

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: P597114

Luminaire Tested: **MSA-SA4B-835-U-5NQ**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P597114
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-SA4B-835-U-5NQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16390 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

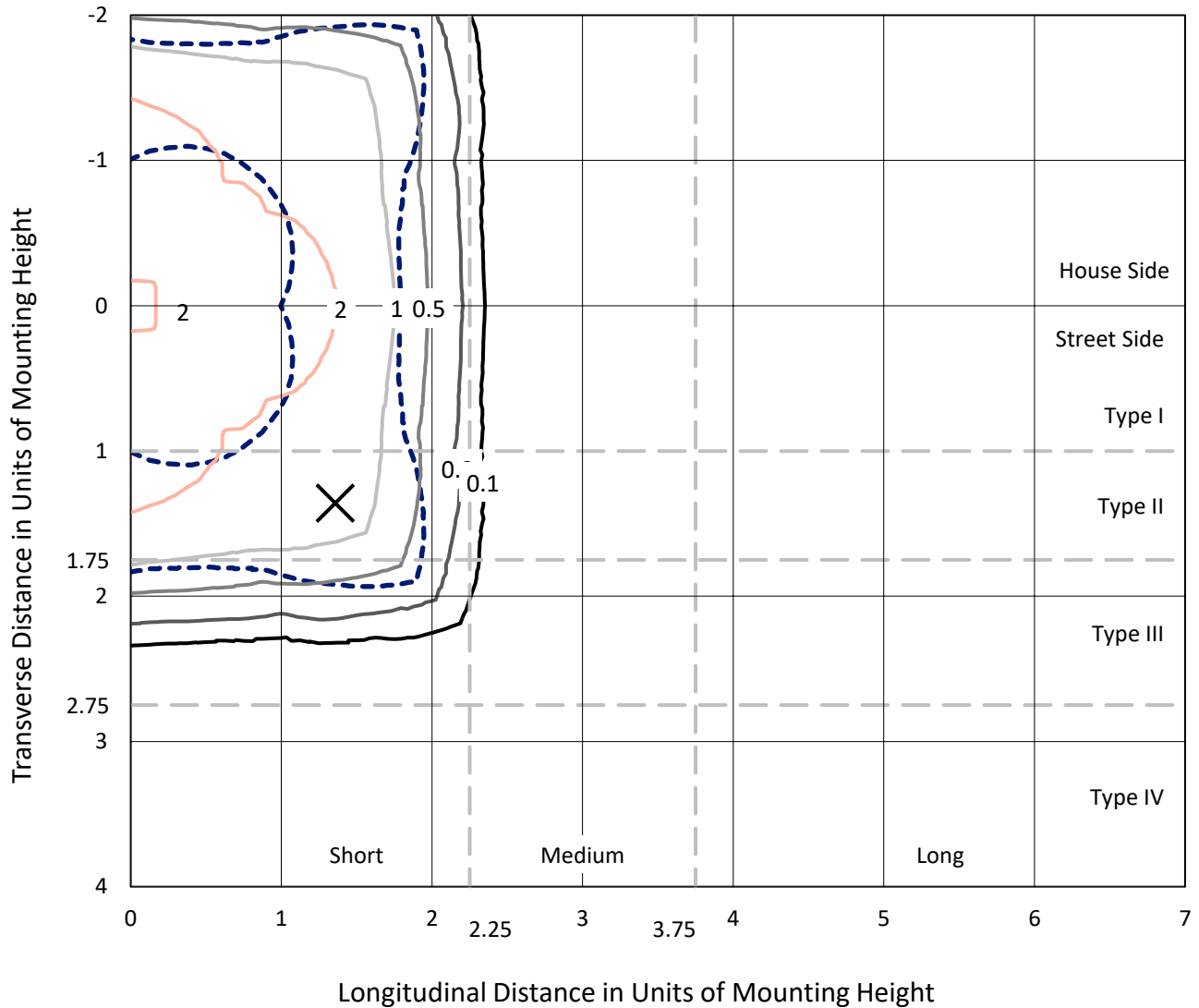
Input Watts (W): 171
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

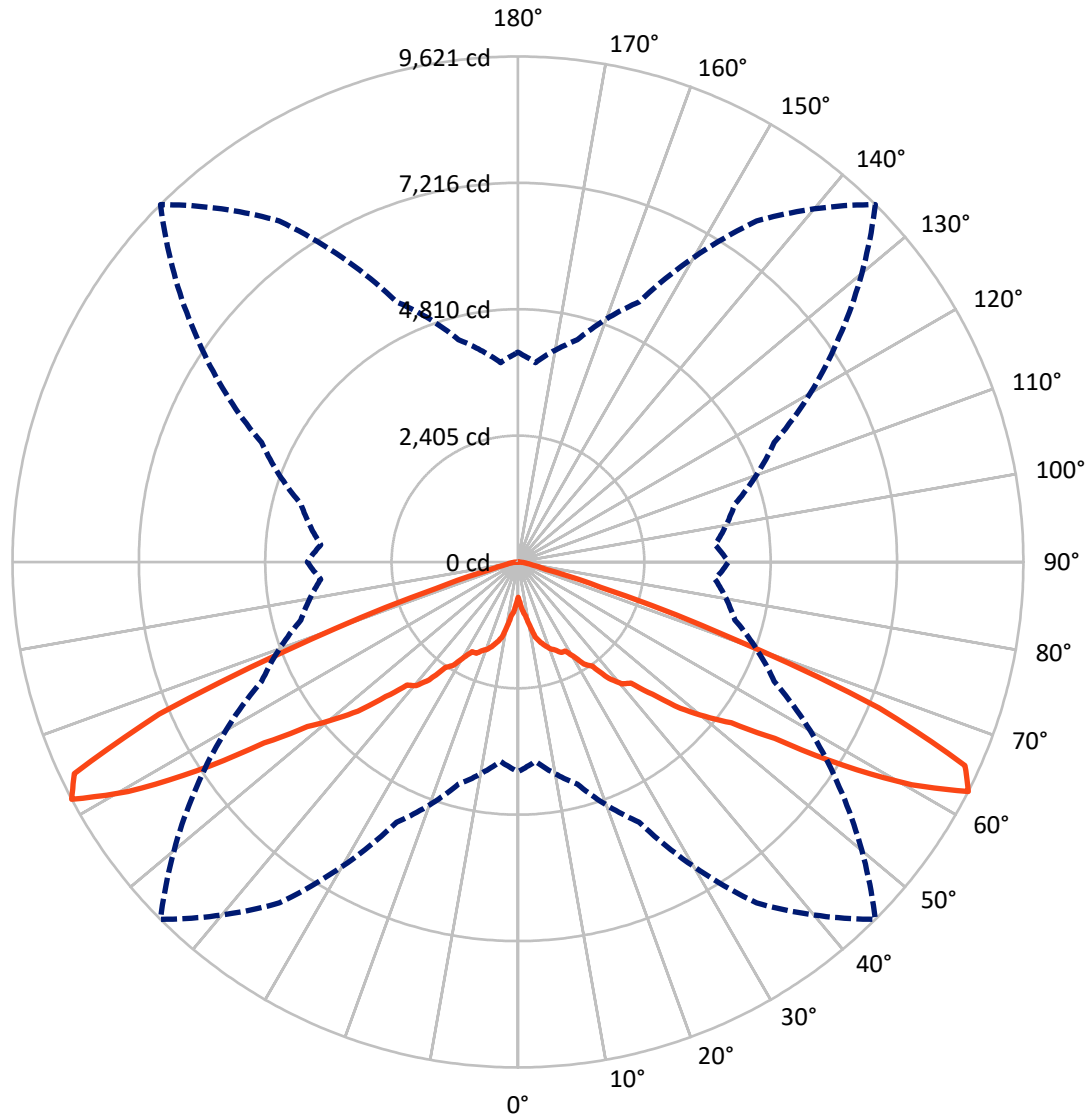
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 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	8195.0	0.0	8195.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	8195.0	0.0	8195.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	16390.0	0.0	16390.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.0	0.6
10°-20°	445.3	2.7
20°-30°	933.4	5.7
30°-40°	1758.6	10.7
40°-50°	3191.8	19.5
50°-60°	5393.1	32.9
60°-70°	4031.7	24.6
70°-80°	451.0	2.8
80°-90°	83.9	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°	16390.0	100.0
0°-180°	16390.0	100.0

Coefficient of Utilization



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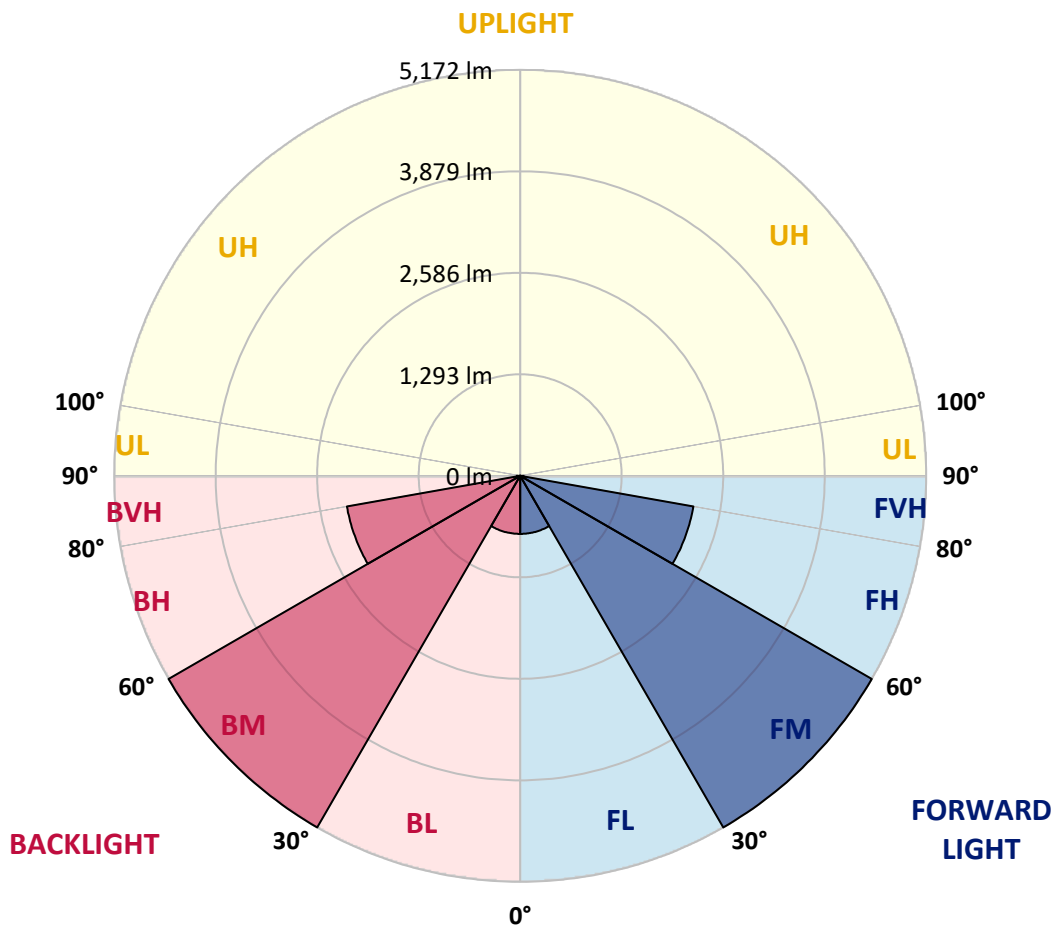
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	739.9	4.5			
FM (30°-60°)	5171.8	31.6			
FH (60°-80°)	2241.4	13.7			G2/5000
FVH (80°-90°)	42.0	0.3			G1/100
BL (0°-30°)	739.9	4.5	B2/1000		
BM (30°-60°)	5171.8	31.6	B4/8500		
BH (60°-80°)	2241.4	13.7	B3/2500		G2/5000
BVH (80°-90°)	42.0	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	670.1	670.1	670.1	670.1	670.1	670.1	670.1	670.1	670.1	670.1	670.1
2.5°	814.8	800.2	748.8	766.8	785.5	782.8	778.2	764.2	751.5	804.2	814.8
5°	1038.9	1005.5	987.5	972.9	969.5	933.5	982.9	977.5	994.2	1022.2	1049.6
7.5°	1217.6	1186.3	1138.9	1128.9	1074.9	1034.9	1077.6	1130.2	1146.9	1198.3	1228.9
10°	1282.9	1255.6	1264.3	1219.6	1216.9	1228.3	1218.9	1230.9	1274.9	1268.9	1291.6
12.5°	1429.6	1434.3	1406.3	1395.0	1417.6	1467.0	1425.0	1410.3	1399.6	1445.0	1459.0
15°	1567.0	1594.3	1548.3	1541.0	1531.7	1577.7	1532.3	1554.3	1573.7	1583.0	1577.7
17.5°	1761.7	1763.0	1711.7	1629.7	1660.4	1675.0	1655.0	1617.0	1708.4	1754.4	1757.0
20°	1889.7	1894.4	1793.1	1665.0	1751.7	1765.0	1755.0	1675.7	1797.1	1873.7	1870.4
22.5°	2027.8	2011.8	1874.4	1781.0	1811.7	1819.7	1798.4	1788.4	1873.7	2013.1	1992.4
25°	2120.5	2149.8	2013.1	1953.1	1927.1	1908.4	1935.7	1941.1	2028.4	2155.1	2085.1
27.5°	2341.8	2291.2	2077.1	2099.8	2044.4	1918.4	2038.4	2104.5	2085.8	2301.8	2354.5
30°	2538.5	2539.9	2239.8	2283.2	2180.5	2078.4	2208.5	2303.8	2280.5	2557.2	2507.2
32.5°	2789.9	2799.3	2520.5	2404.5	2335.2	2315.8	2299.8	2405.2	2550.5	2774.6	2779.3
35°	3061.3	3141.3	2762.6	2640.6	2522.5	2437.2	2529.2	2675.2	2769.9	3128.0	3064.7
37.5°	3590.1	3455.4	3145.3	2916.0	2840.6	2806.6	2855.3	2940.0	3144.7	3453.4	3562.1
40°	3902.8	3865.5	3443.4	3251.4	2960.6	3051.3	3024.6	3256.7	3426.1	3886.8	3896.8
42.5°	4380.9	4192.9	3813.5	3569.4	3308.0	3150.7	3317.4	3628.8	3833.5	4222.9	4406.9
45°	4759.0	4517.6	4224.9	4039.5	3709.5	3592.8	3652.8	4051.5	4308.3	4575.6	4817.7
47.5°	5177.1	4915.7	4623.0	4293.6	3971.5	4161.6	4055.5	4406.3	4657.0	5040.4	5267.1
50°	5702.6	5413.2	5038.4	4766.4	4553.0	4619.7	4603.0	4853.0	5162.4	5511.8	5769.2
52.5°	6281.3	5953.9	5592.5	5339.8	5249.8	5084.4	5300.5	5403.2	5631.2	5951.3	6253.3
55°	6686.1	6358.7	6140.0	6221.3	6197.3	5931.9	6121.3	6132.0	6022.0	6137.3	6441.4
57.5°	6623.4	6310.7	6280.7	6588.1	7047.5	7304.2	7011.5	6382.0	5969.9	5915.9	6238.0
60°	5791.2	5523.8	5798.6	6492.1	7830.3	8611.8	7484.9	6193.3	5514.5	5233.8	5544.5
62.5°	3990.9	3810.1	4379.6	5463.8	7924.4	9620.7	7467.6	5381.8	4276.9	3767.5	4008.9
65°	1891.7	1826.4	2307.2	3464.1	6600.7	9351.3	6524.1	3641.4	2461.9	1966.4	2021.1
67.5°	711.5	678.8	846.8	1530.3	4157.6	7416.9	4385.6	1796.4	952.2	740.2	765.5
70°	404.1	380.7	402.8	558.1	1673.7	4200.9	1891.7	616.1	404.8	368.7	392.8
72.5°	318.1	300.1	303.4	337.4	577.5	1649.0	612.1	351.4	294.1	279.4	300.7
75°	262.7	246.7	246.1	264.7	336.7	535.4	346.1	268.7	238.1	227.4	244.7
77.5°	208.7	199.4	202.0	216.7	241.4	299.4	250.7	217.4	195.4	182.7	194.7
80°	152.7	151.4	162.0	175.4	180.0	201.4	188.0	175.4	156.0	138.0	142.7
82.5°	100.0	100.7	120.7	131.4	129.4	128.7	134.7	134.0	116.7	91.4	91.4
85°	57.3	58.7	74.0	82.7	81.4	64.7	85.4	86.0	74.7	55.3	53.3
87.5°	18.7	23.3	32.0	34.0	32.7	18.0	32.7	36.0	32.7	23.3	20.7
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)