

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: P883742

Luminaire Tested: **NAV-SB4B-727-U-5WQ**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883742  
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-SB4B-727-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

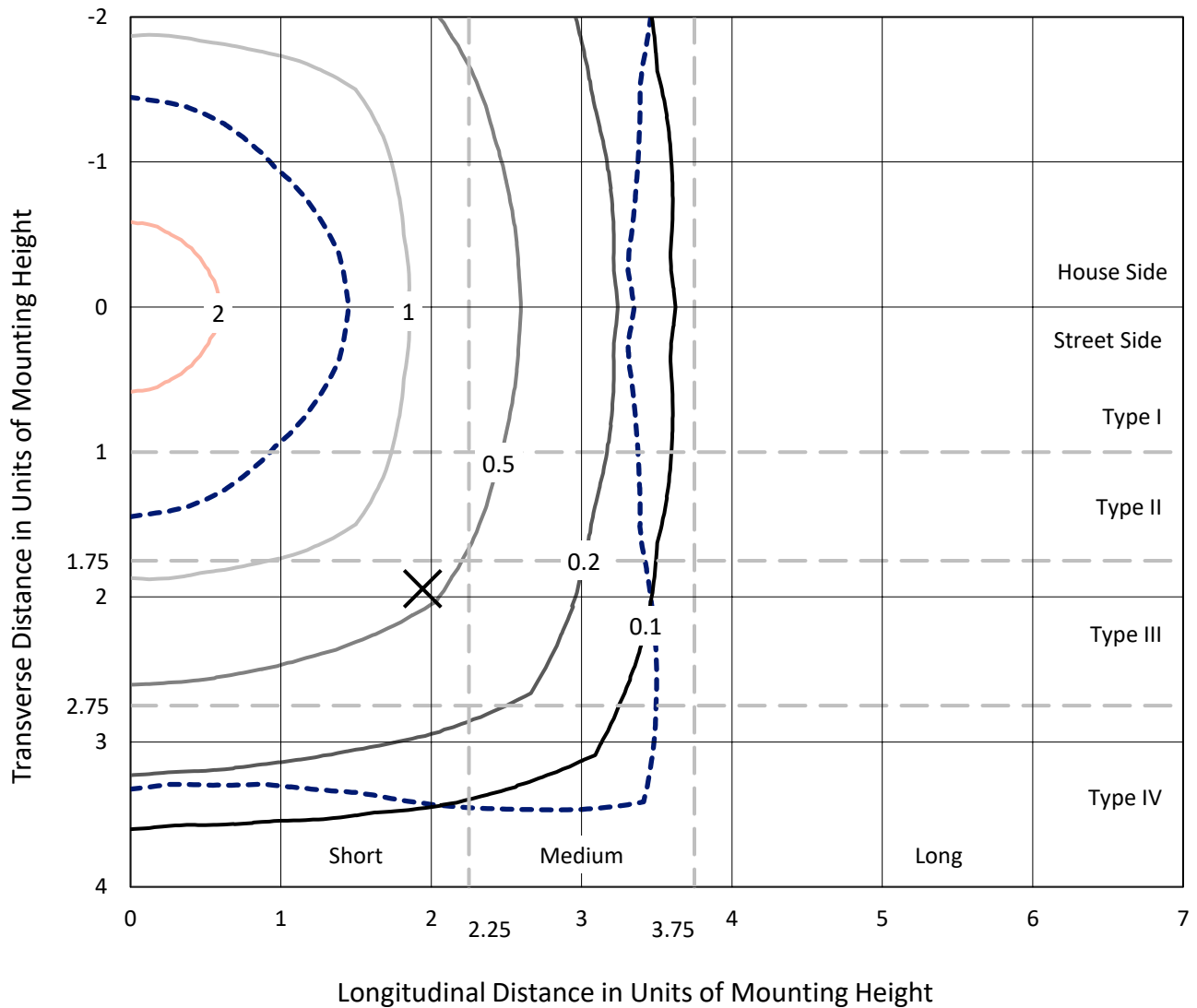
Lumens per Lamp: N/A  
Luminaire Lumens: 20919 lumens  
Efficiency: N/A  
Efficacy: 142.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G3  
  
Input Watts (W): 147  
Input Voltage (V): 120.0  
Input Current (Ain): 1.255  
Voltage Rise (V): NR  
Power Factor: 0.988  
Total Harmonic Distortion (THDi): 13.593  
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

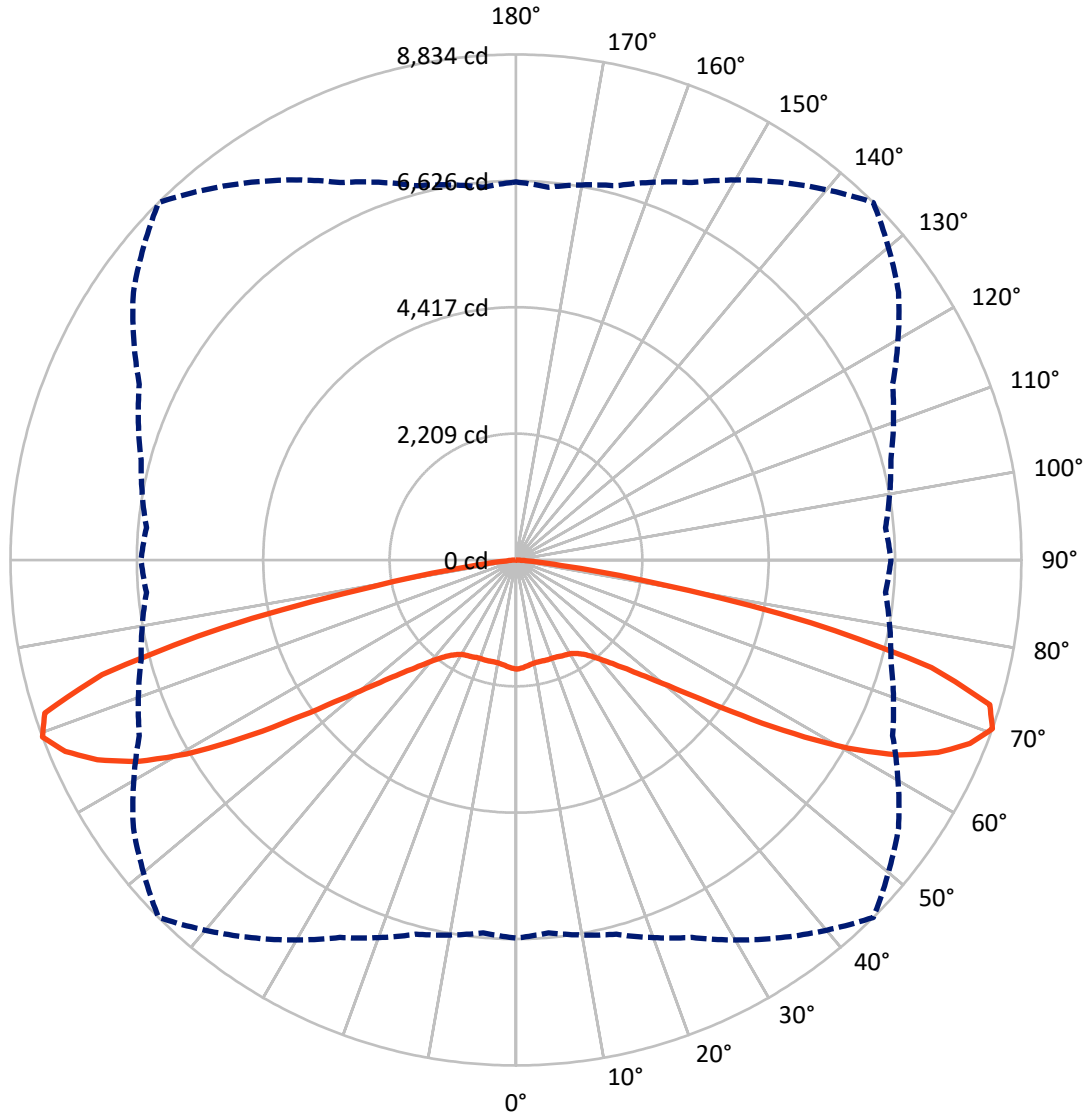
✕ Max cd  
 - - - 1/2 Max cd



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
<b>House Side</b>	Lumens	10459.5	0.0	10459.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	10459.5	0.0	10459.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	20919.0	0.0	20919.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.5	0.8
10°-20°	521.2	2.5
20°-30°	867.4	4.1
30°-40°	1311.7	6.3
40°-50°	2179.8	10.4
50°-60°	4113.2	19.7
60°-70°	6945.3	33.2
70°-80°	4563.8	21.8
80°-90°	239.1	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°	20919.0	100.0
0°-180°	20919.0	100.0



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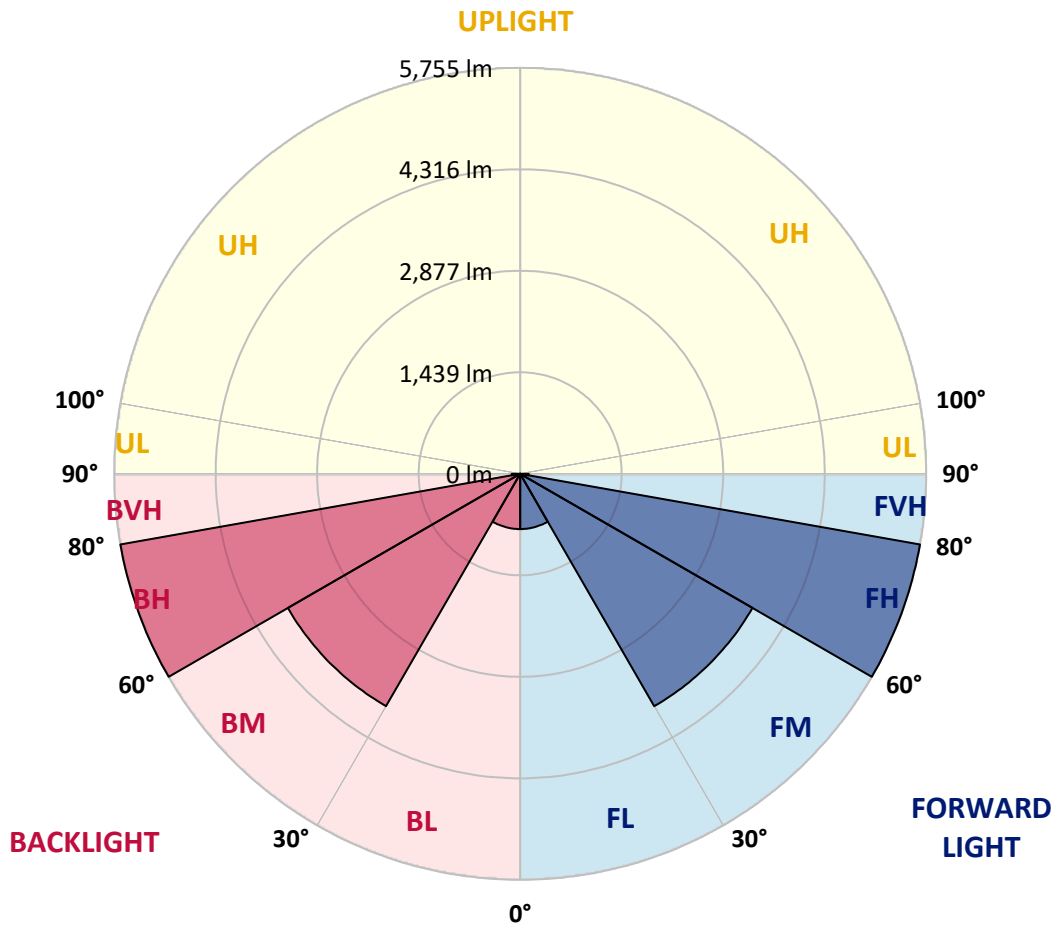
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	783.1	3.7			
FM (30°-60°)	3802.4	18.2			
FH (60°-80°)	5754.5	27.5			G3/7500
FVH (80°-90°)	119.5	0.6			G2/225
BL (0°-30°)	783.1	3.7	B2/1000		
BM (30°-60°)	3802.4	18.2	B3/5000		
BH (60°-80°)	5754.5	27.5	B5		G3/7500
BVH (80°-90°)	119.5	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°	1908.2	1908.2	1908.2	1908.2	1908.2	1908.2	1908.2	1908.2	1908.2	1908.2	1908.2
2.5°	1896.3	1901.7	1899.5	1895.2	1895.2	1891.9	1895.2	1897.4	1900.6	1902.8	1901.7
5°	1871.3	1875.6	1874.5	1871.3	1872.4	1869.1	1871.3	1874.5	1876.7	1877.8	1877.8
7.5°	1849.5	1853.9	1851.7	1846.3	1846.3	1843.0	1844.1	1847.3	1850.6	1851.7	1851.7
10°	1844.1	1848.4	1841.9	1833.2	1829.9	1825.6	1826.7	1829.9	1836.5	1839.7	1839.7
12.5°	1846.3	1849.5	1843.0	1829.9	1826.7	1822.3	1822.3	1825.6	1834.3	1838.6	1839.7
15°	1852.8	1856.0	1846.3	1832.1	1828.9	1825.6	1824.5	1828.9	1838.6	1846.3	1847.3
17.5°	1864.7	1868.0	1852.8	1833.2	1828.9	1829.9	1828.9	1832.1	1847.3	1861.5	1861.5
20°	1875.6	1877.8	1857.1	1833.2	1828.9	1829.9	1828.9	1835.4	1855.0	1874.5	1875.6
22.5°	1878.9	1881.1	1861.5	1840.8	1837.6	1838.6	1837.6	1844.1	1862.6	1882.1	1882.1
25°	1880.0	1883.2	1868.0	1851.7	1857.1	1859.3	1857.1	1858.2	1872.4	1889.7	1888.7
27.5°	1896.3	1900.6	1886.5	1872.4	1875.6	1874.5	1877.8	1881.1	1891.9	1909.3	1905.0
30°	1930.0	1933.2	1921.3	1907.1	1905.0	1897.4	1907.1	1918.0	1930.0	1945.2	1941.9
32.5°	1985.4	1992.0	1976.7	1961.5	1951.7	1947.4	1955.0	1973.5	1989.8	2006.1	1999.6
35°	2077.9	2082.2	2068.1	2039.8	2022.4	2022.4	2028.9	2052.8	2078.9	2099.6	2092.0
37.5°	2208.3	2213.8	2188.8	2155.1	2129.0	2129.0	2137.7	2162.7	2201.8	2231.2	2220.3
40°	2367.1	2374.7	2343.2	2308.4	2283.4	2279.0	2289.9	2318.2	2355.1	2392.1	2380.1
42.5°	2558.4	2567.1	2525.8	2495.4	2475.8	2475.8	2481.2	2507.3	2541.1	2586.7	2583.5
45°	2803.1	2818.3	2761.8	2731.3	2712.8	2717.2	2720.5	2743.3	2773.7	2825.9	2823.8
47.5°	3094.5	3109.7	3049.9	3018.4	3015.1	3035.8	3022.7	3039.0	3055.3	3115.2	3097.8
50°	3425.0	3451.1	3409.8	3407.6	3414.2	3452.2	3421.8	3430.5	3412.0	3450.0	3427.2
52.5°	3829.5	3867.6	3860.0	3873.0	3945.9	4024.1	3954.6	3924.1	3854.5	3866.5	3826.3
55°	4319.9	4377.5	4388.4	4466.7	4632.0	4791.8	4643.9	4521.0	4373.2	4346.0	4303.6
57.5°	4877.7	4923.4	4975.5	5135.4	5444.2	5728.0	5444.2	5172.3	4939.7	4884.2	4845.1
60°	5477.9	5534.4	5584.4	5820.4	6279.2	6678.3	6270.5	5838.9	5531.2	5456.1	5390.9
62.5°	6122.7	6195.5	6230.3	6492.3	7027.3	7503.5	7034.9	6511.9	6170.5	6090.0	6024.8
65°	6741.3	6801.1	6840.3	7119.7	7630.8	8108.1	7665.6	7150.2	6799.0	6693.5	6641.3
67.5°	7029.5	7062.1	7157.8	7474.2	8013.5	8558.2	8104.8	7507.9	7115.4	6930.5	6932.7
70°	6607.6	6541.3	6771.8	7278.5	8059.2	8834.4	8163.5	7263.2	6782.7	6482.6	6554.3
72.5°	5106.0	4991.9	5392.0	6258.6	7537.3	8658.3	7589.4	6307.5	5641.0	5032.1	5183.2
75°	2778.1	2648.7	3201.0	4297.1	6010.7	7504.6	6148.8	4419.9	3564.2	2757.4	2936.8
77.5°	784.0	735.0	1180.8	2078.9	3615.3	5269.1	3754.5	2124.6	1400.5	830.7	923.1
80°	240.3	232.7	315.3	626.3	1535.3	2523.7	1475.5	633.9	401.2	253.3	267.5
82.5°	142.4	130.5	156.6	228.3	391.4	792.7	380.6	238.1	191.4	128.3	139.2
85°	81.5	76.1	92.4	110.9	131.6	168.5	109.8	113.1	102.2	68.5	71.8
87.5°	33.7	30.4	35.9	34.8	30.4	39.1	29.4	34.8	41.3	27.2	25.0
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)