

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: P640960

Luminaire Tested: ML5612LSNFL2597FS1E - 593BB - 900LM - 5000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640960  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-6)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSNFL2597FS1E - 593BB - 900LM - 5000K  
Description: ML56 RR, 25D TIR OPTIC, 5" BLACK BAFFLE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1187.8 lumens  
Efficiency: N/A  
Efficacy: 89.3 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.43  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

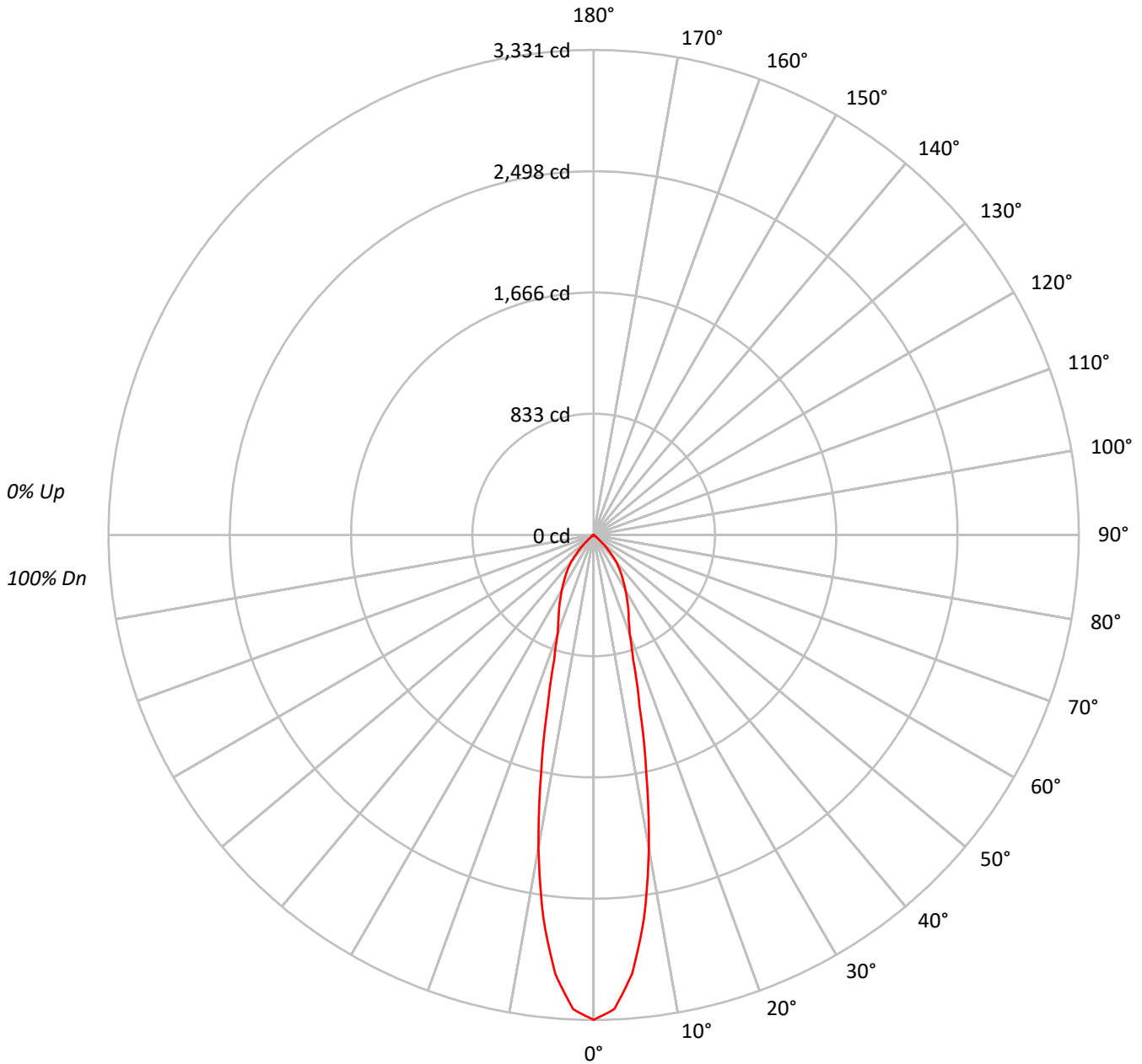
Input Watts (W): 13.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P640960

CATALOG NUMBER: ML5612LSNFL2597FS1E - 593BB - 900LM - 5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P640960

CATALOG NUMBER: ML5612LSNFL2597FS1E - 593BB - 900LM - 5000K

**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	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	94																			
2	109	104	101	97	107	103	99	96	99	97	94	96	94	92	94	92	90	89																			
3	104	98	93	90	102	97	92	89	94	91	88	92	89	86	89	87	85	83																			
4	99	92	87	83	98	91	87	83	89	85	82	87	84	81	85	82	80	79																			
5	95	87	82	78	93	86	81	78	85	80	77	83	79	76	81	78	76	74																			
6	91	83	77	73	89	82	77	73	80	76	72	79	75	72	78	74	72	70																			
7	87	78	73	69	86	78	73	69	77	72	69	75	71	68	74	71	68	67																			
8	83	75	69	66	82	74	69	65	73	68	65	72	68	65	71	67	65	63																			
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	62	60																			
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	66	62	59	58																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	262952
5°	239756
10°	175059
15°	99436
20°	60594
25°	48986
30°	39725
35°	31946
40°	24567
45°	14134
50°	3353
55°	1541
60°	1168
65°	467
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14134 cd/sqm



TEST NUMBER: P640960

CATALOG NUMBER: ML5612LSNFL2597FS1E - 593BB - 900LM - 5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	261.7	22.0
10°-20°	349.7	29.4
20°-30°	258.6	21.8
30°-40°	207.5	17.5
40°-50°	95.8	8.1
50°-60°	11.8	1.0
60°-70°	2.7	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°	869.9	73.2
0°-40°	1077.4	90.7
0°-60°	1185.0	99.8
0°-90°	1187.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1187.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3331	
5°	3026	262
15°	1217	350
25°	562	259
35°	332	208
45°	127	96
55°	11	12
65°	2	3
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P640960

CATALOG NUMBER: ML5612LSNFL2597FS1E - 593BB - 900LM - 5000K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3331.0
2.5°	3260.3
5°	3025.6
7.5°	2653.2
10°	2183.9
12.5°	1667.4
15°	1216.7
17.5°	901.4
20°	721.3
22.5°	629.5
25°	562.4
27.5°	496.6
30°	435.8
32.5°	381.1
35°	331.5
37.5°	286.8
40°	238.4
42.5°	177.5
45°	126.6
47.5°	69.5
50°	27.3
52.5°	16.1
55°	11.2
57.5°	8.7
60°	7.4
62.5°	3.7
65°	2.5
67.5°	1.2
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)