

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: P367898

Luminaire Tested: **MSA-SA3B-830-U-5NQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367898
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-5)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3B-830-U-5NQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11953 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

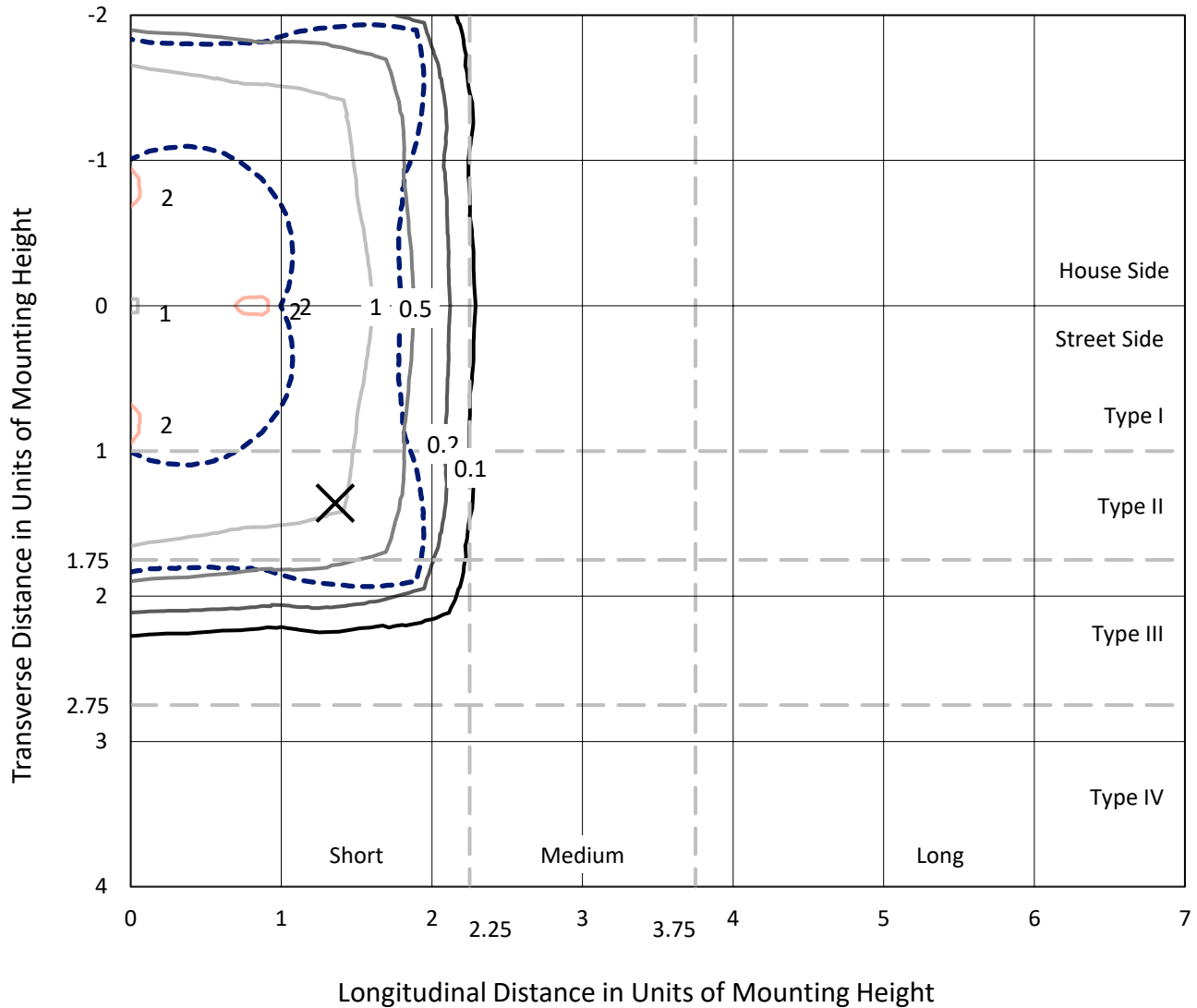
Input Watts (W): 126
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

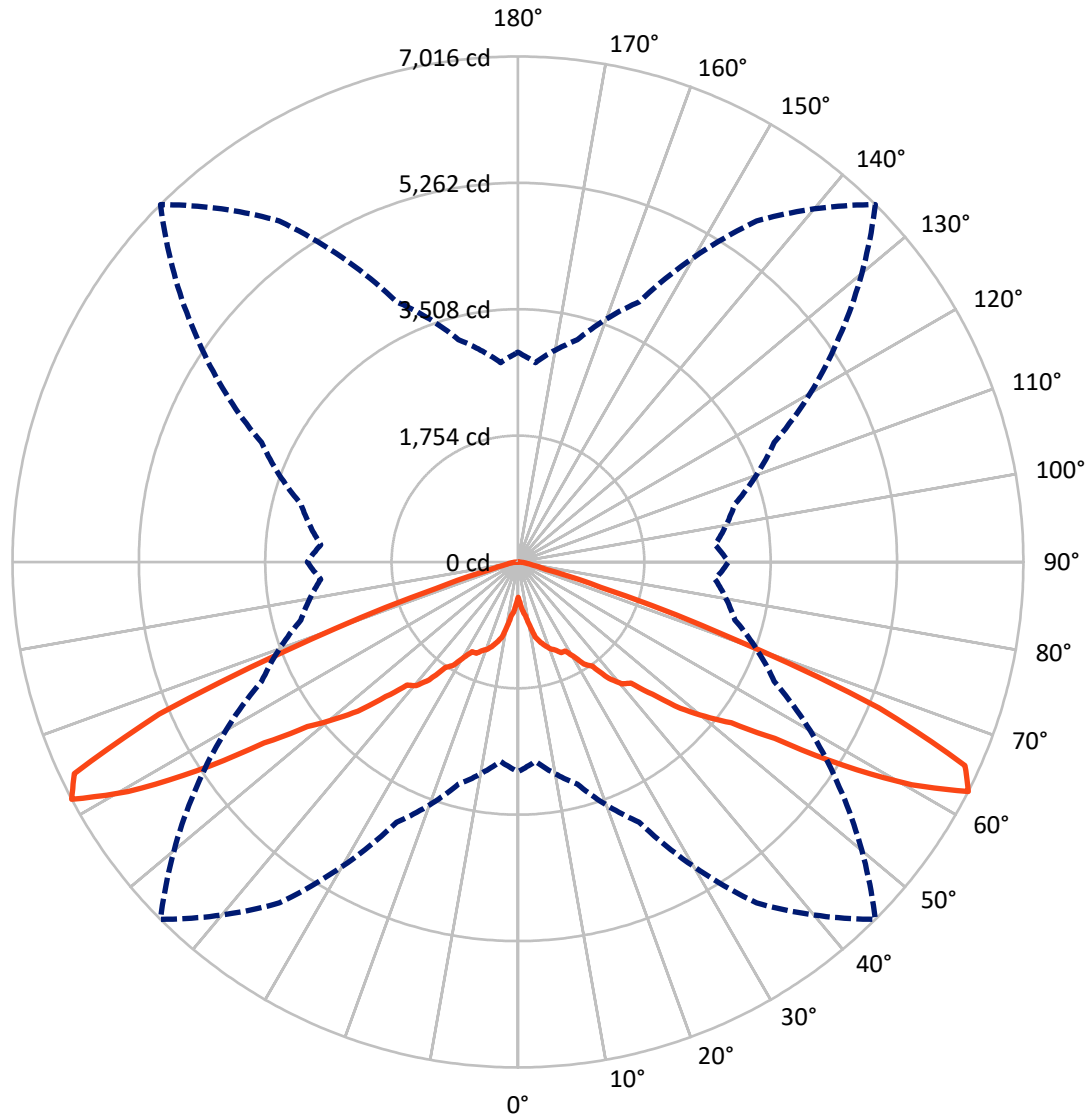
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 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	5976.5	0.0	5976.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5976.5	0.0	5976.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	11953.0	0.0	11953.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.7	0.6
10°-20°	324.8	2.7
20°-30°	680.7	5.7
30°-40°	1282.5	10.7
40°-50°	2327.8	19.5
50°-60°	3933.1	32.9
60°-70°	2940.3	24.6
70°-80°	328.9	2.8
80°-90°	61.2	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°	11953.0	100.0
0°-180°	11953.0	100.0

Coefficient of Utilization



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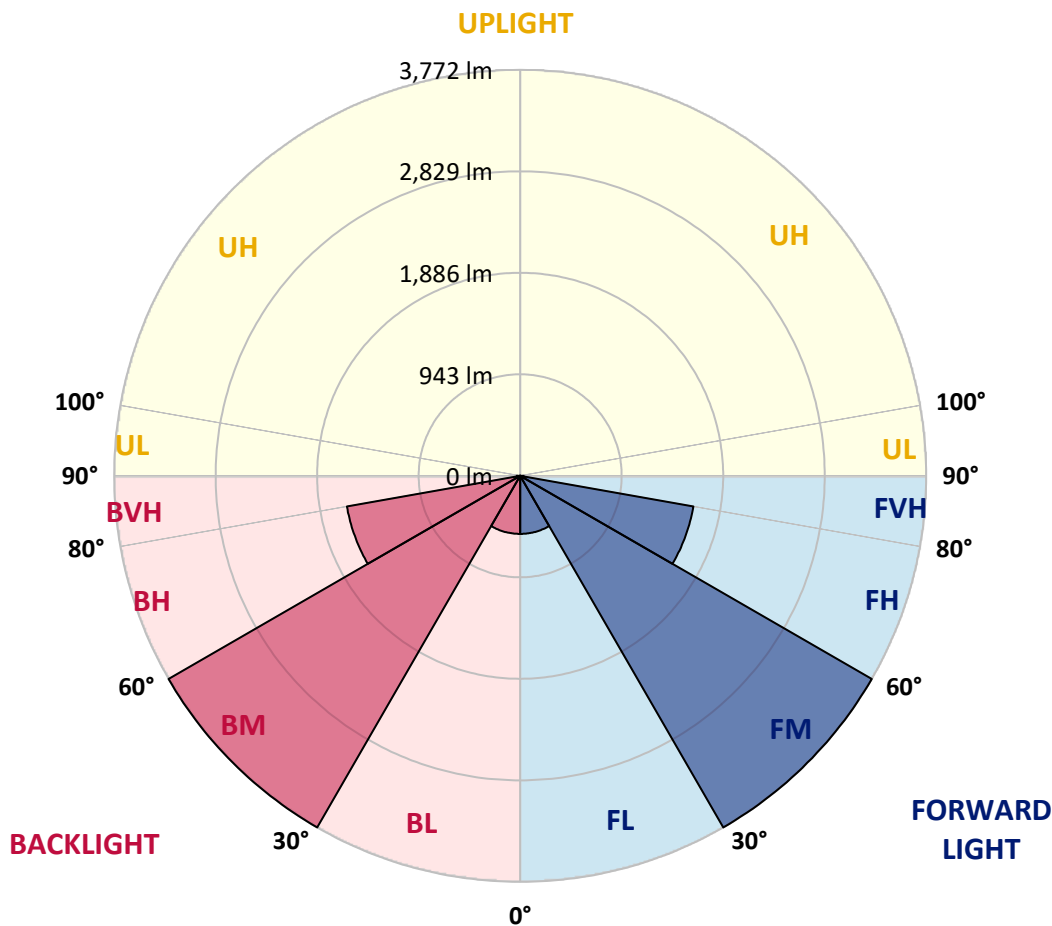
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	539.6	4.5			
FM (30°-60°)	3771.7	31.6			
FH (60°-80°)	1634.6	13.7			G1/1800
FVH (80°-90°)	30.6	0.3			G1/100
BL (0°-30°)	539.6	4.5	B2/1000		
BM (30°-60°)	3771.7	31.6	B3/5000		
BH (60°-80°)	1634.6	13.7	B3/2500		G1/1800
BVH (80°-90°)	30.6	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°	488.7	488.7	488.7	488.7	488.7	488.7	488.7	488.7	488.7	488.7	488.7
2.5°	594.3	583.6	546.1	559.2	572.9	570.9	567.5	557.3	548.1	586.5	594.3
5°	757.6	733.3	720.2	709.5	707.1	680.8	716.8	712.9	725.1	745.5	765.4
7.5°	888.0	865.1	830.6	823.3	783.9	754.7	785.9	824.3	836.4	873.9	896.2
10°	935.6	915.7	922.0	889.4	887.5	895.8	888.9	897.7	929.8	925.4	942.0
12.5°	1042.6	1046.0	1025.6	1017.3	1033.9	1069.8	1039.2	1028.5	1020.7	1053.8	1064.0
15°	1142.8	1162.7	1129.2	1123.8	1117.0	1150.6	1117.5	1133.6	1147.7	1154.5	1150.6
17.5°	1284.8	1285.8	1248.3	1188.5	1210.9	1221.6	1207.0	1179.3	1245.9	1279.4	1281.4
20°	1378.2	1381.6	1307.6	1214.3	1277.5	1287.2	1279.9	1222.1	1310.6	1366.5	1364.1
22.5°	1478.8	1467.2	1367.0	1298.9	1321.3	1327.1	1311.5	1304.2	1366.5	1468.1	1453.0
25°	1546.4	1567.8	1468.1	1424.4	1405.4	1391.8	1411.7	1415.6	1479.3	1571.7	1520.6
27.5°	1707.9	1670.9	1514.8	1531.3	1491.0	1399.1	1486.6	1534.7	1521.1	1678.7	1717.1
30°	1851.3	1852.3	1633.5	1665.1	1590.2	1515.8	1610.6	1680.1	1663.1	1864.9	1828.5
32.5°	2034.7	2041.5	1838.2	1753.6	1703.0	1688.9	1677.2	1754.1	1860.1	2023.5	2026.9
35°	2232.6	2290.9	2014.7	1925.7	1839.7	1777.4	1844.5	1951.0	2020.1	2281.2	2235.0
37.5°	2618.2	2520.0	2293.9	2126.6	2071.6	2046.8	2082.3	2144.1	2293.4	2518.5	2597.8
40°	2846.3	2819.1	2511.2	2371.2	2159.1	2225.3	2205.8	2375.1	2498.6	2834.6	2841.9
42.5°	3195.0	3057.8	2781.1	2603.1	2412.5	2297.7	2419.3	2646.4	2795.7	3079.7	3213.9
45°	3470.7	3294.6	3081.2	2946.0	2705.3	2620.2	2663.9	2954.7	3142.0	3337.0	3513.5
47.5°	3775.6	3585.0	3371.5	3131.3	2896.4	3035.0	2957.6	3213.4	3396.3	3675.9	3841.2
50°	4158.8	3947.7	3674.4	3476.0	3320.4	3369.1	3356.9	3539.3	3764.9	4019.7	4207.4
52.5°	4580.9	4342.1	4078.6	3894.2	3828.6	3708.0	3865.6	3940.4	4106.8	4340.2	4560.5
55°	4876.1	4637.3	4477.8	4537.1	4519.6	4326.1	4464.2	4472.0	4391.7	4475.9	4697.6
57.5°	4830.4	4602.3	4580.4	4804.6	5139.6	5326.9	5113.4	4654.3	4353.8	4314.4	4549.3
60°	4223.5	4028.5	4228.8	4734.6	5710.6	6280.5	5458.7	4516.7	4021.7	3816.9	4043.5
62.5°	2910.5	2778.7	3194.0	3984.7	5779.1	7016.3	5446.0	3924.9	3119.1	2747.6	2923.6
65°	1379.6	1332.0	1682.6	2526.3	4813.8	6819.8	4757.9	2655.7	1795.4	1434.1	1474.0
67.5°	518.9	495.0	617.6	1116.0	3032.0	5409.1	3198.4	1310.1	694.4	539.8	558.3
70°	294.7	277.7	293.7	407.0	1220.6	3063.7	1379.6	449.3	295.2	268.9	286.4
72.5°	232.0	218.8	221.3	246.1	421.1	1202.6	446.4	256.3	214.5	203.8	219.3
75°	191.6	179.9	179.4	193.1	245.6	390.5	252.4	196.0	173.6	165.8	178.5
77.5°	152.2	145.4	147.3	158.0	176.0	218.3	182.8	158.5	142.5	133.2	142.0
80°	111.4	110.4	118.2	127.9	131.3	146.9	137.1	127.9	113.8	100.7	104.1
82.5°	72.9	73.4	88.0	95.8	94.3	93.9	98.2	97.7	85.1	66.6	66.6
85°	41.8	42.8	54.0	60.3	59.3	47.2	62.2	62.7	54.5	40.4	38.9
87.5°	13.6	17.0	23.3	24.8	23.8	13.1	23.8	26.3	23.8	17.0	15.1
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)