

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: P597070

Luminaire Tested: **MSA-SA3D-835-U-5NQ**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P597070  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-5)  
Test Lab: INNOVATIONS CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: MSA-SA3D-835-U-5NQ  
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS.  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16791 lumens  
Efficiency: N/A  
Efficacy: 87.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G2

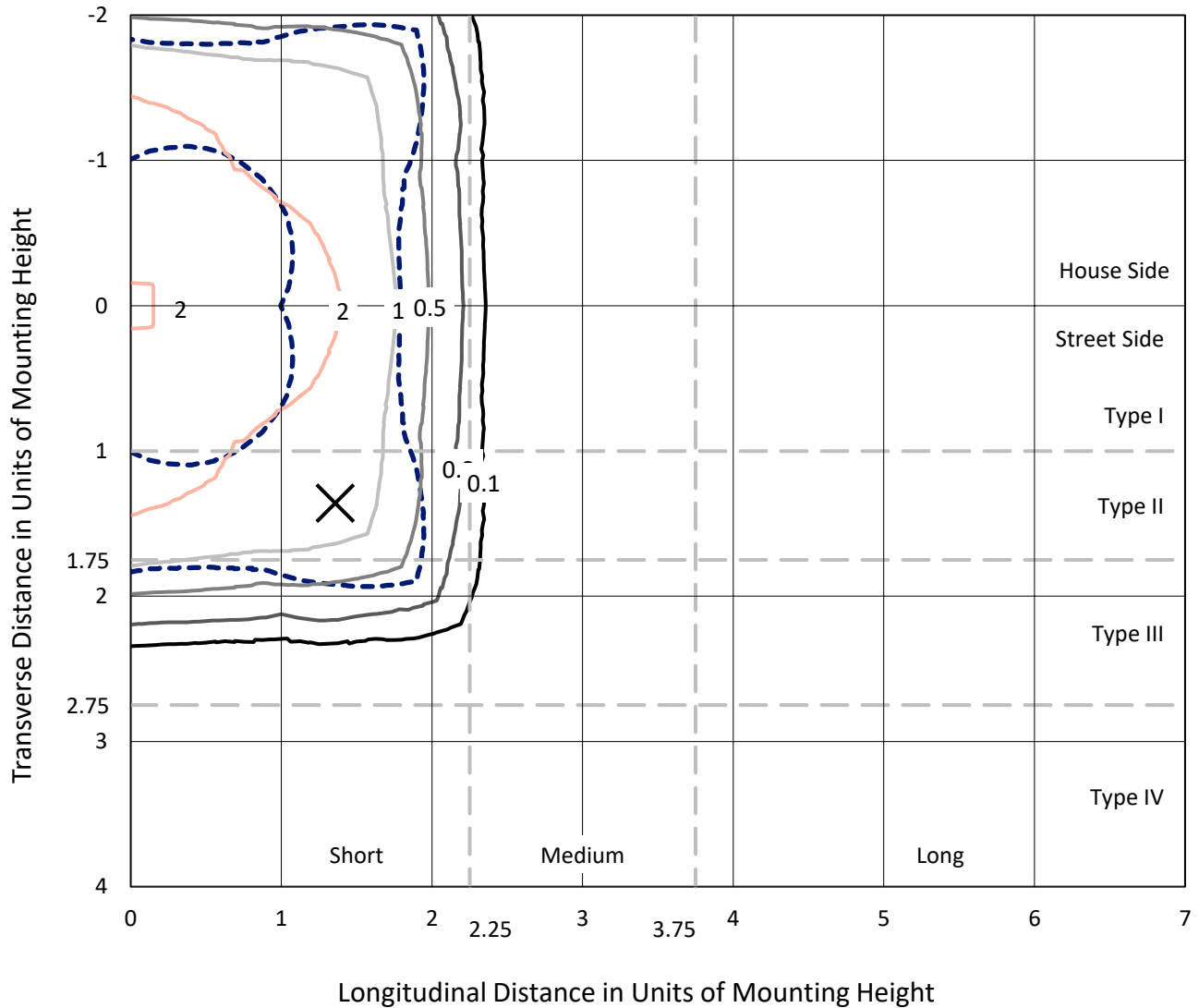
Input Watts (W): 192  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

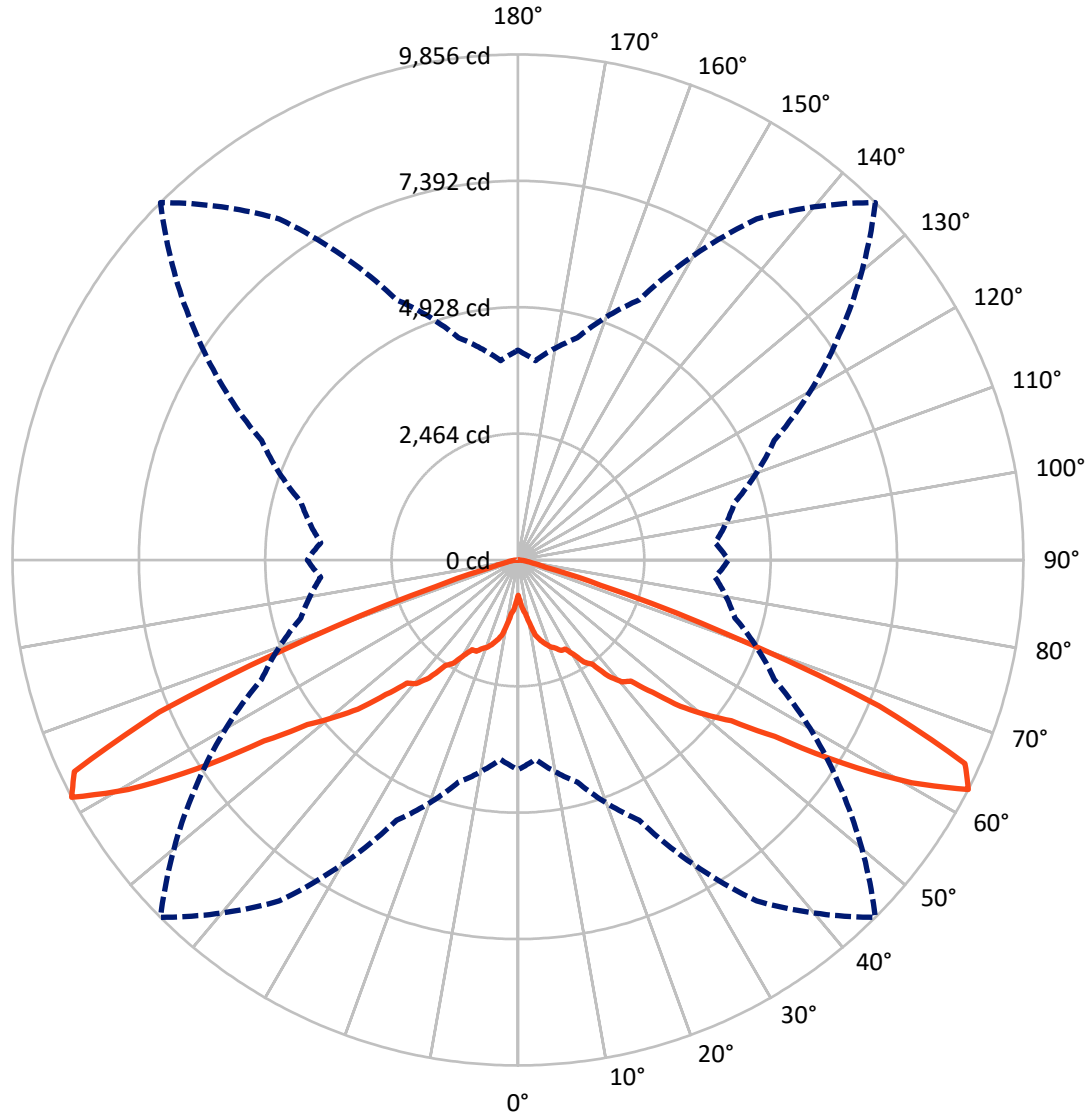
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 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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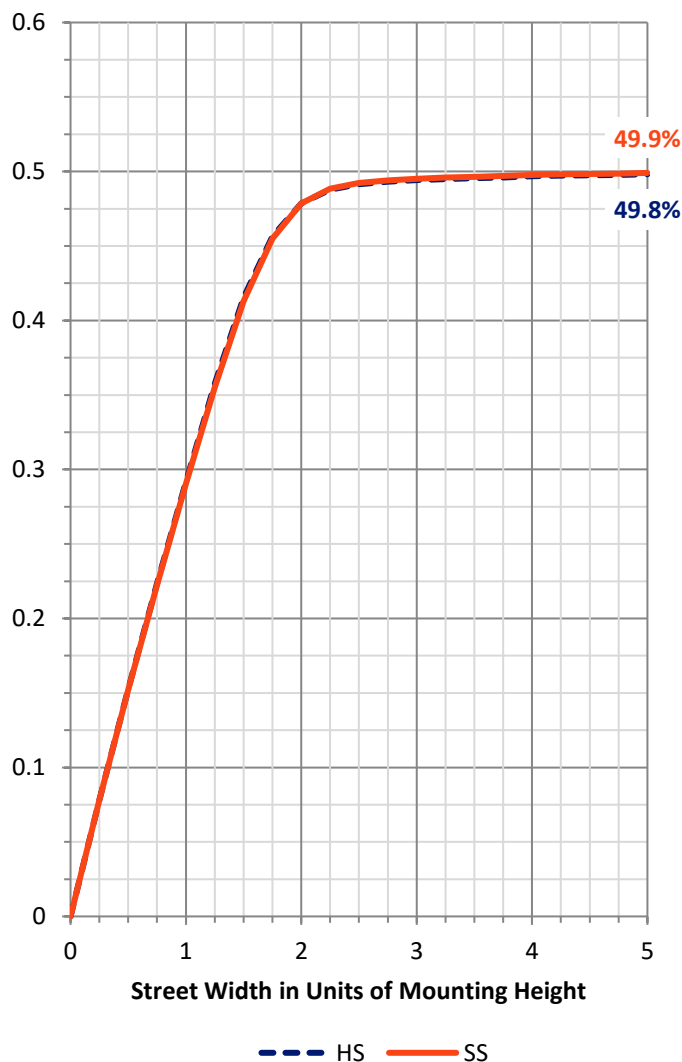
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8395.5	0.0	8395.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	8395.5	0.0	8395.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	16791.0	0.0	16791.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.5	0.6
10°-20°	456.2	2.7
20°-30°	956.2	5.7
30°-40°	1801.7	10.7
40°-50°	3269.9	19.5
50°-60°	5525.1	32.9
60°-70°	4130.3	24.6
70°-80°	462.1	2.8
80°-90°	86.0	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°	16791.0	100.0
0°-180°	16791.0	100.0

**Coefficient of Utilization**

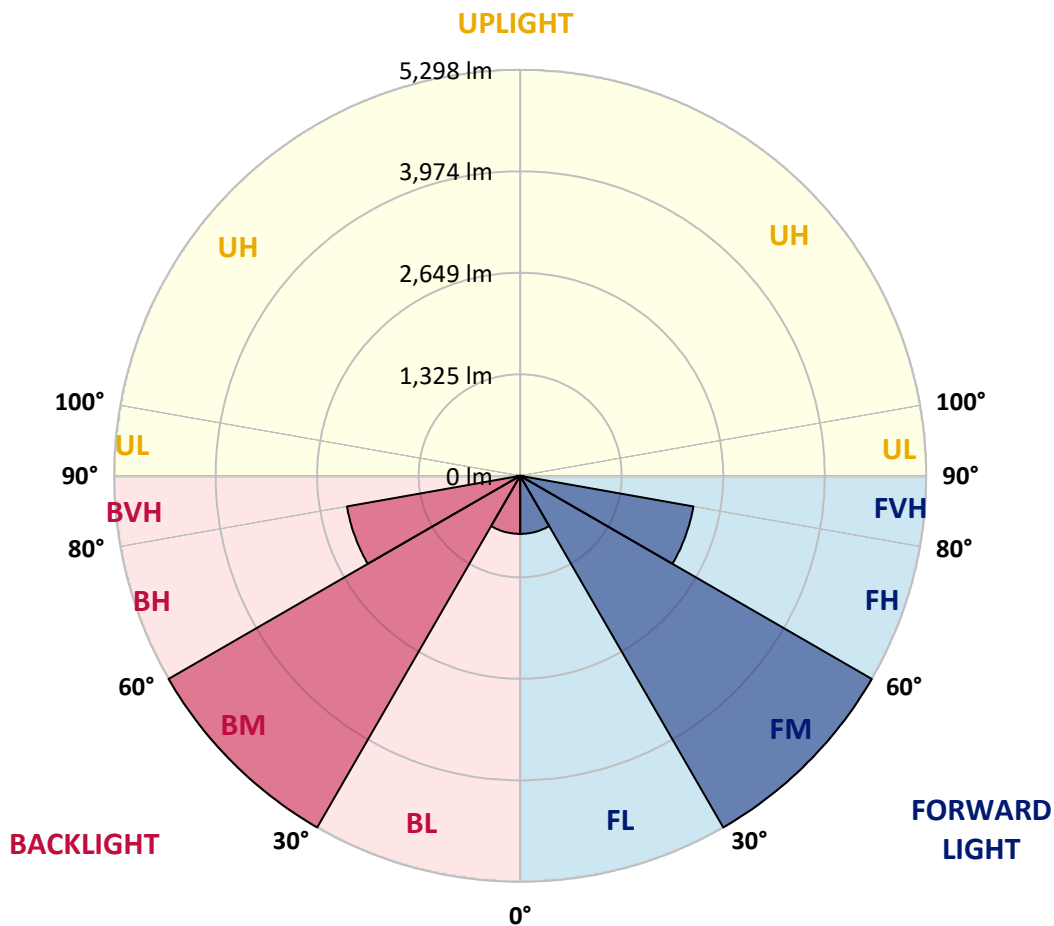


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	758.0	4.5			
FM (30°-60°)	5298.3	31.6			
FH (60°-80°)	2296.2	13.7			G2/5000
FVH (80°-90°)	43.0	0.3			G1/100
BL (0°-30°)	758.0	4.5	B2/1000		
BM (30°-60°)	5298.3	31.6	B4/8500		
BH (60°-80°)	2296.2	13.7	B3/2500		G2/5000
BVH (80°-90°)	43.0	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°	686.5	686.5	686.5	686.5	686.5	686.5	686.5	686.5	686.5	686.5	686.5
2.5°	834.8	819.7	767.1	785.6	804.7	802.0	797.2	782.9	769.9	823.8	834.8
5°	1064.3	1030.2	1011.7	996.7	993.3	956.4	1006.9	1001.5	1018.5	1047.2	1075.2
7.5°	1247.4	1215.3	1166.8	1156.5	1101.2	1060.2	1103.9	1157.9	1175.0	1227.6	1259.0
10°	1314.3	1286.3	1295.2	1249.4	1246.7	1258.3	1248.7	1261.0	1306.1	1300.0	1323.2
12.5°	1464.6	1469.4	1440.7	1429.1	1452.3	1502.9	1459.8	1444.8	1433.9	1480.3	1494.7
15°	1605.3	1633.3	1586.2	1578.7	1569.1	1616.3	1569.8	1592.4	1612.2	1621.7	1616.3
17.5°	1804.8	1806.2	1753.6	1669.6	1701.0	1716.0	1695.5	1656.6	1750.2	1797.3	1800.0
20°	1936.0	1940.8	1836.9	1705.8	1794.6	1808.2	1798.0	1716.7	1841.0	1919.6	1916.2
22.5°	2077.4	2061.0	1920.3	1824.6	1856.0	1864.2	1842.4	1832.1	1919.6	2062.4	2041.2
25°	2172.3	2202.4	2062.4	2000.9	1974.2	1955.1	1983.1	1988.6	2078.1	2207.9	2136.1
27.5°	2399.1	2347.2	2127.9	2151.2	2094.5	1965.3	2088.3	2155.9	2136.8	2358.1	2412.1
30°	2600.7	2602.0	2294.6	2339.0	2233.8	2129.3	2262.5	2360.2	2336.3	2619.8	2568.5
32.5°	2858.2	2867.8	2582.2	2463.3	2392.3	2372.5	2356.1	2464.0	2612.9	2842.5	2847.3
35°	3136.2	3218.2	2830.2	2705.2	2584.3	2496.8	2591.1	2740.7	2837.7	3204.5	3139.6
37.5°	3677.9	3539.9	3222.3	2987.3	2910.1	2875.3	2925.1	3011.9	3221.6	3537.9	3649.2
40°	3998.3	3960.1	3527.7	3330.9	3033.1	3126.0	3098.6	3336.4	3509.9	3981.9	3992.2
42.5°	4488.1	4295.5	3906.8	3656.8	3389.0	3227.8	3398.5	3717.6	3927.3	4326.2	4514.8
45°	4875.5	4628.2	4328.3	4138.4	3800.2	3680.7	3742.2	4150.7	4413.7	4687.6	4935.6
47.5°	5303.8	5036.0	4736.1	4398.6	4068.7	4263.4	4154.8	4514.1	4770.9	5163.7	5396.0
50°	5842.1	5545.6	5161.7	4883.0	4664.4	4732.7	4715.6	4971.8	5288.7	5646.7	5910.4
52.5°	6435.0	6099.6	5729.4	5470.5	5378.2	5208.8	5430.1	5535.4	5769.0	6096.9	6406.3
55°	6849.7	6514.3	6290.2	6373.5	6349.0	6077.1	6271.1	6282.0	6169.3	6287.5	6599.0
57.5°	6785.5	6465.1	6434.3	6749.3	7219.9	7482.9	7183.0	6538.2	6116.0	6060.7	6390.6
60°	5932.9	5659.0	5940.4	6650.9	8021.9	8822.5	7668.1	6344.9	5649.4	5361.8	5680.2
62.5°	4088.5	3903.4	4486.8	5597.5	8118.2	9856.1	7650.3	5513.5	4381.6	3859.6	4106.9
65°	1938.0	1871.1	2363.6	3548.8	6762.2	9580.1	6683.7	3730.5	2522.1	2014.5	2070.5
67.5°	728.9	695.4	867.6	1567.8	4259.3	7598.4	4492.9	1840.3	975.5	758.3	784.2
70°	414.0	390.1	412.6	571.8	1714.6	4303.7	1938.0	631.2	414.7	377.8	402.4
72.5°	325.8	307.4	310.8	345.7	591.6	1689.4	627.1	360.0	301.3	286.2	308.1
75°	269.2	252.8	252.1	271.2	345.0	548.5	354.5	275.3	243.9	232.9	250.7
77.5°	213.8	204.3	207.0	222.0	247.3	306.7	256.9	222.7	200.2	187.2	199.5
80°	156.4	155.1	166.0	179.7	184.4	206.3	192.6	179.7	159.9	141.4	146.2
82.5°	102.5	103.2	123.6	134.6	132.5	131.8	138.0	137.3	119.5	93.6	93.6
85°	58.7	60.1	75.8	84.7	83.3	66.3	87.4	88.1	76.5	56.7	54.6
87.5°	19.1	23.9	32.8	34.8	33.5	18.4	33.5	36.9	33.5	23.9	21.2
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)