

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: P642402

Luminaire Tested: ML5615LSFL409FS1E - 592W - 1200LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642402
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 - 3000K
Description: ML56 RR, 40D TIR OPTIC, 5" WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

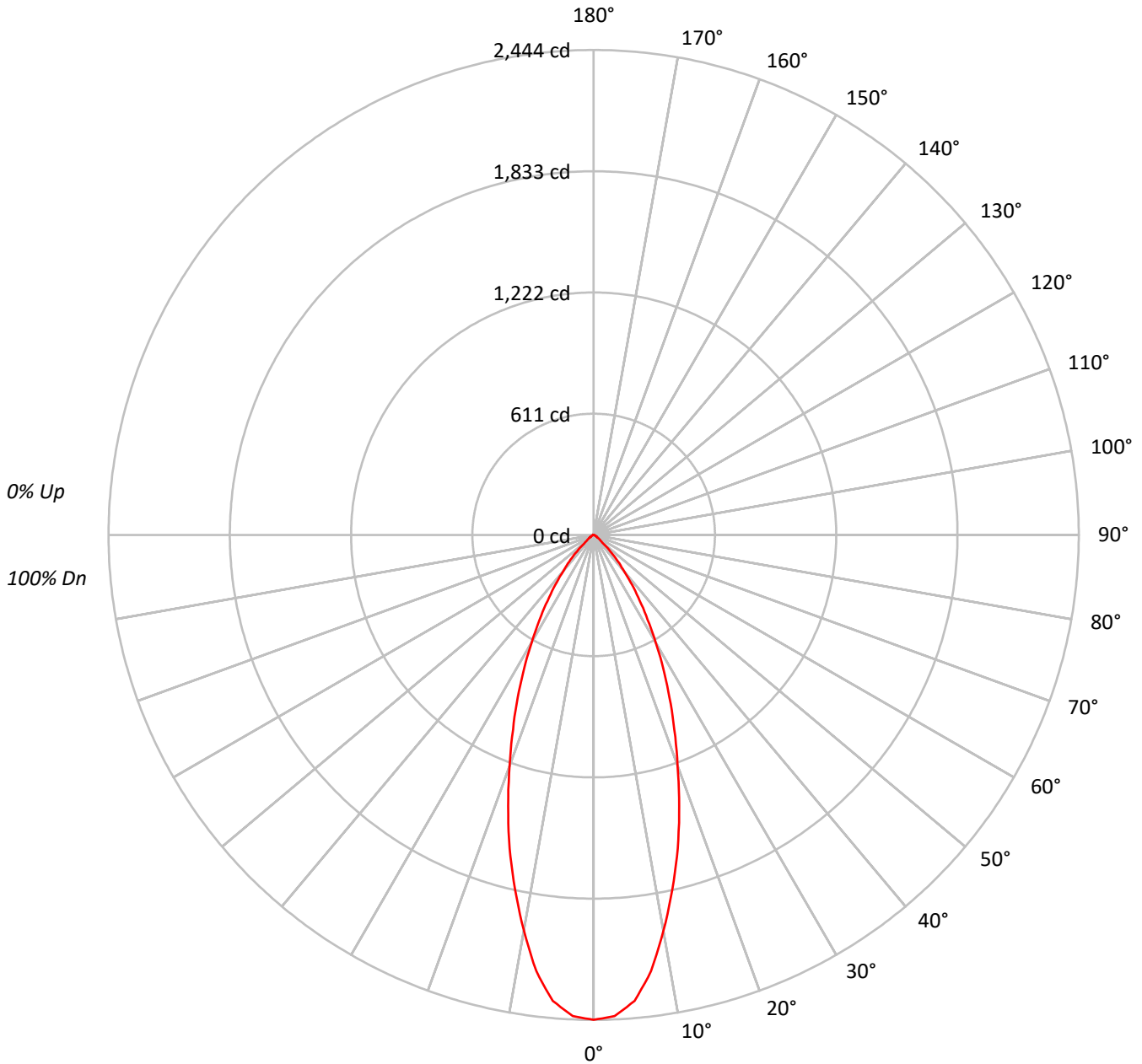
Lumens per Lamp: N/A
Luminaire Lumens: 1479.1 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

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	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°	192900
5°	186838
10°	162297
15°	133670
20°	103841
25°	78766
30°	56934
35°	39001
40°	24536
45°	14379
50°	5748
55°	3757
60°	2668
65°	1700
70°	1500
75°	1586
80°	1773
85°	1177

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14379 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.2	14.5
10°-20°	451.2	30.5
20°-30°	414.5	28.0
30°-40°	256.0	17.3
40°-50°	100.0	6.8
50°-60°	25.8	1.7
60°-70°	10.2	0.7
70°-80°	5.1	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°	1079.9	73.0
0°-40°	1335.9	90.3
0°-60°	1461.8	98.8
0°-90°	1479.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1479.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2444	
5°	2358	214
15°	1636	451
25°	904	415
35°	405	256
45°	129	100
55°	27	26
65°	9	10
75°	5	5
85°	1	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2443.6
2.5°	2426.7
5°	2357.8
7.5°	2217.2
10°	2024.7
12.5°	1829.5
15°	1635.6
17.5°	1432.6
20°	1236.1
22.5°	1061.8
25°	904.3
27.5°	757.3
30°	624.6
32.5°	506.2
35°	404.7
37.5°	317.5
40°	238.1
42.5°	182.2
45°	128.8
47.5°	74.2
50°	46.8
52.5°	36.4
55°	27.3
57.5°	20.8
60°	16.9
62.5°	14.3
65°	9.1
67.5°	6.5
70°	6.5
72.5°	5.2
75°	5.2
77.5°	3.9
80°	3.9
82.5°	2.6
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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(END OF REPORT)