

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: P964147

Luminaire Tested: **NAV-SB3B-827-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964147
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-20)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-827-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15770.6 lumens
Efficiency: N/A
Efficacy: 144.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

Input Watts (W): 109.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



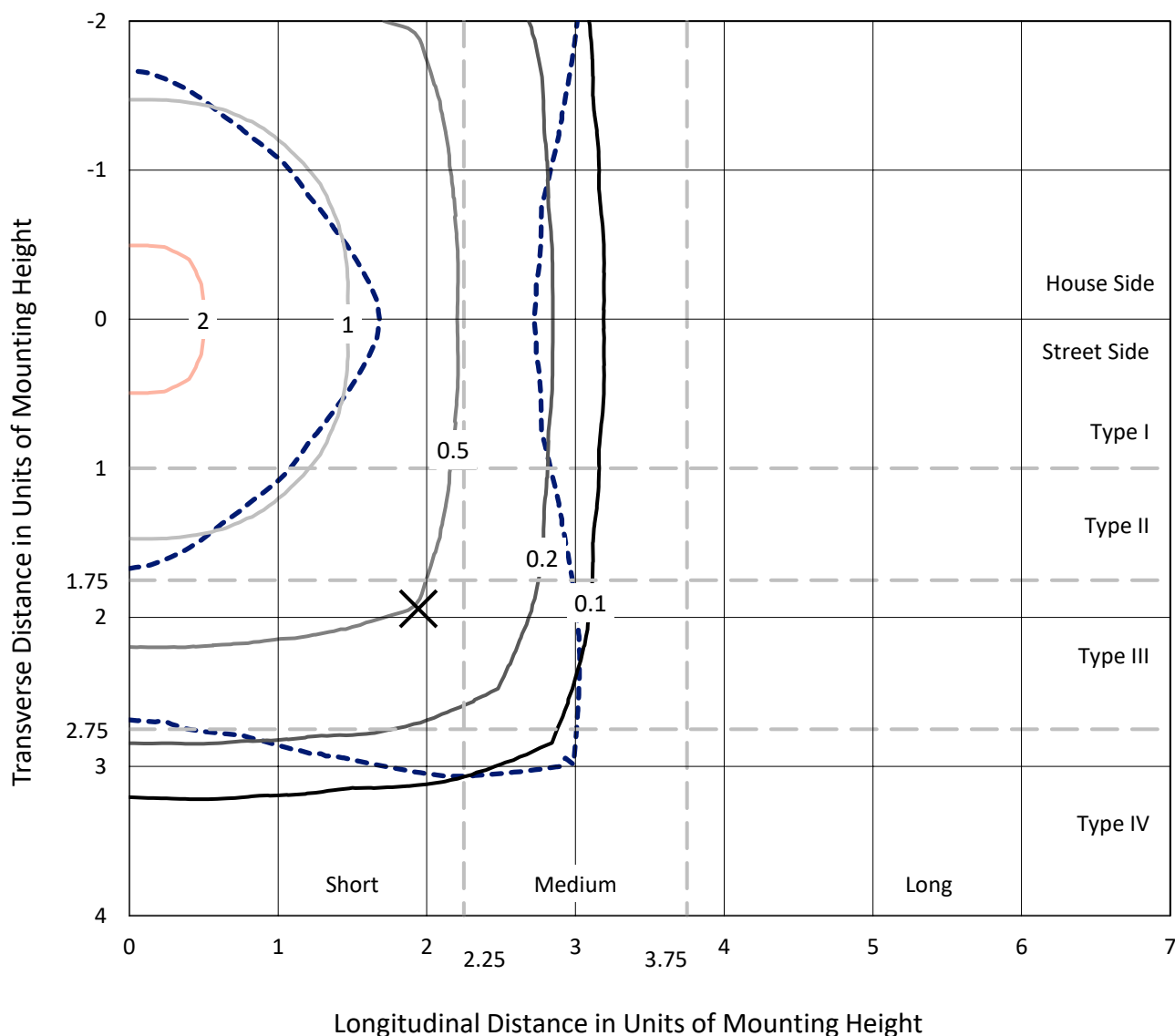
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



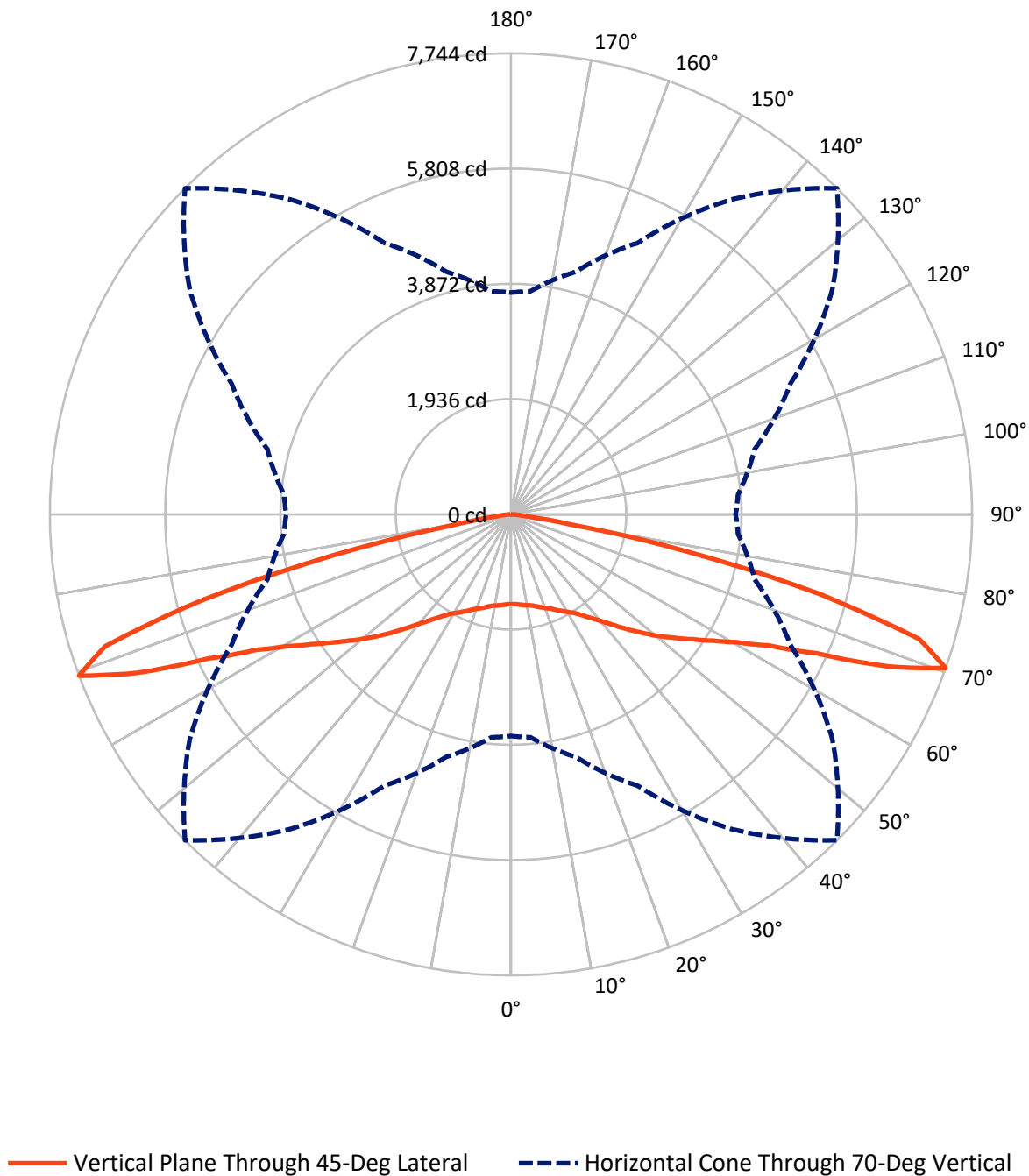
Based on 25 foot mounting height. Maximum calculated value = 2.4 fc

Type V - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7885.3	0.0	7885.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	7885.3	0.0	7885.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	15770.6	0.0	15770.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.8	0.9
10°-20°	455.1	2.9
20°-30°	813.3	5.2
30°-40°	1318.3	8.4
40°-50°	2147.4	13.6
50°-60°	3274.0	20.8
60°-70°	4870.7	30.9
70°-80°	2654.7	16.8
80°-90°	90.4	0.6
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°	15770.6	100.0
0°-180°	15770.6	100.0

Coefficient of Utilization



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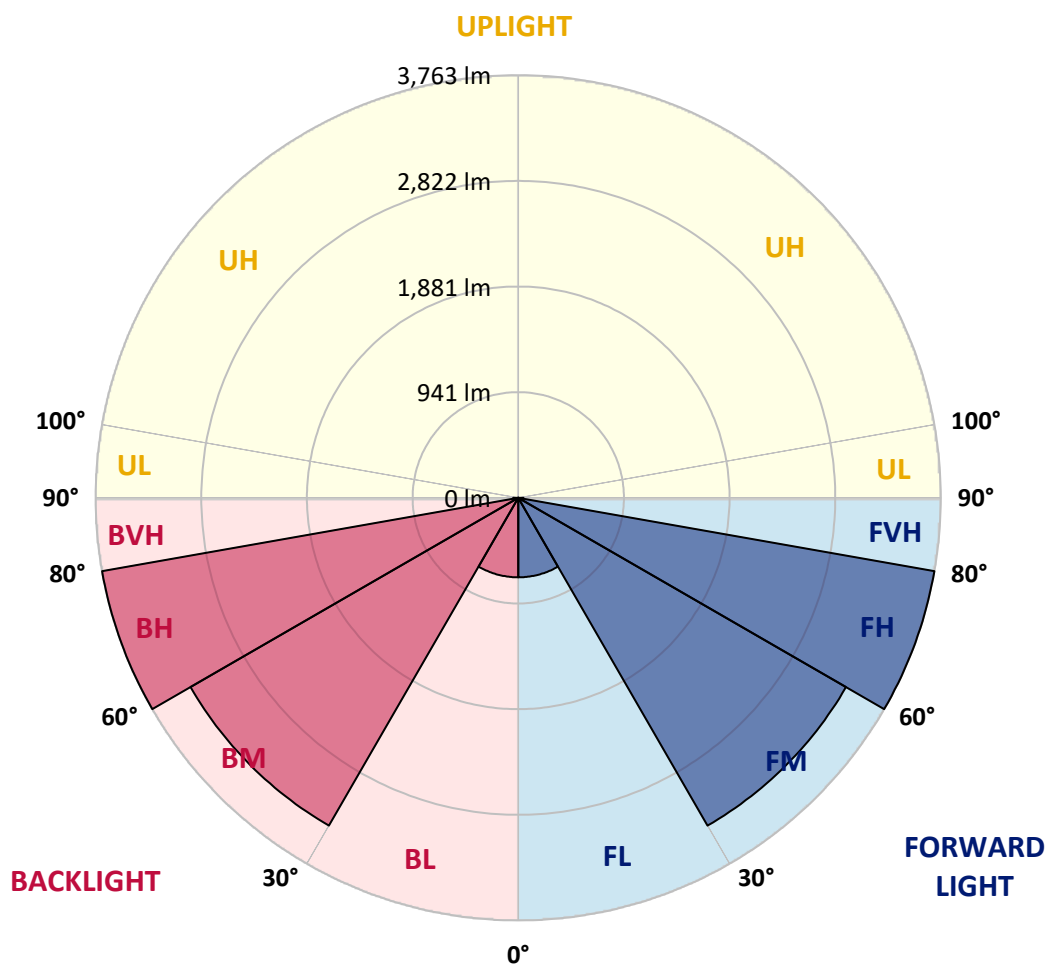
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	707.6	4.5			
FM	(30°-60°)	3369.9	21.4			
FH	(60°-80°)	3762.7	23.9			G2/5000
FVH	(80°-90°)	45.2	0.3			G1/100
BL	(0°-30°)	707.6	4.5	B2/1000		
BM	(30°-60°)	3369.9	21.4	B3/5000		
BH	(60°-80°)	3762.7	23.9	B4/5000		G2/5000
BVH	(80°-90°)	45.2	0.3			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°	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6
2.5°	1517.8	1519.4	1516.2	1514.6	1513.0	1510.6	1511.5	1515.5	1518.5	1517.8	1518.5
5°	1530.4	1532.1	1529.7	1528.9	1525.7	1524.9	1524.9	1528.9	1531.2	1529.7	1530.4
7.5°	1544.7	1547.1	1543.1	1542.3	1540.8	1539.1	1538.4	1542.3	1544.7	1544.7	1544.7
10°	1558.2	1560.6	1557.4	1555.0	1553.4	1553.4	1551.8	1555.0	1558.9	1558.2	1558.2
12.5°	1572.5	1574.0	1570.8	1569.3	1569.3	1571.6	1569.3	1570.8	1574.0	1572.5	1571.6
15°	1589.9	1590.6	1589.9	1592.2	1596.1	1604.1	1596.9	1595.4	1596.9	1593.1	1593.1
17.5°	1613.6	1615.2	1618.4	1623.9	1629.4	1643.7	1631.0	1627.1	1627.1	1619.1	1619.1
20°	1642.9	1645.2	1650.0	1659.5	1666.6	1680.1	1667.5	1661.9	1659.5	1649.2	1649.2
22.5°	1673.7	1677.7	1684.9	1697.5	1710.2	1722.8	1710.2	1700.7	1693.6	1680.1	1679.3
25°	1709.4	1714.1	1725.3	1745.8	1763.2	1781.4	1766.4	1747.4	1733.2	1714.1	1713.4
27.5°	1760.0	1765.6	1779.1	1804.4	1826.6	1842.4	1828.2	1803.6	1783.8	1760.8	1760.0
30°	1831.4	1836.9	1852.7	1879.6	1894.7	1905.0	1895.4	1876.5	1852.7	1826.6	1826.6
32.5°	1923.2	1930.3	1947.7	1973.0	1976.2	1977.8	1974.7	1965.1	1947.7	1916.0	1916.9
35°	2039.5	2047.4	2067.2	2087.8	2084.6	2087.8	2083.1	2079.9	2067.2	2030.8	2030.8
37.5°	2182.1	2191.6	2212.2	2228.0	2220.0	2216.2	2216.9	2217.7	2210.6	2170.2	2170.2
40°	2347.6	2360.2	2375.2	2391.8	2378.4	2366.5	2374.5	2380.8	2374.5	2333.3	2333.3
42.5°	2517.8	2536.0	2551.8	2575.6	2564.4	2549.5	2560.6	2567.6	2554.2	2509.8	2513.0
45°	2707.0	2724.4	2745.1	2780.6	2772.7	2756.8	2772.7	2774.3	2751.3	2699.1	2704.7
47.5°	2902.6	2920.7	2951.7	2999.1	2996.0	2978.5	2999.1	2988.1	2958.8	2896.2	2892.2
50°	3087.8	3113.1	3160.7	3227.2	3233.6	3212.1	3239.8	3218.5	3169.4	3091.0	3089.5
52.5°	3262.1	3288.9	3364.2	3454.5	3477.4	3449.6	3486.8	3449.6	3376.0	3275.5	3266.0
55°	3444.9	3475.0	3564.4	3682.4	3728.3	3707.7	3742.6	3686.4	3581.9	3460.0	3443.4
57.5°	3660.3	3678.5	3785.3	3925.5	4003.1	4007.9	4023.7	3928.7	3802.0	3663.5	3644.5
60°	3893.9	3919.2	4035.5	4203.4	4326.1	4365.7	4349.1	4208.1	4060.9	3901.8	3876.4
62.5°	4193.2	4220.8	4360.1	4561.2	4755.3	4853.5	4788.5	4584.2	4402.2	4211.3	4178.1
65°	4440.9	4471.9	4723.6	5082.3	5435.4	5632.6	5469.4	5093.3	4765.5	4496.4	4452.0
67.5°	4261.2	4299.3	4694.3	5353.1	6231.1	6819.3	6261.2	5433.8	4791.7	4426.7	4372.0
70°	3724.4	3760.0	4220.8	5026.1	6455.1	7744.2	6589.7	5174.1	4235.9	3827.3	3772.7
72.5°	2472.6	2587.4	3053.8	4019.7	5764.0	7166.2	5821.0	3938.2	2832.9	2467.1	2387.1
75°	820.3	912.1	1230.4	2083.9	3860.6	5359.4	3675.3	1844.0	974.7	701.5	663.5
77.5°	206.6	238.3	328.6	596.1	1540.0	3051.4	1386.3	487.0	265.3	185.3	165.4
80°	100.6	110.8	158.4	198.7	385.6	969.9	361.8	186.9	125.0	96.6	88.7
82.5°	55.5	56.2	89.5	112.4	143.3	251.0	148.8	109.3	72.1	58.6	58.6
85°	34.0	33.2	47.5	60.2	60.2	89.5	71.2	60.2	41.2	36.4	38.0
87.5°	13.4	13.4	17.4	19.0	16.6	23.0	18.2	19.8	15.8	15.1	15.8
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)