

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: P640517

Luminaire Tested: ML5609LSWFL55D2W1E - 693SNB - 900LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640517
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-65)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSWFL55D2W1E - 693SNB - 900LM - 2700K
Description: ML56 RR, 55D TIR OPTIC, 6" SATIN NICKLE BAFFLE TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1124.6 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

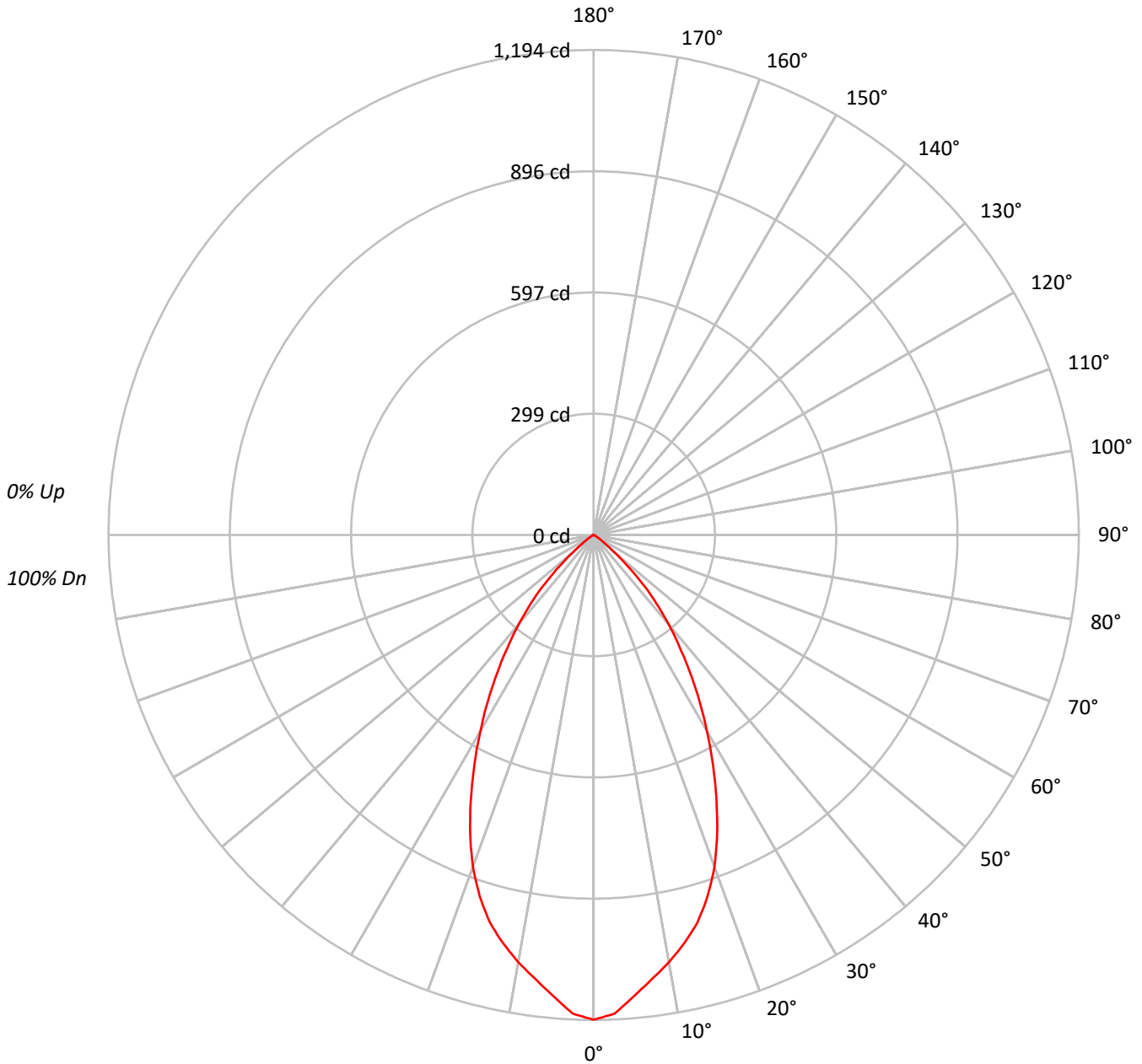
Input Watts (W): 11.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P640517

CATALOG NUMBER: ML5609LSWFL55D2W1E - 693SNB - 900LM - 2700K

Luminous Intensity Polar Plot





TEST NUMBER: P640517

CATALOG NUMBER: ML5609LSWFL55D2W1E - 693SNB - 900LM - 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
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93			93
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86			86
3	101	95	89	85	99	93	88	85	91	87	83	88	85	82	86	83	81	79			79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	74	73			73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67			67
6	86	76	70	65	84	75	70	65	74	69	65	72	68	64	71	67	64	62			62
7	81	71	65	60	80	71	65	60	69	64	60	68	63	60	67	63	59	58			58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	55	54			54
9	73	63	57	52	72	62	56	52	61	56	52	60	55	52	60	55	52	50			50
10	69	59	53	49	68	59	53	49	58	52	49	57	52	49	56	52	48	47			47

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	65439
5°	62706
10°	59457
15°	56056
20°	50708
25°	43212
30°	35303
35°	27639
40°	20496
45°	13319
50°	5740
55°	2112
60°	987
65°	259
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13319 cd/sqm



TEST NUMBER: P640517

CATALOG NUMBER: ML5609LSWFL55D2W1E - 693SNB - 900LM - 2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.6	9.5
10°-20°	274.9	24.4
20°-30°	326.4	29.0
30°-40°	258.3	23.0
40°-50°	131.1	11.7
50°-60°	24.6	2.2
60°-70°	2.8	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°	707.9	62.9
0°-40°	966.2	85.9
0°-60°	1121.8	99.8
0°-90°	1124.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1124.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1194	
5°	1140	107
15°	988	275
25°	714	326
35°	413	258
45°	172	131
55°	22	25
65°	2	3
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P640517

CATALOG NUMBER: ML5609LSWFL55D2W1E - 693SNB - 900LM - 2700K

CANDELA DISTRIBUTION (FULL):

	0°
0°	1193.7
2.5°	1179.7
5°	1139.5
7.5°	1102.3
10°	1068.1
12.5°	1029.9
15°	987.7
17.5°	932.5
20°	869.2
22.5°	794.8
25°	714.4
27.5°	635.0
30°	557.7
32.5°	484.3
35°	413.0
37.5°	346.7
40°	286.4
42.5°	228.1
45°	171.8
47.5°	112.5
50°	67.3
52.5°	36.2
55°	22.1
57.5°	15.1
60°	9.0
62.5°	4.0
65°	2.0
67.5°	1.0
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)