

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: P641062

Luminaire Tested: ML5612LSNFL2597FS1E - 596WB - 900LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641062  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSNFL2597FS1E - 596WB - 900LM - 3000K  
Description: ML56 RR, 25D TIR OPTIC, 5" SHALLOW WHITE BAFFLE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

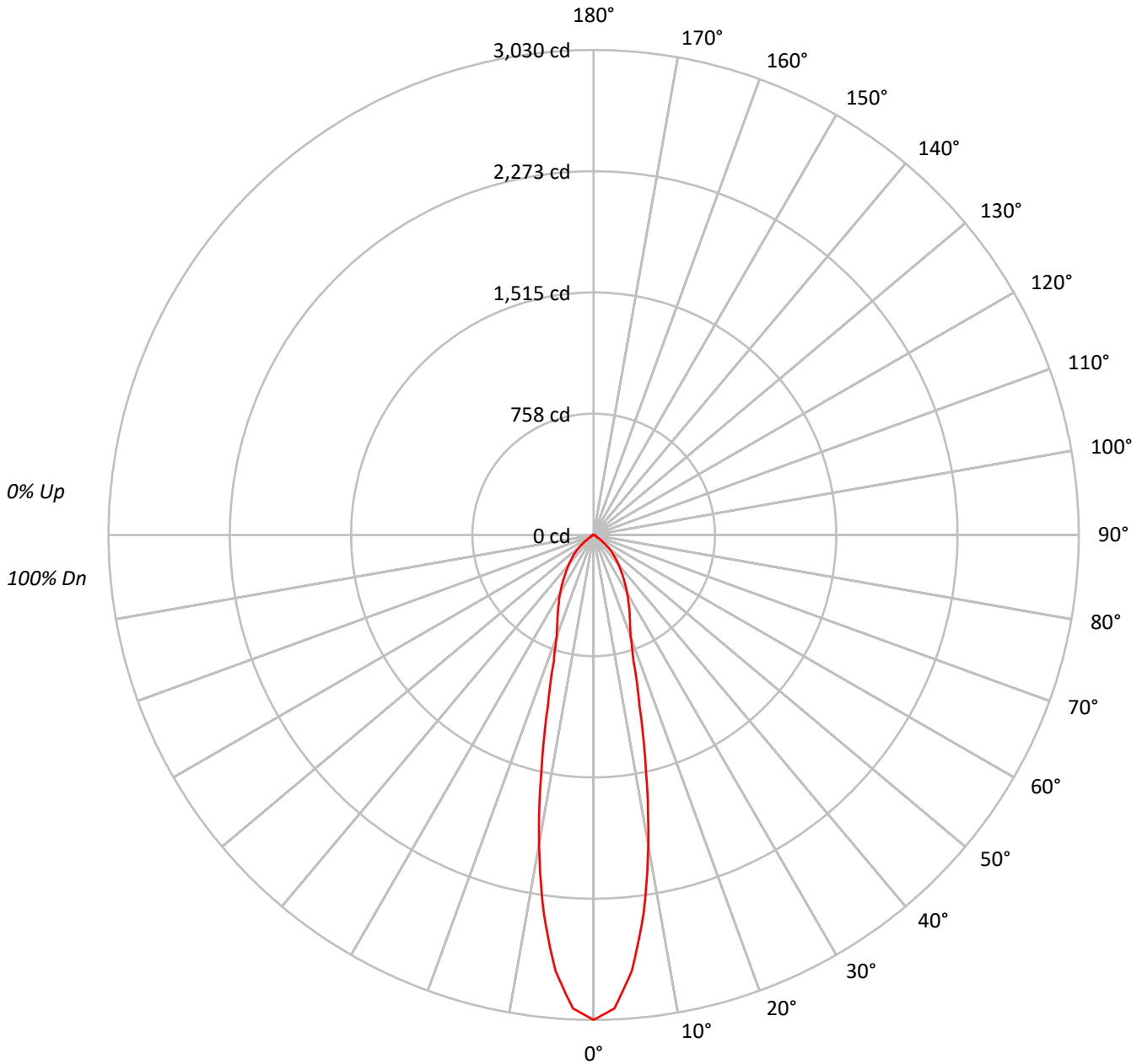
Lumens per Lamp: N/A  
Luminaire Lumens: 1208.6 lumens  
Efficiency: N/A  
Efficacy: 90.9 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.44  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

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: P641062  
CATALOG NUMBER: ML5612LSNFL2597FS1E - 596WB - 900LM - 3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P641062

CATALOG NUMBER: ML5612LSNFL2597FS1E - 596WB - 900LM - 3000K

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

RF	20									20									20									20									
RC	80									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																			
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93																			
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86																			
3	102	95	90	86	100	94	89	86	91	87	84	89	86	83	87	84	82	80																			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75																			
5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70																			
6	88	79	73	69	86	78	72	68	76	71	68	75	71	67	74	70	67	65																			
7	84	74	68	64	82	74	68	64	72	67	64	71	67	63	70	66	63	62																			
8	80	71	65	61	79	70	64	60	69	64	60	68	63	60	67	63	60	58																			
9	76	67	61	57	75	67	61	57	66	61	57	65	60	57	64	60	57	55																			
10	73	64	58	54	72	63	58	54	63	58	54	62	57	54	61	57	54	53																			

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

	0°
0°	239159
5°	216593
10°	157728
15°	90364
20°	56486
25°	46146
30°	38066
35°	30828
40°	24753
45°	19671
50°	13239
55°	6028
60°	3363
65°	3138
70°	2585
75°	2410
80°	2546
85°	3080

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 19671 cd/sqm



TEST NUMBER: P641062

CATALOG NUMBER: ML5612LSNFL2597FS1E - 596WB - 900LM - 3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	236.2	19.5
10°-20°	318.3	26.3
20°-30°	243.9	20.2
30°-40°	200.9	16.6
40°-50°	134.5	11.1
50°-60°	46.7	3.9
60°-70°	16.2	1.3
70°-80°	8.8	0.7
80°-90°	3.2	0.3
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°	798.4	66.1
0°-40°	999.3	82.7
0°-60°	1180.4	97.7
0°-90°	1208.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1208.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3030	
5°	2733	236
15°	1106	318
25°	530	244
35°	320	201
45°	176	134
55°	44	47
65°	17	16
75°	8	9
85°	3	3
90°	0	



TEST NUMBER: P641062

CATALOG NUMBER: ML5612LSNFL2597FS1E - 596WB - 900LM - 3000K

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3029.6
2.5°	2961.1
5°	2733.3
7.5°	2387.6
10°	1967.7
12.5°	1508.6
15°	1105.7
17.5°	827.3
20°	672.4
22.5°	591.6
25°	529.8
27.5°	470.3
30°	417.6
32.5°	367.1
35°	319.9
37.5°	277.3
40°	240.2
42.5°	206.5
45°	176.2
47.5°	144.8
50°	107.8
52.5°	76.3
55°	43.8
57.5°	26.9
60°	21.3
62.5°	19.1
65°	16.8
67.5°	13.5
70°	11.2
72.5°	9.0
75°	7.9
77.5°	7.9
80°	5.6
82.5°	4.5
85°	3.4
87.5°	1.1
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)