

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: P368293

Luminaire Tested: **MSA-SA4A-830-U-5MQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P368293
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-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: 13269 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

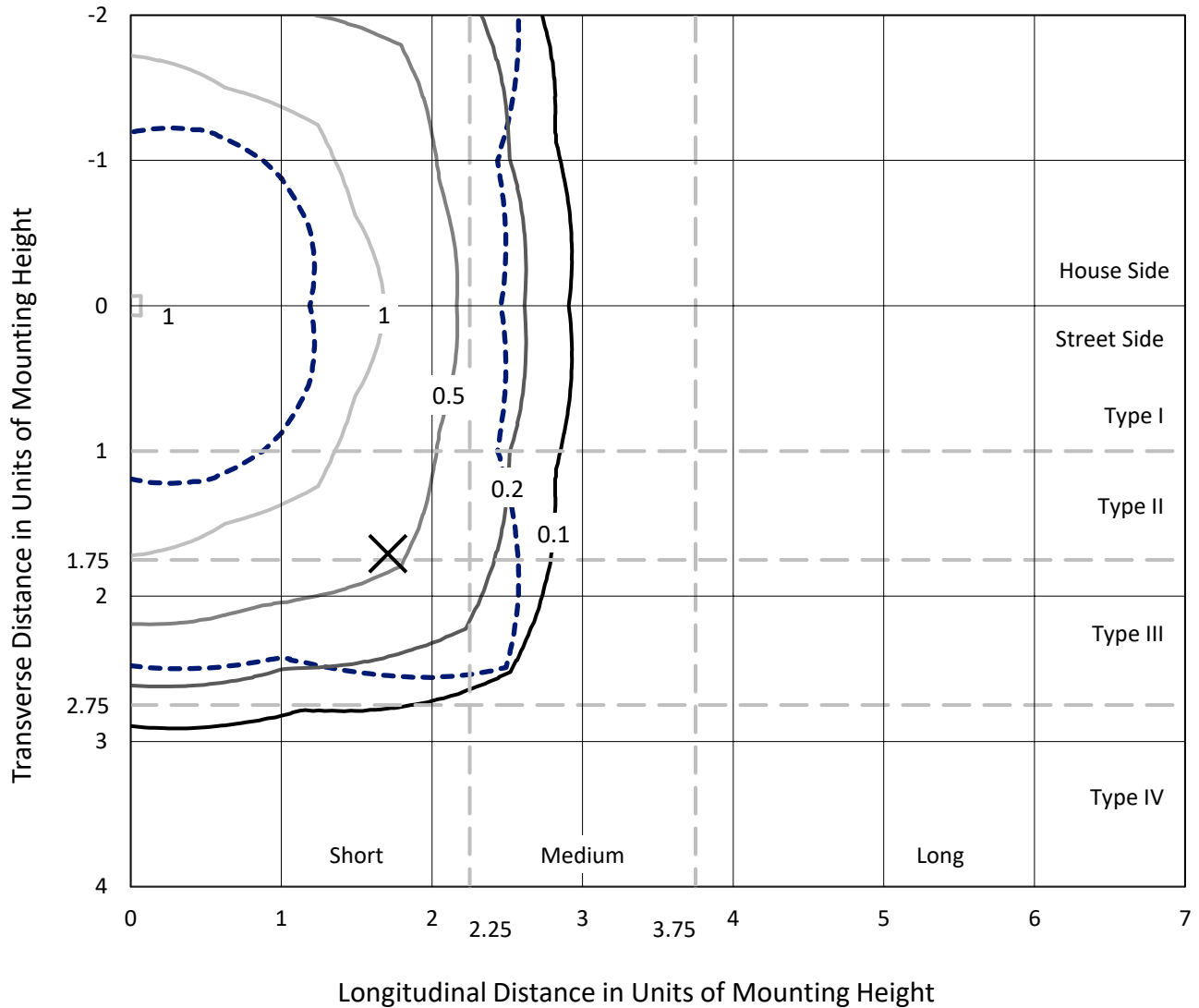
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

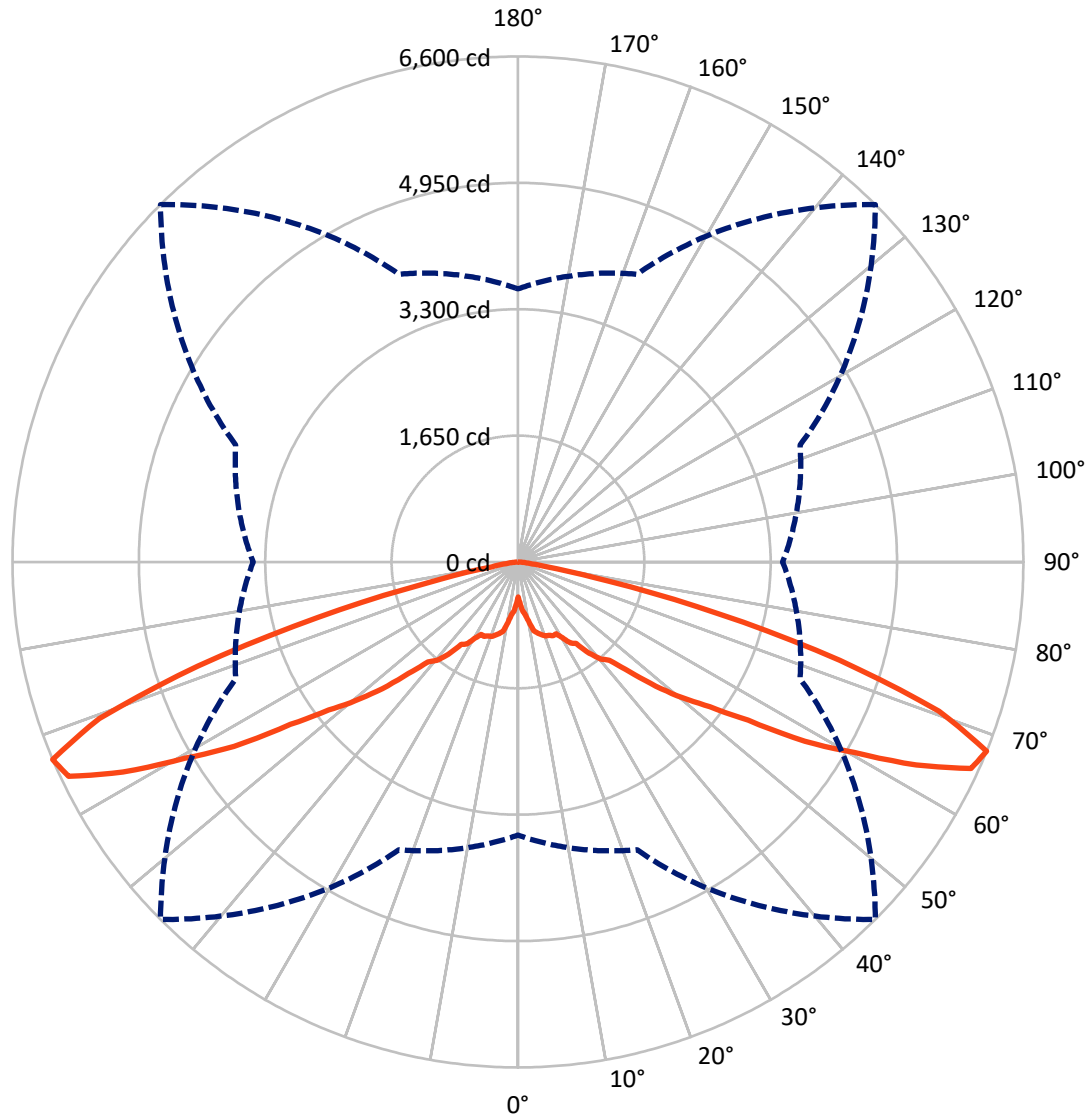
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 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
House Side	Lumens	6634.5	0.0	6634.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6634.5	0.0	6634.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	13269.0	0.0	13269.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	0.5
10°-20°	268.1	2.0
20°-30°	511.5	3.9
30°-40°	935.2	7.0
40°-50°	1813.4	13.7
50°-60°	3462.9	26.1
60°-70°	4678.7	35.3
70°-80°	1453.1	11.0
80°-90°	78.3	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°	13269.0	100.0
0°-180°	13269.0	100.0

Coefficient of Utilization



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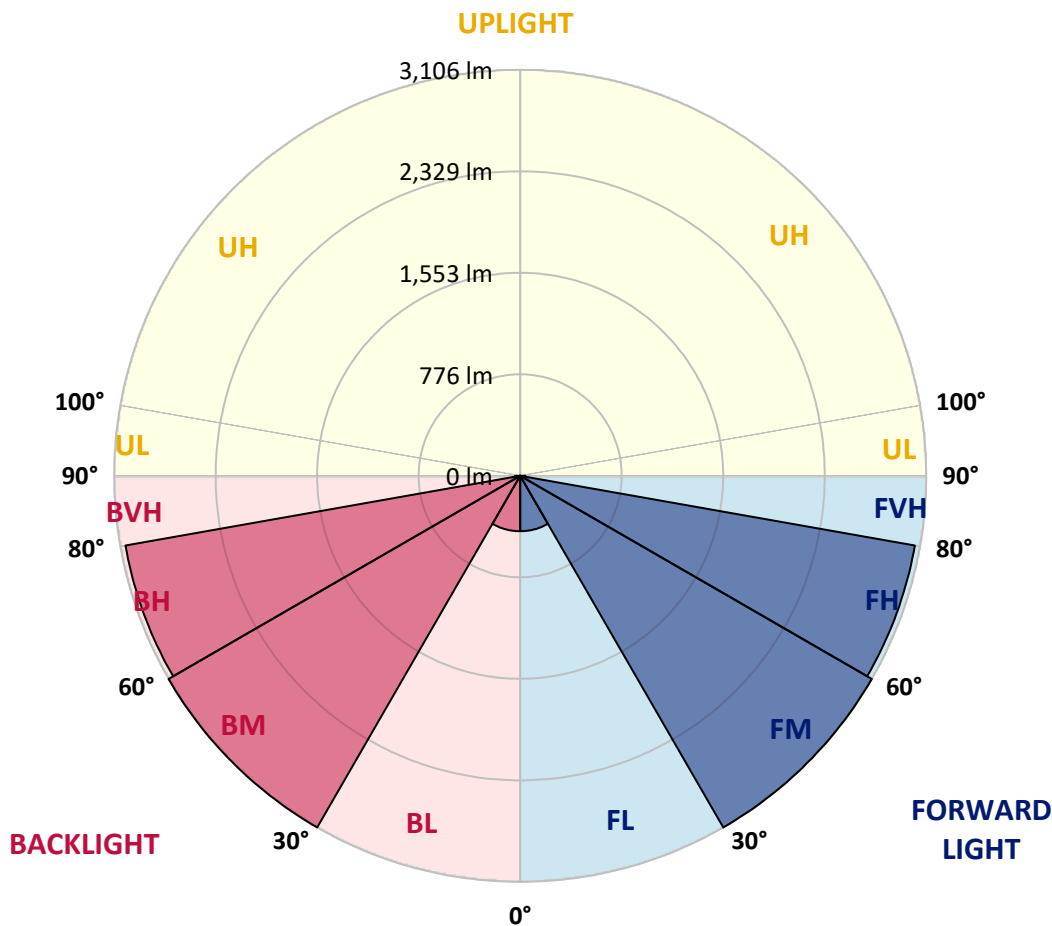
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	423.7	3.2			
FM (30°-60°)	3105.7	23.4			
FH (60°-80°)	3065.9	23.1			G2/5000
FVH (80°-90°)	39.1	0.3			G1/100
BL (0°-30°)	423.7	3.2	B1/500		
BM (30°-60°)	3105.7	23.4	B3/5000		
BH (60°-80°)	3065.9	23.1	B4/5000		G2/5000
BVH (80°-90°)	39.1	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°	454.7	454.7	454.7	454.7	454.7
2.5°	559.8	523.9	540.3	523.9	559.8
5°	711.5	674.1	641.3	664.9	713.6
7.5°	817.6	761.8	692.6	755.6	813.0
10°	835.6	804.3	801.2	800.7	833.5
12.5°	902.7	881.7	923.7	883.8	904.8
15°	955.0	943.2	962.2	958.1	957.1
17.5°	1036.0	956.0	999.1	951.4	1033.4
20°	1071.9	958.6	1030.9	953.0	1071.4
22.5°	1116.0	1019.1	1040.6	1021.7	1111.9
25°	1141.1	1058.1	1065.7	1059.1	1141.6
27.5°	1244.1	1144.2	1062.2	1158.0	1263.1
30°	1322.6	1200.0	1146.2	1201.6	1332.3
32.5°	1435.9	1283.6	1262.6	1304.1	1453.8
35°	1576.3	1424.1	1306.2	1424.6	1606.0
37.5°	1851.6	1551.7	1510.2	1596.8	1872.1
40°	2045.9	1753.2	1664.5	1785.5	2079.2
42.5°	2344.2	1979.2	1754.2	1995.6	2395.5
45°	2622.1	2253.5	2040.2	2272.5	2659.5
47.5°	2915.8	2505.2	2425.2	2528.8	2943.5
50°	3262.8	2846.1	2790.2	2872.7	3274.6
52.5°	3672.4	3302.3	3137.2	3317.7	3676.5
55°	4158.9	3685.2	3648.3	3727.3	4165.1
57.5°	4634.6	4181.5	4418.3	4186.1	4552.1
60°	4974.0	4638.7	5051.4	4520.8	4791.0
62.5°	4995.5	4977.6	5839.8	4777.6	4739.7
65°	4530.0	4840.7	6500.0	4684.3	4302.4
67.5°	3565.8	4066.6	6600.0	3987.7	3456.6
70°	2240.7	2815.8	5834.7	2924.0	2304.2
72.5°	1033.4	1517.4	4393.7	1708.1	1092.4
75°	370.1	580.8	2710.7	623.9	387.0
77.5°	210.2	235.3	1198.0	236.3	217.4
80°	135.3	146.6	346.0	154.8	131.7
82.5°	76.9	102.5	151.7	108.7	70.7
85°	41.5	65.1	67.2	66.6	41.5
87.5°	14.9	25.6	14.9	29.2	13.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)