

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P966255

Luminaire Tested: **NAV-SB4B-827-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966255
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-20)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-827-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21065.8 lumens
Efficiency: N/A
Efficacy: 143.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

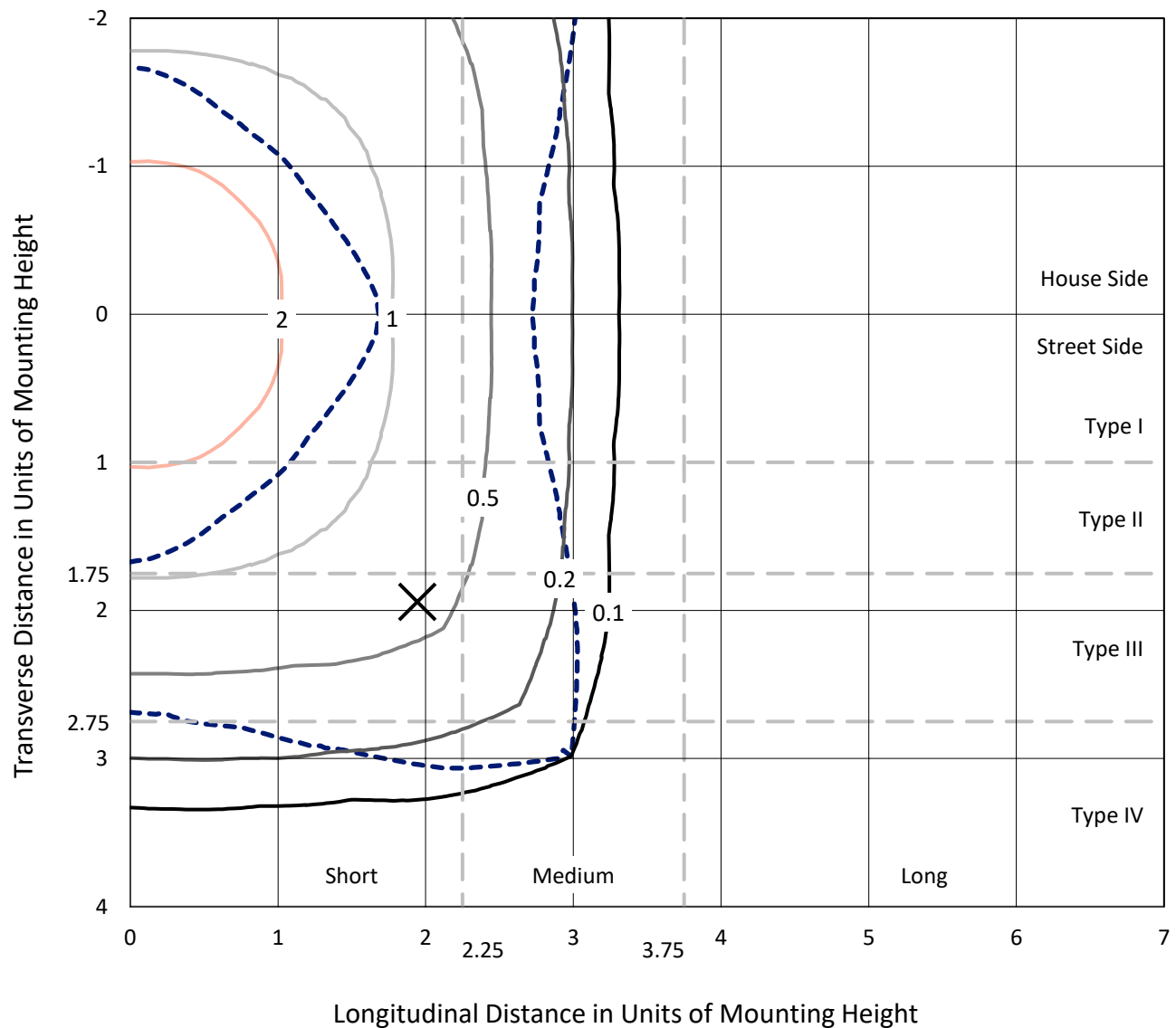


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Iso-Footcandle Lines of Horizontal Illumination

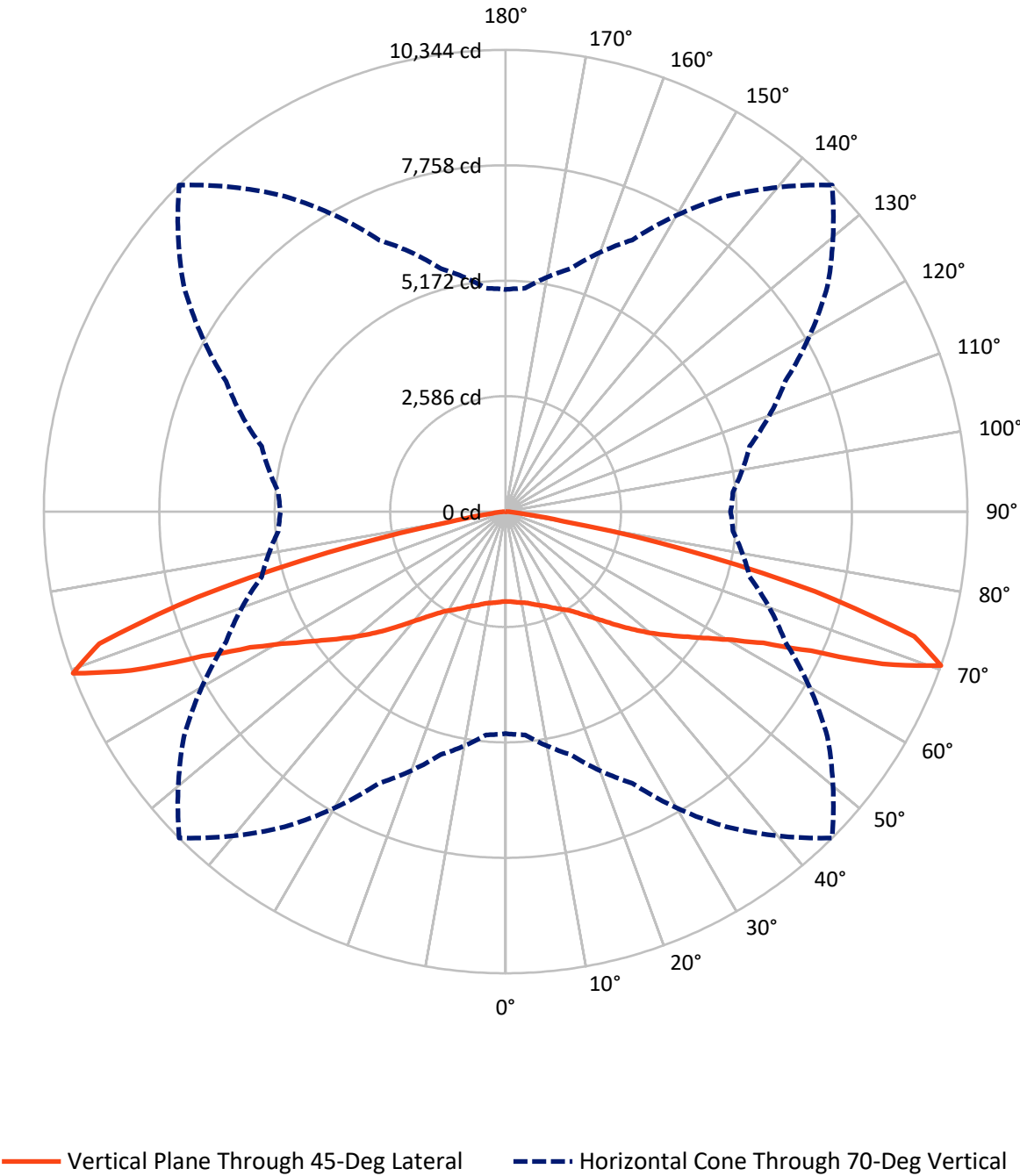
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
Type V - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10532.9	0.0	10532.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10532.9	0.0	10532.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	21065.8	0.0	21065.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.0	0.9
10°-20°	607.9	2.9
20°-30°	1086.4	5.2
30°-40°	1761.0	8.4
40°-50°	2868.4	13.6
50°-60°	4373.3	20.8
60°-70°	6506.1	30.9
70°-80°	3546.0	16.8
80°-90°	120.8	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	21065.8	100.0
0°-180°	21065.8	100.0

Coefficient of Utilization



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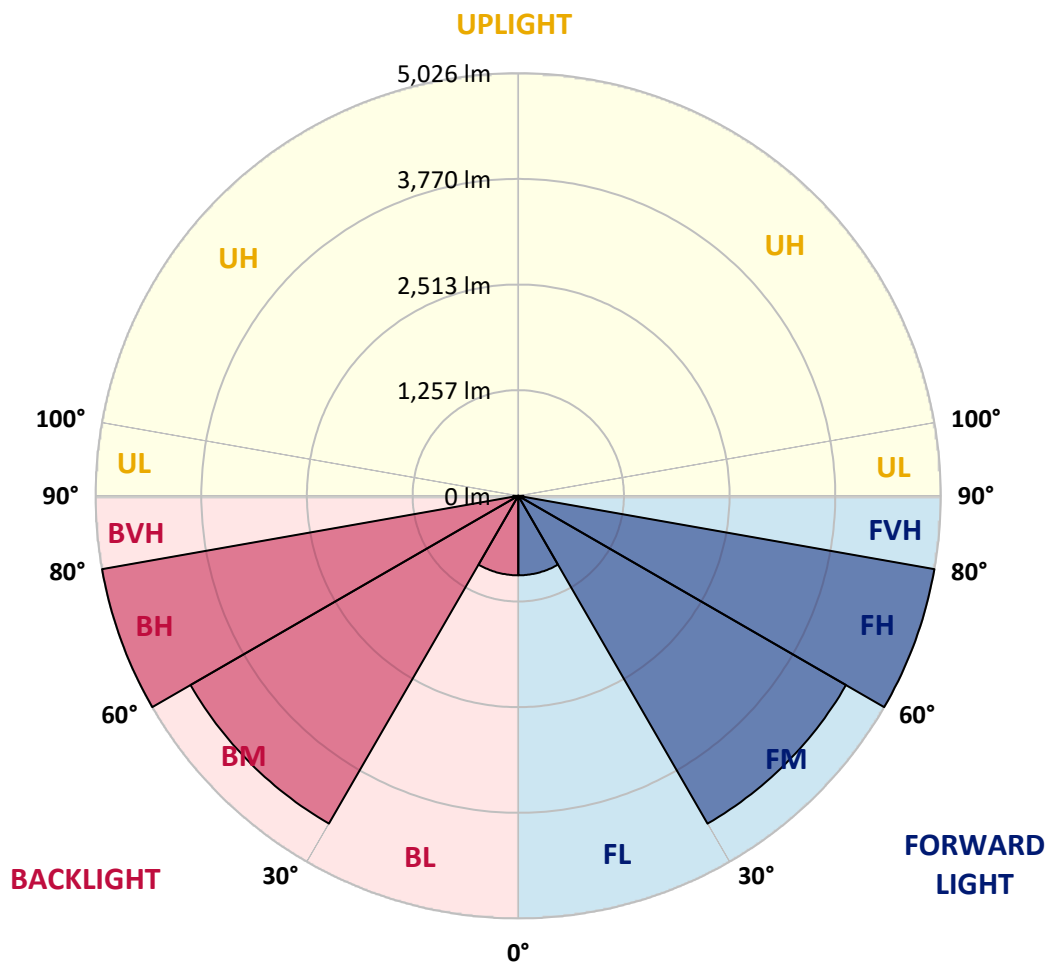
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	945.1	4.5			
FM	(30°-60°)	4501.3	21.4			
FH	(60°-80°)	5026.0	23.9			G3/7500
FVH	(80°-90°)	60.4	0.3			G1/100
BL	(0°-30°)	945.1	4.5	B2/1000		
BM	(30°-60°)	4501.3	21.4	B3/5000		
BH	(60°-80°)	5026.0	23.9	B5		G3/7500
BVH	(80°-90°)	60.4	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2017.9	2017.9	2017.9	2017.9	2017.9	2017.9	2017.9	2017.9	2017.9	2017.9	2017.9
2.5°	2027.4	2029.5	2025.3	2023.1	2021.1	2017.9	2018.9	2024.3	2028.5	2027.4	2028.5
5°	2044.4	2046.4	2043.2	2042.2	2038.0	2036.9	2036.9	2042.2	2045.4	2043.2	2044.4
7.5°	2063.3	2066.5	2061.3	2060.1	2058.1	2055.9	2054.9	2060.1	2063.3	2063.3	2063.3
10°	2081.4	2084.5	2080.2	2077.1	2075.0	2075.0	2072.9	2077.1	2082.4	2081.4	2081.4
12.5°	2100.3	2102.5	2098.3	2096.1	2096.1	2099.3	2096.1	2098.3	2102.5	2100.3	2099.3
15°	2123.6	2124.7	2123.6	2126.8	2132.1	2142.7	2133.1	2131.1	2133.1	2127.9	2127.9
17.5°	2155.4	2157.5	2161.7	2169.1	2176.5	2195.5	2178.6	2173.3	2173.3	2162.8	2162.8
20°	2194.5	2197.7	2204.1	2216.7	2226.2	2244.2	2227.3	2219.8	2216.7	2202.9	2202.9
22.5°	2235.7	2241.1	2250.6	2267.5	2284.4	2301.3	2284.4	2271.7	2262.2	2244.2	2243.1
25°	2283.3	2289.6	2304.5	2332.0	2355.2	2379.5	2359.4	2334.1	2315.1	2289.6	2288.6
27.5°	2351.0	2358.4	2376.4	2410.3	2439.9	2461.0	2442.0	2409.2	2382.7	2352.1	2351.0
30°	2446.2	2453.6	2474.8	2510.7	2530.8	2544.6	2531.9	2506.5	2474.8	2439.9	2439.9
32.5°	2568.9	2578.4	2601.7	2635.5	2639.8	2641.8	2637.6	2624.9	2601.7	2559.3	2560.4
35°	2724.3	2734.9	2761.4	2788.8	2784.6	2788.8	2782.6	2778.3	2761.4	2712.8	2712.8
37.5°	2914.7	2927.4	2954.9	2976.1	2965.5	2960.2	2961.2	2962.4	2952.8	2898.9	2898.9
40°	3135.8	3152.7	3172.8	3195.0	3177.0	3161.1	3171.8	3180.2	3171.8	3116.7	3116.7
42.5°	3363.1	3387.4	3408.6	3440.3	3425.6	3405.5	3420.2	3429.8	3411.8	3352.6	3356.8
45°	3615.9	3639.2	3666.6	3714.3	3703.7	3682.5	3703.7	3705.8	3675.1	3605.3	3612.7
47.5°	3877.2	3901.5	3942.7	4006.1	4001.9	3978.6	4006.1	3991.3	3952.2	3868.7	3863.4
50°	4124.6	4158.4	4221.9	4310.7	4319.2	4290.6	4327.7	4299.2	4233.6	4128.8	4126.8
52.5°	4357.3	4393.3	4493.7	4614.2	4645.0	4607.9	4657.6	4607.9	4509.6	4375.2	4362.6
55°	4601.5	4641.8	4761.3	4918.9	4980.2	4952.7	4999.2	4924.1	4784.6	4621.7	4599.5
57.5°	4889.2	4913.5	5056.3	5243.6	5347.2	5353.6	5374.7	5247.8	5078.6	4893.5	4868.1
60°	5201.3	5235.1	5390.6	5614.7	5778.6	5831.5	5809.4	5621.1	5424.4	5211.8	5178.0
62.5°	5601.0	5638.0	5824.2	6092.8	6351.9	6483.0	6396.3	6123.5	5880.2	5625.3	5580.9
65°	5932.0	5973.3	6309.6	6788.7	7260.4	7523.7	7305.9	6803.5	6365.7	6006.1	5946.8
67.5°	5691.9	5742.8	6270.4	7150.4	8323.2	9109.1	8363.5	7258.2	6400.5	5913.0	5840.0
70°	4974.9	5022.5	5638.0	6713.5	8622.5	10344.3	8802.3	6911.4	5658.1	5112.4	5039.4
72.5°	3302.9	3456.2	4079.1	5369.4	7699.3	9572.3	7775.4	5260.5	3784.1	3295.5	3188.7
75°	1095.6	1218.3	1643.5	2783.6	5156.8	7158.8	4909.3	2463.2	1301.9	937.1	886.2
77.5°	276.0	318.4	438.9	796.3	2057.0	4075.9	1851.9	650.5	354.3	247.4	221.0
80°	134.3	148.1	211.6	265.5	515.1	1295.6	483.3	249.6	167.1	129.0	118.5
82.5°	74.0	75.1	119.5	150.2	191.5	335.3	198.8	146.0	96.2	78.3	78.3
85°	45.5	44.4	63.4	80.4	80.4	119.5	95.2	80.4	55.0	48.7	50.7
87.5°	17.9	17.9	23.3	25.4	22.2	30.6	24.3	26.4	21.1	20.1	21.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)