

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: P640675

Luminaire Tested: ML5612LSFL4097FS1E - 594SNB - 900LM - 5000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640675  
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 - 5000K  
Description: ML56 RR, 40D TIR OPTIC, 5" SATIN NICKLE GIMBAL TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

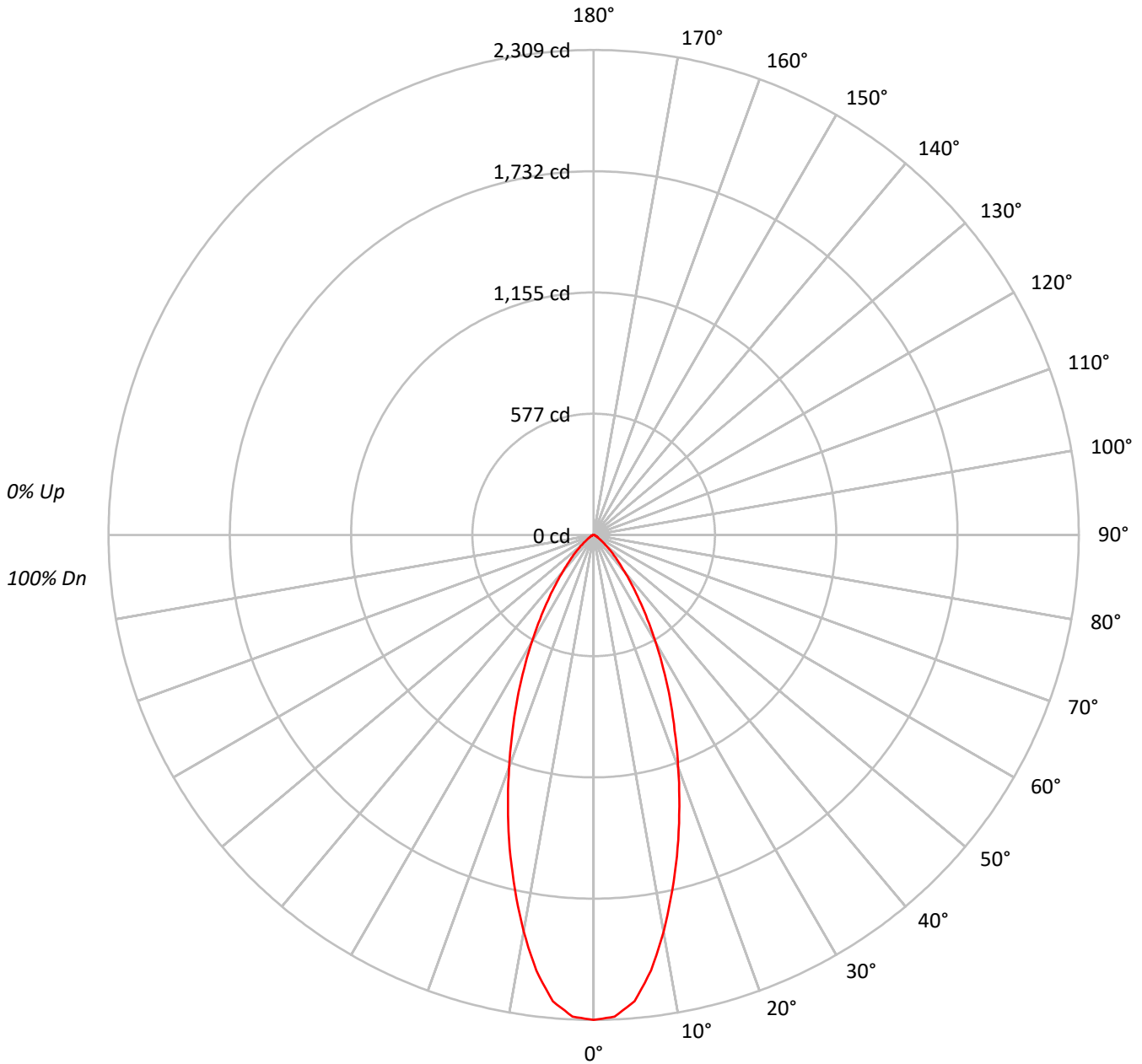
Lumens per Lamp: N/A  
Luminaire Lumens: 1424.4 lumens  
Efficiency: N/A  
Efficacy: 107.1 lumens/watt  
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 13.3  
Input Voltage (V): NR  
Input Current (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



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### Luminous Intensity Polar Plot





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**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			
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°	182282
5°	176592
10°	153680
15°	126176
20°	98759
25°	74751
30°	53698
35°	36447
40°	23516
45°	15228
50°	8830
55°	4955
60°	3331
65°	2316
70°	1708
75°	1525
80°	1137
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15228 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	202.4	14.2
10°-20°	426.9	30.0
20°-30°	393.0	27.6
30°-40°	240.3	16.9
40°-50°	107.4	7.5
50°-60°	35.6	2.5
60°-70°	13.3	0.9
70°-80°	4.9	0.3
80°-90°	0.7	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°	1022.3	71.8
0°-40°	1262.6	88.6
0°-60°	1405.6	98.7
0°-90°	1424.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1424.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2309	
5°	2228	202
15°	1544	427
25°	858	393
35°	378	240
45°	136	107
55°	36	36
65°	12	13
75°	5	5
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2309.1
2.5°	2295.5
5°	2228.5
7.5°	2092.1
10°	1917.2
12.5°	1730.0
15°	1543.9
17.5°	1355.5
20°	1175.6
22.5°	1007.0
25°	858.2
27.5°	716.8
30°	589.1
32.5°	475.0
35°	378.2
37.5°	296.4
40°	228.2
42.5°	176.1
45°	136.4
47.5°	100.4
50°	71.9
52.5°	50.8
55°	36.0
57.5°	27.3
60°	21.1
62.5°	17.4
65°	12.4
67.5°	9.9
70°	7.4
72.5°	6.2
75°	5.0
77.5°	2.5
80°	2.5
82.5°	1.2
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

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— 0°-180°

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(END OF REPORT)