

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: P642581

Luminaire Tested: ML5615LSFL409FS1E - 692W - 1200LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642581
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-39)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 692W - 1200LM - 2700K
Description: ML56 RR, 40D TIR OPTIC, 6" WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

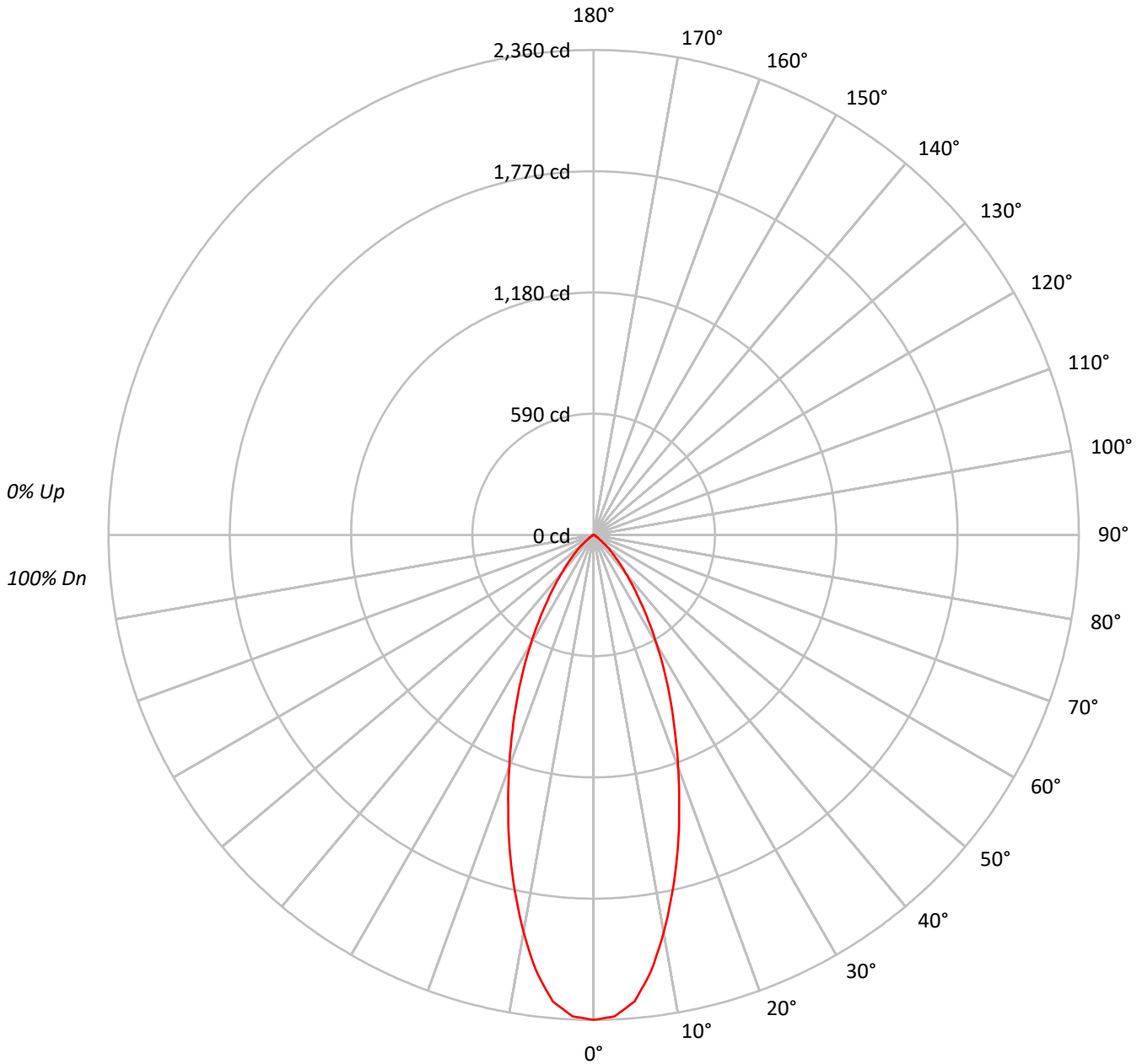
Lumens per Lamp: N/A
Luminaire Lumens: 1448.2 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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



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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	100	98	98	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	81	78	83	80	78	76																			
5	93	85	79	75	91	84	79	75	82	78	74	80	76	73	79	75	73	71																			
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67																			
7	84	75	70	65	83	75	69	65	73	69	65	72	68	65	71	67	64	63																			
8	81	71	66	62	79	71	65	61	70	65	61	69	64	61	68	64	61	59																			
9	77	68	62	58	76	67	62	58	66	61	58	65	61	58	65	60	57	56																			
10	74	64	59	55	73	64	58	55	63	58	55	62	58	55	62	57	54	53																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	129365
5°	125407
10°	109267
15°	89739
20°	70047
25°	53289
30°	38645
35°	26475
40°	17182
45°	10683
50°	5603
55°	2533
60°	1667
65°	986
70°	609
75°	530
80°	789
85°	818

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10683 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.0	14.3
10°-20°	436.7	30.2
20°-30°	403.9	27.9
30°-40°	251.0	17.3
40°-50°	110.3	7.6
50°-60°	27.1	1.9
60°-70°	7.9	0.5
70°-80°	3.2	0.2
80°-90°	1.0	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°	1047.6	72.3
0°-40°	1298.6	89.7
0°-60°	1436.0	99.2
0°-90°	1448.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1448.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2360	
5°	2279	207
15°	1581	437
25°	881	404
35°	396	251
45°	138	110
55°	26	27
65°	8	8
75°	2	3
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2359.8
2.5°	2344.6
5°	2278.9
7.5°	2141.1
10°	1962.9
12.5°	1773.3
15°	1581.2
17.5°	1382.8
20°	1200.7
22.5°	1031.4
25°	881.0
27.5°	740.7
30°	610.5
32.5°	495.5
35°	395.6
37.5°	310.9
40°	240.1
42.5°	185.8
45°	137.8
47.5°	102.4
50°	65.7
52.5°	35.4
55°	26.5
57.5°	20.2
60°	15.2
62.5°	11.4
65°	7.6
67.5°	3.8
70°	3.8
72.5°	3.8
75°	2.5
77.5°	2.5
80°	2.5
82.5°	1.3
85°	1.3
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

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— 0°-180°

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