

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: P642407

Luminaire Tested: ML5615LSFL409FS1E - 592W - 1500LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642407
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-27)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 592W - 1500LM - 3000K
Description: ML56 RR, 40D TIR OPTIC, 5" WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

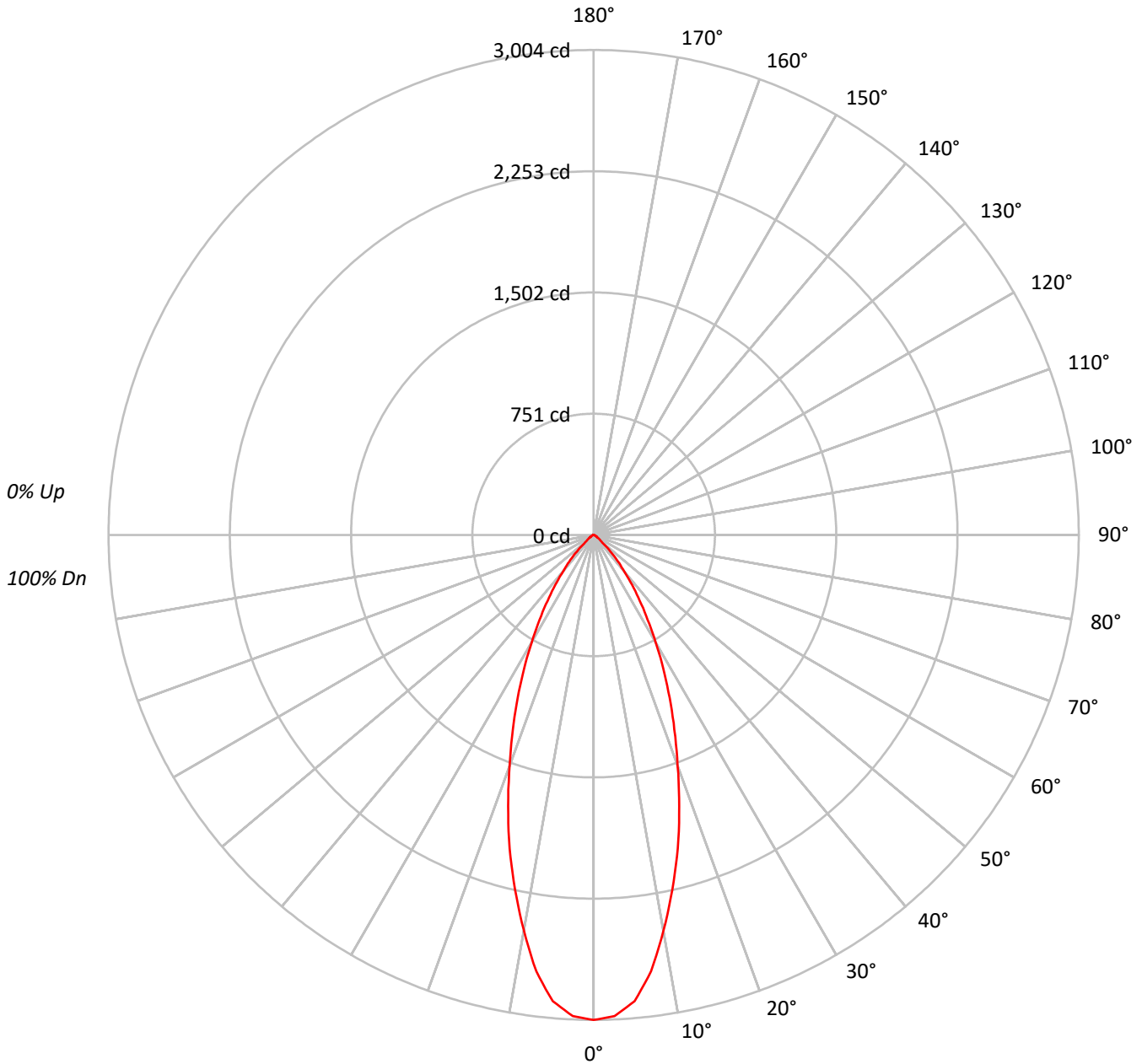
Lumens per Lamp: N/A
Luminaire Lumens: 1818.5 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 17.1
Input Voltage (V): NR
Input Current (Ain): 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	100	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	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81			
4	98	90	85	81	96	89	84	80	87	83	80	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	68	65	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	67	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	54			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	237162
5°	229700
10°	199531
15°	164334
20°	127666
25°	96840
30°	69996
35°	47944
40°	30163
45°	17684
50°	7074
55°	4624
60°	3284
65°	2092
70°	1846
75°	1952
80°	2182
85°	1449

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 17684 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.3	14.5
10°-20°	554.7	30.5
20°-30°	509.6	28.0
30°-40°	314.7	17.3
40°-50°	123.0	6.8
50°-60°	31.8	1.7
60°-70°	12.6	0.7
70°-80°	6.3	0.3
80°-90°	2.4	0.1
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°	1327.7	73.0
0°-40°	1642.3	90.3
0°-60°	1797.1	98.8
0°-90°	1818.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1818.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3004	
5°	2899	263
15°	2011	555
25°	1112	510
35°	498	315
45°	158	123
55°	34	32
65°	11	13
75°	6	6
85°	2	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	3004.3
2.5°	2983.5
5°	2898.7
7.5°	2725.9
10°	2489.2
12.5°	2249.2
15°	2010.8
17.5°	1761.3
20°	1519.7
22.5°	1305.4
25°	1111.8
27.5°	931.0
30°	767.9
32.5°	622.3
35°	497.5
37.5°	390.3
40°	292.7
42.5°	224.0
45°	158.4
47.5°	91.2
50°	57.6
52.5°	44.8
55°	33.6
57.5°	25.6
60°	20.8
62.5°	17.6
65°	11.2
67.5°	8.0
70°	8.0
72.5°	6.4
75°	6.4
77.5°	4.8
80°	4.8
82.5°	3.2
85°	1.6
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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(END OF REPORT)