

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: P640412

Luminaire Tested: ML5609LSVWFL75D2W1E - 594WB - 900LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640412  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-78)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5609LSVWFL75D2W1E - 594WB - 900LM - 3000K  
Description: ML56 RR, 75D TIR OPTIC, 5" WHITE GIMBAL TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

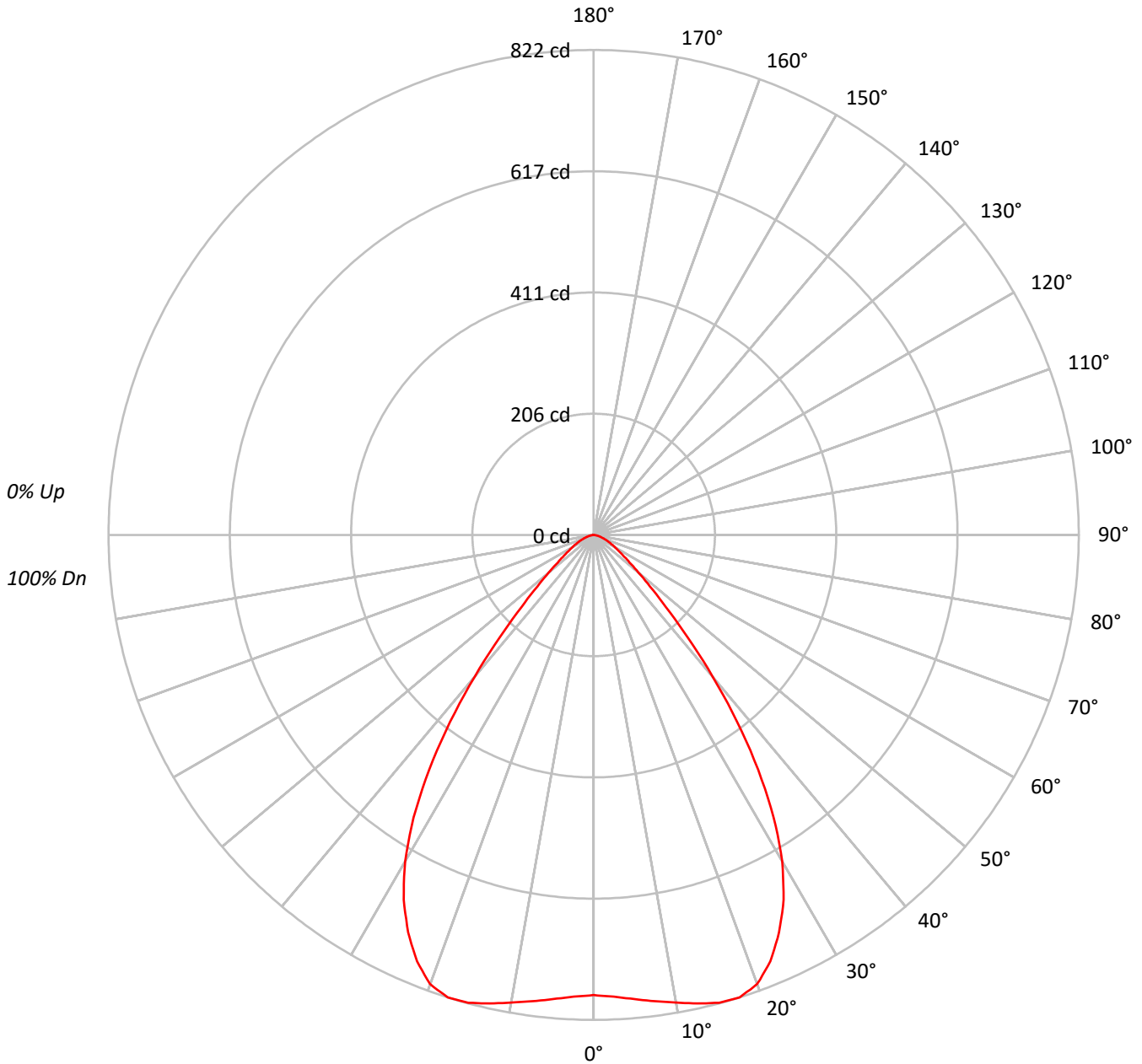
Lumens per Lamp: N/A  
Luminaire Lumens: 1185.6 lumens  
Efficiency: N/A  
Efficacy: 100.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.09  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.8  
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									
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	87	84	83																			
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	83	79	77	75																			
4	93	84	78	73	91	83	77	72	81	76	71	79	74	71	77	73	70	68																			
5	87	78	71	66	86	77	70	66	75	69	65	73	68	64	71	67	64	62																			
6	82	72	65	60	81	71	64	60	69	64	59	68	63	59	67	62	58	57																			
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52																			
8	73	62	55	50	72	61	55	50	60	54	50	59	54	50	58	53	50	48																			
9	69	58	51	47	68	57	51	46	56	50	46	55	50	46	54	50	46	44																			
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41																			

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

	0°
0°	61574
5°	62578
10°	64512
15°	67089
20°	68063
25°	64751
30°	58238
35°	46826
40°	32306
45°	19247
50°	12170
55°	8450
60°	6457
65°	5230
70°	4224
75°	3294
80°	1955
85°	996

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 19247 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.9	6.4
10°-20°	231.4	19.5
20°-30°	338.7	28.6
30°-40°	299.0	25.2
40°-50°	141.8	12.0
50°-60°	57.3	4.8
60°-70°	28.6	2.4
70°-80°	11.5	1.0
80°-90°	1.5	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°	646.0	54.5
0°-40°	945.0	79.7
0°-60°	1144.1	96.5
0°-90°	1185.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1185.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	780	
5°	790	76
15°	821	231
25°	743	339
35°	486	299
45°	172	142
55°	61	57
65°	28	29
75°	11	11
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	780.0
2.5°	783.2
5°	789.7
7.5°	797.2
10°	804.8
12.5°	813.4
15°	820.9
17.5°	822.0
20°	810.2
22.5°	782.2
25°	743.4
27.5°	697.0
30°	638.9
32.5°	567.8
35°	485.9
37.5°	399.7
40°	313.5
42.5°	235.9
45°	172.4
47.5°	129.3
50°	99.1
52.5°	76.5
55°	61.4
57.5°	49.6
60°	40.9
62.5°	34.5
65°	28.0
67.5°	23.7
70°	18.3
72.5°	14.0
75°	10.8
77.5°	7.5
80°	4.3
82.5°	2.2
85°	1.1
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

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— 0°-180°

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(END OF REPORT)