

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: P368185

Luminaire Tested: **MSA-SA4A-727-U-5WQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P368185
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-SA4A-727-U-5WQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13909 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

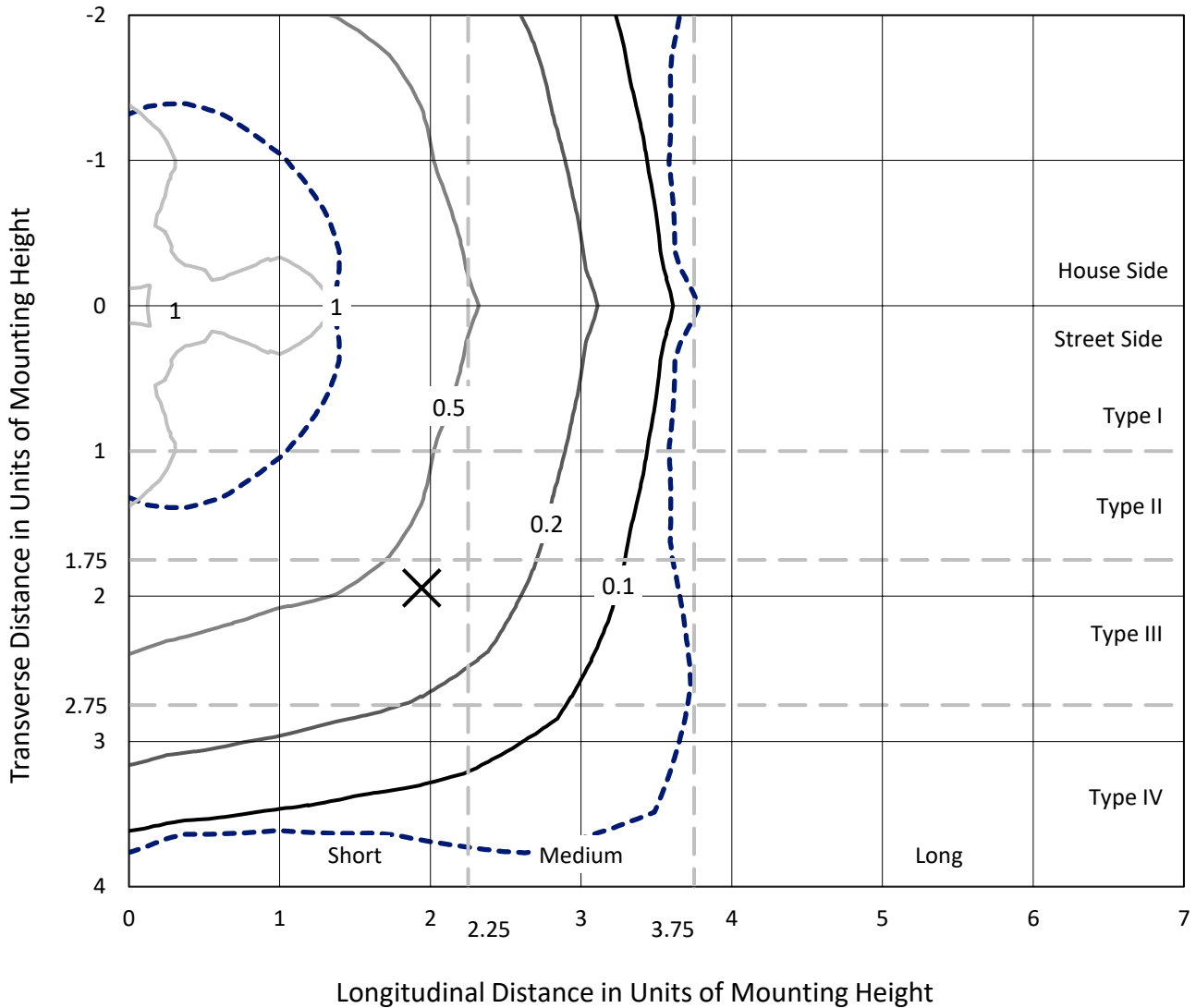
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

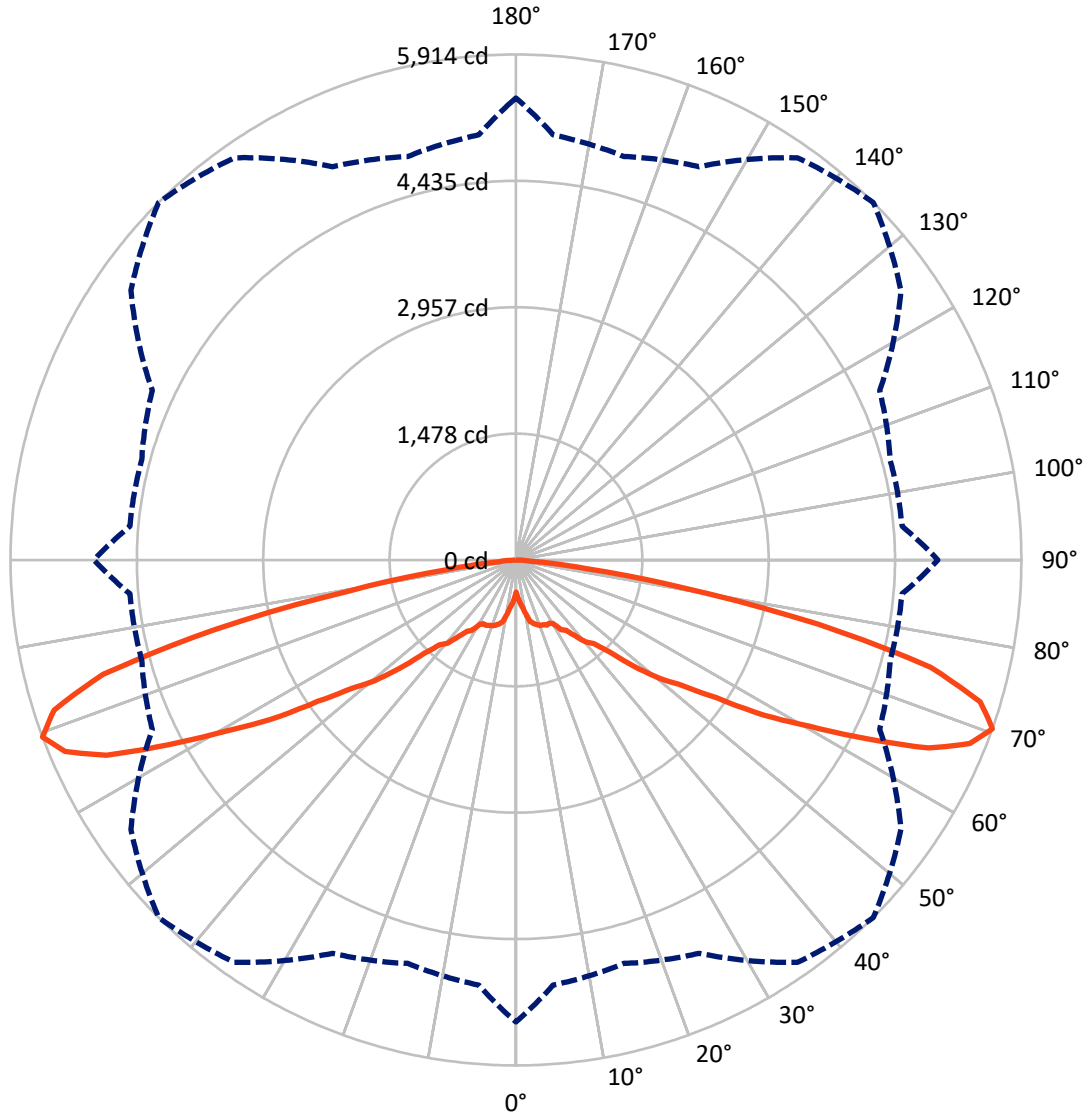
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 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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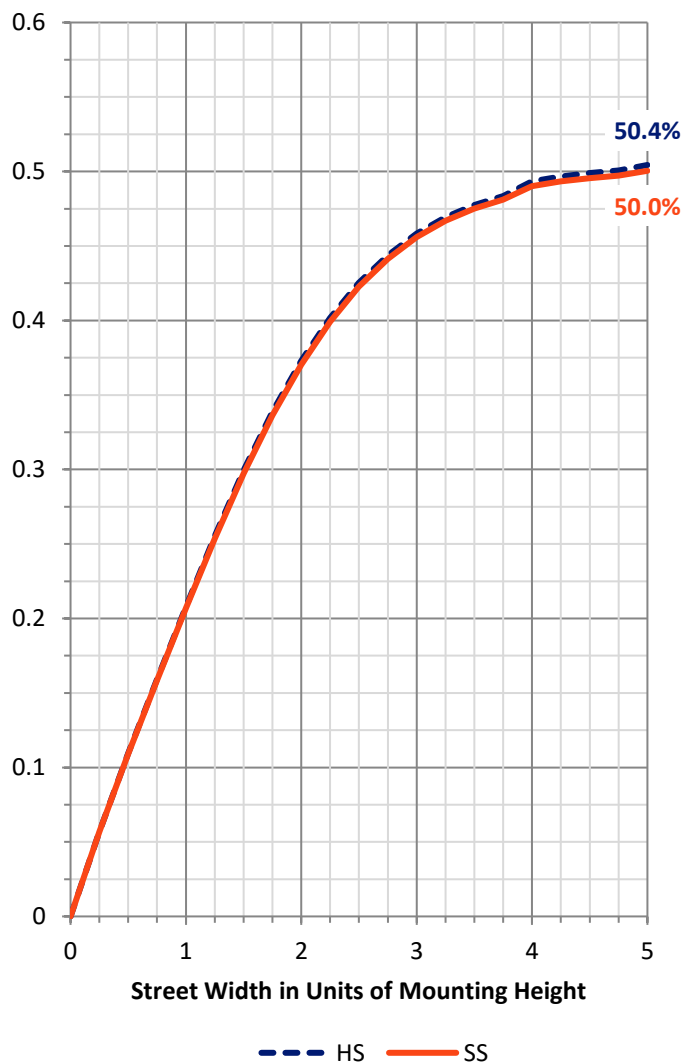
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6954.5	0.0	6954.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6954.5	0.0	6954.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	13909.0	0.0	13909.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.7	0.4
10°-20°	218.9	1.6
20°-30°	413.9	3.0
30°-40°	721.0	5.2
40°-50°	1378.4	9.9
50°-60°	2672.8	19.2
60°-70°	4680.2	33.6
70°-80°	3517.4	25.3
80°-90°	251.7	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°	13909.0	100.0
0°-180°	13909.0	100.0

Coefficient of Utilization



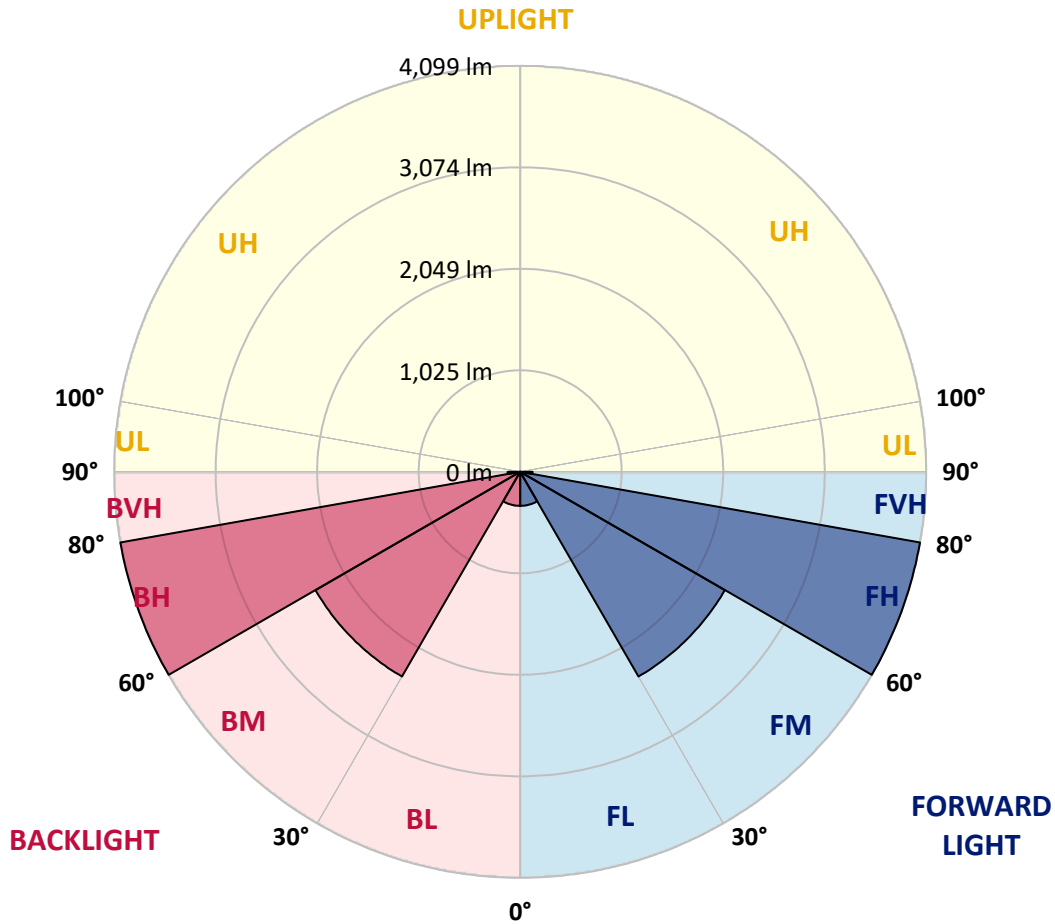
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	343.8	2.5			
FM (30°-60°)	2386.1	17.2			
FH (60°-80°)	4098.8	29.5			G2/5000
FVH (80°-90°)	125.8	0.9			G2/225
BL (0°-30°)	343.8	2.5	B1/500		
BM (30°-60°)	2386.1	17.2	B2/2500		
BH (60°-80°)	4098.8	29.5	B4/5000		G2/5000
BVH (80°-90°)	125.8	0.9			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	376.1	376.1	376.1	376.1	376.1	376.1	376.1	376.1	376.1	376.1	376.1
2.5°	457.6	450.6	428.4	429.5	439.8	440.8	441.9	428.4	425.2	452.7	454.3
5°	581.1	564.9	548.8	542.3	532.6	505.6	535.3	538.5	545.0	566.0	575.7
7.5°	663.7	643.7	621.6	608.1	581.7	559.5	583.8	603.8	616.7	640.5	654.0
10°	679.3	667.5	666.4	642.6	637.8	645.9	644.3	644.8	664.2	664.8	672.9
12.5°	728.4	737.1	720.3	712.2	717.1	737.1	720.9	713.9	718.7	740.8	731.7
15°	792.6	802.9	777.5	764.6	751.6	770.5	753.8	766.2	781.9	798.0	789.9
17.5°	863.9	864.4	829.9	781.9	793.2	795.9	789.9	779.7	824.5	863.3	859.6
20°	902.7	902.2	842.8	777.5	811.0	816.9	811.5	776.5	843.9	897.3	895.7
22.5°	942.7	930.8	859.6	806.7	819.1	823.9	811.5	808.3	859.6	934.0	933.5
25°	964.2	974.5	896.2	863.3	853.1	841.7	852.5	857.9	907.0	979.9	958.8
27.5°	1031.7	1015.0	907.0	903.8	882.2	837.4	874.7	901.1	903.8	1021.4	1043.0
30°	1092.7	1099.1	955.6	960.5	921.1	864.4	922.1	964.2	972.3	1100.2	1098.1
32.5°	1157.4	1160.1	1041.9	991.8	975.0	972.9	950.7	987.4	1051.1	1153.6	1157.9
35°	1255.6	1277.7	1119.1	1051.6	1030.6	1009.0	1028.4	1061.4	1120.7	1274.5	1263.7
37.5°	1480.6	1445.5	1286.9	1147.2	1133.1	1124.5	1140.1	1163.9	1285.3	1449.3	1499.5
40°	1637.6	1620.9	1405.1	1305.3	1216.8	1263.2	1226.5	1318.2	1418.6	1622.0	1654.4
42.5°	1881.0	1806.5	1584.8	1461.2	1369.5	1336.5	1357.1	1476.8	1604.7	1831.3	1895.0
45°	2114.6	1999.7	1809.8	1700.8	1561.6	1527.0	1554.5	1695.4	1843.2	2022.4	2134.6
47.5°	2353.1	2234.4	2025.6	1868.0	1754.2	1857.2	1767.1	1901.0	2048.3	2256.5	2356.4
50°	2600.8	2469.1	2263.0	2091.4	2081.7	2172.9	2065.0	2133.5	2270.0	2485.9	2603.5
52.5°	2885.1	2743.2	2537.1	2421.1	2443.8	2437.8	2416.3	2403.8	2538.2	2750.3	2890.0
55°	3223.5	3070.2	2905.7	2852.2	2914.8	2847.4	2879.2	2874.9	2894.3	3045.9	3209.4
57.5°	3632.5	3459.3	3294.2	3282.3	3362.7	3426.4	3369.7	3288.2	3254.2	3401.5	3588.8
60°	4147.8	3935.2	3753.9	3716.6	3946.0	3945.4	3894.2	3711.8	3698.8	3865.6	4091.1
62.5°	4717.0	4458.0	4260.0	4200.7	4560.0	4600.5	4440.8	4113.8	4180.7	4315.0	4582.7
65°	5200.5	4889.2	4704.6	4688.4	5127.7	5306.3	4953.4	4506.1	4527.6	4639.3	4929.1
67.5°	5515.6	5140.6	4993.8	5072.1	5618.1	5729.8	5401.8	4768.3	4691.7	4738.1	5084.5
70°	5405.0	4992.8	4887.0	5076.9	5744.9	5913.8	5498.3	4694.9	4532.0	4534.1	4936.6
72.5°	4567.0	4174.8	4224.9	4573.5	5444.9	5681.8	5051.6	4240.6	3907.1	3899.0	4264.3
75°	3020.0	2757.8	2955.8	3499.2	4526.6	5011.1	4185.5	3323.8	2905.7	2769.7	3051.9
77.5°	1320.9	1287.4	1454.2	2068.2	3085.9	3611.4	2998.5	2171.3	1580.4	1314.4	1435.8
80°	354.0	346.4	434.9	784.6	1502.2	1988.9	1622.5	866.0	452.2	329.1	349.1
82.5°	129.0	132.2	161.3	219.6	494.8	837.4	539.0	253.1	171.0	140.3	140.3
85°	56.1	54.5	78.2	88.0	134.9	189.4	154.9	107.4	86.3	64.7	62.1
87.5°	15.1	18.9	26.4	27.5	35.1	28.6	41.0	37.8	32.4	22.7	18.3
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)