

## 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



### 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

| KEY DATA              |                 |
|-----------------------|-----------------|
| Lumen Range           | 4,363–20,338    |
| Wattage Range         | 88.7–178.2      |
| Efficacy Range (LPW)  | 46.2–128.3      |
| Reported Life (Hours) | L70/60,000      |
| Weight                | 50 lbs 22.68 kg |
| EPS Side View         | 1.20            |

DATE:LOCATION:

TYPE:PROJECT:

CATALOG #:

ORDERING GUIDE

Example: 1A-ARA2-54L-750-35K8-3-CLR-SQ-UNV-BLT-7PR-SF

CATALOG #

| ARA2     |                                                             |                                      |                                                                     |                                     |                                          |                                   |
|----------|-------------------------------------------------------------|--------------------------------------|---------------------------------------------------------------------|-------------------------------------|------------------------------------------|-----------------------------------|
| Mounting | Model                                                       | LED Engine                           | CCT/CRI <sup>5</sup>                                                | Distribution                        | Lens Options                             | House Side Shield                 |
| 1A       | Single Arm Mount                                            | ARA2 The Archetype 2.0 Large Fixture | 54L-560 54 LEDs - 11,000 Lumens                                     | AM <sup>6</sup> Monochromatic Amber | (Blank) No Lens                          | BC <sup>1</sup> Backlight Control |
| 1W       | Wall Mount                                                  |                                      | 54L-750 54 LEDs - 14,000 Lumens                                     | 27K8 <sup>2</sup> 2700K, 80CRI      | CLR <sup>8</sup> Clear Glass Lens        |                                   |
| HSF      | Horizontal Slipfitter 2" pipe-size mounting end (2-3/8" OD) |                                      | 81L-700 81 LEDs - 19,500 Lumens                                     | 27K9 <sup>2</sup> 2700K, 90CRI      | CP <sup>8</sup> Clear Polycarbonate Lens |                                   |
|          |                                                             |                                      | Equivalent<br>AR-E35= 54L-560<br>AR-P35= 54L-560<br>AR-P70= 81L-700 | 3K7 3000K, 70CRI                    |                                          |                                   |
|          |                                                             |                                      |                                                                     | 3K8 <sup>2</sup> 3000K, 80CRI       |                                          |                                   |
|          |                                                             |                                      |                                                                     | 3K9 <sup>2</sup> 3000K, 90CRI       |                                          |                                   |
|          |                                                             |                                      |                                                                     | 35K8 <sup>2</sup> 3500K, 80CRI      |                                          |                                   |
|          |                                                             |                                      |                                                                     | 35K9 <sup>2</sup> 3500K, 90CRI      |                                          |                                   |
|          |                                                             |                                      |                                                                     | 4K7 4000K, 70CRI                    |                                          |                                   |
|          |                                                             |                                      |                                                                     | 4K8 <sup>2</sup> 4000K, 80CRI       |                                          |                                   |
|          |                                                             |                                      |                                                                     | 4K9 <sup>2</sup> 4000K, 90CRI       |                                          |                                   |
|          |                                                             |                                      |                                                                     | 5K7 5000K, 70CRI                    |                                          |                                   |
|          |                                                             |                                      |                                                                     | 5K8 <sup>2</sup> 5000K, 80CRI       |                                          |                                   |
|          |                                                             |                                      |                                                                     | 5K9 <sup>2</sup> 5000K, 90CRI       |                                          |                                   |
|          |                                                             |                                      |                                                                     | 1 Type I                            |                                          |                                   |
|          |                                                             |                                      |                                                                     | 2 Type II                           |                                          |                                   |
|          |                                                             |                                      |                                                                     | 3 Type III                          |                                          |                                   |
|          |                                                             |                                      |                                                                     | 4 Type IV Forward                   |                                          |                                   |
|          |                                                             |                                      |                                                                     | 4W Type IV Wide                     |                                          |                                   |
|          |                                                             |                                      |                                                                     | 5W Type V Wide                      |                                          |                                   |
|          |                                                             |                                      |                                                                     | 5QM Type V Square Medium            |                                          |                                   |
|          |                                                             |                                      |                                                                     | R Corner Right                      |                                          |                                   |
|          |                                                             |                                      |                                                                     | L Corner Left                       |                                          |                                   |

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

| Control Options                                               | Control Accessories <sup>3</sup>                                                                                                                                               |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SCH-R Round Pole Mounted (Occupancy Sensor up to 16' to 30')  | WIR-RME-L LightGRID+ 7-pin Module                                                                                                                                              |
| SCH-S Square Pole Mounted (Occupancy Sensor up to 16' to 30') | NXOFM-1R1D-UNV NX 7-Pin Twist-Lock® with NX Networked Wireless Radio, Integral Automatic Dimming Photocell, Integral Single Pole Relay with Dimming, and Bluetooth Programming |

- Notes:
- 1 Not available with 5QM and 5W distributions
- 2 See Lumen Multiplier chart on Page 12 for lumen scaling factor. Consult factory for additional details.
- 3 Not available with other sensor or wireless control options
- 4 Not available in 480V
- 5 5-step MacAdam Ellipse Binning is standard. Consult factory for 3-step MacAdam Ellipse Binning
- 6 Turtle Friendly.
- 7 For all arm configurations, please refer to page 4. VSF/SVSF options ordered separately.
- 8 Not Available with 81L-700

## SPECIFICATIONS (CONTINUED)

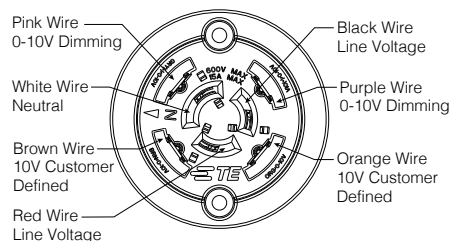
### CONTROLS

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



#### LightGRID+

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

#### WIR-RME-L

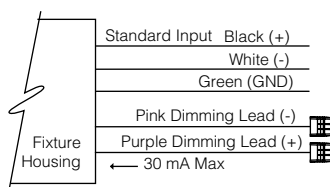
- LightGRID+ External Module, 120-480V, 1000ft range (LOS), Internal Photocell, 1 Digital Input, Compatible with the A-25-7H option

#### NX LIGHTING CONTROLS

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

#### DIMMING:

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



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

#### POLE MOUNTED

##### ROUND POLE-MOUNTED OCCUPANCY SENSOR UP TO 30'

###### SCH-R

- Round Pole Mounted Occupancy Sensor up to 30' - Outdoor occupancy sensor with 0-10V interface dimming control mounts directly to the pole. Wide 360° pattern. Module colors available Black, Gray, and White. Module is cut for round pole mounting. Pole diameter needed. Pole to be drilled in the field with provided installation instructions
- Ordering Example: SCH-R4/277<sup>2</sup>/BL<sup>3</sup>

##### 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/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

#### 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

## PRODUCT EXCEPTIONS & DETAILS

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

| Configuration |    |  |    |
|---------------|----|--|----|
|               | 1A |  | 3T |
|               | 2B |  | 3Y |
|               | 2L |  | 4C |

## MOUNTING OPTIONS

### SUPPORT ARM:

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

### FIXTURE DRILLING INSTRUCTIONS:

- For ARX, ALT, BNS1, AR, ET, RS, UR, and WP9 Fixtures

### OPTIONAL VERTICAL SLIP-FITTER (VSF/SVSF):

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



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

### Ordering example for round:

- 2 A/ARA2/54L-500/35K8/3/CLR/4.00/UNV/BLT
- 1 VSF-2SB

### Ordering example for square:

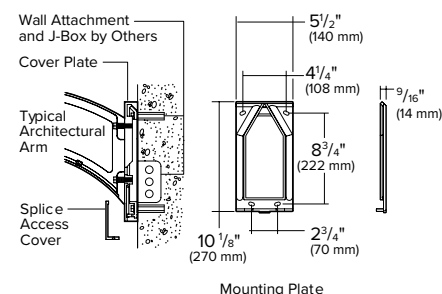
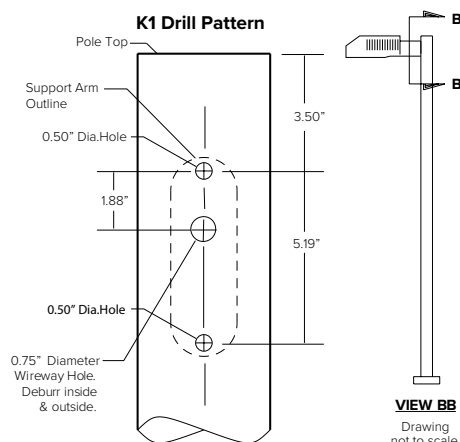
- 2 1A/ARA2/54L-500/35K8/3/CLR/SQ/UNV/BLT
- 1 SVSF-2SB

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

### WALL MOUNT

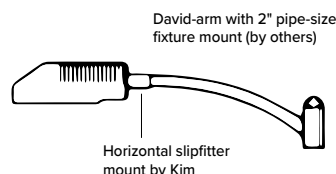
#### 1W

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



### HSF - Horizontal Slipfitter

Replaces standard mounting arm with a slipfitter which allows fixture to be mounted to a horizontal pole davit-arm with 2" pipe-size mounting end (2" O.D.). Cast aluminum slipfitter with set screw anti-rotation lock Bolts to housing from inside the electrical compartment using mounting holes for the standard support arm. Davit-arm must be field drilled at a set screw location to insure against fixture rotation. Finished to match fixture.



## 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 |       |
| 54    | 11,000                | 560           | 1            | 10664       | 1          | 0 | 1 | 120.2 | 10802       | 1          | 0 | 1 | 121.7 | 11380       | 1          | 0 | 1 | 128.3 |
|       |                       |               | 1-BC         | 6020        | 0          | 0 | 0 | 67.8  | 6098        | 0          | 0 | 0 | 68.7  | 6424        | 0          | 0 | 1 | 72.4  |
|       |                       |               | 2            | 9651        | 2          | 0 | 2 | 108.8 | 9776        | 2          | 0 | 2 | 110.2 | 10299       | 2          | 0 | 2 | 116.1 |
|       |                       |               | 2-BC         | 5304        | 0          | 0 | 1 | 59.8  | 5373        | 0          | 0 | 1 | 60.6  | 5660        | 0          | 0 | 1 | 63.8  |
|       |                       |               | 3            | 9901        | 1          | 0 | 2 | 111.6 | 10029       | 1          | 0 | 2 | 113.0 | 10566       | 1          | 0 | 2 | 119.1 |
|       |                       |               | 3-BC         | 5426        | 0          | 0 | 2 | 61.2  | 5496        | 0          | 0 | 2 | 61.9  | 5791        | 0          | 0 | 2 | 65.3  |
|       |                       |               | 4            | 10218       | 1          | 0 | 2 | 115.2 | 10350       | 1          | 0 | 2 | 116.6 | 10904       | 1          | 0 | 2 | 122.9 |
|       |                       |               | 4-BC         | 6926        | 0          | 0 | 2 | 78.1  | 7016        | 0          | 0 | 2 | 79.1  | 7391        | 0          | 0 | 2 | 83.3  |
|       |                       |               | 4W           | 9545        | 1          | 0 | 2 | 107.6 | 9669        | 1          | 0 | 2 | 109.0 | 10186       | 1          | 0 | 2 | 114.8 |
|       |                       |               | 4W-BC        | 5724        | 0          | 0 | 2 | 64.5  | 5798        | 0          | 0 | 2 | 65.3  | 6108        | 0          | 0 | 2 | 68.8  |
|       |                       |               | 5W           | 9561        | 3          | 0 | 2 | 107.7 | 9685        | 3          | 0 | 2 | 109.1 | 10203       | 3          | 0 | 2 | 115.0 |
|       |                       |               | 5QM          | 10254       | 3          | 0 | 1 | 115.6 | 10387       | 3          | 0 | 1 | 117.1 | 10943       | 3          | 0 | 1 | 123.3 |
|       |                       |               | R            | 10021       | 2          | 0 | 2 | 112.9 | 10151       | 2          | 0 | 2 | 114.4 | 10695       | 2          | 0 | 2 | 120.5 |
|       |                       |               | L            | 10021       | 1          | 0 | 2 | 112.9 | 10151       | 1          | 0 | 2 | 114.4 | 10695       | 1          | 0 | 2 | 120.5 |
| 54    | 14,000                | 750           | 1            | 14256       | 1          | 0 | 1 | 112.9 | 14441       | 1          | 0 | 1 | 114.4 | 15213       | 1          | 0 | 1 | 120.5 |
|       |                       |               | 1-BC         | 8048        | 0          | 0 | 1 | 63.7  | 8152        | 0          | 0 | 1 | 64.6  | 8588        | 0          | 0 | 1 | 68.0  |
|       |                       |               | 2            | 12901       | 2          | 0 | 2 | 102.2 | 13069       | 2          | 0 | 2 | 103.5 | 13768       | 2          | 0 | 2 | 109.0 |
|       |                       |               | 2-BC         | 7090        | 0          | 0 | 1 | 56.2  | 7183        | 0          | 0 | 1 | 56.9  | 7567        | 0          | 0 | 2 | 59.9  |
|       |                       |               | 3            | 13236       | 2          | 0 | 2 | 104.8 | 13407       | 2          | 0 | 2 | 106.2 | 14125       | 2          | 0 | 2 | 111.9 |
|       |                       |               | 3-BC         | 7254        | 0          | 0 | 2 | 57.4  | 7348        | 0          | 0 | 2 | 58.2  | 7741        | 0          | 0 | 2 | 61.3  |
|       |                       |               | 4            | 13659       | 1          | 0 | 3 | 108.2 | 13837       | 1          | 0 | 3 | 109.6 | 14577       | 1          | 0 | 3 | 115.4 |
|       |                       |               | 4-BC         | 9259        | 0          | 0 | 2 | 73.3  | 9379        | 0          | 0 | 2 | 74.3  | 9881        | 0          | 0 | 2 | 78.3  |
|       |                       |               | 4W           | 12760       | 2          | 0 | 3 | 101.1 | 12926       | 4          | 0 | 2 | 102.4 | 13618       | 2          | 0 | 3 | 107.8 |
|       |                       |               | 4W-BC        | 7652        | 0          | 0 | 2 | 60.6  | 7751        | 0          | 0 | 2 | 61.4  | 8166        | 0          | 0 | 2 | 64.7  |
|       |                       |               | 5W           | 12781       | 4          | 0 | 2 | 101.2 | 12947       | 2          | 0 | 3 | 102.5 | 13640       | 4          | 0 | 2 | 108.0 |
|       |                       |               | 5QM          | 13708       | 3          | 0 | 1 | 108.6 | 13886       | 3          | 0 | 1 | 110.0 | 14629       | 4          | 0 | 1 | 115.9 |
|       |                       |               | R            | 13397       | 2          | 0 | 2 | 106.1 | 13571       | 2          | 0 | 2 | 107.5 | 14297       | 2          | 0 | 3 | 113.2 |
|       |                       |               | L            | 13397       | 2          | 0 | 2 | 106.1 | 13571       | 2          | 0 | 2 | 107.5 | 14297       | 2          | 0 | 3 | 113.2 |
| 81    | 19,500                | 700           | 1            | 19820       | 2          | 0 | 1 | 111.2 | 20077       | 2          | 0 | 1 | 112.6 | 21151       | 2          | 0 | 1 | 118.7 |
|       |                       |               | 1-BC         | 11188       | 0          | 0 | 1 | 62.8  | 11334       | 0          | 0 | 1 | 63.6  | 11940       | 0          | 0 | 1 | 67.0  |
|       |                       |               | 2            | 17937       | 2          | 0 | 2 | 100.6 | 18169       | 2          | 0 | 2 | 101.9 | 19142       | 3          | 0 | 3 | 107.4 |
|       |                       |               | 2-BC         | 9858        | 0          | 0 | 2 | 55.3  | 9986        | 0          | 0 | 2 | 56.0  | 10520       | 0          | 0 | 2 | 59.0  |
|       |                       |               | 3            | 18402       | 2          | 0 | 3 | 103.2 | 18640       | 2          | 0 | 3 | 104.6 | 19638       | 2          | 0 | 3 | 110.2 |
|       |                       |               | 3-BC         | 10085       | 0          | 0 | 2 | 56.6  | 10216       | 0          | 0 | 2 | 57.3  | 10762       | 0          | 0 | 2 | 60.4  |
|       |                       |               | 4            | 18990       | 2          | 0 | 4 | 106.5 | 19237       | 2          | 0 | 4 | 107.9 | 20266       | 2          | 0 | 4 | 113.7 |
|       |                       |               | 4-BC         | 12872       | 1          | 0 | 3 | 72.2  | 13039       | 1          | 0 | 3 | 73.2  | 13737       | 1          | 0 | 3 | 77.1  |
|       |                       |               | 4W           | 17741       | 2          | 0 | 4 | 99.5  | 17971       | 2          | 0 | 4 | 100.8 | 18933       | 2          | 0 | 4 | 106.2 |
|       |                       |               | 4W-BC        | 10638       | 1          | 0 | 2 | 59.7  | 10776       | 1          | 0 | 3 | 60.5  | 11353       | 1          | 0 | 3 | 63.7  |
|       |                       |               | 5W           | 17769       | 4          | 0 | 2 | 99.7  | 18000       | 4          | 0 | 2 | 101.0 | 18963       | 4          | 0 | 2 | 106.4 |
|       |                       |               | 5QM          | 19058       | 4          | 0 | 2 | 106.9 | 19305       | 4          | 0 | 2 | 108.3 | 20338       | 4          | 0 | 2 | 114.1 |
|       |                       |               | R            | 18625       | 2          | 0 | 3 | 104.5 | 18867       | 2          | 0 | 3 | 105.9 | 19877       | 3          | 0 | 3 | 111.5 |
|       |                       |               | L            | 18625       | 2          | 0 | 3 | 104.5 | 18867       | 2          | 0 | 3 | 105.9 | 19877       | 2          | 0 | 3 | 111.5 |

## DELIVERED LUMENS (CONTINUED)

### CLR LENS

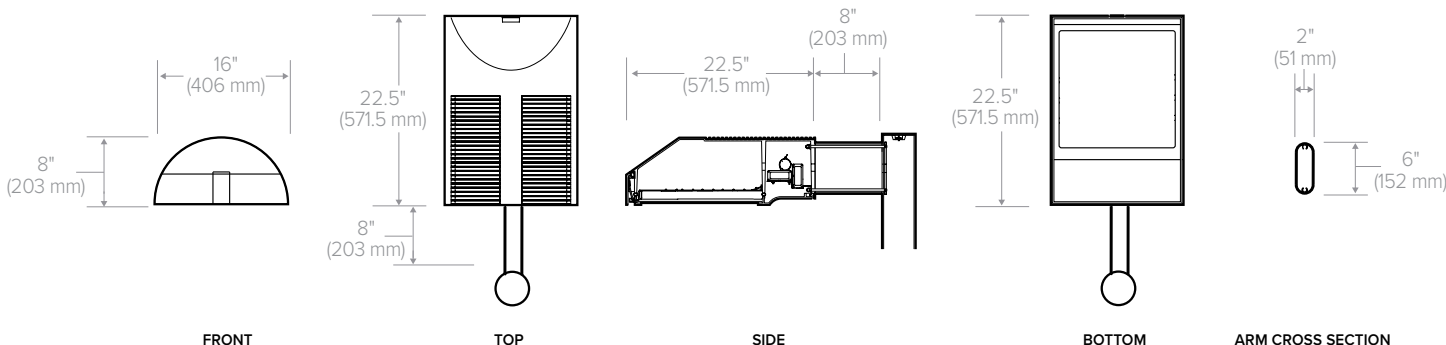
| LED # | Nominal Lumen Package | Drive Current | Distribution | 3000K 70CRI |            |   |   |       | 4000K 70CRI |            |   |   |       | 5000K 70CRI |            |   |   |       |
|-------|-----------------------|---------------|--------------|-------------|------------|---|---|-------|-------------|------------|---|---|-------|-------------|------------|---|---|-------|
|       |                       |               |              | Lumen       | BUG Rating |   |   | lm/w  | Lumen       | BUG Rating |   |   | lm/w  | Lumen       | BUG Rating |   |   | lm/w  |
|       |                       |               |              |             | B          | U | G |       |             | B          | U | G |       |             | B          | U | G |       |
| 54    | 11,000                | 560           | 1            | 8907        | 1          | 0 | 1 | 100.4 | 9023        | 1          | 0 | 1 | 101.7 | 9506        | 1          | 0 | 1 | 107.1 |
|       |                       |               | 1-BC         | 5028        | 0          | 0 | 0 | 56.7  | 5094        | 0          | 0 | 0 | 57.4  | 5366        | 0          | 0 | 0 | 60.5  |
|       |                       |               | 2            | 8061        | 1          | 0 | 2 | 90.8  | 8166        | 1          | 0 | 2 | 92.0  | 8603        | 1          | 0 | 2 | 97.0  |
|       |                       |               | 2-BC         | 4430        | 0          | 0 | 1 | 49.9  | 4488        | 0          | 0 | 1 | 50.6  | 4728        | 0          | 0 | 1 | 53.3  |
|       |                       |               | 3            | 8270        | 1          | 0 | 2 | 93.2  | 8377        | 1          | 0 | 2 | 94.4  | 8826        | 1          | 0 | 2 | 99.5  |
|       |                       |               | 3-BC         | 4532        | 0          | 0 | 1 | 51.1  | 4591        | 0          | 0 | 1 | 51.7  | 4837        | 0          | 0 | 2 | 54.5  |
|       |                       |               | 4            | 8535        | 1          | 0 | 2 | 96.2  | 8645        | 1          | 0 | 2 | 97.4  | 9108        | 1          | 0 | 2 | 102.6 |
|       |                       |               | 4-BC         | 5785        | 0          | 0 | 2 | 65.2  | 5860        | 0          | 0 | 2 | 66.0  | 6174        | 0          | 0 | 2 | 69.6  |
|       |                       |               | 4W           | 7973        | 1          | 0 | 2 | 89.9  | 8076        | 1          | 0 | 2 | 91.0  | 8509        | 1          | 0 | 2 | 95.9  |
|       |                       |               | 4W-BC        | 4781        | 0          | 0 | 2 | 53.9  | 4843        | 0          | 0 | 2 | 54.6  | 5102        | 0          | 0 | 2 | 57.5  |
|       |                       |               | 5W           | 7986        | 3          | 0 | 1 | 90.0  | 8089        | 3          | 0 | 1 | 91.2  | 8522        | 3          | 0 | 2 | 96.0  |
|       |                       |               | 5QM          | 8565        | 3          | 0 | 1 | 96.5  | 8676        | 3          | 0 | 1 | 97.8  | 9140        | 3          | 0 | 1 | 103.0 |
|       |                       |               | R            | 8371        | 3          | 0 | 1 | 94.3  | 8479        | 1          | 0 | 2 | 95.6  | 8933        | 1          | 0 | 2 | 100.7 |
|       |                       |               | L            | 8371        | 1          | 0 | 2 | 94.3  | 8479        | 1          | 0 | 2 | 95.6  | 8933        | 1          | 0 | 2 | 100.7 |
|       | 14,000                | 750           | 1            | 11907       | 1          | 0 | 1 | 94.3  | 12062       | 1          | 0 | 1 | 95.5  | 12708       | 1          | 0 | 1 | 100.6 |
|       |                       |               | 1-BC         | 6722        | 0          | 0 | 1 | 53.2  | 6809        | 0          | 0 | 1 | 53.9  | 7174        | 0          | 0 | 1 | 56.8  |
|       |                       |               | 2            | 10776       | 2          | 0 | 2 | 85.3  | 10916       | 2          | 0 | 2 | 86.4  | 11500       | 2          | 0 | 2 | 91.1  |
|       |                       |               | 2-BC         | 5923        | 0          | 0 | 1 | 46.9  | 5999        | 0          | 0 | 1 | 47.5  | 6321        | 0          | 0 | 1 | 50.1  |
|       |                       |               | 3            | 11056       | 1          | 0 | 2 | 87.6  | 11199       | 1          | 0 | 2 | 88.7  | 11798       | 1          | 0 | 2 | 93.4  |
|       |                       |               | 3-BC         | 6059        | 0          | 0 | 2 | 48.0  | 6137        | 0          | 0 | 2 | 48.6  | 6466        | 0          | 0 | 2 | 51.2  |
|       |                       |               | 4            | 11409       | 1          | 0 | 2 | 90.4  | 11557       | 1          | 0 | 2 | 91.5  | 12176       | 1          | 0 | 2 | 96.4  |
|       |                       |               | 4-BC         | 7733        | 0          | 0 | 2 | 61.2  | 7834        | 0          | 0 | 2 | 62.0  | 8253        | 0          | 0 | 2 | 65.4  |
|       |                       |               | 4W           | 10658       | 1          | 0 | 2 | 84.4  | 10797       | 1          | 0 | 2 | 85.5  | 11375       | 1          | 0 | 3 | 90.1  |
|       |                       |               | 4W-BC        | 6391        | 0          | 0 | 2 | 50.6  | 6474        | 0          | 0 | 2 | 51.3  | 6821        | 0          | 0 | 2 | 54.0  |
|       |                       |               | 5W           | 10676       | 3          | 0 | 2 | 84.5  | 10814       | 3          | 0 | 2 | 85.6  | 11393       | 3          | 0 | 2 | 90.2  |
|       |                       |               | 5QM          | 11450       | 3          | 0 | 1 | 90.7  | 11598       | 3          | 0 | 1 | 91.9  | 12219       | 3          | 0 | 1 | 96.8  |
|       |                       |               | R            | 11190       | 2          | 0 | 2 | 88.6  | 11335       | 2          | 0 | 2 | 89.8  | 11942       | 2          | 0 | 2 | 94.6  |
|       |                       |               | L            | 11190       | 1          | 0 | 2 | 88.6  | 11335       | 1          | 0 | 2 | 89.8  | 11942       | 1          | 0 | 2 | 94.6  |

**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 |       |
| 54    | 11,000                | 560           | 1            | 8772        | 1          | 0 | 1 | 98.9 | 8886        | 1          | 0 | 1 | 100.2 | 9362        | 1          | 0 | 1 | 105.5 |
|       |                       |               | 1-BC         | 4952        | 0          | 0 | 0 | 55.8 | 5016        | 0          | 0 | 0 | 56.5  | 5285        | 0          | 0 | 0 | 59.6  |
|       |                       |               | 2            | 7939        | 1          | 0 | 1 | 89.5 | 8042        | 1          | 0 | 2 | 90.6  | 8472        | 1          | 0 | 2 | 95.5  |
|       |                       |               | 2-BC         | 4363        | 0          | 0 | 1 | 49.2 | 4420        | 0          | 0 | 1 | 49.8  | 4656        | 0          | 0 | 1 | 52.5  |
|       |                       |               | 3            | 8145        | 1          | 0 | 2 | 91.8 | 8251        | 1          | 0 | 2 | 93.0  | 8692        | 1          | 0 | 2 | 98.0  |
|       |                       |               | 3-BC         | 4464        | 0          | 0 | 1 | 50.3 | 4522        | 0          | 0 | 1 | 51.0  | 4764        | 0          | 0 | 1 | 53.7  |
|       |                       |               | 4            | 8405        | 1          | 0 | 2 | 94.7 | 8515        | 1          | 0 | 2 | 96.0  | 8970        | 1          | 0 | 2 | 101.1 |
|       |                       |               | 4-BC         | 5697        | 0          | 0 | 2 | 64.2 | 5771        | 0          | 0 | 2 | 65.0  | 6080        | 0          | 0 | 2 | 68.5  |
|       |                       |               | 4W           | 7852        | 1          | 0 | 2 | 88.5 | 7954        | 1          | 0 | 2 | 89.6  | 8380        | 1          | 0 | 2 | 94.4  |
|       |                       |               | 4W-BC        | 4709        | 0          | 0 | 2 | 53.1 | 4770        | 0          | 0 | 2 | 53.8  | 5025        | 0          | 0 | 2 | 56.6  |
|       |                       |               | 5W           | 7865        | 3          | 0 | 1 | 88.6 | 7967        | 3          | 0 | 1 | 89.8  | 8393        | 3          | 0 | 2 | 94.6  |
|       |                       |               | 5QM          | 8435        | 3          | 0 | 1 | 95.1 | 8545        | 3          | 0 | 1 | 96.3  | 9002        | 3          | 0 | 1 | 101.5 |
|       |                       |               | R            | 8244        | 1          | 0 | 2 | 92.9 | 8351        | 1          | 0 | 2 | 94.1  | 8798        | 1          | 0 | 2 | 99.2  |
|       |                       |               | L            | 8244        | 1          | 0 | 2 | 92.9 | 8351        | 1          | 0 | 2 | 94.1  | 8798        | 1          | 0 | 2 | 99.2  |
|       | 14,000                | 750           | 1            | 11727       | 1          | 0 | 1 | 92.9 | 11880       | 1          | 0 | 1 | 94.1  | 12515       | 1          | 0 | 1 | 99.1  |
|       |                       |               | 1-BC         | 6620        | 0          | 0 | 1 | 52.4 | 6706        | 0          | 0 | 1 | 53.1  | 7065        | 0          | 0 | 1 | 56.0  |
|       |                       |               | 2            | 10613       | 2          | 0 | 2 | 84.1 | 10751       | 2          | 0 | 2 | 85.1  | 11326       | 2          | 0 | 2 | 89.7  |
|       |                       |               | 2-BC         | 5833        | 0          | 0 | 1 | 46.2 | 5909        | 0          | 0 | 1 | 46.8  | 6225        | 0          | 0 | 1 | 49.3  |
|       |                       |               | 3            | 10888       | 1          | 0 | 2 | 86.2 | 11030       | 1          | 0 | 2 | 87.3  | 11620       | 1          | 0 | 2 | 92.0  |
|       |                       |               | 3-BC         | 5967        | 0          | 0 | 2 | 47.3 | 6045        | 0          | 0 | 2 | 47.9  | 6368        | 0          | 0 | 2 | 50.4  |
|       |                       |               | 4            | 11237       | 1          | 0 | 2 | 89.0 | 11383       | 1          | 0 | 2 | 90.1  | 11992       | 1          | 0 | 2 | 95.0  |
|       |                       |               | 4-BC         | 7617        | 0          | 0 | 2 | 60.3 | 7715        | 0          | 0 | 2 | 61.1  | 8128        | 0          | 0 | 2 | 64.4  |
|       |                       |               | 4W           | 10497       | 1          | 0 | 2 | 83.1 | 10633       | 1          | 0 | 2 | 84.2  | 11203       | 1          | 0 | 3 | 88.7  |
|       |                       |               | 4W-BC        | 6295        | 0          | 0 | 2 | 49.8 | 6376        | 0          | 0 | 2 | 50.5  | 6718        | 0          | 0 | 2 | 53.2  |
|       |                       |               | 5W           | 10514       | 3          | 0 | 2 | 83.3 | 10651       | 3          | 0 | 2 | 84.3  | 11221       | 3          | 0 | 2 | 88.9  |
|       |                       |               | 5QM          | 11277       | 3          | 0 | 1 | 89.3 | 11423       | 3          | 0 | 1 | 90.5  | 12034       | 3          | 0 | 1 | 95.3  |
|       |                       |               | R            | 11021       | 2          | 0 | 2 | 87.3 | 11164       | 2          | 0 | 2 | 88.4  | 11761       | 2          | 0 | 2 | 93.1  |
|       |                       |               | L            | 11021       | 1          | 0 | 2 | 87.3 | 11164       | 1          | 0 | 2 | 88.4  | 11761       | 1          | 0 | 2 | 93.1  |

**DIMENSIONS**



# ARA2

## ARCHITECTURAL AREA/SITE PHOTOMETRY

AR2-54L-750-4K7-1

### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 14440        |
| Watts            | 126.27       |
| Efficacy         | 114.4        |
| 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 | 12851  | 89.0%       |
| Downward House Side  | 1589   | 11.0%       |
| Downward Total       | 14440  | 100.0%      |
| Upward Street Side   | 0      | 0.0%        |
| Upward House Side    | 0      | 0.0%        |
| Upward Total         | 0      | 0.0%        |
| Total Flux           | 14440  | 100%        |

AR2-54L-750-4K7-1-BC

### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 8151         |
| Watts            | 126.27       |
| Efficacy         | 64.6         |
| IES Type         | 1            |
| BUG Rating       | B0-U0-G1     |
| Mounting Height  | 15 ft        |
| Grid Scale       | 10 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 8033   | 98.5%       |
| Downward House Side  | 118    | 1.5%        |
| Downward Total       | 8151   | 100.0%      |
| Upward Street Side   | 0      | 0.0%        |
| Upward House Side    | 0      | 0.0%        |
| Upward Total         | 0      | 0.0%        |
| Total Flux           | 8151   | 100%        |

AR2-54L-750-4K7-2

### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 13069        |
| Watts            | 126.27       |
| Efficacy         | 103.5        |
| IES Type         | 2            |
| BUG Rating       | B2-U0-G2     |
| Mounting Height  | 15 ft        |
| Grid Scale       | 10 ft        |

### ZONAL LUMEN SUMMARY

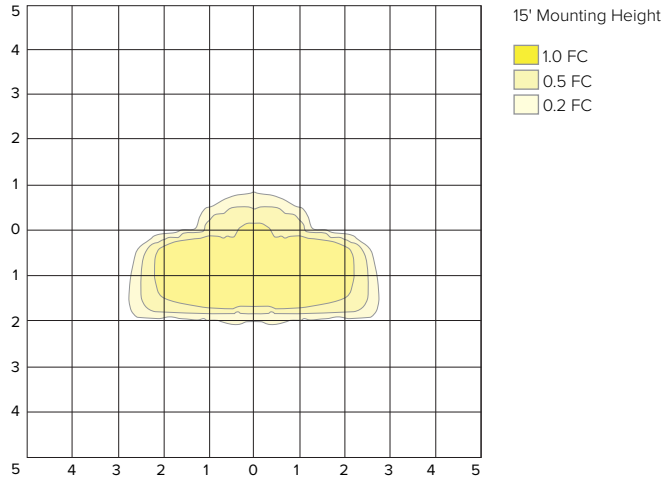
| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 10825  | 82.8%       |
| Downward House Side  | 2245   | 17.2%       |
| Downward Total       | 13069  | 100.0%      |
| Upward Street Side   | 0      | 0.0%        |
| Upward House Side    | 0      | 0.0%        |
| Upward Total         | 0      | 0.0%        |
| Total Flux           | 13069  | 100%        |

DATE: LOCATION:

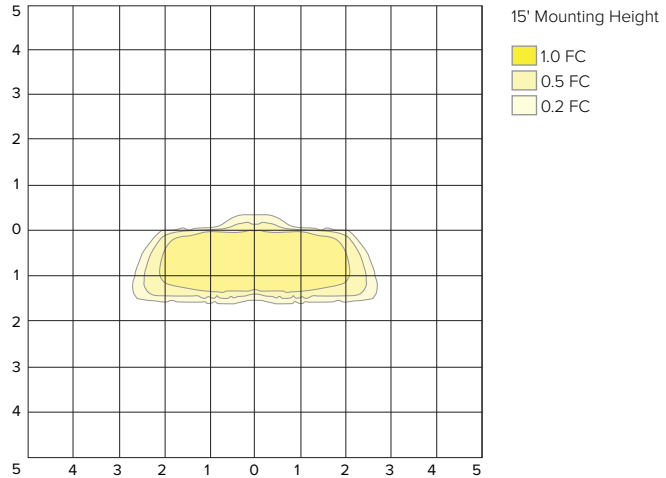
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CATALOG #:

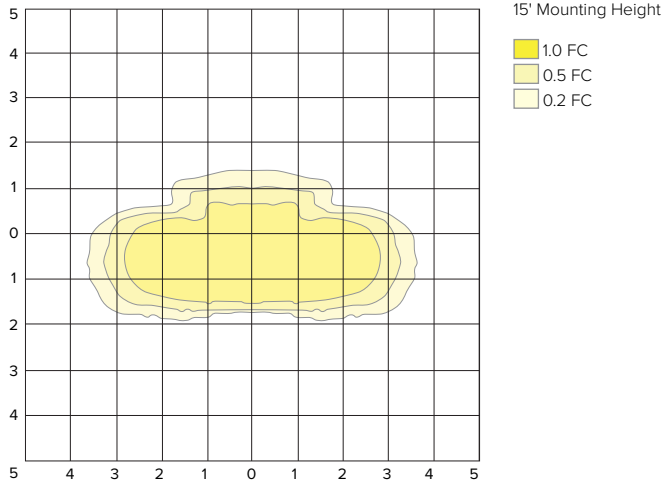
### ISOFOOT CANDLE PLOT



### ISOFOOT CANDLE PLOT



### ISOFOOT CANDLE PLOT





# ARA2

ARCHITECTURAL AREA/SITE

## PHOTOMETRY

AR2-54L-750-4K7-2-BC

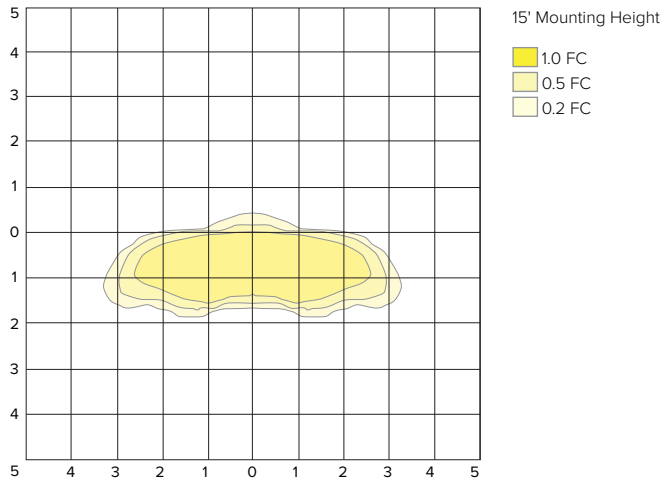
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 7182         |
| Watts            | 126.27       |
| Efficacy         | 56.9         |
| IES Type         | 2            |
| BUG Rating       | B0-U0-G1     |
| Mounting Height  | 15 ft        |
| Grid Scale       | 10 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 7019   | 97.7%       |
| Downward House Side  | 163    | 2.3%        |
| Downward Total       | 7182   | 100.0%      |
| Upward Street Side   | 0      | 0.0%        |
| Upward House Side    | 0      | 0.0%        |
| Upward Total         | 0      | 0.0%        |
| Total Flux           | 7182   | 100%        |

### ISOFOOT CANDLE PLOT



AR2-54L-750-4K7-3

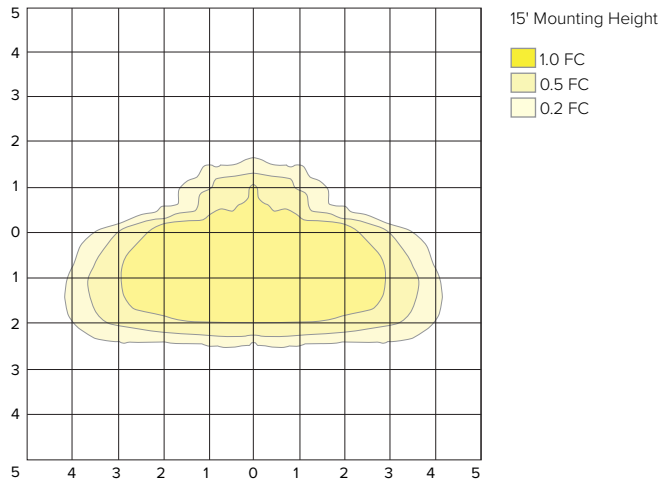
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 13406        |
| Watts            | 126.27       |
| Efficacy         | 106.2        |
| IES Type         | 3            |
| BUG Rating       | B2-U0-G2     |
| Mounting Height  | 15 ft        |
| Grid Scale       | 10 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 11502  | 85.8%       |
| Downward House Side  | 1904   | 14.2%       |
| Downward Total       | 13406  | 100.0%      |
| Upward Street Side   | 0      | 0.0%        |
| Upward House Side    | 0      | 0.0%        |
| Upward Total         | 0      | 0.0%        |
| Total Flux           | 13406  | 100%        |

### ISOFOOT CANDLE PLOT



AR2-54L-750-4K7-3-BC

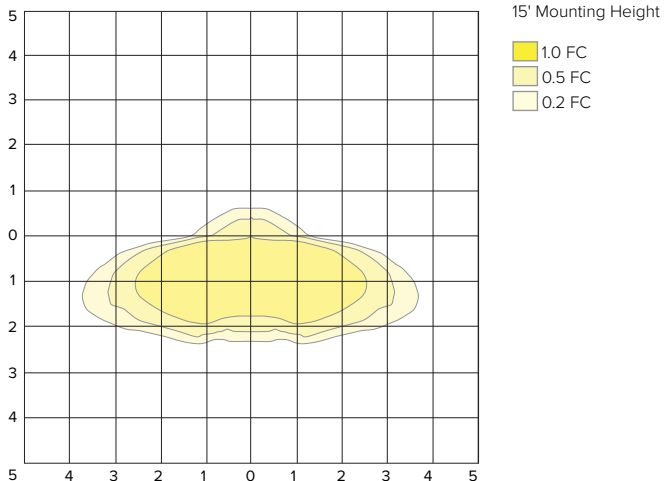
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 7347         |
| Watts            | 126.27       |
| Efficacy         | 58.2         |
| IES Type         | 3            |
| BUG Rating       | B0-U0-G2     |
| Mounting Height  | 15 ft        |
| Grid Scale       | 10 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 7108   | 96.7%       |
| Downward House Side  | 239    | 3.3%        |
| Downward Total       | 7347   | 100.0%      |
| Upward Street Side   | 0      | 0.0%        |
| Upward House Side    | 0      | 0.0%        |
| Upward Total         | 0      | 0.0%        |
| Total Flux           | 7347   | 100%        |

### ISOFOOT CANDLE PLOT



# ARA2

ARCHITECTURAL AREA/SITE

## PHOTOMETRY

AR2-54L-750-4K7-4

### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 13836        |
| Watts            | 126.27       |
| Efficacy         | 109.6        |
| IES Type         | 4            |
| BUG Rating       | B1-U0-G3     |
| Mounting Height  | 15 ft        |
| Grid Scale       | 10 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 12515  | 90.4%       |
| Downward House Side  | 1322   | 9.6%        |
| Downward Total       | 13837  | 100.0%      |
| Upward Street Side   | 0      | 0.0%        |
| Upward House Side    | 0      | 0.0%        |
| Upward Total         | 0      | 0.0%        |
| Total Flux           | 13837  | 100%        |

AR2-54L-750-4K7-4-BC

### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 9381         |
| Watts            | 126.27       |
| Efficacy         | 74.3         |
| IES Type         | 4            |
| BUG Rating       | B0-U0-G2     |
| Mounting Height  | 15 ft        |
| Grid Scale       | 10 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 9093   | 96.0%       |
| Downward House Side  | 289    | 4.0%        |
| Downward Total       | 9382   | 100.0%      |
| Upward Street Side   | 0      | 0.0%        |
| Upward House Side    | 0      | 0.0%        |
| Upward Total         | 0      | 0.0%        |
| Total Flux           | 9382   | 100%        |

AR2-54L-750-4K7-4W

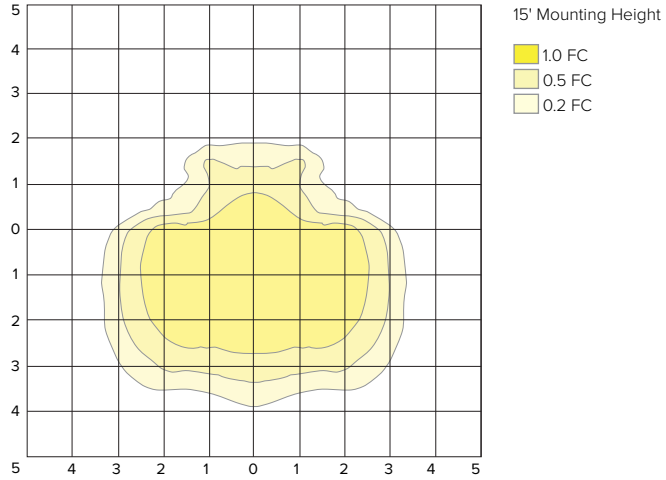
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 12926        |
| Watts            | 126.27       |
| Efficacy         | 102.4        |
| IES Type         | 4W           |
| BUG Rating       | B2-U0-G3     |
| Mounting Height  | 15 ft        |
| Grid Scale       | 10 ft        |

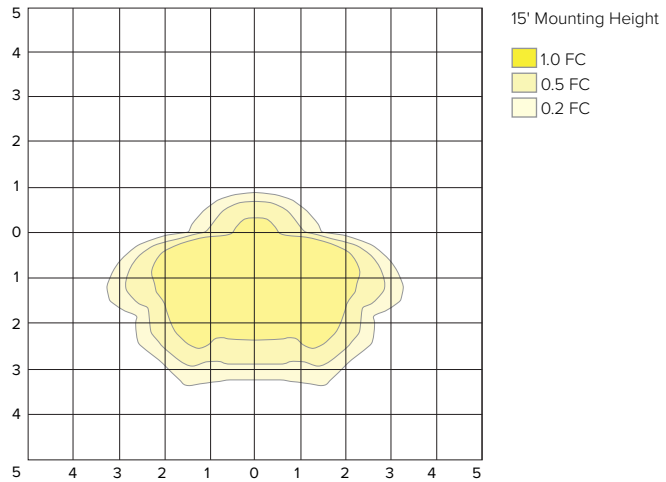
### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 11324  | 87.6%       |
| Downward House Side  | 1602   | 12.4%       |
| Downward Total       | 12926  | 100.0%      |
| Upward Street Side   | 0      | 0.0%        |
| Upward House Side    | 0      | 0.0%        |
| Upward Total         | 0      | 0.0%        |
| Total Flux           | 12926  | 100%        |

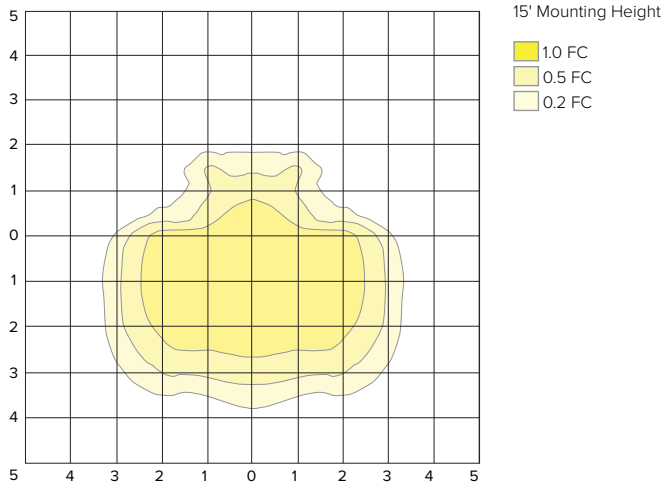
### ISOFOOT CANDLE PLOT



### ISOFOOT CANDLE PLOT



### ISOFOOT CANDLE PLOT



# ARA2

ARCHITECTURAL AREA/SITE

## PHOTOMETRY

AR2-54L-750-4K7-4W-BC

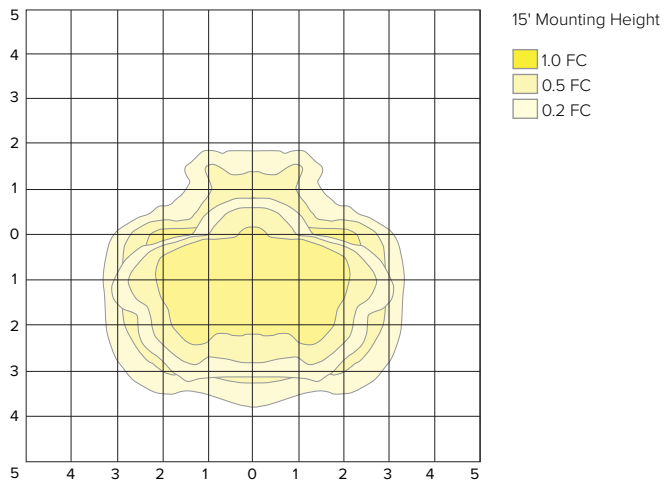
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 7750         |
| Watts            | 126.27       |
| Efficacy         | 61.4         |
| IES Type         | 4W           |
| BUG Rating       | B0-U0-G2     |
| Mounting Height  | 15 ft        |
| Grid Scale       | 10 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 7449   | 96.0%       |
| Downward House Side  | 301    | 4.0%        |
| Downward Total       | 7750   | 100.0%      |
| Upward Street Side   | 0      | 0.0%        |
| Upward House Side    | 0      | 0.0%        |
| Upward Total         | 0      | 0.0%        |
| Total Flux           | 7750   | 100%        |

### ISOFOOT CANDLE PLOT



AR2-54L-750-4K7-5QM

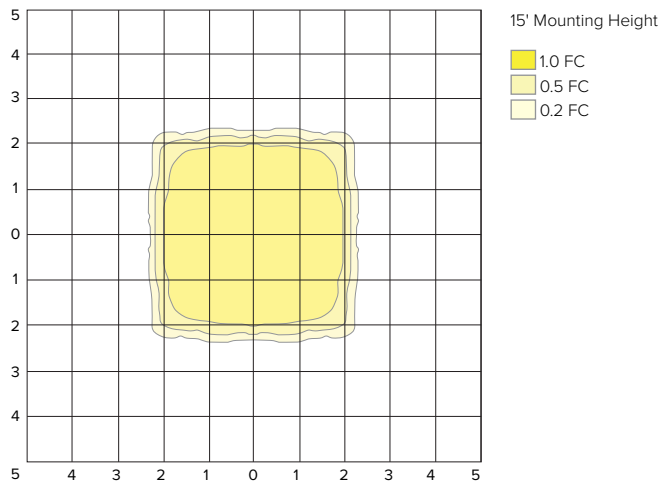
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 13885        |
| Watts            | 126.27       |
| Efficacy         | 110.0        |
| IES Type         | 5            |
| BUG Rating       | B3-U0-G1     |
| Mounting Height  | 15 ft        |
| Grid Scale       | 10 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 6942   | 50.0%       |
| Downward House Side  | 6943   | 50.0%       |
| Downward Total       | 13885  | 100.0%      |
| Upward Street Side   | 0      | 0.0%        |
| Upward House Side    | 0      | 0.0%        |
| Upward Total         | 0      | 0.0%        |
| Total Flux           | 13885  | 100%        |

### ISOFOOT CANDLE PLOT



AR2-54L-750-4K7-5W

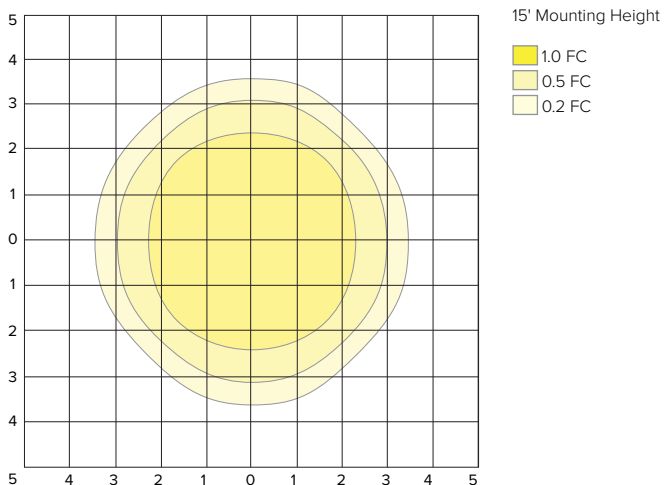
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 12946        |
| Watts            | 126.27       |
| Efficacy         | 102.5        |
| IES Type         | 5            |
| BUG Rating       | B4-U0-G2     |
| Mounting Height  | 15 ft        |
| Grid Scale       | 10 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 6473   | 50.0%       |
| Downward House Side  | 6473   | 50.0%       |
| Downward Total       | 12946  | 100.0%      |
| Upward Street Side   | 0      | 0.0%        |
| Upward House Side    | 0      | 0.0%        |
| Upward Total         | 0      | 0.0%        |
| Total Flux           | 12946  | 100%        |

### ISOFOOT CANDLE PLOT



# ARA2

ARCHITECTURAL AREA/SITE

## PHOTOMETRY

AR2-54L-750-4K7-R

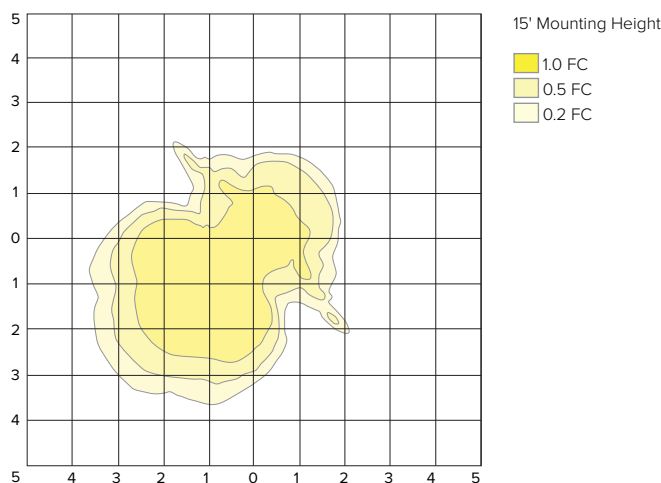
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 13570        |
| Watts            | 126.27       |
| Efficacy         | 107.5        |
| IES Type         | R            |
| BUG Rating       | B2-U0-G2     |
| Mounting Height  | 15 ft        |
| Grid Scale       | 10 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 11231  | 82.8%       |
| Downward House Side  | 2339   | 17.2%       |
| Downward Total       | 13570  | 100.0%      |
| Upward Street Side   | 0      | 0.0%        |
| Upward House Side    | 0      | 0.0%        |
| Upward Total         | 0      | 0.0%        |
| Total Flux           | 13570  | 100%        |

### ISOFOOT CANDLE PLOT



AR2-54L-750-4K7-L

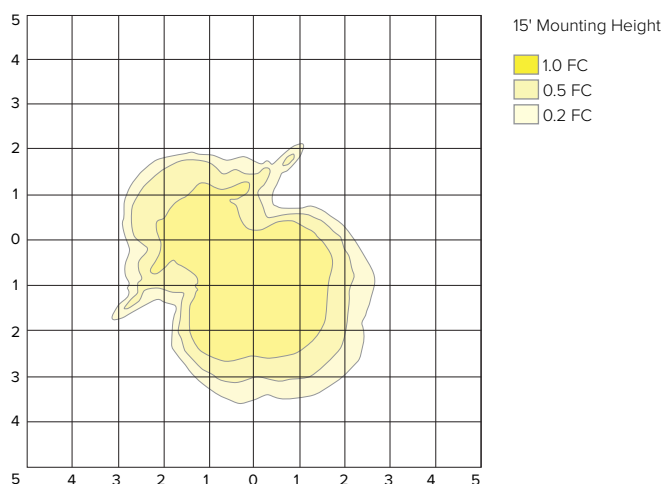
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 13571        |
| Watts            | 126.27       |
| Efficacy         | 107.5        |
| IES Type         | L            |
| BUG Rating       | B2-U0-G2     |
| Mounting Height  | 15 ft        |
| Grid Scale       | 10 ft        |

### ZONAL LUMEN SUMMARY

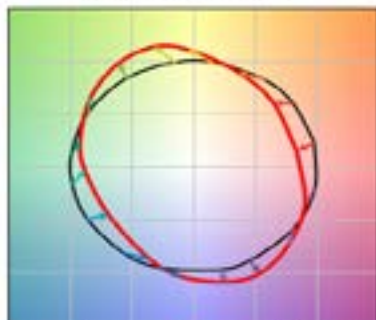
| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 11523  | 84.9%       |
| Downward House Side  | 2048   | 15.1%       |
| Downward Total       | 13571  | 100.0%      |
| Upward Street Side   | 0      | 0.0%        |
| Upward House Side    | 0      | 0.0%        |
| Upward Total         | 0      | 0.0%        |
| Total Flux           | 13571  | 100%        |

### ISOFOOT CANDLE PLOT



## TM-30 DATA

### COLOR VECTOR GRAPHIC

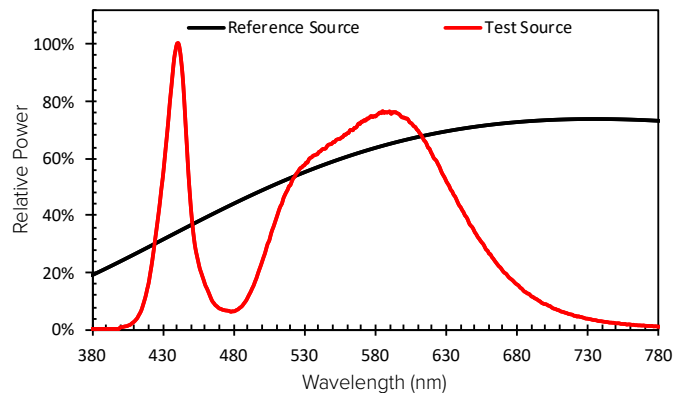


— Reference Illuminant — Test Source

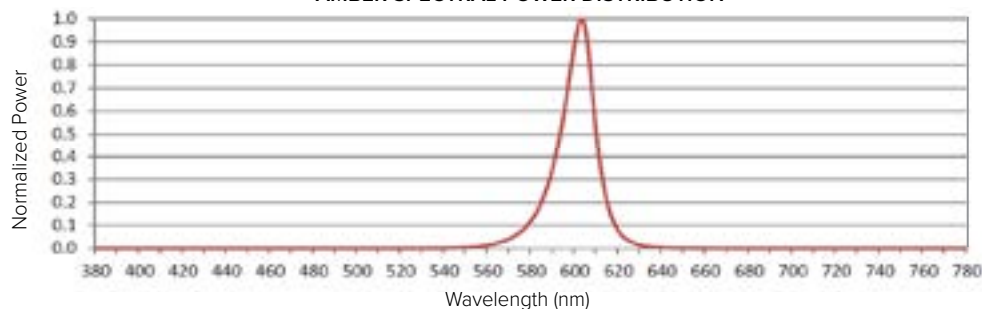
### TEST SOURCE

|                    |        |
|--------------------|--------|
| R <sub>f</sub>     | 68     |
| R <sub>a</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



### 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 |
| 54 LEDs   | 88.7         | 560 mA  | 120-480      | 50/60 | 0.74    | 0.43 | 0.37 | 0.32 | 0.26 | 0.18 | >0.9             | 20           | 10% to 100%   | 0mA                | 1mA | 0V               | 10V |
|           | 126.3        | 750 mA  |              |       | 1.05    | 0.61 | 0.53 | 0.46 | 0.36 | 0.26 |                  |              |               |                    |     |                  |     |
| 81 LEDs   | 178.2        | 700 mA  |              |       | 1.49    | 0.86 | 0.74 | 0.64 | 0.51 | 0.37 |                  |              |               |                    |     |                  |     |

### 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% | 94.22% | 92.26% | 89.84% | 81.68%  | >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 |        |        |