

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: P882112

Luminaire Tested: **NAV-SB1D-830-U-5WQ**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882112  
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-830-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

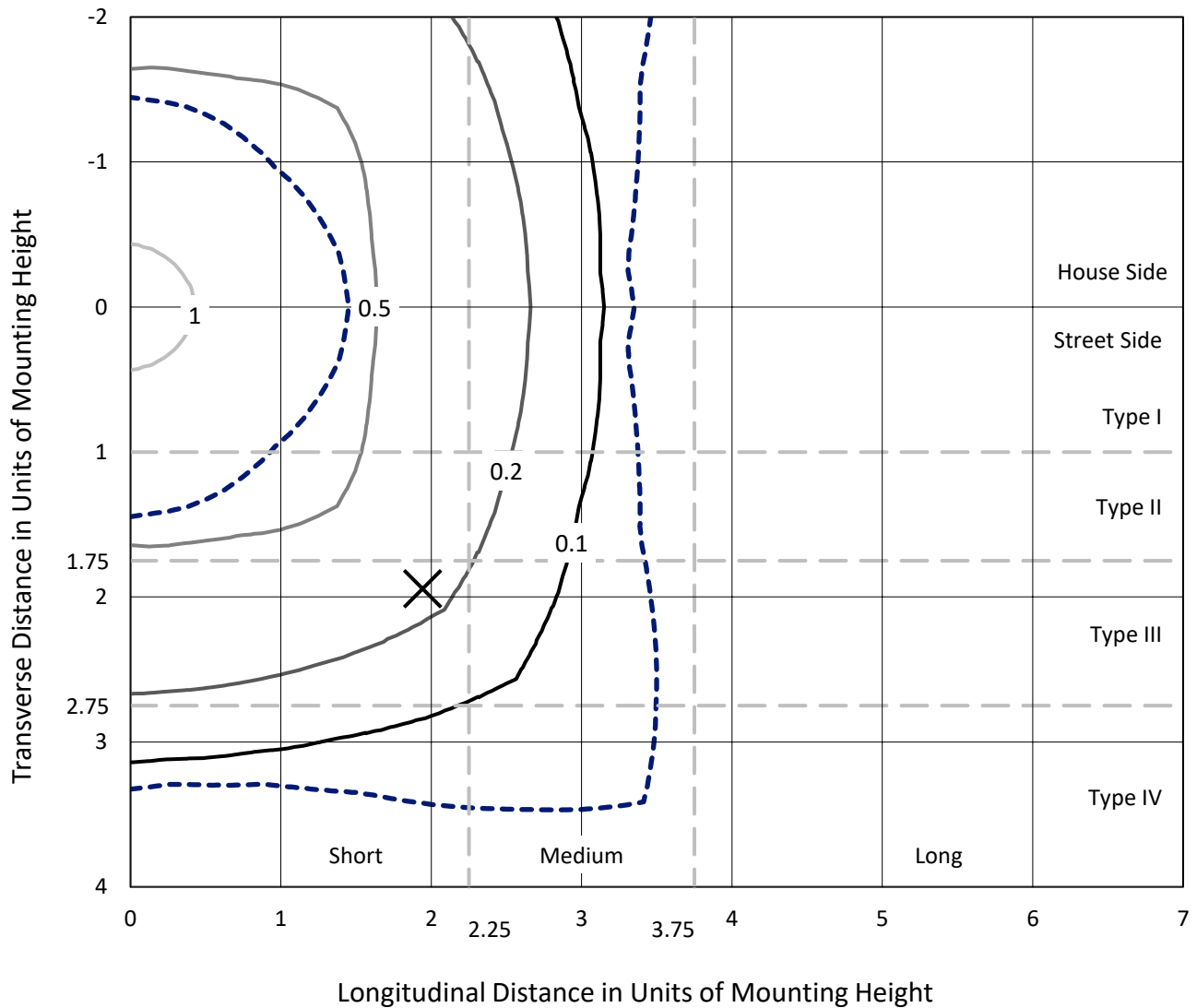
Lumens per Lamp: N/A  
Luminaire Lumens: 9014 lumens  
Efficiency: N/A  
Efficacy: 113.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B3 - U0 - G2  
  
Input Watts (W): 79.6  
Input Voltage (V): 120.0  
Input Current (Ain): 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

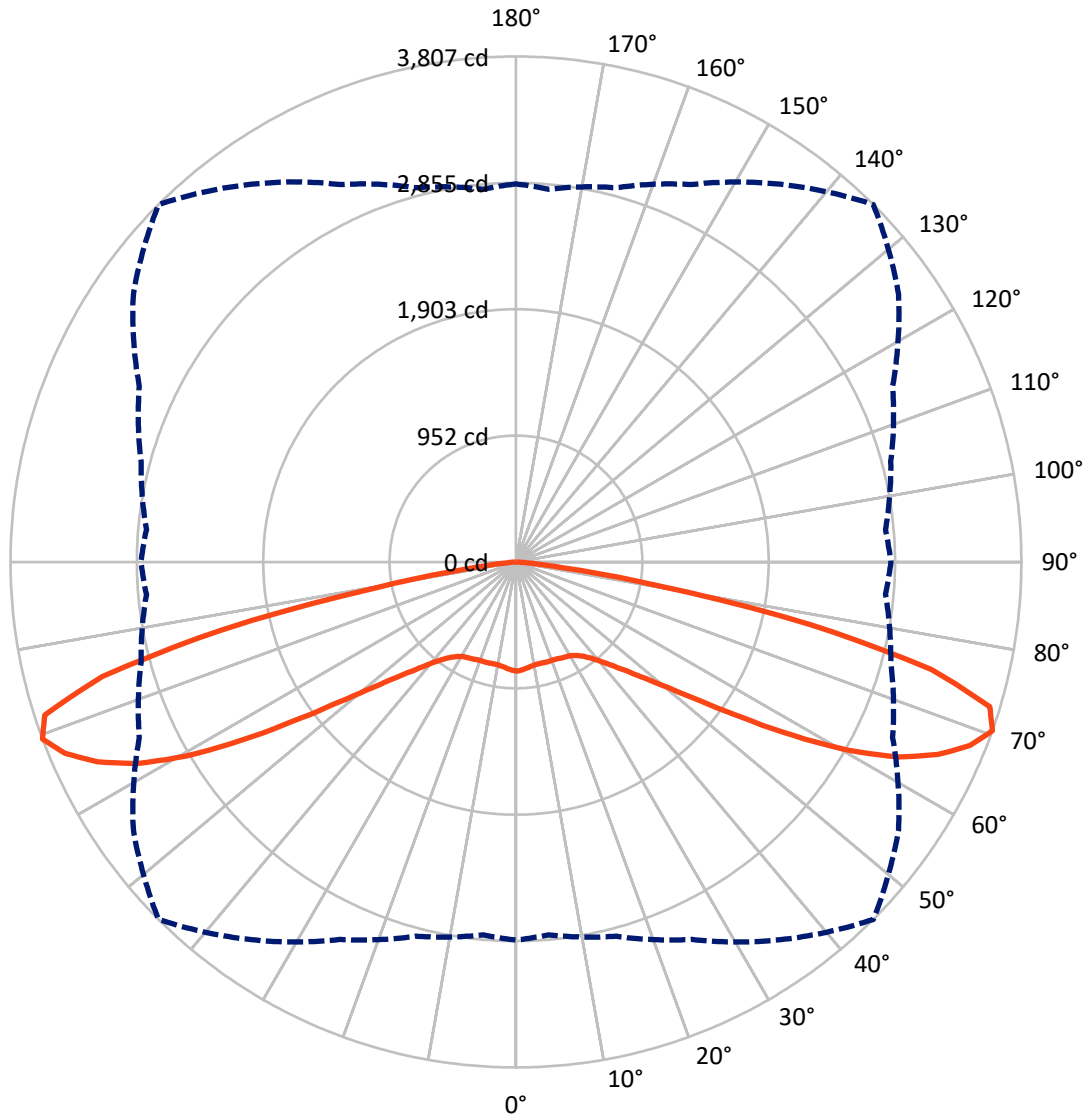
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 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
<b>House Side</b>	Lumens	4507.0	0.0	4507.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	4507.0	0.0	4507.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	9014.0	0.0	9014.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.5	0.8
10°-20°	224.6	2.5
20°-30°	373.8	4.1
30°-40°	565.2	6.3
40°-50°	939.3	10.4
50°-60°	1772.4	19.7
60°-70°	2992.7	33.2
70°-80°	1966.5	21.8
80°-90°	103.0	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°	9014.0	100.0
0°-180°	9014.0	100.0

**Coefficient of Utilization**



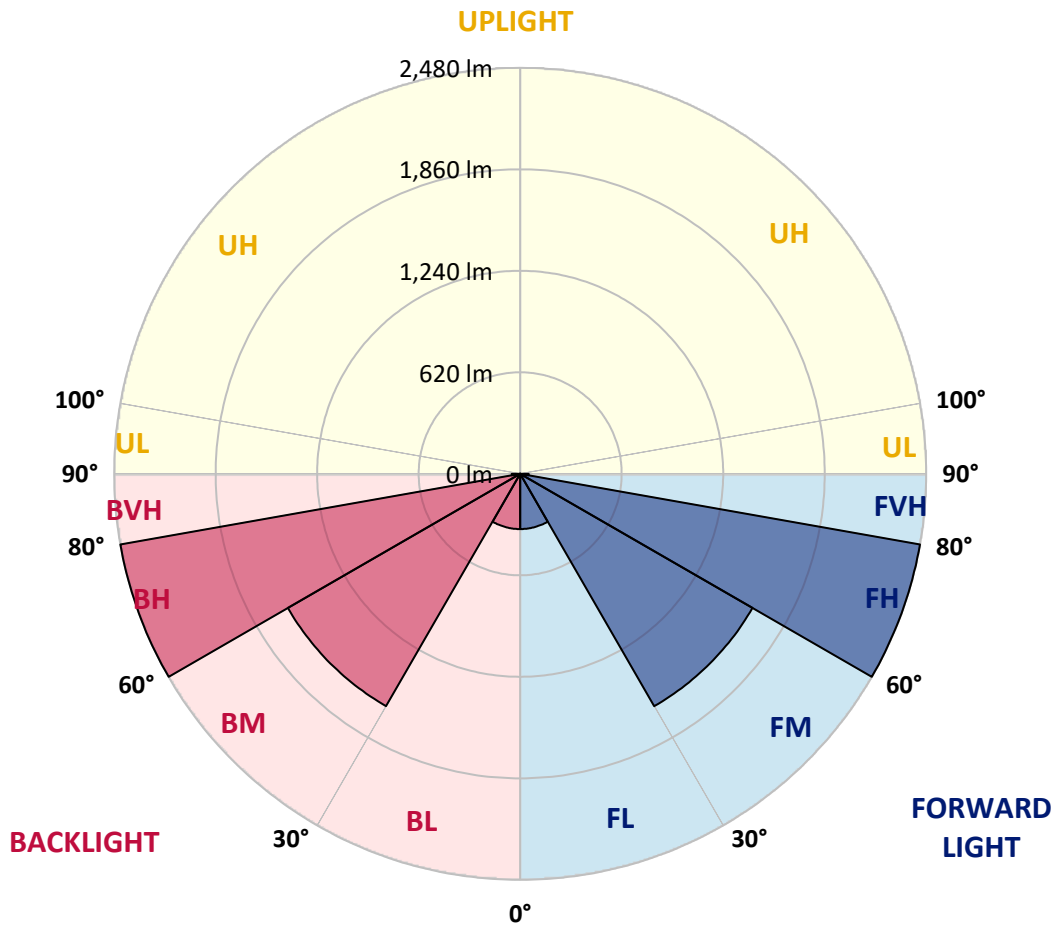
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	337.4	3.7			
FM (30°-60°)	1638.4	18.2			
FH (60°-80°)	2479.6	27.5			G2/5000
FVH (80°-90°)	51.5	0.6			G1/100
BL (0°-30°)	337.4	3.7	B1/500		
BM (30°-60°)	1638.4	18.2	B2/2500		
BH (60°-80°)	2479.6	27.5	B3/2500		G2/5000
BVH (80°-90°)	51.5	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°	822.3	822.3	822.3	822.3	822.3	822.3	822.3	822.3	822.3	822.3	822.3
2.5°	817.1	819.4	818.5	816.6	816.6	815.2	816.6	817.6	819.0	819.9	819.4
5°	806.3	808.2	807.7	806.3	806.8	805.4	806.3	807.7	808.7	809.1	809.1
7.5°	797.0	798.8	797.9	795.6	795.6	794.1	794.6	796.0	797.4	797.9	797.9
10°	794.6	796.5	793.7	789.9	788.5	786.7	787.1	788.5	791.3	792.7	792.7
12.5°	795.6	797.0	794.1	788.5	787.1	785.2	785.2	786.7	790.4	792.3	792.7
15°	798.4	799.8	795.6	789.5	788.1	786.7	786.2	788.1	792.3	795.6	796.0
17.5°	803.5	804.9	798.4	789.9	788.1	788.5	788.1	789.5	796.0	802.1	802.1
20°	808.2	809.1	800.2	789.9	788.1	788.5	788.1	790.9	799.3	807.7	808.2
22.5°	809.6	810.5	802.1	793.2	791.8	792.3	791.8	794.6	802.6	811.0	811.0
25°	810.1	811.5	804.9	797.9	800.2	801.2	800.2	800.7	806.8	814.3	813.8
27.5°	817.1	819.0	812.9	806.8	808.2	807.7	809.1	810.5	815.2	822.7	820.9
30°	831.6	833.0	827.9	821.8	820.9	817.6	821.8	826.5	831.6	838.2	836.8
32.5°	855.5	858.3	851.8	845.2	841.0	839.1	842.4	850.4	857.4	864.4	861.6
35°	895.3	897.2	891.1	878.9	871.5	871.5	874.3	884.6	895.8	904.7	901.4
37.5°	951.6	953.9	943.1	928.6	917.4	917.4	921.1	931.9	948.8	961.4	956.7
40°	1020.0	1023.3	1009.7	994.7	983.9	982.0	986.7	998.9	1014.8	1030.8	1025.6
42.5°	1102.4	1106.2	1088.4	1075.3	1066.8	1066.8	1069.2	1080.4	1094.9	1114.6	1113.2
45°	1207.9	1214.4	1190.0	1176.9	1169.0	1170.8	1172.2	1182.1	1195.2	1217.7	1216.8
47.5°	1333.4	1340.0	1314.2	1300.6	1299.2	1308.1	1302.5	1309.5	1316.6	1342.3	1334.8
50°	1475.8	1487.1	1469.3	1468.4	1471.2	1487.6	1474.4	1478.2	1470.2	1486.6	1476.8
52.5°	1650.1	1666.5	1663.3	1668.9	1700.3	1734.0	1704.0	1690.9	1660.9	1666.1	1648.7
55°	1861.4	1886.3	1891.0	1924.7	1995.9	2064.8	2001.1	1948.1	1884.4	1872.7	1854.4
57.5°	2101.8	2121.5	2144.0	2212.8	2345.9	2468.2	2345.9	2228.8	2128.5	2104.6	2087.7
60°	2360.4	2384.8	2406.3	2508.0	2705.7	2877.7	2702.0	2516.0	2383.4	2351.0	2322.9
62.5°	2638.3	2669.6	2684.6	2797.6	3028.1	3233.3	3031.3	2806.0	2658.9	2624.2	2596.1
65°	2904.8	2930.6	2947.5	3067.9	3288.1	3493.8	3303.1	3081.0	2929.7	2884.2	2861.7
67.5°	3029.0	3043.1	3084.3	3220.6	3453.0	3687.7	3492.4	3235.2	3066.0	2986.4	2987.3
70°	2847.2	2818.6	2918.0	3136.3	3472.7	3806.8	3517.7	3129.7	2922.6	2793.3	2824.3
72.5°	2200.2	2151.0	2323.4	2696.8	3247.8	3730.9	3270.3	2717.9	2430.7	2168.3	2233.5
75°	1197.1	1141.3	1379.3	1851.6	2590.0	3233.7	2649.5	1904.5	1535.8	1188.2	1265.5
77.5°	337.8	316.7	508.8	895.8	1557.8	2270.5	1617.8	915.5	603.5	358.0	397.8
80°	103.5	100.3	135.9	269.9	661.6	1087.4	635.8	273.1	172.9	109.2	115.3
82.5°	61.4	56.2	67.5	98.4	168.7	341.6	164.0	102.6	82.5	55.3	60.0
85°	35.1	32.8	39.8	47.8	56.7	72.6	47.3	48.7	44.0	29.5	30.9
87.5°	14.5	13.1	15.5	15.0	13.1	16.9	12.7	15.0	17.8	11.7	10.8
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)