

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: P641044

Luminaire Tested: ML5612LSNFL2597FS1E - 594WB - 600LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641044  
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 - 600LM - 4000K  
Description: ML56 RR, 25D TIR OPTIC, 5" WHITE GIMBAL TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

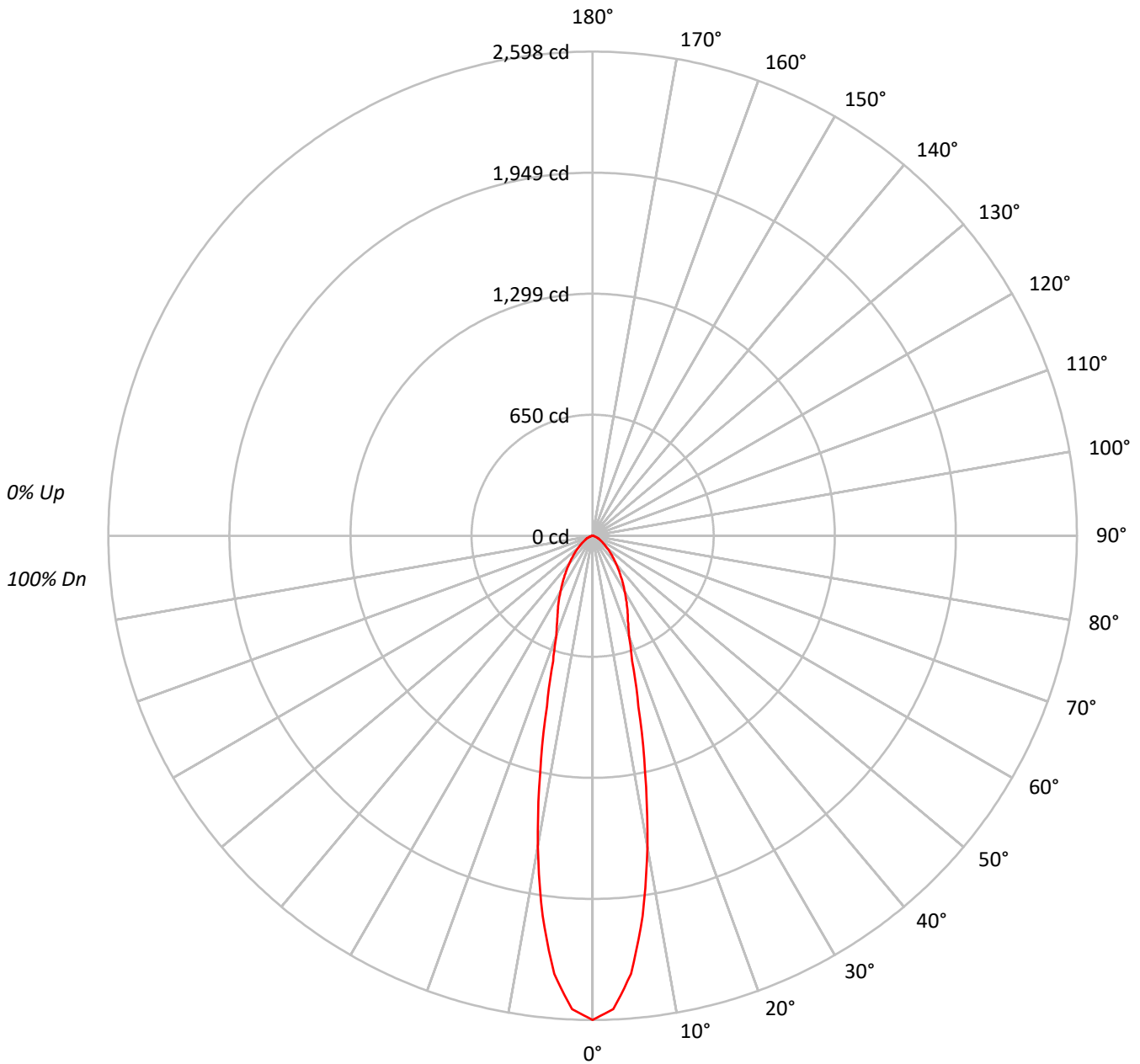
Lumens per Lamp: N/A  
Luminaire Lumens: 1064.3 lumens  
Efficiency: N/A  
Efficacy: 103.3 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.44  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

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

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

	0°
0°	205104
5°	186965
10°	135645
15°	77443
20°	47842
25°	38490
30°	31375
35°	25249
40°	20126
45°	15864
50°	12355
55°	9717
60°	7784
65°	6314
70°	4455
75°	2349
80°	1773
85°	906

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15864 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	203.4	19.1
10°-20°	272.7	25.6
20°-30°	203.7	19.1
30°-40°	164.8	15.5
40°-50°	110.8	10.4
50°-60°	64.3	6.0
60°-70°	33.7	3.2
70°-80°	9.6	0.9
80°-90°	1.3	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°	679.8	63.9
0°-40°	844.6	79.4
0°-60°	1019.6	95.8
0°-90°	1064.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1064.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2598	
5°	2359	203
15°	948	273
25°	442	204
35°	262	165
45°	142	111
55°	71	64
65°	34	34
75°	8	10
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2598.2
2.5°	2542.1
5°	2359.4
7.5°	2057.7
10°	1692.2
12.5°	1299.6
15°	947.6
17.5°	704.9
20°	569.5
22.5°	495.1
25°	441.9
27.5°	391.6
30°	344.2
32.5°	301.7
35°	262.0
37.5°	227.2
40°	195.3
42.5°	167.3
45°	142.1
47.5°	119.9
50°	100.6
52.5°	84.1
55°	70.6
57.5°	59.0
60°	49.3
62.5°	40.6
65°	33.8
67.5°	28.0
70°	19.3
72.5°	12.6
75°	7.7
77.5°	4.8
80°	3.9
82.5°	1.9
85°	1.0
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)