

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: P368008

Luminaire Tested: **MSA-SA3C-760-U-5NQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P368008
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-SA3C-760-U-5NQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18629 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

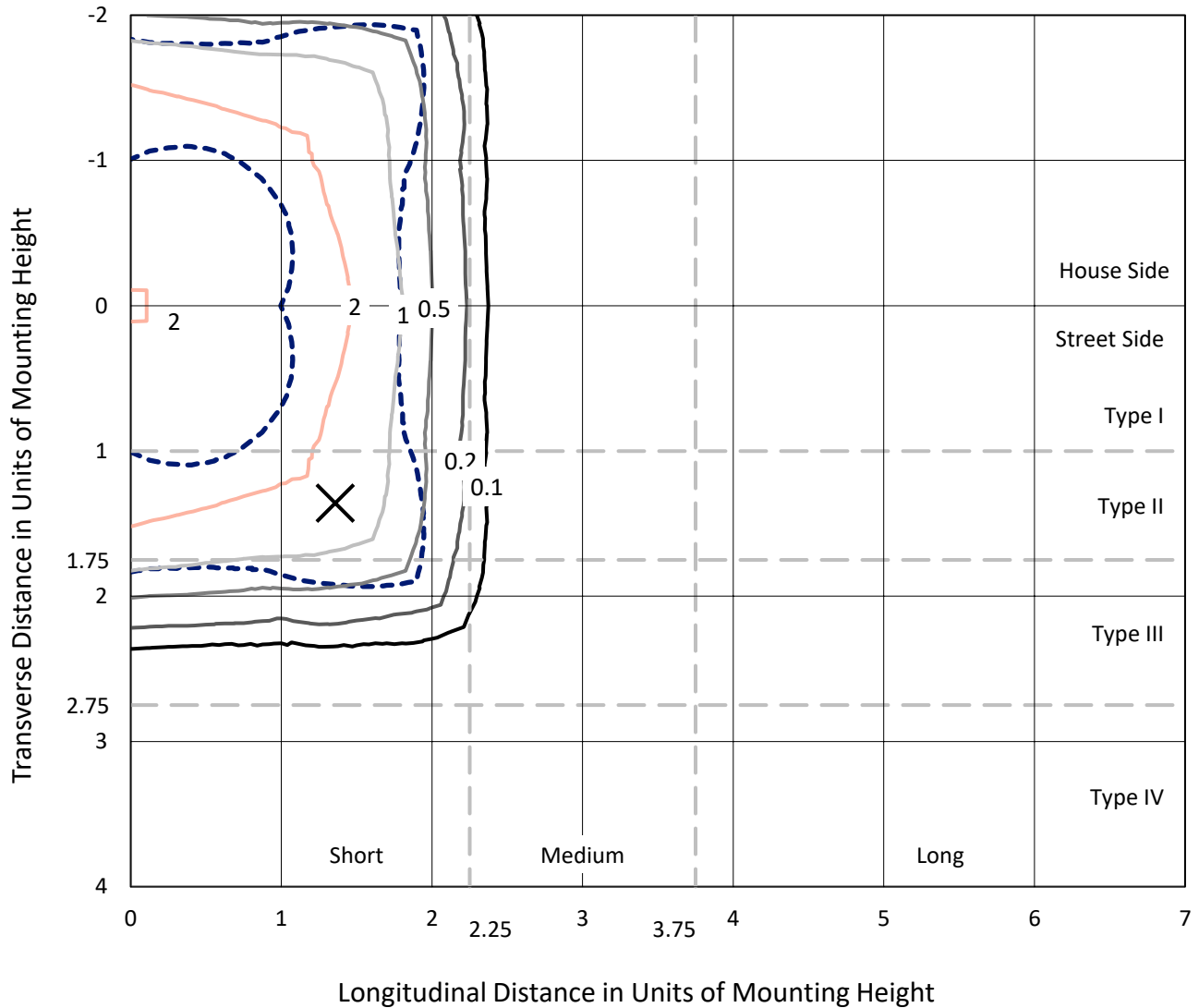
Input Watts (W): 166
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

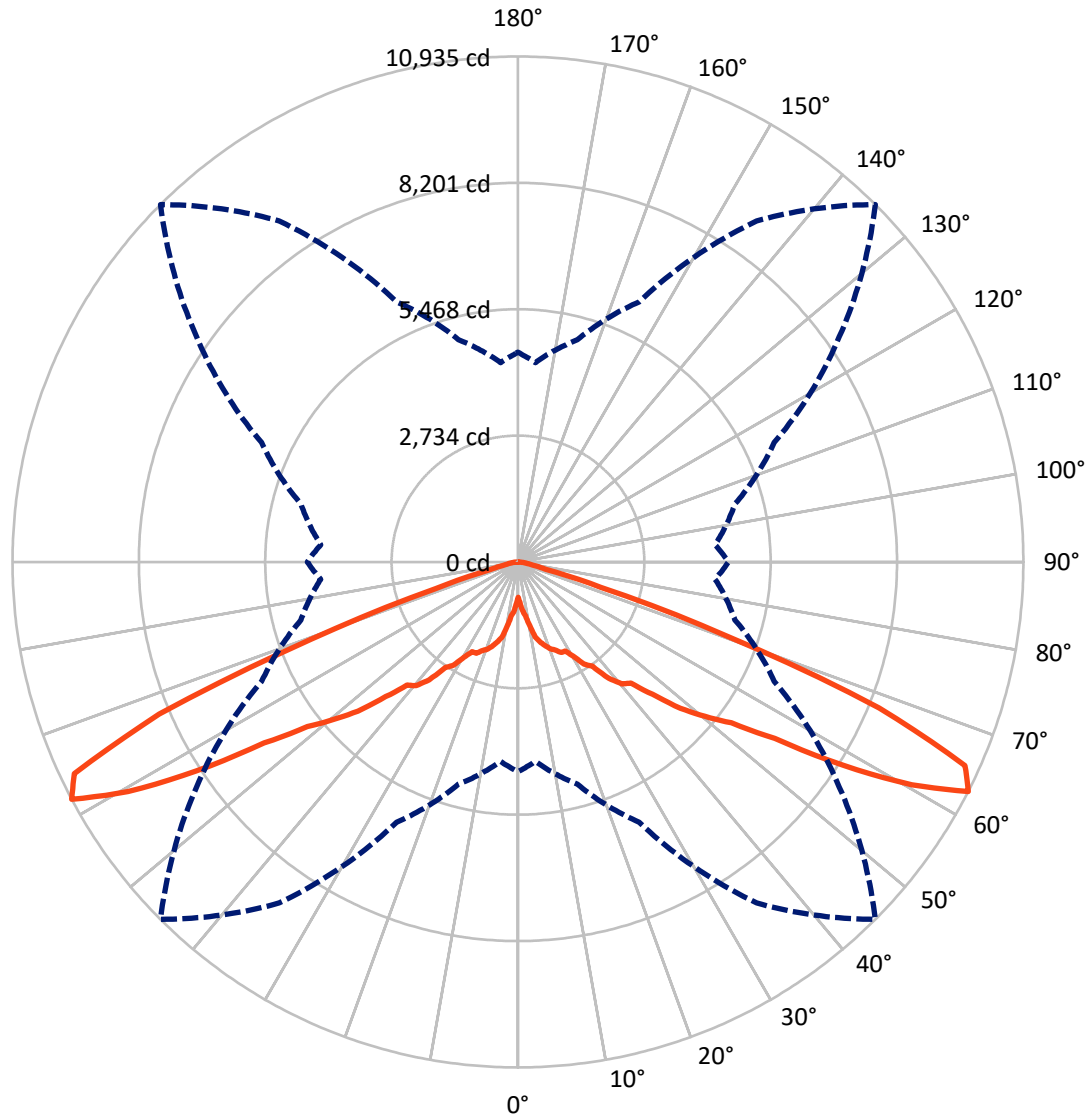
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 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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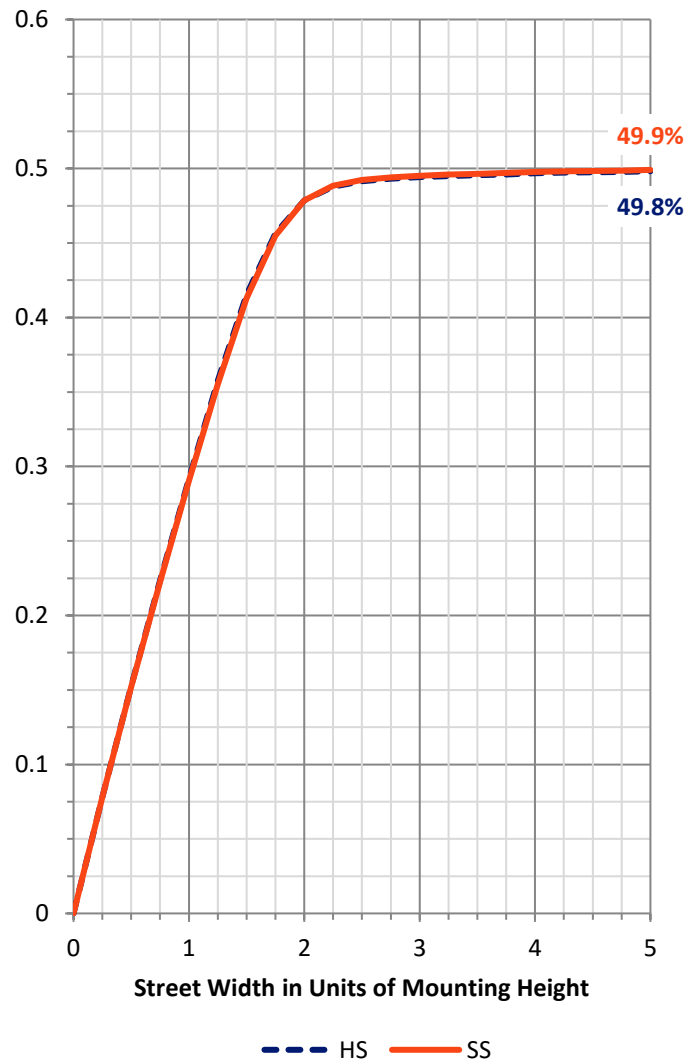
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9314.5	0.0	9314.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9314.5	0.0	9314.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	18629.0	0.0	18629.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	0.6
10°-20°	506.2	2.7
20°-30°	1060.9	5.7
30°-40°	1998.9	10.7
40°-50°	3627.9	19.5
50°-60°	6129.9	32.9
60°-70°	4582.5	24.6
70°-80°	512.7	2.8
80°-90°	95.4	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°	18629.0	100.0
0°-180°	18629.0	100.0



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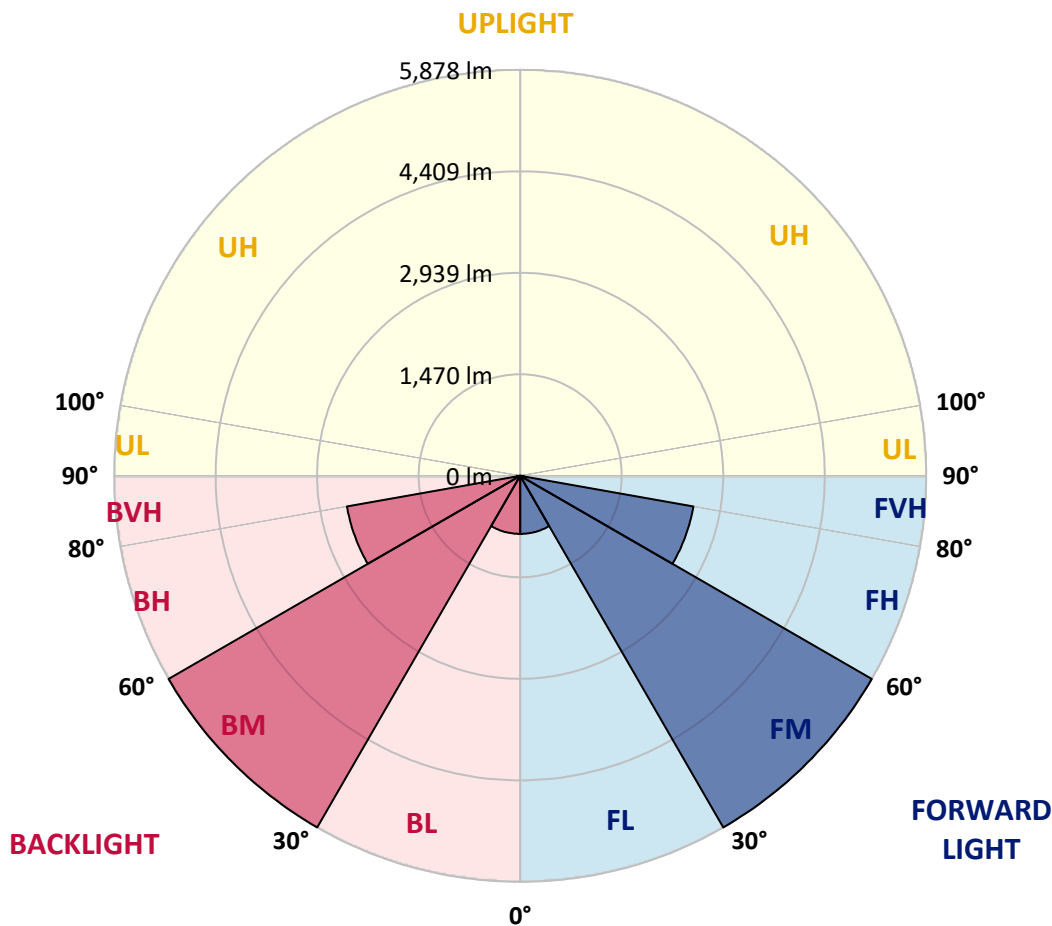
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	840.9	4.5			
FM (30°-60°)	5878.3	31.6			
FH (60°-80°)	2547.6	13.7			G2/5000
FVH (80°-90°)	47.7	0.3			G1/100
BL (0°-30°)	840.9	4.5	B2/1000		
BM (30°-60°)	5878.3	31.6	B4/8500		
BH (60°-80°)	2547.6	13.7	B4/5000		G2/5000
BVH (80°-90°)	47.7	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	761.7	761.7	761.7	761.7	761.7	761.7	761.7	761.7	761.7	761.7	761.7
2.5°	926.2	909.5	851.1	871.6	892.8	889.8	884.5	868.6	854.2	914.0	926.2
5°	1180.8	1142.9	1122.5	1105.8	1102.0	1061.1	1117.1	1111.1	1130.0	1161.9	1192.9
7.5°	1383.9	1348.3	1294.5	1283.1	1221.7	1176.3	1224.8	1284.6	1303.6	1361.9	1396.8
10°	1458.2	1427.1	1437.0	1386.2	1383.2	1396.1	1385.4	1399.1	1449.1	1442.3	1468.1
12.5°	1624.9	1630.2	1598.4	1585.5	1611.3	1667.4	1619.6	1603.0	1590.8	1642.4	1658.3
15°	1781.1	1812.1	1759.8	1751.5	1740.9	1793.2	1741.7	1766.7	1788.6	1799.3	1793.2
17.5°	2002.4	2003.9	1945.5	1852.3	1887.2	1903.8	1881.1	1837.9	1941.7	1994.0	1997.1
20°	2147.9	2153.2	2038.0	1892.5	1991.0	2006.2	1994.8	1904.6	2042.5	2129.7	2125.9
22.5°	2304.8	2286.6	2130.5	2024.4	2059.2	2068.3	2044.1	2032.7	2129.7	2288.1	2264.6
25°	2410.1	2443.5	2288.1	2219.9	2190.3	2169.1	2200.2	2206.2	2305.5	2449.5	2370.0
27.5°	2661.7	2604.1	2360.9	2386.6	2323.7	2180.5	2316.9	2391.9	2370.7	2616.3	2676.1
30°	2885.3	2886.8	2545.8	2595.1	2478.3	2362.4	2510.2	2618.5	2592.0	2906.5	2849.7
32.5°	3171.1	3181.7	2864.9	2733.0	2654.2	2632.2	2614.0	2733.7	2899.0	3153.6	3158.9
35°	3479.5	3570.5	3140.0	3001.3	2867.1	2770.1	2874.7	3040.7	3148.3	3555.3	3483.3
37.5°	4080.5	3927.4	3575.0	3314.3	3228.7	3190.0	3245.3	3341.6	3574.3	3925.2	4048.7
40°	4436.0	4393.5	3913.8	3695.5	3365.1	3468.2	3437.8	3701.6	3894.1	4417.8	4429.2
42.5°	4979.4	4765.7	4334.4	4057.0	3759.9	3581.1	3770.6	4124.5	4357.2	4799.8	5009.0
45°	5409.1	5134.8	4802.1	4591.4	4216.2	4083.6	4151.8	4605.0	4896.8	5200.7	5475.8
47.5°	5884.3	5587.2	5254.5	4880.1	4514.1	4730.1	4609.6	5008.2	5293.2	5729.0	5986.7
50°	6481.6	6152.6	5726.7	5417.5	5174.9	5250.7	5231.8	5516.0	5867.7	6264.8	6557.4
52.5°	7139.4	6767.3	6356.5	6069.3	5967.0	5779.0	6024.6	6141.3	6400.5	6764.3	7107.6
55°	7599.5	7227.3	6978.7	7071.2	7043.9	6742.3	6957.5	6969.7	6844.6	6975.7	7321.3
57.5°	7528.2	7172.8	7138.7	7488.1	8010.3	8302.0	7969.3	7253.9	6785.5	6724.1	7090.2
60°	6582.4	6278.4	6590.7	7378.9	8900.0	9788.3	8507.4	7039.4	6267.8	5948.8	6301.9
62.5°	4536.0	4330.6	4977.9	6210.2	9006.9	10935.0	8487.7	6117.0	4861.2	4282.1	4556.5
65°	2150.2	2075.9	2622.3	3937.3	7502.5	10628.8	7415.3	4138.9	2798.2	2235.0	2297.2
67.5°	808.7	771.5	962.5	1739.4	4725.5	8430.1	4984.7	2041.8	1082.3	841.3	870.1
70°	459.3	432.8	457.8	634.4	1902.3	4774.8	2150.2	700.3	460.0	419.1	446.4
72.5°	361.5	341.1	344.8	383.5	656.3	1874.3	695.8	399.4	334.2	317.6	341.8
75°	298.6	280.4	279.7	300.9	382.7	608.6	393.4	305.4	270.6	258.4	278.1
77.5°	237.2	226.6	229.6	246.3	274.4	340.3	285.0	247.1	222.1	207.7	221.3
80°	173.6	172.0	184.2	199.3	204.6	228.9	213.7	199.3	177.3	156.9	162.2
82.5°	113.7	114.4	137.2	149.3	147.0	146.3	153.1	152.3	132.6	103.8	103.8
85°	65.2	66.7	84.1	94.0	92.5	73.5	97.0	97.8	84.9	62.9	60.6
87.5°	21.2	26.5	36.4	38.7	37.1	20.5	37.1	40.9	37.1	26.5	23.5
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)