

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: P884085

Luminaire Tested: **NAV-SB4D-727-U-T1**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884085  
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-727-U-T1  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

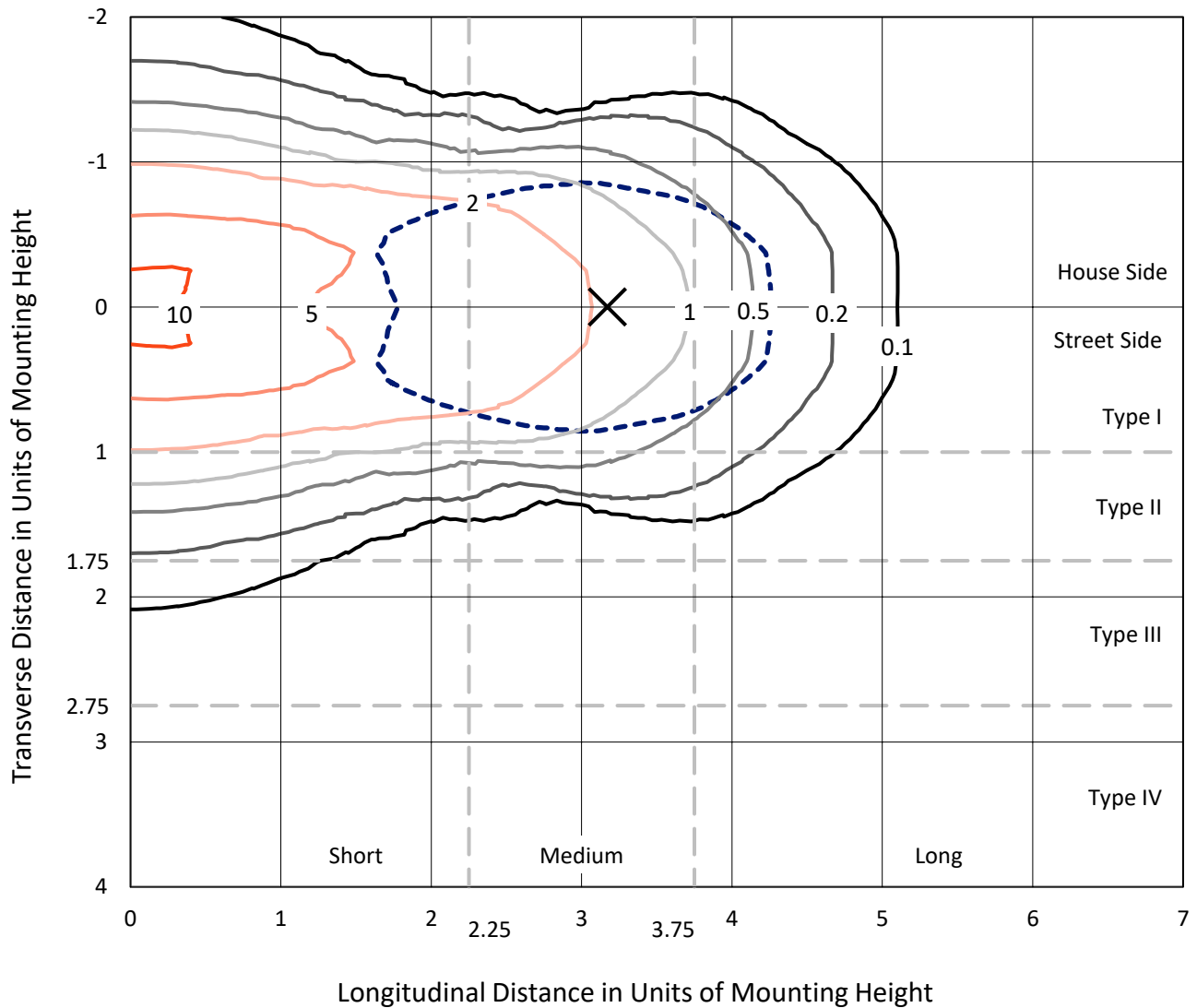
Lumens per Lamp: N/A  
Luminaire Lumens: 36973 lumens  
Efficiency: N/A  
Efficacy: 125.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B5 - U0 - G5  
  
Input Watts (W): 293.6  
Input Voltage (V): 120.0  
Input Current (Ain): 2.469  
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

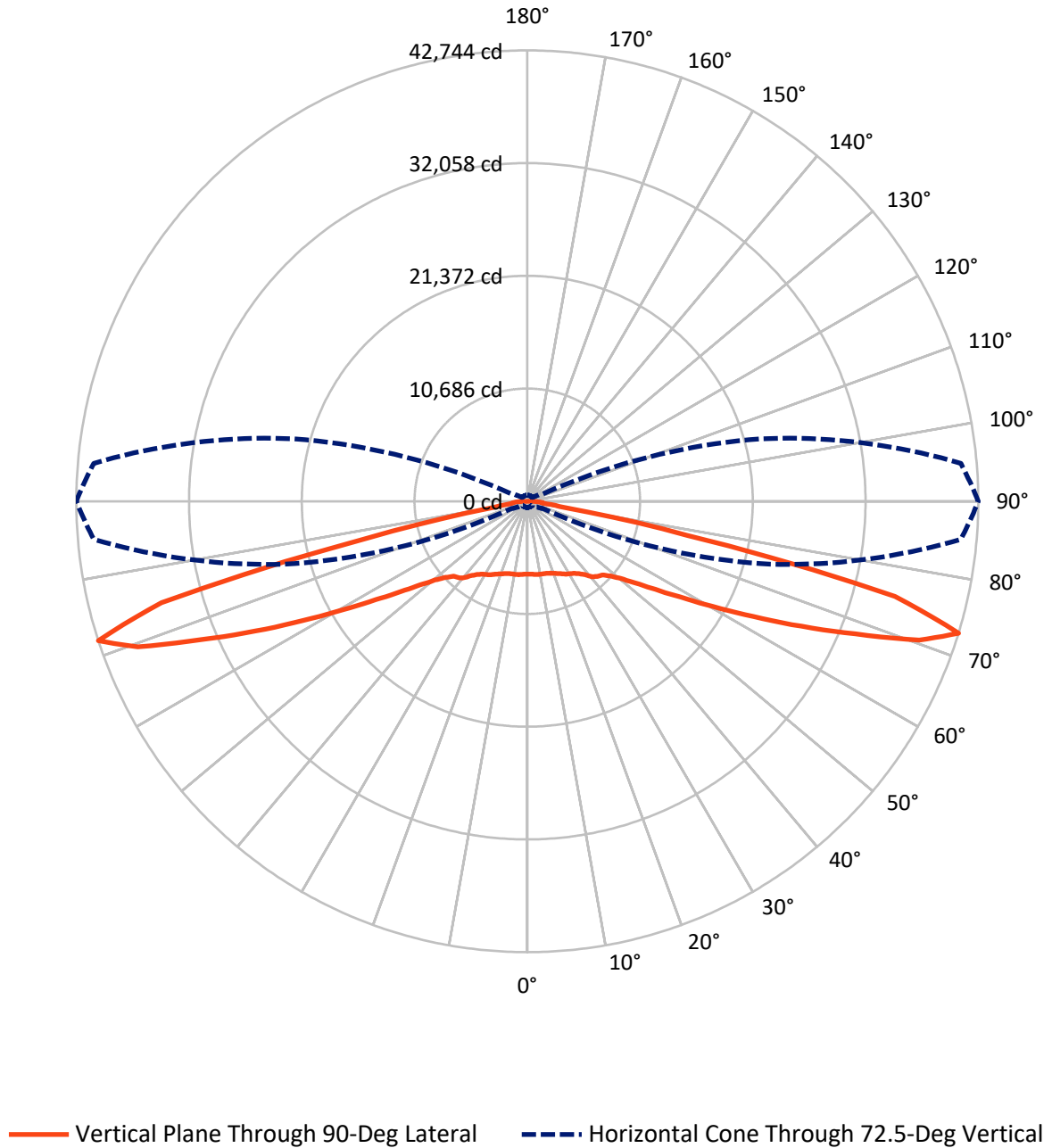
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 fc  
 Type I - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	18486.5	0.0	18486.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	18486.5	0.0	18486.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	36973.0	0.0	36973.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	669.9	1.8
10°-20°	2048.3	5.5
20°-30°	3415.3	9.2
30°-40°	4697.1	12.7
40°-50°	5736.4	15.5
50°-60°	6634.8	17.9
60°-70°	7910.9	21.4
70°-80°	5521.3	14.9
80°-90°	339.1	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°	36973.0	100.0
0°-180°	36973.0	100.0

**Coefficient of Utilization**



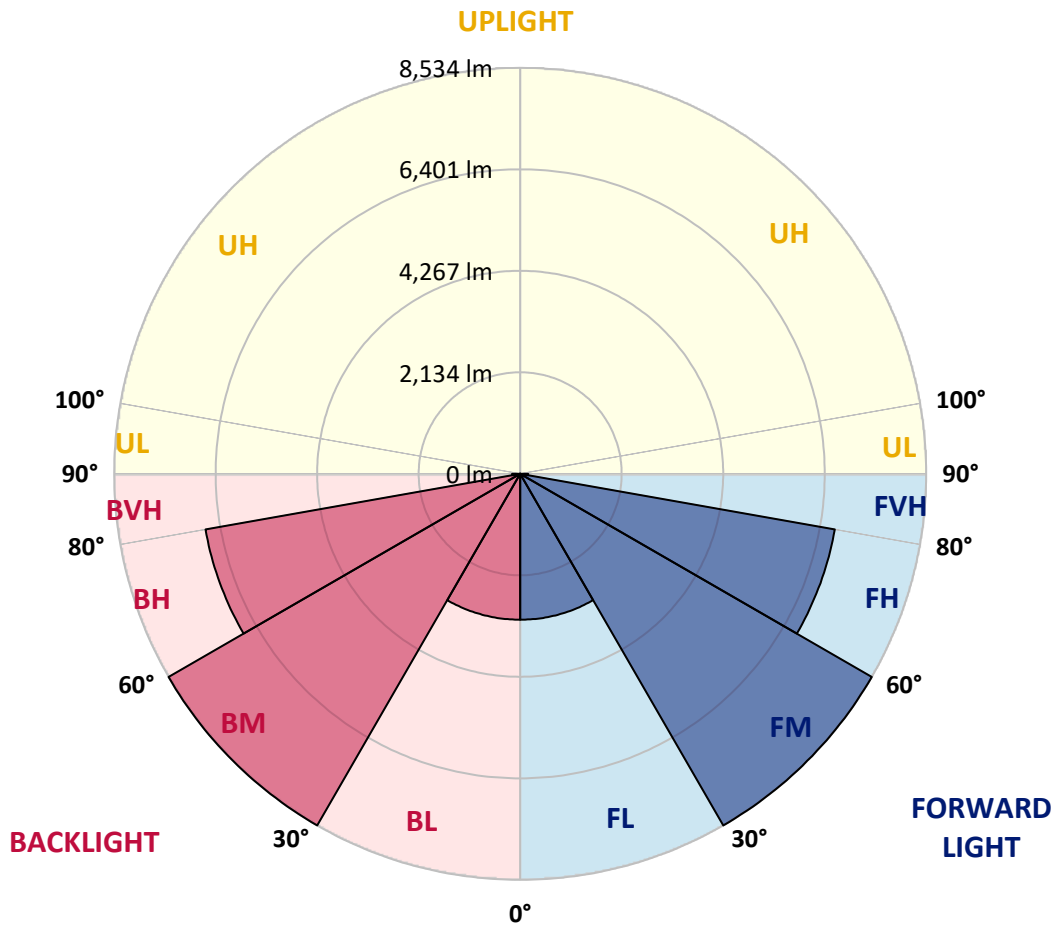
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3066.7	8.3			
FM (30°-60°)	8534.1	23.1			
FH (60°-80°)	6716.1	18.2			G3/7500
FVH (80°-90°)	169.6	0.5			G2/225
BL (0°-30°)	3066.7	8.3	B4/5000		
BM (30°-60°)	8534.1	23.1	B5		
BH (60°-80°)	6716.1	18.2	B5		G5
BVH (80°-90°)	169.6	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°	6908.8	6908.8	6908.8	6908.8	6908.8	6908.8	6908.8	6908.8	6908.8	6908.8	6908.8
2.5°	6914.7	6922.6	6922.6	6916.7	6930.4	6918.6	6918.6	6912.7	6918.6	6912.7	6912.7
5°	6950.1	6959.9	6963.8	6961.8	6979.5	6969.7	6969.7	6961.8	6963.8	6957.9	6957.9
7.5°	7016.9	7030.6	7038.5	7048.3	7073.9	7062.1	7054.2	7030.6	7020.8	7005.1	7005.1
10°	7038.5	7054.2	7079.7	7130.8	7189.8	7191.7	7168.2	7109.2	7064.0	7028.7	7022.8
12.5°	6971.7	6993.3	7046.3	7150.5	7282.1	7335.2	7297.9	7199.6	7111.2	7048.3	7038.5
15°	6887.2	6910.8	6991.3	7148.5	7343.1	7466.8	7462.9	7333.2	7191.7	7093.5	7077.8
17.5°	6755.5	6779.1	6895.0	7115.1	7390.2	7594.6	7649.6	7516.0	7317.5	7185.9	7164.2
20°	6517.8	6539.4	6700.5	7009.0	7405.9	7730.1	7873.6	7755.7	7508.1	7329.3	7295.9
22.5°	6209.3	6242.7	6431.3	6826.3	7368.6	7871.6	8129.0	8048.5	7730.1	7482.6	7437.4
25°	5879.2	5914.5	6134.6	6602.3	7272.3	7973.8	8431.6	8380.5	7981.7	7673.2	7610.3
27.5°	5594.2	5631.6	5871.3	6380.2	7123.0	8013.1	8730.3	8755.9	8286.2	7883.4	7816.6
30°	5370.2	5405.6	5661.0	6201.4	6930.4	7973.8	8991.7	9168.5	8596.7	8066.2	7969.9
32.5°	5124.6	5169.8	5439.0	5983.3	6702.5	7879.5	9219.6	9614.5	8956.3	8262.7	8140.8
35°	4814.1	4855.4	5138.4	5684.6	6403.8	7728.2	9410.2	10109.7	9471.1	8561.3	8425.7
37.5°	4436.9	4476.2	4757.2	5311.3	6107.1	7516.0	9555.6	10667.8	10084.2	8991.7	8810.9
40°	4057.6	4095.0	4358.3	4894.7	5751.4	7244.8	9606.7	11214.0	10787.6	9583.1	9390.5
42.5°	3709.8	3743.2	3984.9	4484.0	5352.5	6899.0	9539.9	11689.5	11418.4	9995.7	9748.2
45°	3389.6	3419.0	3633.2	4098.9	4937.9	6478.5	9339.4	12200.4	12169.0	10290.5	9956.4
47.5°	3024.1	3053.5	3275.6	3725.6	4523.3	5985.3	8999.5	12703.5	13212.4	10958.6	10573.4
50°	2578.0	2603.6	2831.5	3295.2	4093.0	5460.6	8527.9	13098.4	14528.9	11970.5	11487.1
52.5°	2049.5	2077.0	2299.0	2762.7	3582.1	4896.7	7907.0	13355.8	16049.8	13448.2	12852.8
55°	1524.8	1544.5	1737.0	2153.6	2949.4	4254.1	7128.9	13428.5	17775.0	15468.2	14723.4
57.5°	1106.3	1118.1	1241.9	1552.3	2236.1	3450.5	6183.7	13239.9	19828.4	18058.0	17120.7
60°	896.0	900.0	937.3	1074.8	1554.3	2542.7	5042.1	12591.5	22056.7	21396.4	20215.5
62.5°	813.5	813.5	823.3	860.7	1051.3	1678.1	3660.7	11247.4	24446.1	25615.2	24033.4
65°	756.5	756.5	760.4	778.1	829.2	1068.9	2310.8	9058.5	26460.1	30557.1	28556.7
67.5°	705.4	707.4	705.4	711.3	740.8	789.9	1340.1	6256.4	27544.8	35677.8	33518.3
70°	652.4	656.3	646.5	646.5	670.1	672.0	839.0	3430.8	26644.8	39969.2	39401.4
72.5°	589.5	595.4	579.7	575.7	593.4	585.6	630.8	1646.6	22876.1	41250.4	42743.7
75°	534.5	542.3	507.0	497.1	497.1	491.2	512.9	844.9	14847.2	33649.9	35992.2
77.5°	485.3	501.1	444.1	412.6	404.8	387.1	418.5	516.8	6494.2	15798.3	15470.1
80°	400.9	422.5	365.5	328.1	314.4	294.7	330.1	361.6	1931.6	3668.6	3513.3
82.5°	298.7	308.5	259.4	233.8	222.0	208.3	247.6	251.5	628.8	1298.8	1467.8
85°	190.6	194.5	159.2	137.5	131.7	125.8	157.2	137.5	239.7	955.0	1387.3
87.5°	66.8	76.6	60.9	55.0	58.9	49.1	72.7	41.3	66.8	674.0	835.1
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)