

DESCRIPTION

The NAVION™ Area/Site/Roadway LED luminaire combines world class optical performance, energy efficiency, and outstanding versatility to meet the requirements of any area/site or roadway lighting application. Patented AccuLED Optic™ technology delivers unparalleled uniformity and the heavy-duty construction and easy installation features make Navion the right choice for site lighting applications and municipal streets. UL/cUL listed for wet locations, optional IP66 enclosure rating available.

SPECIFICATION FEATURES**Construction**

Heavy-duty cast aluminum housing and door with extruded aluminum heat sink. Tool-less entry, hinged removable power tray door for easy maintenance. 3G vibration rated.

Optics

Choice of several patented, high-efficiency AccuLED Optics™ manufactured from injection-molded acrylic. Optics are precisely designed to effectively illuminate site lighting or roadway applications while maximizing efficiency, uniformity and optimizing application spacing. Optics create consistent distributions with the scalability to meet customized applications. Offered standard in 4000K (+/-275K) CCT and nominal 70 CRI.

Electrical

LED drivers 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. 10kV common and differential-mode surge protection standard. Thermal management incorporates both conduction and convection to transfer heat rapidly away from the LED source for optimal efficiency and light output. Suitable for ambient temperatures from -40°C to 40°C. Optional 50°C HA option available. Standard three-position tunnel type compression terminal block. 90% lumen maintenance expected at 60,000 hours. Light squares are IP66 enclosure rated.

Mounting

Four-bolt/two-bracket slipfitter with cast-in pipe stop and built-in incremental 2.5° leveling steps are standard. Fixed-in-place bird guard seals around 1-1/4" or 2" 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. Heat sink is anodized aluminum. Consult your Cooper Lighting representative for a complete selection of standard colors.

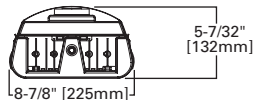
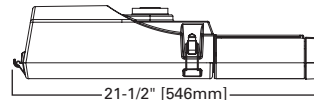
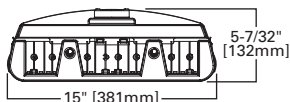
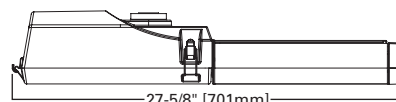
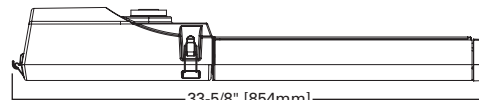
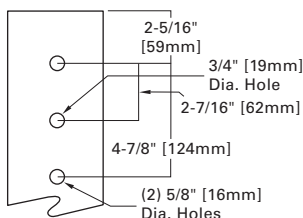
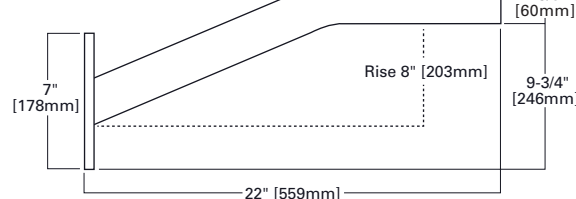
Warranty

Five-year warranty.

**NAV NAVION**

1-6 Light Squares
LED

AREA / SITE / ROADWAY
LUMINAIRE

DIMENSIONS**1, 2 or 3 Light Squares****1 Light Square****4 or 6 Light Squares****2 or 4 Light Squares****3 or 6 Light Squares****ARM DRILLING****TYPE "M"****OPTIONAL ARM****22" Upsweep Arm**

Approved as noted: finish and color shall match exiting light poles. Lenses shall be borosilicate glass with prismatic refractors by: George Thomas

www.designlights.org

CERTIFICATION DATA

UL/cUL Wet Location Listed
ISO 9001
IP66 Light Squares
3G Vibration Rated
ARRA Compliant
DLC Compliant*

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.):****(Fixture only)**

- 1 Square 0.8
- 2 Square's 1.0
- 3 Square's 1.2
- 4 Square's 1.2
- 6 Square's 1.4

(Fixture with AI arm)

- 1 Square 1.2
- 2 Square's 1.3
- 3 Square's 1.5
- 4 Square's 1.5
- 6 Square's 1.7

SHIPPING DATA**Approximate Net Weight:**

- 1 Square 17 lbs. (7.7 kg)
- 2 Square's 22 lbs. (10.0 kg)
- 3 Square's 26 lbs. (11.8 kg)
- 4 Square's 31 lbs. (14.1 kg)
- 6 Square's 36 lbs. (16.3 kg)

ORDERING INFORMATION

SAMPLE NUMBER: NAV-AA-01-E-UNV-T3-10K-AI-AP

NAV								
Product Family NAV=Navion								
Light Engine AA=1A, UL Class 2								
Number of Light Squares¹ 01=1 02=2 03=3 04=4 06=6								
Driver E= Non-Dimming D=Dimming								
Voltage UNV=Universal 120-277V 347=347V 480=480V								
	Distribution T2=Type II T3=Type III T4=Type IV SL2=Type II w/Spill Control SL3=Type III w/Spill Control SL4=Type IV w/Spill Control RW=Rectangular Wide 5MQ=Type V Square Medium 5WQ=Type V Square Wide 5XQ=Type V Square Extra Wide	Surge Protection 10K=Cooper 10kV Surge Module (Standard) X=Driver Surge Protection Only ²	Options³ AI=Arm Included ⁴ PER=NEMA Twistlock Photocontrol Receptacle K=Level Indicator 7060=70 CRI 6000K ⁵ 8030=80 CRI 3000K ⁵ 2L=Two Circuits ⁶ IP66=IP66 Rated HA=50°C High Ambient LCF=Light Square Cover Plate Matches Housing Color MS-L08=On/Off Motion Sensor, Max. 8' Mounting Height ⁷ MS-L20=On/Off Motion Sensor, 9'-20' Mounting Height ⁷ MS-L40=On/Off Motion Sensor, 21'-40' Mounting Height ⁷ MS/X-L08=Bi-Level Motion Sensor, Max. 8' Mounting Height ⁸ MS/X-L20=Bi-Level Motion Sensor, 9'-20' Mounting Height ⁸ MS/X-L40=Bi-Level Motion Sensor, 21'-40' Mounting Height ⁸	Color AP=Grey (Standard) BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White	Accessories⁹ OA/RA1016=NEMA Photocontrol - Multi-Tap OA/RA1027=NEMA Photocontrol 480V OA/RA1201=NEMA Photocontrol 347V OA/RA1013=Photocontrol Shorting Cap OA/RA1014=NEMA Photo Control 120V OA1223=10kV Surge Module Replacement MA1010-XX=Single Tenon Adapter for 3 1/2" O.D. Tenon MA1011-XX=2 @ 180 degrees Tenon Adapter for 3 1/2" O.D. Tenon MA1012-XX=3 @ 120 degrees Tenon Adaptor for 3 1/2" O.D. Tenon MA1013-XX=4 @ 90 degrees Tenon Adapter for 3 1/2" O.D. Tenon MA1014-XX=2 @ 90 degrees Tenon Adapter for 3 1/2" O.D. Tenon MA1015-XX=2 @ 120 degrees Tenon Adapter for 3 1/2" O.D. Tenon MA1016-XX=3 @ 90 degrees Tenon Adapter for 3 1/2" O.D. Tenon MA1017-XX=Single Tenon Adapter for 2 3/8" O.D. Tenon MA1018-XX=2 @ 180 degrees Tenon Adapter for 2 3/8" O.D. Tenon MA1019-XX=3 @ 120 degrees Tenon Adapter for 2 3/8" O.D. Tenon MA1045-XX=4 @ 90 degrees Tenon Adapter for 2 3/8" O.D. Tenon MA1048-XX=2 @ 90 degrees Tenon Adapter for 2 3/8" O.D. Tenon MA1049-XX=3 @ 90 degrees Tenon Adapter for 2 3/8" O.D. Tenon			

NOTES:

- Standard 4000K CCT and Nominal 70 CRI.
- Consult factory for driver surge protection values.
- Add as suffix.
- 22" upsweep arm. Round pole adapter and mounting hardware included, "M" Drill Pattern.
- Consult factory for lead times and lumen multiplier.
- Low-level output varies by number of light squares specified. Consult factory. Requires 2 or more light squares. No terminal block with 2L option.
- Sensor mounted internally for 1, 2, 4 and 6 light square configurations. Sensor mounted externally 3 light square configurations. Consult factory for additional information.
- Sensor mounted internally for 1, 2, 4 and 6 light square configurations. Sensor mounted externally 3 light square configurations. Factory set to 50% dimming of light output of all squares after 5 minutes of inactivity. Available with "D" dimming driver only. Consult factory for additional information.
- Order separately.

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POWER AND LUMENS BY LIGHT SQUARE COUNT

	Number of Light Squares	1	2	3	4	6
	Power (Watts)	51	103	154	206	309
	Current @ 120V (A)	0.43	0.86	1.29	1.72	2.58
Optics	Current @ 277V (A)	0.19	0.38	0.57	0.76	1.14
T2	Lumens	3762	7577	11367	14831	22196
	BUG Rating	1-0-1	2-0-2	3-0-3	3-0-3	3-0-3
T3	Lumens	3748	7548	11324	14774	22111
	BUG Rating	1-0-1	2-0-2	3-0-3	3-0-3	3-0-3
T4	Lumens	3593	7236	10856	14164	21197
	BUG Rating	1-0-1	1-0-2	2-0-2	2-0-3	3-0-4
SL2	Lumens	3686	7423	11156	14529	21744
	BUG Rating	1-0-1	1-0-2	2-0-2	2-0-2	3-0-3
SL3	Lumens	3640	7331	10999	14351	21477
	BUG Rating	1-0-1	1-0-2	2-0-2	2-0-3	3-0-4
SL4	Lumens	3702	7455	11184	14592	21838
	BUG Rating	1-0-1	1-0-2	2-0-2	2-0-3	3-0-4
RW	Lumens	3756	7565	11350	14808	22161
	BUG Rating	2-0-2	3-0-3	3-0-3	3-0-3	4-0-4
5MQ	Lumens	3954	7962	11945	15585	23324
	BUG Rating	2-0-1	3-0-2	4-0-2	4-0-2	5-0-3
5WQ	Lumens	3930	7914	11874	15492	23185
	BUG Rating	3-0-1	3-0-2	4-0-2	4-0-2	5-0-3
5XQ	Lumens	3834	7721	11584	15113	22618
	BUG Rating	2-0-2	3-0-3	4-0-3	4-0-3	5-0-4

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10°C	1.04
15°C	1.03
25°C	1.00
40°C	0.96
50°C	0.92

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
25°C	> 94%	> 350,000
40°C	> 93%	> 250,000
50°C	> 90%	> 170,000

POWER (WATTS)

Number of Light Squares	Power (Watts)	Typical Equivalent
1	51W	70-100W HPS, 175W MV
2	103W	100-200W HPS, 175-200W MH
3	154W	200-250W HPS, 200-250W MH
4	206W	250-400W HPS, 250-350W MH
6	309W	400W HPS, 350-400W MH

NOTE: Light squares are standard 4000K CCT and nominal 70 CRI.

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