

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: P642947

Luminaire Tested: ML5615LSNFL259FS1E - 693BB - 1500LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642947  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-18)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSNFL259FS1E - 693BB - 1500LM - 3000K  
Description: ML56 RR, 25D TIR OPTIC, 6" BLACK BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

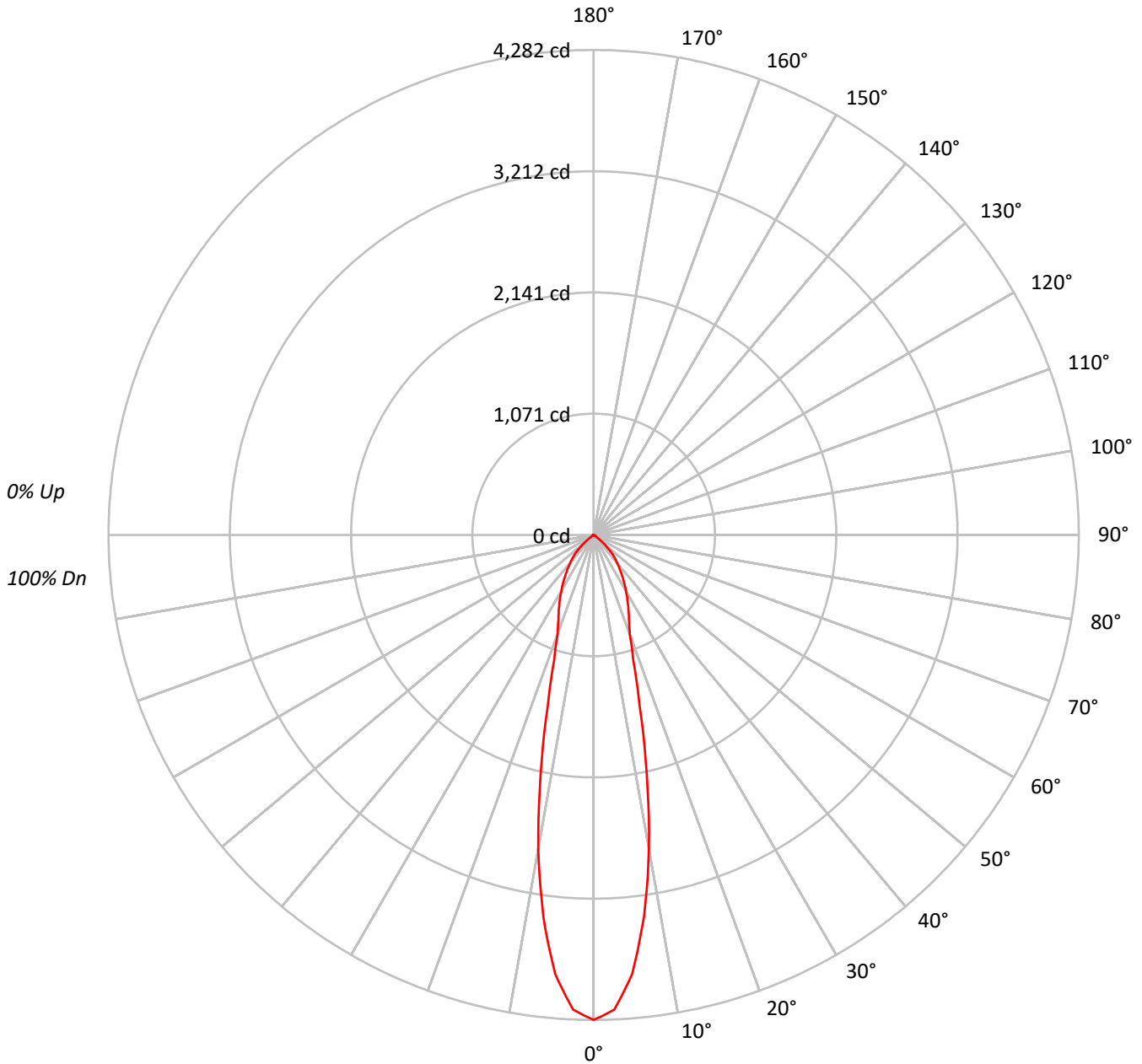
Lumens per Lamp: N/A  
Luminaire Lumens: 1596.9 lumens  
Efficiency: N/A  
Efficacy: 93.4 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.43  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 17.1  
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: P642947  
CATALOG NUMBER: ML5615LSNFL259FS1E - 693BB - 1500LM - 3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P642947

CATALOG NUMBER: ML5615LSNFL259FS1E - 693BB - 1500LM - 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	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	94	96	94	92	93	91	90	88			
3	103	97	92	89	101	96	92	88	93	90	87	91	88	85	89	86	84	82			
4	98	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77			
5	94	86	81	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73			
6	90	81	76	72	88	80	75	71	79	74	71	78	74	70	76	73	70	69			
7	86	77	71	67	84	76	71	67	75	70	67	74	70	67	73	69	66	65			
8	82	73	68	64	81	73	67	64	72	67	63	71	66	63	70	66	63	62			
9	79	70	64	60	78	69	64	60	68	64	60	67	63	60	67	63	60	59			
10	76	67	61	58	75	66	61	57	65	61	57	65	60	57	64	60	57	56			

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

	0°
0°	234767
5°	214175
10°	156610
15°	89098
20°	54243
25°	43950
30°	36063
35°	29132
40°	23022
45°	17490
50°	8870
55°	1988
60°	1228
65°	623
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 17490 cd/sqm



TEST NUMBER: P642947

CATALOG NUMBER: ML5615LSNFL259FS1E - 693BB - 1500LM - 3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	336.3	21.1
10°-20°	451.1	28.2
20°-30°	334.6	21.0
30°-40°	273.0	17.1
40°-50°	166.8	10.4
50°-60°	30.2	1.9
60°-70°	4.9	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°	1122.0	70.3
0°-40°	1395.0	87.4
0°-60°	1592.0	99.7
0°-90°	1596.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1596.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4282	
5°	3892	336
15°	1570	451
25°	727	335
35°	435	273
45°	226	167
55°	21	30
65°	5	5
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P642947

CATALOG NUMBER: ML5615LSNFL259FS1E - 693BB - 1500LM - 3000K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4282.5
2.5°	4196.1
5°	3892.0
7.5°	3400.7
10°	2813.4
12.5°	2158.9
15°	1569.9
17.5°	1158.6
20°	929.8
22.5°	811.4
25°	726.6
27.5°	644.9
30°	569.7
32.5°	500.9
35°	435.3
37.5°	376.1
40°	321.7
42.5°	273.7
45°	225.6
47.5°	161.6
50°	104.0
52.5°	44.8
55°	20.8
57.5°	14.4
60°	11.2
62.5°	8.0
65°	4.8
67.5°	1.6
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)