

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: P368470

Luminaire Tested: **MSA-SA4C-730-U-5NQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P368470
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-730-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: 22423 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

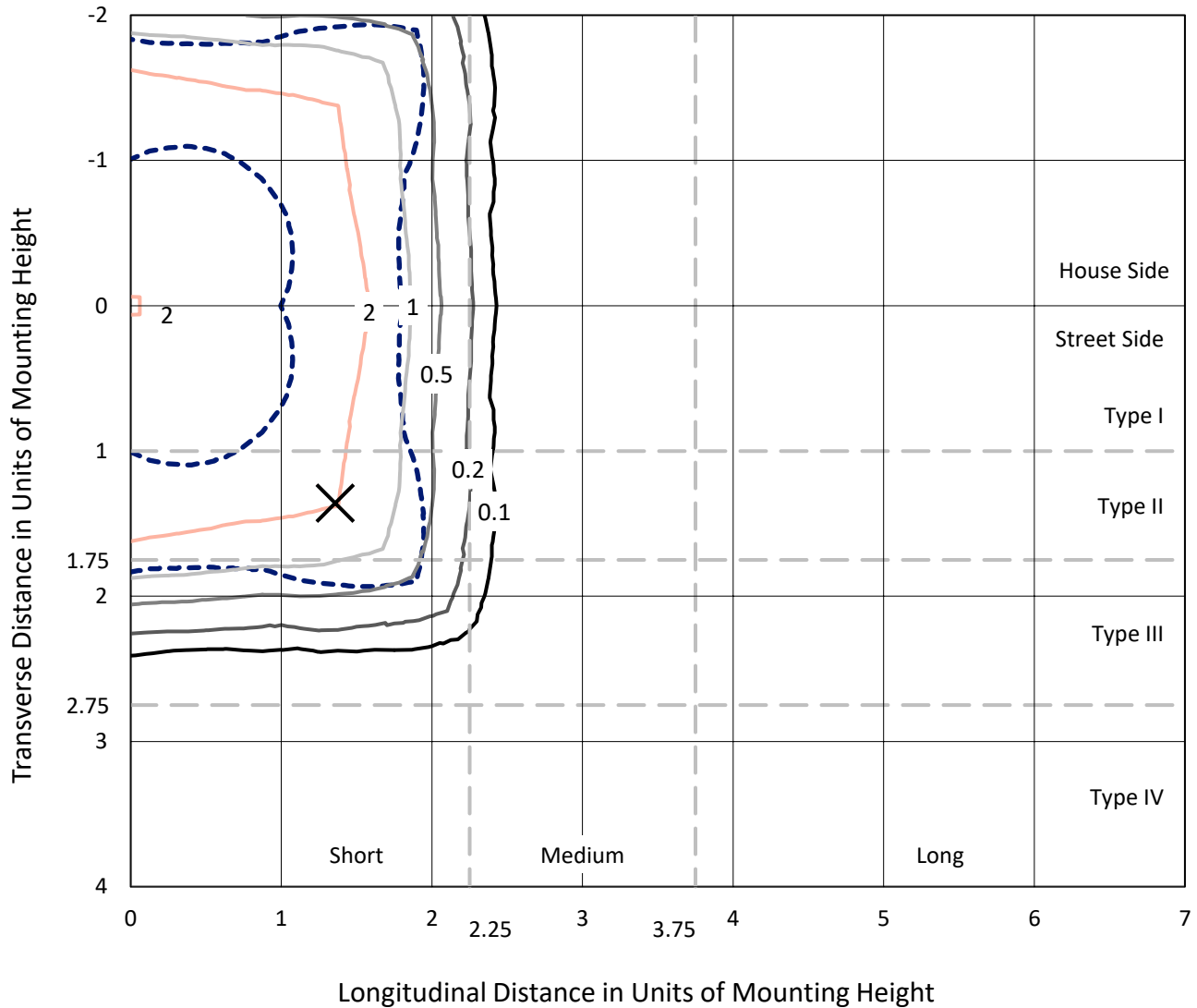
Input Watts (W): 225
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

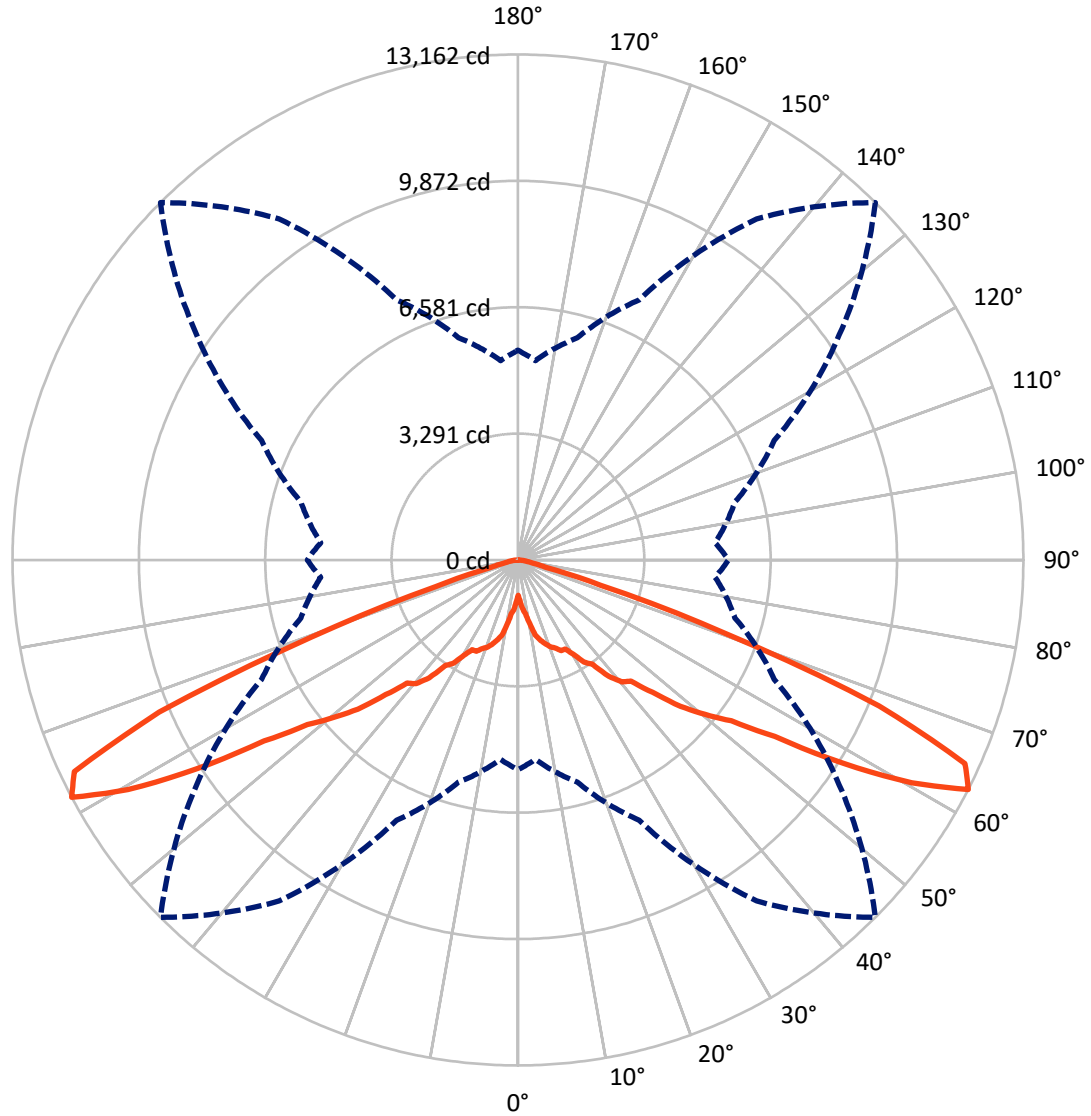
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 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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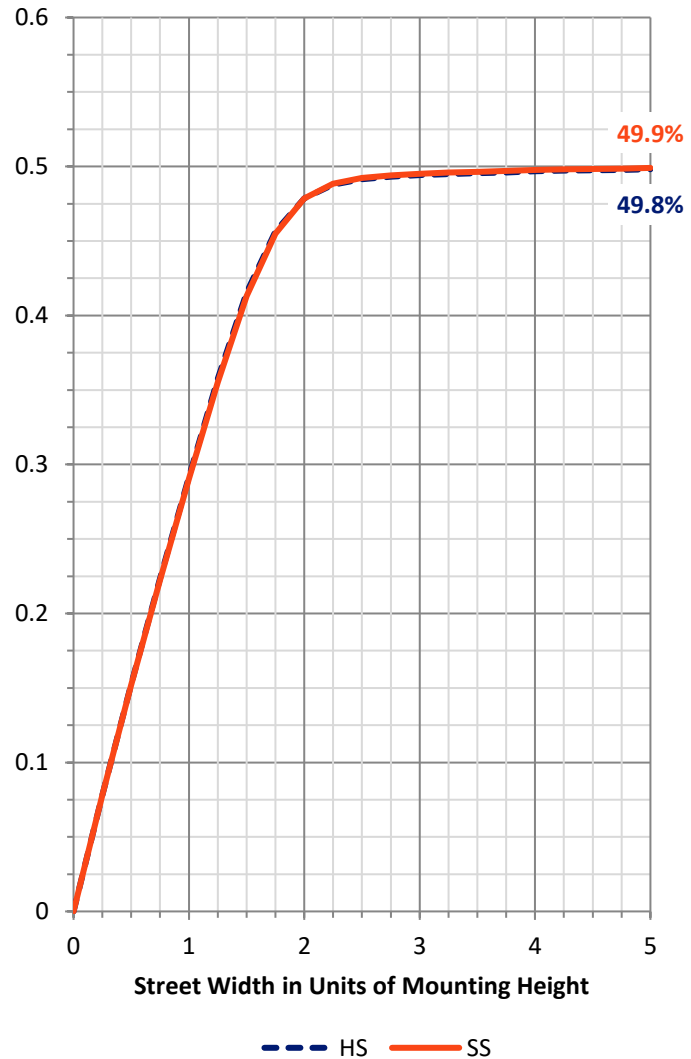
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11211.5	0.0	11211.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	11211.5	0.0	11211.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	22423.0	0.0	22423.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.2	0.6
10°-20°	609.2	2.7
20°-30°	1277.0	5.7
30°-40°	2406.0	10.7
40°-50°	4366.7	19.5
50°-60°	7378.3	32.9
60°-70°	5515.7	24.6
70°-80°	617.1	2.8
80°-90°	114.8	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°	22423.0	100.0
0°-180°	22423.0	100.0



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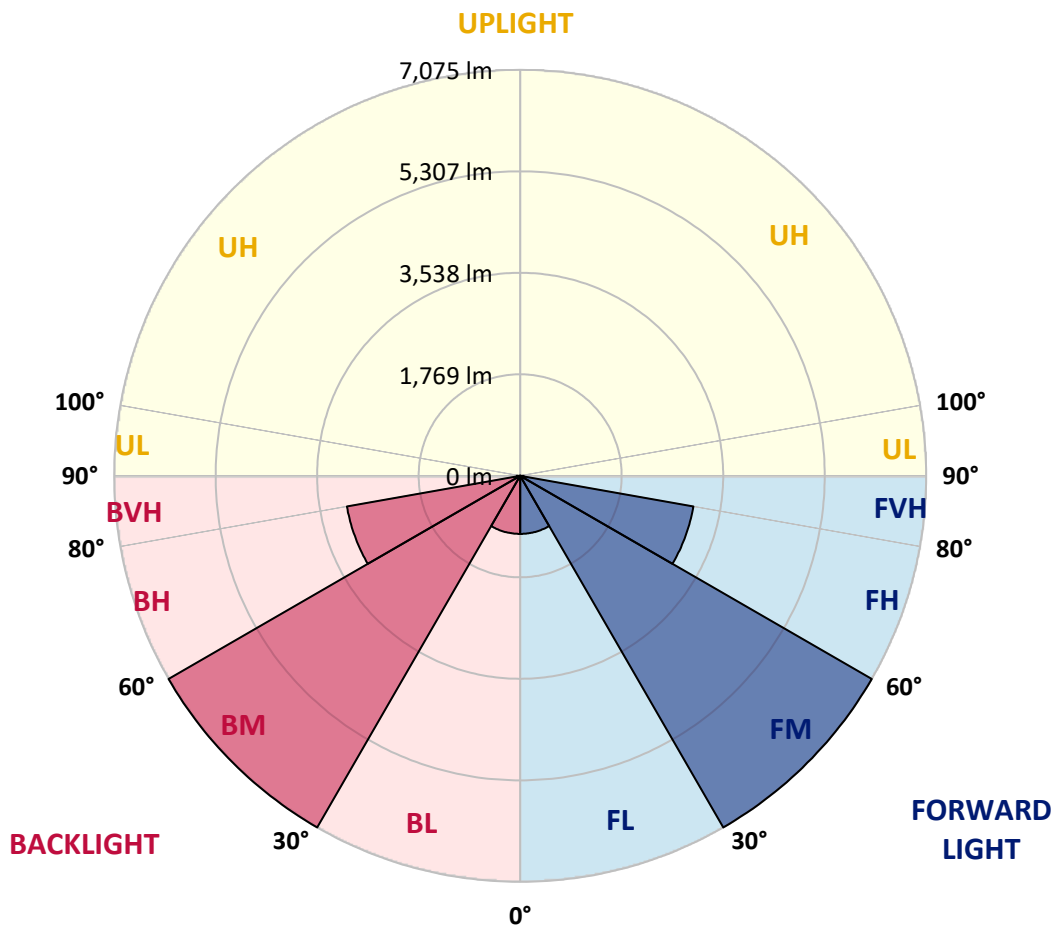
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1012.2	4.5			
FM (30°-60°)	7075.5	31.6			
FH (60°-80°)	3066.4	13.7			G2/5000
FVH (80°-90°)	57.4	0.3			G1/100
BL (0°-30°)	1012.2	4.5	B3/2500		
BM (30°-60°)	7075.5	31.6	B4/8500		
BH (60°-80°)	3066.4	13.7	B4/5000		G2/5000
BVH (80°-90°)	57.4	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°	916.8	916.8	916.8	916.8	916.8	916.8	916.8	916.8	916.8	916.8	916.8
2.5°	1114.8	1094.7	1024.5	1049.1	1074.6	1071.0	1064.6	1045.4	1028.1	1100.2	1114.8
5°	1421.3	1375.7	1351.1	1331.0	1326.4	1277.2	1344.7	1337.4	1360.2	1398.5	1435.9
7.5°	1665.8	1622.9	1558.1	1544.4	1470.6	1415.8	1474.2	1546.3	1569.1	1639.3	1681.3
10°	1755.2	1717.8	1729.6	1668.5	1664.9	1680.4	1667.6	1684.0	1744.2	1736.0	1767.0
12.5°	1955.9	1962.3	1923.9	1908.4	1939.5	2007.0	1949.5	1929.4	1914.8	1976.9	1996.0
15°	2143.8	2181.2	2118.3	2108.2	2095.5	2158.4	2096.4	2126.5	2152.9	2165.7	2158.4
17.5°	2410.2	2412.0	2341.8	2229.6	2271.5	2291.6	2264.2	2212.2	2337.2	2400.1	2403.8
20°	2585.3	2591.7	2453.1	2277.9	2396.5	2414.7	2401.1	2292.5	2458.5	2563.4	2558.9
22.5°	2774.2	2752.3	2564.3	2436.6	2478.6	2489.5	2460.4	2446.7	2563.4	2754.1	2725.8
25°	2901.0	2941.1	2754.1	2672.0	2636.4	2610.9	2648.3	2655.6	2775.1	2948.4	2852.6
27.5°	3203.8	3134.5	2841.7	2872.7	2797.0	2624.6	2788.8	2879.1	2853.5	3149.1	3221.2
30°	3473.0	3474.8	3064.3	3123.6	2983.1	2843.5	3021.4	3151.8	3119.9	3498.5	3430.1
32.5°	3816.9	3829.6	3448.3	3289.6	3194.7	3168.3	3146.4	3290.5	3489.4	3795.9	3802.3
35°	4188.2	4297.6	3779.5	3612.5	3451.1	3334.3	3460.2	3660.0	3789.5	4279.4	4192.7
37.5°	4911.6	4727.3	4303.1	3989.3	3886.2	3839.7	3906.3	4022.1	4302.2	4724.6	4873.3
40°	5339.4	5288.3	4710.9	4448.2	4050.4	4174.5	4138.0	4455.5	4687.2	5317.5	5331.2
42.5°	5993.5	5736.3	5217.2	4883.3	4525.7	4310.4	4538.5	4964.5	5244.6	5777.3	6029.1
45°	6510.8	6180.5	5780.1	5526.4	5074.9	4915.2	4997.3	5542.9	5894.1	6259.9	6591.0
47.5°	7082.8	6725.1	6324.7	5874.0	5433.4	5693.4	5548.3	6028.2	6371.2	6895.7	7205.9
50°	7801.6	7405.7	6893.0	6520.8	6228.9	6320.1	6297.3	6639.4	7062.7	7540.7	7892.8
52.5°	8593.4	8145.5	7651.1	7305.3	7182.2	6955.9	7251.5	7392.0	7704.0	8141.9	8555.1
55°	9147.2	8699.3	8400.0	8511.3	8478.5	8115.4	8374.5	8389.1	8238.6	8396.4	8812.4
57.5°	9061.4	8633.6	8592.5	9013.1	9641.6	9992.8	9592.4	8731.2	8167.4	8093.5	8534.1
60°	7922.9	7557.1	7933.0	8881.7	10712.6	11781.8	10240.1	8473.0	7544.4	7160.3	7585.4
62.5°	5459.8	5212.6	5991.7	7475.0	10841.2	13162.0	10216.3	7362.8	5851.2	5154.2	5484.5
65°	2588.1	2498.7	3156.4	4739.2	9030.4	12793.5	8925.5	4981.8	3368.0	2690.2	2765.0
67.5°	973.4	928.7	1158.6	2093.6	5687.9	10147.0	5999.9	2457.6	1302.7	1012.6	1047.3
70°	552.8	520.9	551.0	763.6	2289.8	5747.2	2588.1	842.9	553.7	504.5	537.3
72.5°	435.1	410.5	415.1	461.6	790.0	2256.0	837.5	480.8	402.3	382.2	411.4
75°	359.4	337.5	336.6	362.2	460.7	732.5	473.5	367.6	325.7	311.1	334.8
77.5°	285.5	272.8	276.4	296.5	330.2	409.6	343.0	297.4	267.3	250.0	266.4
80°	208.9	207.1	221.7	239.9	246.3	275.5	257.3	239.9	213.5	188.8	195.2
82.5°	136.8	137.8	165.1	179.7	177.0	176.1	184.3	183.4	159.6	125.0	125.0
85°	78.5	80.3	101.3	113.1	111.3	88.5	116.8	117.7	102.2	75.7	73.0
87.5°	25.5	31.9	43.8	46.5	44.7	24.6	44.7	49.3	44.7	31.9	28.3
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)