Project	5WQ-GRAY	**Catalog #**	ARCH-L-PA3-220-740-U-5WQ-AP-10K-PR7-U120845	**Type**	323-332804
Prepared by	DAT	**Notes**		**Date**	6.17.21

Streetworks

Archeon Large

Roadway Luminaire

Product Features

Light ARchitect™ LumenSafe Technology

Product Certifications

UL CERTIFIED · IP66 · 3G VIB · TSM SYSTEMS CERTIFIED · ida DARK SKY APPROVED

Interactive Menu

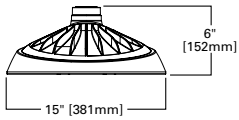
Quick Facts

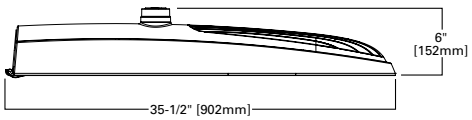
- Die-cast aluminum construction; Single latch tool-less entry
- Replaces up to 1000W equivalent HID; -40°C to 40°C operating range
- Pole-mounted; Optional arm and offset adjustable arm mounting
- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation; IP66 rated

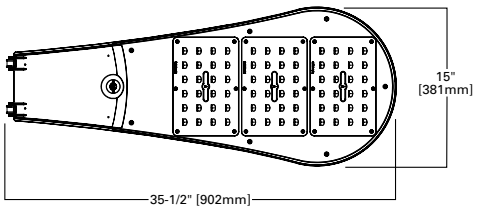
Connected Systems

- WaveLinx
- Enlighted

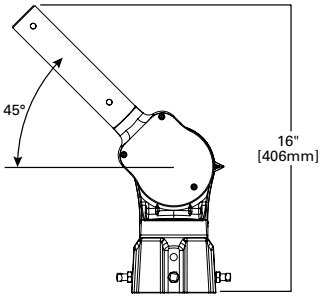
Dimensional Details



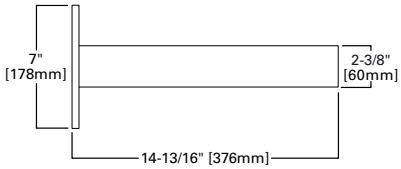




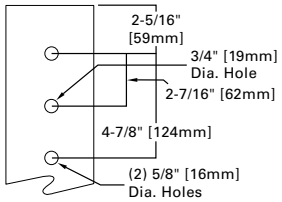
Adjustable Slipfitter Offset Arm



15" Straight Arm



Type "M" - Drilling Pattern



Ordering Information

SAMPLE ORDER NUMBER: **ARCH-L-PA3-90-740-U-T2R-A15-AP-10K-PR**

Product Family [1, 2]	Light Engine	Wattage Bucket	Color Temperature	Voltage	Distribution	Mounting	Finish
ARCH-L=Archeon Largew	**PA3**=(3) Direct Mount Rectangle (72 LED)	**90** **100** **110** **120** **130** **140** **150** **160** **170** **180** **190** **200** **210** **220** **230** **240** **250** **260** **270** **280**	**722**=70 CRI, 2200K **727**=70 CRI, 2700K **730**=70 CRI, 3000K **735**=70 CRI, 3500K **740**=70 CRI, 4000K **750**=70 CRI, 5000K **827**=80 CRI, 2700K **AMB**=Amber, 590nm [22, 23]	**U**=Universal (120-277V) **8**=480V [4] **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 **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)

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 [10]
HSS=Factory Install House Side Shield [11]
PSC=Photocontrol Shorting Cap
NPC=NEMA Photocontrol - Multi-Tap
LLPC=Longlife Photocontrol Included
IP66=IP66 Rated Housing
FADC=Field Adjustable Dimming Controller [24]
CC=Coastal Construction [25]

Controls

PR=NEMA 3-PIN Twistlock Photocontrol Receptacle [6]
PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle
SPB1=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting [26]
SPB2=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting [26]
SPB4=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting [26]
MS/DIM-L08=Motion Sensor for Dimming Operation, Maximum 8' Mounting Height [3, 7]
MS/DIM-L20=Motion Sensor for Dimming Operation, Maximum 9' - 20' Mounting Height [3, 7]
MS/DIM-L40=Motion Sensor for Dimming Operation, Maximum 21' - 40' Mounting Height [3, 7]
LWR-LW=Enlighted Wireless Sensor, Wide Lens for 8' - 16' Mounting Heights [3, 8, 9]
LWR-LN=Enlighted Wireless Sensor, Narrow Lens for 16' - 40' Mounting Heights [3, 8, 9]
5LTD=DALI [3]
ZD=DALI-enabled 4-PIN Twistlock Receptacle [16, 17]
ZW=WaveLinx-enabled 4-PIN Twistlock Receptacle [16, 17]
SWPD4XX=WaveLinx Wireless Sensor, 7' - 15' Mounting Height [19, 20, 21, 22]
SWPD5XX=WaveLinx Wireless Sensor, 15' - 40' Mounting Height [19, 20, 21, 22]

Accessories (Order Separately) [17]

OA / RA1013=Photocontrol Shorting Cap
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) [12, 14]
FSIR-100=Wireless Configuration Tool for Occupancy Sensor [15]
HS-ARCH=Field Install ARCH House Side Shield [11, 13]
VGS-ARCH=Short Vertical Drop Shield
VGL-ARCH=Long Vertical Drop Shield
ASJS15-XX=Adjustable slipfitter (Factory set at 15 degrees) [14]
ASJS25-XX=Adjustable slipfitter (Factory set at 25 degrees) [14]
ASJS45-XX=Adjustable slipfitter (Factory set at 45 degrees) [14]
SWPD4-XX=WaveLinx Wireless Sensor, 7' - 15' Mounting Height [19, 20, 21, 22]
SWPD5-XX=WaveLinx Wireless Sensor, 15' - 40' Mounting Height [19, 20, 21, 22]

NOTES:

1. Customer is responsible for engineering analysis to confirm pole and fixture compatiblity for all applications. Refer to our white paper WP513001EN for additional support information.
2. Nominal wattage values will be labeled on fixture as per ANSI C136.15. For specific fixture wattage, refer to Power and Lumen tables.
3. Only available in universal voltage.
4. 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).
6. If "PR" selected, dimming functionality not available, dimming leads will be capped.
7. The FSIR-100 accessory is required to adjust parameters.
8. Enlighted wireless system is not available with photocontrol receptacle (not required).
9. 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.
10. HA option not available with the following configurations, 250W+, 210W+ if paired with HSS, or 5TLD 150W+.
11. HSS not available with 5WQ distribution, 5LTD 270W+.
12. Round pole adapter and mounting hardware included. "M" drill pattern.
13. Requires three house side shields.
14. Replace XX with color designation.
15. 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.
16. Utilizes internal step-down transformer when 347V or 480V is selected.
17. Controls system is not available with photocontrol (BPC), photocontrol receptacle (PR or PR7), or other controls systems (MS, ZD, ZW, LWR, DALI, or DIM).
18. Requires 4-PIN twistlock receptacle (ZD or ZW) option.
19. Replace XX with sensor color (WH, BZ or BK).
20. Sensor passive infrared (PIR) may be overly sensitive with operating below -20°C (-4°F).
21. 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.
22. Not available with HA option.
23. Amber 590nm +/-5nm for wildlife and observatory use. Supplied in PA3 90 wattage bucket only.
24. Cannot be used with motion response control options.
25. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654.
26. Smart device with Sensor Configuration mobile application by Wattstopper required to change system defaults. See Controls Section for details.

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

Product Family	Camera Type	Data Backhaul	
L=LumenSafe Technology*	**D**=Dome Camera, Standard **H**=Dome Camera, Hi-Res **Z**=Dome Camera, Remote PTZ	**C**=Cellular, Customer Installed SIM Card **A**=Cellular, Factory Installed AT&T SIM Card **V**=Cellular, Factory Installed Verizon SIM Card **S**=Cellular, Factory Installed Sprint SIM Card	**W**=Wi-Fi Networking w/ Omni-Directional Antenna **E**=Ethernet Networking

*Consult LumenSafe system pages for additional details and compatibility.

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 400W to 1000W 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: 27 lbs. (12.2 kgs.)
- Effective Projected Area: 0.86 (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 (PA3 Light Engine)

Supplemental Performance Guide

Light Engine - PA3*		PA3-90	PA3-100	PA3-110	PA3-120	PA3-130	PA3-140	PA3-150	PA3-160	PA3-170	PA3-180
Power (Watts)		93	102	113	123	133	143	153	162	173	181
Wattage Label		90	100	110	120	130	140	150	160	170	180
Input Current @ 120V (A)		0.78	0.85	0.94	1.03	1.11	1.19	1.28	1.35	1.44	1.51
Input Current @ 277V (A)		0.34	0.39	0.42	0.45	0.49	0.53	0.56	0.59	0.62	0.68
Input Current @ 347V (A)		0.27	0.31	0.34	0.37	0.39	0.42	0.45	0.48	0.51	0.55
Input Current @ 480V (A)		0.24	0.24	0.26	0.28	0.30	0.32	0.34	0.36	0.38	0.43
Optics											
T2R	4000K/5000K	15,645	16,846	18,414	19,846	21,273	22,632	23,977	25,098	26,301	26,930
	BUG Rating	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3
	3000K	14,248	15,341	16,769	18,074	19,372	20,611	21,836	22,855	23,952	24,525
	BUG Rating	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3
T3	4000K/5000K	15,537	16,730	18,287	19,710	21,126	22,476	23,812	24,924	26,119	26,745
	BUG Rating	B2-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
	3000K	14,149	15,236	16,654	17,950	19,239	20,469	21,686	22,698	23,788	24,356
	BUG Rating	B2-U0-G2	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
T4W	4000K/5000K	15,473	16,661	18,212	19,629	21,038	22,383	23,713	24,820	26,011	26,633
	BUG Rating	B2-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
	3000K	14,090	15,172	16,584	17,875	19,159	20,384	21,596	22,604	23,688	24,254
	BUG Rating	B2-U0-G3	B2-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
5WQ	4000K/5000K	16,019	17,249	18,854	20,322	21,781	23,174	24,551	25,697	26,930	27,574
	BUG Rating	B4-U0-G3	B4-U0-G3	B4-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G3
	3000K	14,588	15,709	17,169	18,508	19,836	21,103	22,358	23,403	24,525	25,111
	BUG Rating	B4-U0-G2	B4-U0-G3	B4-U0-G3	B4-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G3
T2U	4000K/5000K	15,490	16,678	18,232	19,651	21,061	22,409	23,740	24,848	26,040	2,663
	3000K	14,106	15,189	16,603	17,894	19,181	20,407	21,620	22,629	23,714	24,281
	BUG Rating	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

Energy and Performance Data

Power and Lumens (PA3 Light Engine)

Light Engine - PA3*		PA3-190	PA3-200	PA3-210	PA3-220	PA3-230	PA3-240	PA3-250	PA3-260	PA3-270	PA3-280
Power (Watts)		189	201	211	222	229	242	251	261	273	279
Wattage Label		190	200	210	220	230	240	250	260	270	280
Input Current @ 120V (A)		1.58	1.68	1.76	1.85	1.91	2.01	2.10	2.18	2.27	2.33
Input Current @ 277V (A)		0.71	0.75	0.78	0.82	0.85	0.89	0.92	0.96	0.99	1.02
Input Current @ 347V (A)		0.58	0.61	0.64	0.67	0.70	0.73	0.76	0.78	0.81	0.84
Input Current @ 480V (A)		0.44	0.46	0.48	0.50	0.52	0.54	0.57	0.58	0.60	0.62
Optics											
T2R	4000K/5000K	27,868	29,218	30,114	31,168	31,950	33,030	33,790	34,591	35,538	36,067
	BUG Rating	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
	3000K	25,380	26,608	27,424	28,384	29,097	30,080	30,772	31,501	32,364	32,846
	BUG Rating	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
T3	4000K/5000K	27,678	29,017	29,906	30,954	31,731	32,804	33,557	34,351	35,294	35,818
	BUG Rating	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
	3000K	25,205	26,425	27,235	28,189	28,896	29,874	30,560	31,283	32,141	32,620
	BUG Rating	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
T4W	4000K/5000K	27,562	28,896	29,781	30,825	31,598	32,667	33,417	34,210	35,148	35,670
	BUG Rating	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	3000K	25,100	26,316	27,122	28,072	28,777	29,749	30,433	31,154	32,008	32,484
	BUG Rating	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
5WQ	4000K/5000K	28,535	29,917	30,834	31,913	32,715	33,820	34,598	35,418	36,389	36,929
	BUG Rating	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
	3000K	25,986	27,246	28,080	29,063	29,791	30,801	31,507	32,254	33,138	33,630
	BUG Rating	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
T2U	4000K/5000K	27,592	28,929	29,815	30,858	31,633	32,703	33,454	34,247	35,186	35,709
	3000K	25,128	26,344	27,151	28,103	28,808	29,783	30,467	31,188	32,044	32,519
	BUG Rating	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G4

Lumen Maintenance

Light Engine	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
PA3	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 Large IES files

Control Options

Photocontrol (PR and PR7)
Photocontrol receptacles (PR and PR7) provide a flexible solution to enable “dusk-to-dawn” lighting by sensing light levels. Advanced control systems compatible with ANSI C136.41 7-pin standards can be utilized with the PR7 receptacle.

Dimming Occupancy Sensor (SPB, MS/DIM-LXX)
These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are 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 MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10% power with a time delay of five minutes. The MS/DIM occupancy sensors require the FSIR-100 programming tool to adjust factory defaults.

Enlighted Wireless Control and Monitoring (LWR-LW and LWR-LN)
Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building perfor-mance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building resources, beyond lighting. For additional details, refer to the Enlighted product guides.

LumenSafe Integrated Network Security Camera (LD)
Cooper Lighting Solutions brings ease of camera deployment to a whole new level. No additional wiring is needed beyond providing line power to the luminaire. A variety of networking options allows security integrators to design the optimal solution for active surveillance. As the ideal solution to meet the needs for active surveillance, the LumenSafe integrated network camera is a streamlined, outdoor-ready fixed dome that provides HDTV 1080p video. This IP camera is optimally designed for deployment in the video management system or security software platform of choice.

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