

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: P884252

Luminaire Tested: **NAV-SB5A-727-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884252
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-SB5A-727-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20866 lumens
Efficiency: N/A
Efficacy: 147.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

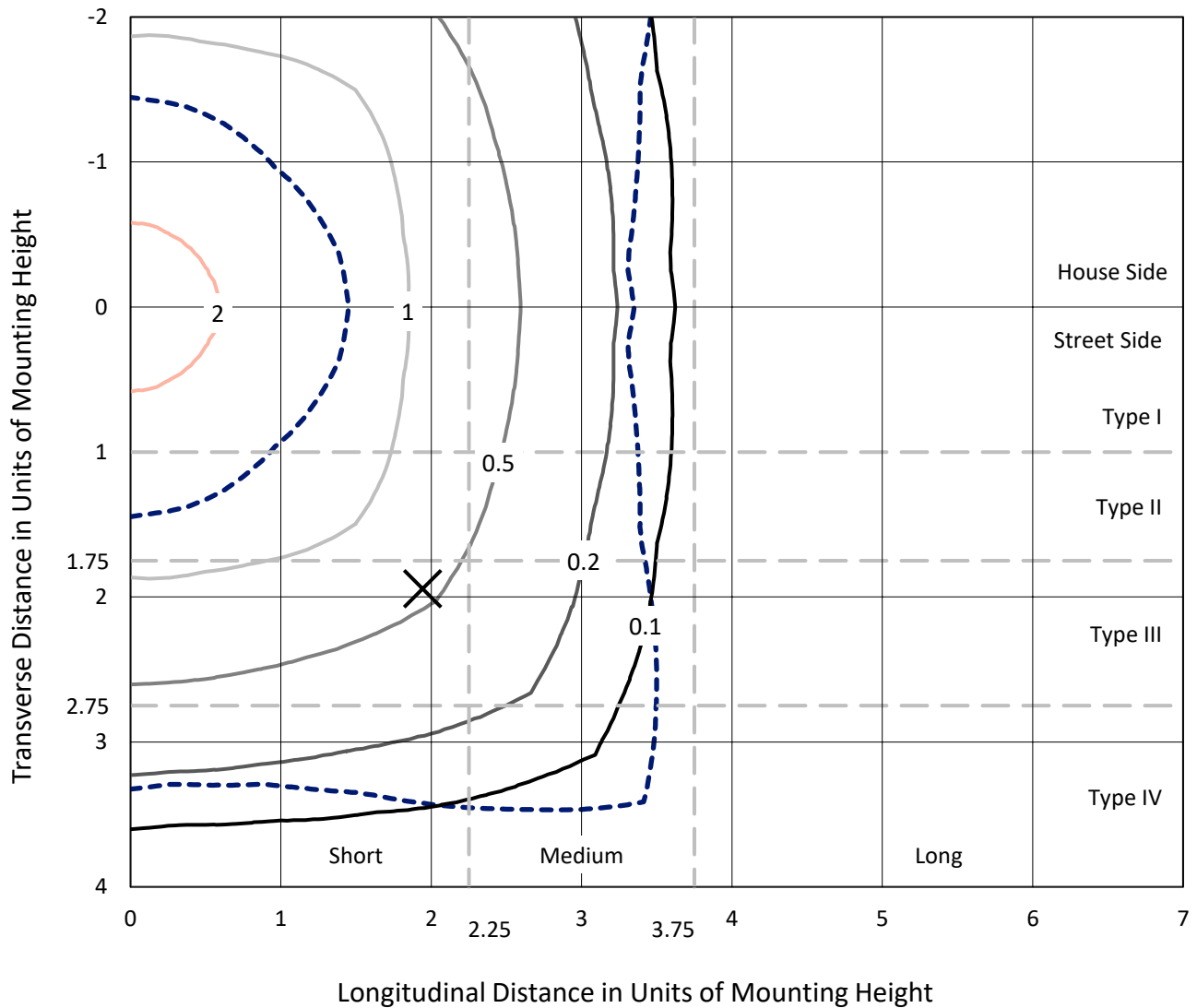
Input Watts (W): 141.7
Input Voltage (V): 120.0
Input Current (Ain): 1.201
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 10.503
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

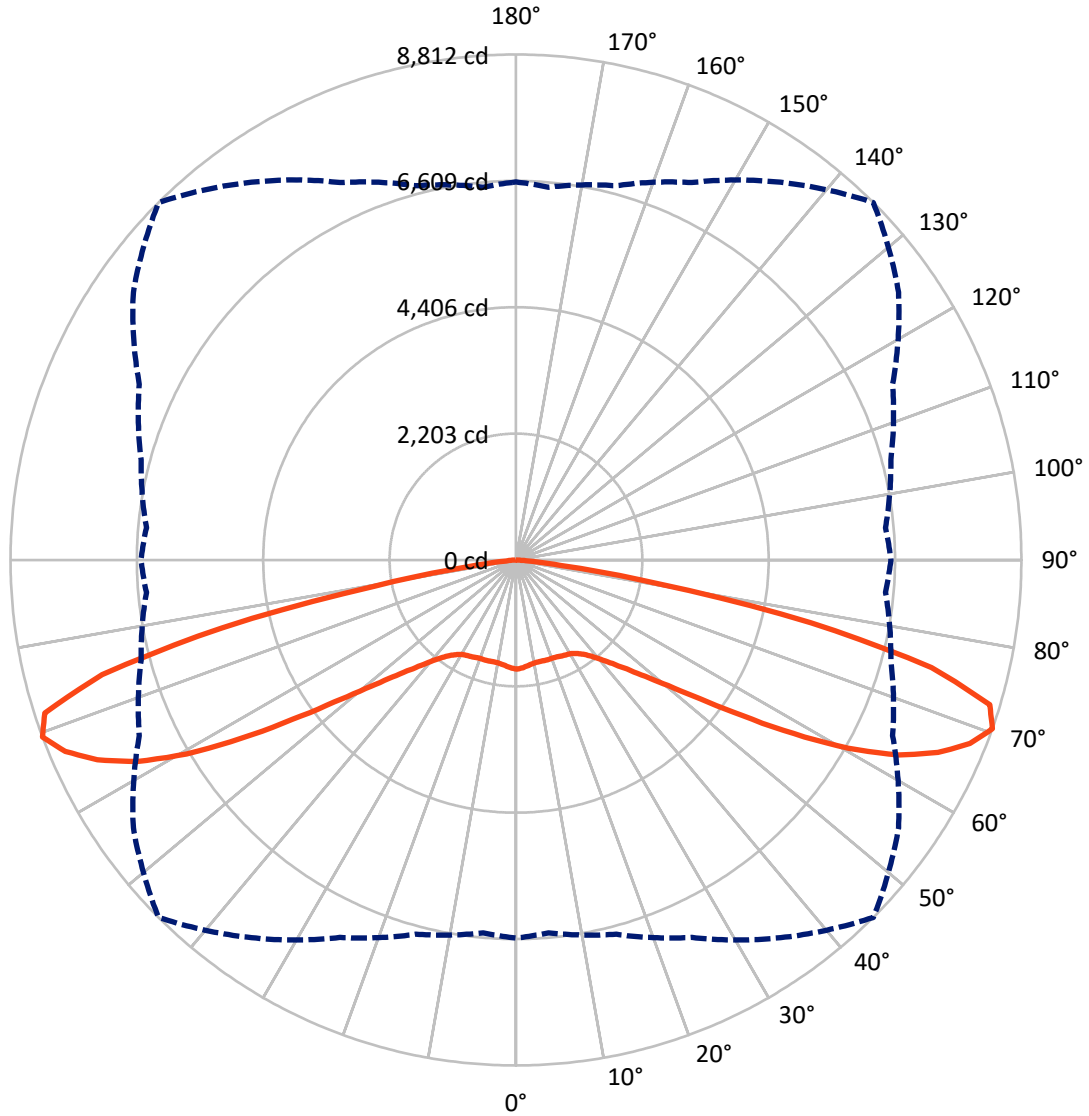
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 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	10433.0	0.0	10433.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10433.0	0.0	10433.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	20866.0	0.0	20866.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.1	0.8
10°-20°	519.9	2.5
20°-30°	865.2	4.1
30°-40°	1308.4	6.3
40°-50°	2174.3	10.4
50°-60°	4102.8	19.7
60°-70°	6927.7	33.2
70°-80°	4552.2	21.8
80°-90°	238.5	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°	20866.0	100.0
0°-180°	20866.0	100.0

Coefficient of Utilization



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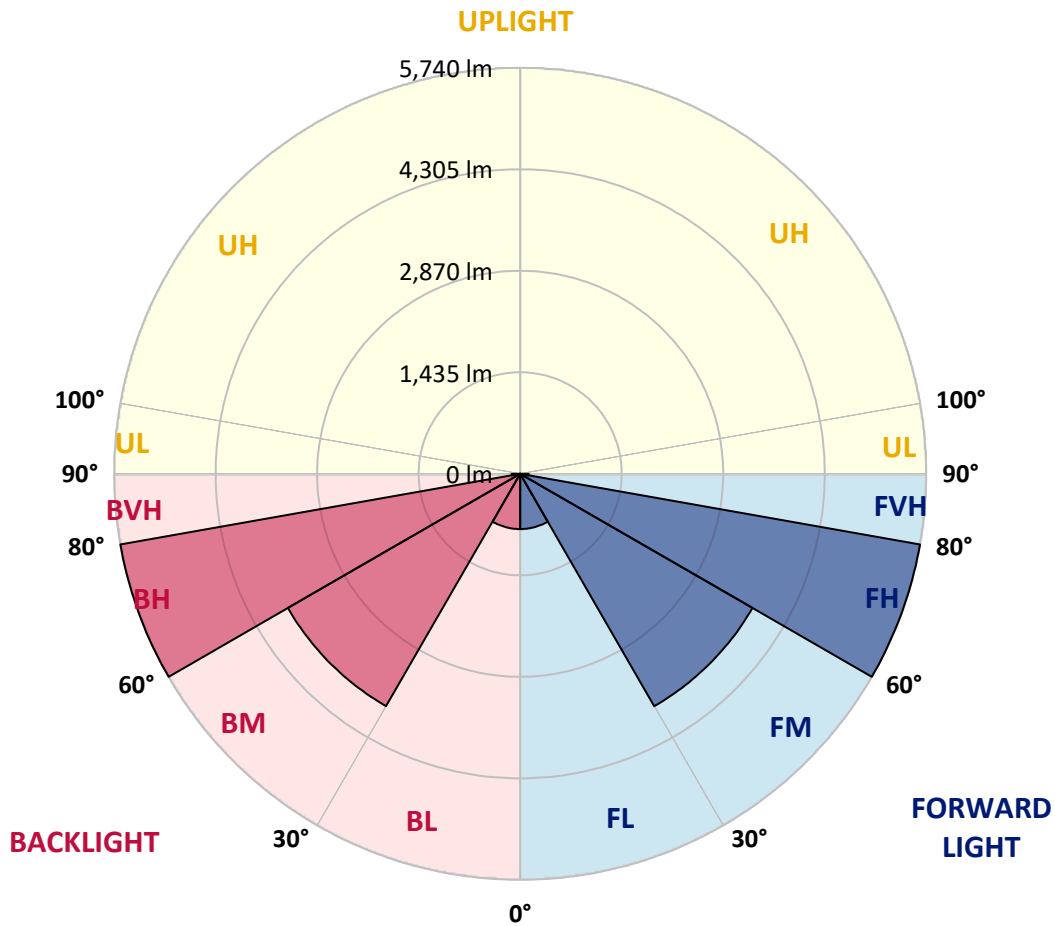
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	781.1	3.7			
FM (30°-60°)	3792.7	18.2			
FH (60°-80°)	5740.0	27.5			G3/7500
FVH (80°-90°)	119.2	0.6			G2/225
BL (0°-30°)	781.1	3.7	B2/1000		
BM (30°-60°)	3792.7	18.2	B3/5000		
BH (60°-80°)	5740.0	27.5	B5		G3/7500
BVH (80°-90°)	119.2	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°	1903.4	1903.4	1903.4	1903.4	1903.4	1903.4	1903.4	1903.4	1903.4	1903.4	1903.4
2.5°	1891.5	1896.9	1894.7	1890.4	1890.4	1887.1	1890.4	1892.6	1895.8	1898.0	1896.9
5°	1866.5	1870.9	1869.8	1866.5	1867.6	1864.4	1866.5	1869.8	1871.9	1873.0	1873.0
7.5°	1844.8	1849.2	1847.0	1841.6	1841.6	1838.3	1839.4	1842.7	1845.9	1847.0	1847.0
10°	1839.4	1843.7	1837.2	1828.6	1825.3	1821.0	1822.1	1825.3	1831.8	1835.1	1835.1
12.5°	1841.6	1844.8	1838.3	1825.3	1822.1	1817.7	1817.7	1821.0	1829.6	1834.0	1835.1
15°	1848.1	1851.3	1841.6	1827.5	1824.2	1821.0	1819.9	1824.2	1834.0	1841.6	1842.7
17.5°	1860.0	1863.3	1848.1	1828.6	1824.2	1825.3	1824.2	1827.5	1842.7	1856.8	1856.8
20°	1870.9	1873.0	1852.4	1828.6	1824.2	1825.3	1824.2	1830.7	1850.3	1869.8	1870.9
22.5°	1874.1	1876.3	1856.8	1836.2	1832.9	1834.0	1832.9	1839.4	1857.8	1877.4	1877.4
25°	1875.2	1878.5	1863.3	1847.0	1852.4	1854.6	1852.4	1853.5	1867.6	1885.0	1883.9
27.5°	1891.5	1895.8	1881.7	1867.6	1870.9	1869.8	1873.0	1876.3	1887.1	1904.5	1900.1
30°	1925.1	1928.3	1916.4	1902.3	1900.1	1892.6	1902.3	1913.2	1925.1	1940.3	1937.0
32.5°	1980.4	1986.9	1971.7	1956.5	1946.8	1942.4	1950.0	1968.5	1984.7	2001.0	1994.5
35°	2072.6	2076.9	2062.8	2034.6	2017.3	2017.3	2023.8	2047.6	2073.7	2094.3	2086.7
37.5°	2202.7	2208.2	2183.2	2149.6	2123.6	2123.6	2132.2	2157.2	2196.2	2225.5	2214.7
40°	2361.1	2368.7	2337.2	2302.5	2277.6	2273.2	2284.1	2312.3	2349.2	2386.0	2374.1
42.5°	2552.0	2560.6	2519.4	2489.1	2469.5	2469.5	2475.0	2501.0	2534.6	2580.2	2576.9
45°	2796.0	2811.2	2754.8	2724.4	2706.0	2710.3	2713.6	2736.3	2766.7	2818.8	2816.6
47.5°	3086.7	3101.8	3042.2	3010.7	3007.5	3028.1	3015.1	3031.3	3047.6	3107.3	3089.9
50°	3416.4	3442.4	3401.2	3399.0	3405.5	3443.5	3413.1	3421.8	3403.3	3441.3	3418.5
52.5°	3819.8	3857.8	3850.2	3863.2	3935.9	4013.9	3944.5	3914.2	3844.8	3856.7	3816.6
55°	4308.9	4366.4	4377.3	4455.4	4620.2	4779.6	4632.1	4509.6	4362.1	4335.0	4292.7
57.5°	4865.3	4910.9	4962.9	5122.4	5430.4	5713.5	5430.4	5159.2	4927.1	4871.8	4832.8
60°	5464.0	5520.4	5570.3	5805.6	6263.3	6661.4	6254.6	5824.1	5517.1	5442.3	5377.2
62.5°	6107.1	6179.8	6214.5	6475.9	7009.5	7484.5	7017.1	6495.4	6154.9	6074.6	6009.5
65°	6724.3	6783.9	6823.0	7101.7	7611.4	8087.5	7646.1	7132.1	6781.7	6676.5	6624.5
67.5°	7011.7	7044.2	7139.6	7455.3	7993.2	8536.6	8084.3	7488.9	7097.3	6913.0	6915.1
70°	6590.9	6524.7	6754.6	7260.0	8038.7	8812.0	8142.9	7244.8	6765.5	6466.1	6537.7
72.5°	5093.1	4979.2	5378.3	6242.7	7518.2	8636.3	7570.2	6291.5	5626.7	5019.3	5170.1
75°	2771.0	2642.0	3192.9	4286.2	5995.4	7485.6	6133.2	4408.7	3555.2	2750.4	2929.4
77.5°	782.0	733.2	1177.8	2073.7	3606.2	5255.8	3745.0	2119.2	1396.9	828.6	920.8
80°	239.7	232.1	314.5	624.7	1531.4	2517.3	1471.7	632.3	400.2	252.7	266.8
82.5°	142.1	130.1	156.2	227.8	390.4	790.6	379.6	237.5	190.9	128.0	138.8
85°	81.3	75.9	92.2	110.6	131.2	168.1	109.5	112.8	101.9	68.3	71.6
87.5°	33.6	30.4	35.8	34.7	30.4	39.0	29.3	34.7	41.2	27.1	24.9
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)