

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: P367568

Luminaire Tested: **MSA-SA2D-740-U-5NQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367568
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-SA2D-740-U-5NQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13801 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G2

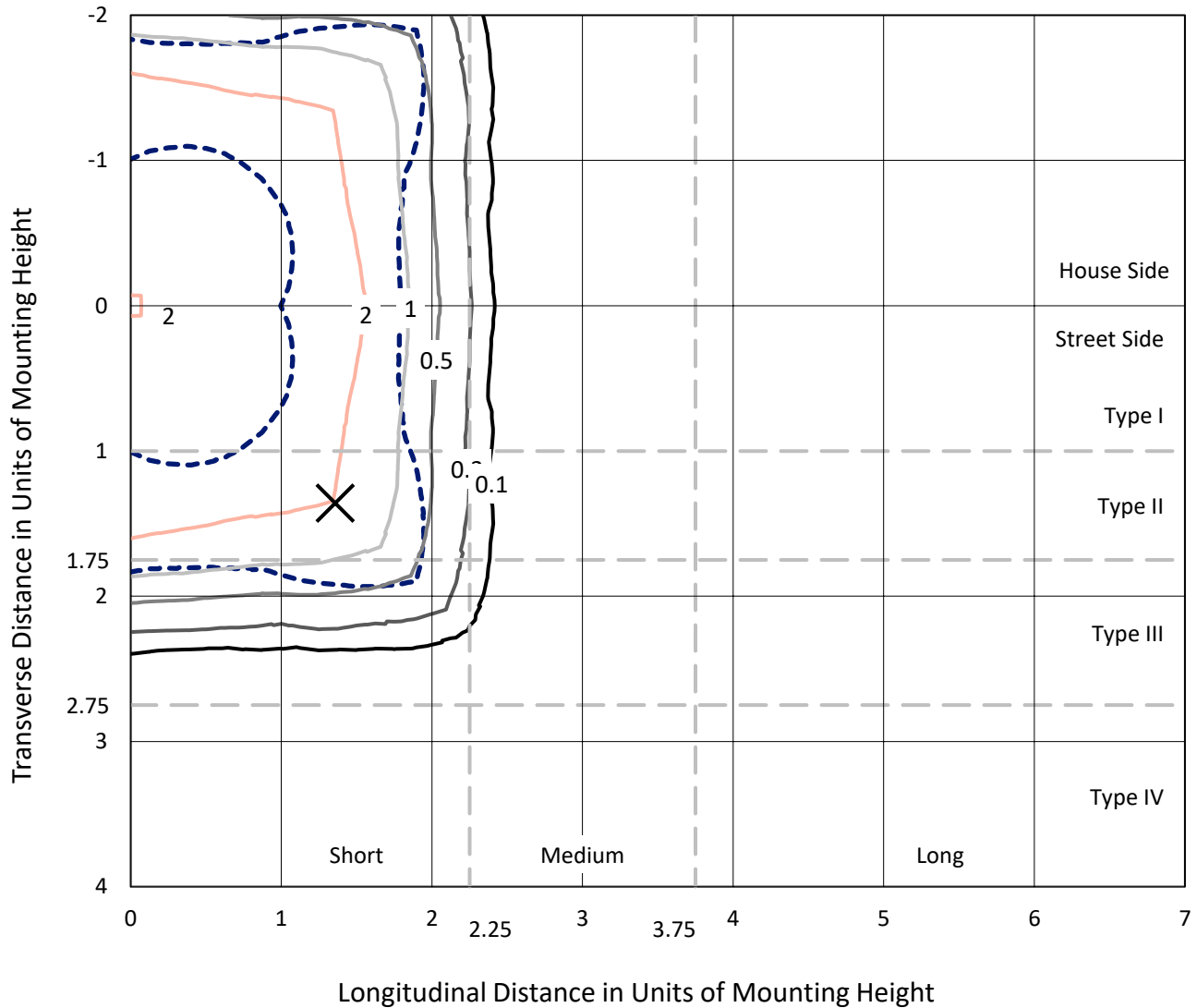
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

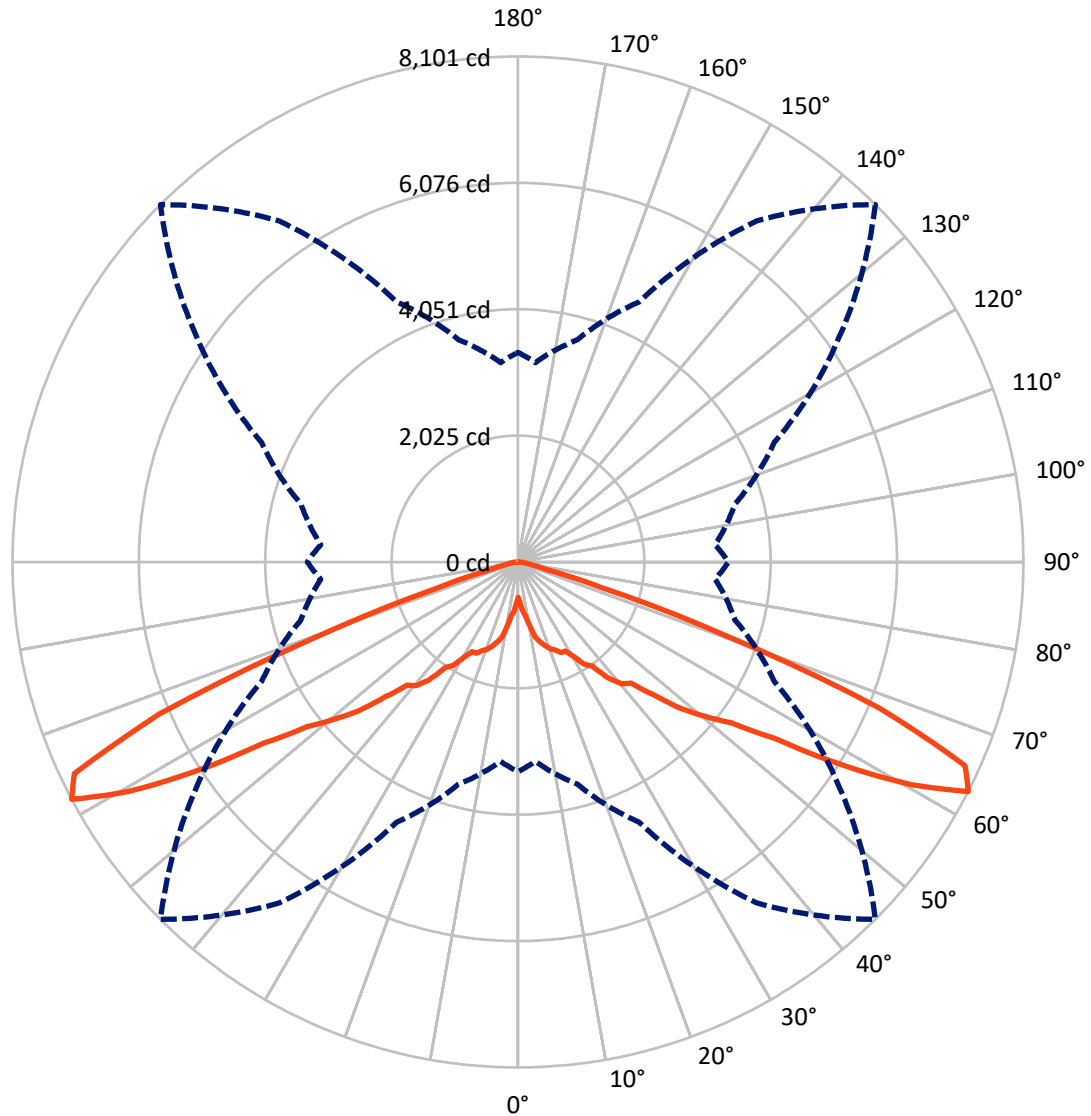
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.7 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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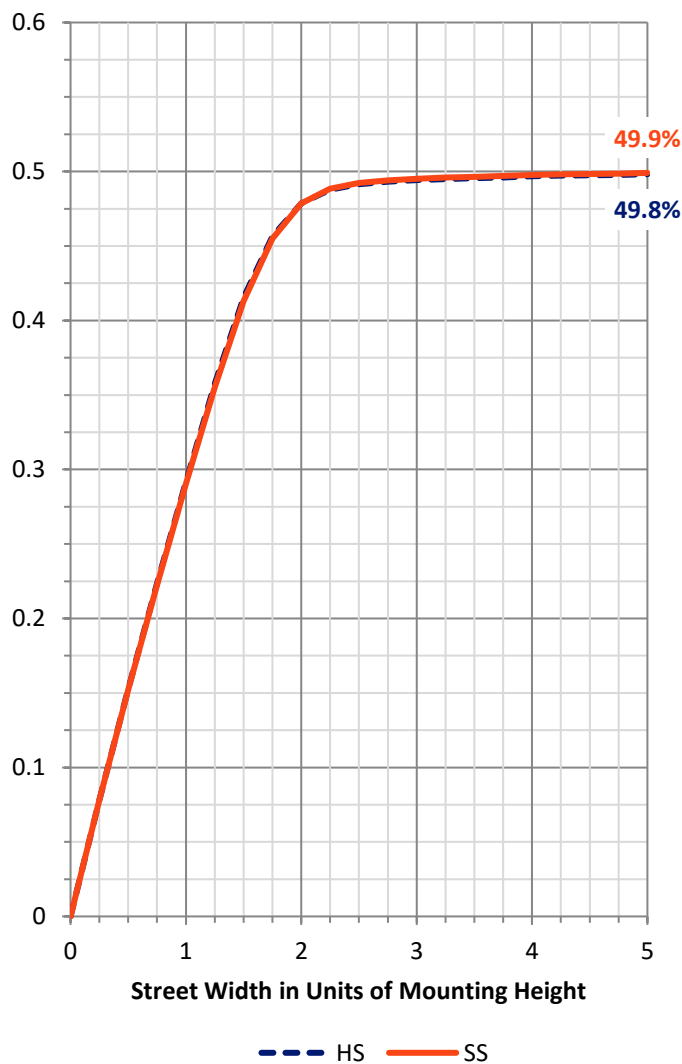
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6900.5	0.0	6900.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6900.5	0.0	6900.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	13801.0	0.0	13801.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.0	0.6
10°-20°	375.0	2.7
20°-30°	785.9	5.7
30°-40°	1480.8	10.7
40°-50°	2687.6	19.5
50°-60°	4541.2	32.9
60°-70°	3394.8	24.6
70°-80°	379.8	2.8
80°-90°	70.7	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°	13801.0	100.0
0°-180°	13801.0	100.0

Coefficient of Utilization



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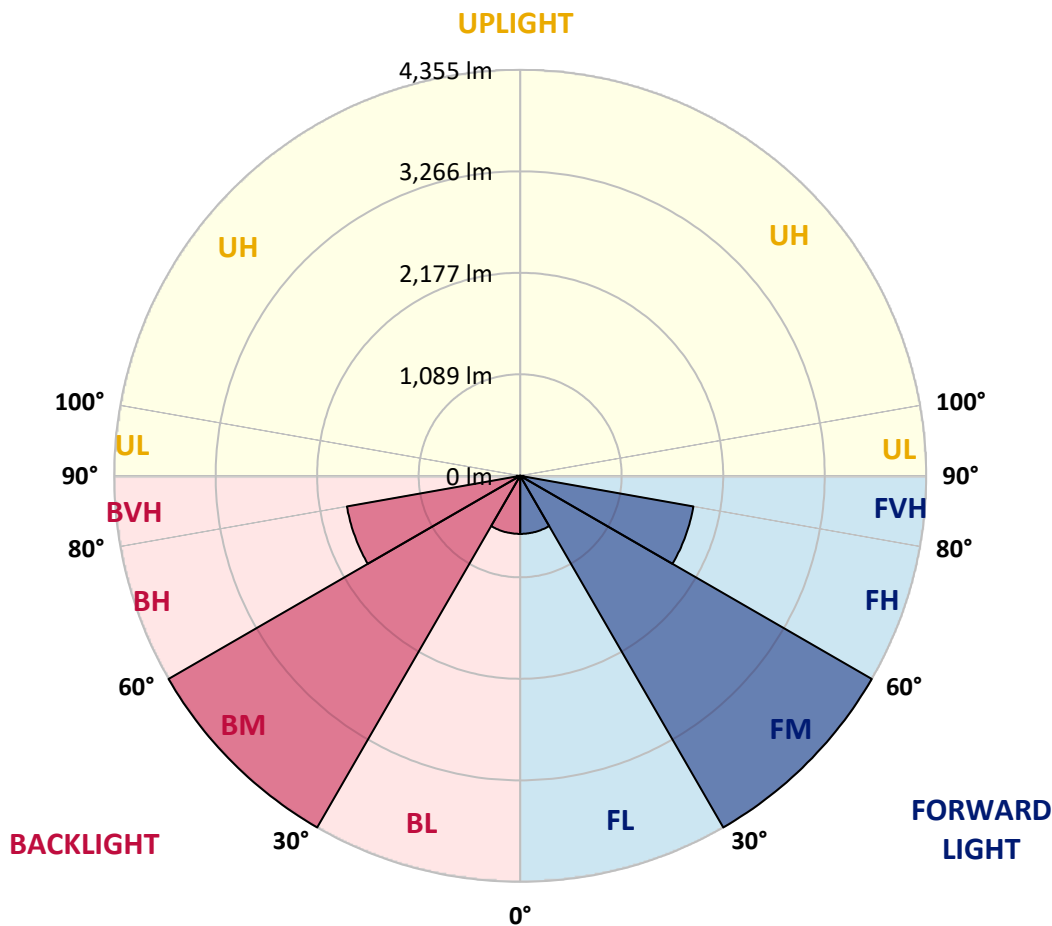
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	623.0	4.5			
FM (30°-60°)	4354.9	31.6			
FH (60°-80°)	1887.3	13.7			G2/5000
FVH (80°-90°)	35.3	0.3			G1/100
BL (0°-30°)	623.0	4.5	B2/1000		
BM (30°-60°)	4354.9	31.6	B3/5000		
BH (60°-80°)	1887.3	13.7	B3/2500		G2/5000
BVH (80°-90°)	35.3	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	564.3	564.3	564.3	564.3	564.3	564.3	564.3	564.3	564.3	564.3	564.3
2.5°	686.1	673.8	630.5	645.7	661.4	659.2	655.2	643.5	632.8	677.1	686.1
5°	874.8	846.7	831.5	819.2	816.4	786.1	827.6	823.1	837.2	860.7	883.8
7.5°	1025.3	998.9	959.0	950.6	905.1	871.4	907.3	951.7	965.7	1009.0	1034.8
10°	1080.3	1057.3	1064.6	1026.9	1024.7	1034.2	1026.4	1036.5	1073.5	1068.5	1087.6
12.5°	1203.8	1207.7	1184.2	1174.6	1193.7	1235.3	1199.9	1187.5	1178.5	1216.7	1228.5
15°	1319.5	1342.5	1303.8	1297.6	1289.7	1328.5	1290.3	1308.8	1325.1	1333.0	1328.5
17.5°	1483.4	1484.5	1441.3	1372.3	1398.1	1410.4	1393.6	1361.6	1438.5	1477.3	1479.5
20°	1591.2	1595.2	1509.8	1402.0	1475.0	1486.2	1477.8	1411.0	1513.2	1577.8	1574.9
22.5°	1707.5	1694.0	1578.3	1499.7	1525.5	1532.3	1514.3	1505.9	1577.8	1695.1	1677.7
25°	1785.5	1810.2	1695.1	1644.6	1622.7	1607.0	1630.0	1634.5	1708.0	1814.7	1755.7
27.5°	1971.9	1929.2	1749.0	1768.1	1721.5	1615.4	1716.4	1772.0	1756.3	1938.2	1982.6
30°	2137.5	2138.7	1886.0	1922.5	1836.0	1750.1	1859.6	1939.9	1920.3	2153.3	2111.2
32.5°	2349.2	2357.1	2122.4	2024.7	1966.3	1950.0	1936.5	2025.3	2147.7	2336.3	2340.2
35°	2577.7	2645.1	2326.2	2223.5	2124.1	2052.2	2129.7	2252.7	2332.4	2633.9	2580.6
37.5°	3023.0	2909.6	2648.5	2455.3	2391.9	2363.3	2404.3	2475.6	2647.9	2907.9	2999.4
40°	3286.3	3254.9	2899.5	2737.8	2493.0	2569.3	2546.9	2742.3	2884.9	3272.9	3281.3
42.5°	3688.9	3530.6	3211.1	3005.6	2785.5	2653.0	2793.4	3055.6	3227.9	3555.8	3710.8
45°	4007.3	3804.0	3557.5	3401.4	3123.5	3025.2	3075.8	3411.5	3627.7	3852.9	4056.7
47.5°	4359.3	4139.2	3892.7	3615.4	3344.2	3504.2	3414.9	3710.3	3921.4	4244.2	4435.1
50°	4801.8	4558.1	4242.5	4013.4	3833.8	3889.9	3875.9	4086.4	4347.0	4641.2	4857.9
52.5°	5289.1	5013.4	4709.1	4496.3	4420.5	4281.3	4463.2	4549.7	4741.7	5011.2	5265.5
55°	5629.9	5354.3	5170.1	5238.6	5218.4	4994.9	5154.4	5163.4	5070.7	5167.8	5423.9
57.5°	5577.2	5313.8	5288.6	5547.4	5934.3	6150.4	5903.9	5373.9	5026.9	4981.4	5252.6
60°	4876.4	4651.3	4882.6	5466.6	6593.4	7251.5	6302.6	5215.0	4643.4	4407.0	4668.7
62.5°	3360.4	3208.3	3687.8	4600.8	6672.6	8101.0	6288.0	4531.7	3601.3	3172.4	3375.6
65°	1592.9	1537.9	1942.7	2916.9	5558.1	7874.2	5493.5	3066.2	2073.0	1655.8	1701.8
67.5°	599.1	571.6	713.1	1288.6	3500.8	6245.3	3692.8	1512.6	801.8	623.2	644.6
70°	340.3	320.6	339.1	470.0	1409.3	3537.3	1592.9	518.8	340.8	310.5	330.7
72.5°	267.8	252.7	255.5	284.1	486.2	1388.5	515.4	295.9	247.6	235.3	253.2
75°	221.2	207.7	207.2	222.9	283.5	450.9	291.4	226.3	200.4	191.5	206.1
77.5°	175.7	167.9	170.1	182.5	203.3	252.1	211.1	183.0	164.5	153.8	164.0
80°	128.6	127.5	136.4	147.7	151.6	169.6	158.3	147.7	131.4	116.2	120.2
82.5°	84.2	84.8	101.6	110.6	108.9	108.4	113.4	112.9	98.3	76.9	76.9
85°	48.3	49.4	62.3	69.6	68.5	54.5	71.9	72.4	62.9	46.6	44.9
87.5°	15.7	19.7	27.0	28.6	27.5	15.2	27.5	30.3	27.5	19.7	17.4
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)