

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: P367128

Luminaire Tested: **MSA-SA2A-727-U-5NQ**

Issue Date: 12/2/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P367128  
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-SA2A-727-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: 6802 lumens  
Efficiency: N/A  
Efficacy: 103.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B2 - U0 - G1

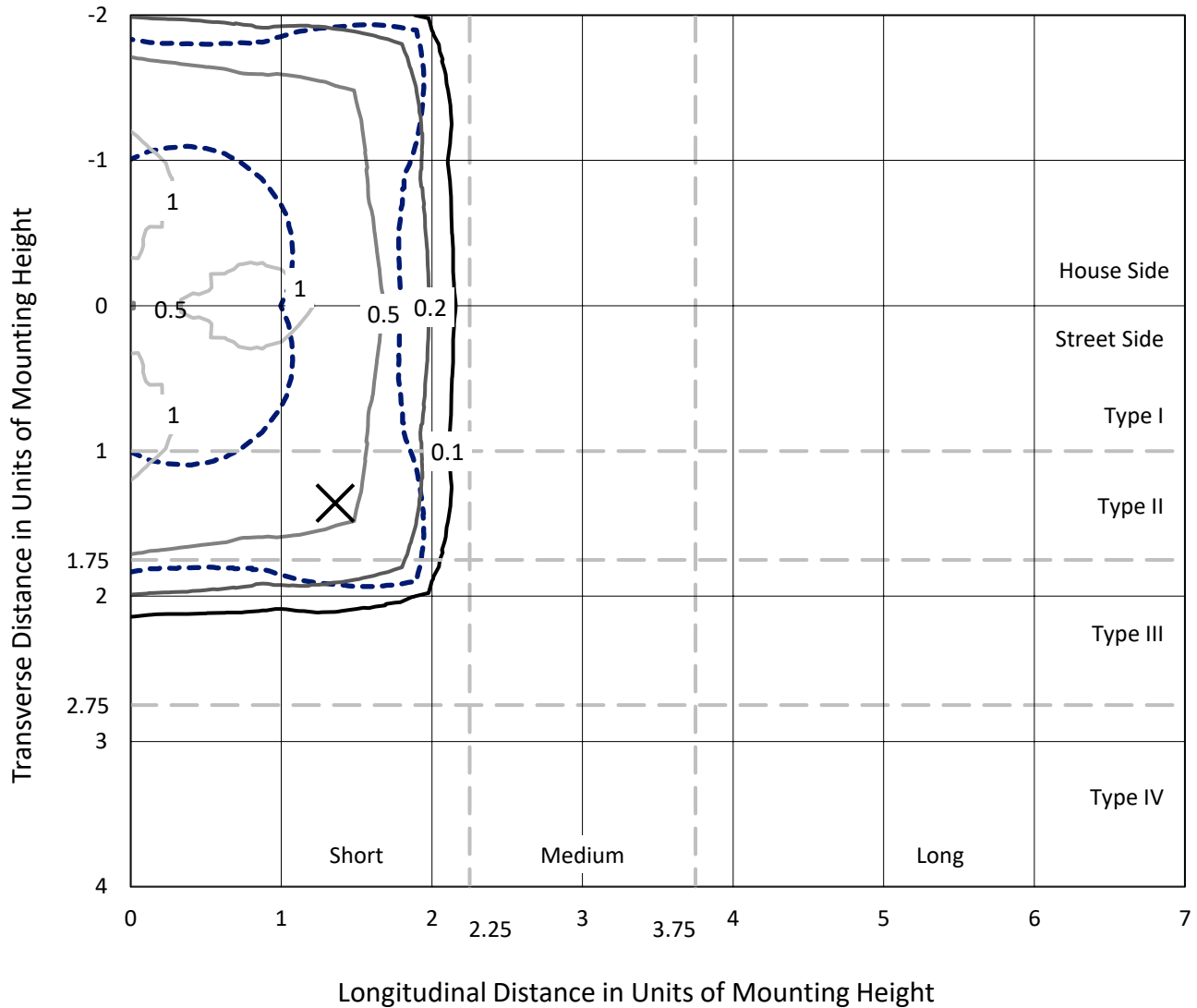
Input Watts (W): 66  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

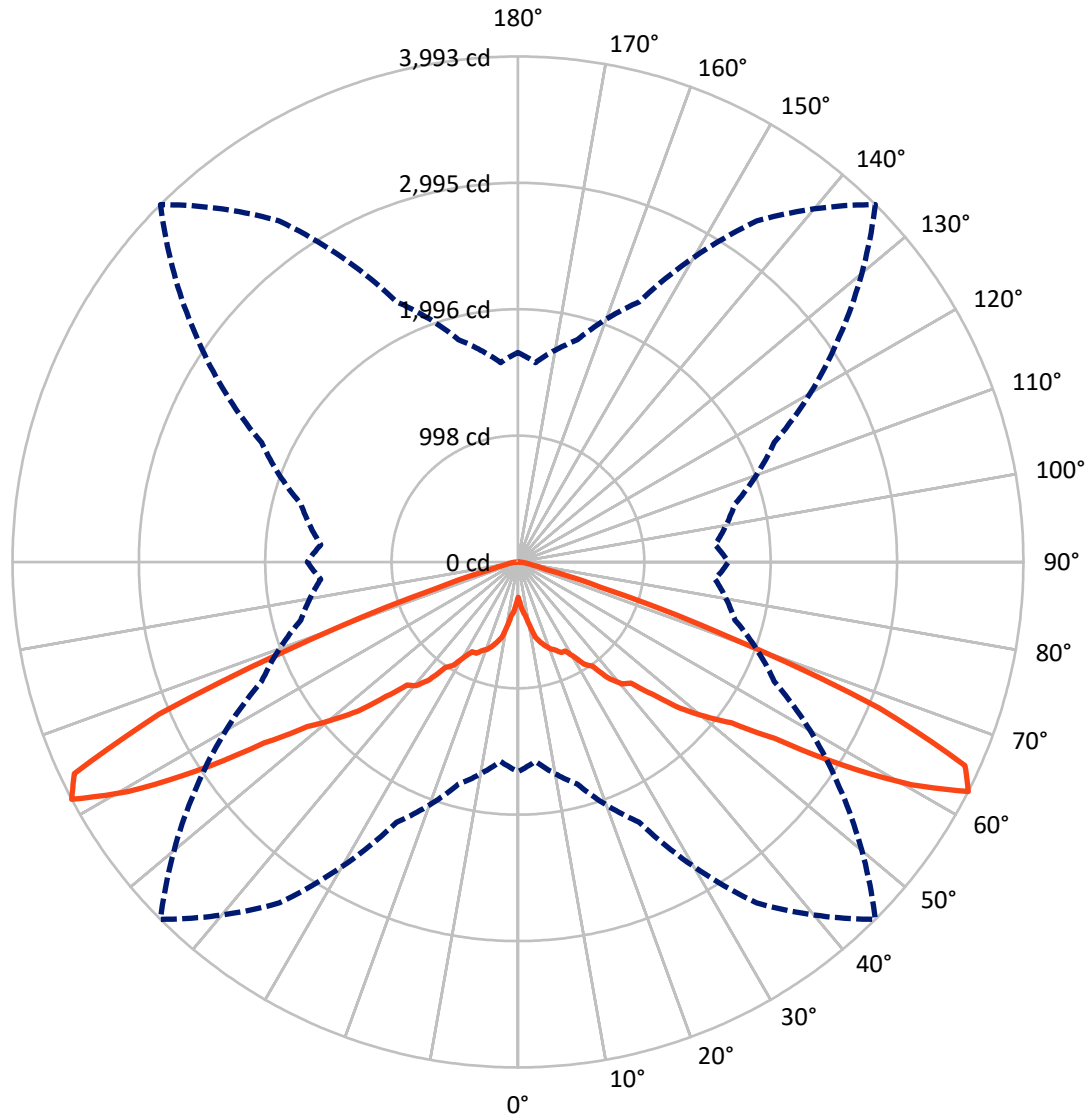
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc  
 Type V - Short - N/A

REPORT NUMBER: P367128  
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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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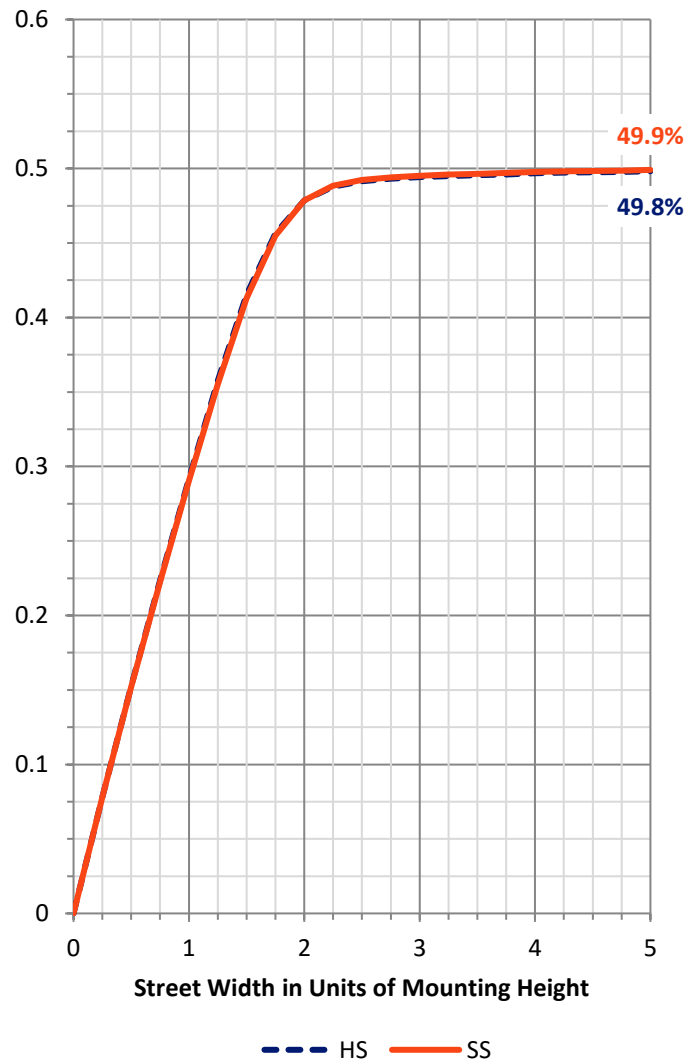
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3401.0	0.0	3401.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	3401.0	0.0	3401.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	6802.0	0.0	6802.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.9	0.6
10°-20°	184.8	2.7
20°-30°	387.4	5.7
30°-40°	729.8	10.7
40°-50°	1324.6	19.5
50°-60°	2238.2	32.9
60°-70°	1673.2	24.6
70°-80°	187.2	2.8
80°-90°	34.8	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°	6802.0	100.0
0°-180°	6802.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P367128

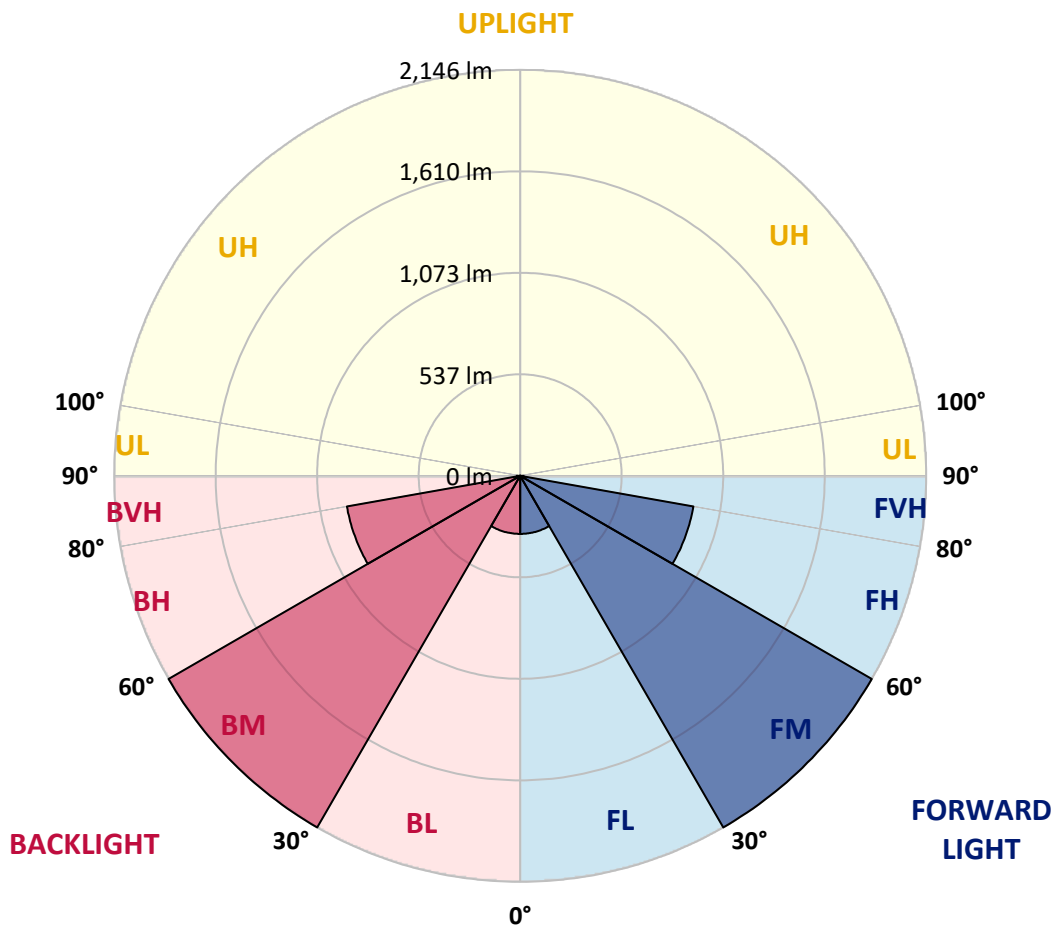
CATALOG NUMBER: MSA-SA2A-727-U-5NQ

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	307.1	4.5			
FM (30°-60°)	2146.3	31.6			
FH (60°-80°)	930.2	13.7			G1/1800
FVH (80°-90°)	17.4	0.3			G1/100
BL (0°-30°)	307.1	4.5	B1/500		
BM (30°-60°)	2146.3	31.6	B2/2500		
BH (60°-80°)	930.2	13.7	B2/1000		G1/1800
BVH (80°-90°)	17.4	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°	278.1	278.1	278.1	278.1	278.1	278.1	278.1	278.1	278.1	278.1	278.1
2.5°	338.2	332.1	310.8	318.2	326.0	324.9	322.9	317.1	311.9	333.7	338.2
5°	431.1	417.3	409.8	403.8	402.4	387.4	407.9	405.7	412.6	424.2	435.6
7.5°	505.3	492.3	472.7	468.5	446.1	429.5	447.2	469.1	476.0	497.3	510.0
10°	532.4	521.1	524.7	506.1	505.0	509.7	505.9	510.8	529.1	526.6	536.0
12.5°	593.3	595.3	583.6	578.9	588.3	608.8	591.4	585.3	580.9	599.7	605.5
15°	650.3	661.7	642.6	639.5	635.7	654.7	635.9	645.1	653.1	657.0	654.7
17.5°	731.1	731.7	710.4	676.3	689.1	695.2	686.8	671.1	709.0	728.1	729.2
20°	784.3	786.2	744.1	691.0	727.0	732.5	728.4	695.4	745.8	777.6	776.2
22.5°	841.5	834.9	777.9	739.2	751.9	755.2	746.3	742.2	777.6	835.5	826.9
25°	880.0	892.2	835.5	810.5	799.8	792.0	803.4	805.6	841.8	894.4	865.3
27.5°	971.9	950.9	862.0	871.4	848.5	796.2	846.0	873.4	865.6	955.3	977.1
30°	1053.5	1054.1	929.5	947.5	904.9	862.6	916.5	956.1	946.4	1061.3	1040.5
32.5°	1157.8	1161.7	1046.0	997.9	969.1	961.1	954.4	998.2	1058.5	1151.5	1153.4
35°	1270.5	1303.7	1146.5	1095.9	1046.9	1011.5	1049.6	1110.2	1149.5	1298.1	1271.9
37.5°	1489.9	1434.0	1305.3	1210.1	1178.9	1164.8	1185.0	1220.1	1305.1	1433.2	1478.3
40°	1619.7	1604.2	1429.0	1349.3	1228.7	1266.3	1255.3	1351.6	1421.8	1613.1	1617.2
42.5°	1818.1	1740.1	1582.6	1481.3	1372.9	1307.6	1376.7	1506.0	1590.9	1752.5	1828.9
45°	1975.0	1874.9	1753.4	1676.4	1539.5	1491.0	1515.9	1681.4	1788.0	1898.9	1999.4
47.5°	2148.5	2040.1	1918.6	1781.9	1648.2	1727.1	1683.1	1828.6	1932.7	2091.8	2185.9
50°	2366.6	2246.5	2091.0	1978.1	1889.5	1917.2	1910.3	2014.1	2142.5	2287.5	2394.3
52.5°	2606.8	2470.9	2321.0	2216.1	2178.7	2110.1	2199.7	2242.4	2337.0	2469.8	2595.2
55°	2774.8	2638.9	2548.1	2581.9	2571.9	2461.8	2540.4	2544.8	2499.2	2547.0	2673.2
57.5°	2748.8	2619.0	2606.5	2734.1	2924.8	3031.3	2909.8	2648.6	2477.6	2455.2	2588.8
60°	2403.4	2292.4	2406.5	2694.3	3249.7	3574.0	3106.3	2570.3	2288.6	2172.1	2301.0
62.5°	1656.2	1581.2	1817.6	2267.5	3288.7	3992.7	3099.1	2233.5	1775.0	1563.5	1663.7
65°	785.1	758.0	957.5	1437.6	2739.4	3880.9	2707.5	1511.2	1021.7	816.1	838.8
67.5°	295.3	281.7	351.4	635.1	1725.4	3078.1	1820.1	745.5	395.2	307.2	317.7
70°	167.7	158.0	167.1	231.6	694.6	1743.4	785.1	255.7	168.0	153.0	163.0
72.5°	132.0	124.5	125.9	140.0	239.6	684.4	254.0	145.8	122.0	116.0	124.8
75°	109.0	102.4	102.1	109.9	139.7	222.2	143.6	111.5	98.8	94.4	101.6
77.5°	86.6	82.7	83.8	89.9	100.2	124.3	104.1	90.2	81.1	75.8	80.8
80°	63.4	62.8	67.2	72.8	74.7	83.6	78.0	72.8	64.8	57.3	59.2
82.5°	41.5	41.8	50.1	54.5	53.7	53.4	55.9	55.6	48.4	37.9	37.9
85°	23.8	24.4	30.7	34.3	33.8	26.8	35.4	35.7	31.0	23.0	22.1
87.5°	7.7	9.7	13.3	14.1	13.6	7.5	13.6	14.9	13.6	9.7	8.6
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)