

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: P883645

Luminaire Tested: **NAV-SB4A-830-U-T1**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883645
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-SB4A-830-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 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: 15736 lumens
Efficiency: N/A
Efficacy: 138.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

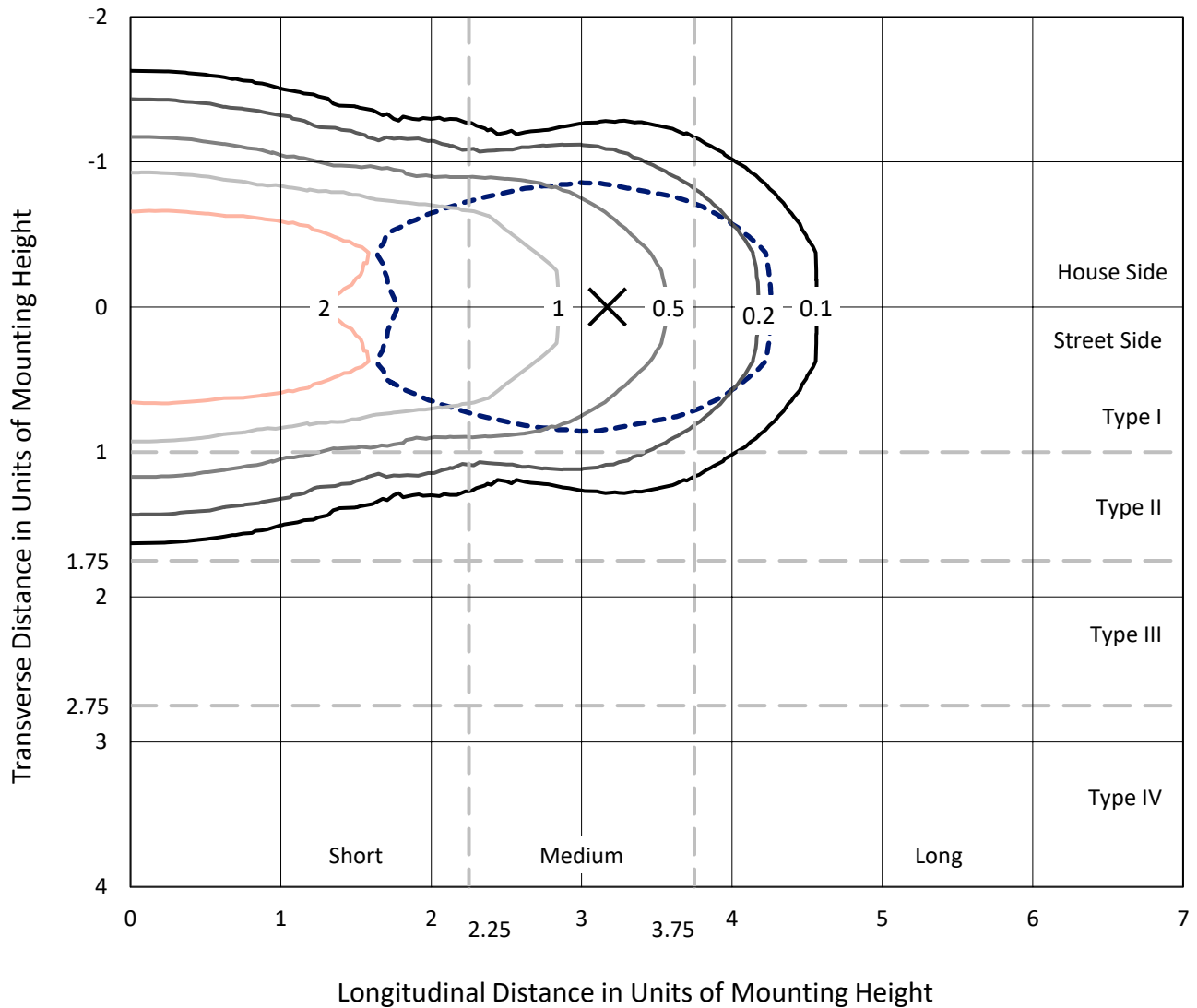
Input Watts (W): 114
Input Voltage (V): 120.0
Input Current (Ain): 0.952
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.206
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P883645
 CATALOG NUMBER: NAV-SB4A-830-U-T1

Iso-Footcandle Lines of Horizontal Illumination

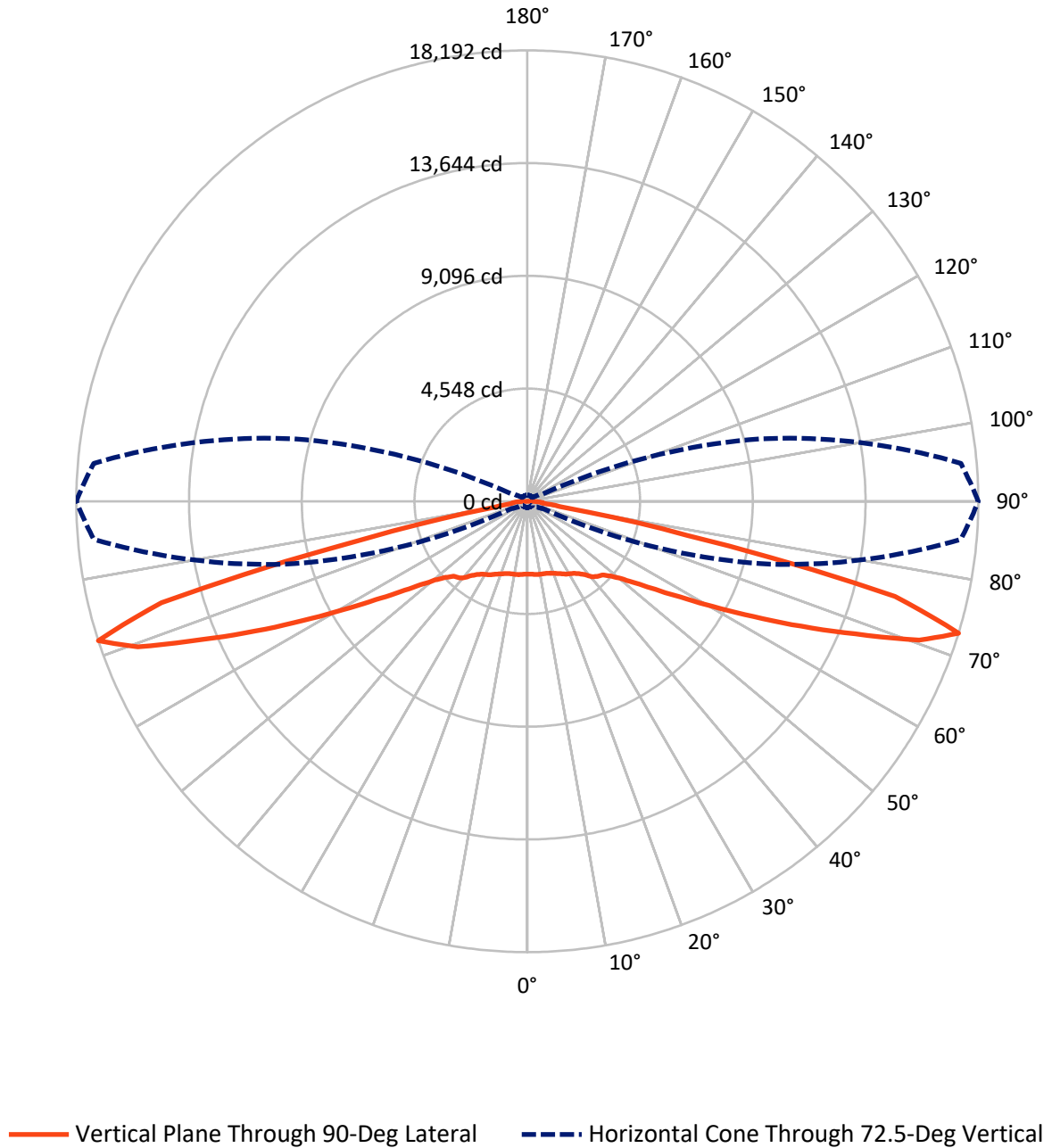
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type I - Short - N/A

REPORT NUMBER: P883645
CATALOG NUMBER: NAV-SB4A-830-U-T1

Luminous Intensity Polar Plot



REPORT NUMBER: P883645
 CATALOG NUMBER: NAV-SB4A-830-U-T1

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7868.0	0.0	7868.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	7868.0	0.0	7868.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	15736.0	0.0	15736.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.1	1.8
10°-20°	871.8	5.5
20°-30°	1453.6	9.2
30°-40°	1999.1	12.7
40°-50°	2441.5	15.5
50°-60°	2823.8	17.9
60°-70°	3366.9	21.4
70°-80°	2349.9	14.9
80°-90°	144.3	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°	15736.0	100.0
0°-180°	15736.0	100.0

Coefficient of Utilization



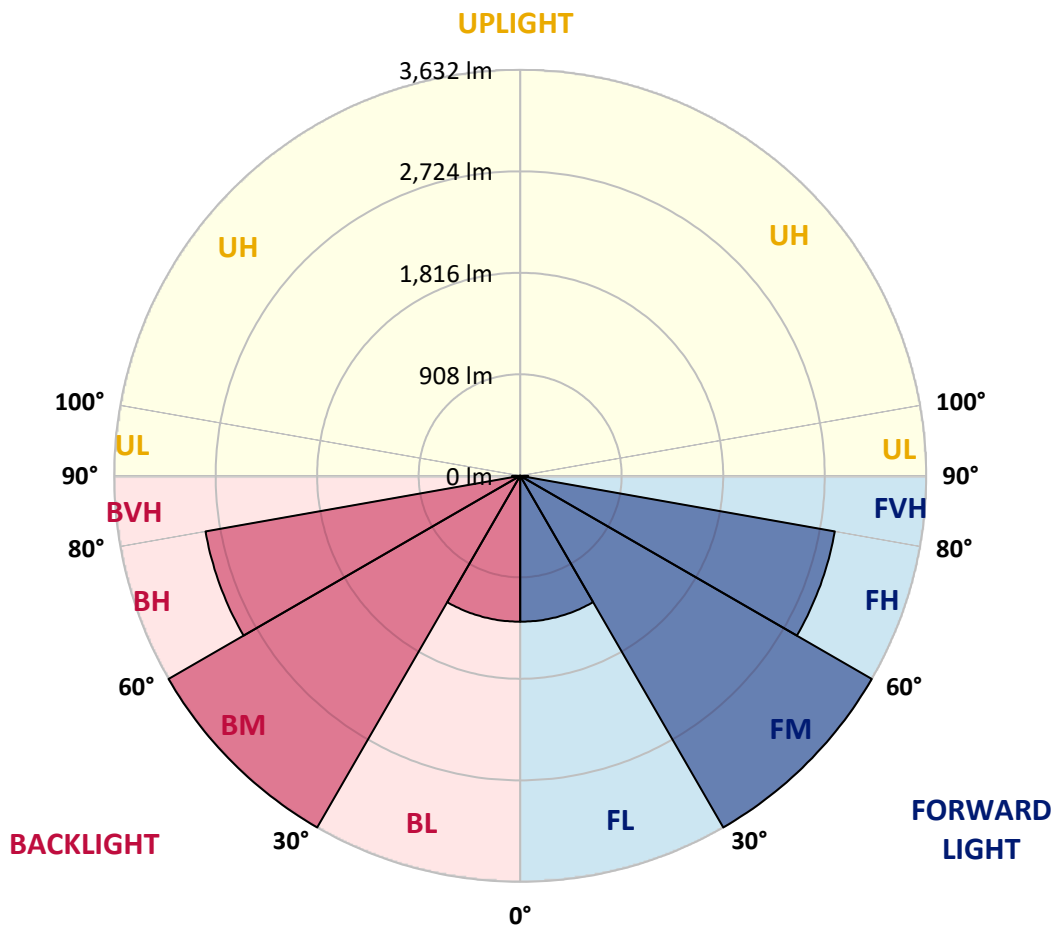
REPORT NUMBER: P883645
 CATALOG NUMBER: NAV-SB4A-830-U-T1

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1305.2	8.3			
FM (30°-60°)	3632.2	23.1			
FH (60°-80°)	2858.4	18.2			G2/5000
FVH (80°-90°)	72.2	0.5			G1/100
BL (0°-30°)	1305.2	8.3	B3/2500		
BM (30°-60°)	3632.2	23.1	B3/5000		
BH (60°-80°)	2858.4	18.2	B4/5000		G4/5000
BVH (80°-90°)	72.2	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



REPORT NUMBER: P883645
 CATALOG NUMBER: NAV-SB4A-830-U-T1

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2940.4	2940.4	2940.4	2940.4	2940.4	2940.4	2940.4	2940.4	2940.4	2940.4	2940.4
2.5°	2942.9	2946.3	2946.3	2943.8	2949.6	2944.6	2944.6	2942.1	2944.6	2942.1	2942.1
5°	2958.0	2962.2	2963.9	2963.0	2970.5	2966.4	2966.4	2963.0	2963.9	2961.3	2961.3
7.5°	2986.4	2992.3	2995.6	2999.8	3010.7	3005.7	3002.3	2992.3	2988.1	2981.4	2981.4
10°	2995.6	3002.3	3013.2	3034.9	3060.0	3060.9	3050.8	3025.7	3006.5	2991.5	2988.9
12.5°	2967.2	2976.4	2999.0	3043.3	3099.3	3121.9	3106.0	3064.2	3026.6	2999.8	2995.6
15°	2931.2	2941.3	2975.6	3042.5	3125.3	3177.9	3176.3	3121.1	3060.9	3019.1	3012.4
17.5°	2875.2	2885.2	2934.6	3028.2	3145.3	3232.3	3255.7	3198.9	3114.4	3058.4	3049.2
20°	2774.0	2783.2	2851.8	2983.1	3152.0	3290.0	3351.1	3300.9	3195.5	3119.4	3105.2
22.5°	2642.7	2656.9	2737.2	2905.3	3136.1	3350.2	3459.8	3425.5	3290.0	3184.6	3165.4
25°	2502.2	2517.3	2610.9	2810.0	3095.2	3393.7	3588.6	3566.8	3397.1	3265.8	3239.0
27.5°	2381.0	2396.8	2498.9	2715.5	3031.6	3410.4	3715.7	3726.6	3526.7	3355.2	3326.8
30°	2285.6	2300.7	2409.4	2639.4	2949.6	3393.7	3826.9	3902.2	3658.8	3433.0	3392.0
32.5°	2181.1	2200.3	2314.9	2546.5	2852.6	3353.6	3923.9	4092.0	3811.9	3516.6	3464.8
35°	2048.9	2066.5	2186.9	2419.4	2725.5	3289.2	4005.1	4302.8	4031.0	3643.8	3586.1
37.5°	1888.4	1905.1	2024.7	2260.5	2599.2	3198.9	4066.9	4540.3	4291.9	3826.9	3750.0
40°	1727.0	1742.9	1854.9	2083.2	2447.9	3083.4	4088.7	4772.8	4591.3	4078.6	3996.7
42.5°	1578.9	1593.2	1696.0	1908.4	2278.1	2936.3	4060.2	4975.2	4859.8	4254.3	4148.9
45°	1442.6	1455.2	1546.3	1744.5	2101.6	2757.3	3974.9	5192.6	5179.2	4379.7	4237.5
47.5°	1287.1	1299.6	1394.1	1585.6	1925.2	2547.4	3830.3	5406.7	5623.3	4664.1	4500.1
50°	1097.2	1108.1	1205.1	1402.5	1742.0	2324.1	3629.6	5574.8	6183.6	5094.8	4889.0
52.5°	872.3	884.0	978.5	1175.8	1524.6	2084.1	3365.3	5684.3	6830.9	5723.7	5470.3
55°	649.0	657.3	739.3	916.6	1255.3	1810.6	3034.1	5715.3	7565.2	6583.4	6266.4
57.5°	470.8	475.9	528.5	660.7	951.7	1468.5	2631.8	5635.0	8439.1	7685.6	7286.7
60°	381.4	383.0	398.9	457.5	661.5	1082.2	2146.0	5359.0	9387.5	9106.5	8603.9
62.5°	346.2	346.2	350.4	366.3	447.4	714.2	1558.0	4787.0	10404.4	10902.0	10228.8
65°	322.0	322.0	323.6	331.2	352.9	454.9	983.5	3855.4	11261.6	13005.3	12154.0
67.5°	300.2	301.1	300.2	302.7	315.3	336.2	570.4	2662.8	11723.3	15184.7	14265.6
70°	277.7	279.3	275.1	275.1	285.2	286.0	357.1	1460.2	11340.3	17011.2	16769.5
72.5°	250.9	253.4	246.7	245.0	252.6	249.2	268.5	700.8	9736.2	17556.5	18192.1
75°	227.5	230.8	215.8	211.6	211.6	209.1	218.3	359.6	6319.1	14321.7	15318.5
77.5°	206.6	213.3	189.0	175.6	172.3	164.8	178.1	219.9	2764.0	6723.9	6584.2
80°	170.6	179.8	155.6	139.7	133.8	125.4	140.5	153.9	822.1	1561.4	1495.3
82.5°	127.1	131.3	110.4	99.5	94.5	88.6	105.4	107.0	267.6	552.8	624.7
85°	81.1	82.8	67.7	58.5	56.0	53.5	66.9	58.5	102.0	406.4	590.4
87.5°	28.4	32.6	25.9	23.4	25.1	20.9	30.9	17.6	28.4	286.9	355.4
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)