

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: P596784

Luminaire Tested: **MSA-SA4C-827-U-5NQ**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596784
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-SA4C-827-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: 18100 lumens
Efficiency: N/A
Efficacy: 80.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

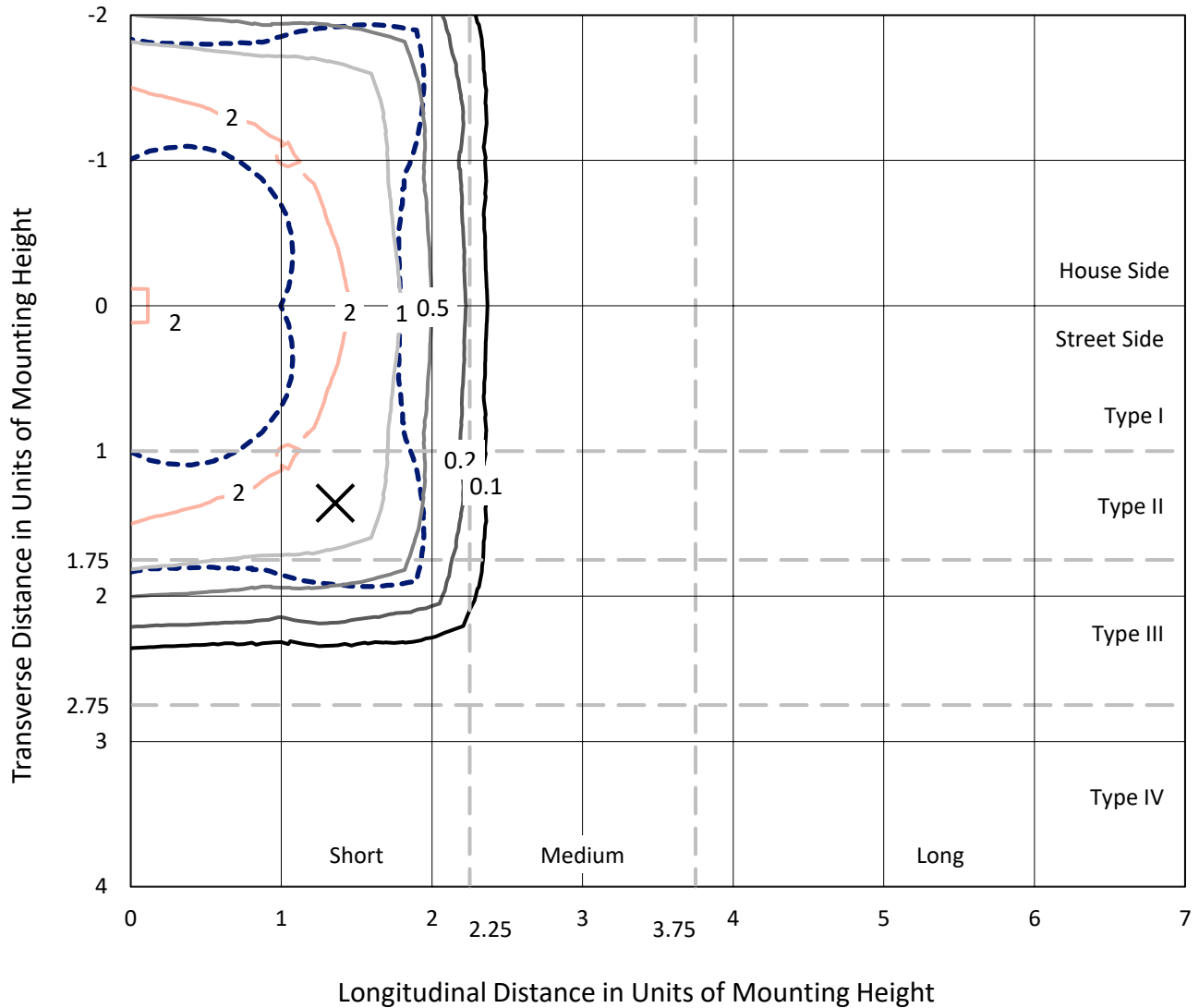
Input Watts (W): 225
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

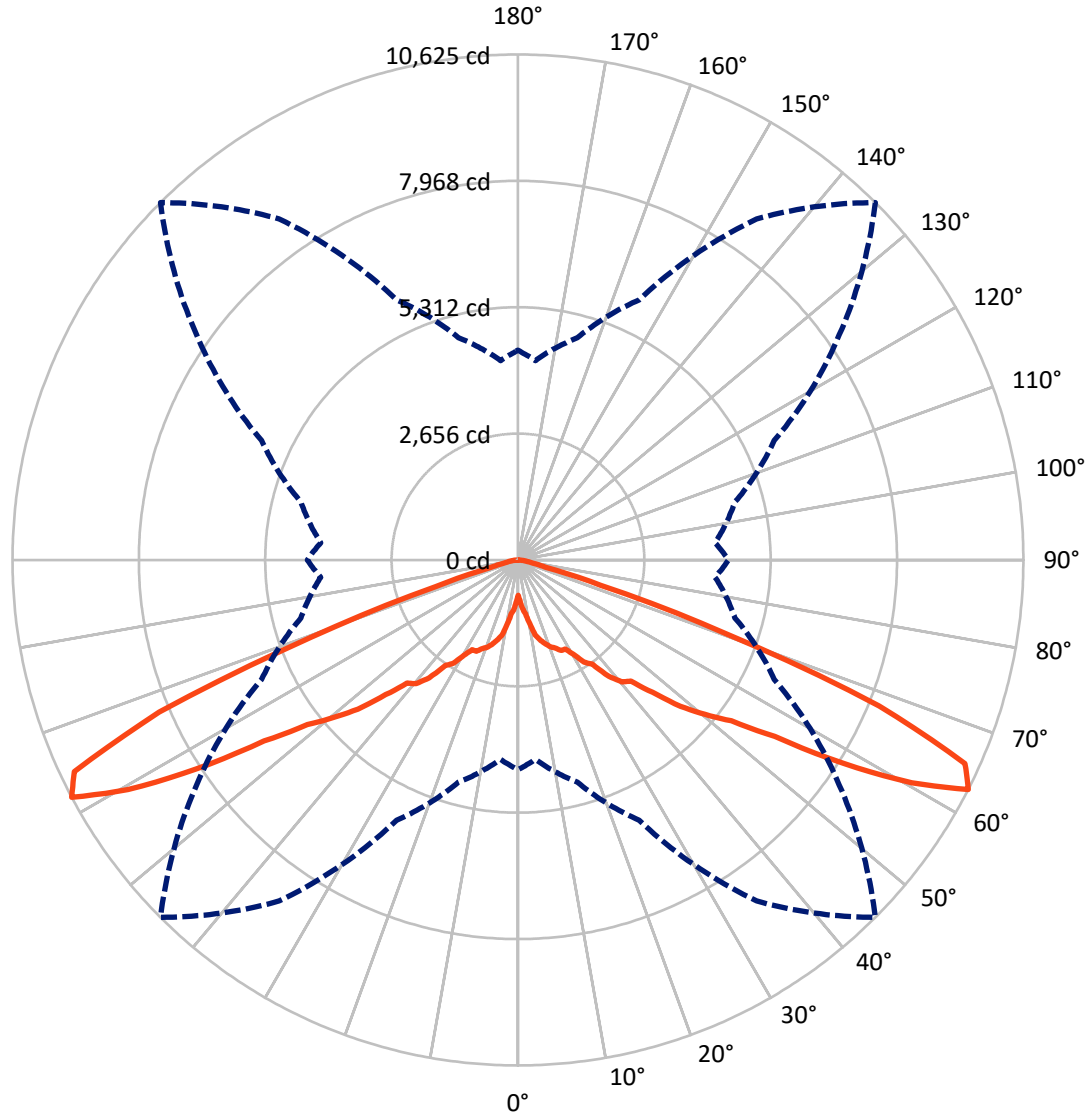
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 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	9050.0	0.0	9050.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9050.0	0.0	9050.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	18100.0	0.0	18100.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.5	0.6
10°-20°	491.8	2.7
20°-30°	1030.8	5.7
30°-40°	1942.1	10.7
40°-50°	3524.8	19.5
50°-60°	5955.8	32.9
60°-70°	4452.3	24.6
70°-80°	498.1	2.8
80°-90°	92.7	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°	18100.0	100.0
0°-180°	18100.0	100.0

Coefficient of Utilization



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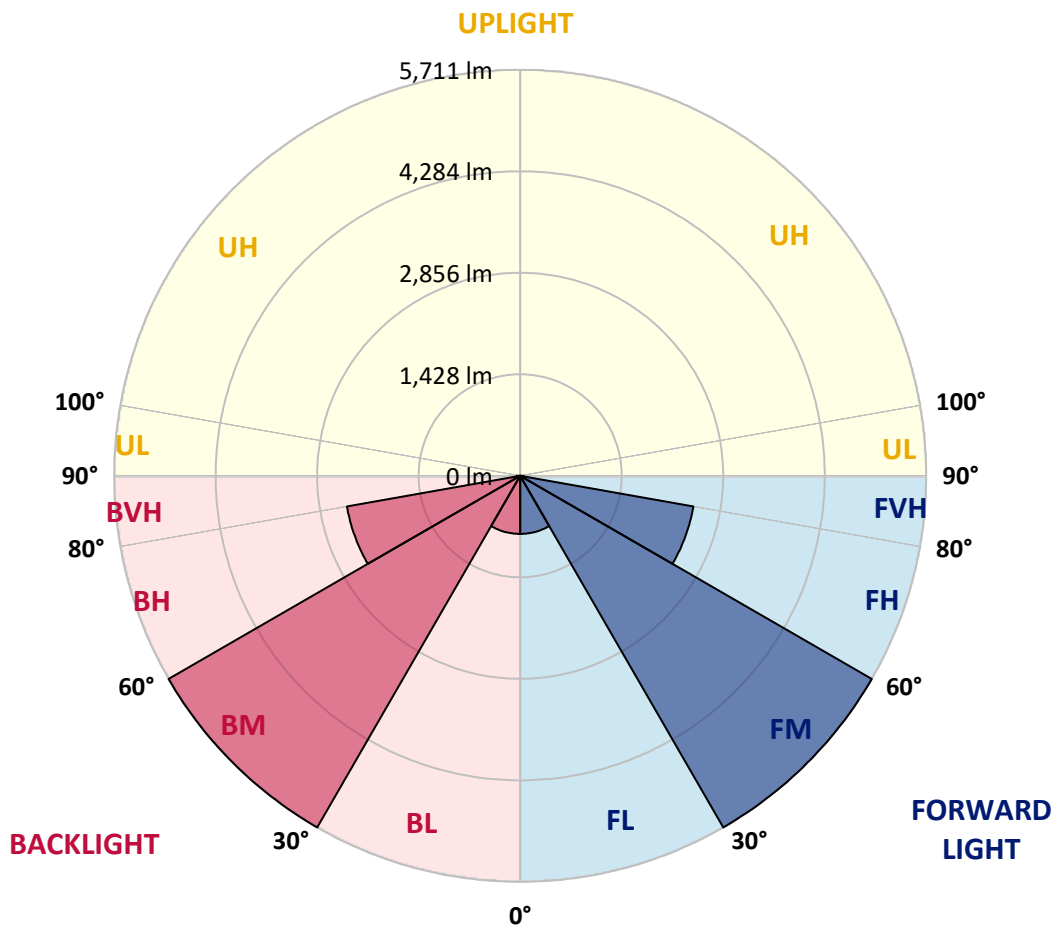
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	817.1	4.5			
FM (30°-60°)	5711.4	31.6			
FH (60°-80°)	2475.2	13.7			G2/5000
FVH (80°-90°)	46.3	0.3			G1/100
BL (0°-30°)	817.1	4.5	B2/1000		
BM (30°-60°)	5711.4	31.6	B4/8500		
BH (60°-80°)	2475.2	13.7	B3/2500		G2/5000
BVH (80°-90°)	46.3	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°	740.1	740.1	740.1	740.1	740.1	740.1	740.1	740.1	740.1	740.1	740.1
2.5°	899.9	883.7	827.0	846.8	867.5	864.5	859.4	843.9	829.9	888.1	899.9
5°	1147.3	1110.5	1090.6	1074.4	1070.7	1030.9	1085.4	1079.5	1097.9	1128.9	1159.1
7.5°	1344.6	1310.0	1257.7	1246.7	1187.0	1142.9	1190.0	1248.2	1266.6	1323.3	1357.1
10°	1416.8	1386.6	1396.2	1346.8	1343.9	1356.4	1346.1	1359.4	1408.0	1401.3	1426.4
12.5°	1578.8	1584.0	1553.0	1540.5	1565.5	1620.0	1573.6	1557.4	1545.7	1595.7	1611.2
15°	1730.5	1760.7	1709.9	1701.8	1691.5	1742.3	1692.2	1716.5	1737.9	1748.2	1742.3
17.5°	1945.5	1947.0	1890.3	1799.7	1833.6	1849.8	1827.7	1785.7	1886.6	1937.4	1940.4
20°	2086.9	2092.1	1980.1	1838.7	1934.5	1949.2	1938.1	1850.5	1984.5	2069.2	2065.5
22.5°	2239.3	2221.7	2070.0	1966.9	2000.7	2009.6	1986.0	1975.0	2069.2	2223.1	2200.3
25°	2341.7	2374.1	2223.1	2156.9	2128.1	2107.5	2137.7	2143.6	2240.1	2380.0	2302.7
27.5°	2586.2	2530.2	2293.8	2318.9	2257.7	2118.6	2251.1	2324.0	2303.4	2542.0	2600.2
30°	2803.4	2804.9	2473.5	2521.4	2408.0	2295.3	2438.9	2544.2	2518.4	2824.0	2768.8
32.5°	3081.0	3091.3	2783.5	2655.4	2578.8	2557.4	2539.8	2656.1	2816.6	3064.1	3069.2
35°	3380.7	3469.1	3050.8	2916.1	2785.7	2691.5	2793.1	2954.4	3058.9	3454.4	3384.4
37.5°	3964.7	3815.9	3473.5	3220.2	3137.0	3099.4	3153.2	3246.7	3472.8	3813.7	3933.7
40°	4310.0	4268.8	3802.7	3590.6	3269.5	3369.7	3340.2	3596.5	3783.5	4292.4	4303.4
42.5°	4838.0	4630.4	4211.4	3941.8	3653.2	3479.4	3663.5	4007.4	4233.4	4663.5	4866.7
45°	5255.5	4989.0	4665.7	4461.0	4096.5	3967.6	4033.9	4474.2	4757.7	5053.0	5320.3
47.5°	5717.2	5428.6	5105.3	4741.5	4385.9	4595.7	4478.7	4866.0	5142.9	5566.3	5816.7
50°	6297.5	5977.9	5564.1	5263.6	5028.0	5101.6	5083.2	5359.4	5701.0	6086.9	6371.1
52.5°	6936.7	6575.1	6176.0	5896.9	5797.5	5614.9	5853.5	5966.9	6218.7	6572.2	6905.8
55°	7383.7	7022.1	6780.6	6870.4	6843.9	6550.8	6760.0	6771.7	6650.2	6777.6	7113.4
57.5°	7314.5	6969.1	6936.0	7275.4	7782.8	8066.3	7743.0	7047.9	6592.8	6533.2	6888.8
60°	6395.5	6100.2	6403.6	7169.4	8647.3	9510.3	8265.9	6839.5	6089.9	5779.8	6123.0
62.5°	4407.2	4207.7	4836.5	6033.9	8751.1	10624.5	8246.7	5943.3	4723.1	4160.5	4427.1
65°	2089.1	2016.9	2547.9	3825.5	7289.4	10327.0	7204.7	4021.4	2718.7	2171.6	2232.0
67.5°	785.7	749.6	935.2	1690.0	4591.3	8190.7	4843.2	1983.8	1051.5	817.4	845.4
70°	446.2	420.5	444.8	616.3	1848.3	4639.2	2089.1	680.4	447.0	407.2	433.7
72.5°	351.3	331.4	335.1	372.6	637.7	1821.1	676.0	388.1	324.7	308.5	332.1
75°	290.1	272.5	271.7	292.3	371.9	591.3	382.2	296.8	262.9	251.1	270.3
77.5°	230.5	220.2	223.1	239.3	266.6	330.6	276.9	240.1	215.8	201.8	215.0
80°	168.6	167.2	178.9	193.7	198.8	222.4	207.7	193.7	172.3	152.4	157.6
82.5°	110.5	111.2	133.3	145.1	142.9	142.1	148.7	148.0	128.9	100.9	100.9
85°	63.3	64.8	81.7	91.3	89.8	71.4	94.3	95.0	82.5	61.1	58.9
87.5°	20.6	25.8	35.3	37.6	36.1	19.9	36.1	39.8	36.1	25.8	22.8
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)