

Madison County, New York

LED Lighting Upgrades

As-Built Documentation

Prepared By: Steve Tacconi

Date: December 15, 2016





December 15, 2016

Kevin Loveless
138 N. Court Street
Oneida, NY 13421

RE: Madison County Lighting Upgrades – Warranty Information

Dear Kevin,

This letter is to inform you on the warranties for your recently completed lighting project. The intent of this letter is to assist you in selecting the correct product should a replacement be necessary.

Product Warranty Information:

Fixtures:

- RAB – 5 years
- Acuity – 5 years
- Deco – 5 years
- Philips – 5 years
- Columbia – 5 years

Lamps:

- Philips – 5 years
- Hylite – 5 years
- RemPhos – 5 years
- TCP – 5 years

Ballasts:

- Philips – 5 years

Additional Information (following pages):

- An as-built of the fixtures used in each area
- Fixture schedule and layout for Office Building basement fixtures
- Cut sheet for the fixtures used

SmartWatt Energy, Inc.
400 Mason Road, Fairport, NY 14450
Smartwattenergy.net



Should you have any questions regarding this matter, please do not hesitate to contact me or any other SmartWatt employee.

Sincerely,
SMARTWATT ENERGY, INC.

A handwritten signature in blue ink that reads "Steve Tacconi". The signature is fluid and cursive, with a large initial "S" and "T".

Steve Tacconi
Project Manager

CC: Mike Paolucci, SWE Site Superintendent
File

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
1	1	1	Jail	Mens locker room	3	3	4' (1 Lamp) 34w T-12 Vanity w/ electronic ballast	3	3	Rebuild with (1) 12.5 watt LED tube and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
2	1	1	Jail	Mens locker room	4	4	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	4	4	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
3	2	1	Jail	Photo lab	2	2	2'x2' (2 lamp) 32w T-8U6 Troffer w/ electronic ballast - 9 Cell Parabolic	2	2	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	16.5T8/22.5-4000 IF-6U 10/1	0	-	0	-	0	-	0	-
4	2	1	Jail	Photo lab	2	2	Recessed Can Hi-Hat Fixture w/(1) CF 13w CF Screw-in Lamp	2	2	Philips 10 watt A lamp 2700K	-	-	8A19/SLIM/2700 DIM 10/1 ENERGY STAR	0	-	0	-	0	-	0	-
5	3	1	Jail	Men's Restroom	1	1	Recessed Can Hi-Hat Fixture w/(1) CF 13w CF Screw-in Lamp	1	1	Philips 10 watt A lamp 2700K	-	-	8A19/SLIM/2700 DIM 10/1 ENERGY STAR	0	-	0	-	0	-	0	-
6	3	1	Jail	Men's Restroom	5	5	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	5	5	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
7	3	1	Jail	Men's Restroom	2	2	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	2	2	Rebuild with (2) 8.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
8	4	1	Jail	Women's Restroom	1	1	Recessed Can Hi-Hat Fixture w/(1) CF 13w CF Screw-in Lamp	1	1	Philips 10 watt A lamp 2700K	-	-	8A19/SLIM/2700 DIM 10/1 ENERGY STAR	0	-	0	-	0	-	0	-
9	4	1	Jail	Women's Restroom	2	2	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
10	4	1	Jail	Women's Restroom	1	1	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	1	1	Rebuild with (2) 8.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
11	5	1	Jail	Hall	1	1	EXIT Compact Fluorescent, (2) 7W lamp	1	1	LED exit sign retrofit-JAIL	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
12	5	1	Jail	Hall	8	8	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	8	8	P-2 2x2 LED prismatic troffer conversion kit, LW lumens (2356) 4000K	TKL-2x2-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
13	5	1	Jail	Hall	5	5	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	5	5	Remove	-	-	-	0	-	0	-	0	-	0	-
14	6	1	Jail	break room	3	3	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	3	3	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
15	7	1	Jail	Road Patrol office	6	6	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	6	6	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
16	8	1	Jail	Hall	3	3	EXIT Compact Fluorescent, (2) 7W lamp	3	3	LED exit sign retrofit-JAIL	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
17	8	1	Jail	Hall	9	9	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	9	9	P-2 2x2 LED prismatic troffer conversion kit, LW lumens (2356) 4000K	TKL-2x2-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
18	9	1	Jail	Office	2	2	2'x4' (3 lamp) 32w T-8 troffer w/ electronic ballast	2	2	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
19	10	1	Jail	Women's Restroom	1	1	3' (2 Lamp) 25w T-8 Vanity w/ electronic ballast	1	1	Rebuild with (2) 10.5 watt 3' LED tubes and normal power, instant start ballast	-	IOPA-2P32-SC	10.5T8/36-4000 IF 10/1	0	-	0	-	0	-	0	-
20	11	1	Jail	Janitor	1	1	Incandescent, (1) 60W lamp	1	1	Philips 10 watt A lamp 2700K	-	-	8A19/SLIM/2700 DIM 10/1 ENERGY STAR	0	-	0	-	0	-	0	-
21	12	1	Jail	Men's Restroom	1	1	3' (2 Lamp) 25w T-8 Vanity w/ electronic ballast	1	1	Rebuild with (2) 10.5 watt 3' LED tubes and normal power, instant start ballast	-	IOPA-2P32-SC	10.5T8/36-4000 IF 10/1	0	-	0	-	0	-	0	-
22	13	1	Jail	equipment room	1	1	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
23	14	1	Jail	ID room	1	1	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	1	1	P-2 2x2 LED prismatic troffer conversion kit, LW lumens (2356) 4000K	TKL-2x2-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
24	15	1	Jail	hall	4	4	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	4	4	P-2 2x2 LED prismatic troffer conversion kit, LW lumens (2356) 4000K	TKL-2x2-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
25	15	1	Jail	Hall	2	2	EXIT Compact Fluorescent, (2) 7W lamp	2	2	LED exit sign retrofit-JAIL	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
26	15	1	Jail	Hall	2	2	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	2	2	P-2 2x2 LED prismatic troffer conversion kit, LW lumens (2356) 4000K	TKL-2x2-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
27	16	1	Jail	Garage	11	11	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	11	11	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
28	17	1	Jail	office	5	5	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	5	5	P-2 2x2 LED prismatic troffer conversion kit, LW lumens (2356) 4000K	TKL-2x2-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
29	18	1	Jail	Office	3	3	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	3	3	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
30	19	1	Jail	Office	4	4	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	4	4	P-2 2x2 LED prismatic troffer conversion kit, LW lumens (2356) 4000K	TKL-2x2-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
31	20	1	Jail	communication	13	13	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	13	13	P-2 2x2 LED prismatic troffer conversion kit, LW lumens (2356) 4000K	TKL-2x2-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
32	20	1	Jail	communication	14	14	Incandescent, (1) 65W lamp	14	14	Relamp with dimmable par 30 LED lamp	-	-	12PAR30L/F25-2700-DIM-AF-RO	0	-	0	-	0	-	0	-
33	21	1	Jail	Office	6	6	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	6	6	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	16.5T8/22.5-4000 IF-6U 10/1	0	-	0	-	0	-	0	-
34	22	1	Jail	break room	3	3	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	3	3	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	16.5T8/22.5-4000 IF-6U 10/1	0	-	0	-	0	-	0	-
35	22	1	Jail	break room	1	1	EXIT Compact Fluorescent, (2) 7W lamp	1	1	LED exit sign retrofit-JAIL	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
36	23	1	Jail	Office	4	4	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	4	4	P-2 2x2 LED prismatic troffer conversion kit, LW lumens (2356) 4000K	TKL-2x2-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
37	24	1	Jail	server	3	3	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	3	3	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
38	25	1	Jail	quartermaster	1	1	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	1	1	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
39	26	1	Jail	equipment room	1	1	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
40	27	1	Jail	server rrom	1	1	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	1	1	P-2 2x2 LED prismatic troffer conversion kit, LW lumens (2356) 4000K	TKL-2x2-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
41	28	1	Jail	reception	3	3	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	3	3	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
42	29	1	Jail	under sheriff	2	2	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	2	2	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
43	30	1	Jail	Office	3	3	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	3	3	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
44	31	1	Jail	bathroom	1	1	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	1	1	Rebuild with (2) 8.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
45	32	1	Jail	closet	1	1	Incandescent, (1) 60W lamp	1	1	Philips 10 watt A lamp 2700K	-	-	8A19/SLIM/2700 DIM 10/1 ENERGY STAR	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
46	33	1	Jail	break room	3	3	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	3	3	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	1	MRF2-1S8A-10C	0	-	0	-
47	34	1	Jail	closet	1	1	Incandescent, (1) 60W lamp	1	1	Philips 10 watt A lamp 2700K	-	-	8A19/SLIM/2700 DIM 10/1 ENERGY STAR	0	-	0	-	0	-	0	-
48	35	1	Jail	Office	6	6	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	6	6	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
49	36	1	Jail	Office	2	2	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	2	2	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
50	37	1	Jail	Office	2	2	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	2	2	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
51	38	1	Jail	entry	2	2	Recessed Can Hi-Hat Fixture w/(2) PL 13w CF Twin Lamps	2	2	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
52	38b	Exterior	Jail	entry outside under overhang	3	3	Recessed Can Hi-Hat Fixture w/(2) PL 13w CF Twin Lamps	3	3	Retrofit drum fixture with 12w LED conversion kit.	RPT-LEDCR-1600LM-4000K	-	-	0	-	0	-	0	-	0	-
53	39	1	Jail	Entry	4	4	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	4	4	P-2 2x2 LED prismatic troffer conversion kit, LW lumens (2356) 4000K	TKL-2x2-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
54	39	1	Jail	Entry	2	2	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
55	39	1	Jail	Bath entry	1	1	Recessed Can Hi-Hat Fixture w/(2) PL 13w CF Twin Lamps	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
56	40	1	Jail	Women's Restroom	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
57	40	1	Jail	Women's Restroom	1	1	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	1	1	Rebuild with (2) 8.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
58	41	1	Jail	Men's Restroom	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
59	41	1	Jail	Men's Restroom	1	1	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	1	1	Rebuild with (2) 8.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
60	42	1	Jail	Janitor	1	1	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
61	43	1	Jail	generator room	4	4	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	4	4	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
62	44	1	Jail	mechanical room	7	7	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	7	7	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
63	44	1	Jail	mechanical room	1	1	EXIT Compact Fluorescent, (2) 7W lamp	1	1	LED exit sign retrofit-JAIL	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
64	45	1	Jail	START OF JAIL - Entry	1	1	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	1	1	P-2 2x2 LED prismatic troffer conversion kit, LW lumens (2356) 4000K	TKL-2x2-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
65	46	1	Jail	carwash	6	6	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	6	6	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
66	47	1	Jail	waiting	2	2	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	2	2	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
67	48	1	Jail	hall	5	5	8' (1 lamp) 86w T-8 VT strip w/ electronic ballast.	5	5	P-2 LED retrofit kit for 8' indirect hallway custom fixtures	P2CL-TKG24-40VW-EU-2X	-	-	0	-	0	-	0	-	0	-
68	48	1	Jail	hall	2	2	8' (1 lamp) 59w T-8 IH Strip w/ electronic ballast.	2	2	P-2 LED retrofit kit for 6' indirect hallway custom fixtures	2CL-TKG24-40VW-EU-1X-TKG22-40VW-EU-1x	-	-	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
69	49	1	Jail	waiting # 2	3	3	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	3	3	P-2 2x2 LED prismatic troffer conversion kit, LW lumens (2356) 4000K	TKL-2x2-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
70	49	1	Jail	waiting # 2	1	1	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
71	50	1	Jail	inmate entry bay	11	11	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	11	11	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
72	51	1	Jail	holding	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
73	52	1	Jail	central control	4	4	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	4	4	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
74	53	1	Jail	bath	1	1	3' (2 Lamp) 25w T-8 Vanity w/ electronic ballast	1	1	Rebuild with (2) 10.5 watt 3' LED tubes and normal power, instant start ballast	-	IOPA-2P32-SC	10.5T8/36-4000 IF 10/1	0	-	0	-	0	-	0	-
75	54	1	Jail	detox	1	1	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
76	55	1	Jail	interview room	1	1	4' (4 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
77	56	1	Jail	electrical	1	1	Incandescent, (1) 60W lamp	1	1	Philips 10 watt A lamp 2700K	-	-	8A19/SLIM/2700 DIM 10/1 ENERGY STAR	0	-	0	-	0	-	0	-
78	57	1	Jail	captains office	3	3	4' (4 lamp) 32w T-8 wrap w/ electronic ballast.	3	3	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
79	57	1	Jail	captains office	2	2	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	2	2	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
80	58	1	Jail	Office	2	2	4' (4 lamp) 32w T-8 wrap w/ electronic ballast.	2	2	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
81	58b	1	Jail	bath	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
82	59	1	Jail	processing property	3	3	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	3	3	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
83	59	1	Jail	processing property	2	2	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	2	2	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
84	59	1	Jail	processing property	3	3	4' (4 lamp) 32w T-8 wrap w/ electronic ballast.	3	3	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
85	60	1	Jail	laundry room	8	8	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	8	8	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
86	61	1	Jail	hall	3	3	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	3	3	P-2 2x2 LED prismatic troffer conversion kit, LW lumens (2356) 4000K	TKL-2x2-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
87	61	1	Jail	hall	1	1	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
88	61	1	Jail	hall	3	3	EXIT Compact Fluorescent, (2) 7W lamp	3	3	LED exit sign retrofit-JAIL	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
89	61	1	Jail	hall	3	3	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	3	3	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
90	62	1	Jail	sprinkler room	1	1	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
91	63	1	Jail	kitchen storage/caged server room	14	14	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	14	14	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
92	64	1	Jail	(2) storage rooms	2	2	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	2	2	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
93	65	1	Jail	kitchen	4	4	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	4	4	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
94	65	1	Jail	kitchen	8	8	2'x4' (3 lamp) 32w T-8 troffer w/ electronic ballast	8	8	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
95	65	1	Jail	kitchen	1	1	4' (1 lamp) 32w T-8 VT strip w/ electronic ballast.	1	1	Rebuild with (1) 12.5 watt LED tube and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
96	65	1	Jail	coolers	4	4	Incandescent, (1) 60W lamp	4	4	Philips 10 watt A lamp 2700K	-	-	8A19/SLIM/2700 DIM 10/1 ENERGY STAR	0	-	0	-	0	-	0	-
97	65b	1	Jail	kitchen office	2	2	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	2	2	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
98	65c	1	Jail	toilet	1	1	Compact Fluorescent, (1) 42W lamp	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
99	66	1	Jail	hall	8	8	8' (1 lamp) 86w T-8 VT strip w/ electronic ballast.	8	8	P-2 LED reofit kit for 8' indirect hallway custom fixtures	P2CL-TKG24-40VW-EU-2X	-	-	0	-	0	-	0	-	0	-
100	66	1	Jail	hall	3	3	8' (1 lamp) 59w T-8 IH Strip w/ electronic ballast.	3	3	P-2 LED reofit kit for 6' indirect hallway custom fixtures	2CL-TKG24-40VW-EU-1X-TKG22-40VW-EU-1x	-	-	0	-	0	-	0	-	0	-
101	66	1	Jail	hall	1	1	EXIT Compact Fluorescent, (2) 9W lamp	1	1	LED exit sign retrofit-JAIL	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
102	67	1	Jail	nurse	5	5	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	5	5	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
103	67	1	Jail	nurse	1	1	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	1	1	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
104	67	1	Jail	nurse bath	1	1	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	1	1	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
105	68	1	Jail	janitor	1	1	Incandescent, (1) 60W lamp	1	1	Philips 10 watt A lamp 2700K	-	-	8A19/SLIM/2700 DIM 10/1 ENERGY STAR	0	-	0	-	0	-	0	-
106	69	1	Jail	Office	4	4	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	4	4	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
107	70	1	Jail	Office	2	2	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	2	2	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
108	71	1	Jail	strip search rrom	1	1	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
109	72	1	Jail	classroom/library	4	4	4' (4 lamp) 32w T-8 wrap w/ electronic ballast.	4	4	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
110	72	1	Jail	classroom/library	6	6	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	6	6	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
111	72	1	Jail	classroom/library	2	2	8' (1 lamp) 86w T-8 VT strip w/ electronic ballast.	2	2	P-2 LED reerofit kit for 8' indirect hallway custom fixtures	P2CL-TKG24-40VW-EU-2X	-	-	0	-	0	-	0	-	0	-
112	72	1	Jail	classroom/library	1	1	4' (1 Lamp) 34w T-12 Vanity w/ electronic ballast	1	1	Rebuild with (1) 12.5 watt LED tube and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
113	72	1	Jail	closet	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
114	73	1	Jail	visit	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
115	74	1	Jail	non contact visits	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
116	75	1	Jail	Office	2	2	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	2	2	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
117	76	1	Jail	conference	2	2	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	2	2	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
118	76	1	Jail	conference	4	4	4' (1 Lamp) 34w T-12 Vanity w/ electronic ballast	4	4	Rebuild with (1) 12.5 watt LED tube and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
119	76	1	Jail	conference	4	4	Incandescent, (1) 65W lamp	4	4	Remove	-	-	-	0	-	0	-	0	-	0	-
120	77	1	Jail	entry for visitation	1	1	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	1	1	P-2 2x2 LED prismatic troffer conversion kit, LW lumens (2356) 4000K	TKL-2x2-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
121	78	1	Jail	hall	5	5	8' (1 lamp) 86w T-8 VT strip w/ electronic ballast.	5	5	P-2 LED reerofit kit for 8' indirect hallway custom fixtures	P2CL-TKG24-40VW-EU-2X	-	-	0	-	0	-	0	-	0	-
122	78	1	Jail	hall	0	0	-	0	0	0	-	-	-	0	-	0	-	0	-	0	-
123	79	1	Jail	hall	2	2	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	2	2	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
124	79	1	Jail	hall	1	1	EXIT Compact Fluorescent, (2) 9W lamp	1	1	LED exit sign retrofit-JAIL	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
125	80	1	Jail	bathroom	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
126	81	1	Jail	rec room	6	6	4' (2 lamp) 40w T-5 VT strip w/ electronic	6	6	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
127	81	1	Jail	rec room	8	8	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	8	8	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
128	82	1	Jail	staff lounge	2	2	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	2	2	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
129	82	1	Jail	bath 1 and 2	7	7	4' (4 lamp) 32w T-8 wrap w/ electronic ballast.	7	7	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
130	83	1	Jail	commisary	3	3	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	3	3	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
131	84	1	Jail	hall	1	1	EXIT Compact Fluorescent, (2) 9W lamp	1	1	LED exit sign retrofit-JAIL	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
132	84	1	Jail	hall	3	3	8' (1 lamp) 86w T-8 VT strip w/ electronic ballast.	3	3	P-2 LED reroft kit for 8' indirect hallway custom fixtures	P2CL-TKG24-40VW-EU-2X	-	-	0	-	0	-	0	-	0	-
133	84	1	Jail	hall	2	2	8' (1 lamp) 59w T-8 IH Strip w/ electronic ballast.	2	2	P-2 LED reroft kit for 6' indirect hallway custom fixtures	2CL-TKG24-40VW-EU-1X-TKG22-40VW-EU-1x	-	-	0	-	0	-	0	-	0	-
134	85	1	Jail	panel room	1	1	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
135	86	1	Jail	A-1	3	3	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	3	3	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
136	86	1	Jail	A-1	2	2	8' (4 lamp) 32w T-8 VN w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
137	86	1	Jail	A-1	1	1	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	1	1	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
138	86	1	Jail	A-1	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
139	87	1	Jail	A-2	2	2	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	2	2	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
140	87	1	Jail	A-2	1	1	8' (4 lamp) 32w T-8 VN w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
141	87	1	Jail	A-2	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
142	87	1	Jail	A-2	6	6	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	6	6	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
143	87	1	Jail	A-2	1	1	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	1	1	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
144	88	1	Jail	flex room	4	4	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	4	4	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
145	89	1	Jail	jail cell	1	1	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
146	89	1	Jail	jail cell	1	1	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
147	90	1	Jail	jail cell	1	1	F8T5/CW 8 WATT	1	1	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
148	90	1	Jail	jail cell	1	1	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
149	90	1	Jail	jail cell	1	1	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
150	91	1	Jail	jail cell	1	1	F8T5/CW 8 WATT	1	1	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
151	91	1	Jail	hall	5	5	8' (1 lamp) 86w T-8 VT strip w/ electronic ballast.	5	5	P-2 LED reroft kit for 8' indirect hallway custom fixtures	P2CL-TKG24-40VW-EU-2X	-	-	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
152	92	1	Jail	Closet	1	1	Compact Fluorescent, (1) 13W lamp	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
153	93	1	Jail	Q-1	2	2	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	2	2	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
154	93	1	Jail	Q-1	1	1	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
155	93	1	Jail	Q-1	1	1	F8T5/CW 8 WATT	1	1	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
156	94	1	Jail	Q-2	1	1	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
157	94	1	Jail	Q-2	1	1	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
158	94	1	Jail	Q-2	1	1	F8T5/CW 8 WATT	1	1	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
159	94	1	Jail	Q-2	1	1	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	1	1	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
160	95	1	Jail	Q-3	1	1	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
161	95	1	Jail	Q-3	1	1	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
162	95	1	Jail	Q-3	1	1	F8T5/CW 8 WATT	1	1	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
163	95	1	Jail	Q-3	1	1	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	1	1	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
164	96	1	Jail	E-30	2	2	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	2	2	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
165	96	1	Jail	E-30	2	2	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	2	2	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
166	96	1	Jail	E-30	2	2	F8T5/CW 8 WATT	2	2	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
167	97	1	Jail	E-20	3	3	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	3	3	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
168	97	1	Jail	E-20	2	2	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	2	2	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
169	97	1	Jail	E-20	2	2	F8T5/CW 8 WATT	2	2	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
170	98	1	Jail	E-10	3	3	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	3	3	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
171	98	1	Jail	E-10	2	2	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	2	2	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
172	98	1	Jail	E-10	2	2	F8T5/CW 8 WATT	2	2	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
173	99	1	Jail	MS-19	1	1	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
174	100	1	Jail	MS-19	1	1	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
175	101	1	Jail	MS-19	1	1	4' (1 lamp) 32w T-8 VT strip w/ electronic ballast.	1	1	Rebuild with (1) 12.5 watt LED tube and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
176	102	1	Jail	ED-1	1	1	4' (1 lamp) 32w T-8 VT strip w/ electronic ballast.	1	1	Rebuild with (1) 12.5 watt LED tube and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
177	103	1	Jail	Hall	26	26	4' (1 lamp) 32w T-8 VT strip w/ electronic ballast.	26	26	Rebuild with (1) 12.5 watt LED tube and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
178	103	1	Jail	Hall	10	10	Compact Fluorescent, long twin, (2) 40W lamp	10	10	Rebuild with (2) Philips 16.5 watt LED T8 4000K 4 pin, instant start -JAIL	-	ICN-2TTP40 -SC	16.5PL-LED/24-4000 IF 10/1	0	-	0	-	0	-	0	-
179	103	1	Jail	Hall	2	2	Compact Fluorescent, twin, (1) 40W lamp	2	2	Rebuild with (1) Philips 16.5 watt LED T8 4000K 4 pin, instant start -JAIL	-	ICN-1TTP40 -SC	16.5PL-LED/24-4000 IF 10/1	0	-	0	-	0	-	0	-
180	103	1	Jail	Hall	4	4	EXIT Compact Fluorescent, (2) 9W lamp	4	4	LED exit sign retrofit-JAIL	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
181	104	1	Jail	C-10	4	4	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	4	4	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
182	104	1	Jail	C-10	2	2	8' (4 lamp) 32w T-8 VN w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
183	104	1	Jail	C-10-MOP SINK	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
184	104	1	Jail	C-10-SHOWER	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
185	104	1	Jail	C-10	6	6	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	6	6	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
186	104	1	Jail	C-10	6	6	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	6	6	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
187	104	1	Jail	C-10	6	6	F8T5/CW 8 WATT	6	6	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
188	105	1	Jail	C-20	4	4	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	4	4	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
189	105	1	Jail	C-20	2	2	8' (4 lamp) 32w T-8 VN w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
190	105	1	Jail	C-20-MOP SINK	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
191	105	1	Jail	C-20-SHOWER	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
192	105	1	Jail	C-20	6	6	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	6	6	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
193	105	1	Jail	C-20	6	6	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	6	6	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
194	105	1	Jail	C-20	6	6	F8T5/CW 8 WATT	6	6	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
195	106	1	Jail	C-30	3	3	8' (4 lamp) 32w T-8 VN w/ electronic ballast	3	3	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
196	106	1	Jail	C-30	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
197	106	1	Jail	C-30-MOP SINK	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
198	106	1	Jail	C-30-SHOWER	4	4	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	4	4	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
199	106	1	Jail	C-30	4	4	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	4	4	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
200	106	1	Jail	C-30	4	4	F8T5/CW 8 WATT	4	4	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
201	107	1	Jail	C-40	3	3	8' (4 lamp) 32w T-8 VN w/ electronic ballast	3	3	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
202	107	1	Jail	C-40	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
203	107	1	Jail	C-40-MOP SINK	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
204	107	1	Jail	C-40-SHOWER	4	4	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	4	4	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
205	107	1	Jail	C-40	4	4	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	4	4	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
206	107	1	Jail	C-40	4	4	F8T5/CW 8 WATT	4	4	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
207	108	1	Jail	OUTSIDE BATHROOM	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
208	109	1	Jail	HALL	1	1	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
209	109	1	Jail	HALL	1	1	EXIT Compact Fluorescent, (2) 7W lamp	1	1	LED exit sign retrofit-JAIL	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
210	110	1	Jail	H-40-SINK LIGHTS	2	2	4' (4 lamp) 32w T-8 VN w/ electronic ballast-DIMMABLE	2	2	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
211	110	1	Jail	H-40-SHOWERS AND BATHROOMS	5	5	CANOPY Fixture w/ (1) PL 42w CF Quad Lamps	5	5	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
212	110	1	Jail	H-40-CLOSET	1	1	Incandescent, (1) 60W lamp	1	1	Philips 10 watt A lamp 2700K	-	-	8A19/SLIM/2700 DIM 10/1 ENERGY STAR	0	-	0	-	0	-	0	-
213	110	1	Jail	H-40	10	10	4' (4 lamp) 32w T-8 VN w/ electronic ballast-DIMMABLE	10	10	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
214	110	1	Jail	H-40	9	9	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	9	9	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
215	111	1	Jail	H-50-SINK LIGHTS	2	2	4' (4 lamp) 32w T-8 VN w/ electronic ballast-DIMMABLE	2	2	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
216	111	1	Jail	H-50-SHOWERS AND BATHROOMS	5	5	CANOPY Fixture w/ (1) PL 42w CF Quad Lamps	5	5	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
217	111	1	Jail	H-50-CLOSET	1	1	Incandescent, (1) 60W lamp	1	1	Philips 10 watt A lamp 2700K	-	-	8A19/SLIM/2700 DIM 10/1 ENERGY STAR	0	-	0	-	0	-	0	-
218	111	1	Jail	H-50	10	10	4' (4 lamp) 32w T-8 VN w/ electronic ballast-DIMMABLE	10	10	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
219	111	1	Jail	H-50	9	9	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	9	9	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
220	112	1	Jail	OFFICER DESK AREA	8	8	4' (4 lamp) 32w T-8 VN w/ electronic ballast-DIMMABLE	8	8	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
221	113	1	Jail	Hall	1	1	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
222	113	1	Jail	Hall	1	1	EXIT Compact Fluorescent, (2) 7W lamp	1	1	LED exit sign retrofit-JAIL	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
223	114	1	Jail	STORAGE	1	1	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
224	115	B	Jail	BASEMENT STAIRS #1	2	2	Compact Fluorescent, long twin, (2) 40W lamp	2	2	Rebuild with (2) Philips 16.5 watt LED T8 4000K 4 pin, instant start -JAIL	-	ICN-2TTP40 -SC	16.5PL-LED/24-4000 IF 10/1	0	-	0	-	0	-	0	-
225	115	B	Jail	BASEMENT STAIRS #2	1	1	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
226	115	B	Jail	GENERAL AREA LIGHTING	42	42	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	42	42	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
227	116	M	Jail	MEZZANINE	2	2	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	2	2	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
228	116	M	Jail	MEZZANINE	5	5	4' (1 lamp) 32w T-8 VT strip w/ electronic ballast.	5	5	Rebuild with (1) 12.5 watt LED tube and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
229	118	1	Jail	CELL BLOCK	7	7	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	7	7	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
230	118	1	Jail	CELL BLOCK	1	1	CANOPY Fixture w/ (1) PL 42w CF Quad Lamps	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
231	118	1	Jail	CELL BLOCK	7	7	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	7	7	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
232	118	1	Jail	CELL BLOCK	7	7	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	7	7	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
233	118	1	Jail	CELL BLOCK	7	7	F8T5/CW 8 WATT	7	7	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
234	119	1	Jail	OPEN AREA CELLS	5	5	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	5	5	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
235	119	1	Jail	OPEN AREA CELLS	3	3	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	3	3	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
236	119	1	Jail	OPEN AREA CELLS	3	3	F8T5/CW 8 WATT	3	3	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
237	119	1	Jail	OPEN AREA CELLS	3	3	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	3	3	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
238	120	1	Jail	OPEN AREA CELLS	6	6	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	6	6	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
239	120	1	Jail	OPEN AREA CELLS	6	6	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	6	6	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
240	120	1	Jail	OPEN AREA CELLS	1	1	F8T5/CW 8 WATT	1	1	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
241	120	1	Jail	OPEN AREA CELLS	6	6	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	6	6	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
242	121	1	Jail	OPEN AREA CELLS	6	6	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	6	6	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
243	121	1	Jail	OPEN AREA CELLS	6	6	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	6	6	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
244	121	1	Jail	OPEN AREA CELLS	1	1	F8T5/CW 8 WATT	1	1	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
245	121	1	Jail	OPEN AREA CELLS	6	6	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	6	6	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
246	122	1	Jail	HALL	2	2	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	2	2	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
247	122	1	Jail	HALL	1	1	EXIT Compact Fluorescent, (2) 7W lamp	1	1	LED exit sign retrofit-JAIL	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
248	123	1	Jail	OFFICER DESK AREA	8	8	4' (4 lamp) 32w T-8 VN w/ electronic ballast-DIMMABLE	8	8	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
249	122B	1	Jail	STORAGE	1	1	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
250	122C	1	Jail	STORAGE	1	1	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
251	124	1	Jail	Hall	26	26	4' (1 lamp) 32w T-8 VT strip w/ electronic ballast.	26	26	Rebuild with (1) 12.5 watt LED tube and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
252	124	1	Jail	Hall	10	10	Compact Fluorescent, long twin, (2) 40W lamp	10	10	Rebuild with (2) Philips 16.5 watt LED T8 4000K 4 pin, instant start -JAIL	-	ICN-2TTP40 -SC	16.5PL-LED/24-4000 IF 10/1	0	-	0	-	0	-	0	-
253	124	1	Jail	Hall	2	2	Compact Fluorescent, twin, (1) 40W lamp	2	2	Rebuild with (1) Philips 16.5 watt LED T8 4000K 4 pin, instant start -JAIL	-	ICN-1TTP40 -SC	16.5PL-LED/24-4000 IF 10/1	0	-	0	-	0	-	0	-
254	124	1	Jail	Hall	4	4	EXIT Compact Fluorescent, (2) 9W lamp	4	4	LED exit sign retrofit-JAIL	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
255	125	1	Jail	C-30	3	3	8' (4 lamp) 32w T-8 VN w/ electronic ballast	3	3	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
256	125	1	Jail	C-30	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
257	125	1	Jail	C-30-MOP SINK	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
258	125	1	Jail	C-30-SHOWER	4	4	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	4	4	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
259	125	1	Jail	C-30	4	4	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	4	4	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
260	125	1	Jail	C-30	4	4	F8T5/CW 8 WATT	4	4	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
261	126	1	Jail	C-30	3	3	8' (4 lamp) 32w T-8 VN w/ electronic ballast	3	3	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
262	126	1	Jail	C-30	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
263	126	1	Jail	C-30-MOP SINK	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
264	126	1	Jail	C-30-SHOWER	4	4	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	4	4	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
265	126	1	Jail	C-30	4	4	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	4	4	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
266	126	1	Jail	C-30	4	4	F8T5/CW 8 WATT	4	4	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
267	127	1	Jail	C-10	4	4	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	4	4	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
268	127	1	Jail	C-10	2	2	8' (4 lamp) 32w T-8 VN w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
269	127	1	Jail	C-10-MOP SINK	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
270	127	1	Jail	C-10-SHOWER	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
271	127	1	Jail	C-10	6	6	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	6	6	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
272	127	1	Jail	C-10	6	6	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	6	6	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
273	127	1	Jail	C-10	6	6	F8T5/CW 8 WATT	6	6	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
274	128	1	Jail	C-10	4	4	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	4	4	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
275	128	1	Jail	C-10	2	2	8' (4 lamp) 32w T-8 VN w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-4P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
276	128	1	Jail	C-10-MOP SINK	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
277	128	1	Jail	C-10-SHOWER	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit canopy fixture LED retrofit kit - 7 watts	RPT-LEDCR-900LM-4000K	-	-	0	-	0	-	0	-	0	-
278	128	1	Jail	C-10	6	6	2' (2 Lamp) 17w T-8 Vanity w/ electronic ballast	6	6	Rebuild with (2) 8.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	8.5T8/24-4000 IF 10/1	0	-	0	-	0	-	0	-
279	128	1	Jail	C-10	6	6	4' (2 Lamp) 32w T-8 Vanity w/ Electronic ballast	6	6	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
280	128	1	Jail	C-10	6	6	F8T5/CW 8 WATT	6	6	Retrofit fixture night light with LED retrofit kits	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
281	129	1	Jail	STORAGE	1	1	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
282	130	1	Jail	STORAGE	1	1	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
283	131	1	Jail	STORAGE	1	1	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-SC	12T8/48-4000 IF 10/1	0	-	0	-	0	-	0	-
284	-	-	-	-	0	0	-	0	0	0	-	-	-	0	-	0	-	0	-	0	-
285	231	2	Veterans	Waiting Room	6	6	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	6	6	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
286	230	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
287	229	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
288	228	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
289	242	2	Veterans	Library/Resource	2	2	2'x4' (3 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-3P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
290	241a	2	Veterans	Copy Room	1	1	2'x4' (3 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-3P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
291	241a	2	Veterans	Copy Room	2	2	Incandescent, (1) 75W lamp	2	2	Philips 10 watt A lamp 2700K	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	8A19/SLIM/2700 DIM 10/1 ENERGY STAR	2	Controlled by Sensor Above	0	-	0	-	0	-
292	241	2	Veterans	Files and Supplies	5	6	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	5	6	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
293	237	2	Veterans	Men's Restroom	1	1	4' (1 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (1) 12.5 watt LED tube and low power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
294	237A	2	Veterans	Women's Restroom	1	1	4' (1 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (1) 12.5 watt LED tube and low power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
295	240	2	Veterans	Lounge	4	4	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	4	4	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
296	227	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
297	226	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
298	245	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
299	244	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
300	224	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
301	223	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
302	222	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
303	221	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
304	246	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
305	247	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
306	220	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
307	248	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
308	219	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
309	218	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
310	217	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #	
311	249	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-	
312	215	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-	
313	214	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-	
314	213	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-	
315	212	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-	
316	239	2	Veterans	Classroom/Boardroom/Group Therapy	3	4	2'x4' (3 lamp) 32w T-8 troffer w/ electronic ballast	3	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-3P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-	
317	239	2	Veterans	Classroom/Boardroom/Group Therapy	9	9	Compact Fluorescent, twin, (2) 13W lamp	9	9	Relamp with (2) 5 Watt LED bi-pin lamp	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	HL-GX23-5W	9	Controlled by Sensor Above	0	-	0	-	0	0	-
318	239	2	Veterans	Classroom/Boardroom/Group Therapy	1	1	Incandescent, (1) 75W lamp	1	1	Philips 10 watt A lamp 2700K	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	8A19/SLIM/2700 DIM 10/1 ENERGY STAR	0	-	0	-	0	-	0	-	
319	235	2	Veterans	Observation	6	6	Compact Fluorescent, twin, (2) 13W lamp	6	6	Relamp with dimmable par 30 LED lamp	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	12.SP30L/F25 2700 DIM	0	-	0	-	0	-	0	-	
320	235	2	Veterans	Observation	1	1	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	1	1	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-	
321	211	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-	
322	210	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-	
323	209	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-	
324	208	2	Veterans	Directors Office (Conference)	3	3	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	3	3	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-	
325	234	2	Veterans	Children Therapy	3	3	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	3	3	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-	
326	207	2	Veterans	Office	2	2	2'x4' (4 lamp fixture with only one lamp installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-	
327	206	2	Veterans	Computer and Billing	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-	
328	233	2	Veterans	Family Therapy	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-	
329	233	2	Veterans	Family Therapy	4	4	-	4	4	0	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	-	0	-	1	-	0	-	0	-	

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
330	205	2	Veterans	Secretary	4	4	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	4	4	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
331	203A	2	Veterans	Janitor Closet	1	1	Compact Fluorescent, twin, (2) 13W lamp	1	1	Relamp with (2) 5 Watt LED bi-pin lamp	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	HL-GX23-5W	0	-	0	-	0	-	0	-
332	203	2	Veterans	Women's Restroom	2	2	4' (1 lamp) 32w T-8 strip w/ electronic ballast.	2	2	Rebuild with (1) 12.5 watt LED tube and low power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
333	202	2	Veterans	Men's Restroom	6	6	4' (1 lamp) 32w T-8 strip w/ electronic ballast.	6	6	Rebuild with (1) 12.5 watt LED tube and low power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
334	201	2	Veterans	Lobby	28	28	Compact Fluorescent, twin, (2) 13W lamp	28	28	Relamp with (2) 5 Watt LED bi-pin lamp	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	HL-GX23-5W	0	-	0	-	0	-	0	-
335	243	2	Veterans	Children Waiting	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
336	232	2	Veterans	Crisis Waiting	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
337	232	2	Veterans	Crisis Waiting	4	4	Compact Fluorescent, twin, (2) 13W lamp	4	4	Relamp with (2) 5 Watt LED bi-pin lamp	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	HL-GX23-5W	4	Controlled by Sensor Above	0	-	0	-	0	-
338	236	2	Veterans	Individual Therapy	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
339	236	2	Veterans	Individual Therapy	4	4	Compact Fluorescent, twin, (2) 13W lamp	4	4	Relamp with (2) 5 Watt LED bi-pin lamp	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	HL-GX23-5W	4	Controlled by Sensor Above	0	-	0	-	0	-
340	251/252/253	2	Veterans	2nd Floor Corridor	56	56	3' (1 lamp) 32w T-8 strip w/ electronic ballast.	56	56	Rebuild with (1) 12.5 watt LED tube and low power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-LW-SC	10.5T8/36-3500 IF 10/1	0	-	0	-	0	-	0	-
341	251/252/253	2	Veterans	2nd Floor Corridor	20	20	Compact Fluorescent, twin, (2) 13W lamp	20	20	Relamp with (2) 5 Watt LED bi-pin lamp	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	HL-GX23-5W	0	-	0	-	0	-	0	-
342	148	1	Veterans	DA Waiting	6	6	Compact Fluorescent, twin, (2) 13W lamp	6	6	Relamp with (2) 5 Watt LED bi-pin lamp	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	HL-GX23-5W	0	-	0	-	0	-	0	-
343	148	1	Veterans	DA Waiting	3	3	4' (1 lamp) 32w T-8 strip w/ electronic ballast.	3	3	Rebuild with (1) 12.5 watt LED tube and low power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
344	147	1	Veterans	DA Reception	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
345	146	1	Veterans	DA Administrative Assistant	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
346	145	1	Veterans	DA Workroom	6	6	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	6	6	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
347	144	1	Veterans	Assistant District Attorney / Investigator	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
348	143	1	Veterans	Stop DWI Assistant DA	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
349	142	1	Veterans	District Attorney	4	4	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	4	4	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
350	141	1	Veterans	Confidential Secretary	3	3	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	3	3	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
351	137	1	Veterans	DA Conference Room /Library Research Area	6	6	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	6	6	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
352	140	1	Veterans	District Attorney Office	4	4	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	4	4	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
353	129	1	Veterans	PBO Offices	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
354	138	1	Veterans	Restroom	1	1	2' (1 lamp) 20w T-12 IH strip w/ mag ballast	1	1	Rebuild with (1) 8.5 watt LED tube and low power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
355	128	1	Veterans	PBO Offices	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
356	127	1	Veterans	PBO Offices	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
357	126	1	Veterans	PBO Offices	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
358	125	1	Veterans	PB Supervisor	3	3	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	3	3	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
359	135	1	Veterans	Victim Witness Room	6	6	2'x4' (3 lamp) 32w T-8 troffer w/ electronic ballast	6	6	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-3P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
360	135	1	Veterans	Victim Witness Room	6	6	Incandescent, (1) 75W lamp	6	6	Philips 10 watt A lamp 2700K	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	8A19/SLIM/2700 DIM 10/1 ENERGY STAR	6	Controlled by Sensor Above	0	-	0	-	0	-
361	135	1	Veterans	Victim Witness Room	2	2	Compact Fluorescent, twin, (2) 13W lamp	2	2	Relamp with (2) 5 Watt LED bi-pin lamp	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	HL-GX23-5W	2	Controlled by Sensor Above	0	-	0	-	0	-
362	136	1	Veterans	Evidence Room	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
363	124	1	Veterans	PB Conference Room	6	6	2'x4' (3 lamp) 32w T-8 troffer w/ electronic ballast	6	6	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-3P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
364	124	1	Veterans	PB Conference Room	8	8	Compact Fluorescent, twin, (2) 13W lamp	8	8	Relamp with dimmable par 30 LED lamp	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	12.5PAR30L/F25 2700 DIM	8	Controlled by Sensor Above	0	-	0	-	0	-
365	118	1	Veterans	PBO Offices	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
366	117	1	Veterans	PBO Offices	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
367	116	1	Veterans	PBO Offices	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
368	115	1	Veterans	PBO Offices	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
369	114	1	Veterans	PBO Offices	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
370	122	1	Veterans	NY SPIN	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
371	121	1	Veterans	PB Waiting Room	4	4	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	4	4	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
372	120	1	Veterans	PB Reception Area	3	3	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	3	3	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
373	113	1	Veterans	PBO Offices	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
374	112	1	Veterans	PBO Offices	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
375	111	1	Veterans	PB Director	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
376	111	1	Veterans	PB Director	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
377	110	1	Veterans	PB Supervisor	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
378	110	1	Veterans	PB Supervisor	1	1	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	1	1	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
379	109	1	Veterans	PB Secreterial Area	7	7	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	7	7	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
380	108	1	Veterans	Kitchen/Break	3	3	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	3	3	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
381	108	1	Veterans	Kitchen/Break	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
382	-	1	Veterans	Small Corridor	1	1	Compact Fluorescent, twin, (2) 13W lamp	1	1	Relamp with (2) 5 Watt LED bi-pin lamp	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	HL-GX23-SW	0	-	0	-	0	-	0	-
383	134	1	Veterans	Grand Jury Room	8	8	2'x4' (3 lamp) 32w T-8 troffer w/ electronic ballast	8	8	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-3P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	OSC15-I0W	0	-	1	OSP20-D0
384	134	1	Veterans	Grand Jury Room	10	10	Compact Fluorescent, twin, (2) 13W lamp	10	10	Relamp with (2) 5 Watt LED bi-pin lamp	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	HL-GX23-SW	0	-	0	-	0	-	0	-
385	134	1	Veterans	Grand Jury Room	10	10	Incandescent, (1) 75W lamp	10	10	Philips 10 watt A lamp 2700K	TKP-2X4-2L-WA-ETM-S8-NB-IL	-	8A19/SLIM/2700 DIM 10/1 ENERGY STAR	0	-	0	-	0	-	0	-
386	151	1	Veterans	Men's Restroom	2	2	4' (1 lamp) 32w T-8 strip w/ electronic ballast.	2	2	Rebuild with (1) 12.5 watt LED tube and low power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
387	150	1	Veterans	Women's Restroom	2	2	4' (1 lamp) 32w T-8 strip w/ electronic ballast.	2	2	Rebuild with (1) 12.5 watt LED tube and low power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
388	104	1	Veterans	STOP DWI	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Retrofit 2' x 4' troffer with (2) 12.5 watt LED tubes and normal power, instant start ballast	TKP-2X4-2L-WA-ETM-S8-NB-IL	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
389	105	1	Veterans	Women's Restroom	4	4	4' (1 lamp) 32w T-8 strip w/ electronic ballast.	4	4	Rebuild with (1) 12.5 watt LED tube and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
390	106	1	Veterans	Men's Restroom	2	2	4' (1 lamp) 32w T-8 strip w/ electronic ballast.	2	2	Rebuild with (1) 12.5 watt LED tube and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
391	103/132/131/130	1	Veterans	Corridor/Lobby	40	40	Compact Fluorescent, twin, (2) 13W lamp	40	40	Relamp with (2) 5 Watt LED bi-pin lamp	-	-	HL-GX23-5W	0	-	0	-	0	-	0	-
392	103/132/131/130	1	Veterans	Corridor/Lobby	40	40	3' (1 lamp) 32w T-8 strip w/ electronic ballast.	40	40	Rebuild with (1) 12.5 watt LED tube and low power, instant start ballast	-	IOPA-2P32-LW-SC	10.5T8/36-3500 IF 10/1	0	-	0	-	0	-	0	-
393	103/132/131/130	1	Veterans	Corridor/Lobby	4	4	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast	4	4	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
394	Transfer Corridor	1	Veterans	Corridor to Courthouse	16	16	4' (1 lamp) 32w T-8 strip w/ electronic ballast.	16	16	Rebuild with (1) 12.5 watt LED tube and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
395	Transfer Corridor	1	Veterans	Corridor to Courthouse	1	1	Compact Fluorescent, twin, (2) 13W lamp	1	1	Relamp with (2) 5 Watt LED bi-pin lamp	-	-	HL-GX23-5W	0	-	0	-	0	-	0	-
396	Entry Vestibule	1	Veterans	Vestibule	2	2	Compact Fluorescent, twin, (2) 13W lamp	2	2	Relamp with (2) 5 Watt LED bi-pin lamp	-	-	HL-GX23-5W	0	-	0	-	0	-	0	-
397	Basement	B	Veterans	Basement Open Floor Plan	7	7	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	7	7	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	7	WSPERMUNV	0	-	0	-	0	-
398	Basement	B	Veterans	Basement Open Floor Plan	8	8	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	8	8	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	8	WSPERMUNV	0	-	0	-	0	-
399	Basement	B	Veterans	Basement Open Floor Plan	7	7	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	7	7	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	7	WSPERMUNV	0	-	0	-	0	-
400	Basement	B	Veterans	Basement Open Floor Plan	7	7	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	7	7	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	7	WSPERMUNV	0	-	0	-	0	-
401	Basement	B	Veterans	Basement Open Floor Plan	8	8	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	8	8	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	8	WSPERMUNV	0	-	0	-	0	-
402	Basement	B	Veterans	Basement Open Floor Plan	5	5	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	5	5	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	5	WSPERMUNV	0	-	0	-	0	-
403	Basement	B	Veterans	Basement Open Floor Plan	8	8	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	8	8	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	8	WSPERMUNV	0	-	0	-	0	-
404	Basement	B	Veterans	Basement Open Floor Plan	8	8	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	8	8	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	8	WSPERMUNV	0	-	0	-	0	-
405	Basement	B	Veterans	Basement Open Floor Plan	10	10	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	10	10	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
406	-	-	Veterans	Exit Signs	24	24	EXIT Incandescent, (2) 25W lamp	24	24	Exit sign - Top Mount with emergency heads	DEC CDLX-C-2-G-WH-EM	-	-	0	-	0	-	0	-	0	-
407	Garage 1	1	Maintenance Garage	Garage Bay #1	7	7	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	7	7	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
408	Garage 2	1	Maintenance Garage	Garage Bay #2	4	4	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	4	4	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
409	Breakroom	1	Maintenance Garage	Breakroom	4	4	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	4	4	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
410	Breakroom	1	Maintenance Garage	Breakroom	1	1	4' (1 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (1) 12.5 watt LED tube and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
411	Garage 2	1	Maintenance Garage	Garage Bay #2	8	8	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	8	8	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
412	Restroom	1	Maintenance Garage	Restroom	2	2	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
413	Restroom	1	Maintenance Garage	Restroom	1	1	4' (1 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (1) 12.5 watt LED tube and low power, instant start ballast.	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
414	-	-	-	-	0	0	-	0	0	0	-	-	-	0	-	0	-	0	-	0	-
415	Evidence Garage	1	Maintenance Garage	Records	5	5	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	5	5	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast.	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
416	Evidence Garage	1	Maintenance Garage	Records	7	7	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	7	7	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast.	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
417	Evidence Garage	1	Maintenance Garage	Flush Mounted Strips	4	4	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	4	4	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast.	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
418	Evidence Garage	1	Maintenance Garage	Task Lighting	3	3	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	3	3	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast.	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
419	-	-	-	-	0	0	-	0	0	0	-	-	-	0	-	0	-	0	-	0	-
420	Garage	1	Highway Garage (Wampsville)	Main Garage	26	26	4L T-5 HO fixture	26	26	New Philips 12,000 Lumen FBX Highbay	FBX-12L-L-50-UNV-WC6	-	-	0	-	0	-	0	-	0	-
421	Garage	1	Highway Garage (Wampsville)	Main Garage - Task Lighting	3	6	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	3	6	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast.	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
422	Garage	1	Highway Garage (Wampsville)	Mechanics Bay	14	15	2'x4' (4 lamp) 54w T-5HO - Troffer w/ Electronic ballast	14	15	Rebuild with (4) 26 watt T5 LED tubes and low power, instant start ballast.	-	IOP-4P32-LW-SC	RPT-TOTALTUBE-T5-46IN-5000K	14	WSPERMUNV	0	-	0	-	0	-
423	Garage	1	Highway Garage (Wampsville)	Mechanics Bay - Task Lighting	14	14	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	14	14	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast.	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
424	Garage	1	Highway Garage (Wampsville)	Tire Shop	20	20	4' (3 lamp) 32w T-8 turret strip w/ electronic ballast.	20	20	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast.	-	IOPA-3P32-LW-SC	12T8/48-5000 IF 10/1	0	-	1	OSC15-I0W	0	-	1	OSP20-D0
425	Garage	1	Highway Garage (Wampsville)	Weld Shop	30	30	4' (3 lamp) 32w T-8 turret strip w/ electronic ballast.	30	30	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast.	-	IOPA-3P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
426	Garage	1	Highway Garage (Wampsville)	Sign Shop	24	24	4' (3 lamp) 32w T-8 turret strip w/ electronic ballast.	24	24	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast.	-	IOPA-3P32-LW-SC	12T8/48-5000 IF 10/1	0	-	1	OSC15-I0W	0	-	1	OSP20-D0
427	Garage	1	Highway Garage (Wampsville)	Corridor	3	3	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	3	3	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast.	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
428	Garage	1	Highway Garage (Wampsville)	Break/Bar	4	6	4' (4 lamp) 32w T-8 wrap w/ electronic ballast.	4	6	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast.	-	IOPA-3P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	OSC15-I0W	0	-	1	OSP20-D0
429	Garage	1	Highway Garage (Wampsville)	Break/Bar	5	3	4' (3 lamp) 32w T-8 wrap w/ electronic ballast.	5	3	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast.	-	IOPA-3P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
430	Garage	1	Highway Garage (Wampsville)	Office	2	2	2'x4' (4 lamp) 32w T-8 troffer w/ electronic ballast	2	2	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	-	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
431	Garage	1	Highway Garage (Wampsville)	Office	2	2	1'x4' (4 lamp) wrap fixture w/ electronic ballast	2	2	Retrofit 1' x 4' wrap fixture with (4) 12.5 watt LED tubes and normal power, instant start ballast	TKL-2x4-LW-F-UL-40K	IOPA-2P32-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
432	Garage	1	Highway Garage (Wampsville)	Men's Restroom	6	6	4' (2 lamp) 32w T-8 VT strip w/ electronic ballast.	6	6	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast.	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
433	Garage	1	Highway Garage (Wampsville)	Stock Room 2nd Floor	12	12	2'x4' (3 lamp) 32w T-8 troffer w/ electronic ballast	12	12	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
434	Garage	1	Highway Garage (Wampsville)	Stock Room 2nd Floor	2	1	4' (4 lamp) 32w T-8 wrap w/ electronic ballast.	2	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
435	Garage	1	Highway Garage (Wampsville)	Stock Room 1st Floor	34	34	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast	34	34	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	0	-	2	OSC15-I0W	0	-	1	OSP20-D0
436	Garage	1	Highway Garage (Wampsville)	Stock Room 1st Floor	3	3	(1) 4' (2 lamp) and (2) 4' (4 lamp) T-8 wrap w/ electronic ballast.	3	3	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
437	Admin Office	2	Highway Garage (Wampsville)	Stairs	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
438	Admin Office	2	Highway Garage (Wampsville)	Highway Planning	3	3	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	3	3	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
439	Admin Office	2	Highway Garage (Wampsville)	Highway Planning	3	3	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	3	3	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
440	Admin Office	2	Highway Garage (Wampsville)	Highway Planning	3	3	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	3	3	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
441	Admin Office	2	Highway Garage (Wampsville)	Joe's Office	6	2	4' (4 lamp) 32w T-8 wrap w/ electronic ballast.	6	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
442	Admin Office	2	Highway Garage (Wampsville)	Kitchen/Break	2	2	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
443	Admin Office	2	Highway Garage (Wampsville)	Women's Restroom	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
444	Admin Office	1	Highway Garage (Wampsville)	1st Floor Planning	7	6	4' (4 lamp) 32w T-8 wrap w/ electronic ballast.	7	6	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	3	OSC15-I0W	0	-	1	OSP20-D0
445	Admin Office	1	Highway Garage (Wampsville)	1st Floor Planning	7	2	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	7	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
446	Admin Office	1	Highway Garage (Wampsville)	1st Floor Planning	8	10	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	8	10	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
447	Admin Office	1	Highway Garage (Wampsville)	Mop Closet	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
448	Admin Office	1	Highway Garage (Wampsville)	Men's Restroom	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
449	Admin Office	1	Highway Garage (Wampsville)	Mechanical Room	1	1	8' (2 lamp) 60w T-12 IH strip w/ ES mag ballast.	1	1	Retrofit IH8 with (2) 12.5 watt LED tubes and low power, instant start ballast	CKM – IR – 2L – T8 – 1x8 – UW – WA – N8M	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
450	-	-	-	-	0	0	-	0	0	0	-	-	-	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
451	Morrisville Garage	1	Highway Garage (Morrisville)	Parts Room	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
452	Morrisville Garage	1	Highway Garage (Morrisville)	Parts Room	0	0	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
453	Morrisville Garage	1	Highway Garage (Morrisville)	Mechanical Shop	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
454	Morrisville Garage	1	Highway Garage (Morrisville)	Mechanical Shop	0	0	4' (3 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
455	Morrisville Garage	1	Highway Garage (Morrisville)	Mechanical Shop	0	0	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
456	Morrisville Garage	1	Highway Garage (Morrisville)	Hydraulic Room	0	0	4' (3 lamp) 32w T-8 turret strip w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
457	Morrisville Garage	1	Highway Garage (Morrisville)	Hydraulic Room	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
458	Morrisville Garage	1	Highway Garage (Morrisville)	Weld Shop - Chain Hung	0	0	4' (3 lamp) 32w T-8 turret strip w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
459	Morrisville Garage	1	Highway Garage (Morrisville)	Weld Shop - Wall Hung	0	0	4' (3 lamp) 32w T-8 turret strip w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
460	Morrisville Garage	1	Highway Garage (Morrisville)	Hallway	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
461	Morrisville Garage	1	Highway Garage (Morrisville)	Hallway	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
462	Morrisville Garage	1	Highway Garage (Morrisville)	Front Office	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
463	Morrisville Garage	1	Highway Garage (Morrisville)	Middle Office	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
464	Morrisville Garage	1	Highway Garage (Morrisville)	Women's Restroom	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
465	Morrisville Garage	1	Highway Garage (Morrisville)	Men's Restroom	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
466	Morrisville Garage	1	Highway Garage (Morrisville)	Main Garage	0	0	4' (3 lamp) 32w T-8 turret strip w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
467	-	-	-	-	0	0	-	0	0	0	-	-	-	0	-	0	-	0	-	0	-
468	DSS - Exterior	1	DSS	DSS - Exterior	7	9	400w High Pressure Sodium	7	9	New Philips Type III area light - 139 watts	ECF-1-3-135LA-6470-CW-UNV-BRP	-	-	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
	DSS - Exterior		DSS	DSS - Exterior	0	0	ADD	0	4	New Philips Type III area light - 139 watts	ECF-1-3-135LA-6470-CW-UNV-BRP										
469	DSS - Exterior	1	DSS	DSS - Exterior	7	9	400w High Pressure Sodium	7	9	New Philips Type III area light - 139 watts	ECF-1-3-135LA-6470-CW-UNV-BRP	-	-	0	-	0	-	0	-	0	-
470	DSS - Exterior	1	DSS	DSS - Exterior	10	10	150w Metal Halide	10	10	New Rab LED area light - 30 watts	ALED26	-	-	0	-	0	-	0	-	0	-
471	DSS - Exterior	1	DSS	DSS - Exterior	24	24	Incandescent, (1) 75W lamp	24	24	Cree Enclosed	-	-	A19P-60W-27K-B1	0	-	0	-	0	-	0	-
472	DSS - Exterior	1	DSS	DSS - Exterior	9	2	50w Metal Halide	9	2	Cree Enclosed	-	-	A19P-60W-27K-B1	0	-	0	-	0	-	0	-
473	Jail - Exterior	1	Jail	Generator Area	1	1	150w High Pressure Sodium Wall Pak	1	1	New Rab LED wall pack - 37 watts	SLIM37/PC2	-	-	0	-	0	-	0	-	0	-
474	Jail - Exterior	1	Jail	Jail - Exterior	3	3	150w High Pressure Sodium Wall Pak	3	3	New Rab LED wall pack - 29 watts - with photo control	SLIM26/PC2	-	-	0	-	0	-	0	-	0	-
475	Jail - Exterior	1	Jail	Jail - Exterior	3	3	70w High Pressure Sodium	3	3	-	ALED5T26W	-	-	0	-	0	-	0	-	0	-
476	Jail - Exterior	1	Jail	Jail - Exterior	3	3	250w High Pressure Sodium Wall Pak	3	3	New Rab LED wall pack - 37 watts	SLIM37	-	-	0	-	0	-	0	-	0	-
477	Jail - Exterior	1	Jail	Jail - Exterior	2	2	150w High Pressure Sodium Wall Pak	2	2	New Rab LED wall pack - 29 watts	SLIM26	-	-	0	-	0	-	0	-	0	-
478	Jail - Exterior	1	Jail	Jail - Exterior	2	2	150w High Pressure Sodium Wall Pak	2	2	New Rab LED wall pack - 29 watts - with photo control	SLIM26/PC2	-	-	0	-	0	-	0	-	0	-
479	Jail - Exterior	1	Jail	Jail - Exterior	6	6	1000w High Pressure Sodium	6	6	New Rab LED flood light - trunnion mount - 315 watts	FXLED300T	-	-	0	-	0	-	0	-	0	-
480	Jail - Exterior	1	Jail	Between Maint Garage and Jail Sallyport	3	3	250w High Pressure Sodium	3	3	-	ALED4T78RG	-	-	0	-	0	-	0	-	0	-
481	Office Building - EXT	1	Office Building - EXT	Office Bld Parking Lot	7	7	70w High Pressure Sodium	7	7	New Rab LED area cobra head Type III - 78 watts	RWLED3T78	-	-	0	-	0	-	0	-	0	-
482	Office Building - EXT	1	Office Building - EXT	Office Bld Parking Lot	31	31	175w High Pressure Sodium Canopy Fixture	31	31	Retrofit drum fixture with 12w LED conversion kit.	RPT-LEDCR-1600LM-4000K	-	-	0	-	0	-	0	-	0	-
483	Office Building - EXT	1	Office Building - EXT	Office Bld Parking Lot	14	17	70w High Pressure Sodium	14	17	-	24L 10LEDE53 MVOLT 4K R3 AY	-	-	0	-	0	-	0	-	0	-
484	-	-	-	-	0	0	-	0	0	0	-	-	-	0	-	0	-	0	-	0	-
485	Maintenance Garage - Exterior	1	Maintenance Garage - Exterior	Maintenance Garage - EXT	3	3	CF Jar Fixture w/ (1) Compact Fluorescent, spiral, (1) 13W Twist Lamp	3	3	No Action	-	-	-	0	-	0	-	0	-	0	-
486	Link Connecting Jail Parking Lot and PH	1	Link Connecting Jail Parking Lot and PH	Office Bld Parking Lot	2	2	400w High Pressure Sodium	2	2	New Rab LED flood light - trunnion mount - 107 watts	FXLED105T	-	-	0	-	0	-	0	-	0	-
487	Link Connecting Jail Parking Lot and PH	1	Link Connecting Jail Parking Lot and PH	Office Bld Parking Lot	5	5	70w High Pressure Sodium	5	5	-	24L 10LEDE53 MVOLT 4K R3 AY	-	-	0	-	0	-	0	-	0	-
488	Link Connecting Jail Parking Lot and PH	1	Link Connecting Jail Parking Lot and PH	Parking Lot between Pub Health and Jail Maintenance	2	2	250w High Pressure Sodium	2	2	New Rab LED flood light - trunnion mount - 89 watts - with photo control	FFLED80T/PC2	-	-	0	-	0	-	0	-	0	-
489	Public Health - Exterior	1	Public Health - Exterior	Public Health - Exterior	7	7	150w High Pressure Sodium Wall Pak	7	7	New Rab LED wall pack - 29 watts	SLIM26	-	-	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
490	Public Health - Exterior	1	Public Health - Exterior	Public Health - Exterior	7	7	70w High Pressure Sodium	7	7	-	24L 10LEDE53 MVOLT 4K R3 AY	-	-	0	-	0	-	0	-	0	-
491	-	-	-	-	0	0	-	0	0	0	-	-	-	0	-	0	-	0	-	0	-
492	Veterans Building - Exterior	1	Veterans Building - Exterior	Veterans - Exterior - High Cans	10	10	Incandescent, (1) 75W lamp	10	10	Cree Enclosed	-	-	A19P-60W-27K-B1	0	-	0	-	0	-	0	-
493	Veterans Building - Exterior	1	Veterans Building - Exterior	Veterans - Exterior - Low Cans	9	9	Incandescent, (1) 75W lamp	9	9	Cree Enclosed	-	-	A19P-60W-27K-B1	0	-	0	-	0	-	0	-
494	Veterans Building - Exterior	1	Veterans Building - Exterior	Veterans - Exterior - Flood	1	1	400w High Pressure Sodium	1	1	New Rab LED flood light - trunnion mount - 107 watts	FXLED105T/PCT	-	-	0	-	0	-	0	-	0	-
495	Veterans Building - Exterior	1	Veterans Building - Exterior	Veterans - Exterior - Wall Packs	1	1	150w High Pressure Sodium Wall Pak	1	1	New Rab LED wall pack - 29 watts - with photo control	SLIM26/PC2	-	-	0	-	0	-	0	-	0	-
496	Veterans Building - Exterior	1	Veterans Building - Exterior	Veterans - Exterior - Wall Pack Link to CH	1	1	70w High Pressure Sodium	1	1	New Rab LED wall pack - 29 watts - with photo control	SLIM26/PC2	-	-	0	-	0	-	0	-	0	-
497	-	-	-	-	0	0	-	0	0	0	-	-	-	0	-	0	-	0	-	0	-
498	Courthouse - Exterior	1	Courthouse - Exterior	Courthouse - Exterior	10	10	50w High Pressure Sodium	10	10	Cree Enclosed	-	-	A19P-60W-27K-B1	0	-	0	-	0	-	0	-
499	Courthouse - Exterior	1	Courthouse - Exterior	Courthouse - Exterior	5	5	70w High Pressure Sodium	5	5	-	24L 10LEDE53 MVOLT 4K R3 AY	-	-	0	-	0	-	0	-	0	-
500	Courthouse - Exterior	1	Courthouse - Exterior	Courthouse - Exterior	7	7	100w High Pressure Sodium	7	7	New Rab LED flood light - 20 watts	HSLED18A	-	-	0	-	0	-	0	-	0	-
501	Courthouse - Exterior	1	Courthouse - Exterior	Courthouse - Exterior - Flag Poles (2)	4	4	Incandescent, (1) 75W lamp	4	4	Par38 Wet rated	-	-	L14P38D50KFLW	0	-	0	-	0	-	0	-
502	-	-	-	-	0	0	-	0	0	0	-	-	-	0	-	0	-	0	-	0	-
503	-	-	Public Health	PUBLIC HEALTH BUILDING	0	0	-	0	0	0	-	-	-	0	-	0	-	0	-	0	-
504	-	2	Public Health	Vestibule	1	1	2'x2' (2 lamp) 31w T-8U1.5 Troffer w/ electronic ballast-9 cell parabolic	1	1	Retrokit 2x2 troffer with (2) 8.5 watt LED tubes and low power, instant start ballast	RTR22T8WS	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
505	-	2	Public Health	Waiting Area	11	11	2'x2' (2 lamp) 31w T-8U1.5 Troffer w/ electronic ballast-9 cell parabolic	11	11	Retrokit 2x2 troffer with (2) 8.5 watt LED tubes and low power, instant start ballast	RTR22T8WS	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
506	-	2	Public Health	Waiting Area	6	6	Compact Fluorescent, quad, (1) 26W lamp	6	6	Relamp with (1) 14.5 Watt LED direct replacemnent CFL lamps-horizontal	-	-	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
507	-	2	Public Health	Open Cubicles	40	40	2'x4' (3 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	40	40	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
508	-	2	Public Health	Office 1	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
509	-	2	Public Health	Office 2	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
510	-	2	Public Health	Binder Storage	2	2	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
511	-	2	Public Health	Office 3	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
512	-	2	Public Health	Office 4	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
513	-	2	Public Health	Conference Table	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
514	-	2	Public Health	Office 5	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
515	-	2	Public Health	Office 6	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
516	-	2	Public Health	Lactation Room	1	1	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
517	-	2	Public Health	Office next to Lactation	1	1	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
518	-	2	Public Health	Office next to Lactation	1	1	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
519	-	2	Public Health	Lab	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
520	-	2	Public Health	Lab Office	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
521	-	2	Public Health	Hall	2	2	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
522	-	2	Public Health	Rest Room	3	3	Compact Fluorescent, quad, (1) 26W lamp	3	3	Relamp with (1) 14.5 Watt LED direct replacement CFL lamps-horizontal	-	ADV ICF2S26H1LDK ELE BAL	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
523	-	2	Public Health	Women's Restroom	6	6	Compact Fluorescent, quad, (1) 26W lamp	6	6	Relamp with (1) 14.5 Watt LED direct replacement CFL lamps-horizontal	-	ADV ICF2S26H1LDK ELE BAL	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
524	-	2	Public Health	Janitor Closet	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit drum fixture with 12w LED conversion kit.	RPT-LEDCR-1600LM-4000K	-	-	0	-	0	-	0	-	0	-
525	-	2	Public Health	Men's Restroom	2	2	2'x2' (2 lamp) 32w T-8U6 Troffer w/ electronic ballast - 9 Cell Parabolic	2	2	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
526	-	2	Public Health	Meeting Room	15	15	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	15	15	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
527	-	2	Public Health	Communications Closet	1	1	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	1	Retrofit drum fixture with 12w LED conversion kit.	RPT-LEDCR-1600LM-4000K	-	-	0	-	0	-	0	-	0	-
528	-	2	Public Health	Storage	2	2	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
529	-	1	Public Health	Stair 1	3	3	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	3	3	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
530	-	1	Public Health	Storage	7	7	2'x2' (2 lamp) 17w T-8 troffer w/ electronic ballast, prismatic lens	7	7	P-2 2x2 LED prismatic troffer conversion kit, LW lumens (2356) 4000K	TKL-2x2-LW-F-UL-40K	-	-	0	-	0	-	0	-	0	-
531	-	1	Public Health	Electrical	4	4	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	4	4	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
532	-	1	Public Health	Closet	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
533	-	1	Public Health	Pump Closet	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
534	-	1	Public Health	Closet	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
535	-	1	Public Health	Hall	3	3	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	3	3	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
536	-	1	Public Health	Hall	4	4	Compact Fluorescent, quad, (1) 26W lamp	4	4	Relamp with (1) 14.5 Watt LED direct replacement CFL lamps-horizontal	-	-	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
537	-	1	Public Health	Kitchenette	5	5	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	5	5	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
538	-	1	Public Health	Closet	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
539	-	1	Public Health	Open Cubicles	50	50	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	50	50	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
540	-	1	Public Health	Office 1	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
541	-	1	Public Health	Office 2	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
542	-	1	Public Health	Conference Area	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
543	-	1	Public Health	Office 3	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
544	-	1	Public Health	Office 4	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
545	-	1	Public Health	Mechanical Room	6	6	4' (2 lamp) 32w T-8 turret strip w/ electronic ballast.	6	6	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-5000 IF 10/1	0	-	0	-	0	-	0	-
546	-	1	Public Health	File Room	3	3	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	3	3	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
547	-	1	Public Health	Janitor Closet	1	2	Fluorescent, CircleLite, (1) 22W lamp, PreHeat Blst	1	2	Retrofit drum fixture with 12w LED conversion kit.	RPT-LEDCLR-1600LM-4000K	-	-	0	-	0	-	0	-	0	-
548	-	1	Public Health	Women's Restroom	6	6	Compact Fluorescent, quad, (1) 26W lamp	6	6	Relamp with (1) 14.5 Watt LED direct replacement CFL lamps-horizontal	-	-	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
549	-	1	Public Health	Women's Restroom 2	6	6	Compact Fluorescent, quad, (1) 26W lamp	6	6	Relamp with (1) 14.5 Watt LED direct replacement CFL lamps-horizontal	-	ADV ICF2S26H1LDK ELE BAL	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
550	-	1	Public Health	Stair 2	3	3	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	3	3	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
551	-	1	Public Health	Elevator	2	2	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
552	-	-	Office Building	COUNTY OFFICE BUILDING	0	0	-	0	0	0	-	-	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
553	-	B	Office Building	Exit Signs	4	4	EXIT Incandescent, (2) 25W lamp	4	4	Exit sign - Side Mount with emergency heads	DEC CDLX-C-2-G-WH-EM	-	-	0	-	0	-	0	-	0	-
554	-	B	Office Building	Exit Signs	2	2	EXIT Incandescent, (2) 25W lamp	2	2	LED exit sign retrofit-JAIL	TCP White LED Exit Retrofit Kit Hardwire 1201277	-	-	0	-	0	-	0	-	0	-
555	-	B	Office Building	B12	13	13	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	13	13	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
556	-	B	Office Building	Office	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
557	-	B	Office Building	Server Room	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
560	-	B	Office Building	B18 - Telephone	2	10	4' (2 lamp) 40w T-12 strip w/ mag ballast.	2	10	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
561	-	B	Office Building	B2 - Remote Storage	13	13	4' (2 lamp) 40w T-12 strip w/ mag ballast.	13	13	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
562	-	B	Office Building	B2 - Remote Storage	6	6	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	6	6	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
563	-	B	Office Building	B2 - Remote Storage	2	4	4' (4 lamp) 32w T-8 wrap w/ electronic ballast.	2	4	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
		B	Office Building	All Locations throughout basement - see map for revised layout	172	172	3'x3' (4 lamp) T-12 troffer w/ mag ballast	113	113		LCAT24-35XWG-EDU/LCAT24-35VWG-EDU/LCAT24-35MWG-EDU (see map for location and fixture type throughout basement)										
565	-	B	Office Building	B25 - Public Defender	0	0	-	0	0	0	-	-	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
569	-	B	Office Building	Office	1	1	4' (2 lamp) 40w T-12 strip w/ mag ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
577	-	B	Office Building	Fire Coordinator Kitchen	2	2	4' (2 lamp) 40w T-12 strip w/ mag ballast.	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
580	-	B	Office Building	Cleaning Storage	1	1	4' (2 lamp) 40w T-12 wrap w/ mag ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
581	-	B	Office Building	Communication Closet	1	1	4' (2 lamp) 40w T-12 strip w/ mag ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
584	-	B	Office Building	"Bath" Storage	1	1	4' (2 lamp) 40w T-12 wrap w/ mag ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
585	-	B	Office Building	"Bath" Storage	1	1	4' (2 lamp) 40w T-12 wrap w/ mag ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
586	-	B	Office Building	Closet	1	1	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
587	-	B	Office Building	Men's Restroom	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	OSC15-10W	0	-	1	OSP20-D0
588	-	B	Office Building	Men's Restroom	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
590	-	B	Office Building	Women's Restroom	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
591	-	B	Office Building	Women's Restroom	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
592	-	B	Office Building	Mechanical Room	21	21	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	21	21	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
593	-	B	Office Building	Mechanical Room	1	1	4' (4 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
594	-	B	Office Building	Boiler Room	4	4	4' (4 lamp) 32w T-8 wrap w/ electronic ballast.	4	4	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
595	-	B	Office Building	Boiler Room	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
596	-	B	Office Building	Boiler Room Entrance	1	1	2'x2' (2 lamp) 31w T-8U1.5 Troffer w/ electronic ballast-9 cell parabolic	1	1	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
597	-	B	Office Building	Office	1	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	1	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
598	-	B	Office Building	Maintenance Bench	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
599	-	B	Office Building	Maintenance Waiting Area	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
600	-	1	Office Building	Stair 1	9	9	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	9	9	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
601	-	1	Office Building	Employee Restroom	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
602	-	1	Office Building	Employee Restroom	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
603	-	1	Office Building	Handicap Restroom	1	1	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	1	1	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
604	-	1	Office Building	118	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
605	-	1	Office Building	Open Office Rec.	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
606	-	1	Office Building	County Clerk Office	43	43	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	43	43	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
607	-	1	Office Building	County Clerk Private Office	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
608	-	1	Office Building	Kitchen	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
609	-	1	Office Building	Women's Restroom outside of Clerk's Office	1	1	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	1	1	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
610	-	1	Office Building	Women's Restroom outside of Clerk's Office	1	1	2' (1 lamp) 20w T-12 wrap w/ mag ballast	1	1	Rebuild with (2) 8.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
611	-	1	Office Building	Men's Restroom outside of Clerk's Office	1	1	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	1	1	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
612	-	1	Office Building	Men's Restroom outside of Clerk's Office	1	1	2' (1 lamp) 20w T-12 wrap w/ mag ballast	1	1	Rebuild with (2) 8.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
613	-	1	Office Building	Employee Restroom	3	3	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	3	3	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
614	-	1	Office Building	Employee Restroom	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
615	-	1	Office Building	Employee Restroom	1	1	Compact Fluorescent, spiral, (1) 23W Twist Lamp	1	1	Philips 10 watt A lamp 2700K	-	-	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
616	-	1	Office Building	131 B - Kevin Maintenance Off.	5	5	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	5	5	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	OSC15-I0W	0	-	1	OSP20-D0
617	-	1	Office Building	131A - Receptionist	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
618	-	1	Office Building	DMV Main Waiting Area	15	15	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	15	15	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
619	-	1	Office Building	DMV Employee Area	32	32	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	32	32	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
620	-	1	Office Building	DMV 105	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
621	-	1	Office Building	DMV Kitchen	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
622	-	1	Office Building	DMV 107	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
623	-	1	Office Building	DMV	18	18	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	18	18	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
624	-	1	Office Building	Youth Services	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	OSC15-I0W	0	-	1	OSP20-D0
625	-	1	Office Building	135 Vet Agency	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
626	-	1	Office Building	Office 1	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
627	-	1	Office Building	Office 2	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
628	-	1	Office Building	Central Services	9	9	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	9	9	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	2	MRF2-1S8A-10C	1	MA-AS-WH	1	OSP20-D0
629	-	1	Office Building	Paper Room	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	OSC15-I0W	0	-	1	OSP20-D0
630	-	1	Office Building	Mail Room	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	OSC15-I0W	0	-	1	OSP20-D0
631	-	1	Office Building	Hallway	22	22	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	22	22	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
632	-	1	Office Building	Atrium Main Level	33	33	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	33	33	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
633	-	1	Office Building	Main Entrance Vestibule	1	1	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	1	1	P-2 2x4 LED prismatic troffer conversion kit, LW lumens (4445) 4000K	TKL-2x4-LW-F-UL-40K	-	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
634	-	2	Office Building	211 Civil Personnel Main Cubicle Area	11	11	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	11	11	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
635	-	2	Office Building	Kitchen	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
636	-	2	Office Building	Office 1	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-
637	-	2	Office Building	Office 2	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	OSC15-I0W	0	-	1	OSP20-D0
638	-	2	Office Building	Restroom	1	1	2' (2 lamp) 20w T-12 wrap w/ mag ballast	1	1	Rebuild with (2) 8.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
639	-	2	Office Building	Office 219	5	5	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	5	5	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	OSC15-I0W	0	-	1	OSP20-D0
640	-	2	Office Building	Conference Room	3	3	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	3	3	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	1	MS-OPS6M2-DV-WH	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
641	-	2	Office Building	Electrical Room	1	1	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	1	1	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
642	-	2	Office Building	Meeting Room	3	3	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	3	3	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
643	-	2	Office Building	-	0	0	-	0	0	0	-	-	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
644	-	2	Office Building	249 Planning Dept	10	10	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	10	10	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
645	-	2	Office Building	232 Office	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
646	-	2	Office Building	238	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
647	-	2	Office Building	239	3	3	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	3	3	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
648	-	2	Office Building	240	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
649	-	2	Office Building	Break Room	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
650	-	2	Office Building	244	9	9	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	9	9	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
651	-	2	Office Building	248	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
652	-	2	Office Building	Break Room	3	3	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	3	3	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
653	-	2	Office Building	Big Office	6	6	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	6	6	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
654	-	2	Office Building	242	3	3	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	3	3	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
655	-	2	Office Building	Executive Session Office	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
656	-	2	Office Building	Restroom	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
657	-	2	Office Building	Restroom	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
658	-	2	Office Building	County Executive	3	6	Compact Fluorescent, twin, (2) 22W lamp	3	6	Relamp with (2) 14.5 Watt LED direct replacement CFL lamps-Horizontal	-	-	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
659	-	2	Office Building	Waiting Room	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
660	-	2	Office Building	Open Office	19	19	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	19	19	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
661	-	2	Office Building	Safe	1	1	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	1	1	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
662	-	2	Office Building	Data Entry Dept	3	3	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	3	3	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
663	-	2	Office Building	206	8	8	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	8	8	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
664	-	2	Office Building	Office 1	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
665	-	2	Office Building	Break Room	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
666	-	2	Office Building	Office 2	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
667	-	2	Office Building	Storage Closet	3	3	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	3	3	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
668	-	2	Office Building	Small Open Office Area	6	6	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	6	6	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
669	-	2	Office Building	Electrical Closet	1	1	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	1	1	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
670	-	2	Office Building	Chambers	35	35	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	35	35	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
671	-	2	Office Building	204 Supervisor Conference Room	10	10	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	10	10	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
672	-	2	Office Building	Break Room	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
673	-	2	Office Building	Supervisor Office	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
674	-	2	Office Building	Supervisor Office	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
675	-	2	Office Building	Supervisor Office	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
676	-	2	Office Building	County Attorney	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
677	-	2	Office Building	Conference Room	6	6	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	6	6	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
678	-	2	Office Building	Office 1	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
679	-	2	Office Building	Office 2	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
680	-	2	Office Building	Office 3	3	3	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	3	3	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
681	-	2	Office Building	County Supervisor	3	3	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	3	3	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
682	-	2	Office Building	Office 1	2	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	2	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
683	-	2	Office Building	Office 2	4	4	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	4	4	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
684	-	2	Office Building	Women's Restroom	1	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	1	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
685	-	2	Office Building	Women's Restroom	2	2	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
686	-	2	Office Building	Men's Restroom	1	1	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	1	1	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
687	-	2	Office Building	Men's Restroom	1	1	2' (2 lamp) 17w T-8 wrap w/ electronic ballast	1	1	Rebuild with (2) 8.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	8.5T8/24-3500 IF 10/1	0	-	0	-	0	-	0	-
688	-	2	Office Building	Closet	1	2	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	1	2	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
689	-	2	Office Building	Hallway Main	27	27	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	27	27	Rebuild with (3) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-3P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
690	-	2	Office Building	Stair 2	7	9	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	7	9	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
691	-	-	-	-	0	0	-	0	0	0	-	-	-	0	-	0	-	0	-	0	-
692	-	-	-	DEPARTMENT OF SOCIAL SERVICES BLDG	0	0	-	0	0	0	-	-	-	0	-	0	-	0	-	0	-
693	100	1	DSS	Vestibule	3	3	2'x2' (2 lamp) 32w T-8U6 Troffer w/ electronic ballast - 9 Cell Parabolic	3	3	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
694	101	1	DSS	Client Waiting	19	19	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	19	19	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
695	102	1	DSS	Passage	2	2	2'x2' (2 lamp) 32w T-8U6 Troffer w/ electronic ballast - 9 Cell Parabolic	2	2	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
696	104	1	DSS	Women's Restroom	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
697	104	1	DSS	Women's Restroom	2	2	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
698	105	1	DSS	Men's Restroom	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
699	105	1	DSS	Men's Restroom	2	2	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
700	112	1	DSS	Reception	6	6	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	6	6	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
701	112	1	DSS	Reception	4	4	Compact Fluorescent, twin, (1) 22W lamp	4	4	Relamp with (1) 14.5 Watt LED direct replacement CFL lamps-horizontal	-	-	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
702	113	1	DSS	Security	4	4	2'x2' (2 lamp) 32w T-8U6 Troffer w/ electronic ballast - 9 Cell Parabolic	4	4	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
703	111	1	DSS	Individual Interview	15	15	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	15	15	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
704	115	1	DSS	Employee Vestibule	4	4	2'x2' (2 lamp) 32w T-8U6 Troffer w/ electronic ballast - 9 Cell Parabolic	4	4	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
705	114	1	DSS	Stair	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
706	114	1	DSS	Stair	1	1	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
707	114	1	DSS	Stair	1	1	4' (4 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
708	116	1	DSS	Staff Lobby	7	7	2'x2' (2 lamp) 32w T-8U6 Troffer w/ electronic ballast - 9 Cell Parabolic	7	7	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
709	117	1	DSS	Coat Room	1	1	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
710	119	1	DSS	Staff Women's Restroom	2	2	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
711	119	1	DSS	Staff Women's Restroom	2	2	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
712	120	1	DSS	Staff Men's Restroom	1	1	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
713	120	1	DSS	Staff Men's Restroom	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
714	121	1	DSS	Janitor Closet	1	1	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
715	122	1	DSS	Storage Closet	1	1	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
716	013	1	DSS	Storage	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
717	012	1	DSS	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
718	011	1	DSS	Office	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
719	010	1	DSS	Conference Room	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
720	009	1	DSS	Office	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
721	008	1	DSS	Office	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
722	130	1	DSS	Financial Program Services West	3	3	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	3	3	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
723	130	1	DSS	Financial Program Services West	2	2	2'x2' (2 lamp) 32w T-8U6 Troffer w/ electronic ballast - 9 Cell Parabolic	2	2	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
724	130	1	DSS	Financial Program Services West	10	10	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	10	10	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
725	130	1	DSS	Financial Program Services South	38	38	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	38	38	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
726	130	1	DSS	Financial Program Services South	4	4	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	4	4	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
727	130	1	DSS	Financial Program Services South	1	1	2'x2' (2 lamp) 32w T-8U6 Troffer w/ electronic ballast - 9 Cell Parabolic	1	1	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
728	129	1	DSS	Receiving	2	2	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
729	128	1	DSS	Supplies Storage	7	7	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	7	7	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
730	004	1	DSS	Office	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
731	114	1	DSS	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
732	005	1	DSS	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
733	006	1	DSS	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
734	007	1	DSS	Office	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
735	112	1	DSS	Mechanical	3	3	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	3	3	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
736	113	1	DSS	Stair Alcove	1	1	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
737	113	1	DSS	Stair	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
738	113	1	DSS	Stair	1	2	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	1	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
739	113	1	DSS	Stair	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
740	111	1	DSS	Server/ File Room	10	10	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	10	10	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
741	025	1	DSS	Office	3	3	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	3	3	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
742	-	1	DSS	Hallway to Resource Room	6	6	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	6	6	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
743	-	1	DSS	Hallway to Resource Room	3	3	2'x2' (2 lamp) 32w T-8U6 Troffer w/ electronic ballast - 9 Cell Parabolic	3	3	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
744	014	1	DSS	Office - MH	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
745	015	1	DSS	Office - MH	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
746	002	1	DSS	Visit	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
747	003	1	DSS	Visit	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
748	110	1	DSS	Large Training Room	6	6	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	6	6	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
749	100/101	1	DSS	Reception and Resource Room	6	6	2'x2' (2 lamp) 32w T-8U6 Troffer w/ electronic ballast - 9 Cell Parabolic	6	6	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
750	100/101	1	DSS	Reception and Resource Room	39	39	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	39	39	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
751	100/101	1	DSS	Reception and Resource Room	3	2	2'x2' (2 lamp) 32w T-8U6 Troffer w/ electronic ballast - 9 Cell Parabolic	3	2	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
752	105	1	DSS	Storage	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
753	106	1	DSS	Access VR	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
754	107	1	DSS	Office - DOL	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
755	108	1	DSS	Office - WD	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
756	109	1	DSS	Office - WD	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
757	102	1	DSS	Training Room	6	6	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	6	6	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
758	000	1	DSS	Storage	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
759	103	1	DSS	Small Conference Room	3	3	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	3	3	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
760	104	1	DSS	Large Conference Room	6	6	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	6	6	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
761	200	2	DSS	Stair	1	1	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
762	201	2	DSS	Lobby	9	9	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	9	9	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
763	202	2	DSS	Staff Women's Restroom	2	2	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
764	202	2	DSS	Staff Women's Restroom	2	2	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
765	203	2	DSS	Staff Men's Restroom	1	1	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
766	203	2	DSS	Staff Men's Restroom	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
767	204	2	DSS	Closet	1	1	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
768	205	2	DSS	Storage	1	1	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
769	206	2	DSS	Storage	1	1	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
770	207	2	DSS	Storage	1	1	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
771	210	2	DSS	Staff Lounge	1	1	2'x2' (2 lamp) 32w T-8U6 Troffer w/ electronic ballast - 9 Cell Parabolic	1	1	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
772	210	2	DSS	Staff Lounge	7	7	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	7	7	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
773	210	2	DSS	Staff Lounge Closet	2	1	4' (1 lamp) 32w T-8 strip w/ electronic ballast.	2	1	Rebuild with (1) 12.5 watt LED tube and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
774	211	2	DSS	Storage	1	1	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
775	212	2	DSS	Supervisor Office	3	3	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	3	3	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
776	213	2	DSS	Adult Services Supervisor	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
777	214	2	DSS	Child Services Supervisor	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
778	215	2	DSS	Child Services Superintendent	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
779	216	2	DSS	CPS Supervisor 1	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
780	217	2	DSS	CPS Supervisor 2	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
781	218	2	DSS	CPS Supervisor 3	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
782	219	2	DSS	CPS Supervisor 4	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
783	220-224	2	DSS	Children Services and CPS Cubicle Offices	9	9	2'x2' (2 lamp) 32w T-8U6 Troffer w/ electronic ballast - 9 Cell Parabolic	9	9	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
784	220-224	2	DSS	Children Services and CPS Cubicle Offices	67	67	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	67	67	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
785	222	2	DSS	Storage	4	4	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	4	4	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
786	226	2	DSS	Secretary	3	3	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	3	3	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
787	227	2	DSS	Legal 1	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
788	228	2	DSS	Legal 2	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
789	229	2	DSS	Legal 3	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
790	230	2	DSS	Legal 4	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
791	231	2	DSS	Storage	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
792	232	2	DSS	Secretary	4	4	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	4	4	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
793	233	2	DSS	Conference	3	3	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	3	3	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
794	234	2	DSS	Commissioner	6	6	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	6	6	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
795	235	2	DSS	Deputy Commissioner	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
796	245	2	DSS	DMA	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
797	246	2	DSS	DMA	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
798	247	2	DSS	Staff DEV	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
799	248	2	DSS	AV Storage	1	1	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
800	249	2	DSS	Comp Program	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
801	250	2	DSS	Conference	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
802	251	2	DSS	D. Acc	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
803	251	2	DSS	Smoking	2	2	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
804	251	2	DSS	Mechanical & Telephone	4	4	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	4	4	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
805	251	2	DSS	Stair	1	1	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
806	236	2	DSS	Coordinator Office	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
807	237	2	DSS	Clerical Offices and Files	19	19	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	19	19	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
808	238	2	DSS	Supervisor Office	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
809	240	2	DSS	Training Room	16	16	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	16	16	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
810	241	2	DSS	Supplies	2	2	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	2	2	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
811	242	2	DSS	Accounting Supervisor	1	1	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	1	1	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
812	243/244	2	DSS	Accounting Area and Passage	28	28	2'x4' (4 lamp fixture with only two lamps installed) 32w T-8 troffer w/ electronic ballast	28	28	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
813	243/244	2	DSS	Accounting Area and Passage	21	21	2'x2' (2 lamp) 32w T-8U6 Troffer w/ electronic ballast - 9 Cell Parabolic	21	21	Rebuild with (2) 16.5 watt LED U tubes and normal power, instant start ballast-JAIL	-	IOPA-2P32-LW-SC	16.5T8/22.5-3500 IF-6U 10/1	0	-	0	-	0	-	0	-
814	001	B	DSS	General Storage	52	52	8' (4 lamp) 32w T-8 strip w/ electronic ballast.	52	52	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
815	001	B	DSS	General Storage	1	1	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
816	002	B	DSS	Stair	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
817	002	B	DSS	Stair	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
818	003	B	DSS	Machine Room	1	1	8' (4 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
819	004	B	DSS	Gas Meter Room	1	1	8' (4 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
820	005	B	DSS	Stair 2	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
821	005	B	DSS	Stair 2	1	1	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
822	006	B	DSS	Telephone IDF Room	2	2	8' (4 lamp) 32w T-8 strip w/ electronic ballast.	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
823	007	B	DSS	Electrical Room	2	2	8' (4 lamp) 32w T-8 strip w/ electronic ballast.	2	2	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
824	008	B	DSS	Vestibule	1	1	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	1	1	Rebuild with (2) 12.5 watt LED tubes and low power, instant start ballast	-	IOPA-2P32-LW-SC	12T8/48-3500 IF 10/1	0	-	0	-	0	-	0	-
825	009	B	DSS	Boiler Room	6	6	8' (4 lamp) 32w T-8 strip w/ electronic ballast.	6	6	Rebuild with (4) 12.5 watt LED tubes and low power, instant start ballast	-	IOP-4P32-LW-SC	12T8/48-5000 IF 10/1	0	-	0	-	0	-	0	-
826	-	-	-	-	0	0	-	0	0	0	-	-	-	0	-	0	-	0	-	0	-
827	-	-	-	COURTHOUSE	0	0	-	0	0	0	-	-	-	0	-	0	-	0	-	0	-
828	-	3	Courthouse	Crow's Nest	0	0	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
829	-	3	Courthouse	Crow's Nest Bath	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
830	-	3	Courthouse	Old Jury Deliberation Room	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
831	-	3	Courthouse	M&W Bath	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
832	-	3	Courthouse	Stair 1	0	0	Incandescent, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
833	-	2	Courthouse	216 Court Clerk	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
834	-	2	Courthouse	216A Bath	0	0	Incandescent, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
835	-	2	Courthouse	215	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
836	-	2	Courthouse	215A	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
837	-	2	Courthouse	215B	0	0	Incandescent, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
838	-	2	Courthouse	218 Judge	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
839	-	2	Courthouse	218A	0	0	Incandescent, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
840	-	2	Courthouse	219A	0	0	Incandescent, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
841	-	2	Courthouse	219B	0	0	Incandescent, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
842	-	2	Courthouse	219C	0	0	Incandescent, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
843	-	2	Courthouse	Storage	0	0	Incandescent, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
844	-	2	Courthouse	214 Courtroom	0	0	Incandescent Globe Fixture, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
845	-	2	Courthouse	Vestibule	0	0	Incandescent, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
846	-	2	Courthouse	203 Grand Jury	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
847	-	2	Courthouse	200E	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
848	-	2	Courthouse	202	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
849	-	2	Courthouse	200B	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
850	-	2	Courthouse	Break Room	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
851	-	2	Courthouse	200F	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
852	-	2	Courthouse	200 Central Jury	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
853	-	2	Courthouse	200 Central Jury	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
854	-	2	Courthouse	200C Men's Room	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
855	-	2	Courthouse	200B Women's Room	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
856	-	2	Courthouse	214B Closet	0	0	Incandescent, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
857	-	2	Courthouse	200A Janitor Closet	0	0	0	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
858	-	2	Courthouse	216 Lobby Rotunda	0	0	Compact Fluorescent, spiral, (1) 26W Twist Lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
859	-	2	Courthouse	204 Cloak Room	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
860	-	2	Courthouse	205 Women's Room	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
861	-	2	Courthouse	Miscellaneous Entries	0	0	Compact Fluorescent, twin, (1) 22W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
862	-	2	Courthouse	Stair to Balcony	0	0	Incandescent, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
863	-	2	Courthouse	210 Law Clerk	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
864	-	2	Courthouse	Coffee Area	0	0	Compact Fluorescent, spiral, (1) 23W Twist Lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
865	-	2	Courthouse	Closet	0	0	Incandescent, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
866	-	2	Courthouse	211 Corridor	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
867	-	2	Courthouse	206 Con. Judge	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
868	-	2	Courthouse	209 Reception	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
869	-	2	Courthouse	Library	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
870	-	2	Courthouse	208	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
871	-	2	Courthouse	Stair to First Floor	0	0	Incandescent, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
872	-	1	Courthouse	112 Lobby	0	0	Compact Fluorescent, spiral, (1) 26W Twist Lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-

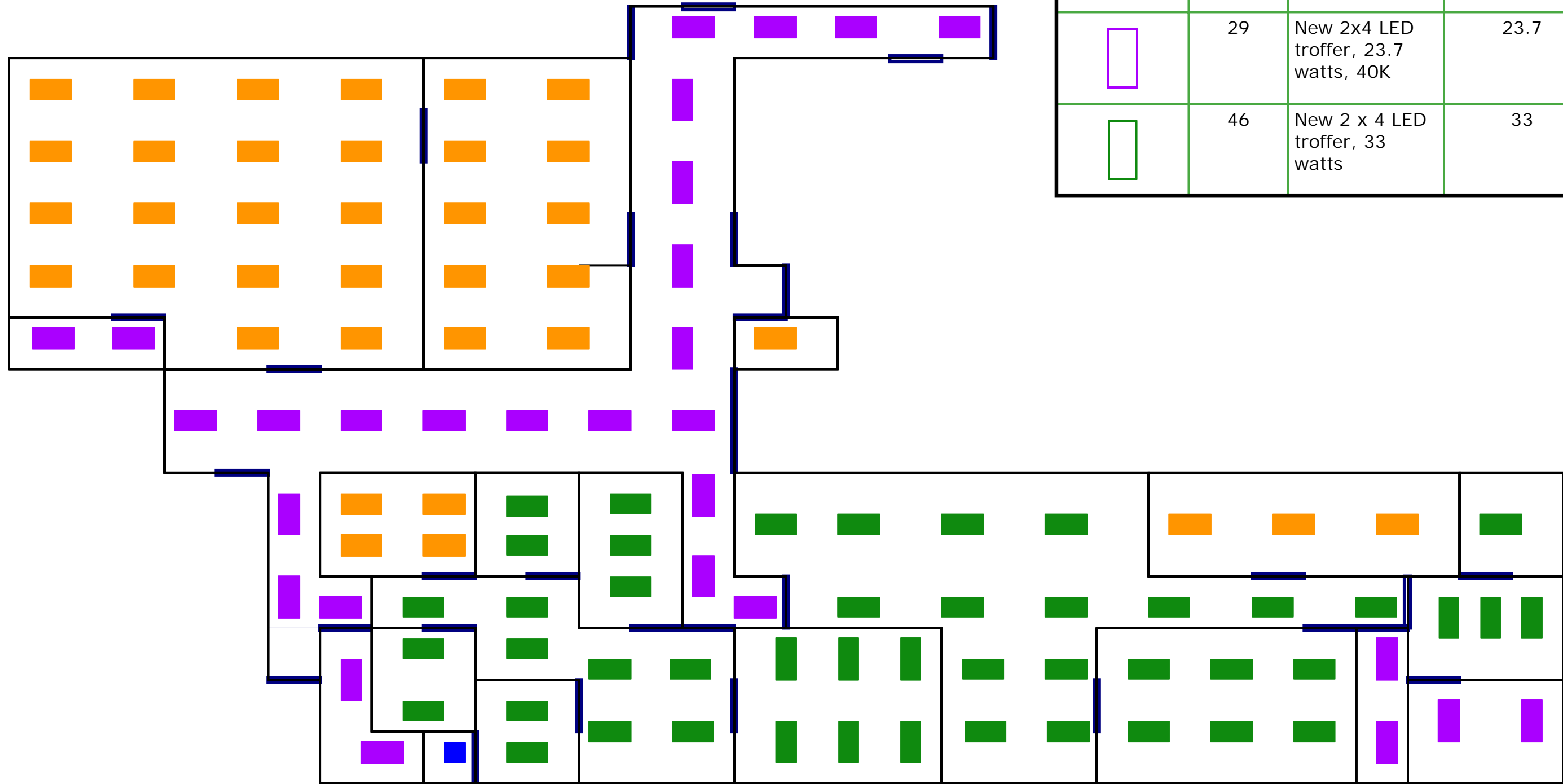
Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
873	-	1	Courthouse	111 Probation	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
874	-	1	Courthouse	100	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
875	-	1	Courthouse	100D - Secretary	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
876	-	1	Courthouse	100R County Judge Office	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
877	-	1	Courthouse	100N	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
878	-	1	Courthouse	100B	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
879	-	1	Courthouse	100M	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
880	-	1	Courthouse	101 - Surrogate Court	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
881	-	1	Courthouse	101D - Secretary	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
882	-	1	Courthouse	101D - Secretary	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
883	-	1	Courthouse	101A - Library	0	0	4 lamp T8 normal ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
884	-	1	Courthouse	101A - Library	0	0	4 lamp T8 normal ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
885	-	1	Courthouse	101B - File Room	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
886	-	1	Courthouse	Stair #2 - 101B	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
887	-	1	Courthouse	101C - County Judge	0	0	4 lamp T8 normal ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
888	-	1	Courthouse	101C - County Judge	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
889	-	1	Courthouse	101C - County Judge	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
890	-	1	Courthouse	111-Probation Department	0	0	2'x4' (3 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
891	-	1	Courthouse	104 - Waiting Room	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
892	-	1	Courthouse	104 - Waiting Room	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
893	-	1	Courthouse	108- Waiting Room	0	0	4 lamp T8 normal ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
894	-	1	Courthouse	108- Waiting Room	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
895	-	1	Courthouse	106- Family Courtroom	0	0	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
896	-	1	Courthouse	106- Family Courtroom	0	0	2'x2' (2 lamp) 32w T-8U troffer w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-

Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
897	-	1	Courthouse	106- Family Courtroom	0	0	Compact Fluorescent, twin, (2) 22W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
898	-	1	Courthouse	106- Family Courtroom	0	0	Compact Fluorescent, twin, (2) 22W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
899	-	1	Courthouse	106A - Family Courtroom Clerk	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
900	-	1	Courthouse	106A - Family Courtroom Clerk	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
901	-	1	Courthouse	106B	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
902	-	1	Courthouse	106B Toilet	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
903	-	1	Courthouse	106 - Corridor	0	0	Incandescent, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
904	-	1	Courthouse	106 - Corridor	0	0	Incandescent, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
905	-	1	Courthouse	106E - Storage	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
906	-	1	Courthouse	106E - Storage	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
907	-	1	Courthouse	106D - Corridor	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
908	-	1	Courthouse	106D - Corridor	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
909	-	1	Courthouse	106F - Toilet	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
910	-	1	Courthouse	106G - Attorney's Room	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
911	-	B	Courthouse	B-1	0	0	Compact Fluorescent, spiral, (1) 26W Twist Lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
912	-	B	Courthouse	B-2	0	0	2'x4' (3 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
913	-	B	Courthouse	B-3	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast- 18 cell parabolic	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
914	-	B	Courthouse	B-4 Family Court	0	0	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
915	-	B	Courthouse	B-5 Mens Room	0	0	Compact Fluorescent, spiral, (1) 26W Twist Lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
916	-	B	Courthouse	FC-101 & 102 Mech Room	0	0	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
917	-	B	Courthouse	FC-101 & 102 Mech Room	0	0	4' (2 lamp) 32w T-8 strip w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
918	-	B	Courthouse	B-10 Restroom	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
919	-	B	Courthouse	B-11 Corridor	0	0	2'x4' (3 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
920	-	B	Courthouse	B-11 Corridor	0	0	2'x4' (3 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
921	-	B	Courthouse	B-11 Corridor	0	0	Compact Fluorescent, twin, (2) 22W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
922	-	B	Courthouse	B-14 Restroom	0	0	4' (2 lamp) 32w T-8 wrap w/ electronic ballast.	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
923	-	B	Courthouse	B-15 Surrogate Records	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
924	-	B	Courthouse	B-14 Restroom	0	0	2' (2 lamp) 17w T-8 strip w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
925	-	B	Courthouse	B-14 Restroom	0	0	Incandescent, (1) 60W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-

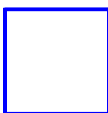



Action Number	Map Location #	Floor #	Building Name	Location Description	Existing Quantity	As-Found	Existing Fixture Description	Proposed Quantity	As-Built	Proposed Fixture Description	Fixture Part Code	Ballast Type	Lamp Type	# of Proposed Fixture Mounted Sensors	Sensor Catalog (Fixture sensor)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog (wall and ceiling)	# of Proposed Wall and Ceiling Sensors	Sensor Catalog #2 (wall and ceiling)	# of Power Packs	Power Pack Catalog #
926	-	B	Courthouse	B-16 Surrogate Court Records	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
927	-	B	Courthouse	B-16 Surrogate Court Records	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
928	-	B	Courthouse	B-16 Surrogate Court Records	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
929	-	B	Courthouse	B-12 (Door Locked)	0	0	-	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
930	-	B	Courthouse	B-17A Attorney Conference	0	0	2'x4' (3 lamp) 32w T-8 troffer w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
931	-	B	Courthouse	B-22 Lobby	0	0	Compact Fluorescent, twin, (2) 22W lamp	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
932	-	B	Courthouse	B-19 Storage	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
933	-	B	Courthouse	B-19 Storage	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
934	-	B	Courthouse	B-1	0	0	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
935	-	B	Courthouse	B-1	0	0	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
936	-	B	Courthouse	B-11 Conference	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
937	-	B	Courthouse	B-Deputy Locker	0	0	2'x4' (3 lamp) 32w T-8 18-Cell Parabolic Troffer w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
938	-	B	Courthouse	B-17A Attorney Room	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
939	-	B	Courthouse	B-15A Stair	0	0	2'x4' (2 lamp) 32w T-8 troffer w/ electronic ballast, prismatic lens	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
940	-	-	-	-	0	0	-	0	0	0	-	-	-	0	-	0	-	0	-	0	-
941	-	E	Highway Garage (Morrisville)	Morrisville Exterior	0	0	70w High Pressure Sodium	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-
942	-	E	Highway Garage (Morrisville)	Morrisville Exterior	0	0	70w High Pressure Sodium	0	0	No Action	-	-	-	0	-	0	-	0	-	0	-



Madison County
COB - Basement



Plan View

Schedule			
Symbol	Quantity	Description	Wattage
	1	New 2x2 LED troffer, 33 watts, 40K	33
	36	New 2 x 4 LED troffer , 30 watts, 40K	29.9
	29	New 2x4 LED troffer, 23.7 watts, 40K	23.7
	46	New 2 x 4 LED troffer, 33 watts	33

Designer

Date

7/7/2016

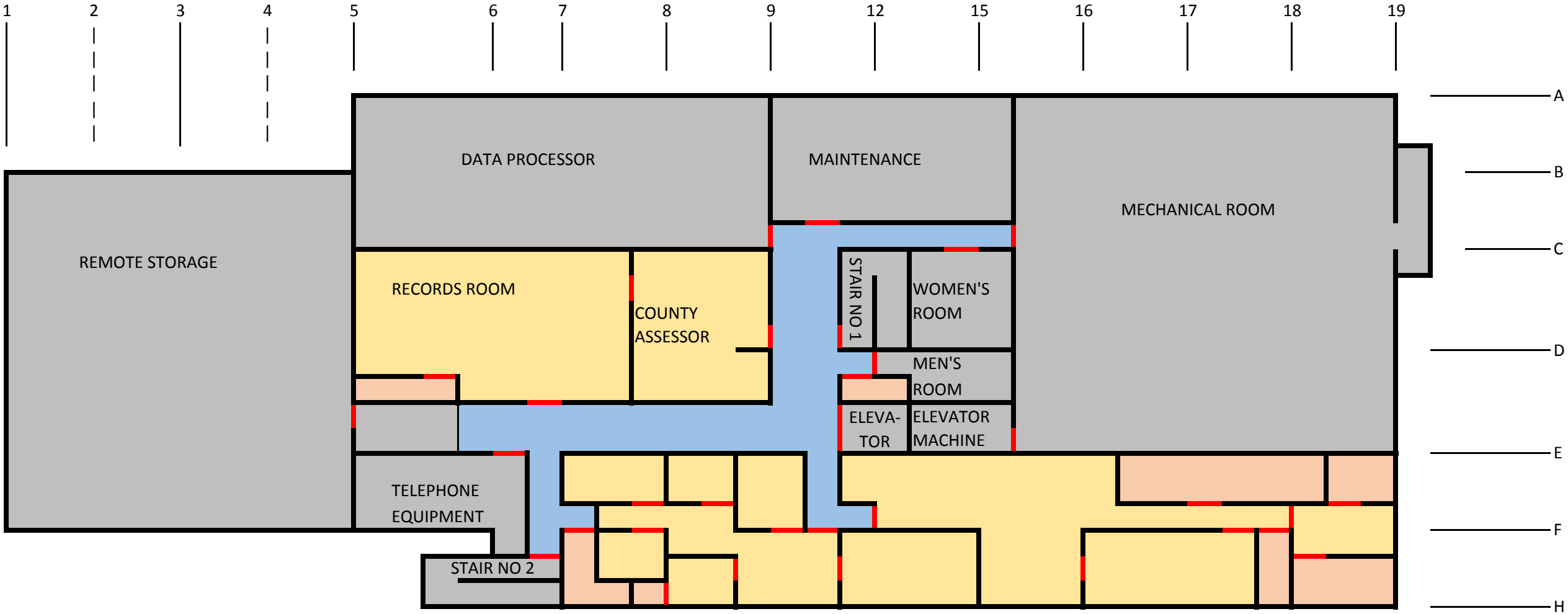
Scale

Not to Scale




Drawing No.

Summary

MADISON COUNTY OFFICE BUILDING BASEMENT FLOOR LAYOUT



KEY

	= occupied space/office areas
	= hallways
	= storage/closet

A19P Series

LED 4Flow 40W & 60W Bulbs

Product Description

The new Cree® LED bulb still looks and lights just like a traditional incandescent, but it's even better than before. Unlike many cheap bulbs in the market, the new ENERGY STAR® certified Cree LED bulb delivers true omnidirectional, all-around light, is fully dimmable with no buzz or hum, and lasts up to 6x longer than some cheap LED bulbs (30,000 hour/27.4 year rated lifetime). The new Cree LED bulb features higher CRI light for better colors and it is suitable for use in enclosed fixtures – so you can experience beautiful light and colors anywhere. And the new Cree LED bulb is a worry-free choice backed by a 5 year, 100% performance satisfaction guarantee.

Performance Summary

Utilizes Cree LED 4Flow™ Filament Design

Lamp Delivered Light Output: 460 lumens (40W equivalent); 815 lumens (60W equivalent)

Input Power: 6 watts (40W equivalent)
10 watts (60W equivalent)

CRI: 83

CCT: 2700K, 5000K

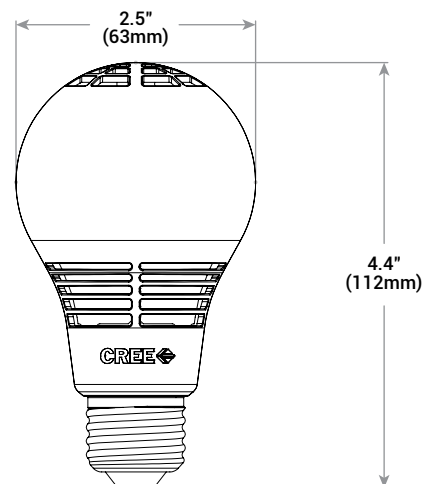
100% Satisfaction Guarantee*: 5 Years

Lifetime: Designed to last at least 30,000 hours

Dimming: Dimmable to 5% with select dimmers

Must order in multiples of master carton (MC), tray pack (T24) or wingstack (WST) quantities;
MC = 8; T24=24; WST = 48

*See <http://lighting.cree.com/warranty> for warranty terms



Ordering Information

Example: A19P-60W-27K-B1

Product	Watt Equivalent	CCT	Voltage	Base	CRI	Packaging Options
A19P	40W 40 Watt (460 lumens) 60W 60 Watt (815 lumens)	27K 2700K 50K 5000K	Blank 120 Volt	Blank E26 (screw base)	Blank 80 CRI	B1 (8) Blister Pack bulbs in master carton (MC=8) T24 Commercially packed bulbs in tray (Quantity 24) WST Wingstack - 60W Equivalent, 2700K only (Quantity 48)



Rev. Date: V6 03/01/2016



US: lighting.cree.com/lighting

T (800) 236-6800 F (262) 504-5415

Canada: www.cree.com/canada

T (800) 473-1234 F (800) 890-7507

A19P Series LED 4Flow Bulbs

Product Specifications

CONSTRUCTION & MATERIALS

- A-type bulb design weighs less than 2 ounces (57g)
- Shatter-proof plastic for increased safety and robustness
- Bulb meets ANSI standards for A19 dimensions
- Uses a standard E26 screw base
- Mercury free

OPTICAL SYSTEM

- Proprietary Cree LED 4Flow™ Filament Design creates perfect omnidirectional light distribution
- Plastic globe offers increased optical spread

ELECTRICAL SYSTEM

- **Power Factor:** > 0.9 nominal
- **Input Voltage:** 120V, 60Hz
- **Dimming:** Dimmable to 5% with select dimmers. Refer to www.creelink.com/exLink.asp?113292800C68M38126736032 for additional details
- **Operating Temperature Range:** -25°C and +45°C (-13°F and +113°F)

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for damp locations; not for use where exposed directly to weather or water
- Do not use in multi-bulb enclosed fixtures together with other bulb technologies (i.e., incandescent, halogen, CFL, etc.). Suitable for use in operating environments between -25°C and +45°C (-13°F and +113°F)
- ENERGY STAR® certified: Please refer to www.energystar.gov/productfinder/product/certified-light-bulbs/results for most current information
 A19P-40W-27K-B1, A19P-40W-27K-T24: BA19-04527OMB-12DE26-3_1
 A19P-40W-50K-B1, A19P-40W-50K-T24: BA19-04550OMB-12DE26-3_1
 A19P-60W-27K-B1, A19P-60W-27K-T24, A19P-60W-27K-WST: BA19-08027OMB-12DE26-3_1
 A19P-60W-50K-B1, A19P-60W-50K-T24: BA19-08050OMB-12DE26-3_1
- Meets FCC Part 15, Subpart B, Class B standards for conducted and radiated emissions
- RoHS compliant. Consult factory for additional details

Packaging

(8) Blister Pack bulbs in master carton (MC = 8)



(24) Commercially packed bulbs in a tray (QTY = 24)



(48) Blister Pack of bulbs in wingstack (WST = 48)



Ordering Information for Master Cartons (ordered in quantities of 8)

Ordering Number	Product Number	Case UPC	Description	Bulb Type	Watts	CCT	Lamps per Master Carton	Pallet Qty	CRI	Lumens	Rated Life (Hrs)
A19P-40W-27K-B1	BA19-04527OMB-12DE26-3_1	849665009726	4Flow 40W Replacement, 2700K USA	A19	6W	2700K	8	80	83	460	30,000
A19P-40W-50K-B1	BA19-04550OMB-12DE26-3_1	849665009740	4Flow 40W Replacement, 5000K USA	A19	6W	5000K	8	80	83	460	30,000
A19P-60W-27K-B1	BA19-08027OMB-12DE26-3_1	849665009764	4Flow 60W Replacement, 2700K USA	A19	10W	2700K	8	80	83	815	30,000
A19P-60W-50K-B1	BA19-08050OMB-12DE26-3_1	849665009788	4Flow 60W Replacement, 5000K USA	A19	10W	5000K	8	80	83	815	30,000

Ordering Information for Trays (ordered in quantities of 24)

Ordering Number	Product Number	UPC	Description	Bulb Type	Watts	CCT	Lamps per Tray	Pallet Qty	CRI	Lumens	Rated Life (Hrs)
A19P-40W-27K-T24	BA19-04527OMB-12DE26-3_1	849665011040	4Flow 40W Replacement, 2700K USA	A19	6W	2700K	24	80	83	460	30,000
A19P-40W-50K-T24	BA19-04550OMB-12DE26-3_1	849665011057	4Flow 40W Replacement, 5000K USA	A19	6W	5000K	24	80	83	460	30,000
A19P-60W-27K-T24	BA19-08027OMB-12DE26-3_1	849665011064	4Flow 60W Replacement, 2700K USA	A19	10W	2700K	24	80	83	815	30,000
A19P-60W-50K-T24	BA19-08050OMB-12DE26-3_1	849665011071	4Flow 60W Replacement, 5000K USA	A19	10W	5000K	24	80	83	815	30,000

Ordering Information for Wingstacks (ordered in quantities of 48)

Ordering Number	Product Number	UPC	Description	Bulb Type	Watts	CCT	Lamps per Wingstack	Pallet Qty	CRI	Lumens	Rated Life (Hrs)
A19P-60W-27K-WST	BA19-08027OMB-12DE26-3_1	849665009764	4Flow 60W Replacement, 2700K USA	A19	10W	2700K	48	80	83	815	30,000

© 2016 Cree, Inc. and/or one of its subsidiaries. All rights reserved. For informational purposes only. Content is subject to change. Patent www.cree.com/patents. Cree® is registered trademark, and the Cree logo and 4Flow™ are trademarks of Cree, Inc. The UL logo is a registered trademark of UL LLC. ENERGY STAR® is a registered trademark of the U.S. Environmental Protection Agency.

US: lighting.cree.com/lighting T (800) 236-6800 F (262) 504-5415

Canada: www.cree.com/canada



T (800) 473-1234 F (800) 890-7507

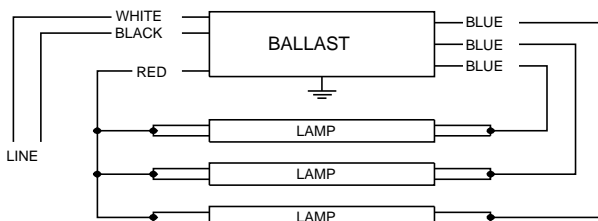
IOP3P32LWSC@120V

Brand Name	OPTANIUM
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Electrical Specifications

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (°F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F .
F32T8	2	32	-20/-29	0.46	55	0.85	10	0.99	1.6	1.55
* F32T8	3	32	-20/-29	0.62	73	0.77	10	0.99	1.6	1.05

Wiring Diagram



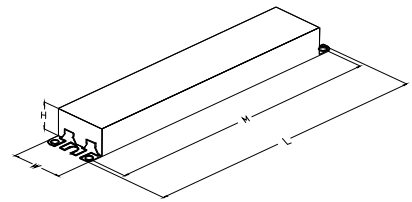
Diag. 65

The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

	in.	cm.		in.	cm.
Black	25	63.5	Yellow/Blue		0
White	25	63.5	Blue/White		0
Blue	31	78.7	Brown		0
Red	37	94	Orange		0
Yellow		0	Orange/Black		0
Gray		0	Black/White		0
Violet		0	Red/White		0

Enclosure



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
9.50 "	1.7 "	1.18 "	8.90 "
9 1/2	1 7/10	1 9/50	8 9/10
24.1 cm	4.3 cm	3 cm	22.6 cm

Revised 03/03/2010



Data is based upon tests performed by Philips Lighting Electronics N.A. in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

PHILIPS LIGHTING ELECTRONICS N.A.

10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018
 Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance
 Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886



IOP3P32LWSC@120V	
Brand Name	OPTANIUM
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Electrical Specifications

Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads color-coded per ANSI C82.11.

Section II - Performance Requirements

- 2.1 Ballast shall be _____ (Instant or Programmed) Start.
- 2.2 Ballast shall provide Independent Lamp Operation (ILO) for Instant Start or Programmed Start Parallel ballasts allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- 2.3 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.4 Ballast shall operate from 50/60 Hz input source of 120V through 277V with sustained variations of +/- 10% (voltage and frequency). GOPA ballasts shall operate from an input source of 347V.
- 2.5 Ballast shall be high frequency electronic type and operate lamps at a frequency between 42 kHz and 52 kHz to avoid interference with infrared devices, eliminate visible flicker and avoid Article Surveillance System, such as anti-theft devices.
- 2.6 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.7 Ballast shall have a minimum ballast factor for primary lamp application as follows: 0.77 for Low Watt, 0.87 for Normal Light Output, and 1.18 for High Light for Instant Start ballasts or 0.71 for Low Watt and 0.88 for Normal Light Output for Programmed Start ballasts.
- 2.8 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.9 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.10 Ballast shall have a Class A sound rating for all 4-foot lamps and smaller.
- 2.11 Ballast shall have a minimum starting temperature of -29C (-20F) on Instant Start ballasts or -18C (0F) on Programmed Start ballasts for standard T8 lamps and 16C (60F) for energy-saving T8 lamps. Consult lamp manufacturer for temperature versus light output characteristics.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Ballast shall have lamp striation-reduction circuitry.
- 2.14 Programmed Start ballast shall provide lamp EOL protection circuitry.
- 2.15 Maximum remote distance for Energy Saving Lamps in Remote/Tandem applications is 6 feet for ICN, IOP, and IOPA Instant Start and Programmed Start models.

Section III - Regulatory Requirements

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with the requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, Non-Consumer (Class A) for EMI/RFI (conducted and radiated).
- 3.6 IOP and IOPA Ballasts shall meet NEMA Premium/CEE High Performance T8 Lighting System Specifications.
- 3.7 IOP ballasts shall comply with UL Type CC rating.
- 3.8 Ballast shall comply with NEMA 410 for in-rush current limits.

Section IV - Other

- 4.1 Ballast shall be manufactured in an ISO 9001 Qualified factory.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C. Ballasts with a "90C" designation in their catalog number shall also carry a three-year warranty at maximum case temperature of 90C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.

Notes:

1. Energy-saving T8 lamps (25W, 28W or 30W) may experience lamp striations if operated on ballasts not rated for their use.

Revised 03/03/2010



Data is based upon tests performed by Philips Lighting Electronics N.A. in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

PHILIPS LIGHTING ELECTRONICS N.A.

10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018

Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance

Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886



Specification grade area lights available with IES Type IV distribution. Suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. Patent pending management system. 5 Year Warranty.

Color: Gray

Weight: 31.0 lbs

Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type:	Constant Current	Watts:	78W
120V:	0.66A	Color Temp:	5100K
208V:	0.41A	Color Accuracy:	67 CRI
240V:	0.35A	L70 Lifespan:	100000
277V:	0.30A	Lumens:	7,564
Input Watts:	79W	Efficacy:	96 LPW
Efficiency:	99%		

Technical Specifications

Listings

UL Listing:

Suitable for wet locations as a downlight.

IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and 80, and have received the Department of Energy "Lighting Facts" label.

Dark Sky Approved:

The International Dark Sky Association has approved this product as a full cutoff, fully shielded luminaire.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.
DLC Product Code: P0000170X

Optical

Lumen Maintenance:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Replacement:

The ALED78 replaces 250W Metal Halide Area Lights.

BUG Rating:

B1 U0 G2

Construction

IES Classification:

The Type IV distribution (also known as a Forward Throw) is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semiCircular distribution with essentially the same candlepower at lateral angles from 90° to 270°.

Effective Projected Area:

EPA = 0.75

Ambient Temperature:

Suitable for use in 40°C ambient temperatures.

Cold Weather Starting:

The minimum starting temperature is -40°C/-40°F

Thermal Management:

Superior heat sinking with external Air-Flow fins.

Housing:

Die cast aluminum housing, lens frame and mounting arm.

IP Rating:

Ingress Protection rating of IP66 for dust and water

Reflector:

Specular vacuum-metallized polycarbonate

Gaskets:

High temperature silicone gaskets.

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

For use on LEED Buildings:

IDA Dark Sky Approval means that this fixture can be used to achieve LEED Credits for Light Pollution Reduction.

LED Characteristics

LEDs:

Six (6) multi-chip, 13W, high-output, long-life LEDs.

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

Electrical

Driver:

Constant Current, Class 2, 2000mA, 100-277V, 50-60Hz, 1.1A, Power Factor 99%

THD:

5.1% at 120V, 13.2% at 277V

Surge Protection:

4kV

Technical Specifications (continued)

Electrical

Surge Protector:

ALED78 is available with a 6kV surge protector (SP6). SP6 available .

Other

California Title 24:

See ALED4T78/D10, ALED4T78/BL, ALED4T78/PCS, ALED4T78/PCS2, or ALED4T78/PCT for a 2013 California Title 24 compliant product. Any additional component requirements will be listed in the Title 24 section under technical specifications on the product page.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Patents:

The ALED design is protected by patents in the U.S. Pat. 668,370, Canada Pat. 144956, China ZL201230100154.X, and Mexico Pat. 38423. Pending patents in Taiwan.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010).

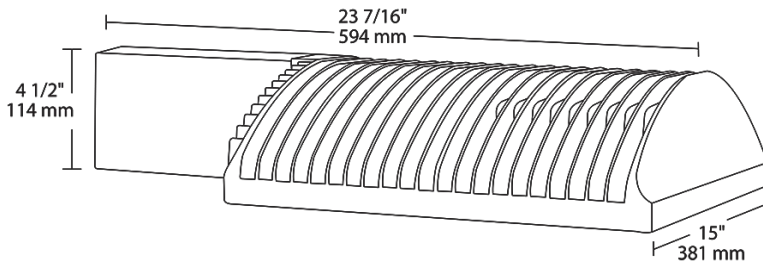
Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

Dimensions



Features

- 66% energy cost savings vs. HID
- 100,000-hour LED lifespan
- Type IV distribution
- 5-year warranty

Ordering Matrix

Family	Distribution	Watts	Mount	Color Temp	Finish	Voltage	Photocell	Dimming	Bi-Level
ALED									
	2T = Type II	360 =	Blank =	Blank = 5000K	Blank =	Blank = 120-277V	Blank = No Photocell	Blank = No	Blank = No Bi-
	3T = Type III	360W	Arm	(Cool)	Bronze	/480 = 480V (Only 360W &	/PC = 120V Button	Dimming	Level
	4T = Type IV	260 =	SF =	Y = 3000K	W = White	260W)	/PC2 = 277V Button	/D10 = Dimmable	/BL = Bi-Level
		260W	Slipfitter	(Warm)	RG = Gray		/PCS = 120V Swivel		
		150 =		N = 4000K			/PCS2 = 277V Swivel		
		150W		(Neutral)			/PCT = 120-277V		
		125 =					Twistlock		
		125W					/PCS4 = 480V Swivel		
		105 =					/PCT4 = 480V		
		105W					Twistlock		
		78 = 78W							



High output LED pole top area light with IES type V circular distribution. Wide and uniform 360 degree pattern ideal for large outdoor areas such as parking lots, corporate parks, and retail settings.

Color: Bronze

Weight: 21.8 lbs

Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type:	Constant Current	Watts:	26W
120V:	0.30A	Color Temp:	5000K (Cool)
208V:	0.17A	Color Accuracy:	68 CRI
240V:	0.15A	L70 Lifespan:	100000
277V:	0.13A	Lumens:	2,748
Input Watts:	30W	Efficacy:	93 LPW
Efficiency:	88%		

Technical Specifications

Listings

UL Listing:

Suitable for wet locations.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

LED Characteristics

LEDs:

High-output, long-life LEDs.

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

Electrical

Power Factor:

99.1% at 120V

Construction

Cold Weather Starting:

Minimum starting temperature is -40°F / -40°C.

Ambient Temperature:

Suitable for use in 40°C (104°F) ambient temperatures.

Effective Projected Area:

EPA = 1.2

Thermal Management:

Superior heat sinking with external air-flow fins.

Housing:

Precision die-cast aluminum, Type V distribution.

Support Arms:

Extruded aluminum.

Lens:

Clear tempered glass lens.

Reflector:

Specular vacuum-metallized polycarbonate, Type V distribution.

Gaskets:

High-temperature silicone.

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Green Technology:

Mercury and UV free, and RoHS compliant.

Other

Patents:

The designs of the ALED5T52 are protected by patents pending in US, Canada, China, Taiwan and Mexico.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

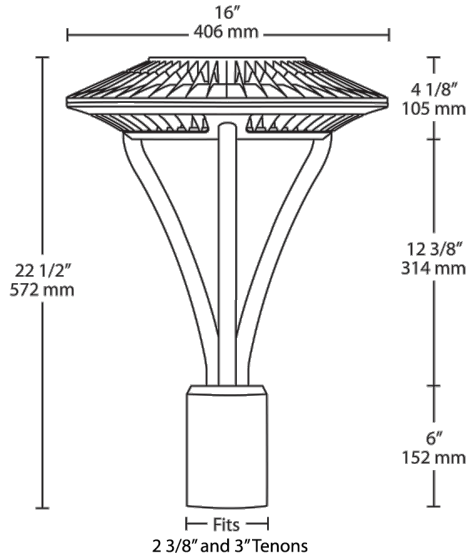
Suitable in accordance with FAR Subpart 25.4.

Optical

BUG Rating:

B2 U1 G1

Dimensions



Features

- IES type V (circular) distribution
- 100,000-hour LED lifespan
- Compatible with standard 2 3/8" and 3" tenons
- Air-flow fins for maximum heat dissipation
- 5-year warranty

Ordering Matrix

Family	Distribution	Watts	Color Temp	Finish	Dimming	Bi-Level
ALED	5T = Type V	78 = 78W 52 = 52W 26 = 26W	= 5000K (Cool) Y = 3000K (Warm) N = 4000K (Neutral)	= Bronze W = White	= No Dimming /D10 = Dimmable	= No Bi-Level /BL = Bi-Level



ALED Area Lights mount to 4" square steel poles at 15-20'. 1 to 4 fixtures can be mounted to each pole. IES Full Cutoff, Fully Shielded optics. 5 year Warranty.

Color: Bronze

Weight: 6.5 lbs

Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type:	Constant Current	Watts:	26W
120V:	0.26A	Color Temp:	5000K
208V:	0.16A	Color Accuracy:	70 CRI
240V:	0.14A	L70 Lifespan:	100000
277V:	0.12A	Lumens:	2,662
Input Watts:	30W	Efficacy:	90 LPW
Efficiency:	88%		

Technical Specifications

Listings

UL Listing:

Suitable for wet locations.

IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and 80, and have received the Department of Energy "Lighting Facts" label.

Dark Sky Approved:

The International Dark Sky Association has approved this product as a full cutoff, fully shielded luminaire.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.
DLC Product Code: P00001700

LED Characteristics

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

Construction

IP Rating:

Ingress Protection rating of IP66 for dust and water

IES Classification:

The Type IV distribution (also known as a Forward Throw) is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semiCircular distribution with essentially the same candlepower at lateral angles from 90° to 270°.

Housing:

Precision die cast aluminum housing, lens frame.

Gaskets:

High temperature silicone.

Effective Projected Area:

EPA = 0.27.

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

Ambient Temperature:

Suitable for use in 40°C ambient temperatures.

Cold Weather Starting:

The minimum starting temperature is -40°C/-40°F

Thermal Management:

Cast aluminum Thermal Management system for optimal heat sinking. The ALED is designed for cool operation, most efficient output and maximum LED life by minimizing LED junction temperature.

Other

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

California Title 24:

See ALED26/PC for a 2013 California Title 24 compliant model.

Equivalency:

The ALED26 is Equivalent in delivered lumens to a 70 W Metal Halide Area Light.

HID Replacement Range:

The ALED26 can be used to replace 42 CFL - 100W Metal Halide Area Light based on delivered lumens.

Patents:

The ALED design is protected by U.S. PATENT D608,040 and patents pending in the U.S., Canada, China, Taiwan and Mexico.

Country of Origin:

Designed by RAB in New Jersey and assembled in Taiwan.

Trade Agreements Act Compliant:

This product is a product of Taiwan and a "designated country" end product that complies with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

Technical Specifications (continued)

Optical

Lumen Maintenance:

The LED will deliver 70% of its initial lumens at 100,000 hours of operation.

BUG Rating:

B1 U0 G0

BUG Rating:

B1 U0 G0

Electrical

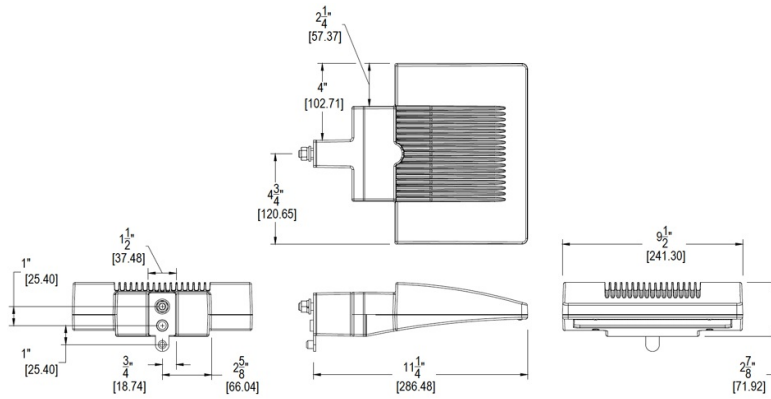
Driver:

Multi-chip 26W high output long life LED Driver
Constant Current, 720mA, Class 2, 6kV Surge
Protection, 100V-277V, 50-60 Hz, 100-240V.4 Amps.

THD:

7.5% at 120V, 11% at 277V

Dimensions



Features

- High output LED light engine
- Maintains 70% of initial lumens at 100,000 hours
- Weatherproof high temperature silicone gaskets
- Superior heat sinking with die cast aluminum housing and external fins

Ordering Matrix

Family	Watts	Color Temp	Finish	Photocell	Dimming
ALED	26 = 26W	Blank = 5000K (Cool) Y = 3000K (Warm) N = 4000K (Neutral)	Blank = Bronze W = White	Blank = No Photocell /PC = 120V Button /PC2 = 277V Button	Blank = No Dimming /D10 = Dimmable

Exit signs

DCLX-C

Combo LED Exit / Emergency Light

Job Information

Type:

Catalog #:

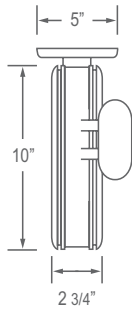
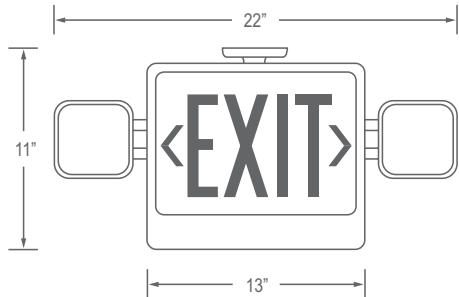
Project:

Comments:

Prepared by:



Dimensions



Description

Commercial, retail and industrial facilities that require battery backup emergency exit lighting and signage. economical and attractive DCLX series uses a thermoplastic housing and solid-state electronics to offer both reliability and low cost performance..

Features

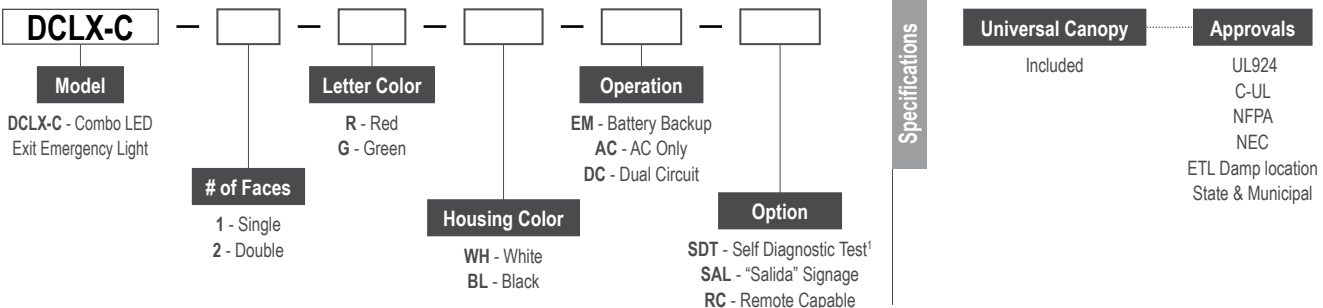
- Universal mounting canopy for top installation
- Energy consumption of less than 3 watts
- LED lamp life of 25 years
- Push to test switch
- 6-volt pure lead, maintenance free battery
- Automatic, low-voltage disconnect (LVD)
- Universal transformer for 120 or 277 VAC operation
- Two fully adjustable, glare-free lighting heads
- Injection molded, V-O flame retardant, high impact, thermoplastic housing
- Suitable for damp location
- Supplied with 6V, 5.4W incandescent wedge base lamp
- 5 Year Warranty



- Exercises battery automatically and prolongs battery life
- User interface signals exact nature of any malfunction
- Runs a 15 minute test every 30 days
- Runs a 90 minute test once a year

ORDERING INFORMATION:

Example: (DCLX-C-2-G-WH-EM-SDT)



¹ Remote Capability & SDT feature cannot be added onto the same fixture



American Revolution LED

Series 247L

PRODUCT OVERVIEW



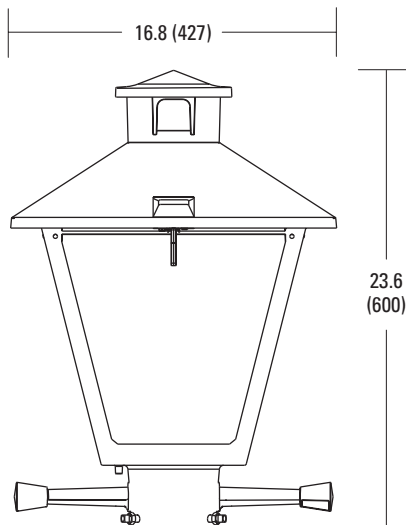
Features:

- Die-cast aluminum housing and hood for long-life performance
- Die-cast trigger latch (TL) and captive thumb screws option available for easy access to internal components
- Optical assembly designed for maximum performance, available in Type II, Type III and Type V
- Hinged hood and captive thumb screws provision afford quick, easy access to electrical and optical area for servicing
- Slipfitter with three set screws allows secure installation to pole sizes 2-3/8" or 3" O.D.
- Surge protection device (standard) exceeds ANSI C62.41 Category C1 criteria (surge tested at 10kV/5kA)
- Complies with ANSI: C136.2, C136.10, C136.15
- CSA listed and suitable for up to 30°C ambient
- Rated L70, LED life greater than 100,000 hours at 25°C
- Replaces up to 150W HPS light source incumbant models
- LED electronic 0V-10V dimmable driver
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Applications:

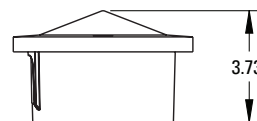
Streetscapes
Walkways
Pathways
Parks

DIMENSIONS

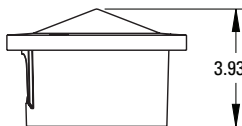


Effective Projected Area (EPA)

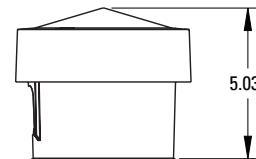
The EPA for the American Revolution Series 247 is 1.6 sq. ft.
P5 or P7 option total height is 24.9 (633).
Approx. Wt. = 36 lbs.



Cupola height
P3 without ROAM
Shown in line diagram



Cupola height
P5/P7 without ROAM



Cupola height
P5/P7 with ROAM

All dimensions are inches (millimeters) unless otherwise noted.

American Revolution LED

Series 247L

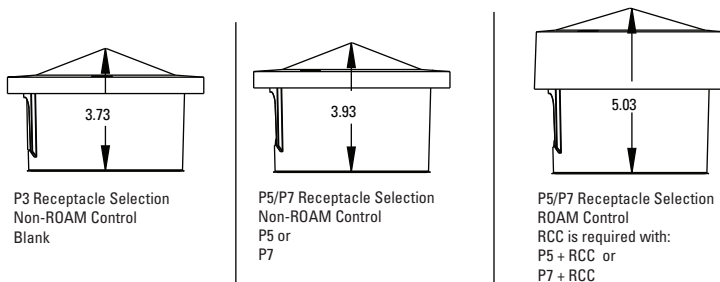
ORDERING INFORMATION

Example: 247L 20LEDE70 MVOLT 4K R3 AY

Series	Performance Package	Voltage	Color Temperature (CCT)
247L American Revolution LED	20LEDE10 20 Chips, 1050 mA Driver, 72 input watts 20LEDE70 20 Chips, 700 mA Driver, 45 input watts 10LEDE10 10 Chips, 1050 mA Driver, 38 input watts 10LEDE70 10 Chips, 700 mA Driver, 25 input watts 10LEDE53 10 Chips, 525 mA Driver, 18 input watts 10LEDE35 10 Chips, 350 mA Driver, 13 input watts	MVOLT Multi-volt, 120-277V 347 347V 480 480V	3K 3000K 4K 4000K 5K 5000K

Distribution	Optics	Options
R2 Type II R3 Type III R5 Type V	AY Acrylic PY Polycarbonate	<p><u>Paint</u>¹</p> <p>(blank) Black (standard) GY Gray DDB Dark Bronze WH White BZ Bronze</p> <p><u>Photocontrol</u></p> <p>(blank) 3 pin NEMA Photocontrol Receptacle (standard) NR² No Photocontrol Receptacle P5³ 5 pin NEMA Photocontrol Receptacle (dimmable driver included) P7³ 7 pin NEMA Photocontrol Receptacle (dimmable driver included) PCLL^{4,5} Solid State Long Life Photocontrol PCSS^{4,5,6} Not CSA Listed Solid State Long Life Photocontrol (120-277V)</p> <p><u>Miscellaneous</u></p> <p>SS Stainless steel hardware NL NEMA Label XL Not CSA Listed TL Tool-less Entry LDR⁷ Ladder Rest SH Shorting Cap SHX⁶ Not CSA Listed Shorting Cap HSB House Side Shield Black HSW House Side Shield White CR Enhanced Corrosion Resistant Finish RCC⁸ ROAM Dimming Node Cupola Cover</p> <p><u>Accessories</u></p> <p>RNC57³ ROAM Dimming Node Cupola Cover</p>

Cupola size based on type of control and receptacle



Notes:

- Other colors available, please contact factory
- PC and SH not available with NR option
- Taller cupola cover (RCC) is required when used with ROAM or other similar wireless monitoring control systems
- Standard failure mode="Fail On"
- Photocontrols supplied with ANSI Standard Turn-On levels
- XL option is required
- Ships with unit, field installed
- Required when using ROAM or other similar wireless monitoring control systems



AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com
© 2016 Acuity Brands Lighting, Inc. All Rights Reserved. 01/22/16

Warranty Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

American Revolution LED

Series 247L

OPERATING CHARACTERISTICS

DLC products are listed in **BOLD**.
Non DLC products are indicated by shaded box.

LED Quantity, mA, CCT	Input Watts	TOTAL LUMENS											
		R2-AY	LPW	R3-AY	LPW	R5-AY	LPW	R2-PY	LPW	R3-PY	LPW	R5-PY	LPW
20LEDE10 3K	73	5,495	75	5,553	76	6,068	83	5,156	71	5,210	71	5,694	78
20LEDE10 4K	73	5,900	81	5,962	82	6,516	89	5,451	75	5,576	76	6,111	84
20LEDE10 5K	73	5,937	81	5,999	82	6,556	90	5,568	76	5,626	77	6,149	84
20LEDE70 3K	46	4,103	89	4,147	90	4,531	99	3,848	84	3,889	85	4,249	92
20LEDE70 4K	46	4,407	96	4,453	97	4,867	106	4,115	89	4,164	91	4,545	99
20LEDE70 5K	46	4,434	96	4,481	97	4,897	106	4,140	90	4,184	91	4,573	99
10LEDE10 3K	39	2,936	75	2,967	76	3,242	83	2,779	71	2,808	72	3,068	79
10LEDE10 4K	39	3,153	81	3,187	82	3,482	89	2,959	76	2,990	77	3,267	84
10LEDE10 5K	39	3,173	81	3,206	82	3,504	90	2,981	76	3,011	77	3,292	84
10LEDE70 3K	26	2,115	81	2,137	82	2,336	90	2,012	77	2,034	78	2,223	86
10LEDE70 4K	26	2,271	87	2,295	88	2,508	96	2,106	81	2,128	82	2,326	89
10LEDE70 5K	26	2,285	88	2,309	89	2,523	97	2,126	82	2,148	83	2,347	90
10LEDE53 3K	19	1,662	87	1,681	88	1,836	97	1,561	82	1,578	83	1,724	91
10LEDE53 4K	19	1,785	94	1,804	95	1,972	104	1,670	88	1,688	89	1,845	97
10LEDE53 5K	19	1,796	95	1,816	96	1,984	104	1,683	89	1,702	90	1,859	98
10LEDE35 3K	14	1,150	82	1,162	83	1,270	91	1,079	77	1,090	78	1,191	85
10LEDE35 4K	14	1,234	88	1,248	89	1,364	97	1,162	83	1,175	84	1,284	92
10LEDE35 5K	14	1,243	89	1,256	90	1,372	98	1,165	83	1,177	84	1,287	92



AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com
© 2016 Acuity Brands Lighting, Inc. All Rights Reserved. 01/22/16

Warranty Five-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.

Please contact your sales representative for the latest product information.



Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Qty: _____
 Notes: _____



Philips Gardco EcoForm LED luminaire combines economy with performance. Capable of delivering up to 20,000 lumens or more in a compact, low profile housing, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems, including motion response and wireless controls are available for further energy savings during off peak hours.

Ordering guide

example: ECF-APD-MRO-1-4-75LA-NW-120-NP-LF

Prefix	Controls	Mounting	Optical System	Wattage	Color Temp	Voltage	Finish	Options
ECF								
ECF EcoForm	— Standard luminaire (leave blank) DIM 0-10V Dimming APD ¹ Auto Profile Dimming APD-MRO ² Auto Profile Dimming and Motion Response Override pole mounted motion sensor APD-MRI ^{2,3} APD with Motion Response Override luminaire sensor MRI ^{2,3} Motion Response at 50% low luminaire sensor MR50 ² Motion Response at 50% low, pole mounted sensor Wireless Controls (Remote wireless controller available. See p.2 for details) LLC2 ^{1,4} #2 lens for 8' mounting heights LLC3 ^{1,4} #3 lens for 9-20' mounting heights LLC4 ^{1,4} #4 lens for 21-40' mounting heights	1 Standard 2 2@180 2@90 2@90 3 3@90 3@120 3@120 4 4@90 WS Wall mount including surface conduit rear entry permitted MA Mast Arm Fitter (requires 2-3/8" O.D. Mast Arm)	2 Type 2 3 Type 3 4 Type 4 5 Type 5	530 mA 55LA-3253 ¹ 75LA-4853 100LA-6453 700mA 70LA-3270 105LA-4870 135LA-6470 1050mA 105LA-321A ¹ 160LA-481A 215LA-641A	CW Cool White 5,700K 70 CRI (nominal) NW Neutral White 4,000K 70 CRI (nominal) WW ⁵ Warm White 3,000K 70 CRI (nominal)	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V 50hz/60hz HVU 347-480V 50hz/60hz	BRP Bronze Paint BLP Black Paint WP White Paint NP Natural Paint OC Optional Color Specify optional color or RAL (ex: OC-LGP or OC-RAL7024) SC Special color Specify, must supply color chip. Requires factory quote.	TL Tool-Less entry and driver removal hardware TB ³ Terminal Block IS ⁶ Internal Shield LF ⁷ Line Fusing LFC ⁷ Line Fusing for Canada PC ^{5,7,8} Receptacle with Photocell (Includes PCR5) PCB ^{4,7,8} Photocell Button PCRS ^{4,9,10} Photocell Receptacle only with 2 dimming connections PCR7 ^{4,10,11} Photocell Receptacle only with 2 dimming and 2 auxiliary connections RAM Retrofit Arm Mount kit PTF2 ¹² Pole Top Fitter for 2 3/8"- 3" Tenon PTF3 ¹² Pole Top Fitter for 3"- 3 1/2" Tenon PTF4 ¹² Pole Top Fitter for 3 1/2"- 4" Tenon RPA ¹³ Round Pole Adapter for 3"- 3.9" O.D. BD Bird Deterrent (field installed only)

1. Available in 120V-277V Voltages only (UNV, 120, 208, 240 & 277).
 2. MR50 and APD-MRO luminaires require one motion sensor per pole, ordered separately. See page 2 for Accessories. Available in 120V or 277V only.
 3. ECF-MRI requires outboard sensor when used with Terminal Block (TB) Option.
 4. LLC2/LLC3/LLC4 Wireless Controls are not configurable with PC/PCB/PCR5/PCR7 Options. See page 6-7 for more info.
 5. Contact factory for lead times on warm white.
 6. Not configurable with Type 5 (5) Optics.
 7. Not configurable with 120-277V (UNV) Voltage. Voltage must be specified.
 8. Not configurable with 480V (480) Voltage.
 9. Works with 3-pin or 5-pin NEMA photocell/dimming device.
 10. If ordered with DIM, APD, MRI, MR50, APD-MRI, APD-MRO, dimming will not be connected to NEMA receptacle.
 11. Works with 3-pin or 5-pin NEMA photocell/dimming device and auxiliary connections are not connected (for future use only).
 12. Not configurable with 3@120 (3@120) Mounting.
 13. No adaptor required for 4" round poles. RPAs provided with Black Paint standard.

ECF EcoForm LED luminaire

EcoForm Accessories (order separately)

FS1R-100

MR hand held programmer

For use with 'MRI' motion response when field programming is required. If desired, only one is needed per job.

MS-A-120V

120V Input Area Motion Sensor

For MR50 (Motion Response) or APD-MRO (Automatic Profile Dimming with Motion Response Override)

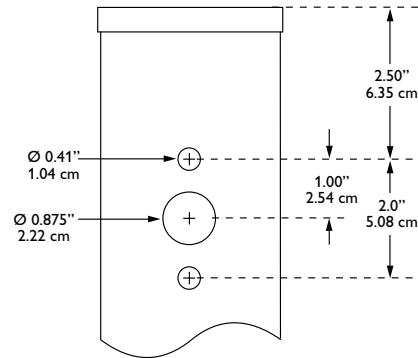
MS-A-277V

277V Input Area Motion Sensor

For MR50 (Motion Response) or APD-MRO (Automatic Profile Dimming with Motion Response Override)

Note: Motion Sensors are ordered separately, with one (1) motion sensor required per pole location for MR50 or APD-MRO luminaires. See Luminaire Configuration Information on page 5 for more details. Area motion sensor color is Arctic White. MRI and APD-MRI luminaires include an integral motion sensor.

EcoForm Drill Template (standard arm mount)



EcoForm Wireless Controls Accessories (for wall or pole mount)^{1,2,3,4}

LLCR2-(F)

Standalone wall or pole wireless controller with #2 Lens.

LLCR3-(F)

Standalone wall or pole wireless controller with #3 Lens.

LLCR4-(F)

Standalone wall or pole wireless controller with #4 Lens.

1. When using the wireless remote accessory option (LLCR-F) in a pole mount application, specify pole option (CL=Coupling Internal Thread, 3/4" size)
2. 120-277V only.
3. Must specify finish (F=Specify matching finish)
4. Luminaire configuration must include 0-10V Dimming 'ECF-DIM' option when Wireless Controls Accessories are specified

LED Wattage and Lumen Values (standard EcoForm luminaire)

Ordering Code	No. of LED Modules (16 LEDs per Module)	Total LEDs	LED Current (mA)	Average System Watts ⁵	Color Temp.	Type 2			Type 3			Type 4			Type 5		
						Delivered Lumens ⁶	Efficacy (LPW)	BUG Rating	Delivered Lumens ⁶	Efficacy (LPW)	BUG Rating	Delivered Lumens ⁶	Efficacy (LPW)	BUG Rating	Delivered Lumens ⁶	Efficacy (LPW)	BUG Rating
55LA-3253	2	32	530	52	4000K	6,294	122	B1-U0-G1	6,190	120	B2-U0-G2	6,106	118	B1-U0-G2	5,867	114	B3-U0-G2
70LA-3270	2	32	700	69	4000K	7,754	112	B2-U0-G2	7,955	115	B2-U0-G2	7,659	111	B2-U0-G2	7,421	107	B3-U0-G2
75LA-4853	3	48	530	77	4000K	9,344	121	B2-U0-G2	9,191	119	B2-U0-G2	9,086	117	B2-U0-G2	8,712	113	B3-U0-G2
105LA-321A	2	32	1050	107	4000K	10,709	100	B2-U0-G2	10,981	103	B3-U0-G2	10,576	99	B2-U0-G2	10,255	96	B4-U0-G2
105LA-4870	3	48	700	104	4000K	11,513	111	B2-U0-G2	11,812	114	B3-U0-G2	11,373	110	B2-U0-G2	11,019	106	B4-U0-G2
100LA-6453	4	64	530	103	4000K	12,491	121	B2-U0-G2	12,285	119	B3-U0-G2	12,129	118	B2-U0-G2	11,645	113	B4-U0-G2
135LA-6470	4	64	700	139	4000K	15,390	111	B3-U0-G2	15,789	114	B3-U0-G2	15,192	110	B3-U0-G3	14,729	106	B4-U0-G2
160LA-481A	3	48	1050	158	4000K	15,901	101	B3-U0-G3	16,343	103	B3-U0-G2	15,696	99	B3-U0-G3	15,188	96	B4-U0-G2
215LA-641A	4	64	1050	211	4000K	21,255	101	B3-U0-G3	21,265	100	B4-U0-G3	20,984	99	B3-U0-G3	20,874	99	B5-U0-G3

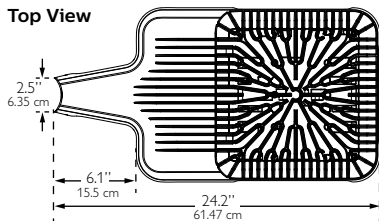
5. System input wattage may vary based on input voltage, by up to +/- 10% , and based on manufacturer forward voltage, by up to +/- 8%.

6. Lumen values based on photometric tests performed in compliance with IESNA LM-79.

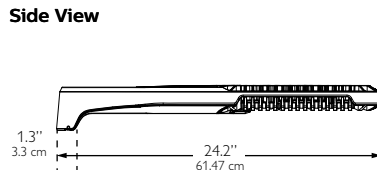
Note: Some data may be scaled based on tests of similar, but not identical, luminaires.

Dimensions – Standard EcoForm luminaire

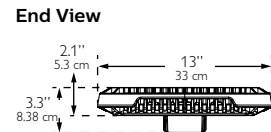
Top View



Side View



End View



EPA (ft²/m²)

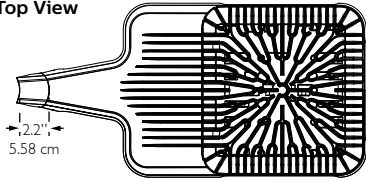
Single	Twin (2@180)	3/4@90
0.2 / 0.019	0.5 / 0.046	0.5 / 0.046

Approximate Luminaire Weight:
20 Lbs (9.07 Kg)

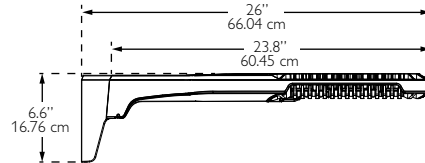
ECF EcoForm LED luminaire

Dimensions – EcoForm with Retrofit Arm Mount (RAM)

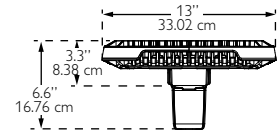
Top View



Side View



End View



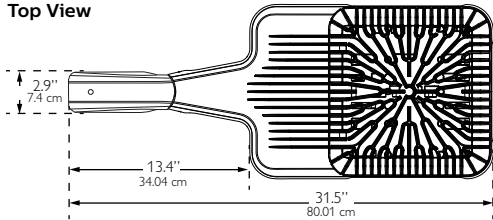
EPA (ft²/m²)

Single	Twin (2@180)	3/4@90
0.3 / 0.028	0.6 / 0.056	0.7 / 0.065

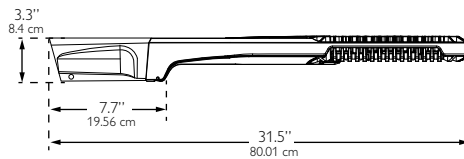
Approximate Luminaire Weight:
21 Lbs (9.53 Kg)

Dimensions – EcoForm with Mast Arm Fitter (MA)

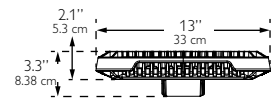
Top View



Side View



End View



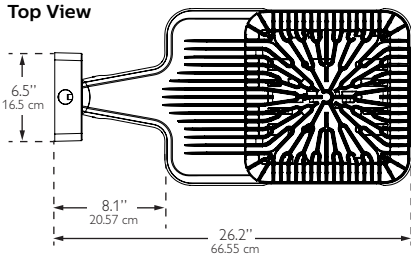
EPA (ft²/m²)

Single
0.51 / 0.047

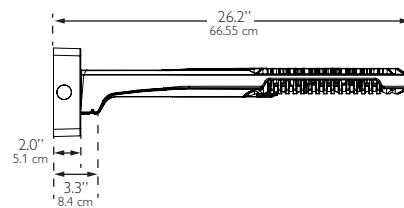
Approximate Luminaire Weight:
21.5 Lbs (9.77 Kg)

Dimensions – EcoForm with Wall Mount (WS)

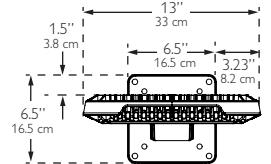
Top View



Side View



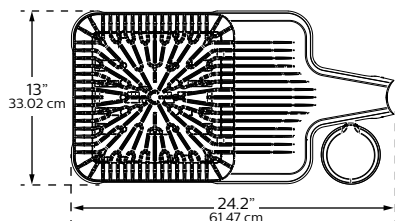
End View



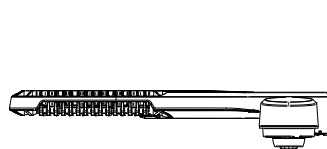
Approximate Luminaire Weight:
23.36 Lbs (10.6 Kg)

Dimensions – EcoForm with wireless controls (luminaire mounted controller)

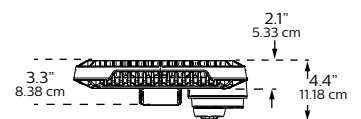
Top View



Side View



End View



ECF EcoForm LED luminaire

Luminaire Configuration Information

ECF

Philips Gardco EcoForm LED standard luminaire providing constant wattage and constant light output when power to the luminaire is energized.

ECF-DIM

Philips Gardco EcoForm LED luminaire provided with 0-10V dimming for connection to a control system provided by others.

ECF-APD

Philips Gardco EcoForm LED luminaire with Automatic Profile Dimming. Luminaire is provided with a Philips DynaDimmer module, programmed to go to 50% power, 50% light output two (2) hours prior to night time mid-point and remain at 50% for six (6) hours after night time mid-point. Mid-point is continuously recalculated by the Philips DynaDimmer module based on the average mid-point of the last two full night cycles. Short duration cycles, and power interruptions are ignored and do not affect the determination of mid-point.

ECF-APD is available in 120V–277V input only.

ECF-APD Dimming Profile:

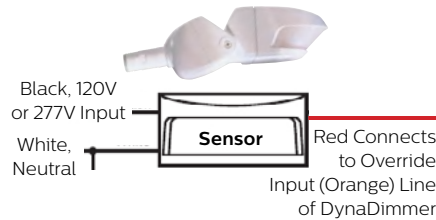
100%	2 hours 50%	6 hours 50%	100%
Power On	Mid Point	Power Off	

ECF-MR50

Philips Gardco EcoForm LED luminaire with motion response, providing a 50% power reduction on low and a commensurate reduction in light output. The power and light output reduction is accomplished utilizing the Philips DynaDimmer module, programmed for a constant 50% power. Power supplied by the motion sensor connected to the override line on the DynaDimmer takes the luminaire to high setting, 100% power and light output, when motion is detected. The luminaire remains on high until no motion is detected for the motion sensor duration period, after which the luminaire returns to low. Duration period is factory set at 15 minutes, and is field adjustable from 5 minutes up to 15 minutes.

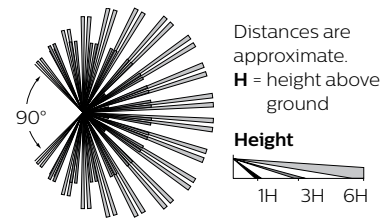
ECF-MR50 is available in 120V–277V input only to the luminaire. Motion sensors require single voltage 120V or 277V input.

The Area PIR motion sensor is the WattStopper EW-200-120-W (120V Input – MSA-120V) or the WattStopper EW-200-277-W (277V Input – MSA-277V.) One motion sensor per pole is required and is ordered separately. Area sensors require single voltage 120V or 277V input.



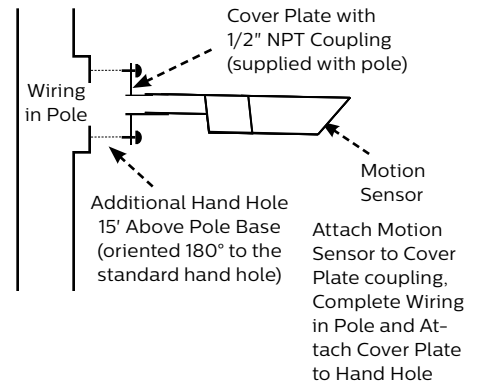
The area motion detector provides coverage equal to up to 6 times the sensor height above ground, 270° from the front-center of the sensor.

Area PIR Motion Sensor Coverage Pattern:



Motion response requires that the pole include an additional hand hole 15 feet above the pole base, normally oriented 180° to the standard hand hole. For Philips Gardco poles, order the pole with the Motion Sensor Mounting (MSM) option which includes the hand hole and a special hand hole cover plate for the sensor with a 1/2" NPT receptacle centered on the hand hole cover plate into which the motion sensor mounts. Once the motion sensor is connected to the hand hole cover plate, then wiring connections are completed in the pole. The plate (complete with motion sensor attached and wired) is then mounted to the hand hole. If poles are supplied by others, the customer is responsible for providing suitable mounting accommodations for the motion sensor in the pole.

Mounting to a Philips Gardco Pole:



ECF-APD-MRO

Philips Gardco EcoForm LED luminaire with Automatic Profile Dimming, with Motion Response Override. The ECF-APD-MRO combines the benefits of both automatic profile dimming and motion response, using the Philips DynaDimmer module. The luminaire will dim to 50% power, 50% light output, per the dimming profile shown for the ECF-APD. If motion is detected during the time that the luminaire is operating at 50%, the luminaire returns to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns to low. Duration period is factory set at 15 minutes, and is field adjustable from 5 minutes up to 15 minutes.

Notes:

ECF-APD-MRO is available in 120V through 277V input only to luminaire. The motion sensor requires either 120V or 277V input to the motion sensor.

The ECF-APD-MRO has the same pole requirements and utilizes the same motion sensors as the ECF-MR50. The motion sensor mounts and wires identically as well. The ECF-APD-MRO utilizes the identical dimming profile as shown for the ECF-APD.

By combining the benefits of automatic profile dimming and motion response, the ECF-APD-MRO assures maximum energy savings, and insures that adequate light is present if motion is detected.

All motion sensors utilized consume 0.0 watts in the off state.

ECF EcoForm LED luminaire

Luminaire Configuration Information (Continued)

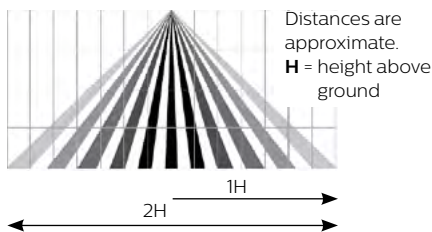
ECF-MRI

Luminaires with Motion Response include a LED driver and an integral programmable motion sensor. The motion sensor is set to a constant 50%. When motion is detected, the luminaire goes to 100%. The luminaire remains on high until no motion is detected for the motion sensor duration period, after which the luminaire returns to low. Duration period is factory set at 5 minutes. Available with 120V or 277V only.

Luminaires include a passive infrared (PIR) motion sensor, WattStopper® FSP-211 equipped with an FSP-L3 lens, capable of detecting motion within 20 feet of the sensor, 180° around the luminaire, when placed at a 20 foot mounting height, or mounted on a wall. Available in 120V or 277V input only. Motion sensor off state power is 0.0 watts.

The approximate motion sensor coverage pattern is as shown below.

Side Coverage Pattern



Top Coverage Pattern



ECF-APD-MRI



Luminaires with Automatic Profile Dimming and Motion Response Override combine the benefits of both automatic profile dimming and motion response. APD-MRI luminaires utilize Philips DynaDimmer. The luminaire will dim to 50% power, 50% light output, per the dimming profile shown for APD luminaires (see page 4). If motion is detected during the time that the luminaire is operating at 50%, the luminaire goes to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns to low. Duration period is factory set at 5 minutes.

APD-MRI luminaires are available with 120V or 277V input voltages only.

APD-MRI luminaires use the identical motion sensor as MRI luminaires. See motion sensor details for ECF-MRI.

FS1R-100 Wireless Remote Programming Tool

The FS1R-100 Remote Programming Tool accessory permits adjustment of ECF-MRI and ECF-APD-MRI sensor settings, including duration and dimming level on low, without the need to connect any wires to the luminaire.

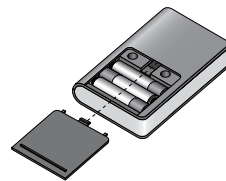
The FS1R-100 Wireless IR Programming Tool is a handheld tool for setup and testing of WattStopper FSP-211. It provides wireless access to the FSP-211 sensors for setup and parameter changes.

The FS1R-100 display shows menus and prompts to lead you through each process. The navigation pad provides a familiar way to navigate through the customization fields.

Within a certain mounting height of the sensor, the FS1R-100 allows modification of the system without requiring ladders or tools simply with a touch of a few buttons.

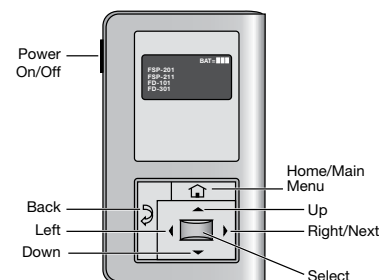
The FS1R-100 IR transceiver allows bi-directional communication between the FSP-211 and the FS1R-100 programming tool. Simple menu screens let you see the current status of the system and make changes. It can change FSP-211 sensor parameters such as high/low mode, sensitivity, time delay, cut off and more. With the FS1R-100 you can also establish and store FSP-211 parameter profiles.

The FS1R-100 operates on three standard 1.5V AAA Alkaline batteries or three rechargeable AAA NiMH batteries. The battery status displays in the upper right corner of the display. Three bars next to BAT= indicates a full battery charge. A warning appears on the display when the battery level falls below a minimum acceptable level. To conserve battery power, the FS1R-100 automatically shuts off 10 minutes after the last key press.



You navigate from one field to another using (up) or (down) arrow keys. The active field is indicated by flashing (alternates between yellow text on black background and black text on yellow background.)

Once active, use the Select button to move to a menu or function within the active field. Value fields are used to adjust parameter settings. They are shown in "less-than/greater-than" symbols: <value>. Once active, change them using (left) and (right) arrow keys. In general the up key increments and the down key decrements a value. Selections wrap-around if you continue to press the key beyond maximum or minimum values. Moving away from the value field overwrites the original value. The Home button takes you to the main menu. The Back button can be thought of as an undo function. It takes you back one screen. Changes that were in process prior to pressing the key are lost. More information on the FS1R-100 Remote Programming Tool is available at wattstopper.com.

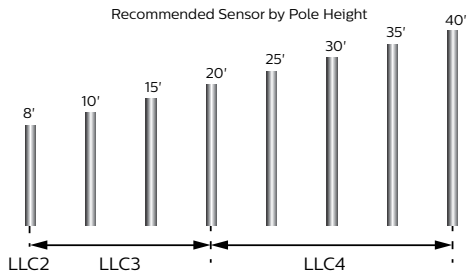
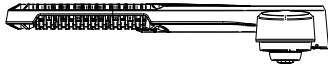


ECF EcoForm LED luminaire

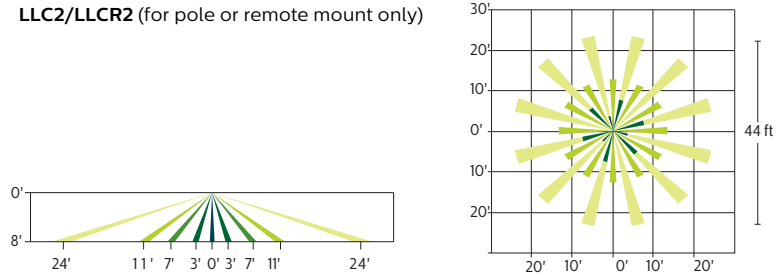
Luminaire Configuration Information – EcoForm with wireless controls

ECF-LLC2/3/4 Luminaire Mounted Controller

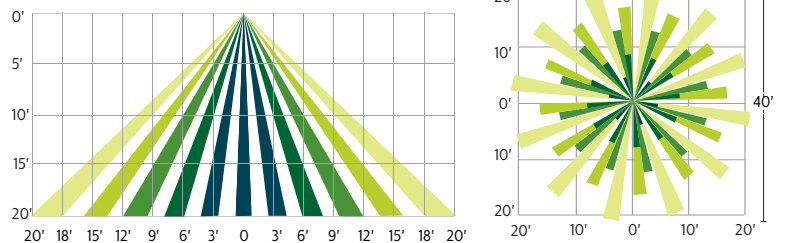
Wireless controller attached to luminaire and includes radio, photocell and motion sensor with #2, 3, or 4 lens for 8-40' mounting heights.



LLC2/LLCR2 (for pole or remote mount only)

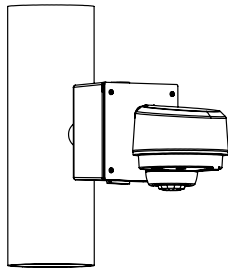


LLC3/LLCR3 (for luminaire, pole, or remote mount)



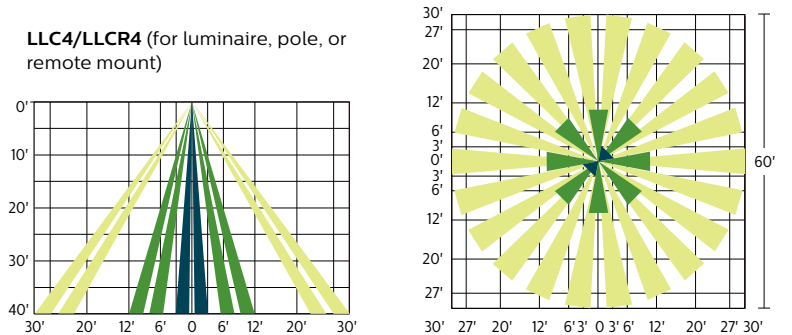
LLCR2/3/4 Pole Mounted Controller

In this configuration, the wireless controller will be mounted to the pole at a fifteen foot mounting height. The number of luminaires on each pole, as well as the specific wattage chosen, will determine how many controllers will be required.



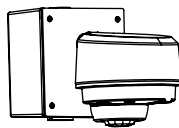
When using the wireless remote accessory option (LLCR-F) in a pole mount application, specify pole option (CL=Coupling Internal Thread, 3/4" size). Confirm required orientation of luminaire and wireless controller. Indicate height above pole base and orientation to handheld. Recommended min pole height is 18ft, with option (CL) 15ft above pole base. Other heights are possible when choosing the appropriate sensor lens type. See pole specification sheets for more information.

LLC4/LLCR4 (for luminaire, pole, or remote mount)

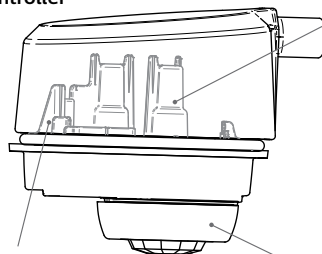


Remote Mount Wireless Controller

Used to extend the communication on site, to extend motion response and add other luminaires that are not pole mounted. Consult factory for more information.



Controller



Photocell

- Ambient light photocell on every wireless radio that averages the light levels of up to 5 controllers for an accurate reading and optimal light harvesting activity.
- Reports ambient light readings to 1500 Fc.

Wireless Radio

- 1.8 Watts max (no load draw)
- Operating voltage 120-277 VAC RMS
- Communicates using the ZigBee protocol
- Carries out dimming commands from Gateway
- Reports ambient light readings to 1500 Ft-Cd
- Transmission Systems Operating within the band 2400-2483.5Mhz
- ROHS Compliant

Motion Response

- Detects motion through passive infrared sensing technology with three different lens configurations
- Motion sensor coverage can be adjusted from a narrow to a wide detection range, which helps reduce false triggers to further increase energy savings.
- Sensing profiles can be updated to adapt to activity levels in the environment, such as occupancy level, wind, and mounting height

ECF EcoForm LED luminaire

Luminaire Configuration Information (EcoForm with wireless controls)

Gateway

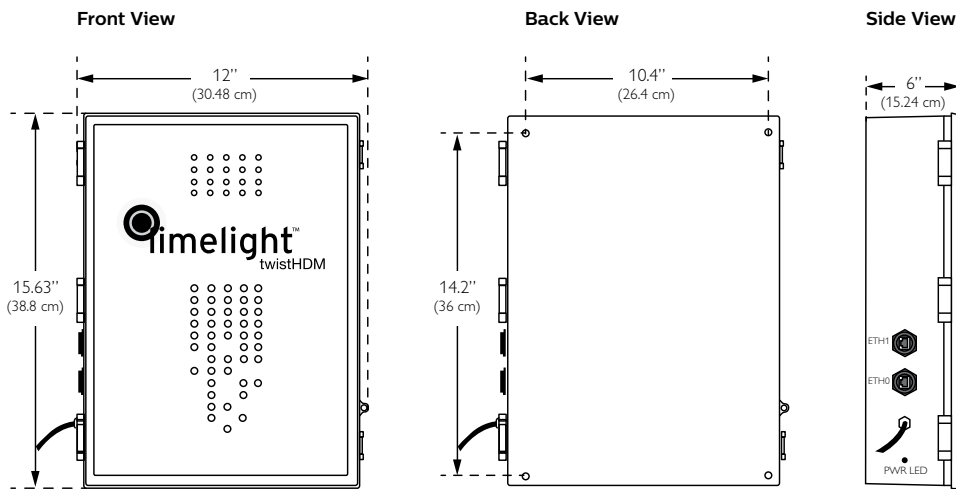
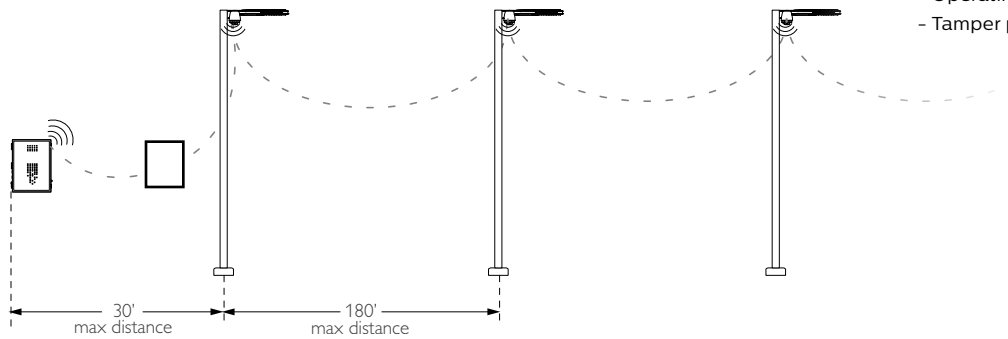
Overview: One gateway is included with the wireless controls system. The gateway opens up communication with the wireless radios installed with the EcoForm luminaires (or pole), allowing you to control your fixtures straight from the web. One gateway can communicate with up to 800 fixtures. Typically one unit is required per parking lot.

Installation: Gateway has 4 blind threaded holes on the back side that accept 10-32 screws. Mount spacing is 10.41" across and 14.19" vertical.

Requirements: The gateway must be mounted in a secure on-site location. The gateway requires 120V. Distance of gateway to the first radio varies upon application; contact factory. Strong internet connection required.

Specifications:

- High density RF Mesh coordinator
- Ethernet or wireless internet connection to server
- Proprietor of software "rules of operation"
- Watertight Ethernet connections
- Highly protected, long life ac/dc power supply
- Single board, ARM compliant 520Mhz Intel computer.
- Operating Temperature -20°C to 55°C
- Tamper proof housing



ECF EcoForm LED luminaire

Specifications

Housing

One piece die cast aluminum housing with integral arm and separate, self retained hinged, one piece die cast door frame.

IP Rating

LED light engine rated IP66.

Vibration Resistance

EcoForm with Standard Arm carries a 3G vibration rating that conforms to standards set forth by ANSI C136.31. Testing includes vibration to 3G acceleration in three axes, all performed on the same luminaire.

Electrical

Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. Optional 0-10V dimming to 10% power. RoHS compliant. Surge protector standard. 10KA per ANSI/IEEE C62.41.2.

LED Board and Array

32, 48, or 64 LEDs. Color temperatures: 3000K, 4000K, 5700K +/- 250K. Minimum CRI of 70. Aluminum metal clad board. RoHS compliant.

LED Thermal Management

The housing design allows the one piece housing to provide excellent thermal management critical to long LED system life.

Energy Saving Benefits

System efficacy up to 95 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

LED Performance

Predicted Lumen Depreciation Data¹

Ambient Temperature °C	Driver (mA)	Calculated L ₇₀ Hours ^{1,2}	L ₇₀ Per TM-21 ^{2,3}	Lumen Maintenance % @ 60,000 hours
Up to 40 °C	Up to 1050 mA	> 350,000 hours	> 60,000 hours	97%

1. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
2. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output.
3. Calculated per IESNA TM21-11. Published L70 hours limited to 6 times actual LED test hours.

Wireless Controls

The wireless controls system includes: gateway, controller (with wireless radio, motion response, and photocell), and commissioning/training. This intelligent web-based system operates through a high density mesh (HDM) wireless technology. Wireless radios with motion response and photocell sensors are integrated with PureForm luminaires, and enable the fixtures to communicate via the ZigBee protocol. The gateway is a mini computer that connects to the internet, and is located in a secure location. The central database channels communication to and from the gateway, allowing data to be viewed or managed through the web-based graphical user interface (GUI). See wireless controls pages 6-7 for details and technical information.

Motion Sensors

ECF-MR50, ECF-APD-MRO, ECF-MRI, ECF-APD-MRI luminaires may be specified for additional energy savings during unoccupied periods. See pages 4-6 for complete details.

Optical Systems

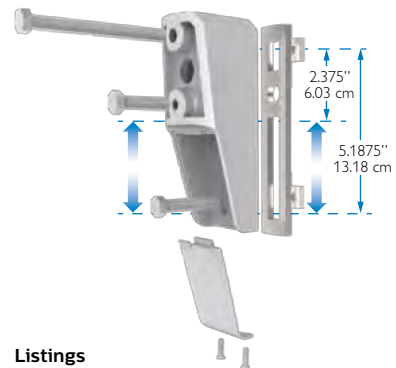
Type 2, 3, 4, and 5 distributions available. Internal Shield option mounts to LED optics and is available with Type 2, 3, and 4 distributions to control backlight.

Mounting

Standard luminaire arm mounts to 4" round poles. Square pole adapter included with every luminaire. Round Pole Adapter (RPA) required for 3-3.9" poles.

Retrofit Arm Mount

EcoForm features an innovative retrofit arm kit. When specified with the retrofit arm (RAM) option, EcoForm seamlessly simplifies site conversions to LED by eliminating the need for additional pole drilling on most existing poles. RAM will be boxed separately.



Listings

ETL/cETL listed to the UL 1598 standard, suitable for Wet Locations. Suitable for use in ambients from -40° to 40°C (-40° to 104°F). The quality systems of this facility have been registered by UL to the ISO 9001 series standards. All EcoForm luminaires equipped with NW and CW are DesignLights Consortium® qualified.

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidyl isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WP), and natural aluminum (NP). Consult factory for specs on optional or custom colors.

Warranty

EcoForm luminaires feature a 5 year limited warranty. Philips Gardco LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED Drivers also carry a 5 year limited warranty. Motion sensors are covered by warranty for 5 years by the motion sensor manufacturer.



PHILIPS Day-Brite CFI

Industrial

LED high bay FBX

8000, 12,000, 16,000, 20,000,
24,000, 36,000 or 45,000 lms



Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Lamps: _____ Qty: _____
 Notes: _____

The Philips Day-Brite / Philips CFI LED high bay FBX provides versatility in form and function. With a range of lumen packages, optical distributions, and accessories available, this luminaire can be used in many different applications ranging from warehouses to retail outlets. SpaceWise technology is optional for additional energy savings and control.

Ordering guide

Example: **FBX24LL40-UNV**

Family	Lumen Package	Source	Color Temperature	Voltage	Distribution	Options
FBX		L	—	—	—	
FBX	08L 8,000 nominal delivered lumens 12L 12,000 nominal delivered lumens 16L 16,000 nominal delivered lumens 20L 20,000 nominal delivered lumens 24L 24,000 nominal delivered lumens 36L 36,000 nominal delivered lumens 45L 45,000 nominal delivered lumens	L LED	35 3500K (CRI 80) 40 4000K (CRI 80) 50 5000K (CRI 80)	UNV Universal voltage 120-277V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V	Blank General Distribution N Narrow M Medium W Wide A Aisle	WP6³ Wired 6' 16/3 Cord & NEMA Twist lock plug WC6 Wired 6' 16/3 Cord WP6D³ Wired 6' 16/3 Cord & NEMA Twist lock plug for line voltage and wired 6' purple and gray leads w/disconnect plug for dimming control WC6D Wired 6' 16/3 Cord for line voltage and wired 6' cord for dimming control MD360^{2,3} 360° Motion detector (ON/OFF) MD360D^{2,3} 360° Motion detector (ON/DIM) EMLED Emergency battery (0°C - 40°C) EMLEDC² Emergency battery cold temp (-20°C - 40°C) 55² High ambient (55°C) LCA Clear acrylic lens LFA Frosted acrylic lens LCR Clear ribbed lens LCR Frosted ribbed lens LCP Clear polycarbonate lens SP1 Optional 10KV surge protector GLR¹ Fusing, fast blow SWI⁴ SpaceWise wireless technology for integrated occupancy (50°C max.) ⁴

Footnotes

1. **GLR** fusing not available for 347V or 480V
2. Not available with SpaceWise (**SWI**) option
3. Must specify line voltage.
4. Must order **SWZ-REMOTE** SpaceWise handheld remote with each system order.

Predicted L70 Lifetime

- 40°C Ambient > 100,000 hours (based upon LED manufacturer's supplied LM-80 data and in-situ laboratory testing)

Wiring Notes

- Standard cords have 3 wires. Consult factory for other cord options.

General Notes

- All options factory installed.
- All accessories are field installed.
- Many luminaire components, such as reflectors, refractors, lenses, sockets, lampholders, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility.
- **EMLED** and **EMLEDC** provide 3500 lumens



FBX LED high bay

8000, 12,000, 16,000, 20,000, 24,000, 36,000 or 45,000 lms

Accessories (order separately)

- **FBX CHAIN KIT** 54" chains & V brackets
- **FBX-GRIP5** 5' cables & V brackets
- **FBX-GRIP10** 10' cables & V brackets
- **FBX-PENHGR** Pendant hanger (adds 3" to height)
(Not available for 36,000 or 45,000 lumen versions)
- **WG-FBX-2N** Wire guard for 8,000 and 12,000 lumen versions
- **WG-FBX-2W** Wire guard for 16,000, 20,000, and 24,000 lumen versions
- **WG-FBX-4** Wire guard for 36,000 and 45,000 lumen versions
- **SWZ-REMOTE** SpaceWise handheld remote for grouping and configuration
- **FBX-SLCA-2N** Clear acrylic snap lens for 08L and 12L
- **FBX-SLCA-2W** Clear acrylic snap lens for 16L, 20L, and 24L
- **FBX-SLCA-4** Clear acrylic snap lens for 36L and 45L
- **FBX-SLFA-2N** Frosted acrylic snap lens for 08L and 12L
- **FBX-SLFA-2W** Frosted acrylic snap lens for 16L, 20L, and 24L
- **FBX-SLFA-4** Frosted acrylic snap lens for 36L and 45L
- **FBX-SLCR-2N** Clear ribbed snap lens for 08L and 12L
- **FBX-SLCR-2W** Clear ribbed snap lens for 16L, 20L, and 24L
- **FBX-SLCR-4** Clear ribbed snap lens for 36L and 45L
- **FBX-SLFR-2N** Frosted ribbed snap lens for 08L and 12L
- **FBX-SLFR-2W** Frosted ribbed snap lens for 16L, 20L, and 24L
- **FBX-SLFR-4** Frosted ribbed snap lens for 36L and 45L

Application

- This luminaire can be used to illuminate retail, cold storage, manufacturing, warehousing and many other large indoor spaces with control and precision.

Construction/Finish

- Metal housing and reflectors provide excellent thermal transfer to extend component life.
- End holes to attach V bracket for chain or cable hanging.
- May be cable, chain, or pendant mounted.
- 7/8" K.O. at each end of luminaire for wiring or motion detector.
- Polyester powder finish for excellent impact and corrosion resistance.
- LED light engines and drivers are field replaceable.
- 5 Year Limited Warranty.
- Components are RoHS compliant.
- Listed by ETL to meet UL 1598 standards for damp location and -35°C to 40°C ambient. High ambient 55°C is optional.
- Dimming drivers are standard. Control is 0-10V DC.
- Optional motion detector.
- DLC Listing for most variations. Please check the DLC Qualified Products List to confirm (www.designlights.org/QPL).
- 4KV surge protection standard.

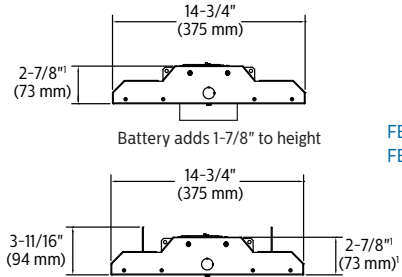
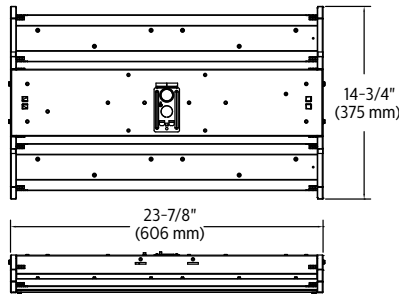
SpaceWise Technology (SWI)

- Optional SpaceWise automated wireless technology provides integrated occupancy sensing and dimming for additional control and energy savings.
- Requiring no system re-wiring, SpaceWise technology is appropriate for retrofit or new design and is an ideal replacement system for typical industrial layouts.
- Occupancy sensors are integral to each luminaire, with embedded automatic dimming behaviors appropriate to multiple applications. Applications modes are selected using the handheld remote control.
- Dimming sensors are integral to each luminaire, eliminating the need for dimming zoning. Dimming sensing is automatic and re-calibration occurs daily when luminaires turn on.
- Luminaires in large areas are grouped together up to a maximum of 50 using a handheld remote, and max light output can be tuned. Granular dimming then provides full light output for occupied areas, and non-occupied areas stay at a background level to ensure visual quality. Grouped luminaires will dim to off when no presence is detected in the group.
- SpaceWise remote control must be purchased separately.
- Visit philips.com/spacewise for more information about SpaceWise technology.

FBX LED high bay

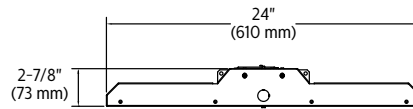
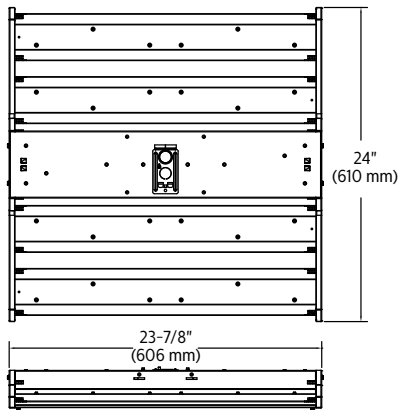
8000, 12,000, 16,000, 20,000, 24,000, 36,000 or 45,000 lms

Dimensions

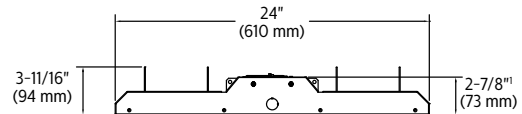


FBX08L
FBX12L

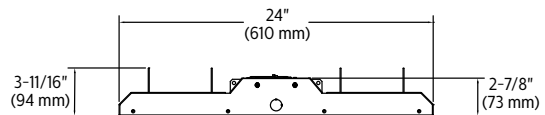
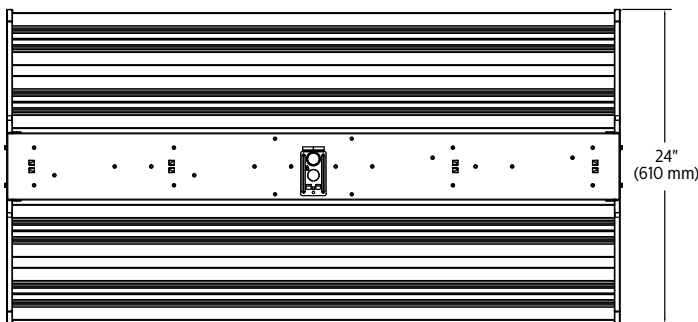
Battery adds 1-7/8" to height



FBX16L
FBX20L
FBX24L



FBX16L high ambient
FBX20L high ambient
FBX24L high ambient



FBX36L
FBX45L

¹ 3-1/2" height for 347V or 480V models.

FBX LED high bay

8000, 12,000, 16,000, 20,000, 24,000, 36,000 or 45,000 lms

LED high bay FBX, general distribution, 24,000 nominal delivered lumens

Catalog No.	FBX24LL40-UNV
Test No.	36994
S/MH	1.3
Lamp Type	LED
Lumens/Lamp	24116
Input Watts	178

Comparative yearly lighting energy cost per 1000 lumens – **\$1.76** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candela distribution

Vertical Angle	Horizontal Angle			
	0°	45°	90°	-45°
0	8924	8924	8924	1656
5	8938	8878	8878	1650
15	8683	8638	8642	1589
25	8133	8116	8102	1437
35	7349	7343	7269	1207
45	6243	6284	6314	929
55	4613	4643	4678	656
65	3105	2930	1538	417
75	1552	293	328	215
85	266	167	177	48

Light Distribution

Degrees	Lumens	% Luminaire
0-30	7035	29.2
0-40	11623	48.2
0-60	20605	85.4
0-180	24116	100.0

Average Luminance

Angle	End	45°	Cross
45	26728	26905	27034
55	24349	24510	24692
65	22241	20988	11016
75	18153	3432	3836
85	9251	5784	6159

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)		80%			70%			50%	
Wall (pw)		70	50	30	70	50	30	50	30
RCR									
Zonal cavity method - Effective floor reflectance = 20%									
Room Cavity Ratio	0	119	119	119	116	116	116	111	111
	1	110	106	102	107	103	100	99	96
	2	101	93	87	98	91	85	88	83
	3	92	82	74	90	81	73	78	71
	4	84	73	65	82	72	64	69	62
	5	78	65	57	76	64	56	62	55
	6	72	59	50	70	58	50	56	49
	7	67	53	45	65	53	44	51	44
	8	62	49	40	60	48	40	47	39
	9	58	45	37	56	44	36	43	36
	10	54	41	33	53	41	33	40	33

LED high bay FBX, medium distribution, 24,000 nominal delivered lumens

Catalog No.	FBX24LL40-UNV-M
Test No.	37068
S/MH	1.4
Lamp Type	LED
Lumens/Lamp	24934
Input Watts	178

Comparative yearly lighting energy cost per 1000 lumens – **\$1.71** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candela distribution

Vertical Angle	Horizontal Angle			
	0°	45°	90°	-45°
0	14574	14574	14574	1656
5	14686	14606	14672	1650
15	15037	15106	15117	1589
25	13662	15466	15670	1437
35	10123	12260	12657	1207
45	3665	6413	4863	929
55	798	532	301	656
65	452	153	109	417
75	181	54	43	215
85	39	19	18	48

Light Distribution

Degrees	Lumens	% Luminaire
0-30	12560	50.4
0-40	19847	79.6
0-60	24630	98.8
0-180	24934	100.0

Average Luminance

Angle	End	45°	Cross
45	15691	27456	20821
55	4212	2808	1588
65	3235	1095	783
75	2114	629	497
85	1362	674	611

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)		80%			70%			50%	
Wall (pw)		70	50	30	70	50	30	50	30
RCR									
Zonal cavity method - Effective floor reflectance = 20%									
Room Cavity Ratio	0	119	119	119	116	116	116	111	111
	1	113	109	107	110	107	105	103	101
	2	106	100	96	104	99	94	95	92
	3	99	92	86	97	91	85	88	83
	4	93	84	78	91	83	77	81	76
	5	87	78	71	86	77	70	75	69
	6	82	72	65	80	71	64	69	63
	7	77	66	59	76	66	59	64	58
	8	72	61	54	71	61	54	60	54
	9	68	57	50	67	56	50	55	50
	10	64	53	46	63	53	46	52	46

FBX LED high bay

8000, 12,000, 16,000, 20,000, 24,000, 36,000 or 45,000 lms

Photometric Test List

Catalog No.	Test No.	Delivered Lumens	Input Watts*	Efficacy**
FBX08LL40-UNV	36703	8803	61	145
FBX08LL40-UNV-LCA	36704	8479	61	140
FBX08LL40-UNV-LFA	36705	7961	61	131
FBX08LL40-UNV-LCR	36706	7613	61	126
FBX08LL40-UNV-LFR	36707	7682	61	127
FBX08LL40-UNV-N	36708	8892	61	146
FBX08LL40-UNV-N-LCA	36709	8582	61	142
FBX08LL40-UNV-N-LFA	36710	7738	61	128
FBX08LL40-UNV-N-LCR	36711	8488	61	140
FBX08LL40-UNV-N-LFR	36712	7978	61	132
FBX08LL40-UNV-M	36713	8419	61	139
FBX08LL40-UNV-M-LCA	36714	8147	61	134
FBX08LL40-UNV-M-LFA	36715	8211	61	135
FBX08LL40-UNV-M-LCR	36716	8178	61	135
FBX08LL40-UNV-M-LFR	36717	7932	61	131
FBX08LL40-UNV-W	36718	8788	61	145
FBX08LL40-UNV-W-LCA	36719	8482	61	140
FBX08LL40-UNV-W-LFA	36720	7929	61	131
FBX08LL40-UNV-W-LCR	36721	7481	61	123
FBX08LL40-UNV-W-LFR	36722	7638	61	126
FBX08LL40-UNV-A	36723	8665	61	143
FBX08LL40-UNV-A-LCA	36724	8340	61	138
FBX08LL40-UNV-A-LFA	36725	7814	61	129
FBX08LL40-UNV-A-LCR	36726	7381	61	122
FBX08LL40-UNV-A-LFR	36727	7538	61	124
FBX12LL40-UNV	36868	12161	88	139
FBX12LL40-UNV-LCA	36869	11680	87	134
FBX12LL40-UNV-LFA	36870	11037	87	126
FBX12LL40-UNV-LCR	36871	10491	87	120
FBX12LL40-UNV-LFR	36872	10611	87	122
FBX12LL40-UNV-N	36873	12331	88	141
FBX12LL40-UNV-N-LCA	36874	11910	87	136
FBX12LL40-UNV-N-LFA	36875	10821	88	123
FBX12LL40-UNV-N-LCR	36876	11622	87	133
FBX12LL40-UNV-N-LFR	36877	11007	87	126
FBX12LL40-UNV-M	36878	12099	88	138
FBX12LL40-UNV-M-LCA	36879	11697	87	134
FBX12LL40-UNV-M-LFA	36880	10633	88	121
FBX12LL40-UNV-M-LCR	36881	11156	87	128
FBX12LL40-UNV-M-LFR	36882	10914	87	125
FBX12LL40-UNV-W	36883	12152	88	139
FBX12LL40-UNV-W-LCA	36884	11714	88	134
FBX12LL40-UNV-W-LFA	36885	10961	87	126
FBX12LL40-UNV-W-LCR	36886	10425	88	119
FBX12LL40-UNV-W-LFR	36887	10542	87	121
FBX12LL40-UNV-A	36888	11904	87	136
FBX12LL40-UNV-A-LCA	36889	11436	87	131
FBX12LL40-UNV-A-LFA	36890	10805	88	123
FBX12LL40-UNV-A-LCR	36891	10163	87	116
FBX12LL40-UNV-A-LFR	36892	10386	87	119
FBX16LL40-UNV	37213	17146	125	138
FBX16LL40-UNV-LCA	37214	16541	124	133
FBX16LL40-UNV-LFA	37215	15497	124	125
FBX16LL40-UNV-LCR	37216	15577	124	125

Catalog No.	Test No.	Delivered Lumens	Input Watts*	Efficacy**
FBX16LL40-UNV-LFR	37217	15748	124	127
FBX16LL40-UNV-N	37218	18152	125	146
FBX16LL40-UNV-N-LCA	37219	17586	124	141
FBX16LL40-UNV-N-LFA	37220	16328	124	131
FBX16LL40-UNV-N-LCR	37221	16739	124	135
FBX16LL40-UNV-N-LFR	37222	15589	124	125
FBX16LL40-UNV-M	37223	18129	125	146
FBX16LL40-UNV-M-LCA	37224	17567	124	141
FBX16LL40-UNV-M-LFA	37225	16189	124	130
FBX16LL40-UNV-M-LCR	37226	16787	124	135
FBX16LL40-UNV-M-LFR	37227	15221	124	122
FBX16LL40-UNV-W	37228	17408	125	140
FBX16LL40-UNV-W-LCA	37229	16739	124	135
FBX16LL40-UNV-W-LFA	37230	15422	124	124
FBX16LL40-UNV-W-LCR	37231	15389	124	124
FBX16LL40-UNV-W-LFR	37232	14627	124	118
FBX16LL40-UNV-A	37233	17280	125	139
FBX16LL40-UNV-A-LCA	37234	16655	124	134
FBX16LL40-UNV-A-LFA	37235	15201	124	122
FBX16LL40-UNV-A-LCR	37236	14301	124	115
FBX16LL40-UNV-A-LFR	37237	14453	124	116
FBX20LL40-UNV	36989	19618	142	138
FBX20LL40-UNV-LCA	36990	18961	142	133
FBX20LL40-UNV-LFA	36991	17622	142	124
FBX20LL40-UNV-LCR	36992	17538	142	123
FBX20LL40-UNV-LFR	36993	16721	142	118
FBX20LL40-UNV-N	37086	20570	143	144
FBX20LL40-UNV-N-LCA	37087	19849	142	140
FBX20LL40-UNV-N-LFA	37088	18510	142	130
FBX20LL40-UNV-N-LCR	37089	19234	142	135
FBX20LL40-UNV-N-LFR	37090	17750	142	125
FBX20LL40-UNV-M	37091	20544	142	145
FBX20LL40-UNV-M-LCA	37092	19919	142	140
FBX20LL40-UNV-M-LFA	37093	18361	142	129
FBX20LL40-UNV-M-LCR	37094	18231	142	128
FBX20LL40-UNV-M-LFR	37095	17479	142	123
FBX20LL40-UNV-W	37096	20054	142	141
FBX20LL40-UNV-W-LCA	37097	19268	142	136
FBX20LL40-UNV-W-LFA	37098	17626	142	124
FBX20LL40-UNV-W-LCR	37099	17531	142	124
FBX20LL40-UNV-W-LFR	37100	16569	142	117
FBX20LL40-UNV-A	37101	20310	142	143
FBX20LL40-UNV-A-LCA	37102	19563	142	137
FBX20LL40-UNV-A-LFA	37103	17336	142	122
FBX20LL40-UNV-A-LCR	37104	16228	142	114
FBX20LL40-UNV-A-LFR	37105	16435	142	116
FBX24LL40-UNV	36994	24116	178	136
FBX24LL40-UNV-LCA	36995	23178	178	131
FBX24LL40-UNV-LFA	36996	21612	178	122
FBX24LL40-UNV-LCR	36997	20473	178	115
FBX24LL40-UNV-LFR	36998	20647	178	116
FBX24LL40-UNV-N	37041	24929	178	140
FBX24LL40-UNV-N-LCA	37042	24127	178	136
FBX24LL40-UNV-N-LFA	37043	22556	178	127

FBX LED high bay

8000, 12,000, 16,000, 20,000, 24,000, 36,000 or 45,000 lms

Photometric Test List (continued)

Catalog No.	Test No.	Delivered Lumens	Input Watts*	Efficacy**
FBX24LL40-UNV-N-LCR	37044	23439	178	132
FBX24LL40-UNV-N-LFR	37045	21689	178	122
FBX24LL40-UNV-M	37068	24934	178	140
FBX24LL40-UNV-M-LCA	37069	24144	178	136
FBX24LL40-UNV-M-LFA	37070	22411	178	126
FBX24LL40-UNV-M-LCR	37071	22382	178	126
FBX24LL40-UNV-M-LFR	37072	21446	178	121
FBX24LL40-UNV-W	37073	24556	178	138
FBX24LL40-UNV-W-LCA	37074	23598	178	133
FBX24LL40-UNV-W-LFA	37075	21634	178	122
FBX24LL40-UNV-W-LCR	37076	20217	178	114
FBX24LL40-UNV-W-LFR	37077	20621	178	116
FBX24LL40-UNV-A	37078	24162	178	136
FBX24LL40-UNV-A-LCA	37079	23255	178	131
FBX24LL40-UNV-A-LFA	37080	21369	177	121
FBX24LL40-UNV-A-LCR	37081	20076	177	113
FBX24LL40-UNV-A-LFR	37082	20369	178	114
FBX36LL40-UNV	37390	37114	256	145
FBX36LL40-UNV-LCA	37391	35859	256	140
FBX36LL40-UNV-LFA	37392	33561	255	131
FBX36LL40-UNV-LCR	37393	32400	255	127
FBX36LL40-UNV-LFR	37394	32438	255	127
FBX36LL40-UNV-N	37395	37692	256	147
FBX36LL40-UNV-N-LCA	37396	36527	255	143
FBX36LL40-UNV-N-LFA	37397	34433	255	135
FBX36LL40-UNV-N-LCR	37398	35941	255	141
FBX36LL40-UNV-N-LFR	37399	33581	255	132
FBX36LL40-UNV-M	37427	37772	256	148
FBX36LL40-UNV-M-LCA	37428	36639	256	143
FBX36LL40-UNV-M-LFA	37429	34321	255	134
FBX36LL40-UNV-M-LCR	37430	34553	255	135
FBX36LL40-UNV-M-LFR	37431	33203	255	130
FBX36LL40-UNV-W	37432	37443	255	147
FBX36LL40-UNV-W-LCA	37433	36049	255	141

Catalog No.	Test No.	Delivered Lumens	Input Watts*	Efficacy**
FBX36LL40-UNV-W-LFA	37434	33446	255	131
FBX36LL40-UNV-W-LCR	37435	31990	255	125
FBX36LL40-UNV-W-LFR	37436	32240	255	126
FBX36LL40-UNV-A	37437	37205	256	146
FBX36LL40-UNV-A-LCA	37438	35811	255	140
FBX36LL40-UNV-A-LFA	37439	32991	255	129
FBX36LL40-UNV-A-LCR	37440	31645	255	124
FBX36LL40-UNV-A-LFR	37441	31928	255	125
FBX45LL40-UNV	37307	45548	316	144
FBX45LL40-UNV-LCA	37308	43899	315	139
FBX45LL40-UNV-LFA	37309	41130	315	130
FBX45LL40-UNV-LCR	37310	39574	315	126
FBX45LL40-UNV-LFR	37311	39745	315	126
FBX45LL40-UNV-N	37312	43101	315	137
FBX45LL40-UNV-N-LCA	37313	44534	315	141
FBX45LL40-UNV-N-LFA	37314	42231	315	134
FBX45LL40-UNV-N-LCR	37315	43429	315	138
FBX45LL40-UNV-N-LFR	37316	41197	315	131
FBX45LL40-UNV-M	37324	46177	316	146
FBX45LL40-UNV-M-LCA	37325	44809	315	142
FBX45LL40-UNV-M-LFA	37326	42145	315	134
FBX45LL40-UNV-M-LCR	37327	42271	315	134
FBX45LL40-UNV-M-LFR	37328	40842	315	130
FBX45LL40-UNV-W	37329	45735	315	145
FBX45LL40-UNV-W-LCA	37330	44154	315	140
FBX45LL40-UNV-W-LFA	37331	41156	315	131
FBX45LL40-UNV-W-LCR	37332	39366	315	125
FBX45LL40-UNV-W-LFR	37333	39605	315	126
FBX45LL40-UNV-A	37334	45627	315	145
FBX45LL40-UNV-A-LCA	37335	43876	315	139
FBX45LL40-UNV-A-LFA	37336	40574	315	129
FBX45LL40-UNV-A-LCR	37337	38636	315	123
FBX45LL40-UNV-A-LFR	37338	39182	315	124

* Add 7% for 347V and 480V models

** "UNV" models

© 2016 Philips Lighting Holding B.V. All rights reserved. Philips reserves the right to make changes in specifications and/or discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication. philips.com/luminaires



Philips Lighting North America Corporation
200 Franklin Square Drive, Somerset, NJ 08873
Tel. 855-486-2216

Philips Lighting Canada Ltd.
281 Hillmount Rd, Markham, ON, Canada L6C 2S3
Tel. 800-668-9008



Rectangular shaped LED floodlight designed to replace 250W Metal Halide. Patent Pending airflow technology ensures long LED and driver lifespan. Use for building facade lighting, sign lighting, LED landscape lighting and instant-on security lighting.

Color: Bronze

Weight: 14.2 lbs

Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type:	Constant Current	Watts:	80W
120V:	N/A	Color Temp:	5000K
208V:	0.48A	Color Accuracy:	72 CRI
240V:	0.41A	L70 Lifespan:	100000
277V:	0.36A	Lumens:	9,672
Input Watts:	89W	Efficacy:	109 LPW
Efficiency:	90%		

Technical Specifications

Listings

UL Listing:

Suitable for wet locations. Suitable for ground mounting.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.

DLC Product Code: PTKPSNQC

LED Characteristics

LEDs:

Multi-chip, high-output, long-life LEDs

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for (SSL) Products, ANSI C78.377-2015.

Electrical

Driver:

Constant Current, Class 2, 100-277V, 50/60 Hz, 6 kV surge protection, 120V: 0.74 A, 208V: 0.48 A, 240V: 0.41 A, 277V: 0.36 A

THD:

11.6% at 120V, 19.5% at 277V

Power Factor:

98.5% at 120V, 89.8% at 277V

Photocell:

277V Button Photocell Included. Photocell is compatible with 208V-277V.

Construction

IP Rating:

Ingress Protection rating of IP66 for dust and water

Ambient Temperature:

Suitable for use in 40°C ambient temperatures.

Cold Weather Starting:

The minimum starting temperature is -40°C/-40°F

Thermal Management Housing:

Superior heat sinking with external Air-Flow fins.

Housing:

Die-cast aluminum housing, lens frame and mounting arm.

Threaded Size:

1/2" threaded arm.

Mounting:

Heavy-duty Trunnion mount with stainless steel hardware.

Effective Projected Area:

EPA = 0.65

Reflector:

Specular polycarbonate

Gaskets:

High-temperature silicone gaskets.

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

Optical

NEMA Type:

NEMA Beam Spread of 7H x 6V

Other

Equivalency:

The FFLED80 is equivalent in delivered lumens to a 250W Metal Halide.

Technical Specifications (continued)

Other

California Title 24:

Select an FFLED80T model equipped with a 0-10V driver (look for /D10 in the catalog #) for a 2013 California Title 24 compliant model.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Patents:

The FFLED design is protected by U.S. Pat. D643,147, Canada Pat. 140798, China Pat. ZL201130171304.1, Mexico Pat. 36757 and pending patent in Taiwan.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010).

Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

American Bureau of Shipping (ABS) :

For use on Mobile Offshore Drilling Units (MODU) and shipping vessels.

Dimensions



Features

- Ultra efficient LED and optical design
- Replaces 250W MH floodlights
- 100,000 hour life based on LM-80 tests
- Air-flow technology heatsink
- 5-year warranty

Ordering Matrix

Family	Watts	Mount	Color Temp	Beam Spread	Finish	Dimming	Photocell
FFLED	80 = 80W	Blank = Arm T = Trunnion SF = Slipfitter	Blank = 5000K (Cool) Y = 3000K (Warm) N = 4000K (Neutral)	Blank = 7H x 6V B44 = 4H x 4V B55 = 5H x 5V	Blank = Bronze W = White	Blank = No Dimming /D10 = Dimmable	Blank = No Photocell /PC = 120V Button /PC2 = 277V Button /PCS = 120V Swivel /PCS2 = 277V Swivel



Ultra high output, high efficiency LED floodlight with wide NEMA type 6H x 6V beam spread. Patent Pending airflow technology ensures long LED and driver lifespan. Use for general and security lighting for large areas, building facades, signs and landscapes.

Color: Bronze

Weight: 25.0 lbs

Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type:	Constant Current	Watts:	105W
120V:	0.89A	Color Temp:	5000K
208V:	0.58A	Color Accuracy:	65 CRI
240V:	0.50A	L70 Lifespan:	100000
277V:	0.44A	Lumens:	10,908
Input Watts:	107W	Efficacy:	102 LPW
Efficiency:	98%		

Technical Specifications

Listings

UL Listing:

Suitable for wet locations. Suitable for ground mounting.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have been received the Department of Energy "Lighting Facts" label.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.

DLC Product Code: P0000176J

LED Characteristics

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

LEDs:

Multi-chip, high-output, long-life LEDs

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

Construction

IP Rating:

Ingress Protection rating of IP66 for dust and water

Maximum Ambient Temperature:

Suitable for use in 104°F (40°C) ambient temperatures

Effective Projected Area:

EPA = 2

Cold Weather Starting:

The minimum starting temperature is -40°C/-40°F

Thermal Management:

Superior thermal management with external Air-Flow fins.

Housing:

Die-cast aluminum housing and door frame

Mounting:

Heavy-duty Trunnion mount with stainless steel hardware

Reflector:

Specular, vacuum-metalized polycarbonate

Gaskets:

High-temperature silicone gaskets

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

Electrical

Drivers:

Two Drivers, Constant Current, Class 2, 1400mA, 100-277V, 50/60Hz, 0.8A, Power Factor 99%

THD:

7.6% at 120V, 15.8% at 277V

Optical

NEMA Type:

NEMA Beam Spread of 6H x 6V

Sensor Characteristics

Field & Beam Angles:

Horizontal Beam Angle (50%): 91.8°, Vertical Beam Angle (50%): 73.5° Horizontal Field Angle (10%): 121.0°, Vertical Field Angle (10%): 108.0°

Other

Warranty:

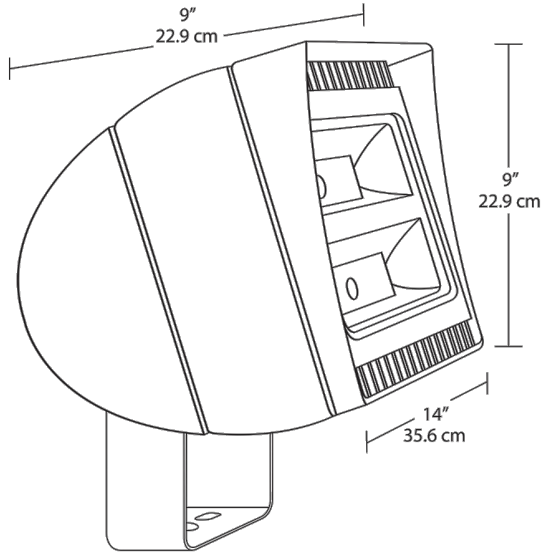
RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Patents:

The design of FXLED105 is protected by patents pending in US, Canada, China, Taiwan and Mexico.

FXLED105T

Dimensions



Features

- 66% energy cost savings vs. HID
- NEMA Type - 6H x 6V
- Air-Flow technology heat dissipation
- 100,000-hour LED lifespan
- 5-year warranty

Ordering Matrix

Family	Watts	Mount	Color Temp	Finish	Voltage	Photocell	Bi-Level
FXLED	105 = 105W	T = Trunnion SF = Slipfitter	Blank = 5000K (Cool) Y = 3000K (Warm) N = 4000K (Neutral)	Blank = Bronze W = White	Blank = 120-277V /480 = 480V	Blank = No Photocell /PCT = 120-277V Twistlock Photocell /PCT4 = 480V Twistlock Photocell	Blank = No Bi-Level /BL = Bi-Level



Ultra high output, high efficiency LED floodlight with twistlock photocell. Available with wide NEMA type 6H x 6V beam spread. Patent Pending airflow technology ensures long LED and driver lifespan. Use for general and security lighting for large areas, building facades, signs and landscapes.

Color: Bronze

Weight: 25.0 lbs

Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type:	Constant Current	Watts:	105W
120V:	0.89A	Color Temp:	5000K
208V:	0.58A	Color Accuracy:	65 CRI
240V:	0.50A	L70 Lifespan:	100000
277V:	0.44A	Lumens:	10,908
Input Watts:	107W	Efficacy:	102 LPW
Efficiency:	98%		

Technical Specifications

Listings

UL Listing:

Suitable for wet locations. Suitable for ground mounting.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have been received the Department of Energy "Lighting Facts" label.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.

LED Characteristics

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

LEDs:

Multi-chip, high-output, long-life LEDs

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

Construction

IP Rating:

Ingress Protection rating of IP66 for dust and water

Maximum Ambient Temperature:

Suitable for use in 104°F (40°C) ambient temperatures

Effective Projected Area:

EPA = 2

Cold Weather Starting:

The minimum starting temperature is -40°C/-40°F

Thermal Management:

Superior thermal management with external Air-Flow fins.

Housing:

Die-cast aluminum housing and door frame

Mounting:

Heavy-duty Trunnion mount with stainless steel hardware

Reflector:

Specular, vacuum-metalized polycarbonate

Gaskets:

High-temperature silicone gaskets

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

Electrical

Drivers:

Two Drivers, Constant Current, Class 2, 1400mA, 100-277V, 50/60Hz, 0.8A, Power Factor 99%

THD:

7.6% at 120V, 15.8% at 277V

Photocell:

120-277V Twistlock Photocell Included. Photocell is compatible with 120V-277V.

Optical

NEMA Type:

NEMA Beam Spread of 6H x 6V

Sensor Characteristics

Field & Beam Angles:

Horizontal Beam Angle (50%): 91.8°, Vertical Beam Angle (50%): 73.5° Horizontal Field Angle (10%): 121.0°, Vertical Field Angle (10%): 108.0°

Other

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Patents:

The design of FXLED105 is protected by patents pending in US, Canada, China, Taiwan and Mexico.

Technical Specifications (continued)

Other

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010).

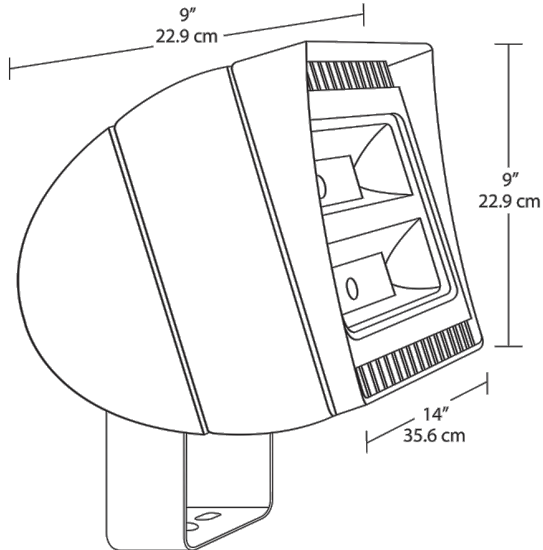
Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

Dimensions



Features

100,000 hour life based on LM-80 tests

Air-flow technology heatsink

5-year warranty

Twistlock Photocell



Ultra high output, high efficiency LED floodlight with NEMA Types: 7H x 6V, 6H x 4V, 4H x 6V, 5H x 5V and 3H x 3V. Patent Pending airflow technology ensures long LED and driver lifespan. Use for general and security lighting for large areas, building facades, signs and landscapes.

Color: Bronze

Weight: 66.1 lbs

Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type:	Constant Current	Watts:	300W
120V:	2.69A	Color Temp:	5000K
208V:	1.57A	Color Accuracy:	72 CRI
240V:	1.36A	L70 Lifespan:	100000
277V:	1.18A	Lumens:	38,292
Input Watts:	315W	Efficacy:	122 LPW
Efficiency:	95%		

Technical Specifications

Listings

UL Listing:

Suitable for wet locations. Suitable for ground mounting.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have been received the Department of Energy "Lighting Facts" label.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.
DLC Product Code: PF5PMFXJ

Electrical

Drivers:

Constant Current, 1050mA, 50/60 Hz, 120-277V, 4 kV surge protection, 120V: 2.69A, 208V: 1.57A, 240V: 1.36A, 277V: 1.18A, THD <20%, Power Factor: 99%

THD:

6.8% at 120V, 10.9% at 277V

Optical

NEMA Type:

NEMA Beam Spread of 7H x 6V

LED Characteristics

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

LEDs:

Multip-chip, high-output, long-life LEDs

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

Construction

IP Rating:

Ingress Protection rating of IP66 for dust and water

Maximum Ambient Temperature:

Suitable for use in 104°F (40°C) ambient temperatures

Effective Projected Area:

EPA = 4

Cold Weather Starting:

The minimum starting temperature is -40°C/-40°F

Thermal Management:

Superior thermal management with external Air-Flow fins.

Housing:

Die-cast aluminum housing and door frame

Mounting:

Heavy-duty Trunnion mount with stainless steel hardware

Reflector:

Specular and semi-specular vacuum metalized polycarbonate

Gaskets:

High-temperature silicone gaskets

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

Other

Replacement:

The FXLED300 replaces 1000W Metal Halide Floodlights.

Warranty:

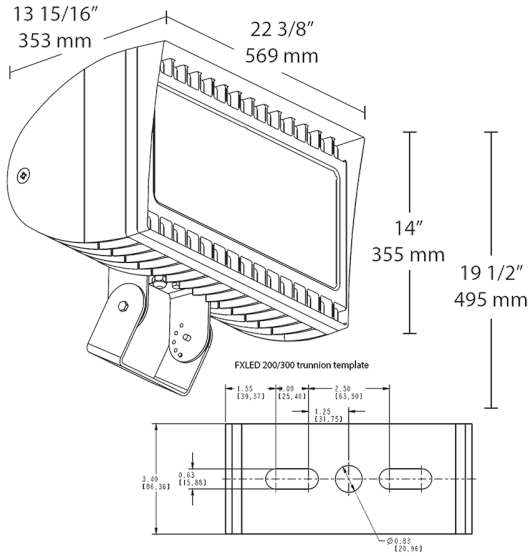
RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

American Bureau of Shipping (ABS) :

For use on Mobile Offshore Drilling Units (MODU) and shipping vessels.

FXLED300T

Dimensions



Features

- 300W replaces 1000 MH floodlights
- 100,000-hour LED lifespan
- 5-year No Compromise Warranty

Ordering Matrix

Family	Watts	Mount	Color Temp	Beam Spread	Finish	Dimming	Voltage	Photocell	Bi-Level
FXLED									
	300 = 300W	SF = Slipfitter T = Trunnion	Blank = 5000K (Cool) Y = 3000K (Warm) N = 4000K (Neutral)	Blank = 7H x 6V B64 = 6H x 4V B55 = 5H x 5V B46 = 4H x 6V B44 = 4H x 4V B33 = 3H x 3V	Blank = Bronze W = White	Blank = No Dimming /D10 = Dimmable	Blank = 120-277V /480 = 480V	Blank = No Photocell /PCS = 120V Swivel /PCS2 = 277V Swivel /PCS4 = 480V Swivel /PCT = 120-277V Twistlock /PCT4 = 480V Twistlock	Blank = No Bi-Level /BL = Bi-Level



Bullet shape die cast aluminum flood with 18 Watt LED Light Engine. Comes with spotlight reflector installed.

Color: Bronze

Weight: 4.6 lbs

Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type:	Constant Current	Watts:	18W
120V:	0.17A	Color Temp:	5000K
208V:	0.11A	Color Accuracy:	68 CRI
240V:	0.10A	L70 Lifespan:	100000
277V:	0.09A	Lumens:	1,997
Input Watts:	20W	Efficacy:	101 LPW
Efficiency:	91%		

Technical Specifications

Listings

UL Listing:

Suitable for wet locations. Suitable for ground mounting.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.

DLC Product Code: PHZ3TK2C1

Electrical

Driver:

Constant Current, 500mA, Class 2 120-277V with 4kV surge protection, 120V: 0.17A, 208V: 0.11A, 240V: 0.10A, 277V: 0.09A, 50/60Hz THD < 20%, Power Factor: 99%

THD:

10.3% at 120V

Optical

NEMA Type:

NEMA Beam Spread of 3H x 3V

LED Characteristics

LEDs:

Multi-chip, high-output, long-life LEDs

Color Stability:

RAB LEDs exceed industry standards for chromatic stability.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

Construction

Cold Weather Starting:

The minimum starting temperature is -40°F (-40°C)

Thermal Management:

Superior heat sinking with external Air-Flow fins

Housing:

Precision die-cast aluminum housing, lens frame and mounting arm

Reflector:

Semi-specular, vacuum-metalized polycarbonate

Mounting:

Heavy-duty mounting arm with "O" ring seal & stainless steel screws.

Gaskets:

High-temperature silicone gaskets

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contain no VOC or toxic heavy metals.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

Other

California Title 24:

HSLED18 comply with 2013 California Title 24 building and electrical codes as a commercial outdoor non-pole-mounted fixture ≤ 30 Watts when used with a photosensor control. Select catalog number PCS900 (120V) or PCS1900/277 (277V) to order a photosensor.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010).

Trade Agreements Act Compliant:

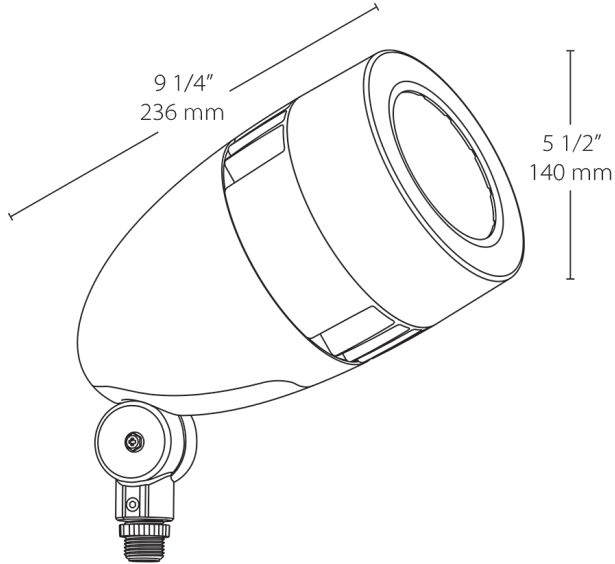
This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

HSLED18A

Dimensions



Features

- 80% energy savings vs. PAR floods
- Mount on junction box or on RAB Mighty Post
- Patent-pending Air-Flow technology
- 5-year warranty

Ordering Matrix

Family	Watts	Finish	Dimming
HSLED	18 = 18W	A = Bronze B = Black VG = Verde Green W = White	Blank = No Dimming /D10 = Dimmable

Ideal for High-quality Illumination in:

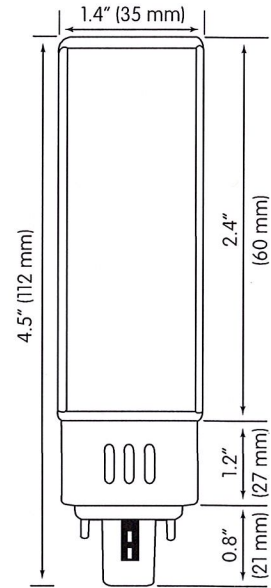
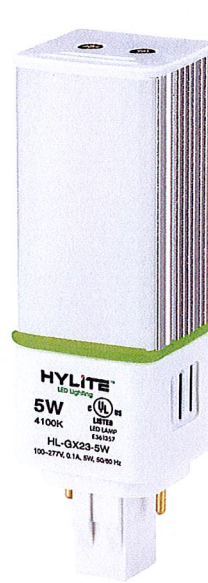
- Down Lights
- Wall Scones
- Bollards
- Wall Packs
- Decorative Lighting
- Accent Lighting
- Ceiling Lights
- Task Lighting
- Pedestrian Tunnels
- Pendant Lights
- Walkway Lighting
- Stairwell Lighting
- Corridor Lighting
- Carriage Lanterns

High Performance LED PL Lamp, 5W

The HyLite High Performance LED PL Lamp is an ideal energy-efficient replacement for CFL and Incandescent Bulb installations in existing and new fixtures. The LED PL Lamp provides energy-efficient illumination at a wide beam angle of 120° and replaces CFL Bulbs up to 13W, effectively reducing energy consumption by up to 62%, and as much as 90% when replacing 50W Incandescent Bulbs. HyLite LED PL Lamps are rated at up to 50,000 hours of lamp life. This is 50 times longer than a traditional Incandescent Bulb, and 7 times longer than a CFL Bulb. This significantly reduces energy usage and costs as well as maintenance expenditures.

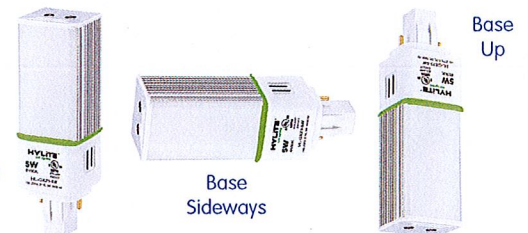


- Optimal Design for Horizontal or Vertical mount Sockets
- Suitable for Damp Location
- Full Brightness with Instant On and Instant Restrike
- Low Power Consumption
- Universal Voltage: 100-277V, AC
- >80 CRI for great visibility
- Easy Installation: No Ballast necessary. AC Direct Retrofit.
- Heat & Impact Resistant, UV Protected, Non-yellowing, Optical Grade Lens
- Excellent Heat Dissipation with proprietary-designed Heat Sink
- Cool Operation: Does not add to Heat Load (up to 90% less heat than Incandescent) while producing brilliantly bright light
- Non-combustible. Made from Flame Retardant, Engineered Polymer, the Base is Mechanically Strong and Heat-resistant up to 435°F (225°C)
- Safe and Reliable: Isolated Circuit Design
- Maintenance-free Operation: Lasts up to 50 times longer than incandescent bulb. Lowers Costs by Reducing Relamp Frequency
- Safe: Contain No Hazardous Materials; RoHS Compliant: No Lead, Mercury, Toxic Metals or Arsenic Gases. No disposal requirements. Facilitates LEED® points
- No Electro-Magnetic (EMI) or Radio Frequency Interference (RFI)
- Environmentally Friendly: 98% of the HyLite LED Bulb is recyclable
- Longer Life = Increased Sustainability + Dependability
- 5 Year Limited Warranty



Universal Burning Positioning

Lamp can be oriented in any position - does not affect or diminish the life of the lamp



Incandescent	Halogen	CFL	Replace with	HyLite
50W	30W	13W		5W
90%	83%	62%	Energy Savings (%)	

98% RECYCLABLE

NO LEAD, MERCURY, HEAVY METALS OR TOXIC GASES

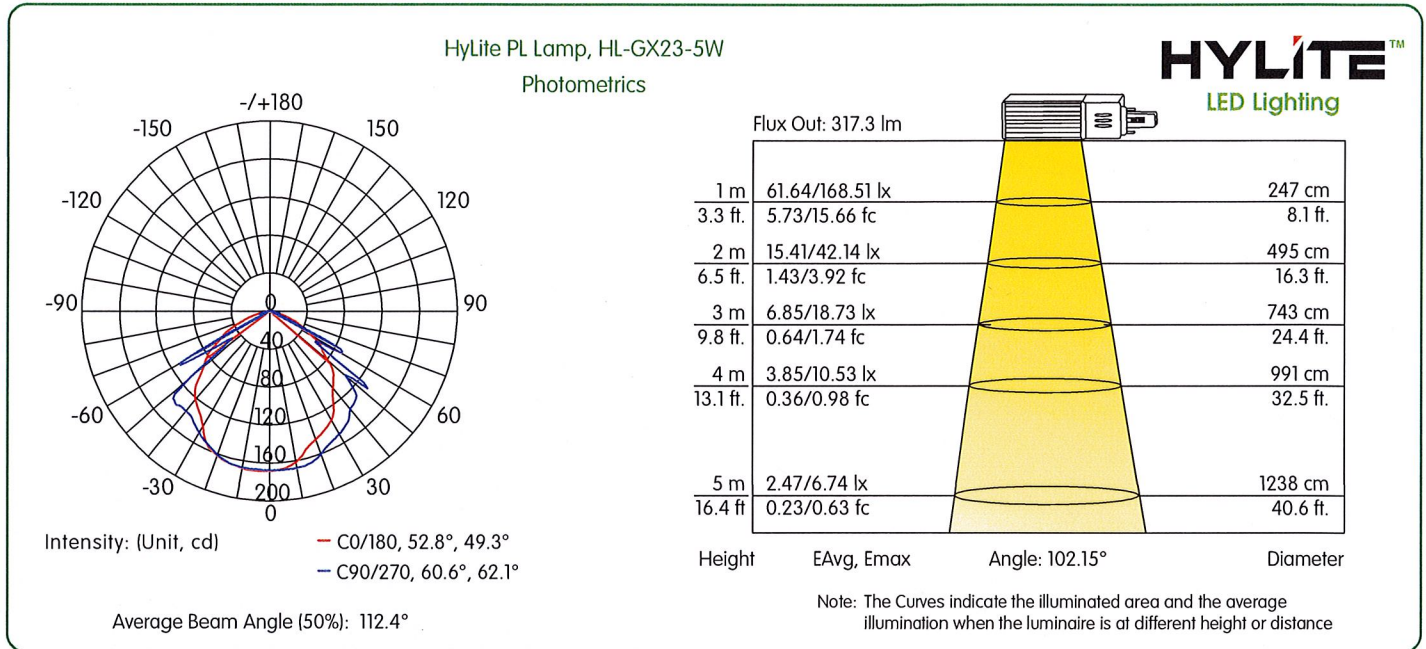
Longer Life Up to 50,000 Hours Increased Sustainability	Energy Costs Reduction of up to 90%	Power Low Consumption	Beam Angle Wide and Uniform	Lumen Efficacy 115 lpw LM-79 Tested	No IR/UV Radiation-Free No Humming	No EMI / RFI Zero Interference	Solid State Vibration and Shock Resistant	Reliability LM-80 Tested ISTMT Tested	Warranty 5 years Reliable and Long-Lasting
--	---	---------------------------------	---------------------------------------	---	--	--	---	---	--

As part of the company's continuous product improvement program, HyLite reserves the right to change materials or modify the design of its product without notification. All Specifications subject to change without notice. All values are design and/or typical values when measured under laboratory conditions. Actual Values depend upon the ambient temperature of the installation location. Please consult factory for your specific requirements.

Model No.	Watts	Lumens (lm)	Input Line Current	Dimensions & Weight (each)		
				Width	Height	Net Weight
HL-GX23-5W	5	475~525 lm	19~70mA	1.4" (35mm)	4.5" (121mm)	4 oz. (120g)

- Efficacy: 95~115 lpw
- CRI: >80
- Beam Angle: 120°
- Max. THD (%): <10%
- Universal Input Voltage
- Power Factor: >0.9
- Protection: IP20
- Rated Life: 50~60,000 Hrs*.
- Warranty: 5 Years
- 100~277V, AC 50/60 Hz.
- Ambient Working Temperature: -22°F~+140°F (-30°C~+60°C)
- Base Types: GX23, E26/E27 (Special Order Only)
- CCT: 2700K (Warm White), 3500K (Soft White), 4100K (Neutral White) and 5000K (Daylight)

* Depending upon the ambient temperature of the installation location



Ordering for HyLite 5W LED PL Lamp with GX23 or E26 Base & Frosted Lens

Model / Base	Nominal Color Temperature (CCT, °K)
HL-GX23F-5W	-27K 2700K = Warm White (WW)
or	-35K 3500K = Soft White (SW)
HL-E26F-5W	-41K 4100K = Neutral White (NW)
(Medium Base)	-50K 5000K = Daylight (DL)

(HL-E26F-5W is Special Order item Only)

Warning: Disable all Power to the Luminaire. HyLite LED PL Lamps are designed to work off 100V~277V, AC. HyLite LED PL lamps are not compatible with Electronic Ballasts. Electronic Ballast (if equipped) must be bypassed or removed from the luminaire before installing the lamp. Failure to follow instructions will VOID Warranty. It can also result in an Electric Shock, or Fire. NOT FOR TOTALLY ENCLOSED LUMINAIRES OR EMERGENCY LIGHTING. NOT FOR USE WITH DIMMERS.

Warning - Risk of Fire or Electric Shock

- For use in Damp Locations Only. Do not use where directly exposed to Liquid, Vapor, Rain or Weather. Non-Submersible (not water tight).
- Operate in fixtures that provide the free flow of air around the Lamp. This will ensure lumen maintenance and extend its working life. When products are used in outdoor fixtures, ensure the space is waterproof and well-ventilated.
- The installer must determine and verify whether 120V to 277V AC is being utilized at the Luminaire before installation. Improper voltage matching can result in performance degradation and/or physical damage. These lamps work on line voltage and require all Ballasts and Starters to be bypassed.
- Wiring modification for HyLite LED Lamp installation requires knowledge of Luminaire electrical systems. If not qualified, DO NOT attempt installation. Contact a qualified electrician.
- Luminaire Wiring, Ballast, or other Electrical Parts may be damaged when installing. Always check for enclosed Wiring and Components.
- To prevent Wiring Damage or Abrasion, DO NOT expose Wiring to edges of Sheet Metal or other Sharp Objects.
- Do not make or alter any open holes in an enclosure for Wiring or Electrical Components during installation.
- Do not block light emanating from product in whole or part, as this may cause an unsafe condition.
- Installing Surge/Lightning Protectors is highly recommended and helps to eliminate premature driver failure caused by Surges and other Power Fluctuations.
- The end retrofit fixture, once modified, can no longer operate as was originally intended.

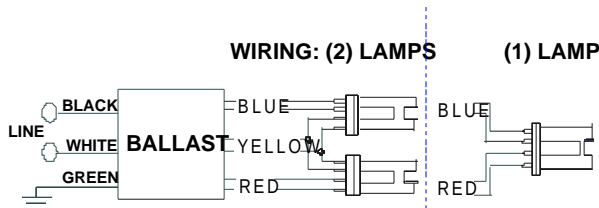


ICF-2S26-H1-LD@120	
Brand Name	SMARTMATE
Ballast Type	Electronic
Starting Method	Programmed Start
Lamp Connection	Series
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Electrical Specifications

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (°F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F.
* CFM26W/GX24Q	1	26	0/-18	0.24	29	1.10	10	0.98	1.5	3.79
CFM26W/GX24q	2	26	0/-18	0.45	54	1.00	10	0.99	1.5	1.85
CFM32W/GX24q	1	32	0/-18	0.31	36	0.98	10	0.98	1.5	2.72
CFM42W/GX24q	1	42	0/-18	0.38	46	0.98	10	0.98	1.5	2.13
CFQ26W/G24q	1	26	0/-18	0.23	27	1.00	10	0.98	1.5	3.70
CFQ26W/G24q	2	26	0/-18	0.43	51	1.00	10	0.99	1.5	1.96
CFS21W/GR10q	2	21	0/-18	0.42	51	1.12	10	0.99	1.5	2.20
FT24W/2G11	2	24	0/-18	0.41	48	0.93	10	0.99	1.5	1.94

Wiring Diagram



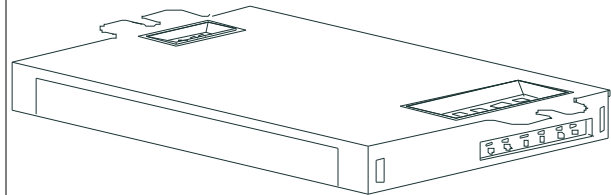
Green Terminal must be Grounded

The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

	in.	cm.		in.	cm.
Black	0.0		Yellow/Blue		
White	0.0		Blue/White		
Blue	0.0		Brown		
Red	0.0		Orange		
Yellow	0		Orange/Black		
Gray			Black/White		
Violet			Red/White		

Enclosure



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
4.98 "	2.4 "	1.0 "	4.6 "
4 49/50	2 2/5	1	4 3/5
12.6 cm	6.1 cm	2.5 cm	11.7 cm

Revised 09/02/2004



Data is based upon tests performed by Advance Transformer in a controlled environment and representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

ADVANCE

O'HARE INTERNATIONAL CENTER · 10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018
 Customer Support/Technical Service: Phone: 800-372-3331 · Fax: 630-307-3071
 Corporate Offices: Phone: 800-322-2086



ICF-2S26-H1-LD@120	
Brand Name	SMARTMATE
Ballast Type	Electronic
Starting Method	Programmed Start
Lamp Connection	Series
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Electrical Specifications

Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be available in a plastic/metal can or all metal can construction to meet all plenum requirements.
- 1.3 Ballast shall be provided with poke-in wire trap connectors color coded per ANSI C82.11.

Section II - Performance Requirements

- 2.1 Ballast shall be Programmed Start except for ballasts with -QS suffix, which shall be Rapid Start.
- 2.2 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.3 Ballast shall operate from 50/60 Hz input source of 120V through 277V with sustained variations of +/- 10% (voltage and frequency) with no damage to the IntelliVolt ballast. RCF models shall operate from 60 Hz input source of 120V with sustained variations of +/- 10% (voltage and frequency) with no damage to the ballast.
- 2.4 Ballast shall be high frequency electronic type and operate lamps at a frequency above 42 kHz to avoid interference with infrared devices and eliminate visible flicker.
- 2.5 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.6 Ballast shall have a minimum ballast factor of 1.00 for primary lamp application.
- 2.7 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less in accordance with lamp manufacturer recommendations.
- 2.8 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.9 Ballast shall have a Class A sound rating.
- 2.10 Ballast shall have a minimum starting temperature of -18C (0F) for primary lamp. Ballasts for PL-H lamps shall have a minimum starting temperature of -30C (-20F) for primary lamp.
- 2.11 Ballast shall provide Lamp EOL Protection Circuit.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions without damage.

Section III - Regulatory Requirements

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall be rated for use in air-handling spaces.
- 3.4 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.5 Ballast shall comply with ANSI C82.11 where applicable.
- 3.6 Ballast shall comply with the requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, Non-Consumer (Class A) for EMI/RFI (conducted and radiated).

Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9002 Quality System Standards.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 75C and three-years for a maximum case temperature of 85C (90C 3year warranty for ICF1H120-M4-XX, ICF2S42-90C-M2-XX and ICF2S70-M4-XX modesls).
- 4.3 Manufacturer shall have a fifteen-year history of producing electronic ballasts for the North American market.

Revised 09/02/2004



Data is based upon tests performed by Advance Transformer in a controlled environment and representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

ADVANCE

O'HARE INTERNATIONAL CENTER - 10275 WEST HIGGINS ROAD
 ROSEMONT, ILLINOIS 60018
 TELEPHONE: (847) 390-5000 FAX: (847) 390-5109

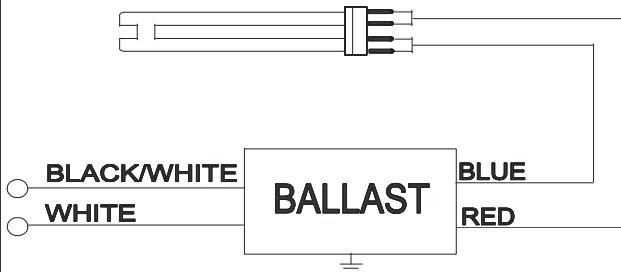


Electrical Specifications

ICN-1TTP40-SC @ 120V	
Brand Name	CENTIUM
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (°F/°C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F.
* FT40W/2G11	1	40	0/-18	0.33	39	0.90	10	0.98	1.5	2.31
FT40W/2G11/ES (25W)	1	25	0/-18	0.28	33	0.90	10	0.98	1.7	2.73
FT40W/2G11/RS	1	40	0/-18	0.33	39	0.90	10	0.98	1.5	2.31

Wiring Diagram

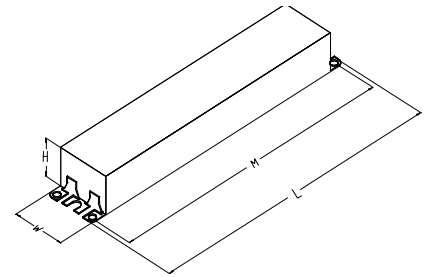


The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

	in.	cm.		in.	cm.
Black		0	Yellow/Blue		0
White	25	63.5	Blue/White		0
Blue	30	76.2	Brown		0
Red	30	76.2	Orange		0
Yellow		0	Orange/Black		0
Gray		0	Black/White	25	63.5
Violet		0	Red/White		0

Enclosure



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
9.50 "	1.7 "	1.18 "	8.90 "
9 1/2	1 7/10	1 9/50	8 9/10
24.1 cm	4.3 cm	3 cm	22.6 cm



Revised 11/13/08

Data is based upon tests performed by Advance Transformer in a controlled environment and representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

ADVANCE TRANSFORMER CO.

O'HARE INTERNATIONAL CENTER · 10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018
 Customer Support/Technical Service: Phone: 800-372-3331 · Fax: 847-768-7768
 Corporate Offices: Phone: 800-322-2086



Electrical Specifications

ICN-1TTP40-SC@120V	
Brand Name	CENTIUM
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads color-coded per ANSI C82.11.

Section II - Performance

- 2.1 Ballast shall be _____ (Instant, Rapid or Programmed) Start.
- 2.2 Ballast shall provide Independent Lamp Operation (ILO) for Instant Start ballasts allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- 2.3 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power (except T8/HO ballast).
- 2.4 Ballast shall operate from 50/60 Hz input source of _____ (120V through 277V or 347V through 480V) with sustained variations of +/- 10% (voltage and frequency).
- 2.5 Ballast shall be high frequency electronic type and operate lamps at a frequency above 42 kHz to avoid interference with infrared devices and eliminate visible flicker.
- 2.6 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.7 Ballast shall have a minimum ballast factor for primary lamp application as follows: 0.75 for Low Watt, 0.85 for Normal Light Output and 1.20 for High Light.
- 2.8 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.9 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.10 Ballast shall have a Class A sound rating for all 4-foot lamps and smaller.
- 2.11 Ballast shall have a minimum starting temperature of _____ [-18C (0F) for standard T8 and Long Twin Tube lamps, 10C (50F) for standard T12 lamps, 0C (32F) for Slimline T8 lamps, -29C (-20F) for HO lamps.] for primary lamp application. Ballast shall have a minimum starting temperature of 16C (60F) for energy-saving lamps.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Ballast for T8 lamps shall provide lamp striation-reduction circuitry.
- 2.14 Ballast for FT5 lamps shall provide lamp EOL protection circuitry.

Section III - Regulatory

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.
- 3.6 Ballast shall comply with NEMA 410 for in-rush current limits.
- 3.7 Ballast for T8 lamps shall meet NEMA Premium/CEE High Performance T8 Lighting System Specifications.
- 3.8 Ballast shall meet RoHS Compliance Standards

Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.
- 4.4 Energy saving T8 lamps (25W, 28W or 30W) may experience lamp striations if operated on ballasts not rated for their use.



Revised 11/13/08

Data is based upon tests performed by Advance Transformer in a controlled environment and representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

ADVANCE TRANSFORMER CO.

O'HARE INTERNATIONAL CENTER - 10275 WEST HIGGINS ROAD - ROSEMONT, ILLINOIS 60018
 TELEPHONE: (847)390-5000 FAX: (847)768-7768

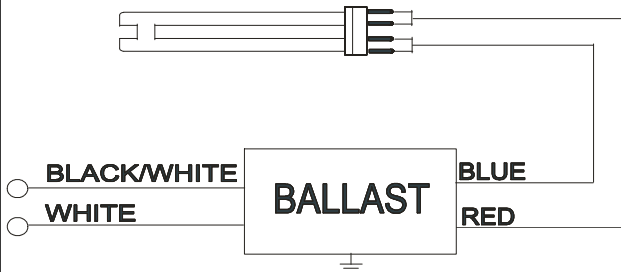


Electrical Specifications

ICN-1TTP40-SC@277V	
Brand Name	CENTIUM
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (°F/°C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F.
* FT40W/2G11	1	40	0/-18	0.14	38	0.90	10	0.98	1.5	2.37
FT40W/2G11/ES (25W)	1	25	0/-18	0.12	32	0.90	10	0.98	1.7	2.81
FT40W/2G11/RS	1	40	0/-18	0.14	38	0.90	10	0.98	1.5	2.37

Wiring Diagram

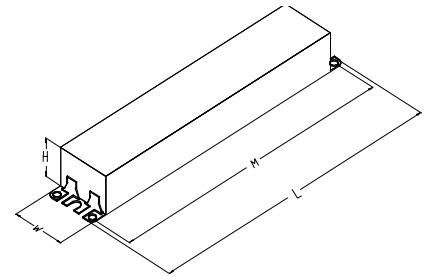


The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

	in.	cm.		in.	cm.
Black		0	Yellow/Blue		0
White	25	63.5	Blue/White		0
Blue	30	76.2	Brown		0
Red	30	76.2	Orange		0
Yellow		0	Orange/Black		0
Gray		0	Black/White	25	63.5
Violet		0	Red/White		0

Enclosure



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
9.50 "	1.7 "	1.18 "	8.90 "
9 1/2	1 7/10	1 9/50	8 9/10
24.1 cm	4.3 cm	3 cm	22.6 cm



Revised 11/13/08

Data is based upon tests performed by Advance Transformer in a controlled environment and representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

ADVANCE TRANSFORMER CO.

O'HARE INTERNATIONAL CENTER · 10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018
 Customer Support/Technical Service: Phone: 800-372-3331 · Fax: 847-768-7768
 Corporate Offices: Phone: 800-322-2086



Electrical Specifications

ICN-1TTP40-SC@277V	
Brand Name	CENTIUM
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads color-coded per ANSI C82.11.

Section II - Performance

- 2.1 Ballast shall be _____ (Instant, Rapid or Programmed) Start.
- 2.2 Ballast shall provide Independent Lamp Operation (ILO) for Instant Start ballasts allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- 2.3 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power (except T8/HO ballast).
- 2.4 Ballast shall operate from 50/60 Hz input source of _____ (120V through 277V or 347V through 480V) with sustained variations of +/- 10% (voltage and frequency).
- 2.5 Ballast shall be high frequency electronic type and operate lamps at a frequency above 42 kHz to avoid interference with infrared devices and eliminate visible flicker.
- 2.6 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.7 Ballast shall have a minimum ballast factor for primary lamp application as follows: 0.75 for Low Watt, 0.85 for Normal Light Output and 1.20 for High Light.
- 2.8 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.9 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.10 Ballast shall have a Class A sound rating for all 4-foot lamps and smaller.
- 2.11 Ballast shall have a minimum starting temperature of _____ [-18C (0F) for standard T8 and Long Twin Tube lamps, 10C (50F) for standard T12 lamps, 0C (32F) for Slimline T8 lamps, -29C (-20F) for HO lamps.] for primary lamp application. Ballast shall have a minimum starting temperature of 16C (60F) for energy-saving lamps.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Ballast for T8 lamps shall provide lamp striation-reduction circuitry.
- 2.14 Ballast for FT5 lamps shall provide lamp EOL protection circuitry.

Section III - Regulatory

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.
- 3.6 Ballast shall comply with NEMA 410 for in-rush current limits.
- 3.7 Ballast for T8 lamps shall meet NEMA Premium/CEE High Performance T8 Lighting System Specifications.
- 3.8 Ballast shall meet RoHS Compliance Standards

Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.
- 4.4 Energy saving T8 lamps (25W, 28W or 30W) may experience lamp striations if operated on ballasts not rated for their use.



Revised 11/13/08

Data is based upon tests performed by Advance Transformer in a controlled environment and representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

ADVANCE TRANSFORMER CO.

O'HARE INTERNATIONAL CENTER - 10275 WEST HIGGINS ROAD - ROSEMONT, ILLINOIS 60018
 TELEPHONE: (847)390-5000 FAX: (847)768-7768

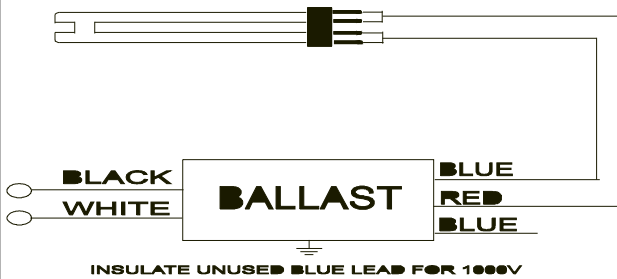
ICN-2TTP40-SC@120V

Brand Name	CENTIUM
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Electrical Specifications

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (°F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F .
* FT40W/2G11	1	40	0/-18	0.35	41	0.88	10	0.98	1.5	2.15
FT40W/2G11	2	40	0/-18	0.57	68	0.88	10	0.98	1.5	1.29
FT40W/2G11/ES (25W)	1	25	0/-18	0.29	35	1.00	10	0.98	1.6	2.86
FT40W/2G11/ES (25W)	2	25	0/-18	0.48	58	0.88	10	0.98	1.6	1.52
FT40W/2G11/RS	1	40	0/-18	0.35	41	0.88	10	0.98	1.5	2.15
FT40W/2G11/RS	2	40	0/-18	0.57	68	0.88	10	0.98	1.5	1.29

Wiring Diagram

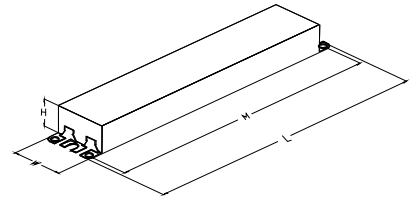


The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

	in.	cm.		in.	cm.
Black	25	63.5	Yellow/Blue		0
White	25	63.5	Blue/White		0
Blue	30	76.2	Brown		0
Red	30	76.2	Orange		0
Yellow		0	Orange/Black		0
Gray		0	Black/White		0
Violet		0	Red/White		0

Enclosure



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
9.50 "	1.7 "	1.18 "	8.90 "
24.1 cm	4.3 cm	3 cm	22.6 cm

Revised 07/22/2009



Data is based upon tests performed by Philips Lighting Electronics N.A. in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

PHILIPS LIGHTING ELECTRONICS N.A.

10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018

Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance

Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886



ICN-2TTP40-SC@120V	
Brand Name	CENTIUM
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Electrical Specifications

Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads color-coded per ANSI C82.11.

Section II - Performance Requirements

- 2.1 Ballast shall be _____ (Instant, Rapid or Programmed) Start.
- 2.2 Ballast shall provide Independent Lamp Operation (ILO) for Instant Start ballasts allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- 2.3 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power (except T8/HO and FT5 ballasts).
- 2.4 Ballast shall operate from 60 Hz input source of 120V, 277V or 347V as applicable with sustained variations of +/- 10% (voltage and frequency). IntelliVolt models shall operate from 50/60 Hz input source of 120V through 277V with sustained variations of +/- 10% (voltage and frequency).
- 2.5 Ballast shall be high frequency electronic type and operate lamps at a frequency above 42 kHz ("GCN" models between 20 kHz and 30kHz) to avoid interference with infrared devices and eliminate visible flicker.
- 2.6 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.7 Ballast shall have a minimum ballast factor for primary lamp application as follows: 0.75 for Low Watt, 0.85 for Normal Light Output and 1.20 for High Light.
- 2.8 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.9 Ballast input current shall have Total Harmonic Distortion (THD) of less than 20% for Standard models and THD of less than 10% for Centium models when operated at nominal line voltage with primary lamp.
- 2.10 Ballast shall have a Class A sound rating for all 4-foot lamps and smaller.
- 2.11 Ballast shall have a minimum starting temperature of _____ [-18C (0F) for standard T8 and Long Twin Tube lamps, 10C (50F) for standard T12 lamps, 0C (32F) for Slimline T8 lamps and "GCN" models, -29C (-20F) for T8/HO lamps,] for primary lamp application. Ballast shall have a minimum starting temperature of 60F (16C) for energy-saving lamps.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 ICN models shall have lamp striation reduction feature.

Section III - Regulatory Requirements

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with the requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, Non-Consumer (Class A) for EMI/RFI (conducted and radiated).
- 3.6 Ballast shall comply with NEMA 410 for in-rush current limits.
- 3.7 ICN models shall meet NEMA Premium/CEE requirements for Super T8 rebates
- 3.8 Ballast shall meet RoHS Compliance Standards

Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.

Note: Energy saving T8 lamps (25W, 28W or 30W) may experience lamp striations if operated on ballasts not rated for their use.

Revised 07/22/2009



Data is based upon tests performed by Philips Lighting Electronics N.A. in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

PHILIPS LIGHTING ELECTRONICS N.A.

10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018

Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance

Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886

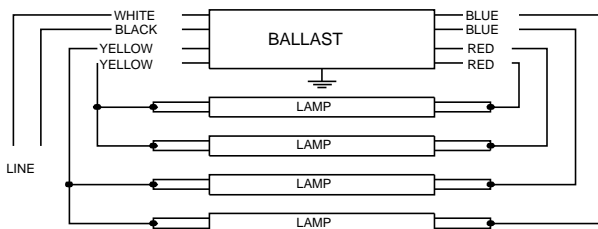
IOP4P32LWSC@120V

Brand Name	OPTANIUM
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Electrical Specifications

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (°F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F .
F32T8	3	32	-20/-29	0.67	80	0.84	10	0.99	1.6	1.05
* F32T8	4	32	-20/-29	0.81	96	0.77	10	0.99	1.6	0.80

Wiring Diagram



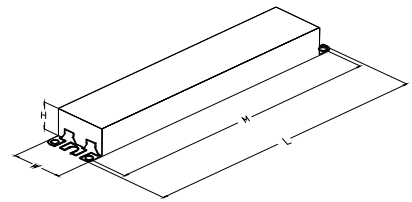
Diag. 66

The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

	in.	cm.		in.	cm.
Black	25	63.5	Yellow/Blue		0
White	25	63.5	Blue/White		0
Blue	31	78.7	Brown		0
Red	31	78.7	Orange		0
Yellow	39	99.1	Orange/Black		0
Gray		0	Black/White		0
Violet		0	Red/White		0

Enclosure



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
9.50 "	1.7 "	1.18 "	8.90 "
9 1/2	1 7/10	1 9/50	8 9/10
24.1 cm	4.3 cm	3 cm	22.6 cm

Revised 03/03/2010



Data is based upon tests performed by Philips Lighting Electronics N.A. in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

PHILIPS LIGHTING ELECTRONICS N.A.

10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018

Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance

Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886

IOP4P32LWSC@120V	
Brand Name	OPTANIUM
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Electrical Specifications

Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads color-coded per ANSI C82.11.

Section II - Performance

- 2.1 Ballast shall be _____ (Instant or Programmed) Start.
- 2.2 Ballast shall provide Independent Lamp Operation (ILO) for Instant Start or Programmed Start Parallel ballasts allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- 2.3 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.4 Ballast shall operate from 50/60 Hz input source of _____ (120V through 277V or 347V) with sustained variations of +/- 10% (voltage and frequency).
- 2.5 Ballast shall be high frequency electronic type and operate lamps at a frequency between 42 kHz and 52 kHz to avoid interference with infrared devices, eliminate visible flicker and avoid Article Surveillance System, such as anti-theft devices.
- 2.6 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.7 Ballast shall have a minimum ballast factor for primary lamp application as follows: 0.77 for Low Watt, 0.87 for Normal Light Output, and 1.18 for High Light for Instant Start ballasts or 0.71 for Low Watt and 0.88 for Normal Light Output for Programmed Start ballasts.
- 2.8 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.9 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.10 Ballast shall have a Class A sound rating for all 4-foot lamps and smaller.
- 2.11 Ballast shall have a minimum starting temperature of -29C (-20F) on Instant Start ballasts or -18C (0F) on Programmed Start ballasts for standard T8 lamps and 16C (60F) for energy-saving T8 lamps. Consult lamp manufacturer for temperature versus light output characteristics.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Ballast shall have lamp striation-reduction circuitry.
- 2.14 Programmed Start ballast shall provide lamp EOL protection circuitry.
- 2.15 Maximum distance for Energy Saving Lamps in Remote/Tandem wiring applications shall be 6 feet for Instant Start and Programmed Start models.

Section III - Regulatory

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.
- 3.6 Ballast shall meet NEMA Premium/CEE High Performance T8 Lighting System Specifications.
- 3.7 IOP or GOP ballast shall comply with UL Type CC rating.
- 3.8 Ballast shall comply with NEMA 410 for in-rush current limits.
- 3.9 Ballast shall meet RoHS Compliance Standards

Section IV - Other

- 4.1 Ballast shall be manufactured in an ISO 9001 Qualified factory.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C. Ballasts with a "90C" designation in their catalog number shall also carry a three-year warranty at maximum case temperature of 90C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.
- 4.4 Energy-saving T8 lamps (25W, 28W or 30W) may experience lamp striations if operated on ballasts not rated for their use.

Revised 03/03/2010



Data is based upon tests performed by Philips Lighting Electronics N.A. in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

PHILIPS LIGHTING ELECTRONICS N.A.

10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018
 Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance
 Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886

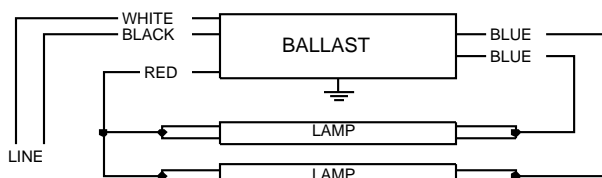
IOPA2P32LWSC@120V

Brand Name	OPTANIUM 2.0
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Electrical Specifications

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (°F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F.
* F17T8	1	17	-20/-29	0.15	18	0.90	20	0.98	1.6	5.00
F17T8	2	17	-20/-29	0.23	27	0.80	10	0.99	1.6	2.96

Wiring Diagram



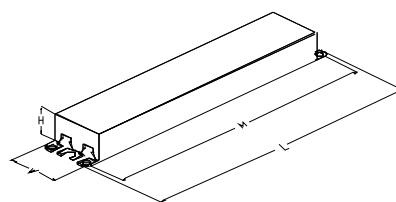
Diag. 64

The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

	in.	cm.		in.	cm.
Black	25	63.5	Yellow/Blue		0
White	25	63.5	Blue/White		0
Blue	31	78.7	Brown		0
Red	37	94	Orange		0
Yellow		0	Orange/Black		0
Gray		0	Black/White		0
Violet		0	Red/White		0

Enclosure



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
9.50 "	1.7 "	1.18 "	8.90 "
9 1/2	1 7/10	1 9/50	8 9/10
24.1 cm	4.3 cm	3 cm	22.6 cm

Revised 06/18/2008



Data is based upon tests performed by Philips Lighting Electronics N.A. in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

PHILIPS LIGHTING ELECTRONICS N.A.

10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018

Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance

Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886



IOPA2P32LWSC@120V	
Brand Name	OPTANIUM 2.0
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Electrical Specifications

Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads color-coded per ANSI C82.11.

Section II - Performance Requirements

- 2.1 Ballast shall be _____ (Instant or Programmed) Start.
- 2.2 Ballast shall provide Independent Lamp Operation (ILO) for Instant Start ballasts allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- 2.3 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.4 Ballast shall operate from 50/60 Hz input source of 120V through 277V with sustained variations of +/- 10% (voltage and frequency) with no damage to the ballast.
- 2.5 Ballast shall be high frequency electronic type and operate lamps at a frequency between 42 kHz and 52 kHz to avoid interference with infrared devices, eliminate visible flicker and avoid Article Surveillance System, such as anti-theft devices.
- 2.6 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.7 Ballast shall have a minimum ballast factor for primary lamp application as follows: 0.77 for Low Watt, 0.87 for Normal Light Output, and 1.18 for High Light for Instant Start ballasts or 0.71 for Low Watt and 0.88 for Normal Light Output for Programmed Start ballasts.
- 2.8 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less in accordance with lamp manufacturer recommendations.
- 2.9 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.10 Ballast shall have a Class A sound rating for all 4-foot lamps and smaller.
- 2.11 Ballast shall have a minimum starting temperature of -20F (-29C) on Instant Start Ballasts or 0F (-18C) Programmed Start ballasts for standard T8 lamps and 60F (16C) for energy-saving T8 lamps. Consult lamp manufacturer for temperature versus light output characteristics.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions without damage.
- 2.13 Ballast shall contain an anti-striation circuitry to reduce striation on energy-saving T8 lamps.
- 2.14 Programmed Start ballasts shall provide lamp EOL protection circuitry.
- 2.15 Ballast can be Remote or Tandem wired as follows:
Instant Start ballasts - Remote or Tandem wiring allowed to a maximum of 20 feet between ballast and lamp socket. For Tandem wiring, any lamp can be remote mounted.
Programmed Start 2-lamp ballast - Remote or Tandem wiring allowed to a maximum of 10 feet between ballast and lamp socket for energy-saving T8 lamps or 20 feet for standard T8 lamps. For Tandem wiring, BLUE lamp must be in same fixture as the ballast.
Programmed Start 3 & 4-lamp (Normal Light) ballast - Remote or Tandem wiring allowed to a maximum of 10 feet between ballast and lamp socket for energy-saving T8 lamps or 20 feet for standard T8 lamps. For Tandem wiring, RED and YELLOW lamps must be in the same fixture as the ballast.
Programmed Start 3 & 4-lamp (Low Watt) ballast - Remote or Tandem wiring allowed to a maximum of 10 feet between ballast and lamp socket for all T8 lamps. For Tandem wiring, RED and YELLOW lamps must be in the same fixture as the ballast.

Section III - Regulatory Requirements

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with the requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18,

Non-Consumer (Class A) for EMI/RFI (conducted and radiated).

3.6 Ballast shall comply with UL Type CC rating (with the exception of IOPA models).

3.7 Ballast shall meet NEMA/CEE High Performance T8 Lighting System Specifications.

Section IV - Other

4.1 Ballast shall be manufactured in a factory certified to ISO 9002 Quality System Standards.

4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C. Ballasts with a 90 C designation in their catalog number shall also carry a three-year warranty at a maximum case temperature of 90 C.

4.3 Manufacturer shall have a fifteen-year history of producing electronic ballasts for the North American market.

4.4 Ballast shall be Advance part # _____ or approved equal.

NOTE: The use of Optanium IOP and ICN-2P32-N models is recommended to reduce striation in energy-saving T8 lamps (25W, 28W or 30W). Remote or tandem wiring of energy-saving T8 lamps (25W, 28W or 30W) is only recommended for Optanium 2.0 (IOP) models.

Consult lamp manufacturer for applications with Ballast Factor > 1.2

Revised 06/18/2008



Data is based upon tests performed by Philips Lighting Electronics N.A. in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

PHILIPS LIGHTING ELECTRONICS N.A.

10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018

Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance

Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886

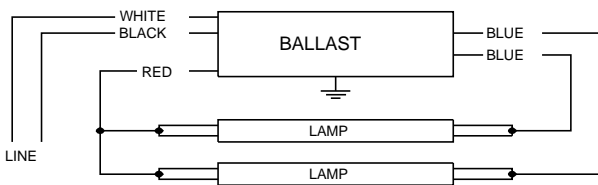
IOPA-2P32-SC@120V

Brand Name	OPTANIUM
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Electrical Specifications

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (°F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F .
F32T8	1	32	-20/-29	0.30	35	1.05	10	0.99	1.6	3.00
* F32T8	2	32	-20/-29	0.47	55	0.87	10	0.99	1.6	1.58

Wiring Diagram



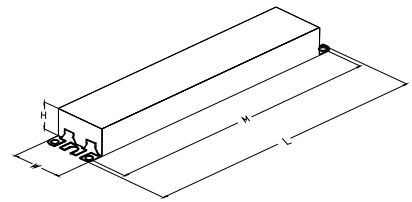
Diag. 64

The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

	in.	cm.	in.	cm.
Black	25	63.5	Yellow/Blue	0
White	25	63.5	Blue/White	0
Blue	31	78.7	Brown	0
Red	37	94	Orange	0
Yellow		0	Orange/Black	0
Gray		0	Black/White	0
Violet		0	Red/White	0

Enclosure



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
9.50 "	1.7 "	1.18 "	8.90 "
9 1/2	1 7/10	1 9/50	8 9/10
24.1 cm	4.3 cm	3 cm	22.6 cm

Revised 01/20/2009



Data is based upon tests performed by Philips Lighting Electronics N.A. in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

PHILIPS LIGHTING ELECTRONICS N.A.

10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018

Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance

Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886

IOPA-2P32-SC@120V	
Brand Name	OPTANIUM
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Electrical Specifications

Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads color-coded per ANSI C82.11.

Section II - Performance Requirements

- 2.1 Ballast shall be _____ (Instant or Programmed) Start.
- 2.2 Ballast shall provide Independent Lamp Operation (ILO) for Instant Start or Programmed Start Parallel ballasts allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- 2.3 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.4 Ballast shall operate from 50/60 Hz input source of 120V through 277V with sustained variations of +/- 10% (voltage and frequency). GOPA ballasts shall operate from an input source of 347V.
- 2.5 Ballast shall be high frequency electronic type and operate lamps at a frequency between 42 kHz and 52 kHz to avoid interference with infrared devices, eliminate visible flicker and avoid Article Surveillance System, such as anti-theft devices.
- 2.6 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.7 Ballast shall have a minimum ballast factor for primary lamp application as follows: 0.77 for Low Watt, 0.87 for Normal Light Output, and 1.18 for High Light for Instant Start ballasts or 0.71 for Low Watt and 0.88 for Normal Light Output for Programmed Start ballasts.
- 2.8 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.9 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.10 Ballast shall have a Class A sound rating for all 4-foot lamps and smaller.
- 2.11 Ballast shall have a minimum starting temperature of -29C (-20F) on Instant Start ballasts or -18C (0F) on Programmed Start ballasts for standard T8 lamps and 16C (60F) for energy-saving T8 lamps. Consult lamp manufacturer for temperature versus light output characteristics.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Ballast shall have lamp striation-reduction circuitry.
- 2.14 Programmed Start ballast shall provide lamp EOL protection circuitry.
- 2.15 Maximum remote distance for Energy Saving Lamps in Remote/Tandem applications is 6 feet for ICN, IOP, and IOPA Instant Start and Programmed Start models.

Section III - Regulatory Requirements

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with the requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, Non-Consumer (Class A) for EMI/RFI (conducted and radiated).
- 3.6 Ballast shall meet NEMA/CEE High Performance T8 Lighting System Specifications.
- 3.7 IOP ballasts shall comply with UL Type CC rating.
- 3.8 Ballast shall comply with NEMA 410 for in-rush current limits.

Section IV - Other

- 4.1 Ballast shall be manufactured in an ISO 9001 Qualified factory.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C. Ballasts with a "90C" designation in their catalog number shall also carry a three-year warranty at maximum case temperature of 90C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.

Notes:

1. Energy-saving T8 lamps (25W, 28W or 30W) may experience lamp striations if operated on ballasts not rated for their use.

Revised 01/20/2009



Data is based upon tests performed by Philips Lighting Electronics N.A. in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

PHILIPS LIGHTING ELECTRONICS N.A.

10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018

Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance

Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886

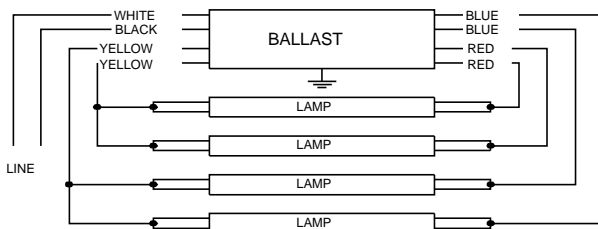
IOPA-4P32-SC@120V

Brand Name	OPTANIUM
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Electrical Specifications

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (°F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F .
F32T8/ES (25W)	3	25	60/16	0.59	70	0.97	10	0.99	1.6	1.39
* F32T8/ES (25W)	4	25	60/16	0.73	87	0.87	10	0.99	1.6	1.00

Wiring Diagram



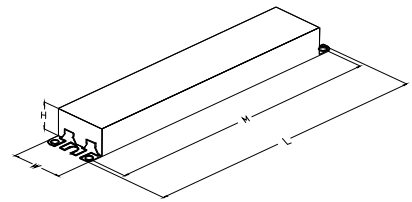
Diag. 66

The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

	in.	cm.		in.	cm.
Black	25	63.5	Yellow/Blue		0
White	25	63.5	Blue/White		0
Blue	31	78.7	Brown		0
Red	31	78.7	Orange		0
Yellow	39	99.1	Orange/Black		0
Gray		0	Black/White		0
Violet		0	Red/White		0

Enclosure



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
9.50 "	1.7 "	1.18 "	8.90 "
9 1/2	1 7/10	1 9/50	8 9/10
24.1 cm	4.3 cm	3 cm	22.6 cm

Revised 03/02/2010



Data is based upon tests performed by Philips Lighting Electronics N.A. in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

PHILIPS LIGHTING ELECTRONICS N.A.

10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018

Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance

Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886



IOPA-4P32-SC@120V	
Brand Name	OPTANIUM
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

Electrical Specifications

Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads color-coded per ANSI C82.11.

Section II - Performance Requirements

- 2.1 Ballast shall be _____ (Instant or Programmed) Start.
- 2.2 Ballast shall provide Independent Lamp Operation (ILO) for Instant Start or Programmed Start Parallel ballasts allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- 2.3 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.4 Ballast shall operate from 50/60 Hz input source of 120V through 277V with sustained variations of +/- 10% (voltage and frequency). GOPA ballasts shall operate from an input source of 347V.
- 2.5 Ballast shall be high frequency electronic type and operate lamps at a frequency between 42 kHz and 52 kHz to avoid interference with infrared devices, eliminate visible flicker and avoid Article Surveillance System, such as anti-theft devices.
- 2.6 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.7 Ballast shall have a minimum ballast factor for primary lamp application as follows: 0.77 for Low Watt, 0.87 for Normal Light Output, and 1.18 for High Light for Instant Start ballasts or 0.71 for Low Watt and 0.88 for Normal Light Output for Programmed Start ballasts.
- 2.8 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.9 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.10 Ballast shall have a Class A sound rating for all 4-foot lamps and smaller.
- 2.11 Ballast shall have a minimum starting temperature of -29C (-20F) on Instant Start ballasts or -18C (0F) on Programmed Start ballasts for standard T8 lamps and 16C (60F) for energy-saving T8 lamps. Consult lamp manufacturer for temperature versus light output characteristics.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Ballast shall have lamp striation-reduction circuitry.
- 2.14 Programmed Start ballast shall provide lamp EOL protection circuitry.
- 2.15 Maximum remote distance for Energy Saving Lamps in Remote/Tandem applications is 6 feet for ICN, IOP, and IOPA Instant Start and Programmed Start models.

Section III - Regulatory Requirements

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with the requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, Non-Consumer (Class A) for EMI/RFI (conducted and radiated).
- 3.6 Ballast shall meet NEMA/CEE High Performance T8 Lighting System Specifications.
- 3.7 IOP ballasts shall comply with UL Type CC rating.
- 3.8 Ballast shall comply with NEMA 410 for in-rush current limits.

Section IV - Other

- 4.1 Ballast shall be manufactured in an ISO 9001 Qualified factory.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C. Ballasts with a "90C" designation in their catalog number shall also carry a three-year warranty at maximum case temperature of 90C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.

Notes:

1. Energy-saving T8 lamps (25W, 28W or 30W) may experience lamp striations if operated on ballasts not rated for their use.

Revised 03/02/2010



Data is based upon tests performed by Philips Lighting Electronics N.A. in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

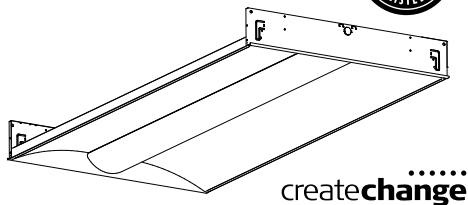
PHILIPS LIGHTING ELECTRONICS N.A.

10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018

Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance

Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886

LED



createchange

FEATURES

- Attractive architectural center lens
- High efficiency acrylic center lens features linear prisms for high performance without pixelation
- Appropriate for offices, schools, medical, and public spaces
- High performance reflector with matte white paint standard
- 60,000 hour LEDs at L80 (up to 150,000 projected life) for reduced maintenance
- Four LED color choices and 80 CRI
- Eight lumen packages
- Multiple driver options to satisfy different applications
- LED modules and electrical accessible from below
- Optional architecturally styled integration of daylight and occupancy sensor(s)
- QR code traceability
- Integral battery pack optional on most models
- Compatible with Dual-Lite inverters
- Recessed, surface or cable mount
- Air return option
- DesignLights Consortium® (DLC) qualified
- Five year warranty (Terms and Conditions apply)

PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

CONSTRUCTION

Luminaire housing, reflectors and end caps are die formed code gauge cold rolled steel. High transmission extruded acrylic enclosed lens features linear prisms with custom frost for high efficacy without pixelation.

SHIELDING

Removable lens for easy access to LED module and electrical components.

FINISH

All reflective surfaces are finished after fabrication with unique formula high reflectivity matte white paint for soft, uniform indirect illumination.

INSTALLATION

An access plate is furnished with each luminaire for fast wiring access without the necessity to open the fixture or wireway.

CEILING COMPATIBILITY

Luminaire fits recessed exposed Grid ceilings (G); four integral NEC compliant T-bar clips are standard. Can be placed in Slot Grid (SG) style ceiling with regress 3/8" above ceiling plane. A Flange Kit (FK) accessory is available for recessed hard ceiling applications. Surface Mount (SM) option allows placement below ceiling plane. Cable Mount (CM) option allows suspension below ceiling plane.

CERTIFICATION

All luminaires are built to UL1598 and 2108 standards, and bear appropriate CSA labels. Damp location is standard. Emergency-equipped fixtures labeled UL 924 and Dry Location unless specified. Adheres to LM79, LM80, and TM21 industry standards. DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org.

IC RATING

IC label is standard for recessed products. Note that IC label is void if product is installed on site with a combination of both step-dimming (ESD) driver plus through wiring or for air return fixtures.

WARRANTY

Five year warranty (Terms and Conditions apply).

ORDERING INFORMATION

EXAMPLE LCAT24-35MLG-ESDU

LCAT		24										
MODEL		COLOR TEMPERATURE		CEILING TYPE		AIR FUNCTION		VOLTAGE		OPTIONS		
LCAT	LED Contemporary Architectural Troffer	30	3000K	G	Grid Lay-in ¹	Blank	Static	U	120V-277V	ELL14	Emergency Battery Pack Installed, 1400 Lumens ^{4,5}	
		35	3500K	SM	Surface Mount ²	A	Air Return Side Slots	347	347V	C388	3-Wire Flex	
		40	4000K	CM	Cable Suspended Mount ^{2,3}					C488	4-Wire Flex	
		50	5000K							C588	5-Wire Flex	
SIZE		LUMEN OUTPUT		DRIVER						GLR	Fast Blow Fuse	
24	2' x 4'	XW	Extra Low Watt	E	Fixed Output					NYC	NYC Compliant	
		VW	Very Low Watt	ESD	Step Dimming ⁴					EOR	End of Row (SM and CM only. Provides end wiring access for continuous row mounting.) ²	
		MW	Medium Low Watt	ED	0-10V Dimming					INT	Intermediate (SM and CM only. Provides ends with wiring access for continuous row mounting.) ²	
		LW	Low Watt	ED1	0-10V 1% Dimming					CP	Chicago Plenum	
		ML	Medium Lumen	LUTH	Lutron H Series 1% Dimming ^{4,5}					ODP	Occupancy and Daylight Sensors, Philips ^{4,6}	
		HL	High Lumen	LUTS	Lutron S Series 5% Dimming ^{4,5}							
		VL	Very High Lumen									
		XL	Extra High Lumen									
			See Product Availability Table below.									
PRODUCT AVAILABILITY		DRIVER AVAILABILITY TABLE										
LUMEN PACKAGE	NOMINAL LUMENS	NOMINAL WATTS	LUMENS PER WATT	2X4	XW	VW	MW	LW	ML	HL	VL	XL
24	XW	2600-2800	24	E	X	X	X	X	X	X	X	X
24	VW	3200-3450	30	ED	X	X	X	X	X	X	X	X
24	MW	3500-3800	33	ED1	X	X	X	X	X	X	X	X
24	LW	4100-4700	40	ESD				X	X	X	X	X
24	ML	4400-5150	40	LUTS	X	X	X	X	X			
24	HL	5350-6200	47	LUTH	X	X	X	X	X			
24	VL	6800-7800	65									
24	XL	7800-9250	80									

Nominal lumen range represents 3000K through 5000K. Lumens vary according to color temperatures and other factors. See specific photometric test(s).

¹ For drywall, order G with Flange Kit Accessory.
² Not available with Air Return (A) air function
³ Order hanger accessories separately
⁴ Not available in 347V
⁵ For compatibility with Dual-Lite LiteGear® inverters, contact Hubbell Lighting Representative
⁶ Only available with 0-10V Dimming (ED) Driver Option.
 For questions about configuration options, contact Hubbell Representative.



Test LCAT24-35LWG-EDU Test Date 12/15/2014

PHOTOMETRIC DATA

LUMINAIRE DATA

Luminaire	LCAT24-35LWG-EDU LCAT Led Architectural Troffer, Recessed Architectural 2 x 4 led with frosted linear prism lens
Ballast	D10CC55UNVTZ-C
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	4170
Watts	39.70
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.21 90° = 1.31
Luminous Opening in Feet	Length: 3.94 Width: 1.88 Height: 0.00

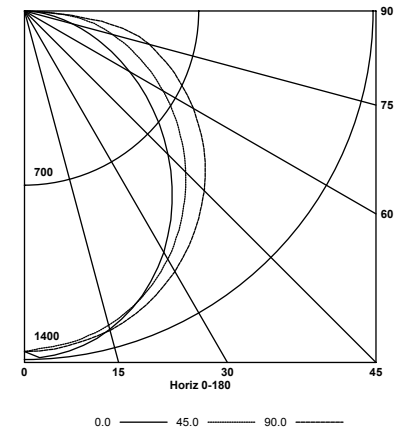
ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1062	25.5	25.5
0-40	1739	41.7	41.7
0-60	3100	74.4	74.4
0-90	4170	100.0	100.0
0-180	4170	100.0	100.0

ENERGY DATA

Total Luminaire Efficiency	100.0%
Total Lumens per Watt	105
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.31 based on 3000 hrs. and \$0.08 per KWH

INDOOR CANDELA PLOT



Test LCAT24-35MLG-EDU Test Date 1/14/2015

LUMINAIRE DATA

Luminaire	LCAT24-35MLG-EDU LCAT Led Architectural Troffer, Recessed Architectural 2 x 4 led with frosted linear prism lens
Ballast	D10CC55UNVTZ-C
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	4790
Watts	39.80
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.21 90° = 1.33
Luminous Opening in Feet	Length: 3.92 Width: 1.90 Height: 0.00

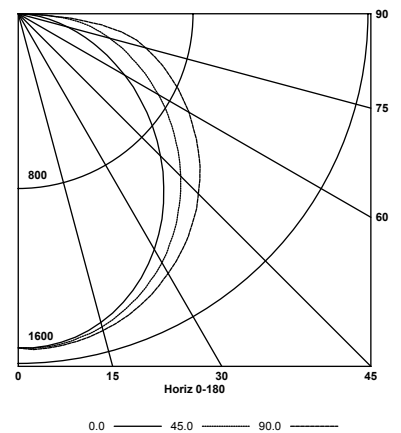
ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1198	25.0	25.0
0-40	1967	41.1	41.1
0-60	3526	73.6	73.6
0-90	4790	100.0	100.0
0-180	4790	100.0	100.0

ENERGY DATA

Total Luminaire Efficiency	100.0%
Total Lumens per Watt	120
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.00 based on 3000 hrs. and \$0.08 per KWH

INDOOR CANDELA PLOT



Test LCAT24-35HLG-EDU Test Date 1/14/2015

LUMINAIRE DATA

Luminaire	LCAT24-35HLG-EDU LCAT Led Architectural Troffer, Recessed Architectural 2 x 4 led with frosted linear prism lens
Ballast	D10CC55UNVTZ-C
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	5587
Watts	47.20
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.21 90° = 1.33
Luminous Opening in Feet	Length: 3.92 Width: 1.90 Height: 0.00

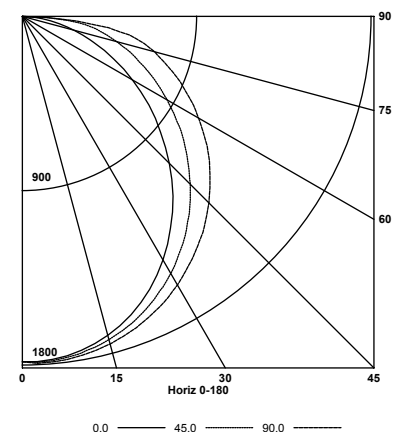
ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1397	25.0	25.0
0-40	2293	41.0	41.0
0-60	4112	73.6	73.6
0-90	5587	100.0	100.0
0-180	5587	100.0	100.0

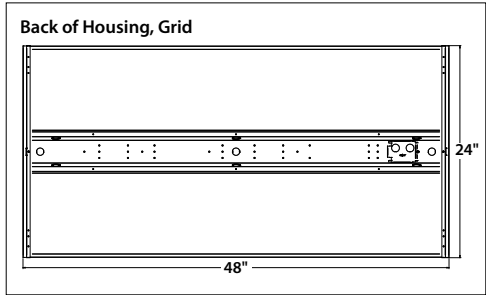
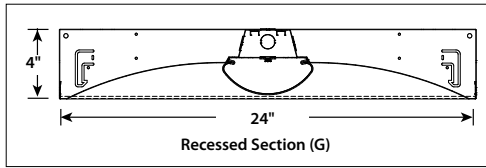
ENERGY DATA

Total Luminaire Efficiency	100.0%
Total Lumens per Watt	118
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.02 based on 3000 hrs. and \$0.08 per KWH

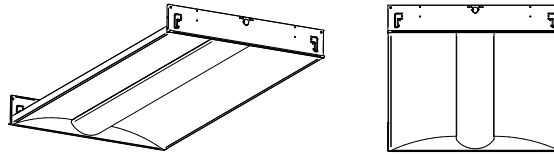
INDOOR CANDELA PLOT



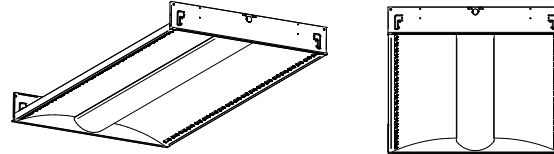
DIMENSIONAL DATA — GRID



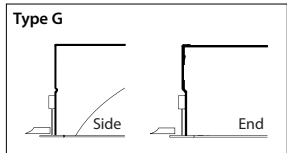
GRID, STATIC



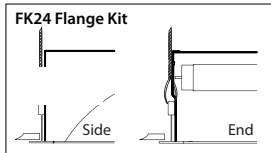
GRID, AIR RETURN



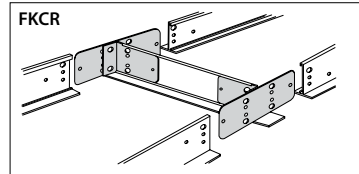
CEILING COMPATIBILITY



For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum tee heights of 2" allowed.



For hard ceiling applications, order FK24 flange kit. Flange kit wires directly into concealed ceiling opening for a clean, finished appearance.



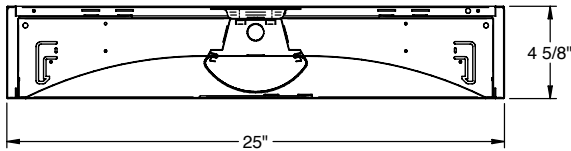
For flanged fixtures in row configurations, the FKCR adapter bracket kit is required in addition to the FK24 kit. Order one less FKCR than the total number of fixtures in row. (Example: Row of two, order (2) FK24 & (1) FKCR)

Row cut out dimensions using FK24s & FKCR adapters:
Width $24\frac{3}{8}$ ", Length $[48" \times (\# \text{ in row})] + \frac{3}{8}"$
Example: $(48" \times 2) + \frac{3}{8}" = 96\frac{3}{8}"$

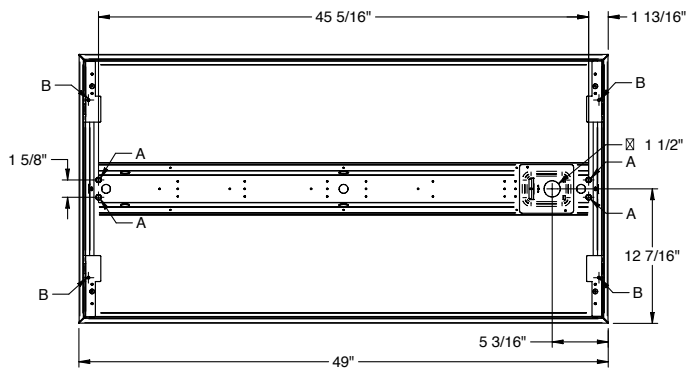
Flange kit cut out dimension for single unit only: $24\frac{3}{8}" \times 48\frac{3}{8}"$

DIMENSIONAL DATA — SURFACE MOUNT OR CABLE MOUNT, STATIC ONLY

Surface Section (SM)



Back of Housing, Surface Mount (SM) and Cable Mount (CM)



Surface Mount:

Order SM ceiling type. Mounting collar required for surface mounting. (4) Mounting knock-outs, $\frac{3}{8}"$, provided in center channel as indicated at left, marked A.

Cable Mount:

Order CM ceiling type. Use CM48Y2SC3F-KIT 48" Cable Mount Kit for 2' wide CM trim fixtures. Mounting holes are provided in diagonal straps shown at left, marked B.

* For Cable Mount a 2" x 3" access plate with (4) $\frac{7}{8}"$ KOs provided in place of Mounting Collar shown.

NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.



5 YEAR WARRANTY



>110 LPW

The next generation of energy efficient LED Drum Fixture Module

RemPhos LEDCR™

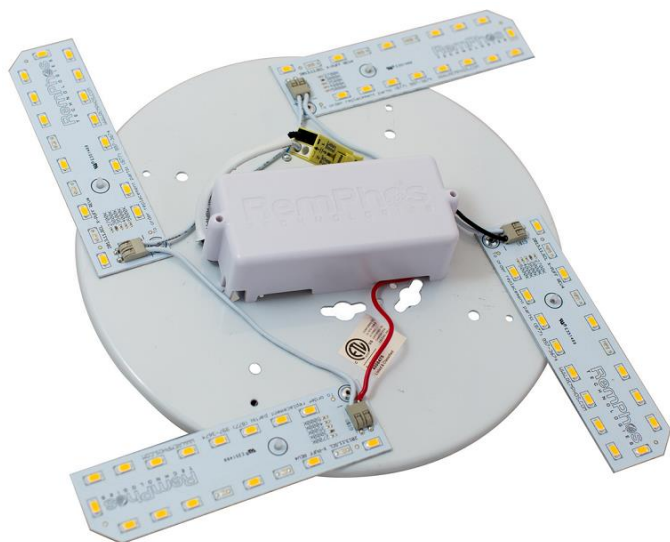
This is the solution you have been waiting for. The LEDCR Drum Module by RemPhos Technologies can be used by fixture OEMs or as an in-the-field retrofit. The LED system offers an economical alternative to upgrade to long lasting LED lighting, while retaining the simple clean look of virtually any standard circular ceiling mount drum fixture. The LEDCR module is both an ETL 1598 Listed luminaire and ETL 1598C Classified Retrofit Kit featuring a unique LED array and driver. The module carries the Energy Star® CSD (Certified Subcomponent Database) Listing, making an easy path for OEM's to receive Energy Star® listing on their luminaires. The LEDCR mounts easily with no drilling to any style fixture. The LEDCR features a patent-pending design which allows the 4 LED arrays to expand in order to fit fixtures of different diameters. The LED module is available with multiple outputs and color temperatures.

All the benefits of a quality LED retrofit:

- 900-3000lm outputs available
- Long life (L70=50,000hrs)
- Reduced maintenance costs
- Available in 2700K-5000K, >80 CRI
- ETL, FCC, RoHS

Plus the unique benefits of the LEDCR:

- Unique flexible design to fit almost any fixture
- Screw-less/drill-less installation
- Superior optics means perfect light distribution
- Environmentally friendly manufacturing process
- Designed in the USA



For the Lighting Fixture OEM:

No need to send your fixtures to UL for re-certification. You can simply install this kit at the factory, it already has UL1598 approval.

For the Electrician/ESCO:

Meets UL and NEC standards to retrofit existing fixture in the field.

Product Information

Project Name	Type
Catalog Number	Date

SPECIFICATIONS

Features

- Industrial strip conversion kits are great energy reducers in aisle-ways, garages, work shops, arenas and other mid ceiling height applications.
- Designed to provide maximum efficiency to meet fluorescent fixture lighting standards.
- Maintains compact size with multiple hood options to provide excellent light distribution.
- Multi-piece construction allows for 4' packaging and shipping.
- Fluorescent technology is proven long life.
- T8 design works with most LED tubes; consult LED tube manufacturer's specifications for compatibility.
- Made In USA. Meets ARRA & Buy American requirements.

Construction of 8' CKM-IR-4L

- (2) 4' Aluminum hood covers
- (4) Adjustable or (3) Specific width brackets
- (8) Rotary lock sockets
- (4) Quarter turns
- (6) Self-tapping tech screws
- Optional ballast w/ disconnect; ships loose
- Weight of hood(s) & brackets: 1x4 - 4 lbs. 1x8 - 8 lbs.

Optional Electrical

- Input Voltage Range: 100-277 VAC Nom. (90-305 V Min/Max)
- Lamp frequency: > 42 kHz
- Power Factor: >0.9% @ full load, 100V through 277V
- Harmonic Distortion: THD < 20% @ full load
- Protection: Over-Voltage, Over-Current & Short Circuit with self-recovery
- Compliant to FCC 47CFR Part 18 Non-consumer Class A Sound Rating



Certifications

- UL 1598B listed for Canada and U.S.
- Luminaires bear appropriate listing labels.



Application

- Suitable for use with most wired or wireless lighting control systems
- Suitable for dry & damp locations:
 - Government buildings
 - Commercial areas
 - Industrial areas
 - Task lighting
 - Stairwells
 - Schools
 - Hallways
 - Closets

ORDERING INFORMATION

EXAMPLE CKM-IR-2L-T8-UW-EA-PWB-UL1-LP-IS-ST

MODEL	LAMP QTY	SIZE	HOOD MATERIAL	WIRE OPTION*	BALLAST VOLTAGE ^{3*}	BALLAST GRADE*
CKM Multi-Piece Kit	1L 1 Lamp (1x4)	1x4 1x4 Nominal	WA White Aluminum Reflector 90-91%	BLANK None	UL1 Universal 120-277 VAC	ST-IL Standard Grade w/ Disconnect
UNIT TYPE	2L 2 Lamp (1x4, 1x6, 1x8)	1x6 1x6 Nominal	EA Enhanced Aluminum 95%	PWS Pre-Wire Sockets Only	UH1 347-480 VAC	UE-IL Ultra Efficient T8 w/ Disconnect
IR Basic Industrial Hood	3L 3 Lamp (1x4, 1x6, 1x8)	1x8 1x8 Nominal		PWB Pre-Wire Sockets to Ballast		
WW90 Wall Wash 90°	4L 4 Lamp (1x6, 1x8)	CHANNEL WIDTH ¹	SOCKET TYPE ²	OTHER	BALLAST FACTOR ^{4*}	
WWC Wall Wash Closed	6L 6 Lamp (1x6, 1x8)	UW Adjustable Brackets (4.062" - 5.25")	NS-NB No Sockets Included, No Ballast	WW White Wireguard	LP Low Power (.75-.78)	
	LAMP TYPE	C/x.xx Channel Specific Width	S8-NB Shunted for IS T8, Med Socket, No Ballast		MP Medium Power (.85-.88)	
	T5HO T5HO		N8-NB Non-Shunted for RS T8, Med Socket, No Ballast		MN Neutral Power (.97-1.04)	
	T8 T8				HP High Power (1.15-1.20)	
					BALLAST STARTING ^{5*}	
					IS Instant Start	
					ISD Instant Start Step Dimming	
					PS Rapid/Programmed Start	

FOOTNOTES

1. Call out specific widths.Ex: C/4.25.
 2. Only select if ordering kit with no ballast.
 3. Numerical indicates number of ballasts per fixture.
 4. "MN" Ballast factor not for use with T8/ISD or T8/PS.
 5. When using UL2, identify number of lamps powered by each ballast before starting method. Largest number first. Ex: 22IS = 4LT8
- * Options only available when ordering kit with ballast.

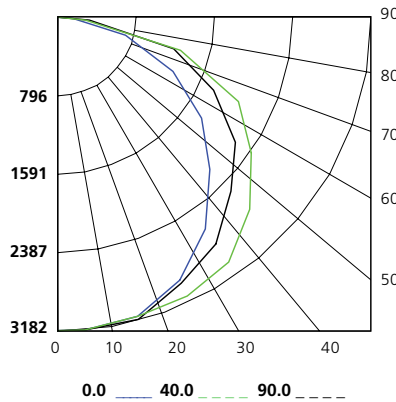
PHOTOMETRIC DATA

PHOTOMETRIC DATA: CKM-IR-4L-T8-1X8-UW-WA-PWB-UL1-HP-IS-ST-IL

LUMINAIRE DATA

Luminaire	CKM-IR-4L-T8-1X8-UW-WA-PWB-UL1-HP-IS-ST-IL Multi-Piece Industrial Conversion Kit
Ballast	4L32-HP-IS-ST
Ballast Factor	1.00
Lamp	F32
Fixture Lumens	11419
Watts	107
Fixture Efficiency	94%
Mounting	Wall, Suspended & Ceiling
Shielding Angle	N.A.
Spacing Criterion	0° = 1.30 90° = 1.46
Luminous Opening in feet	Length: 8.00 Width: 0.83 Height: 0.00

INDOOR CANDELA PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt
0-30	1832	15	16
0-40	3428	28	30
0-60	7252	59	64
0-90	11414	94	100

AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90
0	3176	3176	3176	3176	3176
5	3178	3174	3182	3178	3180
15	3138	3144	3164	3160	3136
25	2934	2950	2974	3090	3112
35	2618	2662	2806	2994	3030
45	2180	2284	2486	2712	2754
55	1784	1944	2202	2458	2396
65	1296	1528	1748	1960	2026
75	712	952	1218	1288	1288
85	162	362	324	298	290

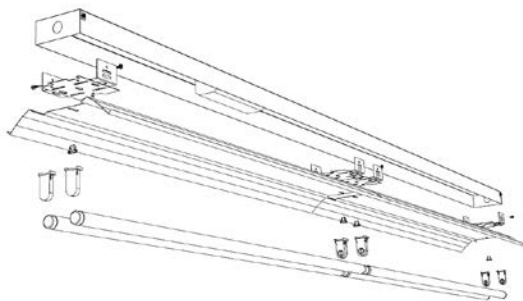
COEFFICIENTS OF UTILIZATION (%)

RCR	RW	80				70				50				0	
		70	50	30	10	70	50	30	10	50	30	10	0	0	
0	111	111	111	111	109	109	109	109	104	104	104	104	94	94	
1	98	92	87	82	95	90	85	80	86	82	78	71	71		
2	87	78	70	63	85	76	68	62	72	66	61	55	55		
3	78	66	57	50	76	65	56	49	62	55	48	44	44		
4	71	58	48	41	68	56	47	40	54	46	40	36	36		
5	65	51	41	34	62	50	40	34	47	39	33	30	30		
6	59	45	35	29	57	44	35	28	42	34	28	25	25		
7	54	40	31	25	53	39	31	24	38	30	24	22	22		
8	50	36	27	21	49	36	27	21	34	27	21	19	19		
9	47	33	25	19	45	32	24	19	31	24	19	16	16		
10	44	30	22	17	42	30	22	17	29	21	17	15	15		

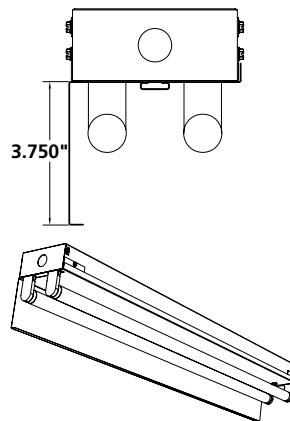
RCR = Room Cavity Ratio RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

KIT IMAGES

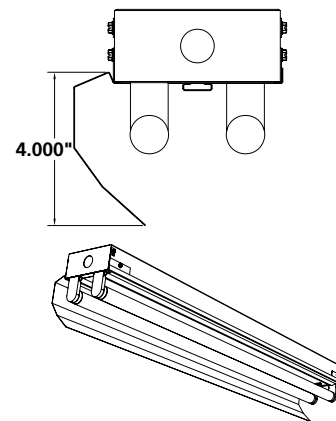
IR- INDUSTRIAL REFLECTOR



WW90- WALL WASHED 90°



WWC- WALL WASHED CLOSED



*Drawings N.T.S.

EXISTING VS. PROPOSED SYSTEM

Existing Lamp/Ballast System	Lamp Quantity	Lamp Type	Mean Lumens Per Lamp	Mean Lumens Per Fixture	Ballast Factor	Net Lumens Per Fixture	Input Watts	Net Lumens Per Watt
1L96-T12 Mag	1	F96/T12/ES	4,750	4,750	0.88	4,180	76	55
2L96-T12 Mag	2	F96/T12/ES	4,750	9,500	0.88	8,360	126	66
1L96-T12HO Mag	1	F96/T12HO/ES	6,950	6,950	0.95	6,603	125	53
2L96-T12HO Mag	2	F96/T12HO/ES	6,950	13,900	0.93	12,927	210	62

Proposed Lamp/Ballast System	Lamp Quantity	Lamp Type	Mean Lumens Per Lamp	Mean Lumens Per Fixture	Ballast Factor	Net Lumens Per Fixture	Input Watts	Net Lumens Per Watt
2L32-T8-LP Elec	2	F32T8/841	2,800	5,600	0.77	4,312	48	90
4L32-T8-LP Elec	4	F32T8/841	2,800	11,200	0.77	8,624	96	90
2L32-T8-MP Elec	2	F32T8/841	2,800	5,600	0.87	4,872	53	92
4L32-T8-MP Elec	4	F32T8/841	2,800	11,200	0.87	9,744	107	91
2L32-T8-MN Elec	2	F32T8/841	2,800	5,600	1.04	5,824	64	91
2L32-T8-HP Elec	2	F32T8/841	2,800	5,600	1.15	6,440	73	88
4L32-T8-HP Elec	4	F32T8/841	2,800	11,200	1.15	12,880	147	88
2L54-T5-HO Elec	2	F54/T5HO/841	4,600	9,200	1.00	9,200	117	79
4L54-T5-HO Elec	4	F54/T5HO/841	4,600	18,400	1.00	18,400	234	79

*Lamp/ballast system values shown are a general reference intended to supply a quick comparison of several common lamp/ballast systems, the associated energy consumption, and net lumen output.

*Values shown are based on normal operating temperatures (25°C T8 and 35°C T5) and at 277 volts.

*Fixture efficiency percentages are generally representative of each system type, actual values will vary.

*There are many operating variables that affect system output, in addition to rating variances from brand to brand.

*All T8 electronic ballast values shown are based on Ultra Efficient (aka 3rd Generation) T8 ballasts.

*All T5 and T8 lamp values shown are for basic grade lamps. Extended life and higher lumen lamp types are available.

*In addition to those shown, there are a wide variety of systems to choose from, each with distinct features and cost points.

*Please consult the lamp/ballast manufacturer's catalogs for the detailed information required to model your system.

Product Information

Project Name	Type
Catalog Number	Date

SPECIFICATIONS

Features

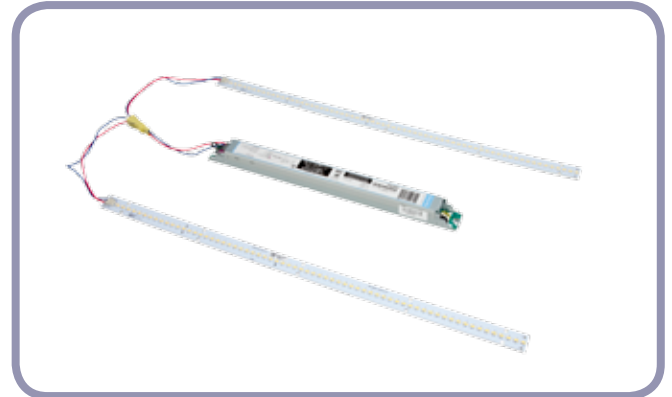
- Low cost LED prismatic troffer retrofit kit
- Long Life 60,000 hour LEDs at L80 for reduced maintenance
- Four LED color choices and 80 CRI
- Available in 2x2 and 2x4 configurations
- Lumen packages ranging from 1400–4800 lumens are consistent with typical delivered lumens provided by lensed troffers
- Efficacy over 100 LPW
- LED boards are provided with thermal adhesive for easy mounting and optimized heat dissipation
- High performance LED driver standard; 0-10V dimming driver optional.
- Pre-wired components for easy installation and maintenance
- Compatible with most lighting control systems
- Five year warranty

Construction

- Retrofit kit includes four LED boards utilizing adhesive tape attachment and LED driver.
- Alignment tool, sold separately, simplifies accurate placement of boards and decreases installation time.

Electrical

- Input Voltage Range: 120-277VAC 50/60Hz
- Driver options include fixed output for on/off function, or continuous 0-10V dimming
- Temperature rating of -40C to 35C



Certifications

- All kits are built to UL 1598 and 2108 standards.
- Luminaire bear appropriate labeling.
- Adheres to LM79, LM80 and TM21 industry standards.
- Maintains insulation contact (IC) rating of existing fixture.
- DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org.

Application

- Ideal for commercial offices, educational facilities, retail and health care facilities.

Warranty

- Five-year warranty. (Terms and Conditions Apply)

CERTIFICATION



ORDERING INFORMATION

EXAMPLE TKG24-40LW-EU

MODEL	SIZE	COLOR TEMP	LUMEN OUTPUT	DRIVER	VOLTAGE
TKG LED Retrofit Kit	22 2x2 Nominal 24 2x4 Nominal	30 3000K 35 3500K 40 4000K 50 5000K	XW Extra Low Wattage (2x4 Only) VW Very Low Wattage MW Medium Low Wattage LW Low Wattage ML Medium Lumen HL High Lumen (2x2 Only) VL Very High Lumen (2x2 Only)	E Fixed Output ED 0-10V Dimming ¹	U Universal 120–277 VAC
					ACCESSORIES (ORDER SEPARATELY)
					AT Alignment Tool ² Part #93062081-01

FOOTNOTES

1. Must be used in conjunction with lighting controls.
2. Recommended for proper placement.

PHOTOMETRIC DATA

PHOTOMETRIC DATA: TKG22-35MW-ED

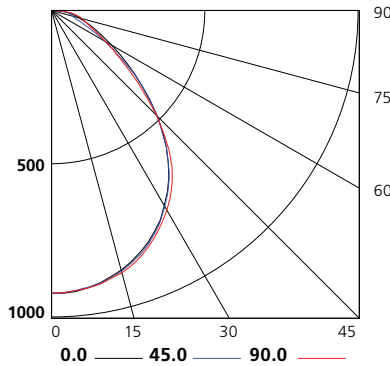
All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP certified lab.

Test: 15611
Test Date: 09/16/15

LUMINAIRE DATA

Luminaire	TKG22-35MW-ED
Ballast	D700CC55UNVTZ-C
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	2039
Watts	20
Mounting	Recessed
Shielding Angle	N.A.
Spacing Criterion	0° = 1.19 90° = 1.21
Luminous Opening in Feet	Length: 1.83' Width: 1.83' Height: 0.00'

INDOOR CANDELA PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	703	35
0-40	1121	55
0-60	1752	86
0-90	2039	100
0-180	2039	100

PHOTOMETRIC DATA: TKG24-35ML-ED

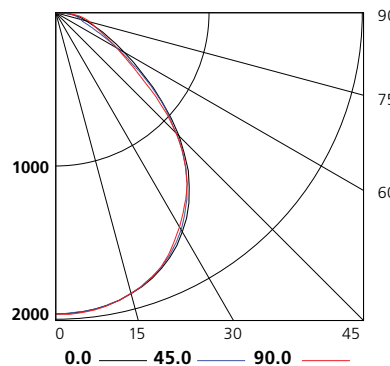
All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP certified lab.

Test: 15613
Test Date: 09/14/15

LUMINAIRE DATA

Luminaire	TKG24-35ML-ED
Ballast	D15CC55UNVTZ-C
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	4567
Watts	42
Mounting	Recessed
Shielding Angle	N.A.
Spacing Criterion	0° = 1.24 90° = 1.22
Luminous Opening in Feet	Length: 3.75' Width: 1.75' Height: 0.00'

INDOOR CANDELA PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	1530	34
0-40	2462	54
0-60	3914	86
0-90	4567	100
0-180	4567	100

LUMEN PACKAGE OPTIONS

2X2 - CCT 3500K

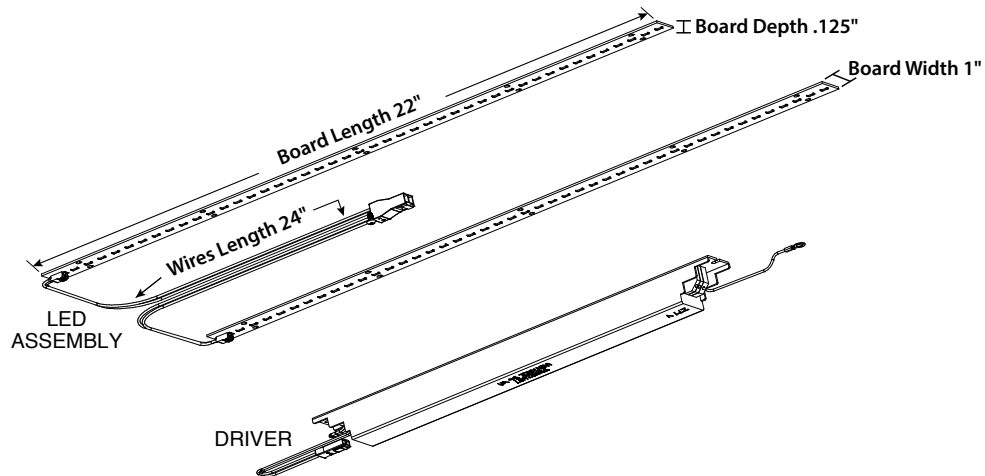
	CRI	Lumen Output	Input Watts	Lumens Per Watt
VW	>80	1400-1600	15	93-106
MW	>80	2000-2300	20	100-115
LW	>80	2300-2500	24	95-104
ML	>80	3100-3400	33	93-103
HL	>80	3300-3600	35	94-102
VL	>80	4200-4500	48	88-94

2X4 - CCT 3500K

	CRI	Lumen Output	Input Watts	Lumens Per Watt
XW	>80	2300-2600	22	104-118
VW	>80	2900-3200	27	107-118
MW	>80	3400-3800	33	103-115
LW	>80	4000-4400	37	108-118
ML	>80	4400-4800	43	102-111

Lumen values shown are initial delivered lumens tested at 25°C per IES LM-79 standards.

DIMENSIONS



FIT AND FUNCTION

Precision-Paragon[P2] recommends a trial installation prior to ordering project quantities to ensure proper fit. TKG is designed to fit into most standard lensed-recessed troffers.

Product Information

Project Name	Type
Catalog Number	Date

SPECIFICATIONS

Features

- Retrofits fluorescent prismatic troffers with state-of-the-art Solid State Lighting technology.
- Output up to 6,400 lumens.
- Up to 127 lumens per watt.
- Rapid installation.
- Long-life, 60,000 hour LEDs at L80 (80% lumen maintenance) reduces life cycle maintenance costs.
- Choice of four lumen packages and dimming option available.
- Low W/ft² to meet the most restrictive lighting power density codes.
- Reduces job site waste by reusing existing fixture housing & prismatic lens.
- Color Rendering Index (CRI) > 80.
- Available in both 2x2 and 2x4 configurations.
- Made In USA. Meets ARRA & Buy American requirements.

Construction

- Conversion kit includes pre-wired reflector LED assembly.
- White aluminum reflector, 90-91% reflectivity.
- Weight: 2x2 - 2 lbs. & 2x4 - 3 lbs.
- (2) Mounting brackets.
- (4) Tek screws.

Electrical

- Input Voltage Range: 100-277 VAC Nom. (90-305 V Min/Max)
- Frequency: 50/60 Hz Nom. (47-63 Hz Min/Max)
- Active Power Factor Correction
- Power Factor: >0.90 @ full load, 100V through 277V
- Inrush Current: 42 Amps max @ 220 VAC, cold start 25°C
- Harmonic Distortion: THD < 20% @ full load
- Protection: Over-Voltage, Over-Temperature (110°) & Short Circuit with self-recovery
- Compliant to FCC Part 15 requirements for EMI/RFI emissions
- NEC/CEC compliant ballast disconnect is standard
- Standard surge protection: ANSI Std. C62.41-2002 Category A (2.5 kV)
- Optional surge protection: ANSI Std. C62.41-2002 Category C High (10kA and 10kV)
- Optional emergency battery pack



Certifications

- UL listed 1598, 1598C and cUL for Canada.
- Luminaires bear appropriate listing labels.
- Emergency-equipped fixtures labeled UL 924.
- Adheres to LM79, LM80 and TM21 industry standards.
- Maintains insulation contact (IC) rating of existing fixture.
- DesignLights Consortium® (DLC) qualified.
- Please refer to the DLC website for specific product qualifications at www.designlights.org.
- Please refer to the Lighting Facts website for specific product qualifications at www.lightingfacts.com.

Application

- Ideal for Commercial Offices, Educational Facilities, Retail, and Health Care Facilities.
- Suitable for use with most wired or wireless lighting control systems.
- Suitable for Dry or Damp Locations.

Warranty

- Five-year warranty. (Terms and Conditions Apply)

CERTIFICATION



ORDERING INFORMATION

EXAMPLE TKL-2X4-LW-F-UL-35K

MODEL	SIZE	LUMEN OUTPUT	DRIVER OUTPUT	DRIVER VOLTAGE	COLOR TEMP	OTHER
TKL LED Prismatic Troffer Conversion Kit	2x2 2x2 Nominal 2x4 2x4 Nominal	XL Extra Low LW Low ML Medium HL High (2x2 Only)	F Fixed DM 0-10v Dimming ¹	UL Universal 120-277 Volt	35K 3500 40K 4000 50K 5000 (Non DLC)	LSP Lighting Surge Protector EB Emergency Battery Backup ² JP Job Pack

FOOTNOTES

1. Must be used in conjunction with lighting controls. Contact factory for assistance.
2. Emergency Battery Backup: 8 Watt (2x2); 16 Watt (2x4). Lumen value with emergency driver + battery pack: 2x2 = 692 lumens, 2x4 = 1200 lumens.

PHOTOMETRIC DATA

PHOTOMETRIC DATA: TKL-2X4-LW-DM-UL-35K

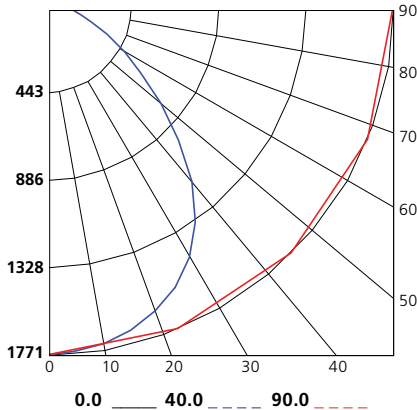
All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP certified lab.

Test: L091407902
Test Date: 09/25/14

LUMINAIRE DATA

Luminaire	TKL-2X4-LW-DM-UL-35K, LED Prismatic Troffer Conversion Kit
Ballast	LED40W-036-C1100-D
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	4023
Watts	35
Mounting	Recessed
Shielding Angle	N/A
Spacing Criterion	0° = 1.24 90° = 1.20
Luminous Opening in feet	Length: 3.82 Width: 1.81 Height: 0.00

INDOOR CANDELA PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	647	N.A.	16
0-30	1364	N.A.	34
0-40	2180	N.A.	54
0-60	3427	N.A.	85
0-80	3939	N.A.	98
0-90	4023	N.A.	100

COEFFICIENTS OF UTILIZATION (%)

RCR	RC	80				70				50				0	
		70	50	30	10	70	50	30	10	70	50	30	10	0	0
0	119	119	119	119	119	116	116	116	116	111	111	111	111	100	
1	110	105	101	98	107	103	99	96	96	96	96	93	86		
2	101	93	87	82	98	91	86	81	88	83	79	73			
3	93	83	75	69	90	81	74	69	79	73	68	63			
4	86	74	66	60	83	73	65	60	71	64	59	55			
5	79	67	59	53	77	66	58	52	64	57	52	49			
6	73	61	53	46	72	60	52	46	58	51	46	43			
7	68	56	47	42	67	55	47	41	53	46	41	39			
8	64	51	43	37	62	50	43	37	49	42	37	35			
9	60	47	39	34	58	46	39	34	45	38	34	32			
10	56	44	36	31	55	43	36	31	42	35	31	29			

RCR = Room Cavity Ratio RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90.0
0	1771	1771	1771	1771	1771
5	1757	1762	1763	1765	1764
10	1736	1740	1741	1741	1739
15	1700	1704	1702	1699	1695
20	1647	1649	1644	1635	1629
25	1573	1573	1562	1546	1540
30	1470	1467	1452	1434	1429
35	1335	1328	1313	1295	1293
40	1166	1157	1142	1127	1127
45	966	966	959	936	931
50	771	774	773	725	712
55	601	584	570	528	527
60	471	435	412	404	416
65	353	311	275	312	325
70	261	233	187	252	262
75	197	179	152	203	220
80	148	126	127	152	174
85	80	73	75	97	100

LUMEN PACKAGE OPTIONS

3500K DETAILS

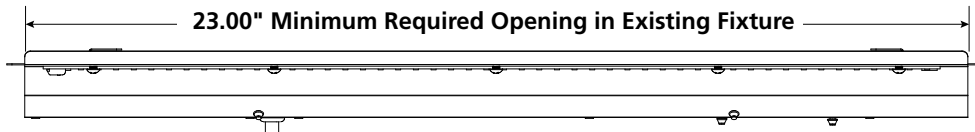
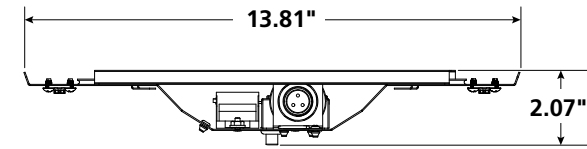
4000K DETAILS

Proposed System	Light Source Quantity & Type	CRI	CCT	Lumens Per Fixture	Input Watts	Lumens Per Watt	CCT	Lumens Per Fixture	Input Watts	Lumens Per Watt
TKL-2X2-XL	1 TKL XL Engine	>80	3500K	2200	23	97	4000K	2356	23	104
TKL-2X2-LW	1 TKL LWEngine	>80	3500K	2803	30	94	4000K	3048	30	102
TKL-2X2-ML	1 TKL ML Engine	>80	3500K	3186	35	91	4000K	3355	35	95
TKL-2X2-HL	1 TKL HL Engine	>80	3500K	4695	52	91	4000K	4832	52	93
TKL-2X4-XL	1 TKL XL Engine	>80	3500K	2854	25	114	4000K	3212	25	127
TKL-2X4-LW	1 TKL LWEngine	>80	3500K	4023	35	116	4000K	4445	37	121
TKL-2X4-ML	1 TKL ML Engine	>80	3500K	5138	48	108	4000K	5537	48	115

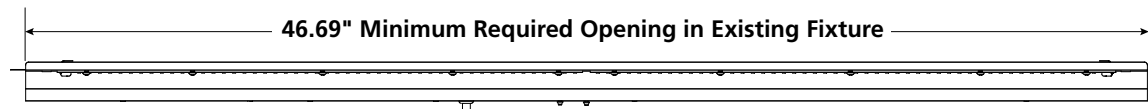
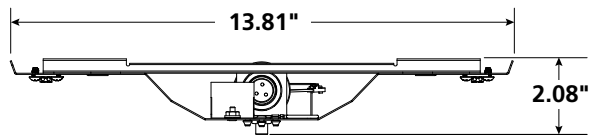
*Lumen values shown are initial delivered lumens tested at 25°C per IES LM-79 standards.

MINIMUM DIMENSIONS OF EXISTING FIXTURE OPENING

2X2 TKL CROSS SECTION & SIDE VIEW



2X4 TKL CROSS SECTION & SIDE VIEW



*Drawings N.T.S.

FIT AND FUNCTION

Minimum dimensional requirements are above but Precision-Paragon[P2] recommends a trial installation prior to ordering project quantities. TKL Conversion Kits are designed to fit into most lensed-recessed prismatic troffers mounted in T-grid installation.

Product Information

Project Name	Type
Catalog Number	Date

SPECIFICATIONS

Features

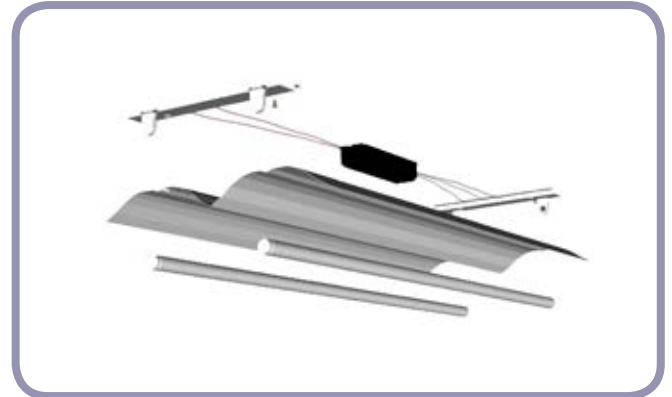
- Convert existing T12 troffers to a more efficient fluorescent solution while increasing the light levels and quality.
- Convert instead of replacing fixtures on your re-lighting project; lower cost, easier labor, & no landfill of old fixture body.
- Light level flexibility to maximize savings: material choice determines efficiency & ballast factor and lamp combination.
- Substantial energy savings that saves money and achieves quick payback .
- Reduces maintenance costs; fewer lamps, electronic ballast and easily cleaned reflector.
- Standard size designed to fit most 2' x 4' existing troffers.
- Snap-in reflector allows for toolless ballast access.
- Fluorescent technology is proven long life.
- Made In USA. Meets ARRA & Buy American requirements.

Construction of TKP-2x4-2L

- (1) 4' Shallow snap-in aluminum reflector
- (2) Socket brackets
- (4) Sockets
- (4) Self tapping tek screws
- Optional ballast w/ disconnect; ships loose
- Weight of reflector & brackets: 2x4 - 4 lbs.

Optional Electrical

- Input Voltage Range: 100-277 VAC Nom. (90-305 V Min/Max)
- Lamp frequency: > 42 kHz
- Power Factor: >0.9% @ full load, 100V through 277V
- Harmonic Distortion: THD < 20% @ full load
- Protection: Over-Voltage, Over-Current & Short Circuit with self-recovery
- Compliant to FCC 47CFR Part 18 Non-consumer Class A Sound Rating



Certifications

- UL 1598B listed for Canada and U.S.
- Luminaires bear appropriate listing labels.



Application

- Suitable for use with most wired or wireless lighting control systems
- Suitable for dry & damp locations.
- Ideal for:
 - Commercial Offices
 - Retail
 - Educational Facilities
 - Health care facilities

ORDERING INFORMATION

EXAMPLE TKP-2X4-2L-WA-TM-UL1-MP-IS-ST-IL

MODEL	LAMP QTY	BRACKET TYPE	BALLAST VOLTAGE*	BALLAST FACTOR ^{3*}	BALLAST GRADE*	WIRE OPTION*	OTHER
TKP Standard Troffer Kit	2L 2 Lamp	TM Top Mount Only	UL1 ² Universal 120-277 VAC	LP Low Power (.75-.78)	ST Standard Grade	BLANK None	1PK Individually Boxed Kit
SIZE	3L 3 Lamp	ETM End & Top Mount	347V Dedicated 347 VAC	MP Mid Power (.85-.88)	UE Ultra Efficient T8	PWS Pre-Wire Sockets Only	
2x4 2x4 Nominal	4L 4 Lamp			MN Neutral Power (.97-1.04)		PWB Pre-Wire Sockets to Ballast	
	REFLECTOR MATERIAL	SOCKET TYPE¹		HP High Power (1.15-1.20)		OTHER	
	WA White Aluminum Reflector 90-91%	NSKT-NB No Sockets, No Ballast		BALLAST STARTING*		IL ⁴ In-Line Ballast Disconnect	
	EA Enhanced Aluminum 95%	S8-NB Shunted for IS, Med Socket, No Ballast		IS Instant Start			
		N8-NB Non-Shunted for PS, Med Socket, No Ballast		PS Rapid/Programmed Start			

FOOTNOTES

1. Only select if ordering kit with no ballast.
 2. Numeral indicates number of ballasts per fixture.
 3. "MN" Ballast factor not for use with T8/ISD or T8/PS.
 4. Must be ordered when ordering kit with ballast.
- * Options only available when ordering kit with ballast.

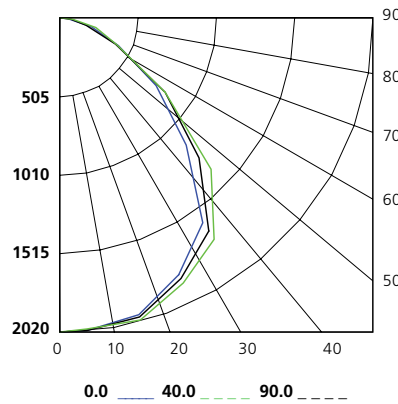
PHOTOMETRIC DATA

PHOTOMETRIC DATA: TKP-2X4-2L-WA-TM-UL1-HP-IS-ST-IL

LUMINAIRE DATA

Luminaire	TKP-2X4-2L-WA-TM-UL1-HP-IS-ST-IL Toffer Conversion Kit
Ballast	B232I120RH
Ballast Factor	1.00
Lamp	F32
Fixture Lumens	5082
Watts	53
Fixture Efficiency	83%
Mounting	Recessed
Shielding Angle	N.A.
Spacing Criterion	0° = 1.28 90° = 1.34
Luminous Opening in feet	Length: 3.75 Width: 1.75 Height: 0.00

INDOOR CANDELA PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt
0-30	1147	19	23
0-40	2113	35	42
0-60	4021	66	79
0-90	5082	83	100

AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90	
Average Luminance Angle	0	2020	2020	2020	2020	
	5	2020	2009	2020	1999	2009
	15	1978	1978	1988	1978	2009
	25	1820	1830	1852	1883	1883
	35	1610	1631	1673	1715	1736
	45	1157	1231	1273	1357	1378
	55	757	757	831	757	831
	65	421	400	400	421	410
	75	210	210	179	242	242
	85	53	63	74	84	84

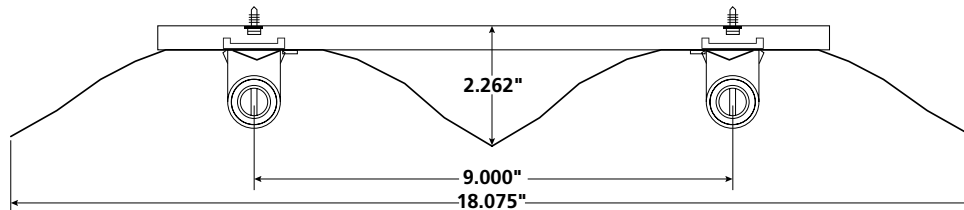
COEFFICIENTS OF UTILIZATION (%)

RCR	RW	80				70				50			0
		70	50	30	10	70	50	30	10	50	30	10	0
0	99	99	99	99	97	97	97	97	93	93	93	83	
1	90	86	82	79	88	84	80	77	80	78	75	69	
2	82	74	69	64	79	73	67	63	70	65	61	57	
3	74	65	58	52	72	64	57	52	61	56	51	47	
4	68	57	50	44	66	56	49	44	54	48	43	40	
5	62	51	43	37	60	50	43	37	48	42	37	34	
6	57	45	38	32	55	45	37	32	43	37	32	29	
7	52	41	33	28	51	40	33	28	39	32	28	25	
8	49	37	30	25	47	36	29	24	35	29	24	22	
9	45	34	27	22	44	33	26	22	32	26	22	20	
10	42	31	24	19	41	30	24	19	29	23	19	18	

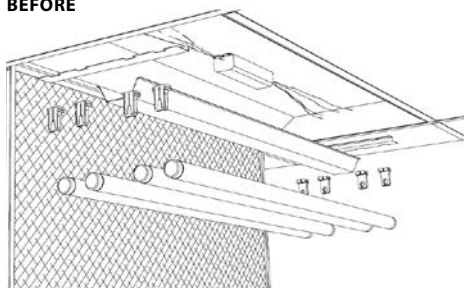
RCR = Room Cavity Ratio RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

KIT IMAGES

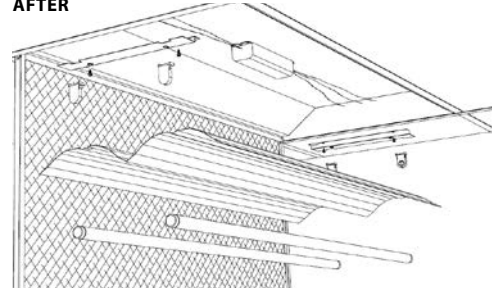
CROSS SECTION



BEFORE



AFTER



*Drawings N.T.S.

EXISTING VS. PROPOSED SYSTEM

Existing Lamp/Ballast System	Lamp Quantity	Lamp Quantity & Type	Mean Lumens Per Lamp	Mean Lumens Per Fixture	Ballast Factor	Net Lumens Per Fixture	Input Watts	Net Lumens Per Watt
3L40-T12 Mag	3	F40/T12/WM	2,280	6,840	0.88	6,019	115	52
4L40-T12 Mag	4	F40/T12/WM	2,280	9,500	0.88	8,026	144	56
3L32-T8-MP Elec	3	F32T8/741	2,660	6,950	0.87	6,943	80	87
4L32-T8-MP Elec	4	F32T8/741	2,660	13,900	0.87	9,257	107	87

Proposed Lamp/Ballast System	Lamp Quantity	Lamp Quantity & Type	Mean Lumens Per Lamp	Mean Lumens Per Fixture	Ballast Factor	Net Lumens Per Fixture	Input Watts	Net Lumens Per Watt
2L32-T8-LP Elec	2	F32T8/841	2,800	5,600	0.77	4,312	48	90
2L32-T8-MP Elec	2	F32T8/841	2,800	5,600	0.87	4,872	53	92
2L32-T8-MN Elec	2	F32T8/841	2,800	5,600	1.04	5,824	64	91
2L32-T8-HP Elec	2	F32T8/841	2,800	5,600	1.15	6,440	73	88

*Lamp/ballast system values shown are a general reference intended to supply a quick comparison of several common lamp/ballast systems, the associated energy consumption, and net lumen output.

*Values shown are based on normal operating temperatures (25°C T8 and 35°C T5) and at 277 volts.

*Fixture efficiency percentages are generally representative of each system type, actual values will vary.

*There are many operating variables that affect system output, in addition to rating variances from brand to brand.

*All T8 electronic ballast values shown are based on Ultra Efficient (aka 3rd Generation) T8 ballasts.

*All T5 and T8 lamp values shown are for basic grade lamps. Extended life and higher lumen lamp types are available.

*In addition to those shown, there are a wide variety of systems to choose from, each with distinct features and cost points.

*Please consult the lamp/ballast manufacturer's catalogs for the detailed information required to model your system.



Wet Location PAR38

The performance you expect from TCP PAR Lamps is now available for wet location applications.

Limitless options for the following applications:

- Outdoor Fixtures
- Landscape Lights
- Security Lights

Great features and benefits:

- Energy Efficient: Up to 80% more energy efficient than halogen alternatives
- UL Wet Location Rated
- Exceeds all industry performance requirements
- Long life: Designed for 25,000 hours (lasts at least 15 times longer than halogen alternative)
- Very durable: Solid state lighting technology significantly reduces lighting service & maintenance due to robust lighting design
- Dimmable



WET LOCATION PAR38



LED
we know light.™

TCP

325 Campus Dr. | Aurora, Ohio 44202 | P: 800-324-1496 | tcp.com

©TCP MAR 2016/57163





LED PAR38 Wet Location Spec Sheet

LED

Designed for 25,000 Hours average rated life, 120 Volts

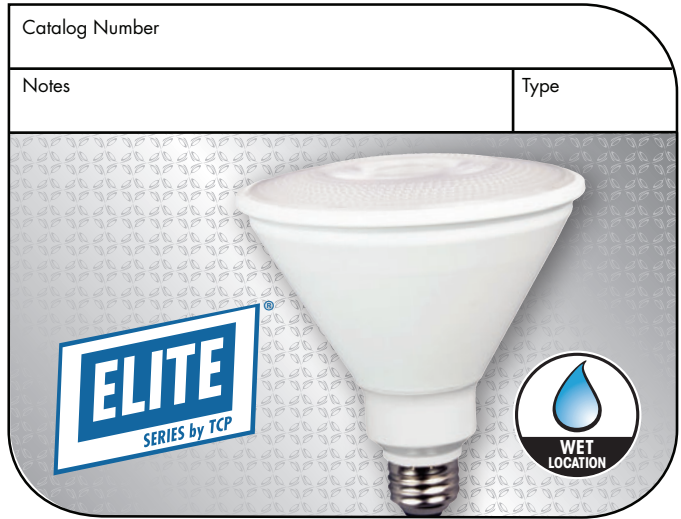
Applications:

Ideal for outdoor PAR38 flood and spot light applications.

- + Outdoor Fixtures
- + Landscape Lights
- + Security Lights

Features and Benefits

- Energy Efficient: Up to 80% less energy than halogen alternatives
- UL Wet Location Rated
- Exceeds all industry performance requirements
- Long Life: Designed for 25,000 hours (lasts at least 15 times longer than Halogen alternative)
- Very Durable: Solid state lighting technology significantly reduces lighting service & maintenance due to robust lighting design
- Dimmable



Specifications

	PAR38
Input Line Voltage:	120 VAC
Input Power	14 W
Input Line Frequency	50/60HZ
Lamp Life (Rated)	25,000 hrs
Minimum Starting Temp	-20°C
Maximum Operating Temp	40°C



WET LOCATION PAR38

**SUITABLE FOR WET LOCATIONS –
WHEN EXPOSED TO WATER USE
ONLY WITH DEVICE BASE UP**

Warranties and Certificates	Item #	Description	Energy Star	Voltage	Wattage	Incandescent Watt Equivalent	Lumens	LPW	CBCP	Beam Angle	CCT	CRI
5 YEAR WARRANTY 	14W PAR38 3000K											
	L14P38D30KFLW	Dimmable 14W Wet Location Smooth PAR38 - 3000K 40°		120	14	90W	1000	71.4	1876	40	3000K	82
	14W PAR38 5000K											
	L14P38D50KFLW	Dimmable 14W Wet Location Smooth PAR38 - 5000K 40°		120	14	90W	1100	78.6	1876	40	5000K	82

TCP

325 Campus Dr. | Aurora, Ohio 44202 | P: 800-324-1496 | tcp.com

©TCP MAR 2016/57163



PHILIPS

LED

InstantFit Lamps



Easily upgrade to LED from fluorescent.

Philips InstantFit LED T8 and 4-pin long compact lamps are an ideal energy saving choice for existing fluorescent fixtures.

Perfect for a wide range of applications

- Full light output in spaces with temperatures down to -4°F (-20°C)
- Perfect for applications with frequent “on/off” switching cycles
- Buildings that desire to be mercury free

Easy to experience

- Compatible with a wide range of ballasts that include instant-start and programmed-start; select models are compatible with dimming ballasts¹
- Fits into existing linear fixtures
- Eliminates the need for rewiring and allows the fixture to maintain original UL and CSA compliance²

Energy savings

- 50% energy savings vs F32T8 electronic instant start systems³

Sustainable lighting solution

- No mercury allowing for non-hazardous waste disposal
- Emits virtually no UV rays or IR
- NSF Certified for use in food areas and refrigerated food displays
- 5-year limited warranty⁴

Footnotes on the page 3.

Philips InstantFit LED T8 Lamps

Ordering, Electrical and Technical Data (Subject to change without notice)

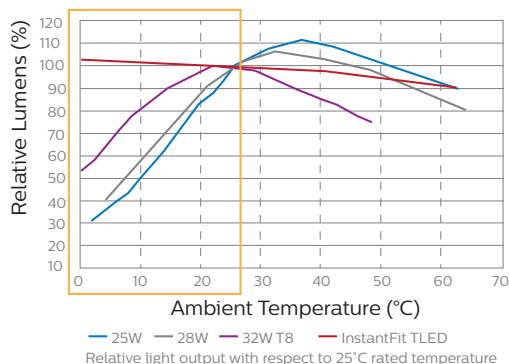
Product No.	Model No.	Ordering Code	Volts (Depending on Ballast)	Base	CRI	Color Temp. (K)	Pkg Qty	Rated Avg. Life ⁵	MOL (In.)	Beam Angle
LED InstantFit T8 - 4'										
45358-9	9290011239	12T8/48-3000 IF 10/1	120-277, 347	G13	82	3000	10	50,000	48	160°
● 45359-7	9290011240	12T8/48-3500 IF 10/1	120-277, 347	G13	82	3500	10	50,000	48	160°
● 45360-5	9290011241	12T8/48-4000 IF 10/1	120-277, 347	G13	82	4000	10	50,000	48	160°
● 45361-3	9290011242	12T8/48-5000 IF 10/1	120-277, 347	G13	82	5000	10	50,000	48	160°
LED InstantFit T8 - 4' Dimmable¹ High Output										
● 45689-7	9290011585	15T8/48-3000 IF DIM 10/1	120-277, 347	G13	82	3000	10	50,000	48	160°
● 45690-5	9290011586	15T8/48-3500 IF DIM 10/1	120-277, 347	G13	82	3500	10	50,000	48	160°
● 45691-3	9290011587	15T8/48-4000 IF DIM 10/1	120-277, 347	G13	82	4000	10	50,000	48	160°
● 45692-1	9290011588	15T8/48-5000 IF DIM 10/1	120-277, 347	G13	82	5000	10	50,000	48	160°
LED InstantFit T8 - 4' Ultra High Output										
● 46313-3	9290012267	16.5T8 LED/48-3500 IF 10/1 UHO	120-277, 347	G13	82	3500	10	70,000	48	160°
● 46314-1	9290012268	16.5T8 LED/48-4000 IF 10/1 UHO	120-277, 347	G13	82	4000	10	70,000	48	160°
● 46315-8	9290012269	16.5T8 LED/48-5000 IF 10/1 UHO	120-277, 347	G13	82	5000	10	70,000	48	160°
LED InstantFit T8 - 4' Glass										
45656-6	9290011511	17T8/48-4000 IFG 10/1	120-277, 347	G13	82	4000	10	36,000	48	240°
45657-4	9290011512	17T8/48-5000 IFG 10/1	120-277, 347	G13	82	5000	10	36,000	48	240°
LED InstantFit T8 - 3'										
45205-2	9290011183	10.5T8/36-3000 IF 10/1	120-277, 347	G13	82	3000	10	50,000	36	160°
45206-0	9290011184	10.5T8/36-3500 IF 10/1	120-277, 347	G13	82	3500	10	50,000	36	160°
45207-8	9290011185	10.5T8/36-4000 IF 10/1	120-277, 347	G13	82	4000	10	50,000	36	160°
45208-6	9290011186	10.5T8/36-5000 IF 10/1	120-277, 347	G13	82	5000	10	50,000	36	160°
LED InstantFit T8 - 2' High Output										
45201-1	9290011179	8.5T8/24-3000 IF 10/1	120-277, 347	G13	82	3000	10	50,000	24	160°
● 45202-9	9290011180	8.5T8/24-3500 IF 10/1	120-277, 347	G13	82	3500	10	50,000	24	160°
● 45203-7	9290011181	8.5T8/24-4000 IF 10/1	120-277, 347	G13	82	4000	10	50,000	24	160°
● 45204-5	9290011182	8.5T8/24-5000 IF 10/1	120-277, 347	G13	82	5000	10	50,000	24	160°
LED InstantFit T8 U-Bent - 6" High Output										
45266-4	9290011196	16.5T8/24-3000 IF-6U 10/1	120-277, 347	G13	82	3000	10	50,000	22.5	160°
45267-2	9290011197	16.5T8/24-3500 IF-6U 10/1	120-277, 347	G13	82	3500	10	50,000	22.5	160°
45268-0	9290011198	16.5T8/24-4000 IF-6U 10/1	120-277, 347	G13	82	4000	10	50,000	22.5	160°
45269-8	9290011199	16.5T8/24-5000 IF-6U 10/1	120-277, 347	G13	82	5000	10	50,000	22.5	160°
LED InstantFit 4-Pin long compact - 2' High Output										
45663-2	9290011513	16.5PL-LED/24-3000 IF 10/1	120-277	2G11	82	3000	10	40,000	22.5	160°
45664-0	9290011514	16.5PL-LED/24-3500 IF 10/1	120-277	2G11	82	3500	10	40,000	22.5	160°
45665-7	9290011515	16.5PL-LED/24-4000 IF 10/1	120-277	2G11	82	4000	10	40,000	22.5	160°

Ballast Compatibility Guide

Please refer to www.philips.com/instantfit for instant start ballasts details and the latest ballast compatibility guide.

Relative Light Output vs. Ambient Temperature

4' T8 Lamps - 0.88 BF Ballast



Suitable for use in fixtures where ambient temperature is between -4°F (-20°C) and 113°F (45°C).

Warning: Philips LED T8 InstantFit lamps will only operate properly on compatible Instant-start and Programmed-start ballasts. Please refer to the Philips LED T8 InstantFit Installation Guide, which can be obtained through your local Philips Sales Representative, or visit www.philips.com/instantfit

FCC Note: This device complies with Part 18 of the FCC Rules.

Philips InstantFit LED T8 Lamps

Ordering, Electrical and Technical Data (Subject to change without notice)

Product No.	Bare Lamp Watts (W)	Average System Watts (W)			Initial Lumens ⁶		
		Low Ballast Factor (0.78)	Normal Ballast Factor (0.88)	High Ballast Factor (1.18)	Low Ballast Factor (0.78)	Normal Ballast Factor (0.88)	High Ballast Factor (1.18)
LED InstantFit T8 - 4'							
45358-9	12	12.5	14.5	18.5	1300	1500	1700
45359-7	12	12.5	14.5	18.5	1300	1500	1800
45360-5	12	12.5	14.5	18.5	1400	1600	1850
45361-3	12	12.5	14.5	18.5	1450	1600	2000
LED InstantFit T8 - 4' Dimmable¹ High Output							
45689-7	15	16	18	26.5	1800	2000	2700
45690-5	15	16	18	26.5	1800	2000	2700
45691-3	15	16	18	26.5	1900	2100	2800
45692-1	15	16	18	26.5	1900	2100	2800
LED InstantFit T8 - 4' Ultra High Output							
46313-3	16.5	18	20	27	2200	2400	2950
46314-1	16.5	18	20	27	2250	2500	3050
46315-8	16.5	18	20	27	2250	2500	3050
LED InstantFit T8 - 4' Glass							
45656-6	17	18.0	20.0	26.5	1850	2100	2450
45657-4	17	18.0	20.0	26.5	1850	2100	2450
LED InstantFit T8 - 3'							
45205-2	10.5	12.5	13	17	1000	1100	1330
45206-0	10.5	12.5	13	17	1050	1160	1400
45207-8	10.5	12.5	13	17	1080	1200	1440
45208-6	10.5	12.5	13	17	1150	1270	1550
LED InstantFit T8 - 2' High Output							
45201-1	8.5	10	10.5	14.5	860	950	1110
45202-9	8.5	10	10.5	14.5	900	1040	1170
45203-7	8.5	10	10.5	14.5	930	1050	1200
45204-5	8.5	10	10.5	14.5	1000	1100	1290
LED InstantFit T8 U-Bent - 6" High Output							
45266-4	16.5	17.5	19	25.5	1800	2000	2700
45267-2	16.5	17.5	19	25.5	1800	2000	2700
45268-0	16.5	17.5	19	25.5	1900	2100	2800
45269-8	16.5	17.5	19	25.5	1950	2150	2900
LED InstantFit 4-Pin long compact (PL-L) - 2' High Output							
45663-2	17	N/A	21	N/A	N/A	1900	N/A
45664-0	17	N/A	21	N/A	N/A	2000	N/A
45665-7	17	N/A	21	N/A	N/A	2100	N/A

- Please refer to the InstantFit ballast compatibility guide @ www.philips.com/instantfit. Compatibility subject to change as additional ballasts are tested. If you do not see your ballast on the compatibility list please contact your local Philips Lighting representative.
 - Must follow guidelines for installation from Philips Quick Installation Guide included with lamp shipment.
 - (2) Lamp F32T8 Electronic Instant Start System with 0.88 Ballast Factor= 58 System Watts; (2) Philips LED T8 InstantFit =29 System Watts; 58 - 29 = 29 System Watts Saved; 29/58 = 50% Energy Saved.
 - See warranty for terms and conditions at www.philips.com/warranties.
 - Tested to B50 L70 requirements with a ballast whose ballast factor is ≤ 0.88 .
 - Photometric testing consistent with IES LM-79.
- This lamp is DLC qualified.

System Power Compatibility Guide

This chart shows the measured system wattage of the Philips InstantFit TLED versus a comparable linear fluorescent lamp when used with the reference ballast.

	Reference Ballast	ICN-1P32-N	ICN-2P32-N	ICN-3P32-N	ICN-4P32-N
	Ballast Factor	0.88	0.88	0.88	0.88
	Number of Lamps	1	2	3	4
Specification	Lamp Type	System Power (W) [*]			
	F32T8	31	59	85	112
	InstantFit 12 W	12.5	27.5	40	58
	InstantFit 15 W	24	35.5	46	63

* Variance <10%

Philips InstantFit LED T8 Lamps

Shipping Data (Subject to change without notice)

Product Number	SKU UPC (0-46677)	Outer Bar Code (5-00-46677)	Case Qty.	Case Weight (lbs.)	Case Cube (cu. Ft.)	Pallet Qty	Lamps/SKU	SKUs per Layer	Layers High	SKU Dimensions (W x D x H) (In.)	Case Dimensions (W x D x H) (In.)	Pallet Dimensions (W x D x H) (In.)
LED InstantFit T8 - 4'												
45358-9	45358-9	45358-4	10	9.7	.59	600	1	60	10	1.1 x 1.1 x 48.0	48.8 x 6.0 x 3.5	49.2 x 39.4 x 40.9
45359-7	45359-6	45359-1	10	9.7	.59	600	1	60	10	1.1 x 1.1 x 48.0	48.8 x 6.0 x 3.5	49.2 x 39.4 x 40.9
45360-5	45360-2	45360-7	10	9.7	.59	600	1	60	10	1.1 x 1.1 x 48.0	48.8 x 6.0 x 3.5	49.2 x 39.4 x 40.9
45361-3	45361-9	45361-4	10	9.7	.59	600	1	60	10	1.1 x 1.1 x 48.0	48.8 x 6.0 x 3.5	49.2 x 39.4 x 40.9
LED InstantFit T8 - 4' Dimmable High Output												
45689-7	45689-4	45689-9	10	9.7	.59	600	1	60	10	1.1 x 1.1 x 48.0	48.8 x 6.0 x 3.5	49.2 x 39.4 x 40.9
45690-5	45690-0	45690-5	10	9.7	.59	600	1	60	10	1.1 x 1.1 x 48.0	48.8 x 6.0 x 3.5	49.2 x 39.4 x 40.9
45691-3	45691-7	45691-2	10	9.7	.59	600	1	60	10	1.1 x 1.1 x 48.0	48.8 x 6.0 x 3.5	49.2 x 39.4 x 40.9
45692-1	45692-4	45692-9	10	9.7	.59	600	1	60	10	1.1 x 1.1 x 48.0	48.8 x 6.0 x 3.5	49.2 x 39.4 x 40.9
LED InstantFit T8 - 4' Ultra High Output												
46313-3	46313-7	46313-2	10	9.7	.59	600	1	60	10	1.1 x 1.1 x 48.0	48.8 x 6.0 x 3.5	49.2 x 39.4 x 40.9
46314-1	46314-4	46314-9	10	9.7	.59	600	1	60	10	1.1 x 1.1 x 48.0	48.8 x 6.0 x 3.5	49.2 x 39.4 x 40.9
46315-8	46315-1	46315-6	10	9.7	.59	600	1	60	10	1.1 x 1.1 x 48.0	48.8 x 6.0 x 3.5	49.2 x 39.4 x 40.9
LED InstantFit T8 - 4' Glass												
45656-6	45656-6	45656-1	10	9.7	1.06	360	1	40	10	1.1 x 1.1 x 48.0	49.8 x 8.8 x 4.2	51.2 x 39.4 x 43.4
45657-4	45657-3	45657-8	10	9.7	1.06	360	1	40	10	1.1 x 1.1 x 48.0	49.8 x 8.8 x 4.2	51.2 x 39.4 x 43.4
LED InstantFit T8 - 3'												
45205-2	45205-6	45205-1	10	5.1	.43	800	1	80	10	1.1 x 1.1 x 36.0	38.0 x 6.0 x 3.4	50.6 x 39.4 x 39.6
45206-0	45206-3	45206-8	10	5.1	.43	800	1	80	10	1.1 x 1.1 x 36.0	38.0 x 6.0 x 3.4	50.6 x 39.4 x 39.6
45207-8	45207-0	45207-5	10	5.1	.43	800	1	80	10	1.1 x 1.1 x 36.0	38.0 x 6.0 x 3.4	50.6 x 39.4 x 39.6
45208-6	45208-7	45208-2	10	5.1	.43	800	1	80	10	1.1 x 1.1 x 36.0	38.0 x 6.0 x 3.4	50.6 x 39.4 x 39.6
LED InstantFit T8 - 2' High Output												
45201-1	45201-8	45201-3	10	4.63	.31	1200	1	120	10	1.1 x 1.1 x 24.0	26.2 x 6.0 x 3.4	50.6 x 39.4 x 39.6
45202-9	45202-5	45202-0	10	4.63	.31	1200	1	120	10	1.1 x 1.1 x 24.0	26.2 x 6.0 x 3.4	50.6 x 39.4 x 39.6
45203-7	45203-2	45203-7	10	4.63	.31	1200	1	120	10	1.1 x 1.1 x 24.0	26.2 x 6.0 x 3.4	50.6 x 39.4 x 39.6
45204-5	45204-9	45204-4	10	4.63	.31	1200	1	120	10	1.1 x 1.1 x 24.0	26.2 x 6.0 x 3.4	50.6 x 39.4 x 39.6
LED InstantFit T8 U-Bent - 6" High Output												
45266-4	45266-7	45266-2	10	8.2	1.19	300	1	100	3	1.1 x 7.2 x 23.0	23.1 x 7.5 x 11.9	47.2 x 39.4 x 41.4
45267-2	45267-4	45267-9	10	8.2	1.19	300	1	100	3	1.1 x 7.2 x 23.0	23.1 x 7.5 x 11.9	47.2 x 39.4 x 41.4
45268-0	45268-1	45268-6	10	8.2	1.19	300	1	100	3	1.1 x 7.2 x 23.0	23.1 x 7.5 x 11.9	47.2 x 39.4 x 41.4
45269-8	45269-8	45269-3	10	8.2	1.19	300	1	100	3	1.1 x 7.2 x 23.0	23.1 x 7.5 x 11.9	47.2 x 39.4 x 41.4
LED InstantFit 4-Pin long compact - 2' High Output												
45663-2	45663-4	45663-9	10	4.65	0.29	1200	1	150	8	23.3 x 0.5 x 4.3	23.3 x 5.0 x 4.3	47.3 x 39.4 x 40.2
45664-0	45664-1	45664-6	10	4.65	0.29	1200	1	150	8	23.3 x 0.5 x 4.3	23.3 x 5.0 x 4.3	47.3 x 39.4 x 40.2
45665-7	45665-8	45665-3	10	4.65	0.29	1200	1	150	8	23.3 x 0.5 x 4.3	23.3 x 5.0 x 4.3	47.3 x 39.4 x 40.2



© 2016 Philips Lighting Holding B.V. All rights reserved. Philips reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.



Philips Lighting North America Corporation
200 Franklin Square Drive, Somerset, NJ 08873
Tel. 855-486-2216

Imported by: Philips Lighting,
A division of Philips Electronics Ltd.
281 Hillmount Rd, Markham, ON, Canada L6C 2S3
Tel. 800-668-9008



PAR30/PAR20 LED

12.5PAR30L/F25 2700 DIM SO

Philips PAR30 and PAR20 LED Single Optic Lamps provide superior lighting aesthetics and optimal thermal efficiency in a sleek, lightweight design.

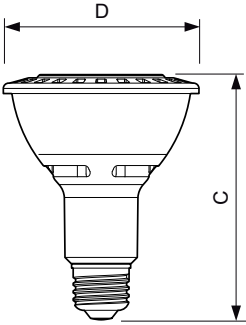
Product data

General Information		Lamp Current (Nom)	
Cap-Base	E26 [Single Contact Medium Screw]		125 mA
Bulb Shape	PAR30L [PAR 3.75 inch/95mm Long]	Wattage Equivalent	75 W
Nominal Lifetime (Nom)	25000 h	Starting Time (Nom)	0.5 s
Switching Cycle	50000X	Warm Up Time To 60% Light (Max)	0.5 s
Technical Type	12.7-75W	Power Factor (Nom)	0.85
		Voltage (Nom)	120 V
Light Technical		Temperature	
Color Code	827 [CCT of 2700K]	T-Case Maximum (Nom)	89 °C
Beam Angle (Nom)	25 °		
Initial lumen (Nom)	850 lm	Controls and Dimming	
Luminous Flux (Rated) (Nom)	850 lm	Dimmable	Yes
Luminous Intensity (Nom)	4700 cd		
Color Designation	Warm White (WW)	Approval and Application	
Rated Beam Angle	25 °	Suitable For Accent Lighting	Yes
Correlated Color Temperature (Nom)	2700 K	Energy Efficiency Label (EEL)	Not applicable
Luminous Efficacy (rated) (Nom)	67 lm/W		
Color Consistency	<6	Product Data	
Color Rendering Index (Nom)	80	Order product name	120V PAR30L 12.7W 25D 2700K 900 D SO
LLMF At End Of Nominal Lifetime (Nom)	70 %	EAN/UPC - Product	046677454661
		Order code	454660
Operating and Electrical		Numerator - Quantity Per Pack	1
Input Frequency	60 Hz	Numerator - Packs per outer box	6
Power (Rated) (Nom)	12.7 W	Material Nr. (12NC)	929001132304

PAR30/PAR20 LED

Net Weight (Piece)	0.001 kg
--------------------	----------

Dimensional drawing



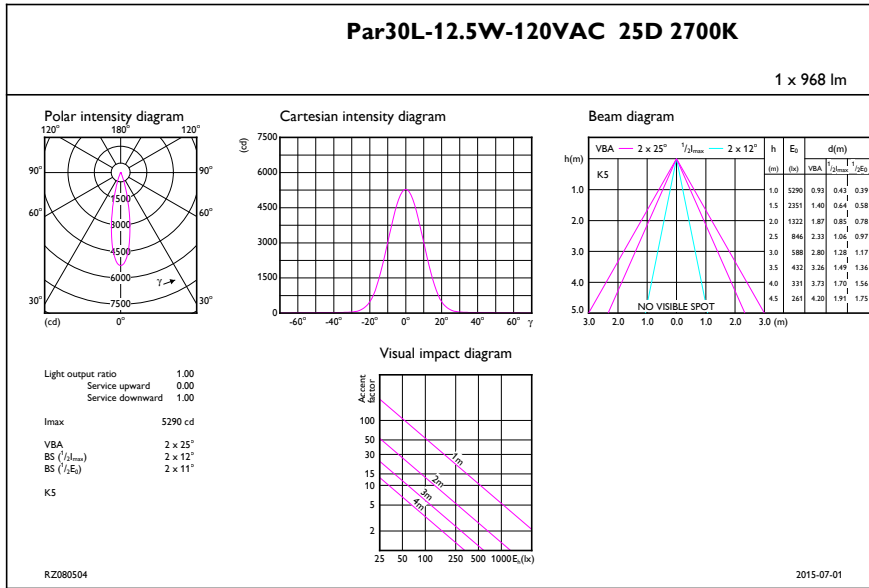
Product	D	C
120V PAR30L 12.7W 25D 2700K 900 D SO	92 mm	116 mm

PAR30L CL 120V 12.5W-75W 25D 2700K E26 D

PAR30/PAR20 LED

Photometric data

Accent Lighting - Spots





LM79
LM80

5 YEAR
WARRANTY

DLC ON 4FT MODEL!!!



The RemPhos: T5 TOTALtUBE®




RemPhos T5 Ballast Compatible
TOTALtUBE LED Lamp

The T5 TOTALtUBE LED lamps by RemPhos Technologies offer an economical and efficient alternative to upgrade to long lasting LED lighting, while retaining the original fixture. The T5 TOTALtUBE directly replaces fluorescent T5 or T5HO lamps* without removing the ballast. Light is emitted 180 degrees so that the original fixture will be illuminated perfectly and uniformly. Extremely efficient at >110LPW, these bright LED lamp can be used as a direct 1 for 1 retrofit for fluorescent. Compatible with program start T5 ballasts. UL Listed.

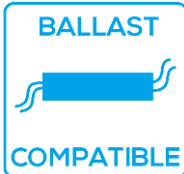
Replaces the following:

T5 fluorescent
T5HO fluorescent



T5 TOTALtUBE can be used with:

*Program start ballasts



Install is as easy as...

- 1) Remove fluorescent lamp
- 2) install LED lamp.

No rewiring required!

*22IN and 33IN model work on standard output ballasts only. The 46IN model works on standard or HO ballasts. It will automatically sense the ballast type and adjust its lumen output and wattage accordingly. See table on page 2 for more details.

RemPhos T5 LED Lamps



DATE

JOB NAME

TYPE

Features

- UL Listed
- >110LPW
- Ballast compatible

Applications

- Troffers
- Vapor tights
- Strips
- Wraps
- Soffits

Manufacturer

RPT

Series

TOTALTUBE

Diameter

T5

Length

22IN (2ft)
33IN (3ft)
46IN (4ft)

Color Temperature

3500K
5000K

WATTAGE & LIGHT OUTPUT TABLE

22IN = 6W = 800LM
33IN = 10W = 1200LM
46IN = works on standard or HO
Standard T5 ballast:
14W= 1500LM
T5HO ballast:
28W= 2900LM

Ordering Example: RPT-TOTALTUBE-T5-46IN-5000K

**46IN (4ft) only
model DLC QPL**

Details

Application Features: The T5 TOTALTUBE LED lamps easily replace older bulb technologies. The lamps are perfect for new construction or retrofits. These LED lamps are designed to safely and **quickly** replace most existing fluorescent tubes.

Construction: UV protected and flame retardant plastic, anodized aluminum

Finish: White bottom, milky top

Electrical: 89% efficient internal driver, LM80 LEDs

Optics: Patent-pending optical system delivers perfectly uniform light from the integral LED lamp. You will be unable to tell the difference between this LED lamp and traditional fluorescent.

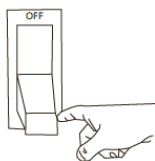
Approvals: cUL, FCC, RoHs, DLC QPL on 46in model only

Manufactured: China – 5 Year Warranty

Installation

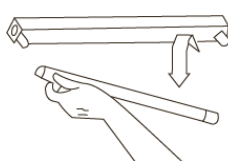
1

Turn off power



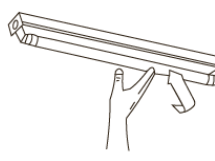
2

Remove fluorescent tube



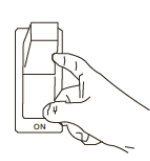
3

Install TOTALTUBE



4

Turn on power



Designed by **US.**
Made by **US.**

RTR / LED Troffer Conversion Kit

The LED troffer kits are designed by our expert in house lighting engineers and fabricated with custom made multi-stage roll forming machinery. This retrofit kit is an excellent alternative to standard retrofit designs and is ideally suited for prismatic lensed and recessed grid, suspended or surface mount troffers.



Project Name: _____ Type: _____

Catalog Number: _____ Date: _____

SPECIFICATIONS

Features

- Available in 2' and 4' lengths
- Many lumen packages are available to choose from
- CCT options available
- Modular design with plug and play style connectors
- Connectors reduce chance of miswiring
- 2x4 LED reflectors are compatible with most EPA 2000 series retrofit bracket mounting features
- Familiar design and installation

Construction

- White gloss painted aluminum enclosure
- Rust free
- Light weight
- Installer friendly

Electrical

- 120-277 VAC universal voltage standard
- Power Factor > .9 & THD < 20% @277 VAC on DLC listed models
- 0-10V dimming standard
- Name brand drivers

Optics

- Name brand LED arrays
- High efficiency LEDs
- CRI > 80 on DLC listed models; high color rendering
- White LED panel has 91% reflectance
- Frosted lens option available to reduce LED glare

Warranty

- 5-year limited warranty
- Project specific warranty terms available

Options

Consult with your sales representative for additional options

ORDERING INFORMATION

TYPE	DIMENSIONS	LUMEN PACKAGE*	COLOR TEMP (K)
RTR	2 2 x 2	20 2,000L	30 3,000K
		22 2,250L	35 3,500K
	25 2,500L	40 4,000K	
	27 2,750L	50 5,000K	
	4 2 x 4		
RTR			
ORDER: RTR			

OPTIONS:

LENS
L Lens

CERTIFICATIONS



Example Ordering Number: **RTR22540-L**

*2x2 from 2,000 to 3,000 in 250 lumen increments

*2x4 from 3,000 to 4,250 in 250 lumen increments

RTR / LED Troffer Conversion Kit

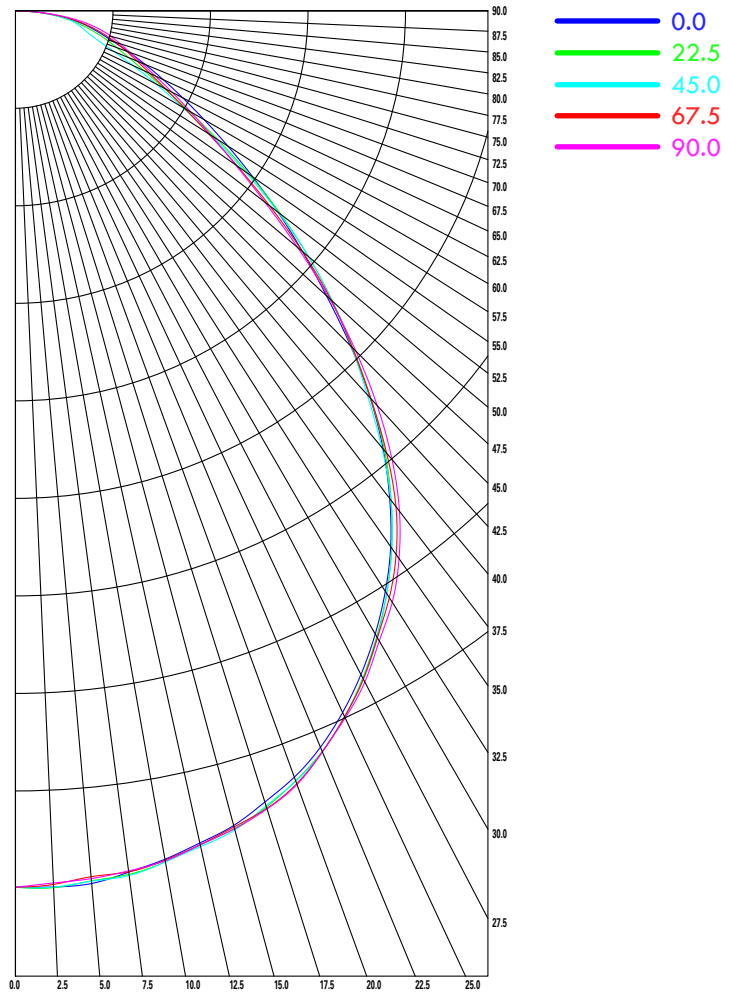
PHOTOMETRIC DATA

Below is the photometric data information for a 2 x 2 fixture.

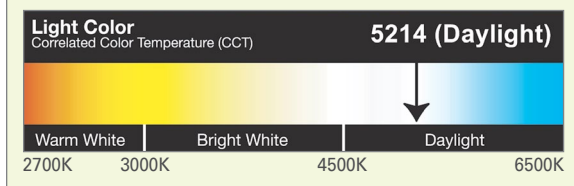
Zonal lumen summary

ZONE	LUMENS	% OF FIXTURE
0-30	829	34.4
0-40	1328	55.1
0-60	2081	86.4
0-90	2409	100.0
90-120	0	0.0
90-150	0	0.0
90-180	0	0.0
0-180	2409	100.0

Polar plot



Light Output (Lumens)	2409
Watts	21.95
Lumens per Watt (Efficacy)	109.7
Color Accuracy Color Rendering Index (CRI)	82



All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting*. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: 61VT-SQ6H10 (Revised)

Model Number: RTR2202LOS067MWNDOS018US004

Type: Retrofit Kit - Downlight

RTR / LED Troffer Conversion Kit

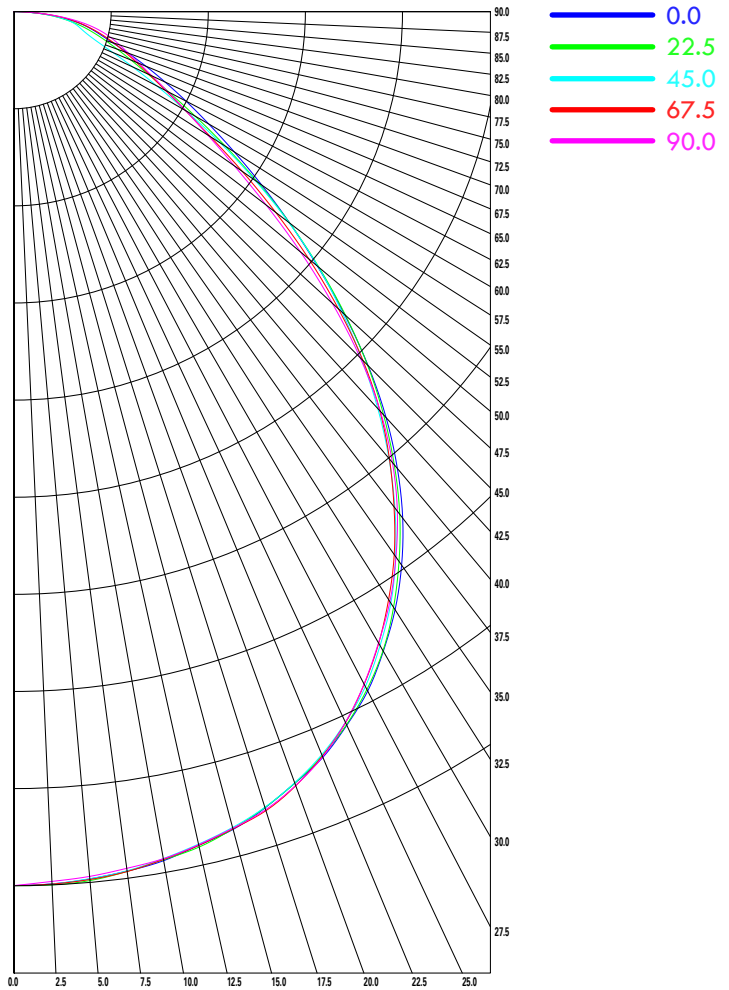
PHOTOMETRIC DATA

Below is the photometric data information for a 2 x 4 fixture.

Zonal lumen summary

ZONE	LUMENS	% OF FIXTURE
0-30	1261	33.9
0-40	2028	54.6
0-60	3208	86.3
0-90	3715	100.0
90-120	0	0.0
90-150	0	0.0
90-180	0	0.0
0-180	3715	100.0

Polar plot



Light Output (Lumens)	3715
Watts	30.72
Lumens per Watt (Efficacy)	120.9
Color Accuracy Color Rendering Index (CRI)	83
Light Color Correlated Color Temperature (CCT)	
5285 (Daylight)	
Warm White	Bright White
2700K	3000K
4500K	6500K

All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting*. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: 61VT-K7MLZZ (Revised)

Model Number: RTR2402LOS067MWNDOS018US005

Type: Retrofit Kit - Downlight

RTR / LED Troffer Conversion Kit

SCALED PERFORMANCE TABLE

Part #	Dimensions	Initial Light Output (lumens)	Input Power (W)	Luminaire Efficacy (lm/w)	CCT
RTR22030	2x2	2000	23.2	86.2	3000
RTR22035	2x2	2000	21.6	92.6	3500
RTR22040	2x2	2000	20.8	96.2	4000
RTR22235	2x2	2250	25.2	89.3	3500
RTR22240	2x2	2250	24.3	92.6	4000
RTR22250	2x2	2250	23.0	97.8	5000
RTR22230	2x2	2250	22.5	100.0	3000
RTR22235	2x2	2250	21.2	106.1	3500
RTR22540	2x2	2500	28.1	89.0	4000
RTR22550	2x2	2500	26.5	94.3	5000
RTR22530	2x2	2500	25.4	98.4	3000
RTR22535	2x2	2500	24.1	103.7	3500
RTR22540	2x2	2500	23.3	107.3	4000
RTR22550	2x2	2500	22.3	112.1	5000
RTR22750	2x2	2750	30.4	90.5	5000
RTR22730	2x2	2750	28.5	96.5	3000
RTR22735	2x2	2750	26.9	102.2	3500
RTR22740	2x2	2750	26.1	105.4	4000
RTR22750	2x2	2750	24.9	110.4	5000
RTR23030	2x2	3000	31.7	94.6	3000
RTR23035	2x2	3000	29.9	100.3	3500
RTR23040	2x2	3000	29.0	103.4	4000
RTR23050	2x2	3000	27.5	109.1	5000
RTR43030	2x4	3000	31.9	94.0	3000
RTR43035	2x4	3000	28.0	107.1	3500
RTR43040	2x4	3000	27.2	110.3	4000
RTR43050	2x4	3000	25.8	116.3	5000
RTR43030	2x4	3000	26.8	111.9	3000
RTR43035	2x4	3000	25.3	118.6	3500
RTR43040	2x4	3000	24.7	121.5	4000
RTR43050	2x4	3000	23.7	126.6	5000
RTR43235	2x4	3250	30.9	105.2	3500
RTR43240	2x4	3250	30.0	108.3	4000
RTR43250	2x4	3250	28.4	114.4	5000
RTR43230	2x4	3250	29.2	111.3	3000
RTR43235	2x4	3250	27.7	117.3	3500
RTR43240	2x4	3250	27.0	120.4	4000
RTR43250	2x4	3250	25.8	126.0	5000

RTR / LED Troffer Conversion Kit

SCALED PERFORMANCE TABLE

RTR43535	2x4	3500	33.8	103.6	3500
RTR43540	2x4	3500	32.8	106.7	4000
RTR43550	2x4	3500	31.1	112.5	5000
RTR43530	2x4	3500	31.8	110.1	3000
RTR43535	2x4	3500	30.0	116.7	3500
RTR43540	2x4	3500	29.4	119.0	4000
RTR43550	2x4	3500	28.0	125.0	5000
RTR43735	2x4	3750	36.9	101.6	3500
RTR43740	2x4	3750	35.8	104.7	4000
RTR43750	2x4	3750	33.8	110.9	5000
RTR43730	2x4	3750	34.4	109.0	3000
RTR43735	2x4	3750	32.5	115.4	3500
RTR43740	2x4	3750	31.6	118.7	4000
RTR43750	2x4	3750	30.2	124.2	5000
RTR44035	2x4	4000	40.1	99.8	3500
RTR44040	2x4	4000	38.7	103.4	4000
RTR44050	2x4	4000	36.7	109.0	5000
RTR44030	2x4	4000	36.8	108.7	3000
RTR44035	2x4	4000	35.1	114.0	3500
RTR44040	2x4	4000	34.0	117.6	4000
RTR44050	2x4	4000	32.5	123.1	5000
RTR44250	2x4	4250	39.9	106.5	5000
RTR44230	2x4	4250	39.4	107.9	3000
RTR44235	2x4	4250	37.4	113.6	3500
RTR44240	2x4	4250	36.3	117.1	4000
RTR44250	2x4	4250	34.7	122.5	5000

APPLICATION NOTES

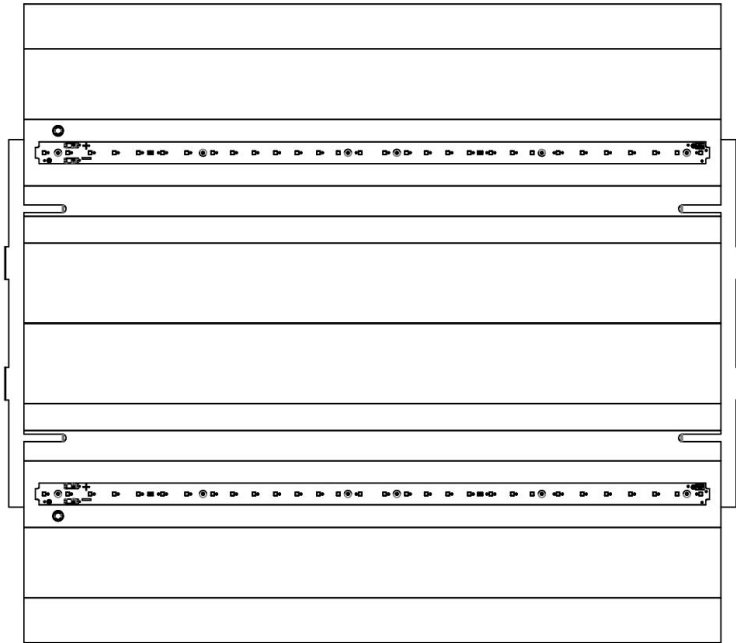
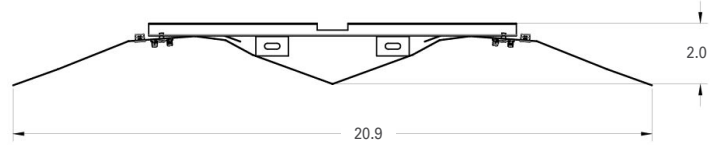
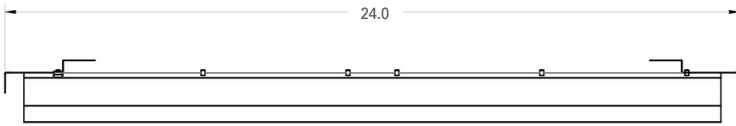
Actual performance may vary by up to +/-10% of values listed.
See IES file for actual values.

See DLC QPL for listed models.

RTR / LED Troffer Conversion Kit

FIXTURE DIMENSIONS

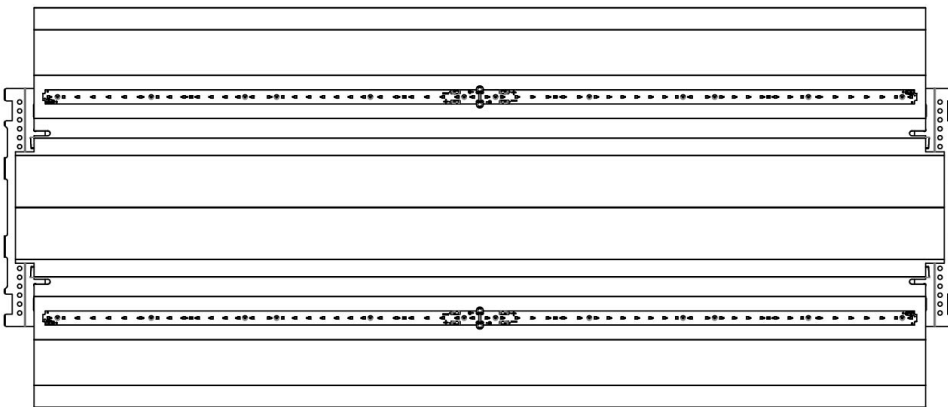
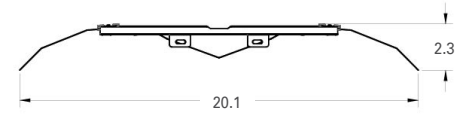
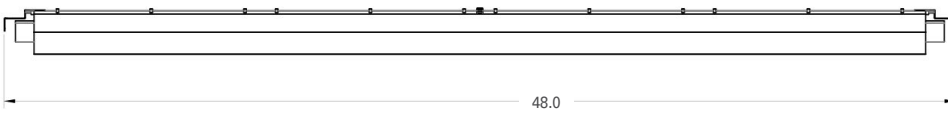
Dimensions for 2x2 fixture



RTR / LED Troffer Conversion Kit

FIXTURE DIMENSIONS

Dimensions for 2x4 fixture



RWLED3T78



LED roadway lighting that's easy to buy. Free trial program and leasing options make it easy to get started with LED. Specification-grade optics deliver efficient, clean, uniform light distributions at a reasonable cost. Optics are factory installed and meet IES Lateral Distribution Type III. LROAD™ 78W replaces 250W metal halide roadway fixtures.

Color: Bronze

Weight: 32.0 lbs

Project:

Type:

Prepared By:

Date:

Driver Info

Type:	Constant Current
120V:	0.66A
208V:	0.41A
240V:	0.35A
277V:	0.30A
Input Watts:	78W
Efficiency:	99%

LED Info

Watts:	78W
Color Temp:	5100K
Color Accuracy:	67 CRI
L70 Lifespan:	100000
Lumens:	6,911
Efficacy:	88 LPW

Technical Specifications

Listings

UL Listing:

Suitable for wet locations as a downlight.

IESNA LM-79 & IESNA LM-80 Testing:

RAB LED fixtures have been tested by an independent laboratory in accordance with IESNA LM-79 and 80, and have received the Department of Energy "Lighting Facts" label.

Dark Sky Approved:

The International Dark Sky Association has approved this product as a full cutoff, fully shielded luminaire.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.

DLC Product Code: P000017A2

Optical

Lumen Maintenance:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Replacement:

The LROAD™ replaces 175W Mercury Vapor, 150W HPS/MH roadway fixtures.

BUG Rating:

B1 U0 G2

Construction

IES Classification:

The Type III distribution is ideal for roadway, general parking and other area lighting applications where a larger pool of lighting is required. It has greater streetside (transverse) throw, allowing the light to project outward and fill the area.

IP Rating:

Ingress Protection rating of IP66 for dust and water

Vibration Rating:

Industry-leading 5G vibration rating per ANSI C136.31.

Ambient Temperature:

Suitable for use in 40°C ambient temperatures.

Cold Weather Starting:

The minimum starting temperature is -40°C/-40°F

Thermal Management:

Superior patent pending thermal management design with external Air-Flow fins provides maximum operational life, even in high ambient temperature environments.

Effective Projected Area:

EPA = 0.75

Housing:

Die cast aluminum housing, lens frame and mounting arm.

Mounting:

Fits most standard roadway upsweep arms. Adaptor brackets supplied fit 1", 1 1/4", 1 1/2" and 2" OD arms.

Wedge Mounting Option:

Allows field adjustment of +/- 5 degree tilt to achieve a level installation of LROAD78 universal adaptor roadway fixtures.

Recommended Mounting Height:

Up to 25 ft.

Reflector:

Specular vacuum-metallized polycarbonate

Gaskets:

High temperature silicone gaskets

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

LED Characteristics

LEDs:

Six (6) multi-chip, 13W, high-output, long-life LEDs.

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

Technical Specifications (continued)

Electrical

Driver:

Constant Current, Class 2, 2000mA, 100-277V, 50-60Hz, 1.1A, Power Factor 99%

THD:

5.3% at 120V, 13.3% at 277V

Surge Protection:

6kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2.

Other

Equivalency:

LROAD™ 78W replaces 250W metal halide

California Title 24:

See RWLED2T78/D10, RWLED2T78/BL, RWLED2T78/PCS, RWLED2T78/PCS2, or RWLED2T78/PCT for a 2013 California Title 24 compliant product. Any additional component requirements will be listed in the Title 24 section under technical specifications on the product page.

Patents:

The LROAD™ design is protected by patents pending in the U.S., Canada, China, Taiwan and Mexico.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of ten (10) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010).

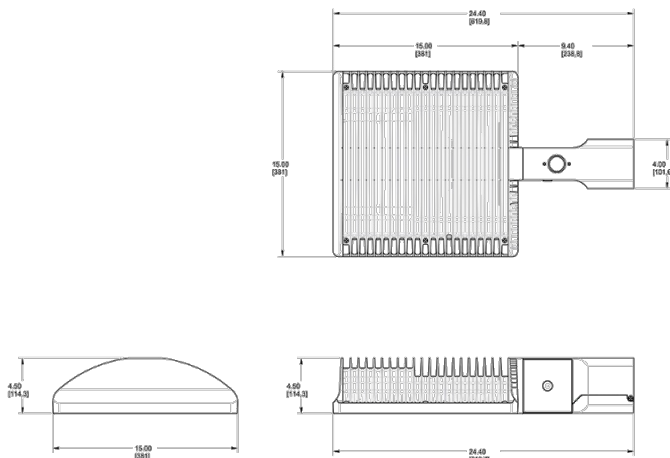
Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

Dimensions



Features

- Ideal for roadway, general parking and major roads
- 78W High-Performance LED
- Replaces 250W metal halide roadway fixtures
- 27 year lifespan dramatically reduces maintenance and re-lamping costs
- Precision optics deliver maximum downward street side lumens with uniformity and minimal glare
- Compatible with standard roadway arms
- Universal adaptors for 1", 1 1/4", 1 1/2" and 2" OD pipe included
- Industry-leading 5G vibration rating per ANSI C136.31
- Easy-access electrical compartment makes wiring fast and secure
- 10-Year no compromise warranty

Ordering Matrix

Family	Distribution	Watts	Color Temp	Finish	Dimming	Voltage	Photocell	Bi-Level
RWLED								
<p>3T = Type III 78 = 78W Blank = 5000K (Cool) Blank = Bronze Blank = No Dimming Blank = 120-277V Blank = No Photocell Blank = No Bi-Level</p> <p>Y = 3000K (Warm) W = White /D10 = Dimmable /480 = 480V /PCT = 120-277V Twistlock /BL = Bi-Level</p> <p>N = 4000K (Neutral) RG = Gray /PCT4 = 480V Twistlock</p>								

Innovative design,
irresistible
price.



PHILIPS SLIMSTYLE A-SHAPE DIMMABLE LED BULBS



Philips SlimStyle A-Shape Dimmable LED Bulb is the same size as a traditional A19 light bulb in a new slim design. Its innovative shape provides energy efficiency and quality light in a durable shape. Its dimmable, comfortable light is ideal for use in table and floor lamps, wall sconces, and pendant lighting.

Long lasting, energy efficient light

- Replaces 40 Watt and 60 Watt incandescent bulbs
- Last up to 22.8 years*
- Low yearly energy costs

Easy to experience

- Provides soft, quality light similar to incandescents
 - Available in Soft White (2700K)
- Long life reduces the hassle of replacing bulbs so often
- Will not fade fabrics or furnishings
- Contains no mercury
- Dimmable**

Innovative design

- Slim shape fits in most fixtures with a medium base
- Rugged design ensures durability and is ideal for households that want to provide a sense of security for their family
- Provides light all-around□

(*; **, □ See next page for footnotes)



PHILIPS

PHILIPS SLIMSTYLE A-SHAPE DIMMABLE LED BULBS

Ordering, Electrical and Technical Data (Subject to change without notice)

Product Number	Ordering Code	Nom. Watts	Volts	Lamp Type	Base	Rated Avg. Life (Hrs.) ¹	Approx. Lumens ²	CRI	Color Temp.	Dim.	MOL (in.)
Standard Incandescent 40W Equivalency[‡]											
<input type="checkbox"/> 43367-2	8A19/SLIM/2700 DIM	8	120	A-Type	Med.	25,000	450	80	2700K	Y	4.2
Standard Incandescent 60W Equivalency[‡]											
<input type="checkbox"/> 43327-6	10.5A19/SLIM/2700 DIM	10.5	120	A-Type	Med.	25,000	800	80	2700K	Y	4.2

1. Rated average life based on engineering testing and probability analysis.

2. Based on photometric testing consistent with IES LM-79.

This lamp is currently in ENERGY STAR® testing

‡ All Philips LED A-Type bulb equivalencies for light output are based upon the ENERGY STAR® Integral LED Lamp Center Beam Intensity Benchmark tool which can be found at: www.EnergyStar.gov/LEDbulbs, LED Light Bulbs for Partners, Program Requirements PDF, Pg 11. A-shape bulbs are calculated on lumen values, not the ENERGY STAR® Integral LED Lamp Center Beam Intensity Benchmark tool.

* 22.8 years means rated average life based on engineering testing and probability analysis where the lamp is used on average 3 hrs/day, 7 days/week

**Dimmable when using leading edge dimmers (see Philips Website: www.philips.com/ledtechguide for compatible leading edge dimmers).

This lamp provides a measured light distribution of 300 degrees. In use, this lamp give the appearance of light all-around (360 degrees).

Shipping Data (Subject to change without notice)

E* Testing	Product Number	SKU UPC (0-46677)	Outer Bar Code (5-00-46677)	Case Qty.	Case Weight (lbs.)	Case Cube (cu. ft.)	Pallet Qty.	SKUs per Layer	Layers High	SKU Dimensions (W x D x H) (In.)	Case Dimensions (W x D x H) (In.)	Pallet Dimensions (W x D x H) (In.)
Yes	43367-2	43367-3	43367-8	10	1.84	0.1578	2040	340	6	2.8 x 1.6 x 4.8	5.9 x 8.5 x 5.4	39.4 x 47.2 x 39.8
Yes	43327-6	43327-7	43327-2	10	1.84	0.1578	2040	340	6	2.8 x 1.6 x 4.8	5.9 x 8.5 x 5.4	39.4 x 47.2 x 39.8

WARNINGS & CAUTIONS:

- Suitable for damp locations
- Not for use in totally enclosed luminaires (fixtures)
- This bulb is not intended for use with emergency exit fixtures or emergency lights.
- Before replacing, turn off power and let bulb cool to avoid electrical shock or burn.

CAUTION: Risk of electric shock—Do Not Use Where Directly Exposed To Water.

NOTES: This device complies with Part 15 of the FCC rule. Operation is subject to the following two conditions: (1) device may not cause harmful interference, and (2) This device must accept any interference received, including, interference that may cause undesired operation. This Class B digital apparatus complies with Canadian ICES-003.



© 2014 Koninklijke Philips N.V.

All rights reserved.

Specifications are subject to change without notice.

PLt-1339BN 1/14

Philips Lighting
North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873
Phone: 855-486-2216

Philips Lighting
281 Hillmount Road
Markham ON, Canada L6C 2S3
Phone: 800-668-9008



12, 18 and 26 Watt SLIM wallpacks are ultra efficient and deliver impressive light distribution with a compact low-profile design that's super easy to install as a downlight or uplight.

Color: Bronze

Weight: 4.5 lbs

Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type:	Constant Current	Watts:	26W
120V:	0.27A	Color Temp:	5100K
208V:	0.17A	Color Accuracy:	67 CRI
240V:	0.15A	L70 Lifespan:	100000
277V:	0.13A	Lumens:	2,849
Input Watts:	29W	Efficacy:	97 LPW
Efficiency:	88%		

Technical Specifications

Listings

UL Listing:

Suitable for wet locations. Suitable for mounting within 1.2m (4ft) of the ground.

ADA Compliant:

SLIM™ is ADA Compliant.

Dark Sky Approved:

The International Dark Sky Association has approved this product as a full cutoff, fully shielded luminaire.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.

DLC Product Code: P0000171S

Construction

IP Rating:

Ingress Protection rating of IP66 for dust and water

Maximum Ambient Temperature:

Suitable for use in 104°F (40°C) ambient temperatures

Thermal Management:

Superior heat sinking with internal Air-Flow fins.

Housing:

Precision die-cast aluminum housing.

Mounting:

Heavy-duty mounting bracket with hinged housing for easy installation.

Recommended Mounting Height:

Up to 22 ft.

Lens:

Tempered glass lens.

Reflector:

Specular thermoplastic.

Gaskets:

High-temperature silicone

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

LED Characteristics

LED:

Multi-chip, long-life LED.

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines for the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

Electrical

Driver:

Constant Current, Class 2, 100-277V, 50/60 Hz., 6KV surge protection, 720mA, 100-277VAC 0.4 Amps, Power Factor 99%.

THD:

13% at 120VOther

HID Replacement Range:

The SLIM26 can be used to replace 175W MH based on delivered lumens.

California Title 24:

See SLIM26/D10 for a 2013 California Title 24 compliant product. Any additional component requirements will be listed in the Title 24 section under technical specifications on the product page.

Patents:

The design of the SLIM™ is protected by patents in U.S. Pat D681,864, and pending patents in Canada, China, Taiwan and Mexico.

Technical Specifications (continued)

Optical

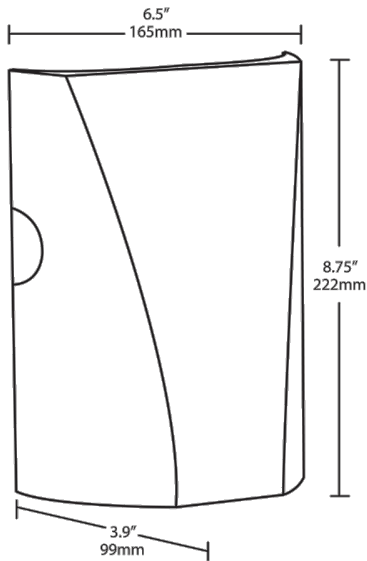
BUG Rating:

B1 U0 G0

BUG Rating:

B1 U0 G0

Dimensions



Features

- Full cutoff, fully shielded LED wallpack
- Can be used as a downlight or uplight
- Contractor friendly features for easy installation
- 100,000-hour LED Life
- 5-Year Warranty

Ordering Matrix

Family	Watts	Color Temp	Finish	Photocell	Dimming
SLIM	26 = 26W 18 = 18W 12 = 12W	Blank = 5000K (Cool) Y = 3000K (Warm) N = 4000K (Neutral)	Blank = Bronze W = White	Blank = No Photocell /PC = 120V Button /PC2 = 277V Button /PCT = 120-277V Twistlock	Blank = No Dimming /D10 = Dimmable



12, 18 and 26 Watt SLIM wallpacks are ultra efficient and deliver impressive light distribution with a compact low-profile design that's super easy to install as a downlight or uplight.

Color: Bronze

Weight: 4.5 lbs

Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type:	Constant Current	Watts:	26W
120V:	N/A	Color Temp:	5100K
208V:	0.17A	Color Accuracy:	67 CRI
240V:	0.15A	L70 Lifespan:	100000
277V:	0.13A	Lumens:	2,849
Input Watts:	29W	Efficacy:	97 LPW
Efficiency:	88%		

Technical Specifications

Electrical

Photocell:

277V Button Photocell Included. Photocell is compatible with 208V-277V.

Driver:

Constant Current, Class 2, 100-277V, 50/60 Hz., 6KV surge protection, 720mA, 100-277VAC 0.4 Amps, Power Factor 99%.

THD:

13% at 120V Listings

UL Listing:

Suitable for wet locations. Suitable for mounting within 1.2m (4ft) of the ground.

ADA Compliant:

SLIM™ is ADA Compliant.

Dark Sky Approved:

The International Dark Sky Association has approved this product as a full cutoff, fully shielded luminaire.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.
DLC Product Code: P0000171S

Construction

IP Rating:

Ingress Protection rating of IP66 for dust and water

Maximum Ambient Temperature:

Suitable for use in 104°F (40°C) ambient temperatures

Thermal Management:

Superior heat sinking with internal Air-Flow fins.

Housing:

Precision die-cast aluminum housing.

Mounting:

Heavy-duty mounting bracket with hinged housing for easy installation.

Recommended Mounting Height:

Up to 22 ft.

Lens:

Tempered glass lens.

Reflector:

Specular thermoplastic.

Gaskets:

High-temperature silicone

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

LED Characteristics

LED:

Multi-chip, long-life LED.

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines for the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

Other

HID Replacement Range:

The SLIM26 can be used to replace 175W MH based on delivered lumens.

California Title 24:

See SLIM26/D10 for a 2013 California Title 24 compliant product. Any additional component requirements will be listed in the Title 24 section under technical specifications on the product page.

Technical Specifications (continued)

Other

Patents:

The design of the SLIM™ is protected by patents in U.S. Pat D681,864, and pending patents in Canada, China, Taiwan and Mexico.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010).

Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

Optical

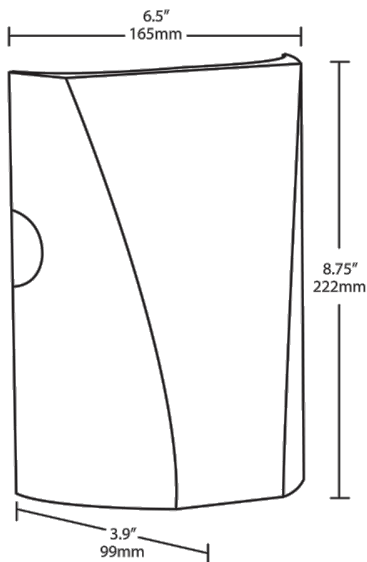
BUG Rating:

B1 U0 G0

BUG Rating:

B1 U0 G0

Dimensions



Features

- Full cutoff, fully shielded LED wallpack
- Can be used as a downlight or uplight
- Contractor friendly features for easy installation
- 100,000-hour LED Life
- 5-Year Warranty

Ordering Matrix

Family	Watts	Color Temp	Finish	Photocell	Dimming
SLIM	26 = 26W 18 = 18W 12 = 12W	Blank = 5000K (Cool) Y = 3000K (Warm) N = 4000K (Neutral)	Blank = Bronze W = White	Blank = No Photocell /PC = 120V Button /PC2 = 277V Button /PCT = 120-277V Twistlock	Blank = No Dimming /D10 = Dimmable



37, 57 and 62 Watt SLIM Wallpacks are designed to cover the footprint of most traditional wallpacks. They are suitable for mounting heights from 20' to 30', and replace HID Wattages from 200W MH to 320W MH. These ultra-high efficiency fixtures are available in cutoff or full cutoff models.

Color: Bronze

Weight: 7.5 lbs

Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type:	Constant Current	Watts:	37W
120V:	0.31A	Color Temp:	5000K
208V:	0.19A	Color Accuracy:	75 CRI
240V:	0.16A	L70 Lifespan:	100000
277V:	0.14A	Lumens:	2,688
Input Watts:	37W	Efficacy:	73 LPW
Efficiency:	N/A		

Technical Specifications

Listings

UL Listing:

Suitable for wet locations. Wall Mount only.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.
DLC Product Code: P0000171T

Construction

Footprint:

Designed to replace RAB HID WP1 wallpacks, both in size and footprint template, so upgrading to LED is easy and seamless.

IP Rating:

Ingress Protection rating of IP66 for dust and water

Cold Weather Starting:

The minimum starting temperature is -40°C/-40°F

Maximum Ambient Temperature:

Suitable for use in 104°F (40°C) ambient temperatures

Thermal Management:

Superior thermal management with internal Air-Flow fins.

Housing:

Precision die-cast aluminum housing and door frame.

Mounting:

Die-cast back box with four (4) conduit entry points and knockout pattern for junction box or direct wall mounting. Hinged housing and bubble level for easy installation.

Cutoff:

Cutoff (7.5°)

Recommended Mounting Height:

Up to 20 ft.

Lens:

Microprismatic diffusion glass lens reduces glare and has smooth and even light distribution.

Reflector:

Specular thermoplastic.

Gaskets:

The unique design of the tight-lock gasket ensures no water or environmental elements will ever get inside the SLIM.

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

LED Characteristics

LED:

Long-life, high-efficiency, micro-power, surface mount LEDs; binned and mixed for uniform light output and color.

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Correlated Color Temp. (Nominal CCT):

5000K

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5 year period.

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Electrical

Driver:

Constant Current, 100-277V. 50/60Hz, 100-277VAC 0.6A, 4kV Surge Protection, 700mA, Power Factor 99.6%.

THD:

7.3% at 120V, 8.5% at 277V

Other

HID Replacement Range:

The SLIM37 can be used to replace 200W MH based on delivered lumens.

Accessories:

Available accessories include polyclear and wire guard. Click to see all accessories.

Technical Specifications (continued)

Other

California Title 24:

See SLIM37/BL for a 2013 California Title 24 compliant product. Any additional component requirements will be listed in the Title 24 section under technical specifications on the product page.

Patents:

The design of the SLIM™ is protected by patents pending in US, Canada, China, Taiwan and Mexico.

Warranty:

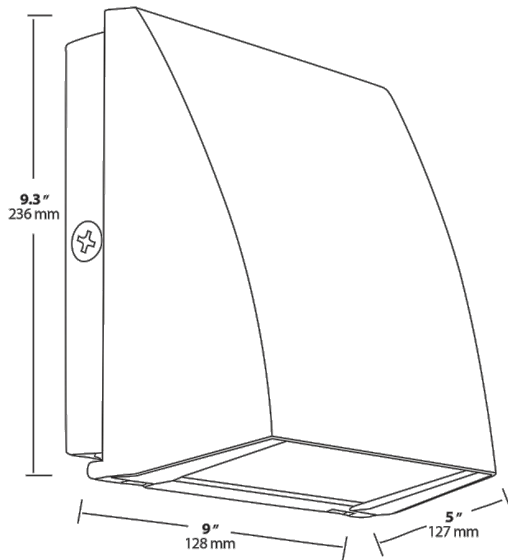
RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Optical

BUG Rating:

B1 U1 G1

Dimensions



Features

- Covers footprint of most traditional wallpacks
- Easy installation with hinged access, bubble level and multiple conduit entries
- Tight-lock gasket keeps elements out
- 100,000-hour LED lifespan
- 5-Year warranty

Ordering Matrix

Family	Cutoff	Watts	Color Temp	Finish	Photocell	Bi-Level
SLIM	Blank = Standard C = Cutoff FC = Full Cutoff	62 = 62W 57 = 57W 37 = 37W	Blank = 5000K (Cool) Y = 3000K (Warm) N = 4000K (Neutral)	Blank = Bronze W = White	Blank = No Photocell /PC = 120V Button /PC2 = 277V Button /PCS = 120V Swivel /PCS2 = 277V Swivel	Blank = No Bi-Level /BL = Bi-Level (57W & 62W)



37, 57 and 62 Watt SLIM Wallpacks are designed to cover the footprint of most traditional wallpacks. They are suitable for mounting heights from 20' to 30', and replace HID Wattages from 200W MH to 320W MH. These ultra-high efficiency fixtures are available in cutoff or full cutoff models.

Color: Bronze

Weight: 7.5 lbs

Project:

Type:

Prepared By:

Date:

Driver Info

Type:	Constant Current
120V:	N/A
208V:	0.19A
240V:	0.16A
277V:	0.14A
Input Watts:	37W
Efficiency:	N/A

LED Info

Watts:	37W
Color Temp:	5000K
Color Accuracy:	75 CRI
L70 Lifespan:	100000
Lumens:	2,688
Efficacy:	73 LPW

Technical Specifications

Electrical

Photocell:

277V Button Photocell Included. Photocell is compatible with 208V-277V.

Driver:

Constant Current, 100-277V. 50/60Hz, 100-277VAC 0.6A, 4kV Surge Protection, 700mA, Power Factor 99.6%.

THD:

7.3% at 120V, 8.5% at 277V

Listings

UL Listing:

Suitable for wet locations. Wall Mount only.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.
DLC Product Code: P0000171T

Construction

Footprint:

Designed to replace RAB HID WP1 wallpacks, both in size and footprint template, so upgrading to LED is easy and seamless.

IP Rating:

Ingress Protection rating of IP66 for dust and water

Cold Weather Starting:

The minimum starting temperature is -40°C/-40°F

Maximum Ambient Temperature:

Suitable for use in 104°F (40°C) ambient temperatures

Thermal Management:

Superior thermal management with internal Air-Flow fins.

Housing:

Precision die-cast aluminum housing and door frame.

Mounting:

Die-cast back box with four (4) conduit entry points and knockout pattern for junction box or direct wall mounting. Hinged housing and bubble level for easy installation.

Cutoff:

Cutoff (7.5°)

Recommended Mounting Height:

Up to 20 ft.

Lens:

Microprismatic diffusion glass lens reduces glare and has smooth and even light distribution.

Reflector:

Specular thermoplastic.

Gaskets:

The unique design of the tight-lock gasket ensures no water or environmental elements will ever get inside the SLIM.

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

LED Characteristics

LED:

Long-life, high-efficiency, micro-power, surface mount LEDs; binned and mixed for uniform light output and color.

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Correlated Color Temp. (Nominal CCT):

5000K

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Other

HID Replacement Range:

The SLIM37 can be used to replace 200W MH based on delivered lumens.

Technical Specifications (continued)

Other

Accessories:

Available accessories include polyshield and wire guard. Click to see all accessories.

California Title 24:

SLIM37/PC2 complies with 2013 California Title 24 building and electrical codes as a commercial outdoor pole-mounted fixture > 30 Watts mounted at height greater than 24 feet. For mounting heights < 24 feet see WPLED52/BL with bi-level operation; additional component requirements will be listed in the Title 24 section under technical specifications on the product page.

Patents:

The design of the SLIM™ is protected by patents pending in US, Canada, China, Taiwan and Mexico.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010).

Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

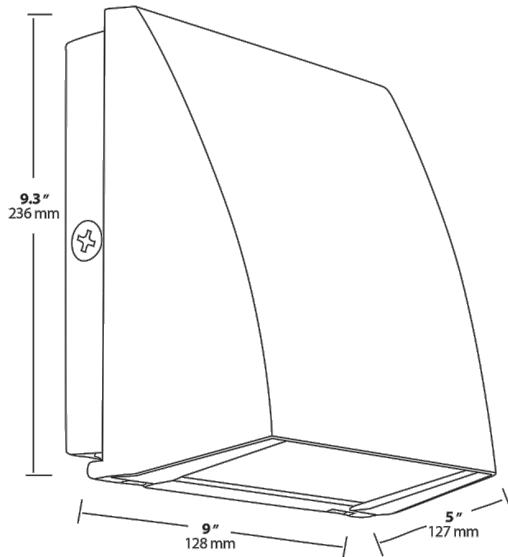
Suitable in accordance with FAR Subpart 25.4.

Optical

BUG Rating:

B1 U1 G1

Dimensions



Features

- Covers footprint of most traditional wallpacks
- Easy installation with hinged access, bubble level and multiple conduit entries
- Tight-lock gasket keeps elements out
- 100,000-hour LED lifespan
- 5-Year warranty

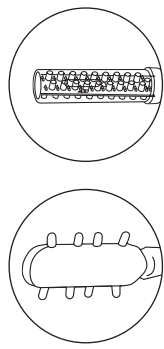
Ordering Matrix

Family	Cutoff	Watts	Color Temp	Finish	Photocell	Bi-Level
SLIM	Blank = Standard C = Cutoff FC = Full Cutoff	62 = 62W 57 = 57W 37 = 37W	Blank = 5000K (Cool) Y = 3000K (Warm) N = 4000K (Neutral)	Blank = Bronze W = White	Blank = No Photocell /PC = 120V Button /PC2 = 277V Button /PCS = 120V Swivel /PCS2 = 277V Swivel	Blank = No Bi-Level /BL = Bi-Level (57W & 62W)

Item Number	Item Description	Watts	Height (inches)	Width (inches)	Depth (Inches)	Lamp Life (Yrs.)	Voltage	Exit Color	Number Of Lamps	LED Retrofit Kit Base Type	Certifications	Stocking or Special
-------------	------------------	-------	-----------------	----------------	----------------	------------------	---------	------------	-----------------	----------------------------	----------------	---------------------

LED Retrofit Kits
Exit Accessories

LED RETROFIT KITS & ACCESSORIES												
Item Number	Item Description	Watts	Height (inches)	Width (inches)	Depth (Inches)	Lamp Life (Yrs.)	Voltage	Exit Color	Number Of Lamps	LED Retrofit Kit Base Type	Certifications	Stocking or Special
20710	One Red LED Exit Retrofit Lamp	.7	4.75	1.25	1.25	10+	120	red	1	candelabra	UL, cUL, UL924	STK
20711	One Red LED Exit Retrofit Lamp Kit With 2 Base Adapters	.7	4.75	1.25	1.25	10+	120	red	1	candelabra	UL, cUL, UL924	STK
20715	Two Red LED Exit Retrofit Lamps With 4 Base Adapters 120 Use Only	1.2	4.75	1.25	1.25	10+	120	red	2	candelabra	ETL, CETL Listed to UL 924 Standards	STK
20716	Red LED Exit Retrofit Kit Hardwire 120/277	1.2	4.75	1.65	0.6	10+	120 or 277	red	2	hardwire	ETL, CETL Listed to UL 924 Standards	STK
20717	Two Green LED Exit Retrofit Lamps With 4 Base Adapters 120 Use Only	.7	5.6	6.9	1	10+	120	green	2	candelabra	ETL, CETL Listed to UL 924 Standards	STK
20718	Green LED Exit Retrofit Kit Hardwire 120/277	.7	4.75	1.65	0.6	10+	120 or 277	green	2	hardwire	ETL, CETL Listed to UL 924 Standards	STK
20719	Two White LED Exit Retrofit Lamp, 4 Base Adapters, 120 Use Only	1.7	4.75	1.65	.6	10+	120	white	2	candelabra	ETL, CETL Listed to UL 924 Standards	STK
20720	Two Red LED Exit Retrofit Lamps, 4 Base Adapters, 2 Red Diffuser Panels	.7	5.6	6.9	1	10+	120	red	2	candelabra	ETL, CETL Listed to UL 924 Standards	STK
20721	White LED Exit Retrofit Kit Hardware 120/277	1.8	4.75	6.9	1	10+	120 or 277	white	2	hardwire	ETL, CETL Listed to UL 924 Standards	STK
20797	Socket Adapter Candelabra to Medium Base		1	0.50 dia								SPC
20798	Socket Adapter Candelabra to Intermediate Base		1	0.50 dia								SPC
20799	Socket Adapter Candelabra to Bayonet Base		1	0.50 dia								SPC



Item Number	Item Description	Height (Inches)	Width (Inches)	Depth (Inches)	Rating	Finish	Number of Lamps	Replacement Lamp / Battery	Stocking or Special
207R1	Single WH Remote Head 6W 6V	7	5	5	Damp Location	white	1	939	STK
207R2	Double WH Remote Head 6W 6V	7	13	5	Damp Location	white	2	939	STK
207R3	Single Grey Remote Waterproof Head 5.4W 6V	4.8	4.75	4.5	Waterproof	grey	1	939	STK
207R4	Double Grey Remote Waterproof Head 2 X 5.4W 6V	6.75	10.25	4.5	Waterproof	grey	2	939	STK
207B2	Ni-Cd Battery 2.4V 300 mAh	1.96	1.10	0.55	Damp Location	yellow			SPC
207B3	Ni-Cd Battery 3.6V 300 mAh	1.96	1.10	0.98	Damp Location	yellow			SPC
207B4	Ni-Cd Battery 8.4V VDC	1.96	1.10	0.98	Damp Location	yellow			SPC
20729	Ni-Cd Battery 4.8V 400Ah	1.125	1.125	1.125	Damp Location	yellow			SPC
20730	Ni-Cd Battery 4.8V 650m Ah	3.875	1.125	0.625	Damp Location	yellow			SPC
20732	Ni-Cd Battery 4.8V 1000m Ah	1.7	2.6	0.6	Damp Location	black			SPC
20734	Lead Acid Battery 6V 4.5 Ah In-Terminals	4	2.75	1.813	Damp Location	black			SPC
20739	Lead Acid Battery 6V 10Ah	3.688	5.875	1.938	Damp Location	black			SPC



Call for availability on Special (SPC)

Exit & Emergency Lighting

TCP CATALOG
800.324.1496 | tcp.com



Exit Sign Limited Warranty

Technical Consumer Products, Inc. (“TCP”) warrants its products to be free from defects in material, workmanship, and title and to operate from the date of invoice (or date of manufacture if invoice date is not known or available) as provided in the Terms and Conditions set forth below. If the product is determined to have failed during the warranty period, TCP will, in its sole discretion, repair the product or defective part, replace with the same or a functionally equivalent product or part, refund or credit the purchaser. Any refunds or credits issued to the purchaser will be on a prorated basis according to the following calculation:

$$\frac{\text{Invoice Price (\$)} \times \text{Remaining Warranty Period (months)}}{\text{Warranty Period (months)}}$$

If TCP chooses to replace the product and is not able to do so because the product has been discontinued, has been modified, or is otherwise not available, TCP may, in its sole discretion, replace the product with a comparable product that is functionally equivalent to the product to be replaced. This limited warranty only applies when TCP products are operated as specified; have been correctly wired and installed; are operated within the electrical values publicized on all the labels; used in lighting equipment designed and approved for the application and in environmental conditions (temperature, humidity, air movement, and free of substances that may react corrosively with the product or parts of the product) within the normal specified operating range of the product. For purposes of clarity, the cost of removal or installing a repaired or replaced product or part, including but not limited to labor costs or expenses, shall be the sole liability of the purchaser. Product must be installed within 30 days of purchase. Lamps and batteries are not covered under this warranty.

Terms and Conditions

This limited warranty is for a period of five (5) years from the date of invoice (or date of manufacture if proof of purchase is not available), with all components to be ordered, assembled, and shipped from a TCP location. This only applies to TCP components; for non-TCP components, the supplier or manufacturer must be contacted for warranty claims. Any repair, alteration or modification of the product, including replacement of product components with components of other manufacturers will void the warranty in its entirety. TCP reserves the right to request the return of all allegedly defective products or components for testing and verification.

This warranty does not apply to damage or failures caused by acts of God, as a result of any abuse, misuse, vandalism, fire, corrosive environments, power surges, excessive switching cycles, improper maintenance, abnormal use, tampering, unlawful acts by third parties, or use in violation of any applicable standard, code, or instructions for use in installations including those contained in the National Electrical Code (NEC), the Standards for Safety of Underwriters Laboratory, Inc. (UL), Standards for the American National Standards Institute (ANSI) or, in Canada, the Canadian Standards Association (CSA). TCP reserves the right to inspect all allegedly defective products and/or components to determine the cause of failure and patterns of usage. The date of purchase and product installation date must be verified to validate the elapsed operating hours if a warranty claim is sought.

Warranty Activation/Service Claims

To obtain coverage under this warranty, customer must complete and deliver to TCP a “Warranty Form” form within 30 days of product installation. An acknowledgement will be sent for each registration with a reference number for future correspondence. Service claims are initiated by contacting Customer Care at 1-800-324-1496.

Return of Defective Products

After contacting TCP, if it is determined to be necessary, a Return Material Authorization (“RMA”) number will be issued, and the purchaser shall promptly return the product to TCP at the purchaser’s expense. The RMA number must be present on the packing slip and on the outside of the shipment packaging of the returned material. Product must be returned within 30 days of receiving the RMA number. Failure to follow this procedure voids this warranty.



THE FOREGOING SHALL CONSTITUTE THE EXCLUSIVE REMEDY OF THE PURCHASER AND THE SOLE LIABILITY OF TCP FOR ANY CLAIMS, WHETHER IN CONTRACT, TORT, OR OTHERWISE ARISING FROM THE FAILURE OF THE PRODUCT AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE OR IS TO BE IMPLIED. In no event shall TCP be liable for any other costs or damages, including installation, lost profits, delays, and incidental, special or consequential damages. TCP reserves the right to examine all failed luminaires, luminaire components, lamps, drivers, and/or ballasts and the right to determine, in its sole discretion, whether any LEDs, lamps, drivers, and/or ballasts are defective and covered under this limited warranty.



Limited Warranty: Components (Lamps, Drivers, Ballasts and Modules)

Philips Lighting North America Corporation (“**Philips**”) warrants to the original purchaser (“**Purchaser**”) that the Philips branded components identified on Schedule 1 (“**Products**”) will be free from defects in material and workmanship which cause the Product to fail to operate in accordance with the performance specifications set forth in documentation published for or provided with the Product (“**Specifications**”) for the applicable period and subject to the additional terms and conditions set forth on Schedule 1 from (unless otherwise noted on Schedule 1) the earlier of the date of installation or six (6) months after the date of manufacturing (“**Warranty Period**”). For LED Products, the Product shall be considered defective only if 10% or more of the LED components fail for such Product.

If any Product covered by this limited warranty is returned by Purchaser in accordance with Philip’s Terms and Conditions of Sale (available at www.philips.com/termsandconditionsprofessional) within the Warranty Period, and Philips determines to its satisfaction that such Product failed to satisfy this warranty, Philips will, at its option, repair or replace the Product or the defective part thereof, or reimburse Purchaser for the purchase price, subject to the terms and conditions set forth herein. For purposes of clarity, “repair or replace the Product or the defective part thereof” does not include any removal or reinstallation costs or expenses, including, without limitation, any labor costs or expenses, shipping costs to return non-conforming Products or any damages that may occur during the return of Product to Philips. If Philips chooses to replace the Product and is not able to do so because it has been discontinued or is not available, Philips may replace it with a comparable product. Philips reserves the right to use new, reconditioned, refurbished, repaired or remanufactured products or parts in the repair or replacement of any Product covered by this limited warranty.

This limited warranty is subject to the following additional conditions:

- The Products have been properly handled, stored, wired, transported, installed, operated and maintained in accordance with the applicable Specifications.
- A Philips representative will have access to the failed Products and the fixtures used to operate them. If the fixture or other parts become suspect, the representative shall have the right to invite other manufacturers’ representatives to evaluate the lighting system components.
- The Product has been purchased directly from an authorized Philips distributor/dealer for use in regions that are within the jurisdiction of the United States or Canada.
- If applicable, purchase receipt for the Product is available for inspection by Philips.

This limited warranty does not apply to damage or failure to perform arising as a result of any acts of God or from any abuse, misuse, abnormal use, improper power supply, power surges or fluctuations, corrosive environments, neglect, exposure or any use or installation in violation of the instructions or restrictions prescribed by Philips or any applicable standard or code, including those contained in the latest National Electrical Code, Standards for Safety of Underwriters Laboratory, Inc. (UL), the American National Standards Institute (ANSI), or, in Canada, the Canadian Standards Association (CSA). No agent, distributor or dealer is authorized to change, modify or extend the terms of this limited warranty on behalf of Philips. **THIS LIMITED WARRANTY IS VOID IF THE PRODUCT IS NOT USED FOR THE PURPOSE FOR WHICH IT IS DESIGNED OR IF ANY REPAIRS OR ALTERATIONS ARE MADE BY ANY PERSON NOT AUTHORIZED BY PHILIPS IN WRITING.**

THIS LIMITED WARRANTY IS THE ONLY WARRANTY GIVEN BY PHILIPS WITH RESPECT TO THE PRODUCTS AND THE SOLE REMEDY FOR ANY AND ALL CLAIMS, IN CONTRACT, IN TORT OR OTHERWISE ARISING FROM THE FAILURE OF PRODUCT AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED. PURCHASER’S EXCLUSIVE REMEDY FOR ANY NONCONFORMITY OR DEFECT IN ANY PRODUCT SHALL BE ONLY AS EXPLICITLY SET FORTH HEREIN. UNDER NO CIRCUMSTANCES SHALL PHILIPS’ AGGREGATE LIABILITY ARISING OUT OF OR IN CONNECTION WITH A DEFECTIVE PRODUCT, IN CONTRACT, TORT OR OTHERWISE, EXCEED THE PURCHASE PRICE OF THE PRODUCT TO WHICH SUCH LIABILITY RELATES. IN NO EVENT SHALL PHILIPS BE LIABLE FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL, INDIRECT OR COMPENSATORY DAMAGES, INCLUDING, WITHOUT LIMITATION, DAMAGES RESULTING FROM LOSS OF USE, PROFITS, BUSINESS OR GOODWILL EVEN IF PHILIPS WAS ADVISED OF OR WAS OTHERWISE AWARE OF THE POSSIBILITY OF SUCH DAMAGES.

This limited warranty is effective for the purchases of the Product on or after the effective date set forth herein and is in consideration of and is expressly subject to and conditioned by the terms set forth herein. Philips reserves the right to modify this warranty from time to time and any modifications shall be effective for all orders placed on or after the effective date of such revised warranty.

Updated August 2016

Philips Lighting North America Corporation
200 Franklin Square Drive, Somerset, NJ 08873
Tel. 855-486-2216



Philips Lighting Canada Ltd.
281 Hillmount Rd, Markham, ON, Canada L6C 2S3
Tel. 800-668-9008

Limited Warranty: Components (Lamps, Drivers, Ballasts and Modules)

Schedule 1 (page 1 of 3)

All Philips components not otherwise described below shall have the warranty period identified on the product packaging or, if no warranty period is identified, a warranty period of 1 year.

LED		Philips System Warranty ³	Single Component Warranty
Lamps	Design life greater than or equal to 70,000 hours ¹		7 years ³
	Design life between 40,000 and 69,999 hours ²		5 years ³
	Design life between 25,000 hours and 39,999 hours		3 years ³
	Design life less than 24,999 hours		1 year ³
Drivers	Xitanium LED Drivers		5 years ⁵
	Xitanium SR LED Drivers		5 years ^{5, 6}
Modules	Fortimo LED Line LV	5 years ⁵	3 years ⁵
	Fortimo LED Strip LV	5 years ⁵	3 years ⁵
	Fortimo LML SE LV	5 years ⁵	3 years ⁵
	Fortimo LED SQ LV	5 years ⁵	3 years ⁵
	Fortimo LED Downlight Module (DLM)	5 years ⁵	3 years ⁵
	Fortimo LED Spotlight Module (SLM)	5 years ⁵	3 years ⁵
	Fortimo LED Twistable Downlight Module (TDLM) Gen 2		3 years ⁵
	Lexel Downlight Module (DLM)	3 years ⁵	
	Fortimo LED High Brightness Module (HBMt)	5 years ⁵	
Display Lighting	IntaGrade Display Lighting	5 years ⁵	
	PrimeSet Display Lighting	5 years ⁵	
Sensors	EasySense	5 years ^{4, 5}	
Retrofit Kits	EvoKit		5 years ⁵

Special Conditions for LED

¹ InstantFit T8 lamps with a design life greater than or equal to 70,000 hours when used with a high ballast factor ballast have a warranty period of 5 years

² InstantFit T8 lamps with a design life between 40,000 hours to 69,999 hours when used with a high ballast factor ballast have a warranty period of 4 years

³ Warranty Period based on lamp operation of 12 hours per day, 365 days per year

⁴ Warranty applicable only if used with Philips Xitanium LED driver (consult product datasheet or application system overview available at Philips.com/oemna)

⁵ Warranty Period commences on the date of manufacturing and subject to operation within allowed specified conditions (see product datasheet)

⁶ Warranty is only applicable when products are used with SR-certified devices and installed, maintained and operated pursuant to the Specifications and does not extend to any SR-certified devices or accompanying software

HID		Warranty Period
Lamps	AllStart Lamps	2 years ¹
	AllStart Long Life Lamp	3 years ¹
	CosmoWhite Lamps	2 years ¹
	Low Pressure Sodium (SOX) Lamps	1 year ¹
	Quartz Metal Halide (excluding MH1500) Lamps	1 year ²
	CDM Elite	18 months ²
	High Pressure Sodium – Standard Life	3 years ^{2, 3}
	High Pressure Sodium – Dual Arc/Instant Restrike	5 years ²
	High Pressure Sodium – Non-cycling	4 years ^{2, 4}
	MasterColor Elite MediumWattage	2 years ¹
Ballasts	Magnetic High Intensity Discharge (HID)	2 years ⁵
	e-Vision Electronic HID (case temp. between the maximum rating marked on the ballast and 9°C below such maximum rating)	3 years ⁵
	CosmoPolis Electronic HID (case temp. no higher than the maximum rating marked on the ballast)	5 years ⁵
	e-Vision Electronic HID (case temp at least 10°C below the maximum rating marked on the ballast)	5 years ⁵

Updated August 2016

Philips Lighting North America Corporation
200 Franklin Square Drive, Somerset, NJ 08873.
Tel. 855-486-2216



Philips Lighting Canada Ltd.
281 Hillmount Rd, Markham, ON, Canada L6C 2S3
Tel. 800-668-9008

Limited Warranty: Components (Lamps, Drivers, Ballasts and Modules)

Schedule 1 (page 2 of 3)

Special Conditions for HID Components		
¹ Warranty Period based on a maximum operation of 4000 hours per year		
² Warranty Period based on a maximum operation of 4500 hours per year		
³ In the event of Product failure during the Warranty Period, such Product shall be replaced as follows: (i) 2 for 1 failed lamp replacement if failure occurs during the first year; (ii) 1 for 1 failed lamp replacement if failure occurs during the second year; and (iii) 1 for 2 failed lamp replacement if failure occurs during the final year of the Warranty Period		
⁴ In the event of Product failure during the Warranty Period, such Product shall be replaced as follows: (i) 2 for 1 failed lamp replacement if failure occurs during the first year; (ii) 1 for 1 failed lamp replacement if failure occurs during the second year; and (iii) 1 for 2 failed lamp replacement if failure occurs during the third or final year of the Warranty Period		
⁵ Warranty Period commences on the date of manufacturing		
LINEAR FLUORESCENT		Warranty Period
Lamps	T5 standard and high output (14w, 21w, 28w, 35w, 24w, 39w, & 54w)	30/36months ²
	T5 Energy Advantage (25w & 49w – including amalgam lamp)	36/42months ²
	T5 Extra Energy Advantage (44w)	42/48months ²
	T5 Extra Long Life (XLL) lamps	48/72months ²
	T5 Lamps used on programmed start ballasts with sensors (set to 15 minutes minimum on time)	2 years ²
	T8 700, HL700 & 800 Series	30/30months ¹
	Advantage T8 32W High Lumen	30/30months ¹
	Plus T8 32W	36/42months ¹
	T8 Energy Advantage & Value Energy Advantage 25W & 28W	36/42months ¹
	Energy Advantage T8 25W XLL, 28W XLL & 32W Extra Long Life (XLL)	42/48months ¹
	32W Twice the Life T8 (2XL)	42/48months ¹
	Energy Advantage T8 25W 2XL & 28W 2XL Twice the Life (2XL)	48/60months ¹
	T8 700 & 800 Series	30/36months ²
	Advantage T8 32W High Lumen	36/36months ²
	Plus T8 32W	42/48months ²
	T8 Energy Advantage & Value Energy Advantage 25W and 28W	48/54months ²
	Energy Advantage T8 25W XLL, 28W XLL & 32W Extra Long Life (XLL)	48/60months ²
	32W Twice the Life T8 (2XL)	48/72months ²
	Energy Advantage T8 25W 2XL & 28W 2XL Twice the Life (2XL)	60/84months ²
	T8 700 & 800 Series & Advantage T8 32W High Lumen	18months ³
	Plus T8 32W, T8 Energy Advantage & Value Energy Advantage 25W&28W	2 years ³
	Energy Advantage T8 25W XLL, 28W XLL, 32W Extra Long Life (XLL), 32W Twice the Life T8 (2XL)	30months ³
	Energy Advantage T8 25W 2XL & 28W 2XL Twice the Life (2XL)	36months ³
	T5 Circline (TL5)	1 year
	T12 Lamps	1 year
Ballasts	Magnetic Fluorescent	2 years ⁴
	AmbiStar Electronic (case temp. 65°C or less)	2 years ⁴
	Centium Electronic 90C (case temp. between 71°C and 90°C)	3 years ⁴
	Optanium Electronic 90C (case temp. between 71°C and 90°C)	3 years ⁴
	Optanium Electronic T5/HO (case temp. between 71°C and 90°C)	3 years ⁴
	signPRO Electronic Sign (case temp. 90°C or less)	3 years ⁴
	SmartMate Compact Fluorescent (case temp. between 76°C and 85°C)	3 years ⁴
	Centium Electronic (case temp. 70°C or less)	5 years ⁴
	Centium Electronic 90C (case temp. 70°C or less)	5 years ⁴
	Mark 7 0-10V Electronic Dimming (case temp. 70°C or less)	5 years ⁴
	Mark 10 Powerline Electronic Dimming (case temp 70°C or less)	5 years ⁴
	Optanium Electronic (case temp. 70°C or less)	5 years ⁴
	Optanium Electronic 90C (case temp. 70°C or less)	5 years ⁴
	Optanium Electronic T5/HO (case temp. 70°C or less)	5 years ⁴
	Optanium Step-Dim Electronic (case temp. 70°C or less)	5 years ⁴
	PowrKut Low Frequency Electronic (case temp. 90°C or less)	5 years ⁴
	PowerSpec HDF Electronic Dimming (case temp. 70°C or less)	5 years ⁴
	ROVR Electronic Dimming (case temp 70°C or less)	5 years ⁴

Updated August 2016

Philips Lighting North America Corporation
200 Franklin Square Drive, Somerset, NJ 08873.
Tel. 855-486-2216



Philips Lighting Canada Ltd.
281 Hillmount Rd, Markham, ON, Canada L6C 2S3
Tel. 800-668-9008

Limited Warranty: Components (Lamps, Drivers, Ballasts and Modules)

Schedule 1 (page 3 of 3)

	SmartMate Compact Fluorescent (case temp. 75°C or less)		5 years ⁴
	Standard Electronic (case temp. 70°C or less)		5 years ⁴
Special Conditions for Linear Fluorescent Components			
¹ Warranty Period based on 3hr/12hr start times on instant start ballasts, without use of sensors, and a maximum operation of 5110 hours per year			
² Warranty Period based on 3hr/12hr start times on programmed start ballasts, without use of sensors, and a maximum operation of 5110 hours per year			
³ Warranty Period based on maximum operation of 5110 hours per year, when used on programmed start ballast with occupancy sensor (set to minimum on time of 15 minutes) or when used on instant start ballast with occupancy sensor (set to minimum on time of 30 minutes)			
⁴ Warranty Period commences on the date of manufacturing			
CFLni			Warranty Period
Lamps	PL-L Energy Advantage		30 months ¹
	PL-L Standard Lamps		24 months ¹
	PL-C Energy Advantage 4-pin		18 months ¹
	PL-C Energy Advantage 2-pin, PL-S Standard Lamps, PL-Q Standard Lamps		12 months ¹
	PL-C Standard Lamps, PL-T Energy Advantage, PL-T Standard Lamps		18 months ¹
	PL-L Energy Advantage, PL-L Standard Lamps, PL-C Energy Advantage, PL-C Standard Lamps 4-pin, PL-T Energy Advantage, PL-T Standard Lamps		12 months ^{1 2}
	PL-L 40W/XEW/25W, PL-L 40W		12 months ^{1 3}
Special Conditions for Compact Fluorescent Non-Integrated Lamps			
¹ Warranty Period based on a maximum operation of 4000 hours per year with 3 hour minimum daily on time. Limited warranty applies only to the extent installed lamps fail in excess of the following percentages: (i) 2% for PL-L and PL-T lamps, (ii) 3% for PL-C 4 pin lamps, (iii) 4% for PL-S lamps, and (iv) 5% for PL-C 2 pin and PL-Q lamps			
² Warranty Period based on a maximum operation of 4000 hours per year with 3 hour minimum daily on time, when used on programmed start ballast with occupancy sensor (set to minimum on time of 15 minutes)			
³ Warranty Period based on a maximum operation of 4000 hours per year with 3 hour minimum daily on time, when used on instant start ballast with occupancy sensor (set to minimum on time of 30 minutes)			
CFLi			Warranty Period
Lamps	Twisters		2 years
	Covered		1 year
	Reflectors		1 year
	Automatic		1 year
* All incandescent and halogen lamps are sold as-is with no warranties.			

Updated August 2016

Philips Lighting North America Corporation
200 Franklin Square Drive, Somerset, NJ 08873.
Tel. 855-486-2216



Philips Lighting Canada Ltd.
281 Hillmount Rd, Markham, ON, Canada L6C 2S3
Tel. 800-668-9008