

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: P596894

Luminaire Tested: **MSA-SA1D-835-U-5NQ**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596894
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-SA1D-835-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: 5785 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B2 - U0 - G1

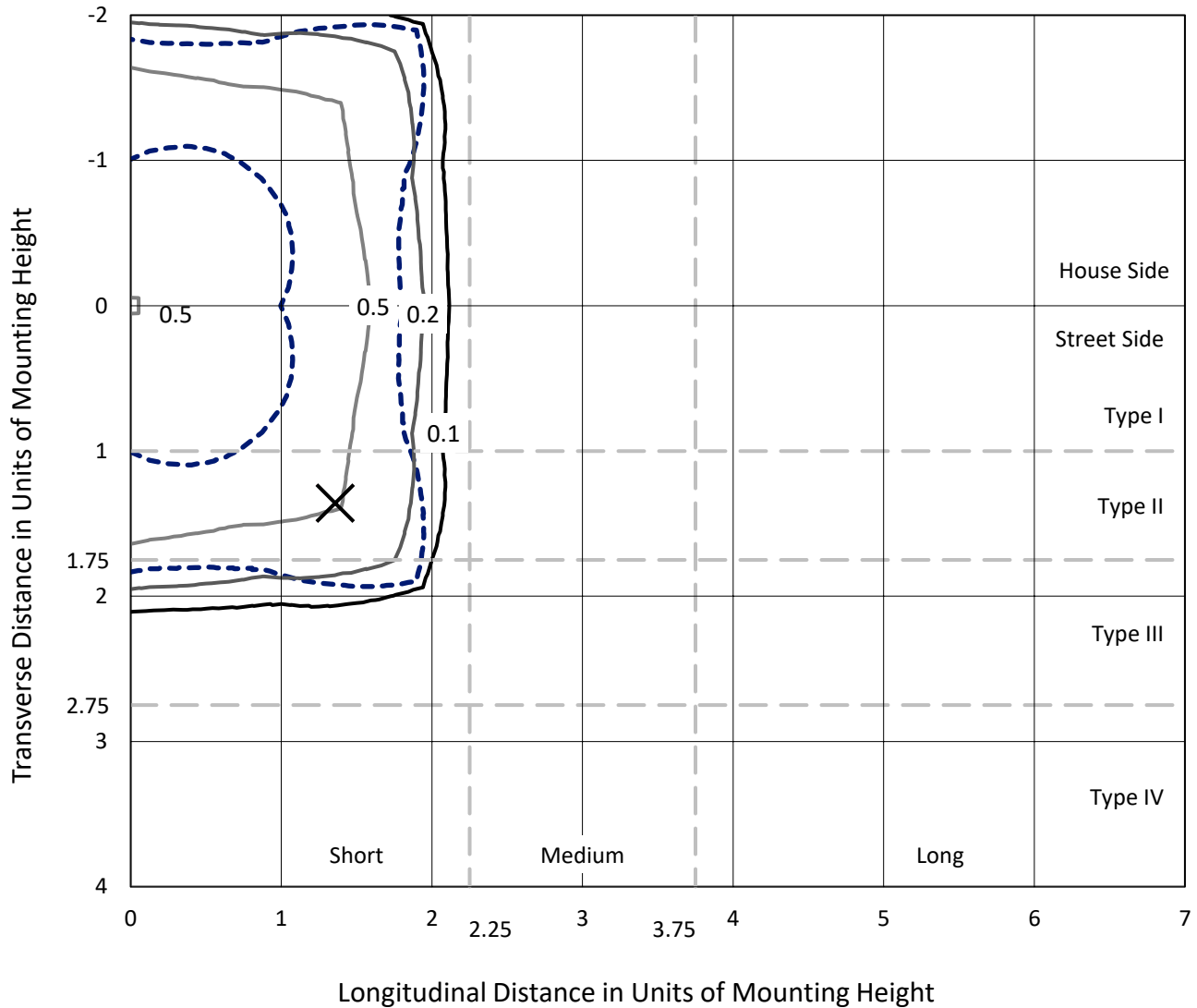
Input Watts (W): 67
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

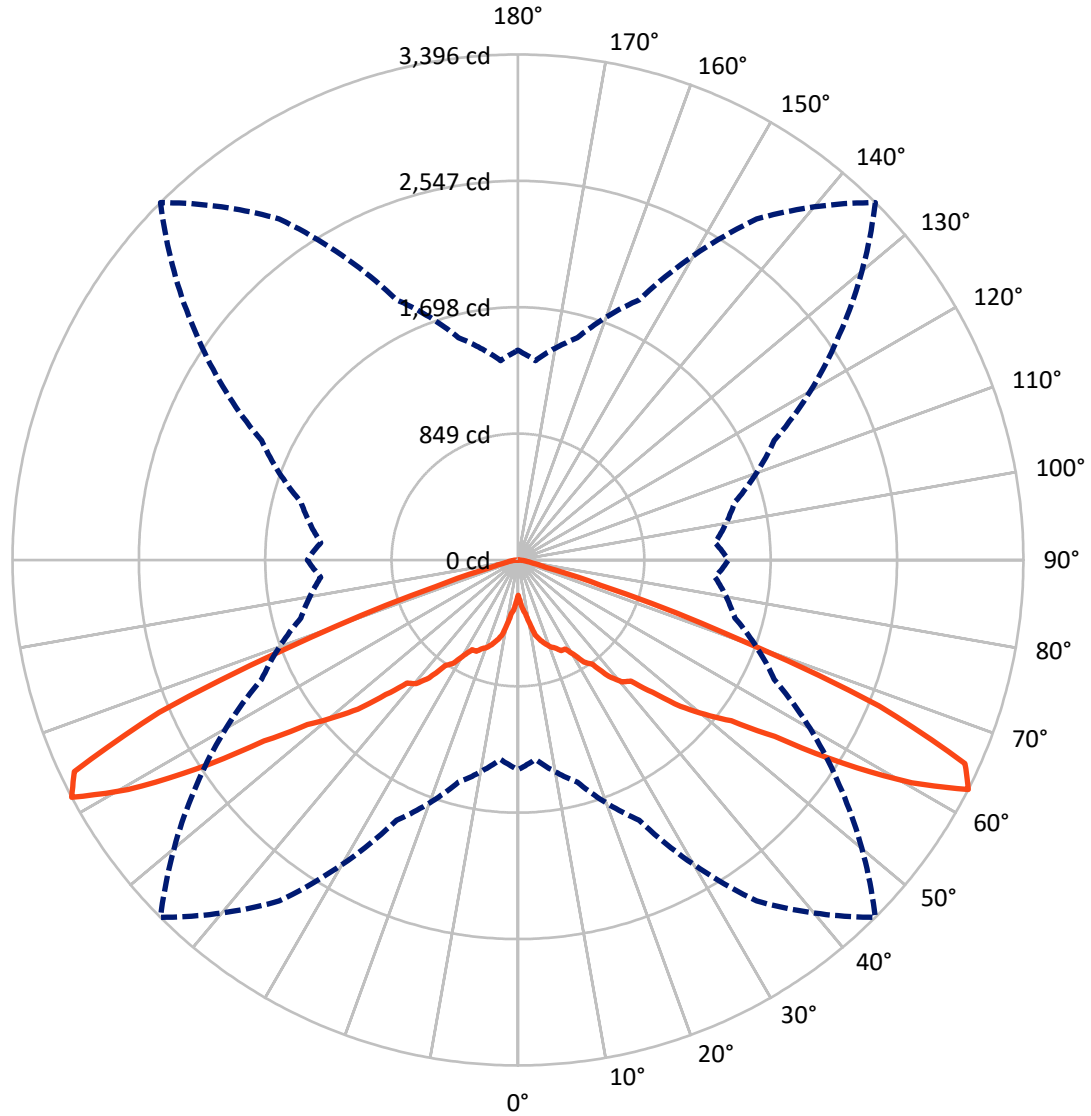
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 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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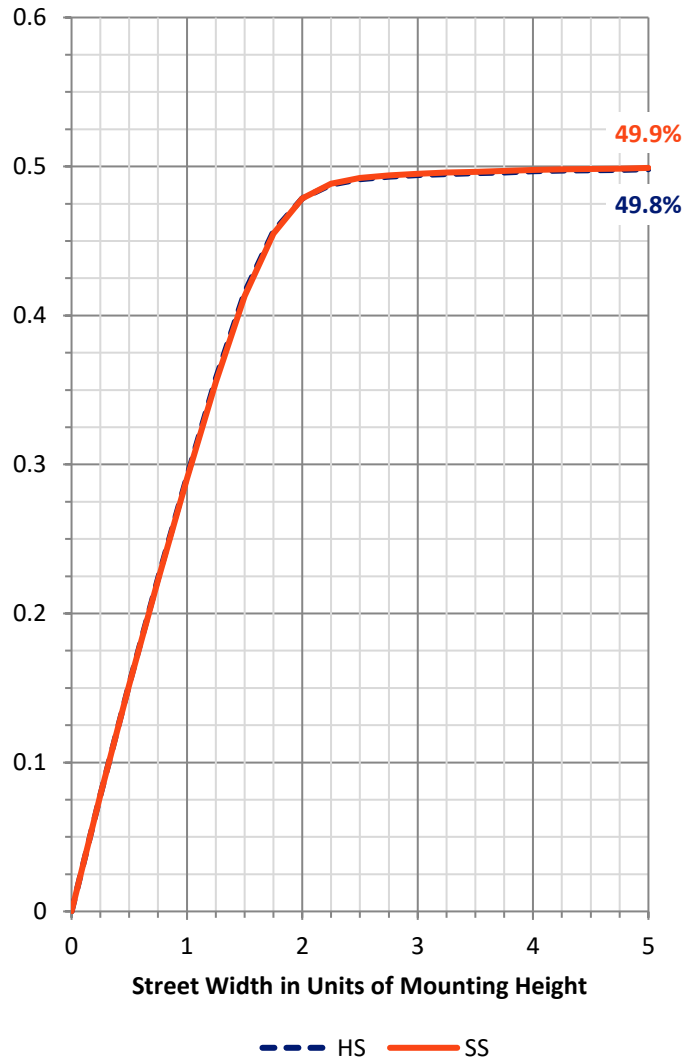
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2892.5	0.0	2892.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2892.5	0.0	2892.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	5785.0	0.0	5785.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.7	0.6
10°-20°	157.2	2.7
20°-30°	329.5	5.7
30°-40°	620.7	10.7
40°-50°	1126.6	19.5
50°-60°	1903.6	32.9
60°-70°	1423.0	24.6
70°-80°	159.2	2.8
80°-90°	29.6	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°	5785.0	100.0
0°-180°	5785.0	100.0

Coefficient of Utilization



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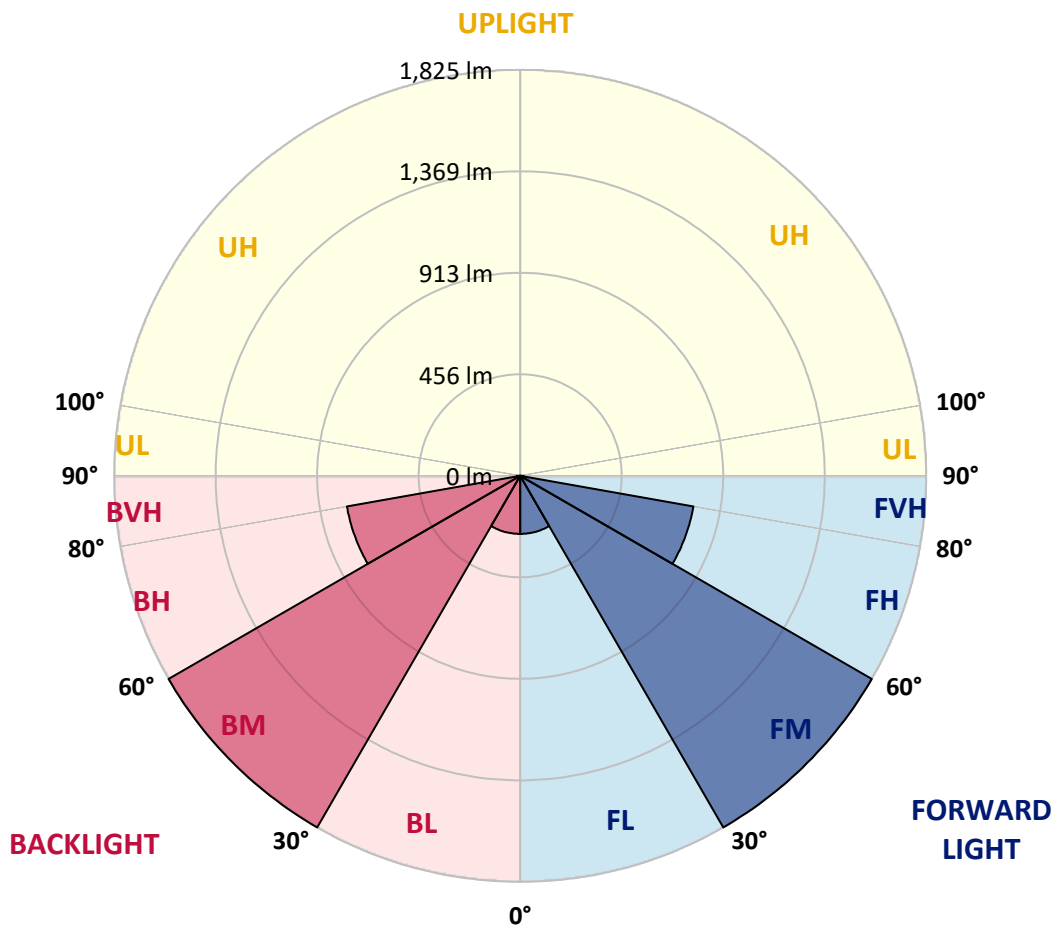
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	261.1	4.5			
FM (30°-60°)	1825.4	31.6			
FH (60°-80°)	791.1	13.7			G1/1800
FVH (80°-90°)	14.8	0.3			G1/100
BL (0°-30°)	261.1	4.5	B1/500		
BM (30°-60°)	1825.4	31.6	B2/2500		
BH (60°-80°)	791.1	13.7	B2/1000		G1/1800
BVH (80°-90°)	14.8	0.3			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°	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5
2.5°	287.6	282.4	264.3	270.7	277.2	276.3	274.7	269.7	265.2	283.8	287.6
5°	366.7	354.9	348.6	343.4	342.2	329.5	346.9	345.0	350.9	360.8	370.5
7.5°	429.8	418.7	402.0	398.5	379.4	365.3	380.3	398.9	404.8	422.9	433.8
10°	452.8	443.2	446.2	430.5	429.5	433.5	430.2	434.5	450.0	447.9	455.9
12.5°	504.6	506.3	496.4	492.4	500.4	517.8	503.0	497.8	494.0	510.0	515.0
15°	553.1	562.7	546.5	543.9	540.6	556.9	540.8	548.6	555.4	558.7	556.9
17.5°	621.8	622.3	604.2	575.2	586.0	591.2	584.2	570.7	603.0	619.2	620.2
20°	667.0	668.6	632.9	587.7	618.3	623.0	619.5	591.5	634.3	661.4	660.2
22.5°	715.7	710.1	661.6	628.6	639.5	642.3	634.8	631.2	661.4	710.5	703.2
25°	748.4	758.8	710.5	689.4	680.2	673.6	683.2	685.1	716.0	760.7	736.0
27.5°	826.6	808.7	733.1	741.1	721.6	677.1	719.5	742.8	736.2	812.5	831.0
30°	896.0	896.5	790.6	805.9	769.6	733.6	779.5	813.2	804.9	902.6	884.9
32.5°	984.7	988.0	889.6	848.7	824.2	817.4	811.7	848.9	900.2	979.3	981.0
35°	1080.5	1108.8	975.1	932.0	890.4	860.2	892.7	944.3	977.7	1104.1	1081.7
37.5°	1267.2	1219.6	1110.2	1029.2	1002.6	990.6	1007.8	1037.7	1109.9	1218.9	1257.3
40°	1377.5	1364.4	1215.4	1147.6	1045.0	1077.0	1067.6	1149.5	1209.3	1371.9	1375.4
42.5°	1546.3	1479.9	1346.0	1259.9	1167.6	1112.1	1170.9	1280.8	1353.1	1490.5	1555.5
45°	1679.7	1594.5	1491.2	1425.8	1309.3	1268.1	1289.3	1430.0	1520.6	1615.0	1700.5
47.5°	1827.3	1735.0	1631.7	1515.5	1401.8	1468.9	1431.4	1555.2	1643.7	1779.1	1859.1
50°	2012.8	1910.6	1778.4	1682.3	1607.0	1630.5	1624.7	1712.9	1822.1	1945.5	2036.3
52.5°	2217.1	2101.5	1973.9	1884.7	1853.0	1794.6	1870.8	1907.1	1987.6	2100.6	2207.2
55°	2359.9	2244.4	2167.2	2195.9	2187.4	2093.7	2160.6	2164.3	2125.5	2166.2	2273.5
57.5°	2337.8	2227.4	2216.8	2325.3	2487.5	2578.1	2474.8	2252.6	2107.1	2088.1	2201.8
60°	2044.1	1949.7	2046.7	2291.4	2763.8	3039.6	2641.9	2186.0	1946.4	1847.3	1957.0
62.5°	1408.6	1344.8	1545.8	1928.5	2797.0	3395.7	2635.8	1899.6	1509.6	1329.8	1415.0
65°	667.7	644.6	814.3	1222.7	2329.8	3300.6	2302.7	1285.3	868.9	694.1	713.4
67.5°	251.1	239.6	298.9	540.1	1467.4	2617.9	1547.9	634.1	336.1	261.2	270.2
70°	142.6	134.4	142.2	197.0	590.7	1482.7	667.7	217.5	142.9	130.2	138.6
72.5°	112.3	105.9	107.1	119.1	203.8	582.0	216.1	124.0	103.8	98.6	106.1
75°	92.7	87.1	86.8	93.4	118.9	189.0	122.1	94.8	84.0	80.3	86.4
77.5°	73.7	70.4	71.3	76.5	85.2	105.7	88.5	76.7	69.0	64.5	68.7
80°	53.9	53.4	57.2	61.9	63.5	71.1	66.4	61.9	55.1	48.7	50.4
82.5°	35.3	35.5	42.6	46.4	45.7	45.4	47.5	47.3	41.2	32.2	32.2
85°	20.2	20.7	26.1	29.2	28.7	22.8	30.1	30.4	26.4	19.5	18.8
87.5°	6.6	8.2	11.3	12.0	11.5	6.4	11.5	12.7	11.5	8.2	7.3
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)