

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: P366711

Luminaire Tested: **MSA-SA1A-830-U-5WQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P366711
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-SA1A-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: 3445 lumens
Efficiency: N/A
Efficacy: 101.3 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

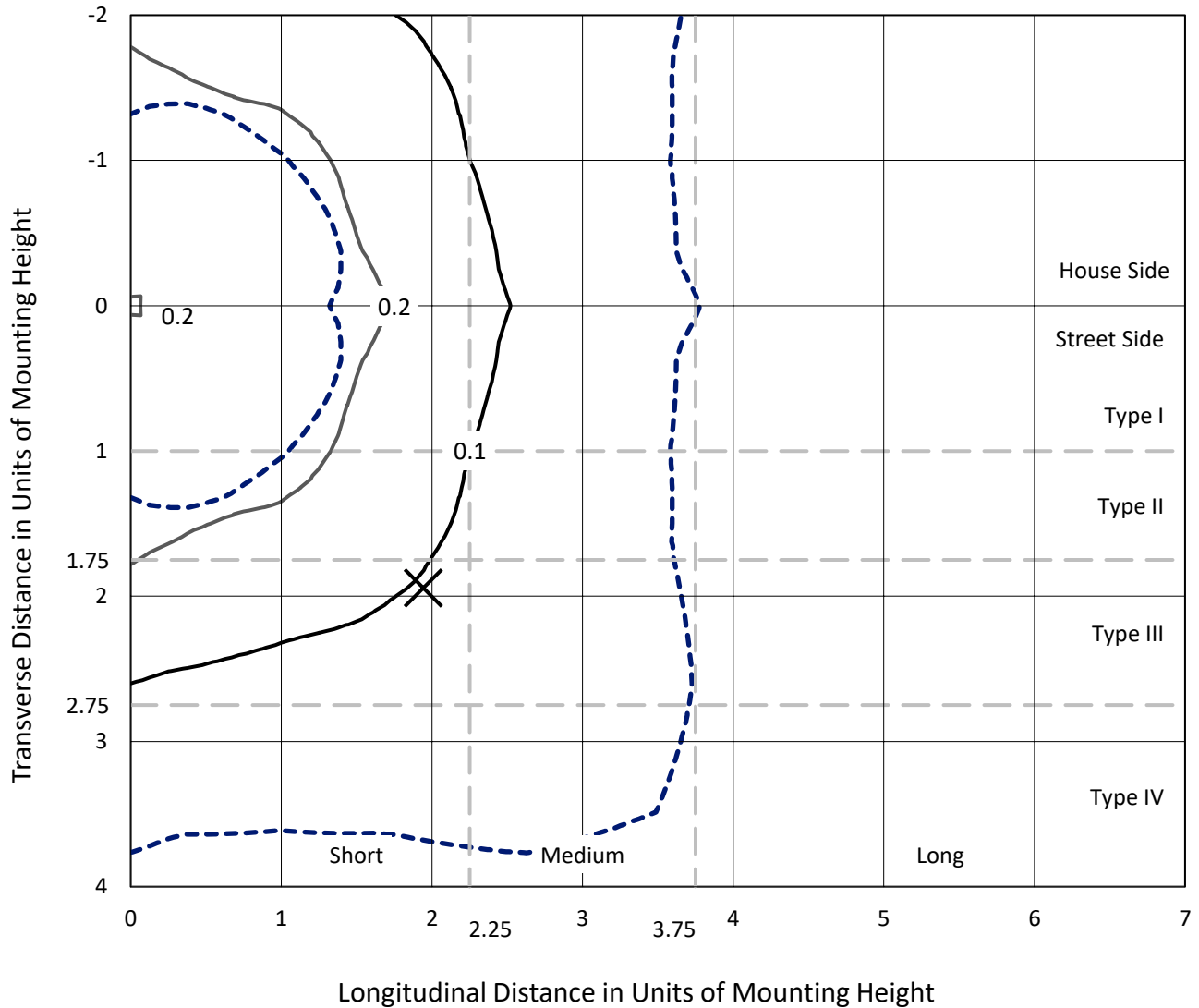
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

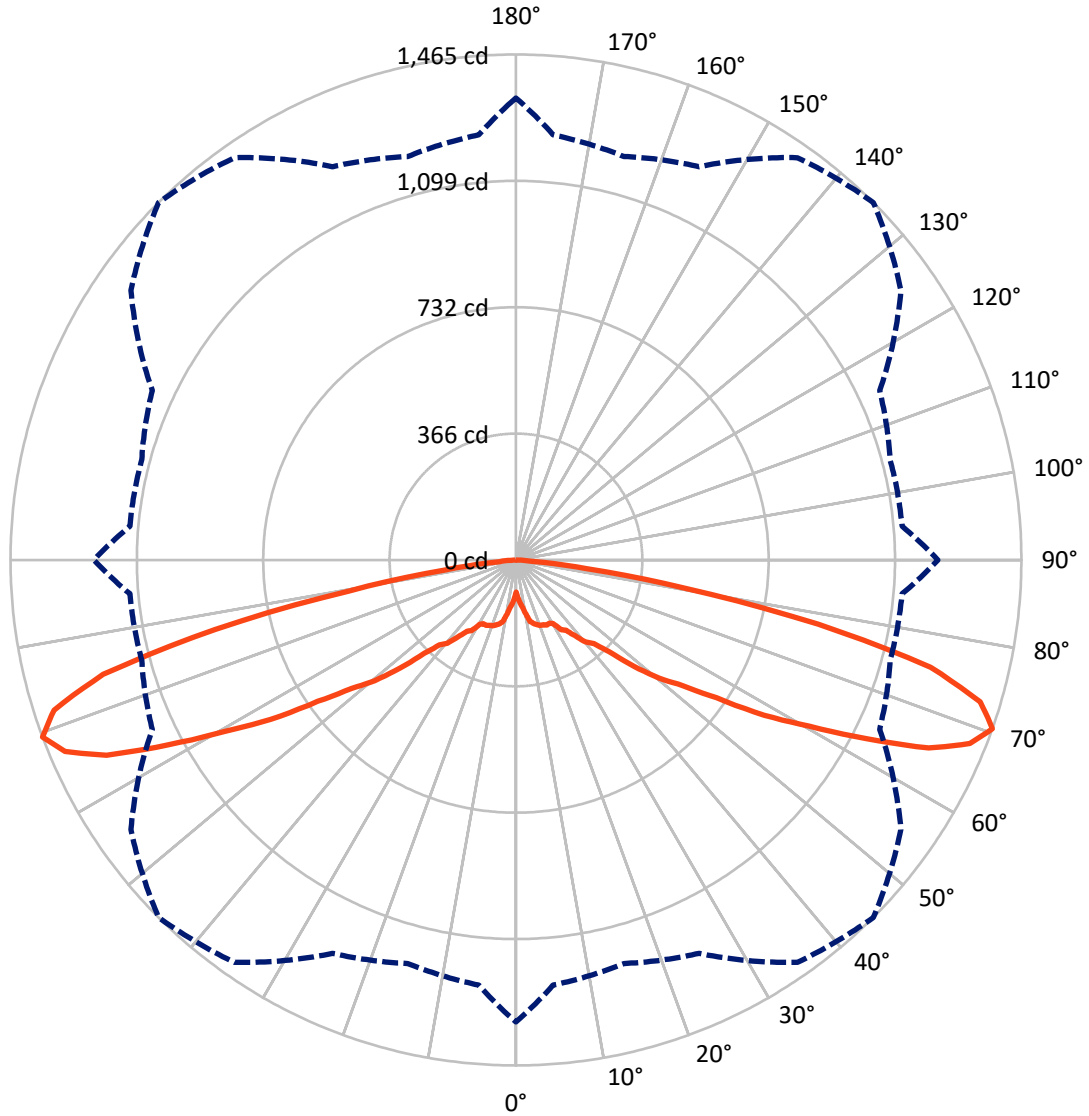
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.3 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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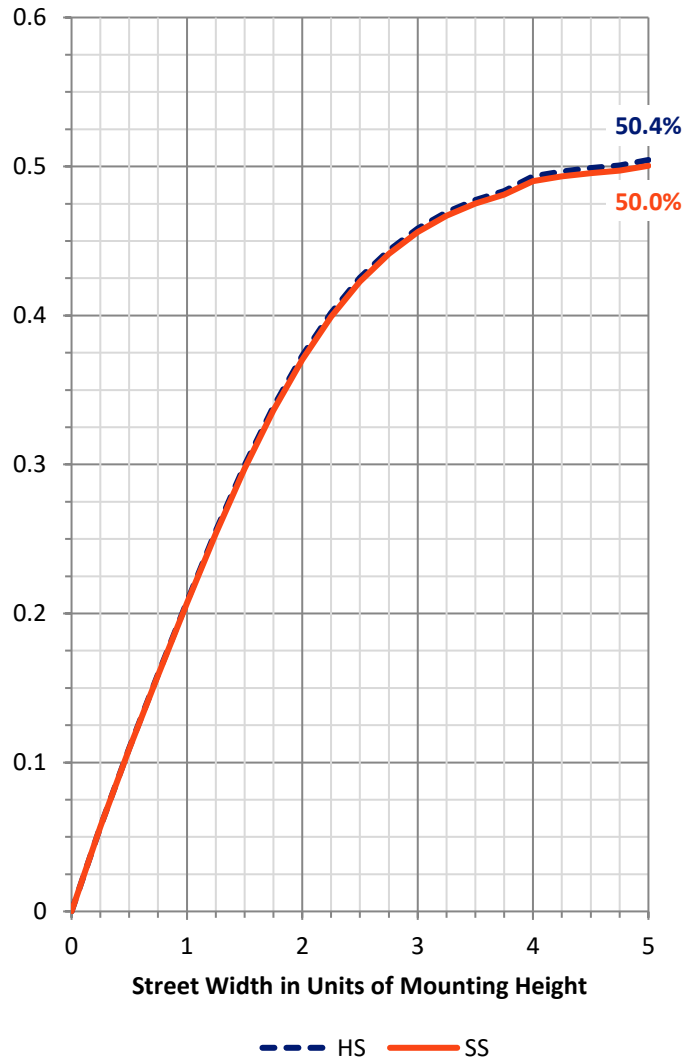
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1722.5	0.0	1722.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1722.5	0.0	1722.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	3445.0	0.0	3445.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.5	0.4
10°-20°	54.2	1.6
20°-30°	102.5	3.0
30°-40°	178.6	5.2
40°-50°	341.4	9.9
50°-60°	662.0	19.2
60°-70°	1159.2	33.6
70°-80°	871.2	25.3
80°-90°	62.3	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°	3445.0	100.0
0°-180°	3445.0	100.0

Coefficient of Utilization



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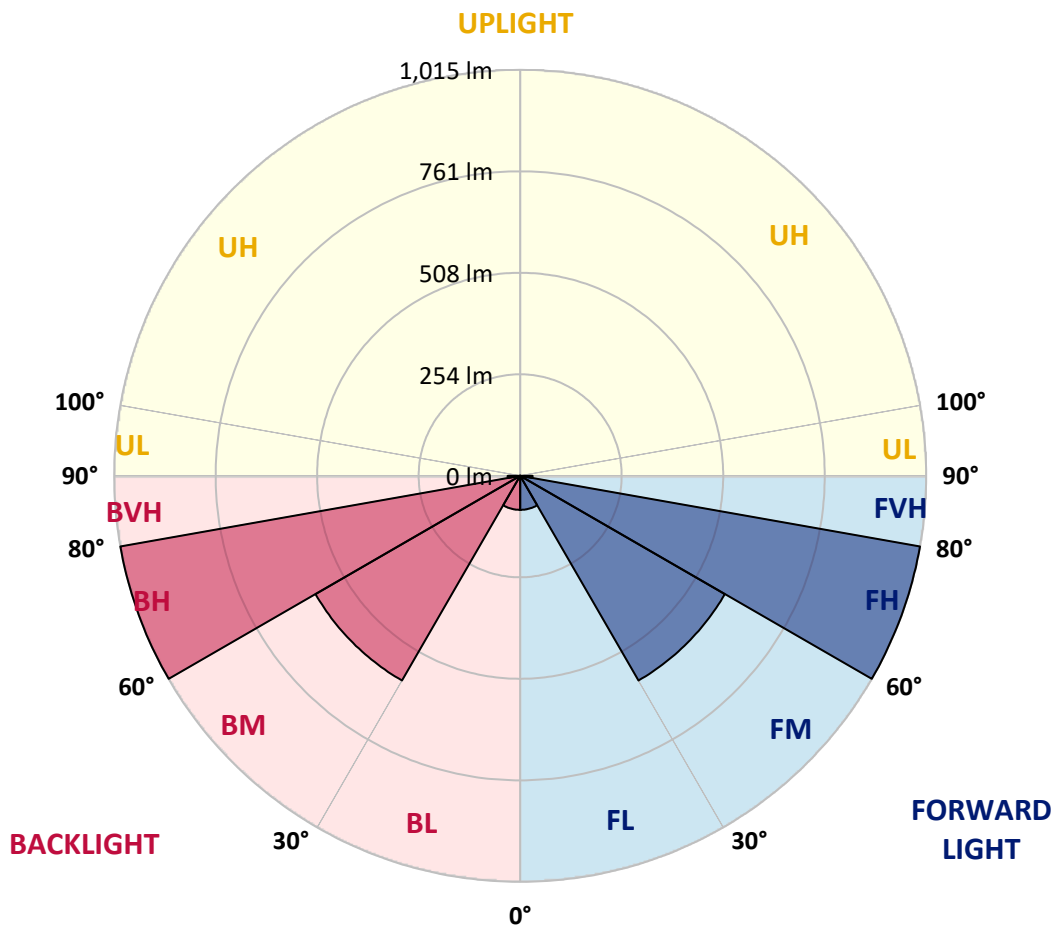
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	85.2	2.5			
FM (30°-60°)	591.0	17.2			
FH (60°-80°)	1015.2	29.5			G1/1800
FVH (80°-90°)	31.2	0.9			G1/100
BL (0°-30°)	85.2	2.5	B0/110		
BM (30°-60°)	591.0	17.2	B1/1000		
BH (60°-80°)	1015.2	29.5	B3/2500		G1/1800
BVH (80°-90°)	31.2	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°	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2
2.5°	113.3	111.6	106.1	106.4	108.9	109.2	109.5	106.1	105.3	112.1	112.5
5°	143.9	139.9	135.9	134.3	131.9	125.2	132.6	133.4	135.0	140.2	142.6
7.5°	164.4	159.4	154.0	150.6	144.1	138.6	144.6	149.5	152.8	158.6	162.0
10°	168.3	165.3	165.1	159.2	158.0	160.0	159.6	159.7	164.5	164.7	166.7
12.5°	180.4	182.6	178.4	176.4	177.6	182.6	178.5	176.8	178.0	183.5	181.2
15°	196.3	198.9	192.6	189.4	186.2	190.8	186.7	189.8	193.7	197.7	195.7
17.5°	214.0	214.1	205.5	193.7	196.5	197.1	195.7	193.1	204.2	213.8	212.9
20°	223.6	223.5	208.8	192.6	200.9	202.3	201.0	192.3	209.0	222.3	221.9
22.5°	233.5	230.5	212.9	199.8	202.9	204.1	201.0	200.2	212.9	231.3	231.2
25°	238.8	241.4	222.0	213.8	211.3	208.5	211.2	212.5	224.7	242.7	237.5
27.5°	255.5	251.4	224.7	223.9	218.5	207.4	216.6	223.2	223.9	253.0	258.3
30°	270.6	272.2	236.7	237.9	228.1	214.1	228.4	238.8	240.8	272.5	272.0
32.5°	286.7	287.3	258.1	245.6	241.5	241.0	235.5	244.6	260.3	285.7	286.8
35°	311.0	316.5	277.2	260.5	255.3	249.9	254.7	262.9	277.6	315.7	313.0
37.5°	366.7	358.0	318.7	284.1	280.7	278.5	282.4	288.3	318.3	359.0	371.4
40°	405.6	401.5	348.0	323.3	301.4	312.9	303.8	326.5	351.4	401.7	409.8
42.5°	465.9	447.4	392.5	361.9	339.2	331.0	336.1	365.8	397.5	453.6	469.4
45°	523.8	495.3	448.2	421.2	386.8	378.2	385.0	419.9	456.5	500.9	528.7
47.5°	582.8	553.4	501.7	462.7	434.5	460.0	437.7	470.8	507.3	558.9	583.6
50°	644.2	611.6	560.5	518.0	515.6	538.2	511.5	528.4	562.2	615.7	644.8
52.5°	714.6	679.4	628.4	599.7	605.3	603.8	598.5	595.4	628.7	681.2	715.8
55°	798.4	760.4	719.7	706.4	721.9	705.2	713.1	712.1	716.9	754.4	794.9
57.5°	899.7	856.8	815.9	813.0	832.9	848.6	834.6	814.4	806.0	842.5	888.9
60°	1027.3	974.7	929.8	920.5	977.3	977.2	964.5	919.3	916.1	957.4	1013.3
62.5°	1168.3	1104.2	1055.1	1040.4	1129.4	1139.5	1099.9	1018.9	1035.5	1068.8	1135.0
65°	1288.1	1211.0	1165.2	1161.2	1270.0	1314.3	1226.9	1116.1	1121.4	1149.1	1220.8
67.5°	1366.1	1273.2	1236.9	1256.3	1391.5	1419.2	1337.9	1181.0	1162.0	1173.5	1259.3
70°	1338.7	1236.6	1210.4	1257.5	1422.9	1464.7	1361.8	1162.8	1122.5	1123.0	1222.7
72.5°	1131.2	1034.0	1046.4	1132.8	1348.6	1407.3	1251.2	1050.3	967.7	965.7	1056.2
75°	748.0	683.1	732.1	866.7	1121.1	1241.2	1036.7	823.3	719.7	686.0	755.9
77.5°	327.2	318.9	360.2	512.3	764.3	894.5	742.7	537.8	391.4	325.6	355.6
80°	87.7	85.8	107.7	194.3	372.1	492.6	401.9	214.5	112.0	81.5	86.5
82.5°	31.9	32.7	40.0	54.4	122.6	207.4	133.5	62.7	42.4	34.7	34.7
85°	13.9	13.5	19.4	21.8	33.4	46.9	38.4	26.6	21.4	16.0	15.4
87.5°	3.7	4.7	6.5	6.8	8.7	7.1	10.2	9.4	8.0	5.6	4.5
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)