

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: P882795

Luminaire Tested: **NAV-SB2D-830-U-T1**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882795
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-SB2D-830-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 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: 17952 lumens
Efficiency: N/A
Efficacy: 121.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

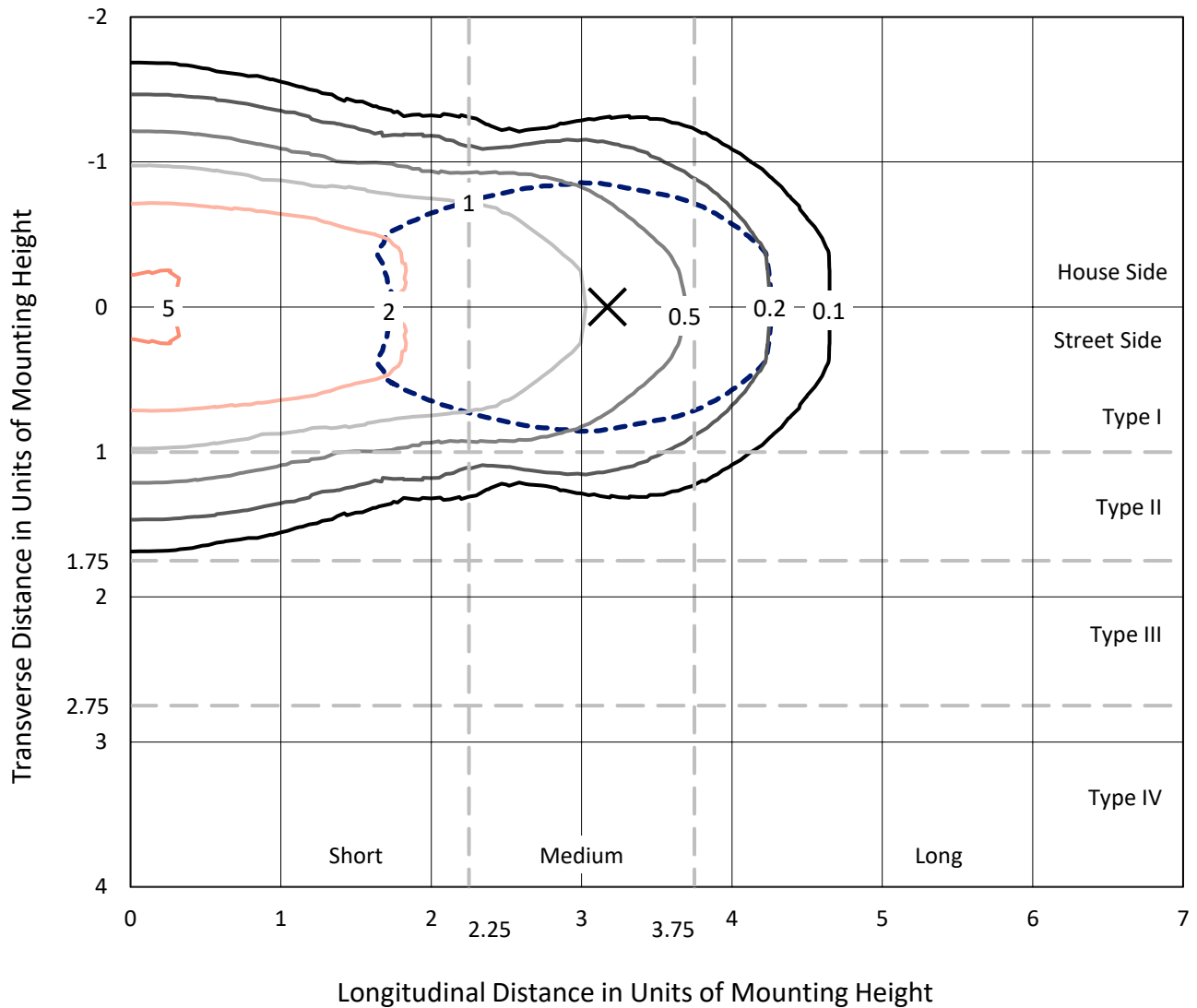
Input Watts (W): 147.6
Input Voltage (V): 120.0
Input Current (Ain): 1.234
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

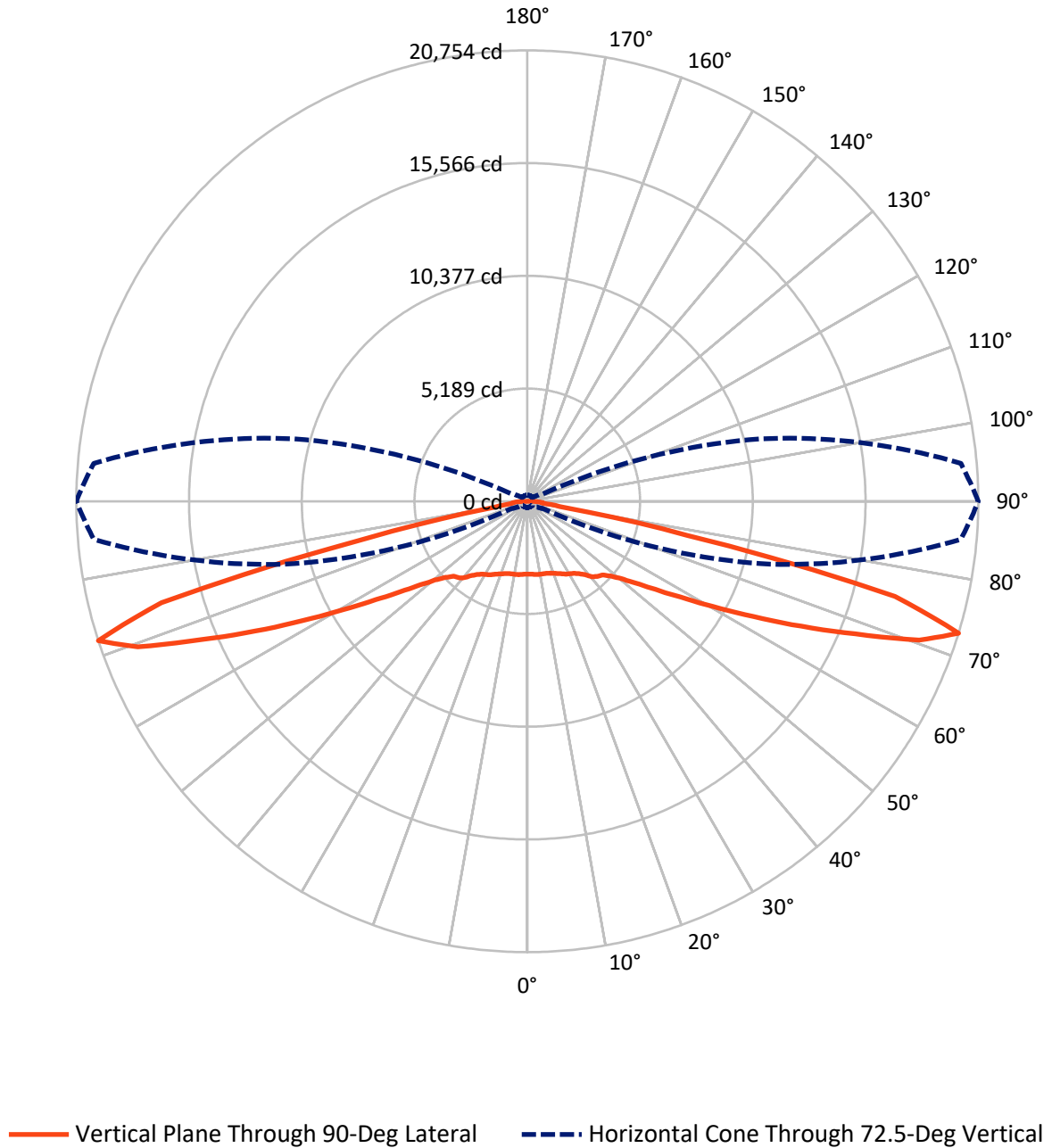
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8976.0	0.0	8976.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	8976.0	0.0	8976.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	17952.0	0.0	17952.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	325.3	1.8
10°-20°	994.5	5.5
20°-30°	1658.3	9.2
30°-40°	2280.6	12.7
40°-50°	2785.3	15.5
50°-60°	3221.5	17.9
60°-70°	3841.1	21.4
70°-80°	2680.8	14.9
80°-90°	164.7	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°	17952.0	100.0
0°-180°	17952.0	100.0

Coefficient of Utilization



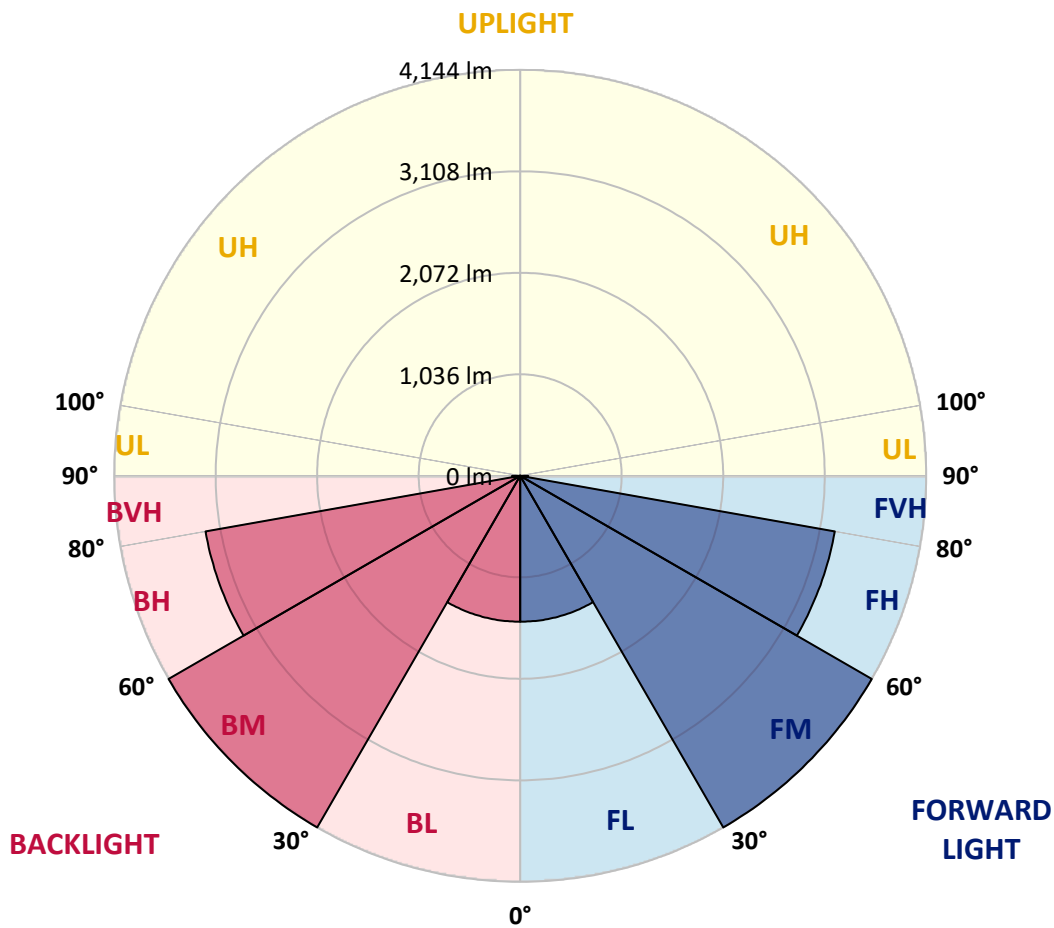
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1489.0	8.3			
FM (30°-60°)	4143.7	23.1			
FH (60°-80°)	3261.0	18.2			G2/5000
FVH (80°-90°)	82.3	0.5			G1/100
BL (0°-30°)	1489.0	8.3	B3/2500		
BM (30°-60°)	4143.7	23.1	B3/5000		
BH (60°-80°)	3261.0	18.2	B4/5000		G4/5000
BVH (80°-90°)	82.3	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°	3354.5	3354.5	3354.5	3354.5	3354.5	3354.5	3354.5	3354.5	3354.5	3354.5	3354.5
2.5°	3357.4	3361.2	3361.2	3358.3	3365.0	3359.3	3359.3	3356.4	3359.3	3356.4	3356.4
5°	3374.6	3379.3	3381.2	3380.3	3388.9	3384.1	3384.1	3380.3	3381.2	3378.4	3378.4
7.5°	3407.0	3413.7	3417.5	3422.3	3434.7	3428.9	3425.1	3413.7	3408.9	3401.3	3401.3
10°	3417.5	3425.1	3437.5	3462.3	3491.0	3491.9	3480.5	3451.8	3429.9	3412.7	3409.9
12.5°	3385.1	3395.5	3421.3	3471.9	3535.8	3561.6	3543.4	3495.7	3452.8	3422.3	3417.5
15°	3344.0	3355.5	3394.6	3470.9	3565.4	3625.5	3623.6	3560.6	3491.9	3444.2	3436.6
17.5°	3280.1	3291.6	3347.8	3454.7	3588.3	3687.5	3714.2	3649.3	3553.0	3489.0	3478.6
20°	3164.7	3175.2	3253.4	3403.2	3595.9	3753.3	3823.0	3765.7	3645.5	3558.7	3542.5
22.5°	3014.9	3031.1	3122.7	3314.4	3577.8	3822.0	3947.0	3907.9	3753.3	3633.1	3611.2
25°	2854.6	2871.8	2978.6	3205.7	3531.0	3871.6	4093.9	4069.1	3875.4	3725.7	3695.1
27.5°	2716.2	2734.4	2850.8	3097.9	3458.5	3890.7	4238.9	4251.3	4023.3	3827.7	3795.3
30°	2607.5	2624.7	2748.7	3011.1	3365.0	3871.6	4365.8	4451.7	4174.1	3916.5	3869.7
32.5°	2488.2	2510.2	2640.9	2905.2	3254.3	3825.8	4476.5	4668.3	4348.7	4011.9	3952.7
35°	2337.5	2357.5	2494.9	2760.1	3109.3	3752.4	4569.1	4908.7	4598.6	4156.9	4091.1
37.5°	2154.3	2173.4	2309.8	2578.9	2965.3	3649.3	4639.7	5179.7	4896.3	4365.8	4278.1
40°	1970.2	1988.3	2116.1	2376.6	2792.6	3517.7	4664.5	5444.9	5237.9	4653.0	4559.5
42.5°	1801.3	1817.5	1934.9	2177.2	2598.9	3349.8	4632.0	5675.8	5544.1	4853.4	4733.2
45°	1645.8	1660.1	1764.1	1990.2	2397.6	3145.6	4534.7	5923.8	5908.6	4996.5	4834.3
47.5°	1468.3	1482.6	1590.4	1808.9	2196.3	2906.1	4369.7	6168.1	6415.2	5320.9	5133.9
50°	1251.7	1264.1	1374.8	1600.0	1987.3	2651.4	4140.7	6359.9	7054.4	5812.2	5577.5
52.5°	995.1	1008.5	1116.3	1341.4	1739.3	2377.5	3839.2	6484.8	7792.9	6529.7	6240.6
55°	740.4	749.9	843.4	1045.7	1432.1	2065.6	3461.4	6520.1	8630.5	7510.5	7148.9
57.5°	537.1	542.9	603.0	753.7	1085.7	1675.4	3002.5	6428.5	9627.6	8767.9	8312.8
60°	435.1	437.0	455.1	521.9	754.7	1234.6	2448.2	6113.7	10709.5	10388.9	9815.5
62.5°	395.0	395.0	399.8	417.9	510.4	814.8	1777.4	5461.1	11869.6	12437.3	11669.3
65°	367.3	367.3	369.2	377.8	402.6	519.0	1122.0	4398.3	12847.5	14836.8	13865.5
67.5°	342.5	343.5	342.5	345.4	359.7	383.5	650.7	3037.8	13374.2	17323.1	16274.6
70°	316.8	318.7	313.9	313.9	325.3	326.3	407.4	1665.8	12937.2	19406.8	19131.1
72.5°	286.2	289.1	281.5	279.5	288.1	284.3	306.3	799.5	11107.3	20028.9	20754.0
75°	259.5	263.3	246.2	241.4	241.4	238.5	249.0	410.3	7209.0	16338.5	17475.8
77.5°	235.7	243.3	215.6	200.4	196.5	188.0	203.2	250.9	3153.2	7670.7	7511.4
80°	194.6	205.1	177.5	159.3	152.7	143.1	160.3	175.5	937.9	1781.3	1705.9
82.5°	145.0	149.8	125.9	113.5	107.8	101.1	120.2	122.1	305.3	630.6	712.7
85°	92.5	94.5	77.3	66.8	63.9	61.1	76.3	66.8	116.4	463.7	673.6
87.5°	32.4	37.2	29.6	26.7	28.6	23.9	35.3	20.0	32.4	327.2	405.5
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)