

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: P640808

Luminaire Tested: ML5612LSFL4097FS1E - 693SNB - 900LM - 3500K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640808
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-42)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSFL4097FS1E - 693SNB - 900LM - 3500K
Description: ML56 RR, 40D TIR OPTIC, 6" SATIN NICKLE BAFFLE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1311.8 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.7
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

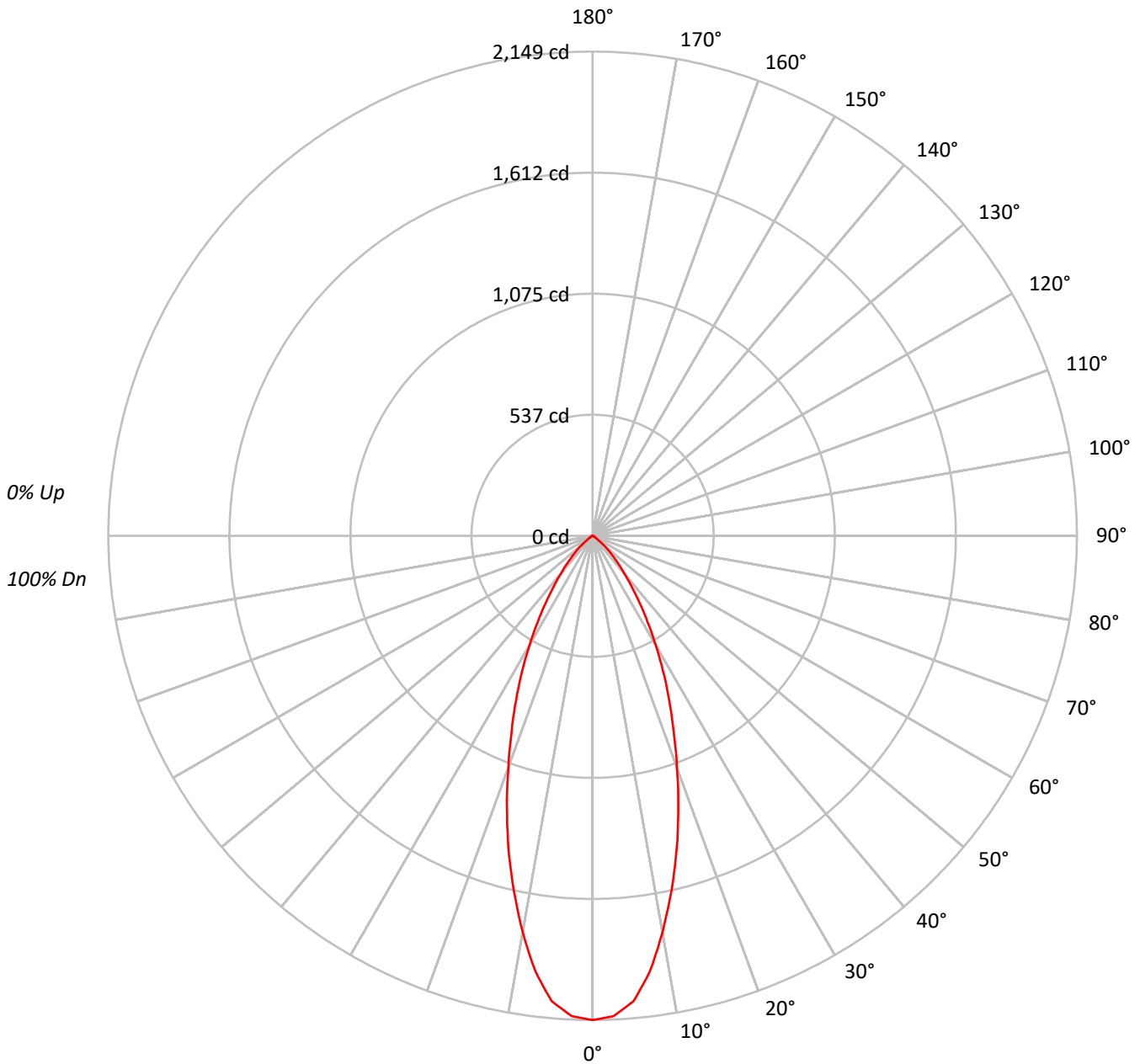
Input Watts (W): 13.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P640808

CATALOG NUMBER: ML5612LSFL4097FS1E - 693SNB - 900LM - 3500K

Luminous Intensity Polar Plot





TEST NUMBER: P640808

CATALOG NUMBER: ML5612LSFL4097FS1E - 693SNB - 900LM - 3500K

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	101	101	100	98	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	95	91	87	93	89	86	90	87	85	88	86	83	82																			
4	98	91	85	81	96	90	85	81	87	83	80	85	82	79	84	80	78	76																			
5	93	85	80	75	92	84	79	75	82	78	74	81	77	74	79	76	73	72																			
6	89	80	74	70	87	79	74	70	78	73	70	77	72	69	75	72	69	67																			
7	85	76	70	66	83	75	70	66	74	69	65	73	68	65	72	68	65	63																			
8	81	72	66	62	80	71	66	62	70	65	62	69	65	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	53																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	117814
5°	114137
10°	99403
15°	81771
20°	63799
25°	48565
30°	35341
35°	24240
40°	15687
45°	9660
50°	5211
55°	1988
60°	1261
65°	454
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9660 cd/sqm



TEST NUMBER: P640808

CATALOG NUMBER: ML5612LSFL4097FS1E - 693SNB - 900LM - 3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.5	14.4
10°-20°	398.1	30.3
20°-30°	368.2	28.1
30°-40°	229.6	17.5
40°-50°	100.3	7.6
50°-60°	23.1	1.8
60°-70°	4.2	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°	954.7	72.8
0°-40°	1184.2	90.3
0°-60°	1307.6	99.7
0°-90°	1311.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1311.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2149	
5°	2074	188
15°	1441	398
25°	803	368
35°	362	230
45°	125	100
55°	21	23
65°	4	4
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P640808

CATALOG NUMBER: ML5612LSFL4097FS1E - 693SNB - 900LM - 3500K

CANDELA DISTRIBUTION (FULL):

	0°
0°	2149.1
2.5°	2134.1
5°	2074.1
7.5°	1949.6
10°	1785.7
12.5°	1613.9
15°	1440.8
17.5°	1264.3
20°	1093.6
22.5°	939.0
25°	802.9
27.5°	676.0
30°	558.3
32.5°	453.4
35°	362.2
37.5°	283.8
40°	219.2
42.5°	169.6
45°	124.6
47.5°	92.3
50°	61.1
52.5°	31.1
55°	20.8
57.5°	16.2
60°	11.5
62.5°	6.9
65°	3.5
67.5°	1.2
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)