

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: P641049

Luminaire Tested: ML5612LSNFL2597FS1E - 594WB - 900LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641049  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSNFL2597FS1E - 594WB - 900LM - 4000K  
Description: ML56 RR, 25D TIR OPTIC, 5" WHITE GIMBAL TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

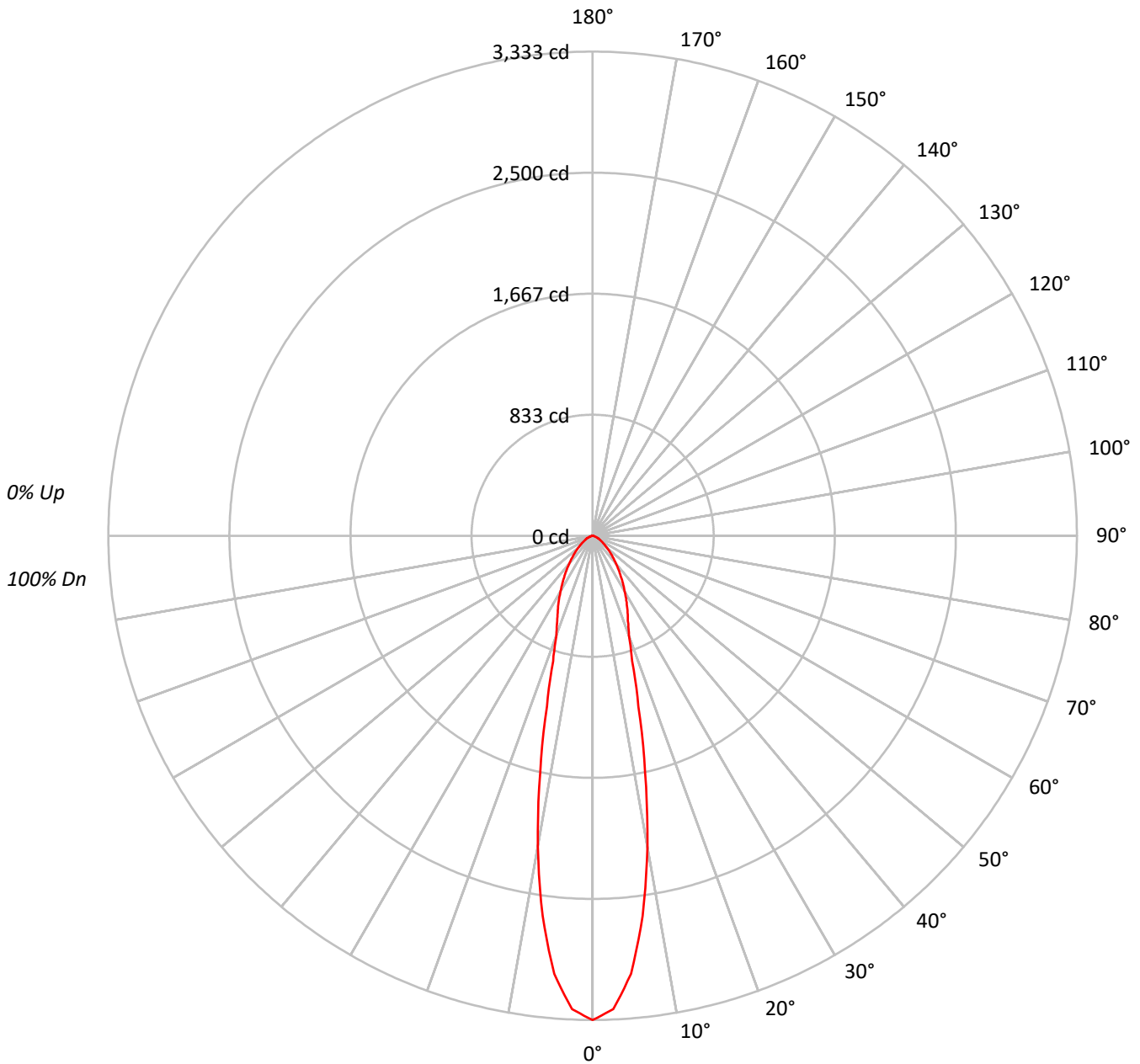
Lumens per Lamp: N/A  
Luminaire Lumens: 1365.6 lumens  
Efficiency: N/A  
Efficacy: 102.7 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.44  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

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	100	100	100
1	113	110	107	105	111	108	105	103	104	102	100	100	98	97	97	95	94	92	92	92	92
2	107	102	97	94	105	100	96	93	97	93	90	94	91	89	91	89	87	85	85	85	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78	78	78	78
4	96	88	82	77	94	87	81	77	84	80	76	82	78	75	80	77	74	73	73	73	73
5	91	82	76	72	89	81	75	71	79	74	71	78	73	70	76	72	69	68	68	68	68
6	86	77	71	67	85	76	71	66	75	70	66	73	69	65	72	68	65	63	63	63	63
7	82	73	67	62	81	72	66	62	71	66	62	70	65	61	68	64	61	60	60	60	60
8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56	56	56	56
9	75	66	60	56	74	65	59	55	64	59	55	63	58	55	62	58	55	54	54	54	54
10	72	62	57	53	71	62	56	53	61	56	53	60	56	52	60	55	52	51	51	51	51

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

	0°
0°	263142
5°	239867
10°	174025
15°	99362
20°	61384
25°	49378
30°	40253
35°	32399
40°	25824
45°	20363
50°	15843
55°	12469
60°	9994
65°	8107
70°	5724
75°	3020
80°	2273
85°	1087

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 20363 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	261.0	19.1
10°-20°	349.9	25.6
20°-30°	261.3	19.1
30°-40°	211.4	15.5
40°-50°	142.1	10.4
50°-60°	82.5	6.0
60°-70°	43.3	3.2
70°-80°	12.4	0.9
80°-90°	1.7	0.1
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°	872.2	63.9
0°-40°	1083.6	79.3
0°-60°	1308.2	95.8
0°-90°	1365.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1365.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3333	
5°	3027	261
15°	1216	350
25°	567	261
35°	336	211
45°	182	142
55°	91	83
65°	43	43
75°	10	12
85°	1	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3333.4
2.5°	3261.5
5°	3027.0
7.5°	2639.9
10°	2171.0
12.5°	1667.3
15°	1215.8
17.5°	904.4
20°	730.7
22.5°	635.2
25°	566.9
27.5°	502.4
30°	441.6
32.5°	387.1
35°	336.2
37.5°	291.5
40°	250.6
42.5°	214.6
45°	182.4
47.5°	153.8
50°	129.0
52.5°	107.9
55°	90.6
57.5°	75.7
60°	63.3
62.5°	52.1
65°	43.4
67.5°	36.0
70°	24.8
72.5°	16.1
75°	9.9
77.5°	6.2
80°	5.0
82.5°	2.5
85°	1.2
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)