

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: P596520

Luminaire Tested: **MSA-SA1C-827-U-5NQ**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P596520  
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-SA1C-827-U-5NQ  
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS.  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4718 lumens  
Efficiency: N/A  
Efficacy: 80.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B2 - U0 - G1

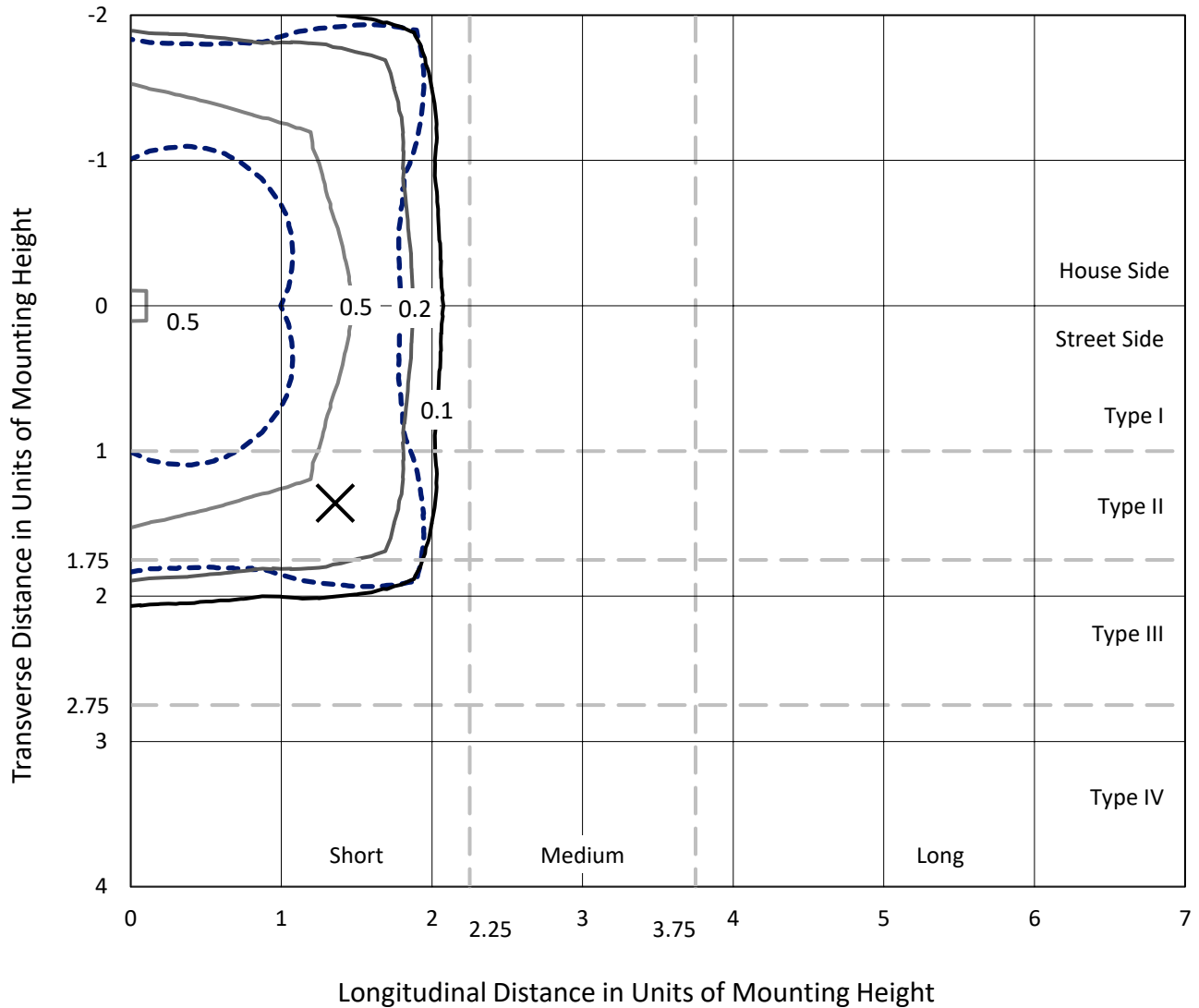
Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

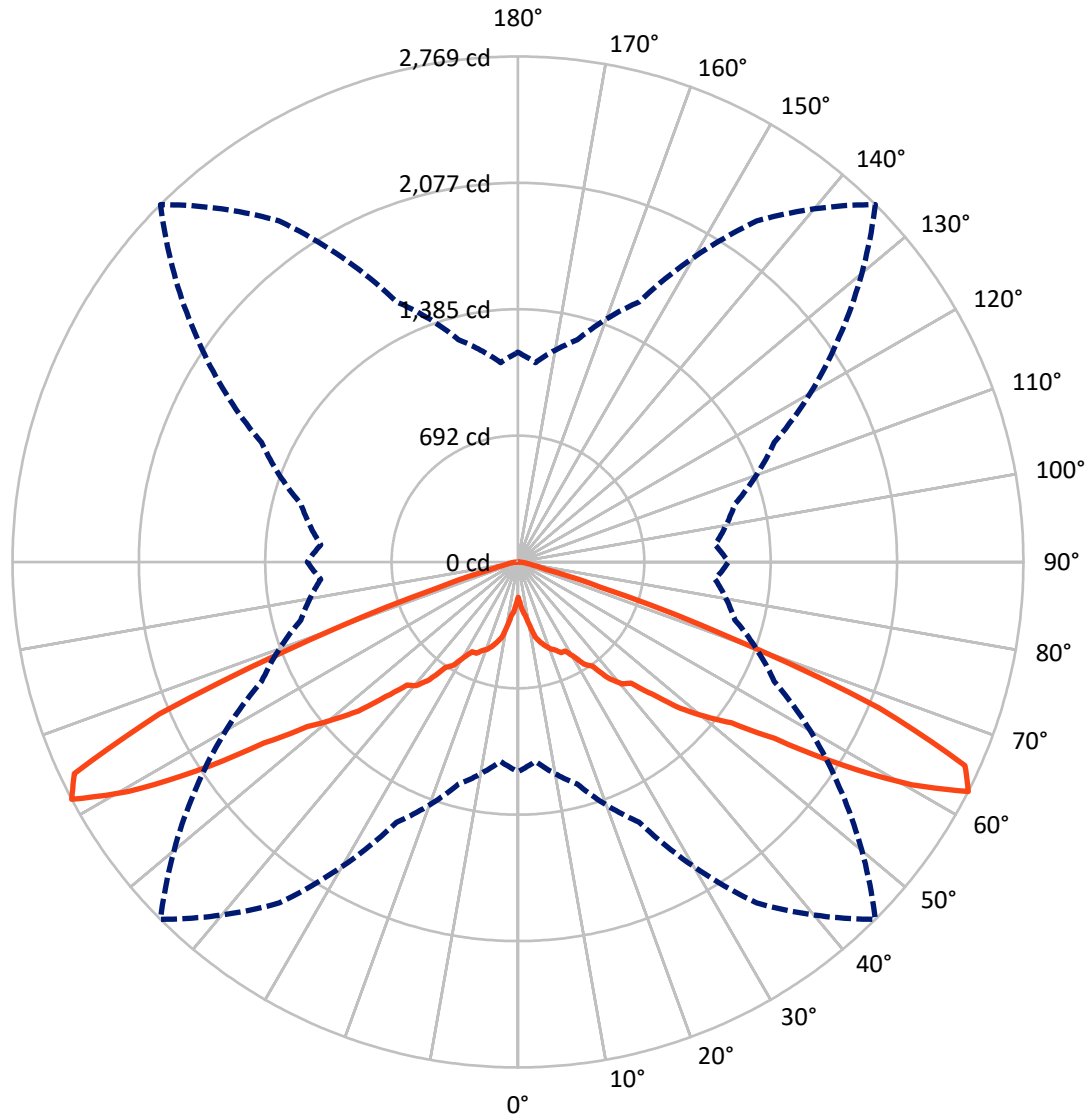
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2359.0	0.0	2359.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2359.0	0.0	2359.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	4718.0	0.0	4718.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.1	0.6
10°-20°	128.2	2.7
20°-30°	268.7	5.7
30°-40°	506.2	10.7
40°-50°	918.8	19.5
50°-60°	1552.5	32.9
60°-70°	1160.6	24.6
70°-80°	129.8	2.8
80°-90°	24.2	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°	4718.0	100.0
0°-180°	4718.0	100.0

**Coefficient of Utilization**



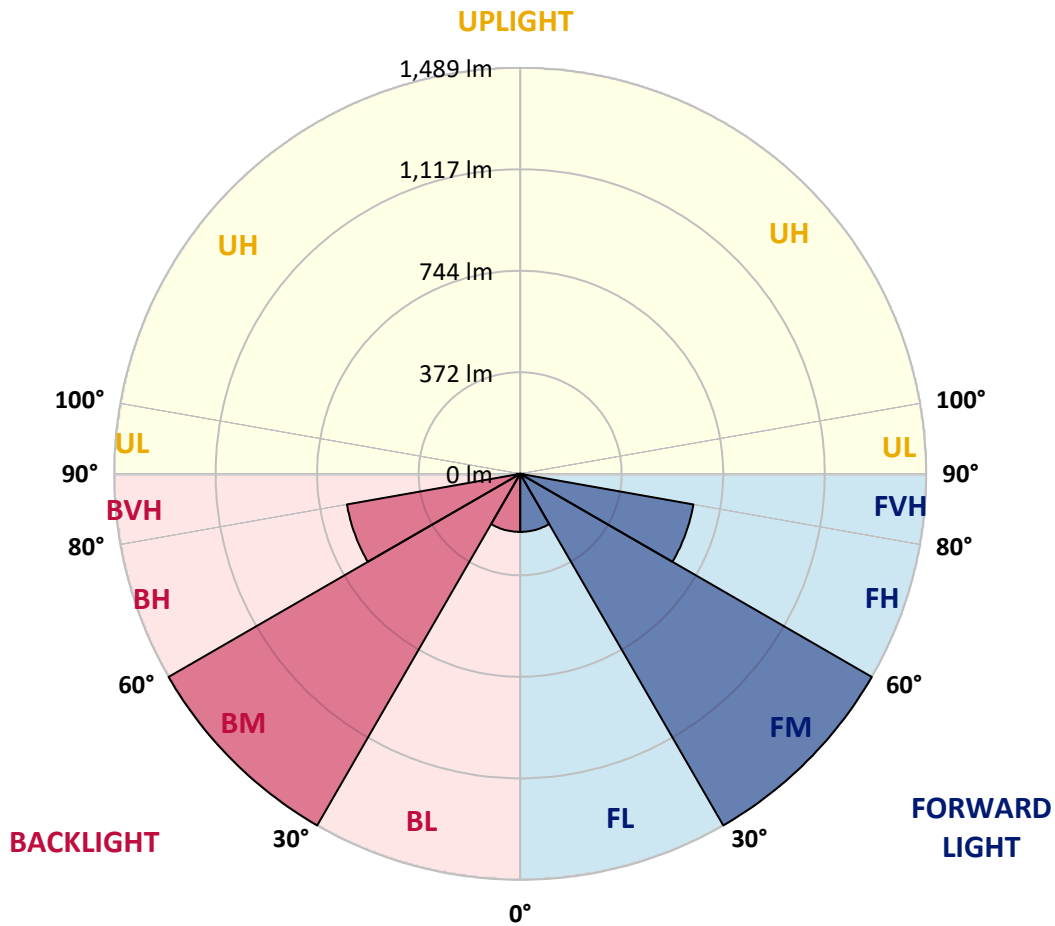
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	213.0	4.5			
FM (30°-60°)	1488.7	31.6			
FH (60°-80°)	645.2	13.7			G0/660
FVH (80°-90°)	12.1	0.3			G1/100
BL (0°-30°)	213.0	4.5	B1/500		
BM (30°-60°)	1488.7	31.6	B2/2500		
BH (60°-80°)	645.2	13.7	B2/1000		G0/660
BVH (80°-90°)	12.1	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	192.9	192.9	192.9	192.9	192.9	192.9	192.9	192.9	192.9	192.9	192.9
2.5°	234.6	230.3	215.6	220.7	226.1	225.3	224.0	220.0	216.3	231.5	234.6
5°	299.1	289.5	284.3	280.1	279.1	268.7	282.9	281.4	286.2	294.3	302.1
7.5°	350.5	341.5	327.8	325.0	309.4	297.9	310.2	325.3	330.1	344.9	353.8
10°	369.3	361.4	363.9	351.1	350.3	353.6	350.9	354.3	367.0	365.3	371.8
12.5°	411.5	412.9	404.8	401.6	408.1	422.3	410.2	406.0	402.9	415.9	420.0
15°	451.1	458.9	445.7	443.6	440.9	454.1	441.1	447.4	453.0	455.7	454.1
17.5°	507.1	507.5	492.7	469.1	477.9	482.2	476.4	465.5	491.8	505.0	505.8
20°	544.0	545.3	516.1	479.3	504.2	508.1	505.2	482.4	517.3	539.4	538.4
22.5°	583.7	579.1	539.6	512.7	521.5	523.8	517.7	514.8	539.4	579.5	573.5
25°	610.4	618.8	579.5	562.2	554.7	549.4	557.2	558.8	583.9	620.4	600.2
27.5°	674.1	659.5	597.9	604.4	588.5	552.2	586.8	605.8	600.4	662.6	677.8
30°	730.7	731.1	644.7	657.2	627.7	598.3	635.7	663.2	656.5	736.1	721.7
32.5°	803.1	805.8	725.6	692.2	672.2	666.6	662.0	692.4	734.2	798.7	800.0
35°	881.2	904.3	795.2	760.1	726.1	701.6	728.1	770.1	797.3	900.4	882.2
37.5°	1033.4	994.7	905.4	839.4	817.7	807.9	821.9	846.3	905.2	994.1	1025.4
40°	1123.5	1112.7	991.2	935.9	852.2	878.3	870.7	937.5	986.2	1118.9	1121.7
42.5°	1261.1	1207.0	1097.7	1027.5	952.2	906.9	954.9	1044.6	1103.5	1215.6	1268.6
45°	1369.9	1300.4	1216.2	1162.8	1067.8	1034.2	1051.5	1166.3	1240.2	1317.1	1386.8
47.5°	1490.3	1415.0	1330.8	1235.9	1143.2	1197.9	1167.4	1268.4	1340.6	1450.9	1516.2
50°	1641.5	1558.2	1450.3	1372.0	1310.6	1329.8	1325.0	1397.0	1486.1	1586.6	1660.7
52.5°	1808.1	1713.9	1609.9	1537.1	1511.2	1463.6	1525.8	1555.3	1621.0	1713.1	1800.1
55°	1924.6	1830.4	1767.4	1790.9	1784.0	1707.6	1762.1	1765.1	1733.5	1766.7	1854.2
57.5°	1906.6	1816.6	1807.9	1896.4	2028.7	2102.6	2018.3	1837.1	1718.5	1703.0	1795.7
60°	1667.1	1590.1	1669.2	1868.8	2254.0	2479.0	2154.6	1782.8	1587.4	1506.6	1596.0
62.5°	1148.8	1096.8	1260.7	1572.8	2281.1	2769.4	2149.6	1549.2	1231.1	1084.5	1154.0
65°	544.6	525.7	664.1	997.2	1900.1	2691.9	1878.0	1048.2	708.7	566.1	581.8
67.5°	204.8	195.4	243.8	440.5	1196.8	2135.0	1262.4	517.1	274.1	213.1	220.4
70°	116.3	109.6	115.9	160.7	481.8	1209.3	544.6	177.4	116.5	106.1	113.1
72.5°	91.6	86.4	87.3	97.1	166.2	474.7	176.2	101.2	84.6	80.4	86.6
75°	75.6	71.0	70.8	76.2	96.9	154.1	99.6	77.4	68.5	65.5	70.4
77.5°	60.1	57.4	58.2	62.4	69.5	86.2	72.2	62.6	56.2	52.6	56.0
80°	44.0	43.6	46.6	50.5	51.8	58.0	54.1	50.5	44.9	39.7	41.1
82.5°	28.8	29.0	34.7	37.8	37.2	37.0	38.8	38.6	33.6	26.3	26.3
85°	16.5	16.9	21.3	23.8	23.4	18.6	24.6	24.8	21.5	15.9	15.4
87.5°	5.4	6.7	9.2	9.8	9.4	5.2	9.4	10.4	9.4	6.7	6.0
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)