

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: P641924

Luminaire Tested: ML5612LSWFL5597FS1E - 591WB - 1200LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641924  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-47)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSWFL5597FS1E - 591WB - 1200LM - 4000K  
Description: ML56 RR, 55D TIR OPTIC, 5" DEADFRONT TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

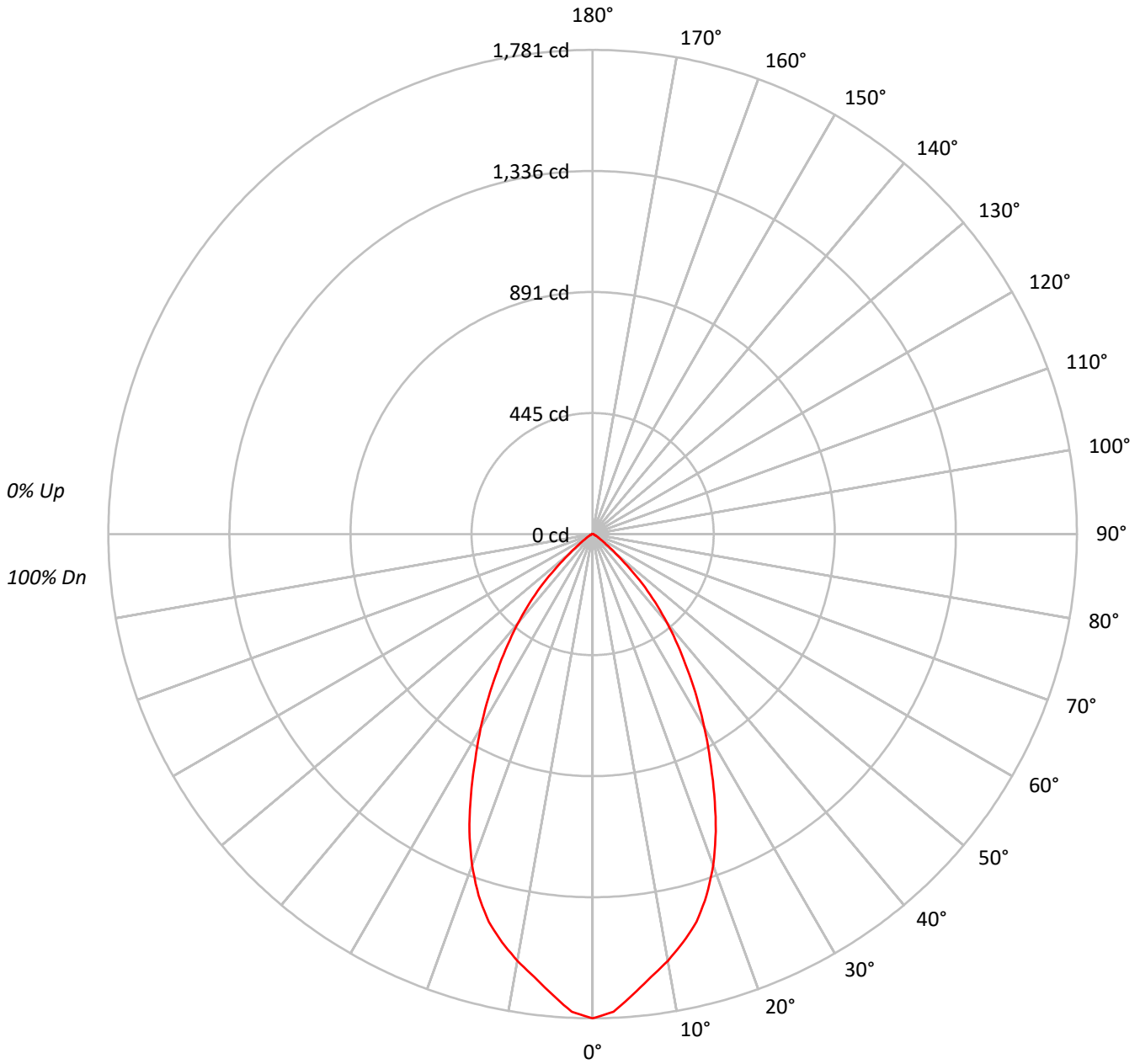
Lumens per Lamp: N/A  
Luminaire Lumens: 1693.6 lumens  
Efficiency: N/A  
Efficacy: 102.6 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.5  
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									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	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	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93																											
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85																											
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	82	80	78																											
4	95	87	81	77	94	86	81	76	84	79	76	82	78	75	80	77	74	72																											
5	90	81	75	70	88	80	74	70	78	73	69	77	72	69	75	71	68	67																											
6	85	76	69	65	84	75	69	65	73	68	64	72	67	64	71	66	63	62																											
7	81	71	64	60	79	70	64	60	69	63	59	68	63	59	66	62	59	57																											
8	76	66	60	56	75	66	60	55	65	59	55	64	59	55	63	58	55	53																											
9	73	62	56	52	71	62	56	52	61	55	51	60	55	51	59	54	51	50																											
10	69	59	53	48	68	58	52	48	57	52	48	57	52	48	56	51	48	47																											

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

	0°
0°	140610
5°	134720
10°	127741
15°	120668
20°	108915
25°	92145
30°	74955
35°	58563
40°	43765
45°	28814
50°	13448
55°	5574
60°	3316
65°	1961
70°	1385
75°	1373
80°	1364
85°	1359

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 28814 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.0	9.4
10°-20°	410.6	24.2
20°-30°	483.6	28.6
30°-40°	381.0	22.5
40°-50°	197.3	11.7
50°-60°	43.8	2.6
60°-70°	11.4	0.7
70°-80°	4.8	0.3
80°-90°	2.0	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°	1053.2	62.2
0°-40°	1434.2	84.7
0°-60°	1675.4	98.9
0°-90°	1693.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1693.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1781	
5°	1700	159
15°	1476	411
25°	1058	484
35°	608	381
45°	258	197
55°	40	44
65°	10	11
75°	4	5
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1781.2
2.5°	1758.7
5°	1700.1
7.5°	1643.1
10°	1593.6
12.5°	1538.1
15°	1476.5
17.5°	1394.0
20°	1296.5
22.5°	1183.9
25°	1057.9
27.5°	934.8
30°	822.3
32.5°	712.8
35°	607.7
37.5°	513.2
40°	424.7
42.5°	340.6
45°	258.1
47.5°	171.1
50°	109.5
52.5°	66.0
55°	40.5
57.5°	27.0
60°	21.0
62.5°	15.0
65°	10.5
67.5°	7.5
70°	6.0
72.5°	4.5
75°	4.5
77.5°	4.5
80°	3.0
82.5°	3.0
85°	1.5
87.5°	1.5
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)