

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: P642568

Luminaire Tested: ML5615LSFL409FS1E - 692SC - 1200LM - 3500K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642568  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-37)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSFL409FS1E - 692SC - 1200LM - 3500K  
Description: ML56 RR, 40D TIR OPTIC, 6" SPECULAR CLEAR TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

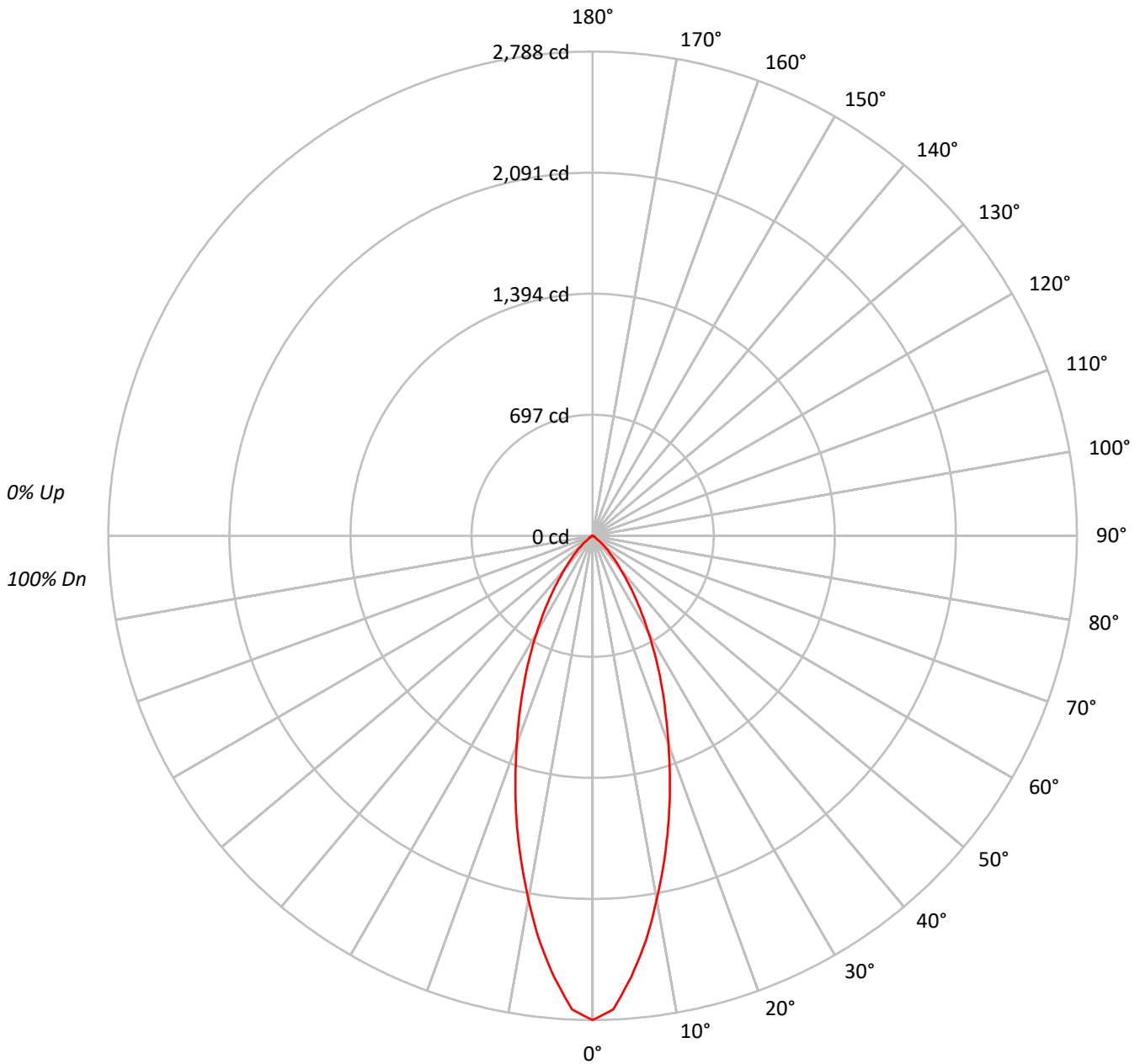
Lumens per Lamp: N/A  
Luminaire Lumens: 1530.0 lumens  
Efficiency: N/A  
Efficacy: 114.2 lumens/watt  
Spacing Criteria (0/90/45): 0.59 / 0.59 / 0.66  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

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									
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																			
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94																			
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88																			
3	103	97	92	88	101	96	91	88	93	89	86	91	88	85	88	86	84	82																			
4	98	91	86	82	96	90	85	81	88	83	80	86	82	79	84	81	78	77																			
5	94	86	80	76	92	85	79	75	83	78	75	81	77	74	80	76	73	72																			
6	89	81	75	71	88	80	74	71	78	74	70	77	73	70	76	72	69	68																			
7	85	76	70	66	84	76	70	66	74	69	66	73	69	66	72	68	65	64																			
8	81	72	66	62	80	72	66	62	71	66	62	69	65	62	69	65	62	60																			
9	78	68	63	59	77	68	63	59	67	62	59	66	62	59	65	61	58	57																			
10	74	65	60	56	73	65	59	56	64	59	56	63	59	56	62	58	55	54																			

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

	0°
0°	152850
5°	140265
10°	118373
15°	96033
20°	74387
25°	56350
30°	40614
35°	27726
40°	17790
45°	10877
50°	5697
55°	2170
60°	1316
65°	519
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10877 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	230.3	15.1
10°-20°	467.9	30.6
20°-30°	427.1	27.9
30°-40°	262.6	17.2
40°-50°	112.7	7.4
50°-60°	24.9	1.6
60°-70°	4.4	0.3
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°	1125.4	73.6
0°-40°	1388.0	90.7
0°-60°	1525.6	99.7
0°-90°	1530.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1530.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2788	
5°	2549	230
15°	1692	468
25°	932	427
35°	414	263
45°	140	113
55°	23	25
65°	4	4
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2788.2
2.5°	2729.3
5°	2548.9
7.5°	2351.1
10°	2126.5
12.5°	1907.3
15°	1692.1
17.5°	1476.9
20°	1275.1
22.5°	1094.7
25°	931.6
27.5°	780.6
30°	641.6
32.5°	519.9
35°	414.3
37.5°	323.5
40°	248.6
42.5°	191.1
45°	140.3
47.5°	102.9
50°	66.8
52.5°	33.4
55°	22.7
57.5°	17.4
60°	12.0
62.5°	8.0
65°	4.0
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

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)