

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: P366842

Luminaire Tested: **MSA-SA1B-830-U-5NQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P366842
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-SA1B-830-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: 4118 lumens
Efficiency: N/A
Efficacy: 93.6 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

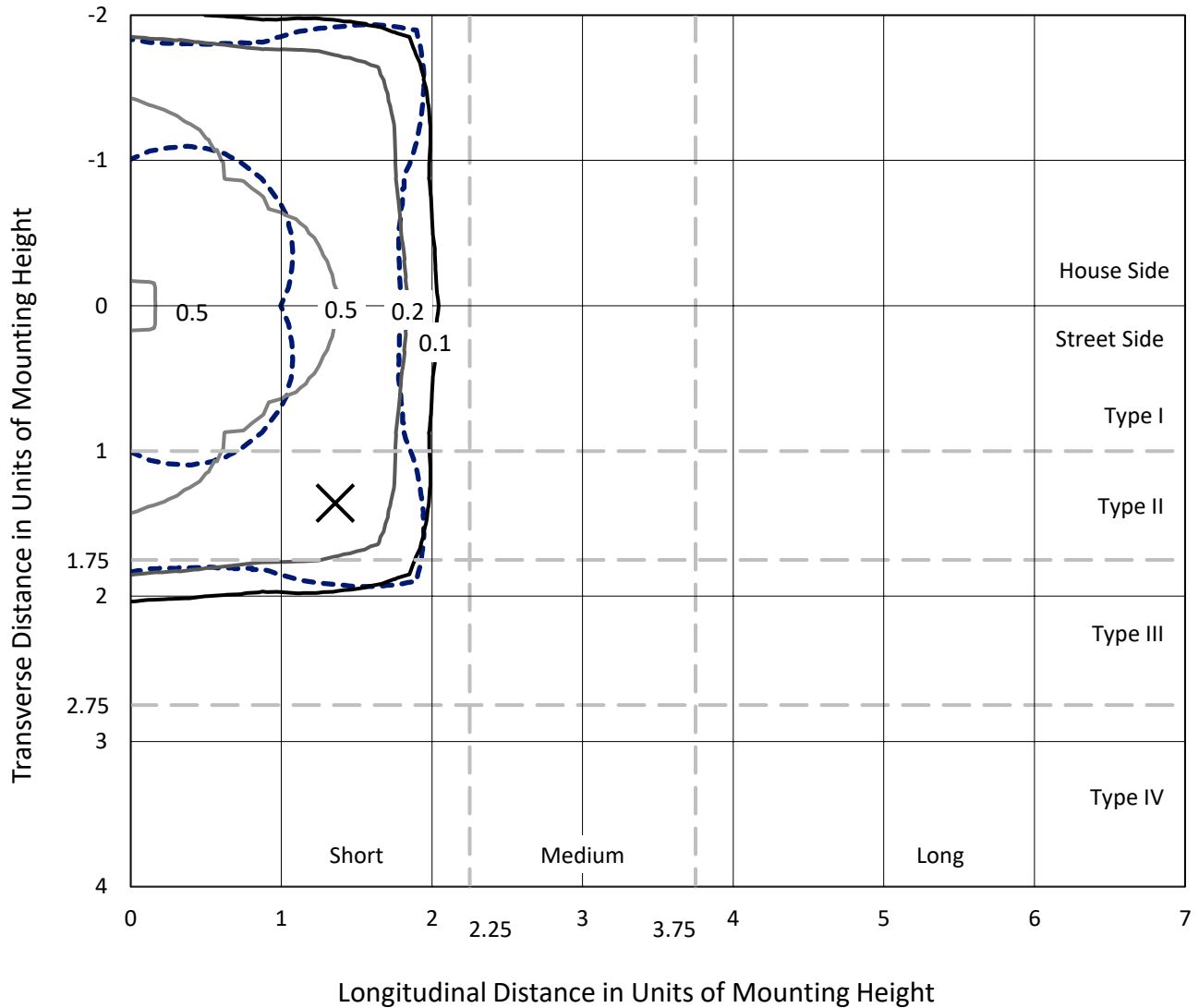
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P366842
 CATALOG NUMBER: MSA-SA1B-830-U-5NQ

Iso-Footcandle Lines of Horizontal Illumination

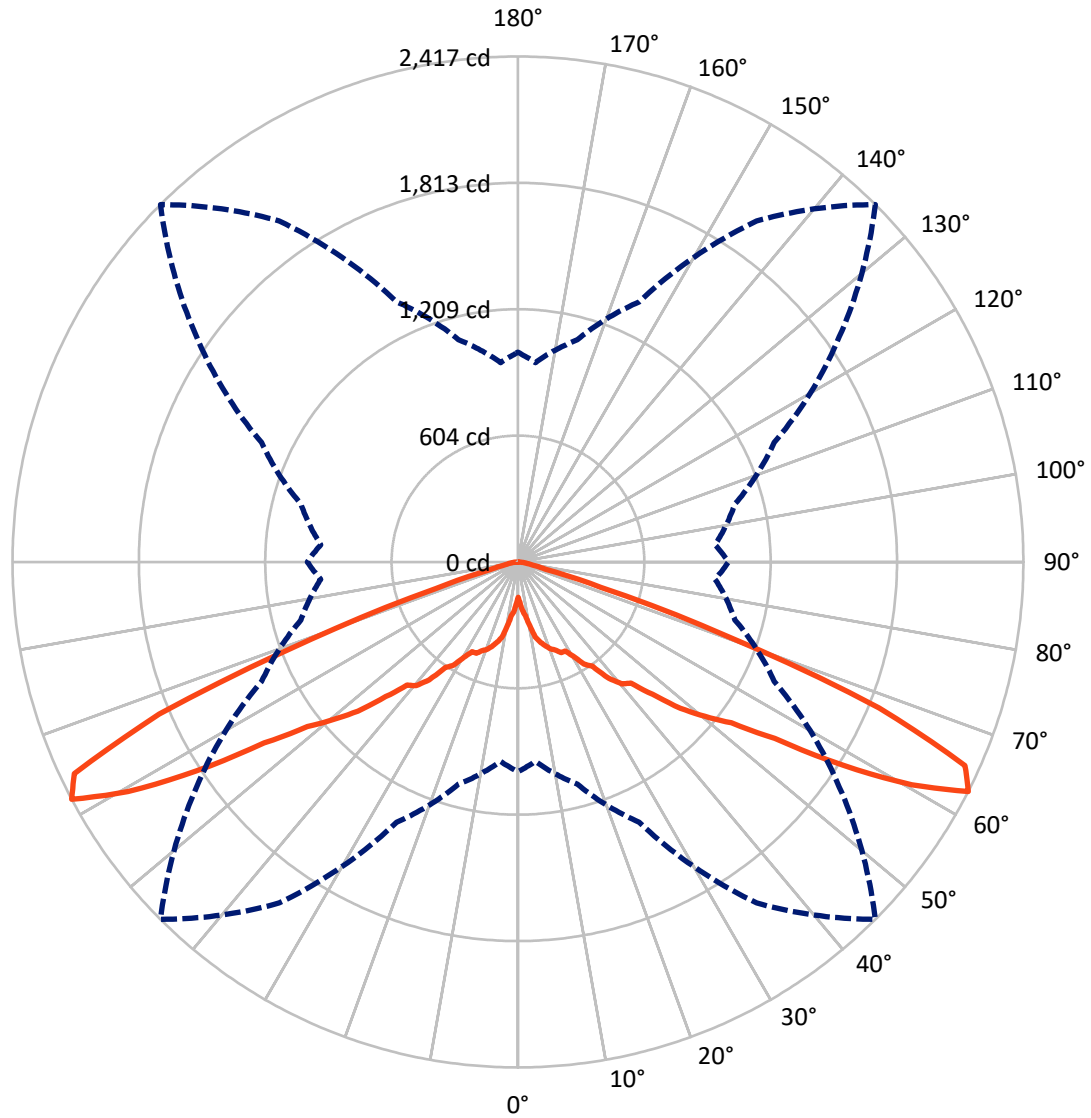
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 fc
 Type V - Short - N/A

REPORT NUMBER: P366842
CATALOG NUMBER: MSA-SA1B-830-U-5NQ

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P366842

CATALOG NUMBER: MSA-SA1B-830-U-5NQ

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2059.0	0.0	2059.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2059.0	0.0	2059.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	4118.0	0.0	4118.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.4	0.6
10°-20°	111.9	2.7
20°-30°	234.5	5.7
30°-40°	441.9	10.7
40°-50°	802.0	19.5
50°-60°	1355.0	32.9
60°-70°	1013.0	24.6
70°-80°	113.3	2.8
80°-90°	21.1	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°	4118.0	100.0
0°-180°	4118.0	100.0

Coefficient of Utilization



REPORT NUMBER: P366842

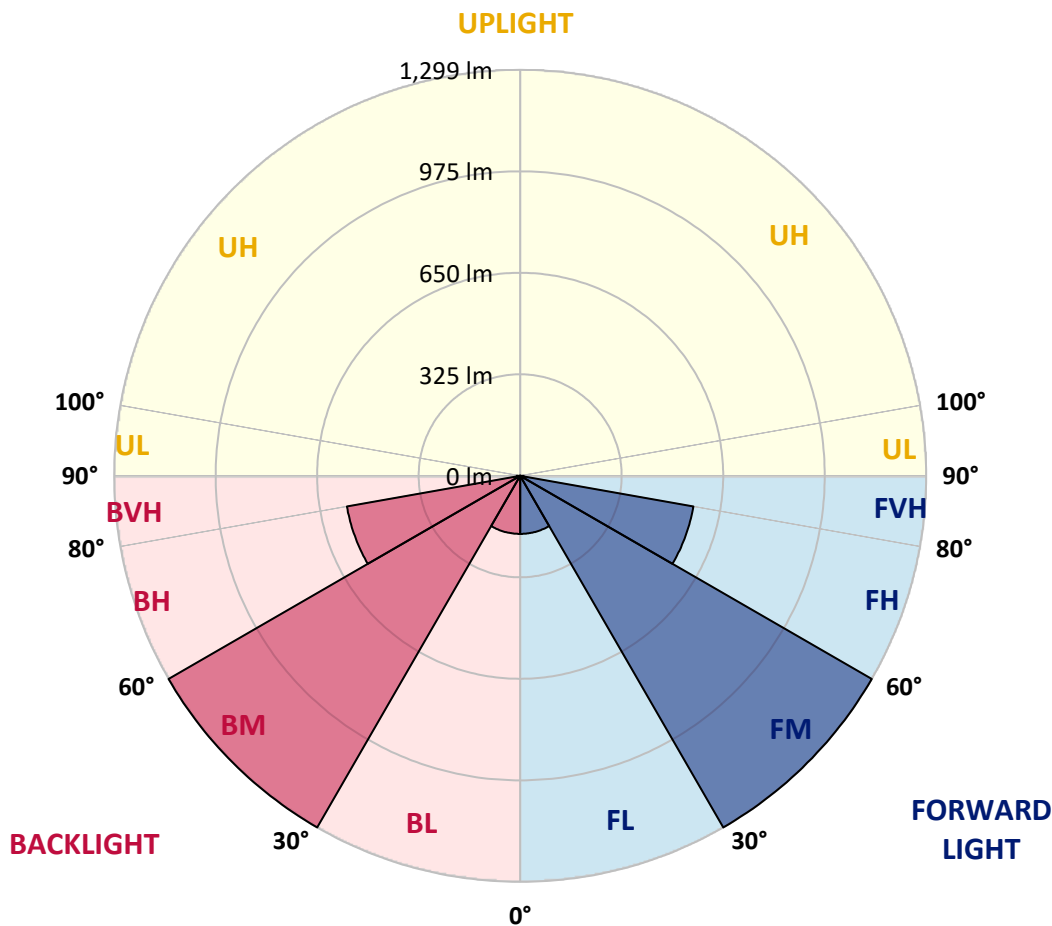
CATALOG NUMBER: MSA-SA1B-830-U-5NQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	185.9	4.5			
FM (30°-60°)	1299.4	31.6			
FH (60°-80°)	563.1	13.7			G0/660
FVH (80°-90°)	10.5	0.3			G1/100
BL (0°-30°)	185.9	4.5	B1/500		
BM (30°-60°)	1299.4	31.6	B2/2500		
BH (60°-80°)	563.1	13.7	B2/1000		G0/660
BVH (80°-90°)	10.5	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





REPORT NUMBER: P366842
 CATALOG NUMBER: MSA-SA1B-830-U-5NQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	168.4	168.4	168.4	168.4	168.4	168.4	168.4	168.4	168.4	168.4	168.4
2.5°	204.7	201.0	188.1	192.7	197.4	196.7	195.5	192.0	188.8	202.0	204.7
5°	261.0	252.6	248.1	244.4	243.6	234.6	246.9	245.6	249.8	256.8	263.7
7.5°	305.9	298.0	286.2	283.6	270.1	260.0	270.7	284.0	288.2	301.1	308.8
10°	322.3	315.5	317.6	306.4	305.8	308.6	306.3	309.3	320.3	318.8	324.5
12.5°	359.2	360.4	353.3	350.5	356.2	368.6	358.0	354.3	351.7	363.1	366.6
15°	393.7	400.6	389.0	387.2	384.8	396.4	385.0	390.5	395.4	397.7	396.4
17.5°	442.6	443.0	430.1	409.5	417.2	420.9	415.8	406.3	429.2	440.8	441.5
20°	474.8	476.0	450.5	418.3	440.1	443.5	441.0	421.0	451.5	470.8	469.9
22.5°	509.5	505.5	470.9	447.5	455.2	457.2	451.8	449.3	470.8	505.8	500.6
25°	532.8	540.1	505.8	490.7	484.2	479.5	486.4	487.7	509.6	541.5	523.9
27.5°	588.4	575.7	521.9	527.6	513.7	482.0	512.2	528.7	524.1	578.3	591.6
30°	637.8	638.1	562.8	573.6	547.8	522.2	554.9	578.8	573.0	642.5	629.9
32.5°	701.0	703.3	633.3	604.1	586.7	581.9	577.8	604.3	640.8	697.1	698.3
35°	769.2	789.3	694.1	663.4	633.8	612.3	635.5	672.2	695.9	785.9	770.0
37.5°	902.0	868.2	790.3	732.6	713.7	705.2	717.4	738.7	790.1	867.7	895.0
40°	980.6	971.2	865.2	816.9	743.9	766.6	759.9	818.2	860.8	976.6	979.1
42.5°	1100.7	1053.5	958.1	896.8	831.1	791.6	833.5	911.7	963.2	1061.0	1107.2
45°	1195.7	1135.1	1061.5	1014.9	932.0	902.7	917.8	1018.0	1082.5	1149.6	1210.5
47.5°	1300.8	1235.1	1161.5	1078.8	997.8	1045.6	1019.0	1107.1	1170.1	1266.4	1323.4
50°	1432.8	1360.1	1265.9	1197.5	1143.9	1160.7	1156.5	1219.3	1297.1	1384.9	1449.5
52.5°	1578.2	1495.9	1405.1	1341.6	1319.0	1277.5	1331.7	1357.5	1414.8	1495.3	1571.2
55°	1679.9	1597.6	1542.7	1563.1	1557.1	1490.4	1538.0	1540.7	1513.0	1542.0	1618.4
57.5°	1664.1	1585.6	1578.0	1655.3	1770.7	1835.2	1761.6	1603.5	1500.0	1486.4	1567.3
60°	1455.1	1387.9	1456.9	1631.1	1967.4	2163.7	1880.6	1556.1	1385.5	1315.0	1393.1
62.5°	1002.7	957.3	1100.4	1372.8	1991.0	2417.2	1876.2	1352.2	1074.6	946.6	1007.2
65°	475.3	458.9	579.7	870.4	1658.4	2349.5	1639.2	914.9	618.5	494.1	507.8
67.5°	178.8	170.6	212.8	384.5	1044.6	1863.5	1101.9	451.3	239.2	186.0	192.3
70°	101.5	95.7	101.2	140.2	420.5	1055.5	475.3	154.8	101.7	92.6	98.7
72.5°	79.9	75.4	76.2	84.8	145.1	414.3	153.8	88.3	73.9	70.2	75.6
75°	66.0	62.0	61.8	66.5	84.6	134.5	87.0	67.5	59.8	57.1	61.5
77.5°	52.4	50.1	50.8	54.4	60.6	75.2	63.0	54.6	49.1	45.9	48.9
80°	38.4	38.0	40.7	44.1	45.2	50.6	47.2	44.1	39.2	34.7	35.9
82.5°	25.1	25.3	30.3	33.0	32.5	32.3	33.8	33.7	29.3	23.0	23.0
85°	14.4	14.7	18.6	20.8	20.4	16.3	21.4	21.6	18.8	13.9	13.4
87.5°	4.7	5.9	8.0	8.5	8.2	4.5	8.2	9.0	8.2	5.9	5.2
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)