

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: P367348

Luminaire Tested: **MSA-SA2B-760-U-5NQ**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367348
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-SA2B-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: 10193 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

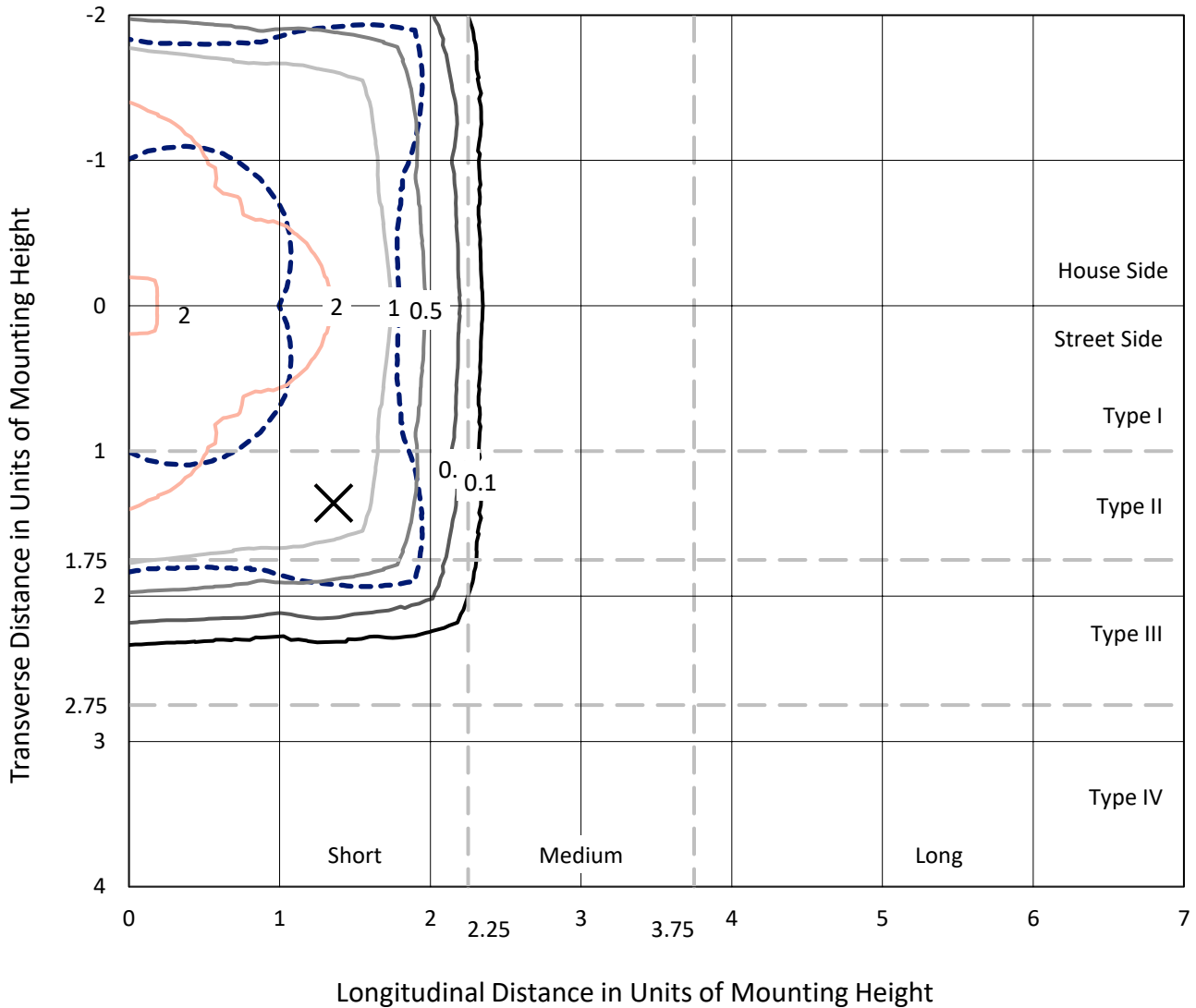
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

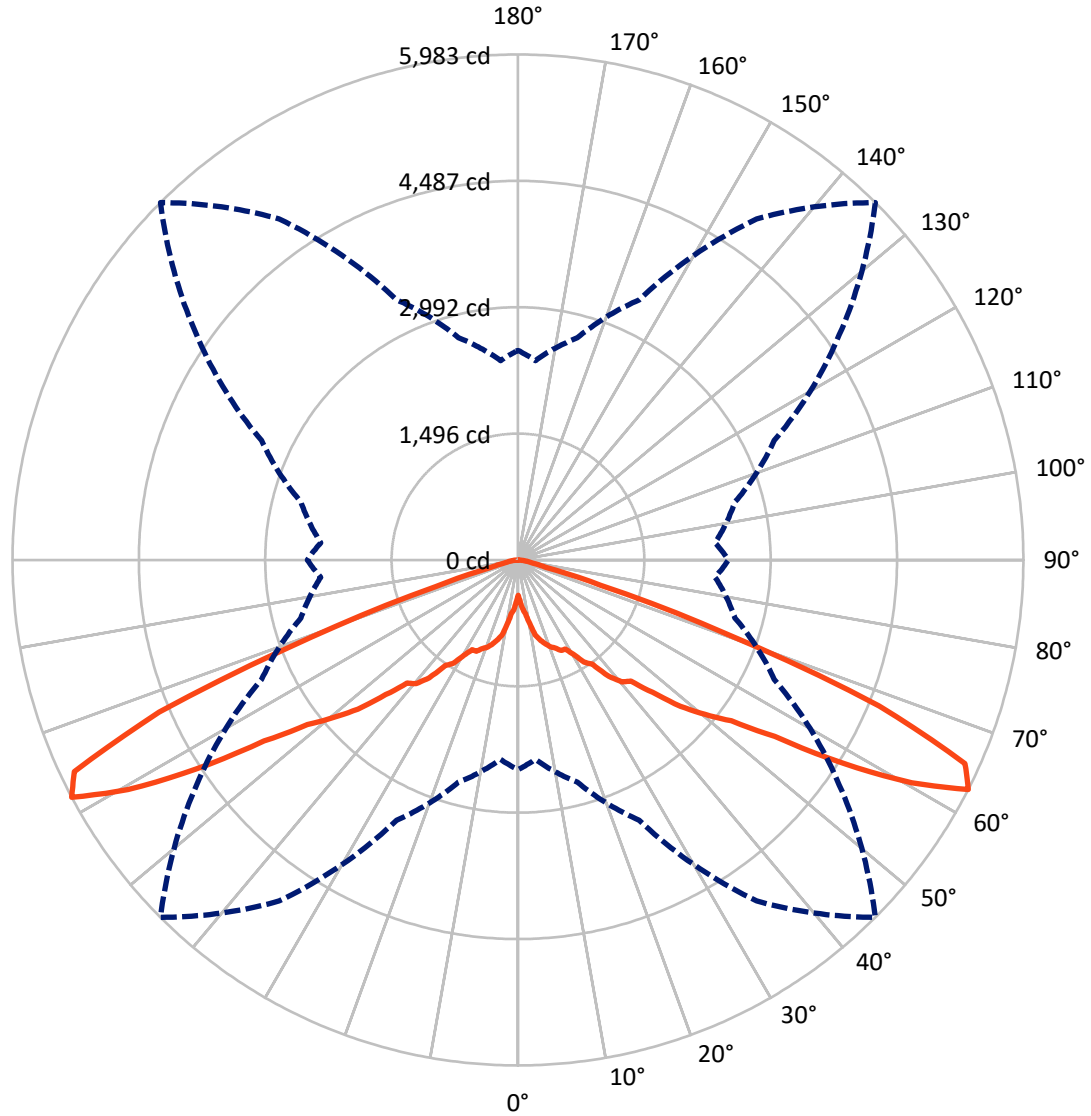
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.8 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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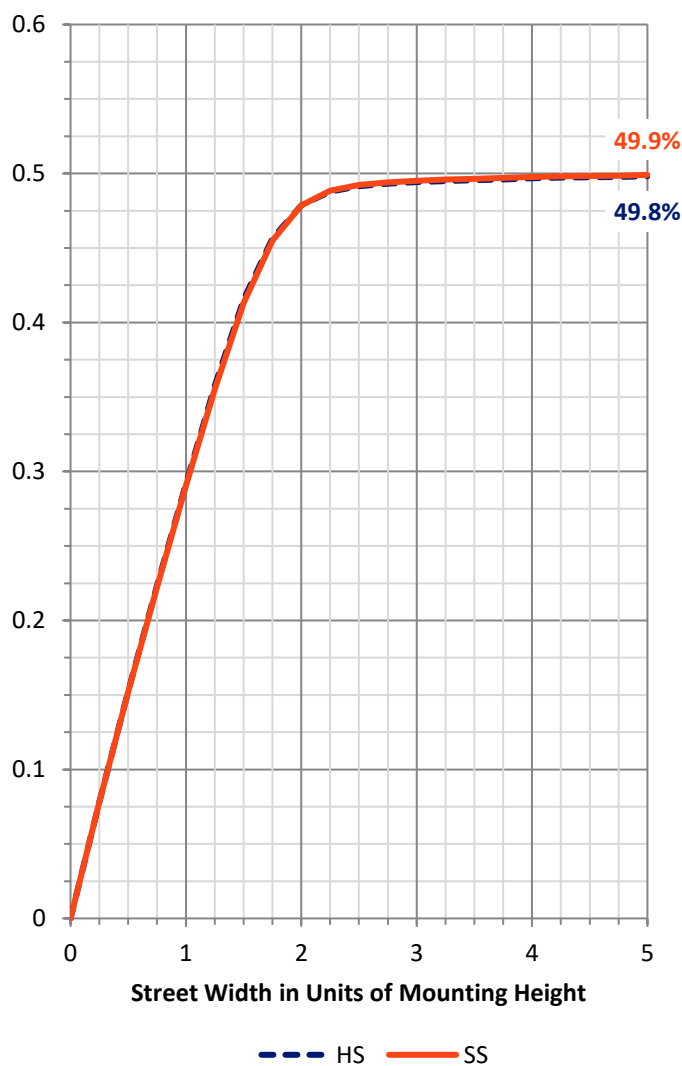
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5096.5	0.0	5096.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5096.5	0.0	5096.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	10193.0	0.0	10193.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.8	0.6
10°-20°	277.0	2.7
20°-30°	580.5	5.7
30°-40°	1093.7	10.7
40°-50°	1985.0	19.5
50°-60°	3354.0	32.9
60°-70°	2507.3	24.6
70°-80°	280.5	2.8
80°-90°	52.2	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°	10193.0	100.0
0°-180°	10193.0	100.0

Coefficient of Utilization



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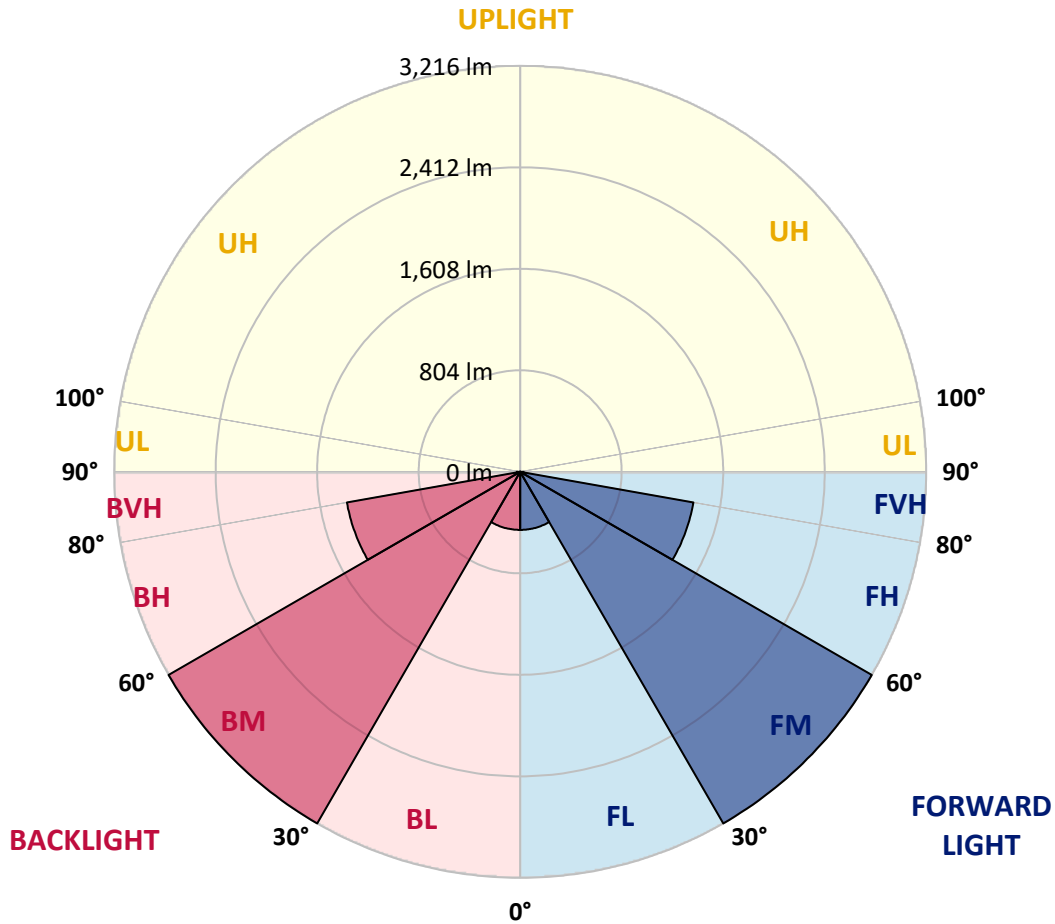
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	460.1	4.5			
FM (30°-60°)	3216.4	31.6			
FH (60°-80°)	1393.9	13.7			G1/1800
FVH (80°-90°)	26.1	0.3			G1/100
BL (0°-30°)	460.1	4.5	B1/500		
BM (30°-60°)	3216.4	31.6	B3/5000		
BH (60°-80°)	1393.9	13.7	B3/2500		G1/1800
BVH (80°-90°)	26.1	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	416.8	416.8	416.8	416.8	416.8	416.8	416.8	416.8	416.8	416.8	416.8
2.5°	506.8	497.6	465.7	476.9	488.5	486.8	483.9	475.2	467.4	500.1	506.8
5°	646.1	625.4	614.2	605.0	603.0	580.6	611.3	607.9	618.3	635.7	652.7
7.5°	757.2	737.7	708.3	702.1	668.5	643.6	670.1	702.9	713.3	745.2	764.3
10°	797.9	780.9	786.3	758.5	756.8	763.9	758.1	765.5	792.9	789.2	803.3
12.5°	889.1	892.0	874.6	867.5	881.6	912.3	886.2	877.1	870.4	898.6	907.3
15°	974.5	991.5	962.9	958.4	952.5	981.2	953.0	966.6	978.7	984.5	981.2
17.5°	1095.6	1096.4	1064.5	1013.5	1032.6	1041.7	1029.3	1005.6	1062.4	1091.1	1092.7
20°	1175.2	1178.1	1115.1	1035.5	1089.4	1097.7	1091.5	1042.1	1117.6	1165.3	1163.2
22.5°	1261.1	1251.1	1165.7	1107.6	1126.7	1131.7	1118.4	1112.2	1165.3	1252.0	1239.1
25°	1318.7	1337.0	1252.0	1214.6	1198.5	1186.8	1203.8	1207.2	1261.5	1340.3	1296.7
27.5°	1456.4	1424.9	1291.8	1305.9	1271.4	1193.1	1267.7	1308.8	1297.2	1431.5	1464.3
30°	1578.7	1579.6	1392.9	1419.9	1356.0	1292.6	1373.5	1432.8	1418.2	1590.3	1559.2
32.5°	1735.1	1740.9	1567.5	1495.4	1452.2	1440.2	1430.3	1495.8	1586.2	1725.5	1728.4
35°	1903.8	1953.6	1718.1	1642.2	1568.8	1515.7	1572.9	1663.7	1722.6	1945.3	1905.9
37.5°	2232.7	2148.9	1956.1	1813.4	1766.6	1745.4	1775.7	1828.4	1955.7	2147.7	2215.3
40°	2427.2	2404.0	2141.5	2022.0	1841.2	1897.6	1881.0	2025.4	2130.7	2417.2	2423.5
42.5°	2724.5	2607.6	2371.6	2219.8	2057.3	1959.4	2063.1	2256.7	2384.1	2626.2	2740.7
45°	2959.7	2809.5	2627.5	2512.2	2306.9	2234.4	2271.7	2519.7	2679.3	2845.6	2996.1
47.5°	3219.7	3057.1	2875.1	2670.2	2469.9	2588.1	2522.2	2740.3	2896.2	3134.7	3275.6
50°	3546.4	3366.5	3133.4	2964.2	2831.5	2873.0	2862.6	3018.1	3210.5	3427.8	3587.9
52.5°	3906.4	3702.8	3478.0	3320.8	3264.9	3162.0	3296.4	3360.2	3502.1	3701.1	3889.0
55°	4158.1	3954.5	3818.5	3869.1	3854.1	3689.1	3806.9	3813.5	3745.1	3816.8	4005.9
57.5°	4119.1	3924.6	3906.0	4097.1	4382.9	4542.5	4360.5	3969.0	3712.7	3679.1	3879.4
60°	3601.6	3435.3	3606.2	4037.4	4869.7	5355.7	4654.9	3851.7	3429.5	3254.9	3448.2
62.5°	2481.9	2369.5	2723.7	3398.0	4928.2	5983.2	4644.1	3347.0	2659.8	2343.0	2493.1
65°	1176.5	1135.8	1434.8	2154.3	4105.0	5815.6	4057.3	2264.6	1531.0	1222.9	1256.9
67.5°	442.5	422.2	526.7	951.7	2585.6	4612.6	2727.4	1117.2	592.2	460.3	476.1
70°	251.3	236.8	250.5	347.1	1040.9	2612.6	1176.5	383.2	251.7	229.3	244.3
72.5°	197.8	186.6	188.7	209.8	359.1	1025.5	380.7	218.5	182.9	173.8	187.0
75°	163.4	153.4	153.0	164.6	209.4	333.0	215.2	167.1	148.0	141.4	152.2
77.5°	129.8	124.0	125.7	134.8	150.1	186.2	155.9	135.2	121.5	113.6	121.1
80°	95.0	94.1	100.8	109.1	112.0	125.2	116.9	109.1	97.0	85.8	88.7
82.5°	62.2	62.6	75.1	81.7	80.5	80.0	83.8	83.4	72.6	56.8	56.8
85°	35.7	36.5	46.0	51.4	50.6	40.2	53.1	53.5	46.4	34.4	33.2
87.5°	11.6	14.5	19.9	21.1	20.3	11.2	20.3	22.4	20.3	14.5	12.9
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)