

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: P367635

Luminaire Tested: **MSA-SA2D-830-U-5WQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367635
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-SA2D-830-U-5WQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS
EACH AND TYPE V WIDE OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11497 lumens
Efficiency: N/A
Efficacy: 89.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' 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



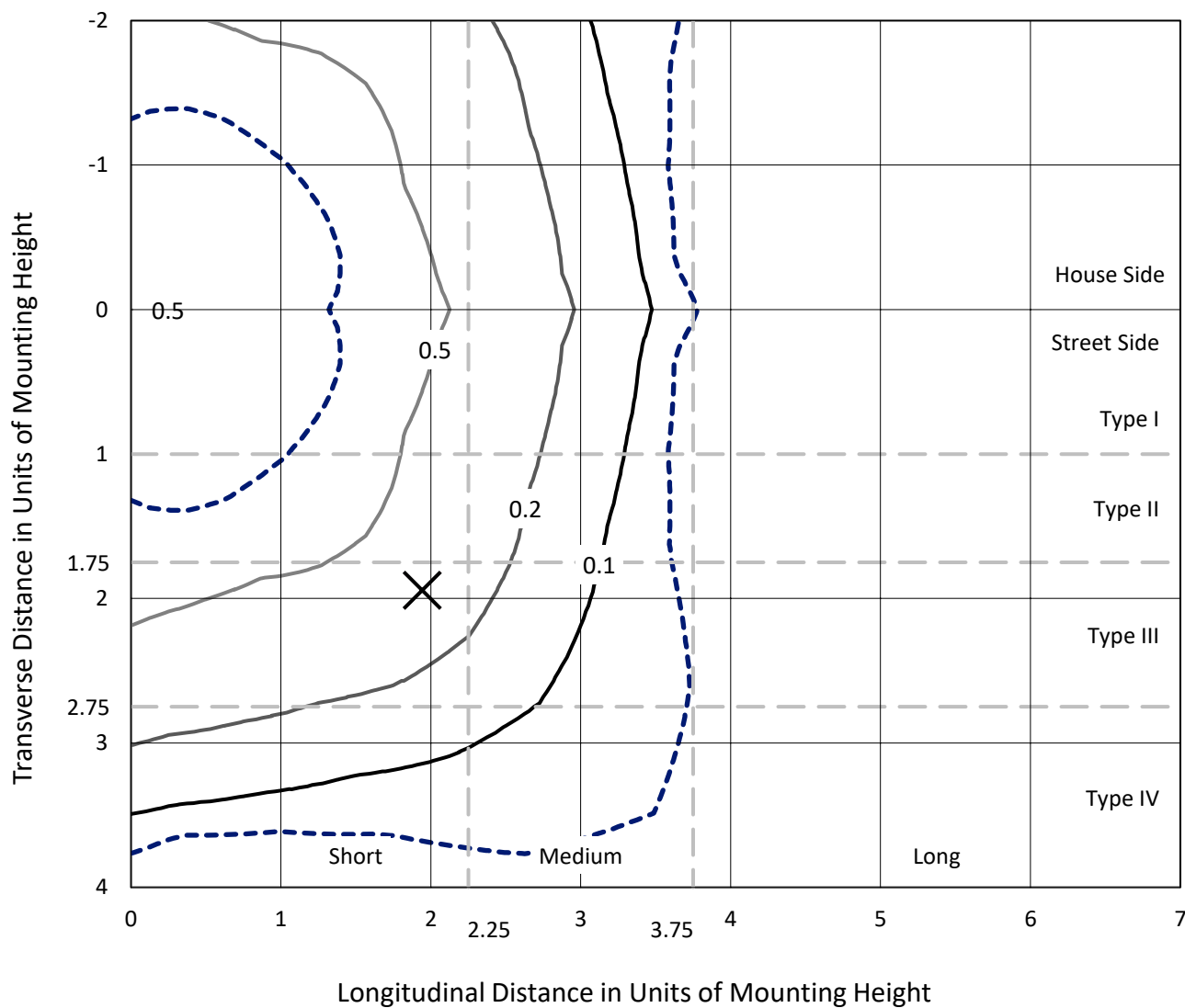
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

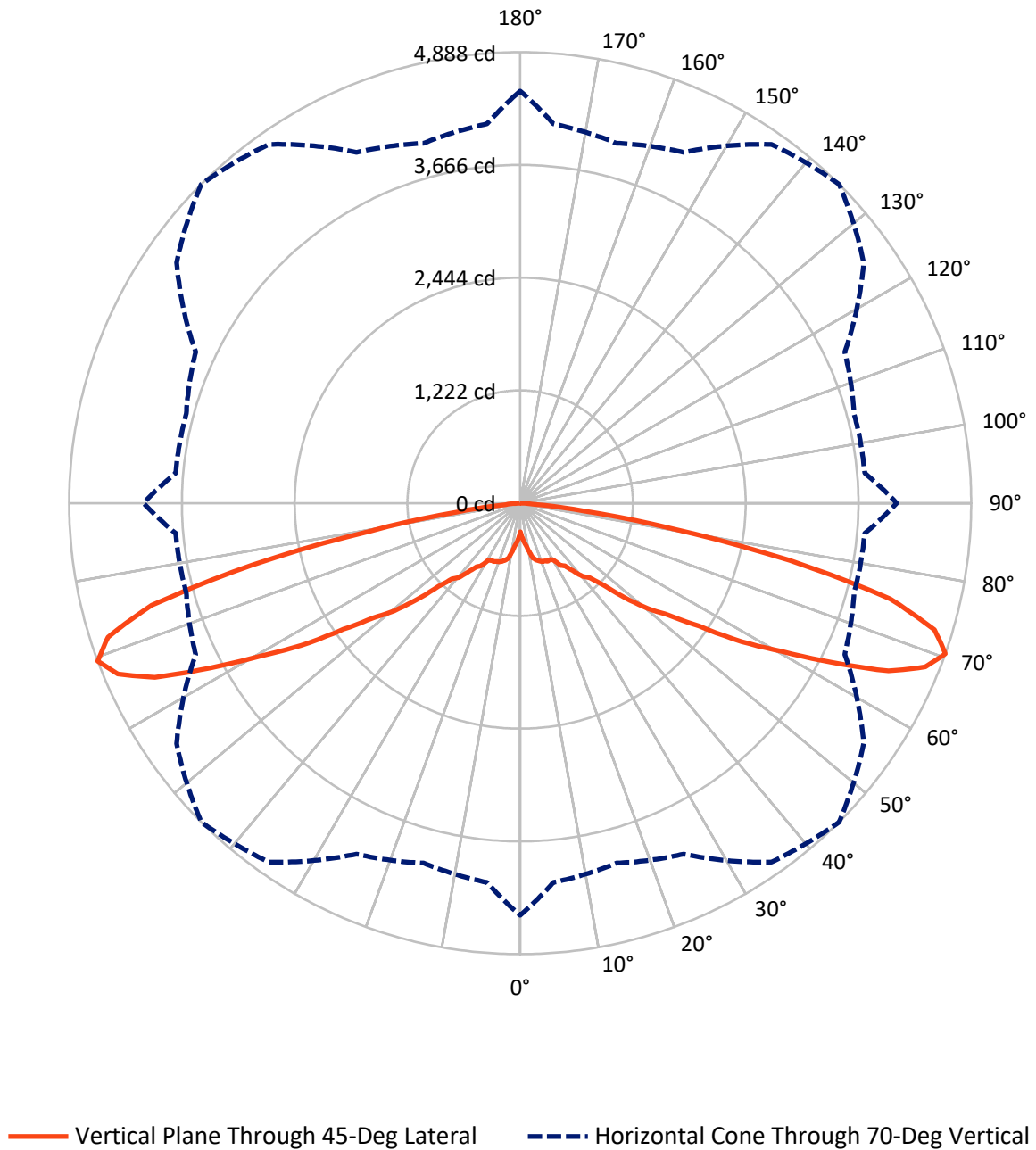


Based on 25 foot mounting height. Maximum calculated value = 1 fc

Type V - Short - N/A

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Luminous Intensity Polar Plot



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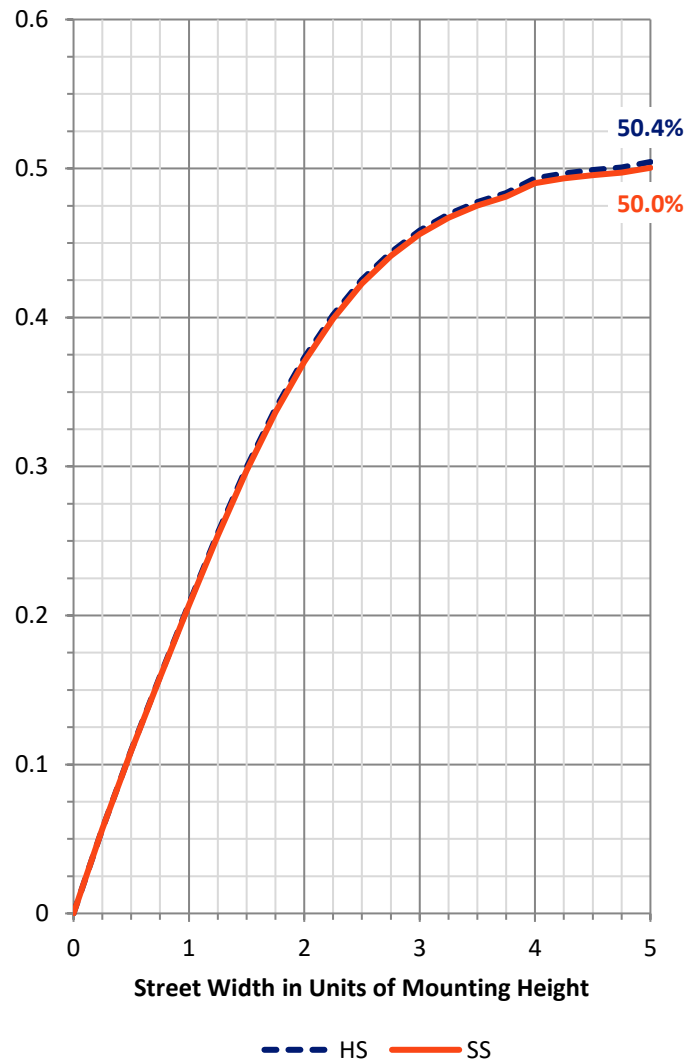
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5748.5	0.0	5748.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5748.5	0.0	5748.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	11497.0	0.0	11497.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.2	0.4
10°-20°	181.0	1.6
20°-30°	342.2	3.0
30°-40°	596.0	5.2
40°-50°	1139.4	9.9
50°-60°	2209.3	19.2
60°-70°	3868.6	33.6
70°-80°	2907.4	25.3
80°-90°	208.0	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°	11497.0	100.0
0°-180°	11497.0	100.0

Coefficient of Utilization



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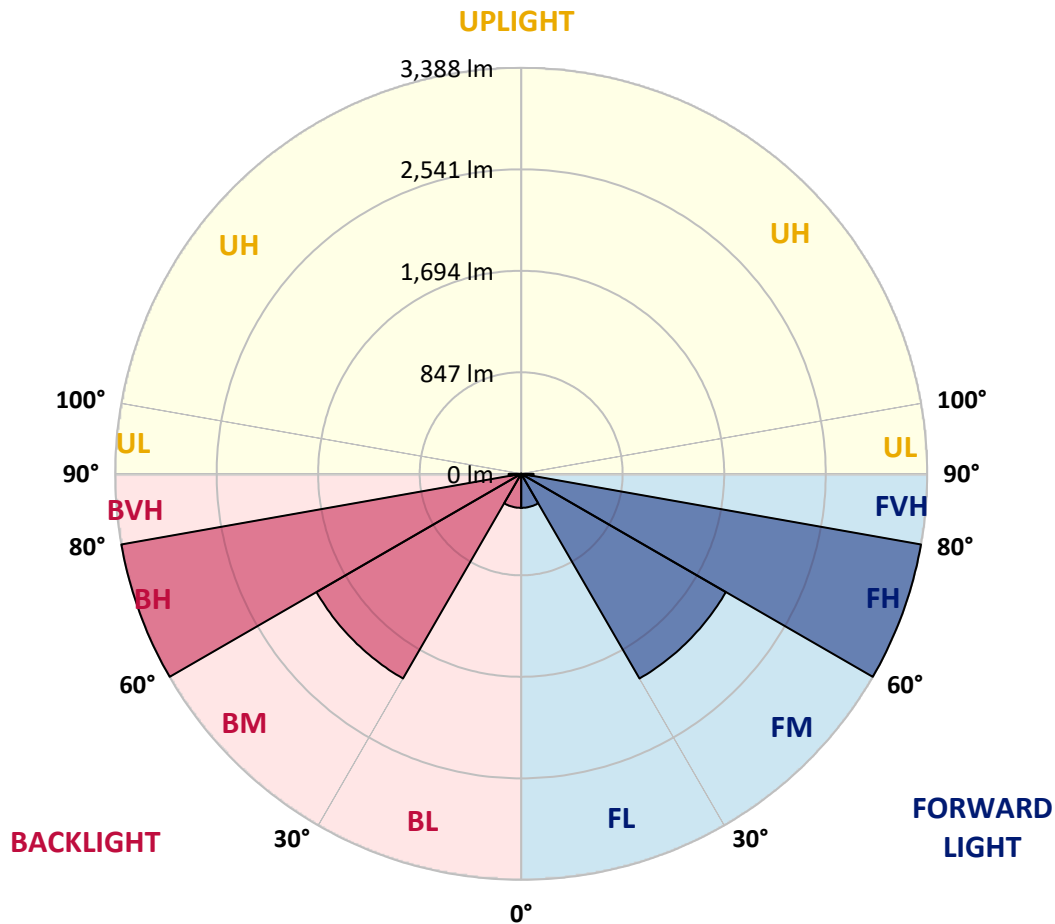
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	284.2	2.5			
FM	(30°-60°)	1972.3	17.2			
FH	(60°-80°)	3388.0	29.5			G2/5000
FVH	(80°-90°)	104.0	0.9			G2/225
BL	(0°-30°)	284.2	2.5	B1/500		
BM	(30°-60°)	1972.3	17.2	B2/2500		
BH	(60°-80°)	3388.0	29.5	B4/5000		G2/5000
BVH	(80°-90°)	104.0	0.9			G2/225
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°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	310.9	310.9	310.9	310.9	310.9	310.9	310.9	310.9	310.9	310.9	310.9
2.5°	378.2	372.4	354.1	355.0	363.5	364.4	365.3	354.1	351.5	374.2	375.5
5°	480.4	467.0	453.6	448.2	440.2	417.9	442.4	445.1	450.5	467.9	475.9
7.5°	548.6	532.1	513.8	502.7	480.8	462.5	482.6	499.1	509.8	529.4	540.6
10°	561.5	551.7	550.8	531.2	527.2	533.9	532.5	533.0	549.0	549.5	556.2
12.5°	602.1	609.3	595.4	588.7	592.8	609.3	595.9	590.1	594.1	612.4	604.8
15°	655.2	663.7	642.7	632.0	621.3	636.9	623.1	633.3	646.3	659.7	653.0
17.5°	714.1	714.5	686.0	646.3	655.6	657.9	653.0	644.5	681.5	713.6	710.5
20°	746.2	745.7	696.7	642.7	670.4	675.3	670.8	641.8	697.6	741.7	740.4
22.5°	779.2	769.4	710.5	666.8	677.0	681.1	670.8	668.1	710.5	772.0	771.6
25°	797.0	805.5	740.8	713.6	705.1	695.8	704.7	709.2	749.7	810.0	792.6
27.5°	852.8	838.9	749.7	747.1	729.2	692.2	723.0	744.8	747.1	844.3	862.1
30°	903.2	908.5	789.9	793.9	761.3	714.5	762.2	797.0	803.7	909.4	907.6
32.5°	956.7	958.9	861.2	819.8	805.9	804.2	785.9	816.2	868.8	953.6	957.1
35°	1037.9	1056.2	925.0	869.3	851.9	834.0	850.1	877.3	926.4	1053.5	1044.6
37.5°	1223.9	1194.9	1063.7	948.2	936.6	929.5	942.4	962.0	1062.4	1198.0	1239.5
40°	1353.6	1339.8	1161.4	1078.9	1005.8	1044.1	1013.8	1089.6	1172.6	1340.7	1367.5
42.5°	1554.8	1493.2	1309.9	1207.8	1132.0	1104.8	1121.7	1220.7	1326.4	1513.8	1566.4
45°	1747.9	1652.9	1495.9	1405.8	1290.8	1262.2	1285.0	1401.4	1523.6	1671.7	1764.4
47.5°	1945.1	1846.9	1674.3	1544.1	1450.0	1535.2	1460.7	1571.3	1693.1	1865.2	1947.7
50°	2149.8	2041.0	1870.6	1728.7	1720.7	1796.1	1706.9	1763.5	1876.4	2054.8	2152.0
52.5°	2384.8	2267.5	2097.1	2001.3	2020.0	2015.1	1997.2	1987.0	2098.0	2273.3	2388.8
55°	2664.5	2537.8	2401.8	2357.6	2409.4	2353.6	2379.9	2376.4	2392.4	2517.7	2652.9
57.5°	3002.6	2859.4	2722.9	2713.1	2779.5	2832.2	2785.3	2718.0	2689.9	2811.7	2966.4
60°	3428.5	3252.8	3102.9	3072.1	3261.7	3261.2	3218.9	3068.1	3057.4	3195.2	3381.7
62.5°	3899.0	3685.0	3521.3	3472.2	3769.2	3802.7	3670.7	3400.4	3455.7	3566.8	3788.0
65°	4298.7	4041.3	3888.8	3875.4	4238.5	4386.1	4094.4	3724.6	3742.5	3834.8	4074.3
67.5°	4559.1	4249.2	4127.8	4192.5	4643.9	4736.2	4465.0	3941.4	3878.1	3916.4	4202.8
70°	4467.7	4127.0	4039.5	4196.5	4748.7	4888.3	4544.9	3880.8	3746.1	3747.8	4080.6
72.5°	3775.0	3450.8	3492.3	3780.4	4500.7	4696.5	4175.6	3505.2	3229.6	3222.9	3524.8
75°	2496.3	2279.6	2443.3	2892.4	3741.6	4142.1	3459.7	2747.4	2401.8	2289.4	2522.6
77.5°	1091.8	1064.2	1202.0	1709.6	2550.7	2985.2	2478.5	1794.8	1306.4	1086.5	1186.8
80°	292.6	286.3	359.5	648.5	1241.7	1644.0	1341.2	715.8	373.8	272.1	288.6
82.5°	106.6	109.3	133.4	181.5	409.0	692.2	445.6	209.2	141.4	116.0	116.0
85°	46.4	45.0	64.7	72.7	111.5	156.6	128.0	88.8	71.4	53.5	51.3
87.5°	12.5	15.6	21.9	22.7	29.0	23.6	33.9	31.2	26.8	18.7	15.2
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)