

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: P596033

Luminaire Tested: **MSA-SA1A-AMB-U-5WQ**

Issue Date: 4/29/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P596033  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2109-400-4)  
Test Lab: INNOVATIONS CENTER  
Issue Date: 4/29/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: MSA-SA1A-AMB-U-5WQ  
Description: POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH  
AND TYPE V WIDE OPTICS.  
Light Source: (16) 1549K CCT, -21.5 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 986 lumens  
Efficiency: N/A  
Efficacy: 48.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B1 - U0 - G0

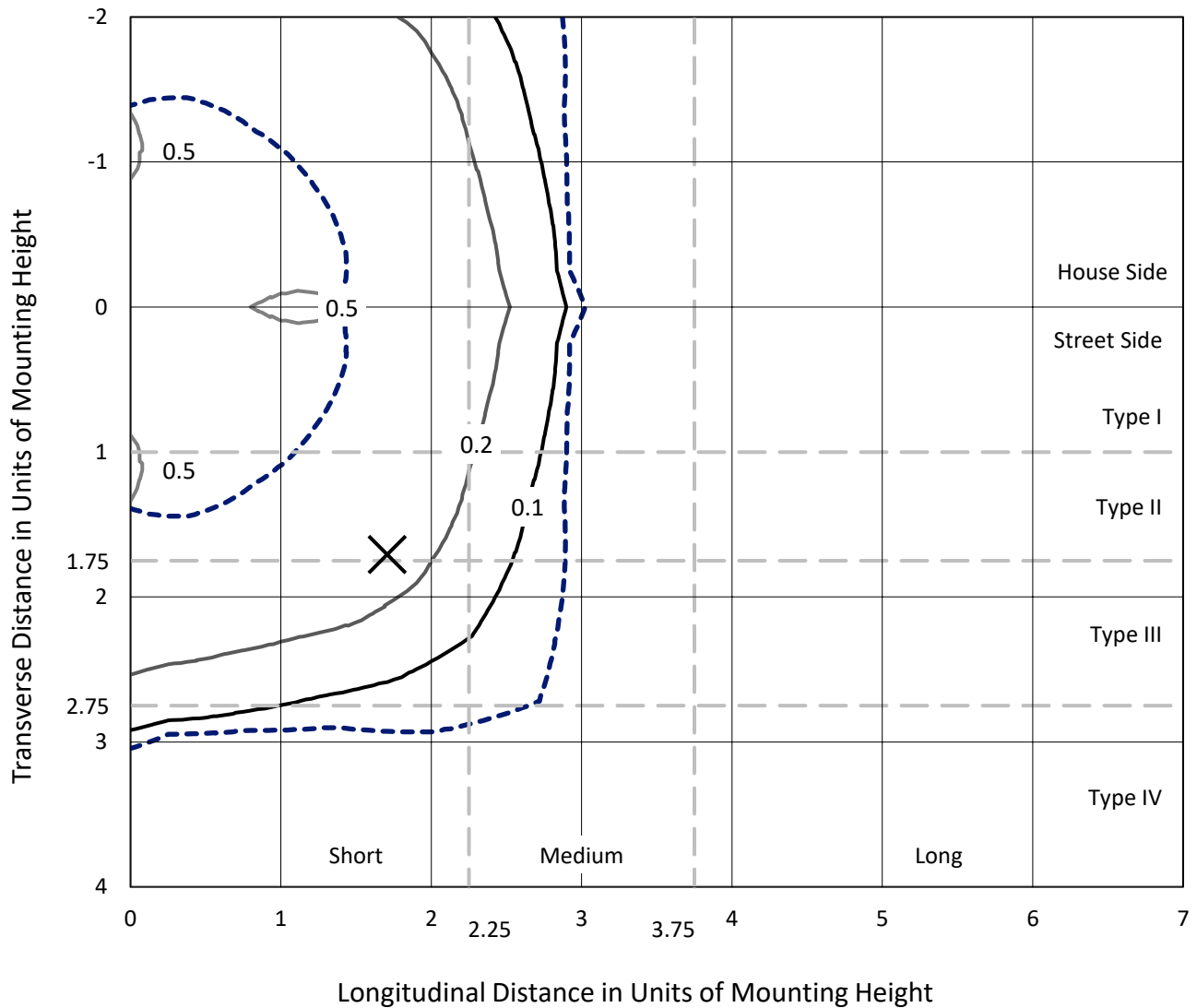
Input Watts (W): 20.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P596033  
 CATALOG NUMBER: MSA-SA1A-AMB-U-5WQ

### Iso-Footcandle Lines of Horizontal Illumination

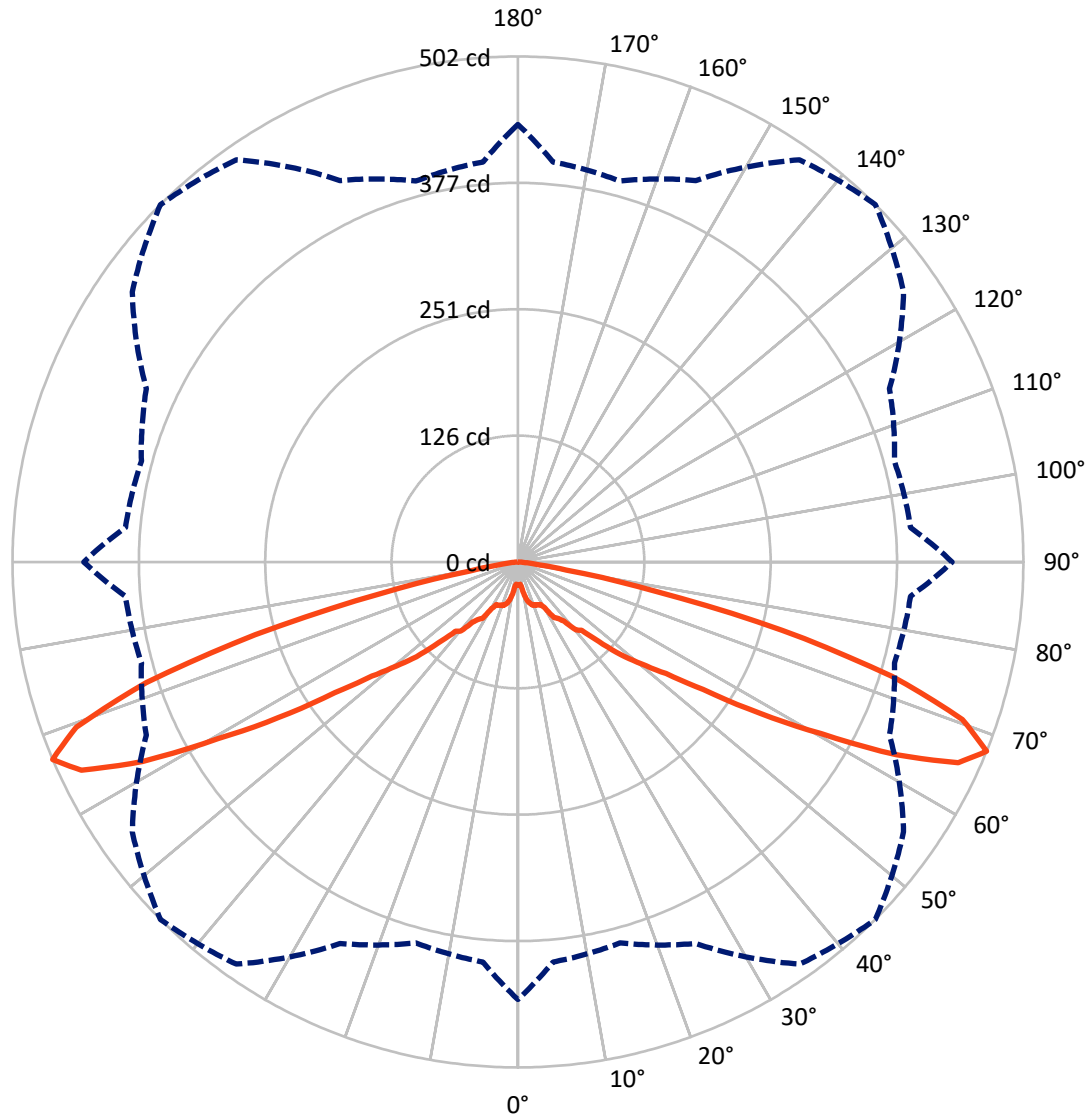
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 0.5 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: P596033  
CATALOG NUMBER: MSA-SA1A-AMB-U-5WQ

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P596033

CATALOG NUMBER: MSA-SA1A-AMB-U-5WQ

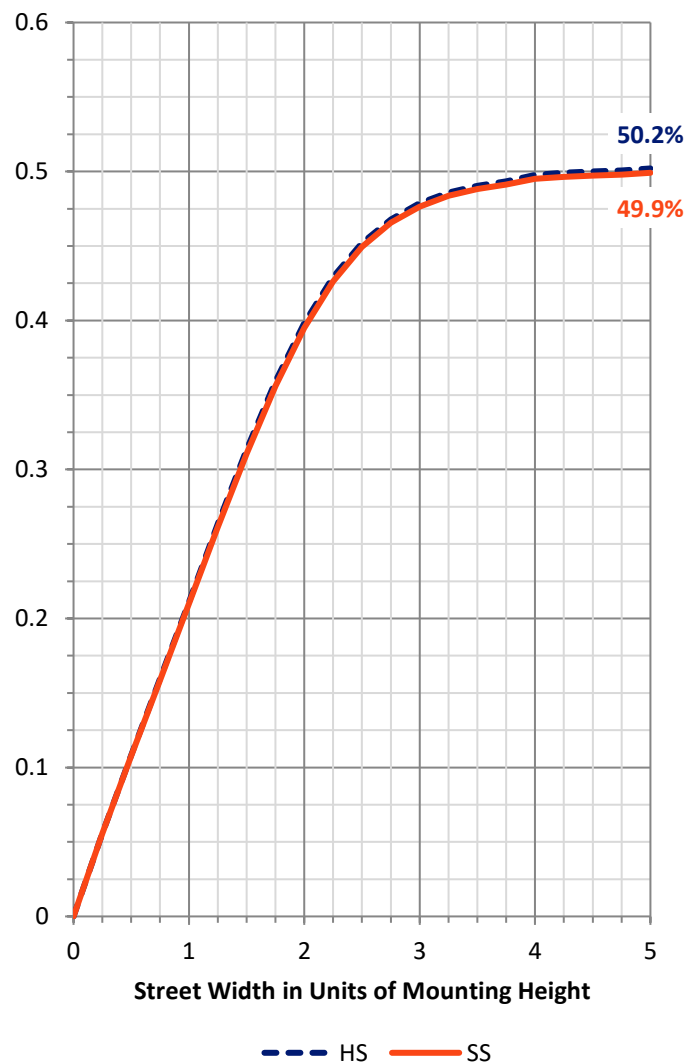
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	493.0	0.0	493.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	493.0	0.0	493.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	986.0	0.0	986.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2.8	0.3
10°-20°	11.7	1.2
20°-30°	23.9	2.4
30°-40°	47.1	4.8
40°-50°	97.6	9.9
50°-60°	217.0	22.0
60°-70°	400.4	40.6
70°-80°	176.8	17.9
80°-90°	8.7	0.9
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°	986.0	100.0
0°-180°	986.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P596033

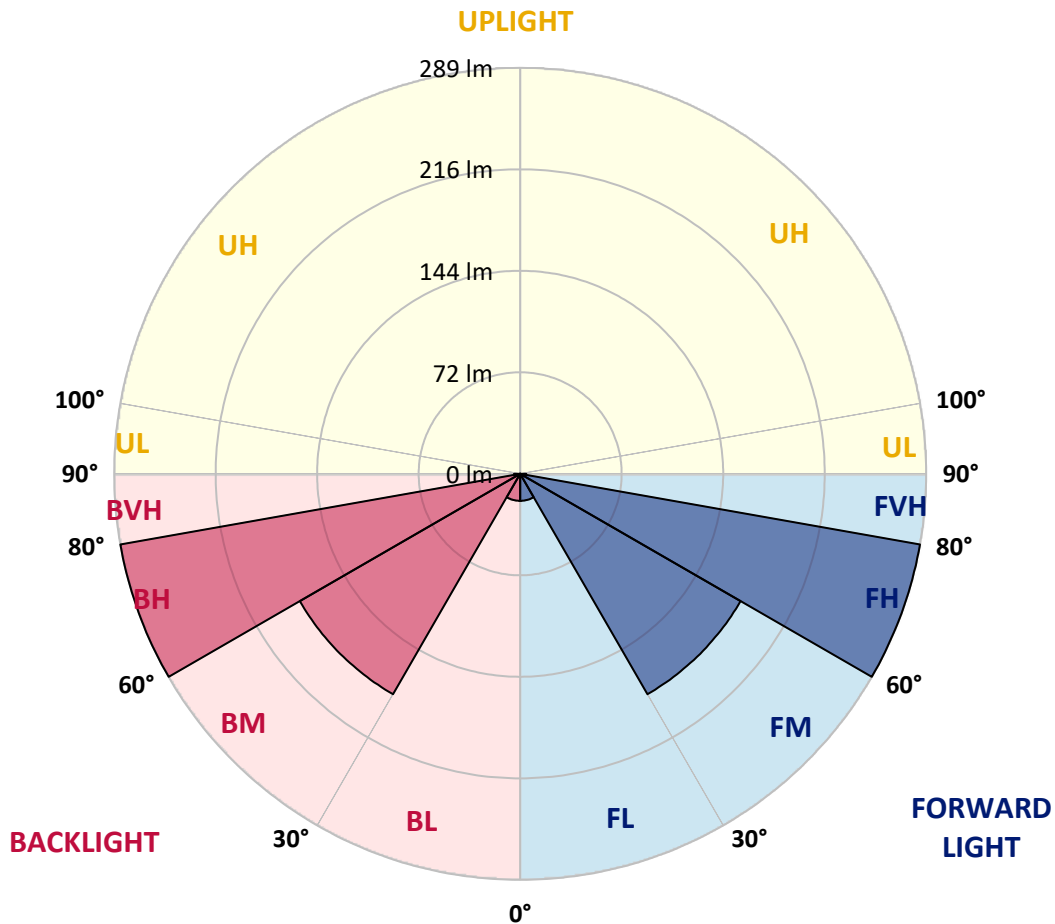
CATALOG NUMBER: MSA-SA1A-AMB-U-5WQ

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	19.2	1.9			
FM (30°-60°)	180.9	18.3			
FH (60°-80°)	288.6	29.3			G0/660
FVH (80°-90°)	4.4	0.4			G0/10
BL (0°-30°)	19.2	1.9	B0/110		
BM (30°-60°)	180.9	18.3	B0/220		
BH (60°-80°)	288.6	29.3	B1/500		G0/660
BVH (80°-90°)	4.4	0.4			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: P596033

CATALOG NUMBER: MSA-SA1A-AMB-U-5WQ

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8
2.5°	27.3	25.2	24.3	23.1	22.8	23.1	22.8	22.5	24.9	24.6	27.0
5°	33.9	30.9	30.6	27.0	23.7	22.2	23.4	26.7	30.6	31.5	34.8
7.5°	37.8	35.1	34.2	30.3	26.7	24.6	26.4	30.0	33.6	34.8	37.5
10°	37.2	36.0	35.1	31.5	31.5	32.1	31.5	31.5	34.8	35.7	36.9
12.5°	38.1	37.8	37.5	36.9	37.2	38.1	37.5	36.9	38.1	38.1	39.3
15°	41.1	41.1	40.5	40.2	41.1	42.0	41.1	40.8	41.7	41.4	41.4
17.5°	45.0	45.9	44.4	43.2	43.5	44.4	43.8	43.2	44.1	45.9	45.0
20°	49.2	49.2	45.9	44.1	45.6	45.9	45.3	44.1	46.2	48.6	48.6
22.5°	53.1	52.5	47.7	45.3	45.9	46.2	45.6	44.7	47.7	51.9	52.5
25°	55.2	55.5	51.3	48.3	47.7	47.4	47.7	48.0	50.7	54.6	55.2
27.5°	63.0	61.5	53.7	53.1	50.4	47.7	50.1	52.8	54.0	60.9	62.7
30°	67.8	69.0	60.0	59.4	56.4	53.1	56.4	60.0	60.6	69.9	68.4
32.5°	72.3	71.1	65.1	62.7	63.0	65.7	63.6	63.3	65.1	71.7	72.9
35°	81.3	82.5	72.0	66.6	67.2	69.0	66.9	66.3	71.4	81.6	81.3
37.5°	102.0	97.2	87.0	76.2	73.8	74.7	74.1	77.1	85.8	98.7	101.4
40°	109.2	106.8	93.3	88.5	84.9	88.8	85.8	88.8	95.1	108.0	111.9
42.5°	125.7	121.5	108.0	99.6	94.2	92.7	93.3	98.7	108.9	123.6	128.7
45°	147.0	137.7	126.0	117.9	109.8	112.5	109.8	117.3	125.4	141.6	150.6
47.5°	168.3	160.5	145.2	136.5	128.7	138.0	129.0	136.2	147.3	162.6	172.2
50°	193.8	184.2	167.7	155.4	154.2	159.0	153.9	156.9	171.0	187.8	197.7
52.5°	222.8	211.5	193.2	186.0	189.0	184.2	187.5	184.5	198.3	216.6	230.0
55°	258.2	243.8	227.0	228.2	230.6	223.4	228.5	227.6	232.7	246.8	261.5
57.5°	309.2	291.2	271.7	272.9	284.6	284.0	281.3	276.2	273.5	283.1	303.8
60°	369.5	343.7	326.9	324.8	349.4	346.1	349.7	329.0	321.8	338.9	365.9
62.5°	424.4	395.6	377.0	381.2	421.4	422.0	411.8	373.1	373.4	392.6	421.4
65°	455.9	419.6	404.3	419.9	471.8	480.5	455.9	405.8	403.4	416.3	450.8
67.5°	434.6	398.9	391.7	418.1	487.7	502.1	467.6	407.3	387.2	391.4	431.3
70°	355.1	314.6	326.6	362.3	439.7	468.5	418.1	347.0	317.6	304.1	336.8
72.5°	207.9	187.5	210.6	254.3	341.3	388.4	325.7	250.4	208.5	182.1	207.3
75°	96.3	86.7	97.5	135.6	217.2	270.8	203.7	134.7	99.6	82.8	91.5
77.5°	32.4	30.3	36.9	57.0	105.3	139.5	99.9	56.4	36.6	32.7	35.1
80°	13.8	13.8	15.3	21.3	40.2	48.6	39.3	22.8	17.1	15.6	15.9
82.5°	6.9	6.9	9.0	10.5	13.5	15.0	15.0	12.6	10.8	9.0	8.7
85°	3.3	3.6	5.1	5.4	6.9	5.4	6.9	6.6	6.6	4.8	4.2
87.5°	1.2	1.5	1.8	2.1	2.1	1.5	2.4	2.7	2.4	2.1	1.2
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)