

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: P641074

Luminaire Tested: ML5612LSNFL2597FS1E - 691WB - 600LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641074  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-13)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSNFL2597FS1E - 691WB - 600LM - 4000K  
Description: ML56 RR, 25D TIR OPTIC, 6" DEADFRONT TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

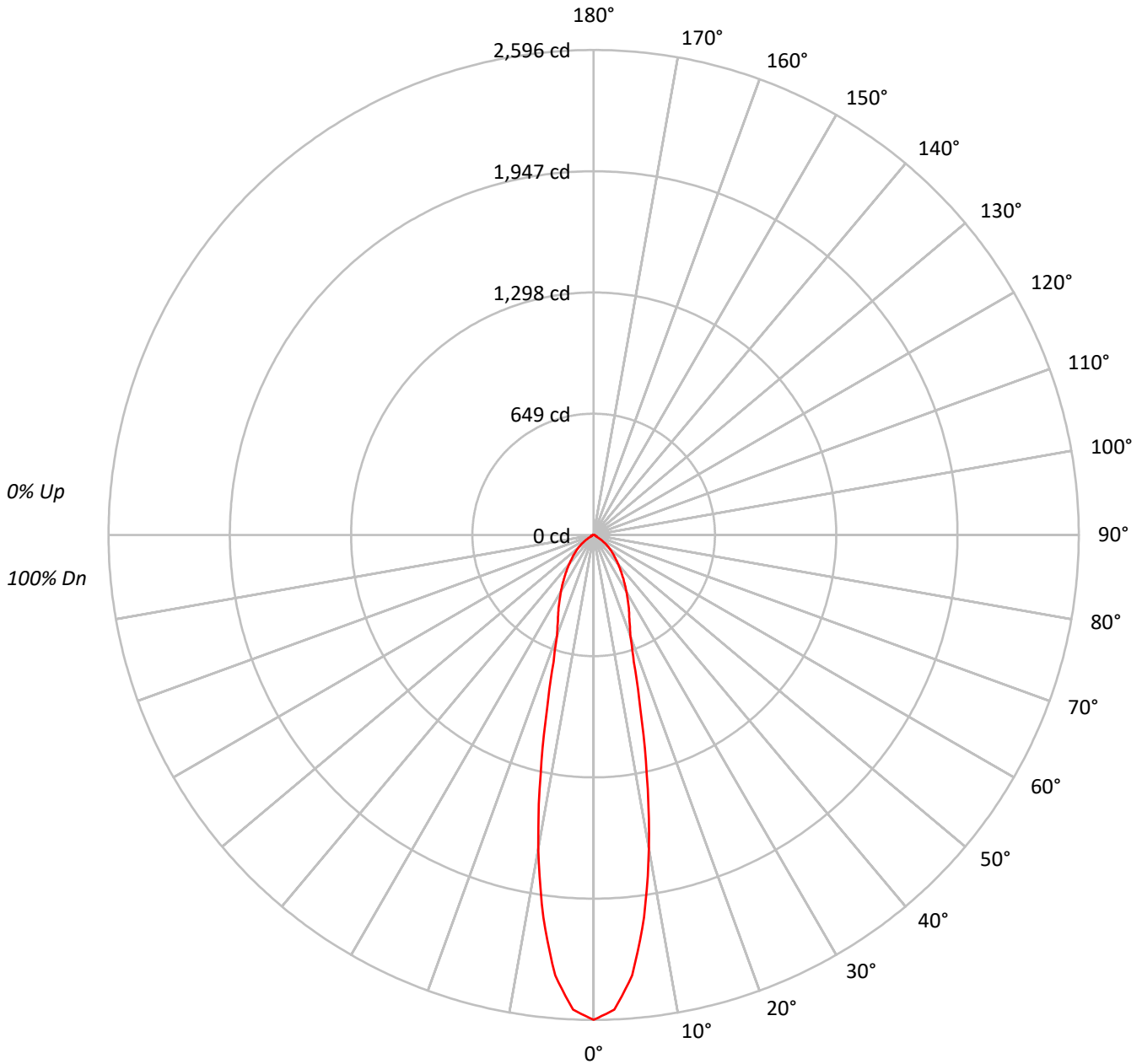
Lumens per Lamp: N/A  
Luminaire Lumens: 1048.9 lumens  
Efficiency: N/A  
Efficacy: 101.8 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93				
2	107	102	98	95	105	101	97	94	97	94	91	94	92	90	92	89	88	86				
3	102	95	90	86	100	94	89	85	91	87	84	89	85	83	86	84	81	80				
4	97	89	83	79	95	88	82	78	86	81	77	84	80	77	82	78	76	74				
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69				
6	87	78	72	68	86	78	72	68	76	71	67	75	70	67	73	69	66	65				
7	83	74	68	64	82	73	68	64	72	67	63	71	66	63	70	66	63	61				
8	80	70	64	60	78	70	64	60	68	63	60	67	63	59	66	62	59	58				
9	76	67	61	57	75	66	61	57	65	60	57	64	60	56	63	59	56	55				
10	73	63	58	54	72	63	58	54	62	57	54	61	57	54	61	57	53	52				

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

	0°
0°	142291
5°	130227
10°	94871
15°	54535
20°	33387
25°	27014
30°	22149
35°	18049
40°	14527
45°	11614
50°	9151
55°	5916
60°	2335
65°	1751
70°	1394
75°	1228
80°	1231
85°	1195

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11614 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.1	19.5
10°-20°	275.5	26.3
20°-30°	205.8	19.6
30°-40°	169.2	16.1
40°-50°	116.6	11.1
50°-60°	55.9	5.3
60°-70°	13.5	1.3
70°-80°	6.3	0.6
80°-90°	2.1	0.2
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°	685.4	65.3
0°-40°	854.5	81.5
0°-60°	1027.1	97.9
0°-90°	1048.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1048.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2596	
5°	2366	204
15°	961	276
25°	447	206
35°	270	169
45°	150	117
55°	62	56
65°	14	13
75°	6	6
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2595.6
2.5°	2543.4
5°	2366.5
7.5°	2063.9
10°	1704.3
12.5°	1313.7
15°	960.9
17.5°	711.5
20°	572.3
22.5°	499.8
25°	446.6
27.5°	396.3
30°	349.9
32.5°	307.4
35°	269.7
37.5°	234.9
40°	203.0
42.5°	175.0
45°	149.8
47.5°	127.6
50°	107.3
52.5°	87.0
55°	61.9
57.5°	39.6
60°	21.3
62.5°	15.5
65°	13.5
67.5°	10.6
70°	8.7
72.5°	6.8
75°	5.8
77.5°	4.8
80°	3.9
82.5°	2.9
85°	1.9
87.5°	1.0
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)