

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: P368161

Luminaire Tested: **MSA-SA3D-830-U-5MQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P368161
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-SA3D-830-U-5MQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17036 lumens
Efficiency: N/A
Efficacy: 88.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

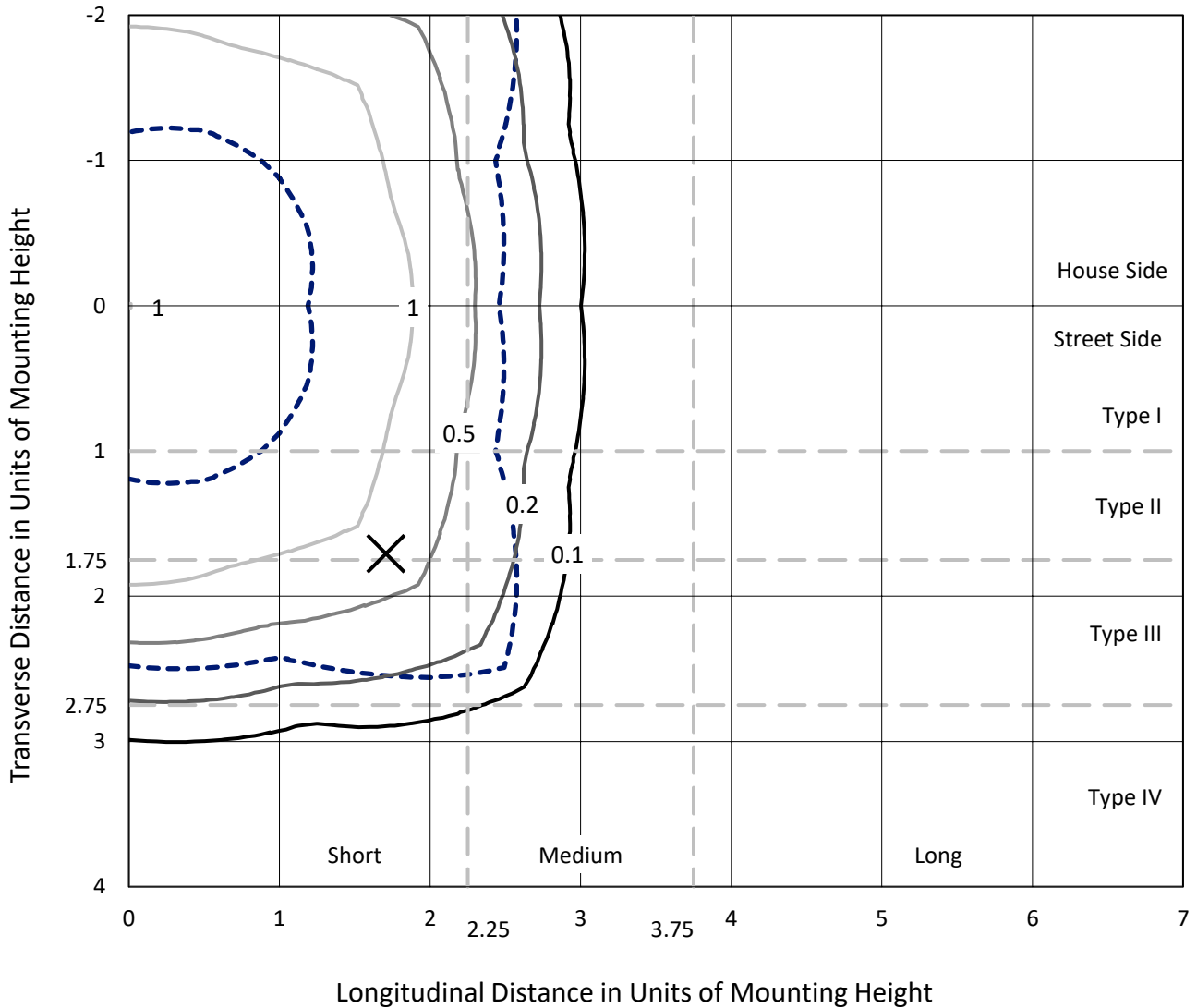
Input Watts (W): 192
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

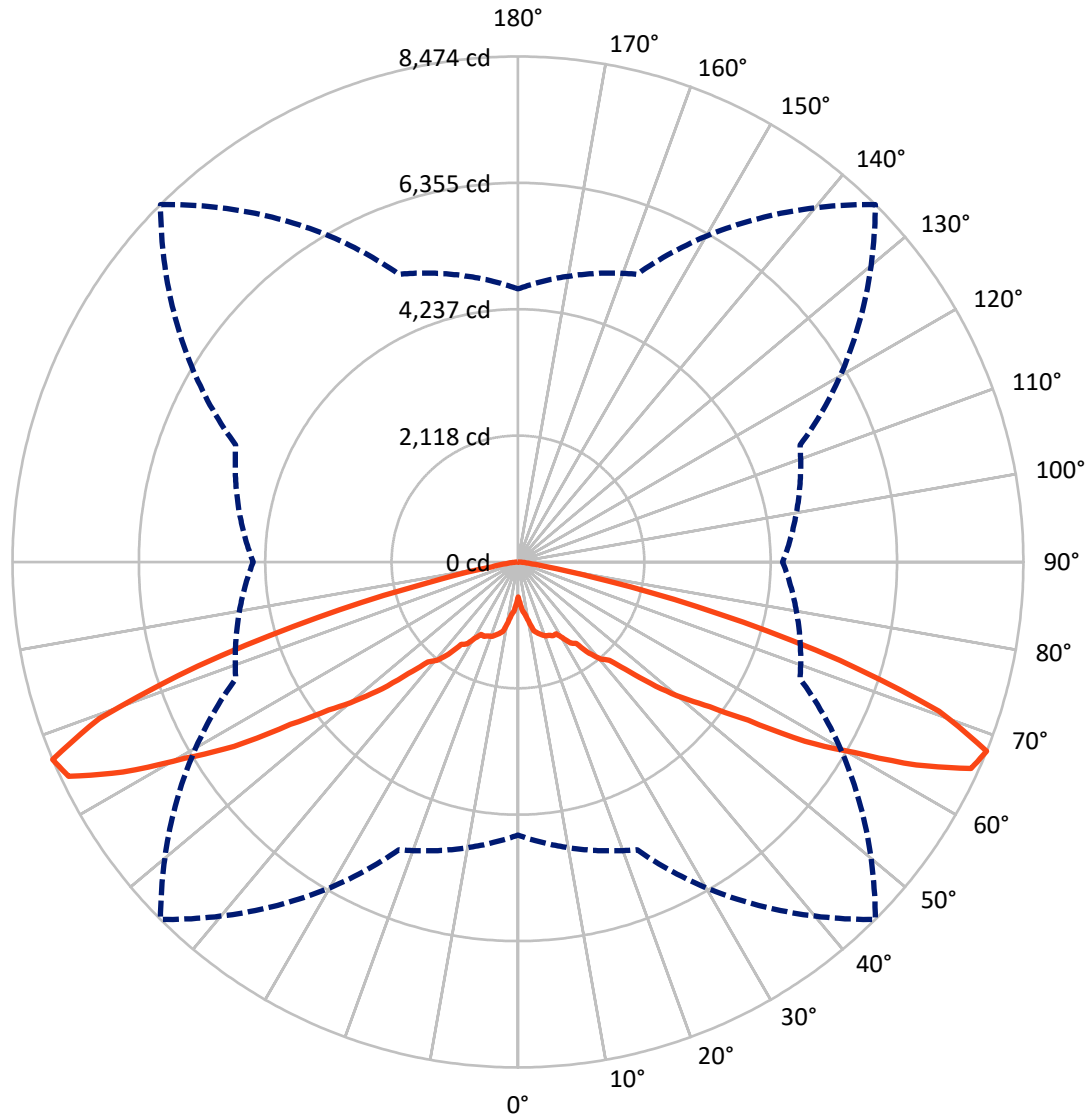
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 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	8518.0	0.0	8518.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	8518.0	0.0	8518.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	17036.0	0.0	17036.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.1	0.5
10°-20°	344.2	2.0
20°-30°	656.7	3.9
30°-40°	1200.7	7.0
40°-50°	2328.2	13.7
50°-60°	4446.0	26.1
60°-70°	6007.0	35.3
70°-80°	1865.6	11.0
80°-90°	100.5	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°	17036.0	100.0
0°-180°	17036.0	100.0

Coefficient of Utilization



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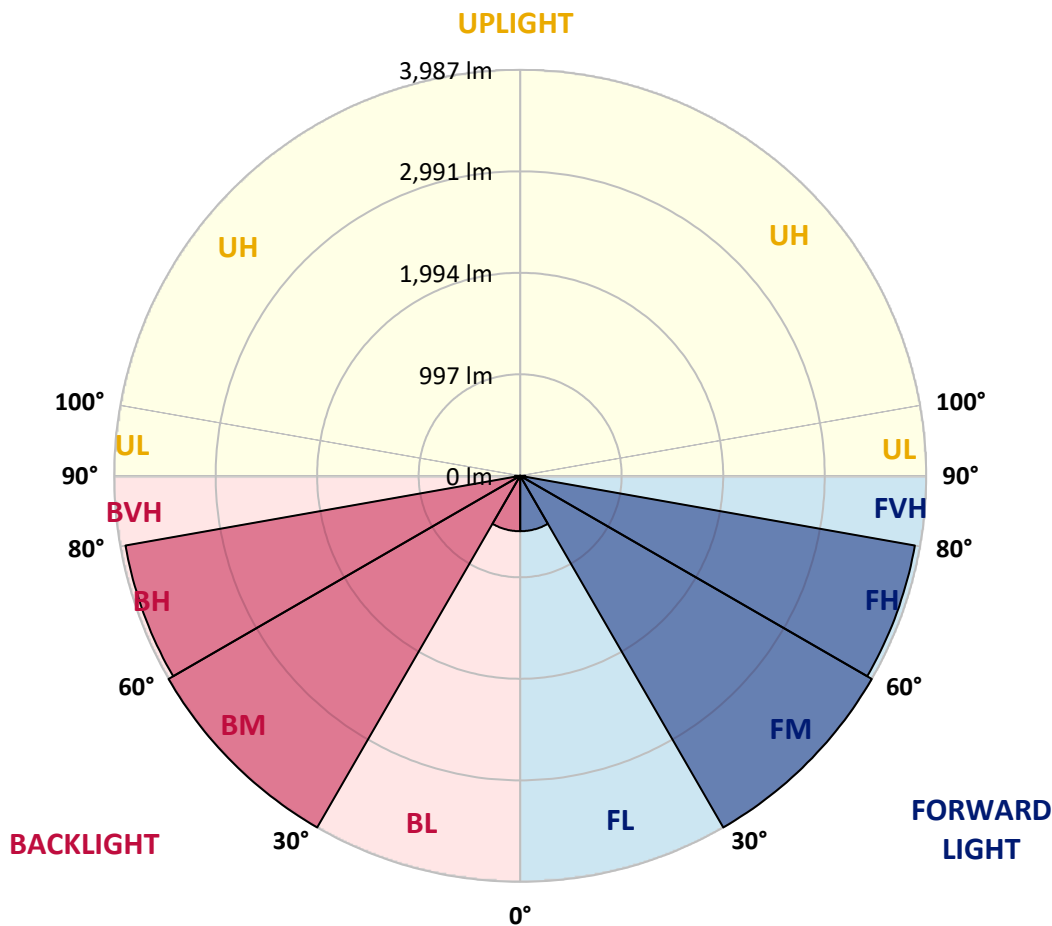
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	544.0	3.2			
FM (30°-60°)	3987.4	23.4			
FH (60°-80°)	3936.3	23.1			G2/5000
FVH (80°-90°)	50.3	0.3			G1/100
BL (0°-30°)	544.0	3.2	B2/1000		
BM (30°-60°)	3987.4	23.4	B3/5000		
BH (60°-80°)	3936.3	23.1	B4/5000		G2/5000
BVH (80°-90°)	50.3	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°	583.8	583.8	583.8	583.8	583.8
2.5°	718.7	672.6	693.7	672.6	718.7
5°	913.5	865.5	823.3	853.6	916.1
7.5°	1049.8	978.0	889.2	970.1	1043.8
10°	1072.8	1032.6	1028.7	1028.0	1070.2
12.5°	1159.0	1132.0	1186.0	1134.7	1161.6
15°	1226.1	1211.0	1235.4	1230.1	1228.8
17.5°	1330.1	1227.5	1282.7	1221.5	1326.8
20°	1376.2	1230.7	1323.5	1223.5	1375.5
22.5°	1432.8	1308.4	1336.1	1311.7	1427.5
25°	1465.0	1358.4	1368.3	1359.7	1465.7
27.5°	1597.3	1469.0	1363.7	1486.8	1621.7
30°	1698.0	1540.7	1471.6	1542.7	1710.5
32.5°	1843.5	1648.0	1621.0	1674.3	1866.5
35°	2023.8	1828.3	1677.0	1829.0	2062.0
37.5°	2377.2	1992.2	1938.9	2050.1	2403.6
40°	2626.7	2250.9	2137.0	2292.3	2669.5
42.5°	3009.7	2541.1	2252.2	2562.2	3075.5
45°	3366.5	2893.2	2619.4	2917.6	3414.5
47.5°	3743.6	3216.4	3113.7	3246.7	3779.1
50°	4189.1	3654.1	3582.3	3688.3	4204.3
52.5°	4715.0	4239.8	4027.9	4259.6	4720.3
55°	5339.6	4731.5	4684.1	4785.4	5347.5
57.5°	5950.4	5368.6	5672.6	5374.5	5844.4
60°	6386.1	5955.6	6485.4	5804.3	6151.1
62.5°	6413.7	6390.7	7497.7	6134.0	6085.3
65°	5816.1	6214.9	8345.4	6014.2	5523.9
67.5°	4578.1	5221.1	8473.7	5119.8	4437.9
70°	2876.8	3615.2	7491.1	3754.1	2958.4
72.5°	1326.8	1948.1	5641.0	2193.0	1402.5
75°	475.2	745.7	3480.3	801.0	496.9
77.5°	269.8	302.1	1538.1	303.4	279.1
80°	173.8	188.2	444.3	198.8	169.1
82.5°	98.7	131.6	194.8	139.5	90.8
85°	53.3	83.6	86.2	85.6	53.3
87.5°	19.1	32.9	19.1	37.5	17.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)