

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: P967869

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967869
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-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: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21109.9 lumens
Efficiency: N/A
Efficacy: 149.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

Input Watts (W): 141.7
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

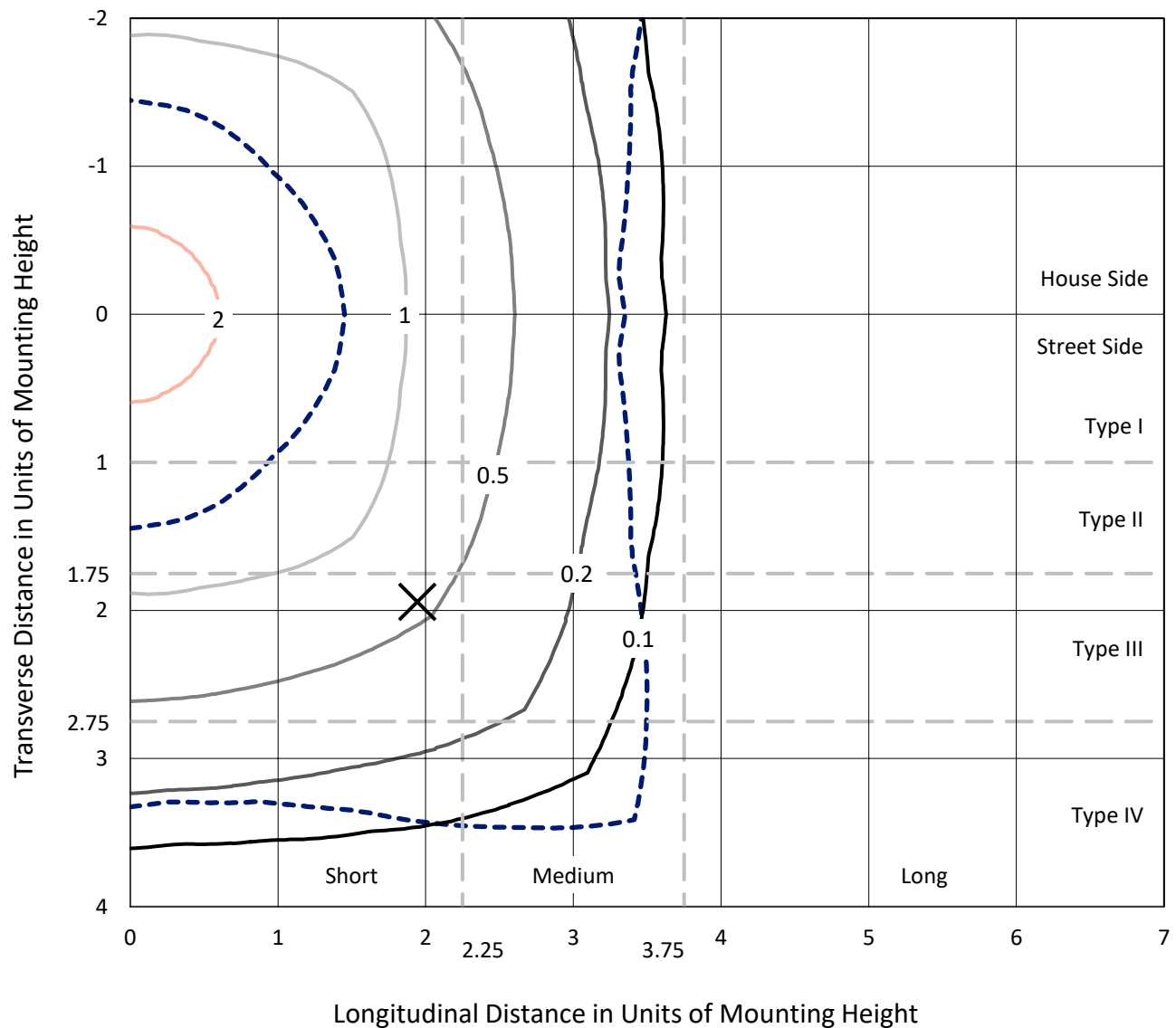


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Iso-Footcandle Lines of Horizontal Illumination

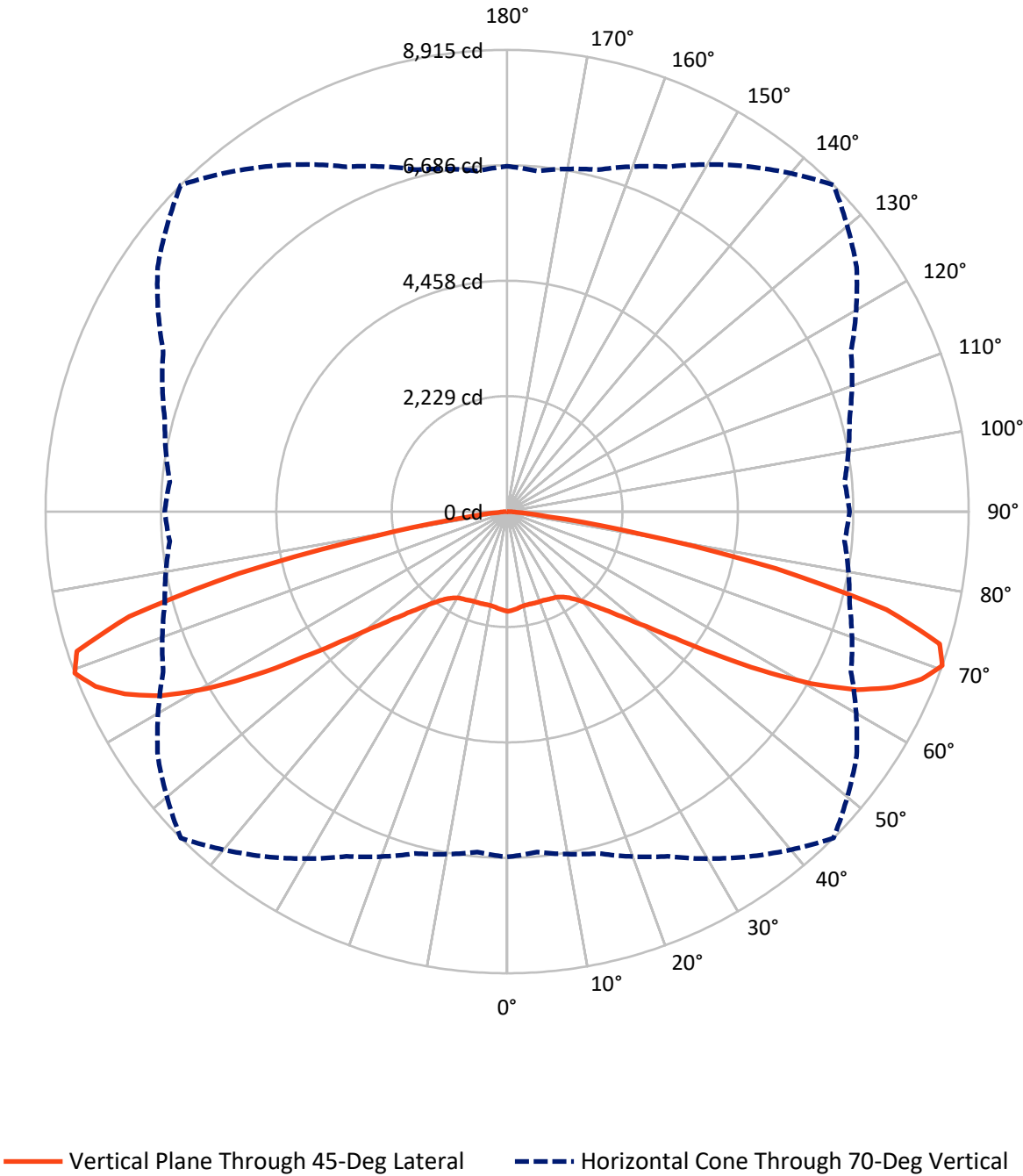
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 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	10554.9	0.0	10554.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10554.9	0.0	10554.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	21109.9	0.0	21109.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.1	0.8
10°-20°	526.0	2.5
20°-30°	875.3	4.1
30°-40°	1323.7	6.3
40°-50°	2199.7	10.4
50°-60°	4150.7	19.7
60°-70°	7008.7	33.2
70°-80°	4605.4	21.8
80°-90°	241.3	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°	21109.9	100.0
0°-180°	21109.9	100.0

Coefficient of Utilization



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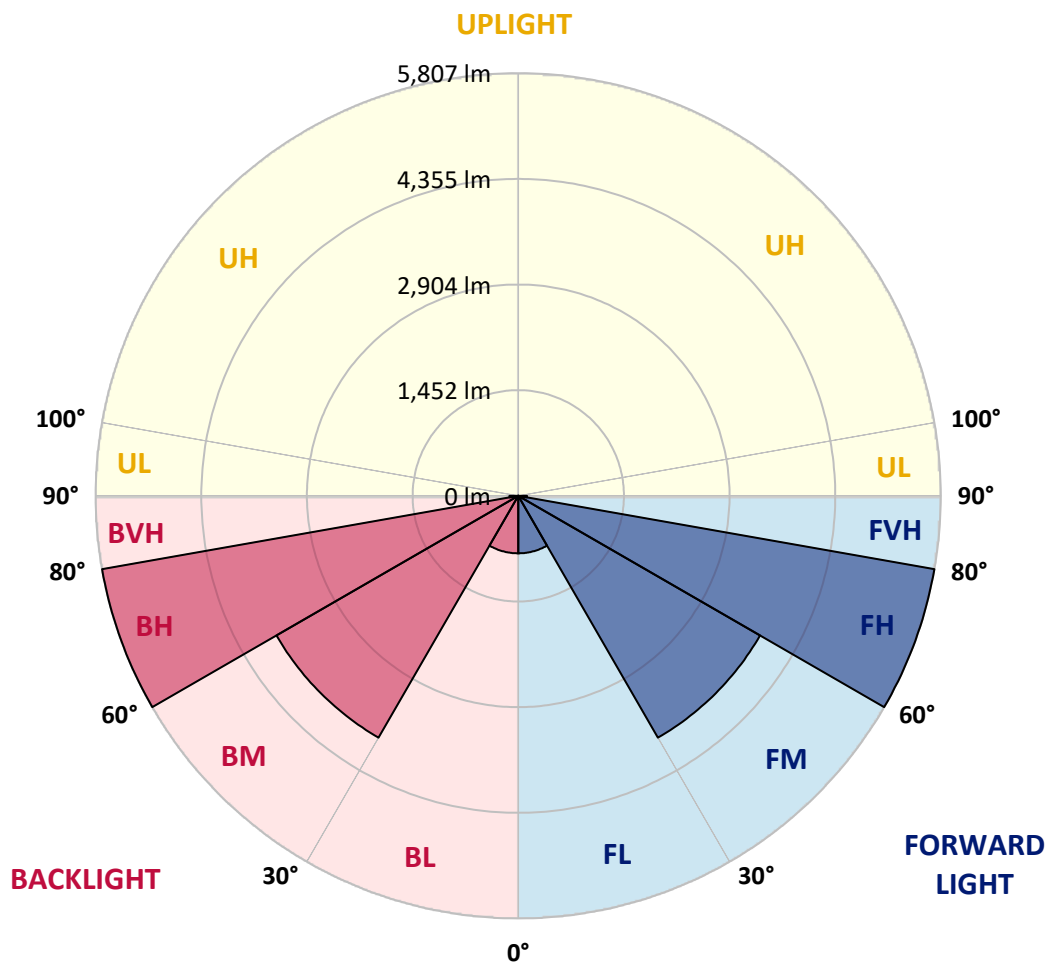
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	790.2	3.7			
FM	(30°-60°)	3837.1	18.2			
FH	(60°-80°)	5807.0	27.5			G3/7500
FVH	(80°-90°)	120.6	0.6			G2/225
BL	(0°-30°)	790.2	3.7	B2/1000		
BM	(30°-60°)	3837.1	18.2	B3/5000		
BH	(60°-80°)	5807.0	27.5	B5		G3/7500
BVH	(80°-90°)	120.6	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°	1925.7	1925.7	1925.7	1925.7	1925.7	1925.7	1925.7	1925.7	1925.7	1925.7	1925.7
2.5°	1913.6	1919.1	1916.9	1912.4	1912.4	1909.2	1912.4	1914.7	1918.0	1920.1	1919.1
5°	1888.4	1892.8	1891.6	1888.4	1889.5	1886.1	1888.4	1891.6	1893.8	1894.9	1894.9
7.5°	1866.4	1870.8	1868.6	1863.1	1863.1	1859.9	1860.9	1864.2	1867.4	1868.6	1868.6
10°	1860.9	1865.3	1858.7	1849.9	1846.6	1842.2	1843.4	1846.6	1853.2	1856.5	1856.5
12.5°	1863.1	1866.4	1859.9	1846.6	1843.4	1839.0	1839.0	1842.2	1851.0	1855.5	1856.5
15°	1869.7	1873.0	1863.1	1848.8	1845.5	1842.2	1841.2	1845.5	1855.5	1863.1	1864.2
17.5°	1881.8	1885.1	1869.7	1849.9	1845.5	1846.6	1845.5	1848.8	1864.2	1878.4	1878.4
20°	1892.8	1894.9	1874.1	1849.9	1845.5	1846.6	1845.5	1852.2	1871.9	1891.6	1892.8
22.5°	1896.0	1898.2	1878.4	1857.6	1854.3	1855.5	1854.3	1860.9	1879.5	1899.3	1899.3
25°	1897.1	1900.5	1885.1	1868.6	1874.1	1876.3	1874.1	1875.1	1889.5	1907.0	1905.9
27.5°	1913.6	1918.0	1903.7	1889.5	1892.8	1891.6	1894.9	1898.2	1909.2	1926.7	1922.4
30°	1947.6	1950.9	1938.8	1924.5	1922.4	1914.7	1924.5	1935.5	1947.6	1963.0	1959.7
32.5°	2003.6	2010.1	1994.8	1979.4	1969.5	1965.1	1972.8	1991.5	2008.0	2024.4	2017.8
35°	2096.8	2101.2	2086.9	2058.4	2040.9	2040.9	2047.4	2071.6	2097.9	2118.8	2111.1
37.5°	2228.5	2234.0	2208.8	2174.7	2148.4	2148.4	2157.1	2182.4	2221.9	2251.5	2240.5
40°	2388.7	2396.3	2364.6	2329.4	2304.2	2299.8	2310.8	2339.3	2376.6	2413.9	2401.9
42.5°	2581.8	2590.6	2548.9	2518.1	2498.4	2498.4	2503.9	2530.2	2564.2	2610.4	2607.0
45°	2828.7	2844.1	2787.0	2756.2	2737.6	2742.0	2745.3	2768.3	2799.1	2851.8	2849.5
47.5°	3122.8	3138.1	3077.8	3045.9	3042.6	3063.5	3050.3	3066.8	3083.2	3143.6	3126.0
50°	3456.3	3482.6	3440.9	3438.8	3445.3	3483.7	3453.0	3461.7	3443.1	3481.5	3458.5
52.5°	3864.5	3902.9	3895.2	3908.3	3981.8	4060.8	3990.6	3959.9	3889.7	3901.8	3861.2
55°	4359.3	4417.4	4428.4	4507.4	4674.2	4835.5	4686.3	4562.3	4413.0	4385.7	4342.8
57.5°	4922.2	4968.3	5021.0	5182.2	5493.9	5780.2	5493.9	5219.5	4984.8	4928.8	4889.2
60°	5527.8	5584.9	5635.3	5873.5	6336.5	6739.2	6327.7	5892.1	5581.6	5505.9	5440.1
62.5°	6178.5	6252.1	6287.1	6551.6	7091.5	7572.0	7099.2	6571.4	6226.8	6145.6	6079.8
65°	6802.8	6863.2	6902.7	7184.7	7700.4	8182.1	7735.5	7215.4	6861.0	6754.5	6701.9
67.5°	7093.6	7126.5	7223.1	7542.4	8086.6	8636.3	8178.8	7576.4	7180.3	6993.8	6995.9
70°	6667.9	6601.0	6833.6	7344.8	8132.7	8915.0	8238.0	7329.6	6844.5	6541.8	6614.1
72.5°	5152.6	5037.4	5441.2	6315.6	7606.0	8737.3	7658.7	6365.0	5692.4	5078.0	5230.5
75°	2803.5	2672.9	3230.3	4336.3	6065.5	7573.1	6204.8	4460.3	3596.7	2782.6	2963.6
77.5°	791.1	741.7	1191.6	2097.9	3648.3	5317.2	3788.7	2144.0	1413.3	838.2	931.5
80°	242.5	234.8	318.2	632.0	1549.3	2546.7	1488.9	639.7	404.9	255.6	269.9
82.5°	143.7	131.7	158.0	230.4	395.0	799.9	384.1	240.3	193.1	129.5	140.4
85°	82.3	76.8	93.3	111.9	132.7	170.0	110.8	114.1	103.1	69.1	72.5
87.5°	34.0	30.7	36.2	35.2	30.7	39.5	29.6	35.2	41.7	27.5	25.2
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)