

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: P641590

Luminaire Tested: ML5612LSVWFL97FS1E - 591WB - 900LM - 5000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641590  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-93)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSVWFL97FS1E - 591WB - 900LM - 5000K  
Description: ML56 RR, MILKY OPTIC, 5" DEADFRONT TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

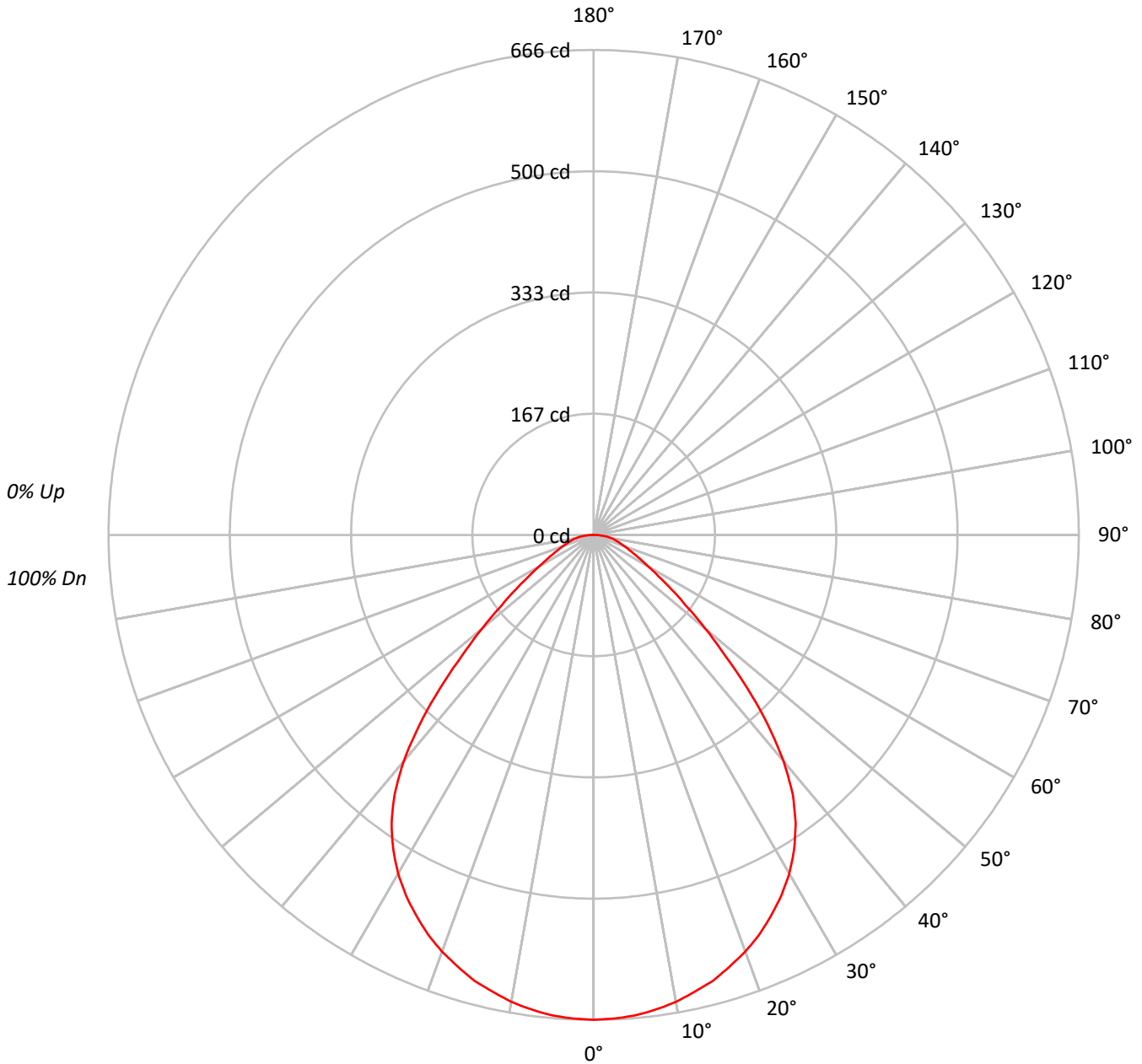
Lumens per Lamp: N/A  
Luminaire Lumens: 1266.8 lumens  
Efficiency: N/A  
Efficacy: 95.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.23  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

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									
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88																			
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77																			
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	81	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	49																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	46	44																			
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	46	41	40																			
9	63	51	44	39	62	50	43	38	49	43	38	48	42	38	47	42	38	36																			
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33																			

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

	0°
0°	52567
5°	52474
10°	52191
15°	51790
20°	51152
25°	50232
30°	48949
35°	46604
40°	41787
45°	33369
50°	24525
55°	17919
60°	13704
65°	11357
70°	10294
75°	10218
80°	10729
85°	11231

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 33369 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.8	5.0
10°-20°	178.5	14.1
20°-30°	265.4	20.9
30°-40°	299.3	23.6
40°-50°	230.2	18.2
50°-60°	119.9	9.5
60°-70°	61.9	4.9
70°-80°	35.5	2.8
80°-90°	13.3	1.1
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°	506.7	40.0
0°-40°	806.0	63.6
0°-60°	1156.1	91.3
0°-90°	1266.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1266.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	666	
5°	662	63
15°	634	178
25°	577	265
35°	484	299
45°	299	230
55°	130	120
65°	61	62
75°	34	35
85°	12	13
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	665.9
2.5°	664.7
5°	662.2
7.5°	657.3
10°	651.1
12.5°	642.4
15°	633.7
17.5°	621.3
20°	608.9
22.5°	594.0
25°	576.7
27.5°	558.0
30°	537.0
32.5°	512.2
35°	483.6
37.5°	448.9
40°	405.5
42.5°	354.7
45°	298.9
47.5°	244.3
50°	199.7
52.5°	160.0
55°	130.2
57.5°	105.4
60°	86.8
62.5°	71.9
65°	60.8
67.5°	52.1
70°	44.6
72.5°	38.4
75°	33.5
77.5°	28.5
80°	23.6
82.5°	18.6
85°	12.4
87.5°	6.2
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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Scaled Data Report



(END OF REPORT)