

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: P882745

Luminaire Tested: **NAV-SB2D-735-U-T1**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882745
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-SB2D-735-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 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: 20517 lumens
Efficiency: N/A
Efficacy: 139.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

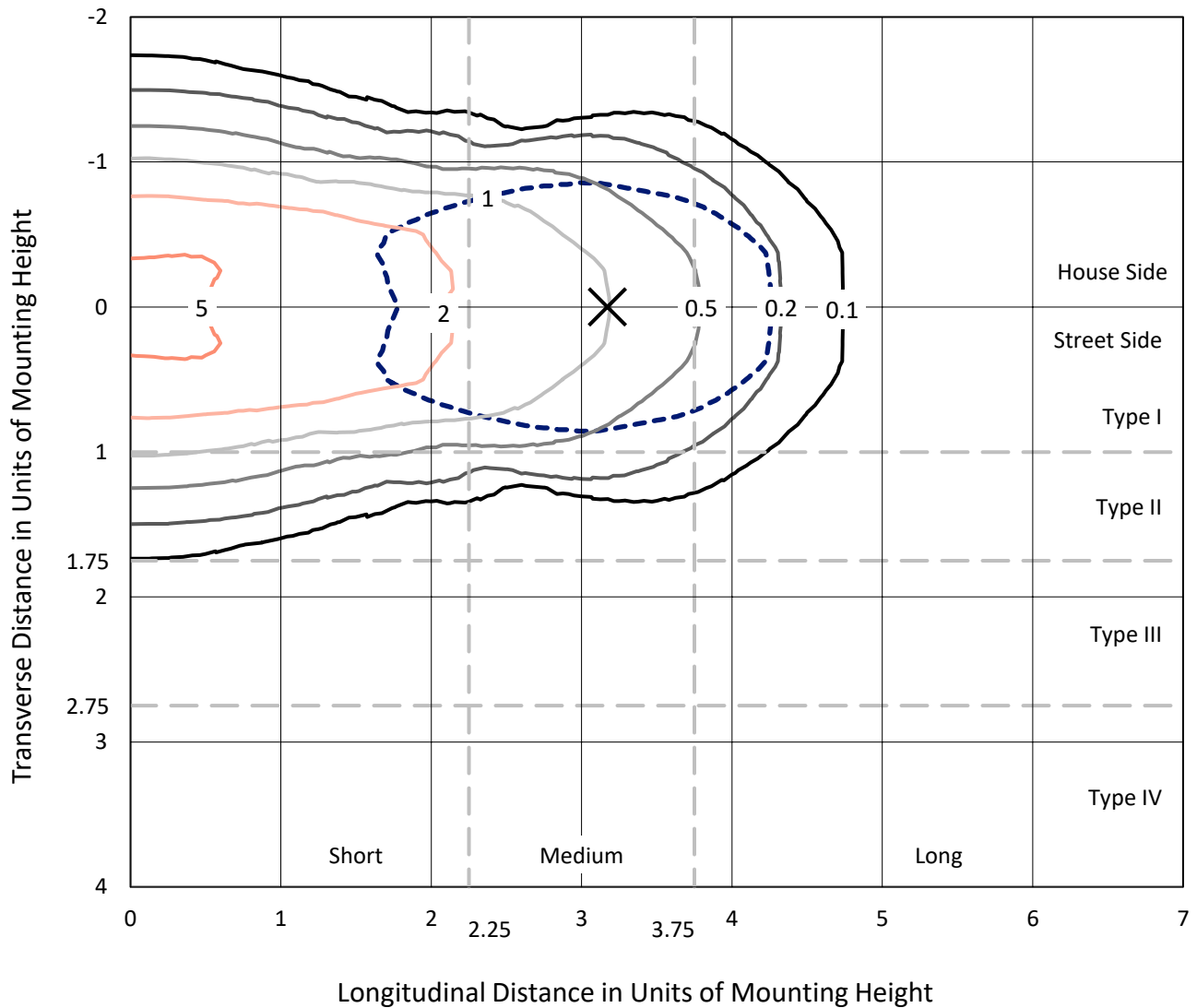
Input Watts (W): 147.6
Input Voltage (V): 120.0
Input Current (Ain): 1.234
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

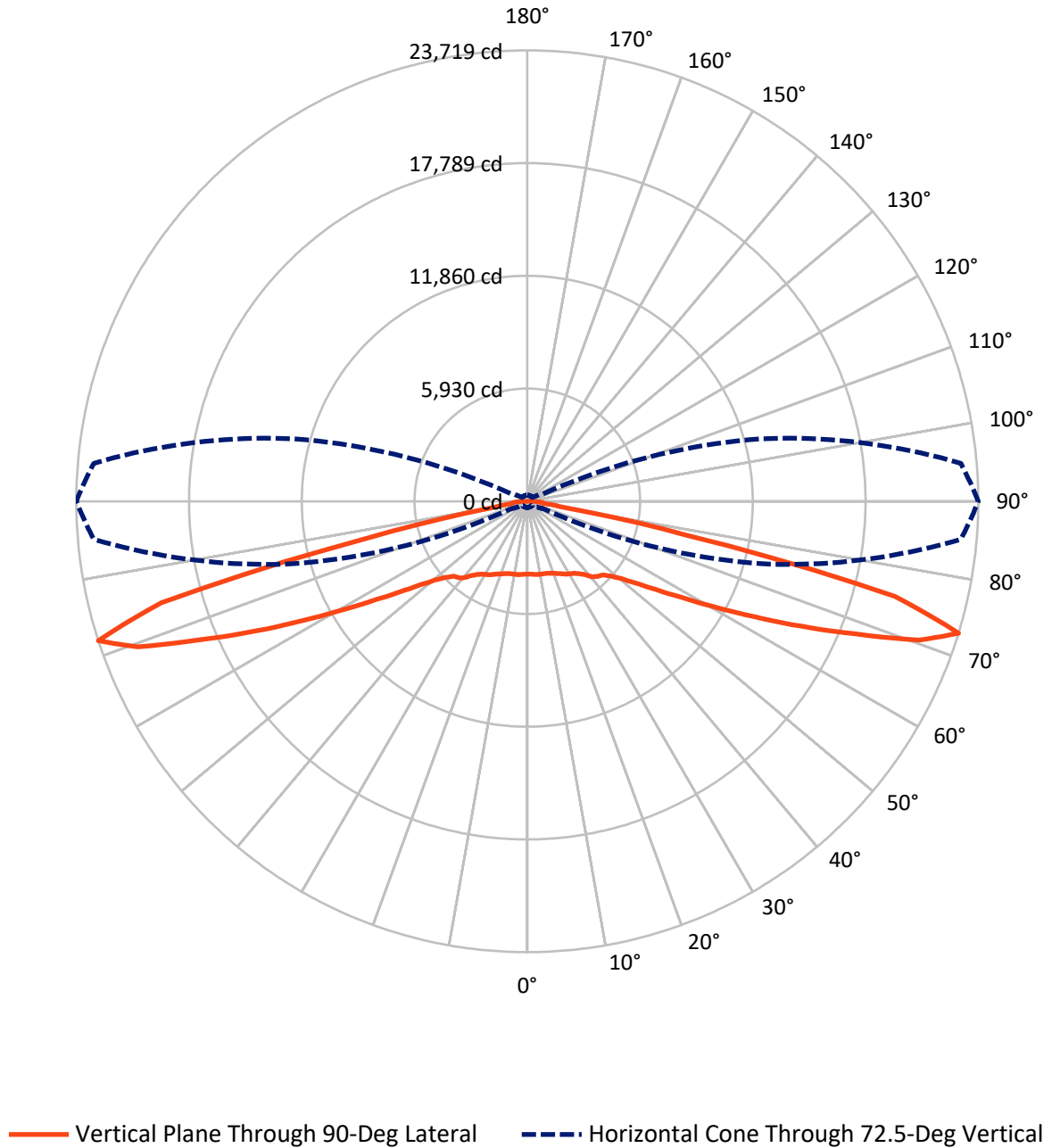
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 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	10258.5	0.0	10258.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10258.5	0.0	10258.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	20517.0	0.0	20517.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	371.7	1.8
10°-20°	1136.6	5.5
20°-30°	1895.2	9.2
30°-40°	2606.5	12.7
40°-50°	3183.3	15.5
50°-60°	3681.8	17.9
60°-70°	4389.9	21.4
70°-80°	3063.9	14.9
80°-90°	188.2	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°	20517.0	100.0
0°-180°	20517.0	100.0

Coefficient of Utilization



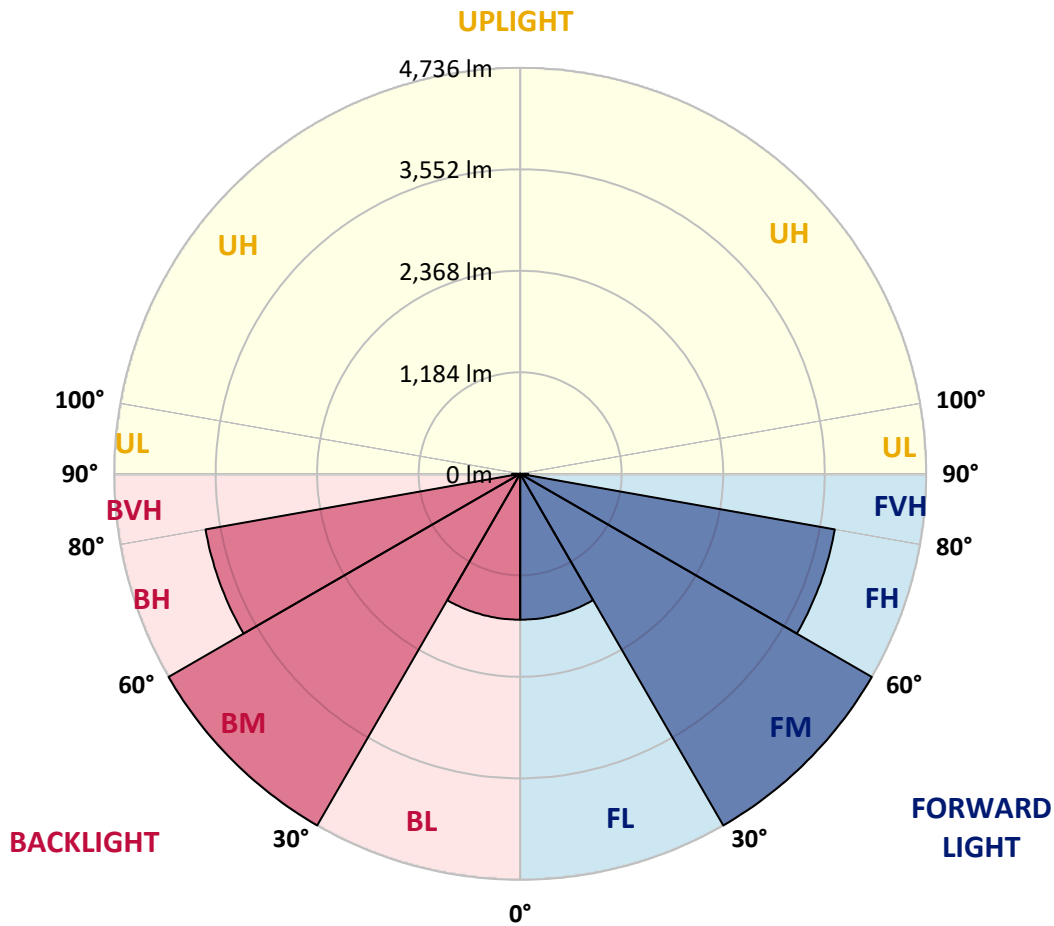
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1701.8	8.3			
FM	(30°-60°)	4735.8	23.1			
FH	(60°-80°)	3726.9	18.2			G2/5000
FVH	(80°-90°)	94.1	0.5			G1/100
BL	(0°-30°)	1701.8	8.3	B3/2500		
BM	(30°-60°)	4735.8	23.1	B3/5000		
BH	(60°-80°)	3726.9	18.2	B4/5000		G4/5000
BVH	(80°-90°)	94.1	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°	3833.8	3833.8	3833.8	3833.8	3833.8	3833.8	3833.8	3833.8	3833.8	3833.8	3833.8
2.5°	3837.1	3841.5	3841.5	3838.2	3845.8	3839.3	3839.3	3836.0	3839.3	3836.0	3836.0
5°	3856.7	3862.2	3864.3	3863.3	3873.1	3867.6	3867.6	3863.3	3864.3	3861.1	3861.1
7.5°	3893.8	3901.4	3905.8	3911.2	3925.4	3918.9	3914.5	3901.4	3896.0	3887.2	3887.2
10°	3905.8	3914.5	3928.7	3957.0	3989.7	3990.8	3977.7	3945.0	3920.0	3900.3	3897.1
12.5°	3868.7	3880.7	3910.1	3967.9	4041.0	4070.4	4049.7	3995.2	3946.1	3911.2	3905.8
15°	3821.8	3834.9	3879.6	3966.8	4074.8	4143.5	4141.3	4069.3	3990.8	3936.3	3927.6
17.5°	3748.8	3761.9	3826.2	3948.3	4101.0	4214.4	4244.9	4170.7	4060.6	3987.6	3975.6
20°	3616.8	3628.8	3718.2	3889.4	4109.7	4289.6	4369.2	4303.8	4166.4	4067.2	4048.6
22.5°	3445.6	3464.2	3568.9	3788.0	4089.0	4368.1	4511.0	4466.2	4289.6	4152.2	4127.1
25°	3262.5	3282.1	3404.2	3663.7	4035.5	4424.8	4678.9	4650.5	4429.2	4258.0	4223.1
27.5°	3104.3	3125.1	3258.1	3540.5	3952.7	4446.6	4844.6	4858.8	4598.2	4374.7	4337.6
30°	2980.0	2999.7	3141.4	3441.3	3845.8	4424.8	4989.6	5087.8	4770.5	4476.1	4422.6
32.5°	2843.7	2868.8	3018.2	3320.2	3719.3	4372.5	5116.1	5335.3	4970.0	4585.1	4517.5
35°	2671.5	2694.4	2851.4	3154.5	3553.6	4288.5	5221.9	5610.1	5255.7	4750.8	4675.6
37.5°	2462.1	2483.9	2639.8	2947.3	3388.9	4170.7	5302.6	5919.7	5595.9	4989.6	4889.3
40°	2251.7	2272.4	2418.5	2716.2	3191.6	4020.3	5330.9	6222.9	5986.3	5317.8	5211.0
42.5°	2058.7	2077.2	2211.3	2488.3	2970.2	3828.4	5293.9	6486.7	6336.3	5546.8	5409.4
45°	1880.9	1897.3	2016.1	2274.6	2740.2	3595.0	5182.6	6770.2	6752.8	5710.4	5525.0
47.5°	1678.1	1694.5	1817.7	2067.4	2510.1	3321.3	4994.0	7049.4	7331.8	6081.1	5867.4
50°	1430.6	1444.8	1571.3	1828.6	2271.3	3030.2	4732.3	7268.6	8062.4	6642.7	6374.4
52.5°	1137.3	1152.5	1275.8	1533.1	1987.8	2717.3	4387.7	7411.4	8906.3	7462.6	7132.3
55°	846.1	857.0	963.9	1195.1	1636.7	2360.7	3955.9	7451.7	9863.7	8583.6	8170.3
57.5°	613.9	620.4	689.1	861.4	1240.9	1914.7	3431.5	7347.1	11003.1	10020.7	9500.6
60°	497.2	499.4	520.1	596.4	862.5	1411.0	2797.9	6987.2	12239.6	11873.3	11218.0
62.5°	451.4	451.4	456.9	477.6	583.4	931.2	2031.4	6241.4	13565.6	14214.3	13336.6
65°	419.8	419.8	422.0	431.8	460.1	593.2	1282.3	5026.7	14683.2	16956.7	15846.7
67.5°	391.5	392.5	391.5	394.7	411.1	438.3	743.6	3471.8	15285.1	19798.2	18599.9
70°	362.0	364.2	358.7	358.7	371.8	372.9	465.6	1903.8	14785.7	22179.7	21864.5
72.5°	327.1	330.4	321.7	319.5	329.3	324.9	350.0	913.7	12694.3	22890.6	23719.3
75°	296.6	300.9	281.3	275.9	275.9	272.6	284.6	468.9	8239.0	18673.0	19972.7
77.5°	269.3	278.0	246.4	229.0	224.6	214.8	232.3	286.8	3603.7	8766.8	8584.7
80°	222.4	234.4	202.8	182.1	174.5	163.6	183.2	200.6	1071.9	2035.8	1949.6
82.5°	165.7	171.2	143.9	129.8	123.2	115.6	137.4	139.6	348.9	720.7	814.5
85°	105.8	107.9	88.3	76.3	73.1	69.8	87.2	76.3	133.0	529.9	769.8
87.5°	37.1	42.5	33.8	30.5	32.7	27.3	40.3	22.9	37.1	374.0	463.4
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)