

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: P640731

Luminaire Tested: ML5612LSFL4097FS1E - 691WB - 900LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640731
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-36)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSFL4097FS1E - 691WB - 900LM - 2700K
Description: ML56 RR, 40D TIR OPTIC, 6" DEADFRONT TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

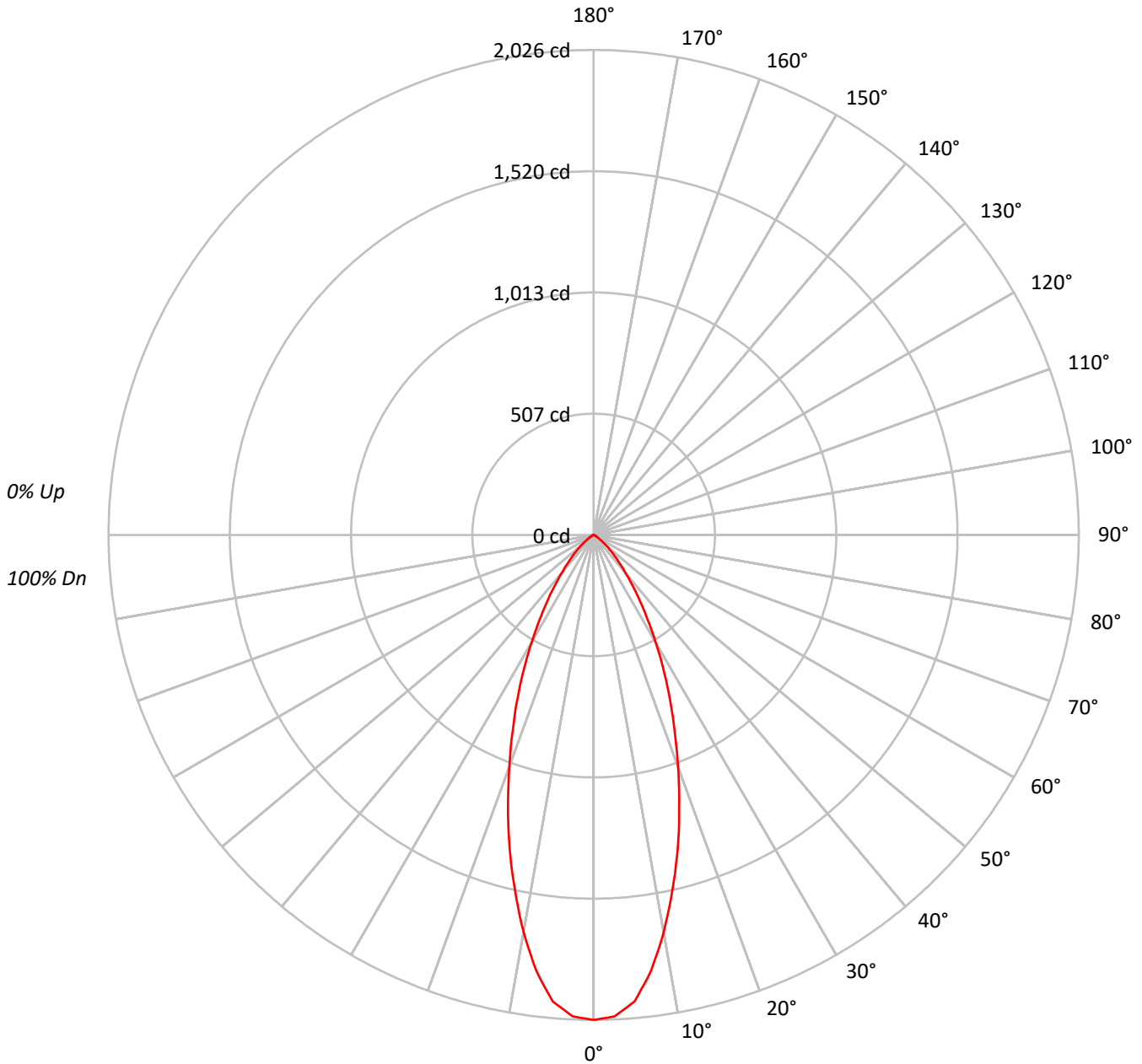
Lumens per Lamp: N/A
Luminaire Lumens: 1249.3 lumens
Efficiency: N/A
Efficacy: 93.9 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 13.3
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: P640731
CATALOG NUMBER: ML5612LSFL4097FS1E - 691WB - 900LM - 2700K

Luminous Intensity Polar Plot





TEST NUMBER: P640731

CATALOG NUMBER: ML5612LSFL4097FS1E - 691WB - 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																			
1	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	94																			
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	93	91	89	87																			
3	103	96	91	87	101	95	90	87	92	89	85	90	87	84	88	85	83	81																			
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76																			
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71																			
6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	67																			
7	84	75	69	65	83	74	69	65	73	68	65	72	68	64	71	67	64	63																			
8	80	71	65	61	79	70	65	61	69	64	61	68	64	61	67	63	60	59																			
9	77	67	62	58	76	67	61	58	66	61	57	65	61	57	64	60	57	56																			
10	73	64	58	55	72	64	58	55	63	58	54	62	57	54	61	57	54	53																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	111066
5°	107654
10°	93780
15°	76924
20°	60054
25°	45444
30°	32790
35°	22546
40°	14749
45°	9637
50°	5671
55°	3020
60°	1677
65°	986
70°	529
75°	233
80°	347
85°	692

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9637 cd/sqm



TEST NUMBER: P640731

CATALOG NUMBER: ML5612LSFL4097FS1E - 691WB - 900LM - 2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.7	14.2
10°-20°	374.7	30.0
20°-30°	344.3	27.6
30°-40°	213.7	17.1
40°-50°	97.8	7.8
50°-60°	30.7	2.5
60°-70°	7.9	0.6
70°-80°	1.7	0.1
80°-90°	0.7	0.1
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°	896.7	71.8
0°-40°	1110.4	88.9
0°-60°	1238.9	99.2
0°-90°	1249.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1249.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2026	
5°	1956	178
15°	1355	375
25°	751	344
35°	337	214
45°	124	98
55°	32	31
65°	8	8
75°	1	2
85°	1	1
90°	0	



TEST NUMBER: P640731

CATALOG NUMBER: ML5612LSFL4097FS1E - 691WB - 900LM - 2700K

CANDELA DISTRIBUTION (FULL):

0°	
0°	2026.0
2.5°	2013.0
5°	1956.3
7.5°	1836.3
10°	1684.7
12.5°	1520.1
15°	1355.4
17.5°	1188.6
20°	1029.4
22.5°	882.2
25°	751.3
27.5°	628.1
30°	518.0
32.5°	419.8
35°	336.9
37.5°	266.1
40°	206.1
42.5°	160.3
45°	124.3
47.5°	91.6
50°	66.5
52.5°	45.8
55°	31.6
57.5°	20.7
60°	15.3
62.5°	10.9
65°	7.6
67.5°	4.4
70°	3.3
72.5°	2.2
75°	1.1
77.5°	1.1
80°	1.1
82.5°	1.1
85°	1.1
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)