

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: P596652

Luminaire Tested: **MSA-SA3A-827-U-5NQ**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596652
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-SA3A-827-U-5NQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8824 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

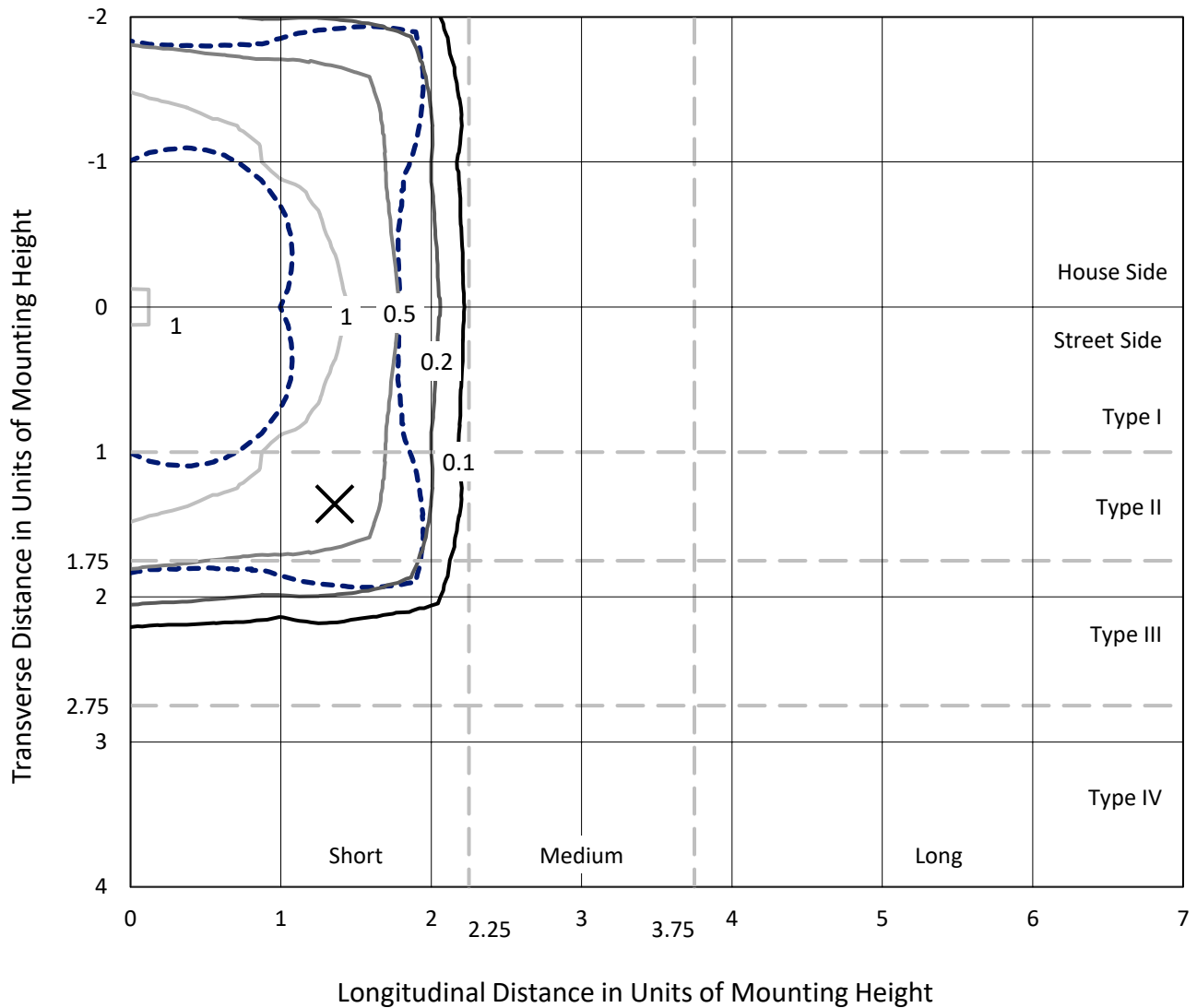
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

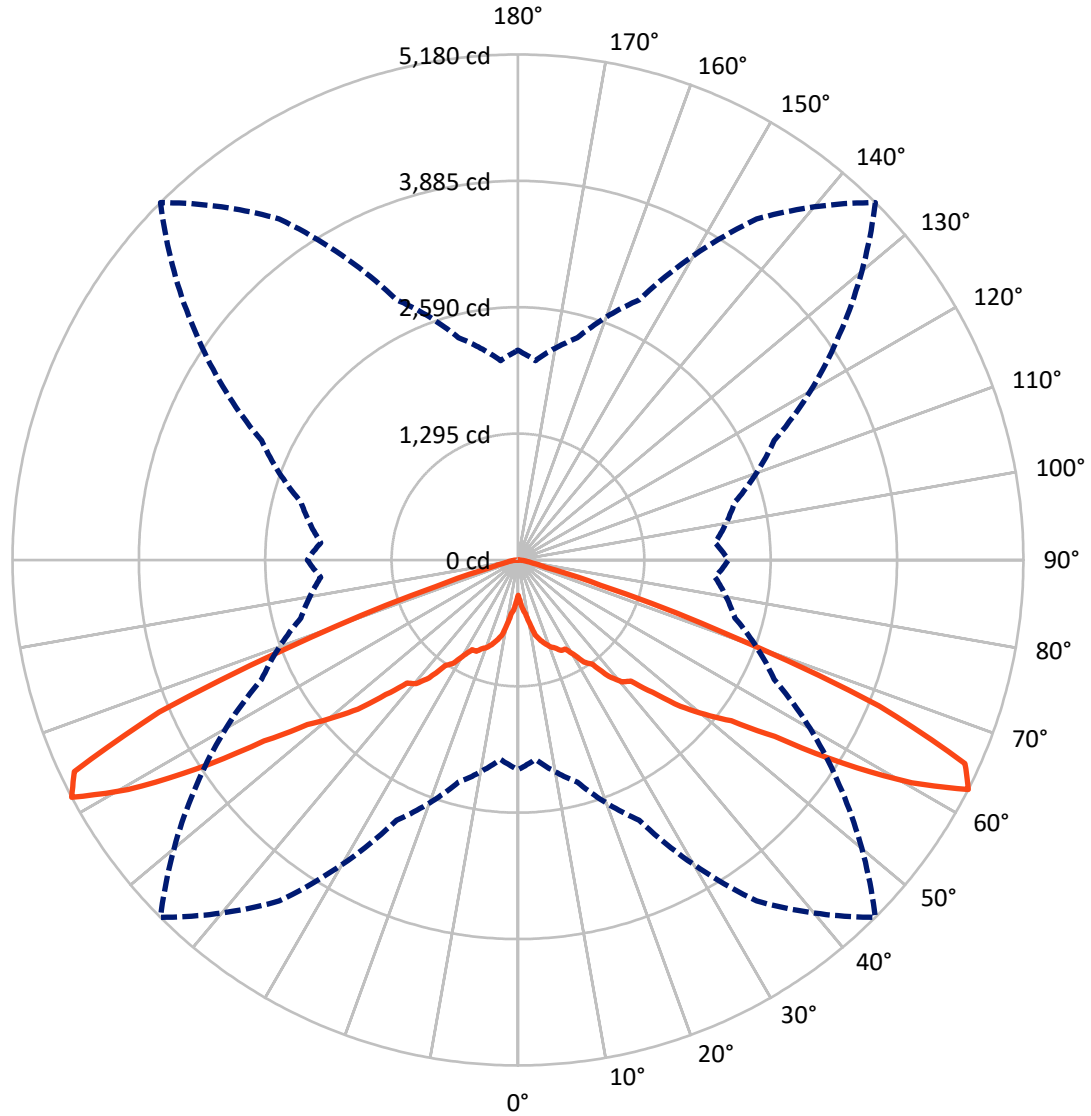
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 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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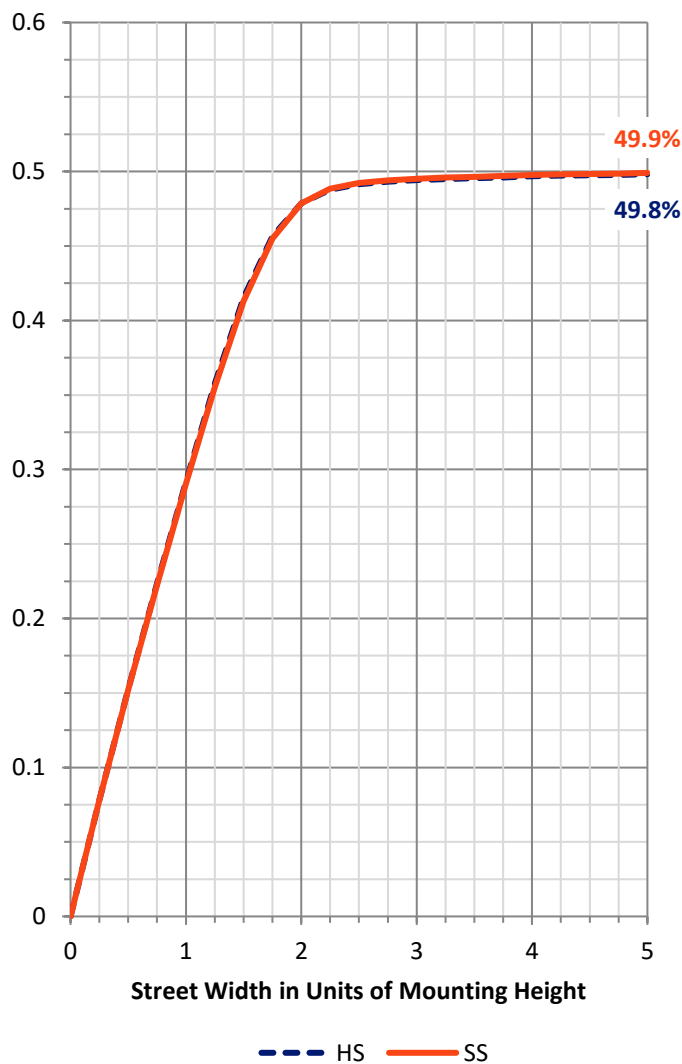
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4412.0	0.0	4412.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4412.0	0.0	4412.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	8824.0	0.0	8824.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	0.6
10°-20°	239.8	2.7
20°-30°	502.5	5.7
30°-40°	946.8	10.7
40°-50°	1718.4	19.5
50°-60°	2903.5	32.9
60°-70°	2170.6	24.6
70°-80°	242.8	2.8
80°-90°	45.2	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°	8824.0	100.0
0°-180°	8824.0	100.0

Coefficient of Utilization

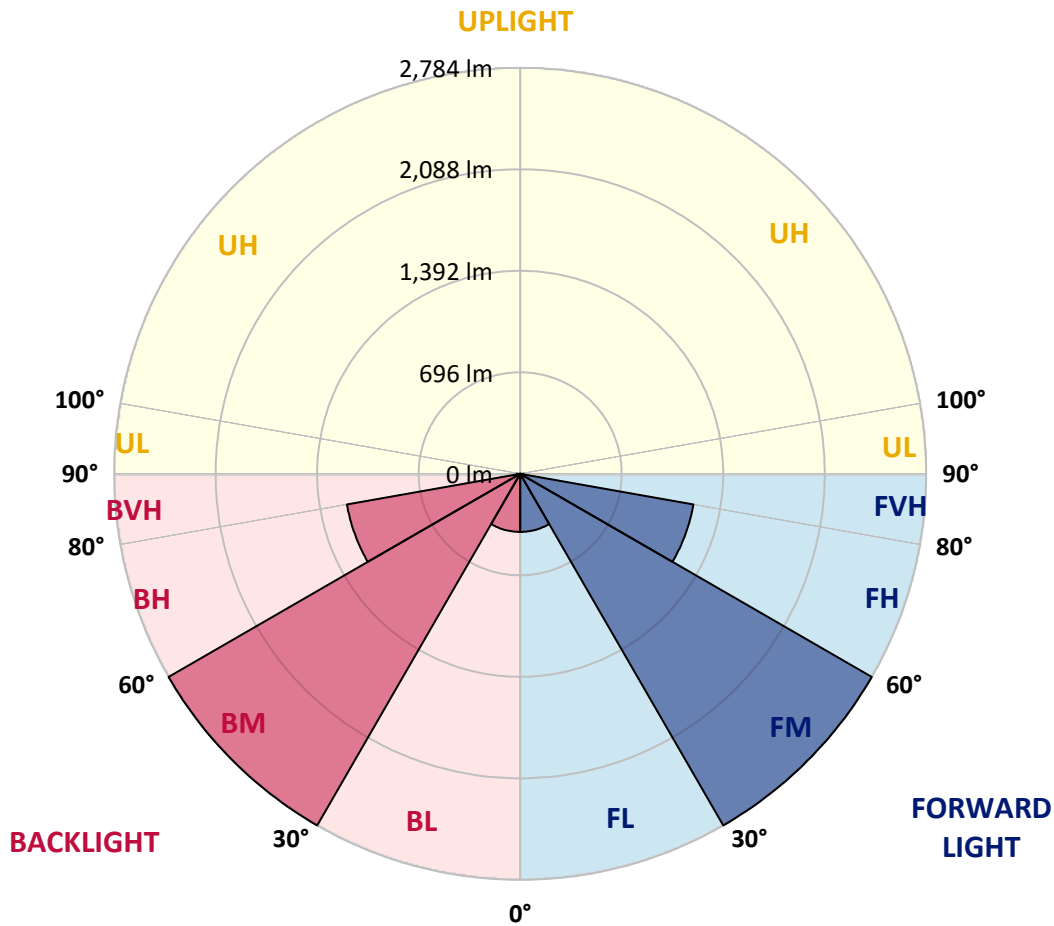


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	398.3	4.5			
FM (30°-60°)	2784.4	31.6			
FH (60°-80°)	1206.7	13.7			G1/1800
FVH (80°-90°)	22.6	0.3			G1/100
BL (0°-30°)	398.3	4.5	B1/500		
BM (30°-60°)	2784.4	31.6	B3/5000		
BH (60°-80°)	1206.7	13.7	B3/2500		G1/1800
BVH (80°-90°)	22.6	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1
 Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	360.8	360.8	360.8	360.8	360.8	360.8	360.8	360.8	360.8	360.8	360.8
2.5°	438.7	430.8	403.2	412.8	422.9	421.5	418.9	411.4	404.6	432.9	438.7
5°	559.3	541.4	531.7	523.8	522.0	502.6	529.2	526.3	535.3	550.3	565.1
7.5°	655.5	638.7	613.2	607.8	578.7	557.2	580.1	608.5	617.5	645.1	661.6
10°	690.7	676.0	680.7	656.6	655.2	661.3	656.2	662.7	686.4	683.2	695.4
12.5°	769.7	772.2	757.1	751.0	763.2	789.8	767.2	759.3	753.5	777.9	785.5
15°	843.6	858.4	833.6	829.6	824.6	849.4	825.0	836.8	847.2	852.3	849.4
17.5°	948.5	949.2	921.5	877.4	893.9	901.8	891.0	870.6	919.7	944.5	946.0
20°	1017.4	1019.9	965.3	896.4	943.1	950.3	944.9	902.2	967.5	1008.8	1007.0
22.5°	1091.7	1083.1	1009.1	958.9	975.4	979.7	968.2	962.8	1008.8	1083.8	1072.7
25°	1141.6	1157.4	1083.8	1051.5	1037.5	1027.4	1042.2	1045.0	1092.1	1160.3	1122.6
27.5°	1260.8	1233.5	1118.3	1130.5	1100.7	1032.8	1097.4	1133.0	1122.9	1239.3	1267.6
30°	1366.7	1367.4	1205.9	1229.2	1173.9	1119.0	1189.0	1240.3	1227.8	1376.7	1349.8
32.5°	1502.0	1507.1	1357.0	1294.5	1257.2	1246.8	1238.2	1294.9	1373.2	1493.8	1496.3
35°	1648.1	1691.2	1487.3	1421.6	1358.1	1312.1	1361.7	1440.3	1491.3	1684.0	1649.9
37.5°	1932.8	1860.3	1693.4	1569.9	1529.3	1511.0	1537.2	1582.8	1693.0	1859.2	1917.8
40°	2101.2	2081.1	1853.8	1750.5	1593.9	1642.8	1628.4	1753.3	1844.5	2092.6	2098.0
42.5°	2358.6	2257.4	2053.1	1921.7	1781.0	1696.3	1786.0	1953.6	2063.9	2273.5	2372.6
45°	2562.1	2432.2	2274.6	2174.8	1997.1	1934.3	1966.6	2181.3	2319.5	2463.4	2593.7
47.5°	2787.2	2646.5	2488.9	2311.6	2138.2	2240.5	2183.4	2372.2	2507.2	2713.6	2835.7
50°	3070.1	2914.3	2712.6	2566.1	2451.2	2487.1	2478.1	2612.8	2779.3	2967.5	3106.0
52.5°	3381.7	3205.5	3010.9	2874.8	2826.4	2737.3	2853.7	2908.9	3031.7	3204.0	3366.7
55°	3599.6	3423.4	3305.6	3349.4	3336.5	3193.6	3295.6	3301.3	3242.1	3304.2	3467.9
57.5°	3565.9	3397.5	3381.4	3546.9	3794.2	3932.4	3774.8	3435.9	3214.1	3185.0	3358.4
60°	3117.9	2973.9	3121.8	3495.2	4215.7	4636.4	4029.7	3334.3	2968.9	2817.8	2985.0
62.5°	2148.6	2051.3	2357.9	2941.6	4266.3	5179.6	4020.4	2897.4	2302.6	2028.3	2158.3
65°	1018.5	983.3	1242.1	1865.0	3553.7	5034.5	3512.4	1960.5	1325.4	1058.7	1088.1
67.5°	383.0	365.5	455.9	823.9	2238.3	3993.1	2361.1	967.1	512.6	398.5	412.1
70°	217.6	205.0	216.8	300.5	901.1	2261.7	1018.5	331.7	217.9	198.5	211.4
72.5°	171.2	161.5	163.3	181.7	310.9	887.8	329.6	189.2	158.3	150.4	161.9
75°	141.4	132.8	132.5	142.5	181.3	288.3	186.3	144.7	128.2	122.4	131.8
77.5°	112.4	107.3	108.8	116.7	130.0	161.2	135.0	117.0	105.2	98.4	104.8
80°	82.2	81.5	87.2	94.4	96.9	108.4	101.2	94.4	84.0	74.3	76.8
82.5°	53.8	54.2	65.0	70.7	69.6	69.3	72.5	72.2	62.8	49.2	49.2
85°	30.9	31.6	39.8	44.5	43.8	34.8	46.0	46.3	40.2	29.8	28.7
87.5°	10.1	12.6	17.2	18.3	17.6	9.7	17.6	19.4	17.6	12.6	11.1
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)