

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: P640841

Luminaire Tested: ML5612LSFL4097FS1E - 694TBZB - 1200LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640841
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-45)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSFL4097FS1E - 694TBZB - 1200LM - 2700K
Description: ML56 RR, 40D TIR OPTIC, 6" TUSCON BRONZE GIMBAL TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1525.4 lumens
Efficiency: N/A
Efficacy: 92.5 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

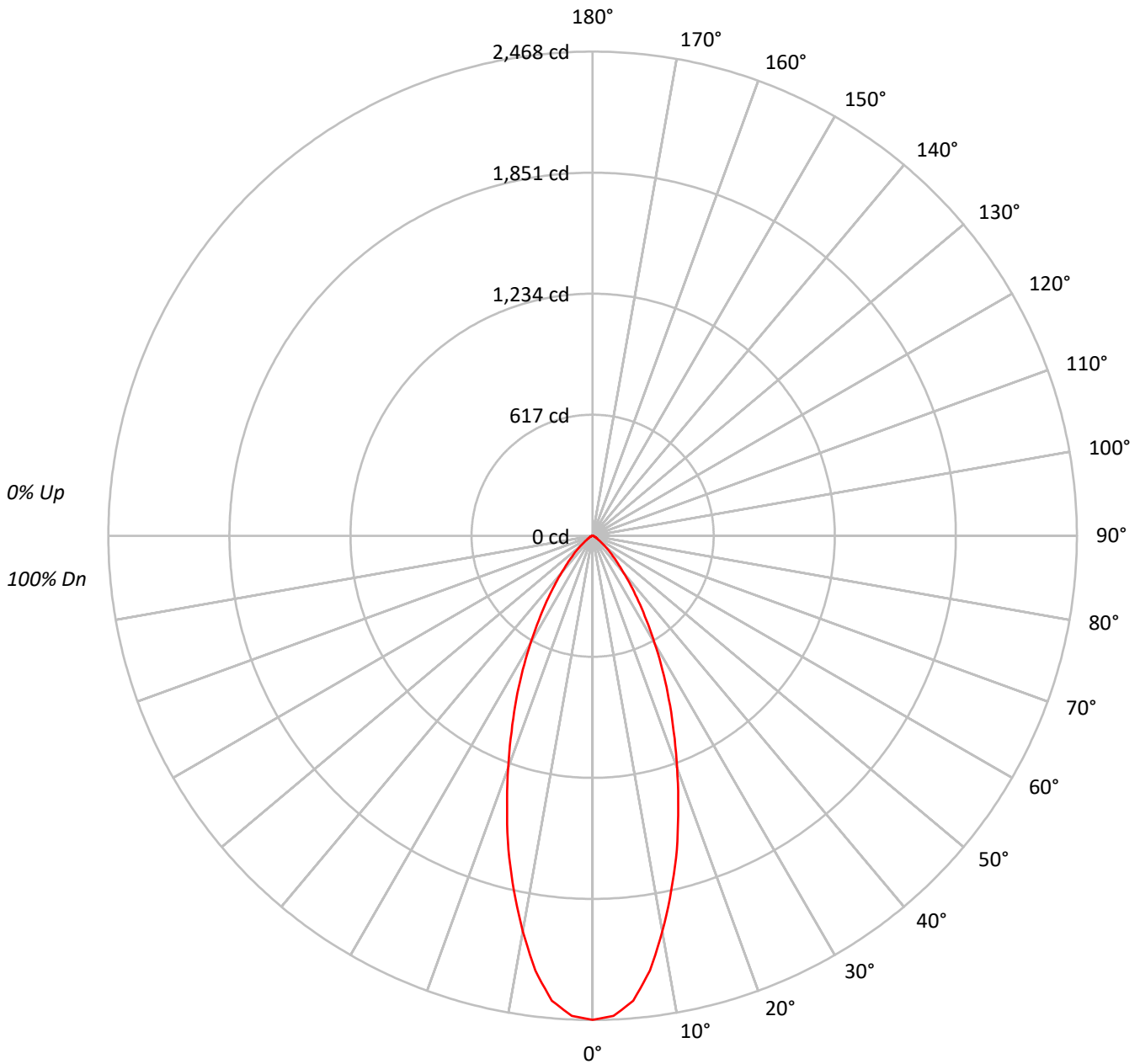
Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P640841

CATALOG NUMBER: ML5612LSFL4097FS1E - 694TBZB - 1200LM - 2700K

Luminous Intensity Polar Plot





TEST NUMBER: P640841

CATALOG NUMBER: ML5612LSFL4097FS1E - 694TBZB - 1200LM - 2700K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	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	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°	135269
5°	130915
10°	113970
15°	94087
20°	73361
25°	55612
30°	39968
35°	27224
40°	17583
45°	11265
50°	6644
55°	3661
60°	2467
65°	1712
70°	1266
75°	847
80°	410
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11265 cd/sqm



TEST NUMBER: P640841

CATALOG NUMBER: ML5612LSFL4097FS1E - 694TBZB - 1200LM - 2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.1	14.2
10°-20°	457.0	30.0
20°-30°	421.2	27.6
30°-40°	258.1	16.9
40°-50°	115.5	7.6
50°-60°	38.1	2.5
60°-70°	14.2	0.9
70°-80°	4.7	0.3
80°-90°	0.5	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°	1094.4	71.7
0°-40°	1352.5	88.7
0°-60°	1506.1	98.7
0°-90°	1525.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1525.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2468	
5°	2379	216
15°	1658	457
25°	919	421
35°	407	258
45°	145	115
55°	38	38
65°	13	14
75°	4	5
85°	0	1
90°	0	



TEST NUMBER: P640841

CATALOG NUMBER: ML5612LSFL4097FS1E - 694TBZB - 1200LM - 2700K

CANDELA DISTRIBUTION (FULL):

	0°
0°	2467.5
2.5°	2449.0
5°	2379.0
7.5°	2235.0
10°	2047.4
12.5°	1851.9
15°	1657.8
17.5°	1449.1
20°	1257.5
22.5°	1079.2
25°	919.4
27.5°	770.1
30°	631.4
32.5°	509.9
35°	406.8
37.5°	318.3
40°	245.7
42.5°	190.2
45°	145.3
47.5°	108.3
50°	77.9
52.5°	54.2
55°	38.3
57.5°	29.1
60°	22.5
62.5°	18.5
65°	13.2
67.5°	10.6
70°	7.9
72.5°	6.6
75°	4.0
77.5°	2.6
80°	1.3
82.5°	1.3
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)