

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: P642569

Luminaire Tested: ML5615LSFL409FS1E - 692SC - 1200LM - 4000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642569
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-37)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 692SC - 1200LM - 4000K
Description: ML56 RR, 40D TIR OPTIC, 6" SPECULAR CLEAR TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

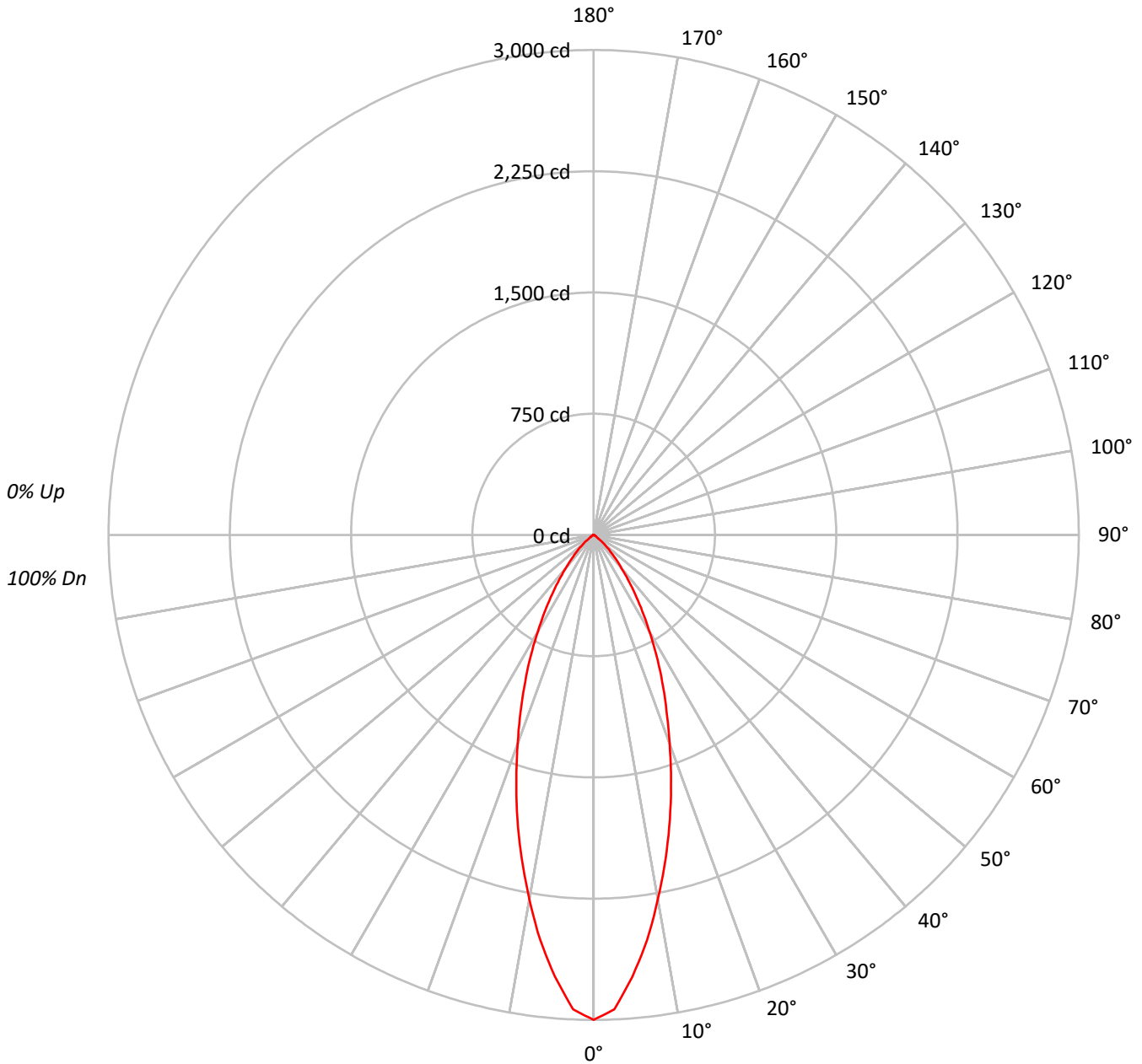
Lumens per Lamp: N/A
Luminaire Lumens: 1646.3 lumens
Efficiency: N/A
Efficacy: 122.9 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.59 / 0.66
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P642569
CATALOG NUMBER: ML5615LSFL409FS1E - 692SC - 1200LM - 4000K

Luminous Intensity Polar Plot





TEST NUMBER: P642569

CATALOG NUMBER: ML5615LSFL409FS1E - 692SC - 1200LM - 4000K

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	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94			
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88			
3	103	97	92	88	101	96	91	88	93	89	86	91	88	85	88	86	84	82			
4	98	91	86	82	96	90	85	81	88	83	80	86	82	79	84	81	78	77			
5	94	86	80	76	92	85	79	75	83	78	75	81	77	74	80	76	73	72			
6	89	81	75	71	88	80	74	71	78	74	70	77	73	70	76	72	69	68			
7	85	76	70	66	84	76	70	66	74	69	66	73	69	66	72	68	65	64			
8	81	72	66	62	80	72	66	62	71	66	62	69	65	62	69	65	62	60			
9	78	68	63	59	77	68	63	59	67	62	59	66	62	59	65	61	58	57			
10	74	65	60	56	73	65	59	56	64	59	56	63	59	56	62	58	55	54			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	164461
5°	150919
10°	127369
15°	103332
20°	80040
25°	60633
30°	43697
35°	29834
40°	19143
45°	11707
50°	6132
55°	2332
60°	1414
65°	558
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11707 cd/sqm



TEST NUMBER: P642569

CATALOG NUMBER: ML5615LSFL409FS1E - 692SC - 1200LM - 4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.8	15.1
10°-20°	503.5	30.6
20°-30°	459.6	27.9
30°-40°	282.6	17.2
40°-50°	121.3	7.4
50°-60°	26.8	1.6
60°-70°	4.7	0.3
70°-80°	0.0	0.0
80°-90°	0.0	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°	1210.9	73.6
0°-40°	1493.4	90.7
0°-60°	1641.5	99.7
0°-90°	1646.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1646.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3000	
5°	2742	248
15°	1821	503
25°	1002	460
35°	446	283
45°	151	121
55°	24	27
65°	4	5
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P642569

CATALOG NUMBER: ML5615LSFL409FS1E - 692SC - 1200LM - 4000K

CANDELA DISTRIBUTION (FULL):

0°	
0°	3000.0
2.5°	2936.7
5°	2742.5
7.5°	2529.7
10°	2288.1
12.5°	2052.2
15°	1820.7
17.5°	1589.1
20°	1372.0
22.5°	1177.8
25°	1002.4
27.5°	839.9
30°	690.3
32.5°	559.4
35°	445.8
37.5°	348.0
40°	267.5
42.5°	205.7
45°	151.0
47.5°	110.7
50°	71.9
52.5°	36.0
55°	24.4
57.5°	18.7
60°	12.9
62.5°	8.6
65°	4.3
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
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

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)