

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: P368425

Luminaire Tested: **MSA-SA4B-830-U-5MQ**

Issue Date: 12/2/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P368425  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/2/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: MSA-SA4B-830-U-5MQ  
Description: MESA POST TOP DECORATIVE LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS.  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16629 lumens  
Efficiency: N/A  
Efficacy: 97.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G2

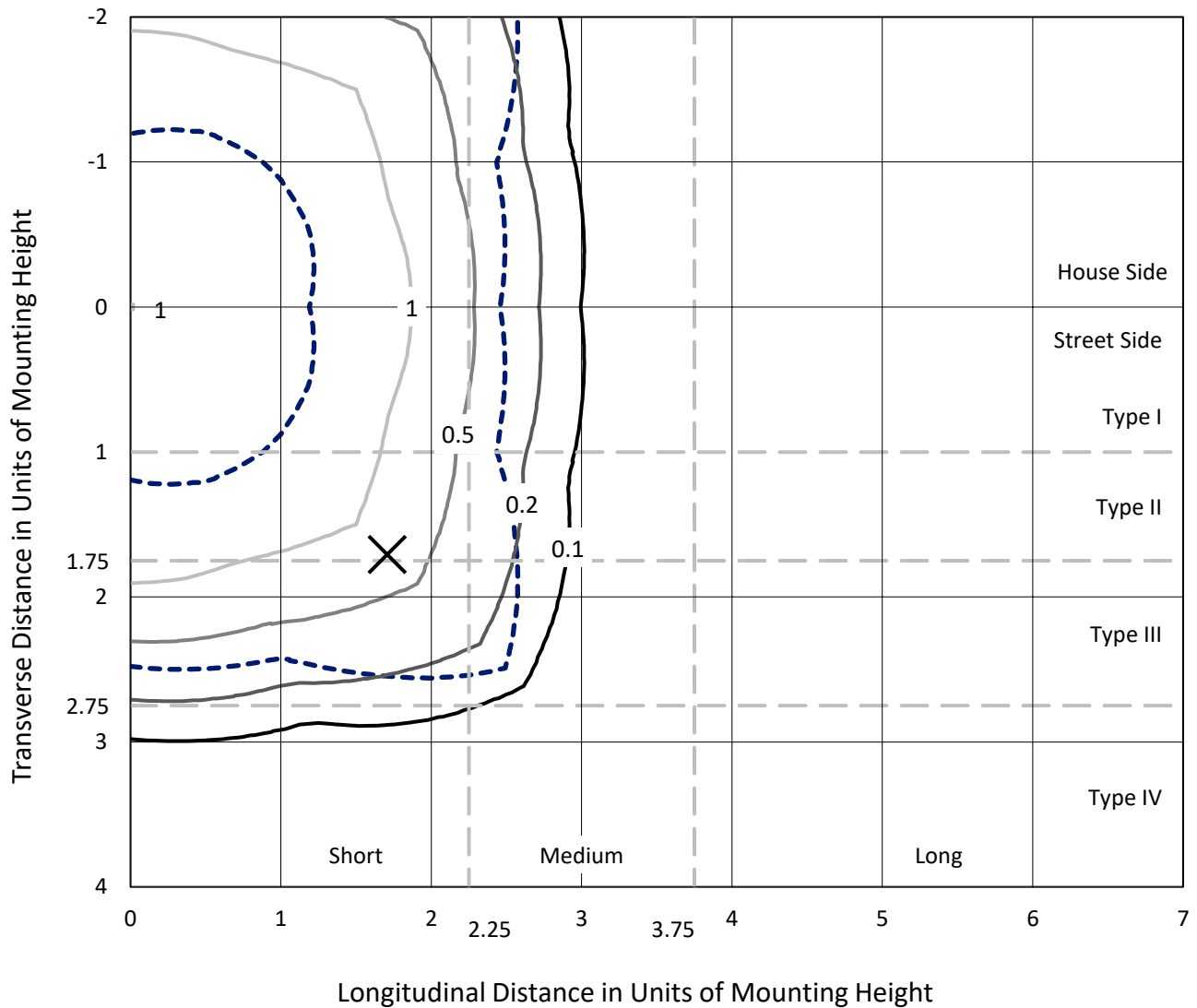
Input Watts (W): 171  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

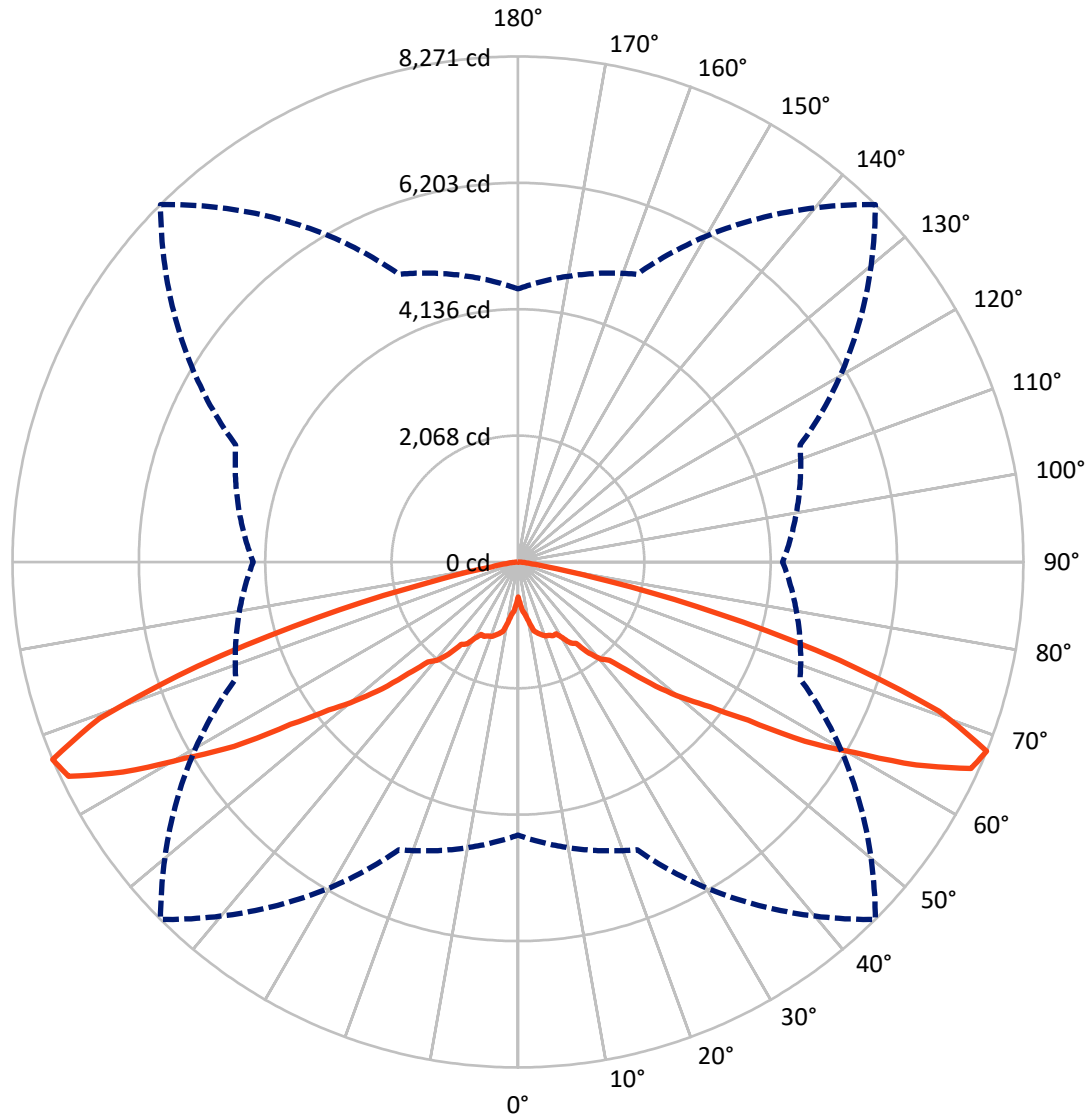
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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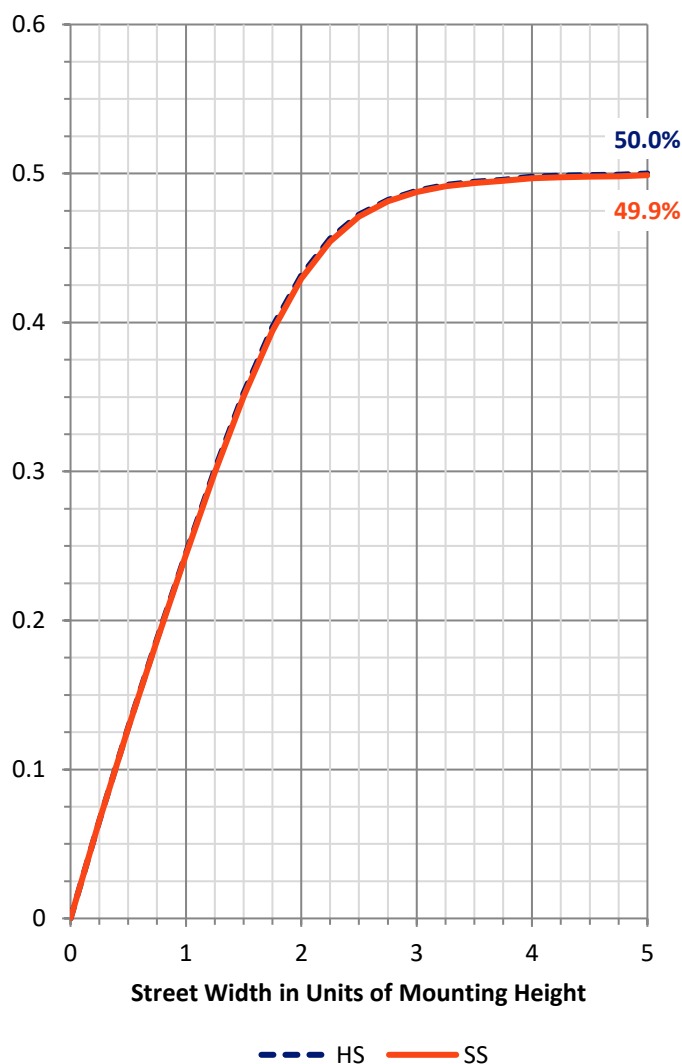
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8314.5	0.0	8314.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	8314.5	0.0	8314.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	16629.0	0.0	16629.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.0	0.5
10°-20°	336.0	2.0
20°-30°	641.1	3.9
30°-40°	1172.1	7.0
40°-50°	2272.5	13.7
50°-60°	4339.8	26.1
60°-70°	5863.5	35.3
70°-80°	1821.0	11.0
80°-90°	98.1	0.6
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°	16629.0	100.0
0°-180°	16629.0	100.0

**Coefficient of Utilization**



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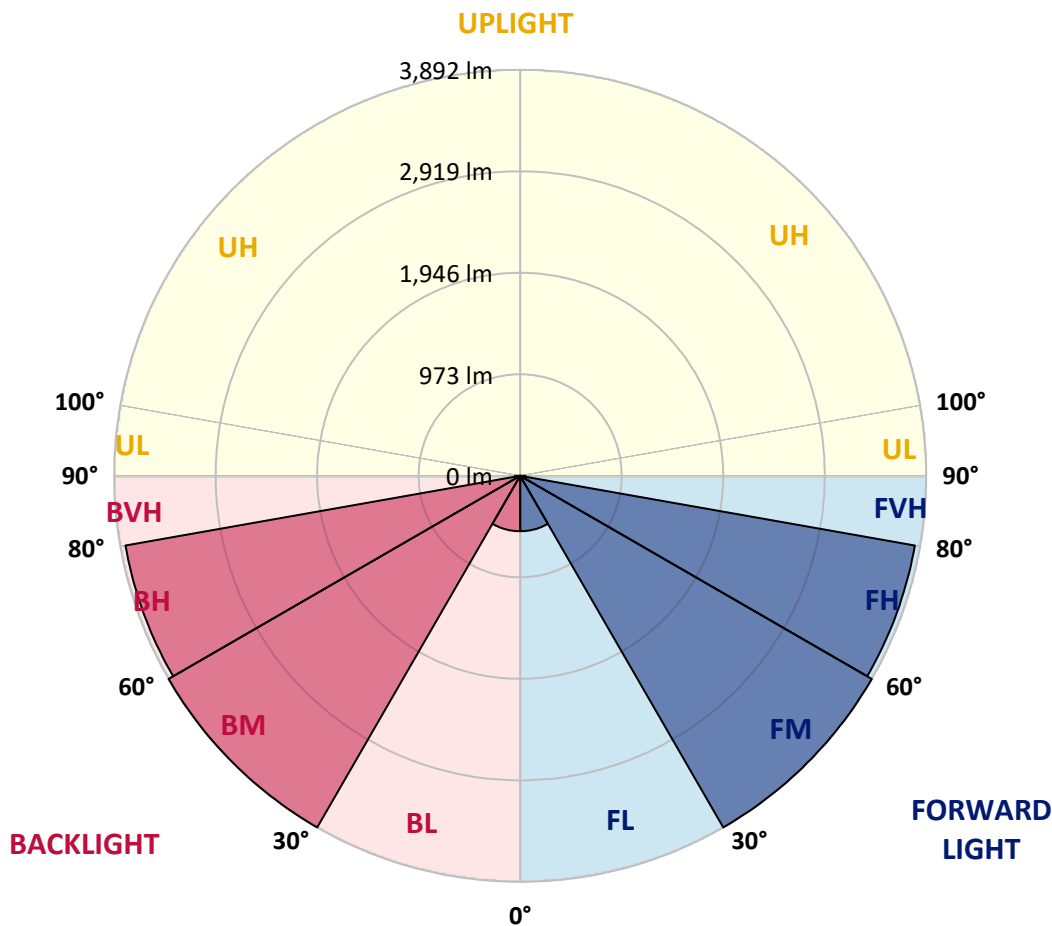
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	531.0	3.2			
FM (30°-60°)	3892.2	23.4			
FH (60°-80°)	3842.3	23.1			G2/5000
FVH (80°-90°)	49.1	0.3			G1/100
BL (0°-30°)	531.0	3.2	B2/1000		
BM (30°-60°)	3892.2	23.4	B3/5000		
BH (60°-80°)	3842.3	23.1	B4/5000		G2/5000
BVH (80°-90°)	49.1	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

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

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	569.8	569.8	569.8	569.8	569.8
2.5°	701.5	656.6	677.1	656.6	701.5
5°	891.7	844.8	803.7	833.2	894.3
7.5°	1024.7	954.6	867.9	946.9	1018.9
10°	1047.2	1008.0	1004.1	1003.5	1044.6
12.5°	1131.3	1105.0	1157.7	1107.5	1133.9
15°	1196.8	1182.1	1205.8	1200.7	1199.4
17.5°	1298.3	1198.1	1252.1	1192.3	1295.1
20°	1343.3	1201.3	1291.9	1194.3	1342.7
22.5°	1398.6	1277.1	1304.1	1280.4	1393.4
25°	1430.0	1326.0	1335.6	1327.3	1430.7
27.5°	1559.2	1433.9	1331.1	1451.2	1582.9
30°	1657.5	1503.9	1436.5	1505.9	1669.7
32.5°	1799.4	1608.6	1582.3	1634.3	1821.9
35°	1975.5	1784.7	1636.9	1785.3	2012.7
37.5°	2320.5	1944.6	1892.6	2001.2	2346.2
40°	2563.9	2197.1	2086.0	2237.6	2605.7
42.5°	2937.8	2480.4	2198.4	2501.0	3002.1
45°	3286.0	2824.1	2556.9	2847.9	3332.9
47.5°	3654.1	3139.6	3039.3	3169.1	3688.8
50°	4089.1	3566.8	3496.7	3600.2	4103.8
52.5°	4602.4	4138.5	3931.7	4157.8	4607.5
55°	5212.0	4618.4	4572.2	4671.1	5219.7
57.5°	5808.2	5240.3	5537.1	5246.1	5704.8
60°	6233.5	5813.3	6330.5	5665.6	6004.1
62.5°	6260.5	6238.0	7318.6	5987.4	5939.9
65°	5677.1	6066.5	8146.0	5870.5	5391.9
67.5°	4468.7	5096.4	8271.3	4997.5	4331.9
70°	2808.1	3528.9	7312.1	3664.4	2887.7
72.5°	1295.1	1901.6	5506.3	2140.6	1369.0
75°	463.8	727.9	3397.2	781.8	485.0
77.5°	263.4	294.9	1501.4	296.2	272.4
80°	169.6	183.7	433.6	194.0	165.1
82.5°	96.4	128.5	190.2	136.2	88.7
85°	52.0	81.6	84.2	83.5	52.0
87.5°	18.6	32.1	18.6	36.6	17.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)