

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: P367502

Luminaire Tested: **MSA-SA2C-830-U-5NQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367502
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-SA2C-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: 10031 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

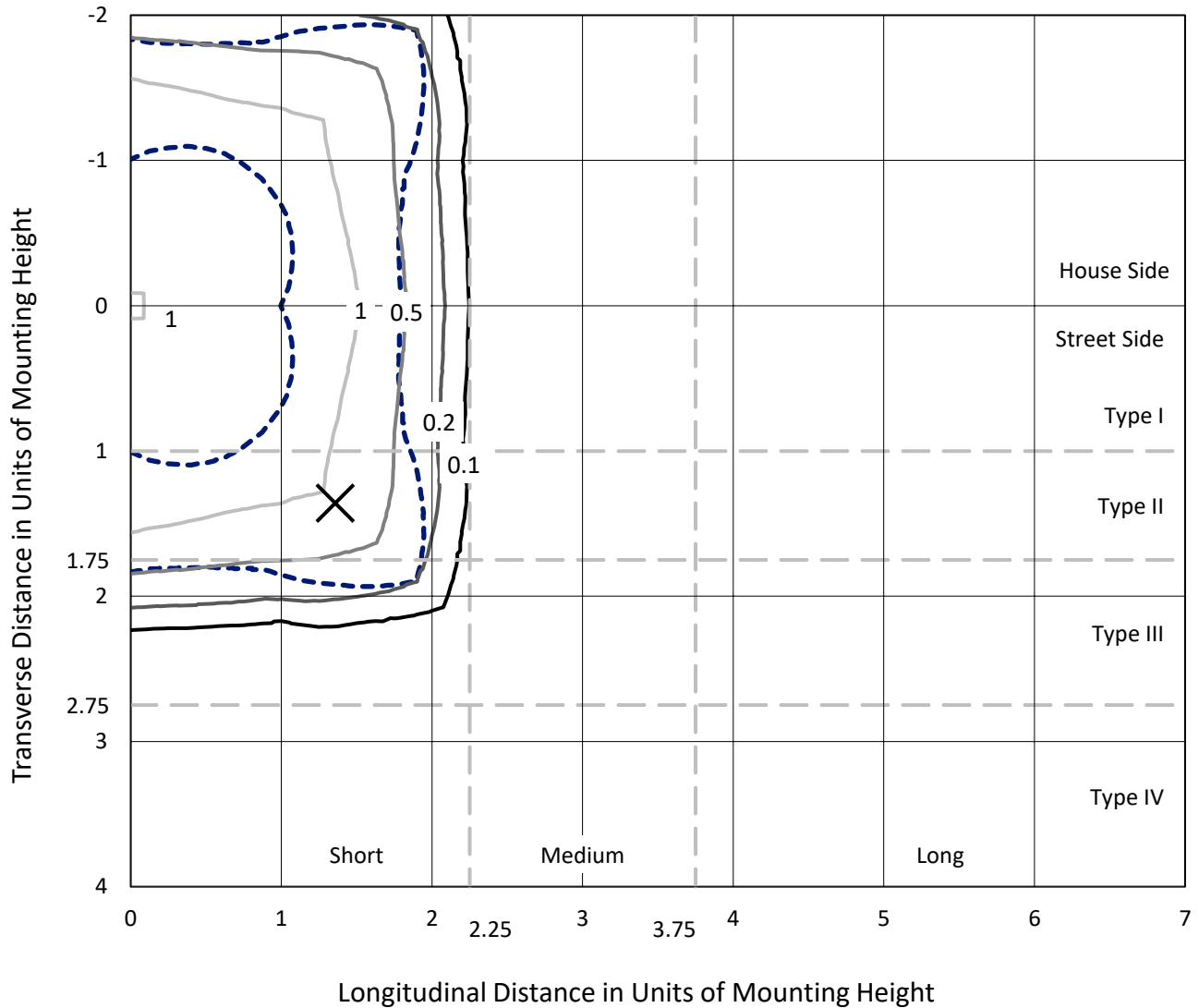
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

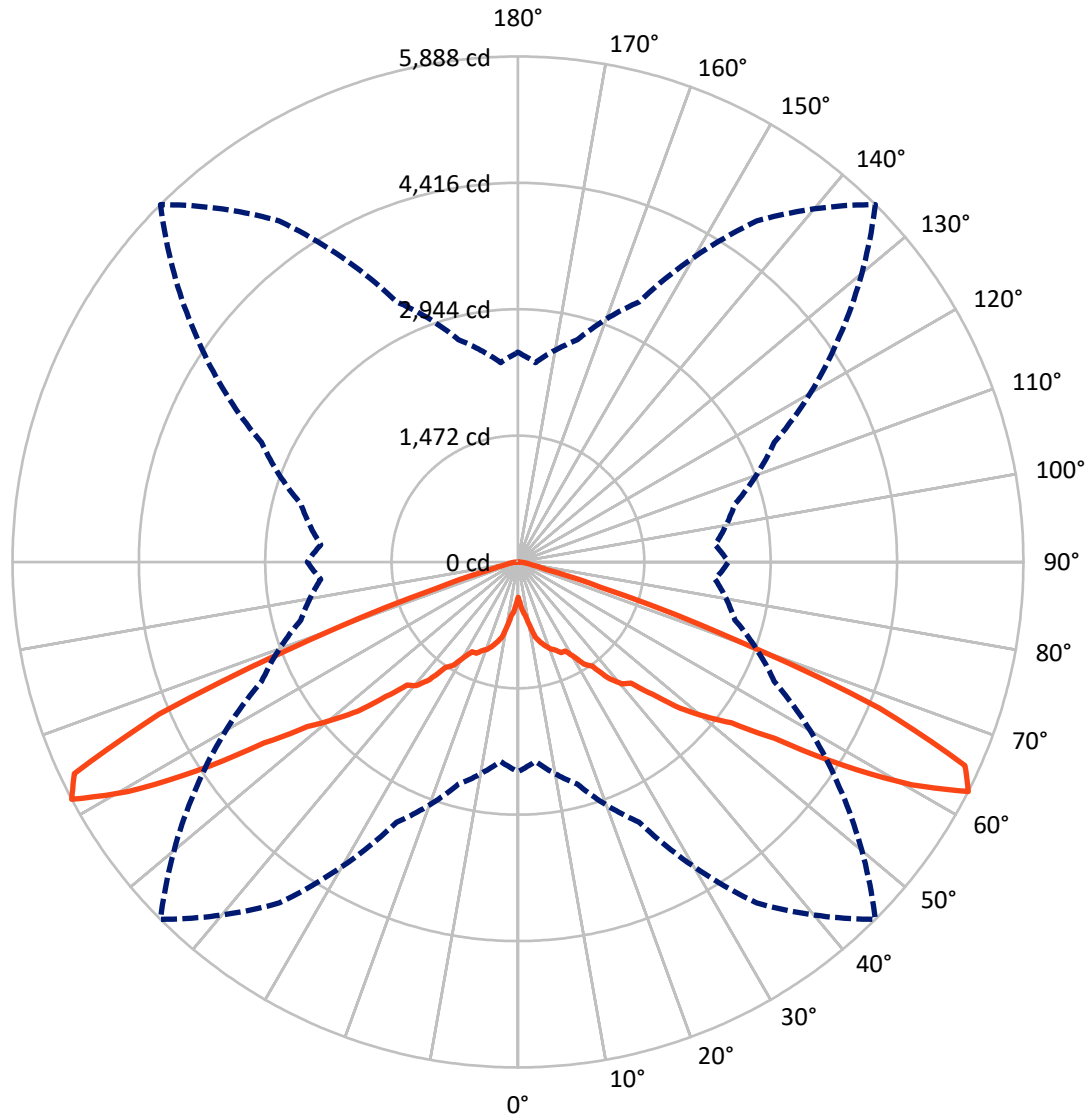
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 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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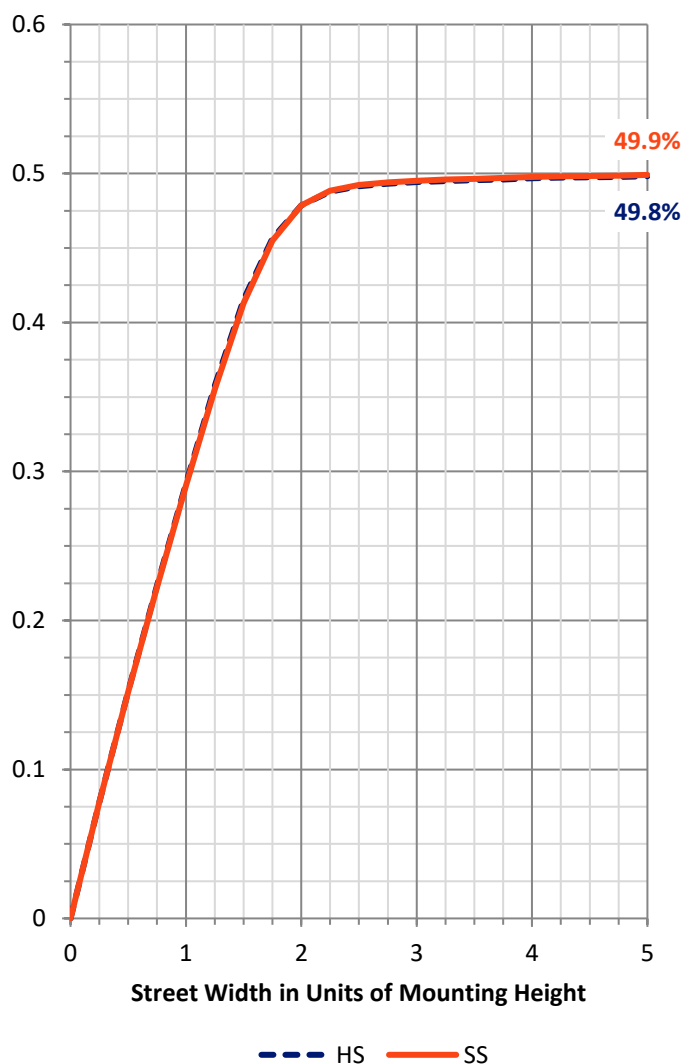
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5015.5	0.0	5015.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5015.5	0.0	5015.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	10031.0	0.0	10031.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.8	0.6
10°-20°	272.5	2.7
20°-30°	571.2	5.7
30°-40°	1076.3	10.7
40°-50°	1953.5	19.5
50°-60°	3300.7	32.9
60°-70°	2467.5	24.6
70°-80°	276.0	2.8
80°-90°	51.4	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°	10031.0	100.0
0°-180°	10031.0	100.0

Coefficient of Utilization



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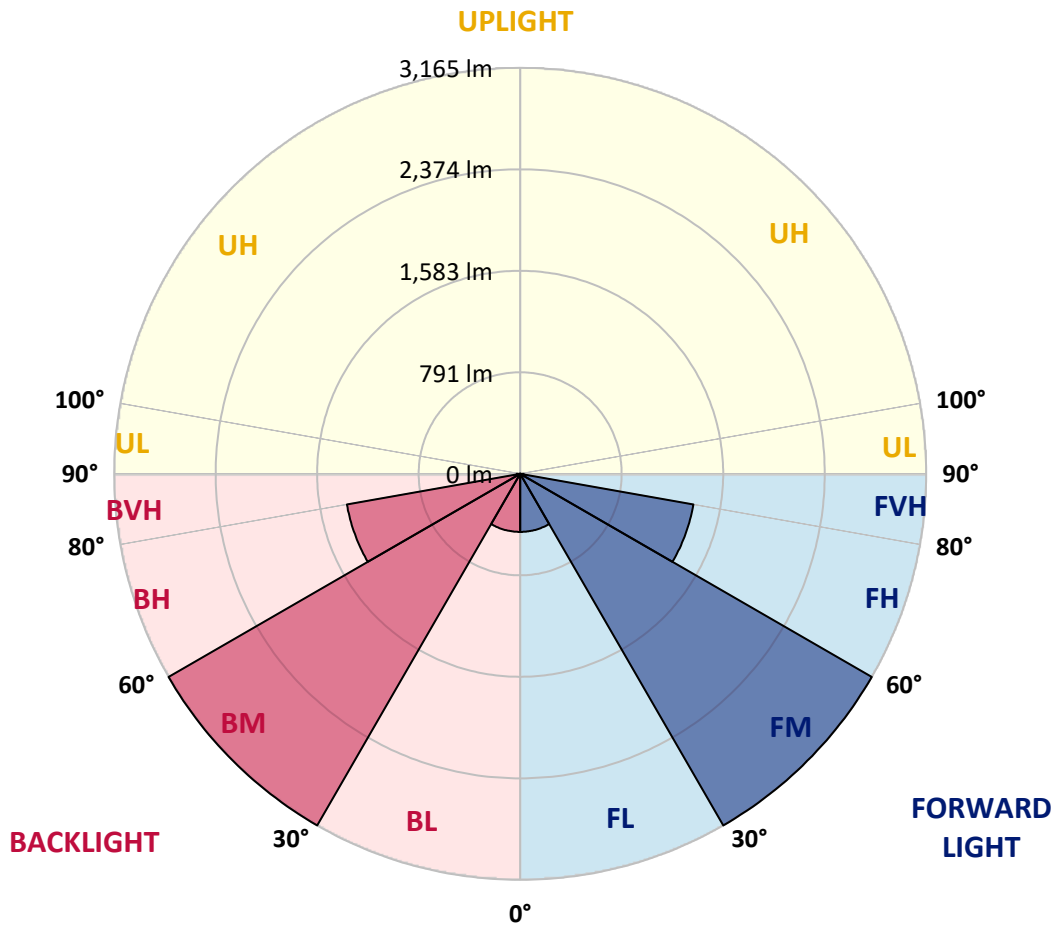
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	452.8	4.5			
FM (30°-60°)	3165.2	31.6			
FH (60°-80°)	1371.8	13.7			G1/1800
FVH (80°-90°)	25.7	0.3			G1/100
BL (0°-30°)	452.8	4.5	B1/500		
BM (30°-60°)	3165.2	31.6	B3/5000		
BH (60°-80°)	1371.8	13.7	B3/2500		G1/1800
BVH (80°-90°)	25.7	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°	410.1	410.1	410.1	410.1	410.1	410.1	410.1	410.1	410.1	410.1	410.1
2.5°	498.7	489.7	458.3	469.3	480.7	479.1	476.3	467.7	459.9	492.2	498.7
5°	635.8	615.4	604.4	595.4	593.4	571.3	601.5	598.3	608.5	625.6	642.3
7.5°	745.2	726.0	697.0	690.9	657.9	633.4	659.5	691.7	701.9	733.4	752.1
10°	785.2	768.5	773.8	746.4	744.8	751.7	746.0	753.4	780.3	776.6	790.5
12.5°	875.0	877.8	860.7	853.7	867.6	897.8	872.1	863.1	856.6	884.4	892.9
15°	959.0	975.8	947.6	943.1	937.4	965.6	937.8	951.3	963.1	968.8	965.6
17.5°	1078.2	1079.0	1047.6	997.4	1016.2	1025.1	1012.9	989.6	1045.6	1073.7	1075.3
20°	1156.6	1159.4	1097.4	1019.0	1072.1	1080.2	1074.1	1025.6	1099.8	1146.8	1144.7
22.5°	1241.0	1231.2	1147.2	1090.0	1108.8	1113.7	1100.6	1094.5	1146.8	1232.1	1219.4
25°	1297.8	1315.7	1232.1	1195.3	1179.4	1168.0	1184.7	1188.0	1241.4	1319.0	1276.1
27.5°	1433.2	1402.2	1271.2	1285.1	1251.2	1174.1	1247.6	1288.0	1276.5	1408.8	1441.0
30°	1553.6	1554.5	1370.8	1397.3	1334.5	1272.0	1351.6	1410.0	1395.7	1565.1	1534.5
32.5°	1707.5	1713.2	1542.6	1471.6	1429.2	1417.3	1407.5	1472.0	1561.0	1698.1	1701.0
35°	1873.6	1922.6	1690.8	1616.1	1543.8	1491.6	1547.9	1637.3	1695.2	1914.4	1875.6
37.5°	2197.2	2114.8	1925.0	1784.6	1738.5	1717.7	1747.5	1799.3	1924.6	2113.6	2180.1
40°	2388.6	2365.8	2107.4	1989.9	1812.0	1867.5	1851.1	1993.2	2096.8	2378.8	2384.9
42.5°	2681.2	2566.1	2333.9	2184.6	2024.6	1928.3	2030.3	2220.9	2346.2	2584.5	2697.1
45°	2912.6	2764.9	2585.7	2472.3	2270.3	2198.8	2235.6	2479.6	2636.7	2800.4	2948.5
47.5°	3168.5	3008.5	2829.4	2627.8	2430.6	2547.0	2482.1	2696.7	2850.2	3084.8	3223.6
50°	3490.1	3313.0	3083.6	2917.1	2786.5	2827.3	2817.1	2970.2	3159.5	3373.4	3530.9
52.5°	3844.3	3643.9	3422.7	3268.1	3213.0	3111.8	3244.0	3306.8	3446.4	3642.3	3827.2
55°	4092.0	3891.6	3757.8	3807.6	3792.9	3630.5	3746.4	3752.9	3685.6	3756.2	3942.2
57.5°	4053.7	3862.3	3843.9	4032.0	4313.2	4470.3	4291.2	3905.9	3653.7	3620.7	3817.8
60°	3544.4	3380.7	3548.8	3973.3	4792.3	5270.6	4580.9	3790.4	3375.0	3203.2	3393.4
62.5°	2442.5	2331.9	2680.4	3344.0	4849.9	5888.1	4570.3	3293.8	2617.6	2305.8	2453.5
65°	1157.8	1117.8	1412.0	2120.1	4039.8	5723.2	3992.9	2228.6	1506.7	1203.5	1237.0
67.5°	435.4	415.4	518.3	936.6	2544.5	4539.3	2684.1	1099.4	582.8	453.0	468.5
70°	247.3	233.0	246.5	341.6	1024.3	2571.0	1157.8	377.1	247.7	225.7	240.4
72.5°	194.7	183.6	185.7	206.5	353.4	1009.2	374.6	215.1	180.0	171.0	184.1
75°	160.8	151.0	150.6	162.0	206.1	327.7	211.8	164.5	145.7	139.2	149.8
77.5°	127.7	122.0	123.7	132.6	147.7	183.2	153.4	133.0	119.6	111.8	119.2
80°	93.5	92.6	99.2	107.3	110.2	123.2	115.1	107.3	95.5	84.5	87.3
82.5°	61.2	61.6	73.9	80.4	79.2	78.8	82.4	82.0	71.4	55.9	55.9
85°	35.1	35.9	45.3	50.6	49.8	39.6	52.2	52.6	45.7	33.9	32.6
87.5°	11.4	14.3	19.6	20.8	20.0	11.0	20.0	22.0	20.0	14.3	12.7
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)