

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: P966071

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966071
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-SB4B-727-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21702.3 lumens
Efficiency: N/A
Efficacy: 147.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

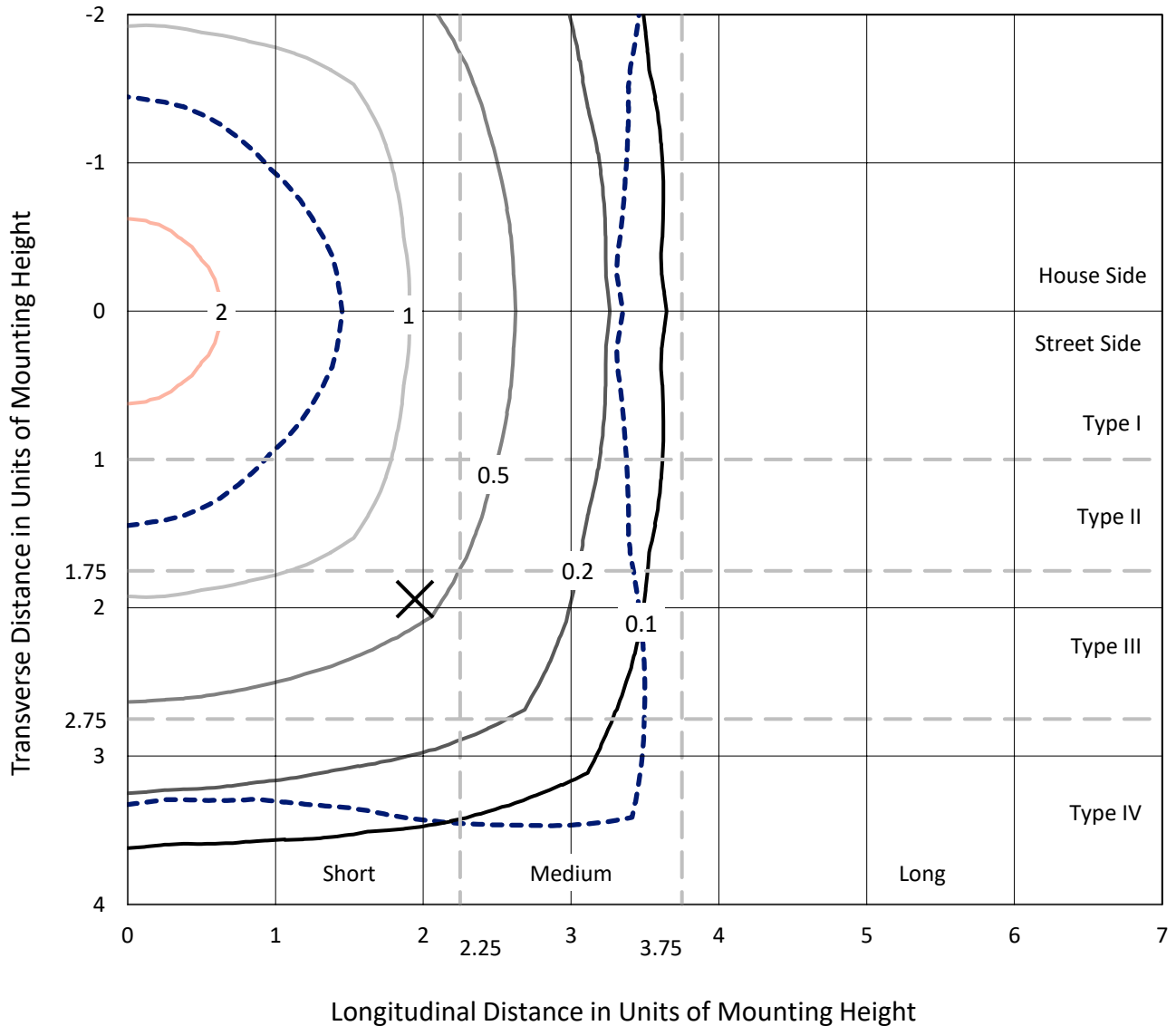
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

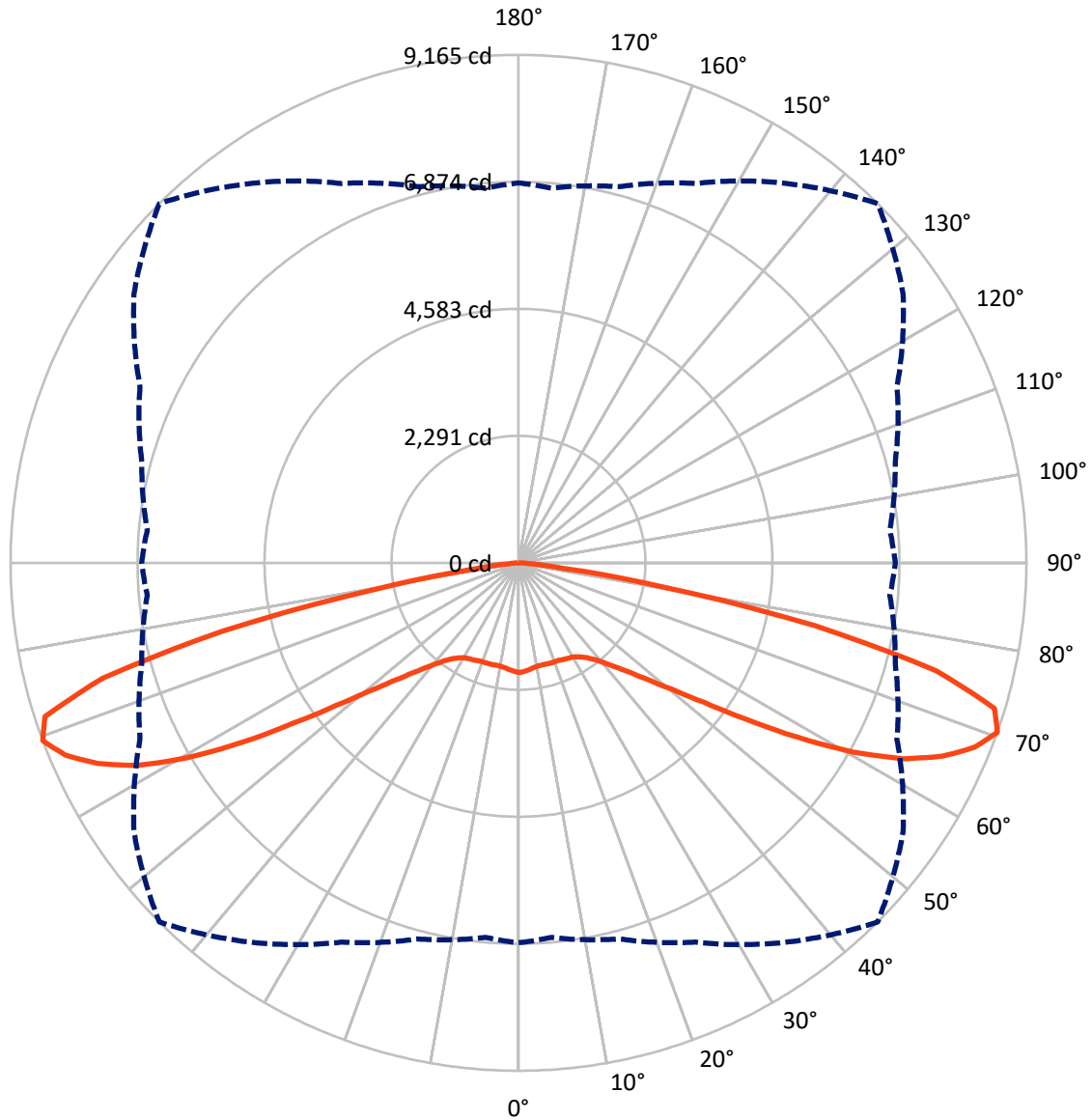
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 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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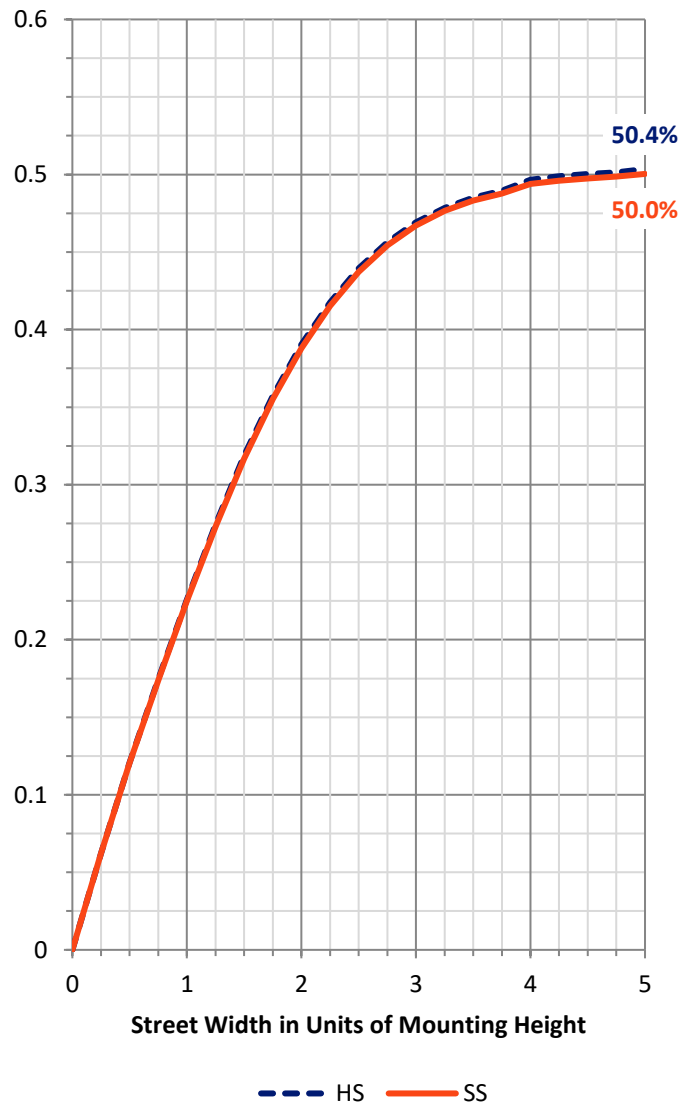
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10851.2	0.0	10851.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10851.2	0.0	10851.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	21702.3	0.0	21702.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.2	0.8
10°-20°	540.7	2.5
20°-30°	899.9	4.1
30°-40°	1360.9	6.3
40°-50°	2261.4	10.4
50°-60°	4267.2	19.7
60°-70°	7205.4	33.2
70°-80°	4734.7	21.8
80°-90°	248.0	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°	21702.3	100.0
0°-180°	21702.3	100.0

Coefficient of Utilization



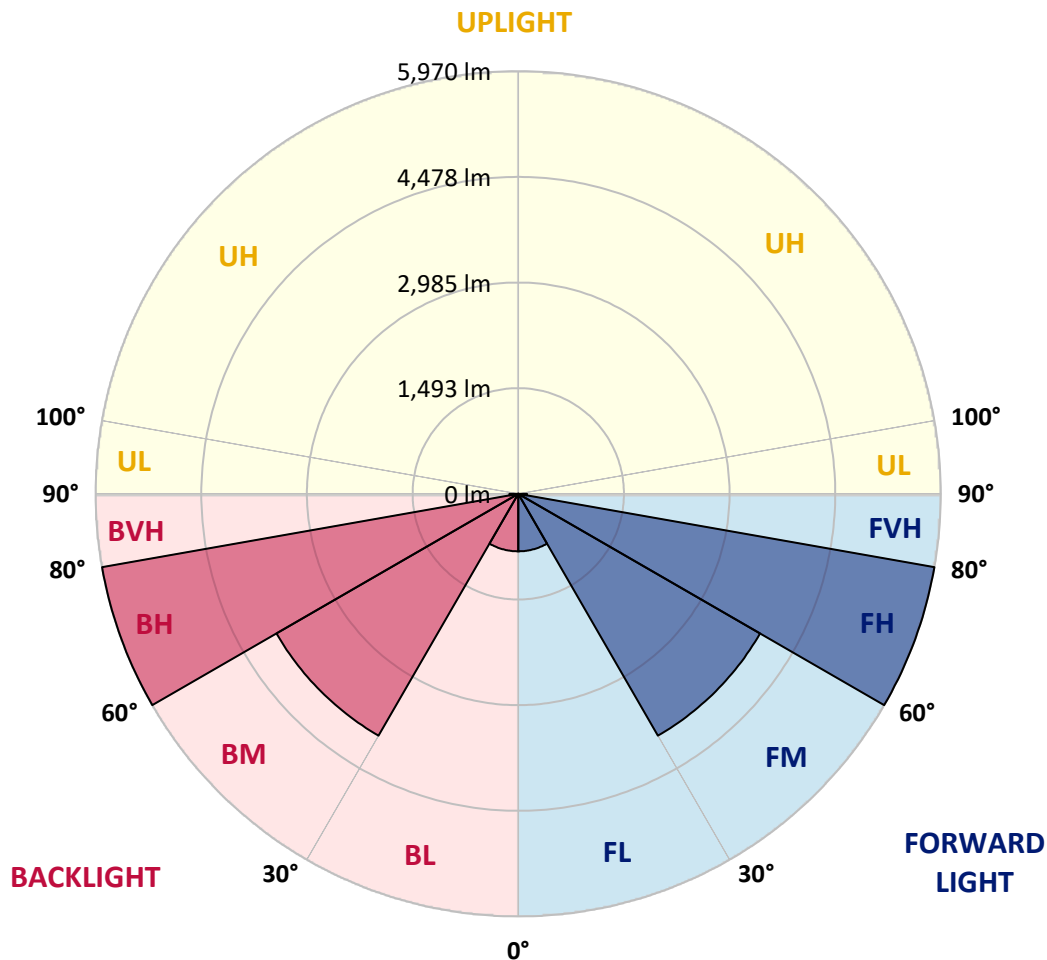
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	812.4	3.7			
FM (30°-60°)	3944.7	18.2			
FH (60°-80°)	5970.0	27.5			G3/7500
FVH (80°-90°)	124.0	0.6			G2/225
BL (0°-30°)	812.4	3.7	B2/1000		
BM (30°-60°)	3944.7	18.2	B3/5000		
BH (60°-80°)	5970.0	27.5	B5		G3/7500
BVH (80°-90°)	124.0	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°	1979.7	1979.7	1979.7	1979.7	1979.7	1979.7	1979.7	1979.7	1979.7	1979.7	1979.7
2.5°	1967.3	1972.9	1970.7	1966.2	1966.2	1962.8	1966.2	1968.4	1971.8	1974.0	1972.9
5°	1941.4	1945.9	1944.7	1941.4	1942.5	1939.1	1941.4	1944.7	1947.0	1948.1	1948.1
7.5°	1918.8	1923.3	1921.1	1915.4	1915.4	1912.0	1913.2	1916.5	1919.9	1921.1	1921.1
10°	1913.2	1917.7	1910.9	1901.9	1898.5	1894.0	1895.1	1898.5	1905.3	1908.7	1908.7
12.5°	1915.4	1918.8	1912.0	1898.5	1895.1	1890.6	1890.6	1894.0	1903.0	1907.5	1908.7
15°	1922.2	1925.6	1915.4	1900.8	1897.4	1894.0	1892.9	1897.4	1907.5	1915.4	1916.5
17.5°	1934.6	1938.0	1922.2	1901.9	1897.4	1898.5	1897.4	1900.8	1916.5	1931.2	1931.2
20°	1945.9	1948.1	1926.7	1901.9	1897.4	1898.5	1897.4	1904.1	1924.4	1944.7	1945.9
22.5°	1949.2	1951.5	1931.2	1909.8	1906.4	1907.5	1906.4	1913.2	1932.3	1952.6	1952.6
25°	1950.4	1953.8	1938.0	1921.1	1926.7	1928.9	1926.7	1927.8	1942.5	1960.5	1959.4
27.5°	1967.3	1971.8	1957.1	1942.5	1945.9	1944.7	1948.1	1951.5	1962.8	1980.8	1976.3
30°	2002.2	2005.6	1993.2	1978.6	1976.3	1968.4	1978.6	1989.8	2002.2	2018.0	2014.6
32.5°	2059.7	2066.5	2050.7	2034.9	2024.8	2020.3	2028.2	2047.3	2064.2	2081.3	2074.4
35°	2155.7	2160.2	2145.5	2116.2	2098.2	2098.2	2104.9	2129.7	2156.8	2178.2	2170.3
37.5°	2291.0	2296.6	2270.7	2235.7	2208.7	2208.7	2217.7	2243.6	2284.2	2314.8	2303.5
40°	2455.7	2463.6	2430.9	2394.8	2368.9	2364.4	2375.6	2405.0	2443.3	2481.6	2469.2
42.5°	2654.2	2663.3	2620.4	2588.8	2568.5	2568.5	2574.2	2601.2	2636.2	2683.6	2680.2
45°	2908.0	2923.8	2865.2	2833.6	2814.4	2819.0	2822.3	2846.0	2877.6	2931.7	2929.4
47.5°	3210.4	3226.2	3164.1	3131.4	3128.0	3149.4	3135.9	3152.8	3169.7	3231.8	3213.8
50°	3553.3	3580.3	3537.5	3535.2	3542.0	3581.5	3549.9	3558.9	3539.7	3579.2	3555.5
52.5°	3972.9	4012.4	4004.5	4018.0	4093.6	4174.8	4102.7	4071.1	3998.8	4011.2	3969.5
55°	4481.6	4541.5	4552.7	4633.9	4805.4	4971.2	4817.8	4690.3	4537.0	4508.8	4464.7
57.5°	5060.3	5107.7	5161.9	5327.6	5648.1	5942.4	5648.1	5366.1	5124.6	5067.1	5026.5
60°	5683.0	5741.6	5793.5	6038.4	6514.4	6928.4	6505.4	6057.5	5738.3	5660.5	5592.8
62.5°	6351.9	6427.5	6463.6	6735.5	7290.4	7784.6	7298.3	6755.8	6401.5	6318.1	6250.4
65°	6993.8	7055.8	7096.4	7386.4	7916.5	8411.7	7952.6	7417.9	7053.5	6944.2	6889.9
67.5°	7292.7	7326.5	7425.8	7754.0	8313.6	8878.8	8408.3	7789.1	7381.8	7190.1	7192.3
70°	6855.0	6786.2	7025.4	7551.0	8360.9	9165.2	8469.3	7535.2	7036.6	6725.3	6799.7
72.5°	5297.2	5178.8	5593.9	6493.0	7819.5	8982.5	7873.6	6543.7	5852.2	5220.5	5377.4
75°	2882.1	2747.9	3320.9	4457.9	6235.7	7785.7	6379.0	4585.4	3697.7	2860.7	3046.8
77.5°	813.3	762.5	1225.1	2156.8	3750.7	5466.4	3895.1	2204.2	1452.9	861.8	957.7
80°	249.3	241.4	327.1	649.7	1592.7	2618.2	1530.7	657.6	416.3	262.8	277.5
82.5°	147.8	135.4	162.5	236.9	406.1	822.4	394.8	247.0	198.5	133.1	144.4
85°	84.6	78.9	95.8	115.1	136.5	174.9	114.0	117.4	106.0	71.0	74.4
87.5°	35.0	31.6	37.2	36.1	31.6	40.6	30.4	36.1	42.8	28.2	25.9
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)