

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: P368229

Luminaire Tested: **MSA-SA4A-740-U-5WQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P368229
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-740-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: 16631 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

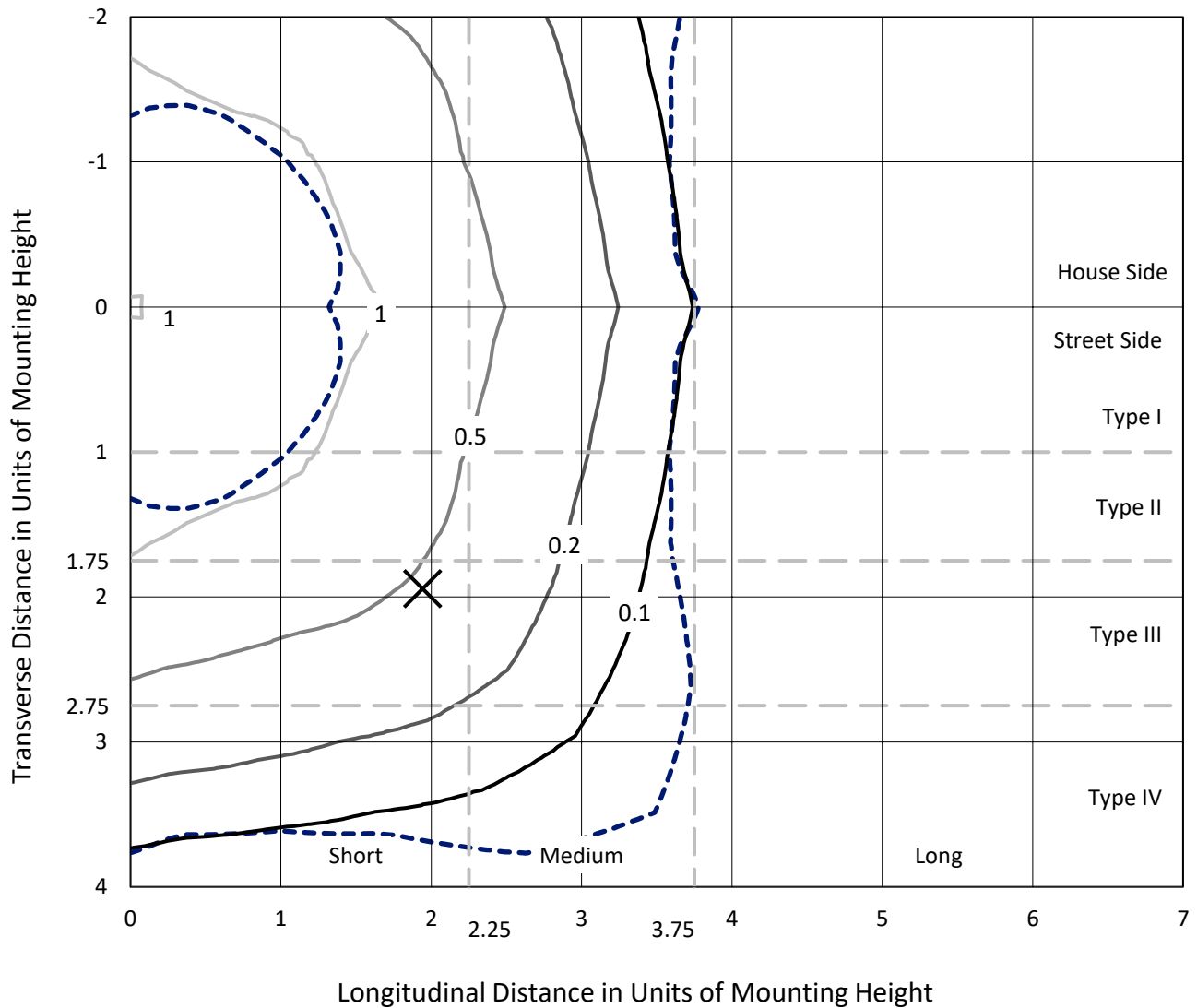
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

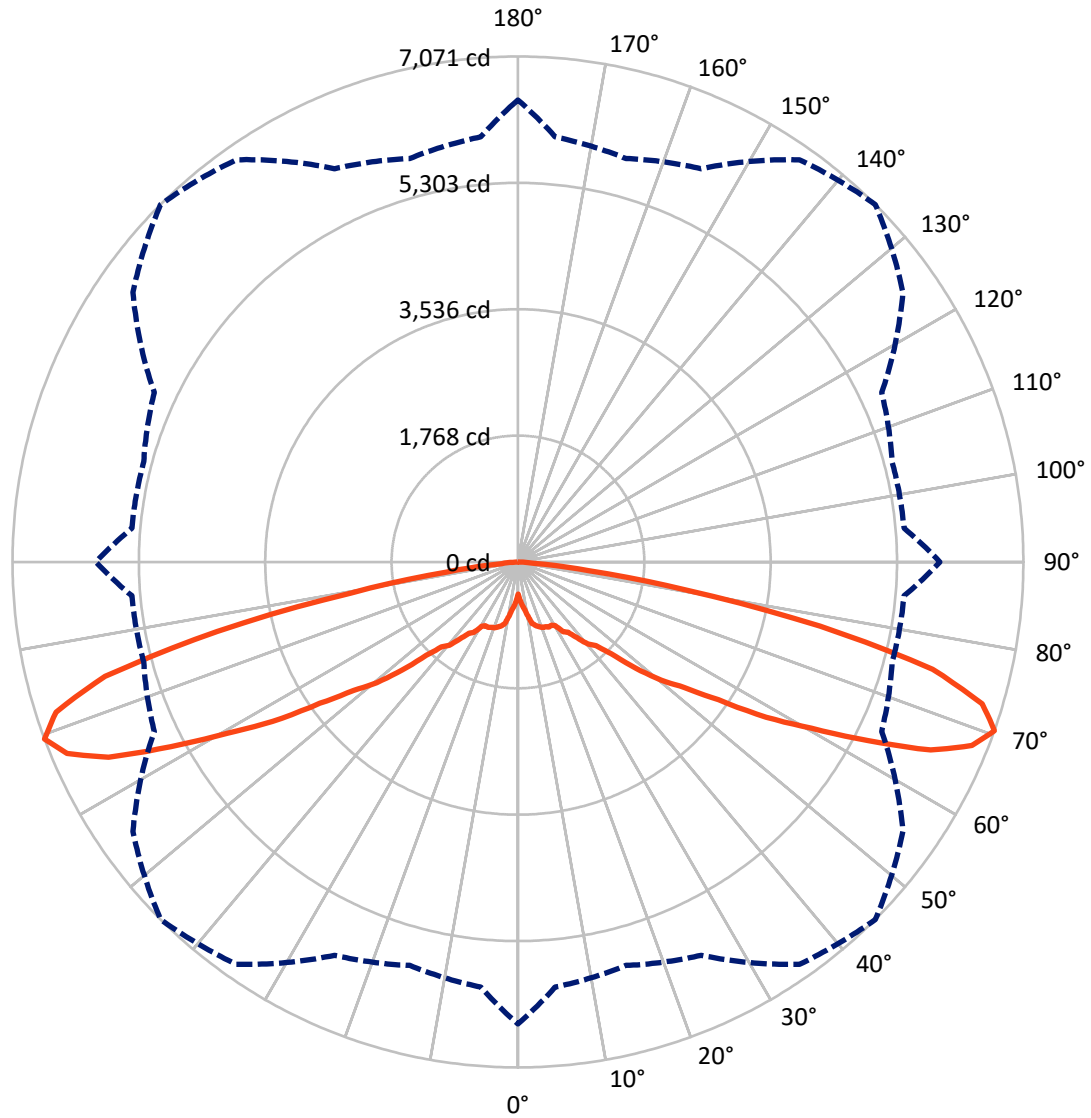
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 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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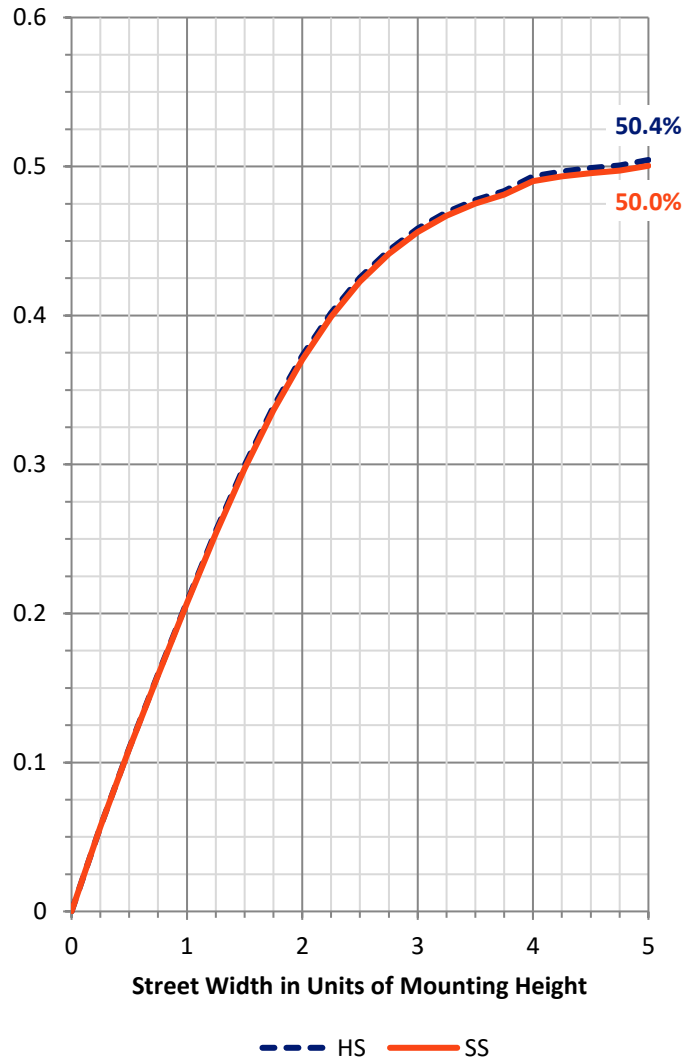
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8315.5	0.0	8315.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	8315.5	0.0	8315.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	16631.0	0.0	16631.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.4	0.4
10°-20°	261.8	1.6
20°-30°	494.9	3.0
30°-40°	862.1	5.2
40°-50°	1648.1	9.9
50°-60°	3195.8	19.2
60°-70°	5596.1	33.6
70°-80°	4205.8	25.3
80°-90°	300.9	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°	16631.0	100.0
0°-180°	16631.0	100.0

Coefficient of Utilization



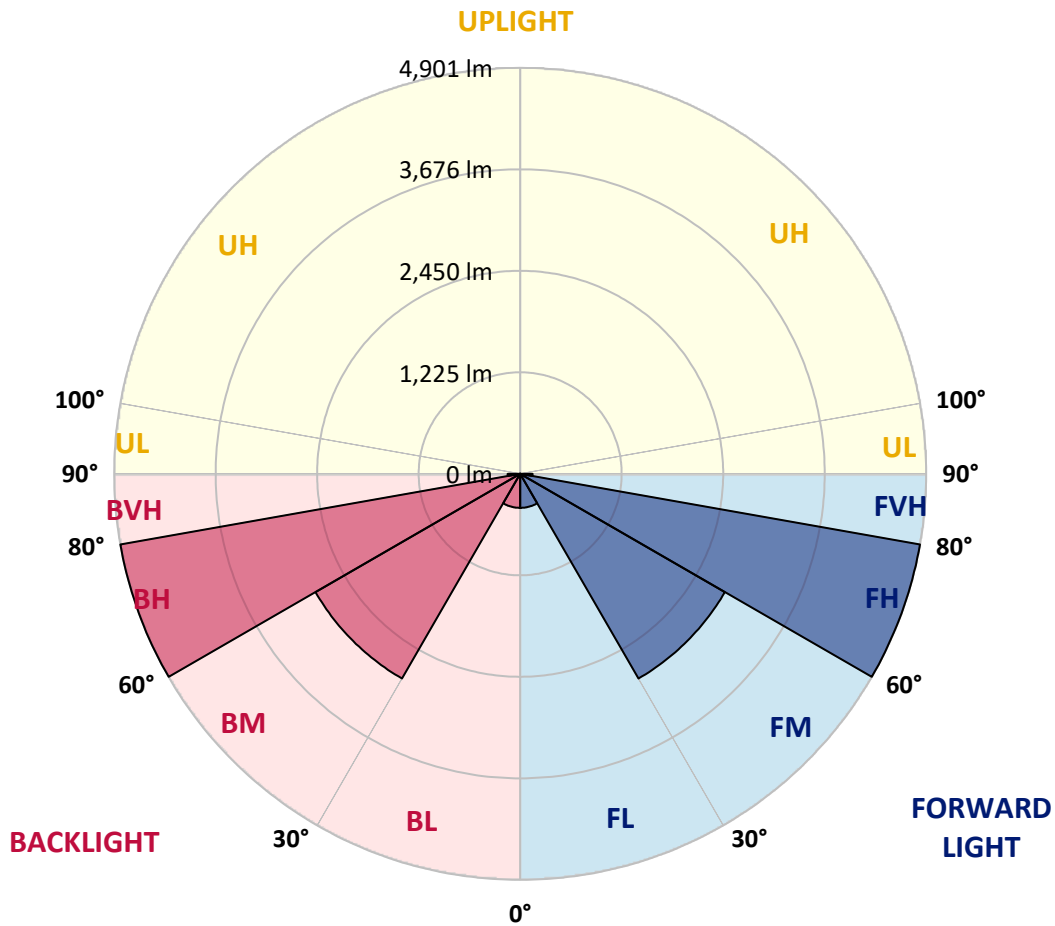
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	411.1	2.5			
FM (30°-60°)	2853.1	17.2			
FH (60°-80°)	4900.9	29.5			G2/5000
FVH (80°-90°)	150.5	0.9			G2/225
BL (0°-30°)	411.1	2.5	B1/500		
BM (30°-60°)	2853.1	17.2	B3/5000		
BH (60°-80°)	4900.9	29.5	B4/5000		G2/5000
BVH (80°-90°)	150.5	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°	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7
2.5°	547.1	538.7	512.3	513.6	525.8	527.1	528.4	512.3	508.4	541.3	543.2
5°	694.9	675.5	656.1	648.4	636.8	604.5	640.0	643.9	651.6	676.8	688.4
7.5°	793.6	769.7	743.2	727.1	695.5	669.1	698.1	722.0	737.4	765.8	782.0
10°	812.3	798.1	796.8	768.4	762.6	772.3	770.3	771.0	794.2	794.9	804.5
12.5°	871.0	881.3	861.3	851.6	857.4	881.3	862.0	853.6	859.4	885.8	874.9
15°	947.8	960.0	929.7	914.2	898.7	921.3	901.3	916.2	934.9	954.2	944.5
17.5°	1032.9	1033.6	992.3	934.9	948.4	951.6	944.5	932.3	985.8	1032.3	1027.8
20°	1079.4	1078.7	1007.8	929.7	969.7	976.8	970.4	928.4	1009.1	1072.9	1071.0
22.5°	1127.1	1112.9	1027.8	964.5	979.4	985.2	970.4	966.5	1027.8	1116.8	1116.2
25°	1152.9	1165.2	1071.6	1032.3	1020.0	1006.5	1019.4	1025.8	1084.5	1171.6	1146.5
27.5°	1233.6	1213.6	1084.5	1080.7	1054.9	1001.3	1045.8	1077.4	1080.7	1221.3	1247.1
30°	1306.5	1314.2	1142.6	1148.4	1101.3	1033.6	1102.6	1152.9	1162.6	1315.5	1312.9
32.5°	1383.9	1387.1	1245.8	1185.8	1165.8	1163.3	1136.8	1180.7	1256.8	1379.4	1384.6
35°	1501.3	1527.8	1338.1	1257.5	1232.3	1206.5	1229.7	1269.1	1340.0	1523.9	1511.0
37.5°	1770.4	1728.4	1538.8	1371.7	1354.9	1344.6	1363.3	1391.7	1536.8	1733.0	1793.0
40°	1958.1	1938.1	1680.0	1560.7	1454.9	1510.4	1466.5	1576.2	1696.2	1939.4	1978.1
42.5°	2249.1	2160.1	1894.9	1747.1	1637.5	1598.1	1622.6	1765.9	1918.8	2189.7	2265.9
45°	2528.5	2391.0	2163.9	2033.6	1867.1	1825.9	1858.8	2027.2	2203.9	2418.1	2552.3
47.5°	2813.6	2671.7	2422.0	2233.6	2097.5	2220.7	2113.0	2273.0	2449.1	2698.1	2817.5
50°	3109.8	2952.3	2705.9	2500.7	2489.1	2598.1	2469.1	2551.0	2714.3	2972.3	3113.0
52.5°	3449.8	3280.1	3033.6	2894.9	2922.0	2914.9	2889.1	2874.3	3034.9	3288.5	3455.6
55°	3854.3	3671.1	3474.3	3410.4	3485.3	3404.6	3442.7	3437.5	3460.7	3642.0	3837.5
57.5°	4343.3	4136.2	3938.8	3924.6	4020.8	4096.9	4029.1	3931.7	3891.1	4067.2	4291.1
60°	4959.5	4705.3	4488.5	4444.0	4718.2	4717.6	4656.3	4438.2	4422.7	4622.1	4891.8
62.5°	5640.2	5330.5	5093.7	5022.7	5452.4	5500.8	5309.8	4918.8	4998.9	5159.5	5479.5
65°	6218.2	5846.0	5625.3	5606.0	6131.1	6344.7	5922.7	5387.9	5413.7	5547.3	5893.7
67.5°	6595.0	6146.6	5971.1	6064.7	6717.6	6851.2	6458.9	5701.5	5609.8	5665.3	6079.5
70°	6462.8	5969.8	5843.4	6070.5	6869.2	7071.2	6574.4	5613.7	5418.9	5421.4	5902.7
72.5°	5460.8	4991.8	5051.8	5468.5	6510.5	6793.7	6040.2	5070.5	4671.7	4662.1	5098.9
75°	3611.1	3297.5	3534.3	4184.0	5412.4	5991.8	5004.7	3974.3	3474.3	3311.7	3649.1
77.5°	1579.4	1539.4	1738.8	2473.0	3689.8	4318.2	3585.3	2596.2	1889.7	1571.7	1716.8
80°	423.2	414.2	520.0	938.1	1796.2	2378.1	1940.1	1035.5	540.7	393.6	417.4
82.5°	154.2	158.1	192.9	262.6	591.6	1001.3	644.5	302.6	204.5	167.7	167.7
85°	67.1	65.2	93.6	105.2	161.3	226.5	185.2	128.4	103.2	77.4	74.2
87.5°	18.1	22.6	31.6	32.9	41.9	34.2	49.0	45.2	38.7	27.1	21.9
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)