

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: P367107

Luminaire Tested: **MSA-SA1D-830-U-5WQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367107
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-4)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA1D-830-U-5WQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5846 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

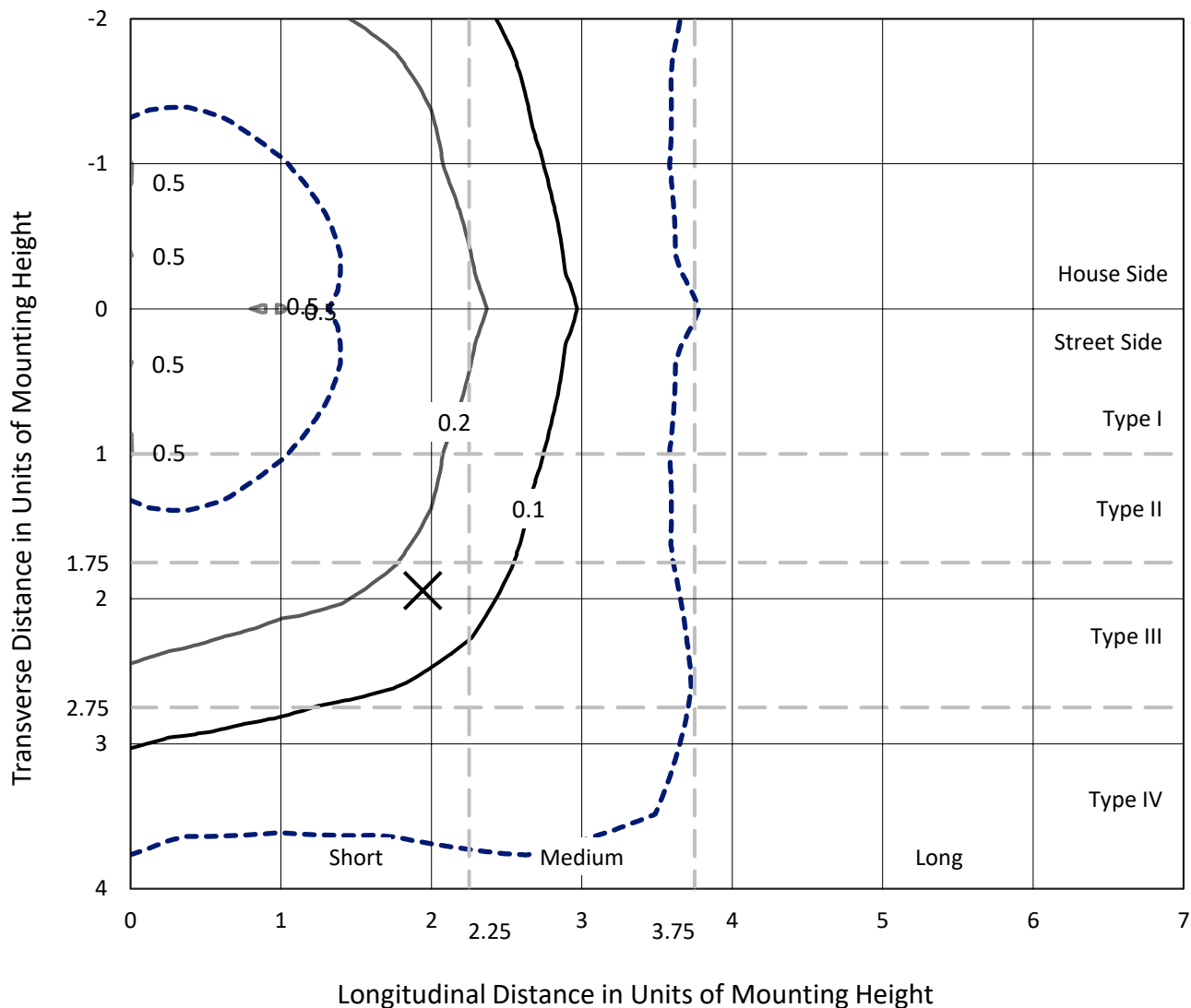
Input Watts (W): 67
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

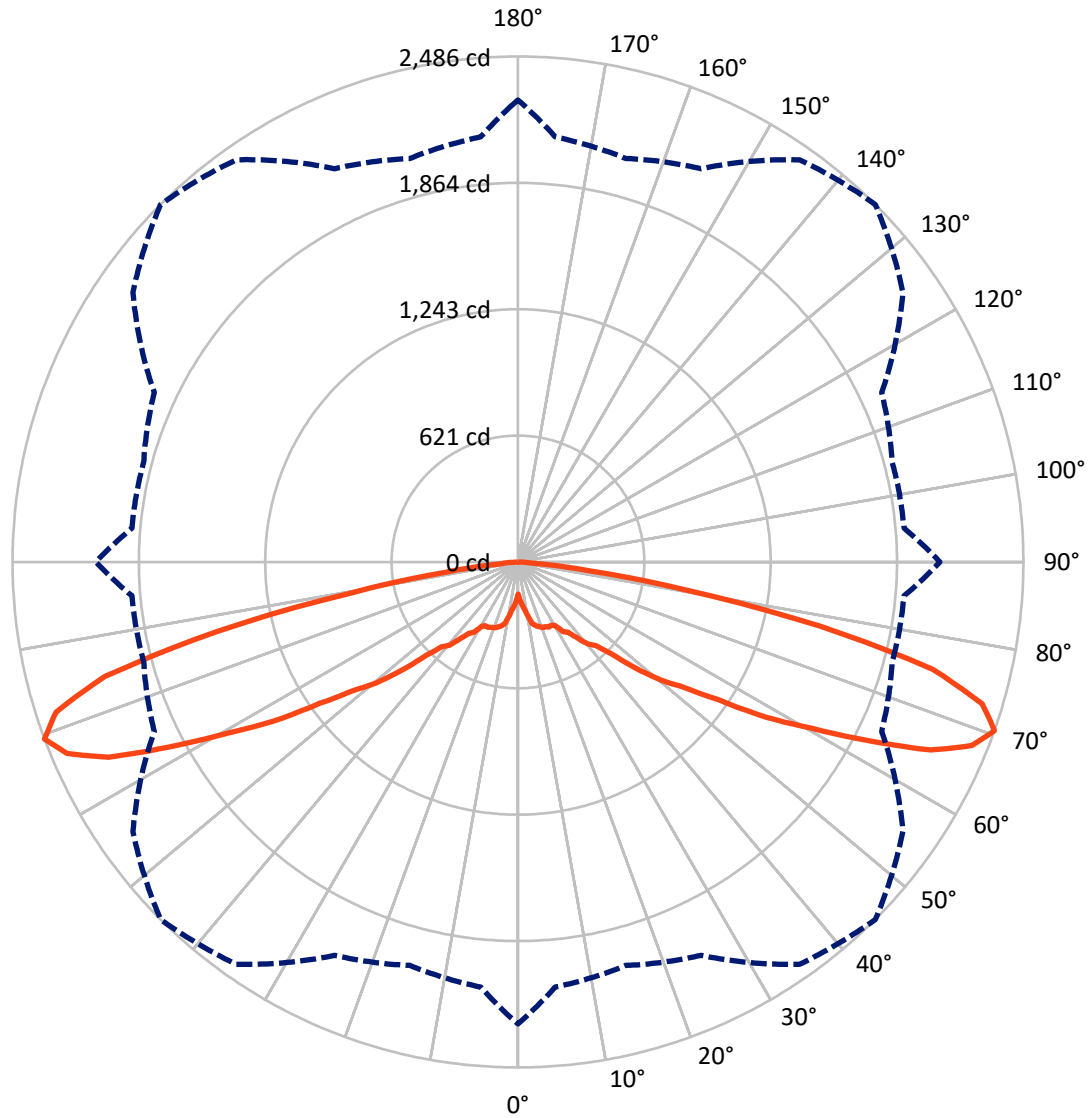
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.5 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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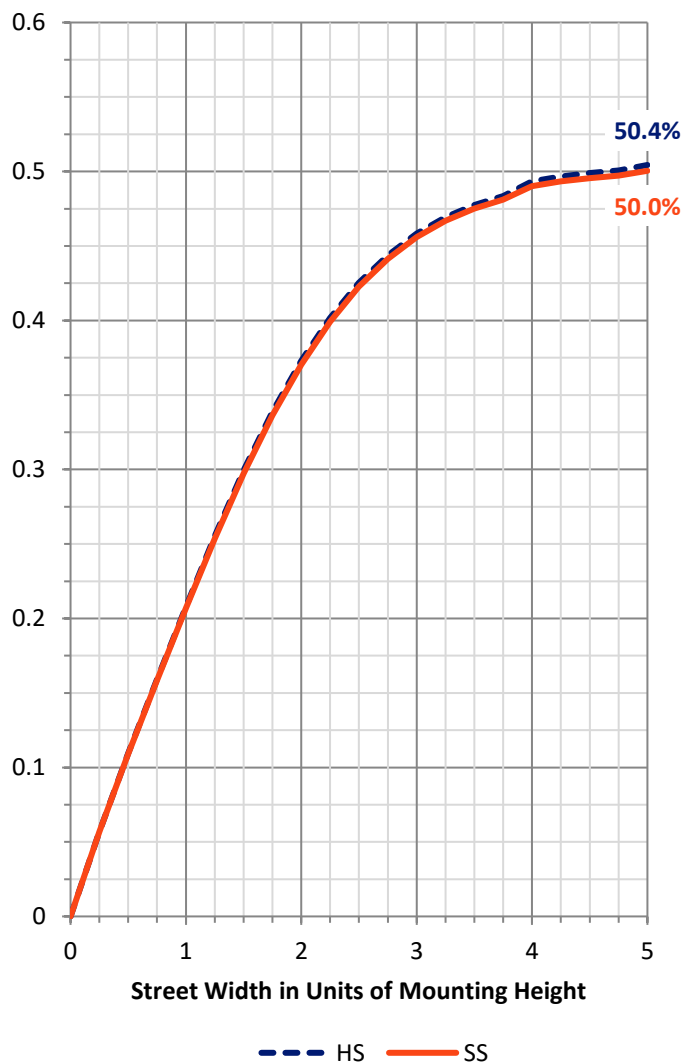
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2923.0	0.0	2923.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2923.0	0.0	2923.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	5846.0	0.0	5846.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.0	0.4
10°-20°	92.0	1.6
20°-30°	174.0	3.0
30°-40°	303.1	5.2
40°-50°	579.3	9.9
50°-60°	1123.4	19.2
60°-70°	1967.1	33.6
70°-80°	1478.4	25.3
80°-90°	105.8	1.8
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°	5846.0	100.0
0°-180°	5846.0	100.0

Coefficient of Utilization



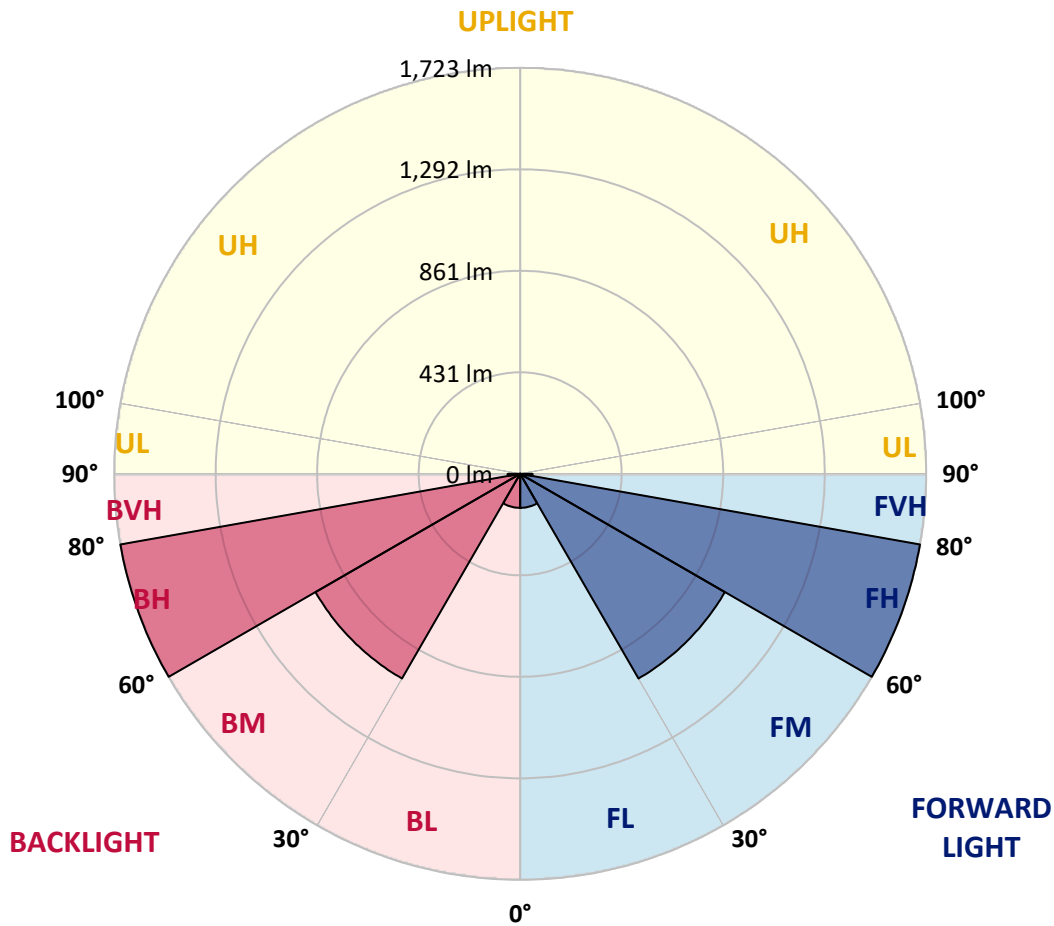
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	144.5	2.5			
FM (30°-60°)	1002.9	17.2			
FH (60°-80°)	1722.7	29.5			G1/1800
FVH (80°-90°)	52.9	0.9			G1/100
BL (0°-30°)	144.5	2.5	B1/500		
BM (30°-60°)	1002.9	17.2	B2/2500		
BH (60°-80°)	1722.7	29.5	B3/2500		G1/1800
BVH (80°-90°)	52.9	0.9			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	158.1	158.1	158.1	158.1	158.1	158.1	158.1	158.1	158.1	158.1	158.1
2.5°	192.3	189.4	180.1	180.5	184.8	185.3	185.7	180.1	178.7	190.3	191.0
5°	244.3	237.4	230.6	227.9	223.8	212.5	225.0	226.3	229.1	237.9	242.0
7.5°	278.9	270.6	261.3	255.6	244.5	235.2	245.4	253.8	259.2	269.2	274.9
10°	285.5	280.5	280.1	270.1	268.1	271.5	270.8	271.0	279.2	279.4	282.8
12.5°	306.2	309.8	302.8	299.4	301.4	309.8	303.0	300.0	302.1	311.4	307.5
15°	333.2	337.5	326.8	321.4	315.9	323.9	316.8	322.0	328.6	335.4	332.0
17.5°	363.1	363.3	348.8	328.6	333.4	334.5	332.0	327.7	346.5	362.9	361.3
20°	379.4	379.2	354.2	326.8	340.9	343.4	341.1	326.3	354.7	377.1	376.5
22.5°	396.2	391.2	361.3	339.0	344.3	346.3	341.1	339.7	361.3	392.6	392.3
25°	405.3	409.6	376.7	362.9	358.6	353.8	358.3	360.6	381.2	411.8	403.0
27.5°	433.6	426.6	381.2	379.9	370.8	352.0	367.6	378.7	379.9	429.3	438.4
30°	459.2	462.0	401.6	403.7	387.1	363.3	387.6	405.3	408.7	462.4	461.5
32.5°	486.5	487.6	437.9	416.8	409.8	408.9	399.6	415.0	441.8	484.9	486.7
35°	527.7	537.0	470.4	442.0	433.2	424.1	432.3	446.1	471.0	535.7	531.1
37.5°	622.3	607.6	540.9	482.2	476.3	472.6	479.2	489.2	540.2	609.2	630.2
40°	688.3	681.3	590.6	548.6	511.4	530.9	515.5	554.0	596.2	681.7	695.3
42.5°	790.6	759.3	666.1	614.1	575.6	561.8	570.4	620.7	674.5	769.7	796.5
45°	888.8	840.5	760.6	714.8	656.3	641.8	653.4	712.6	774.7	850.0	897.2
47.5°	989.0	939.1	851.4	785.1	737.3	780.6	742.7	799.0	860.9	948.4	990.4
50°	1093.1	1037.8	951.2	879.0	875.0	913.3	867.9	896.7	954.1	1044.8	1094.3
52.5°	1212.6	1153.0	1066.4	1017.6	1027.1	1024.6	1015.6	1010.3	1066.8	1155.9	1214.7
55°	1354.8	1290.4	1221.3	1198.8	1225.1	1196.8	1210.1	1208.3	1216.5	1280.2	1348.9
57.5°	1526.7	1453.9	1384.5	1379.6	1413.3	1440.1	1416.3	1382.0	1367.8	1429.7	1508.4
60°	1743.3	1654.0	1577.8	1562.1	1658.5	1658.3	1636.7	1560.1	1554.6	1624.7	1719.5
62.5°	1982.6	1873.7	1790.5	1765.5	1916.6	1933.6	1866.5	1729.0	1757.2	1813.6	1926.1
65°	2185.8	2054.9	1977.4	1970.6	2155.2	2230.2	2081.9	1893.9	1903.0	1949.9	2071.7
67.5°	2318.2	2160.6	2098.9	2131.8	2361.3	2408.3	2270.4	2004.1	1971.9	1991.4	2137.0
70°	2271.7	2098.5	2054.0	2133.9	2414.6	2485.6	2311.0	1973.3	1904.8	1905.7	2074.9
72.5°	1919.5	1754.7	1775.8	1922.3	2288.5	2388.1	2123.2	1782.3	1642.2	1638.8	1792.3
75°	1269.3	1159.1	1242.3	1470.7	1902.5	2106.2	1759.2	1397.0	1221.3	1164.1	1282.7
77.5°	555.2	541.1	611.2	869.3	1297.0	1517.9	1260.3	912.6	664.3	552.5	603.5
80°	148.8	145.6	182.8	329.8	631.4	835.9	682.0	364.0	190.0	138.3	146.7
82.5°	54.2	55.6	67.8	92.3	208.0	352.0	226.6	106.4	71.9	59.0	59.0
85°	23.6	22.9	32.9	37.0	56.7	79.6	65.1	45.1	36.3	27.2	26.1
87.5°	6.4	7.9	11.1	11.6	14.7	12.0	17.2	15.9	13.6	9.5	7.7
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)