

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: P962907

Luminaire Tested: **NAV-SB2D-727-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962907
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-727-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 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: 20262.2 lumens
Efficiency: N/A
Efficacy: 137.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

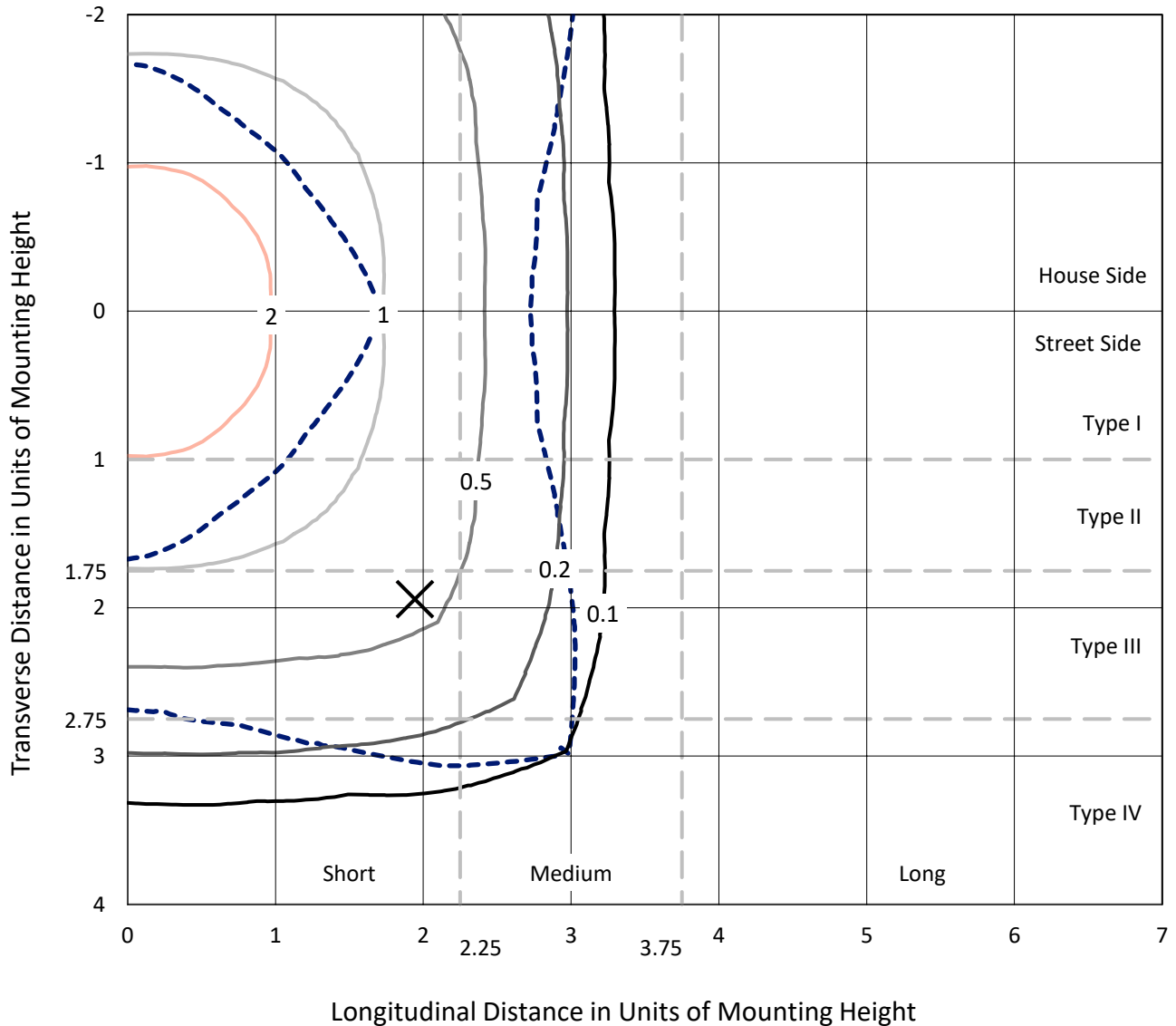
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P962907
 CATALOG NUMBER: NAV-SB2D-727-U-5MQ

Iso-Footcandle Lines of Horizontal Illumination

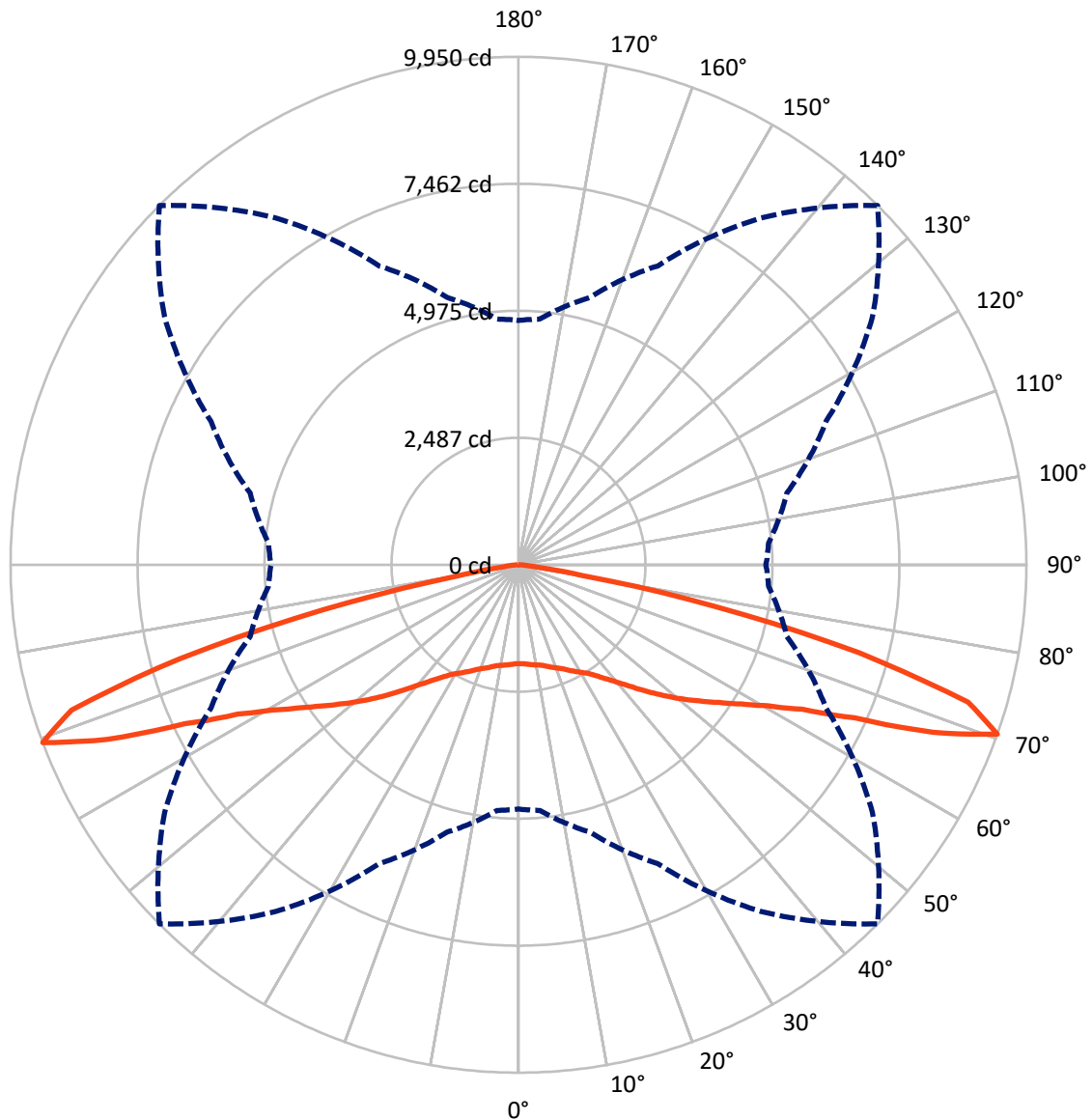
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
 Type V - Short - N/A

REPORT NUMBER: P962907
CATALOG NUMBER: NAV-SB2D-727-U-5MQ

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P962907
 CATALOG NUMBER: NAV-SB2D-727-U-5MQ

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10131.1	0.0	10131.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10131.1	0.0	10131.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	20262.2	0.0	20262.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.6	0.9
10°-20°	584.7	2.9
20°-30°	1044.9	5.2
30°-40°	1693.8	8.4
40°-50°	2759.0	13.6
50°-60°	4206.5	20.8
60°-70°	6257.9	30.9
70°-80°	3410.8	16.8
80°-90°	116.1	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°	20262.2	100.0
0°-180°	20262.2	100.0

Coefficient of Utilization



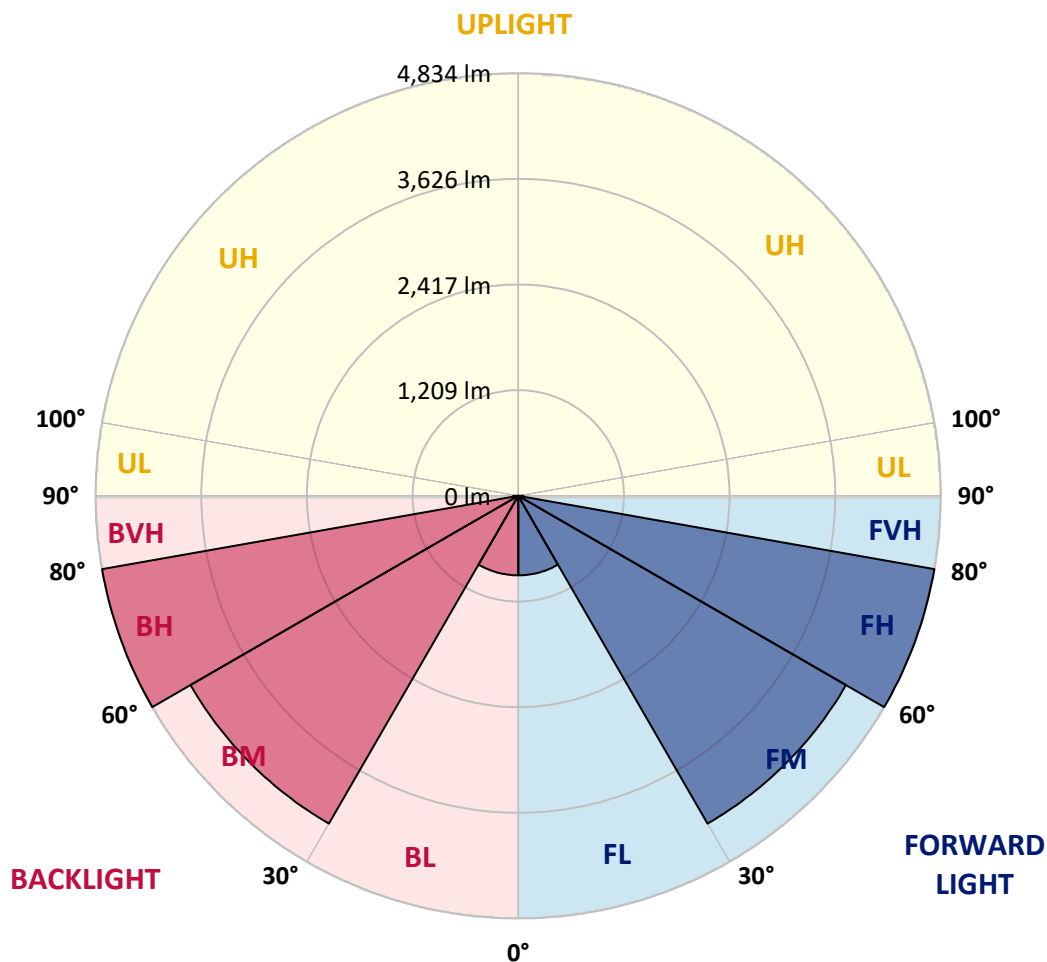
REPORT NUMBER: P962907
 CATALOG NUMBER: NAV-SB2D-727-U-5MQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	909.1	4.5			
FM (30°-60°)	4329.6	21.4			
FH (60°-80°)	4834.3	23.9			G2/5000
FVH (80°-90°)	58.1	0.3			G1/100
BL (0°-30°)	909.1	4.5	B2/1000		
BM (30°-60°)	4329.6	21.4	B3/5000		
BH (60°-80°)	4834.3	23.9	B4/5000		G2/5000
BVH (80°-90°)	58.1	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



REPORT NUMBER: P962907
 CATALOG NUMBER: NAV-SB2D-727-U-5MQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1940.9	1940.9	1940.9	1940.9	1940.9	1940.9	1940.9	1940.9	1940.9	1940.9	1940.9
2.5°	1950.1	1952.1	1948.0	1946.0	1943.9	1940.9	1942.0	1947.0	1951.1	1950.1	1951.1
5°	1966.4	1968.4	1965.3	1964.3	1960.2	1959.2	1959.2	1964.3	1967.4	1965.3	1966.4
7.5°	1984.6	1987.7	1982.7	1981.6	1979.6	1977.5	1976.5	1981.6	1984.6	1984.6	1984.6
10°	2001.9	2005.0	2000.9	1997.8	1995.9	1995.9	1993.8	1997.8	2003.0	2001.9	2001.9
12.5°	2020.3	2022.3	2018.2	2016.2	2016.2	2019.2	2016.2	2018.2	2022.3	2020.3	2019.2
15°	2042.6	2043.6	2042.6	2045.7	2050.8	2061.0	2051.7	2049.8	2051.7	2046.7	2046.7
17.5°	2073.2	2075.2	2079.2	2086.4	2093.5	2111.8	2095.5	2090.5	2090.5	2080.2	2080.2
20°	2110.8	2113.9	2119.9	2132.1	2141.3	2158.6	2142.4	2135.2	2132.1	2118.9	2118.9
22.5°	2150.4	2155.6	2164.7	2181.0	2197.3	2213.5	2197.3	2185.1	2175.9	2158.6	2157.6
25°	2196.3	2202.3	2216.6	2243.0	2265.5	2288.8	2269.5	2245.1	2226.7	2202.3	2201.3
27.5°	2261.4	2268.4	2285.8	2318.3	2346.8	2367.1	2348.8	2317.3	2291.9	2262.4	2261.4
30°	2352.9	2360.1	2380.4	2414.9	2434.3	2447.5	2435.3	2410.9	2380.4	2346.8	2346.8
32.5°	2470.9	2480.1	2502.4	2535.0	2539.0	2541.1	2537.0	2524.8	2502.4	2461.7	2462.8
35°	2620.4	2630.6	2656.1	2682.5	2678.4	2682.5	2676.4	2672.3	2656.1	2609.2	2609.2
37.5°	2803.6	2815.8	2842.2	2862.5	2852.4	2847.2	2848.3	2849.3	2840.2	2788.3	2788.3
40°	3016.2	3032.5	3051.7	3073.2	3055.8	3040.6	3050.7	3058.9	3050.7	2997.8	2997.8
42.5°	3234.8	3258.3	3278.6	3309.1	3294.9	3275.5	3289.7	3299.0	3281.6	3224.6	3228.7
45°	3477.9	3500.4	3526.8	3572.5	3562.4	3542.1	3562.4	3564.4	3534.9	3467.8	3475.0
47.5°	3729.3	3752.6	3792.3	3853.4	3849.3	3826.8	3853.4	3839.1	3801.4	3721.1	3716.0
50°	3967.3	3999.9	4060.8	4146.3	4154.4	4127.0	4162.6	4135.2	4072.0	3971.4	3969.3
52.5°	4191.0	4225.7	4322.3	4438.2	4467.8	4432.1	4480.0	4432.1	4337.6	4208.3	4196.1
55°	4426.1	4464.7	4579.7	4731.2	4790.2	4763.8	4808.5	4736.3	4602.0	4445.3	4424.0
57.5°	4702.7	4726.2	4863.4	5043.5	5143.2	5149.3	5169.7	5047.6	4884.8	4706.8	4682.4
60°	5002.8	5035.4	5185.0	5400.5	5558.3	5609.1	5587.8	5406.7	5217.5	5013.0	4980.5
62.5°	5387.3	5423.0	5602.0	5860.3	6109.6	6235.7	6152.4	5889.9	5655.8	5410.8	5368.0
65°	5705.8	5745.4	6068.9	6529.8	6983.4	7236.7	7027.2	6543.9	6122.8	5776.9	5720.0
67.5°	5474.8	5523.6	6031.3	6877.6	8005.8	8761.6	8044.4	6981.4	6156.4	5687.4	5617.2
70°	4785.1	4830.9	5423.0	6457.5	8293.6	9949.7	8466.6	6647.7	5442.2	4917.3	4847.2
72.5°	3176.9	3324.4	3923.5	5164.6	7405.5	9207.1	7478.8	5059.8	3639.7	3169.7	3067.0
75°	1053.9	1171.9	1580.8	2677.4	4960.1	6885.7	4722.1	2369.2	1252.2	901.3	852.5
77.5°	265.5	306.2	422.2	766.0	1978.6	3920.5	1781.2	625.6	340.8	238.0	212.6
80°	129.1	142.4	203.5	255.3	495.4	1246.1	464.8	240.1	160.7	124.1	114.0
82.5°	71.2	72.3	114.9	144.4	184.1	322.5	191.3	140.4	92.6	75.2	75.2
85°	43.8	42.7	61.0	77.3	77.3	114.9	91.5	77.3	52.9	46.8	48.8
87.5°	17.3	17.3	22.3	24.4	21.3	29.5	23.4	25.4	20.3	19.4	20.3
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)