

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: P640671

Luminaire Tested: ML5612LSFL4097FS1E - 594SNB - 900LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640671  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-33)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSFL4097FS1E - 594SNB - 900LM - 2700K  
Description: ML56 RR, 40D TIR OPTIC, 5" SATIN NICKLE GIMBAL TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

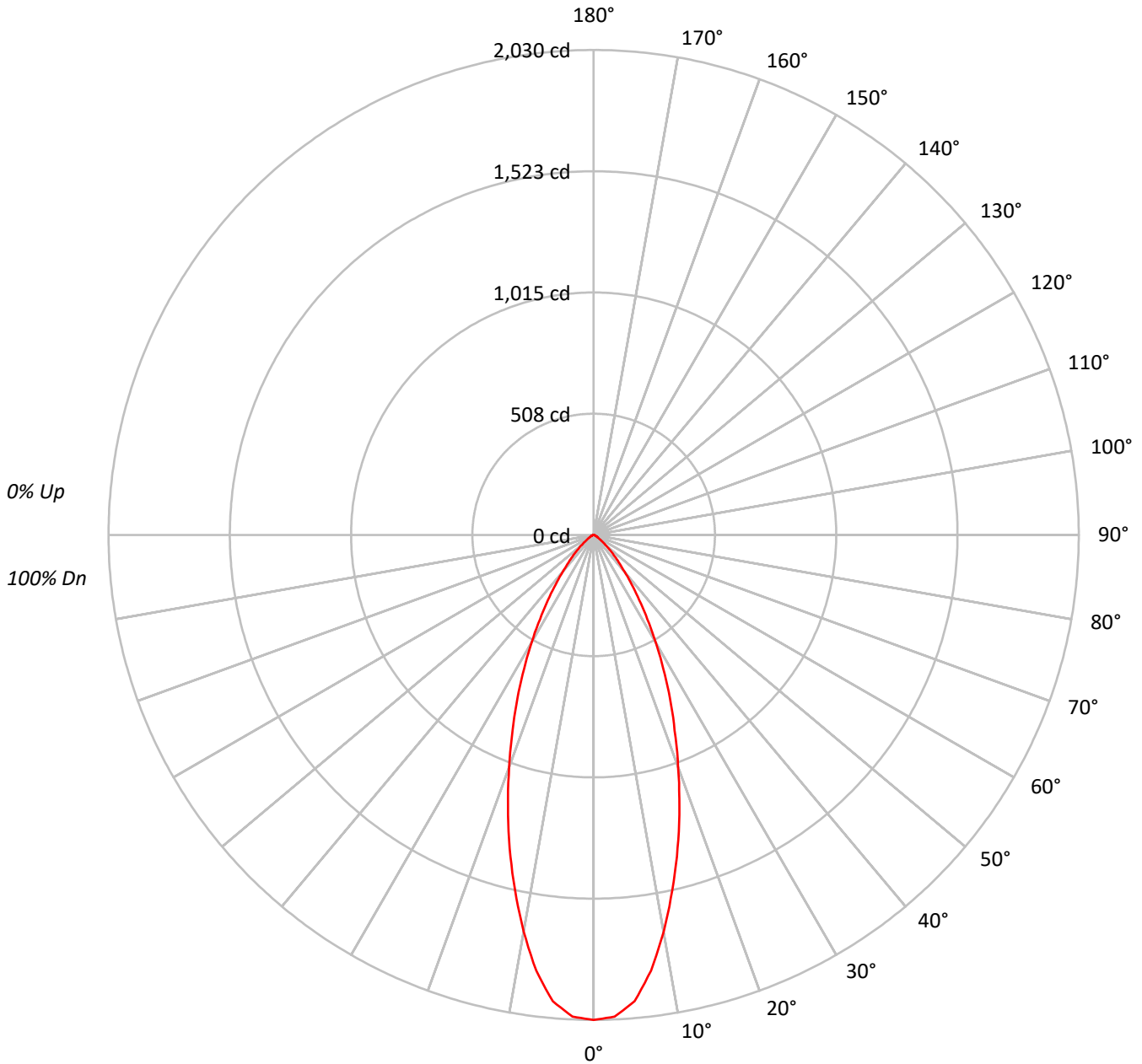
Lumens per Lamp: N/A  
Luminaire Lumens: 1252.5 lumens  
Efficiency: N/A  
Efficacy: 94.2 lumens/watt  
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 13.3  
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: 24 FT



TEST NUMBER: P640671  
CATALOG NUMBER: ML5612LSFL4097FS1E - 594SNB - 900LM - 2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P640671

CATALOG NUMBER: ML5612LSFL4097FS1E - 594SNB - 900LM - 2700K

**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	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93																			
2	108	103	99	96	106	101	98	95	98	95	92	95	93	90	92	90	89	87																			
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	87	85	83	81																			
4	97	90	84	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76																			
5	93	84	79	74	91	83	78	74	82	77	73	80	76	73	79	75	72	71																			
6	88	79	74	69	87	79	73	69	77	72	69	76	71	68	74	71	68	66																			
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62																			
8	80	71	65	61	79	70	65	61	69	64	61	68	64	60	67	63	60	59																			
9	77	67	61	58	76	67	61	57	66	61	57	65	60	57	64	60	57	56																			
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°	160282
5°	155276
10°	135132
15°	110951
20°	86838
25°	65727
30°	47217
35°	32052
40°	20672
45°	13386
50°	7762
55°	4349
60°	2921
65°	2036
70°	1500
75°	1342
80°	1000
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13386 cd/sqm



TEST NUMBER: P640671

CATALOG NUMBER: ML5612LSFL4097FS1E - 594SNB - 900LM - 2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.0	14.2
10°-20°	375.4	30.0
20°-30°	345.5	27.6
30°-40°	211.3	16.9
40°-50°	94.4	7.5
50°-60°	31.3	2.5
60°-70°	11.7	0.9
70°-80°	4.3	0.3
80°-90°	0.6	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°	898.9	71.8
0°-40°	1110.2	88.6
0°-60°	1235.9	98.7
0°-90°	1252.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1252.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2030	
5°	1960	178
15°	1358	375
25°	755	346
35°	333	211
45°	120	94
55°	32	31
65°	11	12
75°	4	4
85°	0	1
90°	0	



TEST NUMBER: P640671

CATALOG NUMBER: ML5612LSFL4097FS1E - 594SNB - 900LM - 2700K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2030.4
2.5°	2018.4
5°	1959.5
7.5°	1839.6
10°	1685.8
12.5°	1521.2
15°	1357.6
17.5°	1191.9
20°	1033.7
22.5°	885.4
25°	754.6
27.5°	630.3
30°	518.0
32.5°	417.6
35°	332.6
37.5°	260.6
40°	200.6
42.5°	154.8
45°	119.9
47.5°	88.3
50°	63.2
52.5°	44.7
55°	31.6
57.5°	24.0
60°	18.5
62.5°	15.3
65°	10.9
67.5°	8.7
70°	6.5
72.5°	5.5
75°	4.4
77.5°	2.2
80°	2.2
82.5°	1.1
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)