

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: P642688

Luminaire Tested: ML5615LSFL409FS1E - 696WB - 1200LM - 3500K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642688
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-46)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 696WB - 1200LM - 3500K
Description: ML56 RR, 40D TIR OPTIC, 6" SHALLOW WHITE BAFFLE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

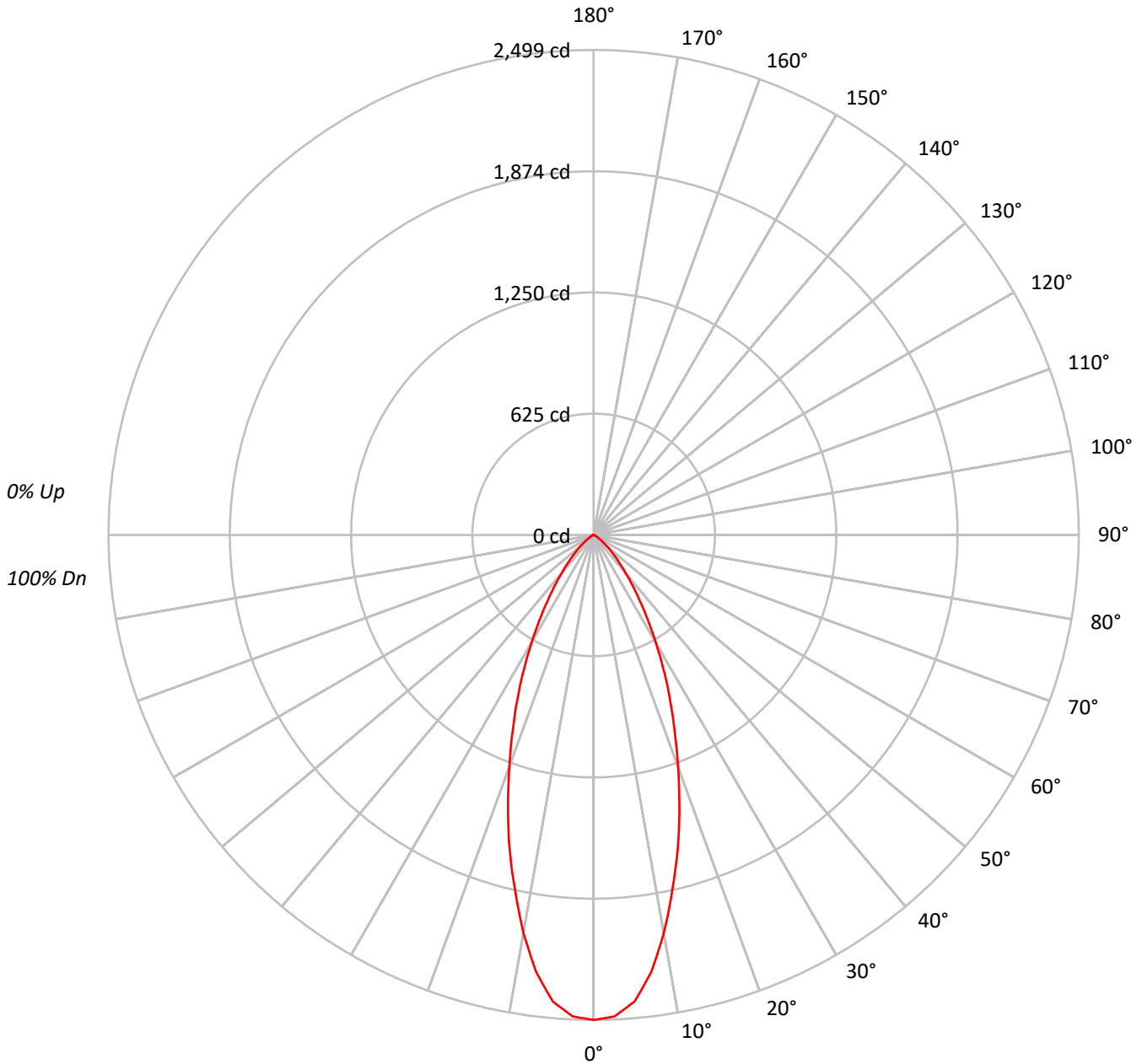
Lumens per Lamp: N/A
Luminaire Lumens: 1542.0 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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									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	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	101	98	95	98	95	93	95	93	91	93	91	89	87																												
3	103	96	91	87	101	95	90	87	92	89	85	90	87	84	88	85	83	81																												
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76																												
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71																												
6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66																												
7	84	75	69	65	83	74	69	65	73	68	65	72	68	64	71	67	64	63																												
8	80	71	65	61	79	70	65	61	69	64	61	68	64	61	67	63	60	59																												
9	77	67	62	58	76	67	61	58	66	61	57	65	60	57	64	60	57	56																												
10	73	64	58	55	72	64	58	55	63	58	54	62	57	54	61	57	54	53																												

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	136996
5°	132814
10°	115913
15°	95057
20°	74101
25°	56066
30°	40411
35°	27713
40°	18163
45°	11807
50°	6951
55°	3833
60°	2193
65°	1206
70°	641
75°	275
80°	410
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11807 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.5	14.2
10°-20°	462.3	30.0
20°-30°	424.9	27.6
30°-40°	263.2	17.1
40°-50°	120.4	7.8
50°-60°	39.0	2.5
60°-70°	10.1	0.7
70°-80°	2.1	0.1
80°-90°	0.5	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°	1106.7	71.8
0°-40°	1369.9	88.8
0°-60°	1529.3	99.2
0°-90°	1542.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1542.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2499	
5°	2414	219
15°	1675	462
25°	927	425
35°	414	263
45°	152	120
55°	40	39
65°	9	10
75°	1	2
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	2499.0
2.5°	2483.0
5°	2413.5
7.5°	2270.6
10°	2082.3
12.5°	1871.2
15°	1674.9
17.5°	1466.5
20°	1270.2
22.5°	1088.6
25°	926.9
27.5°	776.0
30°	638.4
32.5°	518.2
35°	414.1
37.5°	327.2
40°	253.8
42.5°	197.7
45°	152.3
47.5°	113.5
50°	81.5
52.5°	57.4
55°	40.1
57.5°	28.0
60°	20.0
62.5°	14.7
65°	9.3
67.5°	5.3
70°	4.0
72.5°	2.7
75°	1.3
77.5°	1.3
80°	1.3
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)