

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: P883465

Luminaire Tested: **NAV-SB3D-827-U-T1**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883465  
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-SB3D-827-U-T1  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

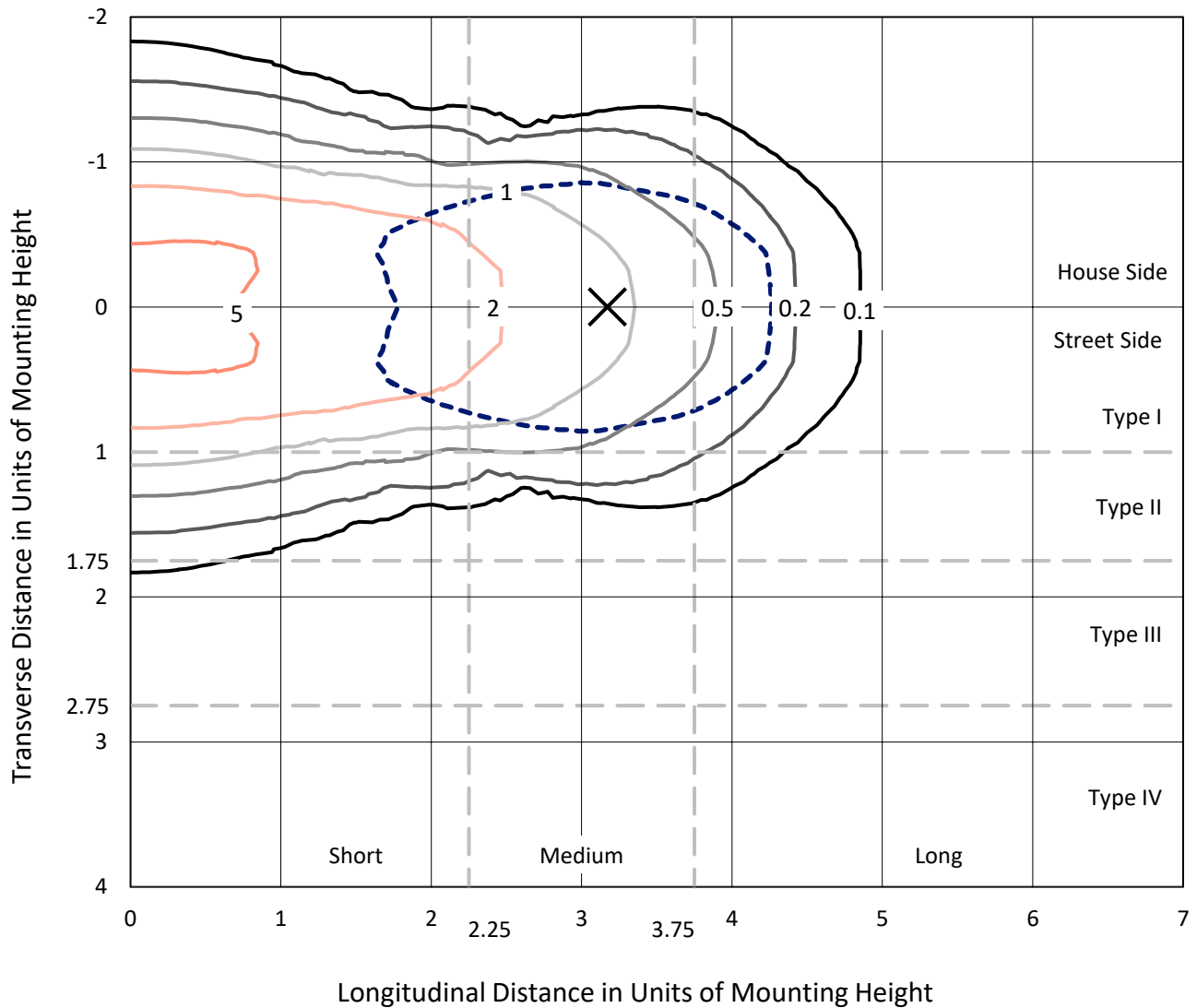
Lumens per Lamp: N/A  
Luminaire Lumens: 24534 lumens  
Efficiency: N/A  
Efficacy: 112.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B4 - U0 - G4  
  
Input Watts (W): 218.1  
Input Voltage (V): 120.0  
Input Current (Ain): 1.84  
Voltage Rise (V): NR  
Power Factor: 0.998  
Total Harmonic Distortion (THDi): 2.542  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P883465  
 CATALOG NUMBER: NAV-SB3D-827-U-T1

### Iso-Footcandle Lines of Horizontal Illumination

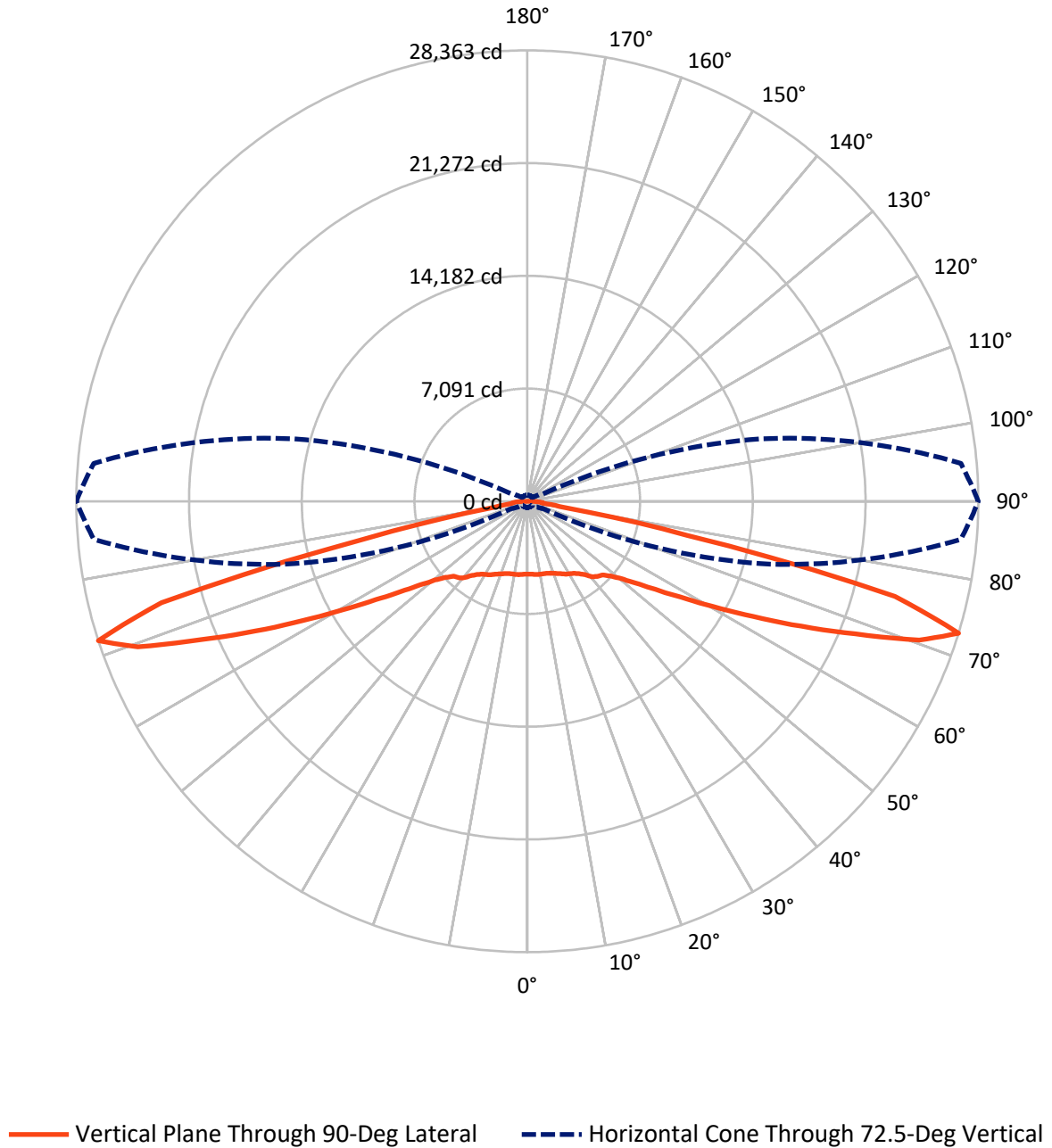
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc  
 Type I - Short - N/A

REPORT NUMBER: P883465  
CATALOG NUMBER: NAV-SB3D-827-U-T1

### Luminous Intensity Polar Plot



REPORT NUMBER: P883465  
 CATALOG NUMBER: NAV-SB3D-827-U-T1

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12267.0	0.0	12267.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	12267.0	0.0	12267.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	24534.0	0.0	24534.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	444.5	1.8
10°-20°	1359.2	5.5
20°-30°	2266.3	9.2
30°-40°	3116.8	12.7
40°-50°	3806.5	15.5
50°-60°	4402.6	17.9
60°-70°	5249.4	21.4
70°-80°	3663.7	14.9
80°-90°	225.0	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°	24534.0	100.0
0°-180°	24534.0	100.0



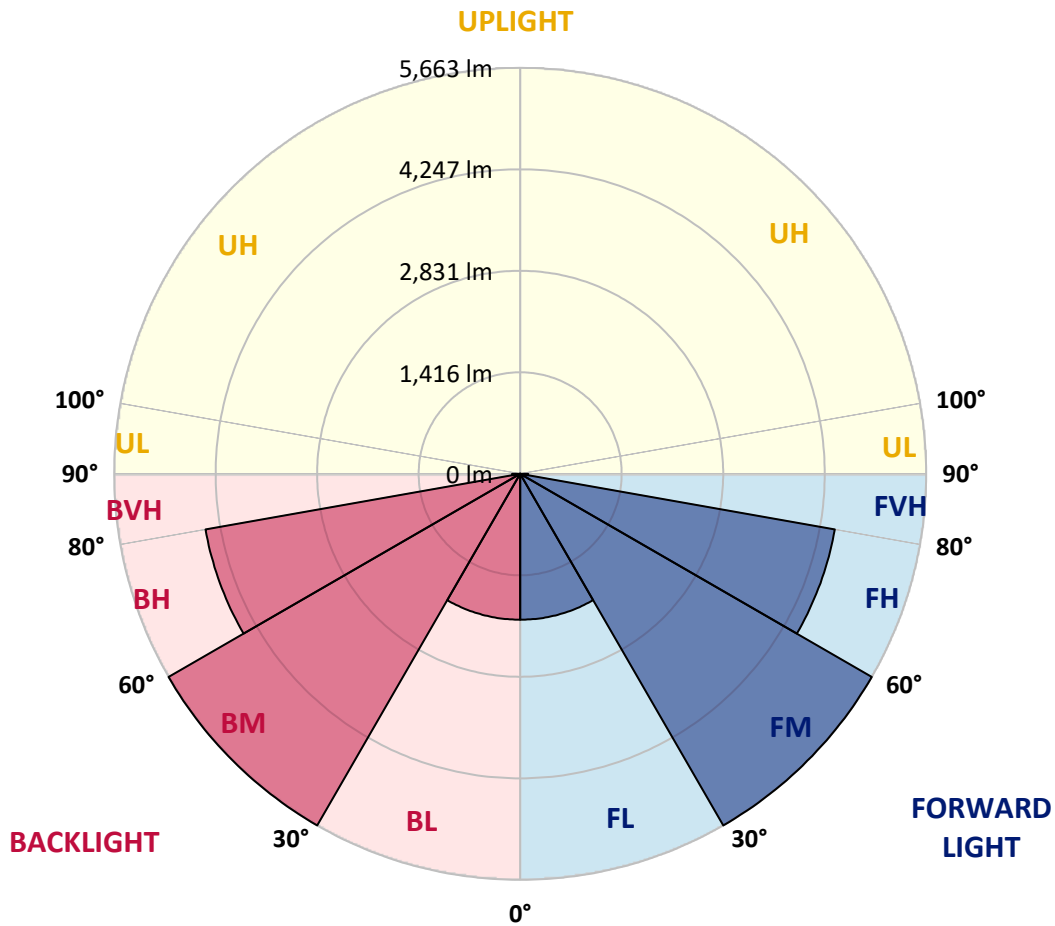
REPORT NUMBER: P883465  
 CATALOG NUMBER: NAV-SB3D-827-U-T1

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2035.0	8.3			
FM (30°-60°)	5663.0	23.1			
FH (60°-80°)	4456.6	18.2			G2/5000
FVH (80°-90°)	112.5	0.5			G2/225
BL (0°-30°)	2035.0	8.3	B3/2500		
BM (30°-60°)	5663.0	23.1	B4/8500		
BH (60°-80°)	4456.6	18.2	B4/5000		G4/5000
BVH (80°-90°)	112.5	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



REPORT NUMBER: P883465  
 CATALOG NUMBER: NAV-SB3D-827-U-T1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4584.4	4584.4	4584.4	4584.4	4584.4	4584.4	4584.4	4584.4	4584.4	4584.4	4584.4
2.5°	4588.3	4593.6	4593.6	4589.7	4598.8	4591.0	4591.0	4587.0	4591.0	4587.0	4587.0
5°	4611.8	4618.3	4620.9	4619.6	4631.4	4624.9	4624.9	4619.6	4620.9	4617.0	4617.0
7.5°	4656.2	4665.3	4670.5	4677.0	4694.0	4686.1	4680.9	4665.3	4658.8	4648.3	4648.3
10°	4670.5	4680.9	4697.9	4731.8	4770.9	4772.2	4756.5	4717.4	4687.4	4664.0	4660.1
12.5°	4626.2	4640.5	4675.7	4744.8	4832.2	4867.4	4842.6	4777.4	4718.7	4677.0	4670.5
15°	4570.1	4585.7	4639.2	4743.5	4872.6	4954.7	4952.1	4866.1	4772.2	4707.0	4696.6
17.5°	4482.7	4498.4	4575.3	4721.3	4903.9	5039.5	5076.0	4987.3	4855.6	4768.3	4753.9
20°	4325.0	4339.3	4446.2	4650.9	4914.3	5129.5	5224.6	5146.4	4982.1	4863.5	4841.3
22.5°	4120.3	4142.4	4267.6	4529.7	4889.5	5223.3	5394.1	5340.7	5129.5	4965.2	4935.2
25°	3901.2	3924.7	4070.7	4381.0	4825.7	5291.1	5594.9	5561.0	5296.4	5091.6	5049.9
27.5°	3712.1	3736.9	3896.0	4233.7	4726.6	5317.2	5793.1	5810.1	5498.5	5231.2	5186.8
30°	3563.5	3587.0	3756.5	4115.0	4598.8	5291.1	5966.5	6083.9	5704.5	5352.4	5288.5
32.5°	3400.5	3430.5	3609.1	3970.3	4447.5	5228.6	6117.8	6379.9	5943.1	5482.8	5402.0
35°	3194.5	3221.9	3409.6	3772.1	4249.3	5128.2	6244.3	6708.5	6284.7	5681.0	5591.0
37.5°	2944.2	2970.2	3156.7	3524.4	4052.5	4987.3	6340.8	7078.8	6691.5	5966.5	5846.6
40°	2692.5	2717.3	2892.0	3248.0	3816.5	4807.4	6374.7	7441.2	7158.3	6359.0	6231.2
42.5°	2461.7	2483.9	2644.3	2975.5	3551.8	4577.9	6330.3	7756.8	7576.8	6632.8	6468.5
45°	2249.2	2268.7	2410.9	2719.9	3276.6	4298.9	6197.3	8095.8	8074.9	6828.4	6606.8
47.5°	2006.7	2026.2	2173.6	2472.2	3001.5	3971.6	5971.8	8429.6	8767.3	7271.7	7016.2
50°	1710.7	1727.6	1878.9	2186.6	2716.0	3623.5	5658.8	8691.7	9640.9	7943.2	7622.5
52.5°	1359.9	1378.2	1525.5	1833.3	2377.0	3249.3	5246.8	8862.5	10650.1	8923.7	8528.7
55°	1011.8	1024.8	1152.6	1429.1	1957.1	2822.9	4730.5	8910.7	11794.9	10264.1	9770.0
57.5°	734.1	741.9	824.1	1030.1	1483.8	2289.6	4103.3	8785.5	13157.4	11982.6	11360.7
60°	594.6	597.2	622.0	713.2	1031.4	1687.2	3345.8	8355.3	14636.0	14197.9	13414.3
62.5°	539.8	539.8	546.3	571.1	697.6	1113.5	2429.1	7463.4	16221.6	16997.4	15947.7
65°	502.0	502.0	504.6	516.3	550.2	709.3	1533.4	6010.9	17558.0	20276.6	18949.3
67.5°	468.1	469.4	468.1	472.0	491.6	524.2	889.2	4151.5	18277.8	23674.5	22241.6
70°	432.9	435.5	429.0	429.0	444.6	445.9	556.8	2276.6	17680.6	26522.2	26145.4
72.5°	391.2	395.1	384.6	382.0	393.8	388.6	418.5	1092.7	15179.8	27372.3	28363.3
75°	354.7	359.9	336.4	329.9	329.9	326.0	340.3	560.7	9852.1	22328.9	23883.1
77.5°	322.1	332.5	294.7	273.8	268.6	256.9	277.7	342.9	4309.3	10483.2	10265.4
80°	266.0	280.3	242.5	217.7	208.6	195.6	219.1	239.9	1281.7	2434.3	2331.3
82.5°	198.2	204.7	172.1	155.2	147.3	138.2	164.3	166.9	417.2	861.9	974.0
85°	126.5	129.1	105.6	91.3	87.4	83.4	104.3	91.3	159.1	633.7	920.5
87.5°	44.3	50.9	40.4	36.5	39.1	32.6	48.2	27.4	44.3	447.2	554.1
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)