

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: P640643

Luminaire Tested: ML5612LSFL4097FS1E - 593TBZB - 900LM - 3500K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640643  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-31)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSFL4097FS1E - 593TBZB - 900LM - 3500K  
Description: ML56 RR, 40D TIR OPTIC, 5" TUSCON BRONZE BAFFLE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

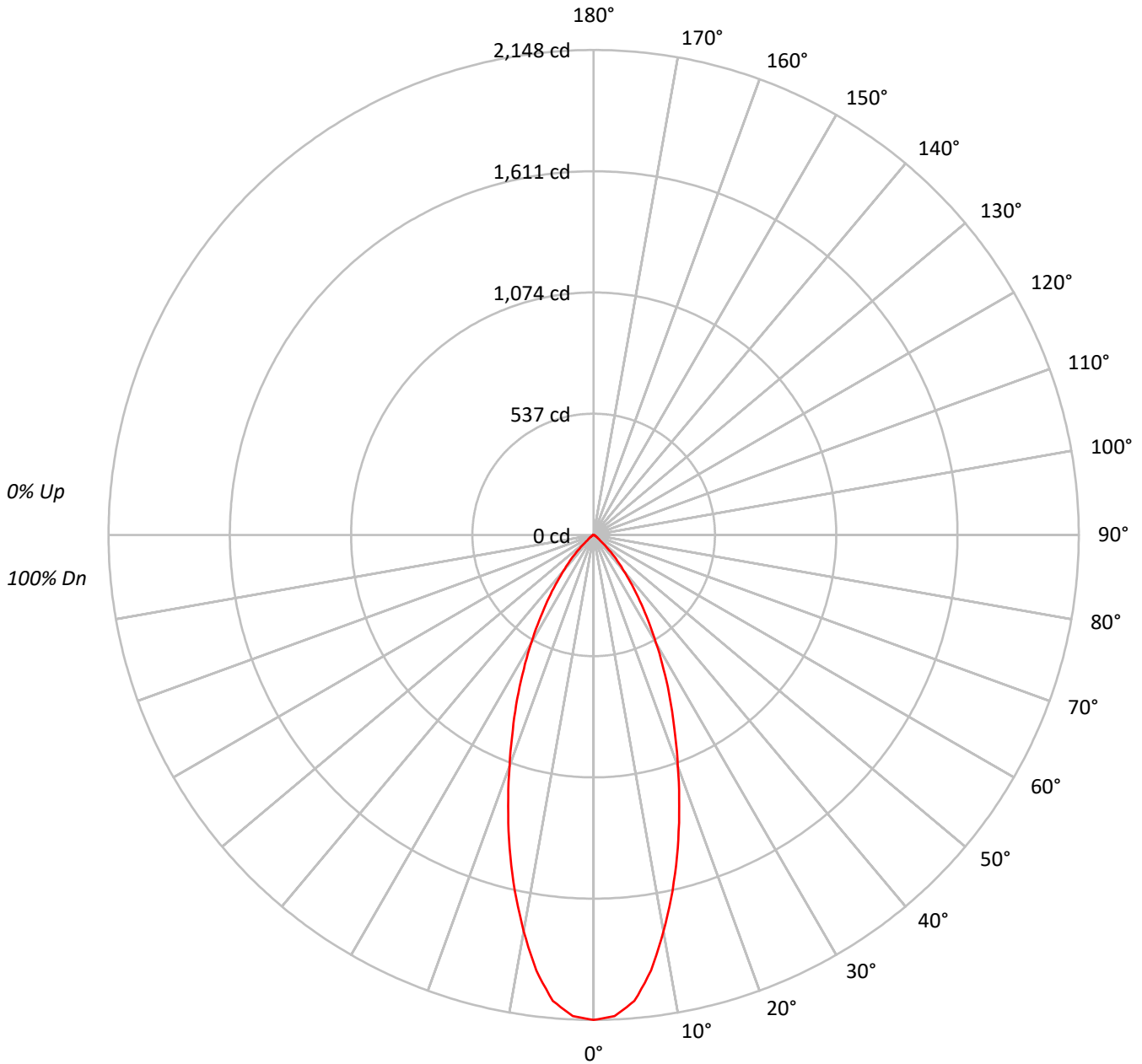
Lumens per Lamp: N/A  
Luminaire Lumens: 1280.7 lumens  
Efficiency: N/A  
Efficacy: 96.3 lumens/watt  
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 13.3  
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	
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				
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94				
2	108	104	100	97	106	102	99	96	99	96	93	96	94	91	93	91	90	88				
3	103	97	92	89	101	96	91	88	93	89	86	91	88	85	89	86	84	82				
4	98	91	86	82	97	90	85	81	88	84	80	86	82	79	84	81	79	77				
5	94	86	80	76	92	85	80	76	83	79	75	81	77	74	80	76	74	72				
6	89	81	75	71	88	80	75	71	79	74	70	77	73	70	76	72	69	68				
7	85	76	71	67	84	76	70	66	74	70	66	73	69	66	72	68	65	64				
8	81	72	67	63	80	72	66	63	71	66	62	70	65	62	69	65	62	61				
9	78	69	63	59	77	68	63	59	67	62	59	66	62	59	66	62	59	57				
10	75	65	60	56	74	65	60	56	64	59	56	63	59	56	63	59	56	54				

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

	0°
0°	169573
5°	164190
10°	142891
15°	117415
20°	91534
25°	69699
30°	50344
35°	34336
40°	21270
45°	11968
50°	4384
55°	2532
60°	1453
65°	430
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11968 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.2	14.7
10°-20°	397.0	31.0
20°-30°	366.1	28.6
30°-40°	225.2	17.6
40°-50°	83.6	6.5
50°-60°	17.5	1.4
60°-70°	3.1	0.2
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°	951.3	74.3
0°-40°	1176.6	91.9
0°-60°	1277.6	99.8
0°-90°	1280.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1280.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2148	
5°	2072	188
15°	1437	397
25°	800	366
35°	356	225
45°	107	84
55°	18	17
65°	2	3
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2148.1
2.5°	2133.1
5°	2072.0
7.5°	1946.3
10°	1782.6
12.5°	1613.1
15°	1436.7
17.5°	1259.1
20°	1089.6
22.5°	935.1
25°	800.2
27.5°	669.9
30°	552.3
32.5°	447.4
35°	356.3
37.5°	277.9
40°	206.4
42.5°	155.7
45°	107.2
47.5°	57.7
50°	35.7
52.5°	25.4
55°	18.4
57.5°	12.7
60°	9.2
62.5°	5.8
65°	2.3
67.5°	0.0
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

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Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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(END OF REPORT)