

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: P596807

Luminaire Tested: **MSA-SA4D-827-U-5WQ**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P596807  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-4)  
Test Lab: INNOVATIONS CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: MSA-SA4D-827-U-5WQ  
Description: MESA POST TOP DECORATIVE LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS.  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20746 lumens  
Efficiency: N/A  
Efficacy: 80.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G3

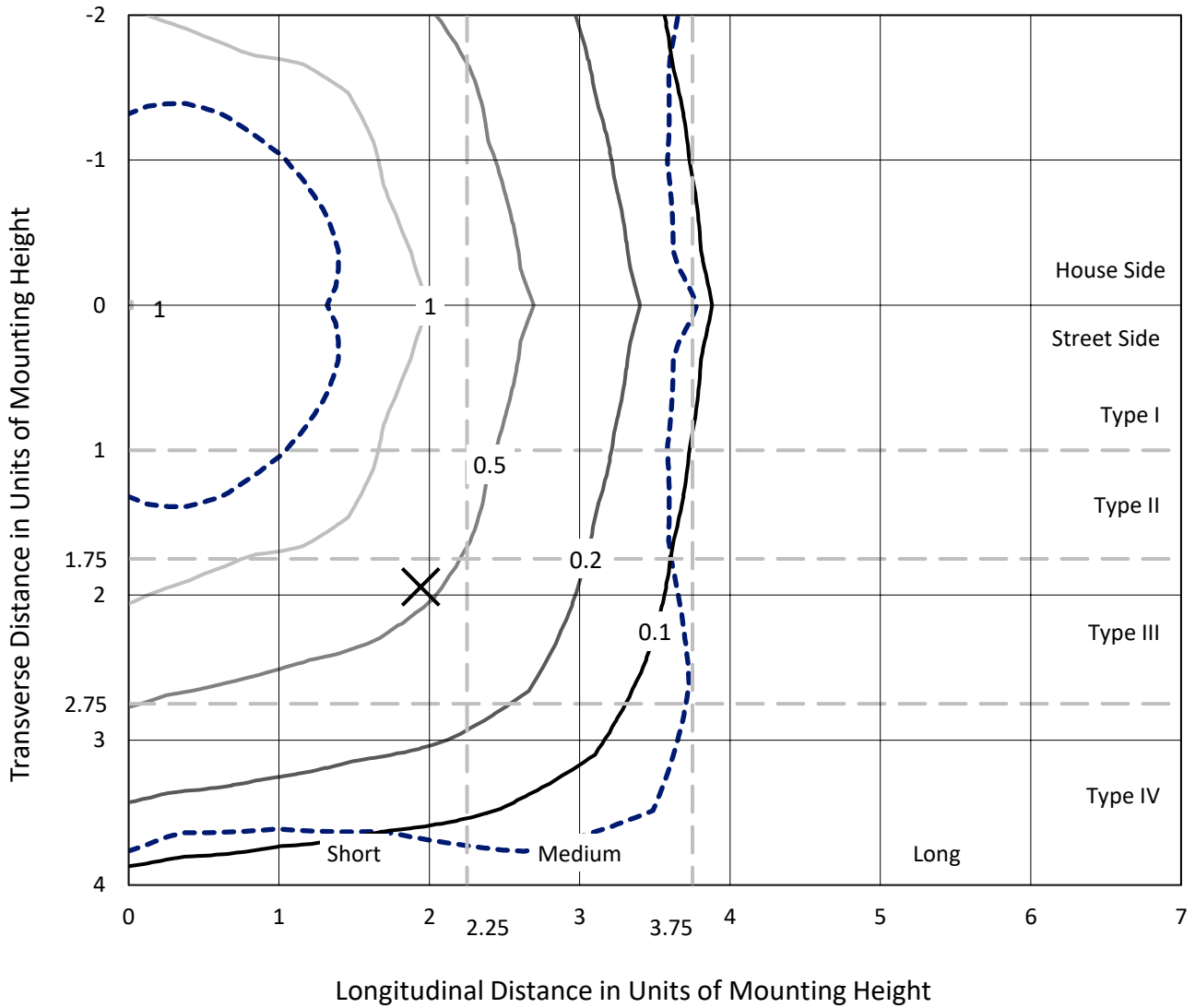
Input Watts (W): 259  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

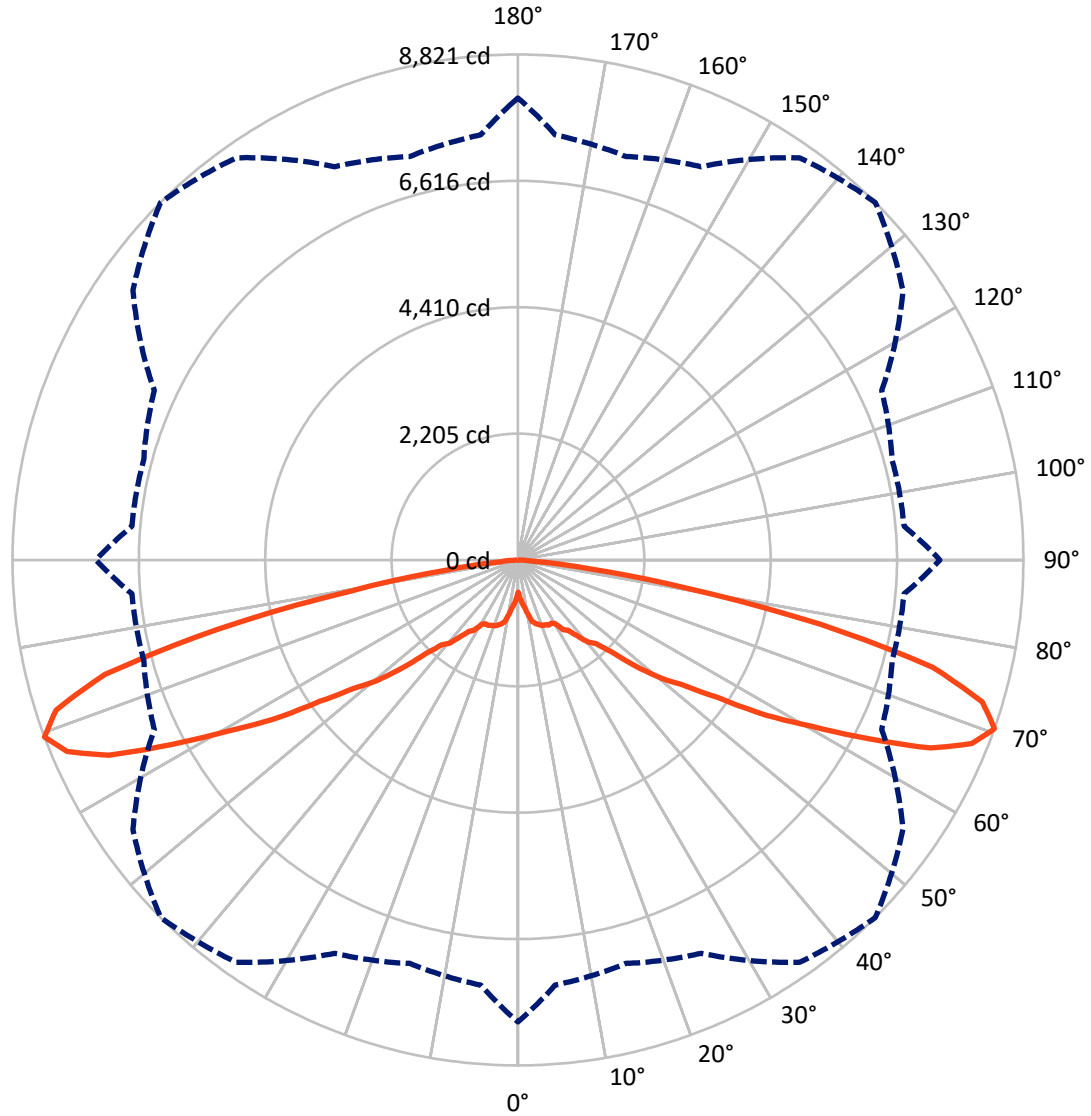
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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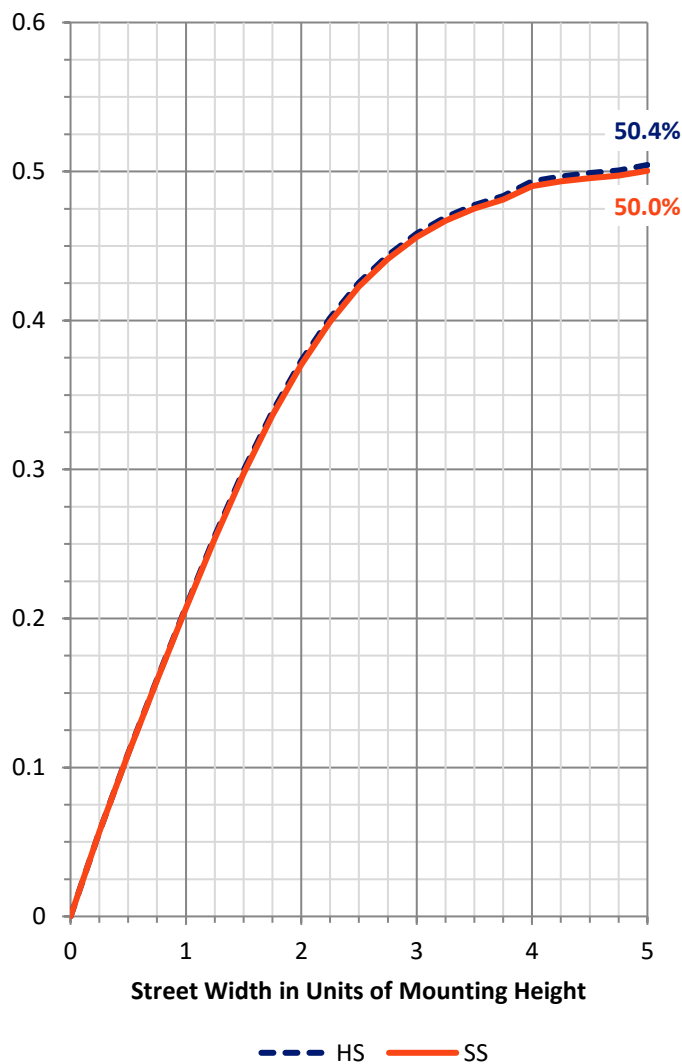
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10373.0	0.0	10373.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	10373.0	0.0	10373.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	20746.0	0.0	20746.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.6	0.4
10°-20°	326.6	1.6
20°-30°	617.4	3.0
30°-40°	1075.4	5.2
40°-50°	2055.9	9.9
50°-60°	3986.6	19.2
60°-70°	6980.7	33.6
70°-80°	5246.4	25.3
80°-90°	375.4	1.8
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°	20746.0	100.0
0°-180°	20746.0	100.0

**Coefficient of Utilization**

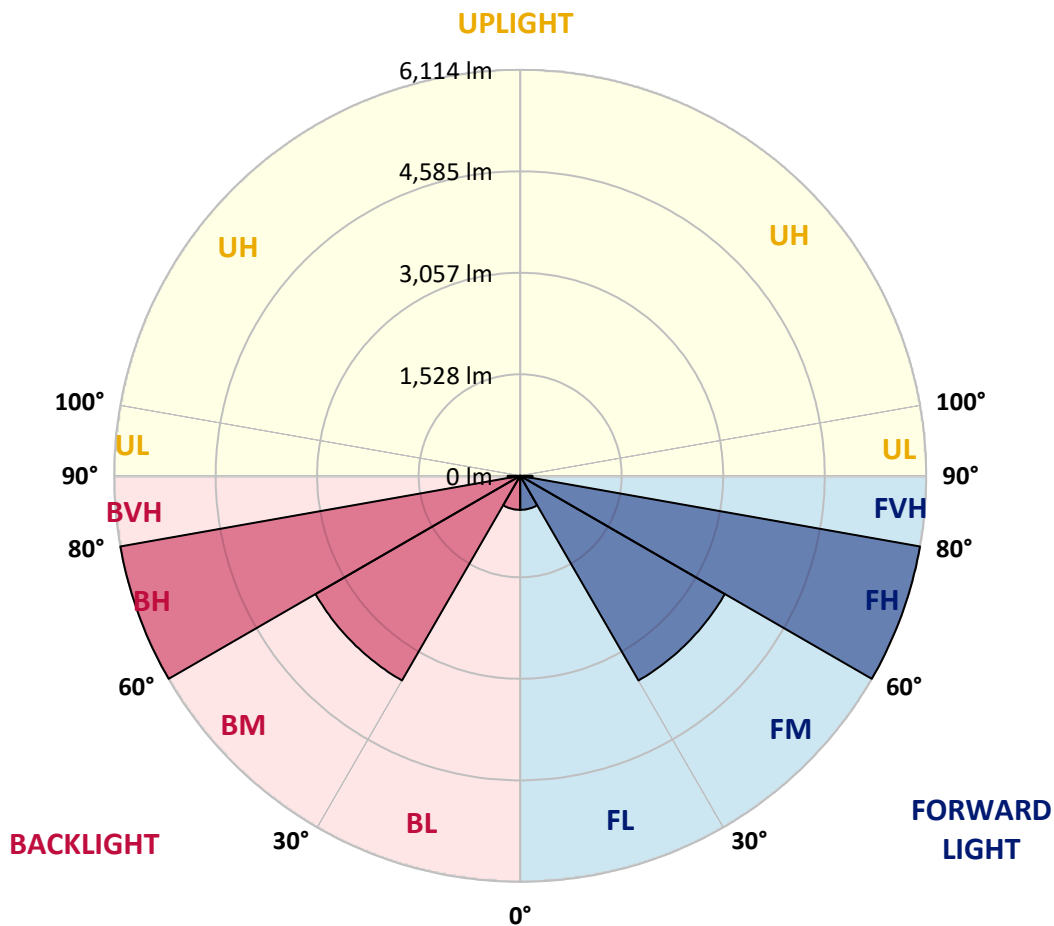


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	512.8	2.5			
FM (30°-60°)	3559.0	17.2			
FH (60°-80°)	6113.5	29.5			G3/7500
FVH (80°-90°)	187.7	0.9			G2/225
BL (0°-30°)	512.8	2.5	B2/1000		
BM (30°-60°)	3559.0	17.2	B3/5000		
BH (60°-80°)	6113.5	29.5	B5		G3/7500
BVH (80°-90°)	187.7	0.9			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G3**  
 Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0
2.5°	682.5	672.0	639.0	640.6	655.9	657.5	659.1	639.0	634.2	675.2	677.7
5°	866.8	842.6	818.5	808.8	794.4	754.1	798.4	803.2	812.9	844.3	858.7
7.5°	989.9	960.1	927.1	907.0	867.6	834.6	870.8	900.6	919.9	955.3	975.4
10°	1013.3	995.6	993.9	958.5	951.3	963.4	961.0	961.8	990.7	991.5	1003.6
12.5°	1086.5	1099.4	1074.4	1062.4	1069.6	1099.4	1075.2	1064.8	1072.0	1105.0	1091.3
15°	1182.3	1197.6	1159.7	1140.4	1121.1	1149.3	1124.3	1142.8	1166.2	1190.3	1178.3
17.5°	1288.5	1289.3	1237.8	1166.2	1183.1	1187.1	1178.3	1163.0	1229.8	1287.7	1282.1
20°	1346.5	1345.7	1257.1	1159.7	1209.6	1218.5	1210.4	1158.1	1258.7	1338.4	1336.0
22.5°	1406.0	1388.3	1282.1	1203.2	1221.7	1229.0	1210.4	1205.6	1282.1	1393.1	1392.3
25°	1438.2	1453.5	1336.8	1287.7	1272.4	1255.5	1271.6	1279.7	1352.9	1461.5	1430.2
27.5°	1538.8	1513.9	1352.9	1348.1	1315.9	1249.1	1304.6	1344.0	1348.1	1523.5	1555.7
30°	1629.8	1639.4	1425.3	1432.6	1373.8	1289.3	1375.4	1438.2	1450.3	1641.0	1637.8
32.5°	1726.3	1730.4	1554.1	1479.3	1454.3	1451.1	1418.1	1472.8	1567.8	1720.7	1727.1
35°	1872.8	1905.8	1669.2	1568.6	1537.2	1505.0	1534.0	1583.1	1671.6	1901.0	1884.9
37.5°	2208.4	2156.1	1919.5	1711.0	1690.1	1677.2	1700.6	1736.0	1917.1	2161.7	2236.6
40°	2442.6	2417.7	2095.7	1946.8	1814.9	1884.1	1829.3	1966.2	2115.9	2419.3	2467.6
42.5°	2805.6	2694.5	2363.7	2179.4	2042.6	1993.5	2024.1	2202.8	2393.5	2731.5	2826.5
45°	3154.1	2982.6	2699.4	2536.8	2329.1	2277.6	2318.7	2528.7	2749.3	3016.5	3183.9
47.5°	3509.8	3332.7	3021.3	2786.3	2616.5	2770.2	2635.8	2835.4	3055.1	3365.7	3514.6
50°	3879.2	3682.8	3375.4	3119.5	3105.0	3241.0	3080.0	3182.2	3385.9	3707.8	3883.2
52.5°	4303.4	4091.7	3784.2	3611.2	3645.0	3636.2	3604.0	3585.5	3785.9	4102.1	4310.6
55°	4808.0	4579.4	4333.9	4254.3	4347.6	4247.0	4294.5	4288.1	4317.0	4543.2	4787.0
57.5°	5418.0	5159.7	4913.4	4895.7	5015.6	5110.6	5026.1	4904.5	4853.8	5073.6	5352.8
60°	6186.6	5869.5	5599.1	5543.6	5885.6	5884.8	5808.4	5536.3	5517.0	5765.7	6102.1
62.5°	7035.7	6649.4	6354.0	6265.5	6801.5	6861.9	6623.6	6135.9	6235.7	6436.1	6835.3
65°	7756.8	7292.4	7017.2	6993.0	7648.2	7914.6	7388.2	6721.0	6753.2	6919.8	7352.0
67.5°	8226.8	7667.5	7448.6	7565.3	8379.7	8546.3	8057.0	7112.2	6997.9	7067.1	7583.8
70°	8061.8	7447.0	7289.2	7572.5	8568.9	8820.8	8201.1	7002.7	6759.6	6762.9	7363.3
72.5°	6812.0	6226.9	6301.7	6821.6	8121.4	8474.7	7534.7	6325.0	5827.7	5815.6	6360.5
75°	4504.6	4113.4	4408.8	5219.2	6751.6	7474.3	6243.0	4957.7	4333.9	4131.1	4552.0
77.5°	1970.2	1920.3	2169.0	3084.9	4602.7	5386.6	4472.4	3238.6	2357.3	1960.5	2141.6
80°	528.0	516.7	648.7	1170.2	2240.6	2966.6	2420.1	1291.7	674.4	490.9	520.7
82.5°	192.4	197.2	240.6	327.6	738.0	1249.1	804.0	377.5	255.1	209.3	209.3
85°	83.7	81.3	116.7	131.2	201.2	282.5	231.0	160.2	128.8	96.6	92.6
87.5°	22.5	28.2	39.4	41.0	52.3	42.7	61.2	56.3	48.3	33.8	27.4
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)