

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: P642029

Luminaire Tested: ML5612LSWFL5597FS1E - 593WB - 1200LM - 4000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642029
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-51)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSWFL5597FS1E - 593WB - 1200LM - 4000K
Description: ML56 RR, 55D TIR OPTIC, 5" WHITE BAFFLE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1683.1 lumens
Efficiency: N/A
Efficacy: 102.0 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

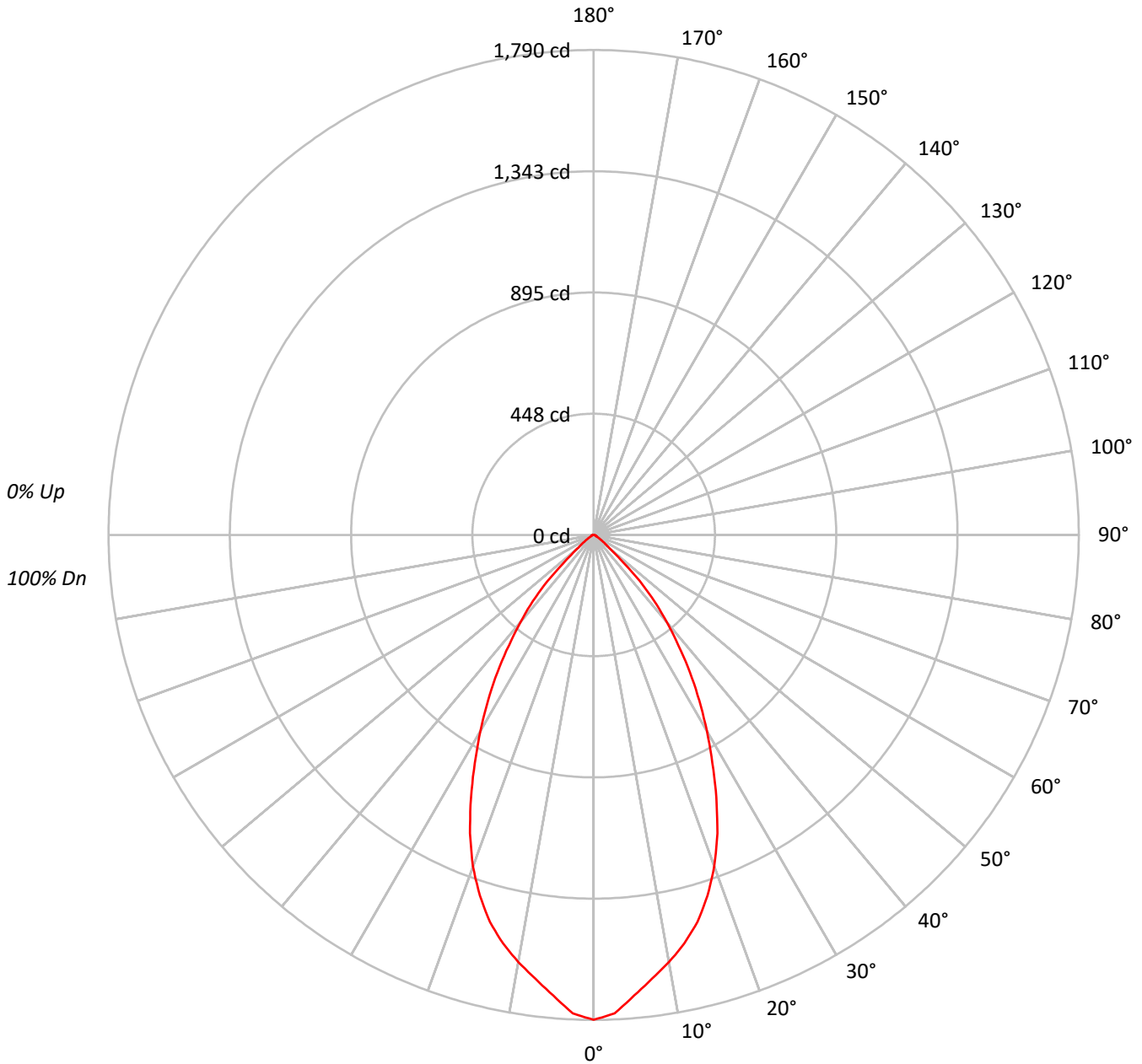
Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P642029

CATALOG NUMBER: ML5612LSWFL5597FS1E - 593WB - 1200LM - 4000K

Luminous Intensity Polar Plot





TEST NUMBER: P642029

CATALOG NUMBER: ML5612LSWFL5597FS1E - 593WB - 1200LM - 4000K

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
1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93			93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85			85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	86	83	80	79			79
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72			72
5	90	82	75	71	89	81	75	70	79	74	70	77	73	69	75	72	68	67			67
6	85	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62			62
7	81	71	65	60	80	70	64	60	69	64	60	68	63	59	67	62	59	58			58
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54			54
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	52	50			50
10	69	59	53	49	68	59	53	49	58	52	49	57	52	48	56	52	48	47			47

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	141281
5°	135283
10°	128302
15°	120864
20°	109361
25°	93242
30°	76095
35°	59614
40°	43168
45°	26816
50°	9591
55°	5161
60°	2605
65°	1961
70°	2077
75°	1830
80°	2046
85°	2717

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 26816 cd/sqm



TEST NUMBER: P642029

CATALOG NUMBER: ML5612LSWFL5597FS1E - 593WB - 1200LM - 4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.7	9.5
10°-20°	411.8	24.5
20°-30°	488.8	29.0
30°-40°	385.0	22.9
40°-50°	180.9	10.7
50°-60°	36.4	2.2
60°-70°	10.9	0.6
70°-80°	6.9	0.4
80°-90°	2.7	0.2
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°	1060.3	63.0
0°-40°	1445.3	85.9
0°-60°	1662.6	98.8
0°-90°	1683.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1683.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1790	
5°	1707	160
15°	1479	412
25°	1070	489
35°	619	385
45°	240	181
55°	38	36
65°	10	11
75°	6	7
85°	3	3
90°	0	



TEST NUMBER: P642029

CATALOG NUMBER: ML5612LSWFL5597FS1E - 593WB - 1200LM - 4000K

CANDELA DISTRIBUTION (FULL):

	0°
0°	1789.7
2.5°	1767.2
5°	1707.2
7.5°	1651.6
10°	1600.6
12.5°	1545.0
15°	1478.9
17.5°	1396.4
20°	1301.8
22.5°	1192.2
25°	1070.5
27.5°	948.9
30°	834.8
32.5°	725.2
35°	618.6
37.5°	513.5
40°	418.9
42.5°	331.8
45°	240.2
47.5°	133.6
50°	78.1
52.5°	54.1
55°	37.5
57.5°	25.5
60°	16.5
62.5°	12.0
65°	10.5
67.5°	9.0
70°	9.0
72.5°	7.5
75°	6.0
77.5°	6.0
80°	4.5
82.5°	3.0
85°	3.0
87.5°	1.5
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)