

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: P643759

Luminaire Tested: ML5615LSWFL559FS1E - 592H - 1500LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643759  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-49)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 592H - 1500LM - 4000K  
Description: ML56 RR, 55D TIR OPTIC, 5" HAZE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

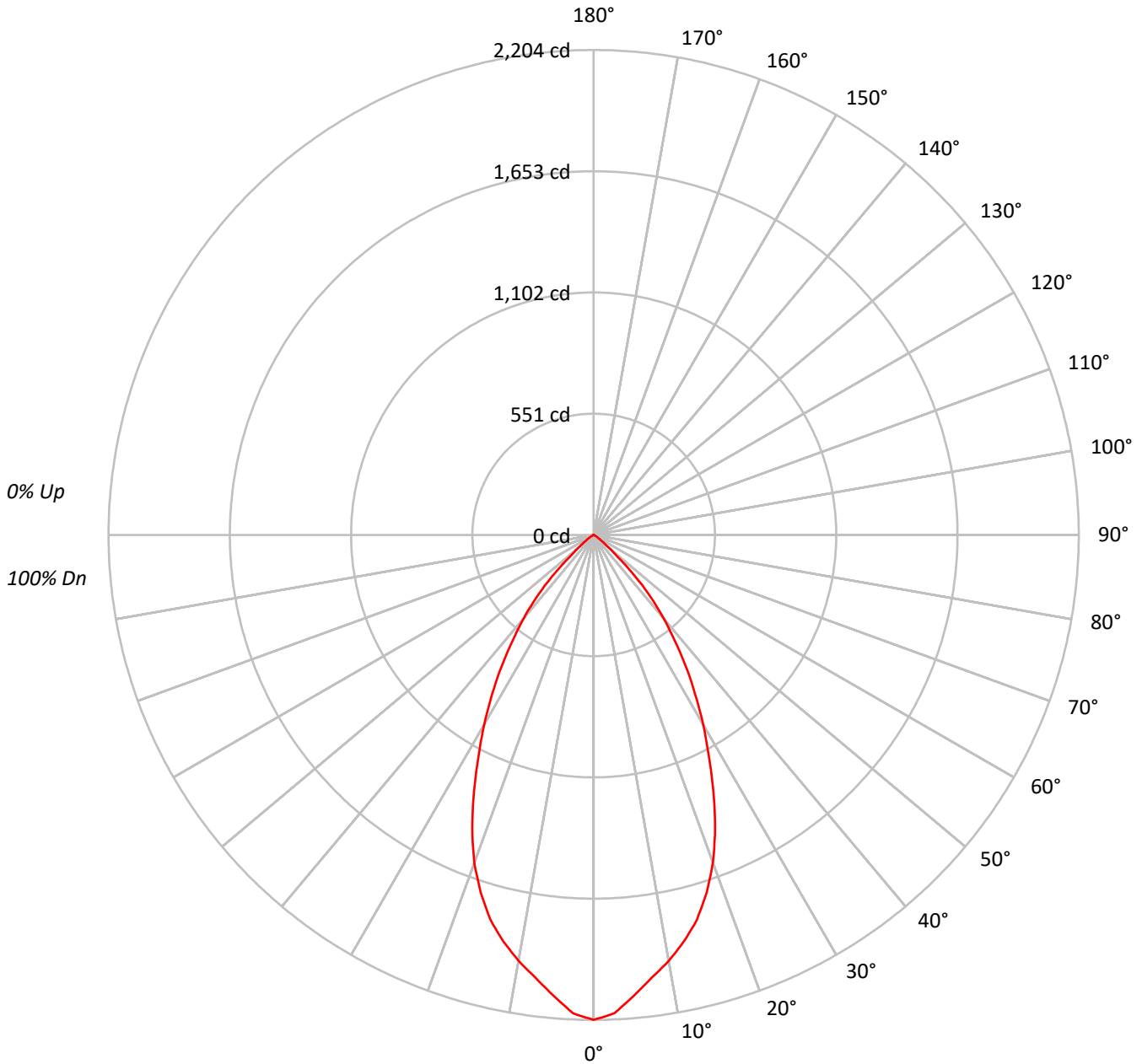
Lumens per Lamp: N/A  
Luminaire Lumens: 1985.1 lumens  
Efficiency: N/A  
Efficacy: 116.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.85 / 0.88  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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



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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	113	110	108	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93																			
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86																			
3	102	95	90	86	100	94	89	85	91	87	84	89	85	82	86	84	81	80																			
4	96	88	83	78	94	87	82	78	85	81	77	83	79	76	81	78	75	74																			
5	91	82	76	72	89	82	76	72	80	75	71	78	74	70	76	73	70	68																			
6	86	77	71	66	85	76	70	66	75	70	66	73	69	65	72	68	65	63																			
7	82	72	66	62	80	71	66	61	70	65	61	69	64	61	68	64	60	59																			
8	78	68	61	57	76	67	61	57	66	61	57	65	60	57	64	60	56	55																			
9	74	64	58	53	73	63	57	53	62	57	53	61	56	53	60	56	53	51																			
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	50	48																			

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

	0°
0°	173978
5°	166512
10°	157520
15°	148021
20°	133135
25°	112004
30°	90615
35°	70398
40°	50855
45°	30210
50°	10206
55°	4624
60°	1389
65°	336
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 30210 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	196.3	9.9
10°-20°	503.6	25.4
20°-30°	587.7	29.6
30°-40°	454.8	22.9
40°-50°	206.3	10.4
50°-60°	33.5	1.7
60°-70°	2.8	0.1
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	1287.6	64.9
0°-40°	1742.5	87.8
0°-60°	1982.3	99.9
0°-90°	1985.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1985.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2204	
5°	2101	196
15°	1811	504
25°	1286	588
35°	730	455
45°	271	206
55°	34	34
65°	2	3
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2203.9
2.5°	2175.6
5°	2101.3
7.5°	2028.8
10°	1965.1
12.5°	1892.6
15°	1811.2
17.5°	1705.1
20°	1584.8
22.5°	1441.6
25°	1285.9
27.5°	1132.0
30°	994.1
32.5°	857.9
35°	730.5
37.5°	603.2
40°	493.5
42.5°	385.6
45°	270.6
47.5°	145.0
50°	83.1
52.5°	53.1
55°	33.6
57.5°	19.5
60°	8.8
62.5°	3.5
65°	1.8
67.5°	1.8
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
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)