

SARA2

ARCHITECTURAL AREA/SITE

FEATURES

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



3000K and warmer CCTs only

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

CONSTRUCTION (CONTINUED)

- Arm is circular cut for specified round pole
- 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, 5W, 5QM, R, and L 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

The Archetype®



RELATED PRODUCTS



ELECTRICAL

- Dimming range from 10% to 100% through the use of standard 0-10V interface on the programmable driver
- 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
- 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
- See [HLI Standard Warranty](#) for additional information

KEY DATA	
Lumen Range	2,714–10,814
Wattage Range	58.87–84.27
Efficacy Range (LPW)	45.3–127.7
Reported Life (Hours)	L70/60,000
Weight	21 lbs 9.5 kg
EPS Side View	0.70

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ORDERING GUIDE

Example: 1SA-SARA2-54L-500-35K8-3-CLR-SQ-UNV-BLT-7PR-SF

CATALOG #

SARA2											
Mounting	Model	LED Engine	CCT/CRI ⁷	Distribution	Lens Options	House Side Shield					
1SA	Single Arm Mount	SARA2 The Archetype 2.0 Small Fixture	27L-695 27 LEDs - 6,000 Lumens	AM ^{1,8} Monochromatic Amber	1 Type I	(Blank) No Lens CLR Clear Glass Lens CP Clear Polycarbonate Lens	BC ³ Backlight Control				
1W	Wall Mount		54L-500 54 LEDs - 9,000 Lumens	27K8 ² 2700K, 80CRI	2 Type II						
HSF	Horizontal Slipfitter			27K9 ² 2700K, 90CRI	3 Type III						
				3K7 3000K, 70CRI	4 Type IV Forward						
				3K8 ² 3000K, 80CRI	4W Type IV Wide						
				3K9 ² 3000K, 90CRI	5W Type V Wide						
				35K8 ² 3500K, 80CRI	5QM Type V Square Medium						
				35K9 ² 3500K, 90CRI	R Corner Right						
				4K7 4000K, 70CRI	L Corner Left						
				4K8 ² 4000K, 80CRI							
				4K9 ² 4000K, 90CRI							
				5K7 5000K, 70CRI							
				5K8 ² 5000K, 80CRI							
				5K9 ² 5000K, 90CRI							

Mounting Options	Fixture Finish	Photocell Options	Fuse Options	Other Options
VSF ⁹ Vertical Slipfitter Mount for 2" pipe tenon (2-3/8" O.D. x 4" LONG)	BLS Black Gloss Smooth	7PR 7-Pin Photocell Receptacle	SF Single Fuse 120, 277, 347 Line Volts	TPL Tamper Resistant Latch
SVSF ⁹ Vertical Slipfitter Mount square for 2" pipe tenon (2-3/8" O.D. x 4" LONG)	BLT Black Matte Textured	PC Button Photocell	DF Double Fuse 208, 240, 480 Line Volts	
2.40 Side Arm Mount 2.4" O.D. Pole	DBS Dark Bronze Gloss Smooth			
3 Side Arm Mount 3" O.D. Pole	DBT Dark Bronze Matte Textured			
3.25 Side Arm Mount 3.25" O.D. Pole	GTT Graphite Matte Textured			
3.5 Side Arm Mount 3.5" O.D. Pole	LGS Light Grey Gloss Smooth			
3.75 Side Arm Mount 3.75" O.D. Pole	LGT Light Grey Matte Textured			
4.00 Side Arm Mount 4" O.D. Pole	PSS Platinum Silver Smooth			
4.5 Side Arm Mount 4.5" O.D. Pole	VGT Verde Green Matte Textured			
5 Side Arm Mount 5" O.D. Pole	WHS White Gloss Smooth			
6 Side Arm Mount 6" O.D. Pole	WHT White Matte Textured			
SQ Side Arm Mount Square Pole	Color Option			
	CC Custom Color			

Control Options	Control Accessories ⁴
SCH-R Round Pole Mounted (Occupancy Sensor up to 16' to 30')	SW7PR ⁵ SiteSync with 7 pin PCR
	SWUSB SiteSync Software on USB
SCH-S Square Pole Mounted (Occupancy Sensor up to 16' to 30')	SWTAB ⁶ SiteSync Windows Tablet
	SWBRG SiteSync Wireless Bridge Node
	WIR-RME-L wiSCAPE 7-pin Module
	NXOFM-1R1D-UNV NX 7-pin Module

Notes:

- Not available with 5QM and 5W distributions
- See Lumen Multiplier chart on [Page 12](#) for lumen scaling factor. Consult factory for additional details.
- Not available with Type 5 distributions or CLR option
- Not available with other sensor or wireless control options
- 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
- Microsoft, Encarta, MSN, and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries
- 5-step MacAdam Ellipse Binning is standard. Consult factory for 3-step MacAdam Ellipse Binning
- Turtle Friendly
- For all arm configurations, please refer to [page 4_VSF/SVSF](#) options ordered separately.

SARA2

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SPECIFICATIONS (CONTINUED)

CONTROLS

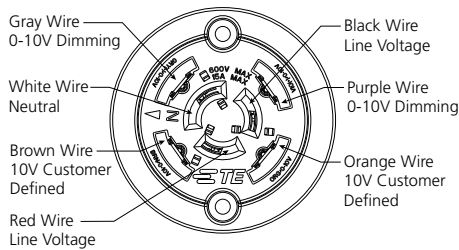
BUTTON PHOTOCELL

- 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

Photocell receptacle wiring diagram

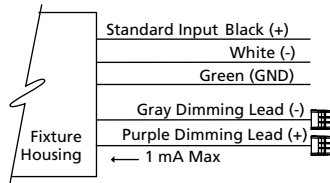


NX DISTRIBUTED INTELLIGENCE™

- 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:

- 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

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

Notes:
 1 Pole diameter
 2 Voltage
 3 Color

SARA2

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PRODUCT EXCEPTIONS & DETAILS

Configuration			EPA
	1SA	1 Arm Side Mount	0.9
	1W	Single Wall Mount	n/a
	HSF	Horizontal Slipfitter	n/a

Configuration			
	1SA		3ST
	2SB		3SY
	2SL		4SC

MOUNTING OPTIONS

SUPPORT ARM:

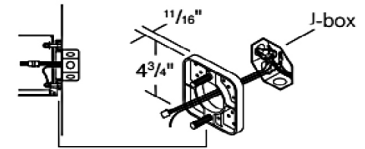
- Die-cast, low copper aluminum alloy, with splice access cover
- Die-cast pole adaptor and an internal reinforcing plate are provided with a wire strain relief
- The arm adapter is square or circular cut for specified pole size and shape
- For field wire connections, a terminal block is mounted in the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

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

WALL MOUNT

- Fixture mounts to 3" or 4" junction boxes by a cast aluminum adapter plate with fixture mounting bolts.
- **NOTE:** Junction box in wall must provide adequate fixture support. See NEC sections 370-13, 17 and 410-14, 16. Quick-disconnect plug and wiring are provided to allow field connections prior to fixture mounting.



Wall mount using adapter plate 3" or 4" J-box in wall (by others)

FIXTURE DRILLING INSTRUCTIONS:

- For ARX, ALT, BNS1, SAR, SET, SRS, UR, and WP9 Fixtures

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

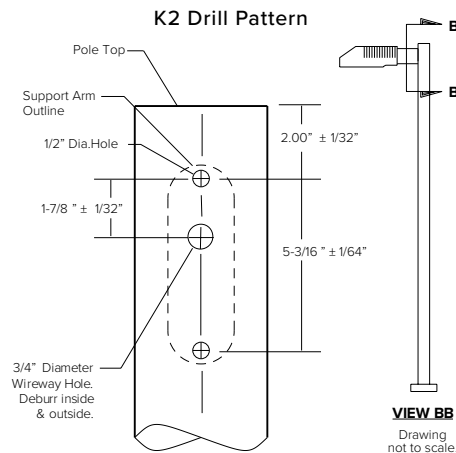
- SVSF use square configuration.

Ordering example for round:

- 2 - 1SA/SARA2/54L-500/35K8/3/CLR/**4.00**/UNV/BLT
- 1 - VSF-2SB

Ordering example for square:

- 2 - 1SA/SARA2/54L-500/35K8/3/CLR/**SQ**/UNV/BLT
- 1 - SVSF-2SB



VSF	SVSF
VSF-1SA	SVSF-1SA
VSF-2SB	SVSF-2SB
VSF-2SL	SVSF-2SL
VSF-3ST	SVSF-3ST
VSF-3SY	SVSF-3SY
VSF-4SC	SVSF-4SC

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	
27	6,000	695	1	6316	1	0	0	105.5	6782	1	0	1	113.3	6902	1	0	1	115.3
			1-BC	3602	0	0	0	60.2	3867	0	0	0	64.6	3936	0	0	0	65.7
			2	5933	1	0	1	99.1	6370	1	0	1	106.4	6483	1	0	1	108.3
			2-BC	3358	0	0	1	56.1	3606	0	0	1	60.2	3670	0	0	1	61.3
			3	5701	1	0	2	95.2	6122	1	0	2	102.3	6230	1	0	2	104.1
			3-BC	3172	0	0	1	53.0	3406	0	0	1	56.9	3466	0	0	1	57.9
			4	5956	1	0	2	99.5	6395	1	0	2	106.8	6508	1	0	2	108.7
			4-BC	3943	0	0	1	65.9	4234	0	0	2	70.7	4309	0	0	2	72.0
			4W	5564	1	0	2	59.9	5974	1	0	2	99.8	6080	1	0	2	101.6
			4W-BC	3259	0	0	1	54.4	3499	0	0	1	58.4	3561	0	0	1	59.5
			5W	5950	3	0	1	99.4	6389	3	0	1	106.7	6502	3	0	1	108.6
			5QM	6390	2	0	1	106.7	6861	2	0	1	114.6	6983	2	0	1	116.6
			R	6032	1	0	2	100.8	6476	1	0	2	108.2	6591	1	0	2	110.1
			L	6032	1	0	2	100.8	6476	1	0	2	108.2	6591	1	0	2	110.1
54	9,000	500	1	9781	1	0	1	116.1	10502	1	0	1	124.6	10688	1	0	1	127.0
			1-BC	5578	0	0	0	66.2	5989	0	0	0	71.1	6095	0	0	0	72.7
			2	9188	1	0	2	109.0	9865	2	0	2	116.8	10040	2	0	2	118.6
			2-BC	5201	0	0	1	61.7	5585	0	0	1	84.3	5684	0	0	1	67.2
			3	8829	1	0	2	104.8	9480	1	0	2	112.5	9648	1	0	2	115.6
			3-BC	4912	0	0	2	58.3	5275	0	0	2	62.6	5368	0	0	2	63.6
			4	9223	1	0	2	109.4	9903	1	0	2	117.5	10079	1	0	2	119.6
			4-BC	6107	0	0	2	72.5	6557	0	0	2	77.8	6673	0	0	2	79.2
			4W	8616	1	0	2	84.3	9251	0	0	2	109.8	9415	1	0	2	112.0
			4W-BC	5047	0	0	2	59.9	5419	0	0	2	64.3	5515	0	0	2	65.9
			5W	9215	3	0	2	109.3	9895	3	0	2	117.4	10070	3	0	2	119.1
			5QM	9896	3	0	1	117.4	10626	3	0	1	126.1	10814	3	0	1	127.7
			R	9341	1	0	2	110.8	10029	2	0	2	119.0	10207	2	0	2	120.8
			L	9341	1	0	2	110.8	10029	2	0	2	119.0	10207	2	0	2	120.8

SARA2

ARCHITECTURAL AREA/SITE

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	
27	6,000	695	1	5491	1	0	0	91.7	5896	1	0	0	98.5	6001	1	0	0	100.2
			1-BC	3132	0	0	0	52.3	3362	0	0	0	56.2	3422	0	0	0	57.2
			2	5158	1	0	1	86.2	5538	1	0	1	92.5	5636	1	0	1	94.1
			2-BC	2919	0	0	1	48.8	3135	0	0	1	52.4	3191	0	0	1	53.3
			3	4956	1	0	1	82.8	5322	1	0	2	88.9	5416	1	0	2	90.5
			3-BC	2758	0	0	1	46.1	2961	0	0	1	49.5	3013	0	0	1	50.3
			4	5178	0	0	2	86.5	5560	1	0	2	92.9	5658	1	0	2	94.5
			4-BC	3428	0	0	1	57.3	3681	0	0	1	61.5	3746	0	0	1	62.6
			4W	4837	1	0	2	80.8	5194	1	0	2	86.8	5286	1	0	2	88.3
			4W-BC	2833	0	0	1	47.3	3042	0	0	1	50.8	3096	0	0	1	51.7
			5W	5173	3	0	1	86.4	5555	3	0	1	92.8	5653	3	0	1	94.4
			5QM	5555	2	0	1	92.8	5965	2	0	1	99.6	6071	2	0	1	101.4
			R	5244	1	0	2	87.6	5630	1	0	2	94.0	5730	1	0	2	95.7
L	5244	1	0	2	87.6	5630	1	0	2	94.0	5730	1	0	2	95.7			
54	9,000	500	1	8504	1	0	1	100.9	9130	1	0	1	108.3	9292	1	0	1	110.3
			1-BC	4850	0	0	0	57.6	5207	0	0	0	61.8	5299	0	0	0	62.9
			2	7988	1	0	2	94.8	8577	1	0	2	101.8	8729	1	0	2	103.6
			2-BC	4522	0	0	1	53.7	4856	0	0	1	57.6	4942	0	0	1	58.6
			3	7676	1	0	2	91.1	8242	1	0	2	97.8	8388	1	0	2	100.0
			3-BC	4271	0	0	1	50.7	4586	0	0	1	54.4	4667	0	0	1	55.4
			4	8019	1	0	2	95.2	8610	1	0	2	102.2	8763	1	0	2	104.0
			4-BC	5309	0	0	2	63.0	5701	0	0	2	67.7	5802	0	0	2	68.9
			4W	7491	1	0	2	88.9	8043	1	0	2	95.4	8185	1	0	2	97.1
			4W-BC	4388	0	0	2	52.1	4711	0	0	2	55.9	4795	0	0	2	56.9
			5W	8012	3	0	2	95.1	8603	3	0	1	102.1	8755	3	0	2	103.9
			5QM	8604	3	0	1	102.1	9238	3	0	1	109.6	9402	3	0	1	111.6
			R	8121	1	0	2	96.4	8719	1	0	2	103.5	8874	1	0	2	105.3
L	8121	1	0	2	96.4	8719	1	0	2	103.5	8874	1	0	2	105.3			

SARA2

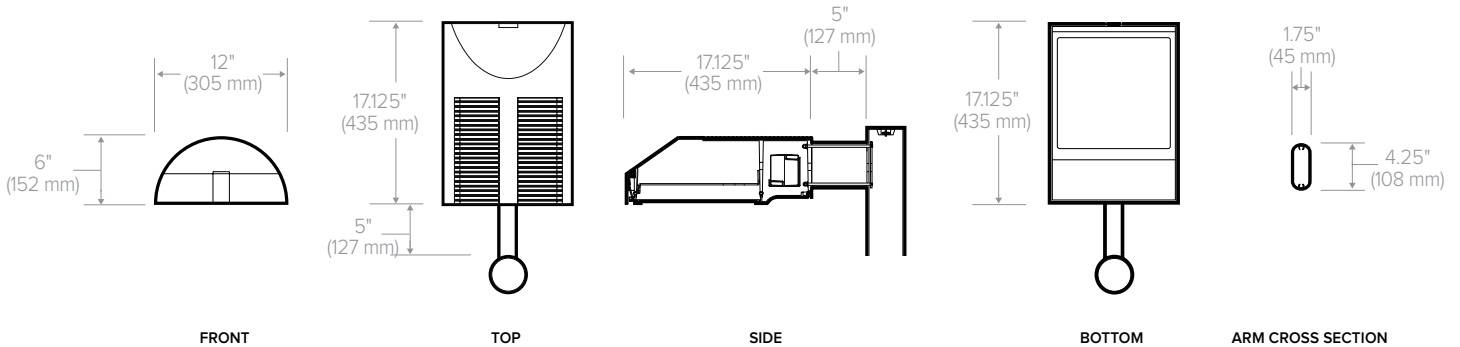
ARCHITECTURAL AREA/SITE

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	
27	6,000	695	1	5403	1	0	0	90.2	5802	1	0	0	96.9	5905	1	0	0	98.6
			1-BC	3082	0	0	0	51.5	3308	0	0	0	55.3	3367	0	0	0	56.2
			2	5076	1	0	1	84.8	5450	1	0	1	91.0	5546	1	0	1	92.6
			2-BC	2873	0	0	1	48.0	3085	0	0	1	51.5	3140	0	0	1	52.4
			3	4877	1	0	1	81.5	5237	1	0	1	87.5	5330	1	0	2	89.0
			3-BC	2714	0	0	1	45.3	2914	0	0	1	48.7	2965	0	0	1	49.5
			4	5095	1	0	2	85.1	5471	1	0	2	91.4	5568	1	0	2	93.0
			4-BC	3373	0	0	1	56.3	3622	0	0	1	60.5	3686	0	0	1	61.6
			4W	4760	1	0	2	79.5	5111	1	0	2	85.4	5202	0	0	1	86.9
			4W-BC	2788	0	0	1	46.6	2993	0	0	1	50.0	3046	0	0	1	50.9
			5W	5090	3	0	1	85.0	5466	3	0	1	91.3	5563	3	0	1	92.9
			5QM	5467	2	0	1	91.3	5870	2	0	1	98.0	5974	2	0	1	99.8
			R	5160	1	0	2	86.2	5540	1	0	2	92.5	5639	1	0	2	94.2
			L	5160	1	0	2	86.2	5540	1	0	2	92.5	5639	1	0	2	94.2
54	9,000	500	1	8368	1	0	1	99.3	8985	1	0	1	106.6	9144	1	0	1	108.5
			1-BC	4772	0	0	0	56.6	5124	0	0	0	60.8	5214	0	0	0	61.9
			2	7860	1	0	1	93.3	8440	1	0	2	100.2	8589	1	0	2	101.9
			2-BC	4450	0	0	1	52.8	4778	0	0	1	56.7	4863	0	0	1	57.7
			3	7553	1	0	2	89.6	8110	1	0	2	96.2	8254	1	0	2	97.9
			3-BC	4202	0	0	1	49.9	4513	0	0	1	53.6	4592	0	0	1	54.5
			4	7890	1	0	2	93.6	8472	1	0	2	100.5	8623	0	0	2	102.3
			4-BC	5225	0	0	2	62.0	5610	0	0	2	66.6	5709	0	0	2	67.7
			4W	7371	1	0	2	87.5	7914	1	0	2	93.9	8055	1	0	2	95.6
			4W-BC	4318	0	0	2	51.2	4636	0	0	2	55.0	4718	0	0	2	56.0
			5W	7884	3	0	2	93.6	8465	3	0	2	100.5	8615	3	0	2	102.2
			5QM	8466	3	0	1	100.5	9091	3	0	1	107.9	9252	3	0	1	109.8
			R	7991	1	0	2	94.8	8580	1	0	2	101.8	8732	1	0	2	103.6
			L	7991	1	0	2	94.8	8580	1	0	2	101.8	8732	1	0	2	103.6

DIMENSIONS



SARA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

SAR2-27L-695-4K7-1

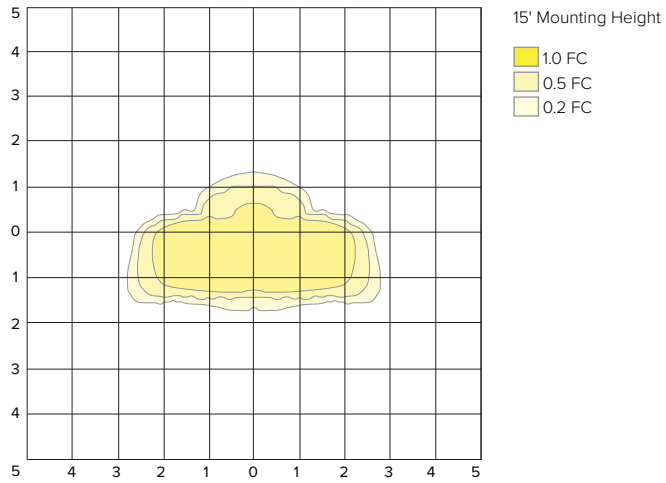
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	6782
Watts	59.87
Efficacy	113.3
IES Type	1
BUG Rating	B1-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6026	88.8%
Downward House Side	757	11.2%
Downward Total	6783	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	6783	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-1-BC

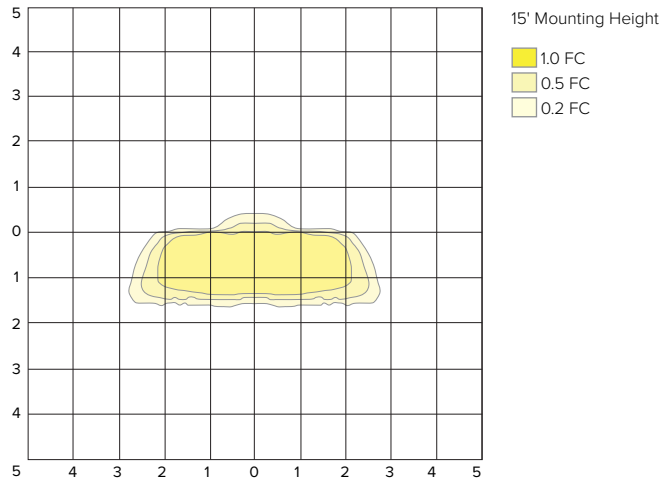
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	3871
Watts	59.87
Efficacy	64.7
IES Type	1-BC
BUG Rating	B0-U0-G0
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	3796	98.0%
Downward House Side	76	2.0%
Downward Total	3871	99.9%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	3871	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-2

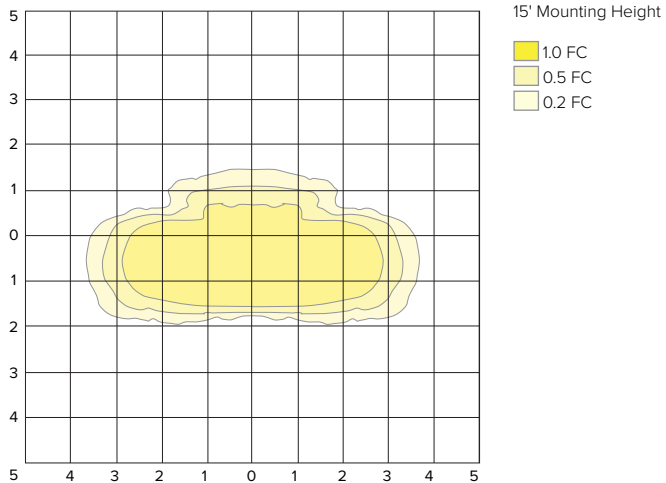
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	6370
Watts	59.87
Efficacy	106.4
IES Type	2
BUG Rating	B1-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	5259	82.5%
Downward House Side	1112	17.5%
Downward Total	6371	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	6371	100%

ISOFOOT CANDLE PLOT



SARA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

SAR2-27L-695-4K7-2-BC

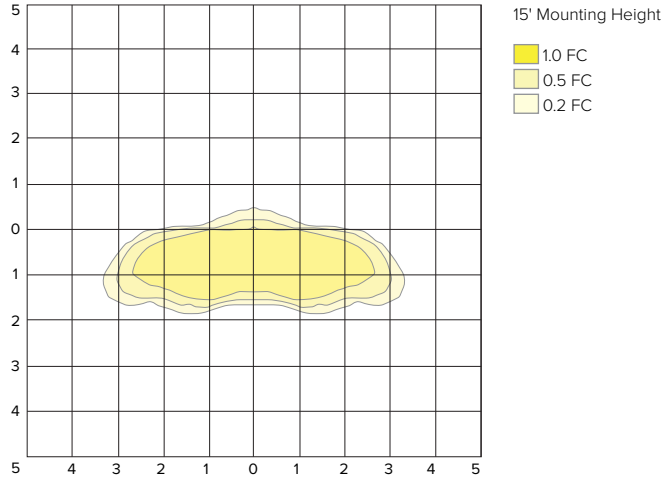
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	3609
Watts	59.87
Efficacy	60.3
IES Type	2-BC
BUG Rating	B0-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	3528	97.7%
Downward House Side	81	2.2%
Downward Total	3609	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	3609	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-3

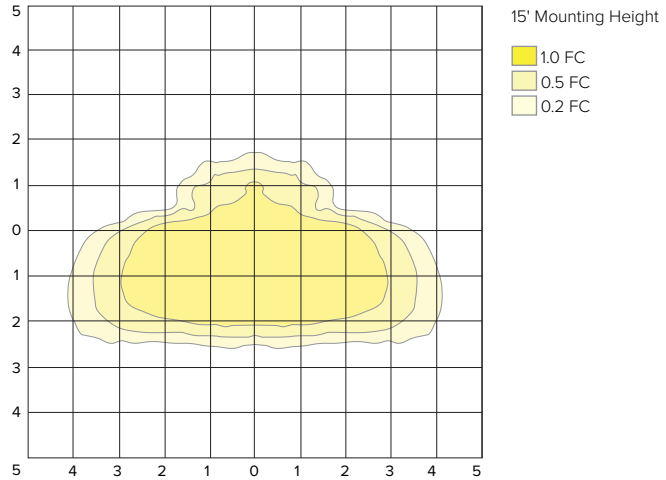
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	6122
Watts	58.87
Efficacy	104.0
IES Type	3
BUG Rating	B1-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	5245	85.7%
Downward House Side	877	14.3%
Downward Total	6122	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	6122	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-3-BC

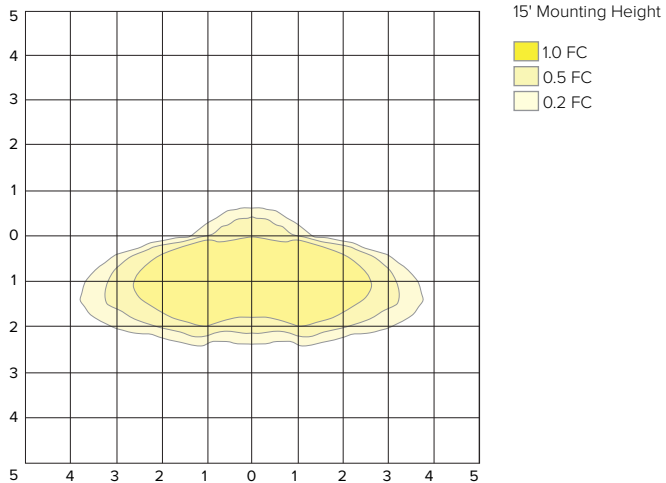
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	3407
Watts	59.87
Efficacy	56.9
IES Type	3-BC
BUG Rating	B0-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	3304	96.9%
Downward House Side	103	3.0%
Downward Total	3407	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	3407	100%

ISOFOOT CANDLE PLOT



SARA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

SAR2-27L-695-4K7-4

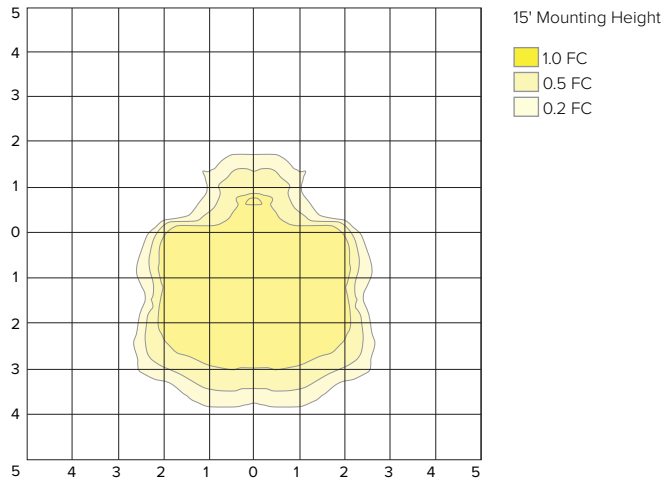
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	6395
Watts	59.87
Efficacy	106.8
IES Type	4
BUG Rating	B1-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	5544	86.7%
Downward House Side	852	13.3%
Downward Total	6396	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	6396	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-4-BC

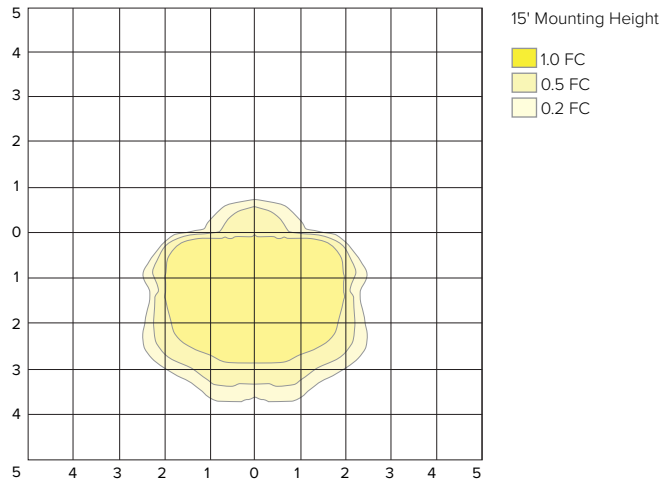
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	4236
Watts	59.87
Efficacy	70.8
IES Type	4-BC
BUG Rating	B0-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	3995	94.3%
Downward House Side	241	5.7%
Downward Total	4236	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	4236	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-4W

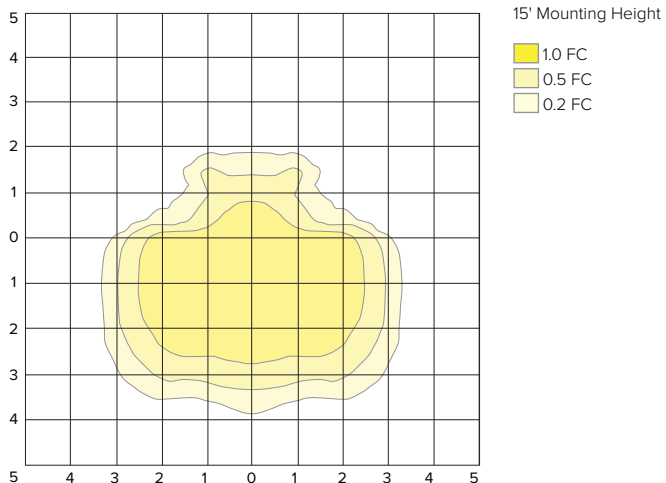
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	5975
Watts	59.87
Efficacy	99.8
IES Type	4W
BUG Rating	B1-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	5179	86.7%
Downward House Side	796	13.3%
Downward Total	5975	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	5975	100%

ISOFOOT CANDLE PLOT



SARA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

SAR2-27L-695-4K7-4W-BC

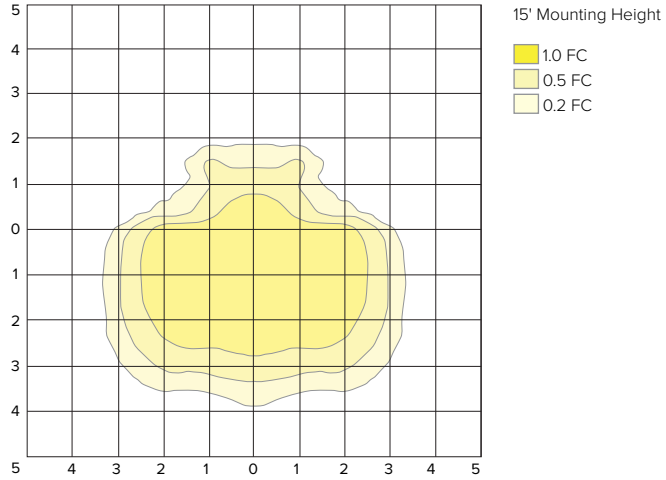
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	4236
Watts	59.87
Efficacy	70.8
IES Type	4W-BC
BUG Rating	B0-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	3995	94.3%
Downward House Side	241	5.7%
Downward Total	4236	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	4236	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-5QM

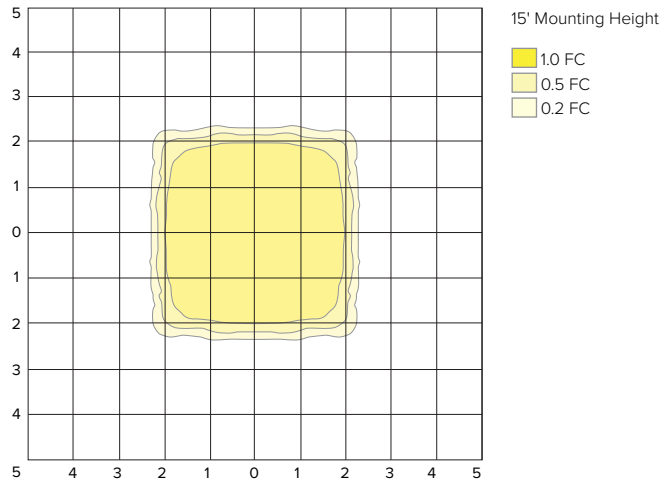
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	6862
Watts	59.87
Efficacy	114.6
IES Type	5QM
BUG Rating	B2-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	3431	50.0%
Downward House Side	3431	50.0%
Downward Total	6862	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	6862	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-5W

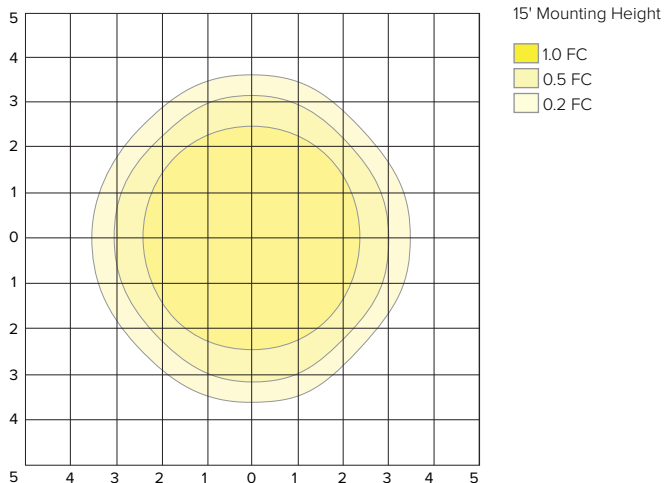
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	6390
Watts	59.87
Efficacy	106.7
IES Type	5QM
BUG Rating	B3-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	3195	50.0%
Downward House Side	3195	50.0%
Downward Total	6390	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	6390	100%

ISOFOOT CANDLE PLOT



SARA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

SAR2-27L-695-4K7-R

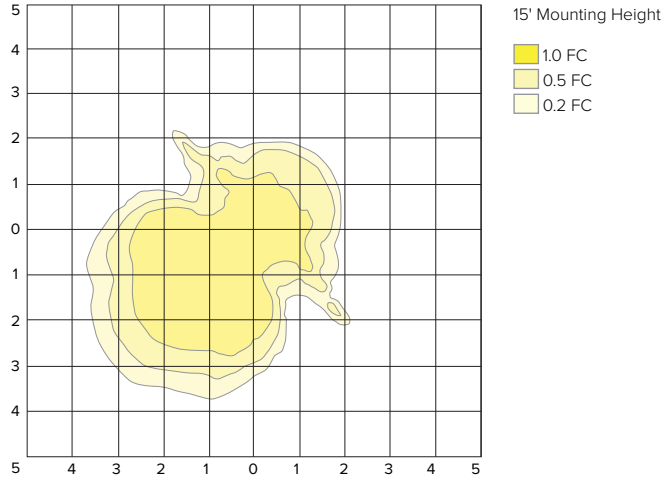
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	6475
Watts	59.87
Efficacy	108.2
IES Type	R
BUG Rating	B1-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	5340	82.5%
Downward House Side	1135	17.5%
Downward Total	6475	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	6475	100%

ISOFOOT CANDLE PLOT



SAR2-27L-695-4K7-L

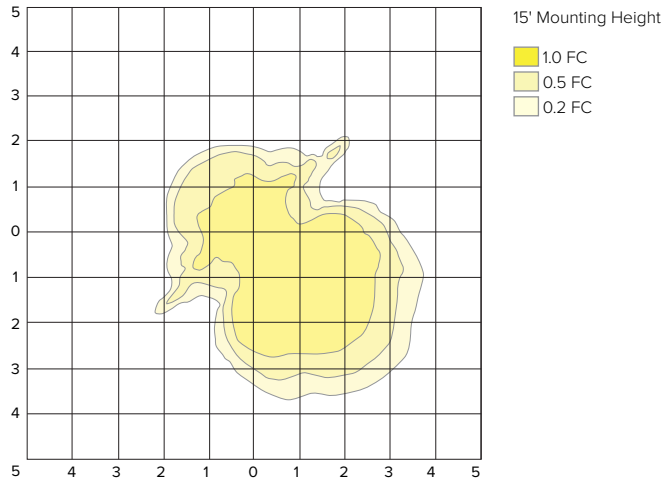
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	6476
Watts	59.87
Efficacy	108.2
IES Type	L
BUG Rating	B1-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	5493	84.8%
Downward House Side	983	15.2%
Downward Total	6476	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	6476	100%

ISOFOOT CANDLE PLOT

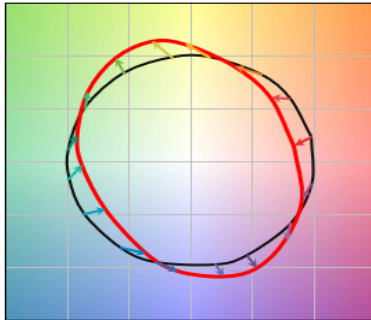


SARA2

ARCHITECTURAL AREA/SITE

TM-30 DATA

COLOR VECTOR GRAPHIC

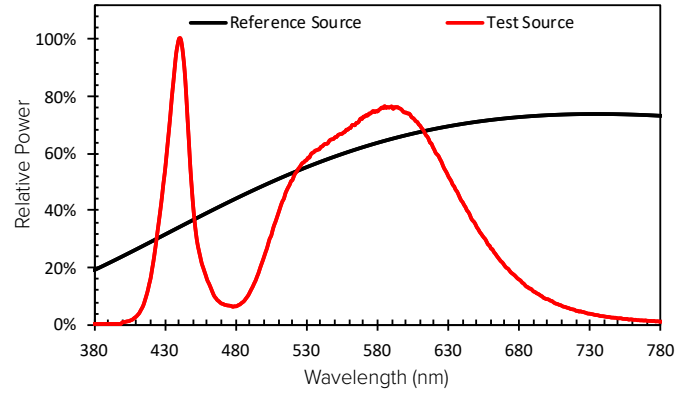


— Reference Illuminant — Test Source

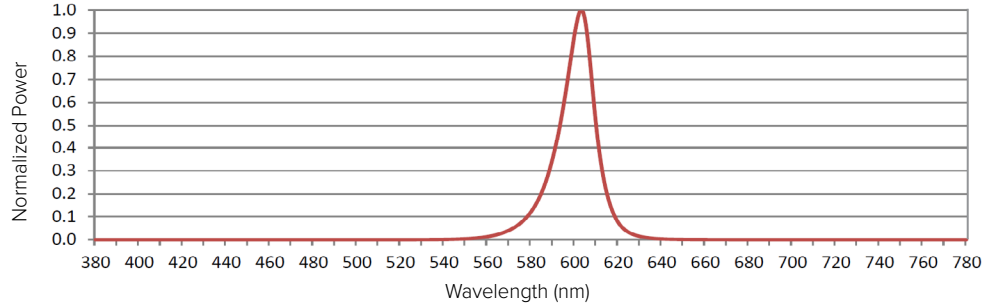
TEST SOURCE

R _f	68
R _g	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
27 LEDs	58.87	695 mA	120-480	50/60	0.50	0.29	0.25	0.22	0.17	0.12	>0.9	20	10% to 100%	0mA	1mA	0V	10V
54 LEDs	84.27	500 mA			0.70	0.41	0.35	0.30	0.24	0.18							

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%	98.05%	96.94%	95.54%	90.73%	>60khrs

CRI Lumen Multiplier for 80 and 90 CRI		
CCT	80 CRI	90 CRI
2700K	0.859	0.655
3000K	0.9119	.7033
3500K	0.906	0.732
4000K	0.8941	.734
5000K	0.879	.7712
Scaling factor of 5000K 70CRI lumen packages		