

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: P643580

Luminaire Tested: ML5615LSVWFL9FS1E - 691WB - 1500LM - 5000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643580  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-105)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSVWFL9FS1E - 691WB - 1500LM - 5000K  
Description: ML56 RR, MILKY OPTIC, 6" DEADFRONT TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

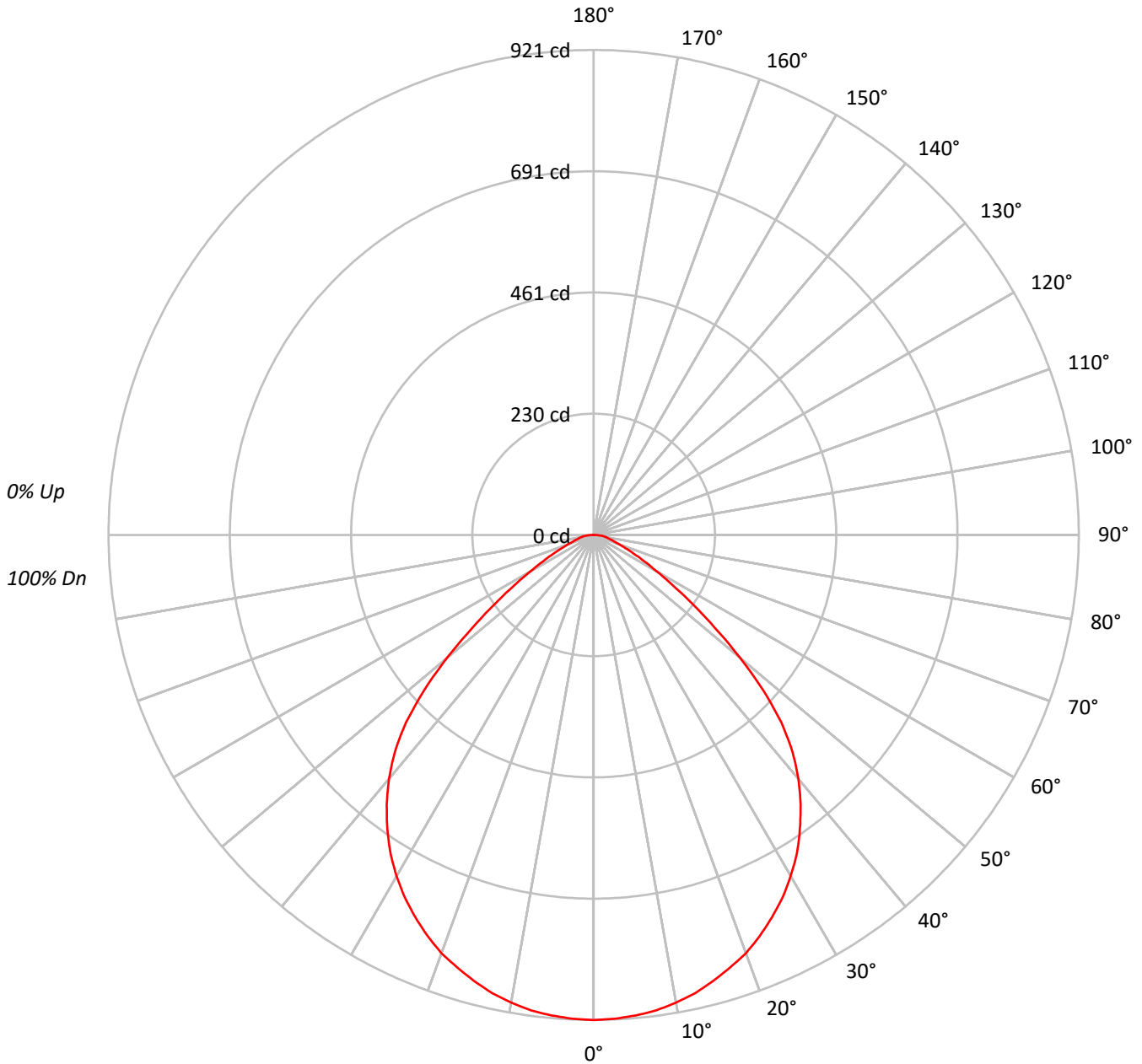
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1858.5 lumens  
Efficiency: N/A  
Efficacy: 108.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.28  
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



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				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				100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89				89
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	80	78				78
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68				68
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62	60				60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53				53
6	76	65	57	51	75	64	56	51	62	55	50	60	54	50	59	54	50	48				48
7	71	59	51	46	70	58	51	46	57	50	45	55	49	45	54	49	45	43				43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	40	39				39
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				35
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				32

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

	0°
0°	50511
5°	50413
10°	50205
15°	49785
20°	49313
25°	48456
30°	47355
35°	45682
40°	43281
45°	39074
50°	30916
55°	21973
60°	15119
65°	10779
70°	8223
75°	7117
80°	7261
85°	7799

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 39074 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.0	4.7
10°-20°	247.4	13.3
20°-30°	368.8	19.8
30°-40°	425.8	22.9
40°-50°	381.4	20.5
50°-60°	210.9	11.3
60°-70°	86.6	4.7
70°-80°	36.9	2.0
80°-90°	13.7	0.7
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°	703.2	37.8
0°-40°	1129.1	60.8
0°-60°	1721.3	92.6
0°-90°	1858.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1858.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	921	
5°	916	87
15°	877	247
25°	801	369
35°	683	426
45°	504	381
55°	230	211
65°	83	87
75°	34	37
85°	12	14
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	921.4
2.5°	919.6
5°	916.1
7.5°	910.8
10°	901.9
12.5°	891.3
15°	877.2
17.5°	861.3
20°	845.3
22.5°	824.1
25°	801.1
27.5°	776.4
30°	748.1
32.5°	718.0
35°	682.6
37.5°	645.5
40°	604.8
42.5°	558.8
45°	504.0
47.5°	436.8
50°	362.5
52.5°	290.0
55°	229.9
57.5°	178.6
60°	137.9
62.5°	107.9
65°	83.1
67.5°	65.4
70°	51.3
72.5°	40.7
75°	33.6
77.5°	28.3
80°	23.0
82.5°	19.5
85°	12.4
87.5°	7.1
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

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— 0°-180°

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(END OF REPORT)