

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: P883822

Luminaire Tested: **NAV-SB4B-835-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883822
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-835-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3500K, 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: 19476 lumens
Efficiency: N/A
Efficacy: 132.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

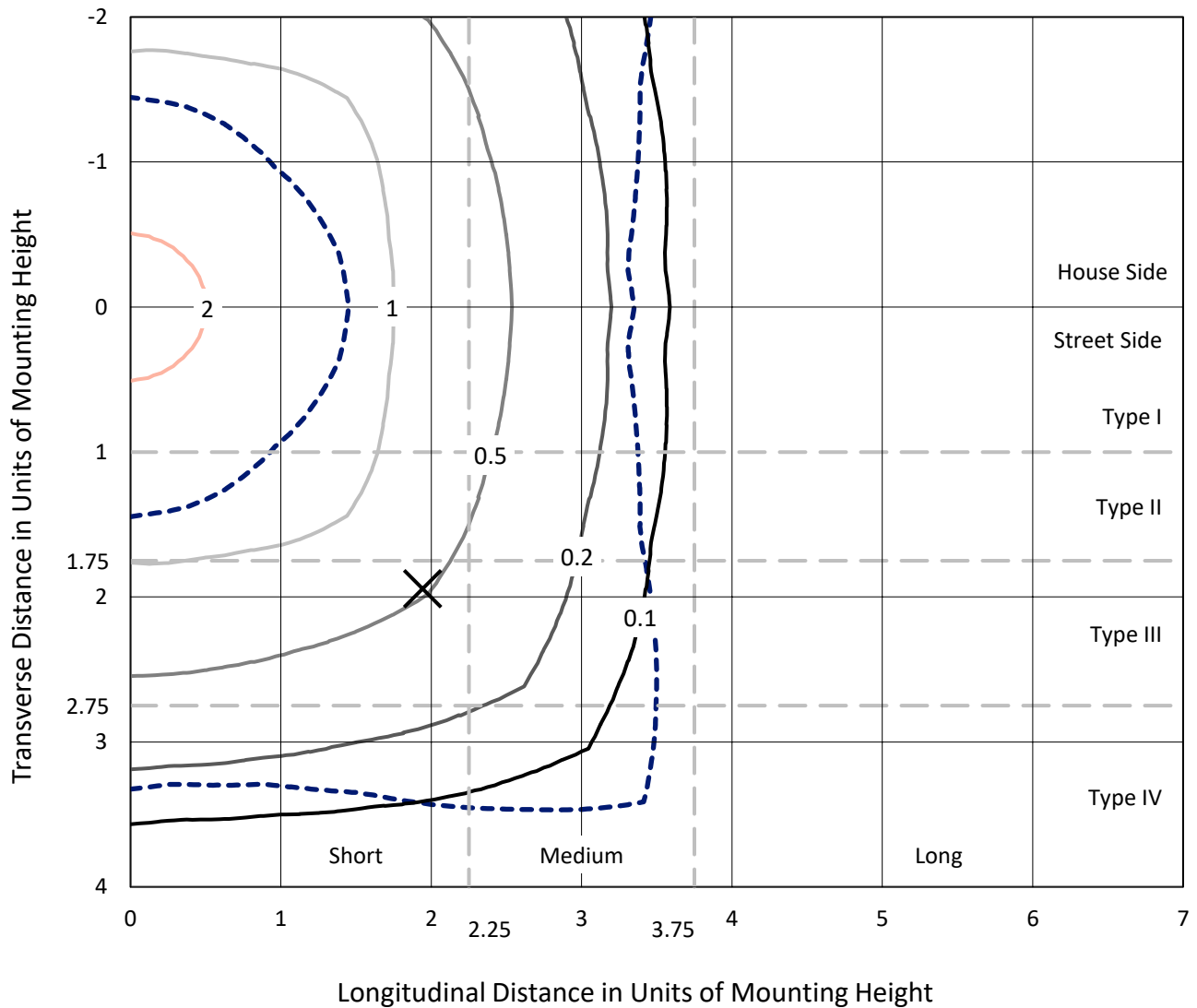
Input Watts (W): 147
Input Voltage (V): 120.0
Input Current (Ain): 1.255
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

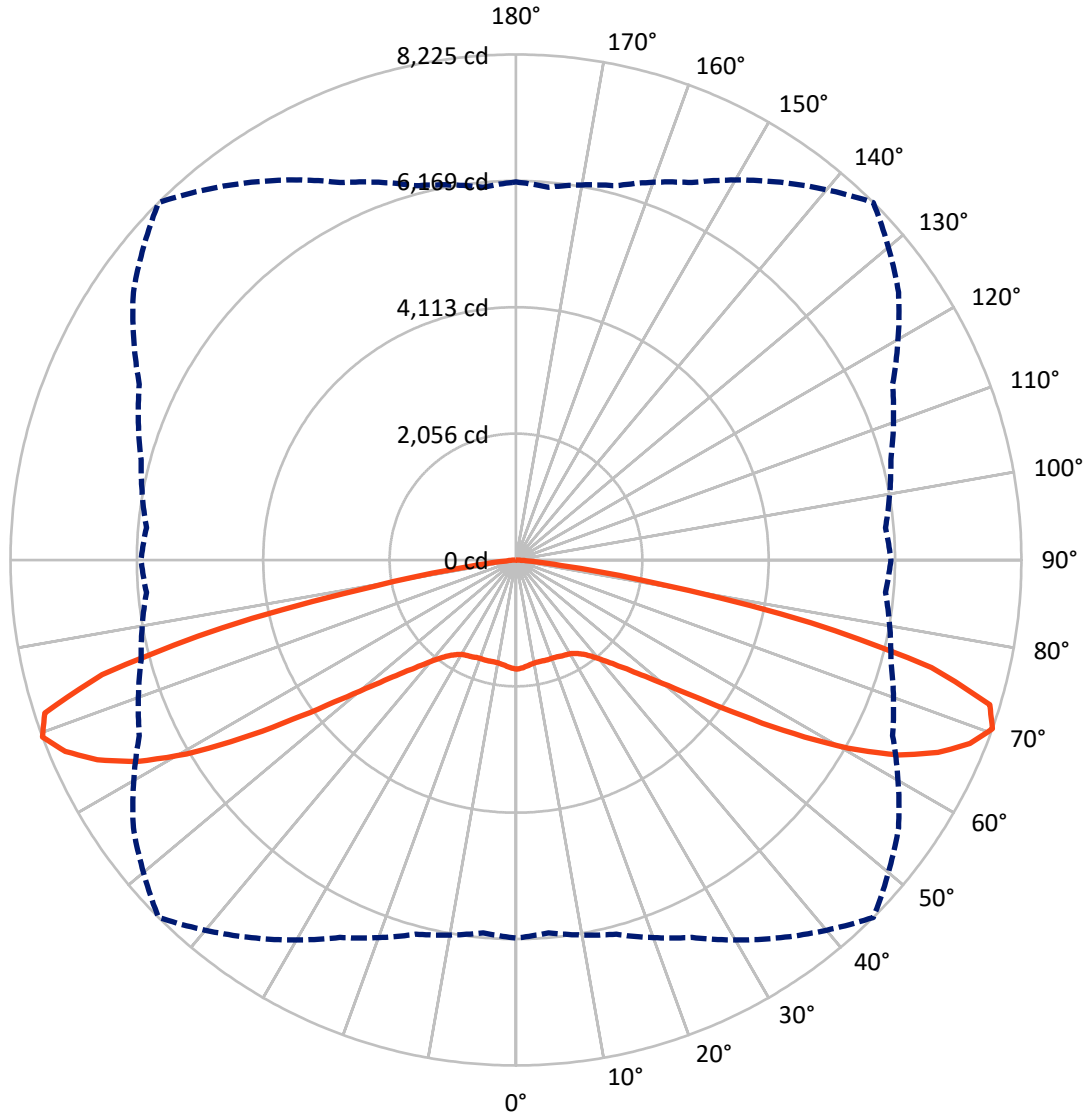
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 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	9738.0	0.0	9738.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9738.0	0.0	9738.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	19476.0	0.0	19476.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.3	0.8
10°-20°	485.3	2.5
20°-30°	807.5	4.1
30°-40°	1221.3	6.3
40°-50°	2029.4	10.4
50°-60°	3829.5	19.7
60°-70°	6466.2	33.2
70°-80°	4249.0	21.8
80°-90°	222.6	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°	19476.0	100.0
0°-180°	19476.0	100.0

Coefficient of Utilization



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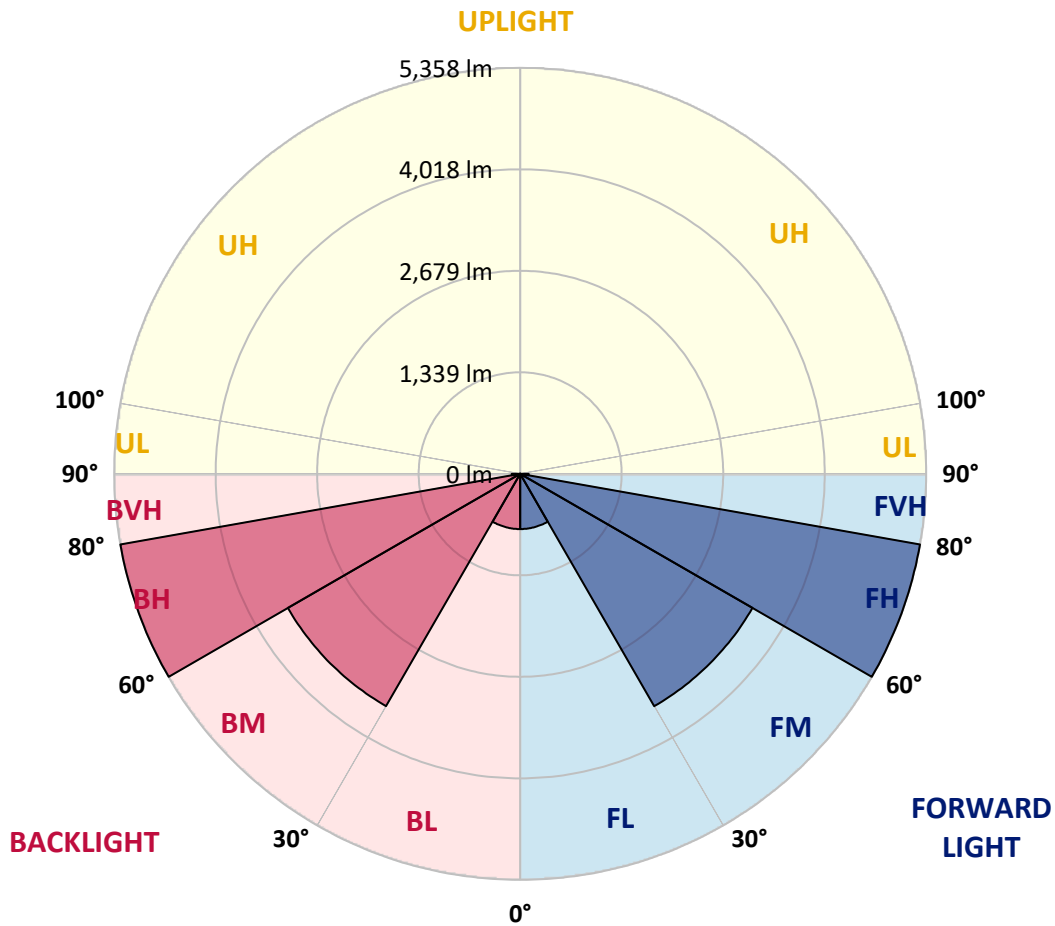
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	729.0	3.7			
FM (30°-60°)	3540.1	18.2			
FH (60°-80°)	5357.6	27.5			G3/7500
FVH (80°-90°)	111.3	0.6			G2/225
BL (0°-30°)	729.0	3.7	B2/1000		
BM (30°-60°)	3540.1	18.2	B3/5000		
BH (60°-80°)	5357.6	27.5	B5		G3/7500
BVH (80°-90°)	111.3	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°	1776.6	1776.6	1776.6	1776.6	1776.6	1776.6	1776.6	1776.6	1776.6	1776.6	1776.6
2.5°	1765.5	1770.5	1768.5	1764.5	1764.5	1761.4	1764.5	1766.5	1769.5	1771.5	1770.5
5°	1742.2	1746.2	1745.2	1742.2	1743.2	1740.2	1742.2	1745.2	1747.2	1748.3	1748.3
7.5°	1721.9	1726.0	1724.0	1718.9	1718.9	1715.9	1716.9	1719.9	1723.0	1724.0	1724.0
10°	1716.9	1720.9	1714.9	1706.8	1703.7	1699.7	1700.7	1703.7	1709.8	1712.8	1712.8
12.5°	1718.9	1721.9	1715.9	1703.7	1700.7	1696.6	1696.6	1699.7	1707.8	1711.8	1712.8
15°	1725.0	1728.0	1718.9	1705.7	1702.7	1699.7	1698.7	1702.7	1711.8	1718.9	1719.9
17.5°	1736.1	1739.1	1725.0	1706.8	1702.7	1703.7	1702.7	1705.7	1719.9	1733.1	1733.1
20°	1746.2	1748.3	1729.0	1706.8	1702.7	1703.7	1702.7	1708.8	1727.0	1745.2	1746.2
22.5°	1749.3	1751.3	1733.1	1713.8	1710.8	1711.8	1710.8	1716.9	1734.1	1752.3	1752.3
25°	1750.3	1753.3	1739.1	1724.0	1729.0	1731.0	1729.0	1730.0	1743.2	1759.4	1758.4
27.5°	1765.5	1769.5	1756.4	1743.2	1746.2	1745.2	1748.3	1751.3	1761.4	1777.6	1773.6
30°	1796.8	1799.9	1788.8	1775.6	1773.6	1766.5	1775.6	1785.7	1796.8	1811.0	1808.0
32.5°	1848.5	1854.6	1840.4	1826.2	1817.1	1813.0	1820.1	1837.3	1852.5	1867.7	1861.6
35°	1934.5	1938.6	1925.4	1899.1	1882.9	1882.9	1889.0	1911.2	1935.5	1954.8	1947.7
37.5°	2056.0	2061.1	2037.8	2006.4	1982.1	1982.1	1990.2	2013.5	2049.9	2077.3	2067.1
40°	2203.8	2210.9	2181.5	2149.1	2125.9	2121.8	2131.9	2158.2	2192.7	2227.1	2215.9
42.5°	2382.0	2390.1	2351.6	2323.3	2305.0	2305.0	2310.1	2334.4	2365.8	2408.3	2405.2
45°	2609.7	2623.9	2571.3	2542.9	2525.7	2529.8	2532.8	2554.1	2582.4	2631.0	2629.0
47.5°	2881.0	2895.2	2839.5	2810.2	2807.1	2826.4	2814.2	2829.4	2844.6	2900.3	2884.1
50°	3188.8	3213.1	3174.6	3172.6	3178.7	3214.1	3185.7	3193.8	3176.6	3212.1	3190.8
52.5°	3565.4	3600.8	3593.7	3605.8	3673.7	3746.6	3681.8	3653.4	3588.6	3599.8	3562.3
55°	4021.9	4075.6	4085.7	4158.6	4312.4	4461.2	4323.6	4209.2	4071.5	4046.2	4006.7
57.5°	4541.2	4583.7	4632.3	4781.1	5068.6	5332.8	5068.6	4815.6	4598.9	4547.3	4510.9
60°	5100.0	5152.7	5199.2	5418.9	5846.1	6217.6	5838.0	5436.1	5149.6	5079.8	5019.0
62.5°	5700.3	5768.1	5800.5	6044.5	6542.6	6985.9	6549.6	6062.7	5744.9	5669.9	5609.2
65°	6276.3	6332.0	6368.4	6628.6	7104.4	7548.8	7136.8	6656.9	6330.0	6231.8	6183.2
67.5°	6544.6	6575.0	6664.0	6958.6	7460.7	7967.9	7545.8	6990.0	6624.6	6452.5	6454.5
70°	6151.8	6090.1	6304.7	6776.4	7503.2	8225.0	7600.4	6762.2	6314.8	6035.4	6102.2
72.5°	4753.8	4647.5	5020.0	5826.9	7017.3	8061.0	7065.9	5872.4	5251.9	4685.0	4825.7
75°	2586.5	2466.0	2980.2	4000.6	5596.0	6987.0	5724.6	4115.0	3318.4	2567.2	2734.2
77.5°	729.9	684.3	1099.4	1935.5	3365.9	4905.7	3495.5	1978.1	1303.9	773.4	859.5
80°	223.7	216.6	293.6	583.1	1429.4	2349.6	1373.7	590.2	373.5	235.9	249.0
82.5°	132.6	121.5	145.8	212.6	364.4	738.0	354.3	221.7	178.2	119.5	129.6
85°	75.9	70.9	86.0	103.3	122.5	156.9	102.2	105.3	95.2	63.8	66.8
87.5°	31.4	28.3	33.4	32.4	28.3	36.4	27.3	32.4	38.5	25.3	23.3
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)