

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: P640499

Luminaire Tested: ML5609LSWFL55D2W1E - 594SNB - 900LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640499
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-56)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSWFL55D2W1E - 594SNB - 900LM - 2700K
Description: ML56 RR, 55D TIR OPTIC, 5" SATIN NICKLE GIMBAL TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

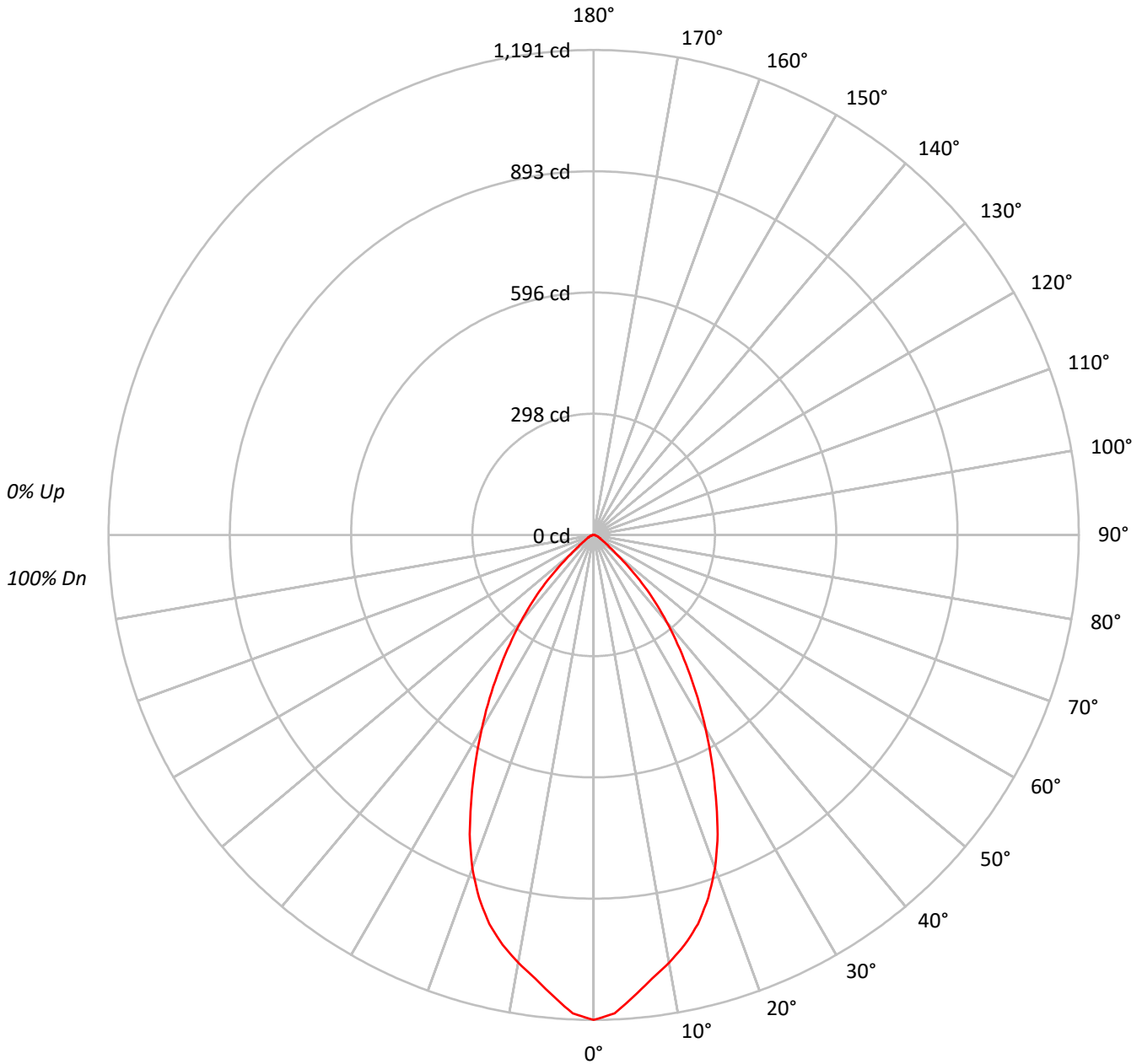
Lumens per Lamp: N/A
Luminaire Lumens: 1143.7 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.88
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 11.8
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: P640499
CATALOG NUMBER: ML5609LSWFL55D2W1E - 594SNB - 900LM - 2700K

Luminous Intensity Polar Plot





TEST NUMBER: P640499

CATALOG NUMBER: ML5609LSWFL55D2W1E - 594\$NB - 900LM - 2700K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	110	108	105	103	104	102	100	100	98	97	97	95	94	92			92																
2	107	101	97	93	105	100	96	92	96	93	90	93	91	88	91	88	87	85			85																
3	101	94	88	84	99	92	87	83	90	86	82	87	84	81	85	82	80	78			78																
4	95	87	81	76	93	86	80	76	84	79	75	82	77	74	80	76	73	72			72																
5	90	81	74	70	88	80	74	70	78	73	69	76	72	68	75	71	68	66			66																
6	85	75	69	64	83	74	68	64	73	68	64	71	67	63	70	66	63	61			61																
7	80	70	64	59	79	70	64	59	68	63	59	67	62	59	66	62	58	57			57																
8	76	66	59	55	75	65	59	55	64	59	55	63	58	54	62	58	54	53			53																
9	72	62	56	51	71	61	55	51	60	55	51	59	54	51	59	54	51	49			49																
10	69	58	52	48	68	58	52	48	57	52	48	56	51	48	55	51	47	46			46																

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	94019
5°	90083
10°	85489
15°	80843
20°	73145
25°	61755
30°	50070
35°	38904
40°	28772
45°	18834
50°	9002
55°	4831
60°	3173
65°	2634
70°	2308
75°	1525
80°	909
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18834 cd/sqm



TEST NUMBER: P640499

CATALOG NUMBER: ML5609LSWFL55D2W1E - 594\$NB - 900LM - 2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.3	9.3
10°-20°	275.3	24.1
20°-30°	324.4	28.4
30°-40°	252.9	22.1
40°-50°	129.3	11.3
50°-60°	35.0	3.1
60°-70°	14.4	1.3
70°-80°	5.5	0.5
80°-90°	0.5	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°	706.0	61.7
0°-40°	958.9	83.8
0°-60°	1123.2	98.2
0°-90°	1143.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1143.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1191	
5°	1137	106
15°	989	275
25°	709	324
35°	404	253
45°	169	129
55°	35	35
65°	14	14
75°	5	6
85°	0	1
90°	0	



TEST NUMBER: P640499

CATALOG NUMBER: ML5609LSWFL55D2W1E - 594\$NB - 900LM - 2700K

CANDELA DISTRIBUTION (FULL):

	0°
0°	1191.0
2.5°	1176.0
5°	1136.8
7.5°	1098.6
10°	1066.5
12.5°	1031.4
15°	989.2
17.5°	935.0
20°	870.7
22.5°	795.4
25°	709.0
27.5°	627.7
30°	549.3
32.5°	475.0
35°	403.7
37.5°	338.4
40°	279.2
42.5°	221.9
45°	168.7
47.5°	112.5
50°	73.3
52.5°	50.2
55°	35.1
57.5°	26.1
60°	20.1
62.5°	17.1
65°	14.1
67.5°	12.1
70°	10.0
72.5°	7.0
75°	5.0
77.5°	3.0
80°	2.0
82.5°	1.0
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)