

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: P640327

Luminaire Tested: ML5609LSFL40D2W1E - 692SC - 900LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640327
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-37)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSFL40D2W1E - 692SC - 900LM - 2700K
Description: ML56 RR, 40D TIR OPTIC, 6" SPECULAR CLEAR TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

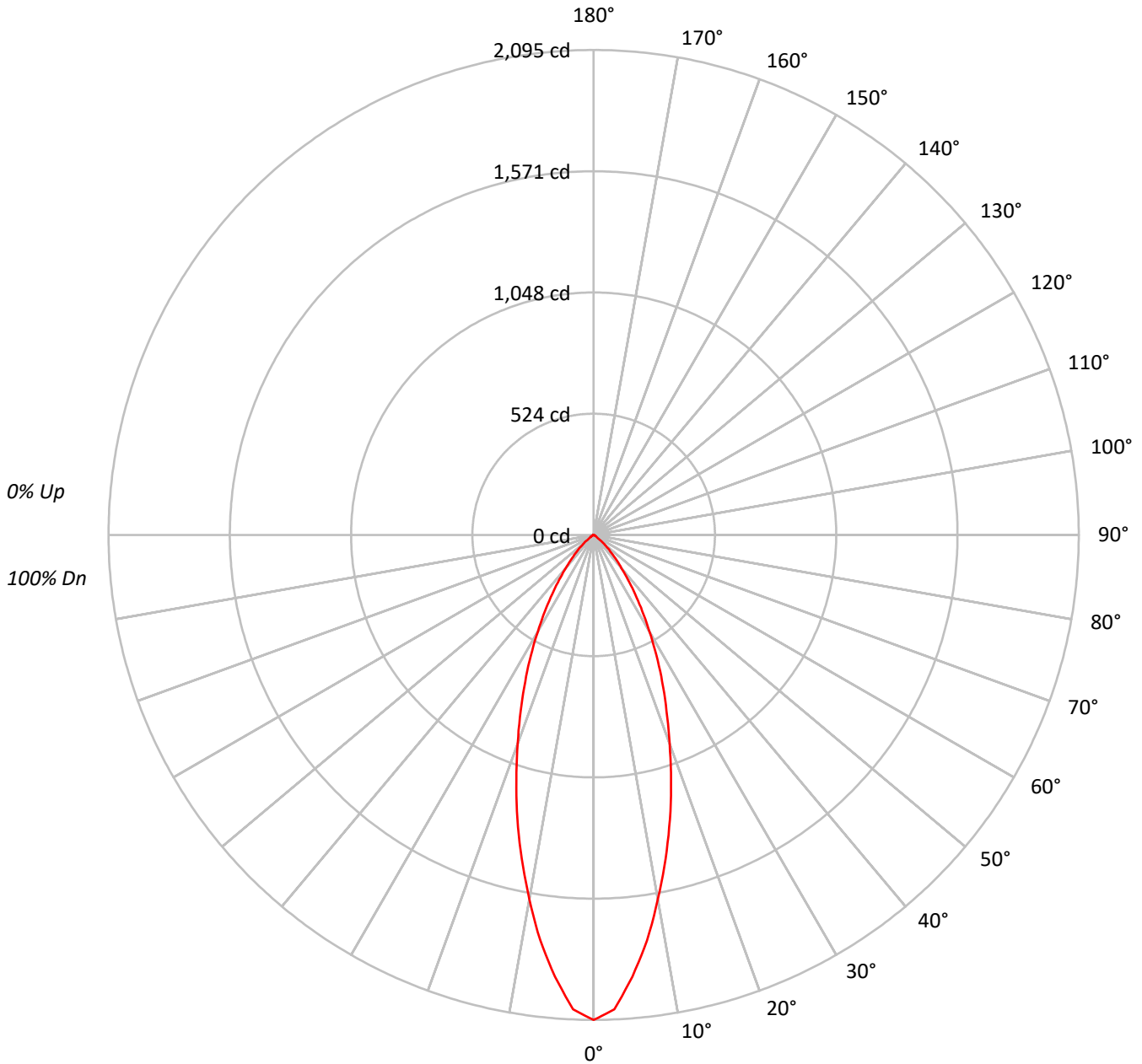
Lumens per Lamp: N/A
Luminaire Lumens: 1149.8 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.59 / 0.66
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P640327
CATALOG NUMBER: ML5609LSFL40D2W1E - 692SC - 900LM - 2700K

Luminous Intensity Polar Plot





TEST NUMBER: P640327

CATALOG NUMBER: ML5609LSFL40D2W1E - 692SC - 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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94		
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88		
3	103	97	92	88	101	96	91	88	93	89	86	91	88	85	88	86	84	82		
4	98	91	86	82	96	90	85	81	88	83	80	86	82	79	84	81	78	77		
5	94	86	80	76	92	85	79	75	83	78	75	81	77	74	80	76	73	72		
6	89	81	75	71	88	80	74	71	78	74	70	77	73	70	76	72	69	68		
7	85	76	70	66	84	76	70	66	74	69	66	73	69	66	72	68	65	64		
8	81	72	66	62	80	72	66	62	71	66	62	69	65	62	69	65	62	60		
9	78	68	63	59	77	68	63	59	67	62	59	66	62	59	65	61	58	57		
10	74	65	60	56	73	65	59	56	64	59	56	63	59	56	62	58	55	54		

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	114859
5°	105404
10°	88954
15°	72168
20°	55900
25°	42347
30°	30517
35°	20840
40°	13368
45°	8179
50°	4281
55°	1634
60°	987
65°	389
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8179 cd/sqm



TEST NUMBER: P640327

CATALOG NUMBER: ML5609LSFL40D2W1E - 692SC - 900LM - 2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.1	15.1
10°-20°	351.6	30.6
20°-30°	321.0	27.9
30°-40°	197.4	17.2
40°-50°	84.7	7.4
50°-60°	18.7	1.6
60°-70°	3.3	0.3
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°	845.7	73.6
0°-40°	1043.0	90.7
0°-60°	1146.5	99.7
0°-90°	1149.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1149.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2095	
5°	1915	173
15°	1272	352
25°	700	321
35°	311	197
45°	106	85
55°	17	19
65°	3	3
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P640327

CATALOG NUMBER: ML5609LSFL40D2W1E - 692SC - 900LM - 2700K

CANDELA DISTRIBUTION (FULL):

	0°
0°	2095.2
2.5°	2051.0
5°	1915.4
7.5°	1766.7
10°	1598.0
12.5°	1433.3
15°	1271.6
17.5°	1109.9
20°	958.2
22.5°	822.6
25°	700.1
27.5°	586.6
30°	482.1
32.5°	390.7
35°	311.4
37.5°	243.1
40°	186.8
42.5°	143.6
45°	105.5
47.5°	77.3
50°	50.2
52.5°	25.1
55°	17.1
57.5°	13.1
60°	9.0
62.5°	6.0
65°	3.0
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

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)