

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: P596982

Luminaire Tested: **MSA-SA2D-835-U-5NQ**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596982
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-835-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: 11378 lumens
Efficiency: N/A
Efficacy: 88.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

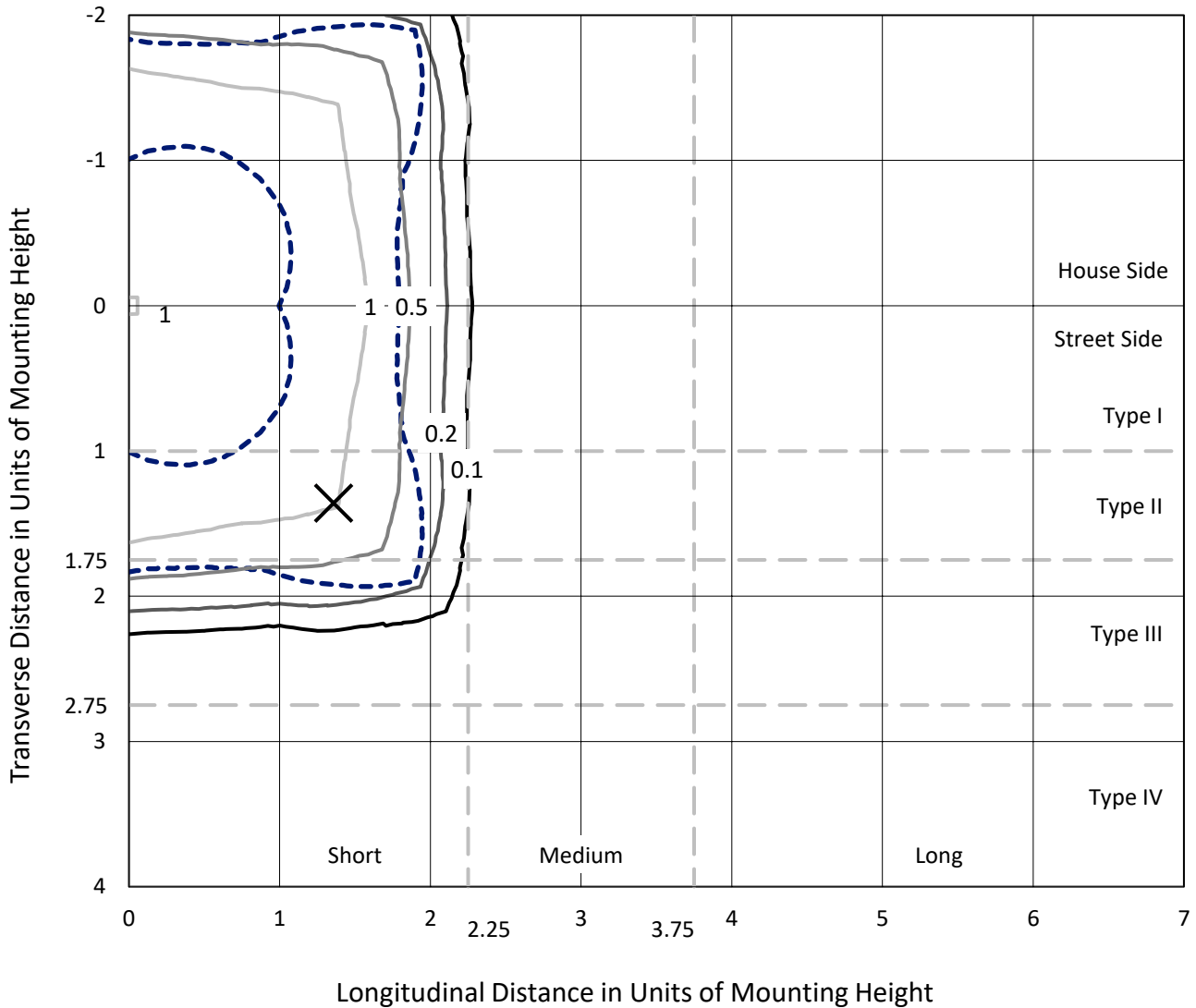
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P596982
 CATALOG NUMBER: MSA-SA2D-835-U-5NQ

Iso-Footcandle Lines of Horizontal Illumination

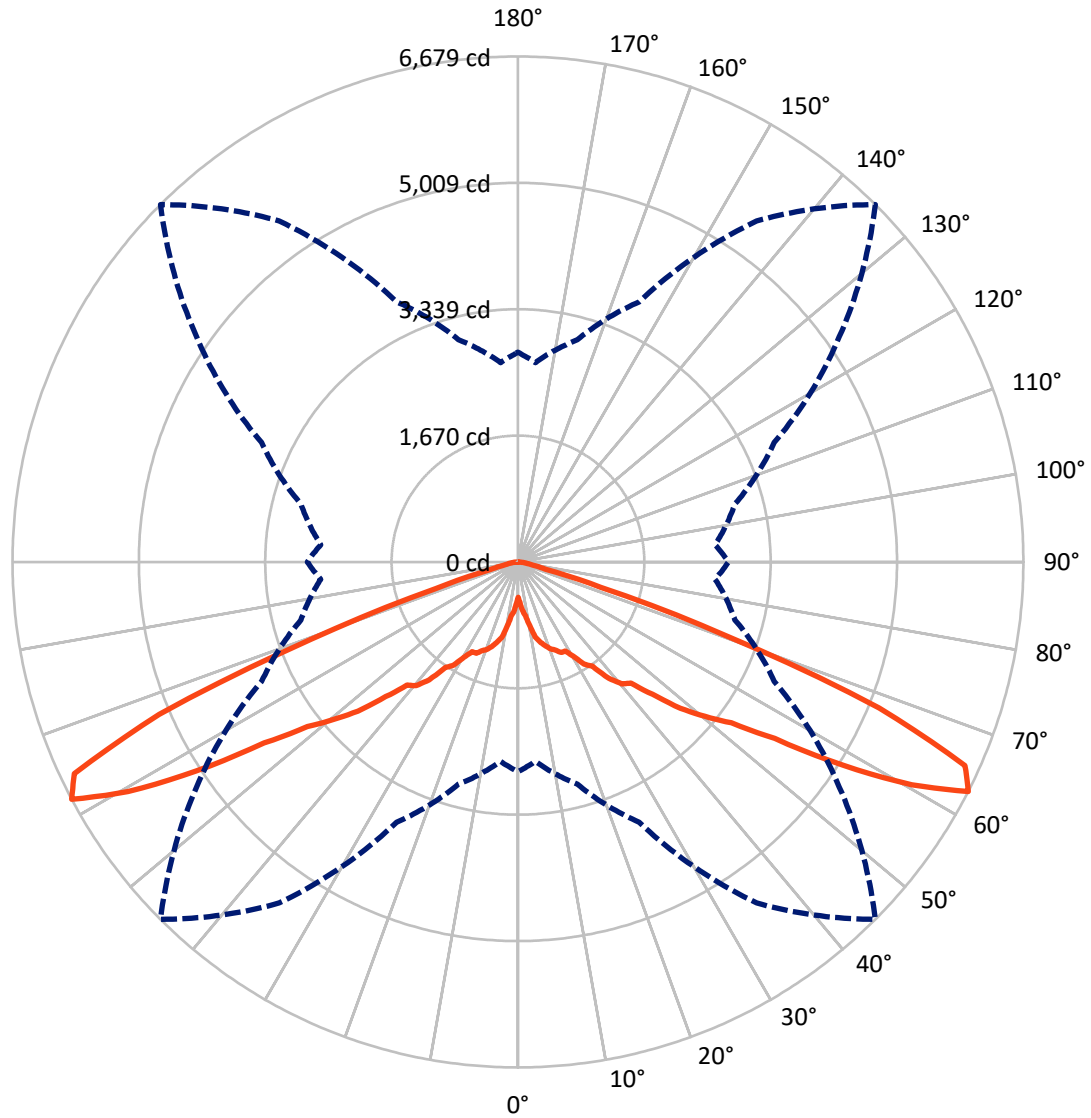
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type V - Short - N/A

REPORT NUMBER: P596982
CATALOG NUMBER: MSA-SA2D-835-U-5NQ

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P596982
 CATALOG NUMBER: MSA-SA2D-835-U-5NQ

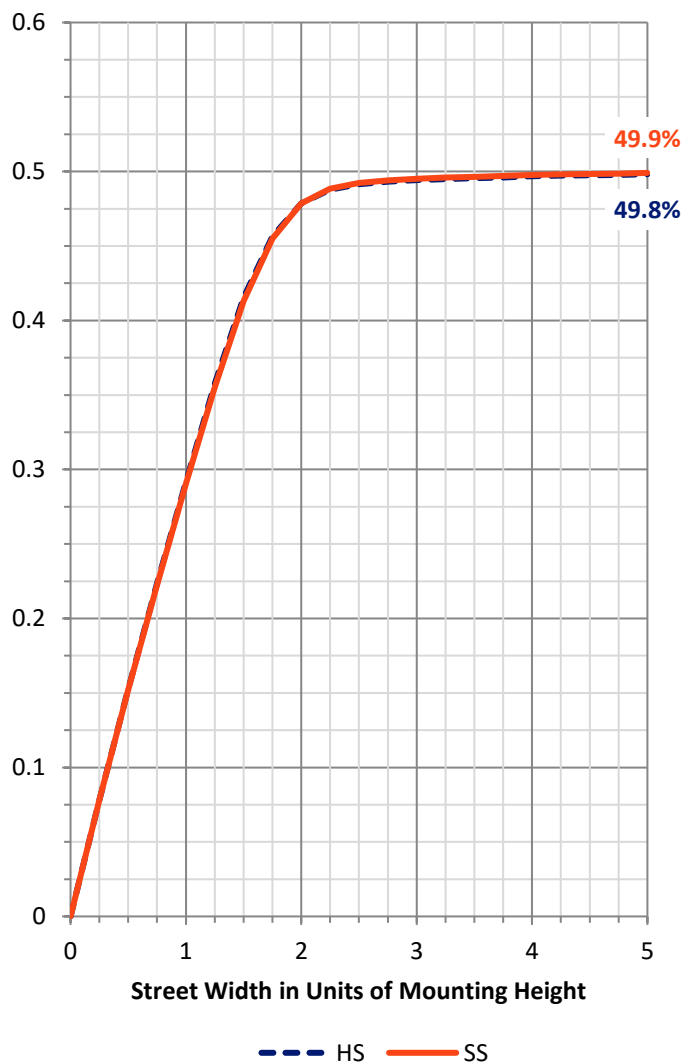
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5689.0	0.0	5689.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5689.0	0.0	5689.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	11378.0	0.0	11378.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.1	0.6
10°-20°	309.1	2.7
20°-30°	648.0	5.7
30°-40°	1220.8	10.7
40°-50°	2215.8	19.5
50°-60°	3743.9	32.9
60°-70°	2798.8	24.6
70°-80°	313.1	2.8
80°-90°	58.3	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°	11378.0	100.0
0°-180°	11378.0	100.0

Coefficient of Utilization



REPORT NUMBER: P596982

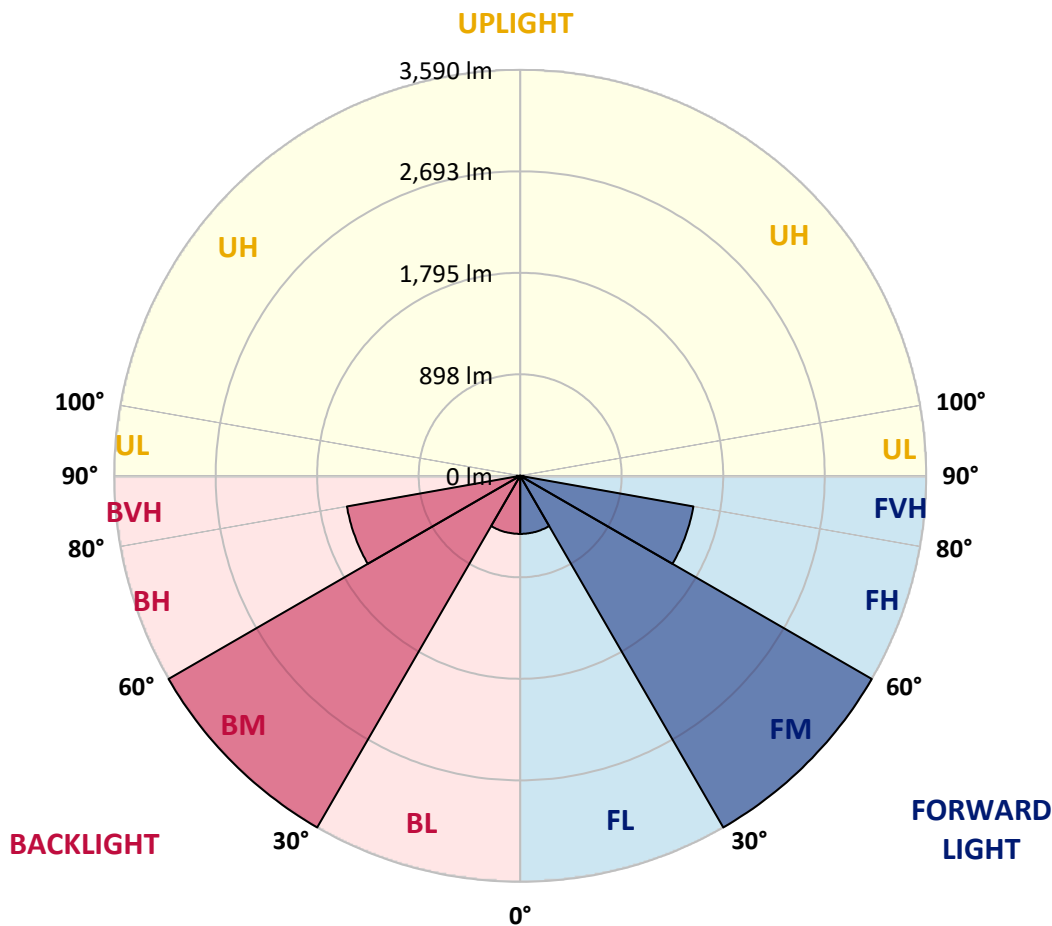
CATALOG NUMBER: MSA-SA2D-835-U-5NQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	513.6	4.5			
FM (30°-60°)	3590.3	31.6			
FH (60°-80°)	1556.0	13.7			G1/1800
FVH (80°-90°)	29.1	0.3			G1/100
BL (0°-30°)	513.6	4.5	B2/1000		
BM (30°-60°)	3590.3	31.6	B3/5000		
BH (60°-80°)	1556.0	13.7	B3/2500		G1/1800
BVH (80°-90°)	29.1	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





REPORT NUMBER: P596982
 CATALOG NUMBER: MSA-SA2D-835-U-5NQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	465.2	465.2	465.2	465.2	465.2	465.2	465.2	465.2	465.2	465.2	465.2
2.5°	565.7	555.5	519.8	532.3	545.3	543.4	540.2	530.5	521.7	558.3	565.7
5°	721.2	698.1	685.6	675.4	673.1	648.1	682.3	678.6	690.2	709.6	728.6
7.5°	845.3	823.5	790.6	783.7	746.2	718.4	748.0	784.6	796.2	831.8	853.1
10°	890.6	871.6	877.7	846.6	844.8	852.7	846.2	854.5	885.1	880.9	896.6
12.5°	992.5	995.7	976.3	968.4	984.1	1018.4	989.2	979.0	971.6	1003.1	1012.8
15°	1087.8	1106.8	1074.9	1069.8	1063.3	1095.2	1063.7	1079.0	1092.4	1098.9	1095.2
17.5°	1223.0	1223.9	1188.3	1131.3	1152.6	1162.8	1148.9	1122.5	1186.0	1217.9	1219.7
20°	1311.9	1315.1	1244.7	1155.9	1216.0	1225.3	1218.4	1163.3	1247.5	1300.8	1298.4
22.5°	1407.7	1396.6	1301.2	1236.4	1257.7	1263.3	1248.4	1241.5	1300.8	1397.5	1383.1
25°	1472.0	1492.4	1397.5	1355.8	1337.8	1324.8	1343.8	1347.5	1408.1	1496.1	1447.5
27.5°	1625.7	1590.5	1441.9	1457.7	1419.3	1331.8	1415.1	1460.9	1448.0	1597.9	1634.5
30°	1762.3	1763.2	1554.9	1585.0	1513.7	1442.9	1533.1	1599.3	1583.1	1775.2	1740.5
32.5°	1936.8	1943.3	1749.8	1669.2	1621.1	1607.7	1596.5	1669.7	1770.6	1926.1	1929.4
35°	2125.2	2180.7	1917.8	1833.1	1751.2	1691.9	1755.8	1857.2	1922.9	2171.5	2127.5
37.5°	2492.3	2398.8	2183.5	2024.3	1972.0	1948.4	1982.1	2040.9	2183.0	2397.4	2472.8
40°	2709.4	2683.4	2390.4	2257.1	2055.3	2118.2	2099.7	2260.8	2378.4	2698.3	2705.2
42.5°	3041.3	2910.7	2647.3	2477.9	2296.5	2187.2	2302.9	2519.1	2661.2	2931.6	3059.3
45°	3303.7	3136.2	2932.9	2804.3	2575.1	2494.1	2535.8	2812.6	2990.8	3176.4	3344.5
47.5°	3594.0	3412.5	3209.3	2980.6	2757.0	2889.0	2815.4	3058.9	3232.9	3499.1	3656.5
50°	3958.7	3757.8	3497.7	3308.8	3160.7	3207.0	3195.4	3369.0	3583.8	3826.3	4005.0
52.5°	4360.5	4133.2	3882.4	3706.9	3644.4	3529.6	3679.6	3750.9	3909.2	4131.4	4341.1
55°	4641.5	4414.2	4262.4	4318.9	4302.2	4118.0	4249.4	4256.8	4180.5	4260.5	4471.6
57.5°	4598.0	4380.9	4360.1	4573.5	4892.4	5070.6	4867.4	4430.4	4144.4	4106.9	4330.4
60°	4020.3	3834.7	4025.4	4506.8	5435.9	5978.4	5196.1	4299.4	3828.2	3633.3	3849.0
62.5°	2770.5	2645.0	3040.3	3793.0	5501.1	6678.7	5184.0	3736.1	2969.1	2615.4	2783.0
65°	1313.3	1267.9	1601.6	2404.8	4582.3	6491.7	4529.0	2527.9	1709.0	1365.1	1403.1
67.5°	493.9	471.2	587.9	1062.4	2886.2	5148.9	3044.5	1247.1	661.0	513.8	531.4
70°	280.5	264.3	279.6	387.4	1161.9	2916.3	1313.3	427.7	281.0	256.0	272.6
72.5°	220.8	208.3	210.6	234.2	400.9	1144.8	424.9	243.9	204.1	194.0	208.8
75°	182.4	171.3	170.8	183.8	233.8	371.7	240.2	186.5	165.3	157.8	169.9
77.5°	144.9	138.4	140.3	150.4	167.6	207.8	174.1	150.9	135.6	126.8	135.2
80°	106.0	105.1	112.5	121.7	125.0	139.8	130.5	121.7	108.3	95.8	99.1
82.5°	69.4	69.9	83.8	91.2	89.8	89.3	93.5	93.0	81.0	63.4	63.4
85°	39.8	40.7	51.4	57.4	56.5	44.9	59.3	59.7	51.8	38.4	37.0
87.5°	13.0	16.2	22.2	23.6	22.7	12.5	22.7	25.0	22.7	16.2	14.3
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)