

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: P883802

Luminaire Tested: **NAV-SB4B-827-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883802
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-827-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 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: 18755 lumens
Efficiency: N/A
Efficacy: 127.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

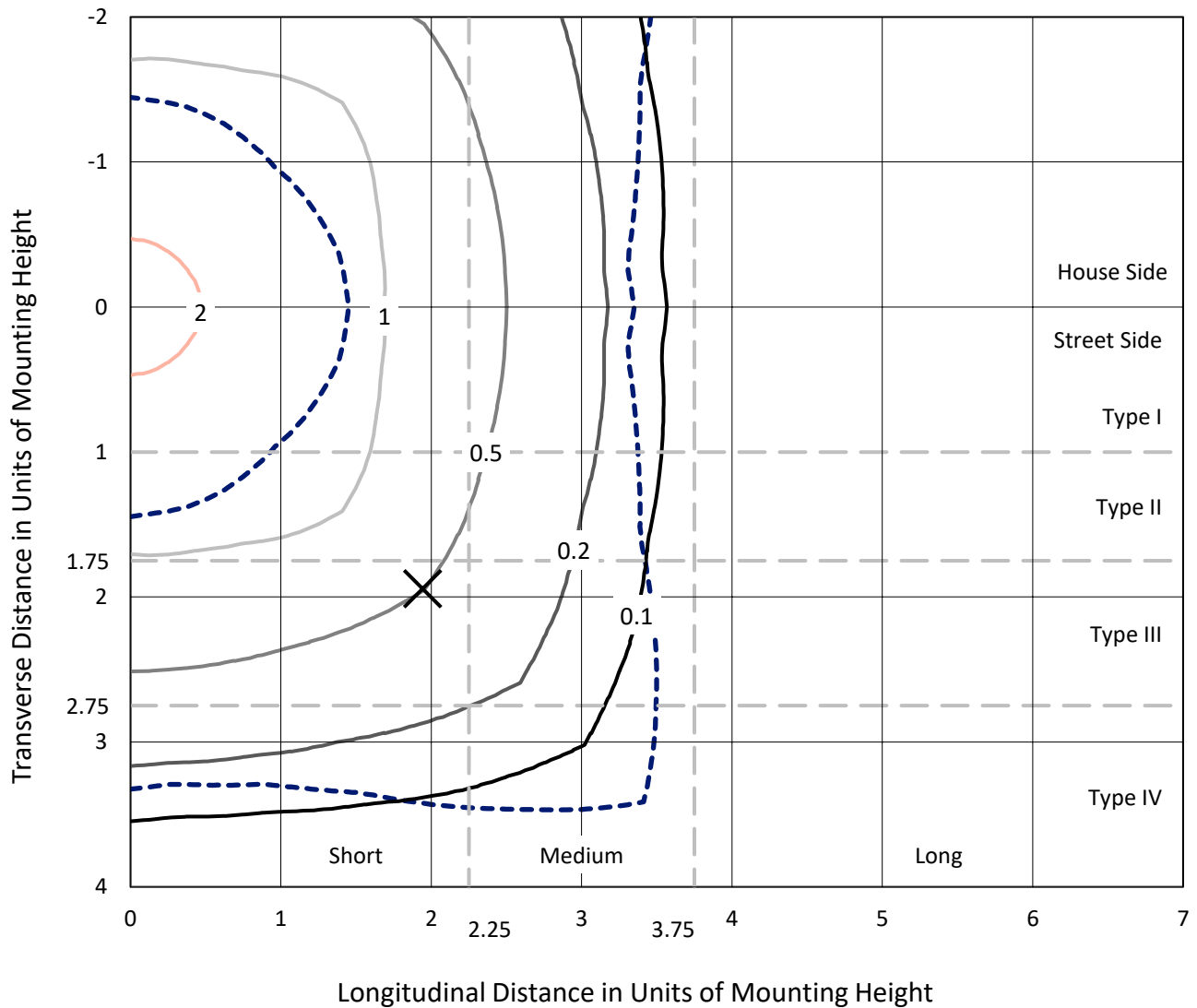
Input Watts (W): 147
Input Voltage (V): 120.0
Input Current (Ain): 1.255
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

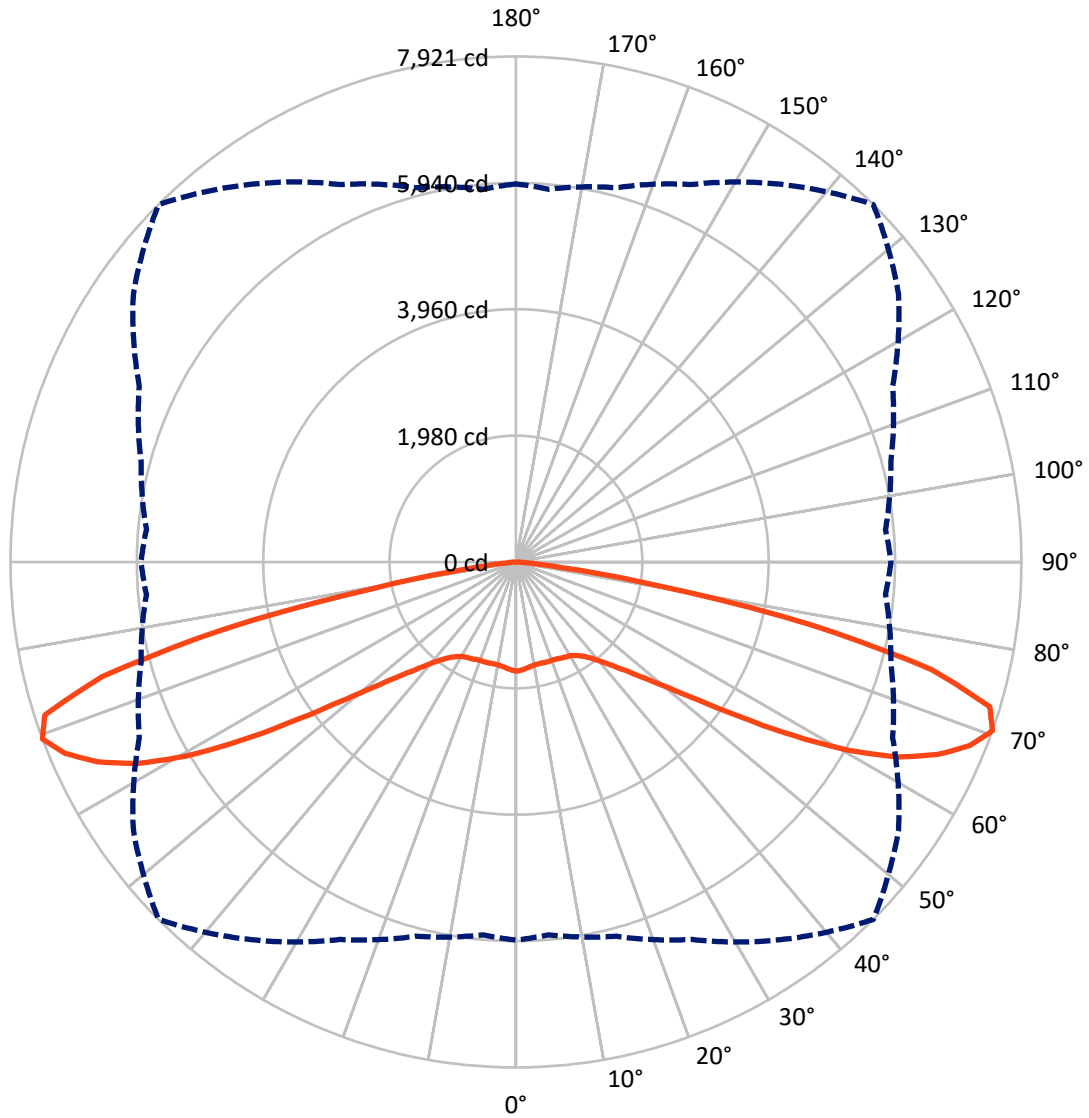
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 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	9377.5	0.0	9377.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9377.5	0.0	9377.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	18755.0	0.0	18755.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.1	0.8
10°-20°	467.3	2.5
20°-30°	777.7	4.1
30°-40°	1176.0	6.3
40°-50°	1954.3	10.4
50°-60°	3687.7	19.7
60°-70°	6226.8	33.2
70°-80°	4091.7	21.8
80°-90°	214.4	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°	18755.0	100.0
0°-180°	18755.0	100.0

Coefficient of Utilization



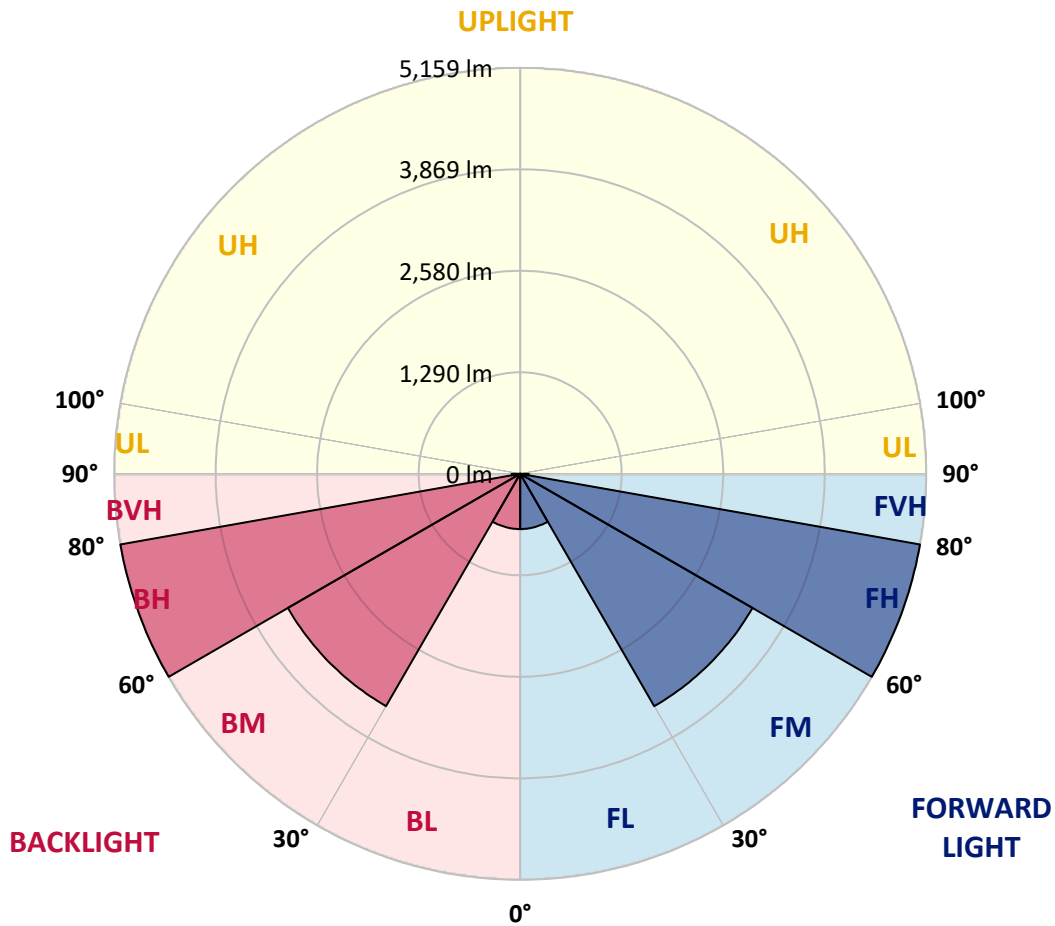
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	702.0	3.7			
FM (30°-60°)	3409.0	18.2			
FH (60°-80°)	5159.2	27.5			G3/7500
FVH (80°-90°)	107.2	0.6			G2/225
BL (0°-30°)	702.0	3.7	B2/1000		
BM (30°-60°)	3409.0	18.2	B3/5000		
BH (60°-80°)	5159.2	27.5	B5		G3/7500
BVH (80°-90°)	107.2	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°	1710.8	1710.8	1710.8	1710.8	1710.8	1710.8	1710.8	1710.8	1710.8	1710.8	1710.8
2.5°	1700.1	1705.0	1703.0	1699.1	1699.1	1696.2	1699.1	1701.1	1704.0	1706.0	1705.0
5°	1677.7	1681.6	1680.6	1677.7	1678.7	1675.7	1677.7	1680.6	1682.6	1683.5	1683.5
7.5°	1658.2	1662.1	1660.1	1655.3	1655.3	1652.3	1653.3	1656.2	1659.2	1660.1	1660.1
10°	1653.3	1657.2	1651.4	1643.6	1640.6	1636.7	1637.7	1640.6	1646.5	1649.4	1649.4
12.5°	1655.3	1658.2	1652.3	1640.6	1637.7	1633.8	1633.8	1636.7	1644.5	1648.4	1649.4
15°	1661.1	1664.0	1655.3	1642.6	1639.7	1636.7	1635.8	1639.7	1648.4	1655.3	1656.2
17.5°	1671.8	1674.8	1661.1	1643.6	1639.7	1640.6	1639.7	1642.6	1656.2	1668.9	1668.9
20°	1681.6	1683.5	1665.0	1643.6	1639.7	1640.6	1639.7	1645.5	1663.1	1680.6	1681.6
22.5°	1684.5	1686.5	1668.9	1650.4	1647.5	1648.4	1647.5	1653.3	1669.9	1687.4	1687.4
25°	1685.5	1688.4	1674.8	1660.1	1665.0	1667.0	1665.0	1666.0	1678.7	1694.3	1693.3
27.5°	1700.1	1704.0	1691.3	1678.7	1681.6	1680.6	1683.5	1686.5	1696.2	1711.8	1707.9
30°	1730.3	1733.3	1722.5	1709.9	1707.9	1701.1	1709.9	1719.6	1730.3	1744.0	1741.1
32.5°	1780.0	1785.9	1772.2	1758.6	1749.8	1745.9	1752.8	1769.3	1783.9	1798.6	1792.7
35°	1862.9	1866.8	1854.1	1828.8	1813.2	1813.2	1819.0	1840.5	1863.9	1882.4	1875.6
37.5°	1979.9	1984.8	1962.3	1932.1	1908.7	1908.7	1916.5	1938.9	1974.0	2000.4	1990.6
40°	2122.2	2129.0	2100.8	2069.6	2047.2	2043.3	2053.0	2078.3	2111.5	2144.6	2133.9
42.5°	2293.8	2301.6	2264.5	2237.2	2219.7	2219.7	2224.6	2248.0	2278.2	2319.1	2316.2
45°	2513.1	2526.8	2476.1	2448.8	2432.2	2436.1	2439.0	2459.5	2486.8	2533.6	2531.6
47.5°	2774.4	2788.0	2734.4	2706.1	2703.2	2721.7	2710.0	2724.7	2739.3	2792.9	2777.3
50°	3070.7	3094.1	3057.1	3055.1	3061.0	3095.1	3067.8	3075.6	3059.0	3093.1	3072.7
52.5°	3433.4	3467.5	3460.7	3472.4	3537.7	3607.9	3545.5	3518.2	3455.8	3466.5	3430.4
55°	3873.0	3924.7	3934.4	4004.6	4152.8	4296.1	4163.5	4053.4	3920.8	3896.4	3858.4
57.5°	4373.1	4414.0	4460.8	4604.1	4881.0	5135.4	4881.0	4637.3	4428.7	4379.0	4343.9
60°	4911.2	4961.9	5006.7	5218.3	5629.7	5987.4	5621.9	5234.9	4959.0	4891.7	4833.2
62.5°	5489.3	5554.6	5585.8	5820.7	6300.4	6727.3	6307.2	5838.3	5532.2	5460.0	5401.6
65°	6044.0	6097.6	6132.7	6383.2	6841.4	7269.3	6872.6	6410.5	6095.6	6001.1	5954.3
67.5°	6302.3	6331.5	6417.3	6701.0	7184.5	7672.9	7266.4	6731.2	6379.3	6213.6	6215.5
70°	5924.1	5864.6	6071.3	6525.5	7225.5	7920.5	7319.1	6511.9	6081.0	5812.0	5876.3
72.5°	4577.8	4475.5	4834.2	5611.1	6757.5	7762.6	6804.3	5655.0	5057.4	4511.5	4647.0
75°	2490.7	2374.7	2869.9	3852.5	5388.9	6728.3	5512.7	3962.7	3195.5	2472.2	2633.0
77.5°	702.9	659.0	1058.7	1863.9	3241.3	4724.0	3366.1	1904.8	1255.6	744.8	827.6
80°	215.4	208.6	282.7	561.5	1376.5	2262.6	1322.8	568.3	359.7	227.1	239.8
82.5°	127.7	117.0	140.4	204.7	350.9	710.7	341.2	213.5	171.6	115.0	124.8
85°	73.1	68.2	82.9	99.4	118.0	151.1	98.5	101.4	91.6	61.4	64.3
87.5°	30.2	27.3	32.2	31.2	27.3	35.1	26.3	31.2	37.0	24.4	22.4
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)