

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



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: P643741

Luminaire Tested: ML5615LSWFL559FS1E - 591WB - 1500LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643741  
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 - 2700K  
Description: ML56 RR, 55D TIR OPTIC, 5" DEADFRONT TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

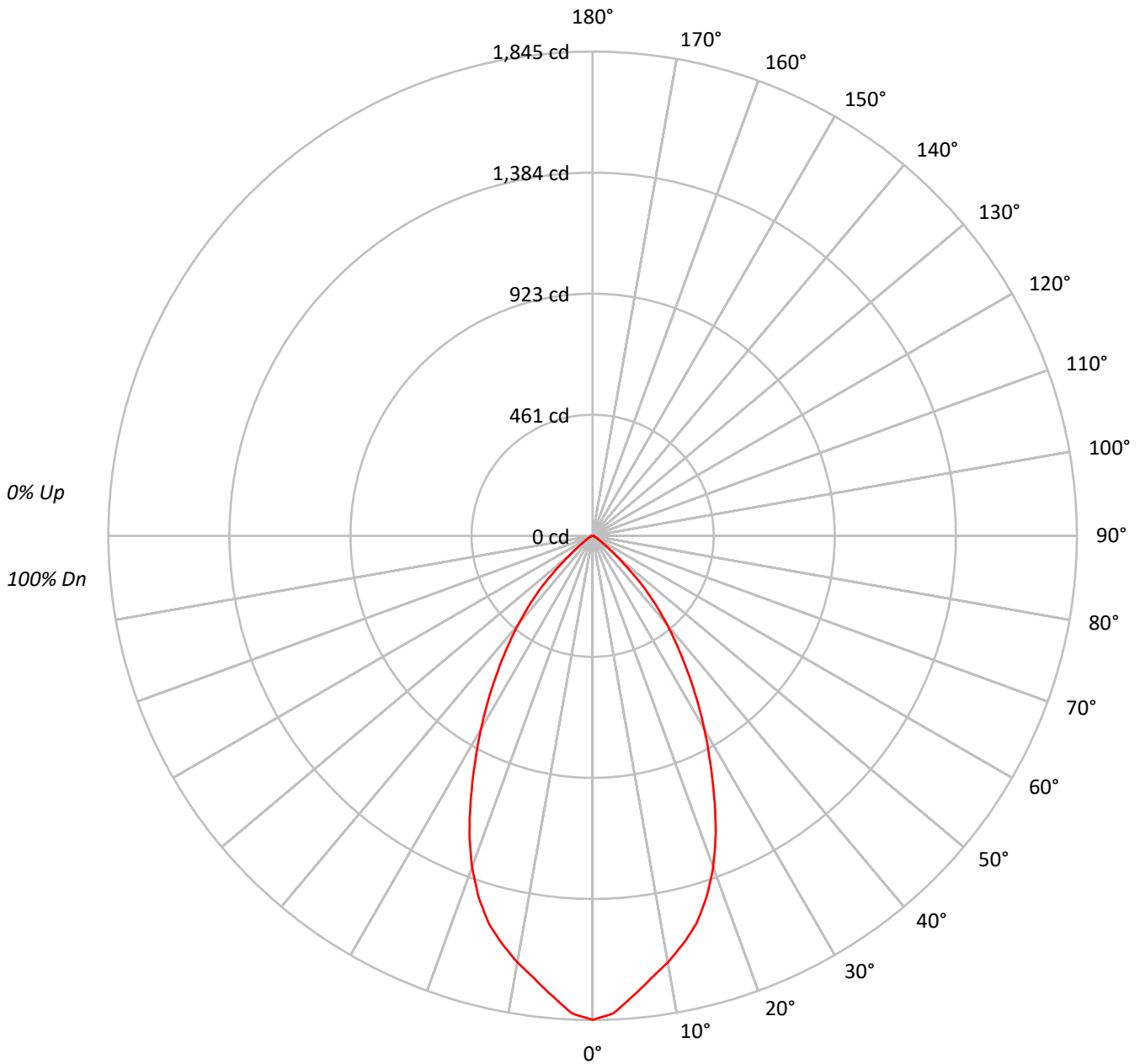
Lumens per Lamp: N/A  
Luminaire Lumens: 1754.0 lumens  
Efficiency: N/A  
Efficacy: 102.6 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P643741

CATALOG NUMBER: ML5615LSWFL559FS1E - 591WB - 1500LM - 2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P643741

CATALOG NUMBER: ML5615LSWFL559FS1E - 591WB - 1500LM - 2700K

**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	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	52	48	68	58	52	48	57	52	48	57	52	48	56	51	48	47																			

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

	0°
0°	145614
5°	139522
10°	132286
15°	124967
20°	112788
25°	95429
30°	77626
35°	60655
40°	45321
45°	29841
50°	13927
55°	5780
60°	3442
65°	2036
70°	1431
75°	1434
80°	1409
85°	1449

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 29841 cd/sqm



TEST NUMBER: P643741

CATALOG NUMBER: ML5615LSWFL559FS1E - 591WB - 1500LM - 2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.6	9.4
10°-20°	425.2	24.2
20°-30°	500.9	28.6
30°-40°	394.6	22.5
40°-50°	204.4	11.7
50°-60°	45.5	2.6
60°-70°	11.9	0.7
70°-80°	5.0	0.3
80°-90°	2.1	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°	1090.7	62.2
0°-40°	1485.3	84.7
0°-60°	1735.1	98.9
0°-90°	1754.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1754.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1845	
5°	1761	165
15°	1529	425
25°	1096	501
35°	629	395
45°	267	204
55°	42	45
65°	11	12
75°	5	5
85°	2	2
90°	0	



TEST NUMBER: P643741

CATALOG NUMBER: ML5615LSWFL559FS1E - 591WB - 1500LM - 2700K

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1844.6
2.5°	1821.3
5°	1760.7
7.5°	1701.6
10°	1650.3
12.5°	1592.8
15°	1529.1
17.5°	1443.6
20°	1342.6
22.5°	1226.1
25°	1095.6
27.5°	968.1
30°	851.6
32.5°	738.1
35°	629.4
37.5°	531.5
40°	439.8
42.5°	352.8
45°	267.3
47.5°	177.2
50°	113.4
52.5°	68.4
55°	42.0
57.5°	28.0
60°	21.8
62.5°	15.5
65°	10.9
67.5°	7.8
70°	6.2
72.5°	4.7
75°	4.7
77.5°	4.7
80°	3.1
82.5°	3.1
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)