

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: P366754

Luminaire Tested: **MSA-SA1B-730-U-5NQ**

Issue Date: 12/2/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P366754  
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-730-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: 4720 lumens  
Efficiency: N/A  
Efficacy: 107.3 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

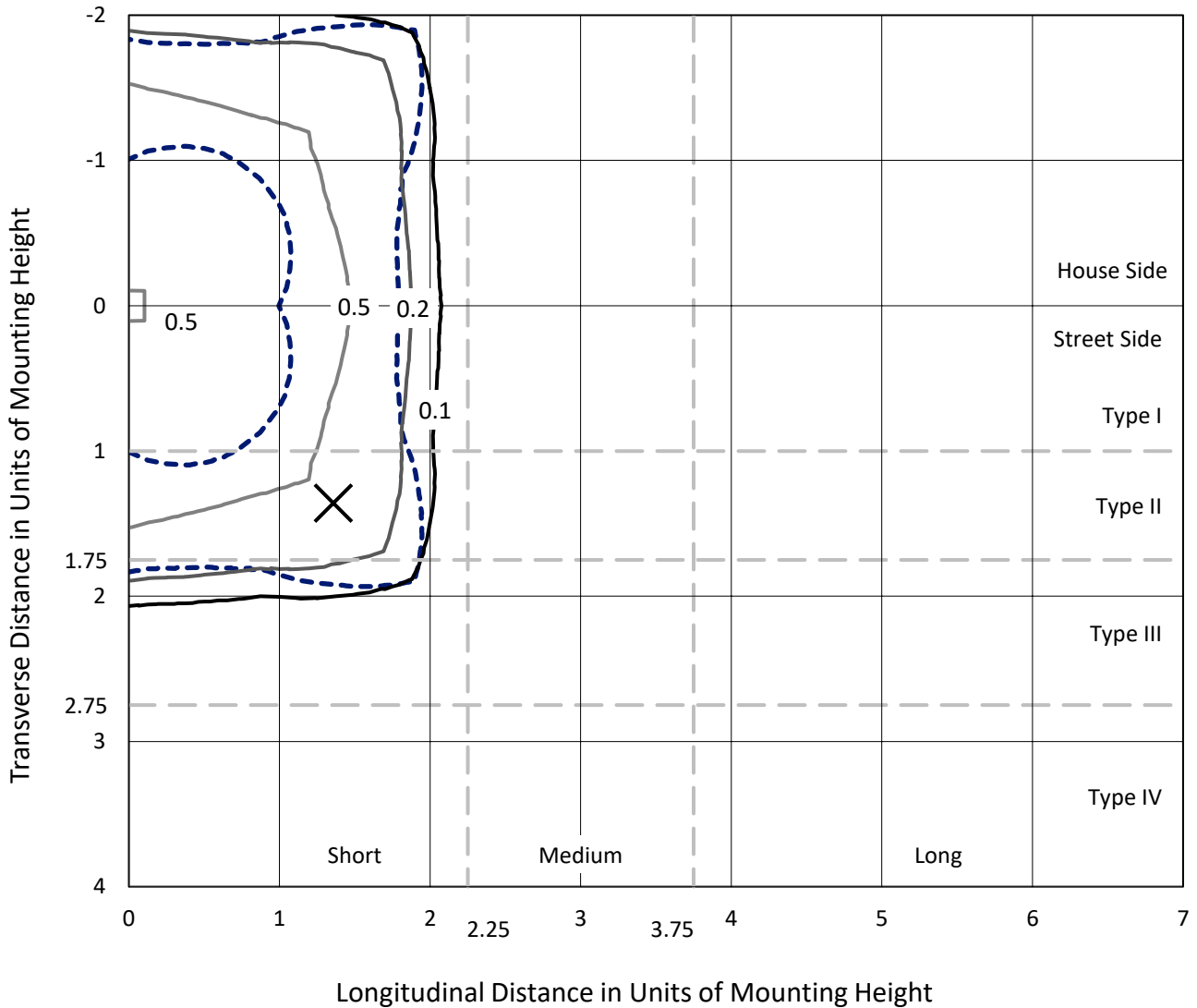
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

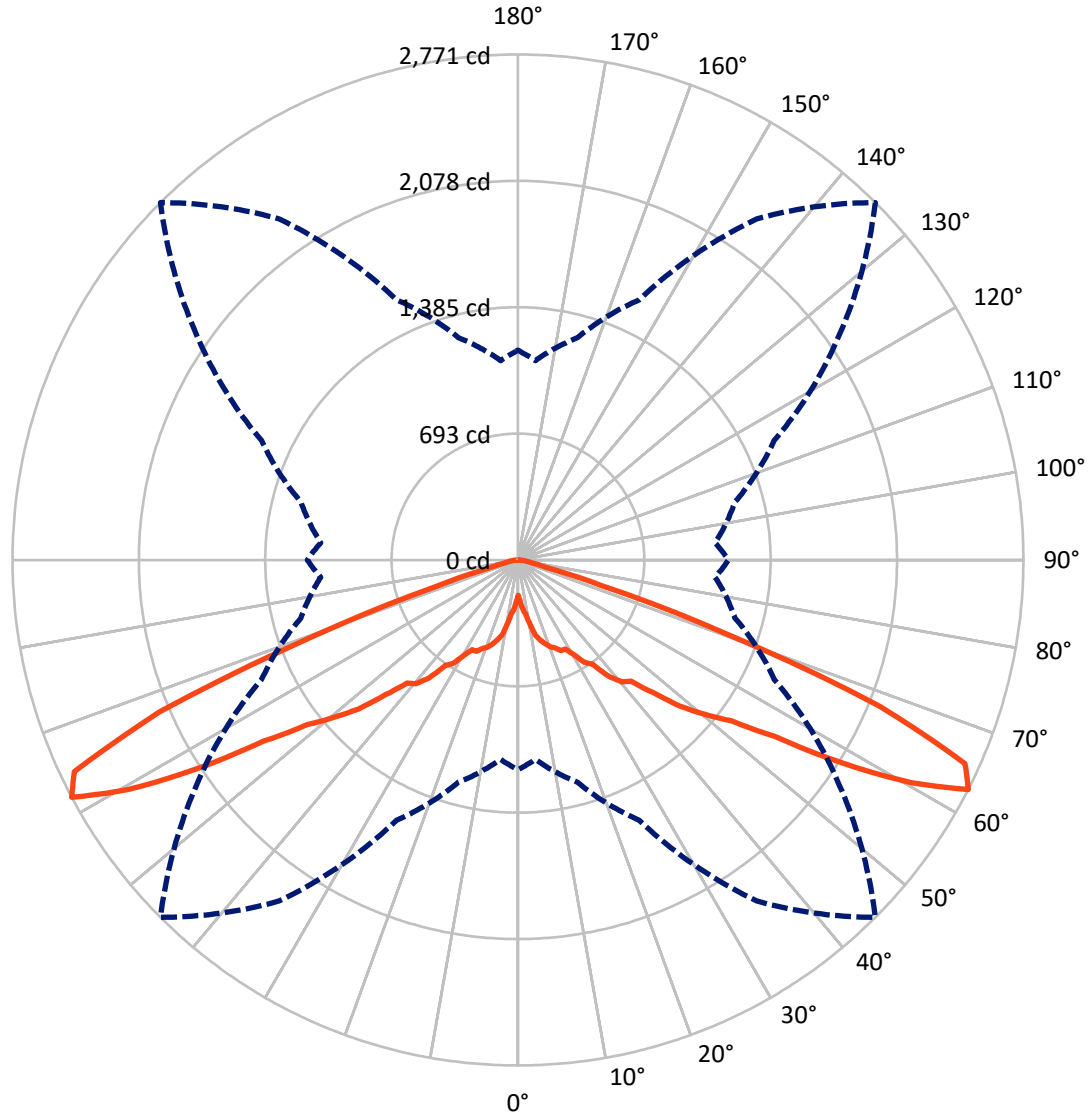
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 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
<b>House Side</b>	Lumens	2360.0	0.0	2360.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2360.0	0.0	2360.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	4720.0	0.0	4720.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.1	0.6
10°-20°	128.2	2.7
20°-30°	268.8	5.7
30°-40°	506.4	10.7
40°-50°	919.2	19.5
50°-60°	1553.1	32.9
60°-70°	1161.1	24.6
70°-80°	129.9	2.8
80°-90°	24.2	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°	4720.0	100.0
0°-180°	4720.0	100.0

**Coefficient of Utilization**



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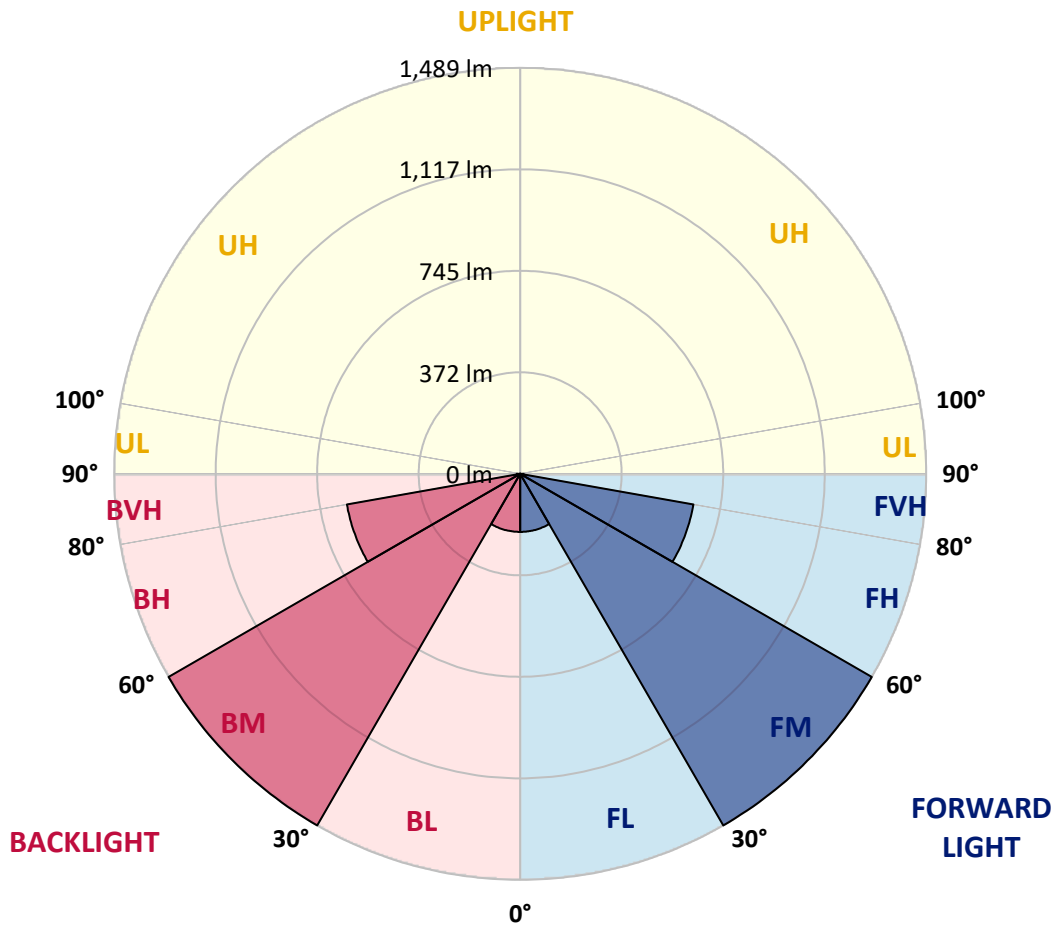
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	213.1	4.5			
FM (30°-60°)	1489.4	31.6			
FH (60°-80°)	645.5	13.7			G0/660
FVH (80°-90°)	12.1	0.3			G1/100
BL (0°-30°)	213.1	4.5	B1/500		
BM (30°-60°)	1489.4	31.6	B2/2500		
BH (60°-80°)	645.5	13.7	B2/1000		G0/660
BVH (80°-90°)	12.1	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	193.0	193.0	193.0	193.0	193.0	193.0	193.0	193.0	193.0	193.0	193.0
2.5°	234.7	230.4	215.6	220.8	226.2	225.4	224.1	220.1	216.4	231.6	234.7
5°	299.2	289.6	284.4	280.2	279.2	268.8	283.0	281.5	286.3	294.4	302.3
7.5°	350.6	341.6	328.0	325.1	309.5	298.0	310.3	325.5	330.3	345.1	353.9
10°	369.5	361.6	364.1	351.2	350.5	353.7	351.0	354.5	367.2	365.4	372.0
12.5°	411.7	413.1	405.0	401.7	408.3	422.5	410.4	406.1	403.1	416.1	420.2
15°	451.3	459.1	445.9	443.8	441.1	454.3	441.3	447.6	453.2	455.9	454.3
17.5°	507.3	507.7	492.9	469.3	478.1	482.4	476.6	465.7	492.0	505.2	506.0
20°	544.2	545.6	516.4	479.5	504.5	508.3	505.4	482.6	517.5	539.6	538.6
22.5°	584.0	579.3	539.8	512.9	521.7	524.0	517.9	515.0	539.6	579.7	573.8
25°	610.6	619.1	579.7	562.5	555.0	549.6	557.5	559.0	584.1	620.6	600.5
27.5°	674.4	659.8	598.2	604.7	588.8	552.5	587.0	606.0	600.7	662.9	678.1
30°	731.1	731.4	645.0	657.5	627.9	598.6	636.0	663.5	656.7	736.4	722.0
32.5°	803.4	806.1	725.9	692.5	672.5	666.9	662.3	692.6	734.5	799.0	800.4
35°	881.6	904.6	795.6	760.4	726.4	701.9	728.4	770.4	797.7	900.8	882.6
37.5°	1033.9	995.1	905.8	839.7	818.0	808.2	822.3	846.7	905.6	994.5	1025.8
40°	1123.9	1113.2	991.6	936.3	852.6	878.7	871.0	937.9	986.6	1119.3	1122.2
42.5°	1261.6	1207.5	1098.2	1027.9	952.7	907.3	955.3	1045.0	1104.0	1216.1	1269.1
45°	1370.5	1301.0	1216.7	1163.3	1068.3	1034.6	1051.9	1166.8	1240.7	1317.7	1387.4
47.5°	1490.9	1415.6	1331.3	1236.5	1143.7	1198.4	1167.9	1268.9	1341.1	1451.5	1516.8
50°	1642.2	1558.9	1451.0	1372.6	1311.2	1330.4	1325.6	1397.6	1486.7	1587.3	1661.4
52.5°	1808.9	1714.6	1610.5	1537.8	1511.8	1464.2	1526.4	1556.0	1621.7	1713.9	1800.8
55°	1925.5	1831.2	1768.2	1791.6	1784.7	1708.3	1762.8	1765.9	1734.2	1767.4	1855.0
57.5°	1907.4	1817.4	1808.7	1897.2	2029.5	2103.5	2019.2	1837.9	1719.2	1703.7	1796.4
60°	1667.8	1590.8	1669.9	1869.6	2255.0	2480.0	2155.5	1783.6	1588.1	1507.2	1596.7
62.5°	1149.3	1097.2	1261.2	1573.5	2282.1	2770.6	2150.5	1549.9	1231.7	1085.0	1154.5
65°	544.8	526.0	664.4	997.6	1900.9	2693.0	1878.8	1048.7	709.0	566.3	582.0
67.5°	204.9	195.5	243.9	440.7	1197.3	2135.9	1263.0	517.3	274.2	213.2	220.4
70°	116.4	109.6	116.0	160.7	482.0	1209.8	544.8	177.4	116.6	106.2	113.1
72.5°	91.6	86.4	87.4	97.2	166.3	474.9	176.3	101.2	84.7	80.5	86.6
75°	75.7	71.1	70.9	76.2	97.0	154.2	99.7	77.4	68.6	65.5	70.5
77.5°	60.1	57.4	58.2	62.4	69.5	86.2	72.2	62.6	56.3	52.6	56.1
80°	44.0	43.6	46.7	50.5	51.8	58.0	54.2	50.5	44.9	39.7	41.1
82.5°	28.8	29.0	34.8	37.8	37.3	37.1	38.8	38.6	33.6	26.3	26.3
85°	16.5	16.9	21.3	23.8	23.4	18.6	24.6	24.8	21.5	15.9	15.4
87.5°	5.4	6.7	9.2	9.8	9.4	5.2	9.4	10.4	9.4	6.7	6.0
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)