

# UR20

ARCHITECTURAL AREA/SITE

## FEATURES

- 20" size in post top, pole and wall mount
- High performance optics up to 17,000 delivered lumens
- Elegant form factor
- Diffusion lens option
- SiteSync™ wireless control options
- UL/cUL listed for wet locations, IP66 and 4G/1.5G vibration rated



3000K and warmer CCTs only

See Certification Specifications

## CONTROL TECHNOLOGY



## SPECIFICATIONS

### CONSTRUCTION

- Low copper aluminum alloy die-casting is designed as one-piece with internal cooling fins.
- Solid, cast aluminum wall creates a thermal barrier between the optical and electrical compartments.
- Molded silicone gasket throughout insures the sealing between the two compartments and provides ingress protection.
- Housing is designed with integral LED heat sink utilized for thermal transfer and for securing the location of each LED module.
- All external fasteners are stainless steel.
- One-piece low copper aluminum alloy die-cast lens frame is secured to housing with 6 screws.

### 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.**

### LENS

- Standard lens (CLR) IK08
- Clear Polycarbonate Lens (CP) IK10

### 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 ±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.
- Luminaire shall be 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.
- Surge protection: 10,000k in parallel, 20,000k in series
- Wiring: No. 18AWM rated 105°C, wet rating.

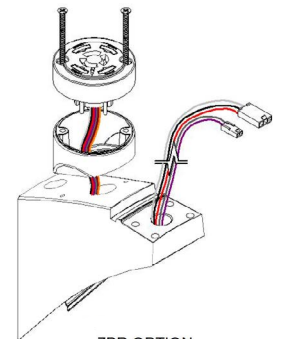
### CONTROLS

#### 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:

- Traditional on/off photoelectric control.
- 5-pin wireless photoelectric control for added dimming feature.
- 7-pin wireless photoelectric control for for dimming and additional I/O connections for customer use.



7PR OPTION  
(Specifications continued on page 3)

## RELATED PRODUCTS

[Ouro Small Post Top](#)

[Ouro Large Post Top](#)

[Ouro Large Arm Mount](#)



KEY DATA	
Lumen Range	2888 - 17080
Wattage Range	25 - 150
Efficacy Range (LPW)	100 -136
Reported Life (Hours)	L70/>60,000
Weight	32 lbs - 14.5 Kg
EPA	0.372

<sup>1</sup> Clear Polycarbonate Lens (CP) IK10, Standard lens (CLR) IK08, Consult factory for details

**UR20**

ARCHITECTURAL AREA/SITE

**ORDERING GUIDE**

**Example:** UR20-24L-25-3K8-3-L-UNV-ASQ-BLT-7PR-BC-SWTAB

CATALOG #

**HOUSING**

Model	LED Engine	CCT/CRI	Distribution	Rotation	Voltage	
<b>UR20</b>	<b>Quro</b>	<b>No Lens or Clear Lens</b> <b>24L-25</b> 3,000 lm <b>24L-65</b> 7,000 lm <b>56L-75</b> 10,000 lm <b>56L-110</b> 15,000 lm <b>56L-140</b> 17,000 lm <b>HDL - High Diffusion Lens</b> <b>28L-30</b> 3,000 lm <b>28L-70</b> 7,000 lm <b>68L-80</b> 9,000 lm <b>68L-115</b> 13,000 lm <b>68L-150</b> 15,000 lm	<b>AM</b> <sup>11</sup> Amber, 595nm <b>27K8</b> 2700K, 80 CRI <b>3K7</b> <b>3000K</b> 70 CRI <b>3K8</b> 3000K, 80 CRI <b>35K8</b> 3500K, 80 CRI <b>3K9</b> 3000K, 90 CRI <b>4K7</b> 4000K, 70 CRI <b>4K8</b> 4000K, 80 CRI <b>5K7</b> 5000K, 70 CRI Consult factory for other CCTs and CRIs	<b>No Lens or Clear Lens</b> <b>FR</b> Type I/Front Row <b>2</b> Type II <b>3</b> Type III <b>4</b> Type IV <b>4W</b> Type IV Wide <b>5QM</b> Type V Square Medium <b>5QN</b> Type V Square Narrow <b>5R</b> Type V Rectangular <b>5W</b> Type V Wide (Round) <b>HDL - High Diffusion Lens</b> <b>3</b> Type III/Asymmetric <b>5W</b> Type V/Symmetric	<b>(Blank)</b> Blank for no rotation <b>L</b> <sup>1</sup> Optic rotation left <b>R</b> <sup>1</sup> Optic rotation right	<b>UNV</b> 120-277V <b>347</b> 347V <b>480</b> 480V <b>DALI</b> 120-277V <sup>1</sup> Consult factory

Mounting	Fixture Finish	Control Options	Options	Control Accessories
<b>ASQ</b> <b>Arm Square</b> pole <b>A34</b> Arm mt 3.3-4.2" OD pole <b>A46</b> Arm mt 4.5-6.0" OD pole <b>MAF</b> Horizontal Slip Fitter 2 3/8" OD arm <b>SVSF</b> Square Vertical Slipfitter for 2" Tenon (2-3/8" OD) <b>VSF</b> Round Vertical Slipfitter for 2" Tenon (2-3/8" OD) <b>WB</b> Wall Bracket	<b>BLS</b> Black Gloss Smooth <b>BLT</b> Black Matte Textured <b>DBS</b> Dark Bronze Gloss Smooth <b>DBT</b> Dark Bronze Matte Textured <b>GTT</b> Graphite Matte Textured <b>LGS</b> Light Grey Gloss Smooth <b>LGT</b> Light Grey Matte Textured <b>PSS</b> Platinum Silver Gloss Smooth <b>VGT</b> Verde Green Matte Textured <b>WHS</b> White Gloss Smooth <b>WHT</b> White Matte Textured <b>Color Option</b> <b>CC</b> <sup>7</sup> Custom Color	<b>7PR-TL</b> 7 pin PCR with twist lock photocontrol <b>7PR-SC</b> 7 pin PCR with shorting cap <b>7PR</b> 7 pin PCR, wireless control enabled <b>AD-01</b> <sup>2</sup> AstroDIM: 50% output at midnight <b>AD-02</b> <sup>2</sup> AstroDIM: 50% output midnight to 4 AM <b>AD-03</b> <sup>2</sup> AstroDIM: 50% output 10PM <b>AD-04</b> <sup>2</sup> AstroDIM: 50% output 10PM to 4AM <b>NXWE</b> NX Wireless Enabled <b>SWP</b> <sup>2,3,4</sup> SiteSync™ Pre commission <b>SWPM-40F</b> <sup>2,3,4,5</sup> SiteSync™ with Sensor 9' to 40' MH <b>WSP-40F-1</b> <sup>2,5</sup> Dimming Occ. Sensor for up to 40' MH, 120/277/347V <b>WSP-40F-2</b> <sup>2,5</sup> Dimming Occ. Sensor for up to 40' MH, 208/240V <b>WSP-40F-3</b> <sup>2,5</sup> Dimming Occ. Sensor for up to 40' MH, 480V <b>NXSPW14F</b> <sup>2,5</sup> NX Wireless, PIR Sensor, 14' <b>NXSPW30F</b> <sup>2,5</sup> NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 30'. <b>NXSP14F</b> <sup>2,5</sup> NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' <b>NXSP30F</b> <sup>2,5</sup> NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 30'	<b>BC</b> <sup>5</sup> <b>Back-light Control</b> <b>SF</b> Single Fuse <b>DF</b> Double Fuse <b>TB</b> Terminal Block <b>CLR</b> <sup>5,6,13</sup> Clear Lens <b>TPL</b> Tamper proof latch <b>CP</b> <sup>12</sup> Clear Polycarbonate Lens	<b>SW7PR</b> <sup>2,3</sup> SiteSync™ with 7 pin PCR <b>SWUSB</b> SiteSync™ Software on USB <b>SWTAB</b> <sup>10</sup> SiteSync™ Windows® Tablet <b>SWBRG</b> SiteSync™ Wireless Bridge Node <b>WIR-RME-L</b> wiSCAPE™ External Fixture Module <b>SCH-R</b> Occ. Sensor for Round Pole (up to 30' MH) <b>SCH-S</b> Occ. Sensor for Square Pole (up to 30' MH) <b>NXOFM-1R1D-UNV</b> NX 7-pin Module

1 Not available with 5QM, 5QN, and 5W distributions.  
 2 Not available with other sensor or wireless control options  
 3 Specify group and zone at time of order. See [www.hubbellighting.com/sitesync](http://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.  
 4 Not available with 347V and 480V.  
 5 24L and 56L only  
 6 Not available with HDL option  
 7 Consult factory for custom color, marine and corrosive finish options.

8 Turtle Friendly.  
 9 Please see Delivered Lumens chart on Page 5 for lumen  
 10 Microsoft, Encarta, MSN, and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.  
 11 Not available with 24L-65 and the 56L-140 configuration of the LED Engine.  
 12 IK10 rated. Consult factory for details  
 13 IK08 rated. Consult factory for details

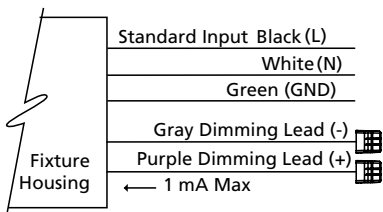
DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

**SPECIFICATIONS (CONTINUED)**

**CONTROLS (CONTINUED)**

**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™**

- 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](http://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

**POLE MOUNTED**

**ROUND POLE-MOUNTED OCCUPANCY**

Sensor up to 30'. Select voltage and finish color.

**SCH-R**

Round 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-R4<sup>1</sup>/277<sup>2</sup>/BL<sup>3</sup>

**SQUARE POLE-MOUNTED OCCUPANCY**

Sensor up to 30'. Select voltage and finish color.

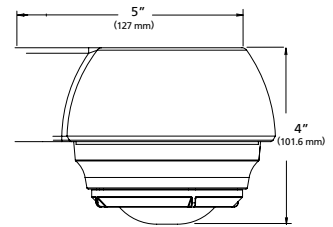
**SCH-S**

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/277<sup>2</sup>/BL<sup>3</sup>

**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.



(Specifications continued on page 4)

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

**SPECIFICATIONS (CONTINUED)**

**MOUNTING**

- High temperature fuse holders factory installed inside the fixture housing.
- Fuse is included.

**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 SLIP-FITTER:**

- Internally accessible slip-fitter attaches to a 1-1/4" to 2-3/8" tenon and allows hands-free wiring and maintenance.

**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.

**OPTIONAL FUSING:**

- SF for 120, 277, and 347 Line volts
- DF for 208, 240, and 480 Line volts

**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.

**CERTIFICATIONS AND LISTINGS**

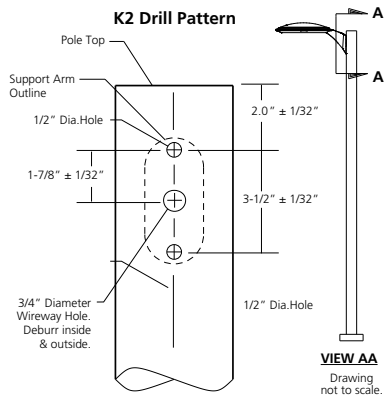
- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations and 40°C ambient temperatures
- ANSI C136.31-2010 Vibration tested and compliant 1.5G and 4G reference page 5
- IEC 66262 Mechanical Impact Code IK08, IK10
- **IDA approved, 3000K and warmer CCTs only.**
- IP66 certified
- RoHS compliant
- This 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

\*PRECOMMISSIONED 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](http://www.HubbellLighting.com/products/sitesync) or contact Hubbell Lighting tech support at (800) 345-4928

Examples:  
PA7R/FT/NU3/12L-020-3K7/42A/BLS/SWP/UNV/LR



**UR20**

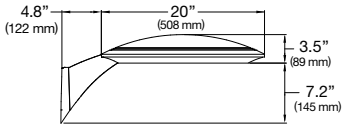
ARCHITECTURAL AREA/SITE

DATE: \_\_\_\_\_ LOCATION: \_\_\_\_\_

TYPE: \_\_\_\_\_ PROJECT: \_\_\_\_\_

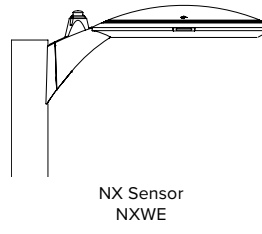
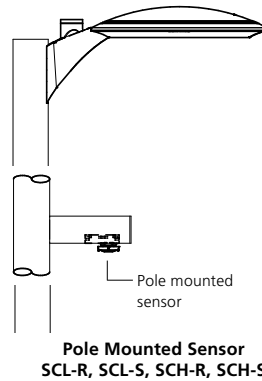
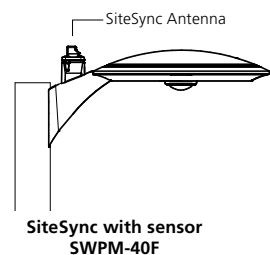
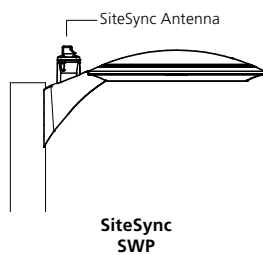
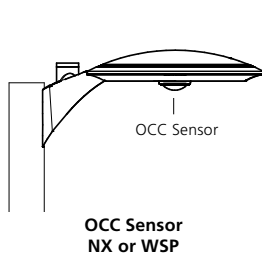
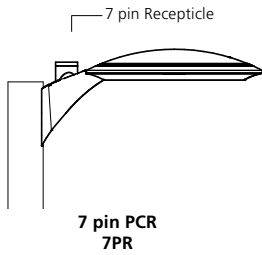
CATALOG #: \_\_\_\_\_

**DIMENSIONS**



Weight: 32 lbs EPA: .372

**SENSOR PLACEMENT**



**MOUNTING VIBRATION RATINGS**

UR 20 Arm		UR28 Arm		UR 20 Post Top		UR 28 Post Top	
Ordering Code	Rating	Ordering Code	Rating	Ordering Code	Rating	Ordering Code	Rating
ASQ	4G	ASQ	4G	FM33	4G	FM44	1.5G
A34	4G	A34	4G	FM44	1.5G	FM45	1.5G
A46	4G	A46	4G	PT23	4G	PT24	1.5G
MAF	4G	MAF	4G	PT24	4G	PT34	1.5G
				PT34	1.5G	PT25	1.5G
						PT35	1.5G

For the 4 G test, ANSI C136.31-2010 Vibration is tested to comply with Vibration Test Level 1 Normal Applications, Vibration Test Level 2 Bridge/Overpass Applications, and Vibration Test Level 3

For the 1.5G test, ANSI C136.31-2010 Vibration is tested to comply with Vibration Level 1 Bridge/Overpass Applications

**UR20**

ARCHITECTURAL AREA/SITE

**DELIVERED LUMENS**

LEDs #	Lumens Package	Drive Current	Nominal Watts	Lens Options	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		
24L	3,000	298mA	25	No lens	FR	3258	0	0	0	128	3467	0	0	0	136	3443	0	0	0	135	
					FR-BC	2141	0	0	0	84	2278	0	0	0	89	2263	0	0	0	89	
					2	3107	1	0	1	122	3306	1	0	1	130	3284	1	0	1	129	
					2-BC	1849	0	0	0	73	1967	0	0	0	77	1954	0	0	0	77	
					3	3128	2	0	1	123	3329	2	0	1	131	3306	2	0	1	130	
					3-BC	1870	0	0	1	73	1990	0	0	1	78	1977	0	0	1	78	
					4	3118	0	0	1	122	3318	0	0	1	130	3295	0	0	1	129	
					4-BC	2330	0	0	1	92	2479	0	0	1	97	2462	0	0	1	97	
					4W	3242	1	0	1	127	3449	1	0	1	135	3426	1	0	1	135	
					4W-BC	2011	0	0	1	79	2140	0	0	1	84	2125	0	0	1	83	
					5QM	2999	2	0	0	118	3191	2	0	0	125	3169	2	0	0	124	
					5QN	2888	2	0	0	113	3073	2	0	0	121	3052	2	0	0	120	
					5R	3092	2	0	2	121	3291	2	0	2	129	3268	2	0	2	128	
					5W	3059	2	0	1	120	3255	2	0	1	128	3233	2	0	1	127	
					clear lens	FR	3083	0	0	0	121	3280	0	0	0	128	3258	0	0	0	128
						FR-BC	2026	0	0	0	79	2155	0	0	0	84	2141	0	0	0	84
						2	2940	1	0	1	115	3128	1	0	1	123	3107	1	0	1	122
						2-BC	1749	0	0	0	68	1861	0	0	0	73	1848	0	0	0	72
						3	2959	1	0	1	116	3149	1	0	1	123	3127	1	0	1	122
						3-BC	1732	0	0	1	68	1843	0	0	1	72	1830	0	0	1	72
		4	2950	0		0	1	116	3139	0	0	1	123	3117	0	0	1	122			
		4-BC	1847	0		0	1	72	1966	0	0	1	77	1952	0	0	0	76			
		4W	3067	1		0	1	120	3263	1	0	1	128	3241	1	0	1	127			
		4W-BC	1903	0		0	1	75	2025	0	0	1	79	2011	0	0	1	79			
5QM	2837	2	0	0		111	3019	2	0	0	118	2998	2	0	0	117					
5QN	2732	2	0	0		107	2907	2	0	0	114	2887	2	0	0	113					
5R	2926	2	0	2		115	3113	2	0	2	122	3092	2	0	2	121					
5W	2894	2	0	1		113	3079	2	0	1	121	3058	2	0	1	120					
28L		298mA	30	HDL lens	3	2880	1	0	1	99	3065	1	0	1	105	2971	1	0	1	102	
					5W	2946	1	0	1	101	3134	1	0	1	107	3113	1	0	1	106	

Scaling factors 27K8 = 0.859, 35K8 = 0.906 of 5K7 lumen packages

**UR20**

ARCHITECTURAL AREA/SITE

**DELIVERED LUMENS (CONTINUED)**

LEDs #	Lumens Package	Drive Current	Nominal Watts	Lens Options	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	
24L	7000	800mA	65	No lens	FR	7507	1	0	1	115	7988	1	0	1	123	7933	1	0	1	122
					FR-BC	4717	0	0	0	73	5019	0	0	0	77	4985	0	0	0	77
					2	6938	1	0	2	107	7382	1	0	2	114	7332	1	0	2	113
					2-BC	4072	0	0	1	63	4334	0	0	1	67	4304	0	0	1	66
					3	6892	1	0	2	106	7333	1	0	2	113	7283	1	0	2	112
					3-BC	4121	0	0	1	63	4385	0	0	1	67	4355	0	0	1	67
					4	6927	1	0	2	107	7371	1	0	2	113	7320	1	0	2	113
					4-BC	5133	0	0	2	79	5461	0	0	2	84	5424	0	0	2	83
					4W	7055	1	0	2	109	7507	1	0	2	115	7456	1	0	2	115
					4W-BC	4431	0	0	2	68	4715	0	0	2	73	4682	0	0	2	72
					5QM	7188	3	0	1	111	7649	3	0	1	118	7597	3	0	1	117
					5QN	7465	3	0	0	115	7944	3	0	0	122	7889	3	0	0	121
					5R	7125	3	0	3	110	7582	3	0	3	117	7530	3	0	3	116
					5W	7048	3	0	2	108	7499	3	0	2	115	7448	3	0	2	115
		clear lens	FR	7149	1	0	1	108	7607	1	0	1	115	7555	1	0	1	114		
			FR-BC	4492	0	0	0	68	4780	0	0	0	72	4747	0	0	0	72		
			2	6607	1	0	2	100	7030	1	0	2	107	6982	1	0	2	106		
			2-BC	3878	0	0	1	59	4127	0	0	1	63	4099	0	0	1	62		
			3	6563	1	0	2	99	6984	1	0	2	106	6936	1	0	2	105		
			3-BC	3841	0	0	1	59	4087	0	0	1	63	4059	0	0	1	62		
			4	6597	1	0	2	100	7019	1	0	2	106	6971	1	0	2	106		
			4-BC	4888	0	0	2	74	5201	0	0	2	79	5165	0	0	2	78		
4W	6719		1	0	2	102	7149	1	0	2	108	7100	1	0	2	108				
4W-BC	4219		0	0	2	64	4490	0	0	2	68	4459	0	0	2	68				
5QM	6846	3	0	1	104	7284	3	0	1	110	7235	3	0	1	110					
5QN	7109	3	0	0	108	7565	3	0	0	115	7513	3	0	0	114					
5R	6785	3	0	3	103	7220	3	0	3	109	7171	3	0	3	109					
5W	6711	3	0	1	102	7142	3	0	1	108	7093	3	0	1	107					
28L	700mA	70	HDL lens	3	6481	2	0	2	98	6897	2	0	2	104	6685	2	0	2	96	
				5W	6628	2	0	1	100	7053	2	0	1	107	6952	2	0	1	100	

Scaling factors 27K8 = 0.859, 35K8 = 0.906 of 5K7 lumen packages

**UR20**

ARCHITECTURAL AREA/SITE

**DELIVERED LUMENS (CONTINUED)**

LEDs #	Lumens Package	Drive Current	Nominal Watts	Lens Options	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		
56L	10,000	420mA	75	No lens	FR	10354	1	0	1	138	11018	1	0	1	146	10942	1	0	1	145	
					FR-BC	6506	0	0	1	87	6923	0	0	1	92	6875	0	0	1	92	
					2	9569	2	0	2	127	10182	2	0	2	135	10112	2	0	2	134	
					2-BC	5617	0	0	1	75	5977	0	0	1	80	5936	0	0	1	79	
					3	9505	1	0	2	125	10114	1	0	2	134	10045	1	0	2	133	
					3-BC	5683	0	0	2	76	6047	0	0	2	81	6006	0	0	2	79	
					4	9554	1	0	2	127	10166	1	0	2	135	10078	1	0	2	134	
					4-BC	7079	0	0	2	94	7533	0	0	2	100	7481	0	0	2	99	
					4W	9731	1	0	2	129	10355	2	0	3	138	10284	2	0	3	137	
					4W-BC	6111	0	0	2	81	6503	0	0	2	87	6458	0	0	2	86	
					5QM	9915	3	0	1	132	10550	3	0	2	140	10478	3	0	2	139	
					5QN	10296	3	0	1	137	10956	3	0	1	146	10881	3	0	1	145	
					5R	9827	3	0	3	131	10457	3	0	3	139	10385	3	0	3	138	
					5W	9720	4	0	2	129	10343	4	0	2	137	10272	4	0	2	137	
					clear lens	FR	9860	1	0	1	130	10492	1	0	1	139	10420	1	0	1	138
						FR-BC	6196	0	0	0	83	6593	0	0	1	88	6547	0	0	1	87
						2	9112	1	0	2	120	9696	2	0	2	128	9630	2	0	2	127
						2-BC	5349	0	0	1	71	5692	0	0	1	76	5653	0	0	1	75
						3	9052	1	0	2	120	9632	1	0	2	127	9566	1	0	2	126
						3-BC	5297	0	0	2	71	5637	0	0	2	75	5598	0	0	2	74
						4	9098	1	0	2	120	9681	1	0	2	128	9615	1	0	2	127
						4-BC	6741	0	0	2	90	7174	0	0	2	96	7124	0	0	2	95
						4W	9267	1	0	2	122	9861	1	0	2	130	9793	1	0	2	129
						4W-BC	5820	0	0	2	78	6193	0	0	2	83	6150	0	0	2	82
5QM	9442	3	0	1		125	10047	3	0	1	133	9978	3	0	1	132					
5QN	9805	3	0	1		130	10434	3	0	1	138	10362	3	0	1	137					
5R	9358	3	0	3		124	9958	3	0	3	132	9890	3	0	3	131					
5W	9257	4	0	2		122	9850	4	0	2	130	9782	4	0	2	129					
68L	350mA	80	HDL lens	3	8418	2	0	2	107	8958	2	0	2	113	8896	2	0	2	113		
				5W	8609	3	0	1	109	9160	3	0	1	116	9252	3	0	1	117		

Scaling factors 27K8 = 0.859, 35K8 = 0.906 of 5K7 lumen packages

**UR20**

ARCHITECTURAL AREA/SITE

**DELIVERED LUMENS (CONTINUED)**

LEDs #	Lumens Package	Drive Current	Nominal Watts	Lens Options	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	
56L	15,000	600mA	110	No lens	FR	15041	1	0	2	139	16005	1	0	2	147	15895	1	0	2	146
					FR-BC	9451	0	0	1	87	10056	0	0	1	93	9987	0	0	1	92
					2	13900	2	0	2	128	14791	2	0	2	136	14689	2	0	2	135
					2-BC	8159	0	0	2	75	8682	0	0	2	80	8623	0	0	2	79
					3	13808	2	0	3	127	14692	2	0	3	135	14592	2	0	3	134
					3-BC	8256	1	0	2	75	8785	1	0	2	80	8725	1	0	2	79
					4	13878	1	0	3	128	14768	1	0	3	136	14667	1	0	3	135
					4-BC	10283	1	0	2	95	10942	1	0	3	101	10867	1	0	3	100
					4W	14135	2	0	3	130	15041	2	0	4	139	14938	2	0	3	138
					4W-BC	8877	0	0	2	82	9446	0	0	2	87	9381	0	0	2	86
					5QM	14402	4	0	2	133	15325	4	0	2	141	15220	4	0	2	140
					5QN	14957	4	0	1	138	15915	4	0	1	147	15806	4	0	1	146
					5R	14275	4	0	4	132	15190	4	0	4	140	15086	4	0	4	139
					5W	14120	4	0	2	130	15025	4	0	2	138	14922	4	0	2	138
		clear lens	FR	14230	1	0	1	132	15142	1	0	2	140	15038	1	0	2	139		
			FR-BC	8941	0	0	1	83	9514	0	0	1	88	9449	0	0	1	87		
			2	13151	2	0	2	122	13994	2	0	2	129	13898	2	0	2	129		
			2-BC	7720	0	0	2	71	8215	0	0	2	76	8158	0	0	2	75		
			3	13064	2	0	2	121	13901	2	0	2	129	13806	2	0	2	128		
			3-BC	7645	1	0	2	69	8135	1	0	2	74	8079	1	0	2	73		
			4	13131	1	0	3	121	13972	1	0	3	129	13876	1	0	3	128		
			4-BC	9729	1	0	2	90	10353	1	0	2	94	10282	1	0	2	95		
4W	13374		2	0	3	124	14231	2	0	3	132	14134	2	0	3	131				
4W-BC	8399		0	0	2	78	8937	0	0	2	83	8876	0	0	2	82				
5QM	13626	3	0	2	126	14500	4	0	2	134	14400	4	0	2	133					
5QN	14151	4	0	1	131	15058	4	0	1	139	14955	4	0	1	138					
5R	13506	4	0	4	125	14372	4	0	4	133	14273	4	0	4	132					
5W	13359	4	0	2	124	14215	4	0	2	132	14118	4	0	2	131					
68L	500mA	115	HDL lens	3	12410	3	0	2	109	13206	3	0	3	116	13115	3	0	3	116	
				5W	12691	3	0	2	112	13505	3	0	2	119	13412	3	0	2	118	

Scaling factors 27K8 = 0.859, 35K8 = 0.906 of 5K7 lumen packages

**UR20**

ARCHITECTURAL AREA/SITE

**DELIVERED LUMENS (CONTINUED)**

LEDs #	Lumens Package	Drive Current	Nominal Watts	Lens Options	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		
56L	17,000	750mA	140	No lens	FR	17031	2	0	2	124	18123	2	0	2	132	17999	2	0	2	131	
					FR-BC	10701	0	0	1	78	11387	0	0	1	83	11309	0	0	1	82	
					2	15740	2	0	2	114	16748	2	0	2	122	16634	2	0	2	121	
					2-BC	9239	1	0	2	67	9831	1	0	2	71	9764	1	0	2	71	
					3	15635	2	0	3	113	16637	2	0	3	121	16523	2	0	3	120	
					3-BC	9348	1	0	2	67	9947	1	0	2	71	9879	1	0	2	71	
					4	15715	1	0	3	114	16722	1	0	3	121	16608	1	0	3	121	
					4-BC	11644	1	0	3	85	12391	1	0	3	90	12306	1	0	3	89	
					4W	16006	2	0	4	116	17032	2	0	4	124	16915	2	0	4	123	
					4W-BC	10052	1	0	2	73	10696	1	0	3	78	10623	1	0	3	77	
					5QM	16309	4	0	2	118	17354	4	0	2	126	17235	4	0	2	125	
					5QN	16936	4	0	1	123	18022	4	0	1	131	17898	4	0	1	130	
					5R	16164	4	0	4	117	17200	4	0	4	125	17082	4	0	4	124	
					5W	15989	4	0	2	116	17013	4	0	2	123	16897	4	0	2	123	
					clear lens	FR	16162	1	0	2	116	17198	2	0	2	124	17080	2	0	2	123
						FR-BC	10155	0	0	1	73	10659	0	0	1	77	10732	0	0	1	77
						2	14936	2	0	2	108	15894	2	0	2	115	15785	2	0	2	114
						2-BC	8768	1	0	2	63	9330	1	0	2	67	9266	1	0	2	67
						3	14837	2	0	3	107	15788	2	0	3	114	15680	2	0	3	113
						3-BC	8683	1	0	2	62	9239	1	0	2	66	9176	1	0	2	66
						4	14913	1	0	3	107	15869	1	0	3	114	15760	1	0	3	114
						4-BC	11050	1	0	3	80	11758	1	0	3	85	11678	1	0	3	84
						4W	15189	2	0	4	109	16163	2	0	4	116	16052	2	0	4	116
						4W-BC	9539	0	0	2	69	10150	1	0	2	73	10081	1	0	2	73
5QM	15476	4	0	2		112	16468	4	0	2	119	16355	4	0	2	118					
5QN	16072	4	0	1		116	17102	4	0	1	123	16985	4	0	1	122					
5R	15339	4	0	4		111	16323	4	0	4	118	16211	4	0	4	117					
5W	15173	4	0	2		109	16145	4	0	2	116	16035	4	0	2	116					
68L		625mA	150	HDL lens	3	14192	3	0	3	96	14999	3	0	3	101	14896	3	0	3	101	
					5W	14514	3	0	2	98	15338	3	0	2	104	15233	3	0	2	103	

Scaling factors 27K8 = 0.859, 35K8 = 0.906 of 5K7 lumen packages

# UR20

ARCHITECTURAL AREA/SITE

## PHOTOMETRY

UR20-56L-140-4K7-FR

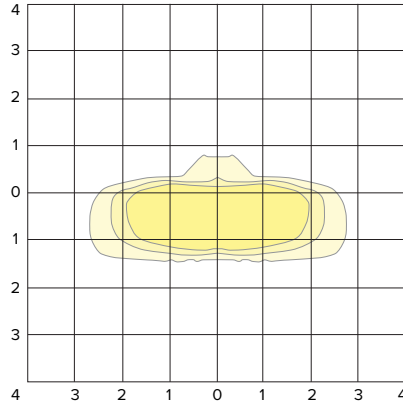
### LUMINAIRE DATA

Description	<b>4000K, 70CRI</b>
Delivered Lumens	<b>18123</b>
Watts	<b>140</b>
Efficacy	<b>129.5</b>
IES Type	<b>II</b>
BUG Rating	<b>B2-U0-G2</b>
Mounting Height	<b>30 ft</b>
Grid Scale	<b>30 ft</b>

### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	16164	89.2%
Downward House Side	1959	10.8%
Downward Total	18123	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	18123	100%

### ISOFOOT CANDLE PLOT



UR20-56L-140-4K7-2

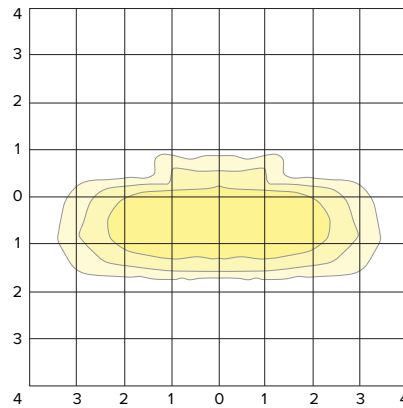
### LUMINAIRE DATA

Description	<b>4000K, 70CRI</b>
Delivered Lumens	<b>16748</b>
Watts	<b>140</b>
Efficacy	<b>119.6</b>
IES Type	<b>II</b>
BUG Rating	<b>B2-U0-G2</b>
Mounting Height	<b>30 ft</b>
Grid Scale	<b>30 ft</b>

### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	13888	82.9%
Downward House Side	2860	17.1%
Downward Total	16748	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	16748	100%

### ISOFOOT CANDLE PLOT



UR20-56L-140-4K7-3

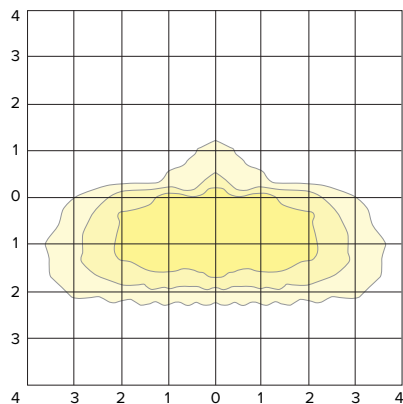
### LUMINAIRE DATA

Description	<b>4000K, 70CRI</b>
Delivered Lumens	<b>16637</b>
Watts	<b>140</b>
Efficacy	<b>118.8</b>
IES Type	<b>III</b>
BUG Rating	<b>B2-U0-G3</b>
Mounting Height	<b>30 ft</b>
Grid Scale	<b>30 ft</b>

### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	14461	86.9%
Downward House Side	2176	13.1%
Downward Total	16637	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	16637	100%

### ISOFOOT CANDLE PLOT



# UR20

ARCHITECTURAL AREA/SITE

## PHOTOMETRY

UR20-56L-140-4K7-4

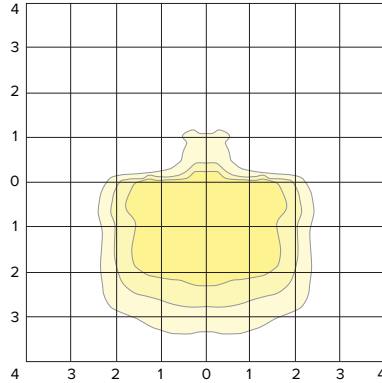
### LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	16722
Watts	140
Efficacy	119.4
IES Type	IV
BUG Rating	B1-U0-G3
Mounting Height	30 ft
Grid Scale	30 ft

### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	15112	90.4%
Downward House Side	1610	9.6%
Downward Total	16722	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	16722	100%

### ISOFOOT CANDLE PLOT



UR20-56L-140-4K7-4W

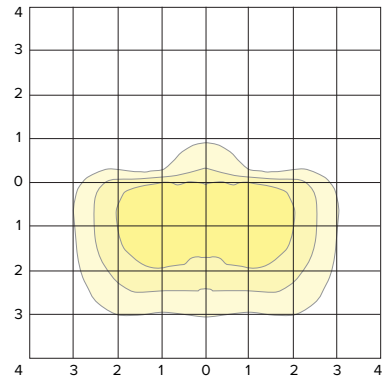
### LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	17033
Watts	138
Efficacy	123.4
IES Type	IV
BUG Rating	B2-U0-G4
Mounting Height	30 ft
Grid Scale	30 ft

### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	15040	88.3%
Downward House Side	1993	11.7%
Downward Total	17033	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	17033	100%

### ISOFOOT CANDLE PLOT



UR20-56L-140-4K7-5QM

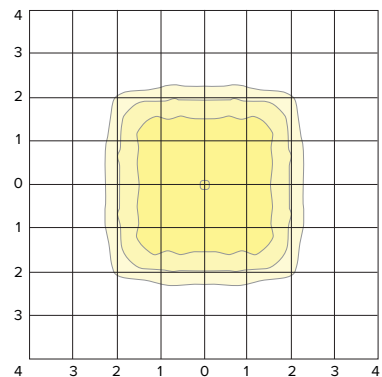
### LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	17354
Watts	140
Efficacy	124.0
IES Type	VS
BUG Rating	B4-U0-G2
Mounting Height	30 ft
Grid Scale	30 ft

### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	8677	50.0%
Downward House Side	8677	50.0%
Downward Total	17354	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	17354	100%

### ISOFOOT CANDLE PLOT



# UR20

ARCHITECTURAL AREA/SITE

## PHOTOMETRY

UR20-56L-140-4K7-5QN

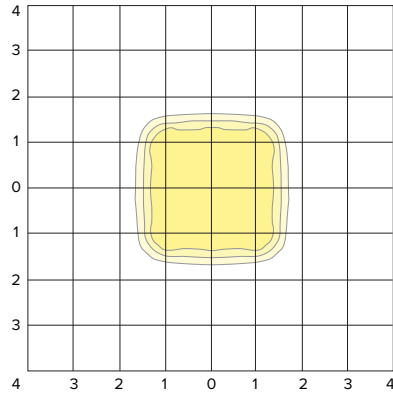
### LUMINAIRE DATA

Description	<b>4000K, 70CRI</b>
Delivered Lumens	<b>18023</b>
Watts	<b>140</b>
Efficacy	<b>128.7</b>
IES Type	<b>VS</b>
BUG Rating	<b>B4-U0-G1</b>
Mounting Height	<b>30 ft</b>
Grid Scale	<b>30 ft</b>

### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	9012	50.0%
Downward House Side	9012	50.0%
Downward Total	18023	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	18023	100%

### ISOFOOT CANDLE PLOT



UR20-56L-140-4K7-5R

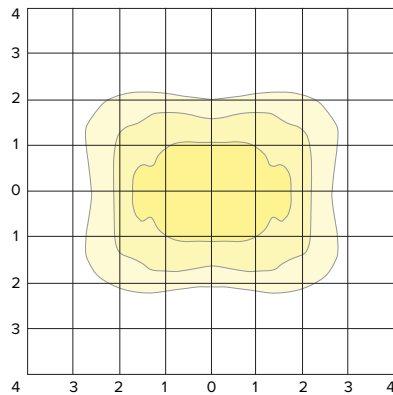
### LUMINAIRE DATA

Description	<b>4000K, 70CRI</b>
Delivered Lumens	<b>17201</b>
Watts	<b>140</b>
Efficacy	<b>122.9</b>
IES Type	<b>III</b>
BUG Rating	<b>B4-U0-G4</b>
Mounting Height	<b>30 ft</b>
Grid Scale	<b>30 ft</b>

### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	8601	50.0%
Downward House Side	8601	50.0%
Downward Total	17201	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	17201	100%

### ISOFOOT CANDLE PLOT



UR20-56L-140-4K7-5W

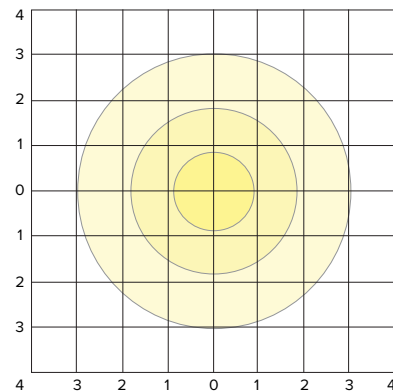
### LUMINAIRE DATA

Description	<b>4000K, 70CRI</b>
Delivered Lumens	<b>17014</b>
Watts	<b>140</b>
Efficacy	<b>121.5</b>
IES Type	<b>III</b>
BUG Rating	<b>B4-U0-G2</b>
Mounting Height	<b>30 ft</b>
Grid Scale	<b>30 ft</b>

### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	8507	50.0%
Downward House Side	8507	50.0%
Downward Total	17014	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	17014	100%

### ISOFOOT CANDLE PLOT

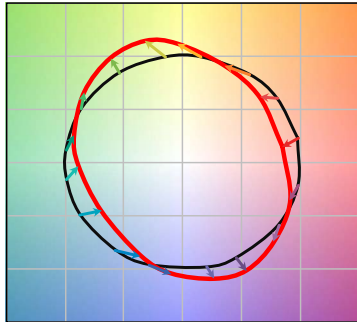


**UR20**

ARCHITECTURAL AREA/SITE

**TM-30 DATA**

**COLOR VECTOR GRAPHIC**

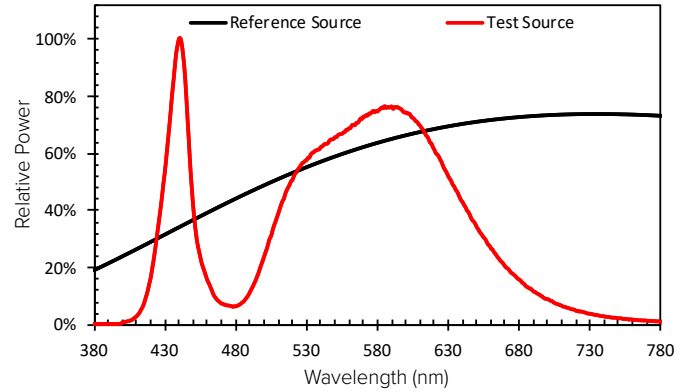


— Reference Illuminant — Test Source

**TEST SOURCE**

R <sub>f</sub>	68
R <sub>g</sub>	99
CCT(K)	3947
D <sub>uv</sub>	0.0004
x	0.3831
y	0.3793
CIE R <sub>a</sub>	72

**SPECTRAL POWER DISTRIBUTION COMPARISON**



**ELECTRICAL DATA**

Drive Current	LED Count	System Watts	Line Voltage		Amps AC						Min. Power Factor	Max THD (%)	Dimming				
													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
298mA	24	25	120-480	50/60	0.21	0.12	0.10	0.09	0.07	0.05	>0.9	20	10% to 100%	0mA	1mA	0V	10V
298mA	28	30			0.25	0.14	0.13	0.11	0.09	0.06							
800mA	24	65			0.54	0.31	0.27	0.23	0.19	0.14							
700mA	28	70			0.58	0.34	0.29	0.25	0.20	0.15							
420mA	56	75			0.63	0.36	0.31	0.27	0.22	0.16							
350mA	68	80			0.67	0.38	0.33	0.29	0.23	0.17							
600mA	56	110			0.92	0.53	0.46	0.40	0.32	0.23							
500mA	68	115			0.96	0.55	0.48	0.42	0.33	0.24							
850mA	56	140			1.17	0.67	0.58	0.51	0.40	0.29							
675mA	68	150			1.25	0.72	0.63	0.54	0.43	0.31							

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%	97%	95%	93%	87%	60khrs

CRI Lumen Multiplier				
CCT	Amber	70 CRI	80 CRI	90 CRI
Amber	0.1727s	—	—	—
2700K	—	—	0.859	—
3000K	—	1	0.9119	0.7033
3500K	—	—	0.906	—
4000K	—	1	0.8941	0.734
5000K	—	1	0.879	0.7712