

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: P884105

Luminaire Tested: **NAV-SB4D-735-U-T1**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884105
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-735-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40797 lumens
Efficiency: N/A
Efficacy: 139.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

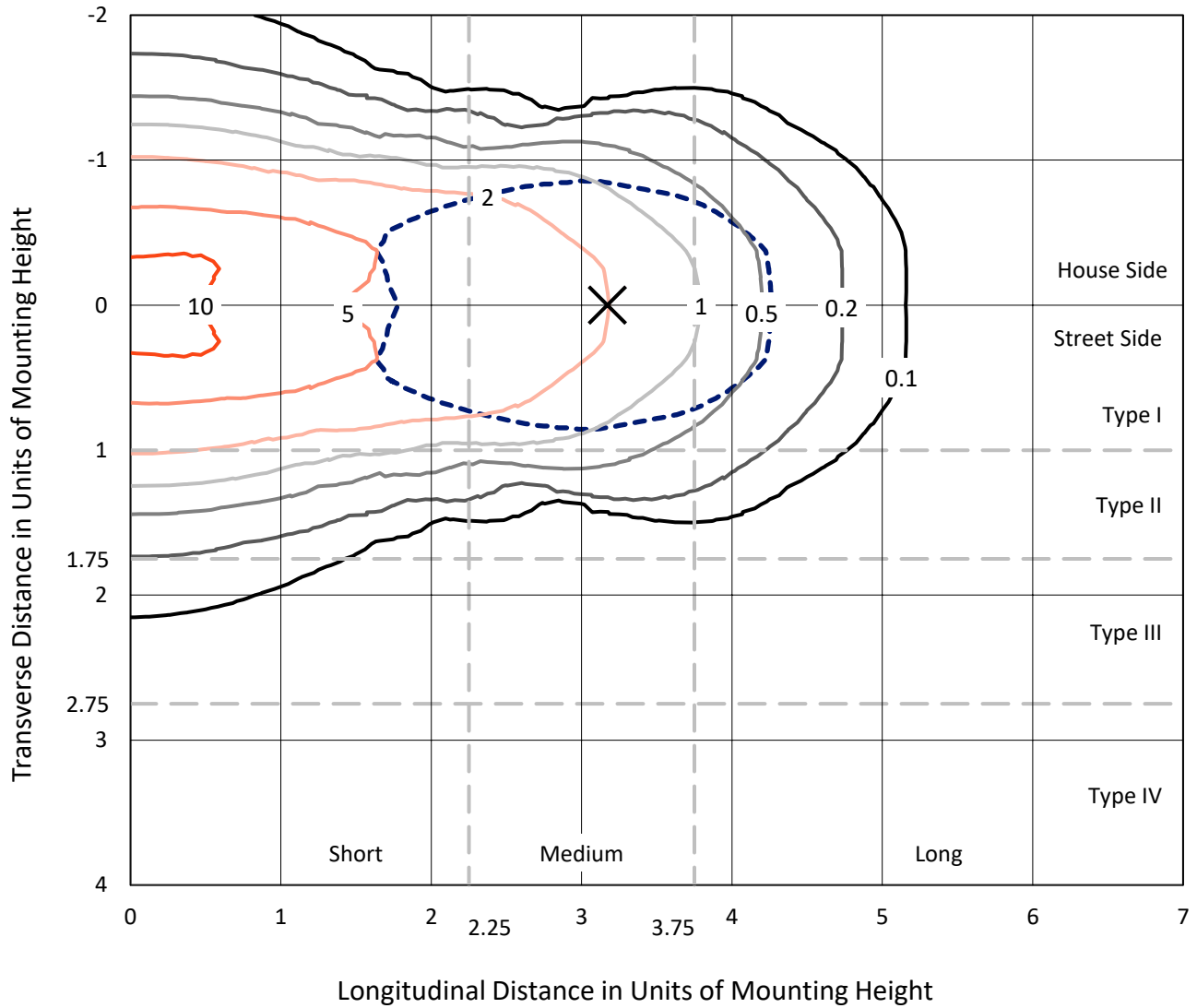
Input Watts (W): 293.6
Input Voltage (V): 120.0
Input Current (Ain): 2.469
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

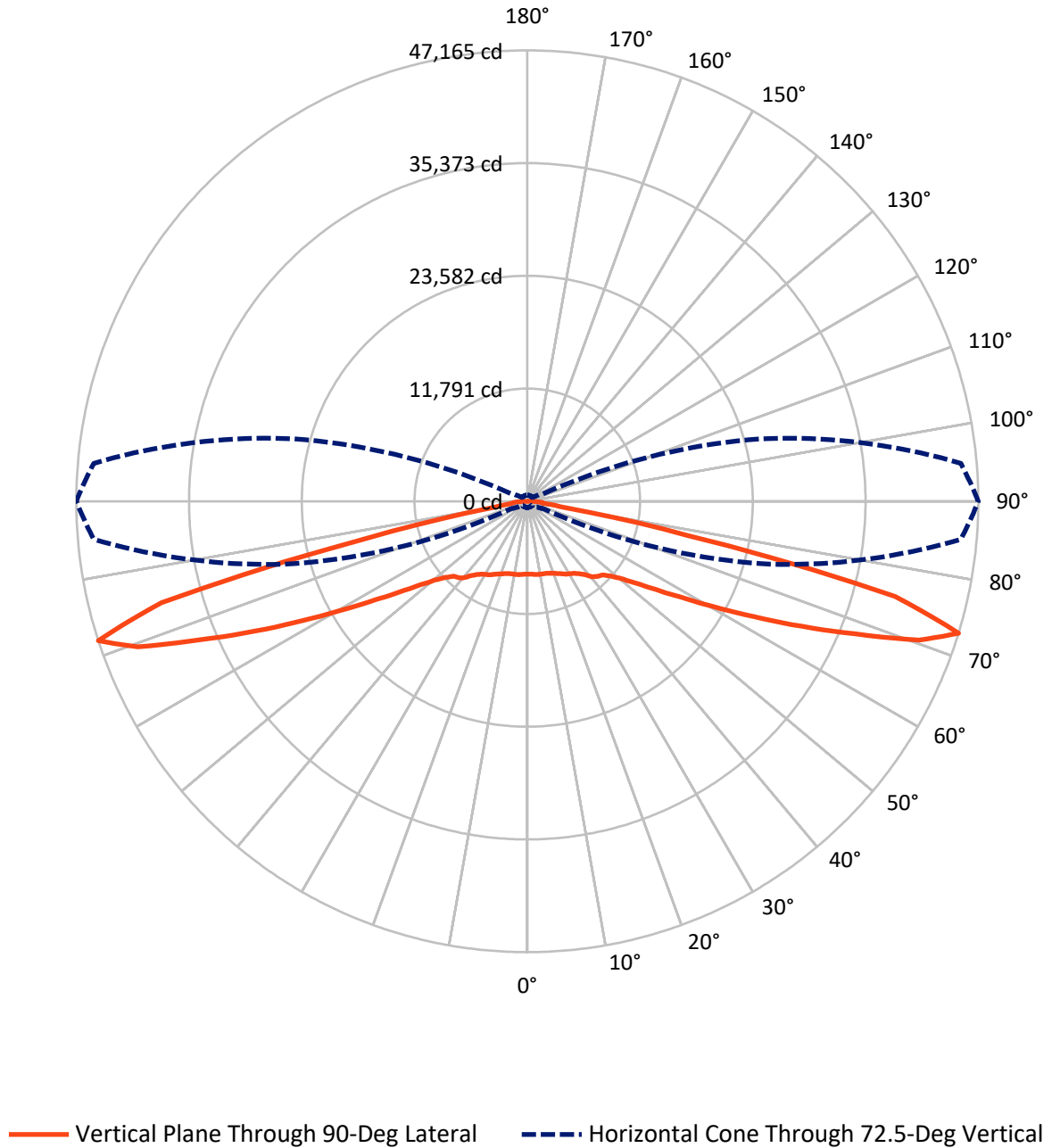
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.2 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	20398.5	0.0	20398.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	20398.5	0.0	20398.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	40797.0	0.0	40797.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	739.2	1.8
10°-20°	2260.1	5.5
20°-30°	3768.5	9.2
30°-40°	5182.9	12.7
40°-50°	6329.7	15.5
50°-60°	7321.0	17.9
60°-70°	8729.1	21.4
70°-80°	6092.3	14.9
80°-90°	374.2	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°	40797.0	100.0
0°-180°	40797.0	100.0



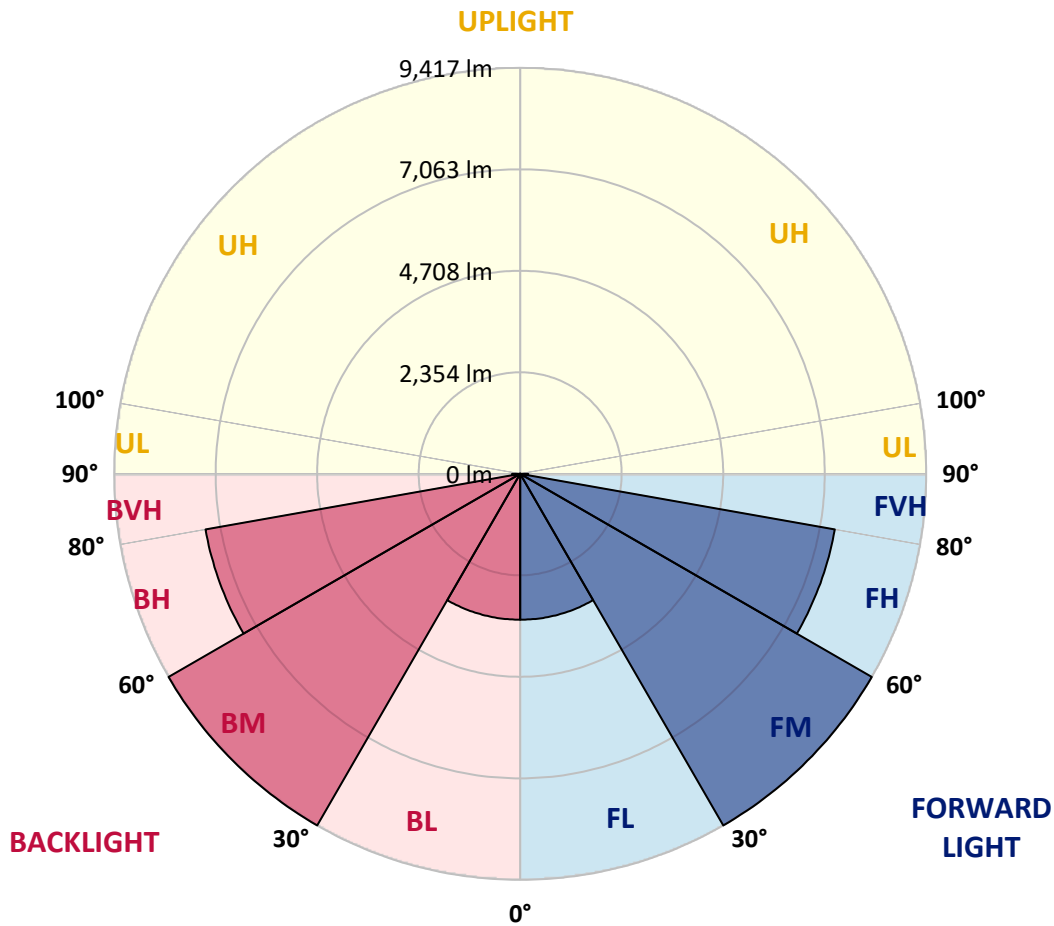
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3383.9	8.3			
FM (30°-60°)	9416.8	23.1			
FH (60°-80°)	7410.7	18.2			G3/7500
FVH (80°-90°)	187.1	0.5			G2/225
BL (0°-30°)	3383.9	8.3	B4/5000		
BM (30°-60°)	9416.8	23.1	B5		
BH (60°-80°)	7410.7	18.2	B5		G5
BVH (80°-90°)	187.1	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°	7623.4	7623.4	7623.4	7623.4	7623.4	7623.4	7623.4	7623.4	7623.4	7623.4	7623.4
2.5°	7629.9	7638.5	7638.5	7632.0	7647.2	7634.2	7634.2	7627.7	7634.2	7627.7	7627.7
5°	7668.9	7679.7	7684.1	7681.9	7701.4	7690.6	7690.6	7681.9	7684.1	7677.6	7677.6
7.5°	7742.6	7757.8	7766.5	7777.3	7805.5	7792.5	7783.8	7757.8	7746.9	7729.6	7729.6
10°	7766.5	7783.8	7812.0	7868.4	7933.4	7935.6	7909.6	7844.5	7794.6	7755.6	7749.1
12.5°	7692.7	7716.6	7775.1	7890.0	8035.3	8093.8	8052.7	7944.2	7846.7	7777.3	7766.5
15°	7599.5	7625.5	7714.4	7887.9	8102.5	8239.1	8234.8	8091.7	7935.6	7827.2	7809.8
17.5°	7454.2	7480.2	7608.2	7851.0	8154.6	8380.0	8440.8	8293.3	8074.3	7929.1	7905.2
20°	7191.9	7215.7	7393.5	7733.9	8171.9	8529.7	8687.9	8557.8	8284.6	8087.3	8050.5
22.5°	6851.5	6888.3	7096.5	7532.3	8130.7	8685.8	8969.8	8880.9	8529.7	8256.5	8206.6
25°	6487.2	6526.2	6769.1	7285.1	8024.5	8798.5	9303.7	9247.3	8807.2	8466.8	8397.4
27.5°	6172.8	6214.0	6478.5	7040.1	7859.7	8841.9	9633.3	9661.4	9143.3	8698.8	8625.1
30°	5925.7	5964.7	6246.6	6842.8	7647.2	8798.5	9921.6	10116.8	9485.8	8900.4	8794.2
32.5°	5654.6	5704.5	6001.5	6602.1	7395.7	8694.4	10173.1	10608.9	9882.6	9117.2	8982.8
35°	5312.1	5357.6	5669.8	6272.6	7066.1	8527.5	10383.5	11155.3	10450.7	9446.8	9297.2
37.5°	4895.8	4939.1	5249.2	5860.6	6738.7	8293.3	10543.9	11771.1	11127.1	9921.6	9722.2
40°	4477.3	4518.5	4809.0	5401.0	6346.3	7994.1	10600.3	12373.9	11903.4	10574.3	10361.8
42.5°	4093.5	4130.4	4397.1	4947.8	5906.1	7612.5	10526.6	12898.6	12599.3	11029.6	10756.4
45°	3740.1	3772.6	4009.0	4522.8	5448.7	7148.5	10305.4	13462.3	13427.6	11354.8	10986.2
47.5°	3336.8	3369.4	3614.4	4110.9	4991.2	6604.3	9930.3	14017.3	14578.9	12092.0	11667.0
50°	2844.7	2872.8	3124.4	3636.1	4516.3	6025.4	9409.9	14453.1	16031.6	13208.6	12675.2
52.5°	2261.4	2291.8	2536.8	3048.5	3952.6	5403.1	8724.8	14737.2	17709.8	14839.1	14182.1
55°	1682.5	1704.2	1916.7	2376.3	3254.5	4694.1	7866.2	14817.4	19613.4	17068.0	16246.2
57.5°	1220.7	1233.7	1370.3	1712.9	2467.4	3807.3	6823.3	14609.3	21879.2	19925.7	18891.4
60°	988.7	993.0	1034.2	1186.0	1715.0	2805.6	5563.6	13893.8	24337.9	23609.4	22306.3
62.5°	897.6	897.6	908.5	949.7	1160.0	1851.6	4039.3	12410.7	26974.4	28264.5	26519.1
65°	834.8	834.8	839.1	858.6	915.0	1179.5	2549.8	9995.3	29196.8	33717.5	31510.3
67.5°	778.4	780.5	778.4	784.9	817.4	871.6	1478.7	6903.5	30393.7	39367.8	36985.0
70°	719.8	724.2	713.3	713.3	739.4	741.5	925.8	3785.7	29400.6	44103.1	43476.5
72.5°	650.5	657.0	639.6	635.3	654.8	646.1	696.0	1816.9	25242.0	45516.8	47164.6
75°	589.7	598.4	559.4	548.6	548.6	542.0	565.9	932.3	16382.8	37130.2	39714.7
77.5°	535.5	552.9	490.0	455.3	446.6	427.1	461.8	570.2	7165.9	17432.2	17070.1
80°	442.3	466.2	403.3	362.1	346.9	325.2	364.3	398.9	2131.3	4048.0	3876.7
82.5°	329.6	340.4	286.2	258.0	245.0	229.8	273.2	277.5	693.8	1433.2	1619.6
85°	210.3	214.7	175.6	151.8	145.3	138.8	173.5	151.8	264.5	1053.7	1530.7
87.5°	73.7	84.6	67.2	60.7	65.0	54.2	80.2	45.5	73.7	743.7	921.5
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)