

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: P884322

Luminaire Tested: **NAV-SB5A-830-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884322
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-SB5A-830-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20146 lumens
Efficiency: N/A
Efficacy: 142.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

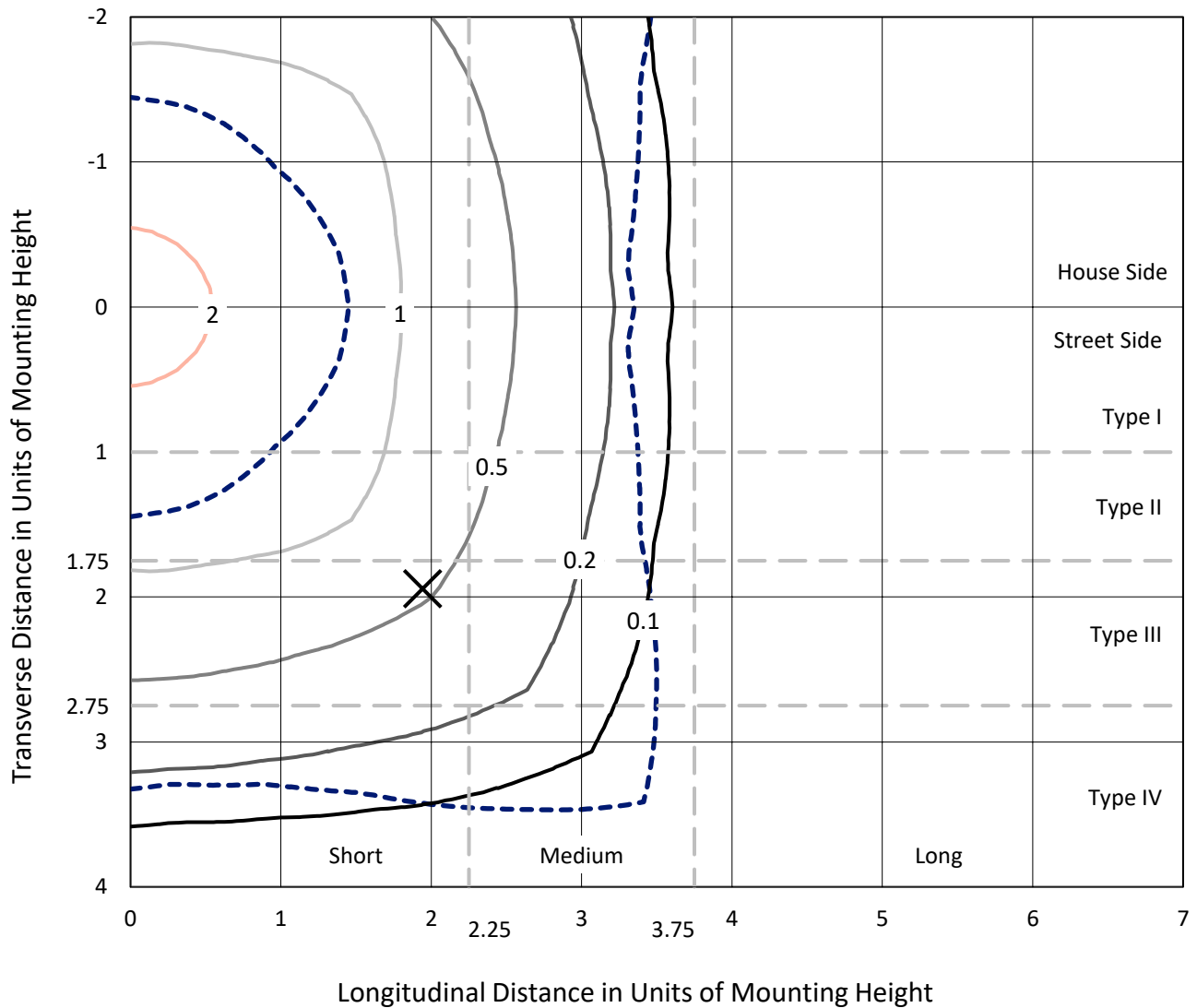
Input Watts (W): 141.7
Input Voltage (V): 120.0
Input Current (Ain): 1.201
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 10.503
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

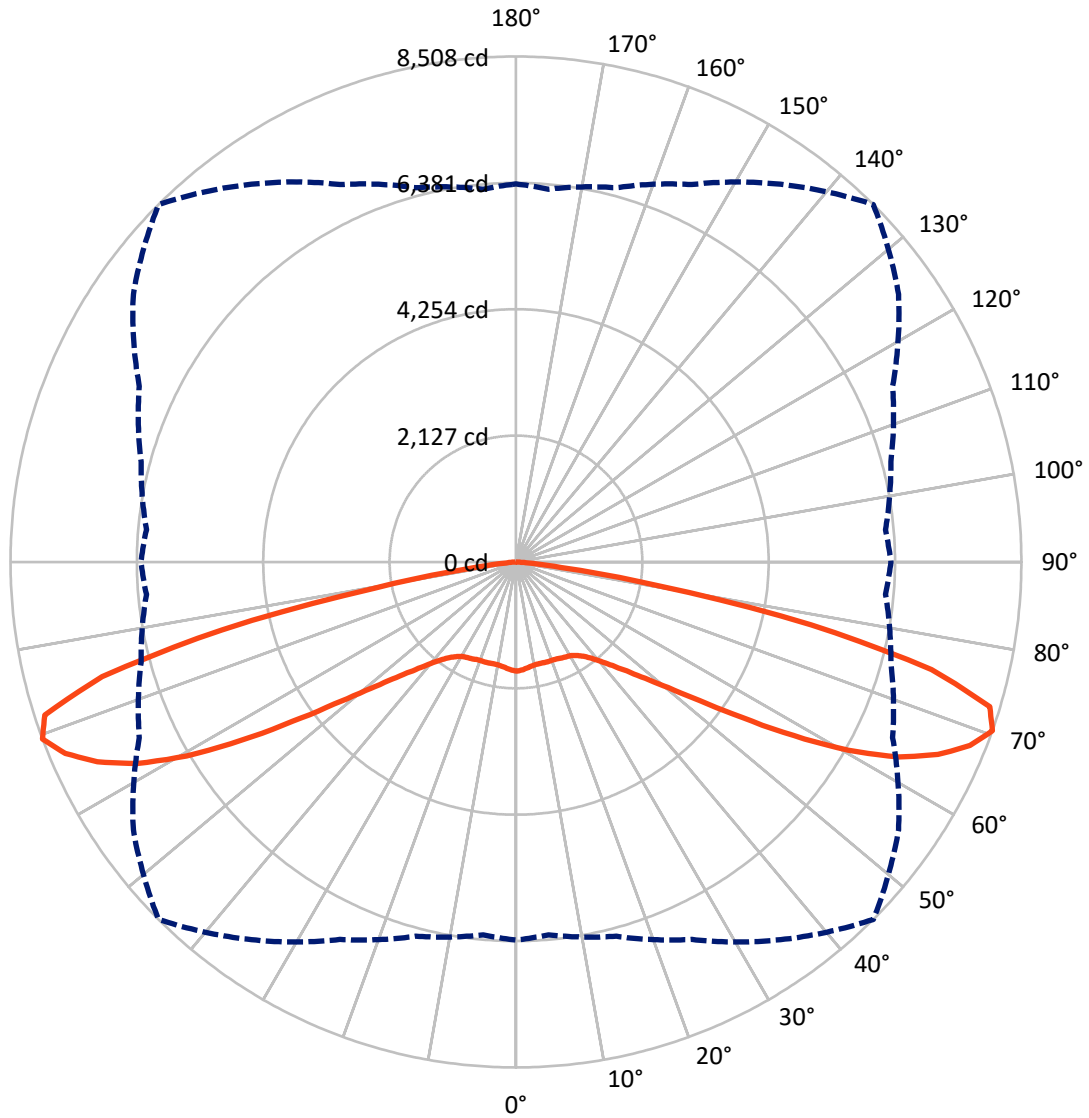
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 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	10073.0	0.0	10073.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10073.0	0.0	10073.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	20146.0	0.0	20146.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.0	0.8
10°-20°	502.0	2.5
20°-30°	835.3	4.1
30°-40°	1263.3	6.3
40°-50°	2099.2	10.4
50°-60°	3961.2	19.7
60°-70°	6688.7	33.2
70°-80°	4395.1	21.8
80°-90°	230.3	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°	20146.0	100.0
0°-180°	20146.0	100.0

Coefficient of Utilization



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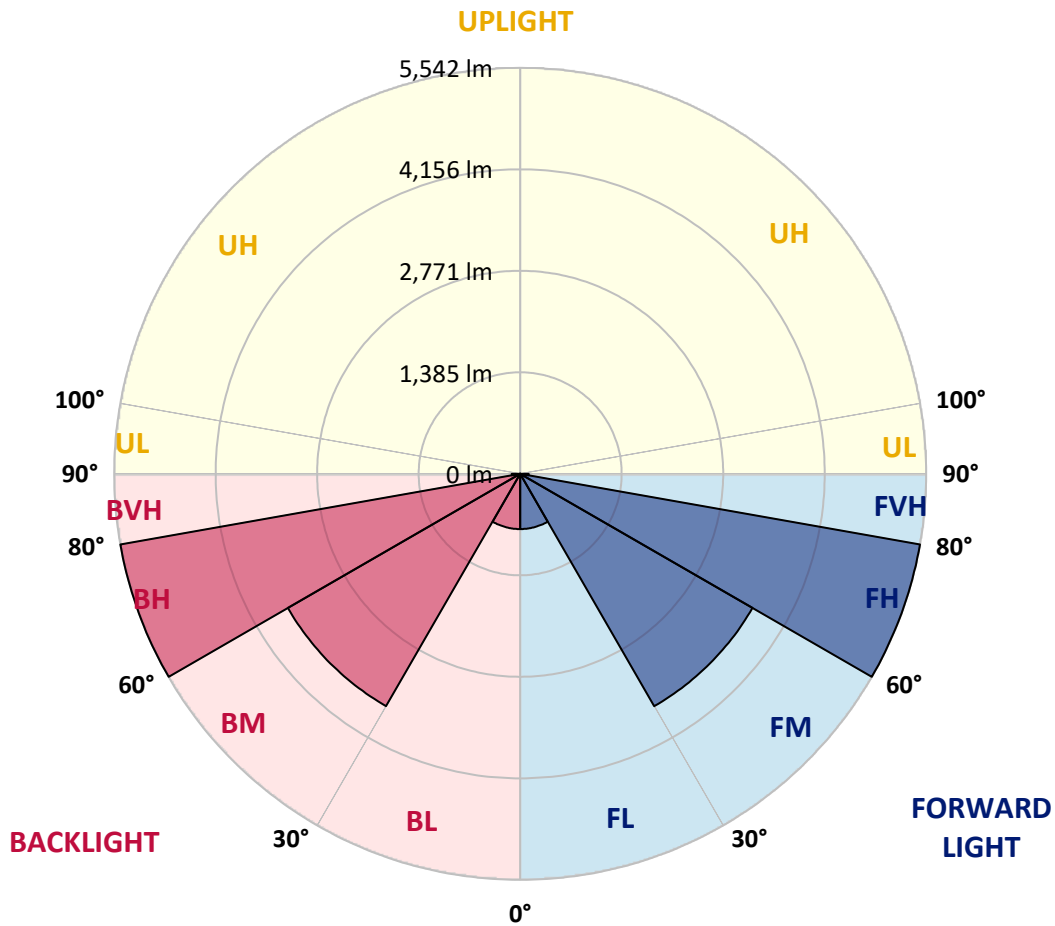
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	754.1	3.7			
FM (30°-60°)	3661.9	18.2			
FH (60°-80°)	5541.9	27.5			G3/7500
FVH (80°-90°)	115.1	0.6			G2/225
BL (0°-30°)	754.1	3.7	B2/1000		
BM (30°-60°)	3661.9	18.2	B3/5000		
BH (60°-80°)	5541.9	27.5	B5		G3/7500
BVH (80°-90°)	115.1	0.6			G2/225
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°	1837.7	1837.7	1837.7	1837.7	1837.7	1837.7	1837.7	1837.7	1837.7	1837.7	1837.7
2.5°	1826.2	1831.4	1829.3	1825.2	1825.2	1822.0	1825.2	1827.2	1830.4	1832.5	1831.4
5°	1802.1	1806.3	1805.3	1802.1	1803.2	1800.0	1802.1	1805.3	1807.4	1808.4	1808.4
7.5°	1781.2	1785.4	1783.3	1778.0	1778.0	1774.9	1775.9	1779.1	1782.2	1783.3	1783.3
10°	1775.9	1780.1	1773.8	1765.5	1762.3	1758.1	1759.2	1762.3	1768.6	1771.8	1771.8
12.5°	1778.0	1781.2	1774.9	1762.3	1759.2	1755.0	1755.0	1758.1	1766.5	1770.7	1771.8
15°	1784.3	1787.5	1778.0	1764.4	1761.3	1758.1	1757.1	1761.3	1770.7	1778.0	1779.1
17.5°	1795.8	1799.0	1784.3	1765.5	1761.3	1762.3	1761.3	1764.4	1779.1	1792.7	1792.7
20°	1806.3	1808.4	1788.5	1765.5	1761.3	1762.3	1761.3	1767.6	1786.4	1805.3	1806.3
22.5°	1809.4	1811.5	1792.7	1772.8	1769.7	1770.7	1769.7	1775.9	1793.7	1812.6	1812.6
25°	1810.5	1813.6	1799.0	1783.3	1788.5	1790.6	1788.5	1789.6	1803.2	1819.9	1818.9
27.5°	1826.2	1830.4	1816.8	1803.2	1806.3	1805.3	1808.4	1811.5	1822.0	1838.8	1834.6
30°	1858.7	1861.8	1850.3	1836.7	1834.6	1827.2	1836.7	1847.1	1858.7	1873.3	1870.2
32.5°	1912.1	1918.4	1903.7	1889.0	1879.6	1875.4	1882.7	1900.5	1916.3	1932.0	1925.7
35°	2001.1	2005.3	1991.6	1964.4	1947.7	1947.7	1954.0	1977.0	2002.1	2022.0	2014.7
37.5°	2126.7	2132.0	2107.9	2075.4	2050.3	2050.3	2058.7	2082.8	2120.4	2148.7	2138.2
40°	2279.6	2286.9	2256.6	2223.1	2199.0	2194.8	2205.3	2232.5	2268.1	2303.7	2292.2
42.5°	2463.9	2472.3	2432.5	2403.2	2384.3	2384.3	2389.6	2414.7	2447.2	2491.1	2488.0
45°	2699.5	2714.2	2659.7	2630.4	2612.6	2616.8	2619.9	2641.9	2671.2	2721.5	2719.4
47.5°	2980.1	2994.8	2937.2	2906.8	2903.7	2923.6	2911.0	2926.7	2942.4	3000.0	2983.3
50°	3298.5	3323.6	3283.8	3281.7	3288.0	3324.7	3295.3	3303.7	3285.9	3322.6	3300.6
52.5°	3688.0	3724.7	3717.3	3729.9	3800.1	3875.4	3808.4	3779.1	3712.1	3723.6	3684.9
55°	4160.3	4215.8	4226.2	4301.6	4460.8	4614.7	4472.3	4354.0	4211.6	4185.4	4144.6
57.5°	4697.4	4741.4	4791.7	4945.6	5243.0	5516.3	5243.0	4981.2	4757.1	4703.7	4666.0
60°	5275.5	5329.9	5378.1	5605.3	6047.2	6431.5	6038.8	5623.1	5326.8	5254.5	5191.7
62.5°	5896.4	5966.6	6000.1	6252.4	6767.6	7226.3	6775.0	6271.3	5942.5	5865.0	5802.2
65°	6492.2	6549.8	6587.5	6856.6	7348.8	7808.5	7382.3	6886.0	6547.7	6446.2	6395.9
67.5°	6769.7	6801.1	6893.3	7198.0	7717.4	8242.0	7805.3	7230.5	6852.4	6674.4	6676.5
70°	6363.4	6299.6	6521.6	7009.5	7761.4	8508.0	7861.9	6994.9	6532.0	6243.0	6312.1
72.5°	4917.3	4807.4	5192.7	6027.3	7258.7	8338.3	7309.0	6074.4	5432.5	4846.1	4991.7
75°	2675.4	2550.8	3082.8	4138.3	5788.6	7227.3	5921.5	4256.6	3432.5	2655.5	2828.3
77.5°	755.0	707.9	1137.2	2002.1	3481.7	5074.4	3615.8	2046.1	1348.7	800.0	889.0
80°	231.4	224.1	303.7	603.1	1478.6	2430.4	1421.0	610.5	386.4	244.0	257.6
82.5°	137.2	125.7	150.8	219.9	377.0	763.4	366.5	229.3	184.3	123.6	134.0
85°	78.5	73.3	89.0	106.8	126.7	162.3	105.8	108.9	98.4	66.0	69.1
87.5°	32.5	29.3	34.6	33.5	29.3	37.7	28.3	33.5	39.8	26.2	24.1
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)