

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: P883402

Luminaire Tested: **NAV-SB3D-727-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883402
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-727-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27979 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G4

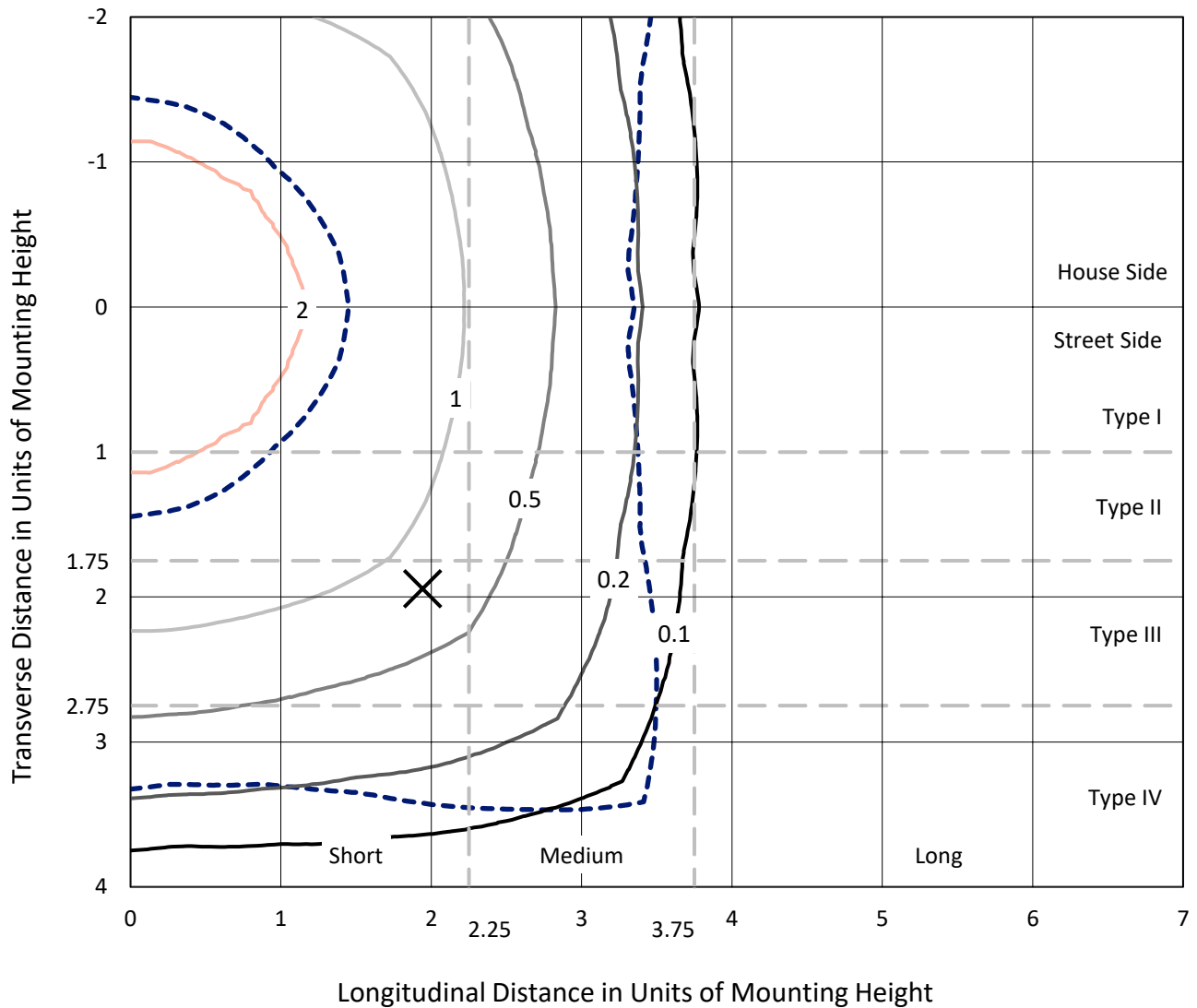
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

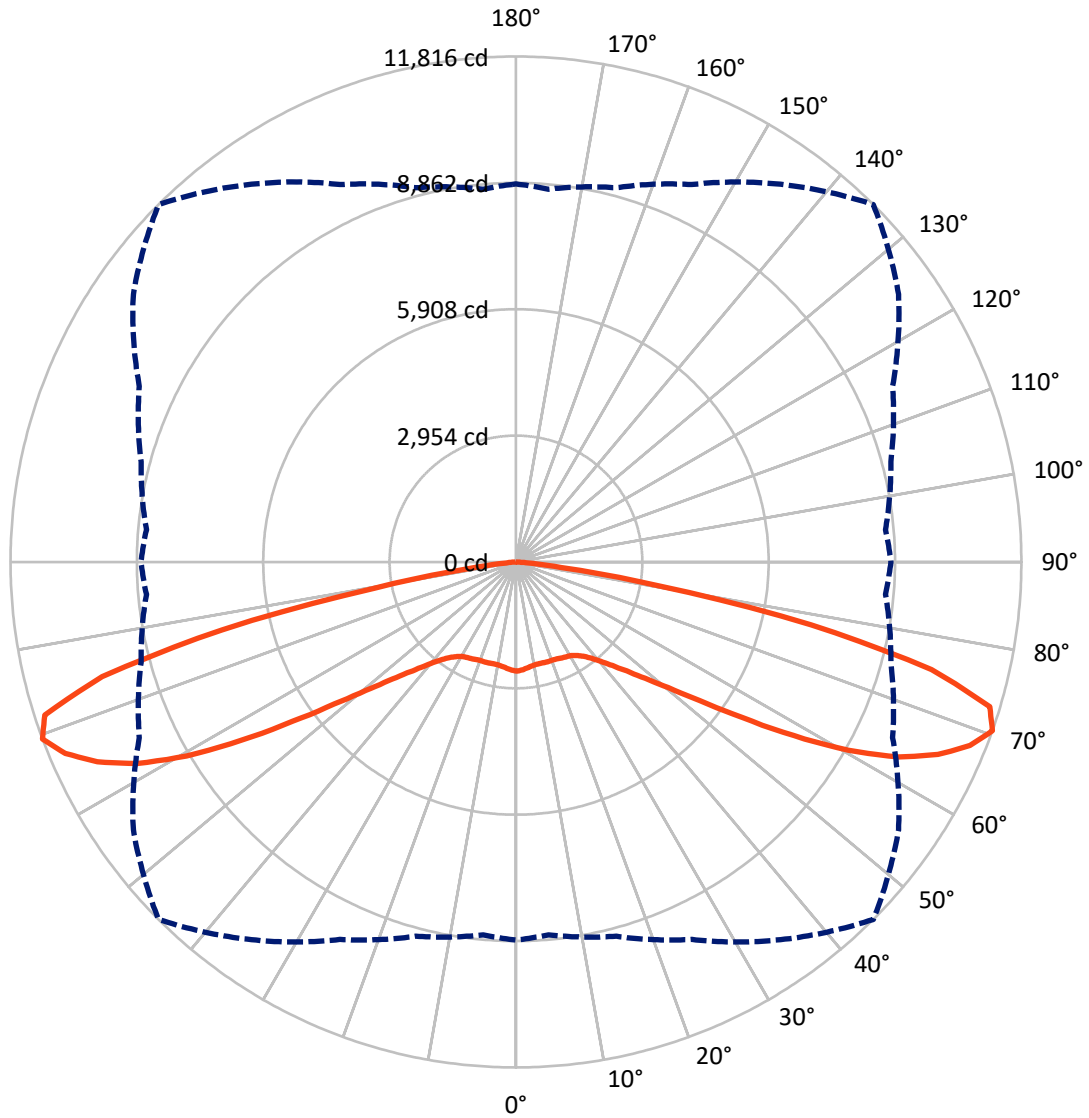
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13989.5	0.0	13989.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	13989.5	0.0	13989.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	27979.0	0.0	27979.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.4	0.8
10°-20°	697.1	2.5
20°-30°	1160.1	4.1
30°-40°	1754.4	6.3
40°-50°	2915.5	10.4
50°-60°	5501.4	19.7
60°-70°	9289.3	33.2
70°-80°	6104.0	21.8
80°-90°	319.8	1.1
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°	27979.0	100.0
0°-180°	27979.0	100.0

Coefficient of Utilization



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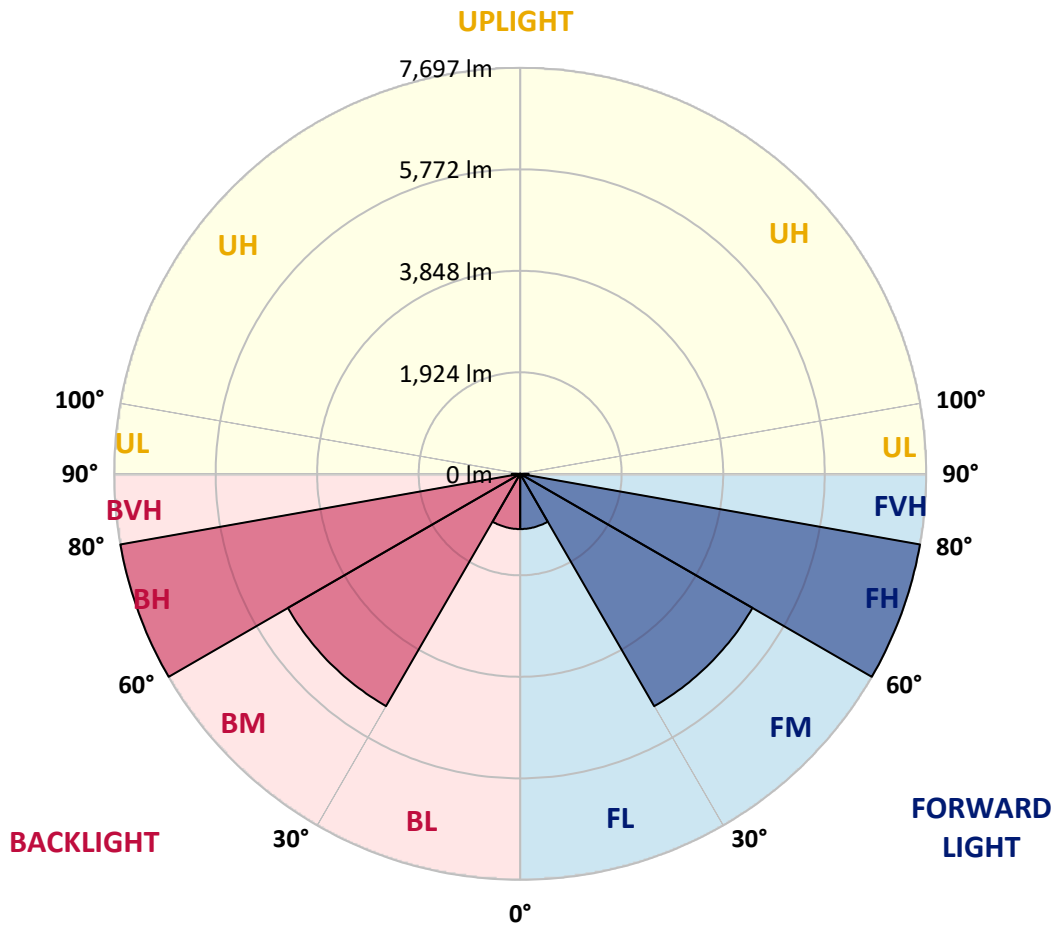
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1047.3	3.7			
FM (30°-60°)	5085.6	18.2			
FH (60°-80°)	7696.6	27.5			G4/12000
FVH (80°-90°)	159.9	0.6			G2/225
BL (0°-30°)	1047.3	3.7	B3/2500		
BM (30°-60°)	5085.6	18.2	B4/8500		
BH (60°-80°)	7696.6	27.5	B5		G4/12000
BVH (80°-90°)	159.9	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G4

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2552.2	2552.2	2552.2	2552.2	2552.2	2552.2	2552.2	2552.2	2552.2	2552.2	2552.2
2.5°	2536.3	2543.5	2540.6	2534.8	2534.8	2530.4	2534.8	2537.7	2542.1	2545.0	2543.5
5°	2502.8	2508.6	2507.2	2502.8	2504.3	2499.9	2502.8	2507.2	2510.1	2511.5	2511.5
7.5°	2473.7	2479.5	2476.6	2469.4	2469.4	2465.0	2466.4	2470.8	2475.2	2476.6	2476.6
10°	2466.4	2472.3	2463.5	2451.9	2447.5	2441.7	2443.2	2447.5	2456.3	2460.6	2460.6
12.5°	2469.4	2473.7	2465.0	2447.5	2443.2	2437.4	2437.4	2441.7	2453.4	2459.2	2460.6
15°	2478.1	2482.4	2469.4	2450.4	2446.1	2441.7	2440.3	2446.1	2459.2	2469.4	2470.8
17.5°	2494.1	2498.4	2478.1	2451.9	2446.1	2447.5	2446.1	2450.4	2470.8	2489.7	2489.7
20°	2508.6	2511.5	2483.9	2451.9	2446.1	2447.5	2446.1	2454.8	2481.0	2507.2	2508.6
22.5°	2513.0	2515.9	2489.7	2462.1	2457.7	2459.2	2457.7	2466.4	2491.2	2517.3	2517.3
25°	2514.4	2518.8	2498.4	2476.6	2483.9	2486.8	2483.9	2485.4	2504.3	2527.5	2526.1
27.5°	2536.3	2542.1	2523.2	2504.3	2508.6	2507.2	2511.5	2515.9	2530.4	2553.7	2547.9
30°	2581.3	2585.7	2569.7	2550.8	2547.9	2537.7	2550.8	2565.3	2581.3	2601.7	2597.3
32.5°	2655.5	2664.2	2643.9	2623.5	2610.4	2604.6	2614.8	2639.5	2661.3	2683.1	2674.4
35°	2779.1	2784.9	2766.0	2728.2	2704.9	2704.9	2713.7	2745.7	2780.6	2808.2	2798.0
37.5°	2953.6	2960.9	2927.5	2882.4	2847.5	2847.5	2859.1	2892.5	2944.9	2984.2	2969.6
40°	3166.0	3176.1	3134.0	3087.4	3054.0	3048.2	3062.7	3100.5	3150.0	3199.4	3183.4
42.5°	3421.9	3433.5	3378.3	3337.6	3311.4	3311.4	3318.6	3353.6	3398.6	3459.7	3455.4
45°	3749.1	3769.5	3693.9	3653.1	3628.4	3634.2	3638.6	3669.1	3709.8	3779.7	3776.7
47.5°	4138.9	4159.2	4079.2	4037.1	4032.7	4060.3	4042.9	4064.7	4086.5	4166.5	4143.2
50°	4581.0	4615.9	4560.6	4557.7	4566.4	4617.3	4576.6	4588.2	4563.5	4614.4	4583.9
52.5°	5121.9	5172.8	5162.7	5180.1	5277.6	5382.3	5289.2	5248.5	5155.4	5171.4	5117.6
55°	5777.8	5854.9	5869.4	5974.2	6195.2	6409.0	6211.2	6046.9	5849.1	5812.7	5756.0
57.5°	6523.9	6584.9	6654.8	6868.5	7281.5	7661.1	7281.5	6918.0	6606.8	6532.6	6480.2
60°	7326.6	7402.2	7469.1	7784.7	8398.4	8932.1	8386.8	7809.4	7397.9	7297.5	7210.3
62.5°	8189.0	8286.4	8333.0	8683.5	9399.0	10035.9	9409.1	8709.6	8253.0	8145.4	8058.1
65°	9016.5	9096.5	9148.8	9522.6	10206.1	10844.5	10252.6	9563.3	9093.6	8952.5	8882.7
67.5°	9401.9	9445.5	9573.5	9996.7	10718.0	11446.6	10840.1	10041.8	9516.8	9269.5	9272.4
70°	8837.6	8748.9	9057.2	9734.9	10779.1	11816.0	10918.7	9714.5	9071.8	8670.4	8766.4
72.5°	6829.3	6676.6	7211.7	8370.8	10081.0	11580.4	10150.8	8436.2	7544.8	6730.4	6932.5
75°	3715.7	3542.6	4281.4	5747.3	8039.2	10037.4	8223.9	5911.6	4767.1	3688.0	3928.0
77.5°	1048.5	983.1	1579.3	2780.6	4835.5	7047.4	5021.6	2841.6	1873.1	1111.1	1234.7
80°	321.4	311.2	421.7	837.7	2053.4	3375.4	1973.4	847.8	536.6	338.8	357.8
82.5°	190.5	174.5	209.4	305.4	523.5	1060.2	509.0	318.5	256.0	171.6	186.1
85°	109.1	101.8	123.6	148.3	176.0	225.4	146.9	151.2	136.7	91.6	96.0
87.5°	45.1	40.7	48.0	46.5	40.7	52.4	39.3	46.5	55.3	36.4	33.4
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)