

DESCRIPTION

The Navion™ roadway LED luminaire combines world class 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 with extruded aluminum heat sink. Tool-less entry, hinged removable power tray door for easy maintenance. 3G vibration rated.

Optics

Choice of 16 patented, high-efficiency AccuLED Optics. The optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 3000K, 5000K and 6000K CCT. For the ultimate level of spill light control, an optional house side shield accessory is available and can be field or factory installed. The house side shield is designed to seamlessly integrate with the SL2, SL3, SL4 or AFL optics.

Electrical

LED drivers are mounted to the 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 UL 1449 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. Ambient operating temperature from -40°C to 40°C; 50°C ambient capability available. Standard three-position tunnel type compression terminal block. Greater than 90% lumen maintenance expected at 60,000 hours. Light squares are IP66 enclosure rated. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

Mounting

Four-bolt/two-bracket slipfitter with cast-in pipe stop and 2.5° leveling steps. Fixed-in-place bird guard seals around 1-1/4" or 2" mounting arms.

Finish

Housing and cast parts finished in five-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 lighting representative at Cooper Lighting Solutions for a complete selection of standard colors.

Warranty

Standard five-year warranty. Optional ten-year warranty, please see your Cooper Lighting Solutions Streetworks sales representative for more information.



NVN NAVION

1-6 Light Squares
LED

ROADWAY LUMINAIRE



CERTIFICATION DATA

UL/cUL Wet Location Listed
ISO 9001
IP66 Light Squares
3G Vibration Rated
DesignLights Consortium® Qualified*

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 0.89
- 2 Square's 1.0
- 3 Square's 1.2
- 4 Square's 1.2
- 5 Square's 1.4
- 6 Square's 1.4

(Fixture with AI Arm)

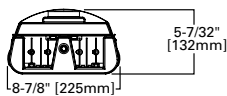
- 1 Square 1.2
- 2 Square's 1.3
- 3 Square's 1.5
- 4 Square's 1.5
- 5 Square's 1.7
- 6 Square's 1.7

SHIPPING DATA

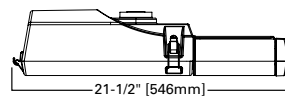
Approximate Net Weight:
1 Square 17 lbs. (7.7 kgs.)
2 Square's 22 lbs. (10.0 kgs.)
3 Square's 26 lbs. (11.8 kgs.)
4 Square's 31 lbs. (14.1 kgs.)
5 Square's 34 lbs. (15.4 kgs.)
6 Square's 36 lbs. (16.3 kgs.)

DIMENSIONS

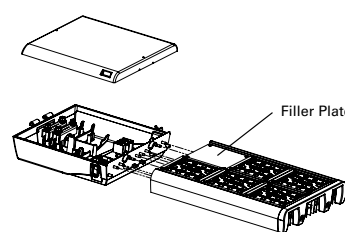
1, 2 or 3 Light Squares



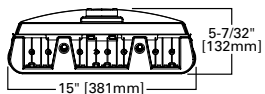
1 Light Square



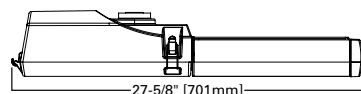
5 Light Squares



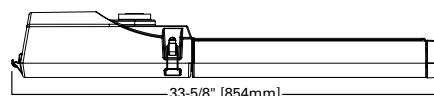
4, 5 or 6 Light Squares



2 or 4 Light Squares

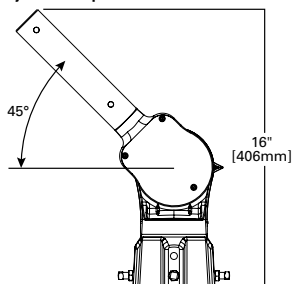


3, 5 or 6 Light Squares



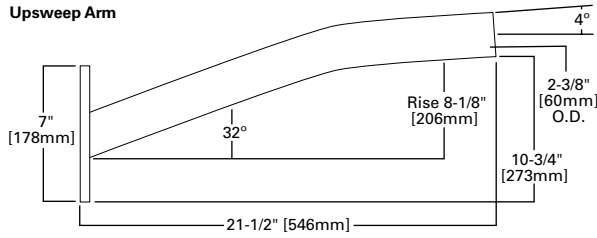
OPTIONAL ARM

Adjustable Slipfitter Offset Arm



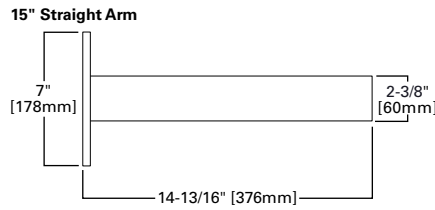
OPTIONAL ARM

Upsweep Arm



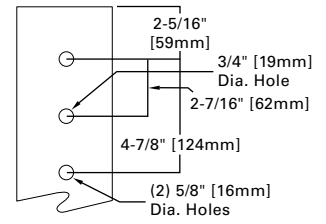
OPTIONAL ARM

15" Straight Arm

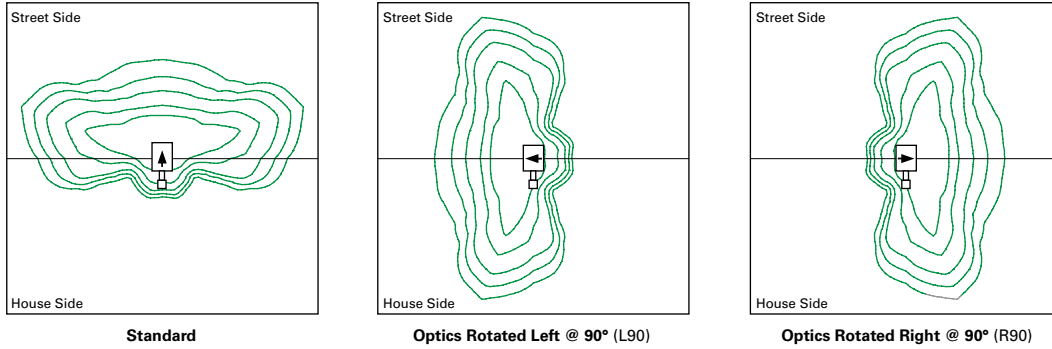


ARM DRILLING

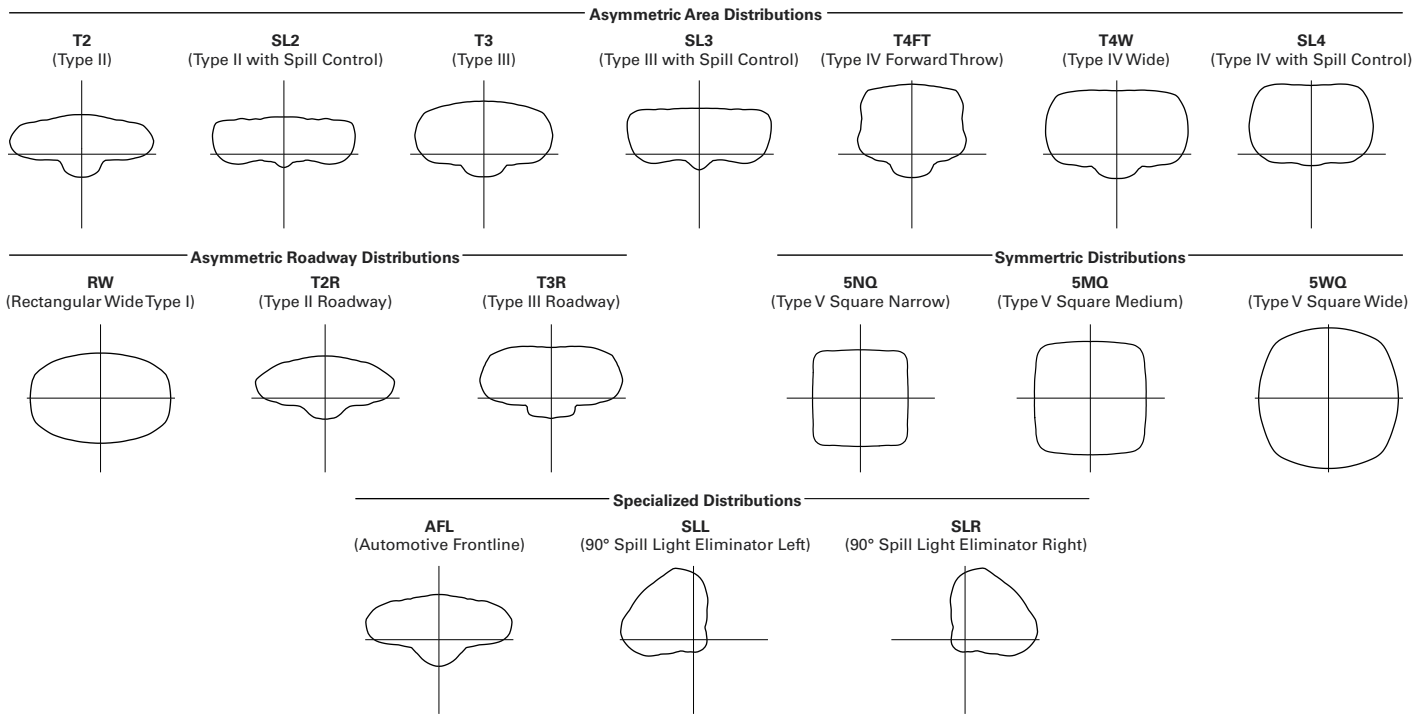
TYPE "M"



OPTIC ORIENTATION



OPTICAL DISTRIBUTIONS



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

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

NOMINAL POWER LUMENS (1.2A)

Number of Light Squares		1	2	3	4	5	6
Nominal Power (Watts)		67	129	191	258	320	382
Input Current @ 120V (A)		0.58	1.16	1.78	2.31	2.94	3.56
Input Current @ 208V (A)		0.33	0.63	0.93	1.27	1.57	1.87
Input Current @ 240V (A)		0.29	0.55	0.80	1.10	1.35	1.61
Input Current @ 277V (A)		0.25	0.48	0.70	0.96	1.18	1.39
Input Current @ 347V (A)		0.20	0.39	0.57	0.78	0.96	1.15
Input Current @ 480V (A)		0.15	0.30	0.43	0.60	0.73	0.85
Optics							
T2	4000K/5000K Lumens	6,711	13,379	19,896	26,798	33,028	39,567
	3000K Lumens	6,345	12,650	18,811	25,337	31,226	37,409
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
T2R	4000K/5000K Lumens	7,184	14,324	21,301	28,690	35,359	42,360
	3000K Lumens	6,793	13,543	20,140	27,125	33,431	40,050
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4
T3	4000K/5000K Lumens	6,858	13,673	20,333	27,385	33,752	40,434
	3000K Lumens	6,483	12,928	19,224	25,892	31,911	38,229
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5
T3R	4000K/5000K Lumens	6,973	13,902	20,675	27,846	34,321	41,114
	3000K Lumens	6,593	13,144	19,548	26,327	32,449	38,872
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5
T4FT	4000K/5000K Lumens	6,909	13,777	20,488	27,594	34,010	40,742
	3000K Lumens	6,533	13,026	19,371	26,089	32,155	38,520
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
T4W	4000K/5000K Lumens	6,775	13,507	20,087	27,055	33,345	39,944
	3000K Lumens	6,406	12,770	18,991	25,580	31,527	37,765
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
SL2	4000K/5000K Lumens	6,721	13,400	19,928	26,840	33,080	39,629
	3000K Lumens	6,355	12,669	18,842	25,377	31,277	37,468
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5
SL3	4000K/5000K Lumens	6,847	13,651	20,300	27,341	33,699	40,370
	3000K Lumens	6,474	12,907	19,194	25,851	31,861	38,169
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5
SL4	4000K/5000K Lumens	6,540	13,040	19,392	26,118	32,190	38,563
	3000K Lumens	6,183	12,329	18,335	24,694	30,434	36,460
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	7,047	14,052	20,897	28,144	34,688	41,554
	3000K Lumens	6,663	13,286	19,757	26,610	32,796	39,289
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3
5MQ	4000K/5000K Lumens	7,301	14,557	21,648	29,156	35,935	43,049
	3000K Lumens	6,903	13,762	20,468	27,566	33,975	40,701
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4
5WQ	4000K/5000K Lumens	7,132	14,220	21,147	28,483	35,106	42,055
	3000K Lumens	6,743	13,444	19,994	26,930	33,191	39,761
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
SLL/SLR	4000K/5000K Lumens	6,056	12,072	17,953	24,181	29,803	35,702
	3000K Lumens	5,725	11,413	16,973	22,861	28,177	33,755
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5
RW	4000K/5000K Lumens	7,006	13,967	20,771	27,977	34,481	41,306
	3000K Lumens	6,624	13,206	19,638	26,451	32,600	39,053
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3
AFL	4000K/5000K Lumens	7,024	14,005	20,827	28,052	34,574	41,418
	3000K Lumens	6,641	13,241	19,692	26,523	32,688	39,160
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3

* Nominal data for 70 CRI.



Cooper Lighting Solutions
 1121 Highway 74 South
 Peachtree City, GA 30269
 P: 770-486-4800
 www.cooperlighting.com

Specifications and dimensions subject to change without notice.

NOMINAL POWER LUMENS (1A)

Number of Light Squares	1	2	3	4	5	6	
Nominal Power (Watts)	59	113	166	225	279	333	
Input Current @ 120V (A)	0.51	1.02	1.53	2.03	2.55	3.06	
Input Current @ 208V (A)	0.29	0.56	0.82	1.11	1.37	1.64	
Input Current @ 240V (A)	0.26	0.48	0.71	0.96	1.19	1.41	
Input Current @ 277V (A)	0.23	0.42	0.61	0.83	1.03	1.23	
Input Current @ 347V (A)	0.17	0.32	0.50	0.64	0.82	1.00	
Input Current @ 480V (A)	0.14	0.24	0.37	0.48	0.61	0.75	
Optics							
T2	4000K/5000K Lumens	6,117	12,196	18,138	24,429	30,109	36,068
	3000K Lumens	5,783	11,530	17,148	23,096	28,466	34,101
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4
T2R	4000K/5000K Lumens	6,549	13,058	19,418	26,153	32,233	38,615
	3000K Lumens	6,192	12,346	18,359	24,726	30,476	36,509
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4
T3	4000K/5000K Lumens	6,251	12,465	18,535	24,964	30,768	36,859
	3000K Lumens	5,910	11,785	17,524	23,602	29,090	34,849
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5
T3R	4000K/5000K Lumens	6,357	12,673	18,847	25,385	31,287	37,480
	3000K Lumens	6,010	11,982	17,819	24,000	29,581	35,436
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5
T4FT	4000K/5000K Lumens	6,298	12,559	18,676	25,154	31,003	37,140
	3000K Lumens	5,955	11,874	17,657	23,782	29,312	35,115
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5
T4W	4000K/5000K Lumens	6,177	12,312	18,311	24,662	30,397	36,413
	3000K Lumens	5,840	11,640	17,312	23,317	28,740	34,428
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5
SL2	4000K/5000K Lumens	6,126	12,215	18,166	24,467	30,156	36,126
	3000K Lumens	5,792	11,549	17,174	23,132	28,511	34,156
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5
SL3	4000K/5000K Lumens	6,242	12,444	18,505	24,924	30,719	36,801
	3000K Lumens	5,901	11,765	17,496	23,565	29,044	34,794
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5
SL4	4000K/5000K Lumens	5,962	11,887	17,678	23,808	29,344	35,154
	3000K Lumens	5,637	11,238	16,713	22,510	27,744	33,237
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	6,424	12,809	19,048	25,656	31,621	37,881
	3000K Lumens	6,074	12,110	18,009	24,257	29,897	35,815
	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3
5MQ	4000K/5000K Lumens	6,655	13,270	19,734	26,578	32,758	39,242
	3000K Lumens	6,292	12,546	18,657	25,129	30,972	37,102
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4
5WQ	4000K/5000K Lumens	6,502	12,963	19,278	25,965	32,002	38,336
	3000K Lumens	6,147	12,256	18,227	24,548	30,257	36,246
	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
SLL/SLR	4000K/5000K Lumens	5,520	11,005	16,366	22,043	27,168	32,545
	3000K Lumens	5,219	10,405	15,473	20,840	25,686	30,771
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5
RW	4000K/5000K Lumens	6,386	12,733	18,935	25,503	31,432	37,654
	3000K Lumens	6,038	12,038	17,902	24,112	29,719	35,600
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3
AFL	4000K/5000K Lumens	6,403	12,766	18,986	25,572	31,517	37,756
	3000K Lumens	6,053	12,070	17,950	24,177	29,798	35,697
	BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3

* Nominal data for 70 CRI.



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NOMINAL POWER LUMENS (800MA)

Number of Light Squares		1	2	3	4	5	6
Nominal Power (Watts)		44	85	124	171	210	249
Input Current @ 120V (A)		0.39	0.77	1.13	1.54	1.90	2.26
Input Current @ 208V (A)		0.22	0.44	0.62	0.88	1.06	1.24
Input Current @ 240V (A)		0.19	0.38	0.54	0.76	0.92	1.08
Input Current @ 277V (A)		0.17	0.36	0.47	0.72	0.83	0.95
Input Current @ 347V (A)		0.15	0.24	0.38	0.49	0.63	0.77
Input Current @ 480V (A)		0.11	0.18	0.29	0.37	0.48	0.59
Optics							
T2	4000K/5000K Lumens	4,942	9,854	14,654	19,737	24,326	29,141
	3000K Lumens	4,672	9,317	13,854	18,660	22,999	27,552
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4
T2R	4000K/5000K Lumens	5,291	10,550	15,689	21,130	26,042	31,199
	3000K Lumens	5,002	9,974	14,833	19,978	24,622	29,498
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4
T3	4000K/5000K Lumens	5,050	10,070	14,975	20,170	24,859	29,780
	3000K Lumens	4,775	9,521	14,158	19,069	23,503	28,156
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4
T3R	4000K/5000K Lumens	5,136	10,239	15,228	20,509	25,278	30,281
	3000K Lumens	4,857	9,680	14,397	19,390	23,899	28,630
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4
T4FT	4000K/5000K Lumens	5,089	10,147	15,090	20,323	25,049	30,007
	3000K Lumens	4,812	9,593	14,267	19,214	23,683	28,370
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4
T4W	4000K/5000K Lumens	4,990	9,948	14,794	19,926	24,559	29,419
	3000K Lumens	4,718	9,406	13,987	18,840	23,220	27,814
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
SL2	4000K/5000K Lumens	4,950	9,869	14,677	19,767	24,364	29,187
	3000K Lumens	4,680	9,331	13,877	18,690	23,035	27,596
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4
SL3	4000K/5000K Lumens	5,043	10,055	14,951	20,137	24,820	29,733
	3000K Lumens	4,768	9,507	14,136	19,038	23,467	28,111
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4
SL4	4000K/5000K Lumens	4,817	9,603	14,282	19,236	23,708	28,402
	3000K Lumens	4,554	9,079	13,503	18,186	22,415	26,854
	BUG Rating	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G5
5NQ	4000K/5000K Lumens	5,190	10,349	15,390	20,728	25,548	30,606
	3000K Lumens	4,908	9,785	14,551	19,598	24,155	28,936
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
5MQ	4000K/5000K Lumens	5,378	10,722	15,944	21,474	26,467	31,706
	3000K Lumens	5,084	10,137	15,074	20,303	25,024	29,977
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3
5WQ	4000K/5000K Lumens	5,253	10,473	15,575	20,978	25,856	30,974
	3000K Lumens	4,967	9,902	14,726	19,834	24,446	29,285
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4
SLL/SLR	4000K/5000K Lumens	4,460	8,891	13,223	17,810	21,949	26,295
	3000K Lumens	4,216	8,406	12,501	16,838	20,753	24,861
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4
RW	4000K/5000K Lumens	5,160	10,287	15,298	20,605	25,396	30,423
	3000K Lumens	4,878	9,726	14,464	19,482	24,011	28,764
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
AFL	4000K/5000K Lumens	5,173	10,314	15,339	20,661	25,463	30,504
	3000K Lumens	4,890	9,751	14,503	19,533	24,074	28,841
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3

* Nominal data for 70 CRI.



Cooper Lighting Solutions
 1121 Highway 74 South
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 www.cooperlighting.com

Specifications and dimensions subject to change without notice.

NOMINAL POWER LUMENS (600MA)

Number of Light Squares		1	2	3	4	5	6
Nominal Power (Watts)		34	66	96	129	162	193
Input Current @ 120V (A)		0.30	0.58	0.86	1.16	1.44	1.73
Input Current @ 208V (A)		0.17	0.34	0.49	0.65	0.84	0.99
Input Current @ 240V (A)		0.15	0.30	0.43	0.56	0.74	0.87
Input Current @ 277V (A)		0.14	0.28	0.41	0.52	0.69	0.81
Input Current @ 347V (A)		0.11	0.19	0.30	0.39	0.49	0.60
Input Current @ 480V (A)		0.08	0.15	0.24	0.30	0.38	0.48
Optics							
T2	4000K/5000K Lumens	4,030	8,035	11,950	16,095	19,837	23,764
	3000K Lumens	3,811	7,597	11,299	15,218	18,755	22,468
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3
T2R	4000K/5000K Lumens	4,315	8,603	12,794	17,232	21,237	25,442
	3000K Lumens	4,080	8,134	12,096	16,292	20,080	24,055
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3
T3	4000K/5000K Lumens	4,118	8,212	12,212	16,448	20,272	24,285
	3000K Lumens	3,894	7,764	11,547	15,551	19,166	22,961
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4
T3R	4000K/5000K Lumens	4,188	8,350	12,418	16,725	20,613	24,694
	3000K Lumens	3,960	7,895	11,740	15,813	19,490	23,348
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4
T4FT	4000K/5000K Lumens	4,150	8,275	12,305	16,573	20,426	24,470
	3000K Lumens	3,923	7,823	11,634	15,669	19,313	23,136
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4
T4W	4000K/5000K Lumens	4,069	8,112	12,065	16,250	20,027	23,991
	3000K Lumens	3,847	7,670	11,407	15,363	18,935	22,683
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4
SL2	4000K/5000K Lumens	4,037	8,049	11,968	16,121	19,869	23,802
	3000K Lumens	3,816	7,610	11,316	15,242	18,785	22,504
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4
SL3	4000K/5000K Lumens	4,112	8,199	12,193	16,421	20,240	24,247
	3000K Lumens	3,889	7,752	11,528	15,526	19,137	22,925
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G4
SL4	4000K/5000K Lumens	3,928	7,832	11,647	15,687	19,334	23,162
	3000K Lumens	3,714	7,405	11,012	14,832	18,279	21,899
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4
5NQ	4000K/5000K Lumens	4,233	8,439	12,551	16,904	20,834	24,958
	3000K Lumens	4,002	7,979	11,867	15,982	19,698	23,597
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2
5MQ	4000K/5000K Lumens	4,385	8,743	13,002	17,511	21,583	25,856
	3000K Lumens	4,146	8,267	12,293	16,556	20,406	24,446
	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3
5WQ	4000K/5000K Lumens	4,284	8,541	12,702	17,107	21,085	25,259
	3000K Lumens	4,050	8,075	12,010	16,174	19,935	23,881
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3
SLL/SLR	4000K/5000K Lumens	3,637	7,251	10,783	14,523	17,900	21,443
	3000K Lumens	3,438	6,855	10,195	13,731	16,923	20,274
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G4
RW	4000K/5000K Lumens	4,207	8,389	12,476	16,803	20,710	24,809
	3000K Lumens	3,978	7,932	11,796	15,886	19,580	23,456
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
AFL	4000K/5000K Lumens	4,219	8,412	12,510	16,848	20,765	24,876
	3000K Lumens	3,989	7,953	11,827	15,929	19,633	23,519
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2

* Nominal data for 70 CRI.



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CONTROL OPTIONS

0-10V (DIM)

This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (4 and 4N7)

Photocontrol receptacles (4 and 4N7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the 4N7 receptacle.

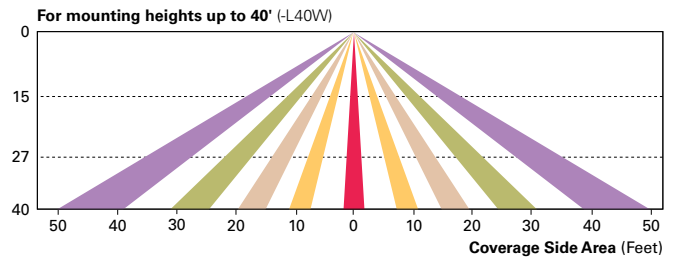
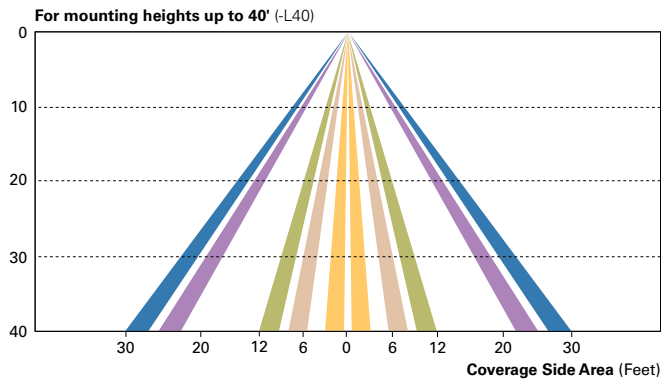
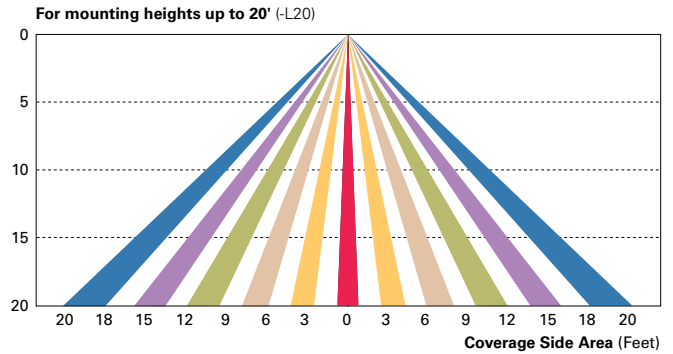
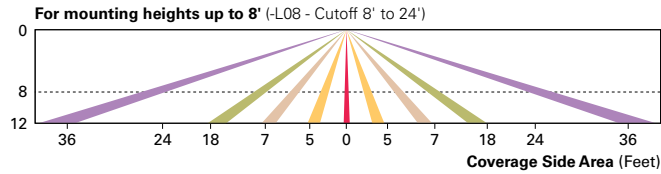
After Hours Dim (AHD)

This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

Dimming Occupancy Sensor (MS/DIM-LXX, MS/X-LXX and MS-LXX)

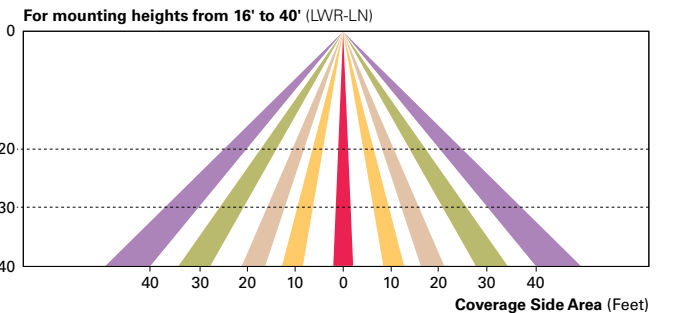
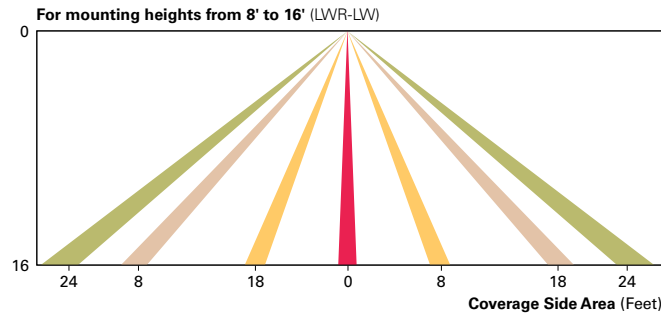
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. The MS/X-LXX is also preset for five minutes and only controls the specified number of light engines to maintain steady output from the remaining light engines.

These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for "dusk-to-dawn" control or daylight harvesting - the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters. A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8'-40'.



Enlighted Wireless Control and Monitoring System (LWR-LW and LWR-LN)

Enlighted system is a peer-to-peer wireless network of luminaire-integral sensors for any sized project. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication. The end-user can securely create and manage sensor profiles with browser-based management software. The software will automatically broadcast to the sensors via wireless gateways for zone-based and individual luminaire control. The Enlighted software provides smart building solutions by utilizing the sensor to provide easy-to-use dashboard and analytic capabilities such as improved energy savings, traffic flow analysis, building management software integration and more. For additional details, refer to the Enlighted product guides.



LumenSafe Integrated Network Security Camera (LD)

Cooper Lighting Solutions brings ease of camera deployment to a whole new level. No additional wiring is needed beyond providing line power to the luminaire. A variety of networking options allows security integrators to design the optimal solution for active surveillance. As the ideal solution to meet the needs for active surveillance, the LumenSafe integrated network camera is a streamlined, outdoor-ready fixed dome that provides HDTV 1080p video. This IP camera is optimally designed for deployment in the video management system or security software platform of choice.

ORDERING INFORMATION

Sample Number: NVN-AF-01-E-U-T3R-10K-4-AP

Product Family ^{1,2}	Light Engine	Number of Light Squares ³	Driver	Voltage	Distribution	Surge Protection	Color
NVN=Navion	AF	01=1 02=2 03=3 04=4 05=5 06=6	E=Non-Dimming D=Dimming (0-10V) ⁴	U=Universal (120-277V) 8=480V ⁵ 9=347V ⁶	T2=Type II T2R=Type II Roadway T3=Type III T3R=Type III Roadway T4T=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 SLL=90° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Right RW=Rectangular Wide Type I AFL=Automotive Frontline	10K=Cooper 10kV Surge Module (Standard) X=Driver Surge Protection Only ⁷	AP=Grey (Standard) BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White

Options (Add as Suffix)

2L=Two Circuits ⁸
 7027=70 CRI / 2700K CCT ⁹
 7030=70 CRI / 3000K CCT ⁹
 7050=70 CRI / 5000K CCT ⁹
 7060=70 CRI / 6000K CCT ⁹
 8030=80 CRI / 3000K CCT ⁹
 AMB=Amber 590nm ^{26,27}
 600=Drive Current Factory Set to 615mA ^{10,11}
 800=Drive Current Factory Set to 800mA ^{10,11}
 1200=Drive Current Set to 1200mA
 4=NEMA Twistlock Photocontrol Receptacle
 4N7=NEMA 7-PIN Twistlock Photocontrol Receptacle ¹²
 IP66=IP66 Rated
 HA=50°C High Ambient ¹³
 L90=Optics Rotated 90° Left
 R90=Optics Rotated 90° Right
 CE=CE Marking ¹⁴
 ALJS15=Adjustable slipfitter (Factory set at 15 degrees)
 ALJS25=Adjustable slipfitter (Factory set at 25 degrees)

ALJS45=Adjustable slipfitter (Factory set at 45 degrees)
 MS/DIM-L08=Motion Sensor for Dimming Operation, Maximum 8' Mounting Height ¹⁵
 MS/DIM-L20=Motion Sensor for Dimming Operation, 9' - 20' Mounting Height ¹⁵
 MS/DIM-L40=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height ¹⁵
 MS/X-L08=Bi-Level Motion Sensor, Maximum 8' Mounting Height ¹⁶
 MS/X-L20=Bi-Level Motion Sensor, 9' - 20' Mounting Height ¹⁶
 MS/X-L40=Bi-Level Motion Sensor, 21' - 40' Mounting Height ¹⁶
 K=Level Indicator
 AI=Site Arm Included ¹⁷
 A15=Arm Included (15" Straight Arm) ¹⁸
 LCF=Light Square Trim Plate Painted to Match Housing
 HSS=Factory Installed House Side Shield ¹⁹
 LWR-LW=Enlighted Wireless Sensor, Wide Lens for 8' - 16' Mounting Heights ^{20,21,(A)}
 LWR-LN=Enlighted Wireless Sensor, Narrow Lens for 16' - 40' Mounting Heights ^{20,21,(A)}
 AHD145=After Hours Dim, 5 Hours ²²
 AHD245=After Hours Dim, 6 Hours ²²
 AHD255=After Hours Dim, 7 Hours ²²
 AHD355=After Hours Dim, 8 Hours ²²


Accessories (Order Separately)

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
 FSIR-100=Wireless Configuration Tool for Motion Sensor ²³

LS/HSS=Field Installed House Side Shield ²⁴
 A15=15" Straight Arm ¹⁷
 ALJS15-XX=Adjustable slipfitter (Factory set at 15 degrees) ²⁵
 ALJS25-XX=Adjustable slipfitter (Factory set at 25 degrees) ²⁵
 ALJS45-XX=Adjustable slipfitter (Factory set at 45 degrees) ²⁵

- NOTES:**
- DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.
 - 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.
 - Standard 1A drive current. Standard 4000K CCT and nominal 70 CRI.
 - Dimming leads will be capped except when 4N7 or motion sensor is specified.
 - 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).
 - Requires the use of an internal step down transformer when combined with sensor options. Not available with sensor at 1200mA. Not available in combination with the HA high ambient and sensor options at 1A.
 - Consult factory for driver surge protection values.
 - Low-level output varies by number of light squares specified. Consult factory. Requires two or more light squares. No terminal block with 2L options.
 - Use dedicated IES files for 2700K, 3000K, 5000K and 6000K when performing layouts. These files are published on the Navion luminaire product page on the website. Extended lead times apply.
 - 1 Amp standard. Use dedicated IES files for 600mA, 800mA and 1200mA when performing layouts. These files are published on the Navion luminaire product page on the website.
 - Not available with any MS/DIM or LWR options.
 - Only available with dimming driver. Not available with MS, MS/DIM or LWR options.
 - Not available with 1200mA.
 - CE is not available with the 1200mA, LWR, MS, MS/X, MS/DIM, 4 or 4N7 options. Available in 120-277V only.
 - Sensor mounted externally. Must specify dimming driver. Consult factory for more information.
 - Sensor mounted externally. Available in 4, 5 or 6 Light Square configurations. Replace "X" with number of Light Squares in low output mode. For ON/OFF operation, replace "X" with "0". Maximum two Light Squares in low output mode.
 - 22" upswep arm. Round pole adapter included.
 - Round pole adapter and mounting hardware included, "M" drilling pattern.
 - Only for use with SL2, SL3, SL4 and AFL distributions. The Light Square trim plate is painted black when the HSS option is selected.
 - Enlighted wireless sensors are factory installed and require network components LWP-EM-1, LWP-GW-1 and LWP-PoE8 in appropriate quantities. See www.cooperlighting.com for Enlighted application information.
 - Enlighted wireless system is not available with 4N7 (Not needed) or with 600mA, 800mA or 2L options.
 - Requires the use of 4 or 4N7 photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information.
 - This tool 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.
 - One required for each light square.
 - Replace XX with color selection.
 - Not available with HA option.
 - Narrow-band 590nm +/-5nm for wildlife and observatory use. Supplied at 500mA drive current only. Available with 5WQ, 5MQ, SL2, SL3 and SL4 distributions. Can be used with HSS option.

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

Product Family	Camera Type	Data Backhaul	
L=LumenSafe Technology* 	D=Dome Camera, Standard H=Dome Camera, Hi-Res Z=Dome Camera, Remote PTZ	C=Cellular, Customer Installed SIM Card A=Cellular, Factory Installed AT&T SIM Card V=Cellular, Factory Installed Verizon SIM Card S=Cellular, Factory Installed Sprint SIM Card	W=Wi-Fi Networking w/ Omni-Directional Antenna E=Ethernet Networking

*Consult LumenSafe system pages for additional details and compatibility.