

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: P963157

Luminaire Tested: **NAV-SB2D-835-U-5WQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963157
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-835-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19570.3 lumens
Efficiency: N/A
Efficacy: 132.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

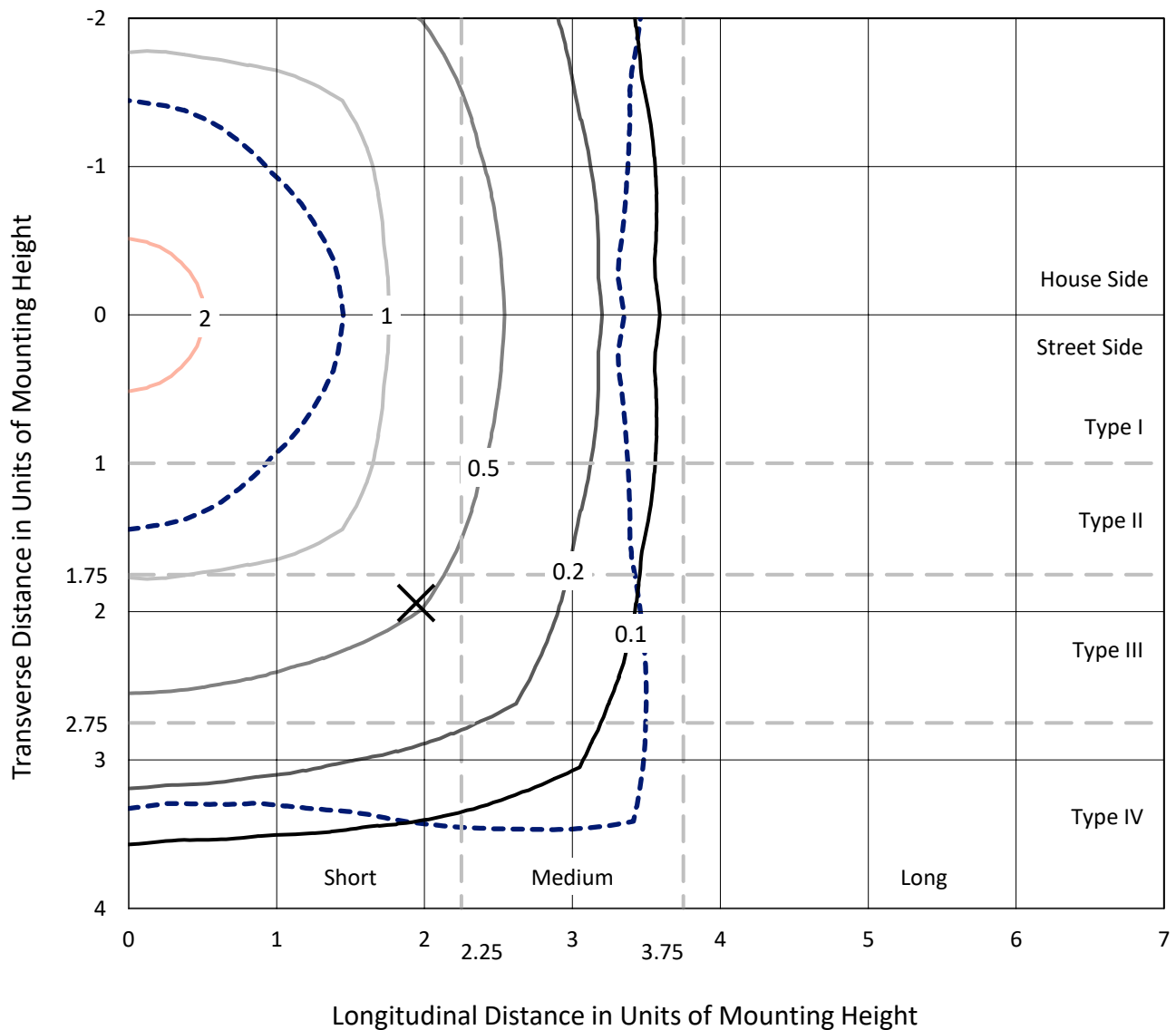


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Iso-Footcandle Lines of Horizontal Illumination

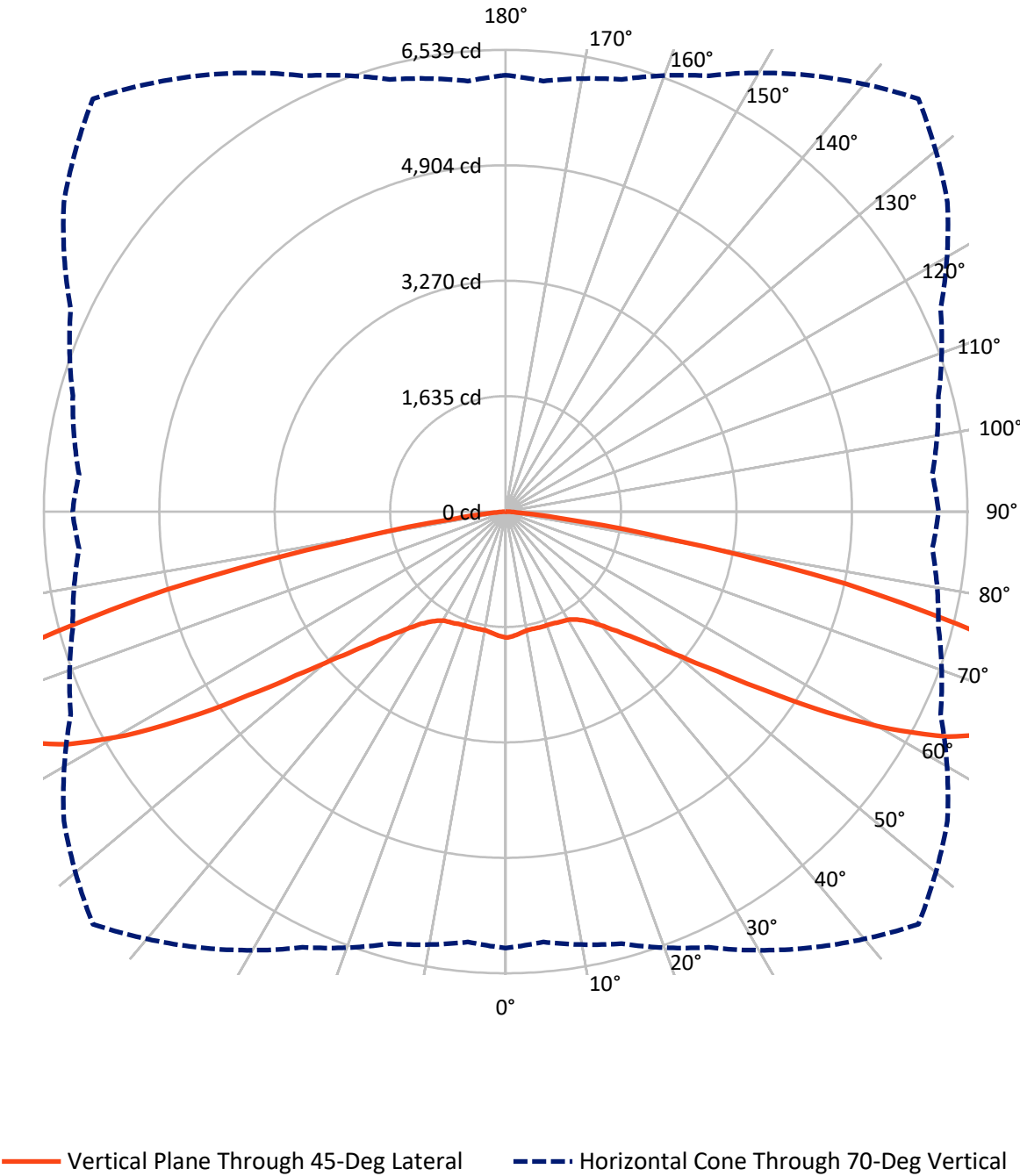
× Max cd
- - - 1/2 Max cd



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



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9785.2	0.0	9785.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9785.2	0.0	9785.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	19570.3	0.0	19570.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.1	0.8
10°-20°	487.6	2.5
20°-30°	811.5	4.1
30°-40°	1227.2	6.3
40°-50°	2039.3	10.4
50°-60°	3848.0	19.7
60°-70°	6497.5	33.2
70°-80°	4269.5	21.8
80°-90°	223.7	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°	19570.3	100.0
0°-180°	19570.3	100.0

Coefficient of Utilization



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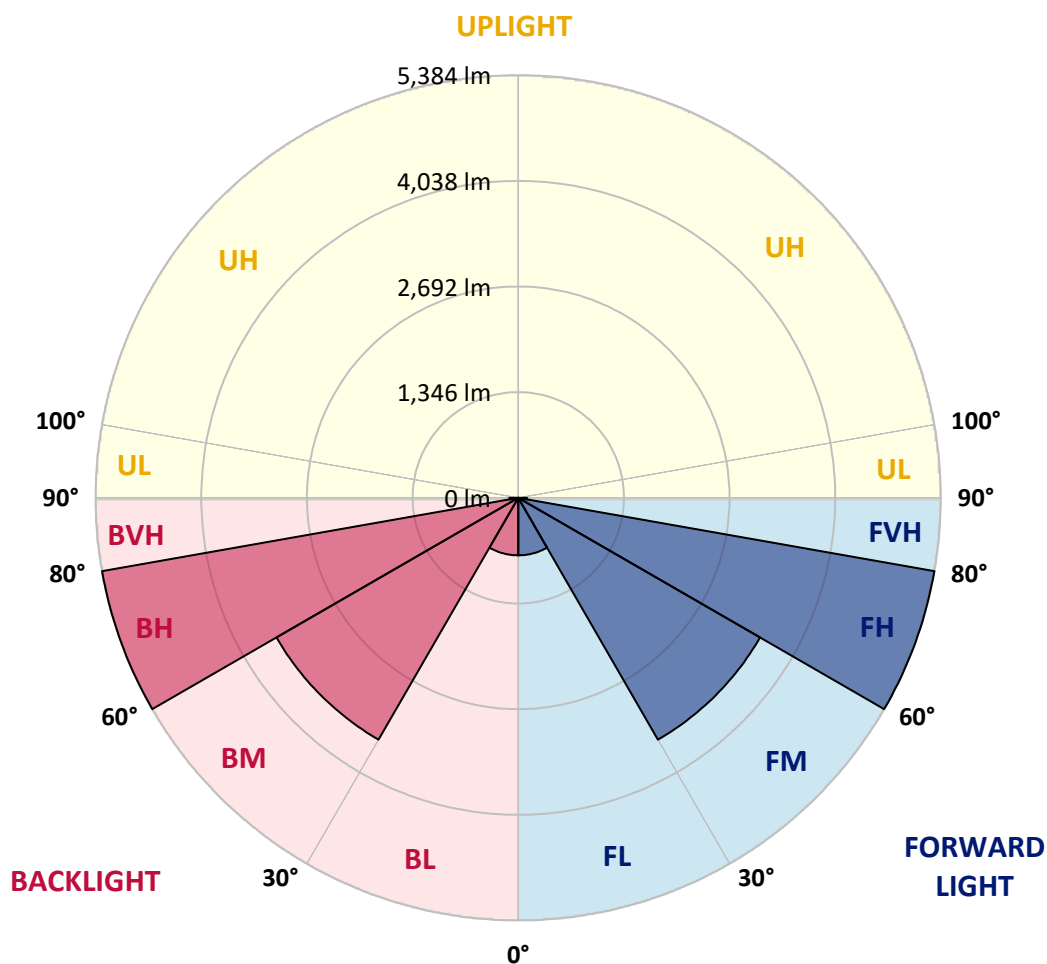
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	732.6	3.7			
FM	(30°-60°)	3557.2	18.2			
FH	(60°-80°)	5383.5	27.5			G3/7500
FVH	(80°-90°)	111.8	0.6			G2/225
BL	(0°-30°)	732.6	3.7	B2/1000		
BM	(30°-60°)	3557.2	18.2	B3/5000		
BH	(60°-80°)	5383.5	27.5	B5		G3/7500
BVH	(80°-90°)	111.8	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°	1785.2	1785.2	1785.2	1785.2	1785.2	1785.2	1785.2	1785.2	1785.2	1785.2	1785.2
2.5°	1774.0	1779.1	1777.0	1773.0	1773.0	1770.0	1773.0	1775.0	1778.1	1780.1	1779.1
5°	1750.6	1754.7	1753.7	1750.6	1751.6	1748.5	1750.6	1753.7	1755.7	1756.7	1756.7
7.5°	1730.3	1734.3	1732.4	1727.2	1727.2	1724.2	1725.2	1728.3	1731.3	1732.4	1732.4
10°	1725.2	1729.3	1723.1	1715.0	1712.0	1707.9	1708.9	1712.0	1718.1	1721.1	1721.1
12.5°	1727.2	1730.3	1724.2	1712.0	1708.9	1704.9	1704.9	1707.9	1716.1	1720.2	1721.1
15°	1733.4	1736.4	1727.2	1714.0	1710.9	1707.9	1706.9	1710.9	1720.2	1727.2	1728.3
17.5°	1744.6	1747.5	1733.4	1715.0	1710.9	1712.0	1710.9	1714.0	1728.3	1741.5	1741.5
20°	1754.7	1756.7	1737.4	1715.0	1710.9	1712.0	1710.9	1717.1	1735.3	1753.7	1754.7
22.5°	1757.8	1759.8	1741.5	1722.1	1719.1	1720.2	1719.1	1725.2	1742.5	1760.7	1760.7
25°	1758.8	1761.8	1747.5	1732.4	1737.4	1739.4	1737.4	1738.4	1751.6	1767.9	1766.9
27.5°	1774.0	1778.1	1764.8	1751.6	1754.7	1753.7	1756.7	1759.8	1770.0	1786.3	1782.2
30°	1805.5	1808.6	1797.4	1784.2	1782.2	1775.0	1784.2	1794.4	1805.5	1819.8	1816.7
32.5°	1857.4	1863.6	1849.3	1835.1	1825.9	1821.8	1828.9	1846.2	1861.5	1876.8	1870.6
35°	1943.9	1948.0	1934.7	1908.2	1892.0	1892.0	1898.1	1920.5	1944.9	1964.2	1957.1
37.5°	2066.0	2071.0	2047.6	2016.1	1991.7	1991.7	1999.9	2023.2	2059.8	2087.3	2077.2
40°	2214.5	2221.6	2192.1	2159.6	2136.1	2132.1	2142.2	2168.7	2203.2	2237.9	2226.7
42.5°	2393.5	2401.7	2363.0	2334.5	2316.2	2316.2	2321.3	2345.7	2377.2	2419.9	2416.8
45°	2622.4	2636.6	2583.7	2555.2	2537.9	2542.0	2545.1	2566.4	2594.9	2643.8	2641.7
47.5°	2895.0	2909.3	2853.3	2823.8	2820.7	2840.1	2827.9	2843.1	2858.4	2914.3	2898.1
50°	3204.3	3228.6	3190.0	3188.0	3194.0	3229.7	3201.2	3209.3	3192.1	3227.6	3206.3
52.5°	3582.6	3618.2	3611.1	3623.3	3691.4	3764.7	3699.6	3671.1	3606.1	3617.2	3579.6
55°	4041.4	4095.3	4105.4	4178.7	4333.3	4482.8	4344.6	4229.6	4091.2	4065.8	4026.1
57.5°	4563.2	4605.9	4654.7	4804.3	5093.2	5358.7	5093.2	4838.9	4621.2	4569.3	4532.7
60°	5124.7	5177.6	5224.4	5445.1	5874.4	6247.7	5866.3	5462.4	5174.6	5104.4	5043.3
62.5°	5727.9	5796.1	5828.7	6073.7	6574.2	7019.8	6581.3	6092.1	5772.7	5697.4	5636.4
65°	6306.7	6362.7	6399.3	6660.8	7138.8	7585.3	7171.3	6689.2	6360.6	6261.9	6213.1
67.5°	6576.3	6606.8	6696.3	6992.3	7496.8	8006.5	7582.3	7023.8	6656.7	6483.7	6485.8
70°	6181.6	6119.6	6335.2	6809.2	7539.6	8264.9	7637.3	6794.9	6345.4	6064.6	6131.8
72.5°	4776.8	4670.0	5044.3	5855.1	7051.3	8100.1	7100.2	5900.8	5277.3	4707.6	4849.1
75°	2599.0	2477.9	2994.6	4020.0	5623.2	7020.8	5752.3	4135.0	3334.4	2579.6	2747.5
77.5°	733.4	687.7	1104.6	1944.9	3382.2	4929.4	3512.5	1987.7	1310.2	777.2	863.6
80°	224.8	217.7	295.0	585.9	1436.3	2361.0	1380.4	593.1	375.4	237.0	250.2
82.5°	133.2	122.1	146.5	213.6	366.2	741.6	356.0	222.7	179.1	120.0	130.2
85°	76.3	71.2	86.5	103.7	123.1	157.6	102.7	105.8	95.6	64.1	67.1
87.5°	31.6	28.5	33.5	32.6	28.5	36.6	27.5	32.6	38.6	25.4	23.4
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)