

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: P882782

Luminaire Tested: **NAV-SB2D-827-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882782
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-827-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 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: 17045 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

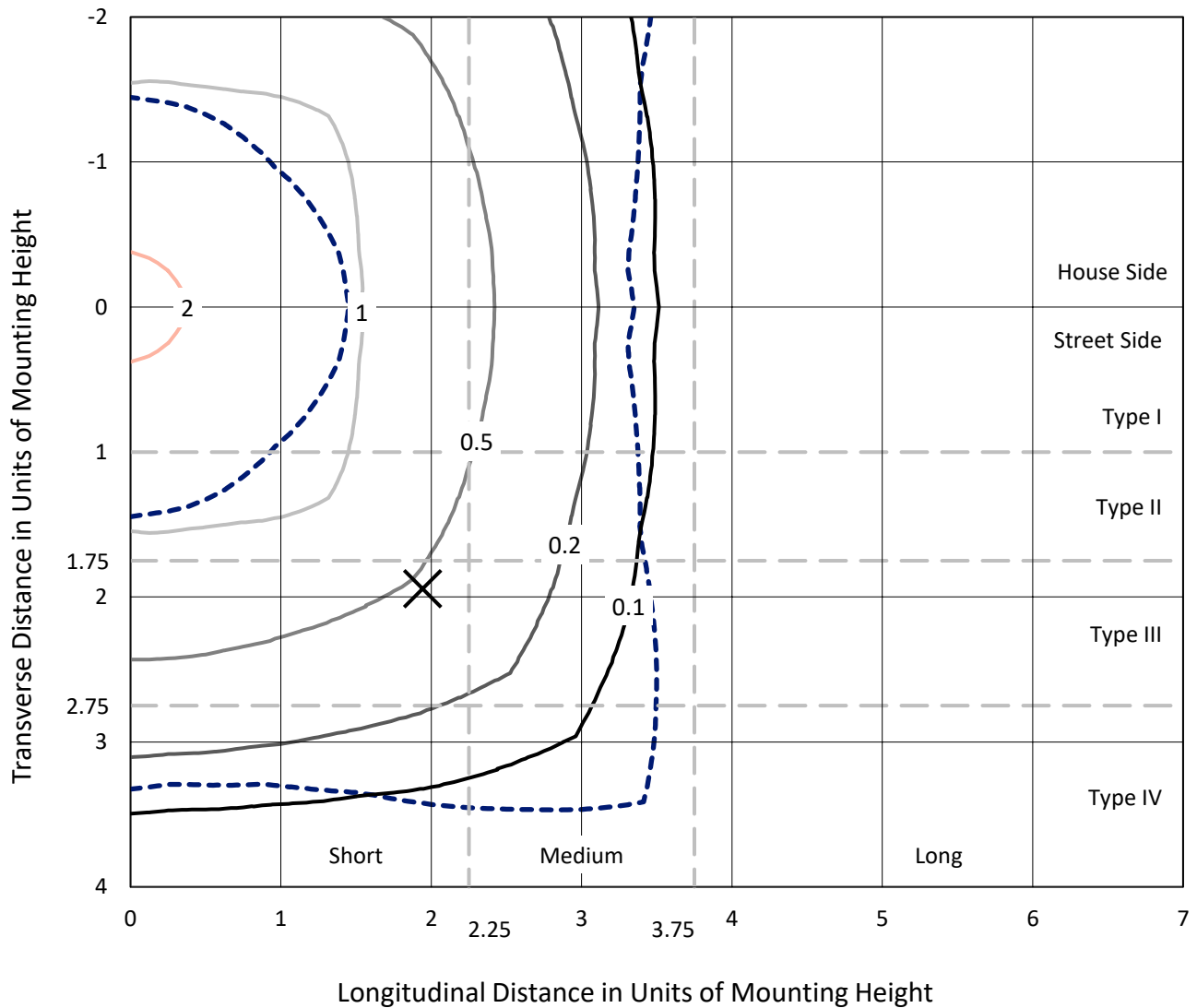
Input Watts (W): 147.6
Input Voltage (V): 120.0
Input Current (Ain): 1.234
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

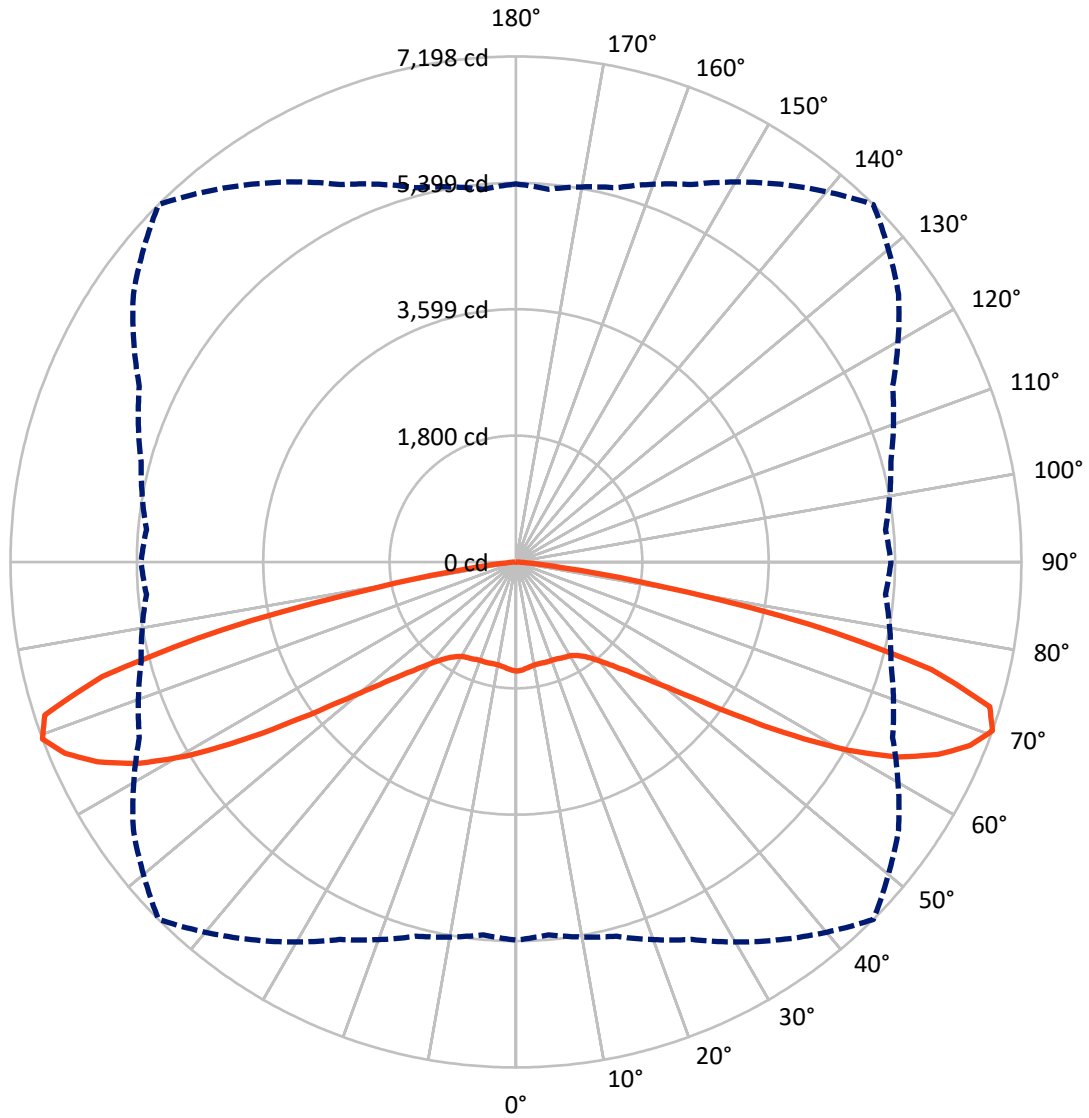
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 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	8522.5	0.0	8522.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	8522.5	0.0	8522.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	17045.0	0.0	17045.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.6	0.8
10°-20°	424.7	2.5
20°-30°	706.7	4.1
30°-40°	1068.8	6.3
40°-50°	1776.1	10.4
50°-60°	3351.5	19.7
60°-70°	5659.1	33.2
70°-80°	3718.6	21.8
80°-90°	194.8	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°	17045.0	100.0
0°-180°	17045.0	100.0



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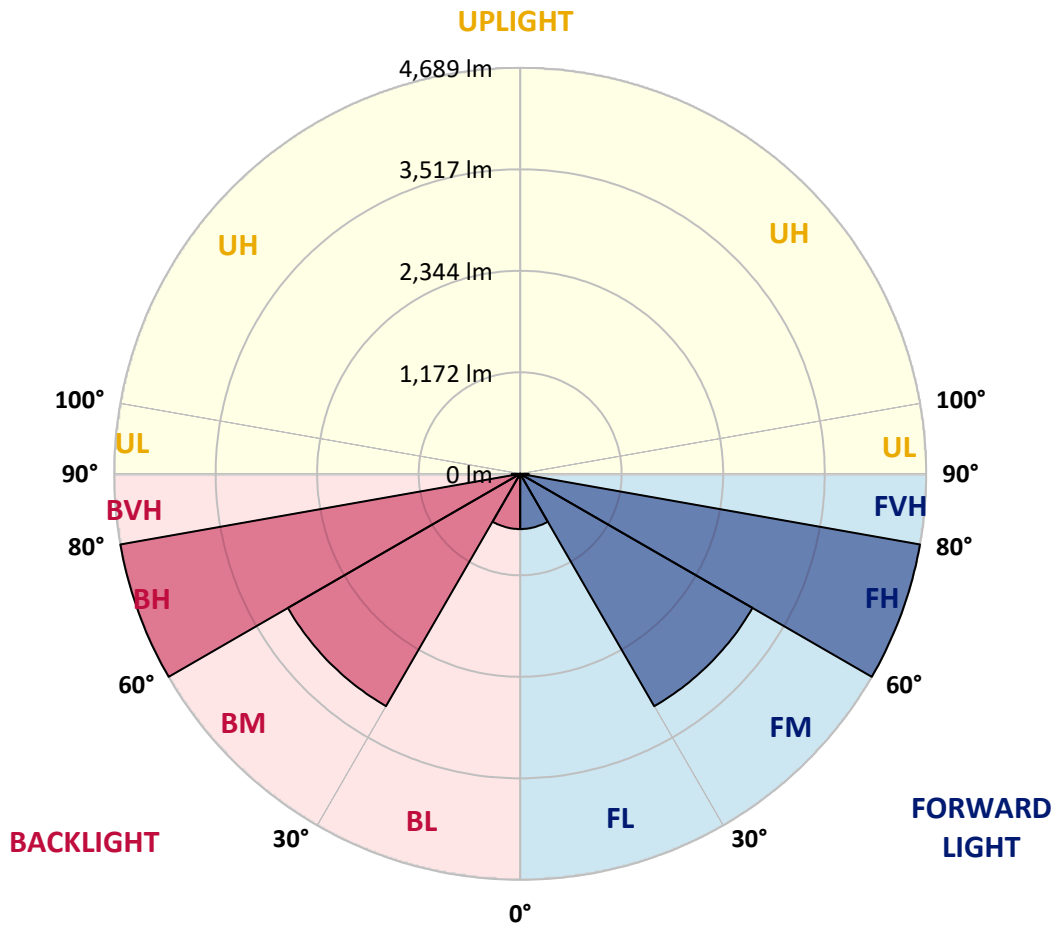
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	638.0	3.7			
FM (30°-60°)	3098.2	18.2			
FH (60°-80°)	4688.9	27.5			G2/5000
FVH (80°-90°)	97.4	0.6			G1/100
BL (0°-30°)	638.0	3.7	B2/1000		
BM (30°-60°)	3098.2	18.2	B3/5000		
BH (60°-80°)	4688.9	27.5	B4/5000		G2/5000
BVH (80°-90°)	97.4	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1554.8	1554.8	1554.8	1554.8	1554.8	1554.8	1554.8	1554.8	1554.8	1554.8	1554.8
2.5°	1545.1	1549.5	1547.8	1544.2	1544.2	1541.6	1544.2	1546.0	1548.6	1550.4	1549.5
5°	1524.7	1528.3	1527.4	1524.7	1525.6	1523.0	1524.7	1527.4	1529.2	1530.0	1530.0
7.5°	1507.0	1510.5	1508.8	1504.3	1504.3	1501.7	1502.6	1505.2	1507.9	1508.8	1508.8
10°	1502.6	1506.1	1500.8	1493.7	1491.1	1487.5	1488.4	1491.1	1496.4	1499.0	1499.0
12.5°	1504.3	1507.0	1501.7	1491.1	1488.4	1484.9	1484.9	1487.5	1494.6	1498.1	1499.0
15°	1509.7	1512.3	1504.3	1492.8	1490.2	1487.5	1486.6	1490.2	1498.1	1504.3	1505.2
17.5°	1519.4	1522.1	1509.7	1493.7	1490.2	1491.1	1490.2	1492.8	1505.2	1516.8	1516.8
20°	1528.3	1530.0	1513.2	1493.7	1490.2	1491.1	1490.2	1495.5	1511.4	1527.4	1528.3
22.5°	1530.9	1532.7	1516.8	1499.9	1497.3	1498.1	1497.3	1502.6	1517.6	1533.6	1533.6
25°	1531.8	1534.5	1522.1	1508.8	1513.2	1515.0	1513.2	1514.1	1525.6	1539.8	1538.9
27.5°	1545.1	1548.6	1537.1	1525.6	1528.3	1527.4	1530.0	1532.7	1541.6	1555.7	1552.2
30°	1572.6	1575.2	1565.5	1554.0	1552.2	1546.0	1554.0	1562.8	1572.6	1585.0	1582.3
32.5°	1617.7	1623.1	1610.7	1598.3	1590.3	1586.7	1592.9	1608.0	1621.3	1634.6	1629.3
35°	1693.1	1696.6	1685.1	1662.0	1647.9	1647.9	1653.2	1672.7	1693.9	1710.8	1704.6
37.5°	1799.4	1803.8	1783.4	1756.0	1734.7	1734.7	1741.8	1762.2	1794.1	1818.0	1809.1
40°	1928.7	1934.9	1909.2	1880.9	1860.5	1857.0	1865.8	1888.9	1919.0	1949.1	1939.4
42.5°	2084.6	2091.7	2058.1	2033.3	2017.3	2017.3	2021.7	2043.0	2070.5	2107.7	2105.0
45°	2284.0	2296.4	2250.3	2225.5	2210.5	2214.0	2216.7	2235.3	2260.1	2302.6	2300.8
47.5°	2521.4	2533.8	2485.1	2459.4	2456.7	2473.6	2462.9	2476.2	2489.5	2538.3	2524.1
50°	2790.8	2812.0	2778.3	2776.6	2781.9	2812.9	2788.1	2795.2	2780.1	2811.1	2792.5
52.5°	3120.3	3151.3	3145.1	3155.8	3215.1	3278.9	3222.2	3197.4	3140.7	3150.4	3117.7
55°	3519.9	3566.8	3575.7	3639.5	3774.2	3904.4	3783.9	3683.8	3563.3	3541.2	3506.6
57.5°	3974.4	4011.6	4054.1	4184.4	4436.0	4667.2	4436.0	4214.5	4024.9	3979.7	3947.8
60°	4463.4	4509.5	4550.3	4742.5	5116.4	5441.5	5109.3	4757.6	4506.8	4445.7	4392.6
62.5°	4988.8	5048.2	5076.5	5290.0	5725.9	6114.0	5732.1	5306.0	5027.8	4962.2	4909.1
65°	5492.9	5541.6	5573.5	5801.2	6217.6	6606.6	6246.0	5826.0	5539.9	5453.9	5411.4
67.5°	5727.7	5754.3	5832.2	6090.0	6529.5	6973.3	6603.9	6117.5	5797.7	5647.1	5648.8
70°	5383.9	5329.9	5517.7	5930.6	6566.7	7198.4	6651.7	5918.2	5526.6	5282.1	5340.5
72.5°	4160.4	4067.4	4393.4	5099.5	6141.4	7054.8	6184.0	5139.4	4596.3	4100.2	4223.3
75°	2263.6	2158.2	2608.2	3501.3	4897.5	6114.8	5010.1	3601.4	2904.2	2246.8	2393.0
77.5°	638.8	598.9	962.1	1693.9	2945.8	4293.3	3059.2	1731.2	1141.1	676.9	752.2
80°	195.8	189.6	256.9	510.3	1251.0	2056.3	1202.2	516.5	326.9	206.4	217.9
82.5°	116.1	106.3	127.6	186.1	318.9	645.9	310.1	194.0	155.9	104.5	113.4
85°	66.4	62.0	75.3	90.4	107.2	137.3	89.5	92.1	83.3	55.8	58.5
87.5°	27.5	24.8	29.2	28.4	24.8	31.9	23.9	28.4	33.7	22.1	20.4
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)