

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: P642439

Luminaire Tested: ML5615LSFL409FS1E - 593SNB - 1500LM - 4000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642439
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-30)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 593SNB - 1500LM - 4000K
Description: ML56 RR, 40D TIR OPTIC, 5" SATIN NICKLE BAFFLE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1986.9 lumens
Efficiency: N/A
Efficacy: 116.2 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

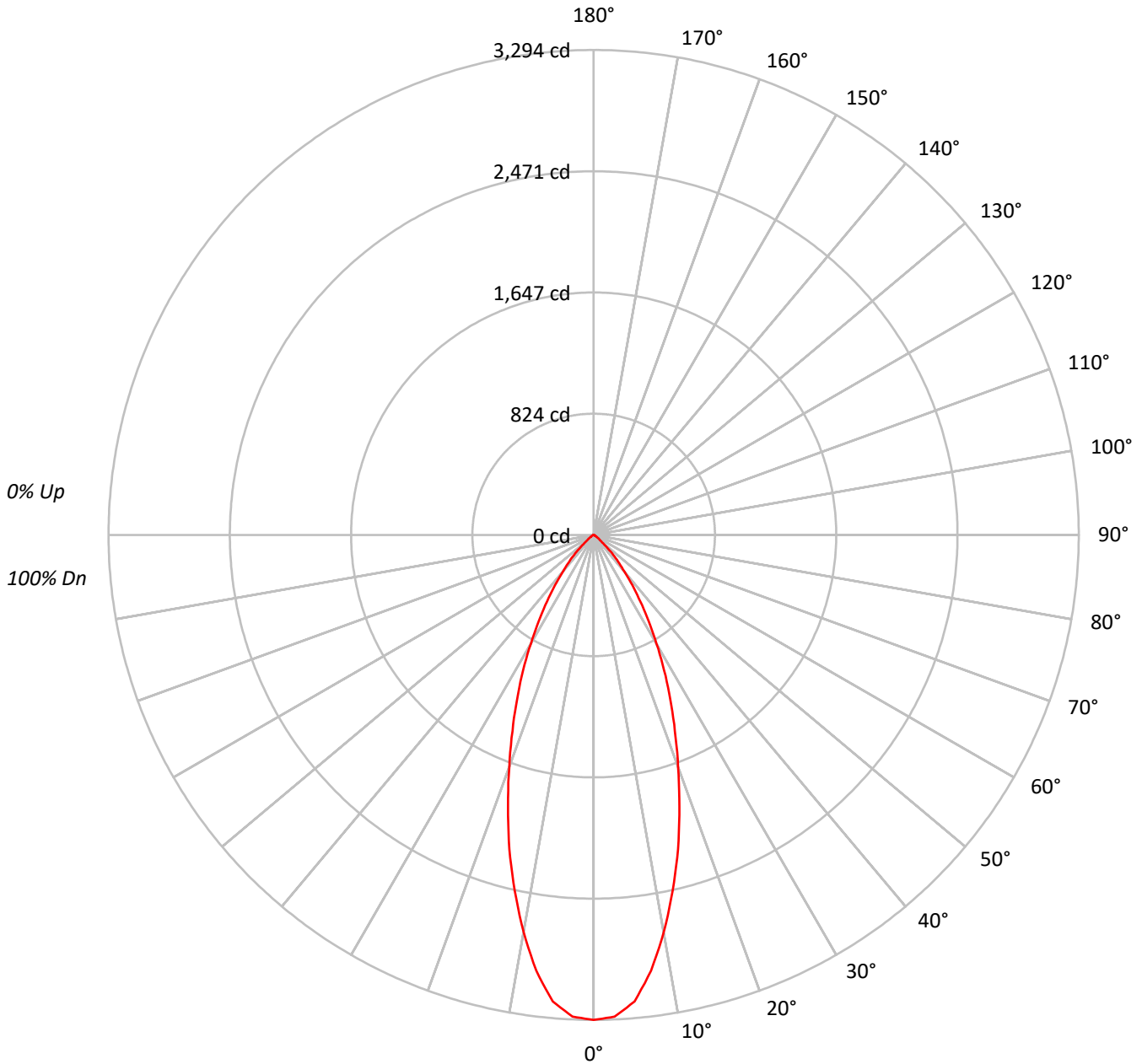
Input Watts (W): 17.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	109	106	111	109	107	105	105	103	102	101	100	99	98	97	96	94																			
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88																			
3	103	97	92	88	101	96	91	88	93	89	86	91	87	85	88	86	84	82																			
4	98	91	86	82	96	90	85	81	88	83	80	86	82	79	84	81	78	77																			
5	93	85	80	76	92	85	79	75	83	78	75	81	77	74	80	76	73	72																			
6	89	81	75	71	88	80	74	70	78	74	70	77	73	69	76	72	69	68																			
7	85	76	70	66	84	75	70	66	74	69	66	73	69	65	72	68	65	64																			
8	81	72	66	62	80	71	66	62	70	65	62	69	65	62	68	64	61	60																			
9	78	68	63	59	76	68	62	59	67	62	59	66	62	58	65	61	58	57																			
10	74	65	59	56	73	65	59	56	64	59	55	63	59	55	62	58	55	54																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	260055
5°	252086
10°	219587
15°	180687
20°	140746
25°	107144
30°	77808
35°	53138
40°	33326
45°	19727
50°	7381
55°	4377
60°	2510
65°	990
70°	415
75°	549
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 19727 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.9	14.5
10°-20°	610.1	30.7
20°-30°	564.1	28.4
30°-40°	349.1	17.6
40°-50°	136.2	6.9
50°-60°	30.4	1.5
60°-70°	6.9	0.3
70°-80°	1.2	0.1
80°-90°	0.0	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°	1463.1	73.6
0°-40°	1812.2	91.2
0°-60°	1978.8	99.6
0°-90°	1986.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1986.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3294	
5°	3181	289
15°	2211	610
25°	1230	564
35°	551	349
45°	177	136
55°	32	30
65°	5	7
75°	2	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	3294.3
2.5°	3274.9
5°	3181.2
7.5°	2985.0
10°	2739.4
12.5°	2476.0
15°	2210.9
17.5°	1933.5
20°	1675.4
22.5°	1440.4
25°	1230.1
27.5°	1035.7
30°	853.6
32.5°	692.8
35°	551.4
37.5°	431.2
40°	323.4
42.5°	245.7
45°	176.7
47.5°	104.3
50°	60.1
52.5°	44.2
55°	31.8
57.5°	23.0
60°	15.9
62.5°	12.4
65°	5.3
67.5°	1.8
70°	1.8
72.5°	1.8
75°	1.8
77.5°	0.0
80°	0.0
82.5°	0.0
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)