

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: P884282

Luminaire Tested: **NAV-SB5A-740-U-5WQ**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884282  
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-SB5A-740-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

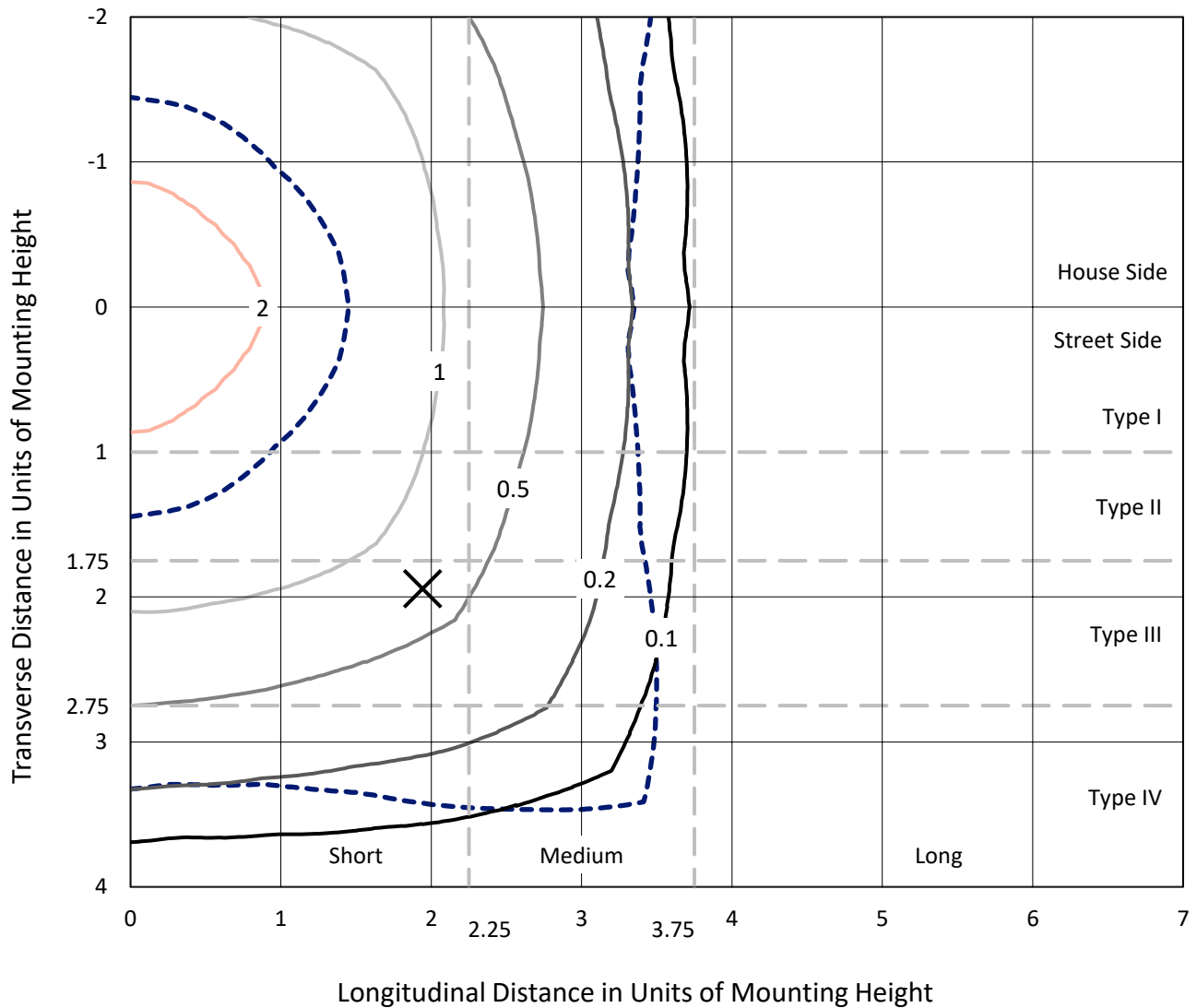
Lumens per Lamp: N/A  
Luminaire Lumens: 24823 lumens  
Efficiency: N/A  
Efficacy: 175.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G3  
  
Input Watts (W): 141.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.201  
Voltage Rise (V): NR  
Power Factor: 0.992  
Total Harmonic Distortion (THDi): 10.503  
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

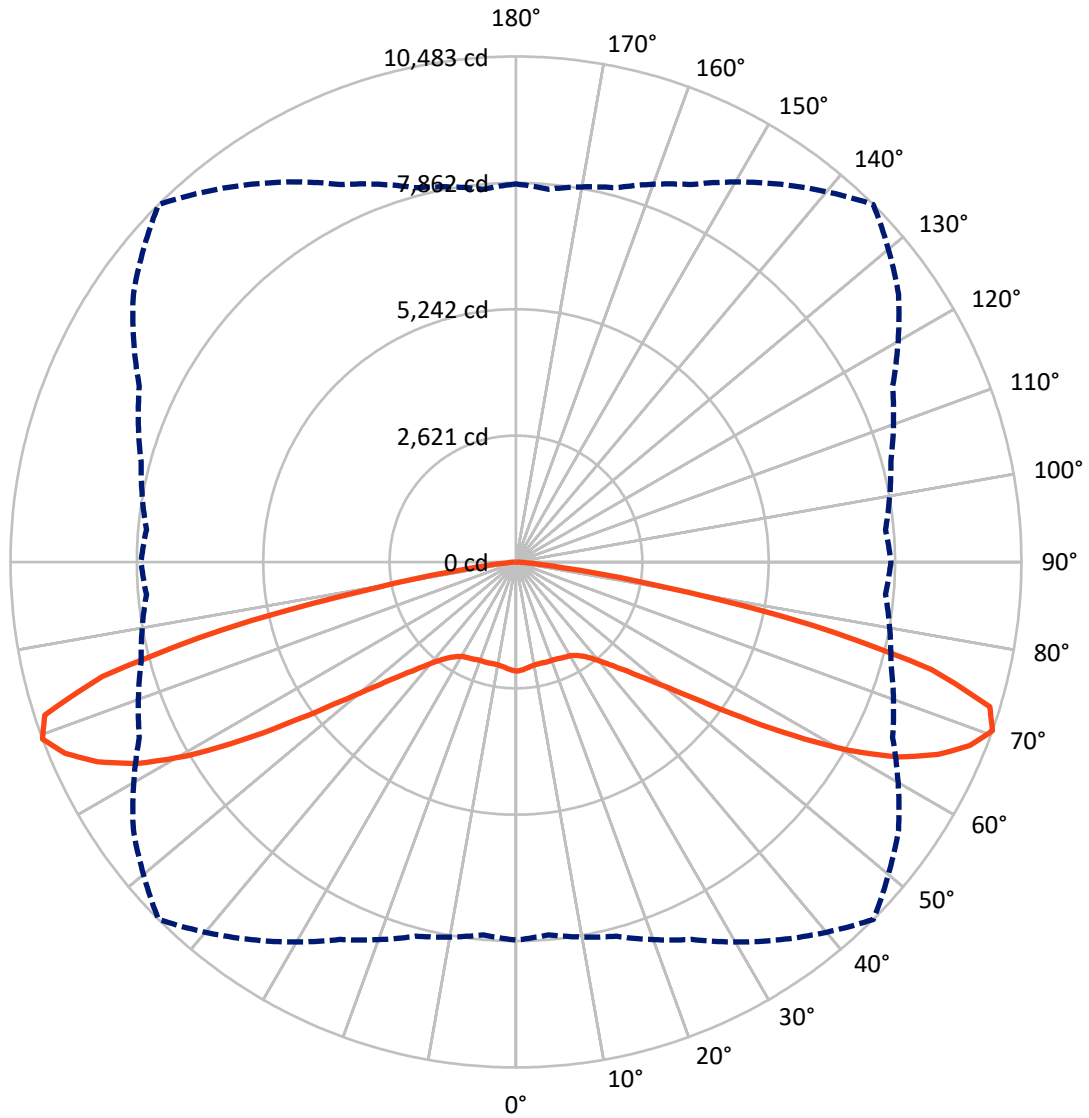
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 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
<b>House Side</b>	Lumens	12411.5	0.0	12411.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	12411.5	0.0	12411.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	24823.0	0.0	24823.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	210.6	0.8
10°-20°	618.5	2.5
20°-30°	1029.3	4.1
30°-40°	1556.5	6.3
40°-50°	2586.6	10.4
50°-60°	4880.8	19.7
60°-70°	8241.5	33.2
70°-80°	5415.5	21.8
80°-90°	283.7	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°	24823.0	100.0
0°-180°	24823.0	100.0

**Coefficient of Utilization**



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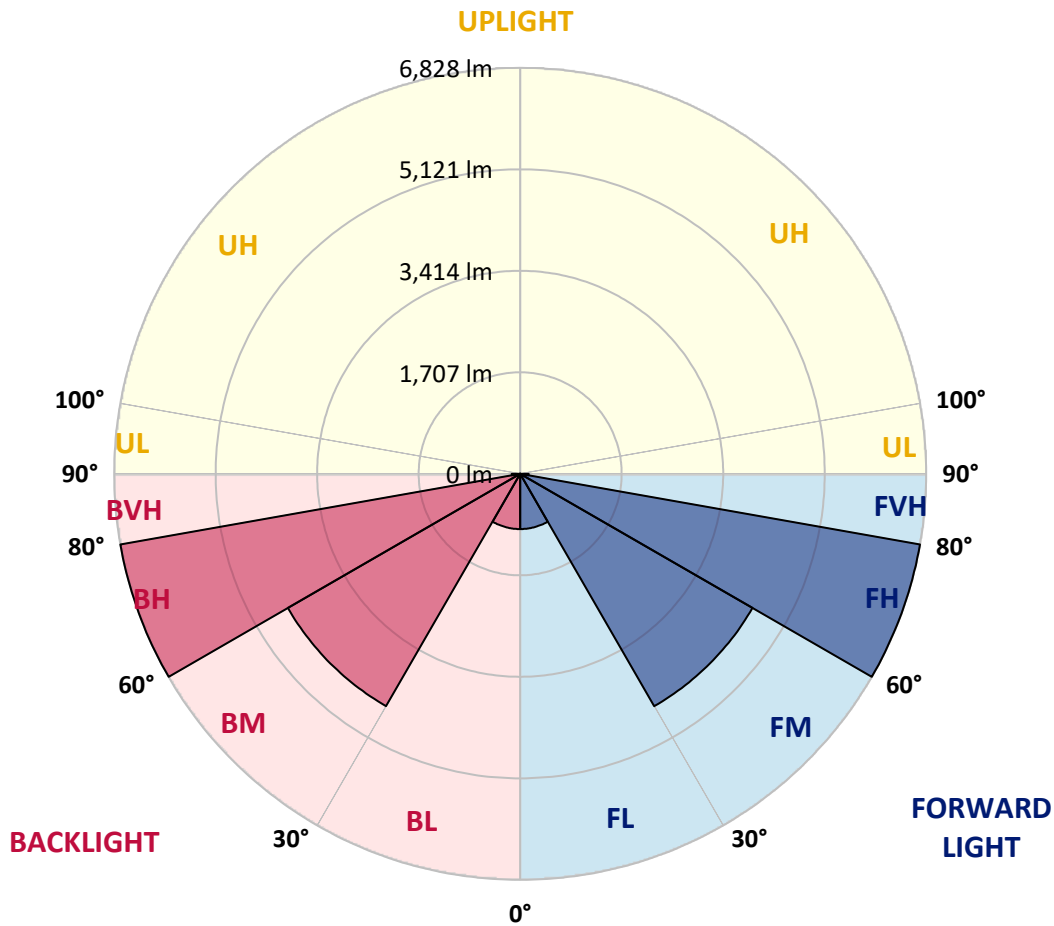
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	929.2	3.7			
FM (30°-60°)	4512.0	18.2			
FH (60°-80°)	6828.5	27.5			G3/7500
FVH (80°-90°)	141.9	0.6			G2/225
BL (0°-30°)	929.2	3.7	B2/1000		
BM (30°-60°)	4512.0	18.2	B3/5000		
BH (60°-80°)	6828.5	27.5	B5		G3/7500
BVH (80°-90°)	141.9	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°	2264.4	2264.4	2264.4	2264.4	2264.4	2264.4	2264.4	2264.4	2264.4	2264.4	2264.4
2.5°	2250.2	2256.6	2254.0	2248.9	2248.9	2245.0	2248.9	2251.5	2255.3	2257.9	2256.6
5°	2220.5	2225.7	2224.4	2220.5	2221.8	2217.9	2220.5	2224.4	2226.9	2228.2	2228.2
7.5°	2194.7	2199.8	2197.3	2190.8	2190.8	2186.9	2188.2	2192.1	2196.0	2197.3	2197.3
10°	2188.2	2193.4	2185.7	2175.3	2171.5	2166.3	2167.6	2171.5	2179.2	2183.1	2183.1
12.5°	2190.8	2194.7	2186.9	2171.5	2167.6	2162.4	2162.4	2166.3	2176.6	2181.8	2183.1
15°	2198.6	2202.4	2190.8	2174.0	2170.2	2166.3	2165.0	2170.2	2181.8	2190.8	2192.1
17.5°	2212.7	2216.6	2198.6	2175.3	2170.2	2171.5	2170.2	2174.0	2192.1	2208.9	2208.9
20°	2225.7	2228.2	2203.7	2175.3	2170.2	2171.5	2170.2	2177.9	2201.1	2224.4	2225.7
22.5°	2229.5	2232.1	2208.9	2184.4	2180.5	2181.8	2180.5	2188.2	2210.2	2233.4	2233.4
25°	2230.8	2234.7	2216.6	2197.3	2203.7	2206.3	2203.7	2205.0	2221.8	2242.4	2241.1
27.5°	2250.2	2255.3	2238.6	2221.8	2225.7	2224.4	2228.2	2232.1	2245.0	2265.6	2260.5
30°	2290.2	2294.0	2279.8	2263.1	2260.5	2251.5	2263.1	2276.0	2290.2	2308.2	2304.4
32.5°	2356.0	2363.7	2345.6	2327.6	2316.0	2310.8	2319.8	2341.8	2361.1	2380.5	2372.7
35°	2465.6	2470.8	2454.0	2420.5	2399.8	2399.8	2407.6	2436.0	2466.9	2491.4	2482.4
37.5°	2620.5	2626.9	2597.2	2557.2	2526.3	2526.3	2536.6	2566.3	2612.7	2647.6	2634.7
40°	2808.8	2817.9	2780.5	2739.2	2709.5	2704.3	2717.2	2750.8	2794.6	2838.5	2824.3
42.5°	3035.9	3046.2	2997.2	2961.1	2937.9	2937.9	2944.3	2975.3	3015.3	3069.5	3065.6
45°	3326.2	3344.3	3277.2	3241.1	3219.1	3224.3	3228.2	3255.3	3291.4	3353.3	3350.7
47.5°	3672.0	3690.1	3619.1	3581.7	3577.8	3602.3	3586.8	3606.2	3625.6	3696.5	3675.9
50°	4064.2	4095.2	4046.2	4043.6	4051.3	4096.5	4060.4	4070.7	4048.7	4093.9	4066.8
52.5°	4544.2	4589.4	4580.3	4595.8	4682.3	4775.1	4692.6	4656.4	4573.9	4588.1	4540.3
55°	5126.1	5194.5	5207.4	5300.3	5496.4	5686.1	5510.6	5364.8	5189.3	5157.1	5106.7
57.5°	5788.0	5842.2	5904.1	6093.8	6460.2	6796.9	6460.2	6137.6	5861.5	5795.7	5749.3
60°	6500.2	6567.3	6626.6	6906.6	7451.1	7924.6	7440.8	6928.5	6563.4	6474.4	6397.0
62.5°	7265.3	7351.7	7393.0	7704.0	8338.8	8903.9	8347.8	7727.2	7322.1	7226.6	7149.2
65°	7999.4	8070.4	8116.9	8448.4	9054.8	9621.3	9096.1	8484.6	8067.8	7942.7	7880.7
67.5°	8341.4	8380.1	8493.6	8869.1	9509.0	10155.4	9617.4	8909.1	8443.3	8223.9	8226.5
70°	7840.7	7762.0	8035.6	8636.8	9563.2	10483.1	9687.1	8618.8	8048.5	7692.4	7777.5
72.5°	6058.9	5923.5	6398.3	7426.6	8943.9	10274.1	9005.8	7484.6	6693.7	5971.2	6150.5
75°	3296.5	3143.0	3798.4	5099.0	7132.4	8905.2	7296.3	5244.8	4229.4	3272.0	3484.9
77.5°	930.3	872.2	1401.2	2466.9	4290.0	6252.5	4455.2	2521.1	1661.8	985.7	1095.4
80°	285.1	276.1	374.2	743.2	1821.8	2994.6	1750.8	752.2	476.1	300.6	317.4
82.5°	169.0	154.8	185.8	270.9	464.5	940.6	451.6	282.6	227.1	152.2	165.1
85°	96.8	90.3	109.7	131.6	156.1	200.0	130.3	134.2	121.3	81.3	85.2
87.5°	40.0	36.1	42.6	41.3	36.1	46.4	34.8	41.3	49.0	32.3	29.7
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)