

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: P963620

Luminaire Tested: **NAV-SB3A-827-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963620
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-SB3A-827-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12562.4 lumens
Efficiency: N/A
Efficacy: 148.3 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): 84.7
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

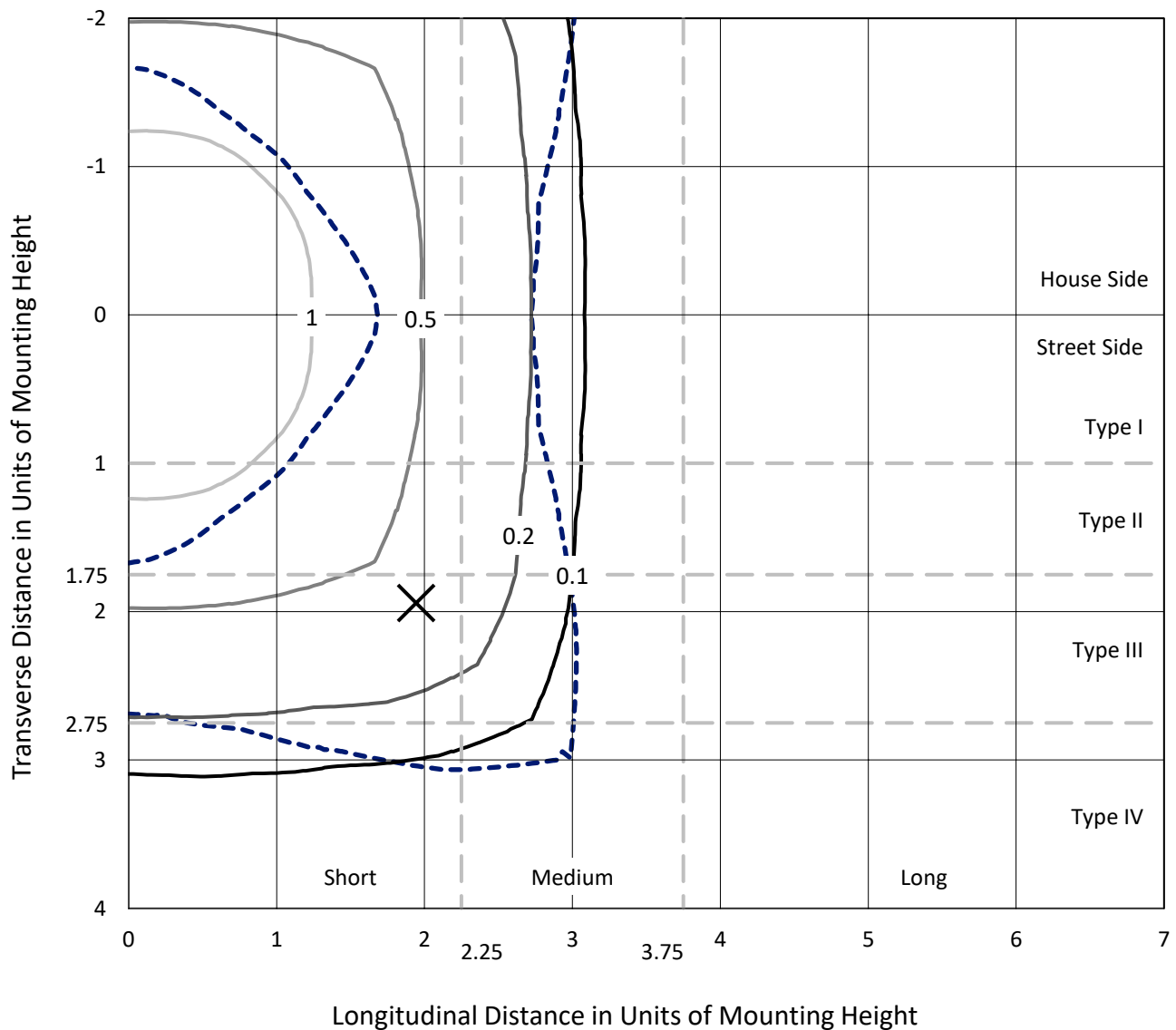


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Iso-Footcandle Lines of Horizontal Illumination

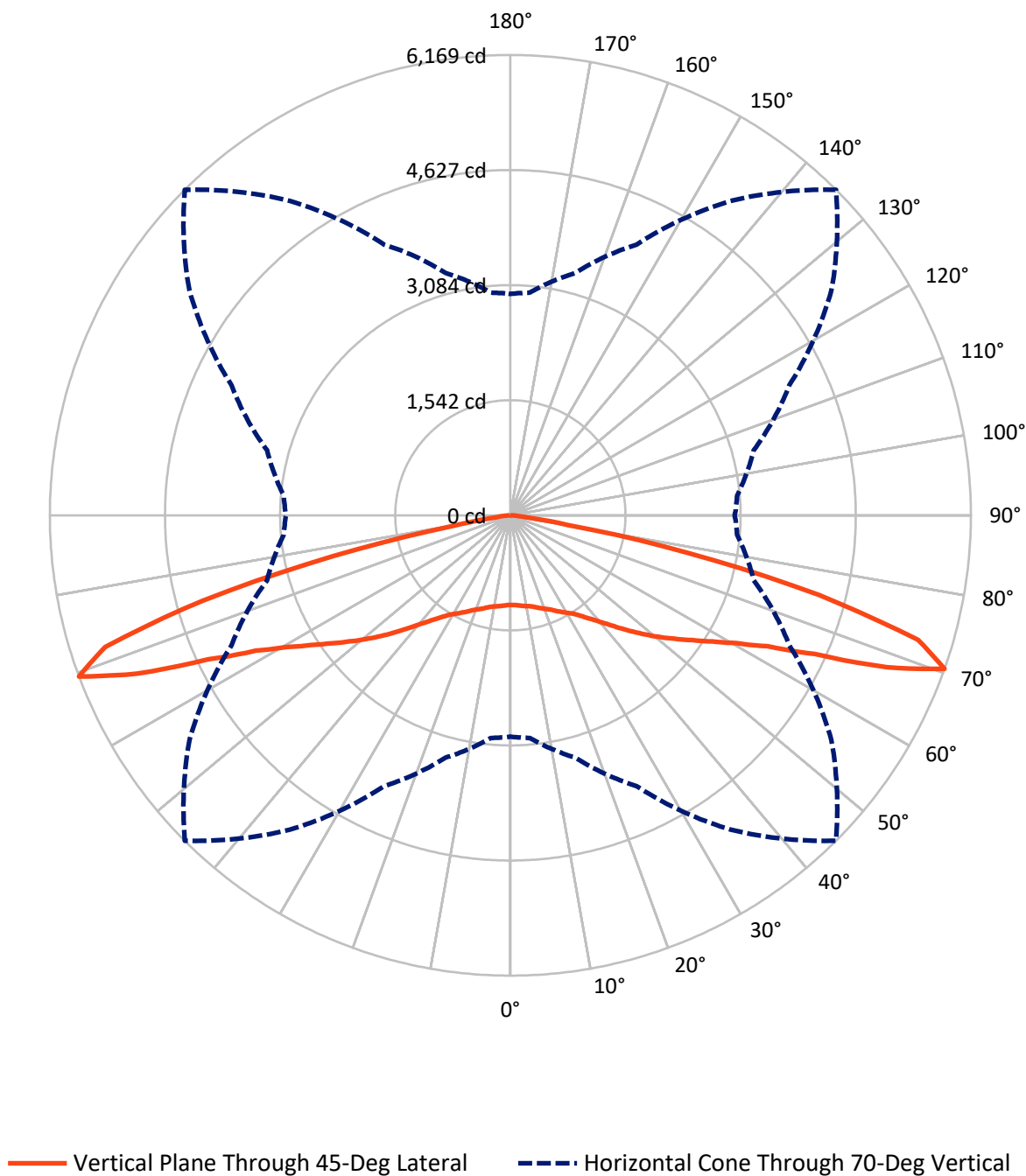
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 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	6281.2	0.0	6281.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6281.2	0.0	6281.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	12562.4	0.0	12562.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.9	0.9
10°-20°	362.5	2.9
20°-30°	647.8	5.2
30°-40°	1050.2	8.4
40°-50°	1710.5	13.6
50°-60°	2608.0	20.8
60°-70°	3879.8	30.9
70°-80°	2114.6	16.8
80°-90°	72.0	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°	12562.4	100.0
0°-180°	12562.4	100.0

Coefficient of Utilization



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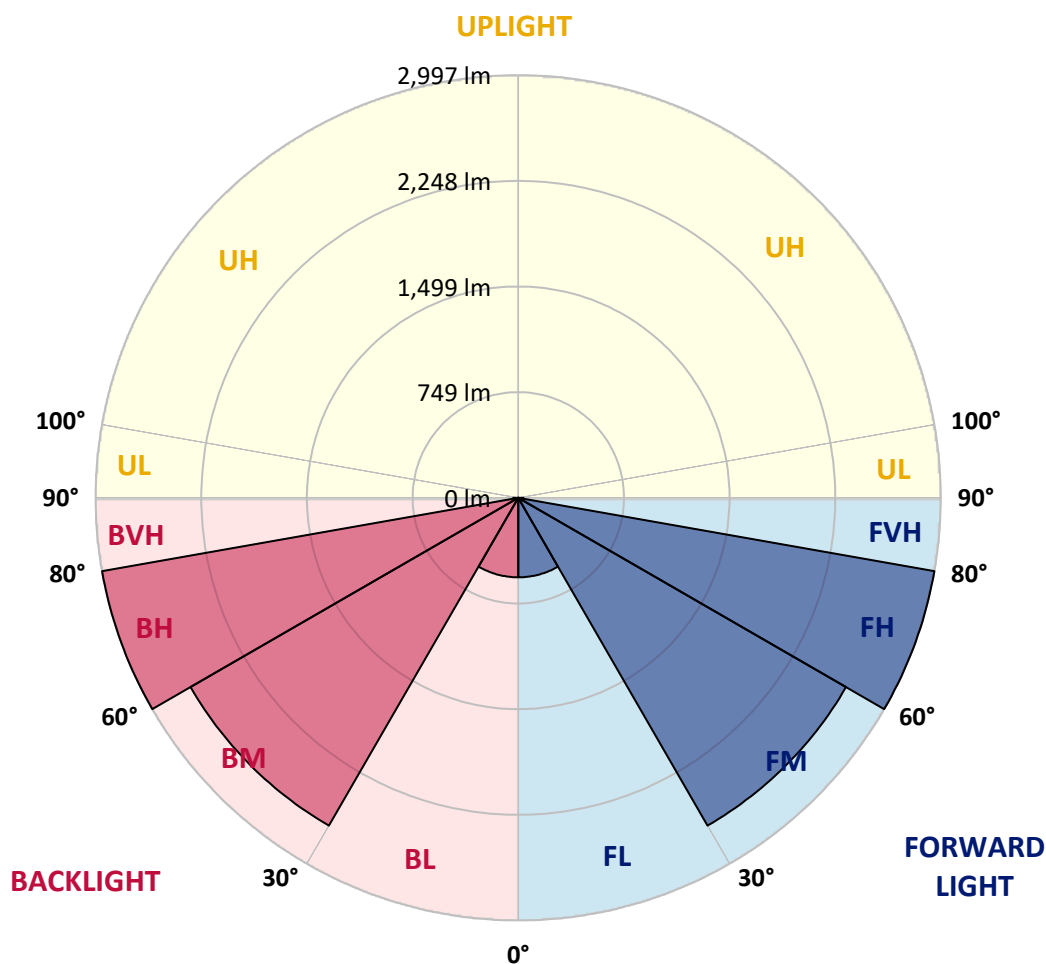
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	563.6	4.5			
FM	(30°-60°)	2684.3	21.4			
FH	(60°-80°)	2997.2	23.9			G2/5000
FVH	(80°-90°)	36.0	0.3			G1/100
BL	(0°-30°)	563.6	4.5	B2/1000		
BM	(30°-60°)	2684.3	21.4	B3/5000		
BH	(60°-80°)	2997.2	23.9	B4/5000		G2/5000
BVH	(80°-90°)	36.0	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°	1203.4	1203.4	1203.4	1203.4	1203.4	1203.4	1203.4	1203.4	1203.4	1203.4	1203.4
2.5°	1209.0	1210.3	1207.8	1206.5	1205.2	1203.4	1204.0	1207.1	1209.7	1209.0	1209.7
5°	1219.1	1220.4	1218.5	1217.8	1215.3	1214.7	1214.7	1217.8	1219.8	1218.5	1219.1
7.5°	1230.5	1232.4	1229.2	1228.6	1227.3	1226.0	1225.4	1228.6	1230.5	1230.5	1230.5
10°	1241.2	1243.1	1240.6	1238.7	1237.4	1237.4	1236.1	1238.7	1241.8	1241.2	1241.2
12.5°	1252.6	1253.8	1251.3	1250.0	1250.0	1251.9	1250.0	1251.3	1253.8	1252.6	1251.9
15°	1266.4	1267.0	1266.4	1268.3	1271.5	1277.8	1272.1	1270.8	1272.1	1268.9	1268.9
17.5°	1285.4	1286.6	1289.1	1293.6	1298.0	1309.3	1299.2	1296.0	1296.0	1289.8	1289.8
20°	1308.7	1310.6	1314.4	1321.9	1327.6	1338.3	1328.2	1323.8	1321.9	1313.7	1313.7
22.5°	1333.3	1336.4	1342.1	1352.2	1362.3	1372.4	1362.3	1354.7	1349.0	1338.3	1337.7
25°	1361.6	1365.4	1374.2	1390.6	1404.6	1419.0	1407.0	1391.9	1380.6	1365.4	1364.8
27.5°	1402.0	1406.4	1417.2	1437.4	1455.0	1467.6	1456.2	1436.7	1421.0	1402.6	1402.0
30°	1458.8	1463.2	1475.8	1497.2	1509.2	1517.4	1509.8	1494.8	1475.8	1455.0	1455.0
32.5°	1532.0	1537.6	1551.4	1571.6	1574.2	1575.4	1573.0	1565.4	1551.4	1526.2	1526.8
35°	1624.6	1631.0	1646.8	1663.2	1660.6	1663.2	1659.4	1656.8	1646.8	1617.8	1617.8
37.5°	1738.2	1745.8	1762.2	1774.8	1768.4	1765.3	1765.9	1766.6	1760.8	1728.7	1728.7
40°	1870.0	1880.1	1892.0	1905.3	1894.6	1885.1	1891.4	1896.5	1891.4	1858.6	1858.6
42.5°	2005.6	2020.1	2032.7	2051.6	2042.8	2030.8	2039.6	2045.3	2034.6	1999.3	2001.8
45°	2156.3	2170.2	2186.6	2214.9	2208.7	2196.1	2208.7	2209.9	2191.7	2150.0	2154.4
47.5°	2312.1	2326.6	2351.1	2389.1	2386.5	2372.7	2389.1	2380.3	2356.9	2307.1	2303.9
50°	2459.7	2479.9	2517.7	2570.7	2575.7	2558.7	2580.7	2563.7	2524.7	2462.2	2460.9
52.5°	2598.4	2619.9	2679.8	2751.7	2770.0	2747.9	2777.5	2747.9	2689.3	2609.1	2601.6
55°	2744.1	2768.1	2839.4	2933.3	2969.9	2953.5	2981.2	2936.5	2853.2	2756.1	2742.9
57.5°	2915.6	2930.2	3015.3	3127.0	3188.8	3192.6	3205.2	3129.4	3028.6	2918.2	2903.0
60°	3101.8	3121.8	3214.6	3348.3	3446.0	3477.6	3464.4	3352.1	3234.8	3108.0	3087.8
62.5°	3340.1	3362.2	3473.2	3633.4	3787.9	3866.1	3814.4	3651.7	3506.6	3354.6	3328.2
65°	3537.5	3562.1	3762.7	4048.3	4329.7	4486.7	4356.8	4057.2	3796.1	3581.7	3546.3
67.5°	3394.4	3424.6	3739.3	4264.1	4963.5	5432.1	4987.4	4328.4	3816.9	3526.2	3482.6
70°	2966.8	2995.2	3362.2	4003.5	5142.0	6168.8	5249.2	4121.5	3374.2	3048.8	3005.2
72.5°	1969.6	2061.1	2432.5	3202.0	4591.4	5708.3	4636.8	3137.0	2256.6	1965.2	1901.5
75°	653.4	726.5	980.1	1660.0	3075.2	4269.1	2927.6	1468.8	776.3	558.8	528.5
77.5°	164.6	189.8	261.8	474.9	1226.7	2430.7	1104.3	387.9	211.3	147.6	131.8
80°	80.1	88.3	126.2	158.3	307.2	772.5	288.2	148.8	99.6	77.0	70.6
82.5°	44.2	44.8	71.2	89.6	114.2	200.0	118.6	87.0	57.4	46.6	46.6
85°	27.2	26.4	37.8	48.0	48.0	71.2	56.8	48.0	32.8	29.0	30.2
87.5°	10.8	10.8	13.8	15.2	13.2	18.2	14.6	15.8	12.6	12.0	12.6
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)