

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: P643876

Luminaire Tested: ML5615LSWFL559FS1E - 594TBZB - 1500LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P643876
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-57)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSWFL559FS1E - 594TBZB - 1500LM - 2700K
Description: ML56 RR, 55D TIR OPTIC, 5" TUSCON BRONZE GIMBAL TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1768.0 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.88
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

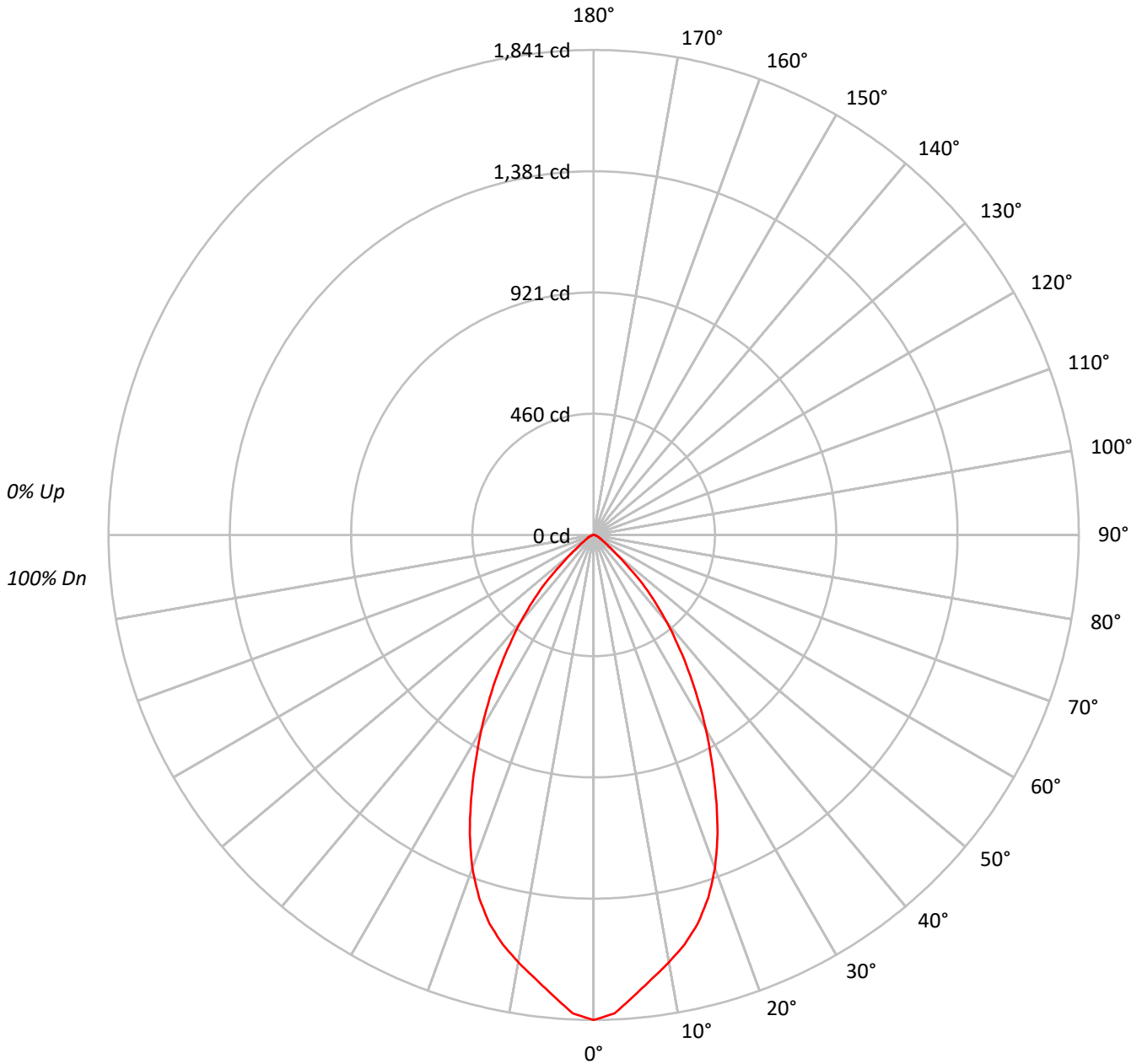
Input Watts (W): 17.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P643876

CATALOG NUMBER: ML5615LSWFL559FS1E - 594TBZB - 1500LM - 2700K

Luminous Intensity Polar Plot





TEST NUMBER: P643876

CATALOG NUMBER: ML5615LSWFL559FS1E - 594TBZB - 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	100	100	100
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92	92	92	92
2	107	101	97	93	105	100	96	92	96	93	90	93	91	88	91	88	87	85	85	85	85
3	101	94	88	84	99	92	87	83	90	86	82	87	84	81	85	82	80	78	78	78	78
4	95	87	81	76	93	86	80	76	84	79	75	82	77	74	80	76	73	72	72	72	72
5	90	81	74	70	88	80	74	69	78	73	69	76	72	68	75	71	68	66	66	66	66
6	85	75	69	64	83	74	68	64	73	68	64	71	67	63	70	66	63	61	61	61	61
7	80	70	64	59	79	70	64	59	68	63	59	67	62	59	66	62	58	57	57	57	57
8	76	66	59	55	75	65	59	55	64	59	55	63	58	54	62	58	54	53	53	53	53
9	72	62	56	51	71	61	55	51	60	55	51	59	54	51	59	54	51	49	49	49	49
10	69	58	52	48	68	58	52	48	57	52	48	56	51	48	55	51	47	46	46	46	46

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	145362
5°	139142
10°	132021
15°	124811
20°	113015
25°	95638
30°	77544
35°	60250
40°	44394
45°	29171
50°	14135
55°	7487
60°	4910
65°	4072
70°	3231
75°	2379
80°	1409
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 29171 cd/sqm



TEST NUMBER: P643876

CATALOG NUMBER: ML5615LSWFL559FS1E - 594TBZB - 1500LM - 2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.3	9.3
10°-20°	425.2	24.0
20°-30°	501.8	28.4
30°-40°	391.0	22.1
40°-50°	199.9	11.3
50°-60°	54.4	3.1
60°-70°	22.1	1.2
70°-80°	8.4	0.5
80°-90°	0.9	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°	1091.2	61.7
0°-40°	1482.3	83.8
0°-60°	1736.6	98.2
0°-90°	1768.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1768.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1841	
5°	1756	164
15°	1527	425
25°	1098	502
35°	625	391
45°	261	200
55°	54	54
65°	22	22
75°	8	8
85°	0	1
90°	0	



TEST NUMBER: P643876

CATALOG NUMBER: ML5615LSWFL559FS1E - 594TBZB - 1500LM - 2700K

CANDELA DISTRIBUTION (FULL):

0°	
0°	1841.4
2.5°	1818.1
5°	1755.9
7.5°	1698.3
10°	1647.0
12.5°	1592.6
15°	1527.2
17.5°	1444.8
20°	1345.3
22.5°	1228.6
25°	1098.0
27.5°	970.5
30°	850.7
32.5°	734.1
35°	625.2
37.5°	522.6
40°	430.8
42.5°	343.7
45°	261.3
47.5°	172.6
50°	115.1
52.5°	77.8
55°	54.4
57.5°	40.4
60°	31.1
62.5°	26.4
65°	21.8
67.5°	18.7
70°	14.0
72.5°	10.9
75°	7.8
77.5°	4.7
80°	3.1
82.5°	1.6
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)