

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: P640875

Luminaire Tested: ML5612LSFL4097FS1E - 696WB - 1200LM - 5000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640875  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-46)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSFL4097FS1E - 696WB - 1200LM - 5000K  
Description: ML56 RR, 40D TIR OPTIC, 6" SHALLOW WHITE BAFFLE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

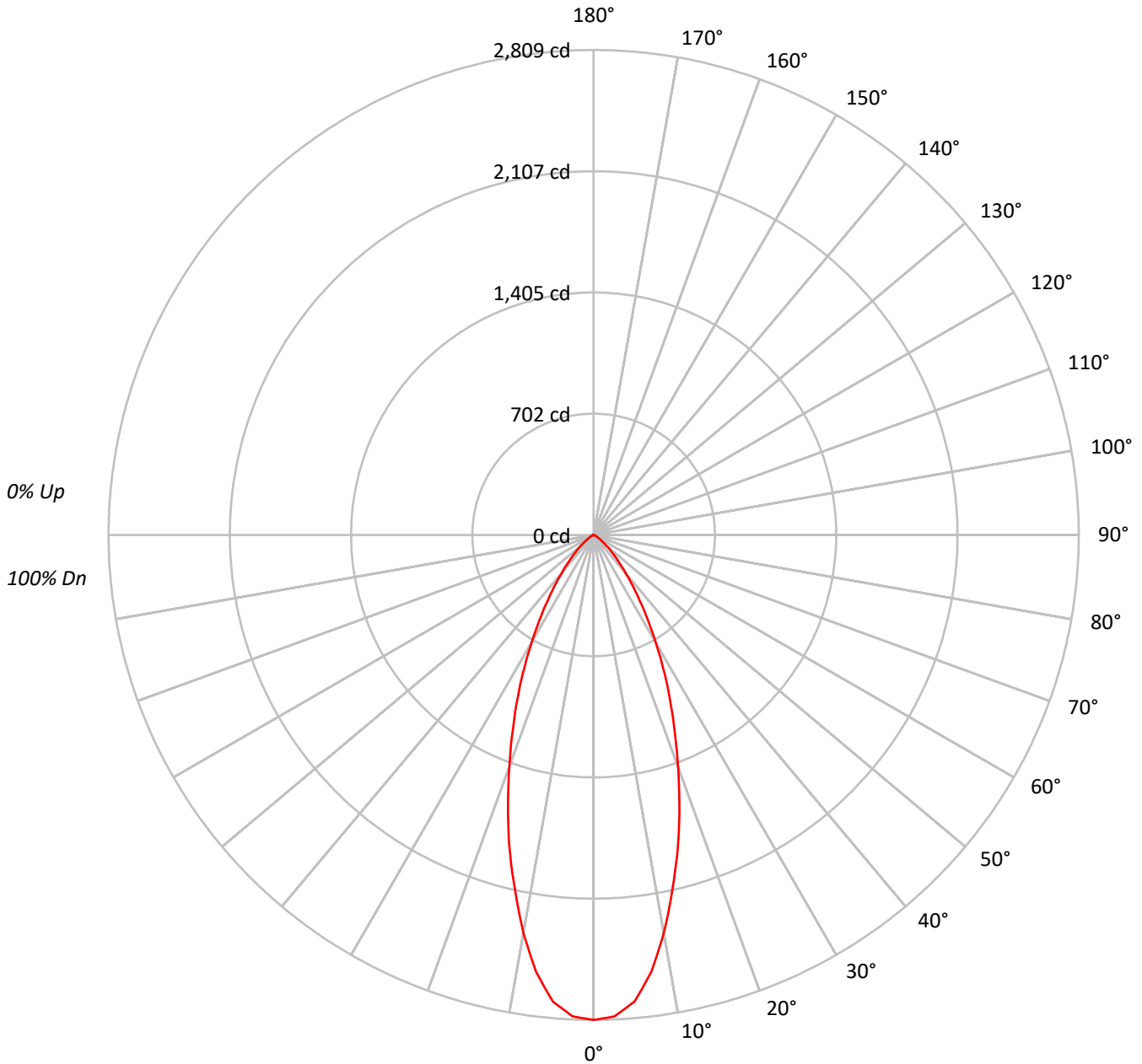
Lumens per Lamp: N/A  
Luminaire Lumens: 1733.3 lumens  
Efficiency: N/A  
Efficacy: 105.0 lumens/watt  
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P640875  
CATALOG NUMBER: ML5612LSFL4097FS1E - 696WB - 1200LM - 5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P640875

CATALOG NUMBER: ML5612LSFL4097FS1E - 696WB - 1200LM - 5000K

**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	101	98	95	98	95	93	95	93	91	93	91	89	87																			
3	103	96	91	87	101	95	90	87	92	89	85	90	87	84	88	85	83	81																			
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76																			
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71																			
6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66																			
7	84	75	69	65	83	74	69	65	73	68	65	72	68	64	71	67	64	63																			
8	80	71	65	61	79	70	65	61	69	64	61	68	64	61	67	63	60	59																			
9	77	67	62	58	76	67	61	58	66	61	57	65	60	57	64	60	57	56																			
10	73	64	58	55	72	64	58	55	63	58	54	62	57	54	61	57	54	53																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	153984
5°	149284
10°	130286
15°	106845
20°	83290
25°	63022
30°	45425
35°	31146
40°	20410
45°	13265
50°	7812
55°	4301
60°	2467
65°	1362
70°	721
75°	318
80°	474
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13265 cd/sqm



TEST NUMBER: P640875

CATALOG NUMBER: ML5612LSFL4097FS1E - 696WB - 1200LM - 5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	246.7	14.2
10°-20°	519.6	30.0
20°-30°	477.6	27.6
30°-40°	295.8	17.1
40°-50°	135.3	7.8
50°-60°	43.9	2.5
60°-70°	11.4	0.7
70°-80°	2.4	0.1
80°-90°	0.6	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°	1244.0	71.8
0°-40°	1539.7	88.8
0°-60°	1718.9	99.2
0°-90°	1733.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1733.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2809	
5°	2713	247
15°	1883	520
25°	1042	478
35°	465	296
45°	171	135
55°	45	44
65°	10	11
75°	2	2
85°	0	1
90°	0	



TEST NUMBER: P640875

CATALOG NUMBER: ML5612LSFL4097FS1E - 696WB - 1200LM - 5000K

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2808.9
2.5°	2790.9
5°	2712.8
7.5°	2552.2
10°	2340.5
12.5°	2103.3
15°	1882.6
17.5°	1648.4
20°	1427.7
22.5°	1223.6
25°	1041.9
27.5°	872.3
30°	717.6
32.5°	582.5
35°	465.4
37.5°	367.8
40°	285.2
42.5°	222.2
45°	171.1
47.5°	127.6
50°	91.6
52.5°	64.6
55°	45.0
57.5°	31.5
60°	22.5
62.5°	16.5
65°	10.5
67.5°	6.0
70°	4.5
72.5°	3.0
75°	1.5
77.5°	1.5
80°	1.5
82.5°	1.5
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)