Streetworks

DESCRIPTION

The XNV2 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 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.
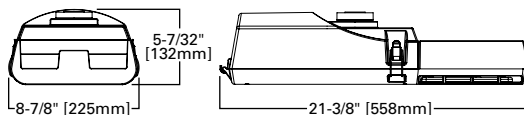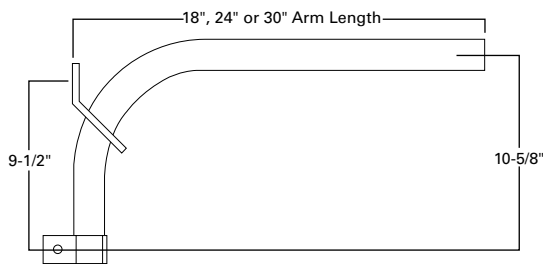
Warranty
Five-year warranty.
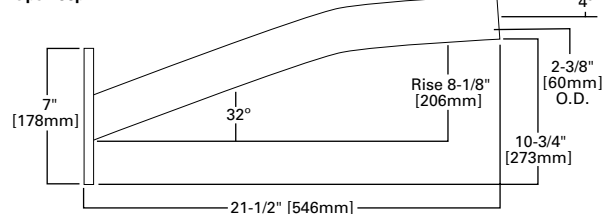
XNV2

2 Light Squares
LED

ROADWAY LUMINAIRE

DIMENSIONS

5-7/32" [132mm]
8-7/8" [225mm]
21-3/8" [558mm]

OPTIONAL WOOD POLE PIPE ARM

18", 24" or 30" Pipe Arm

18", 24" or 30" Arm Length
9-1/2"
10-5/8"

OPTIONAL MOUNTING ARM

Upsweep Arm

7" [178mm]
32°
Rise 8-1/8" [206mm]
4°
2-3/8" [60mm] O.D.
10-3/4" [273mm]
21-1/2" [546mm]

ARM DRILLING

TYPE "M"

2-5/16" [59mm]
3/4" [19mm] Dia. Hole
2-7/16" [62mm]
4-7/8" [124mm]
(2) 5/8" [16mm] Dia. Holes
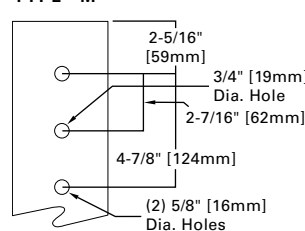
CERTIFICATION DATA
ISO 9001
IP66 Light Square
3G Vibration Rated
DesignLights Consortium® Qualified*
10kV/10kA, UL 1449 Surge Protection
UL and cUL Wet Location Listed

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

EPA
Effective Projected Area (Sq. Ft.): 1.0

SHIPPING DATA
Approximate Net Weight:
22 lbs. (10.0 kgs.)

COOPER
Lighting Solutions

POWER AND LUMENS

Number of LED Squares		2	2	2	2
LED Drive Current		600 mA	800 mA	1 A	1.2 A
Luminaire Wattage (Nominal)		66	85	111	128
Input Current @ 120V (A)		0.58	0.77	1.02	1.16
Input Current @ 277V (A)		0.28	0.36	0.42	0.48
Optics					
T2R	4000K/5000K Lumens	8,517	10,444	12,927	14,181
	3000K Lumens	8,052	9,875	12,222	13,408
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2
T3R	4000K/5000K Lumens	8,266	10,136	12,546	13,763
	3000K Lumens	7,815	9,583	11,862	13,012
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2
T4FT	4000K/5000K Lumens	8,192	10,045	12,433	13,639
	3000K Lumens	7,745	9,498	11,755	12,895
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3
T4W	4000K/5000K Lumens	8,031	9,849	12,189	13,372
	3000K Lumens	7,594	9,312	11,525	12,642
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3
5NQ	4000K/5000K Lumens	8,355	10,246	12,682	13,912
	3000K Lumens	7,899	9,687	11,990	13,154
	BUG Rating	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2
5MQ	4000K/5000K Lumens	8,656	10,614	13,137	14,411
	3000K Lumens	8,185	10,035	12,421	13,626
	BUG Rating	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2
5WQ	4000K/5000K Lumens	8,456	10,369	12,833	14,078
	3000K Lumens	7,995	9,803	12,133	13,310
	BUG Rating	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
SL2	4000K/5000K Lumens	7,968	9,771	12,093	13,266
	3000K Lumens	7,533	9,238	11,434	12,542
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3
SL3	4000K/5000K Lumens	8,117	9,954	12,319	13,515
	3000K Lumens	7,674	9,412	11,647	12,778
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3
SL4	4000K/5000K Lumens	7,753	9,507	11,768	12,910
	3000K Lumens	7,330	8,989	11,126	12,205
	BUG Rating	B1-U0-G2	B1-U0-G3	B1-U0-G3	B1-U0-G3

* 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
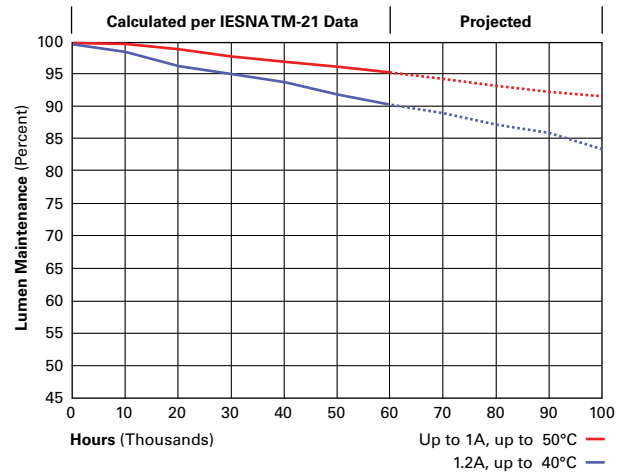
LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

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ORDERING INFORMATION

Sample Number: XNV2-AF-02-E-U-2-10K-4-AP

Product Family [1, 2, 3]	Light Engine	Number of Light Squares	Driver	Voltage	Distribution	Surge Protection
XNV2=XNV2	**AF**=Version AF	**02**=2	**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 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 10kV Surge Module (Standard) **X=**Driver Surge Protection Only [5]

Options (Add as Suffix)		Color	Accessories (Order Separately)
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 **MS/DIM-L08**=Programmable Motion Sensor, Maximum 8' Mounting Height [9] **MS/DIM-L20**= Programmable Motion Sensor, Maximum 20' Mounting Height [9] **MS/DIM-L40**= Programmable Motion Sensor, Maximum 40' Mounting Height [9] **LWR-LW**=Enlighted Wireless Sensor, Wide Lens for 8' - 16' Mounting Height [10, 11] **LWR-LN**=Enlighted Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height [10, 11] **AI**=Site Arm Included [12] **B18**=18" Wood Pole Pipe Arm [13] **B24**=24" Wood Pole Pipe Arm [13] **B30**=30" Wood Pole Pipe Arm [13]		**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:
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. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
3. Standard 4000K CCT and 70 CRI.
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).
5. Consult factory for driver surge protection values.
6. Consult factory for lead times. Use dedicated IES files.
7. Not available in combination with 347V/480V and sensor options.
8. Not available with any sensor options.
9. Factory installed. Includes integral photocontrol. Use FSIR-100 accessory to adjust factory settings.
10. Enlighted wireless sensors are factory installed only requiring network components in appropriate quantities. See www.cooperlighting.com for Enlighted application information.
11. Enlighted wireless system is not available with 4 or 4N7 options. Includes integral photocontrol.
12. 22" upsweep arm. Round pole adapter included. See optional mounting arm drawing.
13. 1-1/4" pipe plus hardware for mounting to wood utility pole. See optional wood pole mounting bracket drawing.
14. 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.
15. Replace XX with color.

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