

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: P884255

Luminaire Tested: **NAV-SB5A-727-U-T1**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884255
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-SB5A-727-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20407 lumens
Efficiency: N/A
Efficacy: 144.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

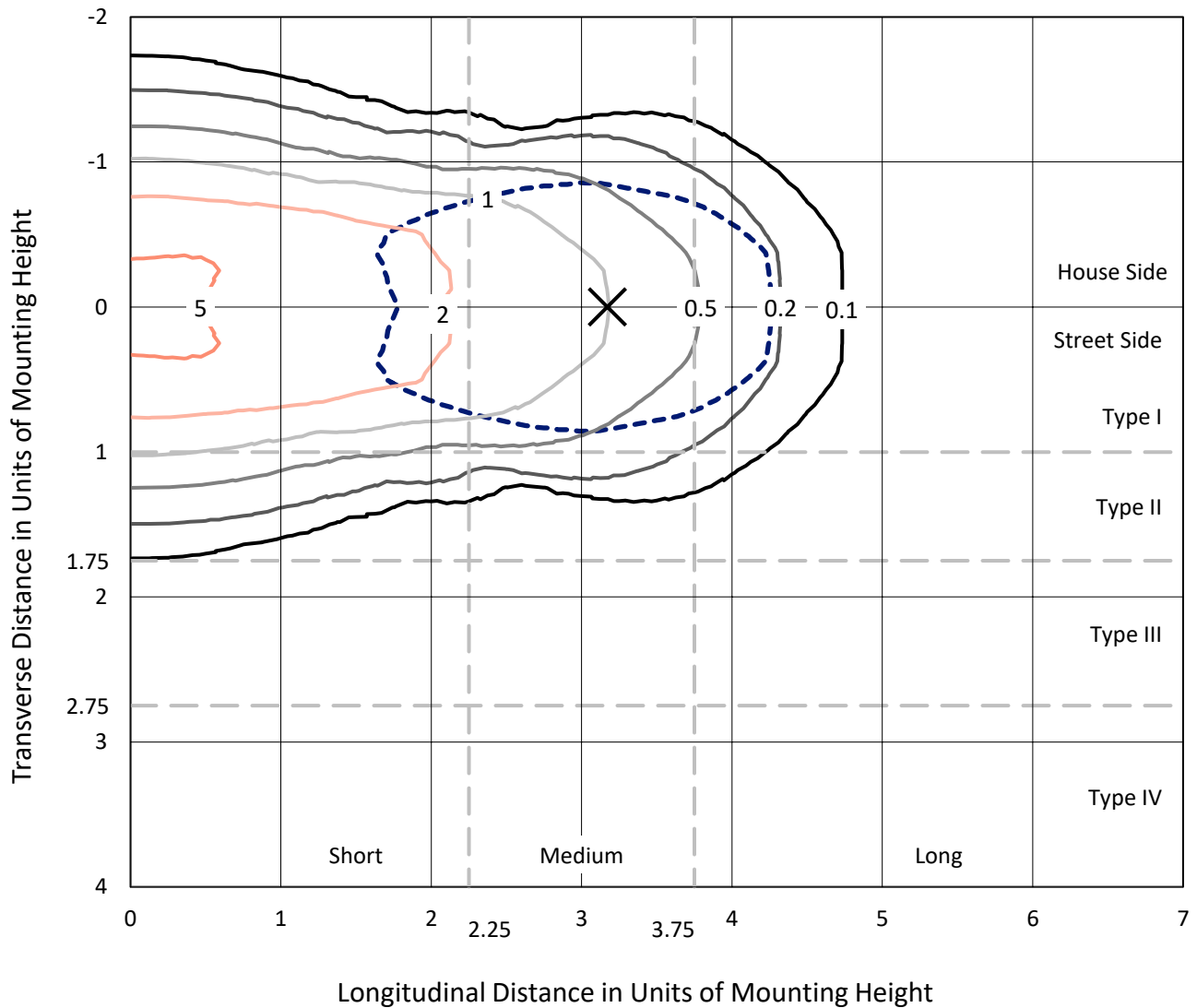
Input Watts (W): 141.7
Input Voltage (V): 120.0
Input Current (Ain): 1.201
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 10.503
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

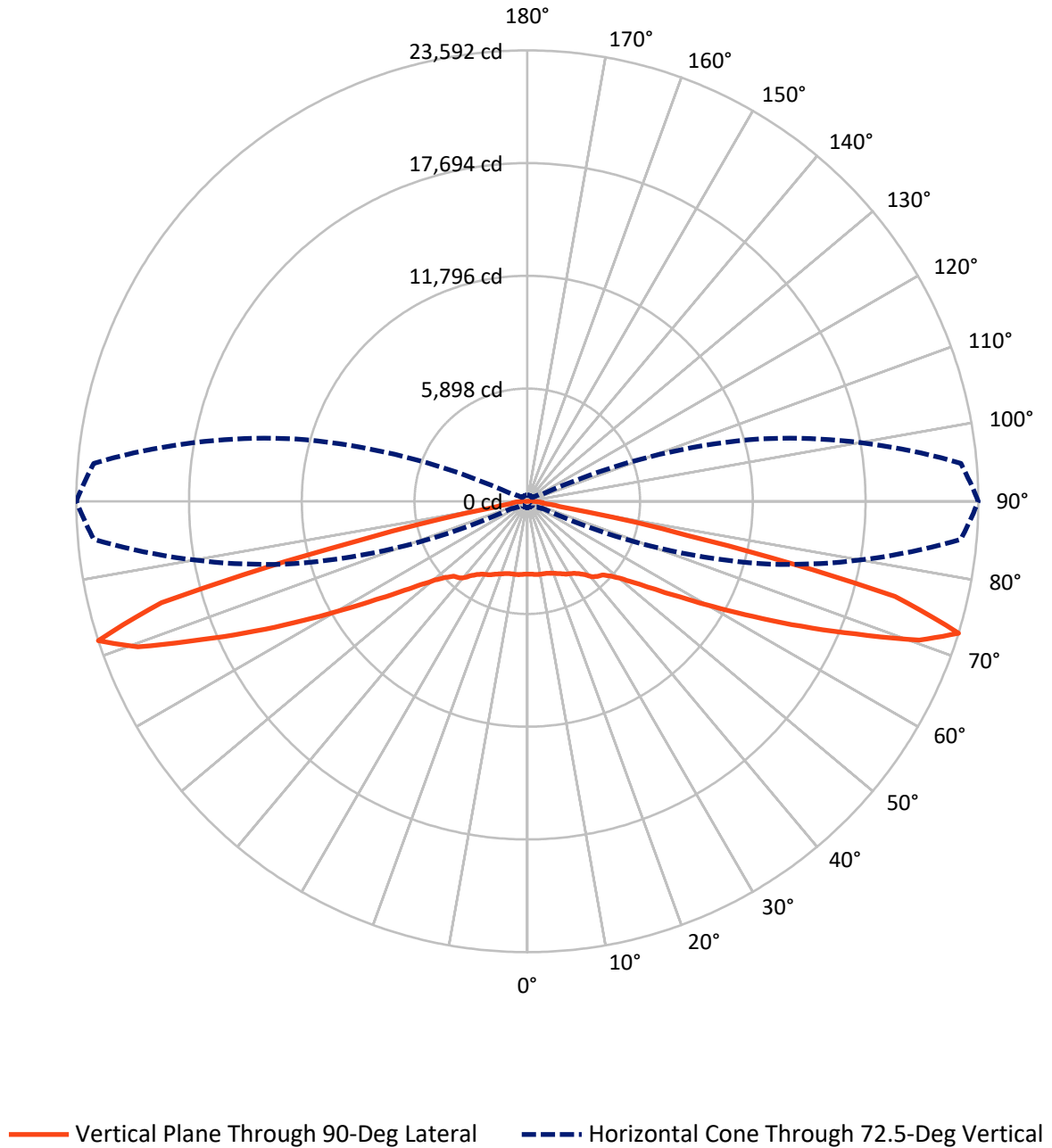
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 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	10203.5	0.0	10203.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10203.5	0.0	10203.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	20407.0	0.0	20407.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	369.7	1.8
10°-20°	1130.5	5.5
20°-30°	1885.0	9.2
30°-40°	2592.5	12.7
40°-50°	3166.2	15.5
50°-60°	3662.0	17.9
60°-70°	4366.4	21.4
70°-80°	3047.4	14.9
80°-90°	187.2	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°	20407.0	100.0
0°-180°	20407.0	100.0

Coefficient of Utilization



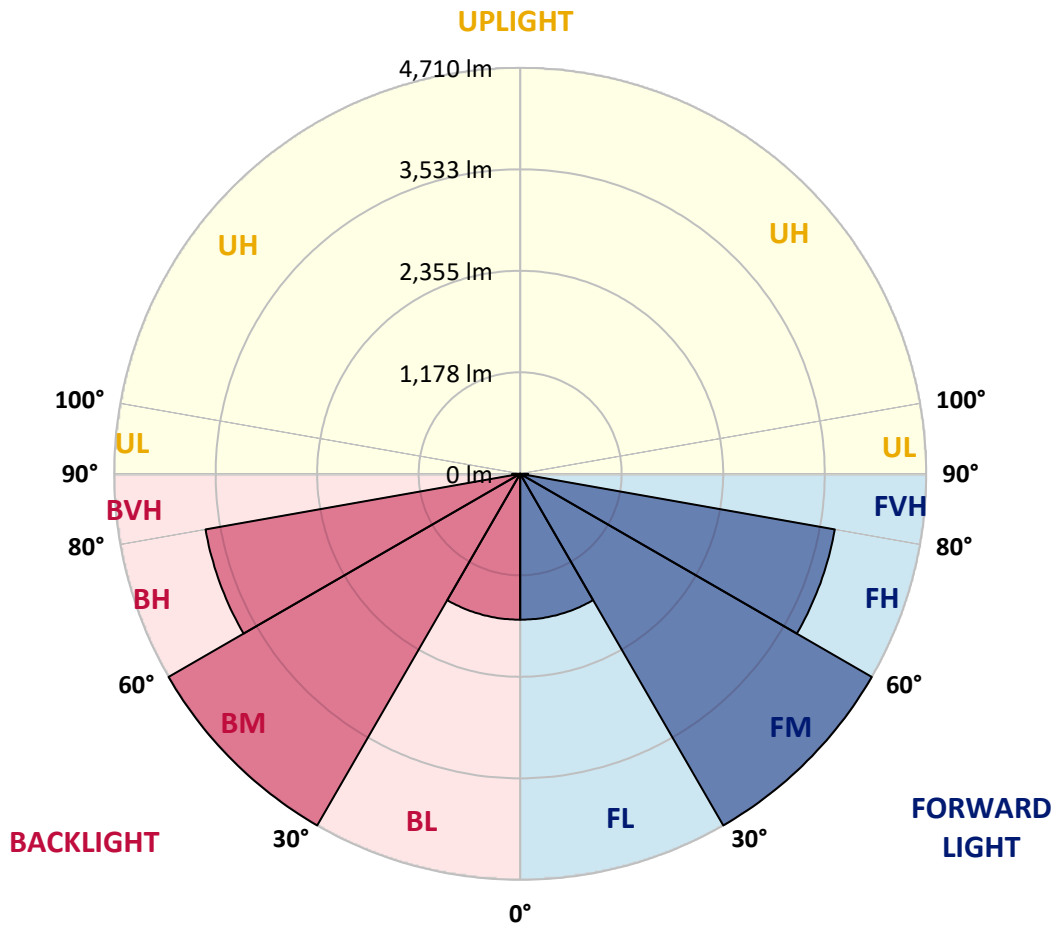
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1692.7	8.3			
FM (30°-60°)	4710.4	23.1			
FH (60°-80°)	3706.9	18.2			G2/5000
FVH (80°-90°)	93.6	0.5			G1/100
BL (0°-30°)	1692.7	8.3	B3/2500		
BM (30°-60°)	4710.4	23.1	B3/5000		
BH (60°-80°)	3706.9	18.2	B4/5000		G4/5000
BVH (80°-90°)	93.6	0.5			G1/100
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°	3813.3	3813.3	3813.3	3813.3	3813.3	3813.3	3813.3	3813.3	3813.3	3813.3	3813.3
2.5°	3816.5	3820.9	3820.9	3817.6	3825.2	3818.7	3818.7	3815.4	3818.7	3815.4	3815.4
5°	3836.0	3841.5	3843.6	3842.5	3852.3	3846.9	3846.9	3842.5	3843.6	3840.4	3840.4
7.5°	3872.9	3880.5	3884.8	3890.3	3904.4	3897.9	3893.5	3880.5	3875.1	3866.4	3866.4
10°	3884.8	3893.5	3907.6	3935.8	3968.4	3969.4	3956.4	3923.9	3898.9	3879.4	3876.2
12.5°	3848.0	3859.9	3889.2	3946.7	4019.3	4048.6	4028.0	3973.8	3925.0	3890.3	3884.8
15°	3801.3	3814.3	3858.8	3945.6	4052.9	4121.3	4119.1	4047.5	3969.4	3915.2	3906.5
17.5°	3728.7	3741.7	3805.7	3927.1	4079.0	4191.8	4222.1	4148.4	4038.8	3966.2	3954.3
20°	3597.4	3609.4	3698.3	3868.6	4087.7	4266.6	4345.8	4280.7	4144.0	4045.4	4026.9
22.5°	3427.2	3445.6	3549.7	3767.7	4067.0	4344.7	4486.8	4442.3	4266.6	4130.0	4105.0
25°	3245.0	3264.5	3386.0	3644.1	4013.9	4401.1	4653.8	4625.6	4405.4	4235.2	4200.4
27.5°	3087.7	3108.3	3240.6	3521.5	3931.5	4422.8	4818.6	4832.7	4573.5	4351.2	4314.3
30°	2964.1	2983.6	3124.6	3422.8	3825.2	4401.1	4962.9	5060.5	4744.9	4452.1	4398.9
32.5°	2828.5	2853.4	3002.0	3302.4	3699.4	4349.0	5088.7	5306.7	4943.4	4560.5	4493.3
35°	2657.1	2679.9	2836.1	3137.6	3534.5	4265.5	5193.9	5580.0	5227.5	4725.4	4650.5
37.5°	2448.9	2470.6	2625.7	2931.5	3370.8	4148.4	5274.1	5888.0	5565.9	4962.9	4863.1
40°	2239.6	2260.2	2405.5	2701.6	3174.5	3998.7	5302.3	6189.5	5954.2	5289.3	5183.0
42.5°	2047.6	2066.1	2199.5	2474.9	2954.3	3807.8	5265.5	6452.0	6302.3	5517.1	5380.4
45°	1870.8	1887.1	2005.3	2262.4	2725.5	3575.7	5154.8	6733.9	6716.6	5679.8	5495.4
47.5°	1669.1	1685.4	1807.9	2056.3	2496.6	3303.5	4967.2	7011.6	7292.5	6048.5	5835.9
50°	1422.9	1437.0	1562.8	1818.8	2259.1	3014.0	4706.9	7229.6	8019.1	6607.1	6340.3
52.5°	1131.2	1146.4	1268.9	1524.9	1977.1	2702.7	4364.2	7371.7	8858.6	7422.6	7094.0
55°	841.6	852.5	958.7	1188.7	1627.9	2348.0	3934.7	7411.8	9810.8	8537.5	8126.5
57.5°	610.6	617.1	685.4	856.8	1234.2	1904.5	3413.1	7307.7	10944.2	9967.0	9449.6
60°	494.6	496.7	517.3	593.2	857.9	1403.4	2782.9	6949.8	12174.0	11809.6	11157.8
62.5°	449.0	449.0	454.4	475.0	580.2	926.2	2020.5	6207.9	13492.8	14138.1	13265.1
65°	417.6	417.6	419.7	429.5	457.7	590.0	1275.4	4999.8	14604.5	16865.8	15761.7
67.5°	389.4	390.4	389.4	392.6	408.9	436.0	739.7	3453.2	15203.2	19692.1	18500.2
70°	360.1	362.2	356.8	356.8	369.8	370.9	463.1	1893.6	14706.4	22060.7	21747.3
72.5°	325.4	328.6	319.9	317.8	327.5	323.2	348.1	908.8	12626.3	22767.9	23592.1
75°	295.0	299.3	279.8	274.4	274.4	271.1	283.1	466.4	8194.8	18572.8	19865.6
77.5°	267.9	276.6	245.1	227.8	223.4	213.7	231.0	285.2	3584.4	8719.7	8538.6
80°	221.2	233.2	201.7	181.1	173.5	162.7	182.2	199.6	1066.1	2024.8	1939.2
82.5°	164.9	170.3	143.2	129.1	122.6	115.0	136.7	138.8	347.1	716.9	810.2
85°	105.2	107.4	87.8	75.9	72.7	69.4	86.8	75.9	132.3	527.1	765.7
87.5°	36.9	42.3	33.6	30.4	32.5	27.1	40.1	22.8	36.9	372.0	460.9
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)