

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: P882785

Luminaire Tested: **NAV-SB2D-827-U-T1**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882785
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-827-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16670 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

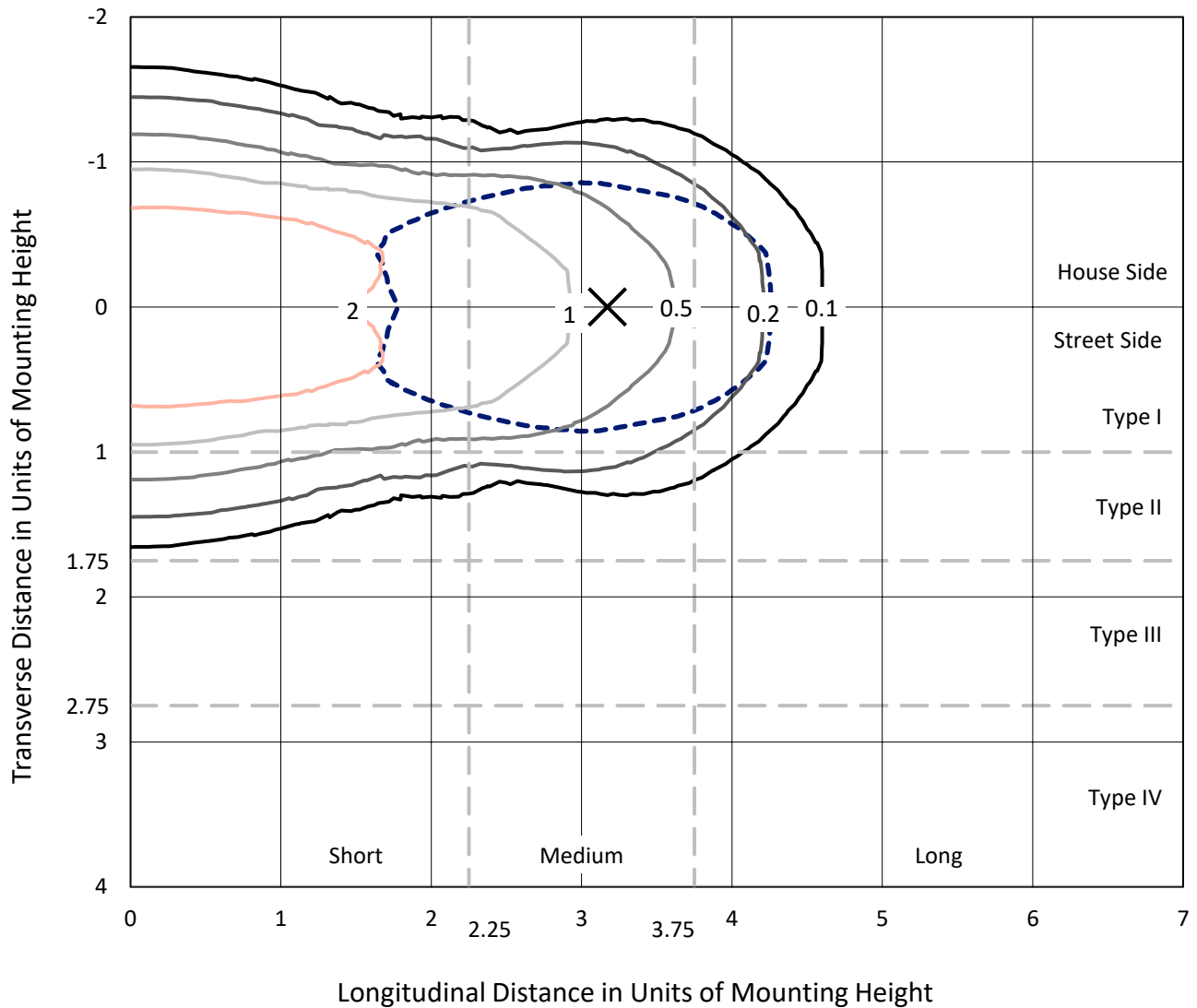
Input Watts (W): 147.6
Input Voltage (V): 120.0
Input Current (Ain): 1.234
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

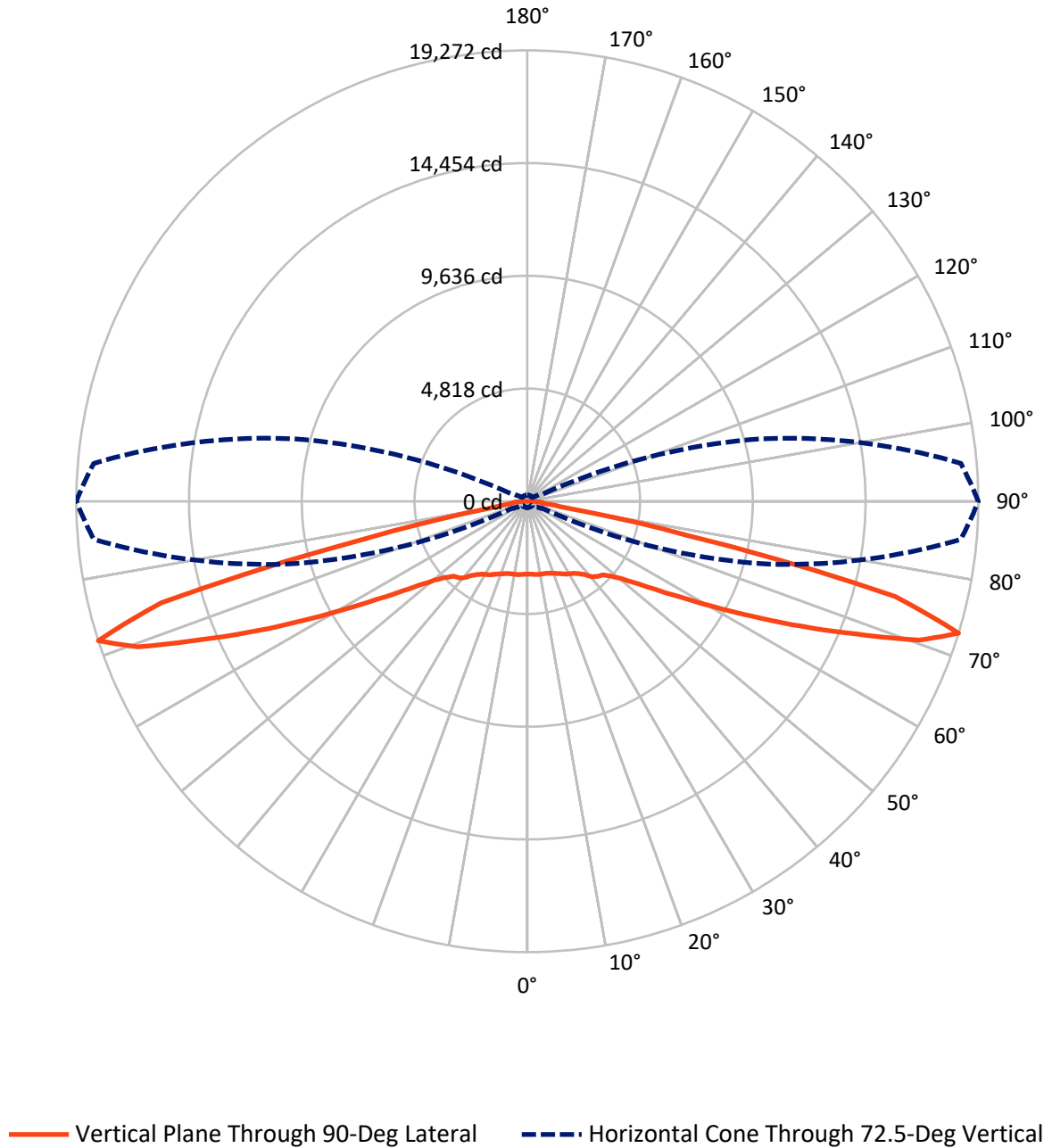
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 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	8335.0	0.0	8335.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	8335.0	0.0	8335.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	16670.0	0.0	16670.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.0	1.8
10°-20°	923.5	5.5
20°-30°	1539.9	9.2
30°-40°	2117.8	12.7
40°-50°	2586.4	15.5
50°-60°	2991.4	17.9
60°-70°	3566.8	21.4
70°-80°	2489.4	14.9
80°-90°	152.9	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°	16670.0	100.0
0°-180°	16670.0	100.0

Coefficient of Utilization



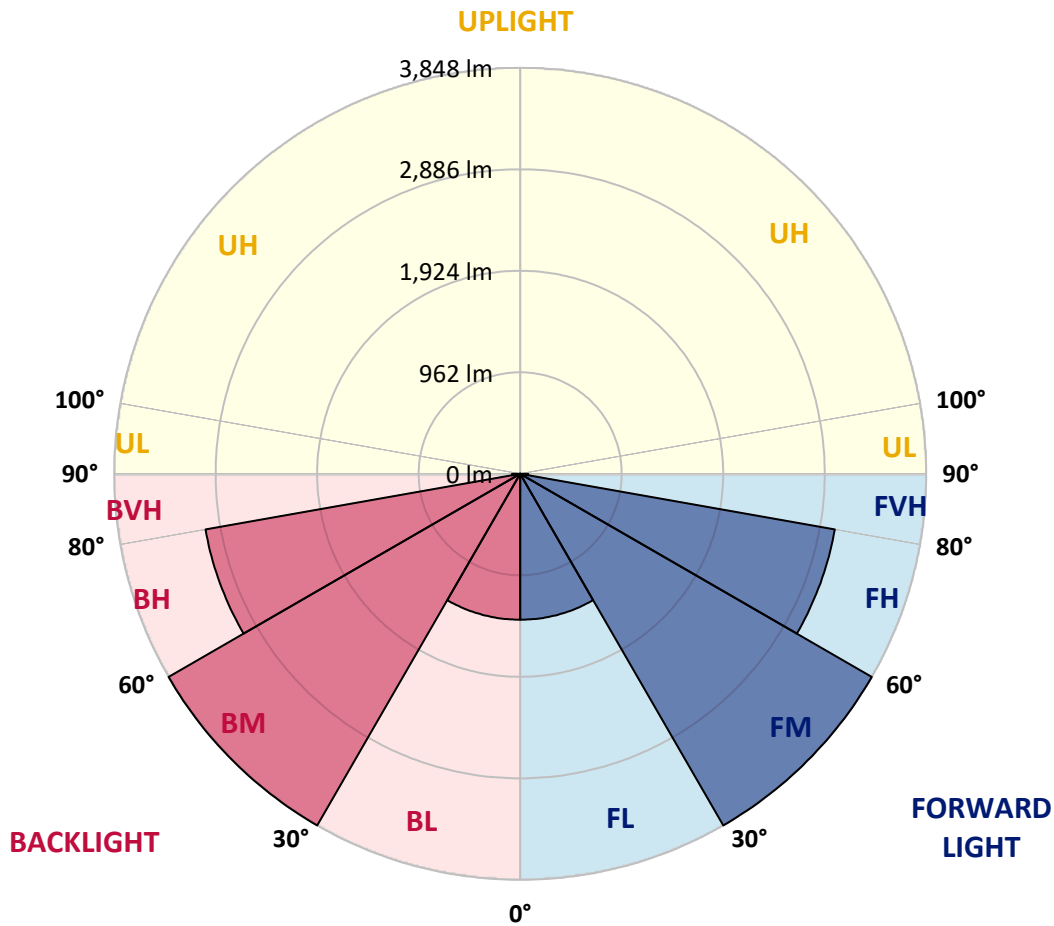
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1382.7	8.3			
FM (30°-60°)	3847.8	23.1			
FH (60°-80°)	3028.1	18.2			G2/5000
FVH (80°-90°)	76.5	0.5			G1/100
BL (0°-30°)	1382.7	8.3	B3/2500		
BM (30°-60°)	3847.8	23.1	B3/5000		
BH (60°-80°)	3028.1	18.2	B4/5000		G4/5000
BVH (80°-90°)	76.5	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°	3115.0	3115.0	3115.0	3115.0	3115.0	3115.0	3115.0	3115.0	3115.0	3115.0	3115.0
2.5°	3117.6	3121.2	3121.2	3118.5	3124.7	3119.4	3119.4	3116.7	3119.4	3116.7	3116.7
5°	3133.6	3138.0	3139.8	3138.9	3146.9	3142.4	3142.4	3138.9	3139.8	3137.1	3137.1
7.5°	3163.7	3169.9	3173.4	3177.9	3189.4	3184.1	3180.5	3169.9	3165.5	3158.4	3158.4
10°	3173.4	3180.5	3192.0	3215.1	3241.7	3242.5	3231.9	3205.3	3185.0	3169.0	3166.3
12.5°	3143.3	3153.1	3177.0	3223.9	3283.3	3307.2	3290.4	3246.1	3206.2	3177.9	3173.4
15°	3105.2	3115.9	3152.2	3223.1	3310.8	3366.6	3364.8	3306.3	3242.5	3198.2	3191.2
17.5°	3045.9	3056.5	3108.8	3208.0	3332.0	3424.2	3449.0	3388.7	3299.2	3239.9	3230.1
20°	2938.7	2948.4	3021.1	3160.1	3339.1	3485.3	3550.0	3496.8	3385.2	3304.6	3289.5
22.5°	2799.6	2814.6	2899.7	3077.8	3322.3	3549.1	3665.1	3628.8	3485.3	3373.7	3353.3
25°	2650.7	2666.7	2765.9	2976.8	3278.9	3595.1	3801.6	3778.5	3598.7	3459.6	3431.2
27.5°	2522.3	2539.1	2647.2	2876.6	3211.5	3612.9	3936.2	3947.7	3736.0	3554.4	3524.3
30°	2421.3	2437.2	2552.4	2796.0	3124.7	3595.1	4054.1	4133.8	3876.0	3636.8	3593.4
32.5°	2310.5	2330.9	2452.3	2697.7	3021.9	3552.6	4156.8	4334.9	4038.1	3725.4	3670.4
35°	2170.6	2189.2	2316.7	2563.0	2887.3	3484.4	4242.8	4558.2	4270.2	3860.0	3798.9
37.5°	2000.5	2018.2	2144.9	2394.7	2753.5	3388.7	4308.3	4809.8	4546.6	4054.1	3972.6
40°	1829.5	1846.3	1965.0	2206.9	2593.1	3266.5	4331.4	5056.1	4863.8	4320.7	4233.9
42.5°	1672.7	1687.7	1796.7	2021.7	2413.3	3110.5	4301.2	5270.5	5148.2	4506.8	4395.1
45°	1528.2	1541.5	1638.1	1848.1	2226.4	2920.9	4210.9	5500.8	5486.6	4639.7	4489.1
47.5°	1363.5	1376.8	1476.9	1679.7	2039.4	2698.6	4057.6	5727.6	5957.1	4940.9	4767.2
50°	1162.4	1173.9	1276.6	1485.7	1845.4	2462.0	3845.0	5905.7	6550.6	5397.1	5179.2
52.5°	924.0	936.4	1036.5	1245.6	1615.1	2207.8	3565.0	6021.7	7236.4	6063.4	5794.9
55°	687.5	696.3	783.2	971.0	1329.8	1918.1	3214.2	6054.5	8014.2	6974.1	6638.3
57.5°	498.8	504.1	559.9	699.9	1008.2	1555.7	2788.1	5969.5	8940.0	8141.8	7719.2
60°	404.0	405.8	422.6	484.6	700.8	1146.4	2273.3	5677.1	9944.7	9647.0	9114.6
62.5°	366.8	366.8	371.2	388.0	474.0	756.6	1650.5	5071.1	11022.0	11549.1	10835.9
65°	341.1	341.1	342.9	350.8	373.9	482.0	1041.9	4084.2	11930.1	13777.3	12875.4
67.5°	318.1	318.9	318.1	320.7	334.0	356.1	604.2	2820.8	12419.1	16086.0	15112.4
70°	294.1	295.9	291.5	291.5	302.1	303.0	378.3	1546.9	12013.3	18020.9	17764.9
72.5°	265.8	268.4	261.4	259.6	267.6	264.0	284.4	742.4	10314.1	18598.5	19271.9
75°	241.0	244.5	228.6	224.1	224.1	221.5	231.2	381.0	6694.2	15171.7	16227.8
77.5°	218.8	225.9	200.2	186.0	182.5	174.5	188.7	233.0	2928.0	7123.0	6975.0
80°	180.7	190.5	164.8	148.0	141.8	132.9	148.8	163.0	870.9	1654.1	1584.1
82.5°	134.7	139.1	116.9	105.4	100.1	93.9	111.6	113.4	283.5	585.6	661.8
85°	85.9	87.7	71.8	62.0	59.4	56.7	70.9	62.0	108.1	430.6	625.5
87.5°	30.1	34.6	27.5	24.8	26.6	22.1	32.8	18.6	30.1	303.9	376.5
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)