

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: P642586

Luminaire Tested: ML5615LSFL409FS1E - 692W - 1500LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642586
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 - 2700K
Description: ML56 RR, 40D TIR OPTIC, 6" WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

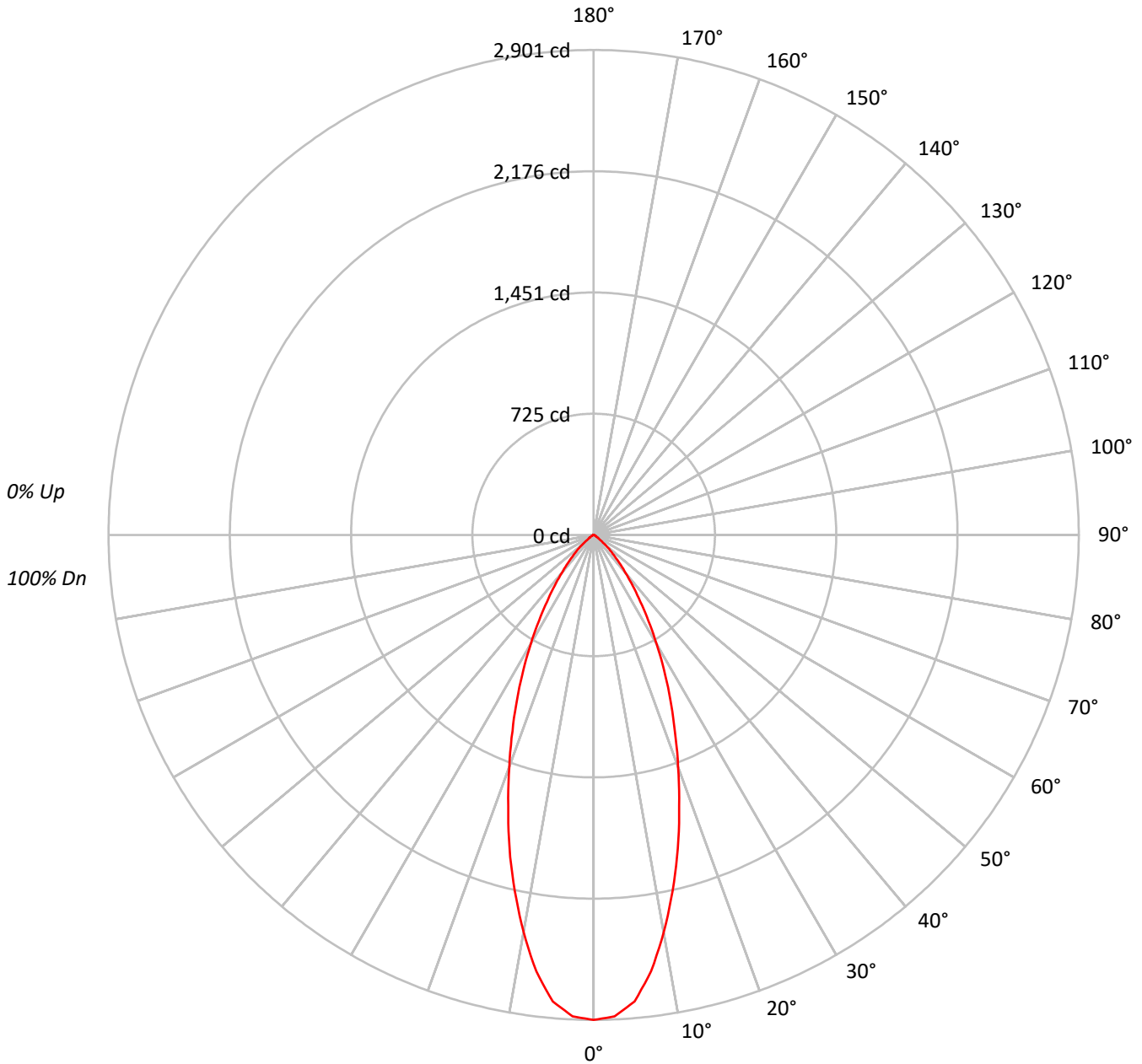
Lumens per Lamp: N/A
Luminaire Lumens: 1780.4 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 17.1
Input Voltage (V): NR
Input Current (Ain): 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°	159044
5°	154176
10°	134333
15°	110330
20°	86119
25°	65514
30°	47507
35°	32551
40°	21125
45°	13133
50°	6891
55°	3116
60°	2039
65°	1206
70°	753
75°	657
80°	979
85°	1006

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13133 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.5	14.3
10°-20°	536.9	30.2
20°-30°	496.5	27.9
30°-40°	308.6	17.3
40°-50°	135.6	7.6
50°-60°	33.3	1.9
60°-70°	9.7	0.5
70°-80°	3.9	0.2
80°-90°	1.3	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°	1287.9	72.3
0°-40°	1596.6	89.7
0°-60°	1765.5	99.2
0°-90°	1780.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1780.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2901	
5°	2802	255
15°	1944	537
25°	1083	496
35°	486	309
45°	169	136
55°	33	33
65°	9	10
75°	3	4
85°	2	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2901.2
2.5°	2882.5
5°	2801.7
7.5°	2632.3
10°	2413.2
12.5°	2180.2
15°	1944.0
17.5°	1700.0
20°	1476.2
22.5°	1268.0
25°	1083.1
27.5°	910.6
30°	750.5
32.5°	609.1
35°	486.4
37.5°	382.3
40°	295.2
42.5°	228.4
45°	169.4
47.5°	125.9
50°	80.8
52.5°	43.5
55°	32.6
57.5°	24.9
60°	18.6
62.5°	14.0
65°	9.3
67.5°	4.7
70°	4.7
72.5°	4.7
75°	3.1
77.5°	3.1
80°	3.1
82.5°	1.6
85°	1.6
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)