

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: P883602

Luminaire Tested: **NAV-SB4A-740-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883602
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-SB4A-740-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 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: 19825 lumens
Efficiency: N/A
Efficacy: 173.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

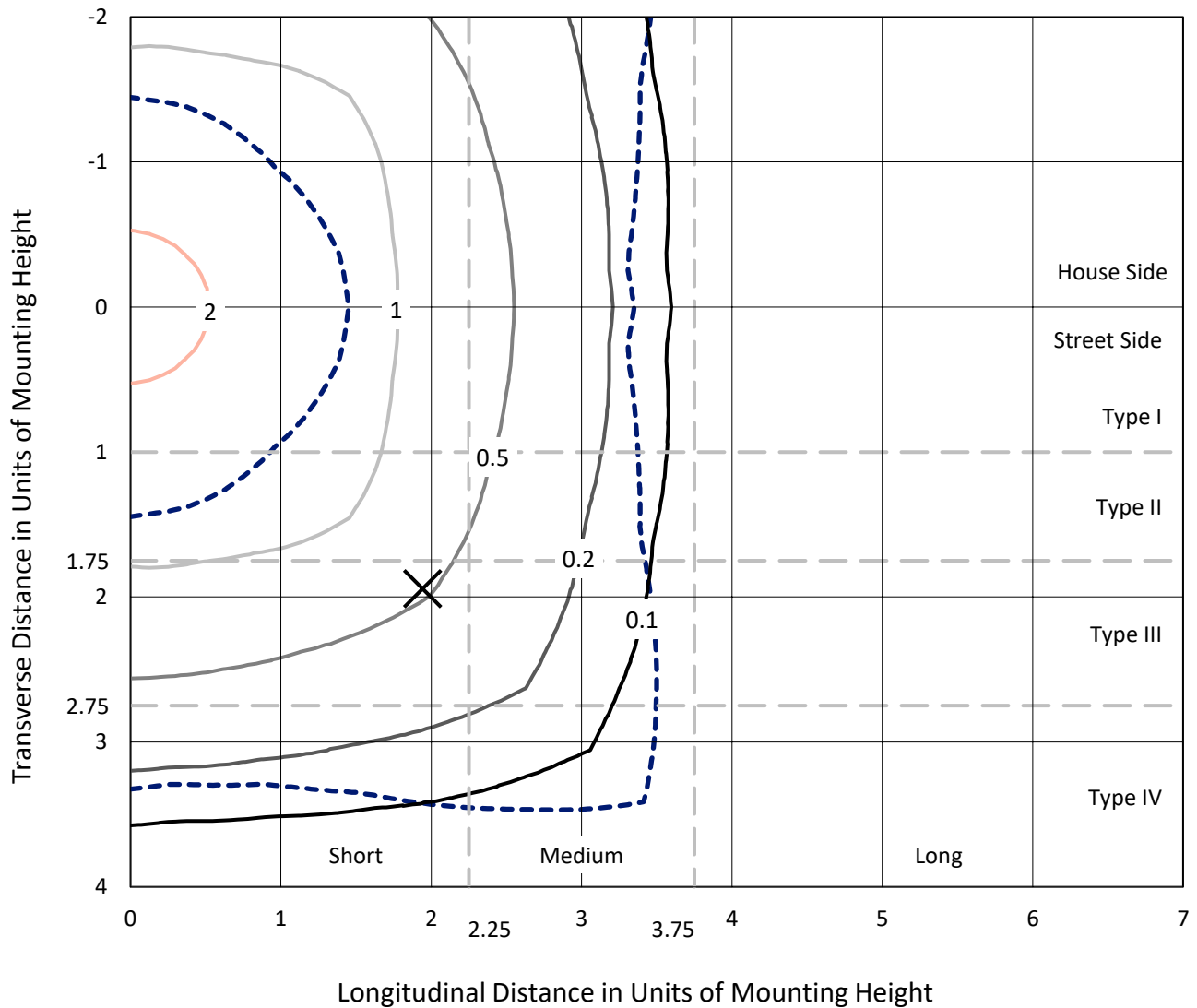
Input Watts (W): 114
Input Voltage (V): 120.0
Input Current (Ain): 0.952
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.206
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

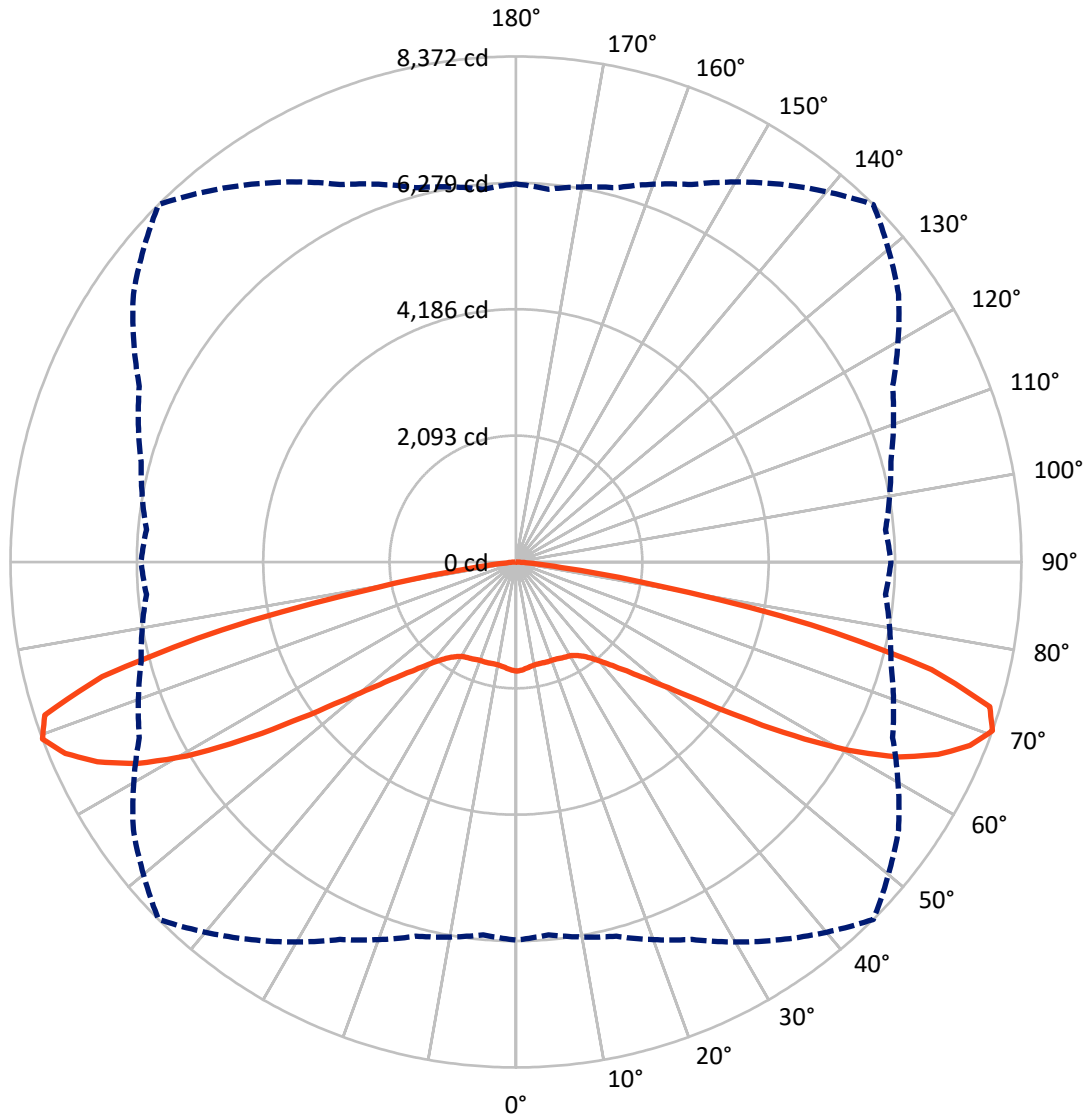
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 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	9912.5	0.0	9912.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9912.5	0.0	9912.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	19825.0	0.0	19825.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.2	0.8
10°-20°	494.0	2.5
20°-30°	822.0	4.1
30°-40°	1243.1	6.3
40°-50°	2065.8	10.4
50°-60°	3898.1	19.7
60°-70°	6582.1	33.2
70°-80°	4325.1	21.8
80°-90°	226.6	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°	19825.0	100.0
0°-180°	19825.0	100.0



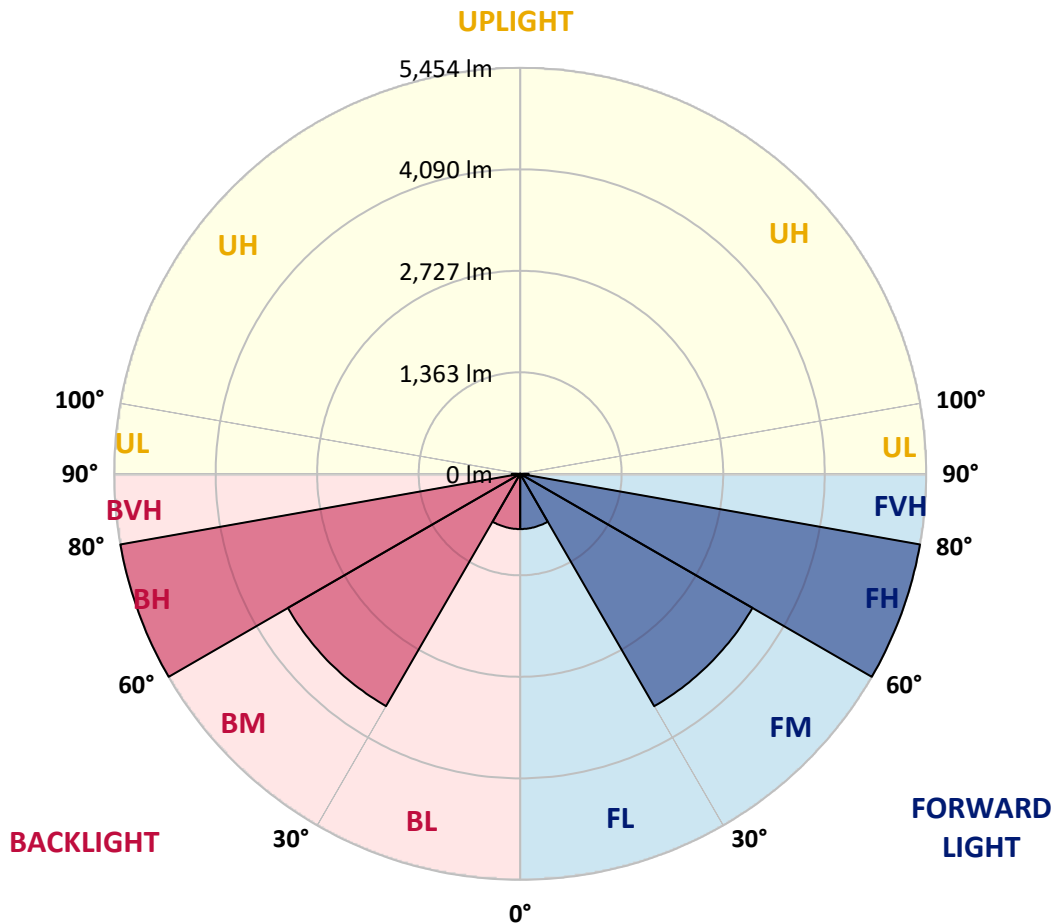
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	742.1	3.7			
FM (30°-60°)	3603.5	18.2			
FH (60°-80°)	5453.6	27.5			G3/7500
FVH (80°-90°)	113.3	0.6			G2/225
BL (0°-30°)	742.1	3.7	B2/1000		
BM (30°-60°)	3603.5	18.2	B3/5000		
BH (60°-80°)	5453.6	27.5	B5		G3/7500
BVH (80°-90°)	113.3	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°	1808.4	1808.4	1808.4	1808.4	1808.4	1808.4	1808.4	1808.4	1808.4	1808.4	1808.4
2.5°	1797.1	1802.3	1800.2	1796.1	1796.1	1793.0	1796.1	1798.1	1801.2	1803.3	1802.3
5°	1773.4	1777.5	1776.5	1773.4	1774.4	1771.3	1773.4	1776.5	1778.6	1779.6	1779.6
7.5°	1752.8	1756.9	1754.9	1749.7	1749.7	1746.6	1747.6	1750.7	1753.8	1754.9	1754.9
10°	1747.6	1751.8	1745.6	1737.3	1734.2	1730.1	1731.2	1734.2	1740.4	1743.5	1743.5
12.5°	1749.7	1752.8	1746.6	1734.2	1731.2	1727.0	1727.0	1730.1	1738.4	1742.5	1743.5
15°	1755.9	1759.0	1749.7	1736.3	1733.2	1730.1	1729.1	1733.2	1742.5	1749.7	1750.7
17.5°	1767.2	1770.3	1755.9	1737.3	1733.2	1734.2	1733.2	1736.3	1750.7	1764.1	1764.1
20°	1777.5	1779.6	1760.0	1737.3	1733.2	1734.2	1733.2	1739.4	1757.9	1776.5	1777.5
22.5°	1780.6	1782.7	1764.1	1744.6	1741.5	1742.5	1741.5	1747.6	1765.2	1783.7	1783.7
25°	1781.6	1784.7	1770.3	1754.9	1760.0	1762.1	1760.0	1761.0	1774.4	1790.9	1789.9
27.5°	1797.1	1801.2	1787.8	1774.4	1777.5	1776.5	1779.6	1782.7	1793.0	1809.5	1805.3
30°	1829.0	1832.1	1820.8	1807.4	1805.3	1798.1	1807.4	1817.7	1829.0	1843.5	1840.4
32.5°	1881.6	1887.8	1873.4	1858.9	1849.7	1845.5	1852.7	1870.3	1885.7	1901.2	1895.0
35°	1969.2	1973.3	1959.9	1933.1	1916.6	1916.6	1922.8	1945.5	1970.2	1989.8	1982.6
37.5°	2092.8	2098.0	2074.3	2042.4	2017.6	2017.6	2025.9	2049.6	2086.7	2114.5	2104.2
40°	2243.3	2250.5	2220.6	2187.6	2163.9	2159.8	2170.1	2196.9	2232.0	2267.0	2255.7
42.5°	2424.6	2432.9	2393.7	2364.9	2346.3	2346.3	2351.5	2376.2	2408.2	2451.4	2448.3
45°	2656.5	2670.9	2617.3	2588.5	2571.0	2575.1	2578.2	2599.8	2628.7	2678.1	2676.1
47.5°	2932.7	2947.1	2890.4	2860.5	2857.4	2877.0	2864.7	2880.1	2895.6	2952.2	2935.8
50°	3245.9	3270.6	3231.5	3229.4	3235.6	3271.7	3242.8	3251.1	3233.6	3269.6	3248.0
52.5°	3629.2	3665.3	3658.1	3670.5	3739.5	3813.7	3747.7	3718.9	3652.9	3664.3	3626.2
55°	4094.0	4148.6	4158.9	4233.1	4389.7	4541.2	4401.1	4284.6	4144.5	4118.7	4078.5
57.5°	4622.6	4665.9	4715.3	4866.8	5159.5	5428.4	5159.5	4901.8	4681.3	4628.8	4591.7
60°	5191.4	5245.0	5292.4	5516.0	5950.8	6329.0	5942.6	5533.5	5241.9	5170.8	5109.0
62.5°	5802.5	5871.5	5904.5	6152.8	6659.8	7111.1	6667.0	6171.4	5847.8	5771.5	5709.7
65°	6388.8	6445.5	6482.6	6747.4	7231.7	7684.1	7264.7	6776.2	6443.4	6343.4	6294.0
67.5°	6661.9	6692.8	6783.5	7083.3	7594.4	8110.7	7681.0	7115.3	6743.3	6568.1	6570.1
70°	6262.0	6199.2	6417.6	6897.8	7637.7	8372.4	7736.6	6883.4	6427.9	6143.5	6211.6
72.5°	4839.0	4730.8	5110.0	5931.3	7143.1	8205.5	7192.5	5977.6	5346.0	4768.9	4912.2
75°	2632.8	2510.2	3033.6	4072.3	5696.3	7112.2	5827.2	4188.8	3377.8	2613.2	2783.2
77.5°	743.0	696.6	1119.1	1970.2	3426.2	4993.6	3558.1	2013.5	1327.2	787.3	874.9
80°	227.7	220.5	298.8	593.5	1455.0	2391.7	1398.3	600.8	380.2	240.1	253.5
82.5°	135.0	123.7	148.4	216.4	371.0	751.2	360.7	225.7	181.4	121.6	131.9
85°	77.3	72.1	87.6	105.1	124.7	159.7	104.1	107.2	96.9	64.9	68.0
87.5°	31.9	28.9	34.0	33.0	28.9	37.1	27.8	33.0	39.2	25.8	23.7
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)