



Pedernales Electric Cooperative  
**Area & Street Lighting Specifications**

March 2022

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# I. General Information

## 1. PEC-Owned Area and Street Lighting

These specifications are for cities, developers, individuals, and other entities within the Pedernales Electric Cooperative service area to follow when selecting materials for installation of outdoor area or street lighting that PEC will own and maintain. The materials listed herein are approved for use in the PEC electric distribution system. 50- and 100-watt LED lighting options are available to choose from.

Lights, shields, photocontrol, and steel poles and arms are covered by these specifications. Organizations or entities may purchase and install on their property the approved pole and arm listed within these specifications, and PEC will install, maintain, and own the lights. Shields are optional, installed by PEC only by request, and will be at an additional cost to be paid by the requesting member.

Organizations, entities, and individual members are free to own, install, and maintain their own area and street lights. Those choosing to do so do not have to follow these specifications, but an active account for billing is required.

Rates for PEC-owned lighting, as well as unmetered lighting device services, are available in the [PEC Business Rules and Tariff](#). Installation costs vary. Light installations are billed at the Cooperative's discretion under sections 500.2.2.1 (*Small Power Service*) for metered locations or 500.3.6.1 (*Unmetered Lighting Device Service*).

If you or your organization would like to have outdoor area or street lighting installed and maintained by PEC, or if you have area or street lighting you would like PEC to improve to specifications and maintain, please [contact us](#).

## 2. Dark-Sky Friendly Lighting

All of the outdoor lighting options in these specifications are dark-sky approved. Three of the four certified International Dark-Sky Communities in Texas are located in the PEC service territory, so we know how important preserving our starry night sky is to our members.

As part of our Cooperative Lighting Program, we're upgrading PEC-owned area and street lights already installed across our service area to make them dark-sky friendly. We expect as many as 30,000 fixtures to be updated to new LED lights that are not only more energy efficient, but can also detect their own outages to expedite restorations.

See our [news article](#) and [FAQs](#) (PDF) for additional information.



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## **II. Area and Street LED Lights**

## DESCRIPTION

The Caretaker™ LED area and road luminaire combines high performance, low maintenance and easy installation in a simple, extremely economical package. Designed for years of worry-free operation, the Caretaker luminaire is the perfect area lighting solution for both full-cutoff needs or landmark applications where a highly visible light source is desired. The Caretaker luminaire is also ideal for municipal street lighting retrofits requiring superior optical performance and fast payback on capital.

<b>Catalog #</b>		<b>Type</b>
<b>Project</b>		
<b>Comments</b>		<b>Date</b>
<b>Prepared by</b>		

## SPECIFICATION FEATURES

### Construction

Single heavy-duty die-cast aluminum housing. Access to stamped aluminum door via a single captive screw (tool-less access option available) for easy maintenance and installation. Corrosion resistant hardware.

### Optical

Precision molded optics are designed to shape the distribution, maximize efficiency, and application coverage in each T2, T3 and T5R distributions. Available in six lumen packages at 4000K CCT and minimum 70CRI standard. Optional 3000K / 70CRI, 5000K / 70CRI, and 2700K / 80CRI also available. Fully compatible with SR Acrylic refractor and ANSI/NEMA Standard refractor assembly. For spill light control, an optional house side shield can be installed over the T2 or T3 optic or the drop shield house side shield can be used in conjunction with the T5R or SR options. For zero upright compliant luminaires, the U0 option provides full cutoff with a spun aluminum shield.

### Electrical

LED driver is standard universal voltage and 0-10V dimming with integrated 6kV surge protection. DALI compatible driver available. 10kV or 20kV additional surge protection available. Three position tunnel type compression terminal block standard. Luminaire is designed for efficient thermal management; heat is transferred away from the LEDs for optimal efficiency, light output, and life. Lumen maintenance of 92% at 50,000 hours.

### Mounting

Two-bolt slipfitter for mounting on 1-1/4" to 2" standard pipe (1-5/8" to 2-3/8" O.D.). Also available with a bracket for mounting to wood poles, square poles, or walls without a pipe.

### Controls

NEMA 3-PIN photocontrol receptacle standard. 7-PIN option available. An integrated dimming and occupancy sensor is a standalone control option available in bi-level dimming (MSP/DIM) operation.

### Finish

Unfinished raw aluminum standard. Optional five-stage super TGIC polyester powder coat paint, 2.5-mil nominal thickness for superior protection against fade and wear. Consult your lighting representative at Cooper Lighting Solutions for a complete selection of standard colors. Coastal Construction option available.

### Warranty

Standard five-year warranty. Optional ten-year warranty, please see your Cooper Lighting Solutions Streetworks sales representative for more information.



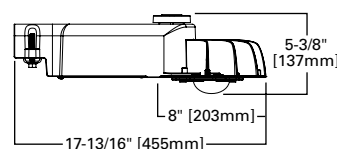
## CRTK2 CARETAKER LED

Solid State LED

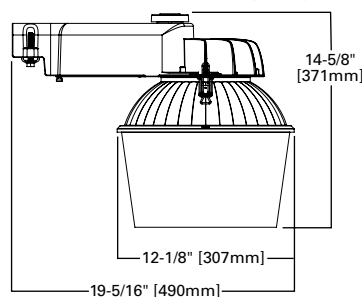
DUSK-TO-DAWN  
AREA/ROADWAY LUMINAIRE

## DIMENSIONS

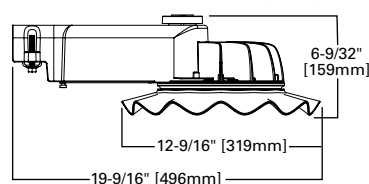
### Standard



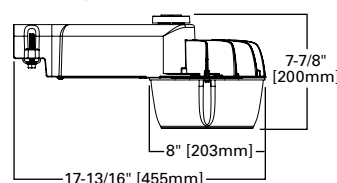
### ANSI / NEMA refractor (order separately)



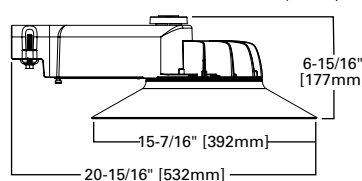
### Fluted Decorative Shield (order separately)



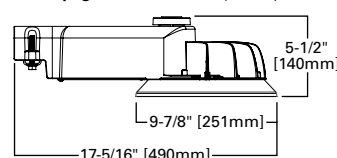
### Small acrylic refractor (order separately)



### Hillbrook Decorative Shield (order separately)



### Zero upright shield (order separately)



### CERTIFICATION DATA

UL/cUL Wet Location Listed  
ISO 9001  
IP66 Rated (Optic)  
3G Vibration Rated  
LM79/LM80 Compliant  
RoHS Compliant

### ENERGY DATA

Electronic LED Driver  
>0.9 Power Factor  
<20% Total Harmonic Distortion  
120-277V, 50/60Hz  
-40°C Minimum Ambient  
Temperature Rating  
+40°C Maximum Ambient  
Temperature Rating

### EPA

Effective Projected Area (Sq. Ft.)  
Standard: 0.49  
Full Cutoff: 0.52  
Small Acrylic Refractor: 0.58  
ANSI/NEMA Refractor: 1.01

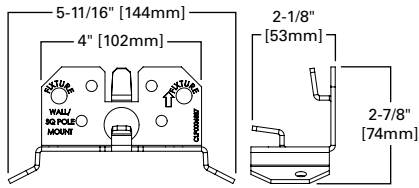
### SHIPPING DATA

Approximate Net Weight:  
7 - 8 lbs. (3.2 - 3.6 kgs.)

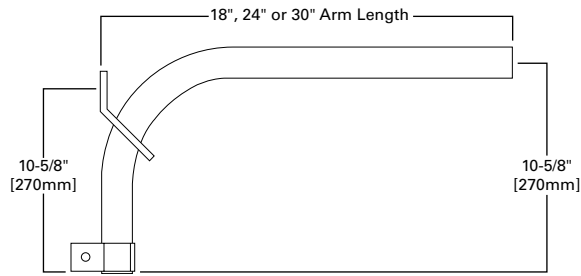
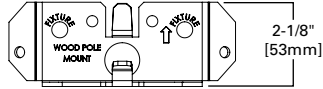
**OPTIONAL WALL/POLE MOUNTING BRACKET**

**OPTIONAL WOOD POLE PIPE ARM**

**Wall Mount / Square Pole Mount**



**Pole Mount**



**CONTROL OPTIONS**

**0-10V (D)**

This fixture is offered standard with 0-10V dimming driver(s). The dimming option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

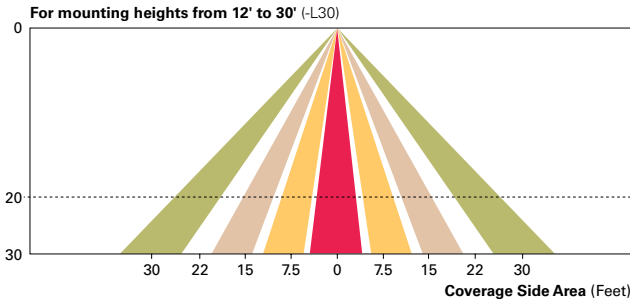
**Photocontrol (4N7)**

Photocontrol receptacles provide a flexible solution to enable dusk-to-dawn lighting by sensing light levels. Advanced control systems compatible with NEMA 7-PIN standards can be utilized with the 4N7 receptacle.

**Dimming Occupancy Sensor (MSP/DIM-L30)**

These sensors are factory installed in the luminaire housing. When the MSP/DIM-L30 sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MSP/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes.

These occupancy sensors includes an integral photocell that can be activated with the ISHH-01 accessory for dusk-to-dawn control or daylight harvesting — the factory preset is OFF. The ISHH-01 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters. A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 12'-30'.



**POWER AND LUMENS (DALI)**

Light Engine		C013	C015	C016	C018	C01	C01H
Power (Watts)		23	33	43	53	60	75
Wattage Label		20	30	40	50	60	80
Input Current @ 120V (A)		0.20	0.28	0.36	0.45	0.50	0.63
Input Current @ 277V (A)		0.09	0.13	0.16	0.19	0.22	0.27
<b>Optics</b>							
T2	4000K Lumens	3,341	4,606	5,790	7,325	8,066	9,523
	BUG Rating	B1-U2-G1	B1-U2-G1	B1-U3-G2	B2-G3-U2	B2-G3-U2	B2-G3-U2
	3000K Lumens	3,212	4,428	5,564	7,128	7,850	9,267
	BUG Rating	B1-U2-G1	B1-U2-G1	B1-U3-G2	B2-G3-U2	B2-U3-G2	B2-G3-U2
T2-U0	4000K Lumens	3,341	4,605	5,788	7,323	8,065	9,521
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	3000K Lumens	3,211	4,427	5,564	7,126	7,848	9,265
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
T3	4000K Lumens	3,240	4,467	5,614	7,103	7,822	9,235
	BUG Rating	B1-U2-G1	B1-U3-G1	B1-U3-G1	B1-U3-G2	B1-U3-G2	B2-U3-G2
	3000K Lumens	3,115	4,294	5,397	6,912	7,612	8,987
	BUG Rating	B1-U2-G1	B1-U2-G1	B1-U3-G1	B1-U3-G2	B1-U3-G2	B2-U3-G2
T3-U0	4000K Lumens	3,243	4,471	5,619	7,109	7,829	9,243
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	3000K Lumens	3,118	4,298	5,402	6,918	7,619	8,994
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
T5R	4000K Lumens	3,526	4,861	6,109	7,730	8,512	10,049
	BUG Rating	B2-U2-G1	B3-U2-G1	B3-U2-G1	B3-U3-G2	B3-U3-G2	B4-U3-G2
	3000K Lumens	3,390	4,673	5,873	7,522	8,283	9,779
	BUG Rating	B2-U2-G1	B3-U2-G1	B3-U2-G1	B3-U3-G2	B3-U3-G2	B4-U3-G2
T5R-U0	4000K Lumens	3,553	4,898	6,156	7,789	8,577	10,126
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2
	3000K Lumens	3,415	4,708	5,918	7,579	8,347	9,854
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2
T5R-SR	4000K Lumens	3,489	4,810	6,046	7,649	8,424	9,945
	BUG Rating	B2-U3-G1	B3-U3-G2	B3-U3-G2	B3-U3-G2	B3-U3-G3	B4-U3-G3
	3000K Lumens	3,354	4,624	5,812	7,443	8,197	9,677
	BUG Rating	B2-U3-G1	B3-U3-G2	B3-U3-G2	B3-U3-G2	B3-U3-G3	B4-U3-G3

**LUMEN MULTIPLIER**

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99

**LUMEN MAINTENANCE**

Ambient Temperature	TM-21 Lumen Maintenance (50,000 Hours)	Theoretical L70 (Hours)
Up to 40°C	92.30%	>306,000

**ORDERING INFORMATION**

Product Family	Light Engine	Driver	Voltage	Distribution
<b>CRTK2=Caretaker</b>	<b>C013=1 LED, Approximately 30% Output</b> <b>C015=1 LED, Approximately 50% Output</b> <b>C016=1 LED, Approximately 60% Output</b> <b>C018=1 LED, Approximately 80% Output</b> <b>C01=1 LED, Full Output</b> <b>C01H=1 LED, High Lumen Output</b>	<b>D=Dimming (0-10V)</b> <b>5LTD=DALI</b>	<b>U=Universal (120-277V)</b>	<b>T2=Type II</b> <b>T3=Type III</b> <b>T5R=Type V Round</b>
<b>Options (Add as Suffix)</b>		<b>Color</b>	<b>Accessories (Order Separately)</b>	
<b>7030=70 CRI / 3000K</b> <b>7050=70 CRI / 5000K</b> <b>8027=80 CRI / 2700K</b> <b>SR=Small Acrylic Refractor (Factory Installed)</b> <b>TSR=Tool-less Small Acrylic Refractor (Factory Installed)</b> <b>U0=Zero Uplight Shield<sup>1</sup></b> <b>TH=Tool-less Door Hardware</b> <b>4N7= NEMA 7-PIN Photocontrol Receptacle</b> <b>S=Shorting Cap</b> <b>MSP/DIM-L30=Integrated Sensor for Dimming Operation, 12' - 30' Mounting Height<sup>2,3</sup></b> <b>10K=10kV UL 1449 Surge Protection Device</b> <b>10MSP=10kV MOV Surge Protection Device</b> <b>20K=20kV UL 1449 Surge Protection Device</b> <b>20MSP=20kV MOV Surge Protection Device</b> <b>CC=Coastal Construction<sup>4</sup></b> <b>V=(3) 5' #14 External Leads</b> <b>B18=18" Wood Pole Pipe Arm</b> <b>B24=24" Wood Pole Pipe Arm</b> <b>WPBKT=Wall or Pole Mounting Bracket</b> <b>5=120V NEMA Photocontrol Included<sup>8</sup></b>		<b>A=Raw Aluminum</b> <b>AP=Grey</b>  <div style="border: 1px solid red; padding: 5px; display: inline-block;"> <b>10X = 10 year warranty</b> </div>	<b>RMARROA5=ANSI/NEMA Standard Refractor Assembly</b> <b>SR-CARETAKER=Small Acrylic Refractor</b> <b>U0-XX=Zero Uplight Shield<sup>5</sup></b> <b>LLPC=Long-life Photocontrol</b> <b>LLPC-FO=Long-life Photocontrol (Fail Off)</b> <b>HSS-CRTK2=Field Install House Side Shield<sup>6</sup></b> <b>DS-HSS-CRTK2=Drop Shield House Side Shield</b> <b>OA1226=10kV Surge Module Replacement</b> <b>OA/RA1013=Shorting Cap</b> <b>ISHH-01=Integrated Sensor Programming Remote<sup>7</sup></b> <b>HS-VERD=Verdeon House Side Shield<sup>8</sup></b> <b>VGS-F/B=Vertical Glare Shield, Front/Back</b> <b>VGS-SIDE=Vertical Glare Shield, Side</b> <b>FS-XX=Fluted Decorative Shield<sup>5</sup></b> <b>HB-XX=Hillbrook Bell Decorative Shield<sup>5</sup></b> <b>TSR-CARETAKER=Tool-less Small Acrylic Refractor</b> <b>B30=30" Wood Pole Pipe Arm</b> <b>B18PK=18" Wood Pole Pipe Arm</b> <b>B24PK=24" Wood Pole Pipe Arm</b> <b>B30PK=30" Wood Pole Pipe Arm</b>	

**NOTE:**

1. U0 option not offered with SR option.
2. Integrated Sensor not available with 10K or 20K options or 5LTD driver.
3. MSP option in conjunction with C01H or C01 Light Engine only suitable up to 30°C ambient. All other Light Engines only suitable up to 35°C ambient.
4. Anti-corrosion treatment on external components, external screws/mounting bolts, and standard pipe clamp.
5. Replace XX with color.
6. Not for use on T5R optical distribution.
7. This tool enables adjustment to parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information.
8. 120V input voltage only required.



Project		Catalog #		Type	
Prepared by		Notes		Date	



# Streetworks

## Archeon Nano

Roadway Luminaire

### Product Features



### Product Certifications



### Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Energy and Performance Data page 3

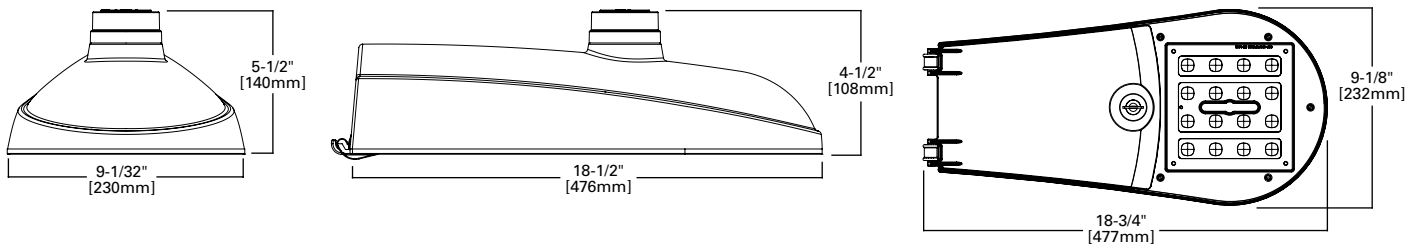
### Quick Facts

- Up to 164 lumens per watt
- Five optical distributions (Type II, III, IV and V)
- Multiple lumen packages ranging from 2,000 - 7,800 delivered lumens
- 4000K CCT standard, optional 2700K CCT, 3000K CCT, 5000K CCT

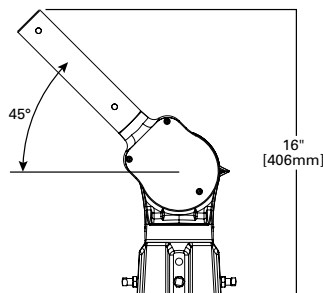
### Connected Systems

- WaveLinX
- Enlighted

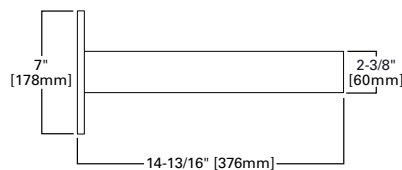
### Dimensional Details



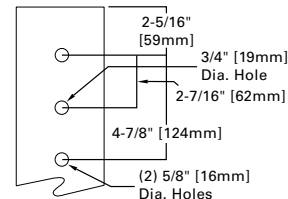
#### Adjustable Slipfitter Offset Arm



#### 15" Straight Arm



#### Type "M" - Drilling Pattern



## Ordering Information

SAMPLE ORDER NUMBER: ARCH-N-PA1-20-D-U-T2R-A15-AP

Product Family <sup>1,2</sup>	Configuration	Wattage Bucket	Color Temperature	Voltage	Distribution	Finish
<b>ARCH-N=Archeon Nano</b>	<b>PA1=Direct Mount Rectangle (16 LED)</b>	<b>10</b> <b>19</b> <b>20</b> <b>30</b> <b>40</b> <b>50</b> <b>60</b>	<b>722=70CRI, 2200K</b> <b>727=70CRI, 2700K</b> <b>730=70CRI, 3000K</b> <b>735=70CRI, 3500K</b> <b>740=70CRI, 4000K</b> <b>750=70CRI, 5000K</b> <b>827=80CRI, 2700K <sup>4</sup></b>	<b>U=Universal (120- 277V)</b> <b>8=480V <sup>3</sup></b> <b>9=347V</b> <b>H=High Voltage Driver (347V-480V) <sup>9</sup></b>	<b>T2R=Type II Roadway</b> <b>T2U=Type II Urban</b> <b>T3=Type III</b> <b>T4W=Type IV Wide</b> <b>5WQ=Type V Square Wide</b>	<b>AP=Grey</b> <b>BZ=Bronze</b> <b>BK=Black</b> <b>DP=Dark Platinum</b> <b>GM=Graphite Metallic</b> <b>WH=White</b>
Options (Add as Suffix)				Controls		
<b>10K=10kV UL 1449 Surge Protective Device</b> <b>20K=Series 20kV UL 1449 Surge Protective Device<sup>17</sup></b> <b>10MSP=10kV MOV Surge Protective Device</b> <b>20MSP=20kV MOV Surge Protective Device</b> <b>K=Level Indicator</b> <b>HA=50°C High Ambient Temperature</b> <b>HSS=House Side Shield<sup>10</sup></b> <b>PSC=Photocontrol Shorting Cap<sup>11</sup></b> <b>NPC=NEMA Photocontrol<sup>11,12</sup></b> <b>LLPC=Longlife Photocontrol Included<sup>11,12</sup></b> <b>IP66=IP66 Rated Housing</b> <b>ZD=DALI-enabled 4-PIN Twistlock Receptacle<sup>23,24</sup></b> <b>ZW=WaveLinX-enabled 4-PIN Twistlock Receptacle<sup>21,22</sup></b> <b>SWPD4XX=WaveLinX Wireless Sensor, 7' - 15' Mounting Height<sup>23,24,25,26</sup></b> <b>SWPD5XX=WaveLinX Wireless Sensor, 15' - 40' Mounting Height<sup>23,24,25,26</sup></b> <b>CC=Coastal Construction<sup>28</sup></b>		<b>FADC=Field Adjustable Dimming Controller<sup>27</sup></b> <b>A15=15" Straight Mast Arm</b> <b>ASJS15=Adjustable Slipfitter (Factory set at 15° degrees)</b> <b>ASJS25=Adjustable Slipfitter (Factory set at 25° degrees)</b> <b>ASJS45=Adjustable Slipfitter (Factory set at 45° degrees)</b>		<b>PR=NEMA 3-PIN Twistlock Photocontrol Receptacle<sup>6</sup></b> <b>PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle</b> <b>SLTD=DALI<sup>12,15,18</sup></b> <b>SPB1=Dimming Occupancy Sensor with Bluetooth Interface, &lt;8' Mounting<sup>29</sup></b> <b>SPB2=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting<sup>29</sup></b> <b>SPB4=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting<sup>29</sup></b> <b>MS/DIM-L08=Motion Sensor for Dimming Operation, Maximum 8' Mounting Height<sup>12,13</sup></b> <b>MS/DIM-L20=Motion Sensor for Dimming Operation, 9'-20' Mounting Height<sup>12,13</sup></b> <b>MS/DIM-L40=Motion Sensor for Dimming Operation, 21'-40' Mounting Height<sup>12,13</sup></b>		
<div style="border: 1px solid red; padding: 5px; display: inline-block;"> <b>10X = 10 year warranty</b> </div>						
Accessories (Order Separately)						
<b>OA / RA1013=Photocontrol Shorting Cap</b> <b>OA1223=10kV Surge Module Replacement</b> <b>OA/RA1014=NEMA Photocontrol - 120V <sup>11</sup></b> <b>OA/RA1016=NEMA Photocontrol - Multi-Tap <sup>11</sup></b> <b>OA/RA1027=NEMA Photocontrol - 480V <sup>11</sup></b> <b>OA/RA1201=NEMA Photocontrol - 347V <sup>11,20</sup></b> <b>HS-ARCHN=Field Install ARCHN House Side Shield<sup>10</sup></b>		<b>FSIR-100=Wireless Configuration Tool for Occupancy Sensor<sup>14</sup></b> <b>A15-XX=Arm (15" Straight Arm)<sup>7,8</sup></b> <b>ASJS15-XX=Adjustable slipfitter (Factory set at 15 degrees)<sup>8</sup></b> <b>ASJS25-XX=Adjustable slipfitter (Factory set at 25 degrees)<sup>8</sup></b> <b>ASJS45-XX=Adjustable slipfitter (Factory set at 45 degrees)<sup>8</sup></b> <b>SWPD4-XX=WaveLinX Wireless Sensor, 7' - 15' Mounting Height<sup>23,24,25,26</sup></b> <b>SWPD5-XX=WaveLinX Wireless Sensor, 15' - 40' Mounting Height<sup>23,24,25,26</sup></b>				
<b>NOTES:</b> 1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information. 2. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. 3. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems). 4. Use dedicated IES files for 2700K, 3000K, and 5000K when performing layouts. These files are published on the ARCH Archeon luminaire product page on the website. 5. Extended lead times may apply. 6. If "PR" selected, dimming functionality not available, dimming leads will be capped. 7. Round pole adapter and mounting hardware included. "M" drill pattern. 8. Replace XX with color designation. 9. Only available with 50W and 60W skus. 10. Not available with 5WQ. 11. Requires ordering of a twistlock photocontrol (3-PIN or 7-PIN) receptacle (PR or PR7). 12. Not available with "H" High Voltage Driver. 13. The FSIR-100 accessory is required to adjust parameters. 14. This tool enables adjustment of parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information. 15. Not available for 10W. 16. Not available for 50 or 60 watts. 17. Only available with "U" universal voltage. 18. Not available with any sensor options. 19. Extended lead times may apply. 20. Not compatible with Surge options when used with "H" High Voltage Driver. 21. Utilizes internal step-down transformer when 347V or 480V is selected. 22. Controls system is not available with photocontrol (BPC), photocontrol receptacle (PR or PR7), or other controls systems (MS, ZD, ZW, LWR, DALI, or DIM). 23. Requires 4-PIN twistlock receptacle (ZD or ZW) option. 24. Replace XX with sensor color (WH, BZ or BK). 25. Sensor passive infrared (PIR) may be overly sensitive with operating below -20°C (-4°F). 26. For this device to be field-configurable, requires WAC Gateway components WAC-PoE and WPOE-120 in appropriate quantities. Only compatible with WaveLinX system and software and requires system components to be installed for operation. See website for more WaveLinX application information. 27. Cannot be used with motion response control options. 28. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. 29. Smart device with Sensor Configuration mobile application by Wattstopper required to change system defaults.						

## Product Specifications

### Construction

- Heavy-duty die-cast aluminum housing and door
- Tool-less entry, hinged removable door for easy maintenance
- 3G vibration rated
- Optics Choice of four patented, high efficiency AccuLED Optics; Available in Type IIR, III, IV wide and V square wide the optics are precisely designed to shape the distribution maximizing efficiency and application spacing; Offered standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 2700K,3000K, or 5000K CCT
- For the ultimate level of spill light control, an optional house side shield accessory is available and can be field or factory installed; The house side shield is designed to seamlessly integrate with the T2R, T3, and T4W optics
- Optics are IP66 enclosure rated

### Electrical

- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation
- Standard 0-10V dimming
- 10kV/10kA common- and differential- mode surge protection available

- Thermal management transfers heat away from the LED source for optimal efficiency, light output and lumen maintenance
- Ambient operating temperature from -40°C to 40°C; 50°C HA, high ambient, capability available
- Standard with three-position tunnel type compression terminal block
- Greater than 90% lumen maintenance expected at 60,000 hours
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected.

### Mounting

- Two-bolt/one-bracket slipfitter with cast-in pipe stop and 2.5" leveling steps
- Fixed-in-place bird guard seals around 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) mounting arms
- Optional 15" pole mount arm available with round pole adapter and mounting hardware included

### Finish

- Housing and cast parts finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear
- Consult your lighting representative at Cooper Lighting Solutions for a complete selection of standard colors

### Shipping Data

- Approximate Net Weight: 12 lbs. (5.4 kgs.)
- Effective Projected Area: 0.35 (Sq. Ft.)

### Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/legal
- Optional ten-year warranty, please see your Cooper Lighting Solutions Streetworks sales representative for more information

## Energy and Performance Data

 [View Archeon Nano IES files](#)

### Power and Lumens

Light Engine - PA	10	19	20	30	40	50	60	
Power (Watts)	14	19	24	31	41	52	62	
Label	10	20	20	30	40	50	60	
Input current @ 120V (A)	0.117	0.159	0.201	0.261	0.344	0.438	0.521	
Input current @ 277V (A)	0.056	0.074	0.098	0.121	0.155	0.212	0.244	
Input current @ 347V (A)	0.045	0.065	0.080	0.100	0.127	0.173	0.200	
Input current @ 480V (A)	0.037	0.047	0.058	0.072	0.093	0.126	0.147	
Optics								
T2R	4000K/5000K Lumens	2267	3041	3444	4429	5594	6850	7706
	Bug Rating	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	3000K Lumens	2065	2770	3137	4034	5095	6238	7018
	Bug Rating	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1
T2U	4000K/5000K Lumens	2,246	3,013	3,413	4,388	5,543	6,787	7,635
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	3000K Lumens	2,046	2,744	3,108	3,997	5,048	6,181	6,953
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2
T3	4000K/5000K Lumens	2246	3012	3411	4387	5541	6784	7632
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	3000K Lumens	2045	2743	3107	3995	5046	6179	6951
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
T4W	4000K/5000K Lumens	2245	3012	3411	4386	5540	6783	7631
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
	3000K Lumens	2045	2743	3106	3994	5045	6178	6950
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
5WQ	4000K/5000K Lumens	2302	3088	3497	4497	5680	6955	7824
	Bug Rating	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2
	3000K Lumens	2096	2812	3185	4095	5173	6334	7125
	Bug Rating	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2

### Lumen Maintenance

Light Engine	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
PA1	Up to 50°C	> 95%	416,000

### FADC Settings

FADC Position	Percent of Typical Lumen Output
1	25%
2	48%
3	56%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: +/-5% typical value

### Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

<b>Project</b>	PEC	<b>Catalog #</b>	ARCH-S-PA1-100-730-U-5WQ-AP-20MS P-PR7-5LTD-10X	<b>Type</b>	
<b>Prepared by</b>	Bob Ebbert	<b>Notes</b>		<b>Date</b>	6-10-2021



# Streetworks

## Archeon Small

Roadway Luminaire

### Product Features



### Product Certifications



### Interactive Menu

- Ordering Information [page 2](#)
- Product Specifications [page 2](#)
- Energy and Performance Data [page 3](#)

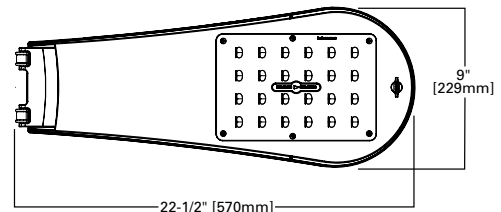
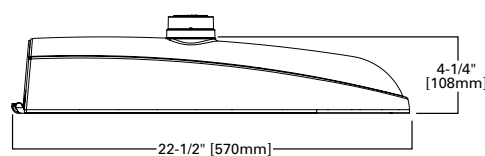
### Quick Facts

- Die-cast aluminum construction; Single latch tool-less entry
- Replaces up to 200W equivalent HID; -40°C to 40°C operating range
- Pole-mounted; Optional arm and offset adjustable arm mounting
- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation; IP66 rated

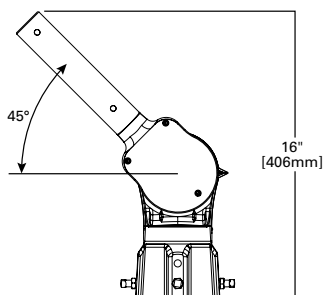
### Connected Systems

- WaveLinX
- Enlighted

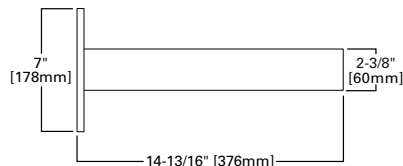
### Dimensional Details



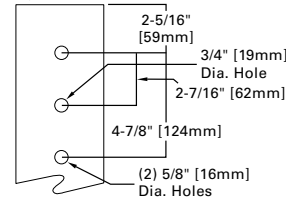
#### Adjustable Slipfitter Offset Arm



#### 15" Straight Arm



#### Type "M" - Drilling Pattern



## Ordering Information

SAMPLE ORDER NUMBER: ARCH-S-PA1-20-740-U-T2R-A15-AP-10K-PR

Product Family <sup>1,2</sup>	Light Engine	Wattage Bucket	Color Temperature	Voltage	Distribution	Mounting	Finish
<b>ARCH-S=Archeon Small</b>	<b>PA1=Direct Mount Rectangle (24 LED)</b>	20 30 40 50 60 70 80 90 100	722=70CRI, 2200K 727=70CRI, 2700K <b>730=70CRI, 3000K</b> 735=70CRI, 3500K 740=70CRI, 4000K 750=70CRI, 5000K 827=80CRI, 2700K <sup>4</sup> AMB=Amber 590nm <sup>16,17</sup>	<b>U=Universal</b> 8=480V <sup>2,3</sup> 9=347V <sup>2</sup>	<b>T2R=Type II Roadway</b> <b>T2U=Type II Urban</b> T3=Type III <b>T4W=Type IV Wide</b> <b>5WQ=Type V Square Wide</b>	[Blank]=None A15=15" Straight Mast Arm <b>ASJS15=Adjustable Slipfitter</b> (Factory set at 15° degrees) <sup>9</sup> <b>ASJS25=Adjustable Slipfitter</b> (Factory set at 25° degrees) <sup>9</sup> <b>ASJS45=Adjustable Slipfitter</b> (Factory set at 45° degrees) <sup>9</sup>	<b>AP=Grey</b> <b>BZ=Bronze</b> <b>BK=Black</b> <b>DP=Dark Platinum</b> <b>WH=White</b>
<b>Options (Add as Suffix)</b>				<b>Controls</b>			
10K=Series 10kV UL 1449 Surge Protective Device 20K=Series 20kV UL 1449 Surge Protective Device 20KI=Series 20kV UL 1449 Surge Protective Device with light indicator 10MSP=Parallel 10kV MOV Surge Protective Device 20MSP=Parallel 20kV MOV Surge Protective Device K=Level Indicator HA=50°C High Ambient Temperature <sup>6</sup> HSS=Factory Install House Side Shield <sup>7</sup> PSC=Photocontrol Shorting Cap NPC=NEMA Photocontrol - Multi-Tap LLPC=Longlife Photocontrol Included FADC=Field Adjustable Dimming Controller <sup>18</sup> CC=Coastal Construction <sup>19</sup>				PR=NEMA 3-PIN Twistlock Photocontrol Receptacle <sup>5</sup> <b>PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle</b> SLTD=DALI SPB1=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting <sup>20</sup> SPB2=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting <sup>20</sup> SPB4=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting <sup>20</sup> ZD=DALI-enabled 4-PIN Twistlock Receptacle <sup>10,11</sup> ZW=WaveLinx-enabled 4-PIN Twistlock Receptacle <sup>10,11</sup> SWPD4XX=WaveLinx Wireless Sensor, 7' - 15' Mounting Height <sup>12,13,14,15</sup> SWPD5XX=WaveLinx Wireless Sensor, 15' - 40' Mounting Height <sup>12,13,14,15</sup>			
<b>Accessories (Order Separately) <sup>17</sup></b>							
OA / RA1013=Photocontrol Shorting Cap OA/RA1201=NEMA Photocontrol - 347V OA1223=10kV Surge Module Replacement OA/RA1014=NEMA Photocontrol - 120V OA/RA1016=NEMA Photocontrol - Multi-Tap OA/RA1027=NEMA Photocontrol - 480V			OA/RA1201=NEMA Photocontrol - 347V A15-XX=Arm (15" Straight Arm) <sup>8,9</sup> ASJS15-XX=Adjustable slipfitter (Factory set at 15 degrees) <sup>9</sup> ASJS25-XX=Adjustable slipfitter (Factory set at 25 degrees) <sup>9</sup> ASJS45-XX=Adjustable slipfitter (Factory set at 45 degrees) <sup>9</sup> HS-ARCH-24=Field Install ARCH House Side Shield			VGS-ARCH=Short Vertical Drop Shield VGL-ARCH=Long Vertical Drop Shield SWPD4-XX=WaveLinx Wireless Sensor, 7' - 15' Mounting Height <sup>12,13,14,15</sup> SWPD5-XX=WaveLinx Wireless Sensor, 15' - 40' Mounting Height <sup>12,13,14,15</sup>	
<b>NOTES:</b> 1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information. 2. Not available with PA1-20. 3. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems). 4. Extended lead times may apply. 5. If "PR" selected, dimming functionality not available, dimming leads will be capped. 6. Option not available with PA1-90 or PA1-100. 7. HS-ARCH not available with 5WQ and T2U distribution. 8. Round pole adapter and mounting hardware included. "M" drill pattern. 9. Replace XX with color designation. 10. Utilizes internal step-down transformer when 347V or 480V is selected. 11. Controls system is not available with photocontrol (BPC), photocontrol receptacle (PR or PR7), or other controls systems (MS,ZD, ZW, LWR, DALI, or DIM). 12. Requires 4-PIN twistlock receptacle (ZD or ZW) option. 13. Replace XX with sensor color (WH, BZ or BK). 14. Sensor passive infrared (PIR) may be overly sensitive with operating below -20°C (-4°F). 15. For this device to be field-configurable, requires WAC Gateway components WAC-PoE and WPOE-120 in appropriate quantities. Only compatible with WaveLinx system and software and requires system components to be installed for operation. See website for more WaveLinx application information. 16. Not available with HA option. 17. Amber 590nm +/-5nm for wildlife and observatory use. Supplied in PA1 30 wattage bucket only. 18. Cannot be used with motion response control options. 19. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. 20. Smart device with Sensor Configuration mobile application by Wattstopper required to change system defaults.							

10X = 10 year warranty

## Product Specifications

### Construction

- Heavy-duty die-cast aluminum housing and door
- Tool-less entry, hinged removable door for easy maintenance
- 3G vibration rated

### Optics

- Choice of four patented, high efficiency AccuLED Optics
- Available in Type IIR, IIU, III, IV wide and V square wide the optics are precisely designed to shape the distribution maximizing efficiency and application spacing
- Offered standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 2200K, 2700K, 3000K, and 5000K CCT
- For the ultimate level of spill light control, an optional house side shield accessory is available and can be field or factory installed
- Optics are IP66 enclosure rated
- IDA Certified for 3000K CCT and warmer only.

### Electrical

- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation
- Standard 0-10V dimming
- 10kV/10kA common- and differential- mode surge protection available

- Ambient operating temperature from -40°C to 40°C; 50°C HA, high ambient, capability available
- Standard with three position tunnel type compression terminal block
- Greater than 98% lumen maintenance expected at 60,000 hours
- Replaces 50W to 150W HID
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected.

### Mounting

- Two-bolt/one-bracket slipfitter with cast-in pipe stop and 2.5" leveling steps
- Fixed-in-place bird guard seals around 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) mounting arms
- Optional 15" pole mount arm available with round pole adapter and mounting hardware included

### Finish

- Housing and cast parts finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear
- Consult your lighting representative at Cooper Lighting Solutions for a complete selection of standard colors

### Shipping Data

- Approximate Net Weight: 12 lbs. (5.4 kgs.)
- Effective Projected Area: 0.5 (Sq. Ft.)

### Warranty

- Five year limited warranty, consult website for details. [www.cooperlighting.com/legal](http://www.cooperlighting.com/legal)
- Optional ten-year warranty, please see your Cooper Lighting Solutions Streetworks sales representative for more information

## Energy and Performance Data

 [View Archeon Small IES files](#)

### Power and Lumens (PA1 Light Engine)

Light Engine - PA1	PA1-20	PA1-30	PA1-40	PA1-50	PA1-60	PA1-70	PA1-80	PA1-90	PA1-100	
Power (Watts)	21	31	40	54	64	74	83	94	96	
Wattage Label	20	30	40	50	60	70	80	90	100	
Input Current @ 120V (A)	0.179	0.257	0.338	0.450	0.534	0.619	0.695	0.783	0.798	
Input Current @ 277V (A)	--	0.122	0.155	0.212	0.244	0.279	0.312	0.347	0.354	
Input Current @ 347V (A)	--	0.100	0.125	0.161	0.187	0.217	0.244	0.275	0.280	
Input Current @ 480V (A)	--	0.073	0.094	0.127	0.145	0.165	0.184	0.205	0.209	
<b>Optics</b>										
<b>T2R</b>	4000K/5000K Lumens	3,398	4,756	6,137	7,912	9,083	10,127	10,942	11,729	11,850
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2
	3000K Lumens	3,094	4,331	5,588	7,206	8,271	9,223	9,966	10,681	10,791
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2
<b>T2U</b>	4000K/5000K Lumens	3,385	4,739	6,114	7,884	9,052	10,091	10,905	11,688	11,809
	Bug Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3
	3000K Lumens	3,084	4,316	5,568	7,180	8,243	9,189	9,930	10,644	10,755
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
<b>T3</b>	4000K/5000K Lumens	3,378	4,729	6,102	7,868	9,033	10,071	10,882	11,664	11,785
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
	3000K Lumens	3,077	4,307	5,558	7,165	8,226	9,172	9,911	10,623	10,732
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
<b>T4W</b>	4000K/5000K Lumens	3,357	4,700	6,062	7,819	8,976	10,006	10,813	11,591	11,710
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	3000K Lumens	3,058	4,280	5,521	7,121	8,175	9,112	9,847	10,554	10,665
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3
<b>5WQ</b>	4000K/5000K Lumens	3,452	4,832	6,234	8,040	9,230	10,291	11,120	11,918	12,042
	Bug Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	3000K Lumens	3,144	4,401	5,678	7,322	8,406	9,372	10,127	10,854	10,967
	Bug Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2

### Lumen Maintenance

Light Engine	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
PA1	40°C	98%	> 800,000 @ 40°C

### FADC Settings

FADC Position	Percent of Typical Lumen Output
1	25%
2	46%
3	55%
4	62%
5	72%
6	77%
7	82%
8	85%
9	90%
10	100%

Note: +/-5% typical value

### Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97



<b>Project</b>	PEC	<b>Catalog #</b>	ARCH-S-PA1-100-730-U-T3-AP-20MSP-PR7-5LTD-10X	<b>Type</b>	
<b>Prepared by</b>	Bo	<b>Notes</b>		<b>Date</b>	6-10-2021



# Streetworks

## Archeon Small

Roadway Luminaire

### Product Features



### Product Certifications



### Interactive Menu

- Ordering Information [page 2](#)
- Product Specifications [page 2](#)
- Energy and Performance Data [page 3](#)

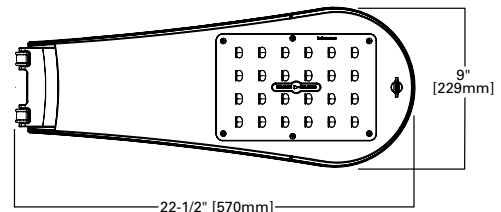
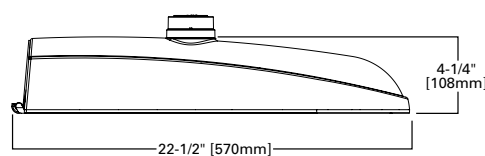
### Quick Facts

- Die-cast aluminum construction; Single latch tool-less entry
- Replaces up to 200W equivalent HID; -40°C to 40°C operating range
- Pole-mounted; Optional arm and offset adjustable arm mounting
- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation; IP66 rated

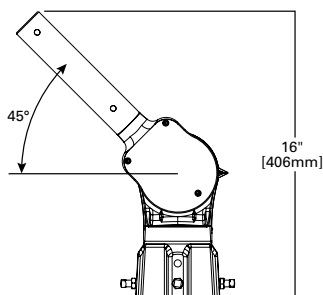
### Connected Systems

- WaveLinX
- Enlighted

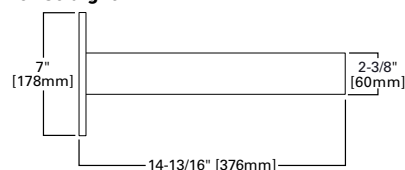
### Dimensional Details



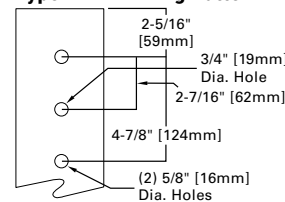
#### Adjustable Slipfitter Offset Arm



#### 15" Straight Arm



#### Type "M" - Drilling Pattern



## Ordering Information

SAMPLE ORDER NUMBER: ARCH-S-PA1-20-740-U-T2R-A15-AP-10K-PR

Product Family <sup>1,2</sup>	Light Engine	Wattage Bucket	Color Temperature	Voltage	Distribution	Mounting	Finish
<b>ARCH-S=Archeon Small</b>	<b>PA1=Direct Mount Rectangle (24 LED)</b>	20 30 40 50 60 70 80 90 <b>100</b>	722=70CRI, 2200K 727=70CRI, 2700K <b>730=70CRI, 3000K</b> 735=70CRI, 3500K 740=70CRI, 4000K 750=70CRI, 5000K 827=80CRI, 2700K <sup>4</sup> AMB=Amber 590nm <sup>16,17</sup>	<b>U=Universal</b> 8=480V <sup>2,3</sup> 9=347V <sup>2</sup>	<b>T2R=Type II Roadway</b> <b>T2U=Type II Urban</b> <b>T3=Type III</b> <b>T4W=Type IV Wide</b> <b>5WQ=Type V Square Wide</b>	[Blank]=None A15=15" Straight Mast Arm <b>ASJS15=Adjustable Slipfitter</b> (Factory set at 15° degrees) <sup>9</sup> <b>ASJS25=Adjustable Slipfitter</b> (Factory set at 25° degrees) <sup>9</sup> <b>ASJS45=Adjustable Slipfitter</b> (Factory set at 45° degrees) <sup>9</sup>	<b>AP=Grey</b> <b>BZ=Bronze</b> <b>BK=Black</b> <b>DP=Dark Platinum</b> <b>WH=White</b>
Options (Add as Suffix)				Controls			
<p>10K=Series 10kV UL 1449 Surge Protective Device 20K=Series 20kV UL 1449 Surge Protective Device 20KI=Series 20kV UL 1449 Surge Protective Device with light indicator 10MSP=Parallel 10kV MOV Surge Protective Device 20MSP=Parallel 20kV MOV Surge Protective Device K=Level Indicator HA=50°C High Ambient Temperature <sup>6</sup> HSS=Factory Install House Side Shield <sup>7</sup> PSC=Photocontrol Shorting Cap NPC=NEMA Photocontrol - Multi-Tap LLPC=Longlife Photocontrol Included FADC=Field Adjustable Dimming Controller <sup>18</sup> CC=Coastal Construction <sup>19</sup></p> <div style="border: 1px solid red; padding: 5px; display: inline-block; margin-top: 10px;">10X = 10 year warranty</div>				<p>PR=NEMA 3-PIN Twistlock Photocontrol Receptacle <sup>5</sup> <b>PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle</b> <b>SLTD=DALI</b> SPB1=Dimming Occupancy Sensor with Bluetooth Interface, &lt;8' Mounting <sup>20</sup> SPB2=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting <sup>20</sup> SPB4=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting <sup>20</sup> ZD=DALI-enabled 4-PIN Twistlock Receptacle <sup>10,11</sup> ZW=WaveLinx-enabled 4-PIN Twistlock Receptacle <sup>10,11</sup> <b>SWPD4XX=WaveLinx Wireless Sensor, 7' - 15' Mounting Height</b> <sup>12,13,14,15</sup> <b>SWPD5XX=WaveLinx Wireless Sensor, 15' - 40' Mounting Height</b> <sup>12,13,14,15</sup></p>			
Accessories (Order Separately) <sup>17</sup>							
<p><b>OA / RA1013=Photocontrol Shorting Cap</b> <b>OA/RA1201=NEMA Photocontrol - 347V</b> <b>OA1223=10kV Surge Module Replacement</b> <b>OA/RA1014=NEMA Photocontrol - 120V</b> <b>OA/RA1016=NEMA Photocontrol - Multi-Tap</b> <b>OA/RA1027=NEMA Photocontrol - 480V</b></p>		<p><b>OA/RA1201=NEMA Photocontrol - 347V</b> <b>A15-XX=Arm (15" Straight Arm)</b> <sup>8,9</sup> <b>ASJS15-XX=Adjustable slipfitter</b> (Factory set at 15 degrees) <sup>9</sup> <b>ASJS25-XX=Adjustable slipfitter</b> (Factory set at 25 degrees) <sup>9</sup> <b>ASJS45-XX=Adjustable slipfitter</b> (Factory set at 45 degrees) <sup>9</sup> <b>HS-ARCH-24=Field Install ARCH House Side Shield</b></p>		<p><b>VGS-ARCH=Short Vertical Drop Shield</b> <b>VGL-ARCH=Long Vertical Drop Shield</b> <b>SWPD4-XX=WaveLinx Wireless Sensor, 7' - 15' Mounting Height</b> <sup>12,13,14,15</sup> <b>SWPD5-XX=WaveLinx Wireless Sensor, 15' - 40' Mounting Height</b> <sup>12,13,14,15</sup></p>			
<p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information.</li> <li>Not available with PA1-20.</li> <li>Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).</li> <li>Extended lead times may apply.</li> <li>If "PR" selected, dimming functionality not available, dimming leads will be capped.</li> <li>Option not available with PA1-90 or PA1-100.</li> <li>HS-ARCH not available with 5WQ and T2U distribution.</li> <li>Round pole adapter and mounting hardware included. "M" drill pattern.</li> <li>Replace XX with color designation.</li> <li>Utilizes internal step-down transformer when 347V or 480V is selected.</li> <li>Controls system is not available with photocontrol (BPC), photocontrol receptacle (PR or PR7), or other controls systems (MS,ZD, ZW, LWR, DALI, or DIM).</li> <li>Requires 4-PIN twistlock receptacle (ZD or ZW) option.</li> <li>Replace XX with sensor color (WH, BZ or BK).</li> <li>Sensor passive infrared (PIR) may be overly sensitive with operating below -20°C (-4°F).</li> <li>For this device to be field-configurable, requires WAC Gateway components WAC-PoE and WPOE-120 in appropriate quantities. Only compatible with WaveLinx system and software and requires system components to be installed for operation. See website for more WaveLinx application information.</li> <li>Not available with HA option.</li> <li>Amber 590nm +/-5nm for wildlife and observatory use. Supplied in PA1 30 wattage bucket only.</li> <li>Cannot be used with motion response control options.</li> <li>Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654.</li> <li>Smart device with Sensor Configuration mobile application by Wattstopper required to change system defaults.</li> </ol>							

## Product Specifications

### Construction

- Heavy-duty die-cast aluminum housing and door
- Tool-less entry, hinged removable door for easy maintenance
- 3G vibration rated

### Optics

- Choice of four patented, high efficiency AccuLED Optics
- Available in Type IIR, IIU, III, IV wide and V square wide the optics are precisely designed to shape the distribution maximizing efficiency and application spacing
- Offered standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 2200K, 2700K, 3000K, and 5000K CCT
- For the ultimate level of spill light control, an optional house side shield accessory is available and can be field or factory installed
- Optics are IP66 enclosure rated
- IDA Certified for 3000K CCT and warmer only.

### Electrical

- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation
- Standard 0-10V dimming
- 10kV/10kA common- and differential- mode surge protection available

- Ambient operating temperature from -40°C to 40°C; 50°C HA, high ambient, capability available
- Standard with three position tunnel type compression terminal block
- Greater than 98% lumen maintenance expected at 60,000 hours
- Replaces 50W to 150W HID
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected.

### Mounting

- Two-bolt/one-bracket slipfitter with cast-in pipe stop and 2.5" leveling steps
- Fixed-in-place bird guard seals around 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) mounting arms
- Optional 15" pole mount arm available with round pole adapter and mounting hardware included

### Finish

- Housing and cast parts finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear
- Consult your lighting representative at Cooper Lighting Solutions for a complete selection of standard colors

### Shipping Data

- Approximate Net Weight: 12 lbs. (5.4 kgs.)
- Effective Projected Area: 0.5 (Sq. Ft.)

### Warranty

- Five year limited warranty, consult website for details. [www.cooperlighting.com/legal](http://www.cooperlighting.com/legal)
- Optional ten-year warranty, please see your Cooper Lighting Solutions Streetworks sales representative for more information



## Energy and Performance Data

 [View Archeon Small IES files](#)

### Power and Lumens (PA1 Light Engine)

Light Engine - PA1	PA1-20	PA1-30	PA1-40	PA1-50	PA1-60	PA1-70	PA1-80	PA1-90	PA1-100	
Power (Watts)	21	31	40	54	64	74	83	94	96	
Wattage Label	20	30	40	50	60	70	80	90	100	
Input Current @ 120V (A)	0.179	0.257	0.338	0.450	0.534	0.619	0.695	0.783	0.798	
Input Current @ 277V (A)	--	0.122	0.155	0.212	0.244	0.279	0.312	0.347	0.354	
Input Current @ 347V (A)	--	0.100	0.125	0.161	0.187	0.217	0.244	0.275	0.280	
Input Current @ 480V (A)	--	0.073	0.094	0.127	0.145	0.165	0.184	0.205	0.209	
<b>Optics</b>										
<b>T2R</b>	4000K/5000K Lumens	3,398	4,756	6,137	7,912	9,083	10,127	10,942	11,729	11,850
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2
	3000K Lumens	3,094	4,331	5,588	7,206	8,271	9,223	9,966	10,681	10,791
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2
<b>T2U</b>	4000K/5000K Lumens	3,385	4,739	6,114	7,884	9,052	10,091	10,905	11,688	11,809
	Bug Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3
	3000K Lumens	3,084	4,316	5,568	7,180	8,243	9,189	9,930	10,644	10,755
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
<b>T3</b>	4000K/5000K Lumens	3,378	4,729	6,102	7,868	9,033	10,071	10,882	11,664	11,785
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
	3000K Lumens	3,077	4,307	5,558	7,165	8,226	9,172	9,911	10,623	10,732
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
<b>T4W</b>	4000K/5000K Lumens	3,357	4,700	6,062	7,819	8,976	10,006	10,813	11,591	11,710
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	3000K Lumens	3,058	4,280	5,521	7,121	8,175	9,112	9,847	10,554	10,665
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3
<b>5WQ</b>	4000K/5000K Lumens	3,452	4,832	6,234	8,040	9,230	10,291	11,120	11,918	12,042
	Bug Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	3000K Lumens	3,144	4,401	5,678	7,322	8,406	9,372	10,127	10,854	10,967
	Bug Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2

### Lumen Maintenance

Light Engine	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
PA1	40°C	98%	> 800,000 @ 40°C

### FADC Settings

FADC Position	Percent of Typical Lumen Output
1	25%
2	46%
3	55%
4	62%
5	72%
6	77%
7	82%
8	85%
9	90%
10	100%

Note: +/-5% typical value

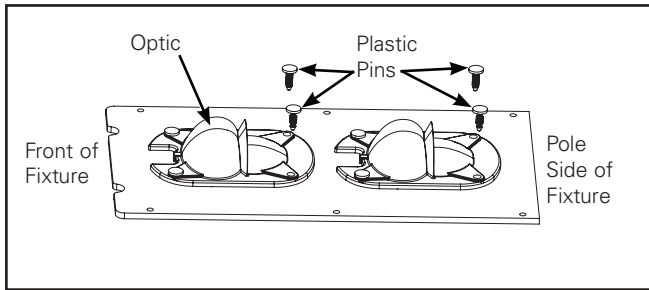
### Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

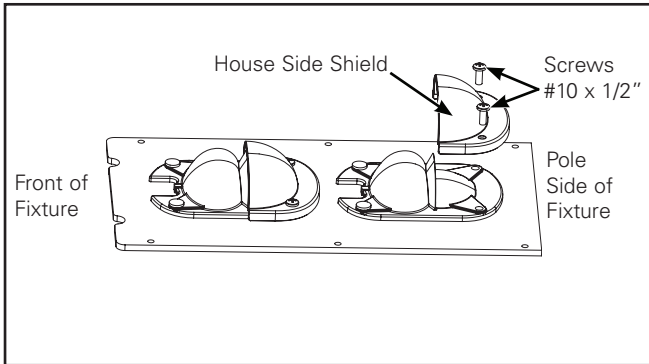


### **III. Light Shields**

## Shield Installation Instructions – Caretaker2



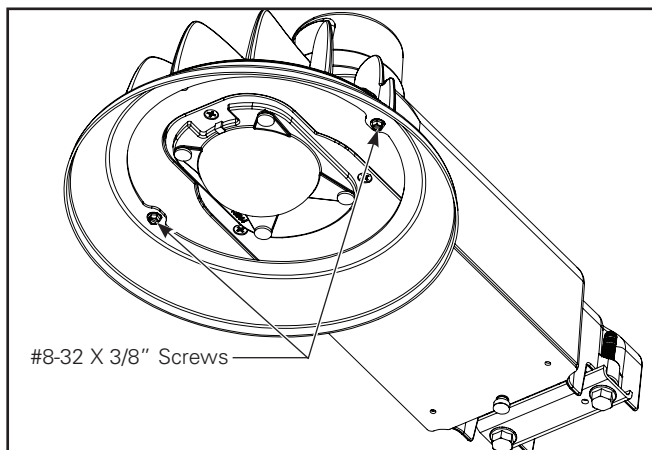
**Figure 9**



**Figure 10**



**Figure 11**



## HSS-CRTK2 Shield

### Tools required

#2 Phillips head screw driver and pliers.

### House Side Shield (Figure 9. and Figure 10.)

1. Remove plastic push pins on back side of optic. (Figure 9.)

**Note:** The optics are permanently secured to the fixture.

DO NOT try to remove the optics. The optics are not rotatable.

2. Install house side shield with provided #10 x 1/2" Phillips screws. Tighten until house side shield is snug. Do not over tighten.

**Note:** House side shield must ONLY be installed on the back side of the optics as shown in. DO NOT install on the other side of the optic. (Figure 10.) The CRTK2 has only one optic, not two as shown on Figures 9 and 10.



## U0 Shield

### Optional Zero Uplight Shield

**Tools Required:** 1/4" Socket or flathead screw driver.

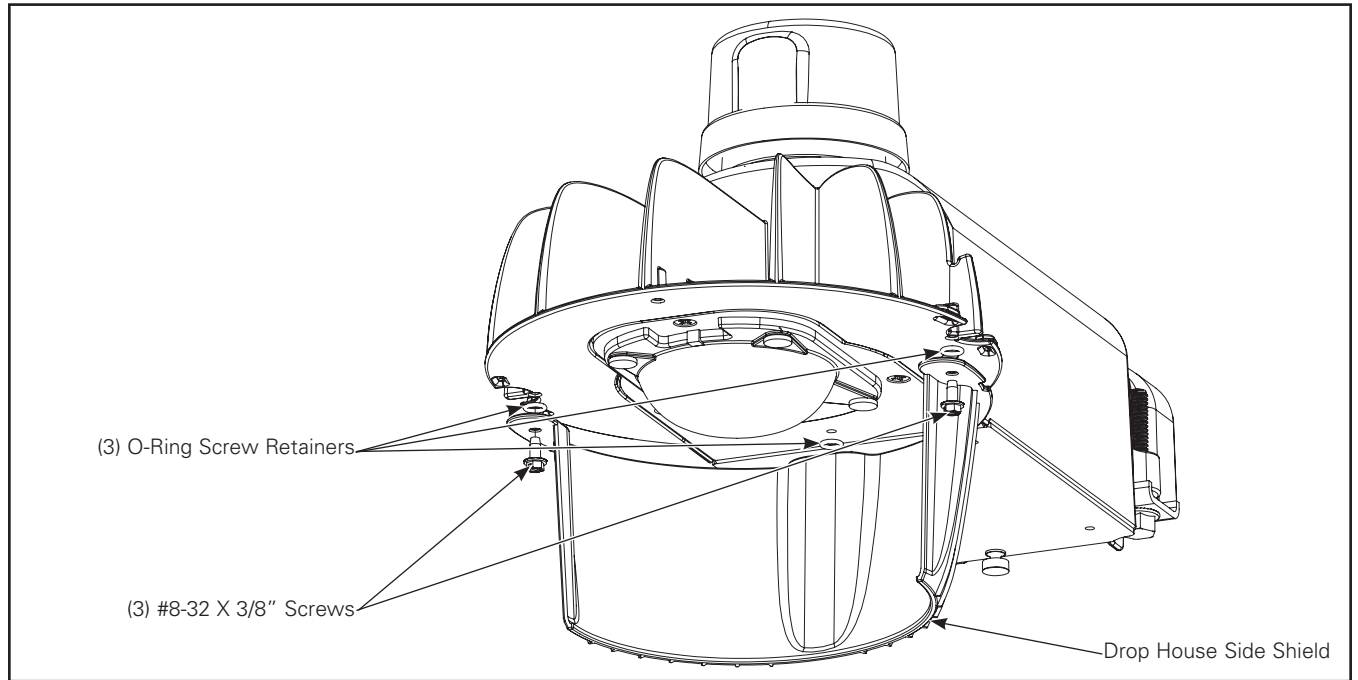
1. Insert provided thread forming screws into mounting holes. Tighten to 12-14 in-lbs. (Figure 11.)

**Optional Drop Shield House Side Shield**

**Tools Required:** 1/4" Socket or flathead screw driver.

1. Insert thread forming screws into house side shield mounting locations and place provided O-rings over screw threads to hold screws within House Side Shield. Install house side shield onto housing. (Figure 12.)

**Note:** There are four positions for the House Side Shield at 90° increments.



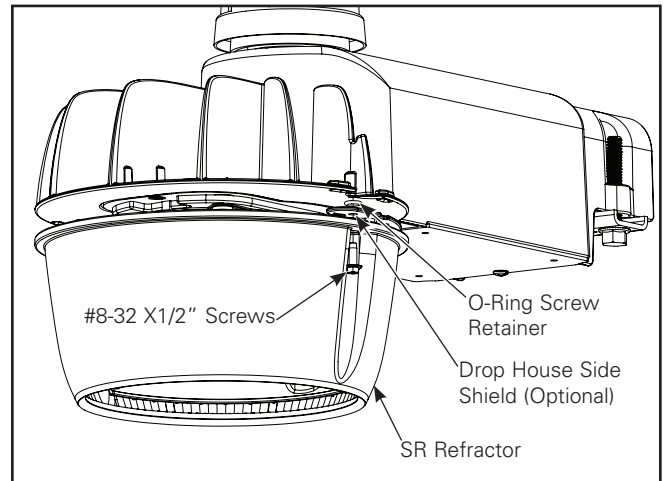
**Figure 12**

**Optional Drop Shield House Side Shield with SR Refractor**

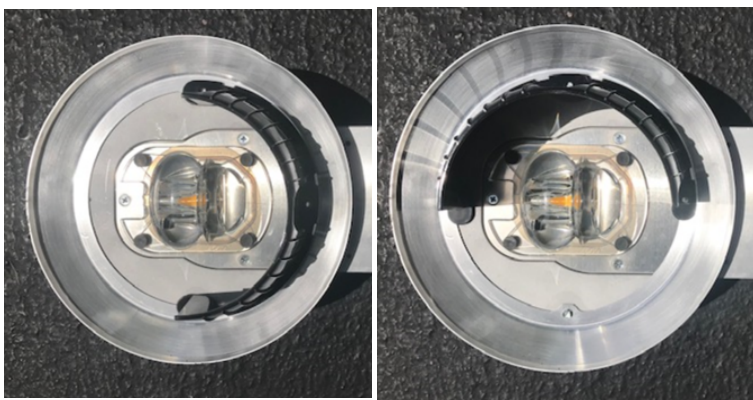
**Tools Required:** 1/4" socket or flathead screwdriver.

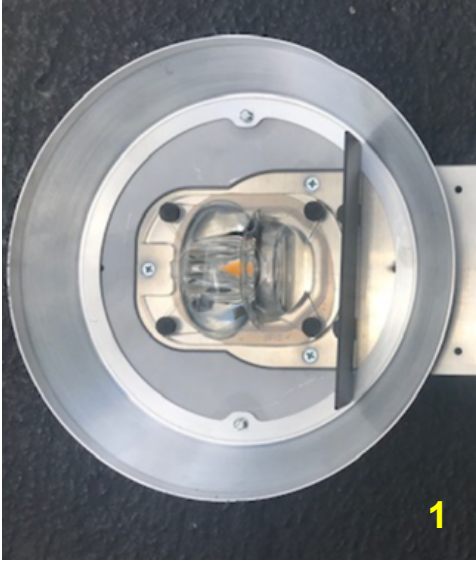
1. If using the Drop House Side Shield with the SR Refractor, slide the drop house side shield in the desired position within the SR refractor.
2. Insert provided thread forming screws into refractor and house side shield and place provided O-rings over screw threads to hold screws within Drop House Side Shield and SR Refractor.
3. Install SR refractor in the die-cast housing in the two side mounting locations. (Figure 13.)

**MAINTENANCE NOTE:** A regular maintenance schedule should be followed to retain optimal light output and thermal performance. Optical lens cleaning should be performed with a clean dry cloth to remove any dust or other contaminants. Additional cleaning can be performed with non-abrasive cleanser.

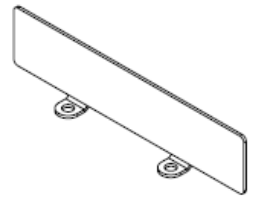


**Figure 13**





## VGS-F/B Vertical Glare Shield, Front / Back



### Tools required

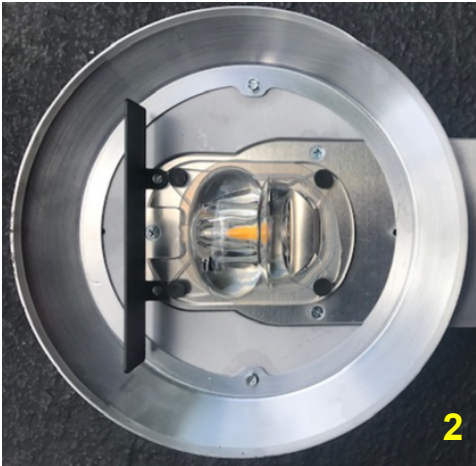
#2 Phillips head screw driver and pliers.

### Vertical Glare Shield, Front / Back (Figure 1. and Figure 2.)

1. Remove plastic push pins on back side of optic.

**Note:** The optics are permanently secured to the fixture.

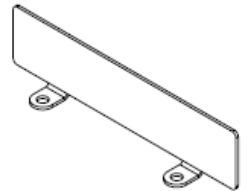
DO NOT try to remove the optics. The optics are not rotatable.



2. Install house side shield with provided #10 x 1/2" Phillips screws. Tighten until house side shield is snug. Do not over tighten.



## VGS-SIDE Vertical Glare Shield, Side



### Tools required

#2 Phillips head screw driver and pliers.

### Vertical Glare Shield, Side (Figure 3 and Figure 4)

1. Remove plastic push pins on back side of optic.

**Note:** The optics are permanently secured to the fixture.

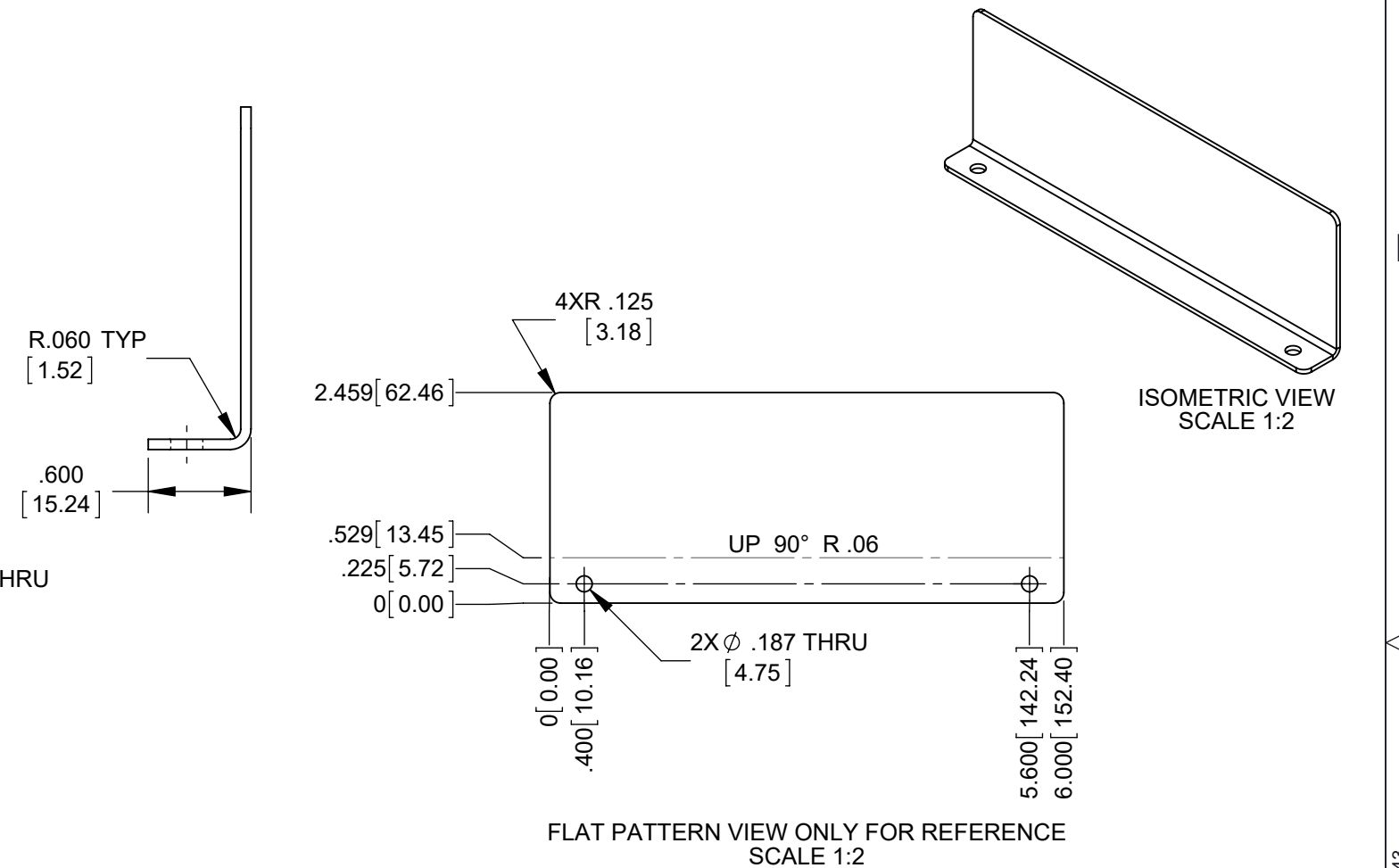
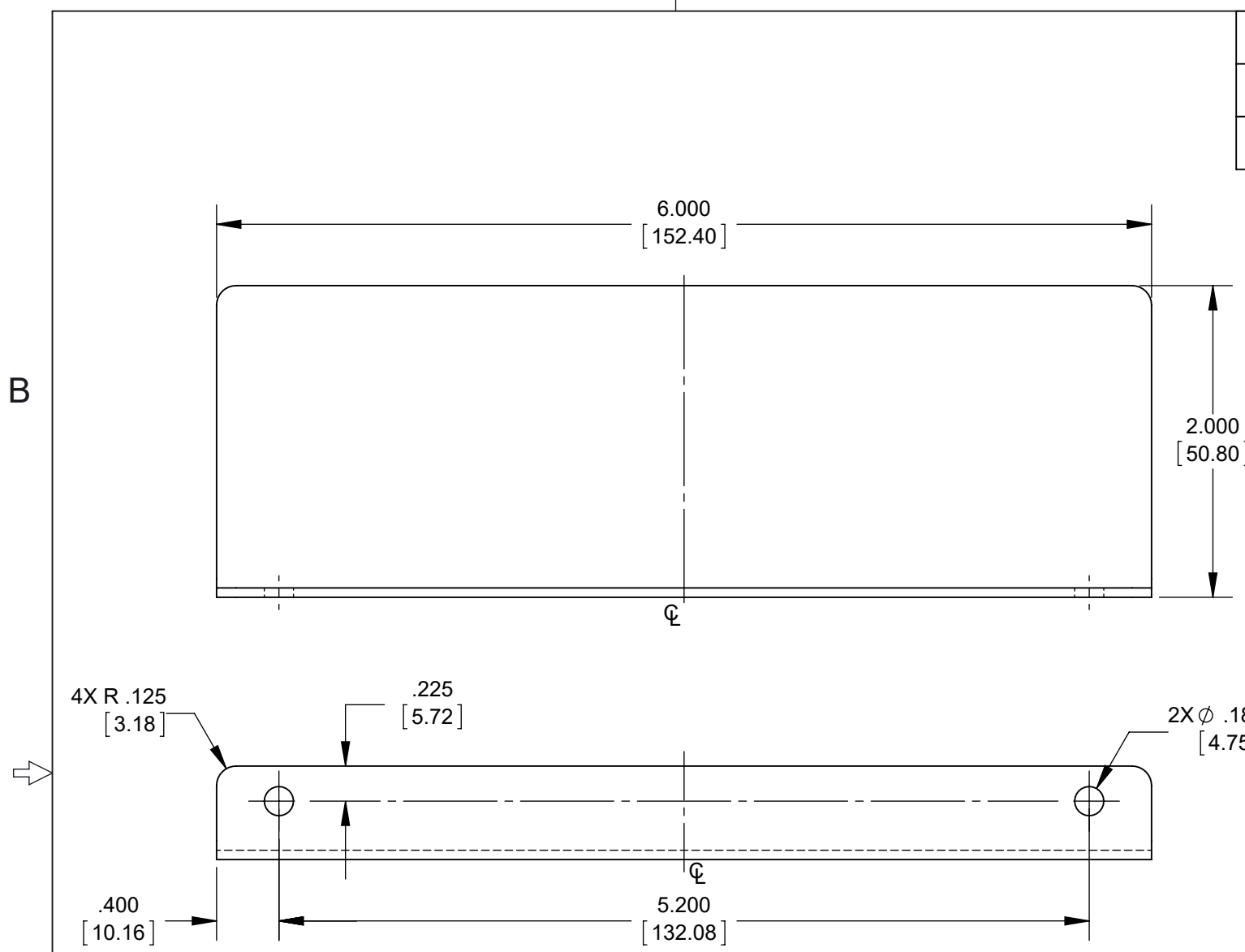
DO NOT try to remove the optics. The optics are not rotatable.

2. Install house side shield with provided #10 x 1/2" Phillips screws. Tighten until house side shield is snug. Do not over tighten.



**Short shield for ARCH optics = CLP0013543H01-PK (Standard color is black)**

REVISIONS					
REV.	DESCRIPTION	DATE	CHANGE_NUMBER	BY	APPROVED
1	INITIAL RELEASE	5/4/2018		LNT/SD	WFB

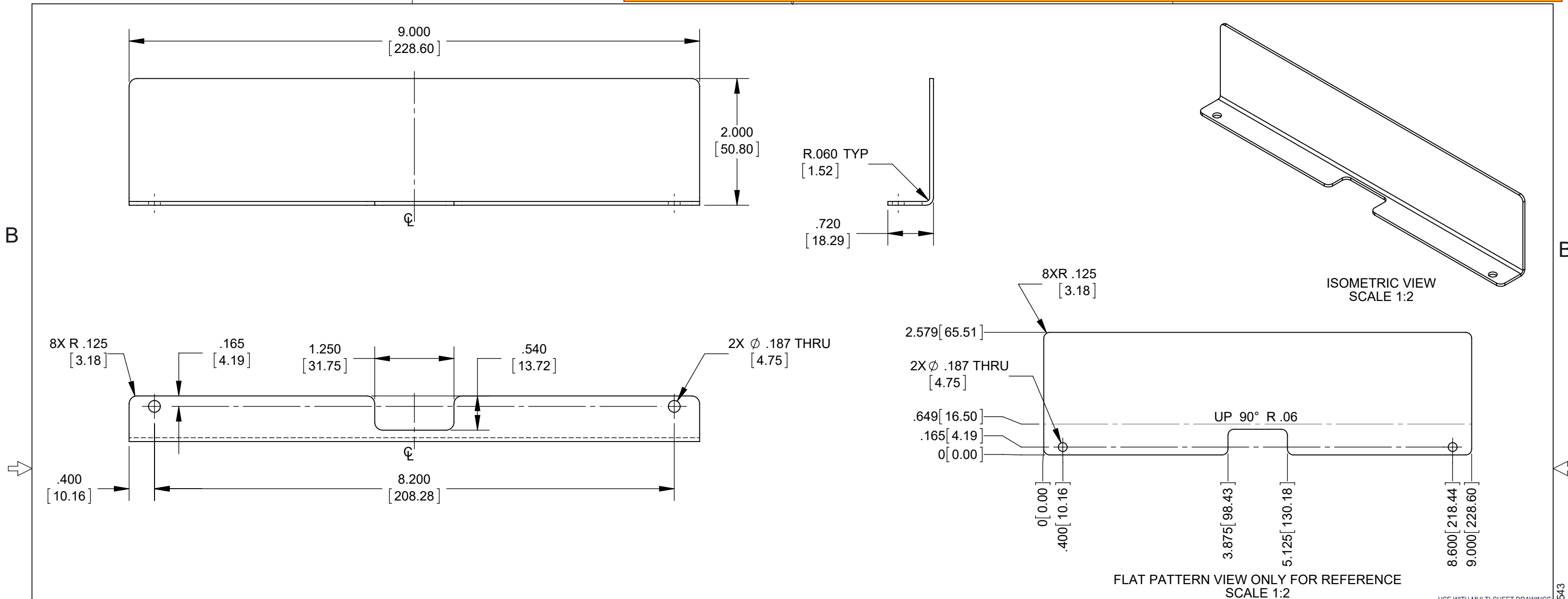


**For shield installation remove existing screws from the Archeon optical square where the shield is being installed. Place shield on top of the optical square positioning the shield holes over the optical square holes and re-install the shield. Do not attempt to remove the optical square from the housing during shield installation. These shields are not designed to be used with the HS-ARCH House Side Shield.**


20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	REV
ELECTRONIC CAD DRAWING. DO NOT REVISE MANUALLY.																				
DIMENSIONS ARE IN INCHES										DIMENSIONS IN [ ] ARE IN MM										
TOLERANCE GENERAL SHEET METAL										APPROVALS DATE										
ENGLISH (IN) .XX .XXX ±0.030 ±0.010 ±0.005 .XX .XXX ±0.03 ±0.015										DRWN: LNT/SD 5/3/2018										
METRIC (MM) .X .XX .XXX ±0.75 ±0.25 ±0.12 .XX .XXX ±0.75 ±0.38										CHKD: WFB 5/3/2018										
SHEET METAL PIERCED, EXTRUDED, NAIL PUNCH HOLE										APPR: WFB 5/3/2018										
ENGLISH (IN) ±0.000 ±0.005 ±0.01										L MOD: C9904693 5/25/2018										
METRIC (MM) ±0.00 ±0.01 ±0.13										FINISH: POWDER PAINT BLACK										
ANGLES ALL ±1.0										TITLE: L BRACKET LIGHT SHIELD AF24 BOARD END										
THIRD ANGLE PROJECTION										SIZE: DWG NO: CLP0013543 REV: 1										
MATERIAL: .060" THK ALUMINUM										DEV/ZINT NO:										
CLP0013543H01										SCALE: 1:1 WT: 0.13 LB VOL: 1.37 IN3 SHEET 1 OF 2										
PART NUMBER										DO NOT SCALE DRAWING SURFACE AREA: 47.20 IN2										



Wide shield for ARCH optics = CLP0013543H02-PK (Standard color is black)



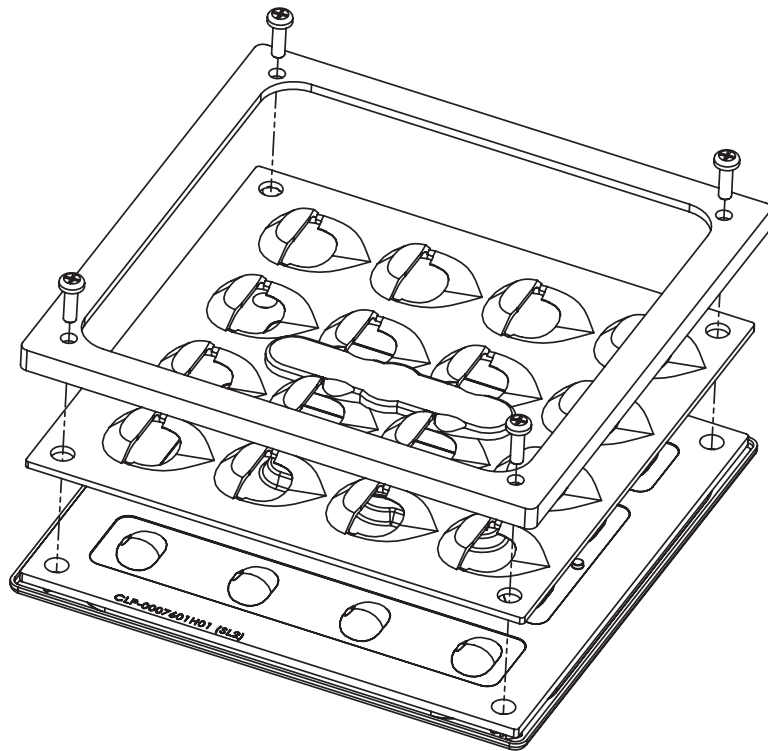
For shield installation remove existing screws from the Archeon optical square where the shield is being installed. Place shield on top of the optical square positioning the shield holes over the optical square holes and re-install the shield. **Do not attempt to remove the optical square from the housing during shield installation. These shields are not designed to be used with the HS-ARCH House Side Shield.**

20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	REV															
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ELECTRONIC CAD DRAWING. DO NOT REVISE MANUALLY.					S DIMENSIONS THAT AFFECT SAFE HANDLING OR OPERATION					C DENOTES CRITICAL DIMENSIONS AND GAUGE CHECK POINTS					P DENOTES FIRST PIECE AND IN-PROCESS INSPECTION					F DENOTES FIRST PIECE INSPECTION ONLY															
DIMENSIONS ARE IN INCHES																																			
DIMENSIONS IN [ ] ARE IN MM																																			
TOLERANCE		GENERAL		SHEET METAL		APPROVALS					DATE					 Powering Business Worldwide Peachtree City, GA																			
ENGLISH (IN)		.XX .XXX		±0.030 ±0.010 ±0.005		XX XXX		±0.03 ±0.015		DRWN: LNT/SD					5/3/2018																				
METRIC (MM)		.X .XX .XXX		+0.75 +0.25 ±0.12		XX XXX		±0.75 ±0.38		CHKD: WFB					5/3/2018																				
SHEET METAL PIERCED, EXTRUDED, NAIL PUNCH HOLE				ENGLISH (IN) METRIC (MM)		±0.000 ±0.005 ±0.13		APPR: WFB					5/3/2018																						
ANGLES		ALL		±1.0		L MOD: C9904693					5/25/2018					TITLE: L BRACKET LIGHT SHIELD AF24 BOARD SIDE																			
THIRD ANGLE PROJECTION						FINISH: POWDER PAINT BLACK										SIZE: B					DWG NO: CLP0013543					REV: 1									
MATERIAL: .060" THK ALUMINUM						SURFACE AREA: 47.20 IN2										SCALE: 2:3					WT: 0.13 LB					VOL: 1.37 IN3					SHEET 2 OF 2				
CLP0013543H02		PART NUMBER		DO NOT SCALE DRAWING																															

CLP0013543

IMI-813

LED Light Square House Side Shield Installation Instructions  
Feuillet d'instructions pour l'installation du pare-lumière latéral  
carré côté édifice du luminaire à DEL  
Instrucciones de instalación del escudo lateral de la carcasa  
cuadrada de la luz LED



**Cooper Lighting**

by **EAT•N**



# LED Light Square House Side Shield Installation Instructions

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## SAFETY

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This fixture must be wired in accordance with the National Electrical Code and applicable local codes and ordinances. Proper grounding is required to insure personal safety. Carefully observe grounding procedure under installation section.

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## WARNING

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Make certain power is **OFF** before starting installation or attempting any maintenance. Risk of fire/electric shock. If not qualified, consult an electrician.

- **RISK OF ELECTRIC SHOCK**—Disconnect power at fuse or circuit breaker before installing or servicing.
- **RISK OF BURN**—Disconnect power and allow fixture to cool before servicing.
- **RISK OF PERSONAL INJURY**—Fixture may become damaged and/or unstable if not installed properly. Tighten all fixture components to their recommended torque values. Do not lift pole into place by securing lifting device to lighting fixture or mounting arm.

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## IMPORTANT

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Read before installing fixture. Retain for future reference.

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## NOTE

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These instructions do not claim to cover all details or variations in the equipment, procedure, or process described, nor to provide directions for meeting every possible contingency during installation, operation or maintenance. When additional information is desired to satisfy a problem not covered sufficiently for user's purpose, please contact your nearest representative. NOTE: Specifications and dimensions subject to change without notice.

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## WARRANTY/LIABILITY

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Consult [www.cooperlighting.com](http://www.cooperlighting.com) for current Limited Warranty and Limitations of Liability information.

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## Installation Instructions

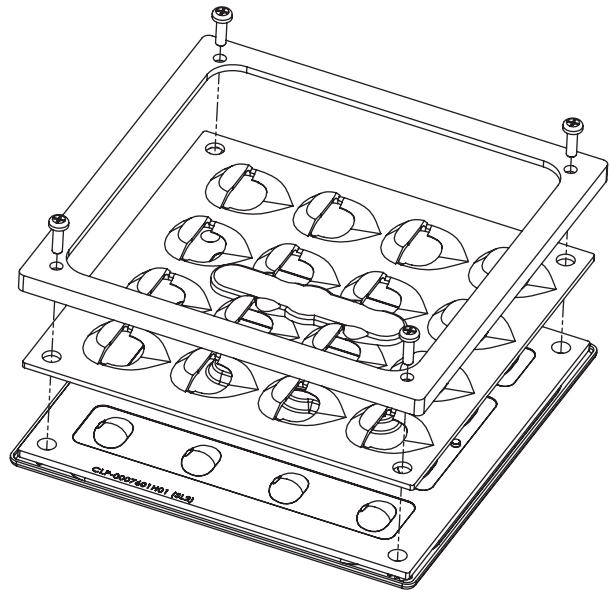
### Tools Required

Phillips head screwdriver.

1. Remove the four screws which secure the light square to the fixture. Retain screws for re-use in step 3.
2. Place the light shield over the light square as shown. FIG. 1
3. Re-insert the four Philips head screws from step 1 back through the light shield, light square and into the fixture. Make sure the flange of the light shield is facing the proper direction to shield the light from its intended source.

**Note:** One house side shield is required per LED Light Square (e.g. GLEON-AE-04 or GAN-AE-04 require four house side shields).

FIG. 1



## SÉCURITÉ

Le câblage du luminaire doit être conforme au Code national de l'électricité, les lois et ordonnances locales en vigueur. Une mise à la terre adéquate est requise afin d'assurer votre sécurité. Respectez soigneusement la procédure de mise à la terre du chapitre d'installation.

## AVERTISSEMENT

Assurez-vous que l'alimentation électrique est coupée avant de commencer l'installation ou de procéder à tout entretien. Risque d'incendie ou de décharge électrique. Si vous n'êtes pas qualifié, consultez un électricien.

- **RISQUE DE DÉCHARGE ÉLECTRIQUE** - Débranchez la source d'alimentation en enlevant le fusible ou en déclenchant le disjoncteur avant l'installation ou l'entretien.
- **RISQUE DE BRÛLURE** - Débranchez la source d'alimentation et laissez refroidir le luminaire avant de procéder à son entretien.
- **RISQUE DE BLESSURES** - Ce luminaire peut s'endommager s'il n'est pas installé correctement ou s'il est instable. Serrez tous les composants du luminaire selon les valeurs de couple recommandées. Ne maintenez pas le poteau en place en le sécurisant avec un dispositif de levage au luminaire ou au bras de montage.

## IMPORTANT

Lisez ce document avant d'installer le luminaire. Conservez-le pour consultation ultérieure.

## NOTE

Ces instructions ne couvrent pas toutes les caractéristiques et variantes de l'équipement, des procédures ou des procédés décrits, et ne parent pas à toutes les

éventualités pouvant survenir lors de l'installation, du fonctionnement ou de l'entretien de l'appareil.

Si des renseignements additionnels sont nécessaires afin de résoudre un problème insuffisamment décrit pour l'utilisation, veuillez communiquer avec votre représentant le plus près de chez vous.

REMARQUE: Les caractéristiques techniques et les dimensions sont sujettes à modifications sans préavis.

## GARANTIE ET RESPONSABILITÉ

Visitez le site [www.cooperlighting.com](http://www.cooperlighting.com) pour obtenir les renseignements de la garantie limitée et les limitations de responsabilité.

## Instructions d'installation

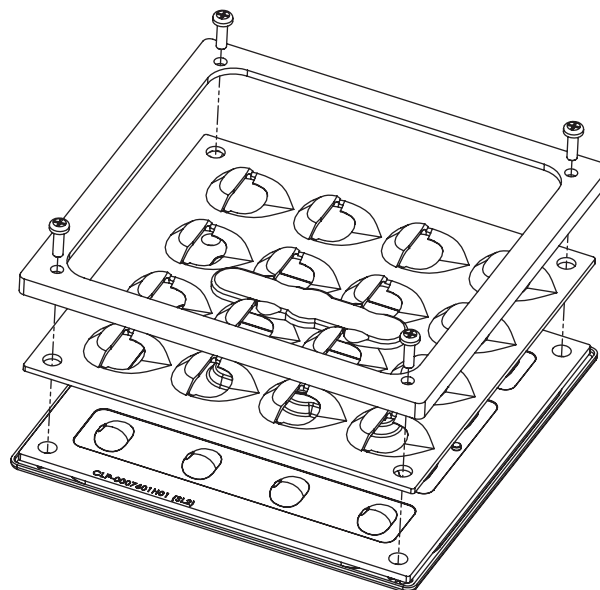
### Outils requis

Tournevis à tête cruciforme.

1. Retirez les quatre vis du luminaire carré fixant le luminaire. Conservez les vis pour l'étape 3.
2. Placez le pare-lumière sur le luminaire carré, comme montré à l'III. 1
3. Réinsérez les quatre vis à tête cruciformes de l'étape 1 dans le pare-lumière, le luminaire carré et le luminaire. Assurez-vous que le rebord du pare-lumière est dirigé correctement afin d'empêcher l'émission de lumière vers l'endroit choisi.

**Remarque:** Un pare-lumière côté édifice est requis par luminaire carré DEL (par ex. : les modèles GLEON-AE-04 ou GAN-AE-04 nécessitent quatre pare-lumières côté édifice.)

### III. 1



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**⚠ SEGURIDAD**

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Este accesorio debe cablearse según el Código Nacional Eléctrico y los códigos y ordenanzas locales aplicables. Se requiere una conexión a tierra adecuada para garantizar la seguridad personal. Observe con atención el procedimiento de conexión a tierra en la sección de instalación.

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**⚠ ADVERTENCIA**

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Asegúrese de que la alimentación esté APAGADA antes de iniciar la instalación o de intentar realizar el mantenimiento. Riesgo de incendio/descarga eléctrica. Si no está calificado, consulte con un electricista.

- **RIESGO DE DESCARGA ELÉCTRICA:** Corte la alimentación desde el fusible o el disyuntor antes de realizar tareas de instalación o mantenimiento.
- **RIESGO DE QUEMADURAS:** Corte la alimentación y permita que el accesorio se enfríe antes de realizar el mantenimiento.
- **RIESGO DE LESIONES PERSONALES:** El accesorio puede dañarse y/o volverse inestable si no se instala correctamente. Ajuste todos los componentes del accesorio según los valores de torque recomendados. No eleve el polo en su lugar asegurando el dispositivo de elevación al accesorio de iluminación o al brazo de montaje.

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**⚠ IMPORTANTE**

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Lea Antes De Instalar El Accesorio. Conserve Para Referencia Futura.

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**NOTA**

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Estas instrucciones no tienen por objetivo cubrir todos los detalles o variaciones del equipo, los procedimientos o procesos descriptos, ni proveer directivas para gestionar cualquier posible contingencia durante la instalación, el funcionamiento o el mantenimiento. Cuando necesite información adicional para satisfacer un problema que no tenga la cobertura suficiente para el objetivo del usuario, comuníquese con su representante más cercano. **NOTA:** Las especificaciones y dimensiones están sujetas a cambios sin previo aviso.

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**⚠ GARANTÍA/RESPONSABILIDAD**

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Consulte en [www.cooperlighting.com](http://www.cooperlighting.com) para obtener información actual sobre la Garantía Limitada y las Limitaciones de Responsabilidad.

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## Instrucciones de Instalación

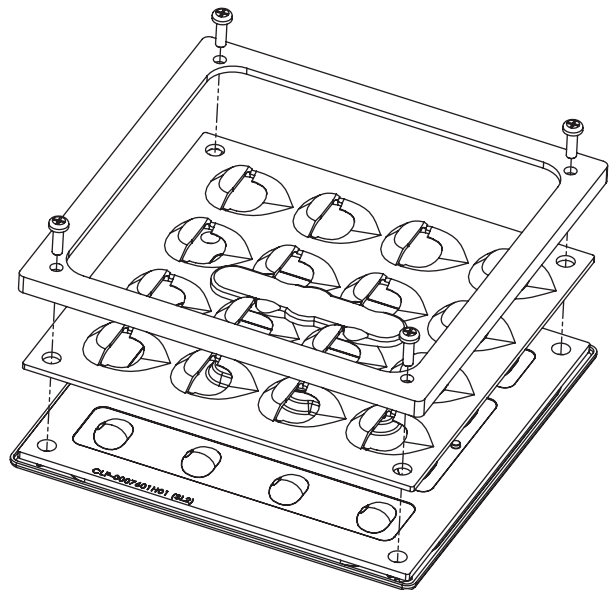
### Herramientas necesarias

Destornillador de cabeza en cruz.

1. Extraiga los cuatro tornillos que sujetan la luz cuadrada a su soporte. Guarde los tornillos para volver a utilizarlos en el paso 3.
2. Coloque la cubierta de la luz por encima de la luz cuadrada como se muestra en la FIG. 1.
3. Vuelva a insertar los cuatro tornillos de cabeza en cruz del paso 1 a través del protector de la luz, a través de la luz cuadrada y hacia adentro del soporte. Asegúrese de que la junta de la cubierta de la luz quede hacia el frente correctamente para cubrir a la luz de su correspondiente fuente.

**Nota:** Se requiere una cubierta para luces para exteriores por cada Luz Cuadrada LED (por ejemplo: las GLEON-AE-04 o GAN-AE-04 requieren cuatro cubiertas para luces para exteriores).

FIG. 1





**Eaton**  
1000 Eaton Boulevard  
Cleveland, OH 44122  
United States  
Eaton.com

Eaton's Cooper Lighting Business  
1121 Hwy 74 South  
Peachtree City, GA 30265  
cooperlighting.com

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Printed in USA  
Publication No. ADH140467

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of their respective owners.



House side orientation

Each shield shows proper orientation for house-side

But the screw holes line up if you rotate the shield



Turned 90 degrees



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## **IV. Photocontrol**





## Smart Streetlight Controller

### SPECIFICATIONS

- Dimensions:** 103.5mm tall, 88mm diameter
- Weight:** 375g
- Lamp Interface** LED, CF, HID and HPS
- Voltage Range** 110V to 480V auto-ranging
- Power Supply** 90V to 506V
- Lamp Power** 1200W (1800VA)
- Energy Consumption** Watt-hour resolution
- Lamp On/Off** Photocell control, software programmable scheduling
- Dimming Controls** Auto-select between 0-10V, DALI/DALI2
- Ext. Sensor Interface** DALI/DALI 2
- Comm. Module** LTE: Cat1, Cat M1, NB-IOT
- Location Based Services** WiFi Mesh (Q1 2022 via OTA update), Bluetooth beacons, and high accuracy GPS
- Firmware Updates:** OTA upgrades
- Power Surge Protection** 20kV/10kA-Extreme
- Average Power Consumption** 1W Typical

- IP Ratings** IP66
- Impact Rating** IK07
- Operating Temp. Range** -40C to + 70C
- Network Protocol** IPV4 and IPV6 network compliant
- Impact & Tilt Detection** 0 to 90° with 1° resolution and knock down alarm
- Vibration Detection** Configurable roadway and bridge modes at 2g/3g detection

### POWER METER SPECIFICATIONS

- Metrology Accuracy** ANSI C12.20 Class 0.5
- Accuracy Verification** Optical infrared pulse
- Line Voltage** 90V to 506V (50/60Hz)
- Accuracy** +/- 0.5%
- Power** Active power with PF
- Energy Consumption** kWh
- Life Cycle Tracking** Cycle count, burn hours tracking, and fault detection

### PROGRAMMABLE FEATURES

- Customer asset management
- Scheduling controls
- Alert thresholds
- Astronomical scheduling with adjustable offsets
- Photocell thresholds
- Luminaire fault detection
- Voltage sag and swell detection
- Tilt detection and alert
- Power loss detection and alert
- Network communication failure
- Group devices by tag for mass control

### WARRANTY

5-Year Warranty, Optional 10-Year Warranty



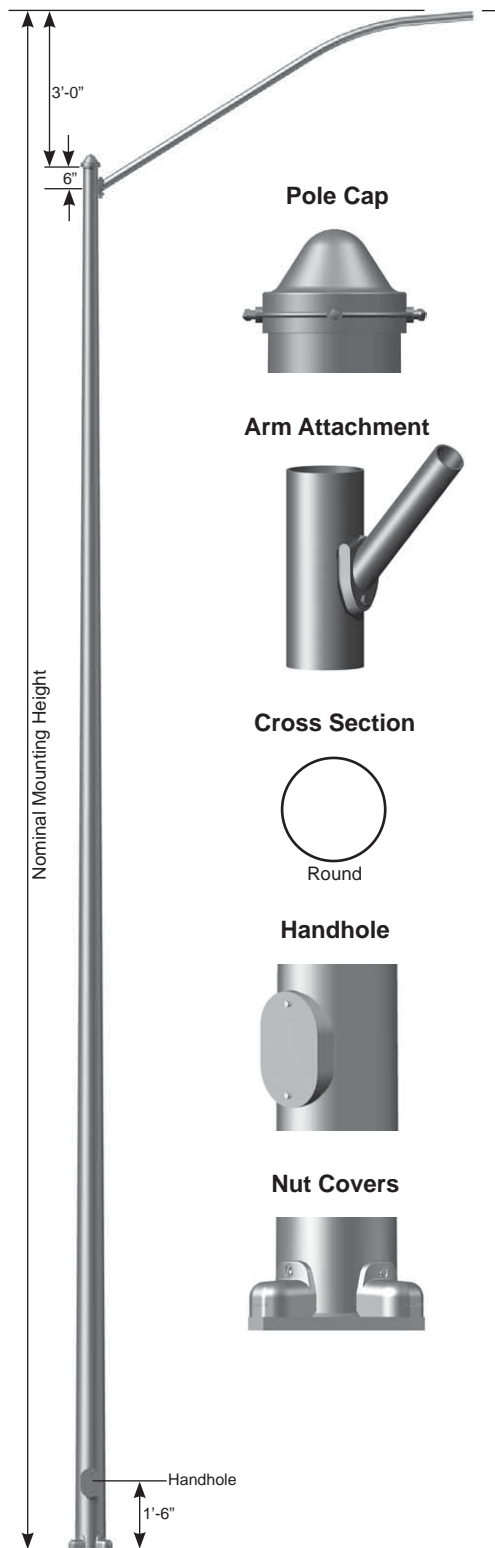


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## **V. Steel Pole and Arm**



Job Name: _____	Client Name: _____
Job Location - City: _____ State: _____	Created By: _____ Date: _____
Product: <b>DS50</b> --- Quote: _____	Customer Approval: _____ Date: _____



**SPECIFICATIONS**

**Pole** - The pole shaft conforms to ASTM A595 Grade A with a constant linear taper of 0.14 in/ft.

**Pole Top** - A removable pole cap with hardware is provided.

**Luminaire Arm** - Luminaire arms are made from 2" schedule 40 pipe (2.38" OD) with a minimum yield strength of 36,000 psi. Double luminaire arms are oriented 180° apart. For other orientations please consult factory.

**Luminaire Arm Attachment** - Connection allows arm to be erected and held in place by gravity and secured by a single bolt.

**Handhole** - A covered handhole and grounding provision with hardware is provided.

**Nut Covers** - Anchor bolt nut covers with hardware are provided.

**Full Base Cover** - Optional two-piece full base cover is fabricated from ABS plastic. Valmont reserves the right to provide an optional two-piece steel full base cover on some applications depending upon the finish requirement and/or pole base diameter.

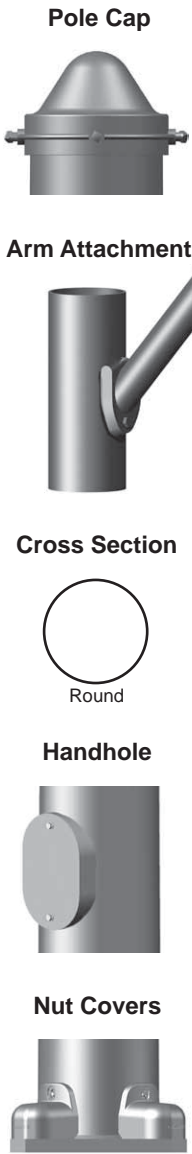
**Anchor Base** - The anchor base (base plate) conforms to ASTM A36.

**Anchor Bolts** - Anchor bolts conform to ASTM F1554 Grade 55 and are provided with two hex nuts and two flat washers. Bolts have an "L" bend on one end and are galvanized a minimum of 12" on the threaded end.

**Hardware** - All structural fasteners are galvanized high strength carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.

**Finish** - Standard finishes are galvanized, prime painted or any of Valmont's V-PRO™ Protection Systems. Additional finish options available upon request.

**Design Criteria** - Please reference Design Criteria Specification for appropriate design conditions.



**ARM DATA**



# ROUND TAPERED STEEL

## Smooth

### DS50 / 20'-30'

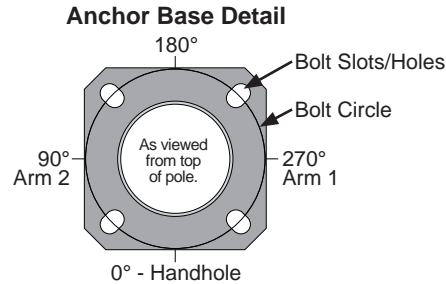


STRUCTURES

Job Name: _____	Client Name: _____
Job Location - City: _____ State: _____	Created By: _____ Date: _____
Product: <b>DS50</b> ---- Quote: _____	Customer Approval: _____ Date: _____

### ANCHORAGE DATA

POLE BASE OD (IN)	BASE PLATE				ANCHOR BOLTS		
	BOLT CIRCLE		SQUARE (IN)	THK (IN)	DIA x LENGTH x HOOK (IN)	PROJECTION (IN)	± (IN)
DIA (IN)	± (IN)						
5.90	9.00	0.50	10.00	0.875	1.00 x 36.00 x 4.00	4.13	0.25
6.50	9.50	0.50	10.50	0.875	1.00 x 36.00 x 4.00	4.13	0.25
6.60	9.50	0.50	10.50	0.875	1.00 x 36.00 x 4.00	4.13	0.25
7.00	10.00	0.50	10.88	0.875	1.00 x 36.00 x 4.00	4.13	0.25
7.50	10.50	0.50	11.25	0.875	1.00 x 36.00 x 4.00	4.13	0.25



### LOAD AND DIMENSIONAL DATA

NOMINAL MOUNTING HEIGHT	DESIGN INFORMATION				POLE DIMENSIONS				MODEL NUMBER
	QUANTITY OF ARMS	MAX ARM LENGTH (FT)	100 MPH w/1.3 GUST		BASE OD (IN)	TOP OD (IN)	WALL THK (GA)	STRUCTURE WEIGHT <sup>2</sup> (LBS)	
			MAX LUMINAIRE EPA <sup>1</sup> (SQFT)	MAX LUMINAIRE WEIGHT <sup>1</sup> (LBS)					
20'-0"	Single	8	2.0	75	5.90	3.52	11	160	R590A170
	Single	8	2.0	75	6.50	4.12	11	180	R650A170
	Double	8	2.0	75	5.90	3.52	11	200	R590A170
25'-0"	Single	8	2.0	75	5.90	2.82	11	185	R590A220
	Single	8	2.0	75	7.00	3.92	11	220	R700A220
	Double	8	2.0	75	5.90	2.82	11	220	R590A220
	Double	8	2.0	75	7.00	3.92	11	255	R700A220
30'-0"	Single	6	2.0	75	6.60	2.82	11	230	R660A270
	Single	8	2.0	68	6.60	2.82	11	232	R660A270
	Single	8	2.0	75	7.50	3.72	11	260	R750A270
	Double	6	2.0	75	6.60	2.82	11	265	R660A270
	Double	8	2.0	75	7.50	3.72	11	300	R750A270

**DS50 32'-45'**  
Mounting Heights  
available at  
[valmontstructures.com](http://valmontstructures.com)

- EPA represents the Effective Projected Area of each luminaire. Designs are limited to one luminaire per arm. Variations from sizes above are available upon inquiry at the factory. Satisfactory performance of poles is dependent upon the pole being properly attached to a supporting foundation of adequate design.
- Structure Weight is a nominal value which includes the pole shaft, base plate and luminaire arm(s) only.

### PRODUCT ORDERING CODES

DESIGN SERIES	MODEL NUMBER	FIXTURE MOUNTING	FINISH	COLOR	V-PRO™ PROTECTION SYSTEM	OPTIONS
DS50				--	--	
	R590A170 R650A170 R590A220 R700A220 R660A270 R750A270	4S = 4' Single 4D = 4' Double 6S = 6' Single 6D = 6' Double 8S = 8' Single 8D = 8' Double	GV = Galvanize PP = Prime Paint FP = Finish Paint GF = Galvanized + Finish Paint	-- = Galvanize -- = Prime Paint WH = White ST = Sandstone BK = Black SM = Silver Metallic SL = Silver LG = Light Gray SG = Slate Gray DT = Dark Tan MB = Medium Bronze CB = Bronze DB = Dark Bronze BN = Brown HG = Hunter Green DG = Dark Green RD = Red SC = Special Color (Contact Factory)	-- = Galvanize -- = Prime Paint V1 = V-PRO 1 Basic 1 Coat Powder. V2 = V-PRO 2 2 Coat Powder or Liquid. Includes epoxy primer & top coat. V3 = V-PRO 3 2 Coat Powder or Liquid. Includes zinc primer & top coat. V4 = V-PRO 4 2 Coat Powder or Liquid. Includes zinc primer & premium top coat.	See Accessories at <a href="http://valmontstructures.com">valmontstructures.com</a> (Please Specify)

SPC7311 04/09 valmontstructures.com carries the most current spec information and supersedes these guidelines.



Pedernales Electric Cooperative