

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: P640683

Luminaire Tested: ML5612LSFL4097FS1E - 594TBZB - 600LM - 3500K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640683  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-34)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSFL4097FS1E - 594TBZB - 600LM - 3500K  
Description: ML56 RR, 40D TIR OPTIC, 5" TUSCON BRONZE GIMBAL TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

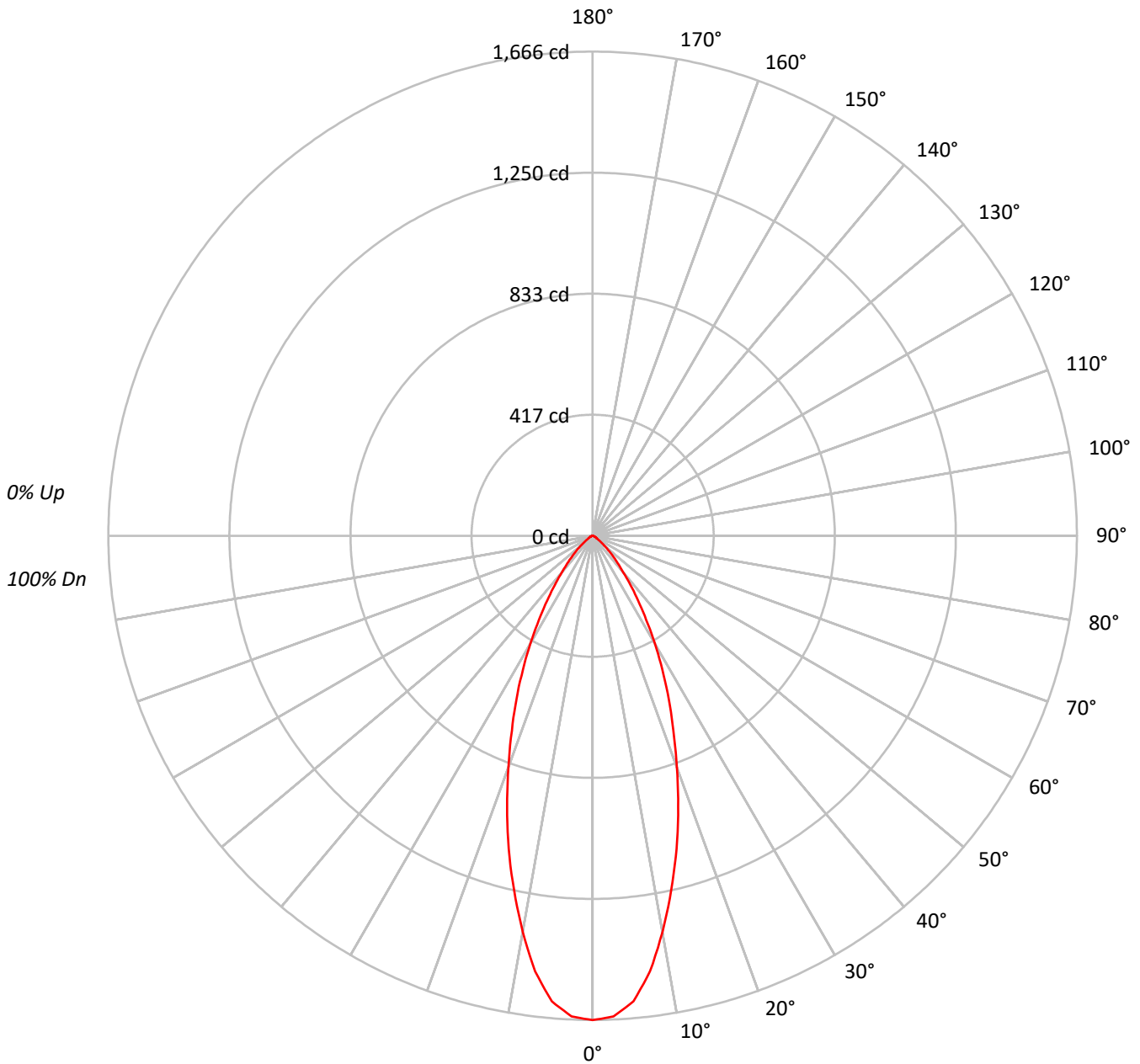
Lumens per Lamp: N/A  
Luminaire Lumens: 1027.9 lumens  
Efficiency: N/A  
Efficacy: 99.8 lumens/watt  
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 10.3  
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				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	50	30	10	
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	
1	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93	92	91	93	92	91	
2	108	103	99	96	106	101	98	95	98	95	92	95	93	91	92	90	89	87	85	83	87	85	83	
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	87	85	83	81	79	77	81	79	77	
4	97	90	85	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76	73	71	76	73	71	
5	93	84	79	74	91	84	78	74	82	77	73	80	76	73	79	75	72	71	68	66	71	68	66	
6	88	79	74	69	87	79	73	69	77	72	69	76	71	68	74	71	68	66	63	61	66	63	61	
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62	59	57	62	59	57	
8	80	71	65	61	79	70	65	61	69	64	61	68	64	60	67	63	60	59	56	54	59	56	54	
9	77	67	61	58	76	67	61	58	66	61	57	65	60	57	64	60	57	56	53	51	56	53	51	
10	73	64	58	55	72	63	58	54	63	58	54	62	57	54	61	57	54	54	51	49	54	51	49	

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

	0°
0°	131555
5°	127430
10°	110900
15°	91116
20°	71095
25°	53994
30°	38895
35°	26232
40°	16941
45°	10929
50°	6398
55°	3592
60°	2416
65°	1681
70°	1246
75°	1098
80°	409
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10929 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	146.1	14.2
10°-20°	308.1	30.0
20°-30°	283.7	27.6
30°-40°	173.4	16.9
40°-50°	77.5	7.5
50°-60°	25.6	2.5
60°-70°	9.7	0.9
70°-80°	3.4	0.3
80°-90°	0.4	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°	737.9	71.8
0°-40°	911.4	88.7
0°-60°	1014.5	98.7
0°-90°	1027.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1027.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1666	
5°	1608	146
15°	1115	308
25°	620	284
35°	272	173
45°	98	78
55°	26	26
65°	9	10
75°	4	3
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1666.5
2.5°	1655.7
5°	1608.1
7.5°	1512.0
10°	1383.5
12.5°	1248.8
15°	1114.9
17.5°	978.3
20°	846.3
22.5°	725.9
25°	619.9
27.5°	518.4
30°	426.7
32.5°	343.2
35°	272.2
37.5°	213.8
40°	164.4
42.5°	127.6
45°	97.9
47.5°	72.8
50°	52.1
52.5°	36.8
55°	26.1
57.5°	18.9
60°	15.3
62.5°	12.6
65°	9.0
67.5°	7.2
70°	5.4
72.5°	4.5
75°	3.6
77.5°	1.8
80°	0.9
82.5°	0.9
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)