

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: P640306

Luminaire Tested: ML5609LSFL40D2W1E - 592W - 900LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640306
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-27)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSFL40D2W1E - 592W - 900LM - 3000K
Description: ML56 RR, 40D TIR OPTIC, 5" WHITE TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

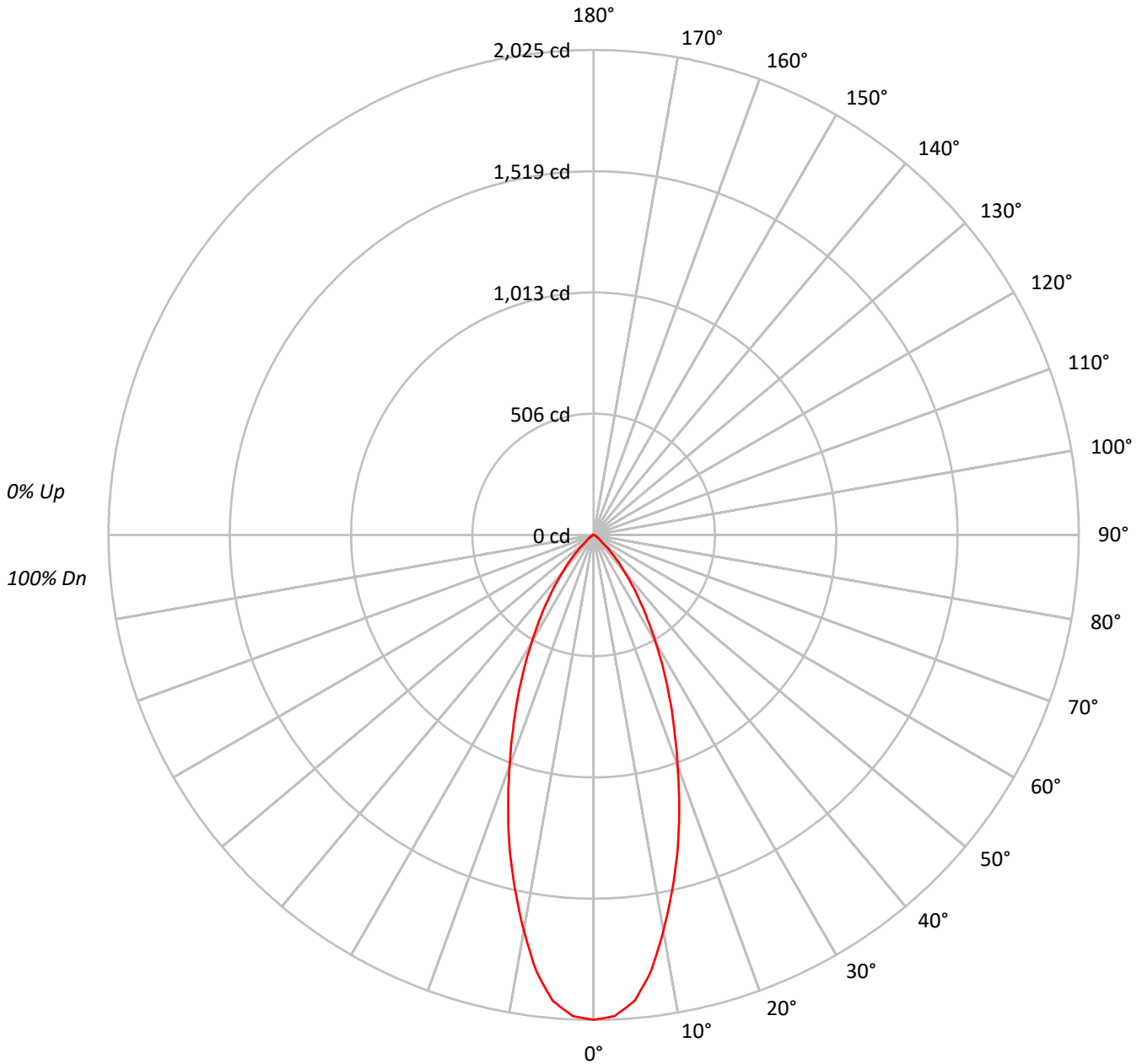
Lumens per Lamp: N/A
Luminaire Lumens: 1225.5 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

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: P640306
CATALOG NUMBER: ML5609LSFL40D2W1E - 592W - 900LM - 3000K

Luminous Intensity Polar Plot





TEST NUMBER: P640306

CATALOG NUMBER: ML5609LSFL40D2W1E - 592W - 900LM - 3000K

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	114	111	108	106	111	109	106	104	105	103	101	101	100	98	97	96	95	94																			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87																			
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81																			
4	98	90	85	81	96	89	84	80	87	83	80	85	82	79	83	80	78	76																			
5	93	85	79	75	92	84	79	75	82	78	74	81	77	73	79	76	73	71																			
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67																			
7	85	76	70	66	83	75	69	66	74	69	65	73	68	65	71	68	65	63																			
8	81	72	66	62	80	71	66	62	70	65	61	69	64	61	68	64	61	60																			
9	77	68	62	58	76	67	62	58	67	62	58	66	61	58	65	61	58	56																			
10	74	65	59	55	73	64	59	55	63	58	55	63	58	55	62	58	55	54																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	159824
5°	154800
10°	134466
15°	110746
20°	86040
25°	65265
30°	47172
35°	32313
40°	20332
45°	11912
50°	4765
55°	3110
60°	2210
65°	1401
70°	1246
75°	1312
80°	1455
85°	996

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11912 cd/sqm



TEST NUMBER: P640306

CATALOG NUMBER: ML5609LSFL40D2W1E - 592W - 900LM - 3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.4	14.5
10°-20°	373.8	30.5
20°-30°	343.4	28.0
30°-40°	212.1	17.3
40°-50°	82.9	6.8
50°-60°	21.4	1.7
60°-70°	8.5	0.7
70°-80°	4.2	0.3
80°-90°	1.6	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°	894.7	73.0
0°-40°	1106.8	90.3
0°-60°	1211.1	98.8
0°-90°	1225.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1225.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2025	
5°	1954	177
15°	1355	374
25°	749	343
35°	335	212
45°	107	83
55°	23	21
65°	8	8
75°	4	4
85°	1	2
90°	0	



TEST NUMBER: P640306

CATALOG NUMBER: ML5609LSFL40D2W1E - 592W - 900LM - 3000K

CANDELA DISTRIBUTION (FULL):

0°	
0°	2024.6
2.5°	2010.6
5°	1953.5
7.5°	1837.0
10°	1677.5
12.5°	1515.8
15°	1355.1
17.5°	1187.0
20°	1024.2
22.5°	879.7
25°	749.3
27.5°	627.4
30°	517.5
32.5°	419.4
35°	335.3
37.5°	263.0
40°	197.3
42.5°	150.9
45°	106.7
47.5°	61.4
50°	38.8
52.5°	30.2
55°	22.6
57.5°	17.2
60°	14.0
62.5°	11.9
65°	7.5
67.5°	5.4
70°	5.4
72.5°	4.3
75°	4.3
77.5°	3.2
80°	3.2
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

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)