

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: P642049

Luminaire Tested: ML5612LSWFL5597FS1E - 594SNB - 600LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642049  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-56)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSWFL5597FS1E - 594SNB - 600LM - 4000K  
Description: ML56 RR, 55D TIR OPTIC, 5" SATIN NICKLE GIMBAL TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

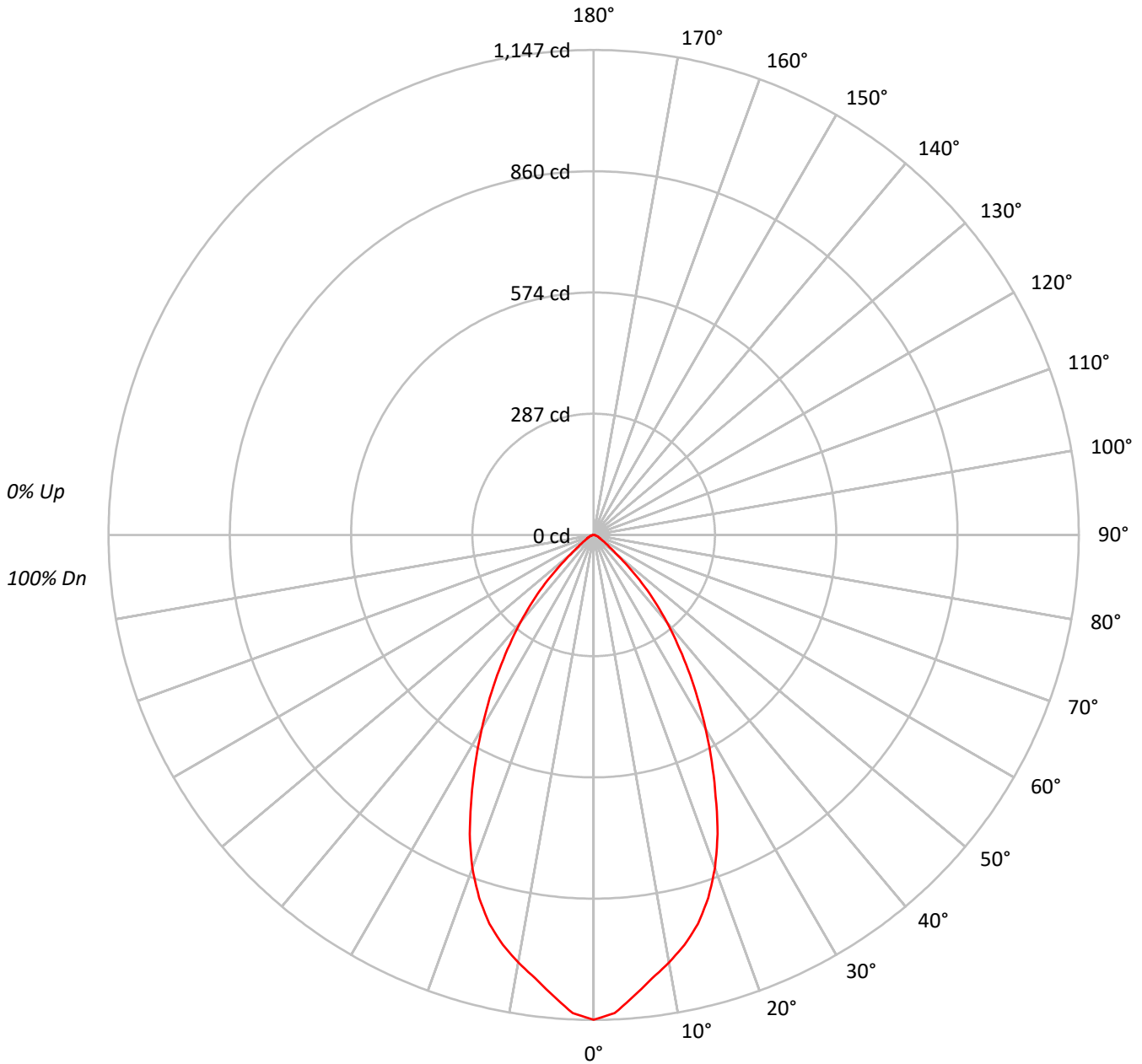
Lumens per Lamp: N/A  
Luminaire Lumens: 1101.1 lumens  
Efficiency: N/A  
Efficacy: 106.9 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.88  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 10.3  
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: P642049  
CATALOG NUMBER: ML5612LSWFL5597FS1E - 594SNB - 600LM - 4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P642049

CATALOG NUMBER: ML5612LSWFL5597FS1E - 594SNB - 600LM - 4000K

**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			100																
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92			92																
2	107	101	97	93	105	100	96	92	96	93	90	93	91	88	91	88	87	85			85																
3	101	94	88	84	99	92	87	83	90	86	82	87	84	81	85	82	80	78			78																
4	95	87	81	76	93	86	80	76	84	79	75	82	77	74	80	76	73	72			72																
5	90	81	74	70	88	80	74	70	78	73	69	76	72	68	75	71	68	66			66																
6	85	75	69	64	83	74	68	64	73	68	64	71	67	63	70	66	63	61			61																
7	80	70	64	59	79	70	64	59	68	63	59	67	62	59	66	62	58	57			57																
8	76	66	59	55	75	65	59	55	64	59	55	63	58	54	62	58	54	53			53																
9	72	62	56	51	71	61	55	51	60	55	51	59	54	51	59	54	51	49			49																
10	69	58	52	48	68	58	52	48	57	52	48	56	51	48	55	51	47	46			46																

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

	0°
0°	90522
5°	86731
10°	82307
15°	77827
20°	70415
25°	59456
30°	48211
35°	37459
40°	27700
45°	18130
50°	8670
55°	4652
60°	3047
65°	2522
70°	2239
75°	1464
80°	864
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 18130 cd/sqm



TEST NUMBER: P642049

CATALOG NUMBER: ML5612LSWFL5597FS1E - 594SNB - 600LM - 4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.4	9.3
10°-20°	265.0	24.1
20°-30°	312.4	28.4
30°-40°	243.5	22.1
40°-50°	124.5	11.3
50°-60°	33.7	3.1
60°-70°	13.8	1.3
70°-80°	5.3	0.5
80°-90°	0.5	0.0
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°	679.7	61.7
0°-40°	923.2	83.8
0°-60°	1081.4	98.2
0°-90°	1101.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1101.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1147	
5°	1094	102
15°	952	265
25°	683	312
35°	389	243
45°	162	124
55°	34	34
65°	14	14
75°	5	5
85°	0	1
90°	0	



TEST NUMBER: P642049

CATALOG NUMBER: ML5612LSWFL5597FS1E - 594SNB - 600LM - 4000K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1146.7
2.5°	1132.2
5°	1094.5
7.5°	1057.7
10°	1026.8
12.5°	992.9
15°	952.3
17.5°	900.1
20°	838.2
22.5°	765.7
25°	682.6
27.5°	604.3
30°	528.9
32.5°	457.3
35°	388.7
37.5°	325.8
40°	268.8
42.5°	213.7
45°	162.4
47.5°	108.3
50°	70.6
52.5°	48.3
55°	33.8
57.5°	25.1
60°	19.3
62.5°	16.4
65°	13.5
67.5°	11.6
70°	9.7
72.5°	6.8
75°	4.8
77.5°	2.9
80°	1.9
82.5°	1.0
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)