

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: P596740

Luminaire Tested: **MSA-SA4A-827-U-5NQ**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596740
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-SA4A-827-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: 11662 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

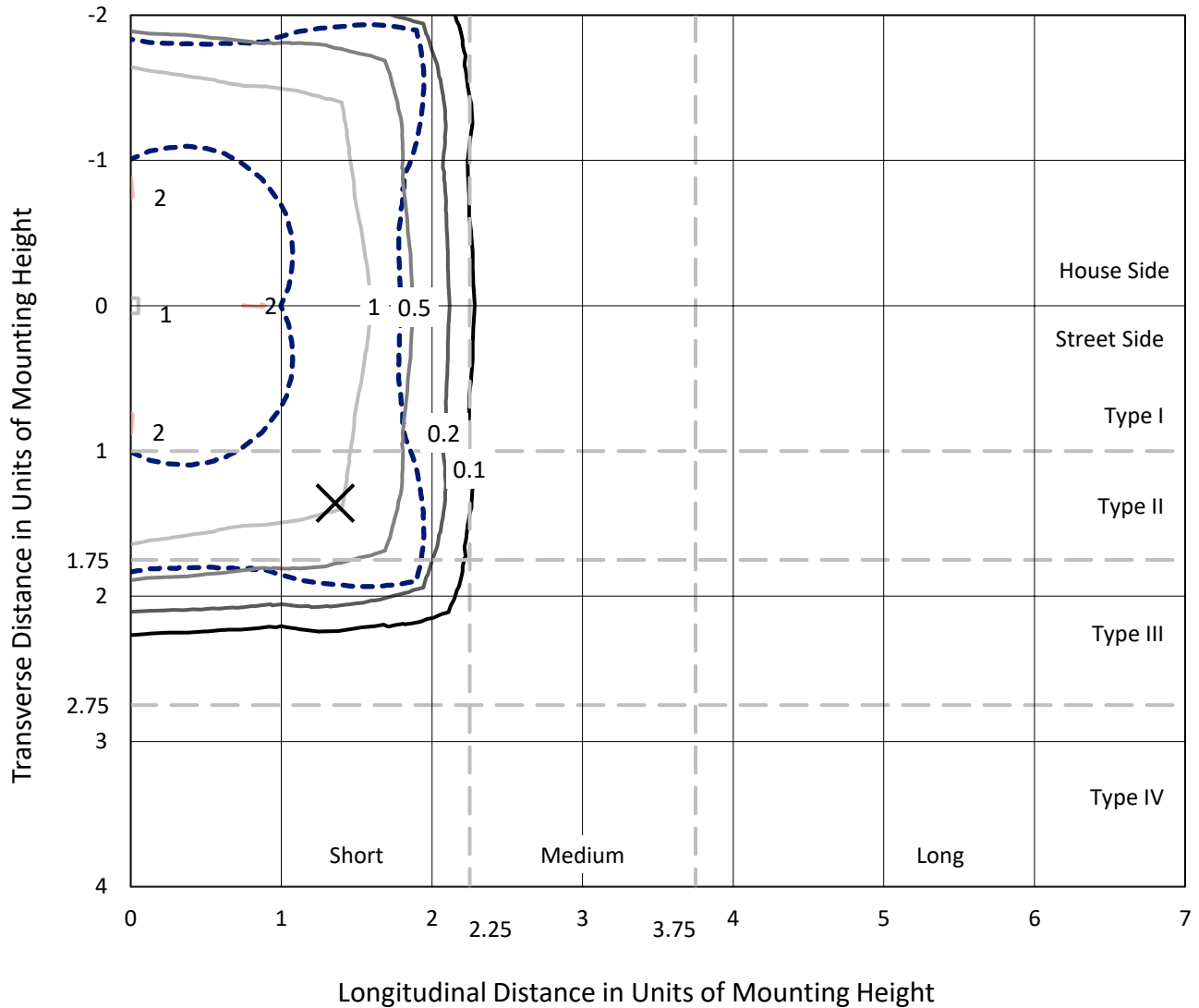
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

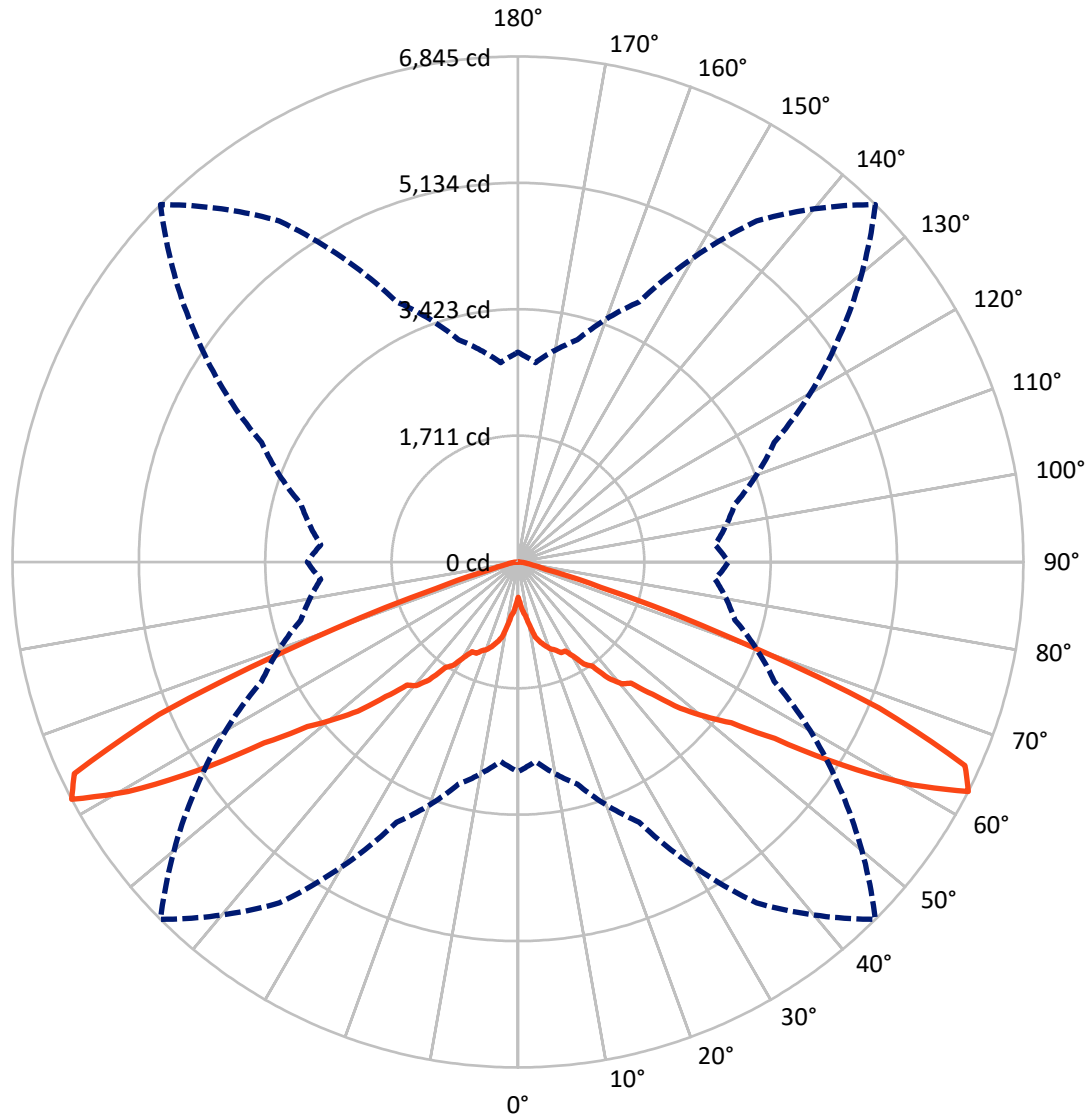
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 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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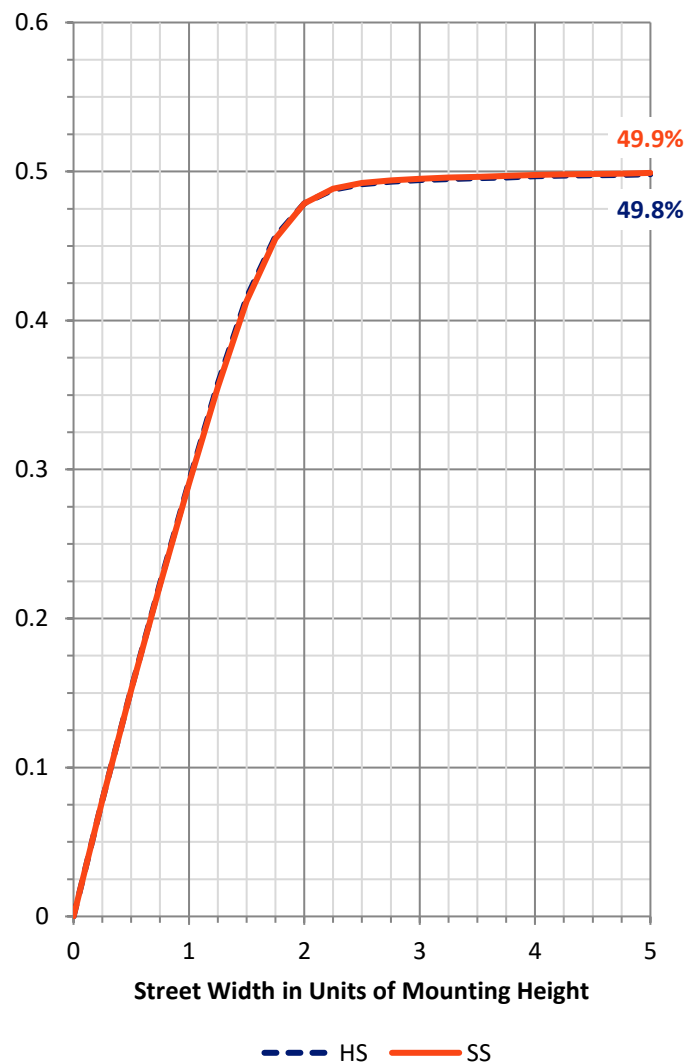
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5831.0	0.0	5831.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5831.0	0.0	5831.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	11662.0	0.0	11662.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.9	0.6
10°-20°	316.9	2.7
20°-30°	664.1	5.7
30°-40°	1251.3	10.7
40°-50°	2271.1	19.5
50°-60°	3837.4	32.9
60°-70°	2868.7	24.6
70°-80°	320.9	2.8
80°-90°	59.7	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°	11662.0	100.0
0°-180°	11662.0	100.0

Coefficient of Utilization



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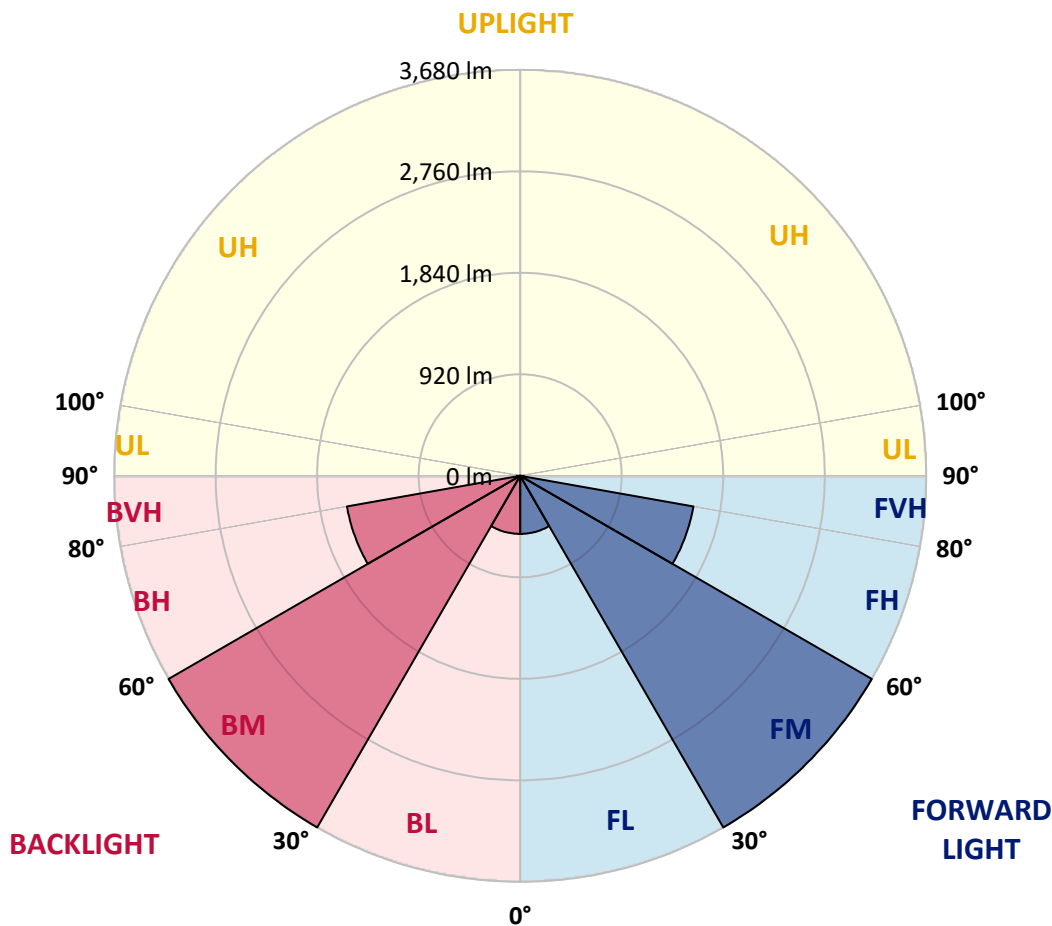
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	526.4	4.5			
FM (30°-60°)	3679.9	31.6			
FH (60°-80°)	1594.8	13.7			G1/1800
FVH (80°-90°)	29.9	0.3			G1/100
BL (0°-30°)	526.4	4.5	B2/1000		
BM (30°-60°)	3679.9	31.6	B3/5000		
BH (60°-80°)	1594.8	13.7	B3/2500		G1/1800
BVH (80°-90°)	29.9	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°	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8
2.5°	579.8	569.3	532.8	545.6	558.9	557.0	553.7	543.7	534.7	572.2	579.8
5°	739.2	715.5	702.7	692.2	689.9	664.2	699.3	695.6	707.4	727.3	746.8
7.5°	866.4	844.1	810.4	803.3	764.8	736.4	766.7	804.2	816.1	852.6	874.4
10°	912.9	893.4	899.6	867.8	865.9	873.9	867.3	875.8	907.2	902.9	919.0
12.5°	1017.2	1020.6	1000.6	992.6	1008.7	1043.8	1013.9	1003.5	995.9	1028.1	1038.1
15°	1115.0	1134.4	1101.7	1096.5	1089.8	1122.6	1090.3	1106.0	1119.7	1126.4	1122.6
17.5°	1253.5	1254.5	1217.9	1159.6	1181.4	1191.8	1177.6	1150.6	1215.6	1248.3	1250.2
20°	1344.6	1347.9	1275.8	1184.7	1246.4	1255.9	1248.8	1192.3	1278.7	1333.2	1330.8
22.5°	1442.8	1431.4	1333.7	1267.3	1289.1	1294.8	1279.6	1272.5	1333.2	1432.4	1417.7
25°	1508.8	1529.6	1432.4	1389.7	1371.2	1357.9	1377.3	1381.1	1443.3	1533.4	1483.6
27.5°	1666.3	1630.2	1477.9	1494.1	1454.7	1365.0	1450.4	1497.4	1484.1	1637.8	1675.3
30°	1806.3	1807.2	1593.7	1624.5	1551.5	1478.9	1571.4	1639.2	1622.6	1819.5	1784.0
32.5°	1985.1	1991.8	1793.4	1710.9	1661.5	1647.8	1636.4	1711.4	1814.8	1974.2	1977.5
35°	2178.2	2235.2	1965.7	1878.8	1794.9	1734.1	1799.6	1903.5	1970.9	2225.7	2180.6
37.5°	2554.5	2458.6	2238.0	2074.8	2021.2	1997.0	2031.6	2091.9	2237.5	2457.2	2534.5
40°	2777.0	2750.4	2450.1	2313.4	2106.6	2171.1	2152.1	2317.2	2437.8	2765.6	2772.7
42.5°	3117.2	2983.4	2713.4	2539.8	2353.8	2241.8	2360.4	2582.0	2727.6	3004.7	3135.7
45°	3386.2	3214.4	3006.2	2874.3	2639.4	2556.4	2599.1	2882.8	3065.5	3255.7	3427.9
47.5°	3683.7	3497.7	3289.4	3055.0	2825.9	2961.1	2885.6	3135.2	3313.6	3586.4	3747.7
50°	4057.5	3851.6	3585.0	3391.4	3239.6	3287.0	3275.2	3453.1	3673.2	3921.9	4105.0
52.5°	4469.4	4236.4	3979.3	3799.4	3735.4	3617.7	3771.4	3844.5	4006.8	4234.5	4449.4
55°	4757.4	4524.4	4368.8	4426.7	4409.6	4220.8	4355.5	4363.1	4284.8	4366.9	4583.2
57.5°	4712.8	4490.2	4468.9	4687.6	5014.5	5197.2	4988.9	4541.0	4247.8	4209.4	4438.5
60°	4120.6	3930.4	4125.9	4619.3	5571.5	6127.6	5325.8	4406.7	3923.7	3724.0	3945.1
62.5°	2839.6	2711.0	3116.2	3887.7	5638.4	6845.4	5313.4	3829.3	3043.2	2680.7	2852.4
65°	1346.0	1299.5	1641.6	2464.8	4696.6	6653.8	4642.1	2591.0	1751.7	1399.2	1438.1
67.5°	506.2	483.0	602.6	1088.9	2958.2	5277.4	3120.5	1278.2	677.5	526.6	544.7
70°	287.5	270.9	286.6	397.1	1190.9	2989.1	1346.0	438.4	288.0	262.4	279.5
72.5°	226.3	213.5	215.9	240.1	410.9	1173.3	435.6	250.0	209.2	198.8	214.0
75°	186.9	175.5	175.1	188.4	239.6	381.0	246.2	191.2	169.4	161.8	174.1
77.5°	148.5	141.9	143.8	154.2	171.8	213.0	178.4	154.7	139.0	130.0	138.5
80°	108.7	107.7	115.3	124.8	128.1	143.3	133.8	124.8	111.0	98.2	101.5
82.5°	71.2	71.6	85.9	93.5	92.0	91.6	95.8	95.4	83.0	65.0	65.0
85°	40.8	41.8	52.7	58.8	57.9	46.0	60.7	61.2	53.1	39.4	38.0
87.5°	13.3	16.6	22.8	24.2	23.2	12.8	23.2	25.6	23.2	16.6	14.7
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)