

EMPALSR

Multi-Purpose Area luminaire

Sensor Ready

HOUSING: Premium powder-coat, die cast aluminum, Bronze housing.

ELECTRICAL:

- Operating temperature (ambient): -40°C to 50°C (-40°F to 122°F) .
- Universal 120-277V or 277-480V AC voltage (50-60Hz) with 6-foot incoming power cords.
- 0-10V DC dimming drivers are standard.
- IES roadway distributions include type III & V.
- Watertight, compression-type electrical connectors.
- Input transient surge protection = 6kV.
- PF > 0.9; THD < 20%.

OPTICAL SYSTEM:

- Polycarbonate lens.
- Field selectable 3000K (warm white), 4000K (neutral white) and 5000K (cool white) color temperatures.*
- EMPALSR-241812L provides a range of 12,267 to 25,747 nominal lumens.*
- EMPALSR-403224L provides a range of 23,377 to 41,366 nominal lumens.*
- Long-life LEDs provide 167,000 hours of operation with at least 70% of initial lumen output (L70), and 51,000 hours with at least 90% of initial lumen output (L90).**
- Screw in sensor ready. Sensor and remote control sold separately. Remote control required to change factory sensor settings.
- LED chromaticity based on < 6-step ANSI quadrangles.
- LED color maintenance < 0.0019 chromaticity shift ($\Delta u'v'$) over the initial 6,000 hours of operation.
- Color Rendering Index > 70.

* Default kelvin temperature 4000k and highest lumen output.

** L70 & L90 hours are IES TM-21-11 calculated hours.

MOUNTING:

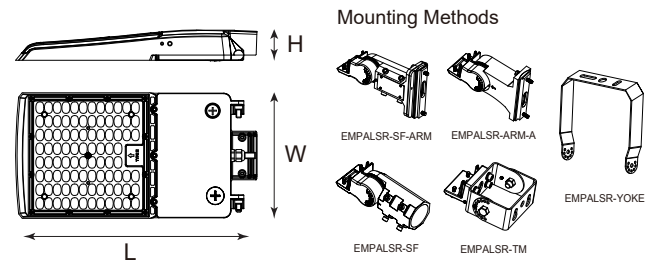
- Optional Universal Mount (Arm and Slip-fitter combination).
- Optional Adjustable Arm Mounting kit.
- Optional Slip-fitter Mounting kit.
- Optional Yoke Mounting kit.
- Optional Trunnion Mounting kit.

ORDERING INFORMATION

Example: EMPALSR-241812L-3CCT-T3-UNC

Model	Nominal Lumen Output (selectable)		Kelvin (selectable)		Distribution	Input Voltage	Installed Options
EMPALSR	241812L	24,000/ 18,000/ 12,000 lm	3CCT	3000/ 4000/ 5000K	T3 Type III T5 Type V	Blank 120-277V UNC 277-480V	PR 3-Pin NEMA Photocell receptacle
	403224L	40,000/ 32,000/ 24,000 lm					

* Mounting hardware sold separately. One must be ordered. Pole tenons and tenon adapters available. See all mounting accessories on page2.



Model #	L (in)	W (in)	H (in)	Weight (lbs)
EMPALSR-241812L-3CCT-T3(T5)	16.63	8.66	2.07	5.59
EMPALSR-403224L-3CCT-T3(T5)	20.05	11.89	2.07	8.24
EMPALSR-241812L-3CCT-T3(T5)-UNC	16.63	8.66	2.07	6.21
EMPALSR-403224L-3CCT-T3(T5)-UNC	20.05	11.89	2.07	8.66

CODE COMPLIANCE:

- cULus listed for wet locations.
- DLC premium listed
- Complies with FCC Part 15, class A.
- IP65 rated for ingress protection.
- IK08 rated for impact protection.

WARRANTY: 5 year warranty on all electronics and housing.



ACCESSORIES (ORDER SEPARATELY)

Sensor

HD09VR-PH5-1 = assive infrared sensor - maximum mounting height = 39 FT
 HD09VR-MH5-1 = Mic owave step-dimming sensor - maximum mounting height = 49 FT
 HD05R = Remote control for HD09VR series Sensors (required to change factory settings)
***HD09VR series has 5-dial setting capability.**

Factory settings for Sensor : detection area =100%, hold time = 5 sec, stand-by period = 0 sec, stand-by dimming level = 10%, daylight threshold = disabled

Photocell

HD07VR-A-1 = 12VDC photocell; RCA jack, factory set to turn on at 10 lux, turns of at 100 lux

Note: Screws into Sensor RCA receptacle that comes standard on the fixture.

NEMA Photocell

JL-205C23-IP65 = 120-277V 3-PIN NEMA Photocell; Rated up to 1800W; Turns on at 6 lux, Turns off at 50 lux
 26WA86 = 480V 3-PIN NEMA Photocell; Rated up to 1800W; Turns on at 10-20 lux, turns off at 30-60 lux

Note: Fixture must be ordered with optional NEMA 3-pin photocell receptacle (-PR).

Mounting Option

MPALSR-SF-ARM = Slip Fitter and Arm Mount Combination (2-3/8" pole or pole tenon, round and square poles)

MPALSR-ARM-A = Adjustable Arm Mount (round and square poles)

MPALSR-SF = Slip Fitter (2-3/8" pole or pole tenon)

MPALSR-YOKE-S = Yoke for MPALSR-241812L

MPALSR-YOKE-L = Yoke for MPALSR-403224L

MPALSR-TM = Trunnion Mount

LEDMPALPRO-D180BH = Double 180° Bullhorn Mounting Bracket

LEDMPALPRO-WMB = Wall Mount Bracket

LEDMPALPRO-WMB90 = 90° Wall Mount Bracket

4SQR-SP-D = 4" Round Pole Tenon

5SQR-SP-D = 5" Round Pole Tenon

4SQ-SP-D = 4" Square Pole Tenon

5SQ-SP-D = 5" Sqaure Pole Tenon

R60-SP2-90-D = 90° Double Tenon Adapter R60-SP2-180-D = 180° Double Tenon Adapter

R60-SP3-90-D = 90° Triple Tenon Adapter

R60-SP3-120-D = 120° Triple Tenon Adapter

R60-SP4-90-D = 90° Quadruple Tenon Adapter

COMPATIBLE DIMMERS AND CONTROLS

Manufacturer	Model Number	Dimmer Range	Load Switching Capacity
Best Lighting	DWS-010V-T	10%-100%	600W
Best Lighting	DWS-010V-D	10%-100%	600W
Leviton	IP710-LFZ	10%-100%	1200W
Lutron	DVSTV	10%-100%	450W

Note: Not compatible with UNC models.

EFFECTIVE PROJECTED AREAS (EPA)

Model	Front (square feet)	Side (square feet)	Face (square feet)
EMPALSR-241812L-3CCT-T3(T5)	0.149	0.287	1.2
EMPALSR-403224L-3CCT-T3(T5)	0.21	0.346	1.98

LUMEN TABLES)

Series	Measurements	Low Lumen			Mid Lumen			High Lumen		
		3000K	4000K	5000K	3000K	4000K	5000K	3000K	4000K	5000K
EMPALSR-241812L-3CCT-T3	Lumens	12,267	12,952	12,897	1,736	19,335	18,935	22,882	24,994	24,095
	Watts	71.28	69.62	71.41	111.4	107.86	111.87	151.23	145.37	151.8
	Efficac	172.10	186.04	180.60	15.58	179.26	169.26	151.31	171.93	158.73
Series	Measurements	Low Lumen			Mid Lumen			High Lumen		
		3000K	4000K	5000K	3000K	4000K	5000K	3000K	4000K	5000K
EMPALSR-241812L-3CCT-T5	Lumens	12,596	133	13,235	18,183	19,593	19,152	23,073	25,052	24,045
	Watts	73.6	71.9	73.8	113.38	109.98	113.85	152.42	146.18	152.17
	Efficac	171.14	1.85	179.34	160.37	178.15	168.22	151.38	171.38	158.01
Series	Measurements	Low Lumen			Mid Lumen			High Lumen		
		3000K	4000K	5000K	3000K	4000K	5000K	3000K	4000K	5000K
EMPALSR-403224L-3CCT-T3	Lumens	23,353	24,576	24,456	31,008	33,019	32,522	37,956	40,847	39,755
	Watts	132.19	129.06	132.24	183.1	177.65	183.38	234.67	226.07	234.84
	Efficac	176.66	190.42	184.94	169.35	185.87	177.35	161.74	180.68	169.29
Series	Measurements	Low Lumen			Mid Lumen			High Lumen		
		3000K	4000K	5000K	3000K	4000K	5000K	3000K	4000K	5000K
EMPALSR-403224L-3CCT-T5	Lumens	23,407	24,658	24,545	31,046	33,005	32,416	37,787	40,597	39,578
	Watts	132.12	129.08	132.17	182.34	176.89	182.15	231.6	223.3	232.15
	Efficac	177.16	191.03	185.71	170.26	186.58	177.96	163.16	181.80	170.48
Series	Measurements	Low Lumen			Mid Lumen			High Lumen		
		3000K	4000K	5000K	3000K	4000K	5000K	3000K	4000K	5000K
EMPALSR-241812L-3CCT-T3-UNC	Lumens	12,388	13,183	13,026	17,996	19,465	18,968	22,969	25,184	24,061
	Watts	73.06	72.16	73.53	112.42	109.27	113.48	152.57	146.78	153.62
	Efficac	169.56	182.69	177.15	160.08	178.14	167.15	150.55	171.58	156.63

Series	Measurements	Low Lumen			Mid Lumen			High Lumen		
		3000K	4000K	5000K	3000K	4000K	5000K	3000K	4000K	5000K
EMPALSR-241812L-3CCT-T5-UNC	Lumens	12,372	13,227	13,126	18,223	19,786	19,363	23,393	25,747	24,823
	Watts	72.44	71.05	72.29	112.34	109.49	112.97	152.82	147	154.02
	Efficac	170.79	186.16	181.57	162.21	180.71	171.40	153.08	175.15	161.17

Series	Measurements	Low Lumen			Mid Lumen			High Lumen		
		3000K	4000K	5000K	3000K	4000K	5000K	3000K	4000K	5000K
EMPALSR-403224L-3CCT-T3-UNC	Lumens	23,377	24,602	24,493	31,211	33,239	32,861	38,622	41,303	40,322
	Watts	132.3	129.2	132.6	182.9	176.7	182.9	234	225	233.8
	Efficac	176.70	190.42	184.71	170.65	188.11	179.67	165.05	183.57	172.46

Series	Measurements	Low Lumen			Mid Lumen			High Lumen		
		3000K	4000K	5000K	3000K	4000K	5000K	3000K	4000K	5000K
EMPALSR-403224L-3CCT-T5-UNC	Lumens	23,517	24,748	24,720	31,399	33,421	33,003	38,500	41,366	40,415
	Watts	132.94	129.62	132.82	184.75	178.22	184.43	234.99	225.63	234.93
	Efficac	176.90	190.93	186.12	169.95	187.53	178.95	163.84	183.34	172.03

Series	CCT	Input Amps (A)								
		Low Lumen			Mid Lumen			High Lumen		
		120V	240V	277V	120V	240V	277V	120V	240V	277V
EMPALSR-241812L-3CCT-T3	3000K	0.59	0.30	0.26	0.93	0.46	0.40	1.26	0.63	0.55
	4000K	0.58	0.29	0.25	0.90	0.45	0.39	1.21	0.61	0.52
	5000K	0.60	0.30	0.26	0.93	0.47	0.40	1.27	0.63	0.55

Series	CCT	Input Amps (A)								
		Low Lumen			Mid Lumen			High Lumen		
		120V	240V	277V	120V	240V	277V	120V	240V	277V
EMPALSR-241812L-3CCT-T5	3000K	0.61	0.31	0.27	0.94	0.47	0.41	1.27	0.64	0.55
	4000K	0.60	0.30	0.26	0.92	0.46	0.40	1.22	0.61	0.53
	5000K	0.62	0.31	0.27	0.95	0.47	0.41	1.27	0.63	0.55

Series	CCT	Input Amps (A)								
		Low Lumen			Mid Lumen			High Lumen		
		277V	347V	480V	277V	347V	480V	277V	347V	480V
EMPALSR-241812L-3CCT-T3-UNC	3000K	0.26	0.21	0.15	0.41	0.32	0.23	0.55	0.44	0.32
	4000K	0.26	0.21	0.15	0.39	0.31	0.23	0.53	0.42	0.31
	5000K	0.27	0.21	0.15	0.41	0.33	0.24	0.55	0.44	0.32

Series	CCT	Input Amps (A)								
		Low Lumen			Mid Lumen			High Lumen		
		277V	347V	480V	277V	347V	480V	277V	347V	480V
EMPALSR-241812L-3CCT-T5-UNC	3000K	0.26	0.21	0.15	0.41	0.32	0.23	0.55	0.44	0.32
	4000K	0.26	0.20	0.15	0.40	0.32	0.23	0.53	0.42	0.31
	5000K	0.26	0.21	0.15	0.41	0.33	0.24	0.56	0.44	0.32

Series	CCT	Input Amps (A)								
		Low Lumen			Mid Lumen			High Lumen		
		277V	347V	480V	277V	347V	480V	277V	347V	480V
EMPALSR-403224L-3CCT-T3-UNC	3000K	0.48	0.38	0.28	0.66	0.53	0.38	0.84	0.67	0.49
	4000K	0.47	0.37	0.27	0.64	0.51	0.37	0.81	0.65	0.47
	5000K	0.48	0.38	0.28	0.66	0.53	0.38	0.84	0.67	0.49

Series	CCT	Input Amps (A)								
		Low Lumen			Mid Lumen			High Lumen		
		277V	347V	480V	277V	347V	480V	277V	347V	480V
EMPALSR-403224L-3CCT-T3-UNC	3000K	0.48	0.38	0.28	0.67	0.53	0.38	0.85	0.68	0.49
	4000K	0.47	0.37	0.27	0.64	0.51	0.37	0.81	0.65	0.47
	5000K	0.48	0.38	0.28	0.67	0.53	0.38	0.85	0.68	0.49

PHOTOMETRICS

EMPALSR-241812L-3CCT-T3

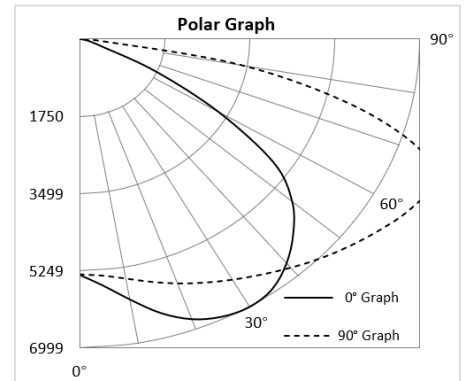
Luminaire Data

Description	Multi Purpose Area Light CCT and Lumen Select
Total Lumens	24,994
Input Wattage	145
Efficacy (lm/W)	172
Max. Cd.	8553.5 (67.5H, 67V)
IES Classification	Type III
Longitudinal Classification	Short

*Photometrics calculated at 4000k and
highest lumen setting.*

Luminaire Classification Systems (LCS)

LCS Zone	Lumens	%Lum
FL 0-30	2,703	10.8%
FM 30-60	7,715	30.9%
FH 60-80	4,041	16.2%
FVH 80-90	268	1.1%
BL 0-30	2,162	8.6%
BM 30-60	5,260	21.0%
BH 60-80	2,712	10.9%
BVH 80-90	134	0.5%
UL 90-100	0	0.0%
UH 100-180	0	0.0%
Total	24,994	100.0%
BUG Rating	B4- U0- G4	



EMPALSR-241812L-3CCT-T5

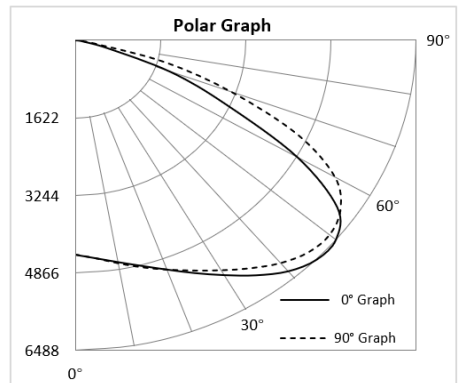
Luminaire Data

Description	Multi Purpose Area Light CCT and Lumen Select
Total Lumens	25,052
Input Wattage	146
Efficacy (lm/W)	171
Max. Cd.	6574.2 (22.5H, 47V)
IES Classification	Type VS
Longitudinal Classification	Very Short

*Photometrics calculated at 4000k and
highest lumen setting.*

Luminaire Classification Systems (LCS)

LCS Zone	Lumens	%Lum
FL 0-30	2,152	8.6%
FM 30-60	7,032	28.1%
FH 60-80	3,419	13.6%
FVH 80-90	131	0.5%
BL 0-30	2,010	8.0%
BM 30-60	6,410	25.6%
BH 60-80	3,681	14.7%
BVH 80-90	217	0.9%
UL 90-100	0	0.0%
UH 100-180	0	0.0%
Total	25,052	100.0%
BUG Rating	B4- U0- G2	



EMPALSR-403224L-3CCT-T3

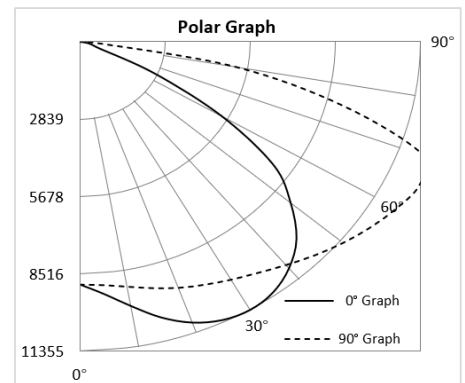
Luminaire Data

Description	Multi Purpose Area Light CCT and Lumen Select
Total Lumens	40,847
Input Wattage	226
Efficacy (lm/W)	181
Max. Cd.	14515 (292.5H, 69V)
IES Classification	Type III
Longitudinal Classification	Medium

*Photometrics calculated at 4000k and
highest lumen setting.*

Luminaire Classification Systems (LCS)

LCS Zone	Lumens	%Lum
FL 0-30	4,412	10.8%
FM 30-60	12,495	30.6%
FH 60-80	6,678	16.3%
FVH 80-90	448	1.1%
BL 0-30	3,584	8.8%
BM 30-60	8,570	21.0%
BH 60-80	4,425	10.8%
BVH 80-90	235	0.6%
UL 90-100	0	0.0%
UH 100-180	0	0.0%
Total	40,847	100.0%
BUG Rating	B5- U0- G4	



EMPALSR-403224L-3CCT-T5

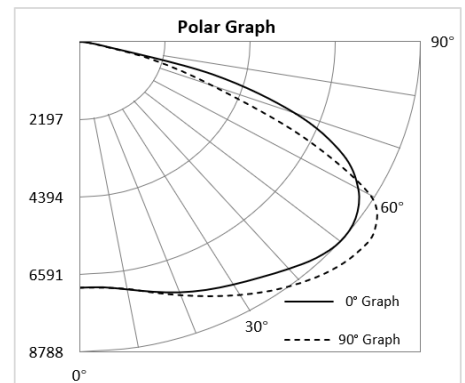
Luminaire Data

Description	Multi Purpose Area Light CCT and Lumen Select
Total Lumens	40,597
Input Wattage	223
Efficacy (lm/W)	182
Max. Cd.	10151 (202.5H, 52V)
IES Classification	Type VS
Longitudinal Classification	Very Short

*Photometrics calculated at 4000k and
highest lumen setting.*

Luminaire Classification Systems (LCS)

LCS Zone	Lumens	%Lum
FL 0-30	3,183	7.8%
FM 30-60	10,099	24.9%
FH 60-80	6,054	14.9%
FVH 80-90	325	0.8%
BL 0-30	3,323	8.2%
BM 30-60	10,985	27.1%
BH 60-80	6,304	15.5%
BVH 80-90	324	0.8%
UL 90-100	0	0.0%
UH 100-180	0	0.0%
Total	40,597	100.0%
BUG Rating	B5- U0- G3	



EMPALSR-241812L-3CCT-T3-UNC

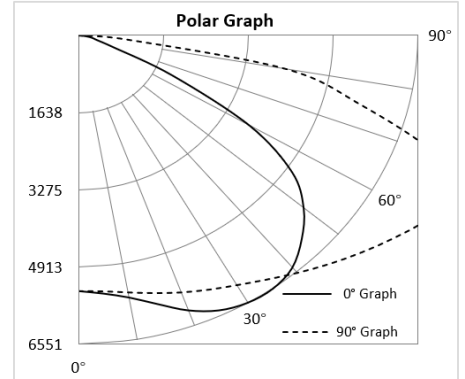
Luminaire Data

Description	Multi Purpose Area Light CCT and Lumen Select
Total Lumens	25,184
Input Wattage	147
Efficacy (lm/W)	172
Max. Cd.	9159.7 (75H, 66V)
IES Classification	Type III
Longitudinal Classification	Short

Photometrics calculated at 4000k and
highest lumen setting.

Luminaire Classification Systems (LCS)

LCS Zone	Lumens	%Lum
FL 0-30	2,559	10.2%
FM 30-60	7,667	30.4%
FH 60-80	4,448	17.7%
FVH 80-90	290	1.2%
BL 0-30	2,222	8.8%
BM 30-60	5,319	21.1%
BH 60-80	2,506	10.0%
BVH 80-90	172	0.7%
UL 90-100	0	0.0%
UH 100-180	0	0.0%
Total	25,184	100.0%
BUG Rating	B4-U0-G4	



EMPALSR-241812L-3CCT-T5-UNC

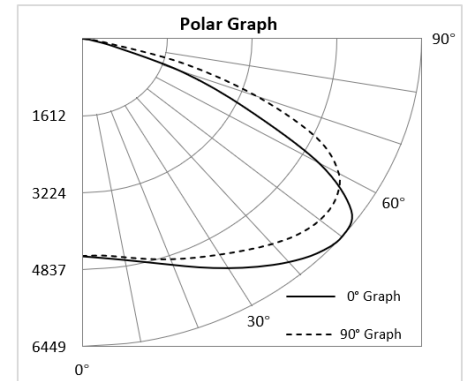
Luminaire Data

Description	Multi Purpose Area Light CCT and Lumen Select
Total Lumens	25,747
Input Wattage	147
Efficacy (lm/W)	175
Max. Cd.	6665.4 (315H, 52V)
IES Classification	Type VS
Longitudinal Classification	Very Short

Photometrics calculated at 4000k and
highest lumen setting.

Luminaire Classification Systems (LCS)

LCS Zone	Lumens	%Lum
FL 0-30	2,147	8.3%
FM 30-60	7,080	27.5%
FH 60-80	3,591	13.9%
FVH 80-90	144	0.6%
BL 0-30	2,085	8.1%
BM 30-60	6,766	26.3%
BH 60-80	3,727	14.5%
BVH 80-90	207	0.8%
UL 90-100	0	0.0%
UH 100-180	0	0.0%
Total	25,747	100.0%
BUG Rating	B4-U0-G2	



EMPALSR-403224L-3CCT-T3-UNC

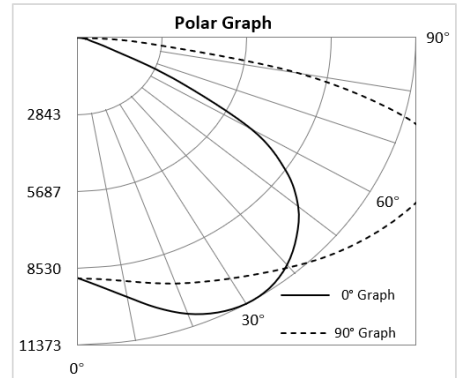
Luminaire Data

Description	Multi Purpose Area Light CCT and Lumen Select
Total Lumens	41,303
Input Wattage	225
Efficacy (lm/W)	184
Max. Cd.	14115 (67.5H, 70V)
IES Classification	Type III
Longitudinal Classification	Medium

Photometrics calculated at 4000k and
highest lumen setting.

Luminaire Classification Systems (LCS)

LCS Zone	Lumens	%Lum
FL 0-30	4,389	10.6%
FM 30-60	12,701	30.8%
FH 60-80	7,050	17.1%
FVH 80-90	573	1.4%
BL 0-30	3,590	8.7%
BM 30-60	8,520	20.6%
BH 60-80	4,220	10.2%
BVH 80-90	260	0.6%
UL 90-100	0	0.0%
UH 100-180	0	0.0%
Total	41,303	100.0%
BUG Rating	B5-U0-G4	



EMPALSR-403224L-3CCT-T5-UNC

Luminaire Data

Description	Multi Purpose Area Light CCT and Lumen Select
Total Lumens	41,366
Input Wattage	226
Efficacy (lm/W)	183
Max. Cd.	10030 (292.5H, 53V)
IES Classification	Type VS
Longitudinal Classification	Short

Photometrics calculated at 4000k and
highest lumen setting.

Luminaire Classification Systems (LCS)

LCS Zone	Lumens	%Lum
FL 0-30	3,342	8.1%
FM 30-60	10,948	26.5%
FH 60-80	6,121	14.8%
FVH 80-90	280	0.7%
BL 0-30	3,264	7.9%
BM 30-60	10,575	25.6%
BH 60-80	6,449	15.6%
BVH 80-90	387	0.9%
UL 90-100	0	0.0%
UH 100-180	0	0.0%
Total	41,366	100.0%
BUG Rating	B5-U0-G3	

