

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: P366820

Luminaire Tested: **MSA-SA1B-760-U-5NQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P366820
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-SA1B-760-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: 5182 lumens
Efficiency: N/A
Efficacy: 117.8 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

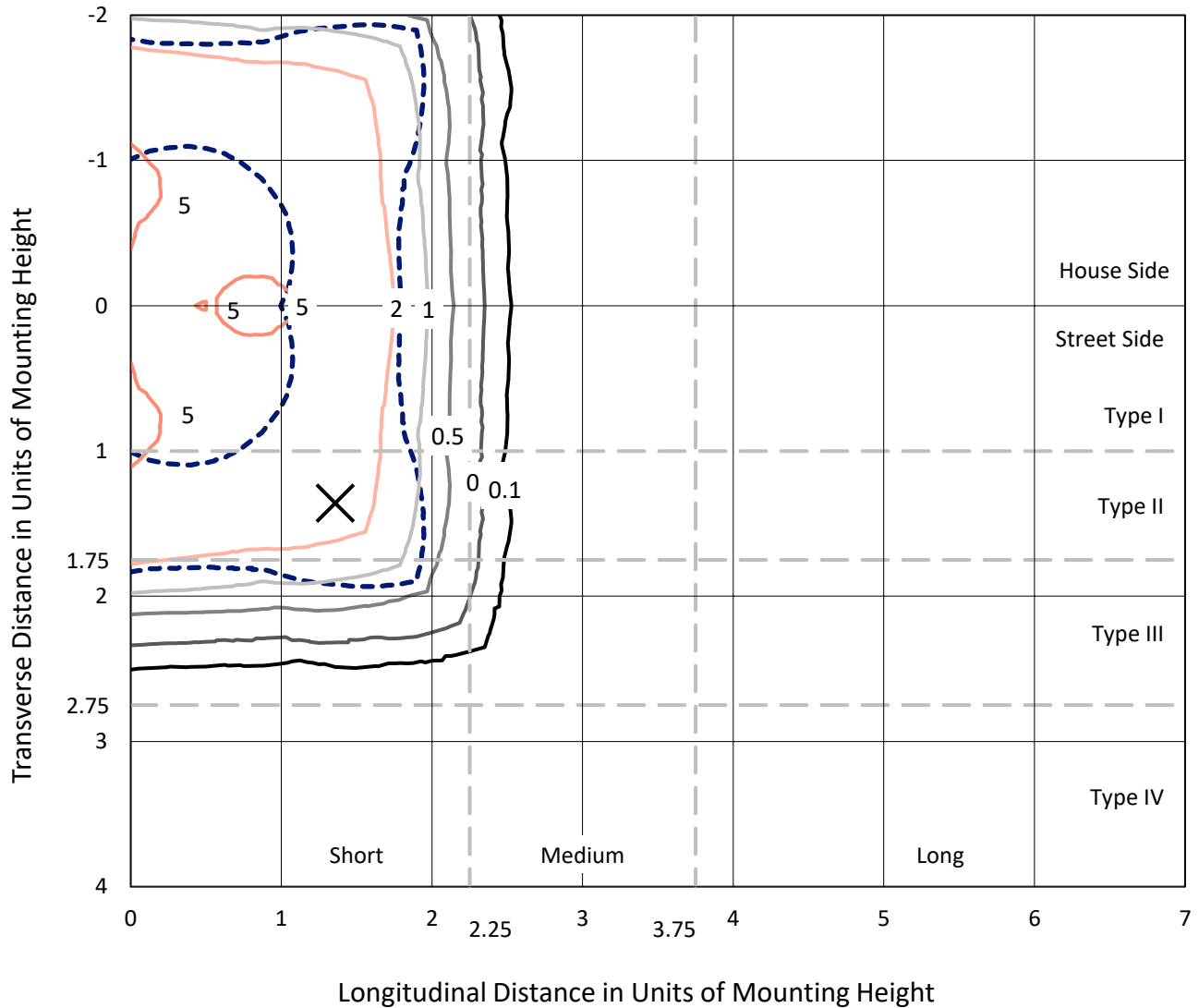
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

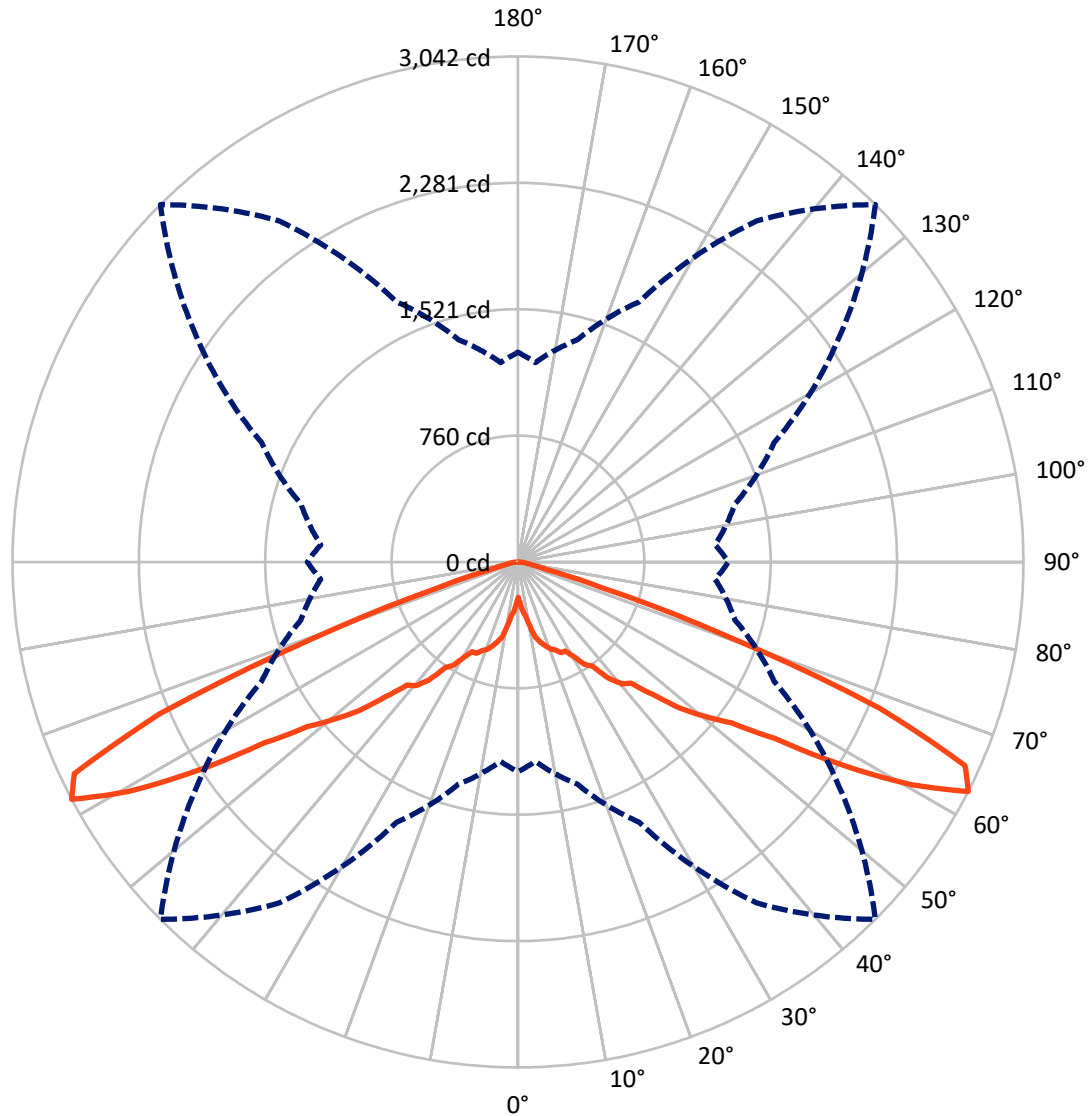
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.6 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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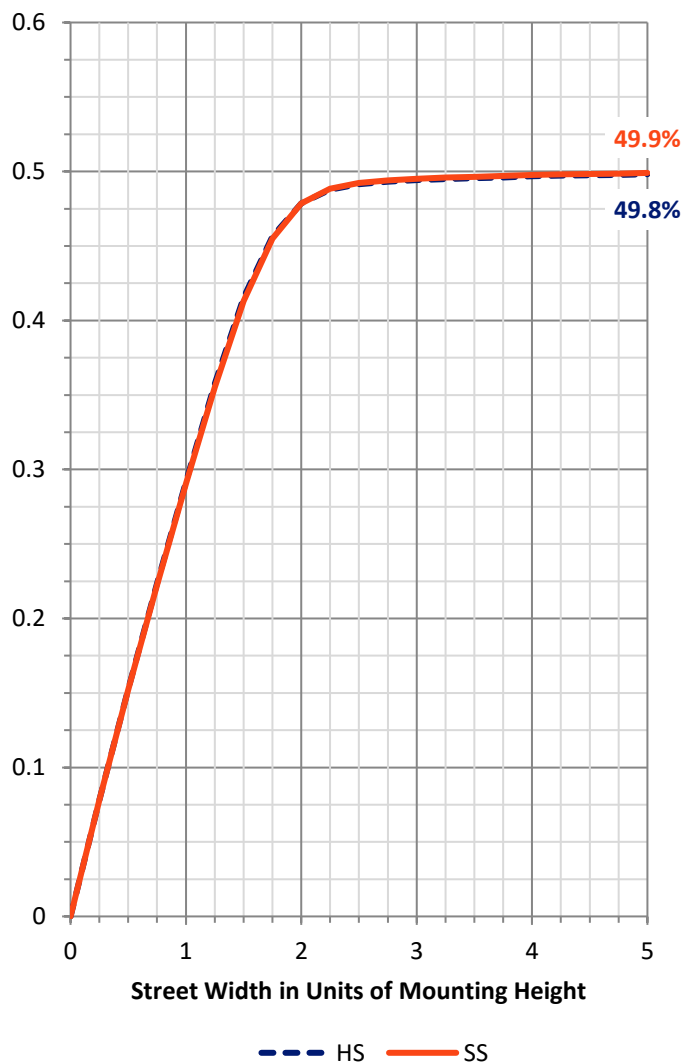
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2591.0	0.0	2591.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2591.0	0.0	2591.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	5182.0	0.0	5182.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.9	0.6
10°-20°	140.8	2.7
20°-30°	295.1	5.7
30°-40°	556.0	10.7
40°-50°	1009.2	19.5
50°-60°	1705.1	32.9
60°-70°	1274.7	24.6
70°-80°	142.6	2.8
80°-90°	26.5	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°	5182.0	100.0
0°-180°	5182.0	100.0

Coefficient of Utilization



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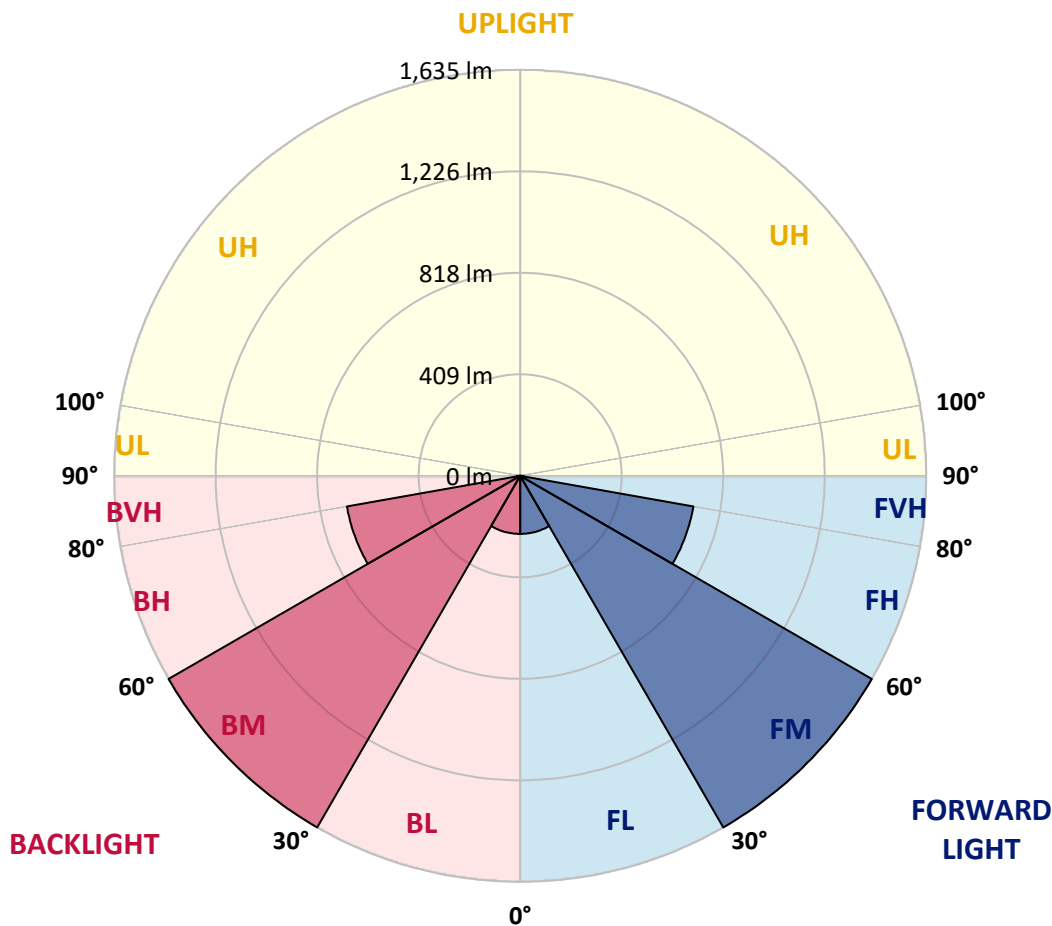
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	233.9	4.5			
FM (30°-60°)	1635.2	31.6			
FH (60°-80°)	708.7	13.7			G1/1800
FVH (80°-90°)	13.3	0.3			G1/100
BL (0°-30°)	233.9	4.5	B1/500		
BM (30°-60°)	1635.2	31.6	B2/2500		
BH (60°-80°)	708.7	13.7	B2/1000		G1/1800
BVH (80°-90°)	13.3	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°	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9
2.5°	257.6	253.0	236.8	242.4	248.4	247.5	246.0	241.6	237.6	254.3	257.6
5°	328.5	317.9	312.2	307.6	306.5	295.2	310.8	309.1	314.3	323.2	331.8
7.5°	385.0	375.1	360.1	356.9	339.8	327.2	340.7	357.3	362.6	378.9	388.5
10°	405.6	397.0	399.7	385.6	384.8	388.3	385.4	389.2	403.1	401.2	408.4
12.5°	452.0	453.5	444.6	441.0	448.2	463.8	450.5	445.9	442.5	456.9	461.3
15°	495.4	504.1	489.5	487.2	484.3	498.8	484.5	491.4	497.5	500.5	498.8
17.5°	557.0	557.4	541.2	515.3	525.0	529.6	523.3	511.2	540.1	554.7	555.5
20°	597.5	599.0	566.9	526.4	553.8	558.1	554.9	529.8	568.2	592.4	591.4
22.5°	641.1	636.1	592.6	563.1	572.8	575.3	568.6	565.4	592.4	636.5	629.9
25°	670.4	679.7	636.5	617.5	609.3	603.4	612.0	613.7	641.3	681.4	659.2
27.5°	740.4	724.4	656.7	663.9	646.4	606.5	644.5	665.4	659.5	727.8	744.4
30°	802.6	803.0	708.2	721.9	689.4	657.1	698.2	728.4	721.0	808.5	792.7
32.5°	882.1	885.0	796.9	760.2	738.3	732.2	727.1	760.4	806.4	877.2	878.7
35°	967.9	993.2	873.4	834.9	797.5	770.6	799.7	845.8	875.8	989.0	968.9
37.5°	1135.1	1092.5	994.5	921.9	898.1	887.4	902.7	929.5	994.2	1091.9	1126.2
40°	1234.0	1222.1	1088.7	1028.0	936.1	964.7	956.3	1029.7	1083.2	1228.9	1232.1
42.5°	1385.1	1325.7	1205.7	1128.5	1045.9	996.1	1048.8	1147.3	1212.0	1335.1	1393.3
45°	1504.7	1428.3	1335.8	1277.2	1172.8	1135.9	1154.9	1281.0	1362.1	1446.7	1523.2
47.5°	1636.8	1554.2	1461.6	1357.5	1255.7	1315.8	1282.2	1393.1	1472.4	1593.6	1665.3
50°	1803.0	1711.5	1593.0	1507.0	1439.5	1460.6	1455.3	1534.4	1632.2	1742.7	1824.0
52.5°	1986.0	1882.4	1768.2	1688.3	1659.8	1607.5	1675.8	1708.3	1780.4	1881.6	1977.1
55°	2113.9	2010.4	1941.3	1967.0	1959.4	1875.5	1935.4	1938.7	1904.0	1940.4	2036.6
57.5°	2094.1	1995.2	1985.8	2082.9	2228.2	2309.4	2216.8	2017.8	1887.5	1870.4	1972.3
60°	1831.0	1746.5	1833.3	2052.6	2475.7	2722.8	2366.5	1958.1	1743.5	1654.8	1753.0
62.5°	1261.8	1204.6	1384.7	1727.5	2505.4	3041.8	2361.0	1701.6	1352.2	1191.2	1267.5
65°	598.1	577.4	729.5	1095.2	2086.9	2956.6	2062.7	1151.3	778.4	621.7	639.0
67.5°	224.9	214.6	267.7	483.8	1314.5	2345.0	1386.6	568.0	301.1	234.0	242.0
70°	127.8	120.4	127.3	176.5	529.2	1328.2	598.1	194.8	128.0	116.6	124.2
72.5°	100.6	94.9	95.9	106.7	182.6	521.4	193.5	111.1	93.0	88.3	95.1
75°	83.1	78.0	77.8	83.7	106.5	169.3	109.4	85.0	75.3	71.9	77.4
77.5°	66.0	63.0	63.9	68.5	76.3	94.7	79.3	68.7	61.8	57.8	61.6
80°	48.3	47.9	51.2	55.4	56.9	63.7	59.5	55.4	49.3	43.6	45.1
82.5°	31.6	31.8	38.2	41.5	40.9	40.7	42.6	42.4	36.9	28.9	28.9
85°	18.1	18.6	23.4	26.1	25.7	20.4	27.0	27.2	23.6	17.5	16.9
87.5°	5.9	7.4	10.1	10.8	10.3	5.7	10.3	11.4	10.3	7.4	6.5
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)