

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: P640491

Luminaire Tested: ML5609LSWFL55D2W1E - 593BB - 900LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640491
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-52)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSWFL55D2W1E - 593BB - 900LM - 2700K
Description: ML56 RR, 55D TIR OPTIC, 5" BLACK BAFFLE TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

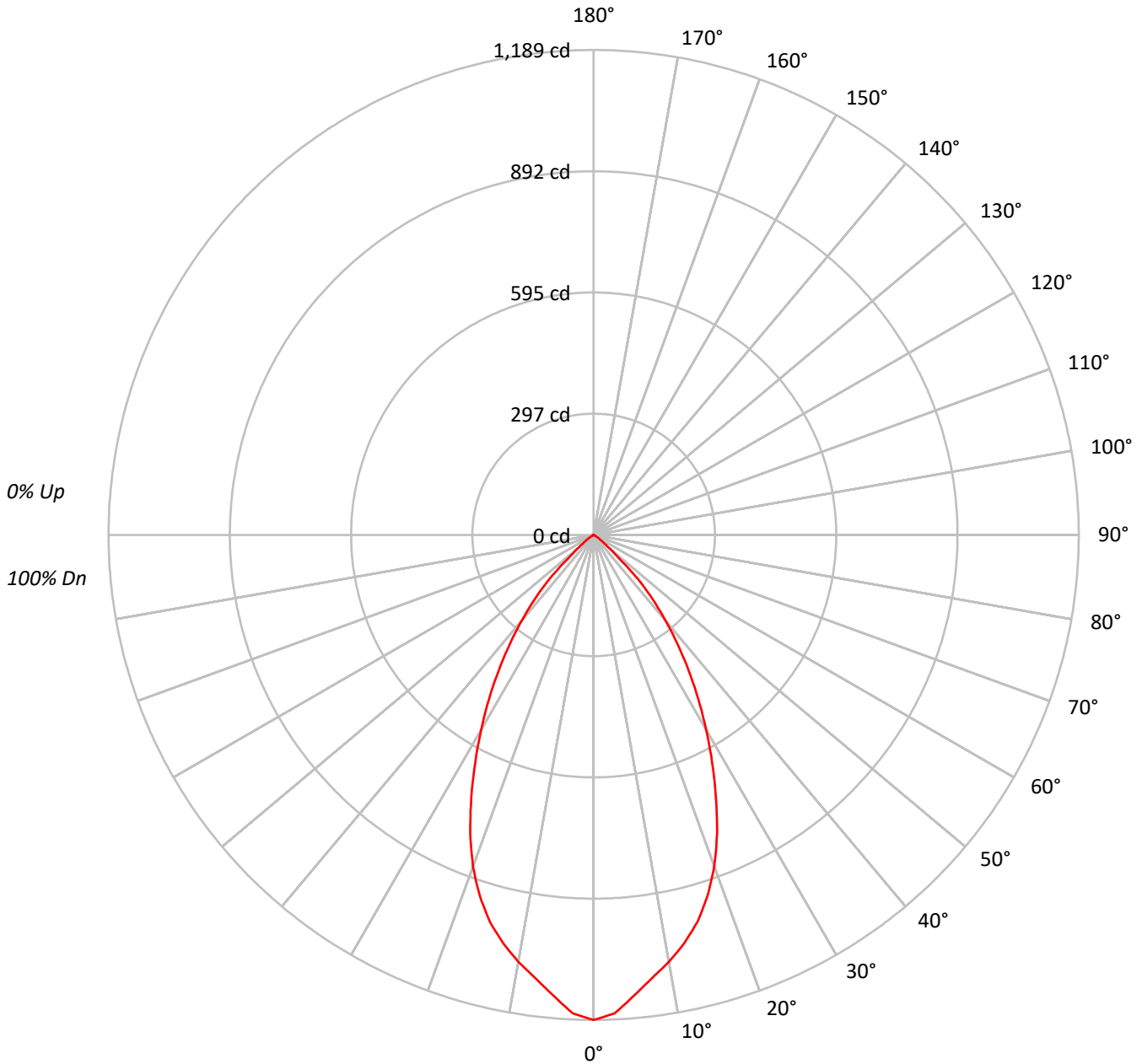
Lumens per Lamp: N/A
Luminaire Lumens: 1091.5 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 11.8
Input Voltage (V): NR
Input Current (Ain): 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				
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			
1	113	110	108	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93			
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86			
3	102	95	90	86	100	94	89	85	91	87	84	89	85	82	86	83	81	79			
4	96	88	83	78	94	87	82	78	85	80	77	83	79	76	81	78	75	73			
5	91	82	76	72	89	81	76	71	80	75	71	78	74	70	76	73	70	68			
6	86	77	71	66	85	76	70	66	75	69	65	73	69	65	72	68	65	63			
7	82	72	66	61	80	71	65	61	70	65	61	69	64	60	68	63	60	59			
8	77	68	61	57	76	67	61	57	66	60	57	65	60	56	64	59	56	55			
9	74	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53	51			
10	70	60	54	50	69	59	54	50	59	53	50	58	53	49	57	53	49	48			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	93861
5°	89845
10°	85169
15°	80263
20°	72633
25°	61755
30°	50253
35°	39097
40°	28143
45°	17259
50°	5674
55°	2491
60°	632
65°	187
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 17259 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.0	9.7
10°-20°	273.5	25.1
20°-30°	323.9	29.7
30°-40°	252.9	23.2
40°-50°	115.6	10.6
50°-60°	18.3	1.7
60°-70°	1.2	0.1
70°-80°	0.0	0.0
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°	703.3	64.4
0°-40°	956.3	87.6
0°-60°	1090.3	99.9
0°-90°	1091.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1091.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1189	
5°	1134	106
15°	982	273
25°	709	324
35°	406	253
45°	155	116
55°	18	18
65°	1	1
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1189.0
2.5°	1173.9
5°	1133.8
7.5°	1095.6
10°	1062.5
12.5°	1025.3
15°	982.1
17.5°	927.9
20°	864.6
22.5°	790.3
25°	709.0
27.5°	628.6
30°	551.3
32.5°	477.0
35°	405.7
37.5°	337.4
40°	273.1
42.5°	213.9
45°	154.6
47.5°	82.3
50°	46.2
52.5°	29.1
55°	18.1
57.5°	11.0
60°	4.0
62.5°	2.0
65°	1.0
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
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

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— 0°-180°

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(END OF REPORT)