

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: P967652

Luminaire Tested: **NAV-SB5A-727-U-5WQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967652
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-727-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21790.5 lumens
Efficiency: N/A
Efficacy: 153.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

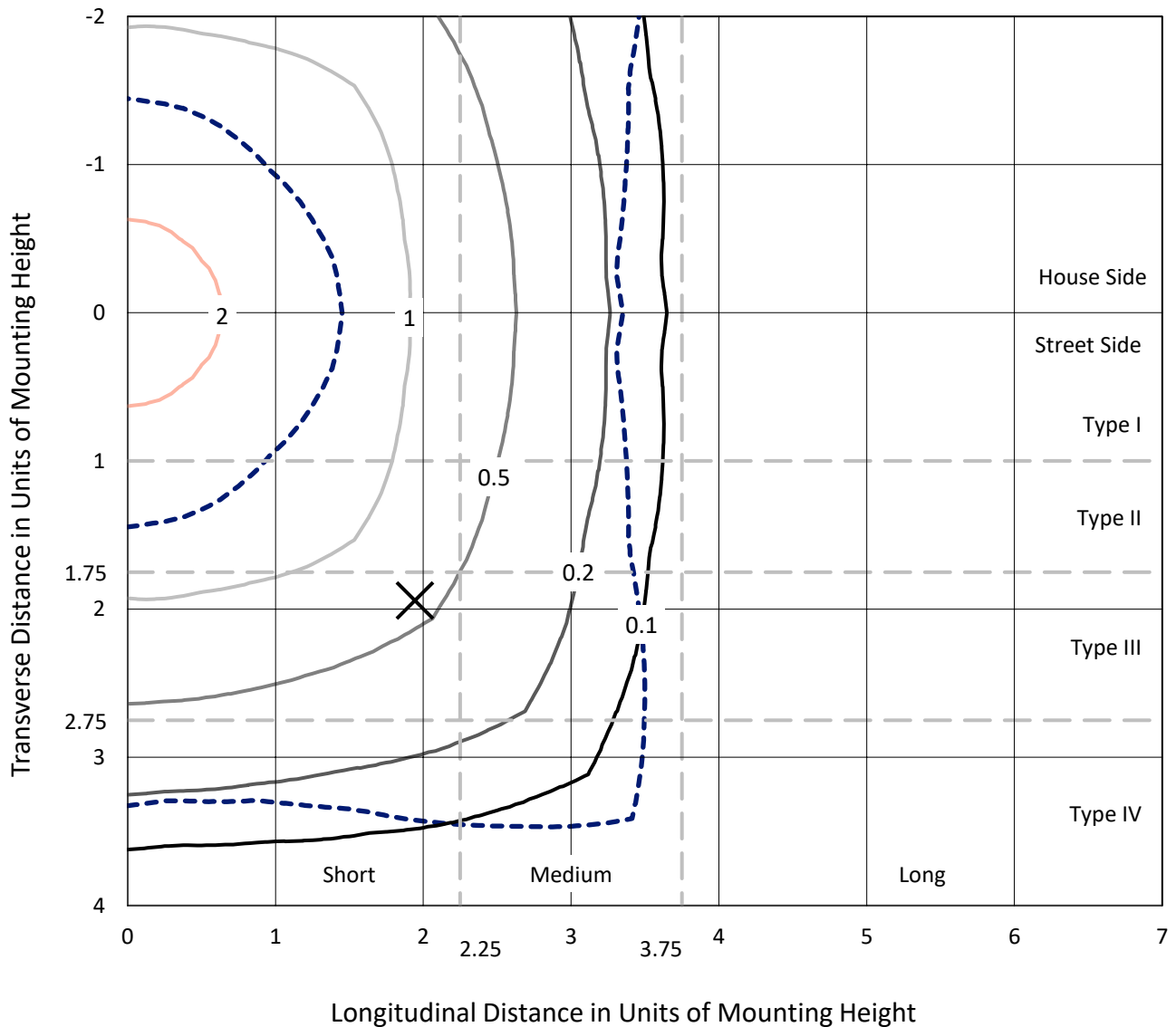
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

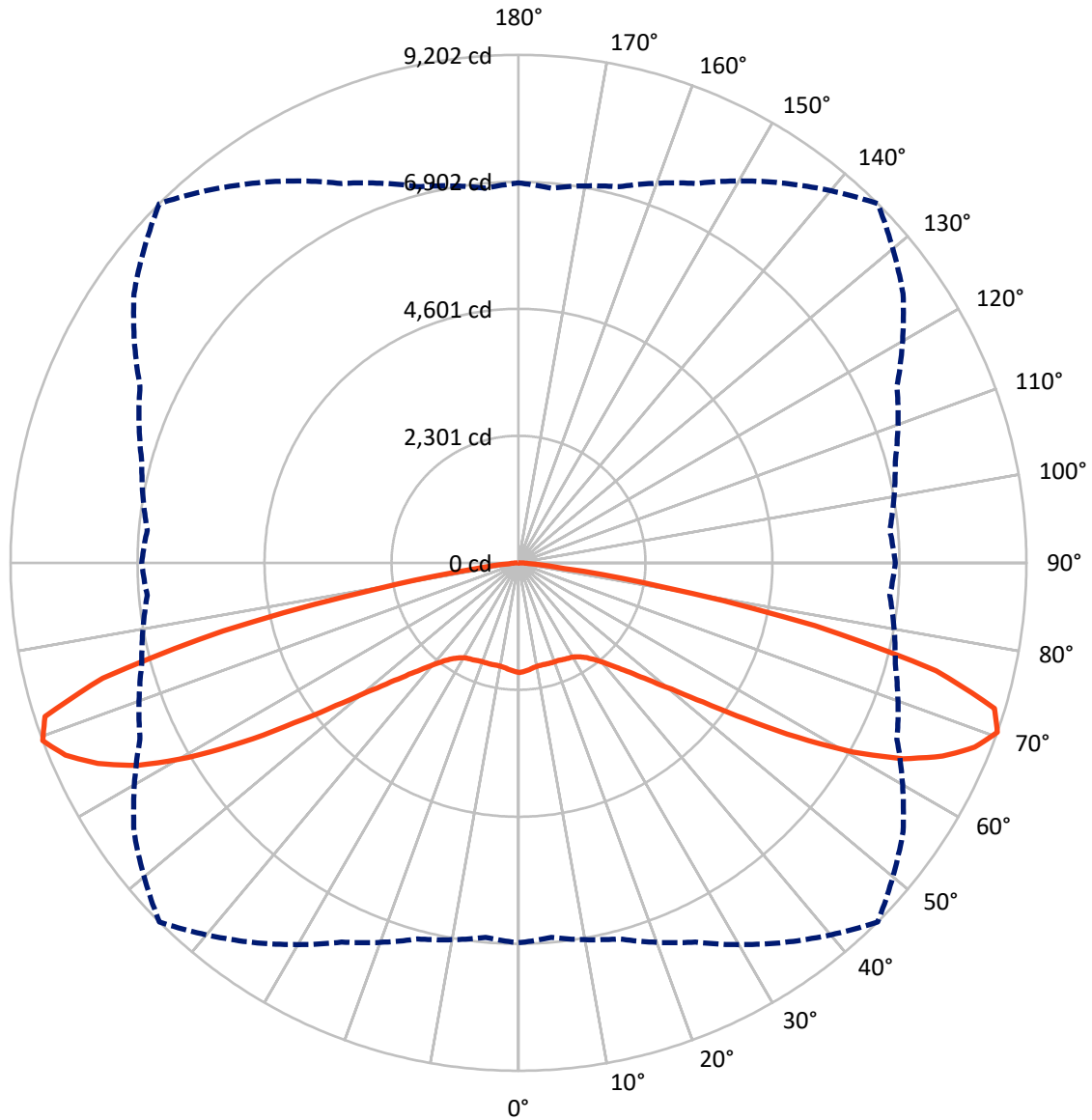
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 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	10895.2	0.0	10895.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10895.2	0.0	10895.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	21790.5	0.0	21790.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.9	0.8
10°-20°	542.9	2.5
20°-30°	903.5	4.1
30°-40°	1366.4	6.3
40°-50°	2270.6	10.4
50°-60°	4284.5	19.7
60°-70°	7234.6	33.2
70°-80°	4753.9	21.8
80°-90°	249.0	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°	21790.5	100.0
0°-180°	21790.5	100.0

Coefficient of Utilization



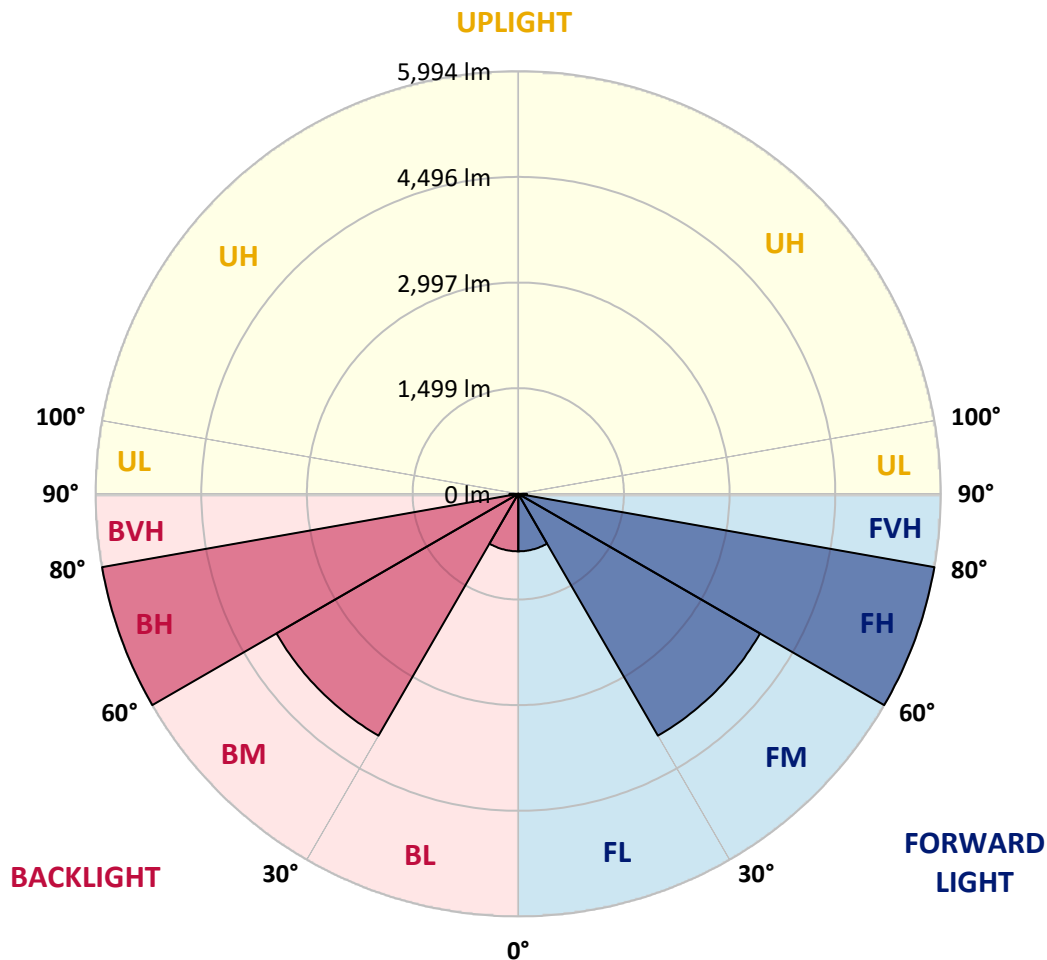
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	815.7	3.7			
FM (30°-60°)	3960.8	18.2			
FH (60°-80°)	5994.3	27.5			G3/7500
FVH (80°-90°)	124.5	0.6			G2/225
BL (0°-30°)	815.7	3.7	B2/1000		
BM (30°-60°)	3960.8	18.2	B3/5000		
BH (60°-80°)	5994.3	27.5	B5		G3/7500
BVH (80°-90°)	124.5	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-G3

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1987.7	1987.7	1987.7	1987.7	1987.7	1987.7	1987.7	1987.7	1987.7	1987.7	1987.7
2.5°	1975.3	1980.9	1978.7	1974.2	1974.2	1970.8	1974.2	1976.4	1979.8	1982.0	1980.9
5°	1949.2	1953.8	1952.6	1949.2	1950.4	1947.0	1949.2	1952.6	1954.9	1956.0	1956.0
7.5°	1926.6	1931.1	1928.8	1923.2	1923.2	1919.7	1921.0	1924.3	1927.7	1928.8	1928.8
10°	1921.0	1925.5	1918.6	1909.6	1906.2	1901.7	1902.8	1906.2	1913.0	1916.3	1916.3
12.5°	1923.2	1926.6	1919.7	1906.2	1902.8	1898.3	1898.3	1901.7	1910.7	1915.2	1916.3
15°	1930.0	1933.4	1923.2	1908.4	1905.1	1901.7	1900.6	1905.1	1915.2	1923.2	1924.3
17.5°	1942.4	1945.9	1930.0	1909.6	1905.1	1906.2	1905.1	1908.4	1924.3	1939.0	1939.0
20°	1953.8	1956.0	1934.5	1909.6	1905.1	1906.2	1905.1	1911.8	1932.2	1952.6	1953.8
22.5°	1957.1	1959.4	1939.0	1917.5	1914.1	1915.2	1914.1	1921.0	1940.1	1960.5	1960.5
25°	1958.3	1961.6	1945.9	1928.8	1934.5	1936.7	1934.5	1935.6	1950.4	1968.5	1967.4
27.5°	1975.3	1979.8	1965.0	1950.4	1953.8	1952.6	1956.0	1959.4	1970.8	1988.9	1984.3
30°	2010.3	2013.8	2001.3	1986.6	1984.3	1976.4	1986.6	1997.9	2010.3	2026.2	2022.8
32.5°	2068.1	2074.9	2059.1	2043.2	2033.0	2028.5	2036.5	2055.6	2072.7	2089.7	2082.9
35°	2164.4	2168.9	2154.2	2124.8	2106.7	2106.7	2113.4	2138.4	2165.5	2187.0	2179.1
37.5°	2300.3	2305.9	2279.9	2244.9	2217.7	2217.7	2226.7	2252.7	2293.5	2324.1	2312.8
40°	2465.7	2473.6	2440.7	2404.5	2378.5	2373.9	2385.3	2414.7	2453.2	2491.8	2479.3
42.5°	2665.0	2674.1	2631.1	2599.3	2579.0	2579.0	2584.6	2611.8	2647.0	2694.5	2691.0
45°	2919.9	2935.7	2876.9	2845.1	2825.8	2830.4	2833.8	2857.6	2889.3	2943.7	2941.3
47.5°	3223.4	3239.3	3177.0	3144.1	3140.7	3162.2	3148.7	3165.6	3182.6	3244.9	3226.8
50°	3567.7	3594.9	3551.8	3549.6	3556.4	3596.0	3564.3	3573.4	3554.1	3593.8	3570.0
52.5°	3989.1	4028.7	4020.8	4034.4	4110.2	4191.7	4119.3	4087.6	4015.1	4027.5	3985.6
55°	4499.9	4559.9	4571.2	4652.8	4824.9	4991.4	4837.4	4709.4	4555.4	4527.0	4482.8
57.5°	5080.9	5128.5	5182.8	5349.3	5671.0	5966.6	5671.0	5387.8	5145.4	5087.7	5046.9
60°	5706.1	5765.0	5817.1	6062.9	6540.8	6956.5	6531.7	6082.1	5761.6	5683.4	5615.5
62.5°	6377.8	6453.6	6489.9	6762.8	7320.0	7816.1	7328.0	6783.2	6427.6	6343.7	6275.8
65°	7022.2	7084.5	7125.3	7416.3	7948.7	8445.9	7984.9	7448.1	7082.2	6972.4	6917.9
67.5°	7322.3	7356.3	7456.0	7785.6	8347.3	8914.7	8442.5	7820.6	7411.8	7219.3	7221.5
70°	6882.9	6813.8	7053.8	7581.7	8394.9	9202.4	8503.6	7565.8	7065.2	6752.6	6827.4
72.5°	5318.7	5199.8	5616.6	6519.3	7851.3	9019.0	7905.6	6570.2	5876.0	5241.7	5399.2
75°	2893.8	2759.0	3334.4	4476.1	6261.1	7817.3	6404.9	4604.1	3712.7	2872.3	3059.2
77.5°	816.6	765.7	1230.0	2165.5	3766.0	5488.7	3910.9	2213.1	1458.8	865.3	961.6
80°	250.3	242.4	328.4	652.4	1599.2	2628.8	1537.0	660.3	417.9	263.9	278.6
82.5°	148.4	135.9	163.1	237.8	407.7	825.6	396.4	248.0	199.4	133.7	144.9
85°	85.0	79.2	96.2	115.5	137.0	175.6	114.4	117.8	106.5	71.3	74.7
87.5°	35.2	31.7	37.4	36.3	31.7	40.8	30.5	36.3	43.0	28.3	26.0
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)