

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: P640579

Luminaire Tested: ML5612LSFL4097FS1E - 592SC - 600LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640579  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-25)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSFL4097FS1E - 592SC - 600LM - 4000K  
Description: ML56 RR, 40D TIR OPTIC, 5" SPECULAR CLEAR TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

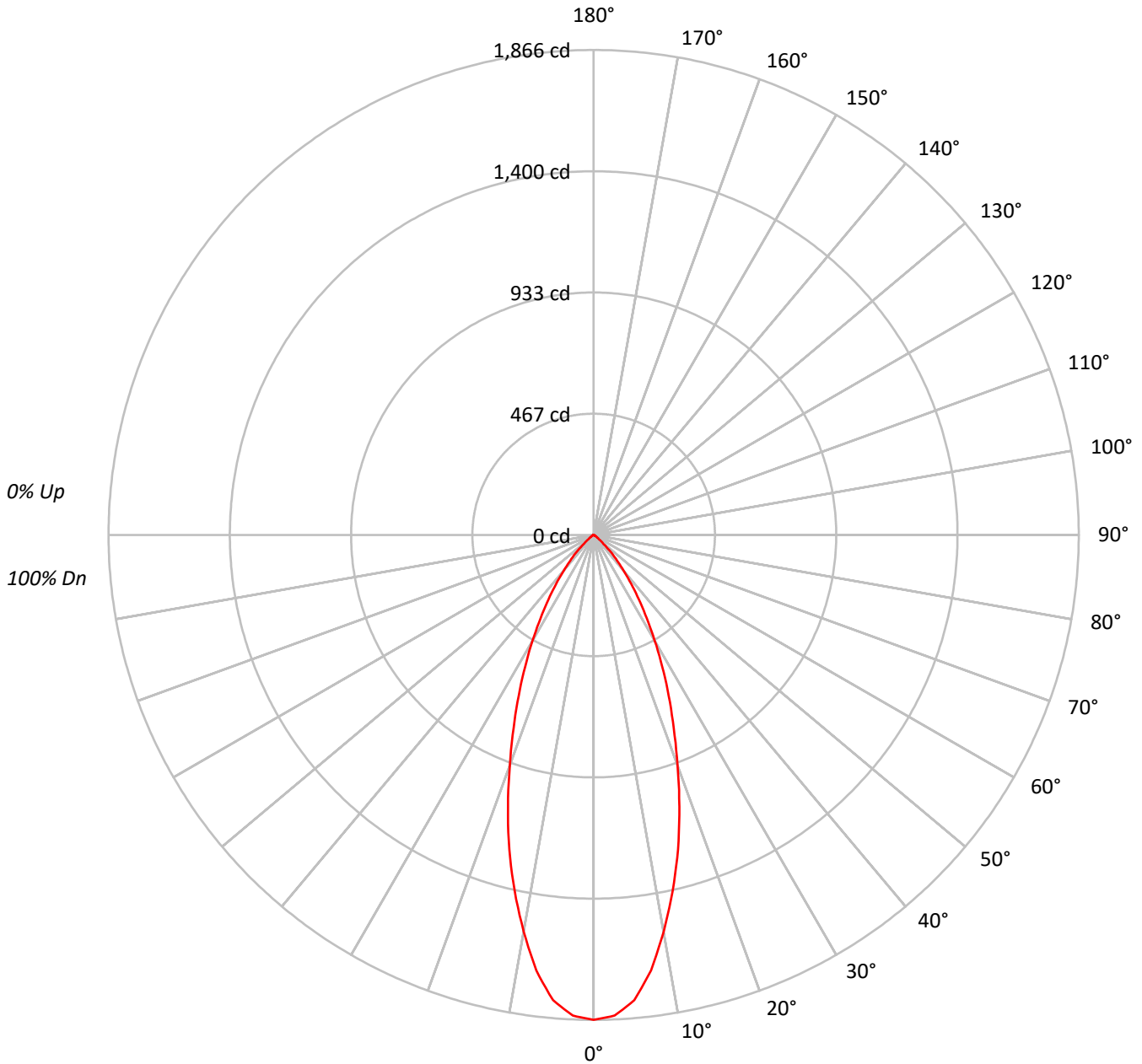
Lumens per Lamp: N/A  
Luminaire Lumens: 1103.0 lumens  
Efficiency: N/A  
Efficacy: 107.1 lumens/watt  
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 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



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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	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94				
2	108	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88				
3	103	97	92	89	101	96	91	88	93	90	87	91	88	85	89	86	84	82				
4	98	91	86	82	97	90	85	81	88	84	80	86	82	80	84	81	79	77				
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	72				
6	89	81	75	71	88	80	75	71	79	74	70	77	73	70	76	72	70	68				
7	85	77	71	67	84	76	70	67	75	70	66	73	69	66	72	69	66	64				
8	82	72	67	63	80	72	67	63	71	66	63	70	65	62	69	65	62	61				
9	78	69	63	59	77	68	63	59	67	63	59	67	62	59	66	62	59	57				
10	75	65	60	56	74	65	60	56	64	59	56	63	59	56	63	59	56	55				

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

	0°
0°	147296
5°	142415
10°	124214
15°	102451
20°	79143
25°	59395
30°	42760
35°	29181
40°	18240
45°	10371
50°	3684
55°	2133
60°	1216
65°	355
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10371 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.4	14.8
10°-20°	345.4	31.3
20°-30°	313.2	28.4
30°-40°	191.4	17.3
40°-50°	72.4	6.6
50°-60°	14.7	1.3
60°-70°	2.6	0.2
70°-80°	0.0	0.0
80°-90°	0.0	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°	822.1	74.5
0°-40°	1013.4	91.9
0°-60°	1100.5	99.8
0°-90°	1103.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1103.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1866	
5°	1797	163
15°	1254	345
25°	682	313
35°	303	191
45°	93	72
55°	16	15
65°	2	3
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1865.9
2.5°	1851.4
5°	1797.2
7.5°	1689.9
10°	1549.6
12.5°	1403.5
15°	1253.6
17.5°	1095.9
20°	942.1
22.5°	803.8
25°	681.9
27.5°	570.7
30°	469.1
32.5°	379.2
35°	302.8
37.5°	236.0
40°	177.0
42.5°	133.5
45°	92.9
47.5°	52.2
50°	30.0
52.5°	21.3
55°	15.5
57.5°	10.6
60°	7.7
62.5°	4.8
65°	1.9
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
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

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— 0°-180°

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(END OF REPORT)