

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: P884825

Luminaire Tested: **NAV-SB5D-827-U-T1**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884825
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-SB5D-827-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41505 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

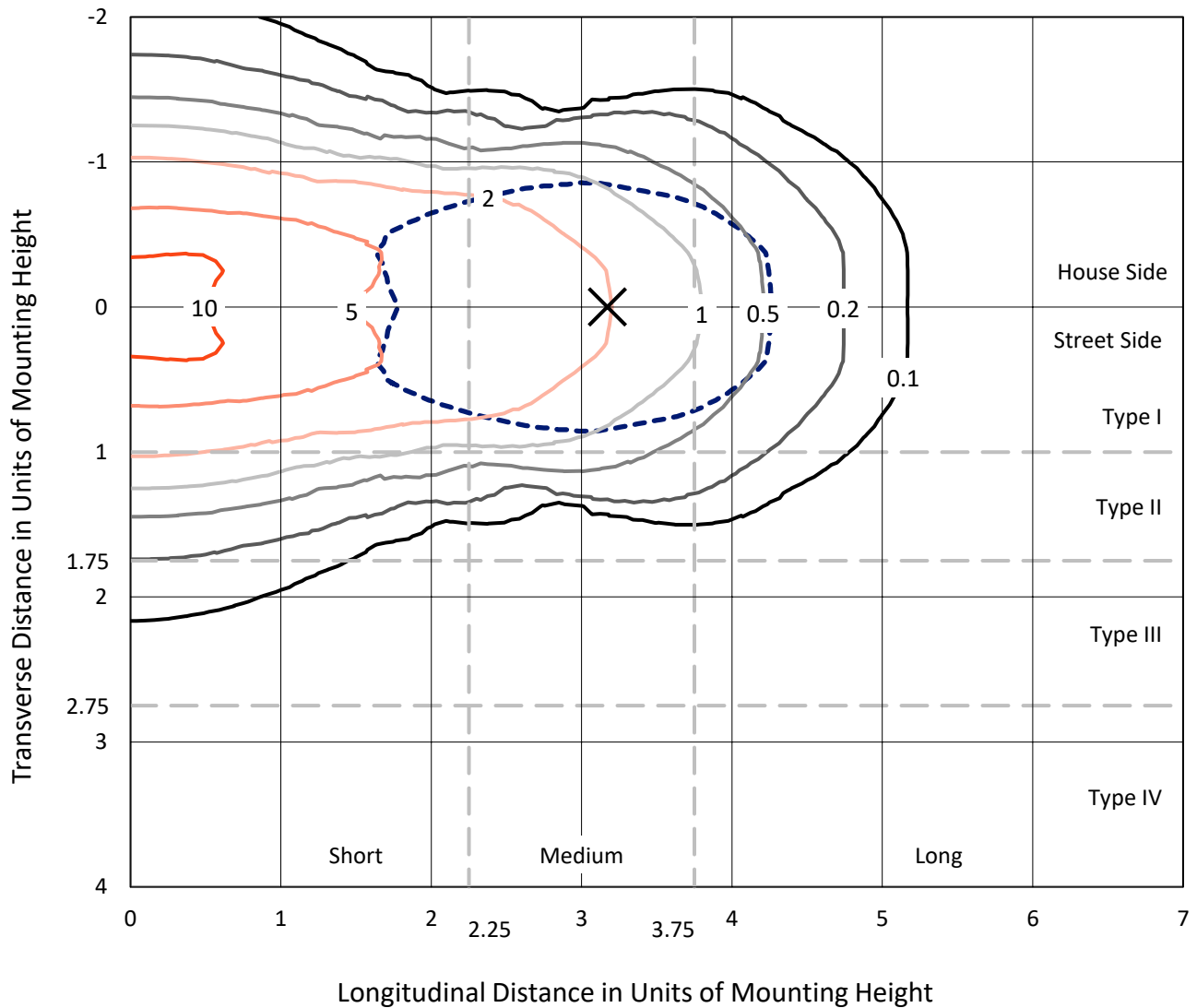
Input Watts (W): 364.9
Input Voltage (V): 120.0
Input Current (Ain): 3.094
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 3.28
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

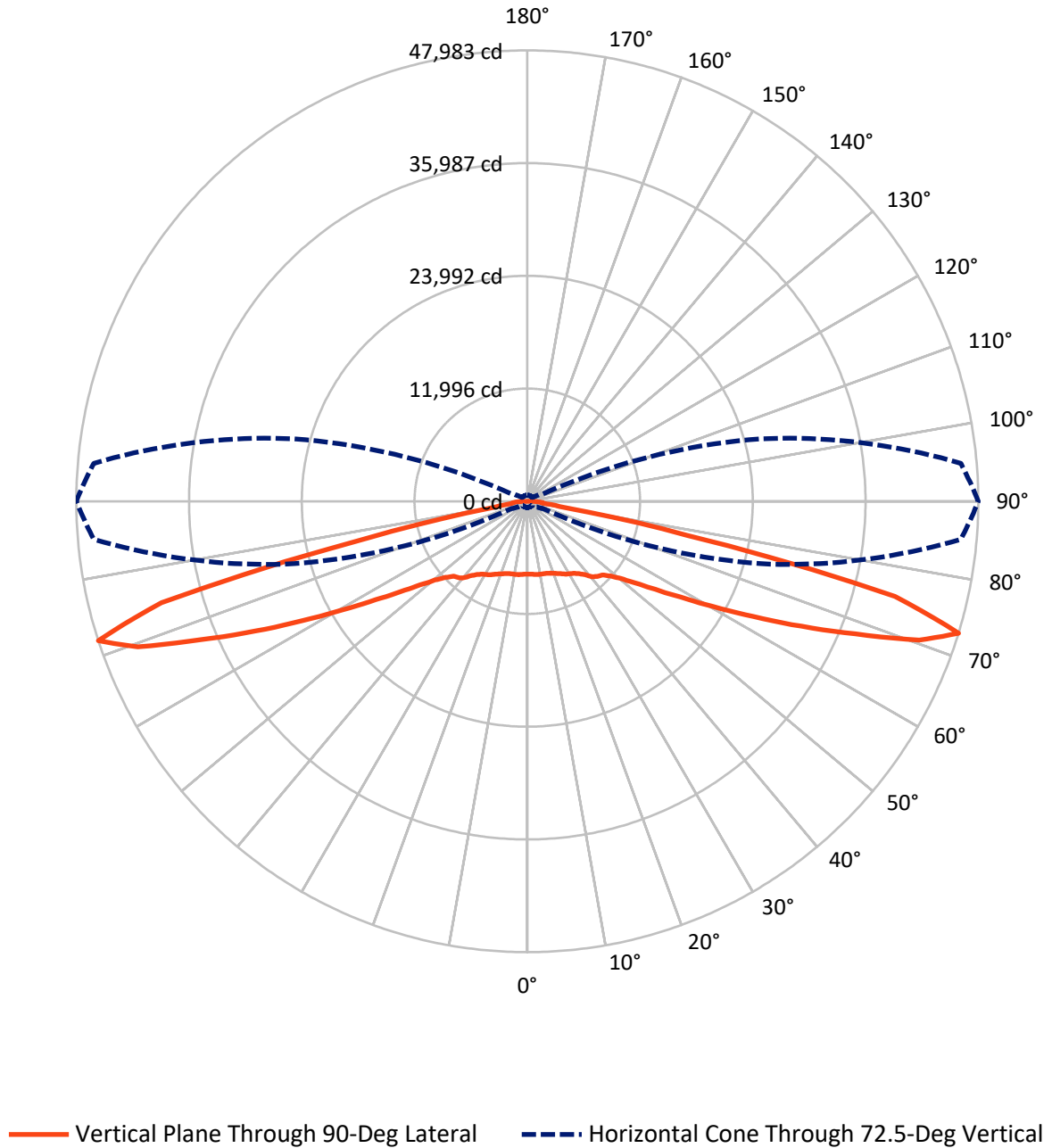
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.4 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	20752.5	0.0	20752.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	20752.5	0.0	20752.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	41505.0	0.0	41505.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	752.0	1.8
10°-20°	2299.3	5.5
20°-30°	3833.9	9.2
30°-40°	5272.8	12.7
40°-50°	6439.6	15.5
50°-60°	7448.0	17.9
60°-70°	8880.6	21.4
70°-80°	6198.1	14.9
80°-90°	380.7	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°	41505.0	100.0
0°-180°	41505.0	100.0



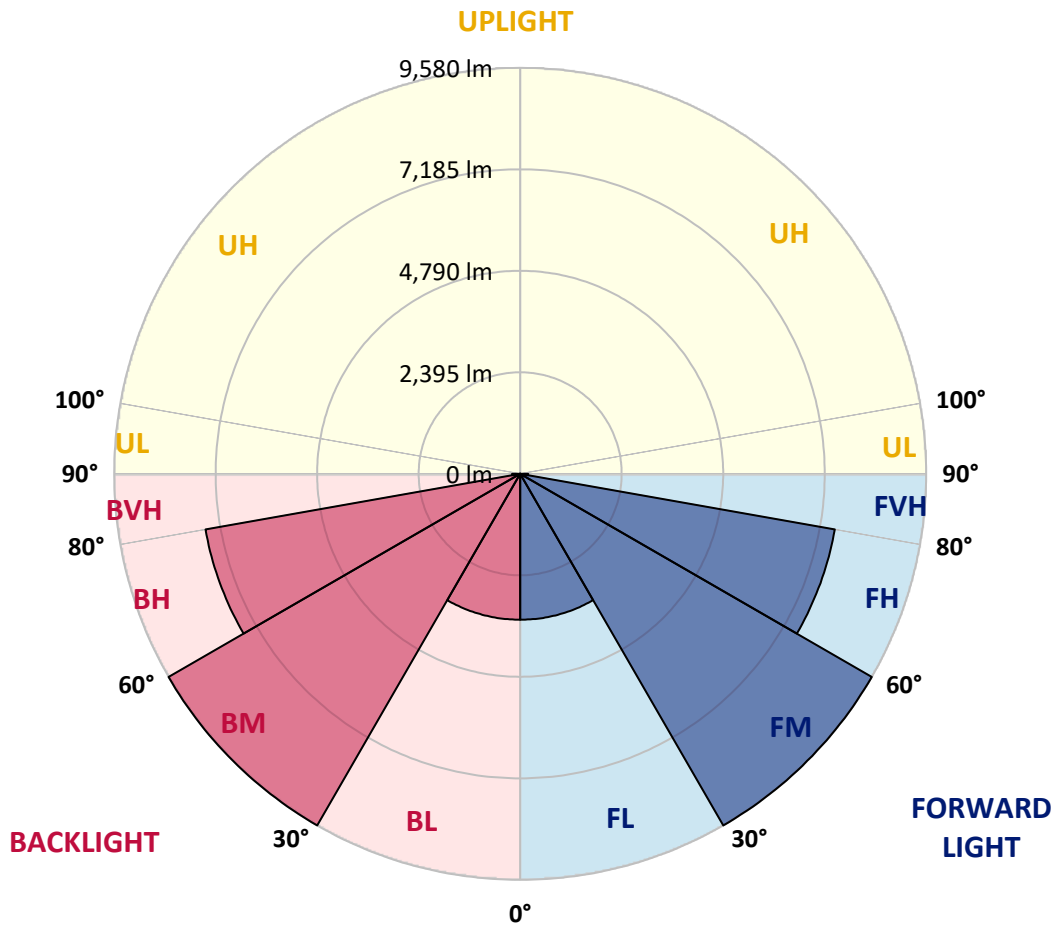
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3442.6	8.3			
FM (30°-60°)	9580.2	23.1			
FH (60°-80°)	7539.3	18.2			G4/12000
FVH (80°-90°)	190.3	0.5			G2/225
BL (0°-30°)	3442.6	8.3	B4/5000		
BM (30°-60°)	9580.2	23.1	B5		
BH (60°-80°)	7539.3	18.2	B5		G5
BVH (80°-90°)	190.3	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°	7755.6	7755.6	7755.6	7755.6	7755.6	7755.6	7755.6	7755.6	7755.6	7755.6	7755.6
2.5°	7762.3	7771.1	7771.1	7764.5	7779.9	7766.7	7766.7	7760.1	7766.7	7760.1	7760.1
5°	7802.0	7813.0	7817.4	7815.2	7835.1	7824.0	7824.0	7815.2	7817.4	7810.8	7810.8
7.5°	7877.0	7892.4	7901.2	7912.3	7940.9	7927.7	7918.9	7892.4	7881.4	7863.7	7863.7
10°	7901.2	7918.9	7947.6	8004.9	8071.1	8073.3	8046.8	7980.6	7929.9	7890.2	7883.6
12.5°	7826.2	7850.5	7910.1	8027.0	8174.8	8234.3	8192.4	8082.1	7982.8	7912.3	7901.2
15°	7731.4	7757.9	7848.3	8024.8	8243.1	8382.1	8377.7	8232.1	8073.3	7963.0	7945.3
17.5°	7583.6	7610.1	7740.2	7987.3	8296.1	8525.5	8587.2	8437.2	8214.5	8066.7	8042.4
20°	7316.7	7341.0	7521.8	7868.1	8313.7	8677.7	8838.7	8706.4	8428.4	8227.7	8190.2
22.5°	6970.4	7007.9	7219.6	7663.0	8271.8	8836.5	9125.5	9035.0	8677.7	8399.7	8349.0
25°	6599.8	6639.5	6886.6	7411.5	8163.7	8951.2	9465.2	9407.8	8960.0	8613.7	8543.1
27.5°	6280.0	6321.9	6591.0	7162.3	7996.1	8995.3	9800.4	9829.1	9301.9	8849.7	8774.7
30°	6028.5	6068.2	6355.0	6961.6	7779.9	8951.2	10093.8	10292.3	9650.4	9054.9	8946.8
32.5°	5752.8	5803.5	6105.7	6716.7	7524.0	8845.3	10349.7	10793.1	10054.1	9275.5	9138.7
35°	5404.2	5450.6	5768.2	6381.4	7188.8	8675.5	10563.7	11348.9	10632.0	9610.7	9458.5
37.5°	4980.7	5024.8	5340.3	5962.3	6855.7	8437.2	10726.9	11975.4	11320.2	10093.8	9890.9
40°	4555.0	4596.9	4892.5	5494.7	6456.4	8132.8	10784.2	12588.6	12109.9	10757.8	10541.6
42.5°	4164.6	4202.1	4473.4	5033.7	6008.6	7744.6	10709.2	13122.4	12818.0	11221.0	10943.1
45°	3805.0	3838.1	4078.6	4601.3	5543.2	7272.6	10484.2	13695.9	13660.6	11551.9	11176.9
47.5°	3394.8	3427.8	3677.1	4182.2	5077.8	6718.9	10102.6	14260.6	14831.9	12301.8	11869.5
50°	2894.0	2922.7	3178.6	3699.2	4594.7	6130.0	9573.2	14704.0	16309.8	13437.8	12895.2
52.5°	2300.7	2331.5	2580.8	3101.4	4021.2	5496.9	8876.2	14992.9	18017.1	15096.6	14428.2
55°	1711.7	1733.8	1949.9	2417.6	3310.9	4775.6	8002.7	15074.5	19953.8	17364.2	16528.2
57.5°	1241.9	1255.1	1394.1	1742.6	2510.2	3873.4	6941.7	14862.8	22258.9	20271.4	19219.3
60°	1005.9	1010.3	1052.2	1206.6	1744.8	2854.3	5660.1	14134.9	24760.3	24019.1	22693.4
62.5°	913.2	913.2	924.2	966.1	1180.1	1883.8	4109.4	12626.1	27442.6	28755.0	26979.3
65°	849.2	849.2	853.7	873.5	930.9	1200.0	2594.0	10168.8	29703.5	34302.6	32057.1
67.5°	791.9	794.1	791.9	798.5	831.6	886.7	1504.4	7023.3	30921.1	40051.0	37626.8
70°	732.3	736.7	725.7	725.7	752.2	754.4	941.9	3851.4	29910.9	44868.5	44231.0
72.5°	661.7	668.4	650.7	646.3	666.2	657.3	708.1	1848.5	25680.1	46306.7	47983.1
75°	600.0	608.8	569.1	558.1	558.1	551.5	575.7	948.5	16667.1	37774.6	40403.9
77.5°	544.8	562.5	498.5	463.2	454.4	434.5	469.8	580.1	7290.2	17734.8	17366.4
80°	450.0	474.3	410.3	368.4	352.9	330.9	370.6	405.9	2168.3	4118.3	3944.0
82.5°	335.3	346.3	291.2	262.5	249.3	233.8	277.9	282.3	705.9	1458.0	1647.7
85°	214.0	218.4	178.7	154.4	147.8	141.2	176.5	154.4	269.1	1072.0	1557.3
87.5°	75.0	86.0	68.4	61.8	66.2	55.1	81.6	46.3	75.0	756.6	937.5
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)