

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: P884115

Luminaire Tested: **NAV-SB4D-740-U-T1**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884115
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-2)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-740-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43985 lumens
Efficiency: N/A
Efficacy: 149.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

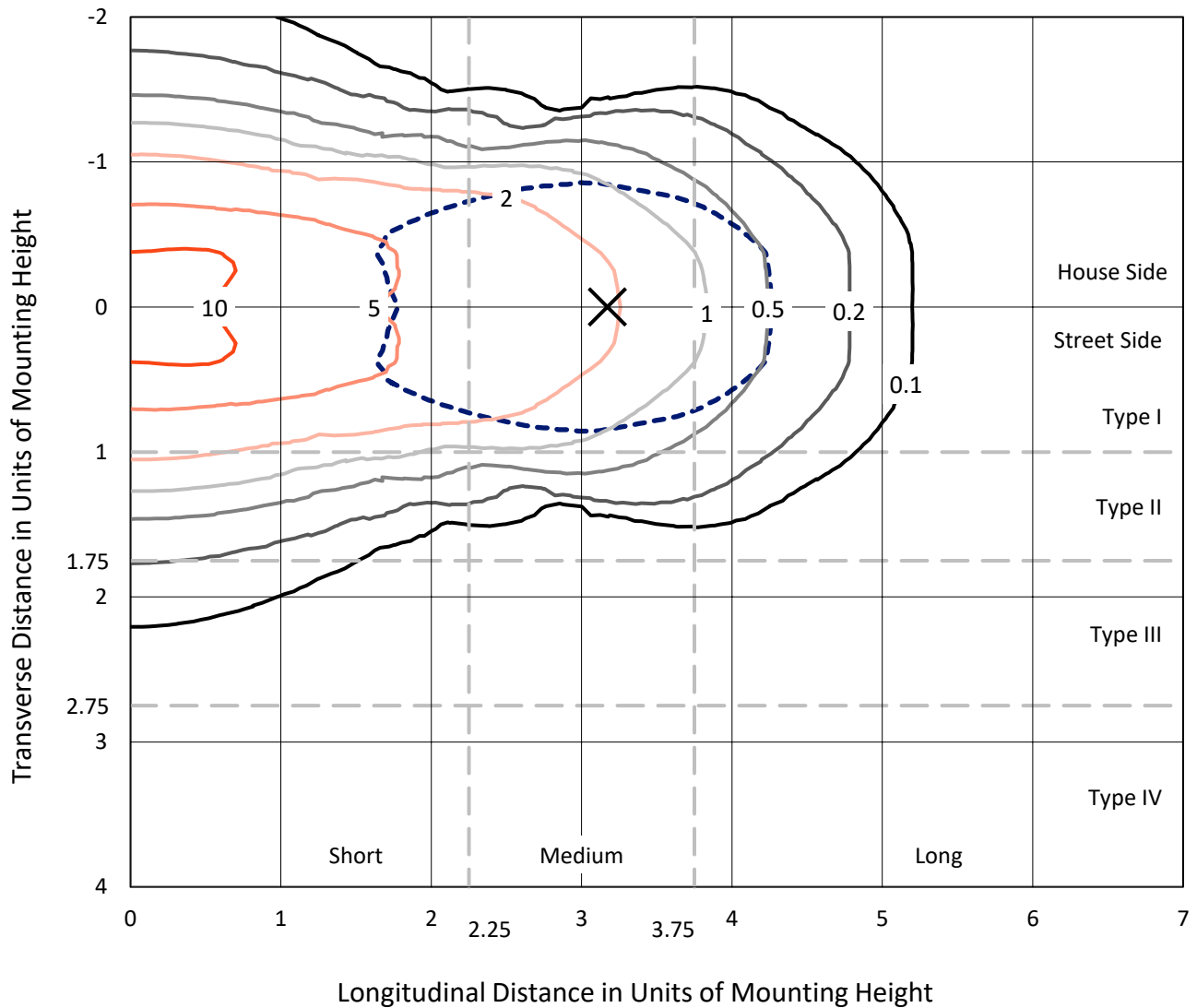
Input Watts (W): 293.6
Input Voltage (V): 120.0
Input Current (Ain): 2.469
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

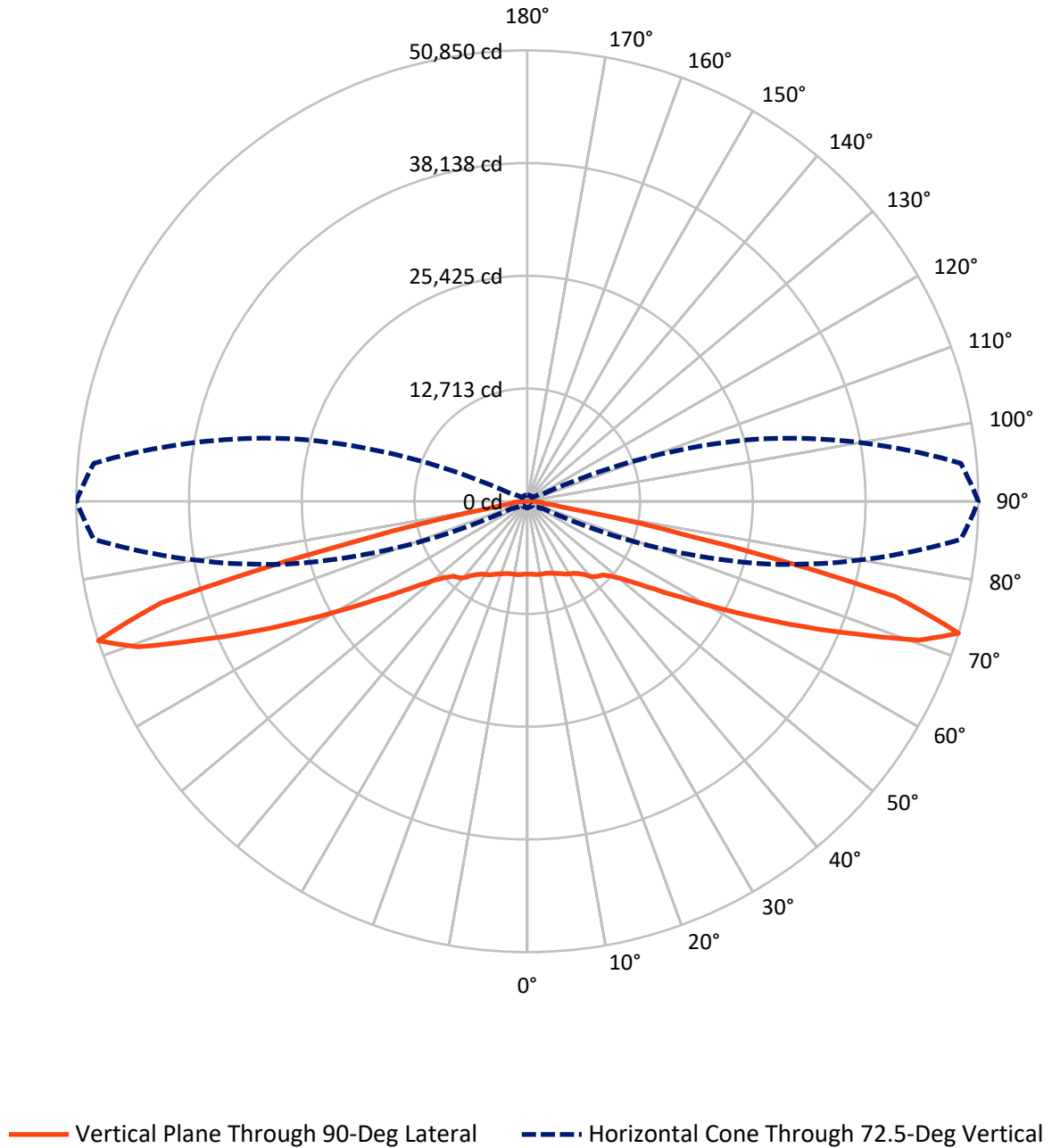
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.2 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21992.5	0.0	21992.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	21992.5	0.0	21992.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	43985.0	0.0	43985.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	796.9	1.8
10°-20°	2436.7	5.5
20°-30°	4063.0	9.2
30°-40°	5587.9	12.7
40°-50°	6824.3	15.5
50°-60°	7893.1	17.9
60°-70°	9411.2	21.4
70°-80°	6568.4	14.9
80°-90°	403.4	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°	43985.0	100.0
0°-180°	43985.0	100.0

Coefficient of Utilization



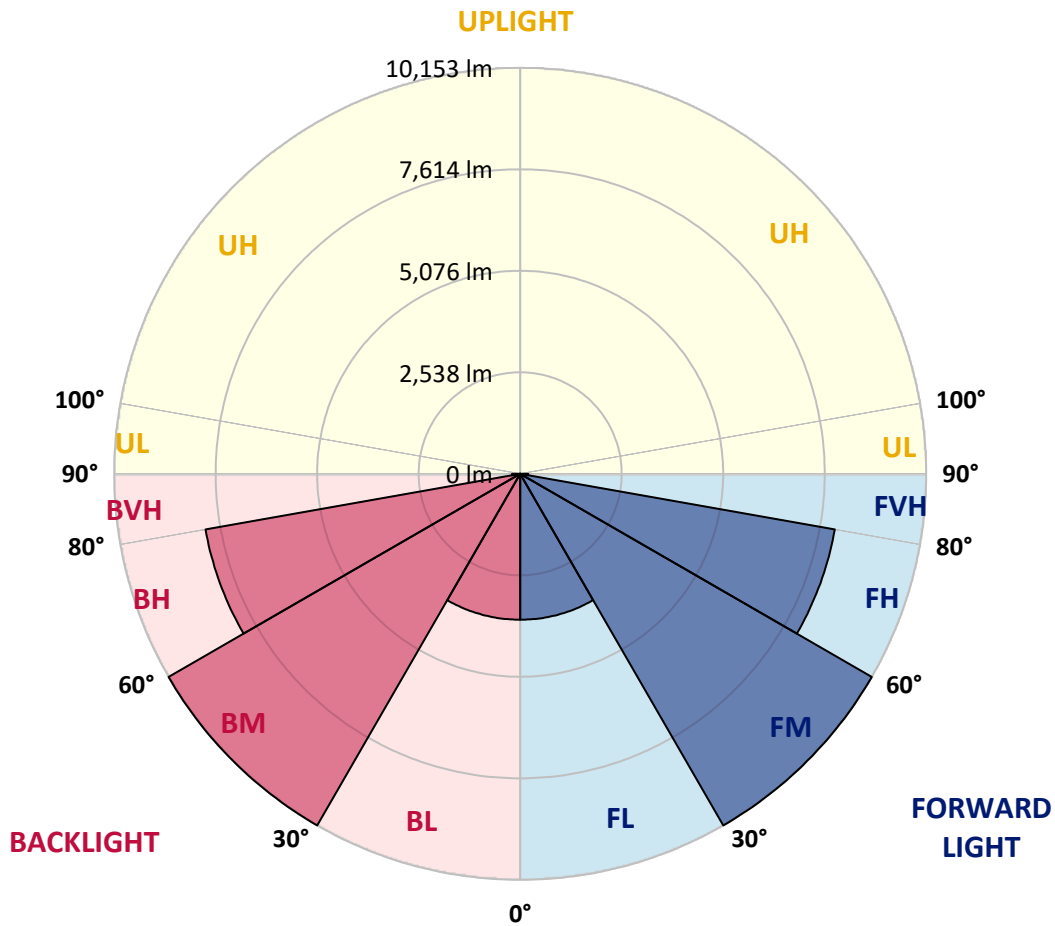
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3648.3	8.3			
FM (30°-60°)	10152.7	23.1			
FH (60°-80°)	7989.8	18.2			G4/12000
FVH (80°-90°)	201.7	0.5			G2/225
BL (0°-30°)	3648.3	8.3	B4/5000		
BM (30°-60°)	10152.7	23.1	B5		
BH (60°-80°)	7989.8	18.2	B5		G5
BVH (80°-90°)	201.7	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type I Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	8219.1	8219.1	8219.1	8219.1	8219.1	8219.1	8219.1	8219.1	8219.1	8219.1	8219.1
2.5°	8226.1	8235.4	8235.4	8228.4	8244.8	8230.7	8230.7	8223.7	8230.7	8223.7	8223.7
5°	8268.2	8279.8	8284.5	8282.2	8303.2	8291.5	8291.5	8282.2	8284.5	8277.5	8277.5
7.5°	8347.6	8364.0	8373.3	8385.0	8415.4	8401.4	8392.0	8364.0	8352.3	8333.6	8333.6
10°	8373.3	8392.0	8422.4	8483.2	8553.3	8555.7	8527.6	8457.5	8403.7	8361.7	8354.6
12.5°	8293.9	8319.6	8382.7	8506.6	8663.2	8726.3	8681.9	8565.0	8459.8	8385.0	8373.3
15°	8193.3	8221.4	8317.2	8504.3	8735.7	8882.9	8878.3	8724.0	8555.7	8438.8	8420.1
17.5°	8036.7	8064.8	8202.7	8464.5	8791.8	9034.9	9100.3	8941.4	8705.3	8548.7	8523.0
20°	7753.9	7779.6	7971.3	8338.3	8810.5	9196.2	9366.8	9226.6	8932.0	8719.3	8679.6
22.5°	7386.9	7426.6	7651.0	8120.9	8766.1	9364.5	9670.7	9574.9	9196.2	8901.6	8847.9
25°	6994.2	7036.2	7298.0	7854.4	8651.5	9486.0	10030.7	9969.9	9495.4	9128.4	9053.6
27.5°	6655.2	6699.6	6984.8	7590.2	8473.9	9532.8	10386.0	10416.4	9857.7	9378.5	9299.0
30°	6388.7	6430.8	6734.7	7377.5	8244.8	9486.0	10696.9	10907.3	10227.1	9595.9	9481.4
32.5°	6096.5	6150.3	6470.5	7118.0	7973.6	9373.8	10968.1	11438.0	10654.9	9829.7	9684.7
35°	5727.2	5776.3	6112.9	6762.7	7618.3	9193.8	11194.8	12027.0	11267.3	10185.0	10023.7
37.5°	5278.3	5325.1	5659.4	6318.6	7265.3	8941.4	11367.8	12690.9	11996.7	10696.9	10481.9
40°	4827.2	4871.6	5184.8	5823.0	6842.2	8618.8	11428.6	13340.8	12833.5	11400.6	11171.5
42.5°	4413.4	4453.2	4740.7	5334.4	6367.7	8207.4	11349.1	13906.5	13583.9	11891.5	11596.9
45°	4032.4	4067.5	4322.3	4876.3	5874.4	7707.1	11110.7	14514.3	14476.9	12242.1	11844.7
47.5°	3597.6	3632.7	3896.8	4432.1	5381.2	7120.4	10706.3	15112.7	15718.1	13036.9	12578.7
50°	3067.0	3097.3	3368.5	3920.2	4869.3	6496.2	10145.3	15582.6	17284.3	14240.8	13665.7
52.5°	2438.1	2470.9	2735.0	3286.7	4261.5	5825.3	9406.6	15888.8	19093.7	15998.7	15290.4
55°	1814.0	1837.4	2066.5	2562.0	3508.8	5060.9	8480.9	15975.3	21146.1	18401.7	17515.8
57.5°	1316.1	1330.1	1477.4	1846.7	2660.2	4104.9	7356.5	15750.9	23588.9	21482.7	20367.7
60°	1066.0	1070.6	1115.0	1278.7	1849.1	3024.9	5998.3	14979.5	26239.8	25454.3	24049.4
62.5°	967.8	967.8	979.5	1023.9	1250.6	1996.3	4355.0	13380.5	29082.3	30473.2	28591.4
65°	900.0	900.0	904.7	925.7	986.5	1271.7	2749.0	10776.4	31478.4	36352.3	33972.6
67.5°	839.2	841.5	839.2	846.2	881.3	939.7	1594.3	7443.0	32768.7	42444.1	39875.1
70°	776.1	780.8	769.1	769.1	797.1	799.5	998.2	4081.5	31698.1	47549.5	46873.9
72.5°	701.3	708.3	689.6	684.9	706.0	696.6	750.4	1958.9	27214.5	49073.6	50850.2
75°	635.8	645.2	603.1	591.4	591.4	584.4	610.1	1005.2	17663.0	40031.7	42818.1
77.5°	577.4	596.1	528.3	490.9	481.5	460.5	497.9	614.8	7725.8	18794.4	18404.1
80°	476.9	502.6	434.8	390.4	374.0	350.6	392.7	430.1	2297.9	4364.3	4179.7
82.5°	355.3	367.0	308.6	278.2	264.2	247.8	294.5	299.2	748.0	1545.2	1746.2
85°	226.7	231.4	189.3	163.6	156.6	149.6	187.0	163.6	285.2	1136.1	1650.4
87.5°	79.5	91.2	72.5	65.5	70.1	58.4	86.5	49.1	79.5	801.8	993.5
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)