

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: P963125

Luminaire Tested: **NAV-SB2D-830-U-5NQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963125
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-18)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-830-U-5NQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19640 lumens
Efficiency: N/A
Efficacy: 133.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

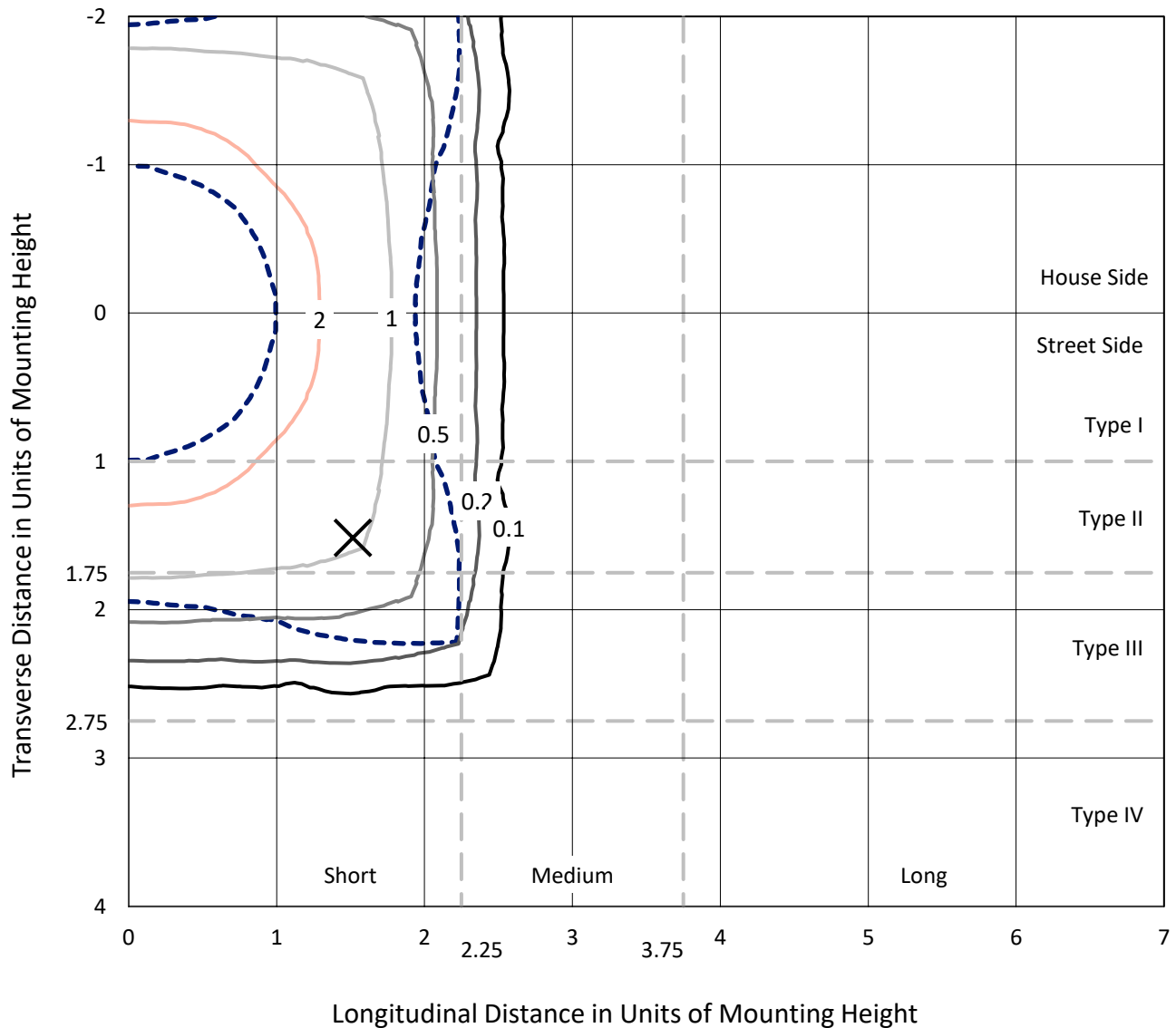
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

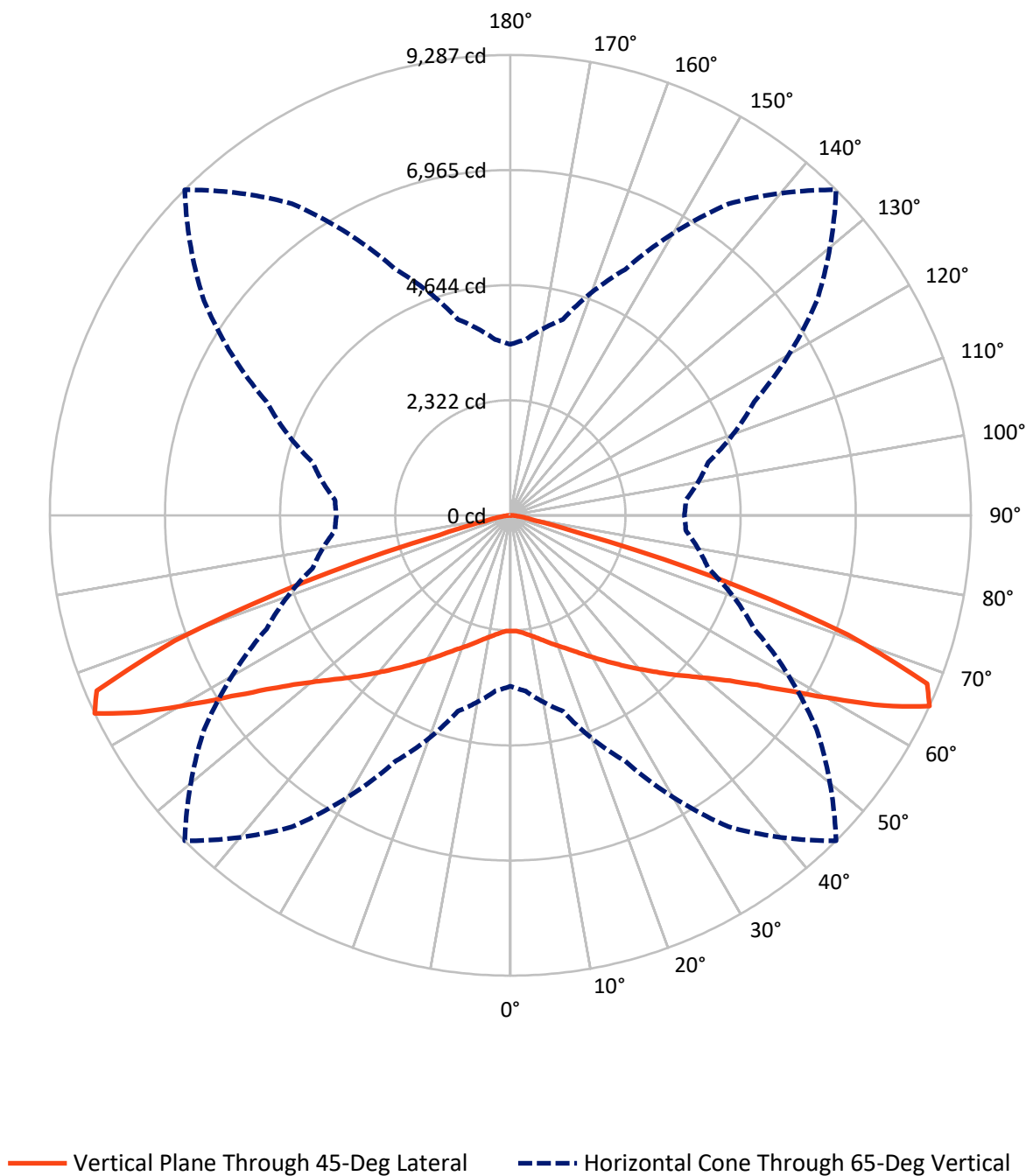
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
Type V - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9820.0	0.0	9820.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9820.0	0.0	9820.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	19640.0	0.0	19640.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.7	1.2
10°-20°	752.7	3.8
20°-30°	1421.2	7.2
30°-40°	2327.2	11.8
40°-50°	3608.3	18.4
50°-60°	5330.2	27.1
60°-70°	5073.9	25.8
70°-80°	818.7	4.2
80°-90°	77.2	0.4
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°	19640.0	100.0
0°-180°	19640.0	100.0

Coefficient of Utilization



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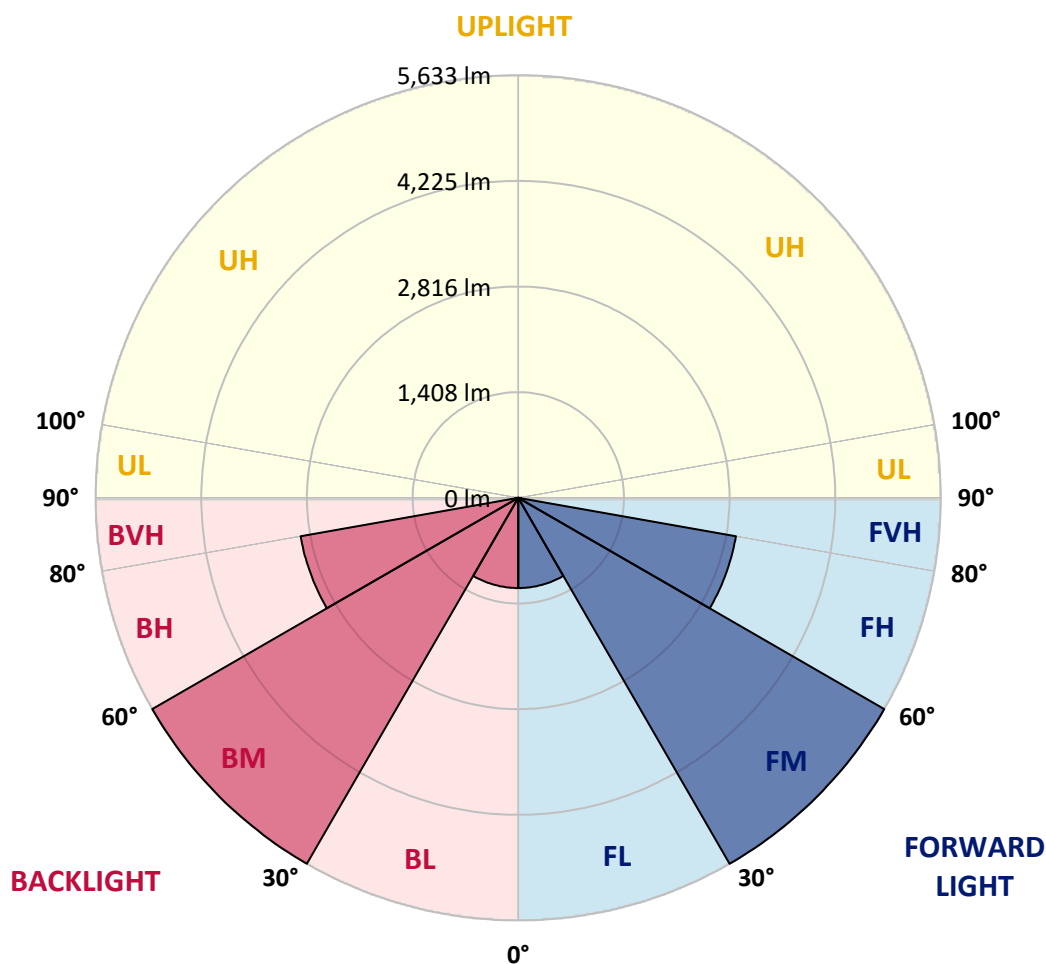
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1202.3	6.1			
FM	(30°-60°)	5632.8	28.7			
FH	(60°-80°)	2946.3	15.0			G2/5000
FVH	(80°-90°)	38.6	0.2			G1/100
BL	(0°-30°)	1202.3	6.1	B3/2500		
BM	(30°-60°)	5632.8	28.7	B4/8500		
BH	(60°-80°)	2946.3	15.0	B4/5000		G2/5000
BVH	(80°-90°)	38.6	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2337.4	2337.4	2337.4	2337.4	2337.4	2337.4	2337.4	2337.4	2337.4	2337.4	2337.4
2.5°	2353.1	2345.2	2351.1	2346.2	2342.3	2338.3	2340.3	2347.2	2350.1	2351.1	2351.1
5°	2384.7	2377.8	2380.8	2380.8	2373.8	2371.8	2372.9	2377.8	2383.6	2383.6	2383.6
7.5°	2435.9	2429.0	2435.9	2431.9	2426.1	2424.1	2423.1	2427.0	2435.9	2435.9	2432.9
10°	2498.0	2490.1	2494.0	2492.1	2485.2	2482.2	2481.2	2487.2	2495.1	2494.0	2492.1
12.5°	2566.0	2557.1	2562.0	2556.1	2554.2	2551.2	2551.2	2550.2	2555.1	2551.2	2553.2
15°	2641.8	2635.9	2637.9	2633.9	2636.9	2635.0	2627.1	2623.1	2625.1	2619.2	2620.2
17.5°	2731.5	2717.7	2724.7	2722.6	2722.6	2726.6	2713.8	2708.9	2712.8	2706.9	2711.8
20°	2834.9	2821.2	2824.2	2820.2	2815.3	2819.3	2803.5	2807.4	2810.3	2806.4	2815.3
22.5°	2948.3	2930.6	2929.6	2931.6	2920.7	2921.7	2910.9	2920.7	2926.6	2915.8	2926.6
25°	3064.5	3045.9	3058.7	3053.8	3039.9	3042.9	3035.0	3044.9	3049.8	3036.0	3051.7
27.5°	3187.7	3174.9	3186.7	3189.7	3173.0	3184.8	3173.0	3181.8	3186.7	3166.1	3181.8
30°	3331.7	3318.8	3329.6	3337.5	3317.8	3336.6	3326.7	3332.6	3333.6	3309.0	3323.8
32.5°	3488.3	3468.6	3496.2	3500.2	3478.4	3501.1	3488.3	3496.2	3501.1	3467.6	3490.2
35°	3679.4	3654.8	3686.4	3681.4	3662.7	3681.4	3669.6	3681.4	3693.3	3652.9	3677.5
37.5°	3885.5	3859.8	3893.3	3884.4	3866.7	3879.5	3872.7	3880.4	3899.2	3855.8	3882.5
40°	4112.1	4080.5	4125.8	4110.0	4093.3	4091.4	4095.3	4100.2	4124.9	4076.6	4092.3
42.5°	4354.5	4321.0	4388.9	4364.3	4340.7	4324.9	4337.7	4347.5	4371.2	4317.0	4345.6
45°	4631.4	4592.9	4681.6	4652.1	4614.7	4582.1	4602.8	4617.5	4652.1	4587.0	4620.5
47.5°	4936.8	4893.5	4988.1	4979.2	4918.2	4847.1	4894.5	4936.8	4962.4	4883.6	4910.3
50°	5235.4	5201.9	5326.1	5336.9	5262.0	5162.5	5228.5	5292.6	5299.5	5196.0	5208.8
52.5°	5515.2	5481.8	5662.1	5730.1	5663.0	5544.8	5614.7	5679.8	5627.6	5493.6	5497.5
55°	5739.0	5711.4	5941.0	6116.4	6139.0	6041.5	6082.9	6080.9	5909.4	5703.5	5710.4
57.5°	5793.1	5789.2	6078.9	6450.4	6686.9	6698.7	6616.9	6408.0	6038.5	5761.6	5743.9
60°	5546.8	5571.4	5969.5	6624.8	7255.5	7517.6	7163.8	6567.7	5891.7	5507.4	5462.0
62.5°	4809.7	4874.8	5354.6	6412.0	7714.7	8459.6	7602.3	6325.3	5288.6	4787.1	4757.5
65°	3446.9	3560.2	4090.4	5471.9	7673.3	9287.3	7539.3	5427.6	4129.8	3551.3	3509.0
67.5°	1563.8	1679.2	2129.4	3746.5	6670.2	9062.6	6654.4	3785.9	2235.8	1685.0	1660.4
70°	566.6	586.3	731.1	1499.8	4262.9	7221.0	4445.1	1510.6	777.5	624.7	616.8
72.5°	343.0	345.8	376.4	537.0	1481.0	4384.0	1544.2	554.7	384.3	340.9	346.9
75°	217.8	215.8	268.0	328.1	525.2	1479.1	550.8	328.1	267.0	243.4	245.4
77.5°	156.7	161.6	192.2	245.4	331.1	501.5	325.1	234.5	192.2	157.6	160.6
80°	117.3	120.2	139.9	191.2	232.6	312.4	206.9	173.4	144.8	98.5	101.5
82.5°	84.8	84.8	91.6	139.0	141.9	168.5	112.3	122.2	95.6	70.0	70.0
85°	50.2	49.3	57.2	82.8	73.9	62.1	51.2	74.9	60.1	43.4	42.3
87.5°	17.7	18.8	17.7	23.7	19.7	16.7	15.8	20.7	16.7	14.8	13.8
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)