

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: P963124

Luminaire Tested: **NAV-SB2D-830-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963124
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-SB2D-830-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19628.7 lumens
Efficiency: N/A
Efficacy: 133.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

Input Watts (W): 147.6
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

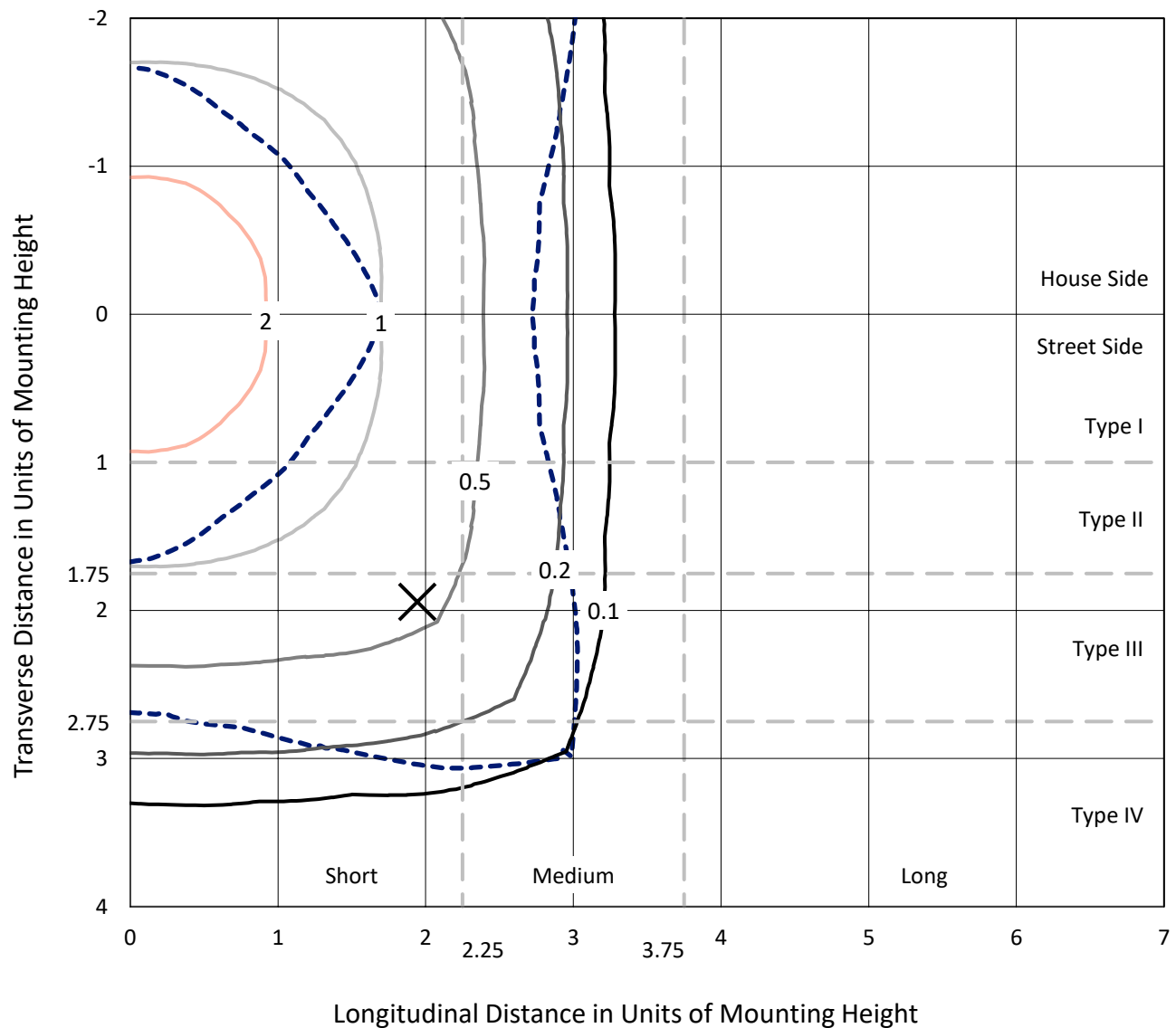


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

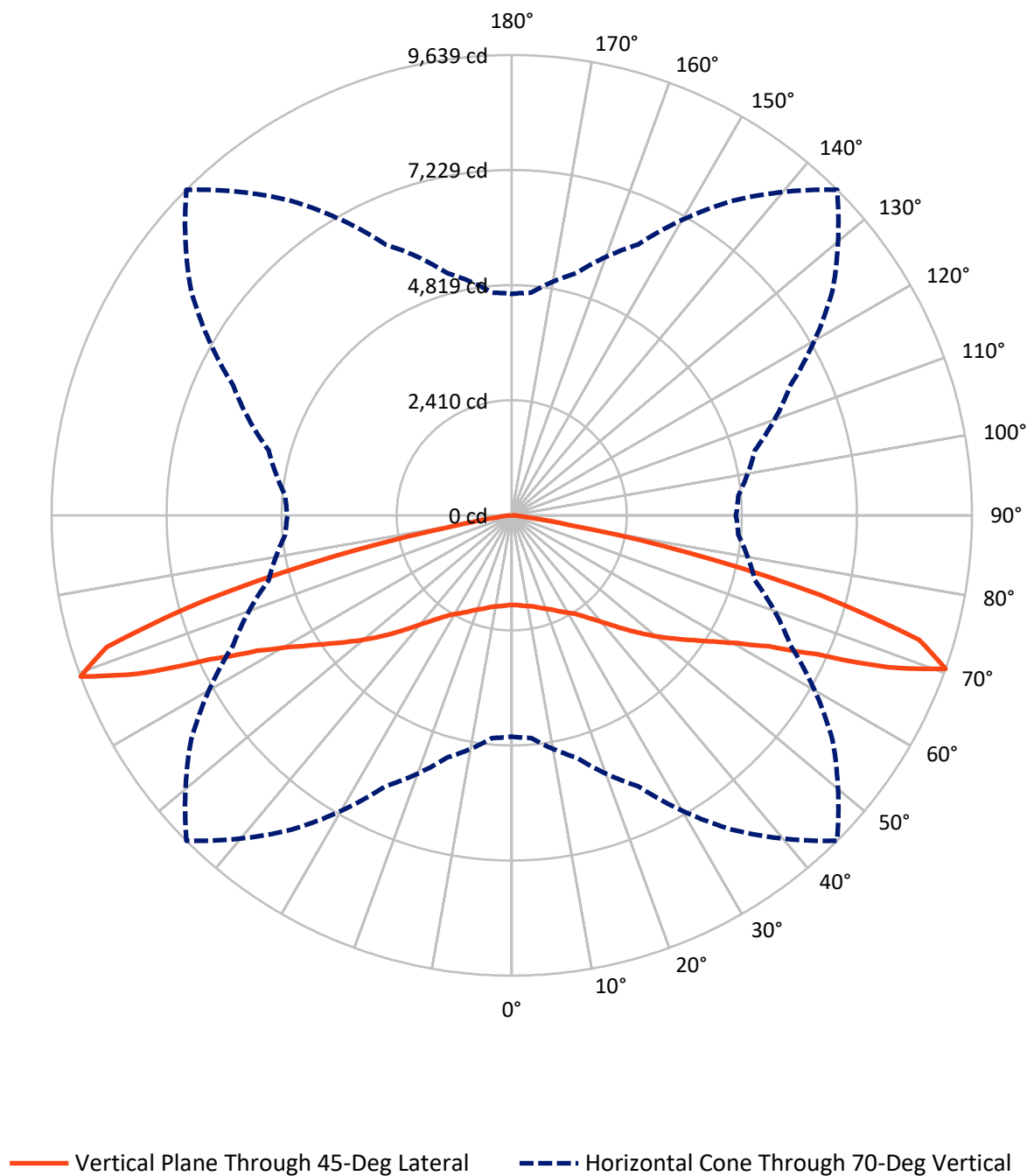


Based on 25 foot mounting height. Maximum calculated value = 3 fc

Type V - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9814.4	0.0	9814.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9814.4	0.0	9814.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	19628.7	0.0	19628.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.7	0.9
10°-20°	566.4	2.9
20°-30°	1012.3	5.2
30°-40°	1640.9	8.4
40°-50°	2672.7	13.6
50°-60°	4075.0	20.8
60°-70°	6062.2	30.9
70°-80°	3304.1	16.8
80°-90°	112.5	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°	19628.7	100.0
0°-180°	19628.7	100.0

Coefficient of Utilization



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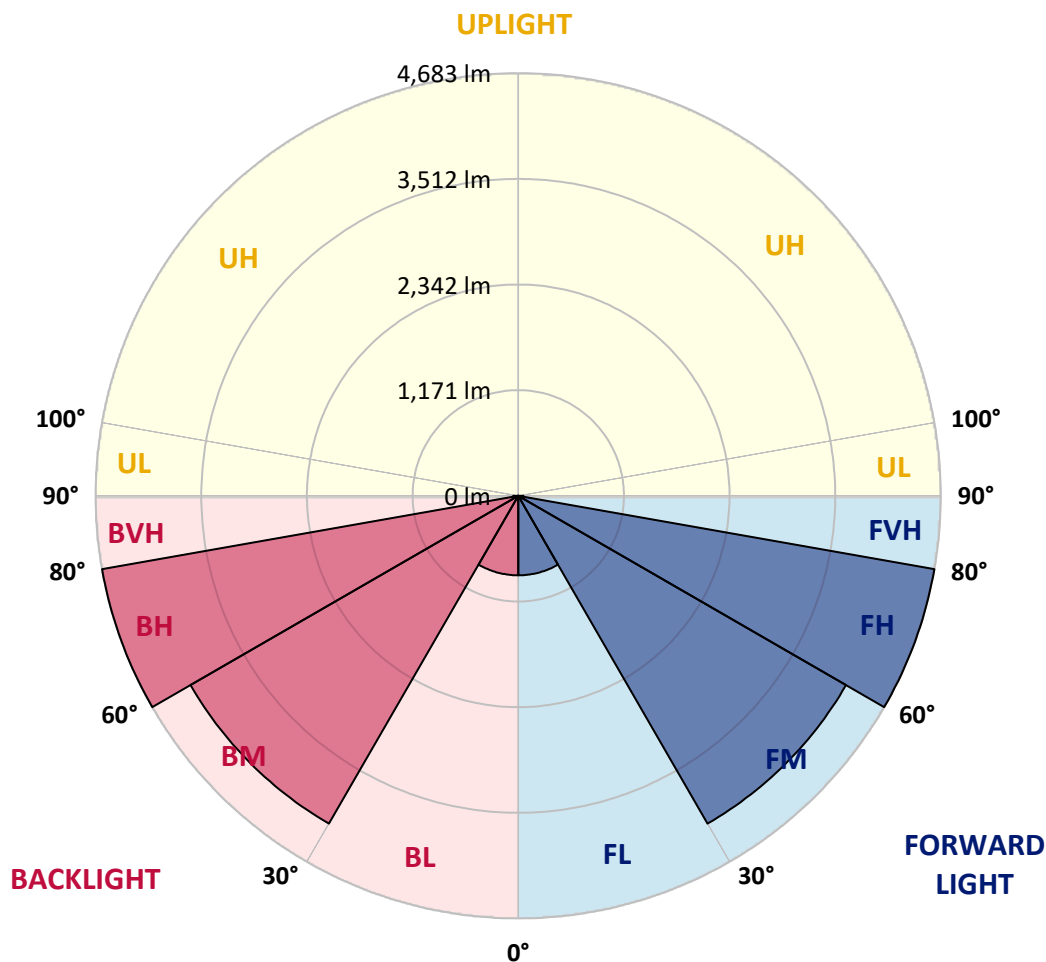
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	880.7	4.5			
FM	(30°-60°)	4194.3	21.4			
FH	(60°-80°)	4683.2	23.9			G2/5000
FVH	(80°-90°)	56.3	0.3			G1/100
BL	(0°-30°)	880.7	4.5	B2/1000		
BM	(30°-60°)	4194.3	21.4	B3/5000		
BH	(60°-80°)	4683.2	23.9	B4/5000		G2/5000
BVH	(80°-90°)	56.3	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1880.3	1880.3	1880.3	1880.3	1880.3	1880.3	1880.3	1880.3	1880.3	1880.3	1880.3
2.5°	1889.1	1891.0	1887.1	1885.2	1883.2	1880.3	1881.2	1886.1	1890.1	1889.1	1890.1
5°	1904.9	1906.8	1903.8	1902.9	1898.9	1898.0	1898.0	1902.9	1905.9	1903.8	1904.9
7.5°	1922.6	1925.6	1920.6	1919.6	1917.7	1915.7	1914.7	1919.6	1922.6	1922.6	1922.6
10°	1939.4	1942.3	1938.4	1935.4	1933.5	1933.5	1931.5	1935.4	1940.3	1939.4	1939.4
12.5°	1957.1	1959.1	1955.1	1953.1	1953.1	1956.1	1953.1	1955.1	1959.1	1957.1	1956.1
15°	1978.8	1979.8	1978.8	1981.7	1986.7	1996.5	1987.7	1985.6	1987.7	1982.8	1982.8
17.5°	2008.4	2010.3	2014.2	2021.2	2028.1	2045.8	2030.0	2025.1	2025.1	2015.3	2015.3
20°	2044.8	2047.7	2053.7	2065.5	2074.4	2091.1	2075.3	2068.4	2065.5	2052.7	2052.7
22.5°	2083.2	2088.1	2097.0	2112.8	2128.5	2144.3	2128.5	2116.7	2107.9	2091.1	2090.2
25°	2127.6	2133.5	2147.3	2172.9	2194.6	2217.3	2198.5	2174.8	2157.1	2133.5	2132.5
27.5°	2190.6	2197.5	2214.3	2245.9	2273.4	2293.1	2275.4	2244.9	2220.3	2191.7	2190.6
30°	2279.3	2286.3	2305.9	2339.5	2358.2	2371.0	2359.1	2335.5	2305.9	2273.4	2273.4
32.5°	2393.7	2402.5	2424.2	2455.7	2459.7	2461.6	2457.7	2445.9	2424.2	2384.8	2385.8
35°	2538.5	2548.4	2573.0	2598.6	2594.7	2598.6	2592.7	2588.7	2573.0	2527.6	2527.6
37.5°	2715.8	2727.7	2753.4	2773.0	2763.2	2758.3	2759.3	2760.2	2751.4	2701.1	2701.1
40°	2921.9	2937.6	2956.3	2977.0	2960.3	2945.5	2955.4	2963.3	2955.4	2904.1	2904.1
42.5°	3133.7	3156.4	3176.1	3205.7	3191.8	3173.1	3186.9	3195.8	3179.0	3123.9	3127.8
45°	3369.3	3390.9	3416.5	3460.9	3451.1	3431.3	3451.1	3453.0	3424.4	3359.3	3366.3
47.5°	3612.6	3635.3	3673.7	3732.8	3729.0	3707.2	3732.8	3719.1	3682.6	3604.7	3599.8
50°	3843.2	3874.8	3934.0	4016.7	4024.6	3997.9	4032.5	4005.8	3944.7	3847.1	3845.2
52.5°	4060.0	4093.5	4187.1	4299.5	4328.1	4293.6	4340.0	4293.6	4202.0	4076.8	4064.9
55°	4287.7	4325.1	4436.5	4583.3	4640.5	4614.9	4658.2	4588.2	4458.1	4306.4	4285.7
57.5°	4555.7	4578.4	4711.4	4885.9	4982.4	4988.4	5008.0	4889.8	4732.1	4559.6	4536.0
60°	4846.4	4878.0	5022.8	5231.7	5384.4	5433.7	5413.0	5237.6	5054.4	4856.2	4824.8
62.5°	5218.9	5253.4	5426.9	5677.2	5918.6	6040.7	5960.0	5705.8	5479.0	5241.5	5200.2
65°	5527.4	5565.7	5879.2	6325.6	6765.1	7010.5	6807.4	6339.4	5931.4	5596.4	5541.2
67.5°	5303.7	5351.0	5842.7	6662.6	7755.5	8487.6	7792.9	6763.2	5964.0	5509.6	5441.6
70°	4635.6	4679.8	5253.4	6255.6	8034.4	9638.7	8201.8	6439.9	5272.1	4763.7	4695.6
72.5°	3077.6	3220.4	3800.9	5003.1	7174.1	8919.2	7245.0	4901.7	3525.9	3070.7	2971.2
75°	1020.9	1135.2	1531.4	2593.7	4805.0	6670.5	4574.5	2295.1	1213.1	873.1	825.8
77.5°	257.2	296.6	409.0	742.0	1916.6	3797.9	1725.5	606.1	330.2	230.6	205.9
80°	125.2	138.0	197.1	247.3	479.9	1207.1	450.4	232.6	155.7	120.2	110.4
82.5°	69.0	70.0	111.3	139.9	178.4	312.4	185.2	136.0	89.7	72.9	72.9
85°	42.3	41.4	59.1	74.9	74.9	111.3	88.7	74.9	51.2	45.3	47.3
87.5°	16.7	16.7	21.7	23.7	20.7	28.6	22.7	24.6	19.7	18.8	19.7
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)