

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: P596477

Luminaire Tested: **MSA-SA1A-827-U-5WQ**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596477
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-4)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA1A-827-U-5WQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3187 lumens
Efficiency: N/A
Efficacy: 93.7 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

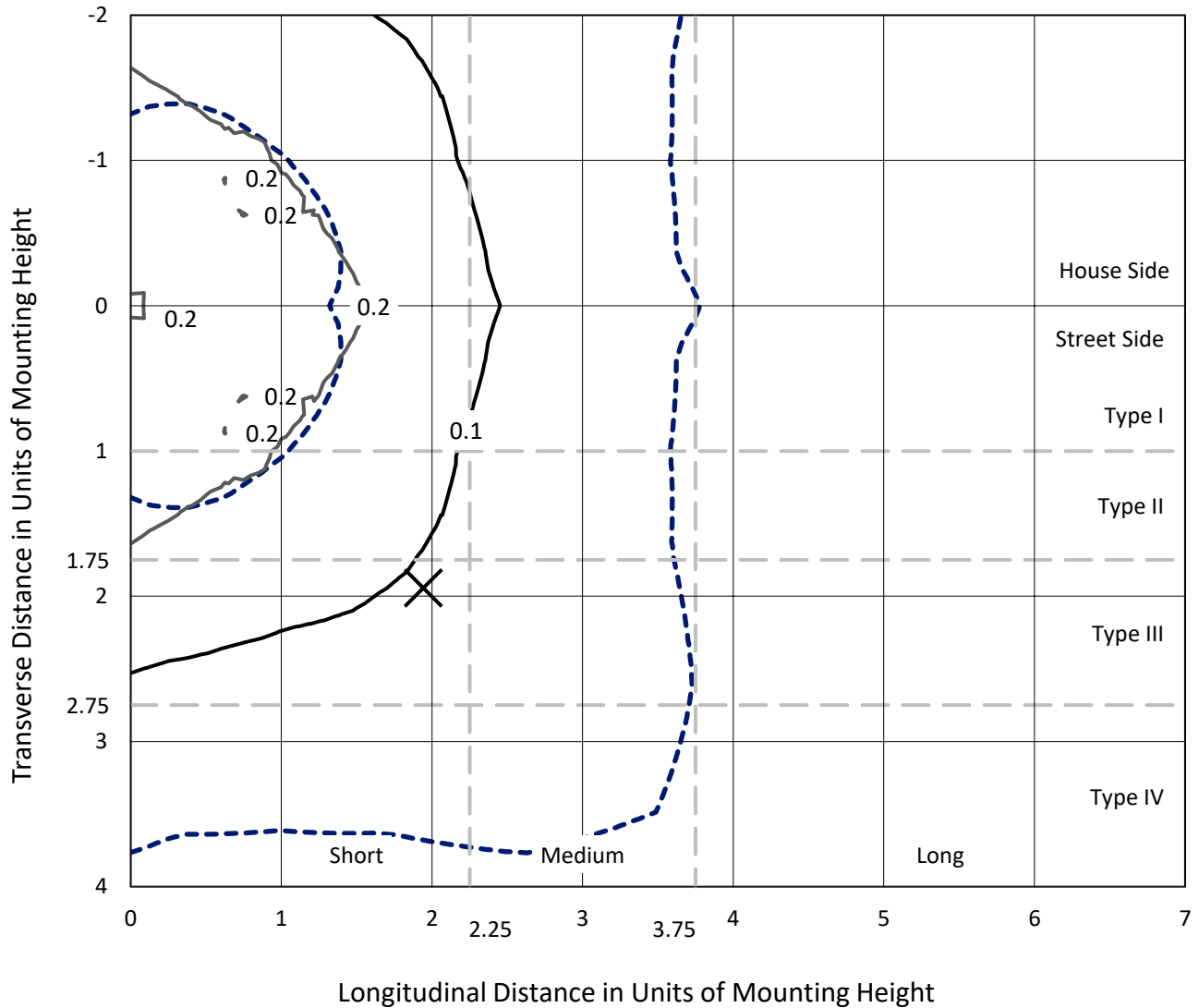
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

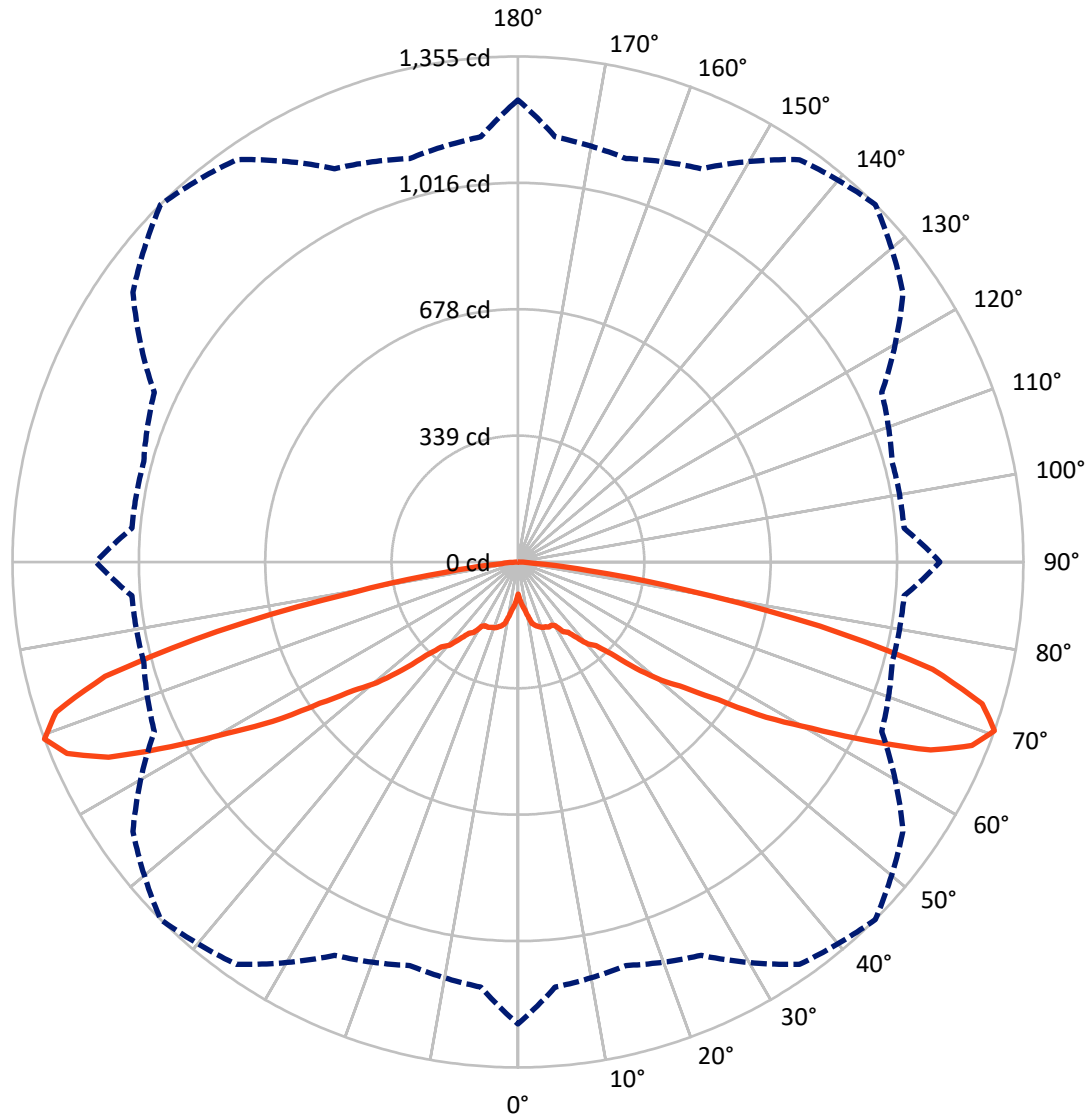
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.3 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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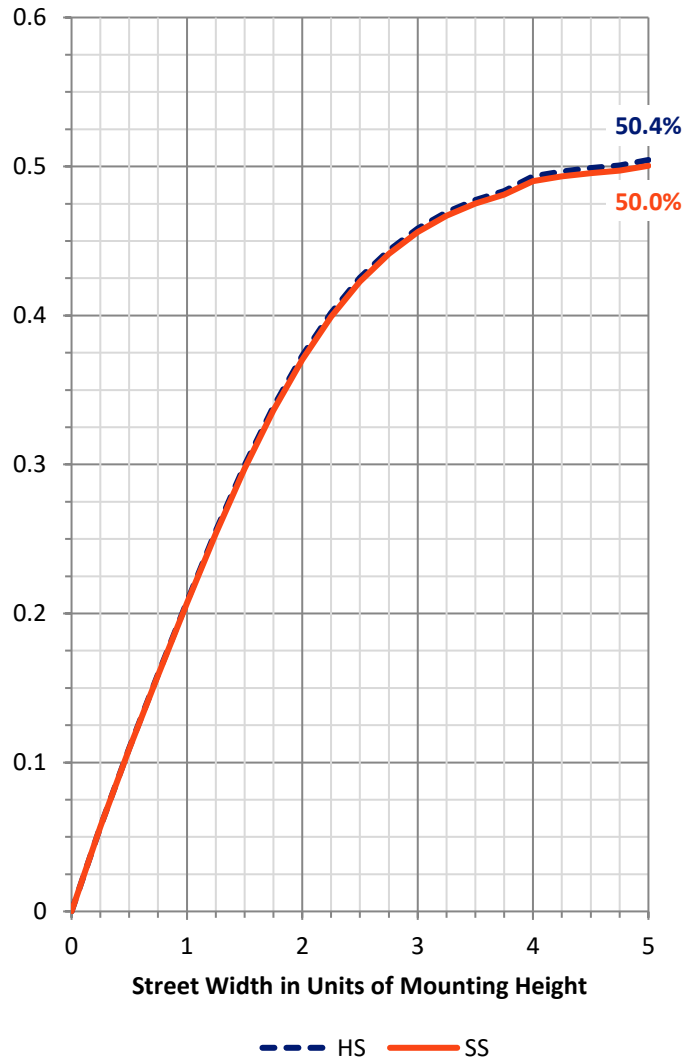
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1593.5	0.0	1593.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1593.5	0.0	1593.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	3187.0	0.0	3187.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.5	0.4
10°-20°	50.2	1.6
20°-30°	94.8	3.0
30°-40°	165.2	5.2
40°-50°	315.8	9.9
50°-60°	612.4	19.2
60°-70°	1072.4	33.6
70°-80°	806.0	25.3
80°-90°	57.7	1.8
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°	3187.0	100.0
0°-180°	3187.0	100.0

Coefficient of Utilization



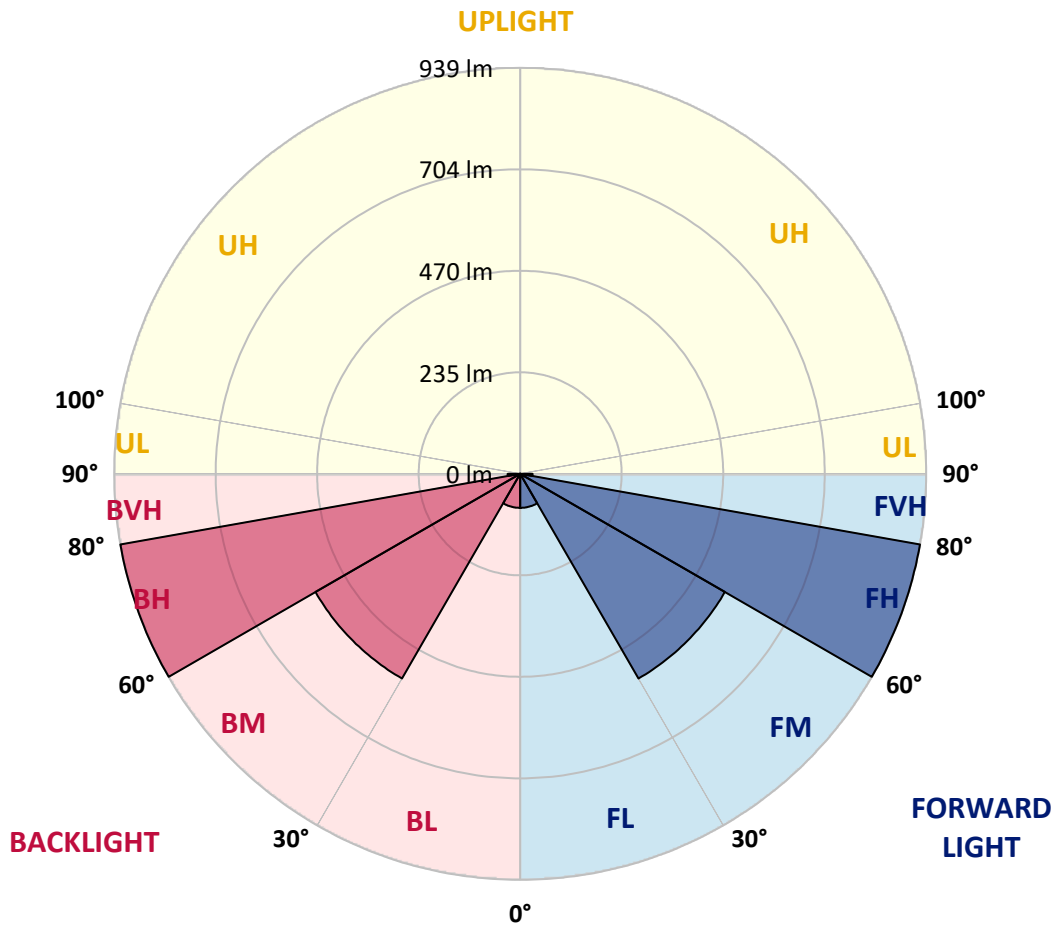
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	78.8	2.5			
FM (30°-60°)	546.7	17.2			
FH (60°-80°)	939.2	29.5			G1/1800
FVH (80°-90°)	28.8	0.9			G1/100
BL (0°-30°)	78.8	2.5	B0/110		
BM (30°-60°)	546.7	17.2	B1/1000		
BH (60°-80°)	939.2	29.5	B2/1000		G1/1800
BVH (80°-90°)	28.8	0.9			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°	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2
2.5°	104.8	103.2	98.2	98.4	100.8	101.0	101.3	98.2	97.4	103.7	104.1
5°	133.2	129.4	125.7	124.3	122.0	115.8	122.6	123.4	124.9	129.7	131.9
7.5°	152.1	147.5	142.4	139.3	133.3	128.2	133.8	138.3	141.3	146.8	149.8
10°	155.7	152.9	152.7	147.3	146.1	148.0	147.6	147.7	152.2	152.3	154.2
12.5°	166.9	168.9	165.1	163.2	164.3	168.9	165.2	163.6	164.7	169.8	167.7
15°	181.6	184.0	178.2	175.2	172.2	176.6	172.7	175.6	179.1	182.9	181.0
17.5°	197.9	198.1	190.2	179.1	181.7	182.4	181.0	178.7	188.9	197.8	197.0
20°	206.8	206.7	193.1	178.2	185.8	187.2	185.9	177.9	193.4	205.6	205.2
22.5°	216.0	213.3	197.0	184.8	187.7	188.8	185.9	185.2	197.0	214.0	213.9
25°	220.9	223.3	205.4	197.8	195.5	192.9	195.3	196.6	207.8	224.5	219.7
27.5°	236.4	232.6	207.8	207.1	202.1	191.9	200.4	206.5	207.1	234.0	239.0
30°	250.4	251.8	219.0	220.1	211.0	198.1	211.3	220.9	222.8	252.1	251.6
32.5°	265.2	265.8	238.7	227.2	223.4	222.9	217.8	226.3	240.8	264.3	265.3
35°	287.7	292.8	256.4	241.0	236.1	231.2	235.6	243.2	256.8	292.0	289.6
37.5°	339.3	331.2	294.9	262.8	259.6	257.7	261.2	266.7	294.5	332.1	343.6
40°	375.2	371.4	321.9	299.1	278.8	289.4	281.0	302.0	325.0	371.6	379.1
42.5°	431.0	413.9	363.1	334.8	313.8	306.2	310.9	338.4	367.7	419.6	434.2
45°	484.5	458.2	414.7	389.7	357.8	349.9	356.2	388.5	422.3	463.4	489.1
47.5°	539.2	512.0	464.1	428.0	401.9	425.6	404.9	435.6	469.3	517.0	539.9
50°	595.9	565.8	518.5	479.2	477.0	497.9	473.2	488.9	520.1	569.6	595.5
52.5°	661.1	628.6	581.3	554.8	559.9	558.6	553.6	550.8	581.6	630.2	662.2
55°	738.6	703.5	665.8	653.5	667.9	652.4	659.7	658.7	663.2	697.9	735.4
57.5°	832.3	792.6	754.8	752.1	770.5	785.1	772.1	753.4	745.6	779.4	822.3
60°	950.4	901.7	860.1	851.6	904.1	904.0	892.3	850.5	847.5	885.7	937.4
62.5°	1080.8	1021.5	976.1	962.5	1044.8	1054.1	1017.5	942.6	957.9	988.7	1050.0
65°	1191.6	1120.3	1078.0	1074.3	1174.9	1215.8	1135.0	1032.5	1037.4	1063.0	1129.4
67.5°	1263.8	1177.9	1144.2	1162.2	1287.3	1312.9	1237.7	1092.6	1075.0	1085.6	1165.0
70°	1238.5	1144.0	1119.8	1163.3	1316.4	1355.0	1259.8	1075.8	1038.4	1038.9	1131.1
72.5°	1046.5	956.6	968.1	1047.9	1247.6	1301.9	1157.5	971.7	895.2	893.4	977.1
75°	692.0	631.9	677.3	801.8	1037.2	1148.2	959.0	761.6	665.8	634.6	699.3
77.5°	302.7	295.0	333.2	473.9	707.1	827.5	687.0	497.5	362.1	301.2	329.0
80°	81.1	79.4	99.7	179.8	344.2	455.7	371.8	198.4	103.6	75.4	80.0
82.5°	29.5	30.3	37.0	50.3	113.4	191.9	123.5	58.0	39.2	32.1	32.1
85°	12.9	12.5	17.9	20.2	30.9	43.4	35.5	24.6	19.8	14.8	14.2
87.5°	3.5	4.3	6.1	6.3	8.0	6.6	9.4	8.7	7.4	5.2	4.2
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)