

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: P882792

Luminaire Tested: **NAV-SB2D-830-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882792
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-830-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 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: 18356 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

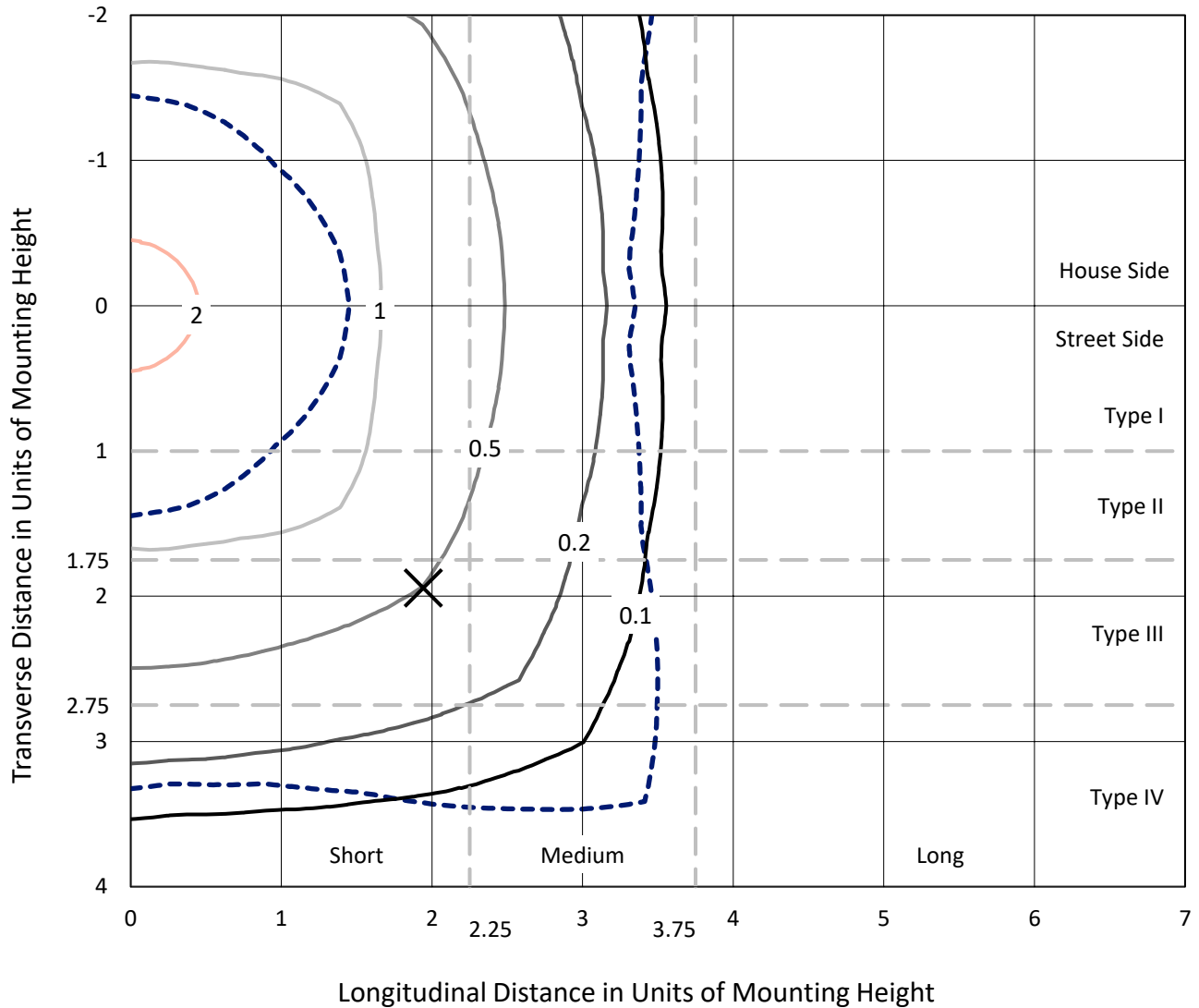
Input Watts (W): 147.6
Input Voltage (V): 120.0
Input Current (Ain): 1.234
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

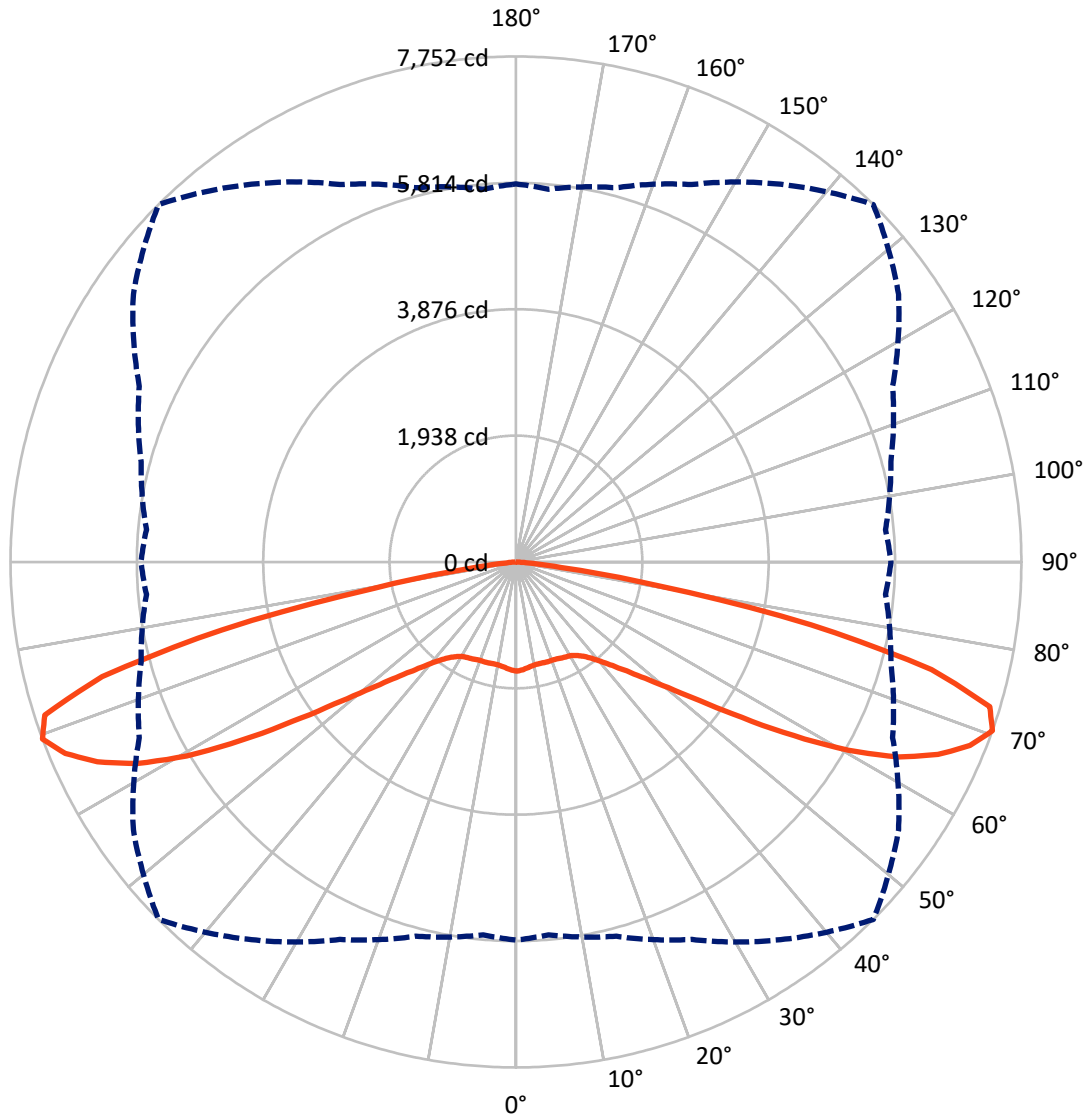
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 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	9178.0	0.0	9178.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9178.0	0.0	9178.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	18356.0	0.0	18356.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.8	0.8
10°-20°	457.4	2.5
20°-30°	761.1	4.1
30°-40°	1151.0	6.3
40°-50°	1912.7	10.4
50°-60°	3609.2	19.7
60°-70°	6094.4	33.2
70°-80°	4004.6	21.8
80°-90°	209.8	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°	18356.0	100.0
0°-180°	18356.0	100.0

Coefficient of Utilization



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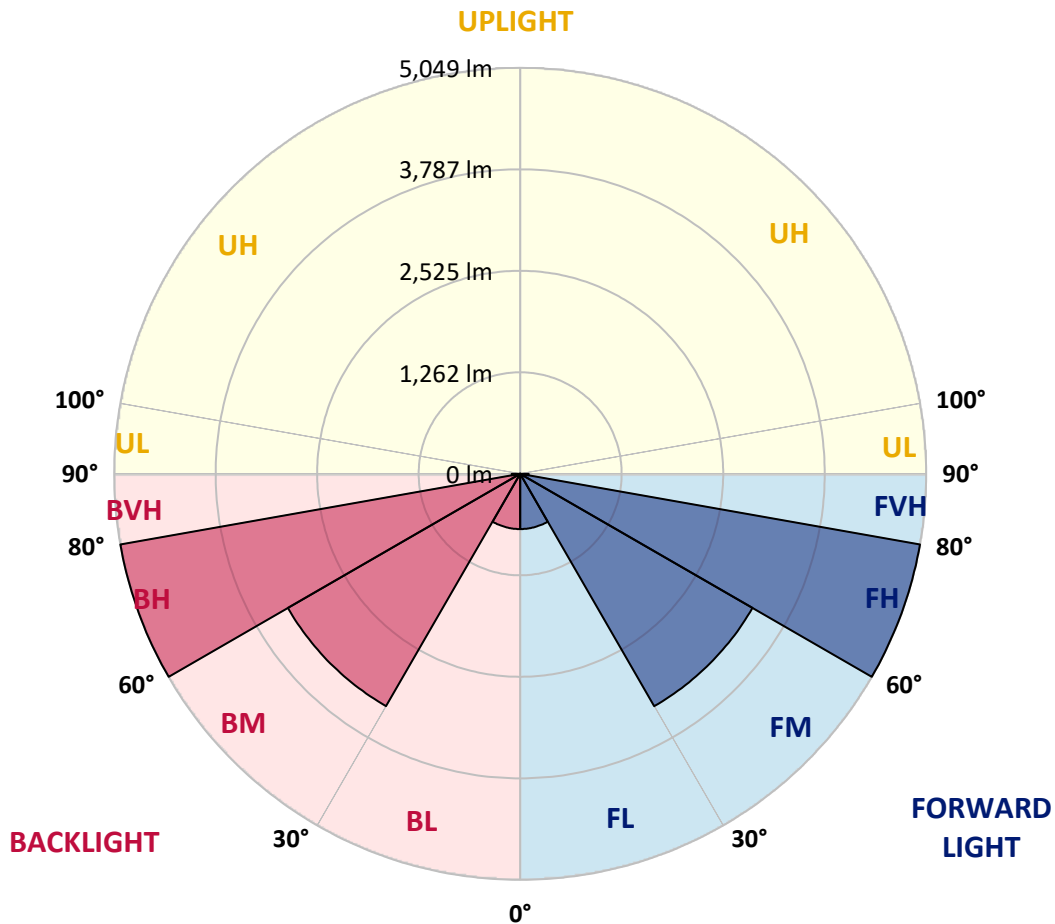
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	687.1	3.7			
FM (30°-60°)	3336.5	18.2			
FH (60°-80°)	5049.5	27.5			G3/7500
FVH (80°-90°)	104.9	0.6			G2/225
BL (0°-30°)	687.1	3.7	B2/1000		
BM (30°-60°)	3336.5	18.2	B3/5000		
BH (60°-80°)	5049.5	27.5	B5		G3/7500
BVH (80°-90°)	104.9	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°	1674.4	1674.4	1674.4	1674.4	1674.4	1674.4	1674.4	1674.4	1674.4	1674.4	1674.4
2.5°	1663.9	1668.7	1666.8	1663.0	1663.0	1660.1	1663.0	1664.9	1667.8	1669.7	1668.7
5°	1642.0	1645.8	1644.9	1642.0	1643.0	1640.1	1642.0	1644.9	1646.8	1647.7	1647.7
7.5°	1622.9	1626.7	1624.8	1620.1	1620.1	1617.2	1618.1	1621.0	1623.9	1624.8	1624.8
10°	1618.1	1622.0	1616.2	1608.6	1605.7	1601.9	1602.9	1605.7	1611.5	1614.3	1614.3
12.5°	1620.1	1622.9	1617.2	1605.7	1602.9	1599.1	1599.1	1601.9	1609.6	1613.4	1614.3
15°	1625.8	1628.6	1620.1	1607.7	1604.8	1601.9	1601.0	1604.8	1613.4	1620.1	1621.0
17.5°	1636.3	1639.1	1625.8	1608.6	1604.8	1605.7	1604.8	1607.7	1621.0	1633.4	1633.4
20°	1645.8	1647.7	1629.6	1608.6	1604.8	1605.7	1604.8	1610.5	1627.7	1644.9	1645.8
22.5°	1648.7	1650.6	1633.4	1615.3	1612.4	1613.4	1612.4	1618.1	1634.4	1651.5	1651.5
25°	1649.6	1652.5	1639.1	1624.8	1629.6	1631.5	1629.6	1630.5	1643.0	1658.2	1657.3
27.5°	1663.9	1667.8	1655.4	1643.0	1645.8	1644.9	1647.7	1650.6	1660.1	1675.4	1671.6
30°	1693.5	1696.4	1685.9	1673.5	1671.6	1664.9	1673.5	1683.0	1693.5	1706.9	1704.0
32.5°	1742.2	1747.9	1734.5	1721.2	1712.6	1708.8	1715.5	1731.7	1746.0	1760.3	1754.6
35°	1823.3	1827.1	1814.7	1789.9	1774.6	1774.6	1780.3	1801.3	1824.2	1842.4	1835.7
37.5°	1937.8	1942.5	1920.6	1891.0	1868.1	1868.1	1875.8	1897.7	1932.0	1957.8	1948.3
40°	2077.1	2083.7	2056.1	2025.5	2003.6	1999.8	2009.3	2034.1	2066.6	2099.0	2088.5
42.5°	2245.0	2252.6	2216.4	2189.6	2172.5	2172.5	2177.2	2200.1	2229.7	2269.8	2266.9
45°	2459.7	2473.0	2423.4	2396.7	2380.5	2384.3	2387.1	2407.2	2433.9	2479.7	2477.8
47.5°	2715.4	2728.7	2676.2	2648.6	2645.7	2663.8	2652.4	2666.7	2681.0	2733.5	2718.2
50°	3005.4	3028.3	2992.0	2990.1	2995.9	3029.3	3002.5	3010.2	2994.0	3027.3	3007.3
52.5°	3360.3	3393.7	3387.0	3398.5	3462.4	3531.1	3470.0	3443.3	3382.3	3392.8	3357.5
55°	3790.6	3841.2	3850.7	3919.4	4064.4	4204.7	4074.9	3967.1	3837.4	3813.5	3776.3
57.5°	4280.1	4320.1	4365.9	4506.2	4777.2	5026.2	4777.2	4538.6	4334.5	4285.8	4251.4
60°	4806.7	4856.3	4900.2	5107.3	5509.9	5860.1	5502.3	5123.5	4853.5	4787.6	4730.4
62.5°	5372.5	5436.4	5467.0	5696.9	6166.3	6584.2	6173.0	5714.1	5414.5	5343.9	5286.6
65°	5915.4	5967.9	6002.2	6247.4	6695.8	7114.7	6726.4	6274.1	5966.0	5873.4	5827.6
67.5°	6168.2	6196.8	6280.8	6558.4	7031.7	7509.7	7111.8	6588.0	6243.6	6081.4	6083.3
70°	5798.0	5739.8	5942.1	6386.7	7071.8	7752.0	7163.3	6373.4	5951.6	5688.3	5751.3
72.5°	4480.4	4380.3	4731.4	5491.8	6613.8	7597.5	6659.6	5534.7	4949.8	4415.6	4548.2
75°	2437.7	2324.2	2808.9	3770.6	5274.2	6585.2	5395.4	3878.4	3127.5	2419.6	2577.0
77.5°	687.9	645.0	1036.1	1824.2	3172.4	4623.5	3294.5	1864.3	1228.9	728.9	810.0
80°	210.9	204.2	276.7	549.6	1347.2	2214.5	1294.7	556.2	352.1	222.3	234.7
82.5°	125.0	114.5	137.4	200.4	343.5	695.5	333.9	208.9	167.9	112.6	122.1
85°	71.6	66.8	81.1	97.3	115.4	147.9	96.4	99.2	89.7	60.1	63.0
87.5°	29.6	26.7	31.5	30.5	26.7	34.3	25.8	30.5	36.3	23.9	21.9
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)