

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: P884452

Luminaire Tested: **NAV-SB5B-740-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884452
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-SB5B-740-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

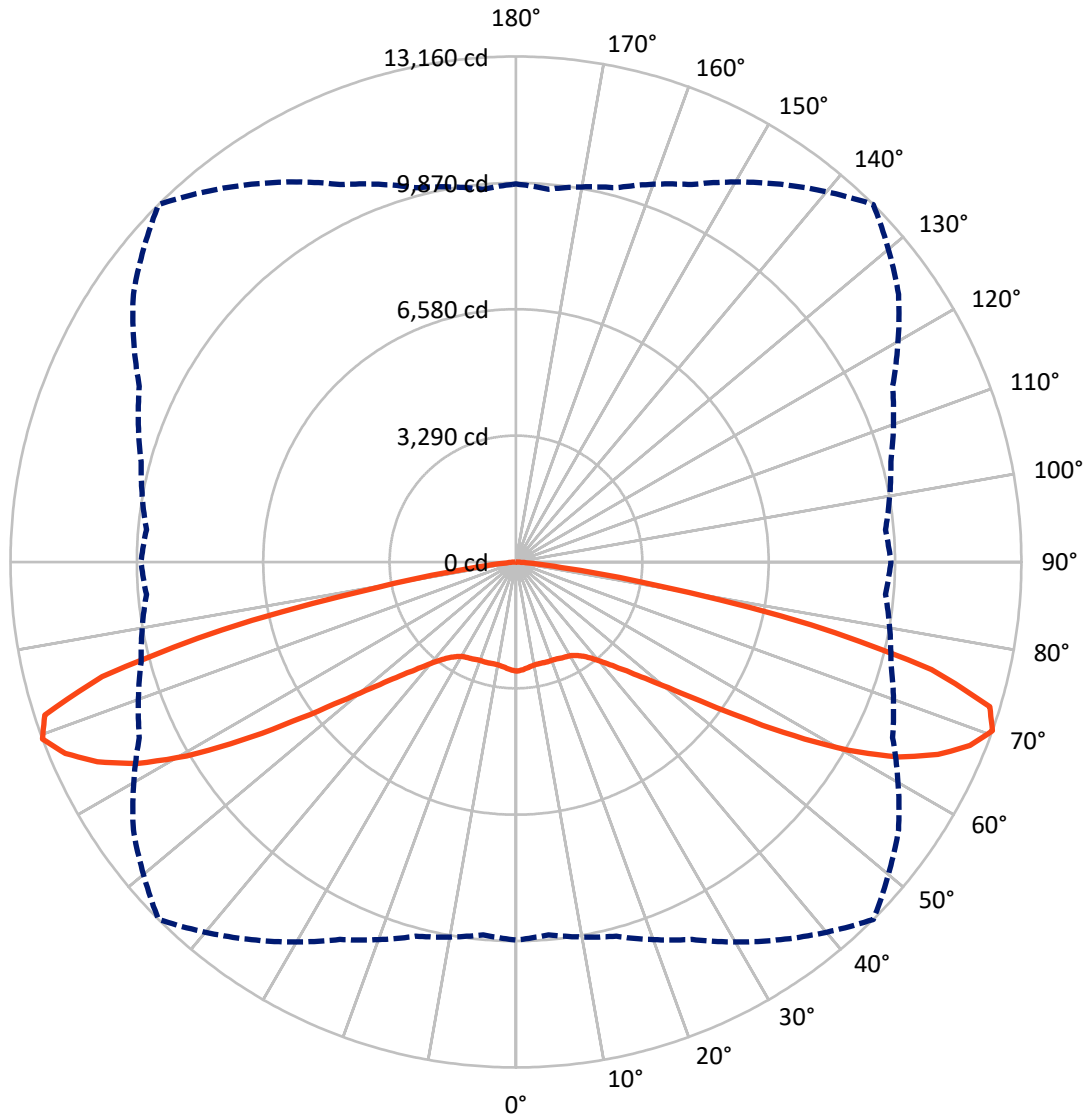
Lumens per Lamp: N/A
Luminaire Lumens: 31161 lumens
Efficiency: N/A
Efficacy: 170.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G4

Input Watts (W): 182.7
Input Voltage (V): 120.0
Input Current (Ain): 1.547
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 11.125
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	15580.5	0.0	15580.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	15580.5	0.0	15580.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	31161.0	0.0	31161.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.4	0.8
10°-20°	776.4	2.5
20°-30°	1292.1	4.1
30°-40°	1954.0	6.3
40°-50°	3247.0	10.4
50°-60°	6127.0	19.7
60°-70°	10345.7	33.2
70°-80°	6798.2	21.8
80°-90°	356.2	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°	31161.0	100.0
0°-180°	31161.0	100.0



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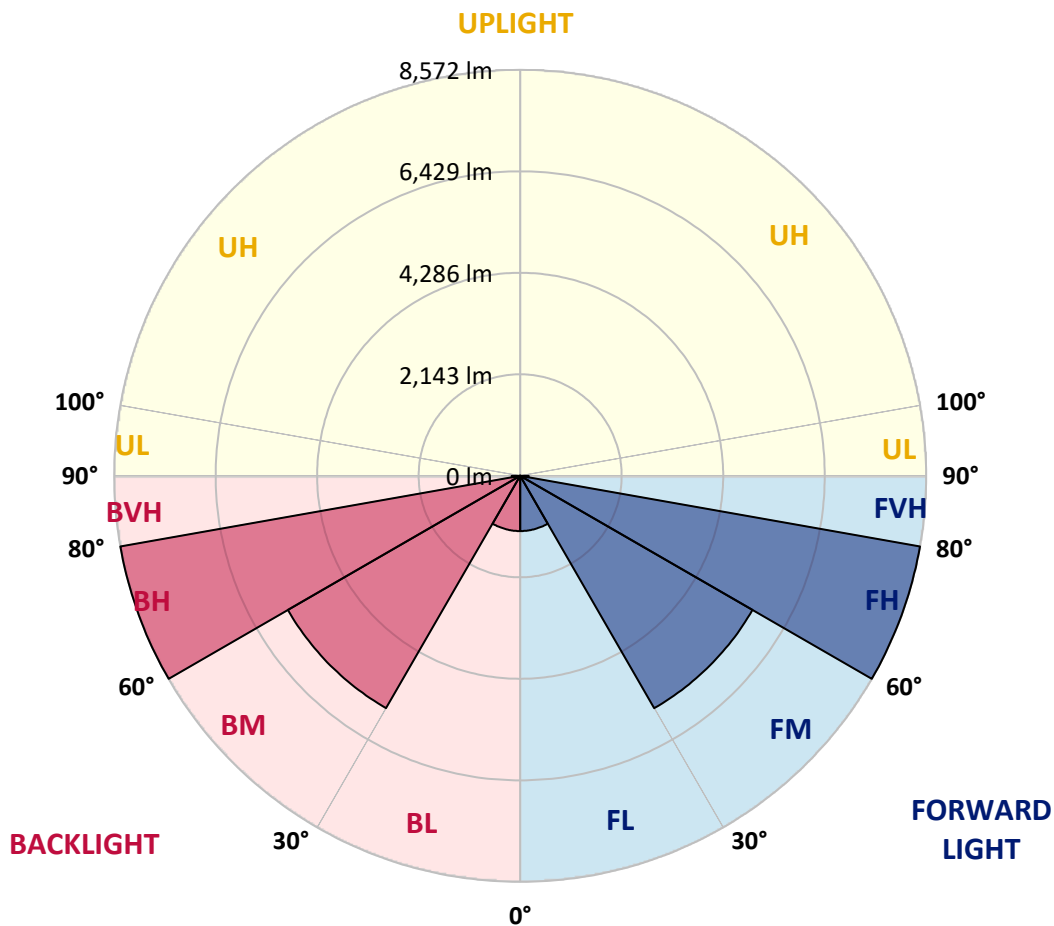
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1166.4	3.7			
FM (30°-60°)	5664.0	18.2			
FH (60°-80°)	8572.0	27.5			G4/12000
FVH (80°-90°)	178.1	0.6			G2/225
BL (0°-30°)	1166.4	3.7	B3/2500		
BM (30°-60°)	5664.0	18.2	B4/8500		
BH (60°-80°)	8572.0	27.5	B5		G4/12000
BVH (80°-90°)	178.1	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°	2842.5	2842.5	2842.5	2842.5	2842.5	2842.5	2842.5	2842.5	2842.5	2842.5	2842.5
2.5°	2824.7	2832.8	2829.6	2823.1	2823.1	2818.2	2823.1	2826.3	2831.2	2834.4	2832.8
5°	2787.4	2793.9	2792.3	2787.4	2789.1	2784.2	2787.4	2792.3	2795.5	2797.2	2797.2
7.5°	2755.0	2761.5	2758.3	2750.2	2750.2	2745.3	2747.0	2751.8	2756.7	2758.3	2758.3
10°	2747.0	2753.4	2743.7	2730.8	2725.9	2719.4	2721.0	2725.9	2735.6	2740.5	2740.5
12.5°	2750.2	2755.0	2745.3	2725.9	2721.0	2714.6	2714.6	2719.4	2732.4	2738.9	2740.5
15°	2759.9	2764.8	2750.2	2729.1	2724.3	2719.4	2717.8	2724.3	2738.9	2750.2	2751.8
17.5°	2777.7	2782.6	2759.9	2730.8	2724.3	2725.9	2724.3	2729.1	2751.8	2772.9	2772.9
20°	2793.9	2797.2	2766.4	2730.8	2724.3	2725.9	2724.3	2734.0	2763.1	2792.3	2793.9
22.5°	2798.8	2802.0	2772.9	2742.1	2737.2	2738.9	2737.2	2747.0	2774.5	2803.6	2803.6
25°	2800.4	2805.3	2782.6	2758.3	2766.4	2769.6	2766.4	2768.0	2789.1	2815.0	2813.4
27.5°	2824.7	2831.2	2810.1	2789.1	2793.9	2792.3	2797.2	2802.0	2818.2	2844.1	2837.7
30°	2874.9	2879.8	2861.9	2840.9	2837.7	2826.3	2840.9	2857.1	2874.9	2897.6	2892.7
32.5°	2957.5	2967.2	2944.5	2921.9	2907.3	2900.8	2912.2	2939.7	2964.0	2988.3	2978.6
35°	3095.2	3101.7	3080.6	3038.5	3012.6	3012.6	3022.3	3057.9	3096.8	3127.6	3116.2
37.5°	3289.5	3297.6	3260.4	3210.2	3171.3	3171.3	3184.3	3221.5	3279.8	3323.6	3307.4
40°	3526.0	3537.3	3490.4	3438.5	3401.3	3394.8	3411.0	3453.1	3508.2	3563.3	3545.4
42.5°	3811.1	3824.0	3762.5	3717.1	3688.0	3688.0	3696.1	3734.9	3785.2	3853.2	3848.3
45°	4175.5	4198.2	4113.9	4068.6	4041.1	4047.5	4052.4	4086.4	4131.8	4209.5	4206.3
47.5°	4609.6	4632.2	4543.2	4496.2	4491.3	4522.1	4502.7	4527.0	4551.3	4640.3	4614.4
50°	5101.9	5140.8	5079.3	5076.0	5085.7	5142.4	5097.1	5110.0	5082.5	5139.2	5105.2
52.5°	5704.5	5761.1	5749.8	5769.2	5877.8	5994.4	5890.7	5845.4	5741.7	5759.5	5699.6
55°	6434.9	6520.8	6537.0	6653.6	6899.8	7137.9	6917.6	6734.6	6514.3	6473.8	6410.6
57.5°	7265.8	7333.8	7411.6	7649.7	8109.7	8532.4	8109.7	7704.7	7358.1	7275.5	7217.2
60°	8159.9	8244.1	8318.6	8670.1	9353.6	9948.0	9340.6	8697.6	8239.2	8127.5	8030.3
62.5°	9120.3	9228.8	9280.7	9671.0	10467.9	11177.3	10479.2	9700.2	9191.6	9071.7	8974.6
65°	10041.9	10131.0	10189.3	10605.6	11366.8	12077.8	11418.6	10650.9	10127.8	9970.7	9892.9
67.5°	10471.1	10519.7	10662.2	11133.6	11936.9	12748.4	12073.0	11183.8	10599.1	10323.7	10327.0
70°	9842.7	9743.9	10087.3	10842.0	12005.0	13159.8	12160.4	10819.4	10103.5	9656.4	9763.3
72.5°	7605.9	7435.9	8031.9	9322.8	11227.5	12897.4	11305.3	9395.7	8402.8	7495.8	7720.9
75°	4138.2	3945.5	4768.3	6400.9	8953.5	11178.9	9159.2	6583.9	5309.3	4107.5	4374.7
77.5°	1167.8	1094.9	1759.0	3096.8	5385.4	7848.9	5592.7	3164.8	2086.1	1237.4	1375.1
80°	357.9	346.6	469.7	932.9	2287.0	3759.2	2197.9	944.3	597.7	377.4	398.4
82.5°	212.2	194.4	233.2	340.1	583.1	1180.7	566.9	354.7	285.1	191.1	207.3
85°	121.5	113.4	137.7	165.2	196.0	251.0	163.6	168.4	152.2	102.0	106.9
87.5°	50.2	45.4	53.4	51.8	45.4	58.3	43.7	51.8	61.5	40.5	37.3
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)