

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: P640362

Luminaire Tested: ML5609LSNFL25D2W1E - 594SNB - 900LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640362  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-10)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5609LSNFL25D2W1E - 594SNB - 900LM - 3000K  
Description: ML56 RR, 25D TIR OPTIC, 5" SATIN NICKLE GIMBAL TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1178.1 lumens  
Efficiency: N/A  
Efficacy: 99.8 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.43  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

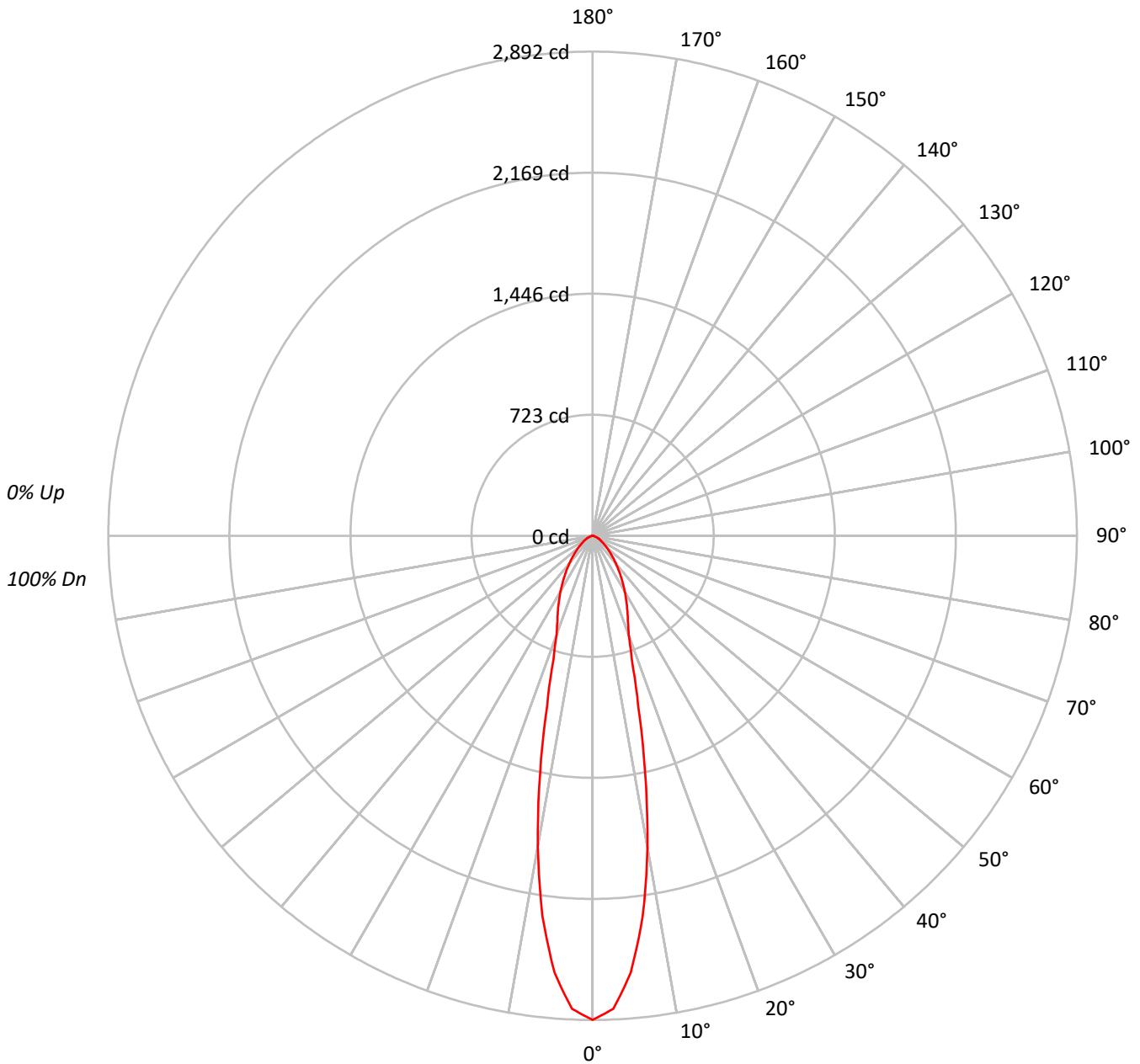
Input Watts (W): 11.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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	113	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92			92
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85			85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78			78
4	96	88	82	78	94	87	81	77	84	80	76	82	78	75	81	77	74	73			73
5	91	82	76	72	89	81	76	71	79	74	71	78	73	70	76	72	69	68			68
6	86	77	71	67	85	76	71	66	75	70	66	74	69	66	72	68	65	64			64
7	82	73	67	62	81	72	66	62	71	66	62	70	65	62	69	64	61	60			60
8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	57			57
9	75	66	60	56	74	65	59	56	64	59	55	63	59	55	62	58	55	54			54
10	72	63	57	53	71	62	57	53	61	56	53	61	56	53	60	55	52	51			51

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

	0°
0°	228281
5°	207457
10°	151195
15°	85706
20°	52698
25°	42619
30°	34875
35°	28043
40°	22218
45°	17449
50°	13632
55°	10680
60°	8510
65°	6837
70°	4985
75°	2623
80°	1455
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 17449 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	226.3	19.2
10°-20°	302.2	25.7
20°-30°	225.7	19.2
30°-40°	182.5	15.5
40°-50°	121.9	10.3
50°-60°	70.7	6.0
60°-70°	37.0	3.1
70°-80°	10.6	0.9
80°-90°	1.0	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°	754.3	64.0
0°-40°	936.8	79.5
0°-60°	1129.4	95.9
0°-90°	1178.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1178.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2892	
5°	2618	226
15°	1049	302
25°	489	226
35°	291	183
45°	156	122
55°	78	71
65°	37	37
75°	9	11
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2891.8
2.5°	2828.2
5°	2618.0
7.5°	2292.5
10°	1886.2
12.5°	1445.4
15°	1048.7
17.5°	777.1
20°	627.3
22.5°	549.7
25°	489.3
27.5°	434.4
30°	382.6
32.5°	334.1
35°	291.0
37.5°	251.1
40°	215.6
42.5°	184.3
45°	156.3
47.5°	131.5
50°	111.0
52.5°	92.7
55°	77.6
57.5°	64.7
60°	53.9
62.5°	45.3
65°	36.6
67.5°	30.2
70°	21.6
72.5°	14.0
75°	8.6
77.5°	5.4
80°	3.2
82.5°	2.2
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

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— 0°-180°

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(END OF REPORT)