

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: P367370

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

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367370
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-5)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2B-830-U-5NQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS
EACH AND TYPE V NARROW OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8100 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

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



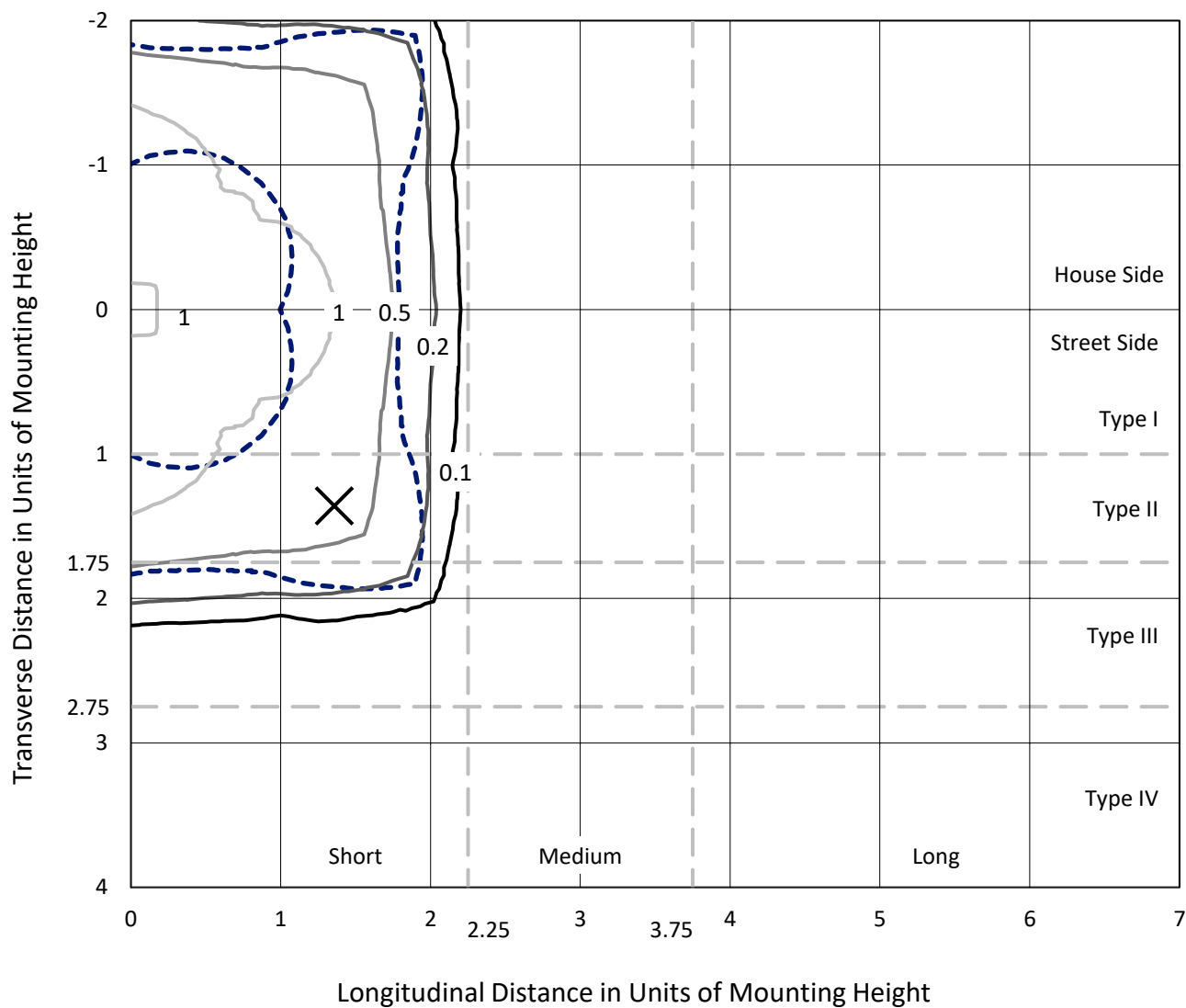
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

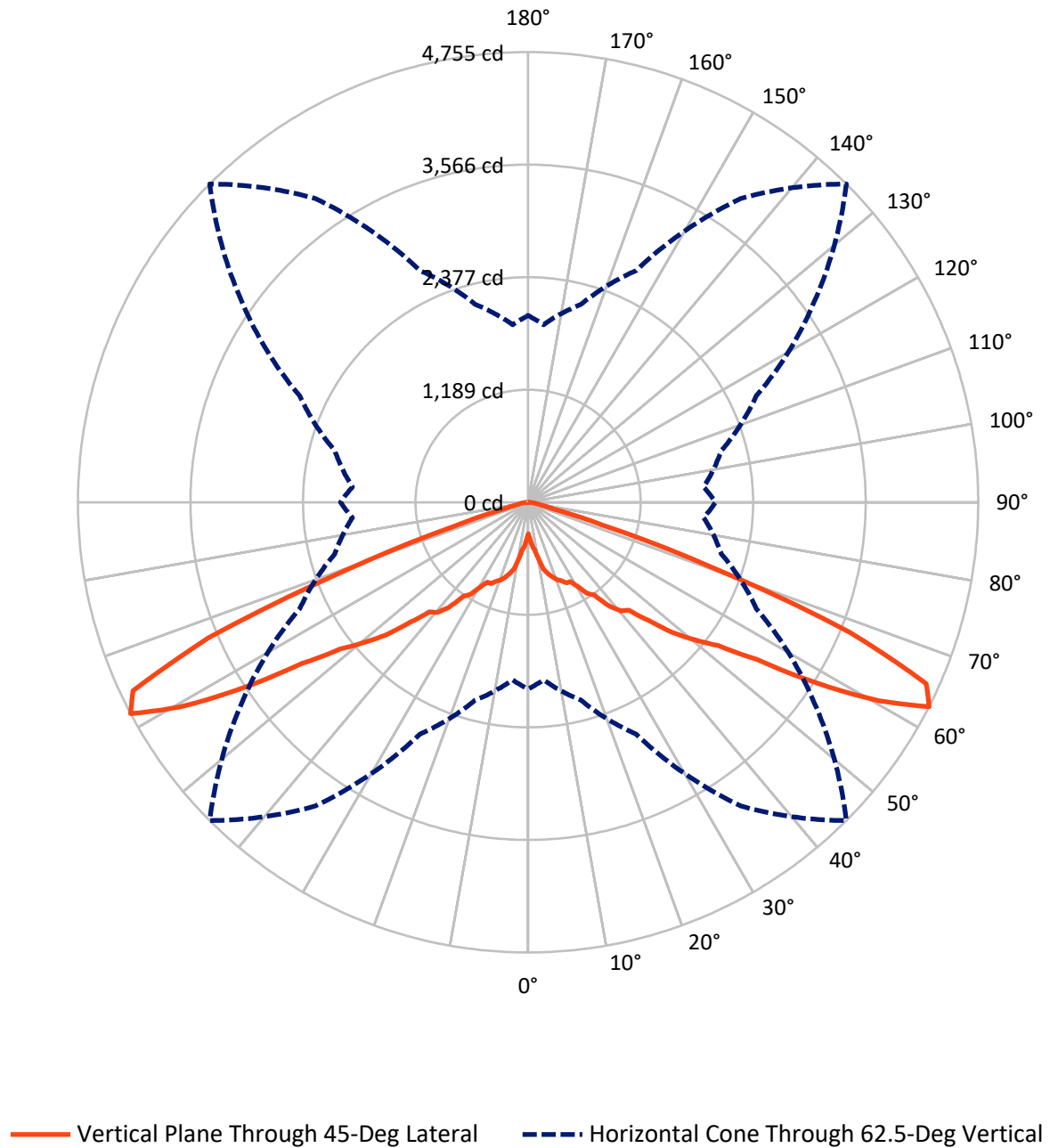


Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



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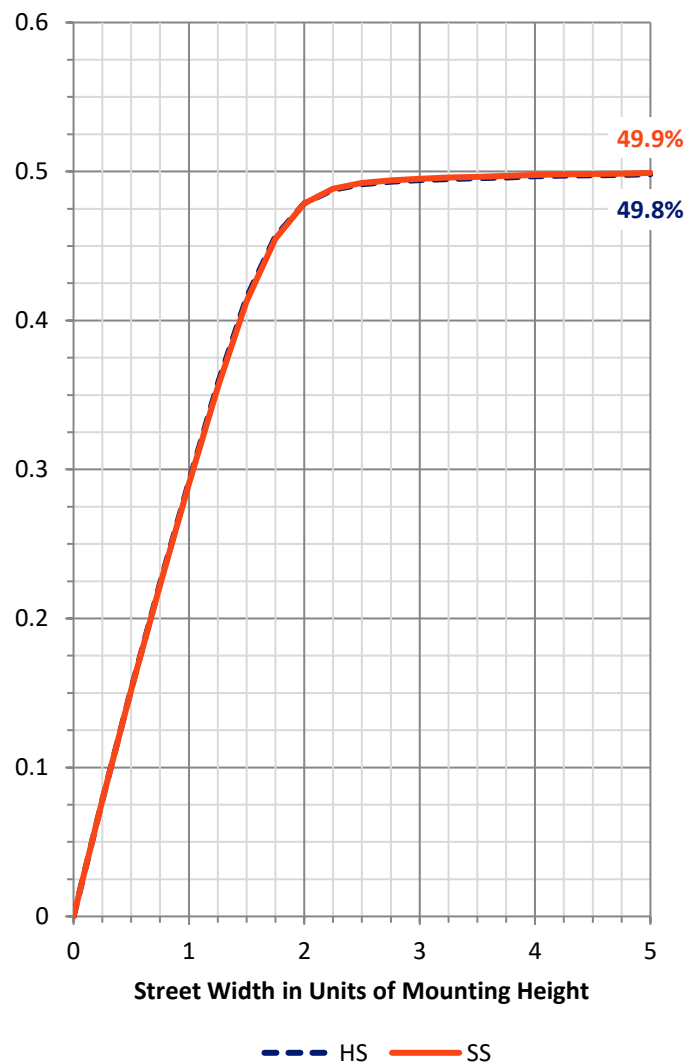
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4050.0	0.0	4050.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4050.0	0.0	4050.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	8100.0	0.0	8100.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.9	0.6
10°-20°	220.1	2.7
20°-30°	461.3	5.7
30°-40°	869.1	10.7
40°-50°	1577.4	19.5
50°-60°	2665.3	32.9
60°-70°	1992.5	24.6
70°-80°	222.9	2.8
80°-90°	41.5	0.5
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°	8100.0	100.0
0°-180°	8100.0	100.0

Coefficient of Utilization



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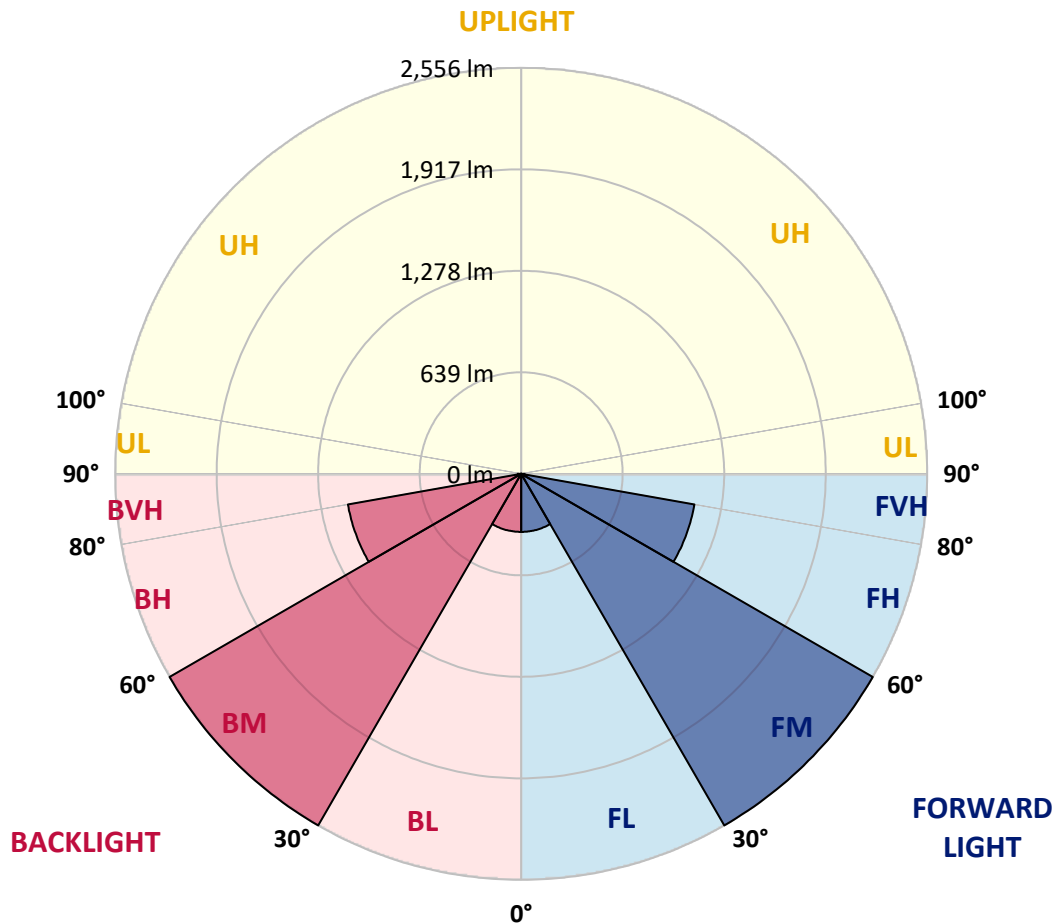
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	365.6	4.5			
FM	(30°-60°)	2555.9	31.6			
FH	(60°-80°)	1107.7	13.7			G1/1800
FVH	(80°-90°)	20.7	0.3			G1/100
BL	(0°-30°)	365.6	4.5	B1/500		
BM	(30°-60°)	2555.9	31.6	B3/5000		
BH	(60°-80°)	1107.7	13.7	B3/2500		G1/1800
BVH	(80°-90°)	20.7	0.3			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°	331.2	331.2	331.2	331.2	331.2	331.2	331.2	331.2	331.2	331.2	331.2
2.5°	402.7	395.4	370.1	379.0	388.2	386.9	384.6	377.7	371.4	397.4	402.7
5°	513.4	496.9	488.0	480.8	479.2	461.4	485.7	483.1	491.3	505.2	518.7
7.5°	601.7	586.3	562.9	557.9	531.2	511.4	532.5	558.6	566.8	592.2	607.3
10°	634.0	620.5	624.8	602.7	601.4	607.0	602.4	608.3	630.1	627.1	638.3
12.5°	706.5	708.8	695.0	689.4	700.6	725.0	704.2	697.0	691.7	714.1	721.0
15°	774.4	787.9	765.2	761.6	757.0	779.7	757.3	768.2	777.7	782.3	779.7
17.5°	870.6	871.3	845.9	805.4	820.6	827.8	817.9	799.1	844.3	867.0	868.3
20°	933.9	936.2	886.1	822.9	865.7	872.3	867.3	828.1	888.1	926.0	924.4
22.5°	1002.1	994.2	926.3	880.2	895.4	899.3	888.8	883.8	926.0	994.9	984.7
25°	1047.9	1062.4	994.9	965.2	952.4	943.1	956.7	959.3	1002.5	1065.1	1030.5
27.5°	1157.3	1132.3	1026.5	1037.7	1010.4	948.1	1007.4	1040.0	1030.8	1137.6	1163.6
30°	1254.6	1255.2	1106.9	1128.3	1077.6	1027.2	1091.4	1138.6	1127.0	1263.8	1239.1
32.5°	1378.8	1383.4	1245.7	1188.3	1154.0	1144.5	1136.6	1188.6	1260.5	1371.2	1373.5
35°	1512.9	1552.5	1365.3	1305.0	1246.6	1204.5	1249.9	1322.1	1368.9	1545.9	1514.6
37.5°	1774.2	1707.7	1554.4	1441.1	1403.8	1387.0	1411.1	1452.9	1554.1	1706.7	1760.4
40°	1928.8	1910.3	1701.7	1606.8	1463.2	1508.0	1494.8	1609.5	1693.2	1920.9	1925.8
42.5°	2165.1	2072.1	1884.6	1764.0	1634.8	1557.1	1639.5	1793.4	1894.5	2087.0	2177.9
45°	2351.9	2232.6	2088.0	1996.4	1833.2	1775.6	1805.2	2002.3	2129.2	2261.3	2380.9
47.5°	2558.5	2429.4	2284.7	2121.9	1962.7	2056.7	2004.3	2177.6	2301.5	2491.0	2603.0
50°	2818.2	2675.2	2490.0	2355.5	2250.1	2283.1	2274.8	2398.4	2551.3	2724.0	2851.2
52.5°	3104.3	2942.5	2763.8	2639.0	2594.5	2512.7	2619.5	2670.3	2783.0	2941.1	3090.4
55°	3304.3	3142.5	3034.4	3074.6	3062.7	2931.6	3025.2	3030.4	2976.1	3033.1	3183.4
57.5°	3273.3	3118.8	3103.9	3255.9	3482.9	3609.8	3465.1	3154.0	2950.4	2923.7	3082.8
60°	2862.1	2729.9	2865.7	3208.4	3869.8	4256.0	3699.1	3060.8	2725.3	2586.6	2740.1
62.5°	1972.3	1883.0	2164.4	2700.2	3916.2	4754.6	3690.5	2659.7	2113.7	1861.9	1981.2
65°	934.9	902.6	1140.2	1712.0	3262.1	4621.5	3224.2	1799.6	1216.7	971.8	998.8
67.5°	351.6	335.5	418.5	756.3	2054.7	3665.5	2167.4	887.8	470.6	365.8	378.3
70°	199.7	188.2	199.0	275.8	827.1	2076.1	934.9	304.5	200.0	182.2	194.1
72.5°	157.2	148.3	149.9	166.7	285.4	815.0	302.5	173.7	145.3	138.1	148.6
75°	129.8	121.9	121.6	130.8	166.4	264.6	171.0	132.8	117.6	112.4	120.9
77.5°	103.1	98.5	99.9	107.1	119.3	148.0	123.9	107.4	96.6	90.3	96.2
80°	75.5	74.8	80.1	86.7	89.0	99.5	92.9	86.7	77.1	68.2	70.5
82.5°	49.4	49.8	59.6	64.9	63.9	63.6	66.6	66.2	57.7	45.1	45.1
85°	28.3	29.0	36.6	40.9	40.2	32.0	42.2	42.5	36.9	27.4	26.4
87.5°	9.2	11.5	15.8	16.8	16.1	8.9	16.1	17.8	16.1	11.5	10.2
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)