

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: P884155

Luminaire Tested: **NAV-SB4D-830-U-T1**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884155  
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-830-U-T1  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

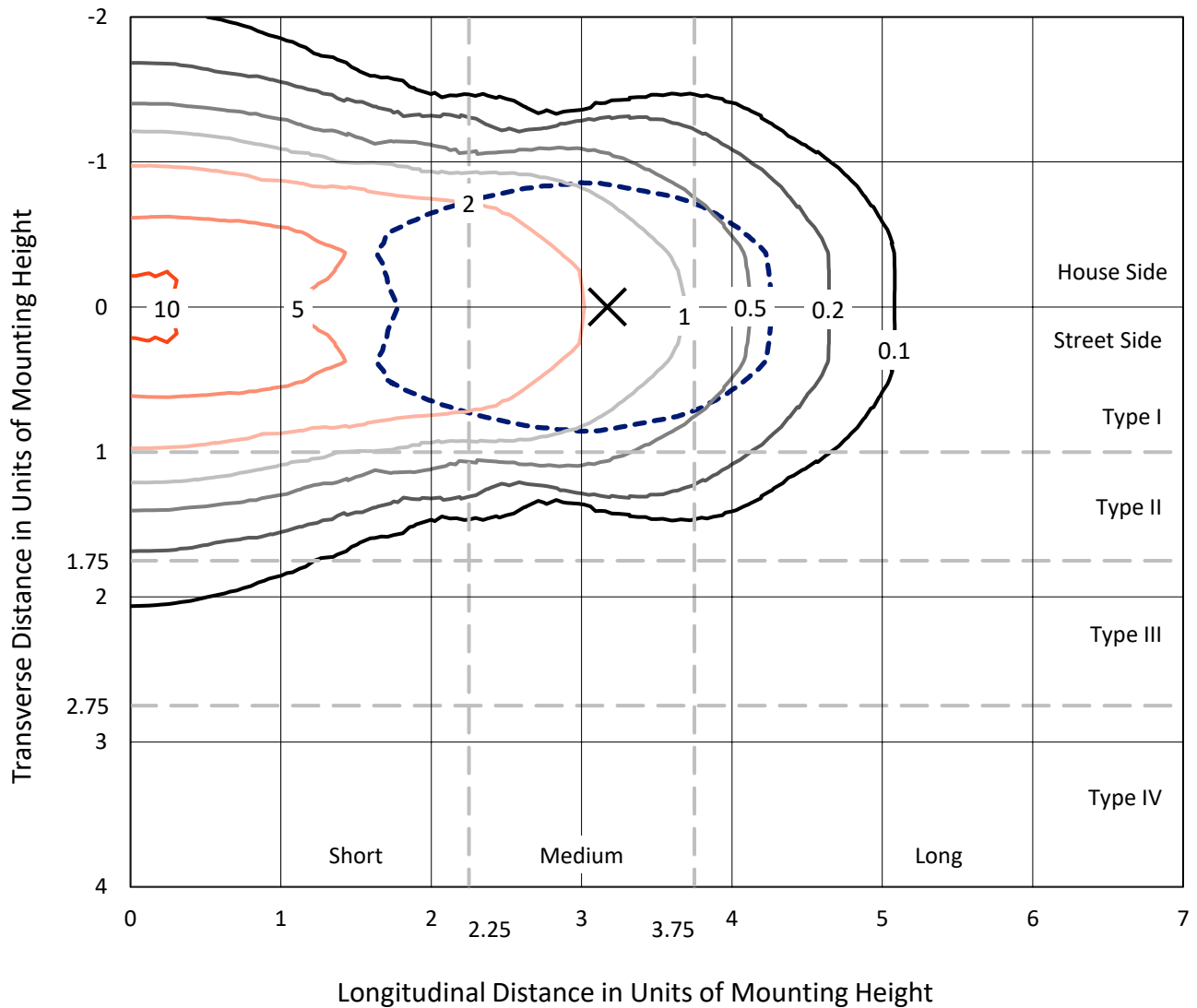
Lumens per Lamp: N/A  
Luminaire Lumens: 35698 lumens  
Efficiency: N/A  
Efficacy: 121.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B5 - U0 - G5  
  
Input Watts (W): 293.6  
Input Voltage (V): 120.0  
Input Current (Ain): 2.469  
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

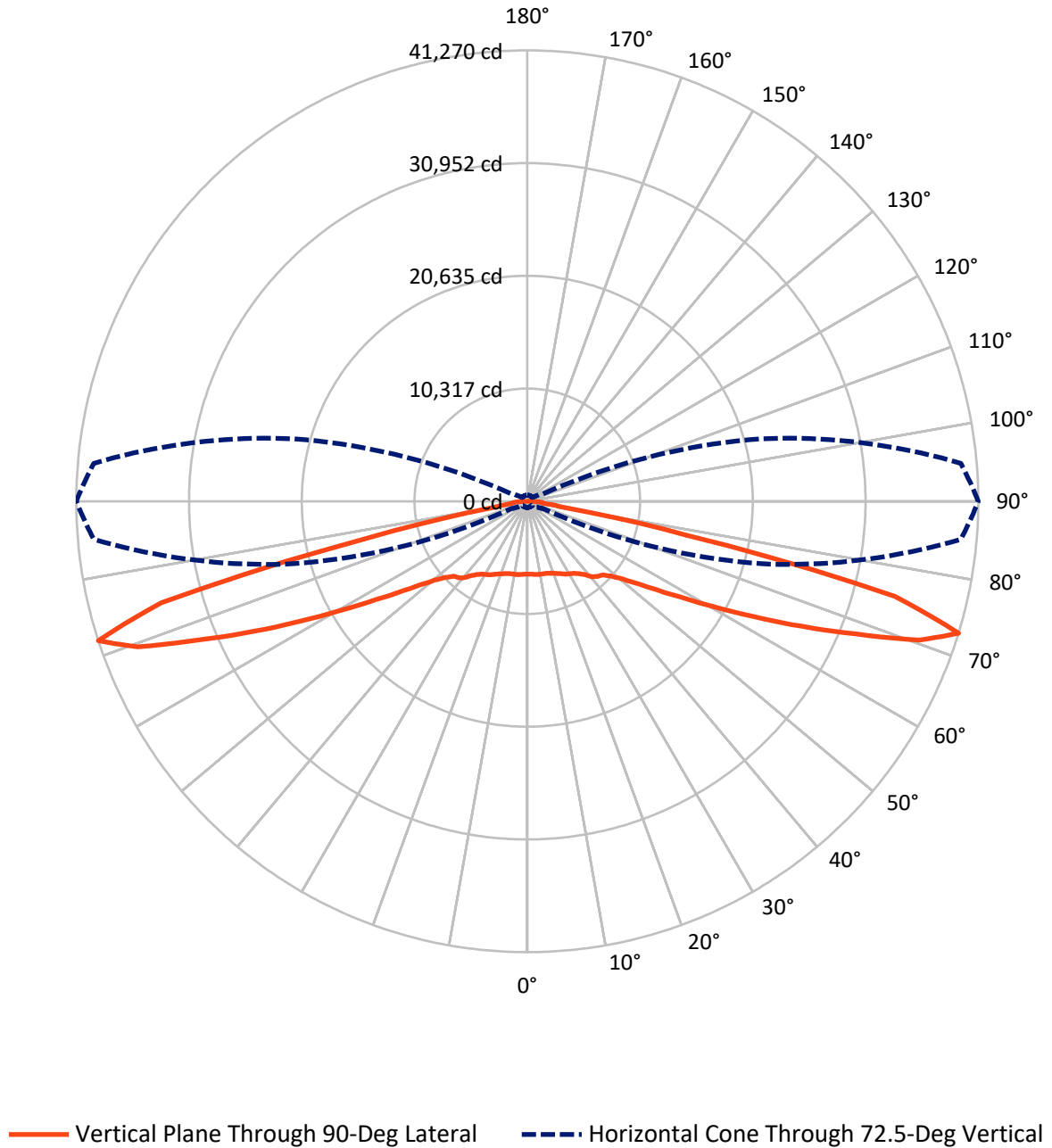
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.7 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	17849.0	0.0	17849.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	17849.0	0.0	17849.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	35698.0	0.0	35698.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	646.8	1.8
10°-20°	1977.6	5.5
20°-30°	3297.5	9.2
30°-40°	4535.1	12.7
40°-50°	5538.6	15.5
50°-60°	6406.0	17.9
60°-70°	7638.1	21.4
70°-80°	5330.9	14.9
80°-90°	327.4	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°	35698.0	100.0
0°-180°	35698.0	100.0



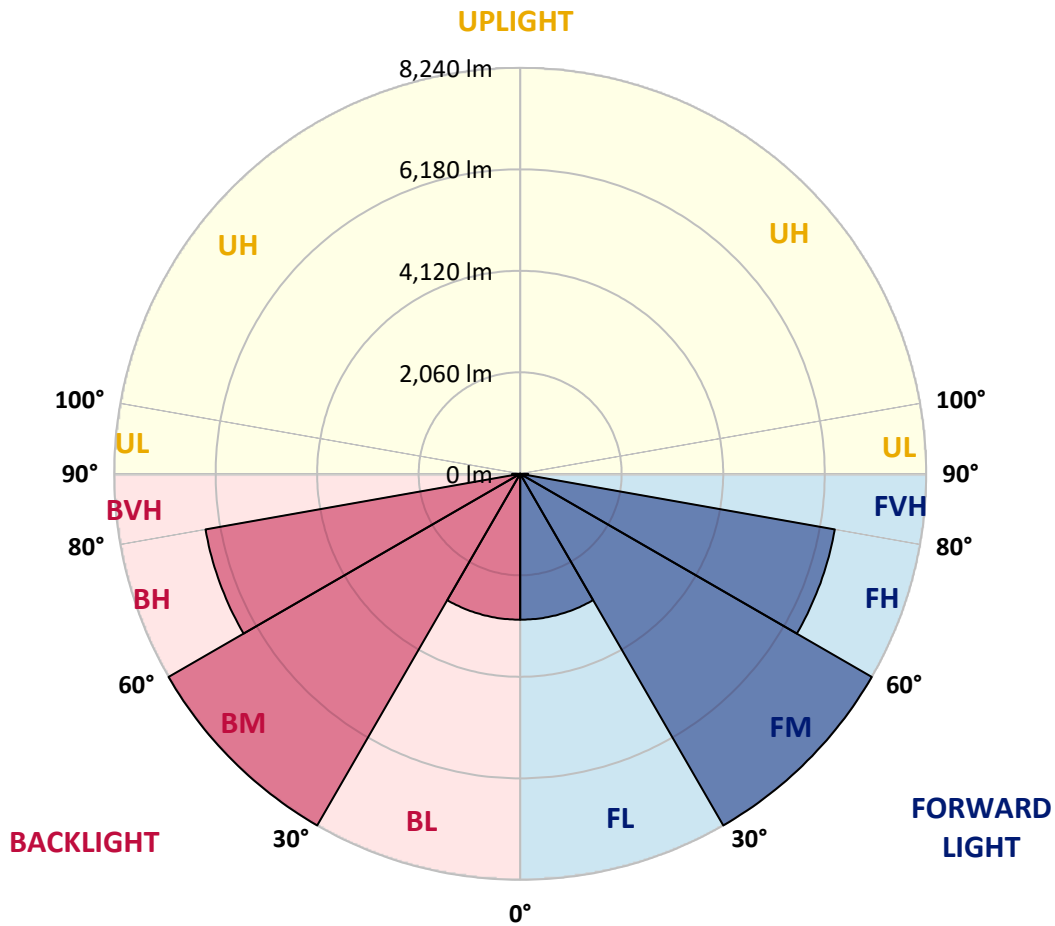
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2961.0	8.3			
FM (30°-60°)	8239.8	23.1			
FH (60°-80°)	6484.5	18.2			G3/7500
FVH (80°-90°)	163.7	0.5			G2/225
BL (0°-30°)	2961.0	8.3	B4/5000		
BM (30°-60°)	8239.8	23.1	B4/8500		
BH (60°-80°)	6484.5	18.2	B5		G5
BVH (80°-90°)	163.7	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°	6670.5	6670.5	6670.5	6670.5	6670.5	6670.5	6670.5	6670.5	6670.5	6670.5	6670.5
2.5°	6676.2	6683.8	6683.8	6678.1	6691.4	6680.0	6680.0	6674.3	6680.0	6674.3	6674.3
5°	6710.4	6719.9	6723.7	6721.8	6738.8	6729.4	6729.4	6721.8	6723.7	6718.0	6718.0
7.5°	6774.9	6788.2	6795.8	6805.2	6829.9	6818.5	6810.9	6788.2	6778.7	6763.5	6763.5
10°	6795.8	6810.9	6835.6	6884.9	6941.8	6943.7	6921.0	6864.1	6820.4	6786.3	6780.6
12.5°	6731.3	6752.1	6803.4	6903.9	7031.0	7082.2	7046.2	6951.3	6866.0	6805.2	6795.8
15°	6649.7	6672.4	6750.2	6902.0	7089.8	7209.4	7205.6	7080.3	6943.7	6848.9	6833.7
17.5°	6522.6	6545.3	6657.3	6869.8	7135.4	7332.7	7385.8	7256.8	7065.2	6938.1	6917.2
20°	6293.0	6313.9	6469.4	6767.3	7150.5	7463.6	7602.1	7488.2	7249.2	7076.5	7044.3
22.5°	5995.1	6027.4	6209.5	6590.9	7114.5	7600.2	7848.7	7770.9	7463.6	7224.5	7180.9
25°	5676.4	5710.6	5923.1	6374.6	7021.5	7698.8	8140.9	8091.5	7706.4	7408.6	7347.8
27.5°	5401.3	5437.4	5668.8	6160.2	6877.3	7736.8	8429.3	8453.9	8000.5	7611.6	7547.1
30°	5185.0	5219.2	5465.8	5987.6	6691.4	7698.8	8681.6	8852.3	8300.2	7788.0	7695.0
32.5°	4947.9	4991.5	5251.4	5777.0	6471.3	7607.8	8901.7	9283.0	8647.4	7977.7	7860.1
35°	4648.1	4688.0	4961.2	5488.6	6183.0	7461.7	9085.7	9761.1	9144.5	8266.1	8135.2
37.5°	4283.9	4321.8	4593.1	5128.1	5896.5	7256.8	9226.1	10299.9	9736.4	8681.6	8507.0
40°	3917.7	3953.8	4208.0	4725.9	5553.1	6995.0	9275.4	10827.3	10415.6	9252.6	9066.7
42.5°	3581.9	3614.2	3847.5	4329.4	5168.0	6661.1	9210.9	11286.4	11024.6	9651.0	9412.0
45°	3272.7	3301.1	3507.9	3957.6	4767.7	6255.1	9017.4	11779.7	11749.3	9935.6	9613.1
47.5°	2919.8	2948.2	3162.6	3597.1	4367.3	5778.9	8689.2	12265.4	12756.8	10580.7	10208.8
50°	2489.1	2513.8	2733.9	3181.6	3951.9	5272.3	8233.8	12646.7	14027.9	11557.7	11091.0
52.5°	1978.8	2005.3	2219.7	2667.5	3458.6	4727.8	7634.3	12895.3	15496.3	12984.4	12409.6
55°	1472.2	1491.2	1677.1	2079.3	2847.7	4107.4	6883.0	12965.5	17162.1	14934.7	14215.7
57.5°	1068.1	1079.5	1199.0	1498.8	2159.0	3331.5	5970.5	12783.3	19144.6	17435.2	16530.3
60°	865.1	868.9	905.0	1037.8	1500.7	2455.0	4868.2	12157.2	21296.0	20658.6	19518.4
62.5°	785.4	785.4	794.9	831.0	1015.0	1620.2	3534.5	10859.6	23603.0	24731.9	23204.6
65°	730.4	730.4	734.2	751.3	800.6	1032.1	2231.1	8746.1	25547.7	29503.3	27572.0
67.5°	681.1	683.0	681.1	686.8	715.2	762.7	1293.9	6040.7	26594.9	34447.4	32362.4
70°	629.9	633.7	624.2	624.2	646.9	648.8	810.1	3312.5	25726.0	38590.9	38042.6
72.5°	569.2	574.9	559.7	555.9	573.0	565.4	609.0	1589.9	22087.2	39827.9	41269.7
75°	516.0	523.6	489.5	480.0	480.0	474.3	495.2	815.8	14335.2	32489.5	34751.0
77.5°	468.6	483.8	428.8	398.4	390.8	373.7	404.1	499.0	6270.2	15253.5	14936.6
80°	387.0	407.9	352.9	316.8	303.6	284.6	318.7	349.1	1864.9	3542.1	3392.2
82.5°	288.4	297.9	250.4	225.8	214.4	201.1	239.0	242.8	607.1	1254.0	1417.2
85°	184.0	187.8	153.7	132.8	127.1	121.4	151.8	132.8	231.5	922.0	1339.4
87.5°	64.5	74.0	58.8	53.1	56.9	47.4	70.2	39.8	64.5	650.7	806.3
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)