

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: P596878

Luminaire Tested: **MSA-SA1C-835-U-SL3**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596878
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-18)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA1C-835-U-SL3
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5074 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

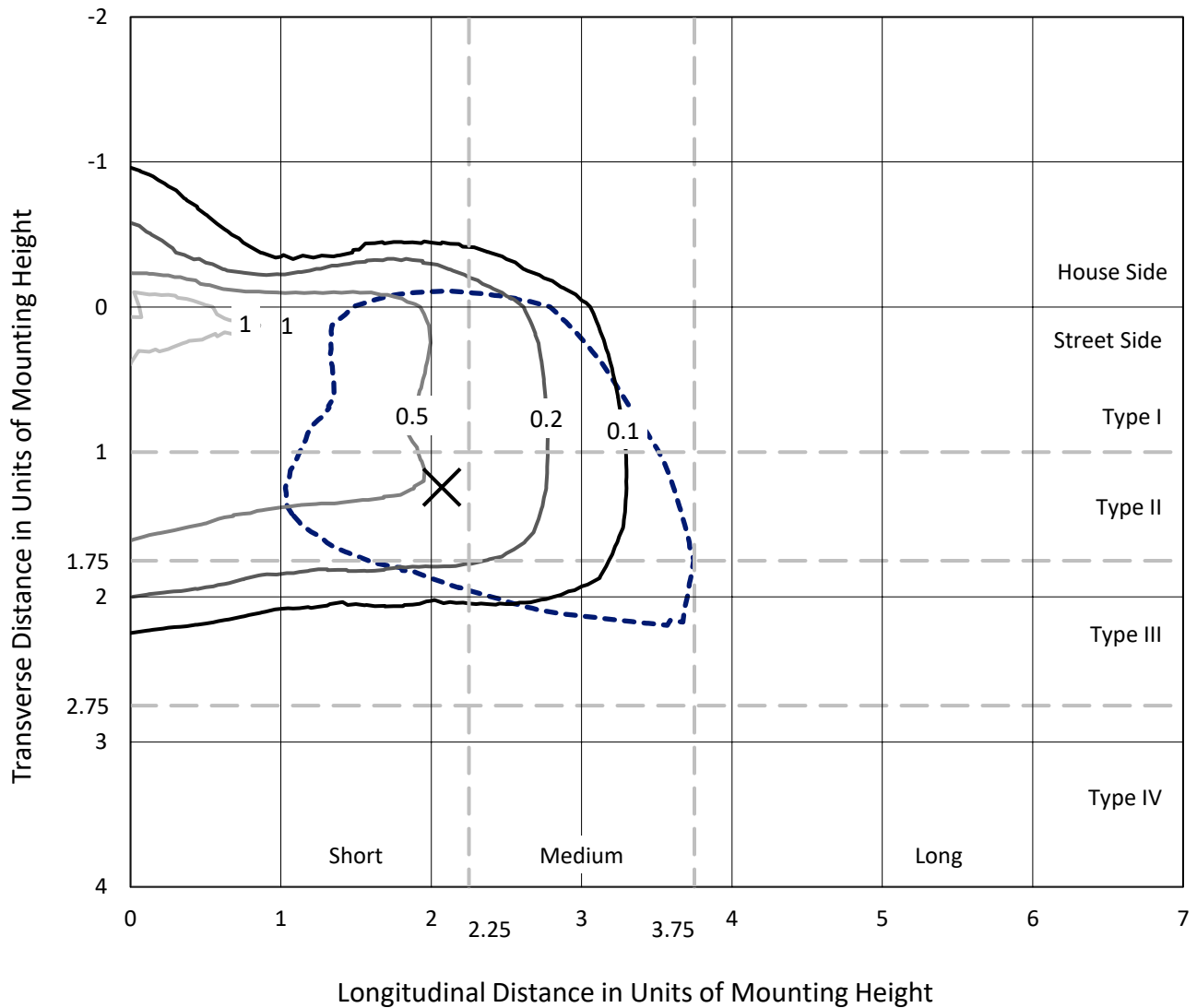
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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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 = 1.3 fc
 Type III - Short - N/A

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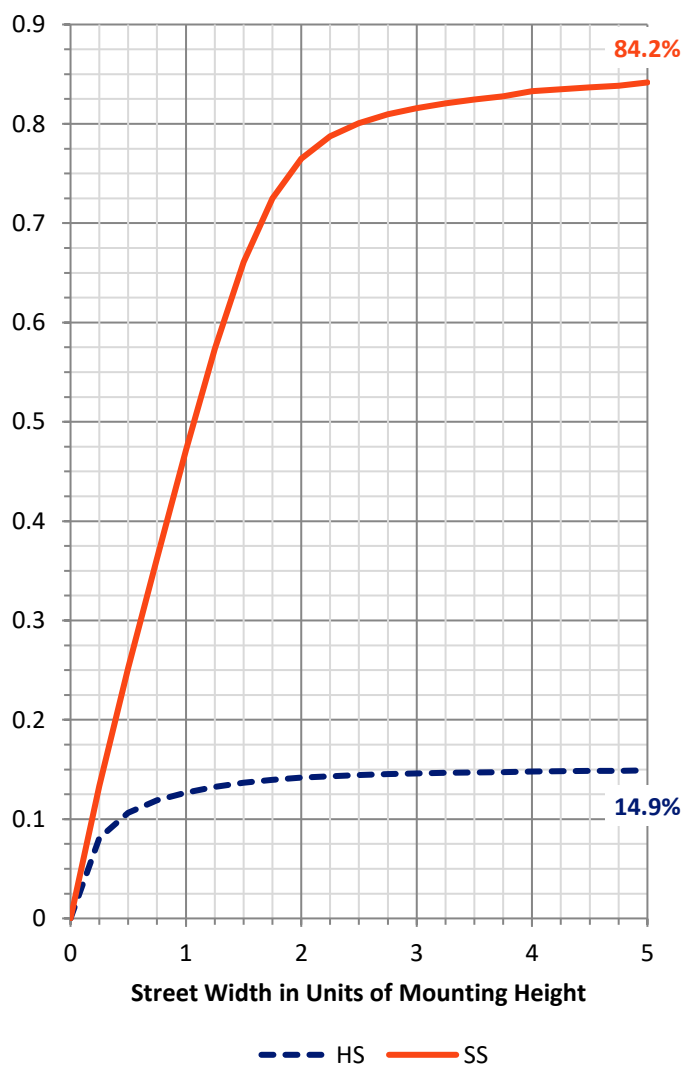
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	763.7	0.0	763.7
	% Fixture	15.1	0.0	15.1
Street Side	Lumens	4310.3	0.0	4310.3
	% Fixture	84.9	0.0	84.9
Total	Lumens	5074.0	0.0	5074.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.7	1.2
10°-20°	185.6	3.7
20°-30°	265.0	5.2
30°-40°	390.5	7.7
40°-50°	659.8	13.0
50°-60°	1148.1	22.6
60°-70°	1463.0	28.8
70°-80°	774.7	15.3
80°-90°	124.6	2.5
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°	5074.0	100.0
0°-180°	5074.0	100.0

Coefficient of Utilization



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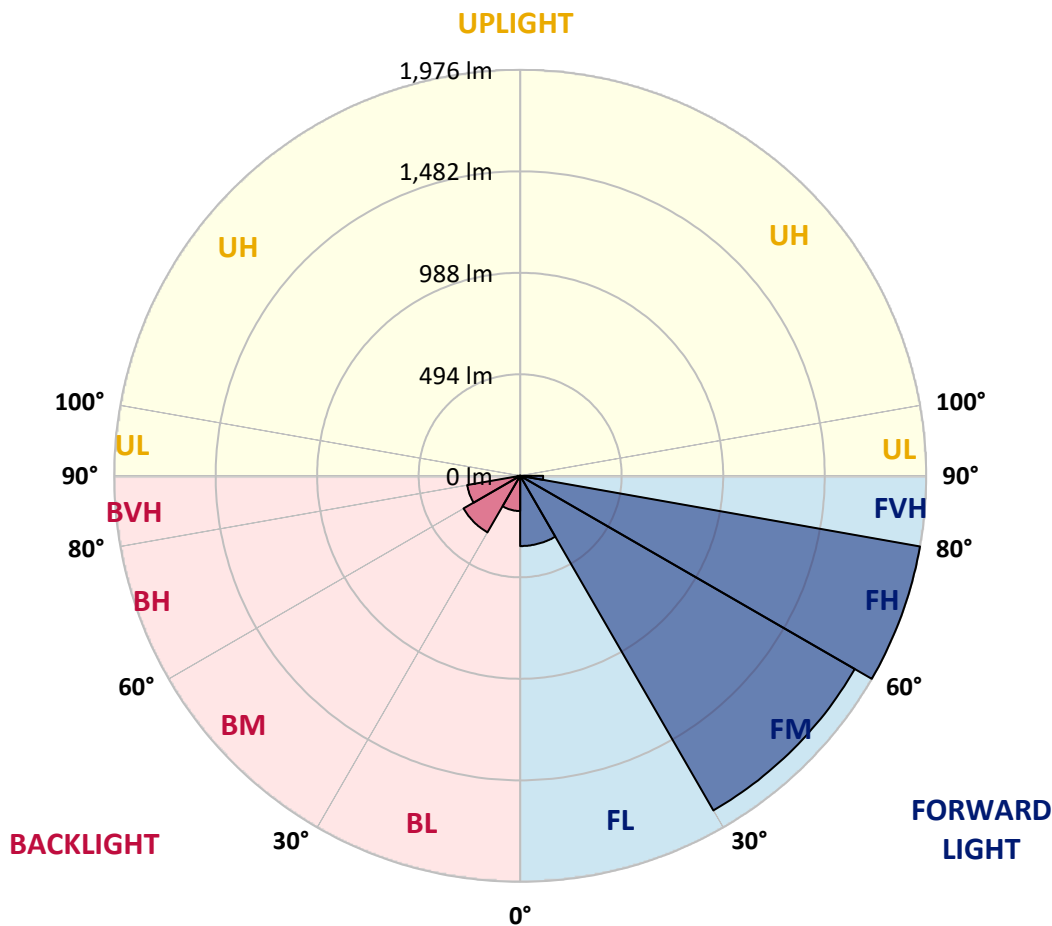
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	342.0	6.7			
FM (30°-60°)	1880.4	37.1			
FH (60°-80°)	1976.0	38.9			G2/5000
FVH (80°-90°)	111.9	2.2			G2/225
BL (0°-30°)	171.3	3.4	B1/500		
BM (30°-60°)	318.0	6.3	B1/1000		
BH (60°-80°)	261.8	5.2	B1/500		G1/500
BVH (80°-90°)	12.7	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	480.1	480.1	480.1	480.1	480.1	480.1	480.1	480.1	480.1	480.1	480.1
2.5°	599.5	571.5	541.8	550.2	567.2	575.0	566.6	558.4	547.9	535.4	578.0
5°	727.0	685.5	679.5	679.2	673.2	649.1	680.1	678.0	690.4	703.3	736.4
7.5°	763.3	747.8	731.1	739.0	708.7	707.4	755.6	769.3	793.4	785.5	830.0
10°	744.6	727.2	736.0	732.8	735.6	767.4	796.9	797.7	823.5	848.9	820.3
12.5°	711.7	713.0	748.0	746.8	791.9	851.0	859.9	853.0	895.1	877.9	902.4
15°	735.1	750.8	742.0	749.6	767.4	842.7	867.2	892.1	932.1	947.6	923.1
17.5°	772.6	780.9	741.4	737.3	774.1	809.8	870.6	891.9	898.1	1008.4	973.8
20°	756.6	773.6	734.9	685.3	746.3	793.6	853.6	847.2	877.5	1013.2	984.4
22.5°	801.8	773.6	724.4	689.1	710.6	754.1	805.0	847.4	883.3	985.4	999.6
25°	810.4	797.1	751.1	716.0	708.7	724.2	796.9	824.6	885.2	1023.3	991.4
27.5°	862.9	842.9	749.1	750.2	713.9	686.6	771.1	829.3	907.2	999.8	1011.4
30°	928.0	912.7	795.1	799.4	749.1	698.8	788.7	806.3	919.8	1036.4	1036.6
32.5°	976.8	1003.7	885.7	827.2	809.3	771.7	761.6	840.9	905.0	1102.6	1079.6
35°	1064.8	1085.6	955.3	908.4	848.0	805.7	835.1	863.7	966.7	1189.7	1143.5
37.5°	1227.5	1203.5	1084.8	1011.0	988.4	927.4	943.7	923.7	1033.8	1287.5	1268.6
40°	1321.7	1300.9	1175.9	1135.1	1045.6	1053.4	1032.9	1047.6	1123.5	1391.6	1385.6
42.5°	1414.6	1386.6	1281.1	1252.7	1163.5	1125.6	1129.3	1176.6	1261.7	1559.7	1539.7
45°	1506.4	1434.8	1388.6	1396.1	1353.1	1275.5	1280.9	1325.4	1412.7	1752.0	1705.9
47.5°	1576.7	1517.6	1481.5	1472.2	1450.9	1554.8	1508.3	1526.4	1564.9	1923.1	1905.7
50°	1709.8	1640.8	1593.7	1580.4	1652.6	1797.1	1702.5	1663.6	1745.5	2144.4	2135.3
52.5°	1922.9	1836.9	1758.4	1757.6	1862.1	1955.8	2022.5	1955.4	1985.5	2371.0	2396.8
55°	2108.9	2009.3	1938.8	1977.7	2126.5	2183.9	2410.3	2357.9	2332.5	2599.8	2673.5
57.5°	2178.3	2062.0	2016.0	2073.4	2292.7	2587.7	2827.1	2689.0	2664.3	2858.7	3013.3
60°	2025.9	1902.9	1905.7	2013.9	2393.8	2884.2	3282.7	3165.5	3020.6	3181.0	3331.9
62.5°	1591.6	1480.4	1552.9	1717.3	2309.1	3172.4	3893.3	3942.8	3427.6	3448.2	3508.7
65°	1081.8	1004.8	1070.1	1231.2	1872.8	3329.5	4474.9	4673.2	3798.3	3623.3	3585.0
67.5°	711.9	657.5	670.2	777.3	1289.2	2838.4	4863.9	5080.0	4137.2	3766.9	3450.4
70°	551.3	507.4	501.9	558.0	764.6	1971.9	4633.4	4962.0	4343.6	3632.3	3007.5
72.5°	432.6	399.3	402.3	456.3	592.2	1094.0	3585.4	4219.5	4032.7	3132.6	2310.6
75°	337.4	310.1	325.3	387.0	547.6	679.9	2473.8	3202.5	3117.8	2319.6	1317.8
77.5°	244.9	227.3	249.0	329.6	514.8	583.3	1540.0	2234.2	1997.3	1191.0	452.2
80°	160.6	150.7	168.6	268.8	466.8	561.4	951.7	1369.0	986.9	334.6	171.2
82.5°	94.6	90.3	105.1	181.9	375.2	526.1	634.7	760.7	403.8	141.5	91.0
85°	49.7	46.4	62.4	104.5	258.7	480.3	499.7	455.4	195.0	61.5	43.4
87.5°	16.6	16.1	26.4	40.4	97.8	255.0	266.6	216.3	80.4	17.8	9.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	480.1	480.1	480.1	480.1	480.1	480.1	480.1	480.1	480.1	480.1	480.1
2.5°	583.8	575.2	525.7	532.6	539.0	535.8	533.9	511.5	509.4	541.2	538.6
5°	735.6	699.9	657.7	655.8	628.1	599.7	605.3	596.2	598.8	611.9	613.2
7.5°	815.8	771.3	731.1	665.7	610.2	565.3	572.4	570.2	564.4	594.1	602.0
10°	814.3	774.7	729.3	650.2	612.8	576.2	532.4	490.9	478.6	464.0	465.3
12.5°	868.0	833.0	734.1	653.4	602.7	539.7	457.6	412.2	368.8	367.9	356.9
15°	884.8	859.0	744.2	634.9	532.0	441.6	356.7	307.5	276.1	269.8	260.6
17.5°	927.2	886.7	713.4	575.2	449.8	345.3	268.1	233.7	231.1	235.4	230.7
20°	930.0	864.4	658.0	486.8	361.4	261.7	218.7	201.5	210.7	221.3	220.8
22.5°	927.6	836.2	610.0	411.5	271.6	210.3	191.6	187.7	196.3	212.0	213.9
25°	903.5	827.0	550.0	338.0	220.4	180.2	175.0	177.4	188.1	206.6	206.6
27.5°	928.7	789.3	474.8	275.0	185.3	160.4	164.1	170.1	178.0	199.1	203.0
30°	920.5	801.8	414.1	221.5	163.4	146.6	154.8	160.8	169.9	191.8	193.7
32.5°	942.4	768.5	363.2	186.2	149.0	141.3	143.2	151.4	163.2	180.4	183.8
35°	976.0	780.7	304.7	167.5	141.9	135.0	138.7	145.1	157.0	173.7	176.5
37.5°	1083.0	780.1	264.3	157.2	140.6	133.7	135.5	140.0	153.7	169.0	175.5
40°	1151.8	824.8	227.5	154.8	139.1	133.1	131.6	136.5	147.5	165.6	170.1
42.5°	1281.1	852.1	211.6	154.0	138.9	129.4	127.9	133.7	144.5	161.3	168.1
45°	1417.6	891.0	198.9	153.5	138.3	128.8	124.3	131.6	140.6	156.7	164.7
47.5°	1578.2	973.4	191.8	152.0	137.0	129.7	123.0	126.6	136.8	152.9	160.8
50°	1788.5	1082.4	193.3	149.9	138.9	129.9	121.1	122.8	132.0	147.7	155.9
52.5°	2044.2	1251.2	203.0	150.7	140.2	128.8	120.2	119.3	127.3	141.1	149.2
55°	2352.3	1490.7	232.0	154.8	140.2	128.6	118.9	115.0	121.1	132.2	140.2
57.5°	2724.1	1768.1	288.8	156.7	139.1	127.3	116.1	109.2	112.9	122.1	129.7
60°	3043.4	1991.9	347.3	158.0	141.3	124.3	110.5	101.9	104.3	111.4	118.0
62.5°	3206.1	2054.7	364.9	157.0	147.1	122.3	103.9	94.2	94.4	100.4	106.4
65°	3236.7	1971.1	294.1	155.9	154.6	122.1	99.1	87.5	86.0	90.3	95.5
67.5°	3019.1	1710.9	212.2	153.5	155.5	120.8	95.9	82.1	78.3	81.3	85.6
70°	2563.4	1377.8	178.2	148.8	145.1	114.4	90.3	76.5	71.4	73.5	76.8
72.5°	1911.1	1019.4	155.5	138.7	126.4	97.8	81.7	70.3	64.9	66.4	68.8
75°	1061.8	543.8	130.1	120.6	103.2	79.1	69.7	62.4	57.6	58.3	60.8
77.5°	352.6	200.6	95.5	95.7	78.1	61.1	57.4	53.3	49.7	49.9	52.0
80°	159.8	110.9	68.4	68.8	54.4	44.3	44.1	42.8	40.4	39.8	41.3
82.5°	92.7	67.3	46.9	44.7	35.0	28.8	32.0	31.4	30.7	28.4	28.8
85°	45.6	36.1	24.5	23.2	19.4	14.4	17.2	17.8	17.2	14.6	14.4
87.5°	11.2	11.8	6.0	5.6	3.2	1.5	2.6	2.6	3.2	2.2	1.1
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)