

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: P642589

Luminaire Tested: ML5615LSFL409FS1E - 692W - 1500LM - 4000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642589
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-39)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 692W - 1500LM - 4000K
Description: ML56 RR, 40D TIR OPTIC, 6" WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

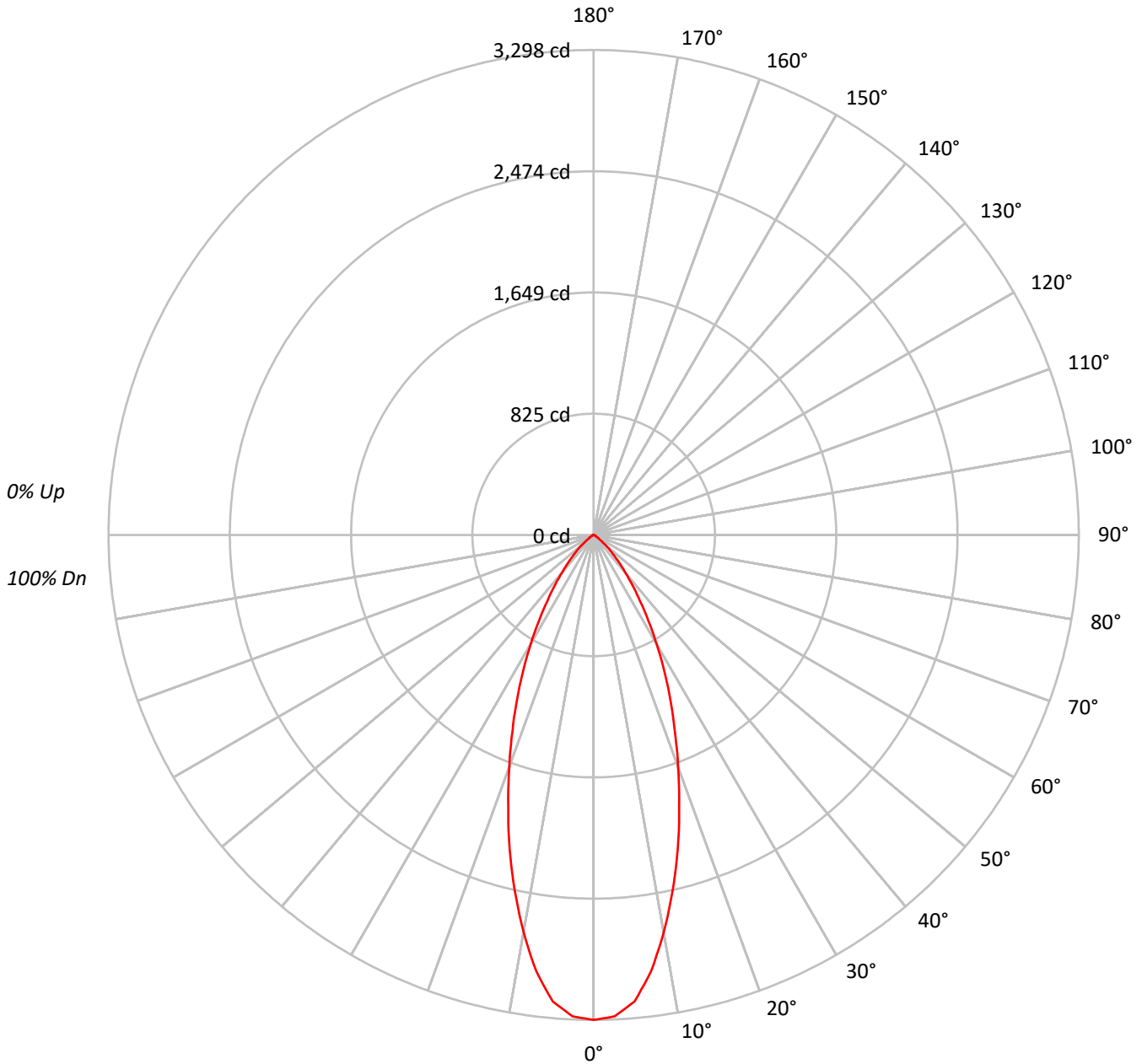
Lumens per Lamp: N/A
Luminaire Lumens: 2024.0 lumens
Efficiency: N/A
Efficacy: 118.4 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 17.1
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	98	96	95	94																			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87																			
3	103	96	92	88	101	95	91	87	92	89	86	90	87	84	88	85	83	81																			
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	78	76																			
5	93	85	79	75	91	84	79	75	82	78	74	80	76	73	79	75	73	71																			
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67																			
7	84	75	70	65	83	75	69	65	73	69	65	72	68	65	71	67	64	63																			
8	81	71	66	62	79	71	65	61	70	65	61	69	64	61	68	64	61	59																			
9	77	68	62	58	76	67	62	58	66	61	58	65	61	58	65	60	57	56																			
10	74	64	59	55	73	64	58	55	63	58	55	62	58	55	62	57	54	53																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	180802
5°	175275
10°	152714
15°	125421
20°	97904
25°	74478
30°	54008
35°	37002
40°	24016
45°	14932
50°	7838
55°	3546
60°	2324
65°	1375
70°	850
75°	741
80°	1105
85°	1132

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14932 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	289.4	14.3
10°-20°	610.4	30.2
20°-30°	564.4	27.9
30°-40°	350.9	17.3
40°-50°	154.1	7.6
50°-60°	37.9	1.9
60°-70°	11.1	0.5
70°-80°	4.4	0.2
80°-90°	1.5	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°	1464.2	72.3
0°-40°	1815.0	89.7
0°-60°	2007.1	99.2
0°-90°	2024.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2024.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3298	
5°	3185	289
15°	2210	610
25°	1231	564
35°	553	351
45°	193	154
55°	37	38
65°	11	11
75°	4	4
85°	2	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	3298.1
2.5°	3276.9
5°	3185.1
7.5°	2992.5
10°	2743.4
12.5°	2478.5
15°	2209.9
17.5°	1932.6
20°	1678.2
22.5°	1441.5
25°	1231.3
27.5°	1035.2
30°	853.2
32.5°	692.5
35°	552.9
37.5°	434.6
40°	335.6
42.5°	259.7
45°	192.6
47.5°	143.1
50°	91.9
52.5°	49.5
55°	37.1
57.5°	28.3
60°	21.2
62.5°	15.9
65°	10.6
67.5°	5.3
70°	5.3
72.5°	5.3
75°	3.5
77.5°	3.5
80°	3.5
82.5°	1.8
85°	1.8
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)