

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: P643831

Luminaire Tested: ML5615LSWFL559FS1E - 593TBZB - 1500LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P643831
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-54)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSWFL559FS1E - 593TBZB - 1500LM - 2700K
Description: ML56 RR, 55D TIR OPTIC, 5" TUSCON BRONZE BAFFLE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

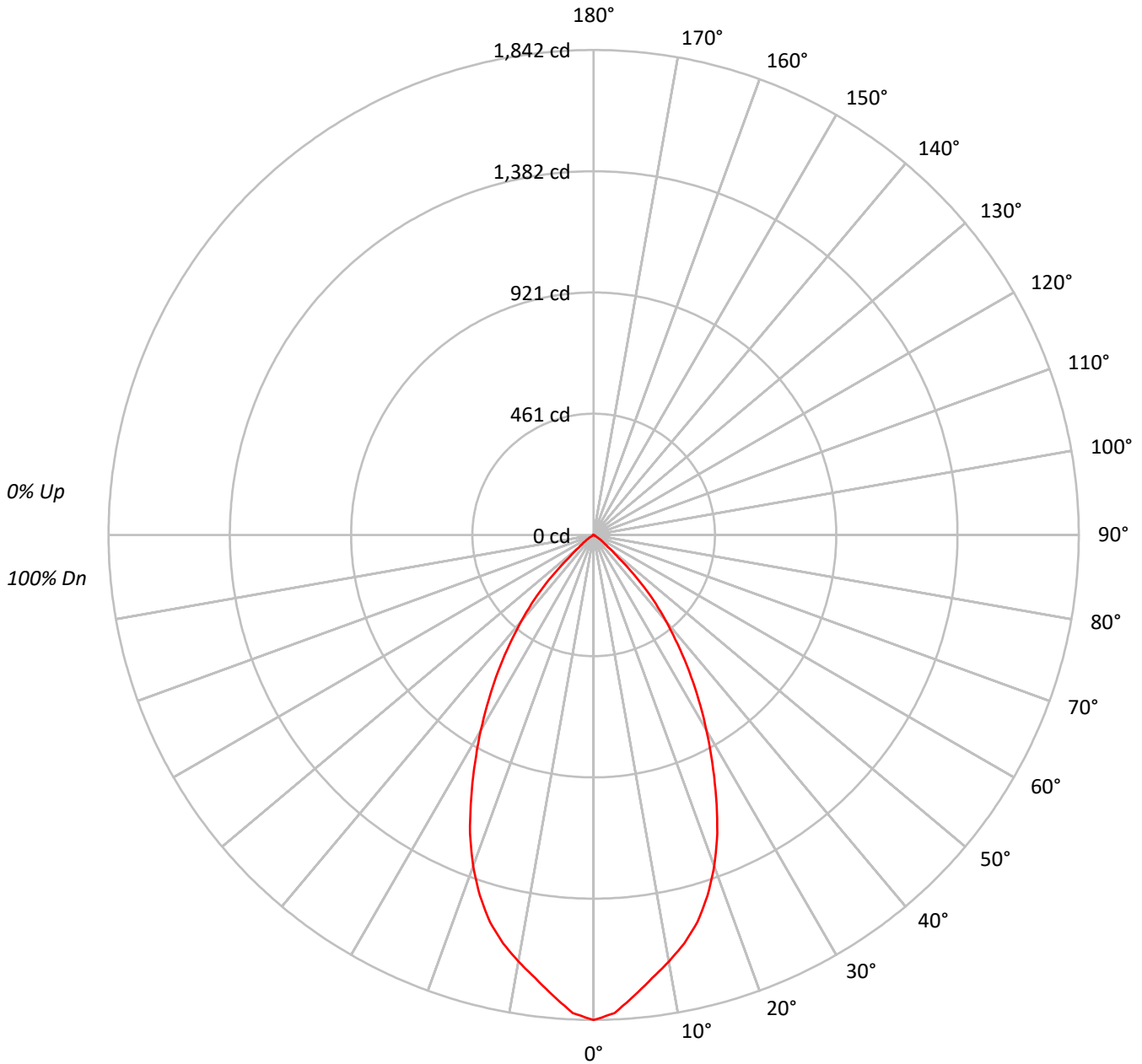
Lumens per Lamp: N/A
Luminaire Lumens: 1694.9 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P643831
CATALOG NUMBER: ML5615LSWFL559FS1E - 593TBZB - 1500LM - 2700K

Luminous Intensity Polar Plot





TEST NUMBER: P643831

CATALOG NUMBER: ML5615LSWFL559FS1E - 593TBZB - 1500LM - 2700K

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	113	110	108	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93			
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86			
3	102	95	90	86	100	94	89	85	91	87	84	89	85	82	86	83	81	79			
4	96	88	83	78	94	87	82	78	85	80	77	83	79	76	81	78	75	73			
5	91	82	76	72	89	81	76	71	80	75	71	78	73	70	76	72	69	68			
6	86	77	71	66	85	76	70	66	75	69	65	73	68	65	72	68	65	63			
7	82	72	66	61	80	71	65	61	70	65	61	69	64	60	68	63	60	59			
8	77	67	61	57	76	67	61	57	66	60	57	65	60	56	64	59	56	55			
9	73	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	52	51			
10	70	60	54	50	69	59	54	50	58	53	49	58	53	49	57	52	49	48			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	145449
5°	139229
10°	131861
15°	124403
20°	112460
25°	95751
30°	78091
35°	60838
40°	43899
45°	26380
50°	8977
55°	4060
60°	1231
65°	299
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 26380 cd/sqm



TEST NUMBER: P643831

CATALOG NUMBER: ML5615LSWFL559FS1E - 593TBZB - 1500LM - 2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.2	9.7
10°-20°	423.6	25.0
20°-30°	502.4	29.6
30°-40°	393.4	23.2
40°-50°	179.8	10.6
50°-60°	29.4	1.7
60°-70°	2.1	0.1
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°	1090.2	64.3
0°-40°	1483.6	87.5
0°-60°	1692.8	99.9
0°-90°	1694.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1694.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1842	
5°	1757	164
15°	1522	424
25°	1099	502
35°	631	393
45°	236	180
55°	30	29
65°	2	2
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P643831

CATALOG NUMBER: ML5615LSWFL559FS1E - 593TBZB - 1500LM - 2700K

CANDELA DISTRIBUTION (FULL):

	0°
0°	1842.5
2.5°	1817.6
5°	1757.0
7.5°	1697.9
10°	1645.0
12.5°	1589.0
15°	1522.2
17.5°	1436.7
20°	1338.7
22.5°	1226.8
25°	1099.3
27.5°	974.9
30°	856.7
32.5°	741.7
35°	631.3
37.5°	524.0
40°	426.0
42.5°	334.3
45°	236.3
47.5°	129.1
50°	73.1
52.5°	46.6
55°	29.5
57.5°	17.1
60°	7.8
62.5°	3.1
65°	1.6
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

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



— 0°-180°

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)