

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: P882742

Luminaire Tested: **NAV-SB2D-735-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882742
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-SB2D-735-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20978 lumens
Efficiency: N/A
Efficacy: 142.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

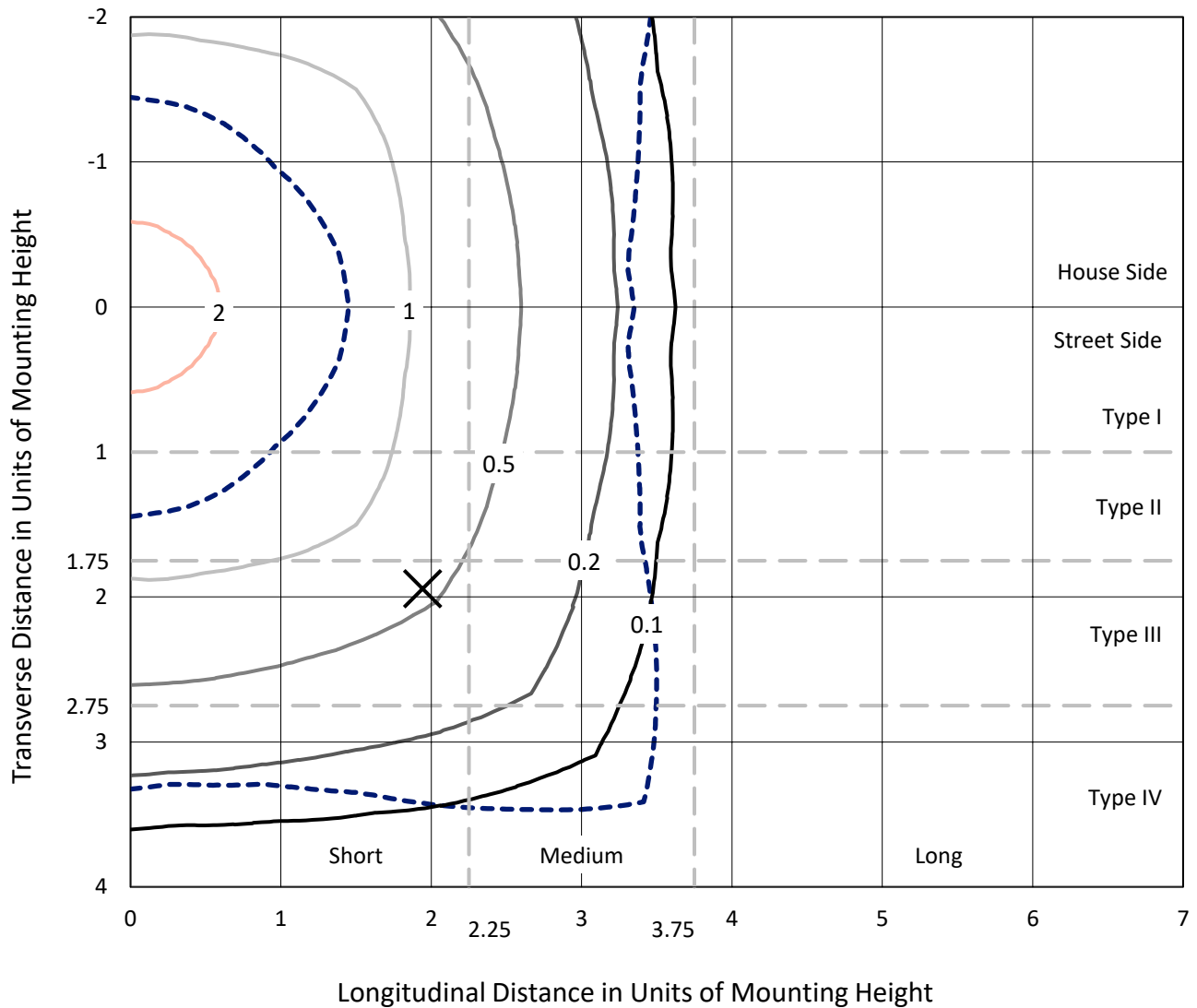
Input Watts (W): 147.6
Input Voltage (V): 120.0
Input Current (Ain): 1.234
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

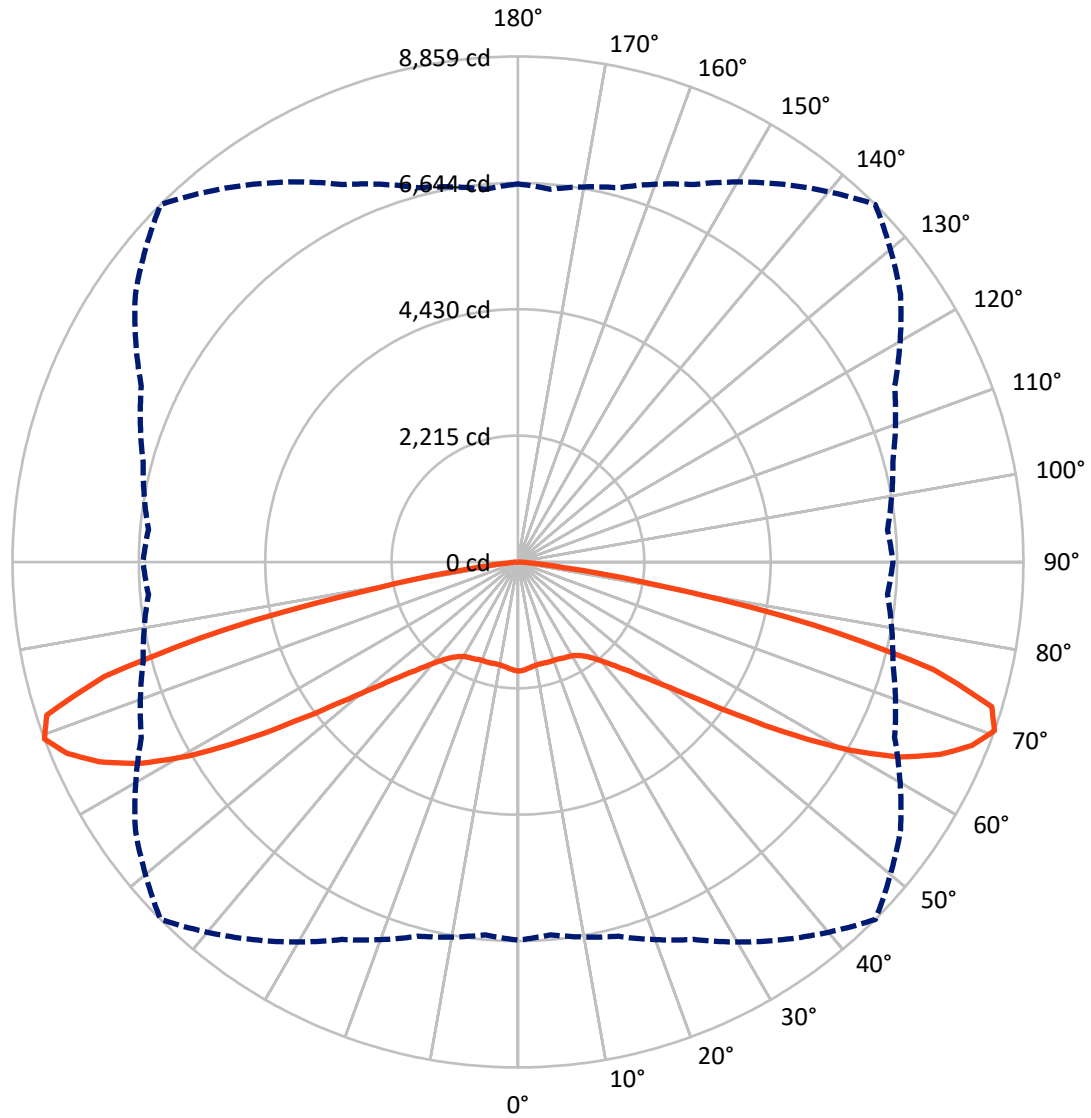
✕ Max cd
 - - - 1/2 Max cd



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



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10489.0	0.0	10489.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10489.0	0.0	10489.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	20978.0	0.0	20978.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.0	0.8
10°-20°	522.7	2.5
20°-30°	869.8	4.1
30°-40°	1315.4	6.3
40°-50°	2185.9	10.4
50°-60°	4124.8	19.7
60°-70°	6964.9	33.2
70°-80°	4576.7	21.8
80°-90°	239.8	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°	20978.0	100.0
0°-180°	20978.0	100.0

Coefficient of Utilization



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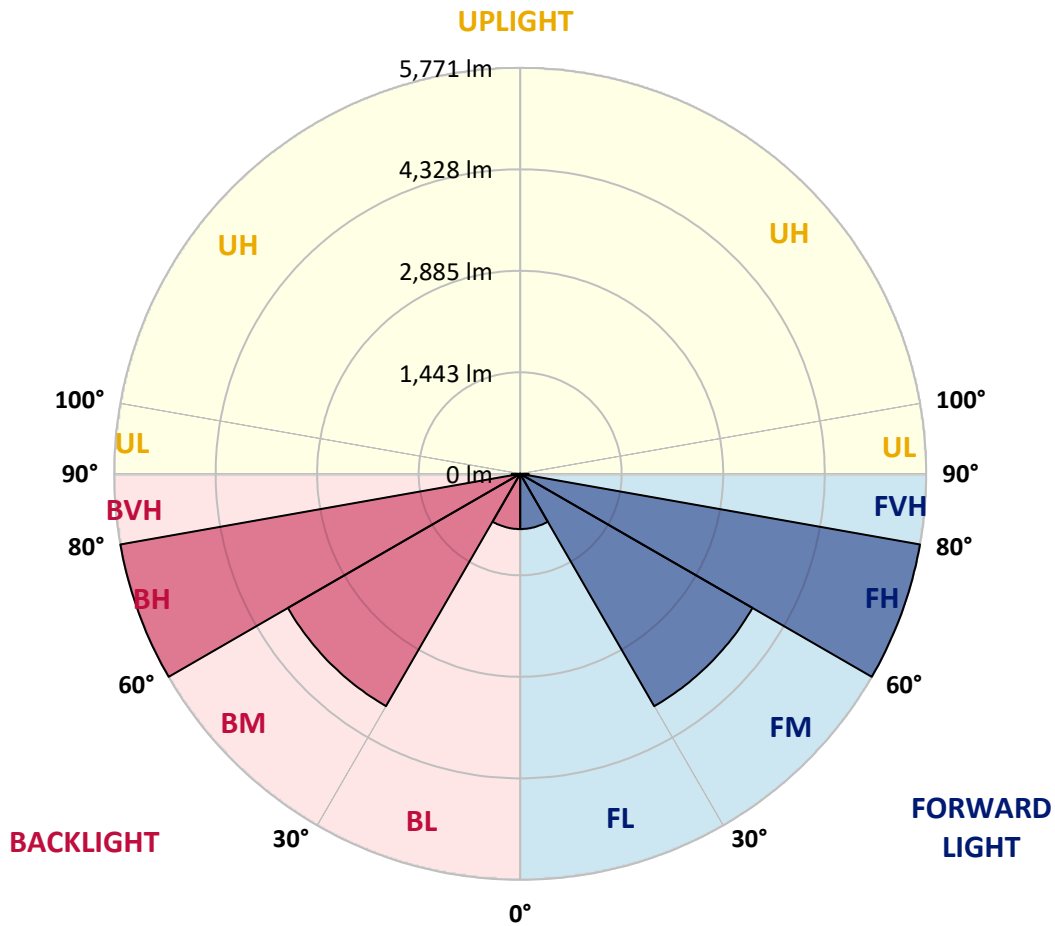
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	785.3	3.7			
FM (30°-60°)	3813.1	18.2			
FH (60°-80°)	5770.8	27.5			G3/7500
FVH (80°-90°)	119.9	0.6			G2/225
BL (0°-30°)	785.3	3.7	B2/1000		
BM (30°-60°)	3813.1	18.2	B3/5000		
BH (60°-80°)	5770.8	27.5	B5		G3/7500
BVH (80°-90°)	119.9	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°	1913.6	1913.6	1913.6	1913.6	1913.6	1913.6	1913.6	1913.6	1913.6	1913.6	1913.6
2.5°	1901.6	1907.1	1904.9	1900.5	1900.5	1897.3	1900.5	1902.7	1906.0	1908.2	1907.1
5°	1876.5	1880.9	1879.8	1876.5	1877.6	1874.4	1876.5	1879.8	1882.0	1883.1	1883.1
7.5°	1854.7	1859.1	1856.9	1851.5	1851.5	1848.2	1849.3	1852.6	1855.8	1856.9	1856.9
10°	1849.3	1853.6	1847.1	1838.4	1835.1	1830.7	1831.8	1835.1	1841.7	1844.9	1844.9
12.5°	1851.5	1854.7	1848.2	1835.1	1831.8	1827.5	1827.5	1830.7	1839.5	1843.8	1844.9
15°	1858.0	1861.3	1851.5	1837.3	1834.0	1830.7	1829.7	1834.0	1843.8	1851.5	1852.6
17.5°	1870.0	1873.3	1858.0	1838.4	1834.0	1835.1	1834.0	1837.3	1852.6	1866.7	1866.7
20°	1880.9	1883.1	1862.4	1838.4	1834.0	1835.1	1834.0	1840.6	1860.2	1879.8	1880.9
22.5°	1884.2	1886.4	1866.7	1846.0	1842.7	1843.8	1842.7	1849.3	1867.8	1887.4	1887.4
25°	1885.3	1888.5	1873.3	1856.9	1862.4	1864.5	1862.4	1863.5	1877.6	1895.1	1894.0
27.5°	1901.6	1906.0	1891.8	1877.6	1880.9	1879.8	1883.1	1886.4	1897.3	1914.7	1910.3
30°	1935.4	1938.7	1926.7	1912.5	1910.3	1902.7	1912.5	1923.4	1935.4	1950.7	1947.4
32.5°	1991.0	1997.6	1982.3	1967.0	1957.2	1952.9	1960.5	1979.0	1995.4	2011.8	2005.2
35°	2083.7	2088.1	2073.9	2045.6	2028.1	2028.1	2034.6	2058.6	2084.8	2105.5	2097.9
37.5°	2214.6	2220.0	2194.9	2161.1	2135.0	2135.0	2143.7	2168.8	2208.0	2237.5	2226.6
40°	2373.8	2381.4	2349.8	2314.9	2289.8	2285.4	2296.3	2324.7	2361.8	2398.8	2386.8
42.5°	2565.7	2574.4	2533.0	2502.4	2482.8	2482.8	2488.2	2514.4	2548.2	2594.0	2590.7
45°	2811.0	2826.3	2769.6	2739.0	2720.5	2724.9	2728.1	2751.0	2781.6	2833.9	2831.7
47.5°	3103.2	3118.5	3058.5	3026.9	3023.6	3044.3	3031.3	3047.6	3064.0	3123.9	3106.5
50°	3434.7	3460.9	3419.4	3417.2	3423.8	3462.0	3431.4	3440.1	3421.6	3459.8	3436.9
52.5°	3840.3	3878.5	3870.8	3883.9	3957.0	4035.5	3965.7	3935.2	3865.4	3877.4	3837.0
55°	4332.1	4389.9	4400.8	4479.3	4645.0	4805.3	4657.0	4533.8	4385.5	4358.2	4315.7
57.5°	4891.4	4937.2	4989.6	5149.9	5459.5	5744.1	5459.5	5186.9	4953.6	4898.0	4858.7
60°	5493.3	5550.0	5600.2	5836.8	6296.9	6697.1	6288.2	5855.3	5546.8	5471.5	5406.1
62.5°	6139.9	6213.0	6247.9	6510.7	7047.1	7524.7	7054.8	6530.3	6187.9	6107.2	6041.8
65°	6760.4	6820.3	6859.6	7139.8	7652.3	8131.0	7687.2	7170.3	6818.1	6712.4	6660.0
67.5°	7049.3	7082.0	7178.0	7495.3	8036.1	8582.4	8127.7	7529.1	7135.4	6950.1	6952.3
70°	6626.2	6559.7	6790.9	7299.0	8081.9	8859.3	8186.6	7283.7	6801.8	6500.8	6572.8
72.5°	5120.4	5005.9	5407.2	6276.2	7558.5	8682.7	7610.8	6325.3	5656.9	5046.3	5197.8
75°	2785.9	2656.2	3210.1	4309.2	6027.6	7525.8	6166.1	4432.4	3574.3	2765.2	2945.1
77.5°	786.2	737.1	1184.2	2084.8	3625.5	5284.0	3765.1	2130.6	1404.4	833.0	925.7
80°	241.0	233.3	316.2	628.1	1539.6	2530.8	1479.6	635.7	402.4	254.1	268.2
82.5°	142.8	130.8	157.0	229.0	392.5	794.9	381.6	238.8	191.9	128.7	139.6
85°	81.8	76.3	92.7	111.2	131.9	169.0	110.1	113.4	102.5	68.7	72.0
87.5°	33.8	30.5	36.0	34.9	30.5	39.3	29.4	34.9	41.4	27.3	25.1
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)