

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: P640664

Luminaire Tested: ML5612LSFL4097FS1E - 594SNB - 1200LM - 4000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640664
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-33)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSFL4097FS1E - 594SNB - 1200LM - 4000K
Description: ML56 RR, 40D TIR OPTIC, 5" SATIN NICKLE GIMBAL TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

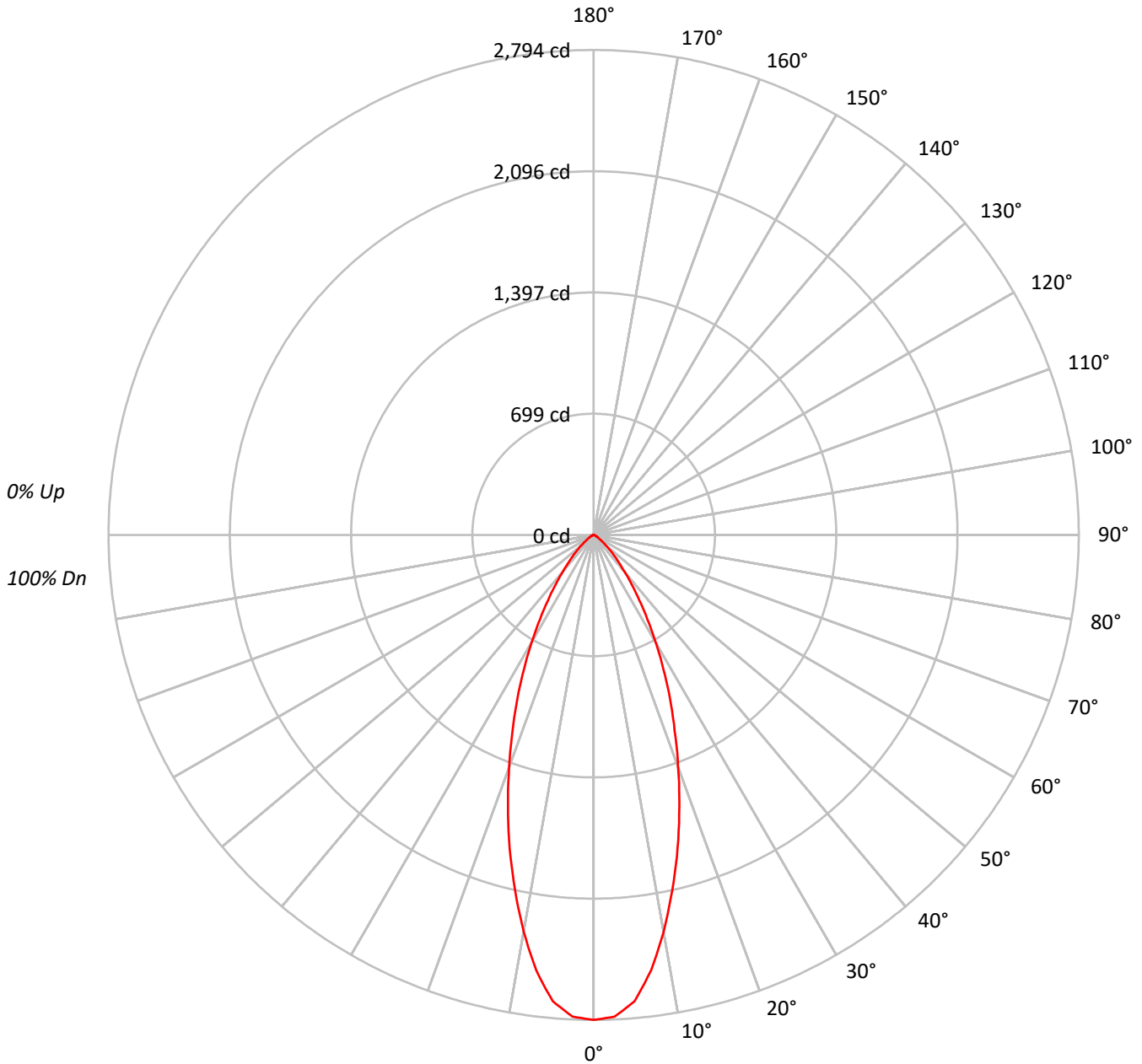
Lumens per Lamp: N/A
Luminaire Lumens: 1723.7 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 16.5
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: P640664
CATALOG NUMBER: ML5612LSFL4097FS1E - 594SNB - 1200LM - 4000K

Luminous Intensity Polar Plot





TEST NUMBER: P640664

CATALOG NUMBER: ML5612LSFL4097FS1E - 594SNB - 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			
1	113	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93			
2	108	103	99	96	106	101	98	95	98	95	92	95	93	90	92	90	89	87			
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	87	85	83	81			
4	97	90	84	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76			
5	93	84	79	74	91	83	78	74	82	77	73	80	76	73	79	75	72	71			
6	88	79	74	69	87	79	73	69	77	72	69	76	71	68	74	71	68	66			
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62			
8	80	71	65	61	79	70	65	61	69	64	61	68	64	60	67	63	60	59			
9	77	67	61	58	76	67	61	57	66	61	57	65	60	57	64	60	57	56			
10	73	64	58	54	72	63	58	54	63	58	54	62	57	54	61	57	54	53			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	220577
5°	213693
10°	185968
15°	152688
20°	119509
25°	90455
30°	64974
35°	44108
40°	28452
45°	18432
50°	10684
55°	5987
60°	4026
65°	2802
70°	2077
75°	1830
80°	1364
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18432 cd/sqm



TEST NUMBER: P640664

CATALOG NUMBER: ML5612LSFL4097FS1E - 594SNB - 1200LM - 4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.9	14.2
10°-20°	516.6	30.0
20°-30°	475.5	27.6
30°-40°	290.8	16.9
40°-50°	129.9	7.5
50°-60°	43.1	2.5
60°-70°	16.1	0.9
70°-80°	5.9	0.3
80°-90°	0.8	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°	1237.0	71.8
0°-40°	1527.8	88.6
0°-60°	1700.8	98.7
0°-90°	1723.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1723.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2794	
5°	2697	245
15°	1868	517
25°	1038	476
35°	458	291
45°	165	130
55°	44	43
65°	15	16
75°	6	6
85°	0	1
90°	0	



TEST NUMBER: P640664

CATALOG NUMBER: ML5612LSFL4097FS1E - 594SNB - 1200LM - 4000K

CANDELA DISTRIBUTION (FULL):

	0°
0°	2794.2
2.5°	2777.7
5°	2696.7
7.5°	2531.6
10°	2320.0
12.5°	2093.4
15°	1868.3
17.5°	1640.2
20°	1422.6
22.5°	1218.5
25°	1038.5
27.5°	867.4
30°	712.8
32.5°	574.8
35°	457.7
37.5°	358.7
40°	276.1
42.5°	213.1
45°	165.1
47.5°	121.6
50°	87.0
52.5°	61.5
55°	43.5
57.5°	33.0
60°	25.5
62.5°	21.0
65°	15.0
67.5°	12.0
70°	9.0
72.5°	7.5
75°	6.0
77.5°	3.0
80°	3.0
82.5°	1.5
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)