

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 power tray door for easy maintenance. 3G vibration 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

LED driver mounted to removable die-cast aluminum door for optimal heat sinking and ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. 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. Light square is IP66 enclosure rated.

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 TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Consult your lighting representative at Eaton for a complete selection of standard colors.

Warranty

Five-year warranty.

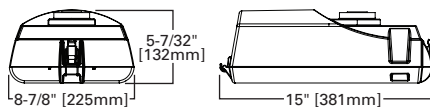


XNV

1 Light Square
LED

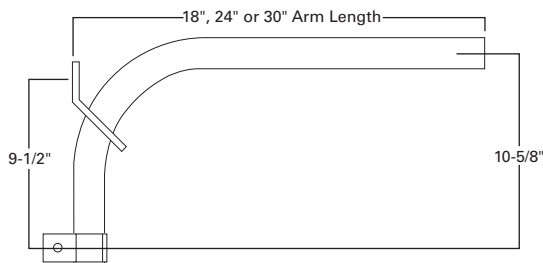
ROADWAY LUMINAIRE

DIMENSIONS



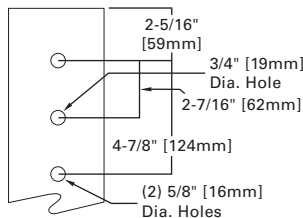
OPTIONAL WOOD POLE PIPE ARM

18", 24" or 30" Pipe Arm



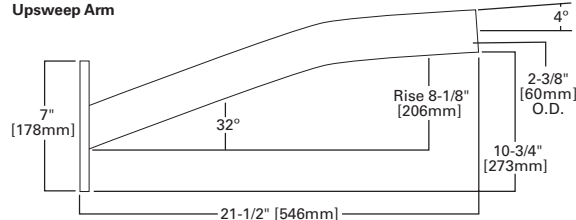
ARM DRILLING

TYPE "M"



OPTIONAL MOUNTING ARM

Upsweep Arm



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
LED Drive Current		1A	700mA	525mA
Luminaire Wattage (Nominal)		53W	39W	30W
Input Current @ 120V (A)		0.44	0.33	0.25
Input Current @ 277V (A)		0.19	0.14	0.11
Optics				
Type II	Lumens	4,879	3,876	3,027
	BUG Rating	1-0-1	1-0-1	1-0-1
Type III	Lumens	5,028	3,995	3,120
	BUG Rating	1-0-2	1-0-1	1-0-1
Type V	Lumens	5,016	3,985	3,112
	BUG Rating	3-0-1	3-0-1	2-0-1

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10°C	1.04
15°C	1.03
25°C	1.00
40°C	0.96

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
40°C	> 90%	> 250,000

ORDERING INFORMATION

Sample Number: XNV-AC-01-E-U-2-10K-4-AP

Product Family ^{1,2,3}	Light Engine	Number of Light Squares	Driver	Voltage	Distribution	Surge Protection
XNV=XNV	AC=Version AC	01=1	E=Non-Dimming D=Dimming (0-10V) ⁴	U=Universal (120-277V) 8=480V ⁵ 9=347V	2=Type II 3=Type III 5=Type V	10K=Cooper 10kV Surge Module (Standard) X=Driver Surge Protection Only ⁶
Options (Add as Suffix)						
7030 =70 CRI / 3000K CCT ⁷ 7060 =70 CRI / 6000K CCT ⁷ 525 =Drive Current Factory Set to 525mA ^{8,9} 700 =Drive Current Factory Set to 700mA ^{8,9} FADC =Field Adjustable Drive Current ^{9,10} 4 =NEMA Twistlock Photocontrol Receptacle 4N7 =NEMA 7-PIN Twistlock Photocontrol Receptacle ⁸ K =Level Indicator IP66 =IP66 Rated AI =Site Arm Included ¹¹				B18 =18" Wood Pole Pipe Arm ¹² B24 =24" Wood Pole Pipe Arm ¹² B30 =30" Wood Pole Pipe Arm ¹² 4B =Four-Bolt, Two Clamp Mounting MS/0-L08 =On/Off Motion Sensor, Maximum 8' Mounting Height ¹³ MS/0-L20 =On/Off Motion Sensor, 9' - 20' Mounting Height ¹³ MS/0-L40 =On/Off Motion Sensor, 21' - 40' Mounting Height ¹³ MS/DIM-L08 =Motion Sensor for Dimming Operation, Maximum 8' Mounting Height ¹⁴ MS/DIM-L20 =Motion Sensor for Dimming Operation, Maximum 20' Mounting Height ¹⁴ MS/DIM-L40 =Motion Sensor for Dimming Operation, Maximum 40' Mounting Height ¹⁴ DIMRF-LW =LumaWatt Wireless Sensor, Wide Lens for 8' - 16' Mounting Height ^{15,16} DIMRF-LN =LumaWatt Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height ^{15,16}		
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 ¹⁷ LS/HSS-XX =Light Square House Side Shield ¹⁸		

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.
- Must specify 4N7 option.
- 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 and lumen multiplier.
- Only available with dimming driver.
- Not available with any MS/DIM options.
- Three settings; 525mA, 700mA and 1000mA. Only available with dimming driver.
- 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.
- Sensor mounted externally.
- Sensor mounted externally. Must specify dimming driver. Consult factory for more information.
- LumaWatt wireless sensors are factory installed only requiring network components RF-EM1, RF-GW1 and RF-ROUT1 in appropriate quantities. See www.eaton.com/lighting for LumaWatt application information.
- LumaWatt wireless system is not available with 4N7 (Not needed) or with FADC, 525mA or 700mA options.
- Hand-held tool that enables adjustment of parameters, including high and low modes, sensitivity, time delay, cutoff, and more. Consult your lighting representative at Eaton for more information. Only available with dimming driver.
- Replace XX with color.