

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: P883785

Luminaire Tested: **NAV-SB4B-750-U-T1**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883785
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-SB4B-750-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 5000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24339 lumens
Efficiency: N/A
Efficacy: 165.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

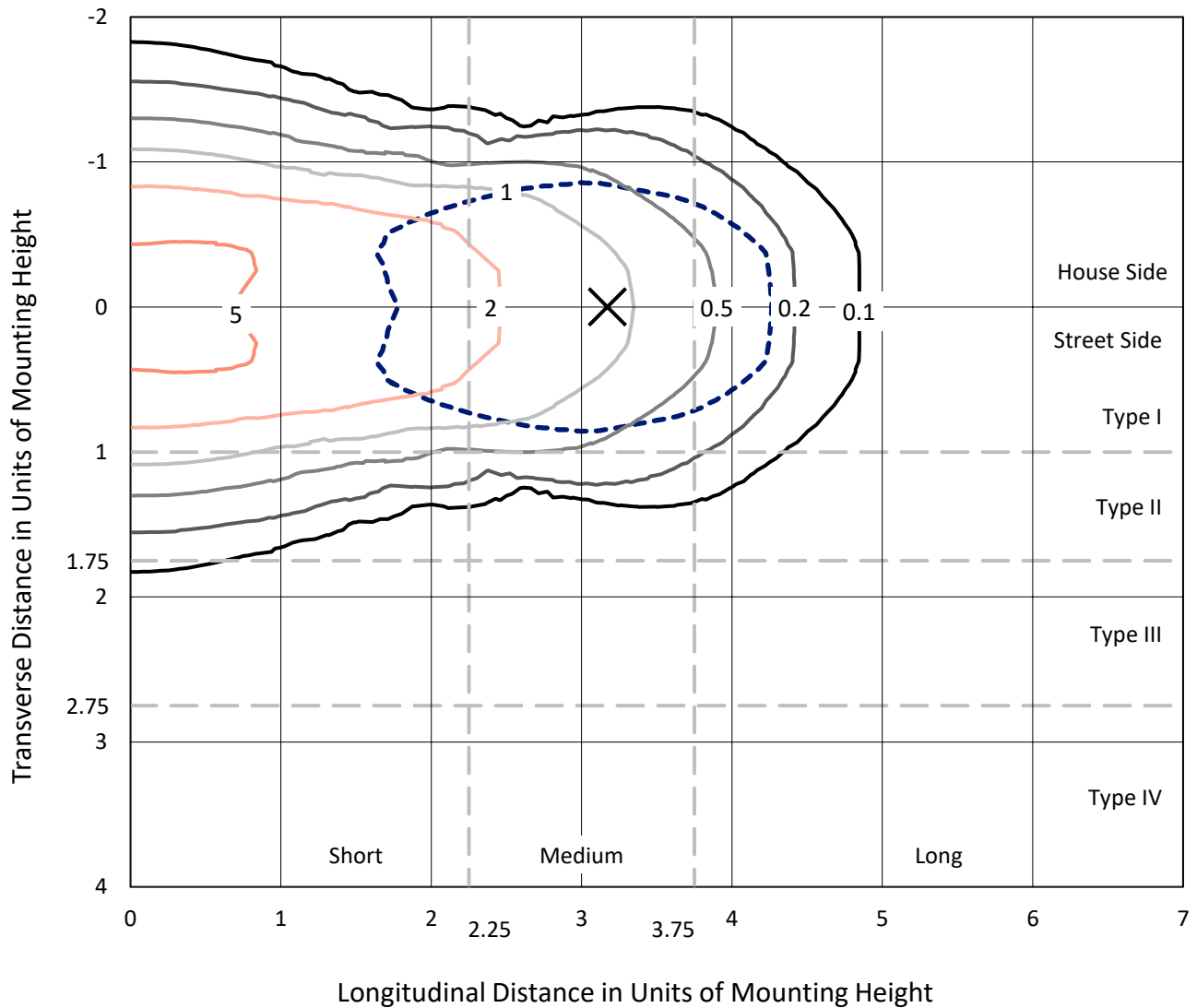
Input Watts (W): 147
Input Voltage (V): 120.0
Input Current (Ain): 1.255
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

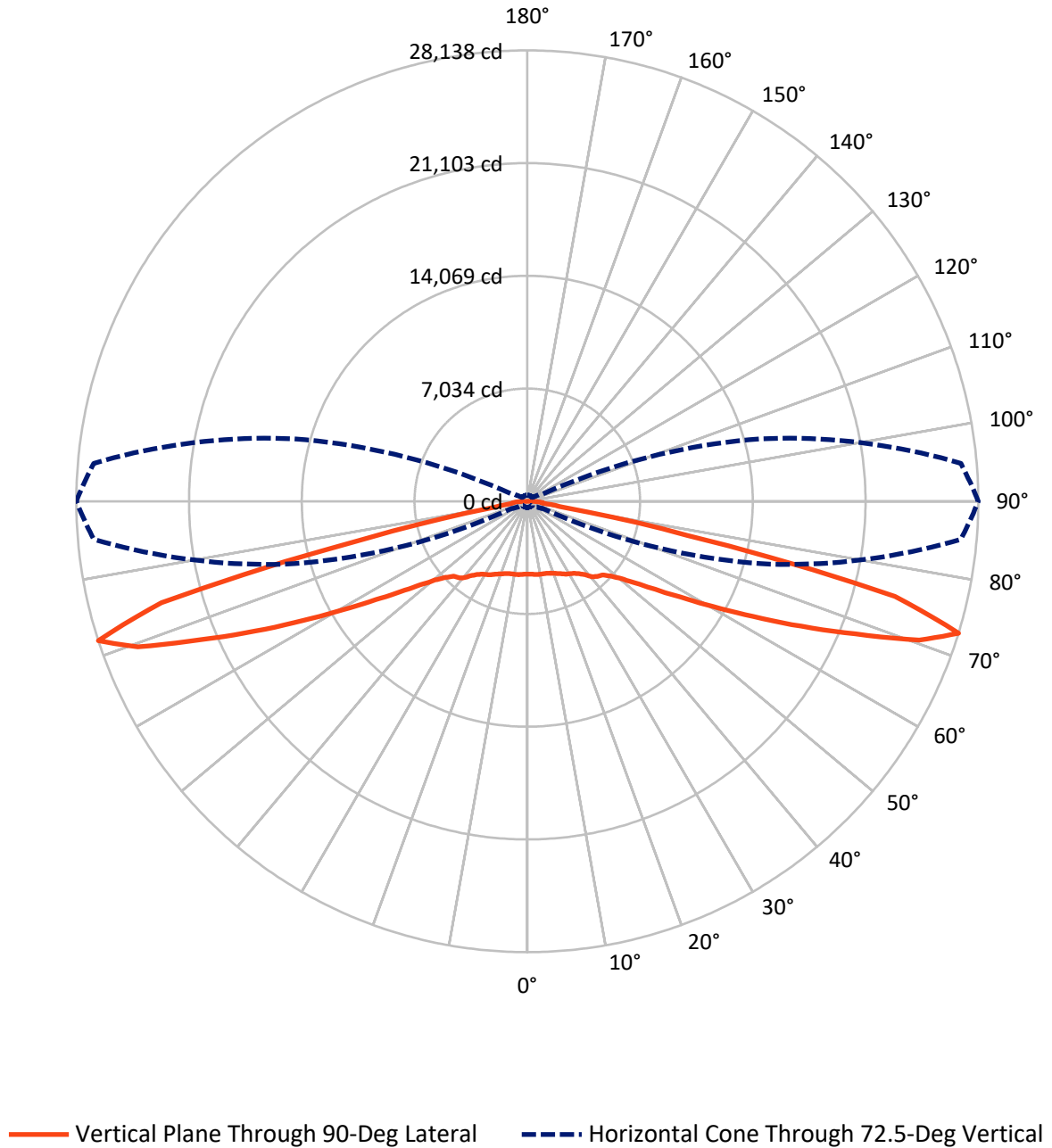
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 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	12169.5	0.0	12169.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	12169.5	0.0	12169.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	24339.0	0.0	24339.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	441.0	1.8
10°-20°	1348.4	5.5
20°-30°	2248.3	9.2
30°-40°	3092.0	12.7
40°-50°	3776.2	15.5
50°-60°	4367.6	17.9
60°-70°	5207.7	21.4
70°-80°	3634.6	14.9
80°-90°	223.2	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°	24339.0	100.0
0°-180°	24339.0	100.0



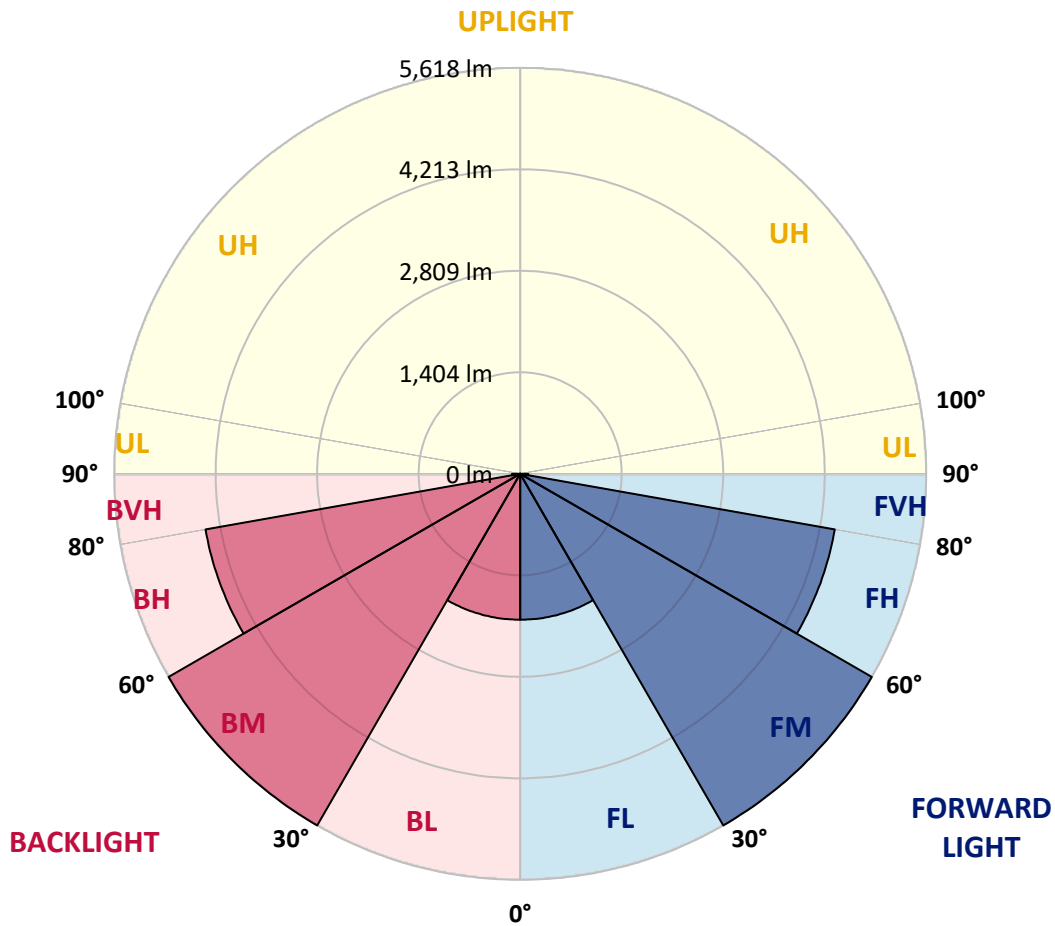
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2018.8	8.3			
FM (30°-60°)	5617.9	23.1			
FH (60°-80°)	4421.1	18.2			G2/5000
FVH (80°-90°)	111.6	0.5			G2/225
BL (0°-30°)	2018.8	8.3	B3/2500		
BM (30°-60°)	5617.9	23.1	B4/8500		
BH (60°-80°)	4421.1	18.2	B4/5000		G4/5000
BVH (80°-90°)	111.6	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°	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0
2.5°	4551.9	4557.1	4557.1	4553.2	4562.2	4554.5	4554.5	4550.6	4554.5	4550.6	4550.6
5°	4575.2	4581.6	4584.2	4582.9	4594.6	4588.1	4588.1	4582.9	4584.2	4580.3	4580.3
7.5°	4619.1	4628.2	4633.4	4639.8	4656.7	4648.9	4643.7	4628.2	4621.7	4611.4	4611.4
10°	4633.4	4643.7	4660.5	4694.2	4733.0	4734.3	4718.7	4679.9	4650.2	4626.9	4623.0
12.5°	4589.4	4603.6	4638.5	4707.1	4793.8	4828.7	4804.1	4739.4	4681.2	4639.8	4633.4
15°	4533.8	4549.3	4602.3	4705.8	4833.9	4915.4	4912.8	4827.4	4734.3	4669.6	4659.2
17.5°	4447.1	4462.6	4538.9	4683.8	4864.9	4999.4	5035.7	4947.7	4817.1	4730.4	4716.2
20°	4290.6	4304.8	4410.9	4614.0	4875.3	5088.7	5183.1	5105.5	4942.5	4824.8	4802.8
22.5°	4087.5	4109.5	4233.7	4493.7	4850.7	5181.8	5351.3	5298.2	5088.7	4925.7	4896.0
25°	3870.2	3893.5	4038.4	4346.2	4787.3	5249.1	5550.5	5516.8	5254.3	5051.2	5009.8
27.5°	3682.6	3707.2	3865.0	4200.0	4689.0	5275.0	5747.1	5763.9	5454.8	5189.6	5145.6
30°	3535.2	3558.5	3726.6	4082.3	4562.2	5249.1	5919.1	6035.5	5659.1	5309.9	5246.5
32.5°	3373.5	3403.2	3580.4	3938.8	4412.2	5187.0	6069.2	6329.2	5895.8	5439.2	5359.0
35°	3169.1	3196.3	3382.5	3742.1	4215.6	5087.4	6194.6	6655.1	6234.7	5635.8	5546.6
37.5°	2920.8	2946.6	3131.6	3496.4	4020.2	4947.7	6290.4	7022.5	6638.3	5919.1	5800.1
40°	2671.1	2695.7	2869.0	3222.1	3786.1	4769.2	6324.0	7382.1	7101.4	6308.5	6181.7
42.5°	2442.2	2464.1	2623.2	2951.8	3523.5	4541.5	6280.0	7695.1	7516.6	6580.1	6417.1
45°	2231.3	2250.7	2391.7	2698.3	3250.6	4264.7	6148.1	8031.4	8010.7	6774.1	6554.2
47.5°	1990.7	2010.1	2156.3	2452.5	2977.7	3940.0	5924.3	8362.6	8697.6	7213.9	6960.4
50°	1697.1	1713.9	1864.0	2169.2	2694.4	3594.7	5613.9	8622.6	9564.3	7880.1	7561.9
52.5°	1349.1	1367.2	1513.4	1818.7	2358.1	3223.4	5205.1	8792.0	10565.4	8852.8	8460.9
55°	1003.8	1016.7	1143.5	1417.7	1941.6	2800.5	4692.9	8839.9	11701.1	10182.6	9692.3
57.5°	728.2	736.0	817.5	1021.9	1472.0	2271.4	4070.7	8715.7	13052.9	11887.4	11270.4
60°	589.8	592.4	617.0	707.6	1023.2	1673.8	3319.2	8288.8	14519.7	14085.1	13307.7
62.5°	535.5	535.5	542.0	566.6	692.0	1104.7	2409.8	7404.1	16092.6	16862.3	15821.0
65°	498.0	498.0	500.6	512.2	545.9	703.7	1521.2	5963.1	17418.5	20115.5	18798.7
67.5°	464.4	465.7	464.4	468.3	487.7	520.0	882.2	4118.6	18132.5	23486.4	22064.8
70°	429.4	432.0	425.6	425.6	441.1	442.4	552.3	2258.5	17540.1	26311.4	25937.6
72.5°	388.1	391.9	381.6	379.0	390.6	385.5	415.2	1084.0	15059.1	27154.8	28137.8
75°	351.8	357.0	333.7	327.3	327.3	323.4	337.6	556.2	9773.8	22151.4	23693.3
77.5°	319.5	329.8	292.3	271.6	266.5	254.8	275.5	340.2	4275.1	10399.9	10183.8
80°	263.9	278.1	240.6	216.0	207.0	194.0	217.3	238.0	1271.5	2415.0	2312.8
82.5°	196.6	203.1	170.7	153.9	146.2	137.1	163.0	165.6	413.9	855.0	966.3
85°	125.5	128.1	104.8	90.5	86.7	82.8	103.5	90.5	157.8	628.6	913.2
87.5°	44.0	50.4	40.1	36.2	38.8	32.3	47.9	27.2	44.0	443.7	549.7
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)