

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: P640657

Luminaire Tested: ML5612LSFL4097FS1E - 593WB - 900LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640657
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-28)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSFL4097FS1E - 593WB - 900LM - 3000K
Description: ML56 RR, 40D TIR OPTIC, 5" WHITE BAFFLE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

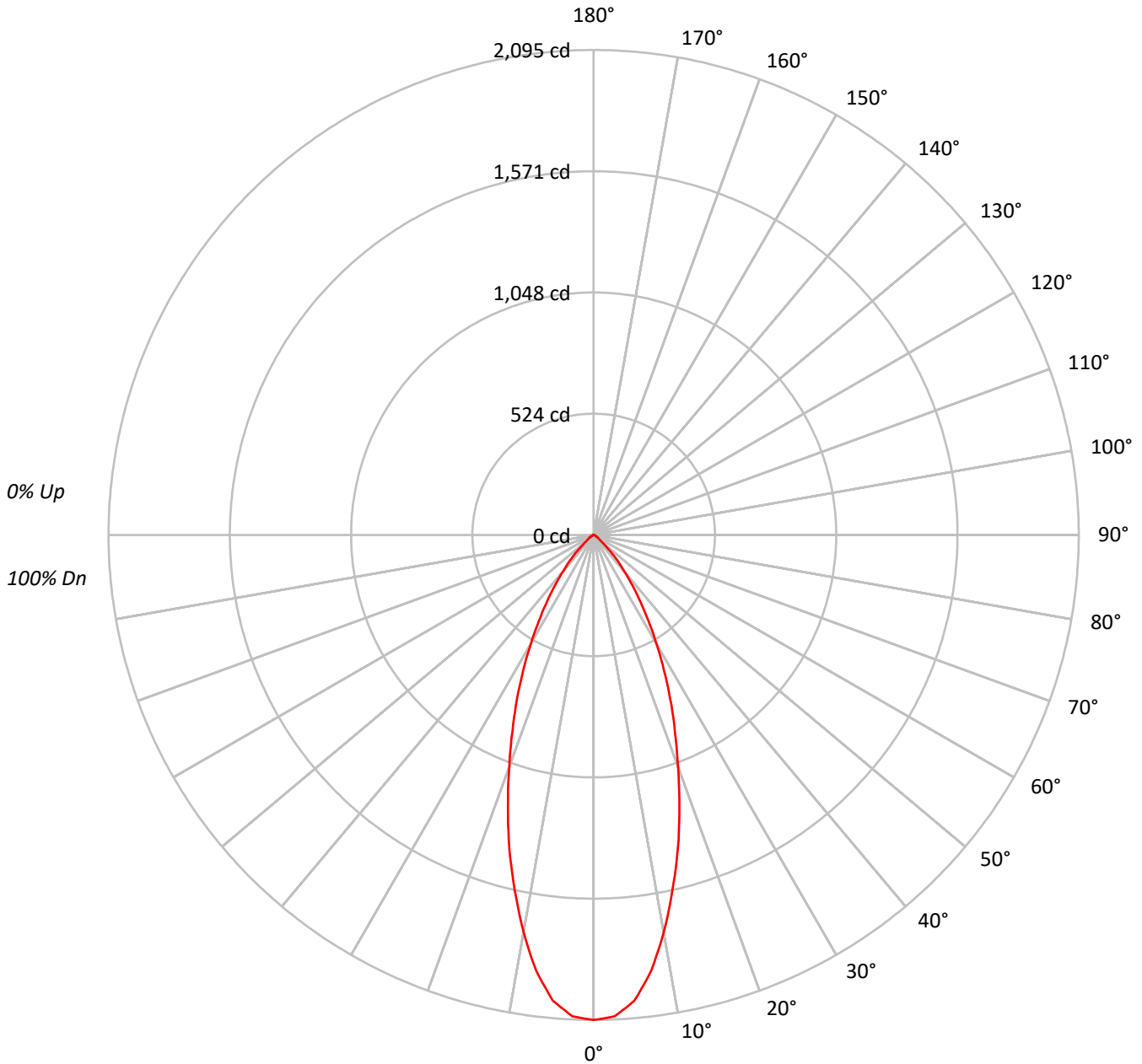
Lumens per Lamp: N/A
Luminaire Lumens: 1274.8 lumens
Efficiency: N/A
Efficacy: 95.9 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P640657
CATALOG NUMBER: ML5612LSFL4097FS1E - 593WB - 900LM - 3000K

Luminous Intensity Polar Plot





TEST NUMBER: P640657

CATALOG NUMBER: ML5612LSFL4097FS1E - 593WB - 900LM - 3000K

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	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	94			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87			
3	103	96	92	88	101	95	91	87	92	89	86	90	87	84	88	85	83	81			
4	98	90	85	81	96	89	84	80	87	83	79	85	82	79	83	80	78	76			
5	93	85	79	75	92	84	79	75	82	78	74	81	77	73	79	76	73	71			
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67			
7	85	76	70	66	83	75	69	66	74	69	65	73	68	65	71	67	64	63			
8	81	72	66	62	80	71	66	62	70	65	61	69	64	61	68	64	61	60			
9	77	68	62	58	76	67	62	58	66	62	58	66	61	58	65	61	58	56			
10	74	65	59	55	73	64	59	55	63	58	55	63	58	55	62	58	55	53			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	165413
5°	160086
10°	139717
15°	114833
20°	89476
25°	68235
30°	49414
35°	33748
40°	21053
45°	12526
50°	4962
55°	3248
60°	2305
65°	1476
70°	1293
75°	1373
80°	1546
85°	1993

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12526 cd/sqm



TEST NUMBER: P640657

CATALOG NUMBER: ML5612LSFL4097FS1E - 593WB - 900LM - 3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.7	14.4
10°-20°	387.9	30.4
20°-30°	358.5	28.1
30°-40°	221.6	17.4
40°-50°	85.9	6.7
50°-60°	22.1	1.7
60°-70°	8.6	0.7
70°-80°	4.5	0.3
80°-90°	2.0	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°	930.2	73.0
0°-40°	1151.8	90.4
0°-60°	1259.9	98.8
0°-90°	1274.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1274.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2095	
5°	2020	184
15°	1405	388
25°	783	359
35°	350	222
45°	112	86
55°	24	22
65°	8	9
75°	4	4
85°	2	2
90°	0	



TEST NUMBER: P640657

CATALOG NUMBER: ML5612LSFL4097FS1E - 593WB - 900LM - 3000K

CANDELA DISTRIBUTION (FULL):

0°	
0°	2095.4
2.5°	2081.9
5°	2020.2
7.5°	1900.1
10°	1743.0
12.5°	1572.4
15°	1405.1
17.5°	1231.2
20°	1065.1
22.5°	915.8
25°	783.4
27.5°	656.6
30°	542.1
32.5°	438.8
35°	350.2
37.5°	275.0
40°	204.3
42.5°	156.0
45°	112.2
47.5°	62.8
50°	40.4
52.5°	30.3
55°	23.6
57.5°	18.0
60°	14.6
62.5°	11.2
65°	7.9
67.5°	5.6
70°	5.6
72.5°	4.5
75°	4.5
77.5°	3.4
80°	3.4
82.5°	2.2
85°	2.2
87.5°	1.1
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)