

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: P884325

Luminaire Tested: **NAV-SB5A-830-U-T1**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884325  
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-SB5A-830-U-T1  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

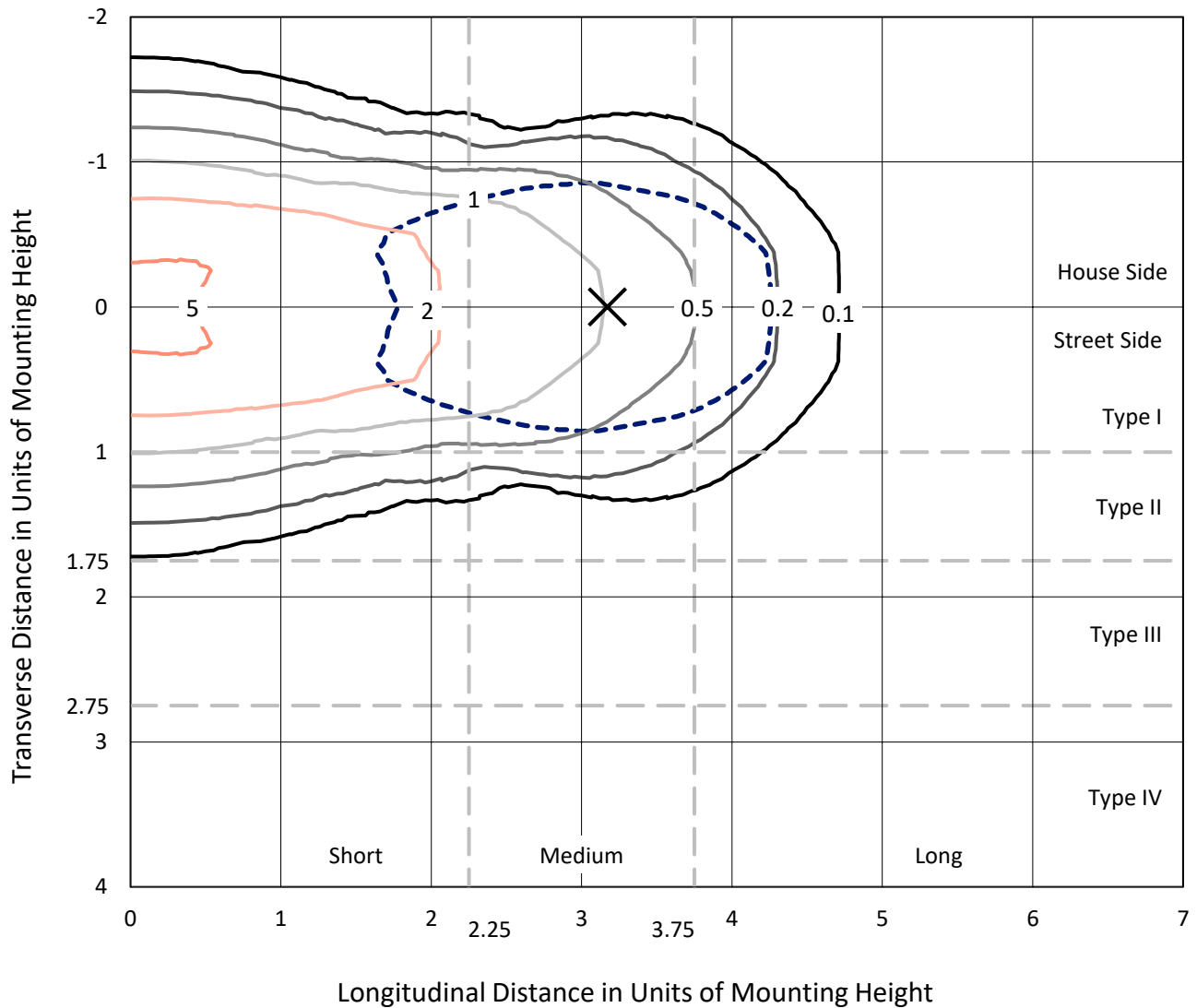
Lumens per Lamp: N/A  
Luminaire Lumens: 19703 lumens  
Efficiency: N/A  
Efficacy: 139.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B4 - U0 - G4  
  
Input Watts (W): 141.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.201  
Voltage Rise (V): NR  
Power Factor: 0.992  
Total Harmonic Distortion (THDi): 10.503  
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

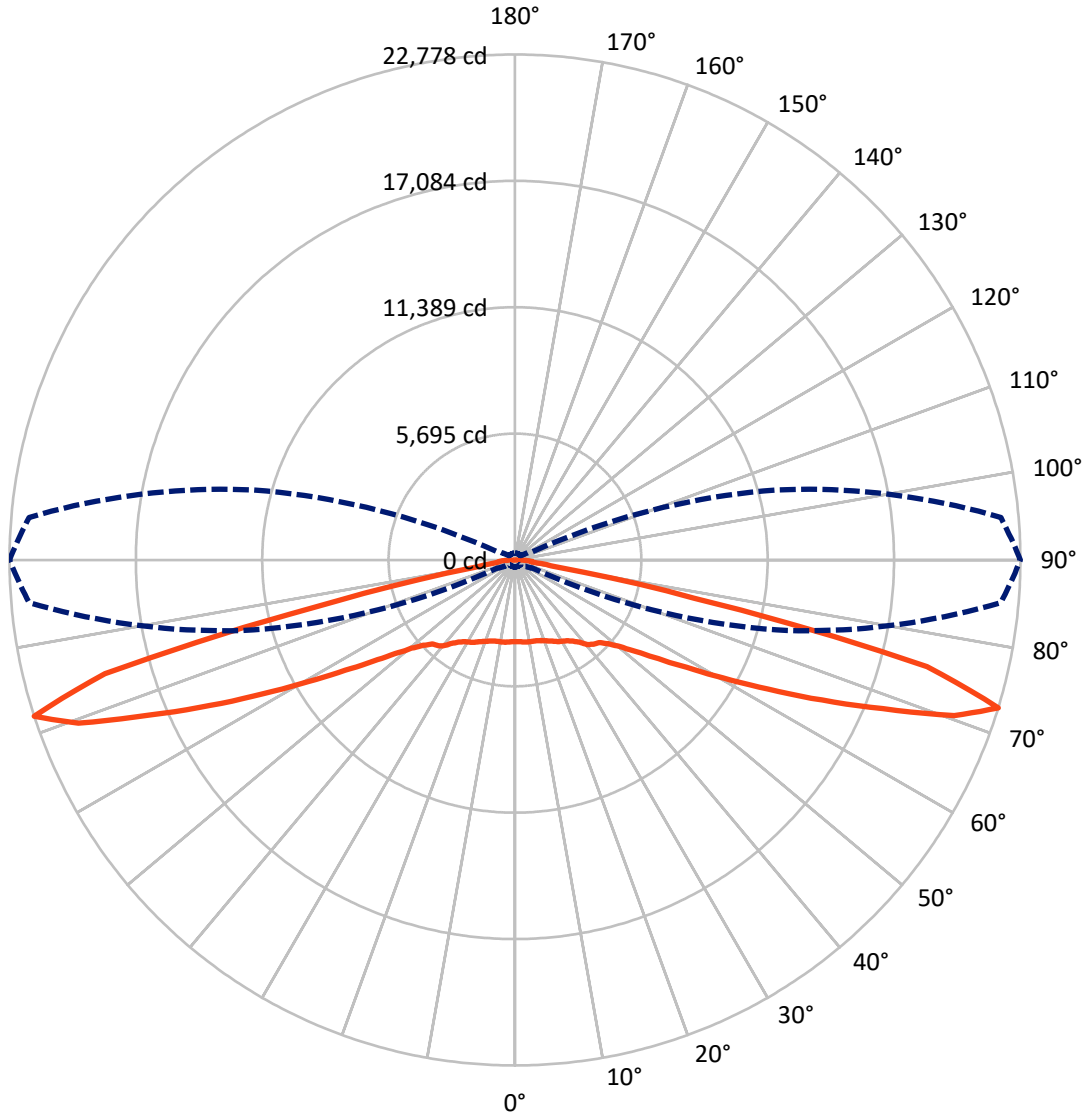
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
 Type I - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9851.5	0.0	9851.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	9851.5	0.0	9851.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	19703.0	0.0	19703.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	357.0	1.8
10°-20°	1091.5	5.5
20°-30°	1820.0	9.2
30°-40°	2503.1	12.7
40°-50°	3057.0	15.5
50°-60°	3535.7	17.9
60°-70°	4215.7	21.4
70°-80°	2942.3	14.9
80°-90°	180.7	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°	19703.0	100.0
0°-180°	19703.0	100.0



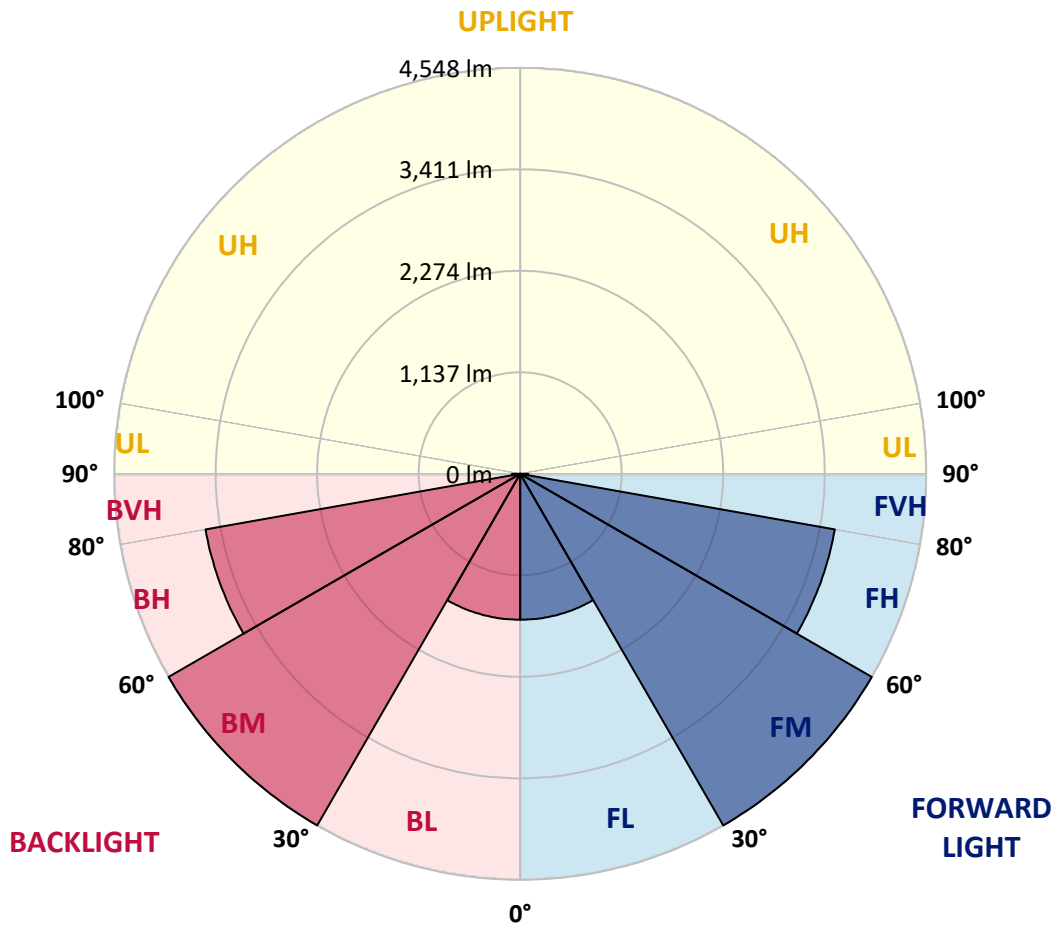
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1634.3	8.3			
FM (30°-60°)	4547.9	23.1			
FH (60°-80°)	3579.0	18.2			G2/5000
FVH (80°-90°)	90.4	0.5			G1/100
BL (0°-30°)	1634.3	8.3	B3/2500		
BM (30°-60°)	4547.9	23.1	B3/5000		
BH (60°-80°)	3579.0	18.2	B4/5000		G4/5000
BVH (80°-90°)	90.4	0.5			G1/100
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°	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7
2.5°	3684.9	3689.0	3689.0	3685.9	3693.2	3686.9	3686.9	3683.8	3686.9	3683.8	3683.8
5°	3703.7	3708.9	3711.0	3710.0	3719.4	3714.2	3714.2	3710.0	3711.0	3707.9	3707.9
7.5°	3739.3	3746.6	3750.8	3756.1	3769.7	3763.4	3759.2	3746.6	3741.4	3733.0	3733.0
10°	3750.8	3759.2	3772.8	3800.0	3831.5	3832.5	3819.9	3788.5	3764.4	3745.6	3742.4
12.5°	3715.2	3726.7	3755.0	3810.5	3880.7	3908.9	3889.0	3836.7	3789.6	3756.1	3750.8
15°	3670.2	3682.8	3725.7	3809.5	3913.1	3979.1	3977.0	3907.9	3832.5	3780.1	3771.8
17.5°	3600.0	3612.6	3674.4	3791.7	3938.3	4047.2	4076.5	4005.3	3899.5	3829.4	3817.8
20°	3473.3	3484.9	3570.7	3735.1	3946.6	4119.4	4195.9	4133.0	4001.1	3905.8	3888.0
22.5°	3308.9	3326.7	3427.3	3637.7	3926.7	4194.8	4332.0	4289.0	4119.4	3987.5	3963.4
25°	3133.0	3151.9	3269.1	3518.4	3875.4	4249.3	4493.2	4466.0	4253.4	4089.0	4055.5
27.5°	2981.2	3001.1	3128.8	3400.0	3795.9	4270.2	4652.4	4666.0	4415.8	4201.1	4165.5
30°	2861.8	2880.7	3016.8	3304.7	3693.2	4249.3	4791.7	4885.9	4581.2	4298.5	4247.2
32.5°	2730.9	2755.0	2898.5	3188.5	3571.8	4199.0	4913.1	5123.6	4772.8	4403.2	4338.3
35°	2565.5	2587.5	2738.2	3029.4	3412.6	4118.4	5014.7	5387.5	5047.2	4562.4	4490.1
37.5°	2364.4	2385.4	2535.1	2830.4	3254.5	4005.3	5092.2	5684.9	5373.9	4791.7	4695.3
40°	2162.3	2182.2	2322.5	2608.4	3065.0	3860.8	5119.4	5976.0	5748.8	5106.9	5004.2
42.5°	1977.0	1994.8	2123.6	2389.6	2852.4	3676.5	5083.8	6229.4	6084.9	5326.8	5194.8
45°	1806.3	1822.0	1936.1	2184.3	2631.4	3452.4	4977.0	6501.6	6484.9	5483.8	5305.8
47.5°	1611.5	1627.2	1745.6	1985.4	2410.5	3189.6	4795.9	6769.7	7040.9	5839.9	5634.6
50°	1373.8	1387.4	1508.9	1756.0	2181.2	2910.0	4544.5	6980.2	7742.5	6379.1	6121.5
52.5°	1092.2	1106.8	1225.1	1472.3	1908.9	2609.5	4213.7	7117.4	8553.0	7166.6	6849.3
55°	812.6	823.0	925.7	1147.7	1571.7	2267.0	3799.0	7156.1	9472.3	8243.0	7846.2
57.5°	589.5	595.8	661.8	827.2	1191.6	1838.8	3295.3	7055.6	10566.6	9623.1	9123.7
60°	477.5	479.6	499.5	572.8	828.3	1355.0	2686.9	6710.0	11754.0	11402.2	10772.9
62.5°	433.5	433.5	438.7	458.6	560.2	894.3	1950.8	5993.8	13027.4	13650.4	12807.5
65°	403.1	403.1	405.2	414.7	441.9	569.6	1231.4	4827.3	14100.7	16283.9	15218.0
67.5°	375.9	377.0	375.9	379.1	394.8	420.9	714.1	3334.1	14678.7	19012.8	17862.0
70°	347.6	349.7	344.5	344.5	357.1	358.1	447.1	1828.3	14199.1	21299.7	20997.1
72.5°	314.1	317.3	308.9	306.8	316.2	312.0	336.1	877.5	12190.7	21982.4	22778.2
75°	284.8	289.0	270.2	264.9	264.9	261.8	273.3	450.3	7912.1	17932.1	19180.3
77.5°	258.6	267.0	236.7	219.9	215.7	206.3	223.0	275.4	3460.8	8418.9	8244.1
80°	213.6	225.1	194.8	174.9	167.5	157.1	175.9	192.7	1029.3	1955.0	1872.3
82.5°	159.2	164.4	138.2	124.6	118.3	111.0	131.9	134.0	335.1	692.2	782.2
85°	101.6	103.7	84.8	73.3	70.2	67.0	83.8	73.3	127.8	508.9	739.3
87.5°	35.6	40.8	32.5	29.3	31.4	26.2	38.7	22.0	35.6	359.2	445.0
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)