

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: P882102

Luminaire Tested: **NAV-SB1D-827-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882102
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-827-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8370 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G2

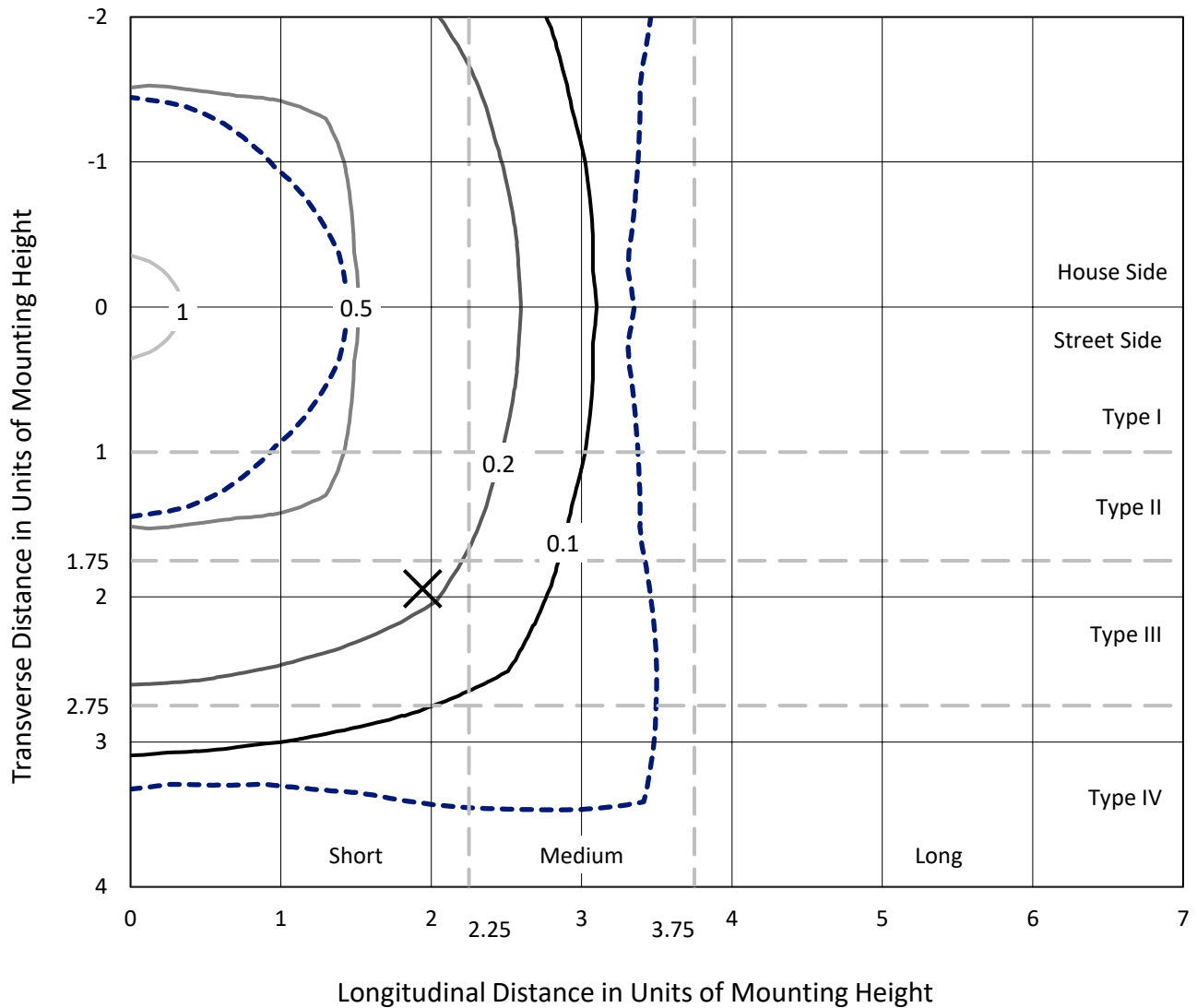
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

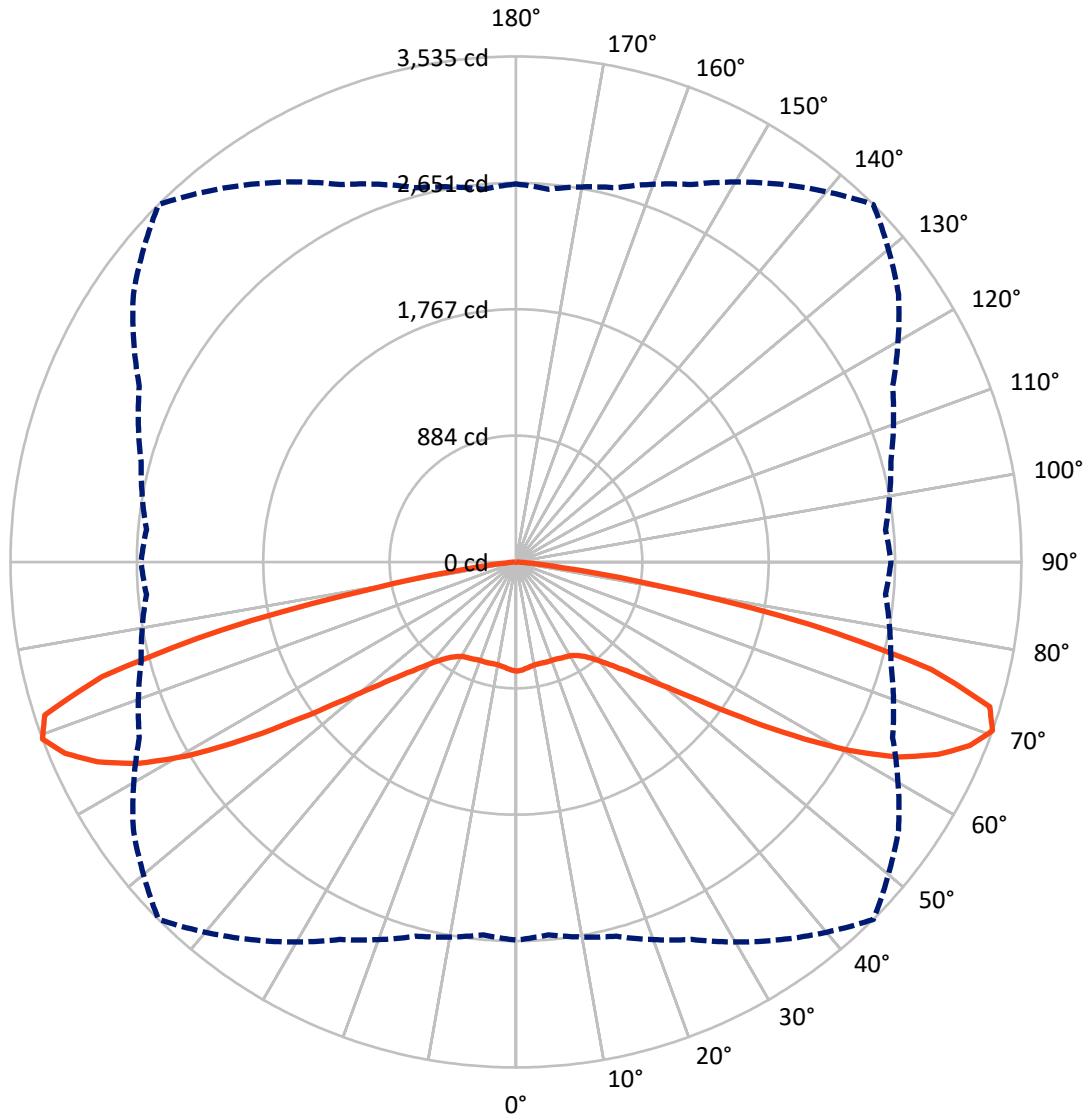
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4185.0	0.0	4185.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4185.0	0.0	4185.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	8370.0	0.0	8370.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.0	0.8
10°-20°	208.5	2.5
20°-30°	347.0	4.1
30°-40°	524.8	6.3
40°-50°	872.2	10.4
50°-60°	1645.7	19.7
60°-70°	2778.9	33.2
70°-80°	1826.0	21.8
80°-90°	95.7	1.1
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°	8370.0	100.0
0°-180°	8370.0	100.0



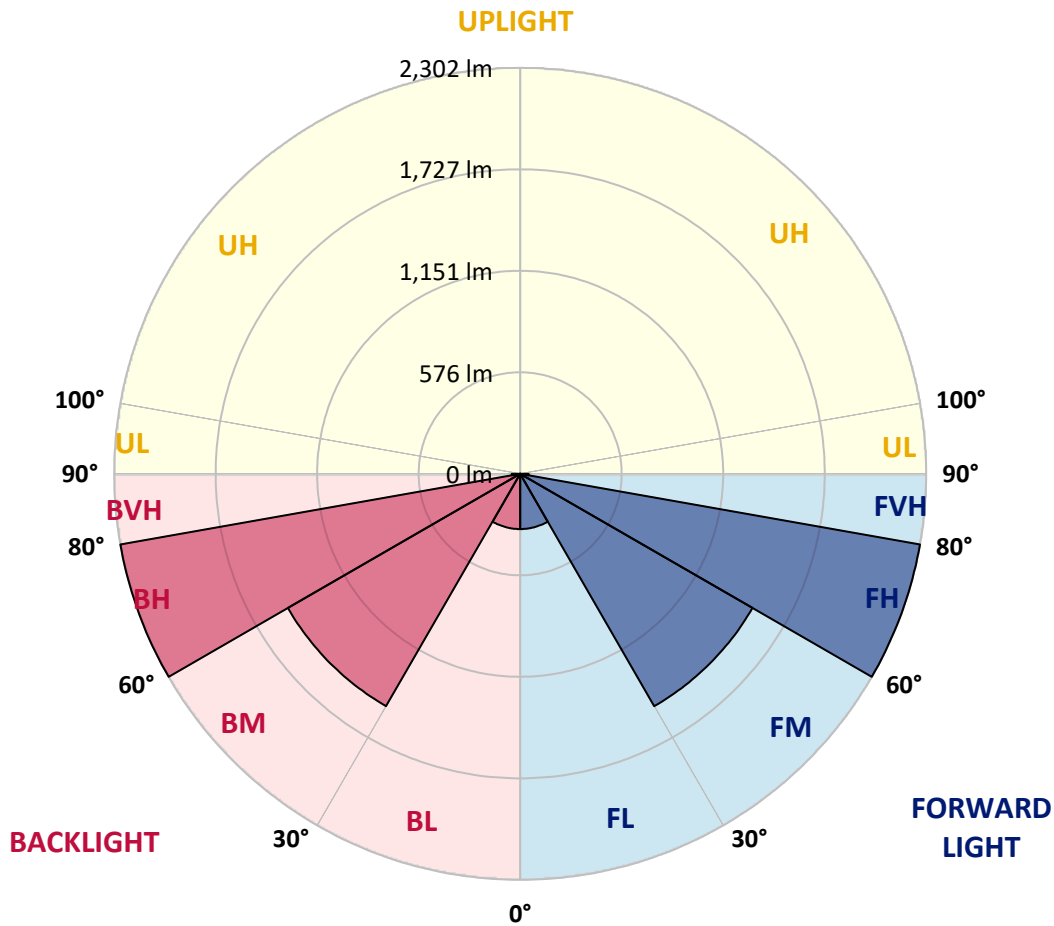
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	313.3	3.7			
FM (30°-60°)	1521.4	18.2			
FH (60°-80°)	2302.5	27.5			G2/5000
FVH (80°-90°)	47.8	0.6			G1/100
BL (0°-30°)	313.3	3.7	B1/500		
BM (30°-60°)	1521.4	18.2	B2/2500		
BH (60°-80°)	2302.5	27.5	B3/2500		G2/5000
BVH (80°-90°)	47.8	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	763.5	763.5	763.5	763.5	763.5	763.5	763.5	763.5	763.5	763.5	763.5
2.5°	758.7	760.9	760.0	758.3	758.3	757.0	758.3	759.2	760.5	761.3	760.9
5°	748.7	750.5	750.0	748.7	749.2	747.9	748.7	750.0	750.9	751.3	751.3
7.5°	740.0	741.8	740.9	738.7	738.7	737.4	737.8	739.1	740.5	740.9	740.9
10°	737.8	739.6	737.0	733.5	732.2	730.4	730.9	732.2	734.8	736.1	736.1
12.5°	738.7	740.0	737.4	732.2	730.9	729.1	729.1	730.4	733.9	735.7	736.1
15°	741.3	742.6	738.7	733.1	731.8	730.4	730.0	731.8	735.7	738.7	739.1
17.5°	746.1	747.4	741.3	733.5	731.8	732.2	731.8	733.1	739.1	744.8	744.8
20°	750.5	751.3	743.1	733.5	731.8	732.2	731.8	734.4	742.2	750.0	750.5
22.5°	751.8	752.6	744.8	736.5	735.2	735.7	735.2	737.8	745.2	753.1	753.1
25°	752.2	753.5	747.4	740.9	743.1	743.9	743.1	743.5	749.2	756.1	755.7
27.5°	758.7	760.5	754.8	749.2	750.5	750.0	751.3	752.6	757.0	763.9	762.2
30°	772.2	773.5	768.7	763.1	762.2	759.2	763.1	767.4	772.2	778.3	777.0
32.5°	794.4	797.0	790.9	784.8	780.9	779.2	782.2	789.6	796.1	802.7	800.1
35°	831.4	833.1	827.5	816.2	809.2	809.2	811.8	821.4	831.8	840.1	837.0
37.5°	883.6	885.8	875.8	862.3	851.8	851.8	855.3	865.3	881.0	892.7	888.4
40°	947.1	950.1	937.5	923.6	913.6	911.9	916.2	927.5	942.3	957.1	952.3
42.5°	1023.7	1027.2	1010.6	998.4	990.6	990.6	992.8	1003.2	1016.7	1035.0	1033.7
45°	1121.6	1127.6	1105.0	1092.8	1085.4	1087.2	1088.5	1097.6	1109.8	1130.7	1129.8
47.5°	1238.2	1244.2	1220.3	1207.7	1206.4	1214.7	1209.4	1216.0	1222.5	1246.4	1239.5
50°	1370.4	1380.8	1364.3	1363.4	1366.1	1381.3	1369.1	1372.6	1365.2	1380.4	1371.3
52.5°	1532.2	1547.5	1544.4	1549.6	1578.8	1610.1	1582.3	1570.1	1542.3	1547.0	1530.9
55°	1728.5	1751.5	1755.9	1787.2	1853.3	1917.3	1858.1	1808.9	1749.8	1738.9	1721.9
57.5°	1951.6	1969.9	1990.8	2054.7	2178.3	2291.8	2178.3	2069.5	1976.4	1954.2	1938.6
60°	2191.8	2214.4	2234.4	2328.8	2512.4	2672.1	2508.9	2336.2	2213.1	2183.1	2157.0
62.5°	2449.8	2478.9	2492.8	2597.7	2811.7	3002.3	2814.8	2605.5	2468.9	2436.7	2410.6
65°	2697.3	2721.2	2736.9	2848.7	3053.2	3244.2	3067.1	2860.9	2720.4	2678.2	2657.3
67.5°	2812.6	2825.6	2863.9	2990.5	3206.3	3424.3	3242.9	3004.0	2847.0	2773.0	2773.9
70°	2643.8	2617.3	2709.5	2912.2	3224.6	3534.8	3266.4	2906.1	2713.8	2593.8	2622.5
72.5°	2043.0	1997.3	2157.4	2504.1	3015.8	3464.3	3036.6	2523.7	2257.0	2013.4	2073.9
75°	1111.6	1059.8	1280.8	1719.3	2405.0	3002.7	2460.2	1768.5	1426.1	1103.3	1175.1
77.5°	313.7	294.1	472.5	831.8	1446.5	2108.3	1502.2	850.1	560.3	332.4	369.4
80°	96.1	93.1	126.2	250.6	614.3	1009.8	590.4	253.6	160.5	101.4	107.0
82.5°	57.0	52.2	62.6	91.4	156.6	317.2	152.3	95.3	76.6	51.3	55.7
85°	32.6	30.5	37.0	44.4	52.6	67.4	43.9	45.2	40.9	27.4	28.7
87.5°	13.5	12.2	14.4	13.9	12.2	15.7	11.7	13.9	16.5	10.9	10.0
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)