

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: P883122

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

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883122
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-SB3B-827-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 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: 13881 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

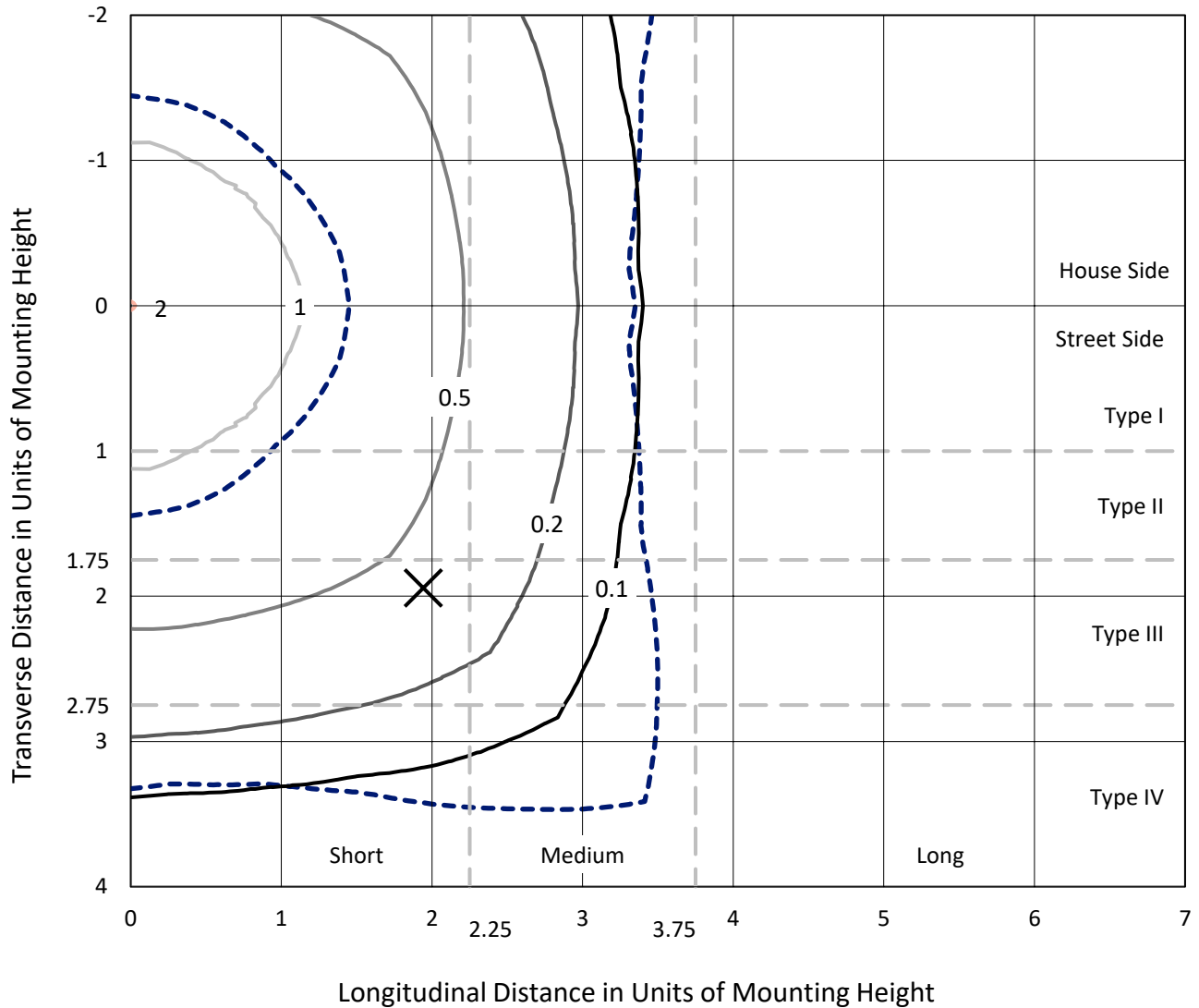
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

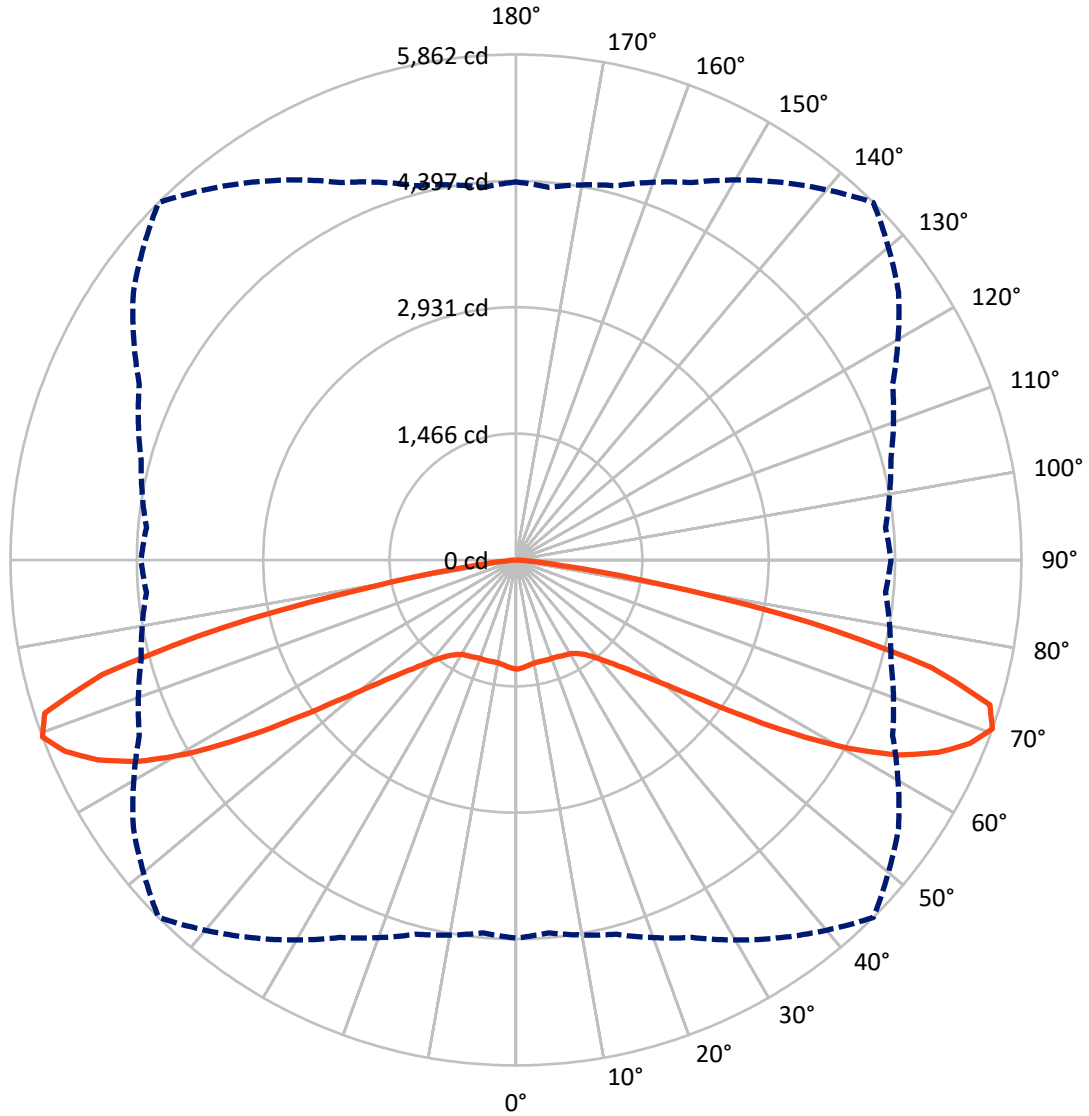
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 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	6940.5	0.0	6940.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6940.5	0.0	6940.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	13881.0	0.0	13881.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.8	0.8
10°-20°	345.9	2.5
20°-30°	575.6	4.1
30°-40°	870.4	6.3
40°-50°	1446.4	10.4
50°-60°	2729.4	19.7
60°-70°	4608.6	33.2
70°-80°	3028.3	21.8
80°-90°	158.7	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°	13881.0	100.0
0°-180°	13881.0	100.0



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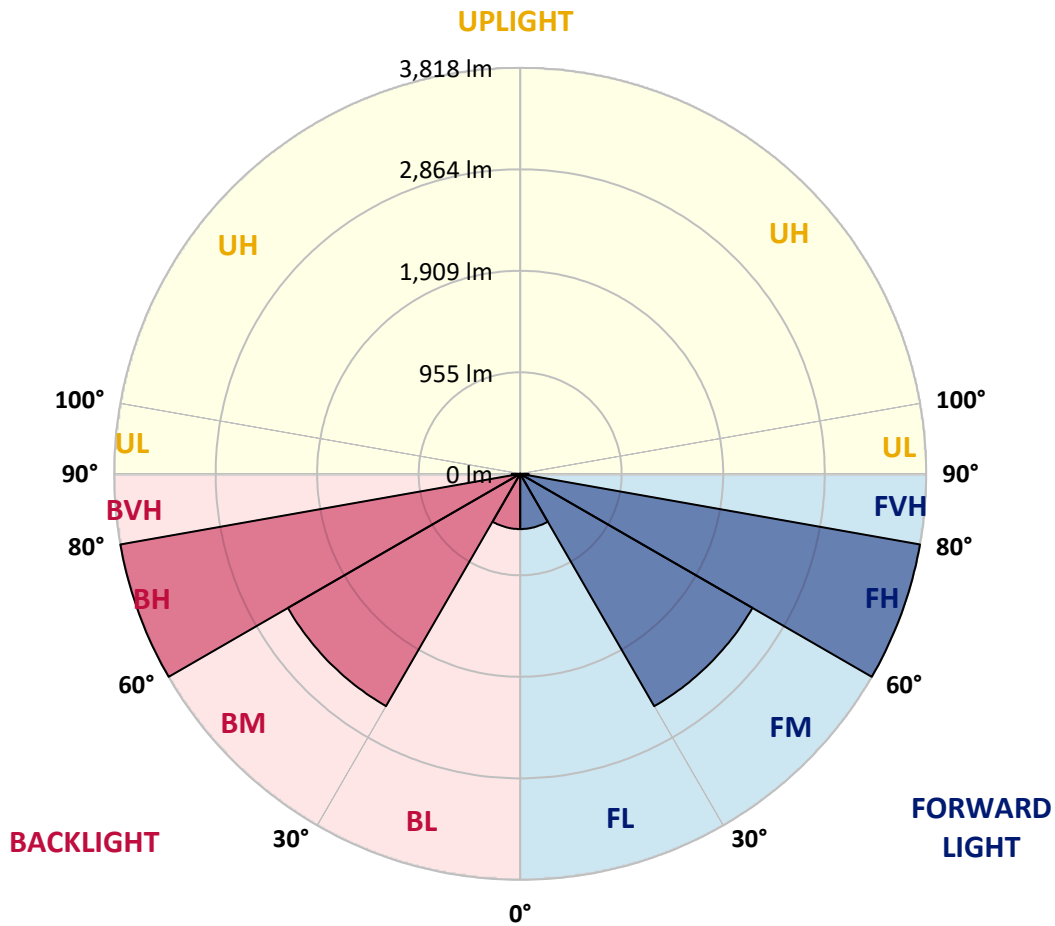
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	519.6	3.7			
FM	(30°-60°)	2523.1	18.2			
FH	(60°-80°)	3818.5	27.5			G2/5000
FVH	(80°-90°)	79.3	0.6			G1/100
BL	(0°-30°)	519.6	3.7	B2/1000		
BM	(30°-60°)	2523.1	18.2	B3/5000		
BH	(60°-80°)	3818.5	27.5	B4/5000		G2/5000
BVH	(80°-90°)	79.3	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°	1266.2	1266.2	1266.2	1266.2	1266.2	1266.2	1266.2	1266.2	1266.2	1266.2	1266.2
2.5°	1258.3	1261.9	1260.5	1257.6	1257.6	1255.4	1257.6	1259.0	1261.2	1262.6	1261.9
5°	1241.7	1244.6	1243.9	1241.7	1242.4	1240.3	1241.7	1243.9	1245.3	1246.0	1246.0
7.5°	1227.3	1230.2	1228.7	1225.1	1225.1	1222.9	1223.7	1225.8	1228.0	1228.7	1228.7
10°	1223.7	1226.5	1222.2	1216.4	1214.3	1211.4	1212.1	1214.3	1218.6	1220.8	1220.8
12.5°	1225.1	1227.3	1222.9	1214.3	1212.1	1209.2	1209.2	1211.4	1217.2	1220.1	1220.8
15°	1229.4	1231.6	1225.1	1215.7	1213.6	1211.4	1210.7	1213.6	1220.1	1225.1	1225.8
17.5°	1237.4	1239.5	1229.4	1216.4	1213.6	1214.3	1213.6	1215.7	1225.8	1235.2	1235.2
20°	1244.6	1246.0	1232.3	1216.4	1213.6	1214.3	1213.6	1217.9	1230.9	1243.9	1244.6
22.5°	1246.7	1248.2	1235.2	1221.5	1219.3	1220.1	1219.3	1223.7	1235.9	1248.9	1248.9
25°	1247.5	1249.6	1239.5	1228.7	1232.3	1233.8	1232.3	1233.0	1242.4	1254.0	1253.2
27.5°	1258.3	1261.2	1251.8	1242.4	1244.6	1243.9	1246.0	1248.2	1255.4	1266.9	1264.1
30°	1280.7	1282.8	1274.9	1265.5	1264.1	1259.0	1265.5	1272.7	1280.7	1290.8	1288.6
32.5°	1317.5	1321.8	1311.7	1301.6	1295.1	1292.2	1297.3	1309.5	1320.3	1331.2	1326.8
35°	1378.8	1381.7	1372.3	1353.5	1342.0	1342.0	1346.3	1362.2	1379.5	1393.2	1388.2
37.5°	1465.4	1469.0	1452.4	1430.0	1412.7	1412.7	1418.5	1435.1	1461.0	1480.5	1473.3
40°	1570.7	1575.7	1554.8	1531.7	1515.1	1512.3	1519.5	1538.2	1562.8	1587.3	1579.4
42.5°	1697.7	1703.5	1676.0	1655.8	1642.8	1642.8	1646.5	1663.8	1686.1	1716.4	1714.3
45°	1860.0	1870.1	1832.6	1812.4	1800.1	1803.0	1805.2	1820.3	1840.5	1875.2	1873.7
47.5°	2053.4	2063.5	2023.8	2002.9	2000.7	2014.4	2005.8	2016.6	2027.4	2067.1	2055.5
50°	2272.7	2290.0	2262.6	2261.2	2265.5	2290.8	2270.6	2276.3	2264.1	2289.3	2274.2
52.5°	2541.1	2566.4	2561.3	2570.0	2618.3	2670.3	2624.1	2603.9	2557.7	2565.6	2538.9
55°	2866.5	2904.7	2912.0	2963.9	3073.6	3179.6	3081.5	3000.0	2901.9	2883.8	2855.7
57.5°	3236.6	3266.9	3301.6	3407.6	3612.5	3800.8	3612.5	3432.2	3277.8	3241.0	3215.0
60°	3634.9	3672.4	3705.6	3862.2	4166.6	4431.4	4160.9	3874.4	3670.3	3620.5	3577.2
62.5°	4062.7	4111.1	4134.2	4308.1	4663.0	4979.0	4668.1	4321.0	4094.5	4041.1	3997.8
65°	4473.3	4513.0	4538.9	4724.4	5063.5	5380.2	5086.6	4744.6	4511.5	4441.5	4406.9
67.5°	4664.5	4686.1	4749.6	4959.6	5317.4	5678.9	5378.0	4981.9	4721.5	4598.8	4600.3
70°	4384.5	4340.5	4493.5	4829.7	5347.7	5862.2	5417.0	4819.6	4500.7	4301.6	4349.2
72.5°	3388.1	3312.4	3577.9	4152.9	5001.4	5745.3	5036.0	4185.4	3743.1	3339.1	3439.4
75°	1843.4	1757.6	2124.1	2851.4	3988.4	4979.8	4080.1	2932.9	2365.1	1829.7	1948.8
77.5°	520.2	487.7	783.5	1379.5	2399.0	3496.4	2491.3	1409.8	929.3	551.2	612.6
80°	159.5	154.4	209.2	415.6	1018.8	1674.6	979.1	420.6	266.2	168.1	177.5
82.5°	94.5	86.6	103.9	151.5	259.7	526.0	252.5	158.0	127.0	85.1	92.4
85°	54.1	50.5	61.3	73.6	87.3	111.8	72.9	75.0	67.8	45.5	47.6
87.5°	22.4	20.2	23.8	23.1	20.2	26.0	19.5	23.1	27.4	18.0	16.6
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)