

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: P642468

Luminaire Tested: ML5615LSFL409FS1E - 593WB - 1500LM - 3500K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642468
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-28)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 593WB - 1500LM - 3500K
Description: ML56 RR, 40D TIR OPTIC, 5" WHITE BAFFLE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1866.3 lumens
Efficiency: N/A
Efficacy: 109.1 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

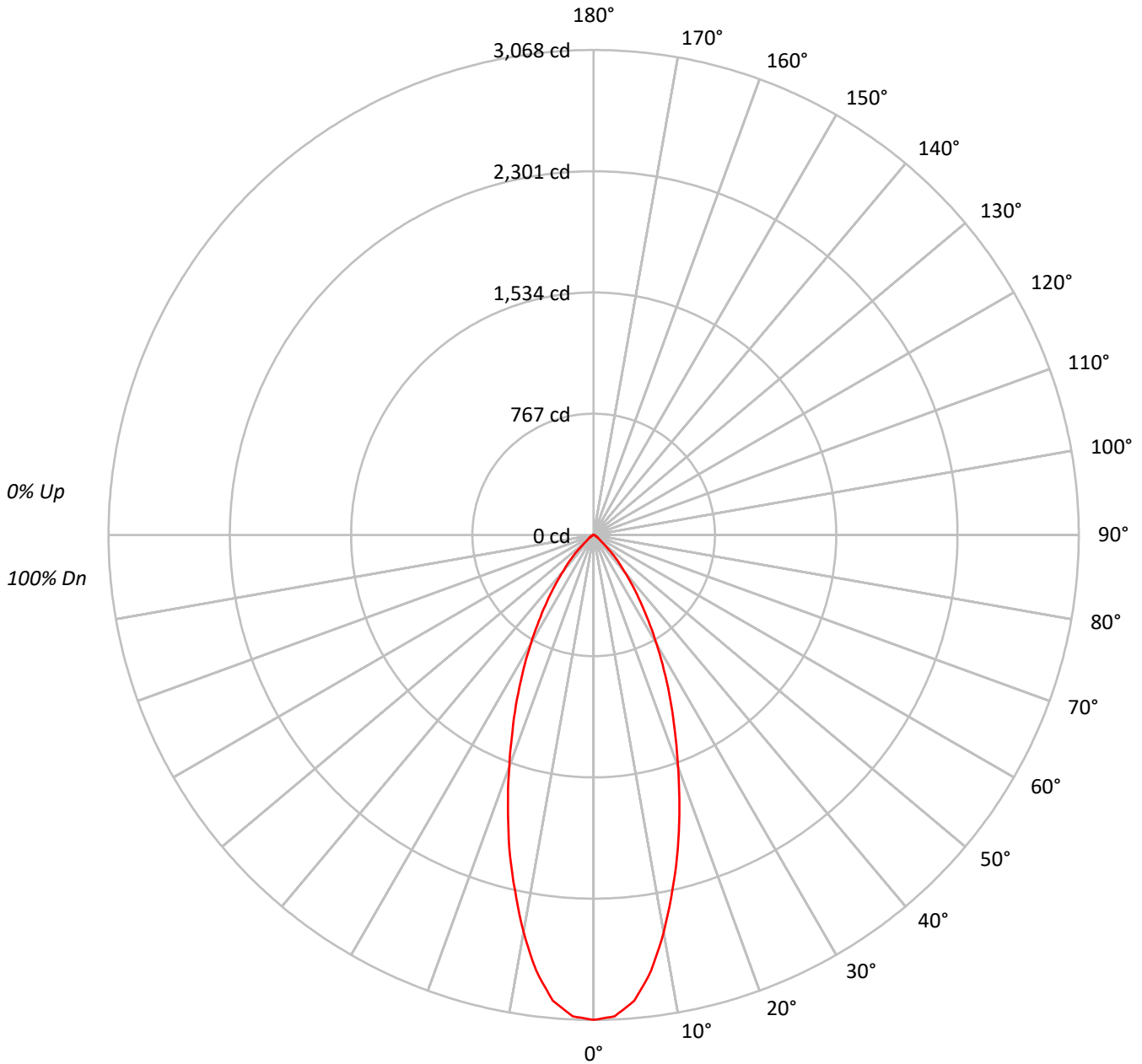
Input Watts (W): 17.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	94																			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87																			
3	103	96	92	88	101	95	91	87	92	89	86	90	87	84	88	85	83	81																			
4	98	90	85	81	96	89	84	80	87	83	79	85	82	79	83	80	78	76																			
5	93	85	79	75	92	84	79	75	82	78	74	81	77	73	79	76	73	71																			
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67																			
7	85	76	70	66	83	75	69	66	74	69	65	73	68	65	71	67	64	63																			
8	81	72	66	62	80	71	66	62	70	65	61	69	64	61	68	64	61	60																			
9	77	68	62	58	76	67	62	58	66	62	58	66	61	58	65	61	58	56																			
10	74	65	59	55	73	64	59	55	63	58	55	63	58	55	62	58	55	53																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	242159
5°	234360
10°	204533
15°	168118
20°	130984
25°	99888
30°	72339
35°	49399
40°	30812
45°	18342
50°	7258
55°	4748
60°	3379
65°	2148
70°	1893
75°	2013
80°	2228
85°	2989

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18342 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.0	14.4
10°-20°	567.9	30.4
20°-30°	524.9	28.1
30°-40°	324.4	17.4
40°-50°	125.8	6.7
50°-60°	32.3	1.7
60°-70°	12.5	0.7
70°-80°	6.5	0.3
80°-90°	2.9	0.2
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°	1361.8	73.0
0°-40°	1686.2	90.4
0°-60°	1844.3	98.8
0°-90°	1866.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1866.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3068	
5°	2958	269
15°	2057	568
25°	1147	525
35°	513	324
45°	164	126
55°	34	32
65°	12	13
75°	7	7
85°	3	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	3067.6
2.5°	3047.8
5°	2957.5
7.5°	2781.7
10°	2551.6
12.5°	2301.9
15°	2057.1
17.5°	1802.4
20°	1559.2
22.5°	1340.7
25°	1146.8
27.5°	961.2
30°	793.6
32.5°	642.4
35°	512.6
37.5°	402.5
40°	299.0
42.5°	228.4
45°	164.3
47.5°	92.0
50°	59.1
52.5°	44.4
55°	34.5
57.5°	26.3
60°	21.4
62.5°	16.4
65°	11.5
67.5°	8.2
70°	8.2
72.5°	6.6
75°	6.6
77.5°	4.9
80°	4.9
82.5°	3.3
85°	3.3
87.5°	1.6
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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