

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: P642412

Luminaire Tested: ML5615LSFL409FS1E - 592W - 900LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642412
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-27)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 592W - 900LM - 3000K
Description: ML56 RR, 40D TIR OPTIC, 5" WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

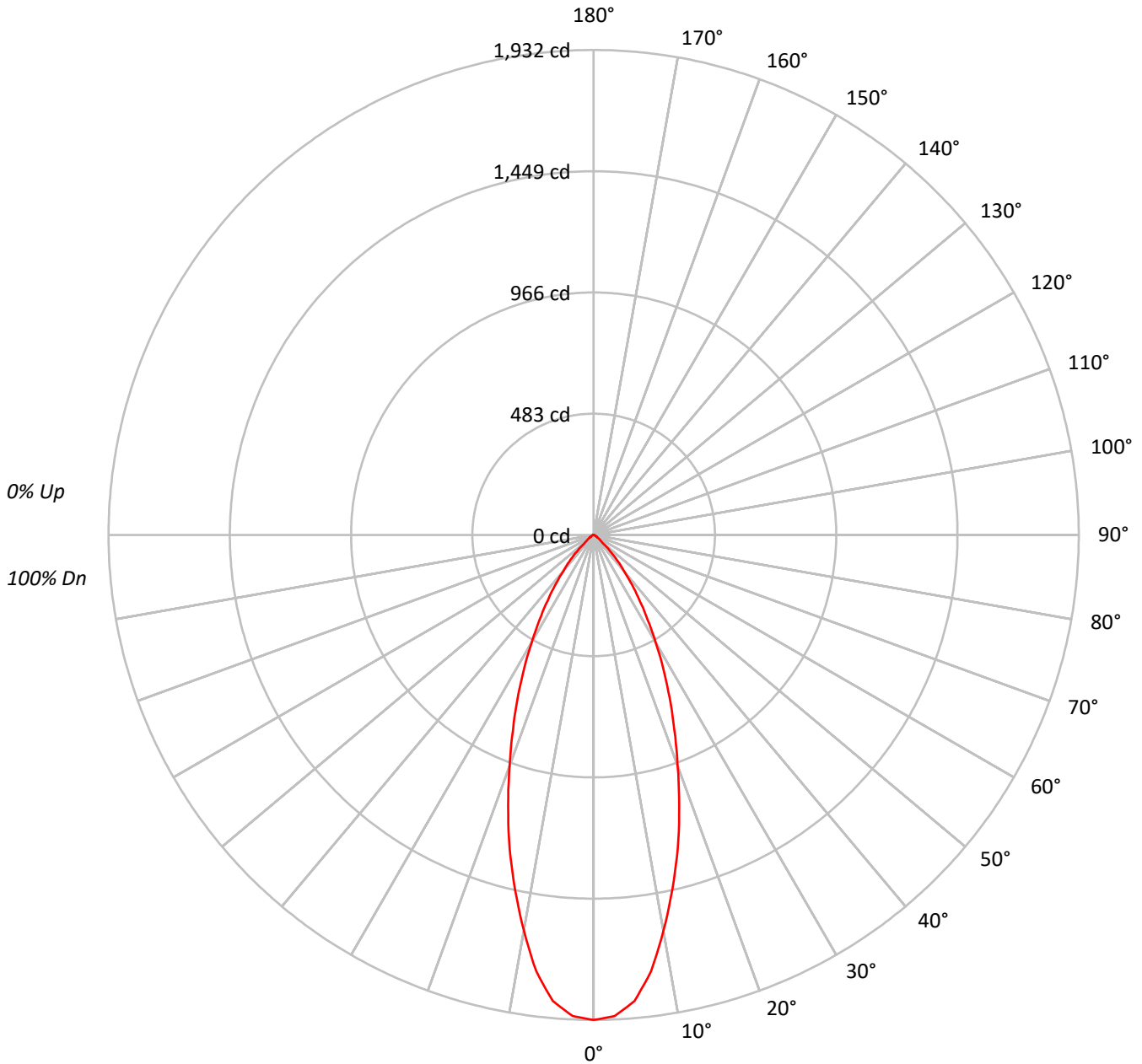
Lumens per Lamp: N/A
Luminaire Lumens: 1169.5 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 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									
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				100															
1	114	111	108	106	111	109	106	104	105	103	101	101	100	98	97	96	95	94				94															
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87				87															
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81				81															
4	98	90	85	81	96	89	84	80	87	83	80	85	82	79	83	80	78	76				76															
5	93	85	79	75	92	84	79	75	82	78	74	81	77	73	79	76	73	71				71															
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67				67															
7	85	76	70	66	83	75	69	66	74	69	65	73	68	65	71	68	65	63				63															
8	81	72	66	62	80	71	66	62	70	65	61	69	64	61	68	64	61	60				60															
9	77	68	62	58	76	67	62	58	67	62	58	66	61	58	65	61	58	56				56															
10	74	65	59	55	73	64	59	55	63	58	55	63	58	55	62	58	55	54				54															

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	152522
5°	147724
10°	128318
15°	105688
20°	82109
25°	62278
30°	45011
35°	30838
40°	19404
45°	11376
50°	4544
55°	2973
60°	2116
65°	1345
70°	1177
75°	1251
80°	1409
85°	906

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11376 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.3	14.5
10°-20°	356.8	30.5
20°-30°	327.8	28.0
30°-40°	202.4	17.3
40°-50°	79.1	6.8
50°-60°	20.5	1.7
60°-70°	8.1	0.7
70°-80°	4.1	0.3
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°	853.8	73.0
0°-40°	1056.2	90.3
0°-60°	1155.8	98.8
0°-90°	1169.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1169.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1932	
5°	1864	169
15°	1293	357
25°	715	328
35°	320	202
45°	102	79
55°	22	20
65°	7	8
75°	4	4
85°	1	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1932.1
2.5°	1918.7
5°	1864.2
7.5°	1753.1
10°	1600.8
12.5°	1446.5
15°	1293.2
17.5°	1132.7
20°	977.4
22.5°	839.5
25°	715.0
27.5°	598.8
30°	493.8
32.5°	400.2
35°	320.0
37.5°	251.0
40°	188.3
42.5°	144.0
45°	101.9
47.5°	58.6
50°	37.0
52.5°	28.8
55°	21.6
57.5°	16.5
60°	13.4
62.5°	11.3
65°	7.2
67.5°	5.1
70°	5.1
72.5°	4.1
75°	4.1
77.5°	3.1
80°	3.1
82.5°	2.1
85°	1.0
87.5°	1.0
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)