

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: P962970

Luminaire Tested: **NAV-SB2D-735-U-5NQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962970
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-735-U-5NQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21858.1 lumens
Efficiency: N/A
Efficacy: 148.1 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

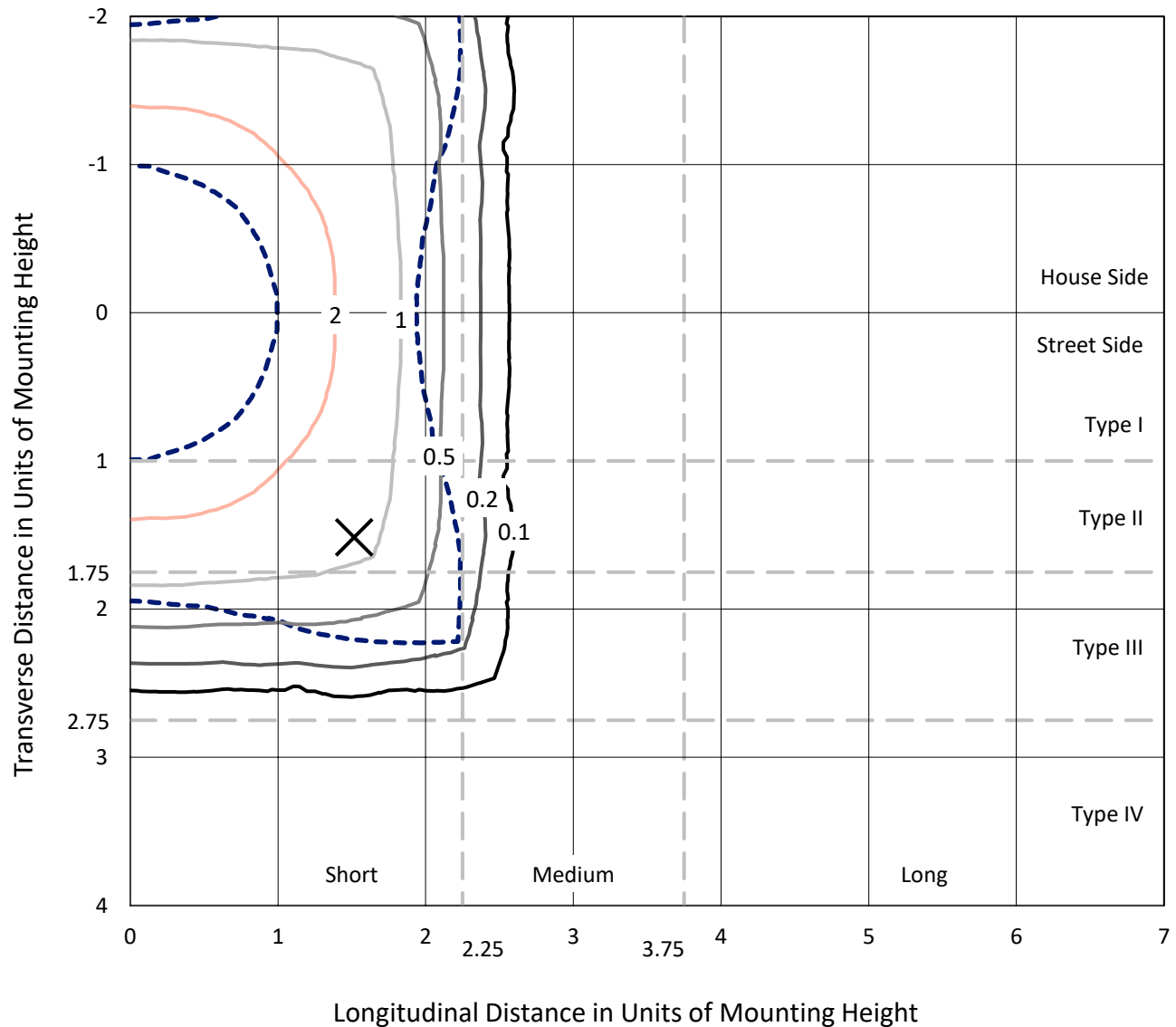


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Iso-Footcandle Lines of Horizontal Illumination

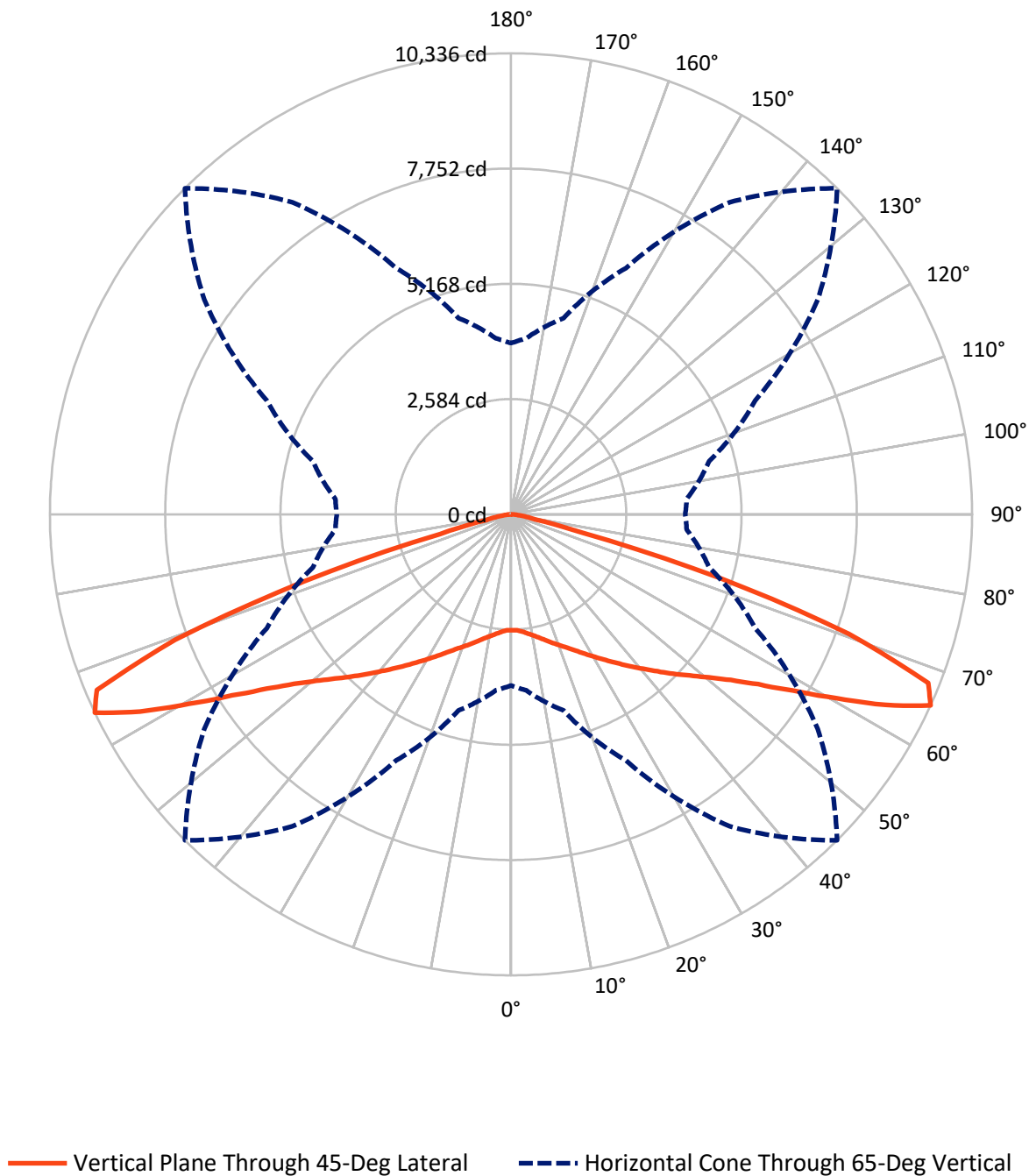
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 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	10929.1	0.0	10929.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10929.1	0.0	10929.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	21858.1	0.0	21858.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.7	1.2
10°-20°	837.7	3.8
20°-30°	1581.7	7.2
30°-40°	2590.0	11.8
40°-50°	4015.8	18.4
50°-60°	5932.2	27.1
60°-70°	5646.9	25.8
70°-80°	911.2	4.2
80°-90°	85.9	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°	21858.1	100.0
0°-180°	21858.1	100.0

Coefficient of Utilization



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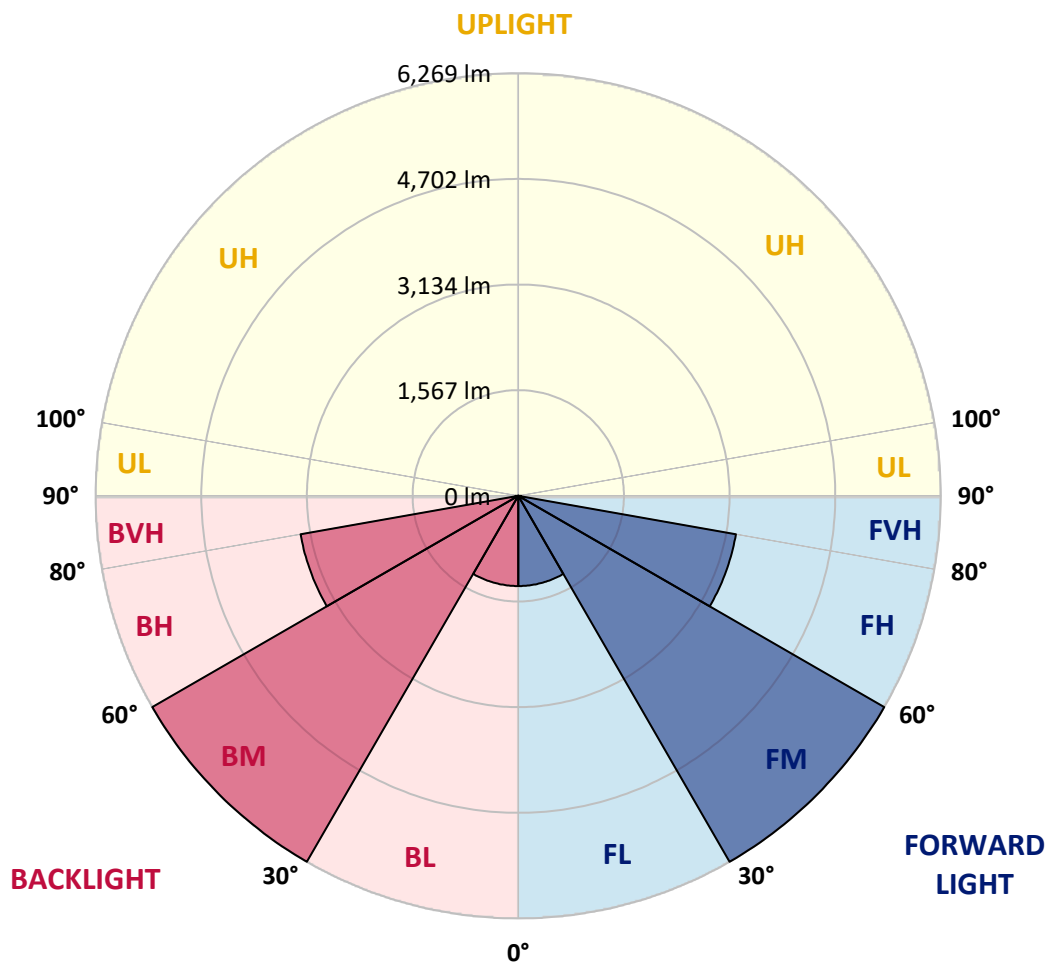
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1338.1	6.1			
FM	(30°-60°)	6269.0	28.7			
FH	(60°-80°)	3279.0	15.0			G2/5000
FVH	(80°-90°)	43.0	0.2			G1/100
BL	(0°-30°)	1338.1	6.1	B3/2500		
BM	(30°-60°)	6269.0	28.7	B4/8500		
BH	(60°-80°)	3279.0	15.0	B4/5000		G2/5000
BVH	(80°-90°)	43.0	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°	2601.3	2601.3	2601.3	2601.3	2601.3	2601.3	2601.3	2601.3	2601.3	2601.3	2601.3
2.5°	2618.9	2610.1	2616.7	2611.2	2606.8	2602.5	2604.6	2612.3	2615.6	2616.7	2616.7
5°	2653.9	2646.3	2649.6	2649.6	2641.9	2639.7	2640.8	2646.3	2652.9	2652.9	2652.9
7.5°	2711.0	2703.3	2711.0	2706.6	2700.1	2697.8	2696.8	2701.2	2711.0	2711.0	2707.7
10°	2780.1	2771.3	2775.7	2773.5	2765.9	2762.6	2761.5	2768.0	2776.8	2775.7	2773.5
12.5°	2855.8	2845.9	2851.3	2844.8	2842.6	2839.4	2839.4	2838.2	2843.7	2839.4	2841.5
15°	2940.2	2933.7	2935.8	2931.4	2934.7	2932.5	2923.7	2919.4	2921.6	2915.0	2916.1
17.5°	3040.0	3024.7	3032.4	3030.1	3030.1	3034.5	3020.3	3014.8	3019.1	3012.6	3018.1
20°	3155.2	3139.8	3143.1	3138.8	3133.2	3137.6	3120.1	3124.4	3127.8	3123.4	3133.2
22.5°	3281.2	3261.5	3260.4	3262.7	3250.6	3251.7	3239.6	3250.6	3257.1	3245.0	3257.1
25°	3410.7	3389.9	3404.1	3398.6	3383.3	3386.6	3377.8	3388.8	3394.3	3378.9	3396.4
27.5°	3547.7	3533.5	3546.7	3550.0	3531.3	3544.4	3531.3	3541.2	3546.7	3523.6	3541.2
30°	3707.9	3693.6	3705.7	3714.5	3692.6	3713.4	3702.4	3709.0	3710.1	3682.6	3699.1
32.5°	3882.3	3860.4	3891.0	3895.4	3871.3	3896.5	3882.3	3891.0	3896.5	3859.2	3884.4
35°	4095.0	4067.6	4102.7	4097.2	4076.4	4097.2	4084.0	4097.2	4110.4	4065.5	4092.8
37.5°	4324.3	4295.7	4333.0	4323.1	4303.4	4317.6	4309.9	4318.7	4339.5	4291.4	4320.9
40°	4576.4	4541.4	4591.8	4574.3	4555.6	4553.5	4557.9	4563.3	4590.8	4537.0	4554.5
42.5°	4846.2	4809.0	4884.6	4857.2	4830.9	4813.3	4827.6	4838.6	4864.9	4804.6	4836.4
45°	5154.4	5111.7	5210.4	5177.5	5135.8	5099.6	5122.6	5139.0	5177.5	5105.1	5142.3
47.5°	5494.4	5446.1	5551.4	5541.6	5473.6	5394.6	5447.3	5494.4	5522.9	5435.2	5464.8
50°	5826.7	5789.4	5927.6	5939.7	5856.3	5745.5	5819.0	5890.3	5898.0	5782.8	5797.1
52.5°	6138.1	6100.9	6301.6	6377.2	6302.6	6171.0	6248.9	6321.3	6263.2	6114.0	6118.4
55°	6387.1	6356.3	6611.9	6807.1	6832.3	6723.8	6769.8	6767.7	6576.8	6347.6	6355.3
57.5°	6447.5	6443.0	6765.4	7178.9	7442.1	7455.2	7364.2	7131.7	6720.5	6412.3	6392.6
60°	6173.3	6200.6	6643.7	7373.0	8074.8	8366.6	7972.9	7309.4	6557.0	6129.4	6079.0
62.5°	5353.0	5425.3	5959.3	7136.2	8585.9	9415.0	8461.0	7039.6	5885.9	5327.6	5294.8
65°	3836.2	3962.3	4552.3	6089.9	8539.9	10336.2	8390.8	6040.5	4596.2	3952.4	3905.2
67.5°	1740.4	1868.8	2369.9	4169.6	7423.5	10086.2	7405.9	4213.5	2488.4	1875.3	1847.9
70°	630.6	652.5	813.7	1669.1	4744.2	8036.5	4947.2	1681.2	865.3	695.3	686.5
72.5°	381.6	384.9	418.9	597.7	1648.3	4879.1	1718.5	617.5	427.7	379.5	386.0
75°	242.4	240.2	298.3	365.2	584.6	1646.2	613.1	365.2	297.2	270.9	273.1
77.5°	174.4	179.9	213.8	273.1	368.5	558.2	361.9	261.0	213.8	175.5	178.8
80°	130.5	133.8	155.7	212.8	258.8	347.7	230.3	193.0	161.2	109.7	113.0
82.5°	94.3	94.3	102.0	154.7	158.0	187.6	125.0	136.0	106.4	77.9	77.9
85°	56.0	54.8	63.7	92.1	82.2	69.1	57.0	83.3	66.9	48.3	47.2
87.5°	19.8	20.8	19.8	26.3	21.9	18.7	17.5	23.1	18.7	16.4	15.4
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)