

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: P367371

Luminaire Tested: **MSA-SA2B-830-U-5WQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367371
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-SA2B-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: 8491 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

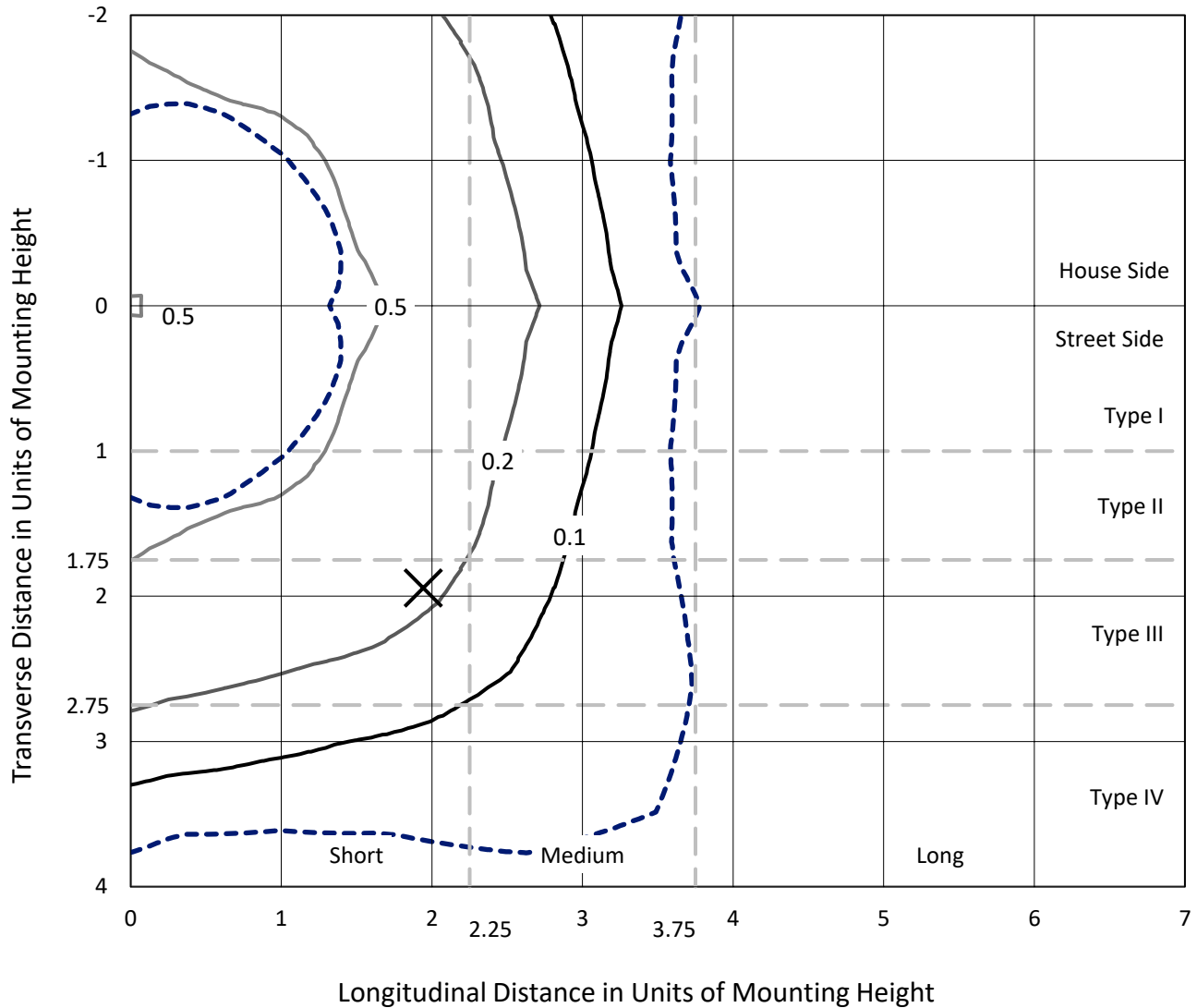
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

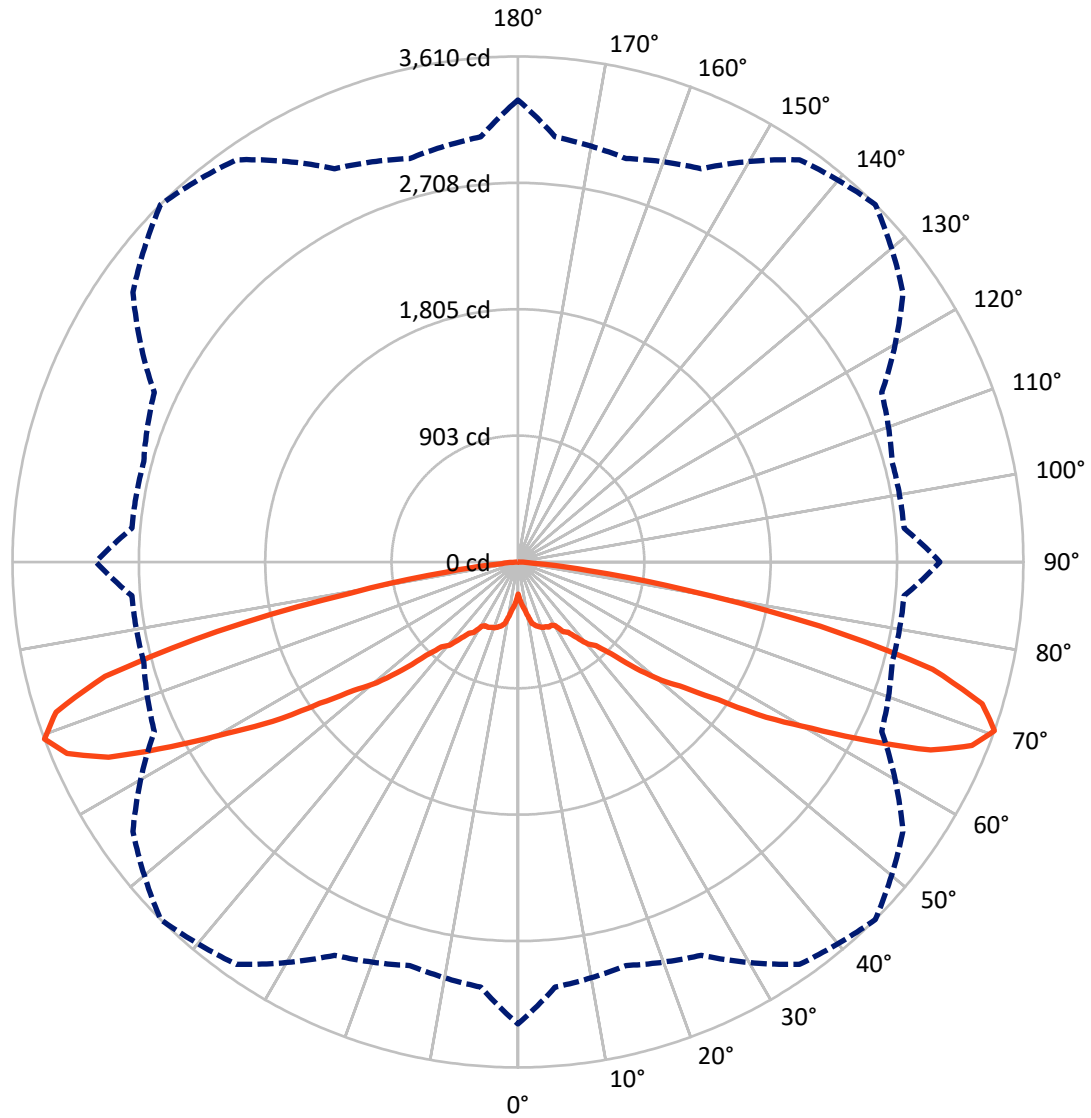
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 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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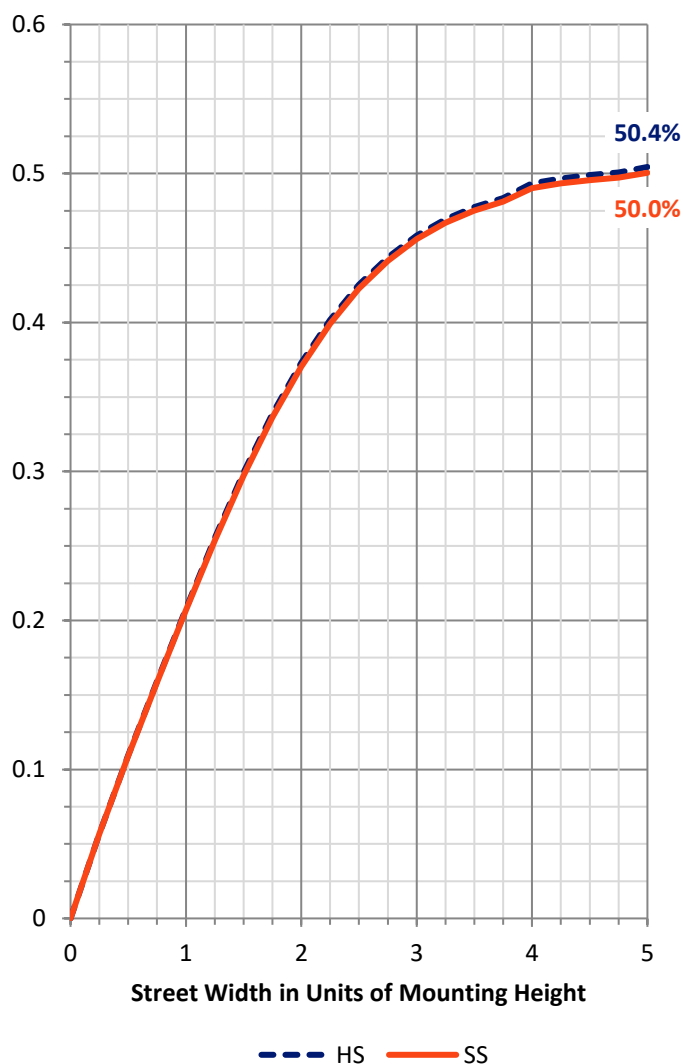
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4245.5	0.0	4245.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4245.5	0.0	4245.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	8491.0	0.0	8491.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.4	0.4
10°-20°	133.7	1.6
20°-30°	252.7	3.0
30°-40°	440.2	5.2
40°-50°	841.5	9.9
50°-60°	1631.6	19.2
60°-70°	2857.1	33.6
70°-80°	2147.3	25.3
80°-90°	153.6	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°	8491.0	100.0
0°-180°	8491.0	100.0

Coefficient of Utilization



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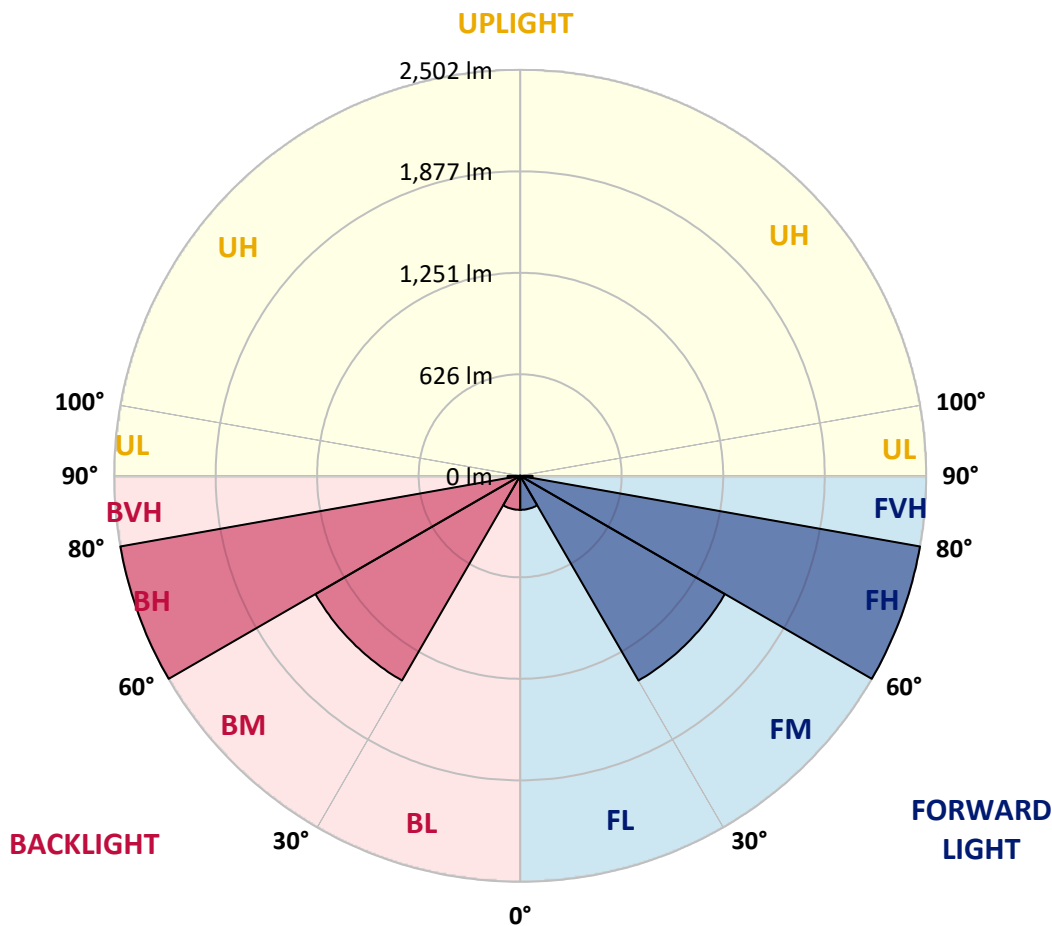
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	209.9	2.5			
FM (30°-60°)	1456.6	17.2			
FH (60°-80°)	2502.2	29.5			G2/5000
FVH (80°-90°)	76.8	0.9			G1/100
BL (0°-30°)	209.9	2.5	B1/500		
BM (30°-60°)	1456.6	17.2	B2/2500		
BH (60°-80°)	2502.2	29.5	B4/5000		G2/5000
BVH (80°-90°)	76.8	0.9			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°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	229.6	229.6	229.6	229.6	229.6	229.6	229.6	229.6	229.6	229.6	229.6
2.5°	279.3	275.0	261.5	262.2	268.5	269.1	269.8	261.5	259.6	276.4	277.4
5°	354.8	344.9	335.0	331.0	325.1	308.6	326.8	328.7	332.7	345.5	351.5
7.5°	405.2	393.0	379.5	371.2	355.1	341.6	356.4	368.6	376.5	391.0	399.2
10°	414.7	407.5	406.8	392.3	389.3	394.3	393.3	393.6	405.5	405.8	410.8
12.5°	444.7	450.0	439.7	434.8	437.8	450.0	440.1	435.8	438.8	452.3	446.7
15°	483.9	490.1	474.7	466.8	458.9	470.4	460.2	467.7	477.3	487.2	482.2
17.5°	527.4	527.7	506.6	477.3	484.2	485.9	482.2	476.0	503.3	527.0	524.7
20°	551.1	550.8	514.5	474.7	495.1	498.7	495.4	474.0	515.2	547.8	546.8
22.5°	575.5	568.2	524.7	492.5	500.0	503.0	495.4	493.4	524.7	570.2	569.9
25°	588.6	594.9	547.1	527.0	520.8	513.9	520.4	523.7	553.7	598.2	585.3
27.5°	629.8	619.6	553.7	551.7	538.6	511.2	534.0	550.1	551.7	623.6	636.7
30°	667.0	671.0	583.4	586.3	562.3	527.7	562.9	588.6	593.6	671.6	670.3
32.5°	706.6	708.2	636.1	605.4	595.2	593.9	580.4	602.8	641.7	704.3	706.9
35°	766.5	780.0	683.2	642.0	629.2	616.0	627.8	647.9	684.2	778.0	771.5
37.5°	903.9	882.5	785.6	700.3	691.7	686.5	696.0	710.5	784.6	884.8	915.4
40°	999.7	989.5	857.8	796.8	742.8	771.1	748.7	804.7	866.0	990.2	1009.9
42.5°	1148.3	1102.8	967.4	892.0	836.0	815.9	828.4	901.6	979.6	1118.0	1156.8
45°	1290.9	1220.7	1104.8	1038.3	953.3	932.2	949.0	1035.0	1125.2	1234.6	1303.1
47.5°	1436.5	1364.0	1236.6	1140.4	1070.9	1133.8	1078.8	1160.5	1250.4	1377.5	1438.5
50°	1587.7	1507.3	1381.5	1276.7	1270.8	1326.5	1260.6	1302.4	1385.8	1517.5	1589.3
52.5°	1761.3	1674.7	1548.8	1478.0	1491.8	1488.2	1475.0	1467.5	1549.5	1678.9	1764.3
55°	1967.8	1874.3	1773.8	1741.2	1779.4	1738.2	1757.7	1755.0	1766.9	1859.5	1959.3
57.5°	2217.5	2111.8	2011.0	2003.7	2052.8	2091.7	2057.1	2007.4	1986.6	2076.5	2190.8
60°	2532.1	2402.3	2291.6	2268.9	2408.9	2408.6	2377.3	2265.9	2258.0	2359.8	2497.5
62.5°	2879.6	2721.5	2600.6	2564.4	2783.7	2808.4	2710.9	2511.3	2552.2	2634.2	2797.6
65°	3174.7	2984.7	2872.0	2862.1	3130.3	3239.3	3023.9	2750.8	2764.0	2832.2	3009.1
67.5°	3367.1	3138.2	3048.6	3096.3	3429.7	3497.9	3297.6	2910.9	2864.1	2892.4	3103.9
70°	3299.6	3047.9	2983.4	3099.3	3507.1	3610.2	3356.6	2866.1	2766.6	2767.9	3013.7
72.5°	2788.0	2548.6	2579.2	2792.0	3324.0	3468.6	3083.8	2588.7	2385.2	2380.2	2603.2
75°	1843.6	1683.6	1804.4	2136.1	2763.3	3059.1	2555.1	2029.1	1773.8	1690.8	1863.1
77.5°	806.4	785.9	887.7	1262.6	1883.8	2204.7	1830.5	1325.5	964.8	802.4	876.5
80°	216.1	211.5	265.5	478.9	917.0	1214.2	990.5	528.7	276.0	200.9	213.1
82.5°	78.7	80.7	98.5	134.1	302.1	511.2	329.1	154.5	104.4	85.6	85.6
85°	34.3	33.3	47.8	53.7	82.3	115.6	94.5	65.6	52.7	39.5	37.9
87.5°	9.2	11.5	16.1	16.8	21.4	17.5	25.0	23.1	19.8	13.8	11.2
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)