

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: P963093

Luminaire Tested: **NAV-SB2D-827-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963093
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-827-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18995.3 lumens
Efficiency: N/A
Efficacy: 128.7 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

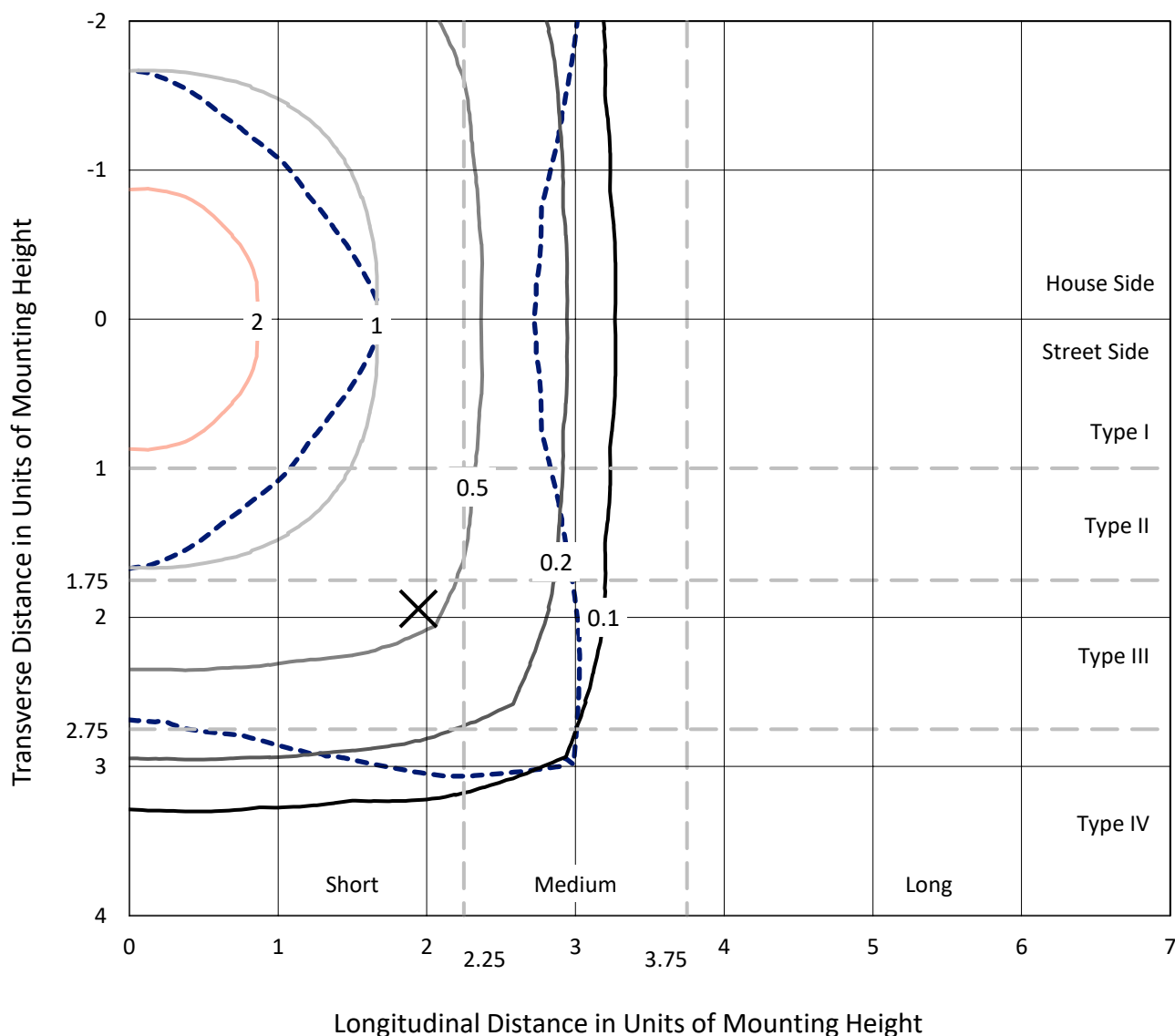


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Iso-Footcandle Lines of Horizontal Illumination

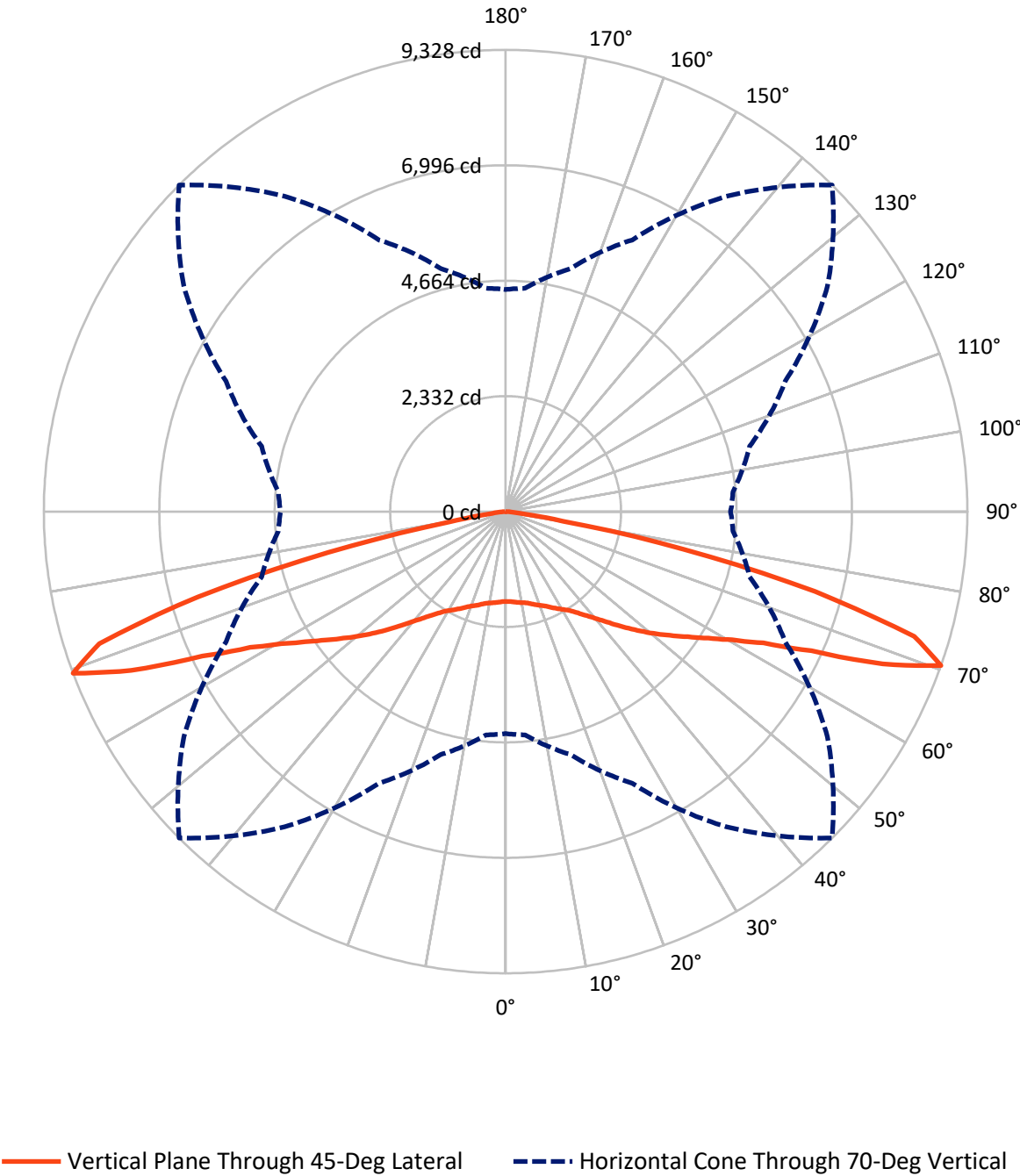
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 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	9497.6	0.0	9497.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9497.6	0.0	9497.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	18995.3	0.0	18995.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.8	0.9
10°-20°	548.1	2.9
20°-30°	979.6	5.2
30°-40°	1587.9	8.4
40°-50°	2586.4	13.6
50°-60°	3943.5	20.8
60°-70°	5866.6	30.9
70°-80°	3197.5	16.8
80°-90°	108.9	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°	18995.3	100.0
0°-180°	18995.3	100.0

Coefficient of Utilization



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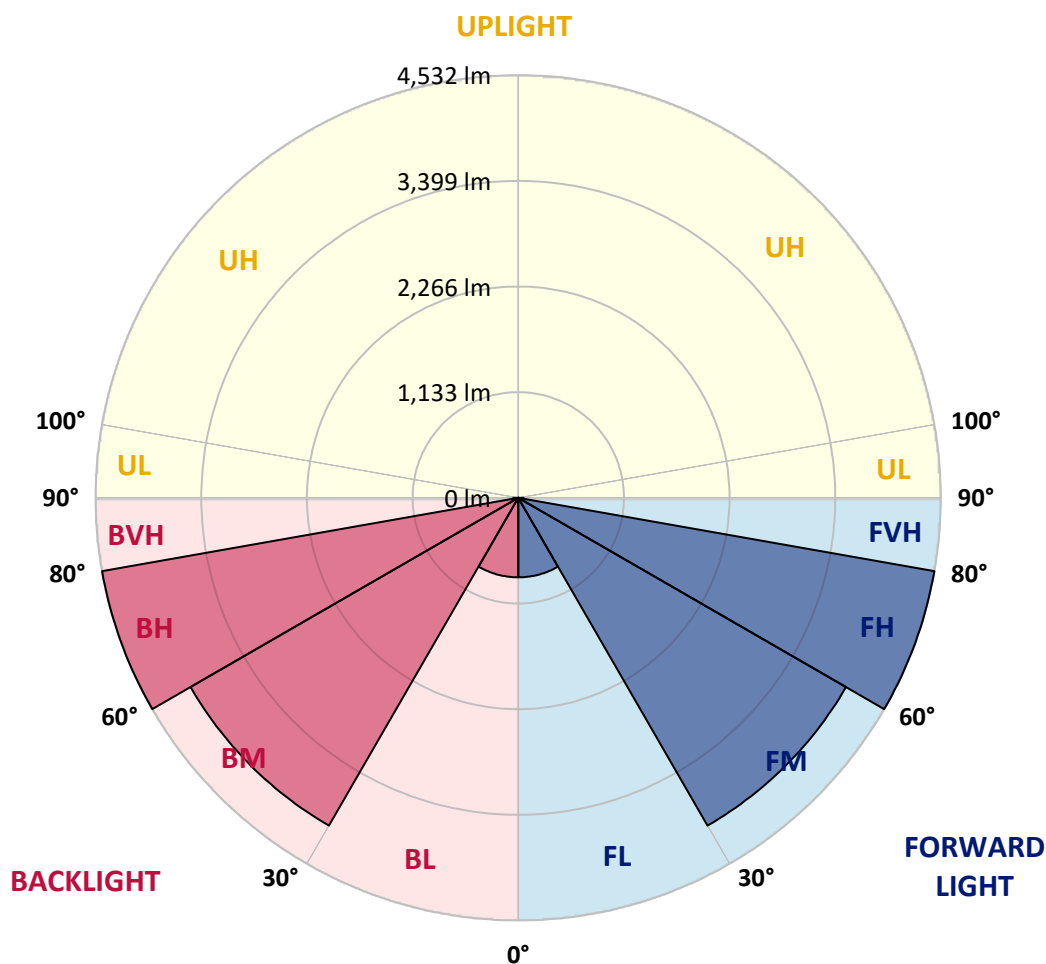
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	852.3	4.5			
FM	(30°-60°)	4058.9	21.4			
FH	(60°-80°)	4532.1	23.9			G2/5000
FVH	(80°-90°)	54.4	0.3			G1/100
BL	(0°-30°)	852.3	4.5	B2/1000		
BM	(30°-60°)	4058.9	21.4	B3/5000		
BH	(60°-80°)	4532.1	23.9	B4/5000		G2/5000
BVH	(80°-90°)	54.4	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	1819.6	1819.6	1819.6	1819.6	1819.6	1819.6	1819.6	1819.6	1819.6	1819.6	1819.6
2.5°	1828.1	1830.0	1826.2	1824.3	1822.4	1819.6	1820.5	1825.3	1829.1	1828.1	1829.1
5°	1843.4	1845.3	1842.4	1841.5	1837.7	1836.7	1836.7	1841.5	1844.4	1842.4	1843.4
7.5°	1860.6	1863.4	1858.6	1857.7	1855.8	1853.9	1852.9	1857.7	1860.6	1860.6	1860.6
10°	1876.8	1879.6	1875.9	1873.0	1871.0	1871.0	1869.2	1873.0	1877.7	1876.8	1876.8
12.5°	1893.9	1895.8	1892.0	1890.1	1890.1	1893.0	1890.1	1892.0	1895.8	1893.9	1893.0
15°	1914.9	1915.8	1914.9	1917.8	1922.6	1932.1	1923.5	1921.6	1923.5	1918.7	1918.7
17.5°	1943.5	1945.4	1949.2	1955.9	1962.6	1979.8	1964.5	1959.7	1959.7	1950.2	1950.2
20°	1978.8	1981.6	1987.4	1998.9	2007.5	2023.7	2008.4	2001.7	1998.9	1986.4	1986.4
22.5°	2016.0	2020.8	2029.4	2044.6	2059.8	2075.1	2059.8	2048.5	2039.9	2023.7	2022.6
25°	2058.9	2064.7	2078.0	2102.8	2123.8	2145.7	2127.6	2104.7	2087.5	2064.7	2063.7
27.5°	2119.9	2126.7	2142.9	2173.3	2200.1	2219.1	2202.0	2172.4	2148.6	2120.9	2119.9
30°	2205.8	2212.5	2231.5	2263.9	2282.1	2294.5	2283.0	2260.1	2231.5	2200.1	2200.1
32.5°	2316.4	2325.0	2345.9	2376.5	2380.3	2382.2	2378.4	2366.9	2345.9	2307.8	2308.8
35°	2456.6	2466.1	2489.9	2514.7	2510.9	2514.7	2509.0	2505.2	2489.9	2446.1	2446.1
37.5°	2628.2	2639.7	2664.5	2683.6	2674.0	2669.2	2670.2	2671.1	2662.5	2614.0	2614.0
40°	2827.6	2842.8	2861.0	2881.0	2864.8	2850.4	2860.0	2867.6	2860.0	2810.3	2810.3
42.5°	3032.6	3054.5	3073.6	3102.2	3088.8	3070.7	3084.1	3092.6	3076.4	3023.0	3026.8
45°	3260.5	3281.5	3306.2	3349.2	3339.7	3320.6	3339.7	3341.6	3313.9	3251.0	3257.7
47.5°	3496.1	3518.0	3555.2	3612.4	3608.6	3587.6	3612.4	3599.1	3563.7	3488.4	3483.7
50°	3719.2	3749.8	3807.0	3887.0	3894.7	3869.0	3902.3	3876.6	3817.4	3723.0	3721.2
52.5°	3929.0	3961.4	4052.0	4160.8	4188.4	4155.0	4199.8	4155.0	4066.4	3945.2	3933.7
55°	4149.3	4185.6	4293.3	4435.4	4490.7	4465.9	4507.8	4440.2	4314.3	4167.4	4147.4
57.5°	4408.7	4430.7	4559.4	4728.1	4821.6	4827.3	4846.4	4732.0	4579.4	4412.5	4389.7
60°	4690.0	4720.5	4860.8	5062.9	5210.7	5258.4	5238.4	5068.6	4891.2	4699.5	4669.1
62.5°	5050.5	5083.9	5251.7	5493.9	5727.6	5845.9	5767.7	5521.6	5302.2	5072.4	5032.3
65°	5349.0	5386.2	5689.5	6121.4	6546.8	6784.3	6587.8	6134.8	5740.0	5415.8	5362.4
67.5°	5132.5	5178.3	5654.2	6447.6	7505.2	8213.7	7541.4	6544.8	5771.5	5331.8	5266.0
70°	4485.9	4528.9	5083.9	6053.8	7775.0	9327.6	7937.2	6232.1	5102.0	4609.9	4544.1
72.5°	2978.2	3116.5	3678.2	4841.7	6942.5	8631.4	7011.2	4743.4	3412.1	2971.6	2875.2
75°	988.0	1098.6	1481.9	2510.0	4650.0	6455.2	4426.8	2221.1	1173.9	844.9	799.2
77.5°	248.9	287.0	395.8	718.1	1854.8	3675.3	1669.8	586.5	319.5	223.1	199.4
80°	121.2	133.6	190.8	239.3	464.4	1168.2	435.8	225.1	150.7	116.3	106.8
82.5°	66.7	67.8	107.7	135.4	172.6	302.3	179.3	131.6	86.8	70.5	70.5
85°	41.0	40.1	57.2	72.5	72.5	107.7	85.8	72.5	49.6	43.9	45.8
87.5°	16.2	16.2	21.0	22.9	20.0	27.7	21.9	23.9	19.1	18.1	19.1
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)