

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: P368227

Luminaire Tested: **MSA-SA4A-740-U-5MQ**

Issue Date: 12/2/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P368227  
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-SA4A-740-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: 16698 lumens  
Efficiency: N/A  
Efficacy: 129.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G2

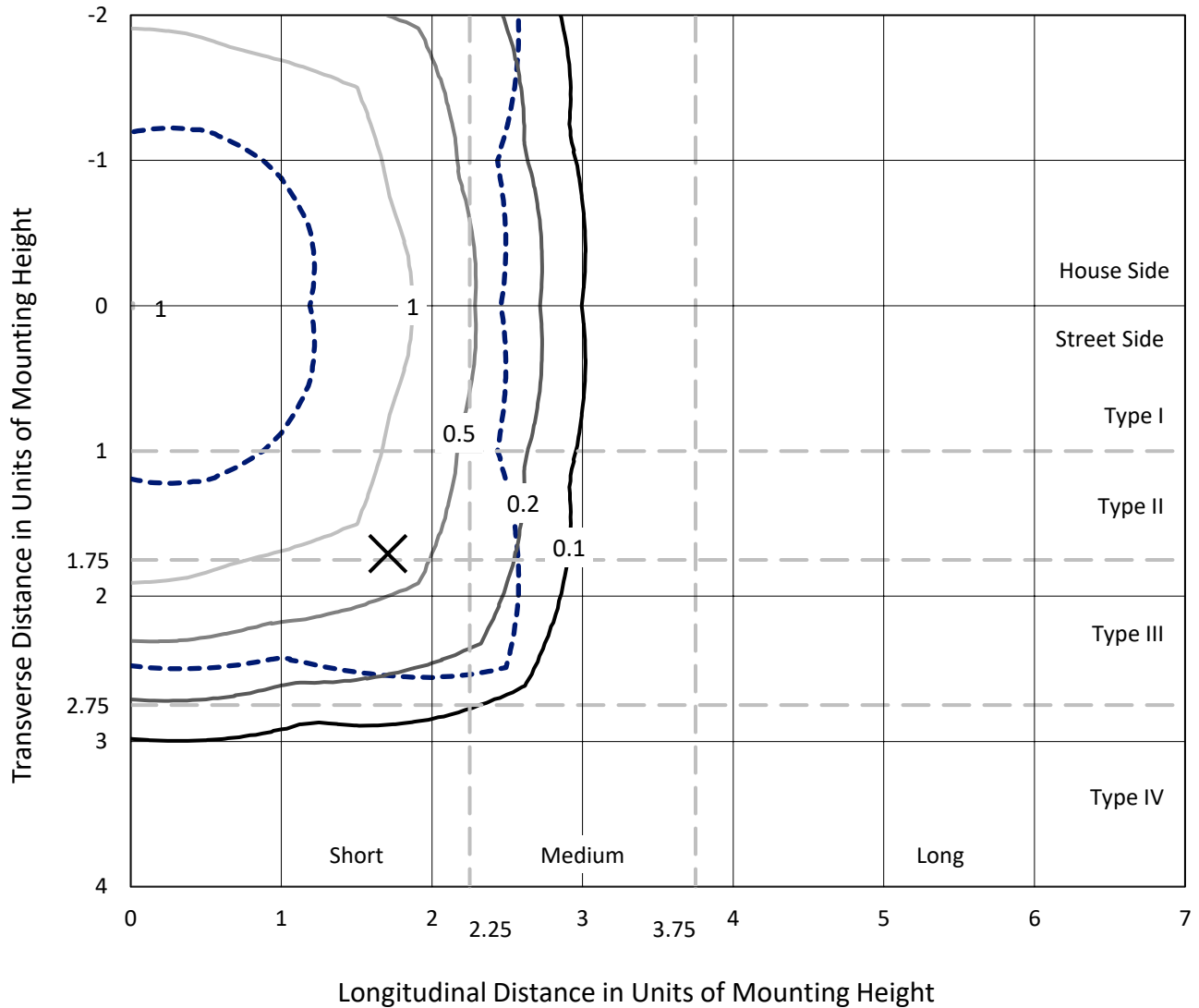
Input Watts (W): 129  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

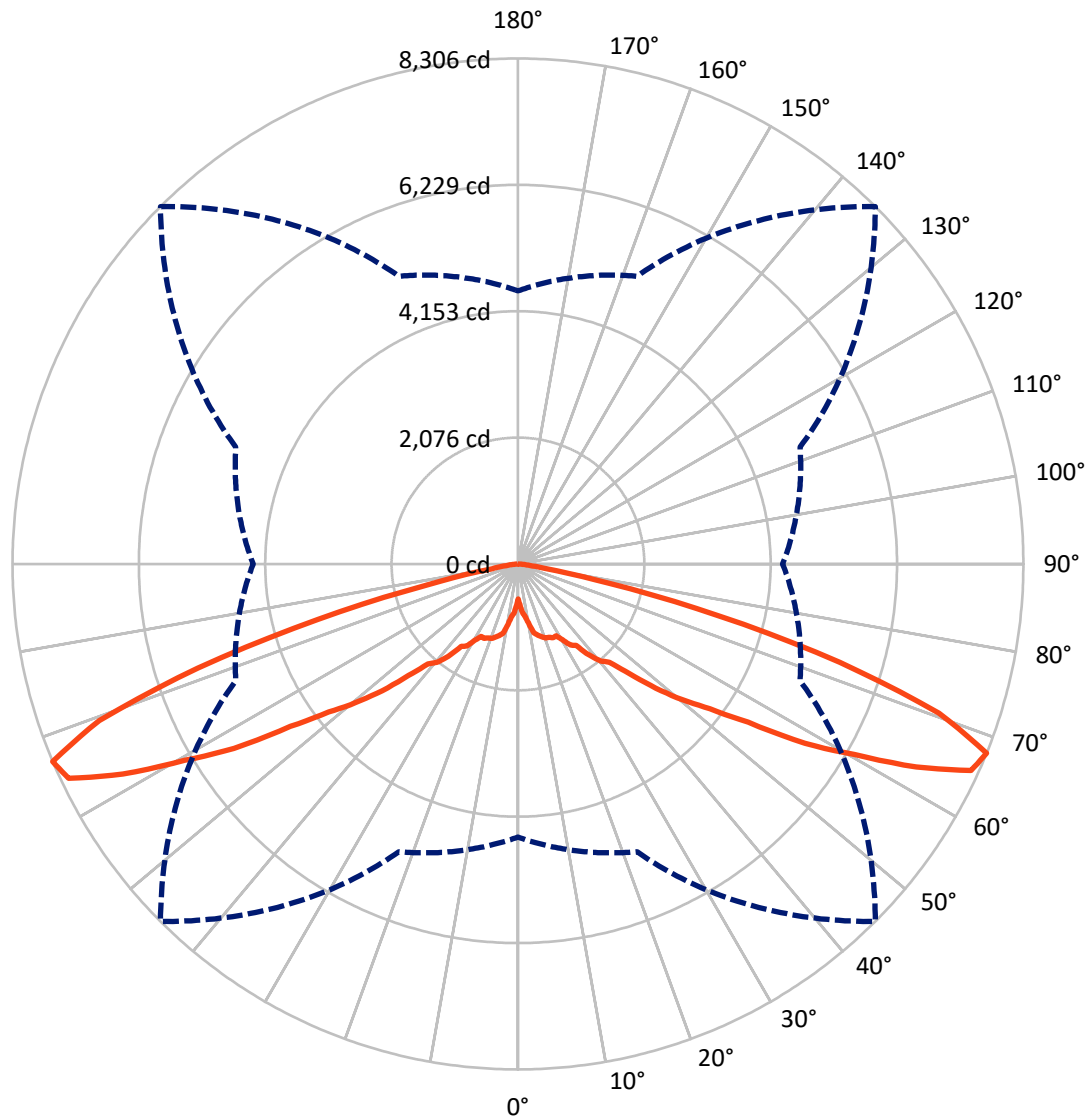
✕ Max cd  
 - - - 1/2 Max cd



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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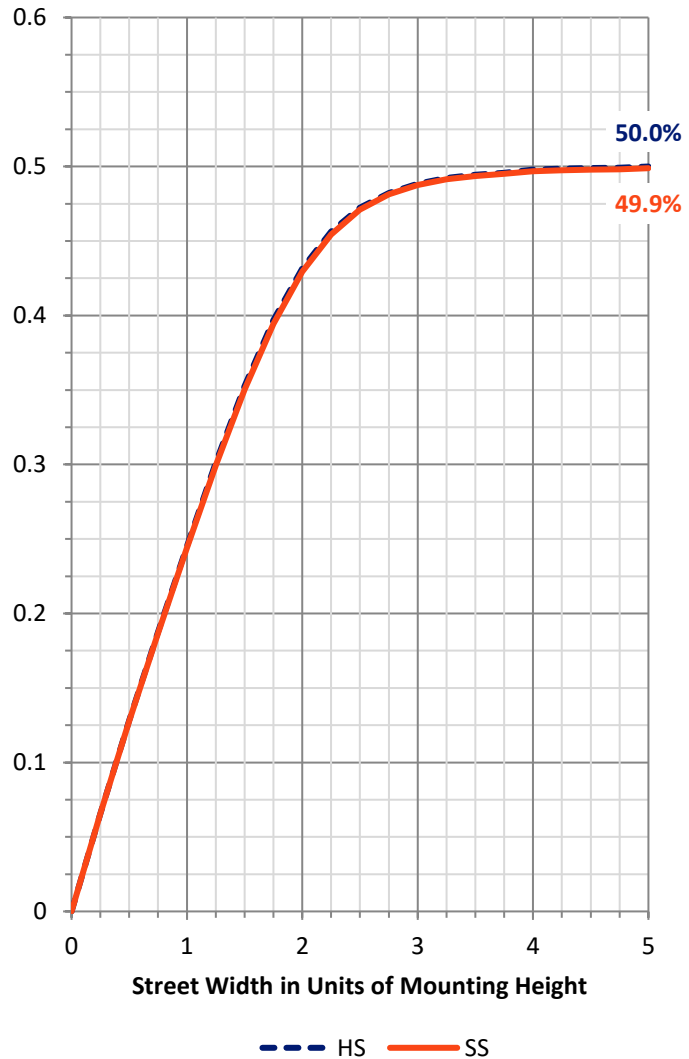
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8349.0	0.0	8349.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	8349.0	0.0	8349.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	16698.0	0.0	16698.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.3	0.5
10°-20°	337.4	2.0
20°-30°	643.7	3.9
30°-40°	1176.9	7.0
40°-50°	2282.0	13.7
50°-60°	4357.8	26.1
60°-70°	5887.8	35.3
70°-80°	1828.6	11.0
80°-90°	98.5	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°	16698.0	100.0
0°-180°	16698.0	100.0

**Coefficient of Utilization**



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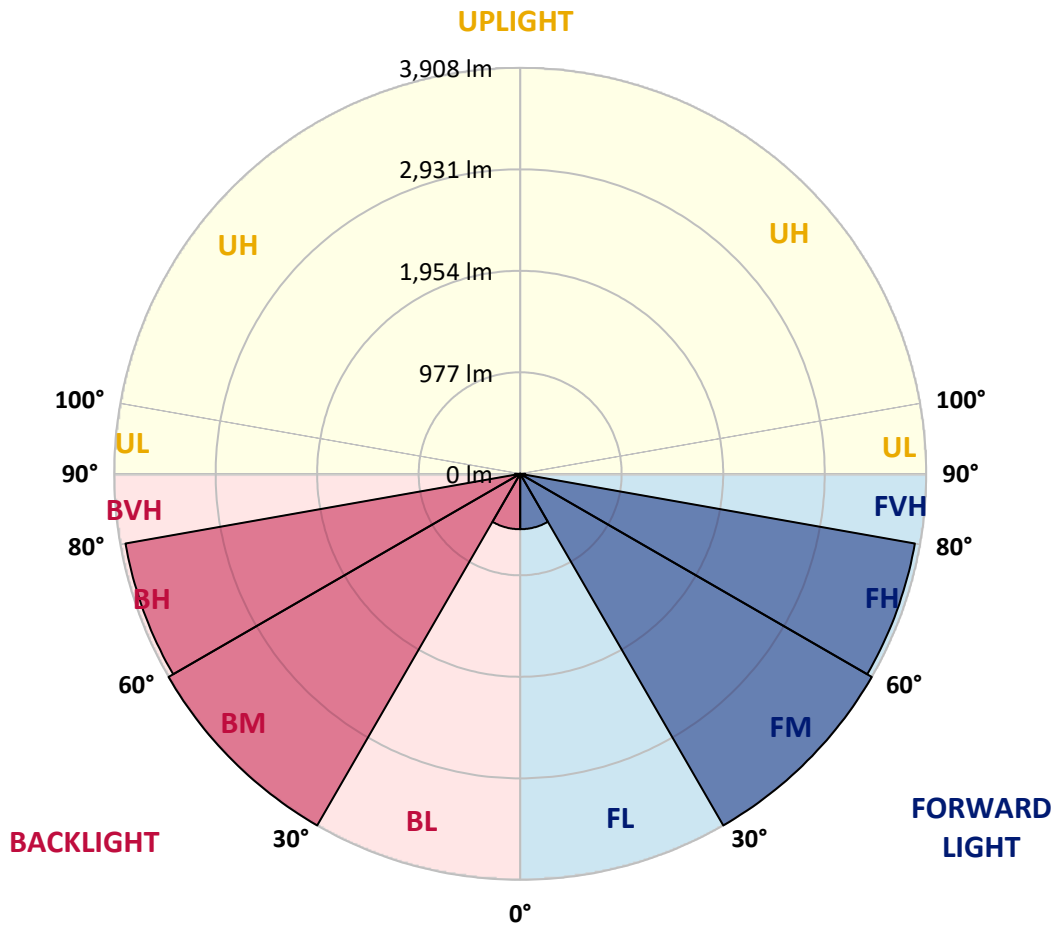
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	533.2	3.2			
FM (30°-60°)	3908.3	23.4			
FH (60°-80°)	3858.2	23.1			G2/5000
FVH (80°-90°)	49.3	0.3			G1/100
BL (0°-30°)	533.2	3.2	B2/1000		
BM (30°-60°)	3908.3	23.4	B3/5000		
BH (60°-80°)	3858.2	23.1	B4/5000		G2/5000
BVH (80°-90°)	49.3	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

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

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	572.2	572.2	572.2	572.2	572.2
2.5°	704.4	659.3	679.9	659.3	704.4
5°	895.4	848.3	807.0	836.7	898.0
7.5°	1028.9	958.6	871.5	950.9	1023.1
10°	1051.5	1012.2	1008.3	1007.6	1048.9
12.5°	1136.0	1109.6	1162.5	1112.1	1138.6
15°	1201.8	1187.0	1210.8	1205.7	1204.4
17.5°	1303.7	1203.1	1257.3	1197.3	1300.5
20°	1348.9	1206.3	1297.3	1199.2	1348.2
22.5°	1404.4	1282.4	1309.5	1285.7	1399.2
25°	1436.0	1331.5	1341.2	1332.8	1436.6
27.5°	1565.6	1439.9	1336.6	1457.3	1589.5
30°	1664.3	1510.2	1442.4	1512.1	1676.6
32.5°	1806.9	1615.3	1588.9	1641.1	1829.5
35°	1983.7	1792.1	1643.7	1792.7	2021.1
37.5°	2330.1	1952.7	1900.4	2009.5	2355.9
40°	2574.6	2206.2	2094.6	2246.9	2616.5
42.5°	2950.0	2490.7	2207.5	2511.4	3014.5
45°	3299.7	2835.8	2567.5	2859.7	3346.8
47.5°	3669.3	3152.6	3051.9	3182.3	3704.1
50°	4106.0	3581.6	3511.3	3615.1	4120.9
52.5°	4621.5	4155.7	3948.0	4175.1	4626.6
55°	5233.7	4637.6	4591.1	4690.5	5241.4
57.5°	5832.3	5262.0	5560.1	5267.8	5728.4
60°	6259.4	5837.5	6356.8	5689.1	6029.1
62.5°	6286.5	6263.9	7348.9	6012.3	5964.5
65°	5700.7	6091.6	8179.8	5894.9	5414.3
67.5°	4487.3	5117.5	8305.6	5018.2	4349.9
70°	2819.7	3543.5	7342.5	3679.6	2899.7
72.5°	1300.5	1909.5	5529.1	2149.5	1374.7
75°	465.8	730.9	3411.3	785.1	487.0
77.5°	264.5	296.1	1507.6	297.4	273.5
80°	170.3	184.5	435.4	194.8	165.8
82.5°	96.8	129.0	190.9	136.8	89.0
85°	52.3	81.9	84.5	83.9	52.3
87.5°	18.7	32.3	18.7	36.8	17.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)