

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: P367238

Luminaire Tested: **MSA-SA2A-830-U-5NQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367238
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-SA2A-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: 6463 lumens
Efficiency: N/A
Efficacy: 97.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B2 - U0 - G1

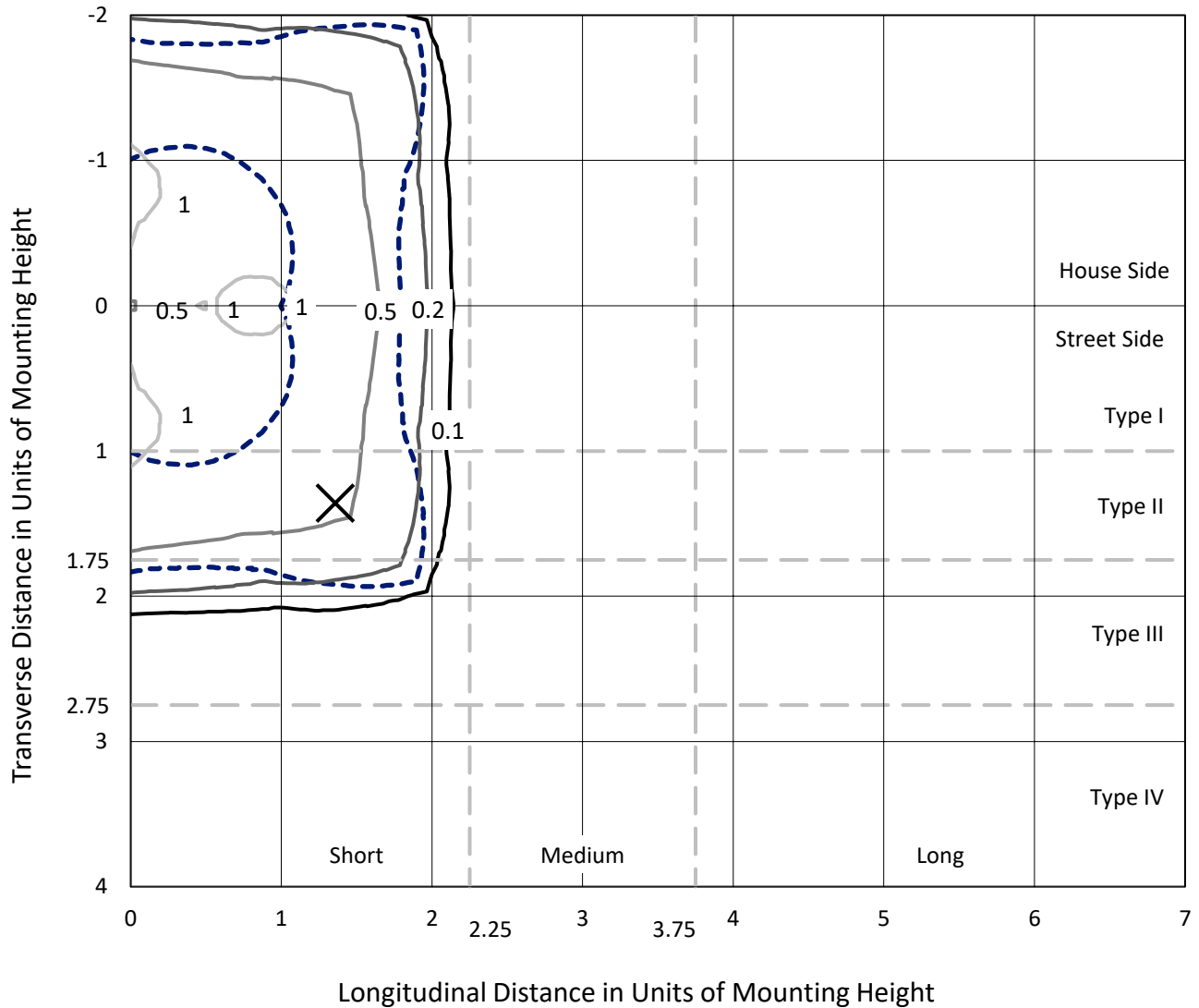
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

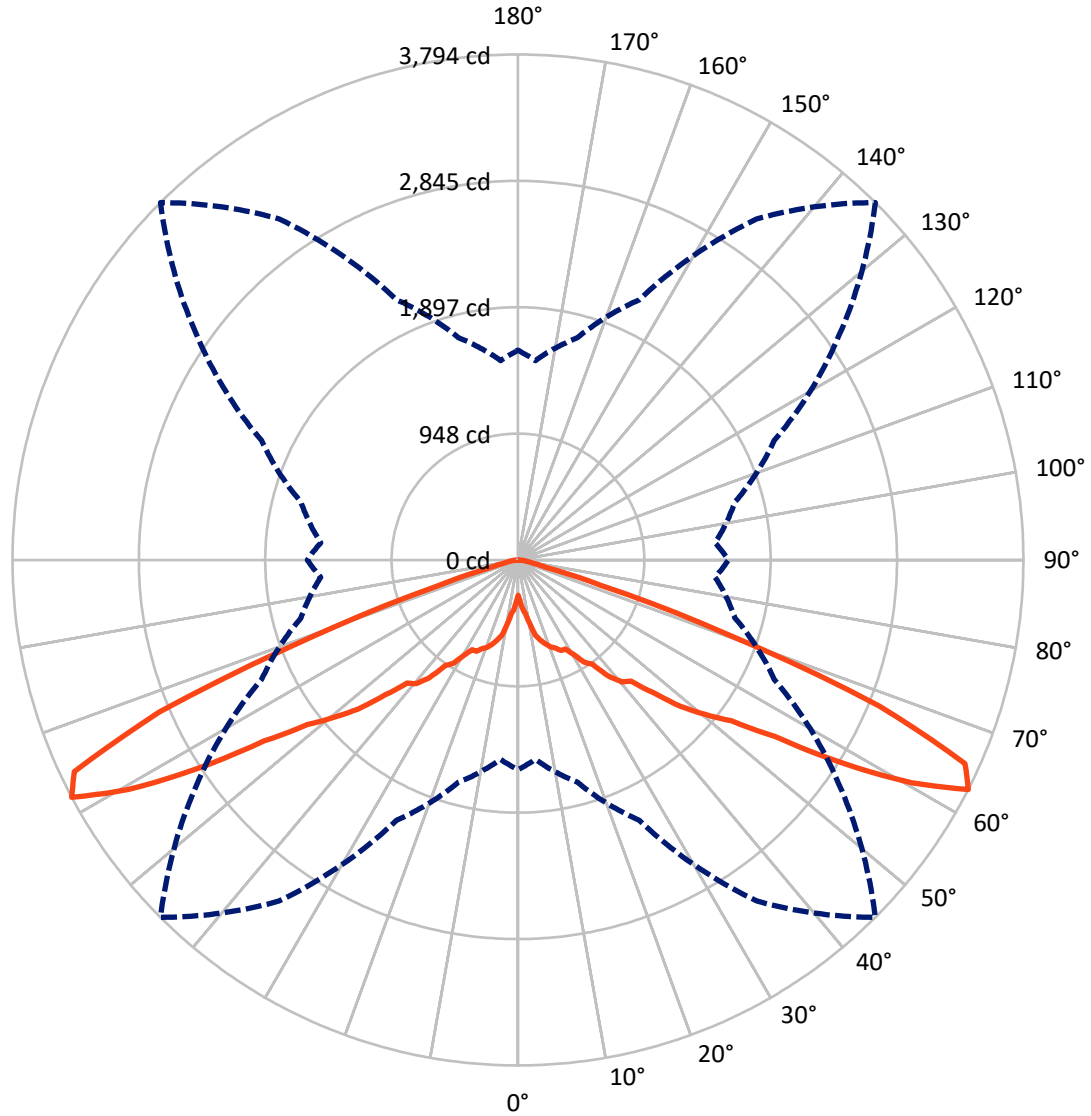
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3231.5	0.0	3231.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3231.5	0.0	3231.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	6463.0	0.0	6463.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.8	0.6
10°-20°	175.6	2.7
20°-30°	368.1	5.7
30°-40°	693.5	10.7
40°-50°	1258.6	19.5
50°-60°	2126.7	32.9
60°-70°	1589.8	24.6
70°-80°	177.9	2.8
80°-90°	33.1	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°	6463.0	100.0
0°-180°	6463.0	100.0

Coefficient of Utilization



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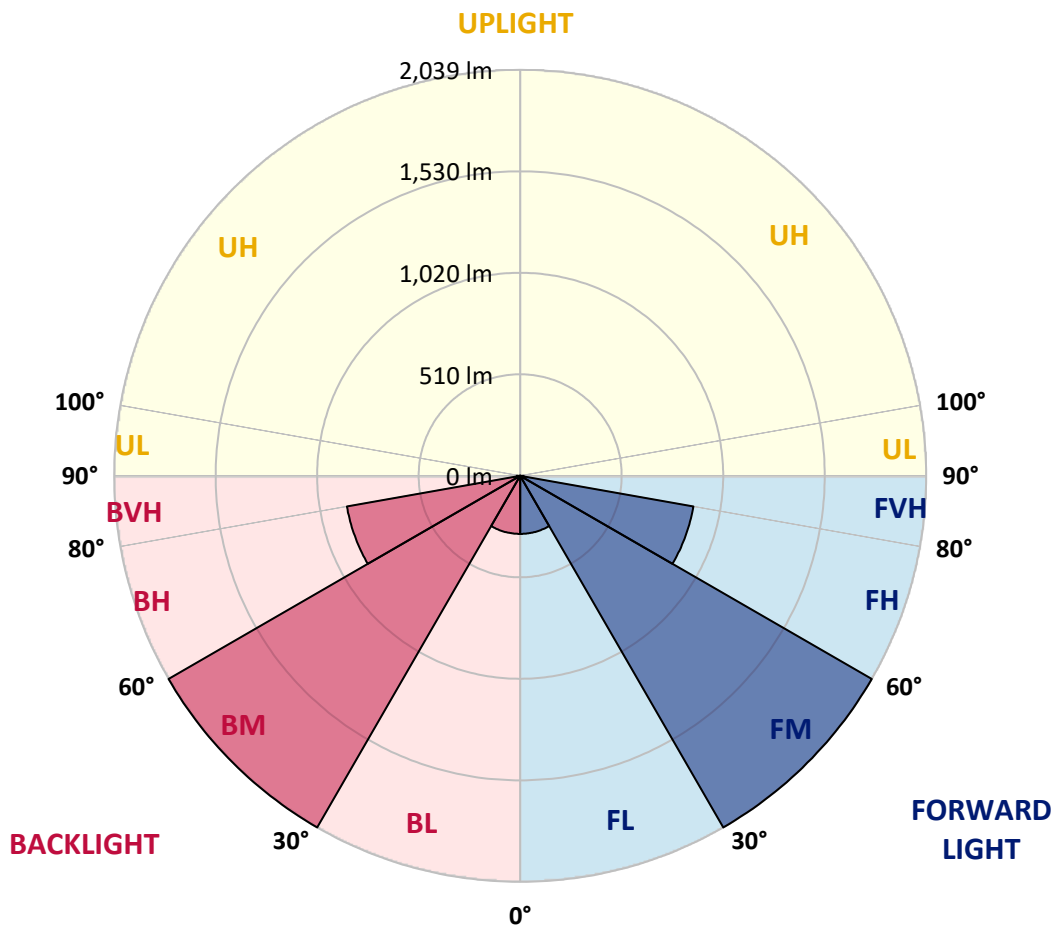
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	291.7	4.5			
FM (30°-60°)	2039.4	31.6			
FH (60°-80°)	883.8	13.7			G1/1800
FVH (80°-90°)	16.5	0.3			G1/100
BL (0°-30°)	291.7	4.5	B1/500		
BM (30°-60°)	2039.4	31.6	B2/2500		
BH (60°-80°)	883.8	13.7	B2/1000		G1/1800
BVH (80°-90°)	16.5	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	264.3	264.3	264.3	264.3	264.3	264.3	264.3	264.3	264.3	264.3	264.3
2.5°	321.3	315.5	295.3	302.4	309.7	308.7	306.9	301.3	296.3	317.1	321.3
5°	409.7	396.5	389.4	383.6	382.3	368.1	387.6	385.5	392.0	403.1	413.9
7.5°	480.1	467.8	449.1	445.2	423.9	408.1	424.9	445.7	452.3	472.5	484.6
10°	505.9	495.1	498.5	480.9	479.9	484.3	480.7	485.4	502.7	500.4	509.3
12.5°	563.7	565.6	554.5	550.1	559.0	578.5	561.9	556.1	551.9	569.8	575.3
15°	617.9	628.7	610.5	607.7	604.0	622.1	604.2	612.9	620.5	624.2	622.1
17.5°	694.7	695.2	675.0	642.6	654.7	660.5	652.6	637.6	673.7	691.8	692.8
20°	745.2	747.0	707.0	656.6	690.7	696.0	692.1	660.8	708.6	738.9	737.5
22.5°	799.6	793.3	739.1	702.3	714.4	717.6	709.1	705.2	738.9	793.8	785.7
25°	836.1	847.7	793.8	770.2	759.9	752.5	763.3	765.4	799.9	849.8	822.2
27.5°	923.4	903.5	819.1	828.0	806.2	756.5	803.8	829.8	822.5	907.7	928.4
30°	1001.0	1001.5	883.2	900.3	859.8	819.6	870.9	908.5	899.3	1008.4	988.7
32.5°	1100.1	1103.8	993.9	948.2	920.8	913.2	906.9	948.4	1005.7	1094.1	1095.9
35°	1207.2	1238.7	1089.4	1041.2	994.7	961.0	997.3	1054.9	1092.3	1233.5	1208.5
37.5°	1415.7	1362.6	1240.3	1149.8	1120.1	1106.7	1125.9	1159.3	1240.0	1361.8	1404.6
40°	1539.0	1524.3	1357.8	1282.1	1167.5	1203.2	1192.7	1284.2	1351.0	1532.7	1536.6
42.5°	1727.5	1653.4	1503.8	1407.5	1304.4	1242.4	1308.1	1430.9	1511.6	1665.2	1737.8
45°	1876.6	1781.4	1666.0	1592.9	1462.7	1416.7	1440.4	1597.6	1698.9	1804.3	1899.7
47.5°	2041.5	1938.4	1823.0	1693.1	1566.1	1641.0	1599.2	1737.5	1836.4	1987.6	2077.0
50°	2248.7	2134.5	1986.8	1879.5	1795.4	1821.6	1815.1	1913.7	2035.7	2173.5	2275.0
52.5°	2476.9	2347.8	2205.3	2105.6	2070.1	2004.9	2090.1	2130.6	2220.5	2346.7	2465.9
55°	2636.5	2507.4	2421.2	2453.2	2443.8	2339.1	2413.8	2418.0	2374.6	2420.1	2540.0
57.5°	2611.8	2488.5	2476.6	2597.8	2779.0	2880.2	2764.8	2516.6	2354.1	2332.8	2459.8
60°	2283.6	2178.2	2286.5	2560.0	3087.7	3395.9	2951.5	2442.2	2174.5	2063.8	2186.3
62.5°	1573.7	1502.4	1727.0	2154.5	3124.8	3793.7	2944.7	2122.2	1686.5	1485.6	1580.8
65°	746.0	720.2	909.8	1366.0	2602.8	3687.5	2572.6	1435.9	970.8	775.4	797.0
67.5°	280.6	267.7	333.9	603.4	1639.4	2924.7	1729.4	708.4	375.5	291.9	301.9
70°	159.3	150.1	158.8	220.1	660.0	1656.5	746.0	243.0	159.6	145.4	154.9
72.5°	125.4	118.3	119.6	133.0	227.7	650.3	241.4	138.6	116.0	110.2	118.6
75°	103.6	97.3	97.0	104.4	132.8	211.1	136.5	106.0	93.9	89.7	96.5
77.5°	82.3	78.6	79.7	85.5	95.2	118.1	98.9	85.7	77.0	72.0	76.8
80°	60.2	59.7	63.9	69.2	71.0	79.4	74.1	69.2	61.5	54.4	56.3
82.5°	39.4	39.7	47.6	51.8	51.0	50.7	53.1	52.9	46.0	36.0	36.0
85°	22.6	23.1	29.2	32.6	32.1	25.5	33.7	33.9	29.4	21.8	21.0
87.5°	7.4	9.2	12.6	13.4	12.9	7.1	12.9	14.2	12.9	9.2	8.2
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)