

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: P963005

Luminaire Tested: **NAV-SB2D-740-U-RW**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963005
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-19)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-740-U-RW
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND RECTANGULAR
WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22725.3 lumens
Efficiency: N/A
Efficacy: 154.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G4

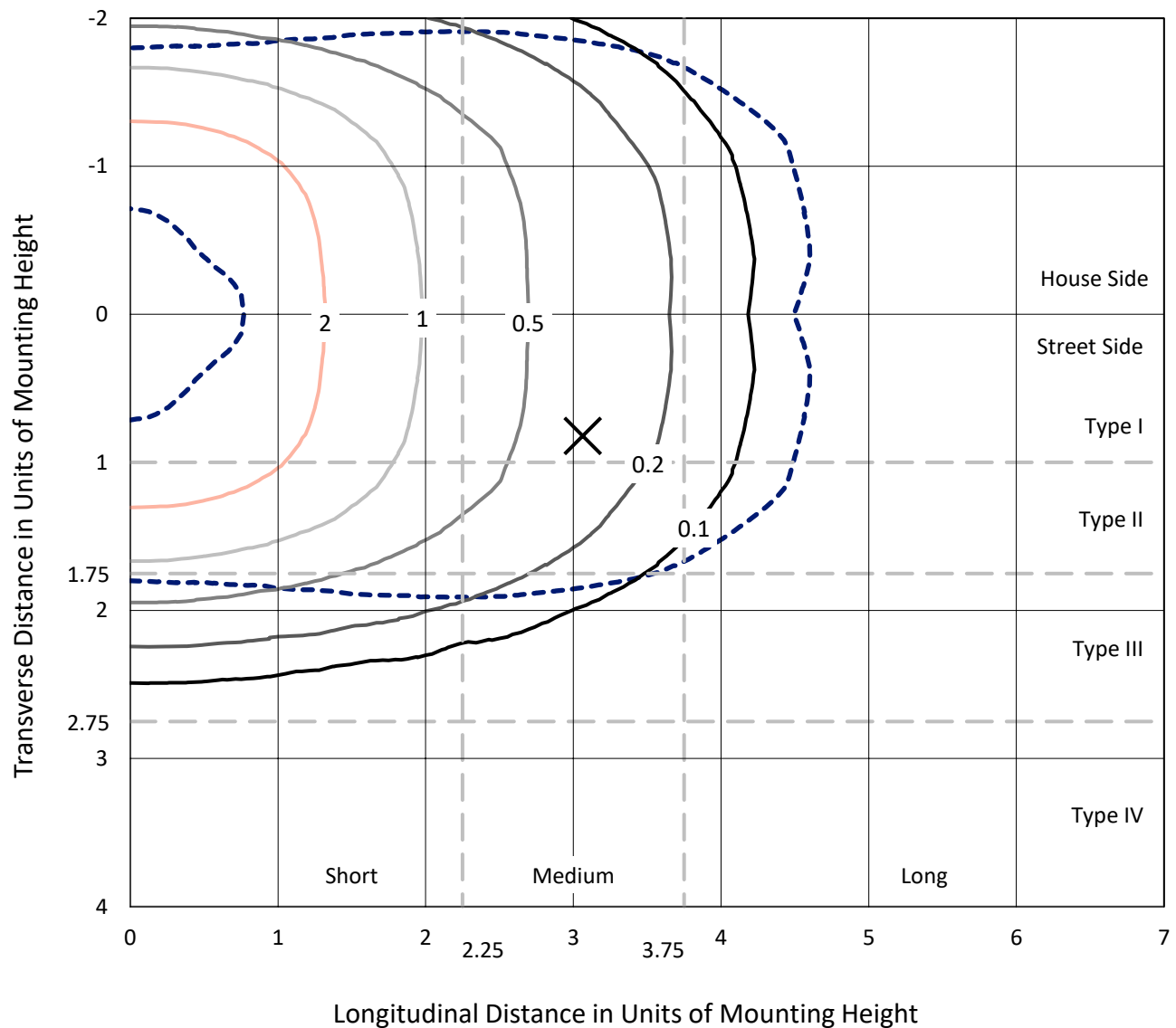
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

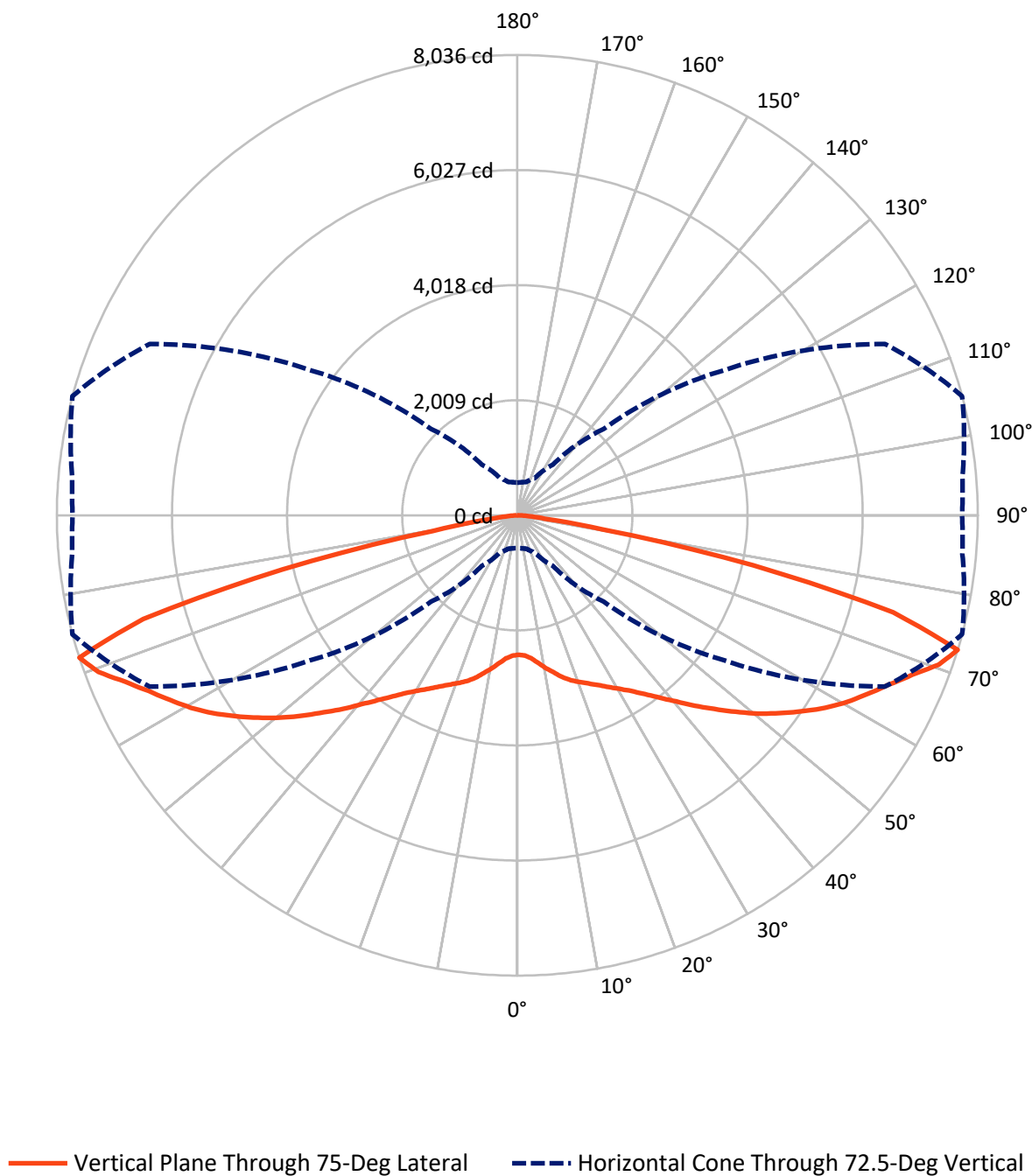
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11362.6	0.0	11362.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	11362.6	0.0	11362.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	22725.3	0.0	22725.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.5	1.0
10°-20°	786.5	3.5
20°-30°	1519.7	6.7
30°-40°	2566.1	11.3
40°-50°	4069.6	17.9
50°-60°	5448.7	24.0
60°-70°	5185.4	22.8
70°-80°	2705.9	11.9
80°-90°	204.8	0.9
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°	22725.3	100.0
0°-180°	22725.3	100.0

Coefficient of Utilization



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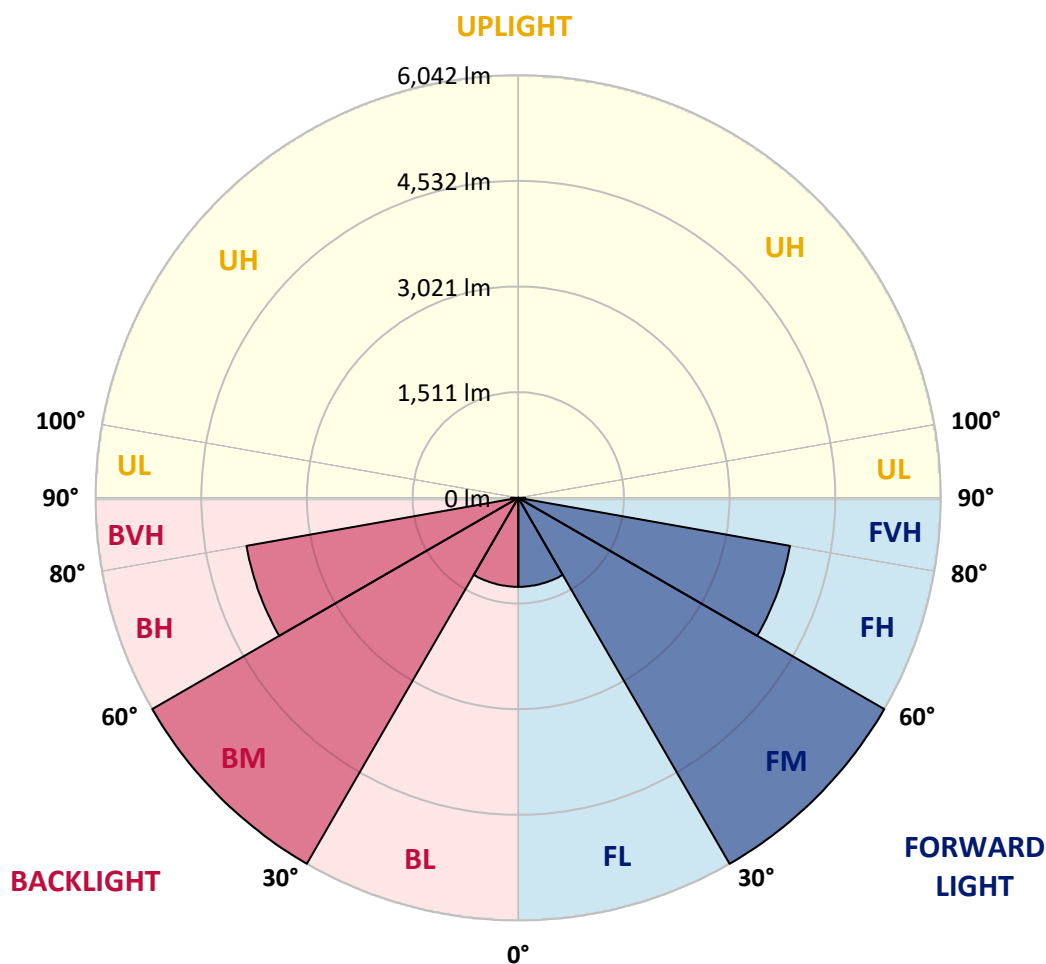
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1272.3	5.6			
FM	(30°-60°)	6042.2	26.6			
FH	(60°-80°)	3945.7	17.4			G2/5000
FVH	(80°-90°)	102.4	0.5			G2/225
BL	(0°-30°)	1272.3	5.6	B3/2500		
BM	(30°-60°)	6042.2	26.6	B4/8500		
BH	(60°-80°)	3945.7	17.4	B4/5000		G4/5000
BVH	(80°-90°)	102.4	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2434.3	2434.3	2434.3	2434.3	2434.3	2434.3	2434.3	2434.3	2434.3	2434.3	2434.3
2.5°	2434.3	2431.9	2434.3	2436.6	2435.4	2435.4	2441.2	2444.7	2451.7	2450.6	2449.3
5°	2418.1	2416.8	2426.2	2436.6	2444.7	2458.7	2476.1	2488.8	2505.1	2508.6	2508.6
7.5°	2409.9	2406.4	2422.7	2441.2	2466.8	2501.6	2535.2	2570.1	2597.9	2607.2	2609.4
10°	2415.7	2416.8	2438.9	2473.7	2514.3	2563.1	2610.7	2669.8	2709.3	2718.5	2727.8
12.5°	2442.4	2440.1	2477.2	2532.9	2588.6	2650.1	2705.8	2770.8	2813.7	2835.8	2845.0
15°	2491.2	2486.5	2538.7	2621.1	2702.3	2774.3	2819.5	2881.0	2930.9	2958.8	2969.2
17.5°	2549.2	2551.4	2619.9	2726.7	2833.4	2914.7	2957.5	2988.9	3027.2	3051.5	3063.1
20°	2651.3	2655.9	2732.4	2858.9	2980.8	3073.6	3108.4	3096.8	3107.3	3125.8	3139.8
22.5°	2788.2	2790.5	2876.4	3013.3	3140.9	3243.0	3266.2	3218.6	3189.6	3202.4	3211.6
25°	2947.1	2962.2	3048.0	3188.5	3319.6	3417.0	3427.5	3355.5	3283.6	3287.1	3292.9
27.5°	3140.9	3154.8	3241.9	3381.1	3514.5	3599.2	3598.1	3501.7	3396.1	3369.5	3377.6
30°	3350.9	3366.0	3455.4	3599.2	3723.3	3797.6	3781.3	3666.5	3515.6	3465.7	3471.6
32.5°	3600.4	3609.6	3700.1	3844.1	3958.9	4018.1	3984.4	3842.8	3654.9	3598.1	3612.0
35°	3902.1	3916.0	3983.3	4119.1	4219.9	4268.7	4211.8	4044.8	3833.6	3769.7	3779.1
37.5°	4246.7	4237.3	4313.9	4434.7	4518.2	4548.3	4470.6	4272.2	4037.8	3962.3	3976.3
40°	4606.3	4601.7	4685.3	4801.3	4846.5	4865.1	4750.3	4533.3	4273.3	4192.1	4218.8
42.5°	4932.4	4928.9	5041.5	5170.2	5224.7	5203.9	5058.9	4810.5	4546.0	4453.2	4476.4
45°	5193.5	5188.9	5326.9	5507.8	5614.6	5579.8	5384.9	5116.9	4822.1	4725.9	4747.9
47.5°	5394.2	5396.5	5545.0	5768.9	5955.8	5968.5	5717.9	5429.0	5126.1	5017.1	5049.6
50°	5539.2	5546.2	5705.2	5953.4	6208.7	6321.3	6057.9	5749.2	5440.6	5317.6	5354.7
52.5°	5575.2	5588.0	5779.4	6070.7	6371.1	6585.8	6403.6	6056.7	5738.8	5621.6	5651.7
55°	5383.7	5409.2	5651.7	6061.3	6470.9	6759.9	6707.6	6368.8	6039.3	5918.7	5952.3
57.5°	4944.0	4980.0	5263.1	5797.9	6448.9	6879.4	6943.1	6668.1	6339.8	6223.8	6250.4
60°	4327.9	4370.8	4642.3	5226.0	6137.9	6923.5	7109.1	6959.4	6616.0	6503.4	6527.8
62.5°	3398.5	3454.1	3779.1	4463.7	5481.2	6718.1	7250.6	7222.8	6864.2	6723.9	6740.1
65°	2180.2	2239.3	2581.7	3390.4	4605.2	6089.2	7294.7	7479.2	7126.5	6930.4	6954.7
67.5°	1314.6	1341.3	1510.6	2054.9	3366.0	5141.2	6921.1	7763.5	7432.8	7189.1	7207.7
70°	841.2	856.3	957.2	1206.7	1902.9	3751.2	5995.2	7816.9	7804.1	7454.8	7452.6
72.5°	570.8	575.5	602.2	714.7	1076.8	2131.5	4421.8	7076.6	8036.1	7797.2	7760.0
75°	417.7	443.2	486.2	505.8	611.5	1065.2	2534.1	4971.9	6772.6	6877.0	6624.1
77.5°	311.0	312.1	371.3	394.5	436.2	567.3	1072.1	2775.4	4204.9	4414.9	3938.0
80°	263.4	249.5	248.3	318.0	328.4	353.9	479.2	958.4	1506.0	913.2	690.3
82.5°	219.2	204.2	184.5	248.3	224.0	217.0	207.7	389.8	479.2	235.5	200.7
85°	153.1	146.2	139.2	162.5	127.6	109.1	99.8	182.1	201.9	99.8	88.1
87.5°	66.1	68.5	69.6	72.0	53.4	38.3	38.3	51.0	51.0	39.5	29.0
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)