

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: P596630

Luminaire Tested: **MSA-SA2D-827-U-5NQ**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596630
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-SA2D-827-U-5NQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10146 lumens
Efficiency: N/A
Efficacy: 78.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

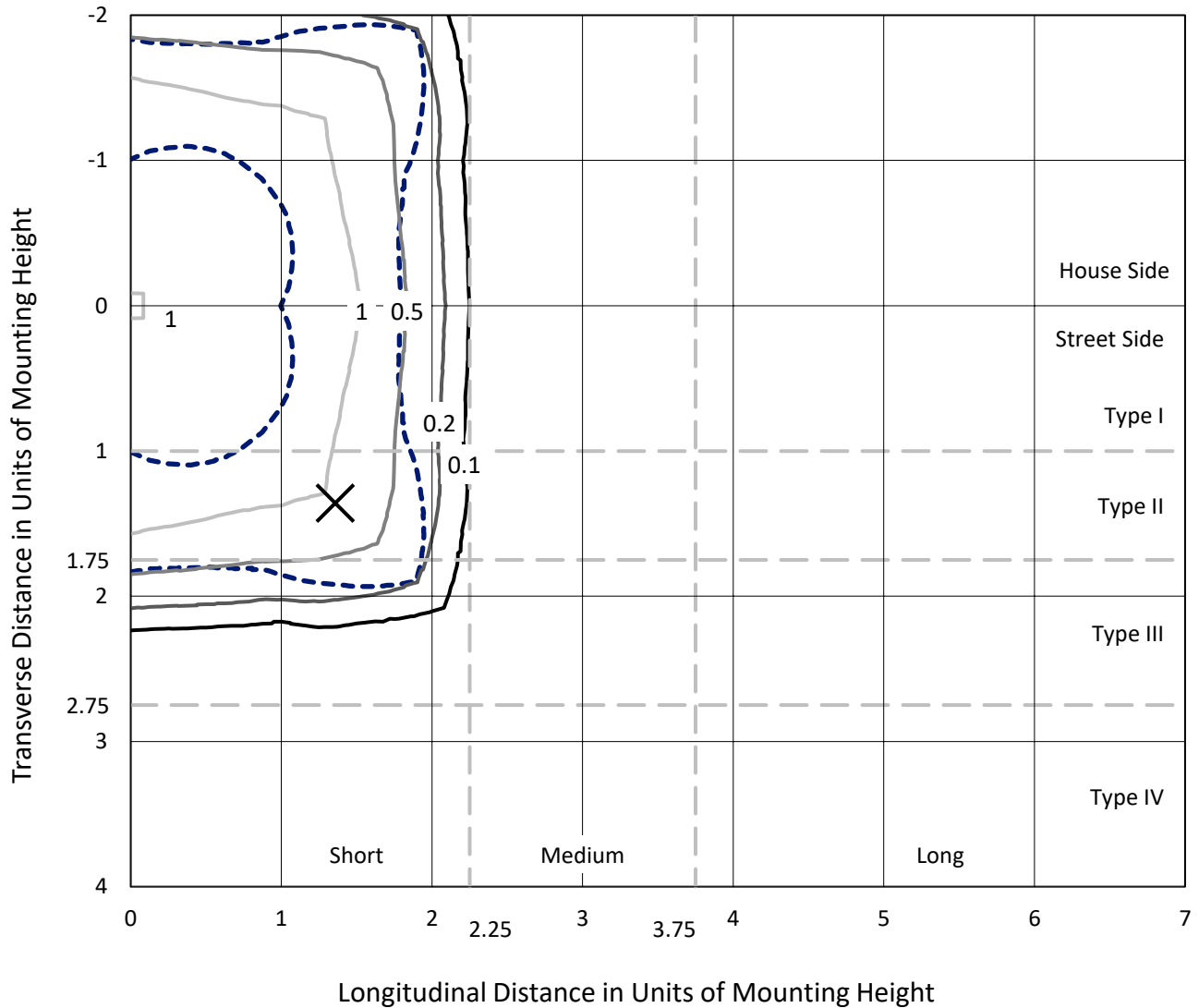
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

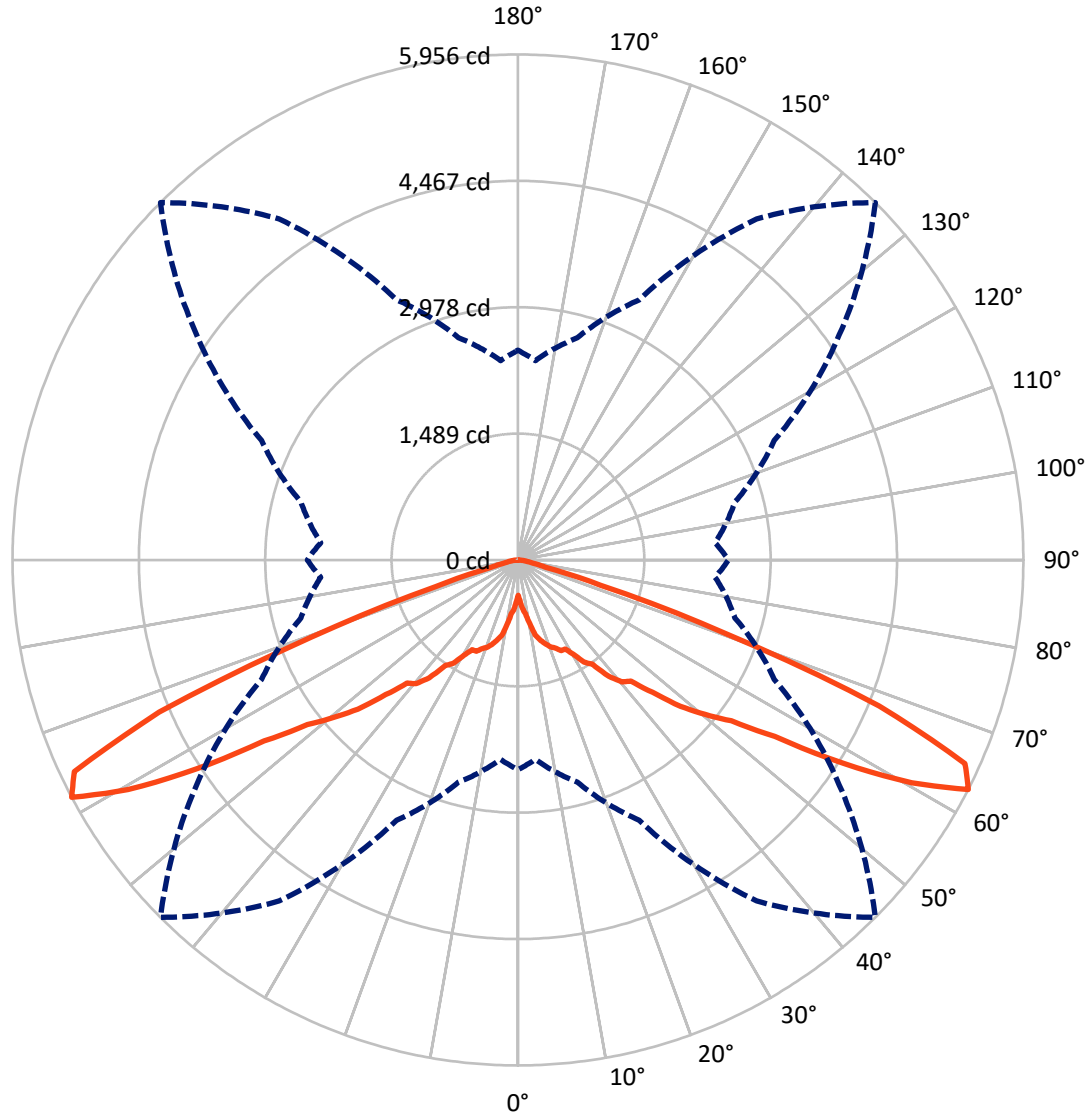
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 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	5073.0	0.0	5073.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5073.0	0.0	5073.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	10146.0	0.0	10146.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.5	0.6
10°-20°	275.7	2.7
20°-30°	577.8	5.7
30°-40°	1088.7	10.7
40°-50°	1975.9	19.5
50°-60°	3338.6	32.9
60°-70°	2495.8	24.6
70°-80°	279.2	2.8
80°-90°	52.0	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°	10146.0	100.0
0°-180°	10146.0	100.0

Coefficient of Utilization

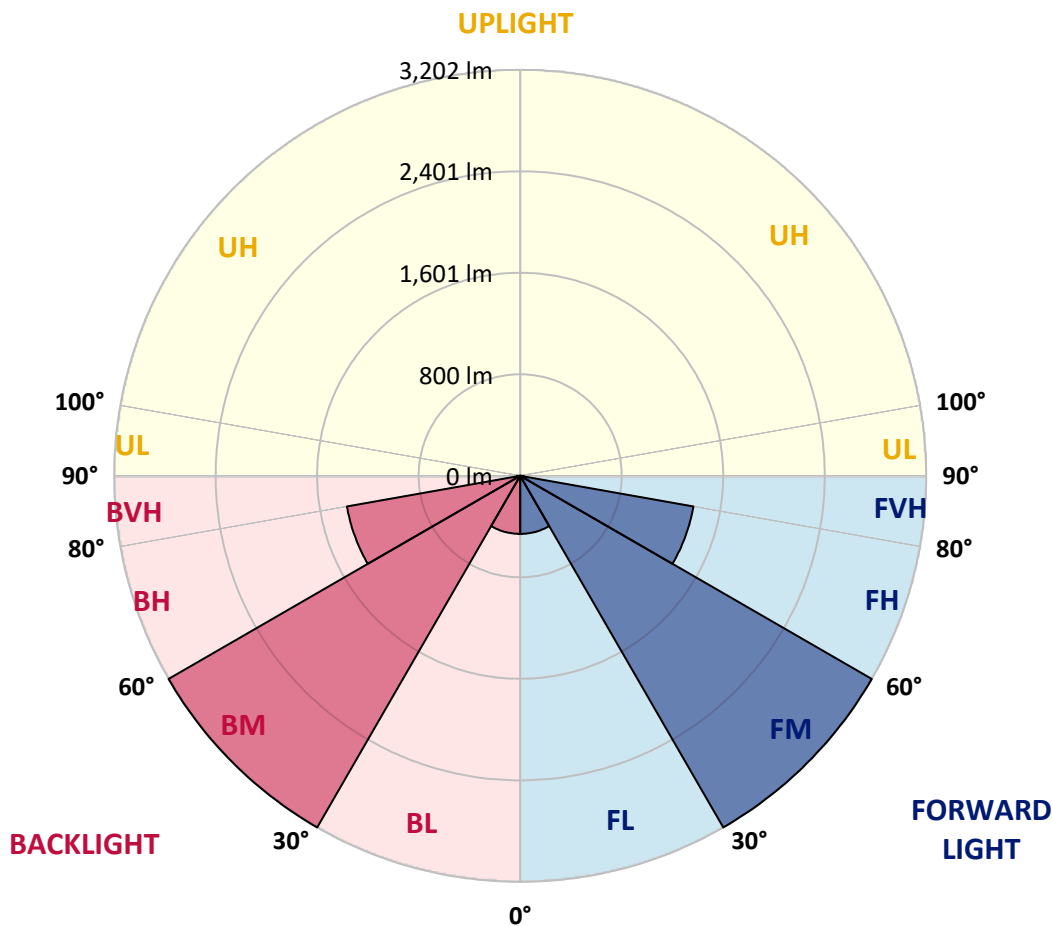


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	458.0	4.5			
FM (30°-60°)	3201.5	31.6			
FH (60°-80°)	1387.5	13.7			G1/1800
FVH (80°-90°)	26.0	0.3			G1/100
BL (0°-30°)	458.0	4.5	B1/500		
BM (30°-60°)	3201.5	31.6	B3/5000		
BH (60°-80°)	1387.5	13.7	B3/2500		G1/1800
BVH (80°-90°)	26.0	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°	414.8	414.8	414.8	414.8	414.8	414.8	414.8	414.8	414.8	414.8	414.8
2.5°	504.4	495.3	463.6	474.7	486.3	484.6	481.7	473.0	465.2	497.8	504.4
5°	643.1	622.5	611.3	602.2	600.2	577.9	608.4	605.1	615.5	632.8	649.7
7.5°	753.7	734.3	705.0	698.8	665.4	640.6	667.1	699.7	710.0	741.8	760.8
10°	794.2	777.3	782.6	755.0	753.3	760.3	754.6	762.0	789.2	785.5	799.6
12.5°	885.0	887.9	870.6	863.5	877.6	908.1	882.1	873.0	866.4	894.5	903.2
15°	970.0	987.0	958.5	953.9	948.2	976.6	948.6	962.2	974.2	979.9	976.6
17.5°	1090.6	1091.4	1059.6	1008.8	1027.8	1036.9	1024.5	1001.0	1057.5	1086.0	1087.7
20°	1169.8	1172.7	1110.0	1030.7	1084.4	1092.6	1086.4	1037.3	1112.4	1159.9	1157.8
22.5°	1255.3	1245.4	1160.3	1102.5	1121.5	1126.5	1113.3	1107.1	1159.9	1246.2	1233.4
25°	1312.6	1330.8	1246.2	1209.0	1192.9	1181.4	1198.3	1201.6	1255.7	1334.1	1290.8
27.5°	1449.7	1418.3	1285.8	1299.8	1265.6	1187.6	1261.9	1302.7	1291.2	1424.9	1457.5
30°	1571.4	1572.3	1386.5	1413.4	1349.8	1286.6	1367.1	1426.2	1411.7	1583.0	1552.0
32.5°	1727.1	1732.8	1560.3	1488.5	1445.6	1433.6	1423.7	1488.9	1578.9	1717.6	1720.5
35°	1895.1	1944.6	1710.1	1634.6	1561.5	1508.7	1565.7	1656.1	1714.7	1936.3	1897.1
37.5°	2222.4	2139.0	1947.1	1805.1	1758.4	1737.4	1767.5	1819.9	1946.7	2137.8	2205.1
40°	2416.0	2392.9	2131.6	2012.7	1832.7	1888.9	1872.4	2016.0	2120.9	2406.1	2412.3
42.5°	2712.0	2595.6	2360.7	2209.6	2047.8	1950.4	2053.6	2246.3	2373.1	2614.1	2728.1
45°	2946.0	2796.6	2615.4	2500.6	2296.3	2224.1	2261.2	2508.0	2667.0	2832.5	2982.3
47.5°	3204.8	3043.0	2861.8	2657.9	2458.5	2576.2	2510.5	2727.6	2882.8	3120.2	3260.5
50°	3530.1	3350.9	3119.0	2950.5	2818.5	2859.7	2849.4	3004.2	3195.7	3412.0	3571.4
52.5°	3888.4	3685.7	3462.0	3305.5	3249.8	3147.4	3281.2	3344.7	3485.9	3684.1	3871.0
55°	4138.9	3936.3	3800.9	3851.2	3836.4	3672.1	3789.3	3795.9	3727.8	3799.2	3987.4
57.5°	4100.1	3906.5	3888.0	4078.3	4362.7	4521.6	4340.4	3950.7	3695.6	3662.2	3861.5
60°	3585.0	3419.5	3589.5	4018.8	4847.3	5331.0	4633.4	3833.9	3413.7	3239.9	3432.3
62.5°	2470.5	2358.6	2711.1	3382.3	4905.5	5955.6	4622.7	3331.5	2647.6	2332.2	2481.6
65°	1171.1	1130.6	1428.2	2144.4	4086.1	5788.8	4038.6	2254.2	1524.0	1217.3	1251.1
67.5°	440.4	420.2	524.2	947.3	2573.7	4591.3	2714.8	1112.0	589.4	458.2	473.9
70°	250.1	235.7	249.3	345.5	1036.1	2600.5	1171.1	381.4	250.6	228.3	243.1
72.5°	196.9	185.8	187.8	208.9	357.5	1020.8	378.9	217.5	182.0	173.0	186.2
75°	162.6	152.7	152.3	163.9	208.5	331.5	214.2	166.3	147.4	140.8	151.5
77.5°	129.2	123.4	125.1	134.2	149.4	185.3	155.2	134.6	120.9	113.1	120.5
80°	94.5	93.7	100.3	108.6	111.5	124.7	116.4	108.6	96.6	85.4	88.3
82.5°	61.9	62.3	74.7	81.3	80.1	79.7	83.4	83.0	72.2	56.6	56.6
85°	35.5	36.3	45.8	51.2	50.4	40.0	52.8	53.2	46.2	34.3	33.0
87.5°	11.6	14.4	19.8	21.1	20.2	11.1	20.2	22.3	20.2	14.4	12.8
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)