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



Streetworks

XNV

Roadway Luminaire

Typical Applications

Outdoor • Roadways • Parking Lots • Building Areas

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Product Certifications



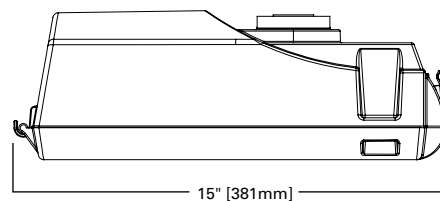
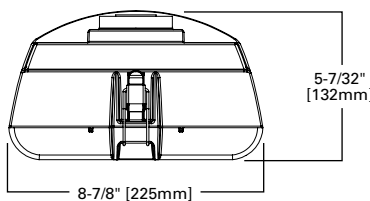
Quick Facts

- Replaces 70-100W HPS
- Up to 148 LPW
- Tool-less entry; hinged removable power door for easy maintenance
- 10kV and 20kV surge protection options available
- Suitable for operation in -40°C to 40°C environments

Connected Systems

- Enlighted

Dimensional Details



Ordering Information

SAMPLE NUMBER: **XNV-SA1C-740-U-T2-AP**

| Product Family ¹ | Light Engine | | Color Temperature | Voltage | Distribution | Mounting | Finish |
|--|---------------|--|--|---|--|--|--|
| XNV=XNV BAA-XNV=XNV Buy American Act Compliant ¹³ TAA-XNV=XNV Trade Agreements Act Compliant ¹³ | Configuration | Drive Current ³ | 722=70CRI, 2200K³ 727=70CRI, 2700K³ 730=70CRI, 3000K³ 735=70CRI, 3500K³ 740=70CRI, 4000K³ 750=70CRI, 5000K³ 760=70CRI, 6000K³ 827=80CRI, 2700K³ 830=80CRI, 3000K³ 835=80CRI, 3500K³ AMB=590nm Amber³ | U=Universal (120-277V) 9=347V 8=480V² | T2=Type II T2R=Type II Roadway T3R=Type III Roadway T4FT=Type IV Forward Throw T4W=Type IV Wide 5NQ=Type V Narrow 5MQ=Type V Square Medium 5WQ=Type V Square Wide SL2=Type II w/Spill Control SL3=Type III w/Spill Control SL4=Type IV w/Spill Control | [Blank]=Standard Mast Arm Slipfitter Al=Site Arm Included⁶ ALJS15=Adjustable Slipfitter (Factory set at 15° tilt) ALJS25=Adjustable Slipfitter (Factory set at 25° tilt) ALJS45=Adjustable Slipfitter (Factory set at 45° tilt) B18=18" Wood Pole Pipe Arm⁷ B24=24" Wood Pole Pipe Arm⁷ B30=30" Wood Pole Pipe Arm⁷ | AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White A=Raw Aluminum Unfinished |
| | SA1=1 square | A=615mA B=800mA C=1050mA (1A) D=1200mA (1.2A)⁴ | | | | | |
| Options (Add as Suffix) | | | | | Controls | | |
| K=Level Indicator IP66=IP66 Rated 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 20MSP=Parallel 20kV MOV Surge Protective Device 10MSP=Parallel 10kV MOV Surge Protective Device PSC=Photocontrol Shorting Cap NPC=NEMA Photocontrol - Multi-Tap LLPC=Longlife Photocontrol Included CC=Coastal Construction finish CE=CE Marking DXXXXX=Department of Transportation - Customer specific details¹⁶ UXXXXX=Utility - Customer specific details¹⁶ | | | | | PR=NEMA Twistlock Photocontrol Receptacle⁵ PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle⁵ FADC=Field Adjustable Dimming Controller¹⁵ MS/DIM-L08=Programmable Motion Sensor, Maximum 8' Mounting Height⁸ MS/DIM-L20=Programmable Motion Sensor, Maximum 20' Mounting Height⁸ MS/DIM-L40=Programmable Motion Sensor, Maximum 40' Mounting Height⁸ LWR-LW=Enlighted Wireless Sensor, Wide Lens for 8' - 16' Mounting Height^{9,10} LWR-LN=Enlighted Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height^{9,10} | | |
| Accessories ¹⁴ | | | | | | | |
| OA/RA1016=NEMA Photocontrol - Multi-Tap OA/RA1027=NEMA Photocontrol - 480V OA/RA1201=NEMA Photocontrol - 347V OA/RA1013=Photocontrol Shorting Cap OA/RA1014=NEMA Photocontrol - 120V OA1223=10kV Surge Module Replacement FSIR-100=Wireless Configuration Tool for Motion Sensor¹¹ LS/HSS-XX=Light Square House Side Shield¹² WOLC-7P-10A=WaveLinX Outdoor Control Module (7-PIN) ALJS15-XX=Adjustable Slipfitter Kit (Factory set at 15° tilt)¹² ALJS25-XX=Adjustable Slipfitter Kit (Factory set at 25° tilt)¹² ALJS45-XX=Adjustable Slipfitter Kit (Factory set at 45° tilt)¹² | | | | | | | |
| NOTES: 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. 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). 3. Use dedicated IES files. 4. Not available in combination with 347V/480V and sensor options. 5. Not available with any sensor options. 6. 22" upswing arm. Round pole adapter included. See optional mounting arm drawing. 7. 1-1/4" pipe plus hardware for mounting to wood utility pole. See optional wood pole mounting bracket drawing. 8. Factory installed. Includes integral photocontrol. Use FSIR-100 accessory to adjust factory settings. 9. Enlighted wireless sensors are factory installed only requiring network components in appropriate quantities. See www.cooperlighting.com for Enlighted application information. 10. Enlighted wireless system is not available with PR or PR7 options. Includes integral photocontrol. 11. Hand-held tool that 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. Only available with dimming driver. 12. Replace XX with color. 13. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. 14. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. 15. Cannot be used with PR7 or other motion response control options. 16. Customer specific specifications utilizes standard products with small adjustments to meet unique requirements such as packaging, labels, wattage adjustments, etc. | | | | | | | |

Product Specifications

Construction

- Heavy-duty cast aluminum housing and door
- Tool-less entry hinged removable door for easy maintenance
- 3G vibration rated
- Light square is IP66 rated

Optics

- Patented, high-efficiency injection molded AccuLED Optics™ system
- Optics are precisely designed to shape the distribution, maximizing efficiency and uniformity while optimizing application spacing

Electrical

- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V

Wye systems only

- Standard with 0-10V dimming driver
- 10kV/10kA and 20kV common- and differential-mode surge protection options available
- Thermal management transfers heat rapidly away from the LED source for optimal efficiency and light output. Ambient operating temperature from -40°C to 40°C.
- Standard three-position tunnel type compression terminal block

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

Finish

- Housing and cast parts finished in 5-stage super durable 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

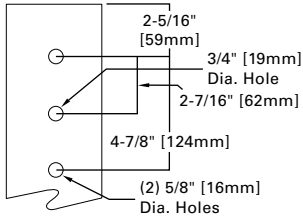
- Approximate Net Weight: 11 lbs. (5.0 kgs.)
- Effective Projected Area (Sq. Ft.): 0.59

Warranty

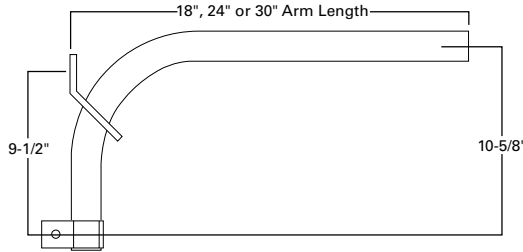
- Five-year warranty

Mounting Details

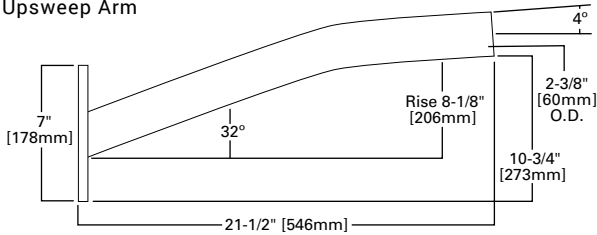
Optional Wood Pole Pipe Arm Type "M"



Arm Drilling 18", 24", 30" Pipe Arm



Optional Mounting Arm Upsweep Arm



Energy and Performance Data

Lumen Maintenance (TM-21)

| Drive Current | Ambient Temperature | 25,000 hours* | 50,000 hours* | 60,000 hours* | 100,000 hours** | Theoretical L70 hours** |
|---------------|---------------------|---------------|---------------|---------------|-----------------|-------------------------|
| Up to 1A | 25°C | 99.4% | 99.0% | 98.9% | 98.3% | > 2.4M |
| | 40°C | 98.7% | 98.3% | 98.1% | 97.4% | > 1.9M |
| | 50°C | 98.2% | 97.2% | 96.8% | 95.2% | > 851,000 |
| 1.2A | 25°C | 99.4% | 99.0% | 98.9% | 98.3% | > 2.4M |
| | 40°C | 98.5% | 97.9% | 97.7% | 96.7% | > 1.3M |

*Supported by IES TM-21 standards

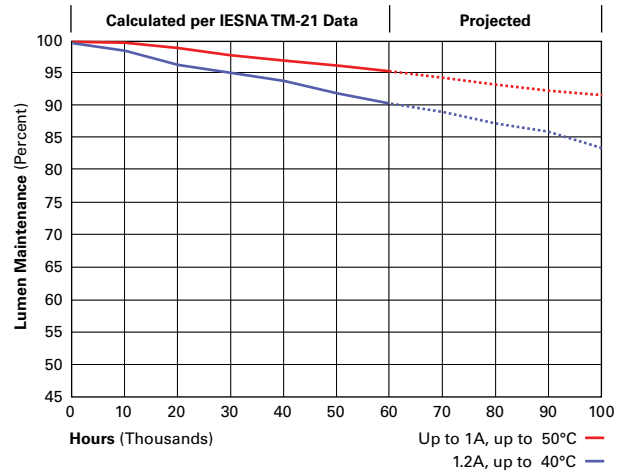
**Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

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% |

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 |



Energy and Performance Data

Power and Lumens

 Supplemental Performance Guide

| Number of LED Squares | | SA1A | SA1B | SA1C | SA1D |
|------------------------------------|-----------------|----------|----------|----------|----------|
| LED Drive Current | | 600 mA | 800 mA | 1.0 A | 1.2 A |
| Luminaire Wattage (Nominal) | | 34 | 44 | 58 | 66 |
| Input Current @ 120V (A) | | 0.30 | 0.39 | 0.51 | 0.58 |
| Input Current @ 277V (A) | | 0.14 | 0.17 | 0.23 | 0.25 |
| Optics | | | | | |
| T2 | Lumens | 4,636 | 5,684 | 7,035 | 7,717 |
| | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 |
| | Lumens per Watt | 136 | 129 | 121 | 117 |
| T2R | Lumens | 4,962 | 6,085 | 7,531 | 8,263 |
| | BUG Rating | B1-U0-G1 | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 |
| | Lumens per Watt | 146 | 138 | 130 | 125 |
| T3 | Lumens | 4,736 | 5,808 | 7,189 | 7,886 |
| | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 |
| | Lumens per Watt | 139 | 132 | 124 | 119 |
| T3R | Lumens | 4,816 | 5,907 | 7,310 | 8,020 |
| | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 |
| | Lumens per Watt | 142 | 134 | 126 | 122 |
| T4FT | Lumens | 4,772 | 5,852 | 7,243 | 7,944 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 |
| | Lumens per Watt | 140 | 133 | 125 | 120 |
| T4W | Lumens | 4,679 | 5,738 | 7,103 | 7,791 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 |
| | Lumens per Watt | 138 | 130 | 122 | 118 |
| SL2 | Lumens | 4,643 | 5,693 | 7,045 | 7,728 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G3 |
| | Lumens per Watt | 137 | 129 | 121 | 117 |
| SL3 | Lumens | 4,729 | 5,800 | 7,179 | 7,873 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 |
| | Lumens per Watt | 139 | 132 | 124 | 119 |
| SL4 | Lumens | 4,518 | 5,540 | 6,856 | 7,520 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B1-U0-G3 |
| | Lumens per Watt | 133 | 126 | 118 | 114 |
| 5NQ | Lumens | 4,868 | 5,968 | 7,388 | 8,105 |
| | BUG Rating | B2-U0-G1 | B2-U0-G1 | B3-U0-G1 | B3-U0-G1 |
| | Lumens per Watt | 143 | 136 | 127 | 123 |
| 5MQ | Lumens | 5,043 | 6,183 | 7,654 | 8,396 |
| | BUG Rating | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 |
| | Lumens per Watt | 148 | 141 | 132 | 127 |
| 5WQ | Lumens | 4,926 | 6,042 | 7,476 | 8,201 |
| | BUG Rating | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 |
| | Lumens per Watt | 145 | 137 | 129 | 124 |
| SLL/SLR | Lumens | 4,182 | 5,129 | 6,348 | 6,965 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 |
| | Lumens per Watt | 123 | 117 | 109 | 106 |
| RW | Lumens | 4,838 | 5,935 | 7,345 | 8,058 |
| | BUG Rating | B2-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 |
| | Lumens per Watt | 142 | 135 | 127 | 122 |
| AFL | Lumens | 4,852 | 5,949 | 7,362 | 8,077 |
| | BUG Rating | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 |
| | Lumens per Watt | 143 | 135 | 127 | 122 |

* Nominal lumen data for 70 CRI. BUG rating for 4000K/5000K. Refer to IES files for 3000K BUG rating.