

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: P641076

Luminaire Tested: ML5612LSNFL2597FS1E - 691WB - 900LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641076  
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 - 2700K  
Description: ML56 RR, 25D TIR OPTIC, 6" DEADFRONT TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

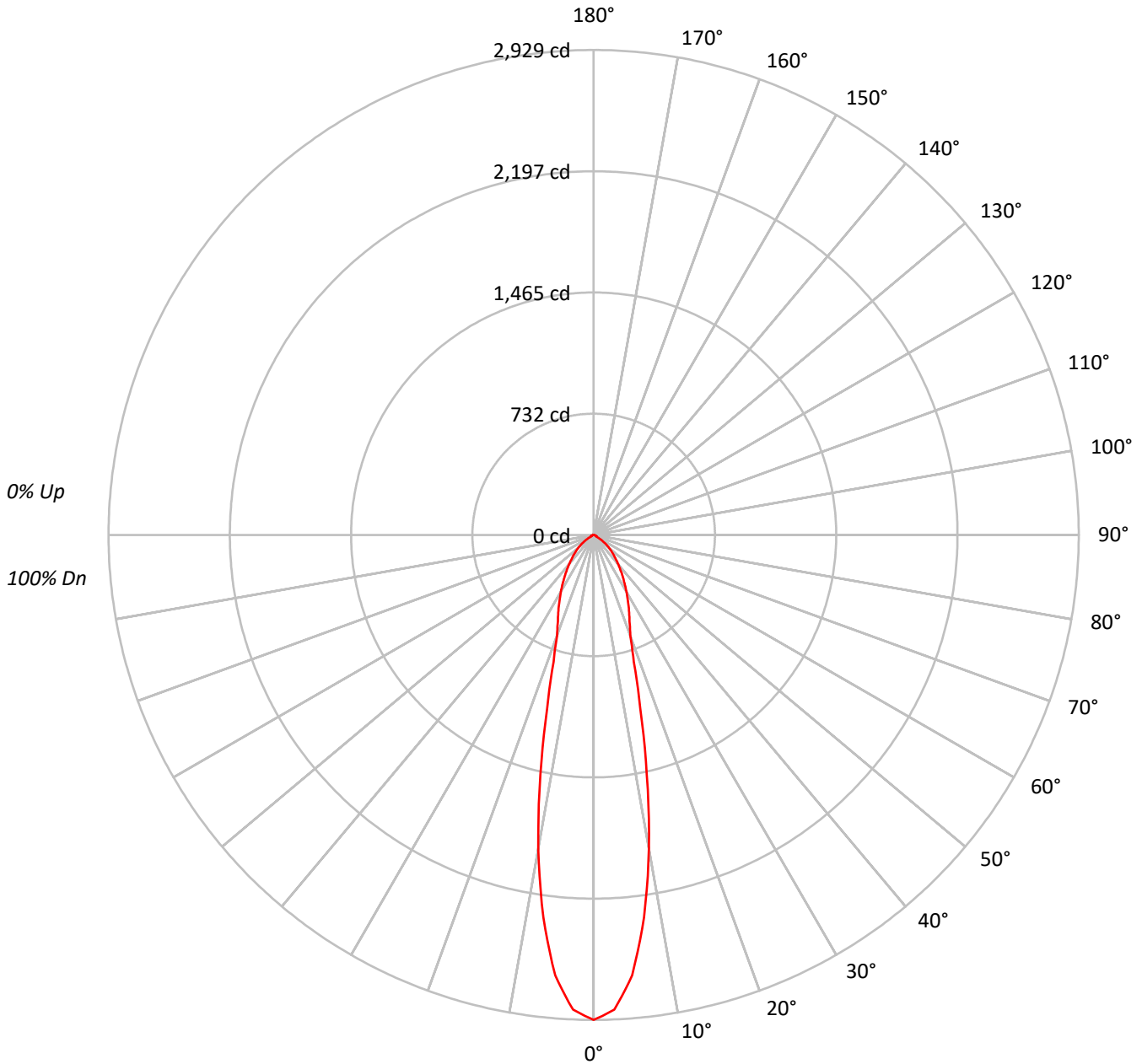
Lumens per Lamp: N/A  
Luminaire Lumens: 1183.8 lumens  
Efficiency: N/A  
Efficacy: 89.0 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

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

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

	0°
0°	160579
5°	146967
10°	107068
15°	61544
20°	37675
25°	30486
30°	24998
35°	20371
40°	16395
45°	13110
50°	10328
55°	6671
60°	2631
65°	1985
70°	1571
75°	1377
80°	1389
85°	1384

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13110 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	230.3	19.5
10°-20°	310.9	26.3
20°-30°	232.3	19.6
30°-40°	190.9	16.1
40°-50°	131.6	11.1
50°-60°	63.1	5.3
60°-70°	15.2	1.3
70°-80°	7.0	0.6
80°-90°	2.4	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°	773.5	65.3
0°-40°	964.4	81.5
0°-60°	1159.1	97.9
0°-90°	1183.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1183.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2929	
5°	2671	230
15°	1084	311
25°	504	232
35°	304	191
45°	169	132
55°	70	63
65°	15	15
75°	6	7
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2929.2
2.5°	2870.3
5°	2670.7
7.5°	2329.2
10°	1923.4
12.5°	1482.6
15°	1084.4
17.5°	802.9
20°	645.8
22.5°	564.0
25°	504.0
27.5°	447.3
30°	394.9
32.5°	346.9
35°	304.4
37.5°	265.1
40°	229.1
42.5°	197.5
45°	169.1
47.5°	144.0
50°	121.1
52.5°	98.2
55°	69.8
57.5°	44.7
60°	24.0
62.5°	17.5
65°	15.3
67.5°	12.0
70°	9.8
72.5°	7.6
75°	6.5
77.5°	5.5
80°	4.4
82.5°	3.3
85°	2.2
87.5°	1.1
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)