

DESCRIPTION

The XNV LED roadway luminaire combines optical performance, energy efficiency, and outstanding versatility to meet the requirements of any roadway application. Patented AccuLED Optics™ technology delivers unparalleled uniformity and budget-beating operating costs for municipal streets and highways. UL/cUL listed for wet locations. IP66 enclosure rating available.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

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. Offered standard in 4000K (+/-275K) CCT and nominal 70 CRI.

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 common- and differential-mode surge protection standard. 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. 90% lumen maintenance expected at 60,000 hours. Standard 1A drive current.

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.

Warranty

Five-year warranty.

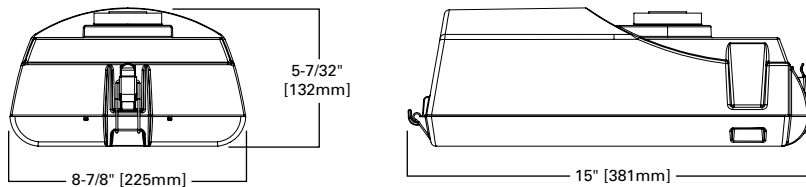


XNV

**1 Light Square
LED**

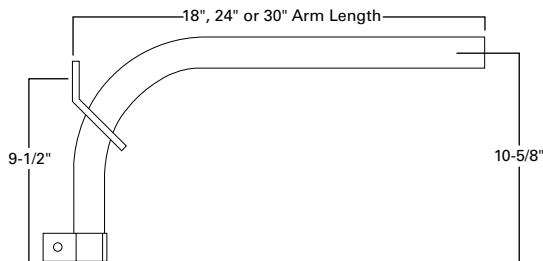
ROADWAY LUMINAIRE

DIMENSIONS



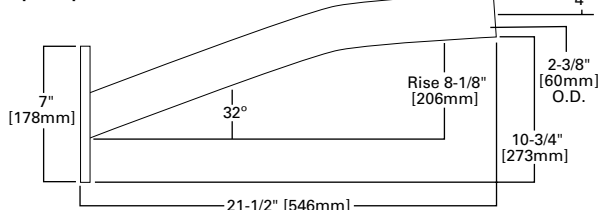
OPTIONAL WOOD POLE PIPE ARM

18", 24" or 30" Pipe Arm



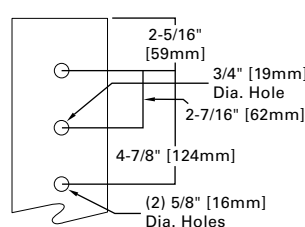
OPTIONAL MOUNTING ARM

Upsweep Arm



ARM DRILLING

TYPE "M"



CERTIFICATION DATA

UL/cUL Wet Location Listed
ISO 9001
IP66 Light Square
3G Vibration Rated
DesignLights Consortium® Qualified*
10kV/10kA, UL1449 Surge Protection

ENERGY DATA

Electronic LED Driver
0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60 Hz,
347V/60 Hz, 480V/60 Hz
-40°C Minimum Temperature
+40°C Ambient Temperature Rating

EPA

Effective Projected Area (Sq. Ft.): 0.59

SHIPPING DATA

Approximate Net Weight:
11 lbs. (5.0 kgs.)

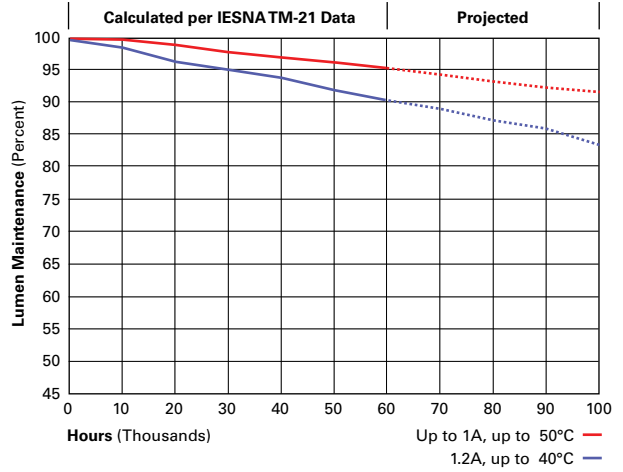
POWER AND LUMENS

Number of LED Squares	1	1	1	1	
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					
T2R	4000K/5000K Lumens	4,272	5,238	6,483	7,113
	3000K Lumens	4,039	4,952	6,129	6,725
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
T3R	4000K/5000K Lumens	4,146	5,085	6,293	6,904
	3000K Lumens	3,920	4,807	5,950	6,527
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
T4FT	4000K/5000K Lumens	4,108	5,038	6,235	6,839
	3000K Lumens	3,884	4,764	5,895	6,466
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
T4W	4000K/5000K Lumens	4,028	4,940	6,115	6,707
	3000K Lumens	3,809	4,671	5,782	6,341
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
5NQ	4000K/5000K Lumens	4,191	5,138	6,360	6,977
	3000K Lumens	3,963	4,858	6,013	6,596
	BUG Rating	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1
5MQ	4000K/5000K Lumens	4,341	5,323	6,589	7,228
	3000K Lumens	4,105	5,034	6,230	6,834
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1
5WQ	4000K/5000K Lumens	4,241	5,201	6,436	7,060
	3000K Lumens	4,010	4,917	6,086	6,676
	BUG Rating	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2
SL2	4000K/5000K Lumens	3,997	4,901	6,065	6,653
	3000K Lumens	3,778	4,634	5,734	6,290
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
SL3	4000K/5000K Lumens	4,071	4,993	6,180	6,778
	3000K Lumens	3,849	4,721	5,842	6,408
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
SL4	4000K/5000K Lumens	3,889	4,769	5,902	6,474
	3000K Lumens	3,678	4,509	5,581	6,121
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2

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

LUMEN MAINTENANCE

Drive Current	Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours)	Projected L70 (Hours)
Up to 1A	Up to 50°C	> 95%	416,000
1.2A	Up to 40°C	> 90%	205,000



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

ORDERING INFORMATION

Sample Number: XNV-AF-01-D-U-2-10K-4-AP

Product Family 1, 2, 3	Light Engine	Number of Light Squares	Driver	Voltage	Distribution	Surge Protection
XNV=XNV	AF=Version AF	01=1	D=Dimming (0-10V)	U=Universal (120-277V) 8=480V ⁴ 9=347V	T2R=Type II Roadway T3R=Type III Roadway T4FT=Type IV Forward Throw T4W=Type IV Wide 5NQ=Type V Square Narrow 5MQ=Type V Square Medium 5WQ=Type V Square Wide SL2=Type II with Spill Control SL3=Type III with Spill Control SL4=Type IV with Spill Control	10K=Cooper Lighting Solutions 10kV Surge Module (Standard) X=Driver Surge Protection Only ⁵
Options (Add as Suffix)						
7027=70 CRI / 2700K CCT ⁶ 7030=70 CRI / 3000K CCT ⁶ 8030=80 CRI / 3000K CCT ⁶ 7050=70 CRI / 5000K CCT ⁶ 600=Drive Current Factory Set to Nominal 600mA 800=Drive Current Factory Set to Nominal 800mA 1200=Drive Current Factory Set to Nominal 1200mA ⁷ 4=NEMA Twistlock Photocontrol Receptacle ⁸ 4N7=NEMA 7-PIN Twistlock Photocontrol Receptacle ⁸ K=Level Indicator IP66=IP66 Rated AI=Site Arm Included ⁹				B18=18" Wood Pole Pipe Arm ¹⁰ B24=24" Wood Pole Pipe Arm ¹⁰ B30=30" Wood Pole Pipe Arm ¹⁰ MS/DIM-L08=Programmable Motion Sensor, Maximum 8' Mounting Height ¹¹ MS/DIM-L20=Programmable Motion Sensor, Maximum 20' Mounting Height ¹¹ MS/DIM-L40=Programmable Motion Sensor, Maximum 40' Mounting Height ¹¹ LWR-LW=LumaWatt Wireless Sensor, Wide Lens for 8' - 16' Mounting Height ^{12, 13} LWR-LN=LumaWatt Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height ^{12, 13}		
Color				Accessories (Order Separately)		
AP=Grey (Standard) BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White A=Raw Aluminum Unfinished				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 Sensor ¹⁴ LS/HSS-XX=Light Square House Side Shield ¹⁵		

- NOTES:**
- 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.
 - DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
 - Standard 4000K CCT and nominal 70 CRI.
 - 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).
 - Consult factory for driver surge protection values.
 - Consult factory for lead times. Use dedicated IES files.
 - Not available in combination with 347V/480V and sensor options.
 - Not available with any sensor options.
 - 22" upsweep arm. Round pole adapter included. See optional mounting arm drawing.
 - 1-1/4" pipe plus hardware for mounting to wood utility pole. See optional wood pole mounting bracket drawing.
 - Factory installed. Includes integral photocontrol. Use FSIR-100 accessory to adjust factory settings.
 - LumaWatt wireless sensors are factory installed only requiring network components in appropriate quantities. See www.cooperlighting.com for LumaWatt application information.
 - LumaWatt wireless system is not available with 4 or 4N7 options. Includes integral photocontrol.
 - 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.
 - Replace XX with color.