

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: P644039

Luminaire Tested: ML5615LSWFL559FS1E - 694TBZB - 1200LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P644039  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-68)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 694TBZB - 1200LM - 4000K  
Description: ML56 RR, 55D TIR OPTIC, 6" TUSCON BRONZE GIMBAL TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

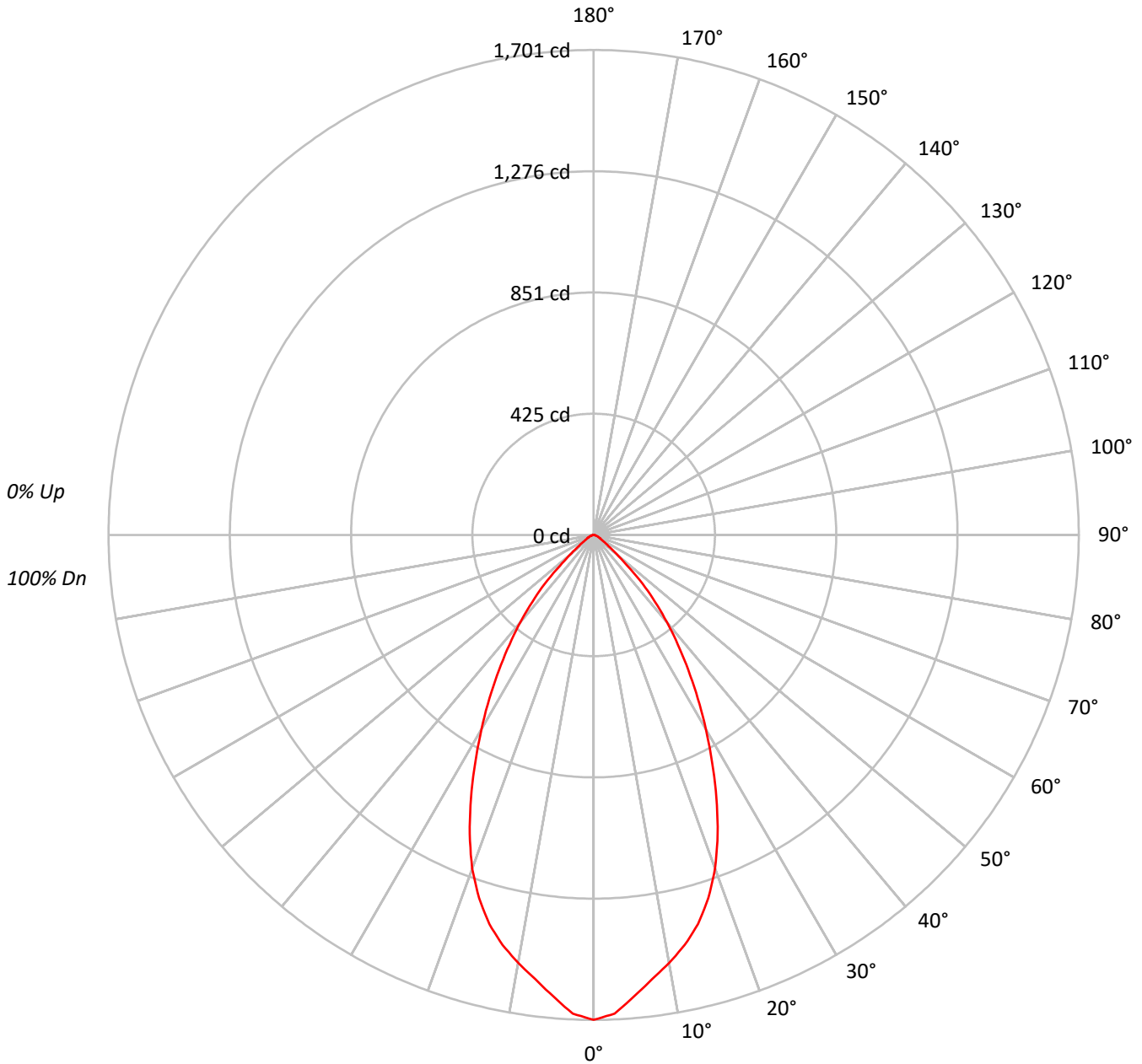
Lumens per Lamp: N/A  
Luminaire Lumens: 1636.2 lumens  
Efficiency: N/A  
Efficacy: 122.1 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 13.4  
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				70				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	100	100
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92	92	92	92
2	107	101	97	93	105	100	96	92	96	93	90	93	91	88	91	88	87	85	85	85	85
3	101	94	88	84	99	92	87	83	90	86	82	87	84	81	85	82	80	78	78	78	78
4	95	87	81	76	93	86	80	76	84	79	75	82	77	74	80	76	73	72	72	72	72
5	90	81	74	70	88	80	74	69	78	73	69	76	72	68	75	71	68	66	66	66	66
6	85	75	69	64	83	74	68	64	73	68	64	71	67	63	70	66	63	61	61	61	61
7	80	70	64	59	79	70	64	59	68	63	59	67	62	59	66	62	58	57	57	57	57
8	76	66	59	55	75	65	59	55	64	59	55	63	58	54	62	58	54	53	53	53	53
9	72	62	56	51	71	61	55	51	60	55	51	59	54	51	59	54	51	49	49	49	49
10	69	58	52	48	68	58	52	48	57	52	48	56	51	48	55	51	47	46	46	46	46

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

	0°
0°	93233
5°	89396
10°	84829
15°	80205
20°	72631
25°	61564
30°	49780
35°	38675
40°	28604
45°	18839
50°	9074
55°	4807
60°	3158
65°	2607
70°	2068
75°	1525
80°	916
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 18839 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.0	9.3
10°-20°	393.3	24.0
20°-30°	464.4	28.4
30°-40°	362.0	22.1
40°-50°	185.3	11.3
50°-60°	50.3	3.1
60°-70°	20.4	1.2
70°-80°	7.8	0.5
80°-90°	0.8	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°	1009.7	61.7
0°-40°	1371.7	83.8
0°-60°	1607.3	98.2
0°-90°	1636.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1636.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1701	
5°	1624	152
15°	1413	393
25°	1018	464
35°	578	362
45°	243	185
55°	50	50
65°	20	20
75°	7	8
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1700.7
2.5°	1680.6
5°	1624.5
7.5°	1571.3
10°	1523.9
12.5°	1473.6
15°	1413.2
17.5°	1335.6
20°	1245.0
22.5°	1135.7
25°	1017.8
27.5°	898.5
30°	786.4
32.5°	680.0
35°	577.9
37.5°	484.5
40°	399.7
42.5°	317.7
45°	243.0
47.5°	159.6
50°	106.4
52.5°	71.9
55°	50.3
57.5°	37.4
60°	28.8
62.5°	24.4
65°	20.1
67.5°	17.3
70°	12.9
72.5°	10.1
75°	7.2
77.5°	4.3
80°	2.9
82.5°	1.4
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)