

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: P368449

Luminaire Tested: **MSA-SA4C-727-U-5WQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P368449
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-SA4C-727-U-5WQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21587 lumens
Efficiency: N/A
Efficacy: 95.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

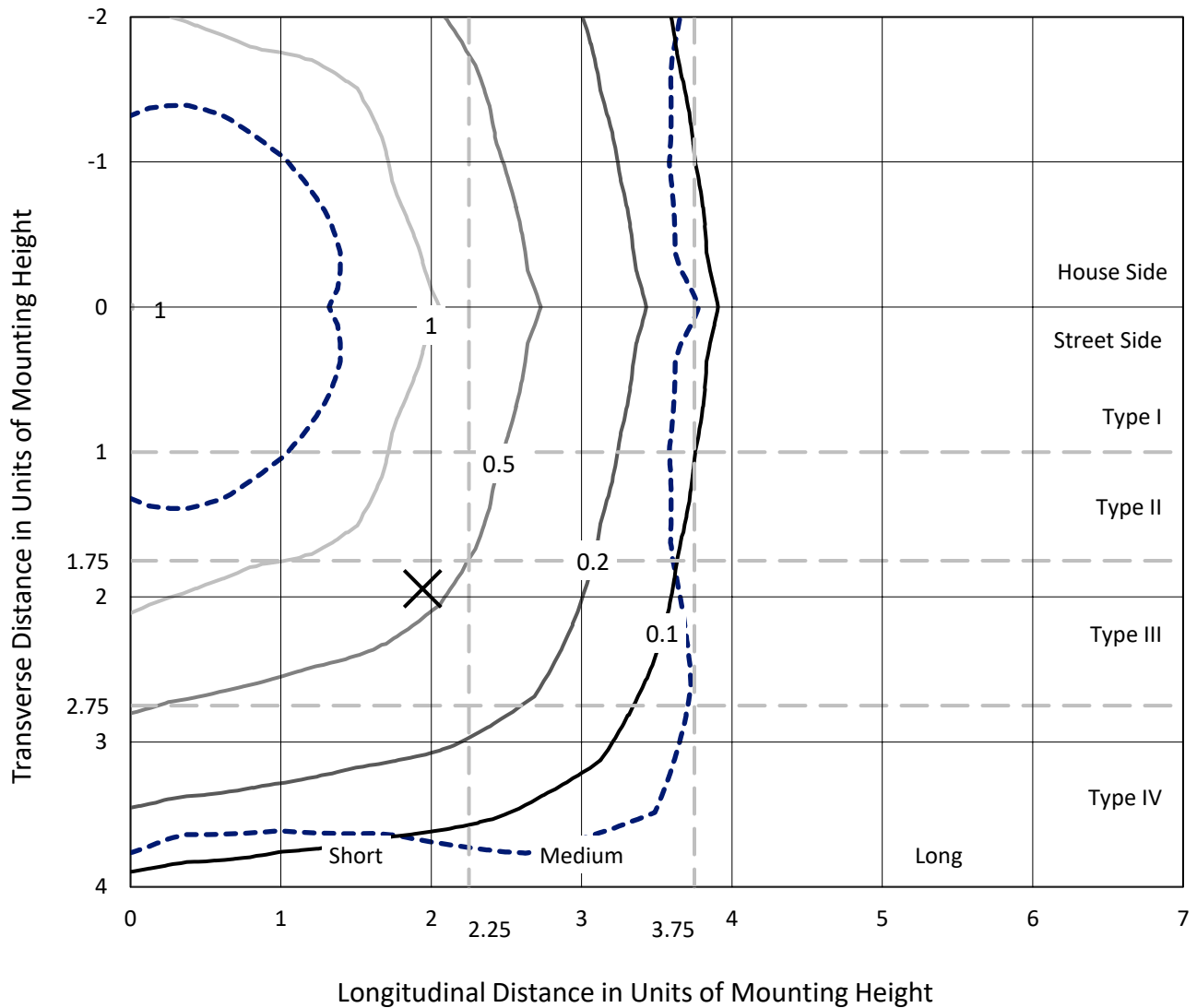
Input Watts (W): 225
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P368449
 CATALOG NUMBER: MSA-SA4C-727-U-5WQ

Iso-Footcandle Lines of Horizontal Illumination

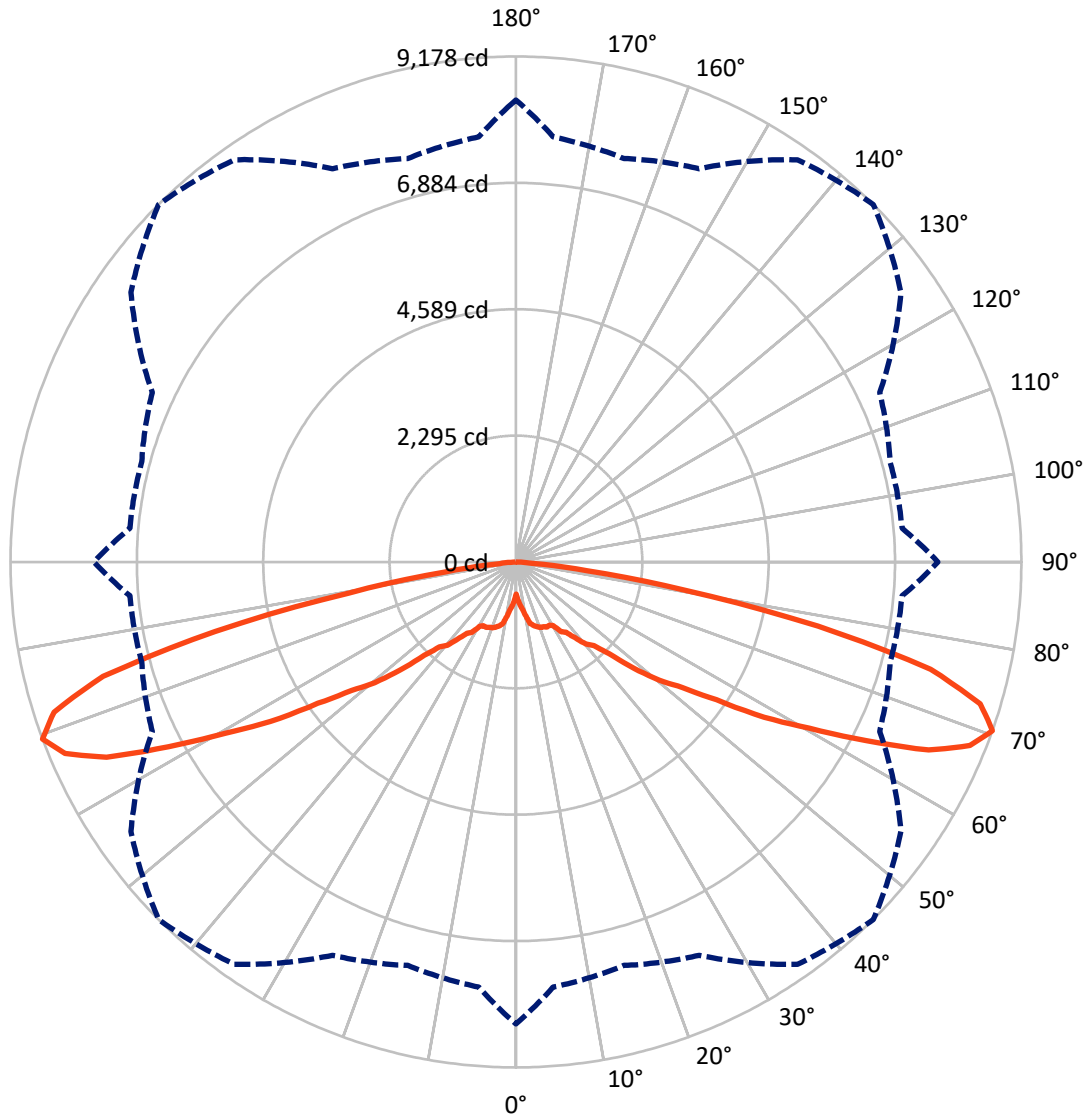
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type V - Short - N/A

REPORT NUMBER: P368449
CATALOG NUMBER: MSA-SA4C-727-U-5WQ

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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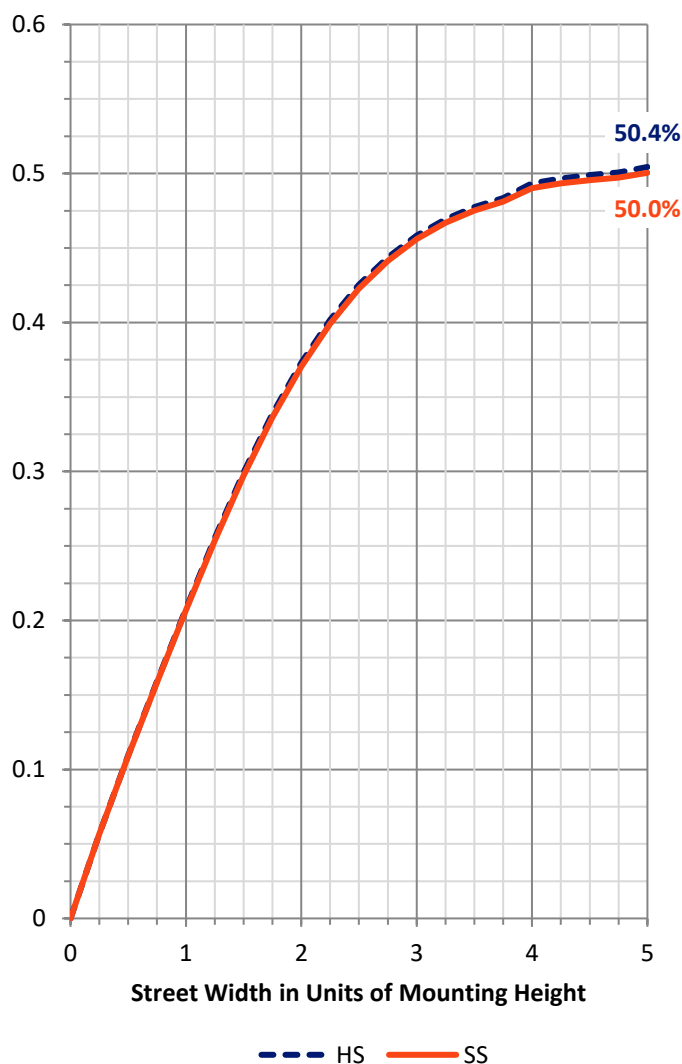
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10793.5	0.0	10793.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10793.5	0.0	10793.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	21587.0	0.0	21587.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.9	0.4
10°-20°	339.8	1.6
20°-30°	642.4	3.0
30°-40°	1119.0	5.2
40°-50°	2139.3	9.9
50°-60°	4148.2	19.2
60°-70°	7263.7	33.6
70°-80°	5459.0	25.3
80°-90°	390.6	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°	21587.0	100.0
0°-180°	21587.0	100.0

Coefficient of Utilization



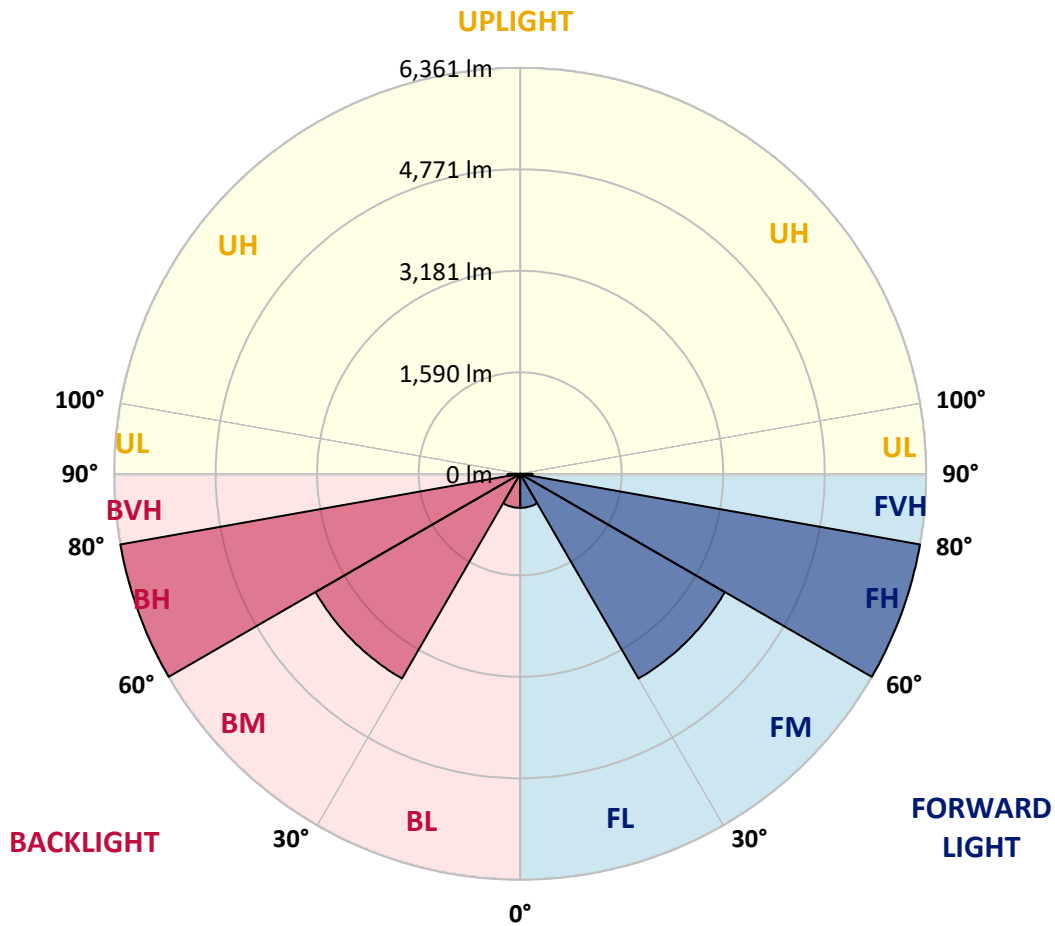
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	533.6	2.5			
FM (30°-60°)	3703.3	17.2			
FH (60°-80°)	6361.4	29.5			G3/7500
FVH (80°-90°)	195.3	0.9			G2/225
BL (0°-30°)	533.6	2.5	B2/1000		
BM (30°-60°)	3703.3	17.2	B3/5000		
BH (60°-80°)	6361.4	29.5	B5		G3/7500
BVH (80°-90°)	195.3	0.9			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	583.7	583.7	583.7	583.7	583.7	583.7	583.7	583.7	583.7	583.7	583.7
2.5°	710.2	699.3	664.9	666.6	682.5	684.2	685.9	664.9	659.9	702.6	705.1
5°	901.9	876.8	851.7	841.6	826.6	784.7	830.7	835.8	845.8	878.5	893.6
7.5°	1030.1	999.1	964.7	943.8	902.8	868.4	906.1	937.1	957.2	994.0	1015.0
10°	1054.3	1035.9	1034.2	997.4	989.9	1002.4	999.9	1000.7	1030.9	1031.7	1044.3
12.5°	1130.5	1143.9	1118.0	1105.4	1113.0	1143.9	1118.8	1107.9	1115.5	1149.8	1135.6
15°	1230.2	1246.1	1206.8	1186.7	1166.6	1195.9	1169.9	1189.2	1213.5	1238.6	1226.0
17.5°	1340.7	1341.6	1288.0	1213.5	1231.0	1235.2	1226.0	1210.1	1279.6	1339.9	1334.0
20°	1401.0	1400.2	1308.1	1206.8	1258.7	1267.9	1259.5	1205.1	1309.8	1392.7	1390.2
22.5°	1463.0	1444.6	1334.0	1252.0	1271.2	1278.8	1259.5	1254.5	1334.0	1449.6	1448.8
25°	1496.5	1512.4	1391.0	1339.9	1324.0	1306.4	1323.2	1331.5	1407.7	1520.8	1488.1
27.5°	1601.2	1575.2	1407.7	1402.7	1369.2	1299.7	1357.5	1398.5	1402.7	1585.3	1618.8
30°	1695.8	1705.9	1483.1	1490.6	1429.5	1341.6	1431.2	1496.5	1509.1	1707.5	1704.2
32.5°	1796.3	1800.5	1617.1	1539.2	1513.3	1509.9	1475.6	1532.5	1631.3	1790.5	1797.1
35°	1948.7	1983.1	1736.9	1632.2	1599.5	1566.0	1596.2	1647.2	1739.4	1978.0	1961.3
37.5°	2297.9	2243.5	1997.3	1780.4	1758.6	1745.2	1769.5	1806.4	1994.8	2249.4	2327.3
40°	2541.6	2515.7	2180.7	2025.8	1888.4	1960.5	1903.5	2045.9	2201.6	2517.3	2567.6
42.5°	2919.3	2803.8	2459.6	2267.8	2125.4	2074.3	2106.2	2292.1	2490.6	2842.3	2941.1
45°	3281.9	3103.6	2808.8	2639.6	2423.6	2370.0	2412.7	2631.2	2860.7	3138.7	3312.9
47.5°	3652.1	3467.8	3143.8	2899.2	2722.5	2882.5	2742.6	2950.3	3178.9	3502.2	3657.1
50°	4036.5	3832.1	3512.2	3245.9	3230.8	3372.4	3204.9	3311.2	3523.1	3858.1	4040.7
52.5°	4477.8	4257.6	3937.7	3757.6	3792.8	3783.6	3750.1	3730.8	3939.3	4268.4	4485.3
55°	5002.9	4765.0	4509.6	4426.7	4523.9	4419.2	4468.6	4461.9	4492.0	4727.4	4981.1
57.5°	5637.7	5368.8	5112.6	5094.2	5218.9	5317.8	5229.8	5103.4	5050.6	5279.2	5569.8
60°	6437.4	6107.5	5826.1	5768.3	6124.2	6123.4	6043.8	5760.8	5740.7	5999.4	6349.5
62.5°	7320.9	6918.9	6611.6	6519.5	7077.2	7140.0	6892.1	6384.7	6488.5	6697.0	7112.4
65°	8071.3	7588.1	7301.7	7276.5	7958.2	8235.4	7687.7	6993.5	7027.0	7200.3	7650.0
67.5°	8560.3	7978.3	7750.5	7872.0	8719.4	8892.8	8383.6	7400.5	7281.6	7353.6	7891.2
70°	8388.7	7748.8	7584.7	7879.5	8916.2	9178.4	8533.5	7286.6	7033.7	7037.0	7661.8
72.5°	7088.1	6479.3	6557.2	7098.2	8450.6	8818.3	7840.1	6581.5	6063.9	6051.4	6618.3
75°	4687.2	4280.2	4587.5	5430.8	7025.3	7777.3	6496.0	5158.6	4509.6	4298.6	4736.6
77.5°	2050.1	1998.1	2256.9	3209.9	4789.3	5605.0	4653.7	3369.9	2452.9	2040.0	2228.4
80°	549.4	537.6	675.0	1217.6	2331.4	3086.8	2518.2	1344.1	701.8	510.8	541.8
82.5°	200.1	205.2	250.4	340.8	767.9	1299.7	836.6	392.8	265.5	217.7	217.7
85°	87.1	84.6	121.4	136.5	209.4	293.9	240.3	166.7	134.0	100.5	96.3
87.5°	23.4	29.3	41.0	42.7	54.4	44.4	63.6	58.6	50.2	35.2	28.5
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)