

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: P966286

Luminaire Tested: **NAV-SB4B-830-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966286
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-830-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21767.9 lumens
Efficiency: N/A
Efficacy: 148.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

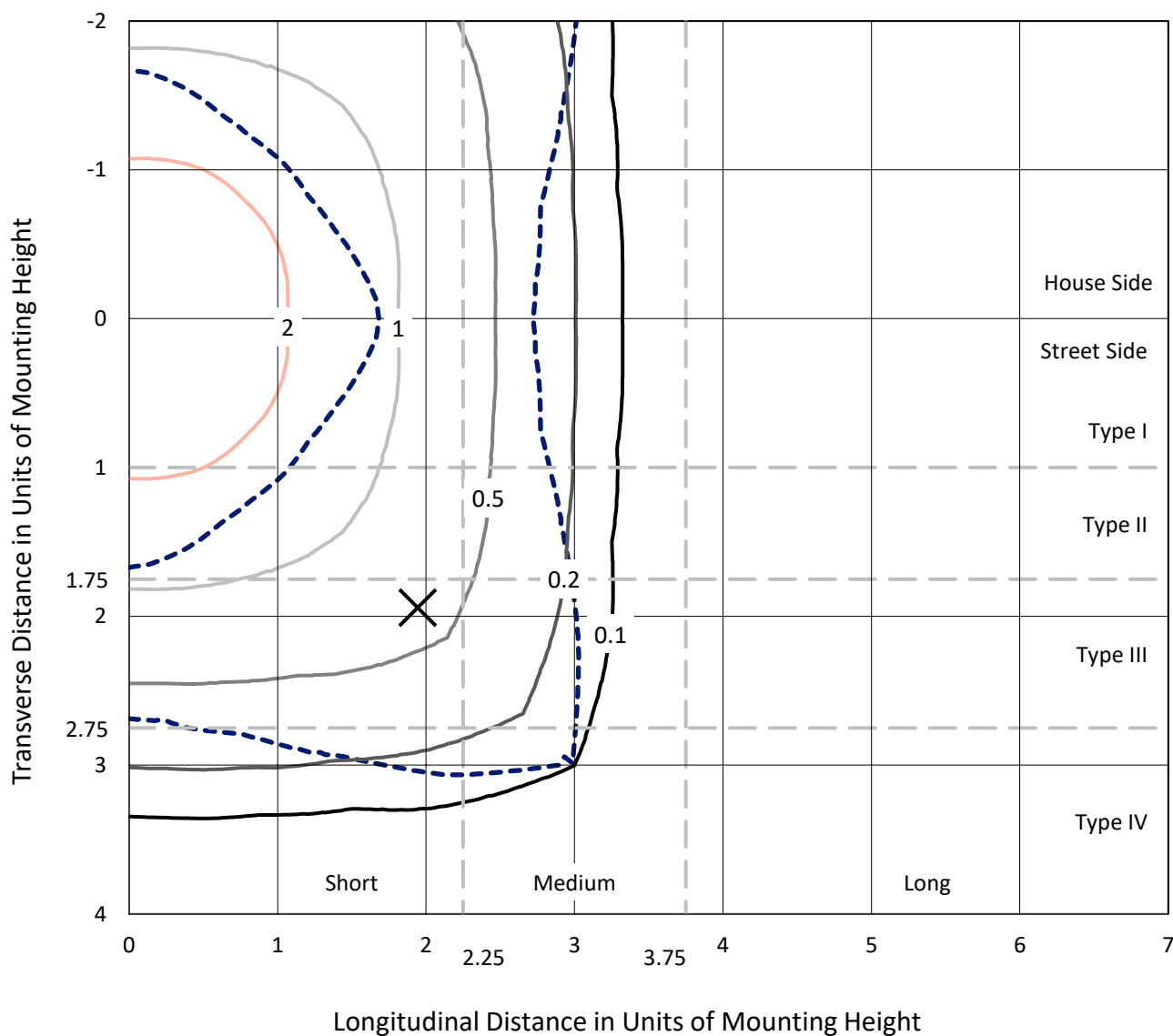
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

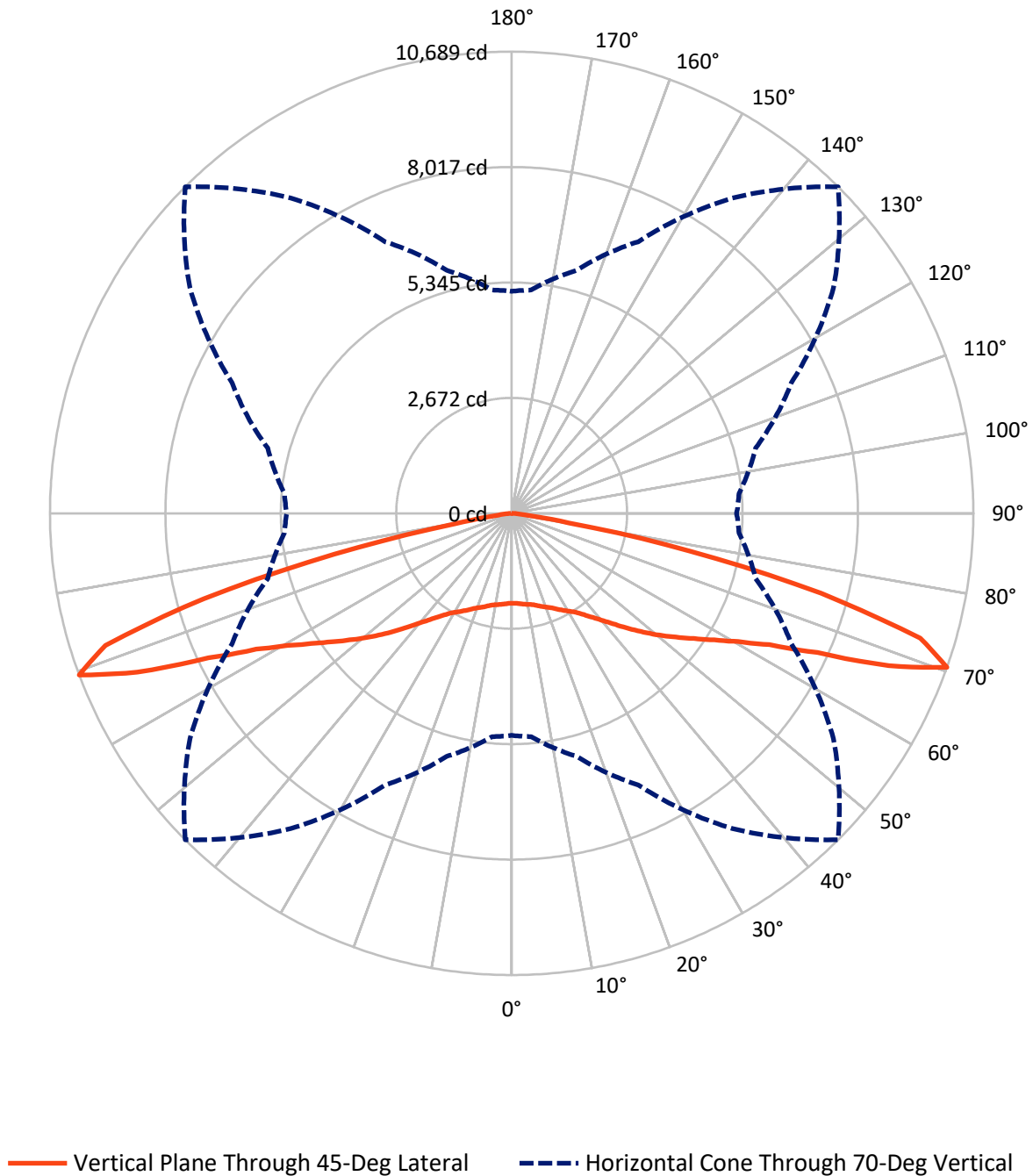
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type V - Short - N/A

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CATALOG NUMBER: NAV-SB4B-830-U-5MQ

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10884.0	0.0	10884.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10884.0	0.0	10884.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	21767.9	0.0	21767.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.6	0.9
10°-20°	628.2	2.9
20°-30°	1122.6	5.2
30°-40°	1819.7	8.4
40°-50°	2964.0	13.6
50°-60°	4519.1	20.8
60°-70°	6722.9	30.9
70°-80°	3664.2	16.8
80°-90°	124.8	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°	21767.9	100.0
0°-180°	21767.9	100.0

Coefficient of Utilization



REPORT NUMBER: P966286

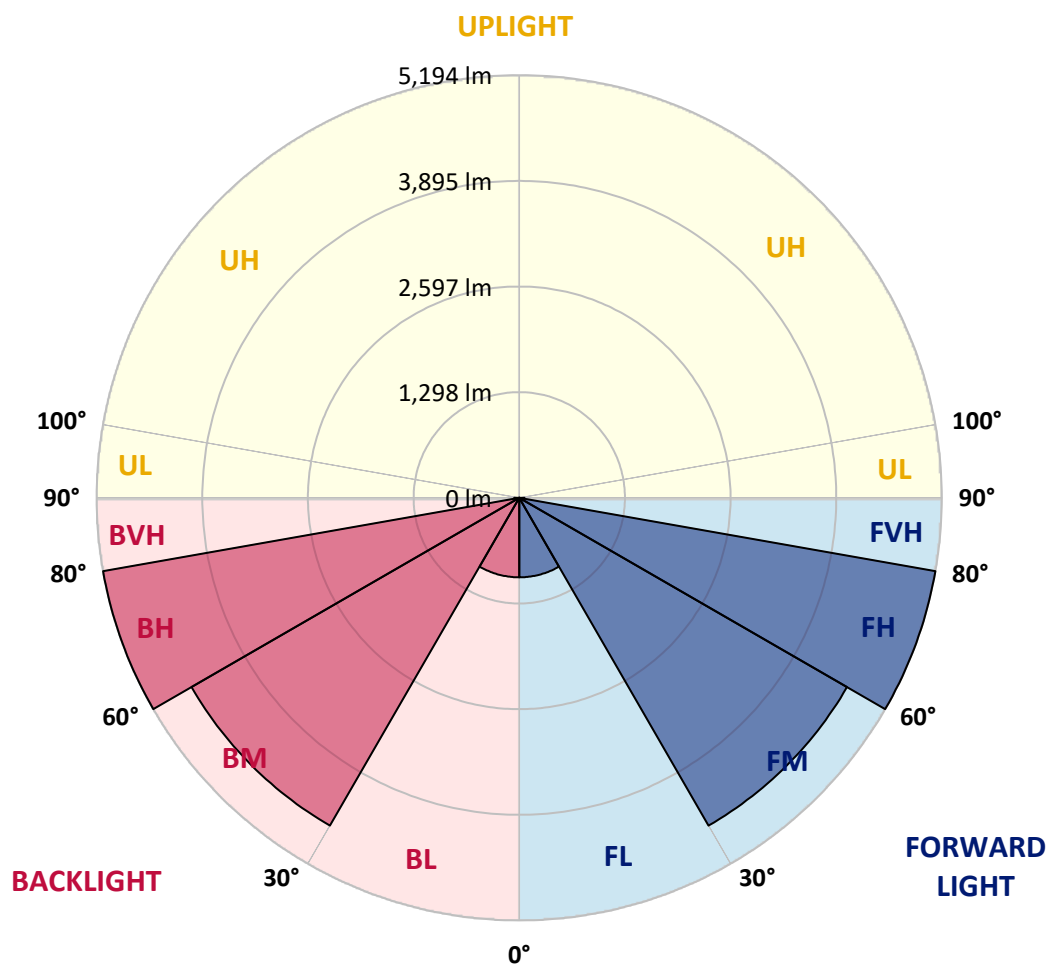
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	976.7	4.5			
FM	(30°-60°)	4651.4	21.4			
FH	(60°-80°)	5193.6	23.9			G3/7500
FVH	(80°-90°)	62.4	0.3			G1/100
BL	(0°-30°)	976.7	4.5	B2/1000		
BM	(30°-60°)	4651.4	21.4	B3/5000		
BH	(60°-80°)	5193.6	23.9	B5		G3/7500
BVH	(80°-90°)	62.4	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°	2085.2	2085.2	2085.2	2085.2	2085.2	2085.2	2085.2	2085.2	2085.2	2085.2	2085.2
2.5°	2095.0	2097.1	2092.7	2090.6	2088.4	2085.2	2086.3	2091.7	2096.0	2095.0	2096.0
5°	2112.4	2114.7	2111.4	2110.3	2105.9	2104.8	2104.8	2110.3	2113.5	2111.4	2112.4
7.5°	2132.1	2135.4	2130.0	2128.8	2126.7	2124.5	2123.4	2128.8	2132.1	2132.1	2132.1
10°	2150.8	2154.0	2149.6	2146.4	2144.2	2144.2	2141.9	2146.4	2151.8	2150.8	2150.8
12.5°	2170.3	2172.6	2168.2	2166.0	2166.0	2169.3	2166.0	2168.2	2172.6	2170.3	2169.3
15°	2194.4	2195.5	2194.4	2197.7	2203.1	2214.1	2204.3	2202.1	2204.3	2198.8	2198.8
17.5°	2227.2	2229.4	2233.8	2241.4	2249.1	2268.7	2251.2	2245.8	2245.8	2234.9	2234.9
20°	2267.6	2270.9	2277.4	2290.6	2300.4	2319.0	2301.5	2293.8	2290.6	2276.4	2276.4
22.5°	2310.2	2315.8	2325.5	2343.0	2360.6	2378.0	2360.6	2347.5	2337.6	2319.0	2317.9
25°	2359.4	2366.0	2381.3	2409.7	2433.8	2458.9	2438.2	2411.9	2392.2	2366.0	2364.9
27.5°	2429.4	2437.0	2455.6	2490.5	2521.2	2543.0	2523.3	2489.5	2462.2	2430.5	2429.4
30°	2527.8	2535.4	2557.3	2594.4	2615.2	2629.3	2616.3	2590.1	2557.3	2521.2	2521.2
32.5°	2654.5	2664.4	2688.4	2723.3	2727.7	2729.9	2725.6	2712.5	2688.4	2644.7	2645.7
35°	2815.2	2826.1	2853.4	2881.8	2877.5	2881.8	2875.2	2870.9	2853.4	2803.2	2803.2
37.5°	3011.9	3025.0	3053.4	3075.3	3064.3	3058.9	3059.9	3061.1	3051.2	2995.5	2995.5
40°	3240.2	3257.8	3278.6	3301.5	3282.9	3266.5	3277.4	3286.2	3277.4	3220.7	3220.7
42.5°	3475.3	3500.4	3522.2	3555.0	3539.7	3518.9	3534.2	3544.0	3525.5	3464.3	3468.7
45°	3736.4	3760.4	3788.9	3838.0	3827.1	3805.3	3827.1	3829.3	3797.6	3725.5	3733.2
47.5°	4006.3	4031.5	4074.1	4139.7	4135.4	4111.3	4139.7	4124.4	4083.9	3997.6	3992.2
50°	4262.1	4297.0	4362.6	4454.4	4463.2	4433.6	4471.9	4442.5	4374.6	4266.5	4264.3
52.5°	4502.5	4539.6	4643.5	4768.1	4799.8	4761.5	4812.9	4761.5	4659.9	4521.1	4508.0
55°	4755.0	4796.5	4920.0	5082.8	5146.2	5117.8	5165.9	5088.3	4944.0	4775.7	4752.7
57.5°	5052.2	5077.3	5224.8	5418.4	5525.4	5531.9	5553.9	5422.7	5247.8	5056.5	5030.4
60°	5374.6	5409.5	5570.3	5801.9	5971.2	6026.0	6003.0	5808.5	5605.2	5385.6	5350.6
62.5°	5787.7	5825.9	6018.3	6295.9	6563.6	6699.1	6609.5	6327.5	6076.2	5812.8	5767.0
65°	6129.7	6172.3	6519.9	7015.0	7502.4	7774.5	7549.3	7030.3	6577.8	6206.3	6145.1
67.5°	5881.7	5934.1	6479.4	7388.7	8600.7	9412.7	8642.2	7500.1	6613.9	6110.1	6034.7
70°	5140.7	5189.9	5825.9	6937.4	8909.9	10689.1	9095.7	7141.7	5846.7	5282.7	5207.4
72.5°	3412.9	3571.4	4215.1	5548.3	7955.8	9891.4	8034.6	5435.8	3910.2	3405.3	3295.0
75°	1132.2	1258.9	1698.3	2876.4	5328.7	7397.4	5072.9	2545.2	1345.3	968.2	915.8
77.5°	285.3	328.9	453.6	822.9	2125.5	4211.8	1913.6	672.1	366.1	255.7	228.4
80°	138.8	153.0	218.5	274.3	532.2	1338.8	499.4	257.9	172.7	133.4	122.4
82.5°	76.5	77.6	123.5	155.2	197.8	346.4	205.4	150.8	99.4	80.9	80.9
85°	46.9	45.9	65.6	83.0	83.0	123.5	98.4	83.0	56.8	50.2	52.5
87.5°	18.6	18.6	24.1	26.2	23.0	31.7	25.1	27.4	21.8	20.8	21.8
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)