

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: P367084

Luminaire Tested: **MSA-SA1D-760-U-5NQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367084
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-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: 7017 lumens
Efficiency: N/A
Efficacy: 104.7 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

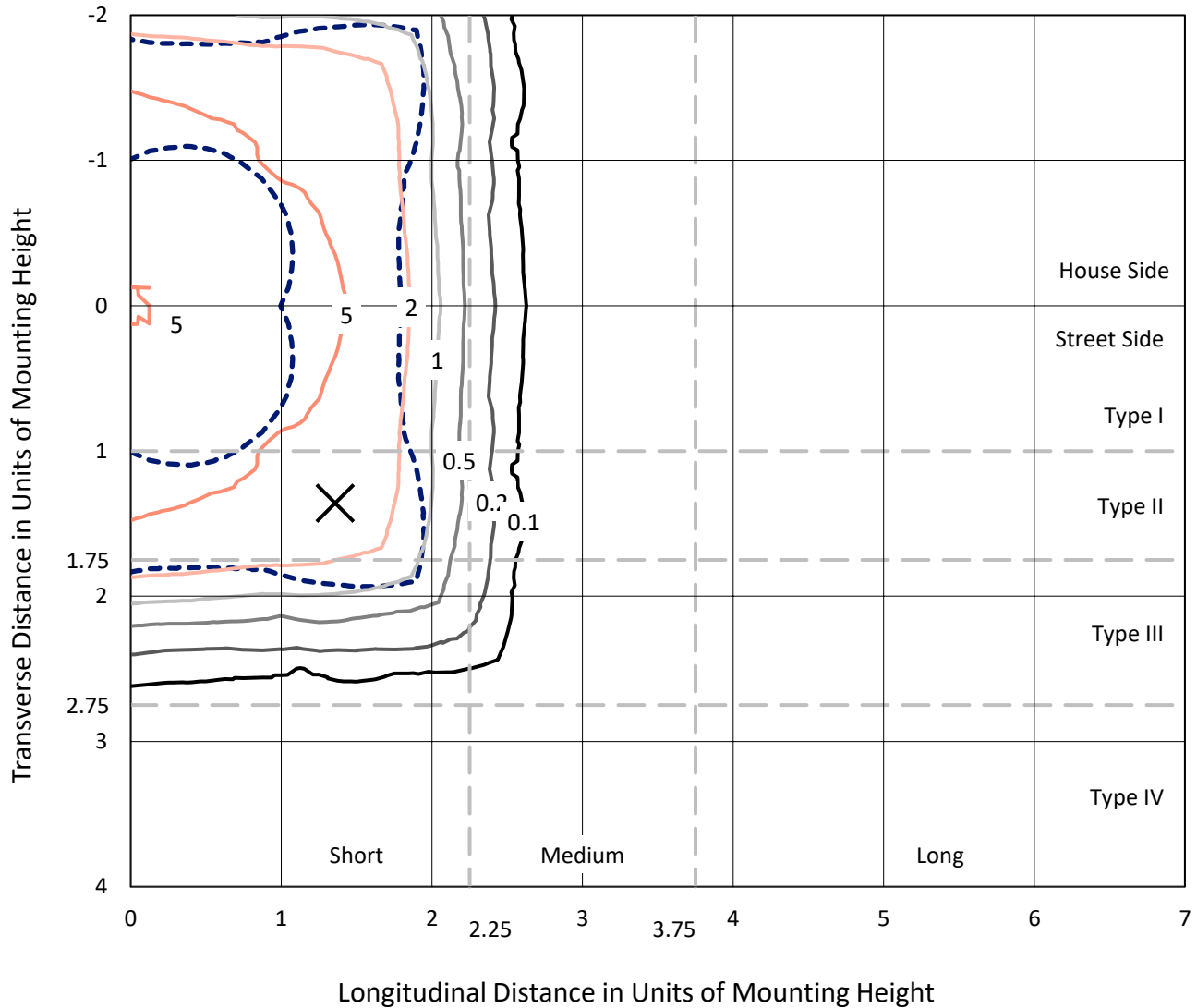
Input Watts (W): 67
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

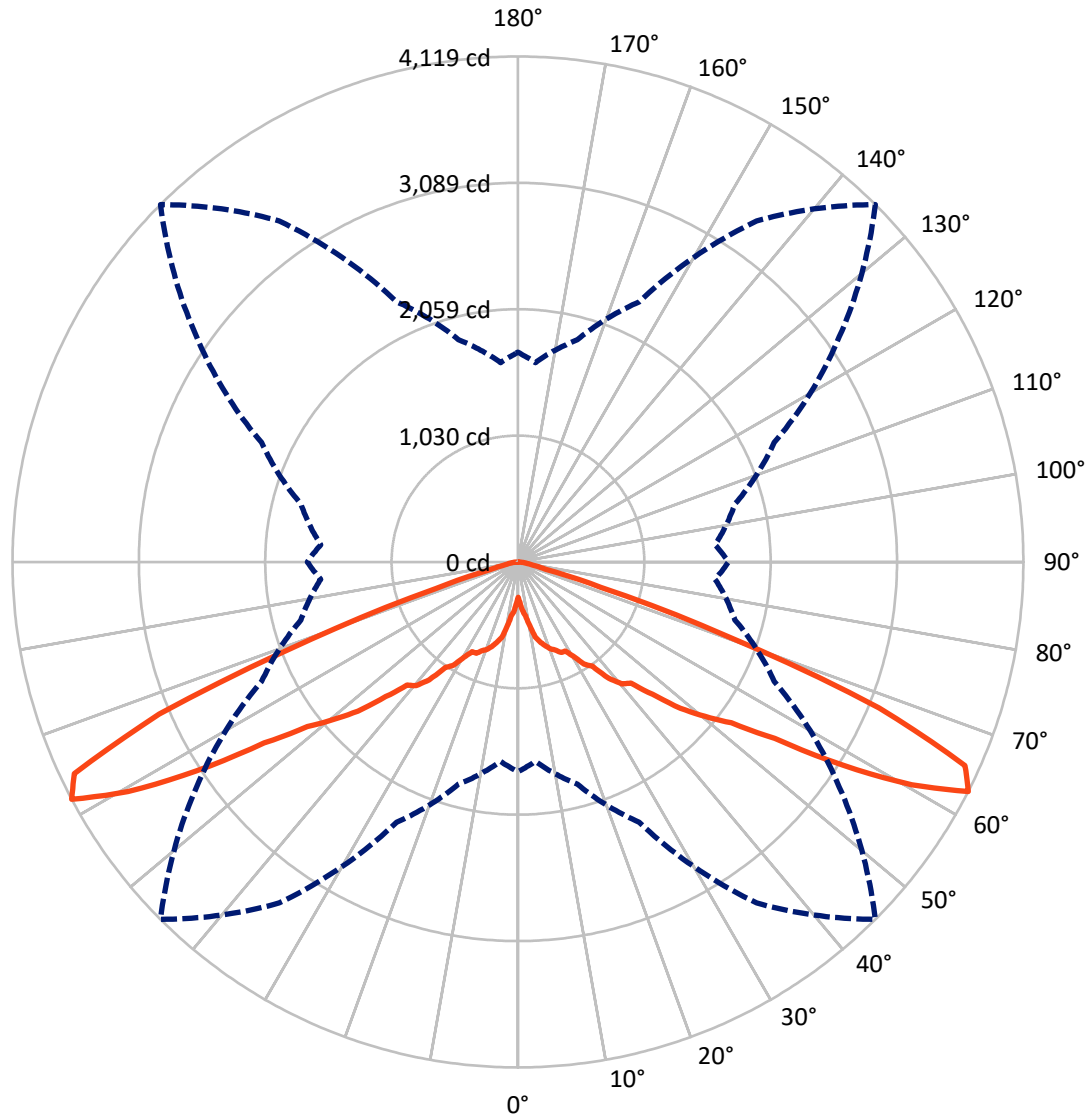
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.6 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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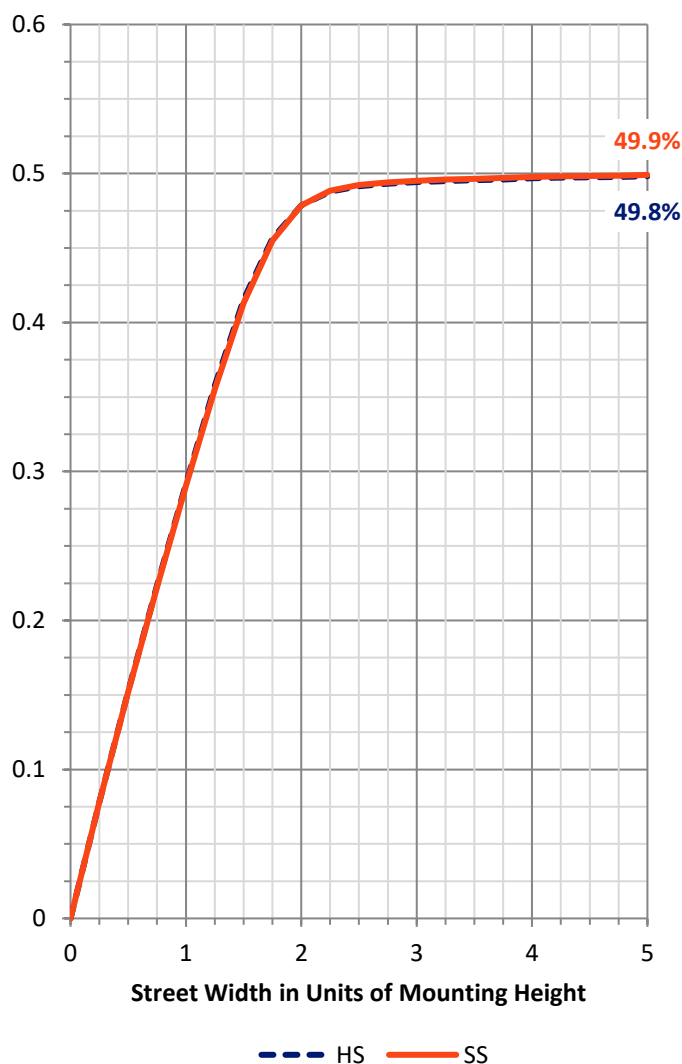
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3508.5	0.0	3508.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3508.5	0.0	3508.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	7017.0	0.0	7017.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.2	0.6
10°-20°	190.7	2.7
20°-30°	399.6	5.7
30°-40°	752.9	10.7
40°-50°	1366.5	19.5
50°-60°	2308.9	32.9
60°-70°	1726.1	24.6
70°-80°	193.1	2.8
80°-90°	35.9	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°	7017.0	100.0
0°-180°	7017.0	100.0

Coefficient of Utilization



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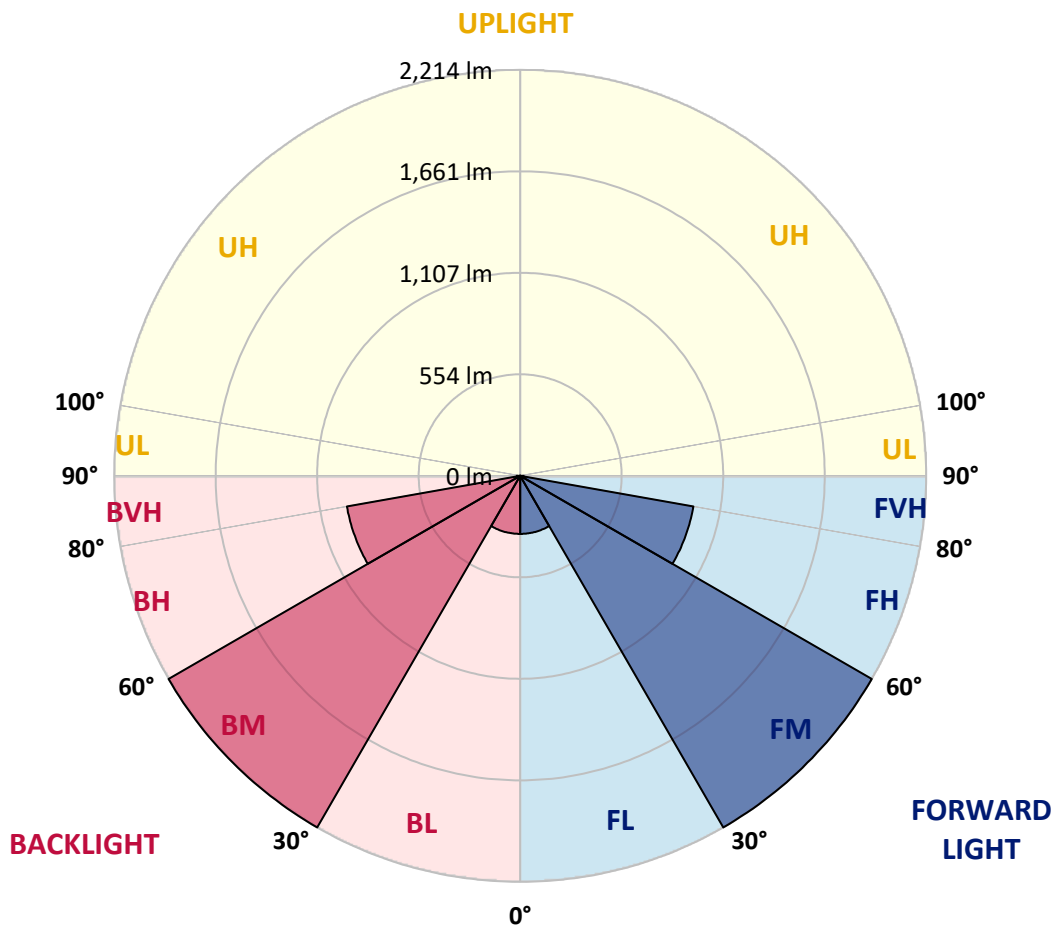
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	316.8	4.5			
FM (30°-60°)	2214.2	31.6			
FH (60°-80°)	959.6	13.7			G1/1800
FVH (80°-90°)	18.0	0.3			G1/100
BL (0°-30°)	316.8	4.5	B1/500		
BM (30°-60°)	2214.2	31.6	B2/2500		
BH (60°-80°)	959.6	13.7	B2/1000		G1/1800
BVH (80°-90°)	18.0	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°	286.9	286.9	286.9	286.9	286.9	286.9	286.9	286.9	286.9	286.9	286.9
2.5°	348.9	342.6	320.6	328.3	336.3	335.2	333.2	327.2	321.7	344.3	348.9
5°	444.8	430.5	422.8	416.5	415.1	399.7	420.8	418.5	425.6	437.6	449.3
7.5°	521.3	507.9	487.6	483.3	460.2	443.1	461.3	483.9	491.0	513.0	526.1
10°	549.3	537.6	541.3	522.1	521.0	525.9	521.9	527.0	545.8	543.3	553.0
12.5°	612.1	614.1	602.1	597.2	606.9	628.1	610.1	603.8	599.2	618.6	624.6
15°	670.9	682.6	662.9	659.7	655.7	675.4	656.0	665.5	673.7	677.7	675.4
17.5°	754.2	754.8	732.8	697.7	710.8	717.1	708.6	692.3	731.4	751.1	752.2
20°	809.0	811.0	767.7	712.8	750.0	755.7	751.4	717.4	769.4	802.2	800.8
22.5°	868.1	861.3	802.5	762.5	775.6	779.1	769.9	765.7	802.2	861.9	853.0
25°	907.8	920.4	861.9	836.2	825.0	817.0	828.7	831.0	868.4	922.7	892.7
27.5°	1002.6	980.9	889.3	899.0	875.3	821.3	872.7	901.0	893.0	985.5	1008.0
30°	1086.8	1087.4	958.9	977.5	933.5	889.8	945.5	986.3	976.3	1094.8	1073.4
32.5°	1194.4	1198.4	1079.1	1029.4	999.7	991.5	984.6	1029.7	1092.0	1187.9	1189.9
35°	1310.6	1344.9	1182.7	1130.5	1080.0	1043.4	1082.8	1145.3	1185.9	1339.2	1312.1
37.5°	1537.0	1479.4	1346.6	1248.4	1216.1	1201.6	1222.4	1258.7	1346.3	1478.5	1525.0
40°	1670.9	1654.9	1474.2	1392.0	1267.5	1306.4	1294.9	1394.3	1466.8	1664.1	1668.3
42.5°	1875.6	1795.1	1632.7	1528.2	1416.3	1348.9	1420.3	1553.6	1641.2	1807.9	1886.7
45°	2037.5	1934.1	1808.8	1729.4	1588.1	1538.2	1563.9	1734.6	1844.5	1959.0	2062.6
47.5°	2216.5	2104.6	1979.2	1838.2	1700.3	1781.7	1736.3	1886.4	1993.8	2157.9	2255.0
50°	2441.4	2317.5	2157.1	2040.6	1949.3	1977.8	1970.7	2077.7	2210.2	2359.8	2470.0
52.5°	2689.2	2549.0	2394.3	2286.1	2247.6	2176.8	2269.3	2313.2	2410.9	2547.9	2677.2
55°	2862.5	2722.3	2628.7	2663.5	2653.2	2539.6	2620.7	2625.3	2578.2	2627.5	2757.7
57.5°	2835.7	2701.8	2688.9	2820.5	3017.2	3127.1	3001.8	2732.3	2555.9	2532.8	2670.7
60°	2479.4	2364.9	2482.5	2779.4	3352.4	3687.0	3204.5	2651.5	2360.9	2240.7	2373.8
62.5°	1708.6	1631.2	1875.0	2339.2	3392.6	4118.9	3197.1	2304.1	1831.1	1613.0	1716.3
65°	809.9	781.9	987.8	1483.1	2826.0	4003.6	2793.1	1559.0	1054.0	841.9	865.3
67.5°	304.6	290.6	362.6	655.2	1780.0	3175.4	1877.6	769.1	407.7	316.9	327.7
70°	173.0	163.0	172.4	238.9	716.6	1798.5	809.9	263.8	173.3	157.9	168.1
72.5°	136.2	128.5	129.9	144.5	247.2	706.0	262.1	150.4	125.9	119.6	128.8
75°	112.5	105.6	105.3	113.3	144.2	229.2	148.2	115.0	101.9	97.3	104.8
77.5°	89.4	85.4	86.5	92.8	103.3	128.2	107.3	93.1	83.6	78.2	83.4
80°	65.4	64.8	69.4	75.1	77.1	86.2	80.5	75.1	66.8	59.1	61.1
82.5°	42.8	43.1	51.7	56.2	55.4	55.1	57.7	57.4	50.0	39.1	39.1
85°	24.6	25.1	31.7	35.4	34.8	27.7	36.5	36.8	32.0	23.7	22.8
87.5°	8.0	10.0	13.7	14.6	14.0	7.7	14.0	15.4	14.0	10.0	8.8
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)