

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: P368536

Luminaire Tested: **MSA-SA4C-760-U-5NQ**

Issue Date: 12/2/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P368536  
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-760-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: 24622 lumens  
Efficiency: N/A  
Efficacy: 109.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G2

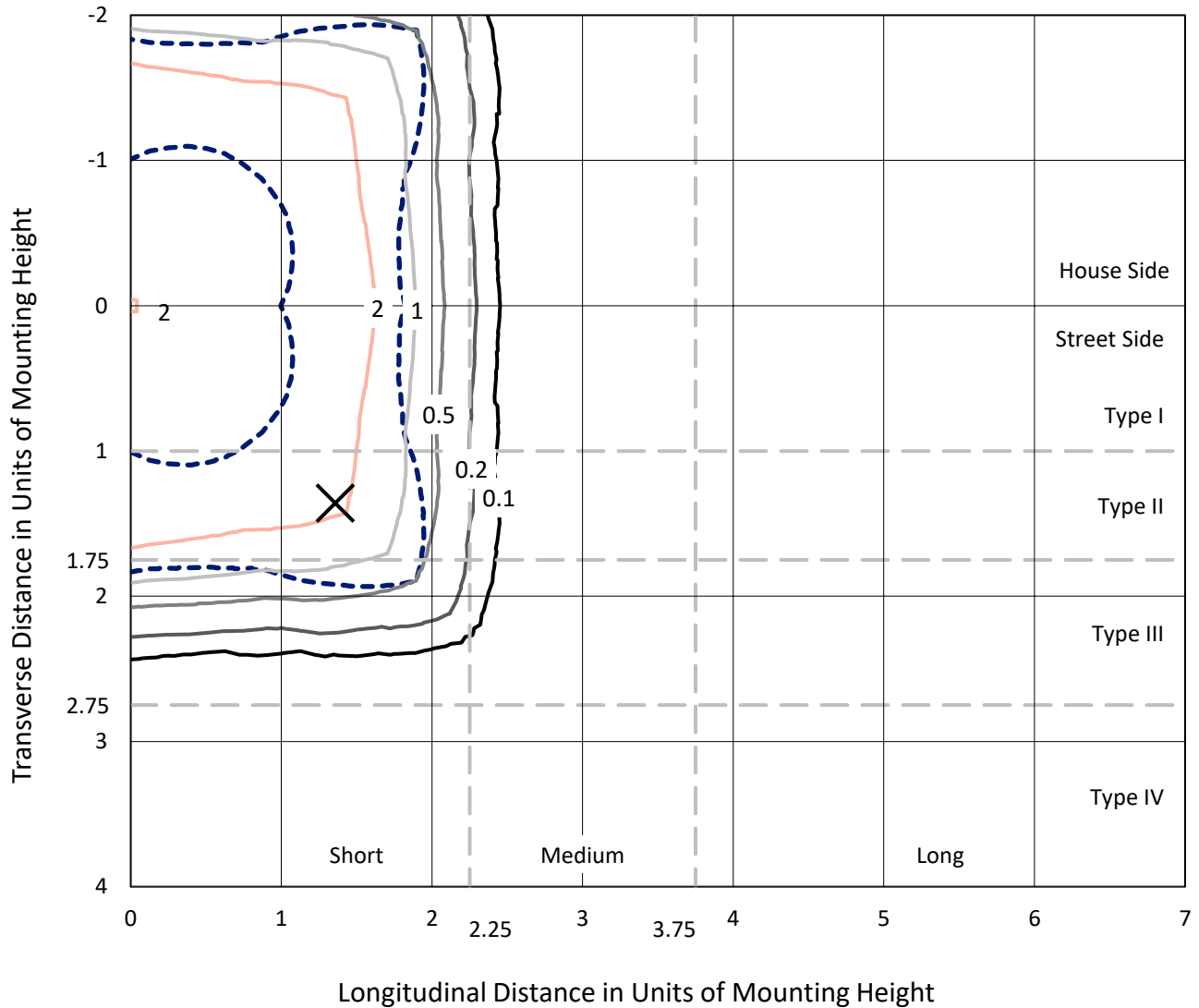
Input Watts (W): 225  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

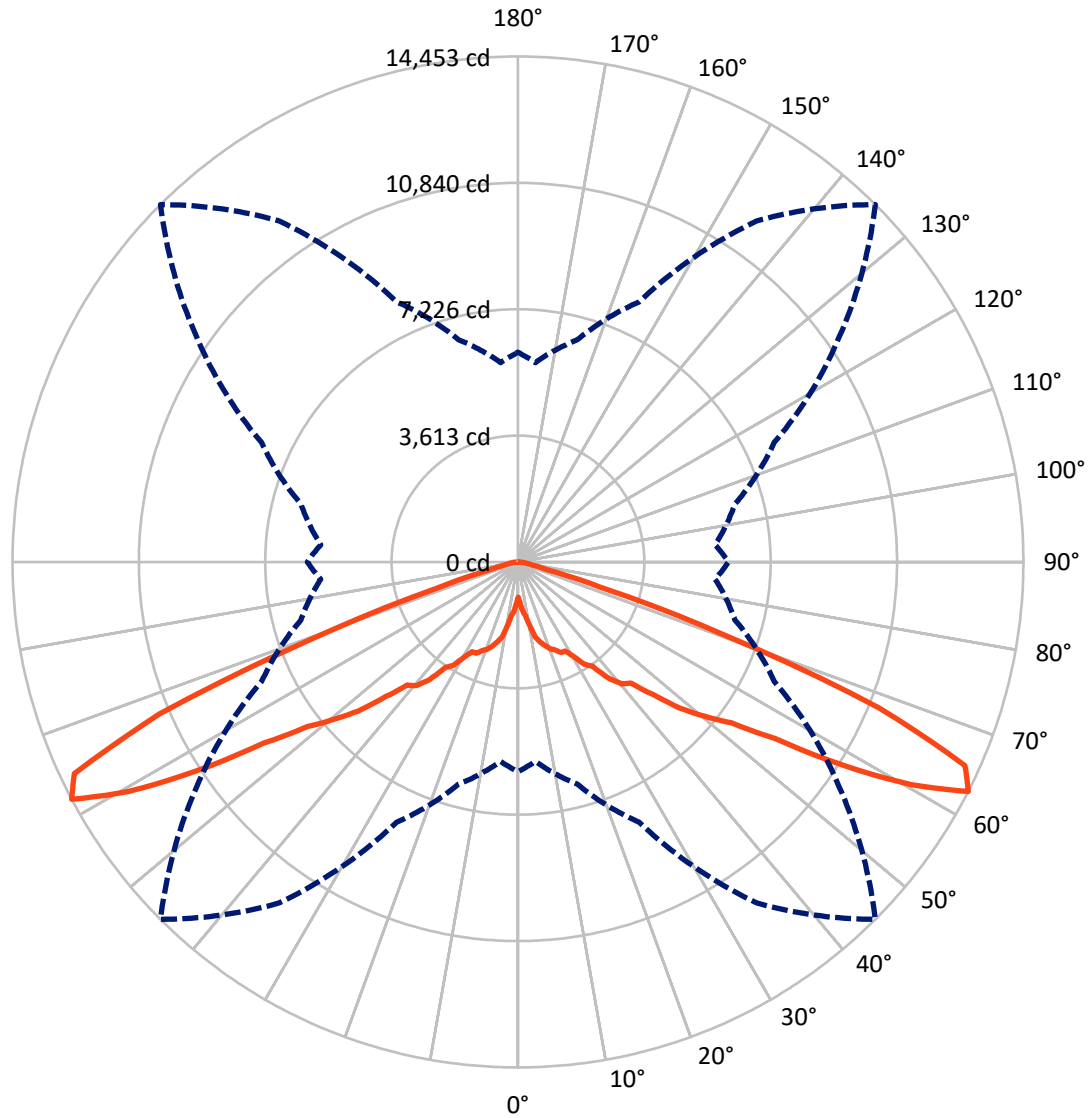
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 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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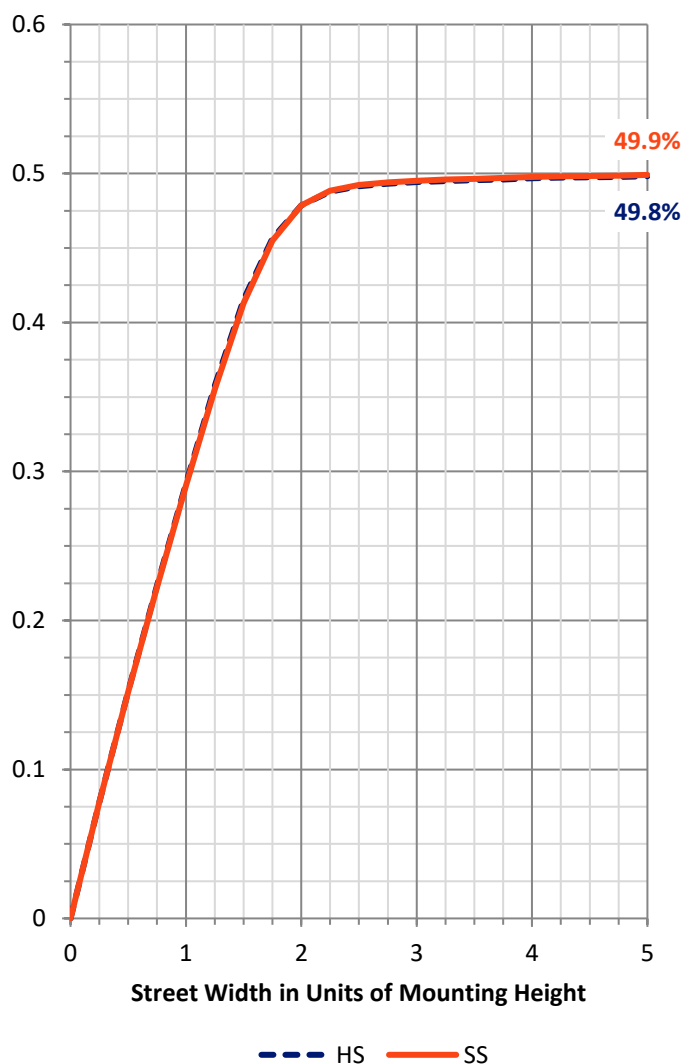
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12311.0	0.0	12311.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	12311.0	0.0	12311.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	24622.0	0.0	24622.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.7	0.6
10°-20°	669.0	2.7
20°-30°	1402.2	5.7
30°-40°	2641.9	10.7
40°-50°	4795.0	19.5
50°-60°	8101.9	32.9
60°-70°	6056.6	24.6
70°-80°	677.6	2.8
80°-90°	126.1	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°	24622.0	100.0
0°-180°	24622.0	100.0

**Coefficient of Utilization**

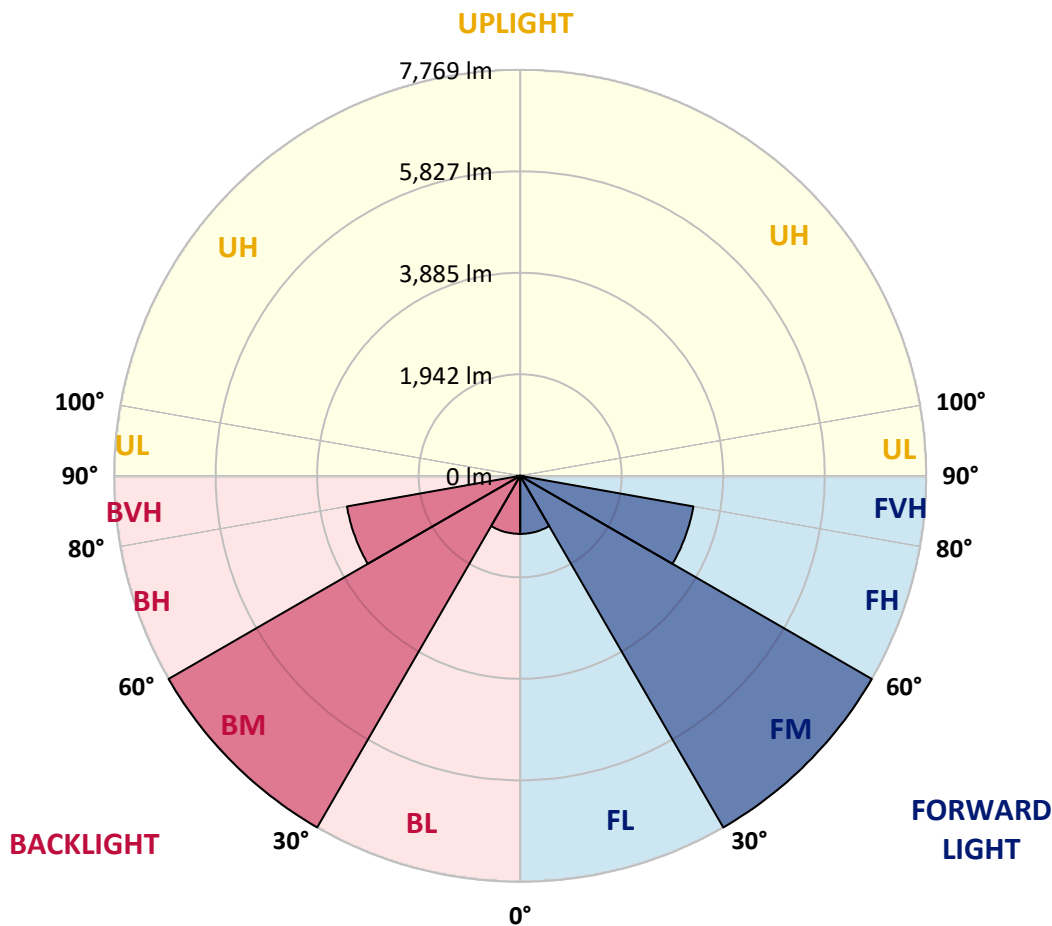


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1111.5	4.5			
FM (30°-60°)	7769.4	31.6			
FH (60°-80°)	3367.1	13.7			G2/5000
FVH (80°-90°)	63.0	0.3			G1/100
BL (0°-30°)	1111.5	4.5	B3/2500		
BM (30°-60°)	7769.4	31.6	B4/8500		
BH (60°-80°)	3367.1	13.7	B4/5000		G2/5000
BVH (80°-90°)	63.0	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°	1006.7	1006.7	1006.7	1006.7	1006.7	1006.7	1006.7	1006.7	1006.7	1006.7	1006.7
2.5°	1224.1	1202.1	1124.9	1152.0	1180.0	1176.0	1169.0	1148.0	1128.9	1208.1	1224.1
5°	1560.7	1510.6	1483.5	1461.5	1456.5	1402.4	1476.5	1468.5	1493.6	1535.6	1576.7
7.5°	1829.1	1782.1	1710.9	1695.9	1614.8	1554.7	1618.8	1697.9	1723.0	1800.1	1846.2
10°	1927.3	1886.2	1899.3	1832.1	1828.1	1845.2	1831.1	1849.2	1915.3	1906.3	1940.3
12.5°	2147.7	2154.7	2112.6	2095.6	2129.7	2203.8	2140.7	2118.6	2102.6	2170.7	2191.8
15°	2354.0	2395.1	2326.0	2315.0	2300.9	2370.1	2302.0	2335.0	2364.1	2378.1	2370.1
17.5°	2646.5	2648.5	2571.4	2448.2	2494.3	2516.3	2486.3	2429.2	2566.4	2635.5	2639.5
20°	2838.9	2845.9	2693.6	2501.3	2631.5	2651.6	2636.5	2517.3	2699.6	2814.8	2809.8
22.5°	3046.2	3022.2	2815.8	2675.6	2721.7	2733.7	2701.6	2686.6	2814.8	3024.2	2993.1
25°	3185.5	3229.5	3024.2	2934.0	2895.0	2866.9	2908.0	2916.0	3047.2	3237.6	3132.4
27.5°	3518.0	3441.9	3120.4	3154.4	3071.3	2881.9	3062.3	3161.4	3133.4	3457.9	3537.1
30°	3813.5	3815.5	3364.8	3429.9	3275.6	3122.4	3317.7	3460.9	3425.9	3841.6	3766.5
32.5°	4191.2	4205.2	3786.5	3612.2	3508.0	3479.0	3454.9	3613.2	3831.6	4168.2	4175.2
35°	4598.9	4719.1	4150.1	3966.8	3789.5	3661.3	3799.5	4018.9	4161.1	4699.1	4603.9
37.5°	5393.3	5190.9	4725.1	4380.5	4267.3	4216.2	4289.4	4416.6	4724.1	5187.9	5351.2
40°	5863.1	5807.0	5172.9	4884.4	4447.6	4583.9	4543.8	4892.4	5146.8	5839.0	5854.0
42.5°	6581.3	6298.8	5728.8	5362.2	4969.5	4733.1	4983.6	5451.4	5758.9	6343.9	6620.4
45°	7149.3	6786.6	6346.9	6068.4	5572.6	5397.3	5487.4	6086.4	6472.1	6873.8	7237.4
47.5°	7777.3	7384.7	6944.9	6450.1	5966.2	6251.7	6092.5	6619.4	6996.0	7572.0	7912.6
50°	8566.7	8132.0	7569.0	7160.3	6839.7	6939.9	6914.9	7290.5	7755.3	8280.2	8666.9
52.5°	9436.2	8944.4	8401.4	8021.8	7886.5	7638.1	7962.7	8116.9	8459.5	8940.3	9394.1
55°	10044.2	9552.4	9223.8	9346.0	9310.0	8911.3	9195.8	9211.8	9046.5	9219.8	9676.6
57.5°	9950.1	9480.3	9435.2	9897.0	10587.2	10972.8	10533.1	9587.5	8968.4	8887.3	9371.1
60°	8699.9	8298.2	8711.0	9752.7	11763.2	12937.2	11244.3	9304.0	8284.2	7862.5	8329.3
62.5°	5995.3	5723.8	6579.3	8208.1	11904.4	14452.8	11218.3	8084.9	6425.0	5659.7	6022.3
65°	2841.9	2743.7	3465.9	5203.9	9916.0	14048.1	9800.8	5470.4	3698.3	2954.1	3036.2
67.5°	1068.8	1019.8	1272.2	2298.9	6245.7	11142.1	6588.3	2698.6	1430.5	1111.9	1150.0
70°	607.0	572.0	605.0	838.4	2514.3	6310.8	2841.9	925.6	608.0	554.0	590.0
72.5°	477.8	450.8	455.8	506.9	867.5	2477.3	919.6	527.9	441.8	419.7	451.8
75°	394.7	370.6	369.6	397.7	505.9	804.4	519.9	403.7	357.6	341.6	367.6
77.5°	313.5	299.5	303.5	325.6	362.6	449.8	376.6	326.6	293.5	274.5	292.5
80°	229.4	227.4	243.4	263.5	270.5	302.5	282.5	263.5	234.4	207.4	214.4
82.5°	150.3	151.3	181.3	197.3	194.3	193.3	202.3	201.3	175.3	137.2	137.2
85°	86.1	88.2	111.2	124.2	122.2	97.2	128.2	129.2	112.2	83.1	80.1
87.5°	28.0	35.1	48.1	51.1	49.1	27.0	49.1	54.1	49.1	35.1	31.1
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)