

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: P883422

Luminaire Tested: **NAV-SB3D-735-U-5WQ**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883422  
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-735-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 3500K, 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: 30874 lumens  
Efficiency: N/A  
Efficacy: 141.6 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

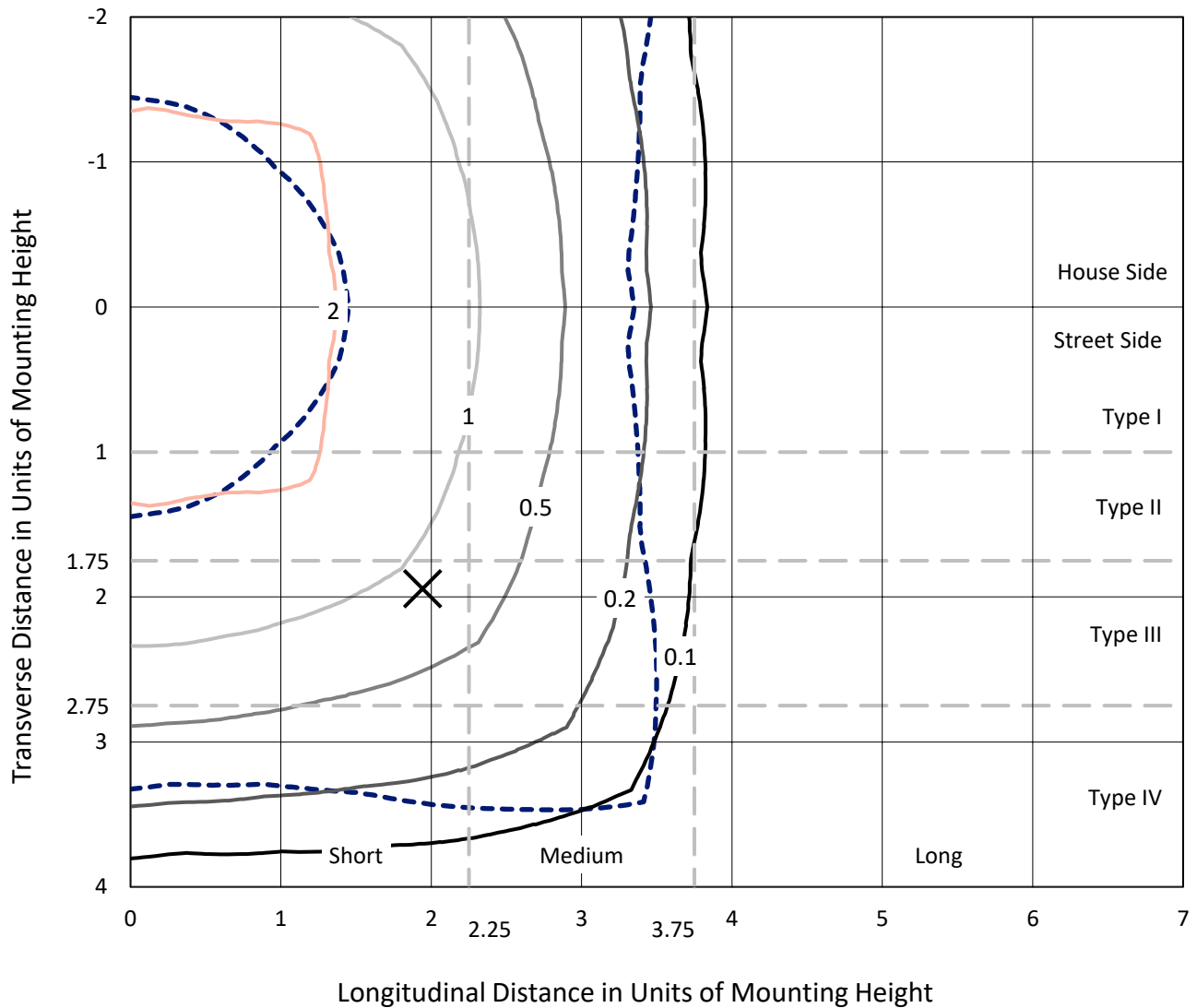
Input Watts (W): 218.1  
Input Voltage (V): 120.0  
Input Current (Ain): 1.84  
Voltage Rise (V): NR  
Power Factor: 0.998  
Total Harmonic Distortion (THDi): 2.542  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P883422  
 CATALOG NUMBER: NAV-SB3D-735-U-5WQ

### Iso-Footcandle Lines of Horizontal Illumination

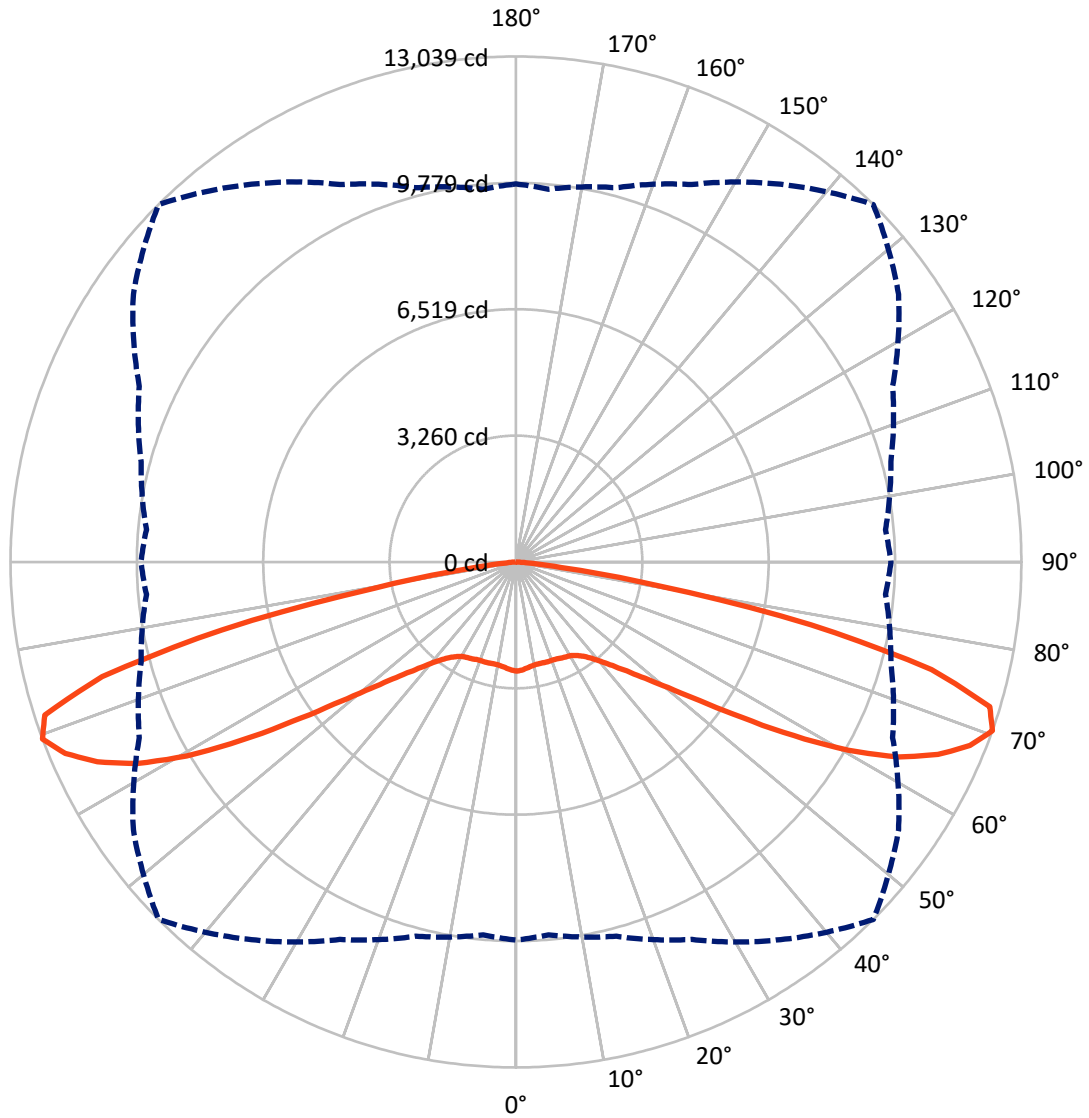
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type V - Short - N/A

REPORT NUMBER: P883422  
CATALOG NUMBER: NAV-SB3D-735-U-5WQ

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P883422

CATALOG NUMBER: NAV-SB3D-735-U-5WQ

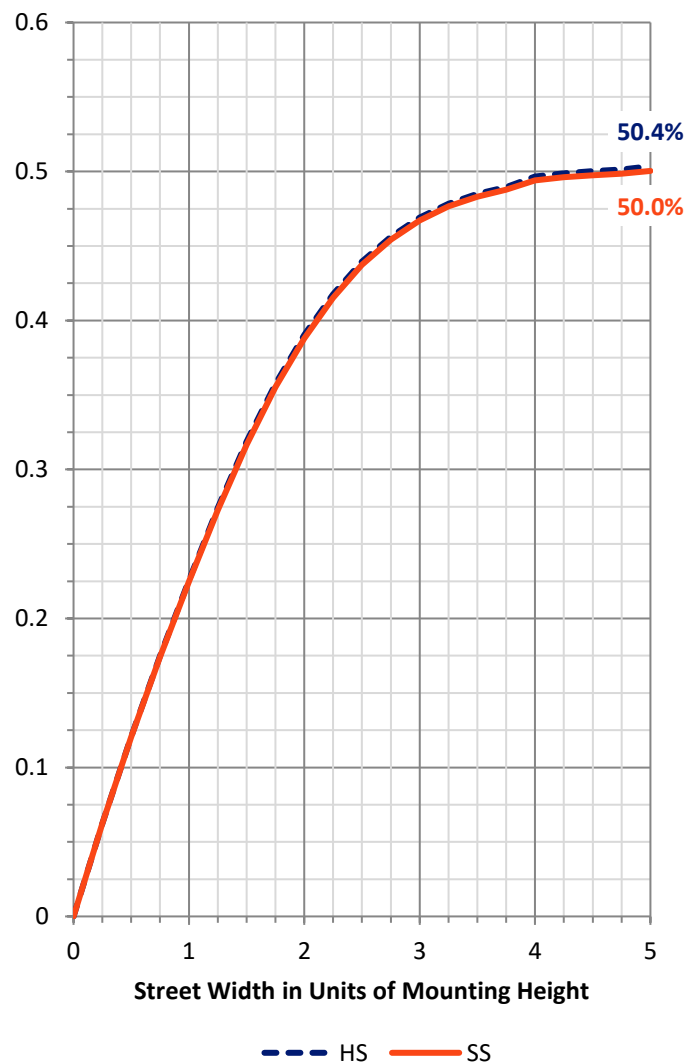
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	15437.0	0.0	15437.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	15437.0	0.0	15437.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	30874.0	0.0	30874.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	262.0	0.8
10°-20°	769.3	2.5
20°-30°	1280.1	4.1
30°-40°	1936.0	6.3
40°-50°	3217.1	10.4
50°-60°	6070.6	19.7
60°-70°	10250.4	33.2
70°-80°	6735.6	21.8
80°-90°	352.9	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°	30874.0	100.0
0°-180°	30874.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P883422

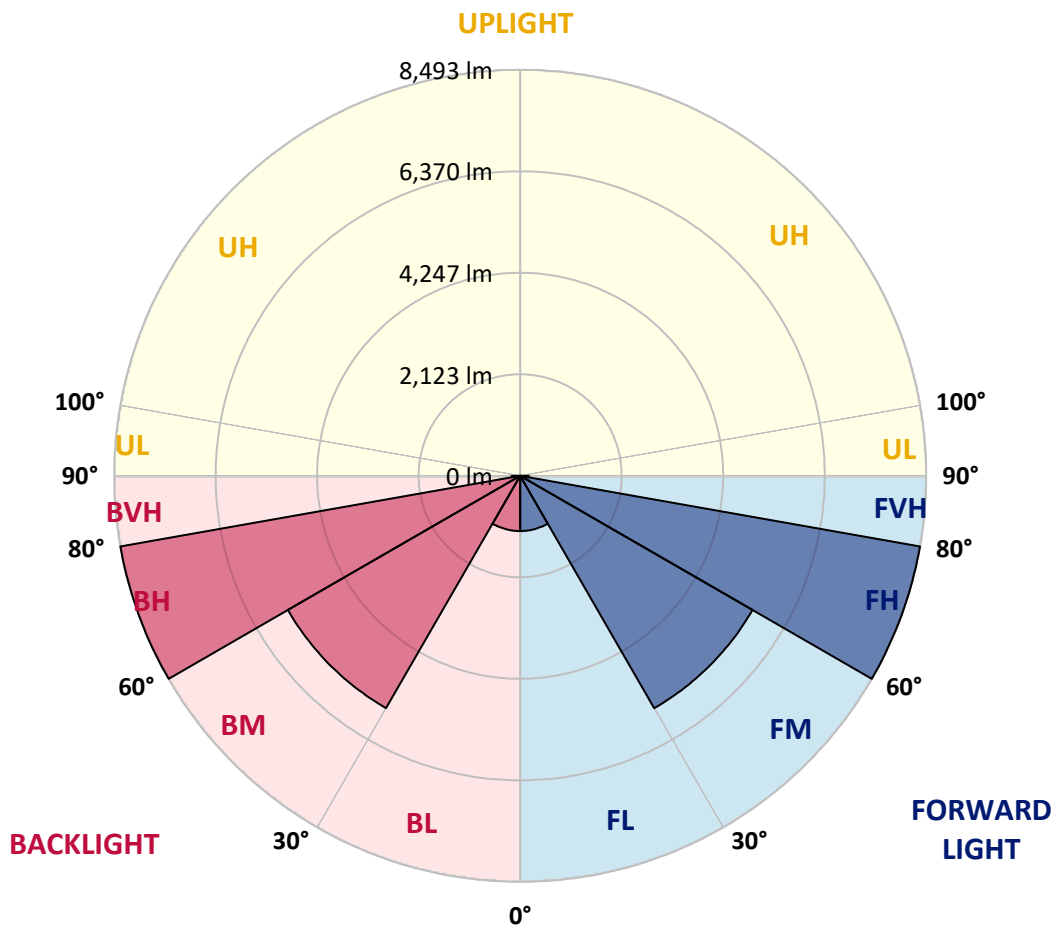
CATALOG NUMBER: NAV-SB3D-735-U-5WQ

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1155.7	3.7			
FM (30°-60°)	5611.8	18.2			
FH (60°-80°)	8493.0	27.5			G4/12000
FVH (80°-90°)	176.4	0.6			G2/225
BL (0°-30°)	1155.7	3.7	B3/2500		
BM (30°-60°)	5611.8	18.2	B4/8500		
BH (60°-80°)	8493.0	27.5	B5		G4/12000
BVH (80°-90°)	176.4	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



REPORT NUMBER: P883422  
 CATALOG NUMBER: NAV-SB3D-735-U-5WQ

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3
2.5°	2798.7	2806.7	2803.5	2797.1	2797.1	2792.3	2797.1	2800.3	2805.1	2808.3	2806.7
5°	2761.8	2768.2	2766.6	2761.8	2763.4	2758.6	2761.8	2766.6	2769.8	2771.4	2771.4
7.5°	2729.7	2736.1	2732.9	2724.9	2724.9	2720.0	2721.7	2726.5	2731.3	2732.9	2732.9
10°	2721.7	2728.1	2718.4	2705.6	2700.8	2694.4	2696.0	2700.8	2710.4	2715.2	2715.2
12.5°	2724.9	2729.7	2720.0	2700.8	2696.0	2689.6	2689.6	2694.4	2707.2	2713.6	2715.2
15°	2734.5	2739.3	2724.9	2704.0	2699.2	2694.4	2692.8	2699.2	2713.6	2724.9	2726.5
17.5°	2752.1	2757.0	2734.5	2705.6	2699.2	2700.8	2699.2	2704.0	2726.5	2747.3	2747.3
20°	2768.2	2771.4	2740.9	2705.6	2699.2	2700.8	2699.2	2708.8	2737.7	2766.6	2768.2
22.5°	2773.0	2776.2	2747.3	2716.8	2712.0	2713.6	2712.0	2721.7	2748.9	2777.8	2777.8
25°	2774.6	2779.4	2757.0	2732.9	2740.9	2744.1	2740.9	2742.5	2763.4	2789.0	2787.4
27.5°	2798.7	2805.1	2784.2	2763.4	2768.2	2766.6	2771.4	2776.2	2792.3	2817.9	2811.5
30°	2848.4	2853.2	2835.6	2814.7	2811.5	2800.3	2814.7	2830.8	2848.4	2870.9	2866.1
32.5°	2930.3	2939.9	2917.4	2895.0	2880.5	2874.1	2885.3	2912.6	2936.7	2960.8	2951.1
35°	3066.7	3073.1	3052.2	3010.5	2984.8	2984.8	2994.5	3029.8	3068.3	3098.8	3087.5
37.5°	3259.2	3267.3	3230.4	3180.6	3142.1	3142.1	3154.9	3191.8	3249.6	3292.9	3276.9
40°	3493.5	3504.8	3458.2	3406.9	3370.0	3363.5	3379.6	3421.3	3475.9	3530.4	3512.8
42.5°	3776.0	3788.8	3727.8	3682.9	3654.0	3654.0	3662.0	3700.5	3750.3	3817.7	3812.9
45°	4137.0	4159.5	4076.1	4031.1	4003.8	4010.3	4015.1	4048.8	4093.7	4170.7	4167.5
47.5°	4567.1	4589.6	4501.3	4454.8	4450.0	4480.5	4461.2	4485.3	4509.3	4597.6	4571.9
50°	5055.0	5093.5	5032.5	5029.3	5038.9	5095.1	5050.1	5063.0	5035.7	5091.9	5058.2
52.5°	5651.9	5708.1	5696.9	5716.1	5823.6	5939.2	5836.5	5791.5	5688.8	5706.5	5647.1
55°	6375.7	6460.7	6476.8	6592.3	6836.2	7072.1	6853.9	6672.5	6454.3	6414.2	6351.6
57.5°	7198.9	7266.3	7343.3	7579.2	8035.0	8453.8	8035.0	7633.8	7290.4	7208.5	7150.8
60°	8084.7	8168.2	8242.0	8590.2	9267.4	9856.4	9254.6	8617.5	8163.3	8052.6	7956.3
62.5°	9036.3	9143.8	9195.2	9581.9	10371.5	11074.4	10382.7	9610.8	9106.9	8988.2	8891.9
65°	9949.4	10037.7	10095.5	10507.9	11262.1	11966.6	11313.5	10552.8	10034.5	9878.8	9801.8
67.5°	10374.7	10422.8	10564.0	11031.0	11827.0	12631.0	11961.8	11080.8	10501.5	10228.7	10231.9
70°	9752.0	9654.2	9994.4	10742.2	11894.4	13038.6	12048.4	10719.7	10010.4	9567.5	9673.4
72.5°	7535.9	7367.4	7957.9	9236.9	11124.1	12778.6	11201.1	9309.1	8325.4	7426.8	7649.8
75°	4100.1	3909.2	4724.4	6342.0	8871.0	11076.0	9074.8	6523.3	5260.4	4069.6	4334.4
77.5°	1157.0	1084.8	1742.8	3068.3	5335.8	7776.6	5541.2	3135.7	2066.9	1226.0	1362.4
80°	354.6	343.4	465.4	924.3	2265.9	3724.6	2177.6	935.6	592.2	373.9	394.8
82.5°	210.2	192.6	231.1	337.0	577.7	1169.9	561.7	351.4	282.4	189.4	205.4
85°	120.4	112.3	136.4	163.7	194.2	248.7	162.1	166.9	150.8	101.1	105.9
87.5°	49.7	44.9	53.0	51.4	44.9	57.8	43.3	51.4	61.0	40.1	36.9
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)