

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: P597136

Luminaire Tested: **MSA-SA4C-835-U-5NQ**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P597136  
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-SA4C-835-U-5NQ  
Description: MESA POST TOP DECORATIVE LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS.  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20298 lumens  
Efficiency: N/A  
Efficacy: 90.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G2

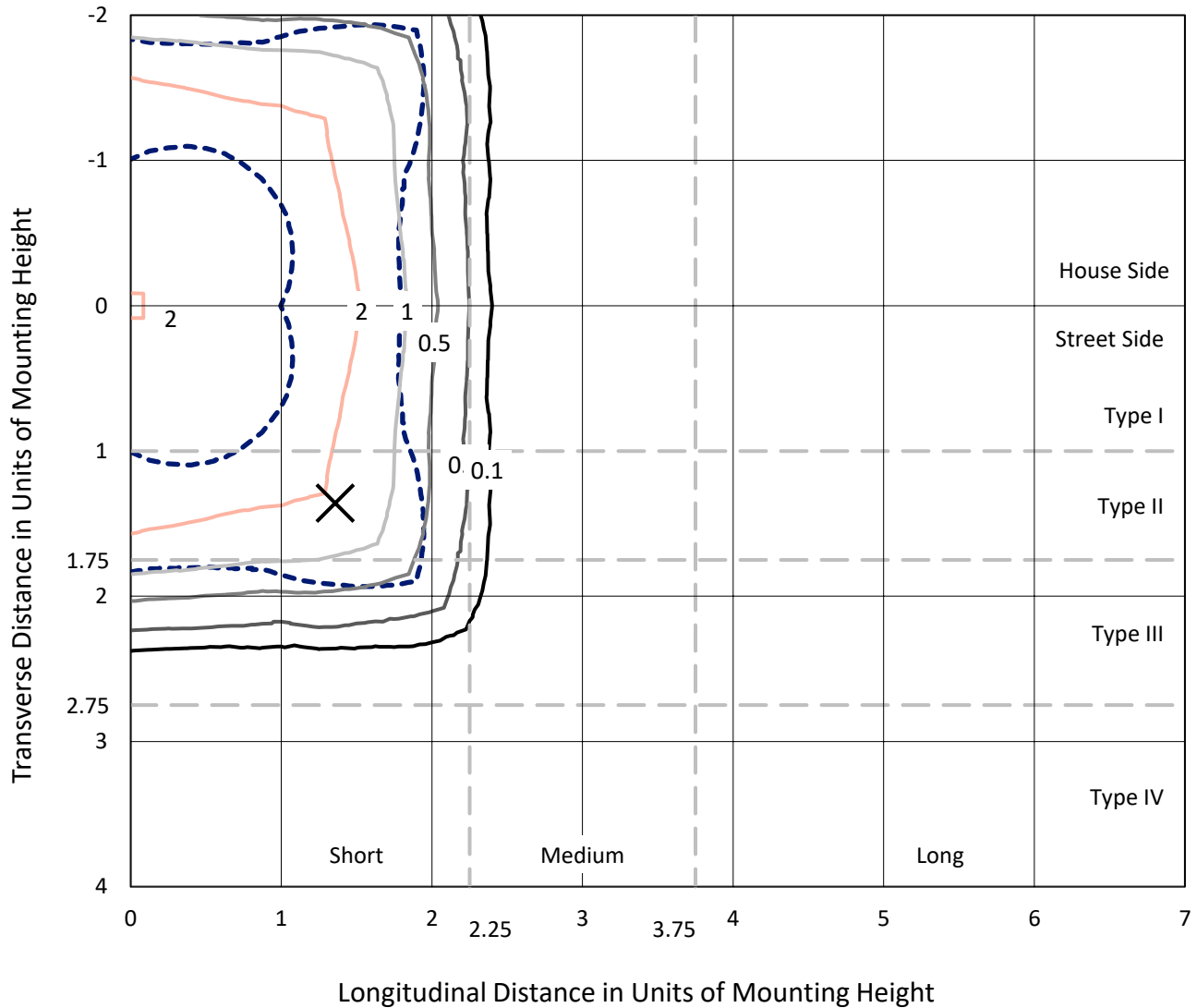
Input Watts (W): 225  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

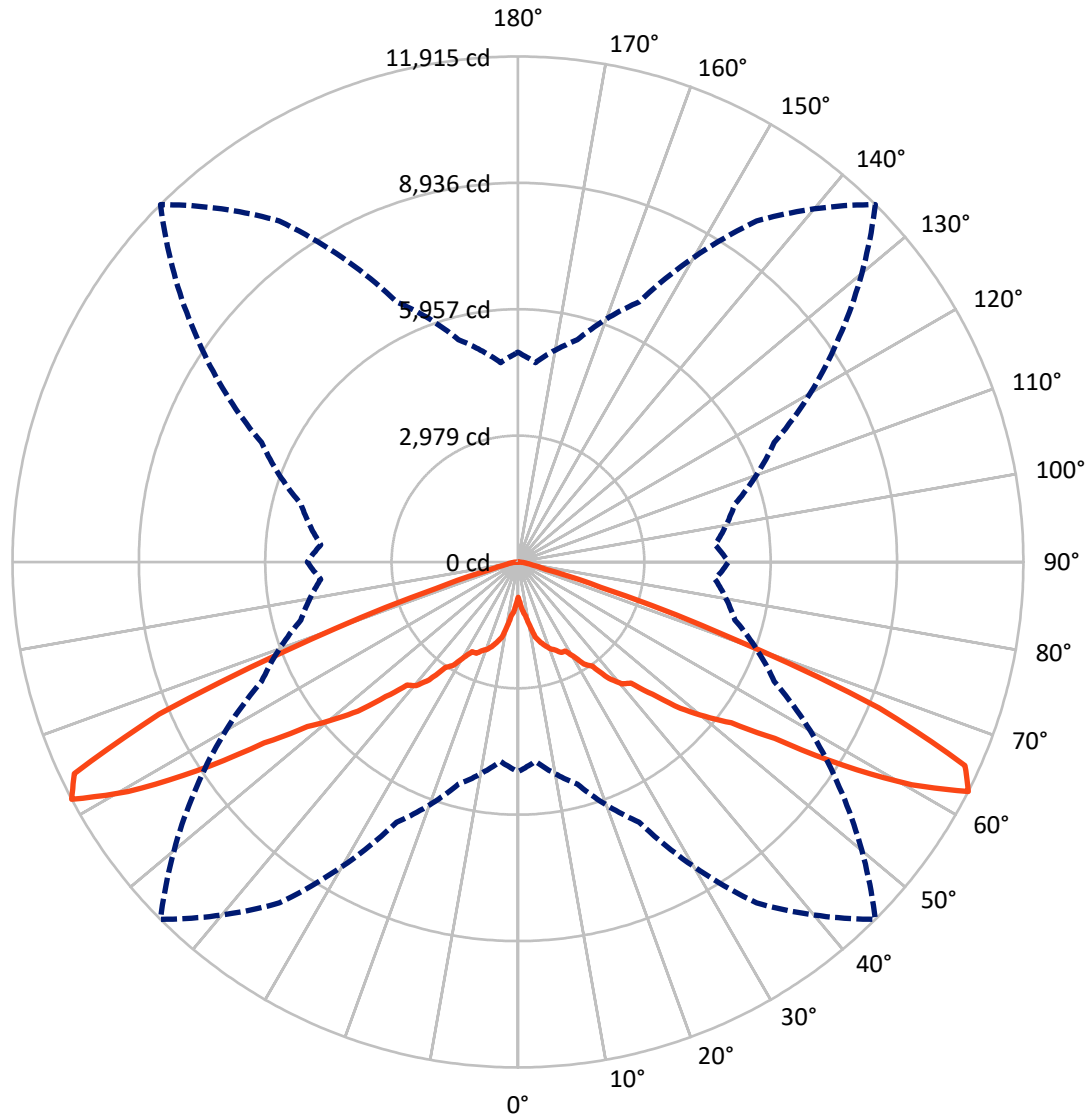
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 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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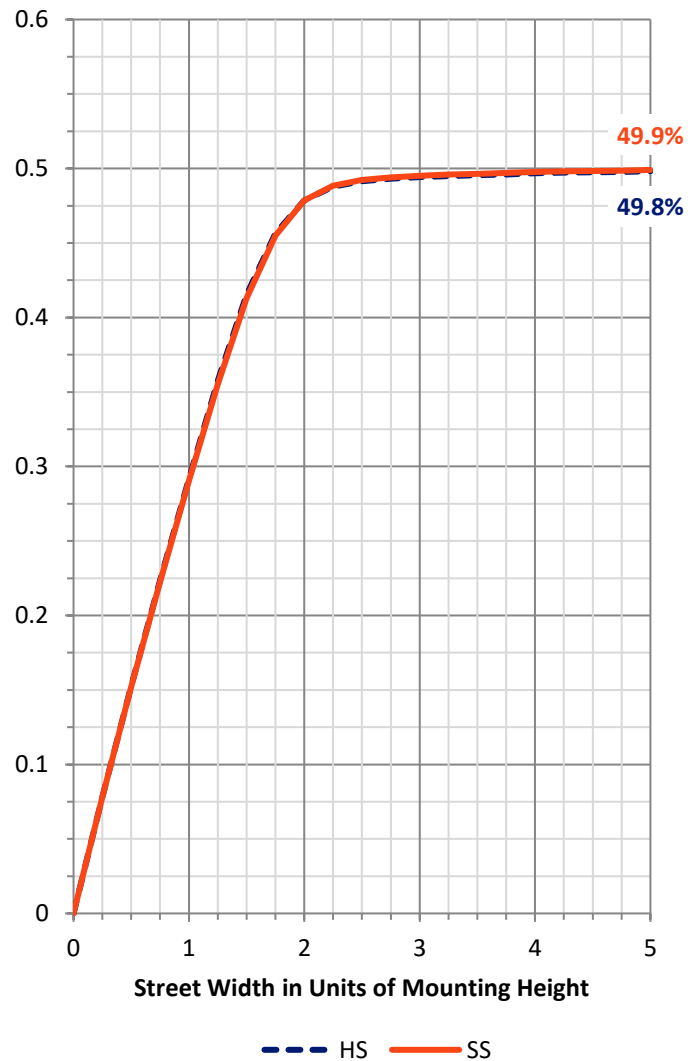
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10149.0	0.0	10149.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	10149.0	0.0	10149.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	20298.0	0.0	20298.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.1	0.6
10°-20°	551.5	2.7
20°-30°	1155.9	5.7
30°-40°	2178.0	10.7
40°-50°	3952.9	19.5
50°-60°	6679.1	32.9
60°-70°	4993.0	24.6
70°-80°	558.6	2.8
80°-90°	103.9	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°	20298.0	100.0
0°-180°	20298.0	100.0



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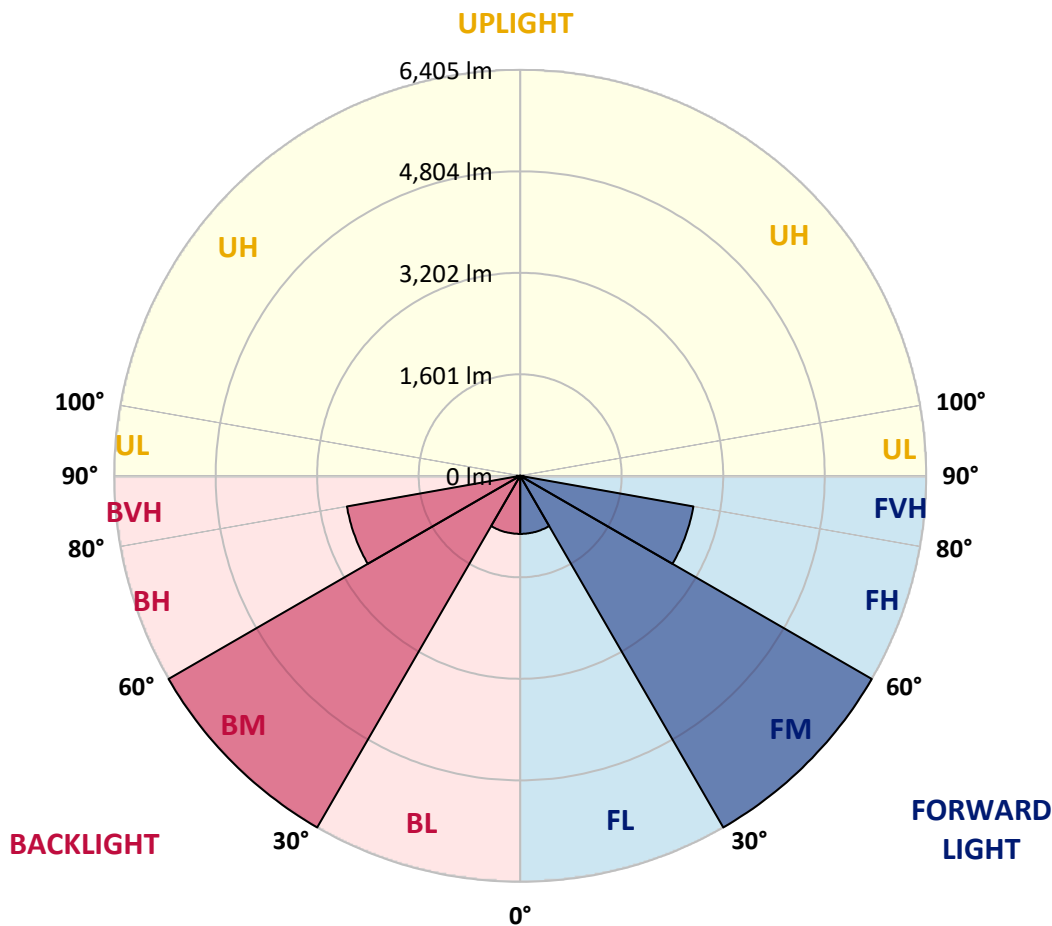
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	916.3	4.5			
FM (30°-60°)	6405.0	31.6			
FH (60°-80°)	2775.8	13.7			G2/5000
FVH (80°-90°)	52.0	0.3			G1/100
BL (0°-30°)	916.3	4.5	B2/1000		
BM (30°-60°)	6405.0	31.6	B4/8500		
BH (60°-80°)	2775.8	13.7	B4/5000		G2/5000
BVH (80°-90°)	52.0	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9
2.5°	1009.1	991.0	927.4	949.7	972.8	969.5	963.7	946.4	930.7	995.9	1009.1
5°	1286.6	1245.3	1223.0	1204.8	1200.7	1156.1	1217.2	1210.6	1231.3	1266.0	1299.8
7.5°	1507.9	1469.1	1410.5	1398.1	1331.2	1281.6	1334.5	1399.7	1420.4	1484.0	1522.0
10°	1588.8	1555.0	1565.7	1510.4	1507.1	1521.1	1509.6	1524.4	1578.9	1571.5	1599.6
12.5°	1770.5	1776.3	1741.6	1727.6	1755.7	1816.8	1764.7	1746.6	1733.4	1789.5	1806.9
15°	1940.6	1974.5	1917.5	1908.4	1896.9	1953.8	1897.7	1924.9	1948.9	1960.5	1953.8
17.5°	2181.8	2183.4	2119.8	2018.3	2056.2	2074.4	2049.6	2002.6	2115.7	2172.7	2176.0
20°	2340.3	2346.1	2220.6	2062.0	2169.4	2185.9	2173.5	2075.2	2225.5	2320.5	2316.4
22.5°	2511.3	2491.4	2321.3	2205.7	2243.7	2253.6	2227.2	2214.8	2320.5	2493.1	2467.5
25°	2626.1	2662.4	2493.1	2418.8	2386.6	2363.4	2397.3	2403.9	2512.1	2669.0	2582.3
27.5°	2900.2	2837.5	2572.4	2600.5	2531.9	2375.8	2524.5	2606.2	2583.1	2850.7	2915.9
30°	3143.8	3145.5	2773.9	2827.5	2700.4	2574.0	2735.1	2853.1	2824.2	3167.0	3105.0
32.5°	3455.2	3466.7	3121.5	2977.8	2892.0	2868.0	2848.2	2978.7	3158.7	3436.2	3441.9
35°	3791.3	3890.4	3421.3	3270.2	3124.0	3018.3	3132.3	3313.1	3430.4	3873.8	3795.4
37.5°	4446.1	4279.3	3895.3	3611.2	3517.9	3475.8	3536.1	3641.0	3894.5	4276.8	4411.4
40°	4833.4	4787.2	4264.4	4026.6	3666.6	3778.9	3745.8	4033.2	4243.0	4813.6	4826.0
42.5°	5425.5	5192.6	4722.8	4420.5	4096.8	3901.9	4108.4	4494.0	4747.5	5229.8	5457.7
45°	5893.7	5594.8	5232.3	5002.7	4593.9	4449.4	4523.7	5017.6	5335.5	5666.7	5966.4
47.5°	6411.5	6087.8	5725.3	5317.3	4918.5	5153.8	5022.5	5456.9	5767.4	6242.2	6523.0
50°	7062.3	6703.9	6239.8	5902.8	5638.6	5721.2	5700.5	6010.2	6393.4	6826.1	7144.8
52.5°	7779.1	7373.6	6926.0	6613.0	6501.5	6296.7	6564.3	6691.5	6973.9	7370.3	7744.4
55°	8280.3	7874.8	7604.0	7704.7	7675.0	7346.3	7580.9	7594.1	7457.8	7600.7	7977.2
57.5°	8202.7	7815.4	7778.2	8158.9	8727.9	9045.8	8683.3	7903.8	7393.4	7326.5	7725.4
60°	7172.1	6840.9	7181.2	8040.0	9697.4	10665.2	9269.6	7670.0	6829.4	6481.7	6866.5
62.5°	4942.4	4718.6	5423.9	6766.6	9813.8	11914.7	9248.2	6665.0	5296.7	4665.8	4964.7
65°	2342.8	2261.9	2857.3	4290.0	8174.6	11581.0	8079.6	4509.7	3048.9	2435.3	2503.0
67.5°	881.1	840.7	1048.8	1895.2	5148.9	9185.4	5431.3	2224.7	1179.2	916.6	948.0
70°	500.4	471.5	498.8	691.2	2072.8	5202.6	2342.8	763.0	501.3	456.7	486.4
72.5°	393.9	371.6	375.7	417.9	715.1	2042.2	758.1	435.2	364.2	346.0	372.4
75°	325.4	305.5	304.7	327.8	417.0	663.1	428.6	332.8	294.8	281.6	303.1
77.5°	258.5	246.9	250.2	268.4	298.9	370.8	310.5	269.2	242.0	226.3	241.1
80°	189.1	187.5	200.7	217.2	223.0	249.4	232.9	217.2	193.2	170.9	176.7
82.5°	123.9	124.7	149.5	162.7	160.2	159.4	166.8	166.0	144.5	113.1	113.1
85°	71.0	72.7	91.7	102.4	100.7	80.1	105.7	106.5	92.5	68.5	66.1
87.5°	23.1	28.9	39.6	42.1	40.5	22.3	40.5	44.6	40.5	28.9	25.6
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)