

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: P884482

Luminaire Tested: **NAV-SB5B-827-U-5WQ**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884482  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5B-827-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

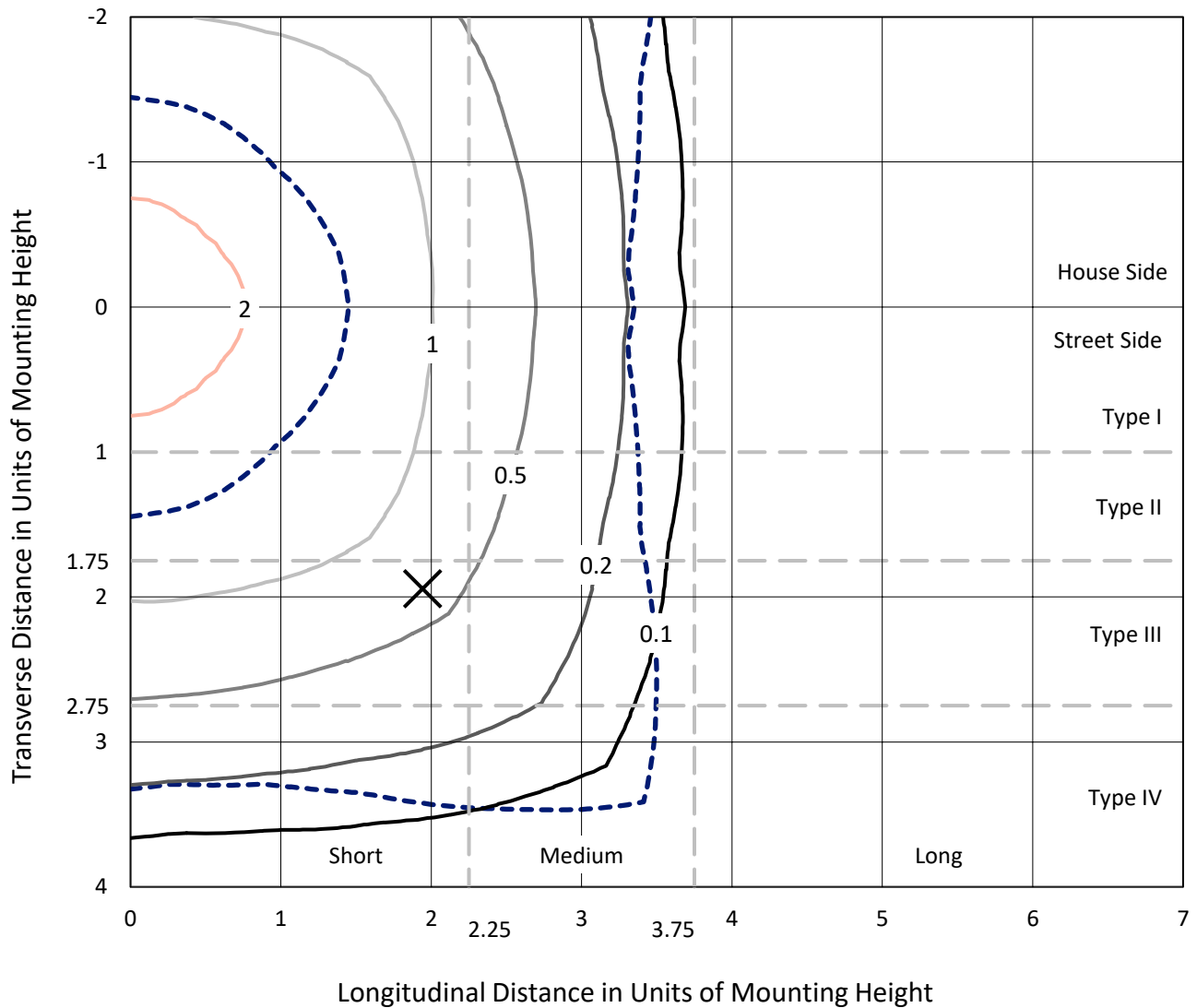
Lumens per Lamp: N/A  
Luminaire Lumens: 23483 lumens  
Efficiency: N/A  
Efficacy: 128.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G3  
  
Input Watts (W): 182.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.547  
Voltage Rise (V): NR  
Power Factor: 0.992  
Total Harmonic Distortion (THDi): 11.125  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P884482  
 CATALOG NUMBER: NAV-SB5B-827-U-5WQ

### Iso-Footcandle Lines of Horizontal Illumination

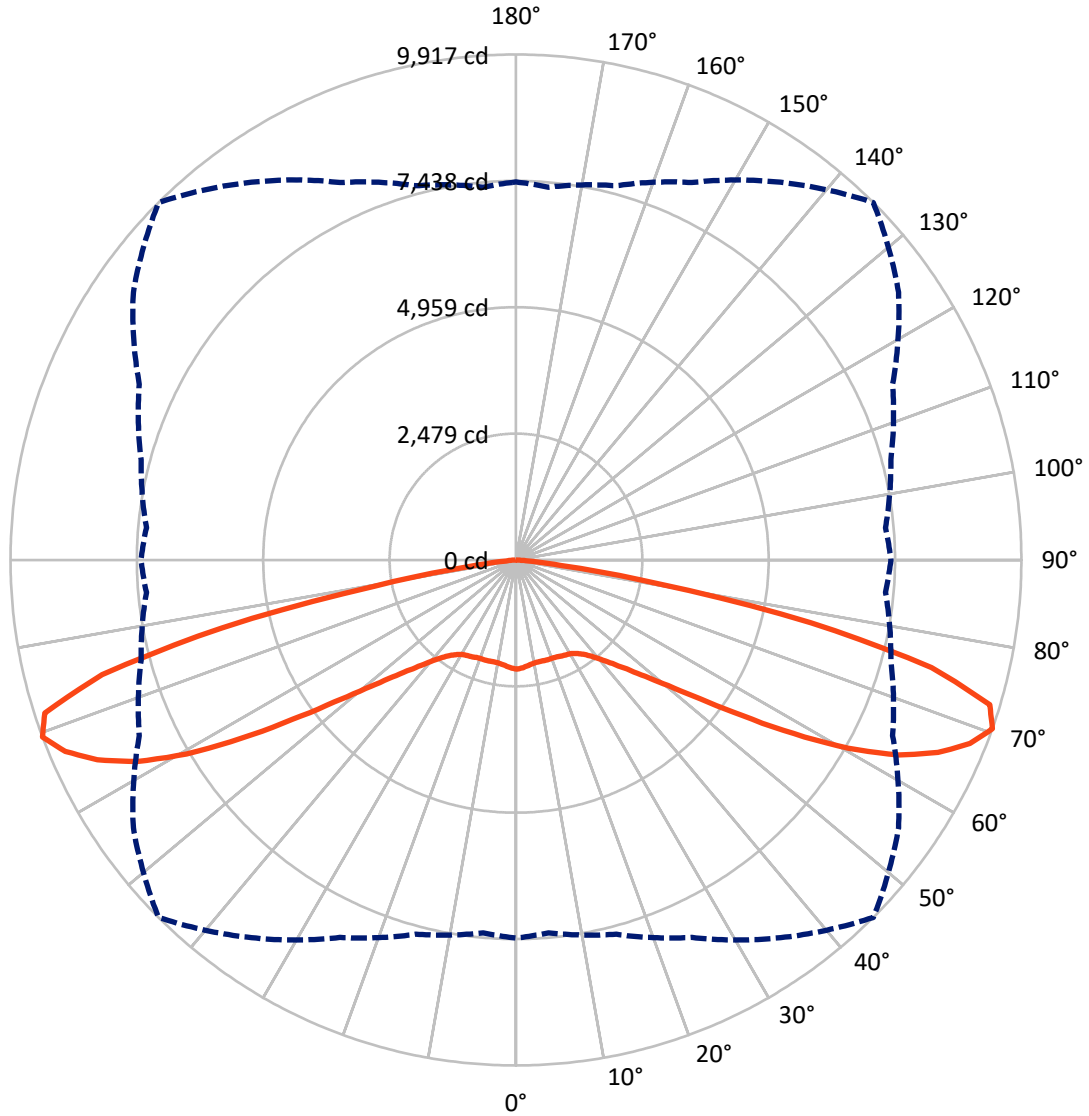
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc  
 Type V - Short - N/A

REPORT NUMBER: P884482  
CATALOG NUMBER: NAV-SB5B-827-U-5WQ

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P884482

CATALOG NUMBER: NAV-SB5B-827-U-5WQ

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	11741.5	0.0	11741.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	11741.5	0.0	11741.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	23483.0	0.0	23483.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	199.3	0.8
10°-20°	585.1	2.5
20°-30°	973.7	4.1
30°-40°	1472.5	6.3
40°-50°	2447.0	10.4
50°-60°	4617.3	19.7
60°-70°	7796.6	33.2
70°-80°	5123.2	21.8
80°-90°	268.4	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°	23483.0	100.0
0°-180°	23483.0	100.0

**Coefficient of Utilization**



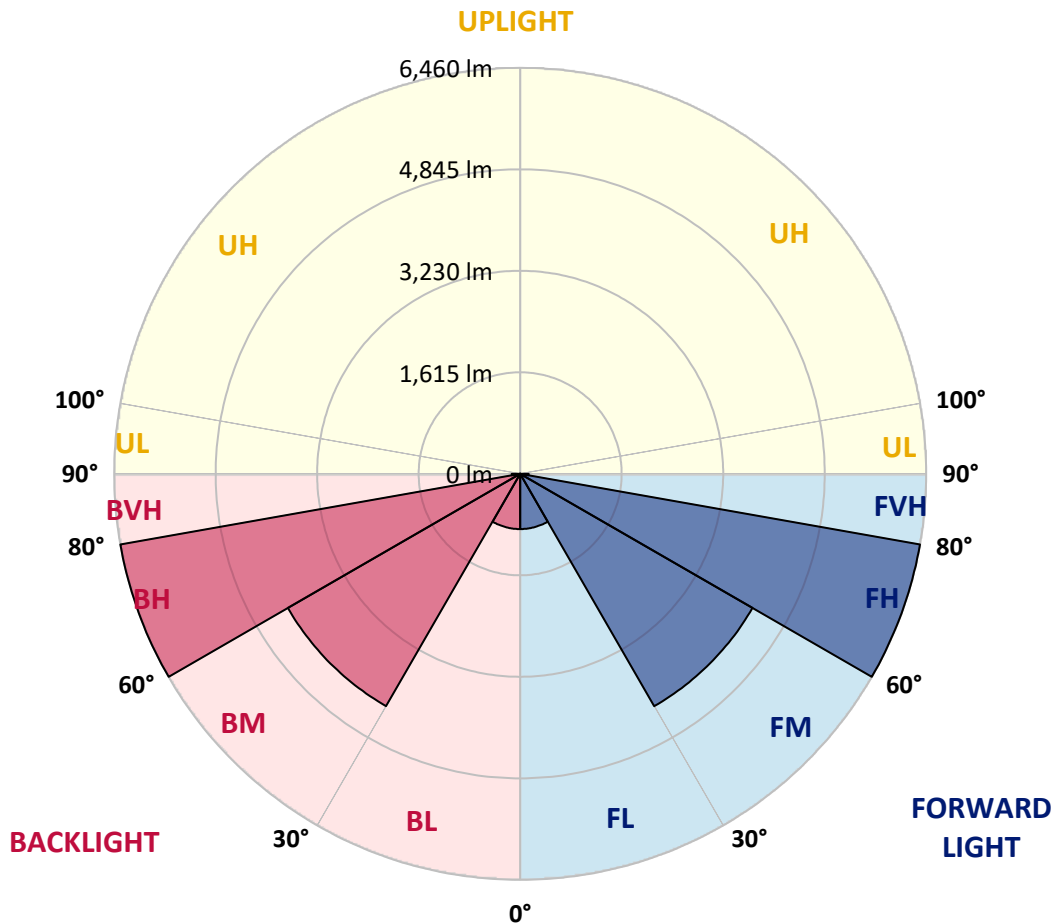
REPORT NUMBER: P884482  
 CATALOG NUMBER: NAV-SB5B-827-U-5WQ

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	879.0	3.7			
FM (30°-60°)	4268.4	18.2			
FH (60°-80°)	6459.9	27.5			G3/7500
FVH (80°-90°)	134.2	0.6			G2/225
BL (0°-30°)	879.0	3.7	B2/1000		
BM (30°-60°)	4268.4	18.2	B3/5000		
BH (60°-80°)	6459.9	27.5	B5		G3/7500
BVH (80°-90°)	134.2	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



REPORT NUMBER: P884482

CATALOG NUMBER: NAV-SB5B-827-U-5WQ

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2142.1	2142.1	2142.1	2142.1	2142.1	2142.1	2142.1	2142.1	2142.1	2142.1	2142.1
2.5°	2128.7	2134.8	2132.4	2127.5	2127.5	2123.8	2127.5	2129.9	2133.6	2136.0	2134.8
5°	2100.6	2105.5	2104.3	2100.6	2101.8	2098.2	2100.6	2104.3	2106.7	2107.9	2107.9
7.5°	2076.2	2081.1	2078.7	2072.5	2072.5	2068.9	2070.1	2073.8	2077.4	2078.7	2078.7
10°	2070.1	2075.0	2067.7	2057.9	2054.2	2049.4	2050.6	2054.2	2061.6	2065.2	2065.2
12.5°	2072.5	2076.2	2068.9	2054.2	2050.6	2045.7	2045.7	2049.4	2059.1	2064.0	2065.2
15°	2079.9	2083.5	2072.5	2056.7	2053.0	2049.4	2048.1	2053.0	2064.0	2072.5	2073.8
17.5°	2093.3	2097.0	2079.9	2057.9	2053.0	2054.2	2053.0	2056.7	2073.8	2089.6	2089.6
20°	2105.5	2107.9	2084.8	2057.9	2053.0	2054.2	2053.0	2060.3	2082.3	2104.3	2105.5
22.5°	2109.2	2111.6	2089.6	2066.4	2062.8	2064.0	2062.8	2070.1	2090.9	2112.8	2112.8
25°	2110.4	2114.0	2097.0	2078.7	2084.8	2087.2	2084.8	2086.0	2101.8	2121.4	2120.2
27.5°	2128.7	2133.6	2117.7	2101.8	2105.5	2104.3	2107.9	2111.6	2123.8	2143.3	2138.5
30°	2166.5	2170.2	2156.8	2140.9	2138.5	2129.9	2140.9	2153.1	2166.5	2183.6	2180.0
32.5°	2228.8	2236.1	2219.0	2201.9	2190.9	2186.1	2194.6	2215.4	2233.7	2252.0	2244.7
35°	2332.5	2337.4	2321.5	2289.8	2270.3	2270.3	2277.6	2304.5	2333.8	2356.9	2348.4
37.5°	2479.0	2485.1	2457.0	2419.2	2389.9	2389.9	2399.7	2427.7	2471.7	2504.6	2492.4
40°	2657.2	2665.8	2630.4	2591.3	2563.2	2558.3	2570.5	2602.3	2643.8	2685.3	2671.9
42.5°	2872.0	2881.8	2835.4	2801.2	2779.3	2779.3	2785.4	2814.7	2852.5	2903.8	2900.1
45°	3146.7	3163.8	3100.3	3066.1	3045.4	3050.2	3053.9	3079.5	3113.7	3172.3	3169.9
47.5°	3473.8	3490.9	3423.7	3388.3	3384.7	3407.9	3393.2	3411.5	3429.8	3497.0	3477.4
50°	3844.8	3874.1	3827.7	3825.3	3832.6	3875.3	3841.2	3850.9	3830.2	3872.9	3847.3
52.5°	4298.9	4341.6	4333.1	4347.7	4429.5	4517.4	4439.3	4405.1	4327.0	4340.4	4295.2
55°	4849.4	4914.1	4926.3	5014.2	5199.7	5379.1	5213.1	5075.2	4909.2	4878.7	4831.1
57.5°	5475.5	5526.8	5585.4	5764.8	6111.5	6430.0	6111.5	5806.3	5545.1	5482.9	5438.9
60°	6149.3	6212.8	6268.9	6533.8	7048.9	7496.8	7039.1	6554.5	6209.1	6124.9	6051.6
62.5°	6873.1	6954.9	6993.9	7288.1	7888.6	8423.2	7897.2	7310.1	6926.8	6836.5	6763.2
65°	7567.6	7634.7	7678.7	7992.4	8566.0	9101.9	8605.1	8026.6	7632.3	7513.9	7455.3
67.5°	7891.1	7927.7	8035.1	8390.3	8995.7	9607.2	9098.2	8428.1	7987.5	7780.0	7782.4
70°	7417.5	7343.0	7601.8	8170.6	9047.0	9917.2	9164.1	8153.5	7614.0	7277.1	7357.7
72.5°	5731.9	5603.7	6052.9	7025.7	8461.1	9719.5	8519.7	7080.6	6332.4	5648.9	5818.5
75°	3118.6	2973.3	3593.4	4823.7	6747.4	8424.5	6902.4	4961.7	4001.1	3095.4	3296.8
77.5°	880.0	825.1	1325.6	2333.8	4058.4	5914.9	4214.7	2385.0	1572.1	932.5	1036.3
80°	269.7	261.2	354.0	703.1	1723.5	2833.0	1656.3	711.6	450.4	284.4	300.3
82.5°	159.9	146.5	175.8	256.3	439.4	889.8	427.2	267.3	214.8	144.0	156.2
85°	91.5	85.4	103.7	124.5	147.7	189.2	123.3	126.9	114.7	76.9	80.6
87.5°	37.8	34.2	40.3	39.1	34.2	43.9	33.0	39.1	46.4	30.5	28.1
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)