

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: P642403

Luminaire Tested: ML5615LSFL409FS1E - 592W - 1200LM - 3500K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642403
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 - 1200LM - 3500K
Description: ML56 RR, 40D TIR OPTIC, 5" WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

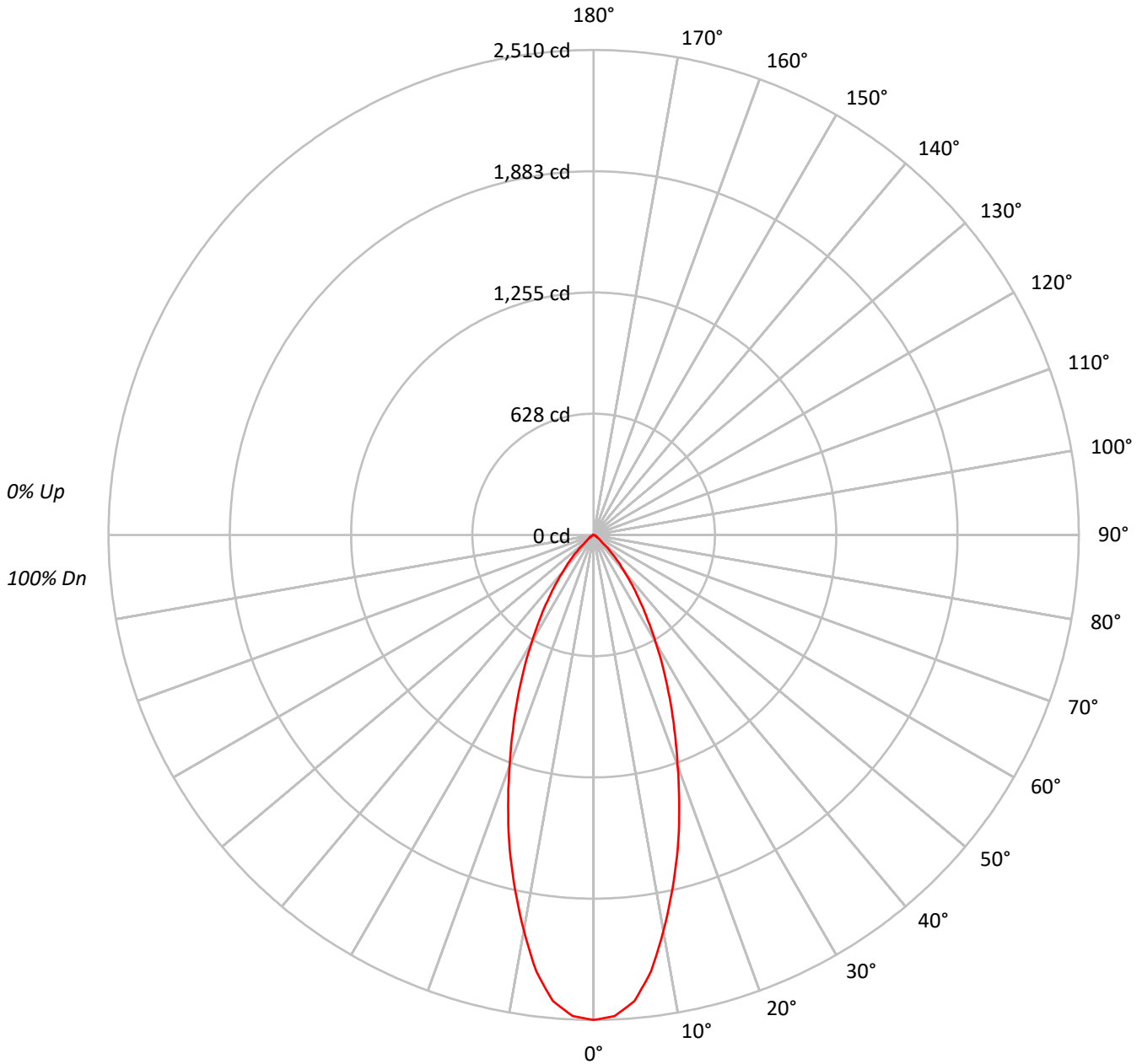
Lumens per Lamp: N/A
Luminaire Lumens: 1519.3 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 13.4
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	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°	198157
5°	191917
10°	166714
15°	137307
20°	106672
25°	80909
30°	58484
35°	40061
40°	25206
45°	14770
50°	5907
55°	3867
60°	2747
65°	1756
70°	1546
75°	1617
80°	1818
85°	1177

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14770 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.0	14.5
10°-20°	463.5	30.5
20°-30°	425.8	28.0
30°-40°	262.9	17.3
40°-50°	102.7	6.8
50°-60°	26.6	1.7
60°-70°	10.6	0.7
70°-80°	5.3	0.3
80°-90°	2.0	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°	1109.3	73.0
0°-40°	1372.2	90.3
0°-60°	1501.5	98.8
0°-90°	1519.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1519.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2510	
5°	2422	220
15°	1680	463
25°	929	426
35°	416	263
45°	132	103
55°	28	27
65°	9	11
75°	5	5
85°	1	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	2510.2
2.5°	2492.8
5°	2421.9
7.5°	2277.6
10°	2079.8
12.5°	1879.3
15°	1680.1
17.5°	1471.6
20°	1269.8
22.5°	1090.7
25°	928.9
27.5°	777.9
30°	641.6
32.5°	519.9
35°	415.7
37.5°	326.1
40°	244.6
42.5°	187.1
45°	132.3
47.5°	76.2
50°	48.1
52.5°	37.4
55°	28.1
57.5°	21.4
60°	17.4
62.5°	14.7
65°	9.4
67.5°	6.7
70°	6.7
72.5°	5.3
75°	5.3
77.5°	4.0
80°	4.0
82.5°	2.7
85°	1.3
87.5°	1.3
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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