

| | | | | | |
|-------------|--|-----------|--|------|--|
| Project | | Catalog # | | Type | |
| Prepared by | | Notes | | Date | |



Streetworks

Archeon Medium

Roadway Luminaire

Product Features



Product Certifications



Interactive Menu

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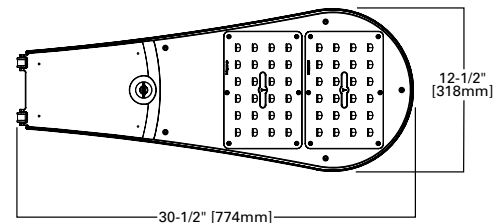
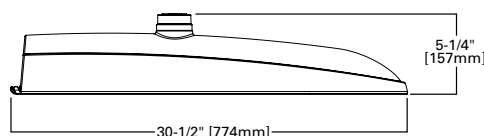
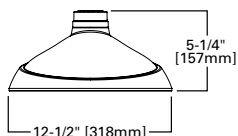
Quick Facts

- Die-cast aluminum construction; Single latch tool-less entry
- Replaces up to 400W 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

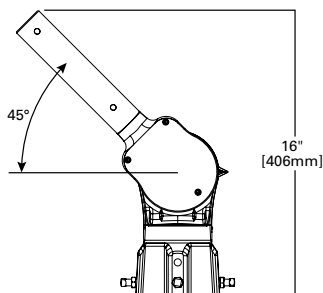
Connected Systems

- WaveLinX
- Enlighted

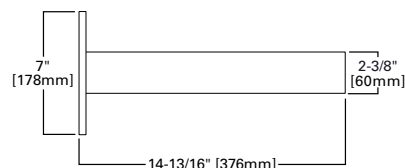
Dimensional Details



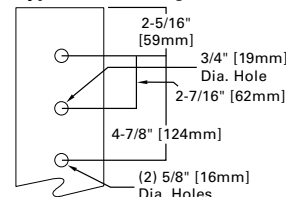
Adjustable Slipfitter Offset Arm



15" Straight Arm



Type "M" - Drilling Pattern



Ordering Information

SAMPLE ORDER NUMBER: ARCH-M-PA2-40-740-U-T2R-A15-AP-10K-PR

| Product Family ^{1,2} | Light Engine | Wattage Bucket | Color Temperature | Voltage | Distribution | Mounting | Finish |
|--|--|--|--|--|---|---|---|
| ARCH-M=Archeon Medium | PA2=(2) Direct Mount Rectangle (48 LED) | 40 50 60 70 80 90 100 110 120 130 140 150 160 | 722=70CRI, 2200K 727=70CRI, 2700K 730=70CRI, 3000K 735=70CRI, 3500K 740=70CRI, 4000K 750=70CRI, 5000K 827=80CRI, 2700K ⁶ AMB=Amber, 590nm ^{18,25} | U=Universal (120-277V) 8=480V ^{4,5} 9=347V ⁴ | T2R=Type II Roadway T2U=Type II Urban T3=Type III T4W=Type IV Wide 5WQ=Type V Square Wide | [Blank]=None A15=15° Straight Mast Arm ¹⁴ ASJS15=Adjustable Slipfitter (Factory set at 15° degrees) ASJS25=Adjustable Slipfitter (Factory set at 25° degrees) ASJS45=Adjustable Slipfitter (Factory set at 45° degrees) | AP=Grey BZ=Bronze BK=Black DP=Dark Platinum WH=White |
| Options (Add as Suffix) | | | | Controls | | | |
| 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 HSS=Factory Install House Side Shield ¹³ PSC=Photocontrol Shorting Cap NPC=NEMA Photocontrol - Multi-Tap LLPC=Longlife Photocontrol Included IP66=IP66 Rated Housing FADC=Field Adjustable Dimming Controller ²⁶ CC=Coastal Construction ²⁷ | | | | PR=NEMA 3-PIN Twistlock Photocontrol Receptacle ⁷ PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle SPB1=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting ²⁸ SPB2=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting ²⁸ SPB4=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting ²⁸ MS/DIM-L08=Motion Sensor for Dimming Operation, Maximum 8' Mounting Height ^{8,9} MS/DIM-L20=Motion Sensor for Dimming Operation, Maximum 9' - 20' Mounting Height ^{8,9} MS/DIM-L40=Motion Sensor for Dimming Operation, Maximum 21' - 40' Mounting Height ^{8,9} LWR-LW=Enlighted Wireless Sensor, Wide Lens for 8' - 16' Mounting Heights ^{8,10,11} LWR-LN=Enlighted Wireless Sensor, Narrow Lens for 16' - 40' Mounting Heights ^{8,10,11} 5LTD=DALI ¹⁹ ZD=DALI-enabled 4-PIN Twistlock Receptacle ^{18,20} ZW=WaveLinX-enabled 4-PIN Twistlock Receptacle ^{18,20} SWPD4XX=WaveLinX Wireless Sensor, 7' - 15' Mounting Height ^{21,22,23,24} SWPD5XX=WaveLinX Wireless Sensor, 15' - 40' Mounting Height ^{21,22,23,24} | | | |
| Accessories (Order Separately) ¹⁷ | | | | | | | |
| OA / RA1013=Photocontrol Shorting Cap 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 OA1223=10kV Surge Module Replacement A15-XX=Arm (15° Straight Arm) ^{14,16} ASJS15-XX=Adjustable slipfitter (Factory set at 15 degrees) ¹⁶ | | | | ASJS25-XX=Adjustable slipfitter (Factory set at 25 degrees) ¹⁶ ASJS45-XX=Adjustable slipfitter (Factory set at 45 degrees) ¹⁶ FSIR-100=Wireless Configuration Tool for Occupancy Sensor ¹⁷ HS-ARCH=Field Install ARCH House Side Shield ^{13,15} SWPD4XX=WaveLinX Wireless Sensor, 7' - 15' Mounting Height ^{21,22,23,24} SWPD5XX=WaveLinX Wireless Sensor, 15' - 40' Mounting Height ^{21,22,23,24} VGS-ARCH=Short Vertical Drop Shield VGL-ARCH=Long Vertical Drop Shield | | | |
| <p>NOTES:</p> <ol style="list-style-type: none"> 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. Nominal wattage values will be labeled on fixture as per ANSI C136.15. For specific fixture wattage, refer to Power and Lumens table. Only available in universal voltage. Not available at 40W or 50W. 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). Extended lead times may apply. If "PR" selected, dimming functionality not available. Dimming leads will be capped. Only available in Universal voltage. The FSIR-100 accessory is required to adjust parameters. Enlighted wireless system is not available with photocontrol receptacle (not required) Enlighted wireless sensors are factory installed and require network components LWP-EM-1, LWP-GW-1, and LWP-PoE8 in appropriate quantities. See website for Enlighted application information. HA option not available with the following configurations, 347/480V 150W and 160W if paired with HS-ARCH or 5TLD 140 160W. HSS not available with 5WQ distribution. Round pole adapter and mounting hardware included. *M* drill pattern. Archeon Medium requires two house side shields. Replace XX with color designation. 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. Amber 590nm +/- 5nm for wildlife and observatory use. Supplied in PA2-60 wattage bucket only. Utilizes internal step-down transformer when 347V or 480V is selected. Controls system is not available with photocontrol (BPC), photocontrol receptacle (PR or PR7), or other controls systems (MS, ZD, ZW, LWR, DALI, or DIM). Requires 4-PIN twistlock receptacle (ZD or ZW) option. Replace XX with sensor color (WH, BZ or BK). Sensor passive infrared (PIR) may be overly sensitive with operating below -20°C (-4°F). 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. Not available with HA option. Cannot be used with motion response control options. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. 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, 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 150W to 400W 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: 18 lbs. (8.16 kgs.)
- Effective Projected Area: 0.71 (Sq. Ft.)

Warranty

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

Energy and Performance Data

Power and Lumens (PA2 Light Engine)

Supplemental Performance Guide

| Light Engine - PA2* | PA2-40 | PA2-50 | PA2-60 | PA2-70 | PA2-80 | PA2-90 | PA2-100 | PA2-110 | PA2-120 | PA2-130 | PA2-140 | PA2-150 | PA2-160 | |
|--------------------------|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Power (Watts) | 38 | 48 | 63 | 73 | 83 | 92 | 101 | 111 | 122 | 131 | 141 | 151 | 161 | |
| Wattage Label | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | |
| Input Current @ 120V (A) | 0.318 | 0.399 | 0.527 | 0.609 | 0.693 | 0.768 | 0.846 | 0.925 | 1.020 | 1.100 | 1.180 | 1.260 | 1.340 | |
| Input Current @ 277V (A) | 0.145 | 0.178 | 0.243 | 0.275 | 0.309 | 0.342 | 0.374 | 0.407 | 0.453 | 0.486 | 0.518 | 0.553 | 0.586 | |
| Input Current @ 347V (A) | -- | -- | 0.188 | 0.216 | 0.245 | 0.271 | 0.298 | 0.325 | 0.371 | 0.400 | 0.428 | 0.458 | 0.487 | |
| Input Current @ 480V (A) | -- | -- | 0.146 | 0.165 | 0.185 | 0.203 | 0.222 | 0.240 | 0.286 | 0.304 | 0.323 | 0.344 | 0.363 | |
| Optics | | | | | | | | | | | | | | |
| T2R | 4000K/5000K Lumens | 6,489 | 8,063 | 10,434 | 11,891 | 13,299 | 14,714 | 15,925 | 17,033 | 18,278 | 19,311 | 20,317 | 21,323 | 22,189 |
| | Bug Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| | 3000K Lumens | 5,911 | 7,342 | 9,502 | 10,829 | 12,111 | 13,400 | 14,501 | 15,512 | 16,646 | 17,586 | 18,502 | 19,418 | 20,206 |
| | Bug Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| T2U | 4000K/5000K Lumens | 6,411 | 7,965 | 10,306 | 11,747 | 13,138 | 14,535 | 15,731 | 16,826 | 18,056 | 19,076 | 20,070 | 21,064 | 21,918 |
| | Bug Rating | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 |
| | 3000K Lumens | 5,838 | 7,253 | 9,385 | 10,698 | 11,963 | 13,238 | 14,325 | 15,323 | 16,443 | 17,373 | 18,277 | 19,182 | 19,961 |
| | 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 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 |
| T3 | 4000K/5000K Lumens | 6,649 | 8,013 | 10,367 | 11,816 | 13,216 | 14,621 | 15,825 | 16,926 | 18,164 | 19,190 | 20,190 | 21,189 | 22,050 |
| | Bug Rating | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 |
| | 3000K Lumens | 5,873 | 7,297 | 9,441 | 10,761 | 12,036 | 13,317 | 14,410 | 15,415 | 16,542 | 17,476 | 18,388 | 19,297 | 20,081 |
| | Bug Rating | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B3-U0-G3 | B3-U0-G3 |
| T4W | 4000K/5000K Lumens | 6,416 | 7,971 | 10,313 | 11,756 | 13,147 | 14,547 | 15,742 | 16,839 | 18,070 | 19,091 | 20,085 | 21,080 | 21,936 |
| | Bug Rating | B1-U0-G2 | B1-U0-G2 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 |
| | 3000K Lumens | 5,843 | 7,259 | 9,392 | 10,706 | 11,973 | 13,247 | 14,336 | 15,334 | 16,455 | 17,385 | 18,292 | 19,197 | 19,977 |
| | Bug Rating | B1-U0-G2 | B1-U0-G2 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 |
| 5WQ | 4000K/5000K Lumens | 6,619 | 8,223 | 10,640 | 12,127 | 13,563 | 15,007 | 16,241 | 17,372 | 18,642 | 19,694 | 20,721 | 21,747 | 22,629 |
| | Bug Rating | B3-U0-G1 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G3 | B4-U0-G3 | B4-U0-G3 | B4-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 |
| | 3000K Lumens | 6,029 | 7,489 | 9,690 | 11,043 | 12,353 | 13,666 | 14,789 | 15,820 | 16,977 | 17,935 | 18,870 | 19,804 | 20,609 |
| | Bug Rating | B3-U0-G1 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G3 | B4-U0-G3 | B4-U0-G3 | B4-U0-G3 | B4-U0-G3 | B5-U0-G3 | B5-U0-G3 |

Lumen Maintenance

| Light Engine | Ambient Temperature | TM-21 Lumen Maintenance (60,000 Hours) | Theoretical L70 (Hours) |
|--------------|---------------------|--|-------------------------|
| PA2 | Up to 40°C | > 98% | > 800,000 |

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 |



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

View Archeon Medium IES files