

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: P596100

Luminaire Tested: **MSA-SA4A-AMB-U-5MQ**

Issue Date: 4/29/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P596100  
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-SA4A-AMB-U-5MQ  
Description: POST TOP DECORATIVE LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH  
AND TYPE V MEDIUM OPTICS.  
Light Source: (64) 1549K CCT, -21.5 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3215.9 lumens  
Efficiency: N/A  
Efficacy: 40.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B2 - U0 - G1

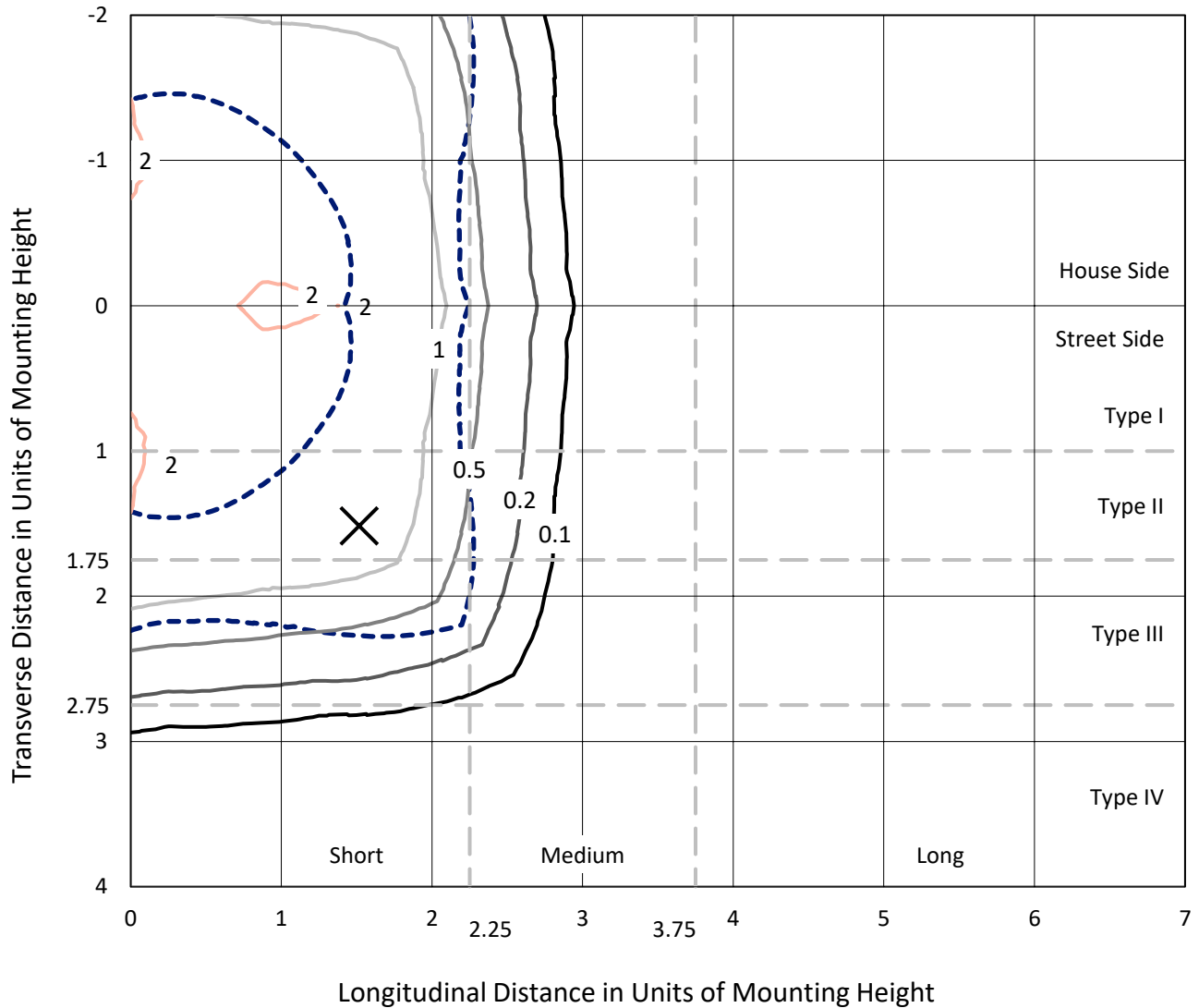
Input Watts (W): 79  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

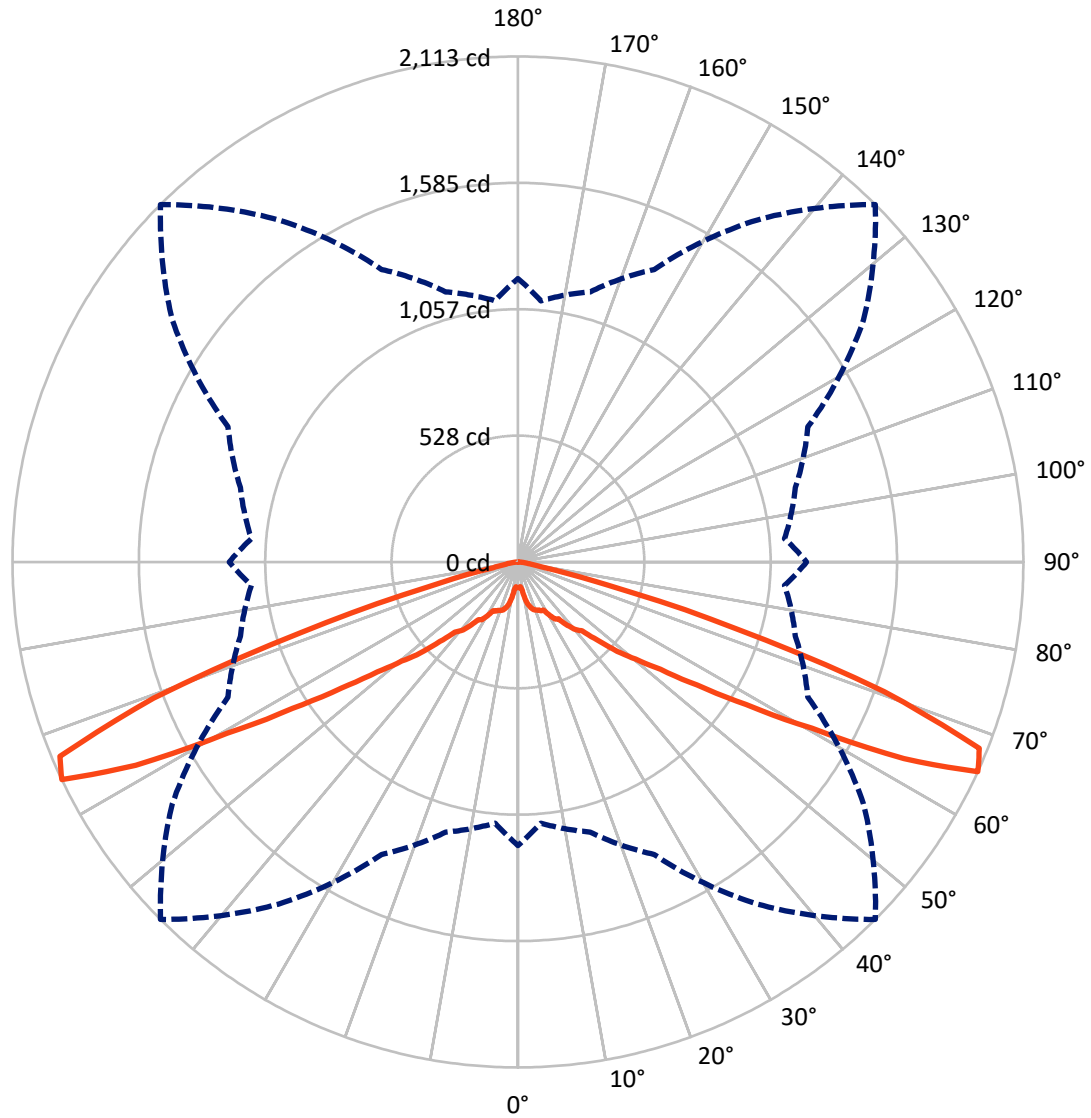
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.2 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



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

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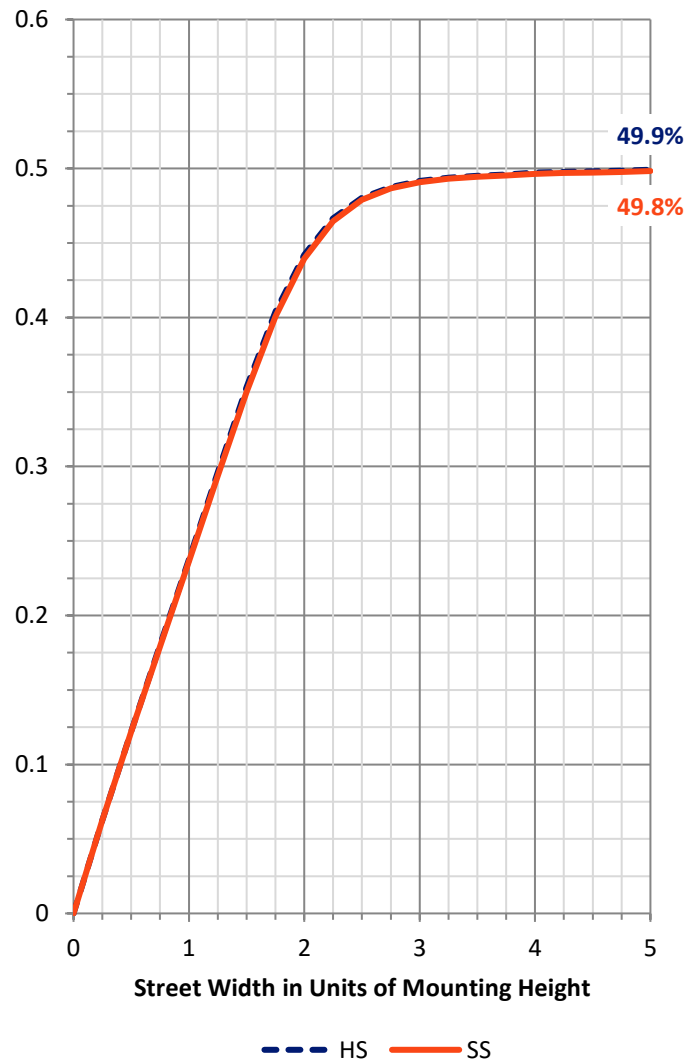
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1608.0	0.0	1608.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	1608.0	0.0	1608.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	3215.9	0.0	3215.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	13.2	0.4
10°-20°	53.9	1.7
20°-30°	108.7	3.4
30°-40°	205.6	6.4
40°-50°	409.6	12.7
50°-60°	877.8	27.3
60°-70°	1267.2	39.4
70°-80°	258.7	8.0
80°-90°	21.2	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°	3215.9	100.0
0°-180°	3215.9	100.0



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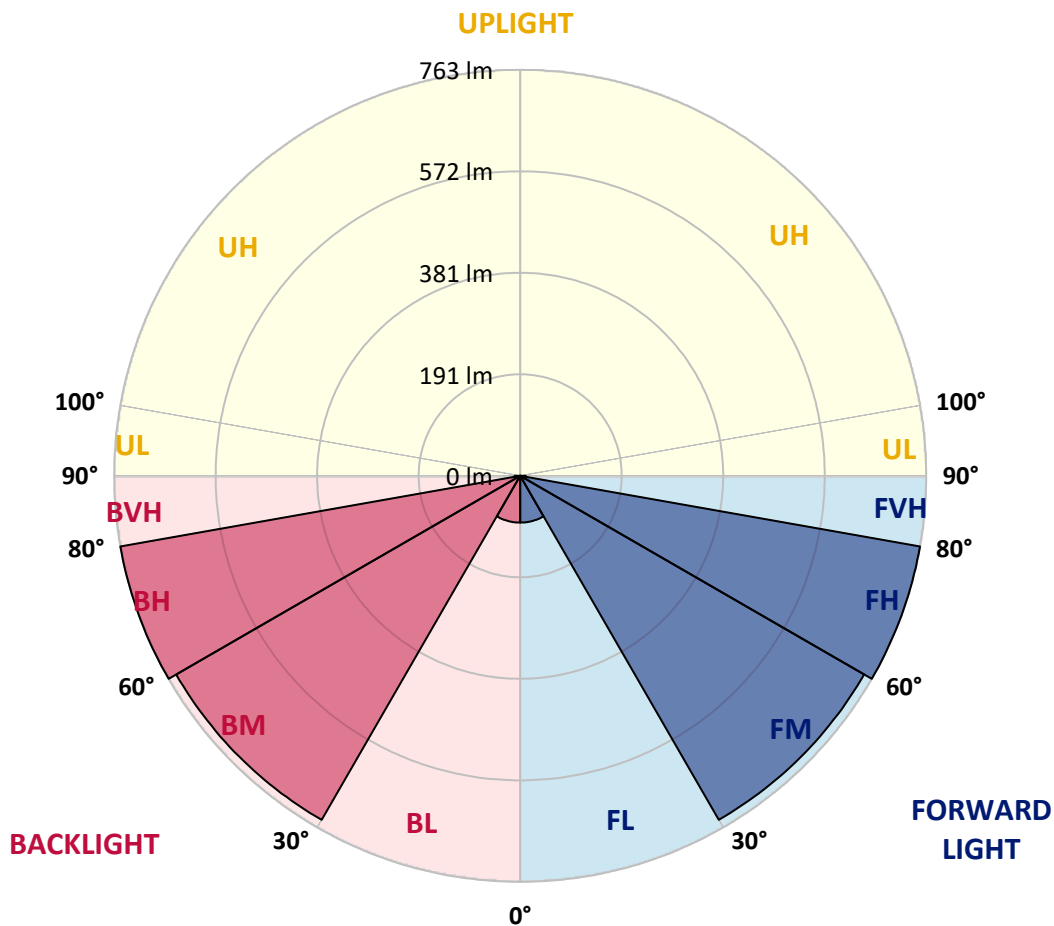
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	87.9	2.7			
FM (30°-60°)	746.5	23.2			
FH (60°-80°)	763.0	23.7			G1/1800
FVH (80°-90°)	10.6	0.3			G1/100
BL (0°-30°)	87.9	2.7	B0/110		
BM (30°-60°)	746.5	23.2	B1/1000		
BH (60°-80°)	763.0	23.7	B2/1000		G1/1800
BVH (80°-90°)	10.6	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°	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0
2.5°	132.0	117.0	116.0	107.0	105.0	108.0	105.0	105.0	117.0	118.0	131.0
5°	160.0	146.0	144.0	127.0	110.0	104.0	111.0	124.0	144.0	148.0	163.0
7.5°	179.0	166.0	160.0	143.0	125.0	114.0	125.0	143.0	160.0	164.0	176.0
10°	172.0	167.0	161.0	146.0	148.0	150.0	147.0	148.0	165.0	167.0	172.0
12.5°	172.0	172.0	174.0	170.0	173.0	179.0	176.0	171.0	177.0	176.0	182.0
15°	184.0	185.0	186.0	186.0	190.0	197.0	193.0	189.0	191.0	187.0	187.0
17.5°	199.0	203.0	199.0	199.0	205.0	209.0	205.0	201.0	200.0	206.0	202.0
20°	216.0	217.0	208.0	203.0	212.0	215.0	214.0	205.0	211.0	215.0	214.0
22.5°	233.0	231.0	217.0	208.0	215.0	218.0	212.0	209.0	220.0	233.0	233.0
25°	241.0	246.0	233.0	227.0	224.0	226.0	227.0	227.0	233.0	246.0	247.0
27.5°	263.0	261.0	238.0	244.0	239.0	228.0	240.0	245.0	238.0	261.0	267.0
30°	286.0	289.0	256.0	263.0	261.0	257.0	263.0	263.0	260.0	292.0	282.0
32.5°	319.0	313.0	288.0	280.0	280.0	284.0	276.0	281.0	295.0	322.0	325.0
35°	345.0	351.0	316.0	307.0	303.0	292.0	304.0	308.0	322.0	356.0	353.0
37.5°	409.0	391.0	355.0	341.0	333.0	336.0	340.0	346.0	361.0	404.0	411.0
40°	451.0	445.0	401.0	385.0	358.0	372.0	366.0	390.0	413.0	461.0	475.0
42.5°	521.0	508.0	461.0	442.0	415.0	394.0	414.0	442.0	477.0	530.0	542.0
45°	597.1	565.0	526.0	504.0	471.0	466.0	475.0	512.0	529.0	584.0	609.1
47.5°	678.1	643.1	600.1	570.0	534.0	558.0	546.0	581.0	614.1	653.1	692.1
50°	766.1	729.1	687.1	652.1	634.1	638.1	642.1	663.1	700.1	742.1	779.1
52.5°	884.1	836.1	784.1	761.1	773.1	746.1	779.1	766.1	794.1	847.1	889.1
55°	1062.1	1014.1	950.1	926.1	925.1	908.1	932.1	911.1	927.1	987.1	1049.1
57.5°	1250.1	1175.1	1125.1	1114.1	1129.1	1124.1	1126.1	1117.1	1137.1	1191.1	1259.1
60°	1390.1	1308.1	1296.1	1305.1	1385.1	1412.1	1378.1	1311.1	1311.1	1336.1	1425.1
62.5°	1393.1	1307.1	1325.1	1390.1	1644.1	1810.2	1640.1	1411.1	1349.1	1322.1	1420.1
65°	1185.1	1096.1	1169.1	1349.1	1746.1	2113.2	1764.1	1337.1	1201.1	1119.1	1207.1
67.5°	804.1	740.1	832.1	1068.1	1568.1	2080.2	1575.1	1056.1	834.1	714.1	799.1
70°	409.0	373.0	456.0	626.1	1084.1	1625.1	1081.1	633.1	451.0	375.0	419.0
72.5°	176.0	164.0	199.0	290.0	568.0	953.1	578.0	284.0	181.0	156.0	173.0
75°	79.0	76.0	86.0	108.0	209.0	388.0	208.0	97.0	80.0	77.0	86.0
77.5°	56.0	54.0	58.0	62.0	77.0	107.0	80.0	62.0	56.0	55.0	58.0
80°	39.0	38.0	42.0	47.0	49.0	52.0	51.0	49.0	44.0	38.0	40.0
82.5°	19.0	20.0	30.0	33.0	35.0	33.0	37.0	35.0	31.0	22.0	22.0
85°	10.0	11.0	19.0	20.0	21.0	16.0	20.0	21.0	20.0	13.0	12.0
87.5°	4.0	6.0	7.0	7.0	7.0	4.0	7.0	9.0	8.0	7.0	4.0
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)