

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: P642999

Luminaire Tested: ML5615LSNFL259FS1E - 693WB - 900LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642999  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-17)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSNFL259FS1E - 693WB - 900LM - 4000K  
Description: ML56 RR, 25D TIR OPTIC, 6" WHITE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1213.0 lumens  
Efficiency: N/A  
Efficacy: 115.5 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

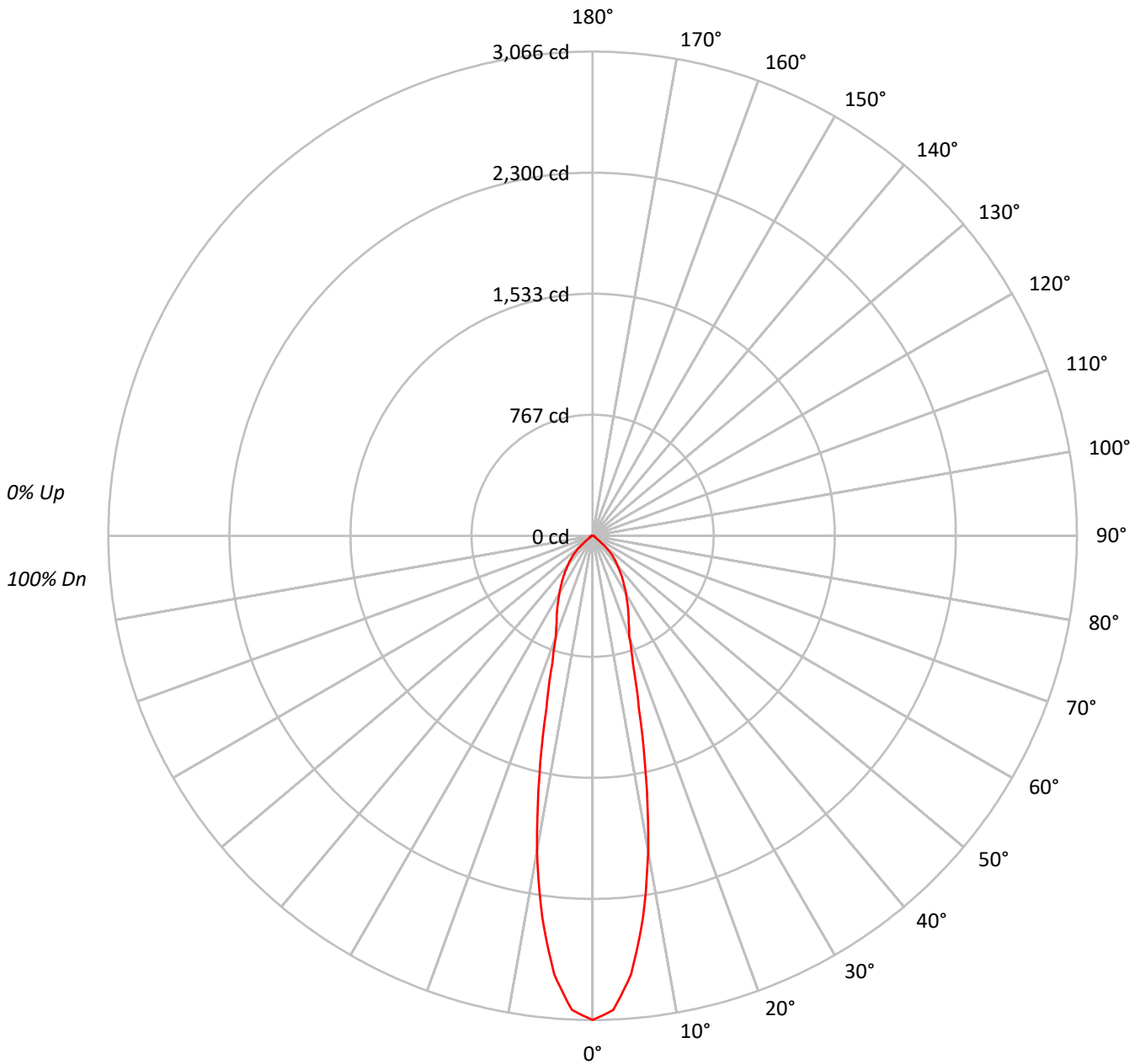
Input Watts (W): 10.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P642999

CATALOG NUMBER: ML5615LSNFL259FS1E - 693WB - 900LM - 4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P642999

CATALOG NUMBER: ML5615LSNFL259FS1E - 693WB - 900LM - 4000K

**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	113	110	108	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93			
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	86			
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	80			
4	97	90	84	80	95	88	83	79	86	82	78	84	81	77	82	79	77	75			
5	92	84	78	74	91	83	78	74	81	77	73	80	76	72	78	75	72	70			
6	88	79	73	69	87	79	73	69	77	72	68	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	71	65	61	70	64	61	68	64	61	68	63	60	59			
9	77	68	62	58	76	67	62	58	66	61	58	65	61	58	65	60	57	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°	168095
5°	153411
10°	112779
15°	64268
20°	39600
25°	32324
30°	26631
35°	21837
40°	17490
45°	13753
50°	7855
55°	2829
60°	2368
65°	2062
70°	1827
75°	1927
80°	2147
85°	2139

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13753 cd/sqm



TEST NUMBER: P642999

CATALOG NUMBER: ML5615LSNFL259FS1E - 693WB - 900LM - 4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.3	19.9
10°-20°	326.5	26.9
20°-30°	246.0	20.3
30°-40°	204.2	16.8
40°-50°	131.5	10.8
50°-60°	34.9	2.9
60°-70°	15.6	1.3
70°-80°	9.6	0.8
80°-90°	3.4	0.3
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°	813.8	67.1
0°-40°	1017.9	83.9
0°-60°	1184.4	97.6
0°-90°	1213.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1213.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3066	
5°	2788	241
15°	1132	327
25°	534	246
35°	326	204
45°	177	132
55°	30	35
65°	16	16
75°	9	10
85°	3	3
90°	0	



TEST NUMBER: P642999

CATALOG NUMBER: ML5615LSNFL259FS1E - 693WB - 900LM - 4000K

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3066.3
2.5°	3006.1
5°	2787.8
7.5°	2441.0
10°	2026.0
12.5°	1556.5
15°	1132.4
17.5°	847.0
20°	678.8
22.5°	595.8
25°	534.4
27.5°	475.2
30°	420.7
32.5°	371.8
35°	326.3
37.5°	283.1
40°	244.4
42.5°	210.3
45°	177.4
47.5°	131.9
50°	92.1
52.5°	47.8
55°	29.6
57.5°	23.9
60°	21.6
62.5°	18.2
65°	15.9
67.5°	12.5
70°	11.4
72.5°	10.2
75°	9.1
77.5°	8.0
80°	6.8
82.5°	4.5
85°	3.4
87.5°	1.1
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)