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Appendices

LED Impact Evaluation Report

Prepared for
California Public Utilities Commission

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Legal Notice

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Appendix A

Participant Survey for 2010-2012 CA IOU Nonresidential Downstream Lighting Programs

Participant Survey for 2010-2012 CA IOU
Nonresidential Downstream Lighting Programs

	INTRODUCTION AND FINDING CORRECT RESPONDENT	
OUTCOME1	This is _____ calling on behalf of the CPUC, from ITRON CONSULTING. THIS IS NOT A SALES CALL NOR A SERVICE CALL. May I please speak with ...<&CONTACT> ... the person at your organization that is most knowledgeable about your participation in <&UTILITY>'s <&PROGRAM> Program. !___[IF NEEDED]...This is a fact-finding survey only, authorized by the California Public Utilities Commission.	
1	Yes (go to next screen)	Continue
2	Make appointment	Make appt and record time
3	Busy/engaged	Record Response and T&T
4	No Answer	Record Response and T&T
5	Refused	Record Response and T&T
6	Disconnected	Record Response and T&T
7	Answering Machine - no message	Record Response and T&T
8	Duplicate	Record Response and T&T
9	DRNA	Record Response and T&T
10	Disability	Record Response and T&T
11-12	Language Barriers	Record Response and T&T
13	Answering Machine - left message	Record Response and T&T
14	NO SCREEN - Participant	Record Response and T&T
15	Hang up	Record Response and T&T
16	Residence	Record Response and T&T

17	Fax	Record Response and T&T
18	Quota full	Record Response and T&T
19	Wrong Address	Record Response and T&T
20	Home office	Record Response and T&T
21	Max attempts	Record Response and T&T
24	General callback	Record Response and T&T
25	Name/Number changed	Record Response and T&T

Thank & Terminate	Thank you for your time and help today. For this study, we need to speak to someone about your organization's installation of energy efficient equipment that your organization installed through <&UTILITY>'s <&PROGRAM> program.	END

Q1B	[IF YOU ARE TRANSFERRED TO ANOTHER PERSON OTHER THAN THE BEST CONTACT] Who would be the person at this location who is most knowledgeable about this facility's energy using equipment? [ENTER NEW CONTACT NAME AND MOVE ON] [IF NEEDED] This is not a sales call. [IF NEEDED] This is a fact-finding survey only, and responses will not be connected with your firm in any way. The California Public Utilities Commission wants to better understand how businesses think about and manage their energy consumption.

77	There is no one here who can help you	Thank & Terminate
1	Continue Q1B until you find appropriate contact person, record as &CONTACT	Intro3:s

Intro3:S	[IF BEST CONTACT IS AVAILABLE] Hello, my name is <INTERVIEWER NAME> and I am calling on behalf of the California Public Utilities Commission from Itron Consulting. I understand you are the person at your location that is most knowledgeable about this facility's energy using equipment. Is this correct?

1	Current individual is best contact	Person:s
2	Transferred to best contact	Intro3:s
3	Given best contact's name and number	Appoint
5	Property management company handles this	PROP5
99	Don't know/refused	T&T

Ext	Is there a phone extension or phone number you recommend we use when we call back?

77	Record Extension or Phone Number, &PHONE	Thank & Terminate
88	Refused	Thank & Terminate

99	Don't know	Thank & Terminate

PROP5 May I have the name and contact information of your property management company?

1	Yes - RECORD	Record Response and T&T
2	No	Thank & Terminate
88	Refused	Thank & Terminate
99	Don't Know	Thank & Terminate

Appoint [IF RECOMMENDED CONTACT IS NOT CURRENTLY AVAILABLE]
When would be a good day and time for us to call back?

77	Record **day** of the week, **time** of day and **date** to call back, as &APPOINT	Record Response and T&T
88	Refused	Intro3(99)
99	Don't know	Intro3(99)

If Person(3)

Intro3(99)	Thank you for your time. We need to speak with the person at your organization that is most familiar with this facility's energy using equipment. Those are all of the questions I have for you today.	Abandoned User30

Hi Who would be the person at this location who is most knowledgeable about this facility's energy using equipment? [Enter technical Contact Name and move on.]

77	Record Name, as &CONTACT	May_I
88	Refused	Thank & Terminate
99	Don't know	Intro3(99)

May_I May I speak with him/her?

77	Yes	Intro3:s
88	No (not available right now@, set cb)	Abandoned Appointment

PERSON:s Your organization participated in <&UTILITY>'s <&PROGRAM> Program by installing energy saving lighting equipment around ... <&DEEM_PAID_DATE1> <&CUST_PAID_DATE>. Through this program, your organization installed....
<&CUSTOM_MEASURE>
<&LTQTY1> ...<&LTMEAS1>
<&LTQTY2> ...<&LTMEAS2>
<&LTQTY3> ...<&LTMEAS3>
Are you the person most knowledgeable about your organization's participation in ...<&UTILITY>'s <&PROGRAM> Program?

1	Yes	Continue
2	Yes, need to make appointment	Appointment
4	No	Thank & Terminate
99	No one knows about the energy using equipment	Thank & Terminate

If you need to provide validation for this survey you should provide the following website **www.cpuc.ca.gov/eevalidation**
Before we start, I would like to inform you that for quality control purposes, this call may be monitored by my supervisor.

Today we're conducting a very important study on the energy needs and perceptions of organizations like yours. We are interested in how organizations like yours think about and manage their energy consumption.

Your input will allow the California Public Utilities Commission to build and maintain better energy savings programs for customers like you.

This is a fact-finding survey only, and responses will not be connected with your organization in any way.

SCREENER

VERIFY For verification purposes only, may I please have your name?

	Get name	Scrn_Addr
88	Refused	Scrn_Addr
99	Don't know	Scrn_Addr

Scrn_Addr First, I'd like to ask you a few questions about your organization and facility. Our records show your organization is located at &SERV_ADDR in &CITY. Is that correct?
[CONTINUE IF ADDRESS REPORTED BY RESPONDENT IS SIMILAR ENOUGH]

1	Yes	Bus_Name
2	No	CORRECT
88	Refused	COMMENT
99	Don't Know	COMMENT

COMMENT We were attempting to reach the customer at &ADDRESS and since you cannot confirm this address, those are all the questions that we have for you today, on behalf of the California Public Utilities Commission, thank you for your time.

CORRECT May I have your correct address?

&CORRECT	Corrected Address	COMPARE

COMPARE Are these addresses similar or totally different?
Computer Address - &ADDRESS
Corrected Address - &CORRECT

1	Similar	Bus_Name
2	Totally Different	COMMENT2

COMMENT2	We were attempting to reach the <&UTILITY> customer at &ADDRESS in &CITY and since that does not match your address, then we must have mis-dialed the telephone number. Those are all the questions that we have for you today, on behalf of the California Public Utilities Commission. Thank you for your time and cooperation.	Thank and Terminate

BUS_NAME Our records show your organization's name as: &BUSINESS. Is that correct?

1	Yes	INCENT
2	No	Bus_Correct

88	Refused	COMMENT
99	Don't Know	COMMENT
BUS_CORRECT	What is the correct name for your organization?	
&BUS_CORRECT	Corrected Business	INCENT
INCENT	What percentage of the cost of your lighting installation was covered by the <&UTILITY>'s <&PROGRAM> program?	
77	RECORD RESPONSE	A1gg
88	REFUSED	FM050
99	DON'T KNOW	FM050
	IF INCENT <> 100 then ask; Else skip to FM050;	
A1gg	What incentive amount did your organization receive from the program towards your lighting installation?	
77	RECORD VERBATIM	FM050
88	Refused	FM050
99	Don't know	FM050
FM050	What is the main business ACTIVITY at this facility? [DO NOT READ]	
1	Offices (non-medical)	FM050a
2	Restaurant/Food Service	FM050b
3	Food Store (grocery/liquor/convenience)	FM050c
4	Agricultural (farms, greenhouses)	FM050d
5	Retail Stores	FM050e
6	Warehouse	FM050f
7	Health Care	FM050g
8	Education	FM050h
9	Lodging (hotel/rooms)	FM050i
10	Public Assembly (church, fitness, theatre, library, museum, convention)	FM050j
11	Services (hair, nail, massage, spa, gas, repair)	FM050k
12	Industrial (food processing plant, manufacturing)	FM050l
13	Laundry (Coin Operated, Commercial Laundry Facility, Dry Cleaner)	FM050m
14	Condo Assoc./Apartment Mgr. (Garden Style, Mobile Home Park, High-rise, Townhouse)	FM050n
15	Public Service (fire/police/postal/military)	FM050o
77	OPEN\Record Other Service Shop	CC2a
88	Refused	CC2a
99	Don't know	CC2a
FM050a	Which of the following types of offices best describes this facility? Would you say...[READ]	
1	Administration and management	CC2a
2	Financial / Legal	CC2a
3	Insurance/Real Estate	CC2a
4	Data Processing/Computer Center	CC2a
5	Mixed-Use/Multi-tenant	CC2a
6	Lab/R&D Facility	CC2a
7	Software Development	CC2a

8	Government Services	CC2a
9	Office with Warehouse	CC2a
10	Contractor's Offices	CC2a
11	Telecommunications Center (call center)	CC2a
12	Travel Services (Travel Agent)	CC2a
77	OPEN\DO NOT USE unless necessary	CC2a
88	Refused	CC2a
99	Don't know	CC2a

FM050b Which of the following types of restaurants or food service best describes this facility? Would you say… [READ]

1	Fast Food or Self Service	CC2a
2	Specialty/Novelty Food Service	CC2a
3	Table Service	CC2a
4	Bar/Tavern/Nightclub/Brew Pub or Microbrewery/Other entertainment	CC2a
5	Caterer	CC2a
6	Other Food Service	CC2a
88	Refused	CC2a
99	Don't know	CC2a

FM050c Which of the following types of food stores best describes this facility? Would you say...[READ]

1	Supermarkets	CC2a
2	Small General Grocery	CC2a
3	Specialty/Ethnic Grocery/Deli	CC2a
4	Convenience Store	CC2a
5	Liquor Store	CC2a
6	Retail Bakery	CC2a
77	OPEN\DO NOT USE unless necessary	CC2a
88	Refused	CC2a
99	Don't know	CC2a

FM050d What type of agricultural facility is this? [READ]

1	Commercial Greenhouse	CC2a
2	Commercial Farm	CC2a
3	Dairy/Ranch	CC2a
4	Vineyard/Orchard	CC2a
5	Agricultural Storage (Grain Elevators, etc.)	CC2a
6	Equine Facility (Horse Boarding/Grooming/Racing/Breeding)	CC2a
77	OPEN\Describe type of agricultural facility	CC2a
88	Refused	CC2a
99	Don't know	CC2a

FM050e Which of the following types of retail stores best describes this facility? Would you say… [READ]

1	Department / Variety Store	CC2a
2	Retail Warehouse/Club	CC2a
3	Shop in Enclosed Mall	CC2a
4	Shop in Strip Mall	CC2a

5	Auto/Truck/Motorcycle Sales	CC2a
6	Art Gallery	CC2a
7	Auction House	CC2a
8	Heavy Equipment Sales	CC2a
9	Facility is a Mall/Strip Mall	CC2a
77	OPEN\DO NOT USE unless necessary	CC2a
88	Refused	CC2a
99	Don't know	CC2a

FM050f Which of the following types of warehouses best describes this facility? Would you say… [READ]

1	Refrigerated Warehouse	CC2a
2	Unconditioned Warehouse, High Bay (lighting higher than 13 ft.)	CC2a
3	Unconditioned Warehouse, Low Bay	CC2a
4	Conditioned Warehouse, High Bay (lighting higher than 13 ft.)	CC2a
5	Conditioned Warehouse, Low Bay	CC2a
6	Shipping/Distribution Center	CC2a
7	Garage/Parking/Storage for Commercial Fleet	CC2a
8	Public Self-Storage Facility	CC2a
77	OPEN\DO NOT USE unless necessary	CC2a
88	Refused	CC2a
99	Don't know	CC2a

FM050g Which of the following types of health care centers best describes this facility? Would you say… [READ]

1	Hospital	CC2a
2	Nursing Home	CC2a
3	Medical/Dental Office	CC2a
4	Clinic/Outpatient Care	CC2a
5	Medical/Dental Lab	CC2a
6	Alcohol/Drug Treatment/Rehabilitation	CC2a
7	Doctor's Office	CC2a
8	Dentist's Office	CC2a
9	Veterinary Hospital/Clinic	CC2a
77	OPEN\DO NOT USE unless necessary	CC2a
88	Refused	CC2a
99	Don't know	CC2a

FM050h Which of the following types of educational centers best describes this facility? Would you say… [READ]

1	Daycare or Preschool	CC2a
2	Elementary School	CC2a
3	Middle / Secondary School	CC2a
4	College or University	CC2a
5	Vocational or Trade School	CC2a
6	Instructional Studio (Dance/Music/Martial Arts)	CC2a
77	OPEN\DO NOT USE unless necessary	CC2a
88	Refused	CC2a
99	Don't know	CC2a

FM050i Which of the following types of lodging best describes this facility? Would you say… [READ]

1	Hotel	CC2a
2	Motel	CC2a
3	Resort	CC2a
4	Bed and Breakfast	CC2a
5	Campground/Trailer Camping/KOA	CC2a
6	Residential Hotel/Motel	CC2a
7	Dormitory/Sorority/Fraternity	CC2a
8	Activity Camp/Summer Campy	CC2a
77	OPEN\DO NOT USE unless necessary	CC2a
88	Refused	CC2a
99	Don't know	CC2a

FM050j Which of the following types of public assembly buildings best describes this facility? Would you say… [READ]

1	Religious Assembly (worship only)	CC2a
2	Religious Assembly (mixed use)	CC2a
3	Health/Fitness Center/Athletic Center/Gym	CC2a
4	Movie Theaters	CC2a
5	Theater / Performing Arts Venue	CC2a
6	Library / Museum	CC2a
7	Conference/Convention Center	CC2a
8	Community Center / Activity Center	CC2a
9	Country Club	CC2a
77	OPEN\DO NOT USE unless necessary	CC2a
88	Refused	CC2a
99	Don't know	CC2a

FM050k Which of the following types of service buildings best describes this facility? Would you say...[READ]

1	Hair Salon	CC2a
2	Nail Salon	CC2a
3	Massage Spa	CC2a
4	Day Spa	CC2a
5	Gas Station / Auto Repair	CC2a
6	Gas Station w/Convenience Store**	CC2a
7	Repair (Non-Auto)	CC2a
8	Copy Center / Printing,	CC2a
9	Package Delivery (Fed Ex / UPS / DHL),	CC2a
10	HVAC Repair Installation,	CC2a
11	Aircraft Maintenance / Repair	CC2a
12	Airport	CC2a
13	Parking Lot / Commuter Service	CC2a
14	Marina	CC2a
15	Amusement (mini-golf/go@-carts/skating/bowling)	CC2a
16	Pet Care / Grooming,	CC2a
17	Car Rental	CC2a

18	Car Wash	CC2a
19	Cemetery / Mortuary / Crematorium	CC2a
20	Equipment Rental	CC2a
21	Fleet Fueling Services	CC2a
22	Pest Control	CC2a
23	Photographer	CC2a
24	Vehicle Inspections	CC2a
25	Transportation	CC2a
26	Upholstery	CC2a
77	OPEN\DO NOT USE unless necessary	CC2a
88	Refused	CC2a
99	Don't know	CC2a

FM050l Which of the following types of buildings best describes this facility? Would you say...[READ]

1	Assembly / Light Manufacturing	CC2a
2	Food Processing Plant	CC2a
3	Recycling Center	CC2a
4	Commercial/Industrial Bakery	CC2a
5	Commercial Brewery / Winery	CC2a
6	Chemical / Petrochemical Production	CC2a
7	Industrial Process	CC2a
8	Radio / Television / Film / Music Production	CC2a
9	Energy Generation / Distribution	CC2a
10	Machine Shop	CC2a
11	Pharmaceutical Production/Manufacturing	CC2a
12	Mail Sorting	CC2a
13	Mining	CC2a
77	OPEN\DO NOT USE unless necessary	CC2a
88	Refused	CC2a
99	Don't know	CC2a

FM050m What type of laundry facility is this? [READ]

1	Coin Operated	CC2a
2	Commercial Laundry Facility	CC2a
3	Dry Cleaners	CC2a
77	OPEN\Record other building type	CC2a
88	Refused	CC2a
99	Don't know	CC2a

FM050n Which of the following types of buildings best describes this facility? Would you say...[READ]

1	Garden Style	CC2a
2	Mobile Home	CC2a
3	High-rise	CC2a
4	Townhouse	CC2a
5	Condominium	CC2a
6	Apartment	CC2a
7	Artists' Studio/Live Work/Loft	CC2a

8	Assisted Living	CC2a
77	OPEN\Record other building type	CC2a
88	Refused	CC2a
99	Don't know	CC2a

FM050o Which of the following types of buildings best describes this facility? Would you say...[READ]

1	Police station	CC2a
2	Fire station	CC2a
3	Post office	CC2a
4	Military	CC2a
5	Ambulance Service	CC2a
6	Jail/Correctional facility	CC2a
7	Courthouse	CC2a
8	Library	CC2a
9	Water/Waste Water Treatment	CC2a
10	General Government (Municipal/State/Federal Agency Buildings)	CC2a
11	Public Park	CC2a
77	OPEN\Record other building type	CC2a
88	Refused	CC2a
99	Don't know	CC2a

CUSTOMER CHARACTERISTICS

Now, I'd like to ask you questions regarding your facility.

CC2a What is the total square footage at this facility?

77	RECORD Square feet	CC2c
888888	Refused	CC3
999999	Don't know	CC3

IF CC2a IN (88, 99)

CC3 Would you say that the floor area is ...?

1	less than 1,500 sq. ft.	CC2c
2	1,500 - 5,000 sq. ft.	CC2c
3	5,000 - 10,000 sq. ft.	CC2c
4	10,000 – 25,000 sq. ft.	CC2c
5	25,000 – 50,000 sq. ft.	CC2c
6	50,000 – 75,000 sq. ft.	CC2c
7	75,000 – 100,000 sq. ft.	CC2c
8	over 100,000 sq. ft. (ag area)	CC2c
88	Refused	CC2c
99	Don't know	CC2c

CC2c Is the entire floor area of this facility heated or cooled?

1	Yes	CC3a
2	No	CC2d
88	Refused	C0
99	Don't know	C0

CC2d What percentage of this facilities total floor area is heated or cooled floor?

77	Percent	CC3a

101	Refused	C0
102	Don't know	C0

If CC2D > 0 or CC2C = 1; Else skip to C0

CC3a Is your space heated using electricity or gas?

1	Electricity	C0
2	Gas	C0
3	Both electricity and gas	C0
4	Propane	C0
5	None	C0
77	OPEN\Other-record	C0
88	Refused	C0
99	Don't know	C0

C0 About what percentage of your operating costs does energy account for?

1	Less than 1 percent	CC4
2	1-2 percent	CC4
3	3-5 percent	CC4
4	6-10 percent	CC4
5	11-15 percent	CC4
6	16-20 percent	CC4
7	21-50 percent	CC4
8	Over 51 percent	CC4
88	Refused	CC4
99	Don't Know	CC4

CC4 Does your organization own, lease or manage the facility?

1	Own	C5
2	Lease/Rent	C5
3	Manage	C5
88	Refused	C5
99	Don't know	C5

C5 How many locations does your organization have? Is it....

1	This facility only	CC6
2	2 to 4 locations	CC6
3	5 to 10 locations	CC6
4	11 to 25 locations	CC6
5	more than 25 locations	CC6
88	Don't know	CC6
99	Refused	CC6

ASK ALL

CC6 How active a role does your business take in making lighting purchase decisions at this facility? Would you say you are…

1	Very active – involved in all phases and have veto power	CC8
2	Somewhat active – we approve decisions and provide some input and review	CC8
3	Slightly active – we have a voice but it's not the dominant voice	CC8
4	Not active at all – we're part of a larger organization	CC8

5	Or, not active at all – our firm doesn't get involved in these issues	CC8
88	Refused	CC8
99	Don't know	CC8

CC8 In what year was the facility built?

&YRB	Year	CC11
8888	Refused	CC10
9999	Don't know	CC10

If CC8 in (88, 99) then Ask; Else skip to CC11;

CC10 If don't know, would you say it was…

1	After 2000	CC11
2	In the 1990's	CC11
3	1980s	CC11
4	1970s	CC11
5	1960s	CC11
6	1950	CC11
7	Before 1950	CC11
88	Refused	CC11
99	Don't know	CC11

CC11 In what year was this facility last remodeled? [PROBE FOR BEST GUESS]

&YRB	Year	CC12a
6666	Never Remodeled	CC12a
8888	Refused	CC11a
9999	Don't know	CC11a

Ask if CC11 in (88, 99); Else skip to CC12a;

CC11a Would you say the last remodeling was done …. [READ RESPONSES.]

1	Between 2008 and Present	CC12a
2	Between the years 2000 and 2007	CC12a
3	During the 1990s	CC12a
4	Before the 1990s	CC12a
88	Refused	CC12a
99	Don't know	CC12a

CC12a In what year was this organization established at this location?

&YRB	Year	CC13
8888	Refused	CC12b
9999	Don't know	CC12b

If CC12a in (88, 99) then ask; else skip to BC090;

CC12b Would you say it was…

1	After 2005	BC090
2	Between 2000 and 2005	BC090
3	In the 1990s	BC090
4	In the 1980s	BC090
5	In the 1970s	BC090
6	In the 1960s or	BC090
7	Before 1960	BC090

88	Don't know	BC090
99	Refused	BC090

ADDITIONAL FACILITY CHARACTERISTICS

BC090 Has the square footage of the facility increased, decreased or remained the same since January 2009?

1	Increase in square footage	BC100
2	Decrease in square footage	BC110
3	Stayed the same	CA15
88	Refused	CA15
99	Don't know	CA15

If BC090 = 1 then ask; Else skip to BC110;

BC100 How many square feet were added?

&SQFTA	Square feet	BC120
88	Refused	BC120
99	Don't know	BC120

If BC090 = 2 then ask; Else skip to BC120;

BC110 By how many square feet was the facility reduced?

&SQFTR	Square feet	BC120
88	Refused	BC120
99	Don't know	BC120

If BC090 in (1, 2) then ask; else skip to CA15;

BC120 In what year did this change occur? IF DON'T KNOW, ASK FOR BEST GUESS

1	2008	CA15
2	2009	CA15
3	2010	CA15
4	2011	CA15
5	2012	CA15
88	Refused	CA15
99	Don't know	CA15

CA15 Over the past 3 years, how would you characterize your organization's business outlook? Would you say it was …

1	Excellent	CA15A
2	Good	CA15A
3	Fair	CA15A
4	Adequate	CA15A
5	Poor	CA15A
88	Refused	CA15A
99	Don't know	CA15A

CA15A Projecting over the NEXT 3 years, how would you characterize your business outlook? Would you say….

1	Excellent	FM070
2	Good	FM070
3	Fair	FM070
4	Adequate	FM070
5	Poor	FM070

6	DO NOT READ...going out of business	FM070
88	Refused	FM070
99	Don't know	FM070

FM070 How many people are currently working at the facility, including both full and part time? (IF DON'T KNOW ASK FOR BEST GUESS)

1	Ten or less	FM080
2	Between 11 and 25	FM080
3	26 to 50	FM080
4	51 to 75	FM080
5	76 to 100	FM080
6	101 to 250	FM080
7	251 to 500	FM080
8	501 to 1000	FM080
9	1001 to 2500	FM080
10	2501 to 5000	FM080
11	5000 or more	FM080
88	Refused	FM080
99	Don't know	FM080

FM080 Since January 2009 has the number of people working at this facility changed by more than 10%?

1	Yes	FM081
2	No	PC010
88	Refused	PC010
99	Don't know	PC010

If FM080 = 1 then ask; Else skip to PC010;

FM081 Would these changes have increased or decreased number of employees?

1	Increased number of employees	FM100
2	Decreased number of employees	PC010
88	Refused	FM100
99	Don't know	FM100

If FM081 in (1, 88, 99) then ask; else skip to PC010;

FM100 In 2008 approximately how many people were working at this facility, including both full- or part-time employees? (IF DON'T KNOW ASK FOR BEST GUESS)

&NUM03	Number of people	PC010
888	Refused	PC010
999	Don't know	PC010

PC010 Thinking back to 2008, were any changes made to the facility during 2008 that would change the energy consumption by more than 10%?

1	Yes	PC020
2	No	V1
88	Refused	V1
99	Don't know	V1

If PC010 = 1 then ask; Else skip to V1;

PC020 Would these changes have increased or decreased consumption?

1	Increased	V1
2	Decreased	V1
88	Refused	V1
99	Don't know	V1

ROLE OF CONTRACTORS

V1 Did you use a contractor/vendor to install the lighting measures that were installed through the 2010-2012 &PROGRAM Program?

1	Yes	V2
2	No	AP9
88	Refused	AP9
99	[DO NOT READ] Don't know/No Answer	AP9

If V1 = 1 then ask; Else skip to AP9;

V2 How did you come into contact with the contractor/vendor?

1	They contacted you	V2b
2	You contacted them	V3
3	You had worked with them before	V2a
77	OTHER - Record	V3
88	Refused	V3
99	[DO NOT READ] Don't know/No Answer	V3

Ask if V2 = 3; Else skip to V2b

V2a In relation to this project, did the vendor/contractor approach you about your lighting installation?

1	Yes	V2b
2	No	V3
88	Refused	V3
99	[DO NOT READ] Don't know/No Answer	V3

Ask if V2 = 1 or V2a = 1; Else skip to V3

V2b On a scale of 0 - 10, with 0 being NOT AT ALL LIKELY and 10 is VERY LIKELY, how likely is it that your organization would have installed this new lighting equipment had the contractor/vendor not contacted you?

1	0-10 response	V3
88	Refused	V3
99	Don't know/No Answer	V3

V3 Did the contractor/vendor tell you about or recommend the program?

1	Yes	V4
2	No	AP9
88	Refused	AP9
99	Don't know/No Answer	AP9

V4 Prior to coming into contact with the contractor/vendor, did you organization have plans to replace/install lighting equipment?

1	Yes	V4a
2	No	V4a
88	Refused	V4a
99	[DO NOT READ] Don't know/No Answer	V4a

V4a Using the same scale of 0 - 10 as before, how likely is it that your organization would have installed lighting equipment had the contractor/vendor not recommended it?

1	0-10 response	V4b
88	Refused	V4b
99	[DO NOT READ] Don't know/No Answer	V4b

V4b How likely is it that your organization would have installed lighting equipment with the same level of efficiency if the contractor/vendor had not recommended to do so?

1	0-10 response	V40
88	Refused	V40
99	[DO NOT READ] Don't know/No Answer	V40

V40 On a scale of 0 - 10, with 0 being very unlikely and 10 being very likely. How important was the input from the contractor you worked with in deciding which specific equipment to install? Was it …

1	0-10 response	AP9
88	Refused	AP9
99	Don't know	AP9

PROGRAM AWARENESS

Next, I'd like to ask you about various energy efficiency programs and what influenced your program participation.

AP9 How did you FIRST learn about <&UTILITY>'s <&PROGRAM> program? [DO NOT READ]

1	Bill insert	AP9a
2	Program Literature	AP9a
3	Account representative	AP9a
4	Program Approved vendor	AP9a
5	Program representative	AP9a
6	Utility or program website	AP9a
7	Trade publication	AP9a
8	Conference	AP9a
9	Newspaper article	AP9a
10	Word of mouth	AP9a
11	Previous experience with it	AP9a
12	Company used it at other locations	AP9a
13	Contractor	AP9a
14	Result of an audit	AP9a
15	Part of a larger expansion or remodeling effort	AP9a
77	Other (RECORD VERBATIM)	AP9a
88	Refused	A1b
99	Don't know	A1b

If AP9 in (1-77) then ask; Else skip to A1b;

AP9a How ELSE did you learn about &UTILITY's program? [DO NOT READ LIST, ACCEPT MULTIPLES]

1	Bill insert	N33
2	Program Literature	N33
3	Account representative	N33

4	Program Approved vendor	N33
5	Program representative	N33
6	Utility or program website	N33
7	Trade publication	N33
8	Conference	N33
9	Newspaper article	N33
10	Word of mouth	N33
11	Previous experience with it	N33
12	Company used it at other locations	N33
13	Contractor	N33
14	Result of an audit	N33
15	Part of a larger expansion or remodeling effort	N33
77	Other (RECORD VERBATIM)	N33
88	Refused	N33
99	Don't know	N33

If AP9 = 3 or AP9A = 3 then ask; Else skip to A1b;

You mentioned that you have a Utility Account Rep.
Can you give me his or her name?
!!___Do you have his/her email address?
!___Do you have a phone number for him/her?

N33 !___Do you have a cell phone number for him/her?\,

77	RECORD NAME, Phone, Email ETC	A1b
88	Refused	A1b
99	Don't know	A1b

INTEGRATED DEMAND SIDE MANAGEMENT

IF AUDIT = 1; THEN ASK ELSE ID0.

A1b According to our records, your organization also received an AUDIT from <&UTILITY>. Is this correct?

1	Yes	ID0
2	No	ID0
88	Refused	ID0
99	Don't know	ID0

If AUDIT <> 1

ID0 To the best of your knowledge, has the facility located at this address received a <&UTILITY>-sponsored energy audit within the past 3 years?

1	Yes	A1c
2	No	A1c
88	Refused	A1c
99	Don't Know	A1c

IF TECH_ASST = 1, THEN ASK, ELSE A1d

A1c According to our records, your organization received TECHNICAL ASSISTANCE from <&UTILITY>. Is this correct?

1	Yes	A1d
2	No	A1d
88	Refused	A1d
99	Don't know	A1d

IF FEAS_STUDY = 1, THEN ASK, ELSE A1e

A1d According to our records, your organization received a FEASABILITY STUDY from <&UTILITY>. Is this correct?

1	Yes	A1e
2	No	A1e
88	Refused	A1e
99	Don't know	A1e

IF RCX = 1, THEN ASK, ELSE A1f

A1e According to our records, your organization received RETROCOMMISSIONING from <&UTILITY>. Is this correct?

1	Yes	A1f
2	No	A1f
88	Refused	A1f
99	Don't know	A1f

IF PTRAIN = 1, THEN ASK. ELSE ASK ID1

A1f According to our records, your organization also received PROGRAM TRAINING from <&UTILITY>. Is this correct?

1	Yes	ID1
2	No	ID1
88	Refused	ID1
99	Don't know	ID1

ID1 Are you aware of other programs, other than the one we mentioned earlier, or resources that are designed to help organizations like yours reduce its energy bills?

1	Yes	ID2
2	No	ID3
88	Refused	ID3
99	Don't Know	ID3

If ID1 = 1 then ask; Else ID3;

ID2 What types of programs can you recall? **[RECORD ALL MENTIONS]** [After each response prompt with "Can you recall any others?"]

1	Rebates/incentives (include mentions of SPC and Express)	ID3
2	Building Commissioning (Retrocommissioning, Monitoring based commissioning)	ID3
3	Business energy audits and feasibility studies	ID3
4	Energy Centers (Pacific Energy Center, SCE CTAC)	ID3
5	Seminars, classes, and workshops	ID3
6	Solar or other Distributed Generation Programs (CSI, SGIP)	ID3
7	Demand Response Programs (Flex Your Power, Peak Choice, BIP, DBP, Aggregator, PDP) ID3	ID3
8	Upstream HVAC and Motors Program	ID3
77	Other programs [SPECIFY:]_____	ID3
88	Refused	ID3
99	Don't Know	ID3

ID3 Has your Account Representative, or any Program Staff or Program Vendors discussed solar, wind or other self-generation equipment opportunities with you?

1	Yes, Account Representative	ID3a

2	Yes, Program Staff	ID3a
3	Yes, Program Vendor	ID3a
4	No	ID3a
88	Refused	ID3a
99	Don't Know	ID3a

ID3a Has your Account Representative, Program Staff, or Program Vendors discussed Demand Reduction programs, technologies, or opportunities with you? (Select all that apply)

1	Yes, Account Representative	LI1
2	Yes, Program Staff	LI1
3	Yes, Program Vendor	LI1
4	No	LI1
88	Don't Know	LI1
99	Refused	LI1

EXISTING LIGHTING EQUIPMENT BATTERY

In this next section, we will be discussing the existing lighting equipment at your facility which was not RETROFITTED AS PART OF THE PROGRAM and has not been RETROFITTED OR INSTALLED BY YOU SINCE JANUARY 2010 outside of the program.

LI1 What are the primary types of lighting used at your facility that was not retrofitted through the program or by you personally since January 2010?

1	High Performance T8	LI1a
2	T8 fluorescent fixtures (1" diameter bulbs)	LI1a
3	T10 fluorescent fixtures	LI1a
4	T12 Fixtures (1.5" diameter bulbs)	LI1a
5	T5 Fixtures (5/8" diameter)	LI1a
6	Compact HID (High Intensity Discharge) Fixtures	LI1a
7	Screw-in Modular CFL bulbs	LI1a
8	Hardwired CFL fixtures	LI1a
9	Incandescent	LI1a
10	Other Fluorescent	LI1a
11	Fat/Thick Tubes	LI1a
12	Skinny/Thin Tubes	LI1a
13	LEDs (lamps, reflector lamps or fixtures - NOT exit signs)	LI1a
77	Other (PLEASE SPECIFY)	LI1a
88	Refused	LI1a
99	Don't know	LI1a

LI1a Which, if any, of the following automatic lighting controls are used on this older equipment?

1	Timers	LI3
2	Occupancy sensors	LI3
3	Photocells	LI3
66	NONE - NO AUTOMATIC LIGHTING CONTROLS	LI3
77	OPEN\Some other form of lighting controls-describe	LI3
88	Refused	LI3

99	Don't know	LI3

LI3 How old would you estimate this pre-retrofit lighting equipment to be? Remember, we are asking about the lighting equipment in use before you retrofitted either through the program or you retrofitted on your own since January 2010. Would you say the majority of it is...

1	Less than 5 years old	LI4
2	Between 5 and 10 years old	LI4
3	Between10 and 15 years old	LI4
4	More than 15 years old	LI4
88	Refused	LI4
99	Don't know	LI4

LI4 And how would you describe the condition of this lighting equipment? Would you say it is....

1	In poor condition	LI6
2	Fair condition	LI6
3	Good condition	LI6
88	Refused	LI6
99	Don't know	LI6

LI6 Do you currently have any plans to retrofit your old lighting equipment?

1	Yes	LI99
2	No	LI99
88	Refused	LI99
99	Don't know	LI99

PROGRAM LIGHTING EQUIPMENT BATTERY

Comment	One way that organizations like yours can reduce their energy use is to install more energy efficient lighting equipment. We would like to ask you about the lighting changes you made as part of your participation in <%UTILITY>'s <%PROGRAM> Program.	LI99

Continue if Custom = 1; Else skip to A3a if Deemed = 1;

LI99 Our records indicate that your organization installed CUSTOM LIGHTING EQUIPMENT through the &Program in our database, it is described as &CUSTOM _MEASURE. Is this correct?

1	Yes	LI100
2	No	A3a
88	Refused	A3a
99	Don't know	A3a

LI100 What types of fixtures, ballasts or light controls were installed as part of this lighting installation?

1	High performance T8 (1" diameter bulbs)	LI101A
2	T8 fluorescent fixtures (1" diameter bulbs)	LI101A
3	T10 fluorescent fixtures	LI101A
4	HID (High Density Discharge) Fixtures, Compact	LI101A
5	Compact Fluorescent, Screw-in Modular	LI90
6	Compact Fluorescent, Hardwire	LI101A

7	Exit Signs, Compact Fluorescent	LI101A
8	Exit Signs, LED	LI101A
9	Halogen	LI101A
10	Installed Reflectors	LI101A
11	Electronic Ballast	LI101A
12	Lighting Controls, Time Clock	LI101A
13	Lighting Controls, Occupancy Sensor	LI101A
14	Lighting Controls, Bypass/Delay Timers	LI101A
15	Lighting Controls, Photocell	LI101A
16	Other Fluorescent	LI101A
17	Skinny/Thin Tubes	LI101A
18	T5 Fixtures (5/8" diameter)	LI101A
19	Screw-in LEDs	LI101A
20	Screw-in LEDs Reflector Lamps	LI101A
21	LED Fixtures or Panels (e.g., replacement for linear fixtures)	LI101A
77	Other (PLEASE SPECIFY)	LI101A

START MACRO FOR CUSTOM MEASURES

LI101A Approximately how many &LI100/&Prgm_LT1_Desc were installed through the &Program?

77	Record #	LI101C
8888	Refused	LI101B
9999	Don't know	LI101B

IF LI101A IN (88, 99) the ask; Else skip to LI101c;

LI101B Would you say that the number of &LI100/&Prgm_LT1_Desc installed under the program are

1	less than 10 units	LI101C
2	11 - 50 units	LI101C
3	50 - 100 units	LI101C
4	More than 100 units	LI101C
88	Refused	LI101C
99	Don't know	LI101C

LI101C Were any of the program provided &Prgm_LT1_Desc placed/installed at another facility? If so, what percentage would you estimate?

1	Yes, #record percentage	LI101D
2	No	LI101D
101	Refused	LI101D
102	Don't know	LI101D

LI101D What type of lighting equipment was removed and replaced when you installed &Prgm_LT1_Desc through the &Program?

1	High performance T8 (1" diameter bulbs)	LI101F
2	T8 fluorescent fixtures (1" diameter bulbs)	LI101F
3	T10 fluorescent fixtures	LI101F
4	T12 Fixtures (1.5" diameter bulbs)	LI101F

5	HID (High Density Discharge) Fixtures, Compact	LI101E
6	Compact Fluorescent, Screw-in Modular	LI101F
7	Compact Fluorescent, Hardwire	LI101F
8	Incandescent	LI101F
9	Exit Signs, Compact Fluorescent	LI101F
10	Exit Signs, LED	LI101F
11	Halogen	LI101F
12	Reflectors	LI101F
13	Electronic Ballast	LI101F
14	Magnetic Ballast	LI101F
15	Manual Switches	LI101F
16	Lighting Controls, Time Clock	LI101F
17	Lighting Controls, Occupancy Sensor	LI101F
18	Lighting Controls, Bypass/Delay Timers	LI101F
19	Lighting Controls, Photocell	LI101F
20	Other Fluorescent	LI101F
21	Fat/Thick Tubes	LI101F
22	Skinny/Thin Tubes	LI101F
23	T5 Fixtures (5/8" diameter)	LI101F
24	Screw-in LEDs	LI101F
25	Screw-in LEDs Reflector Lamps	LI101F
26	LED Fixtures or Panels (e.g., replacement for linear fixtures)	LI101F
66	Did not replace anything - new equipment	LI90
77	Other (PLEASE SPECIFY)	LI101F

ASK IF LI101D = 5; else skip to LI101F;

LI101E Were the HID lamps you removed High Pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?

1	High pressure sodium	LI101F
2	Metal Halide	LI101F
3	Mercury Vapor	LI101F
4	Incandescent	LI101F
88	Refused	LI101F
99	Don't know	LI101F

LI101F Approximately how old were the lighting that was *removed* and replaced with &Prgm_LT1_Desc? Would you say...

1	Less than 5 years old	LI101G
2	Between 5 and 10 years old	LI101G
3	Between 10 and 15 years old	LI101G
4	More than 15 years old	LI101G
88	Refused	LI101G
99	Don't know	LI101G

LI101G How would you describe the removed equipment's condition? Would you say there were in…

1	Poor condition	LI101H
2	Fair condition	LI101H

3	Good condition	LI101H
88	Refused	LI101H
99	Don't know	LI101H

LI101H Approximately what percentage of the lighting equipment that was *removed* and replaced was broken or not working prior to installing &Prgm_LT1_Desc?

%	Percent	LI90
101	Refused	LI90
102	Don't know	LI90

END MACRO

Ask only for CFL_flag = 1 or LI100 = 5

LI90 Of the CFLs you received through the program, what percentage do you estimate were placed into storage for later use?

77	Open Record	CUST_INSTALL_DATE_NU
88	Refused	CUST_INSTALL_DATE_NU
99	Don't know	CUST_INSTALL_DATE_NU

ASK if CUST_INSTALL_DATE <> Null

CUST_INSTALL_DATE_NU Our records indicate that your company installed this CUSTOM LIGHTING EQUIPMENT on <%CUSTOM_INSTALL_DATE>. Is this correct?

1	Yes	A3
2	No	CUST_INSTALL_YEAR
88	Refused	CUST_INSTALL_YEAR
99	Don't know	CUST_INSTALL_YEAR

ASK IF CUST_INSTALL_DATE = NULL

CUST_INSTALL_YEAR In what year did you install this CUSTOM LIGHTING EQUIPMENT (PROBE FOR BEST GUESS)

1	2009	CUST_INSTALL_MONTH
2	2010	CUST_INSTALL_MONTH
3	2011	CUST_INSTALL_MONTH
88	Refused	NTGBATTERY
99	Don't know	NTGBATTERY

If CUST_INSTALL_MONTH in (1, 2, 3) then ask;
Else skip to A3;

CUST_INSTALL_MONTH And in which Month. If you don't know the MONTH, could you remember the SEASON?

1	January	NTGBATTERY
2	February	NTGBATTERY
3	March	NTGBATTERY
4	April	NTGBATTERY
5	May	NTGBATTERY
6	June	NTGBATTERY
7	July	NTGBATTERY
8	August	NTGBATTERY
9	September	NTGBATTERY
10	October	NTGBATTERY
11	November	NTGBATTERY

12	December	NTGBATTERY
13	Fall	NTGBATTERY
14	Winter	NTGBATTERY
15	Spring	NTGBATTERY
16	Summer	NTGBATTERY
88	Refused	NTGBATTERY
99	Don't know	NTGBATTERY

NTGBATTERY **GO TO CUSTOM NTG BATTERY**
START LOOP DEEMED MEASURES, ELSE SKIP TO LI30

A3[A-C] According to our records, your organization installed/delamped &Quantity &Prgm_LT1_Desc through <UTILITY>'s &Program, is this correct? [IF NEEDED: delamping occurs when you retrofit your T12s to T8s and reduce the number of lamps in a fixture or simply reduce the number of fixtures]

1	Yes - Quantity is Correct	DEEMED_INSTALL_DATE _NU
2	Yes - Installed Different Quantity	A3_QTY
3	No, did not install	SKIP CHECK
88	Refused	SKIP CHECK
99	Don't know	SKIP CHECK

If A3[A-C](3 - 99), READ: "We must conduct this study with someone that knows about the installation of this measure."
ABANDONED USER30
If A3 = 2 or missing Qty; else skip to DEEM_INSTALL_DATE_NU

A3[A-C]_QTY Approximately how many &LI100/&Prgm_LT1_Desc were installed/delamped under the &Program?

77	Record #	DEEMED_INSTALL_DATE _NU
8888	Refused	A3_OTH
9999	Don't know	A3_OTH

IF A3_QTY IN (88, 99)

A3[A-C]_OTH Would you say that the number of &LI100/&Prgm_LT1_Desc installed/delamped was?

1	less than 10 units	DEEMED_INSTALL_DATE _NU
2	11 - 50 units	DEEMED_INSTALL_DATE _NU
3	50 - 100 units	DEEMED_INSTALL_DATE _NU
4	More than 100 units	DEEMED_INSTALL_DATE _NU
88	Refused	DEEMED_INSTALL_DATE _NU

99	Don't know	DEEMED_INSTALL_DATE_NU

ASK if DEEM_INSTALL_DATE[1-2] <> Null

DEEM_INSTALL_DATE_NU Our records indicate that your company installed the lighting equipment in &Install_MONTH &Install_YEAR through &Program, is this correct?

1	Yes	LI18
2	No	DEEM_INSTALL_YEAR
88	Refused	DEEM_INSTALL_YEAR
99	Don't know	DEEM_INSTALL_YEAR

Read if DEEM_PAID_DATE[1-3] <> Null and DEEM_INSTALL_DATE[1-3] = Null or LI9d = 2

According to our records, your organization received a rebate for the <(M1Delamp== 0)/installation/delamping> of ...<%LTMEAS1> ... on <%DEEM_PAID_DATE1>.

DEEM_INSTALL_YEAR In what year did you install/delamp &Prgm_LT1_Desc? (PROBE FOR BEST GUESS)

1	2009	DEEM_INSTALL_MONTH
2	2010	DEEM_INSTALL_MONTH
3	2011	DEEM_INSTALL_MONTH
88	Refused	LI18
99	Don't know	LI18

DEEM_INSTALL_MONTH And what month? {If they cannot recall month, try to get the season.}

1	January	LI18
2	February	LI18
3	March	LI18
4	April	LI18
5	May	LI18
6	June	LI18
7	July	LI18
8	August	LI18
9	September	LI18
10	October	LI18
11	November	LI18
12	December	LI18
13	Fall	LI18
14	Winter	LI18
15	Spring	LI18
16	Summer	LI18
88	Refused	LI18
99	Don't know	LI18

Ask only for CFL = 1; else skip to LI19

LI18[A-C] Of the CFLs you received through the program, what percentage do you estimate were placed into storage for later use?

	Open Record	LI19

101	Refused	LI19
102	Don't know	LI19

If A3 in (1-2); Else skip to LI30;

LI19[A-C] Were any of the program provided &Prgm_LT1_Desc installed/delamped at another facility? If so, what percentage would you estimate?

1	Yes, #record percentage	LI20
2	No	LI20
88	Refused	LI20
99	Don't know	LI20

IF NOT M[1-3]DELAMP = 1 ask; Else skip to end of DEEMED MEASURE LOOP;

LI20[A-C] What type of lighting was removed and replaced when you installed &LTMEAS[1-3] through the &Program?

1	High performance T8 (1" diameter bulbs)	LI22
2	T8 fluorescent fixtures (1” diameter bulbs)	LI22
3	T10 fluorescent fixtures	LI22
4	T12 Fixtures (1.5” diameter bulbs)	LI22
5	HID (High Density Discharge) Fixtures, Compact	LI21
6	Compact Fluorescent, Screw-in Modular	LI22
7	Compact Fluorescent, Hardwire	LI22
8	Incandescent	LI22
9	Exit Signs, Compact Fluorescent	LI22
10	Exit Signs, LED	LI22
11	Halogen	LI22
12	Install Reflectors	LI22
13	Electronic Ballast	LI22
14	Magnetic Ballast	LI22
15	Manual Switches	LI22
16	Lighting Controls, Time Clock	LI22
17	Lighting Controls, Occupancy Sensor	LI22
18	Lighting Controls, Bypass/Delay Timers	LI22
19	Lighting Controls, Photocell	LI22
20	Other Fluorescent	LI22
21	Fat/Thick Tubes	LI22
22	Skinny/Thin Tubes	LI22
23	T5 Fixtures (5/8” diameter)	LI22
24	Screw-in LEDs	LI122
25	Screw-in LEDs Reflector Lamps	LI122
26	LED Fixtures or Panels (e.g., replacement for linear fixtures)	LI122
66	ADDON_NEW	SKIP CHECK
77	Other (PLEASE SPECIFY)	LI22

ASK IF LI20 = 5; Else skip to LI22;

LI21[A-C] Were the HID lamps you removed High Pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?

1	High pressure sodium	LI22

2	Metal Halide	LI22
3	Mercury Vapor	LI22
4	Incandescent	LI22
88	Refused	LI22
99	Don't know	LI22

If LI20^= 66 then ask; Else skip to End of DEEMED Loop;

LI22[A-C] Approximately how old was the equipment that were *removed* and replaced with &Prgm_LT1_Desc? Would you say…

1	Less than 5 years old	LI23
2	Between 5 and 10 years old	LI23
3	Between 10 and 15 years old	LI23
4	More than 15 years old	LI23
88	Refused	LI23
99	Don't know	LI23

LI23[A-C] How would you describe the condition of the lighting equipment that was removed and replaced as a result of the installation of &Prgm_LT1_Desc? Would you say it was…

1	In poor condition	LI24
2	Fair condition, or	LI24
3	Good condition	LI24
88	Refused	LI24
99	Don’t know	LI24

LI24[A-C] Approximately what percentage of the lighting equipment that was *removed* and replaced was broken or not working prior to installing &Prgm_LT1_Desc?

%	Percent	SKIP CHECK
88	Refused	SKIP CHECK
99	Don't know	SKIP CHECK

SKIP CHECK **GO TO DEEMED NTG BATTERY AND RETURN TO A3B IF NEEDED, THEN A3C IF NEEDED. ONCE LOOPS ARE COMPLETE, GO TO LI30**

HIGH BAY AND DELAMPING

LI30 Considering all of the lighting changes we just discussed, approximately what percentage of the facility’s lighting was affected by those changes?

%	Percent	HB1
101	Refused	HB1
102	Don't know	HB1

If Linear = 1 or LI100 in (1, 2 ,3, 16, 17, 18, 77); else skip to HB1a

HB1 Thinking about all of the types of linear fluorescent bulbs that were installed through the program, what is the highest height above the area they light? [IN FEET]

1	Record #	HB2
66	They Did not install any Linears	HB1a

88	Refused	HB2
99	Don't know	HB2

IF HB1 < 13 then ask; else skip to HB3;

HB2 Just to double check, was any of the linear fluorescent lighting installed through the program at a height of 13 or more feet above the area it is meant to light? This would qualify as HIGH BAY lighting.

1	Yes	HB3
2	No	HB1a
88	Refused	HB1a
99	Don't know	HB1a

Ask if HB1 > 13, but not 66, 88, 99 or HB2 = 1 else skip to HB1a

HB3 What is the main kind of linear bulbs located at this height?

1	T8s	HB1a
2	T5s	HB1a
77	OPEN\RECORD OTHER	HB1a
88	Refused	HB1a
99	Don't know	HB1a

Ask if Non_Linear = 1 or LI100 in (4, 5, 6, 9, 77); else skip to DEL1;

HB1a Other than linear fluorescents, is any of the lighting installed through the program considered to be High Bay? (If needed, lighting higher than 13 ft.)

1	Yes	HB2a
2	No	DEL1
88	Refused	DEL1
99	Don't know	DEL1

Ask if HB1a=1 else skip to DEL1

HB2a What kind of High Bay Lighting is it?

1	HID (High-intensity discharge)	DEL1
2	Mercury Vapor	DEL1
3	CFLs	DEL1
77	OPEN\RECORD OTHER	DEL1
88	Refused	DEL1
99	Don't know	DEL1

Ask if DELAMP = 1; else skip to DEL1a;

DEL1 We also show that you delamped linear fluorescent fixtures. Is this correct? (If needed: delamping occurs when you retrofit your T12s to T8s and reduce the number of lamps in a fixture or simply reduce the number of fixtures.)

1	Yes	DEL2
2	No	L_MSP1
88	Refused	L_MSP1
99	Don't know	L_MSP1

Ask if DELAMP ^= 1 and Linear = 1 and M1Delamp ^= 1 and M2Delamp ^= 1 and M3Delamp ^= 1 OR LI100(1-3, 16-18, 77);

DEL1a As part of the retrofit you had done during your participation in &PROGRAM program did you have any delamping done? (If needed: delamping occurs when you retrofit your T12s to T8s and reduce the number of lamps in a fixture or simply reduce the number of fixtures.)

1	Yes	DEL2
2	No	L_MSP1
88	Refused	L_MSP1
99	Don't know	L_MSP1

Ask if DEL1 = 1 or DEL1a = 1 or (M1Delamp = 1 and A3A in (1,2)) or (M2Delamp = 1 and A3B in (1,2)) or (M3Delamp = 1 and A3C in (1,2))

There are a few different types of delamping that can take place. Today we will be asking about 3 types in particular. One type of delamping occurs when fixtures are simply removed (removal only). Another type of delamping occurs when the fixtures themselves are removed and replaced with new fixtures containing less bulbs (remove and replace fixtures). The final type is where the current fixtures are retrofitted, not replaced, to accommodate less bulbs (reduce # of bulbs).

DEL2 Have you had Removal only Delamping done within your facility since 2009?

1	Yes	DEL2a
2	No	DEL3
88	Refused	DEL3
99	Don't know	DEL3

If DEL2 = 1 then ask; else skip to DEL3;

DEL2a What percent of the original fixtures within the retrofitted area were removed?

77	Open Record	DEL3
88	Refused	DEL3
99	Don't know	DEL3

DEL3 Have you had Remove and Replace Delamping done within your facility since 2009? Remove and Replace occurs when the fixtures themselves are removed and replaced with new fixtures containing less bulbs.

1	Yes	DEL3a
2	No	DEL4
88	Refused	DEL4
99	Don't know	DEL4

If DEL3 = 1 then ask; else skip to DEL4;

DEL3a What type of fixtures were removed?

77	Open Record	DEL3b
88	Refused	DEL3b
99	Don't know	DEL3b

DEL3b What type of fixtures were installed?

77	Open Record	DEL3c
88	Refused	DEL3c
99	Don't know	DEL3c

DEL3c How many lamps per fixture were present prior to the delamping retrofit?[PROBE FOR BEST GUESS IF DON'T KNOW]

1	1	DEL3d
2	2	DEL3d
3	3	DEL3d
4	4	DEL3d
5	5	DEL3d
6	6	DEL3d
7	7	DEL3d
8	8	DEL3d
88	Refused	DEL3d
99	Don't know	DEL3d

DEL3d How many lamps per fixture are present now, after the delamping retrofit? [PROBE FOR BEST GUESS IF DON'T KNOW]

1	1	DEL3E
2	2	DEL3E
3	3	DEL3E
4	4	DEL3E
5	5	DEL3E
6	6	DEL3E
7	7	DEL3E
8	8	DEL3E
88	Refused	DEL4
99	Don't know	DEL4

DEL3E Approximately how old were the fixtures that were *removed* and replaced as a result of this Remove and Replace delamping? Would you say…

1	Less than 5 years old	LI23
2	Between 5 and 10 years old	LI23
3	Between 10 and 15 years old	LI23
4	More than 15 years old	LI23
88	Refused	LI23
99	Don't know	LI23

DEL3F How would you describe the condition of the fixtures that were removed and replaced as a result of the Remove and Replace delamping? Would you say they were in…

1	Poor condition	LI24
2	Fair condition, or	LI24
3	Good condition	LI24
88	Refused	LI24

99	Don't know	LI24

DEL3G	Approximately what percentage of the fixtures that were removed and replaced were broken or not working prior to the Remove and Replace delamping?	
%	Percent	LI30
101	Refused	LI30
102	Don't know	LI30

DEL4	Have you had a delamping retrofit to reduce the number of lamps per fixture within your facility since 2009?	
1	Yes	DEL4a
2	No	DEL5
88	Refused	DEL5
99	Don't know	DEL5

If DEL4 = 1 then ask; else skip to DEL5;

DEL4a	How many lamps per fixture were present prior to the delamping retrofit?[PROBE FOR BEST GUESS IF DON'T KNOW]	
77	Open Record	DEL4b
88	Refused	DEL4b
99	Don't know	DEL4b

DEL4b	How many lamps per fixture are present now, after the delamping retrofit? [PROBE FOR BEST GUESS IF DON'T KNOW]	
77	Open Record	DEL5
88	Refused	DEL5
99	Don't know	DEL5

DEL5	Is the amount of lighting better, worse, or the same than before your delamping job?	
1	Better	L_MSP1
2	Worse	DEL11
3	Same	L_MSP1
88	Refused	DEL11
99	Don't know	DEL11

If DEL5 in (2, 88, 99) then ask; else skip to L_MSP1;

DEL11	Did you install additional lighting equipment to increase the amount of lighting in the delamped area(s)?	
1	Yes	L_MSP1
2	No	L_MSP1
88	Refused	L_MSP1
99	Don't know	L_MSP1

NTG QUESTIONS

[READ] For the sake of expediency, during the balance of the interview, we will be referring to the <&PROGRAM> as the PROGRAM and we will be referring to the installation of ... <&MEASURE> as the MEASURE. I will repeat this from time to time during the study as your organization may have installed more than one measure through more than one program.

A3 There are usually a number of reasons why an organization like yours decides to participate in energy efficient programs like this one by installing energy efficient lights. In your own words, can you tell me why you decided to participate in this program?

1	To replace old or outdated lighting equipment	N2
2	As part of a planned remodeling, build-out, or expansion	N2
3	To gain more control over how the equipment was used	N2
4	Maintenance downtime/associated expenses for old equip were too high	N2
5	Had process problems and were seeking a solution	N2
6	To improve lighting equipment performance	N2
7	To improve production as a result of lighting	N2
8	To comply with codes set by regulatory agencies	N2
9	To improve visibility/plant safety	N2
10	To comply with company policies regarding regular lighting retrofits or remodeling	N2
11	To get a rebate from the program	N2
12	To protect the environment	N2
13	To reduce energy costs	N2
14	To reduce energy use/power outages	N2
15	To update to the latest technology	N2
77	RECORD VERBATIM	N2
88	Don't know	N2
99	Refused	N2

N2 Did your organization make the decision to install this new lighting equipment before or after you became aware of rebates/cost reduction available through the PROGRAM?

1	Before	N3a
2	After	N3a
88	Refused	N3a
99	Don't know	N3a

[READ] Next, I'm going to ask you to rate the importance of the program as well as other factors that might have influenced your decision to install this lighting equipment through the program. Using a scale of 0 to 10 where 0 means not at all important and 10 means extremely important, how would you rate the importance of...

N3a The age or condition of the old equipment

#	Record 0 to 10 score (_____)	N3aa
88	Refused	N3b
99	Don't know	N3b

IF N3a > 5 and NTG_TYPE = 2 THEN ASK.

N3aa How, specifically, did this enter into your decision to install/delamp this lighting?

77	RECORD VERBATIM	N3b
88	Don't know	N3b
99	Refused	N3b

N3b Availability of the PROGRAM rebate/cost reduction

#	Record 0 to 10 score (_____)	N3bb
88	Refused	N3c
99	Don't know	N3c

IF N3b > 7 AND NTG_TYPE = 2, THEN ASK.

N3bb Why do you give it this rating?

77	Record VERBATIM	N3c
88	Refused	N3c
99	Don't know	N3c

IF &FEAS_STUDY=1, A1B(1), &TECH_ASSIST=1, or ID0(1) THEN ASK, ELSE N3d

N3c Please rate the degree of importance of information provided through...
A1D(1)/<(FEAS_STUDY = 1)/ The Feasibility study/>
A1B(1)/<(AUDIT = 1)/The Facility or System AUDIT/>
A1C(1)/<(TECH_ASST = 1)/The Technical Assistance/>

#	Record 0 to 10 score (_____)	N3cc
88	Refused	N3d
99	Don't know	N3d

IF N3c > 7 and NTG_TYPE = 2, THEN ASK.

N3cc Why do you give it this rating?

77	Record VERBATIM	N3d
88	Refused	N3d
99	Don't know	N3d

If V1 = 1 then ask; Else skip to N3e.

N3d Recommendation from an equipment vendor that sold you the lighting equipment and/or installed it for you **[VENDOR_1]**

#	Record 0 to 10 score (_____)	N3e
88	Refused	N3e
99	Don't know	N3e

N3e. Your previous experience with energy efficient lighting projects?

#	Record 0 to 10 score (_____)	N3f
88	Refused	N3f
99	Don't know	N3f

N3f Your previous experience with <&UTILITY>'s &PROGRAM or a similar utility program?

#	Record 0 to 10 score (_____)	N3g
88	Don't know	N3g
99	Refused	N3g

IF A1F=1 and NTG_TYPE = 3 THEN ASK, ELSE N3h

N3g Information from &PROGRAM or &UTILITY training course?

#	Record 0 to 10 score (_____)	N3gg
88	Refused	N3h
99	Don't know	N3h

IF N3g > 5, THEN ASK.

N3gg What type of information was provided during the training?

77	Record VERBATIM	N3ggg

88	Refused	N3ggg
99	Don't know	N3ggg
N3ggg	How, specifically, did this enter into your decision to install/delamp this lighting equipment?	
77	RECORD VERBATIM	N3h
88	Don't know	N3h
99	Refused	N3h
N3h	Information from &PROGRAM or &UTILITY marketing materials?	
#	Record 0 to 10 score (_____)	N3hh
88	Refused	N3j
99	Don't know	N3j
	IF N3h > 5 and NTG_TYPE = 2, THEN ASK	
N3hh	What type of information was provided that pertained to the PROJECT?	
77	Record VERBATIM	N3hhh
88	Refused	N3hhh
99	Don't know	N3hhh
	IF N3hh = 77, THEN ASK	
N3hhh	How, specifically, did this enter into your decision to install/delamp this energy efficient lighting equipment?	
77	RECORD VERBATIM	N3j
88	Don't know	N3j
99	Refused	N3j
	IF NTG_TYPE = 2	
N3j	Standard practice in your business/industry	
#	Record 0 to 10 score (_____)	N3k
88	Refused	N3k
99	Don't know	N3k
	If AP9 = 3 or AP9A = 3 then ask; Else skip to N3m;	
N3l	Endorsement or recommendation by your account rep?	
#	Record 0 to 10 score (_____)	N3ll
88	Refused	N3m
99	Don't know	N3m
	IF N3l > 5, THEN ASK	
N3ll	What did they recommend?	
77	Record VERBATIM	N3lll
88	Refused	N3lll
99	Don't know	N3lll
N3lll	How, specifically, did this enter into your decision to install this project using energy efficient equipment?	
77	RECORD VERBATIM	N3m
88	Don't know	N3m
99	Refused	N3m
	IF NTG_TYPE = 2, ASK	
N3m	Corporate policy or guidelines	
#	Record 0 to 10 score (_____)	N3mm

88	Refused	N3mm
99	Don't know	N3mm

IF N3m > 5, THEN ASK.

N3mm How, specifically, did this enter into your decision to install/delamp this lighting equipment?

77	RECORD VERBATIM	N3n
88	Don't know	N3n
99	Refused	N3n

N3n Payback or return on investment of installing this lighting equipment

#	Record 0 to 10 score (_____)	N3o
88	Refused	N3o
99	Don't know	N3o

N3o To Improve overall quality of lighting?

#	Record 0 to 10 score (_____)	N3oo
88	Refused	N3p
99	Don't know	N3p

IF N3o > 5, THEN ASK.

N3oo How, specifically, did this enter into your decision to install/delamp this lighting equipment?

77	RECORD VERBATIM	N3p
88	Don't know	N3p
99	Refused	N3p

IF FM050 = 12 AND NTG_TYPE = 4, THEN ASK, ELSE SKIP TO N3r

N3p Compliance with state or federal regulations or standards such as Title 24?

#	Record 0 to 10 score (_____)	N3pp
88	Refused	N3r
99	Don't know	N3r

IF N3p > 5, THEN ASK.

N3pp How, specifically, did this enter into your decision to upgrade to energy efficient equipment?

77	RECORD VERBATIM	N3r
88	Don't know	N3r
99	Refused	N3r

N3r Compliance with your organization's normal remodeling or lighting replacement practices?

#	Record 0 to 10 score (_____)	N3rr
88	Refused	N3s
99	Don't know	N3s

IF N3r > 5, THEN ASK.

N3rr How, specifically, did this enter into your decision to install/delamp this lighting equipment?

77	RECORD VERBATIM	N3s.
88	Don't know	N3s.
99	Refused	N3s.

N3s	Were there any other factors we haven't discussed that were influential in your decision to install/delamp this MEASURE?	
1	Nothing else influential	CC1
77	Record verbatim	N3ss
88	Refused	CC1
99	Don't know	CC1
N3ss	Using the same zero to 10 scale, how would you rate the influence of this factor?	
#	Record 0 to 10 score (_____)	CC1
88	Refused	CC1
99	Don't know	CC1
	CONSISTENCY CHECKS ON N3p, N3q and N3r	
	IF A3 = 8, AND N3p < 4, THEN ASK.	
CC1	You indicated earlier that compliance with codes or regulatory policies was one of the reasons you did the project. However, just now you scored the importance of compliance with state or federal regulations or standards such as Title 24 in your decision making fairly low, why is that?	
77	RECORD VERBATIM	CC1a
88	Don't know	CC1a
99	Refused	CC1a
	IF A3 not equal to 8, and N3p > 7, THEN ASK.	
CC1a	You indicated earlier that compliance with codes or regulatory policies was not one of the primary reasons you did the project. However, just now you scored the importance of compliance with state or federal regulations or standards such as Title 24 in your decision making fairly high, why is that?	
77	RECORD VERBATIM	CC3
88	Don't know	CC3
99	Refused	CC3
	IF A3 = 2 or 10, AND N3r < 4, THEN ASK.	
NCC3	You indicated earlier that a regularly scheduled retrofit was one of the reasons you did the project. However, just now you scored the importance of compliance with your companies regularly schedule retrofit or lighting replacement in your decision making fairly low, why is that?	
77	RECORD VERBATIM	CC3a
88	Don't know	CC3a
99	Refused	CC3a
	IF A3 ^= 2 and A3 ^= 9 and A3^=10 AND N3r > 7 THEN ASK.	
NCC3a	You indicated earlier that a regularly scheduled retrofit was NOT one of the reasons you did the project. However, just now you scored the importance of compliance with your companies regularly schedule retrofit or lighting replacement in your decision making fairly high, why is that?	
77	RECORD VERBATIM	N33
88	Don't know	N33
99	Refused	N33
	ASK ALL	

PAYBACK BATTERY (If payback importance > 5)

If INCENT < 100 AND NTG_TYPE = 2, then ask; Else skip to N33;

P1 What financial calculations does your company typically make before proceeding with the installation of lighting equipment like you installed through the program?

1	Payback	P2
2	Return on investment	P2
77	Record VERBATIM	P2
88	Don't know	P2
99	Refused	P2

If P1 = 1, ask; else skip to P2B;

P2A What is your threshold in terms of the payback or return on investment your company uses before deciding to proceed with installing lighting equipment like you installed through the program?

1	0 to 6 months	P3
2	6 months to 1 year	P3
3	1 to 2 years	P3
4	2 to 3 years	P3
5	3 to 5 years	P3
6	Over 5 years	P3
88	Don't know	P3
99	Refused	P3

If P1 = 2, then ask;

P2B What is your ROI?

1	Record ROI____;	P3

P3 Did the rebate move your lighting equipment project within this acceptable range?

1	Yes	P4
2	No	P3a
88	Don't know	P3a
99	Refused	P3a

If P3 = 1 then ask; Else skip to P3A;

P4. On a scale of 0 to 10, with a 10 meaning a "Very Important" and a 0 meaning "Not at all important", how important in your decision was it that the project was now in the acceptable range?

#	Record 0 to 10 score (_____)	P3a
88	Refused	P3a
99	Don't know	P3a

CONSISTENCY CHECKS ON N3b and P3

IF P3 = 1, AND N3b < 5, THEN ASK.

P3a The rebate seemed to make the difference between meeting your financial criteria and not meeting them, but you are saying that the rebate didn't have much effect on your decision, why is that?

77	Record VERBATIM	P3e
88	Don't know	P3e
99	Refused	P3e

IF P3 = 2, AND N3b > 5, THEN ASK.

The rebate didn't cause the installation of lighting equipment to meet your company's financial criteria, but you said that the rebate had an impact on the decision to install this lighting equipment.

P3e. Why did it have an impact?

77	Record VERBATIM	N33
88	Don't know	N33
99	Refused	N33

Next, I would like you to rate the importance of the PROGRAM in your decision to implement this MEASURE as opposed to other factors that may have influenced your decision such as...(SCAN BELOW AND READ TO THEM THOSE

ITEMS WHERE THEY GAVE A RATING OF 8 or higher)

<%N3A> Age or condition of old equipment,

<%N3D> Equipment Vendor recommendation

<%N3E> Previous experience with this measure

<%N3F> Previous experience with this program

<%N3J> Standard practice in your business/industry

<%N3M> Corporate policy or guidelines

<%N3N> Payback on investment.

<%N3O> To improve production as a result of lighting,

<%N3P> Compliance with state or federal regulations or standards such as Title 24

<%N3R> Compliance with normal maintenance or retrocommissioning policies or your companies regularly scheduled retrofit or lighting replacement

If you were given 10 points to award in total, how many points would give to the importance of the program and how many points would you give to these other factors?\

N41 How many of the ten points would you give to the importance of the PROGRAM in your decision?

#	Record 0 to 10 score (_____)	N42
88	Refused	N42
99	Don't know	N42

N42 And how many points would you give to all of these other factors?\

#	Record 0 to 10 score (_____)	N41a
88	Refused	N41a
99	Don't know	N41a

If N41 <> 88 and N41 <> 99 and N42 <> 88 and N42 <> 99, computer N41 + N42. While N41+N42 <> 10, display:

__We want these two sets of numbers to equal 10.

<%N41> for Program influence and

<%N42> for Non Program factors

Now I would like you to think about the action you would have taken with regard to the installation of this equipment if the &PROGRAM had not been available.

IF MEASURE= REPLACEMENT THEN ASK; Else skip to N5aa;

Using a likelihood scale from 0 to 10, where 0 is Not at all likely and 10 is Extremely likely, if THE PROGRAM had NOT BEEN AVAILABLE, what is the likelihood that you would have installed exactly the same program qualifying lighting equipment that you did in this project?

N5

#	Record 0 to 10 score (_____)	N5a
88	Refused	N5B
99	Don't know	N5B

IF MEASURE = ADD-ON THEN ASK; Else skip to N6;

Using a likelihood scale from 0 to 10, where 0 is Not at all likely and 10 is Extremely likely, if THE PROGRAM had NOT BEEN AVAILABLE, what is the likelihood that you would have installed exactly the same lighting equipment at the same time as you did?

N5aa

#	Record 0 to 10 score (_____)	N6
88	Don't know	N6
99	Refused	N6

CONSISTENCY CHECKS

IF N3b > 7 and N5 > 7, THEN ASK.

When you answered ...<%N3B> ... for the question about the influence of the rebate, I would interpret that to mean that the rebate was quite important to your decision to install. Then, when you answered ..<%N5>... for how likely you would be to install the same equipment **without** the rebate, it sounds like the rebate was not very important in your installation decision.

I want to check to see if I am misunderstanding your answers or if the questions may have been unclear. Will you explain in your own words, the role the rebate played in your decision to install this efficient equipment?

N5a

77	Record VERBATIM	NN5aa
88	Don't know	NN5aa
99	Refused	NN5aa

Would you like for me to change your score on the importance of the rebate that you gave a rating of <%N3B> and/or change your rating on the likelihood you would install the same equipment without the rebate which you gave a rating of <%N5> and/or we can change both if you wish?

NN5aa

77	Record how they would rate rebate influence and how they would rate likeliness to install without the rebate	N5b
88	Don't know	N5b
99	Refused	N5b

If MEASURE = REPLACEMENT then ask; Else skip to N6;

Using the same scale as before, if the program had not been available, what is the likelihood that you would have done this project at the same time as you did?

N5b

#	Record 0 to 10 score (_____)	TD1
88	Refused	TD1
99	Don't know	TD1

DEFERRED FREE RIDERSHIP FOLLOW-UP

INTRO FOR BOTH TD1 and TD1a

Next, I'd like to ask a couple of questions to help us estimate at what point in the future you would definitely have replaced your existing equipment. We understand that you can't know exactly when you would have done this, especially so far into the future. We're just trying to get a sense of how long you think the current equipment or process would have kept serving your company's needs before you had to or chose to replace it.

If N5b < 9, ask TD1, ELSE N6;

TD1 If the program had not been available, how likely is it that you would have replaced your existing equipment within one year of when you did?

1	Definitely would have (1.0 probability)	N6
2	Probably would have (0.75 probability)	TD2
3	50-50 chance (0.50 probability)	TD2
4	Probably not (0.25 probability)	TD2
5	Definitely not (0.0 probability)	TD2

IF TD1 = 2, 3, 4, 5 ASK TD2, ELSE GO TO N6

TD2 If the program had not been available, how likely is it that you would have replaced your existing equipment within three years of when you did?

1	Definitely would have (1.0 probability)	N9bb
2	Probably would have (0.75 probability)	TD3
3	50-50 chance (0.50 probability)	TD3
4	Probably not (0.25 probability)	TD3
5	Definitely not (0.0 probability)	TD3

IF TD2= 2, 3, 4, 5 ASK TD3, ELSE GO TO N6

TD3 If the program had not been available, how likely is it that you would have replaced your existing equipment within five years of when you did?

1	Definitely would have (1.0 probability)	N9bb
2	Probably would have (0.75 probability)	N9bb
3	50-50 chance (0.50 probability)	N9bb
4	Probably not (0.25 probability)	N9bb
5	Definitely not (0.0 probability)	N9bb

CONSISTENCY CHECK ON AGE

IF (N3a > 6 AND TD3 = 3, 4 or 5) THEN ASK. ELSE N6.

N9bb Earlier when asked about the influence of the age/condition of the old equipment on your decision to install this new equipment, you gave me a rating of <%N3A> out of ten. I would interpret this to mean that the age/condition was quite influential in your decision to install this new equipment when you did. Perhaps I have either recorded something incorrectly or maybe you could explain in your own words the role the age/condition of the existing equipment played in your decision to install this new energy-efficient equipment.

77	Record VERBATIM	N6
88	Don't know	N6
99	Refused	N6

ADDITIONAL BASELINE INPUT

N6 Now I would like you to think one last time about what action you would have taken if the program had not been available. Which of the following alternatives would you have been MOST likely to do?

1	Install/Delamped fewer units	N6a
2	Install standard efficiency equipment or whatever required by code	N7
3	Installed equipment more efficient than code but less efficient than what you installed through the program	N6b
4	Done nothing	N7
5	Done the same thing I would have done as I did through the program	N7
6	Repair or overhaul the existing equipment	N6c
77	something else (specify what _____)	N7
88	Don't know	N7
99	Refused	N7

N6a How many fewer units would you have installed/Delamped? (It is okay to take an answer such as ...HALF...or 10 percent fewer ... etc.)

77	RECORD VERBATIM	N7
88	Refused	N7
99	Refused	N7

N6b Can you tell me what model or efficiency level you were considering as an alternative? (It is okay to take an answer such as … 10 percent more efficient than code or 10 percent less efficient than the program equipment)

77	RECORD VERBATIM	N7
88	Don't know	N7
99	Refused	N7

N6c How long do you think the repaired lighting equipment would have lasted before requiring replacement?

77	RECORD VERBATIM	N7
88	Don't know	N7
99	Refused	N7

EARLY REPLACEMENT BATTERY

[IF N5b < 8 and A3 = 1, 4,8, or 10 THEN ASK. ELSE SKIP TO SP1]

Earlier, when I asked you a question about why you decided to implement the project, you gave reasons related to <A3> Now I would like to ask you some follow up questions regarding these responses you gave me.

IF MEASURE=REPLACEMENT THEN ASK,

ER2 How many more years do you think your lighting system would have gone before failing and required replacement?

Yrs	___ Estimated Remaining Useful Life	ER6
88	Don't know	ER6
99	Refused	ER6

IF A3 = 4, THEN ASK,

ER6 How much downtime did you experience in the past year?

Wks	_____Downtime Estimate	ER9

88	Don't know	ER9
99	Refused	ER9

ER9 In your opinion, based on the economics of operating this equipment, for how many more years could you have kept this equipment functioning?

Yrs	___ Estimated Remaining Useful Life	ER11
88	Don't know	ER11
99	Refused	ER11

IF A3 = 8, THEN ASK,

ER15 Can you briefly describe the specific code/regulatory requirements that this project addressed?

77	RECORD VERBATIM	ER19
88	Don't know	ER19
99	Refused	ER19

IF A3 = 10, THEN ASK,

ER19 Can you briefly describe the specific company policies regarding regular/normal maintenance/replacement policy(ies) that were relevant to this project?

Can you briefly describe the specific company policies regarding regular lighting retrofits and remodeling?

77	RECORD VERBATIM	SP1
88	Don't know	SP1
99	Refused	SP1

PROCESS QUESTIONS

PP1 What do you believe the PROGRAM'S primary strengths are?

77	Record VERBATIM	PP2
88	Don't know	PP2
99	Refused	PP2

PP2 What concerns do you have about the PROGRAM, if any? (IF NEEDED: What do you view as the primary features that need to be improved?)

77	Record VERBATIM	PP4
88	Don't know	PP4
99	Refused	PP4

PP4 On a scale of 0 - 10, where 0 is completely dissatisfied and 10 is completely satisfied, how would you rate your OVERALL satisfaction with the &PROGRAM?

#	Record 0 to 10 score (_____)	PP5
88	Refused	PP5
99	Don't know	PP5

IF PP4 < 4, THEN ASK. ELSE PP5A

PP5 Why do you say that?

77	Record VERBATIM	PP5A
88	Don't know	PP5A
99	Refused	PP5A

PP5A Using the same 0 - 10 scale, how would you rate your OVERALL satisfaction with the performance of the lighting measures you had installed?

#	Record 0 to 10 score (_____)	PP5B
88	Refused	PP6
99	Don't know	PP6

IF PP5A < 6, THEN ASK. ELSE PP6.

PP5B Why do you say that?

77	Record VERBATIM	PP6
88	Don't know	PP6
99	Refused	PP6

ASK IF [&Implementer = "a local government" , "state government", or "an independent firm"]. ELSE PP10.

IF &PRGNAME is not an IOU administered program:

PP6 The program you participated in was run by &IMPLEMENTER. Has your organization participated in energy efficiency programs run by &IOU in the past three years?

1	Yes	PP8
2	No	PP10
88	Refused	PP10
99	Don't know	PP10

PP8 Please consider your recent experience with the PROGRAM run by &IMPLEMENTER versus your past experience with the program run by &UTILITY. Are there any differences between the two that stand out? Any there attributes or services that seemed better in one or the other?

77	Yes, Record VERBATIM	PP10
78	No differences	PP10
88	Don't know	PP10
99	Refused	PP10

ASK IF &PRGNAME is IOU administered program. ELSE PP12.

PP10 The program you participated in was run by &UTILITY. Have you participated in programs run by governments, institutions, or other independent firms in the past three years? (select all that apply)

1	Local Government	PP14
2	State Government or Institution	PP14
3	Independent Firm	PP12
88	Refused	PP16
99	Don't know	PP16

If PP10 = 3 "Independent Firm", then ask

PP12 Please consider your experiences with the program run by an independent firm versus your recent experience with the program run by an independent firm versus your recent experience with &UTILITY's program. Are there any differences between the two that stand out? Are there attributes or services that seemed better in one or the other? (NOTE: SPECIFY WHICH ENTITY IS REFERRED TO IN EACH COMMENT)

1	No differences	PP16
77	Yes, RECORD DIFFERENCES	PP16
88	Refused	PP16

99	Don't know	PP16

If PP6 = 1 and PP10 < 4, then ask;

PP14 Please consider your experiences with the program run by a government or institution versus your recent experience with <UTILITY>'s PROGRAM. Are there any differences between the two that stand out? Are there attributes that seemed better in one or the other? (NOTE: SPECIFY WHICH ENTITY IS REFERRED TO IN EACH COMMENT)

77	Yes, Record VERBATIM	PP16
78	No differences	PP16
88	Refused	PP16
99	Don't know	PP16

ASK if PP6 = 1 OR PP10 = 1, 2 or 3. ELSE PP3.

PP16 Which entity, the UTILITY program or the IMPLEMENTER program was more effective in supporting your organization's decision making process?

1	IMPLEMENTER	PP18
2	UTILITY	PP18
3	Very little difference	PP18
88	Refused	PP18
99	Don't know	PP18

If PP16 in (1, 2) then ask; else skip to PP20;

PP18 How significant was this difference? Would you say…

1	Very Significant	PP20
2	Somewhat Significant	PP20
3	Not very significant	PP20
88	Refused	PP20
99	Don't know	PP20

PP20 Which entity had a better technical understanding of the energy use at your facility and provided the best technical assistance in specifying the project?

1	&IMP2	PP22
2	&IOU	PP22
3	Very little difference	PP22
88	Refused	PP22
99	Don't know	PP22

If PP20 in (1, 2) then ask; else skip to PP24;

PP22 How significant was this difference? Would you say…

1	Very Significant	PP24
2	Somewhat Significant	PP24
3	Not very significant	PP24
88	Refused	PP24
99	Don't know	PP24

PP24 Which entity was more effective in supporting you through the application process

1	&IMP2	PP26
2	&IOU	PP26
3	Very little difference	PP26

88	Refused	PP26
99	Don't know	PP26

If PP24 in (1, 2) then ask; else skip to PP3;

PP26 How significant was this difference? Would you say…

1	Very Significant	PP3
2	Somewhat Significant	PP3
3	Not very significant	PP3
88	Refused	PP3
99	Don't know	PP3

PP3 Do you have any comments on the current incentive structure of the PROGRAM?

1	No	ID1
77	Yes - RECORD COMMENTS_____	ID1
88	Don't know	ID1
99	Refused	ID1

LONG TERM INFLUENCE

If NTG_TYPE = 2

IF N3f > 4, THEN ASK, ELSE CCC12A

Now I'd like you to think about your organization's experiences with %UTILITY's energy efficiency programs and efforts over the longer term, for example, over the past 5, 10, or even 20 years.

In an earlier question, you indicated that your previous experience with utility energy efficiency programs was a factor that influenced your decision to implement this PROJECT. I would like to ask you a few questions about this experience.

LT2 For how many years have you been participating in UTILITY's energy efficiency PROGRAM(s)?

# yrs	Record Number of Years	LT3
88	Refused	LT3
99	Don't know	LT3

LT3 During this time, how many times has your organization participated in these PROGRAM(s)?

1	7 to 10 times, or more	CA6
2	4 to 7 times	CA6
3	2 to 4 times	CA6
4	less than 2 times	CA6
88	Refused	LT6
99	Don't know	LT6

IF LT3(1||4);

CA6 What type of equipment did you install through this (these) program(s)? [READ RESPONSE CATEGORIES]

1	Indoor lighting	LT6
2	Cooling equipment	LT6
3	Natural gas equipment, such as water heater, furnace or appliances	LT6
4	Insulation or windows	LT6
5	Refrigeration	LT6
6	Industrial process equipment	LT6
7	Greenhouse heat curtains	LT6

8	Food service equipment	LT6
77	OPEN \SOMETHING OTHER (specify)	LT6
88	Refused	LT6
99	Don't Know	LT6

LT6 What factors led you to participate in these program(s)?

77	Record VERBATIM	LT7
88	Refused	LT7
99	Don't know	LT7

LT7 And exactly how did that experience help to convince you to install this lighting equipment?

77	Record VERBATIM	LT8
88	Refused	LT8
99	Don't know	LT8

IF LT3 = 1 or 2, THEN ASK. ELSE CCC12A.

LT8 Have these programs had any long-term influence on your organization's energy efficiency related practices and policies that go beyond the immediate effect of incentives on individual projects? [DO NOT READ: Examples are causing them to add energy efficiency procurement policies, internal incentive or reward structures for improving energy efficiency, or adoption of energy management best practices.]

1	Yes	LT9
2	No	CC12A
88	Refused	CC12A
99	Don't know	CC12A

If LT8 = 1 then ask; else skip to CA2;

LT9 Has your organization developed a specification policy for the selection of energy-efficient equipment? [EXAMPLES... REQUIREMENTS THAT ALL NEW FLUORESCENT LIGHTING SYSTEMS USE ELECTRONIC BALLAST, OR THAT ALL NEW MOTORS BE PREMIUM EFFICIENCY]

1	Yes	LT10
2	No	LT10
88	Refused	LT10
99	Don't know	LT10

LT10 Has your organization assigned responsibility for controlling energy usage and costs to any of the following?

1	An in-house staff person	LT11
2	A group of staff	LT11
3	An outside contractor	LT11
4	NONE OF THESE	LT11
88	Refused	LT11
99	Don't know	LT11

LT11 Does your organization have any internal incentive or reward policies for business units or staff responsible for managing energy costs?

1	Yes	LC7
2	No	CA2

88	Refused	CA2
99	Don't know	CA2

LC7 How do these incentive/reward structures work?

77	OPEN/Record	CA2
88	Refused	CA2
99	Don't know	CA2

CA2 In marketing materials or in communications with customers, does your company highlight the ways in which your business is environmentally conscious?

1	Yes	RETURN TO PROGRAM LIGHTING EQUIPMENT BATTERY
2	No	RETURN TO PROGRAM LIGHTING EQUIPMENT BATTERY
77	OPEN\RECORD OTHER	RETURN TO PROGRAM LIGHTING EQUIPMENT BATTERY
88	Refused	RETURN TO PROGRAM LIGHTING EQUIPMENT BATTERY
99	Don't know	RETURN TO PROGRAM LIGHTING EQUIPMENT BATTERY

LIGHTING SPILLOVER

If LI30 ^= 100; else skip to CL1

READ Comment IF &Program LIGHTING PARTICIPANT

Comment	Thanks for discussing the new lighting equipment that you installed through the program. Next I would like to discuss any lighting equipment you might have installed OUTSIDE of the program	L_MSP1

ASK ALL

L_MSP1 Since January 2010 have you purchased and installed any lighting on your own without any assistance from the &Utility &Program or another utility program either at this facility or at other locations?

1	Yes, only at this facility	LSP2
2	Yes, only at other locations	LSP2
3	Yes, at this facility and other locations	LSP2
4	No	T12Intro
88	Refused	T12Intro
99	Don't know	T12Intro

If L_MSP1 in (1-3); else skip to CL1

LSP2 What type of fixtures, ballasts, or lighting controls were installed as part of this lighting retrofit that was done without any assistance from your utility? [SELECT ALL THAT APPLY, AFTER EACH RESPONSE, PROMPT WITH,]

		LIGHT_TECH1B
1	High performance T8 fluorescent fixtures (1” diameter bulbs)	High
2	T8 fluorescent fixtures (1” diameter bulbs)	High
3	T10 fluorescent fixtures	Low

4	T12 Fixtures (1.5” diameter bulbs)	Low
5	HID (High Density Discharge) Fixtures, Compact	High
6	Compact Fluorescent, Screw-in Modular	High
7	Compact Fluorescent, Hardwire	High
8	Incandescent	None
9	Exit Signs, Compact Fluorescent	High
10	Exit Signs, LED	High
11	Halogen	Low
12	Install Reflectors	High
13	Electronic Ballast	Low
14	Magnetic Ballast	Low
15	Lighting Controls, Time Clock	High
16	Lighting Controls, Occupancy Sensors	High
17	Lighting Controls, Bypass/Delay Timers	High
18	Lighting Controls, Photocell	High
19	Other Fluorescent	Low
20	Fat/Thick Tubes	Low
21	Skinny/Thin Tubes	High
22	T5 Fixtures (5/8” diameter)	High
23	Generic LED (Screw Based)	High
24	Screw-in LEDs Reflector Lamps	High
25	LED Fixtures or Panels (e.g., replacement for linear fixtures)	High
77	Other (PLEASE SPECIFY)	Low
88	Refused	None
99	Don't Know	None

ASK IF LSP2=5 ; ELSE SKIP TO MSP2A

LI17 Were the HID lamps you installed High Pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?

1	High pressure sodium	Loop
2	Metal Halide	Loop
3	Mercury Vapor	Loop
4	Incandescent	Loop
88	Refused	Loop
99	Don't know	Loop

Loop **LOOP THROUGH MSP2 TO MSP26**

ASK IF LIGHT_TECH1B = High; Else Skip to MSP26

READ: Now I would like to ask you a few questions about the &LIGHT_TECH1B that you purchased outside the program.

If L_MSP1 in (1-2); else skip to MSP2B

MSP2A How many &LIGHT_TECH1B did you purchase for this facility?

1	{Record Number} for this facility	MSP2B
88	Refused	MSP2B
99	Don't know	MSP2B

If L_MSP1 in (2-3)

MSP2B How many &LIGHT_TECH1B products did you buy on your own for other locations?

1	{Record Number} for another facility	MSP4

88	Refused	MSP4
99	Don't know	MSP4

I'm going to read a statement about this equipment that you purchased on your own. On a scale from 1-10, with 1 indicating that you strongly disagree, and 10 indicating that you strongly agree, please rate the following statement.

MSP4 My experience with the 2010-2012 &Utility &Program influenced my decision to install different types of high efficiency equipment on my own.

	{Record Response (1-10)} _____	MSP5
88	Refused	MSP5
99	Don't Know	MSP5

If MSP4 > 5 then ask; Else skip to MSP6;

MSP5 Why do you give it this rating?

77	Record VERBATIM	MSP17
88	Don't know	MSP17
99	Refused	MSP17

MSP17 Why did you purchase this lighting without the financial assistance available through &Utility program? {DO NOT READ; INDICATE ALL THAT APPLY}

1	Too much paperwork	MSP19
2	Takes too long to get approval	MSP19
3	No time to participate, needed equipment immediately	MSP19
4	The program had ended	MSP19
5	The equipment would not qualify {PROBE: Why not?}	MSP19
6	The amount of the rebate wasn't important enough	MSP19
7	Did not know the program was available	MSP19
8	There was no program available	MSP19
77	Other {SPECIFY}	MSP19
88	Refused	MSP19
99	Don't know	MSP19

MSP19 Was this measure specifically recommended by a PROGRAM/UTILITY sponsored audit, report or program technical specialist?

1	Yes	MSP20
2	No	MSP20
88	Refused	MSP20
99	Don't know	MSP20

MSP20 If you had not participated in the Program, how likely is it that your organization would still have implemented this measure, using a 0 to 10 scale where 0 means you definitely WOULD NOT have implemented this measure and 10 means you definitely WOULD have implemented this measure?

#	Record 0 to 10 likelihood rating (_____)	MSP23
88	Refused	MSP23
99	Don't know	MSP23

ASK ALL LIGHTING ADOPTERS

MSP23 In what year did you install &LIGHT_TECH1B? (PROBE FOR BEST GUESS)

1	2010	MSP24
2	2011	MSP24
88	Refused	MSP25
99	Don't know	MSP24

MSP24 And in which month? If you cannot get month, try to get the season.

1	January	MSP25
2	February	MSP25
3	March	MSP25
4	April	MSP25
5	May	MSP25
6	June	MSP25
7	July	MSP25
8	August	MSP25
9	September	MSP25
10	October	MSP25
11	November	MSP25
12	December	MSP25
13	Fall	MSP25
14	Winter	MSP25
15	Spring	MSP25
16	Summer	MSP25
88	Refused	MSP25
99	Don't know	MSP25

MSP25 Did you receive a rebate for the purchase of the &LIGHTING_TECH1B?

1	Yes	MSP26
2	No	MSP26
88	Refused	MSP26
99	Don't know	MSP26

ASK IF LIGHT_TECH1B = Low and LOOP; Else Skip to CFL_Comment

Next I'd like to ask you a few questions about the equipment that was removed and replaced when you installed the &LIGHT_TECH1B…

MSP26 What type of lighting was removed and replaced when you installed &LIGHT_TECH1B?

1	High performance T8 (1" diameter bulbs)	MSP27
2	T8 fluorescent fixtures (1” diameter bulbs)	MSP27
3	T10 fluorescent fixtures	MSP27
4	T12 Fixtures (1.5” diameter bulbs)	MSP27
5	HID (High Density Discharge) Fixtures, Compact	MSP27
6	Compact Fluorescent, Screw-in Modular	MSP27
7	Compact Fluorescent, Hardwire	MSP27
8	Incandescent	MSP27
9	Exit Signs, Compact Fluorescent	MSP27
10	Exit Signs, LED	MSP27

11	Halogen	MSP27
12	Install Reflectors	MSP27
13	Electronic Ballast	MSP27
14	Magnetic Ballast	MSP27
15	Lighting Controls, Time Clock	MSP27
16	Lighting Controls, Occupancy Sensor	MSP27
17	Lighting Controls, Bypass/Delay Timers	MSP27
18	Lighting Controls, Photocell	MSP27
19	Other Fluorescent	MSP27
20	Fat/Thick Tubes	MSP27
21	Skinny/Thin Tubes	MSP27
22	T5 Fixtures (5/8" diameter)	MSP27
66	NOTHING, EQUIPMENT WAS ONLY ADDED, NOT REPLACED	MSP27
77	Other (PLEASE SPECIFY)	MSP27
88	Refused	MSP27
99	Don't know	MSP27

MSP27 Approximately how old was this light equipment that you removed/replaced? Would you say…

1	Less than 5 years old	MSP28
2	Between 5 and 10 years old	MSP28
3	Between 10 and 15 years old	MSP28
4	More than 15 years old	MSP28
88	Refused	MSP28
99	Don't know	MSP28

MSP28 How would you describe the condition of this removed equipment? Would you say they were…

1	In poor condition	MSP29
2	Fair condition, or	MSP29
3	Good condition	MSP29
88	Refused	MSP29
99	Don't know	MSP29

MSP29 Approximately what percentage of this removed lighting equipment was broken or not working prior to installing…

%	Percent	CFL_Comment
88	Refused	CFL_Comment
99	Don't know	CFL_Comment

CFL_Comment	I'd like to ask you some specific questions about the CFLs you purchased outside of your participation in the program.	CFL1A

Ask if LSP2 = 6 and CFL_Flag = 1 or LI100 = 5

CFL1A Where did you purchase the CFLs? [ACCEPT MULTIPLES]

1	Home Depot	CFL3
2	Costco	CFL3
3	Orchard Supply Hardware	CFL3
4	ACE Hardware	CFL3
5	Lowe's	CFL3

6	SaveMart	CFL3
7	K-Mart	CFL3
8	Sam's Club	CFL3
9	Smart & Final	CFL3
10	Yardbirds Home Center	CFL3
11	Fry's Electronics	CFL3
12	True Value	CFL3
65	CONTRACTOR INSTALLED	CFL3
77	OTHER [Specify:]	CFL3
88	Refused	CFL3
99	Don't know	CFL3

CFL3 Were all these CFLs installed or were some put in storage for later use?

1	All installed	LI30_A
2	All in storage	CFL5
3	Some in storage, Some installed	CFL4
88	Refused	LI30_A
99	Don't Know	LI30_A

IF CFL3 = 3

CFL4 What percentage were installed?

77	Open Record	CFL5
88	Refused	CFL5
99	Don't know	CFL5

IF CFL3 = in (2, 3)

CFL5 Why were they put in storage?

77	Open Record	LI30_A
88	Refused	LI30_A
99	Don't know	LI30_A

LI30_A Considering all of the lighting changes we just discussed (purchases outside the programs), approximately what percentage of the facility's lighting was affected by those changes?

%	Percent	T12Intro
101	Refused	T12Intro
102	Don't know	T12Intro

USE OF T12s AND AWARENESS OF T12 PHASE OUT

T12Intro I would now like to ask you some questions about your familiarity with a change in the law that affects the production and availability of certain less efficient linear fluorescent lamps.

If LI1 = (4, 11) and LSP2 = (4, 20) skip to T12_1a

T12_1 Do you currently use T12 fluorescent lamps for any of your lighting needs? These would be linear fluorescent tubes that are 1.5" in diameter or are fatter/thicker than other linear fluorescent lamps.

1	Yes	T12_1a
2	No	T12_1a
88	Refused	T12_1a
99	Don't Know	T12_1a

If LI101D = (4, 21) or LI20[A-C] = (4, 21) THEN SKIP TO T12_1b

T12_1a Have you retrofitted any T12 linear fluorescent lighting systems to more energy efficient linear fluorescent lighting such as T8s or T5s within the last year?

1	Yes	T12_1b
2	No	T12_2
88	Refused	T12_2
99	Don't Know	T12_2

If T12_1 = 2 AND T12_1a = 2, GO TO CL1

If T12_1a = 1 or LINEAR = 1 or LF_DELAMP = 1, ASK;

T12_1b For what percent of the linear fluorescent lighting that you've retrofitted in the last year did you receive rebates from your utility? Your best estimate is fine.

77	RECORD percent	T12_2
101	Refused	T12_2
2	Don't Know	T12_2

IF T12_1 = 2, THEN SKIP TO T12_3. IF LI1 IN (4, 11) OR LSP2 = (4, 20), READ: "Earlier you mentioned that you use T12s or fat/thick linear fluorescent tubes for some of your lighting needs." ELSE CONTINUE WITH T12_2

T12_2 Do you carry an inventory of T12 linear fluorescent lamps to use when your existing ones burn out?

1	Yes	T12_2a
2	No	T12_3
88	Refused	T12_3
99	Don't Know	T12_3

T12_2a How long do you estimate your inventory of T12 fluorescent lamps will last?

77	RECORD length of time	T12_3
88	Refused	T12_3
99	Don't Know	T12_3

T12_3 Are you aware of the new law that came into effect in July of 2012 that has phased out the production of most T12 linear fluorescent lamps?

1	Yes	T12_5
2	No	T12_4
88	Refused	T12_4
99	Don't Know	T12_4

T12_4 You may have heard that the Department of Energy has issued a mandate that prohibits the production of less efficient fluorescent lighting systems. As of last July, the production of many T12 lamps has been phased out. Does this sound familiar?

1	Yes	T12_5
2	No	T&T
88	Refused	T&T
99	Don't Know	T&T

T12_5 How did you become aware of the law affecting the production of T12 lamps? [ALLOW MULTIPLES]

1	From a lighting retailer/vendor	T12_6

2	Utility account representative	T12_6
3	Utility program representative	T12_6
4	Utility or program website	T12_6
5	Contractor	T12_6
6	Lighting manufacturer - if selected, ask which one and RECORD	T12_6
8	Energy services company	T12_6
9	Newspaper article	T12_6
10	Radio	T12_6
11	Internet	T12_6
12	Trade publication	T12_6
13	Conference	T12_6
14	Word of mouth	T12_6
15	Result of an audit	T12_6
77	Other (RECORD VERBATIM)	T12_6
88	Refused	T12_6
99	Don't know	T12_6

ASK IF LI101D IN (4, 21) OR LI20[A-C] IN (4, 21) OR T12_1a = 1; ELSE SKIP TO T12_20

T12_6 Did you choose to replace your T12 lamps to higher efficiency linear fluorescent lighting because of the T12 phase out?

1	Yes	T12_7
2	No	T12_20
88	Refused	T12_20
99	Don't Know	T12_20

ASK IF T12_6 = 1

T12_7 Do you think the T12 phase out has had an influence on your decisions to retrofit your T12 systems earlier than you otherwise would have?

1	Yes	T12_8
2	No	T12_20
88	Refused	T12_20
99	Don't Know	T12_20

T12_8 How much earlier did you retrofit your T12 lighting systems due to the T12 phase out?

1	6 months earlier than they would have	T12_10
2	between 6 months and 1 year earlier	T12_10
3	1 to 2 years earlier	T12_10
4	2 to 4 years earlier	T12_10
5	4 to 7 years earlier	T12_10
77	Other - RECORD	T12_10
88	Refused	T12_10
99	Don't Know	T12_10

T12_10 On a scale of 0 to 10 where 10 means completely influential and 0 means not at all influential, how influential was the T12 phase out on your decision to retrofit your T12 lighting system?

77	RECORD 0 TO 10	T12_20
88	Refused	T12_20
99	Don't Know	T12_20

ASK IF T12_1 = 1 OR LI1 IN (4, 11) OR LSP2 IN (4, 20)

T12_20 Because of the T12 phase out, have you thought about replacing your T12 linear fluorescent lighting to higher efficiency linear fluorescent lighting?

1	Yes	T12_21
2	No	T12_21
88	Refused	T12_21
99	Don't Know	T12_21

T12_21 On a scale of 0 to 10 where 10 means extremely likely and 0 means not at all likely, how likely are you to replace your T12 fixtures with a lighting system that is the minimum allowable level of efficiency within the next year as a result of the T12 phase out?

77	RECORD 0 TO 10	T12_22
88	Refused	T12_22
99	Don't Know	T12_22

T12_22 On a scale of 0 to 10 where 10 means extremely likely and 0 means not at all likely, how likely are you to replace your T12 fixtures with a lighting system that is better than the minimum allowable level of efficiency within the next year as a result of the T12 phase out?

77	RECORD 0 TO 10	T&T
88	Refused	T&T
99	Don't Know	T&T

OTHER END USES

ASK ALL

CL1 What type of equipment is used to cool this facility? (allow multiples)

1	**No A/C**	R1
2	**Split system** (two components; compressor is separate from the supply air fan, air conditioner, or heat pump)	CL2
3	**Packaged systems** (one component; rooftop units)	CL2
4	**Package Terminal A/C or Heat Pump** (e.g., Hotel/Motel units)	CL2
5	**Evaporative coolers** (swamp coolers)	CL2
6	**Water or Air Chiller** (Central plant)	CL2
7	**Window/Wall Units**	CL2
77	Other (Specify)	CL2
88	Refused	CL2
99	Don't Know	CL2

If CL1 ^= 1; else skip to R1

CL2 What is the primary fuel used by this cooling equipment?

1	Electricity	R1
2	Natural Gas	R1
3	Both Electricity and Gas	R1
77	Other (PLEASE SPECIFY)	R1

88	Refused	R1

Now I would like to ask you a couple of questions about your **refrigeration** equipment.

R1 What kinds of refrigeration equipment, if any, is present at your facility? [DO NOT READ]

1	Residential Sized Refrigerator	G1
2	Residential Sized Freezer	G1
3	Larger Standard Refrigerator (>30 cubic feet)	G1
4	Self-Contained - Coffin/Horizontal Case	G1
5	Self-Contained - Vertical Case (multi shelf)	G1
6	Single-Deck display cases - Open single-deck	G1
7	Single-Deck display cases - Closed service case	G1
8	Single-Deck display cases - Island coffin/tub (shop around)	G1
9	Single-Deck display cases - Coffin/tub (one-side shopping)	G1
10	Multi-Deck (vertical) display cases - Open/reach-in multi-deck	G1
11	Multi-Deck (vertical) display cases - Glass-door cases	G1
12	Walk-Ins and Preparation Areas - Freezer/Low Temp	G1
13	Walk-Ins and Preparation Areas - Cooler/Med Temp	G1
66	NONE - no refrigeration equipment	G1
77	Other Refrigeration (Specify)	G1
88	Refused	G1
99	Don't know	G1

G1 Which of the following natural gas equipment is present at your facility?

1	Water Heater	GH1
2	Furnace	GH1
3	Boiler	GH1
4	Stove	GH1
5	Clothes Dryer	GH1
66	NONE … Don't use Natural Gas	GH1
77	Other (specify)	GH1
88	Refused	GH1
99	Don't know	GH1

GH1 Do you have greenhouses at your facility?

1	Yes	GH2
2	No	ST1
88	Refused	ST1
99	Don’t know	ST1

Ask if GH1 = 1; Else skip to ST1;

GH2 How many square feet of greenhouses do you have at your facility?

SQFT	Square feet	ST1
88	Refused	ST1
99	Don’t know	ST1

ST1 Do you have steam traps at your facility?

1	Yes	ST2
2	No	M1
88	Refused	M1

99	Don't know	M1

Ask if ST1 = 1; Else skip to M1

ST2 How many steam traps are currently installed at your facility? Just a rough estimate would be fine.

	Number of Steam traps	M1
88	Refused	M1
99	Don't know	M1

M1 Do you currently have any motors installed in your facility?

1	Yes	M2
2	No	OT2
88	Refused	OT2
99	Don't know	OT2

Ask if M1 = 1; Else skip to OT2;

M2 How many motors are currently installed at your facility? Just a rough estimate would be fine.

	Number of Motors	M3
88	Refused	M3
99	Don't know	M3

M3 What two or three applications account for most of the *motor* energy used in your facility?

1	Pumping	OT2
2	Fans/Blowers	OT2
3	Compressed Air	OT2
4	Materials handling (conveyor belts)	OT2
5	Production process machinery	OT2
6	Ventilation/HVAC	OT2
7	Boiler fans	OT2
77	Other (Specify)	OT2
88	Refused	OT2
99	Don't Know	OT2

OT2 Besides what we have already covered, since January 2009, have you added or replaced other equipment that is expected to significantly affect overall energy consumption (This includes Refrigeration, Cooling, Heating, and Gas Equipment)?

1	Yes	OT3
2	No	ALWAYS
88	Refused	ALWAYS
99	Don't know	ALWAYS

Ask if OT2 = 1; Else skip to ALWAYS;

OT3 Which of the following types of equipment were installed since January 2010? (READ FIRST FOUR THEN ASK FOR OTHER)

		&OTHEREQUIP 1
1	Food Service Equipment	OT5
2	Water Heating Equipment	OT5
3	Outdoor Lighting Equipment	OT5
4	Compressed Air Equipment	OT5
5	Heating, Ventilation, Air Conditioning or other Cooling equipment	OT5
6	Refrigeration Equipment	OT5

7	Gas Equipment	OT5
77	Other (SPECIFY) – 1st mention	OT5
88	Refused	ALWAYS
99	Don't Know	ALWAYS

For the first three equipment types mentioned in OT3, ask OT5 through OT18

Question name endings have e_# associated with the response # from OT3

OT5 Please describe the type of &OTHEREQUIP1 that was installed?

77	Record verbatim	OT6
88	Refused	OT6
99	Don't know	OT6

OT6 Please describe the quantity of &OTHEREQUIP1 that was installed?

77	Record verbatim	OT7
88	Refused	OT7
99	Don't know	OT7

OT7 Please describe the efficiency level of &OTHEREQUIP1 that was installed?

1	Standard Efficiency	OT10
2	High Efficiency	OT10
3	Energy Star	OT10
88	Refused	OT10
99	Don't know	OT10

OT10 In what year did you install OTHEREQUIP1?

1	2009	OT11
2	2010	OT11
3	2011	OT11
88	Refused	OT18
99	Don't know	OT18

OT11 And can you recall which month? If cannot get month – ask for season

1	January	OT18
3	March	OT18
4	April	OT18
5	May	OT18
6	June	OT18
7	July	OT18
8	August	OT18
9	September	OT18
10	October	OT18
11	November	OT18
12	December	OT18
13	Fall	OT18
14	Winter	OT18
15	Spring	OT18
16	Summer	OT18
88	Refused	OT18
99	Don't know	OT18

Ask if OT7 in (2-3); else skip to ALWAYS;

OT18 Did you receive a rebate for the purchase of &OTHEQUIP1?

1	Yes	ALWAYS
2	No	ALWAYS
88	Refused	ALWAYS
99	Don't know	ALWAYS

OPERATING HOURS

We are almost finished. The next few questions are to help us get a full understanding of your organization's operational hours.

ALWAYS Is your organization operation 24 hours a day, 7 days a week?

1	Yes	HOLIDAYS
2	No	HOLIDAYS
88	Refused	HOLIDAYS

HOLIDAYS Does your facility closed for any holidays during the year? If so, which one(s)?

1	New Year's Day - January 1	DAYS
2	Martin Luther King Jr. Day - January 18, 2010 (3rd Monday in January)	DAYS
3	President's Day - February 15, 2010 (3rd Monday in February)	DAYS
4	Memorial Day - May 31, 2010 (Last Monday in May)	DAYS
5	Independence Day - July 4th (Or Surrounding Monday/Friday if July 4 is a weekend)	DAYS
6	Labor Day - September 6, 2010 (First Monday in September)	DAYS
7	Thanksgiving - November 26, 2010 (4th Thursday in November)	DAYS
8	Day after Thanksgiving	DAYS
9	Christmas Eve - December 24	DAYS
10	Christmas Day - December 25	DAYS
66	NO HOLIDAY CLOSURES	DAYS
77	Other - Specify	DAYS
88	Refused	DAYS
99	Don't Know	DAYS

Ask if ALWAYS = 2; else skip to OS_REC;

DAYS Is your facility closed any of the 7 days of the week? If so, which days are you CLOSED?

1	Monday	MONDAY_OPEN
2	Tuesday	MONDAY_OPEN
3	Wednesday	MONDAY_OPEN
4	Thursday	MONDAY_OPEN
5	Friday	MONDAY_OPEN
6	Saturday	MONDAY_OPEN

7	Sunday	MONDAY_OPEN
66	Open EVERYDAY	MONDAY_OPEN
88	REFUSED	MONDAY_OPEN
99	DON'T KNOW	MONDAY_OPEN

Ask if DAYS ~= 1; else skip to TUESDAY_OPEN;

MONDAY_OPEN What time do you open your facility on MONDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	MONDAY_CLOSE
88	REFUSED	MONDAY_CLOSE
99	DON'T KNOW	MONDAY_CLOSE

MONDAY_CLOSE What time do you close your facility on MONDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	TUESDAY_OPEN
88	REFUSED	TUESDAY_OPEN
99	DON'T KNOW	TUESDAY_OPEN

Ask if DAYS ~= 2; else skip to WEDNESDAY_OPEN;

TUESDAY_OPEN What time do you open your facility on TUESDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	TUESDAY_CLOSE
88	REFUSED	TUESDAY_CLOSE
99	DON'T KNOW	TUESDAY_CLOSE

TUESDAY_CLOSE What time do you close your facility on TUESDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	WEDNESDAY_OPEN
88	REFUSED	WEDNESDAY_OPEN
99	DON'T KNOW	WEDNESDAY_OPEN

Ask if DAYS ~= 3; else skip to THURSDAY_OPEN;

WEDNESDAY_OPEN What time do you open your facility on WEDNESDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	WEDNESDAY_CLOSE
88	REFUSED	WEDNESDAY_CLOSE
99	DON'T KNOW	WEDNESDAY_CLOSE

WEDNESDAY_CLOSE What time do you close your facility on WEDNESDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	THURSDAY_OPEN
88	REFUSED	THURSDAY_OPEN
99	DON'T KNOW	THURSDAY_OPEN

Ask if DAYS ~= 4; else skip to FRIDAY_OPEN;

THURSDAY_OPEN What time do you open your facility on THURSDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	THURSDAY_CLOSE
88	REFUSED	THURSDAY_CLOSE
99	DON'T KNOW	THURSDAY_CLOSE

THURSDAY_CLOSE What time do you close your facility on THURSDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	FRIDAY_OPEN
88	REFUSED	FRIDAY_OPEN
99	DON'T KNOW	FRIDAY_OPEN

Ask if DAYS ~= 5; else skip to SATURDAY_OPEN;

FRIDAY_OPEN What time do you open your facility on FRIDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	FRIDAY_CLOSE
88	REFUSED	FRIDAY_CLOSE
99	DON'T KNOW	FRIDAY_CLOSE

FRIDAY_CLOSE What time do you close your facility on FRIDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	SATURDAY_OPEN
88	REFUSED	SATURDAY_OPEN
99	DON'T KNOW	SATURDAY_OPEN

Ask if DAYS ~= 6; else skip to SUNDAY_OPEN;

SATURDAY_OPEN What time do you open your facility on SATURDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	SATURDAY_CLOSE
88	REFUSED	SATURDAY_CLOSE
99	DON'T KNOW	SATURDAY_CLOSE

SATURDAY_CLOSE What time do you close your facility on SATURDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	SUNDAY_OPEN
88	REFUSED	SUNDAY_OPEN
99	DON'T KNOW	SUNDAY_OPEN

Ask if DAYS ~= 7; else skip to DIFF_SCHEDULE;

SUNDAY_OPEN What time do you open your facility on SUNDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	SUNDAY_CLOSE
88	REFUSED	SUNDAY_CLOSE
99	DON'T KNOW	SUNDAY_CLOSE

SUNDAY_CLOSE What time do you close your facility on SUNDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	DIFF_SCHEDULE
88	REFUSED	DIFF_SCHEDULE
99	DON'T KNOW	DIFF_SCHEDULE

DIFF_SCHEDULE Some organizations have different schedules for certain times of the year. Does your organization maintain a different schedule for certain months of the year?

1	Yes	MONTHS
2	No	OS_REC
88	REFUSED	OS_REC
99	DON'T KNOW	OS_REC

MONTHS **Ask if DIFF_SCHEDULE = 1; Else skip to OS_REC;**
Which months of the year does the schedule vary from the times I just recorded?

1	January	ALT_DAYS
2	February	ALT_DAYS
3	March	ALT_DAYS
4	April	ALT_DAYS
5	May	ALT_DAYS
6	June	ALT_DAYS
7	July	ALT_DAYS
8	August	ALT_DAYS
9	September	ALT_DAYS
10	October	ALT_DAYS
11	November	ALT_DAYS
12	December	ALT_DAYS
88	REFUSED	ALT_DAYS
99	DON'T KNOW	ALT_DAYS

ALT_ALWAYS Is your organization operation 24 hours a day, 7 days a week?

1	Yes	HOLIDAYS
2	No	HOLIDAYS
88	Refused	HOLIDAYS

ALT_DAYS **If ALT_ALWAYS~=1 then ask; Else skip to OS_REC;**
During this alternate schedule, is your facility closed any of the 7 days of the week? If so, which days are you CLOSED?

1	Monday	ALT_MONDAY_OPEN
2	Tuesday	ALT_MONDAY_OPEN
3	Wednesday	ALT_MONDAY_OPEN
4	Thursday	ALT_MONDAY_OPEN
5	Friday	ALT_MONDAY_OPEN
6	Saturday	ALT_MONDAY_OPEN

7	Sunday	ALT_MONDAY_OPEN
66	Open EVERYDAY	ALT_MONDAY_OPEN
88	REFUSED	ALT_MONDAY_OPEN
99	DON'T KNOW	ALT_MONDAY_OPEN

Ask if ALT_DAYS ~= 1; else skip to ALT_TUESDAY_OPEN;

ALT_MONDAY_OPEN For the alternate schedule, what time do you open your facility on MONDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_MONDAY_CLOSE
88	REFUSED	ALT_MONDAY_CLOSE
99	DON'T KNOW	ALT_MONDAY_CLOSE

ALT_MONDAY_CLOSE What time do you close your facility on MONDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_TUESDAY_OPEN
88	REFUSED	ALT_TUESDAY_OPEN
99	DON'T KNOW	ALT_TUESDAY_OPEN

Ask if ALT_DAYS ~= 2; else skip to ALT_WEDNESDAY_OPEN;

ALT_TUESDAY_OPEN What time do you open your facility on TUESDAY during your alternate schedule?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_TUESDAY_CLOSE
88	REFUSED	ALT_TUESDAY_CLOSE
99	DON'T KNOW	ALT_TUESDAY_CLOSE

ALT_TUESDAY_CLOSE What time do you close your facility on TUESDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_WEDNESDAY_OPEN
88	REFUSED	ALT_WEDNESDAY_OPEN
99	DON'T KNOW	ALT_WEDNESDAY_OPEN

Ask if ALT_DAYS ~= 3; else skip to ALT_THURSDAY_OPEN;

ALT_WEDNESDAY_OPEN What time do you open your facility on WEDNESDAY during your alternate schedule?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_WEDNESDAY_CLOSE
88	REFUSED	ALT_WEDNESDAY_CLOSE
99	DON'T KNOW	ALT_WEDNESDAY_CLOSE

ALT_WEDNESDAY_CLOSE What time do you close your facility on WEDNESDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_THURSDAY_OPEN
88	REFUSED	ALT_THURSDAY_OPEN
99	DON'T KNOW	ALT_THURSDAY_OPEN

Ask if ALT_DAYS ~= 4; else skip to ALT_FRIDAY_OPEN;

ALT_THURSDAY_OPEN — What time do you open your facility on THURSDAY during your alternate schedule?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_THURSDAY_CLOSE
88	REFUSED	ALT_THURSDAY_CLOSE
99	DON'T KNOW	ALT_THURSDAY_CLOSE

ALT_THURSDAY_CLOSE — What time do you close your facility on THURSDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_FRIDAY_OPEN
88	REFUSED	ALT_FRIDAY_OPEN
99	DON'T KNOW	ALT_FRIDAY_OPEN

ALT_FRIDAY_OPEN — **Ask if ALT_DAYS ~= 5; else skip to ALT_SATURDAY_OPEN;** What time do you open your facility on FRIDAY during this alternate schedule?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_FRIDAY_CLOSE
88	REFUSED	ALT_FRIDAY_CLOSE
99	DON'T KNOW	ALT_FRIDAY_CLOSE

ALT_FRIDAY_CLOSE — What time do you close your facility on FRIDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_SATURDAY_OPEN
88	REFUSED	ALT_SATURDAY_OPEN
99	DON'T KNOW	ALT_SATURDAY_OPEN

ALT_SATURDAY_OPEN — **Ask if ALT_DAYS ~= 6; else skip to ALT_SUNDAY_OPEN;** I recorded that during your alternate schedule you are also open on Saturday. What time do you open your facility on SATURDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_SATURDAY_CLOSE
88	REFUSED	ALT_SATURDAY_CLOSE
99	DON'T KNOW	ALT_SATURDAY_CLOSE

ALT_SATURDAY_CLOSE — What time do you close your facility on SATURDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_SUNDAY_OPEN
88	REFUSED	ALT_SUNDAY_OPEN
99	DON'T KNOW	ALT_SUNDAY_OPEN

ALT_SUNDAY_OPEN — **Ask if ALT_DAYS ~= 7; else skip to OS_REC;** I recorded that during your alternate schedule you are also open on Sunday. What time do you open your facility on SUNDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_SUNDAY_CLOSE
88	REFUSED	ALT_SUNDAY_CLOSE

99	DON'T KNOW	ALT_SUNDAY_CLOSE

ALT_SUNDAY_CLOSE What time do you close your facility on SUNDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	OS_REC
88	REFUSED	OS_REC
99	DON'T KNOW	OS_REC

ONSITE RECRUITING

TO SCHEDULE INSTALLATION OF LIGHTING LOGGERS

If Logger_Flag = 1; Else Skip to Comment1

In order to improve this program's performance, &UTILITY would also like to make an accurate measurement of the energy savings associated with fluorescent lighting by collecting and analyzing information from selected customers.

If you agree to participate, Itron, on behalf of &UTILITY, will come to your business to install lighting logger devices on your lights to record when each light is in use. The lighting loggers would then be installed in an unobtrusive place and would be removed by us at the end of the research project. We expect the site visit to take about two hours. We'll come back and remove the logger devices within 3-6 months. Note, the electric use data will be used strictly for the study of the &Program and will not affect your electric service at all. You will need to sign a brief participation agreement.

LOG_REC Are you interested in participating in this project?

1	Yes	Comment2
2	No	Comment1
88	Refused	Comment1
99	Don't know	Comment1

TO SCHEDULE ONSITE VERIFICATION

COMMENT1 As we've discussed, the &Program is an important component of the California Public Utilities Commission's ongoing efforts to save energy and reduce emissions affecting climate change. In order to improve this program's performance, the CPUC would like to make an accurate measurement of the energy savings associated with energy efficiency equipment installed by collecting and analyzing information from selected customers.

Your input to this research is extremely important. By receiving a rebate through the &PROGRAM, your firm has agreed to allow verification of the installation of the equipment rebated through the program.

COMMENT2 Our verification technician will need to meet a facilities representative of your company. This should be either the manager of the facility or part of the facilities staff.

OS_NAME1 May I please have the name of the person who our technician can call you to set up an appointment time?

77	Record Name	OS_PHONE1
99	Don't know	T&T

OS_PHONE1 May I also have the best phone number for the technician to reach this person?

&OS_PHONE1	PHONE FOR PRIMARY CONTACT	OTHER
88	Refused	T&T
99	Don't know	T&T
OTHER	Is there another person that the engineer might speak with at your company, if this primary person is not available?	
&OTHER	Get name	OS_NAME2
88	Refused	T&T
99	Don't know	T&T
OS_NAME2	May I please have their name so our technician can call them at another time?	
&OS_NAME2	Get name	OS_PHONE2
88	Refused	T&T
99	Don't know	T&T
OS_PHONE2	May I also have the best phone number for the technician to reach them?	
&OS_PHONE2	Get phone number	HB_Lift
88	Refused	T&T
99	Don't know	T&T
	Ask if HighBay_Flag = 1 or HB1>1=13 or HB2 = 1 or HB1a = 1; Else skip to VERIFY;	
HB_Lift	Do you have some form or a lift or ladder available to reach the lighting at your facility that is located 13ft or more above ground?	
1	Yes	VERIFY
2	No	VERIFY
88	Refused	T&T
99	Don't know	T&T
OS_Business	Do you have a sign or business name other than &BUSINESS that our technicians should look for when they visit your site?	
1	Yes	OS_Bus_name
2	No	Vendor_Name
88	Refused	T&T
99	Don't know	T&T
OS_Bus_Name	What is the sign or business name they should be looking for?	
1	Get name	OS_REC
VENDOR_NAME	You mentioned that you had a vendor/contractor that helped you with the installation of the lighting equipment that was installed through the 2010-2012 &IOU &PROGRAM program. Can you give me his or her name? !!___Do you have his/her email address? !___Do you have a phone number for him/her? !___Do you have a cell phone number for him/her?\,	
77	RECORD NAME, Phone, Email ETC	VERIFY
88	Refused	VERIFY
99	Don't know	VERIFY
END.	Those are all the questions I have for today. Thank you for your time and help in this important study.	

Appendix B

WO29 Onsite Survey Instrument

CPUC 2012 Non-Residential Lighting Evaluation On-Site Verification Survey Form

General Site Information (from phone survey & IOU tracking database)

Itron SiteID			
Sample Strata		What to Do	
Evaluation Phase		What to Log	

Corporate (Multi-Site) Name			
Business Name (Tracking Data)			
Actual Business Name			
Service Address			
City		Zip Code	
CORRECTIONS TO SITE INFORMATION			
Revised Corp. (Multi-Site) Name			
Revised Business Name			
Revised Service Address			
Revised City		Revised Zip	

Site Contact Information

PS Completion Date:		Length (min)		Respondent:		Date of Install:	

	Contacted	Contact Name	Phone Number	Alternate Phone	Email Address
OS Primary	☐				
OS Back-up	☐				
OS Other	☐				

Note: Use the "Contacted" check box to indicate the actual contact(s) for the site visit.

Scheduling Notes/Special Instructions for On-site Visit: _____

Survey Tracking Information

Survey Company:		Assigned Surveyor's Initials:	
Survey Travel Mileage:	miles	Total Travel Time	hrs
Survey Duration (24 hr clock)	Start:	Survey Duration (24 hr clock)	End:
Total Onsite Time	hrs	Total Time to Fill Out Survey Form	hrs

	Date:	Initials
Field survey completed:	__ __ / __ __ / __ __	__ __ __
Survey received from surveyor:	__ __ / __ __ / __ __	__ __ __
Initial QC check completed:	__ __ / __ __ / __ __	__ __ __
Survey sent back to surveyor (*if needed*):	__ __ / __ __ / __ __	__ __ __
Received from surveyor (*if needed*):	__ __ / __ __ / __ __	__ __ __
Itron QC completed:	__ __ / __ __ / __ __	__ __ __
Data entry (DE) completed:	__ __ / __ __ / __ __	__ __ __
Logger extraction DE complete:	__ __ / __ __ / __ __	__ __ __
Follow-up Logger Extraction DE complete:	__ __ / __ __ / __ __	__ __ __

IOU Tracking Data Measure Summary Sheet

This is a summary of all of the measures implemented at this site as extracted from the IOU tracking database. All of the measures listed here should also be found on the measure-level verification forms.

Measure Category	Meas ID	Measure Code	IOU MeasureName	Unit Basis	Rebated # of Units	Reference Meas Code

Lighting Other Description

Measure Code	Revised MeasureName Description	Rebated # of Units

Phone Survey Self-Reported Measure Counts for Calculated kWh Measures

CATI Measure Category-RebatedUnits-UnitBasis	Self Report # of Units

Phone Survey CFL-Specific Information

CATI Measure Category	Self Report % in Storage	% Installed outside this Facility

CFLs: Self-Report # of CFLs bought Outside Program	

Phone Survey High Bay Information

High Bay?	Max Fixture Height (ft)	Access to fixtures via lift or ladder?

Custom Measure Summary

Meas ID	Measure Name	Measure State	Activity Area	Unit Basis	Qty	Lamps per Fixture	Length	Type	Watts

Site & Business Characteristics

PRIMARY BUSINESS TYPE CODE *(do not leave blank)*:		*(Use codes from Business Type Table on next page)*

Phone Survey	**Phone Survey Building Type:**	*FM050*
	Detailed Building Type:	*FM050a-j*

Primary Product or Service: Give a brief description about the type of work and/or primary product/service. What is the primary activity(ies) that occur here and what makes this premise unique from other businesses of this type?	
Recent Survey Area Changes: Give a brief description about any changes made to this site since January 2009 that significantly impacted energy usage.	
Percent of Site Lighting Retrofitted: What percent of the site lighting was retrofitted? Describe whether it was almost all of the lighting or just certain areas.	

Fields in this table will be populated as much as possible with data from the phone survey. However, any fields that are blank should be completed during the on-site verification. Any fields that are incorrect should also be corrected.

Electric Utility	PGE SCE SDGE SMUD LADWP OT _____		
Gas Utility	PGE SCG SDGE AllElec/None Propane LBGO SWG OT _____		
Is this premise owner-occupied (**O**) or leased (**L**)?	*CC4*	Revised	O L
How many full-time equivalent employees work at this premise?	*FM070*	Revised	
What is the total occupied floor area of this premise? (exclude prkg garage)	*CC2a / CC2b* ft^2	Revised	_____ft^2
-- If the premise has an enclosed parking garage, what is the floor area?	_____ft^2		
What percent of the total floor area is heated or cooled?	*CC2c / CC2d* %	Revised	_____%
How many buildings are part of this premise?			
What year was this business established at this location?	*CC12a*	Revised	
What year was the majority of the facility built?	*CC8*	Revised	
Cooling Type: 1=No A/C 2=Split-System 3=PkgRooftop 4=PTAC/PTHP 5=EvapCool 6=Chiller 7=IndivAC/HP 8=WLHP OT=Other		Revised	
Heating Fuel Type: 1=Electric 2=Gas 3=Both 4=Propane 5=None OT=Other		Revised	
What kind of site is this? **P** = Part of a bldg **B** = Single building **SM** = Small multi-building **CM** = Campus (multi-bldg, subsampled bldgs) **OT** = Other _____			
For single, stand-alone buildings or partial buildings: Number of stories/floors			

Premise-Level Schedule Definitions

Standard Holidays *(check all that apply)* ☐ N/A

Indicate below which, if any, standard holidays that the business is closed or operation deviates drastically from normal/typical operations, and indicate on Form BUS_HRS what the holiday operation hours are. Indicate any additional holidays in the comment block.

New Year's Eve	☐	July 4th Celebrated	☐
New Year's Day	☐	Labor Day	☐
New Year's Day Celebrated	☐	Columbus Day	☐
Martin Luther King Day	☐	Veterans' Day	☐
Presidents' Day	☐	Thanksgiving	☐
St. Patrick's Day	☐	Thanksgiving Friday	☐
Easter Sunday	☐	Christmas Eve	☐
Memorial Day	☐	Christmas Day	☐
Flag Day	☐	Christmas Day Celebrated	☐
July 4th	☐	Caesar Chavez Day	☐
Other (1) _____	☐	Other (2)_____	☐

Seasonal Operation Periods ☐ N/A

Define seasonal operation periods for significant periods of time where business hours and/or equipment operation differs significantly from normal or typical business hours and/or equipment operation. To indicate seasonal operation periods, provide a brief description of the period (e.g. "spring break", "winter break", "summer break", "extended holiday hours"), and list the beginning/ending months (1-12) and days for up to three time periods.

Typical Schedule			**Seasonal Time Period**					
1			**2**			**3**		
Description _____			Description _____			Description _____		
Begin Month/Day			Begin Month/Day			Begin Month/Day		
End Month/Day			End Month/Day			End Month/Day		
Begin Month/Day			Begin Month/Day			Begin Month/Day		
End Month/Day			End Month/Day			End Month/Day		
Begin Month/Day			Begin Month/Day			Begin Month/Day		
End Month/Day			End Month/Day			End Month/Day		

Holiday and Seasonal Operation Comments:

_____
_____
_____
_____
_____
_____

Business Schedule

Primary Business Hours

Define typical operation for <u>all</u> Day Types listed below and specify hours in military time (00 to 24). For partial (i.e. not full) operation days, also indicate the approximate % of full operation as Partial Op %.

Day Type	From Phone Survey	Corrected Business Hours	Closed All Day?	Open 24 hrs?	PartialOp%
Monday	from _____ to _____	from _____ to_____			
Tuesday	from _____ to _____	from _____ to_____			
Wednesday	from _____ to _____	from _____ to_____			
Thursday	from _____ to _____	from _____ to_____			
Friday	from _____ to _____	from _____ to_____			
Saturday	from _____ to _____	from _____ to_____			
Sunday	from _____ to _____	from _____ to_____			
Holidays	from _____ to _____	from _____ to_____			

Seasonal Operation Business Hours – Time Period 2

☐ N/A

Day Type	From Phone Survey	Corrected Business Hours	Closed All Day?	Open 24 hrs?	PartialOp%
Monday	from _____ to _____	from _____ to_____			
Tuesday	from _____ to _____	from _____ to_____			
Wednesday	from _____ to _____	from _____ to_____			
Thursday	from _____ to _____	from _____ to_____			
Friday	from _____ to _____	from _____ to_____			
Saturday	from _____ to _____	from _____ to_____			
Sunday	from _____ to _____	from _____ to_____			
Holidays	from _____ to _____	from _____ to_____			

Seasonal Operation Business Hours – Time Period 3

☐ N/A

Day Type	Business Hours	Closed All Day?	Open 24 hrs?	PartialOp%
Monday	from _____ to_____	Y N	Y N	
Tuesday	from _____ to_____	Y N	Y N	
Wednesday	from _____ to_____	Y N	Y N	
Thursday	from _____ to_____	Y N	Y N	
Friday	from _____ to_____	Y N	Y N	
Saturday	from _____ to_____	Y N	Y N	
Sunday	from _____ to_____	Y N	Y N	
Holidays	from _____ to_____	Y N	Y N	

Activity Area Definitions

Activity Area ID# Assignments *Identify an Area ID# for each distinct Activity Area type within the surveyed area. Indicate each area on the Site Plan sketch, Form PREM_SKETCH. Also consider lighting system controls and operation when defining these areas.*

Area ID#	Activity Area Code (AA Code)	Surveyor's Description of Area (include floor and Bldg identifiers if needed)	% of Total Premise Floor Area	Windows or Skylights	Conditioned Space Type Code	Total Qty of this Area Type On-site
1				W S		
2				W S		
3				W S		
4				W S		
5				W S		
6				W S		
7				W S		
8				W S		
9				W S		
10				W S		
11				W S		
12				W S		
13				W S		
14				W S		
15				W S		
16				W S		
17				W S		
18				W S		
19				W S		
20				W S		
21				W S		
22				W S		
23				W S		
24				W S		
25				W S		

Conditioned Space Type Codes				
CH = Cooled & Heated	CL = Only Cooled	HT = Only Heated	ECH = EvapCooled & Heated	ECL = Only EvapCool
NU = HVAC present but not used	RF = Refrigerated	UN = Unconditioned	OU = Outside	OT = Other (describe in comments)

COMMENTS:

Premise/Site-Plan Sketch

This sketch should provide a high-level view of the premise and its surroundings as it is actually configured. Attach site plans and floor plans available from other sources. Sketch all buildings and the closest streets/roadways in both directions. Mark the orientation of True North. Use multiple sheets/drawings if necessary. Also indicate the "front" or primary entrance for each building. A site map or site plans can be used in place of this, as long as streets can be shown.

Premise/Site-Plan sketch comments:

Premise/Site-Plan Sketch

Premise/Site-Plan sketch comments:

_____

_____

_____

_____

Hourly Operation Schedules

Use this form if equipment operation is independent of Business Hours as indicated on Form BUS_HRS. Use one block for each end use. Indicate the applicable daytypes for each day type schedule, and account for all day types including holidays. Specify the % of max. occupancy or equipment-on for all time periods, and be sure to accurately capture transition periods. Pay attention to lighting control type as a separate schedule is needed for different control types.

Hour	**12-1**	**1-2**	**2-3**	**3-4**	**4-5**	**5-6**	**6-7**	**7-8**	**8-9**	**9-10**	**10-11**	**11-12**

Schedule #______ LtgCtrlType:_____ Description________________________

Applicable DayTypes		**%** Equipment On											
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												

Schedule #______ LtgCtrlType:_____ Description________________________

Applicable DayTypes		**%** Equipment On											
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												

Schedule #______ LtgCtrlType:_____ Description________________________

Applicable DayTypes		**%** Equipment On											
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												

Hourly Operation Schedules

Use this form if equipment operation is independent of Business Hours as indicated on Form 7a/b. Use one block for each end use. Indicate the applicable daytypes for each day type schedule, and account for all day types including holidays. Specify the % of max. occupancy or equipment-on for all time periods, and be sure to accurately capture transition periods.

Hour	**12-1**	**1-2**	**2-3**	**3-4**	**4-5**	**5-6**	**6-7**	**7-8**	**8-9**	**9-10**	**10-11**	**11-12**

Schedule #______ LtgCtrlType:_____ Description_________________________

Applicable DayTypes		**%** Equipment On											
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												

Schedule #______ LtgCtrlType:_____ Description_________________________

Applicable DayTypes		**%** Equipment On											
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												

Schedule #______ LtgCtrlType:_____ Description_________________________

Applicable DayTypes		**%** Equipment On											
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												
M T W T F S S H	AM												
	PM												

Lighting Logger Installation Form

Use this table to record information for installed measurement devices such as lighting loggers.

Installation Date		**Extraction Date**	
Installer's Initials		**Extraction Initials**	
Scheduled Extraction Date			

Installation

Logger Serial Number					
Primary or Backup Logger?	P B	P B	P B	P B	P B
Placement Area ID# (ref only)					
Lighting Tech Type (HIM)	**CF LF HID LED HB**	**CF LF HID LED HB**	**CF LF HID LED HB**	**CF LF HID LED HB**	**CF LF HID LED HB**
Logger Placement on Fixture	**I**(nt) **E**(xt) **O**(ther)	**I**(nt) **E**(xt) **O**(ther)	**I**(nt) **E**(xt) **O**(ther)	**I**(nt) **E**(xt) **O**(ther)	**I**(nt) **E**(xt) **O**(ther)
Placement Description Include building, floor, room #, etc. and be descriptive enough that it can be located for extraction.					
Schedule #					

Extraction

Logger Intact? See Legend Belo	**Y N L *P***	**Y N L *P***	**Y N L *P***	**Y N L *P***	**Y N L *P***
Logger Tested "OK" (On/Off)	**Y N** NA	**Y N** NA	**Y N** NA	**Y N** NA	**Y N** NA
% "ON" Time	%	%	%	%	%
Extraction Comments					
Logger Date&Time (HH:MM)					
Computer Date&Time (HH:MM)					
Alternate Extraction Date					

Logger Intact: "Y" – If logger is as originally installed, does <u>not</u> appear to be tampered with, and display indicates the logger is working
Logger Tested "OK" – <u>If Logger Intact was "Y"</u> then <u>is it</u> properly logging the light ON/OFF, "Y" or "N"? <u>If Logger Intact was "N"</u> use "NA"

Lighting Logger Installation Form (continued)

Use this table to record information for installed measurement devices such as lighting loggers.

Installation

Logger Serial Number					
Primary or Backup Logger?	P B	P B	P B	P B	P B
Placement Area ID# (ref only)					
Lighting Tech Type (HIM)	**CF LF HID LED HB**	**CF LF HID LED HB**	**CF LF HID LED HB**	**CF LF HID LED HB**	**CF LF HID LED HB**
Logger Placement on Fixture	**I**(nt) **E**(xt) **O**(ther)	**I**(nt) **E**(xt) **O**(ther)	**I**(nt) **E**(xt) **O**(ther)	**I**(nt) **E**(xt) **O**(ther)	**I**(nt) **E**(xt) **O**(ther)
Placement Description Include building, floor, room #, etc. and be descriptive enough that it can be located for extraction.					
Schedule #					

Extraction

Logger Intact? (L=Lost/missing)	**Y N L *P***	**Y N L *P***	**Y N L *P***	**Y N L *P***	**Y N L *P***
Logger Tested "OK" (On/Off)	**Y N** NA	**Y N** NA	**Y N** NA	**Y N** NA	**Y N** NA
% "ON" Time	%	%	%	%	%
Extraction Comments					
Logger Date&Time (HH:MM)					
Computer Date&Time (HH:MM)					
Alternate Extraction Date					

Logger Intact: "Y" – If logger is as originally installed, does <u>not</u> appear to be tampered with, and display indicates the logger is working
Logger Tested "OK" – <u>If Logger Intact is "Y"</u> then is it properly logging the light ON/OFF, "Y" or "N"? <u>If Logger Intact is "N"</u> use "NA"

Lighting Logger Installation Form (continued)

Use this table to record information for installed measurement devices such as lighting loggers.

Installation

Logger Serial Number					
Primary or Backup Logger?	P B	P B	P B	P B	P B
Placement Area ID# (ref only)					
Lighting Tech Type (HIM)	**CF LF HID LED HB**	**CF LF HID LED HB**	**CF LF HID LED HB**	**CF LF HID LED HB**	**CF LF HID LED HB**
Logger Placement on Fixture	**I**(nt) **E**(xt) **O**(ther)	**I**(nt) **E**(xt) **O**(ther)	**I**(nt) **E**(xt) **O**(ther)	**I**(nt) **E**(xt) **O**(ther)	**I**(nt) **E**(xt) **O**(ther)
Placement Description Include building, floor, room #, etc. and be descriptive enough that it can be located for extraction.					
Schedule #					

Extraction

Logger Intact? (L=Lost/missing)	**Y N L *P***	**Y N L *P***	**Y N L *P***	**Y N L *P***	**Y N L *P***
Logger Tested "OK" (On/Off)	**Y N** NA	**Y N** NA	**Y N** NA	**Y N** NA	**Y N** NA
% "ON" Time	%	%	%	%	%
Extraction Comments					
Logger Date&Time (HH:MM)					
Computer Date&Time (HH:MM)					
Alternate Extraction Date					

Logger Intact: "Y" – If logger is as originally installed, does <u>not</u> appear to be tampered with, and display indicates the logger is working
Logger Tested "OK" – <u>If Logger Intact is "Y"</u> then is it properly logging the light ON/OFF, "Y" or "N"? <u>If Logger Intact is "N"</u> use "NA"

CFL Compact Fluorescent Lighting Measures

IOU Tracking Data	Measure Category	CFL_MeasCategory	
	Measure Code	CFL_OS_MeasCode	
	Measure Name	CFL_OS_MeasName	
	Rebated #of Units	CFL_IOUUnitQtyRebated	
	IOU Unit Basis	CFL_IOUUnitBasis	
	Correct Unit Basis (if incorrect above above)		
	Can Rebated measures be clearly identified?	Y N	
Visual Verification Data	Inside or outside lighting?	**I O**	
	Total number of fixtures		
	Number of lamps per fixture		
	Total number of lamps		
	Ltg Application Type Code		
	Fixture Mount Type Code		
	Ltg Control Code		
	***Multilevel:* Fixture or Lamp switched?**	**ML-F ML-L NA**	
Verification Counts	**(A) Installed & Operational # of units (ex post quantity)**		#
	-- Was subsampling or estimation used?	**Y N**	
	-- # fixtures switched off (basis may be different than IOU unit basis)		
	-- # of lamps burned out in partial operation fixtures		
	(B) # of Non-Operable (broken/entire fixture burned-out) Units in place		#
	(C) # of Units in Storage/Spares		#
	-- Utility rebate sticker observed on packages?	**Y N**	
Physical Inspection Data	*Check box if Lamps/Fixtures are NOT accessible (explain in comments)*	☐	
	Number of units physically inspected		
	*If more than one type	**Primary**	***Secondary**
	Lamp Wattage		
	Make/Manufacturer		
	Model/Lamp Code		
	Energy Star Observed		
	CFL Lamp Shape Code		
	Ballast configuration: M=Modular I=Integral	**M I**	**M I**
	Lamp Base Type Code:	**P M C I MO ADP GU24 OT**	**P M C I MO ADP GU24 OT**
	# of lamps		
Baseline System Summary Data (Observed or Self-Reported)	Is post-installation operation the same as pre-retrofit operation?	**Y N**	
	-- If pre-retrofit operation was different, specify Sched #		
	Approximate age of existing lighting system prior to retrofit (years)		
	Lamp Type Code		
	Lamp Wattage		
	Control Type Code		
	Number of lamps per fixture		
Observed versus Rebated # of Units is: E=Equal M=More L=Less OT (describe)		**E M L OT**	
If Disposition Not Equal: Site Contact/Self-Report Questions	Self-Reported # of rebated units onsite (probe for rebated under 10-12)		
	Others purchased since rebated units installed		
	(D) # of units located at Other Affiliated Sites		#

Failed (and Replaced) <u>Rebated</u> Units (Indirect/Self-Report)	How long did units typically operate before failure (months)?	
	(E) # of rebated units that Failed, but replaced w/ incandescent	#
	# of rebated units that Failed but were replaced in-kind (Ref)	
Removed <u>Rebated</u> Units (Indirect/Self-Report)	**(F)** # of rebated units that were Removed and not replaced	#
	-- When were the units removed? (month/year if possible)	
	-- Describe why units were removed in comments	
(Sum A-F) Total # of units accounted for on-site		**(reqd)**
Total # of units (A-F) MORE than Rebated # of Units	# that were rebated by other programs/projects?	
	# that were purchased at Retailer?	
	# that were received from utility give-away program?	
	# that were obtained from OTHER means (describe in comments)?	
Total # of units (A-F) LESS than Rebated # of Units	# of rebated units, other site contact explanation (note in comments)	
	# of rebated units, unaccounted for	

CFL – Activity Area Assignment Table **Measure Code:**_____

Use this table to associate CFL # of units to Activity Areas, equipment operation schedules, and lighting loggers. The values in the "Represented # of Units" column must add up to the total # of installed and operational units in the table above.

Area ID #	Sched #	Item #	Primary or Secondary Type	Control type Code	Repres. # of Units	% of Total Inst&Op. Units (Ref)	Primary Logger S/N	Ref. Logger	Back-up Logger S/N	Comments
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
						%	<= Totals # of Installed & Operational Units check *(no data entry)*			

Comments:_____

Linear Fluorescent Lighting Measures

IOU Tracking Data	Measure Category	LINFLUOR_MeasCategory
	Measure Code	*LINFLUOR_OS_MeasCode*
	Measure Name	LINFLUOR_OS_MeasName
	Rebated #of Units	LINFLUOR_IOUUnitQtyRebated
	IOU Unit Basis	*LINFLUOR_IOUUnitBasis*
	Correct Unit Basis (if incorrect above above)	
	Can Rebated measures be clearly identified?	Y N
	Associated DELAMP Measure Code *(if applicable)*	
	All associated CASCADE Measure Code(s) *(if applicable)*	

Visual Verification Data	Inside or outside lighting?	**I O**
	Ceiling height in ft	
	Fixture height from floor in ft	
	Total number of fixtures	
	PREDOMINANT # of lamps per fixture	
	Total number of lamps	
	Tube Length in ft. (e.g. 1.5 2 3 4 8)	
	Tube Diameter (T5 T8 T12)	**T8 T5 T12**
	Special fixture type: Delamped or Tandem?	**D T**
	***Multilevel:* Fixture or Lamp switched?**	**ML-F ML-L NA**
	Ltg Application Code	
	Fixture Mount type code	
	Shiny/polished reflector?	**Y N**

Verification Counts	**(A) Installed & Operational # of units (ex post quantity)**	
	-- Was sub sampling or estimation used?	**Y N**
	-- # fixtures switched off (basis may be different than IOU unit basis)	
	-- # of lamps burned out in partial operation fixtures	
	(B) # of Non-Operable (broken/entire fixture burned-out) Units in place	
	(C) # of Rebated Units in Storage/Spares	

Physical Inspection Data	*Check box if Lamps/Fixtures are NOT accessible (explain in comments)*	☐
	Number of units physically inspected	
	Lamp Wattage	
	Lamp Make/Manufacturer	
	Lamp Model/Lamp Code	
	Ballst type: **M**=Magnetic **E**=Electronic **A**=Advanced	**M E A**
	Ballast Type Code	
	Predominant Fixture Type: # of ballasts per fixture	
	Ballast Model #	
	Ballast Manufacturer/Brand	
	Secondary Fixture Type: # of ballasts per fixture	
	Ballast Model #	
	Ballast Manufacturer/Brand	

Baseline System Summary Data (Observed or Self-Reported)	Is post-installation operation the same as pre-retrofit operation?	**Y N**
	-- If pre-retrofit operation was different, specify Sched #	
	Lamp Type Code	
	Lamp Wattage	
	Control type Code	
	Tube Length and Diameter (e.g. 4ft T12)	
	Number of lamps per fixture	
	Ballast type: **M**=Magnetic **E**=Electronic **A**=Advanced	**M E A**

Observed versus Rebated # of Units is: E=Equal M=More L=Less OT (describe)		**E**	**M**	**L**	**OT**
If Disposition Not Equal: Site Contact/Self-Report Questions	Self-Reported # of rebated units onsite (probe for rebated under 10-12)				
	Others purchased since rebated units installed				
	(D) # of units located at Other Affiliated Sites				
Failed (and Replaced) <u>Rebated</u> Units (Indirect/Self-Report)	How long did units typically operate before failure (months)?				
	(E) # of rebated units that Failed, but were replaced w/<u>different tech</u>				
	# of rebated units that Failed but were replaced in-kind (Ref)				
Removed <u>Rebated</u> Units (Indirect/Self-Report)	**(F)** # of rebated units that were Removed and not replaced				
	-- When were the units removed? (month/year if possible)				
	-- Describe why units were removed in comments				
(Sum A-F) Total # of units accounted for on-site					**(reqd)**
Total # of units (A-F) MORE than Rebated # of Units	# that were rebated by other programs/projects?				
	# that were obtained from OTHER means (explain in comments)?				
Total # of units (A-F) LESS than Rebated # of Units	# of rebated units, other site contact explanation (note in comments)				
	# of rebated units, unaccounted for				

Linear - Activity Area Assignment Table (AAAT) **Measure Code:** _____

*Use the AAAT below to associate lighting units to Activity Areas, equipment oper. schedules, and lighting loggers. The values in the "Represented # of Units" column must add up to the **total # of Installed and Operational** units in the table above.*

- *<u>If ONLY FIXTURE **DENT LL**</u>: Only fill out **<u>AAAT</u>** below.*
- *<u>If **DENT LL & (DENT CT or HOBO)**</u>: Fill out **<u>AAAT</u>** with logger info **&** the **<u>HIGHBAY</u>** Form for Panel Metering*
- *<u>If ONLY **PANEL METERING**</u>: Check **<u>N/A</u>** box and <u>only</u> fill out **<u>HIGHBAY</u>** Form.*

***Circle all that apply:** (If Verify Only, circle 'NA', <u>and fill out AAAT</u>)*

Metering Type:	DENT LL	DENT CT	HOBO	NA

☐ **N/A**

Area ID #	Sched #	Item #	Control Type Code	Repres. # of Units	% of Total Inst&Op. Units (Ref)	Primary Logger S/N	Ref. Logger	Back-up Logger S/N	Comments
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					% <= Total # of Installed & Operational Units check *(no data entry)*				

Comments (for delamping, explain how counts were confirmed: tombstone shadows observed, etc.)**:** _____

Baseline Technology Characterization

Approximate age of existing lighting system prior to retrofit (years)	
Prior to retrofit, if original lamps were replaced, were they replaced with **Energy Saver** lamps?	**Y N**
Since original fixtures were installed, approximately how many **ballasts** had been replaced?	
Were the replacement ballasts **M**agnetic, **E**lectronic or **A**dvanced?	**M E A**
What % of the originally installed fixtures had ballasts replaced since July 2010?	
Condition of original fixtures prior to retrofit (**G**ood, **F**air, **P**oor)	**G F P**
What % of original fixtures were completely burned out?	
What % of original fixtures were partially burned out?	
On a scale of 1-10, Please rate the following topics on their level of influence for retrofitting the lighting fixtures:	
Burned out fixtures	
Adequate lighting levels	
Major Renovation / Re-Modeling	
Safety of Occupants	
Productivity of Occupants	
Lowering energy consumption and energy bills	
Going green	
Utility Incentive	
Other (*describe in comments*)	
Considering all of the influential factors above, in the absence of an energy efficiency rebate program: How long would you have continued to operate the original fixtures before replacing them? (years)	

Comments: _____

_____

_____

_____

Delamping Lighting Measures

IOU Tracking Data	Measure Category	DELAMP_MeasCategory
	Measure Code	*DELAMP_OS_MeasCode*
	Measure Name	DELAMP_OS_MeasName
	Rebated #of Units	DELAMP_IOUUnitQtyRebated
	IOU Unit Basis	*DELAMP_IOUUnitBasis*
	Correct Unit Basis (if incorrect above above)	
	Can Rebated measures be clearly identified?	Y N
	Associated LINFLUOR Measure Code *(if applicable)*	

Visual Verification Data	Inside or outside lighting?	**I O**
	Ceiling height in ft	
	Fixture height from floor in ft	
	Total number of fixtures	
	Number of lamps per fixture	
	Number of **delamped** lamps per fixture	
	Total number of lamps	
	Tube Length in ft. (e.g. 1.5 2 3 4 8)	
	Tube Diameter (T5 T8 T12)	**T8 T5 T12**
	Special fixture type: Delamped or Tandem?	**D T**
	***Multilevel:* Fixture or Lamp switched?**	**ML-F ML-L NA**
	Ltg Application Code	
	Fixture Mount type code	
	Shiny/polished reflector?	**Y N**

Verification Counts	**(A) Delamped # of units (ex post quantity = Installed & Operable)**	
	-- Was subsampling or estimation used?	**Y N**
	-- # fixtures switched off (basis may be different than IOU unit basis)	
	-- # of lamps burned out in partial operation fixtures	
	(B) # of Non-Operable (broken/entire fixture burned-out) Units in place	
	(C) # of Rebated Units in Storage/Spares	

Physical Inspection Data	*Check box if Lamps/Fixtures are NOT accessible (explain in comments)*	☐
	Number of fixtures physically inspected (for evidence of delamping)	
	Installed Lamp Wattage	
	Installed Lamp Make/Manufacturer	
	Installed Lamp Model/Lamp Code	
	Ballst type: **M**=Magnetic **E**=Electronic **A**=Advanced	**M E A**
	Ballast Type Code	
	Predominant Fixture Type: # of ballasts per fixture	
	Ballast Model #	
	Ballast Manufacturer/Brand	
	Secondary Fixture Type: # of ballasts per fixture	
	Ballast Model #	
	Ballast Manufacturer/Brand	

Baseline System Summary Data	Is post-installation operation the same as pre-retrofit operation?	**Y N**
	-- If pre-retrofit operation was different, specify Sched #	

	Approximate age of existing lighting system prior to retrofit (years)	
	Lamp Type Code	
	Lamp Wattage	
	Tube Length and Diameter (e.g. 4ft T12)	
	Number of lamps per fixture	
	Ballast type: **M**=Magnetic **E**=Electronic **A**=Advanced	**M E A**
Observed versus Rebated # of Units is: E=Equal M=More L=Less OT (describe)		**E M L OT**
If Disposition Not Equal: Site Contact/Self-Report Questions	Self-Reported # of rebated units onsite (probe for rebated under 10-12)	
	Others purchased since rebated units installed	
	(D) # of units located at Other Affiliated Sites	
Failed (and Replaced) Rebated Units (Indirect/Self-Report)	How long did units typically operate before failure (months)?	
	(E) # of rebated units that Failed, but were replaced w/different tech	
	# of rebated units that Failed but were replaced in-kind (Ref)	
Removed Rebated Units (Indirect/Self-Report)	**(F)** # of rebated units that were Removed and not replaced	
	-- When were the units removed? (month/year if possible)	
(Sum A-F) Total # of units accounted for on-site		**(reqd)**
Total # of units (A-F) MORE than Rebated # of Units	# that were rebated by other programs/projects?	
	# that were obtained from other means (explain in comments)?	
Total # of units (A-F) LESS than Rebated # of Units	# of rebated units, other site contact explanation (note in comments)	
	# of rebated units, unaccounted for	

Delamping – Activity Area Assignment Table Measure Code:_____

For fixtures that are covered by both a* LF *and a* Delamping *measure, the logger information should be recorded on the LF form and copied below, making sure to check all Ref. Logger boxes. *Use this table to associate lighting units to Activity Areas, equipment operation schedules, and lighting loggers. The values in the "Represented # of Units" column must add up to the total # of installed and operational units in the table above.*

Area ID #	Sched #	Item #	Control Type Code	Repres. # of Units	% of Total Inst&Op. Units (Ref)	Primary Logger S/N	Ref. Logger	Back-up Logger S/N	Comments
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		

% <= Total # of Installed & Operational Units check *(no data entry)*

Comments (for delamping, explain how counts were confirmed: tombstone shadows observed, etc. and any discrepancies in observed versus rebated quantities)**:** _____

Occupancy Sensor Lighting Measures (1 of 2): Verification Totals

NOTE: If any lighting measures are associated with the Occupancy Sensors, **FIRST** fill out the lighting measure forms, then fill out this form, making sure to link the Occ. Sensor **Item #'s** to the other measure forms.

IOU Tracking Data	Measure Category	LIGHTINGCONTROL_MeasCategory	
	Measure Code	LIGHTINGCONTROL _OS_MeasCode	
	Measure Name	LIGHTINGCONTROL _OS_MeasName	
	Rebated #of Units	LIGHTINGCONTROL _IOUUnitQtyRebated	
	IOU Unit Basis	LIGHTINGCONTROL _IOUUnitBasis	
	Correct Unit Basis (if incorrect above above)		
	Can Rebated measures be clearly identified?	Y N	
Verification Counts and Physical Inspection Data	Inside or Outside Occupancy Sensors		**I O**
	Installed & Operational # of Occupancy Sensor Units (A)		
	Was subsampling or estimation used?		**Y N**
	Number of Non-Operable (broken/non-powered) Units in place (B)		
	Occupancy Sensor Make/Manufacturer		
	Occupancy Sensor Model		
	Number of Units in Storage/Spares (C)		
	Check box if Lamps/Fixtures are NOT accessible (explain in comments)		☐
	Number of units physically inspected		
Controlled Wattage	Controlled Total Nominal Lamp Wattage: ***(Sum of All (F)'s from the Controlled Watts Detail tables)***		
Observed versus Rebated # of Units is: E=Equal M=More L=Less OT (describe)			**E M L OT**
If Disposition Not Equal: Site Contact/Self-Report Questions	Self-Reported # of rebated units onsite (probe for rebated under 10-12)		
	Others purchased since rebated units installed		
	(D) # of units located at Other Affiliated Sites		
Failed (and Replaced) Rebated Units (Indirect/Self-Report)	How long did units typically operate before failure (months)?		
	(E) # of rebated units that Failed, but were replaced w/different tech		
	# of rebated units that Failed but were replaced in-kind (Ref)		
Removed Rebated Units (Indirect/Self-Report)	**(F)** # of rebated units that were Removed and not replaced		
	-- When were the units removed? (month/year if possible		
	-- Describe why units were removed in comments		
(Sum A-F) Total # of units accounted for on-site			**(reqd)**
Total # of units (A-F) MORE than Rebated # of Units	# that were rebated by other programs/projects		
	# that were obtained from OTHER means (explain in comments)		
Total # of units (A-F) LESS than Rebated # of Units	# of rebated units, other site contact explanation (note in comments)		
	# of rebated units, unaccounted for		

Comments:_____

Occ. Sensor Ltg Measures (2 of 2): Controlled Watts Detail **Measure:**_____

Control Information				
OccupancySensor Item #				
Associated **Panel Meter Item #**: *(if applicable)*				
Installed & Operational *(OP)* or Non-Operable *(N-OP)*	OP N-OP		OP N-OP		OP N-OP	
Inside or Outside Occupancy Sensor(s)	I O		I O		I O	
Area ID # / Sched #						
Control Type Code						
Control Time Delay (minutes)						
If Non-Operable, **Control Type Code** now controlling fixtures						
Were sensors added to a **non**-retroffited lighting system?	Y N		Y N		Y N	
Associated Lighting Measure Code(s) If '**N**' & applicable						
Lamp Type code						
Total # of Controls represented here: ***(A)***						
# of Fixtures on EACH control ***(B)***						
# of Lamps Per Fixture Controlled by Occ. Sensor ***(C)***						
# of Lamps per fixture						
Total number of lamps burnt out ***(D)***						
Number of Fixtures physically inspected						
Lamp Make/Manufacturer						
Lamp Model						
Lamp Wattage ***(E)***						
Total Controlled Lamp Wattage: *(A*B*C*E)-(D*E)* ***(F)***						
Tube diameter (T8 or T5)						
Ballst type:	**M E A**		**M E A**		**M E A**	
Ballast Type Code						
# of Ballasts per fixture						
Ballast Manufacturer/Brand						
Ballast Model #						
Baseline System Summary Data (observed or self-eported)						
Pre-retrofit Control Type Code						
(required) Pre-retrofit operation Sched #						
Approximate age of existing lighting system prior to retrofit						
Logger Information						
Logger Type: (***DCT*** = *DENT CT,* ***H****=HOBO,* ***DLL****=DENT LL)*	DCT H DLL		DCT H DLL		DCT H DLL	
Primary Logger S/N:						
Reference Logger: *(Check if logger info already exists on this form or another)*	☐		☐		☐	
Backup Logger S/N:						
Logger Channel # HOBO						
CT Amp size HOBO						
Comments: *(Make sure to provide detailed comments about the information above and/or logger, if it is associated with other measures, Acitvity Area Assignement Tables, or Panel Metering)*						

HID High Intensity Discharge Lighting Measures

IOU Tracking Data	Measure Category	HID_MeasCategory	
	Measure Code	HID_OS_MeasCode	
	Measure Name	HID_OS_MeasName	
	Rebated #of Units	HID_IOUUnitQtyRebated	
	IOU Unit Basis	HID_IOUUnitBasis	
	Correct Unit Basis (if incorrect above above)		
	Can Rebated measures be clearly identified?	Y N	
Visual Verification Data	Inside or outside lighting?	**I O**	
	Lamp Type Code		
	Ceiling height in ft		
	Fixture height from floor in ft		
	Total number of fixtures		
	Number of lamps per fixture		
	***Multilevel:* Fixture or Lamp switched?**	**ML-F ML-L NA**	
	Total number of lamps		
	Ltg Control Type Code		
	Ltg Application Code		
	Fixture Mount type code		
Verification Counts	**(A) Installed & Operational (or delamped) # of units (ex post quantity)**		
	-- Was subsampling or estimation used?	**Y N**	
	-- # fixtures switched off (basis may be different than IOU unit basis)		
	-- # of lamps burned out in partial operation fixtures		
	(B) # of Non-Operable (broken/entire fixture burned-out) Units in place		
	(C) # of Rebated Units in Storage/Spares		
Physical Inspection Data	*Check box if Lamps/Fixtures are NOT accessible (explain in comments)*	☐	
	Number of units physically inspected		
	Lamp Wattage		
	Lamp Make/Manufacturer		
	Lamp Model/Lamp Code		
	Ballst type: **M**=Magnetic **E**=Electronic **A**=Advanced	**M E A**	
	Ballast Type Code		
	Predominant Fixture Type: # of ballasts per fixture		
	Ballast Model #		
	Ballast Manufacturer/Brand		
	Secondary Fixture Type: # of ballasts per fixture		
	Ballast Model #		
	Ballast Manufacturer/Brand		
Baseline System Summary Data (Observed or Self-Reported)	Is post-installation operation the same as pre-retrofit operation?	**Y N**	
	-- If pre-retrofit operation was different, specify Sched #		
	Approximate age of exisiting lighting system prior to retrofit (years)		
	Lamp Type Code		
	Lamp Wattage		
	Tube Length and Diameter (e.g. 4ft T12)		
	Number of lamps per fixture		
	Ballast type: **M**=Magnetic **E**=Electronic **A**=Advanced	**M E A**	
	Observed versus Rebated # of Units is: E=Equal M=More L=Less OT (describe)	**E M L OT**	

If Disposition Not Equal: Site Contact/Self-Report Questions	Self-Reported # of rebated units onsite (probe for rebated under 10-12)	
	Others purchased since rebated units installed	
	(D) # of units located at Other Affiliated Sites	
Failed (and Replaced) Rebated Units (Indirect/Self-Report)	How long did units typically operate before failure (months)?	
	(E) # of rebated units that Failed, but were replaced w/different tech	
	# of rebated units that Failed but were replaced in-kind (Ref)	
Removed Rebated Units (Indirect/Self-Report)	**(F)** # of rebated units that were Removed and not replaced	
	-- When were the units removed? (month/year if possible)	
	-- Describe why units were removed in comments	
(Sum A-F) Total # of units accounted for on-site		**(reqd)**
Total # of units (A-F) MORE than Rebated # of Units	# that were rebated by other programs/projects?	
	# that were obtained from OTHER means (explain in comments)?	
Total # of units (A-F) LESS than Rebated # of Units	# of rebated units, other site contact explanation (note in comments)	
	# of rebated units, unaccounted for	

HID Lighting – Activity Area Assignment Table (AAAT) Measure Code: _____

Use the AAAT below to associate lighting units to Activity Areas, equipment oper. schedules, and lighting loggers. The values in the "Represented # of Units" column must add up to the total # of installed and operational units in the table above.

- *If only **DENT LL**: Only fill out **AAAT** below.*
- *If **DENT LL & (DENT CT or HOBO)**: Fill out **AAAT** with **DENT LL** info, & **HIGHBAY** Form for Panel Metering*
- *If only **DENT CT** or **HOBO**: Check **N/A** box and only fill out **HIGHBAY** Form.*

***Circle all that apply:** (If Verify Only, circle 'NA', and fill out AAAT)*

Metering Type:	DENT LL DENT CT HOBO NA

☐ **N/A**

Area ID #	Sched #	Item #	Control Type Code	Repres. # of Units	% of Total Inst&Op. Units (Ref)	Primary Logger S/N	Ref. Logger	Back-up Logger S/N	Comments
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%	<= Total # of Installed & Operational Units check *(no data entry)*			

Comments:_____

LED Lamp Lighting Measures

IOU Tracking Data	Measure Category	LED_MeasCategory	
	Engineering Estimation Method	LED_EngEstMethod	
	Measure Code	LED_OS_MeasCode	
	Measure Name	LED_OS_MeasName	
	Rebated #of Units	LED_IOUUnitQtyRebated	
	IOU Unit Basis	LED_IOUUnitBasis	
	Correct Unit Basis (only if incorrect above)		
	Can Rebated measures be clearly identified?	Y N	
Visual Verification Data	Inside or outside lighting?	**I O**	
	Total number of fixtures		
	Number of lamps per fixture		
	Total number of lamps		
	Ltg Application Type Code		
	Fixture Mount Type Code		
	Ltg Control Code		
	***Multilevel:* Fixture or Lamp switched?**	**ML-F ML-L NA**	
Verification Counts	**(A) Installed & Operational # of units (ex post quantity)**		
	-- Was subsampling or estimation used?	**Y N**	
	-- # fixtures switched off (basis may be different than IOU unit basis)		
	-- # of lamps burned out in partial operation fixtures		
	(B) # of Non-Operable (broken/entire fixture burned-out) Units in place		
	(C) # of Units in Storage/Spares		
	-- Utility rebate sticker observed on packages?	**Y N**	
Physical Inspection Data	*Lamps/fixtures are NOT accessible (Check box & explain in comments)*	☐	
	Number of units physically inspected		
	*If more than one type	**Primary**	***Secondary**
	Lamp Wattage		
	Make/Manufacturer		
	Model/Lamp Code		
	Lamp Shape/Features Code		
	Lamp Base Type Code:	**P M C I MO ADP GU24 OT**	**P M C I MO ADP GU24 OT**
	Installed and OP # of lamps		
Baseline System Summary Data (Observed or Self-Reported)	Is post-installation operation the same as pre-retrofit operation?	**Y N**	
	-- If pre-retrofit operation was different, specify Sched #		
	Lamp Type Code		
	Watts per lamp		
	Number of lamps per fixture		
Observed versus Rebated # of Units is: E=Equal M=More L=Less OT (describe)		**E M L OT**	
If Disposition Not Equal: Site Contact/Self-Report Questions	Self-Reported # of rebated units onsite (probe for rebated under 10-12)		
	Others purchased since rebated units installed		
	(D) # of units located at Other Affiliated Sites		

Failed (and Replaced) <u>Rebated</u> Units (Indirect/Self-Report)	How long did units typically operate before failure (months)?	
	(E) # of rebated units that Failed, but replaced w/ incandescent	
	# of rebated units that Failed but were replaced in-kind (Ref)	
Removed <u>Rebated</u> Units (Indirect/Self-Report)	**(F)** # of rebated units that were Removed and not replaced	
	-- When were the units removed? (month/year if possible)	
	-- Describe why units were removed **in comments**	
(Sum A-F) Total # of units accounted for on-site		**(reqd)**
Total # of units (A-F) MORE than Rebated # of Units	# that were rebated by other programs/projects?	
	# that were obtained from OTHER means (explain in comments)?	
Total # of units (A-F) LESS than Rebated # of Units	# of rebated units, other site contact explanation (note in comments)	
	# of rebated units, unaccounted for	

LED – Activity Area Assignment Table

Measure Code:_____

Use this table to associate LED # of units to Activity Areas, equipment operation schedules, and lighting loggers. The values in the "Represented # of Units" column must add up to the total # of installed and operational units in the table above.

Area ID #	Sched #	Item #	Primary or Secondary Type	Control type Code	Repres. # of Units	% of Total Inst&Op. Units (Ref)	Primary Logger S/N	Ref. Logger	Back-up Logger S/N	Comments
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
			P S			%		☐		
						%	<= Totals # of Installed & Operational Units check *(no data entry)*			

Comments:_____

Baseline Characterization

Please describe why these lights were changed to LEDs instead of any other lighting technology	

Approximate age of existing lighting system prior to retrofit (years)	
Condition of original fixtures prior to retrofit (**G**ood, **F**air, **P**oor)	**G F P**
What % of original fixtures were completely burned out?	
What % of original fixtures were partially burned out?	
On a scale of 1-10, Please rate the following topics on their level of influence for retrofitting the lighting fixtures:	
Burned out fixtures	
Adequate lighting levels	
Major Renovation / Re-Modeling	
Safety of Occupants	
Productivity of Occupants	
Lowering energy consumption and energy bills	
Long lamp life	
Low maintenance	
Going green	
Utility Incentive	
Other (*describe in comments*)	
Considering all of the influential factors above, in the absence of an energy efficiency rebate program: How long would you have continued to operate the original fixtures before replacing them? (years)	

Comments: _____

LED Hardwired Fixture Lighting Measures

IOU Tracking Data	Measure Category	LEDFixture _MeasCategory	
	Measure Code	LEDFixture _*OS_MeasCode*	
	Measure Name	LEDFixture_OS_MeasName	
	Rebated #of Units	LEDFixture _IOUUnitQtyRebated	
	IOU Unit Basis	*LEDFixture_IOUUnitBasis*	
	Correct Unit Basis (if incorrect above above)		
	Can Rebated measures be clearly identified?	Y N	
Visual Verification Data	Inside or outside lighting?	**I O**	
	Ceiling height in ft		
	Fixture height from floor in ft		
	Ltg Application Code		
	Fixture Mount type code		
	Total number of fixtures		
	If LED Linear Tubes or Track lighting fixtures: Fixture Replacement or Lamp Replacement	**FR LP**	
	If LED Linear Tubes or Track lighting fixtures: PREDOMINANT # Lamps per Fixture		
	If LED Linear Tubes or Track lighting fixtures: Total number of lamps		
	Lamp Shape/Features Code		
	If LED **bar, strip, string, or tape**: Provide length (ft)		
	If LED **panel/head**: Provide dimensions (length X width in ft)	Length _____X_____Width (ft)	
	If LED **linear fixture:** Fixture dimensions (length X width in ft) and Tube length (ft)	Length _____X_____Width (ft)	
	***Multilevel:* Fixture or Lamp switched?**	**ML-F ML-L NA**	
Verification Counts	**(A) Installed & Operational # of units (ex post quantity)**		
	-- Was sub sampling or estimation used?	**Y N**	
	-- # fixtures switched off (basis may be different than IOU unit basis)		
	(B) # of Non-Operable (broken/entire fixture burned-out) Units in place		
	(C) # of Rebated Units in Storage/Spares		
Physical Inspection Data	*Check box if Fixtures are NOT accessible (explain in comments)*	☐	
	Number of units physically inspected		
	If the Unit Basis = Lamp: Provide Lamp information instead of Fixture info: Fixture Wattage:		
	Fixture Make/Manufacturer		
	Fixture Model Number		
Baseline System Summary Data (Observed or Self-Reported)	Is post-installation operation the same as pre-retrofit operation?	**Y N**	
	-- If pre-retrofit operation was different, specify Sched #		
	Control type Code		
	Lamp Type Code		
	(If LF Baseline) - Tube Length and Diameter (e.g. 4ft T12)		
	# Lamps/Fixture		
	Lamp Wattage		
	If **NOT** LF Baseline: Fixture Description (i.e. unique characteristics)		
Observed versus Rebated # of Units is: E=Equal M=More L=Less OT (describe)		**E M L OT**	
If Disposition Not Equal: Site Contact/Self-Report Questions	Self-Reported # of rebated units onsite (probe for rebated under 10-12)		
	Others purchased since rebated units installed		
	(D) # of units located at Other Affiliated Sites		
Failed (and Replaced) Rebated Units (Indirect/Self-Report)	How long did units typically operate before failure (months)?		
	(E) # of rebated units that Failed, but were replaced w/different tech		
	# of rebated units that Failed but were replaced in-kind (Ref)		

Removed Rebated Units (Indirect/Self-Report)	**(F)** # of rebated units that were Removed and not replaced	
	-- When were the units removed? (month/year if possible)	
	-- Describe why units were removed **in comments**	
	(Sum A-F) Total # of units accounted for on-site	**(reqd)**
Total # of units (A-F) MORE than Rebated # of Units	# that were rebated by other programs/projects?	
	# that were obtained from OTHER means (explain in comments)?	
Total # of units (A-F) LESS than Rebated # of Units	# of rebated units, other site contact explanation (note in comments)	
	# of rebated units, unaccounted for	

LED Fixture - Activity Area Assignment Table (AAAT) Measure Code: _____

*Use the AAAT below to associate lighting units to Activity Areas, equipment oper. Schedules, and lighting loggers. The values in the "Represented # of Units" column must add up to the **total # of Installed and Operational** units in the table above.*

- *If ONLY FIXTURE **DENT LL**: Only fill out **AAAT** below.*
- *If **DENT LL & (DENT CT or HOBO)**: Fill out **AAAT** with logger info **&** the **HIGHBAY** Form for Panel Metering*
- *If ONLY **PANEL METERING**: Check **N/A** box and only fill out **HIGHBAY** Form.*

***Circle all that apply:** (If Verify Only, circle 'NA', and fill out AAAT)*

Metering Type:	DENT LL	DENT CT	HOBO	NA

☐ **N/A**

Area ID #	Sched #	Item #	Control Type Code	Repres. # of Units	% of Total Inst&Op. Units (Ref)	Primary Logger S/N	Ref. Logger	Back-up Logger S/N	Comments
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		
					%		☐		

<= Total # of Installed & Operational Units check *(no data entry)*

Comments _____
_____
_____
_____

Baseline Characterization

Please describe why these lights were changed to LEDs instead of any other lighting technology	

Approximate age of existing lighting system prior to retrofit (years)	
Condition of original fixtures prior to retrofit (**G**ood, **F**air, **P**oor)	**G F P**
What % of original fixtures were completely burned out?	
What % of original fixtures were partially burned out?	
On a scale of 1-10, Please rate the following topics on their level of influence for retrofitting the lighting fixtures:	
Burned out fixtures	
Adequate lighting levels	
Major Renovation / Re-Modeling	
Safety of Occupants	
Productivity of Occupants	
Lowering energy consumption and energy bills	
Long lamp life	
Low maintenance	
Going green	
Utility Incentive	
Other (*describe in comments*)	
Considering all of the influential factors above, in the absence of an energy efficiency rebate program: How long would you have continued to operate the original fixtures before replacing them? (years)	

Comments: _____

Panel Meter - Circuit Spot Measurement Table: (REFERENCE ONLY – NO DATA ENTRY)

Note 1: Fill this table out, then fill out the ***Consolidated Logging Circuit Table*** below.

Circuit Label #	Phase	# Fixtures Controlled *(DD)*	# Lamps per Fixture *(EE)*	Watts per Lamp (FF)	# Lamps Burnt Out (GG)	*(DD*EE*FF) -(FF*GG)* Calc. Circuit Watts *(HH)*	Measured Circuit Watts (MW) *(II)*	PF (JJ)	Measured Volts *(KK)*	Measured Amps *(LL)*	Measured Parasistic Watts *(MM)*	Comments

Panel Meter – Consolidated Logging Circuit Table: (REFERENCE ONLY – NO DATA ENTRY)

Note 1: After each circuit measurement is recorded in the table above, fill out the table below; here you can roll up >1 circuit into a single CT channel (if on the same phase).
Note 2: You will copy **ALL** values from the table below into their fields on the ***Panel Meter – Final Spot Measurement and Logging*** form.
Note 3: The "**Item #**" below should correlate to the "**Item #**" on the ***Panel Meter – Final Spot Measurement and Logging*** form.

Item # *(A)*	*From table above* Circuit Label #*(s)* *(B)*		*From table above* Phase *(C)*	*DCT or HOBO* Logger Type *(X)*	Logger ID *(Y)*	*(HOBO)* CT Channel # *(Z)*	*From applicalbe fields in table above* Total Fixtures Controlled *(D)*	# Lamps per Fixture *(E)*	Watts per Lamp *(F)*	# Lamps Burnt Out *(G)*	Sum Circuit Watts *(H)*	*From applicalbe fields in table above* Sum Meas. Watts *(I)*	Avg. *PF* (J)	Avg. Meas. Volts *(K)*	Sum *Meas. Amp* *(L)*	Sum Parasitic Watts *(M)*

Panel Meter – Final Spot Measurement and Logging – (DATA ENTRY)

Breaker Circuit and Point of Control (POC) Assessment				
Panel Meter Item #:	***(A)***			
Associated Measure Code(s)				
IOU Unit Basis				
Panel number/identifier (if applicable)				
Circuit Label Number(s):	***(B)***			
Phase of Circuit(s):	***(C)***	A B C	A B C	A B C
Breaker(s) Rated Amps				
Control Type Code (CTC)				
# Wall switches connected to this Circuit				
Circuit Configuration Code (CCC)				
Schedule #				
Area ID #: *(if >1 AA, enter from left to right)*				
# Rebated Controls per Activity Area(s) above:				
Fixture Verification and Nominal Watt Calculation				
Circuit(s) tested (On/Off)?		Y N	Y N	Y N
# of Rebated **Units** on Circuit(s)				
# of Rebated Fixtures controlled by Circuit(s):	***(D)***			
# of Rebated Lamps per Fixture:	***(E)***			
Rated Lamp Wattage:	***(F)***			
# of Lamps Burned-out or Non-Operable:	***(G)***			
Total Nominal Rebated Circuit(s) Watts: ***(D*E*F)-(F*G)***	***(H)***			
Spot Measurements				
Max Measured Wattage: (with all fixtures on Circuit ON):	***(I)***	G N	G N	G N
Power Factor: *(if 2 circuits on 1 CT, average the PF)*:	***(J)***			
Measured Circuit(s) Voltage: (to Ground or Neutral):	***(K)***			
Max Measured Amperage: (with all fixtures 'ON'):	***(L)***			
% Meas. vs. Calc. Watts: ***(I/H*100)***; Is this between 90-110%?		% Y N	% Y N	% Y N
Non-Rebated or Parsitic Loads				
Do Non-Rebated or Parasitic Loads exist on this Circuit?		Y N DK	Y N DK	Y N DK
Is the parasitic load Constant or Variable?		C V NA	C V NA	C V NA
Parasitic Wattage: (only if a contant parasitic load):	***(M)***			
Logger Information				
Logger Type: ***(DCT** = DENT CT, **H**=HOBO)*	***(X)***	DCT H	DCT H	DCT H
Primary Logger S/N:	***(Y)***			
Logger Channel #	***(Z)***			
Reference Logger:		☐	☐	☐
Reference Channel:		☐	☐	☐
CT Amp size				
Logger Installation Comments				

Panel Meter – Final Spot Measurement and Logging – (DATA ENTRY)

Breaker Circuit and Point of Control (POC) Assessment				
Panel Meter Item #:	***(A)***			
Associated Measure Code(s)				
IOU Unit Basis				
Panel number/identifier (if applicable)				
Circuit Label Number(s):	***(B)***			
Phase of Circuit(s):	***(C)***	A B C	A B C	A B C
Breaker(s) Rated Amps				
Control Type Code (CTC)				
# Wall switches connected to this Circuit				
Circuit Configuration Code (CCC)				
Schedule #				
Area ID #: *(if >1 AA, enter from left to right)*				
# Rebated Controls per Activity Area(s) above:				
Fixture Verification and Nominal Watt Calculation				
Circuit(s) tested (On/Off)?		Y N	Y N	Y N
# of Rebated **Units** on Circuit(s)				
# of Rebated Fixtures controlled by Circuit(s):	***(D)***			
# of Rebated Lamps per Fixture:	***(E)***			
Rated Lamp Wattage:	***(F)***			
# of Lamps Burned-out or Non-Operable:	***(G)***			
Total Nominal Rebated Circuit(s) Watts: ***(D*E*F)-(F*G)***	***(H)***			
Spot Measurements				
Max Measured Wattage: (with all fixtures on Circuit ON):	***(I)***	G N	G N	G N
Power Factor: *(if 2 circuits on 1 CT, average the PF)*:	***(J)***			
Measured Circuit(s) Voltage: (to Ground or Neutral):	***(K)***			
Max Measured Amperage: (with all fixtures 'ON'):	***(L)***			
% Meas. vs. Calc. Watts: ***(I/H*100)***; Is this between 90-110%?		% Y N	% Y N	% Y N
Non-Rebated or Parsitic Loads				
Do Non-Rebated or Parasitic Loads exist on this Circuit?		Y N DK	Y N DK	Y N DK
Is the parasitic load Constant or Variable?		C V NA	C V NA	C V NA
Parasitic Wattage: (only if a contant parasitic load):	***(M)***			
Logger Information				
Logger Type: ***(DCT** = DENT CT, **H**=HOBO)*	***(X)***	DCT H	DCT H	DCT H
Primary Logger S/N:	***(Y)***			
Logger Channel #	***(Z)***			
Reference Logger:		☐	☐	☐
Reference Channel:		☐	☐	☐
CT Amp size				
Logger Installation Comments				

Panel Meter – Final Spot Measurement and Logging

Breaker Circuit and Point of Control (POC) Assessment				
Panel Meter Item #:	***(A)***			
Associated Measure Code(s)				
IOU Unit Basis				
Panel number/identifier (if applicable)				
Circuit Label Number(s):	***(B)***			
Phase of Circuit(s):	***(C)***	A B C	A B C	A B C
Breaker(s) Rated Amps				
Control Type Code (CTC)				
# Wall switches connected to this Circuit				
Circuit Configuration Code (CCC)				
Schedule #				
Area ID #: *(if >1 AA, enter from left to right)*				
# Rebated Controls per Activity Area(s) above:				
Fixture Verification and Nominal Watt Calculation				
Circuit(s) tested (On/Off)?		Y N	Y N	Y N
# of Rebated **Units** on Circuit(s)				
# of Rebated Fixtures controlled by Circuit(s):	***(D)***			
# of Rebated Lamps per Fixture:	***(E)***			
Rated Lamp Wattage:	***(F)***			
# of Lamps Burned-out or Non-Operable:	***(G)***			
Total Nominal Rebated Circuit(s) Watts: ***(D*E*F)-(F*G)***	***(H)***			
Spot Measurements				
Max Measured Wattage: (with all fixtures on Circuit ON):	***(I)***	G N	G N	G N
Power Factor: *(if 2 circuits on 1 CT, average the PF)*:	***(J)***			
Measured Circuit(s) Voltage: (to Ground or Neutral):	***(K)***			
Max Measured Amperage: (with all fixtures 'ON'):	***(L)***			
% Meas. vs. Calc. Watts: ***(I/H*100)***; Is this between 90-110%?		% Y N	% Y N	% Y N
Non-Rebated or Parsitic Loads				
Do Non-Rebated or Parasitic Loads exist on this Circuit?		Y N DK	Y N DK	Y N DK
Is the parasitic load Constant or Variable?		C V NA	C V NA	C V NA
Parasitic Wattage: (only if a contant parasitic load):	***(M)***			
Logger Information				
Logger Type: ***(DCT** = DENT CT, **H**=HOBO)*	***(X)***	DCT H	DCT H	DCT H
Primary Logger S/N:	***(Y)***			
Logger Channel #	***(Z)***			
Reference Logger:		☐	☐	☐
Reference Channel:		☐	☐	☐
CT Amp size				
Logger Installation Comments				

General Comments

Item #	Form Name	Comments

Site Photo Log

Record site photo information here including the PhotoID (i.e. digital file name) and a brief description of the photo where needed. Site Photos should include the site entrance and entire building, rebated measures, and close-up photos of nameplates, lamp codes, and other make/model identification. Refer to the training manual for more on what photos to take. Photo/file naming conventions is SiteID_Item# or SiteID 00# (e.g. PGE_056789_1.jpg, PGE_056789 001.jpg).

Item #	Description/Comments/Measure Code *(no data entry)*
1	
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Incentive Payment

My signature acknowledges that I received a participation incentive in the form of a $____ gift card for the survey effort regarding the California Saturation Survey / California Market Share Tracking effort.

Print Name		**Date Received**	
Gift Card Company		**Gift Card Serial #**	
Signature			

Appendix C

NTGR Working Group Framework for NTG Analysis

Methodological Framework for Using the Self-Report Approach to Estimating Net-to-Gross Ratios for Nonresidential Customers

Prepared for the Energy Division, California Public Utilities Commission

By

The Nonresidential Net-To-Gross Ratio Working Group

October 16, 2012

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Acknowledgments

As part of the evaluation of the 2010-12 energy efficiency programs designed and implemented by the four investor-owned utilities (Pacific Gas & Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas and Electric Company) and third parties, the Energy Division of the California Public Utilities Commission (CPUC) re-formed the nonresidential net-to-gross ratio working group that was originally formed during the PY2006-2008 evaluation. The main purpose of this group was to furtherrefine and improve the standard net-to-gross methodological framework that was developed during the PY2006-2008 evaluation cycle. This framework includes decision rules, for integrating in a systematic and consistent manner the findings from both quantitative and qualitative information in estimating net-to-gross ratios. The working group, listed alphabetically, is composed of the following evaluation professionals:

- Jennifer Fagan, Itron, Inc.
- Nikhil Gandhi, Strategic Energy Technologies, Inc.
- Kay Hardy, Energy Division, CPUC
- Jeff Hirsch, James J. Hirsch & Associates
- Richard Ridge, Ridge & Associates
- Mike Rufo, Itron, Inc.
- Claire Palmgren, KEMA
- Valerie Richardson, KEMA
- Philippus Willems, PWP, Inc.

A public webinar was conducted to obtain feedback from the four investor-owned utilities and other interested stakeholders. The questionnaire was then pre-tested and, based on the pre-test results, finalized in December 2011.

1. OVERVIEW OF THE LARGE NONRESIDENTIAL FREE RIDERSHIP APPROACH

The methodology described in this section was developed to address the unique needs of Large Nonresidential customer projects developed through energy efficiency programs offered by the four California investor-owned utilities and third-parties. This method relies exclusively on the Self-Report Approach (SRA) to estimate project and program-level Net-to-Gross Ratios (NTGRs), since other available methods and research designs are generally not feasible for large nonresidential customer programs. This methodology provides a standard framework, including decision rules, for integrating findings from both quantitative and qualitative information in the calculation of the net-to-gross ratio in a systematic and consistent manner. This approach is designed to fully comply with the *California Energy Efficiency Evaluation: Protocols: Technical, Methodological, and Reporting Requirements for Evaluation Professionals* (Protocols) and the *Guidelines for Estimating Net-To-Gross Ratios Using the Self-Report Approaches* (Guidelines)**.**

This approach preserves the most important elements of the approaches previously used to estimate the NTGRs in large nonresidential customer programs. However, it also incorporates several enhancements that are designed to improve upon that approach, for example:

- The method incorporates a 0 to 10 scoring system for key questions used to estimate the NTGR, rather than using fixed categories that are assigned weights.

- The method asks respondents to jointly consider and rate the importance of the many likely events or factors that may have influenced their energy efficiency decision making, rather than focusing narrowly on only their rating of the program's importance. This question structure more accurately reflects the complex nature of the real-world decision making and should help to ensure that all non-program influences are reflected in the NTGR assessment in addition to program influences.

It is important to note that the NTGR approach described in this document is a general framework, designed to address all large nonresidential programs. In order to implement this approach on a program-specific basis, it also needs to be customized to reflect the unique nature of the individual programs.

2. BASIS FOR SRA IN SOCIAL SCIENCE LITERATURE

The social sciences literature provides strong support for use of the methods used in the SRA to assess program influence. As the *Guidelines* notes,

> More specifically, the SRA is a mixed method approach that involves asking one or more key participant decision-makers a series of structured and open-ended questions about whether they would have installed the same EE equipment in the

absence of the program as well as questions that attempt to rule out rival explanations for the installation (Weiss, 1972; Scriven, 1976; Shadish, 1991; Wholey et al., 1994; Yin, 1994; Mohr, 1995). In the simplest case (e.g., residential customers), the SRA is based primarily on quantitative data while in more complex cases the SRA is strengthened by the inclusion of additional quantitative and qualitative data which can include, among others, in-depth, open-ended interviews, direct observation, and review of program records. Many evaluators believe that additional qualitative data regarding the economics of the customer's decision and the decision process itself can be very useful in supporting or modifying quantitatively-based results (Britan, 1978; Weiss and Rein, 1972; Patton, 1987; Tashakkori and Teddlie, 1998).[1]

More details regarding the philosophical and methodological underpinnings of this approach are in Ridge, Willems and Fagan (2009), Ridge, Willems, Fagan and Randazzo (2009) and Megdal, Patil, Gregoire, Meissner, and Parlin (2009). In addition to these two articles, Appendix A provides an extensive listing of references in the social sciences literature regarding the methods employed in the SRA.

3. FREE RIDERSHIP ANALYSIS BY PROJECT TYPE

There are three levels of free-ridership analysis. The most detailed level of analysis, the **Standard – Very Large Project** NTGR, is applied to the largest and most complex projects (representing 10 to 20% of the total) with the greatest expected levels of gross savings[2] The **Standard** NTGR, involving a somewhat less detailed level of analysis, is applied to projects with moderately high levels of gross savings. The least detailed analysis, the **Basic** NTGR, is applied to all remaining projects. Evaluators must exercise their own discretion as to what the appropriate thresholds should be for each of these three levels.

4. SOURCES OF INFORMATION ON FREE RIDERSHIP

There are five sources of free-ridership information in this study. Each level of analysis relies on information from one or more of these sources. These sources are described below.

1. **Program Files**. As described in previous sections of this report, programs often maintain a paper file for each paid application. These can contain various pieces of information which are relevant to the analysis of free-ridership, such as letters written by the utility's customer representatives that document what the customer had planned to do in the absence of the rebate and explain the customer's motivation for implementing the efficiency measure. Information on the measure payback with and without the rebate may also be available.

[1] *Guidelines for Estimating Net-To-Gross Ratios Using the Self-Report Approaches*, October 15, 2007, pg. 3.

[2] Note that we do not refer to an Enhanced level of analysis, since this is defined by the Protocols to involve the application of two separate analysis approaches, such as billing analysis or discrete choice modeling.

2. **Decision-Maker Surveys**. When a site is recruited, one must also determine who was involved in the decision-making process which led to the implementation of measures under the program. They are asked to complete a Decision Maker survey. This survey obtains highly structured responses concerning the probability that the customer would have implemented the same measure in the absence of the program. First, participants are asked about the timing of their program awareness relative to their decision to purchase or implement the energy efficiency measure. Next, they are asked to rate the importance of the program versus non-program influences in their decision making. Third, they are asked to rate the significance of various factors and events that may have led to their decision to implement the energy efficiency measure at the time that they did. These include:

    - the age or condition of the equipment,
    - information from a feasibility study or facility audit
    - the availability of an incentive or endorsement through the program
    - a recommendation from an equipment supplier, auditor or consulting engineer
    - their previous experience with the program or measure,
    - information from a program-sponsored training course or marketing materials provided by the program
    - the measure being included as part of a major remodeling project
    - a suggestion from program staff, a program vendor, or a utility representative
    - a standard business practice
    - an internal business procedure or policy
    - stated concerns about global warming or the environment
    - a stated desire to achieve energy independence.

    In addition, the survey obtains a description of what the customer would have done in the absence of the program, beginning with whether the implementation was an early replacement action. If it was not, the decision maker is asked to provide a description of what equipment would have been implemented in the absence of the program, including both the efficiency level and quantities of these alternative measures. This is used to adjust the gross engineering savings estimate for partial free ridership, as discussed in Section 5.2.

    This survey contains a core set of questions for **Basic** NTGR sites, and several supplemental questions for both **Standard and Standard – Very Large** NTGR sites For example, if a Standard or Standard-Very Large respondent indicates that a financial calculation entered highly into their decision, they are asked additional questions about their *financial criteria* for investments and their rationale for the current project in light of them. Similarly, if they respond that a *corporate policy* was a primary consideration in their decision, they are asked a series of questions about the specific policy that led to their adoption of the installed measure. If they indicate the installation was a *standard practice*, there are supplemental questions to understand the origin and evolution of that standard practice within their

organization. These questions are intended to provide a deeper understanding of the decision making process and the likely level of program influence versus these internal policies and procedures. Responses to these questions also serve as a basis for consistency checks to investigate conflicting answers regarding the relative importance of the program and other elements in influencing the decision. In addition, **Standard – Very Large** sites may receive additional detailed probing on various aspects of their installation decision based on industry- or technology-specific issues, as determined by review of other information sources. For Standard-Very Large sites all these data are used to construct an internally consistent "story" that supports the NTGR calculated based on the overall information given.

3. **Vendor Surveys**. A Vendor Survey is completed for all **Standard** and **Standard-Very Large** NTGR sites that utilized vendors, and for **Basic** NTGR sites that indicate a high level of vendor influence in the decision to implement the energy efficient measure. For those sites that indicate the vendor was very influential in decision making, the vendor survey results enter directly into the NTGR scoring. The vendor survey findings are also be used to corroborate Decision Maker findings, particularly with respect to the vendor's specific role and degree of influence on the decision to implement the energy efficient measure. Vendors are queried on the program's significance in their decision to recommend the energy efficient measures, and on their likelihood to have recommended the same measure in the absence of the program. Generally, the vendors contacted as part of this study are contractors, design engineers, distributors, and installers.

4. **Utility and Program Staff Interviews**. For the Standard and Standard-Very Large NTGR analyses, interviews with utility staff and program staff are also conducted. These interviews are designed to gather information on the historical background of the customer's decision to install the efficient equipment, the role of the utility and program staff in this decision, and the name and contact information of vendors who were involved in the specification and installation of the equipment.

5. **Other information**. For **Standard – Very Large Project** NTGR sites, secondary research of other pertinent data sources is performed. For example, this could include a review of standard and best practices through industry associations, industry experts, and information from secondary sources (such as the U.S. Department of Energy's Industrial Technologies Program, Best Practices website URL, http://www1.eere.energy.gov/industry/bestpractices/). In addition, the Standard- Very Large NTGR analysis calls for interviews with other employees at the participant's firm, sometimes in other states, and equipment vendor experts from other states where the rebated equipment is being installed (some without rebates), to provide further input on standard practice within each company.

Table 1 below shows the data sources used in each of the three levels of free-ridership analysis. Although more than one level of analysis may share the same source, the amount of information that is utilized in the analysis may vary. For example, all three levels of analysis obtain core question data from the Decision Maker survey.

Table 1: Information Sources for Three Levels of NTGR Analysis

	Program File	Decision Maker Survey Core Question	Vendor Surveys	Decision Maker Survey Supplemental Questions	Utility & Program Staff Interviews	Other Research Findings
Basic NTGR	√	√	√[1]		√[2]	
Standard NTGR	√	√	√[1]	√	√	
Standard NTGR - Very Large Projects	√	√	√[3]	√	√	√

[1]Only performed for sites that indicate a vendor influence score (N3d) greater than maximum of the other program element scores (N3b, N3c, N3g, N3h, N3l).

[2]Only performed for sites that have a utility account representative

[3]Only performed if significant vendor influence reported or if secondary research indicates the installed measure may be becoming standard practice.

A copy of the complete survey forms (with lead-in text and skip patterns) are available upon request.

5. NTGR FRAMEWORK

The Self-Report-based Net-to-Gross analysis relies on responses to a series of survey questions that are designed to measure the influence of the program on the participant's decision to implement program-eligible energy efficiency measure(s). Based on these responses, a NTGR is derived based on responses to a set of "core" NTGR questions.

5.1. NTGR Questions and Scoring Algorithm

A self-report NTGR is computed for all NTGR levels using the following approach. Adjustments may be made for **Standard – Very Large** NTGR sites, if the additional information that is collected is inconsistent with information provided through the Decision Maker survey.

The NTGR is calculated as an average of three scores. Each of these scores represents the highest response or the average of several responses given to one or more questions about the decision to install a program measure.

- **Program attribution index 1 (PAI–1) score** that reflects the influence of the **most important** of various program and program-related elements in the

customer's decision to select the specific program measure at this time. Program influence through vendor recommendations is also incorporated in this score.

- **Program attribution index 2 (PAI–2) score** that captures the perceived importance of the program (whether rebate, recommendation, training, or other program intervention) relative to non-program factors in the decision to implement the specific measure that was eventually adopted or installed. This score is determined by asking respondents to assign importance values to both the program and most important non-program influences so that the two total 10. The program influence score is adjusted (i.e., divided by 2) if respondents say they had already made their decision to install the specific program qualifying measure before they learned about the program.

- **Program attribution index 2 (PAI–3) score** that captures the likelihood of various actions the customer might have taken at this time and in the future if the program had not been available (the counterfactual).

When there are multiple questions that feed into the scoring algorithm, as is the case for both the **PAI-1** and **PAI-3** scores, the maximum score is always used. The rationale for using the maximum value is to capture the most important element in the participant's decision making. Thus, each score is always based on the strongest influence indicated by the respondent. However, high scores that are inconsistent with other previous responses trigger consistency checks and can lead to follow-up questions to clarify and resolve the discrepancy.

The calculation of each of the above scores is discussed below. For each score, the associated questions are presented and the computation of each score is described.

5.1.1. PAI–1 score

For the Decision Maker, the questions asked are:
I'm going to ask you to rate the importance of the program as well as other factors that might influence your decision to implement [MEASURE.] Think of the degree of importance as being shown on a scale with equally spaced units from 0 to 10, where 0 means not at all important and 10 means very important, so that an importance rating of 8 shows twice as much influence as a rating of 4.

Now, using this 0 to 10 rating scale, where 0 means "Not at all important" and 10 means "Very important," please rate the importance of each of the following in your decision to implement this specific [MEASURE] at this time.

- Availability of the PROGRAM rebate

- Information provided through a recent feasibility study, energy audit or other types of technical assistance provided through PROGRAM

- Information from PROGRAM training course

- Information from other PROGRAM marketing materials
- Suggestion from program staff
- Suggestion from your account rep
- Recommendation from a vendor/supplier (If a score of greater than 5 is given, a vendor interview is triggered)

For the Vendor, the questions asked (if the interview is triggered) are:
I'm going to ask you to rate the importance of the [PROGRAM] in influencing your decision to recommend [MEASURE] to [CUSTOMER] and other customers. Think of the degree of importance as being shown on a scale with equally spaced units from 0 to 10, where 0 means not at all important and 10 means very important, so that an importance rating of 8 shows twice as much influence as a rating of 4.

1. Using this 0 to 10 scale where 0 is 'Not at all important" and 10 is "Very Important," how important was the PROGRAM, including incentives as well as program services and information, in influencing your decision to recommend that CUSTOMER install the energy efficiency MEASURE at this time?

2. And using a 0 to 10 likelihood scale, where 0 denotes "not at all likely" and 10 denotes "very likely," if the PROGRAM, including incentives as well as program services and information, had not been available, what is the likelihood that you would have recommended this specific energy efficiency MEASURE to CUSTOMER?
3. Now, using a 0 to 100 percent scale, in what percent of sales situations did you recommend MEASURE before you learned about the [PROGRAM]?
4. And using the same 0 to 100 percent scale, in what percent of sales situations do you recommend MEASURE now that you have worked with the [PROGRAM]?
5. And, using the same 0 to 10 scale where 0 is "Not at all important" and 10 is "Very important", how important in your recommendation were:
    a. Training seminars provided by UTILITY?
    b. Information provided by the UTILITY website?
    c. Your firm's past participation in a rebate or audit program sponsored by UTILITY?

If the Vendor interview is triggered, a score is calculated that captures the highest degree of program influence on the vendor's recommendation. This score (VMAX) is calculated as the MAXIMUM value of the following:

1. The response to question 1
2. 10 minus the response to question 2
3. The response to question 4 minus the response to question 3, divided by 10
4. The response to question 5a.
5. The response to question 5b.
6. The response to question 5c.

Note that vendors are asked an additional question regarding other ways that their recommendations regarding the measure might have been influenced. Their responses are not used in the direct calculation of the NTGR but are potentially useful in making adjustments to the core NTGR.

The PAI–1 score is calculated as:
The highest program influence score divided by the sum of the highest program influences (i.e., the responses to the first six decision maker questions) plus the highest non-program influence score, multiplied by 10. and, if the vendor interview has been triggered, the VMAX score multiplied by the score the decision makers assigned to the vendor recommendation.

5.1.2. PAI–2 score

The questions asked are:

1. Did you learn about PROGRAM BEFORE or AFTER you decided to implement the specific MEASURE that was eventually adopted or installed?

2. Now I'd like to ask you a last question about the importance of the program to your decision as opposed to other factors that may have influenced your decision. Again using the 0 to 10 rating scale we used earlier, where 0 means “Not at all important” and 10 means “Very important,” please rate the overall importance of PROGRAM versus the most important of the other factors we just discussed in your decision to implement the specific MEASURE that was adopted or installed. This time I would like to ask you to have the two importance ratings -- the program importance and the non-program importance -- total 10.

The PAI–2 score is calculated as:
The importance of the program, on the 0 to 10 scale, to question 2. This score is reduced by half if the respondent learned about the program after the decision had been made.

5.1.3. PAI–3 Score

The questions asked are:

1. Now I would like you to think about the action you would have taken with regard to the installation of this equipment if the &PROGRAM had not been available.

Using a likelihood scale from 0 to 10, where 0 is “Not at all likely” and 10 is “Extremely likely”, if PROGRAM had not been available, what is the likelihood that you would have installed exactly the same program-qualifying efficiency equipment that you did in this project?

The PAI-3 score is calculated as:

10 minus the likelihood of installing the same equipment

5.1.4. The Core NTGR

The self-reported core NTGR in most cases is simply the average of the PAI-1, PAI-2, and PAI-3 scores, divided by 10. The one exception to this is when the respondent indicates a 10 in 10 probability of installing the same equipment at the same time in the absence of the program, in which case the NTGR is based on the average of the PAI-2 and PAI-3 scores only.

5.2. Data Analysis and Integration

The calculation of the Core NTGR is fairly mechanical and is based on the answers to the closed-ended questions. However, the reliance of the Standard NTGR – Very Large on more information from so many different sources requires more of a case study level of effort. The SRA Guidelines point out that a case study is one method of assessing both quantitative and qualitative data in estimating a NTGR. A case study is an organized presentation of all these data available about a particular customer site with respect to all relevant aspects of the decision to install the efficient equipment. In such cases where multiple interviews are conducted eliciting both quantitative and qualitative data and a variety of program documentation has been collected, one will need to integrate all of this information into an internally consistent and coherent story that supports a specific NTGR.

The following data sources should be investigated and reviewed as appropriate to supplement the information collected through the decision maker interviews.

- Account Representative Interview
- Utility Program Manager/Staff Interview
- Utility Technical Contractor Interview
- Third party Program Manager Interview
- Evaluation Engineer Interview
- Gross Impact Site Plan/Analysis Review
- Corporate Green/Environmental Policy Review (if mentioned as important)
- Corporate Standard Practice Review (if mentioned as important)
- Industry Standard Practice Review (if mentioned as important)
- Corporate payback review (if mentioned as important)
- Review relevant codes and standards, including regulatory requirements
- Review industry publications, websites, reports such as the Commercial Energy Use Survey, historical purchase data of specific measures etc.

As detailed in the Self-Report NTGR Guidelines, when complementing the quantitative analysis of free-ridership with additional quantitative and qualitative data from multiple respondents and other sources, there are some basic concerns that one must keep in mind. Some of the other data – including interviews with third parties who were involved in the decision to install the energy efficient equipment – may reveal important influences on the customer's decision to install the qualifying program measure. When one chooses to

incorporate other data, one should keep the following principles in mind: 1) the method chosen should be balanced. That is, the method should allow for the possibility that the other influence can either increase or decrease the NTGR calculated from the decision maker survey responses, 2) the rules for deciding which customers will be examined for potential other influences should be balanced. In the case of Standard –Very Large interviews, all customers are subject to such a review, so that the pool of customers selected for such examination will not be biased towards ones for whom the evaluator believes the external influence will have the effect of influencing the NTGR in only one direction, 3) the plan for capturing other influences should be based on a well-conceived causal framework. The onus is on the evaluator to build a compelling case using a variety of quantitative and/or qualitative data for estimating a customer's NTGR.

Establishing Rules for Data Integration

Before the analysis begins, the evaluation team should establish, to the extent feasible, rules for the integration of the quantitative and qualitative data. These rules should be as specific as possible and be strictly adhered to throughout the analysis. Such rules might include instructions regarding when the NTGR based on the quantitative data should be overridden based on qualitative data, how much qualitative data are needed to override the NTGR based on quantitative data, how to handle contradictory information provided by more than one person at a given site, how to handle situations when there is no decision-maker interview, when there is no appropriate decision-maker interview, or when there is critical missing data on the questionnaire, and how to incorporate qualitative information on deferred free-ridership.

One must recognize that it is difficult to anticipate all the situations that one may encounter during the analysis. As a result, one may refine existing rules or even develop new ones during the initial phase of the analysis. One must also recognize that it is difficult to develop algorithms that effectively integrate the quantitative and qualitative data. It is therefore necessary to use judgment in deciding how much weight to give to the quantitative versus qualitative data and how to integrate the two. The methodology and estimates, however, must contain methods to support the validity of the integration methods through preponderance of evidence or other rules/procedures as discussed above.

For the **Standard-Very Large** cases in the large Nonresidential programs, the quantitative data used in the NTGR Calculator (which calculates the "core" NTGR), together with other information collected from the decision maker regarding the installation decision, form the initial basis for the NTG "story" for each site. Note that in most cases, supplemental data such as tracking data, program application files and results of interviews with program/IOU staff and vendors, will have been completed before the decision maker is contacted and will help guide the non-quantitative questioning in the interview. In practice, this means that most potential inconsistencies between decision maker responses and other sources of information should have been resolved before the interview is complete and data are entered into the NTGR Calculator. For example, if a company has an aggressive "green" policy widely promoted on its website that is not mentioned by the decision makers, the interviewer will ask the respondent to clarify the role of that policy in the decision. Conversely, if the decision maker attributes the

decision to install the equipment to a new company wide initiative rather than the program, yet there is no evidence of such an initiative reported by program staff, vendors, or the company's website, the decision maker will be asked to explain the discrepancy so that his or her responses can be changed if needed.

In some cases, however, it may be necessary to modify or override one of the scores contributing to the overall NTGR or the NTGR itself. Before this is done all quantitative and qualitative data will be systematically (and independently) analyzed by two experienced researchers who are familiar with the program, the individual site and the social science theory that underlies the decision maker survey instrument. Each will determine whether the additional information justifies modifying the previously calculated NTGR score, and will present any recommended modifications and their rationale in a well-organized manner, along with specific references to the supporting data. Again, it is important to note that the other influences can have the effect of either increasing or decreasing the NTGR calculated from the decision maker survey responses, and one should be skeptical about a consistent pattern of "corrections" in one direction or another.

Sometimes, *all* the quantitative and qualitative data will clearly point in the same direction while, in others, the *preponderance* of the data will point in the same direction. Other cases will be more ambiguous. In all cases, in order to maximize reliability, it is essential that more than one person be involved in analyzing the data. Each person must analyze the data separately and then compare and discuss the results. Important insights can emerge from the different ways in which two analysts look at the same set of data. Ultimately, differences must be resolved and a case made for a particular NTGR. Careful training of analysts in the systematic use of rules is essential to insure inter-rater reliability[3].

Once the individual analysts have completed their review, they meet to discuss their respective findings and present to the other the rationale for their recommended changes to the Calculator-derived NTGR. Key points of these arguments will be written down in summary form (e.g., Analyst 1 reviewed recent AQMD ruling and concluded that customer would have had to install the same measure within 2 years, not 3, thereby reducing NP score from 7.8 to 5.5) and also presented in greater detail in a workpaper so that an independent reviewer can understand and judge the data and the logic underlying each NTGR estimate. Equally important, the CPUC will have all the essential data to enable them to replicate the results, and if necessary, to derive their own estimates.

The outcome of the reconciliation by two analysts determines the final NTGR for a specific project. Again, the reasoning behind the "negotiated" final value must be thoroughly documented in a workpaper, while a more concise summary description of the rationale can be included in the NTGR Calculator workbook (e.g., Analyst 1 and Analyst 2 agreed that the NTGR score should have been higher than the calculated value of 0.45

[3] Inter-rater reliability is the extent to which two or more individuals (coders or raters) agree. Inter-rater reliability addresses the consistency of the implementation of a rating system.

because of extensive interaction between program technical staff and the customer, but they disagreed on whether this meant the NTGR should be .6 or .7. After discussion, they agreed on a NTGR of .65 as reflecting the extent of program influence on the decision).

In summary, it has been decided that supplemental data from non-core NTG questions collected through these surveys should be used in the following ways in the California Large Nonresidential evaluations:

- Vendor interview data will be used at times in the direct calculation of the NTGR. It will also be used to provide context and confirming/contradictory information for Standard-Very Large decision maker interviews.

- Qualitative and quantitative information from other sources (e.g., industry data, vendor estimates of sales in no-program areas, and other data as described above) may be used to alter core inputs only if contradictions are found with the core survey responses. Since judgments will have to be made in deciding which information is more compelling when there are contradictions, supplemental data are reviewed independently by two senior analysts, who then summarize their findings and recommendations and together reach a final NTGR value.

- Responses will also be used to construct a NTGR "story" around the project; that is they will help to provide the context and rationale for the project. This is particularly valuable in helping to provide guidance to program design for future years. It may be, for example, that responses to the core questions yield a high NTGR for a project, but additional information sources strongly suggest that the program qualifying technology has since become standard practice for the firm or industry, so that free ridership rates in future years are likely to be higher if program rules are not changed.

- Findings from other non-core NTGR questions (e.g., Payback Battery, Corporate Policy Battery) are also be used to **cross-check the consistency** of responses to core NTGR questions. When an inconsistency is found, it is presented to the Decision Maker respondent who is then be asked to explain and resolve it if they can. If they are not able to do so, their responses to the core NTGR question with the inconsistency may be overridden by the findings from these supplemental probes. These situations are handled on a case-by-case basis; however consistency checks are programmed into the CATI survey instrument used for the Basic and Standard cases.

Finally, some analysis of additional information beyond the close-ended questions that are used to calculate the Core NTGR could be done for the **Standard NTGR**. For example information regarding the financial criteria used to make capital investments, corporate policy regarding the purchase of energy efficiency equipment or the influence of standard practice in the same industry as the participant could be taken into account and used to make adjustments to the Core NTGR in a manner similar what is done for the Standard – Very Large NTGR.

5.3. Accounting for Partial Free Ridership

Partial free-ridership can occur when, in the absence of the program, the participant would have installed something more efficient than the program-assumed baseline efficiency but not as efficient as the item actually installed as a result of the program.

In situations where there is partial free ridership, the assumed baseline condition is affected. Absent partial free ridership, the assumed baseline would normally be based on existing equipment (in early replacement cases), on code requirements (in normal replace on burnout cases), or on a level above current code (e.g., this could be a market average or value purposefully set above code minimum but below market average; in this case, the definition and requirement would typically be defined by a specific program's baseline rules). In some cases, there may be a "dual" baseline (more specifically, a baseline that changes over the measure's EUL) if the project involves early replacement plus partial free ridership. In such cases, the baseline basis for estimating savings is the existing equipment over the remaining useful life (RUL) of the equipment, and then a baseline of likely intermediate efficiency equipment (e.g., code or above) for the remainder of the analysis period (i.e., the period equal to the EUL-RUL). When there is partial free ridership, the baseline equipment that would have been installed absent the program is of an intermediate efficiency level (resulting in lower energy savings than that assumed by the program if the program took in situ equipment efficiency as the basis for savings over the entire EUL). A related issue with respect to determination of the appropriate baseline is whether the adjustment made, if any, from the in situ or otherwise claimed baseline in the ex ante calculation, is whether the adjustment applies to the gross or net savings calculation.

Assignment of Partial Free Ridership Effects to Gross versus Net. In past evaluations, partial free ridership impacts have principally been incorporated into the net-to-gross ratio. This is because most partial free ridership is induced by market conditions, rather than by non-market factors. Market conditions refer primarily to standard adoption of a technology by a particular market segment or end user as a result of competitive market forces or other end user-specific factors. The key determining principle with respect to application of the adjustment to the net-to-gross ratio is whether there is a level of efficiency, below the efficiency of the measure for which savings are paid and claimed, but above what is required by code or minimum program baseline requirements that the end user would have implemented anyway without the program. Conditions that cause this adjustment to be made to gross savings rather than the net-to-gross ratio may include factors such as

- changing baseline equipment to meet changed business circumstances (such as increased production/throughput, changes in occupancy, etc.);
- compliance with environmental regulations, indoor air quality requirements, safety requirements; or
- the need to address an operational problem.

Each project should be examined separately for partial free ridership and a determination should be made based on the unique circumstances of each installation of whether an adjustment to gross savings or the net-to-gross ratio is warranted.

Data Collection Procedures. Information is gathered on partial free ridership using the following questions asked as part of the decision maker NTGR survey.

1. Now I would like you to think one last time about what action you would have taken if the program had not been available. Supposing that you had not installed the program qualifying equipment, which of the following alternatives would you have been MOST likely to do?
    a. Install fewer units
    b. Install standard efficiency equipment or whatever required by code
    c. Install equipment more efficient than code but less efficient than what you installed through the program
    d. repair/rewind or overhaul the existing equipment
    e. do nothing (keep the existing equipment as is)
    f. something else (specify what _____)

2. (IF FEWER UNITS) How many fewer units would you have installed? (It is okay to take an answer such as ...HALF...or 10 percent fewer ... etc.)

3. (IF MORE EFFICIENT THAN CODE) Can you tell me what model or efficiency level you were considering as an alternative? (It is okay to take an answer such as … 10 percent more efficient than code or 10 percent less efficient than the program equipment)

4. (IF REPAIR/REWIND/OVERHAUL) How long do you think the repaired/rewound/refurbished equipment would have lasted before requiring replacement?

In addition, these same partial free ridership questions should be asked during the on-site audit for a given project. This latter interview will be conducted by the project engineers. The collected information helps the gross impact and NTG analysis teams gain a more complete understanding of the true project baseline and equipment selection decision. These decision maker questions are included in the Excel version of the CATI-based Standard and Basic decision maker survey instrument as well as in the Standard-Very Large instrument.

Data Analysis and Integration Procedures. In cases where partial free ridership is found and it is determined that the adjustment should be made to the net-to-gross ratio, the following procedure should be used:

On the net side, the adjustment is based on the intermediate baseline indicated by the decision maker for the time period in which the intermediate equipment would have been installed. The calculation of energy saved under this intermediate baseline is done, and then divided by the savings calculated under the in situ baseline. The resulting ratio is then multiplied by the initial NTGR which was previously calculated using only the

'core' scoring inputs. The effect of this adjustment is to reduce the NTGR further to reflect the effects of the revealed partial free ridership.

In all cases, the Gross Impacts and NTG analysis teams will need to carefully coordinate their calculations to ensure that they are not inadvertently adjusting the savings twice for the same partial free ridership, i.e., through adjustments both to the gross savings calculation and to the NTG ratio.

6. NTGR INTERVIEW PROCESS

The NTGR surveys are conducted via telephone interviews. Highly-trained professionals with experience levels that are commensurate with the interview requirements should perform these interviews. Basic and Standard level interviews should be conducted by senior interviewers, who are highly experienced conducting telephone interviews of this type. Standard - Very Large interviews should be completed by professional consulting staff due to the complex nature of these projects and related decision making processes. More than likely, these will involve interviews of several entities involved in the project including the primary decision maker, vendor representatives, utility account executives, program staff and other decision influencers, as well as a review of market data to help establish an appropriate baseline.

All but the Standard -Very Large interviews should be conducted using computer-aided telephone interview (CATI) software. Use of a CATI approach has several advantages: (1) the surveys can be customized to reflect the unique characteristics of each program, and associated program descriptions, response categories, and skip patterns; (2) it drastically reduces inaccuracies associated with the more traditional paper and pencil method; and (3) the process of checking for inconsistent answers can be automated, with follow up prompts triggered when inconsistencies are found.

7. COMPLIANCE WITH SELF-REPORT GUIDELINES

The proposed NTGR framework fully complies with all of the CPUC/ED and the MECT's Guidelines for Estimating Net-to-Gross Ratios Using the Self-Report Approach.

Appendix A

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Appendix D

Survey Banners

This appendix provides the questions and responses to the phone survey. Each question and response is provided at the Program Period, HIM group and Building Type level as well as across Program Period.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<FM050> What is the main business activity at this facility?													
Offices (non-medical)	8.90	15.85	6.71	58.25	0.00	0.14	0.00	3.69	38.84	0.00	1.24	0.00	6.86
Restaurant/Food Service	18.02	28.91	14.60	0.00	68.98	88.56	0.00	8.96	0.00	87.54	83.73	0.00	6.06
Food Store (grocery/liquor/convenience)	1.13	1.74	0.93	0.00	11.25	0.05	0.00	0.91	0.00	7.63	0.09	0.00	1.61
Agricultural (farms, greenhouses)	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Retail Stores	44.77	35.55	47.66	1.95	0.00	11.25	100.00	71.61	8.53	0.41	14.94	48.47	75.06
Warehouse	1.39	1.58	1.33	5.73	0.00	0.00	0.00	0.42	4.27	0.00	0.00	0.00	2.50
Health Care	1.21	2.91	0.68	11.74	0.00	0.00	0.00	0.00	6.23	0.00	0.00	0.00	0.00
Education	0.01	0.03	0.01	0.12	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00
Public Assembly (church/fitness/theatre/	9.85	5.47	11.22	11.90	19.77	0.00	0.00	0.25	20.33	0.00	0.00	22.17	0.50
Services (hair/nail/massage/spa/gas/repa	4.86	5.95	4.52	5.51	0.00	0.00	0.00	12.04	18.03	4.42	0.00	0.00	6.82
Industrial (food processing plant, Manuf	0.25	0.58	0.15	1.93	0.00	0.00	0.00	0.28	0.64	0.00	0.00	0.00	0.24
Laundry (Coin Operated/Commercial Laundr	0.01	0.03	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	9.60	1.38	12.19	2.77	0.00	0.00	0.00	1.76	3.06	0.00	0.00	29.37	0.37
n	*564*	*278*	*286*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*13*	*102*
<FM050A> Which of the following types of offices best describes this facility?													
Administration and management	21.47	22.43	20.67	22.35	0.00	100.00	0.00	21.60	16.82	0.00	100.00	0.00	24.15
Financial / Legal	25.42	38.94	14.21	41.88	0.00	0.00	0.00	1.30	20.62	0.00	0.00	0.00	0.00
Insurance/Real Estate	12.04	16.21	8.59	17.47	0.00	0.00	0.00	0.00	12.46	0.00	0.00	0.00	0.00
Mixed-Use/Multi-tenant	8.21	6.06	9.98	6.53	0.00	0.00	0.00	0.00	13.50	0.00	0.00	0.00	2.33
Office with Warehouse	2.88	4.81	1.28	3.85	0.00	0.00	0.00	17.61	1.86	0.00	0.00	0.00	0.00
Contractors' Offices	1.93	0.61	3.03	0.65	0.00	0.00	0.00	0.00	4.39	0.00	0.00	0.00	0.00
Travel Services (Travel Agent)	1.22	1.04	1.38	0.95	0.00	0.00	0.00	2.15	2.00	0.00	0.00	0.00	0.00
Other	26.83	9.91	40.85	6.32	0.00	0.00	0.00	57.34	28.35	0.00	0.00	0.00	73.51
n	*125*	*67*	*58*	*59*	*0*	*1*	*0*	*7*	*53*	*0*	*1*	*0*	*4*
<FM050B> Which of the following types of restaurants or food service best describes this facility?													
Fast Food or Self Service	10.23	11.13	9.67	0.00	30.24	3.82	0.00	0.00	0.00	29.12	2.13	0.00	0.00
Specialty/Novelty Food Service	15.27	13.28	16.52	0.00	0.68	20.62	0.00	8.06	0.00	5.43	8.47	0.00	73.53
Table Service	59.53	55.90	61.81	0.00	53.04	68.54	0.00	0.00	0.00	55.78	79.68	0.00	0.00
Bar/Tavern/Nightclub/Brew Pub or Micro-B	8.56	11.97	6.42	0.00	8.75	0.00	0.00	79.74	0.00	2.33	9.73	0.00	1.27
Caterer	0.60	0.00	0.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.10
Other	3.70	5.65	2.48	0.00	0.26	7.02	0.00	12.20	0.00	0.00	0.00	0.00	18.10
Other-Do not use unless necessary	2.11	2.06	2.13	0.00	7.03	0.00	0.00	0.00	0.00	7.34	0.00	0.00	0.00
n	*144*	*66*	*78*	*0*	*32*	*31*	*0*	*3*	*0*	*39*	*31*	*0*	*8*
<FM050C> Which of the following types of food stores best describes this facility?													
Supermarkets	28.73	20.64	33.40	0.00	26.03	0.00	0.00	0.00	0.00	84.92	0.00	0.00	0.00
Specialty/Ethnic Grocery/Deli	1.58	4.33	0.00	0.00	4.81	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Store	5.49	2.19	7.40	0.00	0.00	0.00	0.00	10.85	0.00	0.00	0.00	0.00	12.40
Liquor Store	8.72	15.83	4.61	0.00	0.00	0.00	0.00	78.40	0.00	0.00	0.00	0.00	7.73
Retail Bakery	54.84	57.00	53.59	0.00	69.15	0.00	0.00	10.75	0.00	15.08	0.00	0.00	79.87
Other	0.64	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*14*	*8*	*6*	*0*	*4*	*1*	*0*	*3*	*0*	*2*	*1*	*0*	*3*
<FM050D> What type of agricultural facicility is this?													
Commercial Farm	100.00	100.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
n	*1*	*1*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*
<FM050E> Which of the following types of retail stores best describes this facility?													
Department / Variety Store	16.96	3.67	19.94	0.00	0.00	0.00	21.49	0.05	7.97	0.00	0.00	42.82	3.85
Retail Warehouse/Club	2.16	0.36	2.57	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	5.25	0.73
Shop in Enclosed Mall	1.51	0.00	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.47
Shop in Strip Mall	16.56	22.78	15.16	5.73	0.00	100.00	0.00	21.59	0.00	0.00	100.00	0.63	21.96
Auto / Truck / Motorcycle Sales	1.48	4.77	0.75	0.00	0.00	0.00	0.00	6.35	0.00	0.00	0.00	0.99	0.63
Art Gallery	2.35	1.95	2.44	0.00	0.00	0.00	0.00	2.60	0.00	0.00	0.00	0.00	4.58
Heavy Equipment Sales	0.97	0.00	1.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.22
Facility is a Mall/Strip Mall	2.78	2.19	2.91	0.00	0.00	0.00	0.00	2.91	17.32	0.00	0.00	0.00	4.81
10	11.47	24.78	8.48	23.70	0.00	0.00	0.00	32.52	13.95	100.00	0.00	0.00	15.29
Other	43.75	39.49	44.70	70.57	0.00	0.00	78.51	33.50	60.76	0.00	0.00	50.30	42.46
n	*146*	*67*	*79*	*6*	*0*	*1*	*3*	*57*	*6*	*1*	*1*	*7*	*64*
<FM050F> Which of the following types of warehouses best describes this facility?													
Unconditioned Warehouse,High Bay(lightin	3.96	14.56	0.00	5.77	0.00	0.00	0.00	92.79	0.00	0.00	0.00	0.00	0.00
Unconditioned Warehouse,Low Bay	18.61	68.42	0.00	76.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shipping / Distribution Center	19.94	7.27	24.68	8.09	0.00	0.00	0.00	0.00	70.53	0.00	0.00	0.00	0.00
Garage / Parking / Storage for Commercia	0.20	0.73	0.00	0.00	0.00	0.00	0.00	7.21	0.00	0.00	0.00	0.00	0.00
Public Self-Storage Facility	1.46	5.36	0.00	5.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	55.83	3.66	75.32	4.07	0.00	0.00	0.00	0.00	29.47	0.00	0.00	0.00	100.00
n	*13*	*8*	*5*	*6*	*0*	*0*	*0*	*2*	*4*	*0*	*0*	*0*	*1*
<FM050G> Which of the following types of health care centers best describes this facility?													
Medical/Dental Office	13.67	21.82	2.68	21.82	0.00	0.00	0.00	0.00	2.68	0.00	0.00	0.00	0.00
Clinic/Outpatient Care	30.83	44.31	12.65	44.31	0.00	0.00	0.00	0.00	12.65	0.00	0.00	0.00	0.00
Alchohol/Drug Treatment / Rehabilitation	2.42	4.22	0.00	4.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Doctor's Office	4.56	7.94	0.00	7.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dentist's Office	9.90	10.83	8.64	10.83	0.00	0.00	0.00	0.00	8.64	0.00	0.00	0.00	0.00
Other	38.61	10.88	76.03	10.88	0.00	0.00	0.00	0.00	76.03	0.00	0.00	0.00	0.00
n	*20*	*13*	*7*	*13*	*0*	*0*	*0*	*0*	*7*	*0*	*0*	*0*	*0*
<FM050H> Which of the following types of educational centers best describes this facility?													
Vocational or Trade School	100.00	100.00	100.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
n	*2*	*1*	*1*	*1*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*
<FM050I> Which of the following types of lodging best describes this facility?													
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<FM050J> Which of the following types of public assembly buildings best describes this facility?													
Religious Assembly (worship only)	15.37	57.31	8.94	23.86	100.00	0.00	0.00	0.00	45.40	0.00	0.00	0.00	0.00
Religious Assembly (mixed use)	1.55	1.72	1.53	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00
Health/Fitness Center / Athletic Center	0.10	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00
Library / Museum	70.58	2.79	80.97	5.18	0.00	0.00	0.00	0.00	11.05	0.00	0.00	100.00	0.00
Conference/Convention Center	1.53	11.54	0.00	21.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	10.87	26.64	8.45	49.51	0.00	0.00	0.00	0.00	42.94	0.00	0.00	0.00	0.00
n	*16*	*7*	*9*	*5*	*1*	*0*	*0*	*1*	*6*	*0*	*0*	*2*	*1*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<FM050K> Which of the following types of service buildings best describes this facility?													
Hair Salon	26.93	36.81	22.61	0.00	0.00	0.00	0.00	47.76	0.00	0.00	0.00	0.00	46.02
Day Spa	3.02	1.29	3.77	0.00	0.00	0.00	0.00	1.68	0.00	0.00	0.00	0.00	7.68
Gas Station / Auto Repair	9.02	12.07	7.69	42.73	0.00	0.00	0.00	2.95	7.34	0.00	0.00	0.00	8.80
Gas Station w/Convenience Store	3.46	0.00	4.98	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
General Repair (Non-Auto)	4.87	1.76	6.23	0.00	0.00	0.00	0.00	2.28	0.00	0.00	0.00	0.00	12.68
Package Delivery (Fed Ex / UPS / DHL)	4.78	0.00	6.88	0.00	0.00	0.00	0.00	0.00	14.99	0.00	0.00	0.00	0.00
Pet Care / Grooming	4.10	0.00	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.01
Photographer	4.17	8.60	2.24	37.49	0.00	0.00	0.00	0.00	4.87	0.00	0.00	0.00	0.00
Vehicle Inspections	0.29	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
Upholstery	4.13	0.00	5.93	0.00	0.00	0.00	0.00	0.00	12.92	0.00	0.00	0.00	0.00
Other	35.23	39.48	33.37	19.78	0.00	0.00	0.00	45.34	59.88	0.00	0.00	0.00	11.98
n	*41*	*19*	*22*	*5*	*0*	*0*	*0*	*14*	*9*	*1*	*0*	*0*	*12*
<FM050L> Which of the following types of buildings best describes this facility?													
Assembly / Light Manufacturing	65.73	81.99	46.07	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
Other	34.27	18.01	53.93	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00
n	*8*	*6*	*2*	*5*	*0*	*0*	*0*	*1*	*1*	*0*	*0*	*0*	*1*
<FM050M> What type of laundry facility is this?													
Dry Cleaners	100.00	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*1*	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<FM050N> Which of the following types of buildings best describes this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<FM050O> Which of the following types of buildings best describes this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<CC2A> What is the total square footage at this facility?													
Less than 1500 sq ft	12.83	18.01	11.02	21.06	14.11	3.80	0.00	27.15	14.48	21.85	2.89	0.00	20.21
Between 1500 and 5000 sq ft	31.18	40.41	27.95	24.83	39.77	74.59	9.08	38.18	30.61	60.72	47.91	0.41	40.44
Between 5000 and 10,000 sq ft	8.44	7.57	8.74	8.89	21.73	12.14	0.00	0.94	13.45	8.27	32.56	0.00	7.99
Between 10,000 and 25,000 sq ft	7.42	3.02	8.96	0.76	0.00	0.00	0.00	7.44	8.65	0.00	8.03	8.90	10.62
Between 25,000 and 50,000 sq ft	12.30	10.88	12.80	5.89	0.00	0.00	69.43	14.43	8.73	0.00	0.00	32.44	2.71
Between 50,000 and 75,000 sq ft	0.64	1.32	0.41	5.32	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.41	0.00
Over 100,000 sq ft (Ag area)	7.30	0.00	9.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.87	0.00
Don't Know	19.89	18.81	20.27	33.26	24.40	9.47	21.49	11.85	21.83	9.16	8.61	27.97	18.03
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<CC2b> Would you say that the floor area is...													
Less than 1500 sq ft	7.72	14.80	5.41	28.88	0.00	4.54	0.00	7.18	18.13	7.14	15.36	0.00	6.29
Between 1500 and 5000 sq ft	46.42	71.12	38.39	63.28	95.86	95.46	0.00	78.73	27.22	83.81	84.64	0.00	84.26
Between 5000 and 10,000 sq ft	2.45	4.97	1.63	6.03	0.00	0.00	0.00	9.14	4.46	0.00	0.00	0.00	2.82
Between 10,000 and 25,000 sq ft	39.93	6.46	50.81	0.00	0.00	0.00	100.00	0.00	40.53	0.00	0.00	100.00	0.00
Between 25,000 and 50,000 sq ft	0.54	0.31	0.62	0.70	0.00	0.00	0.00	0.00	4.72	0.00	0.00	0.00	0.00
Don't Know	2.94	2.33	3.13	1.11	4.14	0.00	0.00	4.94	4.94	9.05	0.00	0.00	6.63
n	*107*	*54*	*53*	*28*	*4*	*5*	*1*	*15*	*18*	*6*	*6*	*1*	*21*
<CC2C> Is the entire floor area of this facility heated or cooled?													
Yes	81.72	78.08	83.00	72.13	91.70	81.10	100.00	72.81	68.35	80.80	82.09	100.00	73.63
No	17.64	21.92	16.14	27.87	8.30	18.90	0.00	27.19	31.65	19.20	17.91	0.00	24.12
Don't Know	0.64	0.00	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<CC2D> What percentage of the floor area is heated or cooled at htis facility?													
0 Percent	26.65	29.04	25.51	30.87	14.56	31.40	0.00	28.51	12.73	11.13	12.37	0.00	35.24
Between 0 and 15 Percent	5.06	10.78	2.33	24.40	0.00	0.00	0.00	6.58	9.83	0.00	0.00	0.00	0.00
Between 15 and 30 Percent	7.76	8.75	7.29	8.71	0.00	32.20	0.00	1.43	6.34	0.00	12.50	0.00	7.40
Between 30 and 45 Percent	8.17	4.00	10.15	12.28	0.00	0.00	0.00	0.29	6.68	39.54	1.61	0.00	10.17
Between 45 and 60 Percent	14.20	10.85	15.80	5.34	83.25	0.00	0.00	10.94	33.44	19.16	0.00	0.00	11.35
Between 60 and 80 Percent	14.43	7.02	17.95	0.87	0.00	36.40	0.00	1.53	21.00	5.40	73.53	0.00	6.27
Between 80 and 100 Percent	9.98	12.41	8.82	9.09	0.00	0.00	0.00	20.25	2.98	24.77	0.00	0.00	11.36
100 Percent	2.60	0.89	3.41	1.42	0.00	0.00	0.00	0.95	5.20	0.00	0.00	0.00	3.78
Don't Know	11.15	16.26	8.72	7.04	2.19	0.00	0.00	29.54	1.82	0.00	0.00	0.00	14.42
n	*160*	*86*	*74*	*35*	*4*	*8*	*0*	*38*	*26*	*8*	*7*	*0*	*32*
<CC3A> Is your space heated using electricity or gas?													
Electricity	39.70	39.07	39.91	58.53	15.14	51.13	21.49	31.41	50.09	39.05	44.05	28.74	46.00
Gas	38.32	36.65	38.90	35.54	52.72	34.97	78.51	25.95	29.70	47.86	50.26	50.25	26.17
Both Gas and Electricty	11.24	12.72	10.73	1.19	25.79	12.65	0.00	17.71	14.62	8.20	4.38	16.19	6.56
Propane	0.05	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
5	6.24	8.96	5.30	0.70	4.84	1.25	0.00	21.12	0.81	3.83	1.31	0.00	13.40
Other	2.93	0.20	3.87	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.00	4.82	6.08
Don't Know	1.53	2.40	1.22	4.04	1.51	0.00	0.00	3.27	4.77	1.06	0.00	0.00	1.61
n	*504*	*247*	*257*	*100*	*37*	*29*	*3*	*77*	*88*	*42*	*31*	*10*	*85*
<C0> About what percentage of your operating costs does energy account for?													
Less than 1 percent	4.01	5.00	3.66	8.80	0.00	0.00	0.00	7.41	4.26	4.76	0.00	0.00	7.52
1 to 2 percent	11.96	17.05	10.18	12.58	33.96	4.92	9.08	21.81	13.95	12.20	3.04	0.41	19.15
3 to 5 percent	15.02	19.61	13.41	34.55	22.61	17.60	0.00	12.87	11.68	17.94	22.84	3.31	19.28
6 to 10 percent	13.60	13.13	13.77	7.61	14.73	19.86	0.00	14.69	15.85	40.43	26.47	0.65	16.97
11 to 15 percent	8.43	7.41	8.79	10.83	0.00	11.46	0.00	6.64	9.37	1.57	0.00	16.99	5.11
16 to 20 percent	2.04	3.94	1.37	3.72	0.00	9.03	0.00	3.38	5.32	1.14	4.55	0.00	0.42
21 to 50 percent	4.31	9.53	2.48	6.04	4.22	6.57	0.00	16.43	2.92	2.60	2.93	0.00	4.32
Over 51 percent	1.20	1.21	1.19	2.01	2.90	0.00	0.00	0.94	5.51	0.31	0.00	0.00	1.32
Don't Know	39.43	23.12	45.15	13.86	21.58	30.54	90.92	15.83	31.16	19.05	40.17	78.65	25.91
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<CC4> Does your business own, lease or manage the facility?													
Own	23.49	24.70	23.07	42.96	45.87	10.87	21.49	13.37	35.03	19.94	15.23	32.91	13.51
Lease/Rent	76.24	75.12	76.63	56.92	54.13	89.14	78.51	86.21	64.98	75.31	84.77	67.09	86.37
Manage	0.23	0.04	0.30	0.12	0.00	0.00	0.00	0.03	0.00	4.76	0.00	0.00	0.12
Refused	0.04	0.15	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00	0.00
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<C5> How many locations does your organization have. Is it....													
This facility only	69.72	74.48	68.06	75.34	65.18	67.37	69.43	81.32	73.99	77.35	72.55	62.96	68.01
2 to 4 locations	17.28	16.66	17.49	15.76	23.38	23.75	9.08	12.56	10.49	14.32	24.99	8.54	25.62
5 to 10 locations	2.01	3.90	1.35	0.36	5.00	6.76	0.00	4.98	5.34	0.33	1.20	0.41	1.09
11 to 25 locations or	1.24	1.46	1.16	1.96	5.96	0.44	0.00	0.40	1.27	6.41	0.00	0.00	1.72
More than 25 locations	9.75	3.51	11.94	6.58	0.48	1.68	21.49	0.74	8.90	1.60	1.25	28.09	3.57
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<CC6> How active a role does your business take in making lighting and climate control equipment purchase decisions at this facility? Would you say you are…													
Very active – involved in all phases and have veto power	74.06	72.16	74.73	57.89	83.60	59.86	78.51	82.99	80.08	73.87	58.46	68.60	83.08
Somewhat active-we approve decisions and provide some input and review	17.80	15.73	18.53	23.26	6.07	31.38	21.49	5.21	12.08	9.36	36.42	31.28	5.78
Slightly active-we have a voice but it's not the dominant voice	3.57	5.73	2.82	11.59	5.00	8.76	0.00	1.50	2.81	13.54	5.12	0.00	3.08
Not active at all-we are part of a large organization	0.41	0.75	0.29	0.47	5.07	0.00	0.00	0.04	0.00	1.87	0.00	0.12	0.39
OR not active at all- our firm doesn't get involved in these issues	3.01	4.42	2.51	6.80	0.27	0.00	0.00	7.11	4.19	1.36	0.00	0.00	5.01
Don't Know	1.15	1.20	1.13	0.00	0.00	0.00	0.00	3.15	0.84	0.00	0.00	0.00	2.66
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*

* Values are shown as percent of respondents weighted by kWh.

* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<CC8> In what year was your facility built?													
After 2000	5.99	5.08	6.31	8.40	0.62	2.86	0.00	6.25	11.87	15.61	24.33	0.00	3.51
In the 1990's	4.58	4.60	4.58	1.69	12.47	11.85	0.00	0.97	0.74	10.63	8.67	0.00	7.69
1980's	8.02	6.54	8.54	6.43	11.92	0.44	0.00	8.92	7.29	7.97	1.69	16.99	3.75
1970's	5.69	9.64	4.31	9.81	15.89	17.91	0.00	4.76	13.78	16.35	7.09	0.00	2.56
1960's	4.05	7.31	2.90	6.27	23.67	14.21	0.00	0.31	1.32	3.91	19.96	0.00	0.85
1950's	2.90	3.83	2.58	1.89	0.00	0.00	0.00	8.84	1.62	1.67	0.00	0.00	5.96
Before 1950	9.95	10.81	9.65	0.77	0.00	0.14	0.00	27.84	9.99	4.93	0.00	12.88	10.21
Don't Know	58.81	52.19	61.13	64.73	35.44	52.59	100.00	42.11	53.39	38.92	38.26	70.13	65.49
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<CC10> If Don't Know, would you say it was...													
After 2000	0.89	0.64	0.97	0.00	7.40	0.00	0.00	0.07	3.55	2.66	0.75	0.18	0.93
In the 1990's	18.76	9.10	21.65	6.63	30.51	1.12	21.49	6.42	10.65	18.23	4.43	39.88	10.92
1980's	11.00	17.38	9.09	26.78	2.26	17.60	0.00	17.96	17.91	15.90	9.76	0.00	14.44
1970's	30.66	21.42	33.42	15.68	11.60	32.39	69.43	6.00	13.86	36.51	24.37	47.77	26.55
1960's	13.96	15.08	13.62	21.94	5.83	25.13	0.00	9.74	14.06	8.76	29.00	0.00	23.84
1950's	7.94	10.89	7.06	5.03	3.85	11.39	0.00	22.22	13.87	0.00	0.00	11.59	2.91
Before 1950	6.87	15.43	4.31	19.21	37.21	1.63	9.08	16.68	5.60	13.29	0.14	0.58	7.37
Don't Know	9.92	10.06	9.88	4.73	1.34	10.74	0.00	20.91	20.50	4.64	31.53	0.00	13.03
n	*348*	*175*	*173*	*71*	*19*	*17*	*3*	*64*	*59*	*19*	*19*	*8*	*67*
<CC11> In what year was this facility last remodeled?													
Between 2008 and present	47.76	45.20	48.65	49.67	53.08	32.60	78.51	41.12	53.71	33.44	38.17	53.27	48.20
Between 2000 and 2007	21.00	18.91	21.73	23.41	26.54	40.98	0.00	5.19	20.56	55.02	39.29	18.12	15.54
During the 1990's OR	7.21	8.79	6.65	13.73	5.07	4.49	0.00	10.25	14.16	7.70	8.72	0.00	9.26
Before the 1990's	3.23	3.87	3.00	2.14	4.52	2.96	0.00	5.82	3.24	1.17	5.01	0.65	4.62
Don't Know	20.81	23.24	19.97	11.05	10.80	18.97	21.49	37.61	8.32	2.67	8.81	27.97	22.39
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<CC11A> Would you say the last remodeling was done ...													
Between 2008 and present	8.08	11.35	6.75	0.00	0.00	40.17	0.00	8.21	0.00	0.00	33.23	0.00	11.89
Between 2000 and 2007	5.79	2.37	7.19	18.25	0.00	0.00	0.00	0.36	4.50	0.00	0.00	0.00	16.13
During the 1990's OR	4.05	7.61	2.59	6.58	0.00	40.18	0.00	0.88	15.22	0.00	14.29	0.00	2.61
Before the 1990's	15.78	32.46	8.98	31.54	15.90	18.89	0.00	40.39	29.00	17.91	18.82	0.00	15.00
Don't Know	66.30	46.20	74.49	43.62	84.10	0.76	100.00	50.16	51.28	82.09	33.66	100.00	54.37
n	*119*	*66*	*53*	*23*	*7*	*9*	*1*	*26*	*14*	*5*	*7*	*1*	*26*
<CC12a> In what year was this organization established at this location?													
Between 2009 and present	25.57	24.07	26.09	21.16	15.51	6.56	78.51	29.51	16.27	29.47	6.64	36.16	25.68
Between 2006 and 2008	8.82	9.60	8.55	4.15	5.65	17.73	0.00	11.75	7.63	15.77	31.24	0.41	8.30
Between 2000 and 2005	16.53	14.62	17.21	14.58	15.90	35.83	0.00	5.71	26.72	26.98	36.72	4.82	17.87
In the 1990's	17.95	25.00	15.48	35.61	10.34	33.27	0.00	22.40	18.88	11.63	17.36	0.00	27.70
1980's	11.19	10.23	11.53	12.57	19.13	3.25	0.00	10.89	11.62	7.26	2.17	17.63	9.54
1970's	4.13	4.31	4.07	7.28	9.17	0.14	0.00	3.56	15.65	6.70	0.00	0.00	4.71
1960's	1.89	3.81	1.22	0.62	22.86	2.96	0.00	0.72	2.25	0.42	5.01	0.00	0.96
1950's	1.52	3.05	0.98	0.00	0.00	0.00	0.00	8.02	0.00	0.00	0.00	0.00	2.55
Before 1950	3.25	0.00	4.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.88	0.36
Don't Know	9.14	5.30	10.49	4.03	1.44	0.26	21.49	7.44	0.98	1.76	0.86	28.09	2.33
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<CC12b> If Don't Know, would you say it was...													
After 2005	78.20	22.94	87.98	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	99.56	0.00
Between 2000 and 2005	1.72	9.25	0.39	49.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00
In the 1990s	14.32	54.37	7.23	10.28	33.04	0.00	0.00	96.06	23.75	90.56	0.00	0.00	72.06
In the 1980s	1.78	3.37	1.49	10.24	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	4.96
In the 1970s	2.86	7.48	2.05	16.61	66.96	0.00	0.00	3.94	0.00	9.44	0.00	0.00	22.98
Before 1960	1.12	2.59	0.86	13.77	0.00	0.00	0.00	0.00	76.25	0.00	0.00	0.00	0.00
n	*25*	*13*	*12*	*6*	*2*	*1*	*1*	*2*	*2*	*2*	*1*	*2*	*4*
<BC090> Has the square footage of the facility increased, decreased or remained the same since January 2009?													
Increase in square footage	0.77	0.80	0.76	0.00	2.87	0.44	0.00	0.95	3.38	6.48	0.00	0.00	0.00
Decrease in square footage	0.27	0.58	0.16	2.35	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00	0.00
Stayed the same	97.87	97.75	97.92	97.00	94.76	99.56	100.00	97.95	95.29	93.52	100.00	100.00	96.97
Don't Know	1.09	0.87	1.17	0.65	2.36	0.00	0.00	1.09	0.00	0.00	0.00	0.00	3.03
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<BC100> How many square feet were added?													
Less than 1500 sq ft	50.46	63.78	45.86	0.00	100.00	100.00	0.00	12.18	0.00	100.00	0.00	0.00	0.00
Between 1500 and 5000 sq ft	40.24	0.00	54.14	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
Between 5000 and 10,000 sq ft	9.30	36.22	0.00	0.00	0.00	0.00	0.00	87.82	0.00	0.00	0.00	0.00	0.00
n	*8*	*4*	*4*	*0*	*1*	*1*	*0*	*2*	*3*	*1*	*0*	*0*	*0*
<BC110> How many square feet was the facility reduced?													
Between 1500 and 5000 sq ft	100.00	100.00	100.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
n	*2*	*1*	*1*	*1*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*
<BC120> What year did this change in square feet occur?													
2010	8.03	0.00	12.28	0.00	0.00	0.00	0.00	0.00	19.75	0.00	0.00	0.00	0.00
2011	67.70	91.13	55.31	100.00	100.00	0.00	0.00	89.66	28.10	100.00	0.00	0.00	0.00
2012	22.14	2.71	32.41	0.00	0.00	0.00	0.00	10.34	52.15	0.00	0.00	0.00	0.00
6	2.13	6.16	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*11*	*6*	*5*	*1*	*1*	*1*	*0*	*3*	*4*	*1*	*0*	*0*	*0*
<CA15> Over the past 3 years, how would you characterize your organization's business outlook?													
Excellent	15.28	26.07	11.50	43.48	43.00	5.25	0.00	23.60	35.55	12.75	4.11	0.65	15.14
Good	39.60	37.49	40.33	26.94	40.67	45.80	21.49	41.53	38.16	48.07	26.46	46.21	38.91
Fair	27.28	19.18	30.11	12.99	7.93	20.51	78.51	17.37	15.53	19.74	42.26	53.15	12.92
Adequate OR	10.25	8.52	10.85	9.42	3.09	6.65	0.00	11.92	9.34	11.56	6.93	0.00	21.67
Poor	7.06	8.12	6.69	7.17	1.50	21.80	0.00	5.18	1.42	0.17	20.25	0.00	11.11
Refused	0.47	0.62	0.41	0.00	3.81	0.00	0.00	0.39	0.00	7.72	0.00	0.00	0.00
Don't Know	0.07	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<CA15A> Projecting over the next 3 years, how would you characterize your business outlook?													
Excellent	19.28	30.82	15.24	51.76	46.52	11.50	0.00	26.40	45.43	8.57	6.19	0.77	21.63
Good	59.39	42.38	65.36	23.78	44.09	50.69	90.92	42.54	31.01	63.27	74.37	95.52	48.03
Fair	11.71	13.54	11.07	15.67	3.67	25.80	9.08	9.83	19.03	12.19	11.12	3.72	14.70
Adequate OR	3.75	4.14	3.61	2.97	0.97	5.80	0.00	5.71	3.40	6.66	6.82	0.00	5.43
Poor	1.59	1.55	1.60	5.20	0.00	0.00	0.00	0.70	0.65	1.14	0.00	0.00	3.80
DO NOT READ...going out of business	0.05	0.10	0.03	0.39	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00
Refused	0.47	0.62	0.41	0.00	3.81	0.00	0.00	0.39	0.00	7.72	0.00	0.00	0.00
Don't Know	3.77	6.86	2.68	0.23	0.95	6.22	0.00	14.43	0.24	0.43	1.50	0.00	6.41
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<FM070> How many people are currently working at the facility, including both full and part time?													
1 to 10	99.20	99.50	99.09	99.88	96.19	100.00	100.00	100.00	96.09	91.82	100.00	100.00	100.00
51 to 100	0.80	0.50	0.91	0.12	3.81	0.00	0.00	0.00	3.91	8.18	0.00	0.00	0.00
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<FM080> Since January 2009 has the number of people working at this facility changed by more than 10%?													
Yes	30.21	37.07	27.80	29.17	43.00	37.09	0.00	45.81	29.60	17.29	34.95	20.30	33.10
No	60.35	59.67	60.59	67.57	50.75	62.91	78.51	52.95	68.75	72.85	65.05	51.74	62.61
Refused	0.43	0.47	0.41	0.00	3.81	0.00	0.00	0.00	0.00	7.72	0.00	0.00	0.00
Don't Know	9.01	2.79	11.19	3.26	2.44	0.00	21.49	1.24	1.65	2.13	0.00	27.97	4.29
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<FM081> Would these changes have increased or decreased number of employees?													
Increased number of employees	46.51	60.82	39.82	18.67	83.12	94.88	0.00	57.60	60.08	57.42	71.34	0.00	44.22
Decreased number of employees	50.87	39.18	56.34	81.33	16.88	5.12	0.00	42.40	39.92	42.58	28.66	100.00	47.39
Don't Know	2.62	0.00	3.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.39
n	*152*	*78*	*74*	*30*	*10*	*10*	*0*	*28*	*27*	*9*	*9*	*2*	*27*
<FM100> In 2008 approximately how many people were working at this facility, including both full- or part-time employees?													
1 to 10	58.52	60.75	57.07	70.65	60.59	76.59	0.00	48.82	31.12	25.94	94.89	0.00	52.33
11 to 50	19.13	19.95	18.59	18.83	0.00	22.57	0.00	27.08	3.66	0.00	4.74	0.00	30.56
51 to 100	4.84	2.73	6.21	0.00	13.99	0.00	0.00	0.00	34.16	3.31	0.00	0.00	0.00
101 to 500	0.56	0.00	0.93	0.00	0.00	0.00	0.00	0.00	5.23	0.00	0.00	0.00	0.00
Don't Know	16.96	16.57	17.21	10.51	25.42	0.84	0.00	24.10	25.83	70.75	0.38	0.00	17.11
n	*86*	*41*	*45*	*12*	*7*	*7*	*0*	*15*	*17*	*6*	*6*	*0*	*16*
<PC010> Thinking back to 2008, were any changes made to the facility during 2008 that would change the energy consumption by more than 10%?													
Yes	9.17	9.32	9.13	12.85	10.05	13.57	0.00	6.02	14.86	11.55	14.36	0.00	13.31
No	65.87	63.27	66.79	69.39	72.94	85.69	30.57	49.74	62.04	75.77	74.08	67.56	64.31
Refused	0.04	0.14	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	24.92	27.28	24.09	17.20	17.01	0.74	69.43	44.24	23.10	12.68	11.56	32.44	22.39
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<PC020> Would these changes have increased or decreased consumption?													
Increased	28.33	30.87	27.42	6.47	1.79	82.99	0.00	21.18	13.73	44.21	27.38	0.00	30.22
Decreased	69.02	69.13	68.97	93.53	98.21	17.01	0.00	78.82	86.27	2.69	72.62	0.00	69.78
Don't Know	2.65	0.00	3.60	0.00	0.00	0.00	0.00	0.00	0.00	53.10	0.00	0.00	0.00
n	*48*	*23*	*25*	*9*	*3*	*4*	*0*	*7*	*10*	*3*	*4*	*0*	*8*
<V1> Now I would like to find out, did you use a contractor/vendor to install the lighting measures that were installed through the 2010-2012 Program?													
Yes	82.26	79.45	83.24	85.64	85.95	76.18	100.00	71.91	83.17	84.30	85.40	87.00	79.26
No	16.55	19.49	15.52	13.99	13.04	19.91	0.00	27.86	15.01	14.87	11.13	13.00	19.19
Don't Know	1.19	1.06	1.24	0.37	1.01	3.91	0.00	0.23	1.81	0.83	3.47	0.00	1.55
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<V2> How did you come into contact with the contractor/vendor?													
They contacted you	74.80	81.31	72.62	73.26	88.19	78.22	69.43	88.96	72.63	74.23	80.93	47.11	93.81
You contacted them	5.56	6.79	5.15	16.55	1.50	11.80	0.00	0.00	15.64	13.71	11.68	0.00	3.26
You had worked with them before	14.83	3.60	18.58	0.00	3.59	8.63	21.49	0.00	0.00	0.49	3.43	52.42	0.25
4	0.05	0.15	0.01	0.00	1.12	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00
Other	3.92	7.41	2.76	10.19	4.77	1.36	0.00	11.04	8.39	5.73	3.97	0.00	2.68
Don't Know	0.84	0.76	0.87	0.00	0.83	0.00	9.08	0.00	3.34	5.64	0.00	0.47	0.00
n	*426*	*212*	*214*	*86*	*32*	*25*	*3*	*65*	*72*	*32*	*26*	*8*	*75*
<V2A> In relation to this project, did the vendor/contractor approach you about retrofiting your lighting?													
No	100.00	100.00	100.00	0.00	100.00	100.00	100.00	0.00	0.00	100.00	100.00	100.00	100.00
n	*9*	*3*	*6*	*0*	*1*	*1*	*1*	*0*	*0*	*1*	*1*	*3*	*1*
<V2B> On a scale of 0 - 10, with 0 being very unlikely and 10 being Very likely. How likely is it that your organization would have retrofitted lighting equipment had the contractor/vendor Not contacted you?													
1 Not at All Likely	13.72	15.12	13.19	0.29	0.70	10.06	0.00	34.86	11.95	0.00	0.00	0.00	24.67
2	7.71	9.82	6.92	16.74	21.15	10.20	0.00	2.52	18.10	10.75	5.37	0.00	7.35
3	8.97	10.22	8.50	19.40	6.18	18.00	0.00	3.97	6.88	1.13	10.26	11.77	7.68
4	1.56	1.38	1.63	1.08	0.00	5.88	0.00	0.20	4.20	0.00	5.25	0.00	0.94
5	20.69	16.98	22.09	13.23	4.30	0.00	100.00	18.83	11.40	14.47	0.00	87.23	0.75
6	2.29	1.41	2.62	5.21	0.36	0.00	0.00	0.31	0.78	0.00	0.00	0.00	5.31
7	1.10	0.00	1.51	0.00	0.00	0.00	0.00	0.00	0.00	0.48	5.70	0.00	1.60
8	0.52	1.22	0.25	3.93	0.00	1.11	0.00	0.22	0.00	2.95	0.00	0.00	0.22
9	0.68	1.64	0.32	6.37	0.00	0.67	0.00	0.00	1.35	0.00	1.24	0.00	0.00
10 VERY LIKELY	2.73	2.85	2.69	0.46	5.08	10.43	0.00	0.29	13.37	0.97	1.36	1.01	1.22
Zero Not at All Likely	39.91	39.36	40.12	33.29	62.23	43.66	0.00	38.81	31.97	69.25	70.82	0.00	49.91
Don't Know	0.12	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
n	*344*	*172*	*172*	*62*	*25*	*22*	*1*	*61*	*55*	*23*	*21*	*4*	*68*
<V3> Did the contractor/vendor tell you about or recommend the program?													
Yes	66.75	70.23	65.58	62.56	72.42	52.18	78.51	83.32	70.78	65.72	70.50	47.58	79.30
No	32.25	28.35	33.56	33.62	27.58	45.61	21.49	16.68	24.95	33.51	28.03	52.42	20.33
Don't Know	1.00	1.42	0.86	3.81	0.00	2.20	0.00	0.00	4.27	0.78	1.46	0.00	0.37
n	*426*	*212*	*214*	*86*	*32*	*25*	*3*	*65*	*72*	*32*	*26*	*8*	*75*
<V4> Prior to coming into contact with the contractor/vendor, did you organization have plans to replace/install lighting equipment?													
Yes	31.60	18.39	36.33	20.15	2.14	13.99	100.00	8.42	16.70	22.17	4.80	87.35	23.71
No	68.11	81.00	63.50	77.66	97.86	85.37	0.00	91.58	83.30	77.83	93.78	12.65	76.29
Don't Know	0.29	0.61	0.17	2.20	0.00	0.65	0.00	0.00	0.00	0.00	1.42	0.00	0.00
n	*286*	*143*	*143*	*51*	*21*	*17*	*2*	*52*	*44*	*21*	*17*	*5*	*56*
<V4A> On a scale of 0 - 10, with 0 being very unlikely and 10 being Very likely. How likely is it that your organization would have retrofitted lighting equipment had the contractor/vendor Not recommended it?													
1 Not at All Likely	9.54	3.31	11.77	0.00	8.14	1.48	0.00	4.86	1.81	3.38	2.81	0.00	24.86
2	9.42	7.69	10.04	20.09	10.07	0.73	0.00	3.49	7.21	10.21	30.62	0.00	10.85
3	9.11	10.98	8.45	18.33	0.00	0.00	0.00	16.21	0.65	2.84	0.16	11.65	11.90
4	3.59	2.36	4.03	1.25	8.61	6.17	0.00	0.08	13.76	1.93	12.57	0.00	1.35
5	23.45	21.83	24.03	16.28	1.50	5.54	88.44	24.38	5.12	13.56	5.33	86.37	0.83
6	1.26	1.52	1.17	1.93	0.00	6.78	0.00	0.33	0.80	0.00	1.96	0.00	1.87
7	1.39	1.35	1.40	5.02	0.76	0.00	0.00	0.13	3.80	2.88	0.00	1.00	1.12
8	1.02	0.58	1.17	0.87	0.43	2.30	0.00	0.00	0.00	3.01	1.42	0.00	1.89
9	0.36	0.00	0.49	0.00	0.00	0.00	0.00	0.00	0.00	7.98	0.00	0.00	0.12
10 VERY LIKELY	3.10	0.95	3.87	0.13	0.00	0.00	11.56	0.00	5.24	0.00	0.73	0.99	6.42
Zero Not at All Likely	37.00	49.43	32.54	36.08	70.47	76.99	0.00	50.52	53.62	54.22	44.40	0.00	38.79
Don't Know	0.77	0.00	1.04	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
n	*286*	*143*	*143*	*51*	*21*	*17*	*2*	*52*	*44*	*21*	*17*	*5*	*56*
<V4B> On a scale of 0 - 10, with 0 being very unlikely and 10 being Very likely. How likely is it that your organization would have installed lighting equipment with the same level of efficiency if the contractor/vendor had Not recommended to do so?													
1 Not at All Likely	5.52	2.85	6.47	0.00	15.67	0.00	0.00	1.70	1.81	4.52	0.00	0.00	13.52
2	12.27	13.34	11.89	19.78	9.25	21.35	0.00	10.88	12.06	8.82	33.46	0.00	13.00
3	6.25	13.54	3.64	19.26	31.77	0.36	0.00	11.14	4.30	2.84	2.21	0.00	5.99
4	4.29	5.22	3.96	14.08	1.12	12.59	0.00	0.00	17.44	2.88	12.47	0.00	0.00
5	7.84	6.03	8.48	0.77	4.09	2.23	0.00	12.19	0.00	16.57	0.00	19.64	6.02
6	1.88	6.69	0.16	6.70	0.00	1.66	0.00	11.93	0.80	0.00	0.00	0.00	0.12
7	1.02	1.10	0.99	2.20	0.00	0.00	0.00	1.40	3.80	0.00	0.00	0.00	1.12
8	2.83	0.91	3.52	0.87	1.26	0.65	0.00	1.09	6.64	1.39	3.91	1.00	4.17
9	0.44	0.15	0.55	0.64	0.00	0.00	0.00	0.00	0.46	7.98	0.00	0.00	0.12
10 VERY LIKELY	3.14	2.66	3.31	0.13	0.00	11.54	11.56	0.33	0.39	0.00	0.73	0.99	6.60
Zero Not at All Likely	53.12	46.76	55.39	34.53	36.85	49.62	88.44	48.15	44.30	55.00	47.21	78.38	47.98
Don't Know	1.41	0.74	1.65	1.05	0.00	0.00	0.00	1.21	8.00	0.00	0.00	0.00	1.36
n	*286*	*143*	*143*	*51*	*21*	*17*	*2*	*52*	*44*	*21*	*17*	*5*	*56*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<V40> On a scale of 0 - 10, with 0 being very unlikely and 10 being Very likely. How important was the input from the contractor you worked with in deciding which specific equipment to install? Was it ...													
2	0.20	0.03	0.26	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.59
3	2.29	2.55	2.20	0.43	0.00	0.00	0.00	5.98	8.21	5.38	0.00	0.00	1.87
4	17.40	8.61	20.55	0.00	3.84	0.00	88.44	2.56	0.00	0.00	0.00	78.38	2.13
5	5.18	9.53	3.62	1.14	0.29	13.25	0.00	18.12	0.42	8.19	12.30	0.00	3.66
6	2.16	1.36	2.44	1.91	6.59	0.00	0.00	0.00	6.70	8.72	0.00	0.00	2.47
7	6.53	3.26	7.70	1.71	4.61	5.38	0.00	3.63	1.44	11.69	5.63	7.99	9.45
8	12.94	9.94	14.02	22.41	17.28	2.96	0.00	4.48	25.82	12.68	4.39	0.00	21.27
9	13.60	22.47	10.42	12.23	32.52	0.65	0.00	36.74	10.70	10.99	7.96	1.00	16.27
10 Extremely Important	37.28	37.64	37.15	55.73	34.09	70.97	11.56	22.21	45.90	40.01	67.76	12.63	39.64
Zero Not at All Important	0.72	1.93	0.29	1.65	0.78	6.78	0.00	1.23	0.00	0.00	1.96	0.00	0.12
Don't Know	1.70	2.69	1.35	2.78	0.00	0.00	0.00	4.97	0.80	2.35	0.00	0.00	2.52
n	*286*	*143*	*143*	*51*	*21*	*17*	*2*	*52*	*44*	*21*	*17*	*5*	*56*
<AP9> How did you FIRST learn about the Utility's program?													
Bill insert	6.48	8.40	5.81	15.72	0.48	16.94	0.00	3.14	4.85	11.36	29.50	0.00	3.52
Program literature	7.02	8.53	6.50	10.09	5.03	12.78	0.00	7.77	10.64	12.12	18.33	0.00	6.58
Account representative	8.13	3.93	9.59	4.72	16.82	0.26	0.00	1.69	2.75	6.41	1.36	16.99	8.22
Program Approved Vendor	8.44	15.77	5.87	11.98	16.97	5.58	0.00	25.34	21.77	10.35	6.23	0.65	4.63
Program representative	20.24	29.29	17.07	22.20	27.20	42.42	0.00	32.30	22.76	45.26	19.91	0.12	25.07
Utility or program website	0.51	0.36	0.56	1.45	0.00	0.00	0.00	0.00	4.50	0.00	0.17	0.00	0.00
Trade publication	1.16	1.46	1.06	5.89	0.00	0.00	0.00	0.00	8.73	0.00	0.00	0.00	0.00
Conference	4.06	2.74	4.53	1.22	19.77	0.00	0.00	0.00	2.29	0.00	0.00	12.88	0.00
Newspaper article	0.01	0.02	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Word of mouth	4.92	6.19	4.47	9.41	3.59	0.00	0.00	8.99	0.95	7.57	3.94	0.00	9.12
Previous experience with it	1.17	2.57	0.69	0.54	0.00	0.00	0.00	6.39	0.00	0.00	0.00	0.00	1.79
Other	0.89	0.17	1.14	0.00	1.36	0.00	0.00	0.00	0.38	0.00	0.00	3.31	0.00
Contractor	31.34	17.23	36.28	14.53	8.76	15.72	100.00	10.20	15.39	5.79	12.53	66.05	28.40
Result of an audit	0.19	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
e-mail	0.41	1.09	0.18	0.00	0.00	5.25	0.00	0.20	0.00	0.00	0.00	0.00	0.47
17	1.72	0.54	2.13	2.17	0.00	0.00	0.00	0.00	2.79	0.00	0.00	0.00	4.66
Other -Record	1.60	0.30	2.06	0.00	0.00	0.00	0.00	0.79	0.18	1.14	8.03	0.00	2.82
Don't Know	1.70	1.42	1.80	0.00	0.00	1.06	0.00	3.18	2.03	0.00	0.00	0.00	4.05
n	*559*	*277*	*282*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<AP9A> How else did you learn about Utility's program?													
Bill insert	4.36	2.79	4.92	2.35	13.90	0.67	0.00	0.91	0.97	14.30	0.00	3.31	7.73
Program literature	1.37	2.61	0.93	0.79	5.01	7.03	0.00	1.15	2.18	5.46	1.87	0.00	0.42
Account representative	1.82	0.22	2.38	0.86	0.00	0.00	0.00	0.00	2.29	2.14	17.62	0.00	0.00
Program Approved Vendor	1.59	1.48	1.63	5.89	0.00	0.00	0.00	0.00	8.91	0.00	0.00	0.00	1.46
Program representative	2.75	0.60	3.50	0.43	1.19	0.00	0.00	0.92	2.83	1.20	0.00	0.00	8.22
Utility or program website	2.71	3.04	2.60	3.45	0.00	9.33	0.00	0.99	1.65	2.98	12.97	0.00	2.07
Trade publication	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Conference	0.14	0.20	0.12	0.56	0.48	0.00	0.00	0.00	0.25	1.60	0.00	0.00	0.00
Newspaper article	0.31	1.19	0.00	0.00	0.00	0.00	0.00	3.19	0.00	0.00	0.00	0.00	0.00
Word of mouth	1.95	2.43	1.79	1.94	4.05	5.30	0.00	1.10	7.77	0.58	0.00	0.00	2.17
Previous experience with it	1.05	1.45	0.91	0.00	4.69	0.00	0.00	2.31	0.00	0.64	0.00	0.41	1.97
Other	0.12	0.22	0.09	0.89	0.00	0.00	0.00	0.00	0.73	0.00	0.00	0.00	0.00
Contractor	8.76	2.81	10.85	5.49	0.00	1.05	21.49	0.00	1.16	6.94	3.39	27.97	1.46
Result of an audit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Part of larger expansion or remodeling e	0.16	0.61	0.00	0.00	0.00	0.00	0.00	1.64	0.00	0.00	0.00	0.00	0.00
NO OTHER SOURCES	72.84	79.54	70.49	74.07	69.97	76.62	78.51	88.08	70.43	64.17	64.15	68.31	75.26
Other -Record	0.04	0.15	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.30	0.68	0.16	2.35	0.71	0.00	0.00	0.00	1.35	0.00	0.00	0.00	0.00
Email from utility or City of Palm Deser	1.06	5.96	0.00	25.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*551*	*274*	*277*	*106*	*38*	*33*	*3*	*94*	*92*	*43*	*34*	*10*	*98*
<N33> You mentioned that you have an Utility Account Representative. Can you give me his or her name? !|___Do you have his/her email address? !___Do you have a phone number for him/her? !___Do you have a cell phone number for him/her?|													
Don't have ACCOUNT REP	47.04	88.93	41.94	83.40	100.00	100.00	0.00	62.96	10.28	92.31	100.00	0.00	73.54
Record information	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know THIS INFORMATION	7.48	7.28	7.50	4.70	0.00	0.00	0.00	37.04	0.00	7.69	0.00	0.00	26.46
n	*35*	*16*	*19*	*3*	*5*	*1*	*0*	*7*	*2*	*5*	*3*	*1*	*8*
<A1B> According to our Records, your organization also received an AUDIT from your Utility. Is this correct?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<ID0> To the best of your knowledge, has the facility located at this address received a Utility-sponsored energy audit within the past 3 years?													
Yes	26.22	21.13	28.00	15.45	25.90	13.22	90.92	16.91	8.41	15.11	5.27	60.41	14.70
No	58.31	67.67	55.03	75.38	64.58	75.94	9.08	68.24	86.62	68.47	84.11	23.40	62.00
Don't Know	15.48	11.20	16.98	9.17	9.52	10.84	0.00	14.85	4.97	16.42	10.62	16.19	23.30
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<A1C> According to our Records, your organization also received TECHNICAL ASSISTANCE from your Utility . Is this correct?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<A1D> According to our Records, your organization also received a FEASABILITY STUDY from your Utility. Is this correct?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<A1E> According to our Records, your organization also received RETROCOMMISSIONING from your Utility. Is this correct?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<A1F> According to our Records, your organization also received PROGRAM TRAINING from your Utility. Is this correct?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<ID1> Are you aware of any programs, other than the one we mentioned early, or resources that are designed to help organizations like yours reduce its energy bills?													
Yes	13.31	18.06	11.65	20.27	34.86	12.58	0.00	16.63	20.69	21.15	5.96	3.31	16.26
No	86.17	81.30	87.87	79.73	59.87	87.42	100.00	83.37	79.31	72.39	94.04	96.28	83.74
Don't Know	0.53	0.65	0.48	0.00	5.27	0.00	0.00	0.00	0.00	6.46	0.00	0.41	0.00
n	*559*	*277*	*282*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<ID2> What types of programs can you recall? ?													
Rebates/incentives (include mentions of	31.45	13.08	41.42	16.16	13.51	17.65	0.00	8.61	39.53	38.19	10.71	100.00	35.78
BLDG Commissioning(Retrocommissioning,Mo	0.24	0.25	0.23	0.91	0.00	0.00	0.00	0.00	1.07	0.00	0.00	0.00	0.00
Business energy audits and feasibility s	7.75	5.12	9.17	18.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.07
Energy Centers (Pacific Energy Center, S	1.49	0.44	2.06	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.00	0.00	3.83
Seminars, classes, and workshops	2.37	6.73	0.00	0.00	28.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	7.82	7.00	8.27	8.62	12.96	0.00	0.00	4.34	3.19	38.34	0.00	0.00	7.17
Demand Response Programs (Flex Your Powe	22.57	19.90	24.03	32.28	27.37	6.83	0.00	10.00	31.47	20.90	5.76	0.00	27.72
Upstream HVAC and Motors Program	0.96	2.72	0.00	9.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER PROGRAM...Record name or descripti	10.03	1.25	14.81	0.00	3.91	2.35	0.00	0.00	12.91	0.00	50.50	0.00	17.07
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	11.70	29.56	2.00	9.48	0.00	51.73	0.00	57.05	4.71	0.00	13.22	0.00	0.45
n	*98*	*48*	*50*	*16*	*9*	*5*	*0*	*18*	*20*	*6*	*7*	*1*	*16*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<ID3> Has your Account Representativeresentative, or any Program Staff or Program Vendors discussed solar, wind or other self-generation equipment opportunities with you?													
Yes, Account Representative	7.56	1.55	9.66	0.00	0.48	0.00	21.49	0.72	0.84	1.60	0.00	27.97	0.64
Yes, Program Staff	1.60	1.91	1.49	2.66	0.00	6.51	0.00	0.00	3.76	0.00	0.35	0.00	2.58
Yes, Program Vendor	2.21	5.57	1.03	7.35	19.77	0.59	0.00	3.16	5.02	4.42	1.69	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	3.21	0.04	4.32	0.15	0.00	0.00	0.00	0.00	0.54	0.00	0.00	12.88	0.00
n	*559*	*277*	*282*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<ID3A> Has your Account Representativeresentative, Program Staff, or Program Vendors discussed Demand Reduction programs, techNologies, or opportunities with you?													
Yes, Account Representative	12.83	3.40	16.13	3.76	0.00	0.00	21.49	3.28	5.59	1.04	0.29	44.96	1.38
Yes, Program Staff	0.14	0.01	0.19	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.29	0.00	0.41
Yes, Program Vendor	1.00	0.04	1.34	0.07	0.00	0.00	0.00	0.06	0.26	4.42	0.73	0.00	2.58
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	3.50	0.26	4.64	0.49	0.27	0.00	0.00	0.28	1.65	0.00	0.00	12.88	0.48
n	*559*	*277*	*282*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<LI1> What are the primary types of lighting used at your facility that was Not retrofitted through the program or by you personally since January 2010?													
High Performance T8 Fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 Fluorescent Fixtures (1 inch)	11.34	4.20	13.84	7.69	5.59	0.66	21.49	0.70	9.07	4.83	0.00	27.97	8.47
T10 Fluorescent Fixtures	0.20	0.00	0.27	0.00	0.00	0.00	0.00	0.00	2.21	0.00	0.00	0.00	0.00
T12 Fixtures (1.5 in)	0.73	0.82	0.70	0.81	3.80	0.00	0.00	0.39	5.10	0.42	0.00	0.00	0.15
T5 Fixtures (5/8 inch)	0.09	0.04	0.10	0.15	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.12	0.00
COMPACT HID (High Intensity Discharge) F	0.23	0.61	0.10	0.12	4.69	0.00	0.00	0.00	0.54	0.64	0.00	0.00	0.00
Screw-in Modular CFL bulbs	0.76	1.38	0.54	1.19	4.69	1.68	0.00	0.49	0.12	0.64	1.25	0.00	0.92
Hardwired CFL Fixtures	5.51	1.46	6.92	5.89	0.00	0.00	0.00	0.00	8.73	0.00	0.00	16.99	0.67
Incandescent	4.98	5.66	4.74	17.52	0.14	5.37	0.00	0.71	9.20	13.12	3.58	0.00	6.58
Other	2.52	4.40	1.86	11.87	10.97	0.00	0.00	0.30	2.36	11.26	0.00	0.00	2.53
Fat/Thick Tubes	0.98	0.08	1.30	0.23	0.18	0.00	0.00	0.00	1.71	0.00	8.03	0.00	0.52
Skinny/Thin Tubes	2.84	2.87	2.83	0.08	0.00	2.74	0.00	6.10	2.78	6.21	11.15	0.00	2.40
Other-Record	5.85	5.53	5.96	2.11	2.20	0.00	0.00	12.43	2.22	14.30	21.07	0.00	6.75
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	5.09	1.02	6.51	0.63	2.62	0.26	0.00	1.29	8.10	0.96	0.86	13.53	2.40
LEDs (lamps/reflector lamps/fixtures-NOT	11.00	13.33	10.51	25.03	0.00	93.92	0.00	0.00	15.67	0.00	34.04	0.00	8.50
All lights were retrofitted	55.97	65.81	52.52	51.95	34.35	85.96	78.51	72.95	47.46	43.34	59.77	41.39	62.85
n	*559*	*277*	*282*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<LI1A> Which, if any, of the following automatic lighting controls are used on this older equipment?													
Timers	33.33	18.68	37.02	18.70	16.22	36.85	0.00	18.05	9.94	18.79	26.62	51.18	37.04
Occupancy sensors	16.43	6.08	19.03	3.66	10.49	26.68	0.00	0.74	14.40	5.84	46.73	28.99	1.82
Photocells	12.21	1.83	14.82	1.53	0.00	15.81	0.00	0.18	6.76	19.72	9.06	28.99	0.00
NONE-no automatic lighting controls	54.16	62.03	52.17	65.85	73.29	39.24	100.00	50.28	62.45	70.75	16.16	48.82	59.37
Other	4.36	12.26	2.37	12.26	0.00	0.00	0.00	26.55	16.61	0.00	0.00	0.00	0.47
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.59	1.37	0.39	0.00	0.00	0.00	0.00	4.56	0.00	0.00	0.00	0.00	1.30
n	*219*	*99*	*120*	*36*	*20*	*10*	*1*	*32*	*43*	*23*	*12*	*5*	*37*
<LED1> Does your older lighting that exisited before the retrofit have any medium/screw based LED lighting??													
Yes	14.83	22.90	12.79	18.79	18.31	35.02	0.00	30.78	15.71	11.66	4.52	21.98	1.87
No	78.05	66.08	81.07	61.18	80.97	64.98	100.00	56.32	67.58	84.61	95.48	78.02	85.98
Don't Know	7.12	11.03	6.14	20.03	0.73	0.00	0.00	12.89	16.72	3.73	0.00	0.00	12.16
n	*219*	*99*	*120*	*36*	*20*	*10*	*1*	*32*	*43*	*23*	*12*	*5*	*37*
<LI3> How old would you estimate this pre-retrofit lighting equipment to be? Would you say the majority of it is...													
Less than 5 years old	32.59	26.99	34.00	22.00	13.21	28.52	100.00	34.57	18.79	30.08	14.08	47.72	29.25
Between 5 and 10 years old	32.11	27.93	33.17	38.96	23.48	43.17	0.00	17.99	35.11	48.67	78.61	21.98	30.02
Between 10 and 15 years old or	21.77	16.32	23.15	4.39	50.37	16.65	0.00	5.22	23.06	6.13	3.11	29.20	24.85
More than 15 years old.	12.15	25.27	8.85	32.64	11.85	11.66	0.00	33.83	19.90	12.56	4.21	1.10	15.05
Don't Know	1.37	3.48	0.83	2.01	1.09	0.00	0.00	8.39	3.13	2.56	0.00	0.00	0.83
n	*219*	*99*	*120*	*36*	*20*	*10*	*1*	*32*	*43*	*23*	*12*	*5*	*37*
<LI4> And how would you describe the condition of this lighting equipment? Would you say it is....													
In poor condition	2.60	2.97	2.50	4.50	0.00	0.00	0.00	4.65	11.01	0.00	0.00	0.00	3.40
In Fair condition or	28.49	28.70	28.44	41.62	22.62	19.21	0.00	24.42	36.31	41.76	47.82	28.99	15.32
In Good condtion	67.63	63.23	68.74	43.06	77.38	80.79	100.00	66.48	51.43	58.24	52.18	71.01	80.76
Don't Know	1.29	5.10	0.32	10.82	0.00	0.00	0.00	4.45	1.24	0.00	0.00	0.00	0.52
n	*219*	*99*	*120*	*36*	*20*	*10*	*1*	*32*	*43*	*23*	*12*	*5*	*37*
<LI6> Do you currently have any plans to retrofit your old lighting equipment?													
Yes	19.64	22.48	18.93	7.17	46.05	35.66	0.00	20.85	14.55	17.61	8.89	30.09	9.19
No	79.96	76.18	80.92	92.83	53.95	64.34	100.00	74.70	85.45	82.39	91.11	69.91	90.30
Don't Know	0.39	1.34	0.16	0.00	0.00	0.00	0.00	4.45	0.00	0.00	0.00	0.00	0.52
n	*219*	*99*	*120*	*36*	*20*	*10*	*1*	*32*	*43*	*23*	*12*	*5*	*37*
<LI99> Our Records indicate that your organization intalled lighting measures through the Program during ..., is this correct?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI100> What type of lighting or lighting equipment was installed as a result of your participation in the Program?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Installed Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI90> What percentage of the program related CFLs received during your participation in the &Program program were placed in storage?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101A_1> Approximately how many High Performance T8 fluorescent fixtures (1in. diameter bulbs) were installed through the program?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101B_1> Would you say that the number installed was?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101C_1>Were any placed/installed at another facility? If so, what percentage would you estimate?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<LI101D_1> What type of lighting was removed and replaced when you installed the High Performance T8 fluorescent fixtures through the Program?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact HID (High Intensity Discharge) F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Screw-in Modular CFLS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hardwired CFL Fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFL Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manual Switches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DID NOT REMOVE ANYTHING, ADDITION ONLY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101E_1> Were the HID Lamps you removed High pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101F_1> Approximately how old were the lights that were removed/replaced by the high performance T8 fluorescent fixtures?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101G_1> How would you describe the removed light equipment's condition? Would you say they were in													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101H_1> Approximately what percentage of the lighting equipment that was removed and replaced was broken or not working prior to installing?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI10A_2> Approximately how many T8 Flu													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101B_2> Would you say that the number of T8 fluorescent fixtures installed under the program are													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101C_2> Were any placed/installed at another facility? If so, what percentage would you estimate?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101D_2> What type of lighting was removed and replaced when you installed the T8 fluorescent fixtures through the Program?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact HID (High Intensity Discharge) F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Screw-in Modular CFLS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hardwired CFL Fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFL Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manual Switches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DID NOT REMOVE ANYTHING, ADDITION ONLY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101E_2> Were the HID Lamps you removed High pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101F_2> Approximately how old were the lights that were removed/replaced by the T8 fluorescent fixtures?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101G_2> How would you describe the removed light equipment's condition? Would you say they were in													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101H_2> Approximately what percentage of the lighting equipment that was removed and replaced was broken or not working prior to installing?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101A_3> Approximately how many T10 fluorescent fixtures did you buy for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101B_3>Would you say that the number of T10 fluorescent fixtures installed under the program are													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101C_3> Were any placed/installed at another facility? If so, what percentage would you estimate?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<LI101D_3>What type of lighting was removed and replaced when you installed the T10 fluorescent fixtures through the Program?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact HID (High Intensity Discharge) F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Screw-in Modular CFLS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hardwired CFL Fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFL Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manual Switches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DID NOT REMOVE ANYTHING, ADDITION ONLY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101E_3> Were the HID Lamps you removed High pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101F_3> Approximately how old were the lights that were removed/replaced by the T10 fluorescent fixtures?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101G_3> How would you describe the removed light equipment's condition? Would you say they were in													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101H_3> Approximately what percentage of the lighting equipment that was removed and replaced was broken or not working prior to installing?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101A_4> Approximately how many HID fixtures did you buy for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101B_4> Would you say that the number of HID fixtures installed under the program are													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101C_4> Were any placed/installed at another facility? If so, what percentage would you estimate?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101D_4>What type of lighting was removed and replaced when you installed the HID fixtures through the Program?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact HID (High Intensity Discharge) F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Screw-in Modular CFLS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hardwired CFL Fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFL Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manual Switches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DID NOT REMOVE ANYTHING, ADDITION ONLY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101E_4> Were the HID Lamps you removed High pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101F_4> Approximately how old were the lights that were removed/replaced by the HID fixtures?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101G_4> How would you describe the removed light equipment's condition? Would you say they were in													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101H_4> Approximately what percentage of the lighting equipment that was removed and replaced was broken or not working prior to installing?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101A_5> Approximately how many Compact Fluorescent, Screw-in Modular did you buy for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101B_5> Would you say that the number of Compact Fluorescent, Screw-in Modular installed under the program are													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101C_5> Were any placed/installed at another facility? If so, what percentage would you estimate?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<LI101D_5>What type of lighting was removed and replaced when you installed the Compact Fluorescent, Screw-in Modular through the Program?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact HID (High Intensity Discharge) F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Screw-in Modular CFLS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hardwired CFL Fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFL Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manual Switches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DID NOT REMOVE ANYTHING, ADDITION ONLY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101E_5> Were the HID Lamps you removed High pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101F_5> Approximately how old were the lights that were removed/replaced by the Compact Fluorescent, Screw-in Modular?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101G_5> How would you describe the removed light equipment's condition? Would you say they were in													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101H_5> Approximately what percentage of the lighting equipment that was removed and replaced was broken or not working prior to installing?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101A_6> Approximately how many Hardwired Compact Fluorescent Fixtures did you buy for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101B_6> Would you say that the number of Hardwired Compact Fluorescent Fixtures installed under the program are													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101C_6> Were any placed/installed at another facility? If so, what percentage would you estimate?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101D_6>What type of lighting was removed and replaced when you installed the Hardwired Compact Fluorescent Fixtures through the Program?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact HID (High Intensity Discharge) F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Screw-in Modular CFLS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hardwired CFL Fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFL Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manual Switches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DID NOT REMOVE ANYTHING, ADDITION ONLY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101E_6> Were the HID Lamps you removed High pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101F_6> Approximately how old were the lights that were removed/replaced by the Hardwired Compact Fluorescent Fixtures?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101G_6> How would you describe the removed light equipment's condition? Would you say they were in													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101H_6> Approximately what percentage of the lighting equipment that was removed and replaced was broken or not working prior to installing?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101A_10> Approximately how many Reflectors did you buy for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101B_10> Would you say that the number of Reflectors installed under the program are													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101C_10>Were any placed/installed at another facility? If so, what percentage would you estimate?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<LI101D_10>What type of lighting was removed and replaced when you installed the Reflectors through the Program?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact HID (High Intensity Discharge) F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Screw-in Modular CFLS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hardwired CFL Fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFL Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manual Switches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DID NOT REMOVE ANYTHING, ADDITION ONLY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101E_10> Were the HID Lamps you removed High pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101F_10> Approximately how old were the lights that were removed/replaced by the Reflectors?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101G_10> How would you describe the removed light equipment's condition? Would you say they were in													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101H_10> Approximately what percentage of the lighting equipment that was removed and replaced was broken or not working prior to installing?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101A_11> Approximately how many Electronic Ballasts did you buy for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101B_11> Would you say that the number of Electronic Ballasts installed under the program are													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101C_11> Were any placed/installed at another facility? If so, what percentage would you estimate?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101D_11>What type of lighting was removed and replaced when you installed the Electronic Ballasts through the Program?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact HID (High Intensity Discharge) F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Screw-in Modular CFLS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hardwired CFL Fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFL Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manual Switches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DID NOT REMOVE ANYTHING, ADDITION ONLY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101E_11> Were the HID Lamps you removed High pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101F_11> Approximately how old were the lights that were removed/replaced by the Electronic Ballasts?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101G_11> How would you describe the removed light equipment's condition? Would you say they were in													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101H_11> Approximately what percentage of the lighting equipment that was removed and replaced was broken or not working prior to installing?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101A_13> Approximately how many Occupancy Sensor Lighting Controls did you buy for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101B_13> Would you say that the number of Occupancy Sensor Lighting Controls installed under the program are													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101C_13> Were any placed/installed at another facility? If so, what percentage would you estimate?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<LI101D_13>What type of lighting was removed and replaced when you installed the Occupancy Sensor Lighting Controls through the Program?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact HID (High Intensity Discharge) F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Screw-in Modular CFLS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hardwired CFL Fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFL Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manual Switches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DID NOT REMOVE ANYTHING, ADDITION ONLY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101E_13> Were the HID Lamps you removed High pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101F_13> Approximately how old were the lights that were removed/replaced by the Occupancy Sensor Lighting Controls?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101G_13> How would you describe the removed light equipment's condition? Would you say they were in													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101H_13> Approximately what percentage of the lighting equipment that was removed and replaced was broken or not working prior to installing?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101A_16> Approximately how many These Other Fluorescent Fixtures did you buy for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101B_16> Would you say that the number of These Other Fluorescent Fixtures installed under the program are													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101C_16> Were any placed/installed at another facility? If so, what percentage would you estimate?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101D_16>What type of lighting was removed and replaced when you installed the These Other Fluorescent Fixtures through the Program?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact HID (High Intensity Discharge) F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Screw-in Modular CFLS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hardwired CFL Fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFL Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manual Switches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DID NOT REMOVE ANYTHING, ADDITION ONLY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101E_16> Were the HID Lamps you removed High pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101F_16> Approximately how old were the lights that were removed/replaced by the These Other Fluorescent Fixtures?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101G_16> How would you describe the removed light equipment's condition? Would you say they were in													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101H_16> Approximately what percentage of the lighting equipment that was removed and replaced was broken or not working prior to installing?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101A_17> Approximately how many Skinny/Thin Fluorescent Tube Fixtures did you buy for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101B_17> Would you say that the number of Skinny/Thin Fluorescent Tube Fixtures installed under the program are													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101C_17>Were any placed/installed at another facility? If so, what percentage would you estimate?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<LI101D_17>What type of lighting was removed and replaced when you installed the Skinny/Thin Fluorescent Tube Fixtures through the Program?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact HID (High Intensity Discharge) F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Screw-in Modular CFLS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hardwired CFL Fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFL Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manual Switches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DID NOT REMOVE ANYTHING, ADDITION ONLY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101E_17> Were the HID Lamps you removed High pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101F_17> Approximately how old were the lights that were removed/replaced by the Skinny/Thin Fluorescent Tube Fixtures?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101G_17> How would you describe the removed light equipment's condition? Would you say they were in													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101H_17> Approximately what percentage of the lighting equipment that was removed and replaced was broken or not working prior to installing?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101A_18>Approximately how many T5 Fixtures did you buy for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101B_18> Would you say that the number of T5 Fixtures installed under the program are													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101C_18> Were any placed/installed at another facility? If so, what percentage would you estimate?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101D_18>What type of lighting was removed and replaced when you installed the T5 Fixtures through the Program?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact HID (High Intensity Discharge) F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Screw-in Modular CFLS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hardwired CFL Fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFL Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manual Switches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DID NOT REMOVE ANYTHING, ADDITION ONLY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101E_18> Were the HID Lamps you removed High pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101F_18> Approximately how old were the lights that were removed/replaced by the T5 Fixtures?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101G_18> How would you describe the removed light equipment's condition? Would you say they were in													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101H_18> Approximately what percentage of the lighting equipment that was removed and replaced was broken or not working prior to installing?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101A_77> Approximately how many These Other Lighting Measures did you buy for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101B_77>Would you say that the number of These Other Lighting Measures installed under the program are													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101C_77> Were any placed/installed at another facility? If so, what percentage would you estimate?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<LI101D_77>What type of lighting was removed and replaced when you installed the These Other Lighting Measures through the Program?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact HID (High Intensity Discharge) F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Screw-in Modular CFLS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hardwired CFL Fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFL Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen bulbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manual Switches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DID NOT REMOVE ANYTHING, ADDITION ONLY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101E_77> Were the HID Lamps you removed High pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101F_77> Approximately how old were the lights that were removed/replaced by the These Other Lighting Measures?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101G_77> How would you describe the removed light equipment's condition? Would you say they were in													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI101H_77> Approximately what percentage of the lighting equipment that was removed and replaced was broken or not working prior to installing?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<C_REPLACE_ADDON> To determine if replacement or Addon?													
REPLACEMENT	99.54	100.00	99.44	100.00	0.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	99.29
ADDON	0.46	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71
n	*46*	*20*	*26*	*6*	*0*	*1*	*0*	*13*	*9*	*1*	*1*	*0*	*15*
<CUST_INSTALL_DATE_NU> Our Records indicate that your organization installed this CUSTOM LIGHTING EQUIPMENT on this specific date. Is this correct?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<CUST_INSTALL_YEAR>In what year did you install this CUSTOM LIGHTING EQUIPMENT?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<CUST_INSTALL_MONTH> And in which Month. If you Don't Know the MONTH, could you remember the SEASON?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<T12_1> Do you currently use T12 fluorescent lamps for any of your lighting needs? These would be linear fluorescent tubes that are 1.5 inches in diameter or are fatter/thicker than other linear fluorescent lamps.													
Yes	12.35	8.05	13.87	2.20	23.04	18.99	0.00	2.93	7.95	28.83	17.24	21.01	6.41
No	67.78	70.92	66.68	81.26	59.19	63.47	30.57	77.60	82.51	55.42	61.25	46.55	82.43
Don't Know	19.87	21.04	19.46	16.54	17.77	17.54	69.43	19.47	9.55	15.74	21.51	32.44	11.16
n	*544*	*268*	*276*	*101*	*35*	*34*	*3*	*94*	*89*	*43*	*33*	*10*	*100*
<T12_1a> Have you retrofitted any T12 Linear Fluorescent lighting systems to more energy efficient linear fluorescent lighting such at T8s or T5s within the last year?													
Yes	15.37	10.47	16.89	6.68	6.72	16.25	21.49	8.60	8.00	28.49	7.74	27.97	8.21
No	64.51	70.77	62.57	77.62	88.16	72.23	9.08	73.02	87.62	62.21	91.50	26.71	86.04
Don't Know	20.12	18.76	20.54	15.70	5.12	11.52	69.43	18.38	4.37	9.30	0.76	45.32	5.75
n	*404*	*190*	*214*	*56*	*29*	*26*	*3*	*75*	*62*	*36*	*26*	*10*	*79*
<T12_1b> For what percent of the linear fluorescent lighting that you have retrofittedin the last year did you receive rebates or other incentives from your utility or through a utility program? Your best estimate is fine.													
0 Percent	34.99	41.56	32.55	34.11	56.66	66.86	0.00	36.68	35.96	45.89	86.12	0.00	51.53
Between 0 and 15 Percent	16.31	6.61	19.91	0.69	0.00	16.70	23.64	0.00	9.37	0.00	0.66	46.30	0.00
Between 30 and 45 Percent	0.08	0.30	0.00	0.00	0.00	0.00	0.00	1.08	0.00	0.00	0.00	0.00	0.00
Between 45 and 60 Percent	0.07	0.26	0.00	0.00	0.00	0.00	0.00	0.95	0.00	0.00	0.00	0.00	0.00
Between 60 and 80 Percent	0.70	0.00	0.96	0.00	0.00	0.00	0.00	0.00	8.29	0.00	0.00	0.00	0.00
Between 80 and 100 Percent	0.74	1.89	0.31	1.98	3.59	4.06	0.00	0.00	0.00	0.68	2.26	0.00	0.00
100 Percent	38.98	38.15	39.29	55.17	29.21	0.45	76.36	43.14	43.16	25.82	0.51	53.70	36.60
Don't Know	8.13	11.23	6.98	8.05	10.53	11.93	0.00	18.16	3.23	27.61	10.45	0.00	11.87
n	*279*	*148*	*131*	*64*	*18*	*19*	*2*	*44*	*45*	*25*	*17*	*2*	*41*
<T12_2> Do you carry an inventory of T12 fluorescent lamps to use when your existing ones burn out?													
Yes	21.04	18.15	21.90	8.56	32.88	42.69	0.00	3.45	11.72	49.18	8.96	30.29	2.81
No	70.55	61.87	73.15	48.07	57.12	55.15	100.00	60.19	79.59	45.94	91.04	69.71	76.67
Don't Know	8.41	19.98	4.95	43.36	10.00	2.15	0.00	36.36	8.68	4.88	0.00	0.00	20.52
n	*144*	*70*	*74*	*21*	*13*	*11*	*1*	*23*	*20*	*18*	*9*	*4*	*22*
<T12_2a> How long do you estimate your inventory of T12 fluorescent lamps will last?													
3 to 6 months	6.82	26.00	2.06	0.00	7.54	41.72	0.00	0.00	0.00	9.72	8.88	0.00	0.00
6 months to 1 year	34.36	56.13	28.95	45.25	62.31	56.38	0.00	36.04	39.66	31.05	91.12	20.43	100.00
1 to 2 years	0.46	2.32	0.00	20.34	0.00	0.00	0.00	12.79	0.00	0.00	0.00	0.00	0.00
2 to 3 years	9.50	10.00	9.38	0.00	30.15	1.90	0.00	0.00	0.00	59.23	0.00	0.00	0.00
3 to 5 years	2.39	2.72	2.31	34.41	0.00	0.00	0.00	0.00	60.34	0.00	0.00	0.00	0.00
5 to 10 years	0.56	2.83	0.00	0.00	0.00	0.00	0.00	51.17	0.00	0.00	0.00	0.00	0.00
99	45.90	0.00	57.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	79.57	0.00
n	*30*	*15*	*15*	*4*	*4*	*4*	*0*	*3*	*4*	*5*	*3*	*2*	*1*
<T12_3> Are you aware of the new law that came into effect in July of 2012 that has phased out the production of most T12 linear fluorescent lamps?													
Yes	35.85	22.47	40.08	35.49	10.12	4.46	23.64	28.26	45.27	9.31	28.81	50.17	33.82
No	63.88	76.79	59.80	64.51	89.88	95.54	76.36	69.09	54.73	90.69	71.19	49.83	65.76
Don't Know	0.27	0.75	0.12	0.00	0.00	0.00	0.00	2.65	0.00	0.00	0.00	0.00	0.43
n	*316*	*160*	*156*	*68*	*22*	*19*	*2*	*48*	*54*	*28*	*19*	*5*	*49*
<T12_4> You may have heard that the Department of Energy has issued a mandate that prohibits the production of less efficient fluorescent lighting systems. As of last July, the production of many T12 lamps has been phased out. Doe this sound familiar?													
Yes	12.78	8.81	14.40	9.21	0.30	18.25	0.00	5.44	26.84	13.79	16.69	0.00	26.56
No	84.78	83.90	85.14	90.79	99.70	81.75	100.00	66.70	73.16	84.19	83.31	100.00	72.55
Don't Know	2.45	7.29	0.47	0.00	0.00	0.00	0.00	27.86	0.00	2.01	0.00	0.00	0.89
n	*235*	*117*	*118*	*45*	*21*	*17*	*1*	*33*	*36*	*25*	*17*	*3*	*37*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<T12_5> How did you become aware of the law affecting the production of T12 lamps?													
From a lighting retailer/vendor	30.16	22.04	31.70	25.47	0.00	0.00	100.00	13.91	5.88	0.00	0.37	68.47	0.29
Utility ACCOUNT representative	1.29	0.00	1.53	0.00	0.00	0.00	0.00	0.00	12.02	0.00	0.00	0.00	0.00
Utility PROGRAM representative	7.33	13.75	6.10	2.10	0.00	73.75	0.00	0.74	11.22	0.00	27.50	0.00	6.89
Utility or program website	3.89	0.00	4.63	0.00	0.00	0.00	0.00	0.00	8.34	0.00	0.00	0.00	11.94
Contractor	6.05	4.86	6.27	6.01	2.63	0.00	0.00	7.53	2.91	32.89	0.00	0.00	16.68
Lighting manufacturer	12.72	0.00	15.14	0.00	0.00	0.00	0.00	0.00	0.00	33.88	0.00	31.53	0.00
Energy services company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Newspaper article	10.86	28.14	7.57	37.79	0.00	0.00	0.00	41.66	31.09	0.00	0.00	0.00	12.08
Radio	3.13	2.14	3.32	0.00	0.00	0.00	0.00	6.91	0.00	0.00	0.00	0.00	11.10
Internet	4.84	3.27	5.14	5.18	0.00	0.00	0.00	3.81	0.95	0.00	0.00	0.00	16.79
Trade publication	0.27	1.66	0.00	0.00	0.00	0.00	0.00	5.36	0.00	0.00	0.00	0.00	0.00
Conference	0.91	0.94	0.91	2.33	0.00	0.00	0.00	0.00	7.14	0.00	0.00	0.00	0.00
Word of mouth	9.59	2.08	11.02	3.99	0.00	0.00	0.00	1.53	5.90	0.00	1.12	0.00	33.99
Result of an audit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Record how they heard about	6.97	7.99	6.78	12.57	0.00	5.09	0.00	6.63	0.71	6.68	68.33	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	3.88	7.99	3.09	3.52	97.37	15.26	0.00	0.00	0.00	26.55	2.47	0.00	6.89
n	*113*	*59*	*54*	*31*	*2*	*4*	*1*	*20*	*23*	*5*	*6*	*2*	*17*
<T12_6> Did you choose to replace your T12 lamps to higher efficiency linear fluorescent lighting because of the T12 phase out?													
Yes	62.62	31.90	70.03	24.35	2.63	0.00	100.00	29.50	9.42	93.95	87.39	100.00	56.69
No	37.38	68.10	29.97	75.65	97.37	100.00	0.00	70.50	90.58	6.05	12.61	0.00	43.31
n	*86*	*48*	*38*	*28*	*2*	*1*	*1*	*15*	*18*	*2*	*3*	*1*	*13*
<T12_7> Do you think the T12 phase out has had an influence on your decisions to retrofit your T12 systems earlier than you otherwise would have?													
Yes	97.00	99.59	96.71	100.00	0.00	0.00	100.00	100.00	100.00	0.00	75.34	100.00	95.42
No	3.00	0.41	3.29	0.00	100.00	0.00	0.00	0.00	0.00	100.00	24.66	0.00	4.58
n	*29*	*13*	*16*	*7*	*1*	*0*	*1*	*4*	*4*	*1*	*2*	*1*	*8*
<T12_8> How much earlier did you retrofit your T12 lighting systems due to the T12 phase out?													
6 months earlier than they would have	3.27	0.00	3.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.39
between 6 months and 1 year earlier	5.79	33.33	2.68	6.45	0.00	0.00	0.00	95.41	38.22	0.00	100.00	0.00	6.04
1 to 2 years earlier	80.02	62.57	82.00	82.67	0.00	0.00	100.00	4.59	0.00	0.00	0.00	100.00	35.96
2 to 4 years earlier	1.76	0.00	1.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.30
4 to 7 years earlier	7.69	0.00	8.56	0.00	0.00	0.00	0.00	0.00	25.13	0.00	0.00	0.00	33.42
Other	0.47	0.71	0.44	1.89	0.00	0.00	0.00	0.00	8.89	0.00	0.00	0.00	0.89
Don't Know	0.99	3.39	0.72	8.99	0.00	0.00	0.00	0.00	27.77	0.00	0.00	0.00	0.00
n	*25*	*12*	*13*	*7*	*0*	*0*	*1*	*4*	*4*	*0*	*1*	*1*	*7*
<T12_10> On a scale of 0 to 10 where 10 means Completely Influential and 0 means not at all influential, how influencial was the T12 phase out on your decision to retrofit your T12 lighting system?													
5	77.56	29.95	82.95	0.00	0.00	0.00	100.00	0.00	0.00	0.00	100.00	100.00	38.90
6	0.64	6.25	0.00	16.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.35	1.42	0.23	3.77	0.00	0.00	0.00	0.00	8.89	0.00	0.00	0.00	0.00
8	6.13	2.43	6.55	6.45	0.00	0.00	0.00	0.00	63.35	0.00	0.00	0.00	20.75
9	7.10	0.00	7.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.42
10 Completely Influential	5.27	30.94	2.36	73.17	0.00	0.00	0.00	10.45	27.77	0.00	0.00	0.00	6.93
Zero- Not at All Influential	2.95	29.00	0.00	0.00	0.00	0.00	0.00	89.55	0.00	0.00	0.00	0.00	0.00
n	*25*	*12*	*13*	*7*	*0*	*0*	*1*	*4*	*4*	*0*	*1*	*1*	*7*
<T12_20> Because of the T12 phase out, have you thought about replacing your T12 linear fluorescent lighting to higher efficiency linear fluorescent lighting?													
Yes	90.87	87.00	91.55	41.98	100.00	100.00	0.00	64.21	31.14	100.00	100.00	100.00	100.00
No	9.13	13.00	8.45	58.02	0.00	0.00	0.00	35.79	68.86	0.00	0.00	0.00	0.00
n	*24*	*12*	*12*	*6*	*1*	*1*	*0*	*3*	*5*	*2*	*1*	*1*	*2*
<T12_21> On a scale of 0 to 10 where 10 means Extremely Likely and 0 means Not at All Likely, how likely are you to replace your T12 fixtures with a lighting system that is the minimum allowable level of efficiency within the next year as a result of the													
1 Not at All Likely	3.32	20.72	0.24	0.00	100.00	0.00	0.00	35.79	0.00	5.88	0.00	0.00	0.00
3	0.73	2.29	0.45	14.85	0.00	0.00	0.00	0.00	3.70	0.00	0.00	0.00	0.00
5	49.53	0.00	58.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
7	11.39	5.11	12.51	33.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.26
8	17.54	55.86	10.75	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
10 Extremely Likely	7.18	14.45	5.89	41.98	0.00	0.00	0.00	64.21	31.14	0.00	0.00	0.00	12.74
Zero - Not at All Likely	10.31	1.56	11.86	10.12	0.00	0.00	0.00	0.00	65.15	94.12	0.00	0.00	0.00
n	*24*	*12*	*12*	*6*	*1*	*1*	*0*	*3*	*5*	*2*	*1*	*1*	*2*
<T12_22> On a scale of 0 to 10 where 10 means Extremely Likely and 0 means Not at All Likely, how likely are you to replace your T12 fixtures with a lighting system that is better than the minimum allowable level of efficiency within the next year as a re													
1 Not at All Likely	3.32	20.72	0.24	0.00	100.00	0.00	0.00	35.79	0.00	5.88	0.00	0.00	0.00
3	0.73	2.29	0.45	14.85	0.00	0.00	0.00	0.00	3.70	0.00	0.00	0.00	0.00
5	1.81	2.35	1.71	15.18	0.00	0.00	0.00	0.00	13.94	0.00	0.00	0.00	0.00
7	12.96	5.22	14.34	0.00	0.00	0.00	0.00	46.32	0.00	0.00	0.00	0.00	100.00
8	67.07	55.86	69.05	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00	100.00	0.00
10 Extremely Likely	4.72	8.45	4.06	36.92	0.00	0.00	0.00	17.89	31.14	0.00	0.00	0.00	0.00
Zero - Not at All Likely	9.39	5.11	10.15	33.04	0.00	0.00	0.00	0.00	51.21	94.12	0.00	0.00	0.00
n	*24*	*12*	*12*	*6*	*1*	*1*	*0*	*3*	*5*	*2*	*1*	*1*	*2*
<A3> In your own words, can you tell me why you decided to participate in this program?													
To replace old/outdated lighting equipment	3.81	5.56	3.19	7.30	6.51	9.52	9.08	1.60	8.80	10.22	1.68	1.05	2.72
As part of a planned remodeling/build-out/expansion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
To gain more control over how the mequipment was used	0.04	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00
Maintenance downtime/associated expenses for old equip were too high	4.85	0.00	6.55	0.00	0.00	0.00	0.00	0.00	7.56	0.00	0.00	16.99	0.08
Had process problems and were seeking a solution	0.76	1.75	0.42	0.00	0.00	0.00	0.00	4.59	0.00	0.00	0.00	0.00	1.09
To improve lighting equipment performance	11.07	7.50	12.32	7.55	8.09	9.13	0.00	7.58	5.47	0.74	27.30	17.40	7.44
To improve the quality of the lighting in your facility	10.69	8.87	11.33	9.95	0.53	6.85	0.00	13.14	9.57	0.00	0.15	16.99	11.78
To comply with codes set by regulatory agencies	1.15	0.30	1.44	0.39	0.00	1.04	0.00	0.00	0.00	0.00	3.39	0.00	2.78
To improve visibility/plant safety	1.17	1.60	1.01	0.84	0.00	6.51	0.00	0.36	0.25	0.00	0.35	0.00	2.46
Comply w/co. policies regarding lighting retrofits/remodeling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
To get a rebate from the program	31.05	30.11	31.38	32.51	33.64	22.33	30.57	31.28	42.99	17.77	17.33	32.33	32.86
To protect the environment	21.23	27.79	18.93	15.75	39.24	32.59	9.08	32.28	13.53	31.51	31.36	13.29	20.16
To reduce energy costs	73.93	74.01	73.90	83.99	75.47	79.04	69.43	65.17	76.83	62.20	81.25	70.98	74.99
To reduce energy use/power outages	25.05	25.67	24.83	16.44	47.41	28.72	0.00	26.86	26.80	33.14	22.71	16.99	30.34
To update to the latest technology	1.84	1.88	1.82	2.07	3.85	2.73	0.00	0.98	0.13	2.09	11.35	0.00	1.15
Other	2.49	5.24	1.52	1.51	9.54	0.00	0.00	9.69	1.32	0.00	0.00	0.12	3.43
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.10	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.26
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<N2> Did your company make the decision to install measure before or after you became aware of rebates/cost reduction available through the program?													
Before	22.97	13.47	26.30	5.97	16.24	0.74	90.92	12.36	7.23	9.40	0.00	61.47	12.07
After	75.98	84.52	72.99	86.30	83.76	98.86	9.08	87.64	88.71	90.60	99.14	38.53	87.67
Don't Know	1.04	2.02	0.70	7.73	0.00	0.40	0.00	0.00	4.06	0.00	0.86	0.00	0.26
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<N3A> On a scale of 1-10 please rate the age or condition of the old measure?													
1 Not at All Important	2.29	1.96	2.41	0.25	9.59	1.69	0.00	1.02	0.68	3.04	2.83	0.00	4.81
2	6.42	3.88	7.31	1.95	7.86	1.91	0.00	5.42	12.11	7.77	12.27	0.12	10.48
3	7.82	2.85	9.56	0.38	2.62	3.20	0.00	4.79	5.39	6.42	2.39	22.22	2.51
4	12.86	13.81	12.53	17.64	16.65	11.02	0.00	13.86	14.70	11.95	24.71	12.88	8.14
5	17.57	13.10	19.13	16.00	5.02	20.97	21.49	8.55	13.07	15.01	25.54	31.28	9.32
6	5.02	5.86	4.73	2.44	5.16	9.03	0.00	7.59	2.83	7.18	5.90	0.00	8.71
7	4.58	3.74	4.87	4.27	4.40	8.25	0.00	1.46	4.53	20.98	4.35	0.00	7.07
8	8.58	11.13	7.69	21.14	3.35	14.99	0.00	6.86	12.76	9.34	12.27	0.00	11.14
9	1.68	3.83	0.93	2.12	3.09	12.08	0.00	1.58	1.18	0.42	2.24	0.00	1.34
10 Extremely Important	13.33	19.85	11.04	17.05	28.15	15.21	9.08	22.94	11.72	6.41	4.08	1.05	22.04
Zero Not at All Important	19.80	19.99	19.73	16.77	14.11	1.65	69.43	25.91	20.42	11.48	3.42	32.44	14.46
Don't Know	0.06	0.01	0.08	0.00	0.00	0.00	0.00	0.03	0.62	0.00	0.00	0.00	0.00
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<N3AA> How, specifically, did this enter into your decision to install/delamp this lighting equipment?													
Equipment broken/needed replacement	29.02	32.51	27.27	24.42	33.62	39.22	0.00	31.96	19.85	17.65	30.50	100.00	28.10
Program was sole reason for equipment replacement	16.78	28.95	10.67	59.36	52.71	22.72	0.00	12.86	25.17	25.22	13.65	0.00	5.90
Poor lighting quality	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Inefficient equipment	19.24	16.85	20.44	7.22	28.60	24.39	0.00	15.08	10.34	29.48	40.52	0.00	17.75
Equipment being phased out	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.29	0.05	0.41	0.22	0.00	0.00	0.00	0.00	3.40	0.00	0.00	0.00	0.00
Other - Unrelated	11.59	5.96	14.41	0.36	16.49	13.16	0.00	2.29	17.87	15.66	11.86	0.00	14.32
Other	20.08	11.92	24.17	9.19	0.00	0.00	0.00	24.11	23.37	0.00	0.00	0.00	32.05
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	5.14	8.88	3.26	0.00	1.26	0.51	0.00	21.34	0.00	13.94	3.47	0.00	2.59
n	*139*	*65*	*74*	*26*	*6*	*13*	*0*	*20*	*22*	*9*	*12*	*1*	*30*
<N3B> On a scale of 1-10 please rate the availability of the program rebate/cost reduction													
1 Not at All Important	0.28	1.08	0.00	4.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.26	0.22	0.27	0.90	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00
3	0.76	0.37	0.90	0.00	3.01	0.00	0.00	0.00	0.00	11.58	0.00	0.00	0.73
4	1.10	0.29	1.39	0.39	0.00	0.00	0.00	0.51	0.00	6.94	0.00	0.00	2.64
5	2.71	4.94	1.93	13.55	6.43	3.72	0.00	0.21	3.64	11.86	1.69	0.00	1.72
6	0.67	0.56	0.70	0.07	0.00	0.00	0.00	1.43	2.80	1.96	0.00	0.12	0.57
7	11.39	6.92	12.95	6.17	10.55	10.47	21.49	2.29	1.08	4.62	4.99	31.28	4.43
8	12.88	19.79	10.46	14.56	25.93	21.90	0.00	23.10	16.51	13.31	14.94	0.65	15.29
9	14.50	4.25	18.09	7.14	0.69	1.88	0.00	5.34	8.77	2.32	10.20	29.87	15.39
10 Extremely Important	53.76	59.57	51.72	50.09	53.39	62.03	78.51	63.66	63.47	47.40	67.90	38.09	55.64
Zero Not at All Important	0.63	0.94	0.52	2.77	0.00	0.00	0.00	0.67	1.32	0.00	0.00	0.00	0.93
Don't Know	1.07	1.06	1.08	0.00	0.00	0.00	0.00	2.79	0.17	0.00	0.29	0.00	2.66
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<N3BB> Why do you give it this rating?													
1	26.93	17.86	29.88	2.93	1.16	14.39	100.00	17.88	9.57	36.79	23.04	56.20	17.16
2	10.50	6.71	11.73	16.51	0.00	11.66	0.00	2.39	13.59	0.00	5.83	24.91	3.44
3	1.33	2.92	0.81	0.35	0.00	0.00	0.00	6.32	0.67	0.00	5.05	0.00	0.29
4	48.64	59.95	44.96	66.31	83.69	73.77	0.00	54.16	48.40	59.65	63.86	18.89	57.55
5	0.97	0.00	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.23
7	0.54	0.68	0.49	0.68	6.42	0.00	0.00	0.06	0.00	0.00	0.00	0.00	1.24
8	1.12	0.63	1.29	3.42	0.00	0.00	0.00	0.00	9.76	0.00	0.00	0.00	0.00
9	1.38	1.74	1.26	3.75	8.73	0.18	0.00	0.66	1.09	3.55	2.22	0.00	1.82
Record verbatim	7.57	5.41	8.27	6.05	0.00	0.00	0.00	9.44	16.92	0.00	0.00	0.00	15.16
Don't Know	1.04	4.11	0.04	0.00	0.00	0.00	0.00	9.09	0.00	0.00	0.00	0.00	0.10
n	*286*	*129*	*157*	*49*	*15*	*18*	*1*	*45*	*55*	*17*	*20*	*6*	*58*
<N3C> Information provided through...													
1 Not at All Important	0.06	0.00	0.07	0.00	0.00	0.00	0.00	0.00	2.01	0.00	0.00	0.00	0.00
2	34.12	18.58	38.23	0.00	0.00	0.00	76.36	0.00	0.00	0.00	0.00	53.70	0.00
3	1.33	1.67	1.24	0.00	11.09	0.00	0.00	0.00	0.00	42.88	0.00	0.00	0.00
5	6.51	18.80	3.26	54.75	7.57	2.20	0.00	24.56	48.21	23.92	15.56	0.00	2.43
6	3.84	1.24	4.53	0.00	0.00	0.00	0.00	4.08	0.00	0.00	0.00	0.00	22.41
7	29.64	12.03	34.29	0.00	1.97	49.71	23.64	0.00	0.92	5.10	55.53	46.30	0.00
8	3.63	5.52	3.13	12.49	18.09	1.09	0.00	1.32	29.35	4.21	23.45	0.00	7.20
9	5.63	5.12	5.76	12.82	1.81	0.00	0.00	8.28	0.00	0.00	0.00	0.00	28.51
10 Extremely Important	8.66	19.63	5.76	15.02	39.96	47.01	0.00	17.18	19.51	16.15	5.46	0.00	22.14
Zero Not at All Important	5.71	14.07	3.50	4.92	2.05	0.00	0.00	42.26	0.00	0.00	0.00	0.00	17.31
Don't Know	0.88	3.34	0.22	0.00	17.45	0.00	0.00	2.31	0.00	7.75	0.00	0.00	0.00
n	*71*	*35*	*36*	*8*	*10*	*4*	*2*	*11*	*10*	*9*	*4*	*2*	*11*
<N3CC> Why do you give it this rating?													
6	91.25	91.55	91.03	54.60	100.00	100.00	0.00	100.00	37.86	100.00	0.00	0.00	100.00
Record verbatim	8.75	8.45	8.97	45.40	0.00	0.00	0.00	0.00	62.14	0.00	0.00	0.00	0.00
n	*21*	*11*	*10*	*4*	*2*	*1*	*0*	*4*	*4*	*1*	*0*	*0*	*5*
<N3D> Recommendation from an equipment vendor that sold you the lighting measure and/or installed it													
1 Not at All Important	2.53	7.43	0.89	0.00	0.21	0.00	0.00	21.49	0.00	5.38	0.00	0.00	1.64
2	11.76	5.09	13.99	0.27	0.60	0.00	69.43	0.00	2.25	8.52	3.52	37.29	0.00
3	1.14	1.95	0.87	0.00	0.16	1.17	0.00	4.98	0.00	6.06	0.00	0.00	1.49
4	5.05	3.68	5.51	1.19	13.72	3.03	0.00	2.83	11.82	10.55	2.80	0.00	8.72
5	15.50	12.51	16.51	13.71	9.13	20.28	0.00	11.33	17.31	12.96	18.88	19.53	13.19
6	2.19	5.45	1.10	10.24	3.05	8.63	0.00	2.09	4.20	0.00	3.43	0.00	0.56
7	11.70	5.06	13.92	5.55	12.32	0.38	21.49	0.97	2.50	4.82	1.48	35.95	2.16
8	15.09	18.62	13.91	18.20	1.94	39.47	0.00	18.11	22.14	9.78	31.44	0.74	18.77
9	5.46	8.96	4.29	13.83	6.73	0.73	0.00	12.20	2.16	15.68	1.00	0.00	8.29
10 Extremely Important	23.86	25.01	23.47	25.14	46.33	22.73	9.08	21.21	24.07	12.16	15.35	6.49	43.46
Zero Not at All Important	5.27	5.32	5.26	11.88	5.82	1.38	0.00	3.25	13.34	14.09	20.63	0.00	1.47
Don't Know	0.44	0.93	0.28	0.00	0.00	2.20	0.00	1.52	0.20	0.00	1.46	0.00	0.24
n	*426*	*212*	*214*	*86*	*32*	*25*	*3*	*65*	*72*	*32*	*26*	*8*	*75*
<N3E> On a scale of 1-10 please rate your previous experience with energy efficient lighting projects?													
1 Not at All Important	3.73	6.57	2.73	0.00	1.01	2.31	0.00	15.77	0.00	0.83	2.39	4.82	2.17
2	3.87	3.74	3.92	4.49	3.99	5.16	9.08	1.59	3.23	12.26	3.08	0.41	6.18
3	2.20	2.73	2.01	0.34	17.03	0.00	0.00	1.44	0.79	6.42	8.03	0.12	1.67
4	1.83	2.26	1.68	0.00	3.85	5.25	0.00	2.03	0.18	0.82	0.00	0.00	4.21
5	4.60	5.34	4.34	9.41	2.67	9.32	0.00	2.34	4.02	6.58	8.57	0.00	6.64
6	2.92	4.21	2.46	10.06	2.87	0.00	0.00	3.58	0.17	8.66	0.00	0.00	5.14
7	10.26	2.88	12.85	5.50	0.36	0.00	21.49	0.69	4.88	8.90	0.44	31.28	3.67
8	9.49	11.83	8.67	15.34	7.61	17.53	0.00	9.81	32.28	23.31	7.59	0.00	6.94
9	5.08	1.55	6.32	5.00	0.00	0.26	0.00	0.69	0.51	1.98	0.86	16.99	1.17
10 Extremely Important	11.98	11.57	12.13	6.89	8.12	7.69	0.00	19.42	14.88	2.67	27.90	0.41	18.10
Zero Not at All Important	41.73	45.13	40.54	38.62	49.66	52.19	69.43	40.75	34.42	25.11	35.18	45.97	41.53
Don't Know	2.32	2.20	2.36	4.35	2.84	0.29	0.00	1.89	4.65	2.48	5.96	0.00	2.61
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<N3F> On a scale of 1-10 please rate your previous experience with the utility the program or a similar utility program?													
1 Not at All Important	4.19	6.39	3.41	0.00	1.01	2.60	0.00	15.08	0.00	0.83	2.39	4.82	3.89
2	3.92	3.96	3.91	5.38	11.14	4.42	0.00	1.08	7.69	12.26	3.08	0.00	5.14
3	1.56	1.46	1.59	0.69	9.87	0.00	0.00	0.20	0.27	2.98	8.03	0.00	1.32
4	0.54	0.55	0.53	0.00	2.87	0.00	0.00	0.51	0.30	6.75	0.00	0.00	0.35
5	3.45	3.60	3.40	2.17	0.95	1.00	9.08	5.88	2.71	4.13	0.86	0.41	6.81
6	1.41	1.06	1.53	0.22	0.00	5.25	0.00	0.00	0.64	1.14	0.00	0.12	3.51
7	15.20	6.47	18.26	7.90	2.61	7.02	21.49	4.27	1.05	1.04	2.93	48.27	4.77
8	5.46	7.64	4.70	7.75	4.52	7.81	0.00	9.63	9.88	13.71	6.94	0.00	5.19
9	1.83	2.71	1.53	6.93	3.49	0.00	0.00	1.47	2.31	11.92	0.00	0.00	1.58
10 Extremely Important	10.87	9.17	11.46	11.78	7.92	7.69	0.00	9.98	18.47	8.37	23.67	0.41	15.66
Zero Not at All Important	48.64	55.12	46.37	54.10	52.77	63.93	69.43	50.01	52.27	34.41	46.14	45.97	46.62
Don't Know	2.95	1.89	3.32	3.08	2.84	0.29	0.00	1.89	4.41	2.48	5.96	0.00	5.19
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<N3G> Information from the program or utility training course?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<N3GG> What type of information was provided that was related to the project?													
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<N3GGG> How, specifically, did this enter into your decision to install/delamp this lighting equipment?													
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<N3H> On a scale of 1-10 please rate Information from the program or utility marketing materials?													
1 Not at All Important	2.75	6.85	1.31	0.00	3.81	2.31	0.00	15.59	0.68	7.72	2.39	0.00	1.44
2	7.07	2.27	8.75	0.74	0.00	2.20	0.00	4.37	5.96	0.00	9.74	16.99	3.50
3	3.50	2.43	3.87	3.64	2.87	0.00	0.00	3.09	5.86	6.48	0.00	0.00	7.32
4	2.89	3.73	2.60	2.79	5.69	11.16	0.00	0.51	3.26	12.32	8.33	0.00	1.63
5	20.52	15.60	22.24	17.42	12.40	14.32	69.43	8.10	16.73	18.58	10.21	45.45	8.06
6	3.40	3.51	3.37	2.54	0.00	6.57	0.00	4.25	7.27	6.40	3.10	0.00	4.68
7	13.87	7.65	16.04	13.42	0.00	14.25	21.49	0.99	2.83	1.69	16.40	36.10	4.90
8	11.48	18.98	8.86	20.27	21.86	22.53	0.00	18.24	10.79	20.50	11.95	0.00	13.34
9	3.19	5.58	2.35	11.13	3.36	8.99	0.00	1.72	4.06	2.39	4.55	0.00	3.14
10 Extremely Important	15.98	13.97	16.69	10.52	33.01	15.56	0.00	11.32	22.92	13.30	26.22	0.41	26.42
Zero Not at All Important	13.61	17.87	12.11	15.62	16.82	2.10	9.08	28.96	16.14	10.25	6.67	1.05	22.16
Don't Know	1.75	1.59	1.80	1.93	0.18	0.00	0.00	2.86	3.50	0.36	0.44	0.00	3.41
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<N3HH> What type of information was provided that pertained to the project?													
Related	67.11	73.17	65.24	69.32	40.27	67.07	100.00	91.02	60.86	62.00	60.15	98.87	45.58
Unrelated	19.20	14.93	20.52	2.38	59.73	21.84	0.00	6.23	20.32	38.00	31.58	0.00	29.29
Other	7.77	0.28	10.08	0.00	0.00	0.00	0.00	0.71	18.38	0.00	0.00	0.00	19.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	5.92	11.62	4.16	28.31	0.00	11.09	0.00	2.04	0.44	0.00	8.27	1.13	6.13
n	*172*	*77*	*95*	*33*	*7*	*14*	*1*	*21*	*34*	*8*	*15*	*4*	*33*
<N3HHH> How, specifically, did this enter into your decision to install/delamp this lighting equipment?													
Related	67.11	73.17	65.24	69.32	40.27	67.07	100.00	91.02	60.86	62.00	60.15	98.87	45.58
Unrelated	19.20	14.93	20.52	2.38	59.73	21.84	0.00	6.23	20.32	38.00	31.58	0.00	29.29
Other	7.77	0.28	10.08	0.00	0.00	0.00	0.00	0.71	18.38	0.00	0.00	0.00	19.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	5.92	11.62	4.16	28.31	0.00	11.09	0.00	2.04	0.44	0.00	8.27	1.13	6.13
n	*172*	*77*	*95*	*33*	*7*	*14*	*1*	*21*	*34*	*8*	*15*	*4*	*33*
<N3J> On a scale of 1-10 please rate standard practice in your business/industry													
1 Not at All Important	3.38	7.76	2.01	0.00	0.00	2.65	0.00	17.47	0.82	0.00	2.85	0.00	4.44
2	1.66	2.06	1.53	3.17	9.76	2.53	0.00	0.00	6.75	10.47	2.56	0.00	0.00
3	2.85	2.79	2.86	0.09	5.79	0.00	0.00	5.58	0.99	14.64	0.00	0.00	5.62
4	0.82	1.24	0.70	1.62	8.40	0.00	0.00	0.45	5.30	2.01	0.00	0.00	0.00
5	8.74	9.29	8.56	6.64	13.15	17.45	0.00	7.30	9.66	12.80	30.42	3.86	6.19
6	2.73	3.40	2.52	0.33	7.34	3.39	0.00	4.87	6.88	9.76	2.42	0.00	2.81
7	14.18	6.61	16.53	3.84	19.37	7.16	23.64	2.68	8.64	1.64	2.66	28.08	13.20
8	14.24	14.06	14.29	14.27	13.36	22.66	0.00	11.81	4.60	27.42	13.85	18.42	11.48
9	2.57	4.20	2.06	1.98	0.00	12.97	0.00	2.43	3.43	0.00	8.44	0.00	2.16
10 Extremely Important	26.10	19.26	28.23	13.05	12.63	9.09	76.36	20.25	10.69	3.41	10.42	49.63	20.35
Zero Not at All Important	13.88	21.43	11.53	41.64	5.64	14.87	0.00	20.00	29.98	17.39	19.28	0.00	14.51
Don't Know	8.88	7.92	9.17	13.37	4.56	7.22	0.00	7.15	12.26	0.46	7.09	0.00	19.24
n	*346*	*156*	*190*	*59*	*19*	*22*	*2*	*53*	*63*	*26*	*24*	*9*	*67*
<N3L> A suggestion by your account representative													
2	0.88	0.00	0.98	0.00	0.00	0.00	0.00	0.00	0.00	25.00	0.00	0.00	0.00
5	3.26	29.94	0.00	0.00	58.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.34	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40
7	5.93	32.89	2.64	100.00	0.00	0.00	0.00	8.31	89.72	0.00	0.00	0.00	1.11
8	59.69	28.13	63.54	0.00	34.24	0.00	0.00	68.76	0.00	43.82	0.00	100.00	50.36
9	1.43	2.80	1.27	0.00	0.00	100.00	0.00	5.96	0.00	7.69	4.51	0.00	0.00
10 Extremely Important	28.07	4.08	31.00	0.00	2.83	0.00	0.00	16.97	10.28	18.69	95.49	0.00	47.13
Zero Not at All Important	0.40	2.16	0.19	0.00	4.24	0.00	0.00	0.00	0.00	4.79	0.00	0.00	0.00
n	*37*	*17*	*20*	*3*	*5*	*1*	*0*	*7*	*2*	*5*	*3*	*1*	*8*
<N3LL> What did they recommend?													
Related	82.75	12.43	88.13	0.00	0.00	100.00	0.00	52.58	0.00	0.00	100.00	100.00	64.67
Unrelated	8.03	15.11	7.49	0.00	50.83	0.00	0.00	0.00	0.00	100.00	0.00	0.00	20.23
Other	0.23	1.13	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	8.99	71.34	4.21	100.00	49.17	0.00	0.00	47.42	0.00	0.00	0.00	0.00	15.09
n	*20*	*10*	*10*	*2*	*2*	*1*	*0*	*4*	*0*	*1*	*2*	*1*	*5*
<N3LLL> How, specifically, did this enter into your decision to install/delamp this lighting equipment?													
Related	64.70	35.89	65.36	0.00	0.00	100.00	0.00	79.32	0.00	0.00	4.63	100.00	43.75
Unrelated	29.23	0.00	29.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	95.37	0.00	45.56
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	6.07	64.11	4.73	0.00	100.00	0.00	0.00	20.68	0.00	100.00	0.00	0.00	10.69
n	*15*	*6*	*9*	*0*	*1*	*1*	*0*	*3*	*0*	*1*	*2*	*1*	*4*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<N3M> How, specifically, did this enter into your decision to install this lighting equipment?													
1 Not at All Important	4.83	8.27	3.76	2.22	0.00	2.65	0.00	17.47	13.03	0.00	2.85	0.12	5.31
2	2.78	1.23	3.26	2.85	0.00	2.53	0.00	0.00	2.66	8.11	2.56	0.00	6.25
3	5.55	3.88	6.08	0.00	10.02	12.94	0.00	0.81	0.56	8.82	17.79	0.00	10.22
4	1.29	1.10	1.35	0.06	7.42	0.00	0.00	1.18	1.86	1.03	0.00	0.00	2.98
5	6.38	11.66	4.73	23.56	15.08	12.18	0.00	5.93	7.86	16.54	9.45	3.32	2.31
6	8.77	3.27	10.49	0.78	19.02	0.00	23.64	0.02	0.98	0.00	0.00	28.08	0.00
7	2.09	3.62	1.61	1.36	0.00	3.10	0.00	6.45	1.35	0.00	1.41	0.00	3.60
8	13.18	14.66	12.71	14.06	5.64	31.00	0.00	10.72	14.16	18.29	17.89	18.84	3.87
9	0.69	2.08	0.25	1.82	0.00	7.78	0.00	0.04	0.90	0.00	1.43	0.00	0.00
10 Extremely Important	13.83	5.67	16.37	1.72	10.01	1.95	0.00	9.84	4.31	3.41	31.39	17.06	16.81
Zero Not at All Important	35.96	39.83	34.75	50.34	25.28	18.50	76.36	42.02	47.47	33.64	8.14	32.57	40.80
Refused	0.16	0.02	0.20	0.00	0.00	0.00	0.00	0.06	0.98	1.95	0.00	0.00	0.00
Don't Know	4.50	4.71	4.44	1.22	7.53	7.38	0.00	5.47	3.89	8.21	7.09	0.00	7.86
n	*346*	*156*	*190*	*59*	*19*	*22*	*2*	*53*	*63*	*26*	*24*	*9*	*67*
<N3MM> How, specifically, did this enter into your decision to install/delamp this lighting equipment?													
Related	11.00	2.39	12.90	11.59	0.00	0.00	0.00	1.56	6.37	0.00	0.00	20.22	4.61
Unrelated	76.81	78.93	76.34	87.67	45.13	99.33	100.00	64.01	73.07	100.00	98.05	79.14	53.73
Other	6.14	0.33	7.42	0.00	0.00	0.00	0.00	0.87	15.87	0.00	0.00	0.00	30.30
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	6.04	18.35	3.34	0.74	54.87	0.67	0.00	33.56	4.69	0.00	1.95	0.65	11.36
n	*109*	*48*	*61*	*19*	*4*	*8*	*1*	*16*	*20*	*6*	*12*	*6*	*17*
<N3N> Please rate the degree of importance of payback or return on investment of installing this lighting equipment…?													
1 Not at All Important	0.38	0.46	0.35	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.00	0.00	0.92
2	1.09	0.09	1.44	0.35	0.00	0.00	0.00	0.00	1.81	0.96	0.73	3.31	0.00
3	1.09	1.18	1.06	2.68	2.62	0.00	0.00	0.51	0.17	0.00	0.00	0.00	2.71
4	0.25	0.44	0.18	0.67	0.00	0.00	0.00	0.71	0.00	2.55	0.00	0.00	0.13
5	4.14	8.10	2.75	16.20	9.82	13.08	0.00	0.97	5.00	8.89	5.29	0.00	2.83
6	2.20	2.92	1.95	0.74	5.25	10.88	0.00	0.00	3.04	7.25	7.94	0.00	0.81
7	4.79	2.58	5.57	1.63	1.14	0.44	0.00	5.13	0.62	12.62	0.00	0.00	12.53
8	31.00	18.37	35.42	9.61	23.74	16.92	90.92	12.28	14.09	23.01	18.96	73.41	16.03
9	6.02	8.62	5.10	11.84	5.00	9.92	0.00	8.26	6.75	0.64	2.35	0.00	10.33
10 Extremely Important	38.66	41.45	37.69	33.84	49.79	42.63	9.08	47.94	47.09	38.46	59.10	22.63	41.40
Zero Not at All Important	6.07	9.86	4.75	17.14	0.00	0.00	0.00	14.77	15.71	5.26	0.00	0.65	6.11
Refused	0.01	0.03	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	4.30	5.93	3.73	5.31	2.64	5.99	0.00	8.24	5.73	0.36	5.64	0.00	6.22
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<N3O> To improve production as a result of lighting?													
1 Not at All Important	0.34	1.00	0.11	0.00	5.00	0.00	0.00	1.02	0.17	0.33	0.00	0.00	0.19
2	2.33	0.62	2.93	1.58	0.00	0.00	0.00	0.61	0.00	7.26	11.04	0.00	3.43
3	0.61	1.59	0.27	2.85	7.15	0.00	0.00	0.00	1.32	1.37	0.29	0.00	0.00
4	2.27	1.58	2.51	0.00	0.51	6.86	0.00	0.53	8.41	1.22	3.75	0.00	2.64
5	8.53	10.77	7.75	24.82	9.32	9.30	0.00	4.45	26.42	16.58	6.99	0.00	7.50
6	2.89	3.33	2.73	2.06	15.12	3.26	0.00	0.87	4.66	6.41	5.01	0.00	3.30
7	6.02	4.08	6.70	1.25	3.88	11.25	0.00	2.89	1.17	17.16	20.52	3.31	5.87
8	25.15	19.16	27.25	20.12	5.23	32.30	21.49	16.09	20.30	13.62	35.11	46.44	12.63
9	5.67	6.65	5.33	14.01	0.41	1.47	0.00	7.48	8.02	6.77	0.86	0.00	10.14
10 Extremely Important	34.73	42.88	31.87	31.07	50.76	34.52	9.08	57.29	27.24	28.91	16.43	17.81	50.25
Zero Not at All Important	11.46	8.34	12.56	2.25	2.62	1.05	69.43	8.77	2.28	0.36	0.00	32.44	4.05
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<N3OO> How, specifically, did this enter into your decision to install/delamp this lighting equipment?													
Related	45.91	32.50	50.75	25.11	40.28	41.13	100.00	26.30	45.35	32.19	16.79	87.78	37.49
Unrelated	46.67	61.69	41.25	69.27	59.72	58.39	0.00	63.25	36.56	66.91	80.53	12.22	48.97
Other	5.30	1.70	6.60	5.05	0.00	0.17	0.00	1.28	14.57	0.00	1.59	0.00	11.56
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	2.12	4.11	1.40	0.58	0.00	0.31	0.00	9.17	3.52	0.90	1.10	0.00	1.97
n	*432*	*218*	*214*	*83*	*29*	*24*	*2*	*79*	*69*	*30*	*25*	*9*	*80*
<N3P> Compliance with state or federal regulations or standards such as Title 24?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<N3PP> How, specifically, did this enter into your decision to install/delamp this lighting equipment?													
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<N3R> Compliance with your organization's normal remodeling or lighting replacement practices?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<N3RR> How, specifically, did this enter into your decision to install/delamp this lighting equipment?													
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<N3S> Were there any other factors we haven't discussed that was influential in your decision to install this lighting equipment?													
Related	95.86	95.25	96.08	91.01	100.00	94.16	100.00	96.31	90.77	99.69	98.31	100.00	93.24
Unrelated	3.71	4.52	3.42	8.99	0.00	5.84	0.00	3.08	9.23	0.31	1.69	0.00	5.46
Other	0.43	0.23	0.50	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00	1.30
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<N3SS> Using the same Zero to 10 scale, how would you rate the influence of this factor?													
5	1.79	7.12	0.00	0.00	0.00	0.00	0.00	23.85	0.00	0.00	0.00	0.00	0.00
6	1.76	0.00	2.36	0.00	0.00	0.00	0.00	0.00	9.10	4.29	0.00	0.00	0.00
7	6.90	0.77	8.96	0.00	0.00	0.00	0.00	2.58	10.38	0.00	0.00	0.00	11.15
8	8.88	9.95	8.52	21.21	0.00	0.00	0.00	0.00	6.95	0.00	0.00	0.00	11.69
9	7.67	8.50	7.40	0.00	0.00	0.00	0.00	28.45	0.00	95.71	0.00	0.00	0.00
10 Extremely Important	72.99	73.66	72.76	78.79	0.00	100.00	0.00	45.13	73.58	0.00	100.00	0.00	77.16
n	*43*	*18*	*25*	*10*	*0*	*2*	*0*	*6*	*12*	*2*	*2*	*0*	*9*
<CC1> You indicated earlier that compliance with codes or regulatory policies was one of the reasons you did the project. However, just now you scored the importance of compliance with state or federal regulations or standards such as Title 24 in your dec													
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<CC1A> You indicated earlier that compliance with codes or regulatory policies was not one of the primary reasons you did the project. However, just now you scored the importance of compliance with state or federal regulations or standards such as Title													
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<NCC3> You indicated earlier that a regularly scheduled retrofit was one of the reasons you did the project. However, just now you scored the importance of compliance with your companies regularly schedule retrofit or lighting replacement in your decision													
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<P1> What financial calculations does your company typically make before proceeding with the installation of lighting equipment like you installed through the program?													
Payback	80.00	37.11	86.59	0.00	0.00	0.00	100.00	0.00	20.30	39.66	0.00	96.13	0.00
Return on Investment (ROI)	10.99	39.47	6.62	94.26	0.00	95.42	0.00	28.76	37.07	0.00	82.99	3.87	18.39
upfront Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No Calculations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	50.67	30.78	53.73	5.74	0.00	0.00	76.36	4.79	44.59	0.00	0.00	57.79	28.91
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	6.96	21.03	4.80	0.00	100.00	4.58	0.00	66.44	18.34	60.34	17.01	0.00	52.71
n	*38*	*16*	*22*	*4*	*2*	*4*	*2*	*3*	*5*	*3*	*3*	*5*	*5*
<P2A> What is your threshold in terms of the payback or return on investment your company uses before deciding to proceed with an investment?													
0 to 6 months	42.06	75.96	39.83	0.00	0.00	0.00	76.36	0.00	0.00	100.00	0.00	39.46	0.00
1 to 2 years	0.38	0.00	0.41	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
2 to 3 years	57.55	24.04	59.76	0.00	0.00	0.00	23.64	0.00	0.00	0.00	0.00	60.54	0.00
n	*10*	*3*	*7*	*0*	*0*	*0*	*2*	*0*	*1*	*1*	*0*	*4*	*0*
<P2B> What is your ROI?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<P3> Did the rebate move your project within this acceptable range?													
Yes	83.00	98.52	80.89	98.01	51.86	98.38	100.00	100.00	69.58	93.53	100.00	79.46	100.00
No	3.09	1.48	3.31	1.99	48.14	1.62	0.00	0.00	10.19	6.47	0.00	3.35	0.00
Don't Know	13.91	0.00	15.80	0.00	0.00	0.00	0.00	0.00	20.23	0.00	0.00	17.19	0.00
n	*45*	*18*	*27*	*5*	*3*	*4*	*2*	*3*	*7*	*4*	*3*	*7*	*5*
<P4> On a scale of 0 to 10, with a 10 meaning a "Very Important" and a 0 meaning "Not at All Important", how important in your decision was it that the project was now in the acceptable range?													
5	2.89	11.65	1.44	0.00	87.57	19.73	0.00	28.76	0.00	17.77	24.85	0.00	9.47
6	3.05	9.22	2.03	0.00	12.43	77.25	0.00	0.00	0.00	42.57	58.15	0.00	0.00
7	29.92	10.18	33.19	0.00	0.00	0.00	23.64	4.79	0.00	0.00	0.00	35.62	28.91
8	17.20	21.00	16.58	6.81	0.00	0.00	0.00	66.44	74.72	39.66	0.00	16.40	1.58
9	0.54	0.19	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.92
10 VERY IMPORTANT	45.73	47.41	45.46	93.19	0.00	0.00	76.36	0.00	0.00	0.00	0.00	47.98	51.12
Zero Not at All Important	0.33	0.00	0.38	0.00	0.00	0.00	0.00	0.00	25.28	0.00	0.00	0.00	0.00
Don't Know	0.33	0.36	0.32	0.00	0.00	3.01	0.00	0.00	0.00	0.00	17.01	0.00	0.00
n	*36*	*15*	*21*	*4*	*2*	*3*	*2*	*3*	*4*	*3*	*3*	*5*	*5*
<P3A> The rebate seemed to make the difference between meeting your financial criteria and not meeting them, but you are saying that the rebate didn't have much effect on your decision, why is that?													
Related	100.00	100.00	100.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Unrelated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*2*	*1*	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*
<P3E> Why did it have an impact?													
Related	0.74	12.87	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unrelated	99.26	87.13	100.00	100.00	100.00	0.00	0.00	0.00	100.00	100.00	0.00	100.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*6*	*3*	*3*	*1*	*1*	*1*	*0*	*0*	*1*	*1*	*0*	*1*	*0*
<N41> How many of the ten points would you give to the importance of the program in your decision?													
0	0.25	0.88	0.03	0.00	7.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
1	0.64	0.00	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25
2	1.96	1.41	2.15	5.27	0.51	0.00	0.00	0.10	4.91	2.31	3.01	0.00	2.86
3	2.87	4.98	2.13	2.46	0.00	0.00	0.00	11.50	0.98	0.00	0.00	0.00	5.22
4	4.05	2.56	4.57	5.93	0.00	0.30	0.00	2.73	8.53	0.00	0.29	3.31	6.27
5	42.04	27.67	47.07	15.92	29.02	31.99	100.00	21.90	25.83	34.72	15.18	82.75	34.02
6	7.23	11.04	5.90	9.37	20.44	4.24	0.00	14.18	13.98	18.02	1.18	0.00	8.08
7	8.59	11.12	7.70	10.95	8.48	35.38	0.00	1.50	3.85	18.40	40.60	0.00	4.58
8	16.53	18.25	15.92	7.06	24.58	14.42	0.00	28.14	15.38	5.03	31.67	13.53	15.15
9	2.49	0.64	3.14	0.58	0.48	1.31	0.00	0.49	5.65	6.35	0.86	0.00	5.24
10	11.49	20.50	8.33	41.59	9.35	12.37	0.00	17.55	16.97	15.15	5.05	0.41	12.40
99	1.87	0.95	2.19	0.88	0.00	0.00	0.00	1.92	3.91	0.00	2.17	0.00	3.85
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<N42> And how many points would you give to all of these other factors?													
0	11.49	20.50	8.33	41.59	9.35	12.37	0.00	17.55	16.97	15.15	5.05	0.41	12.40
1	2.49	0.64	3.14	0.58	0.48	1.31	0.00	0.49	5.65	6.35	0.86	0.00	5.24
2	16.53	18.25	15.92	7.06	24.58	14.42	0.00	28.14	15.38	5.03	31.67	13.53	15.15
3	8.59	11.12	7.70	10.95	8.48	35.38	0.00	1.50	3.85	18.40	40.60	0.00	4.58
4	7.23	11.04	5.90	9.37	20.44	4.24	0.00	14.18	13.98	18.02	1.18	0.00	8.08
5	42.04	27.67	47.07	15.92	29.02	31.99	100.00	21.90	25.83	34.72	15.18	82.75	34.02
6	4.05	2.56	4.57	5.93	0.00	0.30	0.00	2.73	8.53	0.00	0.29	3.31	6.27
7	2.87	4.98	2.13	2.46	0.00	0.00	0.00	11.50	0.98	0.00	0.00	0.00	5.22
8	2.10	1.41	2.34	5.27	0.51	0.00	0.00	0.10	4.91	2.31	4.74	0.00	2.86
9	0.64	0.00	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25
10	0.31	1.10	0.03	0.88	7.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
99	1.67	0.73	2.00	0.00	0.00	0.00	0.00	1.92	3.91	0.00	0.44	0.00	3.85
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<N5> Using a likelihood scale from 0 to 10, where 0 is Not at All Likely and 10 is Extremely Likely, if THE program had NOT BEEN AVAILABLE, what is the likelihood that you would have installed exactly the same program qualifying lighting equipment that y													
1 Not at All Likely	14.70	14.50	14.77	5.00	7.43	2.96	0.00	30.22	7.90	4.71	5.01	19.25	18.58
2	14.57	7.10	17.34	4.93	8.78	11.67	0.00	5.93	6.85	18.77	17.96	32.29	11.54
3	4.10	5.51	3.58	7.62	3.75	11.68	0.00	1.65	3.83	14.55	5.73	0.00	3.43
4	3.01	5.02	2.27	7.26	5.65	7.54	0.00	2.19	1.37	4.60	1.87	0.00	3.67
5	7.14	9.47	6.28	12.29	0.27	20.15	29.69	4.04	8.01	16.00	8.67	5.50	4.13
6	2.17	3.71	1.60	0.23	0.00	3.19	0.00	7.81	0.77	1.67	2.16	0.00	2.63
7	9.45	4.39	11.33	11.81	0.00	0.00	70.31	0.00	6.55	0.00	0.44	41.40	0.00
8	1.57	2.72	1.15	0.07	3.85	0.00	0.00	5.71	2.79	0.54	0.00	0.00	1.71
9	0.54	0.20	0.67	0.17	0.00	0.00	0.00	0.41	0.00	0.00	3.94	0.00	0.42
10 Extremely Likely	2.71	2.94	2.62	0.70	17.03	0.00	0.00	1.30	6.12	0.00	0.00	0.96	3.58
Zero Not at All Likely	39.83	43.86	38.33	49.93	48.72	42.80	0.00	40.75	55.82	38.00	54.22	0.61	50.32
Don't Know	0.21	0.59	0.07	0.00	4.52	0.00	0.00	0.00	0.00	1.17	0.00	0.00	0.00
n	*552*	*273*	*279*	*104*	*38*	*34*	*2*	*94*	*92*	*43*	*34*	*9*	*100*
<N5AA> Using a likelihood scale from 0 to 10, where 0 is Not at All Likely and 10 is Extremely Likely, if THE program had NOT BEEN AVAILABLE, what is the likelihood that you would have installed exactly the same lighting equipment at the same time as you													
5	3.12	20.07	0.00	0.00	0.00	0.00	0.00	62.13	0.00	0.00	0.00	0.00	0.00
Zero Not at All Likely	96.88	79.93	100.00	100.00	0.00	0.00	100.00	37.87	100.00	0.00	0.00	100.00	100.00
n	*9*	*5*	*4*	*2*	*0*	*0*	*1*	*2*	*1*	*0*	*0*	*1*	*2*

* Values are shown as percent of respondents weighted by kWh.

* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<N5A> Will you explain in your own words, the role the rebate played in your decision to install this efficient equipment?													
1	39.04	52.08	33.52	100.00	0.00	0.00	0.00	84.57	24.48	0.00	0.00	100.00	37.78
2	43.05	45.99	41.81	0.00	100.00	0.00	0.00	13.22	75.52	100.00	0.00	0.00	41.35
Record	9.58	1.94	12.82	0.00	0.00	0.00	0.00	2.22	0.00	0.00	0.00	0.00	20.87
Don't Know	8.33	0.00	11.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*31*	*14*	*17*	*2*	*2*	*0*	*0*	*9*	*4*	*1*	*1*	*1*	*9*
<NN5AA> Would you like for me to change your score on the importance of the rebate that you gave a rating of <N3B> and/or change your rating on the likelihood you would install the same equipment without the rebate which you gave a rating of <N5> and/or													
No change	73.77	94.55	64.97	66.67	100.00	0.00	0.00	91.68	87.76	100.00	0.00	100.00	65.35
5	18.13	3.54	24.31	33.33	0.00	0.00	0.00	5.13	0.00	0.00	100.00	0.00	21.07
8	1.88	0.00	2.68	0.00	0.00	0.00	0.00	0.00	12.24	0.00	0.00	0.00	0.00
10	0.25	0.85	0.00	0.00	0.00	0.00	0.00	1.41	0.00	0.00	0.00	0.00	0.00
Record	5.96	1.06	8.03	0.00	0.00	0.00	0.00	1.77	0.00	0.00	0.00	0.00	13.58
n	*31*	*14*	*17*	*2*	*2*	*0*	*0*	*9*	*4*	*1*	*1*	*1*	*9*
<N5B> If the program had not been available, what is the likelihood that you would have done this project at the same time as you did?													
1 Not at All Likely	12.74	16.79	11.24	7.39	12.12	10.22	0.00	29.11	5.20	4.49	5.01	19.25	11.23
2	8.03	8.89	7.71	4.79	8.78	10.73	0.00	11.20	4.22	18.12	8.82	0.00	11.55
3	2.85	1.28	3.43	1.20	4.53	1.04	0.00	0.43	7.82	9.21	7.32	0.00	2.11
4	3.46	5.82	2.58	14.51	0.18	6.51	0.00	1.70	2.44	4.53	0.64	0.00	4.42
5	4.46	6.87	3.56	7.72	0.00	21.26	0.00	1.31	3.49	2.14	6.21	4.90	2.24
6	0.91	2.92	0.16	0.00	0.27	0.00	0.00	7.52	0.00	0.00	0.00	0.00	0.37
7	8.51	2.09	10.90	1.98	0.00	0.00	70.31	0.72	0.00	0.00	0.44	41.40	1.07
8	0.73	0.79	0.70	0.62	3.85	0.00	0.00	0.32	2.48	0.54	0.00	0.00	0.78
9	0.01	0.04	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00
10 Extremely Likely	0.59	1.73	0.17	0.29	7.15	0.00	29.69	0.38	0.00	0.00	0.00	0.60	0.00
Zero Not at All Likely	57.50	52.17	59.48	61.50	58.60	50.24	0.00	47.16	74.35	59.79	71.56	33.85	66.24
Don't Know	0.22	0.60	0.07	0.00	4.52	0.00	0.00	0.03	0.00	1.17	0.00	0.00	0.00
n	*552*	*273*	*279*	*104*	*38*	*34*	*2*	*94*	*92*	*43*	*34*	*9*	*100*
<TD1> If the program had not been available, how likely is it that you would have replaced your existing equipment within one year of when you did?													
Definitely would have within one year	13.43	3.05	17.20	1.97	1.30	0.00	100.00	2.67	7.79	0.44	3.94	42.61	11.58
Probably would have (within one year)	5.87	8.12	5.05	6.12	18.35	9.55	0.00	5.90	6.67	13.72	5.23	4.93	3.34
50-50 chance you would (within one year)	15.53	24.76	12.18	30.18	1.05	47.79	0.00	16.74	16.67	14.07	17.04	0.00	16.18
Probably not (within one year) OR	19.80	19.72	19.83	23.87	36.78	27.21	0.00	8.40	17.28	38.65	53.20	0.18	19.76
Definitely not (within one year)	44.71	43.98	44.97	37.85	42.53	15.45	0.00	65.32	51.22	33.12	20.60	52.28	47.46
Don't Know	0.66	0.38	0.77	0.00	0.00	0.00	0.00	0.96	0.37	0.00	0.00	0.00	1.67
n	*541*	*265*	*276*	*103*	*36*	*34*	*1*	*91*	*92*	*42*	*34*	*8*	*100*
<TD2> If the program had not been available, how likely is it that you would have replaced your existing equipment within three years of when you did?													
Definitely would have within three years	10.09	10.07	10.10	8.11	5.00	4.89	0.00	15.88	12.78	5.41	7.31	0.00	14.73
Probably would have (within three years)	21.84	21.18	22.12	33.48	29.15	17.08	0.00	12.40	15.99	33.04	18.66	42.33	15.77
50-50 chance you would (within three yea	17.40	25.49	13.94	20.64	16.18	51.25	0.00	17.48	22.12	23.09	15.65	0.00	14.55
Probably not (within three years) OR	28.83	20.87	32.23	16.81	37.61	19.47	0.00	19.28	17.28	28.86	48.98	56.60	23.02
Definitely not (within three years)	21.69	21.89	21.61	20.49	8.96	7.31	0.00	34.95	31.83	9.59	9.40	1.07	31.93
Don't Know	0.15	0.50	0.00	0.48	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*508*	*251*	*257*	*99*	*34*	*34*	*0*	*84*	*87*	*41*	*33*	*6*	*90*
<TD3> If the program had not been available, how likely is it that you would have replaced your existing equipment within five years of when you did?													
Definitely would have within five years	17.45	16.65	17.79	21.29	40.79	17.91	0.00	4.19	20.38	17.51	10.54	33.75	12.29
Probably would have (within five years)	26.00	32.73	23.13	33.52	35.21	34.78	0.00	30.01	19.39	56.10	22.99	12.51	23.43
50-50 chance you would (within five year	22.92	14.58	26.46	10.28	13.60	24.76	0.00	11.79	26.85	10.11	14.47	52.67	21.59
Probably not (within five years)	14.82	15.57	14.50	18.30	0.66	19.61	0.00	16.02	7.46	5.60	45.45	0.00	14.23
Definitely not (within five years)	18.69	20.47	17.93	16.61	9.74	2.94	0.00	38.00	25.61	9.02	6.55	1.07	28.46
Don't Know	0.12	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.32	1.66	0.00	0.00	0.00
n	*433*	*211*	*222*	*82*	*30*	*29*	*0*	*70*	*79*	*34*	*30*	*6*	*73*
<N9BB> you could explain in your own words the role the age/condition of the existing equpment played in your decision to install this new measure?													
n	*16*	*9*	*7*	*3*	*1*	*3*	*0*	*2*	*0*	*1*	*2*	*0*	*4*
<N6> Now I would like you to think one last time about what action you would have taken if the program had not been available. Which of the following alternatives would you have been MOST likely to do?													
Installed fewer units	1.90	2.00	1.87	2.48	0.00	5.25	0.00	0.99	0.68	0.00	0.00	0.00	4.65
Installed standard efficiency equipment	11.56	20.50	8.43	28.78	11.01	25.01	0.00	18.97	22.55	7.76	12.34	0.65	9.63
Installed equipment more efficient than	24.99	14.87	28.53	17.08	4.71	6.12	69.43	13.05	14.21	19.41	27.09	54.67	12.31
Done nothing (keep the existing equipmen	36.38	38.35	35.69	36.85	40.34	37.87	0.00	44.65	36.15	50.14	34.53	12.88	53.46
Done the exact same thing we did through	13.64	9.46	15.11	6.07	24.29	3.13	21.49	8.21	16.73	7.34	6.18	31.40	4.24
Repair/rewind or overhaul the existing e	10.91	13.04	10.17	8.67	19.66	16.12	0.00	14.14	9.44	15.35	19.50	0.00	15.72
Do Something else (specify)	0.26	0.53	0.17	0.08	0.00	0.00	9.08	0.00	0.25	0.00	0.00	0.41	0.00
Don't Know	0.35	1.25	0.04	0.00	0.00	6.51	0.00	0.00	0.00	0.00	0.35	0.00	0.00
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<N6A> How many fewer units would you have?													
0-25% less	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26-50% less	34.25	88.45	24.21	100.00	0.00	0.00	0.00	69.63	58.34	0.00	0.00	0.00	22.65
51-75% less	21.88	0.00	25.93	0.00	0.00	0.00	0.00	0.00	33.91	0.00	0.00	0.00	25.57
76-100% less	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	16.92	11.55	17.91	0.00	0.00	0.00	0.00	30.37	7.75	0.00	0.00	0.00	18.38
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	26.95	0.00	31.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.41
n	*15*	*6*	*9*	*3*	*0*	*0*	*0*	*3*	*4*	*0*	*0*	*0*	*5*
<N6B> Can you tell me what model or efficiency level you were considering as an alternative?													
Less efficient than code	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
None	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	76.51	68.87	78.25	91.99	29.02	62.25	100.00	30.79	73.94	43.69	71.15	87.20	68.40
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	20.69	20.55	20.72	6.00	70.98	37.75	0.00	39.22	24.13	56.31	27.79	12.80	28.01
n	*65*	*30*	*35*	*6*	*5*	*3*	*1*	*15*	*8*	*7*	*5*	*3*	*12*
<ER2> How many more years do you think your lighting system would have gone before failing and required replacement?													
0	0.04	0.15	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00
1	17.54	6.80	21.53	2.09	5.31	5.96	100.00	6.53	7.57	8.02	8.04	62.02	8.07
2	9.23	9.32	9.19	12.47	1.84	17.14	0.00	6.03	2.86	19.28	31.90	0.00	8.58
3	10.07	12.42	9.20	17.20	6.54	10.16	0.00	12.96	4.45	17.41	11.40	0.00	14.31
4	4.07	2.64	4.60	1.19	0.00	1.05	0.00	5.51	6.64	5.92	0.29	7.14	3.53
5	21.32	13.00	24.40	18.81	14.06	20.65	0.00	5.16	32.34	32.65	18.66	25.15	21.92
6	0.97	1.98	0.60	0.93	0.00	0.00	0.00	4.50	0.64	0.00	0.00	0.00	1.19
7	2.26	0.45	2.93	0.91	0.00	0.00	0.00	0.54	0.00	0.00	0.00	4.90	3.96
8	1.11	1.07	1.13	0.00	0.00	5.25	0.00	0.00	0.47	0.00	0.00	0.00	2.48
10	17.08	19.40	16.22	28.96	8.85	15.56	0.00	19.46	22.19	10.94	17.48	0.80	23.74
12	0.07	0.26	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	1.67	5.16	0.37	7.86	19.77	0.00	0.00	1.32	0.97	0.00	0.00	0.00	0.57
20	0.85	1.52	0.61	0.00	4.56	0.00	0.00	2.41	0.00	1.17	3.01	0.00	0.38
25	0.45	0.16	0.55	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	1.29
30	0.05	0.10	0.02	0.39	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
40	0.09	0.32	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.00	0.00	0.00
99	13.15	25.24	8.66	8.21	39.07	24.24	0.00	33.94	21.71	4.60	9.23	0.00	9.99
n	*552*	*273*	*279*	*104*	*38*	*34*	*2*	*94*	*92*	*43*	*34*	*9*	*100*
<ER6> How much downtime did you experience in the past year?													
0	96.92	0.00	96.92	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
5	3.08	0.00	3.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
n	*3*	*0*	*3*	*0*	*0*	*0*	*0*	*0*	*2*	*0*	*0*	*0*	*1*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<ER9> In your opinion, based on the economics of operating this equipment, for how many more years could you have kept this equipment functioning?													
1	3.08	0.00	3.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
5	36.61	0.00	36.61	0.00	0.00	0.00	0.00	0.00	37.77	0.00	0.00	0.00	0.00
99	60.32	0.00	60.32	0.00	0.00	0.00	0.00	0.00	62.23	0.00	0.00	0.00	0.00
n	*3*	*0*	*3*	*0*	*0*	*0*	*0*	*0*	*2*	*0*	*0*	*0*	*1*
<ER15> Can you briefly describe the specific code/regulatory requirements that this project addressed?													
Related	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unrelated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	100.00	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*1*	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<ER19> Can you briefly describe the specific company policies regarding regular/normal maintenance/replacement policy(ies) that were relevant to this project?													
Related	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unrelated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<PP1> What do you believe the PROGRAM'S primary strengths are?													
Improved lighting quality	11.92	17.43	9.99	24.09	35.39	12.46	0.00	12.38	11.16	9.43	31.26	3.84	8.87
Ease of participation	6.40	10.89	4.83	23.26	2.57	8.73	0.00	8.25	11.14	7.28	7.61	0.00	5.84
Reliability of program	0.88	0.67	0.95	1.76	0.00	0.05	0.00	0.59	3.57	1.14	0.00	0.00	1.20
Financial benefits (upfront costs, savings, payback, ROI)	48.63	51.09	47.77	57.19	77.06	43.53	0.00	50.13	63.19	59.30	56.14	34.24	50.51
Energy efficiency/environmental impacts	37.94	45.44	35.31	52.05	60.66	42.66	78.51	32.69	27.24	41.91	33.72	37.67	35.36
No impact	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Program awareness	14.70	12.29	15.54	8.09	1.21	20.71	69.43	5.86	7.90	14.01	10.98	32.44	4.97
Educational benefit	13.63	9.33	15.14	8.80	0.71	6.09	69.43	5.17	7.84	1.30	2.24	32.44	8.22
Other	9.31	10.30	8.96	4.02	0.00	0.14	0.00	24.38	16.05	3.29	1.24	0.00	17.41
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	7.64	2.21	9.55	0.00	0.27	2.95	21.49	1.02	0.00	0.41	2.04	27.97	0.19
n	*559*	*277*	*282*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<PP2> What concerns do you have about the program, if any? (IF NEEDED: What do you view as the primary features that need to be improved?)													
None	49.88	61.39	46.26	55.41	62.85	95.82	9.08	56.44	56.15	61.66	63.56	17.52	58.65
Program will not continue	22.28	9.81	26.21	8.59	0.00	0.00	90.92	1.70	10.13	0.00	0.00	78.09	1.66
Problems with contractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate amount will decrease	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Insufficient advertisement/program awareness	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dissatisfaction with equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Too time consuming or cumbersome paperwork	1.75	3.37	1.24	10.00	6.03	0.00	0.00	0.00	6.06	9.08	0.00	0.00	0.00
Lack of follow up	0.76	0.80	0.74	2.94	0.00	0.00	0.00	0.00	4.67	2.72	0.00	0.00	0.00
Source of program funding	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate too small	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate too small	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Expand program scope	2.38	1.31	2.71	0.09	1.34	0.00	0.00	3.38	0.72	0.55	4.68	0.00	5.20
Savings are not what were expected	2.09	2.11	2.08	0.10	7.07	0.00	0.00	3.95	0.00	11.27	1.78	0.00	3.30
Other	15.38	10.41	16.95	9.42	1.12	3.86	0.00	20.41	19.99	6.46	28.36	4.39	23.88
Refused	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00
Don't Know	0.06	0.11	0.04	0.15	0.22	0.00	0.00	0.14	0.02	0.16	0.02	0.00	0.07
n	*467*	*231*	*236*	*90*	*31*	*27*	*3*	*80*	*80*	*34*	*28*	*8*	*86*
<PP4> On a scale of 0 - 10, where 0 is Completely Dissatisfied and 10 is Completely Satisfied, how would you rate your overall satisfaction with the the program?													
1 Completely Dissatisfied	0.26	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	6.42	0.00	0.00	0.00
2	0.03	0.10	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.19	0.62	0.04	0.00	5.00	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.00
4	0.16	0.43	0.07	0.00	0.00	2.22	0.00	0.00	0.00	0.00	0.64	0.00	0.00
5	1.64	2.28	1.42	0.40	3.81	8.88	0.00	0.00	0.53	9.27	6.82	0.00	0.26
6	1.03	0.95	1.05	0.81	2.62	0.00	0.00	1.13	1.64	0.00	0.00	0.00	2.22
7	9.58	3.71	11.64	2.68	3.38	0.00	21.49	3.71	0.00	7.25	3.01	28.09	4.29
8	13.82	19.59	11.80	11.89	16.20	37.93	0.00	19.35	11.39	22.38	28.05	3.31	13.08
9	11.81	4.95	14.21	9.47	5.81	2.00	0.00	3.96	12.55	8.33	0.00	22.46	12.55
10 Completely Satisfied	61.08	66.03	59.35	68.89	63.17	48.97	78.51	71.85	73.25	45.62	61.48	46.14	67.60
Zero Completely Dissatisfied	0.41	1.36	0.08	5.47	0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.00
n	*559*	*277*	*282*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<PP5> Why do you say that?													
To replace old/outdated lighting equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As part of a planned remodeling/build-out/expansion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
To gain more control over how the mequipment was used	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maintenance downtime/associated expenses for old equip were too high	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Had process problems and were seeking a solution	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
To improve lighting equipment performance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
To improve the quality of the lighting in your facility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lack of follow up	0.76	0.80	0.74	2.94	0.00	0.00	0.00	0.00	4.67	2.72	0.00	0.00	0.00
To improve visibility/plant safety	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comply w/co. policies regarding lighting retrofits/remodeling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comply w/co. policies regarding lighting retrofits/remodeling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
To get a rebate from the program	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
To protect the environment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know													
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<PP6> The program you participated in was run by an implementer, has your organizaiton participated in energy efficiency programs run by utility in the past three years?													
No	97.40	100.00	95.07	100.00	100.00	100.00	0.00	100.00	100.00	0.00	100.00	0.00	100.00
Don't Know	2.60	0.00	4.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
n	*14*	*10*	*4*	*2*	*4*	*1*	*0*	*3*	*1*	*0*	*1*	*1*	*1*
<PP8> Please consider your recent experience with the program run by the implementer versus your past experience with the utility run programs. Are there any differences between the two that stand out? Any there attributes or services that seemed better													
Related	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unrelated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<PP10> The program you participated in was run by &IOU, have you participated in programs run by governments, institutions, or other independent firms in the past three years? (select all that apply)													
Local Government	4.16	0.02	5.55	0.08	0.00	0.00	0.00	0.00	0.64	0.00	0.00	12.93	2.85
State Government or Institution	3.96	0.00	5.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.45	12.93	0.00
Independent Firm	0.12	0.37	0.04	1.18	0.06	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.09
Other	89.56	98.76	86.49	98.05	98.32	98.09	100.00	99.44	99.36	97.87	87.23	70.01	94.96
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	5.47	0.86	7.02	0.70	1.62	1.91	0.00	0.42	0.00	2.13	3.32	17.06	2.10
n	*545*	*267*	*278*	*104*	*34*	*33*	*3*	*93*	*92*	*43*	*33*	*9*	*101*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<PP12> Please consider your experiences with the program run by an independent firm versus your recent experience with the utility run program. Are there any differences between the two that stand out? Are there attributes or services that seemed better													
Related	65.26	84.56	0.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unrelated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	34.74	15.44	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00
n	*5*	*4*	*1*	*2*	*1*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*1*
<PP14> Please consider your experiences with the program run by a government or institution versus your recent experience with the utility run program. Are there any differences between the two that stand out? Are there attributes that seemed better in o													
None	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unrelated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<PP16> Which entity, the utility or the implementer was more effective in supporting your organization's decision making process?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<PP18> How significant was this difference, would you say…													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<PP20> Which entity had a better technical understanding of the energy use at your facility and provided the best technical assistance in specifying the project?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<PP22> How significant was this difference, would you say…													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<PP24> Which entity, the utility or the implementer was more effective in supporting you through the application process													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<PP26> How significant was this difference, would you say…													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<PP3> Do you have any comments on the current incentive structure of the program?													
n	*559*	*277*	*282*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<LT2> For how many years have you been participating in utility's energy efficiency program(s)?													
1	4.28	5.60	3.99	0.19	0.00	31.71	0.00	0.00	7.30	24.03	15.57	0.00	2.46
2	3.66	6.44	3.05	0.00	0.00	28.90	0.00	3.02	0.00	18.05	0.00	0.85	6.02
3	10.66	15.63	9.56	20.66	39.59	29.98	0.00	5.85	33.57	28.80	0.00	0.00	15.26
4	9.09	2.76	10.48	8.97	8.04	0.00	0.00	0.00	32.62	7.38	58.94	0.00	4.34
5	12.37	23.77	9.86	22.48	1.54	0.00	0.00	39.60	14.49	0.00	0.00	0.00	26.45
6	13.30	1.21	15.97	0.00	0.00	0.00	0.00	2.65	0.00	0.00	0.00	34.81	1.49
7	2.73	1.07	3.10	4.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.78	0.25
8	4.88	4.25	5.02	10.52	0.00	0.00	0.00	3.54	6.61	0.00	0.00	0.00	13.70
9	0.63	0.07	0.76	0.00	1.14	0.00	0.00	0.00	0.00	17.69	0.00	0.00	0.00
10	7.98	7.47	8.09	1.11	11.52	0.00	0.00	14.16	1.36	0.00	13.17	0.00	21.37
18	0.04	0.24	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00
20	0.06	0.12	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.67	2.57	0.25	0.51	38.17	0.00	0.00	0.00	0.77	4.06	0.00	0.00	0.00
99	29.64	28.80	29.82	31.30	0.00	9.41	100.00	30.64	3.29	0.00	12.32	57.56	8.65
n	*117*	*52*	*65*	*20*	*6*	*5*	*1*	*19*	*20*	*9*	*6*	*5*	*24*
<LT3> During this time, how many times has your organization participated in these program(s)?													
7 to 10 times, or more	0.61	2.57	0.17	0.50	38.17	0.00	0.00	0.00	0.00	4.06	0.00	0.00	0.00
4 to 7 times	4.20	0.50	5.02	1.01	0.00	0.00	0.00	0.53	0.55	0.00	0.00	0.00	15.71
2 to 4 times	47.97	50.04	47.51	52.26	22.24	67.06	0.00	51.94	46.86	46.89	22.63	42.44	62.09
less than 2 times	18.42	19.52	18.18	14.92	39.59	31.71	0.00	16.89	47.81	49.05	74.51	0.00	13.54
Don't Know	28.80	27.36	29.12	31.30	0.00	1.24	100.00	30.64	4.78	0.00	2.86	57.56	8.65
n	*117*	*52*	*65*	*20*	*6*	*5*	*1*	*19*	*20*	*9*	*6*	*5*	*24*
<CA6> What type of equipment did you install through this (these) program(s)?													
Indoor lighting	81.45	94.23	78.81	91.44	61.83	100.00	0.00	100.00	99.18	79.47	39.33	100.00	70.06
Cooling equipment	2.73	3.83	2.50	0.00	39.59	0.00	0.00	0.00	17.20	2.20	0.00	0.00	0.00
Natural gas equipment (Water heater/furnace/appliances)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Insulation or windows	1.38	1.69	1.32	6.95	0.00	0.00	0.00	0.00	0.00	21.82	0.00	0.00	0.00
Refrigeration	10.25	5.62	11.21	0.00	38.17	0.00	0.00	4.03	0.00	28.08	74.23	0.00	0.46
Industrial process equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greenhouse heat curtains	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Outdoor lighting	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Food Service Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HVAC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
None	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	4.84	2.25	5.38	8.56	0.00	0.00	0.00	0.00	0.82	0.00	0.00	0.00	12.73
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	5.82	0.00	7.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.20
n	*95*	*41*	*54*	*15*	*6*	*3*	*0*	*16*	*16*	*9*	*5*	*3*	*20*
<LT6> What factors led you to participate in these program(s)?													
Rebate/Incentive	38.81	16.75	43.82	2.21	9.58	0.00	100.00	22.46	27.27	70.70	5.78	57.31	37.08
Energy savings	32.69	32.02	32.84	10.61	39.59	98.76	0.00	20.92	26.46	28.80	32.42	42.44	21.04
Cost savings	29.09	28.50	29.23	53.65	0.00	28.90	0.00	21.93	36.68	5.35	13.17	41.59	16.02
Quality of equipment	9.93	20.80	7.46	36.12	38.17	0.00	0.00	20.42	5.27	28.08	0.00	0.00	19.19
Payback	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ease of program participation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Recommendation from utility rep or contractor	2.38	1.28	2.63	0.00	1.14	0.00	0.00	2.65	5.76	17.69	0.00	0.00	4.15
Other	10.38	2.34	12.21	0.64	11.52	0.00	0.00	2.90	9.74	0.00	58.94	0.00	18.86
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	8.07	21.86	4.94	30.66	0.00	1.24	0.00	30.64	8.69	0.00	2.86	0.25	12.26
n	*116*	*52*	*64*	*20*	*6*	*5*	*1*	*19*	*20*	*9*	*6*	*5*	*23*
<LT7> And exactly how did that experience help to convince you to install this lighting equipment?													
Positive experience	28.80	19.33	31.35	27.38	12.66	0.00	0.00	21.21	35.10	72.93	79.93	15.88	22.43
Ease of participation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reliability of program	6.56	13.28	4.76	0.53	0.00	11.97	0.00	22.15	12.84	0.00	10.49	0.00	4.01
Financial benefits (upfront costs, savings, payback, ROI)	35.29	24.16	38.27	33.55	8.04	42.32	0.00	16.85	26.40	11.79	6.41	83.53	25.82
Energy efficiency/environmental impacts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No impact	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Familiarity with program requirements	0.81	0.09	1.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	2.30
Other	21.10	18.16	21.89	6.06	79.30	43.90	0.00	8.86	16.74	15.28	0.00	0.00	43.23
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	11.02	24.98	7.27	32.48	0.00	1.81	0.00	30.76	8.92	0.00	3.17	0.59	12.64
n	*106*	*47*	*59*	*17*	*6*	*4*	*0*	*19*	*18*	*8*	*5*	*4*	*23*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<LT8> Have these programs had any long-term influence on your organization's energy efficiency related practices and policies that go beyond the immediate effect of incentives on individual projects?													
No	98.07	91.73	98.89	33.14	100.00	0.00	0.00	100.00	0.00	100.00	0.00	0.00	100.00
Don't Know	1.93	8.27	1.11	66.86	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
n	*7*	*4*	*3*	*2*	*1*	*0*	*0*	*1*	*1*	*1*	*0*	*0*	*1*
<LT9> Has your organization developed a specification policy for the selection of energy-efficient equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LT10> Has your organization assigned responsibility for controlling energy usage and costs to any of the following?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LT11> Does your organization have any internal incentive or reward policies for business units or staff responsible for managing energy costs?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<CA2> In marketing materials or in communications with customers, does your company highlight the ways in which your business is environmentally conscious?													
Yes	47.04	38.42	50.06	26.38	37.65	51.90	90.92	31.89	30.54	34.88	63.61	77.24	31.10
No	51.77	59.62	49.02	67.24	61.90	47.85	9.08	67.39	69.46	60.59	35.53	22.34	67.71
Don't Know	1.20	1.96	0.93	6.39	0.45	0.26	0.00	0.72	0.00	4.53	0.86	0.41	1.18
n	*559*	*277*	*282*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<A3A> According to our Records, your organization inatalled <qty1> many lighting measures through <> period is this correct?													
Yes-quantity correct	96.73	98.35	96.16	96.09	98.79	98.95	100.00	99.14	93.70	100.00	82.38	100.00	97.07
Yes-Change Quantity	3.27	1.65	3.84	3.91	1.21	1.05	0.00	0.86	6.30	0.00	17.62	0.00	2.94
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<A3A_QTY> Approximately how many of this lighting measure did you install?													
2	1.59	12.04	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	1.17	8.89	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	8.20	34.83	4.15	60.25	0.00	0.00	0.00	0.00	20.98	0.00	0.00	0.00	0.00
10	1.11	8.45	0.00	14.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	6.52	2.22	7.17	0.00	0.00	0.00	0.00	11.31	0.00	0.00	0.00	0.00	24.50
16	1.25	9.47	0.00	16.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	9.27	8.22	9.43	0.00	0.00	0.00	0.00	41.82	0.00	0.00	0.00	0.00	32.20
20	13.63	14.26	13.54	8.75	0.00	0.00	0.00	46.86	4.34	0.00	0.00	0.00	43.31
46	12.83	0.00	14.78	0.00	0.00	0.00	0.00	0.00	74.68	0.00	0.00	0.00	0.00
50	43.82	0.00	50.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
9999	0.61	1.61	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*19*	*11*	*8*	*5*	*1*	*1*	*0*	*3*	*3*	*0*	*1*	*0*	*3*
<A3A_OTH> Would you say that the number of units installed through the program were …?													
Don't Know	100.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*2*	*1*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<DEEM_INSTALL_DATE1_NU> Our Records indicate you installed lighting equipment throught the program on <this date> is that correct?													
1	98.08	97.64	98.23	91.90	100.00	100.00	100.00	99.07	95.13	100.00	100.00	100.00	96.94
2	0.01	0.04	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
99	1.91	2.32	1.77	7.92	0.00	0.00	0.00	0.93	4.87	0.00	0.00	0.00	3.06
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<DEEM_INSTALL_YEAR1> In what year did you install/delamp the lighting equipment?													
3	100.00	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*1*	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<DEEM_INSTALL_MONTH1> And what month?													
6	100.00	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*1*	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI18A> Of the CFLs you received through the program, what percentage do you estimate were placed into storage for later use?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI19A> Were any of the program provided lighting equipment installed at another facility? If so, what percentage would you estimate?													
0	92.43	98.06	90.46	99.71	95.00	100.00	78.51	99.90	99.75	95.25	100.00	72.03	99.93
1	0.01	0.03	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.18	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	4.42	0.00	0.00	0.00
70	0.17	0.62	0.02	0.00	5.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
80	7.15	1.22	9.23	0.00	0.00	0.00	21.49	0.00	0.00	0.00	0.00	27.97	0.00
90	0.02	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
100	0.01	0.04	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102	0.03	0.04	0.03	0.00	0.00	0.00	0.00	0.10	0.25	0.00	0.00	0.00	0.00
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<LI20A> What type of lighting was removed and replaced when you installed the lighting equipment through the Program?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.78	1.72	0.45	6.05	0.22	0.00	0.00	0.51	0.32	5.26	0.00	0.00	0.35
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 fluorescent fixtures	3.77	3.48	3.88	11.16	0.22	0.44	0.00	1.59	2.14	0.00	0.00	0.00	9.41
Compact HID (High Intensity Discharge) F	0.03	0.03	0.03	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00
Screw-in Modular CFLs	4.72	6.97	3.93	7.46	7.65	6.65	0.00	7.64	22.76	1.94	0.00	0.41	2.41
Hardwired CFL Fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent bulbs	39.55	48.18	36.52	36.08	67.22	42.00	9.08	58.85	33.25	53.71	51.90	22.22	43.03
CFL Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED Exit Signs	0.09	0.35	0.00	0.00	2.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen bulbs	28.85	16.21	33.27	3.48	3.81	20.08	21.49	25.77	19.46	17.39	19.03	40.85	37.44
Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.02	0.06	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manual Switches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	5.59	9.00	4.40	12.03	12.75	0.00	0.00	11.72	5.97	8.02	0.00	0.77	7.77
Fat/Thick Tubes	1.57	3.70	0.83	6.42	5.75	2.55	0.00	2.39	1.46	2.32	2.88	0.00	0.53
Skinny/Thin Tubes	0.73	0.41	0.85	0.31	0.23	0.00	0.00	0.73	0.26	0.66	5.75	0.00	0.33
T5 Fixtures (5/8in. diameter)	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00
Nid not Remove Anything	9.78	5.87	11.15	0.18	0.00	0.00	69.43	4.98	0.24	0.00	0.00	32.44	1.08
Record	6.42	4.56	7.07	7.74	4.10	7.26	0.00	1.96	11.42	13.78	4.51	3.31	8.73
Screw-in LEDs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<D_REPLACE_ADDON> To determine if replacement or add on													
1	90.22	94.14	88.85	99.82	100.00	100.00	30.57	95.02	99.76	100.00	100.00	67.56	98.92
2	9.78	5.87	11.15	0.18	0.00	0.00	69.43	4.98	0.24	0.00	0.00	32.44	1.08
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<LI21A> Were the HID lamps you removed High Pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
Metal Halide	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<LI22A> Approximately how old was the equipment that were removed and replaced?													
Less than 5 years old	57.34	48.82	60.51	19.26	48.46	71.90	70.31	55.89	48.47	64.84	65.82	65.97	59.00
Between 5 and 10 years old	20.05	29.94	16.38	55.06	16.08	18.42	0.00	25.08	31.80	27.08	22.53	0.00	17.78
Between 10 and 15 years old or	5.77	6.24	5.59	7.55	13.32	1.34	29.69	4.34	6.14	2.46	10.39	7.74	3.16
More than 15 years old	14.38	10.18	15.94	9.46	19.77	1.15	0.00	12.68	11.71	5.26	0.06	26.29	17.35
Don't Know	2.46	4.82	1.59	8.66	2.36	7.19	0.00	2.01	1.88	0.36	1.20	0.00	2.71
n	*552*	*273*	*279*	*104*	*38*	*34*	*2*	*94*	*92*	*43*	*34*	*9*	*100*
<LI23A> How would you describe the condition of the lighting equipment that was removed and replaced?													
Poor condition	5.38	7.05	4.75	12.69	2.63	1.04	0.00	8.24	2.36	6.84	3.68	0.61	7.96
Fair condition or	43.01	39.00	44.49	50.33	34.43	44.34	100.00	27.10	35.62	57.55	42.82	74.47	28.41
Good condition	49.93	52.96	48.81	36.74	62.94	54.36	0.00	62.39	56.38	35.61	52.64	24.92	61.12
Don't Know	1.69	0.99	1.95	0.25	0.00	0.26	0.00	2.27	5.63	0.00	0.86	0.00	2.51
n	*552*	*273*	*279*	*104*	*38*	*34*	*2*	*94*	*92*	*43*	*34*	*9*	*100*
<LI24A> Approximately what percentage of the lighting equipment that was removed and replaced was broken or Not working prior to installing ?													
0	69.82	79.84	66.10	69.91	92.49	95.14	0.00	78.05	73.47	79.31	90.64	19.86	81.89
1	2.61	2.26	2.73	1.98	0.48	0.00	0.00	4.37	6.09	3.79	0.00	4.90	1.04
2	0.57	0.27	0.68	1.03	0.00	0.00	0.00	0.00	5.01	0.00	0.00	0.00	0.00
3	0.87	1.95	0.47	0.00	0.00	0.44	0.00	4.83	0.00	0.00	0.00	0.00	1.10
4	0.29	0.03	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86
5	6.00	2.23	7.40	4.66	0.00	2.70	0.00	1.18	1.11	1.14	1.18	26.10	1.15
8	0.36	0.25	0.40	0.00	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.94
9	0.07	0.13	0.05	0.00	1.01	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.00
10	3.37	1.35	4.12	2.50	0.68	1.04	0.00	1.01	3.57	0.80	3.39	7.14	3.20
15	3.32	3.31	3.32	6.79	0.00	0.00	0.00	3.98	9.00	8.65	0.00	0.00	3.68
20	9.38	2.57	11.91	1.53	4.10	0.00	70.31	0.87	0.25	4.83	0.00	41.40	2.80
25	0.54	1.51	0.18	2.10	0.00	0.00	0.00	2.49	0.00	0.00	0.00	0.00	0.42
30	0.99	0.69	1.10	2.36	0.53	0.00	0.00	0.00	0.55	0.00	0.00	0.00	2.40
33	0.04	0.13	0.01	0.14	0.71	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
45	0.31	1.14	0.00	4.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.47	1.06	0.25	1.75	0.00	0.00	29.69	0.14	0.17	0.65	0.00	0.60	0.09
60	0.36	0.00	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.94	0.00	0.00
99	0.10	0.21	0.06	0.79	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00
100	0.03	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00
102	0.52	1.10	0.30	0.11	0.00	0.68	0.00	2.43	0.00	0.00	0.86	0.00	0.45
n	*552*	*273*	*279*	*104*	*38*	*34*	*2*	*94*	*92*	*43*	*34*	*9*	*100*
<A3B> According to our Records, your organization inatalled <qty1> many lighting measures through <> period is this correct?													
Yes-quantity correct	92.17	93.67	91.55	92.83	91.02	96.64	100.00	92.51	95.09	97.45	77.07	98.59	88.01
Yes-Change Quantity	1.27	1.39	1.22	4.12	0.00	0.00	0.00	1.03	1.77	0.41	0.00	0.00	2.76
Did Not Install	2.07	2.82	1.76	1.42	0.00	3.36	0.00	4.84	0.48	1.76	2.74	1.41	2.17
Don't Know	4.49	2.13	5.47	1.64	8.98	0.00	0.00	1.63	2.66	0.37	20.18	0.00	7.06
n	*466*	*242*	*224*	*92*	*35*	*30*	*3*	*81*	*71*	*39*	*30*	*7*	*76*
<A3B_QTY> Approximately how many of this lighting measure did you install?													
2	4.90	15.27	0.00	21.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	27.06	47.26	17.52	65.75	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
10	56.24	28.11	69.53	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	86.52
15	3.00	9.35	0.00	13.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	1.45	0.00	2.13	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
20	7.36	0.00	10.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.48
n	*8*	*4*	*4*	*3*	*0*	*0*	*0*	*1*	*1*	*1*	*0*	*0*	*2*
<A3B_OTH> Would you say that the number of units installed through the program were …?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<DEEM_INSTALL_DATE2_NU> Our Records indicate you installed lighting equipment throught the program on <this date> is that correct?													
1	97.87	99.09	97.35	98.49	96.49	100.00	100.00	99.67	97.75	92.46	100.00	100.00	94.66
2	0.67	0.68	0.66	1.04	3.51	0.00	0.00	0.00	0.00	7.54	0.00	0.00	0.46
99	1.46	0.24	1.98	0.47	0.00	0.00	0.00	0.33	2.26	0.00	0.00	0.00	4.87
n	*428*	*221*	*207*	*87*	*32*	*28*	*3*	*70*	*66*	*37*	*28*	*5*	*70*
<DEEM_INSTALL_YEAR2> In what year did you install/delamp the lighting equipment?													
3	11.54	38.05	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
99	88.46	61.95	100.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00
n	*5*	*3*	*2*	*2*	*1*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*1*
<DEEM_INSTALL_MONTH2> And what month?													
6	20.34	20.34	0.00	20.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
99	79.66	79.66	0.00	79.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*2*	*2*	*0*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI18B> Of the CFLs you received through the program, what percentage do you estimate were placed into storage for later use?													
0	57.69	100.00	47.85	100.00	100.00	100.00	0.00	100.00	0.00	100.00	100.00	0.00	43.33
102	42.31	0.00	52.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.67
n	*13*	*8*	*5*	*2*	*2*	*3*	*0*	*1*	*0*	*1*	*1*	*0*	*3*
<LI19B> Were any of the program provided lighting equipment installed at another facility? If so, what percentage would you estimate?													
0	89.22	96.77	86.00	99.53	100.00	100.00	78.51	95.49	100.00	100.00	100.00	62.11	98.02
1	0.02	0.07	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00
70	9.76	1.44	13.31	0.00	0.00	0.00	21.49	0.00	0.00	0.00	0.00	37.89	0.00
90	0.94	1.61	0.65	0.00	0.00	0.00	0.00	4.33	0.00	0.00	0.00	0.00	1.87
102	0.06	0.12	0.04	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
n	*428*	*221*	*207*	*87*	*32*	*28*	*3*	*70*	*66*	*37*	*28*	*5*	*70*
<LI20B> What type of lighting was removed and replaced when you installed the lighting equipment through the Program?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	3.66	2.70	4.05	4.00	0.00	6.49	0.00	1.33	16.35	11.11	0.00	0.00	3.97
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 fluorescent fixtures	10.10	10.53	9.92	22.39	7.36	0.00	0.00	10.95	22.95	4.77	0.00	0.00	20.49
Compact HID (High Intensity Discharge) F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Screw-in Modular CFLS	4.13	5.47	3.58	7.81	12.71	1.42	0.00	4.74	12.66	10.20	5.42	0.00	2.36
Hardwired CFL Fixtures	0.36	0.63	0.24	0.14	0.00	1.22	0.00	1.00	0.00	0.00	0.00	0.00	0.75
Incandescent bulbs	16.58	24.90	13.16	10.91	45.80	23.19	9.08	31.80	11.86	22.57	30.04	0.55	21.30
CFL Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen bulbs	18.32	4.28	24.08	0.54	1.34	12.34	21.49	0.13	4.67	9.91	7.27	55.43	3.05
Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.03	0.10	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manual Switches	7.47	9.98	6.43	6.54	3.33	0.00	0.00	21.55	7.20	1.46	0.80	0.00	16.48
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	1.07	1.39	0.93	0.11	3.94	3.11	0.00	0.86	0.00	7.16	1.02	0.00	1.31
Fat/Thick Tubes	7.16	9.14	6.35	12.97	5.89	15.56	0.00	6.23	8.23	9.76	25.85	0.00	5.96
Skinny/Thin Tubes	3.85	4.68	3.51	0.64	0.32	23.66	0.00	0.15	6.03	0.55	20.81	0.00	1.35
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DID NOT REMOVE ANYTHING	1.79	2.92	1.33	4.95	1.33	3.03	0.00	2.60	2.65	1.27	2.74	0.00	1.89
Other -Record	1.52	0.85	1.80	0.15	4.30	0.00	0.00	0.81	0.78	0.63	0.00	0.00	5.13
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	20.91	17.44	22.34	27.83	9.05	9.99	69.43	6.25	6.26	15.23	6.05	44.02	9.96
n	*372*	*193*	*179*	*73*	*30*	*23*	*3*	*63*	*60*	*30*	*24*	*4*	*60*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<LI21B> Were the HID lamps you removed High Pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI22B> Approximately how old was the equipment that were removed and replaced?													
Less than 5 years old	48.02	54.37	45.45	47.22	84.86	57.39	30.57	52.71	49.97	79.85	54.89	38.50	42.91
Between 5 and 10 years old	22.44	18.10	24.19	29.36	9.09	16.96	0.00	17.90	27.03	11.32	20.41	17.48	34.56
Between 10 and 15 years old or	6.43	8.94	5.41	9.62	1.32	15.19	0.00	9.71	12.05	0.00	12.48	0.00	7.84
More than 15 years old	6.39	8.38	5.58	11.17	0.00	9.83	0.00	10.30	10.95	8.02	3.77	0.00	10.31
Don't Know	16.73	10.21	19.37	2.63	4.73	0.63	69.43	9.38	0.00	0.81	8.44	44.02	4.37
n	*359*	*185*	*174*	*69*	*28*	*22*	*3*	*62*	*58*	*29*	*23*	*4*	*59*
<LI23B> How would you describe the condition of the lighting equipment that was removed and replaced?													
Poor condition	5.77	6.43	5.51	11.69	3.62	9.25	0.00	3.70	22.28	9.66	4.15	0.00	5.04
Fair condition or	29.90	42.41	24.85	54.19	30.20	43.29	0.00	47.12	34.46	42.81	44.65	0.00	41.19
Good condition	50.31	44.80	52.53	33.24	62.80	47.47	30.57	48.28	43.00	47.54	51.20	55.98	53.58
Don't Know	14.02	6.36	17.11	0.87	3.37	0.00	69.43	0.91	0.26	0.00	0.00	44.02	0.19
n	*359*	*185*	*174*	*69*	*28*	*22*	*3*	*62*	*58*	*29*	*23*	*4*	*59*
<LI24B> Approximately what percentage of the lighting equipment that was removed and replaced was broken or Not working prior to installing ?													
0	59.69	75.52	53.29	84.00	84.72	78.98	9.08	79.25	66.16	59.15	85.13	18.03	78.98
1	1.32	2.58	0.81	0.00	0.00	0.00	0.00	6.97	0.00	5.79	0.00	0.00	1.52
2	0.19	0.08	0.24	0.00	0.67	0.00	0.00	0.00	0.77	2.44	0.00	0.00	0.00
3	0.04	0.02	0.05	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
5	0.65	1.42	0.34	0.48	2.10	5.08	0.00	0.28	1.01	0.00	1.94	0.00	0.00
8	0.01	0.03	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.10	0.17	0.07	0.00	1.42	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
10	4.22	1.62	5.27	0.63	3.99	0.83	0.00	2.24	8.84	0.55	2.78	0.00	11.82
15	3.84	4.94	3.40	8.22	4.05	0.00	0.00	6.60	13.01	17.90	0.00	0.00	2.24
20	13.16	4.91	16.49	3.34	0.00	8.62	21.49	2.19	0.00	7.25	10.15	37.95	1.02
25	0.25	0.32	0.22	0.16	2.30	0.00	0.00	0.00	0.00	3.91	0.00	0.00	0.00
30	0.12	0.17	0.10	0.33	0.75	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.00
50	0.40	1.31	0.03	0.23	0.00	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	0.09	0.19	0.05	0.78	0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.00	0.00
90	14.41	5.68	17.94	0.00	0.00	0.00	69.43	0.73	0.00	1.74	0.00	44.02	2.55
100	1.39	0.56	1.72	1.63	0.00	0.00	0.00	0.43	9.05	0.00	0.00	0.00	1.71
102	0.14	0.49	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00	0.00	0.00
n	*359*	*185*	*174*	*69*	*28*	*22*	*3*	*62*	*58*	*29*	*23*	*4*	*59*
<A3C> According to our Records, your organization inatalled <qty1> many lighting measures through <> period is this correct?													
Yes-quantity correct	92.11	95.89	90.10	91.24	89.97	100.00	100.00	98.19	83.89	76.90	100.00	100.00	85.35
Yes-Change Quantity	1.46	2.18	1.07	7.61	0.00	0.00	0.00	0.53	1.81	0.00	0.00	0.00	1.96
Did Not Install	2.11	1.54	2.41	0.84	10.03	0.00	0.00	0.48	4.76	11.35	0.00	0.00	2.42
Don't Know	4.32	0.39	6.42	0.31	0.00	0.00	0.00	0.80	9.54	11.75	0.00	0.00	10.27
n	*325*	*171*	*154*	*62*	*28*	*23*	*1*	*56*	*49*	*27*	*21*	*1*	*55*
<A3C_QTY> Approximately how many of this lighting measure did you install?													
16	42.33	9.30	78.18	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00
25	51.61	84.33	16.09	92.98	0.00	0.00	0.00	0.00	73.73	0.00	0.00	0.00	0.00
50	6.06	6.37	5.73	7.02	0.00	0.00	0.00	0.00	26.27	0.00	0.00	0.00	0.00
n	*6*	*3*	*3*	*2*	*0*	*0*	*0*	*1*	*2*	*0*	*0*	*0*	*1*
<A3C_OTH> Would you say that the number													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<DEEM_INSTALL_DATE3_NU> Our Records indicate you installed lighting equipment throught the program on <this date> is that correct?													
1	98.65	98.97	98.47	99.24	100.00	95.66	100.00	100.00	98.29	100.00	91.49	100.00	100.00
2	1.14	0.83	1.32	0.00	0.00	4.34	0.00	0.00	0.00	0.00	8.51	0.00	0.00
99	0.21	0.20	0.21	0.76	0.00	0.00	0.00	0.00	1.71	0.00	0.00	0.00	0.00
n	*296*	*159*	*137*	*59*	*25*	*23*	*1*	*50*	*43*	*23*	*21*	*1*	*48*
<DEEM_INSTALL_YEAR3> In what year did you install/delamp the lighting equipment?													
99	100.00	100.00	100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*2*	*1*	*1*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*1*	*0*	*0*
<DEEM_INSTALL_MONTH3> And what month? {If they can Not recall month, try to get the season.}													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<LI18C> Of the CFLs you received through the program, what percentage do you estimate were placed into storage for later use?													
0	100.00	100.00	100.00	100.00	100.00	0.00	0.00	100.00	100.00	100.00	100.00	0.00	100.00
n	*22*	*9*	*13*	*2*	*5*	*0*	*0*	*2*	*1*	*6*	*3*	*0*	*3*
<LI19C> Were any of the program provided lighting equipment installed at another facility? If so, what percentage would you estimate?													
0	99.88	99.66	100.00	98.72	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
102	0.12	0.34	0.00	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*296*	*159*	*137*	*59*	*25*	*23*	*1*	*50*	*43*	*23*	*21*	*1*	*48*
<LI20C> What type of lighting was removed and replaced when you installed the lighting equipment through the Program?													
High Performance T8	0.70	1.12	0.47	5.95	0.00	0.00	0.00	0.00	4.81	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	3.11	3.14	3.09	12.37	0.00	0.23	0.00	1.89	1.87	0.00	0.00	0.00	7.97
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 fluorescent fixtures	4.09	5.24	3.47	18.42	1.93	0.00	0.00	3.79	9.05	1.52	0.00	0.00	6.76
Compact HID (High Intensity Discharge) F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Screw-in Modular CFLS	2.87	3.10	2.74	0.00	0.00	0.00	0.00	7.84	0.00	0.00	0.00	0.00	7.52
Hardwired CFL Fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent bulbs	54.66	46.05	59.28	23.71	71.04	46.76	100.00	39.07	27.18	35.13	75.29	100.00	28.00
CFL Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED Exit Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen bulbs	38.19	22.43	46.64	0.00	8.20	18.10	100.00	24.80	0.00	27.12	9.63	100.00	33.31
Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.04	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00
Manual Switches	0.46	1.13	0.09	0.00	10.26	0.00	0.00	0.00	0.00	2.05	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	8.11	7.00	8.70	0.28	6.10	0.41	0.00	15.62	2.81	0.00	1.59	0.00	22.36
Fat/Thick Tubes	8.42	11.08	6.99	28.88	0.00	20.55	0.00	2.32	45.49	0.00	0.64	0.00	6.59
Skinny/Thin Tubes	0.34	0.34	0.34	0.11	0.00	1.39	0.00	0.00	3.24	0.00	0.10	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.04	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00
DID NOT REMOVE ANYTHING	2.21	3.37	1.59	0.00	0.00	0.00	0.00	8.51	0.00	5.85	0.53	0.00	3.39
Other -Record	1.24	0.45	1.67	0.00	2.46	0.00	0.00	0.46	1.70	20.84	0.00	0.00	1.55
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	7.14	14.62	3.13	5.06	0.00	13.33	0.00	26.82	0.00	7.50	8.68	0.00	3.46
n	*188*	*96*	*92*	*29*	*16*	*17*	*1*	*32*	*26*	*13*	*18*	*1*	*33*
<LI21C> Were the HID lamps you removed High Pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<LI22C> Approximately how old was the equipment that were removed and replaced?													
Less than 5 years old	39.25	41.24	38.20	33.17	88.12	55.05	0.00	31.12	26.05	97.83	64.13	0.00	55.86
Between 5 and 10 years old	39.92	25.67	47.42	34.16	3.22	16.17	100.00	18.43	26.07	0.62	17.43	100.00	26.66
Between 10 and 15 years old or	9.65	14.56	7.06	1.00	7.13	27.39	0.00	18.83	4.29	1.55	18.34	0.00	9.25
More than 15 years old	6.44	7.20	6.04	31.67	1.53	1.39	0.00	1.35	43.59	0.00	0.10	0.00	4.65
Don't Know	4.75	11.34	1.28	0.00	0.00	0.00	0.00	30.27	0.00	0.00	0.00	0.00	3.58
n	*184*	*95*	*89*	*29*	*16*	*17*	*1*	*31*	*26*	*12*	*17*	*1*	*32*
<LI23C> How would you describe the condition of the lighting equipment that was removed and replaced?													
Poor condition	9.83	9.78	9.86	32.51	1.14	9.83	0.00	2.45	36.06	4.26	11.52	0.00	11.11
Fair condition or	47.59	40.01	51.58	27.18	9.77	46.53	100.00	39.30	34.61	21.24	27.44	100.00	28.59
Good condition	37.95	39.22	37.28	40.31	89.09	43.63	0.00	28.94	29.33	74.50	61.04	0.00	56.72
Don't Know	4.63	10.98	1.28	0.00	0.00	0.00	0.00	29.31	0.00	0.00	0.00	0.00	3.58
n	*184*	*95*	*89*	*29*	*16*	*17*	*1*	*31*	*26*	*12*	*17*	*1*	*32*
<LI24C> Approximately what percentage of the lighting equipment that was removed and replaced was broken or Not working prior to installing ?													
0	51.23	61.06	46.06	61.28	89.13	90.17	0.00	46.82	55.22	91.04	88.48	0.00	58.41
1	2.49	4.95	1.19	6.41	0.00	0.00	0.00	9.87	2.72	0.00	0.00	0.00	2.58
2	0.64	0.00	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.75
3	0.31	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.33
5	3.00	1.64	3.71	1.39	6.10	0.00	0.00	1.79	6.46	0.00	0.00	0.00	8.56
9	0.17	0.25	0.13	0.00	2.17	0.00	0.00	0.00	0.00	3.09	0.00	0.00	0.00
10	3.04	1.98	3.60	4.42	0.00	0.00	0.00	2.98	1.55	0.00	0.00	0.00	9.62
15	1.83	2.72	1.36	0.00	0.00	0.00	0.00	7.26	0.00	0.00	0.00	0.00	3.80
20	1.96	3.09	1.36	0.00	0.00	9.83	0.00	2.03	0.00	0.00	4.18	0.00	1.72
25	3.08	2.91	3.17	14.89	0.00	0.00	0.00	0.00	31.73	0.00	0.00	0.00	0.00
30	0.31	0.33	0.30	0.19	2.60	0.00	0.00	0.00	2.33	1.62	0.00	0.00	0.00
33	0.02	0.07	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	0.86	0.00	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.34	0.00	0.00
45	0.00	0.01	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	2.59	2.21	2.79	11.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.64
90	0.12	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00
95	23.73	7.83	32.10	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00
102	4.62	10.96	1.28	0.00	0.00	0.00	0.00	29.24	0.00	0.00	0.00	0.00	3.58
n	*184*	*95*	*89*	*29*	*16*	*17*	*1*	*31*	*26*	*12*	*17*	*1*	*32*
<LI30> Considering all of the lighting changes we just discussed that were implemented through the program, approximately what percentage of the facility' lighting was affected by these changes?													
0	0.16	0.39	0.07	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.00	0.00	0.19
1	0.32	0.45	0.27	1.80	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00
2	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
5	0.35	0.20	0.40	0.24	0.00	0.00	0.00	0.37	1.64	0.00	0.00	0.00	0.52
10	0.76	0.69	0.79	0.00	1.44	0.00	9.08	0.00	3.36	1.97	0.00	0.41	0.37
15	0.96	0.34	1.18	0.34	0.00	0.00	0.00	0.68	0.27	0.00	3.01	0.00	2.12
17	0.23	0.88	0.00	0.00	7.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	1.97	1.87	2.01	1.55	2.87	2.11	0.00	1.85	1.59	12.89	1.79	0.00	2.37
25	0.82	1.82	0.48	5.32	0.00	1.69	0.00	0.45	1.35	0.00	2.83	0.00	0.00
30	0.70	0.32	0.83	0.00	1.01	0.00	0.00	0.51	0.91	0.83	0.00	0.00	1.75
33	0.23	0.71	0.06	0.00	4.52	0.00	0.00	0.39	0.00	1.17	0.00	0.00	0.00
35	4.30	0.05	5.80	0.15	0.00	0.05	0.00	0.00	1.20	0.84	0.00	16.99	0.00
40	4.10	0.84	5.24	0.23	3.09	0.00	0.00	1.05	1.03	1.07	0.29	12.88	2.02
45	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00
50	8.33	6.86	8.84	12.40	0.95	4.90	0.00	7.18	3.94	3.51	25.18	0.77	13.36
60	1.20	2.41	0.78	3.22	0.00	6.23	0.00	1.08	2.04	2.14	3.47	0.00	0.10
70	10.34	3.53	12.72	1.87	5.67	0.00	21.49	3.04	0.69	3.74	8.03	27.97	6.04
75	3.65	5.85	2.88	1.35	23.76	12.94	0.00	0.27	6.12	12.26	7.73	0.00	1.63
80	6.19	6.10	6.22	1.83	4.47	6.65	0.00	10.04	7.02	16.86	0.00	0.00	11.62
85	1.95	3.10	1.55	5.89	0.51	0.00	0.00	4.15	8.73	0.77	0.00	0.00	1.18
90	9.15	4.31	10.85	5.89	3.34	6.05	0.00	3.36	15.03	8.31	14.82	8.13	11.07
95	3.11	5.09	2.42	5.09	9.75	2.70	0.00	5.56	5.54	2.51	1.18	0.00	3.85
98	0.58	1.49	0.26	3.96	4.10	0.00	0.00	0.00	0.00	4.83	0.00	0.00	0.00
99	0.70	0.00	0.94	0.00	0.00	0.00	0.00	0.00	2.86	0.00	0.00	0.00	1.55
100	39.80	52.63	35.31	48.88	26.96	56.69	69.43	58.86	34.28	24.76	31.68	32.86	40.27
102	0.07	0.05	0.08	0.00	0.40	0.00	0.00	0.00	0.00	1.54	0.00	0.00	0.00
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<HB1> Thinking about all of the types of linear fluorescent bulbs that were installed through the program, what is the highest height above the area they light? [IN FEET]													
0	1.37	0.06	1.95	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	4.41
5	0.65	0.56	0.69	0.00	10.47	0.00	0.00	0.00	0.00	13.83	0.00	0.00	0.00
6	0.70	0.22	0.91	0.00	0.00	0.00	0.00	0.52	0.27	0.97	0.75	0.00	1.64
7	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00
8	14.19	11.64	15.31	10.68	29.48	9.33	0.00	12.81	27.26	13.89	29.84	0.00	14.38
9	4.13	3.79	4.28	5.97	8.72	3.33	0.00	2.50	1.56	35.09	1.08	0.00	4.77
10	26.18	38.37	20.82	33.25	36.81	34.12	0.00	49.46	28.04	18.63	23.84	0.00	27.80
11	16.77	6.49	21.29	0.00	4.97	0.00	100.00	0.00	0.00	0.00	0.00	98.05	0.00
12	9.91	6.36	11.47	8.36	0.00	11.32	0.00	4.49	4.49	0.00	3.32	0.00	23.35
13	0.69	0.45	0.79	0.00	0.00	0.00	0.00	1.08	0.00	2.78	0.00	0.00	1.48
14	1.87	0.54	2.45	1.86	0.00	0.00	0.00	0.14	7.97	0.00	8.70	0.00	0.09
15	6.58	10.47	4.87	13.35	4.49	30.07	0.00	1.61	14.31	1.77	19.09	0.00	0.00
16	2.88	5.41	1.77	7.67	0.00	0.00	0.00	8.11	0.00	0.00	6.67	0.00	2.05
17	0.24	0.78	0.00	0.50	0.00	0.00	0.00	1.54	0.00	0.00	0.00	0.00	0.00
18	0.31	0.82	0.08	3.18	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00
20	5.27	7.34	4.36	12.48	0.00	11.76	0.00	4.08	1.97	2.44	4.17	0.00	7.65
22	0.38	0.00	0.54	0.00	0.00	0.00	0.00	0.00	3.36	0.00	0.00	0.00	0.00
25	0.08	0.15	0.05	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
26	0.20	0.43	0.10	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.00	0.00	0.22
28	0.03	0.11	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00
30	0.81	0.31	1.03	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.00	2.32
66	0.34	0.16	0.42	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.95	0.00
99	6.41	5.48	6.81	1.48	5.06	0.07	0.00	11.41	10.28	10.61	2.54	0.00	9.73
n	*336*	*169*	*167*	*67*	*17*	*21*	*1*	*62*	*61*	*19*	*22*	*2*	*62*
<HB2> Just to double check, was any of the linear fluorescent lighting installed through the program at a height of 13 or more feet above the area it is meant to light? This would qualify as HIGH BAY lighting.													
Yes	2.74	1.51	3.22	4.20	5.50	0.00	0.00	0.40	13.40	0.00	0.83	0.00	3.18
No	96.01	95.33	96.27	94.02	94.50	88.15	100.00	98.00	84.86	100.00	99.17	100.00	96.16
Don't Know	1.26	3.17	0.52	1.78	0.00	11.85	0.00	1.60	1.74	0.00	0.00	0.00	0.66
n	*229*	*112*	*117*	*44*	*12*	*13*	*1*	*41*	*44*	*14*	*13*	*1*	*44*
<HB3> What is the main kind of linear bulbs located at this height?													
T8s	37.76	28.88	43.62	55.20	61.11	9.21	0.00	11.76	71.78	39.74	45.44	0.00	19.64
T5s	3.39	0.72	5.16	0.00	0.00	0.00	0.00	2.53	16.27	0.00	0.00	0.00	0.00
Other	5.60	1.12	8.57	0.00	0.00	0.00	0.00	3.91	9.56	0.00	0.00	0.00	14.20
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	50.41	61.68	42.96	44.80	38.89	65.85	0.00	81.80	11.95	60.26	44.63	0.00	66.16
n	*92*	*48*	*44*	*23*	*3*	*7*	*0*	*15*	*19*	*3*	*9*	*0*	*13*
<HB1a> Other than linear fluorescents, is any of the lighting installed through the program considered to be High Bay? (If needed, lighting higher than 13 ft)													
Yes	30.57	19.41	34.48	15.39	38.27	26.53	21.49	12.02	19.30	19.52	14.59	58.90	26.14
No	67.39	76.85	64.07	81.74	52.92	67.18	78.51	86.03	79.73	75.56	77.85	41.10	73.27
Don't Know	2.04	3.74	1.44	2.87	8.81	6.28	0.00	1.95	0.96	4.92	7.56	0.00	0.59
n	*561*	*278*	*283*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*

* Values are shown as percent of respondents weighted by kWh.

* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<HB2A> What kind of High Bay Lighting is it?													
HID (High-intensity discharge) High Pres	0.37	1.54	0.14	0.00	0.58	0.00	0.00	5.93	0.00	0.00	0.00	0.00	0.48
HID Metal Halide	23.38	6.26	26.76	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	47.49	0.00
HID Mercury Vapor	0.04	0.22	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00
HID - Don't Know what type	1.59	6.02	0.72	0.00	0.00	22.94	0.00	0.00	0.00	0.00	15.34	0.00	0.00
CFLs	0.39	0.69	0.33	0.00	2.49	0.00	0.00	0.38	0.00	10.92	0.00	0.00	0.00
Other	31.59	13.45	35.17	1.20	0.00	40.42	0.00	11.05	40.33	0.00	48.61	21.87	61.16
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	12.77	32.51	8.88	51.48	0.00	24.77	0.00	67.47	7.80	10.94	20.07	1.10	22.17
n	*86*	*36*	*50*	*9*	*9*	*4*	*1*	*13*	*13*	*6*	*6*	*5*	*20*
<DEL1> We also show that you delamped linear fluorescent fixtures. Is this correct?													
Yes	77.95	81.11	77.11	100.00	100.00	100.00	0.00	58.39	100.00	63.90	100.00	0.00	71.37
No	0.86	0.00	1.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41
Don't Know	21.18	18.89	21.80	0.00	0.00	0.00	0.00	41.61	0.00	36.10	0.00	0.00	27.22
n	*37*	*19*	*18*	*4*	*2*	*1*	*0*	*12*	*4*	*3*	*1*	*0*	*10*
<DEL1a> As part of the retrofit you had done during your participation in Program program did you have any delamping done?													
Yes	8.62	7.34	9.15	6.36	0.00	0.00	0.00	13.87	7.94	3.97	0.00	0.00	22.91
No	66.16	78.90	60.95	86.82	81.76	90.24	0.00	85.78	90.02	96.03	100.00	1.95	76.29
Don't Know	25.22	13.76	29.90	6.82	18.24	9.76	100.00	0.35	2.04	0.00	0.00	98.05	0.80
n	*210*	*101*	*109*	*37*	*10*	*14*	*1*	*38*	*40*	*11*	*18*	*2*	*37*
<DEL2> Have you had Removal only Delamping done within your facility since 2009?													
Yes	4.88	5.64	4.46	12.20	0.00	0.18	0.00	3.56	0.00	2.59	17.12	100.00	4.25
No	93.52	90.32	95.27	77.44	95.06	99.82	0.00	96.44	98.30	97.41	82.88	0.00	95.75
Don't Know	1.61	4.05	0.27	10.36	4.94	0.00	0.00	0.00	1.70	0.00	0.00	0.00	0.00
n	*220*	*118*	*102*	*52*	*13*	*12*	*0*	*41*	*34*	*20*	*8*	*1*	*39*
<DEL2a> What percent of the original fixtures within the retrofitted area were removed?													
Between 0 and 15 Percent	30.42	4.51	48.35	0.00	0.00	100.00	0.00	15.72	0.00	0.00	0.00	0.00	75.13
Between 15 and 30 Percent	6.47	15.81	0.00	21.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Between 30 and 45 Percent	9.46	0.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.87
Between 45 and 60 Percent	1.22	2.98	0.00	0.00	0.00	0.00	0.00	11.62	0.00	0.00	0.00	0.00	0.00
Between 80 and 100 Percent	2.23	0.00	3.78	0.00	0.00	0.00	0.00	0.00	0.00	67.88	0.00	0.00	0.00
100 Percent	39.99	58.06	27.48	78.60	0.00	0.00	0.00	0.00	0.00	32.12	100.00	0.00	0.00
Don't Know	10.21	18.64	4.38	0.00	0.00	0.00	0.00	72.65	0.00	0.00	0.00	100.00	0.00
n	*13*	*6*	*7*	*2*	*0*	*1*	*0*	*3*	*0*	*2*	*2*	*1*	*2*
<DEL3> Have you had Remove and Replace Delamping done within your facility since 2009?													
Yes	23.91	32.22	19.35	24.98	39.92	51.72	0.00	29.18	17.79	26.27	22.41	0.00	18.49
No	72.35	60.68	78.74	72.52	37.02	22.34	0.00	70.82	80.51	72.85	54.49	100.00	81.51
Don't Know	3.74	7.11	1.90	2.49	23.06	25.93	0.00	0.00	1.70	0.88	23.11	0.00	0.00
n	*220*	*118*	*102*	*52*	*13*	*12*	*0*	*41*	*34*	*20*	*8*	*1*	*39*
<DEL3a> What type of fixtures were removed?													
2	3.64	0.00	6.96	0.00	0.00	0.00	0.00	0.00	0.00	53.47	0.00	0.00	0.00
4	33.16	19.73	45.41	9.71	0.00	0.00	0.00	46.66	58.93	0.00	0.00	0.00	56.94
13	0.27	0.56	0.00	0.00	4.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	5.40	11.33	0.00	0.00	0.00	47.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	5.47	7.86	3.28	14.45	0.00	0.00	0.00	10.98	22.28	0.00	0.00	0.00	0.00
Describe Type of Fixtures	24.20	34.00	15.26	45.51	5.97	44.59	0.00	28.65	15.42	24.81	100.00	0.00	3.12
Don't Know	27.86	26.51	29.08	30.33	89.64	8.00	0.00	13.70	3.37	21.72	0.00	0.00	39.94
n	*56*	*33*	*23*	*15*	*4*	*4*	*0*	*10*	*9*	*4*	*2*	*0*	*8*
<DEL3b> What type of fixtures were installed?													
1	15.26	17.48	13.24	2.05	0.00	0.00	0.00	46.07	19.68	0.00	0.00	0.00	16.03
2	23.70	4.40	41.30	2.70	0.00	0.00	0.00	10.02	53.93	53.47	0.00	0.00	40.91
13	0.27	0.56	0.00	0.00	4.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	13.47	21.47	6.18	0.00	0.00	47.41	0.00	27.57	0.00	0.00	0.00	0.00	9.59
21	2.02	3.82	0.38	14.45	0.00	0.00	0.00	0.00	2.60	0.00	0.00	0.00	0.00
Describe Type of Fixtures	21.57	25.43	18.05	45.51	5.97	44.59	0.00	5.34	16.98	24.81	100.00	0.00	7.08
Don't Know	23.71	26.83	20.86	35.29	89.64	8.00	0.00	11.00	6.80	21.72	0.00	0.00	26.40
n	*56*	*33*	*23*	*15*	*4*	*4*	*0*	*10*	*9*	*4*	*2*	*0*	*8*
<DEL3c> How many lamps per fixture were present prior to the delamping retrofit?													
1	2.86	0.99	4.57	0.00	0.00	0.00	0.00	2.70	0.00	0.00	0.00	0.00	7.08
2	30.17	19.41	39.98	50.34	0.00	24.02	0.00	0.96	25.67	8.57	58.41	0.00	47.38
3	2.03	0.00	3.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.03
4	50.33	52.03	48.79	40.46	10.36	20.57	0.00	95.37	55.50	91.43	41.59	0.00	39.51
Don't Know	14.60	27.57	2.78	9.20	89.64	55.41	0.00	0.97	18.83	0.00	0.00	0.00	0.00
n	*56*	*33*	*23*	*15*	*4*	*4*	*0*	*10*	*9*	*4*	*2*	*0*	*8*
<DEL3d> How many lamps per fixture are present Now, after the delamping retrofit?													
1	18.79	10.16	26.65	38.38	0.00	0.00	0.00	0.00	1.80	0.00	0.00	0.00	40.91
2	58.44	48.09	67.88	31.28	10.36	44.59	0.00	75.66	98.20	100.00	100.00	0.00	50.61
3	6.70	14.04	0.00	10.25	0.00	47.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	8.71	12.26	5.47	20.08	0.00	8.00	0.00	13.70	0.00	0.00	0.00	0.00	8.48
Don't Know	7.37	15.45	0.00	0.00	89.64	0.00	0.00	10.63	0.00	0.00	0.00	0.00	0.00
n	*56*	*33*	*23*	*15*	*4*	*4*	*0*	*10*	*9*	*4*	*2*	*0*	*8*
<DEL3E> Approximately how old were the lfixtures that were removed and replaced as a result of this Remove and Replace delamping? Would you say…													
Less than 5 years old	17.82	11.33	23.74	0.00	0.00	47.41	0.00	0.00	51.34	30.29	0.00	0.00	18.97
Between 6 and 10 years old	45.97	42.62	49.02	38.61	95.68	20.57	0.00	41.27	26.27	0.00	41.59	0.00	65.01
Between 10 and 15 years old	8.50	14.91	2.65	54.20	0.00	0.00	0.00	1.55	17.99	0.00	0.00	0.00	0.00
More than 15 years old	26.23	30.36	22.47	7.19	0.00	32.02	0.00	56.57	4.40	53.47	58.41	0.00	16.03
Don't Know	1.48	0.78	2.11	0.00	4.32	0.00	0.00	0.61	0.00	16.24	0.00	0.00	0.00
n	*56*	*33*	*23*	*15*	*4*	*4*	*0*	*10*	*9*	*4*	*2*	*0*	*8*
<DEL3F> How would you describe the condition of the fixtures that were removed and replaced as a result of the Remove and Replace delamping? Would you say they were in…													
Poor condition	1.04	1.36	0.74	5.15	0.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00	0.00
Fair condition or	51.38	72.03	32.55	90.90	94.03	75.98	0.00	48.17	22.39	53.47	41.59	0.00	29.57
Good condition	45.83	22.93	66.71	3.96	5.97	24.02	0.00	41.80	72.61	46.53	58.41	0.00	70.43
Don't Know	1.76	3.69	0.00	0.00	0.00	0.00	0.00	10.02	0.00	0.00	0.00	0.00	0.00
n	*56*	*33*	*23*	*15*	*4*	*4*	*0*	*10*	*9*	*4*	*2*	*0*	*8*
<DEL3G> Approximately what percentage of the fixtures that were removed and replaced were broken or not working prior to the Remove and Replace delamping?													
0 Percent	84.81	87.62	82.26	89.17	95.61	79.43	0.00	89.02	77.01	46.53	58.41	0.00	93.53
Between 0 and 15 Percent	8.95	7.36	10.40	7.10	4.39	20.57	0.00	0.00	20.40	0.00	41.59	0.00	6.47
Between 15 and 30 Percent	4.10	0.55	7.34	2.07	0.00	0.00	0.00	0.00	2.60	53.47	0.00	0.00	0.00
Between 45 and 60 Percent	0.21	0.44	0.00	1.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Between 60 and 80 Percent	0.17	0.35	0.00	0.00	0.00	0.00	0.00	0.96	0.00	0.00	0.00	0.00	0.00
Don't Know	1.76	3.69	0.00	0.00	0.00	0.00	0.00	10.02	0.00	0.00	0.00	0.00	0.00
n	*56*	*33*	*23*	*15*	*4*	*4*	*0*	*10*	*9*	*4*	*2*	*0*	*8*
<DEL4> Have you had a delamping retrofit to reduce the number of lamps per fixture within your facility since 2009?													
Yes	50.44	40.45	55.91	53.50	47.56	15.38	0.00	36.86	67.52	59.37	37.36	0.00	54.66
No	48.35	57.25	43.48	41.28	47.50	84.62	0.00	63.14	28.69	40.63	62.64	100.00	45.34
Don't Know	1.21	2.29	0.61	5.21	4.94	0.00	0.00	0.00	3.80	0.00	0.00	0.00	0.00
n	*220*	*118*	*102*	*52*	*13*	*12*	*0*	*41*	*34*	*20*	*8*	*1*	*39*
<DEL4a> How many lamps per fixture were present prior to the delamping retrofit?													
1 to 10	89.36	92.11	88.27	98.58	64.29	100.00	0.00	92.19	100.00	97.14	100.00	0.00	82.67
51 to 100	10.64	7.89	11.73	1.42	35.71	0.00	0.00	7.81	0.00	2.86	0.00	0.00	17.33
n	*109*	*58*	*51*	*28*	*4*	*4*	*0*	*22*	*17*	*9*	*3*	*0*	*22*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
DEL4bnew													
1	87.75	90.33	86.73	99.23	64.29	100.00	0.00	86.57	98.81	97.14	100.00	0.00	80.68
3	12.25	9.67	13.27	0.77	35.71	0.00	0.00	13.43	1.19	2.86	0.00	0.00	19.32
n	*109*	*58*	*51*	*28*	*4*	*4*	*0*	*22*	*17*	*9*	*3*	*0*	*22*
<DEL5> Is the amount of lighting better, worse, or the same than before your delamping job?													
Better	55.70	61.08	52.74	82.00	18.51	70.04	0.00	51.12	76.00	46.37	73.56	0.00	46.21
Worse	8.20	10.25	7.08	3.17	0.00	0.00	0.00	22.59	1.56	2.25	0.00	0.00	9.80
Same	34.80	27.42	38.84	14.82	81.50	29.96	0.00	23.24	22.45	51.38	26.44	100.00	42.01
Don't Know	1.30	1.24	1.33	0.00	0.00	0.00	0.00	3.06	0.00	0.00	0.00	0.00	1.97
n	*220*	*118*	*102*	*52*	*13*	*12*	*0*	*41*	*34*	*20*	*8*	*1*	*39*
<DEL11> Did you install additional lighting equipment to increase the amount of lighting in the delamped area(s)?													
No	100.00	100.00	100.00	100.00	0.00	0.00	0.00	100.00	100.00	100.00	0.00	0.00	100.00
n	*13*	*7*	*6*	*2*	*0*	*0*	*0*	*5*	*2*	*1*	*0*	*0*	*3*
<L_MSP1> Since January 2010, have you purchased and installed any lighting on your own without any assistance from any UTILITY or Program either at this facility or at other locations?													
Yes-only at this facility	34.64	31.77	35.36	10.48	35.29	33.33	0.00	49.21	16.53	7.64	59.80	51.67	23.92
Other	11.99	4.02	14.00	0.67	6.84	0.00	70.31	0.00	0.39	0.44	0.00	41.65	0.00
No	52.50	62.87	49.88	88.85	57.86	66.67	29.69	46.80	83.08	91.92	40.20	6.68	74.00
Don't Know	0.87	1.33	0.75	0.00	0.00	0.00	0.00	3.99	0.00	0.00	0.00	0.00	2.07
n	*327*	*149*	*178*	*50*	*24*	*18*	*2*	*54*	*52*	*34*	*21*	*8*	*62*
<LSP2> What type of fixtures, ballasts or light controls were installed as part of this lighting retrofit that was done without any assistance from your Utility?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	3.97	0.55	4.60	1.16	0.00	0.00	0.00	0.98	30.13	0.00	19.66	0.00	3.13
T10 fluorescent fixtures	2.30	0.00	2.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.66	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	16.08	0.00	19.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.11	10.76
Compact Fluorescent, Screw-in Modular	4.57	3.52	4.76	0.00	12.51	4.56	0.00	0.00	0.00	8.96	9.63	0.00	19.09
Compact Fluorescent, Hardwire	14.60	0.74	17.14	0.00	0.00	4.56	0.00	0.00	0.00	0.00	0.00	27.11	0.00
Incandescent	1.25	2.60	1.00	0.00	0.00	16.00	0.00	0.00	2.14	0.00	6.56	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	8.48	17.89	6.76	6.00	64.24	0.00	0.00	6.80	2.29	0.00	19.66	0.00	22.50
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	2.30	0.00	2.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.66	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.55	3.54	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00	0.00	0.00	0.00
Other	2.87	0.00	3.39	0.00	0.00	0.00	0.00	0.00	6.46	6.74	0.00	0.00	17.33
Fat/Thick Tubes	0.09	0.55	0.00	4.05	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	2.91	0.81	3.29	0.00	0.00	0.00	0.00	1.75	7.78	15.87	0.00	0.00	15.91
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (Screw Based)	11.10	0.75	12.99	9.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.56	0.00
Other -Record	38.98	22.40	42.00	0.00	6.41	78.88	100.00	1.90	0.00	63.02	73.78	44.63	16.72
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	4.29	0.60	4.96	6.50	0.00	0.00	0.00	0.15	2.15	0.00	0.00	7.70	0.00
Screw-in LEDSs Reflector Lamps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*79*	*33*	*46*	*9*	*6*	*4*	*1*	*12*	*11*	*9*	*7*	*4*	*14*
<LI17> Were the HID lamps you installed High Pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?													
High Pressure Sodium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Metal Halide	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mercury Vapor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incadescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2A_1> How many High Performance T8 Fluorescent Fixtures did you purchase for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2B_1> How many High Performance T8 Fluorescent Fixtures did you purchase for your other locations?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP4_1> On a scale from 0 to 10, where Zero indicates you Strongly Disagree and 10 indicates you Strongly Agree, please rate the following statement. My experience with the 2010-2012 Program influenced my decision to install this high efficiency equipmen													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP5_1> Why do you give it this rating?													
Record REASON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP17_1> Why did you purchase this lighting without the financial assistance available through a utility program?													
Too much paperwork	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Takes too long to get approval	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Needed equipment immediately (no time to	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Program had ended	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipment would not qualify	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate wasn't important enough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Didn't know program was available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No program available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP19_1> Was this measure specifically recommended by a Program or Utility sponsored Audit, report or program technical specialist?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP20_1> If you had not participated in the Program, how likely is it that your organization would still have implemented this measure, using a 0 to 10 scale where 0 means you Definitely Would Not have implemented this measure and 10 means you Definitely													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP23_1> In what year did you install the High Performance T8 Fluorescent Fixtures?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
And in which month (or season)													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP25_1> Did you receive a rebate for the High Performance T8 Fluorescent Fixtures?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP26_1> What type of lighting equipment was removed and replaced when you installed the High Performance T8 Fluorescent Fixtures?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP27_1> Approximately how old was this lighting equipment that you removed?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP28_1> How would you describe the condition of this removed equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP29_1> Approximately what percentage of this removed lighting equiment was broken or not working prior to installing the T8 Fluorescent Fixtures (1 inch diameter bulbs)?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2A_2>How many T8 Fluorescent Fixtures (1 inch diameter bulbs) did you purchase for this facility?													
4	22.52	0.00	23.01	0.00	0.00	0.00	0.00	0.00	79.34	0.00	0.00	0.00	0.00
5	13.44	82.48	11.94	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00
10	57.80	0.00	59.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
13	6.24	17.52	5.99	100.00	0.00	0.00	0.00	0.00	20.66	0.00	0.00	0.00	0.00
n	*6*	*2*	*4*	*1*	*0*	*0*	*0*	*1*	*2*	*0*	*1*	*0*	*1*
<MSP2B_2> How many T8 Fluorescent Fixtures (1 inch diameter bulbs) did you purchase for your other locations?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP4_2> On a scale from 0 to 10, where Zero indicates you Strongly Disagree and 10 indicates you Strongly Agree, please rate the following statement. My experience with the 2010-2012 Program influenced my decision to install this high efficiency equipmen													
5	13.44	82.48	11.94	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00
10 STRONGLY AGREE	6.24	17.52	5.99	100.00	0.00	0.00	0.00	0.00	20.66	0.00	0.00	0.00	0.00
Zero Strongly disagree	80.32	0.00	82.07	0.00	0.00	0.00	0.00	0.00	79.34	0.00	100.00	0.00	0.00
n	*6*	*2*	*4*	*1*	*0*	*0*	*0*	*1*	*2*	*0*	*1*	*0*	*1*
<MSP5_2> Why do you give it this rating?													
Record REASON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*2*	*1*	*1*	*1*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*
<MSP17_2> Why did you purchase this lighting without the financial assistance available through a utility program?													
Too much paperwork	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Takes too long to get approval	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Needed equipment immediately (no time to	35.96	82.48	34.95	0.00	0.00	0.00	0.00	100.00	79.34	0.00	0.00	0.00	100.00
Program had ended	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipment would not qualify	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate wasn't important enough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Didn't know program was available	57.80	0.00	59.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
No program available	6.24	17.52	5.99	100.00	0.00	0.00	0.00	0.00	20.66	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*6*	*2*	*4*	*1*	*0*	*0*	*0*	*1*	*2*	*0*	*1*	*0*	*1*
<MSP19_2> Was this measure specifically recommended by a Program or Utility sponsored Audit, report or program technical specialist?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP20_2> If you had not participated in the Program, how likely is it that your organization would still have implemented this measure, using a 0 to 10 scale where 0 means you Definitely Would Not have implemented this measure and 10 means you Definitely													
5	13.44	82.48	11.94	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00
10 DEFINITELY WOULD HAVE	86.56	17.52	88.06	100.00	0.00	0.00	0.00	0.00	100.00	0.00	100.00	0.00	0.00
n	*6*	*2*	*4*	*1*	*0*	*0*	*0*	*1*	*2*	*0*	*1*	*0*	*1*
<MSP23_2> In what year did you install the T8 Fluorescent Fixtures (1 inch diameter bulbs)?													
2010	57.80	0.00	59.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
2011	35.96	82.48	34.95	0.00	0.00	0.00	0.00	100.00	79.34	0.00	0.00	0.00	100.00
4	6.24	17.52	5.99	100.00	0.00	0.00	0.00	0.00	20.66	0.00	0.00	0.00	0.00
n	*6*	*2*	*4*	*1*	*0*	*0*	*0*	*1*	*2*	*0*	*1*	*0*	*1*
And in which month (or season)													
June	57.80	0.00	59.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
November	22.52	0.00	23.01	0.00	0.00	0.00	0.00	0.00	79.34	0.00	0.00	0.00	0.00
Spring	6.24	17.52	5.99	100.00	0.00	0.00	0.00	0.00	20.66	0.00	0.00	0.00	0.00
Don't Know	13.44	82.48	11.94	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00
n	*6*	*2*	*4*	*1*	*0*	*0*	*0*	*1*	*2*	*0*	*1*	*0*	*1*
<MSP25_2> Did you receive a rebate for the T8 Fluorescent Fixtures (1 inch diameter bulbs)?													
No	100.00	100.00	100.00	100.00	0.00	0.00	0.00	100.00	100.00	0.00	100.00	0.00	100.00
n	*6*	*2*	*4*	*1*	*0*	*0*	*0*	*1*	*2*	*0*	*1*	*0*	*1*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP26_2> What type of lighting equipment was removed and replaced when you installed the T8 Fluorescent Fixtures (1 inch diameter bulbs)?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	71.24	82.48	70.99	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00	0.00	100.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	6.24	17.52	5.99	100.00	0.00	0.00	0.00	0.00	20.66	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	22.52	0.00	23.01	0.00	0.00	0.00	0.00	0.00	79.34	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*6*	*2*	*4*	*1*	*0*	*0*	*0*	*1*	*2*	*0*	*1*	*0*	*1*
<MSP27_2> Approximately how old was this lighting equipment that you removed?													
Less than 5 years old	91.95	82.48	92.22	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00	0.00	100.00
More than 15 years old?	8.05	17.52	7.78	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
n	*5*	*2*	*3*	*1*	*0*	*0*	*0*	*1*	*1*	*0*	*1*	*0*	*1*
<MSP28_2> How would you describe the condition of this removed equipment?													
In Poor condition	91.95	82.48	92.22	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00	0.00	100.00
Fair condition or	8.05	17.52	7.78	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
n	*5*	*2*	*3*	*1*	*0*	*0*	*0*	*1*	*1*	*0*	*1*	*0*	*1*
<MSP29_2> Approximately what percentage of this removed lighting equipment was broken or working prior to installing T8 Fluorescent Fixtures (1 inch diameter bulbs)?													
1	8.05	17.52	7.78	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
5	74.60	0.00	76.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
100	17.35	82.48	15.51	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00
n	*5*	*2*	*3*	*1*	*0*	*0*	*0*	*1*	*1*	*0*	*1*	*0*	*1*
<MSP23_3> In what year did you install the T10 fluorescent fixtures?													
2010	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*
And in which month (or season)													
December	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*
<MSP26_3> What type of lighting equipment was removed and replaced when you installed the T10 fluorescent fixtures?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*
<MSP27_3> Approximately how old was this lighting equipment that you removed?													
Between 5 and 10 years old	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*
<MSP28_3> How would you describe the condition of this removed equipment?													
In Poor condition	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*
<MSP29_3> Approximately what percentage of this removed lighting equipment was broken or working prior to installing the T10 fluorescent fixtures?													
20	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*
<MSP23_4> In what year did you install the T12 Fixtures (1.5in. diameter bulbs)?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
And in which month (or season)													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP26_4> What type of lighting equipment was removed and replaced when you installed the T12 Fixtures (1.5in. diameter bulbs)?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP27_4> Approximately how old was this lighting equipment that you removed?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP28_4> How would you describe the condition of this removed equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP29_4> Approximately what percentage of this removed lighting equipment was broken or working prior to installing the T10 fluorescent fixtures?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2A_5> How many compact HID (High Density Discharge) Fixtures did you buy on your own for his facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2B_5> How many compact HID (High Density Discharge) Fixtures did you buy on your own for other locations?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP4_5> On a scale from 0 to 10, where Zero indicates you Strongly Disagree and 10 indicates you Strongly Agree, please rate the following statement. My experience with the 2010-2012 Program influenced my decision to install this high efficiency equipmen													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP5_5> Why do you give it this rating?													
Record REASON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP17_5> Why did you purchase this lighting without the financial assistance available through a utility program?													
Too much paperwork	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Takes too long to get approval	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Needed equipment immediately (no time to	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Program had ended	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipment would not qualify	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate wasn't important enough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Didn't know program was available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No program available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP19_5> Was this measure specifically recommended by a Program or Utility sponsored Audit, report or program technical specialist?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP20_5> If you had not participated in the Program, how likely is it that your organization would still have implemented this measure, using a 0 to 10 scale where 0 means you Definitely Would Not have implemented this measure and 10 means you Definitely													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP23_5> In what year did you install the compact HID (High Density Discharge) Fixtures?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
And in which month (or season)													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP25_5> Did you receive a rebate for the compact HID (High Density Discharge) Fixtures?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP26_5> What type of lighting was removed and replaced when you installed the compact HID (High Density Discharge) Fixtures?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP27_5> Approximately how old was this lighting equipment that you removed?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP28_5> How would you describe the condition of this removed equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP29_5> Approximately what percentage of the removed replaced lighting equipment was broken or not working prior to installing the compact HID (High Density Discharge) Fixtures?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2A_6> How many SCREW-IN MODULAR CFLs did you purchase for this facility?													
5	8.21	21.07	6.47	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	9.22
15	24.60	0.00	27.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
20	11.04	78.93	1.87	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
9999	56.15	0.00	63.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.78
n	*6*	*2*	*4*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*1*	*0*	*2*
<MSP2B_6> How many SCREW-IN MODULAR CFLs did you purchase for your other locations?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP4_6> On a scale from 0 to 10, where Zero indicates you Strongly Disagree and 10 indicates you Strongly Agree, please rate the following statement. My experience with the 2010-2012 Program influenced my decision to install this high efficiency equipmen													
1 STRONGLY DISAGREE	24.60	0.00	27.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
10 STRONGLY AGREE	67.19	78.93	65.61	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	90.78
Zero Strongly disagree	8.21	21.07	6.47	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	9.22
n	*6*	*2*	*4*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*1*	*0*	*2*
<MSP5_6> Why do you give it this rating?													
Record REASON	83.57	0.00	97.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*3*	*1*	*2*	*0*	*1*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*1*
<MSP17_6> Why did you purchase this lighting without the financial assistance available through a utility program?													
Too much paperwork	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Takes too long to get approval	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Needed equipment immediately (no time to	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Program had ended	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipment would not qualify	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate wasn't important enough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Didn't know program was available	88.96	21.07	98.13	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	100.00
No program available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	2.51	21.07	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*6*	*2*	*4*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*1*	*0*	*2*
<MSP19_6>Was this measure specifically recommended by a Program or Utility sponsored Audit, report or program technical specialist?													
Yes	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
n	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*
<MSP20_6> If you had not participated in the Program, how likely is it that your organization would still have implemented this measure, using a 0 to 10 scale where 0 means you Definitely Would Not have implemented this measure and 10 means you Definitely													
5	30.30	0.00	34.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	9.22
10 DEFINITELY WOULD HAVE	69.70	100.00	65.61	0.00	100.00	100.00	0.00	0.00	0.00	100.00	0.00	0.00	90.78
n	*6*	*2*	*4*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*1*	*0*	*2*
<MSP23_6> In what year did you install the SCREW-IN MODULAR CFLs?													
2010	56.15	0.00	63.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.78
2011	24.60	0.00	27.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
2012	5.70	0.00	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.22
4	13.55	100.00	1.87	0.00	100.00	100.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
n	*6*	*2*	*4*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*1*	*0*	*2*
And in which month (or season)													
November	2.51	21.07	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
December	11.04	78.93	1.87	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Fall	61.86	0.00	70.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Don't Know	24.60	0.00	27.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*6*	*2*	*4*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*1*	*0*	*2*
<MSP25_6> Did you receive a rebate for the SCREW-IN MODULAR CFLs?													
No	100.00	100.00	100.00	0.00	100.00	100.00	0.00	0.00	0.00	100.00	100.00	0.00	100.00
n	*6*	*2*	*4*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*1*	*0*	*2*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP26_6> What type of lighting equipment was removed and replaced when you installed the SCREW-IN MODULAR CFLs?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	41.34	78.93	36.27	0.00	100.00	0.00	0.00	0.00	0.00	100.00	100.00	0.00	9.22
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	56.15	0.00	63.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.78
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	2.51	21.07	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*6*	*2*	*4*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*1*	*0*	*2*
<MSP27_6> Approximately how old was this lighting equipment that you removed?													
Less than 5 years old	88.96	21.07	98.13	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	100.00
Don't Know	11.04	78.93	1.87	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
n	*6*	*2*	*4*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*1*	*0*	*2*
<MSP28_6> How would you describe the condition of this removed equipment?													
In Poor condition	38.14	100.00	29.79	0.00	100.00	100.00	0.00	0.00	0.00	100.00	100.00	0.00	0.00
Fair condition or	5.70	0.00	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.22
Good condition	56.15	0.00	63.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.78
n	*6*	*2*	*4*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*1*	*0*	*2*
<MSP29_6> Approximately what percentage of this removed lighting equiment was broken or not working prior to installing the SCREW-IN MODULAR CFLs?													
0	56.15	0.00	63.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.78
20	2.51	21.07	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	24.60	0.00	27.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
100	16.74	78.93	8.35	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	9.22
n	*6*	*2*	*4*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*1*	*0*	*2*
<CFL1A> Where did you purchase the CFLs that were installed OUTSIDE the Program? [ACCEPT MULTIPLES]													
Home Depot	86.45	0.00	98.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	100.00
Costco	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Orchard Spply Hdwr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE Hardware	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lowe's	56.15	0.00	63.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.78
SaveMart	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K-Mart	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sam's Club	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Smart & Final	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yardbirds Hm Ctr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FRY's Elect	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
True Value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contractor Installed them	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	13.55	100.00	1.87	0.00	100.00	100.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*6*	*2*	*4*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*1*	*0*	*2*
<CFL3A>Were all of these CFLs installed or were some put into storage for later use?													
All installed	80.75	0.00	91.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	90.78
Some installed, some in storage	19.25	100.00	8.35	0.00	100.00	100.00	0.00	0.00	0.00	100.00	0.00	0.00	9.22
n	*6*	*2*	*4*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*1*	*0*	*2*
<CFL4> Considering all of the lighting changes we just discussed (purchases outside the programs), approximately what percentage of the facility's lighting was affected by those changes?													
Between 15 and 30 Percent	13.02	21.07	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Between 45 and 60 Percent	57.35	78.93	22.45	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Between 60 and 80 Percent	29.63	0.00	77.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
n	*4*	*2*	*2*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*0*	*0*	*1*
<CFL5> Why were they put in storage?													
Record REASON PUT INTO STORAGE	86.98	78.93	100.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*4*	*2*	*2*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*0*	*0*	*1*
<MSP2A_7> How many Hardwired CFL Fixtures did you purchase for this facility?													
10	0.78	100.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	99.22	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
n	*2*	*1*	*1*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP2B_7> How many Hardwired CFL Fixtures did you purchase for your other locations?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP4_7> On a scale from 0 to 10, where Zero indicates you Strongly Disagree and 10 indicates you Strongly Agree, please rate the following statement. My experience with the 2010-2012 Program influenced my decision to install this high efficiency equipmen													
3	99.22	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
Zero Strongly disagree	0.78	100.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*2*	*1*	*1*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP5_7> Why do you give it this rating?													
Record REASON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP17_7> Why did you purchase this lighting without the financial assistance available through a utility program?													
Too much paperwork	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Takes too long to get approval	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Needed equipment immediately (no time to	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Program had ended	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipment would not qualify	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate wasn't important enough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Didn't know program was available	100.00	100.00	100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
No program available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.78	100.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	2	*1*	*1*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP19_7> Was this measure specifically recommended by a Program or Utility sponsored Audit, report or program technical specialist?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP20_7> If you had not participated in the Program, how likely is it that your organization would still have implemented this measure, using a 0 to 10 scale where 0 means you Definitely Would Not have implemented this measure and 10 means you Definitely													
10 DEFINITELY WOULD HAVE	100.00	100.00	100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
n	2	*1*	*1*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP23_7> In what year did you install the Hardwired CFL Fixtures?													
2010	99.22	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
4	0.78	100.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	2	*1*	*1*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
And in which month (or season)													
January	0.78	100.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	99.22	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
n	2	*1*	*1*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP25_7>Did you receive a rebate for the Hardwired CFL Fixtures?													
No	100.00	100.00	100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
n	2	*1*	*1*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP26_7> What type of lighting equipment was removed and replaced when you installed the Hardwired CFL Fixtures?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	100.00	100.00	100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
Incandescent	99.22	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	99.22	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	2	*1*	*1*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP27_7> Approximately how old was this lighting equipment that you removed?													
Less than 5 years old	0.78	100.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
More than 15 years old?	99.22	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
n	2	*1*	*1*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP28_7> How would you describe the condition of this removed equipment?													
In Poor condition	100.00	100.00	100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
n	2	*1*	*1*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP29_7> Approximately what percentage of this removed lighting equiment was broken or not working prior to installing the Hardwired CFL Fixtures?													
10	99.22	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
20	0.78	100.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	2	*1*	*1*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP2A_9> How many ...Compact Fluorescent Exit Signs did you purchase for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2B_9> How many ...COMPACT FLUORESCE did you purchase for your other locations?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP4_9> On a scale from 0 to 10, where Zero indicates you Strongly Disagree and 10 indicates you Strongly Agree, please rate the following statement. My experience with the 2010-2012 Program influenced my decision to install this high efficiency equipmen													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP5_9> Why do you give it this rating?													
Record REASON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP17_9> Why did you purchase this lighting without the financial assistance available through a utility program?													
Too much paperwork	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Takes too long to get approval	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Needed equipment immediately (no time to	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Program had ended	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipment would not qualify	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate wasn't important enough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Didn't know program was available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No program available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP19_9> Was this measure specifically recommended by a Program or Utility sponsored Audit, report or program technical specialist?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP20_9> If you had not participated in the Program, how likely is it that your organization would still have implemented this measure, using a 0 to 10 scale where 0 means you Definitely Would Not have implemented this measure and 10 means you Definitely													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP23_9> In what year did you install the Compact Fluorescent Exit Signs?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
And in which month (or season)													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP25_9> Did you receive a rebate for the Compact Fluorescent Exit Signs?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP26_9> What type of lighting equipment was removed and replaced when you installed the													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* Values are shown as percent of respondents weighted by kWh.

* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP27_9> Approximately how old was this lighting equipment that you removed?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP28_9> How would you describe the condition of this removed equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP29_9> Approximately what percentage of the removed replaced lighting equipment was broken or not working prior to installing?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2A_10> How many ...LED Exit Signs.. did you purchase for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2B_10> How many ...LED Exit Signs.. did you purchase for your other locations?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP4_10> On a scale from 0 to 10, where Zero indicates you Strongly Disagree and 10 indicates you Strongly Agree, please rate the following statement. My experience with the 2010-2012 Program influenced my decision to install this high efficiency equipme													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP5_10> Why do you give it this rating?													
Record REASON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP17_10> Why did you purchase this lighting without the financial assistance available through a utility program?													
Too much paperwork	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Takes too long to get approval	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Needed equipment immediately (no time to	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Program had ended	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipment would not qualify	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate wasn't important enough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Didn't know program was available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No program available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP19_10> Was this measure specifically recommended by a Program or Utility sponsored Audit, report or program technical specialist?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP20_10> If you had not participated in the Program, how likely is it that your organization would still have implemented this measure, using a 0 to 10 scale where 0 means you Definitely Would Not have implemented this measure and 10 means you Definitely													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP23_10> In what year did you install the LED Exit Signs?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
And in which month (or season)													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP25_10> Did you receive a rebate for the LED Exit Signs?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP26_10> What type of lighting equipment was removed and replaced when you installed the LED Exit Signs?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP27_10> Approximately how old was this lighting equipment that you removed?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP28_10> How would you describe the condition of this removed equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP29_10> Approximately what percentage of the removed replaced lighting equipment was broken or not working prior to installing													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP23_11> In what year did you install the Halogen lamps?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
And in which month (or season)													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP26_11> What type of lighting equipment was removed and replaced when you installed the													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP27_11> Approximately how old was this lighting equipment that you removed?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP28_11> How would you describe the condition of this removed equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP29_11> Approximately what percentage of the removed replaced lighting equipment was broken or not working prior to installing													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2A_12> How many ...REFLECTORS...did you purchase for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2B_12> How many ...REFLECTORS... did you purchase for your other locations?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP4_12> On a scale from 0 to 10, where Zero indicates you Strongly Disagree and 10 indicates you Strongly Agree, please rate the following statement. My experience with the 2010-2012 Program influenced my decision to install this high efficiency equipme													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP5_12> Why do you give it this rating?													
Record REASON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP17_12> Why did you purchase this lighting without the financial assistance available through a utility program?													
Too much paperwork	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Takes too long to get approval	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Needed equipment immediately (no time to	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Program had ended	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipment would not qualify	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate wasn't important enough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Didn't know program was available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No program available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP19_12> Was this measure specifically recommended by a Program or Utility sponsored Audit, report or program technical specialist?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP20_12> If you had not participated in the Program, how likely is it that your organization would still have implemented this measure, using a 0 to 10 scale where 0 means you Definitely Would Not have implemented this measure and 10 means you Definitely													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP23_12> In what year did you install the Reflectors?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
And in which month (or season)													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP25_12> Did you receive a rebate for the Reflectors?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP26_12> What type of lighting equipment was removed and replaced when you installed the Reflectors?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP27_12> Approximately how old was this lighting equipment that you removed?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP28_12> How would you describe the condition of this removed equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP29_12> Approximately what percentage of the removed replaced lighting equipment was broken or not working prior to installing													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP23_13> In what year did you install the ELECTRONIC BALLAST?													
+	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*
And in which month (or season)													
6	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*
<MSP26_13>What type of lighting equipment was removed and replaced when you installed the Electronic Ballast?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP27_13> Approximately how old was this lighting equipment that you removed?													
Between 5 and 10 years old	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*
<MSP28_13>How would you describe the condition of this removed equipment?													
In Poor condition	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*
<MSP29_13> Approximately what percentage of this removed lighting equipment was broken or working prior to installing the Electronic ballast?													
5	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*
<MSP23_14> In what year did you install the MAGNETIC BALLAST?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
And in which month (or season)													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP26_14>What type of lighting equipment was removed and replaced when you installed the MAGNETIC BALLAST?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP27_14> Approximately how old was this lighting equipment that you removed?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP28_14> How would you describe the condition of this removed equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP29_14> Approximately what percentage of this removed lighting equipment was broken or working prior to installing the MAGNETIC BALLAST?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2A_15> How many ...TIME CLOCK LIGHT did you purchase for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2B_15> How many ...TIME CLOCK LIGHT.. did you purchase for your other locations?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP4_15> On a scale from 0 to 10, where Zero indicates you Strongly Disagree and 10 indicates you Strongly Agree, please rate the following statement. My experience with the 2010-2012 Program influenced my decision to install this high efficiency equipme													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP5_15> Why do you give it this rating?													
Record REASON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP17_15> Why did you purchase this lighting without the financial assistance available through a utility program?													
Too much paperwork	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Takes too long to get approval	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Needed equipment immediately (no time to	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Program had ended	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipment would not qualify	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate wasn't important enough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Didn't know program was available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No program available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP19_15> Was this measure specifically recommended by a Program or Utility sponsored Audit, report or program technical specialist?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP20_15> If you had not participated in the Program, how likely is it that your organization would still have implemented this measure, using a 0 to 10 scale where 0 means you Definitely Would Not have implemented this measure and 10 means you Definitely													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP23_15> In what year did you install the Time Clock Lighting Controls?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
And in which month (or season)													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP25_15> Did you receive a rebate for the Time Clock Lighting Controls?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP26_15> What type of lighting equipment was removed and replaced when you installed the Time Clock Lighting Controls?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP27_15> Approximately how old was this lighting equipment that you removed?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP28_15> How would you describe the condition of this removed equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP29_15> Approximately what percentage of the removed replaced lighting equipment was broken or not working prior to installing													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2A_16> How many OCCUPANCY SENSOR LIGHTING CONTROLS did you purchase for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2B_16>How many OCCUPANCY SENSOR LIGHTING CONTROLS did you purchase for your other locations?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP4_16> On a scale from 0 to 10, where Zero indicates you Strongly Disagree and 10 indicates you Strongly Agree, please rate the following statement. My experience with the 2010-2012 Program influenced my decision to install this high efficiency equipme													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP5_16>Why do you give it this rating?													
Record REASON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP17_16>Why did you purchase this lighting without the financial assistance available through a utility program?													
Too much paperwork	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Takes too long to get approval	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Needed equipment immediately (no time to	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Program had ended	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipment would not qualify	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate wasn't important enough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Didn't know program was available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No program available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP19_16> Was this measure specifically recommended by a Program or Utility sponsored Audit, report or program technical specialist?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP20_16> If you had not participated in the Program, how likely is it that your organization would still have implemented this measure, using a 0 to 10 scale where 0 means you Definitely Would Not have implemented this measure and 10 means you Definitely													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP23_16> In what year did you install the OCCUPANCY SENSOR LIGHTING CONTROLS?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
And in which month (or season)													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP25_16> Did you receive a rebate for the OCCUPANCY SENSOR LIGHTING CONTROLS?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP26_16>What type of lighting equipment was removed and replaced when you installed the OCCUPANCY SENSOR LIGHTING CONTROLS?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP27_16> Approximately how old was this lighting equipment that you removed?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP28_16>How would you describe the condition of this removed equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP29_16> Approximately what percentage of this removed lighting equiment was broken or not working prior to installing the OCCUPANCY SENSOR LIGHTING CONTROLS?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2A_17> How many ...BYPASS/DELAY TIM did you purchase for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2B_17> How many ...BYPASS/DELAY TIM did you purchase for your other locations?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP4_17> On a scale from 0 to 10, where Zero indicates you Strongly Disagree and 10 indicates you Strongly Agree, please rate the following statement. My experience with the 2010-2012 Program influenced my decision to install this high efficiency equipme													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP5_17> Why do you give it this rating?													
Record REASON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP17_17> Why did you purchase this lighting without the financial assistance available through a utility program?													
Too much paperwork	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Takes too long to get approval	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Needed equipment immediately (no time to	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Program had ended	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipment would not qualify	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate wasn't important enough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Didn't know program was available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No program available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP19_17> Was this measure specifically recommended by a Program or Utility sponsored Audit, report or program technical specialist?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP20_17> If you had not participated in the Program, how likely is it that your organization would still have implemented this measure, using a 0 to 10 scale where 0 means you Definitely Would Not have implemented this measure and 10 means you Definitely													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP23_17> In what year did you install the Bypass/Delay Timers Lighting Controls?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
And in which month (or season)													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP25_17> Did you receive a rebate for the Bypass/Delay Timers Lighting Cont													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP26_17> What type of lighting equipment was removed and replaced when you installed the Bypass/Delay Timers Lighting Cont													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP27_17> Approximately how old was this lighting equipment that you removed?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP28_17> How would you describe the condition of this removed equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP29_17> Approximately what percentage of the removed replaced lighting equipment was broken or not working prior to installing													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2A_18> How many Photocell Lighting Controls did you purchase for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2B_18> How many Photocell Lighting Controls did you purchase for your other locations?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP4_18> On a scale from 0 to 10, where Zero indicates you Strongly Disagree and 10 indicates you Strongly Agree, please rate the following statement. My experience with the 2010-2012 Program influenced my decision to install this high efficiency equipme													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP5_18> Why do you give it this rating?													
Record REASON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP17_18> Why did you purchase this lighting without the financial assistance available through a utility program?													
Too much paperwork	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Takes too long to get approval	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Needed equipment immediately (no time to	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Program had ended	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipment would not qualify	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate wasn't important enough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Didn't know program was available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No program available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP19_18> Was this measure specifically recommended by a Program or Utility sponsored Audit, report or program technical specialist?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP20_18> If you had not participated in the Program, how likely is it that your organization would still have implemented this measure, using a 0 to 10 scale where 0 means you Definitely Would Not have implemented this measure and 10 means you Definitely													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP23_18> In what year did you install the Photocell Lighting Controls?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
And in which month (or season)													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP25_18> Did you receive a rebate for the Photocell Lighting Controls?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP26_18> What type of lighting equipment was removed and replaced when you installed the Photocell Lighting Controls?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP27_18> Approximately how old was this lighting equipment that you removed?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP28_18> How would you describe the condition of this removed equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP29_18> Approximately what percentage of the removed replaced lighting equipment was broken or not working prior to installing													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP23_19> In what year did you install the FLUORESCENT FIXTURES?													
+	97.84	0.00	97.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
4	2.16	0.00	2.16	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
n	2	*0*	2	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*1*
And in which month (or season)													
11	2.16	0.00	2.16	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
15	97.84	0.00	97.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
n	2	*0*	2	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*1*
<MSP26_19> What type of lighting equipment was removed and replaced when you installed the FLUORESCENT FIXTURES?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	97.84	0.00	97.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	2.16	0.00	2.16	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
n	2	*0*	2	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*1*
<MSP27_19> Approximately how old was this lighting equipment that you removed?													
Less than 5 years old	2.16	0.00	2.16	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Between 5 and 10 years old	97.84	0.00	97.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
n	2	*0*	2	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*1*
<MSP28_19> How would you describe the condition of this removed equipment?													
2010	2.16	0.00	2.16	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
2012	97.84	0.00	97.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
n	2	*0*	2	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*1*
<MSP29_19> Approximately what percentage of this removed lighting equiment was broken or not working prior to installing the FLUORESCENT FIXTURES?													
0	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00
n	2	*0*	2	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*1*
<MSP23_20> In what year did you install the Fat or Thicker FLUORESCENT FIXTURES?													
2	60.59	60.59	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	39.41	39.41	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
n	2	*2*	*0*	*1*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*
And in which month (or season)													
12	100.00	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*1*	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP26_20> What type of lighting equipment was removed and replaced when you installed the Fat or Thicker FLUORESCENT FIXTURES?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	60.59	60.59	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	39.41	39.41	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	2	2	0	1	0	0	0	1	0	0	0	0	0
<MSP27_20> Approximately how old was this lighting equipment that you removed?													
Don't Know	100.00	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	1	1	0	1	0	0	0	0	0	0	0	0	0
<MSP28_20>How would you describe the condition of this removed equipment?													
In Poor condition	100.00	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	1	1	0	1	0	0	0	0	0	0	0	0	0
<MSP29_20> Approximately what percentage of this removed lighting equiment was broken or not working prior to installing the Fat or Thicker FLUORESCENT FIXTURES?													
0	100.00	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	1	1	0	1	0	0	0	0	0	0	0	0	0
<MSP2A_21> How many SKINNY or THIN FLUORESCENT FIXTURESs did you purchase for this facility?													
4	4.60	0.00	4.80	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
25	4.28	100.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
9999	91.12	0.00	95.20	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	100.00
n	4	1	3	0	0	0	0	1	1	1	0	0	1
<MSP2B_21> How many SKINNY or THIN FLUORESCENT FIXTURES did you purchase for your other locations?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	0	0	0	0	0	0	0	0	0	0	0	0	0
<MSP4_21> On a scale from 0 to 10, where Zero indicates you Strongly Disagree and 10 indicates you Strongly Agree, please rate the following statement. My experience with the 2010-2012 Program influenced my decision to install this high efficiency equipme													
3	91.12	0.00	95.20	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	100.00
Zero Strongly disagree	8.88	100.00	4.80	0.00	0.00	0.00	0.00	100.00	0.00	100.00	0.00	0.00	0.00
n	4	1	3	0	0	0	0	1	1	1	0	0	1
<MSP5_21>Why do you give it this rating?													
Record REASON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	0	0	0	0	0	0	0	0	0	0	0	0	0
<MSP17_21>Why did you purchase this lighting without the financial assistance available through a utility program?													
Too much paperwork	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Takes too long to get approval	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Needed equipment immediately (no time to	85.70	0.00	89.54	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00
Program had ended	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipment would not qualify	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate wasn't important enough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Didn't know program was available	14.30	100.00	10.46	0.00	0.00	0.00	0.00	100.00	100.00	0.00	0.00	0.00	0.00
No program available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	4	1	3	0	0	0	0	1	1	1	0	0	1
<MSP19_21> Was this measure specifically recommended by a Program or Utility sponsored Audit, report or program technical specialist?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	0	0	0	0	0	0	0	0	0	0	0	0	0
<MSP20_21> If you had not participated in the Program, how likely is it that your organization would still have implemented this measure, using a 0 to 10 scale where 0 means you Definitely Would Not have implemented this measure and 10 means you Definitel													
*	100.00	100.00	100.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	0.00	0.00	100.00
n	4	1	3	0	0	0	0	1	1	1	0	0	1
<MSP23_21> In what year did you install the SKINNY or THIN FLUORESCENT FIXTURES?													
2012	10.01	0.00	10.46	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
4	89.99	100.00	89.54	0.00	0.00	0.00	0.00	100.00	0.00	100.00	0.00	0.00	100.00
n	4	1	3	0	0	0	0	1	1	1	0	0	1
And in which month (or season)													
March	94.89	100.00	94.63	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00
June	5.11	0.00	5.37	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
n	3	1	2	0	0	0	0	1	0	1	0	0	1
<MSP25_21> Did you receive a rebate for the SKINNY or THIN FLUORESCENT FIXTURES?													
No	100.00	100.00	100.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	0.00	0.00	100.00
n	4	1	3	0	0	0	0	1	1	1	0	0	1

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP26_21> What type of lighting equipment was removed and replaced when you installed the SKINNY or THIN FLUORESCENT FIXTURES?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	4.28	100.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	81.10	0.00	84.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	4.60	0.00	4.80	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	10.01	0.00	10.46	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
n	*4*	*1*	*3*	*0*	*0*	*0*	*0*	*1*	*1*	*1*	*0*	*0*	*1*
<MSP27_21> Approximately how old was this lighting equipment that you removed?													
Less than 5 years old	85.01	0.00	89.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Between 10 and 15 years old or	4.49	100.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
Don't Know	10.50	0.00	10.99	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
n	*3*	*1*	*2*	*0*	*0*	*0*	*0*	*1*	*1*	*0*	*0*	*0*	*1*
<MSP28_21> How would you describe the condition of this removed equipment?													
In Poor condition	100.00	100.00	100.00	0.00	0.00	0.00	0.00	100.00	100.00	0.00	0.00	0.00	100.00
n	*3*	*1*	*2*	*0*	*0*	*0*	*0*	*1*	*1*	*0*	*0*	*0*	*1*
<MSP29_21> Approximately what percentage of this removed lighting equiment was broken or not working prior to installing the SKINNY or THIN FLUORESCENT FIXTURES?													
20	4.49	100.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
80	85.01	0.00	89.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
100	10.50	0.00	10.99	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
n	*3*	*1*	*2*	*0*	*0*	*0*	*0*	*1*	*1*	*0*	*0*	*0*	*1*
<MSP2A_22>How many T5 FIXTURES did you purchase for this facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2B_22> How many T5 FIXTURES did you purchase for your other locations?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP4_22> On a scale from 0 to 10, where Zero indicates you Strongly Disagree and 10 indicates you Strongly Agree, please rate the following statement. My experience with the 2010-2012 Program influenced my decision to install this high efficiency equipme													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP5_22>Why do you give it this rating?													
Record REASON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP17_22>Why did you purchase this lighting without the financial assistance available through a utility program?													
Too much paperwork	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Takes too long to get approval	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Needed equipment immediately (no time to	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Program had ended	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipment would not qualify	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate wasn't important enough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Didn't know program was available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No program available	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP19_22> Was this measure specifically recommended by a Program or Utility sponsored Audit, report or program technical specialist?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP20_22> If you had not participated in the Program, how likely is it that your organization would still have implemented this measure, using a 0 to 10 scale where 0 means you Definitely Would Not have implemented this measure and 10 means you Definitely													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP23_22> In what year did you install the T5 FIXTURES?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
And in which month (or season)													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP25_22> Did you receive a rebate for the T5 FIXTURES?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP26_22> What type of lighting equipment was removed and replaced when you installed the T5 FIXTURES?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP27_22> Approximately how old was this lighting equipment that you removed?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP28_22> How would you describe the condition of this removed equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP29_22> Approximately what percentage of this removed lighting equiment was broken or not working prior to installing the T5 FIXTURES?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP2A_23> How many GENERIC SCREW BASED LED BULBS did you purchase for this facility?													
3	0.47	44.72	0.00	44.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.58	55.28	0.00	55.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200	98.96	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
n	*3*	*2*	*1*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP2B_23>How many GENERIC SCREW BASED LED BULBS did you purchase for your other locations?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP4_23> On a scale from 0 to 10, where Zero indicates you Strongly Disagree and 10 indicates you Strongly Agree, please rate the following statement. My experience with the 2010-2012 Program influenced my decision to install this high efficiency equipme													
10 STRONGLY AGREE	98.96	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
Zero Strongly disagree	1.04	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*3*	*2*	*1*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP5_23>Why do you give it this rating?													
Record REASON	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP17_23>Why did you purchase this lighting without the financial assistance available through a utility program?													
Too much paperwork	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Takes too long to get approval	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Needed equipment immediately (no time to	0.47	44.72	0.00	44.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Program had ended	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipment would not qualify	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rebate wasn't important enough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Didn't know program was available	0.58	55.28	0.00	55.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No program available	98.96	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*3*	*2*	*1*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP19_23> Was this measure specifically recommended by a Program or Utility sponsored Audit, report or program technical specialist?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<MSP20_23> If you had not participated in the Program, how likely is it that your organization would still have implemented this measure, using a 0 to 10 scale where 0 means you Definitely Would Not have implemented this measure and 10 means you Definitely													
4	98.96	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
10 DEFINITELY WOULD HAVE	1.04	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*3*	*2*	*1*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP23_23> In what year did you install the GENERIC SCREW BASED LED BULBS?													
2010	0.58	55.28	0.00	55.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	98.96	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
Don't Know	0.47	44.72	0.00	44.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*3*	*2*	*1*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
And in which month (or season)													
Don't Know	100.00	100.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
n	*2*	*1*	*1*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP25_23> Did you receive a rebate for the GENERIC SCREW BASED LED BULBS?													
No	100.00	100.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
n	*3*	*2*	*1*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP26_23> What type of lighting equipment was removed and replaced when you installed the GENERIC SCREW BASED LED BULBS?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	0.58	55.28	0.00	55.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	98.96	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generic LED (SCREW BASE)	0.47	44.72	0.00	44.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other -Record	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*3*	*2*	*1*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP27_23> Approximately how old was this lighting equipment that you removed?													
Less than 5 years old	0.58	55.28	0.00	55.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Between 5 and 10 years old	98.96	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
Don't Know	0.47	44.72	0.00	44.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*3*	*2*	*1*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP28_23> How would you describe the condition of this removed equipment?													
In Poor condition	0.47	44.72	0.00	44.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Good condition	99.53	55.28	100.00	55.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
n	*3*	*2*	*1*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP29_23> Approximately what percentage of this removed lighting equiment was broken or not working prior to installing the GENERIC SCREW BASED LED BULBS?													
0	98.96	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
1	0.58	55.28	0.00	55.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	0.47	44.72	0.00	44.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*3*	*2*	*1*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*
<MSP23_77> In what year did you install the OTHER FIXTURES?													
2010	35.84	31.55	36.34	0.00	46.81	78.33	0.00	0.00	0.00	48.70	21.79	37.79	63.81
2011	0.03	0.32	0.00	0.00	8.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012	2.81	8.23	2.18	0.00	0.00	21.67	0.00	0.00	29.89	17.16	7.36	0.00	0.00
4	61.32	59.89	61.48	100.00	44.76	0.00	100.00	100.00	70.11	34.14	70.85	62.21	36.19
n	*35*	*13*	*22*	*3*	*3*	*3*	*1*	*2*	*4*	*5*	*5*	*2*	*5*
And in which month (or season)													
March	2.19	14.72	0.74	69.09	0.00	0.00	0.00	27.67	27.61	17.16	0.00	0.00	0.00
April	1.87	0.00	2.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.10	0.00	0.00
June	1.61	2.68	1.48	30.91	0.00	0.00	0.00	0.00	57.84	29.79	0.00	0.00	0.00
August	0.19	1.83	0.00	0.00	0.00	4.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
September	41.53	17.56	44.32	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	62.21	0.00
October	2.74	0.00	3.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.60
November	1.05	2.11	0.92	0.00	44.76	0.00	0.00	0.00	0.00	4.35	4.61	0.00	0.00
December	6.47	29.76	3.76	0.00	0.00	78.33	0.00	0.00	0.00	0.00	21.79	0.00	0.00
Spring	2.97	22.83	0.66	0.00	0.00	0.00	0.00	72.33	0.00	0.00	0.00	0.00	7.89
Fall	8.38	0.00	9.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.14	0.00	0.00
Winter	4.73	6.41	4.53	0.00	0.00	16.86	0.00	0.00	14.55	0.00	7.36	0.00	35.40
Don't Know	26.27	2.12	29.08	0.00	55.24	0.00	0.00	0.00	0.00	48.70	0.00	37.79	20.12
n	*34*	*13*	*21*	*3*	*3*	*3*	*1*	*2*	*3*	*5*	*5*	*2*	*5*
<MSP26_77> What type of lighting equipment was removed and replaced when you installed the OTHER FIXTURES?													
High Performance T8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T8 fluorescent fixtures (1in. diameter b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T10 fluorescent fixtures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 Fixtures (1.5in. diameter bulbs)	0.12	0.39	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HID (High Intensity Discharge) Fixtures-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Fluorescent, Screw-in Modular	3.98	0.00	4.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.10	0.00	28.41
Compact Fluorescent, Hardwire	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incandescent	35.46	8.79	38.56	27.50	0.00	16.86	0.00	0.00	47.46	0.00	61.50	37.79	0.00
Generic LED (SCREW BASE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, Compact Fluorescent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exit Signs, LED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Halogen	42.86	17.56	45.80	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	62.21	20.12
Install Reflectors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnetic Ballast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Time Clock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Occupancy Sensor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Bypass/Delay Timers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lighting Controls, Photocell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fat/Thick Tubes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Skinny/Thin Tubes	0.06	0.62	0.00	3.41	8.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T5 Fixtures (5/8in. diameter)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nothing removed...new euqipment	11.33	35.74	8.50	69.09	0.00	78.33	0.00	0.00	22.66	56.85	21.79	0.00	43.58
Other -Record	4.03	5.73	3.83	0.00	91.57	4.81	0.00	0.00	17.95	43.15	16.71	0.00	0.00
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.91	8.73	0.00	0.00	0.00	0.00	0.00	27.67	0.00	0.00	0.00	0.00	0.00
n	*35*	*13*	*22*	*3*	*3*	*3*	*1*	*2*	*4*	*5*	*5*	*2*	*5*
<MSP27_77> Approximately how old was this lighting equipment that you removed?													
Less than 5 years old	59.59	43.26	60.92	0.00	100.00	77.80	100.00	0.00	0.00	60.23	84.53	62.21	0.00
Between 5 and 10 years old	11.29	53.29	7.87	100.00	0.00	0.00	0.00	100.00	100.00	39.77	15.47	0.00	64.34
Between 10 and 15 years old or	1.91	2.84	1.83	0.00	0.00	22.20	0.00	0.00	0.00	0.00	0.00	0.00	35.66
More than 15 years old?	27.22	0.61	29.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.79	0.00
n	*27*	*11*	*16*	*2*	*3*	*2*	*1*	*2*	*3*	*3*	*4*	*2*	*3*
<MSP28_77> How would you describe the condition of this removed equipment?													
In Poor condition	34.26	17.55	35.62	0.00	8.43	22.20	0.00	27.67	15.44	39.77	21.36	37.79	50.36
Fair condition or	18.65	52.46	16.12	100.00	46.81	77.80	0.00	72.33	84.56	50.15	78.64	0.00	49.64
Good condition	46.89	30.00	48.26	0.00	44.76	0.00	100.00	0.00	0.00	10.08	0.00	62.21	0.00
n	*27*	*11*	*16*	*2*	*3*	*2*	*1*	*2*	*3*	*3*	*4*	*2*	*3*

* Values are shown as percent of respondents weighted by kWh.

* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<MSP29_77>Approximately what percentage of this removed lighting equiment was broken or not working prior to installing the OTHER FIXTURES?													
0	15.47	9.68	15.94	100.00	44.76	22.20	0.00	0.00	76.80	10.08	84.70	0.00	35.66
1	3.34	35.53	0.72	0.00	0.00	0.00	0.00	72.33	0.00	0.00	0.00	0.00	13.98
10	75.76	37.30	78.89	0.00	0.00	77.80	100.00	0.00	0.00	0.00	9.41	100.00	0.00
30	0.45	0.00	0.49	0.00	0.00	0.00	0.00	0.00	23.20	0.00	0.00	0.00	0.00
40	0.17	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	39.77	0.00	0.00	0.00
50	3.32	0.61	3.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.90	0.00	50.36
100	1.49	16.89	0.23	0.00	55.24	0.00	0.00	27.67	0.00	50.15	0.00	0.00	0.00
n	*27*	*11*	*16*	*2*	*3*	*2*	*1*	*2*	*3*	*3*	*4*	*2*	*3*
<LI30_A> Considering all of the lighting changes we just discussed (purchases outside the programs), approximately what percentage of the facility's lighting was affected by those changes?													
0 Percent	24.95	7.13	28.21	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	44.63	0.00
Between 0 and 15 Percent	39.71	65.23	35.05	19.14	32.48	79.44	0.00	94.64	79.16	68.81	18.06	34.81	36.34
Between 15 and 30 Percent	19.80	18.17	20.10	29.38	67.52	4.56	0.00	0.00	14.62	20.38	43.12	20.56	1.76
Between 30 and 45 Percent	6.09	1.10	7.01	0.00	0.00	0.00	0.00	2.39	0.00	0.00	29.29	0.00	16.90
Between 45 and 60 Percent	2.81	3.94	2.60	5.21	0.00	16.00	0.00	1.99	6.23	0.00	5.86	0.00	8.63
Between 60 and 80 Percent	0.87	2.87	0.51	34.76	0.00	0.00	0.00	0.00	0.00	0.00	3.67	0.00	0.00
Between 80 and 100 Percent	2.57	1.11	2.84	11.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.91
Don't Know	3.19	0.45	3.69	0.00	0.00	0.00	0.00	0.98	0.00	10.81	0.00	0.00	20.46
n	*79*	*33*	*46*	*9*	*6*	*4*	*1*	*12*	*11*	*9*	*7*	*4*	*14*
<CL1> What type of equipment is used to cool this facility?													
No A/C	5.47	5.62	5.41	8.39	5.02	2.16	9.08	5.25	3.62	18.91	0.56	0.41	9.79
Split system-compressor is separate from	11.84	10.12	12.45	18.18	19.77	8.82	0.00	3.92	16.70	0.00	2.74	16.99	11.74
Packaged system-(one component-rooftop u	75.08	77.37	74.28	60.58	72.35	84.53	69.43	87.47	73.33	80.26	94.22	66.16	74.99
Package Terminal A/C or Heat Pump (Hotel	0.06	0.22	0.00	0.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evaporative coolers (swamp coolers)	1.98	2.06	1.96	3.02	0.54	3.44	0.00	1.52	0.05	20.00	5.49	0.00	0.71
Water or Air Chiller (Central plant)	0.34	0.15	0.40	0.62	0.00	0.00	0.00	0.00	3.31	0.00	0.00	0.00	0.00
Window/Wall Units	1.46	3.40	0.78	9.09	1.18	0.00	0.00	2.63	2.33	0.00	0.00	0.00	1.29
Other	0.46	0.49	0.45	0.00	0.27	0.00	0.00	1.20	0.00	0.00	0.00	0.00	1.18
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	9.89	2.26	12.56	1.84	1.01	1.05	21.49	0.69	4.26	0.83	0.00	33.44	2.52
n	*559*	*277*	*282*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<CL2> What is the primary fuel used by this cooling equipment?													
Electricity	78.83	86.75	76.06	86.14	89.27	91.29	76.36	85.43	79.29	71.90	92.43	67.08	78.82
Natural Gas	3.09	4.60	2.56	7.44	4.23	0.00	0.00	5.97	3.61	13.79	0.00	0.00	4.05
Both Electricity and Gas	5.92	4.10	6.56	1.23	6.00	8.71	0.00	3.47	15.08	9.23	7.57	0.00	9.26
Don't Know	12.16	4.56	14.82	5.19	0.50	0.00	23.64	5.13	2.03	5.09	0.00	32.92	7.88
n	*500*	*248*	*252*	*100*	*36*	*30*	*2*	*80*	*87*	*39*	*32*	*9*	*85*
<R1> What kinds of refrigeration equipment, if any, is present at your facility?													
Residential Sized Refrigerator	41.06	35.05	43.16	58.96	20.98	6.57	69.43	33.31	43.93	6.13	2.93	66.03	40.02
Residential Sized Freezer	3.27	4.28	2.92	1.02	5.89	14.75	0.00	1.22	3.02	9.91	3.27	0.00	4.31
Larger Standard Refrigerator (>30 cubic	8.05	9.74	7.46	2.34	37.54	20.45	0.00	1.60	5.99	47.97	23.59	0.00	4.03
Self Contained - Coffin/Horizontal Case	3.07	6.18	1.99	0.00	21.37	3.75	0.00	7.42	0.00	14.66	8.95	0.00	0.55
Self Contained - Vertical Case (multi sh	2.00	2.95	1.67	0.00	13.53	6.16	0.00	0.28	0.00	13.11	7.08	0.00	0.48
Single-Deck display cases - Open single-	3.12	3.80	2.88	0.62	7.69	13.27	0.00	0.39	2.25	16.07	3.27	0.00	3.61
Single-Deck display cases - Closed servi	2.04	3.13	1.67	0.00	13.83	7.42	0.00	0.00	0.00	24.12	3.37	0.00	0.00
Single-Deck display cases - Island coffi	1.28	1.94	1.05	0.00	2.87	8.25	0.00	0.00	0.00	10.90	4.18	0.00	0.00
Single-Deck display cases - Coffin/tub (	1.18	1.51	1.06	0.62	3.88	4.59	0.00	0.00	2.25	14.71	0.00	0.00	0.00
Multi-Deck (vertical) display cases - Op	1.70	1.83	1.65	0.00	1.92	7.51	0.00	0.39	0.00	6.41	0.69	0.00	3.20
Multi-Deck (vertical) display cases - Gl	3.16	4.63	2.64	0.00	13.93	0.89	0.00	7.21	0.00	18.53	0.53	0.00	4.14
Walk-Ins and Preparation Areas - Freezer	14.52	16.27	13.90	1.37	43.93	50.33	0.00	2.25	4.29	46.81	52.65	12.88	2.10
Walk-Ins and Preparation Areas - Cooler/	18.57	25.06	16.29	6.56	66.60	69.62	0.00	4.89	10.77	65.02	72.78	0.00	8.99
NONE-no refrigeration equipment	11.35	17.90	9.06	19.54	0.00	0.00	9.08	32.96	16.63	0.00	0.00	6.00	13.17
Other	9.64	2.99	11.97	0.96	0.71	11.92	0.00	0.98	6.94	10.66	9.27	16.99	10.21
Refused	0.08	0.29	0.00	0.00	2.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	7.54	1.62	9.62	0.00	0.00	0.00	21.49	1.07	0.00	0.00	0.00	27.97	1.01
n	*559*	*277*	*282*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<G1> Which of the following natural gas equipment is present at your facility?													
Water Heater	40.62	49.23	37.61	36.43	85.89	70.15	78.51	30.79	42.57	66.56	82.18	36.28	20.35
Furnace	31.28	26.36	33.01	29.52	27.50	23.43	78.51	17.66	36.06	54.50	29.56	49.84	15.61
Boiler	3.39	5.00	2.82	1.30	10.82	17.43	0.00	0.00	6.29	15.27	11.21	0.00	0.00
Stove	17.71	22.67	15.98	11.08	48.09	70.89	0.00	1.02	17.24	69.33	71.32	0.00	5.95
Clothes Dryer	2.72	5.75	1.66	0.78	24.29	6.51	0.00	3.46	2.09	1.17	0.35	0.00	3.40
NONE- DO NOT HAVE NATURAL GAS	32.06	34.37	31.25	48.64	7.45	4.59	0.00	53.95	48.79	11.45	0.00	4.82	60.11
Other	0.39	0.38	0.40	0.00	3.09	0.00	0.00	0.00	0.00	0.42	0.44	0.00	0.85
Refused	0.08	0.29	0.00	0.00	2.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	13.56	4.14	16.85	2.07	0.00	0.14	21.49	6.26	1.05	0.00	1.24	41.91	7.17
n	*559*	*277*	*282*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<GH1> Do you have greenhouses at your facility?													
No	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
n	*559*	*277*	*282*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<GH2> How many square feet of greenhouses do you have at your facility?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<ST1> Do you have steamtraps at your facility?													
Yes	0.09	0.04	0.10	0.12	0.00	0.05	0.00	0.00	0.00	1.93	0.00	0.00	0.00
No	90.12	94.43	88.61	99.74	99.73	93.38	30.57	99.28	99.74	96.93	97.07	67.56	99.56
Don't Know	9.80	5.53	11.29	0.15	0.27	6.57	69.43	0.72	0.26	1.14	2.93	32.44	0.44
n	*559*	*277*	*282*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<ST2> How many steamtraps are currently installed at your facility?													
1 to 10	91.41	23.57	100.00	0.00	0.00	100.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
11 to 50	8.59	76.43	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*5*	*2*	*3*	*1*	*0*	*1*	*0*	*0*	*0*	*3*	*0*	*0*	*0*
<M1> Do you currently have any motors installed at your facility?													
Yes	17.11	12.66	18.67	13.42	30.97	18.37	0.00	5.24	18.95	18.29	12.97	29.87	10.68
No	82.89	87.34	81.33	86.58	69.03	81.63	100.00	94.76	81.05	81.71	87.03	70.13	89.32
n	*559*	*277*	*282*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<M2> How many motors are currently installed at your facility?													
1	72.62	74.15	72.26	92.00	43.53	85.32	0.00	83.23	86.70	76.05	90.89	56.88	93.68
2	7.14	16.24	4.98	8.00	24.58	14.68	0.00	16.77	13.30	23.95	9.11	0.00	6.32
6	20.24	9.60	22.76	0.00	31.88	0.00	0.00	0.00	0.00	0.00	0.00	43.12	0.00
n	*83*	*41*	*42*	*15*	*8*	*6*	*0*	*12*	*9*	*12*	*6*	*2*	*13*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<M3> What two or three applications account for most of the motor energy used in your facility?													
Pumping	4.85	10.45	3.52	7.67	0.00	26.77	0.00	6.17	11.85	0.00	14.03	0.00	4.50
Fans/Blowers	12.66	9.56	13.40	2.55	29.51	0.00	0.00	0.00	1.44	52.32	61.96	0.00	26.00
Compressed Air	11.24	20.13	9.13	41.08	0.00	14.68	0.00	33.36	9.82	25.79	9.11	0.00	26.66
Materials handling (conveyor belts)	1.47	5.02	0.62	0.62	16.14	0.00	0.00	0.00	0.00	1.80	0.00	0.00	2.41
Production process machinery	2.32	3.89	1.95	0.62	0.00	0.00	0.00	23.66	0.00	0.00	0.00	0.00	8.85
Ventilation/HVAC	28.79	29.00	28.74	3.44	21.88	66.16	0.00	19.47	6.28	43.57	38.04	43.12	0.00
Boiler fans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	10.22	21.62	7.51	43.90	0.00	33.84	0.00	4.23	46.07	5.08	0.00	0.00	7.18
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	1.84	9.60	0.00	0.00	31.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*83*	*41*	*42*	*15*	*8*	*6*	*0*	*12*	*9*	*12*	*6*	*2*	*13*
<OT2> Besides what we have already covered, since January 2009, have you added or replaced other equipment that is expected to significantly affect overall energy consumption?													
Yes	6.93	11.08	5.48	11.75	8.56	17.62	0.00	9.80	17.04	10.09	10.95	0.00	4.31
No	89.86	88.92	90.19	88.25	91.44	82.38	100.00	90.20	82.96	88.37	89.05	87.12	95.69
Don't Know	3.21	0.00	4.33	0.00	0.00	0.00	0.00	0.00	0.00	1.54	0.00	12.88	0.00
n	*559*	*277*	*282*	*106*	*38*	*34*	*3*	*96*	*93*	*43*	*34*	*10*	*102*
<OT3> Which of the following types of equipment were installed since January 2010?													
Food Service Equipment	21.34	20.60	21.87	5.67	0.00	62.55	0.00	0.00	11.98	24.87	67.36	0.00	0.00
Water Heating Equipment	4.36	4.82	4.03	0.56	0.00	15.30	0.00	0.00	4.36	0.00	10.78	0.00	0.00
Outdoor Lighting Equipment or	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Air Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	24.46	28.21	21.80	73.27	58.37	0.00	0.00	10.17	24.02	3.26	0.00	0.00	40.99
Refrigeration Equipment	12.12	17.98	7.97	12.34	8.09	37.19	0.00	7.74	0.00	7.64	32.64	0.00	0.00
Gas Equipment	5.07	3.27	6.34	0.00	33.53	0.26	0.00	0.00	0.00	64.24	0.00	0.00	0.00
Record	26.07	27.46	25.08	6.75	0.00	3.74	0.00	72.88	19.07	0.00	0.00	0.00	59.01
Refused	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*48*	*26*	*22*	*8*	*4*	*7*	*0*	*7*	*10*	*5*	*4*	*0*	*3*
<OT7_1> What was the efficiency level of the Food Service Equipment?													
Energy Star	79.25	90.28	71.89	0.00	0.00	97.31	0.00	0.00	0.00	33.59	100.00	0.00	0.00
Don't Know	20.75	9.72	28.11	100.00	0.00	2.69	0.00	0.00	100.00	66.41	0.00	0.00	0.00
n	*8*	*3*	*5*	*1*	*0*	*2*	*0*	*0*	*1*	*2*	*2*	*0*	*0*
<OT10_1> In what year did you install the Food Service Equipment?													
2009	1.59	0.00	2.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.90	0.00	0.00
2010	15.28	7.23	20.66	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
2011	4.47	0.00	7.46	0.00	0.00	0.00	0.00	0.00	0.00	66.41	0.00	0.00	0.00
2012	2.26	0.00	3.77	0.00	0.00	0.00	0.00	0.00	0.00	33.59	0.00	0.00	0.00
2013	76.39	92.77	65.46	0.00	0.00	100.00	0.00	0.00	0.00	0.00	96.10	0.00	0.00
n	*8*	*3*	*5*	*1*	*0*	*2*	*0*	*0*	*1*	*2*	*2*	*0*	*0*
<OT11_1> And can you recall the month?													
February	1.00	2.49	0.00	0.00	0.00	2.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00
June	1.59	0.00	2.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.90	0.00	0.00
December	2.26	0.00	3.77	0.00	0.00	0.00	0.00	0.00	0.00	33.59	0.00	0.00	0.00
Summer	79.87	90.28	72.91	0.00	0.00	97.31	0.00	0.00	0.00	66.41	96.10	0.00	0.00
Don't Know	15.28	7.23	20.66	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
n	*8*	*3*	*5*	*1*	*0*	*2*	*0*	*0*	*1*	*2*	*2*	*0*	*0*
<OT18_1> Did you receive a rebate for the Food Service Equipment?													
Yes	95.13	100.00	91.06	0.00	0.00	100.00	0.00	0.00	0.00	0.00	96.10	0.00	0.00
No	4.87	0.00	8.94	0.00	0.00	0.00	0.00	0.00	0.00	100.00	3.90	0.00	0.00
n	*4*	*1*	*3*	*0*	*0*	*1*	*0*	*0*	*0*	*1*	*2*	*0*	*0*
<OT7_2> What was the efficiency level of the Water Heating Equipment?													
Standard Efficiency	76.50	96.94	59.16	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
High Efficiency	23.50	3.06	40.84	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
n	*4*	*2*	*2*	*1*	*0*	*1*	*0*	*0*	*1*	*0*	*1*	*0*	*0*
<OT10_2> In what year did you install the Water Heating Equipment?													
2012	76.50	96.94	59.16	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
2013	23.50	3.06	40.84	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
n	*4*	*2*	*2*	*1*	*0*	*1*	*0*	*0*	*1*	*0*	*1*	*0*	*0*
<OT11_2> And can you recall the month?													
August	23.50	3.06	40.84	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
September	76.50	96.94	59.16	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*4*	*2*	*2*	*1*	*0*	*1*	*0*	*0*	*1*	*0*	*1*	*0*	*0*
<OT18_2> Did you receive a rebate for the Water Heating Equipment													
No	100.00	100.00	100.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
n	*2*	*1*	*1*	*1*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*
<OT7_3> What was the efficiency level of Outdoor Lighting Equipment ?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<OT10_3> In what year did you install the Outdoor Lighting Equipment ?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<OT11_3> And can you recall the month?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<OT18_3> Did you receive a rebate for the Outdoor Lighting Equipment ?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<OT7_4> What was the efficiency level of the Compressed Air Equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<OT10_4> In what year did you install the Compressed Air Equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<OT11_4> And can you recall the month?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
<OT18_4> Did you receive a rebate for the Compressed Air Equipment?													
.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

	ALL	LED Lamp(s)(%)	LED Reflector(s)(%)	LED Lamp(s) Office - Small(%)	LED Lamp(s) Restaurant - Fast Food(%)	LED Lamp(s) Restaurant - Sit Down(%)	LED Lamp(s) Retail - Large(%)	LED Lamp(s) Retail - Small(%)	LED Reflector(s) Office - Small(%)	LED Reflector(s) Restaurant - Fast Food(%)	LED Reflector(s) Restaurant - Sit Down(%)	LED Reflector(s) Retail - Large(%)	LED Reflector(s) Retail - Small(%)
<OT7_5> What was the efficiency level of the HVAC Cooling Equipment?													
Standard Efficiency	10.19	19.69	1.48	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
High Efficiency	19.64	6.44	31.75	8.89	0.00	0.00	0.00	3.11	67.48	0.00	0.00	0.00	6.53
Energy Star	33.09	11.09	53.27	0.00	0.00	0.00	0.00	91.37	0.00	0.00	0.00	0.00	93.47
Don't Know	37.08	62.78	13.51	91.11	0.00	0.00	0.00	5.52	32.52	0.00	0.00	0.00	0.00
n	*14*	*7*	*7*	*3*	*1*	*0*	*0*	*3*	*4*	*1*	*0*	*0*	*2*
<OT10_5> In what year did you install the HVAC Cooling Equipment?													
2010	33.09	11.09	53.27	0.00	0.00	0.00	0.00	91.37	0.00	0.00	0.00	0.00	93.47
2011	1.94	0.00	3.73	0.00	0.00	0.00	0.00	0.00	8.98	0.00	0.00	0.00	0.00
2012	2.44	1.05	3.72	0.00	0.00	0.00	0.00	8.63	0.00	0.00	0.00	0.00	6.53
2013	62.52	87.86	39.28	100.00	100.00	0.00	0.00	0.00	91.02	100.00	0.00	0.00	0.00
n	*14*	*7*	*7*	*3*	*1*	*0*	*0*	*3*	*4*	*1*	*0*	*0*	*2*
<OT11_5> And can you recall the month?													
August	33.09	11.09	53.27	0.00	0.00	0.00	0.00	91.37	0.00	0.00	0.00	0.00	93.47
October	34.81	62.11	9.78	91.11	0.00	0.00	0.00	0.00	23.55	0.00	0.00	0.00	0.00
November	3.29	1.17	5.23	1.72	0.00	0.00	0.00	0.00	12.60	0.00	0.00	0.00	0.00
December	14.23	4.89	22.79	7.17	0.00	0.00	0.00	0.00	54.88	0.00	0.00	0.00	0.00
Summer	2.12	0.38	3.72	0.00	0.00	0.00	0.00	3.11	0.00	0.00	0.00	0.00	6.53
Don't Know	12.46	20.36	5.20	0.00	100.00	0.00	0.00	5.52	8.98	100.00	0.00	0.00	0.00
n	*14*	*7*	*7*	*3*	*1*	*0*	*0*	*3*	*4*	*1*	*0*	*0*	*2*
<OT18_5> Did you receive a rebate for the HVAC Cooling Equipment?													
No	100.00	100.00	100.00	100.00	0.00	0.00	0.00	100.00	100.00	0.00	0.00	0.00	100.00
n	*8*	*4*	*4*	*2*	*0*	*0*	*0*	*2*	*2*	*0*	*0*	*0*	*2*
<OT7_6> What was the efficiency level of the Refrigeration Equipment?													
Standard Efficiency	37.00	35.52	39.36	0.00	73.77	51.21	0.00	0.00	0.00	100.00	33.03	0.00	0.00
High Efficiency	9.61	15.63	0.00	0.00	26.23	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
Energy Star	42.30	30.83	60.64	0.00	0.00	48.79	0.00	0.00	0.00	0.00	66.97	0.00	0.00
Don't Know	11.08	18.02	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	*12*	*9*	*3*	*1*	*2*	*4*	*0*	*2*	*0*	*1*	*2*	*0*	*0*
<OT10_6> In what year did you install the the Refrigeration Equipment?													
2009	1.26	2.04	0.00	0.00	26.23	0.00	0.00	6.34	0.00	0.00	0.00	0.00	0.00
2010	5.27	8.56	0.00	0.00	0.00	13.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012	9.49	9.52	9.46	0.00	73.77	10.05	0.00	0.00	0.00	100.00	0.00	0.00	0.00
2013	83.98	79.88	90.54	100.00	0.00	76.39	0.00	93.66	0.00	0.00	100.00	0.00	0.00
n	*12*	*9*	*3*	*1*	*2*	*4*	*0*	*2*	*0*	*1*	*2*	*0*	*0*
<OT11_6> And can you recall the month?													
January	37.03	22.27	60.64	0.00	0.00	35.24	0.00	0.00	0.00	0.00	66.97	0.00	0.00
February	0.69	1.12	0.00	0.00	26.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
August	3.91	6.35	0.00	0.00	0.00	10.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
November	27.51	26.01	29.91	0.00	0.00	41.16	0.00	0.00	0.00	0.00	33.03	0.00	0.00
Winter	8.36	13.58	0.00	0.00	0.00	0.00	0.00	93.66	0.00	0.00	0.00	0.00	0.00
Summer	11.65	18.94	0.00	100.00	0.00	0.00	0.00	6.34	0.00	0.00	0.00	0.00	0.00
Don't Know	10.85	11.73	9.46	0.00	73.77	13.55	0.00	0.00	0.00	100.00	0.00	0.00	0.00
n	*12*	*9*	*3*	*1*	*2*	*4*	*0*	*2*	*0*	*1*	*2*	*0*	*0*
<OT18_6> Did you receive a rebate for the Refrigeration Equipment?													
No	28.67	52.07	0.00	0.00	100.00	27.78	0.00	100.00	0.00	0.00	0.00	0.00	0.00
Don't Know	71.33	47.93	100.00	0.00	0.00	72.22	0.00	0.00	0.00	0.00	100.00	0.00	0.00
n	*6*	*5*	*1*	*0*	*1*	*2*	*0*	*2*	*0*	*0*	*1*	*0*	*0*
<OT7_7> What was the efficiency level of the Gas Equipment?													
High Efficiency	0.65	2.43	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy Star	99.35	97.57	100.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
n	*3*	*2*	*1*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*0*	*0*	*0*
<OT10_7> In what year did you install the Gas Equipment?													
2011	0.65	2.43	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	99.35	97.57	100.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
n	*3*	*2*	*1*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*0*	*0*	*0*
<OT11_7> And can you recall the month?													
April	0.65	2.43	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
December	99.35	97.57	100.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
n	*3*	*2*	*1*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*0*	*0*	*0*
<OT18_7> Did you receive a rebate for the Gas Equipment?													
No	100.00	100.00	100.00	0.00	100.00	100.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
n	*3*	*2*	*1*	*0*	*1*	*1*	*0*	*0*	*0*	*1*	*0*	*0*	*0*
<OT7_77> What was the efficiency level of the other equipment?													
Standard Efficiency	27.03	1.66	40.32	22.59	0.00	0.00	0.00	0.00	70.20	0.00	0.00	0.00	0.00
High Efficiency	10.87	3.68	14.64	0.00	0.00	100.00	0.00	0.00	25.48	0.00	0.00	0.00	0.00
Energy Star	55.09	78.98	42.56	0.00	0.00	0.00	0.00	88.78	0.00	0.00	0.00	0.00	100.00
Don't Know	7.02	15.68	2.48	77.41	0.00	0.00	0.00	11.22	4.31	0.00	0.00	0.00	0.00
n	*12*	*6*	*6*	*3*	*0*	*1*	*0*	*2*	*5*	*0*	*0*	*0*	*1*
<OT10_77> In what year did you install of the other equipment?													
2009	20.99	0.00	31.99	0.00	0.00	0.00	0.00	0.00	55.69	0.00	0.00	0.00	0.00
2010	55.09	78.98	42.56	0.00	0.00	0.00	0.00	88.78	0.00	0.00	0.00	0.00	100.00
2011	9.60	0.00	14.64	0.00	0.00	0.00	0.00	0.00	25.48	0.00	0.00	0.00	0.00
2012	7.75	9.37	6.90	77.41	0.00	100.00	0.00	0.00	12.01	0.00	0.00	0.00	0.00
2013	6.57	11.64	3.92	22.59	0.00	0.00	0.00	11.22	6.82	0.00	0.00	0.00	0.00
n	*12*	*6*	*6*	*3*	*0*	*1*	*0*	*2*	*5*	*0*	*0*	*0*	*1*
<OT11_77> And can you recall the month?													
August	1.31	3.90	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
September	0.42	1.26	0.00	71.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
November	2.83	0.50	4.02	28.57	0.00	0.00	0.00	0.00	7.13	0.00	0.00	0.00	0.00
December	3.56	10.58	0.00	0.00	0.00	0.00	0.00	11.22	0.00	0.00	0.00	0.00	0.00
Spring	57.14	83.76	43.65	0.00	0.00	0.00	0.00	88.78	0.00	0.00	0.00	0.00	100.00
Summer	3.01	0.00	4.53	0.00	0.00	0.00	0.00	0.00	8.04	0.00	0.00	0.00	0.00
Don't Know	31.72	0.00	47.81	0.00	0.00	0.00	0.00	0.00	84.83	0.00	0.00	0.00	0.00
n	*10*	*5*	*5*	*2*	*0*	*1*	*0*	*2*	*4*	*0*	*0*	*0*	*1*
<OT18_77> Did you receive a rebate for the other equipment?													
No	85.44	100.00	74.41	0.00	0.00	100.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00
Don't Know	14.56	0.00	25.59	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
n	*4*	*2*	*2*	*0*	*0*	*1*	*0*	*1*	*1*	*0*	*0*	*0*	*1*

* Values are shown as percent of respondents weighted by kWh.
* n is the number of respondents.

Appendix E

Lighting Logger Field Installation Procedures

This appendix contains the procedures for installing lighting loggers in commercial establishments for the Nonresidential Downstream Lighting Impact Evaluation of the 2010-2012 Investor-Owned Utilities' (IOU) energy efficiency programs. It presents an overview of the objectives and describes the equipment and materials used for the study, initialization and programming of the data loggers, the procedures to be used for installing and extracting the loggers, and the procedures for panel metering and circuit spot measurements.

Please note that this appendix contains materials taken directly from the procedure and guideline documents provided to the onsite surveyors, and therefore are written in a future tense on what the surveyors should do on-site.

Sections of this appendix are as follows.

E.1 Technologies Monitored

Lighting loggers will be used to obtain annual equivalent full load hour estimates and load shapes for seven high-impact measures (HIM) lighting technologies: Indoor – CFL Basic, CFL Reflectors, Occupancy Sensors, HIDs, High Bay Fluorescents, Linear Fluorescents, and Linear Fluorescent Delamping. The following are brief descriptions of each technology monitored:

- **Indoor CFL – Basic (CFL).** These are either screw-in CFLs or pin-based fixtures. For these measures, the counts and measure descriptions are available from the IOU tracking database.

- **Indoor CFL – Reflector (CFLr).** These are either screw-in CFLs or pin-based fixtures where the CFL shape is that of a reflector, flood, or PAR. For these measures, the counts and measure descriptions are available from the IOU tracking database.
- **Indoor Controls – Occupancy Sensor (OCC).** These are any type of occupancy sensor that controls indoor lighting. These will typically be mounted on indoor walls, ceilings, or integrated into the lighting fixture.
- **Indoor HID (HID).** These are high intensity discharge lamps with the most common being metal halide and ceramic metal halide.
- **Indoor High Bay Fluorescent (HBF).** These are typically four to six lamp T8 or T5HO fixtures used in a high bay (fixtures greater than 12 ft. in height) space. They typically replace HID lighting or HO T12s.
- **Indoor Linear Fluorescents (LF).** These are non-high bay linear fluorescent fixtures, typically converted and/or delamped from T12s, but other baseline technologies (less efficient T8s, incandescent, mercury vapor, etc.) are possible.
- **Indoor Linear Fluorescent Delamping (LFD).** Typically these are done in conjunction with a linear fluorescent retrofit where the fixture configuration installed has fewer lamps per fixture than the fixture that was replaced.

E.2 Equipment and Installation Materials

This section contains a description of the lighting loggers used for this study, and the materials needed to install them.

E.2.1 Lighting Data Loggers

Dent Instruments (DENT) and/or Onset Computer Corporation (HOBO) data loggers will be used for this study. The three data logger models that will be used are:

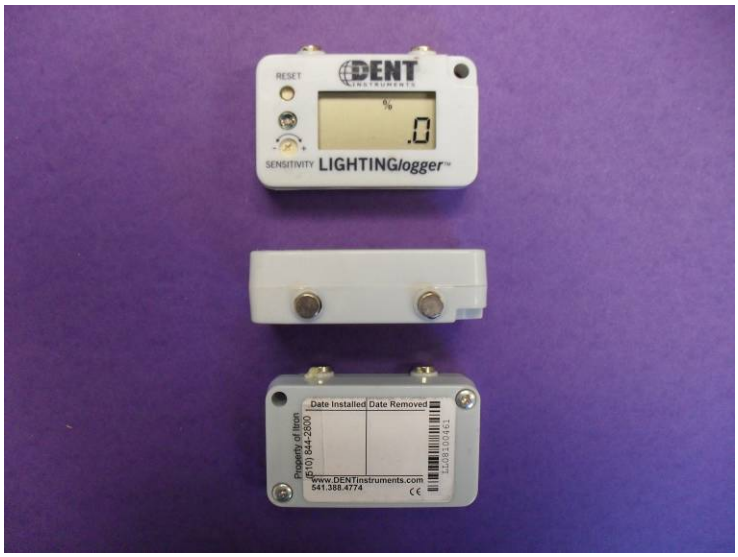
- DENT LIGHTING*logger (LL or LC).* This is the project default, and will be used for all HIM lighting technologies whenever possible. These loggers are installed on or in the vicinity of lighting fixtures and follow the installation guidelines set forth in Section E.4 below.
- DENT CT*logger (CT).* The CT (current tranducer) logger will be used for HIM lighting technologies in plug-in or high bay applications where fixtures are not accessible and do not have integrated occupancy sensors. When used in high bay applications the logger will be installed in the electric panel and follows installation guidelines set forth in Section E.7 below.

- Onset HOBO U12-006 (*HOBO*). This is a four channel logger that when used in combination with Onset split-core current transducers (CTV/A/B/C) records current levels flowing through a circuit at pre-defined time intervals. This logger and current transducer combination will be used for high bay applications where fixtures are controlled by integrated occupancy sensors. These loggers are also installed in electric panels and follow the installation guidelines in Section E.7 below.

Each data logger is described briefly below.

DENT LIGHTING*logger*™ (TOUL-3G)**.** This is a time-of-use (TOU) logger that monitors on/off events and is the default data logger installed on the majority of measures seen throughout the project. The data logger is shown in Figure E-1. Both the photocell sensor and adjustment screw are located on the front of the logger, as is the LCD indicator panel which shows total on-time in hours, percent of time on, and a light-on indicator. These loggers are equipped with magnets that can be used to attach to the lighting fixture.

Figure E-1: Dent Instruments Lighting Logger



DENT CT*logger*™ (TOUCT-3G)**.** This data logger is shown in Figure E-2. The CT logger is also a time-of-use type logger, but monitors the current through an electrical circuit via a clamp-on current transducer (CT). The CT logger will be used to monitor plug-in wall-mounted and table fixtures, such as those commonly found in hotels and motels, as well as be installed in electrical panels to monitor inaccessible high bay fixtures controlled by a switch or circuit breaker. As with the DENT lighting logger, the adjustment screw and LCD indicator panel are located on the front of the logger. For plug-in fixtures, a split-wire extension cord will need to be used with the CT logger. As shown in Figure E-3, one of the wires from the extension cord is

wound around the prongs of the CT logger, and the CT is zip tied to ensure that it remains clamped around the wire. Because the minimum current sensitivity of the logger (0.25 amps) was below that for a single lamp (12W CFL. 120V = 0.1 amps), typically at least three twists were required to ensure that the logger would register. Surveyors were instructed to use as many twists as needed to register fixture operation at its minimum operation state, for example, for a two lamp fixture with independent switching the minimum would be one lamp. For high bay fixtures, the CT will be installed on the lighting circuit in the electric panel as shown in Figure E-4.

Figure E-2: Dent CT Logger

Figure E-3: Dent CT Logger and Split-Wire Extension Cord

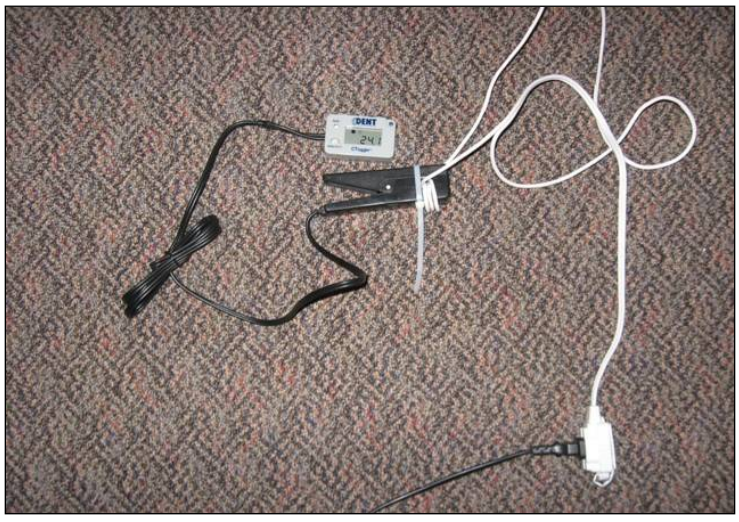


Figure E-4: Dent CT Logger on Circuit in Electric Panel

Onset HOBO U12-006 with CVT-A/B (HOBO**).** These are continuous type metering loggers rather than event loggers, and can record the magnitude of current at a pre-defined time interval when used in conjunction with the HOBO split-core current transducers (CTV-A/B). For high bay lighting that is controlled by integrated occupancy sensors and are not physically accessible, Itron will use the HOBO logger with CTV-B (50 amp) and CTV-A (20 amp) split-core CTs to log the lighting circuits. The HOBO allows for up to four split-core CTs, however, due to limited logger memory, Itron will only use two of the four channels as to extend the data logging period. This data logger setup is shown in Figure E-5.

Figure E-5: HOBO Logger and Split-core CTV-B

A summary of the data logger specifications is presented in Table E-1.

Table E-1: Data Logger Characteristics Summary

Logger Type	Sensitivity Range	Sensitivity Adjustment* – = less sensitive + = more sensitive	Event Checking Rate	Data Storage Capacity	Battery Life
Dent LL	2 to 450 lumens/m^2	CC = – , CW = +	1 sec	8000 on/off events	5 Year
Dent CT	0.25 to 16 amps	CC = – , CW = +	1 sec	8000 on/off events	5 Year
HOBO	+-4.5% of Full Scale	NA	5 min	43,000 measurements	1Year

* CW = Clockwise, CC = Counter-clockwise

E.2.2 Logger Installation Tools and Materials

Materials needed specifically for lighting logger installation include the following.

- Multiple copies of the CPUC Letter of Introduction and business cards. These should be left behind at <u>every site</u> so that if something happens with the loggers, the site contact will know who to contact.
- Extra copies of blank logger installation and verification forms.
- Assortment of loggers (based on measures to be logged).
- Large gallon-size zip-lock plastic bags (for storing retrieved loggers or broken CFL clean-up).
- Razor blade or sharp pocket knife (for slitting painted-over fixtures to allow access to lamps and ballasts).
- Plastic zip ties, variety pack various lengths (4", 8", 14").
- 3M double-sided tape – 1" squares (3M-4026) and glass scraper (for removal).
- Hook and loop (i.e., Velcro™) tape.
- Stick-on, round Avery labels (color coding dots) for marking the location of installed loggers (something bright and easy to see, i.e., red, yellow, orange). Note that dots do not have to be used for smaller sites where the lamps are uncovered and loggers are clearly visible, <u>and</u> every fixture and logger location can be shown on the site sketch.
- Poster putty (removable/reusable). The best way to install a logger with putty is to put two dime to nickel sized pieces in contact with the logger and the surface.
- DENT Flexible fiber-optic attachment, various lengths.
- Split-wire extension cords for the DENT CT loggers.
- Flexible water discharge hose (used to hide and wrap installed CT loggers).

- Permanent ink fine point pen (for marking CFL lamps for retention study).
- Electrical tape and wire nuts.
- Small scissors or wire cutters (use to snip zip ties for logger extraction).
- 6 foot telescoping ladder to access lighting fixtures.
- For panel metering:
  - Insulated tool set for removal of panel covers
  - Personal Protective Equipment (PPE) following NFPA 70E standards
  - Digital multimeter with current transducer for circuit power measurements

E.3 Data Logger Initialization and Programming Procedures

Prior to their use in the field, data loggers need to be initialized and/or programmed. A summary of these procedures for DENT and HOBO loggers is provided in this section, but the *data logger user's guides should be reviewed for additional details*.

E.3.1 DENT Data Logger Initialization Procedures

The following steps, applicable to both the LL and CT loggers, should be taken when programming the DENT data loggers:

1. Be sure your computer clock is set to the correct time before beginning.
2. Make sure the software installed on your machine is Smartware 2011.
3. Communications cable needed is a Dent Smartlogger USB Com Cable.
4. After opening the software and plugging in a logger, choose the following:
   A. Logger>Logger Clock>Synchronize time to match PC.
   B. Logger>Clear Logger Memory.

E.3.2 HOBO Data Logger Initialization Procedures

The following steps should be taken when programming the HOBO data loggers:

1. Be sure your computer clock is set to the correct time before beginning.
2. Make sure the software installed on your machine is HOBOwarePro.
3. Use a micro USB cable to connect data logger to computer.
4. After opening the software and plugging in a logger choose the following:
   A. Device>Launch

5. In the pop-up click "Blink Device Light" to see if the red light on the logger blinks, then select "OK".
6. Verify the logger serial number and make sure the logger has sufficient battery life.
7. Enable channels 1 and 2 and change the sensor type to AC Current (50 or 20 Amps).
8. Disable channels 3 and 4.
9. Set the sampling interval to 5 minutes.
10. Set the starting method to "Button Start" and select "Launch" to complete the setup.

E.4 Logger Installation Guidelines

This section covers installation of the loggers, how to select the fixtures and proper logging method, and how to install and adjust the loggers while following proper safety protocol.

E.4.1 Pre-Visit Preparation

Before the site visit, the information provided on the populated onsite survey form should be *thoroughly reviewed* and the surveyor should estimate the number and type of loggers needed and installation methods to be used. The measure summary, phone survey questions, and site information sections of the survey form should all be reviewed. Issues to consider are discussed below.

- **Business Type.** Is it a large or small business? Is it likely to have high bay ceilings? Are the business hours regular/consistent, or mostly by appointment? If mostly by appointment, instead of making a cold-call (the default approach) the surveyor should call to schedule an appointment. If a school, then an appointment and possibly registration will be required if you plan on going during school hours. The DEER activity areas for this business type should also be reviewed.
- **Technology Types and Configurations.** What are the types of measures installed onsite? Are any of the measures installed in high bay applications and if so, are they accessible by lift or ladder? If there are high bay lights you may need to bring Dent CT and HOBO loggers. Are the CFLs likely to be downlights/cans? If so, then an optical cable might need to be used, so make sure that you bring a few and know how to use and install them.
- **Measure Summary Table.** This table contains a summary of the rebated measures that you will be logging and verifying, so review the Measure Summary table and make sure that you understand what the measures are. This should include understanding what the pre-retrofit baseline technology assumed by the IOUs was, since you will be trying to obtain that information as well.

- **Estimate the Number and Type of Loggers Needed and Bring Extras.** To avoid revisiting a site to install additional loggers, be prepared by bringing a variety of loggers and installation materials, and also be ready to improvise with what you have if needed. But always remember rule #1 (safety first)!

As always, if there are any questions or anticipated problems, then the surveyor should consult with one of the field survey leads for direction *before actually visiting the site*.

E.4.2 Logger Placement and Logger Type

The first step in deciding which fixtures to log is to assess the site and define schedule groups[1] for the rebated lighting fixtures. Once schedule groups have been defined, loggers should be placed in all areas that have a different time or control schedule. Several considerations factor into how and where loggers should be placed. The following guidelines will be used to determine the type, number, and location of loggers to be installed.

1. **Safety for Surveyors and Occupants Is #1!** If loggers cannot be installed safely, do not attempt to install them. It is better to lose this site and do another one than to risk injury installing and/or retrieving the loggers. This applies to the safety of the occupants as well. Never install a logger where it could injure someone if it falls especially if it is installed with putty, or alternately, make sure that a logger is secure if you are installing it above a space that is usually occupied (like a fixture above someone's desk).
2. **Defining Schedule Groups**. For this study, a schedule group can be considered as the Activity Area plus Hourly Equipment Operation Schedule plus the Control Type for the fixtures or circuits represented by the logger. When deciding on schedule groups, keep in mind that the final, composite logger data results should produce a complete picture of how the lighting measure/technology operates at that site. As such, lights that are on all the time, as well as those that are suspected to be mostly off should also be logged.
3. **Log ALL lighting HIMs found onsite, unless otherwise noted**. For this study, certain basic CFL and linear fluorescent measures do not need to be logged, and instead self-report lighting schedules will be used and adjusted using results from the 2006-08 lighting logger study. The survey forms will indicate which measures do not need to be logged.
4. **Type of Loggers**. The types of loggers installed onsite depend on the rebated technologies, how they are controlled, and if they are physically accessible. Dent lighting loggers are used in most applications and are installed on physically accessible fixtures. Dent CT loggers are used for plug-in fixtures and inaccessible high bay fixtures controlled

[1] For this study a "Schedule Group" consists of the Activity Area + Hourly Equipment Operation Schedule + Control Type that are to be represented by the logger.

by a switch or circuit breaker. HOBO loggers are used for inaccessible high bay fixtures controlled by integrated occupancy sensors as they measure current levels, capturing when each individually controlled fixture on a circuit is on or off. When logging inaccessible high bay fixtures, both the Dent CT and HOBO loggers are installed in electrical panels. This type of logging is referred to as "Panel Metering" has its own set of procedures and safety protocols contained in Section E.7 below.

5. **Minimum of # of Loggers per Site**. Never install only one logger at a site, unless the only measure at the site is a single lamp fixture. Even the smallest sites should have at least two loggers installed, one primary logger and one backup logger, if there is only a single circuit/switch at the site.
6. **Target # of Loggers per Site**. An overall average of 10 loggers per site is the target. For individual sites - such as hotels/motels or sites with multiple private offices - that means that more than 10 can be used if needed to characterize the diversity of lighting operation at the site. For Large Custom sites, the max number of loggers to install is 30. For most small commercial sites, it is expected that four to six loggers is all that will be needed, but the surveyor has the latitude to use a much larger number.
7. **Placement within Fixture: Avoid "insensitive" logger situations.** Be sure to place the logger so that the photocell eye "sees" only the lamp, and a part of the lamp that is brightest. This means checking the angle of installation as well as the position along the lamp. A symptom of incorrect placement is the logger appearing to be insensitive, that is, needing to be adjusted to maximum sensitivity to register. Situations to be avoided are:
   - **Avoid darkened tube ends.** Position the logger in the middle of the fixture and away from the tube ends, which will darken with age. This will also avoid the situation of trying to adjust a logger when the tube ends have already started to darken.
   - **Avoid highly angled mounting surfaces.** The logger should be installed such that the light sensor is aimed as directly at the light source as possible to maximize sensitivity and avoid ambient lighting effects. In practice, this means to avoid mounting the logger on an angled surface that will causes the sensor to view more of the fixture and surroundings than the lamp. The aperture of most light sensors is very small, so if it is not pointed directly at the light source the sensitivity will be need to be increased, which also makes the logger more susceptible to ambient lighting sources. If the logger has to be turned up to maximum sensitivity to register, then it is installed at too large an angle to the light source and should be re-adjusted with poster putty or moved to a different mounting surface.

8. **Back-up Loggers.** A "back-up" logger[2] is a logger placed on the same switched circuit but in a different fixture. Back-up loggers should not be placed side-by-side in the exact same physical location as the primary logger. If they are placed in the same spot due to special circumstances (like inaccessible fixtures and limited options for placing loggers on horizontal or vertical surfaces) then this situation should be fully explained in comments. Additional notes include:
   - **Back-up required for Significant Loads/Number of Measures.** Schedule groups that have larger than 10 fixtures must have a backup logger installed on the groups representing the largest kW loads. The idea is that if something happens to the primary logger that these large loads will always be represented in the final analysis.
   - **Bi-level A/B Switched Fixtures.** These are fixtures where the lamps in that fixture are on two different switches, and can be used to create two different lighting levels (hence bi-level). A logger installed on the "A" side should not be recorded as a back-up (secondary logger) for the "B" side. In addition, the "A" and "B" lamp loggers should be installed in *different fixtures* to avoid any lighting spillover. If this cannot be done, then the loggers should be installed so the logger eye is right on the lamp.
9. **Single room or area served by multiple switches/circuits.** At least one fixture on every switch should receive a logger. If the lighting in this area is a significant fraction of the total rebated quantity for the site, then a back-up logger should also be installed in at least one of the circuits. The surveyor should also ask if switches are typically operated separately or all together and should note this in comments, but should not rely on this information to limit the installation of loggers on all switches/circuits, except where an inordinate number of loggers (>20) would be required otherwise.
   - **Describe Location.** The room number, office tenant name, etc. should be recorded on the logger installation comments. This information will be used during logger data QC to compare/contrast the operation of switches/fixtures within the same area.
10. **Minimum # of Similar Areas to Log.** Examples include private offices, classrooms, and lodging guest rooms. If a large number of similar activity areas are found that have varying time schedules (such as individual private offices) then ~20% should receive loggers.
   - **Target # of Guest Rooms for Lodging Sites.** Surveyors should attempt to log at least five (5) guest rooms throughout the hotel/motel and representing as many different room configurations as possible. It is understood that access to guest rooms

[2] Note that for the analysis, if data from both loggers is good it will be averaged together rather than just using one logger.

may be limited by the management staff. However, *at least two guest rooms must be monitored*, otherwise a replacement site will need to be selected.

11. **Difficult Locations: Downlight/Cans, Sealed, Inaccessible Fixtures.** Loggers do not have to be placed in the fixture. If the area is relatively free from other light sources (sunlight, task lighting, etc.) and a suitable location outside the fixture can be found, then the logger can be placed and adjusted properly for this location. Specific issues/examples are described below:
    - **CFL Cans/Downlights.** The easiest way to attach loggers to CFL cans/downlights is to use several plastic cable zip ties and tie them directly to the base of the lamp itself. If loggers cannot be placed inside of the cans, poster putty, double-sided tape, Velcro™ (hook and loop) tape, or plastic cable zip ties can be used to attach them outside the fixture. Unfortunately, CFL cans are usually aluminum, but sometimes poster putty or double-sided tape will work. Try stepping back and looking at the area/room as a whole and look for a spot with minimal ambient light pollution. Work through the possibilities to choose the best situation for logging. Sometimes there are other flat surfaces where a logger can be placed, or even metal nearby (such as HVAC diffuser plates) so the loggers magnets can be used. For cans that have slits in the top and are installed in a false ceiling, consider placing the logger in the ceiling on top of the can and over the slit. A proxy fixture – as described below – might also be used. If no other options are available, the DENT Flexible fiber-optic attachment may be used. Each circumstance is unique and might require a bit of thought and creativity, but you can usually find some way to install the logger properly.
    - **High-Bay fixtures.** If panel metering cannot be conducted the Dent lighting loggers can be placed on a horizontal surface (book case, shelf, etc.) away from windows and other ambient light sources and adjusted accordingly. Lots of testing is needed to confirm the logger is only capturing rebated lighting lumens and no other light sources.
    - **Using a Proxy Fixture/Circuit.** Generally, only rebated fixtures and lamps should be logged. However, if rebated fixtures or lamps are inaccessible but a suitable non-rebated fixture "proxy" is available, then loggers can be installed on that fixture/circuit. However, this approach should only be used as a last resort, and must be *thoroughly explained in comments, photographs, and diagrams if needed*.
12. **Place Loggers where they will not be disturbed**. An attempt should always be made to place loggers where they are not easily noticed or accessed by occupants. This prevents moving, removal, or resetting by site personnel once the logger has been placed.
    - **Consider covering the reset button.** If the loggers are visible and can be easily accessed by a customer or guest, consider covering the reset button with a piece of tape of round sticker to remove the temptation of pressing the reset button.

13. **Do not install loggers in excessively hot environments.** The data loggers are only rated for 140 F, and some downlights and covered fixtures may get hot. DENT equates this to a distance of eight inches from a 100 watt incandescent bulb in free-moving air. In this situation, install the logger outside of the fixture and use a DENT with the fiber optic extension.
14. **Do not install loggers where there is a high probability of theft.** For sites such as a rundown motel with highly transient guests, or a restaurant where the installed logger would be accessible to the customers, if the loggers cannot be installed out of site and/or you think they will likely be stolen no matter where they are installed, then do not install loggers. Just be sure to document your reason for not installing loggers in site comments. Enough loggers are lost at reputable sites (sometimes as high as 20% at lodging sites), so that it is better to not install loggers where theft is highly expected. Whenever possible, you should call one of the field-survey leads to confirm this approach.
15. **Two Different Rebated Measures on the Same Switch**. The survey form is set up so a logger can be used to represent more than one measure. A reference box is included next to the logger field on the measures' Activity Area Assignment Table (AAAT) and can be checked any time a logger ID is repeated on another measure's AAAT.

Please note that *whenever there is any doubt about the correct approach to be used for a site*, Itron staff should be *immediately* consulted for guidance.

E.4.3 Dent Logger Adjustment and Installation Procedures (Non-Panel)

There are general as well as specific adjustment procedures required for the Dent loggers and they are addressed in this section.

DENT LL Logger Adjustment and Installation Procedures

Once the fixture locations have been decided, the following procedures should be used to properly set the logger to accurately measure lighting operation:

1. Press and hold the reset button (approximately two seconds) on the front of the logger until the word "rESEt" appears on the display, then immediately release the button.

NOTE: Be sure to release the reset button as soon as "rESEt" appears. Holding the reset button for more than that - approximately five seconds - will cause "CLEAR" to appear on the LCD. This function resets the internal date to **01/01/2001** and the time to **12:00 am**. If this happens while on site, you **should *not* use this logger** and you will need to resynchronize the logger's date and time before it can be used.

2. The logger should be placed at or as close as possible to the location chosen.
3. **Adjust the Sensitivity.** The sensitivity adjustment screw should be all the way toward the negative (left). Slowly adjust the sensitivity screw toward the positive (right) until the sunlight -  symbol appears on the display. Note that there will be a couple second delay before the symbol appears on the display, so turn the sensitivity screw slowly and gradually to allow for this delay. When the symbol first appears, this means that the logger is now sensing the light from the measured fixture. **Once this threshold has been reached, the sensitivity screw needs to be adjusted another ~10 degrees clockwise.** NOTE: Be careful not to allow yourself to create a shadow between the measured light source and the sensor on the logger while doing this.
4. Once the sensitivity has been adjusted, place the logger in the location chosen and verify that the  remains on in the display.
5. **Testing.** Now turn OFF the fixture/s being measured and verify that the  symbol has disappeared from the display. This means the logger is no longer sensing light and will accurately measure the lighting source ON/OFF operation. If the light cannot be turned off, an easy way to test it is to face the photocell downward away from the light. Facing downward exposes the photocell to the amount of light it will see when the fixture is off.
6. Test one time further by turning ON the fixture/s and verifying that the lighting symbol appears again. If these are fixtures that are observed and/or reported to be always off, then see Section E.5.1 .

Final Actions

7. Place a colored Avery™ dot near the logger to aid in locating the logger for removal.
8. Record the date of install and a detailed location for the logger on the survey form and site sketch.
9. Complete the verification survey form.

DENT CT Logger Adjustment and Installation Procedures

See "Hotel/Motel (and Other Lodging) Guest Rooms" in Section E.5.2 below.

E.5 Special Logger Installation Situations

There are some situations that require additional efforts, including the following.

- Fixtures/lamps that are always off.
- Hotel/motel guest rooms (and other lodging).
- High-ceiling and high-bay T5/T8 lighting.
- Using the fiber-optic cable for recessed cans.

E.5.1 Fixtures/Lamps That Are Always or Mostly Off

For some small businesses, the lights in some areas may be off more often than they are on. This can occur in areas that are rarely used, or in areas that receive adequate ambient lighting from windows, skylights, or adjacent areas. Since the logger data for these areas would look more like a logger that malfunctioned, special steps are taken during installation to ensure that we can tell that this is valid data:

- **Describe this unusual situation in comments!** Because there is essentially no energy being used and hence no savings being produced by these fixtures, this situation should be thoroughly described in comments and a unique schedule defined. The comment must include the *reason* the lights are typically turned off (e.g., ambient light from windows/skylights is enough, staff work mostly in another room that does not have rebated measures, etc.). An estimate of the on time (hours per day, week, or month, whatever the site contact tells you) should be incorporated into the schedule and recorded in comments.
- **Test Period to validate logger operation.** Once installed, the logger should be run through a "test period" of operation; the light must be turned on and left on for at least one minute or more. If possible, you should leave the light on the whole time that you are installing loggers in other areas, which will give an even better test period/confirmation. *This process will be repeated when the logger is extracted* if the lights are off at the time of the site visit. The idea is that, even if these lights are never turned on during the monitoring period, the test period data – which can be reviewed as part of the logger data QC process - will confirm that the logger was correctly installed and operational.

As always, if there are multiple switches/circuits in a room, both need to be monitored and both should be tested.

E.5.2 Hotel/Motel (and Other Lodging) Guest Rooms

The problems that a surveyor faces with installation of loggers at a lodging site are numerous and include:

- Getting access to the guest rooms, which is typically where rebated CFLs are installed.
- Guest room CFL fixtures are typically plug-in wall, desk, and floor lamps for which CT loggers are better suited (rather than LL loggers).
- Sub-sampling to estimate for large numbers of rebated fixtures/lamps.
- Tracking burnt out CFLs or # rebated units that failed and replaced with in-kind technology. Since records are not kept by the maintenance staff it is usually impossible to estimate a schedule for these lights.
- Theft of the CT loggers, which requires additional efforts to hide and secure them.

NOTE: Do not install loggers at a site – especially a smaller one – if you think there is a high probability that all or most of the loggers will be stolen. Just be sure to document your reason for not installing loggers in the "lost" site disposition. Enough loggers are lost at reputable sites (typically about 20%), so that it is better to not install loggers where theft is highly expected.

This procedure attempts to address these conditions. The following approach should be followed while performing the verifications and logger installation at lodging facilities:

- **Schedule the site visit.** Unlike most small commercial sites which can be visited without scheduling, for a larger hotel it is better to schedule an appointment with the site contact. Furthermore, if the CFLs are installed in the guest rooms, then you should ask them to make available five rooms and, if possible, a variety of rooms. These would include different physical configurations, and those on different floors that are occupied frequently and not as much. You can also try to schedule your visit between typical check-in/check-out times. In case of a smaller motel site, scheduling may not be necessary, though it is always a good idea to ensure some guest rooms are accessible.
- **Use the LL Loggers whenever possible, be creative!** The LL loggers should be used wherever possible, as they are less expensive and can be used in more applications than the CT loggers. Two examples showing creative use of tie-wraps are shown in Figure E-6 and Figure E-7 below. However, if needed, a CT logger can be utilized for plug-in fixtures.

Figure E-6: LL Logger Installation in a Downlight w/ Zip ties

Figure E-7: LL Logger Installation in a Table Lamp w/ Zip Ties

- **Obtain a site plan and attach to the survey form.** Most lodging sites will have a map of the site that shows the site layout including all buildings and common areas (office/lobby, pool, gym, etc.). A copy of the site plan should be obtained and used to indicate which buildings were physically visited and what rooms the loggers were installed in.

- **Add building identifiers if needed.** If not already identified, label each building on the site plan with a letter or number (Bldg A, Bldg 1, etc.), which can be referenced on the sketches, comments, and lighting logger installation forms.
- **Sketch the typical room layout.** Provide a sketch of a typical room configuration showing placement of the lighting fixtures, or do a quick sketch of each room configuration that is logged, if there are significant differences. Show the bathroom as a separate area, if lighting measures are installed there.

- **Logging Common Areas.** The common areas in a hotel/motel (lobby, hallways, breakfast area, offices, etc.) can typically be logged with the default DENT LL loggers. However, if needed, a CT logger can be utilized for plug-in fixtures.
- **Logging Guest Rooms.** Most of the rebated CFLs for a lodging site will be located in the guest rooms. Up to five guest rooms located on different floors and of different physical configurations should be logged. However, access to the guest rooms is often limited by the site contact. If loggers cannot be installed in at least two guest rooms, then the site should not be logged and it should be recorded as a "lost" site.
- **Approach to Logger Installation in Guest Rooms.** Most of the CFLs in guest rooms will be installed in plug-in wall and table lamps. For these lamps, a CT logger is usually the best choice. However, as the CT loggers and associated split-wire extension cords are much more visible than the DENT LL loggers, it is important to take a few precautions during installation to avoid theft or disturbance of these units. Guidelines for installing loggers in guest rooms are as follows:
  - **Install loggers on all measures.** Install logger on all of the rebated measures in the guest room. Use the CT loggers for plug-in fixtures and LL loggers for hardwired fixtures and/or wherever they can be used.
  - **Use as many loggers as needed.** The average loggers assigned per site is 10, but it is OK – and in fact expected for lodging sites – that more than 10 loggers will be used. But do not install loggers in more than 5 guest rooms.
  - **Hide the CT loggers.** The CT loggers should be installed in such a way that they are out of sight, tucked away behind a desk, bed, table, or a television set.
  - **Anchor/Secure the CT loggers.** The CT loggers should be anchored with a zip tie to furniture or other fixed object whenever possible, as shown in Figure E-8. Again, this will help to eliminate theft of the loggers.
  - **Inform maintenance staff.** The surveyor should ask the site contact to inform the maintenance staff (head of housekeeping) about the loggers, so that they know not to disturb or unplug the logger. The surveyor should also leave his business card with the site contact so that they can call us in case the loggers are unplugged or end up in lost and found.

– **Guest room bathroom fixtures.** The guest room bathrooms will usually have T8s or CFLs which can be logged with the LL loggers. Extra care must be taken to keep the logger out of sight so that the management does not get complaints from the guests. Create a separate Activity Area for the guest bathrooms.

Figure E-8: CT Logger Zip tied to a Bed Frame

CT Logger Installation Procedure. The CT logger detects current flowing or not flowing through the wire and records this as ON/OFF transition data. A brief description of how a CT logger should be installed to monitor a plug-in fixture is given below.

1) Put a split-wire extension cord between the wall outlet and the plug-in fixture containing the rebated measures.
2) **Adjust and test the sensitivity.** Turn the CT logger sensitivity switch all the way clockwise so it is at its highest level of sensitivity. This will ensure that the logger can detect low watt CFLs. For fixtures that have only one low-watt CFL bulb, wrap the wire around the CT clamp at least three times (as shown in Figure 7) to get the logger to register[3]. *Turn the lamp on and make sure the indicator icon is shown on the panel.* If it is not, keep wrapping until it registers as on. Also, if there are multiple lamps in the fixture that can be operated independently, *test the logger* to make sure that it registers with only one lamp on.
3) **Tie-wrap the CT jaws closed.** Once the logger is registering correctly, zip tie the CT closed as shown Figure E-9, make the assembly as unobtrusive as possible, and anchor the whole assembly as previously described, to avoid theft or accidental removal.

[3] Minimum sensitivity is 0.25 amps, which corresponds to about 27W @ 110V.

4) **Wrap in flexible discharge hose.** The CT logger, split-extension cord, and lighting fixture cord should be enclosed in a sleeve of flexible discharge hose. This will clean up the installation and make it less likely that the logger will be removed by cleaning staff. A photo of discharge hose is shown in Figure E-10.

Figure E-9: CT Logger and Split-Wire Extension Cord

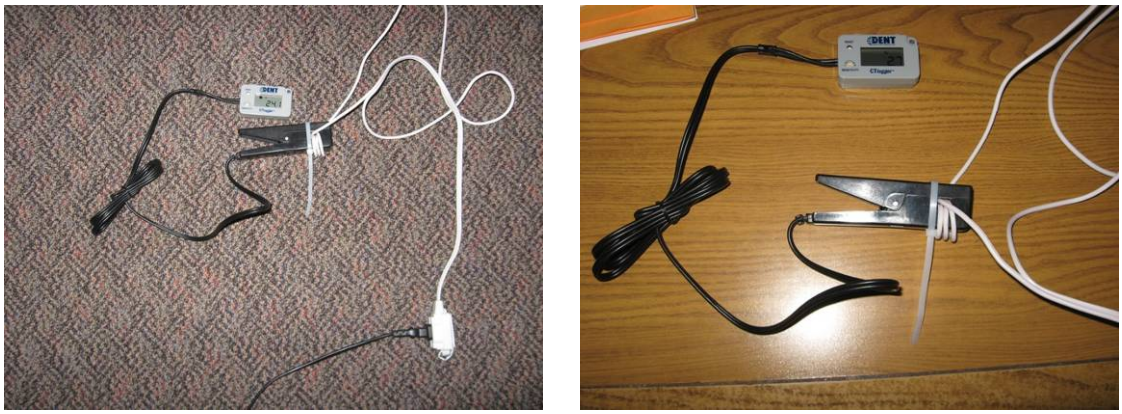
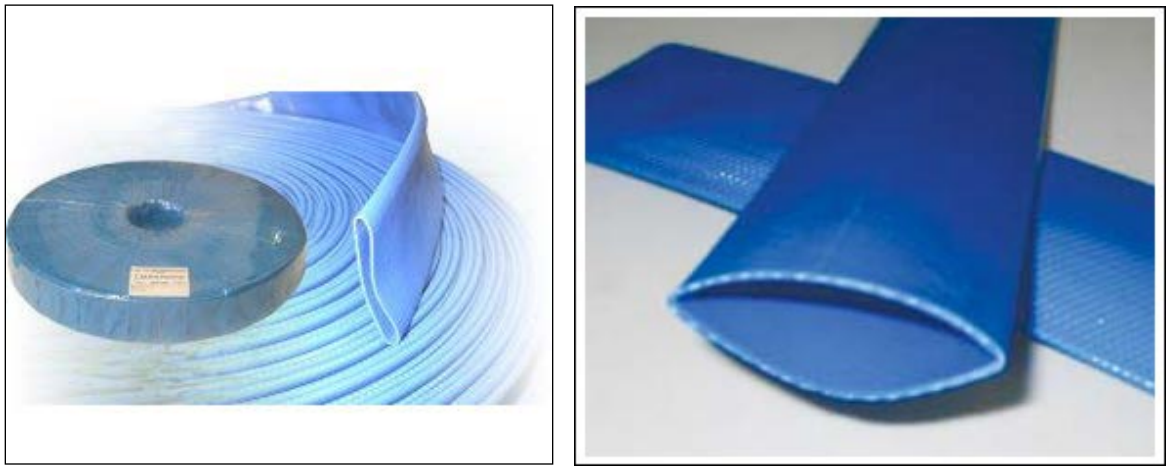


Figure E-10: Flat Water Discharge Hose



E.5.3 Inaccessible High-Ceiling and High Bay Fixtures

The DENT LL loggers should be used to log these fixtures whenever possible or whenever it makes the most sense by using whatever local equipment is made available to the surveyor (i.e., ladders or lifts) to reach the fixtures. However, in some cases, high-ceiling and high bay fixtures will be inaccessible. If panel metering cannot be conducted and if a good proxy for the inaccessible fixtures is available (i.e., a system that operates the same as the high bay system), then that approach can be used as long as it is noted as a proxy in comments. You should always ask if a lift or other method is available for accessing the fixtures. However, as always, consider

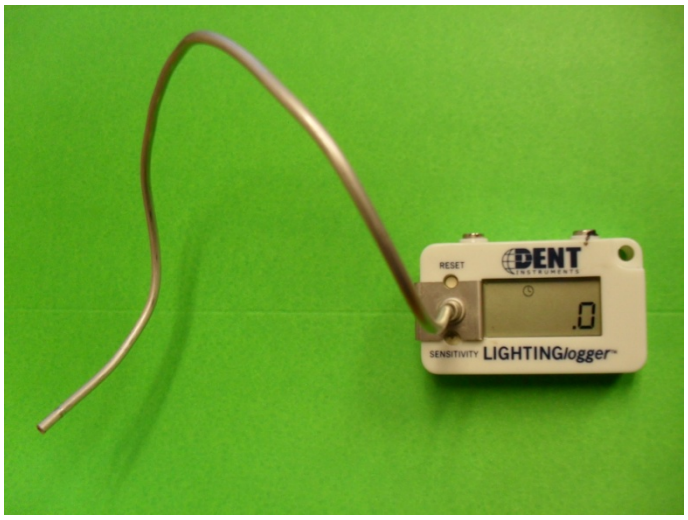
your safety; do not do anything that you feel is unsafe, such as standing on a pallet lifted by a forklift, or carrying a 30 ft. ladder through an active production line.

E.5.4 DENT Fiber Optic Attachment for Recessed Cans

A fiber optic attachment, shown in Figure E-11, is available for use with the DENT LL loggers. Minimum length is 1 foot, and longer lengths are available. The fiber optic attachment can be used for situations where the lighting loggers cannot be placed inside of the lighting fixture for physical reasons, or because the logger could overheat (for instance inside a CFL downlight). For example, for a site with recessed cans and a suspended ceiling, the logger can be placed behind one of the ceiling panels and the fiber optic attachment snaked through an opening in the can or the panel. Another use for the fiber optic attachment would be to "aim" the photocell at a high bay fixture and screen out ambient light.

One note of caution: The fiber optic attachment should not be bent at right angles to avoid cracking the housing! Bends should be gradual and curving, as shown in the figure.

Figure E-11: DENT LL Logger with Fiber Optic Attachment



E.6 Logger Extraction Procedures

Loggers are schedule to remain in the field for 2 to 6 months with a maximum of one year. Ideally the surveyor who did the original installation will also do the extraction. The type of lighting systems and loggers installed must be reviewed before visiting the site. Take a camera along to photograph problems found when the loggers are extracted or photos missed upon installation. Use a **colored pen (blue or red)** to record any extraction notes and comments so that they stand out from the text on the copied survey forms that are used for extraction and do not use a pencil! Wire cutters will be needed in loggers are installed with plastic zip ties. For magnets that separate from the loggers, a pair of pliers may be needed to remove magnets from the lighting fixtures.

The process should be as follows:

1. **Obtain a copy of the survey form.** *Prior to the site visit*, obtain a copy of the complete survey form and write "*Extraction*" across the top of the form. The copy can be made from the surveyor's original hardcopy or the scanned copy of the survey form that is saved on the network drive. It's typically easiest to print out the entire form. Do not use the original survey form for the extraction work! Additional instructions are:
   - On the cover sheet: Check the installation date and make sure the loggers have been in at least 2 months. Also note the surveyor's initials and have their cell phone number handy in case you need to call them while on site.
   - Review the cover sheet, comments, logger installation sheet, and site tracking spreadsheet for notes regarding extraction (logger #'s that were missed, ballast numbers missed, retention marking needed, etc.) and especially note any additional information that needs to be obtained when re-visited.
   - Make sure the Lighting Logger Installation form is present and filled out. Note the quantity and of each type of logger installed and use this as a check when you leave the site. For some site, this page may also contain notes on actions that need to be taken when the loggers are extracted. For example, sometimes the logger numbers were not recorded correctly.
   - Review the lighting measure sheets for the type of fixtures the loggers were installed on. Review the sketch to see where the loggers were placed. Check the ceiling height recorded on the lighting measure sheets to determine if a lift or high ladder
2. **Prep a logger storage bag.** Prepare a zip-lock or paper bag for storage of the loggers after retrieval. Write the SiteID, date, and surveyor's initials on both sides of a card or piece of paper and place in the bag (paper bag can also write on the outside of the bag). Please use the full SiteID, that is, use PGE_663621371 not just 663621371.

3. **Site visit: Record extraction date and initials.** Record the date of the site visit and surveyor's initials in the "**Extraction Date"** and "**Extraction Initials**" field. Hard scheduling the logger pick-up for a specific day is highly recommended.
   - ***Multiple Extractions/Alternate Extraction Dates.*** Multiple extractions are often required *for lodging sites when some guest rooms cannot be accessed*. In these situations, the "alternate extraction date" for these loggers should be recorded at the bottom of the column for that logger (see revised/latest logger installation form).
4. **Observe the logger <u>before</u> removing it; Is it still in position and functional?** Observe the logger and make sure it is still *functioning correctly*. If the lights are off, turn them on briefly to see if the "lights on" indicator responds (sun symbol). If the lights are on when you arrive, make sure the appropriate indicator is shown, then turn the lights off to make sure the off indicator responds accordingly.
   - ***Low-Use Test for loggers where lights are off and show <=5% On time.*** If the lights in a logged fixture are off when you arrive and the LED display indicates a percent on time of 5% or less, then a test is needed to show that the logger is working and was adjusted correctly. Before removing these loggers from the fixture, turn the lights on and leave them on for at least a minute, or if possible, turn on the lights and leave them on, and extract these loggers last. This will provide a small test period that can be reviewed during the logger QC process. Extraction comment for the test should be something like "Light off, test done, logger OK" or "light on, logger OK, no test needed".
   - ***Photograph any unique situations.*** If the loggers are damaged or found in a unique condition that should be avoided in future installations, take a photo so that it can be shared with other field staff and/or included in the field procedures. Figure E-12 is an example of a logger installed in a closed fixture and overheated or melted, or hanging by a single magnet, or fallen down within a closed fixture. Turn in those photos with the loggers.

Figure E-12: Melted Lighting Logger

5. **"Logger intact?" and "Extraction Comments".** If loggers have been moved or fallen or have obviously been tampered with, then circle "N" in the "**Logger Intact?**" field of the survey form, and describe the situation in the "**Extraction Comments**" block. If the logger appears to be functioning correctly and is as originally placed, then circle "Y" for "**Logger Intact**". Loggers that cannot be found are recorded as "L" for Lost.

Example extraction comment for an intact, low % on-time logger: Could be something like *"4.5% On Lights Off, Test Done, Logger OK"* which translates to the lights were off when the space was entered, the lights were flipped on and left on to perform the low-use test, and the logger sensitivity was checked to make sure that the sun symbol showed when the light was turned on and disappeared when the light was turned off (or the sensor was covered by your finger).

Other instructions and issues for this section of the survey form include:

- ***Light is Off.*** If the light is off when you enter the space where the logger is installed, then you should note that in the extraction comments (or in general comments and reference the logger ID).
- ***Logger Sensitivity Check.*** Again, this should be done before you remove the logger from the fixture, and it is especially important for loggers with low % on-times, and this applies for both LL and CT loggers. If the lights are on, then the sun symbol should be displayed and it should disappear when the lights are turned off or the sensor is covered. This would get a "logger OK" comment in the extraction comments field. If the lights are off, then turn the lights on and see if the sun symbol is displayed. If the sun symbol is not displayed, then either the logger sensitivity was not set correctly, or there is some other issue with the logger. Check the current sensitivity adjustment (and the logger can probably be removed from the lighting fixture for this test. Is it turned all the way to the minimum setting or is the sensitivity adjustment stripped out (turns and doesn't hit a stop)? If the logger is turned to the minimum setting, note this in the extraction comments because the data cannot be used (there will probably not be any data to use). If the logger was instead turned up to maximum sensitivity and pointed to a light source and still not registering, then it should be noted as a "BAD logger/insensitive" in extractions comments, and explained in general comments as well.
- ***Record the % On Time on the display.*** In the extraction comments block, record the percent on time displayed on the logger. If 0 % on time is displayed, perform the test described previously for lights that are off. If 0% is displayed and the lights are on, note this discrepancy in the extraction comments as well (the logger sensitivity was probably not correctly set).

- ***Lost/Missing and Pending loggers need an explanation!*** In some cases it may not be possible to locate all of the loggers, especially in lodging guest rooms where they can easily be removed by hotel guests or cleaning staff. Sometimes loggers can fall out of open fixtures where they are picked up by staff. In any case, you should ask the site contact about any loggers that appear to be missing before recording them as lost. If the problem is that they cannot be located then call the field surveyor who did the installation to see if he can provide additional information. If they cannot be located, then *please record a note in the General Comments form to explain what you did to try to locate the lost loggers.*
- ***Flickering or burnt-out lamps.*** If the linear fluorescent lamp being monitored by the logger is flickering or burnt-out, then that should be noted in the extraction comments.

6. **Remove loggers.** Remove each logger and adjust the sensitivity to its least sensitive setting (all the way to the "-" sign), as confirmed by the sun indicator. Place in the marked zip-lock bag so that loggers don't get separated. *This is especially important if you are picking up loggers from multiple sites in a single day.* The loggers should always be bagged and not just left loose. **Do <u>NOT</u> push the reset button!** This will erase all of the recorded data. Use pliers to remove any magnets that separate from the logger and remain attached to the lighting fixture.
7. **Before leaving the site, check quantities (="**No loggers left behind"). Do a quick quantity by type count and make sure that you have all of the loggers that were installed. These totals by logger type will be needed for the daily site status report that is emailed to Itron. Lost loggers should also be noted in the daily status report.
8. **Tag updated sections of the survey form.** Use post-its and highlighters to indicate the portions of the survey form that have been updated. Updates will typically be limited to the logger installation form, the general comments page, the spot watt measurement form, and possibly the photo page, but may affect other pages as well.
9. **Return loggers and survey forms to Itron.** Extracted loggers and updated survey forms will be returned to Itron for downloading.
10. **Download the logger data.** Logger downloads will be conducted by trained admin staff, not the onsite surveyors. The admin staff will download and briefly review the .log and .csv files and save in the site's subdirectory on the network using the correct file naming convention Section E.6.1 . Record the "logger time" and "computer time" in the logger extraction comment block or in the respective data fields (two versions of the form). Review the other comments written in the extraction notes that might explain issues observed with the logger data. Update the tracking sheet (or send a status report) to show that the loggers were extracted and how many were extracted.

- ***Check Extraction Date.*** An extraction date is critical! If the extraction date is blank then follow up with the field person who removed the loggers immediately to obtain a date.
- ***Extraction on multiple dates.*** If for any reason the loggers at a site are extracted on different dates, then the earliest date should be recorded on the logger installation form as the extraction date, and the later extraction date should be recorded in the Alternate Extraction Date under that logger, as well as noting in General Comments why multiple extractions were required.
- ***Record Logger vs. Clock time and note differences.*** If the logger time and clock time are more than 15 minutes different, the logger should be tagged as "BAD". To check the logger time follow the following steps:
  - Open SMARTware 2011 and plug logger into computer
  - Choose Logger > Display Logger Status

  This will open up a dialog box showing the current time of the logger.
  - **Daylight Savings Time (DST).** DST will be very evident; there will be a roughly 1 hour difference (maybe a few minutes off) between the logger time and computer time, and the installation/extraction period will span a DST event.
  - **False DST.** This situation occurs when the surveyor installed loggers after the March DST event that were not resynchronized after DST. When this happened, it was usually only one or two loggers at a site, so it is very easy to detect in that the majority of the other loggers are OK (logger time = computer time) and the installation date is after - and typically close to the DST event.
  - **Time-Drift Issue.** Some of these loggers will be very noticeably shifted, and not by an hour. This problem is illustrated in the SMARTware graph below.

Figure E-13: Illustration of Logger Time-Drift Issue

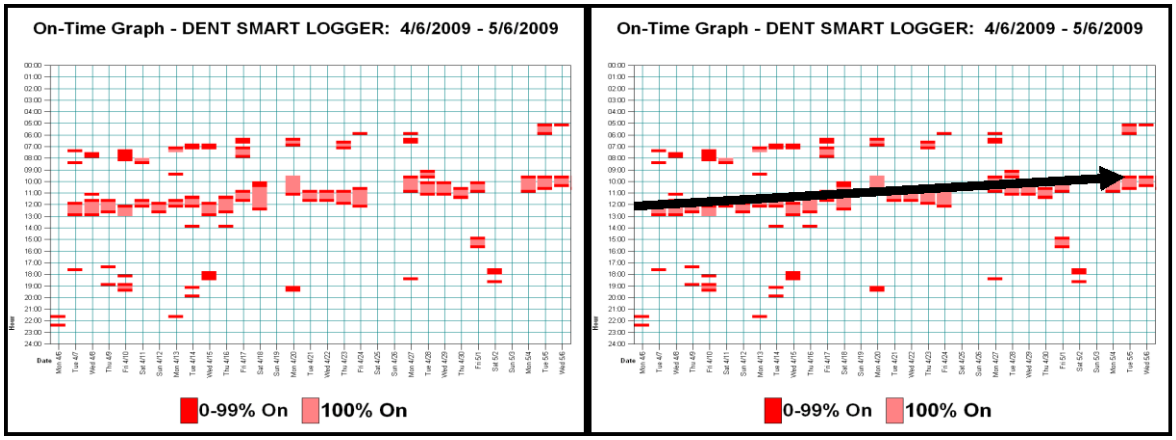
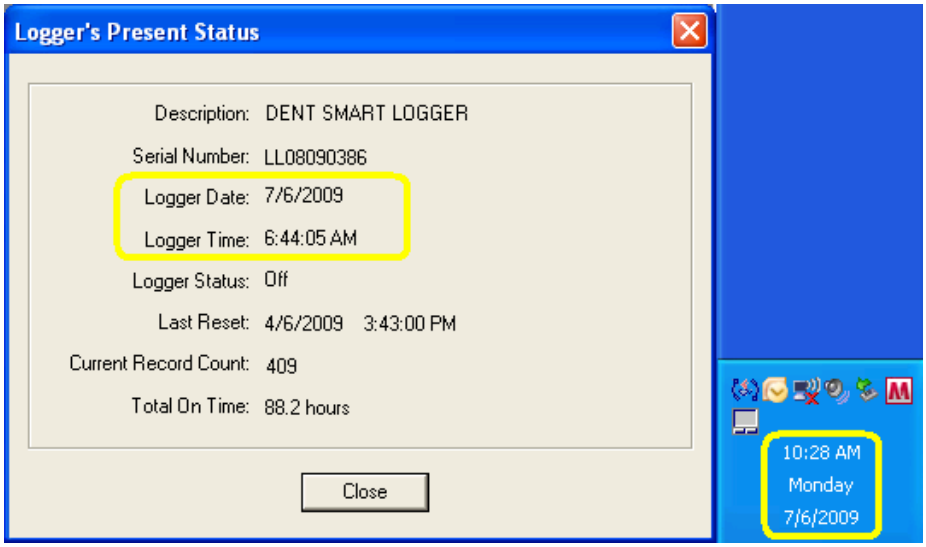


Figure E-14: Logger Time vs. Computer Time



- ***Year Set to 2001.*** The date should also be checked. If the Logger Date year is 2001 then write "2001" in the Extraction Comments block. The logger is likely OK, but was not either not synchronized before installation ((Last Reset year is 2001 but month/date other than 1/1) or was cleared at installation (Last Reset = 1/1/2001).
  - **Logger was "Clear"ed instead of reset on site**. The "Logger Reset" date will be 1/1/2001 and the "Data Ends" date will also be 2001. To be used for the analysis, this data will have to be re-sequenced/time-corrected.
  - **Logger was synchronized but not reset upon installation**. The "Logger Reset" date will be different than the installation date (typically will be 1/1/2001 or another 2001 date), but the "Data Ends" date/year will be consistent with the installation/extraction period (2012, 2013, or 2014).
- ***Loggers with no data, 0%.*** A logger that shows 0% run-time is not necessarily a BAD logger, since there are many sites where the lighting systems in some areas are not used. To test the logger, turn it all the way back to maximum sensitivity and hold it near a lighting fixture. If the indicator does not light within 2 to 3 feet of a lighting fixture, then it should be marked as BAD.
- ***Loggers that lost their magnets and fell-off.*** Re-attach and make sure both magnets are secure and check for other data anomalies. If it seems OK, then it can be returned to inventory.
- ***Loggers exposed to too much heat.*** Loggers that on extraction are found to have been overheated (melted or permanent black LED screen) or reset to 2001should be marked as BAD and placed in the BAD LOGGERS box. If the LED screen is black

but slowly returns to normal (in a couple of hours) the logger is still good and reusable.

11. **Scan the survey form.** Admin staff will scan the completed Lighting Logger Installation form and save the PDF on the network drive and place the hardcopy in the file folder.
12. **Logger Check-In (return to inventory for re-use or BAD).** Once the data has been successfully downloaded and QCed, the loggers can be checked in and returned to inventory or reset and readied for installation at another site.
    - ***Good Loggers.*** These should be returned to inventory and checked into the tracking spreadsheet. In the tracking spreadsheet, record the date that the logger is checked back in and under the "Person Assigned" column change from surveyors initials to "OFFICE".
    - ***BAD Loggers.*** A logger will be labeled "Bad" for several reasons. It may have a time-drift issue, may have crushed/melted, or had battery failure. These are also checked into the spreadsheet, but labeled "BAD" with a description of why. The loggers that have a time-drift issue will be returned to DENT. The battery failures will be set aside to have the battery replaced, and the rest will be placed in the "bad logger" box.

E.6.1 Logger Data File Naming Conventions

The Itron viewLoggers tool will be used to review and disposition all logger data. This tool reads the logger data from the *.csv files, so the naming and format must be consistent. Naming conventions for the logger data files are as follows:

- Files must be saved in a subdirectory named for the SiteID.
- Save both the proprietary raw logger data file (*.log,), and the processed transition data file as a *.csv file.
- Both the proprietary and the processed transition data files should have the LoggerID - logger type (LL, LC, or CT) and the serial # - encoded into file name at the beginning of the file[4]. The format must be: <Serial Number>_<SiteID>.log <Serial Number>_<SiteID>.csv. An example is given below:
  - SiteID: PGE_2584148005
  - LoggerID/Serial Number: LL0807007901
  - Final raw data file name => LL0807007901_ PGE_2584148005.log
  - Final transition data file name => LL0807007901_ PGE_2584148005.csv

[4] Additional characters may be added to the file name if needed by the surveyor, but the LoggerID must always appear first in the file name.

In creating the name, field staff should assure the following rules:

- LL, CT, and LC are capital letters
- There are no spaces in the file name
- There are no extraneous suffixes (e.g., _1, _2, …)

- In addition, the LoggerID number must be present in the *first line* of the *.csv file itself, as shown in the examples below.

Figure E-15: DENT LL logger[5] => LL0805097701_PGE2584148005.csv

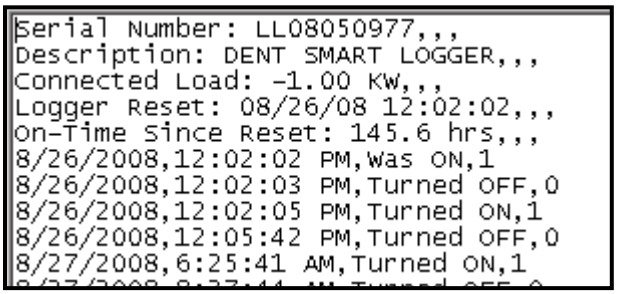
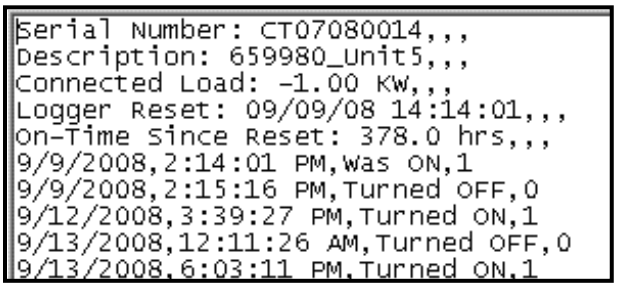


Figure E-16: DENT CT logger => CT0708001401_PGE2584148005.csv



- NOTE: The viewLoggers tool does not use the file names, but instead relies on the text in the first line of the csv file to determine what type of logger it is, and then reads the LoggerID accordingly from the file. Examples:
  - For DENT LL and CT TOU Loggers: If first line starts with *Serial Number*…. then it is a DENT LL or CT logger. The first two characters denote the logger type (LL or CT) and the next eight numbers are a unique number. This serial number is hard-wired into the logger, and the default *.log file saved by SmartWare is named as S/N01.log (as shown in the examples above).

[5] The file name for DENT CT and LL loggers is actually the logger type (CT or LL), the serial number, and then an "01" is tacked on to the end when the data is downloaded from the SmartWare software.

E.7 Panel Metering Guidelines

E.7.1 Objective

To safely, accurately, and efficiently monitor and measure lighting usage within electrical panels for commercial high bay applications.

E.7.2 Overview

High bay lighting (considered as more than 12 feet in height for this document) presents its own challenges for monitoring lighting usage. For these applications, monitoring within the electrical panel, compared to the fixture level, provides a solution to these challenges and can be faster, safer, and allow for more accurate data acquisition. Panel metering addresses the following challenges associated with evaluating high bay lighting:

1. Fixtures may not be physically accessible for the installation of DENT time of use (TOU) loggers within the fixture due to their increased fixture height. In this case, the only option for monitoring lighting usage is in the electrical panel
2. If fixtures are accessible, extra time is needed onsite for the use of ladders and lifts to access the fixtures, also increasing the risk for injury
3. Time onsite is further increased when fixtures are controlled with integrated occupancy sensors, as each logger installed in a fixture only represents that one fixture

The onsite surveyor will determine the best logging approach for each high bay site, taking into account safety, fixture accessibility, time, and accuracy of data.

The remainder of this document focuses on the equipment, procedures, and forms used to assess and perform panel metering in high bay applications.

E.7.3 Equipment

Three categories of equipment are needed for the metering of commercial electric panels: Safety, Measurement, and Metering equipment. Each of these is described in detail below:

Safety Equipment

Safety is the number one priority onsite and to safely meter in commercial electrical panels you must have the appropriate safety equipment. Itron currently follows the 2009 NFPA 70E standards for safety and each onsite surveyor conducing panel metering has attended and

completed training on the 2009 NFPA 70E standards. Each surveyor has also gone through onsite training and has been deemed a qualified person by senior engineering staff.

Below is an itemized list of the safety equipment required for these metering efforts:

NOTE: Fire Resistant (FR), Hazard Category (HC), and equipment ratings vary with application and the 2009 NFPA 70E standards should be used to determine equipment needs and safety ratings.

1. Insulated mat
2. Insulated shoes
3. Fire resistant pants
4. Fire resistant jacket
5. Protective glasses
6. Balaclava (sock hood)
7. Ear plugs
8. Face shield
9. Insulated gloves
10. Insulated hand tools

Measurement Equipment

1. Digital multimeter with current transducer to measure watts, power factor, voltage, and amperage

Figure E-17: Digital Multimeter with Current Transducer

Metering Equipment

Itron uses DentCT and HOBO data loggers (discussed in Section E.2.1 above) as the two metering options for electric panel metering. Each option is specific to different lighting configurations seen onsite. These configurations and their associated metering methods are discussed later below.

E.7.4 Procedures

Perform Pre-visit Calling Site Assessment

While the CATI center will make the initial contact with customers, it is the responsibility of the field technician to arrange the site visit and gather all pre-site visit information before going onsite. The questions in Figure E-18 are to be asked when scheduling a site visit to pre-assess the rebated technologies, options for logging and any site requirements the host may have.

Figure E-18: Panel Pre-Visit Site Contact Questions

	Pre-visit Site Contact Questions
1	**What is the approximate height of the rebated lighting (ft)?**
2	**In what areas are the rebated high bay fixtures or lights installed *(describe all that apply)***
3	**Are there any skylights in these areas *(circle one)*?** Yes No
4	**Are the high bay fixtures accessible and if so, how*?*** Yes No □ Ladders □ Lifts □ Other
5	**How are the rebated high bay fixtures/lights controlled *(select all that apply)*?** □ Manual Switch □ Breaker □ Int. Occ. Sensor □ Occ. Sensor □ Photocell □ EMS □ Always on 24/7
6	**Are there any protocols we need to follow onsite as we may be accessing and installing loggers within the fixtures or electrical panels? *(circle one)?*** Yes No **If Yes, describe all that apply?**
7	**Will we be able to turn high bay lights ON and OFF to verify the connected circuits *(circle one)?*** Yes

Using the answers to the pre-site visit questions the surveyor will visit the site aware of accessibility, onsite requirements, and logging strategies. The technician will also estimate the type of loggers (DENT CT and/or HOBO), number of loggers, and number of HOBO CTs needed to capture the rebated lighting usage.

Complete Onsite Verification of Measures

The first order of action onsite is to complete the onsite verification of all measures and forms. **NOTE:** If rebated low bay measures also exist onsite, perform the necessary installation of

DENT loggers for the low bay fixtures before attempting high bay panel logging. Only after the site verification is complete (site sketch, activity areas, schedules, etc.) shall the surveyor move to the logging of rebated high bay fixtures.

Locate High Bay Lighting and Investigate the Best Logging Method

The following high bay logging screening questions in Figure E-19 should be asked onsite to investigate the best method for monitoring the high bay lighting. As a default, first screen for monitoring within the electrical panel and if this option is not available, screen for monitoring at the fixture with DENT TOU loggers. If HOBO, DENT CT and DENT LL logging are not feasible, the high bay lighting will only be verified and no metering will be performed.

Figure E-19: Screening for Panel Monitoring

Screening for Panel Monitoring:		
1. Are the electrical panels accessible, and will the customer allow you to get into them? ***(circle one)***		Yes No
2. Are the electrical panels clean and safe to work with? ***(circle one)***		Yes No
If Q1 or Q2 = NO:	You cannot conduct any metering at the panel. Do not move on to Q3.	
3. Is either true: A) the lighting is 277V; or B) you can trace all wiring from the Point-of-Control to the breaker Circuit? ***(circle one)***		Yes No
4. Will the customer allow you to switch lights ON and OFF throughout the business for several minutes at a time? ***(circle one)***		Yes No
5. Through the combination of amp measurements AND site contact confidence, can you identify and relate the number of rebated fixtures associated with each lighting circuit? ***(circle one)***		Yes No
If Q3, Q4, or Q5 = YES:	You may conduct metering at the panel.	

Screening for Fixture Monitoring:		
1. Are the high bay lamps accessible by ladder or lift? ***(circle one)***		Yes No
If Q1 = NO:	You cannot conduct any metering at the fixture. Do not move on to Q2.	
2. Will the customer allow you to switch lights on and off throughout the business for several minutes at a time? ***(circle one)***		Yes No
If Q2 = YES:	You may conduct metering at the fixture, depending on the level of confidence in the accuracy of assumptions.	

Identify and Test Each Lighting Circuit and Confirm Number of Fixtures per Circuit

The overall intent of testing the lighting ON and OFF is to determine the number of fixtures controlled by each circuit. As we are installing loggers on a circuit, we need to know the number of fixtures that circuit controls and this information will be recorded on the general site sketch with clear distinctions of which fixtures are associated with each breaker. Each high bay lighting circuit must be tested ON and OFF at the circuit breaker, not at the walls switches, as there may

be a discontinuity between the fixtures controlled by the circuit breaker and those controlled by the associated wall switch. Logging should only be performed on a circuit that can be turned ON and OFF at the breaker/contactor level.

Determine the Circuit Configuration Codes (CCC) and Logging Method

After testing each lighting circuit and confirming the number of fixtures controlled by each circuit, we need to qualify and record the configuration type of the circuits, as different configurations require different logging approaches. The areas in which the rebated lights exist along with the numerous ways they can be controlled are all factors that must be considered as each combination of scenarios may yield a different logging approach. The Circuit Configuration Code Tables (CCC), seen in Figure E-20 and Figure E-21 below, outline the different circuit configuration types and associates each type with the appropriate logging method to be used. The first table below is used for lighting fixtures that are physically controlled by the customer at the wall switch level. The second table is for lighting controlled by the customer at the breaker/contractor, and both provide scenarios for integrated occupancy sensors.

Figure E-20: Circuit Configuration Code Tables (CCC)

Circuit Configuration Codes (CCC): Wall Switch Controlled

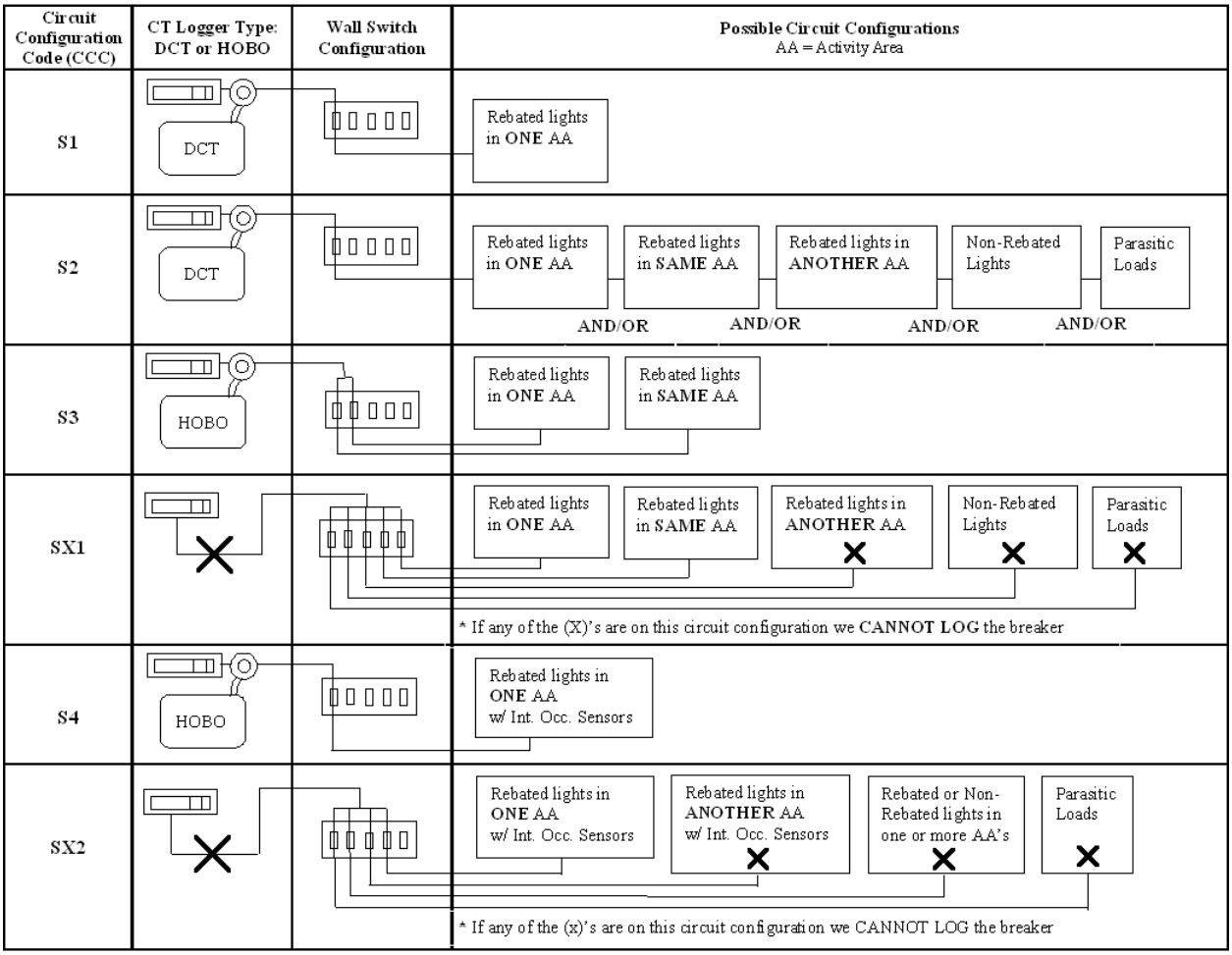
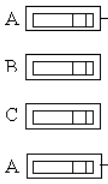


Figure E-21: Circuit Configuration Code Tables (CCC)

Circuit Configuration Codes (CCC): Breaker/Contactor Controlled

Circuit Config. Code (CCC)	Breaker or Contactor Controlled	CT Logger Type: DCT or HOBO	Possible Circuit Configurations AA = Activity Area
B1		DCT	Rebated lights in ONE AA
B2		DCT	Rebated lights in ONE AA — AND/OR — Rebated lights in ANOTHER AA — AND/OR — Non-Rebated Lights — AND/OR — Parasitic Loads (*) * If **contactors** are used or if the circuit voltage is **277**, parasitic loads will not exist on the circuit as it is strictly a lighting circuit
B3		HOBO	Rebated lights in ONE AA w/ Int. Occ. Sensors
BX		X	Rebated lights in ONE AA w/ Int. Occ. Sensors — Rebated lights in ANOTHER AA w/ Int. Occ. Sensors X — **Rebated** or **Non-Rebated** lights in ONE or MORE AA's X — Parasitic Loads X * If any of the (X)'s are on this circuit configuration we CANNOT LOG the breaker
B4		DCT	B1 — B1 — AND/OR * ONLY AS A LAST RESORT, if DENT LL is not an option, shall a CT log two or more circuits at once. **This can only be done if the contact is confident that both breakers/contactors are always turned ON/OFF at the *SAME* time *AND* if all circuits are on the same phase, *ELSE*, DO NOT LOG.**

Legend:

DCT = DENT CT Logger (Time Of Use) HOBO = HOBO Logger w/ CT's (Amp Level) X = No CT logger can be installed on the breaker

Complete: Panel Meter – Circuit Spot Measurement Table (CSMT)

After identifying the Circuit Configuration Codes and determining the logging method to use, the surveyor will then fill out the ***Panel Meter – Circuit Spot Measurement Table (CSMT)***. This table is for reference only and acts as the first stepping stone to completing the final form that will be data entered, the ***Final Spot Measurement and Logging Form*** seen in Figure E-25 below. The ***CSMT*** tracks each spot measurement and allows for the cross checking of each circuit, comparing the expected nominal values to measured values, and determining if the data received from each logger is representative of the fixtures stated. The ***CSMT*** is seen in Figure E-22 below.

Figure E-22: Panel Meter – Circuit Spot Measurement Table (CSMT)

Panel Meter - Circuit Spot Measurement Table:

Note 1: Fill this table out, then fill out the ***Consolidated Logging Circuit Table*** below.

Circuit Label #	Phase	# Fixtures Controlled *(DD)*	# Lamps per Fixture *(EE)*	Watts per Lamp (FF)	# Lamps Burnt Out (GG)	*(DD*EE*FF) -(FF*GG)* Calc. Circuit Watts *(HH)*	Measured Circuit Watts (MW) *(II)*	PF *(JJ)*	Measured Volts *(KK)*	Measured Amps *(LL)*	Measured Parasistic Watts *(MM)*	Comments

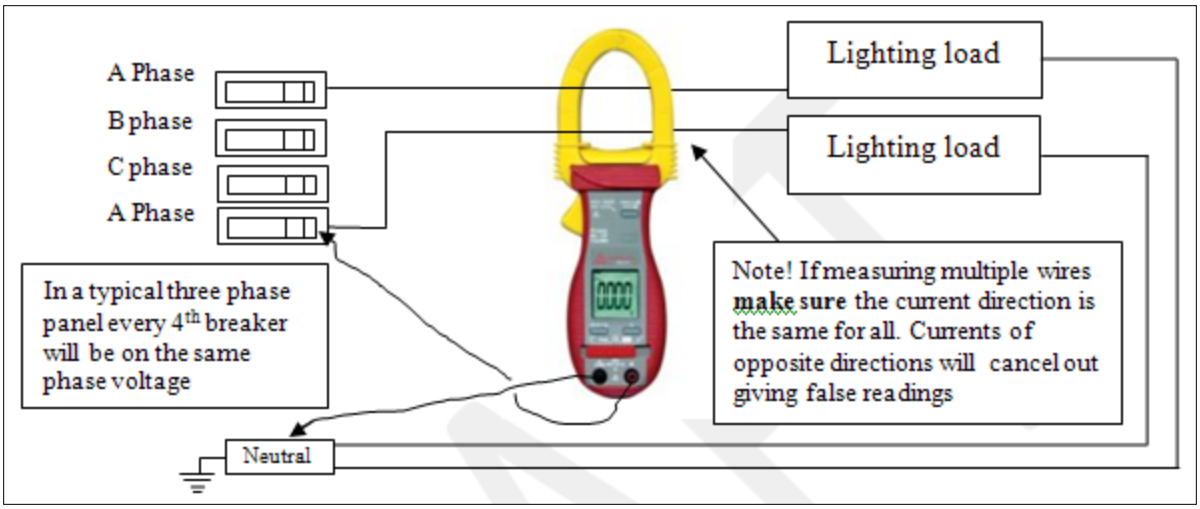
The main items to compare are columns "*II*" and "*JJ*" as this will confirm if the number of fixtures we think the circuit represents is actually representative, as well as if our assumptions on lamp wattage is correct. For example, if we tested a circuit ON and OFF and think it controls 5 fixtures, with 6 lamps per fixture, at 32 watts per fixture, we would expect to measure on the circuit (at full output), 5*6*32 = 960 watts, plus or minus ten percent due to ballast factor. If we actually measured around 750 watts, we know our counts were wrong, other parasitic loads exist on the circuit, or our estimated lamp wattage was incorrect. In this case we might think that our estimated lamp wattage was incorrect as if the lamp wattage was 25 watts, our calculated nominal circuit watts (*II*) would be 750, matching our measured value of 750 watts (*JJ*). After filling out this table, trends usually appear between the calculated and measured values across the circuits, one being that the measured wattage is usually 5-10% higher than the calculated (mostly due to ballast factor). Lastly columns "DD – MM" will be associated to columns "D-M" in the ***Panel Meter – Consolidated Logging Circuit Table (CLCT)*** discussed further below.

How To Conduct Spot Measurements

1. Make sure the lighting is on for at least 10 minutes before taking a reading. For Metal Halide and other arc type lamps the internal arc must be on steady before starting the count to 10 minutes.
2. Set meter switch to power setting.
3. Clamp meter around the conductor or conductors to be measured. More than one conductor can be measured as long as all are the same AC phase electrically.
4. Attach the black or reference lead to neutral. If neutral is not safely accessible use ground instead, but neutral is preferred for greater accuracy.
5. Attach the red or hot lead to the exposed conductor, such as on the breaker screw.
6. Read the kW or Watts and the power factor and record on the survey form. The meter is self-ranging. Power factor is always between 0.5 and 1.

7. If the reading varies allow it to stabilize within 10% of a nominal reading then take an average.
8. If the reading is negative either flip the current clamp or the meter leads. The meter is accurate for either direction so an absolute value can be taken here.
9. Place the slider to the "V-A Auto" setting and record the amperage of the circuit.
10. In the "V-A Auto" setting, press the "Select" button twice and record the voltage from the conductor to neutral or ground.

Figure E-23: Spot Measurements



Common system voltages from a conductor to neutral:

- 105 to 130 volts is usually seen in smaller commercial and office buildings from conductor to neutral or ground. Voltage phase to phase is around 202 to 210 if a 3 phase panel.
- 220 volts to ground is not used often. It's usually in smaller commercial and office buildings.
- 267 to 280 volts is often used in larger office buildings and industrial facilities. Voltage phase to phase is around 470 to 490 Volts.

Complete: Panel Meter – Consolidated Logging Circuit Table (CLCT)

The ***Panel Meter - Consolidated Logging Circuit Table (CLCT)***, seen in Figure E-24 below, is also for reference only and is the second stepping stone to completing the ***Final Spot Measurement and Logging Form*** seen in Figure E-25 below. The ***CLCT*** is used to assign loggers and channels to circuits. This table is the consolidated version of the ***CSMT***, as multiple

items in the ***CSMT*** can be rolled together and assigned to a single current transducer. As previously mentioned, columns "DD – MM" from the ***CSMT*** will be combined, when appropriate, and entered into columns "D-M" of the ***CLCT***. Typically no more than two line items in the ***CSMT*** will be consolidated into one item on the ***CSMT*** as each circuit is usually controlled by a 20 amp breaker, and the CTV-B current transducers are rated at 50 amps**.**

Figure E-24: Consolidated Logging Circuit Table

Panel Meter – Consolidated Logging Circuit Table:

	From table above			*DCT or HOBO*		*(HOBO)*	*From applicalbe fields in table above*					*From applicalbe fields in table above*				
Item #	Circuit Label #(s)		Phase	Logger Type	Logger ID	CT Channel #	Total Fixtures Controlled	# Lamps per Fixture	Watts per Lamp	# Lamps Burnt Out	Sum Circuit Watts	Sum Meas. Watts	Avg. *PF*	Avg. Meas. Volts	Sum *Meas. Amp*	Sum Parasitic Watts
(A)	*(B)*		*(C)*	*(X)*	*(Y)*	*(Z)*	*(D)*	*(E)*	*(F)*	*(G)*	*(H)*	*(I)*	*(J)*	*(K)*	*(L)*	*(M)*

Complete: Panel Meter – Final Spot Measurement and Logging Form

This is the final panel metering form to be data entered, and summaries all of the rebated measures and the lighting loggers associated to each measure and configuration. Many fields on this form are directly copied from the ***CLCT***, and each row on the ***CLCT*** will be shown as a column on the ***Panel Meter – Final Spot Measurement and Logging Form.*** Fields "*A, B, C, X, Y, Z, D, E, F, G, H, I, J, K, L,* and M" will be copied from the ***CLCT*** and inserted on to this final form. The ***Panel Meter – Final Spot Measurement and Logging Form*** is shown in Figure E-25 below.

Figure E-25: Panel Meter – Final Spot Measurement and Logging Form

Panel Meter – Final Spot Measurement and Logging

Breaker Circuit and Point of Control (POC) Assessment				
Panel Meter Item #:	***(A)***			
Associated Measure Code(s)				
IOU Unit Basis				
Panel number/identifier (if applicable)				
Circuit Label Number(s):	***(B)***			
Phase of Circuit(s):	***(C)***	A B C	A B C	A B C
Breaker(s) Rated Amps				
Control Type Code (CTC)				
# Wall switches connected to this Circuit				
Circuit Configuration Code (CCC)				
Schedule #				
Area ID #: *(if > 1 AA, enter from left to right)*				
Fixture Verification and Nominal Watt Calculation				
Circuit(s) tested (On/Off)?		Y N	Y N	Y N
# of Rebated **Units** on Circuit(s)				
# of Rebated Fixtures controlled by Circuit(s):	***(D)***			
# of Rebated Lamps per Fixture:	***(E)***			
Rated Lamp Wattage:	***(F)***			
# of Lamps Burned-out or Non-Operable:	***(G)***			
Total Nominal Rebated Circuit(s) Watts: ***(D*E*F)-(F*G)***	***(H)***			
Spot Measurements				
Max Measured Wattage: (with all fixtures on Circuit ON):	***(I)***	G N	G N	G N
Power Factor: *(if 2 circuits on 1 CT, average the PF)*:	***(J)***			
Measured Circuit(s) Voltage: (to Ground or Neutral):	***(K)***			
Max Measured Amperage: (with all fixtures 'ON'):	***(L)***			
% Meas. vs. Calc. Watts: ***(I/H*100)***; Is this between 90-110%?		% Y N	% Y N	% Y N
Non-Rebated or Parasitic Loads				
Do Non-Rebated or Parasitic Loads exist on this Circuit?		Y N DK	Y N DK	Y N DK
Is the parasitic load Constant or Variable?		C V NA	C V NA	C V NA
Parasitic Wattage: (only if a contant parasitic load):	***(M)***			
Logger Information				
Logger Type: ***(DCT** = DENT CT, **H**=HOBO)*	***(X)***	DCT H	DCT H	DCT H
Primary Logger S/N:	***(Y)***			
Logger Channel #	***(Z)***			
Reference Logger:		☐	☐	☐
Reference Channel:		☐	☐	☐
CT Amp size				
Logger Installation Comments				

Install Loggers and Current Transducers

Safety around electrical panels is CRITICAL! Please refer to and follow all safety procedures when working in or around electrical panels (Section A.7 Onsite Safety).

Once the ***Panel Meter – Final Spot Measurement and Logging Form*** is filled out, the loggers are ready to be installed as we now know which loggers and channels are going to be logging which circuits, and have measured values associated with each of those circuits logged. The DENT CT loggers and/or the CTV-B CTs associated with the HOBO loggers are placed on individual circuits at the contactor or breaker.

HOBO Logger and CTV-B Installation

The I-bar of the CTV's can be hinged open in order to install the CTV around an individual wire or multiple wires if on the same phase. Be sure that the current you are measuring will never exceed the maximum range of the CTV, this would corrupt the data on all channels. Below are the steps for installing the CTVs and HOBO logger:

1. Rotate the CTV I-bar open
2. Place the wire or wires from the branch circuit(s) in the CTV window
3. Snap the I-bar closed
4. Slide circuits toward the center of the CTV for most accurate readings
5. Insert the CTV lead into the HOBO logger channel assigned

A light (LED) on the side of the HOBO logger confirms logger operation. The light should blink once every 4 or 8 seconds. If the logger was launched the LED will flash every four seconds. If the LED flashes every eight seconds the logger is not launched. Double check that each logger LED blinks every four seconds before closing up the electrical panel. If the light is not blinking, or it is blinking in a different pattern, re-launch the logger to ensure proper operation.

DENT CT Logger Installation

The CT of the logger is pressed open in order to wrap around an individual wire or multiple wires if on the same phase. Be sure that the current you are measuring will never exceed the maximum range of the CT, this would corrupt the data on all channels.

1. Press the CT clamp open
2. Place the CT clamp around the wire or wires from the branch circuit(s)
3. Close the CT clamp and slide circuits toward the center for most accurate readings
4. Calibrate the sensitivity of the logger by turning the circuit ON and OFF, making sure that the logger only registers that the fixtures are on a minimum amount of current is seen

Extracting Panel Loggers

Before visiting a site to extract loggers, the type of lighting system and loggers installed must be reviewed. Ideally the surveyor who did the original installation will also do the retrieval but this may not always be the case. The process should be as follows:

1. *Prior to retrieval site visit*, obtain a copy of the Lighting Logger Installation form that was completed when the loggers were installed. The copy can be made from the surveyor's original hardcopy or downloaded from the online tool. In addition, prepare a zip-lock bag for storage of the loggers after retrieval. Write the SiteID, date, and surveyor's initials on both sides of a card or piece of paper and place in the bag.

2. On each logger form, record the date and time that the logger was removed.

3. Observe the logger and make sure it is still *functioning correctly*. For DENT CT loggers, if the lights are off, turn them on briefly to see if the "lights on" indicator responds (sun symbol or green LED on TOU loggers). For Amp level loggers (HOBO U12-006), note if the red logging "ON" LED is blinking. If not, note as the logging has stopped.

4. Remove each logger. For DENT CT loggers, adjust the sensitivity to its minimum (least sensitive) setting (all the way to the "-" sign). Place in the marked zip-lock bag, so that loggers do not get separated. This is especially important if you are picking up loggers from multiple sites in a single day.

5. Record the logger disposition and repeat this process for all loggers at the site.

6. Record any information that was missed during the logger installation site visit.

Onsite Safety

Safety is the number one priority onsite and all safety precautions should be followed. Below is a list of safety precautions to check while onsite.

- What are this facility's potential safety hazards (equipment, water, etc.)? _____
- Who do I contact in case of an accident or injury? _____
- Where is the working panel power disconnect? _____
- Where are the entrances and exits closest to the working panel? _____
- Are there obstructions or doors that may interfere with access safety in the panel? _____
- Are there any forms of backup power or SCADA associated with the working panel? ___
- Rate the quality of the working panel (dust, corrosion, wiring) [1-5 high quality] _____
- Brush the back of your hand across panel before opening it for shock detection.

- ☐ Open panel door away from you to avoid arc flash to the body and head.
- ☐ Wear appropriately rated insulated gloves.
- ☐ Wear appropriate safety goggles or face shield.
- ☐ Test for loose wires that may come free when working in the panel.
- ☐ Measure voltage of panel to assess the shock hazard. Volts:_____

High bay lighting is often in industrial environments that present special hazards. Keep that in mind! Know what the special precautions are!

- **Forklift trucks**. High bay lighting often tends to be located in factories and warehouses. Forklifts have right of way. Always look both ways before entering an aisle.

- **Trip hazards**. When doing lighting surveys the in high bay situations the surveyor is often looking up and not where they are going. Always look ahead some distance before walking while looking up to pre-observe if any trip hazards exist. Only walk the distance and path you have looked ahead too. When going down a new path take a second to refresh your view.

- **Safety apparel**. Electrical safety apparel may be required by the site and may include hard hats, steel toe shoes, goggles, long sleeve shirts, or flame retardant clothing. Electrical safety wear should meet or exceed 2009 NFPA 70E requirements.

Appendix F

Lighting Logger Data Validation Process

F.1 Overview

As part of the CPUC Nonresidential Downstream Lighting Impact Evaluation, over 4,000 lighting loggers were installed and processed. To ensure the quality of the data logged for this project, each logger was reviewed by qualified staff to ensure the loggers were recording information accurately. Three different types of loggers were installed throughout this evaluation process. DENT Lighting loggers (Dent LL), which represent the vast majority of loggers installed, record lighting ON/OFF transitional data using a built in photocell and are typically installed interior to the lighting fixtures. DENT Current loggers (Dent CT) also record lighting ON/OFF transitional data but unlike the Dent LL, records usage based on the presence of current flowing through a circuit. These loggers are typically installed within electric panels to monitor high bay lighting controlled by switches or circuit breakers, but can also be used to monitor plug in fixtures. The third logger type installed is HOBO loggers. Hobo loggers are also installed in electric panels, record continuous (not transitional) data, and are configured to measure the level of current flowing through a lighting circuit in five minute intervals. This logger is also used to monitor high bay lighting however it is used specifically for fixtures with integrated occupancy sensors as amperage levels on a circuit change in relation to each fixture's operation. This appendix describes the systems used to review and QC the Dent and HOBO loggers (4000+) so that each logger received a hands-on look at what it recorded in the field.

As both Dent loggers (LL and CT) record transitional data, a system named viewLoggers was used to evaluate each logger's data. Section F.4 below presents an overview of the viewLoggers system, showing the various components and how they were brought together to allow each evaluator, while reviewing the site, to have easy access to all the pertinent information necessary to make an informed decision about the validity of the data logged.

The HOBO logger data was reviewed in much the same way as the DENT loggers, however as it does not record transitional data, the viewLoggers system was not used. Instead a process referred to as HOBO QC was used and is further discussed in Section F.5 .

F.2 Checking the Quality of the Logger Data

Why is it necessary to check the quality of the logger data? Each of the three types of loggers used in the study come with their own set of limitations and can be prone to problems if proper measures aren't taken to ensure their data quality. The Dent LL loggers have the highest variation for data quality, followed by the HOBO, then the Dent CT. Since the Dent LL loggers use a photo sensor to record changes in lighting levels, many factors need to be considered to ensure that it is only picking up the lumens from the lamp or lamps intended. Things like the placement of the logger, sensitivity of the photocell, and environmental conditions are critical to understand. Any outside lighting source can adversely affect the information recorded. In addition, setting the sensitivity of the photocell is an art, not a science. With the HOBO loggers, spot measurements with a digital multimeter are needed to confirm the correct circuit is being logged as well as to identify any parasitic loads on the circuit that could provide false lighting data. The Dent CT has the least room for error as setting the sensitivity of the current transducer is simple, unlike the Dent LL where you have also have to adjust for ambient light. These and many other issues are evaluated during the process of reviewing the data recorded by the loggers.

Before the review process begins, there are several steps taken to account for the multitude of issues that can arise on-site as part of using these types of lighting logger equipment. Onsite procedures, surveyor training, and the survey form itself were all designed to minimize logger data error and maximize each logger' quality. Some examples of steps taken to ensure good logger data are installing two loggers on the same circuit but in different fixtures. This ensures that if one logger fails the other logger will capture the correct lighting usage of that circuit. The surveyors are also trained to install and calibrate loggers to ensure that the logger accurately captures the changes in the state of the lighting, rather than changes in the ambient lighting due to other light sources or the amount of daylight entering the room.

The persons evaluating the data are trained to recognize these problems and other types of errors in an effort to ensure the data logged represents the actual usage of the lighting. Once an initial evaluation is performed, the evaluator dispositions the logger with written comments and indicators as to the quality of the data. It is this function that viewLoggers and HOBO QC facilitates. The viewLoggers tool is used to view graphically and numerically the data represented by the logger. ViewLoggers also makes available the raw data, survey form, and photos taken at each site. For HOBO QC, the logger data is also viewed graphically with contextual logger and site information available to correctly assess each logger. Finally, on-site and phone survey data are also made available to help facilitate the process of determining whether or not the data that were recorded met expectations for the type of area in which the lighting was installed.

F.3 The Process

Behind every lighting logger is an entire sample design/ phone survey/on-site survey process that must be managed and performed. The steps in this process include the following:

- Sample design was created using information collected from the IOUs about the programs in which they were involved.
- Phone surveys were performed to collect preliminary information about the lighting purchased and/or installed at the site.
- Sites were recruited to allow the surveyors to perform the installations.
- A survey was performed on-site to collect information about the actual state of the lighting found and about site characteristics as well.
- Loggers were installed, for an average of 7 months, in order to collect lighting usage data.
- The logger data were downloaded for evaluation and analysis.

The phone survey data is retrieved using a CATI system and hence automatically entered into a machine readable form. The on-site survey data are collected using paper forms and must be data entered. A different system was developed to facilitate the data entry process using Microsoft Access as the data store. The logger data were downloaded into files stored on a file system, then cataloged and stored with their respective site data, along with photos and survey forms to make a complete package of original data to support the analysis process. Only then was it possible to load the data into viewLoggers and HOBO QC and start reviewing the actual data logged. As mentioned before, the tools bring together all the information mentioned above so the evaluator has, at their fingertips, everything needed to understand the site, area, and lighting equipment being logged. The next sections go into detail about how viewLoggers and HOBO QC present these data for review. Figure F-1 below shows examples of a Dent LL and installation, Figure F-2 shows a Dent CT and installation, and Figure F-3 shows a HOBO logger and installation.

Figure F-1: Photos of Dent LL and Installation

Figure F-2: Photos of Dent CT and Installation

Figure F-3: Photos of HOBO Logger Installation

F.4 viewLoggers

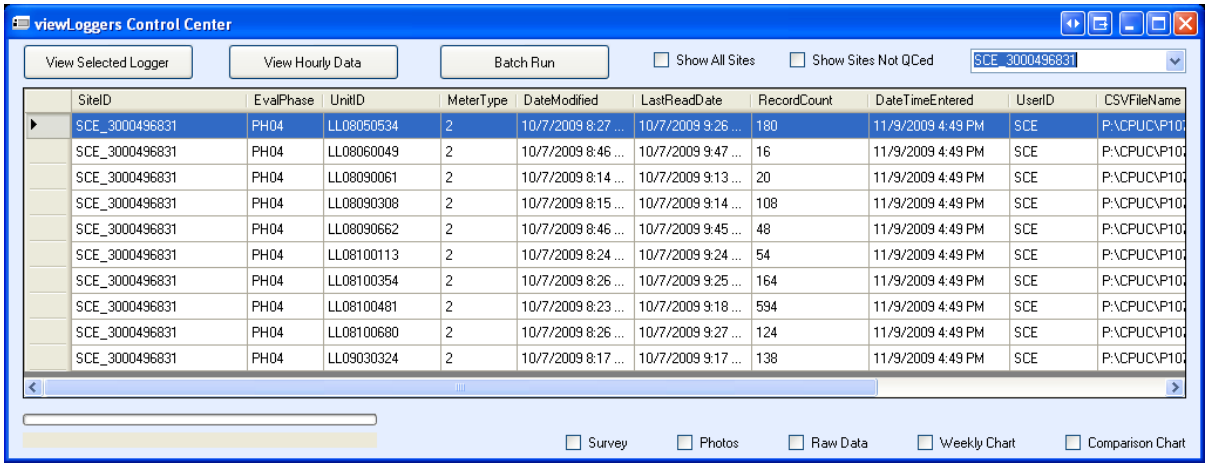
viewLoggers is a program that makes easy access to the logger data files for review and quality control (QC). The software is written using Microsoft's Visual Studio and C#.NET. Some third party tools were also utilized for graphics and the user interface.

In this section we discuss various attributes of the software and show how the tool made the quality control process accessible enough as to allow the review of over 4,000 loggers in such a short period of time.

F.4.1 The Control Window

The Control Window is shown in Figure F-4. This is the opening window and controls all the processes available in the software. A database of files supplies the list of loggers for evaluation. The Control Window allows the evaluator access to all the loggers available for QC at a given site. By selecting a site identifier in the upper right-hand corner, all loggers for which there are data files on the drive are selectable in the grid seen on the dialog.

Figure F-4: viewLoggers Control Dialog



The evaluator selects each logger one-by-one and reviews the data by viewing the user selectable resources made available by the software. By clicking the checkboxes in the bottom right corner of the dialog, the user can view the resources to aid in the evaluation process. The checkboxes allow the evaluator to open the following items:

- The on-site survey form as an Adobe PDF file.
- The photos taken at the site by the surveyor.
- The raw transition data collected by the logger.
- A weekly chart showing the percent of lighting on per minute by week.
  - Included with this chart are numeric views to the transition data and the number of seconds ON per minute.
- The same weekly chart with an additional view of the data using a Gantt format of the same data.

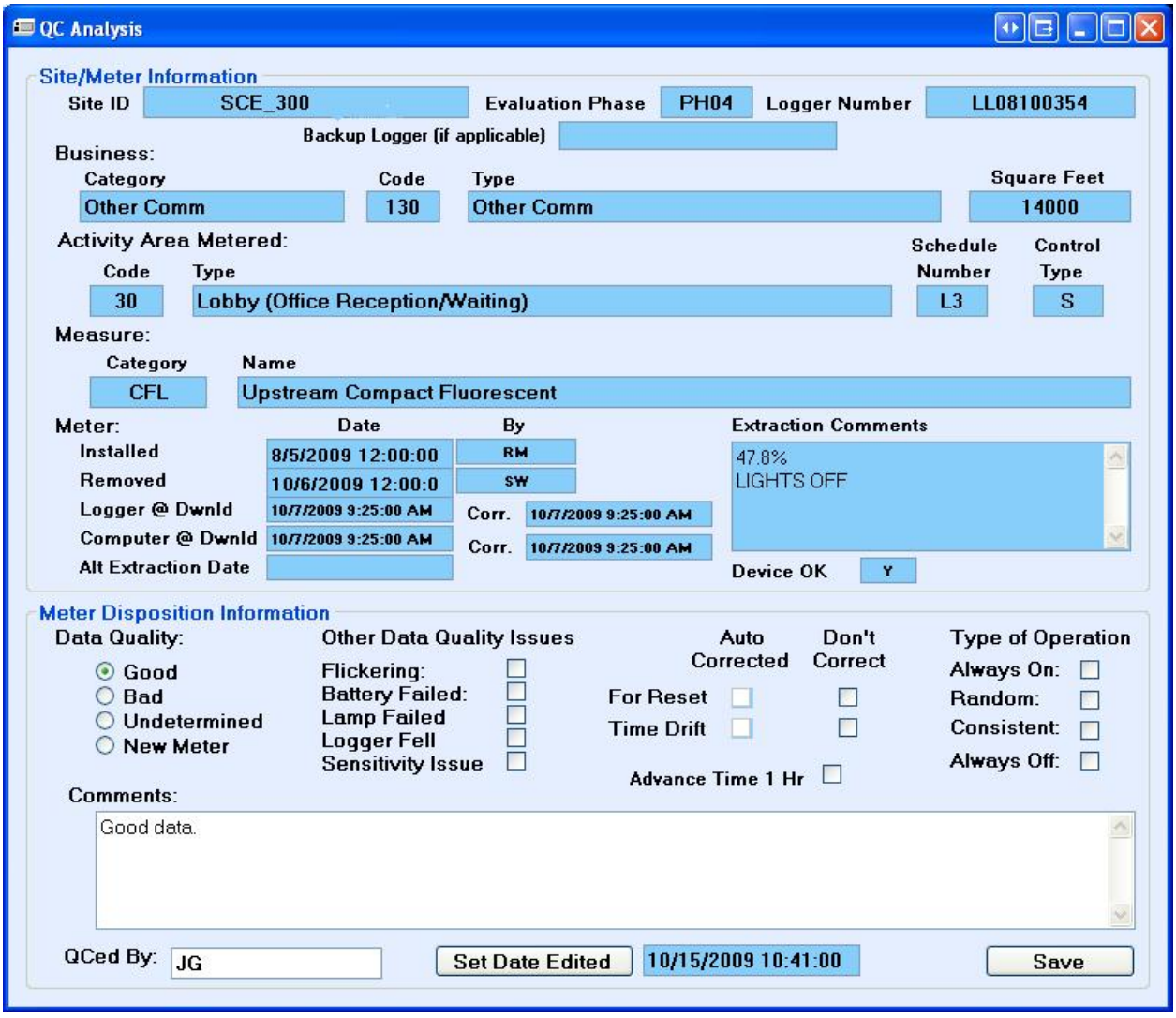
Each of the above items will be discussed in the following sections. Also available from this dialog is the ability to view the hourly rollup of these data for the entire period of installation, as well as other bells and whistles for batch processing and viewing the available list of loggers in different ways.

F.4.2 QC Analysis Dialog

This dialog is the heart of the logger evaluation process. As seen in Figure F-5 below, this dialog shows all of the pertinent information about the site and information about the area in which the logger was installed. Knowing this information can be very useful when trying to understand the patterns recorded by the logger. The upper part of the screen is populated with data from the on-site survey and shows the following information:

- Site and logger identifiers,
- Backup logger identifier (if installed),
- Business type,
- Total square feet,
- Activity area where logger was installed,
- The schedule number associated with the logger,
- Type of control on the circuit being logged,
- What type of lighting was being logged,
- Status of the logger at time of removal,
- Pertinent dates associated with the installation and removal of the logger, and
- Comments recorded at the time of extraction.

Figure F-5: QC Analysis Dialog



In the bottom third of the dialog are the evaluation controls used to disposition the logger data. It is here that the logger data are marked as usable or not and why. Controls are made available to indicate if the data are considered good or not, what quality issues cause concern or disqualification of the data, whether or not the clock on the logger needed mechanical adjustment, and an indication of the type of operation observed by the evaluator in the data. All these inputs are used during analysis to include or remove logger data where problems are observed.

At the bottom of the dialog are the controls to indicate who evaluated the data and when. The "QCed By" control may contain multiple initials indicating that a logger has undergone further review before a final decision was made about the quality of the data logged. Once the disposition of the data is performed, the quality of the data is indicated by using the controls and/or written comments. With the comments written and the flags set, the Save button is

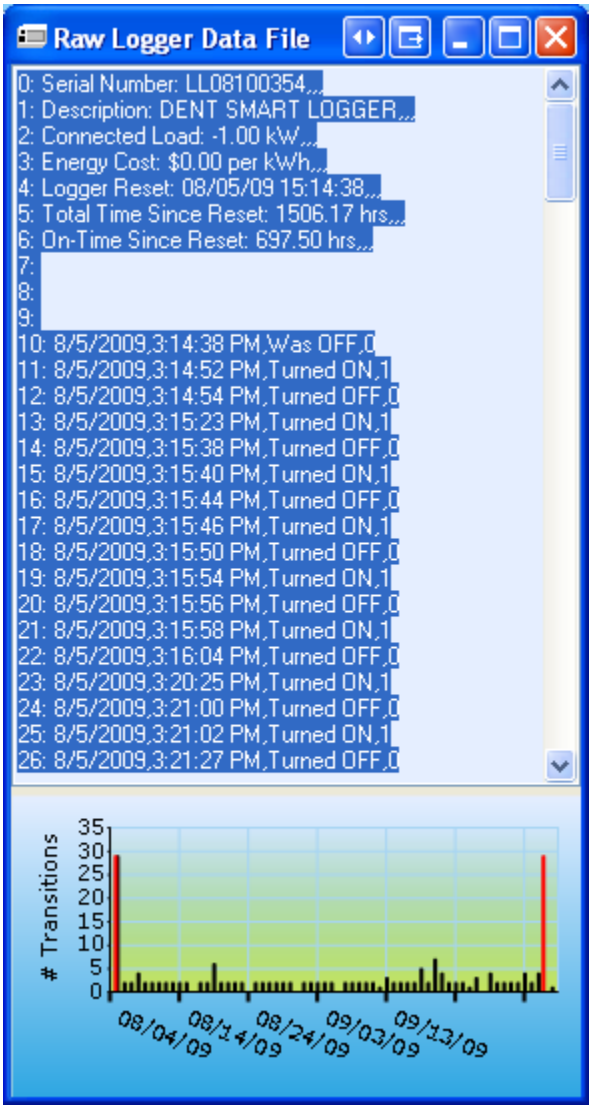
pressed and the data are stored to the database. If the logger is marked as good then the hourly data are calculated and stored to the database as well. If the logger is not marked as good then the disposition and comments are saved but the hourly data are not calculated or stored.

F.4.3 Raw Logger Data File Dialog

In Figure F-6, the contents of the raw logger file is made available to the evaluator. The ability to view these data is invaluable in the process of QCing the logger data. It is here that the actual ON/OFF transitions may be viewed. All the graphical views in the world are no match to seeing the raw data.

The dialog has two parts. The first shows the exact contents of the comma delimited file when the data are stored. Looking at these data can reveal many issues encountered by the logger during the period of installation. The second is a histogram of the number of transitions per day recorded by the logger. The histogram can be very useful for seeing gaps in the data caused by logger failure or for seeing periods of flickering cause by the effects of outside lighting sources on the logger. The two red lines in the histogram indicate the dates of installation and removal. When the hourly data are calculated, only the data between these two dates are stored to the database. It is presumed that the data recorded on or before the date of installation and on or after the date of removal are subject to external effects and not representative of the actual lighting usage at the site.

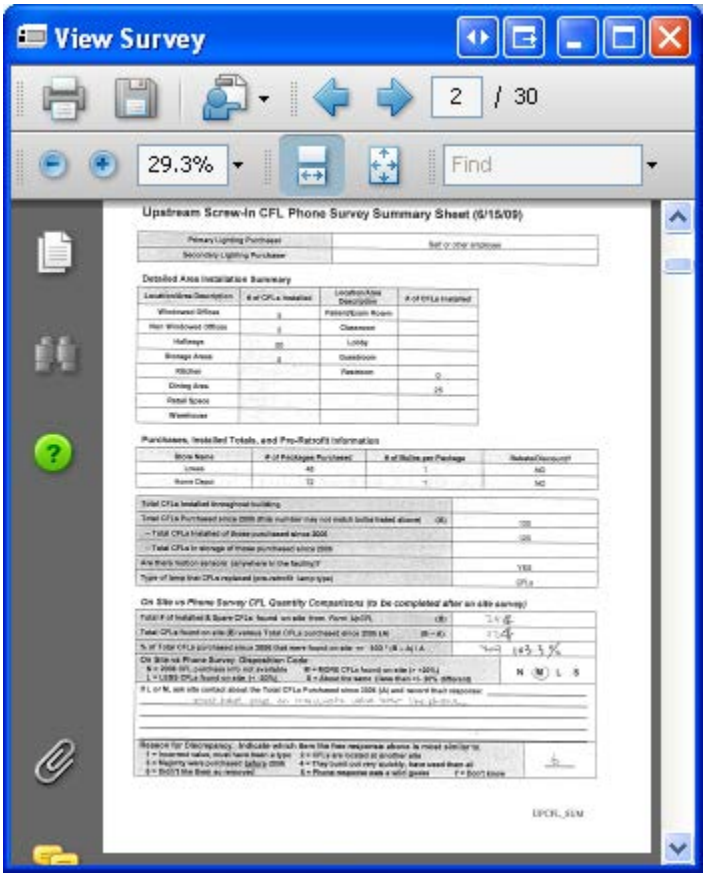
Figure F-6: Raw Logger Data File Dialog



F.4.4 View Survey Dialog

The View Survey dialog, shown in Figure F-7, makes available the scanned survey form in Adobe PDF format. This gives the evaluator access to all information collected during the on-site survey. Having this information readily available can prove to be invaluable while evaluating the accuracy of the logger data.

Figure F-7: View Survey Dialog



F.4.5 View Photos Dialog

The View Photos dialog makes available all the photos taken at the site. While Figure F-8 only shows one of the multitudes of pictures taken at the site, the dialog acts much like a browser when opened to full screen—the evaluator can scroll through all the pictures to see where the loggers were placed and under what conditions. When trying to evaluate why a logger experienced frequent transitions, being able to view the area in which the logger was installed is very useful. The pictures can also be expanded to full screen for a closer view, if needed. It should also be mentioned that pictures, like the one in this figure, were very useful when looking at model numbers of CFLs to get wattage, lumens, color rendition, etc. for the lighting analysis.

Figure F-8: View Photos Dialog

F.4.6 Graphically Reviewing the Data

A graph is worth a thousand words with it comes to reviewing logger data. Whilst the tools made available by the logger manufacturers can be quite useful for this purpose, it was decided that a new tool would be even more useful if it brought together all the above mentioned information with a graphical representation of the actual logger data. The dialog, shown in Figure F-9, shows much the same data available in other software. The chart on top shows the *percent on per minute* for an entire week's period of time. This view may be scrolled using the buttons and calendar control in the upper left-hand corner. If the buttons are used the evaluator can scroll through the data week by week to see the change in the data over time. If a particular day stands out, say in the raw data, the user can use the dropdown to select that day and view a week of data starting on the day in question. In this version of the software, a view of a single day is not available.

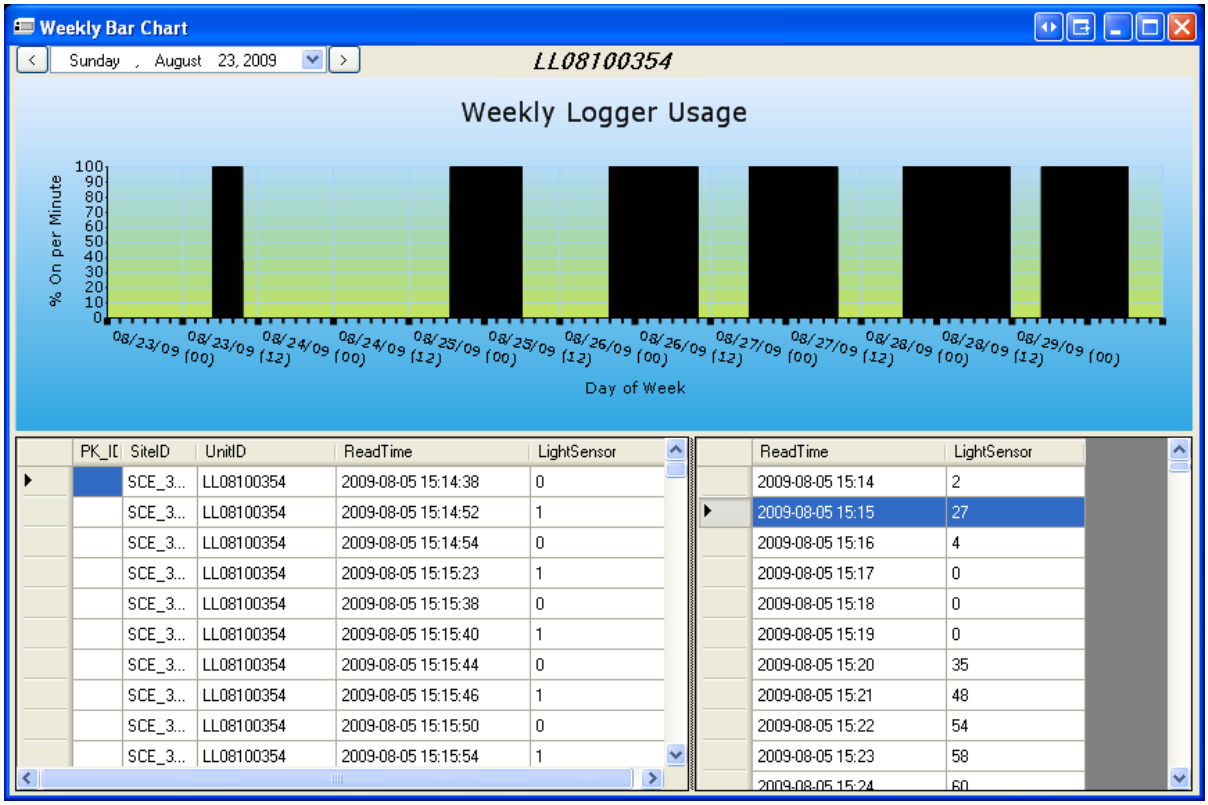
In the bottom of the dialog two grids are presented. The bottom left grid shows the transitions recorded by the logger after adjustments have been made by the software. There are four types of adjustments that can be made to the transition data. They are as follows:

- Time correction due to logger reset,
- Time correction due to malfunctioning logger clock,
- Time correction due to Daylight Saving Time, and
- Conversion from analog to transition.

Discussion of these corrections will follow later in section J.5.1. The evaluator can use the grid with the Raw Data View to view the adjustments in the data and, if errors are observed, report these errors to the programming staff for correction. Here, the evaluator can make sure the right procedure was used to save a logger that might otherwise have been discarded.

The bottom right-hand grid shows the actual minute-by-minute data as it was calculated from the transition data. The grid shows the number of seconds the light was on in each minute of the logger's life. No data are excluded from this view. This allows a complete review of all data recorded by the logger. It shows what happened to the logger from the point it was initialized by the surveyor through to the point it was plugged into the computer and downloaded into the file read by viewLoggers. As mentioned above, only the data between the installation and removal dates are used in the analysis, but being able to view the periods outside this time can be invaluable to uncovering problems with the way the logger recorded the transitions.

Figure F-9: Weekly Bar Chart



PK_ID	SiteID	UnitID	ReadTime	LightSensor
	SCE_3...	LL08100354	2009-08-05 15:14:38	0
	SCE_3...	LL08100354	2009-08-05 15:14:52	1
	SCE_3...	LL08100354	2009-08-05 15:14:54	0
	SCE_3...	LL08100354	2009-08-05 15:15:23	1
	SCE_3...	LL08100354	2009-08-05 15:15:38	0
	SCE_3...	LL08100354	2009-08-05 15:15:40	1
	SCE_3...	LL08100354	2009-08-05 15:15:44	0
	SCE_3...	LL08100354	2009-08-05 15:15:46	1
	SCE_3...	LL08100354	2009-08-05 15:15:50	0
	SCE_3...	LL08100354	2009-08-05 15:15:54	1

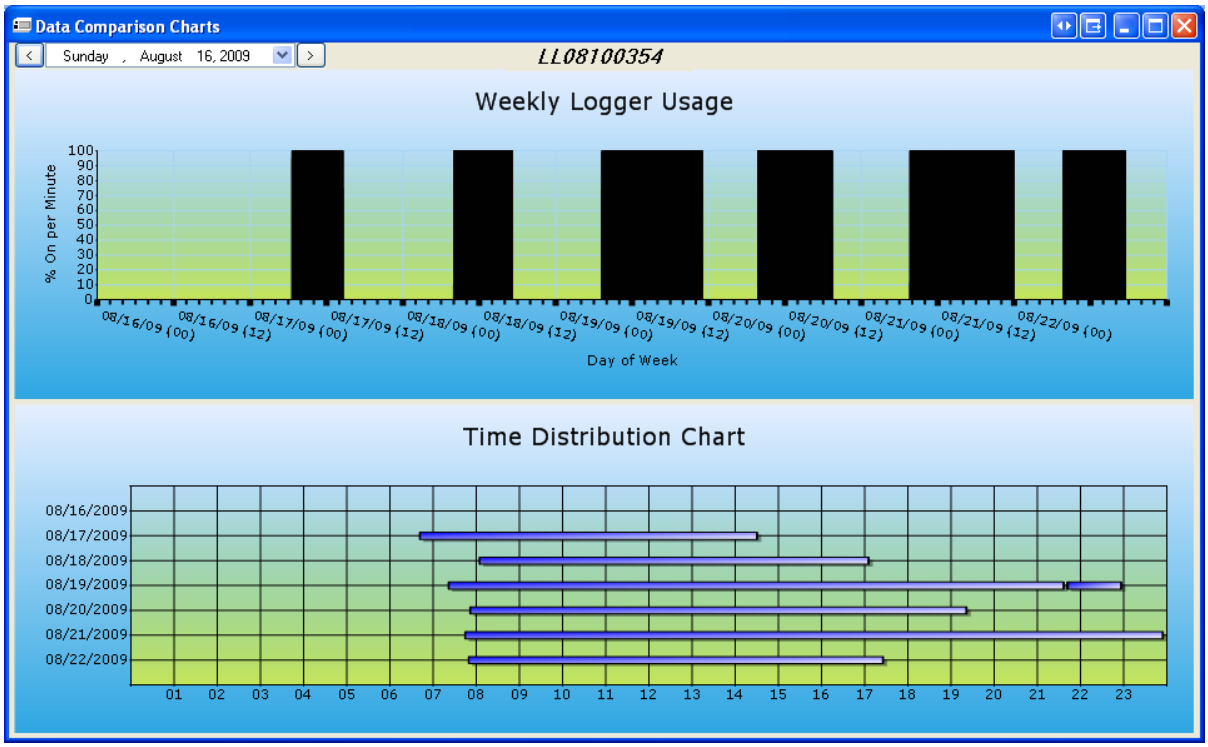
ReadTime	LightSensor
2009-08-05 15:14	2
2009-08-05 15:15	27
2009-08-05 15:16	4
2009-08-05 15:17	0
2009-08-05 15:18	0
2009-08-05 15:19	0
2009-08-05 15:20	35
2009-08-05 15:21	48
2009-08-05 15:22	54
2009-08-05 15:23	58
2009-08-05 15:24	60

F.4.7 Data Comparison Charts

The charts shown in Figure F-10 are another tool available in viewLoggers for the purposes of reviewing the logger data. While the top chart is identical to the chart in Figure F-9, the Gantt chart in the bottom of this dialog shows these data in a different and interesting way. The interesting point to this chart is that it accentuates the issue of flickering in the data. In the weekly chart, the problem of flickering caused by external influences is washed out because there is so much data compacted in such a small space (i.e., the weekly chart is a bar chart where every bar represents one minute of data for a week).

The Gantt representation of the data shows all actual starts and stops or transitions in the data. It does this by breaking the line for each transition. Note the break in the line on August 19 at around 21:40. Looking at the bar chart above, this transition is not visible but it can be seen in the Gantt representation of the data. In this case, there certainly is no problem with the data and the logger would not be adversely affected by this transition. In the case where there are multiple transitions like this, they are easily identified by the evaluator, which would give reason to inspect the data and comments further to determine if the transitions are legitimate or a cause for alarm. The Gantt chart and the histogram on the Raw Data View have proven to be quite useful as an effective and efficient way to uncover problems with the logger data.

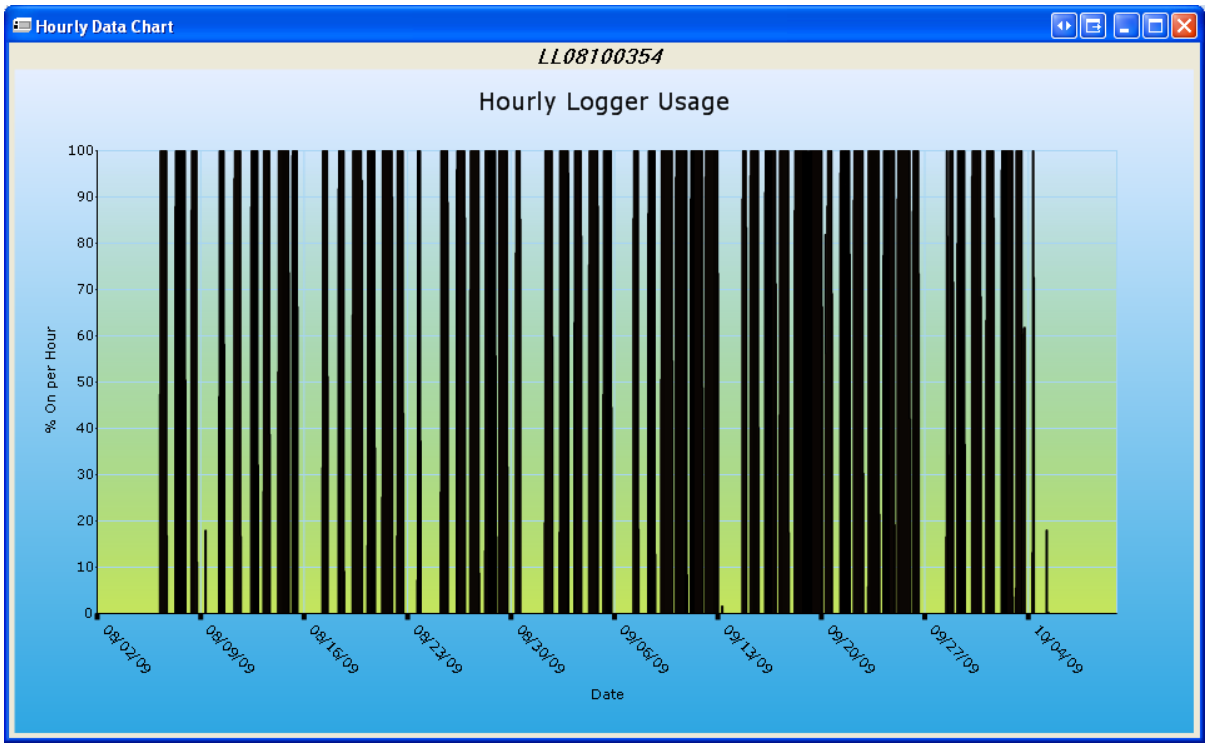
Figure F-10: Data Comparison Charts



F.4.8 Hourly Data Chart

Finally, the Hourly Data View shows the data as it will be used in the analysis. Figure F-11 shows the data represented by this dialog. As the period for the loggers in the study did not exceed six months, it was decided to show the entire data in this chart. In future revisions to the software, this may be enhanced. As it is now, the evaluator can view graphically the percent ON per hour of the period between the installation date and the removal data. Being able to review the data in this format allows for another way of seeing gaps in data collection as well as how regular or irregular the data are on an hourly basis. Seeing this may cause further review of the data or give the reviewer the necessary confidence that the data are representative of the type of building and area where the data were collected.

Figure F-11: Hourly Data View Dialog



F.4.9 Dent Data Issues

As mentioned in section J.4.6, there were a few issues with the data that were caused by outside forces. That is to say, they were not issues with the lighting being logged but with the logger itself. In some cases, the logger data and even the loggers needed to be discarded. Case in point: when a logger was placed too close to a heat source, the logger would melt beyond recognition. This happened in cases where the logger was installed on a CFL but the CFL was replaced during the survey period (by the business owner) with an incandescent bulb. The heat generated from the incandescent bulb was too great for the logger.

Other issues included in the list in section J.4.6 are with the clock or with the way the data are recorded by the logger. This section will go through each issue and discuss the corrections needed to save or convert the data for use in the analysis.

F.4.10 Dent Time Issues

There were three basic time issues that needed to be addressed. This section will offer a description of these issues and explain how they are corrected by viewLoggers.

Time Correction Due to Logger Reset

This correction was implemented whenever a logger was reset to factory defaults by mistake. Each logger is plugged into the computer and set to the clock before being taken out to the site. During the installation process, the loggers are tested and adjusted to capture the changes in lighting state from the lamp being logged. Once the adjustments are made, the installer presses the reset button to clear out the extraneous transitions and then places the logger where it belongs to record lighting usage. If the reset button is pressed for too long the logger resets to factory default.

When this problem was discovered, the evaluation team developed a method to adjust the time/date stamps recorded in the logger file using the time of the computer and the time of the logger at the moment the data were downloaded to the computer. It was found that by using this information, an adjustment could be calculated and applied to each transition to bring the time/date stamps to the present time. With no exceptions, this method was successful in making data available for analysis that would otherwise have been lost.

Time Correction Due to Malfunctioning Logger Clocks

This problem was somewhat more problematic. Early on, the team became aware that some loggers had problems with their clocks. The clocks seemed to be cycling either slower or faster than the standard 60 cycles per second. The effect of this was for the logger clocks to either slow down or speed up over time. This seemed like an insurmountable problem until it was discovered that the clocks were changing at predictable rate that was linear in nature. With this knowledge, it was simple to program a correction using the time/date stamps of the logger and the computer at the moment the data were downloaded. The difference in these times was distributed proportionally over time based on the amount of time that had passed since installation. After making this correction, the recorded times were observed to be remarkably accurate. It should be noted that this correction was only applied if the difference between the computer time and the logger time was more than 15 minutes and less than 20 hours. Any difference more than 20 hours was considered not salvageable.

Daylight Saving Time

The loggers used for this analysis do not have the ability to correct for Daylight Saving Time (DST). Because of this, it is necessary to adjust the time/date stamps when time changes occur to set the logger's clock back to clock time. To help facilitate these adjustments, a calendar was created indicating when time changes occurred. Code was then written to recognize the time to which the logger was synced and then adjust the data when a DST boundary was crossed. This adjustment is automatic in viewLoggers.

A secondary issue arose for the loggers that were initialized before DST started but installed after DST was in effect. These loggers were identified and code was written to correct this problem by advancing the clock one hour for all time/date stamps in the transition file. This is controlled by the checkbox on the QC dialog called "Advance Time 1 Hour".

F.5 HOBO Logger Data Validation

HOBO QC is not a program like viewLoggers, it is a term used to describe the process and tools developed that allow each logger to be reviewed in reference of the contextual data surrounding a logger while allowing for the tracking of their final dispositions. This section discusses the details of the HOBO QC tools, the thought process behind validating a logger, and the tracking of their dispositions. To better understand the HOBO QC process it is recommended that the Panel Metering section of Appendix E be reviewed first to become familiar with the HOBO data loggers and the on-site data used to cross-reference the HOBO data.

F.5.1 HOBO_QC_Tracking Workbook

The HOBO QC Tracking Workbook is an excel workbook that populates and tracks all of the HOBO loggers that have been downloaded and are ready for QC. A team of engineers trained in the validation of HOBO data use the workbook to make logger QC assignments, provide final dispositions for loggers, include logger comments, and document all action items needed to process a logger. The workbook has three sections and described below are all the variables present under those sections in the workbook.

Unique Logger Records

1. **Evaluation Phase**, **SiteID**, and **Logger ID** – These are the three variables used to uniquely identify a logger and they are pre-populated to the workbook as HOBO loggers become ready for QC.

Logger and Action Item Status

These fields depict the overall status for each logger in the QC process.

1. **QC Assignment** – This field is updated with an engineer's initials and designates the engineer assigned to a logger.
2. **QC Complete?** – (Yes/No) field that provides a final status for each logger
3. **Form Action Item Complete?** – (Yes/No/NA) field that provides a final status for any action items relating to survey form adjustments that need to be made based on the logger data. For example, a form may show a logger was measuring 8 fixtures while the logger data shows it is measuring 10. The form and database must be updated to represent 10 fixtures logged.
4. **SAS Action Item Complete?** – (Yes/No/NA) field that provides a final status for any action items relating to code fixes that need to be made to a logger's data. For example, if a circuit is found to have a constant parasitic load of two amps, SAS code needs to be written for the logger to subtract out two amps from each observation.

Final Logger Dispositions and Comments

1. **Start Date –** QCer enters the date for which the logger began logging. This date is compared to the date the on-site was completed to make sure they match.
2. **Adjusted Start Date –** This is the date depicting when we want to start using the logger data if a logger for some reason began logging prior to its installation on site.
3. **Adjusted Start Date Comments –** Comments describing the rationale for the adjusted start date.
4. **End Date –** QCer enters the date the logger stopped logging.
5. **Adjusted End Date –** This is the data depicting when we want to cut the data off if the logger continued logging after being extracted from a site.
6. **Adjusted End Date Comments –** Comments describing the rationale for the adjusted start date.
7. **Parasitic Loads?** – (Yes/No) field for whether the logger was recording any parasitic loads (any load not related to the rebated lighting). Ideally there are no parasitic loads on a circuit but it can happen, even after being properly tested prior to the logger installation.
8. **Parasitic Load Type –** (Constant/Variable/NA) field that describes the type of parasitic load on the logger. If the parasitic load is constant then the parasitic data can be easily removed from the data. If the parasitic load is variable the parasitic data cannot be easily removed and may require specific SAS code adjustments or be designated as unusable.

9. **Constant Parasitic Amperage** – This is filled out with a numeric value if the parasitic load is constant. This value is subtracted from the data to eliminate the parasitic load.
10. **Denominator Amps for Analysis** – This is a very important numeric value set by the QCer. The QC process was designed to help extract this value from the data. The value represents the maximum amperage for the circuit to be used in the analysis to generate the %ON time for a logger. As the logger records amperage levels, those levels need to be compared to the maximum amperage draw for the rebated lights on the circuit to get a %ON time.
11. **Max Amps Source** – This field is used to describe where the maximum amperage value the QCer chose came from. As a logger could be measuring 10 lighting fixtures with integrated occupancy sensors, it's possible that throughout the entire logging period all 10 lights were never on at once. As such, the maximum amperage value to compare the amp levels against to obtain a %ON value does not exist in the data. The source types that can be designated are described below:
    a. **98% Max** – Is the max amperage recorded by the logger in the 98th percentile. This value is generated from code and is used to account for small spikes at circuit start up that may not accurately represent a circuit's steady state maximum amperage draw.
    b. **Max Logger** – This is the maximum amperage that the logger ever recorded.
    c. **Max Measured Amps** – This is the maximum amperage value measured onsite with a multimeter when all fixtures on a circuit were believed to be on.
    d. **Max Measured Calculated Amps** – This is the maximum amperage value obtain from measuring maximum circuit wattage, voltage, and power factor with a multimeter and back calculating the amperage
    e. **Rated Calculated Amps** – This is the maximum amperage expected on a circuit from calculating the nominal input circuit watts from the lighting configurations and divining by the measured circuit voltage and power factor to obtain amps.
    f. **QCer Value** – This is a numerical value the QCer sets using the contextual information gleaned from items a. through e. above. The a. through e. values may not be the exact values we want to use, however they each allow cross-referencing to determining the best value to generate an accurate %ON time for the fixtures being logged.
12. **Rationale for Max Value** – This is a text field where the QCer provides the justification for why they set the maximum amp value they did.
13. **Data Quality** – This is another key field that described whether all the data for a logger is "Good" or "Bad". If the disposition is "Good" then the logger data can be used for analysis, if "Bad" it cannot.

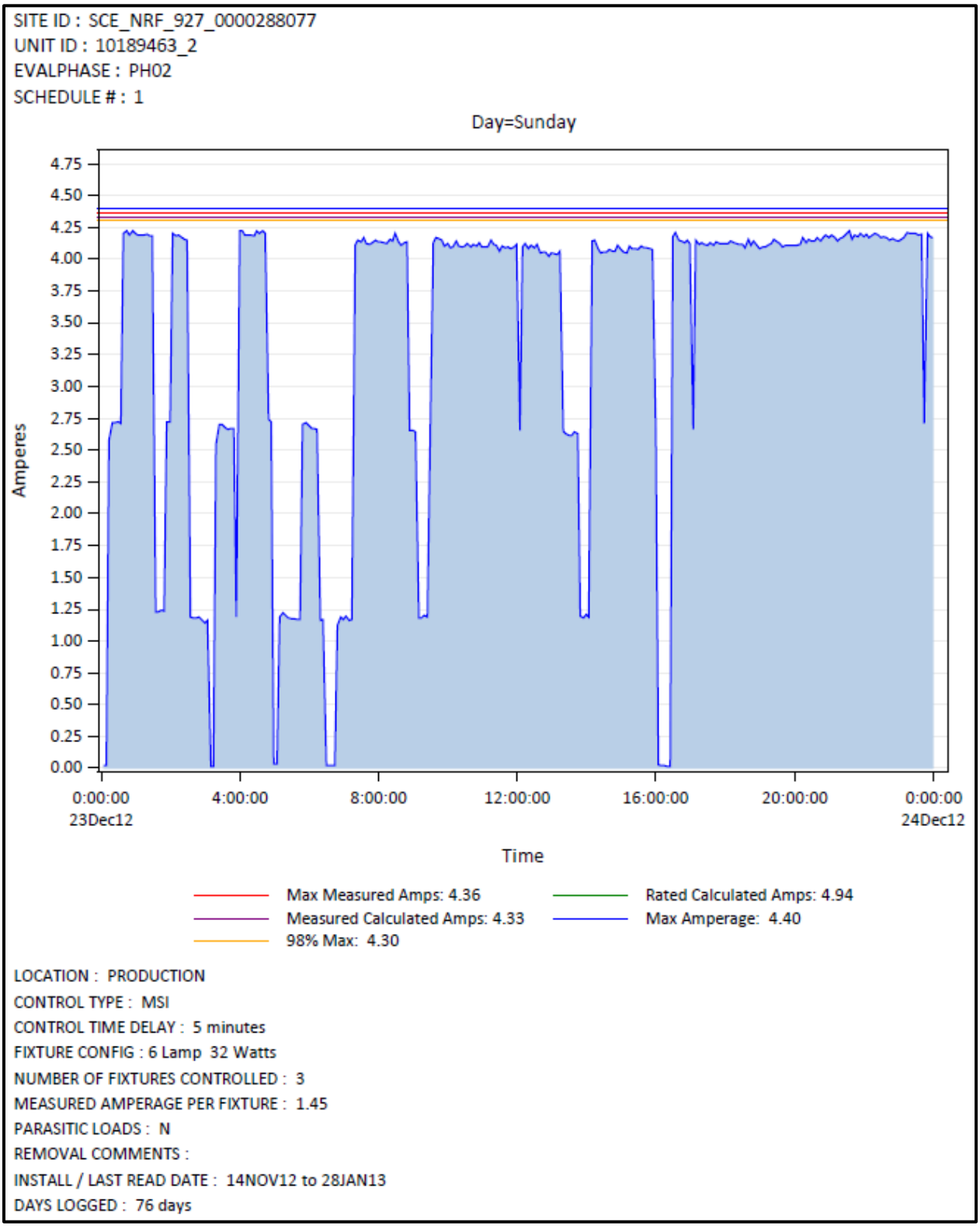
14. **Spot Measure Comments** – This field describes accuracy of the spot measurements and their consistency with the data.
15. **General Comments** – This field allows the QCer to describe in more detail any discrepancies or issues related to the logger that may have been touched upon earlier in the QC workbook.
16. **Action Items for Form Change** – This field describes any changes that need to be updated on the survey form from QCing the logger's data.
17. **Action Items for SAS** – This field describes in detail the adjustments that need to be made to a logger using SAS code.
18. **Final QCer** – Contains the initials for the person who gave the final dispositions for the logger.
19. **Date Final QC** – Date the loggers' QC was complete.

F.6 Hobo QC PDFs

As with Dent logger QC, the ability to view the logger data in graphical form is essential to assessing the quality of a logger. For HOBO QC each logger's raw data was graphed to PDFs using SAS code. Each logger PDF is stored in it respective site folder where the final survey form, site photos, and raw data live, making it easy to access all site information at one time. Each PDF shows day by day lighting usage and the format allows you to scroll through each day of data (76 days maximum for HOBO loggers). Pre-populated on each PDF is contextual information about the site and logger that allow a QCer to perform key checks to ensure the data is as expected. The contextual data populated to the form is listed below and an example of a HOBO QC PDF is shown in Figure F-12.

- Schedule item
- Location
- Control type
- Control time delay
- Fixture configuration
- Number of fixtures controlled
- Measured amperage per fixture
- Parasitic loads
- Removal comments
- Install / Last read date
- Days installed

Figure F-12: Example HOBO PDF



Also shown in the graph are five colored horizontal reference lines. These reference lines represent different circuit measurements taken onsite as well as values extracted directly form the data. The reference lines are used to asses the quality of the data. A description of each reference line is provided below.

1. **Max Measured Amps (Red)** – This is a direct amp measurement made with a digital mulitmeter on this logger's lighting circuit and made when the surveyor believed all of the lights on the circuit were on. This value is important because if done correctly, the maximum amperage seen in the data should top out around this point. This value cannot be used alone to assess the data quality as the lighting fixtures have integrated occupancy sensors and not all of the lights on the circuit may be on at one time during the montorign period.
2. **Measured Calcualted Amps (Purple)** – This measurement is a cross-reference to the max measured amps above. Here the surveyor will measure the circuit wattage, voltage, and power factor. From these three measurements the amperage is calcualted (Watts/Votage*Powerfactor). If no fixtures have turned off between taking the max measured amps and measured calculated amps, the amp values should be roughly the same.
3. **Rated Calculated Amps (Green)** – This is a rough calculation conducted to make sure the other measurements taken are in the right ballpark. This calculation takes into account the number of fixtures on a circuit, the number of lamps per fixture, and the lamp wattage. The number of fixtures*lamps per fixture*lamp wattage/circuit voltage*powerfactor give you a benchmark for your other measurements. For example, if you have 10 fixtures on a circuit, 4 lamps per fixture, with 32 watt lamps, you would expect the amperage measured on the circuit (when all the lights are on) to be around 10.4 amps (if the voltage is 120 and powerfactor is 0.98). If the amperage measurements are not around this range, you are likely measureing the wrong circuit.
4. **Max Amperage** – This is extracted from the logger data and is the maximum value seen in the data throughout the logging period. This is also used as a reference and should be in the same range as the other referecne measure lines above.
5. **98% Max** – This is also extracted from the logger data and is the maximum amperage value seen in the data at the 98^{th} percentile. This value is useful because it helps factor out any startup amperage spike the circuit may see, which would a false maximum steady state amperage draw.

The reference values seen in Figure F-12, are right around the same amperage range, and the maximum amperage seen in the logger data profile peaks slightly below these values. Taking a closer look shows that the data represent 3 fixtures on the circuit and there is a clear three step pattern in the data, showing when each of the three fixtures turned on and off. As described in

the HOBO QC Workbook, one of our main goals is to extract a maximum amperage value to compare the data agains to calculate %ON time. In this example it is clear that when three fixtures are on, the maximum amperage is right around 4.15 amps (on averge). As such, 4.15 amps is set as the max value for the logger and is the denominator the data is compared against for generating %ON times.

F.6.1 HOBO Data Issues

The testing, crosschecking, and installation of HOBO loggers are a tedious and multifaceted process. Given the variability of electric panel wiring in relation to lighting fixtures, as well as the operation of the integrated occupancy sensors that control the lights logged by HOBO loggers, two types of data errors are likely to occur. The first error occurs when the fixture count and expected amperage measured on a circuit do not match. This happens because one may not be able to turn lighting circuits on and off at a site, and if one can, the fixtures on that circuit may turn off before measurements can be made at the electric panel. This results in an inaccurate measurement and inaccurate expected amperage to later compare with the logger data. The form is set up to flag these instances and require re-tests, but sometimes all options have been expended and the surveyor will have to use what they were able to get. The second data issue is parasitic loads. When testing and measuring the lighting circuits to be logged, the surveyors perform test to look for parasitic loads (non-rebated lighting loads on the circuit). During the day all tests for this may pass, but it is possible that there are still loads on the circuit that were not on at the time. As such, some loggers show parasitic loads that have to be evaluated and adjusted on a logger by logger basis. For each of these issues, Itron has built in survey form and onsite procedure cross checks that allow these to be detected and rectified in most cases.

F.6.2 HOBO Time Issues

For the HOBO loggers the only time issue that needed to be addressed was Daylight Saving Time (DST). When a logger's installation period includes a DST event, it is necessary to adjust the time/date stamps when time changes occur to set the logger's clock back to clock time. To help facilitate these adjustments, a calendar was created indicating when time changes occurred. Code was then written to recognize the time to which the logger was synced and then adjust the data when a DST boundary was crossed.

F.7 Conclusion

After using viewLoggers to evaluate thousands of loggers and HOBO QC for hundreds, obvious potential improvements have been identified for the next revision of the QC processes. For both viewLogger and HOBO QC, allowing the user to zoom in on the data could be invaluable. For viewLoggers, looking at one day's usage may show issues that could have only been identified in

the raw data. Also, having viewLoggers generate load shapes from the logged data and reported operating schedules could save time during analysis. For HOBO QC, having weekly profiles available would help identify circuit trends that previously took a lot of daily data scrolling. Other issues have arisen that will also need to be addressed, but the logger QC processes worked admirably well given the short development time and planning that went into its design.

Reviewing and assigning dispositions to over 4,000 loggers would not have been possible without well trained and dedicated evaluators and tools that could be used to review the data efficiently and effectively. viewLoggers was developed to be that tool for the Dent loggers and HOBO QC for the HOBO loggers. With their ability to bring together all pertinent information in one place for evaluation, both were key elements in maintaining the integrity and high level of data quality for this CPUC Non-Residential Downstream Lighting Impact Evaluation.

Appendix I

IEPEC Paper on Self-Report Adjustment Factors

Is The Customer Always Right? A Cost-Effective Method for Estimating Lighting Usage in Commercial Buildings

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ABSTRACT

The California Public Utilities Commission recently released the *Small Commercial Contract Group Direct Impact Evaluation Report*. This evaluation included the largest lighting end use monitoring study of its kind, with the installation of nearly 7,000 lighting loggers in over 1,200 commercial buildings throughout California. As part of the on-site visit for this study, participants were asked to estimate their lighting usage by activity area within their building, as well as provide their business operating hours. Lighting loggers were then installed on rebated CFLs and linear fluorescent fixtures. This allowed for a comparison of participants' actual lighting usage to both their self-reported lighting usage and their business operating hours.

This paper establishes a method for estimating lighting usage in commercial buildings without the cost of installing on-site metering equipment. The method leverages on-site monitoring data from the *Small Commercial Report* by using business operating hours as a predictor to estimate daily lighting usage profiles by building type and activity area. As a secondary approach, the usage estimates can be further refined using site-level self-reported usage data, if available.

Introduction

How does one estimate lighting usage profiles for commercial buildings? Ideally, lighting logger equipment can be installed to monitor the usage, but this is an expensive approach. A less costly option may be to ask customers to estimate their own lighting usage. But, how accurate are these self-reported usage values? Do customers tend to over- or under-estimate their usage? Do these trends vary by building type and activity area?[1] Are there certain times of the day that customers are simply unable to accurately estimate their own usage?

Another option may be to use business hours as a proxy for lighting usage. In its simplest form, this method would assume that all lights in a business were ON when the business was open, and OFF when the business was closed. However, some lights are left ON after businesses have closed, and not all lights are turned ON during open hours.

The purpose of this study was to develop a method for estimating lighting usage in commercial buildings that leverages existing monitoring data from the *Small Commercial Contract Group Direct Impact Evaluation Report*. The method developed requires only a building's business hours to develop accurate usage profiles. As a secondary approach, self-reported lighting usage information can also be used to further refine the estimation during times that businesses are open.

The primary results of this study are presented as lighting usage *rates*[2] that allow for the

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[1] Activity areas are defined as areas at the premise that have different activity types (e.g., office, dining room, and kitchen).

[2] In this context, a lighting usage *rate* is a percentage that can be thought of as a probability. For example, if the usage rate for a lamp is 50% in a certain period, then there is a 50% chance that the lamp will be on at any given time within that period.

development of simple 8760 lighting use shapes based on business open, closed, and shoulder hours[3] specific to building type and activity area. We refer to these primary results as the *business hour rates.* They are meant to be used to estimate lighting usage across an entire market segment or building type (such as Office buildings or Restaurants). To apply the business hour rates, a sample of sites and their business hours must be obtained (or assumed). Then, the rates are used to develop lighting usage profiles for each site in the sample based on their individual business hours. Finally, individual profiles are then averaged together to make an estimated usage profile for the entire sector.

As mentioned above, this paper also provides secondary results that use self-reported lighting usage to refine the business hour estimation. We refer to these secondary results as the *self-report adjustment factors,* since they are used to adjust self-reported usage to make it more accurate. Each self-report adjustment factor is the ratio of actual monitored lighting usage over self-reported usage. Although we began this study with the intention of presenting self-report adjustment factors as the primary method for estimating lighting usage, we found that customers too often self-reported zero or very little use during the times that the business was not open, making the ratios undefined or unreasonably large. Therefore, we present the self-report adjustment factors as a way to adjust self-reported usage during open times only.

Background

The analysis for this study was completed using data collected for the recently released *2006-2008 Small Commercial Contract Group Direct Impact Evaluation Report* (Small Com Report),[4] prepared by Itron, Inc., for the California Public Utilities Commission. The primary purpose of the Small Com Report was to provide an evaluation of the California investor owned utilities' claimed energy efficient accomplishments in the commercial sector for the 2006-2008 program cycle.[5] The majority of these claimed savings came by way of efficient lighting retrofit projects. Hence, an extensive statewide on-site survey and time-of-use data collection effort was undertaken by Itron to gather the lighting usage information needed to calculate the energy savings.

Data Collection

The three main components of the on-site survey utilized in this analysis were the site's business hours, the self-reported lighting usage, and the lighting logger data.

The business hours were collected over the phone during the initial telephone recruitment survey and then confirmed by the surveyor on-site. These business hours were recorded as the opening time and closing time for each day of the week. If a business kept a separate set of business hours for seasonal operation, that information was recorded as well.

The self-reported operating hours were collected as a percent of time on per hour for each hour in each day of the week. On-site surveyors collected these self-report estimates for each different lighting usage schedule within the building. Typically, different activity areas within a building had different lighting usage schedules.

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[3] As described in further detail below, the shoulder periods are defined as the two hours before opening and the two hours after closing.

[4] The Small Com Report can be found at www.CALMAC.org. Study ID: CPU0019.01.

[5] The scope of the Small Com Report included the evaluation of claimed lighting savings from all non-residential programs, *excluding* the custom programs. These non-custom programs were typically directed toward small- and medium-sized customers, while the custom programs typically served large customers. For this reasons, the Report was named "Small Commercial" even though the participants were not exclusively "small."

The time-of-use data were obtained through the installation of lighting loggers. A technical description of the lighting loggers and the installation/extraction procedures can be found in the Small Com Report, Appendix G. Once on-site, surveyors attempted to log every representative activity area where rebated CFLs and linear fluorescent lamps were installed.

Data Processing

After extraction, the lighting logger data were processed into a percent-ON-per-hour format. This allowed for a comparison of the actual lighting usage data with the business hours and secondarily with the self-reported hours of usage. Figure 1 demonstrates this comparison for an office area. The data shown represent CFL usage at an office activity area within a particular office building on an average Friday. The vertical axis represents the usage rate (i.e., percent ON for each hour of the day) for the self-reported and actual usage values. For the business hours, a value of 1 on the vertical axis means the business was open, and a value of 0 means the business was closed.

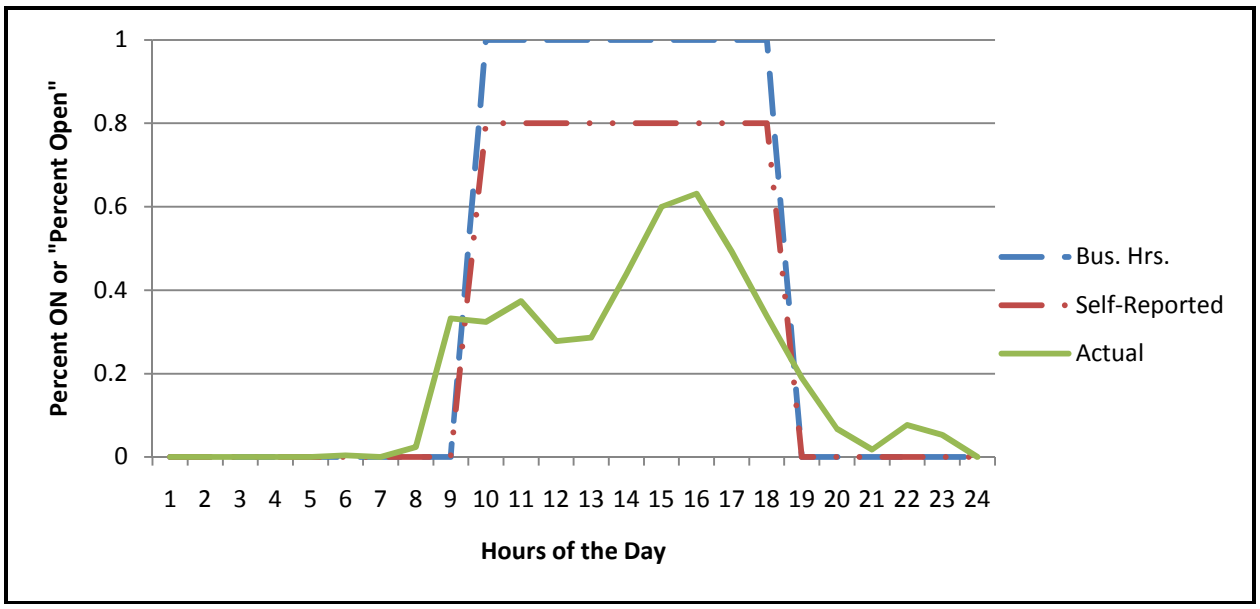

Figure 1: Example of Actual and Self-Reported Lighting Usage and Business Hours

This analysis was motivated by a desire to utilize these business hour and usage shapes to help estimate lighting usage in future studies. Understanding that buildings in future studies may have different business operating schedules, or self-reported usage, we provide our results at a level of granularity that allows future researchers to take those differences into account.

The next step in processing of the data was to identify each hour at each site as being in one of the following four periods (relative to business hours): Open, Opening Shoulder, Closing Shoulder, or Closed. The Open period was defined as all hours of the day for which the business was open. The Opening Shoulder and Closing Shoulder periods were defined as the two hours before opening and after closing, respectively. The Closed period was defined as all hours for which the business was closed and not in one of the two shoulder periods.

Once these periods were identified, the actual and self-reported usage rates were calculated for each period and each activity area at each site. The aggregation from individual loggers to activity areas

was done based on the number of lamps each logger was monitoring. The final calculation of the results is described in the Results section below.

Results

As mentioned in the Introduction, the primary results are the business hour rates. These results can be applied simply by knowing the business operating hours, building type, and activity areas. In case the activity area distributions within the buildings are not known, aggregated building type results are also provided.

The secondary results are the self-report adjustment factors. In order to apply these factors, one must also obtain self-reported usage rates during open times by activity area for the sample of buildings. The self-reported usage rates used in this analysis were collected on-site. We believe that the on-site visit is necessary to gather reliable self-report information and to properly label activity areas. Thus, we recommend that self-reported values used for future estimations also be collected on-site.

Business Hour Rates

The business hour rates represent the percent usage during each period of the day (Open, Closed, and the Shoulder periods). The dataset for the business hour rates included data from the seasonal business operation schedules and holidays. The usage rates for each logger were weighted by the total number of lamps represented and the total hours elapsed in each period.

Table 1 and Table 2 presented below contain the business hour rates by building type and activity area. Table 3 and Table 4 contain the business hour rates aggregated to the building type level. We chose to provide these building level estimation figures in addition to the activity area figures to offer additional flexibility to future evaluators.

Self-Report Adjustment Factors

As mentioned above, the original intent of this analysis was to produce adjustment factors (i.e., multipliers) that could be applied to self-reported usage for each of the four periods in the day. An adjustment factor is defined as actual metered usage divided by self-reported use. However, we found that many sites self-reported that they had zero or very little usage during the shoulder or closed periods. Since the denominator in the multiplier was zero or nearly zero, this made the adjustment factors either undefined or extremely large. Therefore, adjusting self-reported usage is not a good way to estimate lighting use during the closed and shoulder periods. For those periods, we recommend using the business hour rates as presented in the previous section.

Table 5 and Table 6 contain the self-report adjustment factors that can be applied to self-reported usage during the Open period. The results are presented by building type and activity area, separately for CFL and linear fluorescent lighting. The building level figures were not provided for the self-report factors because we assume that future evaluators will gather self-report usage information at the activity area detailed level.

Table 1: Business Hour Rates - CFL

Building Type	Activity Area	Num Sites	Closed		Opening Shoulder		Open		Closing Shoulder	
			Usage Rate	90% C.I.	Usage Rate	90% C.I.	Usage Rate	90% C.I.	Usage Rate	90% C.I.
Assembly	Assembly	32	0.03	(0.02, 0.05)[6]	0.04	(0.02, 0.06)	0.14	(0.11, 0.17)	0.09	(0.05, 0.13)
	HallwayLobby	54	0.13	(0.08, 0.17)	0.22	(0.13, 0.31)	0.43	(0.32, 0.54)	0.20	(0.13, 0.28)
	Kitchen/Break	12	0.04	(0.01, 0.07)	0.03	(0.01, 0.04)	0.12	(0.06, 0.18)	0.10	(0.02, 0.18)
	Office	23	0.04	(0.01, 0.07)	0.07	(0.02, 0.12)	0.30	(0.19, 0.41)	0.16	(0.09, 0.22)
	OtherMisc	35	0.03	(0.02, 0.04)	0.08	(0.04, 0.11)	0.43	(0.31, 0.55)	0.12	(0.08, 0.16)
	Restrooms	43	0.08	(0.04, 0.13)	0.12	(0.05, 0.18)	0.31	(0.2, 0.42)	0.17	(0.09, 0.26)
	Storage	31	0.04	(0.01, 0.07)	0.05	(0, 0.1)	0.16	(0.05, 0.27)	0.07	(0.01, 0.12)
Health/ Medical - Clinic	HallwayLobby	40	0.18	(0.05, 0.31)	0.32	(0.17, 0.47)	0.63	(0.47, 0.8)	0.38	(0.2, 0.55)
	Office	24	0.03	(0.02, 0.05)	0.12	(0.08, 0.16)	0.43	(0.25, 0.62)	0.21	(0.11, 0.31)
	OtherMisc	26	0.04	(0, 0.08)	0.09	(0, 0.2)	0.15	(0.1, 0.21)	0.21	(0, 0.44)
	Restrooms	24	0.01	(0, 0.01)	0.02	(0, 0.05)	0.16	(0.04, 0.27)	0.05	(0.02, 0.08)
Lodging	Guest Rooms	91	0.07	(0.04, 0.11)	0.10	(0.06, 0.15)	0.08	(0.07, 0.09)	0.05	(0.02, 0.08)
	HallwayLobby	54	0.25	(0.16, 0.33)	0.21	(0.13, 0.29)	0.64	(0.56, 0.73)	0.19	(0.13, 0.26)
	Kitchen/Break	12	0.13	(0, 0.38)	0.40	(0, 0.92)	0.34	(0.12, 0.57)	0.27	(0, 0.66)
	Mechanical/Elec. Room	16	0.01	(0, 0.01)	0.05	(0.02, 0.07)	0.31	(0.11, 0.51)	0.01	(0, 0.04)
	Office	13	0.07	(0, 0.18)	0.05	(0, 0.11)	0.32	(0.22, 0.42)	0.09	(0, 0.17)
	OtherMisc	18	0.08	(0, 0.19)	0.05	(0, 0.1)	0.61	(0.5, 0.72)	0.13	(0.07, 0.19)
	Restrooms	39	0.09	(0.03, 0.15)	0.16	(0.03, 0.3)	0.07	(0.06, 0.09)	0.15	(0.01, 0.29)
	Storage	13	0.14	(0, 0.48)	0.43	(0, 1.16)	0.18	(0.06, 0.3)	0.22	(0, 0.65)
Office - Small	HallwayLobby	46	0.29	(0.15, 0.44)	0.39	(0.25, 0.53)	0.64	(0.53, 0.76)	0.40	(0.28, 0.53)
	Office	32	0.04	(0.02, 0.06)	0.14	(0.08, 0.2)	0.57	(0.48, 0.67)	0.16	(0.11, 0.22)
	OtherMisc	23	0.04	(0.01, 0.07)	0.05	(0.02, 0.07)	0.32	(0.18, 0.46)	0.14	(0.08, 0.21)
	Restrooms	72	0.04	(0.01, 0.07)	0.06	(0.02, 0.1)	0.15	(0.08, 0.21)	0.09	(0.03, 0.14)
	Storage	20	0.06	(0, 0.11)	0.14	(0.06, 0.22)	0.20	(0.06, 0.33)	0.15	(0.06, 0.25)
Other	HallwayLobby	31	0.25	(0.17, 0.33)	0.11	(0.02, 0.2)	0.61	(0.42, 0.81)	0.57	(0.26, 0.88)
	Office	20	0.17	(0.03, 0.31)	0.23	(0.1, 0.36)	0.51	(0.42, 0.6)	0.31	(0.11, 0.52)
	OtherMisc	32	0.13	(0.11, 0.16)	0.08	(0.04, 0.13)	0.14	(0, 0.33)	0.04	(0, 0.09)
	Restrooms	62	0.08	(0.05, 0.11)	0.18	(0.09, 0.27)	0.45	(0.3, 0.6)	0.25	(0.12, 0.38)
	Storage	29	0.19	(0, 0.4)	0.22	(0, 0.46)	0.52	(0.28, 0.76)	0.27	(0.05, 0.5)
Restaurant	Dining	67	0.06	(0.03, 0.1)	0.23	(0.17, 0.3)	0.78	(0.71, 0.85)	0.30	(0.24, 0.35)
	HallwayLobby	36	0.33	(0.17, 0.49)	0.42	(0.23, 0.6)	0.64	(0.38, 0.9)	0.42	(0.23, 0.61)
	Kitchen/Break	26	0.13	(0.04, 0.22)	0.54	(0.4, 0.68)	0.84	(0.72, 0.96)	0.36	(0.23, 0.49)
	Office	14	0.10	(0.04, 0.16)	0.27	(0.14, 0.4)	0.40	(0.28, 0.53)	0.26	(0.13, 0.38)
	OtherMisc	8	0.23	(0.02, 0.45)	0.47	(0.22, 0.72)	0.70	(0.56, 0.84)	0.41	(0.25, 0.58)
	Restrooms	52	0.16	(0.09, 0.24)	0.31	(0.23, 0.4)	0.52	(0.42, 0.62)	0.32	(0.2, 0.43)
	Storage	42	0.09	(0.05, 0.14)	0.30	(0.2, 0.39)	0.45	(0.31, 0.6)	0.19	(0.11, 0.26)
Retail - Small	HallwayLobby	21	0.17	(0.06, 0.28)	0.31	(0.19, 0.43)	0.59	(0.43, 0.75)	0.28	(0.17, 0.4)
	Office	27	0.31	(0.08, 0.54)	0.44	(0.25, 0.62)	0.75	(0.57, 0.92)	0.36	(0.15, 0.57)
	OtherMisc	26	0.04	(0.01, 0.07)	0.18	(0.08, 0.28)	0.54	(0.33, 0.76)	0.13	(0.08, 0.18)
	Restrooms	104	0.03	(0.02, 0.04)	0.05	(0.03, 0.08)	0.17	(0.12, 0.22)	0.07	(0.04, 0.1)
	RetailSales	59	0.22	(0.08, 0.36)	0.29	(0.18, 0.4)	0.81	(0.74, 0.87)	0.31	(0.21, 0.42)
	Storage	31	0.04	(0, 0.1)	0.14	(0.05, 0.24)	0.37	(0.13, 0.62)	0.07	(0.01, 0.13)

[6] The lower confidence limits for all confidence intervals in this paper have been restricted to a minimum value of zero.

Table 2: Business Hour Rates- Linear Fluorescent

Building Type	Activity Area	Num Sites	Closed		Opening Shoulder		Open		Closing Shoulder	
			Usage Rate	90% C.I.	Usage Rate	90% C.I.	Usage Rate	90% C.I.	Usage Rate	90% C.I.
Assembly	Assembly	16	0.03	(0.02, 0.04)	0.06	(0.01, 0.11)	0.28	(0.13, 0.42)	0.08	(0.05, 0.12)
	HallwayLobby	9	0.13	(0.09, 0.17)	0.12	(0, 0.27)	0.24	(0.04, 0.44)	0.21	(0.05, 0.37)
	Kitchen/Break	10	0.06	(0.03, 0.09)	0.16	(0.03, 0.29)	0.37	(0.23, 0.52)	0.18	(0.08, 0.28)
	Office	14	0.03	(0.02, 0.04)	0.14	(0.07, 0.2)	0.44	(0.39, 0.5)	0.11	(0.06, 0.15)
	OtherMisc	20	0.04	(0.02, 0.05)	0.12	(0.07, 0.16)	0.27	(0.17, 0.37)	0.11	(0.06, 0.16)
Health/ Medical - Clinic	Comm/Ind Work	10	0.04	(0.01, 0.07)	0.06	(0.01, 0.12)	0.64	(0.3, 0.99)	0.30	(0.13, 0.47)
	HallwayLobby	27	0.20	(0.1, 0.29)	0.26	(0.15, 0.36)	0.81	(0.75, 0.88)	0.47	(0.36, 0.58)
	Kitchen/Break	12	0.03	(0, 0.07)	0.17	(0.06, 0.28)	0.61	(0.51, 0.7)	0.30	(0.18, 0.42)
	Office	25	0.07	(0.03, 0.11)	0.18	(0.11, 0.25)	0.64	(0.51, 0.76)	0.29	(0.22, 0.36)
	OtherMisc	16	0.01	(0, 0.02)	0.04	(0, 0.08)	0.41	(0.33, 0.49)	0.28	(0.15, 0.4)
	Patient Rooms	10	0.02	(0, 0.05)	0.06	(0.02, 0.1)	0.30	(0.13, 0.47)	0.20	(0.07, 0.34)
	Storage	10	0.01	(0, 0.02)	0.02	(0, 0.04)	0.45	(0, 0.92)	0.03	(0, 0.06)
Grocery	OtherMisc	6	0.18	(0.03, 0.33)	0.29	(0, 0.64)	0.69	(0.43, 0.95)	0.23	(0.07, 0.39)
	RetailSales	10	0.17	(0.03, 0.31)	0.57	(0.17, 0.96)	0.95	(0.88, 1.02)	0.32	(0.18, 0.46)
Office - Small	Comm/Ind Work	25	0.22	(0.04, 0.4)	0.37	(0.14, 0.61)	0.65	(0.56, 0.75)	0.41	(0.22, 0.6)
	Conference Room	23	0.02	(0.01, 0.04)	0.12	(0, 0.27)	0.35	(0.18, 0.52)	0.15	(0.05, 0.25)
	HallwayLobby	47	0.14	(0.06, 0.22)	0.27	(0.13, 0.42)	0.78	(0.71, 0.86)	0.41	(0.28, 0.55)
	Kitchen/Break	34	0.16	(0, 0.31)	0.31	(0.07, 0.56)	0.52	(0.31, 0.73)	0.31	(0.08, 0.55)
	Office	88	0.10	(0.01, 0.19)	0.23	(0.12, 0.35)	0.68	(0.61, 0.75)	0.33	(0.21, 0.46)
	OtherMisc	12	0.05	(0.01, 0.08)	0.21	(0, 0.46)	0.42	(0.22, 0.62)	0.15	(0.05, 0.25)
	Restrooms	9	0.04	(0.01, 0.08)	0.04	(0, 0.08)	0.34	(0.08, 0.61)	0.14	(0.02, 0.27)
	Storage	31	0.01	(0, 0.02)	0.05	(0.02, 0.09)	0.30	(0.16, 0.43)	0.07	(0.03, 0.11)
Other	Comm/Ind Work	30	0.09	(0.02, 0.16)	0.20	(0.11, 0.29)	0.67	(0.59, 0.74)	0.27	(0.11, 0.43)
	HallwayLobby	30	0.21	(0.08, 0.33)	0.41	(0.26, 0.56)	0.85	(0.82, 0.87)	0.49	(0.32, 0.66)
	Office	47	0.04	(0.02, 0.06)	0.11	(0.06, 0.16)	0.55	(0.42, 0.67)	0.19	(0.14, 0.24)
	OtherMisc	47	0.02	(0.02, 0.03)	0.11	(0.03, 0.19)	0.39	(0.25, 0.53)	0.13	(0.09, 0.16)
	Restrooms	13	0.03	(0.01, 0.04)	0.12	(0.05, 0.2)	0.27	(0, 0.62)	0.19	(0.03, 0.36)
	Storage	24	0.07	(0, 0.15)	0.14	(0, 0.27)	0.52	(0.37, 0.67)	0.19	(0.04, 0.34)
Retail - Small	Auto Repair Workshop	27	0.02	(0.01, 0.04)	0.12	(0.06, 0.18)	0.75	(0.63, 0.86)	0.31	(0.2, 0.42)
	Comm/Ind Work	33	0.06	(0.02, 0.11)	0.27	(0.13, 0.41)	0.83	(0.73, 0.92)	0.31	(0.22, 0.4)
	HallwayLobby	31	0.05	(0, 0.1)	0.16	(0.06, 0.26)	0.77	(0.65, 0.88)	0.22	(0.14, 0.3)
	Kitchen/Break	24	0.04	(0, 0.09)	0.11	(0.02, 0.19)	0.39	(0.24, 0.54)	0.18	(0.08, 0.28)
	Office	67	0.01	(0.01, 0.02)	0.09	(0.05, 0.13)	0.67	(0.59, 0.76)	0.15	(0.11, 0.2)
	OtherMisc	18	0.07	(0, 0.15)	0.17	(0.06, 0.29)	0.76	(0.6, 0.92)	0.30	(0, 0.61)
	Restrooms	15	0.02	(0.01, 0.03)	0.05	(0.01, 0.08)	0.26	(0.11, 0.4)	0.12	(0.04, 0.21)
	RetailSales	102	0.03	(0.02, 0.04)	0.15	(0.11, 0.18)	0.92	(0.9, 0.94)	0.14	(0.11, 0.17)
	Storage	62	0.04	(0.01, 0.06)	0.12	(0.07, 0.17)	0.72	(0.64, 0.79)	0.16	(0.08, 0.25)
Restaurant	Dining	12	0.03	(0, 0.07)	0.08	(0, 0.16)	0.58	(0.43, 0.74)	0.17	(0, 0.34)
	Kitchen/Break	13	0.28	(0.05, 0.51)	0.63	(0.35, 0.92)	0.80	(0.59, 1.01)	0.58	(0.34, 0.82)
	OtherMisc	8	0.01	(0, 0.03)	0.35	(0.26, 0.43)	0.83	(0.58, 1.07)	0.19	(0.14, 0.23)
Warehouse	Office	18	0.06	(0.02, 0.1)	0.20	(0.12, 0.28)	0.61	(0.56, 0.66)	0.13	(0.05, 0.2)
	OtherMisc	16	0.02	(0.01, 0.03)	0.18	(0.06, 0.29)	0.43	(0.28, 0.57)	0.05	(0.02, 0.07)
	Storage	14	0.10	(0, 0.22)	0.14	(0.02, 0.25)	0.48	(0.3, 0.65)	0.13	(0, 0.26)

Table 3: Business Hour Rates. Overall Building Type - CFLs

Building Type	Num Sites	Closed		Opening Shoulder		Open		Closing Shoulder	
		Usage Rate	90% C.I.	Usage Rate	90% C.I.	Usage Rate	90% C.I.	Usage Rate	90% C.I.
Assembly	230	0.06	(0.04, 0.07)	0.09	(0.07, 0.12)	0.31	(0.26, 0.37)	0.13	(0.11, 0.15)
Health/Medical - Clinic	114	0.11	(0.04, 0.19)	0.23	(0.12, 0.33)	0.21	(0.14, 0.28)	0.29	(0.17, 0.41)
Lodging	256	0.08	(0.06, 0.11)	0.11	(0.08, 0.14)	0.14	(0.11, 0.17)	0.08	(0.05, 0.11)
Office - Small	193	0.13	(0.07, 0.19)	0.19	(0.14, 0.25)	0.43	(0.36, 0.49)	0.22	(0.17, 0.28)
Other	174	0.15	(0.13, 0.17)	0.12	(0.06, 0.17)	0.30	(0.07, 0.53)	0.16	(0, 0.31)
Restaurant	245	0.11	(0.08, 0.15)	0.30	(0.25, 0.35)	0.72	(0.66, 0.77)	0.32	(0.27, 0.36)
Retail - Small	268	0.16	(0.08, 0.23)	0.24	(0.18, 0.31)	0.63	(0.56, 0.69)	0.24	(0.18, 0.3)

Table 4: Business Hour Rates. Overall Building Type - Linear Fluorescent

Building Type	Num Sites	Closed		Opening Shoulder		Open		Closing Shoulder	
		Usage Rate	90% C.I.	Usage Rate	90% C.I.	Usage Rate	90% C.I.	Usage Rate	90% C.I.
Assembly	69	0.04	(0.03, 0.05)	0.10	(0.07, 0.13)	0.30	(0.24, 0.37)	0.11	(0.09, 0.13)
Grocery	16	0.17	(0.06, 0.28)	0.51	(0.18, 0.85)	0.90	(0.81, 1)	0.30	(0.19, 0.41)
Health/Medical - Clinic	110	0.08	(0.05, 0.12)	0.16	(0.1, 0.21)	0.53	(0.41, 0.66)	0.33	(0.27, 0.38)
Office - Small	269	0.12	(0.06, 0.18)	0.25	(0.17, 0.33)	0.64	(0.59, 0.69)	0.33	(0.25, 0.41)
Other	191	0.06	(0.04, 0.09)	0.16	(0.11, 0.2)	0.54	(0.4, 0.68)	0.21	(0.16, 0.27)
Restaurant	33	0.10	(0.01, 0.18)	0.30	(0.14, 0.45)	0.70	(0.56, 0.83)	0.29	(0.15, 0.44)
Retail - Small	379	0.03	(0.02, 0.04)	0.14	(0.12, 0.17)	0.81	(0.78, 0.84)	0.18	(0.15, 0.21)
Warehouse	48	0.06	(0.02, 0.09)	0.18	(0.12, 0.24)	0.52	(0.46, 0.59)	0.11	(0.06, 0.15)

Table 5: Self-Report Adjustment Factor for Usage during Business Open Hours - CFLs

Building Type	Activity Area	Num Sites	Self-Reported Usage	Self-Report Adjustment Factor	90% C.I. for the Adj. Factor
Assembly	Assembly	32	28%	0.55	(0.37, 0.74)
	HallwayLobby	54	54%	0.83	(0.64, 1.02)
	Kitchen/Break Room	12	23%	0.45	(0.09, 0.8)
	Office	23	63%	0.53	(0.34, 0.71)
	OtherMisc	35	55%	0.70	(0.51, 0.89)
	Restrooms	43	34%	0.88	(0.66, 1.11)
	Storage	31	23%	0.58	(0.34, 0.81)
Health/Medical - Clinic	HallwayLobby	38	74%	0.80	(0.67, 0.92)
	Office	23	82%	0.63	(0.38, 0.89)
	OtherMisc	23	65%	0.22	(0, 0.44)
	Restrooms	22	16%	1.35	(0.29, 2.42)
Lodging	Guest Rooms	82	33%	0.22	(0.16, 0.27)
	HallwayLobby	46	84%	0.86	(0.77, 0.95)
	Kitchen/Break Room	12	55%	0.65	(0.36, 0.95)
	Mechanical/Electrical Room	14	32%	0.76	(0.4, 1.12)
	Office	10	80%	0.41	(0.25, 0.58)
	OtherMisc	17	57%	0.91	(0.73, 1.09)
	Restrooms	34	25%	0.30	(0.18, 0.42)
	Storage	12	26%	0.61	(0.21, 1.01)
Office - Small	HallwayLobby	45	74%	0.83	(0.72, 0.94)
	Office	31	75%	0.75	(0.66, 0.83)
	OtherMisc	23	43%	0.80	(0.63, 0.96)
	Restrooms	68	19%	0.76	(0.55, 0.96)
	Storage	20	34%	0.45	(0.16, 0.74)
Other	HallwayLobby	30	77%	0.72	(0.56, 0.87)
	Office	18	80%	0.60	(0.54, 0.67)
	OtherMisc	31	9%	0.97	(0.84, 1.1)
	Restrooms	61	28%	1.29	(0.83, 1.75)
	Storage	27	54%	0.86	(0.66, 1.06)
Restaurant	Dining	66	87%	0.88	(0.8, 0.97)
	HallwayLobby	35	81%	0.83	(0.69, 0.97)
	Kitchen/Break Room	25	91%	0.91	(0.83, 0.99)
	Office	13	34%	1.18	(0.65, 1.71)
	OtherMisc	8	72%	0.91	(0.68, 1.14)
	Restrooms	49	51%	1.02	(0.87, 1.17)
	Storage	40	44%	1.14	(0.88, 1.39)
Retail - Small	HallwayLobby	19	85%	0.62	(0.42, 0.82)
	Office	27	64%	1.11	(0.74, 1.48)
	OtherMisc	25	65%	0.70	(0.47, 0.93)
	Restrooms	99	14%	1.36	(0.85, 1.87)
	RetailSales	58	80%	1.02	(0.88, 1.17)
	Storage	29	59%	0.84	(0.68, 1.01)

Table 6: Self-Report Adjustment Factor for Usage during Business Open Hours - Linear Fluorescent

Building Type	Activity Area	Num Sites	Self-Reported Usage	Self-Report Adjustment Factor	90% C.I. for the Adj. Factor
Assembly	Assembly	16	53%	0.35	(0.08, 0.62)
	HallwayLobby	8	54%	0.43	(0.2, 0.66)
	Kitchen/Break Room	10	43%	0.92	(0.29, 1.55)
	Office	13	55%	0.78	(0.55, 1)
	OtherMisc	20	54%	0.49	(0.41, 0.58)
Grocery	OtherMisc	6	70%	0.97	(0.71, 1.24)
	RetailSales	10	95%	0.97	(0.86, 1.08)
Health/Medical - Clinic	Comm/Ind Work	9	77%	0.87	(0.55, 1.19)
	HallwayLobby	26	89%	0.89	(0.81, 0.98)
	Kitchen/Break Room	12	70%	0.91	(0.67, 1.14)
	Office	24	75%	0.77	(0.56, 0.99)
	OtherMisc	16	55%	0.80	(0.63, 0.98)
	Patient Rooms	10	73%	0.45	(0.35, 0.54)
	Storage	10	45%	1.05	(0, 2.14)
Office - Small	Comm/Ind Work	25	83%	0.78	(0.71, 0.85)
	Conference Room	23	45%	0.85	(0.47, 1.23)
	HallwayLobby	47	93%	0.83	(0.76, 0.9)
	Kitchen/Break Room	33	70%	0.80	(0.63, 0.97)
	Office	87	82%	0.81	(0.74, 0.87)
	OtherMisc	12	69%	0.73	(0.49, 0.97)
	Restrooms	9	43%	0.82	(0.49, 1.15)
	Storage	30	44%	0.70	(0.54, 0.87)
Other	Comm/Ind Work	29	69%	1.00	(0.84, 1.17)
	HallwayLobby	29	60%	1.47	(0.61, 2.33)
	Office	46	61%	0.88	(0.74, 1.01)
	OtherMisc	46	40%	1.06	(0.83, 1.29)
	Restrooms	12	22%	1.69	(0, 4.35)
	Storage	24	51%	1.02	(0.66, 1.39)
Restaurant	Dining	12	73%	0.83	(0.7, 0.95)
	Kitchen/Break Room	13	82%	0.96	(0.8, 1.13)
	OtherMisc	7	80%	0.86	(0.57, 1.15)
Retail - Small	Auto Repair Workshop	26	87%	0.88	(0.78, 0.98)
	Comm/Ind Work	33	93%	0.85	(0.75, 0.95)
	HallwayLobby	29	82%	0.96	(0.86, 1.05)
	Kitchen/Break Room	21	60%	0.69	(0.48, 0.9)
	Office	65	74%	0.91	(0.82, 0.99)
	OtherMisc	17	81%	0.93	(0.87, 0.99)
	Restrooms	15	34%	0.87	(0.49, 1.24)
	RetailSales	100	94%	0.98	(0.95, 1.02)
	Storage	59	72%	0.98	(0.9, 1.05)
Warehouse	Office	15	88%	0.71	(0.64, 0.79)
	OtherMisc	15	73%	0.73	(0.64, 0.81)
	Storage	12	50%	0.95	(0.78, 1.13)

Application of Results

In this section, we provide an example to give guidance on the application of the results. We apply the two methods to our own data to estimate CFL usage at office activity areas within office buildings. We start with an application of the business hour rates and then show how the self-report factors can offer an additional refinement. It is important to note that the estimation techniques presented in this paper are meant to be applied to a large survey sample; they are not meant to accurately predict usage at a single site. Since the estimation techniques are sensitive to business hours at the individual sites, they must first be applied to each site in the sample and then aggregated to represent the desired population-wide lighting usage.

Application of Business Hour Rates

For each site in the sample, apply the business hour rates to each appropriate business hour period. The dotted line in Figure 2 is an example of this application to a single site. The dashed line shows the business's opening and closing times.

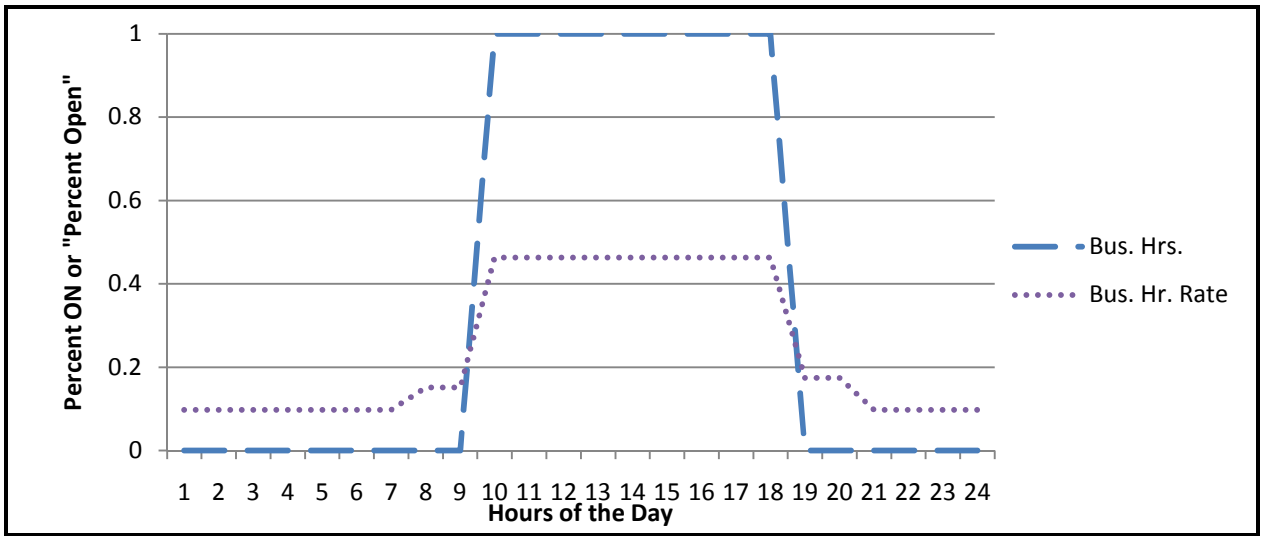

Figure 2: Application of the Business Hour Rates to a Single Site

Once the business hour rate estimates have been applied individually to all sites in the sample, the estimated usage profiles should be aggregated to create the desired population-wide lighting usage estimate. This population-wide estimation is shown in Figure 3. The Actual usage is also shown on Figure 3 to allow for a comparison with the estimate.

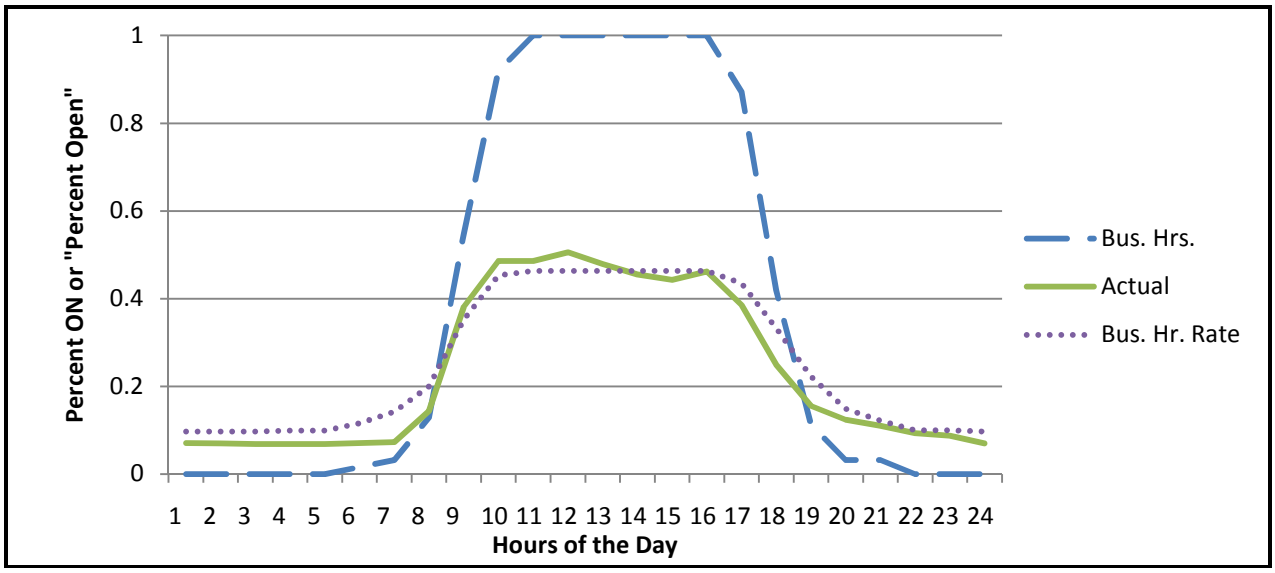

Figure 3: Population-Wide Actual Usage, Business Hours, and the Business Hour Rate Estimate

Application of Self-Report Adjustment Factors

As discussed in the Results section of this paper, the self-report adjustment factors can only be applied to self-reported usage during Open periods. In Figure 1, we saw a self-reported usage rate of 80% during the Open period. Table 6 tells us that this usage rate should be multiplied by a factor of 0.68. Thus, the estimated usage at this particular site during the Open period would be 54%. The estimates for the Closed and Shoulder periods are the same as the business hour rates.

Once these estimates have been applied individually to each site in the sample, they should be aggregated together to produce the desired population-wide estimate. This is shown in Figure 4.

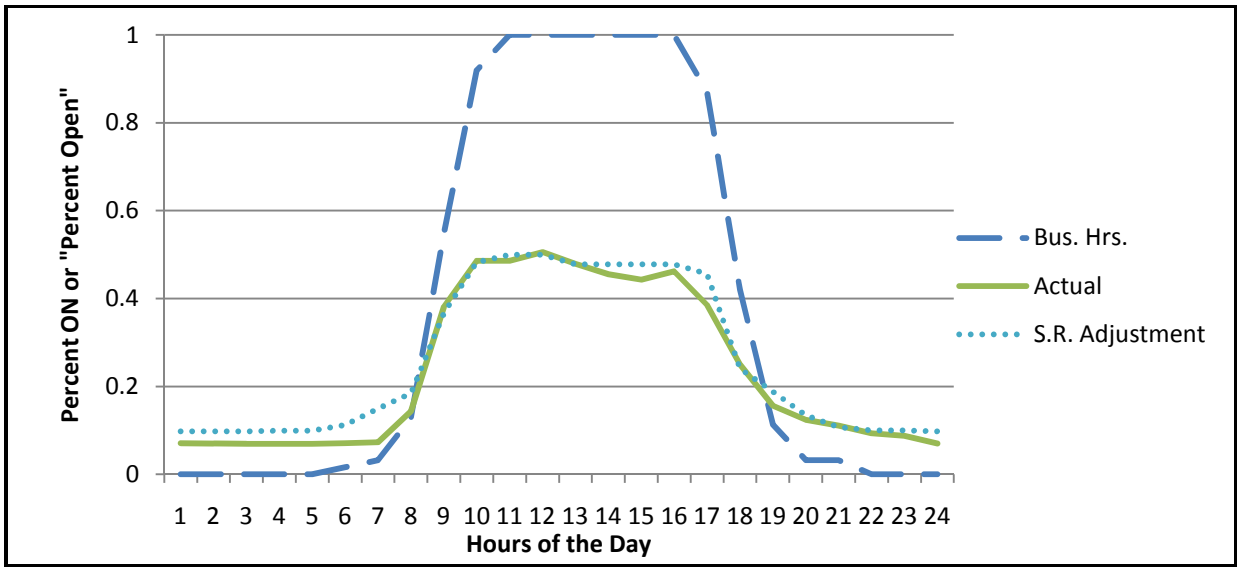

Figure 4: Population-Wide Actual Usage, Business Hours, and the Self-Report Adjustment Estimate

Conclusion

This paper provides evaluators with a cost-effective method for obtaining accurate lighting usage estimates in commercial buildings. With the business hour rates, evaluators can leverage simple business operating hours into reliable estimates of lighting use shapes. With the self-report method, evaluators can further refine their estimates to contour their lighting load shapes to the unique characteristics of the buildings under their study. Because these results are provided at a detailed level, evaluators have the flexibility to apply them based on the specific building type, activity area, and business hour characteristics of the population under their study.

References

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