

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: P641970

Luminaire Tested: ML5612LSWFL5597FS1E - 592W - 1200LM - 5000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641970  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-50)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSWFL5597FS1E - 592W - 1200LM - 5000K  
Description: ML56 RR, 55D TIR OPTIC, 5" WHITE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

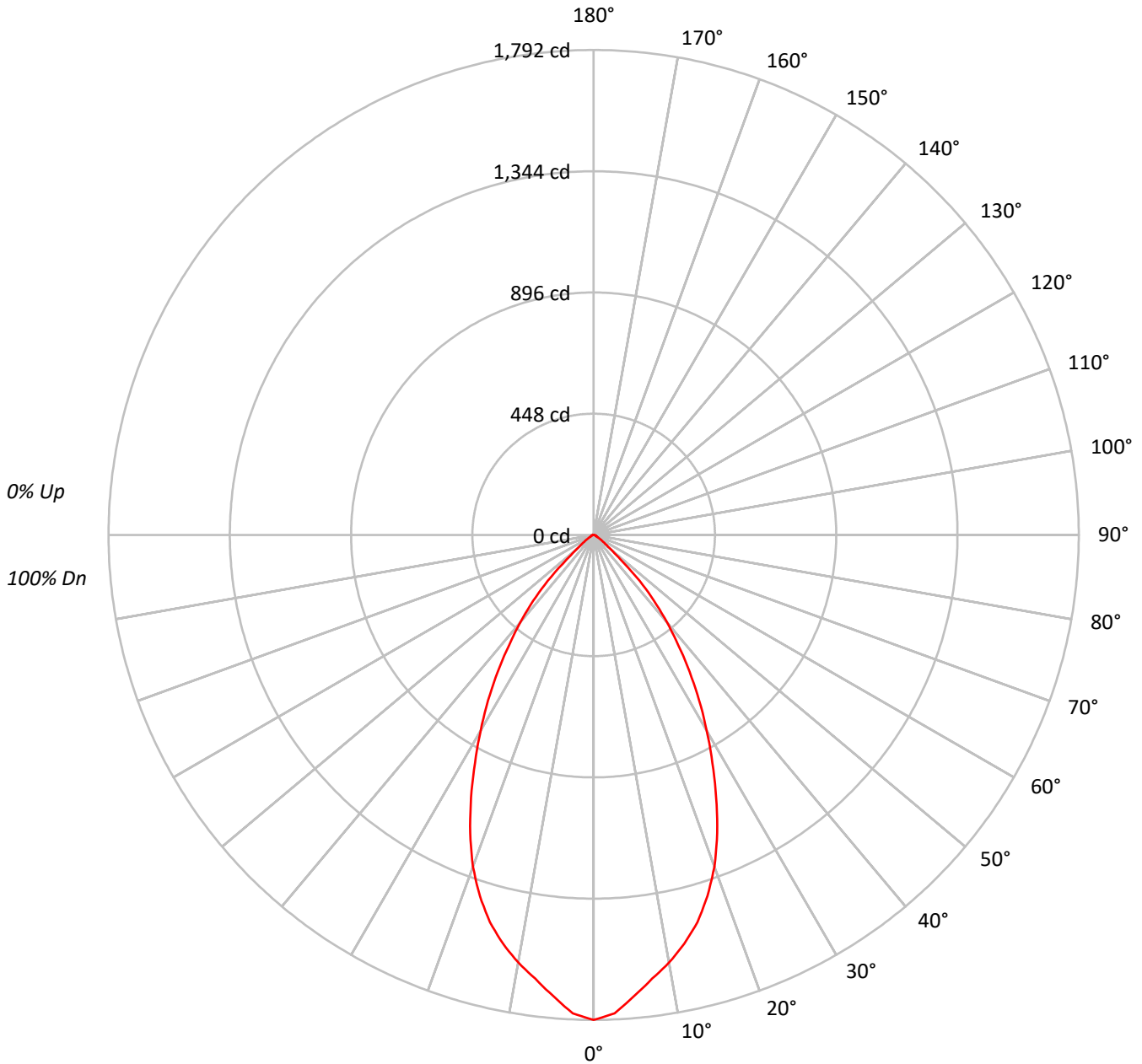
Lumens per Lamp: N/A  
Luminaire Lumens: 1685.3 lumens  
Efficiency: N/A  
Efficacy: 102.1 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.5  
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: P641970  
CATALOG NUMBER: ML5612LSWFL5597FS1E - 592W - 1200LM - 5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P641970

CATALOG NUMBER: ML5612LSWFL5597FS1E - 592W - 1200LM - 5000K

**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
1	113	110	108	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93			93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85			85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	86	83	80	79			79
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72			72
5	90	81	75	71	89	81	75	70	79	74	70	77	73	69	75	72	68	67			67
6	85	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62			62
7	81	71	65	60	80	70	64	60	69	64	60	68	63	59	67	62	59	58			58
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54			54
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	52	50			50
10	69	59	53	49	68	59	53	49	58	52	49	57	52	48	56	52	48	47			47

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

	0°
0°	141462
5°	135576
10°	128591
15°	121044
20°	109529
25°	93286
30°	76131
35°	59498
40°	43343
45°	26827
50°	9776
55°	5175
60°	2605
65°	1961
70°	2077
75°	1830
80°	2046
85°	1359

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 26827 cd/sqm



TEST NUMBER: P641970

CATALOG NUMBER: ML5612LSWFL5597FS1E - 592W - 1200LM - 5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	160.0	9.5
10°-20°	412.4	24.5
20°-30°	489.1	29.0
30°-40°	385.1	22.8
40°-50°	181.3	10.8
50°-60°	36.9	2.2
60°-70°	11.3	0.7
70°-80°	6.9	0.4
80°-90°	2.2	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°	1061.5	63.0
0°-40°	1446.6	85.8
0°-60°	1664.8	98.8
0°-90°	1685.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1685.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1792	
5°	1711	160
15°	1481	412
25°	1071	489
35°	617	385
45°	240	181
55°	38	37
65°	10	11
75°	6	7
85°	2	2
90°	0	



TEST NUMBER: P641970

CATALOG NUMBER: ML5612LSWFL5597FS1E - 592W - 1200LM - 5000K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1792.0
2.5°	1769.5
5°	1710.9
7.5°	1653.8
10°	1604.2
12.5°	1547.2
15°	1481.1
17.5°	1398.5
20°	1303.8
22.5°	1192.7
25°	1071.0
27.5°	949.3
30°	835.2
32.5°	725.5
35°	617.4
37.5°	513.7
40°	420.6
42.5°	330.5
45°	240.3
47.5°	135.2
50°	79.6
52.5°	54.1
55°	37.6
57.5°	27.0
60°	16.5
62.5°	13.5
65°	10.5
67.5°	9.0
70°	9.0
72.5°	7.5
75°	6.0
77.5°	6.0
80°	4.5
82.5°	3.0
85°	1.5
87.5°	1.5
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)