

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: P596054

Luminaire Tested: **MSA-SA2A-AMB-U-5MQ**

Issue Date: 4/29/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P596054  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2109-400-6)  
Test Lab: INNOVATIONS CENTER  
Issue Date: 4/29/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: MSA-SA2A-AMB-U-5MQ  
Description: POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH  
AND TYPE V MEDIUM OPTICS.  
Light Source: (32) 1549K CCT, -21.5 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1898 lumens  
Efficiency: N/A  
Efficacy: 46.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B1 - U0 - G0

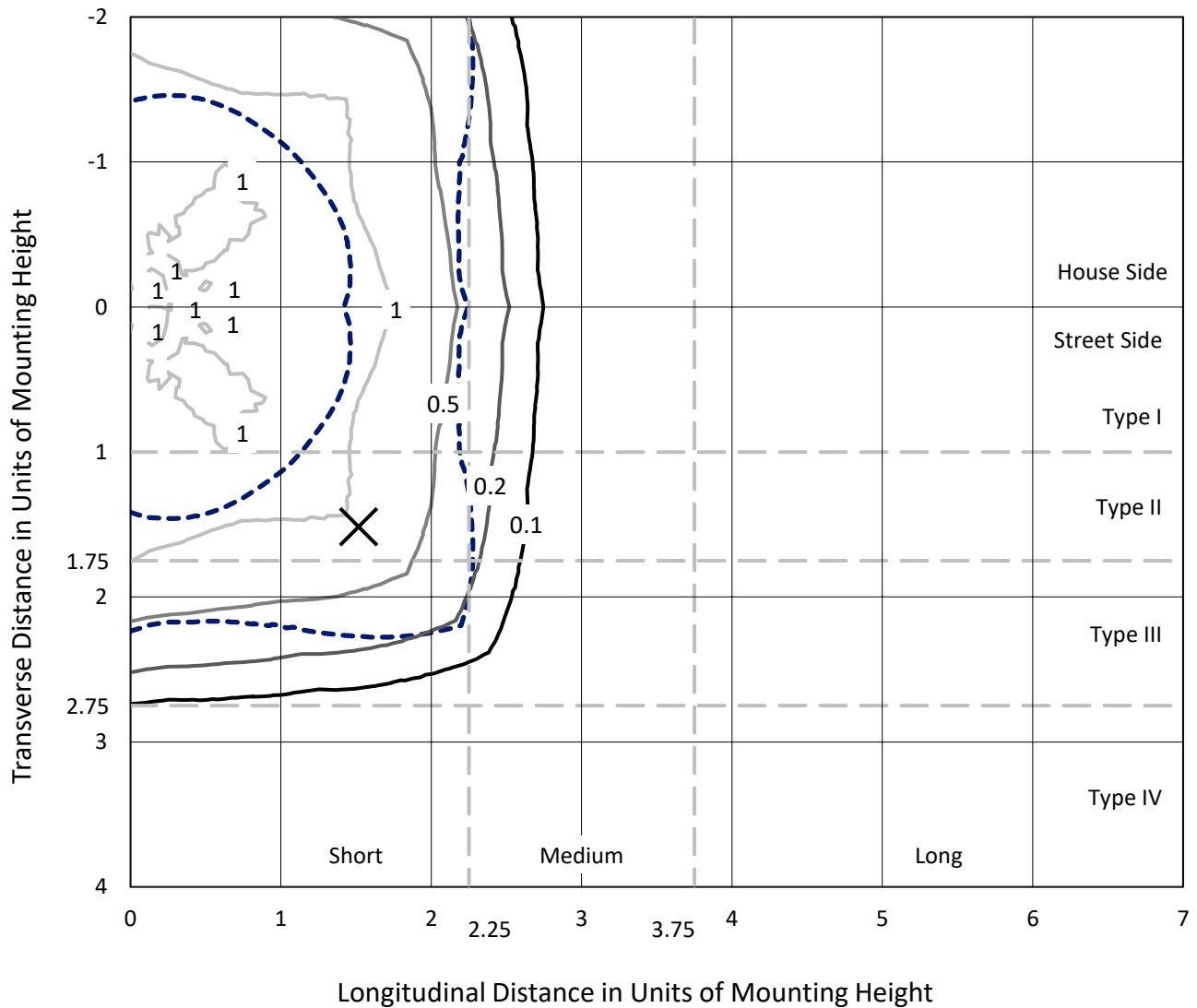
Input Watts (W): 41.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P596054  
 CATALOG NUMBER: MSA-SA2A-AMB-U-5MQ

### Iso-Footcandle Lines of Horizontal Illumination

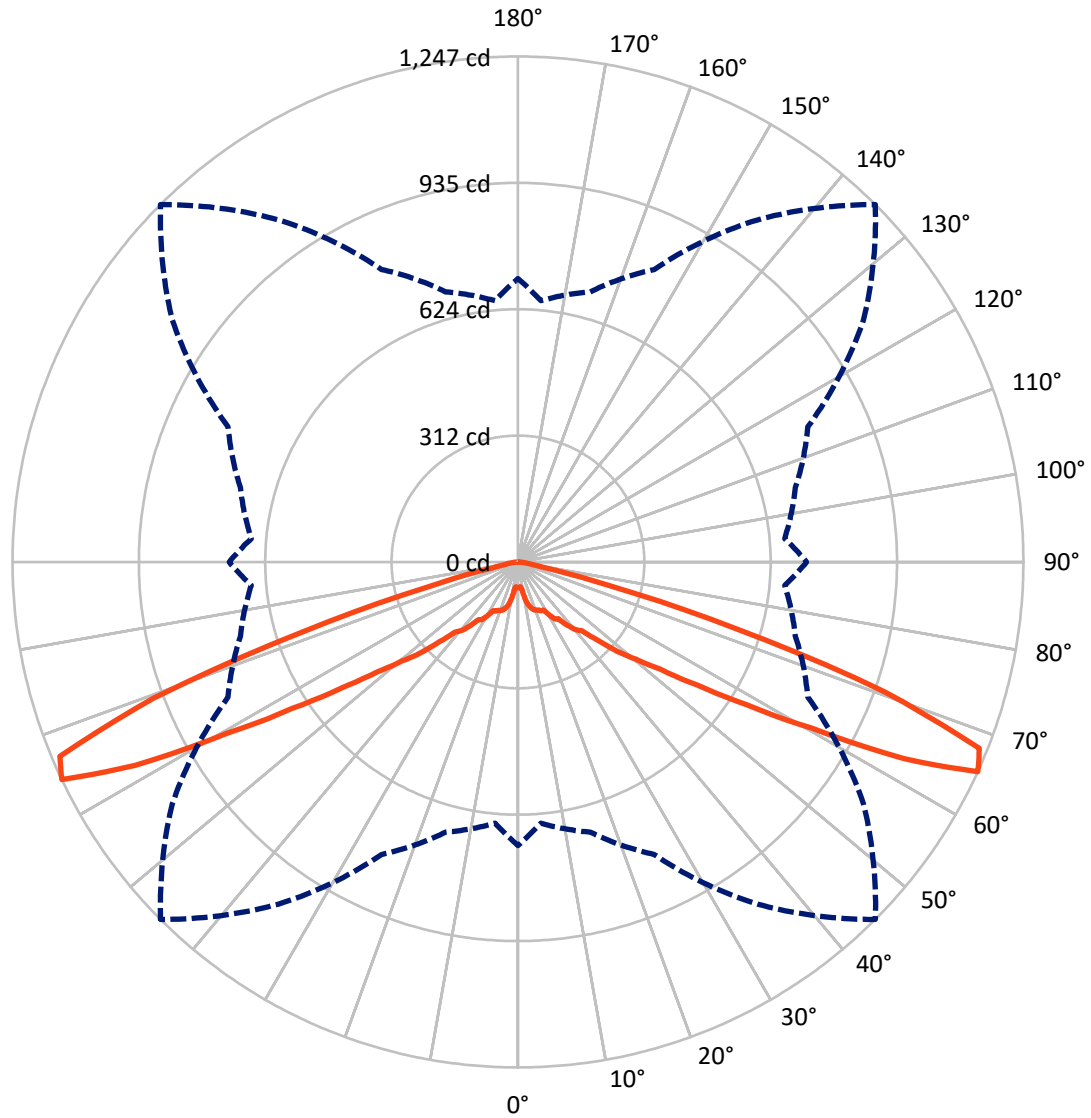
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.3 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: P596054  
CATALOG NUMBER: MSA-SA2A-AMB-U-5MQ

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P596054

CATALOG NUMBER: MSA-SA2A-AMB-U-5MQ

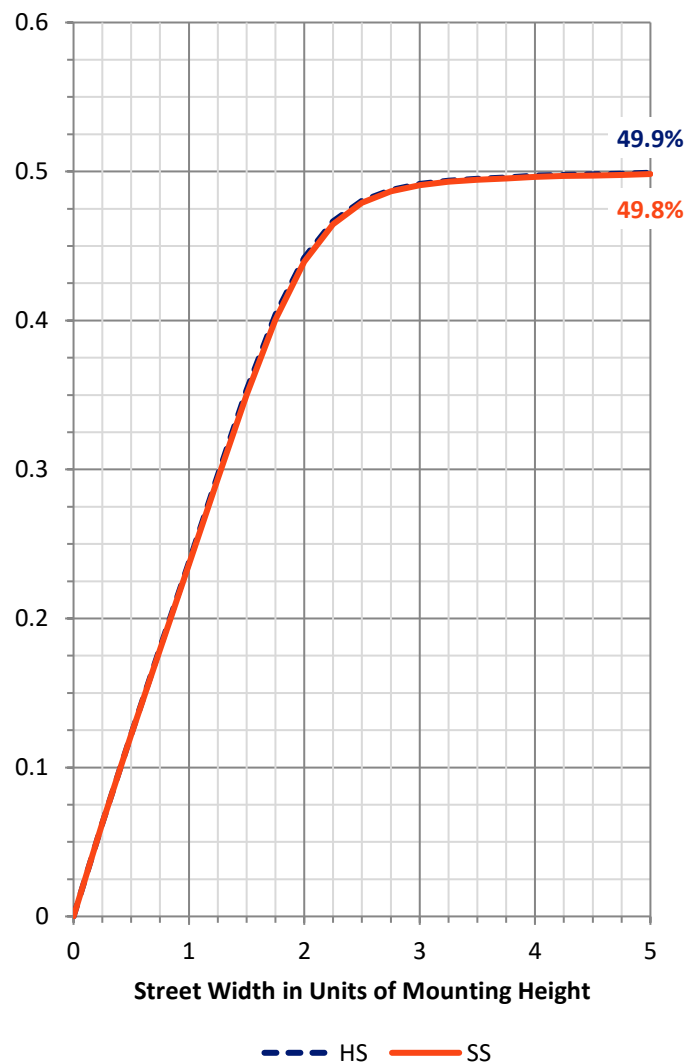
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	949.0	0.0	949.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	949.0	0.0	949.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	1898.0	0.0	1898.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	7.8	0.4
10°-20°	31.8	1.7
20°-30°	64.2	3.4
30°-40°	121.4	6.4
40°-50°	241.7	12.7
50°-60°	518.0	27.3
60°-70°	747.9	39.4
70°-80°	152.7	8.0
80°-90°	12.5	0.7
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°	1898.0	100.0
0°-180°	1898.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P596054

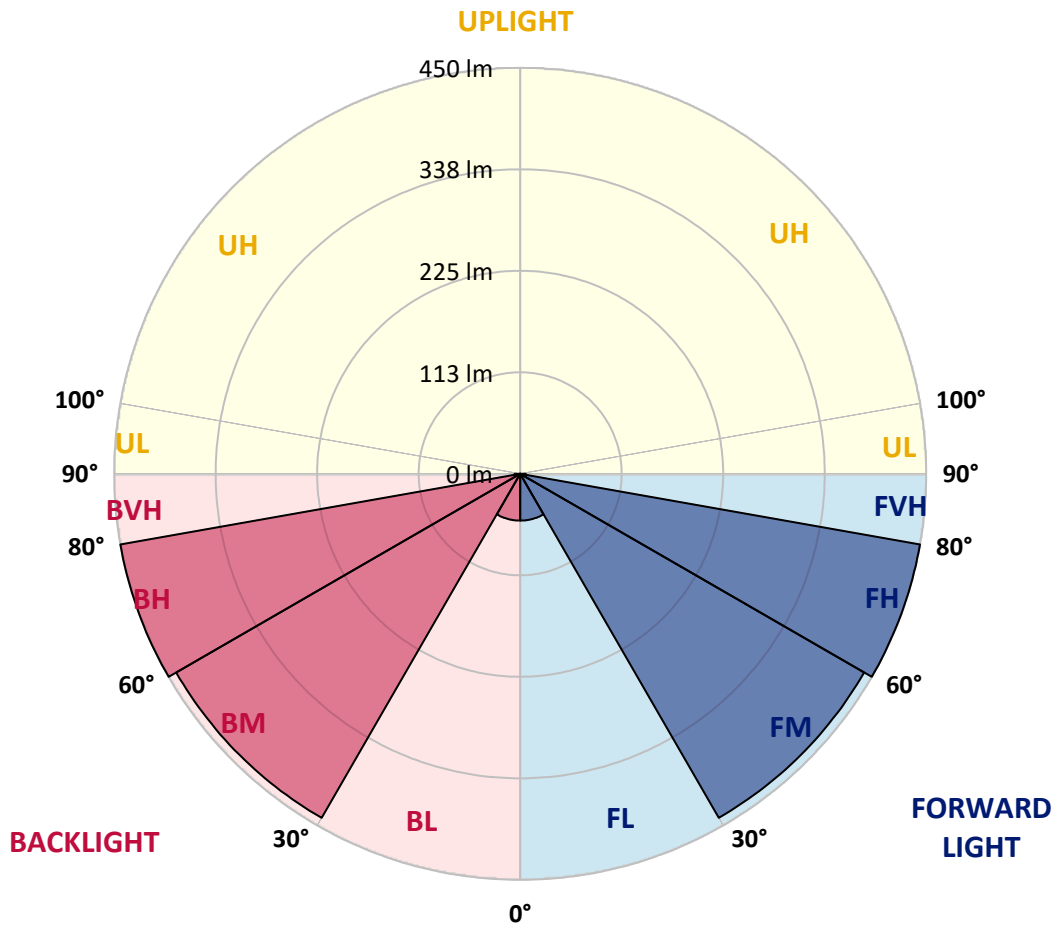
CATALOG NUMBER: MSA-SA2A-AMB-U-5MQ

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	51.9	2.7			
FM (30°-60°)	440.6	23.2			
FH (60°-80°)	450.3	23.7			G0/660
FVH (80°-90°)	6.3	0.3			G0/10
BL (0°-30°)	51.9	2.7	B0/110		
BM (30°-60°)	440.6	23.2	B1/1000		
BH (60°-80°)	450.3	23.7	B1/500		G0/660
BVH (80°-90°)	6.3	0.3			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G0**

Type V Short





REPORT NUMBER: P596054

CATALOG NUMBER: MSA-SA2A-AMB-U-5MQ

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
2.5°	77.9	69.1	68.5	63.2	62.0	63.7	62.0	62.0	69.1	69.6	77.3
5°	94.4	86.2	85.0	75.0	64.9	61.4	65.5	73.2	85.0	87.4	96.2
7.5°	105.7	98.0	94.4	84.4	73.8	67.3	73.8	84.4	94.4	96.8	103.9
10°	101.5	98.6	95.0	86.2	87.4	88.5	86.8	87.4	97.4	98.6	101.5
12.5°	101.5	101.5	102.7	100.3	102.1	105.7	103.9	100.9	104.5	103.9	107.4
15°	108.6	109.2	109.8	109.8	112.1	116.3	113.9	111.6	112.7	110.4	110.4
17.5°	117.5	119.8	117.5	117.5	121.0	123.4	121.0	118.6	118.0	121.6	119.2
20°	127.5	128.1	122.8	119.8	125.1	126.9	126.3	121.0	124.5	126.9	126.3
22.5°	137.5	136.3	128.1	122.8	126.9	128.7	125.1	123.4	129.8	137.5	137.5
25°	142.2	145.2	137.5	134.0	132.2	133.4	134.0	134.0	137.5	145.2	145.8
27.5°	155.2	154.0	140.5	144.0	141.1	134.6	141.7	144.6	140.5	154.0	157.6
30°	168.8	170.6	151.1	155.2	154.0	151.7	155.2	155.2	153.5	172.3	166.4
32.5°	188.3	184.7	170.0	165.3	165.3	167.6	162.9	165.9	174.1	190.1	191.8
35°	203.6	207.2	186.5	181.2	178.8	172.3	179.4	181.8	190.1	210.1	208.3
37.5°	241.4	230.8	209.5	201.3	196.5	198.3	200.7	204.2	213.1	238.5	242.6
40°	266.2	262.6	236.7	227.2	211.3	219.6	216.0	230.2	243.8	272.1	280.4
42.5°	307.5	299.8	272.1	260.9	244.9	232.5	244.4	260.9	281.5	312.8	319.9
45°	352.4	333.5	310.5	297.5	278.0	275.0	280.4	302.2	312.2	344.7	359.4
47.5°	400.2	379.5	354.1	336.4	315.2	329.3	322.3	342.9	362.4	385.4	408.4
50°	452.1	430.3	405.5	384.8	374.2	376.6	378.9	391.3	413.2	437.9	459.8
52.5°	521.8	493.4	462.7	449.2	456.2	440.3	459.8	452.1	468.6	499.9	524.7
55°	626.8	598.5	560.7	546.5	546.0	535.9	550.1	537.7	547.1	582.6	619.1
57.5°	737.8	693.5	664.0	657.5	666.4	663.4	664.6	659.3	671.1	703.0	743.1
60°	820.4	772.0	764.9	770.2	817.5	833.4	813.3	773.8	773.8	788.5	841.1
62.5°	822.2	771.4	782.0	820.4	970.3	1068.3	968.0	832.8	796.2	780.3	838.1
65°	699.4	646.9	690.0	796.2	1030.5	1247.1	1041.2	789.1	708.9	660.5	712.4
67.5°	474.5	436.8	491.1	630.4	925.5	1227.7	929.6	623.3	492.2	421.4	471.6
70°	241.4	220.2	269.1	369.5	639.8	959.1	638.0	373.6	266.2	221.3	247.3
72.5°	103.9	96.8	117.5	171.2	335.2	562.5	341.1	167.6	106.8	92.1	102.1
75°	46.6	44.9	50.8	63.7	123.4	229.0	122.8	57.3	47.2	45.4	50.8
77.5°	33.1	31.9	34.2	36.6	45.4	63.2	47.2	36.6	33.1	32.5	34.2
80°	23.0	22.4	24.8	27.7	28.9	30.7	30.1	28.9	26.0	22.4	23.6
82.5°	11.2	11.8	17.7	19.5	20.7	19.5	21.8	20.7	18.3	13.0	13.0
85°	5.9	6.5	11.2	11.8	12.4	9.4	11.8	12.4	11.8	7.7	7.1
87.5°	2.4	3.5	4.1	4.1	4.1	2.4	4.1	5.3	4.7	4.1	2.4
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)