

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: P640687

Luminaire Tested: ML5612LSFL4097FS1E - 594TBZB - 900LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640687
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-34)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSFL4097FS1E - 594TBZB - 900LM - 3000K
Description: ML56 RR, 40D TIR OPTIC, 5" TUSCON BRONZE GIMBAL TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

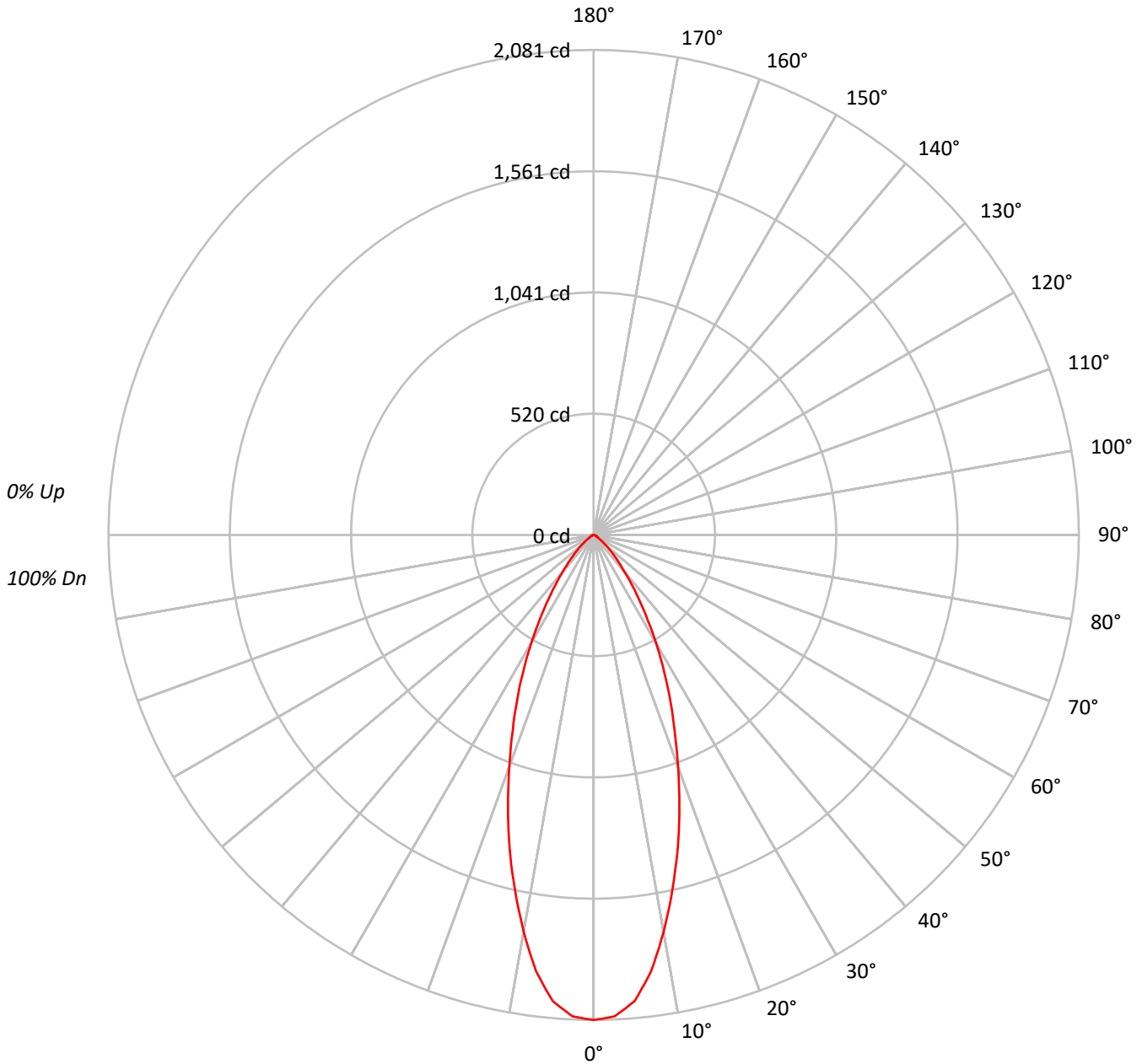
Lumens per Lamp: N/A
Luminaire Lumens: 1283.8 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 13.3
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: P640687
CATALOG NUMBER: ML5612LSFL4097FS1E - 594TBZB - 900LM - 3000K

Luminous Intensity Polar Plot





TEST NUMBER: P640687

CATALOG NUMBER: ML5612LSFL4097FS1E - 594TBZB - 900LM - 3000K

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	93																			
2	108	103	99	96	106	101	98	95	98	95	92	95	93	91	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	85	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76																			
5	93	84	79	74	91	84	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	58	66	61	57	65	60	57	64	60	57	56																			
10	73	64	58	55	72	63	58	54	63	58	54	62	57	54	61	57	54	53																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	164308
5°	159158
10°	138514
15°	113803
20°	88796
25°	67434
30°	48585
35°	32765
40°	21156
45°	13653
50°	7995
55°	4473
60°	3016
65°	2092
70°	1546
75°	1373
80°	500
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13653 cd/sqm



TEST NUMBER: P640687

CATALOG NUMBER: ML5612LSFL4097FS1E - 594TBZB - 900LM - 3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.5	14.2
10°-20°	384.8	30.0
20°-30°	354.3	27.6
30°-40°	216.6	16.9
40°-50°	96.8	7.5
50°-60°	32.0	2.5
60°-70°	12.0	0.9
70°-80°	4.3	0.3
80°-90°	0.4	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°	921.6	71.8
0°-40°	1138.2	88.7
0°-60°	1267.0	98.7
0°-90°	1283.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1283.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2081	
5°	2008	183
15°	1392	385
25°	774	354
35°	340	217
45°	122	97
55°	32	32
65°	11	12
75°	4	4
85°	0	0
90°	0	



TEST NUMBER: P640687

CATALOG NUMBER: ML5612LSFL4097FS1E - 594TBZB - 900LM - 3000K

CANDELA DISTRIBUTION (FULL):

0°	
0°	2081.4
2.5°	2067.9
5°	2008.5
7.5°	1888.4
10°	1728.0
12.5°	1559.7
15°	1392.5
17.5°	1221.9
20°	1057.0
22.5°	906.6
25°	774.2
27.5°	647.4
30°	533.0
32.5°	428.6
35°	340.0
37.5°	267.0
40°	205.3
42.5°	159.3
45°	122.3
47.5°	90.9
50°	65.1
52.5°	46.0
55°	32.5
57.5°	23.6
60°	19.1
62.5°	15.7
65°	11.2
67.5°	9.0
70°	6.7
72.5°	5.6
75°	4.5
77.5°	2.2
80°	1.1
82.5°	1.1
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)