

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: P884495

Luminaire Tested: **NAV-SB5B-830-U-T1**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884495  
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-SB5B-830-U-T1  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

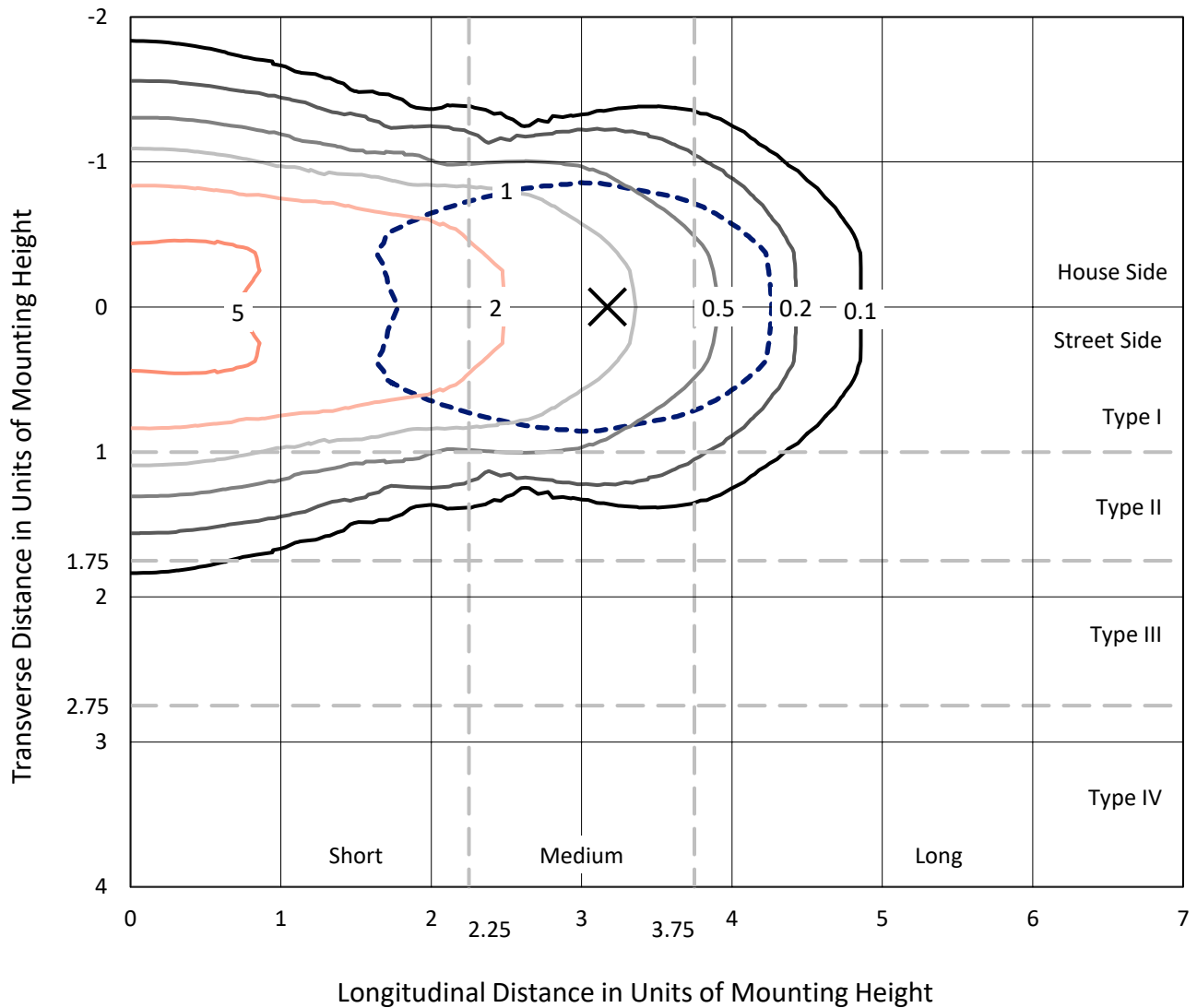
Lumens per Lamp: N/A  
Luminaire Lumens: 24734 lumens  
Efficiency: N/A  
Efficacy: 135.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B4 - U0 - G4  
  
Input Watts (W): 182.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.547  
Voltage Rise (V): NR  
Power Factor: 0.992  
Total Harmonic Distortion (THDi): 11.125  
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

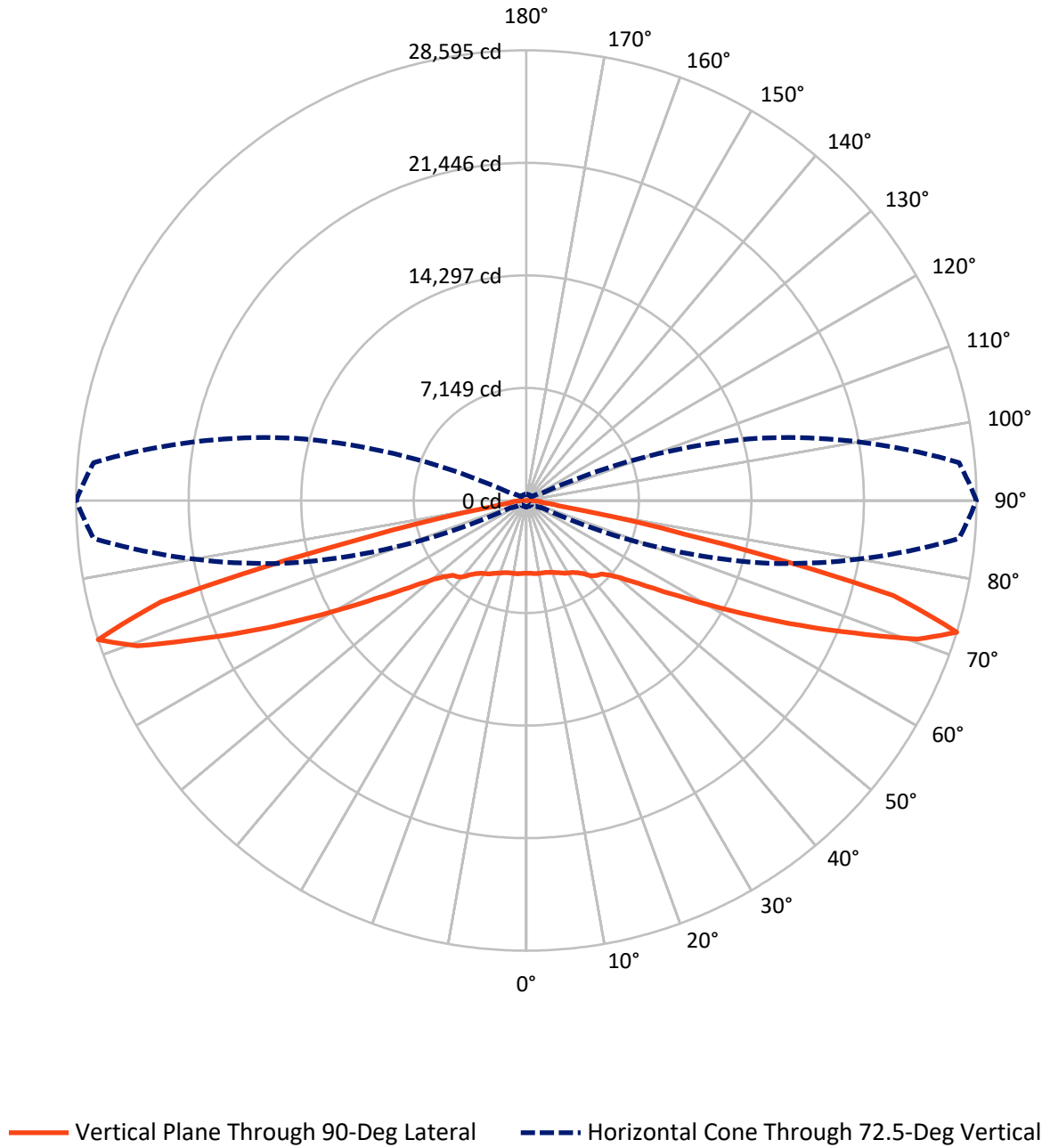
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 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	12367.0	0.0	12367.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	12367.0	0.0	12367.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	24734.0	0.0	24734.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	448.1	1.8
10°-20°	1370.2	5.5
20°-30°	2284.7	9.2
30°-40°	3142.2	12.7
40°-50°	3837.5	15.5
50°-60°	4438.5	17.9
60°-70°	5292.2	21.4
70°-80°	3693.6	14.9
80°-90°	226.9	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°	24734.0	100.0
0°-180°	24734.0	100.0

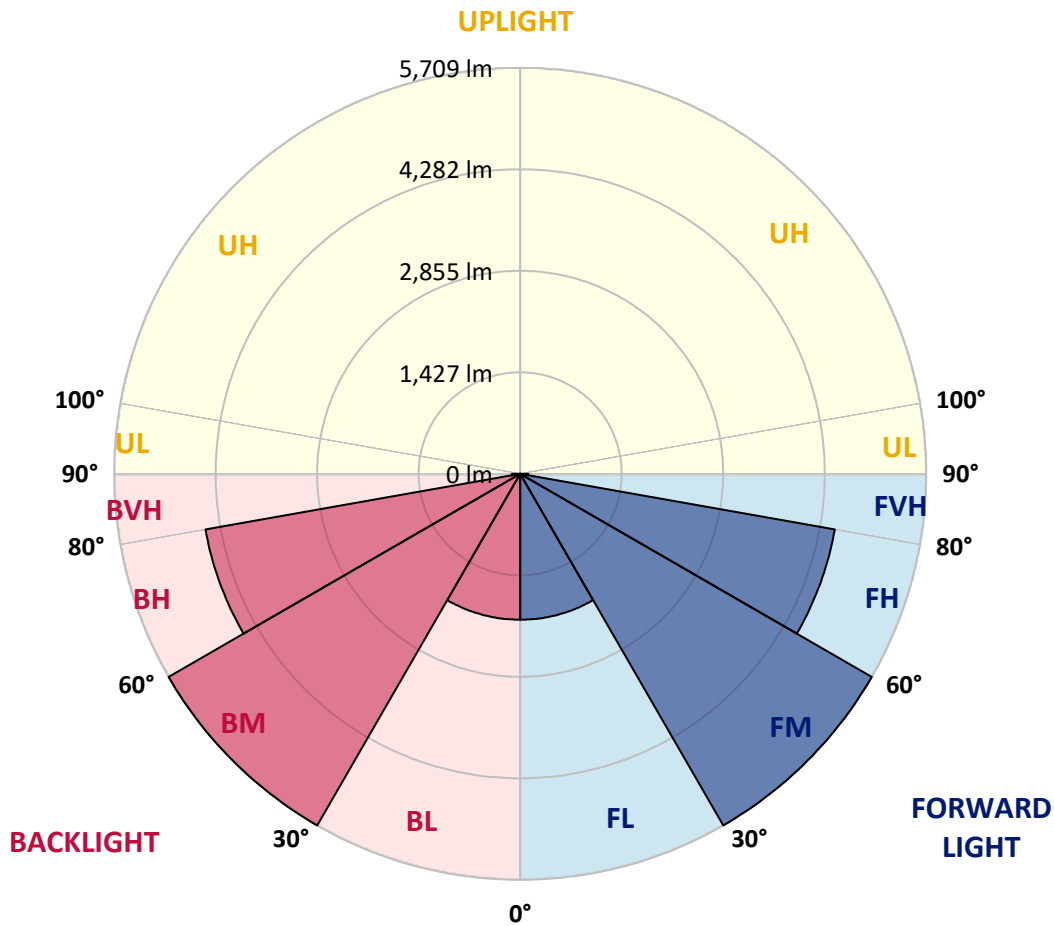


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2051.6	8.3			
FM (30°-60°)	5709.1	23.1			
FH (60°-80°)	4492.9	18.2			G2/5000
FVH (80°-90°)	113.4	0.5			G2/225
BL (0°-30°)	2051.6	8.3	B3/2500		
BM (30°-60°)	5709.1	23.1	B4/8500		
BH (60°-80°)	4492.9	18.2	B4/5000		G4/5000
BVH (80°-90°)	113.4	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G4**  
 Type I Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8
2.5°	4625.8	4631.0	4631.0	4627.1	4636.3	4628.4	4628.4	4624.4	4628.4	4624.4	4624.4
5°	4649.4	4656.0	4658.6	4657.3	4669.1	4662.6	4662.6	4657.3	4658.6	4654.7	4654.7
7.5°	4694.1	4703.3	4708.6	4715.1	4732.2	4724.3	4719.1	4703.3	4696.7	4686.2	4686.2
10°	4708.6	4719.1	4736.2	4770.3	4809.8	4811.1	4795.3	4755.9	4725.7	4702.0	4698.1
12.5°	4663.9	4678.3	4713.8	4783.5	4871.6	4907.1	4882.1	4816.4	4757.2	4715.1	4708.6
15°	4607.3	4623.1	4677.0	4782.2	4912.3	4995.1	4992.5	4905.7	4811.1	4745.4	4734.9
17.5°	4519.3	4535.1	4612.6	4759.8	4943.9	5080.6	5117.4	5028.0	4895.2	4807.2	4792.7
20°	4360.2	4374.7	4482.5	4688.8	4954.4	5171.3	5267.2	5188.4	5022.7	4903.1	4880.8
22.5°	4153.8	4176.2	4302.4	4566.6	4929.4	5265.9	5438.1	5384.2	5171.3	5005.6	4975.4
25°	3933.0	3956.7	4103.9	4416.7	4865.0	5334.3	5640.6	5606.4	5339.5	5133.2	5091.1
27.5°	3742.4	3767.4	3927.7	4268.2	4765.1	5360.6	5840.4	5857.4	5543.3	5273.8	5229.1
30°	3592.5	3616.2	3787.1	4148.6	4636.3	5334.3	6015.2	6133.5	5751.0	5396.1	5331.6
32.5°	3428.2	3458.5	3638.6	4002.7	4483.8	5271.2	6167.7	6431.9	5991.5	5527.5	5446.0
35°	3220.5	3248.1	3437.4	3802.9	4284.0	5170.0	6295.2	6763.1	6335.9	5727.3	5636.6
37.5°	2968.2	2994.4	3182.4	3553.1	4085.5	5028.0	6392.5	7136.5	6746.1	6015.2	5894.3
40°	2714.5	2739.4	2915.6	3274.4	3847.6	4846.6	6426.6	7501.9	7216.6	6410.9	6282.0
42.5°	2481.8	2504.1	2665.8	2999.7	3580.7	4615.2	6381.9	7820.0	7638.6	6686.9	6521.3
45°	2267.5	2287.2	2430.5	2742.1	3303.4	4333.9	6247.9	8161.8	8140.7	6884.1	6660.6
47.5°	2023.0	2042.7	2191.3	2492.3	3026.0	4004.0	6020.4	8498.3	8838.7	7331.0	7073.4
50°	1724.6	1741.7	1894.2	2204.4	2738.1	3653.0	5705.0	8762.5	9719.5	8008.0	7684.6
52.5°	1371.0	1389.4	1538.0	1848.2	2396.3	3275.8	5289.6	8934.7	10736.9	8996.5	8598.2
55°	1020.1	1033.2	1162.0	1440.7	1973.1	2845.9	4769.0	8983.3	11891.0	10347.8	9849.6
57.5°	740.1	748.0	830.8	1038.5	1495.9	2308.3	4136.8	8857.2	13264.7	12080.3	11453.3
60°	599.4	602.0	627.0	719.0	1039.8	1701.0	3373.0	8423.4	14755.3	14313.7	13523.7
62.5°	544.2	544.2	550.8	575.8	703.3	1122.6	2448.9	7524.2	16353.8	17135.9	16077.7
65°	506.1	506.1	508.7	520.5	554.7	715.1	1545.9	6059.9	17701.2	20441.9	19103.7
67.5°	471.9	473.2	471.9	475.9	495.6	528.4	896.5	4185.4	18426.8	23867.5	22422.9
70°	436.4	439.0	432.5	432.5	448.2	449.6	561.3	2295.1	17824.7	26738.4	26358.5
72.5°	394.4	398.3	387.8	385.2	397.0	391.7	422.0	1101.6	15303.5	27595.5	28594.5
75°	357.5	362.8	339.1	332.6	332.6	328.6	343.1	565.2	9932.4	22510.9	24077.8
77.5°	324.7	335.2	297.1	276.0	270.8	259.0	280.0	345.7	4344.4	10568.6	10349.1
80°	268.2	282.6	244.5	219.5	210.3	197.2	220.8	241.9	1292.2	2454.2	2350.3
82.5°	199.8	206.4	173.5	156.4	148.5	139.3	165.6	168.3	420.6	868.9	981.9
85°	127.5	130.1	106.5	92.0	88.1	84.1	105.2	92.0	160.4	638.9	928.0
87.5°	44.7	51.3	40.7	36.8	39.4	32.9	48.6	27.6	44.7	450.9	558.7
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)