

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: P643742

Luminaire Tested: ML5615LSWFL559FS1E - 591WB - 1500LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643742  
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: ML5615LSWFL559FS1E - 591WB - 1500LM - 3000K  
Description: ML56 RR, 55D TIR OPTIC, 5" DEADFRONT TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

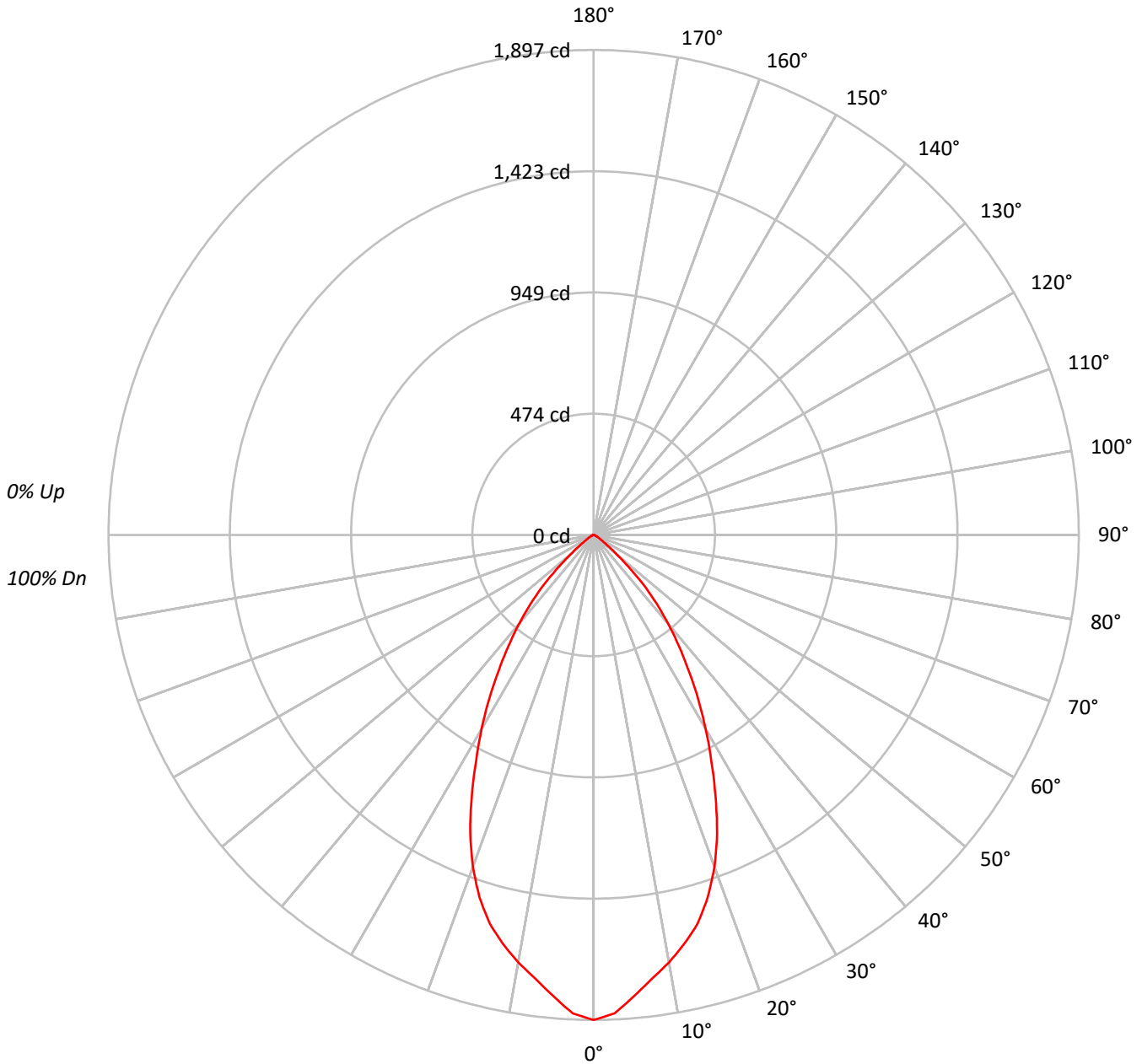
Lumens per Lamp: N/A  
Luminaire Lumens: 1804.1 lumens  
Efficiency: N/A  
Efficacy: 105.5 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 17.1  
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



TEST NUMBER: P643742  
CATALOG NUMBER: ML5615LSWFL559FS1E - 591WB - 1500LM - 3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P643742

CATALOG NUMBER: ML5615LSWFL559FS1E - 591WB - 1500LM - 3000K

**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			100																
1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93			93																
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85			85																
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	82	80	78			78																
4	95	87	81	77	94	86	81	76	84	79	76	82	78	75	80	77	74	72			72																
5	90	81	75	70	88	80	74	70	78	73	69	77	72	69	75	71	68	67			67																
6	85	76	69	65	84	75	69	65	73	68	64	72	67	64	71	66	63	62			62																
7	81	71	64	60	79	70	64	60	69	63	59	68	63	59	66	62	59	57			57																
8	76	66	60	56	75	66	60	55	65	59	55	64	59	55	63	58	55	53			53																
9	73	62	56	52	71	62	56	52	61	55	51	60	55	51	59	54	51	50			50																
10	69	59	53	48	68	58	52	48	57	52	48	57	52	48	56	51	48	47			47																

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

	0°
0°	149775
5°	143508
10°	136069
15°	128538
20°	116014
25°	98155
30°	79841
35°	62380
40°	46610
45°	30690
50°	14332
55°	5946
60°	3537
65°	2092
70°	1477
75°	1464
80°	1455
85°	1449

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 30690 cd/sqm



TEST NUMBER: P643742

CATALOG NUMBER: ML5615LSWFL559FS1E - 591WB - 1500LM - 3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	169.3	9.4
10°-20°	437.4	24.2
20°-30°	515.2	28.6
30°-40°	405.8	22.5
40°-50°	210.2	11.6
50°-60°	46.7	2.6
60°-70°	12.2	0.7
70°-80°	5.1	0.3
80°-90°	2.2	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°	1121.9	62.2
0°-40°	1527.7	84.7
0°-60°	1784.6	98.9
0°-90°	1804.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1804.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1897	
5°	1811	169
15°	1573	437
25°	1127	515
35°	647	406
45°	275	210
55°	43	47
65°	11	12
75°	5	5
85°	2	2
90°	0	



TEST NUMBER: P643742

CATALOG NUMBER: ML5615LSWFL559FS1E - 591WB - 1500LM - 3000K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1897.3
2.5°	1873.3
5°	1811.0
7.5°	1750.2
10°	1697.5
12.5°	1638.3
15°	1572.8
17.5°	1484.9
20°	1381.0
22.5°	1261.1
25°	1126.9
27.5°	995.8
30°	875.9
32.5°	759.2
35°	647.3
37.5°	546.6
40°	452.3
42.5°	362.8
45°	274.9
47.5°	182.2
50°	116.7
52.5°	70.3
55°	43.2
57.5°	28.8
60°	22.4
62.5°	16.0
65°	11.2
67.5°	8.0
70°	6.4
72.5°	4.8
75°	4.8
77.5°	4.8
80°	3.2
82.5°	3.2
85°	1.6
87.5°	1.6
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

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report





Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



— 0°-180°

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)