

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: P882755

Luminaire Tested: **NAV-SB2D-740-U-T1**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882755
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-SB2D-740-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 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: 22120 lumens
Efficiency: N/A
Efficacy: 149.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

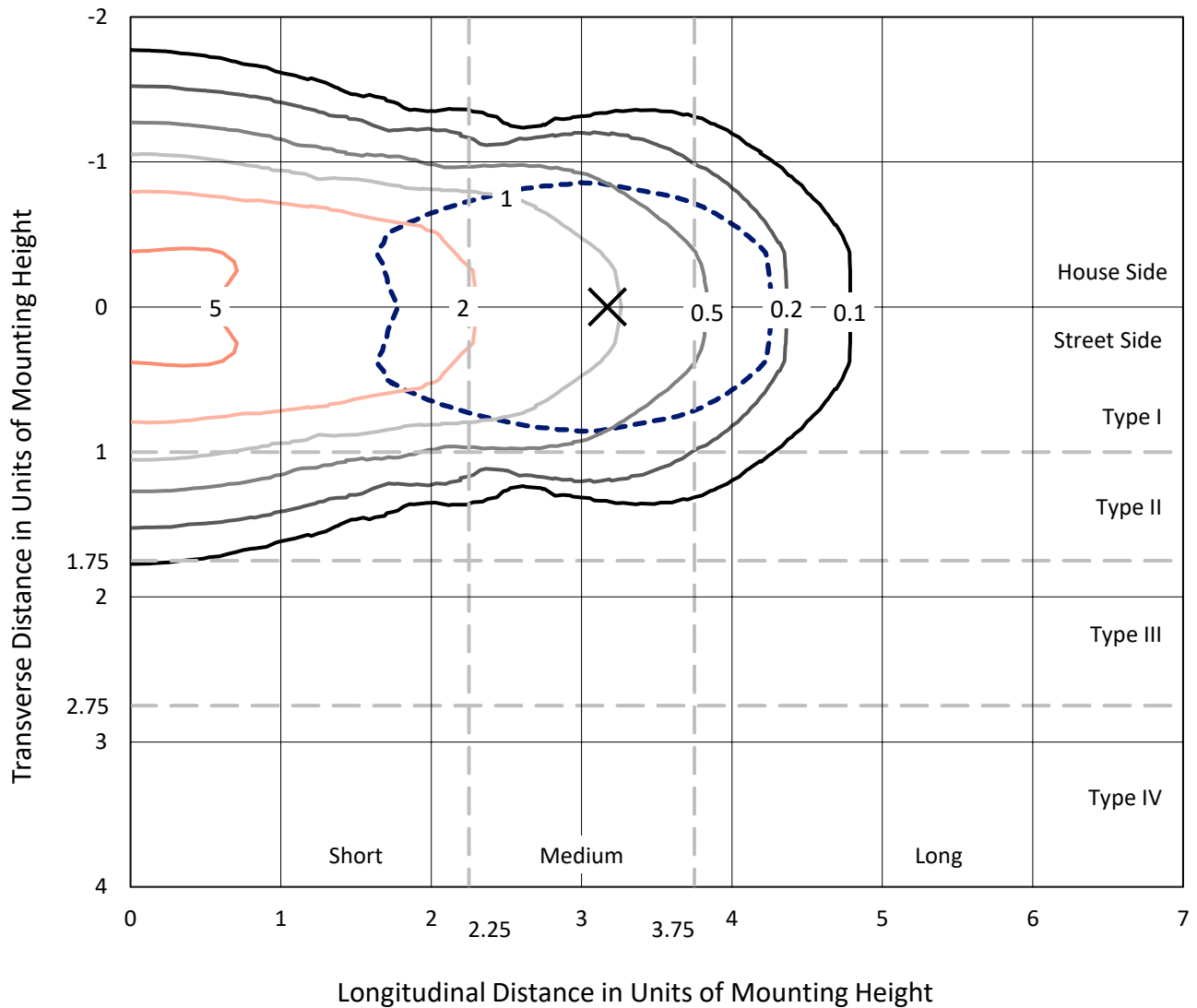
Input Watts (W): 147.6
Input Voltage (V): 120.0
Input Current (Ain): 1.234
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

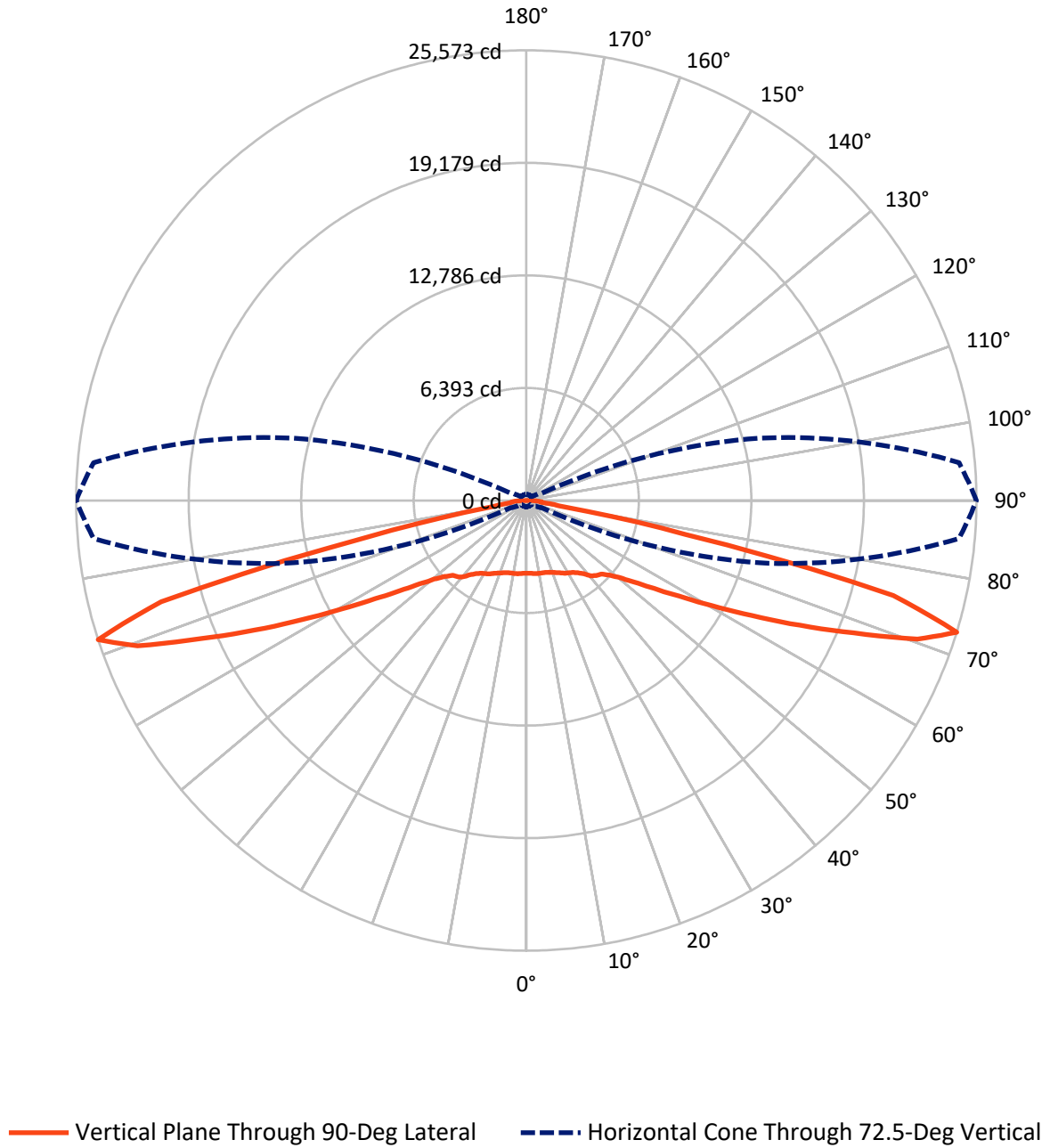
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 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	11060.0	0.0	11060.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	11060.0	0.0	11060.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	22120.0	0.0	22120.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	400.8	1.8
10°-20°	1225.4	5.5
20°-30°	2043.3	9.2
30°-40°	2810.1	12.7
40°-50°	3432.0	15.5
50°-60°	3969.4	17.9
60°-70°	4732.9	21.4
70°-80°	3303.2	14.9
80°-90°	202.9	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°	22120.0	100.0
0°-180°	22120.0	100.0

Coefficient of Utilization



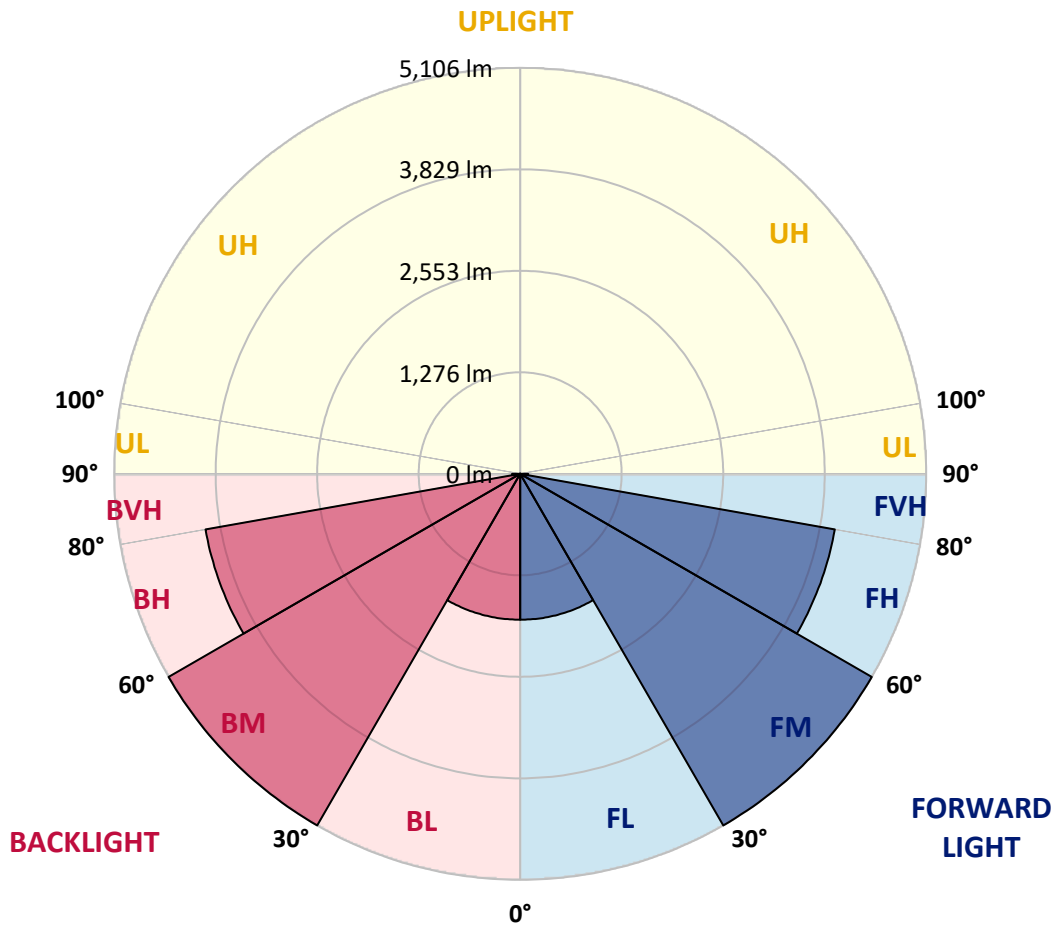
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1834.7	8.3			
FM (30°-60°)	5105.8	23.1			
FH (60°-80°)	4018.1	18.2			G2/5000
FVH (80°-90°)	101.4	0.5			G2/225
BL (0°-30°)	1834.7	8.3	B3/2500		
BM (30°-60°)	5105.8	23.1	B4/8500		
BH (60°-80°)	4018.1	18.2	B4/5000		G4/5000
BVH (80°-90°)	101.4	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 I Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4133.4	4133.4	4133.4	4133.4	4133.4	4133.4	4133.4	4133.4	4133.4	4133.4	4133.4
2.5°	4136.9	4141.6	4141.6	4138.1	4146.3	4139.2	4139.2	4135.7	4139.2	4135.7	4135.7
5°	4158.0	4163.9	4166.3	4165.1	4175.7	4169.8	4169.8	4165.1	4166.3	4162.7	4162.7
7.5°	4198.0	4206.2	4210.9	4216.8	4232.1	4225.1	4220.3	4206.2	4200.4	4191.0	4191.0
10°	4210.9	4220.3	4235.6	4266.2	4301.5	4302.6	4288.5	4253.3	4226.2	4205.1	4201.5
12.5°	4171.0	4183.9	4215.6	4278.0	4356.7	4388.5	4366.1	4307.3	4254.4	4216.8	4210.9
15°	4120.4	4134.5	4182.7	4276.8	4393.2	4467.2	4464.9	4387.3	4302.6	4243.9	4234.5
17.5°	4041.7	4055.8	4125.1	4256.8	4421.4	4543.6	4576.6	4496.6	4377.9	4299.1	4286.2
20°	3899.4	3912.3	4008.7	4193.3	4430.8	4624.7	4710.6	4640.0	4491.9	4384.9	4364.9
22.5°	3714.8	3734.8	3847.7	4084.0	4408.4	4709.4	4863.4	4815.2	4624.7	4476.6	4449.6
25°	3517.3	3538.5	3670.2	3950.0	4350.8	4770.5	5044.4	5013.9	4775.2	4590.7	4553.0
27.5°	3346.9	3369.2	3512.6	3817.1	4261.5	4794.0	5223.1	5238.4	4957.4	4716.4	4676.5
30°	3212.9	3234.0	3386.9	3710.1	4146.3	4770.5	5379.5	5485.3	5143.2	4825.8	4768.2
32.5°	3065.9	3093.0	3254.0	3579.7	4009.9	4714.1	5515.8	5752.1	5358.3	4943.3	4870.4
35°	2880.2	2904.9	3074.2	3401.0	3831.2	4623.6	5629.9	6048.4	5666.3	5122.0	5040.9
37.5°	2654.5	2678.0	2846.1	3177.6	3653.7	4496.6	5716.9	6382.2	6033.1	5379.5	5271.3
40°	2427.6	2449.9	2607.4	2928.4	3440.9	4334.4	5747.4	6709.1	6454.0	5733.3	5618.1
42.5°	2219.5	2239.5	2384.1	2682.7	3202.3	4127.5	5707.5	6993.6	6831.3	5980.2	5832.1
45°	2027.9	2045.5	2173.7	2452.3	2954.2	3875.9	5587.6	7299.2	7280.4	6156.5	5956.7
47.5°	1809.2	1826.9	1959.7	2228.9	2706.2	3580.8	5384.2	7600.2	7904.6	6556.2	6325.8
50°	1542.4	1557.6	1694.0	1971.5	2448.7	3266.9	5102.0	7836.4	8692.3	7161.7	6872.5
52.5°	1226.1	1242.6	1375.4	1652.9	2143.1	2929.6	4730.6	7990.4	9602.2	8045.7	7689.5
55°	912.3	924.0	1039.2	1288.4	1764.6	2545.1	4265.0	8033.9	10634.3	9254.2	8808.7
57.5°	661.9	668.9	743.0	928.7	1337.8	2064.3	3699.6	7921.1	11862.8	10803.6	10242.9
60°	536.1	538.4	560.8	643.0	929.9	1521.2	3016.6	7533.1	13195.9	12800.9	12094.4
62.5°	486.7	486.7	492.6	514.9	628.9	1003.9	2190.1	6729.0	14625.4	15324.9	14378.6
65°	452.6	452.6	455.0	465.5	496.1	639.5	1382.5	5419.4	15830.4	18281.5	17084.8
67.5°	422.0	423.2	422.0	425.6	443.2	472.6	801.7	3743.1	16479.3	21345.1	20053.1
70°	390.3	392.6	386.8	386.8	400.9	402.0	502.0	2052.6	15940.9	23912.6	23572.8
72.5°	352.7	356.2	346.8	344.4	355.0	350.3	377.4	985.1	13686.2	24679.0	25572.5
75°	319.8	324.5	303.3	297.4	297.4	293.9	306.8	505.5	8882.7	20131.9	21533.2
77.5°	290.4	299.8	265.7	246.9	242.2	231.6	250.4	309.2	3885.3	9451.7	9255.4
80°	239.8	252.8	218.7	196.3	188.1	176.3	197.5	216.3	1155.6	2194.8	2101.9
82.5°	178.7	184.6	155.2	139.9	132.8	124.6	148.1	150.5	376.2	777.1	878.2
85°	114.0	116.4	95.2	82.3	78.8	75.2	94.0	82.3	143.4	571.3	830.0
87.5°	40.0	45.8	36.4	32.9	35.3	29.4	43.5	24.7	40.0	403.2	499.6
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)