

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: P643667

Luminaire Tested: ML5615LSVWFL9FS1E - 693TBZB - 1500LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643667  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-112)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSVWFL9FS1E - 693TBZB - 1500LM - 3000K  
Description: ML56 RR, MILKY OPTIC, 6" TUSCON BRONZE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1301.4 lumens  
Efficiency: N/A  
Efficacy: 76.1 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.21  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

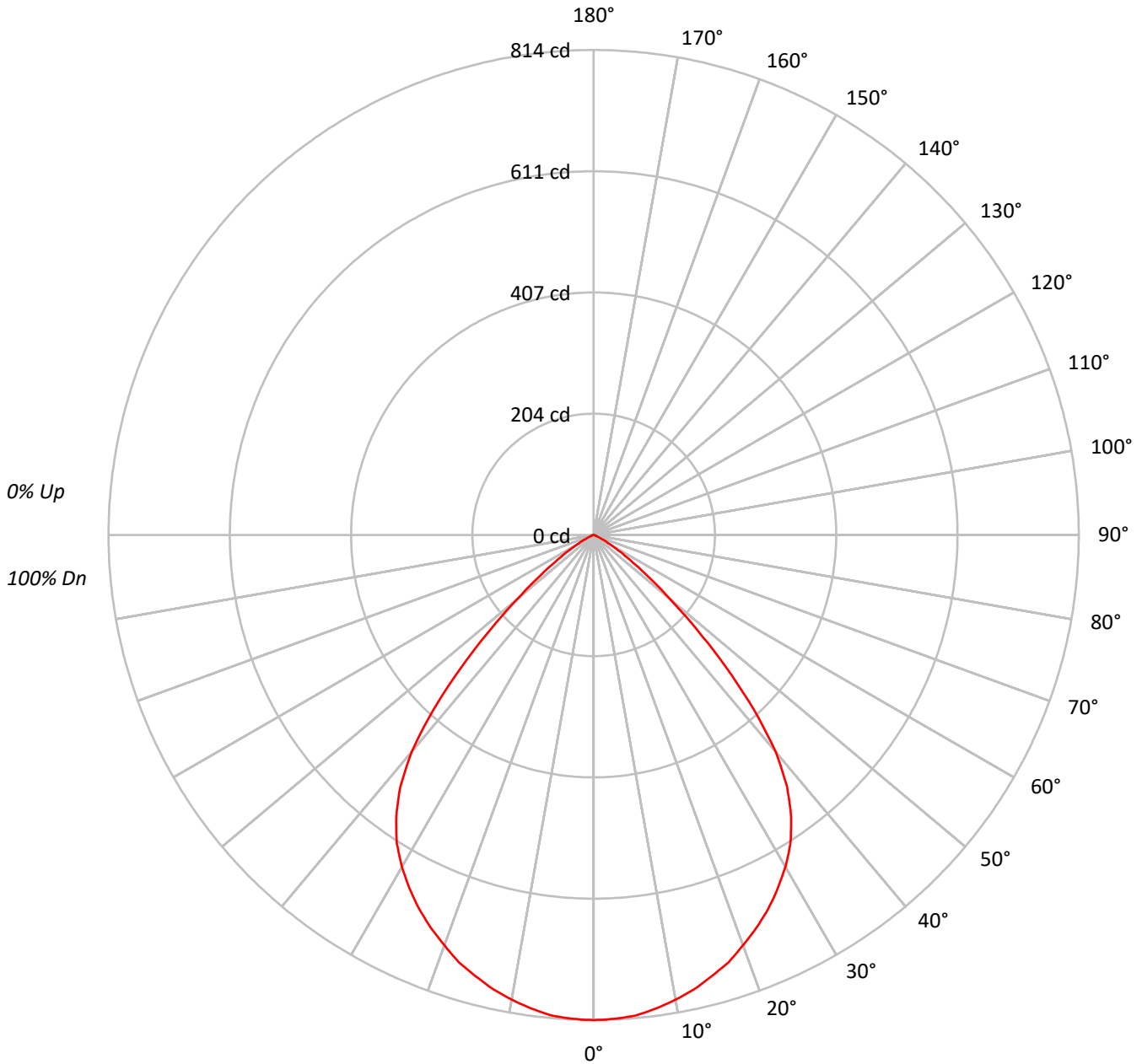
Input Watts (W): 17.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P643667

CATALOG NUMBER: ML5615LSVWFL9FS1E - 693TBZB - 1500LM - 3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P643667

CATALOG NUMBER: ML5615LSVWFL9FS1E - 693TBZB - 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	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91																			
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82																			
3	99	91	85	80	97	90	84	80	87	82	78	84	80	77	82	79	76	74																			
4	92	83	77	72	90	82	76	71	80	75	70	78	73	69	76	72	69	67																			
5	86	76	69	64	85	75	69	64	73	68	63	72	67	63	70	66	62	60																			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55																			
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50																			
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46																			
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42																			
10	63	52	45	40	62	51	45	40	50	44	40	50	44	40	49	44	40	38																			

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

	0°
0°	44651
5°	44557
10°	44093
15°	43502
20°	42756
25°	41912
30°	40721
35°	38661
40°	34014
45°	24313
50°	14191
55°	7493
60°	3508
65°	1453
70°	513
75°	339
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 24313 cd/sqm



TEST NUMBER: P643667

CATALOG NUMBER: ML5615LSVWFL9FS1E - 693TBZB - 1500LM - 3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.7	5.9
10°-20°	216.1	16.6
20°-30°	318.6	24.5
30°-40°	356.7	27.4
40°-50°	241.9	18.6
50°-60°	76.7	5.9
60°-70°	12.9	1.0
70°-80°	1.7	0.1
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°	611.4	47.0
0°-40°	968.2	74.4
0°-60°	1286.8	98.9
0°-90°	1301.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1301.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	814	
5°	810	77
15°	766	216
25°	693	319
35°	578	357
45°	314	242
55°	78	77
65°	11	13
75°	2	2
85°	0	0
90°	0	



TEST NUMBER: P643667

CATALOG NUMBER: ML5615LSVWFL9FS1E - 693TBZB - 1500LM - 3000K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	814.5
2.5°	812.9
5°	809.7
7.5°	801.7
10°	792.1
12.5°	780.9
15°	766.5
17.5°	752.1
20°	732.9
22.5°	713.7
25°	692.9
27.5°	668.9
30°	643.3
32.5°	614.5
35°	577.7
37.5°	532.9
40°	475.3
42.5°	398.5
45°	313.6
47.5°	233.6
50°	166.4
52.5°	116.8
55°	78.4
57.5°	52.8
60°	32.0
62.5°	19.2
65°	11.2
67.5°	4.8
70°	3.2
72.5°	1.6
75°	1.6
77.5°	1.6
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)