

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: P883772

Luminaire Tested: **NAV-SB4B-740-U-5WQ**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883772  
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-SB4B-740-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 4000K, 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: 24887 lumens  
Efficiency: N/A  
Efficacy: 169.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G3

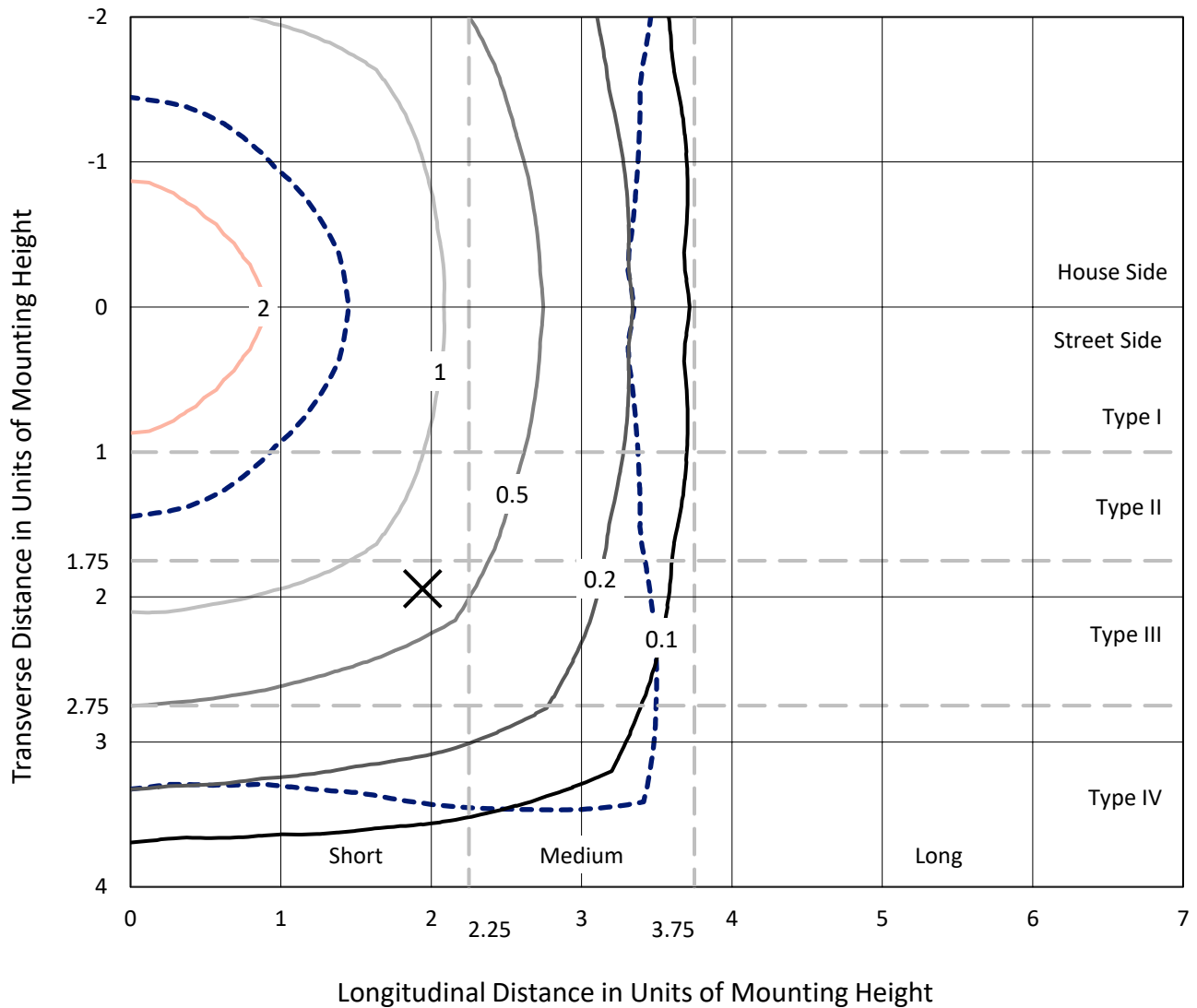
Input Watts (W): 147  
Input Voltage (V): 120.0  
Input Current (Ain): 1.255  
Voltage Rise (V): NR  
Power Factor: 0.988  
Total Harmonic Distortion (THDi): 13.593  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P883772  
 CATALOG NUMBER: NAV-SB4B-740-U-5WQ

### Iso-Footcandle Lines of Horizontal Illumination

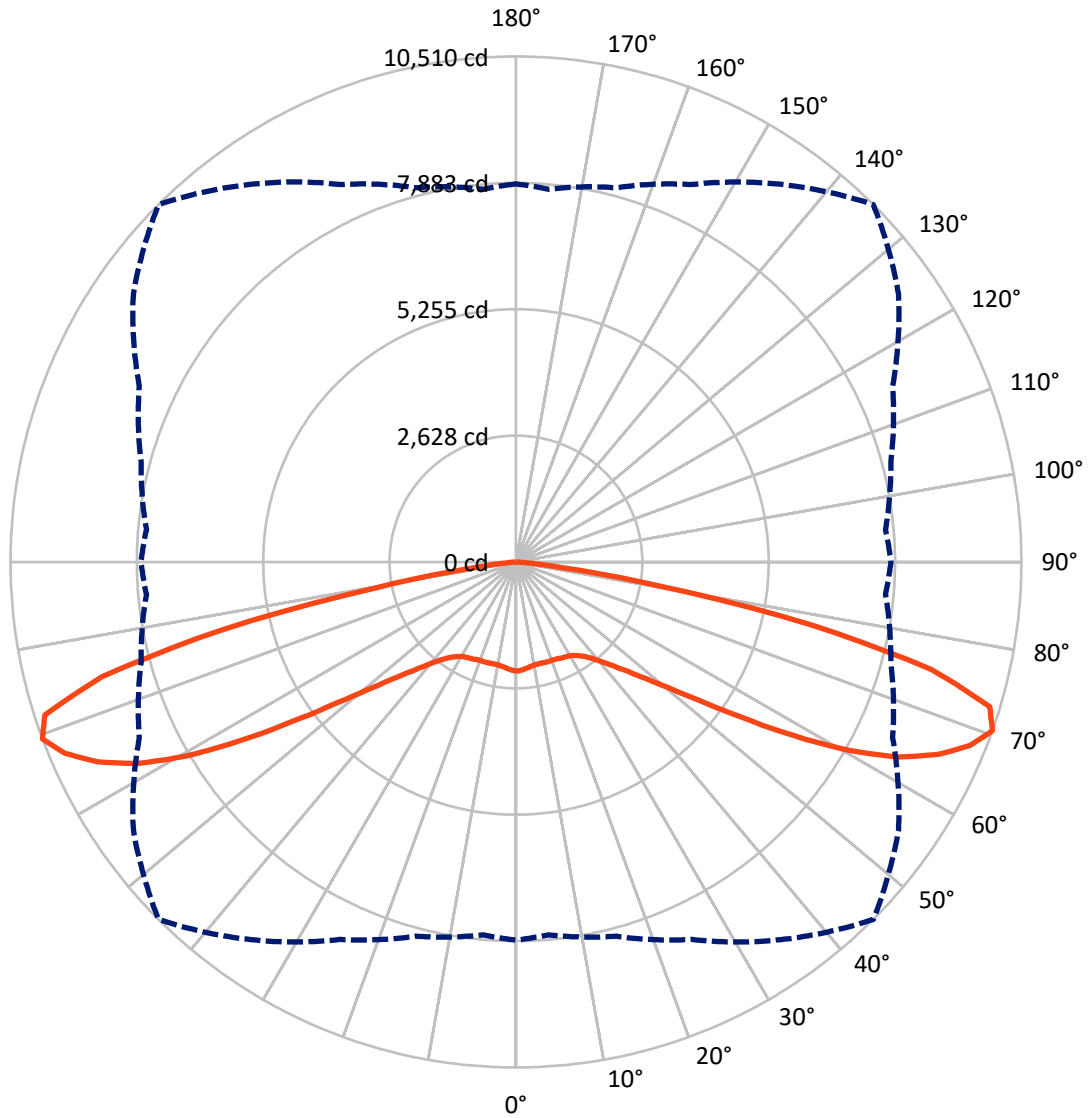
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc  
 Type V - Short - N/A

REPORT NUMBER: P883772  
CATALOG NUMBER: NAV-SB4B-740-U-5WQ

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P883772  
 CATALOG NUMBER: NAV-SB4B-740-U-5WQ

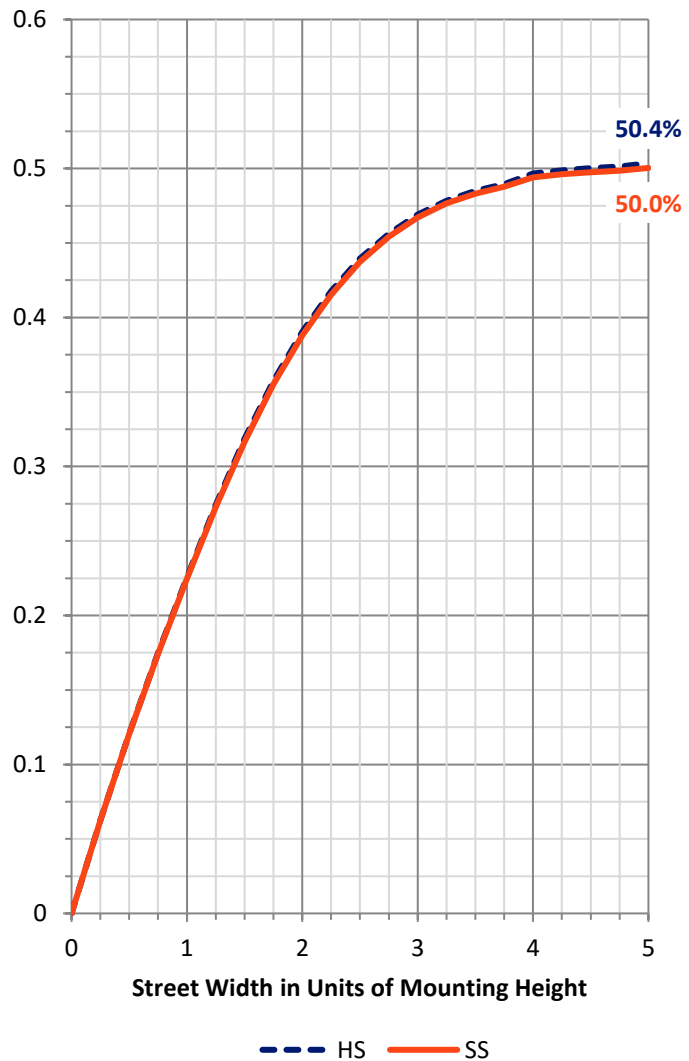
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12443.5	0.0	12443.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	12443.5	0.0	12443.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	24887.0	0.0	24887.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	211.2	0.8
10°-20°	620.1	2.5
20°-30°	1031.9	4.1
30°-40°	1560.6	6.3
40°-50°	2593.3	10.4
50°-60°	4893.4	19.7
60°-70°	8262.7	33.2
70°-80°	5429.4	21.8
80°-90°	284.4	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°	24887.0	100.0
0°-180°	24887.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P883772

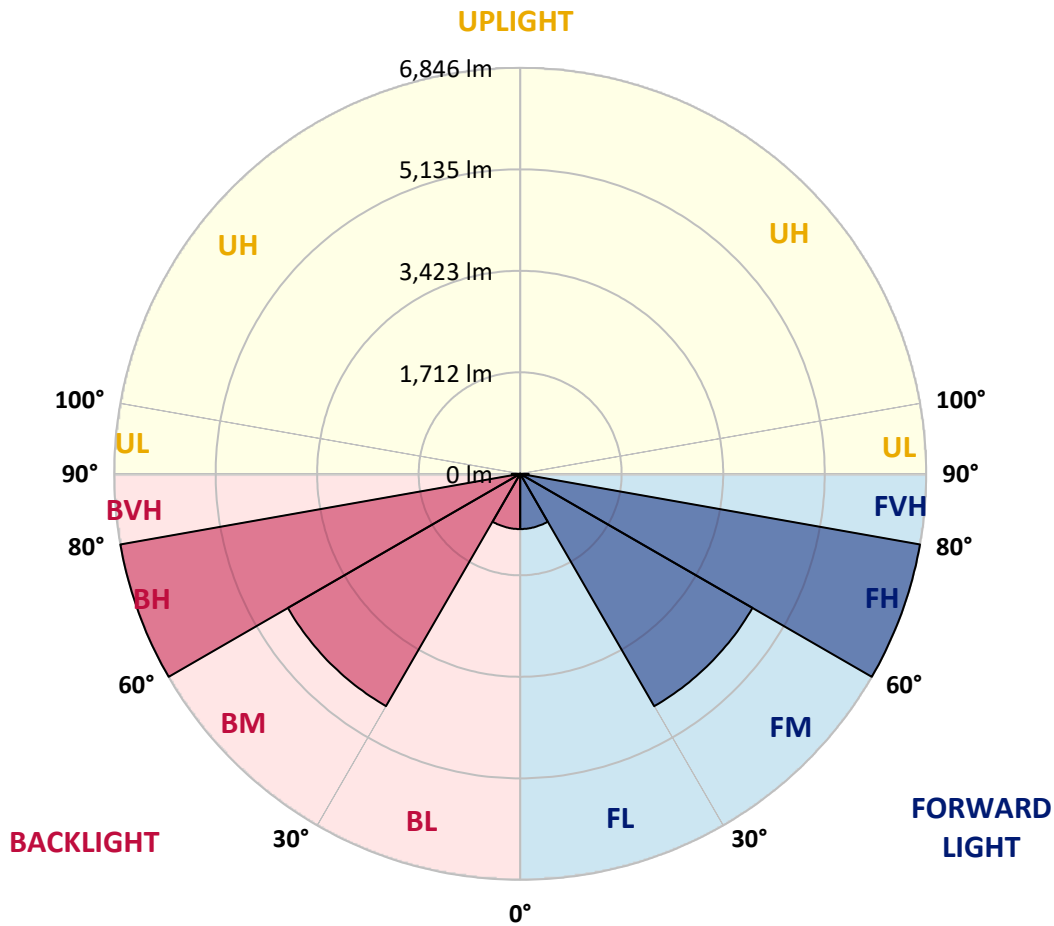
CATALOG NUMBER: NAV-SB4B-740-U-5WQ

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	931.6	3.7			
FM (30°-60°)	4523.6	18.2			
FH (60°-80°)	6846.1	27.5			G3/7500
FVH (80°-90°)	142.2	0.6			G2/225
BL (0°-30°)	931.6	3.7	B2/1000		
BM (30°-60°)	4523.6	18.2	B3/5000		
BH (60°-80°)	6846.1	27.5	B5		G3/7500
BVH (80°-90°)	142.2	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: P883772

CATALOG NUMBER: NAV-SB4B-740-U-5WQ

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2270.2	2270.2	2270.2	2270.2	2270.2	2270.2	2270.2	2270.2	2270.2	2270.2	2270.2
2.5°	2256.0	2262.4	2259.8	2254.7	2254.7	2250.8	2254.7	2257.3	2261.1	2263.7	2262.4
5°	2226.2	2231.4	2230.1	2226.2	2227.5	2223.6	2226.2	2230.1	2232.7	2234.0	2234.0
7.5°	2200.3	2205.5	2202.9	2196.5	2196.5	2192.6	2193.9	2197.8	2201.6	2202.9	2202.9
10°	2193.9	2199.0	2191.3	2180.9	2177.1	2171.9	2173.2	2177.1	2184.8	2188.7	2188.7
12.5°	2196.5	2200.3	2192.6	2177.1	2173.2	2168.0	2168.0	2171.9	2182.2	2187.4	2188.7
15°	2204.2	2208.1	2196.5	2179.6	2175.8	2171.9	2170.6	2175.8	2187.4	2196.5	2197.8
17.5°	2218.5	2222.3	2204.2	2180.9	2175.8	2177.1	2175.8	2179.6	2197.8	2214.6	2214.6
20°	2231.4	2234.0	2209.4	2180.9	2175.8	2177.1	2175.8	2183.5	2206.8	2230.1	2231.4
22.5°	2235.3	2237.9	2214.6	2190.0	2186.1	2187.4	2186.1	2193.9	2215.9	2239.2	2239.2
25°	2236.6	2240.4	2222.3	2202.9	2209.4	2212.0	2209.4	2210.7	2227.5	2248.2	2246.9
27.5°	2256.0	2261.1	2244.3	2227.5	2231.4	2230.1	2234.0	2237.9	2250.8	2271.5	2266.3
30°	2296.1	2299.9	2285.7	2268.9	2266.3	2257.3	2268.9	2281.8	2296.1	2314.2	2310.3
32.5°	2362.0	2369.8	2351.7	2333.6	2321.9	2316.8	2325.8	2347.8	2367.2	2386.6	2378.9
35°	2472.0	2477.2	2460.3	2426.7	2406.0	2406.0	2413.8	2442.2	2473.3	2497.9	2488.8
37.5°	2627.2	2633.7	2603.9	2563.8	2532.8	2532.8	2543.1	2572.9	2619.5	2654.4	2641.4
40°	2816.1	2825.1	2787.6	2746.2	2716.5	2711.3	2724.2	2757.9	2801.8	2845.8	2831.6
42.5°	3043.7	3054.1	3004.9	2968.7	2945.4	2945.4	2951.9	2982.9	3023.0	3077.4	3073.5
45°	3334.8	3352.9	3285.6	3249.4	3227.4	3232.6	3236.5	3263.6	3299.9	3362.0	3359.4
47.5°	3681.5	3699.6	3628.4	3590.9	3587.0	3611.6	3596.1	3615.5	3634.9	3706.0	3685.3
50°	4074.7	4105.8	4056.6	4054.0	4061.8	4107.0	4070.8	4081.2	4059.2	4104.5	4077.3
52.5°	4555.9	4601.2	4592.1	4607.7	4694.3	4787.5	4704.7	4668.5	4585.7	4599.9	4552.0
55°	5139.3	5207.9	5220.8	5313.9	5510.6	5700.7	5524.8	5378.6	5202.7	5170.4	5119.9
57.5°	5802.9	5857.2	5919.3	6109.5	6476.8	6814.5	6476.8	6153.5	5876.6	5810.7	5764.1
60°	6516.9	6584.2	6643.7	6924.4	7470.3	7945.0	7460.0	6946.4	6580.3	6491.1	6413.5
62.5°	7284.0	7370.7	7412.1	7723.8	8360.3	8926.8	8369.3	7747.1	7340.9	7245.2	7167.6
65°	8020.1	8091.2	8137.8	8470.2	9078.2	9646.1	9119.6	8506.4	8088.6	7963.1	7901.1
67.5°	8362.9	8401.7	8515.5	8891.9	9533.5	10181.6	9642.2	8932.0	8465.0	8245.1	8247.7
70°	7861.0	7782.0	8056.3	8659.1	9587.9	10510.2	9712.0	8641.0	8069.2	7712.2	7797.6
72.5°	6074.6	5938.7	6414.8	7445.7	8966.9	10300.6	9029.0	7503.9	6711.0	5986.6	6166.4
75°	3305.0	3151.1	3808.2	5112.1	7150.8	8928.1	7315.1	5258.3	4240.3	3280.5	3493.9
77.5°	932.7	874.4	1404.8	2473.3	4301.1	6268.6	4466.7	2527.6	1666.1	988.3	1098.2
80°	285.9	276.8	375.1	745.1	1826.5	3002.3	1755.4	754.1	477.3	301.4	318.2
82.5°	169.5	155.2	186.3	271.6	465.7	943.0	452.7	283.3	227.7	152.6	165.6
85°	97.0	90.5	110.0	131.9	156.5	200.5	130.6	134.5	121.6	81.5	85.4
87.5°	40.1	36.2	42.7	41.4	36.2	46.6	34.9	41.4	49.2	32.3	29.8
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)