

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: P642410

Luminaire Tested: ML5615LSFL409FS1E - 592W - 1500LM - 5000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642410
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 - 5000K
Description: ML56 RR, 40D TIR OPTIC, 5" WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

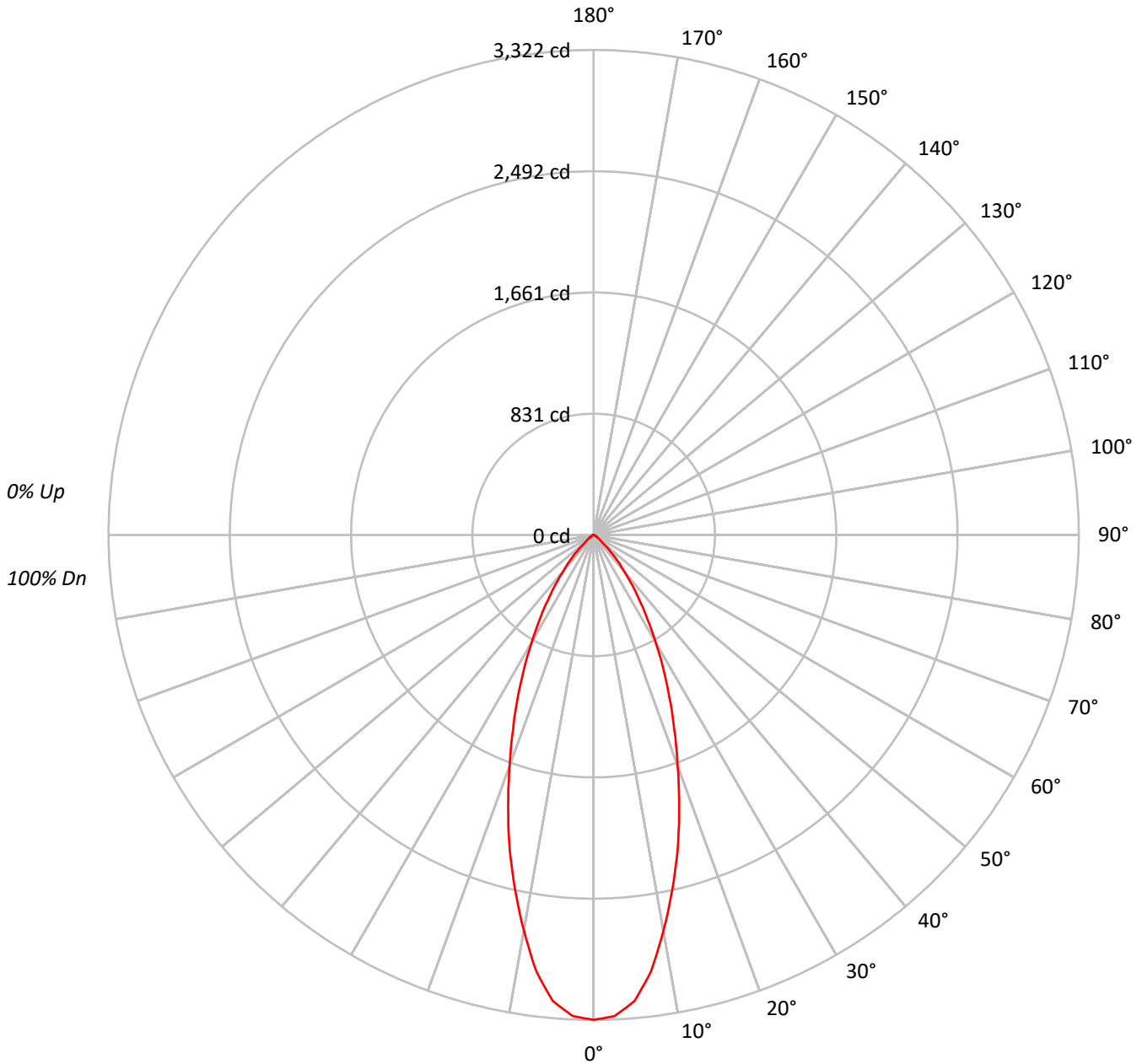
Lumens per Lamp: N/A
Luminaire Lumens: 2010.6 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P642410
CATALOG NUMBER: ML5615LSFL409FS1E - 592W - 1500LM - 5000K

Luminous Intensity Polar Plot





TEST NUMBER: P642410

CATALOG NUMBER: ML5615LSFL409FS1E - 592W - 1500LM - 5000K

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	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°	262218
5°	253972
10°	220613
15°	181701
20°	141157
25°	107074
30°	77389
35°	53013
40°	33357
45°	19548
50°	7823
55°	5106
60°	3631
65°	2316
70°	2031
75°	2166
80°	2409
85°	1630

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 19548 cd/sqm



TEST NUMBER: P642410

CATALOG NUMBER: ML5615LSFL409FS1E - 592W - 1500LM - 5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	291.1	14.5
10°-20°	613.3	30.5
20°-30°	563.5	28.0
30°-40°	347.9	17.3
40°-50°	136.0	6.8
50°-60°	35.1	1.7
60°-70°	13.9	0.7
70°-80°	7.0	0.3
80°-90°	2.7	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°	1468.0	73.0
0°-40°	1815.9	90.3
0°-60°	1987.0	98.8
0°-90°	2010.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2010.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3322	
5°	3205	291
15°	2223	613
25°	1229	563
35°	550	348
45°	175	136
55°	37	35
65°	12	14
75°	7	7
85°	2	3
90°	0	



TEST NUMBER: P642410

CATALOG NUMBER: ML5615LSFL409FS1E - 592W - 1500LM - 5000K

CANDELA DISTRIBUTION (FULL):

	0°
0°	3321.7
2.5°	3298.7
5°	3205.0
7.5°	3014.0
10°	2752.2
12.5°	2486.9
15°	2223.3
17.5°	1947.4
20°	1680.3
22.5°	1443.3
25°	1229.3
27.5°	1029.4
30°	849.0
32.5°	688.0
35°	550.1
37.5°	431.6
40°	323.7
42.5°	247.6
45°	175.1
47.5°	100.8
50°	63.7
52.5°	49.5
55°	37.1
57.5°	28.3
60°	23.0
62.5°	19.5
65°	12.4
67.5°	8.8
70°	8.8
72.5°	7.1
75°	7.1
77.5°	5.3
80°	5.3
82.5°	3.5
85°	1.8
87.5°	1.8
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

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



— 0°-180°

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)