

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: P642424

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

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642424
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-29)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 593BB - 1500LM - 4000K
Description: ML56 RR, 40D TIR OPTIC, 5" BLACK BAFFLE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

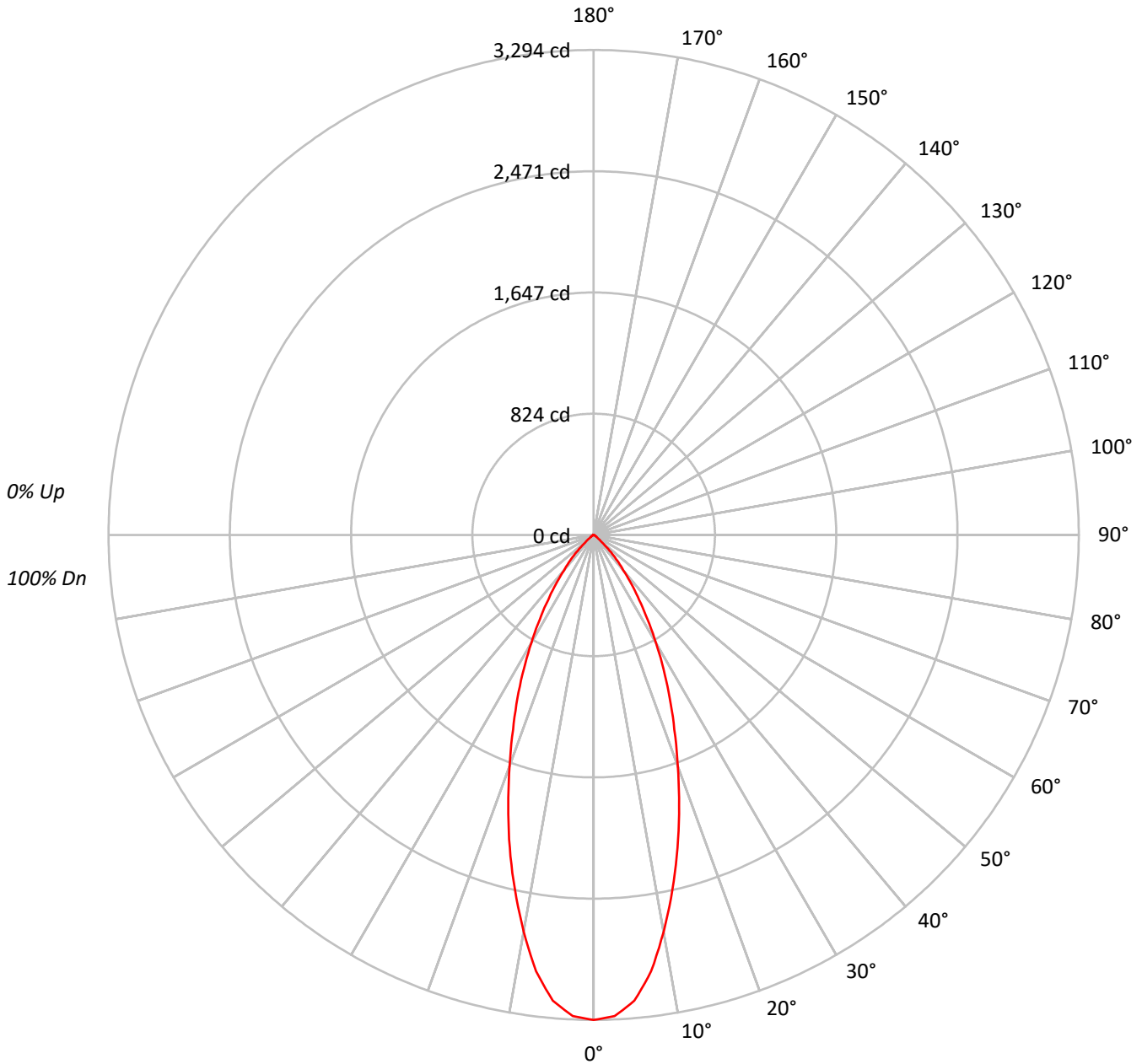
Lumens per Lamp: N/A
Luminaire Lumens: 1958.5 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	260055
5°	251650
10°	219250
15°	179870
20°	140158
25°	106482
30°	77088
35°	52001
40°	32265
45°	18566
50°	6521
55°	3647
60°	1958
65°	654
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18566 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.8	14.7
10°-20°	608.2	31.1
20°-30°	560.2	28.6
30°-40°	342.7	17.5
40°-50°	128.1	6.5
50°-60°	26.0	1.3
60°-70°	4.5	0.2
70°-80°	0.0	0.0
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°	1457.2	74.4
0°-40°	1799.9	91.9
0°-60°	1954.0	99.8
0°-90°	1958.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1958.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3294	
5°	3176	289
15°	2201	608
25°	1222	560
35°	540	343
45°	166	128
55°	26	26
65°	4	4
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	3294.3
2.5°	3271.3
5°	3175.7
7.5°	2990.0
10°	2735.2
12.5°	2469.8
15°	2200.9
17.5°	1928.4
20°	1668.4
22.5°	1431.3
25°	1222.5
27.5°	1026.1
30°	845.7
32.5°	681.1
35°	539.6
37.5°	422.8
40°	313.1
42.5°	237.1
45°	166.3
47.5°	90.2
50°	53.1
52.5°	38.9
55°	26.5
57.5°	19.5
60°	12.4
62.5°	8.8
65°	3.5
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
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)