

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO

Report Number: P641196

Luminaire Tested: ML5612LSNFL2597FS1E - 694TBZB - 900LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641196  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-22)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSNFL2597FS1E - 694TBZB - 900LM - 2700K  
Description: ML56 RR, 25D TIR OPTIC, 6" TUSCON BRONZE GIMBAL TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1192.5 lumens  
Efficiency: N/A  
Efficacy: 89.7 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.43  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

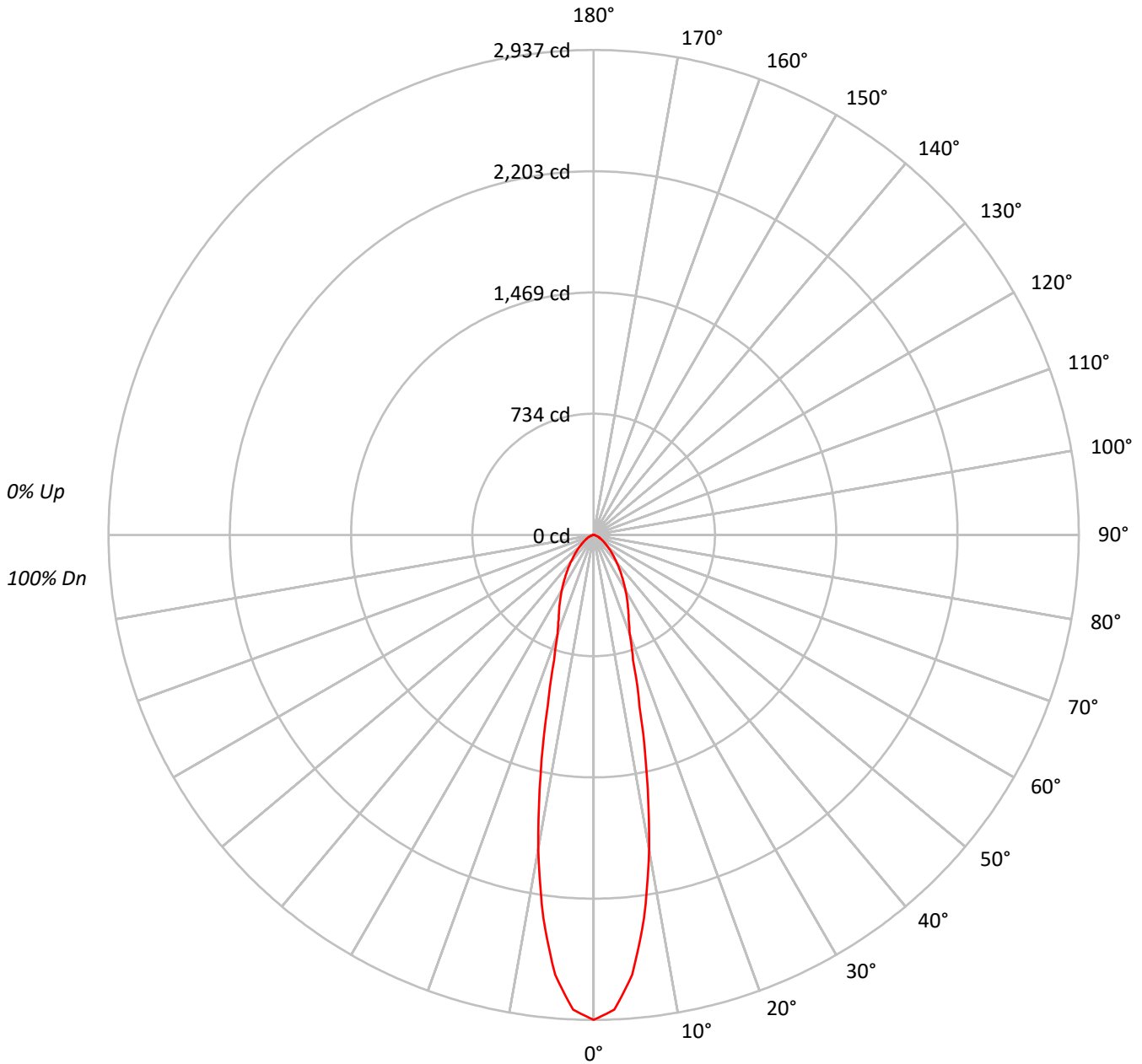
Input Watts (W): 13.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P641196

CATALOG NUMBER: ML5612LSNFL2597FS1E - 694TBZB - 900LM - 2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P641196

CATALOG NUMBER: ML5612LSNFL2597FS1E - 694TBZB - 900LM - 2700K

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	95	94	93	93	93	93
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	82	86	83	80	79	79	79	79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73	73	73	73
5	91	82	76	72	89	81	76	71	80	75	71	78	74	70	76	73	70	68	68	68	68
6	87	77	71	67	85	77	71	67	75	70	66	74	69	66	72	68	65	64	64	64	64
7	83	73	67	63	81	72	67	63	71	66	62	70	65	62	69	65	61	60	60	60	60
8	79	69	63	59	78	69	63	59	68	62	59	67	62	58	66	61	58	57	57	57	57
9	75	66	60	56	74	65	60	56	64	59	56	63	59	55	63	58	55	54	54	54	54
10	72	63	57	53	71	62	57	53	62	56	53	61	56	53	60	56	53	51	51	51	51

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	160990
5°	147133
10°	107463
15°	60942
20°	37179
25°	29838
30°	24314
35°	19501
40°	15465
45°	12102
50°	9398
55°	7407
60°	5866
65°	4812
70°	3494
75°	2076
80°	1042
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12102 cd/sqm



TEST NUMBER: P641196

CATALOG NUMBER: ML5612LSNFL2597FS1E - 694TBZB - 900LM - 2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	231.0	19.4
10°-20°	309.3	25.9
20°-30°	227.6	19.1
30°-40°	183.2	15.4
40°-50°	121.7	10.2
50°-60°	70.5	5.9
60°-70°	37.0	3.1
70°-80°	11.1	0.9
80°-90°	1.0	0.1
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°-30°	767.9	64.4
0°-40°	951.1	79.8
0°-60°	1143.4	95.9
0°-90°	1192.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1192.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2937	
5°	2674	231
15°	1074	309
25°	493	228
35°	291	183
45°	156	122
55°	78	71
65°	37	37
75°	10	11
85°	0	1
90°	0	



TEST NUMBER: P641196

CATALOG NUMBER: ML5612LSNFL2597FS1E - 694TBZB - 900LM - 2700K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2936.7
2.5°	2877.8
5°	2673.7
7.5°	2338.6
10°	1930.5
12.5°	1484.2
15°	1073.8
17.5°	793.4
20°	637.3
22.5°	554.4
25°	493.3
27.5°	437.6
30°	384.1
32.5°	336.1
35°	291.4
37.5°	252.1
40°	216.1
42.5°	183.3
45°	156.1
47.5°	132.0
50°	110.2
52.5°	92.8
55°	77.5
57.5°	64.4
60°	53.5
62.5°	44.7
65°	37.1
67.5°	30.6
70°	21.8
72.5°	14.2
75°	9.8
77.5°	5.5
80°	3.3
82.5°	2.2
85°	0.0
87.5°	0.0
90°	0.0

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report





Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



— 0°-180°

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)