

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: P596102

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

Issue Date: 4/29/2022

Test Information

Test Method: LM-79-08
Report Number: P596102
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-SA4A-AMB-U-5WQ
Description: POST TOP DECORATIVE LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH
AND TYPE V WIDE OPTICS.
Light Source: (64) 1549K CCT, -21.5 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3287 lumens
Efficiency: N/A
Efficacy: 41.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B2 - U0 - G1

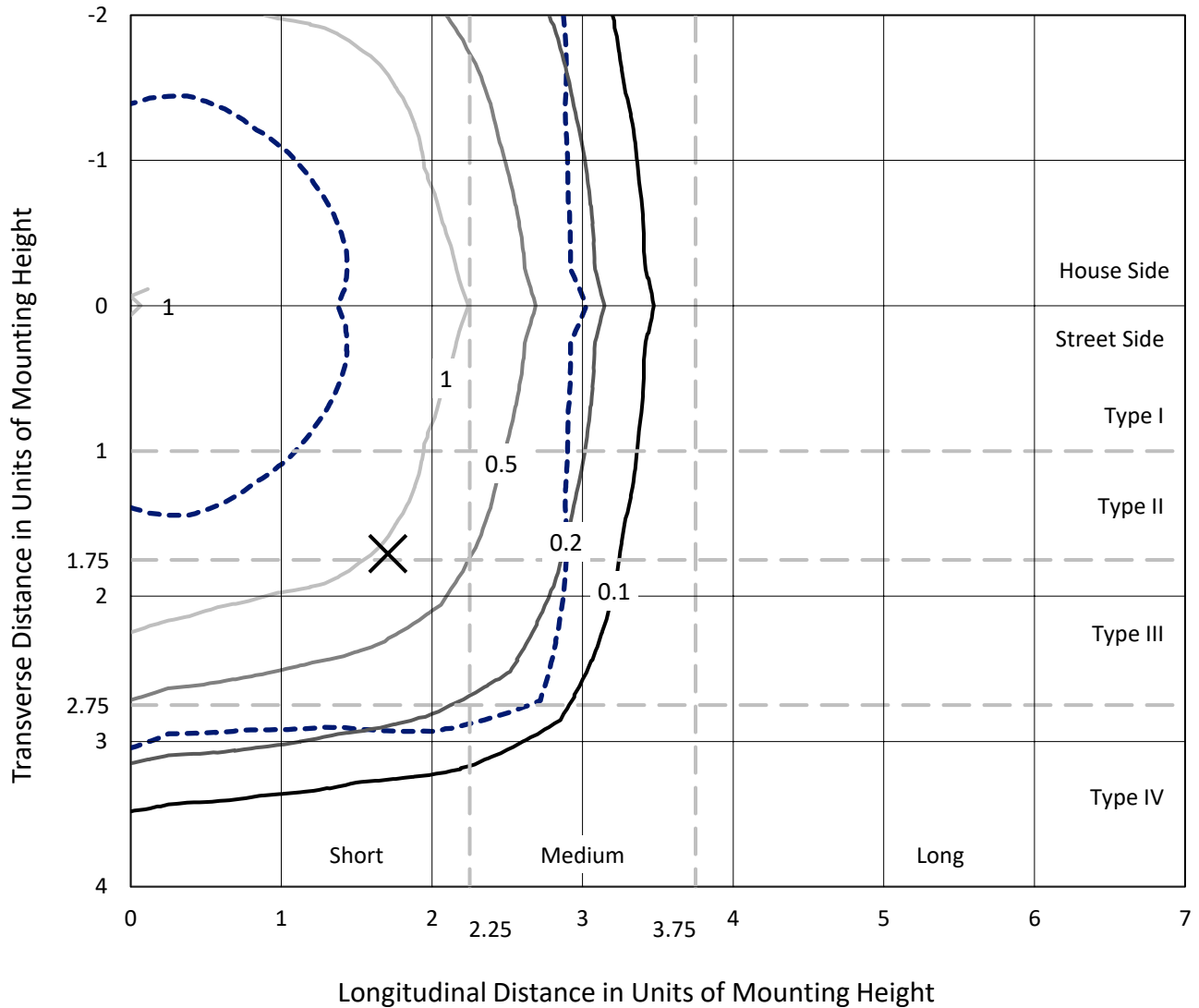
Input Watts (W): 79
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

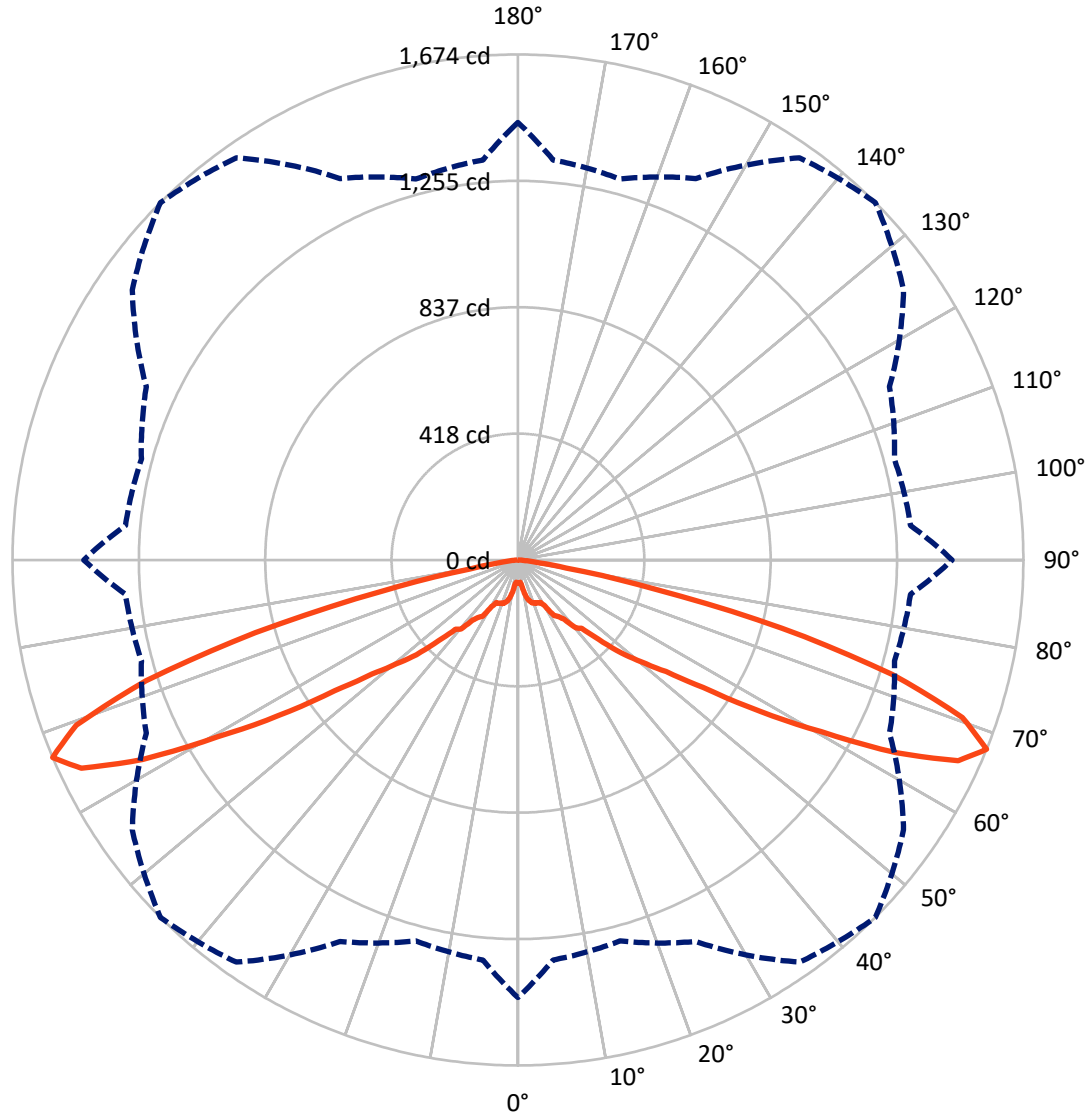
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.8 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



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

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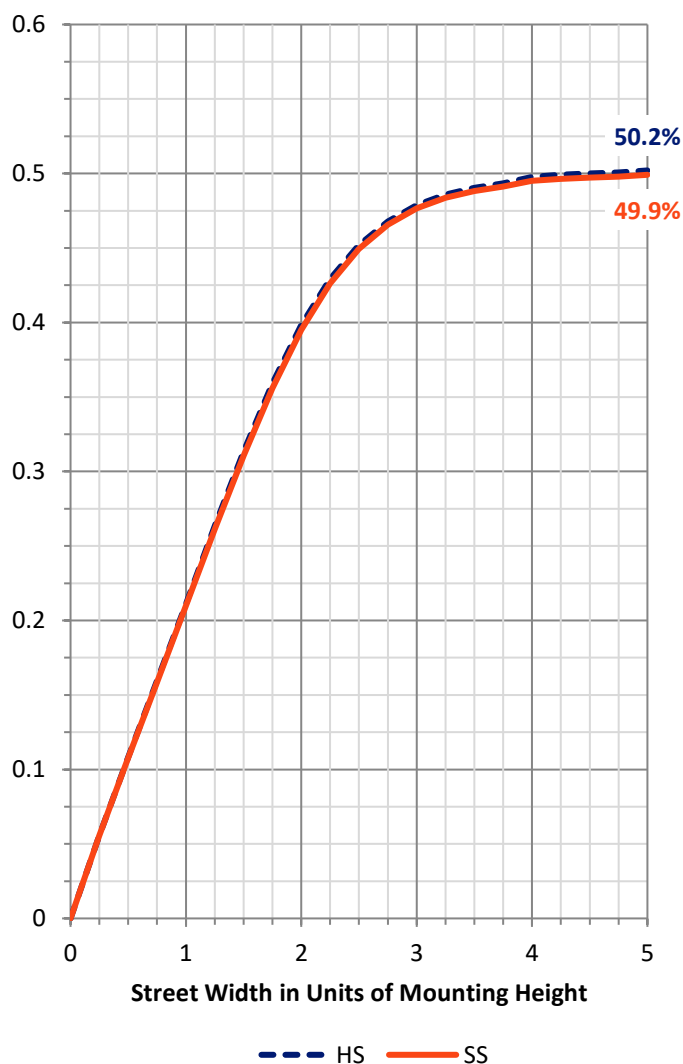
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1643.5	0.0	1643.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1643.5	0.0	1643.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	3287.0	0.0	3287.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.4	0.3
10°-20°	39.0	1.2
20°-30°	79.6	2.4
30°-40°	156.9	4.8
40°-50°	325.4	9.9
50°-60°	723.6	22.0
60°-70°	1334.7	40.6
70°-80°	589.4	17.9
80°-90°	29.1	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°	3287.0	100.0
0°-180°	3287.0	100.0

Coefficient of Utilization



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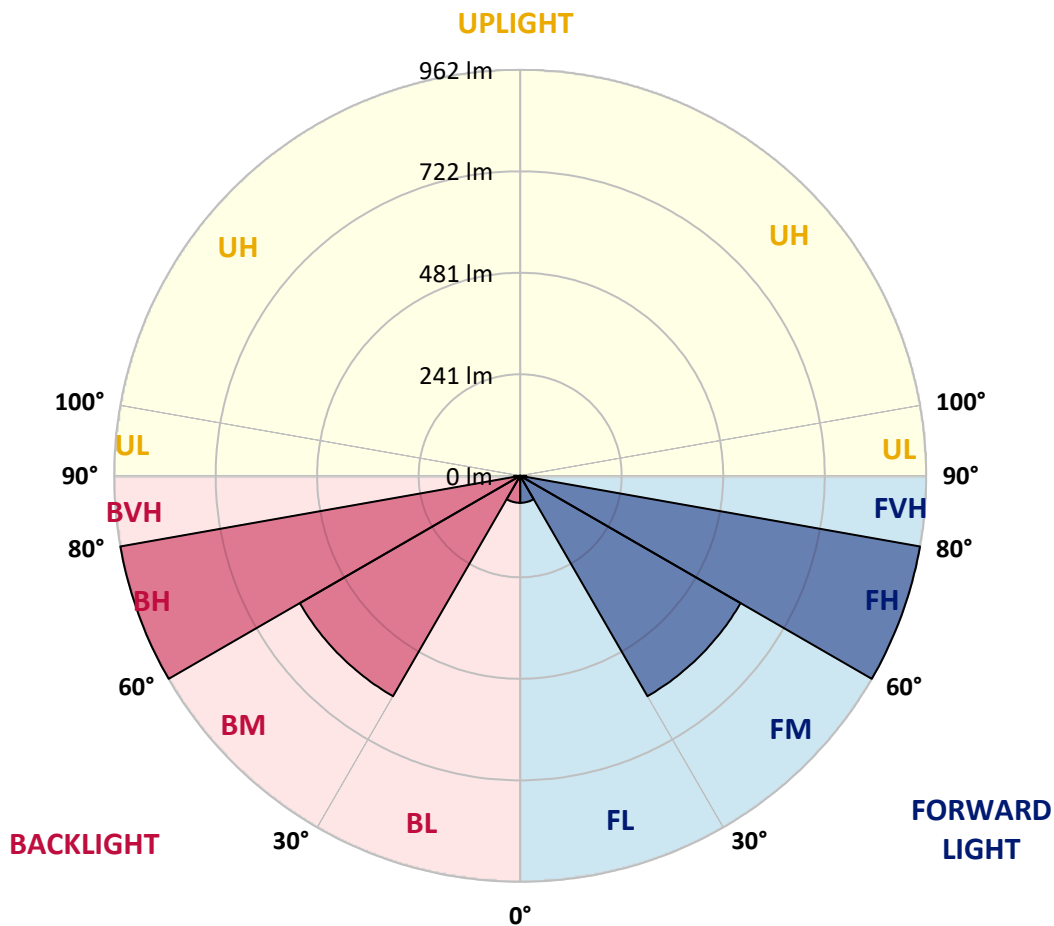
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	64.0	1.9			
FM (30°-60°)	603.0	18.3			
FH (60°-80°)	962.0	29.3			G1/1800
FVH (80°-90°)	14.5	0.4			G1/100
BL (0°-30°)	64.0	1.9	B0/110		
BM (30°-60°)	603.0	18.3	B1/1000		
BH (60°-80°)	962.0	29.3	B2/1000		G1/1800
BVH (80°-90°)	14.5	0.4			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°	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
2.5°	91.0	84.0	81.0	77.0	76.0	77.0	76.0	75.0	83.0	82.0	90.0
5°	113.0	103.0	102.0	90.0	79.0	74.0	78.0	89.0	102.0	105.0	116.0
7.5°	126.0	117.0	114.0	101.0	89.0	82.0	88.0	100.0	112.0	116.0	125.0
10°	124.0	120.0	117.0	105.0	105.0	107.0	105.0	105.0	116.0	119.0	123.0
12.5°	127.0	126.0	125.0	123.0	124.0	127.0	125.0	123.0	127.0	127.0	131.0
15°	137.0	137.0	135.0	134.0	137.0	140.0	137.0	136.0	139.0	138.0	138.0
17.5°	150.0	153.0	148.0	144.0	145.0	148.0	146.0	144.0	147.0	153.0	150.0
20°	164.0	164.0	153.0	147.0	152.0	153.0	151.0	147.0	154.0	162.0	162.0
22.5°	177.0	175.0	159.0	151.0	153.0	154.0	152.0	149.0	159.0	173.0	175.0
25°	184.0	185.0	171.0	161.0	159.0	158.0	159.0	160.0	169.0	182.0	184.0
27.5°	210.0	205.0	179.0	177.0	168.0	159.0	167.0	176.0	180.0	203.0	209.0
30°	226.0	230.0	200.0	198.0	188.0	177.0	188.0	200.0	202.0	233.0	228.0
32.5°	241.0	237.0	217.0	209.0	210.0	219.0	212.0	211.0	217.0	239.0	243.0
35°	271.0	275.0	240.0	222.0	224.0	230.0	223.0	221.0	238.0	272.0	271.0
37.5°	340.0	324.0	290.0	254.0	246.0	249.0	247.0	257.0	286.0	329.0	338.0
40°	364.0	356.0	311.0	295.0	283.0	296.0	286.0	296.0	317.0	360.0	373.0
42.5°	418.9	404.9	360.0	332.0	314.0	309.0	311.0	329.0	363.0	411.9	428.9
45°	489.9	458.9	419.9	393.0	366.0	375.0	366.0	391.0	417.9	471.9	501.9
47.5°	560.9	534.9	483.9	454.9	428.9	459.9	429.9	453.9	490.9	541.9	573.9
50°	645.9	613.9	558.9	517.9	513.9	529.9	512.9	522.9	569.9	625.9	658.9
52.5°	742.9	704.9	643.9	619.9	629.9	613.9	624.9	614.9	660.9	721.9	766.9
55°	860.9	812.9	756.9	760.9	768.9	744.9	761.9	758.9	775.9	822.9	871.9
57.5°	1030.9	970.9	905.9	909.9	948.9	946.9	937.9	920.9	911.9	943.9	1012.9
60°	1231.8	1145.9	1089.9	1082.9	1164.9	1153.9	1165.9	1096.9	1072.9	1129.9	1219.8
62.5°	1414.8	1318.8	1256.8	1270.8	1404.8	1406.8	1372.8	1243.8	1244.8	1308.8	1404.8
65°	1519.8	1398.8	1347.8	1399.8	1572.8	1601.8	1519.8	1352.8	1344.8	1387.8	1502.8
67.5°	1448.8	1329.8	1305.8	1393.8	1625.8	1673.8	1558.8	1357.8	1290.8	1304.8	1437.8
70°	1183.9	1048.9	1088.9	1207.9	1465.8	1561.8	1393.8	1156.9	1058.9	1013.9	1122.9
72.5°	692.9	624.9	701.9	847.9	1137.9	1294.8	1085.9	834.9	694.9	606.9	690.9
75°	321.0	289.0	325.0	451.9	723.9	902.9	678.9	448.9	332.0	276.0	305.0
77.5°	108.0	101.0	123.0	190.0	351.0	464.9	333.0	188.0	122.0	109.0	117.0
80°	46.0	46.0	51.0	71.0	134.0	162.0	131.0	76.0	57.0	52.0	53.0
82.5°	23.0	23.0	30.0	35.0	45.0	50.0	50.0	42.0	36.0	30.0	29.0
85°	11.0	12.0	17.0	18.0	23.0	18.0	23.0	22.0	22.0	16.0	14.0
87.5°	4.0	5.0	6.0	7.0	7.0	5.0	8.0	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)