

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: P596498

Luminaire Tested: **MSA-SA1B-827-U-5NQ**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596498
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-5)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA1B-827-U-5NQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3810 lumens
Efficiency: N/A
Efficacy: 86.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B2 - U0 - G0

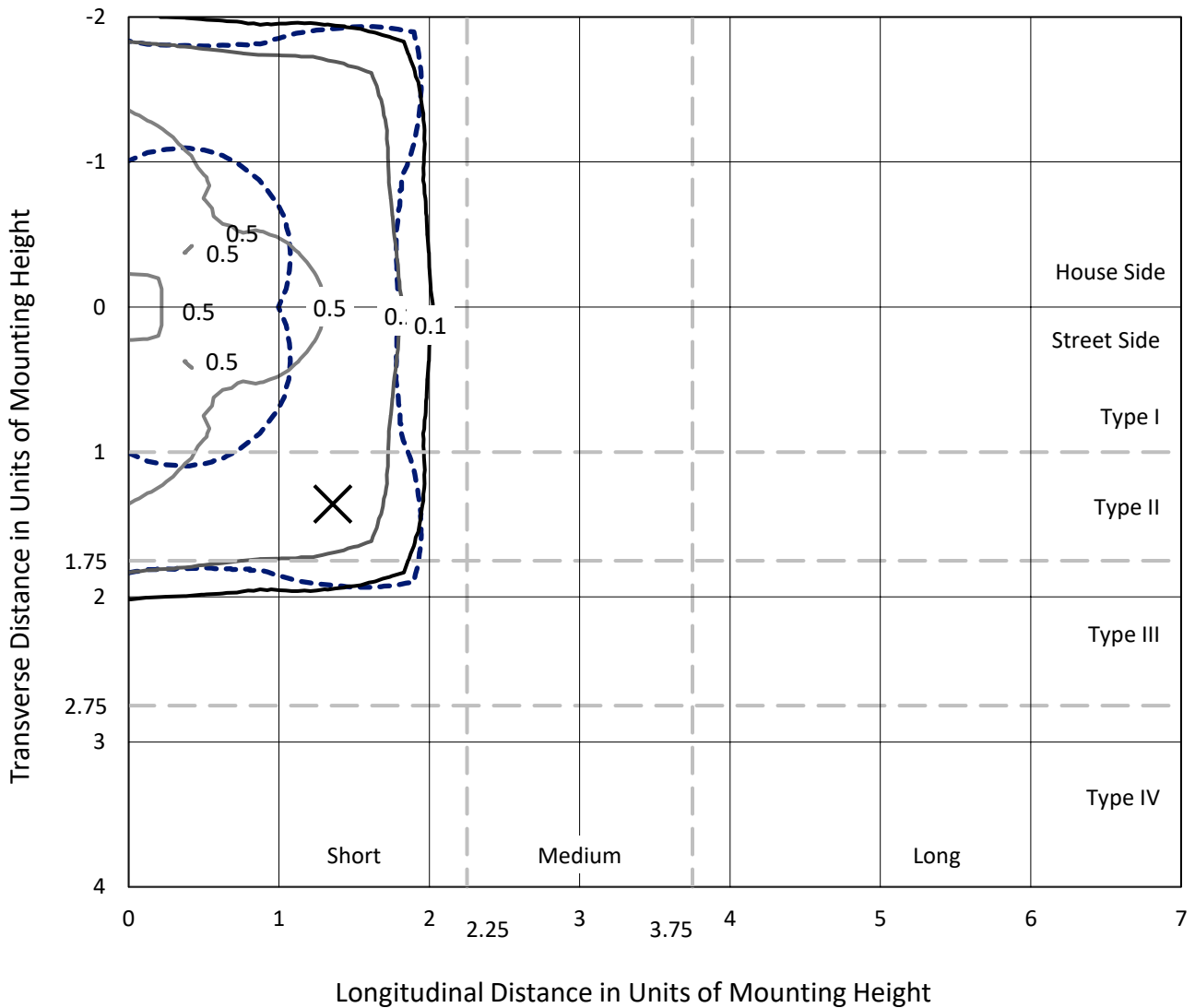
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

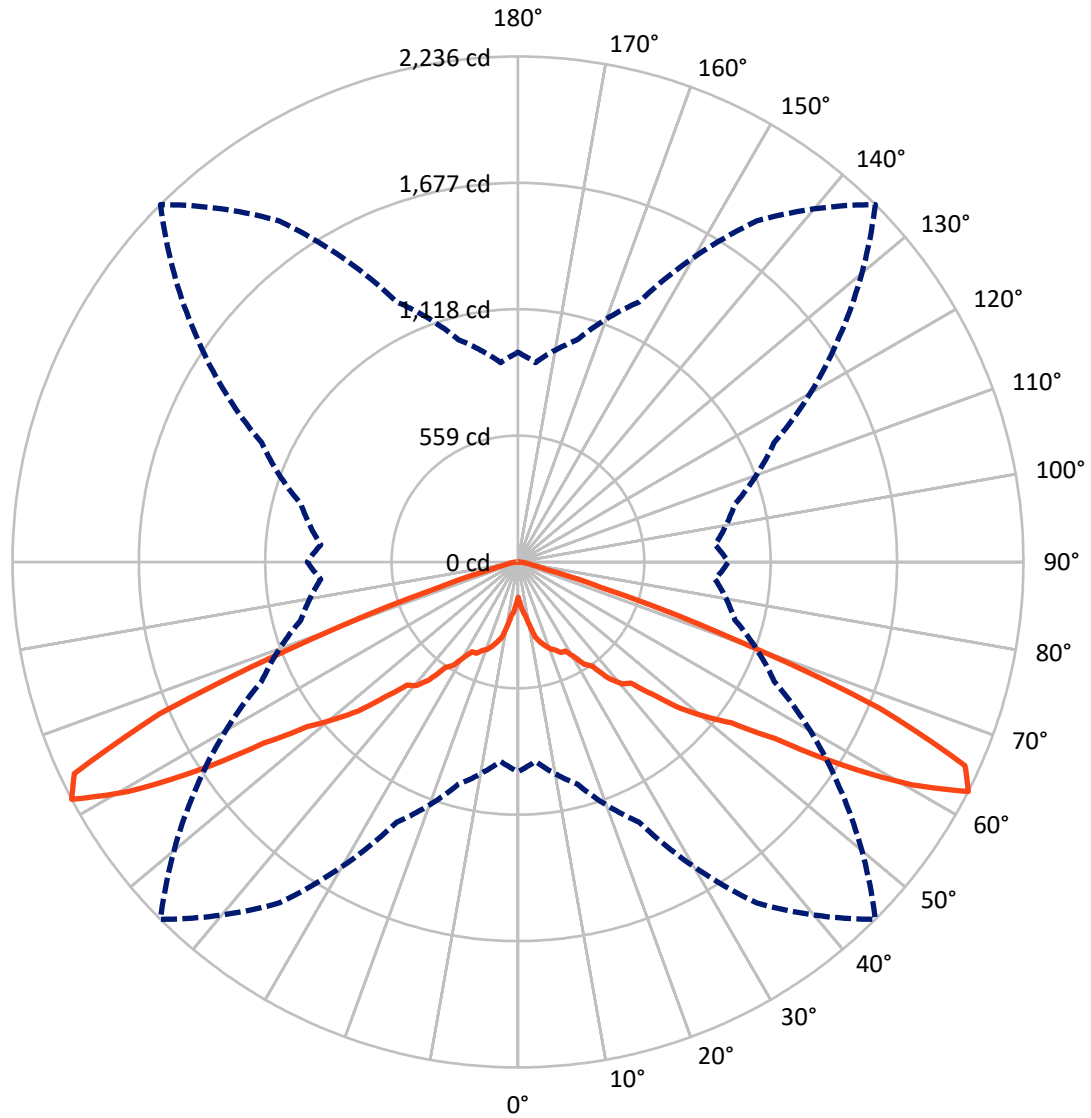
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 fc
 Type V - Short - N/A

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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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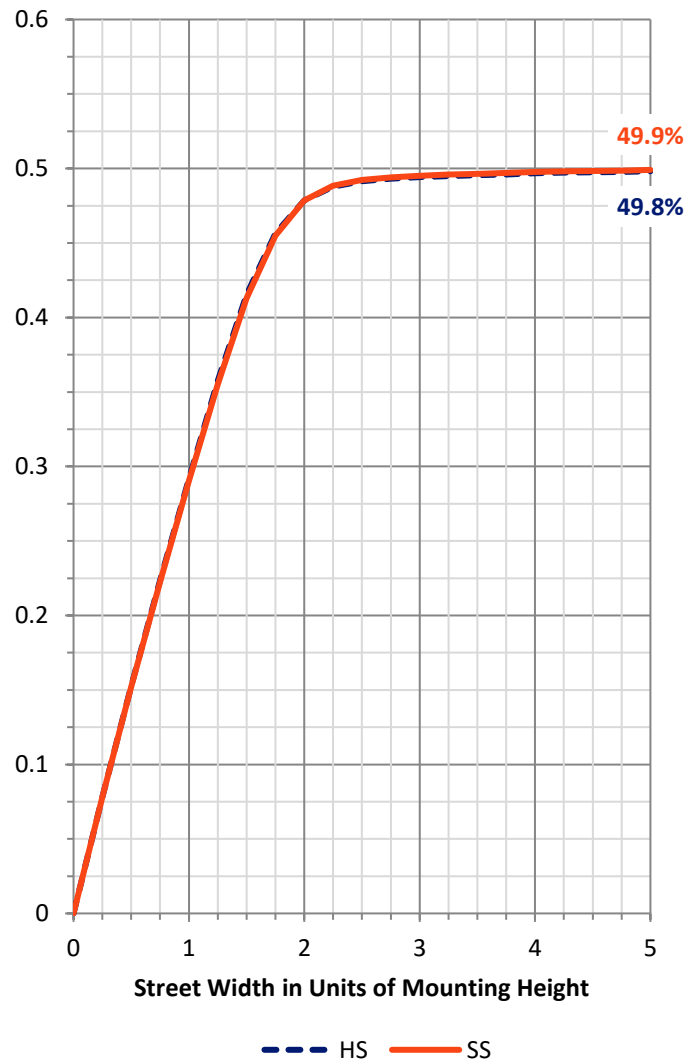
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1905.0	0.0	1905.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1905.0	0.0	1905.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	3810.0	0.0	3810.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.5	0.6
10°-20°	103.5	2.7
20°-30°	217.0	5.7
30°-40°	408.8	10.7
40°-50°	742.0	19.5
50°-60°	1253.7	32.9
60°-70°	937.2	24.6
70°-80°	104.8	2.8
80°-90°	19.5	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°	3810.0	100.0
0°-180°	3810.0	100.0



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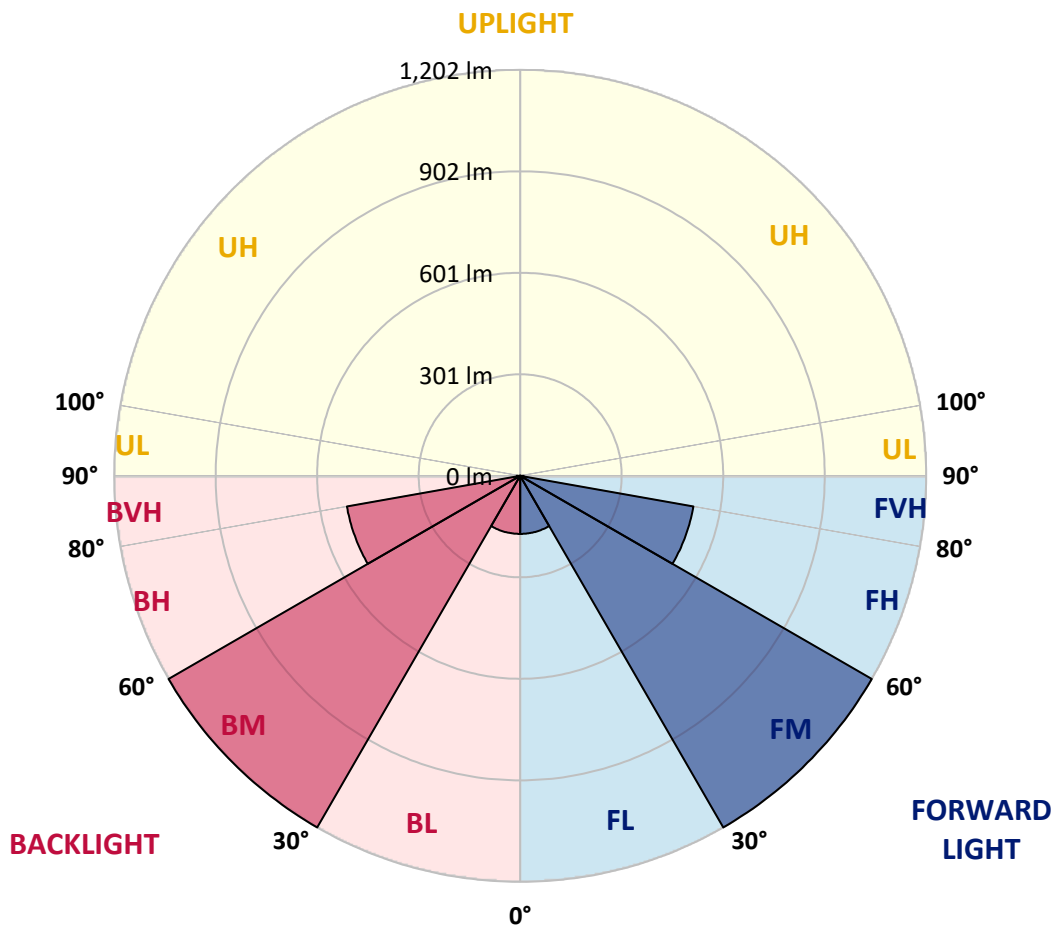
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	172.0	4.5			
FM (30°-60°)	1202.2	31.6			
FH (60°-80°)	521.0	13.7			G0/660
FVH (80°-90°)	9.8	0.3			G0/10
BL (0°-30°)	172.0	4.5	B1/500		
BM (30°-60°)	1202.2	31.6	B2/2500		
BH (60°-80°)	521.0	13.7	B2/1000		G0/660
BVH (80°-90°)	9.8	0.3			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G0

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	155.8	155.8	155.8	155.8	155.8	155.8	155.8	155.8	155.8	155.8	155.8
2.5°	189.4	186.0	174.1	178.3	182.6	182.0	180.9	177.6	174.7	186.9	189.4
5°	241.5	233.7	229.6	226.2	225.4	217.0	228.5	227.2	231.1	237.6	244.0
7.5°	283.0	275.8	264.7	262.4	249.9	240.6	250.5	262.7	266.6	278.5	285.7
10°	298.2	291.9	293.9	283.5	282.9	285.5	283.4	286.1	296.4	295.0	300.2
12.5°	332.3	333.4	326.9	324.3	329.5	341.0	331.2	327.8	325.4	335.9	339.2
15°	364.3	370.6	359.9	358.2	356.0	366.7	356.2	361.3	365.8	368.0	366.7
17.5°	409.5	409.8	397.9	378.8	386.0	389.4	384.7	375.9	397.1	407.8	408.4
20°	439.3	440.4	416.8	387.0	407.2	410.3	408.0	389.5	417.7	435.6	434.8
22.5°	471.4	467.7	435.7	414.0	421.2	423.0	418.1	415.7	435.6	468.0	463.2
25°	492.9	499.7	468.0	454.0	448.0	443.6	450.0	451.2	471.5	501.0	484.7
27.5°	544.4	532.6	482.8	488.1	475.2	446.0	473.9	489.2	484.9	535.1	547.3
30°	590.1	590.4	520.7	530.7	506.9	483.2	513.4	535.5	530.1	594.4	582.8
32.5°	648.5	650.7	585.9	559.0	542.8	538.3	534.6	559.1	592.9	645.0	646.1
35°	711.6	730.2	642.2	613.8	586.4	566.5	587.9	621.9	643.9	727.1	712.4
37.5°	834.6	803.2	731.2	677.8	660.3	652.4	663.7	683.4	731.0	802.8	828.0
40°	907.2	898.6	800.4	755.8	688.2	709.3	703.1	757.0	796.4	903.5	905.9
42.5°	1018.4	974.7	886.5	829.7	769.0	732.4	771.2	843.5	891.1	981.7	1024.4
45°	1106.3	1050.2	982.1	939.0	862.3	835.2	849.1	941.8	1001.5	1063.6	1119.9
47.5°	1203.5	1142.7	1074.7	998.1	923.2	967.4	942.7	1024.3	1082.6	1171.7	1224.4
50°	1325.6	1258.3	1171.2	1108.0	1058.4	1073.9	1070.0	1128.1	1200.1	1281.3	1341.1
52.5°	1460.2	1384.0	1300.0	1241.3	1220.4	1181.9	1232.1	1256.0	1309.0	1383.4	1453.6
55°	1554.2	1478.1	1427.3	1446.2	1440.6	1378.9	1423.0	1425.4	1399.9	1426.7	1497.4
57.5°	1539.7	1467.0	1460.0	1531.5	1638.3	1697.9	1629.9	1483.6	1387.8	1375.2	1450.1
60°	1346.2	1284.1	1347.9	1509.1	1820.2	2001.9	1739.9	1439.7	1281.9	1216.6	1288.9
62.5°	927.7	885.7	1018.1	1270.1	1842.1	2236.4	1735.9	1251.1	994.2	875.8	931.9
65°	439.8	424.6	536.3	805.3	1534.4	2173.8	1516.6	846.5	572.3	457.1	469.8
67.5°	165.4	157.8	196.9	355.7	966.5	1724.1	1019.5	417.6	221.3	172.1	177.9
70°	93.9	88.5	93.6	129.7	389.1	976.5	439.8	143.2	94.1	85.7	91.3
72.5°	73.9	69.8	70.5	78.4	134.2	383.3	142.3	81.7	68.4	64.9	69.9
75°	61.1	57.4	57.2	61.5	78.3	124.5	80.4	62.5	55.3	52.9	56.9
77.5°	48.5	46.3	47.0	50.4	56.1	69.6	58.3	50.5	45.4	42.5	45.3
80°	35.5	35.2	37.7	40.8	41.9	46.8	43.7	40.8	36.3	32.1	33.2
82.5°	23.3	23.4	28.1	30.5	30.1	29.9	31.3	31.2	27.1	21.2	21.2
85°	13.3	13.6	17.2	19.2	18.9	15.0	19.8	20.0	17.4	12.9	12.4
87.5°	4.3	5.4	7.4	7.9	7.6	4.2	7.6	8.4	7.6	5.4	4.8
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)