

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: P642548

Luminaire Tested: ML5615LSFL409FS1E - 691WB - 900LM - 3500K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642548
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-36)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 691WB - 900LM - 3500K
Description: ML56 RR, 40D TIR OPTIC, 6" DEADFRONT TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

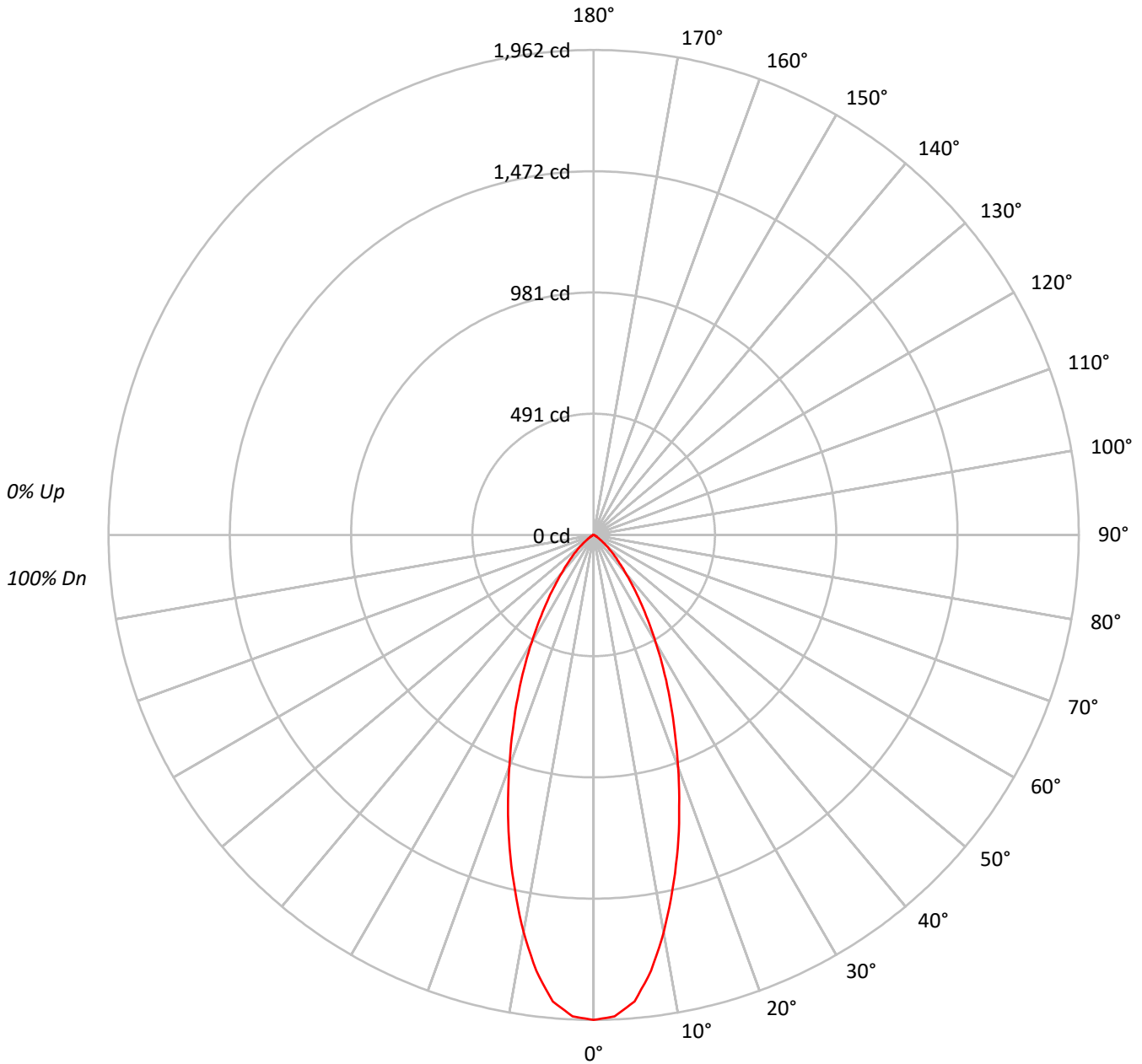
Lumens per Lamp: N/A
Luminaire Lumens: 1209.9 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 10.5
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				
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	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	99	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°	107563
5°	104254
10°	90819
15°	74495
20°	58158
25°	44011
30°	31752
35°	21837
40°	14284
45°	9334
50°	5492
55°	2925
60°	1623
65°	960
70°	513
75°	233
80°	347
85°	692

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9334 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.1	14.2
10°-20°	362.8	30.0
20°-30°	333.5	27.6
30°-40°	207.0	17.1
40°-50°	94.7	7.8
50°-60°	29.8	2.5
60°-70°	7.7	0.6
70°-80°	1.7	0.1
80°-90°	0.7	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°	868.3	71.8
0°-40°	1075.3	88.9
0°-60°	1199.8	99.2
0°-90°	1209.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1209.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1962	
5°	1894	172
15°	1313	363
25°	728	333
35°	326	207
45°	120	95
55°	31	30
65°	7	8
75°	1	2
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1962.1
2.5°	1949.4
5°	1894.5
7.5°	1778.3
10°	1631.5
12.5°	1472.1
15°	1312.6
17.5°	1151.0
20°	996.9
22.5°	854.3
25°	727.6
27.5°	608.3
30°	501.6
32.5°	406.6
35°	326.3
37.5°	257.7
40°	199.6
42.5°	155.2
45°	120.4
47.5°	88.7
50°	64.4
52.5°	44.4
55°	30.6
57.5°	20.1
60°	14.8
62.5°	10.6
65°	7.4
67.5°	4.2
70°	3.2
72.5°	2.1
75°	1.1
77.5°	1.1
80°	1.1
82.5°	1.1
85°	1.1
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)