

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: P643021

Luminaire Tested: ML5615LSNFL259FS1E - 694WB - 1500LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643021  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-21)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSNFL259FS1E - 694WB - 1500LM - 2700K  
Description: ML56 RR, 25D TIR OPTIC, 6" WHITE GIMBAL TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

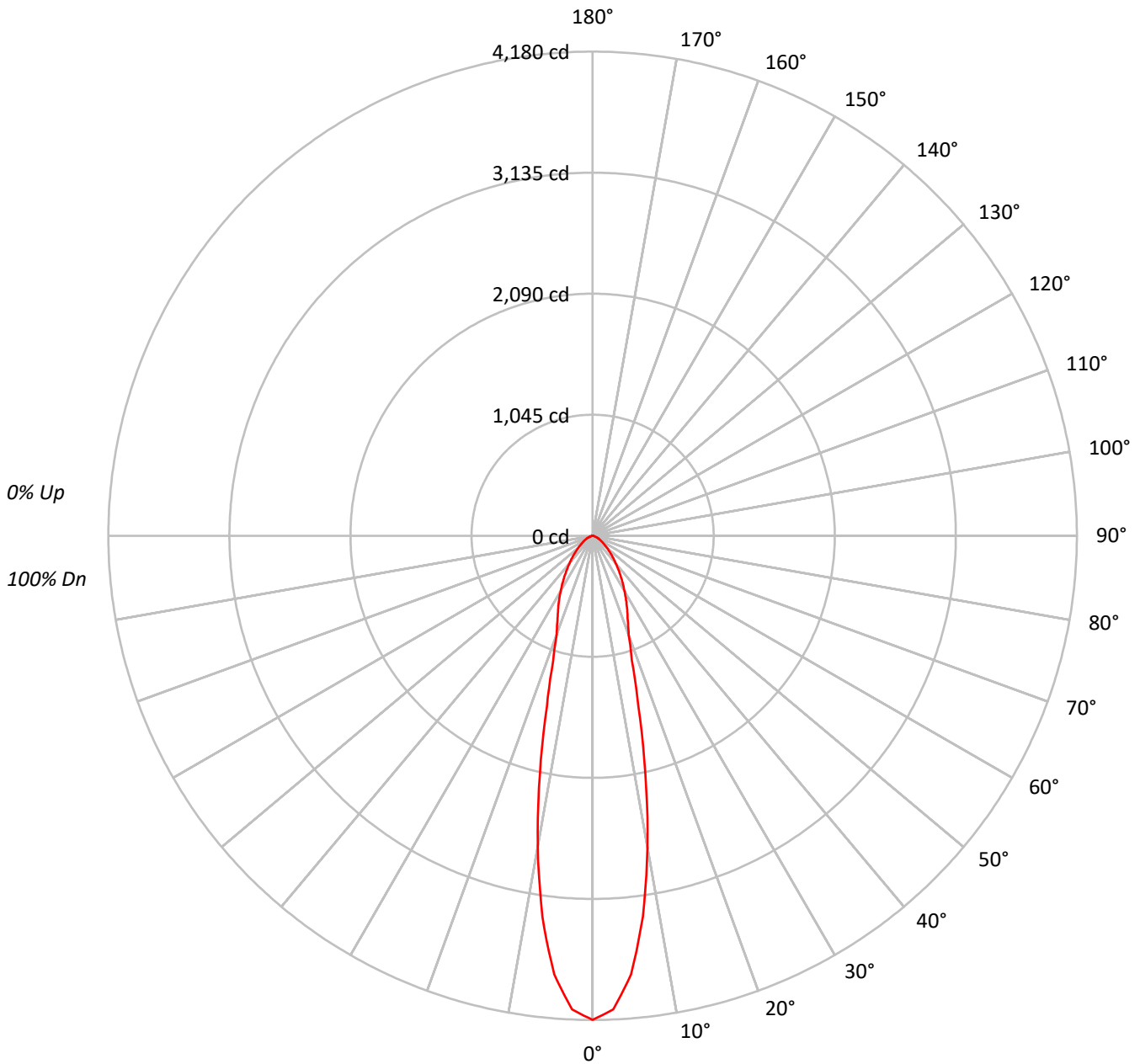
Lumens per Lamp: N/A  
Luminaire Lumens: 1702.6 lumens  
Efficiency: N/A  
Efficacy: 99.6 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.43  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

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: P643021  
CATALOG NUMBER: ML5615LSNFL259FS1E - 694WB - 1500LM - 2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P643021

CATALOG NUMBER: ML5615LSNFL259FS1E - 694WB - 1500LM - 2700K

**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	113	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92																			
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85																			
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78																			
4	96	88	82	78	94	87	81	77	85	80	76	82	78	75	81	77	74	73																			
5	91	82	76	72	89	81	76	71	79	74	71	78	73	70	76	72	69	68																			
6	87	77	71	67	85	77	71	66	75	70	66	74	69	66	72	68	65	64																			
7	82	73	67	62	81	72	66	62	71	66	62	70	65	62	69	64	61	60																			
8	79	69	63	59	77	69	63	59	67	62	58	66	62	58	65	61	58	57																			
9	75	66	60	56	74	65	60	56	64	59	55	63	59	55	62	58	55	54																			
10	72	63	57	53	71	62	57	53	61	56	53	61	56	53	60	56	52	51																			

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

	0°
0°	229121
5°	209211
10°	151845
15°	86448
20°	52954
25°	42686
30°	34828
35°	27981
40°	22134
45°	17475
50°	13654
55°	10695
60°	8519
65°	6849
70°	4985
75°	2626
80°	1957
85°	1006

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 17475 cd/sqm



TEST NUMBER: P643021

CATALOG NUMBER: ML5615LSNFL259FS1E - 694WB - 1500LM - 2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	327.8	19.3
10°-20°	438.6	25.8
20°-30°	325.1	19.1
30°-40°	262.5	15.4
40°-50°	175.7	10.3
50°-60°	102.0	6.0
60°-70°	53.3	3.1
70°-80°	15.5	0.9
80°-90°	2.1	0.1
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°	1091.5	64.1
0°-40°	1354.0	79.5
0°-60°	1631.7	95.8
0°-90°	1702.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1702.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4180	
5°	3802	328
15°	1523	439
25°	706	325
35°	418	262
45°	225	176
55°	112	102
65°	53	53
75°	12	16
85°	2	2
90°	0	



TEST NUMBER: P643021

CATALOG NUMBER: ML5615LSNFL259FS1E - 694WB - 1500LM - 2700K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4179.5
2.5°	4092.5
5°	3801.8
7.5°	3316.9
10°	2727.8
12.5°	2101.4
15°	1523.2
17.5°	1128.4
20°	907.7
22.5°	791.1
25°	705.7
27.5°	624.8
30°	550.2
32.5°	481.8
35°	418.1
37.5°	360.6
40°	309.3
42.5°	265.8
45°	225.4
47.5°	189.6
50°	160.1
52.5°	133.7
55°	111.9
57.5°	93.3
60°	77.7
62.5°	65.3
65°	52.8
67.5°	43.5
70°	31.1
72.5°	20.2
75°	12.4
77.5°	7.8
80°	6.2
82.5°	3.1
85°	1.6
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)