

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P640345

Luminaire Tested: ML5609LSNFL25D2W1E - 591WB - 900LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640345
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSNFL25D2W1E - 591WB - 900LM - 2700K
Description: ML56 RR, 25D TIR OPTIC, 5" DEADFRONT TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

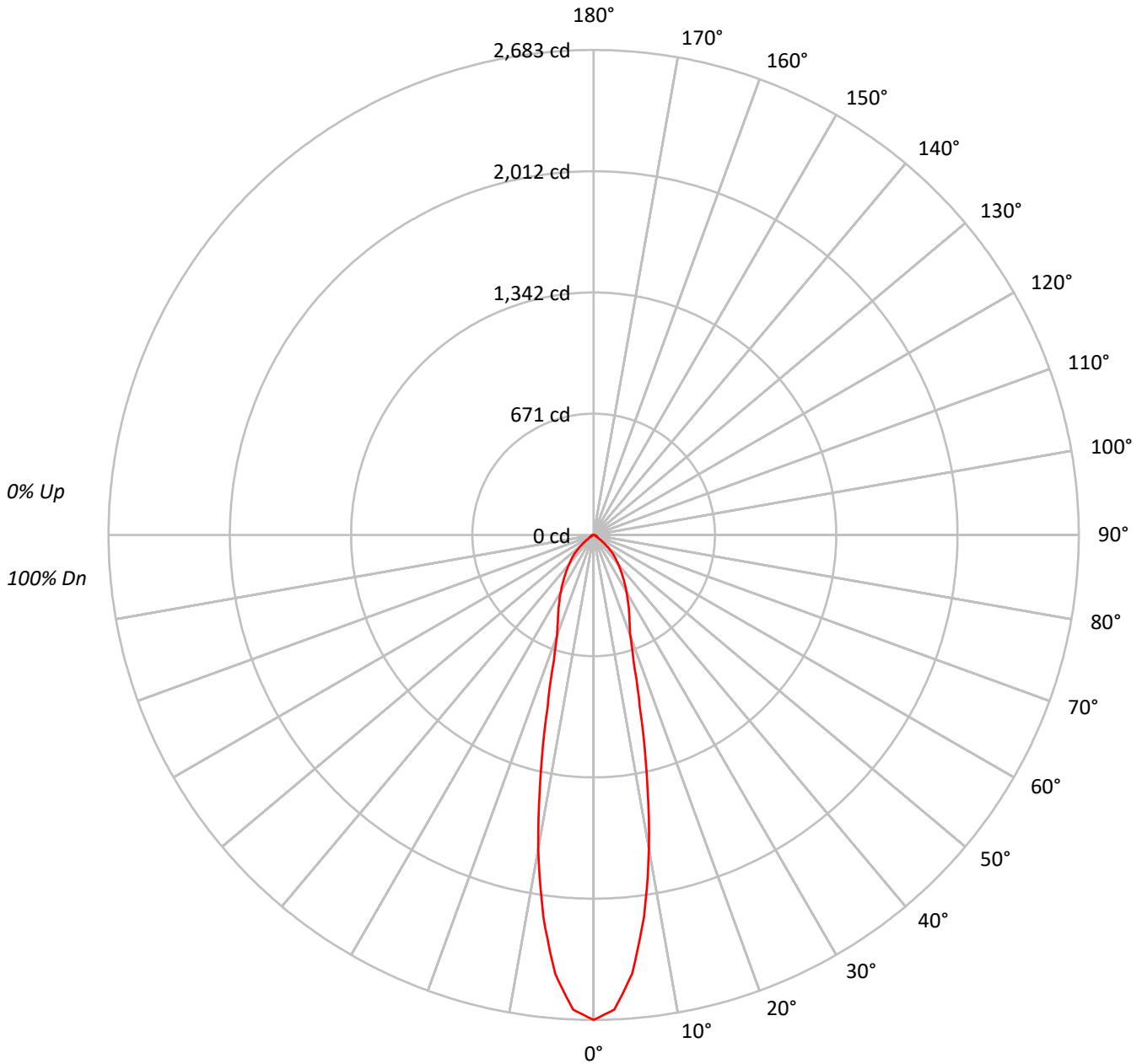
Lumens per Lamp: N/A
Luminaire Lumens: 1066.4 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P640345
CATALOG NUMBER: ML5609LSNFL25D2W1E - 591WB - 900LM - 2700K

Luminous Intensity Polar Plot





TEST NUMBER: P640345

CATALOG NUMBER: ML5609LSNFL25D2W1E - 591WB - 900LM - 2700K

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			100
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93			93
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86			86
3	102	95	90	86	100	94	89	86	91	87	84	89	86	83	87	84	82	80			80
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75			75
5	92	84	78	74	90	83	77	73	81	76	73	79	75	72	78	74	71	70			70
6	88	79	73	69	86	78	72	68	77	72	68	75	71	67	74	70	67	66			66
7	84	75	69	64	82	74	68	64	73	68	64	71	67	64	70	66	63	62			62
8	80	71	65	61	79	70	64	61	69	64	60	68	63	60	67	63	60	58			58
9	77	67	61	58	76	67	61	57	66	61	57	65	60	57	64	60	57	56			56
10	73	64	58	55	72	64	58	55	63	58	54	62	58	54	61	57	54	53			53

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	211806
5°	193114
10°	141320
15°	80459
20°	49539
25°	40250
30°	33143
35°	26916
40°	21744
45°	17382
50°	11348
55°	4982
60°	3173
65°	2821
70°	2539
75°	2440
80°	2728
85°	2717

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 17382 cd/sqm



TEST NUMBER: P640345

CATALOG NUMBER: ML5609LSNFL25D2W1E - 591WB - 900LM - 2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.6	19.8
10°-20°	283.4	26.6
20°-30°	212.8	20.0
30°-40°	175.5	16.5
40°-50°	117.0	11.0
50°-60°	39.7	3.7
60°-70°	15.3	1.4
70°-80°	8.6	0.8
80°-90°	3.5	0.3
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°	706.9	66.3
0°-40°	882.3	82.7
0°-60°	1039.0	97.4
0°-90°	1066.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1066.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2683	
5°	2437	211
15°	984	283
25°	462	213
35°	279	175
45°	156	117
55°	36	40
65°	15	15
75°	8	9
85°	3	4
90°	0	



TEST NUMBER: P640345

CATALOG NUMBER: ML5609LSNFL25D2W1E - 591WB - 900LM - 2700K

CANDELA DISTRIBUTION (FULL):

	0°
0°	2683.1
2.5°	2627.9
5°	2437.0
7.5°	2130.6
10°	1763.0
12.5°	1353.1
15°	984.5
17.5°	730.3
20°	589.7
22.5°	516.3
25°	462.1
27.5°	409.9
30°	363.6
32.5°	319.4
35°	279.3
37.5°	243.1
40°	211.0
42.5°	181.8
45°	155.7
47.5°	121.5
50°	92.4
52.5°	63.3
55°	36.2
57.5°	24.1
60°	20.1
62.5°	18.1
65°	15.1
67.5°	13.1
70°	11.0
72.5°	9.0
75°	8.0
77.5°	7.0
80°	6.0
82.5°	5.0
85°	3.0
87.5°	2.0
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

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



— 0°-180°

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)