

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: P642678

Luminaire Tested: ML5615LSFL409FS1E - 694WB - 1500LM - 3500K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642678
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: ML5615LSFL409FS1E - 694WB - 1500LM - 3500K
Description: ML56 RR, 40D TIR OPTIC, 6" WHITE GIMBAL TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

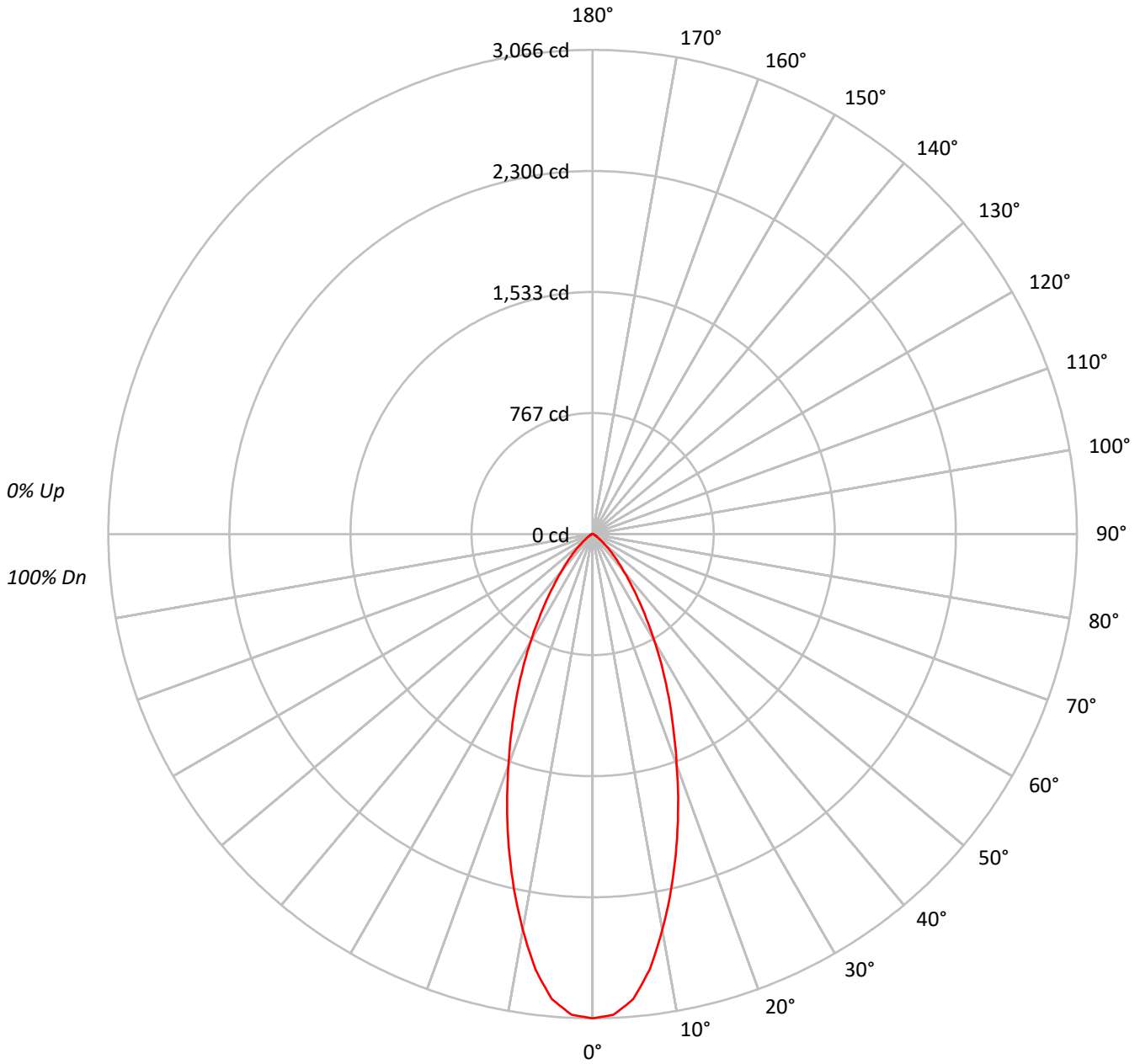
Lumens per Lamp: N/A
Luminaire Lumens: 1890.9 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 17.1
Input Voltage (V): NR
Input Current (A_{in}): 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	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	55	72	63	58	54	63	58	54	62	57	54	61	57	54	53																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	168090
5°	162673
10°	141597
15°	116295
20°	90780
25°	68877
30°	49514
35°	33649
40°	21641
45°	14017
50°	8128
55°	4559
60°	3059
65°	2127
70°	1587
75°	1398
80°	505
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14017 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.6	14.2
10°-20°	566.7	30.0
20°-30°	521.7	27.6
30°-40°	319.3	16.9
40°-50°	142.9	7.6
50°-60°	47.2	2.5
60°-70°	17.6	0.9
70°-80°	6.3	0.3
80°-90°	0.7	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°	1357.0	71.8
0°-40°	1676.3	88.7
0°-60°	1866.4	98.7
0°-90°	1890.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1890.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3066	
5°	2956	269
15°	2049	567
25°	1139	522
35°	503	319
45°	181	143
55°	48	47
65°	16	18
75°	7	6
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	3066.2
2.5°	3046.5
5°	2956.1
7.5°	2778.7
10°	2543.7
12.5°	2300.5
15°	2049.1
17.5°	1799.3
20°	1556.1
22.5°	1335.9
25°	1138.7
27.5°	954.7
30°	782.2
32.5°	631.0
35°	502.8
37.5°	394.4
40°	302.4
42.5°	236.6
45°	180.8
47.5°	133.1
50°	95.3
52.5°	67.4
55°	47.7
57.5°	36.2
60°	27.9
62.5°	23.0
65°	16.4
67.5°	13.1
70°	9.9
72.5°	8.2
75°	6.6
77.5°	3.3
80°	1.6
82.5°	1.6
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)