

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: P642508

Luminaire Tested: ML5615LSFL409FS1E - 594WB - 1200LM - 3500K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642508
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-32)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 594WB - 1200LM - 3500K
Description: ML56 RR, 40D TIR OPTIC, 5" WHITE GIMBAL TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1535.4 lumens
Efficiency: N/A
Efficacy: 114.6 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

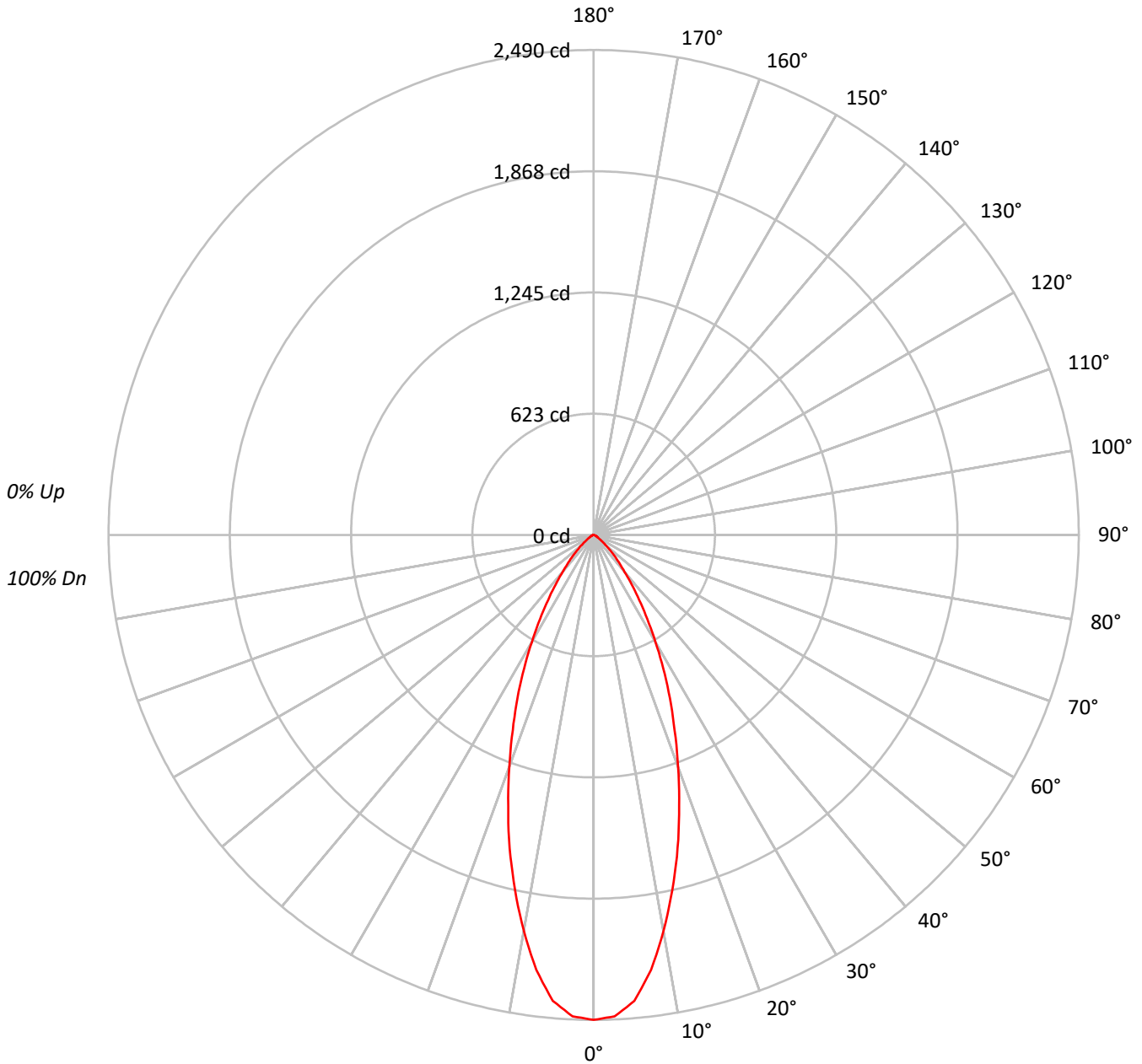
Input Watts (W): 13.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	113	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93																			
2	108	103	99	96	106	101	98	95	98	95	92	95	93	90	92	90	89	87																			
3	103	96	91	87	101	95	90	87	92	88	85	90	86	84	87	85	83	81																			
4	97	90	84	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76																			
5	93	84	79	74	91	83	78	74	82	77	73	80	76	73	78	75	72	71																			
6	88	79	74	69	87	79	73	69	77	72	69	76	71	68	74	71	68	66																			
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62																			
8	80	71	65	61	79	70	65	61	69	64	61	68	64	60	67	63	60	59																			
9	77	67	61	58	76	67	61	57	66	61	57	65	60	57	64	60	57	56																			
10	73	64	58	54	72	63	58	54	63	58	54	62	57	54	61	57	54	53																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	196547
5°	190309
10°	165512
15°	136090
20°	106319
25°	80552
30°	57746
35°	39280
40°	25340
45°	16266
50°	9518
55°	5340
60°	3584
65°	2503
70°	2170
75°	1617
80°	1227
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16266 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.0	14.2
10°-20°	460.0	30.0
20°-30°	423.3	27.6
30°-40°	258.9	16.9
40°-50°	115.7	7.5
50°-60°	38.4	2.5
60°-70°	14.5	0.9
70°-80°	5.8	0.4
80°-90°	0.7	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°	1101.4	71.7
0°-40°	1360.3	88.6
0°-60°	1514.4	98.6
0°-90°	1535.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1535.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2490	
5°	2402	218
15°	1665	460
25°	925	423
35°	408	259
45°	146	116
55°	39	38
65°	13	15
75°	5	6
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2489.8
2.5°	2473.8
5°	2401.6
7.5°	2253.3
10°	2064.8
12.5°	1865.7
15°	1665.2
17.5°	1459.4
20°	1265.6
22.5°	1085.2
25°	924.8
27.5°	772.5
30°	633.5
32.5°	511.9
35°	407.6
37.5°	319.4
40°	245.9
42.5°	191.1
45°	145.7
47.5°	108.3
50°	77.5
52.5°	54.8
55°	38.8
57.5°	29.4
60°	22.7
62.5°	18.7
65°	13.4
67.5°	10.7
70°	9.4
72.5°	6.7
75°	5.3
77.5°	4.0
80°	2.7
82.5°	1.3
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

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— 0°-180°

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(END OF REPORT)