

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: P963126

Luminaire Tested: **NAV-SB2D-830-U-5WQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963126
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-830-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18958.4 lumens
Efficiency: N/A
Efficacy: 128.4 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

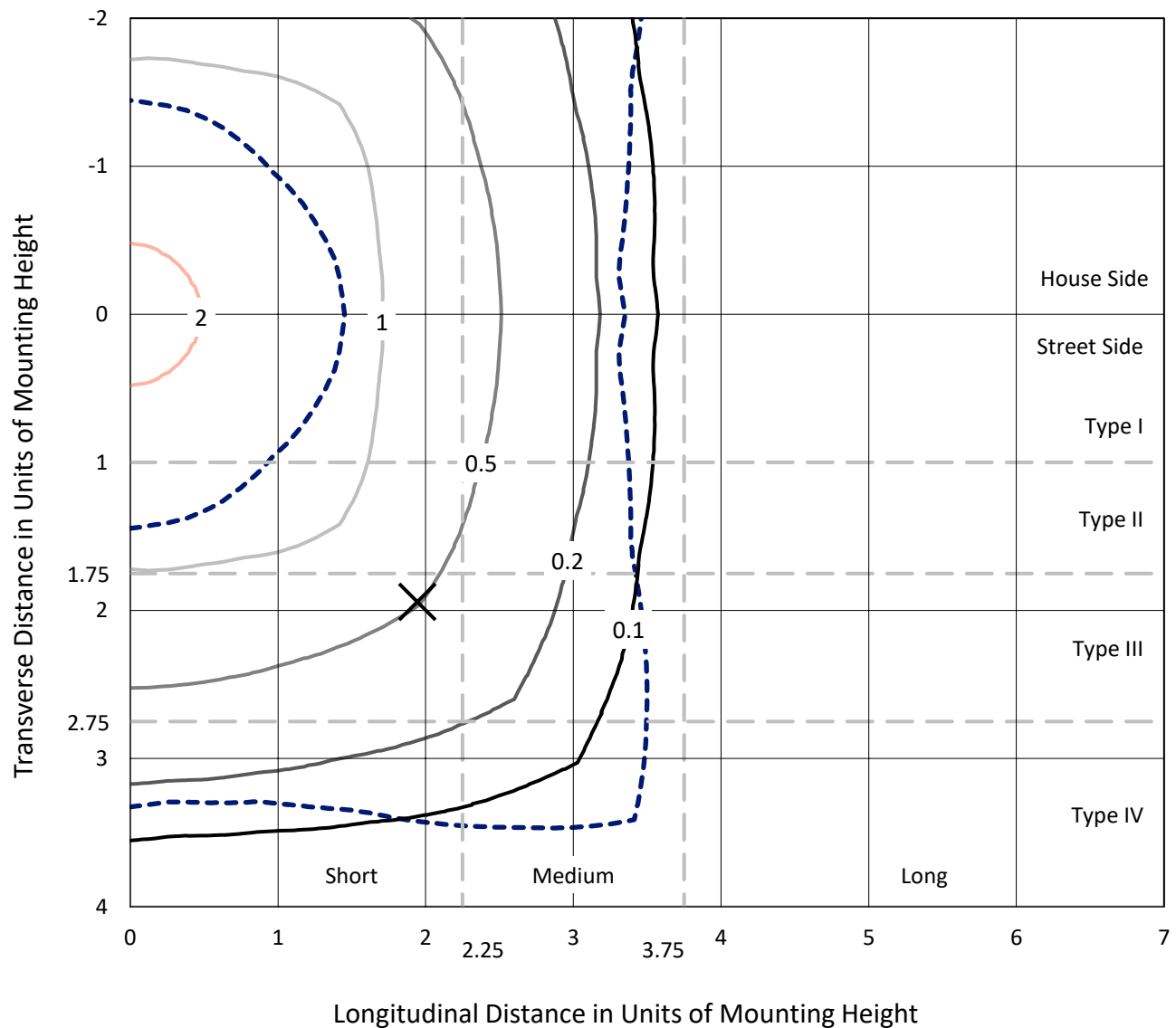


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Iso-Footcandle Lines of Horizontal Illumination

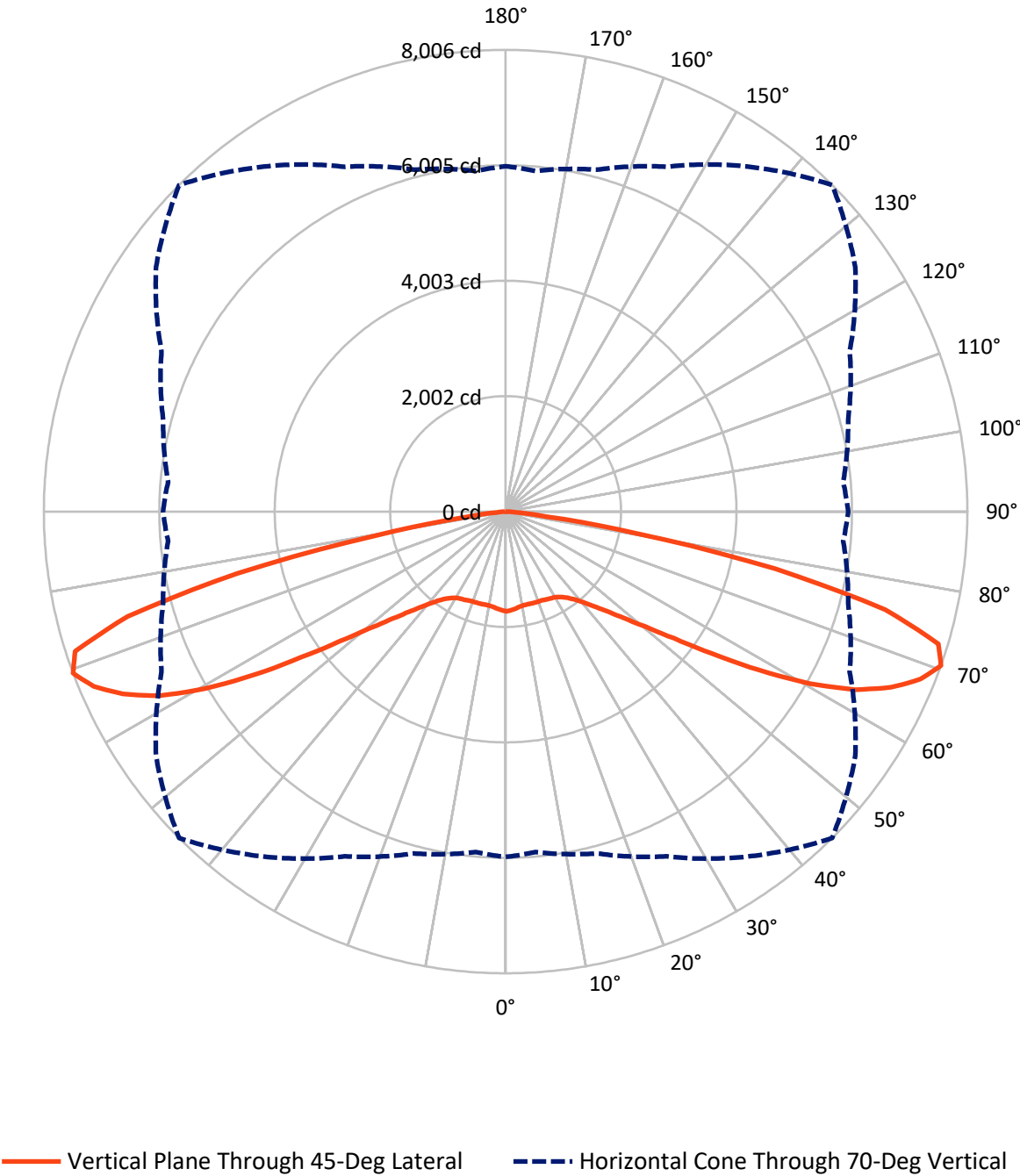
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 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	9479.2	0.0	9479.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9479.2	0.0	9479.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	18958.4	0.0	18958.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.9	0.8
10°-20°	472.4	2.5
20°-30°	786.1	4.1
30°-40°	1188.8	6.3
40°-50°	1975.5	10.4
50°-60°	3727.7	19.7
60°-70°	6294.4	33.2
70°-80°	4136.0	21.8
80°-90°	216.7	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°	18958.4	100.0
0°-180°	18958.4	100.0

Coefficient of Utilization



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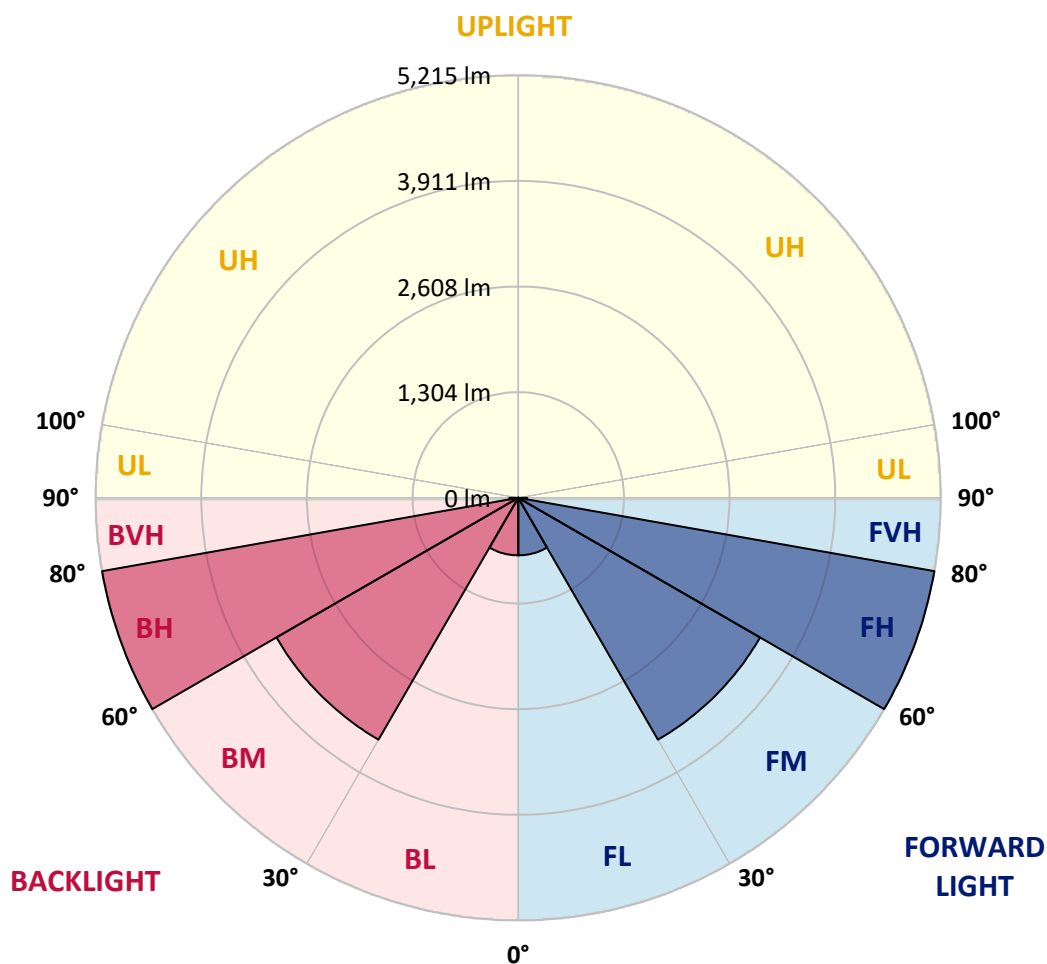
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	709.7	3.7			
FM	(30°-60°)	3446.0	18.2			
FH	(60°-80°)	5215.2	27.5			G3/7500
FVH	(80°-90°)	108.3	0.6			G2/225
BL	(0°-30°)	709.7	3.7	B2/1000		
BM	(30°-60°)	3446.0	18.2	B3/5000		
BH	(60°-80°)	5215.2	27.5	B5		G3/7500
BVH	(80°-90°)	108.3	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°	1729.4	1729.4	1729.4	1729.4	1729.4	1729.4	1729.4	1729.4	1729.4	1729.4	1729.4
2.5°	1718.5	1723.4	1721.5	1717.6	1717.6	1714.6	1717.6	1719.5	1722.5	1724.5	1723.4
5°	1695.9	1699.9	1698.8	1695.9	1696.9	1693.9	1695.9	1698.8	1700.8	1701.8	1701.8
7.5°	1676.2	1680.1	1678.1	1673.2	1673.2	1670.2	1671.3	1674.2	1677.2	1678.1	1678.1
10°	1671.3	1675.2	1669.3	1661.4	1658.4	1654.5	1655.5	1658.4	1664.4	1667.3	1667.3
12.5°	1673.2	1676.2	1670.2	1658.4	1655.5	1651.6	1651.6	1654.5	1662.3	1666.3	1667.3
15°	1679.2	1682.1	1673.2	1660.4	1657.4	1654.5	1653.5	1657.4	1666.3	1673.2	1674.2
17.5°	1690.0	1692.9	1679.2	1661.4	1657.4	1658.4	1657.4	1660.4	1674.2	1687.0	1687.0
20°	1699.9	1701.8	1683.0	1661.4	1657.4	1658.4	1657.4	1663.4	1681.1	1698.8	1699.9
22.5°	1702.8	1704.8	1687.0	1668.3	1665.3	1666.3	1665.3	1671.3	1688.0	1705.7	1705.7
25°	1703.8	1706.7	1692.9	1678.1	1683.0	1685.0	1683.0	1684.1	1696.9	1712.7	1711.6
27.5°	1718.5	1722.5	1709.7	1696.9	1699.9	1698.8	1701.8	1704.8	1714.6	1730.4	1726.4
30°	1749.1	1752.0	1741.2	1728.4	1726.4	1719.5	1728.4	1738.3	1749.1	1762.9	1759.9
32.5°	1799.4	1805.2	1791.5	1777.7	1768.8	1764.8	1771.7	1788.5	1803.3	1818.0	1812.2
35°	1883.1	1887.0	1874.2	1848.6	1832.9	1832.9	1838.7	1860.5	1884.1	1902.8	1895.9
37.5°	2001.3	2006.3	1983.6	1953.0	1929.5	1929.5	1937.4	1960.0	1995.5	2022.0	2012.2
40°	2145.2	2152.1	2123.6	2092.0	2069.4	2065.4	2075.2	2100.8	2134.4	2167.9	2157.0
42.5°	2318.7	2326.5	2289.1	2261.5	2243.7	2243.7	2248.7	2272.3	2302.9	2344.3	2341.3
45°	2540.4	2554.2	2502.9	2475.4	2458.6	2462.6	2465.5	2486.1	2513.8	2561.1	2559.1
47.5°	2804.5	2818.2	2764.0	2735.5	2732.5	2751.3	2739.4	2754.2	2769.0	2823.2	2807.4
50°	3104.0	3127.7	3090.3	3088.2	3094.2	3128.7	3101.0	3108.9	3092.2	3126.7	3106.0
52.5°	3470.6	3505.1	3498.2	3510.0	3576.0	3647.0	3583.9	3556.3	3493.3	3504.1	3467.7
55°	3915.0	3967.3	3977.1	4048.0	4197.8	4342.7	4208.6	4097.3	3963.3	3938.7	3900.2
57.5°	4420.5	4461.9	4509.2	4654.1	4933.9	5191.1	4933.9	4687.5	4476.7	4426.5	4391.0
60°	4964.5	5015.7	5061.0	5274.9	5690.7	6052.3	5682.8	5291.7	5012.8	4944.8	4885.7
62.5°	5548.8	5614.8	5646.4	5883.9	6368.6	6800.3	6375.6	5901.6	5592.2	5519.2	5460.2
65°	6109.5	6163.7	6199.2	6452.5	6915.6	7348.1	6947.1	6480.0	6161.8	6066.2	6018.9
67.5°	6370.7	6400.2	6486.9	6773.7	7262.4	7756.2	7345.3	6804.3	6448.5	6281.0	6282.9
70°	5988.4	5928.2	6137.1	6596.3	7303.8	8006.4	7398.4	6582.6	6146.9	5875.0	5940.0
72.5°	4627.5	4524.0	4886.6	5672.0	6830.8	7846.8	6878.2	5716.3	5112.3	4560.4	4697.5
75°	2517.7	2400.4	2901.1	3894.3	5447.4	6801.3	5572.5	4005.7	3230.2	2499.0	2661.6
77.5°	710.4	666.1	1070.1	1884.1	3276.5	4775.3	3402.6	1925.5	1269.2	752.9	836.6
80°	217.8	210.8	285.8	567.6	1391.4	2287.1	1337.2	574.5	363.6	229.6	242.4
82.5°	129.0	118.3	141.9	206.9	354.8	718.3	344.9	215.8	173.4	116.2	126.2
85°	73.9	69.0	83.7	100.6	119.2	152.7	99.5	102.5	92.7	62.1	65.1
87.5°	30.5	27.6	32.5	31.6	27.6	35.5	26.6	31.6	37.4	24.6	22.7
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)