

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: P367216

Luminaire Tested: **MSA-SA2A-760-U-5NQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367216
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-SA2A-760-U-5NQ
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8133 lumens
Efficiency: N/A
Efficacy: 123.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

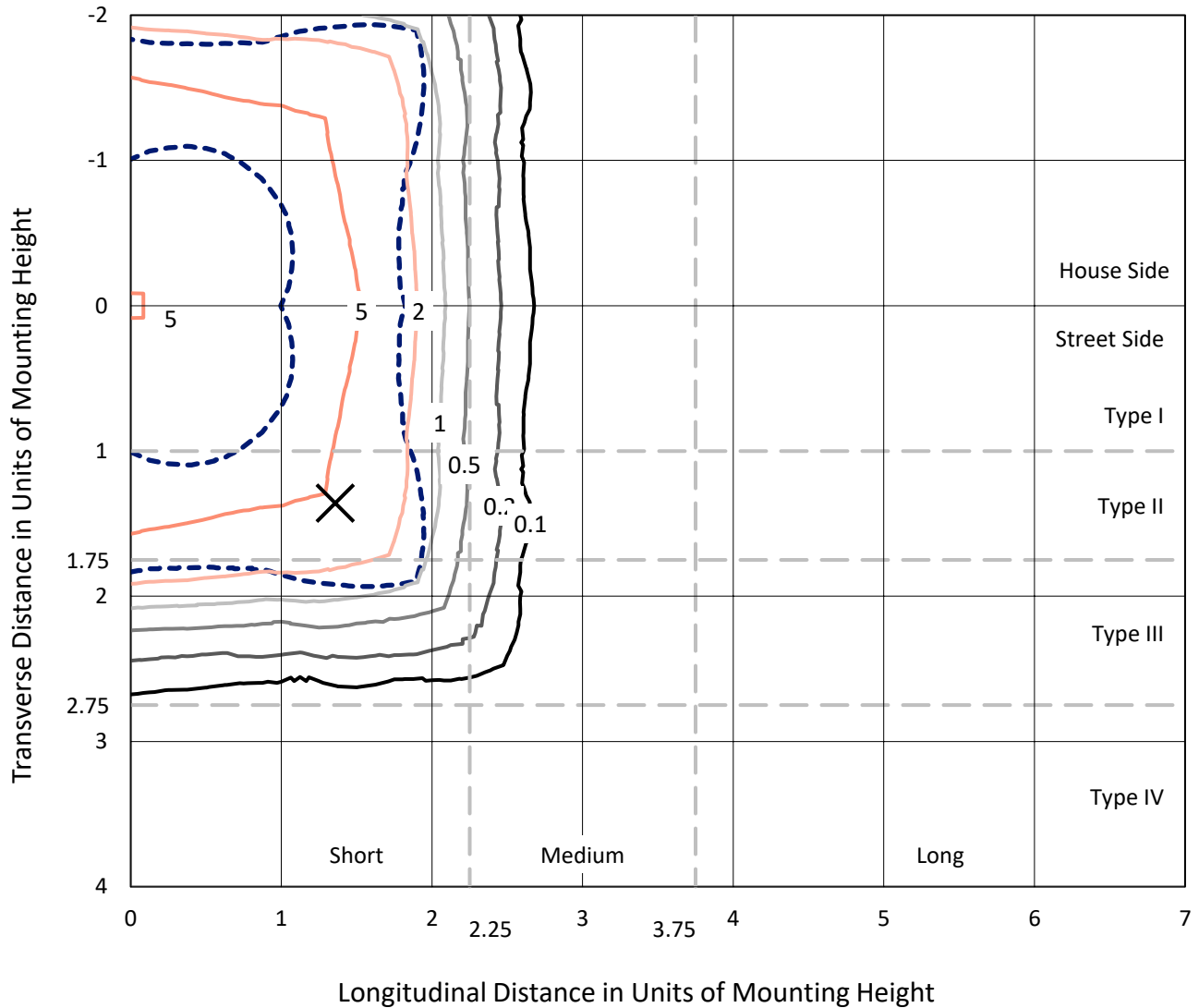
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

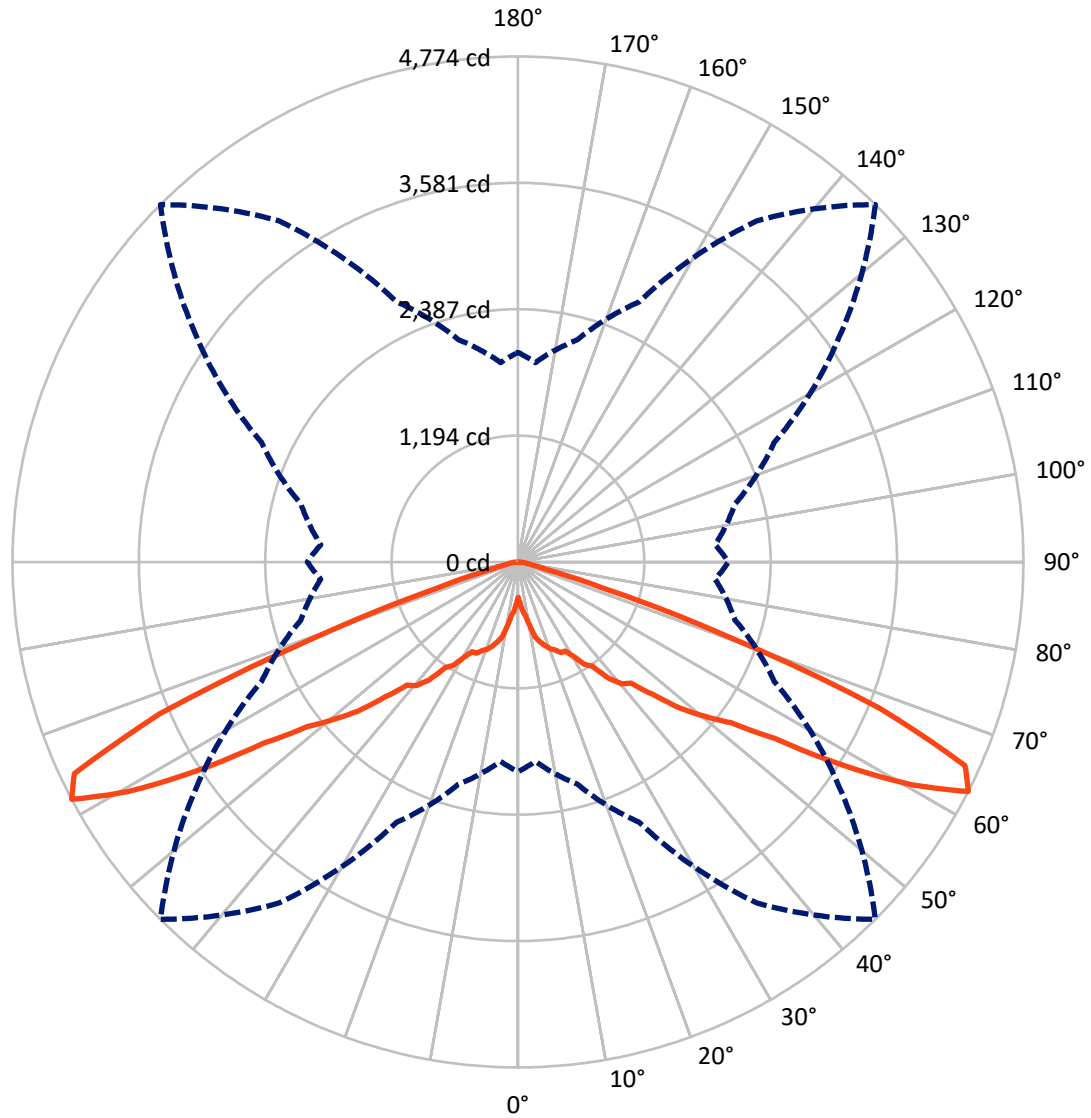
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.8 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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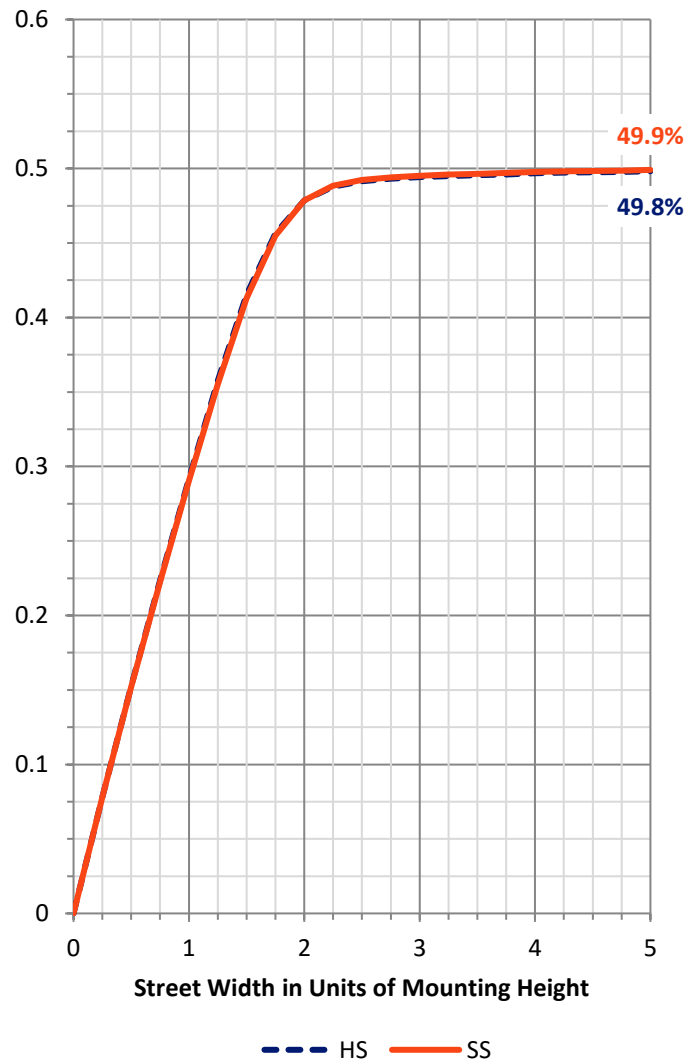
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4066.5	0.0	4066.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4066.5	0.0	4066.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	8133.0	0.0	8133.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.1	0.6
10°-20°	221.0	2.7
20°-30°	463.2	5.7
30°-40°	872.7	10.7
40°-50°	1583.8	19.5
50°-60°	2676.2	32.9
60°-70°	2000.6	24.6
70°-80°	223.8	2.8
80°-90°	41.6	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°	8133.0	100.0
0°-180°	8133.0	100.0



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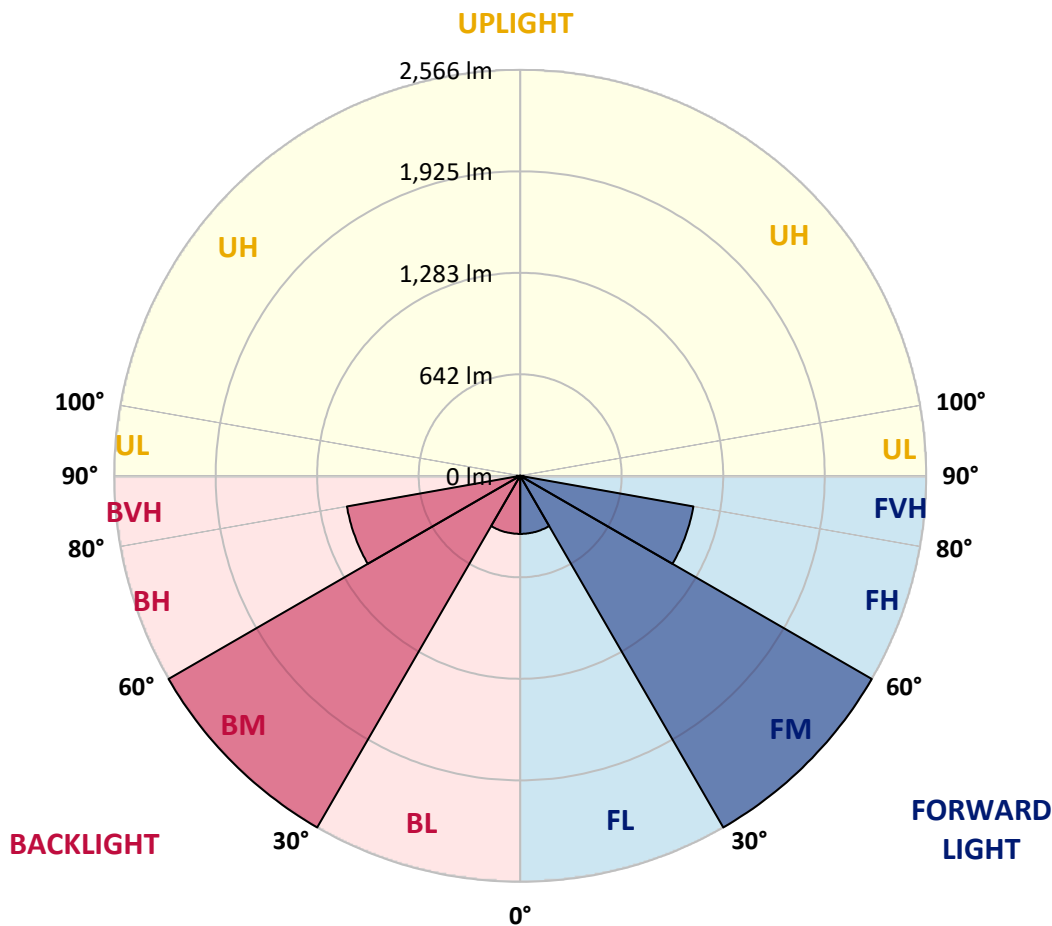
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	367.1	4.5			
FM (30°-60°)	2566.3	31.6			
FH (60°-80°)	1112.2	13.7			G1/1800
FVH (80°-90°)	20.8	0.3			G1/100
BL (0°-30°)	367.1	4.5	B1/500		
BM (30°-60°)	2566.3	31.6	B3/5000		
BH (60°-80°)	1112.2	13.7	B3/2500		G1/1800
BVH (80°-90°)	20.8	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5
2.5°	404.3	397.1	371.6	380.5	389.8	388.5	386.1	379.2	372.9	399.0	404.3
5°	515.5	499.0	490.0	482.8	481.1	463.2	487.7	485.1	493.3	507.2	520.8
7.5°	604.2	588.6	565.1	560.2	533.4	513.5	534.7	560.8	569.1	594.6	609.8
10°	636.6	623.1	627.4	605.2	603.9	609.5	604.9	610.8	632.6	629.7	640.9
12.5°	709.4	711.7	697.8	692.2	703.5	727.9	707.1	699.8	694.5	717.0	724.0
15°	777.6	791.1	768.3	764.7	760.0	782.9	760.4	771.3	780.9	785.5	782.9
17.5°	874.2	874.9	849.4	808.7	823.9	831.2	821.2	802.4	847.7	870.6	871.9
20°	937.7	940.0	889.7	826.2	869.2	875.8	870.9	831.5	891.7	929.8	928.1
22.5°	1006.2	998.3	930.1	883.8	899.0	903.0	892.4	887.4	929.8	998.9	988.7
25°	1052.2	1066.8	998.9	969.2	956.2	947.0	960.6	963.2	1006.5	1069.4	1034.7
27.5°	1162.1	1136.9	1030.7	1041.9	1014.5	951.9	1011.5	1044.3	1035.0	1142.2	1168.3
30°	1259.7	1260.3	1111.4	1132.9	1082.0	1031.4	1095.9	1143.2	1131.6	1268.9	1244.1
32.5°	1384.4	1389.0	1250.7	1193.2	1158.7	1149.2	1141.2	1193.5	1265.6	1376.8	1379.1
35°	1519.1	1558.8	1370.8	1310.3	1251.7	1209.4	1255.0	1327.5	1374.5	1552.2	1520.7
37.5°	1781.5	1714.6	1560.8	1446.9	1409.6	1392.7	1416.8	1458.9	1560.4	1713.6	1767.6
40°	1936.7	1918.1	1708.7	1613.4	1469.1	1514.1	1500.9	1616.0	1700.1	1928.7	1933.7
42.5°	2173.9	2080.6	1892.3	1771.2	1641.5	1563.4	1646.1	1800.7	1902.2	2095.5	2186.8
45°	2361.5	2241.7	2096.5	2004.5	1840.7	1782.8	1812.6	2010.4	2137.8	2270.5	2390.6
47.5°	2569.0	2439.3	2294.0	2130.6	1970.7	2065.0	2012.4	2186.5	2310.9	2501.1	2613.6
50°	2829.7	2686.1	2500.1	2365.1	2259.3	2292.4	2284.1	2408.2	2561.7	2735.1	2862.8
52.5°	3116.9	2954.4	2775.1	2649.7	2605.0	2523.0	2630.2	2681.1	2794.3	2953.1	3103.0
55°	3317.8	3155.3	3046.8	3087.1	3075.2	2943.5	3037.5	3042.8	2988.2	3045.4	3196.3
57.5°	3286.7	3131.5	3116.6	3269.1	3497.1	3624.5	3479.2	3166.9	2962.4	2935.6	3095.4
60°	2873.7	2741.0	2877.4	3221.5	3885.6	4273.3	3714.2	3073.2	2736.4	2597.1	2751.3
62.5°	1980.3	1890.7	2173.2	2711.2	3932.2	4774.0	3705.6	2670.6	2122.3	1869.5	1989.3
65°	938.7	906.3	1144.9	1718.9	3275.4	4640.3	3237.4	1806.9	1221.6	975.8	1002.9
67.5°	353.1	336.8	420.2	759.4	2063.1	3680.4	2176.2	891.4	472.5	367.3	379.9
70°	200.5	188.9	199.9	276.9	830.5	2084.6	938.7	305.7	200.8	183.0	194.9
72.5°	157.8	148.9	150.6	167.4	286.5	818.3	303.7	174.4	145.9	138.6	149.2
75°	130.4	122.4	122.1	131.4	167.1	265.7	171.7	133.3	118.1	112.8	121.4
77.5°	103.6	98.9	100.3	107.5	119.8	148.6	124.4	107.9	96.9	90.7	96.6
80°	75.8	75.1	80.4	87.0	89.3	99.9	93.3	87.0	77.4	68.5	70.8
82.5°	49.6	50.0	59.9	65.2	64.2	63.9	66.8	66.5	57.9	45.3	45.3
85°	28.5	29.1	36.7	41.0	40.4	32.1	42.4	42.7	37.1	27.5	26.5
87.5°	9.3	11.6	15.9	16.9	16.2	8.9	16.2	17.9	16.2	11.6	10.3
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)