

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: P366996

Luminaire Tested: **MSA-SA1D-727-U-5NQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P366996
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-5)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA1D-727-U-5NQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5868 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B2 - U0 - G1

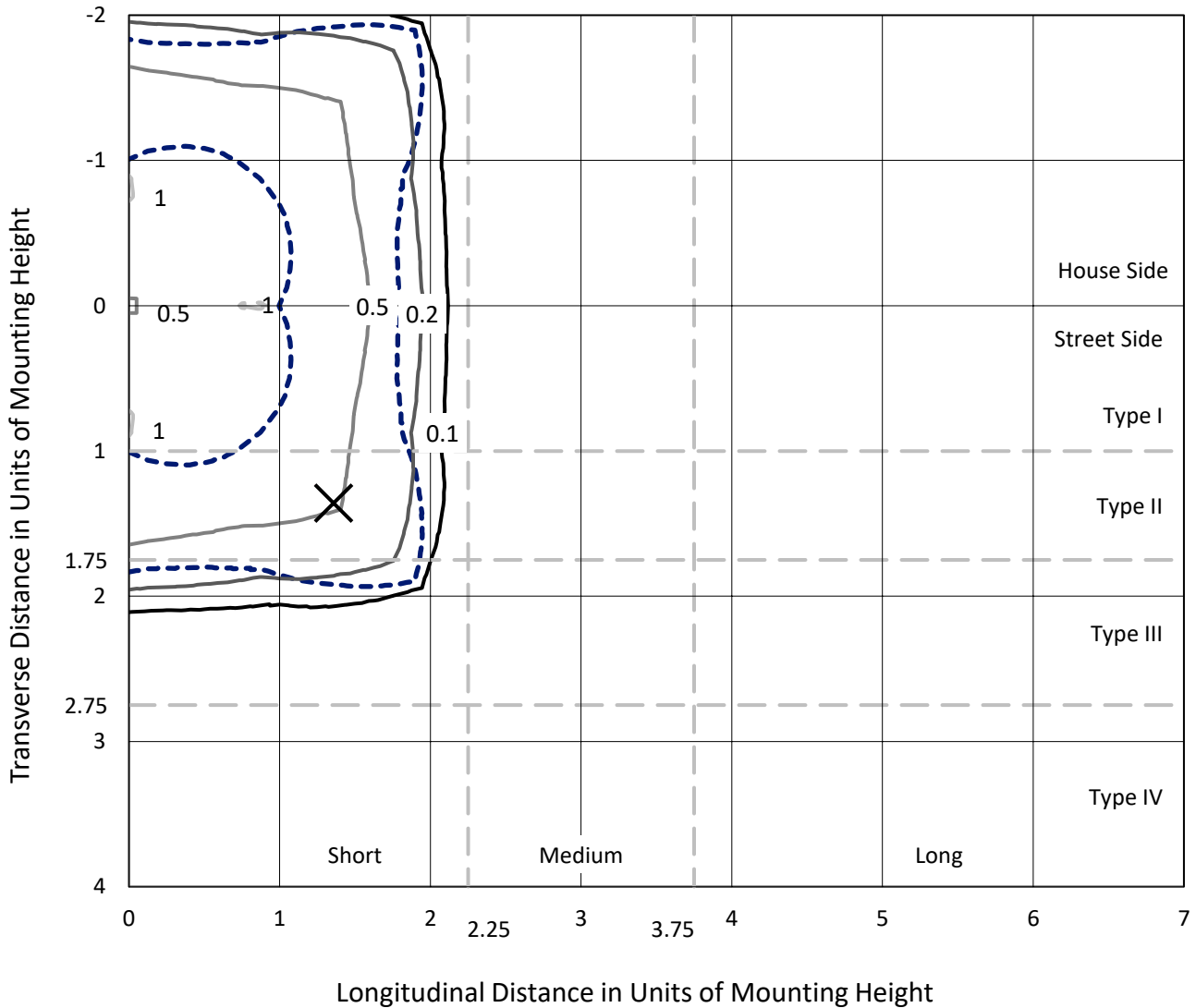
Input Watts (W): 67
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

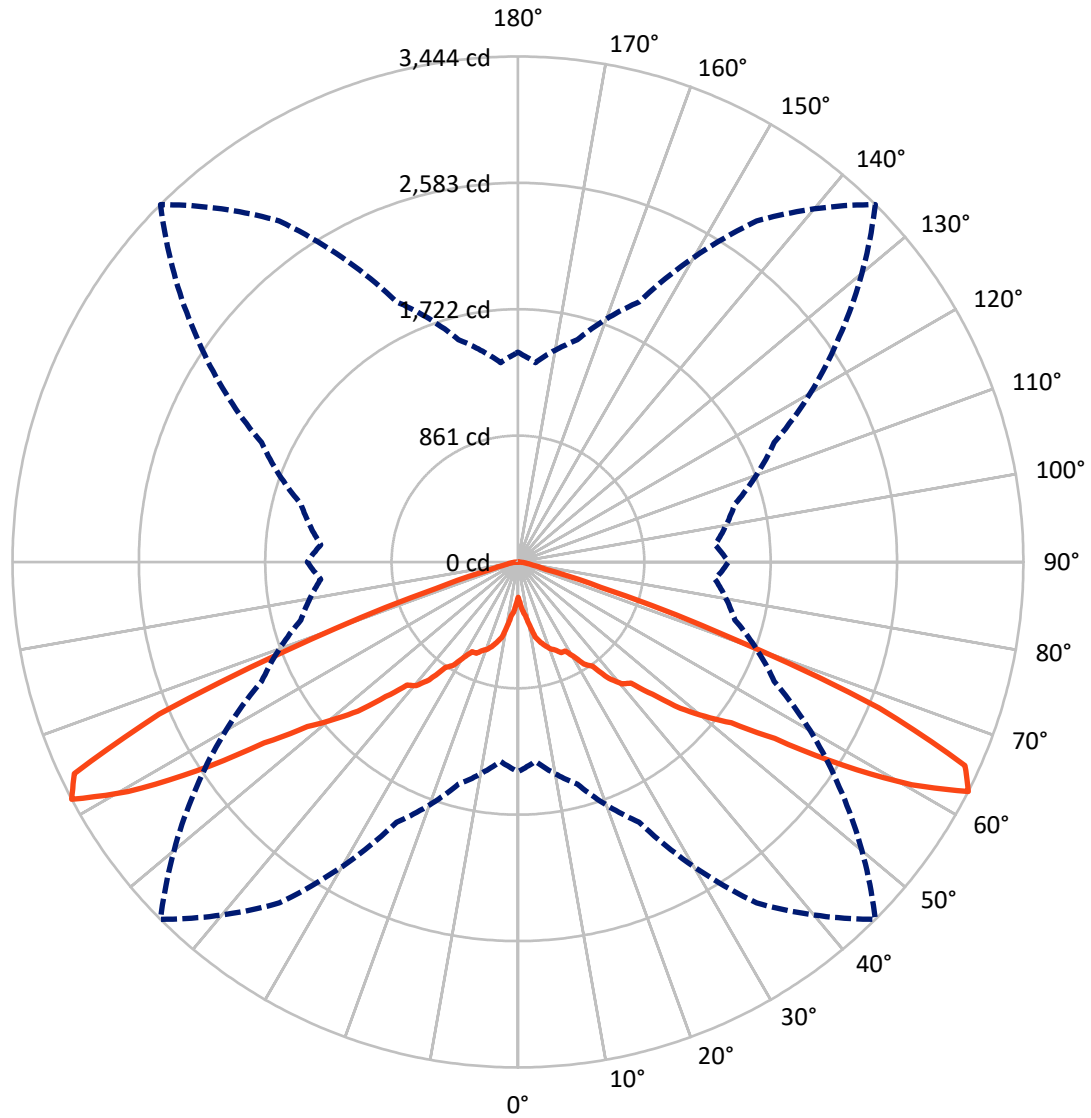
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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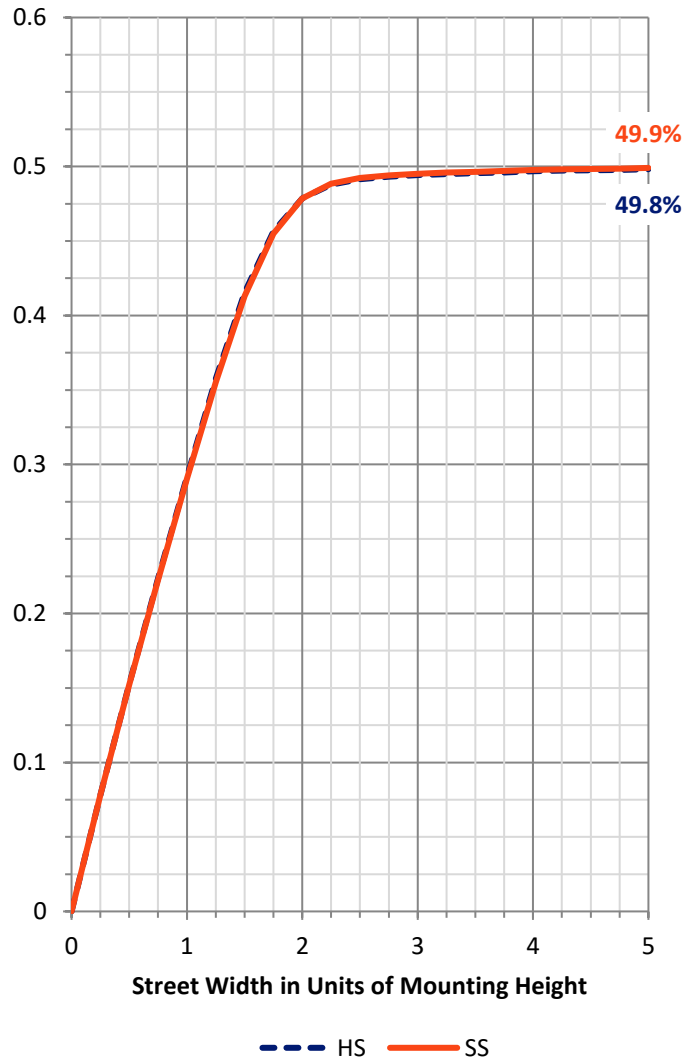
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2934.0	0.0	2934.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2934.0	0.0	2934.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	5868.0	0.0	5868.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.2	0.6
10°-20°	159.4	2.7
20°-30°	334.2	5.7
30°-40°	629.6	10.7
40°-50°	1142.8	19.5
50°-60°	1930.9	32.9
60°-70°	1443.4	24.6
70°-80°	161.5	2.8
80°-90°	30.1	0.5
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°	5868.0	100.0
0°-180°	5868.0	100.0

Coefficient of Utilization



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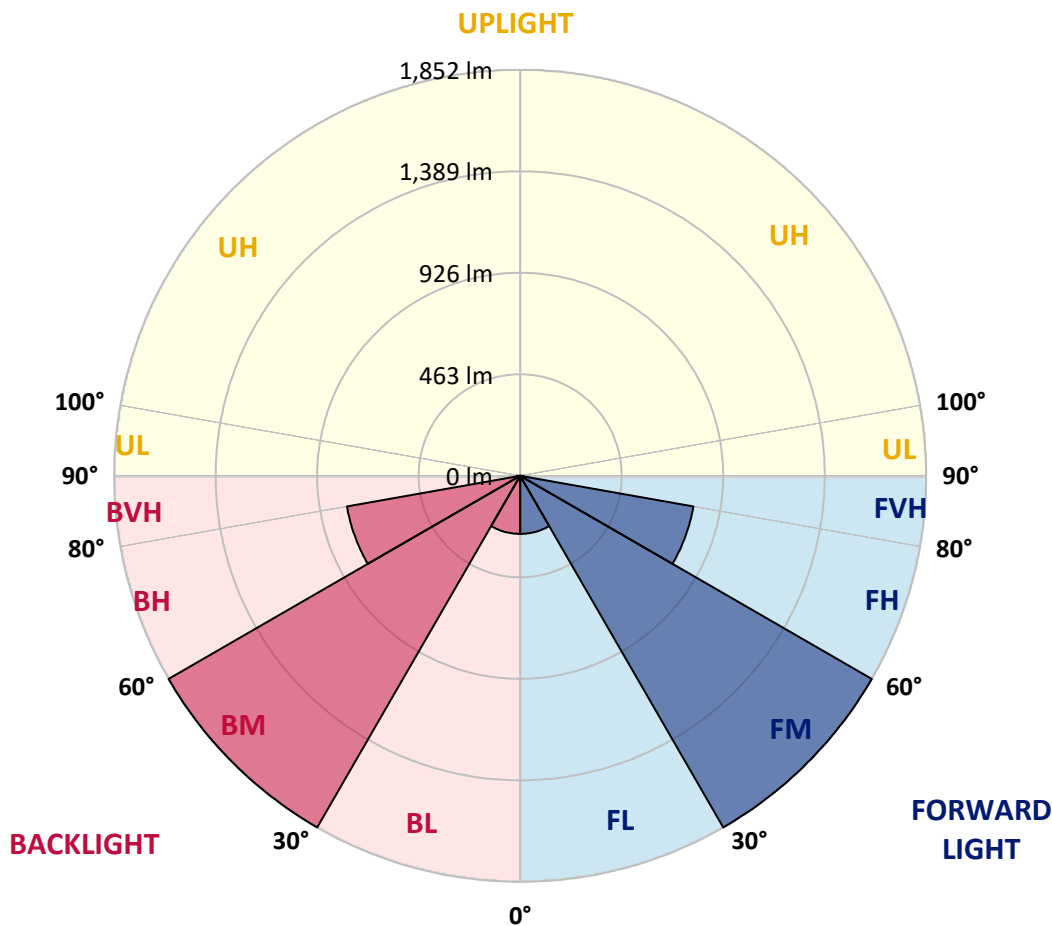
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	264.9	4.5			
FM (30°-60°)	1851.6	31.6			
FH (60°-80°)	802.5	13.7			G1/1800
FVH (80°-90°)	15.0	0.3			G1/100
BL (0°-30°)	264.9	4.5	B1/500		
BM (30°-60°)	1851.6	31.6	B2/2500		
BH (60°-80°)	802.5	13.7	B2/1000		G1/1800
BVH (80°-90°)	15.0	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	239.9	239.9	239.9	239.9	239.9	239.9	239.9	239.9	239.9	239.9	239.9
2.5°	291.7	286.5	268.1	274.5	281.2	280.3	278.6	273.6	269.1	287.9	291.7
5°	371.9	360.0	353.6	348.3	347.1	334.2	351.9	350.0	356.0	366.0	375.8
7.5°	435.9	424.7	407.8	404.2	384.8	370.5	385.8	404.7	410.6	429.0	440.0
10°	459.3	449.5	452.6	436.6	435.7	439.7	436.4	440.7	456.5	454.3	462.4
12.5°	511.8	513.5	503.5	499.4	507.5	525.2	510.2	504.9	501.1	517.3	522.3
15°	561.0	570.8	554.3	551.7	548.4	564.8	548.6	556.5	563.4	566.8	564.8
17.5°	630.7	631.2	612.8	583.5	594.4	599.7	592.5	578.9	611.6	628.1	629.1
20°	676.6	678.2	642.0	596.1	627.2	631.9	628.3	599.9	643.4	670.8	669.6
22.5°	726.0	720.3	671.1	637.7	648.6	651.5	643.9	640.3	670.8	720.7	713.3
25°	759.2	769.7	720.7	699.2	689.9	683.3	693.0	695.0	726.2	771.6	746.5
27.5°	838.4	820.3	743.7	751.8	732.0	686.8	729.8	753.4	746.8	824.1	843.0
30°	908.9	909.3	801.9	817.4	780.7	744.1	790.7	824.8	816.5	915.5	897.6
32.5°	998.9	1002.2	902.4	860.9	836.0	829.1	823.4	861.1	913.2	993.4	995.0
35°	1096.0	1124.7	989.1	945.4	903.1	872.6	905.5	957.8	991.7	1119.9	1097.2
37.5°	1285.3	1237.1	1126.1	1044.0	1017.0	1004.8	1022.3	1052.6	1125.9	1236.4	1275.3
40°	1397.3	1383.9	1232.8	1164.1	1060.0	1092.4	1082.9	1166.0	1226.6	1391.6	1395.2
42.5°	1568.5	1501.2	1365.3	1277.9	1184.4	1128.0	1187.7	1299.2	1372.5	1511.9	1577.8
45°	1703.8	1617.4	1512.6	1446.2	1328.1	1286.3	1307.8	1450.5	1542.5	1638.2	1724.8
47.5°	1853.5	1759.9	1655.1	1537.2	1421.9	1489.9	1452.0	1577.5	1667.3	1804.6	1885.8
50°	2041.6	1938.0	1803.9	1706.5	1630.1	1653.9	1648.0	1737.5	1848.3	1973.4	2065.5
52.5°	2248.9	2131.6	2002.3	1911.8	1879.5	1820.3	1897.7	1934.5	2016.1	2130.7	2238.8
55°	2393.8	2276.6	2198.3	2227.4	2218.8	2123.8	2191.6	2195.4	2156.0	2197.3	2306.2
57.5°	2371.3	2259.4	2248.6	2358.7	2523.2	2615.1	2510.3	2284.9	2137.4	2118.0	2233.3
60°	2073.4	1977.7	2076.0	2324.3	2803.4	3083.2	2679.8	2217.4	1974.3	1873.8	1985.1
62.5°	1428.8	1364.1	1568.0	1956.2	2837.1	3444.4	2673.6	1926.8	1531.2	1348.8	1435.3
65°	677.3	653.9	826.0	1240.2	2363.2	3348.0	2335.8	1303.7	881.4	704.0	723.6
67.5°	254.7	243.0	303.2	547.9	1488.5	2655.4	1570.1	643.1	340.9	265.0	274.1
70°	144.7	136.3	144.2	199.8	599.2	1504.0	677.3	220.6	144.9	132.0	140.6
72.5°	113.9	107.4	108.6	120.8	206.7	590.4	219.2	125.8	105.3	100.0	107.7
75°	94.1	88.3	88.1	94.8	120.6	191.7	123.9	96.2	85.2	81.4	87.6
77.5°	74.7	71.4	72.3	77.6	86.4	107.2	89.8	77.8	69.9	65.4	69.7
80°	54.7	54.2	58.0	62.8	64.5	72.1	67.3	62.8	55.9	49.4	51.1
82.5°	35.8	36.0	43.2	47.0	46.3	46.1	48.2	48.0	41.8	32.7	32.7
85°	20.5	21.0	26.5	29.6	29.1	23.2	30.6	30.8	26.7	19.8	19.1
87.5°	6.7	8.4	11.5	12.2	11.7	6.4	11.7	12.9	11.7	8.4	7.4
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)