

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: P883765

Luminaire Tested: **NAV-SB4B-735-U-T1**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883765
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-735-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22576 lumens
Efficiency: N/A
Efficacy: 153.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

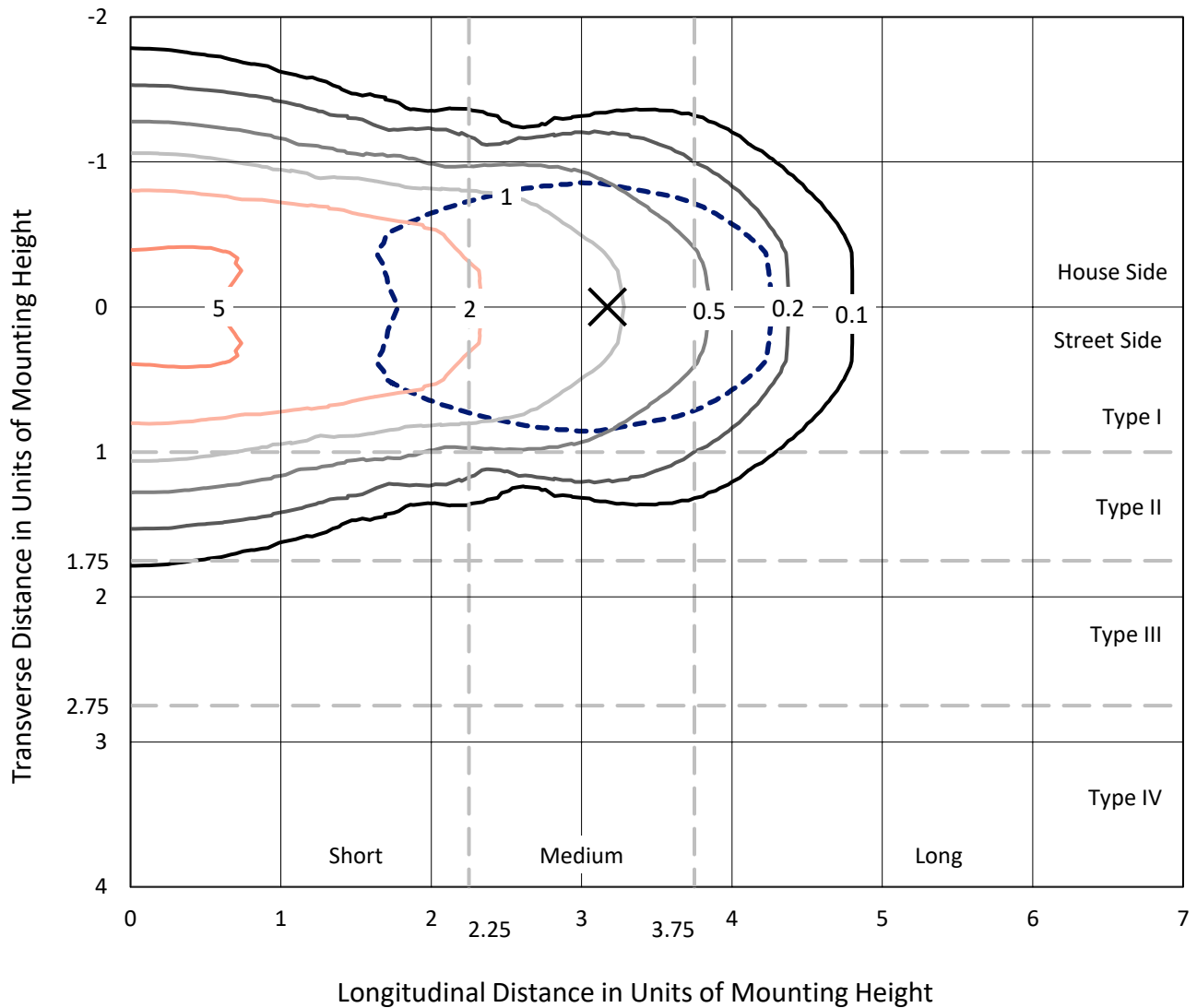
Input Watts (W): 147
Input Voltage (V): 120.0
Input Current (Ain): 1.255
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

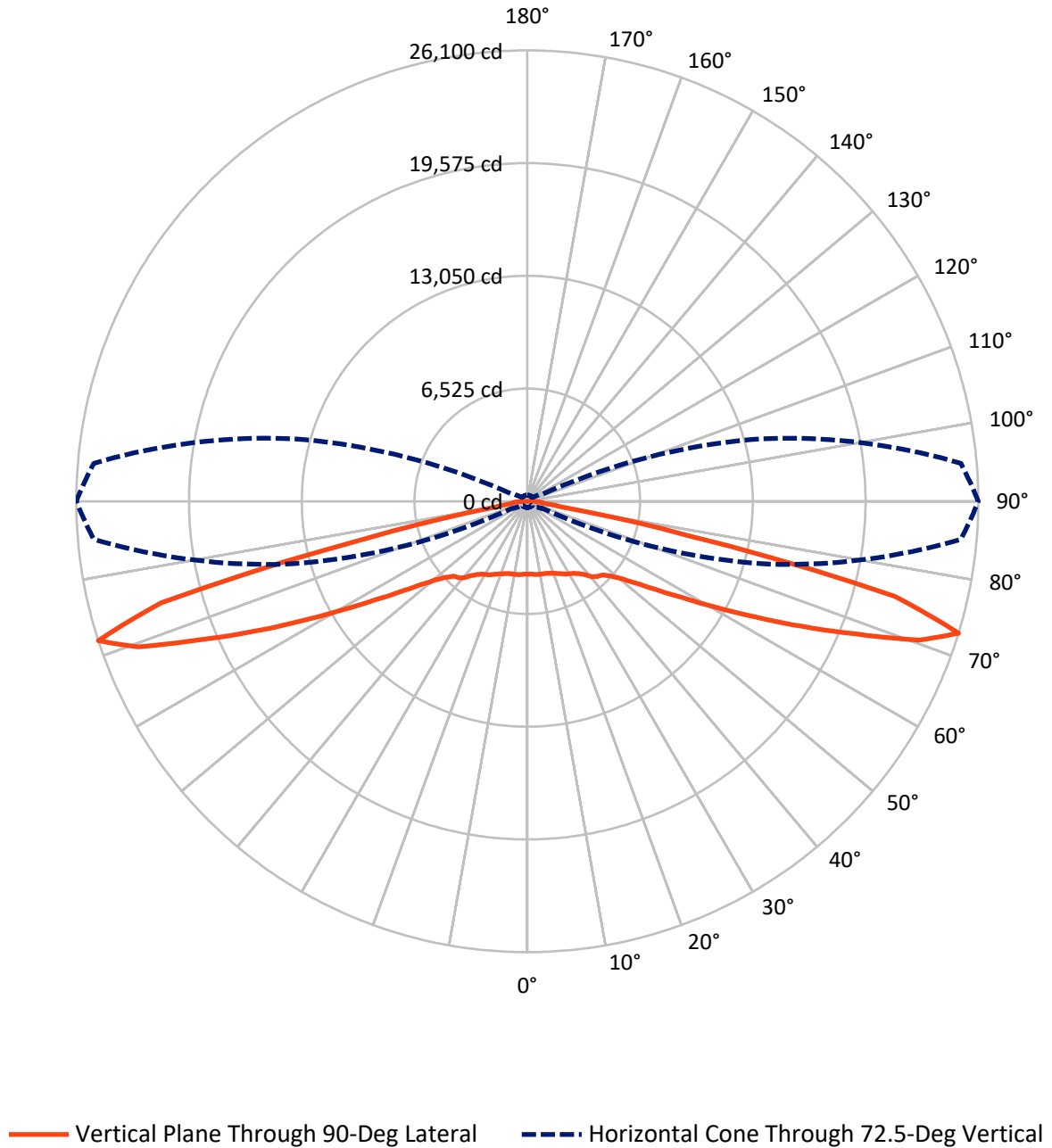
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 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	11288.0	0.0	11288.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	11288.0	0.0	11288.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	22576.0	0.0	22576.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	409.0	1.8
10°-20°	1250.7	5.5
20°-30°	2085.4	9.2
30°-40°	2868.1	12.7
40°-50°	3502.7	15.5
50°-60°	4051.2	17.9
60°-70°	4830.4	21.4
70°-80°	3371.3	14.9
80°-90°	207.1	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°	22576.0	100.0
0°-180°	22576.0	100.0



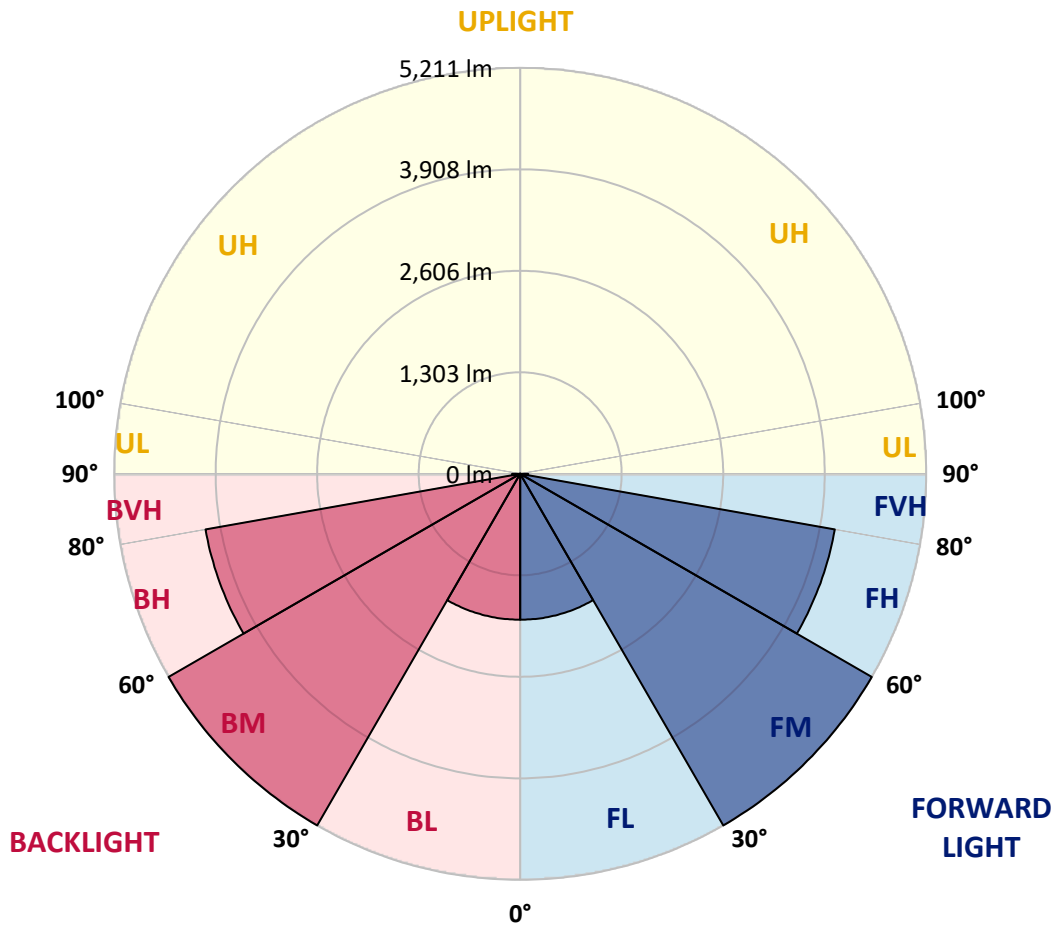
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1872.6	8.3			
FM (30°-60°)	5211.0	23.1			
FH (60°-80°)	4100.9	18.2			G2/5000
FVH (80°-90°)	103.5	0.5			G2/225
BL (0°-30°)	1872.6	8.3	B3/2500		
BM (30°-60°)	5211.0	23.1	B4/8500		
BH (60°-80°)	4100.9	18.2	B4/5000		G4/5000
BVH (80°-90°)	103.5	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°	4218.6	4218.6	4218.6	4218.6	4218.6	4218.6	4218.6	4218.6	4218.6	4218.6	4218.6
2.5°	4222.2	4227.0	4227.0	4223.4	4231.8	4224.6	4224.6	4221.0	4224.6	4221.0	4221.0
5°	4243.8	4249.8	4252.2	4251.0	4261.8	4255.8	4255.8	4251.0	4252.2	4248.6	4248.6
7.5°	4284.6	4293.0	4297.8	4303.8	4319.3	4312.1	4307.4	4293.0	4287.0	4277.4	4277.4
10°	4297.8	4307.4	4322.9	4354.1	4390.1	4391.3	4376.9	4340.9	4313.3	4291.8	4288.2
12.5°	4257.0	4270.2	4302.6	4366.1	4446.5	4478.9	4456.1	4396.1	4342.1	4303.8	4297.8
15°	4205.4	4219.8	4269.0	4364.9	4483.7	4559.3	4556.9	4477.7	4391.3	4331.3	4321.7
17.5°	4125.0	4139.4	4210.2	4344.5	4512.5	4637.3	4670.9	4589.3	4468.1	4387.7	4374.5
20°	3979.8	3993.0	4091.4	4279.8	4522.1	4720.1	4807.7	4735.7	4584.5	4475.3	4454.9
22.5°	3791.4	3811.8	3927.0	4168.2	4499.3	4806.5	4963.7	4914.5	4720.1	4568.9	4541.3
25°	3589.9	3611.5	3745.8	4031.4	4440.5	4868.9	5148.4	5117.2	4873.7	4685.3	4646.9
27.5°	3415.9	3438.7	3585.1	3895.8	4349.3	4892.9	5330.8	5346.4	5059.6	4813.7	4772.9
30°	3279.1	3300.7	3456.7	3786.6	4231.8	4868.9	5490.4	5598.4	5249.2	4925.3	4866.5
32.5°	3129.1	3156.7	3321.1	3653.4	4092.6	4811.3	5629.6	5870.7	5468.8	5045.2	4970.9
35°	2939.6	2964.8	3137.5	3471.1	3910.2	4718.9	5745.9	6173.1	5783.1	5227.6	5144.8
37.5°	2709.2	2733.2	2904.8	3243.1	3729.0	4589.3	5834.7	6513.8	6157.5	5490.4	5380.0
40°	2477.6	2500.4	2661.2	2988.7	3511.9	4423.7	5865.9	6847.4	6587.0	5851.5	5733.9
42.5°	2265.3	2285.7	2433.2	2738.0	3268.3	4212.6	5825.1	7137.7	6972.1	6103.5	5952.3
45°	2069.7	2087.7	2218.5	2502.8	3015.1	3955.8	5702.7	7449.7	7430.5	6283.5	6079.5
47.5°	1846.5	1864.5	2000.1	2274.9	2762.0	3654.6	5495.2	7756.8	8067.6	6691.4	6456.2
50°	1574.2	1589.8	1728.9	2012.1	2499.2	3334.3	5207.2	7998.0	8871.5	7309.3	7014.1
52.5°	1251.4	1268.2	1403.8	1686.9	2187.3	2989.9	4828.1	8155.2	9800.1	8211.6	7848.0
55°	931.1	943.1	1060.6	1315.0	1800.9	2597.6	4352.9	8199.6	10853.6	9445.0	8990.2
57.5°	675.5	682.7	758.3	947.9	1365.4	2106.9	3775.8	8084.4	12107.4	11026.3	10454.0
60°	547.1	549.5	572.3	656.3	949.1	1552.6	3078.7	7688.4	13468.0	13064.8	12343.7
62.5°	496.7	496.7	502.7	525.5	641.9	1024.6	2235.3	6867.8	14926.9	15640.8	14675.0
65°	461.9	461.9	464.3	475.1	506.3	652.7	1411.0	5531.2	16156.8	18658.4	17437.0
67.5°	430.7	431.9	430.7	434.3	452.3	482.3	818.3	3820.2	16819.1	21785.1	20466.5
70°	398.3	400.7	394.7	394.7	409.1	410.3	512.3	2094.9	16269.5	24405.5	24058.8
72.5°	359.9	363.5	353.9	351.5	362.3	357.5	385.1	1005.4	13968.3	25187.8	26099.7
75°	326.4	331.2	309.6	303.6	303.6	300.0	313.2	515.9	9065.8	20546.9	21977.1
77.5°	296.4	306.0	271.2	252.0	247.2	236.4	255.6	315.6	3965.4	9646.5	9446.2
80°	244.8	258.0	223.2	200.4	192.0	180.0	201.6	220.8	1179.4	2240.1	2145.3
82.5°	182.4	188.4	158.4	142.8	135.6	127.2	151.2	153.6	383.9	793.1	896.3
85°	116.4	118.8	97.2	84.0	80.4	76.8	96.0	84.0	146.4	583.1	847.1
87.5°	40.8	46.8	37.2	33.6	36.0	30.0	44.4	25.2	40.8	411.5	509.9
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)