

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: P966069

Luminaire Tested: **NAV-SB4B-727-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966069
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-20)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-727-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22470 lumens
Efficiency: N/A
Efficacy: 152.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

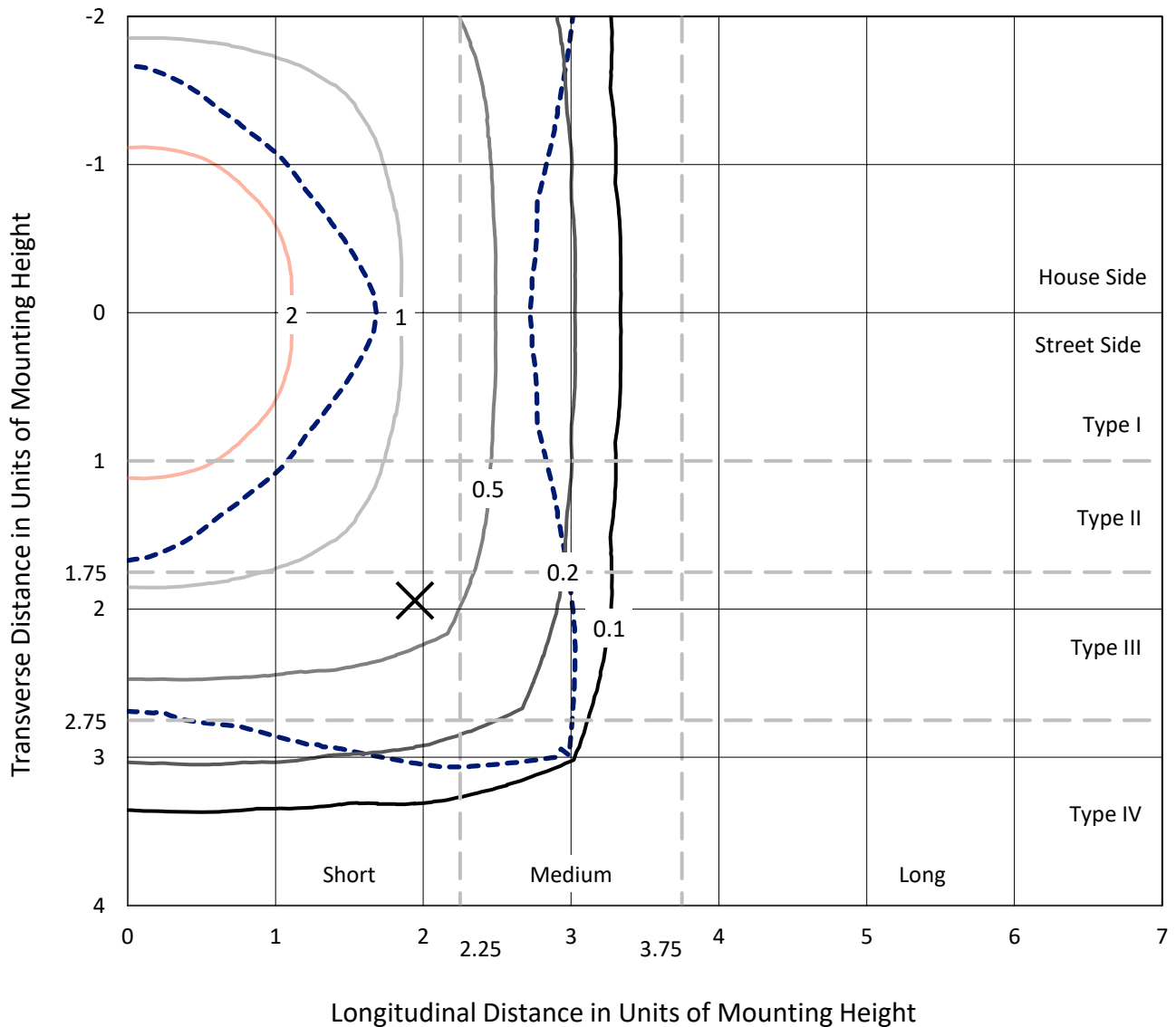
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

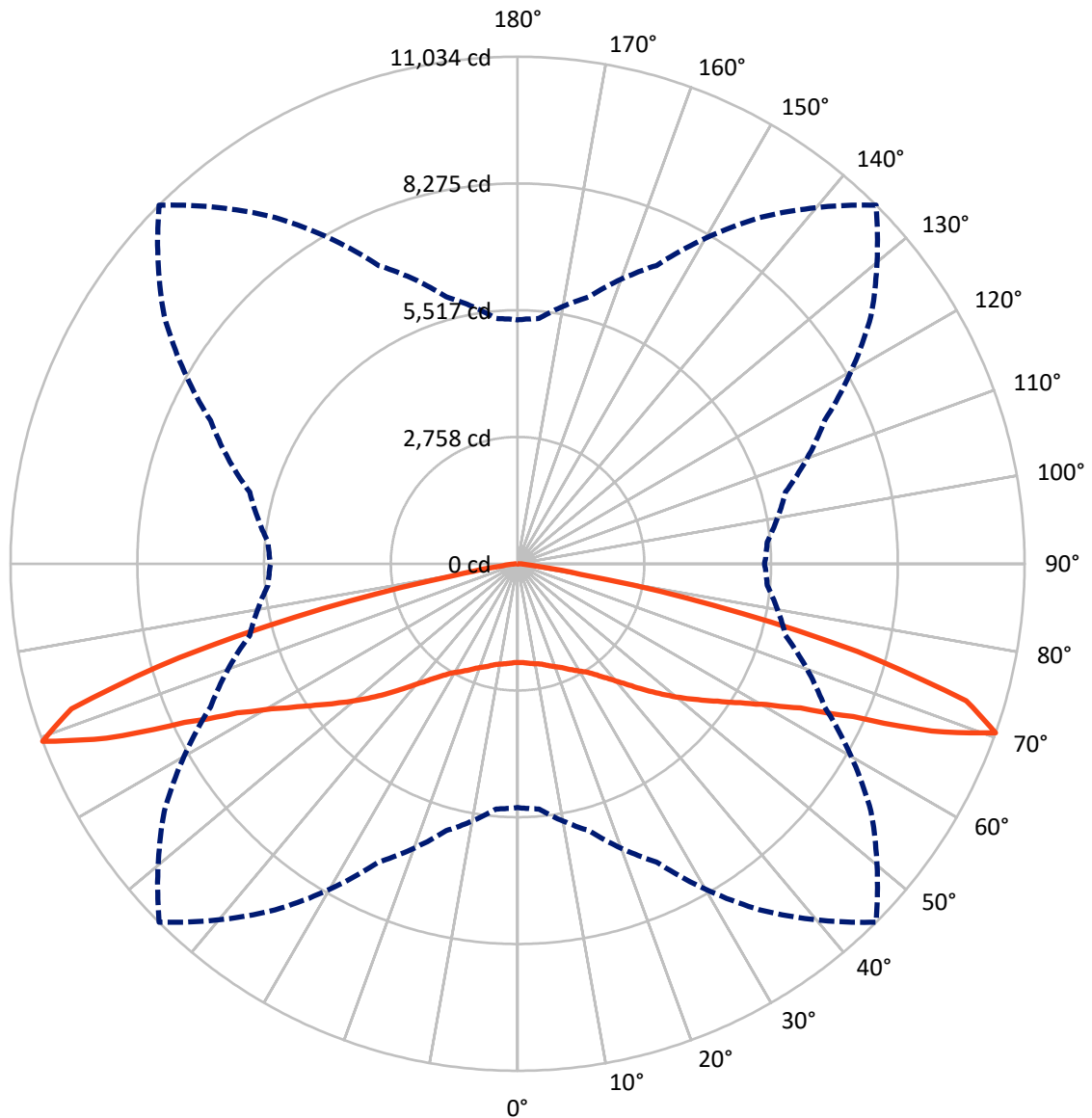
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 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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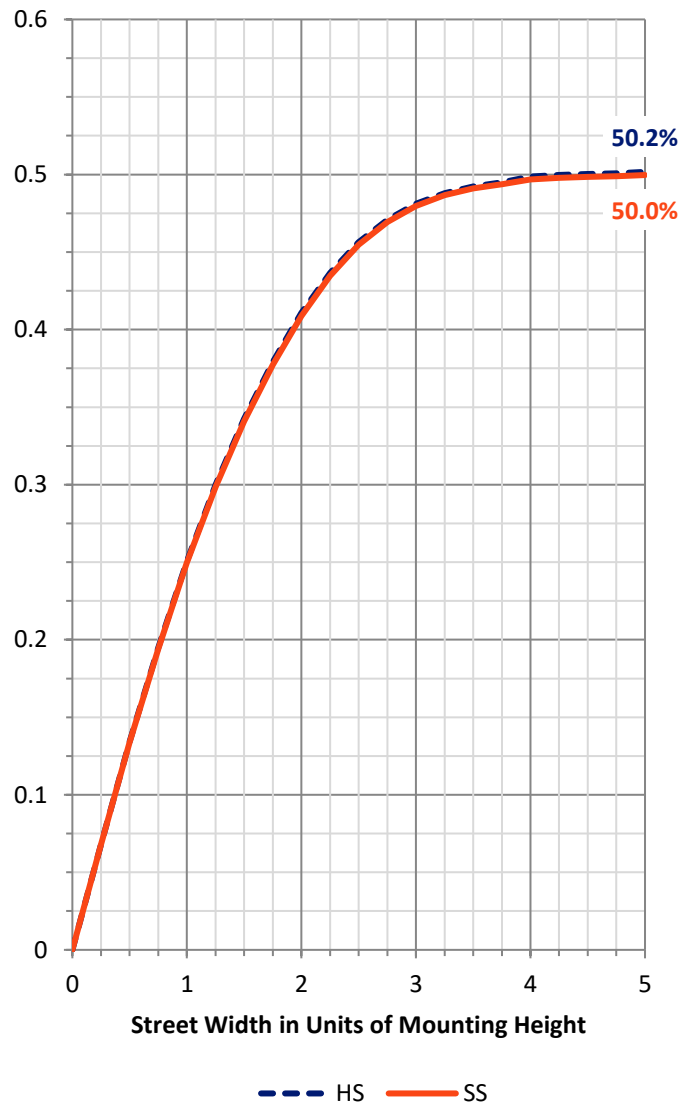
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11235.0	0.0	11235.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	11235.0	0.0	11235.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	22470.0	0.0	22470.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.1	0.9
10°-20°	648.4	2.9
20°-30°	1158.8	5.2
30°-40°	1878.4	8.4
40°-50°	3059.6	13.6
50°-60°	4664.8	20.8
60°-70°	6939.8	30.9
70°-80°	3782.4	16.8
80°-90°	128.8	0.6
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°	22470.0	100.0
0°-180°	22470.0	100.0

Coefficient of Utilization



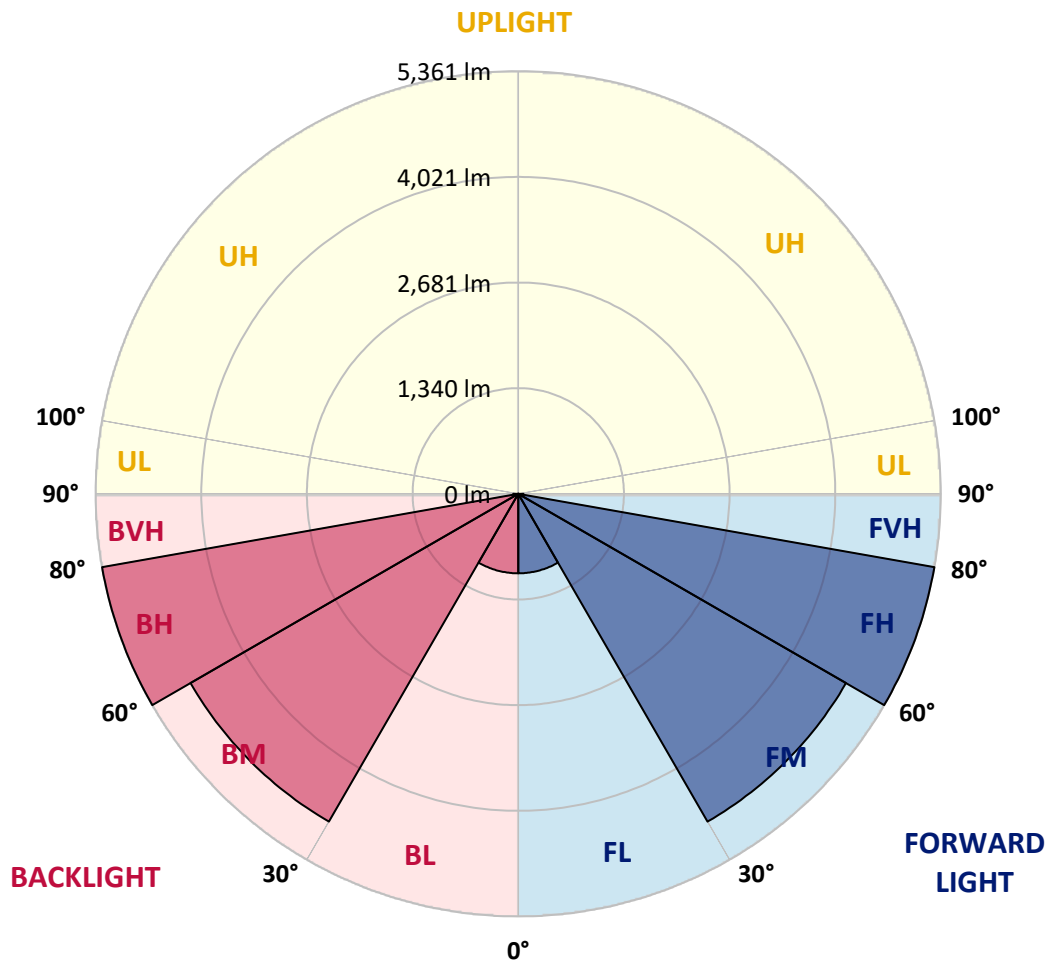
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1008.1	4.5			
FM (30°-60°)	4801.4	21.4			
FH (60°-80°)	5361.1	23.9			G3/7500
FVH (80°-90°)	64.4	0.3			G1/100
BL (0°-30°)	1008.1	4.5	B3/2500		
BM (30°-60°)	4801.4	21.4	B3/5000		
BH (60°-80°)	5361.1	23.9	B5		G3/7500
BVH (80°-90°)	64.4	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4
2.5°	2162.5	2164.8	2160.3	2158.0	2155.8	2152.4	2153.5	2159.2	2163.7	2162.5	2163.7
5°	2180.6	2182.8	2179.5	2178.3	2173.8	2172.7	2172.7	2178.3	2181.7	2179.5	2180.6
7.5°	2200.9	2204.3	2198.6	2197.5	2195.2	2193.0	2191.9	2197.5	2200.9	2200.9	2200.9
10°	2220.0	2223.4	2218.9	2215.5	2213.3	2213.3	2211.0	2215.5	2221.2	2220.0	2220.0
12.5°	2240.3	2242.6	2238.1	2235.8	2235.8	2239.2	2235.8	2238.1	2242.6	2240.3	2239.2
15°	2265.2	2266.4	2265.2	2268.6	2274.3	2285.5	2275.4	2273.1	2275.4	2269.8	2269.8
17.5°	2299.1	2301.3	2305.8	2313.7	2321.6	2341.9	2323.9	2318.2	2318.2	2307.0	2307.0
20°	2340.8	2344.2	2350.9	2364.5	2374.6	2393.8	2375.7	2367.9	2364.5	2349.8	2349.8
22.5°	2384.8	2390.4	2400.5	2418.6	2436.6	2454.8	2436.6	2423.1	2413.0	2393.8	2392.7
25°	2435.5	2442.3	2458.2	2487.5	2512.3	2538.2	2516.8	2489.7	2469.4	2442.3	2441.1
27.5°	2507.8	2515.7	2534.8	2570.9	2602.5	2625.0	2604.7	2569.8	2541.6	2508.9	2507.8
30°	2609.2	2617.1	2639.7	2678.1	2699.5	2714.2	2700.7	2673.6	2639.7	2602.5	2602.5
32.5°	2740.1	2750.3	2775.1	2811.2	2815.7	2817.9	2813.4	2799.9	2775.1	2730.0	2731.1
35°	2906.0	2917.3	2945.4	2974.8	2970.2	2974.8	2968.0	2963.5	2945.4	2893.6	2893.6
37.5°	3109.0	3122.6	3151.9	3174.4	3163.1	3157.5	3158.6	3159.8	3149.6	3092.1	3092.1
40°	3344.8	3362.8	3384.2	3407.9	3388.8	3371.8	3383.1	3392.1	3383.1	3324.5	3324.5
42.5°	3587.3	3613.2	3635.9	3669.7	3653.9	3632.5	3648.3	3658.4	3639.3	3576.0	3580.5
45°	3857.0	3881.8	3911.1	3961.8	3950.6	3928.0	3950.6	3952.8	3920.1	3845.7	3853.6
47.5°	4135.6	4161.5	4205.6	4273.2	4268.7	4243.9	4273.2	4257.4	4215.7	4126.5	4120.9
50°	4399.5	4435.7	4503.3	4598.2	4607.2	4576.6	4616.2	4585.6	4515.7	4404.1	4401.9
52.5°	4647.8	4686.1	4793.3	4921.8	4954.5	4915.1	4968.1	4915.1	4810.2	4666.9	4653.4
55°	4908.3	4951.2	5078.7	5246.8	5312.2	5282.8	5332.5	5252.4	5103.5	4929.7	4906.1
57.5°	5215.2	5241.1	5393.4	5593.1	5703.6	5710.4	5732.9	5597.6	5417.1	5219.7	5192.6
60°	5547.9	5584.1	5749.8	5989.1	6163.9	6220.3	6196.6	5995.8	5786.0	5559.2	5523.1
62.5°	5974.4	6013.9	6212.4	6498.9	6775.4	6915.2	6822.7	6531.6	6272.2	6000.3	5952.9
65°	6327.4	6371.5	6730.2	7241.2	7744.4	8025.2	7792.9	7257.0	6790.0	6406.5	6343.2
67.5°	6071.4	6125.5	6688.4	7627.0	8878.0	9716.3	8921.0	7742.1	6827.2	6307.1	6229.3
70°	5306.5	5357.3	6013.9	7161.2	9197.3	11033.8	9389.1	7372.1	6035.3	5453.2	5375.3
72.5°	3523.0	3686.6	4351.0	5727.3	8212.5	10210.3	8293.7	5611.2	4036.3	3515.1	3401.2
75°	1168.7	1299.6	1753.1	2969.1	5500.6	7636.0	5236.6	2627.3	1388.7	999.5	945.4
77.5°	294.5	339.6	468.1	849.4	2194.1	4347.6	1975.3	693.8	377.9	263.9	235.7
80°	143.3	158.0	225.6	283.1	549.4	1381.9	515.6	266.2	178.2	137.7	126.4
82.5°	78.9	80.1	127.5	160.2	204.2	357.6	212.1	155.7	102.7	83.4	83.4
85°	48.5	47.4	67.6	85.7	85.7	127.5	101.6	85.7	58.6	51.9	54.1
87.5°	19.2	19.2	24.8	27.1	23.7	32.7	25.9	28.2	22.5	21.4	22.5
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)