

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: P884165

Luminaire Tested: **NAV-SB4D-835-U-T1**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884165  
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-835-U-T1  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

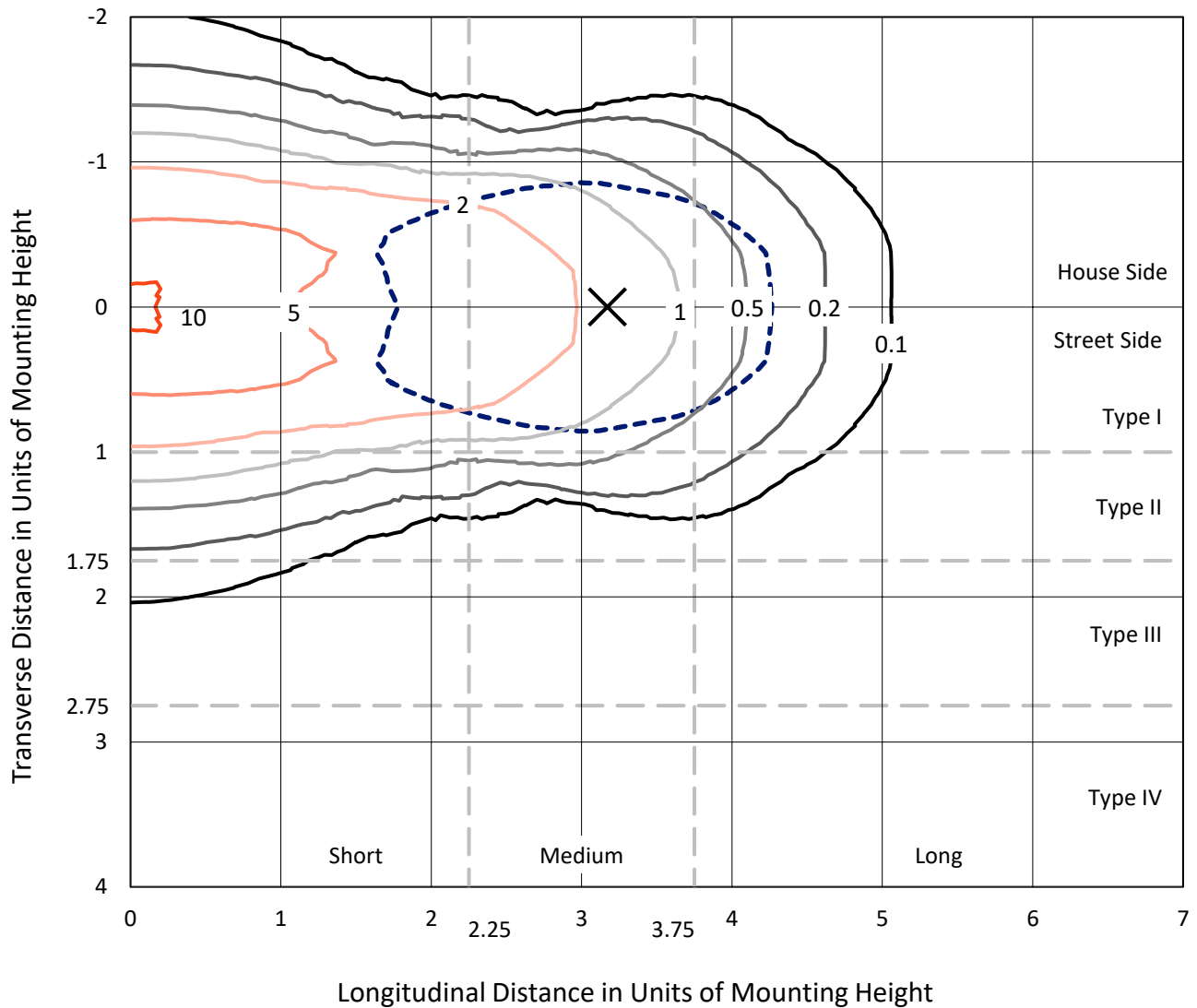
Lumens per Lamp: N/A  
Luminaire Lumens: 34423 lumens  
Efficiency: N/A  
Efficacy: 117.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B5 - U0 - G5  
  
Input Watts (W): 293.6  
Input Voltage (V): 120.0  
Input Current (Ain): 2.469  
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

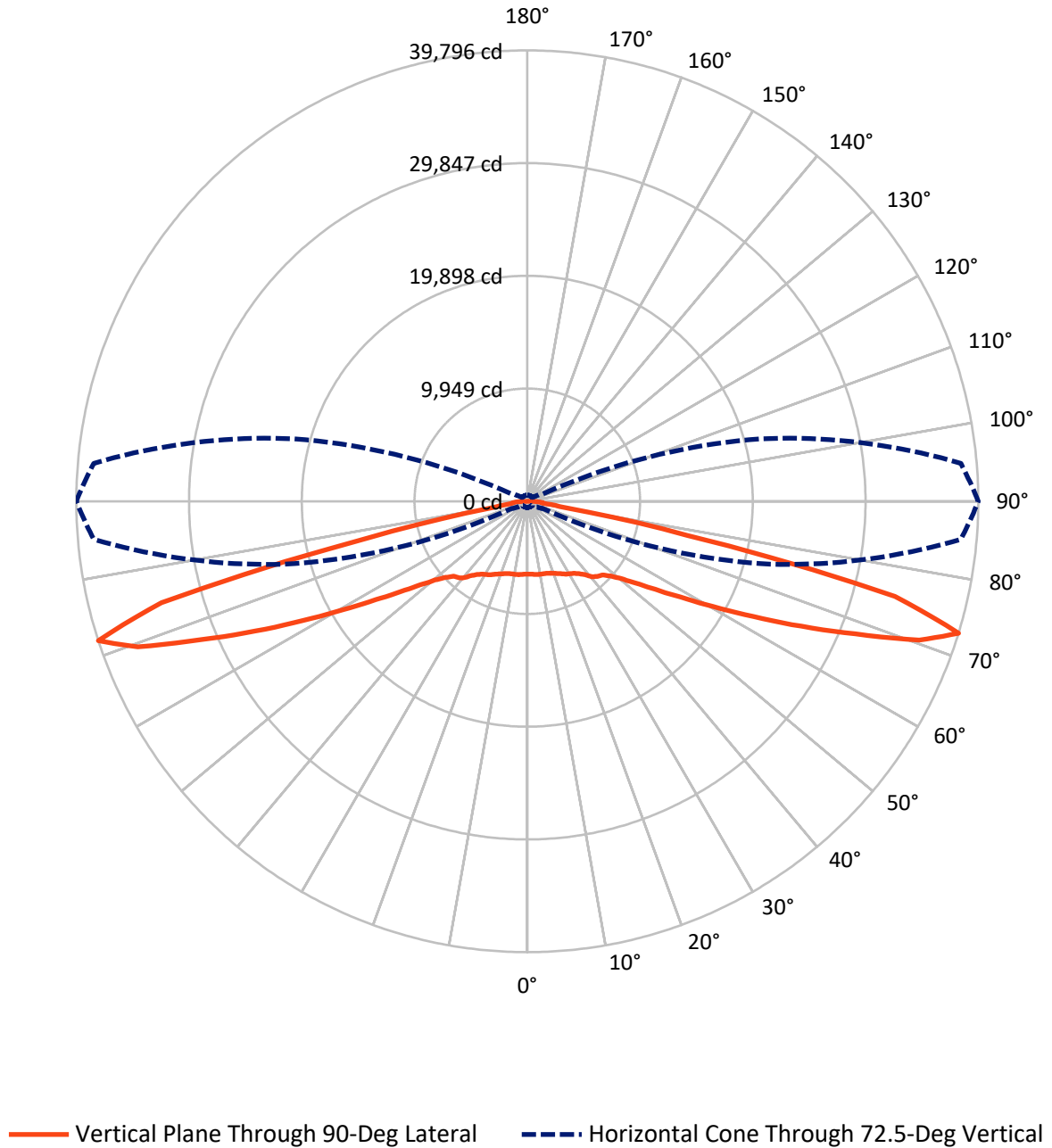
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.3 fc  
 Type I - Short - N/A

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### Luminous Intensity Polar Plot



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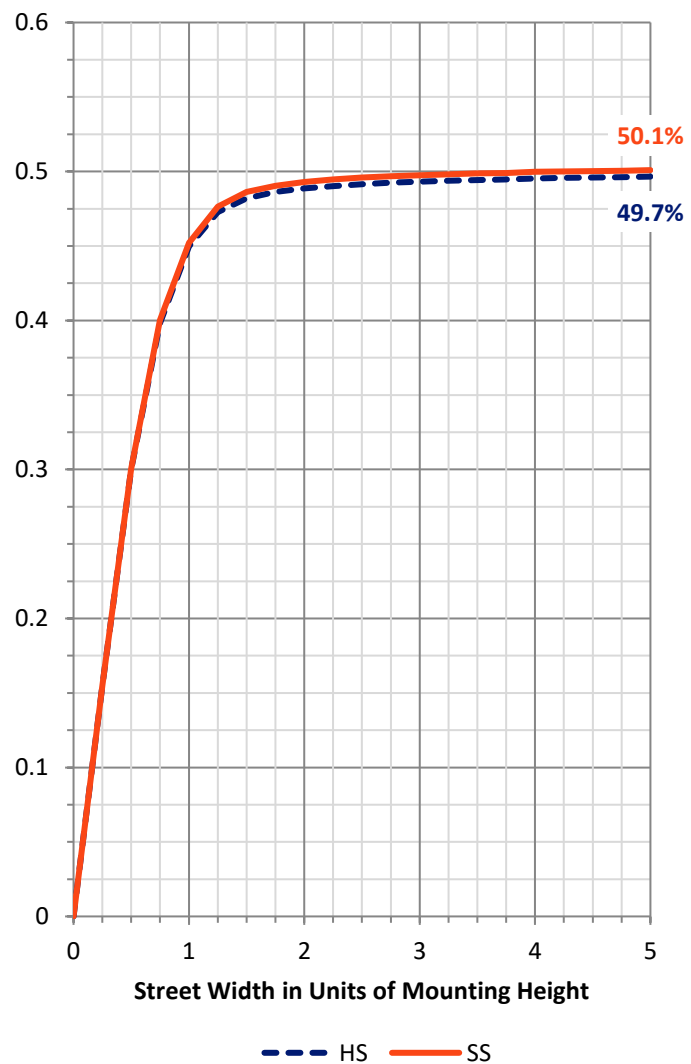
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	17211.5	0.0	17211.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	17211.5	0.0	17211.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	34423.0	0.0	34423.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	623.7	1.8
10°-20°	1907.0	5.5
20°-30°	3179.7	9.2
30°-40°	4373.1	12.7
40°-50°	5340.8	15.5
50°-60°	6177.2	17.9
60°-70°	7365.3	21.4
70°-80°	5140.5	14.9
80°-90°	315.7	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°	34423.0	100.0
0°-180°	34423.0	100.0

**Coefficient of Utilization**



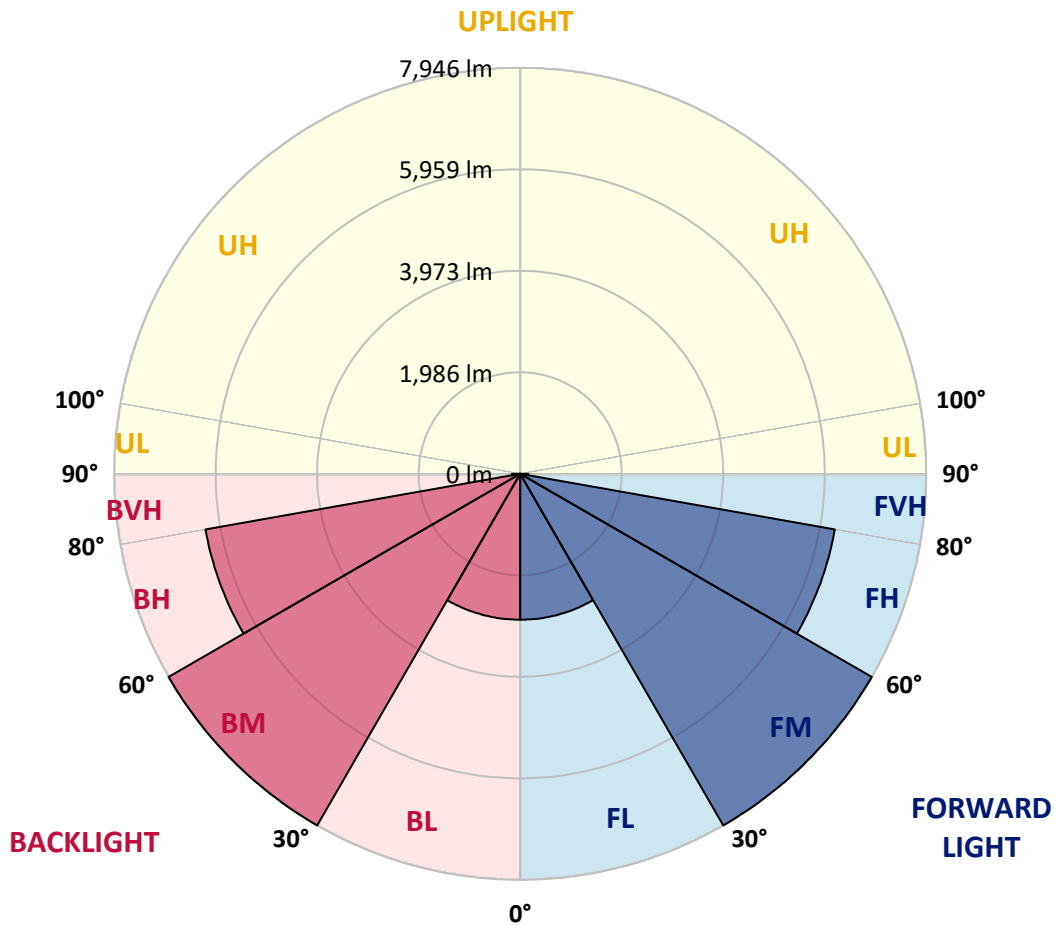
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2855.2	8.3			
FM (30°-60°)	7945.5	23.1			
FH (60°-80°)	6252.9	18.2			G3/7500
FVH (80°-90°)	157.9	0.5			G2/225
BL (0°-30°)	2855.2	8.3	B4/5000		
BM (30°-60°)	7945.5	23.1	B4/8500		
BH (60°-80°)	6252.9	18.2	B5		G5
BVH (80°-90°)	157.9	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°	6432.3	6432.3	6432.3	6432.3	6432.3	6432.3	6432.3	6432.3	6432.3	6432.3	6432.3
2.5°	6437.8	6445.1	6445.1	6439.6	6452.4	6441.4	6441.4	6436.0	6441.4	6436.0	6436.0
5°	6470.7	6479.9	6483.5	6481.7	6498.2	6489.0	6489.0	6481.7	6483.5	6478.0	6478.0
7.5°	6532.9	6545.7	6553.0	6562.2	6586.0	6575.0	6567.7	6545.7	6536.6	6521.9	6521.9
10°	6553.0	6567.7	6591.5	6639.0	6693.9	6695.7	6673.8	6618.9	6576.8	6543.9	6538.4
12.5°	6490.8	6511.0	6560.4	6657.3	6779.9	6829.3	6794.5	6703.1	6620.7	6562.2	6553.0
15°	6412.2	6434.1	6509.1	6655.5	6836.6	6951.9	6948.2	6827.5	6695.7	6604.3	6589.6
17.5°	6289.6	6311.6	6419.5	6624.4	6880.5	7070.8	7122.0	6997.6	6812.8	6690.3	6670.1
20°	6068.2	6088.4	6238.4	6525.6	6895.1	7197.0	7330.6	7220.8	6990.3	6823.8	6792.7
22.5°	5781.0	5812.1	5987.7	6355.5	6860.4	7328.7	7568.4	7493.4	7197.0	6966.5	6924.4
25°	5473.7	5506.6	5711.5	6146.9	6770.7	7423.9	7850.1	7802.5	7431.2	7144.0	7085.4
27.5°	5208.4	5243.2	5466.4	5940.2	6631.7	7460.4	8128.2	8152.0	7714.7	7339.7	7277.5
30°	4999.9	5032.8	5270.6	5773.7	6452.4	7423.9	8371.5	8536.2	8003.8	7509.8	7420.2
32.5°	4771.2	4813.2	5063.9	5570.6	6240.2	7336.0	8583.7	8951.4	8338.6	7692.8	7579.4
35°	4482.1	4520.5	4784.0	5292.6	5962.1	7195.2	8761.2	9412.5	8817.9	7970.9	7844.6
37.5°	4130.9	4167.5	4429.1	4945.0	5685.9	6997.6	8896.6	9932.0	9388.7	8371.5	8203.2
40°	3777.8	3812.5	4057.7	4557.1	5354.8	6745.1	8944.1	10440.6	10043.6	8922.2	8742.9
42.5°	3454.0	3485.1	3710.1	4174.8	4983.4	6423.2	8881.9	10883.3	10630.9	9306.3	9075.8
45°	3155.8	3183.2	3382.6	3816.2	4597.4	6031.7	8695.3	11359.0	11329.7	9580.8	9269.8
47.5°	2815.5	2842.9	3049.7	3468.6	4211.4	5572.5	8378.8	11827.3	12301.1	10202.8	9844.2
50°	2400.2	2424.0	2636.2	3068.0	3810.7	5084.0	7939.8	12195.0	13526.9	11144.9	10694.9
52.5°	1908.1	1933.7	2140.4	2572.2	3335.1	4559.0	7361.7	12434.7	14942.8	12520.7	11966.3
55°	1419.6	1437.9	1617.2	2005.1	2746.0	3960.7	6637.2	12502.4	16549.1	14401.3	13708.0
57.5°	1030.0	1040.9	1156.2	1445.3	2081.9	3212.5	5757.2	12326.7	18460.8	16812.5	15939.9
60°	834.2	837.9	872.6	1000.7	1447.1	2367.3	4694.3	11723.0	20535.4	19920.7	18821.2
62.5°	757.4	757.4	766.5	801.3	978.7	1562.3	3408.2	10471.7	22760.0	23848.5	22375.8
65°	704.3	704.3	708.0	724.5	772.0	995.2	2151.4	8433.7	24635.2	28449.6	26587.2
67.5°	656.8	658.6	656.8	662.3	689.7	735.4	1247.7	5824.9	25645.0	33217.1	31206.5
70°	607.4	611.0	601.9	601.9	623.8	625.7	781.2	3194.2	24807.2	37212.6	36683.9
72.5°	548.8	554.3	539.7	536.0	552.5	545.2	587.2	1533.1	21298.3	38405.4	39795.7
75°	497.6	504.9	472.0	462.8	462.8	457.4	477.5	786.7	13823.2	31329.1	33509.8
77.5°	451.9	466.5	413.5	384.2	376.9	360.4	389.7	481.1	6046.3	14708.7	14403.2
80°	373.2	393.3	340.3	305.5	292.7	274.4	307.3	336.6	1798.3	3415.6	3271.0
82.5°	278.1	287.2	241.5	217.7	206.7	193.9	230.5	234.2	585.4	1209.3	1366.6
85°	177.5	181.1	148.2	128.1	122.6	117.1	146.4	128.1	223.2	889.1	1291.6
87.5°	62.2	71.3	56.7	51.2	54.9	45.7	67.7	38.4	62.2	627.5	777.5
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)