

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: P640484

Luminaire Tested: ML5609LSWFL55D2W1E - 591WB - 900LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640484
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-47)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSWFL55D2W1E - 591WB - 900LM - 3000K
Description: ML56 RR, 55D TIR OPTIC, 5" DEADFRONT TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

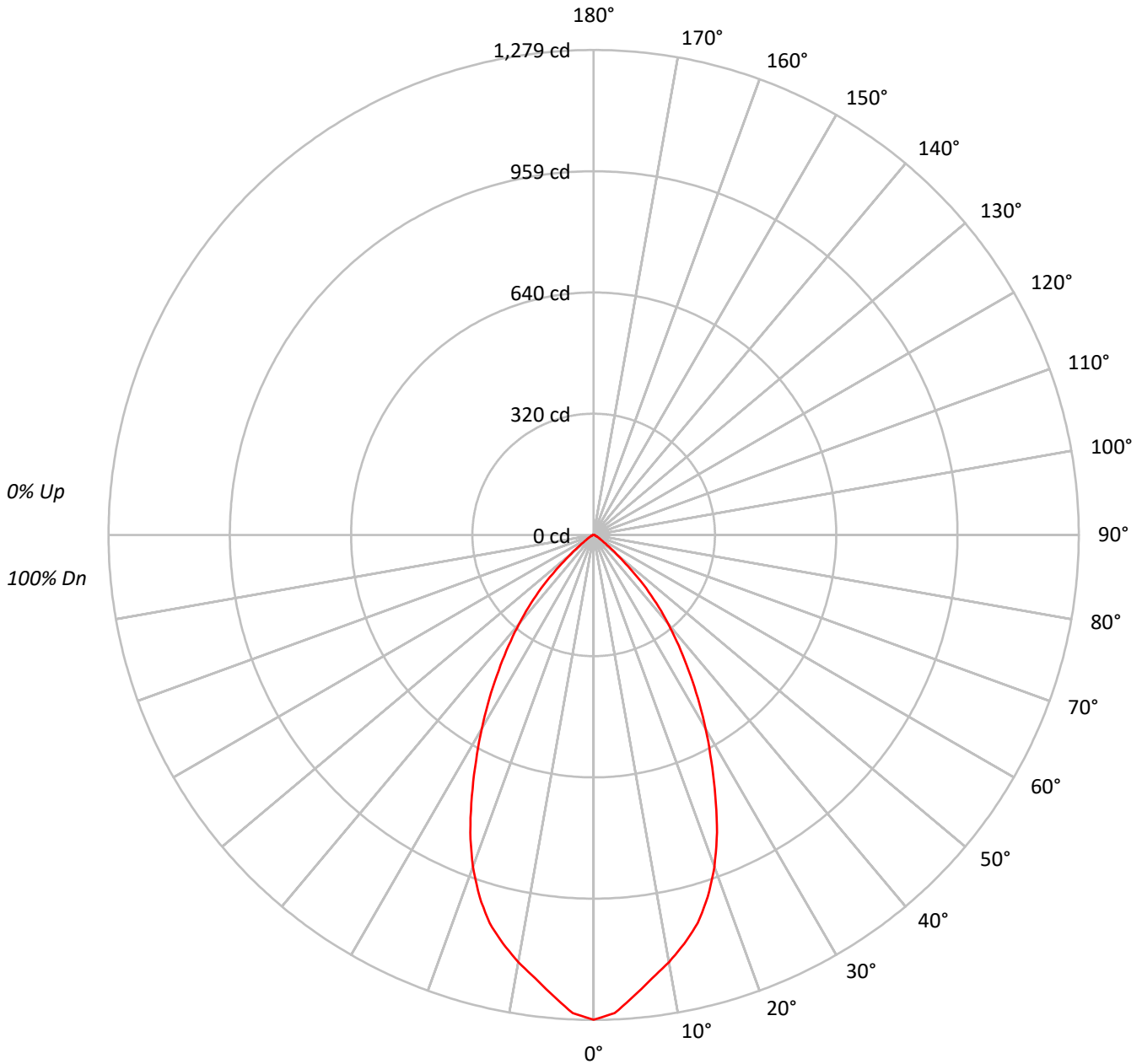
Lumens per Lamp: N/A
Luminaire Lumens: 1215.8 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 11.8
Input Voltage (V): NR
Input Current (A_{in}): 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			100																
1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93			93																
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	82	80	78			78																
4	95	87	81	77	94	86	81	76	84	79	76	82	78	75	80	77	74	72			72																
5	90	81	75	70	88	80	74	70	78	73	69	77	72	69	75	71	68	67			67																
6	85	76	69	65	84	75	69	65	73	68	64	72	67	64	71	66	63	62			62																
7	81	71	64	60	79	70	64	60	69	63	59	68	63	59	66	62	59	57			57																
8	76	66	60	56	75	66	60	55	65	59	55	64	59	55	63	58	55	53			53																
9	73	62	56	52	71	62	56	52	61	55	51	60	55	51	59	54	51	50			50																
10	69	59	53	48	68	58	52	48	57	52	48	57	52	48	56	51	48	47			47																

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	100934
5°	96707
10°	91702
15°	86621
20°	78185
25°	66145
30°	53808
35°	42046
40°	31410
45°	20687
50°	9653
55°	4005
60°	2384
65°	1401
70°	992
75°	976
80°	1000
85°	996

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 20687 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.1	9.4
10°-20°	294.7	24.2
20°-30°	347.2	28.6
30°-40°	273.5	22.5
40°-50°	141.6	11.6
50°-60°	31.5	2.6
60°-70°	8.2	0.7
70°-80°	3.4	0.3
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°	756.0	62.2
0°-40°	1029.6	84.7
0°-60°	1202.7	98.9
0°-90°	1215.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1215.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1279	
5°	1220	114
15°	1060	295
25°	759	347
35°	436	274
45°	185	142
55°	29	31
65°	8	8
75°	3	3
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1278.6
2.5°	1262.4
5°	1220.4
7.5°	1179.5
10°	1144.0
12.5°	1104.1
15°	1059.9
17.5°	1000.7
20°	930.7
22.5°	849.9
25°	759.4
27.5°	671.1
30°	590.3
32.5°	511.7
35°	436.3
37.5°	368.4
40°	304.8
42.5°	244.5
45°	185.3
47.5°	122.8
50°	78.6
52.5°	47.4
55°	29.1
57.5°	19.4
60°	15.1
62.5°	10.8
65°	7.5
67.5°	5.4
70°	4.3
72.5°	3.2
75°	3.2
77.5°	3.2
80°	2.2
82.5°	2.2
85°	1.1
87.5°	1.1
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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