

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: P640642

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

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640642
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-31)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSFL4097FS1E - 593TBZB - 900LM - 3000K
Description: ML56 RR, 40D TIR OPTIC, 5" TUSCON BRONZE BAFFLE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

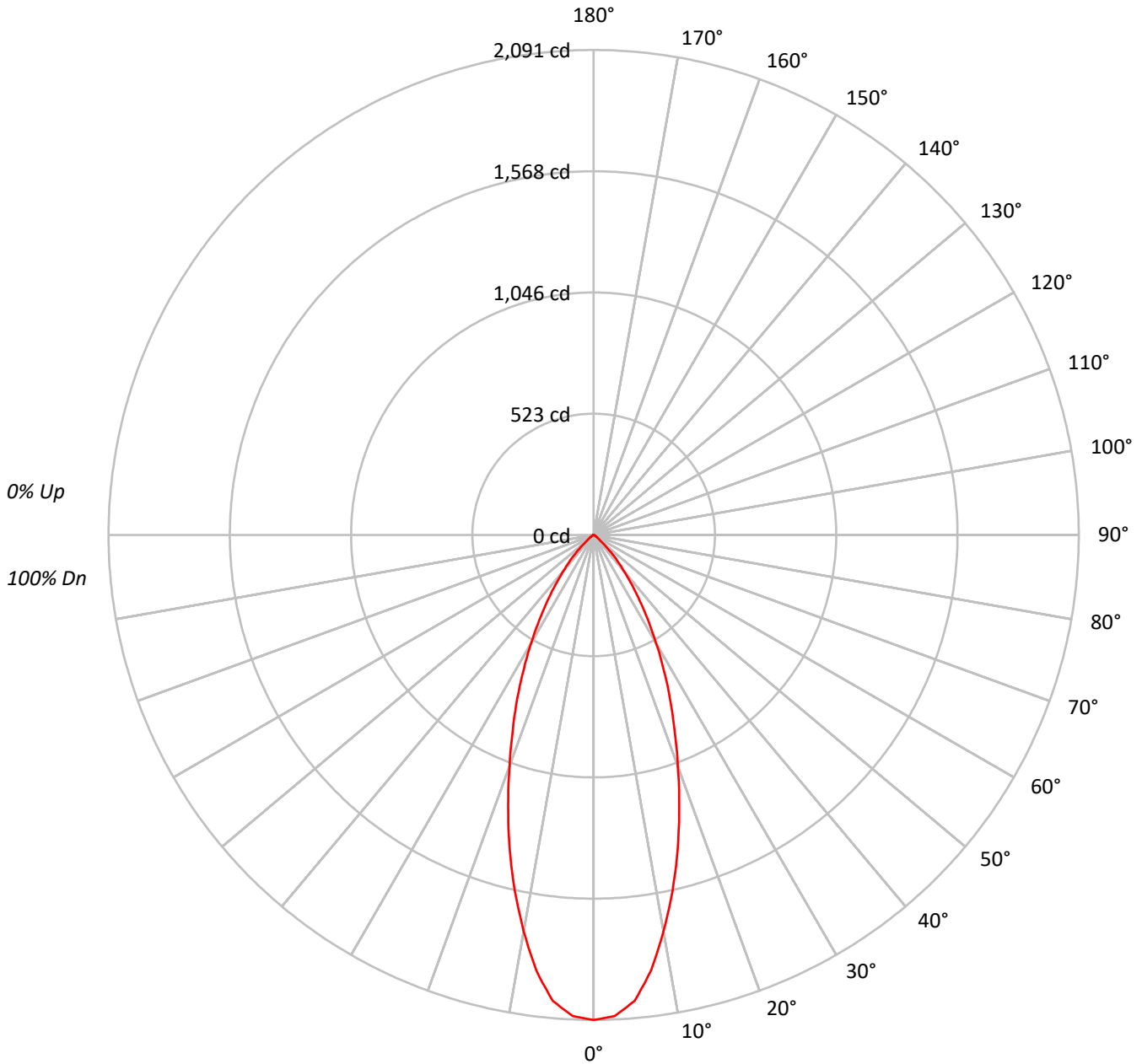
Lumens per Lamp: N/A
Luminaire Lumens: 1246.7 lumens
Efficiency: N/A
Efficacy: 93.7 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

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: P640642
CATALOG NUMBER: ML5612LSFL4097FS1E - 593TBZB - 900LM - 3000K

Luminous Intensity Polar Plot





TEST NUMBER: P640642

CATALOG NUMBER: ML5612LSFL4097FS1E - 593TBZB - 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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94		
2	108	104	100	97	106	102	99	96	99	96	93	96	94	91	93	91	90	88		
3	103	97	92	89	101	96	91	88	93	89	86	91	88	85	89	86	84	82		
4	98	91	86	82	97	90	85	81	88	84	80	86	82	79	84	81	79	77		
5	94	86	80	76	92	85	80	76	83	79	75	81	77	74	80	76	74	72		
6	89	81	75	71	88	80	75	71	79	74	70	77	73	70	76	72	69	68		
7	85	76	71	67	84	76	70	66	74	70	66	73	69	66	72	68	65	64		
8	81	72	67	63	80	72	66	63	71	66	62	70	65	62	69	65	62	61		
9	78	69	63	59	77	68	63	59	67	62	59	66	62	59	66	62	59	57		
10	75	65	60	56	74	65	60	56	64	59	56	63	59	56	63	59	56	54		

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	165073
5°	159840
10°	139099
15°	114301
20°	89106
25°	67852
30°	49013
35°	33421
40°	20703
45°	11655
50°	4274
55°	2477
60°	1421
65°	411
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11655 cd/sqm



TEST NUMBER: P640642

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.2	14.7
10°-20°	386.5	31.0
20°-30°	356.4	28.6
30°-40°	219.2	17.6
40°-50°	81.4	6.5
50°-60°	17.0	1.4
60°-70°	3.0	0.2
70°-80°	0.0	0.0
80°-90°	0.0	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°	926.1	74.3
0°-40°	1145.3	91.9
0°-60°	1243.7	99.8
0°-90°	1246.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1246.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2091	
5°	2017	183
15°	1399	387
25°	779	356
35°	347	219
45°	104	81
55°	18	17
65°	2	3
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P640642

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

CANDELA DISTRIBUTION (FULL):

	0°
0°	2091.1
2.5°	2076.5
5°	2017.1
7.5°	1894.7
10°	1735.3
12.5°	1570.3
15°	1398.6
17.5°	1225.7
20°	1060.7
22.5°	910.3
25°	779.0
27.5°	652.1
30°	537.7
32.5°	435.5
35°	346.8
37.5°	270.5
40°	200.9
42.5°	151.5
45°	104.4
47.5°	56.1
50°	34.8
52.5°	24.7
55°	18.0
57.5°	12.3
60°	9.0
62.5°	5.6
65°	2.2
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
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)