

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: P640802

Luminaire Tested: ML5612LSFL4097FS1E - 693SNB - 600LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640802
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-42)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSFL4097FS1E - 693SNB - 600LM - 3000K
Description: ML56 RR, 40D TIR OPTIC, 6" SATIN NICKLE BAFFLE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

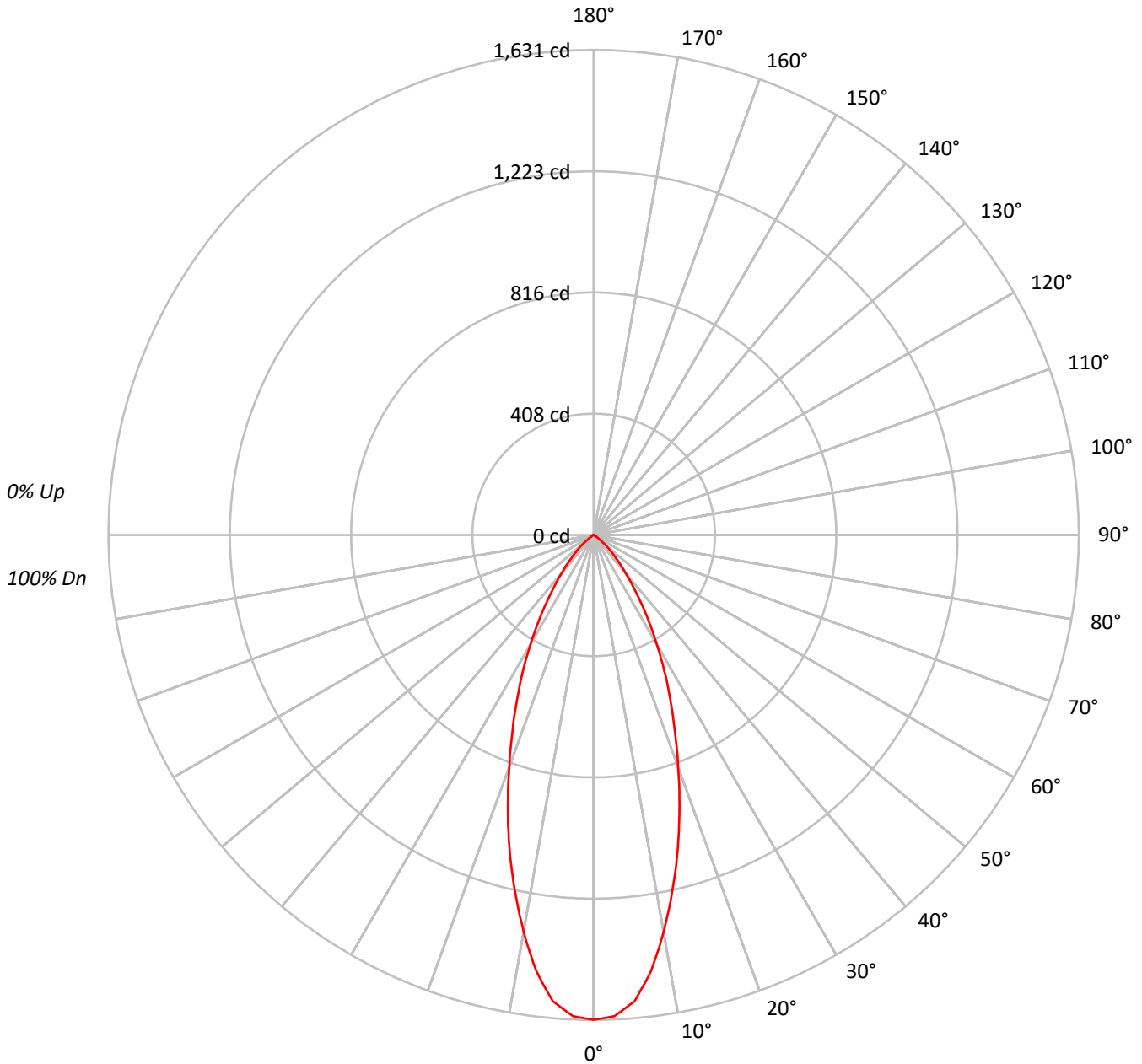
Lumens per Lamp: N/A
Luminaire Lumens: 995.4 lumens
Efficiency: N/A
Efficacy: 96.6 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.7
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 10.3
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: P640802
CATALOG NUMBER: ML5612LSFL4097FS1E - 693SNB - 600LM - 3000K

Luminous Intensity Polar Plot





TEST NUMBER: P640802

CATALOG NUMBER: ML5612LSFL4097FS1E - 693SNB - 600LM - 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	109	106	111	109	107	105	105	103	101	101	100	98	98	97	96	94			
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88			
3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	86	83	82			
4	98	91	85	81	96	90	85	81	87	83	80	85	82	79	84	80	78	76			
5	93	85	80	75	92	84	79	75	82	78	74	81	77	74	79	76	73	72			
6	89	80	74	70	87	79	74	70	78	73	70	77	72	69	75	72	69	67			
7	85	76	70	66	83	75	70	66	74	69	65	73	68	65	72	68	65	63			
8	81	72	66	62	80	71	66	62	70	65	62	69	65	61	68	64	61	60			
9	77	68	62	58	76	67	62	58	67	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°	89395
5°	86606
10°	75427
15°	62049
20°	48409
25°	36849
30°	26821
35°	18397
40°	11901
45°	7326
50°	3957
55°	1510
60°	965
65°	337
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7326 cd/sqm



TEST NUMBER: P640802

CATALOG NUMBER: ML5612LSFL4097FS1E - 693SNB - 600LM - 3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.0	14.4
10°-20°	302.1	30.3
20°-30°	279.4	28.1
30°-40°	174.2	17.5
40°-50°	76.1	7.6
50°-60°	17.5	1.8
60°-70°	3.2	0.3
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°	724.4	72.8
0°-40°	898.6	90.3
0°-60°	992.2	99.7
0°-90°	995.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	995.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1631	
5°	1574	143
15°	1093	302
25°	609	279
35°	275	174
45°	94	76
55°	16	18
65°	3	3
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P640802

CATALOG NUMBER: ML5612LSFL4097FS1E - 693SNB - 600LM - 3000K

CANDELA DISTRIBUTION (FULL):

	0°
0°	1630.7
2.5°	1619.4
5°	1573.8
7.5°	1479.3
10°	1355.0
12.5°	1224.6
15°	1093.3
17.5°	959.4
20°	829.8
22.5°	712.5
25°	609.2
27.5°	512.9
30°	423.7
32.5°	344.0
35°	274.9
37.5°	215.3
40°	166.3
42.5°	128.7
45°	94.5
47.5°	70.0
50°	46.4
52.5°	23.6
55°	15.8
57.5°	12.3
60°	8.8
62.5°	5.3
65°	2.6
67.5°	0.9
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)