

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: P366975

Luminaire Tested: **MSA-SA1C-830-U-5WQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P366975
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-SA1C-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: 5347 lumens
Efficiency: N/A
Efficacy: 90.6 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

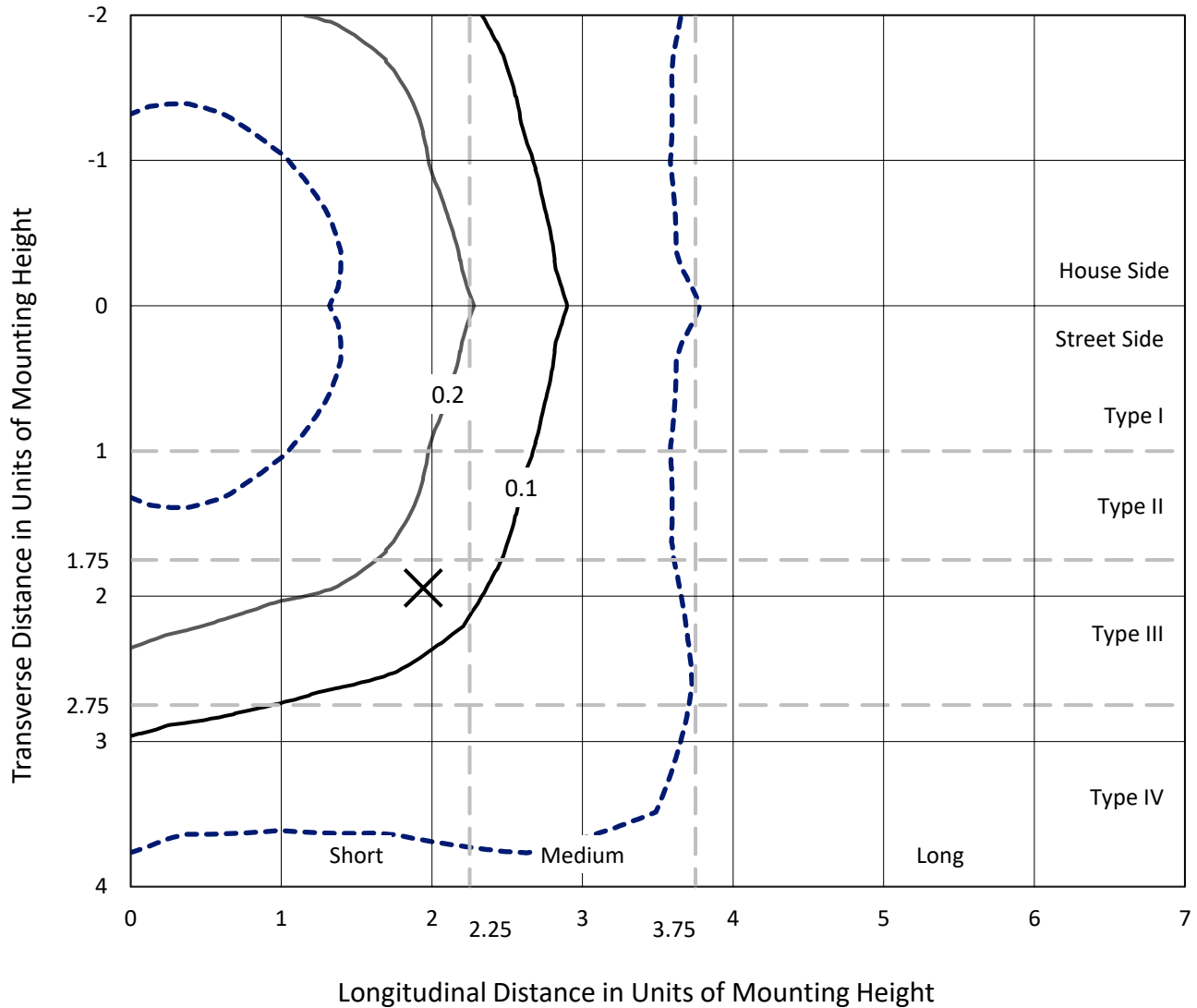
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

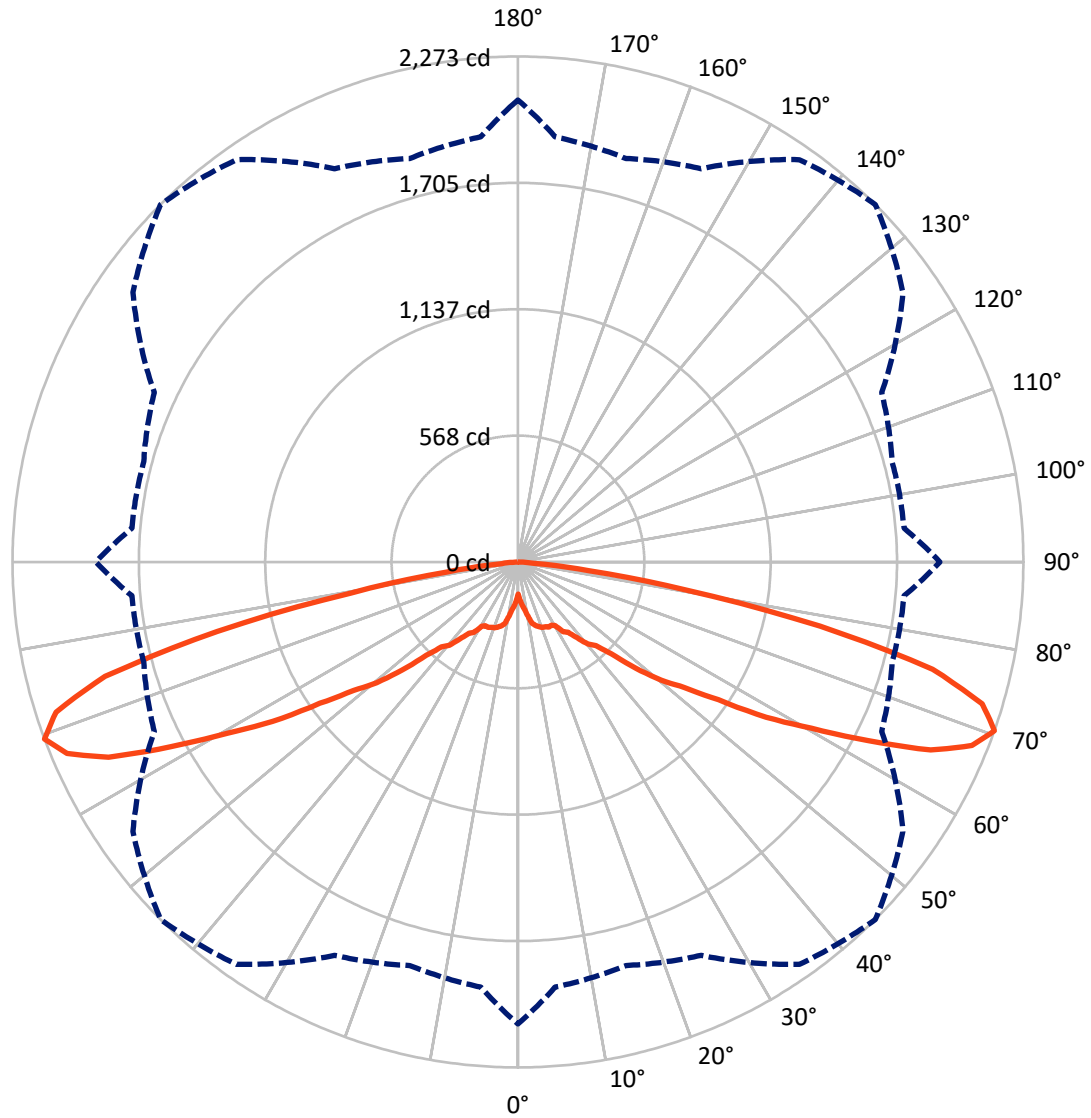
× Max cd
 - - - 1/2 Max cd



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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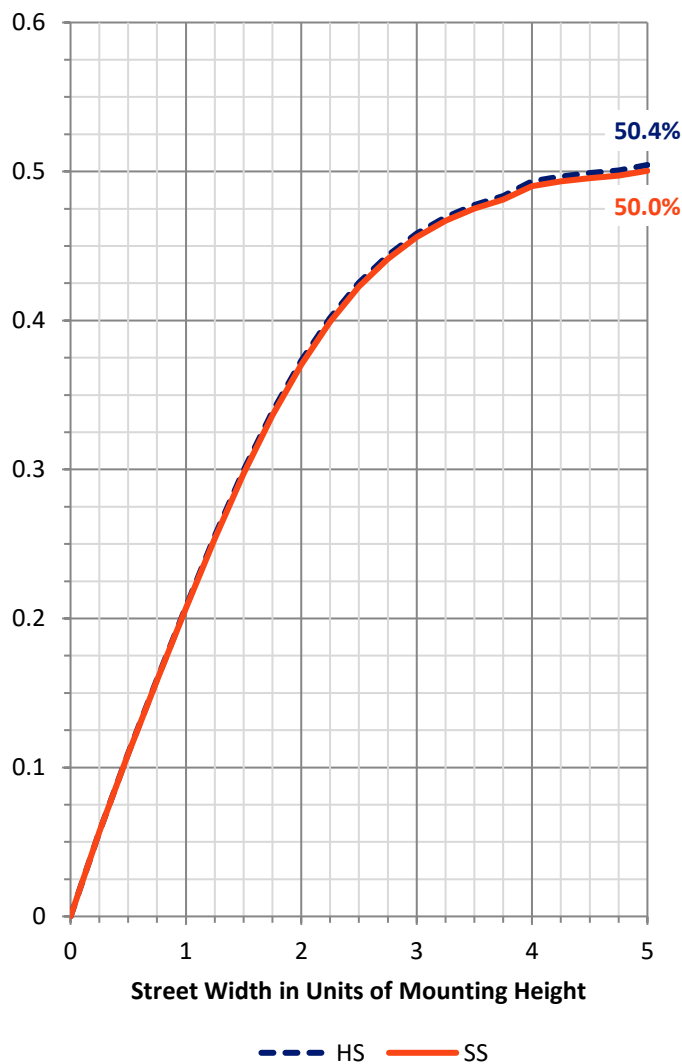
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2673.5	0.0	2673.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2673.5	0.0	2673.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	5347.0	0.0	5347.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.0	0.4
10°-20°	84.2	1.6
20°-30°	159.1	3.0
30°-40°	277.2	5.2
40°-50°	529.9	9.9
50°-60°	1027.5	19.2
60°-70°	1799.2	33.6
70°-80°	1352.2	25.3
80°-90°	96.8	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°	5347.0	100.0
0°-180°	5347.0	100.0

Coefficient of Utilization

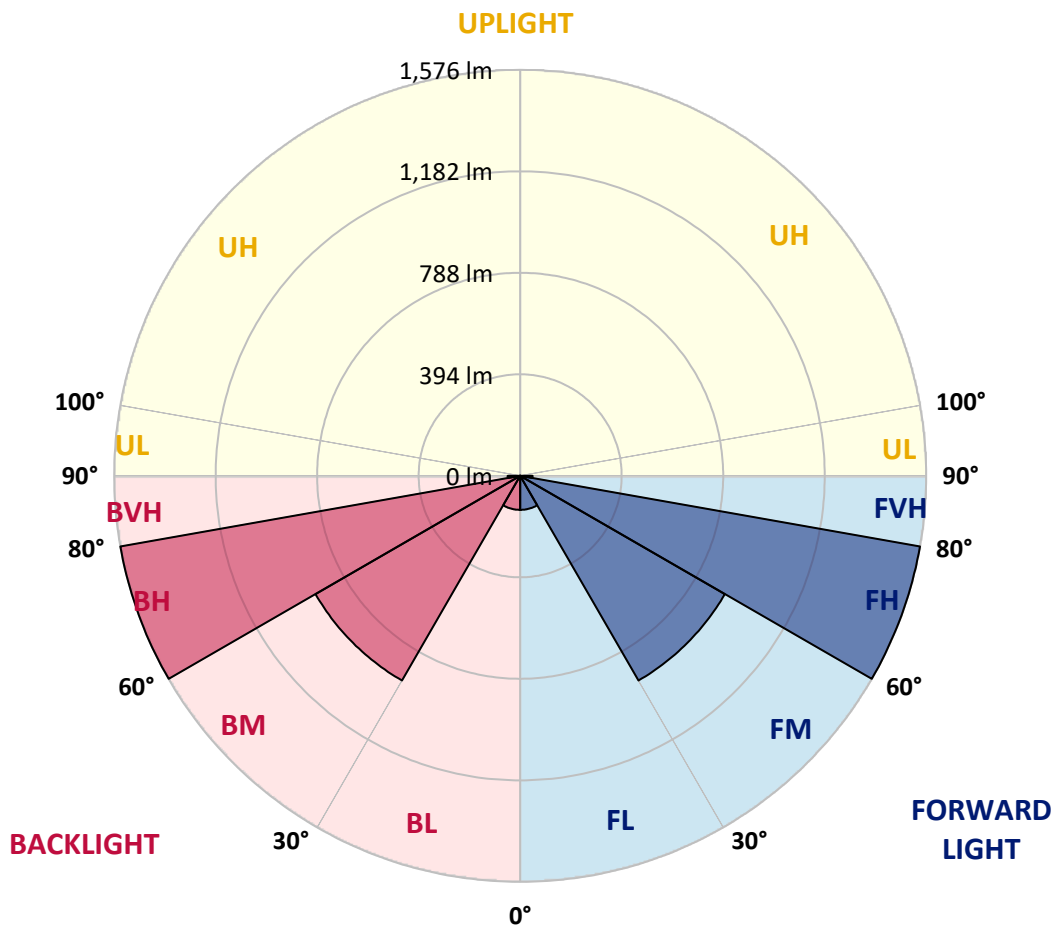


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	132.2	2.5			
FM (30°-60°)	917.3	17.2			
FH (60°-80°)	1575.7	29.5			G1/1800
FVH (80°-90°)	48.4	0.9			G1/100
BL (0°-30°)	132.2	2.5	B1/500		
BM (30°-60°)	917.3	17.2	B1/1000		
BH (60°-80°)	1575.7	29.5	B3/2500		G1/1800
BVH (80°-90°)	48.4	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°	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6
2.5°	175.9	173.2	164.7	165.1	169.1	169.5	169.9	164.7	163.5	174.0	174.7
5°	223.4	217.2	211.0	208.5	204.7	194.4	205.8	207.0	209.5	217.6	221.3
7.5°	255.1	247.5	239.0	233.8	223.6	215.1	224.4	232.1	237.1	246.2	251.4
10°	261.2	256.6	256.2	247.0	245.2	248.3	247.7	247.9	255.3	255.6	258.7
12.5°	280.0	283.3	276.9	273.8	275.7	283.3	277.1	274.4	276.3	284.8	281.3
15°	304.7	308.7	298.9	293.9	289.0	296.2	289.8	294.6	300.6	306.8	303.7
17.5°	332.1	332.3	319.0	300.6	304.9	306.0	303.7	299.7	317.0	331.9	330.4
20°	347.0	346.8	324.0	298.9	311.8	314.0	312.0	298.5	324.4	345.0	344.3
22.5°	362.4	357.8	330.4	310.1	314.9	316.7	312.0	310.7	330.4	359.1	358.9
25°	370.7	374.6	344.5	331.9	327.9	323.6	327.7	329.8	348.7	376.7	368.6
27.5°	396.6	390.2	348.7	347.4	339.1	321.9	336.2	346.4	347.4	392.7	401.0
30°	420.0	422.5	367.4	369.2	354.1	332.3	354.5	370.7	373.8	423.0	422.1
32.5°	444.9	446.0	400.5	381.3	374.8	374.0	365.5	379.6	404.1	443.5	445.1
35°	482.7	491.2	430.2	404.3	396.2	387.9	395.4	408.0	430.8	490.0	485.8
37.5°	569.2	555.7	494.7	441.0	435.6	432.3	438.3	447.4	494.1	557.2	576.4
40°	629.6	623.1	540.1	501.8	467.8	485.6	471.5	506.8	545.3	623.5	636.0
42.5°	723.1	694.5	609.2	561.7	526.5	513.8	521.7	567.7	616.9	704.0	728.5
45°	812.9	768.7	695.7	653.8	600.3	587.0	597.6	651.7	708.6	777.4	820.6
47.5°	904.6	859.0	778.7	718.1	674.4	714.0	679.3	730.8	787.4	867.5	905.8
50°	999.8	949.2	870.0	804.0	800.3	835.3	793.8	820.2	872.7	955.6	1000.9
52.5°	1109.1	1054.6	975.3	930.7	939.5	937.2	928.9	924.1	975.8	1057.3	1111.0
55°	1239.2	1180.3	1117.0	1096.5	1120.5	1094.6	1106.8	1105.2	1112.7	1170.9	1233.8
57.5°	1396.4	1329.8	1266.4	1261.8	1292.7	1317.2	1295.4	1264.1	1251.0	1307.6	1379.6
60°	1594.5	1512.8	1443.1	1428.8	1516.9	1516.7	1497.0	1426.9	1421.9	1486.0	1572.7
62.5°	1813.4	1713.8	1637.7	1614.8	1753.0	1768.6	1707.2	1581.4	1607.2	1658.8	1761.7
65°	1999.2	1879.5	1808.6	1802.4	1971.2	2039.9	1904.2	1732.3	1740.5	1783.5	1894.9
67.5°	2120.4	1976.2	1919.8	1949.8	2159.8	2202.7	2076.6	1833.1	1803.6	1821.4	1954.6
70°	2077.8	1919.4	1878.7	1951.7	2208.5	2273.4	2113.7	1804.9	1742.2	1743.0	1897.8
72.5°	1755.7	1604.9	1624.2	1758.2	2093.2	2184.2	1942.0	1630.2	1502.0	1498.9	1639.3
75°	1161.0	1060.2	1136.3	1345.2	1740.1	1926.4	1609.0	1277.8	1117.0	1064.7	1173.2
77.5°	507.8	494.9	559.0	795.1	1186.3	1388.3	1152.7	834.7	607.6	505.3	552.0
80°	136.1	133.2	167.2	301.6	577.5	764.6	623.7	332.9	173.8	126.5	134.2
82.5°	49.6	50.8	62.0	84.4	190.2	321.9	207.2	97.3	65.8	53.9	53.9
85°	21.6	21.0	30.1	33.8	51.9	72.8	59.5	41.3	33.2	24.9	23.9
87.5°	5.8	7.3	10.2	10.6	13.5	11.0	15.8	14.5	12.4	8.7	7.1
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)