

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: P884145

Luminaire Tested: **NAV-SB4D-827-U-T1**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884145
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-2)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-827-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33148 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

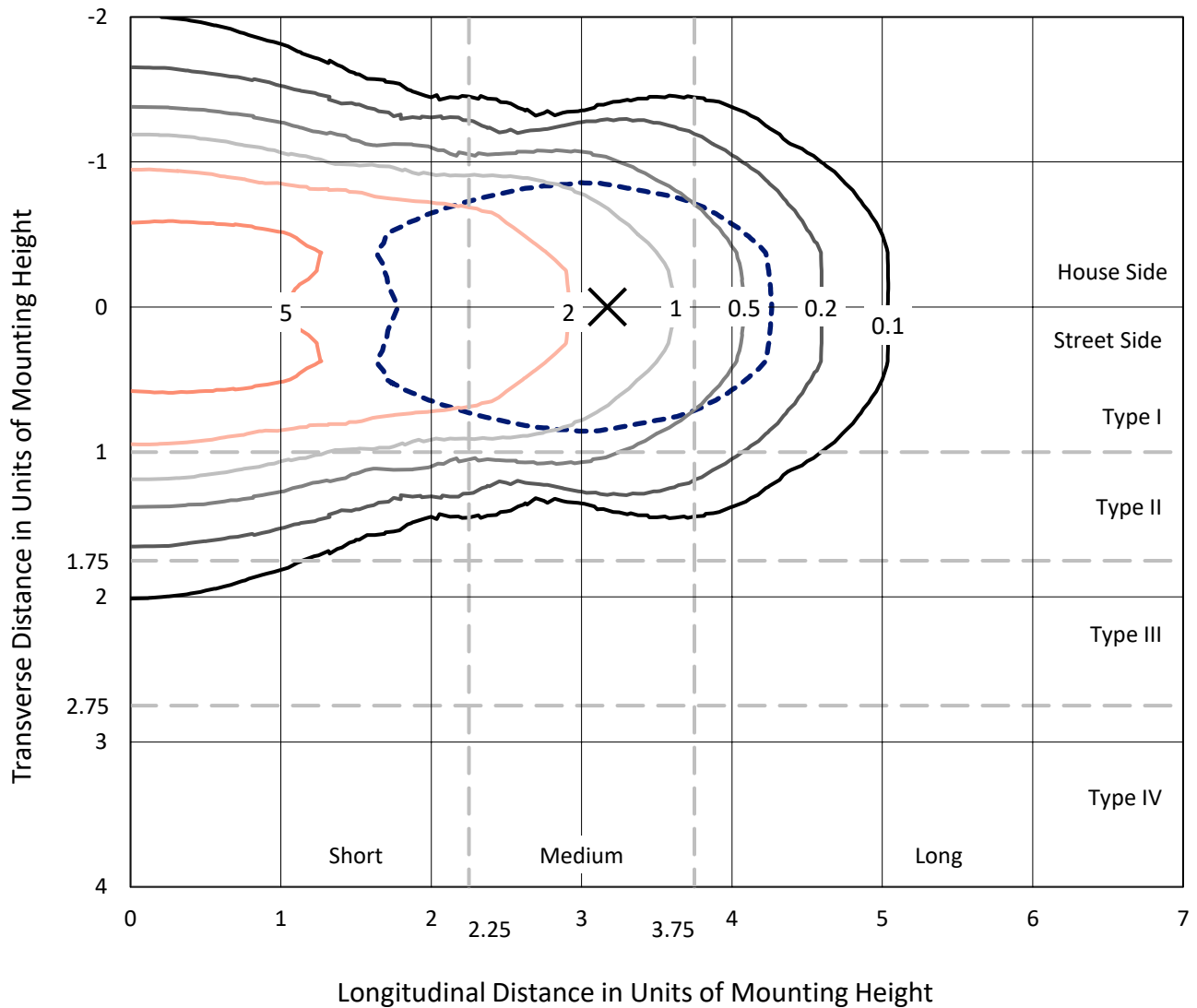
Input Watts (W): 293.6
Input Voltage (V): 120.0
Input Current (Ain): 2.469
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

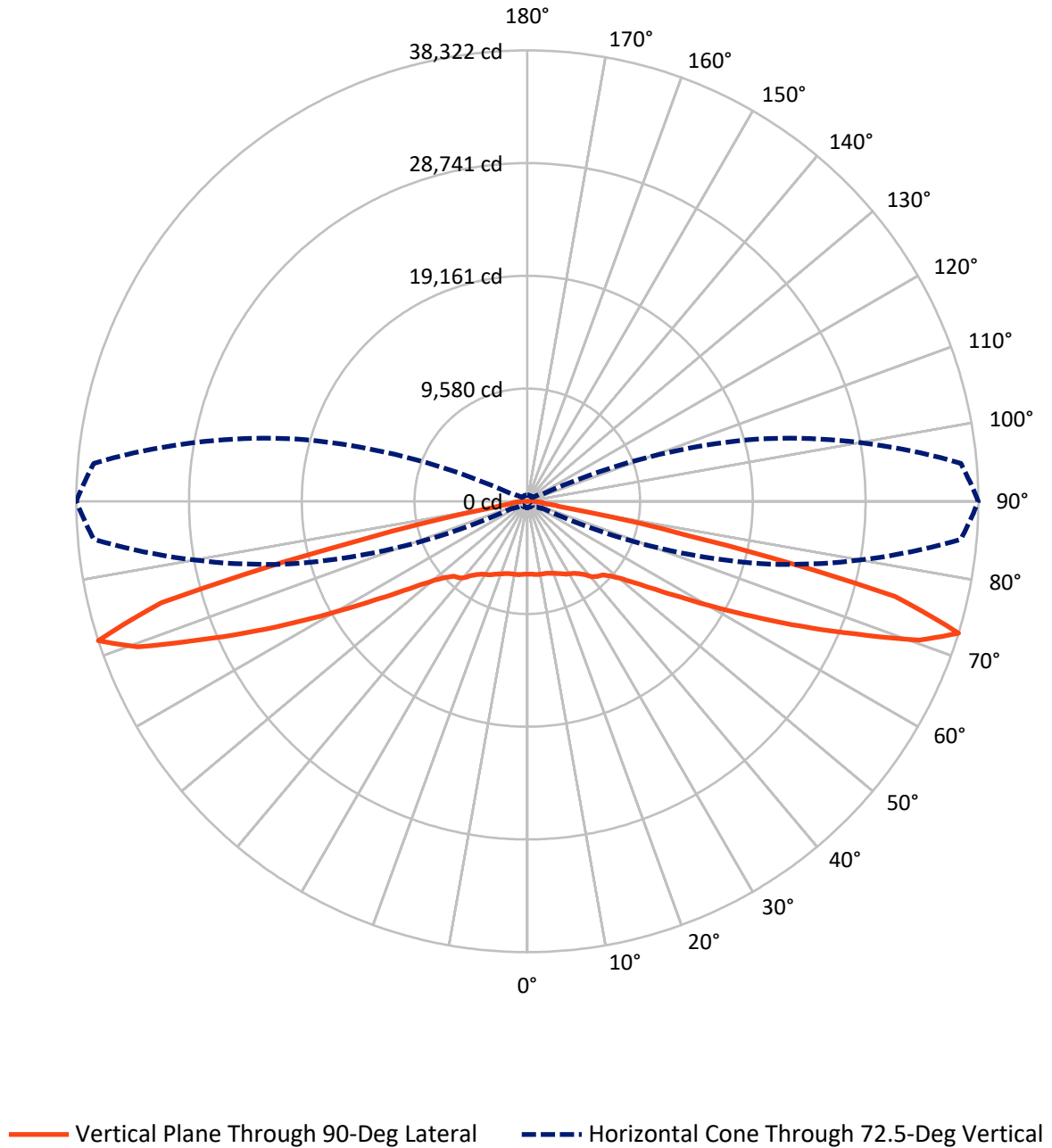
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.9 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16574.0	0.0	16574.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	16574.0	0.0	16574.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	33148.0	0.0	33148.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	600.6	1.8
10°-20°	1836.4	5.5
20°-30°	3062.0	9.2
30°-40°	4211.1	12.7
40°-50°	5143.0	15.5
50°-60°	5948.4	17.9
60°-70°	7092.5	21.4
70°-80°	4950.1	14.9
80°-90°	304.0	0.9
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°	33148.0	100.0
0°-180°	33148.0	100.0



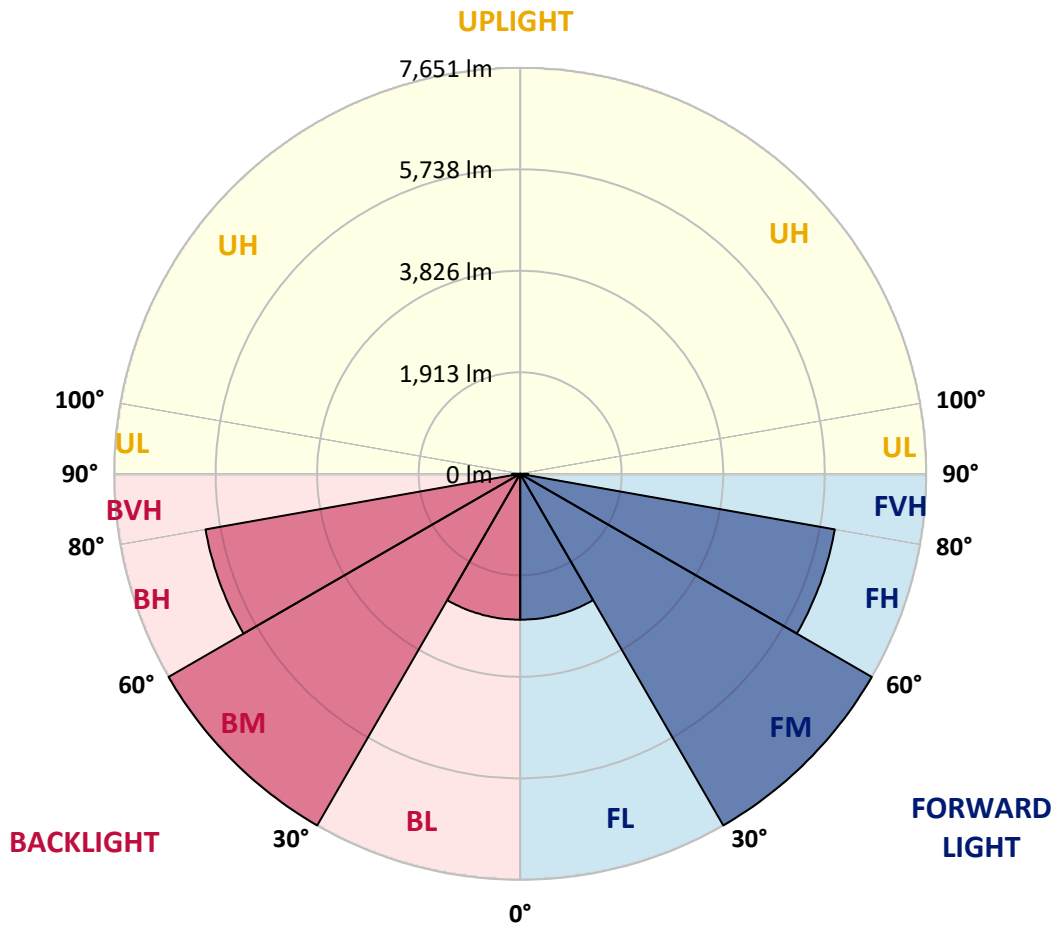
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2749.5	8.3			
FM (30°-60°)	7651.2	23.1			
FH (60°-80°)	6021.3	18.2			G3/7500
FVH (80°-90°)	152.0	0.5			G2/225
BL (0°-30°)	2749.5	8.3	B4/5000		
BM (30°-60°)	7651.2	23.1	B4/8500		
BH (60°-80°)	6021.3	18.2	B5		G5
BVH (80°-90°)	152.0	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type I Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6194.1	6194.1	6194.1	6194.1	6194.1	6194.1	6194.1	6194.1	6194.1	6194.1	6194.1
2.5°	6199.3	6206.4	6206.4	6201.1	6213.4	6202.9	6202.9	6197.6	6202.9	6197.6	6197.6
5°	6231.0	6239.9	6243.4	6241.6	6257.5	6248.7	6248.7	6241.6	6243.4	6238.1	6238.1
7.5°	6290.9	6303.3	6310.3	6319.1	6342.0	6331.5	6324.4	6303.3	6294.5	6280.4	6280.4
10°	6310.3	6324.4	6347.3	6393.1	6446.0	6447.7	6426.6	6373.7	6333.2	6301.5	6296.2
12.5°	6250.4	6269.8	6317.4	6410.7	6528.8	6576.3	6542.9	6454.8	6375.5	6319.1	6310.3
15°	6174.7	6195.8	6268.0	6409.0	6583.4	6694.4	6690.8	6574.6	6447.7	6359.7	6345.6
17.5°	6056.6	6077.8	6181.7	6379.0	6625.7	6808.9	6858.2	6738.4	6560.5	6442.5	6423.1
20°	5843.5	5862.9	6007.3	6283.9	6639.8	6930.4	7059.0	6953.3	6731.4	6571.1	6541.1
22.5°	5566.9	5596.8	5766.0	6120.1	6606.3	7057.3	7288.1	7215.8	6930.4	6708.5	6667.9
25°	5270.9	5302.6	5500.0	5919.2	6520.0	7148.9	7559.4	7513.5	7155.9	6879.3	6823.0
27.5°	5015.5	5049.0	5263.9	5720.2	6386.1	7184.1	7827.1	7850.0	7429.0	7067.8	7007.9
30°	4814.7	4846.4	5075.4	5559.9	6213.4	7148.9	8061.4	8220.0	7707.3	7231.7	7145.4
32.5°	4594.5	4635.0	4876.3	5364.3	6009.1	7064.3	8265.8	8619.9	8029.7	7407.8	7298.6
35°	4316.1	4353.1	4606.8	5096.5	5741.3	6928.7	8436.7	9063.8	8491.3	7675.6	7554.1
37.5°	3977.9	4013.1	4265.0	4761.8	5475.3	6738.4	8567.0	9564.1	9040.9	8061.4	7899.4
40°	3637.9	3671.3	3907.4	4388.3	5156.4	6495.3	8612.8	10053.9	9671.6	8591.7	8419.1
42.5°	3326.0	3356.0	3572.7	4020.1	4798.8	6185.2	8552.9	10480.2	10237.1	8961.6	8739.7
45°	3038.9	3065.3	3257.3	3674.9	4427.1	5808.2	8373.2	10938.2	10910.1	9225.9	8926.4
47.5°	2711.2	2737.6	2936.7	3340.1	4055.4	5366.1	8068.5	11389.2	11845.5	9824.9	9479.6
50°	2311.3	2334.2	2538.6	2954.3	3669.6	4895.7	7645.7	11743.3	13025.8	10732.1	10298.8
52.5°	1837.4	1862.1	2061.2	2476.9	3211.5	4390.1	7089.0	11974.1	14389.4	12056.9	11523.1
55°	1367.1	1384.7	1557.3	1930.8	2644.3	3814.0	6391.4	12039.3	15936.1	13867.9	13200.2
57.5°	991.8	1002.4	1113.4	1391.7	2004.8	3093.5	5544.0	11870.2	17777.1	16189.8	15349.5
60°	803.3	806.8	840.3	963.6	1393.5	2279.6	4520.5	11288.8	19774.8	19182.9	18124.1
62.5°	729.3	729.3	738.1	771.6	942.5	1504.5	3282.0	10083.8	21917.0	22965.2	21547.1
65°	678.2	678.2	681.8	697.6	743.4	958.4	2071.7	8121.3	23722.7	27395.8	25602.4
67.5°	632.4	634.2	632.4	637.7	664.2	708.2	1201.5	5609.2	24695.2	31986.8	30050.7
70°	584.9	588.4	579.6	579.6	600.7	602.5	752.2	3075.9	23888.3	35834.3	35325.1
72.5°	528.5	533.8	519.7	516.2	532.0	525.0	565.5	1476.3	20509.4	36982.9	38321.7
75°	479.2	486.2	454.5	445.7	445.7	440.4	459.8	757.5	13311.2	30168.7	32268.6
77.5°	435.1	449.2	398.1	370.0	362.9	347.1	375.2	463.3	5822.3	14163.9	13869.7
80°	359.4	378.8	327.7	294.2	281.9	264.3	296.0	324.1	1731.7	3289.0	3149.9
82.5°	267.8	276.6	232.5	209.6	199.1	186.7	222.0	225.5	563.7	1164.5	1316.0
85°	170.9	174.4	142.7	123.3	118.0	112.7	140.9	123.3	214.9	856.2	1243.7
87.5°	59.9	68.7	54.6	49.3	52.9	44.0	65.2	37.0	59.9	604.3	748.7
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)