

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: P368603

Luminaire Tested: **MSA-SA4D-730-U-5WQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P368603
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-SA4D-730-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: 25701 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G4

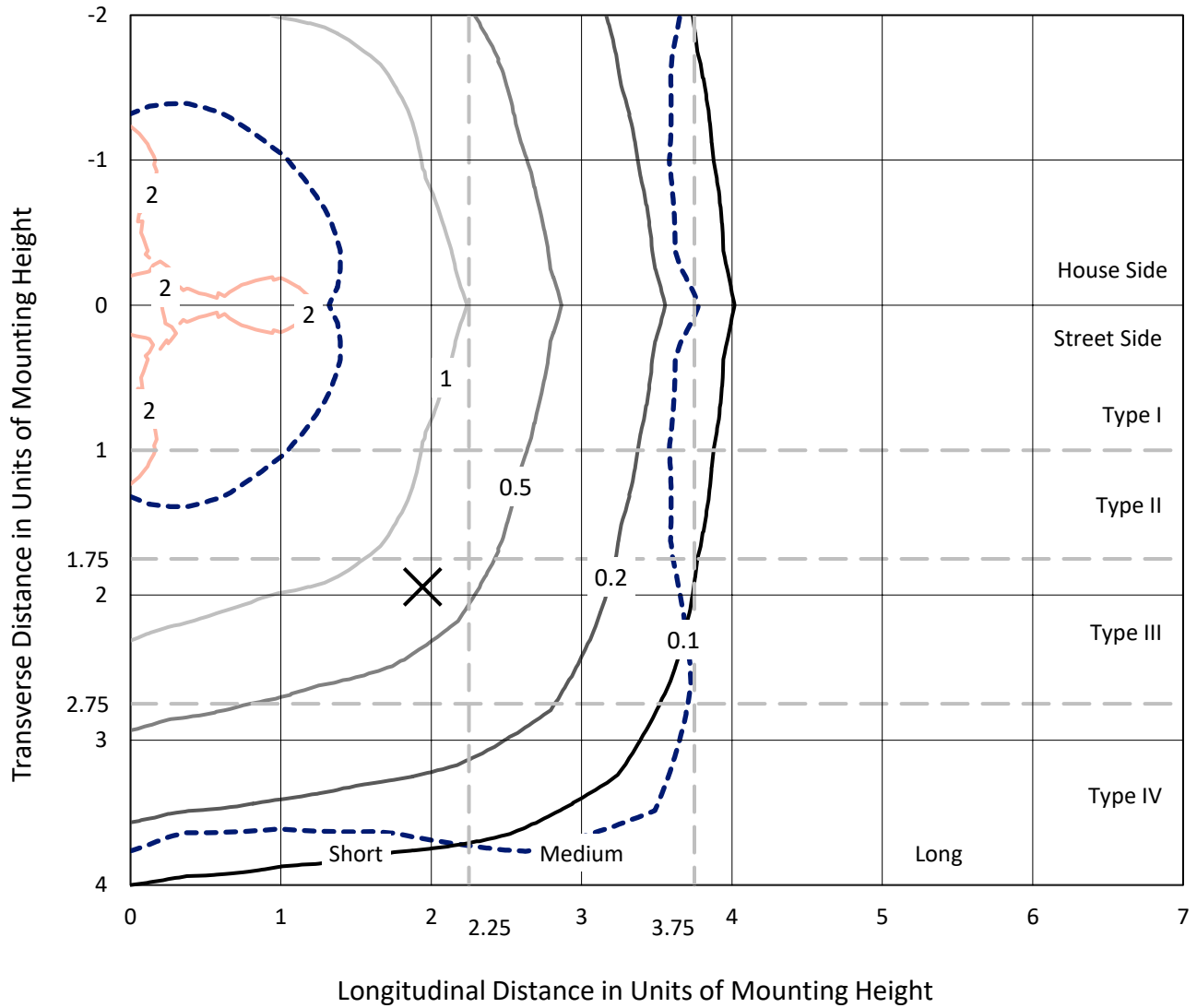
Input Watts (W): 259
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

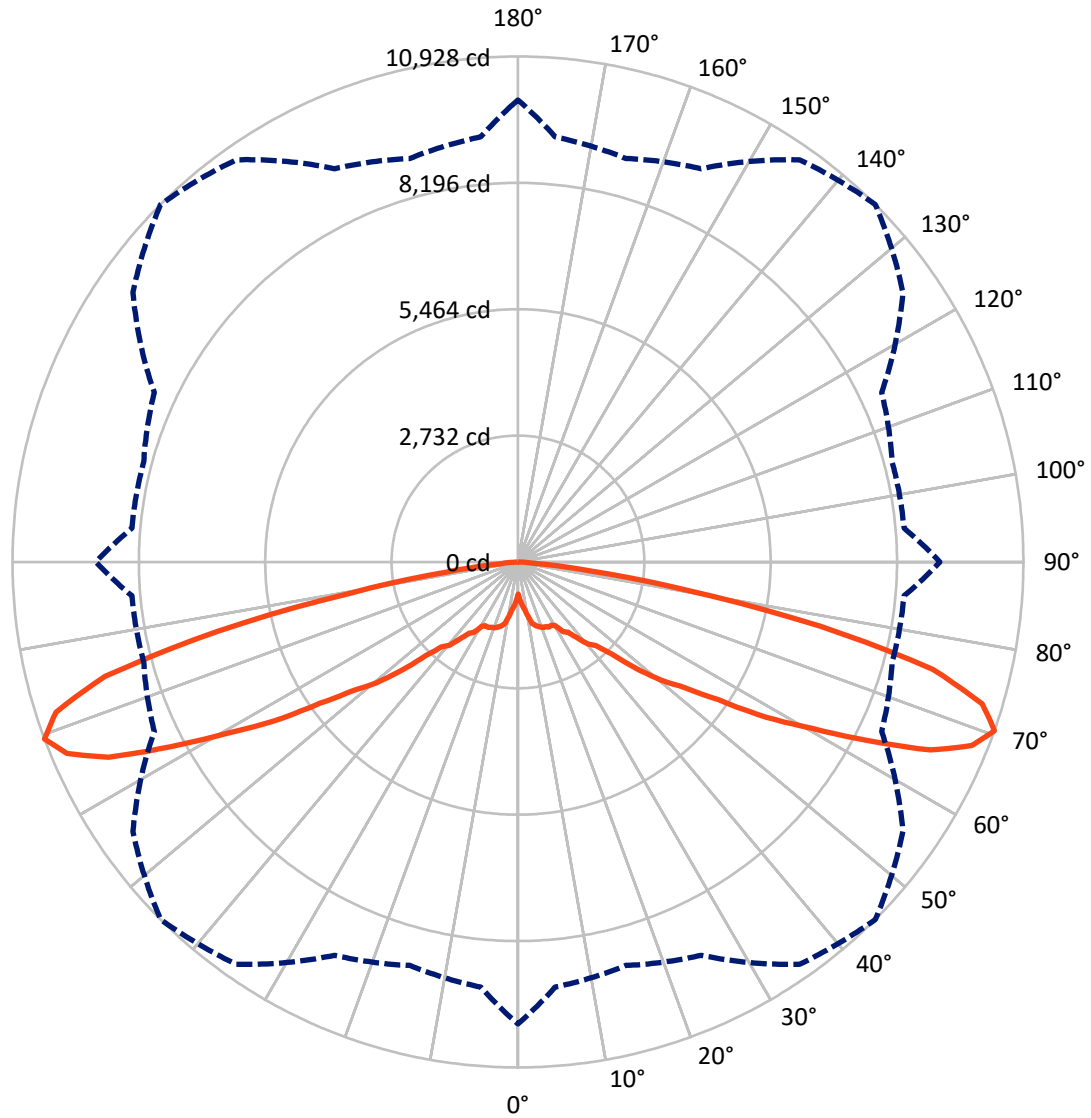
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 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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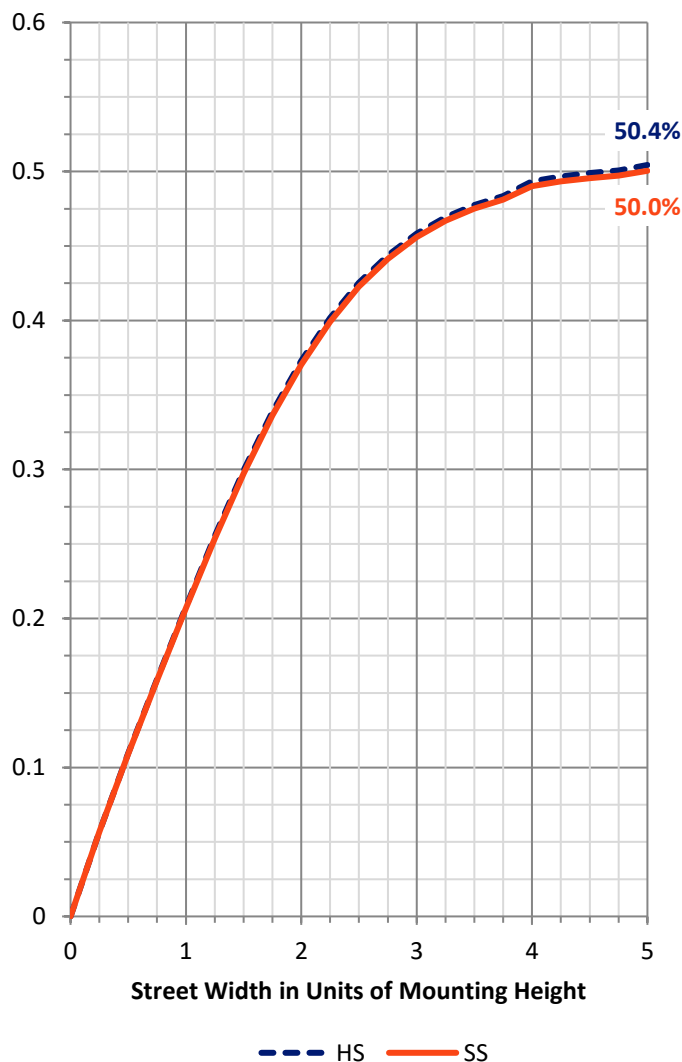
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12850.5	0.0	12850.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	12850.5	0.0	12850.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	25701.0	0.0	25701.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.1	0.4
10°-20°	404.6	1.6
20°-30°	764.9	3.0
30°-40°	1332.3	5.2
40°-50°	2547.0	9.9
50°-60°	4938.8	19.2
60°-70°	8648.0	33.6
70°-80°	6499.4	25.3
80°-90°	465.0	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°	25701.0	100.0
0°-180°	25701.0	100.0

Coefficient of Utilization

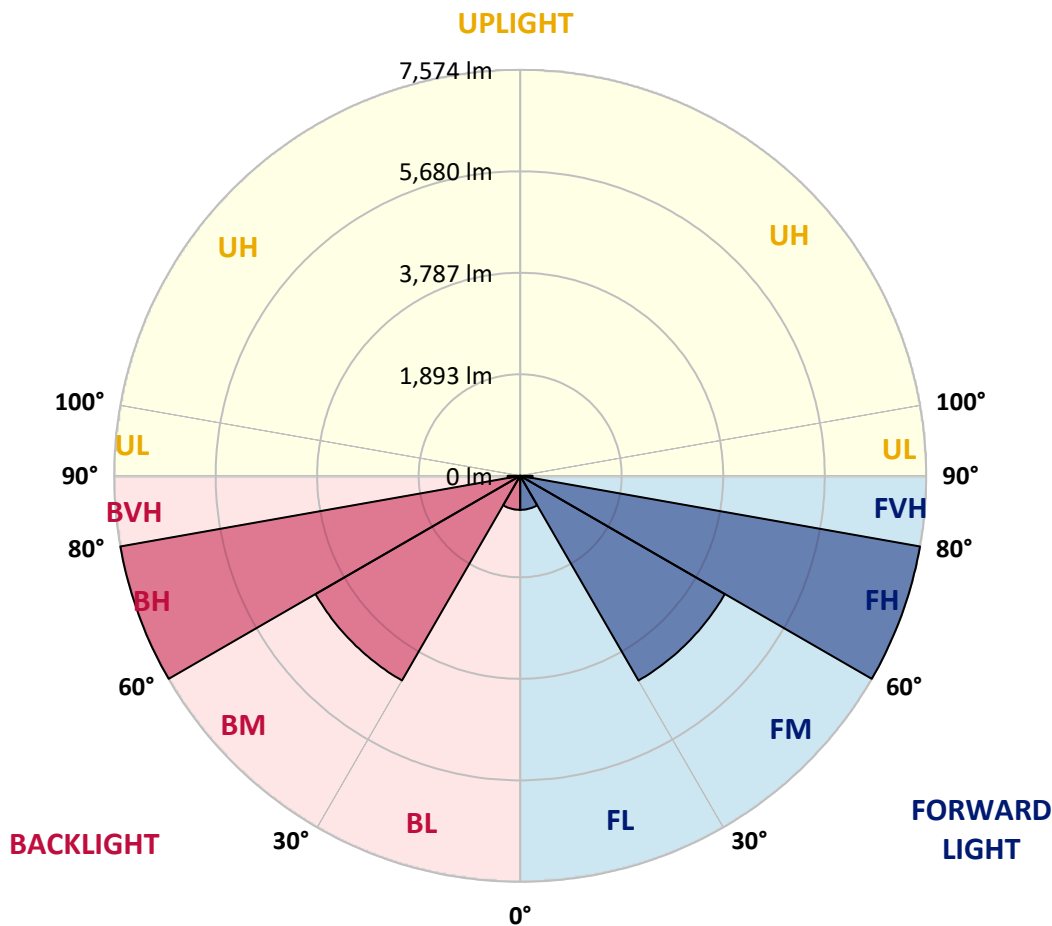


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	635.3	2.5			
FM (30°-60°)	4409.0	17.2			
FH (60°-80°)	7573.7	29.5			G4/12000
FVH (80°-90°)	232.5	0.9			G3/500
BL (0°-30°)	635.3	2.5	B2/1000		
BM (30°-60°)	4409.0	17.2	B3/5000		
BH (60°-80°)	7573.7	29.5	B5		G4/12000
BVH (80°-90°)	232.5	0.9			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G4
 Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9
2.5°	845.5	832.5	791.6	793.6	812.6	814.6	816.6	791.6	785.7	836.5	839.5
5°	1073.8	1043.9	1014.0	1002.0	984.1	934.2	989.1	995.0	1007.0	1045.9	1063.8
7.5°	1226.4	1189.5	1148.6	1123.7	1074.8	1033.9	1078.8	1115.7	1139.6	1183.5	1208.4
10°	1255.3	1233.3	1231.3	1187.5	1178.5	1193.5	1190.5	1191.5	1227.4	1228.4	1243.3
12.5°	1346.0	1362.0	1331.0	1316.1	1325.1	1362.0	1332.0	1319.1	1328.1	1368.9	1352.0
15°	1464.7	1483.6	1436.7	1412.8	1388.9	1423.8	1392.9	1415.8	1444.7	1474.6	1459.7
17.5°	1596.3	1597.3	1533.4	1444.7	1465.6	1470.6	1459.7	1440.7	1523.5	1595.3	1588.3
20°	1668.0	1667.0	1557.4	1436.7	1498.6	1509.5	1499.5	1434.7	1559.4	1658.1	1655.1
22.5°	1741.8	1719.9	1588.3	1490.6	1513.5	1522.5	1499.5	1493.6	1588.3	1725.9	1724.9
25°	1781.7	1800.7	1656.1	1595.3	1576.3	1555.4	1575.3	1585.3	1676.0	1810.6	1771.7
27.5°	1906.3	1875.4	1676.0	1670.0	1630.2	1547.4	1616.2	1665.1	1670.0	1887.4	1927.3
30°	2019.0	2031.0	1765.8	1774.7	1701.9	1597.3	1703.9	1781.7	1796.7	2033.0	2029.0
32.5°	2138.6	2143.6	1925.3	1832.6	1801.6	1797.7	1756.8	1824.6	1942.2	2131.7	2139.6
35°	2320.1	2361.0	2067.9	1943.2	1904.3	1864.5	1900.4	1961.2	2070.9	2355.0	2335.1
37.5°	2735.9	2671.1	2377.9	2119.7	2093.8	2077.8	2106.7	2150.6	2374.9	2678.0	2770.8
40°	3026.0	2995.1	2596.3	2411.8	2248.3	2334.1	2266.3	2435.8	2621.2	2997.1	3056.9
42.5°	3475.7	3338.1	2928.3	2700.0	2530.5	2469.7	2507.6	2728.9	2965.2	3384.0	3501.6
45°	3907.4	3695.0	3344.1	3142.7	2885.4	2821.6	2872.5	3132.7	3405.9	3736.9	3944.3
47.5°	4348.1	4128.7	3742.9	3451.7	3241.4	3431.8	3265.3	3512.6	3784.8	4169.6	4354.1
50°	4805.7	4562.5	4181.6	3864.5	3846.6	4015.1	3815.7	3942.3	4194.5	4593.4	4810.7
52.5°	5331.2	5068.9	4688.1	4473.7	4515.6	4504.6	4464.7	4441.8	4690.1	5081.9	5340.1
55°	5956.3	5673.2	5369.1	5270.3	5386.0	5261.4	5320.2	5312.2	5348.1	5628.3	5930.4
57.5°	6712.1	6392.0	6086.9	6065.0	6213.5	6331.2	6226.5	6076.0	6013.1	6285.3	6631.3
60°	7664.2	7271.4	6936.4	6867.6	7291.3	7290.4	7195.6	6858.6	6834.7	7142.8	7559.6
62.5°	8716.1	8237.5	7871.6	7762.0	8426.0	8500.8	8205.6	7601.4	7725.1	7973.3	8467.9
65°	9609.5	9034.2	8693.2	8663.3	9474.9	9804.9	9152.8	8326.3	8366.2	8572.5	9108.0
67.5°	10191.7	9498.8	9227.6	9372.2	10381.2	10587.6	9981.4	8810.8	8669.3	8755.0	9395.1
70°	9987.3	9225.6	9030.2	9381.1	10615.5	10927.6	10159.8	8675.2	8374.1	8378.1	9121.9
72.5°	8438.9	7714.1	7806.8	8450.9	10061.1	10498.8	9334.3	7835.7	7219.6	7204.6	7879.6
75°	5580.4	5095.9	5461.8	6465.8	8364.2	9259.5	7734.0	6141.8	5369.1	5117.8	5639.3
77.5°	2440.8	2378.9	2687.0	3821.7	5702.1	6673.2	5540.5	4012.1	2920.3	2428.8	2653.1
80°	654.1	640.1	803.6	1449.7	2775.8	3675.1	2998.1	1600.2	835.5	608.2	645.1
82.5°	238.3	244.3	298.1	405.8	914.3	1547.4	996.0	467.6	316.1	259.2	259.2
85°	103.7	100.7	144.6	162.5	249.3	350.0	286.2	198.4	159.5	119.6	114.7
87.5°	27.9	34.9	48.9	50.8	64.8	52.8	75.8	69.8	59.8	41.9	33.9
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)