

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: P642401

Luminaire Tested: ML5615LSFL409FS1E - 592W - 1200LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642401
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 - 2700K
Description: ML56 RR, 40D TIR OPTIC, 5" WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

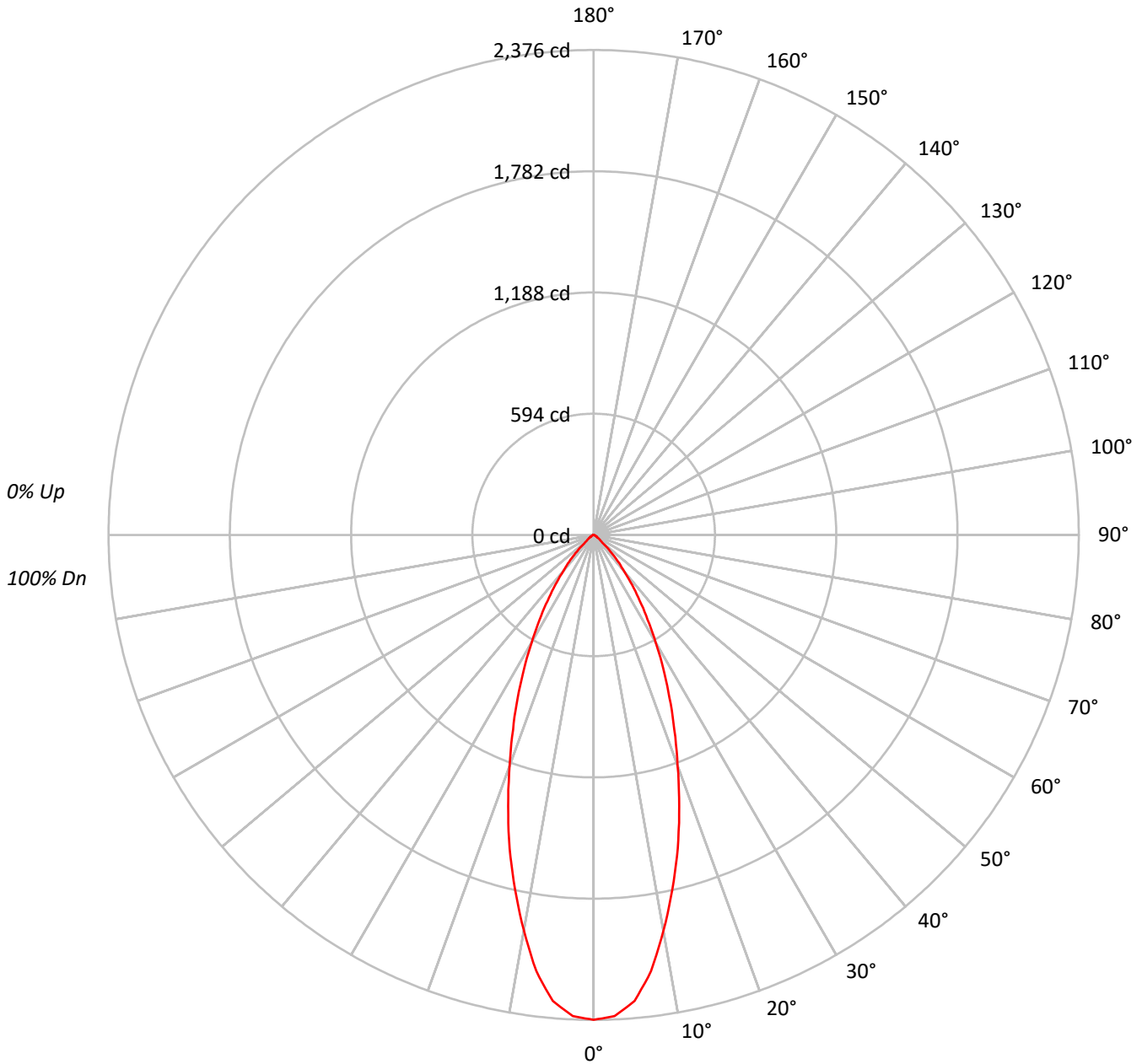
Lumens per Lamp: N/A
Luminaire Lumens: 1438.0 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 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					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	114	111	108	106	111	109	106	104	105	103	101	101	100	98	97	96	95	94					94			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87					87			
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81					81			
4	98	90	85	81	96	89	84	80	87	83	80	85	82	79	83	80	78	76					76			
5	93	85	79	75	92	84	79	75	82	78	74	81	77	73	79	76	73	71					71			
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67					67			
7	85	76	70	66	83	75	69	66	74	69	65	73	68	65	71	68	65	63					63			
8	81	72	66	62	80	71	66	62	70	65	61	69	64	61	68	64	61	60					60			
9	77	68	62	58	76	67	62	58	67	62	58	66	61	58	65	61	58	56					56			
10	74	65	59	55	73	64	59	55	63	58	55	63	58	55	62	58	55	54					54			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	187548
5°	181647
10°	157784
15°	129960
20°	100960
25°	76580
30°	55348
35°	37912
40°	23856
45°	13977
50°	5588
55°	3661
60°	2589
65°	1662
70°	1454
75°	1556
80°	1727
85°	1177

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13977 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.2	14.5
10°-20°	438.7	30.5
20°-30°	403.0	28.0
30°-40°	248.8	17.3
40°-50°	97.2	6.8
50°-60°	25.1	1.7
60°-70°	10.0	0.7
70°-80°	5.0	0.3
80°-90°	1.9	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°	1049.9	73.0
0°-40°	1298.8	90.3
0°-60°	1421.1	98.8
0°-90°	1438.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1438.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2376	
5°	2292	208
15°	1590	439
25°	879	403
35°	393	249
45°	125	97
55°	27	25
65°	9	10
75°	5	5
85°	1	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2375.8
2.5°	2359.3
5°	2292.3
7.5°	2155.6
10°	1968.4
12.5°	1778.7
15°	1590.2
17.5°	1392.8
20°	1201.8
22.5°	1032.3
25°	879.2
27.5°	736.3
30°	607.2
32.5°	492.1
35°	393.4
37.5°	308.7
40°	231.5
42.5°	177.1
45°	125.2
47.5°	72.1
50°	45.5
52.5°	35.4
55°	26.6
57.5°	20.2
60°	16.4
62.5°	13.9
65°	8.9
67.5°	6.3
70°	6.3
72.5°	5.1
75°	5.1
77.5°	3.8
80°	3.8
82.5°	2.5
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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