

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: P883805

Luminaire Tested: **NAV-SB4B-827-U-T1**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883805
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-SB4B-827-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18343 lumens
Efficiency: N/A
Efficacy: 124.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

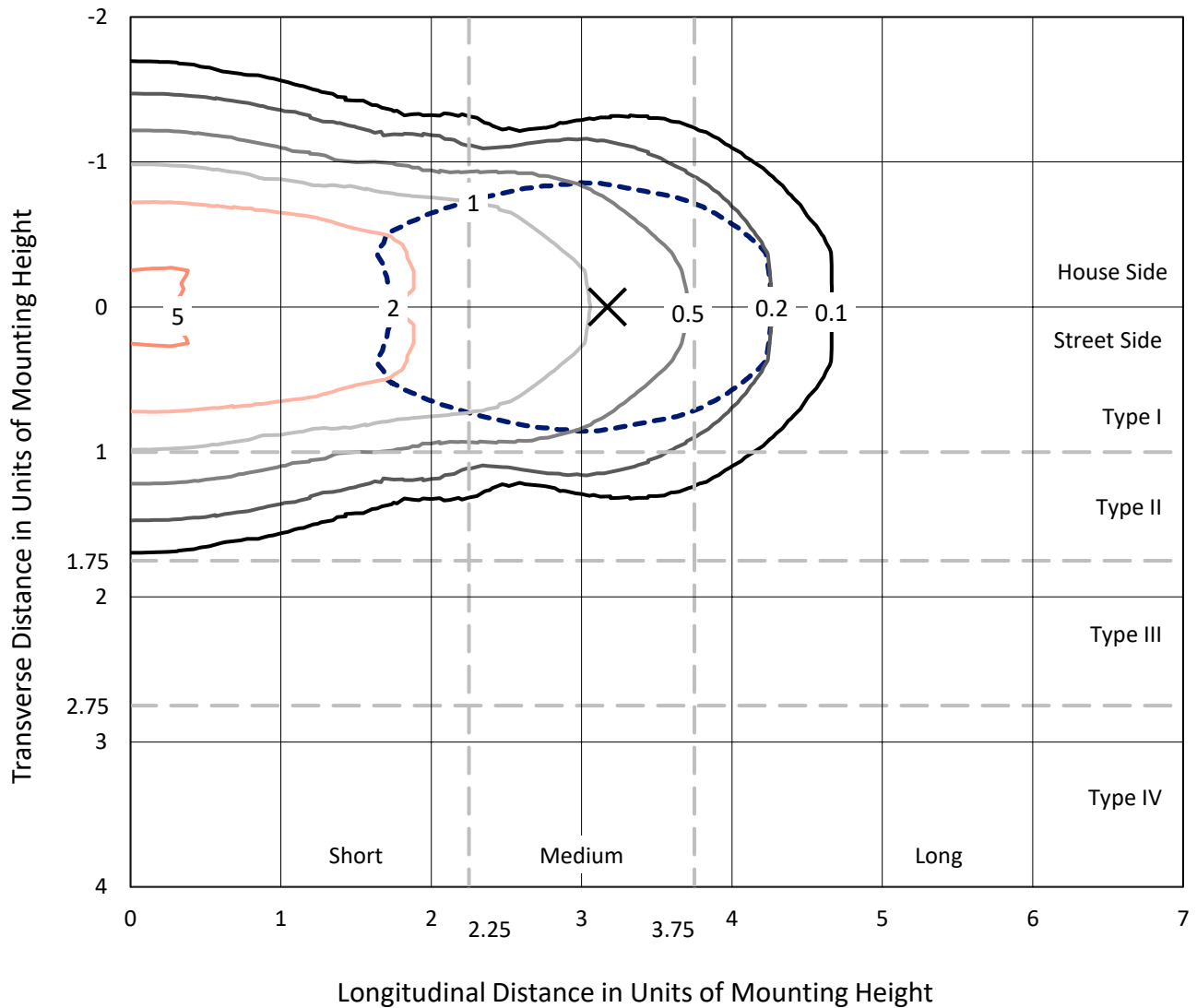
Input Watts (W): 147
Input Voltage (V): 120.0
Input Current (Ain): 1.255
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

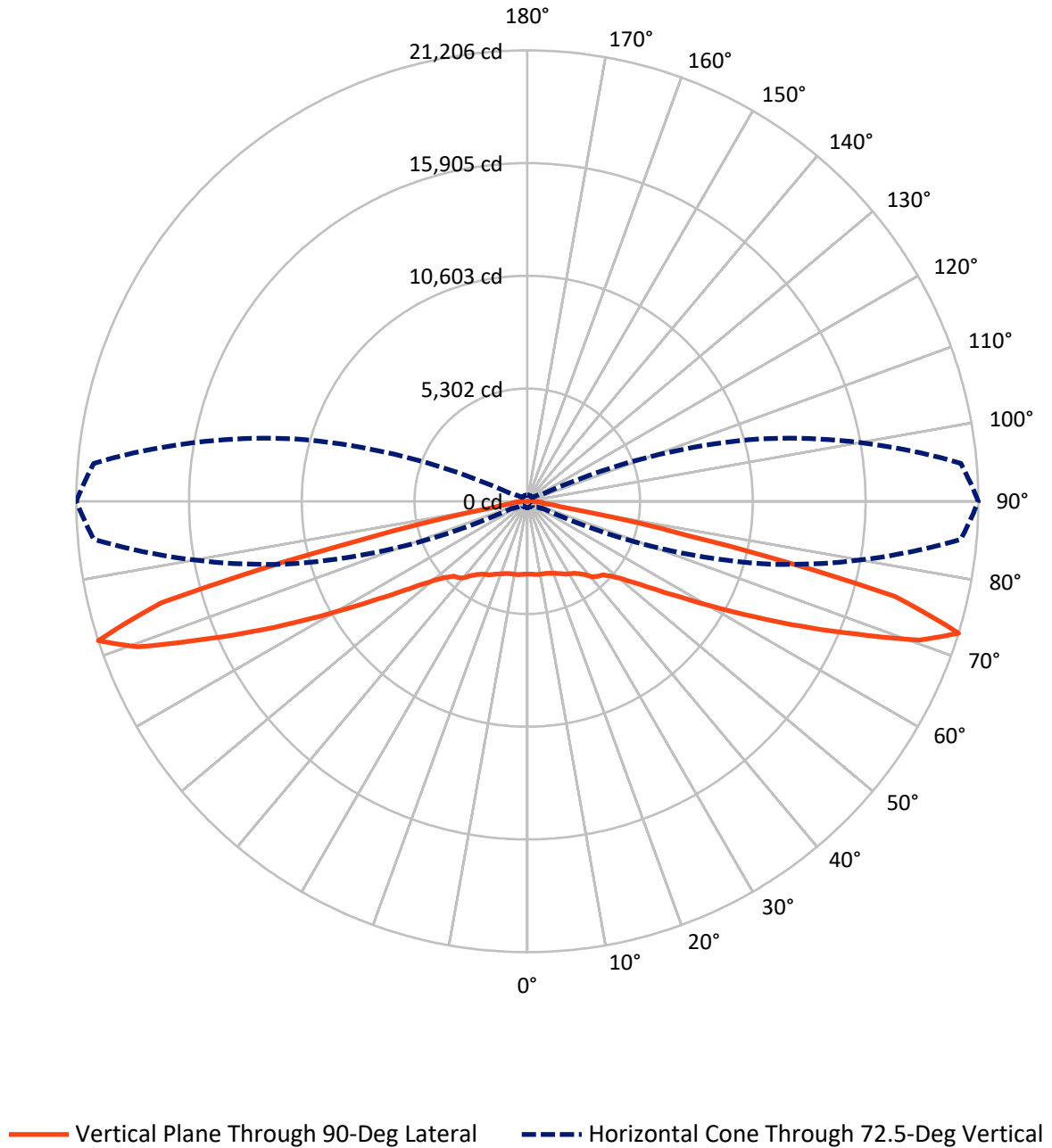
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 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	9171.5	0.0	9171.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9171.5	0.0	9171.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	18343.0	0.0	18343.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	332.3	1.8
10°-20°	1016.2	5.5
20°-30°	1694.4	9.2
30°-40°	2330.3	12.7
40°-50°	2845.9	15.5
50°-60°	3291.6	17.9
60°-70°	3924.7	21.4
70°-80°	2739.2	14.9
80°-90°	168.2	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°	18343.0	100.0
0°-180°	18343.0	100.0

Coefficient of Utilization



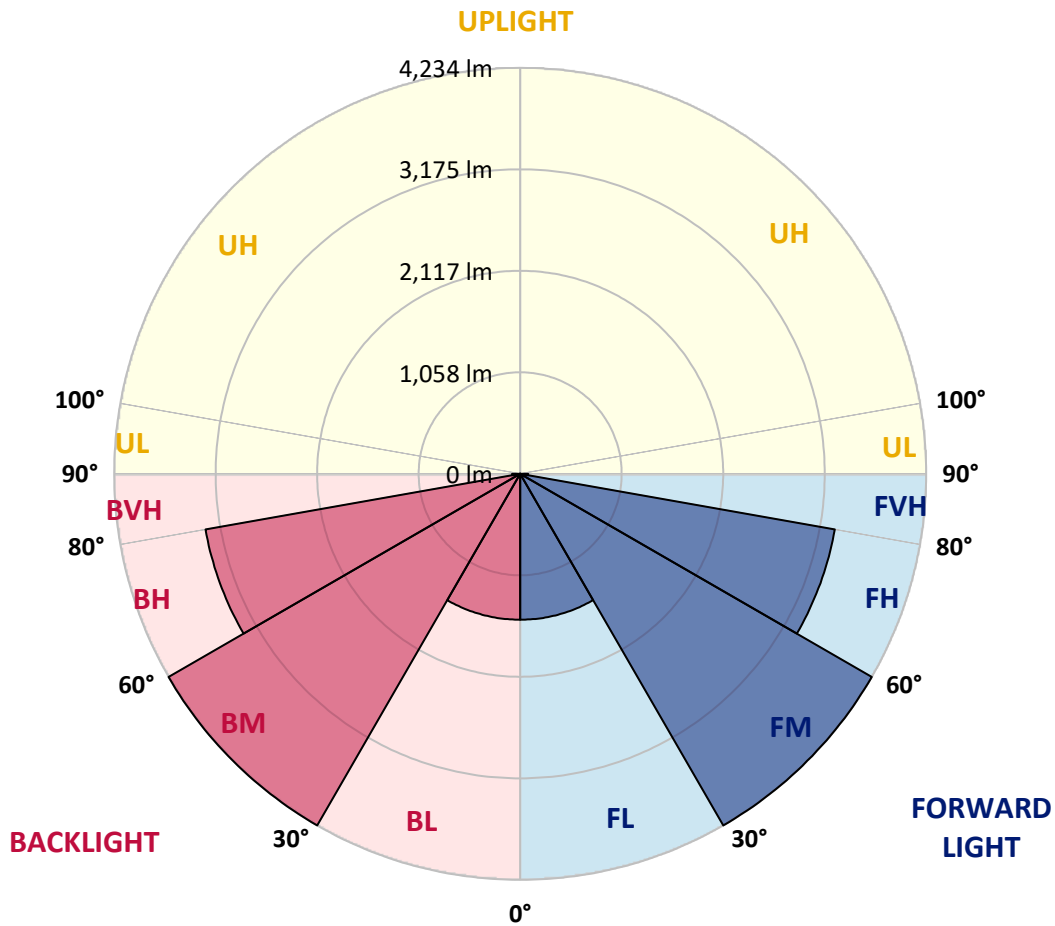
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1521.5	8.3			
FM (30°-60°)	4233.9	23.1			
FH (60°-80°)	3332.0	18.2			G2/5000
FVH (80°-90°)	84.1	0.5			G1/100
BL (0°-30°)	1521.5	8.3	B3/2500		
BM (30°-60°)	4233.9	23.1	B3/5000		
BH (60°-80°)	3332.0	18.2	B4/5000		G4/5000
BVH (80°-90°)	84.1	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°	3427.6	3427.6	3427.6	3427.6	3427.6	3427.6	3427.6	3427.6	3427.6	3427.6	3427.6
2.5°	3430.5	3434.4	3434.4	3431.5	3438.3	3432.5	3432.5	3429.5	3432.5	3429.5	3429.5
5°	3448.1	3452.9	3454.9	3453.9	3462.7	3457.8	3457.8	3453.9	3454.9	3452.0	3452.0
7.5°	3481.2	3488.0	3491.9	3496.8	3509.5	3503.6	3499.7	3488.0	3483.1	3475.4	3475.4
10°	3491.9	3499.7	3512.4	3537.7	3567.0	3568.0	3556.3	3527.0	3504.6	3487.0	3484.1
12.5°	3458.8	3469.5	3495.8	3547.5	3612.8	3639.1	3620.6	3571.9	3528.0	3496.8	3491.9
15°	3416.9	3428.6	3468.5	3546.5	3643.0	3704.4	3702.5	3638.2	3568.0	3519.2	3511.4
17.5°	3351.5	3363.2	3420.8	3529.9	3666.4	3767.8	3795.1	3728.8	3630.4	3565.0	3554.3
20°	3233.6	3244.3	3324.2	3477.3	3674.2	3835.1	3906.2	3847.7	3724.9	3636.2	3619.6
22.5°	3080.5	3097.1	3190.7	3386.6	3655.7	3905.3	4033.0	3993.0	3835.1	3712.2	3689.8
25°	2916.8	2934.3	3043.5	3275.5	3607.9	3956.0	4183.1	4157.7	3959.9	3806.8	3775.6
27.5°	2775.4	2793.9	2912.9	3165.3	3533.8	3975.5	4331.3	4343.9	4111.0	3911.1	3878.0
30°	2664.3	2681.8	2808.6	3076.6	3438.3	3956.0	4460.9	4548.7	4265.0	4001.8	3954.0
32.5°	2542.4	2564.8	2698.4	2968.4	3325.2	3909.2	4574.0	4770.0	4443.4	4099.3	4038.8
35°	2388.4	2408.9	2549.2	2820.2	3177.0	3834.1	4668.6	5015.6	4698.8	4247.4	4180.2
37.5°	2201.2	2220.7	2360.1	2635.0	3029.8	3728.8	4740.7	5292.5	5002.9	4460.9	4371.2
40°	2013.1	2031.6	2162.2	2428.4	2853.4	3594.3	4766.1	5563.5	5351.9	4754.4	4658.8
42.5°	1840.5	1857.1	1977.0	2224.6	2655.5	3422.7	4732.9	5799.4	5664.9	4959.1	4836.2
45°	1681.6	1696.2	1802.5	2033.5	2449.8	3214.1	4633.5	6052.9	6037.3	5105.3	4939.6
47.5°	1500.3	1514.9	1625.1	1848.3	2244.1	2969.4	4464.8	6302.4	6554.9	5436.8	5245.7
50°	1279.0	1291.7	1404.8	1634.8	2030.6	2709.1	4230.9	6498.4	7208.1	5938.8	5699.0
52.5°	1016.8	1030.4	1140.6	1370.6	1777.2	2429.3	3922.8	6626.1	7962.6	6671.9	6376.5
55°	756.5	766.2	861.8	1068.4	1463.3	2110.6	3536.8	6662.1	8818.5	7674.0	7304.6
57.5°	548.8	554.7	616.1	770.1	1109.4	1711.8	3067.9	6568.6	9837.2	8958.9	8493.9
60°	444.5	446.5	465.0	533.2	771.1	1261.5	2501.5	6246.9	10942.7	10615.2	10029.3
62.5°	403.6	403.6	408.5	427.0	521.5	832.5	1816.2	5580.1	12128.1	12708.2	11923.4
65°	375.3	375.3	377.3	386.0	411.4	530.3	1146.4	4494.1	13127.4	15159.9	14167.5
67.5°	350.0	350.9	350.0	352.9	367.5	391.9	664.8	3103.9	13665.5	17700.4	16629.0
70°	323.7	325.6	320.7	320.7	332.4	333.4	416.3	1702.1	13219.0	19829.5	19547.8
72.5°	292.5	295.4	287.6	285.6	294.4	290.5	312.9	816.9	11349.2	20465.1	21206.0
75°	265.2	269.1	251.5	246.6	246.6	243.7	254.4	419.2	7366.0	16694.4	17856.4
77.5°	240.8	248.6	220.3	204.7	200.8	192.0	207.6	256.4	3221.9	7837.8	7675.0
80°	198.9	209.6	181.3	162.8	156.0	146.2	163.8	179.4	958.3	1820.1	1743.0
82.5°	148.2	153.1	128.7	116.0	110.2	103.3	122.8	124.8	312.0	644.4	728.2
85°	94.6	96.5	79.0	68.2	65.3	62.4	78.0	68.2	118.9	473.8	688.2
87.5°	33.1	38.0	30.2	27.3	29.2	24.4	36.1	20.5	33.1	334.4	414.3
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)