

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: P643397

Luminaire Tested: ML5615LSVWFL9FS1E - 591WB - 1500LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643397  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-93)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSVWFL9FS1E - 591WB - 1500LM - 3000K  
Description: ML56 RR, MILKY OPTIC, 5" DEADFRONT TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

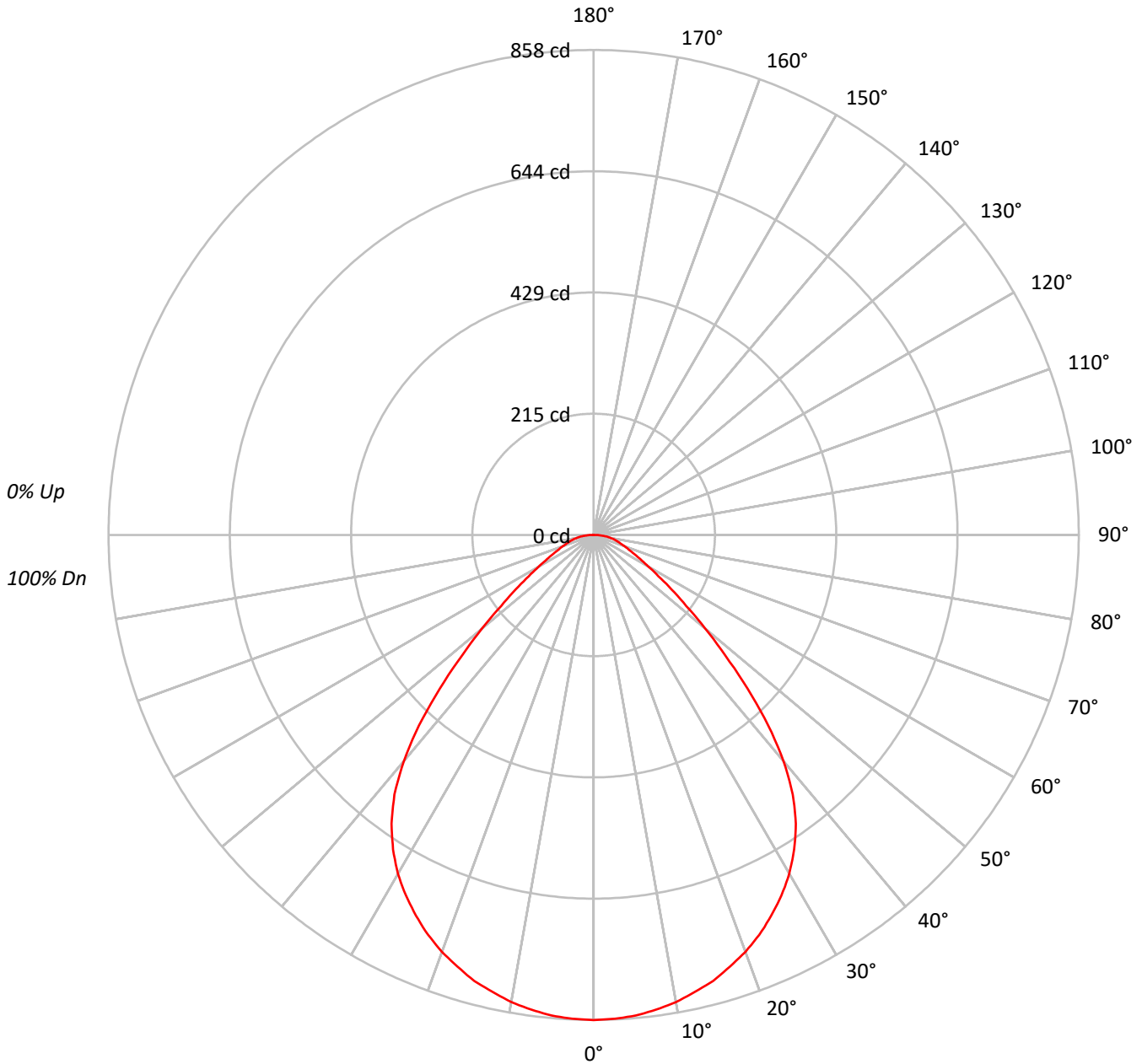
Lumens per Lamp: N/A  
Luminaire Lumens: 1633.0 lumens  
Efficiency: N/A  
Efficacy: 95.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.23  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

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: P643397  
CATALOG NUMBER: ML5615LSVWFL9FS1E - 591WB - 1500LM - 3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P643397

CATALOG NUMBER: ML5615LSVWFL9FS1E - 591WB - 1500LM - 3000K

**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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88																			
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77																			
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	81	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	49																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	46	44																			
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	46	41	40																			
9	63	51	44	39	62	50	43	38	49	43	38	48	42	38	47	42	38	36																			
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33																			

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

	0°
0°	67763
5°	67641
10°	67269
15°	66754
20°	65937
25°	64743
30°	63087
35°	60076
40°	53864
45°	43003
50°	31611
55°	23094
60°	17667
65°	14626
70°	13271
75°	13176
80°	13820
85°	14492

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 43003 cd/sqm



TEST NUMBER: P643397

CATALOG NUMBER: ML5615LSVWFL9FS1E - 591WB - 1500LM - 3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.0	5.0
10°-20°	230.1	14.1
20°-30°	342.1	20.9
30°-40°	385.8	23.6
40°-50°	296.7	18.2
50°-60°	154.5	9.5
60°-70°	79.8	4.9
70°-80°	45.8	2.8
80°-90°	17.2	1.1
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°	653.1	40.0
0°-40°	1039.0	63.6
0°-60°	1490.2	91.3
0°-90°	1633.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1633.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	858	
5°	854	81
15°	817	230
25°	743	342
35°	623	386
45°	385	297
55°	168	155
65°	78	80
75°	43	46
85°	16	17
90°	0	



TEST NUMBER: P643397

CATALOG NUMBER: ML5615LSVWFL9FS1E - 591WB - 1500LM - 3000K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	858.4
2.5°	856.8
5°	853.6
7.5°	847.2
10°	839.2
12.5°	828.0
15°	816.8
17.5°	800.8
20°	784.9
22.5°	765.7
25°	743.3
27.5°	719.3
30°	692.1
32.5°	660.2
35°	623.4
37.5°	578.7
40°	522.7
42.5°	457.2
45°	385.2
47.5°	314.9
50°	257.4
52.5°	206.2
55°	167.8
57.5°	135.9
60°	111.9
62.5°	92.7
65°	78.3
67.5°	67.1
70°	57.5
72.5°	49.6
75°	43.2
77.5°	36.8
80°	30.4
82.5°	24.0
85°	16.0
87.5°	8.0
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)