

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: P640863

Luminaire Tested: ML5612LSFL4097FS1E - 694WB - 600LM - 3500K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640863  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-44)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSFL4097FS1E - 694WB - 600LM - 3500K  
Description: ML56 RR, 40D TIR OPTIC, 6" WHITE GIMBAL TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1034.2 lumens  
Efficiency: N/A  
Efficacy: 100.4 lumens/watt  
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

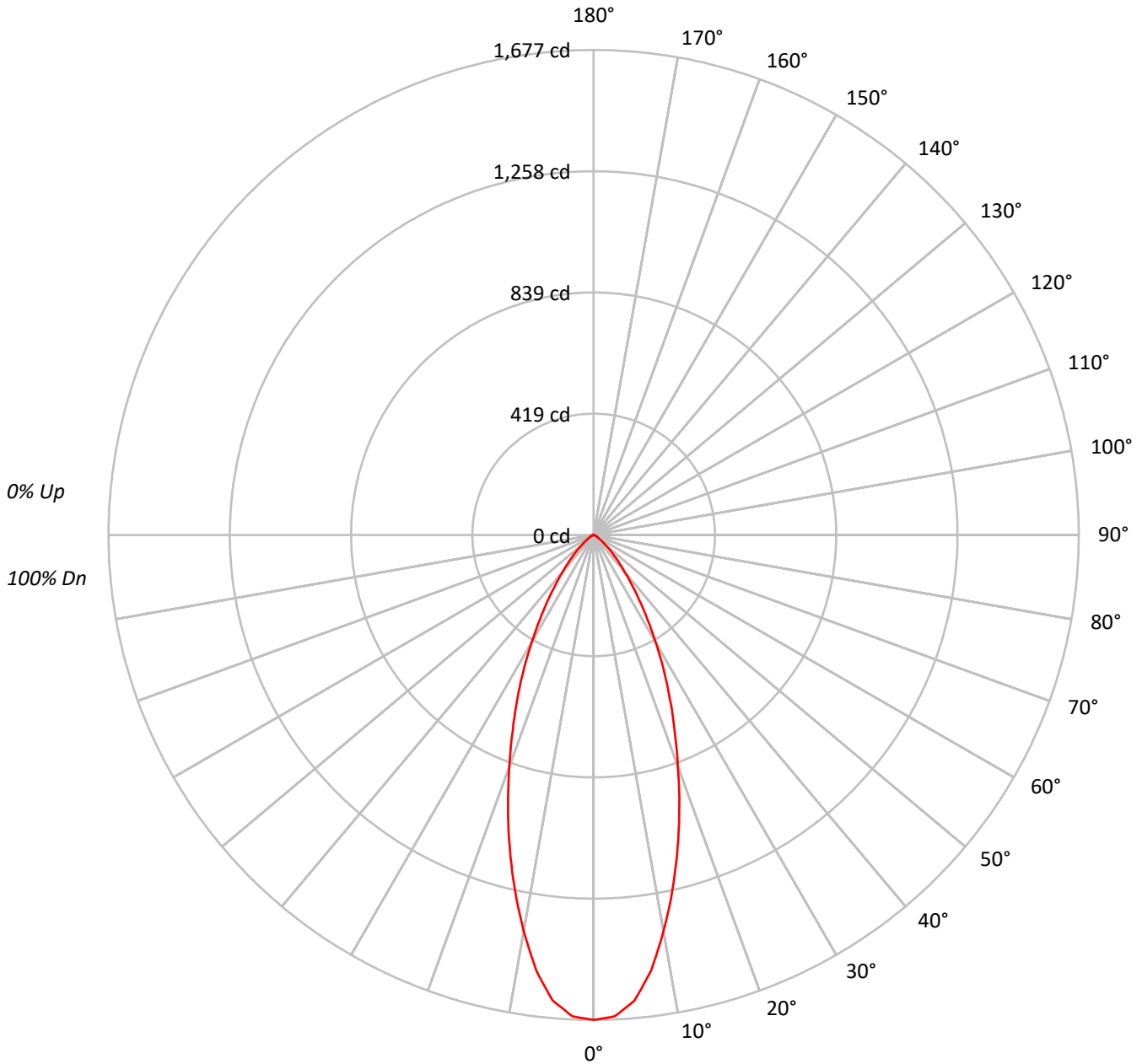
Input Watts (W): 10.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
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	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93			
2	108	103	99	96	106	101	98	95	98	95	92	95	93	91	92	90	89	87			
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	87	85	83	81			
4	97	90	85	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76			
5	93	84	79	74	91	84	78	74	82	77	73	80	76	73	79	75	72	71			
6	88	79	74	69	87	79	73	69	77	72	69	76	71	68	74	71	68	66			
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62			
8	80	71	65	61	79	70	65	61	69	64	61	68	64	60	67	63	60	59			
9	77	67	61	58	76	67	61	57	66	61	57	65	60	57	64	60	57	56			
10	73	64	58	54	72	63	58	54	63	58	54	62	57	54	61	57	54	53			

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

	0°
0°	91928
5°	88966
10°	77442
15°	63604
20°	49652
25°	37672
30°	27080
35°	18404
40°	11836
45°	7667
50°	4443
55°	2495
60°	1677
65°	1167
70°	866
75°	763
80°	284
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7667 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	146.9	14.2
10°-20°	309.9	30.0
20°-30°	285.3	27.6
30°-40°	174.6	16.9
40°-50°	78.2	7.6
50°-60°	25.8	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°	742.2	71.8
0°-40°	916.8	88.6
0°-60°	1020.8	98.7
0°-90°	1034.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1034.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1677	
5°	1617	147
15°	1121	310
25°	623	285
35°	275	175
45°	99	78
55°	26	26
65°	9	10
75°	4	3
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1676.9
2.5°	1666.2
5°	1616.7
7.5°	1519.7
10°	1391.2
12.5°	1258.2
15°	1120.7
17.5°	984.1
20°	851.1
22.5°	730.6
25°	622.8
27.5°	522.1
30°	427.8
32.5°	345.1
35°	275.0
37.5°	215.7
40°	165.4
42.5°	129.4
45°	98.9
47.5°	72.8
50°	52.1
52.5°	36.8
55°	26.1
57.5°	19.8
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)