

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: P640624

Luminaire Tested: ML5612LSFL4097FS1E - 593SNB - 600LM - 4000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640624
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-30)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSFL4097FS1E - 593SNB - 600LM - 4000K
Description: ML56 RR, 40D TIR OPTIC, 5" SATIN NICKLE BAFFLE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

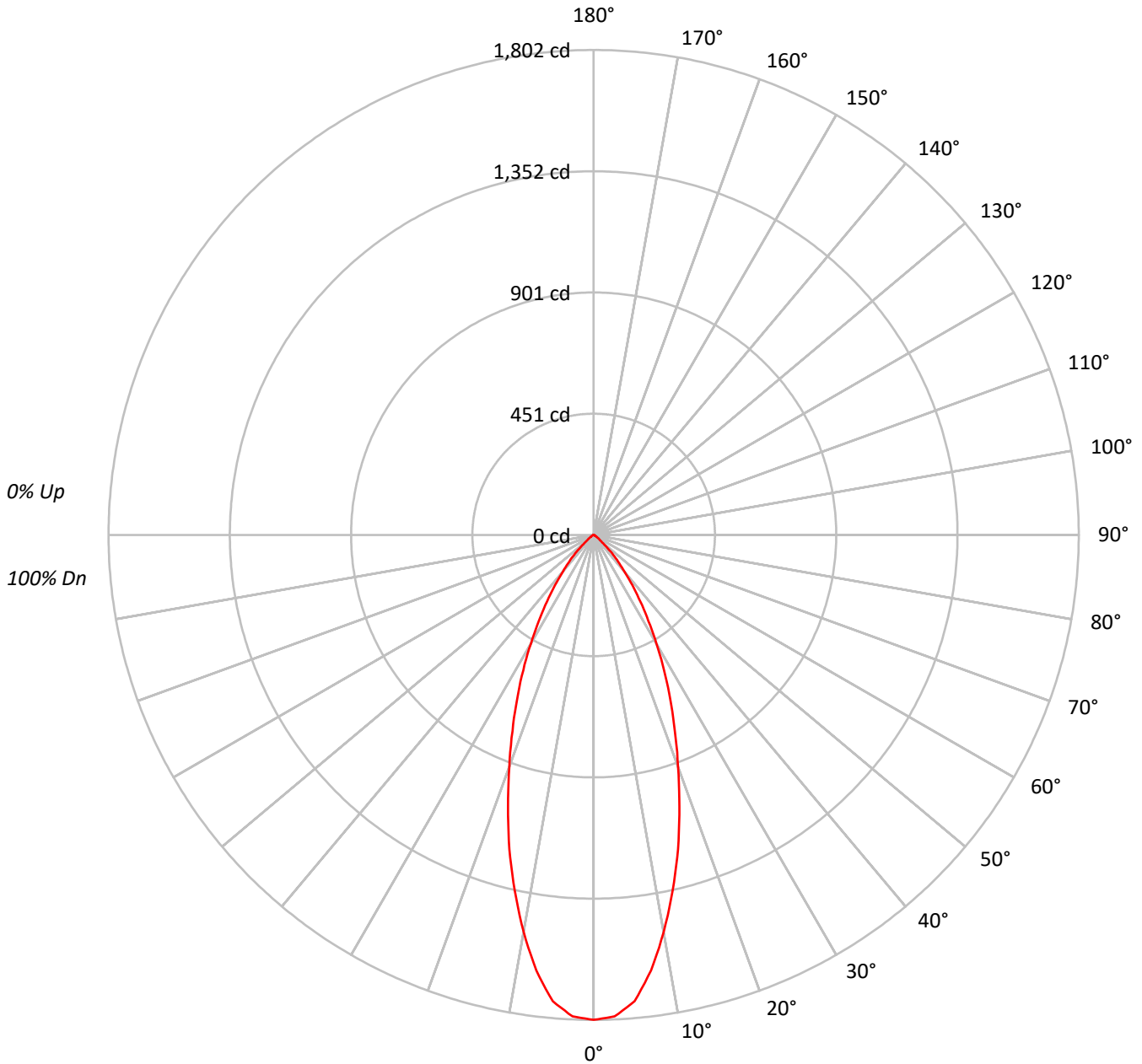
Lumens per Lamp: N/A
Luminaire Lumens: 1086.7 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 10.3
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: P640624
CATALOG NUMBER: ML5612LSFL4097FS1E - 593SNB - 600LM - 4000K

Luminous Intensity Polar Plot





TEST NUMBER: P640624

CATALOG NUMBER: ML5612LSFL4097FS1E - 593SNB - 600LM - 4000K

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	109	106	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	87	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	93	85	80	76	92	85	79	75	83	78	75	81	77	74	80	76	73	72																			
6	89	81	75	71	88	80	74	70	78	74	70	77	73	69	76	72	69	68																			
7	85	76	70	66	84	75	70	66	74	69	66	73	69	65	72	68	65	64																			
8	81	72	66	62	80	71	66	62	70	65	62	69	65	62	68	64	61	60																			
9	78	68	63	59	76	68	62	59	67	62	59	66	62	58	65	61	58	57																			
10	74	65	59	56	73	65	59	56	64	59	55	63	59	55	62	58	55	54																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	142228
5°	137866
10°	120094
15°	98823
20°	76976
25°	58593
30°	42559
35°	29065
40°	18230
45°	10796
50°	4040
55°	2395
60°	1374
65°	542
70°	231
75°	305
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10796 cd/sqm



TEST NUMBER: P640624

CATALOG NUMBER: ML5612LSFL4097FS1E - 593SNB - 600LM - 4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.0	14.5
10°-20°	333.7	30.7
20°-30°	308.5	28.4
30°-40°	190.9	17.6
40°-50°	74.5	6.9
50°-60°	16.6	1.5
60°-70°	3.8	0.3
70°-80°	0.7	0.1
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°	800.2	73.6
0°-40°	991.1	91.2
0°-60°	1082.3	99.6
0°-90°	1086.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1086.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1802	
5°	1740	158
15°	1209	334
25°	673	309
35°	302	191
45°	97	75
55°	17	17
65°	3	4
75°	1	1
85°	0	0
90°	0	



TEST NUMBER: P640624

CATALOG NUMBER: ML5612LSFL4097FS1E - 593SNB - 600LM - 4000K

CANDELA DISTRIBUTION (FULL):

	0°
0°	1801.7
2.5°	1791.0
5°	1739.8
7.5°	1632.5
10°	1498.2
12.5°	1354.2
15°	1209.2
17.5°	1057.4
20°	916.3
22.5°	787.8
25°	672.7
27.5°	566.4
30°	466.9
32.5°	378.9
35°	301.6
37.5°	235.8
40°	176.9
42.5°	134.4
45°	96.7
47.5°	57.0
50°	32.9
52.5°	24.2
55°	17.4
57.5°	12.6
60°	8.7
62.5°	6.8
65°	2.9
67.5°	1.0
70°	1.0
72.5°	1.0
75°	1.0
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)