

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: P640502

Luminaire Tested: ML5609LSWFL55D2W1E - 594TBZB - 900LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640502  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-57)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5609LSWFL55D2W1E - 594TBZB - 900LM - 3000K  
Description: ML56 RR, 55D TIR OPTIC, 5" TUSCON BRONZE GIMBAL TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

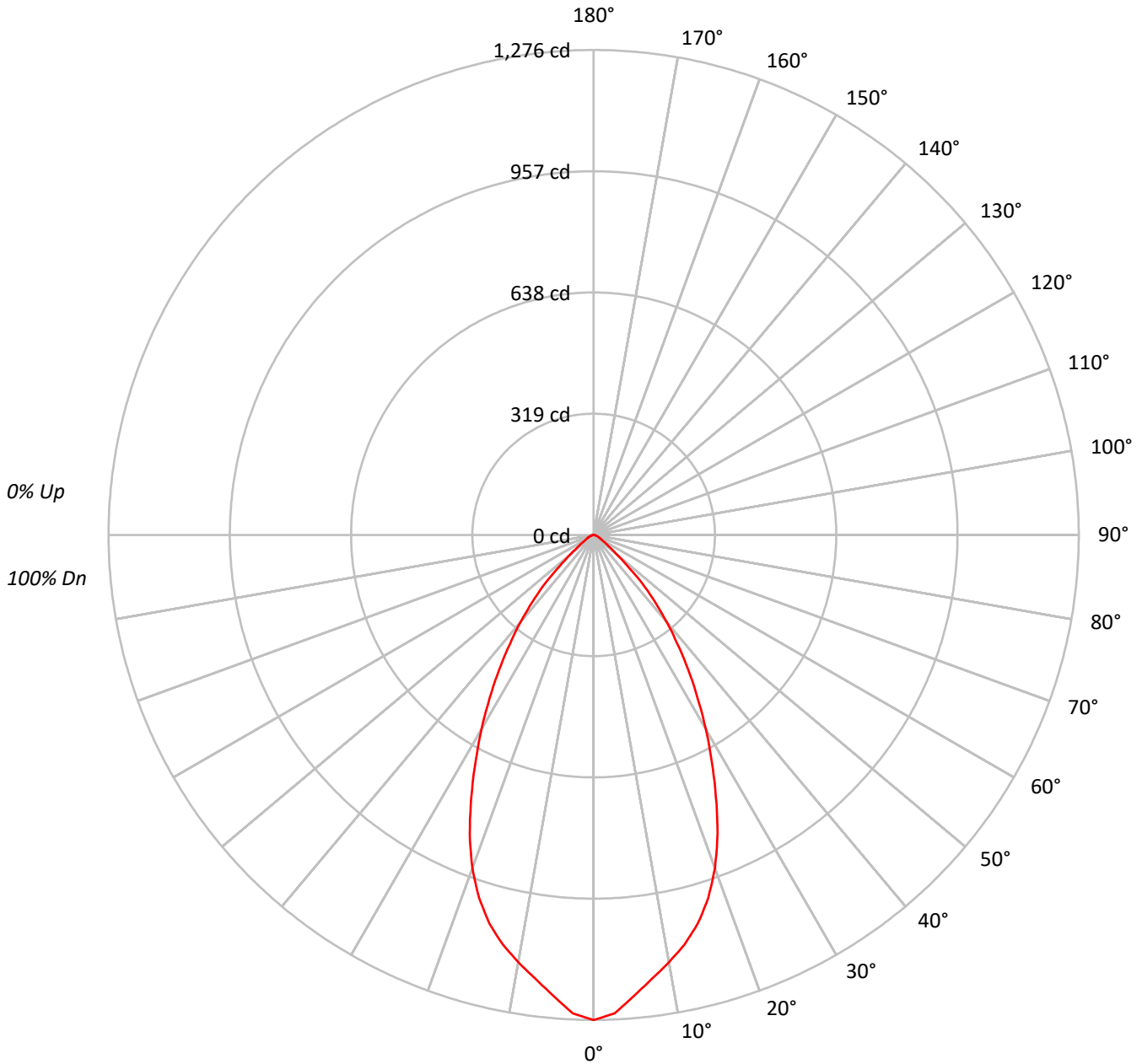
Lumens per Lamp: N/A  
Luminaire Lumens: 1225.4 lumens  
Efficiency: N/A  
Efficacy: 103.9 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.88  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.8  
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			100																
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92			92																
2	107	101	97	93	105	100	96	92	96	93	90	93	91	88	91	88	87	85			85																
3	101	94	88	84	99	92	87	83	90	86	82	87	84	81	85	82	80	78			78																
4	95	87	81	76	93	86	80	76	84	79	75	82	77	74	80	76	73	72			72																
5	90	81	74	70	88	80	74	70	78	73	69	76	72	68	75	71	68	66			66																
6	85	75	69	64	83	74	68	64	73	68	64	71	67	63	70	66	63	61			61																
7	80	70	64	59	79	70	64	59	68	63	59	67	62	59	66	62	58	57			57																
8	76	66	59	55	75	65	59	55	64	59	55	63	58	54	62	58	54	53			53																
9	72	62	56	51	71	61	55	51	60	55	51	59	54	51	59	54	51	49			49																
10	69	58	52	48	68	58	52	48	57	52	48	56	51	48	55	51	47	46			46																

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

	0°
0°	100760
5°	96446
10°	91509
15°	86515
20°	78337
25°	66293
30°	53753
35°	41766
40°	30771
45°	20218
50°	9800
55°	5189
60°	3410
65°	2821
70°	2239
75°	1647
80°	1000
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 20218 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.9	9.3
10°-20°	294.7	24.1
20°-30°	347.8	28.4
30°-40°	271.0	22.1
40°-50°	138.6	11.3
50°-60°	37.7	3.1
60°-70°	15.3	1.2
70°-80°	5.8	0.5
80°-90°	0.6	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°	756.4	61.7
0°-40°	1027.4	83.8
0°-60°	1203.7	98.2
0°-90°	1225.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1225.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1276	
5°	1217	114
15°	1059	295
25°	761	348
35°	433	271
45°	181	139
55°	38	38
65°	15	15
75°	5	6
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1276.4
2.5°	1260.2
5°	1217.1
7.5°	1177.2
10°	1141.6
12.5°	1103.9
15°	1058.6
17.5°	1001.5
20°	932.5
22.5°	851.6
25°	761.1
27.5°	672.7
30°	589.7
32.5°	508.8
35°	433.4
37.5°	362.2
40°	298.6
42.5°	238.2
45°	181.1
47.5°	119.7
50°	79.8
52.5°	53.9
55°	37.7
57.5°	28.0
60°	21.6
62.5°	18.3
65°	15.1
67.5°	12.9
70°	9.7
72.5°	7.5
75°	5.4
77.5°	3.2
80°	2.2
82.5°	1.1
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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Scaled Data Report



(END OF REPORT)