

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: INVUE

Report Number: P596718

Luminaire Tested: **MSA-SA3D-827-U-5NQ**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P596718  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-5)  
Test Lab: INNOVATIONS CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: MSA-SA3D-827-U-5NQ  
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS.  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14973 lumens  
Efficiency: N/A  
Efficacy: 78.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B3 - U0 - G2

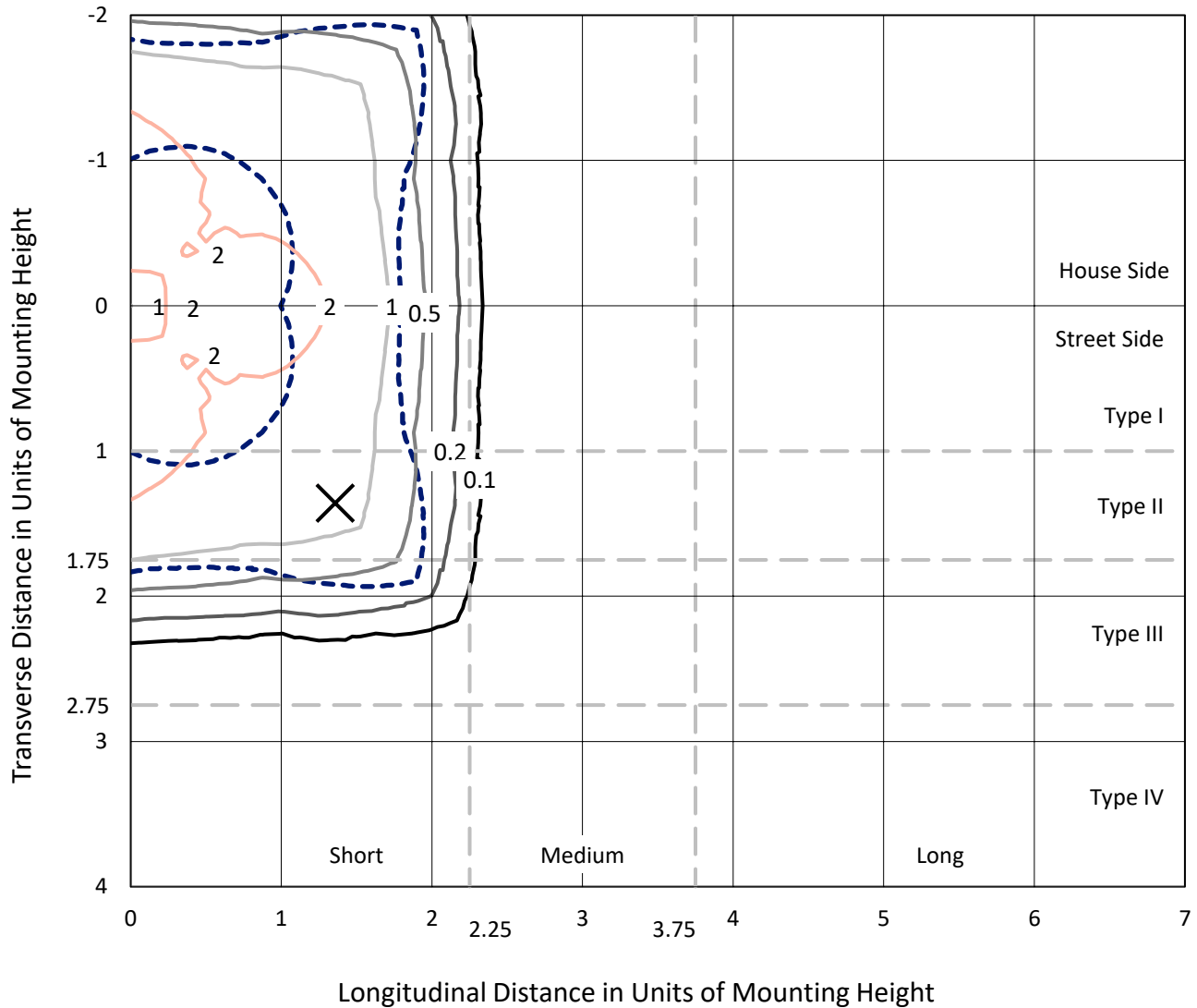
Input Watts (W): 192  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P596718  
 CATALOG NUMBER: MSA-SA3D-827-U-5NQ

### Iso-Footcandle Lines of Horizontal Illumination

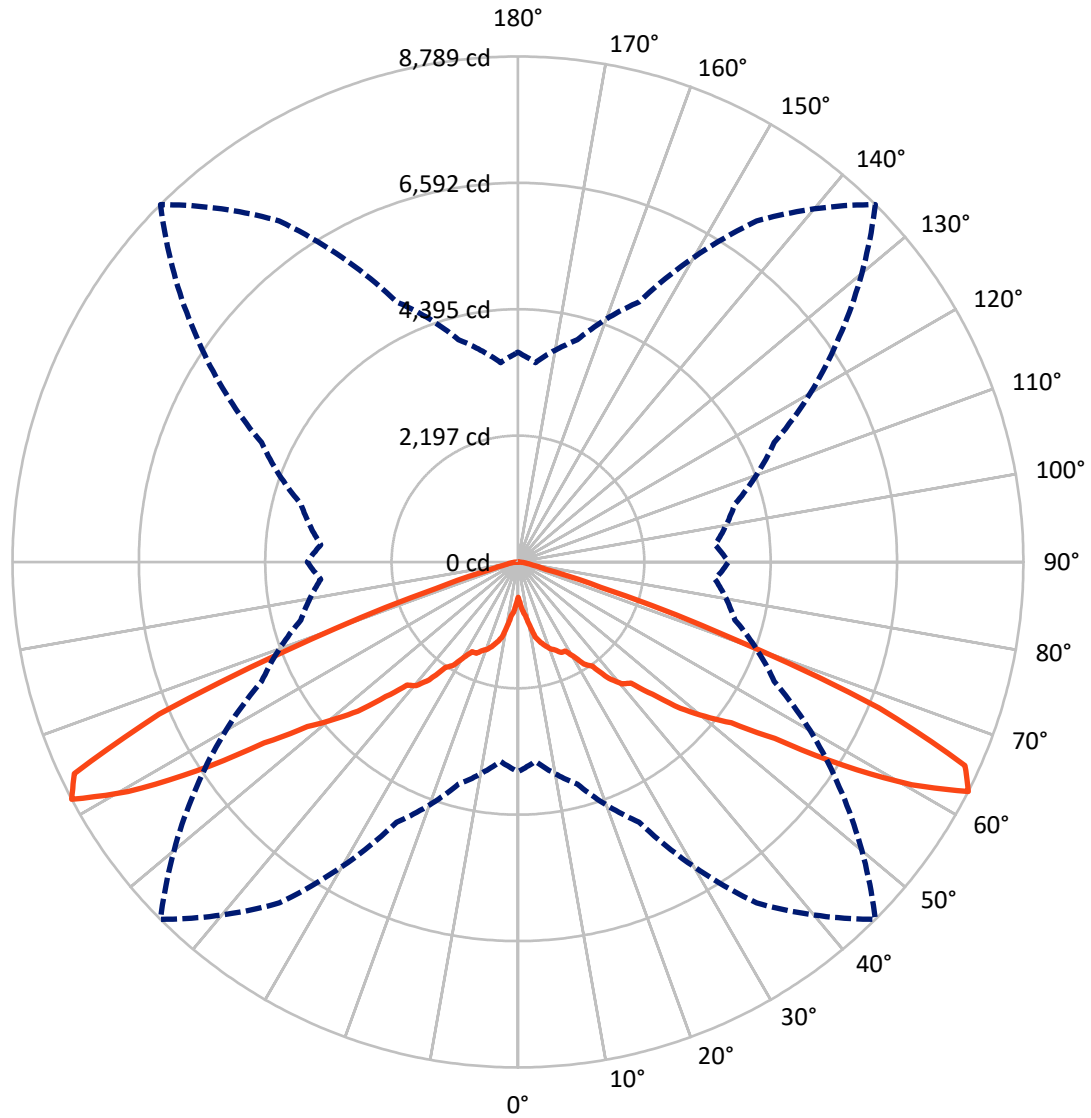
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc  
 Type V - Short - N/A

REPORT NUMBER: P596718  
CATALOG NUMBER: MSA-SA3D-827-U-5NQ

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P596718  
 CATALOG NUMBER: MSA-SA3D-827-U-5NQ

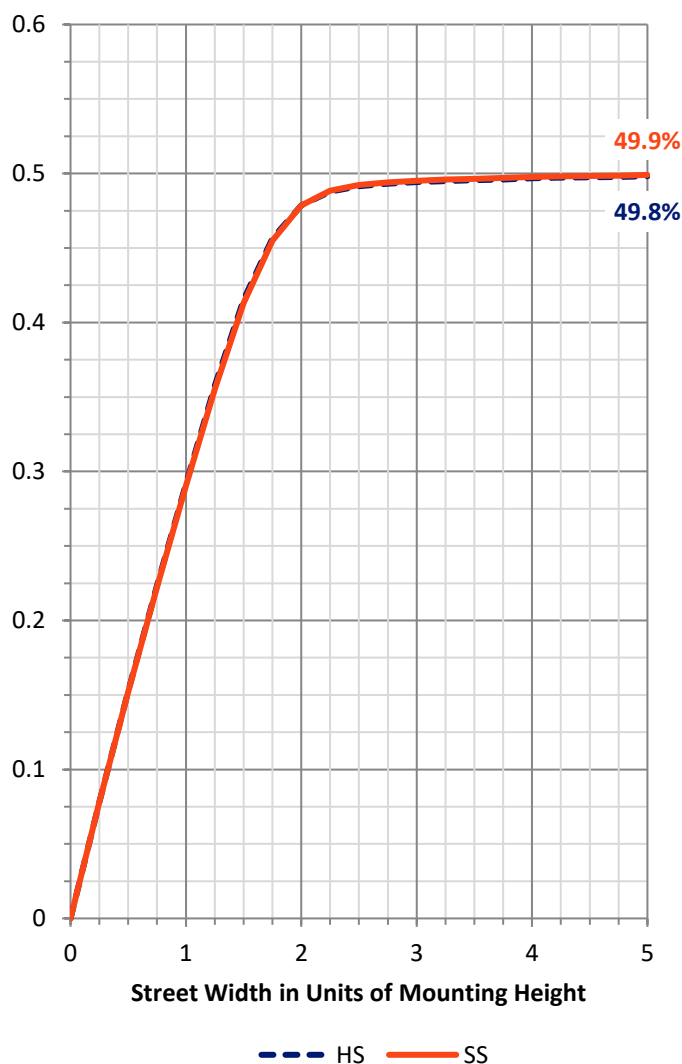
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7486.5	0.0	7486.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	7486.5	0.0	7486.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	14973.0	0.0	14973.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.3	0.6
10°-20°	406.8	2.7
20°-30°	852.7	5.7
30°-40°	1606.6	10.7
40°-50°	2915.9	19.5
50°-60°	4926.9	32.9
60°-70°	3683.1	24.6
70°-80°	412.0	2.8
80°-90°	76.7	0.5
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°	14973.0	100.0
0°-180°	14973.0	100.0

**Coefficient of Utilization**

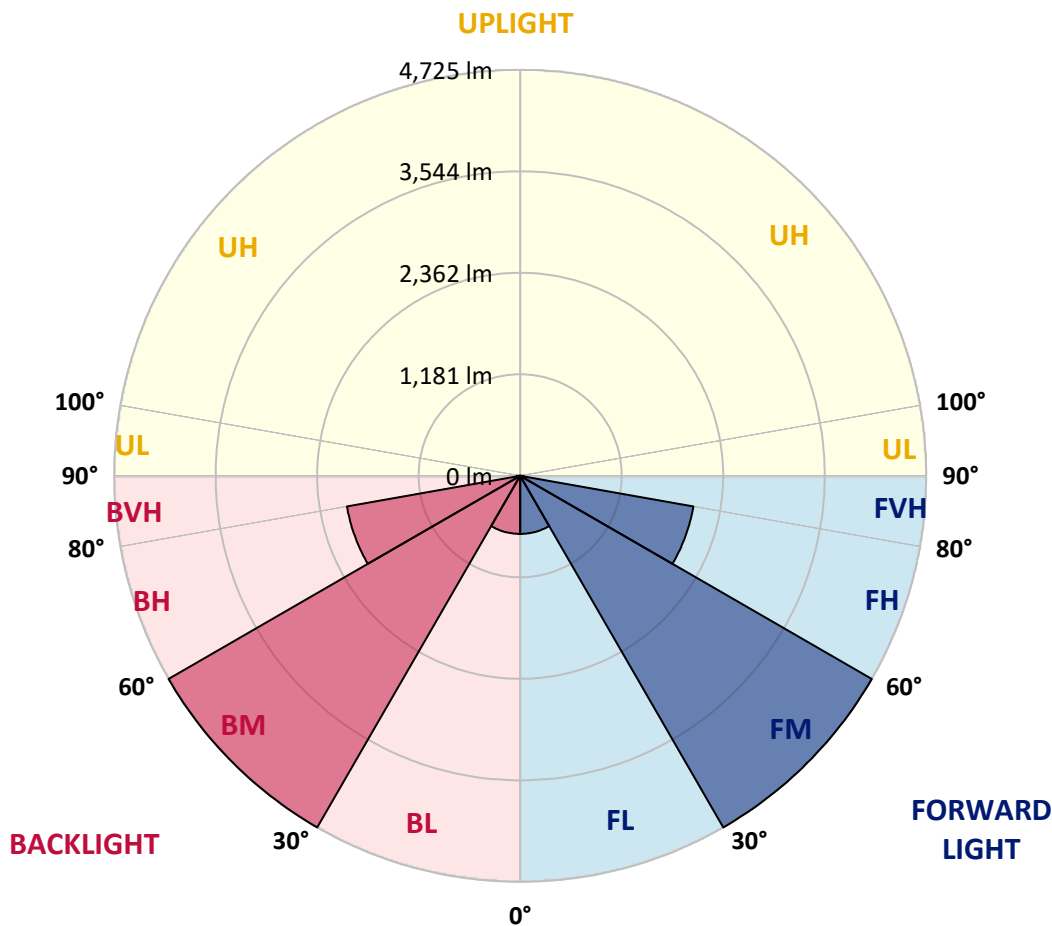


REPORT NUMBER: P596718  
 CATALOG NUMBER: MSA-SA3D-827-U-5NQ

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	675.9	4.5			
FM (30°-60°)	4724.7	31.6			
FH (60°-80°)	2047.6	13.7			G2/5000
FVH (80°-90°)	38.3	0.3			G1/100
BL (0°-30°)	675.9	4.5	B2/1000		
BM (30°-60°)	4724.7	31.6	B3/5000		
BH (60°-80°)	2047.6	13.7	B3/2500		G2/5000
BVH (80°-90°)	38.3	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G2**  
 Type V Short





REPORT NUMBER: P596718  
 CATALOG NUMBER: MSA-SA3D-827-U-5NQ

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	612.2	612.2	612.2	612.2	612.2	612.2	612.2	612.2	612.2	612.2	612.2
2.5°	744.4	731.0	684.1	700.5	717.6	715.2	710.9	698.1	686.5	734.6	744.4
5°	949.1	918.6	902.2	888.8	885.7	852.8	897.9	893.0	908.3	933.8	958.8
7.5°	1112.3	1083.7	1040.4	1031.3	982.0	945.4	984.4	1032.5	1047.8	1094.7	1122.7
10°	1172.0	1147.0	1155.0	1114.2	1111.7	1122.1	1113.5	1124.5	1164.7	1159.2	1179.9
12.5°	1306.0	1310.3	1284.7	1274.4	1295.1	1340.2	1301.8	1288.4	1278.6	1320.1	1332.8
15°	1431.5	1456.5	1414.5	1407.8	1399.2	1441.3	1399.9	1420.0	1437.6	1446.1	1441.3
17.5°	1609.4	1610.6	1563.7	1488.8	1516.8	1530.2	1511.9	1477.2	1560.7	1602.7	1605.1
20°	1726.4	1730.6	1638.0	1521.1	1600.3	1612.4	1603.3	1530.8	1641.7	1711.7	1708.7
22.5°	1852.5	1837.8	1712.3	1627.1	1655.1	1662.4	1642.9	1633.8	1711.7	1839.1	1820.2
25°	1937.1	1963.9	1839.1	1784.2	1760.5	1743.4	1768.4	1773.3	1853.1	1968.8	1904.8
27.5°	2139.4	2093.1	1897.5	1918.2	1867.7	1752.6	1862.2	1922.5	1905.5	2102.8	2150.9
30°	2319.1	2320.3	2046.2	2085.8	1992.0	1898.8	2017.5	2104.6	2083.3	2336.1	2290.4
32.5°	2548.7	2557.3	2302.6	2196.6	2133.3	2115.6	2101.0	2197.2	2330.0	2534.7	2539.0
35°	2796.7	2869.8	2523.8	2412.3	2304.5	2226.5	2310.5	2444.0	2530.5	2857.6	2799.7
37.5°	3279.7	3156.7	2873.4	2663.9	2595.0	2564.0	2608.4	2685.8	2872.8	3154.8	3254.1
40°	3565.4	3531.3	3145.7	2970.3	2704.7	2787.5	2763.2	2975.1	3129.9	3550.8	3559.9
42.5°	4002.2	3830.4	3483.8	3260.8	3022.0	2878.3	3030.6	3315.1	3502.1	3857.8	4025.9
45°	4347.6	4127.1	3859.6	3690.3	3388.8	3282.2	3337.0	3701.3	3935.8	4180.1	4401.2
47.5°	4729.5	4490.7	4223.3	3922.4	3628.2	3801.8	3704.9	4025.3	4254.4	4604.6	4811.8
50°	5209.5	4945.2	4602.8	4354.3	4159.3	4220.3	4205.0	4433.5	4716.1	5035.3	5270.5
52.5°	5738.3	5439.2	5109.0	4878.2	4795.9	4644.8	4842.2	4936.0	5144.4	5436.8	5712.7
55°	6108.0	5809.0	5609.1	5683.5	5661.5	5419.1	5592.1	5601.8	5501.3	5606.7	5884.5
57.5°	6050.8	5765.1	5737.7	6018.5	6438.2	6672.7	6405.3	5830.3	5453.8	5404.5	5698.7
60°	5290.6	5046.3	5297.3	5930.8	7153.4	7867.3	6837.8	5657.9	5037.8	4781.3	5065.2
62.5°	3645.8	3480.7	4001.0	4991.5	7239.3	8789.0	6822.0	4916.5	3907.2	3441.8	3662.3
65°	1728.2	1668.5	2107.7	3164.6	6030.1	8542.9	5960.0	3326.6	2249.0	1796.4	1846.4
67.5°	650.0	620.1	773.6	1398.0	3798.1	6775.7	4006.4	1641.1	869.9	676.2	699.3
70°	369.2	347.8	367.9	509.9	1529.0	3837.7	1728.2	562.9	369.8	336.9	358.8
72.5°	290.6	274.1	277.2	308.2	527.5	1506.5	559.2	321.0	268.6	255.2	274.7
75°	240.0	225.4	224.8	241.8	307.6	489.2	316.2	245.5	217.5	207.7	223.6
77.5°	190.7	182.1	184.6	198.0	220.5	273.5	229.0	198.6	178.5	166.9	177.9
80°	139.5	138.3	148.0	160.2	164.5	184.0	171.8	160.2	142.5	126.1	130.4
82.5°	91.4	92.0	110.3	120.0	118.2	117.6	123.1	122.4	106.6	83.5	83.5
85°	52.4	53.6	67.6	75.5	74.3	59.1	78.0	78.6	68.2	50.6	48.7
87.5°	17.1	21.3	29.2	31.1	29.8	16.4	29.8	32.9	29.8	21.3	18.9
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)