

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: P641079

Luminaire Tested: ML5612LSNFL2597FS1E - 691WB - 900LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641079  
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 - 900LM - 4000K  
Description: ML56 RR, 25D TIR OPTIC, 6" DEADFRONT TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

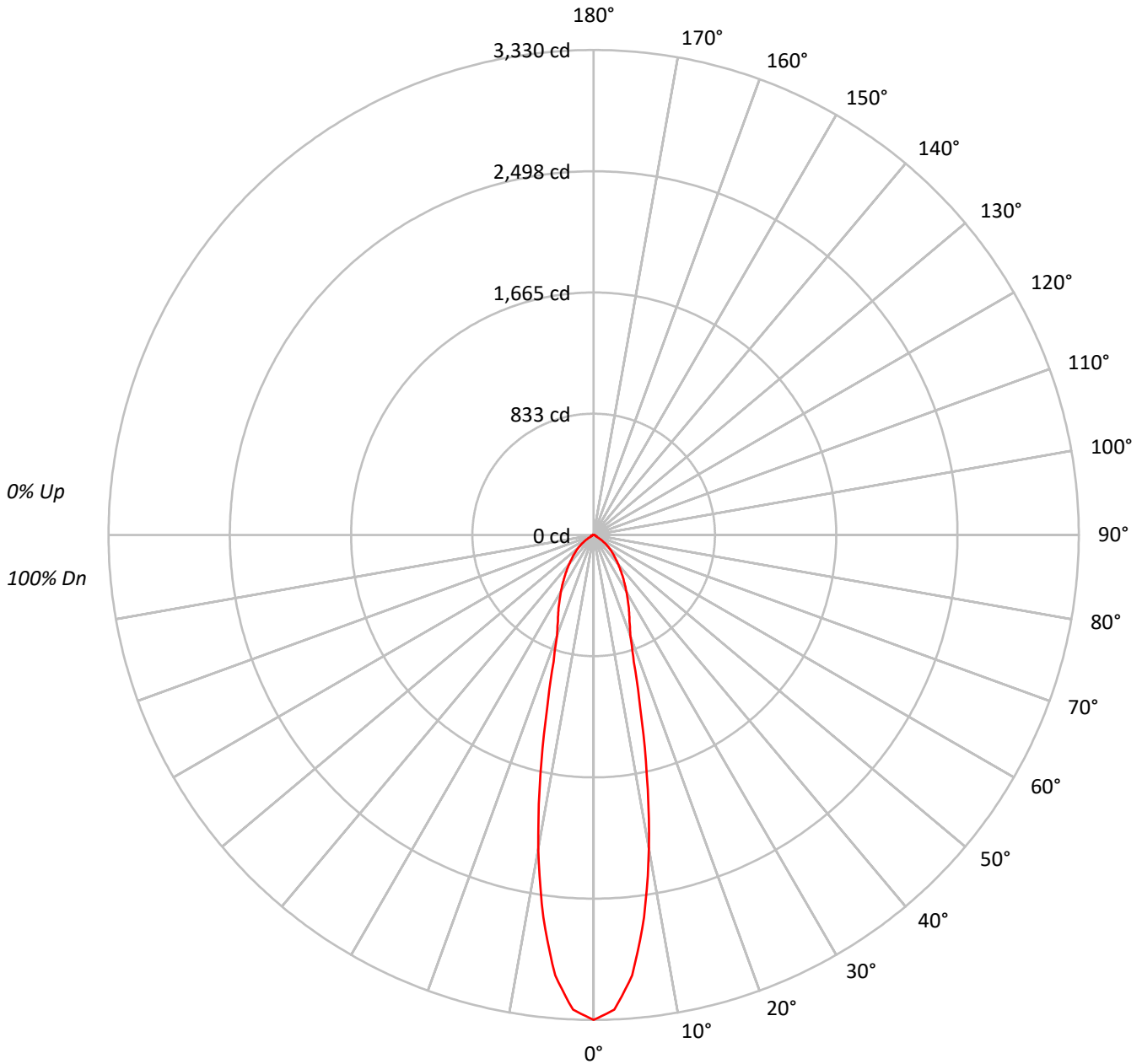
Lumens per Lamp: N/A  
Luminaire Lumens: 1345.7 lumens  
Efficiency: N/A  
Efficacy: 101.2 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 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									
RC	80									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	90	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°	182551
5°	167075
10°	121713
15°	69966
20°	42832
25°	34659
30°	28422
35°	23155
40°	18635
45°	14901
50°	11744
55°	7589
60°	2993
65°	2257
70°	1795
75°	1567
80°	1578
85°	1572

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14901 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	261.8	19.5
10°-20°	353.5	26.3
20°-30°	264.0	19.6
30°-40°	217.0	16.1
40°-50°	149.6	11.1
50°-60°	71.8	5.3
60°-70°	17.3	1.3
70°-80°	8.0	0.6
80°-90°	2.7	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°	879.3	65.3
0°-40°	1096.3	81.5
0°-60°	1317.7	97.9
0°-90°	1345.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1345.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3330	
5°	3036	262
15°	1233	353
25°	573	264
35°	346	217
45°	192	150
55°	79	72
65°	17	17
75°	7	8
85°	2	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3330.0
2.5°	3263.1
5°	3036.1
7.5°	2647.9
10°	2186.5
12.5°	1685.5
15°	1232.8
17.5°	912.8
20°	734.2
22.5°	641.2
25°	573.0
27.5°	508.5
30°	449.0
32.5°	394.4
35°	346.0
37.5°	301.4
40°	260.4
42.5°	224.5
45°	192.2
47.5°	163.7
50°	137.7
52.5°	111.6
55°	79.4
57.5°	50.8
60°	27.3
62.5°	19.8
65°	17.4
67.5°	13.6
70°	11.2
72.5°	8.7
75°	7.4
77.5°	6.2
80°	5.0
82.5°	3.7
85°	2.5
87.5°	1.2
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)