

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: P366689

Luminaire Tested: **MSA-SA1A-760-U-5WQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P366689
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-SA1A-760-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: 4335 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

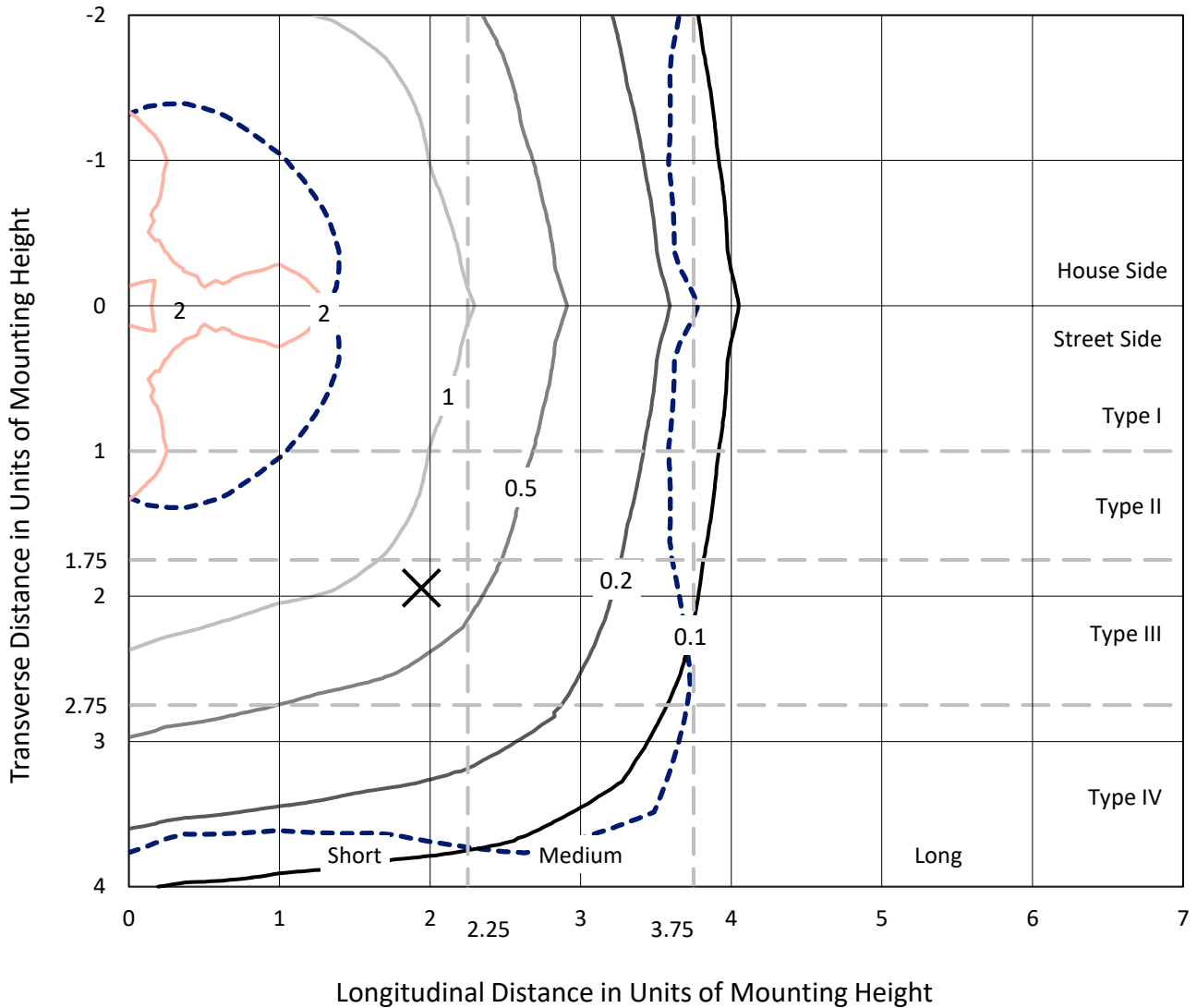
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

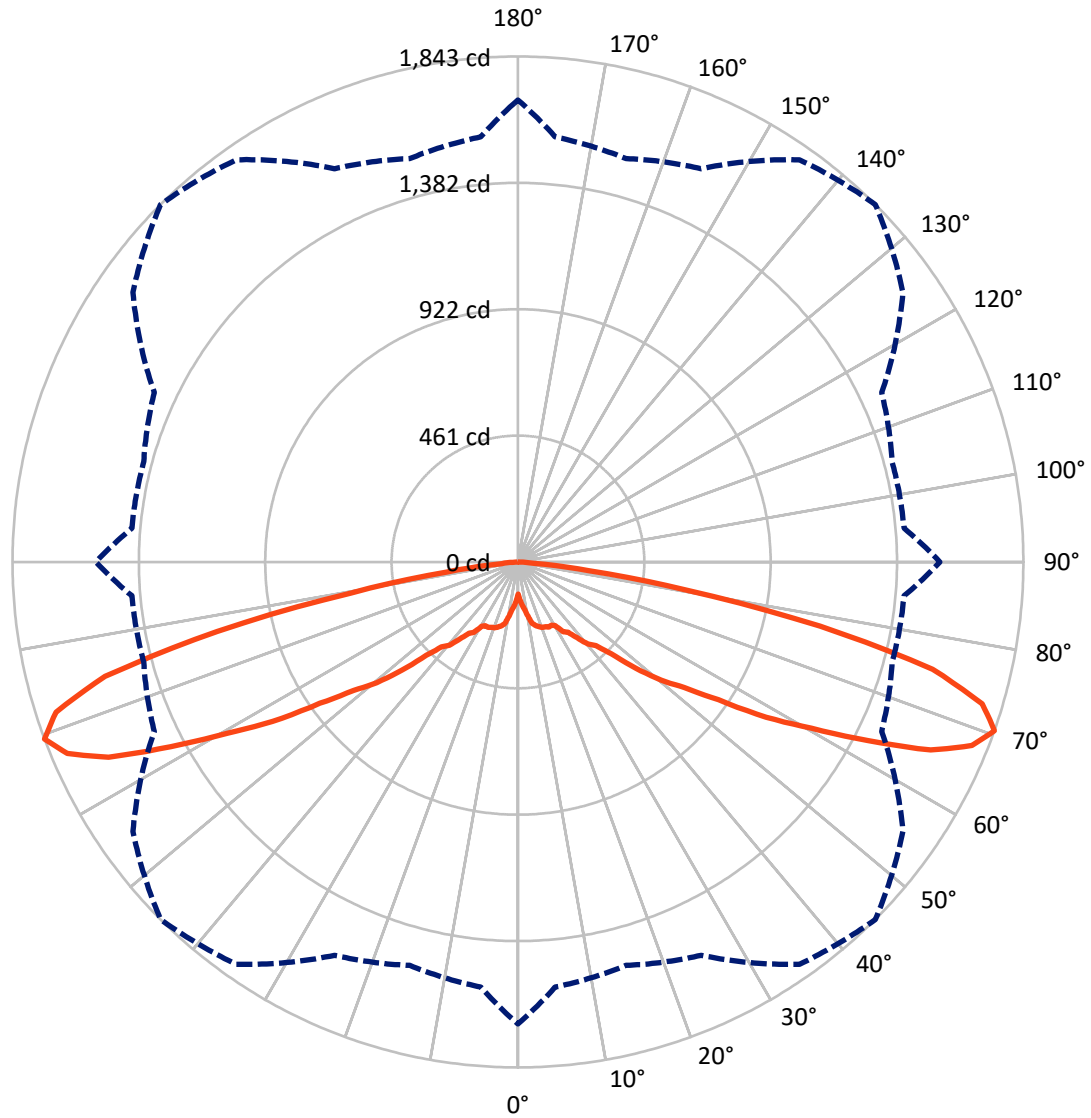
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.4 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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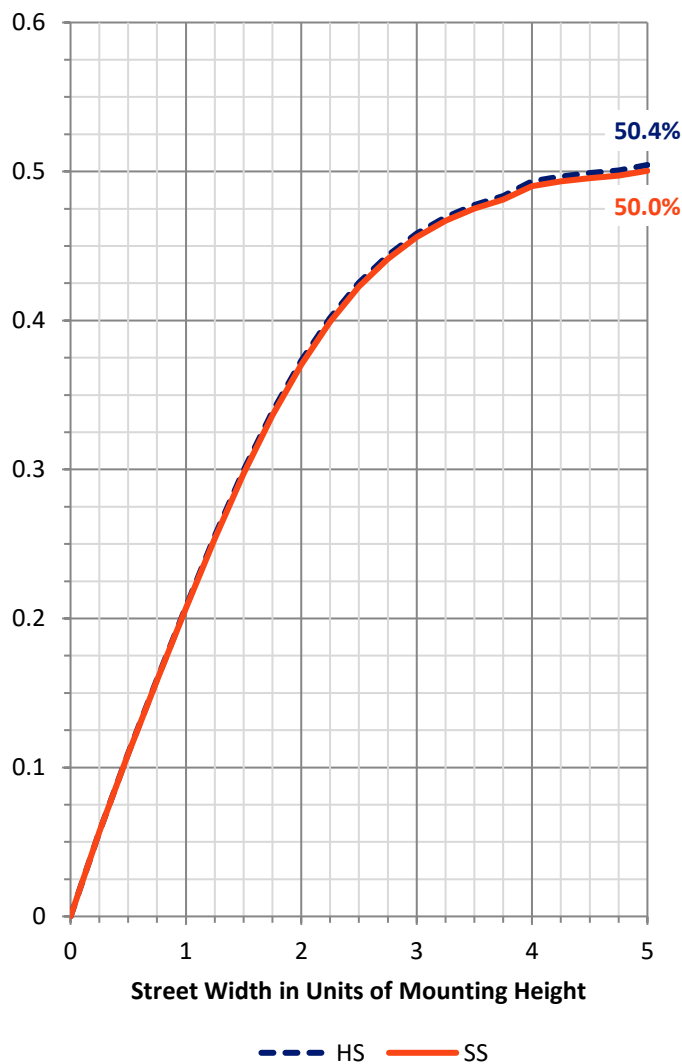
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2167.5	0.0	2167.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2167.5	0.0	2167.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	4335.0	0.0	4335.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.0	0.4
10°-20°	68.2	1.6
20°-30°	129.0	3.0
30°-40°	224.7	5.2
40°-50°	429.6	9.9
50°-60°	833.0	19.2
60°-70°	1458.7	33.6
70°-80°	1096.3	25.3
80°-90°	78.4	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°	4335.0	100.0
0°-180°	4335.0	100.0

Coefficient of Utilization



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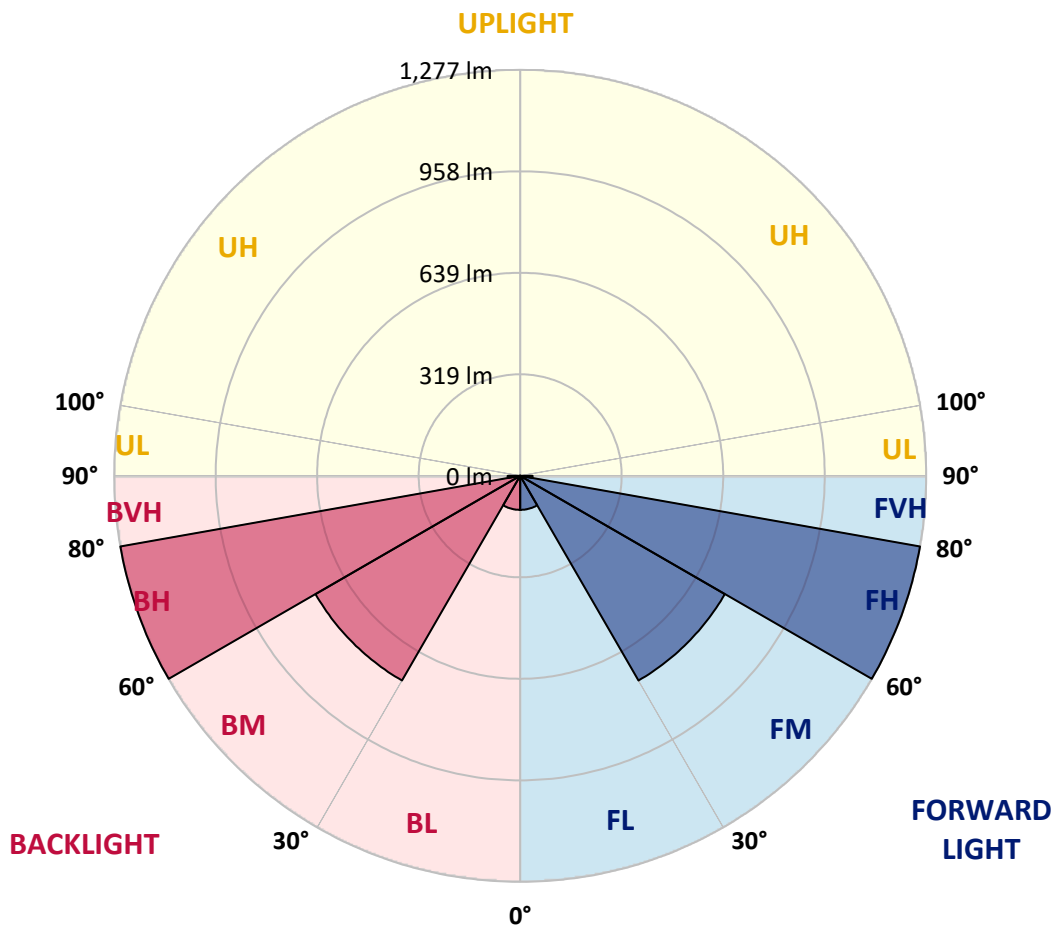
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	107.1	2.5			
FM (30°-60°)	743.7	17.2			
FH (60°-80°)	1277.5	29.5			G1/1800
FVH (80°-90°)	39.2	0.9			G1/100
BL (0°-30°)	107.1	2.5	B0/110		
BM (30°-60°)	743.7	17.2	B1/1000		
BH (60°-80°)	1277.5	29.5	B3/2500		G1/1800
BVH (80°-90°)	39.2	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-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	117.2	117.2	117.2	117.2	117.2	117.2	117.2	117.2	117.2	117.2	117.2
2.5°	142.6	140.4	133.5	133.9	137.1	137.4	137.7	133.5	132.5	141.1	141.6
5°	181.1	176.1	171.0	169.0	166.0	157.6	166.8	167.8	169.9	176.4	179.4
7.5°	206.9	200.6	193.7	189.5	181.3	174.4	182.0	188.2	192.2	199.6	203.8
10°	211.7	208.0	207.7	200.3	198.8	201.3	200.8	201.0	207.0	207.2	209.7
12.5°	227.0	229.7	224.5	222.0	223.5	229.7	224.7	222.5	224.0	230.9	228.0
15°	247.0	250.2	242.3	238.3	234.3	240.1	234.9	238.8	243.7	248.7	246.2
17.5°	269.2	269.4	258.6	243.7	247.2	248.1	246.2	243.0	257.0	269.1	267.9
20°	281.4	281.2	262.7	242.3	252.8	254.6	252.9	242.0	263.0	279.7	279.2
22.5°	293.8	290.1	267.9	251.4	255.3	256.8	252.9	251.9	267.9	291.1	290.9
25°	300.5	303.7	279.3	269.1	265.9	262.3	265.7	267.4	282.7	305.4	298.8
27.5°	321.5	316.3	282.7	281.7	275.0	261.0	272.6	280.8	281.7	318.3	325.1
30°	340.5	342.6	297.8	299.3	287.1	269.4	287.4	300.5	303.0	342.9	342.2
32.5°	360.7	361.6	324.7	309.1	303.9	303.2	296.3	307.8	327.6	359.5	360.9
35°	391.3	398.2	348.8	327.8	321.2	314.5	320.5	330.8	349.3	397.2	393.9
37.5°	461.5	450.5	401.1	357.5	353.2	350.5	355.3	362.7	400.6	451.7	467.3
40°	510.4	505.2	437.9	406.8	379.2	393.7	382.3	410.8	442.1	505.5	515.6
42.5°	586.2	563.0	493.9	455.4	426.8	416.6	423.0	460.3	500.1	570.8	590.6
45°	659.1	623.2	564.0	530.1	486.7	475.9	484.5	528.4	574.5	630.3	665.3
47.5°	733.4	696.4	631.3	582.2	546.7	578.8	550.8	592.5	638.4	703.3	734.4
50°	810.6	769.6	705.3	651.8	648.8	677.2	643.6	664.9	707.5	774.8	811.4
52.5°	899.2	855.0	790.7	754.6	761.6	759.8	753.1	749.2	791.1	857.2	900.7
55°	1004.7	956.9	905.6	889.0	908.5	887.4	897.4	896.0	902.1	949.3	1000.3
57.5°	1132.1	1078.1	1026.7	1023.0	1048.0	1067.9	1050.2	1024.8	1014.2	1060.2	1118.5
60°	1292.7	1226.5	1170.0	1158.4	1229.8	1229.7	1213.7	1156.8	1152.8	1204.8	1275.1
62.5°	1470.2	1389.4	1327.7	1309.2	1421.2	1433.8	1384.0	1282.1	1303.0	1344.9	1428.3
65°	1620.8	1523.8	1466.3	1461.2	1598.1	1653.8	1543.8	1404.4	1411.1	1445.9	1536.2
67.5°	1719.0	1602.2	1556.4	1580.8	1751.0	1785.8	1683.6	1486.1	1462.2	1476.7	1584.7
70°	1684.6	1556.1	1523.1	1582.3	1790.5	1843.2	1713.7	1463.3	1412.5	1413.1	1538.6
72.5°	1423.4	1301.1	1316.8	1425.4	1697.0	1770.8	1574.4	1321.7	1217.7	1215.2	1329.1
75°	941.3	859.5	921.2	1090.6	1410.8	1561.8	1304.5	1035.9	905.6	863.2	951.2
77.5°	411.7	401.3	453.2	644.6	961.8	1125.6	934.5	676.7	492.6	409.7	447.5
80°	110.3	108.0	135.5	244.5	468.2	619.9	505.7	269.9	140.9	102.6	108.8
82.5°	40.2	41.2	50.3	68.4	154.2	261.0	168.0	78.9	53.3	43.7	43.7
85°	17.5	17.0	24.4	27.4	42.0	59.0	48.3	33.5	26.9	20.2	19.3
87.5°	4.7	5.9	8.2	8.6	10.9	8.9	12.8	11.8	10.1	7.1	5.7
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)