

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: P966271

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966271
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
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: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19899.3 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

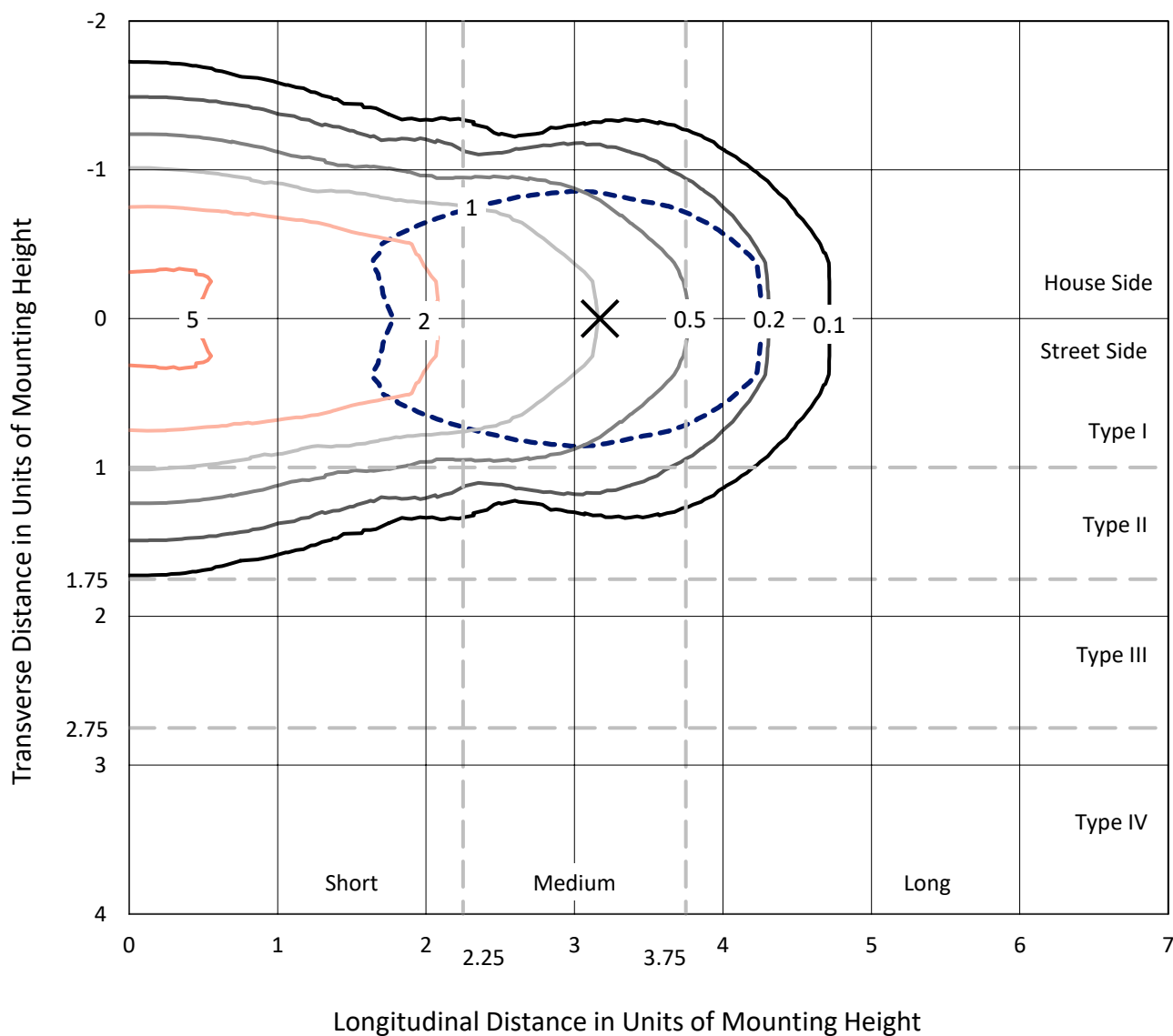
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

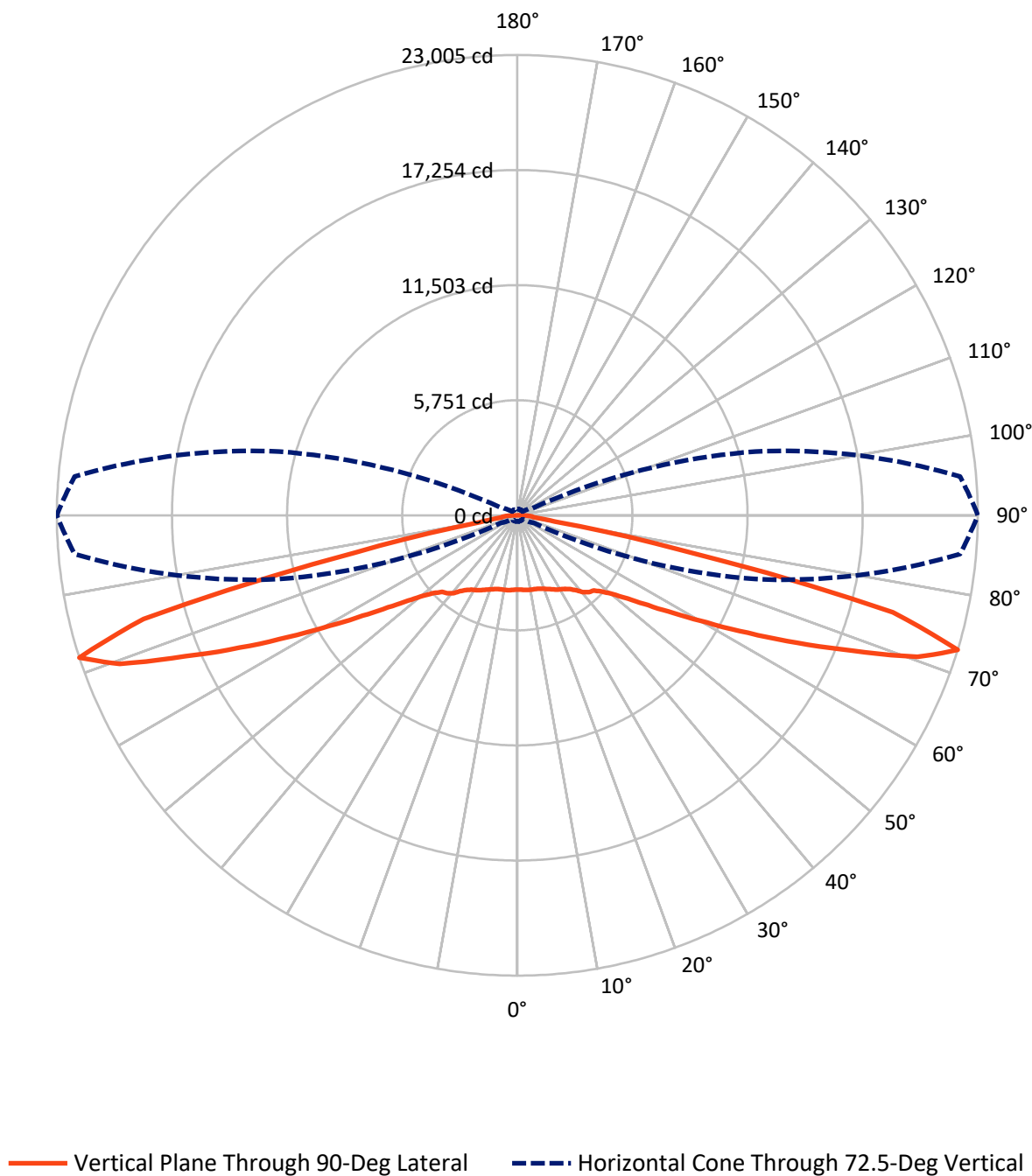
× Max cd
 - - - 1/2 Max cd



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



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9949.7	0.0	9949.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9949.7	0.0	9949.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	19899.3	0.0	19899.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	360.5	1.8
10°-20°	1102.4	5.5
20°-30°	1838.2	9.2
30°-40°	2528.0	12.7
40°-50°	3087.4	15.5
50°-60°	3570.9	17.9
60°-70°	4257.7	21.4
70°-80°	2971.6	14.9
80°-90°	182.5	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°	19899.3	100.0
0°-180°	19899.3	100.0

Coefficient of Utilization



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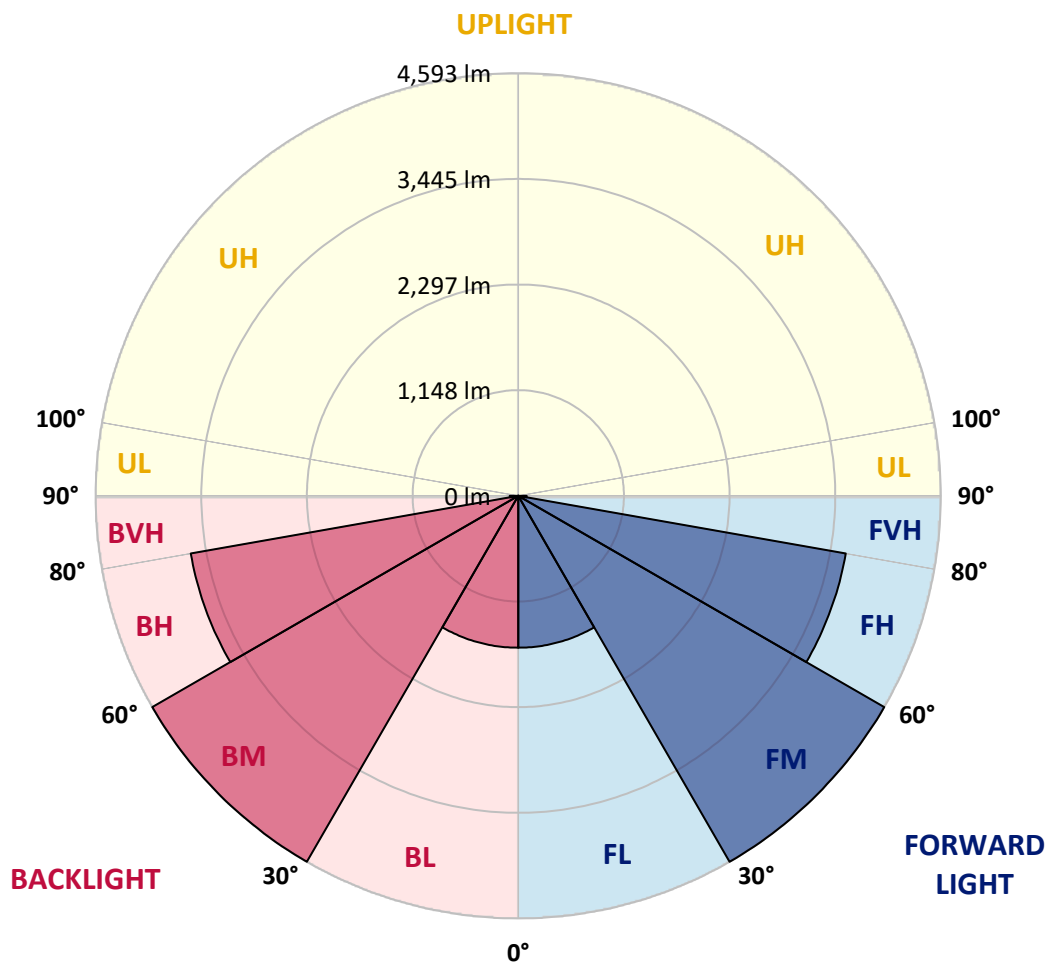
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1650.5	8.3			
FM	(30°-60°)	4593.2	23.1			
FH	(60°-80°)	3614.7	18.2			G2/5000
FVH	(80°-90°)	91.3	0.5			G1/100
BL	(0°-30°)	1650.5	8.3	B3/2500		
BM	(30°-60°)	4593.2	23.1	B3/5000		
BH	(60°-80°)	3614.7	18.2	B4/5000		G4/5000
BVH	(80°-90°)	91.3	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°	3718.4	3718.4	3718.4	3718.4	3718.4	3718.4	3718.4	3718.4	3718.4	3718.4	3718.4
2.5°	3721.6	3725.8	3725.8	3722.6	3730.1	3723.7	3723.7	3720.5	3723.7	3720.5	3720.5
5°	3740.6	3745.9	3748.0	3747.0	3756.5	3751.2	3751.2	3747.0	3748.0	3744.8	3744.8
7.5°	3776.6	3784.0	3788.2	3793.5	3807.3	3800.9	3796.7	3784.0	3778.7	3770.3	3770.3
10°	3788.2	3796.7	3810.4	3837.9	3869.7	3870.7	3858.0	3826.3	3801.9	3782.9	3779.8
12.5°	3752.2	3763.9	3792.4	3848.5	3919.3	3947.9	3927.8	3874.9	3827.3	3793.5	3788.2
15°	3706.8	3719.4	3762.8	3847.4	3952.1	4018.7	4016.7	3946.9	3870.7	3817.8	3809.3
17.5°	3635.9	3648.6	3711.0	3829.4	3977.5	4087.5	4117.1	4045.2	3938.4	3867.5	3855.8
20°	3508.0	3519.5	3606.3	3772.3	3985.9	4160.5	4237.7	4174.2	4041.0	3944.7	3926.8
22.5°	3341.9	3359.8	3461.4	3674.0	3965.8	4236.6	4375.1	4331.8	4160.5	4027.2	4002.9
25°	3164.3	3183.2	3301.7	3553.5	3914.1	4291.6	4538.0	4510.5	4295.9	4129.8	4096.0
27.5°	3010.9	3031.0	3160.0	3434.0	3833.7	4312.8	4698.8	4712.5	4459.8	4243.0	4207.0
30°	2890.3	2909.4	3046.8	3337.7	3730.1	4291.6	4839.4	4934.6	4626.8	4341.3	4289.5
32.5°	2758.2	2782.5	2927.3	3220.2	3607.4	4240.8	4962.1	5174.7	4820.4	4447.1	4381.5
35°	2591.0	2613.2	2765.6	3059.5	3446.6	4159.4	5064.7	5441.2	5097.4	4607.8	4534.8
37.5°	2387.9	2409.2	2560.3	2858.6	3286.9	4045.2	5142.9	5741.5	5427.5	4839.4	4742.2
40°	2183.9	2204.0	2345.7	2634.4	3095.5	3899.2	5170.4	6035.5	5806.0	5157.8	5054.1
42.5°	1996.7	2014.6	2144.7	2413.4	2880.8	3713.2	5134.5	6291.4	6145.5	5379.8	5246.6
45°	1824.3	1840.2	1955.4	2206.1	2657.6	3486.8	5026.6	6566.5	6549.5	5538.5	5358.7
47.5°	1627.6	1643.5	1763.0	2005.1	2434.5	3221.4	4843.6	6837.2	7111.0	5898.1	5690.8
50°	1387.5	1401.3	1524.0	1773.6	2202.9	2939.0	4589.8	7049.7	7819.6	6442.7	6182.5
52.5°	1103.0	1117.9	1237.4	1487.0	1927.9	2635.5	4255.7	7188.3	8638.2	7237.9	6917.5
55°	820.7	831.3	934.9	1159.1	1587.4	2289.6	3836.9	7227.4	9566.7	8325.2	7924.4
57.5°	595.4	601.8	668.4	835.5	1203.6	1857.1	3328.2	7125.9	10671.9	9719.0	9214.5
60°	482.3	484.4	504.5	578.5	836.5	1368.5	2713.7	6776.9	11871.1	11515.9	10880.3
62.5°	437.9	437.9	443.1	463.2	565.8	903.1	1970.3	6053.5	13157.2	13786.5	12935.1
65°	407.1	407.1	409.3	418.8	446.3	575.3	1243.7	4875.4	14241.1	16446.2	15369.6
67.5°	379.7	380.7	379.7	382.8	398.7	425.2	721.3	3367.3	14825.0	19202.2	18040.0
70°	351.1	353.2	348.0	348.0	360.6	361.7	451.6	1846.5	14340.6	21512.0	21206.3
72.5°	317.2	320.4	312.0	309.9	319.4	315.2	339.5	886.2	12312.2	22201.5	23005.2
75°	287.6	291.9	272.9	267.5	267.5	264.3	276.0	454.8	7991.0	18110.8	19371.5
77.5°	261.2	269.7	239.0	222.1	217.8	208.4	225.3	278.2	3495.2	8502.8	8326.2
80°	215.8	227.3	196.7	176.6	169.2	158.7	177.6	194.5	1039.6	1974.5	1890.9
82.5°	160.7	166.0	139.6	125.9	119.5	112.1	133.2	135.4	338.5	699.0	790.0
85°	102.6	104.7	85.7	74.0	70.8	67.6	84.6	74.0	129.0	513.9	746.6
87.5°	36.0	41.2	32.8	29.6	31.8	26.4	39.2	22.2	36.0	362.7	449.5
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)