

FEATURES

- TIR Strike Optics
- Patented low profile luminaire
- Available in Monochromatic Amber, 2700K, 3000K, 3500K, 4000K and 5000K
- Type 1, 2, 3, 4, 4W, 5Q, L, and R distributions
- 0 - 10V dimming drivers standard
- IP65 optical assembly



CONTROL TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- One piece die-cast housing, low copper (<0.6% Cu) Aluminum Alloy with integral cooling ribs over the optical chamber and electrical compartment
- Solid barrier wall separates optical and electrical compartments
- Double-thick wall with gussets on the support-arm mounting end
- Housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail
- All hardware is stainless steel or electro-zinc plated steel
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat
- One-piece die-cast, low copper (<0.6% Cu) aluminum alloy lens frame with 1" minimum depth around the gasket flange
- Optional clear 1/8" thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimete
- Optional, fixture supplied with a one-piece flat, clear, UV stabilized polycarbonate, fully gasketed, replacing the standard tempered glass lens. CAUTION: Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight. A program of regular inspection and periodic replacement is highly recommended to maintain optimum fixture performance
- One-piece extruded aluminum arm with internal bolt guides and fully radiussed top and bottom
- Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief
- Arm is circular cut for specified round pole

CONSTRUCTION (CONTINUED)

- Optional cast, low copper aluminum horizontal slip-fitter with adaptor plate to secure the luminaire to 2" IPS pipe size arms
- Optional cast aluminum wall mount plate assembly. Attaches to the wall over the junction box. Luminaire attaches to the wall plate

OPTICS

- Optical cartridge system consisting of a die cast heat sink, LED Total Internal Reflection (TIR) optics, gasket and bezel plate
- Molded silicone gasket ensures a weather-proof seal around each individual LED
- Features revolutionary individual LED optical control based on high performance TIR optical designs
- Optional BackLight Control for complete control of unwanted backlight
- IP65 Optical assembly
- Type 1, 2, 3, 4, 4W, 5Q, L, and R standard distributions
- Available in Monochromatic Amber, 2700K, 3000K, 3500K, 4000K and 5000K
- Die-cast, low copper aluminum heat sink modules provide thermal transfer at PCB level
- Anodized aluminum heat sink modules

INSTALLATION

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury

ELECTRICAL

- Dimming range from 10% to 100% through the use of standard 0-10V interface on the programmable driver

Warp9®



RELATED PRODUCTS

Ouro

Pavilion

PGL8

ELECTRICAL (CONTINUED)

- Modular wiring harness in the service area provides user access to the dimming circuitry
- Optional factory programmed dimming profile
- Surge protection: 10kV surge suppression
- SF for 120, 277, 347 Line volts
DF for 208, 240, 480 Line volts

CONTROLS

- 7-pin Receptacle and Button Photocell

CERTIFICATIONS AND LISTINGS

- Listed to UL1598 and CSA C22.2#250.0-24 for wet location and 40°C ambient temperatures
- IDA approved, 3000K and warmer CCTs only
- ANSI C136.31-2010 3G Vibration tested and compliant
- RoHS compliant
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 6/06/2020. See Buy American Solutions

WARRANTY

- 5 year warranty

KEY DATA	
Lumen Range	5,361–28,501
Wattage Range	95–159.1
Efficacy Range (LPW)	52.2–128
Reported Life (Hours)	L70/60,000
Weight	70 lbs 31.75 kg
EPA Front View / Side View	1.5

DATE:

LOCATION:

TYPE:

PROJECT:

CATALOG #:

ORDERING GUIDE

Example: 1SA-WP9LA2-81L-550-3K7-3-CLR-SQ-UNV-BLT-7PR-SF

CATALOG #

		WP9LA2										
Mounting		Model	LED Engine		CCT/CRI ⁶		Distribution		Lens Options		House Side Shield	
1SA	Single Arm Mount	WP9LA2 Warp9 2.0 Large Fixture	81L-550	81 LEDs - 15,000 Lumens	AM ⁷	Monochromatic Amber	1	Type I	(Blank)	No Lens	BC ¹ Backlight Control	
1W	Wall Mount		108L-550	54 LEDs - 20,000 Lumens	27K8 ²	2700K, 80CRI	2	Type II	CLR	Clear Lens		
HSF	Horizontal Slipfitter		108L-700	81 LEDs - 25,000 Lumens	27K9 ²	2700K, 90CRI	3	Type III	CP	Clear Polycarbonate Lens		
					3K7	3000K, 70CRI	4	Type IV Forward				
					3K8 ²	3000K, 80CRI	4W	Type IV Wide				
					3K9 ²	3000K, 90CRI	5QM	Type V Square Medium				
						35K8 ²	3500K, 80CRI	R	Corner Right			
						35K9 ²	3500K, 90CRI	L	Corner Left			
						4K7	4000K, 70CRI					
						4K8 ²	4000K, 80CRI					
					4K9 ²	4000K, 90CRI						
					5K7	5000K, 70CRI						
					5K8 ²	5000K, 80CRI						
					5K9 ²	5000K, 90CRI						

SPECIFICATIONS (CONTINUED)

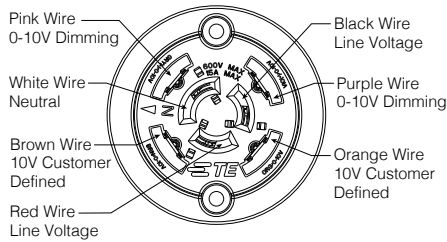
CONTROLS

BUTTON PHOTOCELL

- Factory installed photocell inside housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others

7PR

- Fully gasketed and wired 7-pin receptacle option. Easy access location above the electrical compartment. 7-pin construction allows for a user-defined interface and provides a controlled definition of operational performance. ANSI twist-lock control module by-others
- Standard customer operation modes:
 1. Traditional on/off photoelectric control
 2. 5-pin wireless photoelectric control for added dimming feature
 3. 7-pin wireless photoelectric control for dimming and additional I/O connections for customer use



LIGHTGRID+™

- LightGrid+™ wireless control modules allow an individual fixture to be managed, monitored and measured. The modules communicate securely over a robust certified meshed radio signal. The LightGrid+™ modules provide on/off/dim control, external device input, alerts and metering.

WIR-RME-L

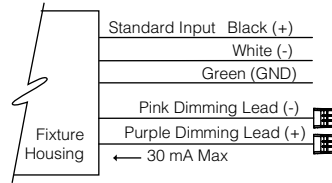
- LightGrid+™ External Module, 120-480V, 1000ft range (LOS), Internal Photocell, 1 Digital Input, Compatible with the A-25-7H option

NX LIGHTING CONTROLS

- NX lighting controls platform utilizes a Distributed Network Architecture (DNA) that connects intelligent devices including luminaires, controllers, panels, occupancy sensors, photocells, wall switches and dimmers, creating a system with an unmatched level of reliability, scalability and simplicity.

DIMMING:

- Dimming range from 100% to 10% through the use of the standard 0-10V interface on the programmable driver



- Modular wiring harness in the service area provides user access to the dimming circuitry
- Dimming circuitry compatible with 0-10V, user-defined control devices
- Optional factory programmed dimming profile

POLE MOUNTED

ROUND POLE-MOUNTED OCCUPANCY SENSOR UP TO 30'

SCH-R

- Round Pole Mounted Occupancy Sensor up to 30' - Outdoor occupancy sensor with 0-10V interface dimming control mounts directly to the pole. Wide 360° pattern. Module colors available Black, Gray, and White. Module is cut for round pole mounting. Pole diameter needed. Pole to be drilled in the field with provided installation instructions
- Ordering Example: SCH-R4/277²/BL³

SQUARE POLE-MOUNTED OCCUPANCY SENSOR UP TO 30'

SCH-S

- Square Pole Mounted Occupancy Sensor up to 30' - Outdoor occupancy sensor with 0-10V interface dimming control mounts directly to the pole. Wide 360° pattern. Module colors available Black, Gray, and White. Module is cut for square pole mounting
- Ordering Example: SCH-S/277²/BL³

ASTRODIM

- AstroDIM provides multi-stage night-time power reduction based on an internal timer referenced to the power on/off time. There is no need for an external control infrastructure. The unit automatically performs a dimming profile based on the predefined scheduled reference to the midpoint, which is calculated based on the power on/off times

OPTIONAL FUSING:

- SF for 120, 277, and 347 Line volts
- DF for 208, 240, and 480 Line volts
- High temperature fuse holders factory installed inside the fixture housing
- Fuse is included

CAUTION:

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury

Notes:

- 1 Pole diameter
- 2 Voltage
- 3 Color

PRODUCT EXCEPTIONS & DETAILS

Configuration			EPA
	1A	1 Arm Side Mount	1.5
	1W	Single Wall Mount	n/a
	HSF	Horizontal Slipfitter	n/a

VSF/SVSF Configuration			
	1A		3T
	2B		3Y
	2L		4C

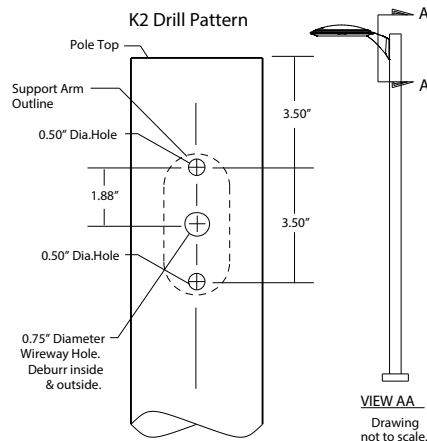
MOUNTING OPTIONS

SUPPORT ARM:

- Die-cast, low copper aluminum alloy, with splice access cover
- Die-cast pole adaptor and an internal reinforcing plate are provided with a wire strain relief
- The arm adapter is square or circular cut for specified pole size and shape
- For field wire connections, a terminal block is mounted in the arm cavity and accessible behind the splice access cover. The block accepts #14 to #8 wire sizes and is factory prewired to the electrical module's quick-disconnect plug inside the electrical compartment

Fixture Drilling Instructions:

For AR, CC, CCS, and ET Fixtures



OPTIONAL VERTICAL SLIP-FITTER (VSF/SVSF):

- Internally accessible slip-fitter attaches to a 2-3/8" x 4" long tenon and allows hands-free wiring and maintenance
- Available for round and square poles



- For VSF arm configurations, please use 4". Mounting option on fixture ordering configuration. The optional VSF/SVSF will need to be ordered separately.
- SVSF use square configuration.

Ordering example for round:

- 2 A/WP9LA2/54L-500/35K8/3/CLR/4.00/UNV/BLT

- 1 VSF-2SB

Ordering example for square:

- 2 1A/WP9LA2/54L-500/35K8/3/CLR/SQ/UNV/BLT

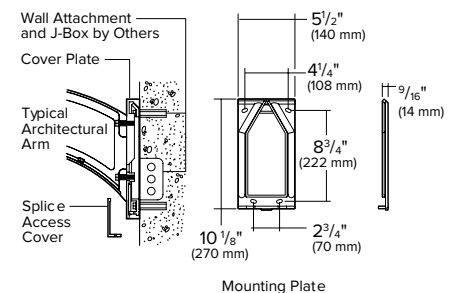
- 1 SVSF-2SB

VSF	SVSF
VSF-1A	SVSF-1A
VSF-2B	SVSF-SB
VSF-2L	SVSF-2L
VSF-3T	SVSF-3T
VSF-3Y	SVSF-3Y
VSF-4C	SVSF-4C

WALL MOUNT

1W

- A cast mounting plate of 356 alloy, low-copper (<0.6% Cu) aluminum, is mounted to the wall with bolts (by others). Fixture and arm are mounted to a cast 356 alloy aluminum cover plate before attaching to the wall mounting plate. The fixture-arm-cover plate assembly is hooked to the wall mounting plate, and secured with stainless steel screws provided. After mounting to the wall, field splices are made at the opening in the cover plate, then covered by a cast 356 alloy aluminum plate that blends with the cover plate design. Complete fixture-arm-cover plate assembly can therefore be mounted before field splices are made. Cover plate is finished to match arm and fixture powder coat color
- Optional Wall Mount: (CC is illustration the same for all site area?)
- Optional, cast aluminum mounting plate attaches to a wall over a junction box and the speed mount is bolted to the cover plate. To complete the wiring, the luminaire assembly slides over the mounting plate.



DELIVERED LUMENS

NO LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
				Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
					B	U	G			B	U	G			B	U	G	
81	15,000	550	1	16511	2	0	1	119.6	17135	2	0	1	124.1	17841	2	0	1	129.3
			1-BC	10571	0	0	1	76.6	10970	0	0	1	79.5	11423	0	0	1	82.8
			2	15496	2	0	2	112.3	16081	2	0	2	116.5	16745	2	0	2	121.3
			2-BC	9870	0	0	2	71.5	10243	0	0	2	74.2	10666	0	0	2	77.3
			3	15369	2	0	3	111.3	15949	2	0	3	115.5	16607	2	0	3	120.3
			3-BC	9555	0	0	2	69.2	9915	0	0	2	71.8	10325	0	0	2	74.8
			4	16147	1	0	3	117.0	16757	1	0	3	121.4	17448	1	0	4	126.4
			4-BC	11679	0	0	3	84.6	12120	0	0	3	87.8	12620	0	0	3	91.4
			4W	15395	2	0	3	111.5	15976	2	0	4	115.7	16635	2	0	4	120.5
			4W-BC	9875	1	0	2	71.5	10248	1	0	2	74.2	10671	1	0	2	77.3
			5Q	15963	4	0	2	115.6	16565	4	0	2	120.0	17249	4	0	2	125.0
			R	15323	2	0	3	111.0	15902	2	0	3	115.2	16558	2	0	3	120.0
			L	15323	2	0	3	111.0	15902	2	0	3	115.2	16558	2	0	3	120.0
			1	21901	2	0	2	118.5	22728	2	0	2	122.9	23665	2	0	2	128.0
108	20,000	550	1-BC	14021	0	0	1	75.8	14551	0	0	1	78.7	15151	0	0	1	81.9
			2	20555	3	0	3	111.2	21331	3	0	3	115.4	22211	3	0	3	120.1
			2-BC	13092	1	0	2	70.8	13587	1	0	2	73.5	14147	1	0	2	76.5
			3	20386	2	0	4	110.3	21155	2	0	4	114.4	22028	2	0	4	119.1
			3-BC	12674	1	0	3	68.5	13152	1	0	3	71.1	13695	1	0	3	74.1
			4	21418	2	0	4	115.8	22227	2	0	4	120.2	23144	2	0	4	125.2
			4-BC	15492	1	0	4	83.8	16076	1	0	4	87.0	16740	1	0	4	90.5
			4W	20420	2	0	4	110.4	21191	2	0	4	114.6	22065	2	0	4	119.3
			4W-BC	13099	1	0	3	70.8	13593	1	0	3	73.5	14154	1	0	3	76.6
			5Q	21173	4	0	2	114.5	21973	4	0	2	118.8	22879	4	0	2	123.7
			R	20325	2	0	3	109.9	21092	2	0	4	114.1	21962	3	0	4	118.8
			L	20325	2	0	3	109.9	21092	2	0	4	114.1	21962	3	0	4	118.8
	25,000	700	1	26376	2	0	2	112.0	27372	2	0	2	116.2	28501	2	0	2	121.1
			1-BC	16887	1	0	2	71.7	17524	1	0	2	74.4	18247	1	0	2	77.7
			2	24755	3	0	3	105.1	25689	3	0	3	109.1	26749	3	0	3	113.9
			2-BC	15768	1	0	2	66.9	16363	1	0	2	69.5	17038	1	0	2	72.6
			3	24551	2	0	4	103.8	25478	2	0	4	107.6	26529	3	0	4	112.3
			3-BC	15263	1	0	3	64.8	15840	1	0	3	67.2	16493	1	0	3	70.5
			4	25795	2	0	4	109.5	26769	2	0	4	113.6	27873	2	0	5	118.3
			4-BC	18657	1	0	4	79.2	19361	1	0	4	82.2	20160	1	0	4	85.6
			4W	24593	3	0	4	104.4	25521	3	0	5	108.4	26574	3	0	5	112.9
			4W-BC	15775	1	0	3	67.0	16371	1	0	4	69.5	17046	1	0	4	72.6
			5Q	25500	5	0	2	108.3	26462	5	0	2	112.3	27554	5	0	2	116.5
			R	24478	3	0	4	103.9	25402	3	0	4	107.8	26450	3	0	4	111.8
			L	24478	3	0	4	103.9	25402	3	0	4	107.8	26450	3	0	4	111.8

DELIVERED LUMENS (CONTINUED)

CLR LENS

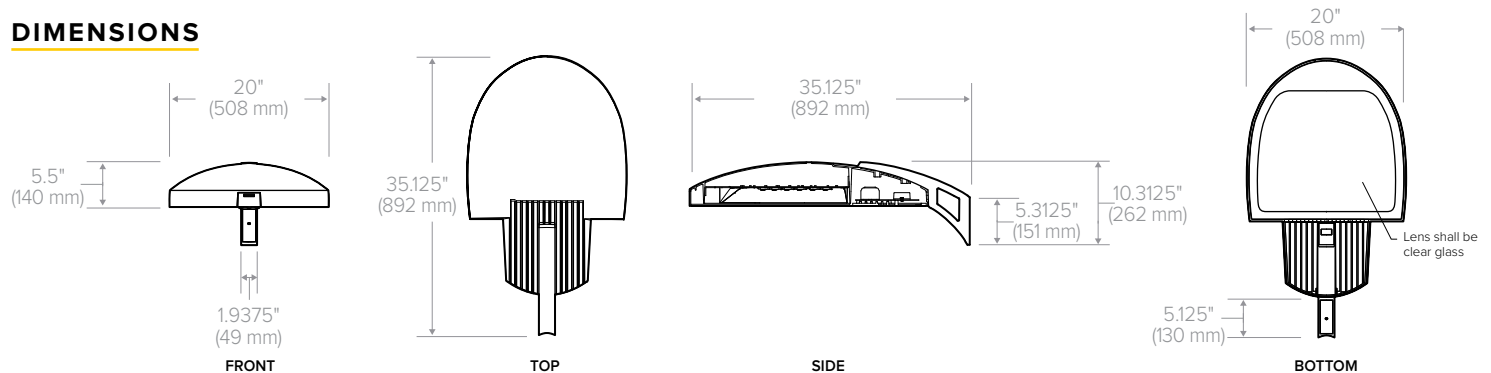
LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
				Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
					B	U	G			B	U	G			B	U	G	
81	15,000	550	1	14100	1	0	1	102.2	14632	1	0	1	106.0	15236	1	0	1	110.4
			1-BC	9027	0	0	1	65.4	9368	0	0	1	67.9	9754	0	0	1	70.7
			2	13233	2	0	2	95.9	13733	2	0	2	99.5	14300	2	0	2	103.6
			2-BC	8429	0	0	2	61.1	8747	0	0	2	63.4	9108	0	0	2	66.0
			3	13124	2	0	2	95.1	13620	2	0	3	98.7	14182	2	0	3	102.7
			3-BC	8159	0	0	2	59.1	8468	0	0	2	61.3	8817	0	0	2	63.9
			4	13789	1	0	3	99.9	14310	1	0	3	103.7	14900	1	0	3	107.9
			4-BC	9974	0	0	2	72.3	10350	0	0	3	75.0	10777	0	0	3	78.1
			4W	13147	2	0	3	95.2	13643	2	0	3	98.8	14206	2	0	3	102.9
			4W-BC	8433	1	0	2	61.1	8751	1	0	2	63.4	9112	1	0	2	66.0
			5Q	13632	3	0	1	98.8	14146	3	0	1	102.5	14730	3	0	2	106.7
			R	13085	2	0	2	94.8	13579	2	0	2	98.4	14140	2	0	3	102.4
			L	13085	2	0	2	94.8	13579	2	0	2	98.4	14140	2	0	3	102.4
108	20,000	550	1	18703	2	0	1	101.2	19409	2	0	1	105.0	20210	2	0	2	109.3
			1-BC	11974	0	0	1	64.8	12426	0	0	1	67.2	12939	0	0	1	70.0
			2	17553	2	0	2	94.9	18216	2	0	2	98.5	18967	2	0	2	102.6
			2-BC	11181	0	0	2	60.5	11603	0	0	2	62.8	12081	0	0	2	65.3
			3	17409	2	0	3	94.2	18066	2	0	3	97.7	18811	2	0	3	101.7
			3-BC	10823	1	0	2	58.5	11232	1	0	2	60.7	11695	1	0	2	63.3
			4	18290	2	0	4	98.9	18981	2	0	4	102.7	19764	2	0	4	106.9
			4-BC	13229	0	0	3	71.6	13729	0	0	3	74.3	14295	0	0	3	77.3
			4W	17438	2	0	4	94.3	18097	2	0	4	97.9	18843	2	0	4	101.9
			4W-BC	11186	1	0	3	60.5	11608	1	0	3	62.8	12087	1	0	3	65.4
			5Q	18081	4	0	2	97.8	18764	4	0	2	101.5	19538	1	0	2	105.7
			R	17357	2	0	3	93.9	18012	2	0	3	97.4	18755	2	0	3	101.4
			L	17357	2	0	3	93.9	18012	2	0	3	97.4	18755	2	0	3	101.4
	25,000	700	1	22524	2	0	2	95.6	23375	2	0	2	99.2	24339	2	0	2	103.3
			1-BC	14421	0	0	1	61.2	14965	0	0	1	63.5	15582	0	0	1	66.1
			2	21140	3	0	3	89.7	21938	3	0	3	93.1	22843	3	0	3	97.0
			2-BC	13465	1	0	2	57.2	13974	1	0	2	59.3	14550	1	0	2	61.8
			3	20966	2	0	4	89.0	21757	2	0	4	92.4	22655	2	0	3	97.0
			3-BC	13034	1	0	3	55.3	13527	1	0	3	57.4	14085	1	0	3	59.8
			4	22028	2	0	4	93.5	22859	2	0	4	97.0	23802	2	0	4	101.0
			4-BC	15932	1	0	4	67.6	16534	1	0	4	70.2	17216	1	0	4	73.1
			4W	21001	2	0	4	89.1	21794	2	0	4	92.5	22693	2	0	4	96.3
			4W-BC	13471	1	0	3	57.2	13980	1	0	3	59.3	14557	1	0	3	61.8
			5Q	21776	4	0	2	92.4	22598	4	0	2	95.9	23530	4	0	2	99.9
			R	20903	2	0	4	88.7	21693	3	0	4	92.1	22588	3	0	4	95.9
			L	20903	2	0	4	88.7	21693	3	0	4	92.1	22588	3	0	4	95.9

DELIVERED LUMENS (CONTINUED)

PL LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
				Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
					B	U	G			B	U	G			B	U	G	
81	15,000	550	1	12880	1	0	1	93.3	13367	1	0	1	96.8	13918	1	0	1	100.8
			1-BC	8246	0	0	1	59.7	8558	0	0	1	62.0	8911	0	0	1	64.6
			2	12088	2	0	2	87.6	12545	2	0	2	90.9	13062	2	0	2	94.6
			2-BC	7700	0	0	2	55.8	7991	0	0	2	57.9	8320	0	0	2	60.3
			3	11989	1	0	2	86.9	12442	1	0	2	90.1	12955	1	0	2	93.9
			3-BC	7454	0	0	2	54.0	7735	0	0	2	56.0	8054	0	0	2	58.4
			4	12596	1	0	3	91.3	13072	1	0	3	94.7	13611	1	0	3	98.6
			4-BC	9111	0	0	2	66.0	9455	0	0	2	68.5	9845	0	0	2	71.3
			4W	12009	2	0	3	87.0	12463	2	0	3	90.3	12977	2	0	3	94.0
			4W-BC	7703	0	0	2	55.8	7994	0	0	2	57.9	8324	1	0	2	60.3
			5Q	12452	3	0	1	90.2	12922	3	0	1	93.6	13455	3	0	1	97.5
			R	11953	2	0	2	86.6	12405	2	0	2	89.9	12916	2	0	2	93.6
			L	11953	2	0	2	86.6	12405	2	0	2	89.9	12916	2	0	2	93.6
108	20,000	550	1	17085	2	0	1	92.4	17730	2	0	1	95.9	18461	2	0	1	99.8
			1-BC	10938	0	0	1	59.2	11351	0	0	1	61.4	11819	0	0	1	63.9
			2	16034	2	0	2	86.7	16640	2	0	2	90.0	17326	2	0	2	93.7
			2-BC	10213	0	0	2	55.2	10599	0	0	2	57.3	11036	0	0	2	59.7
			3	15903	2	0	3	86.0	16503	2	0	3	89.3	17184	2	0	3	92.9
			3-BC	9887	0	0	2	53.5	10260	0	0	2	55.5	10683	1	0	2	57.8
			4	16708	1	0	3	90.4	17339	1	0	4	93.8	18054	2	0	4	97.6
			4-BC	12085	0	0	3	65.4	12541	0	0	3	67.8	13058	0	0	3	70.6
			4W	15930	2	0	4	86.2	16531	2	0	4	89.4	17213	2	0	4	93.1
			4W-BC	10218	1	0	2	55.3	10604	1	0	2	57.4	11041	1	0	3	59.7
			5Q	16517	4	0	2	89.3	17141	4	0	2	92.7	17848	4	0	2	96.5
			R	15855	2	0	3	85.8	16454	2	0	3	89.0	17133	2	0	3	92.7
			L	15855	2	0	3	85.8	16454	2	0	3	89.0	17133	2	0	3	92.7
	25,000	700	1	20576	2	0	2	87.3	21353	2	0	2	90.6	22233	2	0	2	94.4
			1-BC	13173	0	0	1	55.9	13670	0	0	1	58.0	14234	0	0	1	60.4
			2	19311	2	0	2	82.0	20040	3	0	3	85.1	20867	3	0	3	88.6
			2-BC	12300	0	0	2	52.2	12765	0	0	2	54.2	13291	1	0	2	56.4
			3	19152	2	0	3	81.3	19875	2	0	4	84.4	20695	2	0	3	88.2
			3-BC	11907	1	0	2	50.5	12356	1	0	3	52.4	12866	1	0	3	54.6
			4	20122	2	0	4	85.4	20882	2	0	4	88.6	21743	2	0	4	92.3
			4-BC	14554	0	0	3	61.8	15104	0	0	3	64.1	15727	1	0	4	66.8
			4W	19184	2	0	4	81.4	19909	2	0	4	84.5	20730	2	0	4	88.0
			4W-BC	12306	1	0	3	52.2	12771	1	0	3	54.2	13297	1	0	3	56.4
			5Q	19892	4	0	2	84.4	20643	4	0	2	87.6	21495	4	0	2	91.2
			R	19095	2	0	3	81.1	19816	2	0	3	84.1	20633	2	0	3	87.6
			L	19095	2	0	3	81.1	19816	2	0	3	84.1	20633	2	0	3	87.6

DIMENSIONS



WP9LA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

WP9L2-108L-550-4K7-1

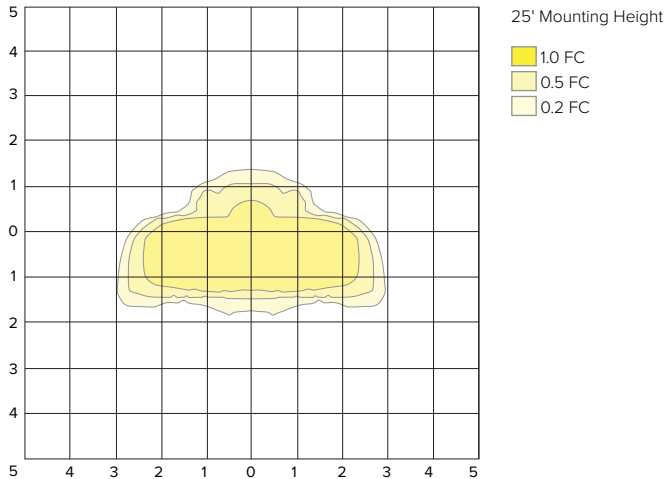
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	22728
Watts	184.89
Efficacy	122.9
IES Type	1
BUG Rating	B2-U0-G2
Mounting Height	25 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	20268	89.2%
Downward House Side	2460	10.8%
Downward Total	22728	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	22728	100%

ISOFOOT CANDLE PLOT



WP9L2-108L-550-4K7-1-BC

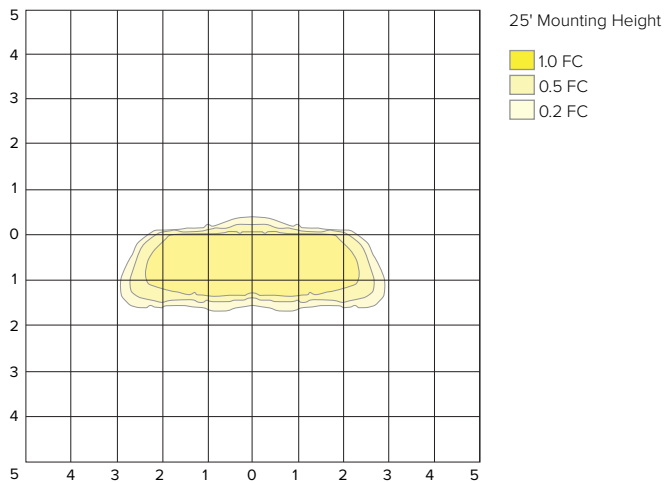
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	14551
Watts	184.89
Efficacy	78.7
IES Type	1
BUG Rating	B0-U0-G1
Mounting Height	25 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	14216	97.7%
Downward House Side	335	2.3%
Downward Total	14551	99.9%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	14551	100%

ISOFOOT CANDLE PLOT



WP9L2-108L-550-4K7-2

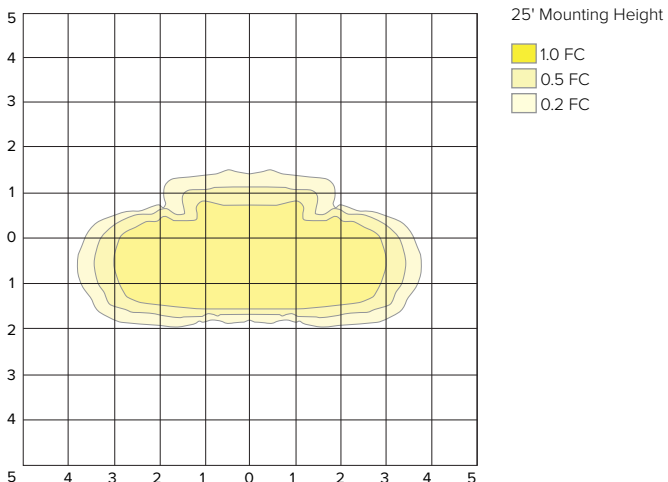
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	21331
Watts	184.89
Efficacy	115.4
IES Type	2
BUG Rating	B3-U0-G3
Mounting Height	25 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	17798	83.4%
Downward House Side	3533	16.6%
Downward Total	21331	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	21331	100%

ISOFOOT CANDLE PLOT



WP9LA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

WP9L2-108L-550-4K7-2-BC

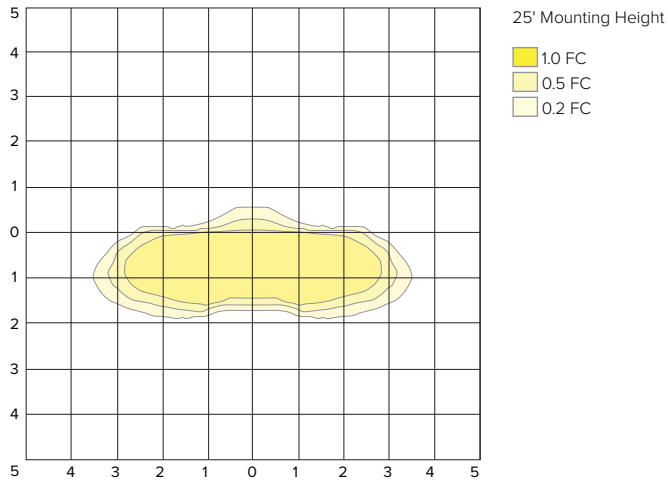
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13587
Watts	184.89
Efficacy	73.5
IES Type	2
BUG Rating	B1-U0-G2
Mounting Height	25 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	13164	96.9%
Downward House Side	423	3.1%
Downward Total	13587	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13587	100%

ISOFOOT CANDLE PLOT



WP9L2-108L-550-4K7-3

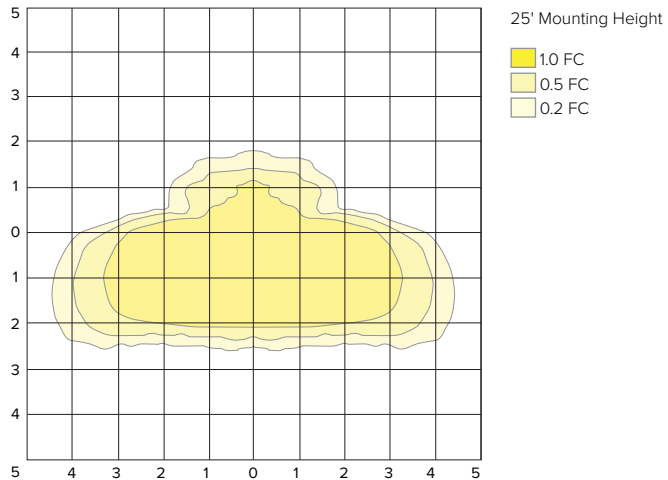
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	21155
Watts	184.89
Efficacy	114.4
IES Type	3
BUG Rating	B2-U0-G4
Mounting Height	25 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	18326	86.6%
Downward House Side	2829	13.3%
Downward Total	21155	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	21155	100%

ISOFOOT CANDLE PLOT



WP9L2-108L-550-4K7-3-BC

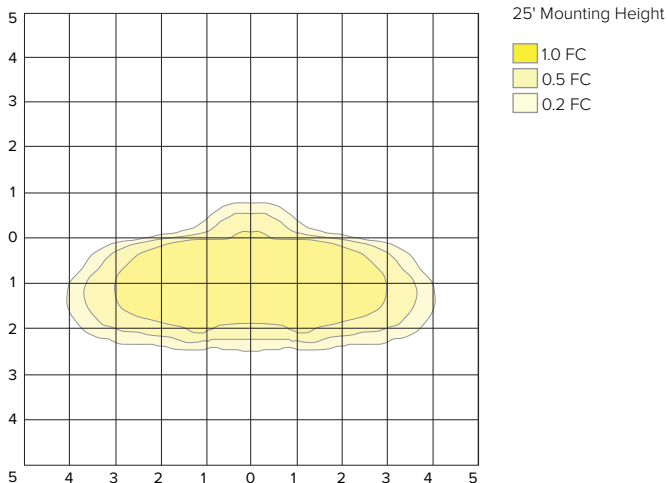
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13152
Watts	184.89
Efficacy	71.1
IES Type	3
BUG Rating	B1-U0-G3
Mounting Height	25 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	12634	96.0%
Downward House Side	519	3.9%
Downward Total	13152	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13152	100%

ISOFOOT CANDLE PLOT



WP9LA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

WP9L2-108L-550-4K7-4

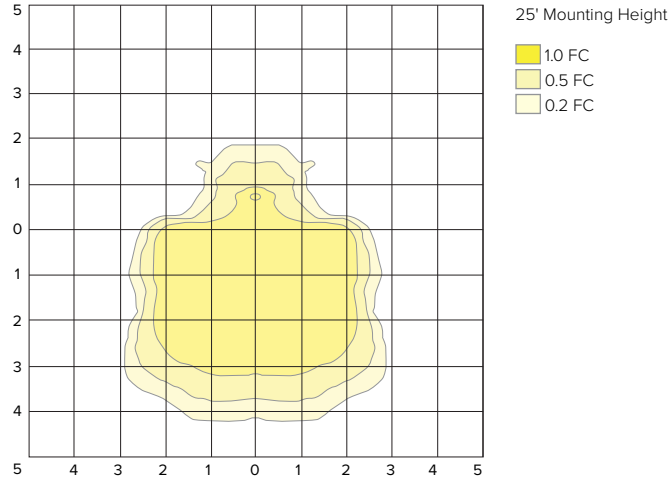
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	22227
Watts	184.89
Efficacy	120.2
IES Type	4
BUG Rating	B2-U0-G4
Mounting Height	25 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	20144	90.6%
Downward House Side	2083	9.4%
Downward Total	22227	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	22227	100%

ISOFOOT CANDLE PLOT



WP9L2-108L-550-4K7-4-BC

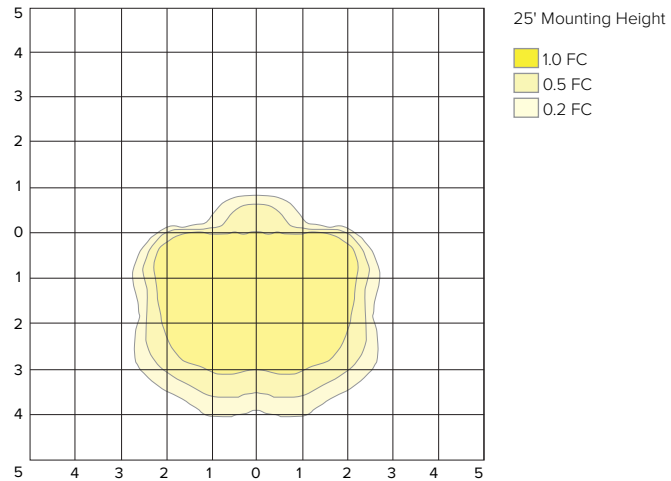
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	16077
Watts	184.89
Efficacy	87.0
IES Type	4
BUG Rating	B1-U0-G4
Mounting Height	25 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	15598	97.0%
Downward House Side	480	3.0%
Downward Total	16078	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	16078	100%

ISOFOOT CANDLE PLOT



WP9L2-108L-550-4K7-4W

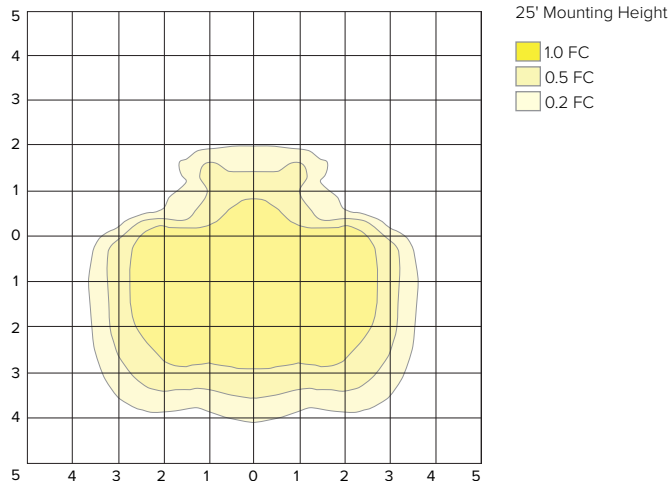
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	21192
Watts	184.89
Efficacy	114.6
IES Type	4
BUG Rating	B2-U0-G4
Mounting Height	25 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	18722	88.4%
Downward House Side	2470	11.6%
Downward Total	21191	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	21191	100%

ISOFOOT CANDLE PLOT



WP9LA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

WP9L2-108L-550-4K7-4W-BC

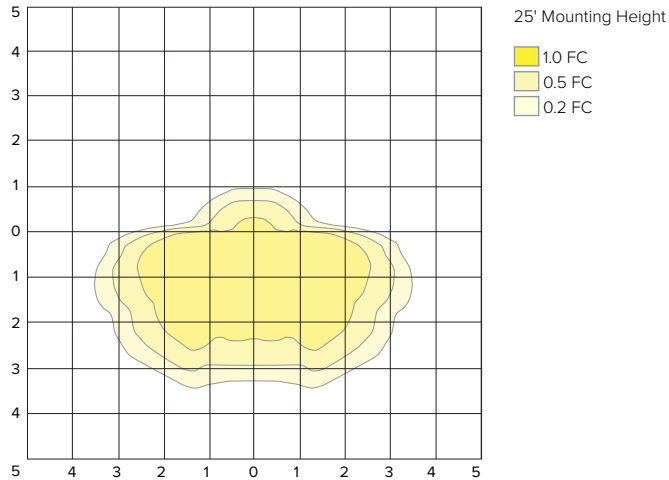
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13594
Watts	184.89
Efficacy	73.5
IES Type	4
BUG Rating	B1-U0-G3
Mounting Height	25 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	12923	95.1%
Downward House Side	670	4.9%
Downward Total	13594	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13594	100%

ISOFOOT CANDLE PLOT



WP9L2-108L-550-4K7-5Q

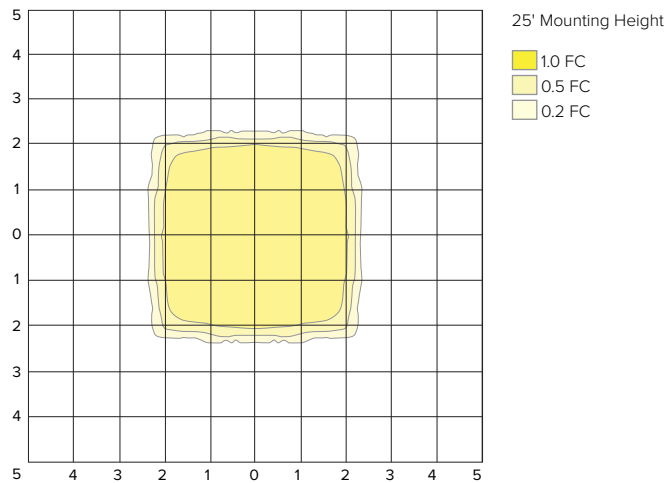
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	21973
Watts	184.89
Efficacy	118.8
IES Type	5
BUG Rating	B4-U0-G2
Mounting Height	25 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	10987	50.0%
Downward House Side	10987	50.0%
Downward Total	21974	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	21974	100%

ISOFOOT CANDLE PLOT



WP9L2-108L-550-4K7-L

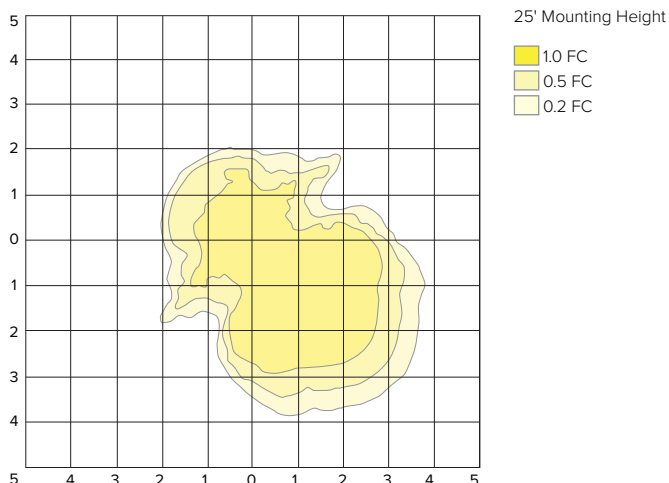
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	21092
Watts	184.89
Efficacy	114.1
IES Type	L
BUG Rating	B2-U0-G4
Mounting Height	25 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	3339	15.8%
Downward House Side	17753	84.2%
Downward Total	21092	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	21092	100%

ISOFOOT CANDLE PLOT



WP9LA2
ARCHITECTURAL AREA/SITE

DATE:

LOCATION:

TYPE:

PROJECT:

CATALOG #:

PHOTOMETRY

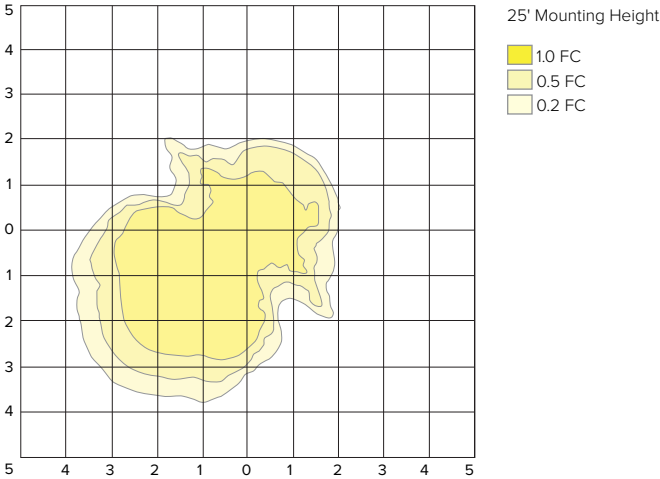
WP9L2-108L-550-4K7-R
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	21092
Watts	184.89
Efficacy	114.1
IES Type	R
BUG Rating	B2-U0-G4
Mounting Height	25 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	17618	83.6%
Downward House Side	3474	16.4%
Downward Total	21092	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	21092	100%

ISOFOOT CANDLE PLOT

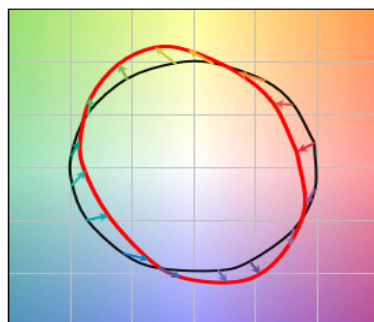


WP9LA2

ARCHITECTURAL AREA/SITE

TM-30 DATA

COLOR VECTOR GRAPHIC

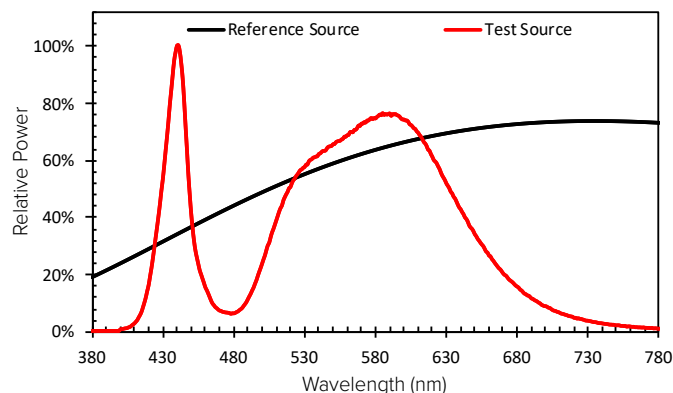


— Reference Illuminant — Test Source

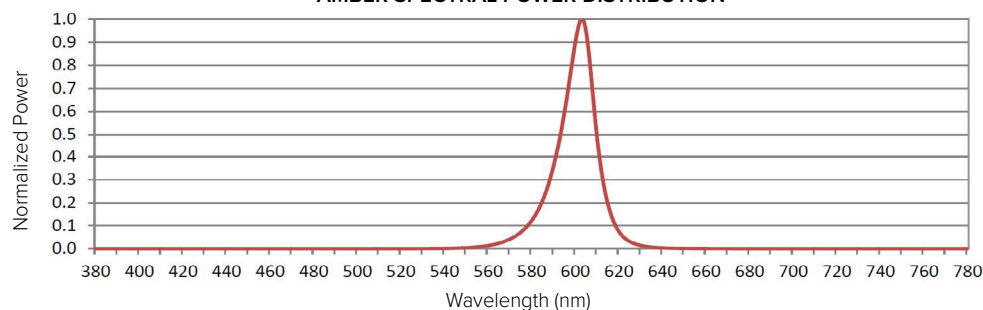
TEST SOURCE

R _f	68
R _a	99
CCT(K)	3947
D _{uv}	0.0004
x	0.3831
y	0.3793
CIE R _a	72

SPECTRAL POWER DISTRIBUTION COMPARISON



AMBER SPECTRAL POWER DISTRIBUTION



ELECTRICAL DATA

LED Count	System Watts	Current	Line Voltage		Amps AC						Min Power Factor	Max. THD (%)	Dimming				
			VAC	Hz	120	208	240	277	347	480			Dimming Range	Source Current Out		Absolute Voltage	
														Min	Max	Min	Max
81 LEDs	138.0	550 mA	120-480	50/60	115	0.66	0.58	0.50	0.40	0.29	>0.9	20	10% to 100%	0mA	1mA	0V	10V
108 LEDs	184.9	550 mA			1.54	0.89	0.77	0.67	0.53	0.39							
	235.6	700 mA			1.96	1.13	0.98	0.85	0.68	0.49							

TM-21 Lifetime Calculation - Projected Lumen Maintenance (25°C / 77°C)						
Ambient Temp.	0	25,000	36,000	50,000	100,000	Reported L70
25°C / 77°F	100%	93.41%	91.12%	88.30%	78.90%	>60khrs

CRI Lumen Multiplier for 80 and 90 CRI		
CCT	80 CRI	90 CRI
2700K	0.859	0.655
3000K	0.919	.7033
3500K	0.906	0.732
4000K	0.8941	.734
5000K	0.879	.7712
Scaling factor of 5000K 70CRI lumen packages		