

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: P642506

Luminaire Tested: ML5615LSFL409FS1E - 594WB - 1200LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642506
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 - 2700K
Description: ML56 RR, 40D TIR OPTIC, 5" WHITE GIMBAL TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

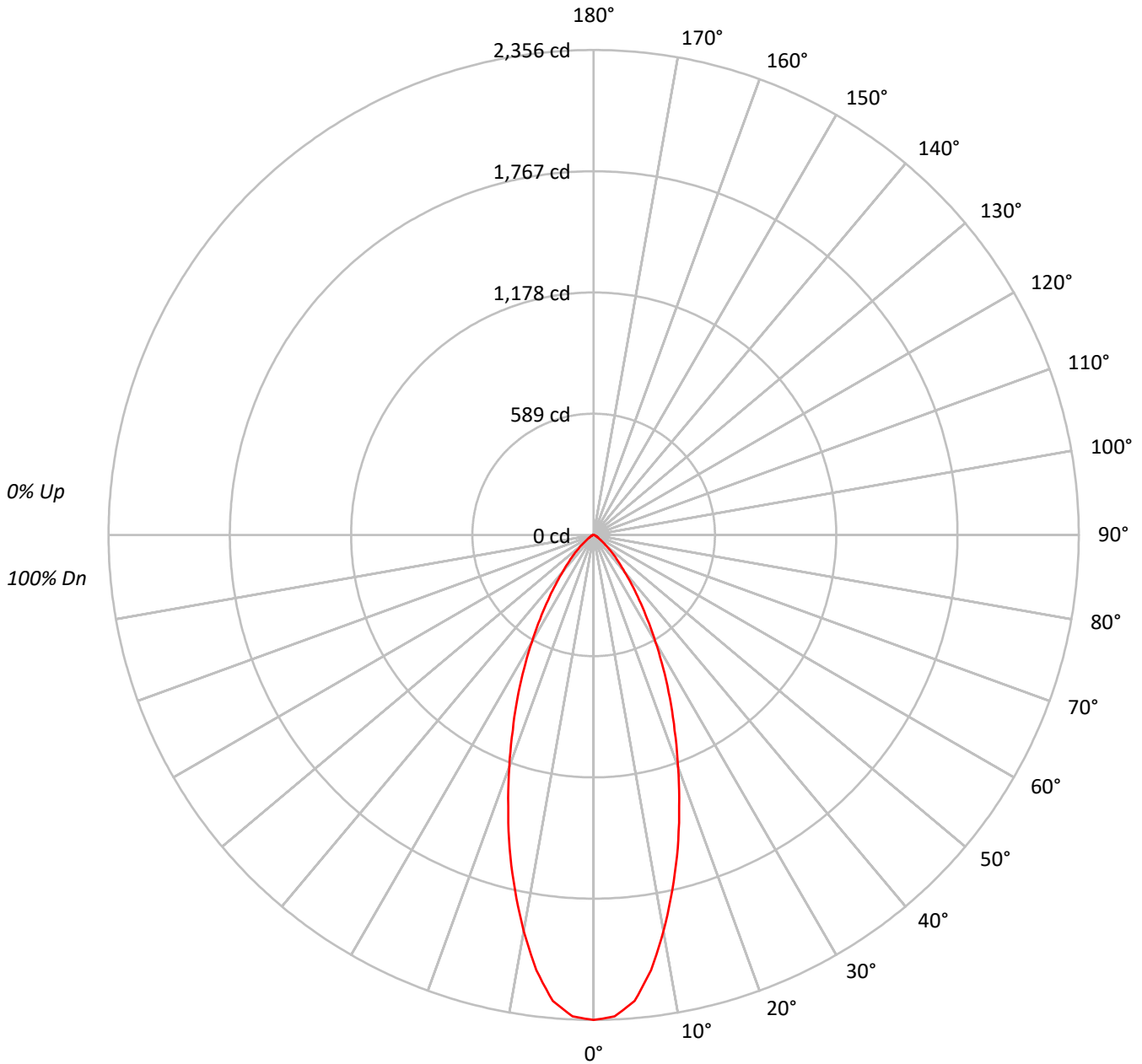
Lumens per Lamp: N/A
Luminaire Lumens: 1453.2 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

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°	186024
5°	180118
10°	156654
15°	128808
20°	100632
25°	76240
30°	54655
35°	37179
40°	23980
45°	15395
50°	9014
55°	5051
60°	3394
65°	2354
70°	2054
75°	1556
80°	1137
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15395 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.4	14.2
10°-20°	435.4	30.0
20°-30°	400.7	27.6
30°-40°	245.0	16.9
40°-50°	109.5	7.5
50°-60°	36.3	2.5
60°-70°	13.7	0.9
70°-80°	5.5	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°	1042.5	71.7
0°-40°	1287.5	88.6
0°-60°	1433.3	98.6
0°-90°	1453.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1453.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2356	
5°	2273	206
15°	1576	435
25°	875	401
35°	386	245
45°	138	110
55°	37	36
65°	13	14
75°	5	6
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2356.5
2.5°	2341.3
5°	2273.0
7.5°	2132.6
10°	1954.3
12.5°	1765.8
15°	1576.1
17.5°	1381.3
20°	1197.9
22.5°	1027.1
25°	875.3
27.5°	731.1
30°	599.6
32.5°	484.5
35°	385.8
37.5°	302.3
40°	232.7
42.5°	180.9
45°	137.9
47.5°	102.5
50°	73.4
52.5°	51.9
55°	36.7
57.5°	27.8
60°	21.5
62.5°	17.7
65°	12.6
67.5°	10.1
70°	8.9
72.5°	6.3
75°	5.1
77.5°	3.8
80°	2.5
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)