

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: P367041

Luminaire Tested: **MSA-SA1D-740-U-5WQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367041
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-SA1D-740-U-5WQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7356 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G2

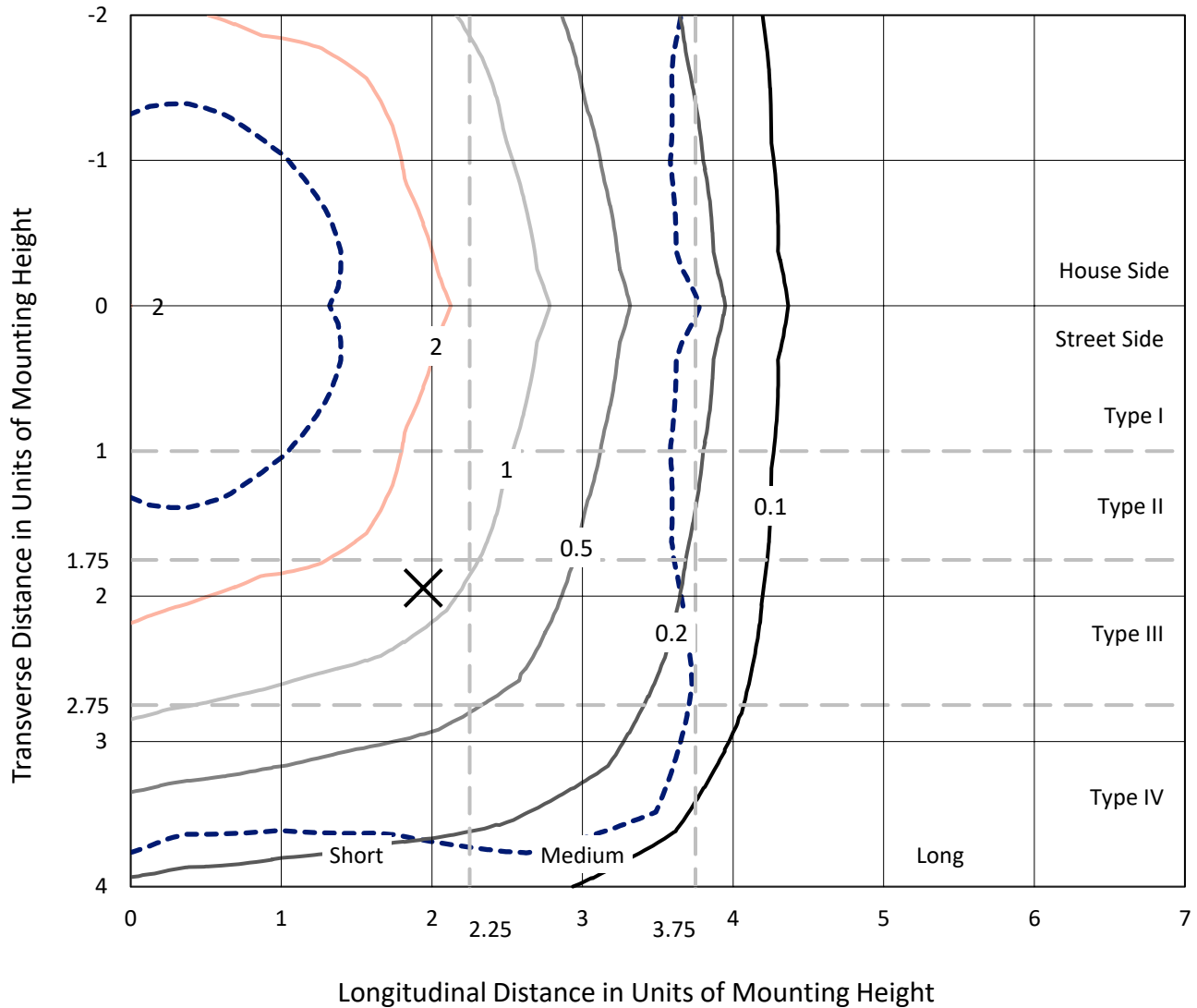
Input Watts (W): 67
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

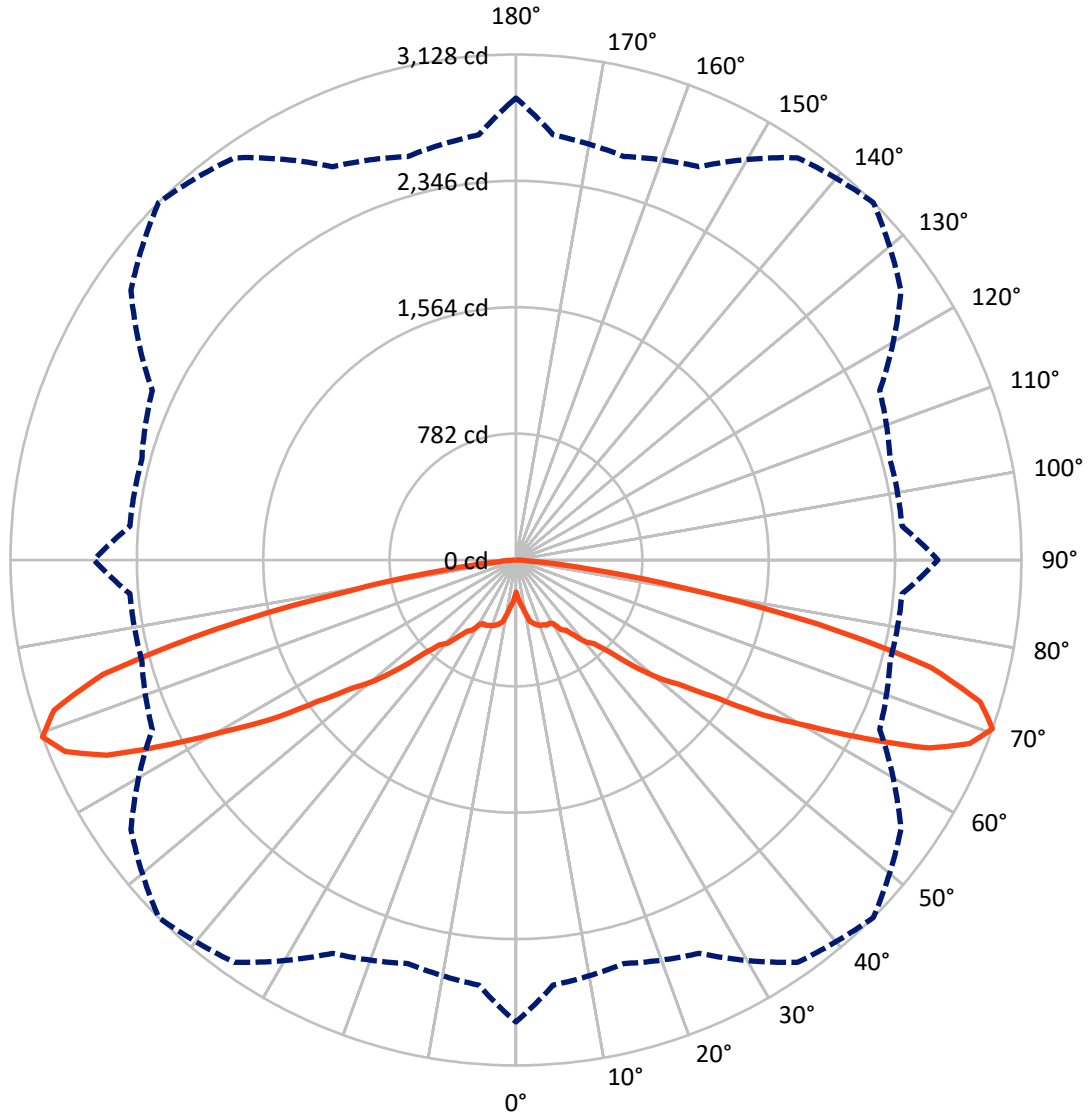
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 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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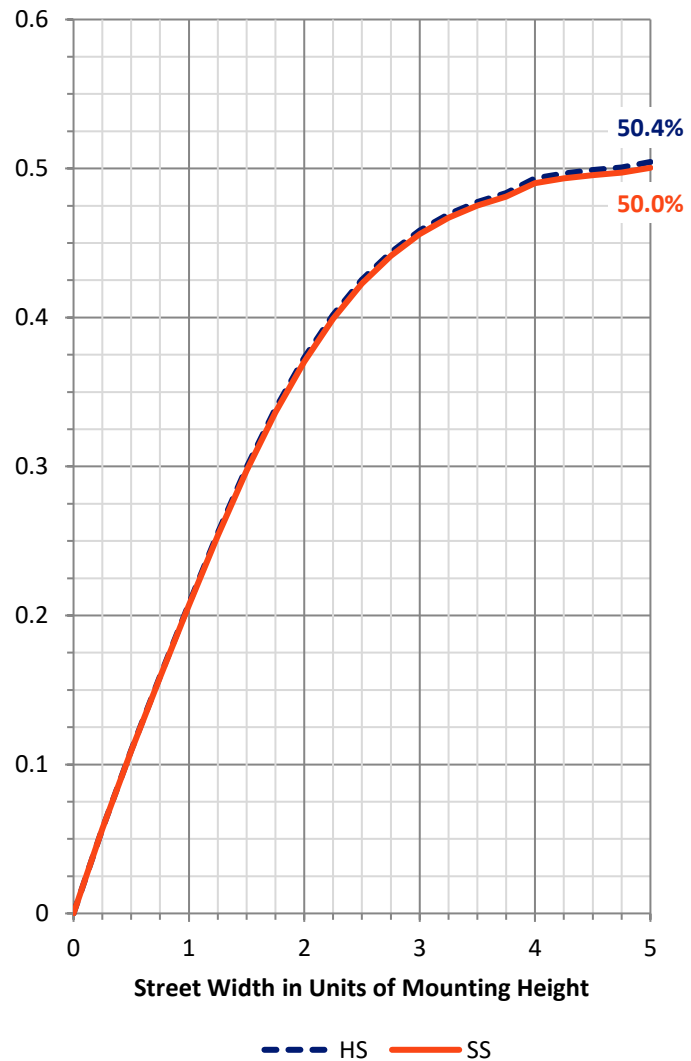
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3678.0	0.0	3678.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3678.0	0.0	3678.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	7356.0	0.0	7356.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.9	0.4
10°-20°	115.8	1.6
20°-30°	218.9	3.0
30°-40°	381.3	5.2
40°-50°	729.0	9.9
50°-60°	1413.5	19.2
60°-70°	2475.2	33.6
70°-80°	1860.2	25.3
80°-90°	133.1	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°	7356.0	100.0
0°-180°	7356.0	100.0



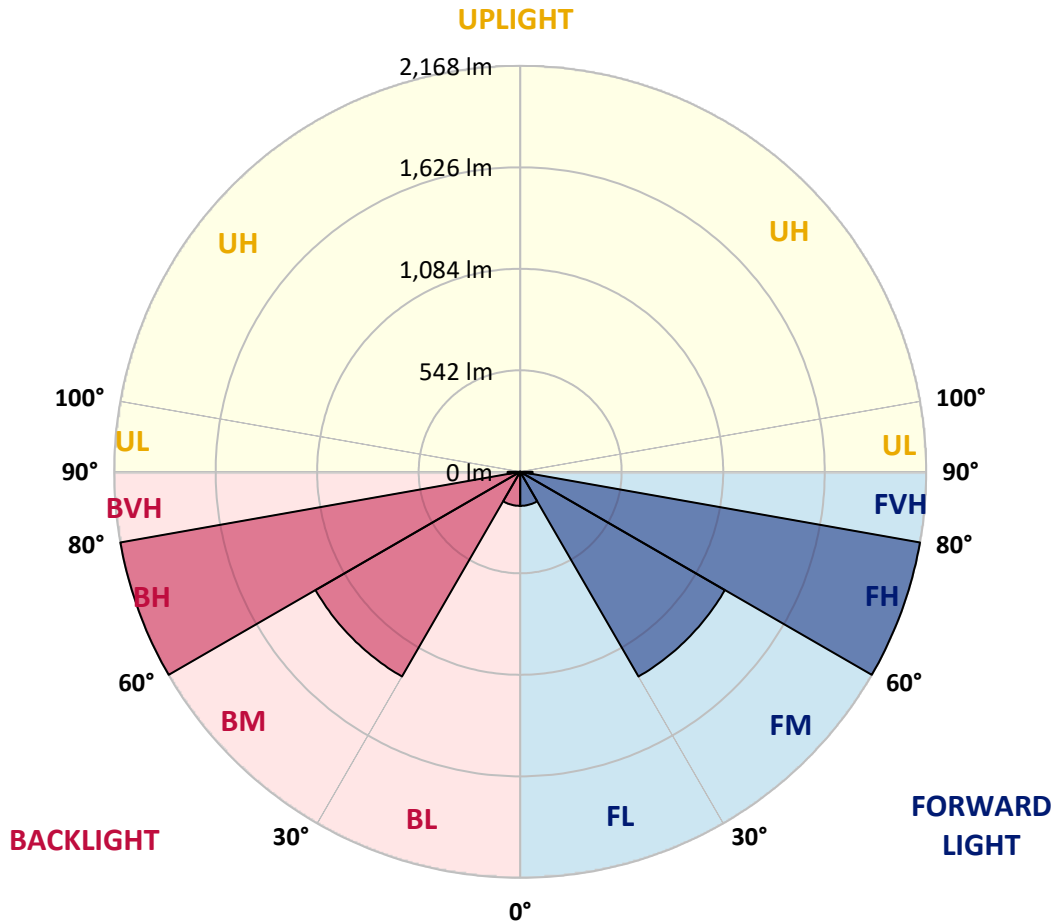
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	181.8	2.5			
FM (30°-60°)	1261.9	17.2			
FH (60°-80°)	2167.7	29.5			G2/5000
FVH (80°-90°)	66.6	0.9			G1/100
BL (0°-30°)	181.8	2.5	B1/500		
BM (30°-60°)	1261.9	17.2	B2/2500		
BH (60°-80°)	2167.7	29.5	B3/2500		G2/5000
BVH (80°-90°)	66.6	0.9			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	198.9	198.9	198.9	198.9	198.9	198.9	198.9	198.9	198.9	198.9	198.9
2.5°	242.0	238.3	226.6	227.2	232.6	233.1	233.7	226.6	224.9	239.4	240.3
5°	307.3	298.8	290.2	286.8	281.7	267.4	283.1	284.8	288.2	299.4	304.5
7.5°	351.0	340.4	328.7	321.6	307.6	295.9	308.8	319.3	326.2	338.7	345.9
10°	359.3	353.0	352.4	339.9	337.3	341.6	340.7	341.0	351.3	351.6	355.9
12.5°	385.2	389.8	381.0	376.7	379.3	389.8	381.3	377.5	380.1	391.8	387.0
15°	419.2	424.6	411.2	404.4	397.5	407.5	398.7	405.2	413.5	422.1	417.8
17.5°	456.9	457.2	438.9	413.5	419.5	420.9	417.8	412.4	436.0	456.6	454.6
20°	477.4	477.1	445.7	411.2	428.9	432.0	429.2	410.6	446.3	474.6	473.7
22.5°	498.5	492.3	454.6	426.6	433.2	435.8	429.2	427.5	454.6	494.0	493.7
25°	510.0	515.4	474.0	456.6	451.2	445.2	450.9	453.7	479.7	518.2	507.1
27.5°	545.6	536.8	479.7	478.0	466.6	442.9	462.6	476.6	478.0	540.2	551.6
30°	577.9	581.3	505.4	508.0	487.1	457.2	487.7	510.0	514.2	581.9	580.7
32.5°	612.1	613.5	551.0	524.5	515.7	514.5	502.8	522.2	555.9	610.1	612.4
35°	664.0	675.7	591.9	556.2	545.1	533.6	543.9	561.3	592.7	674.0	668.3
37.5°	783.0	764.5	680.6	606.7	599.3	594.7	603.0	615.5	679.7	766.5	793.0
40°	866.1	857.2	743.1	690.3	643.5	668.0	648.6	697.2	750.2	857.8	874.9
42.5°	994.8	955.4	838.1	772.8	724.3	706.9	717.7	781.0	848.7	968.5	1002.2
45°	1118.4	1057.6	957.1	899.5	825.9	807.6	822.1	896.6	974.8	1069.6	1128.9
47.5°	1244.5	1181.7	1071.3	987.9	927.7	982.2	934.6	1005.3	1083.3	1193.4	1246.2
50°	1375.5	1305.8	1196.8	1106.1	1100.9	1149.2	1092.1	1128.3	1200.5	1314.7	1376.9
52.5°	1525.9	1450.8	1341.8	1280.4	1292.4	1289.3	1277.9	1271.3	1342.4	1454.5	1528.4
55°	1704.8	1623.7	1536.7	1508.5	1541.6	1505.9	1522.7	1520.4	1530.7	1610.9	1697.4
57.5°	1921.1	1829.5	1742.2	1735.9	1778.4	1812.1	1782.1	1739.0	1721.0	1799.0	1898.0
60°	2193.6	2081.2	1985.3	1965.6	2086.9	2086.6	2059.5	1963.0	1956.2	2044.4	2163.7
62.5°	2494.7	2357.7	2253.0	2221.6	2411.6	2433.0	2348.6	2175.6	2211.0	2282.1	2423.6
65°	2750.4	2585.7	2488.1	2479.6	2711.8	2806.3	2619.7	2383.1	2394.5	2453.6	2606.8
67.5°	2917.0	2718.7	2641.1	2682.5	2971.2	3030.3	2856.8	2521.8	2481.3	2505.8	2689.0
70°	2858.5	2640.5	2584.6	2685.0	3038.3	3127.6	2907.9	2483.0	2396.8	2397.9	2610.8
72.5°	2415.3	2207.9	2234.4	2418.8	2879.6	3004.9	2671.6	2242.7	2066.3	2062.1	2255.3
75°	1597.2	1458.5	1563.2	1850.6	2393.9	2650.2	2213.6	1757.9	1536.7	1464.8	1614.0
77.5°	698.6	680.9	769.1	1093.8	1632.0	1910.0	1585.8	1148.3	835.8	695.2	759.4
80°	187.2	183.2	230.0	414.9	794.5	1051.9	858.1	458.0	239.1	174.1	184.6
82.5°	68.2	69.9	85.3	116.1	261.7	442.9	285.1	133.8	90.5	74.2	74.2
85°	29.7	28.8	41.4	46.5	71.3	100.2	81.9	56.8	45.7	34.2	32.8
87.5°	8.0	10.0	14.0	14.6	18.5	15.1	21.7	20.0	17.1	12.0	9.7
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)