

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: P967836

Luminaire Tested: **NAV-SB5A-827-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967836
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-SB5A-827-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21150.9 lumens
Efficiency: N/A
Efficacy: 149.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

Input Watts (W): 141.7
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

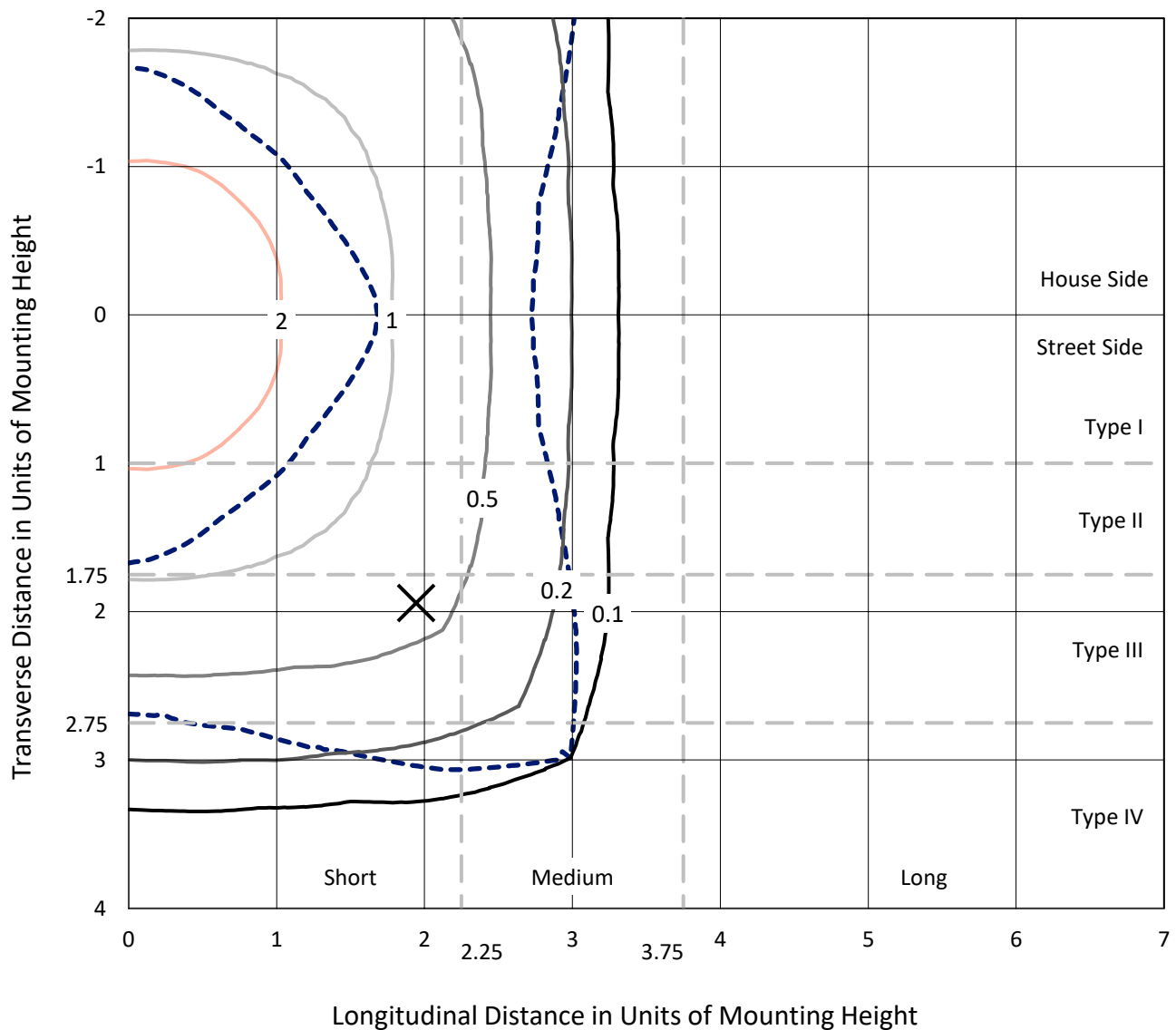


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Iso-Footcandle Lines of Horizontal Illumination

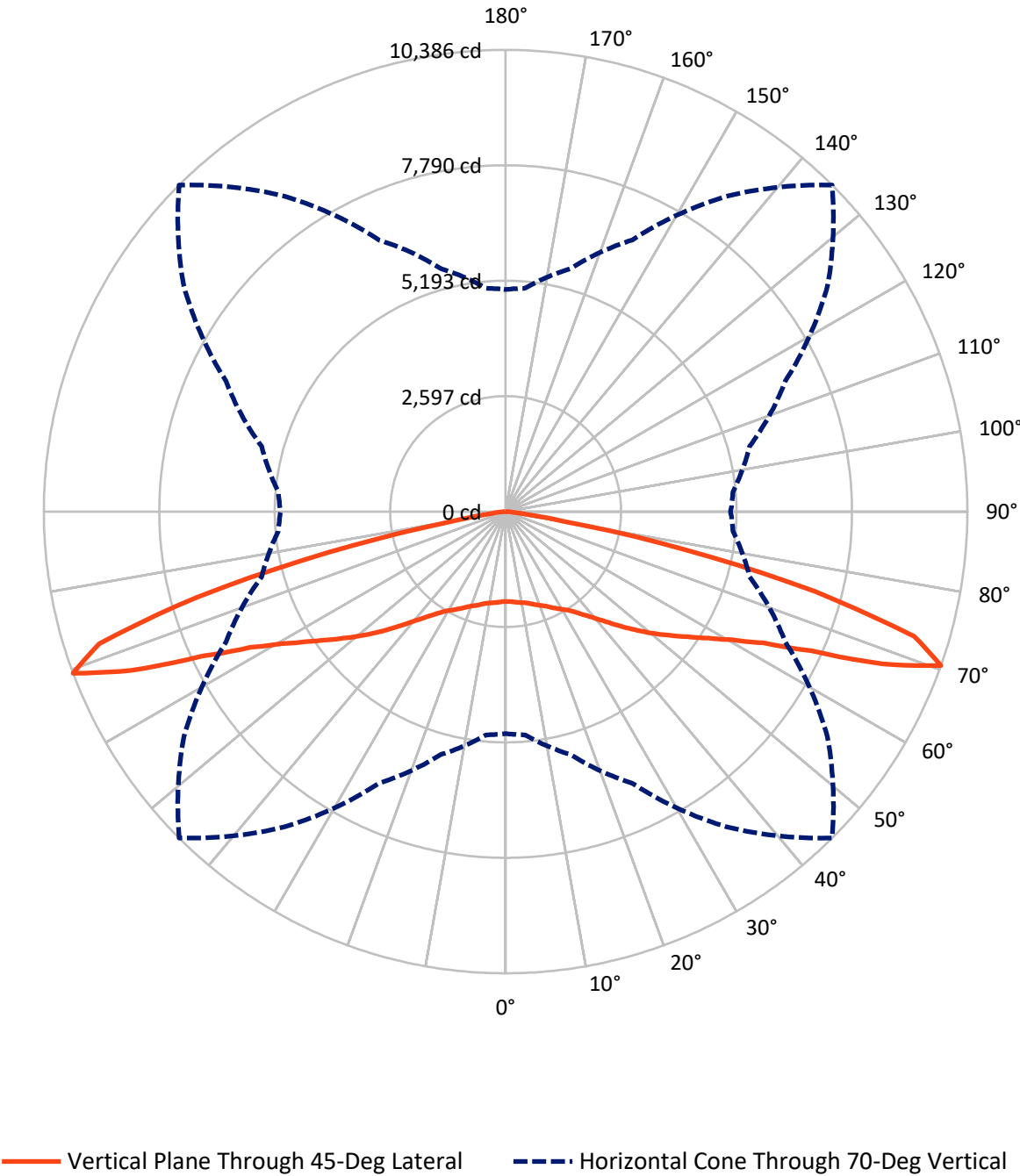
× Max cd
- - - 1/2 Max cd



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	10575.4	0.0	10575.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10575.4	0.0	10575.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	21150.9	0.0	21150.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.8	0.9
10°-20°	610.3	2.9
20°-30°	1090.8	5.2
30°-40°	1768.1	8.4
40°-50°	2880.0	13.6
50°-60°	4391.0	20.8
60°-70°	6532.3	30.9
70°-80°	3560.3	16.8
80°-90°	121.2	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°	21150.9	100.0
0°-180°	21150.9	100.0

Coefficient of Utilization



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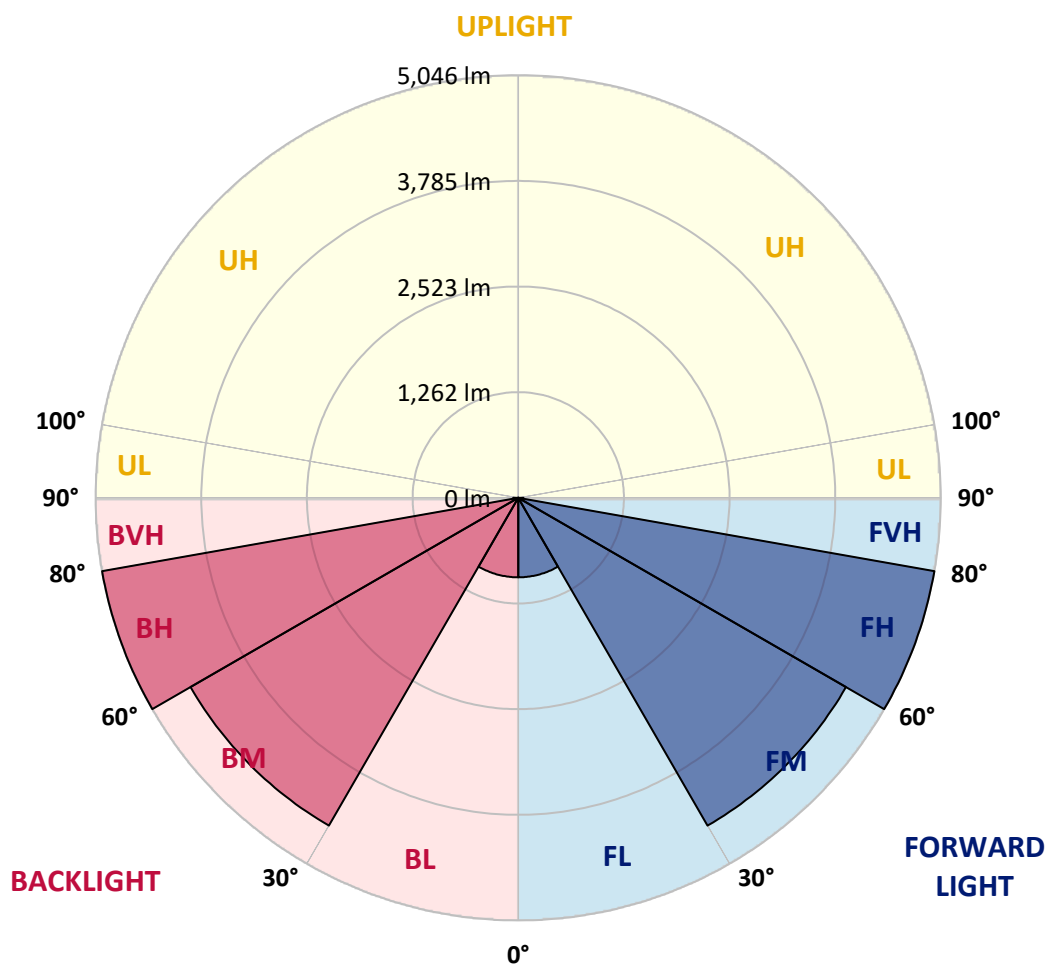
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	949.0	4.5			
FM	(30°-60°)	4519.5	21.4			
FH	(60°-80°)	5046.3	23.9			G3/7500
FVH	(80°-90°)	60.6	0.3			G1/100
BL	(0°-30°)	949.0	4.5	B2/1000		
BM	(30°-60°)	4519.5	21.4	B3/5000		
BH	(60°-80°)	5046.3	23.9	B5		G3/7500
BVH	(80°-90°)	60.6	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°	2026.0	2026.0	2026.0	2026.0	2026.0	2026.0	2026.0	2026.0	2026.0	2026.0	2026.0
2.5°	2035.5	2037.7	2033.5	2031.3	2029.2	2026.0	2027.1	2032.4	2036.7	2035.5	2036.7
5°	2052.6	2054.7	2051.5	2050.4	2046.2	2045.2	2045.2	2050.4	2053.7	2051.5	2052.6
7.5°	2071.7	2074.9	2069.6	2068.6	2066.4	2064.2	2063.2	2068.6	2071.7	2071.7	2071.7
10°	2089.8	2092.9	2088.6	2085.5	2083.4	2083.4	2081.3	2085.5	2090.8	2089.8	2089.8
12.5°	2108.8	2111.0	2106.8	2104.6	2104.6	2107.8	2104.6	2106.8	2111.0	2108.8	2107.8
15°	2132.2	2133.3	2132.2	2135.4	2140.7	2151.4	2141.7	2139.7	2141.7	2136.5	2136.5
17.5°	2164.1	2166.2	2170.4	2177.9	2185.3	2204.5	2187.5	2182.1	2182.1	2171.5	2171.5
20°	2203.3	2206.5	2212.9	2225.7	2235.2	2253.3	2236.2	2228.9	2225.7	2211.8	2211.8
22.5°	2244.8	2250.1	2259.6	2276.6	2293.6	2310.7	2293.6	2280.9	2271.3	2253.3	2252.2
25°	2292.5	2299.0	2313.8	2341.4	2364.8	2389.2	2369.0	2343.6	2324.4	2299.0	2297.8
27.5°	2360.5	2368.0	2386.0	2420.0	2449.8	2471.0	2451.8	2418.9	2392.4	2361.6	2360.5
30°	2456.1	2463.5	2484.8	2520.9	2541.1	2554.8	2542.1	2516.6	2484.8	2449.8	2449.8
32.5°	2579.3	2588.8	2612.2	2646.1	2650.4	2652.5	2648.3	2635.6	2612.2	2569.7	2570.8
35°	2735.3	2746.0	2772.5	2800.1	2795.9	2800.1	2793.7	2789.5	2772.5	2723.6	2723.6
37.5°	2926.5	2939.2	2966.9	2988.1	2977.4	2972.2	2973.2	2974.2	2964.7	2910.6	2910.6
40°	3148.4	3165.4	3185.6	3207.8	3189.8	3173.9	3184.6	3193.0	3184.6	3129.3	3129.3
42.5°	3376.8	3401.2	3422.4	3454.2	3439.4	3419.2	3434.1	3443.6	3425.6	3366.1	3370.3
45°	3630.6	3653.9	3681.5	3729.3	3718.6	3697.4	3718.6	3720.7	3690.0	3619.9	3627.4
47.5°	3892.7	3917.2	3958.7	4022.3	4018.1	3994.7	4022.3	4007.4	3968.2	3884.3	3879.0
50°	4141.3	4175.2	4239.0	4328.2	4336.7	4308.0	4345.2	4316.5	4250.7	4145.5	4143.4
52.5°	4374.9	4411.0	4511.8	4632.9	4663.8	4626.5	4676.5	4626.5	4527.8	4392.9	4380.2
55°	4620.2	4660.5	4780.5	4938.8	5000.4	4972.7	5019.4	4944.0	4803.9	4640.4	4618.0
57.5°	4909.0	4933.4	5076.7	5264.7	5368.7	5375.2	5396.4	5269.0	5099.1	4913.2	4887.7
60°	5222.3	5256.2	5412.3	5637.4	5802.0	5855.1	5832.9	5643.8	5446.3	5232.8	5198.9
62.5°	5623.7	5660.8	5847.7	6117.4	6377.5	6509.3	6422.1	6148.2	5904.0	5648.1	5603.5
65°	5956.0	5997.4	6335.1	6816.1	7289.7	7554.0	7335.3	6831.0	6391.4	6030.3	5970.8
67.5°	5715.0	5765.9	6295.8	7179.3	8356.8	9145.9	8397.2	7287.5	6426.4	5936.9	5863.6
70°	4995.0	5042.8	5660.8	6740.7	8657.4	10386.1	8837.9	6939.2	5681.0	5133.1	5059.8
72.5°	3316.2	3470.1	4095.6	5391.1	7730.3	9610.9	7806.8	5281.7	3799.4	3308.8	3201.5
75°	1100.1	1223.2	1650.1	2794.9	5177.7	7187.7	4929.1	2473.1	1307.2	940.8	889.8
77.5°	277.2	319.6	440.6	799.6	2065.4	4092.4	1859.4	653.0	355.7	248.5	221.9
80°	134.9	148.6	212.4	266.5	517.1	1300.8	485.2	250.6	167.8	129.6	118.9
82.5°	74.3	75.4	120.0	150.8	192.2	336.6	199.7	146.6	96.7	78.6	78.6
85°	45.6	44.6	63.8	80.7	80.7	120.0	95.5	80.7	55.2	48.9	50.9
87.5°	18.0	18.0	23.4	25.5	22.3	30.7	24.4	26.5	21.2	20.2	21.2
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)