

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: P368558

Luminaire Tested: **MSA-SA4C-830-U-5NQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P368558
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-SA4C-830-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: 19565 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

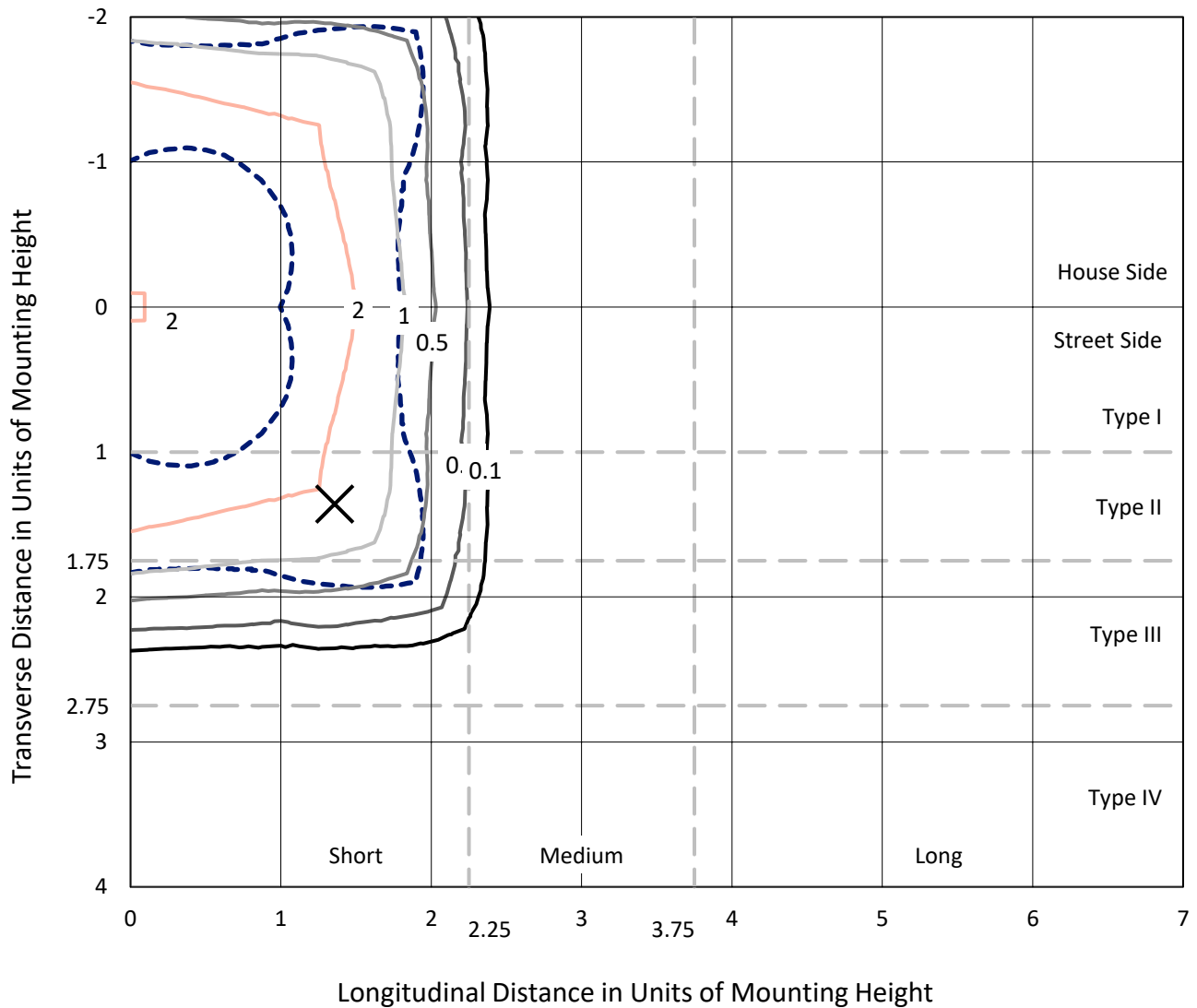
Input Watts (W): 225
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

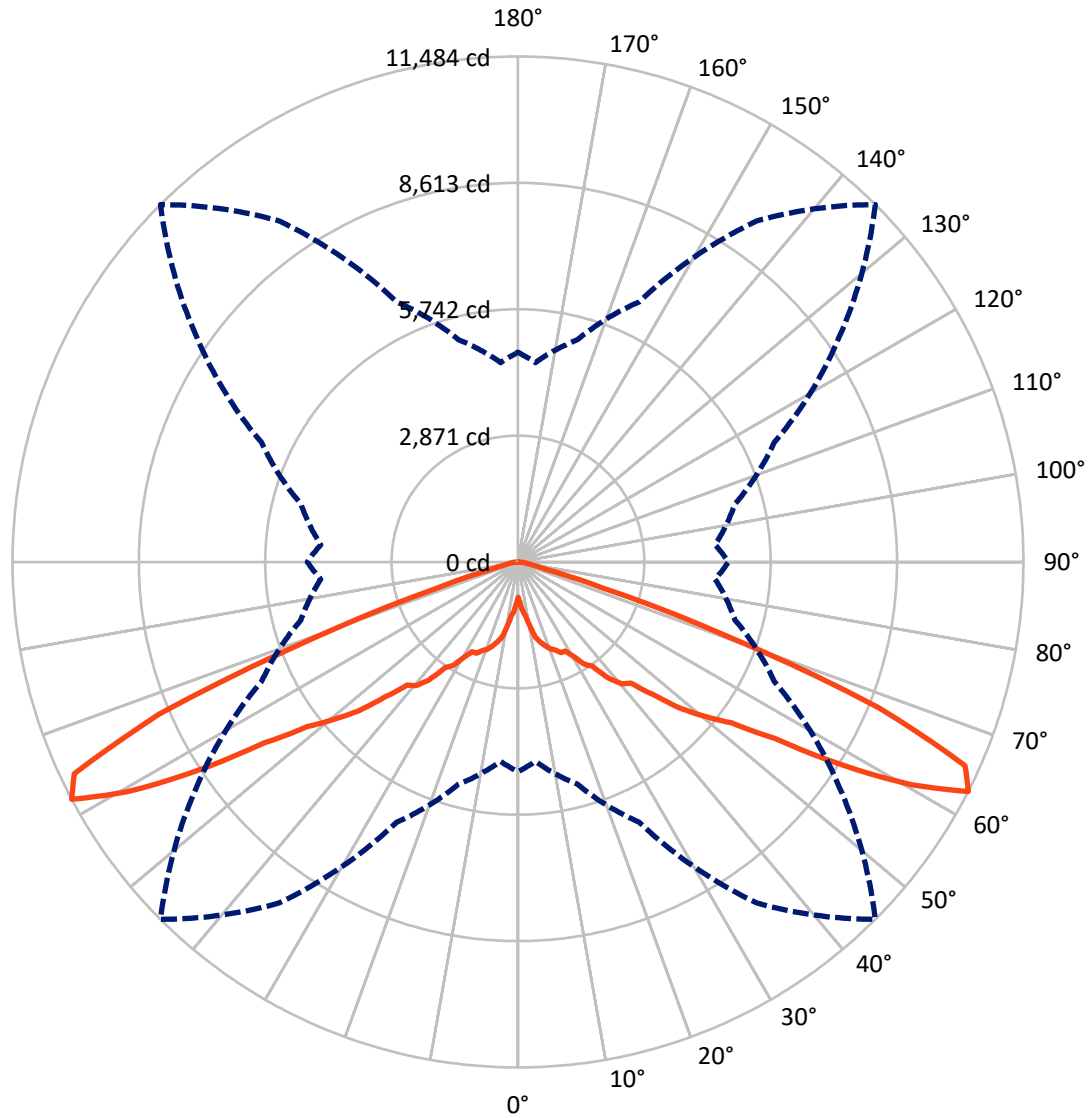
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 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	9782.5	0.0	9782.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9782.5	0.0	9782.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	19565.0	0.0	19565.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.6	0.6
10°-20°	531.6	2.7
20°-30°	1114.2	5.7
30°-40°	2099.3	10.7
40°-50°	3810.1	19.5
50°-60°	6437.9	32.9
60°-70°	4812.7	24.6
70°-80°	538.4	2.8
80°-90°	100.2	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°	19565.0	100.0
0°-180°	19565.0	100.0

Coefficient of Utilization



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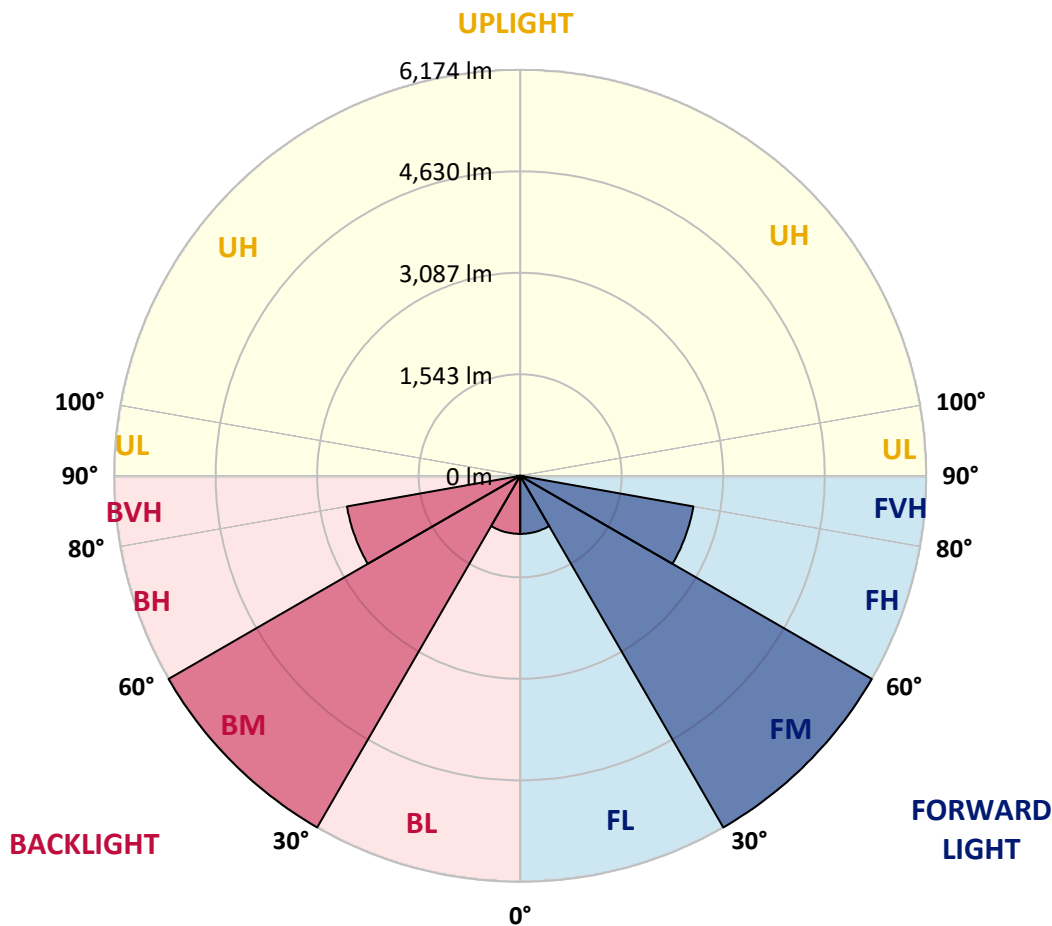
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	883.2	4.5			
FM (30°-60°)	6173.7	31.6			
FH (60°-80°)	2675.6	13.7			G2/5000
FVH (80°-90°)	50.1	0.3			G1/100
BL (0°-30°)	883.2	4.5	B2/1000		
BM (30°-60°)	6173.7	31.6	B4/8500		
BH (60°-80°)	2675.6	13.7	B4/5000		G2/5000
BVH (80°-90°)	50.1	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	800.0	800.0	800.0	800.0	800.0	800.0	800.0	800.0	800.0	800.0	800.0
2.5°	972.7	955.2	893.9	915.4	937.7	934.5	928.9	912.2	897.1	960.0	972.7
5°	1240.1	1200.3	1178.8	1161.3	1157.4	1114.4	1173.3	1166.9	1186.8	1220.2	1252.9
7.5°	1453.5	1416.0	1359.5	1347.6	1283.1	1235.4	1286.3	1349.2	1369.1	1430.4	1467.0
10°	1531.5	1498.8	1509.2	1455.8	1452.7	1466.2	1455.1	1469.4	1521.9	1514.8	1541.8
12.5°	1706.6	1712.2	1678.7	1665.2	1692.3	1751.2	1701.0	1683.5	1670.8	1724.9	1741.6
15°	1870.6	1903.2	1848.3	1839.5	1828.4	1883.3	1829.2	1855.4	1878.5	1889.7	1883.3
17.5°	2103.0	2104.6	2043.3	1945.4	1982.0	1999.5	1975.6	1930.3	2039.3	2094.2	2097.4
20°	2255.8	2261.4	2140.4	1987.6	2091.0	2107.0	2095.0	2000.3	2145.2	2236.7	2232.7
22.5°	2420.6	2401.5	2237.5	2126.1	2162.7	2172.2	2146.8	2134.8	2236.7	2403.1	2378.4
25°	2531.2	2566.2	2403.1	2331.4	2300.4	2278.1	2310.7	2317.1	2421.4	2572.6	2489.0
27.5°	2795.5	2735.0	2479.5	2506.5	2440.5	2290.0	2433.3	2512.1	2489.8	2747.7	2810.6
30°	3030.3	3031.9	2673.7	2725.4	2602.9	2481.1	2636.3	2750.1	2722.3	3052.6	2992.9
32.5°	3330.4	3341.5	3008.8	2870.3	2787.5	2764.4	2745.3	2871.1	3044.6	3312.1	3317.6
35°	3654.3	3749.9	3297.7	3152.1	3011.2	2909.3	3019.2	3193.5	3306.5	3733.9	3658.3
37.5°	4285.6	4124.8	3754.6	3480.8	3390.9	3350.3	3408.4	3509.5	3753.8	4122.4	4252.1
40°	4658.9	4614.3	4110.4	3881.2	3534.2	3642.4	3610.6	3887.6	4089.7	4639.8	4651.7
42.5°	5229.6	5005.1	4552.2	4260.9	3948.9	3761.0	3960.0	4331.7	4576.1	5040.9	5260.6
45°	5680.9	5392.8	5043.3	4822.1	4428.0	4288.7	4360.4	4836.4	5142.8	5462.0	5751.0
47.5°	6180.0	5868.0	5518.5	5125.3	4740.9	4967.7	4841.2	5259.8	5559.1	6016.8	6287.5
50°	6807.2	6461.8	6014.4	5689.7	5435.0	5514.6	5494.7	5793.1	6162.5	6579.6	6886.8
52.5°	7498.1	7107.3	6675.9	6374.2	6266.8	6069.4	6327.3	6449.8	6722.1	7104.1	7464.7
55°	7981.3	7590.5	7329.4	7426.5	7397.8	7081.0	7307.1	7319.8	7188.5	7326.2	7689.2
57.5°	7906.5	7533.2	7497.3	7864.3	8412.7	8719.2	8369.7	7618.3	7126.4	7061.9	7446.4
60°	6913.1	6593.9	6921.8	7749.7	9347.2	10280.1	8934.9	7393.1	6582.8	6247.7	6618.6
62.5°	4763.9	4548.2	5228.0	6522.3	9459.4	11484.4	8914.2	6424.4	5105.4	4497.3	4785.4
65°	2258.2	2180.2	2754.1	4135.1	7879.4	11162.8	7787.9	4346.9	2938.8	2347.3	2412.6
67.5°	849.3	810.3	1010.9	1826.8	4962.9	8853.7	5235.2	2144.4	1136.7	883.5	913.8
70°	482.4	454.5	480.8	666.2	1997.9	5014.7	2258.2	735.5	483.2	440.2	468.8
72.5°	379.7	358.2	362.2	402.8	689.3	1968.5	730.7	419.5	351.0	333.5	359.0
75°	313.6	294.5	293.7	316.0	402.0	639.2	413.1	320.8	284.2	271.4	292.1
77.5°	249.1	238.0	241.2	258.7	288.1	357.4	299.3	259.5	233.2	218.1	232.4
80°	182.3	180.7	193.4	209.3	214.9	240.4	224.5	209.3	186.3	164.8	170.3
82.5°	119.4	120.2	144.1	156.8	154.4	153.6	160.8	160.0	139.3	109.0	109.0
85°	68.5	70.0	88.4	98.7	97.1	77.2	101.9	102.7	89.1	66.1	63.7
87.5°	22.3	27.9	38.2	40.6	39.0	21.5	39.0	43.0	39.0	27.9	24.7
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)