

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: P883812

Luminaire Tested: **NAV-SB4B-830-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883812
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-SB4B-830-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20198 lumens
Efficiency: N/A
Efficacy: 137.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

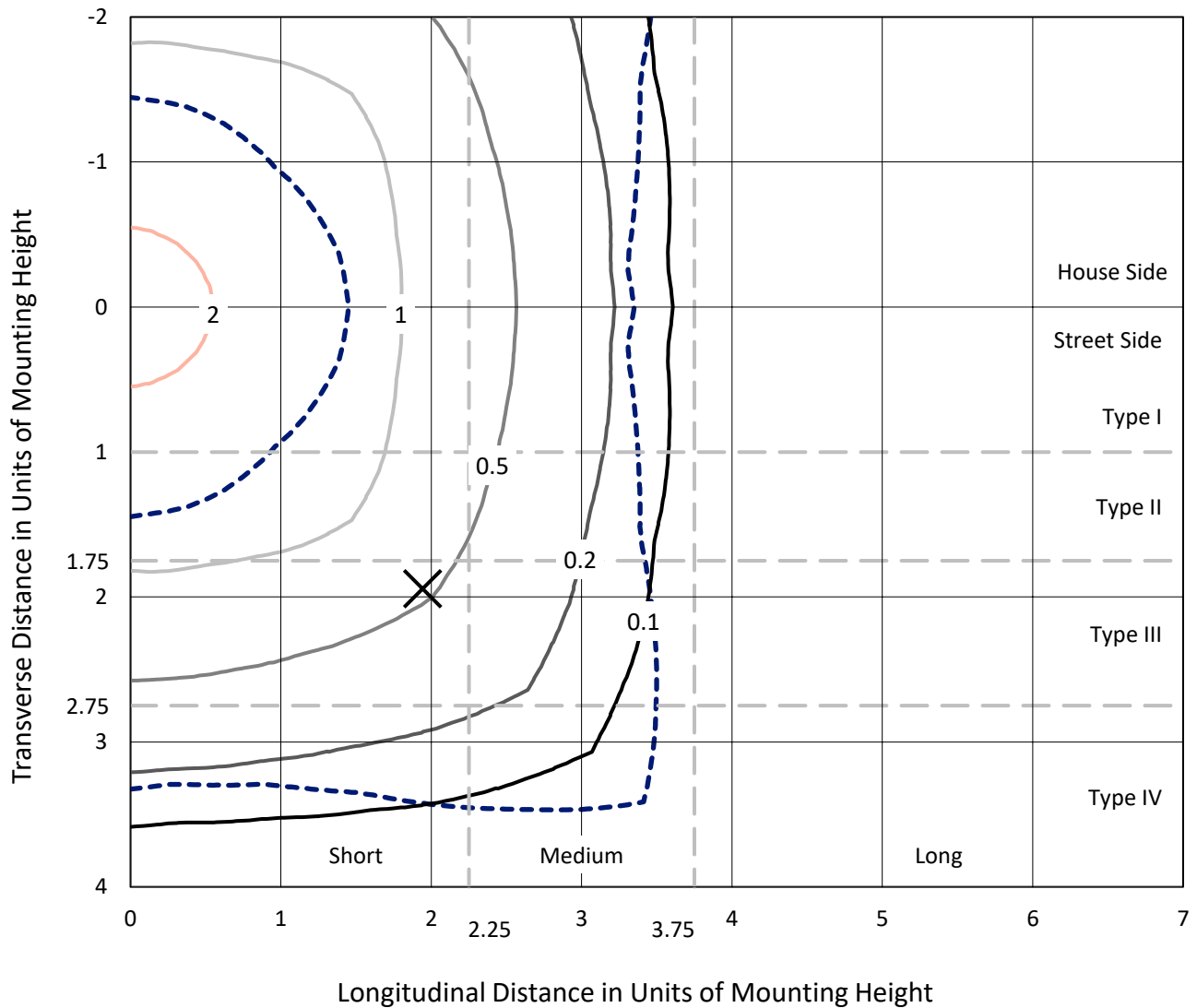
Input Watts (W): 147
Input Voltage (V): 120.0
Input Current (Ain): 1.255
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

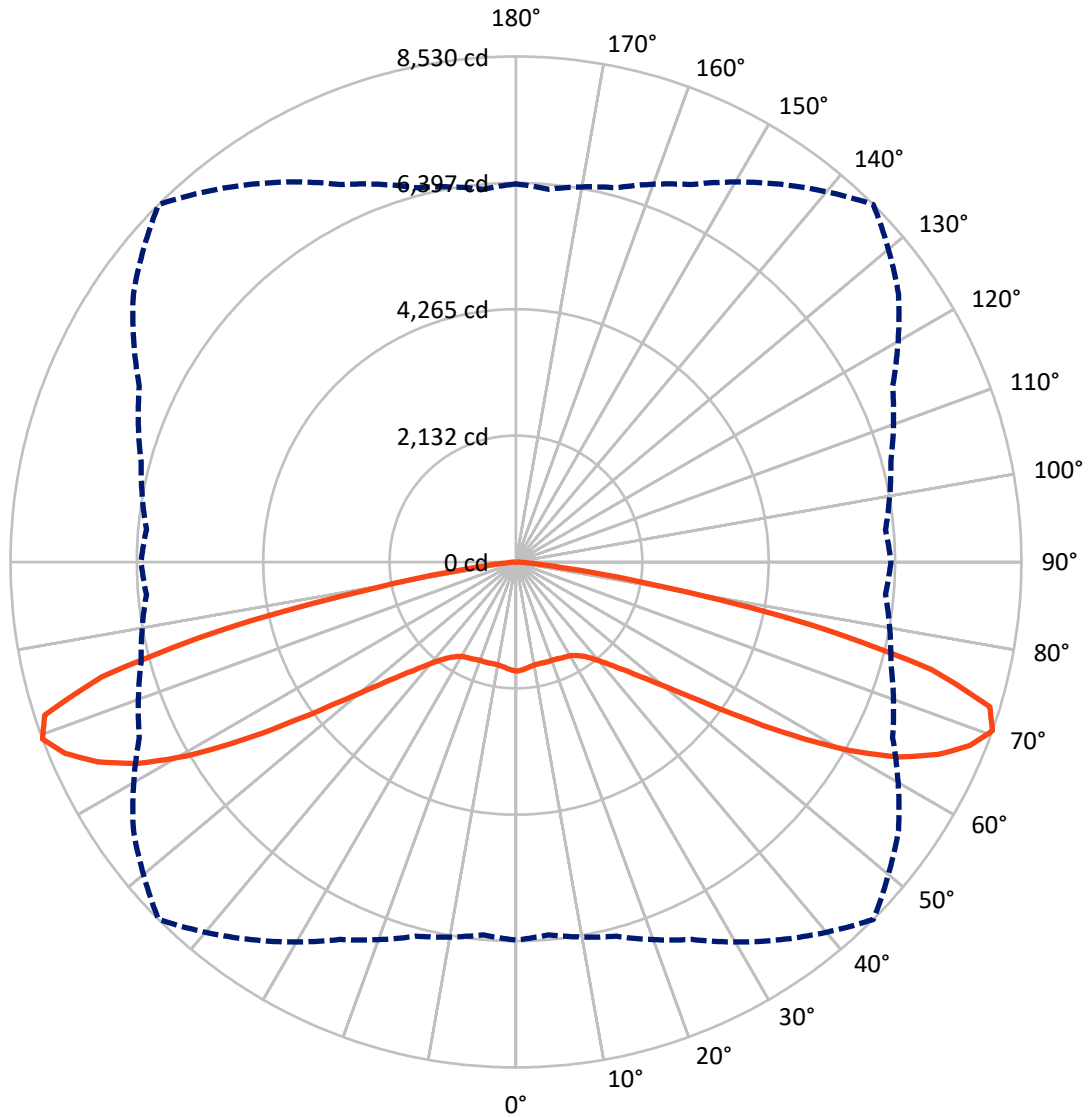
✕ Max cd
 - - - 1/2 Max cd



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	10099.0	0.0	10099.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10099.0	0.0	10099.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	20198.0	0.0	20198.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.4	0.8
10°-20°	503.3	2.5
20°-30°	837.5	4.1
30°-40°	1266.5	6.3
40°-50°	2104.7	10.4
50°-60°	3971.4	19.7
60°-70°	6705.9	33.2
70°-80°	4406.5	21.8
80°-90°	230.9	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°	20198.0	100.0
0°-180°	20198.0	100.0

Coefficient of Utilization



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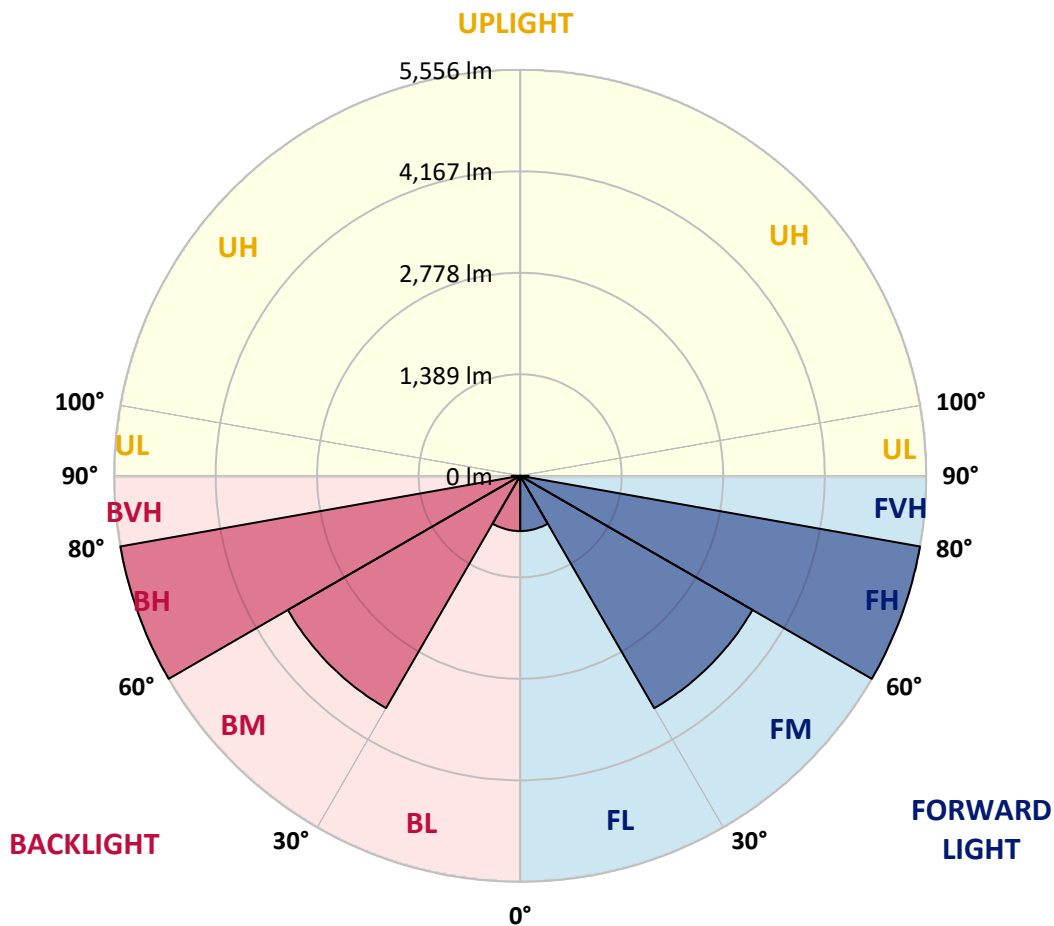
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	756.1	3.7			
FM (30°-60°)	3671.3	18.2			
FH (60°-80°)	5556.2	27.5			G3/7500
FVH (80°-90°)	115.4	0.6			G2/225
BL (0°-30°)	756.1	3.7	B2/1000		
BM (30°-60°)	3671.3	18.2	B3/5000		
BH (60°-80°)	5556.2	27.5	B5		G3/7500
BVH (80°-90°)	115.4	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°	1842.5	1842.5	1842.5	1842.5	1842.5	1842.5	1842.5	1842.5	1842.5	1842.5	1842.5
2.5°	1830.9	1836.2	1834.1	1829.9	1829.9	1826.7	1829.9	1832.0	1835.1	1837.2	1836.2
5°	1806.8	1811.0	1809.9	1806.8	1807.8	1804.7	1806.8	1809.9	1812.0	1813.1	1813.1
7.5°	1785.8	1790.0	1787.9	1782.6	1782.6	1779.5	1780.5	1783.7	1786.8	1787.9	1787.9
10°	1780.5	1784.7	1778.4	1770.0	1766.9	1762.7	1763.7	1766.9	1773.2	1776.3	1776.3
12.5°	1782.6	1785.8	1779.5	1766.9	1763.7	1759.5	1759.5	1762.7	1771.1	1775.3	1776.3
15°	1788.9	1792.1	1782.6	1769.0	1765.8	1762.7	1761.6	1765.8	1775.3	1782.6	1783.7
17.5°	1800.5	1803.6	1788.9	1770.0	1765.8	1766.9	1765.8	1769.0	1783.7	1797.3	1797.3
20°	1811.0	1813.1	1793.1	1770.0	1765.8	1766.9	1765.8	1772.1	1791.0	1809.9	1811.0
22.5°	1814.1	1816.2	1797.3	1777.4	1774.2	1775.3	1774.2	1780.5	1798.4	1817.3	1817.3
25°	1815.2	1818.3	1803.6	1787.9	1793.1	1795.2	1793.1	1794.2	1807.8	1824.6	1823.6
27.5°	1830.9	1835.1	1821.5	1807.8	1811.0	1809.9	1813.1	1816.2	1826.7	1843.5	1839.3
30°	1863.5	1866.6	1855.1	1841.4	1839.3	1832.0	1841.4	1851.9	1863.5	1878.2	1875.0
32.5°	1917.0	1923.3	1908.6	1893.9	1884.5	1880.3	1887.6	1905.5	1921.2	1936.9	1930.7
35°	2006.2	2010.4	1996.8	1969.5	1952.7	1952.7	1959.0	1982.1	2007.3	2027.2	2019.9
37.5°	2132.2	2137.5	2113.3	2080.8	2055.6	2055.6	2064.0	2088.1	2125.9	2154.3	2143.8
40°	2285.5	2292.8	2262.4	2228.8	2204.7	2200.5	2211.0	2238.3	2273.9	2309.6	2298.1
42.5°	2470.3	2478.7	2438.8	2409.4	2390.5	2390.5	2395.7	2420.9	2453.5	2497.6	2494.4
45°	2706.5	2721.2	2666.6	2637.2	2619.3	2623.5	2626.7	2648.7	2678.1	2728.5	2726.4
47.5°	2987.8	3002.5	2944.8	2914.3	2911.2	2931.1	2918.5	2934.3	2950.0	3007.8	2991.0
50°	3307.0	3332.2	3292.3	3290.2	3296.5	3333.2	3303.8	3312.2	3294.4	3331.1	3309.1
52.5°	3697.5	3734.3	3726.9	3739.5	3809.9	3885.4	3818.3	3788.9	3721.7	3733.2	3694.4
55°	4171.0	4226.6	4237.1	4312.7	4472.3	4626.6	4483.9	4365.2	4222.4	4196.2	4155.3
57.5°	4709.6	4753.7	4804.1	4958.4	5256.5	5530.5	5256.5	4994.1	4769.4	4715.9	4678.1
60°	5289.1	5343.7	5392.0	5619.8	6062.8	6448.1	6054.4	5637.6	5340.5	5268.1	5205.1
62.5°	5911.6	5982.0	6015.6	6268.6	6785.1	7244.9	6792.4	6287.5	5957.8	5880.1	5817.1
65°	6509.0	6566.7	6604.5	6874.3	7367.8	7828.6	7401.4	6903.7	6564.6	6462.8	6412.4
67.5°	6787.2	6818.7	6911.1	7216.6	7737.3	8263.3	7825.5	7249.1	6870.1	6691.7	6693.8
70°	6379.9	6315.8	6538.4	7027.6	7781.4	8529.9	7882.2	7012.9	6548.9	6259.1	6328.4
72.5°	4930.0	4819.8	5206.1	6042.9	7277.5	8359.9	7327.9	6090.1	5446.6	4858.6	5004.6
75°	2682.3	2557.4	3090.7	4149.0	5803.5	7246.0	5936.8	4267.6	3441.4	2662.4	2835.6
77.5°	756.9	709.7	1140.1	2007.3	3490.7	5087.5	3625.1	2051.4	1352.2	802.1	891.3
80°	232.0	224.7	304.5	604.7	1482.4	2436.7	1424.6	612.1	387.4	244.6	258.3
82.5°	137.5	126.0	151.2	220.5	377.9	765.3	367.4	229.9	184.8	123.9	134.4
85°	78.7	73.5	89.2	107.1	127.0	162.7	106.0	109.2	98.7	66.1	69.3
87.5°	32.5	29.4	34.6	33.6	29.4	37.8	28.3	33.6	39.9	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)