

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

FEATURES

- Elegant form factor
- High performance optics up to 35,387 delivered lumens
- Diffusion lens for low glare comfort
- NX™ wireless control options
- IP66 Rated



CONTROL TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- One piece die-cast, low copper (<0.6% Cu) Aluminum Alloy 360 with vents and .100" minimum wall thickness..
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat.
- Optional lens is impact resistant 1/8" tempered glass with anti-reflective coating.
- Optional lens has a one-piece extruded vulcanized silicone gasket.
- Optional lens frame one piece die-cast, low copper (<0.6% Cu) Aluminum Alloy 360 and .100" minimum wall thickness.
- Lens frame has a one-piece O-ring extruded vulcanized silicone gasket.
- Mid-frame one piece die-cast, low copper (<0.6% Cu) Aluminum Alloy 360 and .100" minimum wall thickness.
- Mid-frame secures to Lens Frame and housing by stainless steel recessed Allen-head screws.
- Silicone gaskets throughout.
- All external fasteners are stainless steel.

OPTICS

- LEDs mount to a metal printed circuit board assembly (MCPCB.)
- Optical lenses are clear injection molded PMMA acrylic.
- Optional Backlight Control on each LED module to completely control unwanted backlight.
- Optional fixture finish optical surfaces will not exceed BUG ratings of the standard white finish and will be greater than or equal to the delivered lumens of the optional matte black optical surface finish.

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

- Universal voltage, 120 through 277V with a $\pm 10\%$ tolerance. Driver is Underwriters Laboratories listed.
- High voltage configurations, 347/480. Driver has a 0-10V dimming interface for multi-level illumination options. Driver is Underwriters Laboratories listed.
- "Thermal Shield", secondary side, thermistor provides protection for the sustainable life of LED module and electronic components.
- Drivers shall have greater than a 0.9 power factor, less than 20% harmonic distortion, and be suitable for operation in -40°C to 40°C ambient environments.

Altitude®



RELATED PRODUCTS

[Ouro](#)

[Pavilion](#)

[PGL8](#)

ELECTRICAL (CONTINUED)

- Luminaire are capable of operating at 100% brightness in a 40°C environment. Both driver and optical array have integral thermal protection that will dim the luminaire upon detection of temperatures in excess of 85°C.
- Modular wiring harness in the service area provides user access to the dimming circuitry.
- Optional factory programmed dimming profile.
- Surge protection: 20,000kA in series.
- SF for 120, 277, 347 Line volts.
DF for 208, 240, 480 Line volts.
- Wiring: No. 18AWM rated 105°C, wet rating.

(Controls continued on page 3)

KEY DATA	
Lumen Range	8,203–35,387
Wattage Range	160–285
Efficacy Range (LPW)	9–139
Reported Life (Hours)	L70/60,000
Weight	34.6 lbs 15.69 kg
EPA Front View / Side View	.44 / .85

ORDERING GUIDE

Example: ALT2-100L-200-3K7-3-UNV-A34-GTT-NXSPW30F-CLR

CATALOG #

HOUSING

Housing	LED Engine	CCT / CRI ¹⁴	Distribution	Rotation	Voltage
ALT2 Architectural Area/Site	100L-160 160W, 20,000 lm 100L-200 200W, 25,000 lm 100L-240 240W, 30,000 lm 100L-285 285W, 35,000 lm <i>Equivalent</i> ALT96-P70 = 100L-160 ALT120-P35 = 100L-160 ALT120-P70 = 100L-240 ALT180-P35 = 100L-200	AM Monochromatic Amber 27K8 ¹⁴ 2700K, 80 CRI 27K9 ¹⁴ 2700K, 90 CRI 3K7 3000K, 70 CRI 3K8 3000K, 80 CRI 3K9 3000K, 90 CRI 35K8 ¹⁴ 3500K, 80 CRI 35K9 ¹⁴ 3500K, 90 CRI 4K7 4000K, 70 CRI 4K8 4000K, 80 CRI 4K9 ¹⁴ 4000K, 90 CRI 5K7 5000K, 70 CRI 5K8 ¹⁴ 5000K, 80 CRI 5K9 ¹⁴ 5000K, 90 CRI	FR Type I/Front Row 2 Type II 3 Type III 4 Type IV 4W Type IV Wide 5QM Type V Square Medium 5QN Type V Square Narrow 5R Type V Rectangular 5W Type V Wide (Round) CL Corner Left CR Corner Right	(Blank) Blank for no rotation L ³ Optic rotation left R ³ Optic rotation right	UNV 120–277V 347 347V 480 480V

Mounting	Fixture Finish	Control Options	Options	Control Accessories
ASQ Arm Square pole A34 Arm mt 3.3–4.2" OD pole A46 Arm mt 4.5–6.0" OD pole MAF Horizontal Slipfitter 2.375" OD arm SVSF Vertical Slipfitter Mount square for 2" pipe tenon, (2.375" OD) VSF Vertical Slipfitter Mount for 2" pipe tenon, (2.375" OD) WB Wall Bracket for area wall mount	BLS Black Gloss Smooth BLT Black Matte Textured DBS Dark Bronze Gloss Smooth DBT Dark Bronze Matte Textured GTT Graphite Matte Textured LGS Light Grey Gloss Smooth LGT Light Grey Matte Textured PSS Platinum Silver Gloss Smooth VGT Verde Green Matte Textured WHS White Gloss Smooth WHT White Matte Textured Color Option CC ⁴ Custom Color	7PR 7 pin PCR, wireless control enabled 7PR-TL 7 pin PCR with twist lock photocontrol 7PR-SC 7 pin PCR with shorting cap AD-01 ⁵ AstroDIM: 50% output at midnight AD-02 ⁵ AstroDIM: 50% output midnight to 4 AM AD-03 AstroDIM: 50% output 10PM AD-04 ⁵ AstroDIM: 50% output 10PM to 4AM NXSP14F ^{6,7} Wired NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' NXSP30F ^{6,7} Wired NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 30' NXSPW14F ^{6,7} NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' NXSPW30F ^{6,7} NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 30' NXWE NX Wireless Enabled SCL-8F ⁸ Low voltage sensor for 3rd party wireless controls via 7PR. For mounting heights up to 8' SCL-40F ⁸ Low voltage sensor for 3rd party wireless controls via 7PR. For mounting heights 9' to 40' SCP-8F Remote control programmable line voltage sensor, use with SCPREMOTE SCP-40F Remote control programmable line voltage sensor, use with SCPREMOTE SWP ^{6,7,9} Site Sync™ Pre Commission Wireless Module SWPM-40F ^{6,7,9} Site Sync with Sensor 9' to 40' Mounting Height	BC ¹⁰ Backlight Control SF Single Fuse DF Double Fuse TB Terminal Block CLR Clear Lens HDL ¹¹ Diffuse Lens CP ¹⁵ Clear Polycarbonate Lens	SCPREMOTE Remote control for SCP option. Order at least one per project to program and control the occupancy sensor SW7PR SiteSync™ on fixture module via 7PR SWUSB SiteSync™ Software on USB SWTAB ¹² SiteSync™ Windows Tablet SWBRG SiteSync™ Wireless Bridge Node SWFC SiteSync™ Field Commission Service WIR-RME-L wSCAPE™ External Fixture Module NXOFM-1R1D-UNV NX External Control

Notes:

- Turtle friendly.
- See Lumen Multiplier chart on [Page 16](#) for lumen scaling factor.
- Not available with 5QM, 5W, CL, and CR distributions.
- Consult factory for custom color, marine and corrosive finish options.
- Not available with 28L-20 configuration of the LED Engine
- Not available with other sensor or wireless control options.
- Not available in 480V.
- UNV only.
- Specify group and zone at time of order. See www.hubbellighting.com/sitesync for more details. Order at least one SiteSync interface accessory SWUSB or SWTAB. Each option contains SiteSync License, GUI, and Bridge Node.
- Not available with Type 5 distributions, CLR, CP, or HDL option.
- Only available in Type 3 or Type 5W.
- Microsoft, Encarta, MSN, and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- IK10 rated. Consult factory for details
- See Lumen Multiplier chart on Page 12 for lumen scaling factor

SPECIFICATIONS (CONTINUED)

Certifications and Listings:

- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations and 40°C ambient temperatures.
- ANSI C136.31-2010 Vibration tested and compliant 1.5G and 4G reference [page 12](#)
- RoHS compliant.
- IP66 Rated
- IEC 66262 Mechanical Impact Code IK08 and IK10.
- IDA approved, 3000K and warmer CCTs only.
- DLC® (DesignLights Consortium) Qualified, with some Premium Qualified configurations. Please refer to the DLC website for specific product qualifications at www.designlights.org

WARRANTY

- 5 year warranty
- See [HLI Standard Warranty](#) for additional information

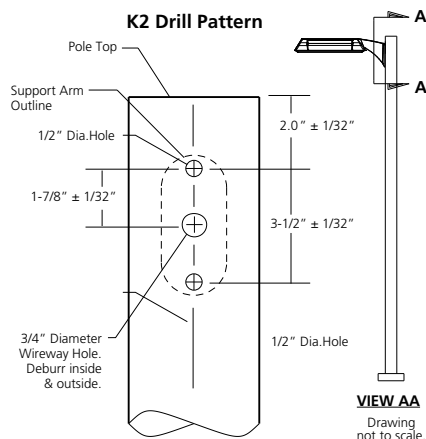
Mounting:

Support Arm:

- Die-cast, low copper aluminum alloy, with splice access cover.
- Die-cast pole adapter 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.

Optional Wall Mount:

- 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.



PRODUCT EXCEPTIONS & DETAILS

Configuration			EPA
	1SA	1 Arm Side Mount	0.85
	2SL	2 Arm Side Mount	1.29
	2SB	2 Arm Side Mount	1.70
	3SY	3 Arm Side Mount	1.91

Configuration			EPA
	3ST*	3 Arm Side Mount	2.14
	4SC	4 Arm Side Mount	2.14
	1W	Single Wall Mount	n/a
	MAF	Horizontal Slipfitter	n/a

SPECIFICATIONS (CONTINUED)

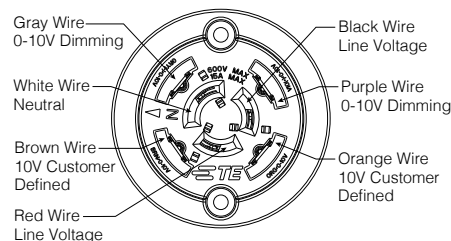
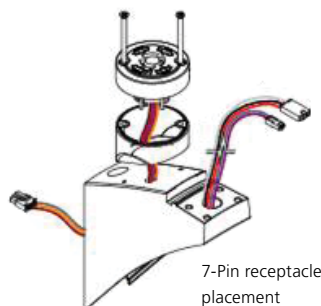
CONTROLS:

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.

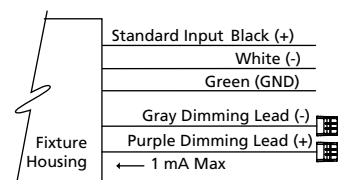
Standard customer operation modes:

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.



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.

Wireless Controls wiSCAPE™

Hubbell Control Solution's wiSCAPE™ 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 wiSCAPE modules provide on/off/dim control, external device input, alerts and metering.

WIR-RME-L

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

SiteSync™¹

SiteSync™ wireless control system for reduction in energy and maintenance cost while optimizing light quality 24/7. See ordering information or visit www.hubbellighting.com/products/sitesync for more details.

NX Distributed Intelligence™

Hubbell Control Solutions' NX Distributed Intelligence™ lighting control 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 WASP Occupancy Sensor WSP

The Dimming WASP Outdoor Occupancy Sensor is specifically designed to provide 0-10VDC output for the control of dimmable fixtures. Easy to use dipswitches allow the user to adjust sensor time delay and sensitivity as well as set unoccupied and occupied dimming levels. Sensors also feature a daylight sensor for ON/OFF control of fixtures when there is sufficient natural light. Visit https://hubbellcdn.com/installationmanuals/2102B_Dimming_WASP_Install.pdf for more details.

Round Pole-Mounted Occupancy Sensor up to 30'. Select voltage and finish color.

SCH-R

Round Pole-Mounted Occupancy Sensor: 16' to 30' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for round pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.

Ordering Example: SCH-R4¹/277²/BL³

Square Pole-Mounted Occupancy Sensor up to 30'. Select voltage and finish color.

SCH-S

Square Pole-Mounted Occupancy Sensor: up to 30' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for round pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.

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.

¹PRECOMMISSIONED SITESYNC ORDERING INFORMATION: When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit www.HubbellLighting.com/products/sitesync or contact Hubbell Lighting tech support at (800) 345-4928.

SiteSync fixtures with occupancy sensor (SWPM) require the mounting height of the fixture for selection of the lens.

DELIVERED LUMENS

LEDs #	NW (Nominal Watts)	NL (Nominal Lumens)	LO (Lens Options)	Dist. (Distribution)	Amber				3000K 70CRI				4000K 70CRI				5000K 70CRI							
					Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
						B	U	G			B	U	G			B	U	G			B	U	G	
100L	160	20,000	No Lens	FR	3840	1	0	0	24	20843	2	0	2	130	21939	2	0	2	137	22233	2	0	2	139
				FR-BC	2300	0	0	0	14	12486	1	0	1	78	13142	1	0	1	82	13318	1	0	1	84
				2	3535	1	0	1	22	19189	3	0	3	120	20198	3	0	3	126	20469	3	0	3	129
				2-BC	1958	0	0	0	12	10631	1	0	2	66	11190	1	0	2	70	11340	1	0	2	72
				3	3634	1	0	1	23	19729	2	0	4	123	20766	2	0	4	130	21044	2	0	4	132
				3-BC	1793	0	0	1	11	9732	1	0	2	61	10244	1	0	2	64	10381	1	0	2	66
				4	3600	0	0	1	23	19545	2	0	4	122	20573	2	0	4	129	20848	2	0	4	131
				4-BC	2130	0	0	1	13	11562	1	0	2	72	12170	1	0	2	76	12333	1	0	2	78
				4W	3605	1	0	2	23	19567	2	0	4	122	20596	2	0	4	129	20872	2	0	4	130
				4W-BC	1511	0	0	1	9	8203	1	0	2	51	8634	1	0	2	54	8750	1	0	2	56
				5R	3742	2	0	2	23	20311	4	0	4	127	21379	4	0	4	134	21665	4	0	4	135
				5QM	3813	2	0	0	24	20697	4	0	2	129	21785	4	0	2	136	22077	4	0	2	137
				5QN	3733	2	0	0	23	20265	4	0	1	127	21330	4	0	1	133	21616	4	0	1	136
				5W	3706	3	0	1	23	20116	5	0	3	126	21174	5	0	3	132	21457	5	0	3	134
				CL	3667	1	0	1	23	19909	3	0	3	124	20956	3	0	4	131	21236	3	0	4	133
				CR	3667	1	0	1	23	19909	3	0	3	124	20956	3	0	4	131	21236	3	0	4	133
			Clear Lens	FR	3591	0	0	0	23	19495	2	0	2	123	20520	2	0	2	130	20795	2	0	2	132
				2	3306	1	0	1	21	17948	2	0	3	114	18892	3	0	3	120	19145	3	0	3	121
				3	3324	1	0	1	21	18045	2	0	3	114	18994	2	0	3	120	19248	2	0	3	122
				4	3368	0	0	1	21	18281	1	0	4	116	19242	2	0	4	122	19500	2	0	4	123
				4W	3371	1	0	1	21	18302	2	0	4	116	19264	2	0	4	122	19522	2	0	4	124
				5R	3500	2	0	2	22	18997	4	0	4	120	19996	4	0	4	127	20264	4	0	4	128
				5QM	3566	2	0	0	23	19359	4	0	2	123	20376	4	0	2	129	20649	4	0	2	131
				5QN	3492	2	0	0	22	18954	4	0	1	120	19951	4	0	1	126	20218	4	0	1	128
				5W	3466	2	0	1	22	18815	5	0	3	119	19804	5	0	3	125	20069	5	0	3	127
				CL	3430	1	0	1	22	18621	3	0	3	118	19600	3	0	3	124	19863	3	0	3	126
			CR	3430	1	0	1	22	18621	3	0	3	118	19600	3	0	3	124	19863	3	0	3	126	
			HDL Lens	3	2850	1	0	1	18	15474	3	0	3	97	16287	3	0	3	102	16505	3	0	3	104
				5W	2989	1	0	1	19	16224	3	0	2	102	17076	3	0	2	107	17305	3	0	2	108

DELIVERED LUMENS (CONTINUED)

LEDs #	NW (Nominal Watts)	NL (Nominal Lumens)	LO (Lens Options)	Dist. (Distribution)	Amber					3000K 70CRI					4000K 70CRI					5000K 70CRI				
					Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
						B	U	G			B	U	G			B	U	G			B	U	G	
100L	200	25,000	No Lens	FR	4439	1	0	0	22	24095	2	0	2	122	25362	2	0	2	128	25702	2	0	2	130
				FR-BC	2659	0	0	0	13	14434	1	0	1	73	15193	1	0	1	77	15396	1	0	1	78
				2	4086	1	0	1	21	22183	3	0	3	112	23349	3	0	3	118	23662	3	0	3	120
				2-BC	2264	0	0	0	11	12290	1	0	2	62	12936	1	0	2	65	13109	1	0	2	66
				3	4201	1	0	1	21	22807	2	0	4	115	24006	3	0	4	121	24327	3	0	4	123
				3-BC	2073	0	0	1	10	11251	1	0	2	57	11842	1	0	2	60	12001	1	0	2	61
				4	4162	1	0	2	21	22595	2	0	4	114	23782	2	0	4	120	24101	2	0	4	122
				4-BC	2462	0	0	1	12	13366	1	0	2	68	14069	1	0	3	71	14257	1	0	3	72
				4W	4167	1	0	2	21	22620	3	0	4	114	23809	3	0	5	120	24128	3	0	5	122
				4W-BC	1747	0	0	1	9	9483	1	0	2	48	9982	1	0	2	50	10115	1	0	2	51
				5R	4325	2	0	2	22	23480	4	0	4	119	24714	4	0	4	125	25045	4	0	4	126
				5QM	4408	2	0	1	22	23927	4	0	2	121	25184	4	0	2	127	25522	4	0	2	129
				5QN	4316	2	0	0	22	23427	5	0	1	118	24658	5	0	1	125	24988	5	0	1	126
				5W	4284	3	0	1	22	23255	5	0	3	117	24477	5	0	3	124	24805	5	0	3	125
				CL	4240	1	0	1	21	23015	3	0	4	116	24225	3	0	4	122	24550	3	0	4	124
				CR	4240	1	0	1	21	23015	3	0	4	116	24225	3	0	4	122	24550	3	0	4	124
			Clear Lens	FR	4152	1	0	0	21	22537	2	0	2	114	23722	2	0	2	120	24039	2	0	2	121
				2	3822	1	0	1	19	20749	3	0	3	105	21839	3	0	3	110	22132	3	0	3	112
				3	3930	1	0	1	20	21332	2	0	4	108	22453	2	0	4	113	22754	2	0	4	115
				4	3893	0	0	1	20	21133	2	0	4	107	22244	2	0	4	112	22542	2	0	4	114
				4W	3897	1	0	2	20	21157	2	0	4	107	22270	2	0	4	112	22568	3	0	4	114
				5R	4046	2	0	2	20	21961	4	0	4	111	23116	4	0	4	117	23425	4	0	4	118
				5QM	4123	2	0	1	21	22379	4	0	2	113	23556	4	0	2	119	23871	4	0	2	121
				5QN	4036	2	0	0	20	21912	4	0	1	111	23063	5	0	1	116	23372	5	0	1	118
				5W	4007	3	0	1	20	21751	5	0	3	110	22894	5	0	3	116	23201	5	0	3	117
				CL	3966	1	0	1	20	21527	3	0	4	109	22659	3	0	4	114	22962	3	0	4	116
				CR	3966	1	0	1	20	21527	3	0	4	109	22659	3	0	4	114	22962	3	0	4	116
			HDL Lens	3	3341	1	0	1	17	18236	3	0	3	92	19195	3	0	3	97	19452	3	0	3	98
				5W	3406	1	0	1	17	18403	3	0	2	93	19371	4	0	2	98	19630	4	0	2	99

DELIVERED LUMENS (CONTINUED)

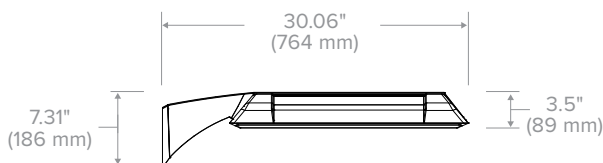
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					Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
						B	U	G			B	U	G			B	U	G			B	U	G	
100L	240	30,000	No Lens	FR	Configuration Not Available					28520	2	0	2	118	30020	2	0	2	125	30422	2	0	2	126
				FR-BC						17085	1	0	1	71	17983	1	0	1	75	18223	1	0	1	76
				2						26257	3	0	4	109	27638	3	0	4	115	28008	3	0	4	116
				2-BC						14547	1	0	2	60	15312	1	0	2	64	15517	1	0	2	64
				3						26995	3	0	4	112	28415	3	0	4	118	28795	3	0	4	119
				3-BC						13317	1	0	2	55	14017	1	0	2	58	14205	1	0	2	59
				4						26744	2	0	4	111	28150	2	0	5	117	28527	2	0	5	118
				4-BC						15821	1	0	3	66	16653	1	0	3	69	16876	1	0	3	70
				4W						26775	3	0	5	111	28182	3	0	5	117	28559	3	0	5	119
				4W-BC						11225	1	0	2	47	11815	1	0	2	49	11973	1	0	2	50
				5R						27792	5	0	5	115	29253	5	0	5	121	29645	5	0	5	123
				5QM						28321	4	0	2	118	29809	5	0	3	124	30209	5	0	3	125
				5QN						27729	5	0	1	115	29187	5	0	1	121	29578	5	0	1	123
				5W						27525	5	0	4	114	28972	5	0	4	120	29360	5	0	4	122
				CL						27242	3	0	4	113	28674	3	0	4	119	29058	3	0	4	121
				CR						27242	3	0	4	113	28674	3	0	4	119	29058	3	0	4	121
			Clear Lens	FR						26676	2	0	2	111	28078	2	0	2	117	28454	2	0	2	118
				2						24559	3	0	3	102	25850	3	0	3	107	26196	3	0	4	109
				3						25249	3	0	4	105	26577	3	0	4	110	26933	3	0	4	112
				4						25014	2	0	4	104	26329	2	0	4	109	26682	2	0	4	111
				4W						25043	3	0	5	104	26359	3	0	5	109	26712	3	0	5	111
				5R						25995	5	0	5	108	27361	5	0	5	114	27728	5	0	5	115
				5QM						26489	4	0	2	110	27882	4	0	2	116	28255	4	0	2	117
				5QN						25936	5	0	1	108	27299	5	0	1	113	27665	5	0	1	115
				5W						25745	5	0	3	107	27099	5	0	3	112	27461	5	0	3	114
				CL						25480	3	0	4	106	26820	3	0	4	111	27179	3	0	4	113
				CR						25480	3	0	4	106	26820	3	0	4	111	27179	3	0	4	113
			HDL Lens	3						21586	3	0	3	90	22720	3	0	3	94	23025	3	0	3	96
				5W						21783	4	0	2	90	22928	4	0	2	95	23235	4	0	2	96

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

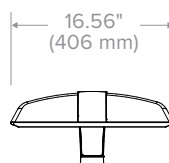
DELIVERED LUMENS (CONTINUED)

LEDs #	NW (Nominal Watts)	NL (Nominal Lumens)	LO (Lens Options)	Dist. (Distribution)	Amber					3000K 70CRI					4000K 70CRI					5000K 70CRI				
					Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
						B	U	G			B	U	G			B	U	G			B	U	G	
100L	285	35,000	No Lens	FR	Configuration Not Available					33175	2	0	2	116	34919	2	0	2	123	35387	2	0	2	124
				FR-BC						19873	1	0	1	70	20918	1	0	1	73	21198	1	0	1	74
				2						30543	3	0	4	107	32149	3	0	4	113	32579	3	0	4	114
				2-BC						16921	1	0	2	59	17811	1	0	2	62	18049	1	0	2	63
				3						31402	3	0	5	110	33052	3	0	5	116	33495	3	0	5	118
				3-BC						15490	1	0	3	54	16305	1	0	3	57	16523	1	0	3	58
				4						31109	2	0	5	109	32745	2	0	5	115	33183	2	0	5	116
				4-BC						18403	1	0	3	65	19371	1	0	3	68	19630	1	0	3	69
				4W						31145	3	0	5	109	32782	3	0	5	115	33221	3	0	5	117
				4W-BC						13057	1	0	2	46	13743	1	0	3	48	13927	1	0	3	49
				5R						32328	5	0	5	113	34028	5	0	5	119	34483	5	0	5	121
				5QM						32943	5	0	3	116	34675	5	0	3	122	35139	5	0	3	123
				5QN						32255	5	0	1	113	33951	5	0	1	119	34405	5	0	1	121
				5W						32018	5	0	4	112	33701	5	0	4	118	34152	5	0	4	120
				CL						31689	3	0	4	111	33354	3	0	4	117	33801	3	0	5	119
				CR						31689	3	0	4	111	33354	3	0	4	117	33801	3	0	5	119
			Clear Lens	FR						31030	2	0	2	109	32661	2	0	2	115	33098	2	0	2	116
				2						28568	3	0	4	100	30069	3	0	4	106	30472	3	0	4	107
				3						29371	3	0	4	103	30915	3	0	5	108	31329	3	0	5	110
				4						29097	2	0	5	102	30627	2	0	5	107	31037	2	0	5	109
				4W						29130	3	0	5	102	30662	3	0	5	108	31072	3	0	5	109
				5R						30237	5	0	5	106	31827	5	0	5	112	32253	5	0	5	113
				5QM						30813	5	0	3	108	32432	5	0	3	114	32867	5	0	3	115
				5QN						30169	5	0	1	106	31755	5	0	1	111	32180	5	0	1	113
				5W						29947	5	0	4	105	31521	5	0	4	111	31944	5	0	4	112
				CL						29639	3	0	4	104	31197	3	0	4	109	31615	3	0	4	111
				CR						29639	3	0	4	104	31197	3	0	4	109	31615	3	0	4	111
			HDL Lens	3						25109	3	0	3	88	26429	3	0	3	93	26783	3	0	3	94
				5W						25338	4	0	3	89	26670	4	0	3	94	27027	4	0	3	95

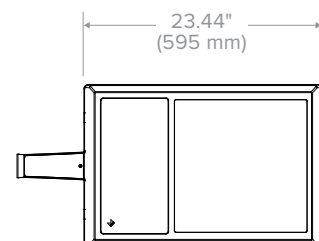
DIMENSIONS



Side View



Front View



Top View

PHOTOMETRY

ALT2-100L-285-4K7-FR

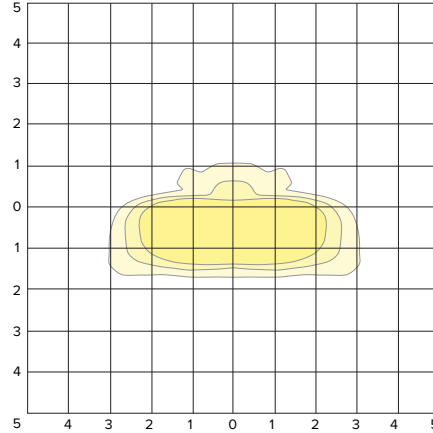
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	34919
Watts	285
Efficacy	122.5
IES Type	II
BUG Rating	B2-U0-G2
Mounting Height	30 ft
Grid Scale	30 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	31150	89.2%
Downward House Side	3769	10.8%
Downward Total	34919	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	34919	100%

ISOFOOTCANDLE PLOT



ALT2-100L-285-4K7-2

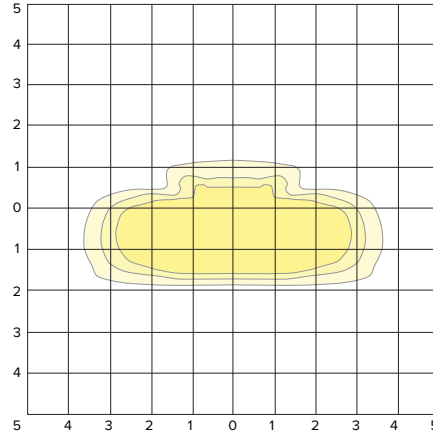
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	32148
Watts	285
Efficacy	112.8
IES Type	II
BUG Rating	B3-U0-G4
Mounting Height	30 ft
Grid Scale	30 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	26654	82.9%
Downward House Side	5494	17.1%
Downward Total	32148	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	32148	100%

ISOFOOTCANDLE PLOT



ALT2-100L-285-4K7-3

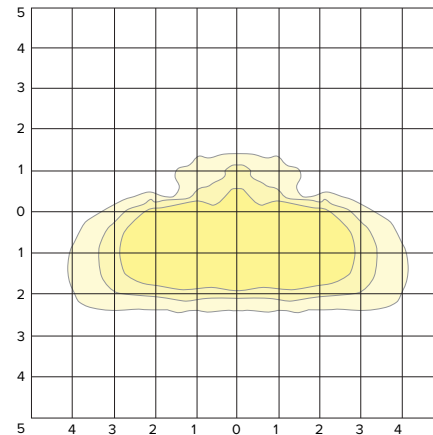
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	33052
Watts	285
Efficacy	116.0
IES Type	III
BUG Rating	B3-U0-G5
Mounting Height	30 ft
Grid Scale	30 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	28601	86.5%
Downward House Side	4451	13.5%
Downward Total	33052	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	33052	100%

ISOFOOTCANDLE PLOT



¹ All Isofootcandle plots are similar for all CCT/CRI including Amber.

PHOTOMETRY CONTINUED

ALT2-100L-285-4K7-4

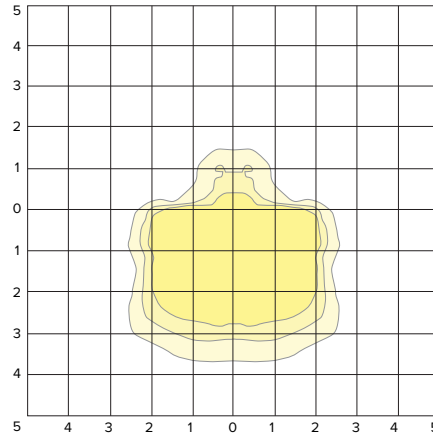
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	32745
Watts	285
Efficacy	114.9
IES Type	IV
BUG Rating	B2-U0-G5
Mounting Height	30 ft
Grid Scale	30 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	29689	90.7%
Downward House Side	3056	9.3%
Downward Total	32745	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	32745	100%

ISOFOOTCANDLE PLOT



ALT2-100L-285-4K7-4W

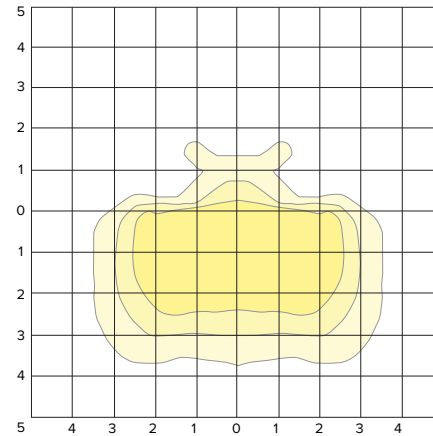
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	32782
Watts	285
Efficacy	115.0
IES Type	IV
BUG Rating	B3-U0-G5
Mounting Height	30 ft
Grid Scale	30 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	29219	89.1%
Downward House Side	3563	10.9%
Downward Total	32782	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	32782	100%

ISOFOOTCANDLE PLOT



ALT2-100L-285-4K7-5R

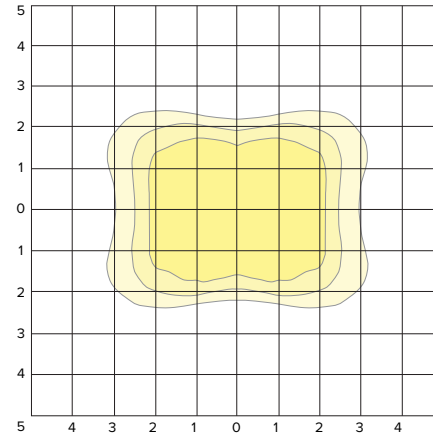
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	34028
Watts	285
Efficacy	119.4
IES Type	III
BUG Rating	B5-U0-G5
Mounting Height	30 ft
Grid Scale	30 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	17014	50.0%
Downward House Side	17014	50.0%
Downward Total	34028	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	34028	100%

ISOFOOTCANDLE PLOT



¹ All Isofootcandle plots are similar for all CCT/CRI including Amber.

PHOTOMETRY CONTINUED

ALT2-100L-285-4K7-5QM

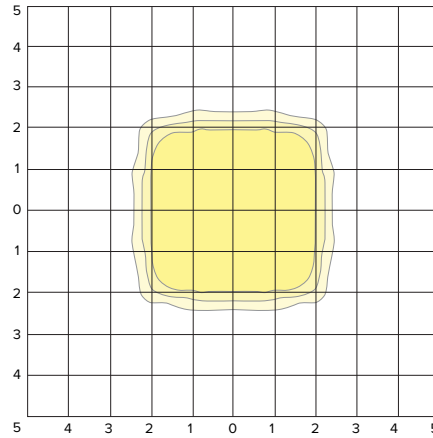
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	34674
Watts	285
Efficacy	121.7
IES Type	V
BUG Rating	B5-U0-G3
Mounting Height	30 ft
Grid Scale	30 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	17337	50.0%
Downward House Side	17337	50.0%
Downward Total	34674	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	34674	100%

ISOFOOT CANDLE PLOT



ALT2-100L-285-4K7-5QN

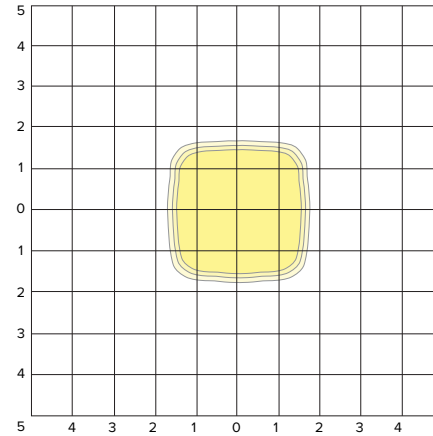
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	33951
Watts	285
Efficacy	119.1
IES Type	V
BUG Rating	B5-U0-G1
Mounting Height	30 ft
Grid Scale	30 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	16976	50.0%
Downward House Side	16976	50.0%
Downward Total	33951	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	33951	100%

ISOFOOT CANDLE PLOT



ALT2-100L-285-4K7-5W

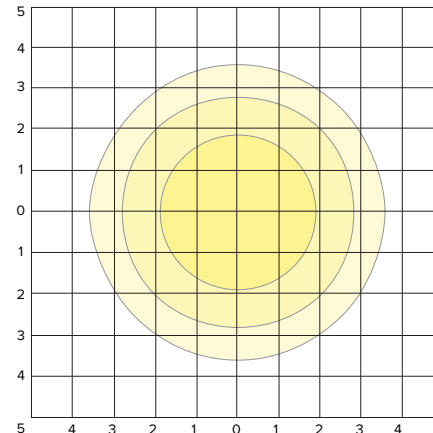
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	33701
Watts	285
Efficacy	118.2
IES Type	V
BUG Rating	B5-U0-G4
Mounting Height	30 ft
Grid Scale	30 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	16851	50.0%
Downward House Side	16851	50.0%
Downward Total	33701	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	33701	100%

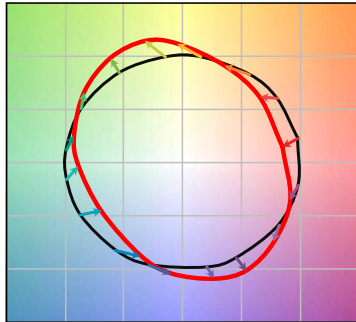
ISOFOOT CANDLE PLOT



¹ All Isofootcandle plots are similar for all CCT/CRI including Amber.

TM-30 DATA

COLOR VECTOR GRAPHIC

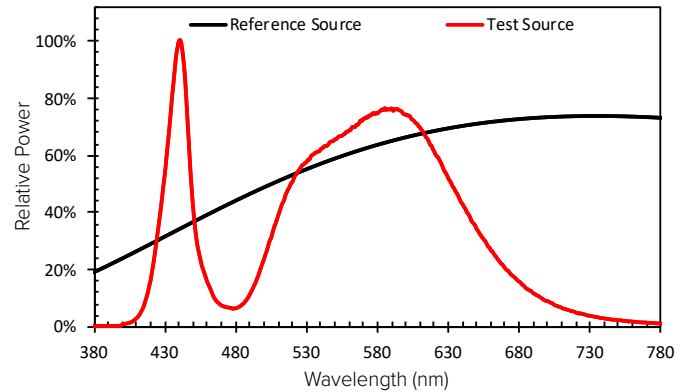


— Reference Illuminant — Test Source

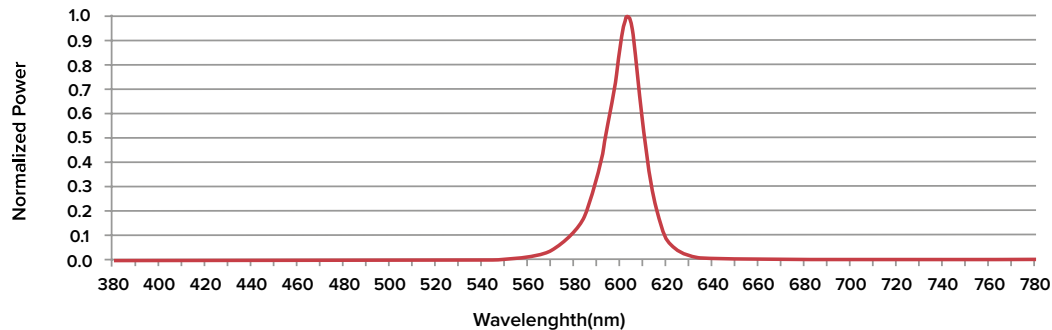
TEST SOURCE

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

Electrical												Dimming					
# LED	System Watts	Drive Current	Line Voltage		Amps AC						Min. Power Factor	Max THD (%)	Dimming Range	Source current out of 0-10V		Absolute voltage range on 0-10V (+)	
			VAC	Hz	120	208	240	277	347	480				Min	Max	Min	Max
100	160	500 mA	120-480	50/60	1.33	0.77	0.67	0.58	0.46	0.33	>0.9	20	10% to 100%	0mA	1mA	0V	10V
	198	600 mA			1.65	0.95	0.83	0.71	0.57	0.41							
	241	750 mA			2.01	1.16	1.00	0.87	0.69	0.50							
	285	875 mA			2.38	1.37	1.19	1.03	0.82	0.59							

TM-21 Lifetime Calculation - Projected Lumen Maintenance (25°C / 77°C)						
Hours	0	25,000	36,000	50,000	100,000	Reported L70
Projected Lumen Maintenance	100%	96.9%	95.3%	93.3%	86.6%	> 60,000

TM-21 Data is calculated for white LEDs. For Amber and other Lumen Maintenance values, contact factory.

VIBRATION RATINGS

ALT 1		ALT 2		ALT 3	
Ordering Code	Rating	Ordering Code	Rating	Ordering Code	Rating
WM	1.5G	WM	1.5G	WM	1.5G
VSF	1.5G	VSF	1.5G	VSF	1.5G
SVSF	1.5G	SVSF	1.5G	SVSF	1.5G
A34	4G	A34	1.5G	A34	1.5
MAF	4G	MAF	4G	MAF	3G

Lumen Multiplier for 80 and 90 CRI		
CCT	80 CRI	90 CRI
2700K	0.859	0.655
3000K	0.9119	0.7033
3500K	0.906	0.732
4000K	0.8941	0.734
5000K	0.879	0.7712

Scaling factor of 5000K 70CRI lumen packages