

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: P641072

Luminaire Tested: ML5612LSNFL2597FS1E - 691WB - 600LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641072  
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 - 3000K  
Description: ML56 RR, 25D TIR OPTIC, 6" DEADFRONT TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

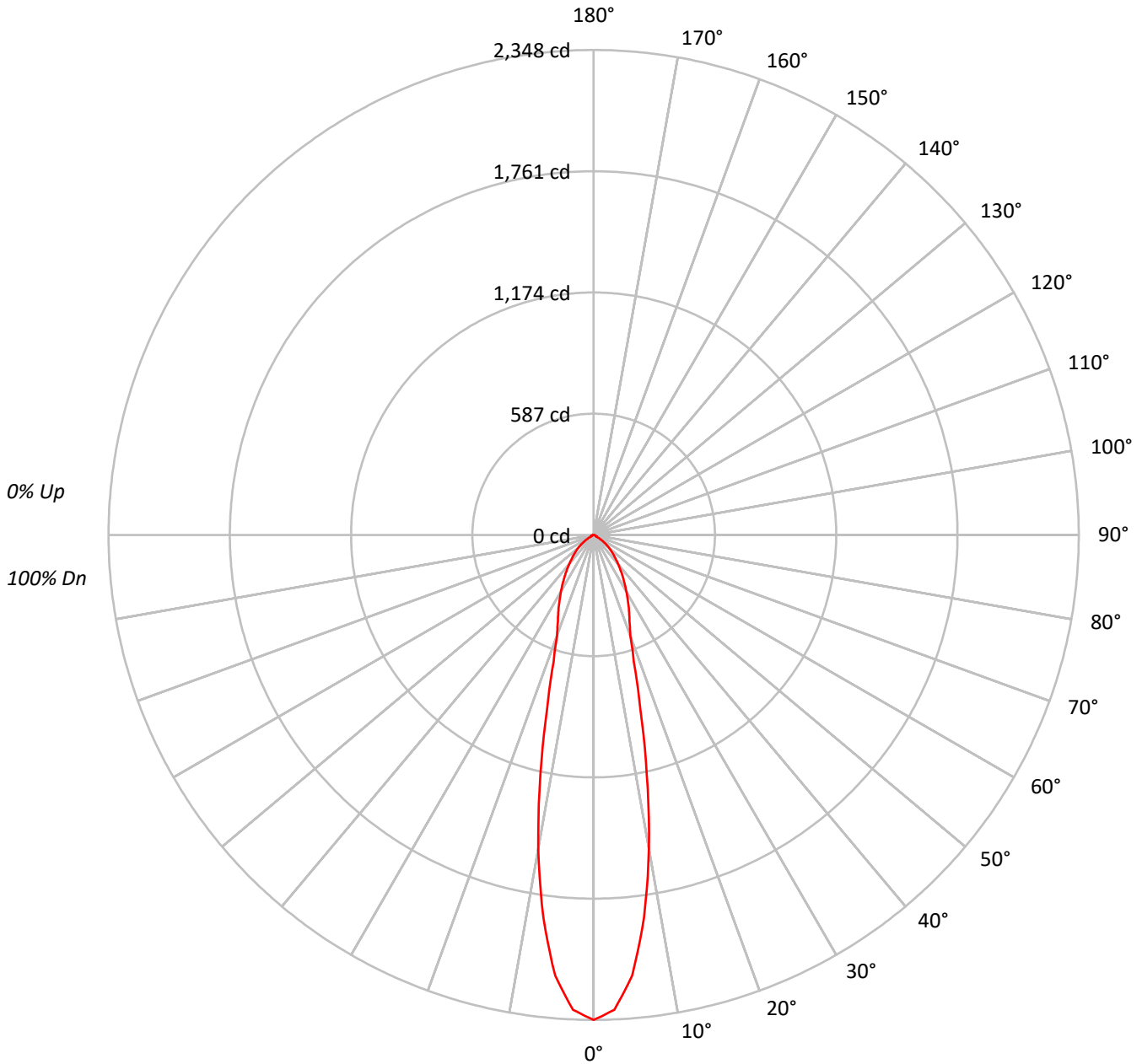
Lumens per Lamp: N/A  
Luminaire Lumens: 949.0 lumens  
Efficiency: N/A  
Efficacy: 92.1 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 10.3  
Input Voltage (V): NR  
Input Current (Ain): 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	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°	128740
5°	117824
10°	85837
15°	49342
20°	30208
25°	24443
30°	20041
35°	16329
40°	13146
45°	10513
50°	8281
55°	5352
60°	2105
65°	1583
70°	1266
75°	1101
80°	1105
85°	1069

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10513 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.6	19.5
10°-20°	249.3	26.3
20°-30°	186.2	19.6
30°-40°	153.0	16.1
40°-50°	105.5	11.1
50°-60°	50.6	5.3
60°-70°	12.2	1.3
70°-80°	5.6	0.6
80°-90°	1.9	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°	620.1	65.3
0°-40°	773.2	81.5
0°-60°	929.3	97.9
0°-90°	949.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	949.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2348	
5°	2141	185
15°	869	249
25°	404	186
35°	244	153
45°	136	106
55°	56	51
65°	12	12
75°	5	6
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2348.4
2.5°	2301.2
5°	2141.1
7.5°	1867.4
10°	1542.0
12.5°	1188.6
15°	869.4
17.5°	643.7
20°	517.8
22.5°	452.2
25°	404.1
27.5°	358.6
30°	316.6
32.5°	278.1
35°	244.0
37.5°	212.5
40°	183.7
42.5°	158.3
45°	135.6
47.5°	115.5
50°	97.1
52.5°	78.7
55°	56.0
57.5°	35.9
60°	19.2
62.5°	14.0
65°	12.2
67.5°	9.6
70°	7.9
72.5°	6.1
75°	5.2
77.5°	4.4
80°	3.5
82.5°	2.6
85°	1.7
87.5°	0.9
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)