

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: P640589

Luminaire Tested: ML5612LSFL4097FS1E - 592W - 1200LM - 4000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640589
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: ML5612LSFL4097FS1E - 592W - 1200LM - 4000K
Description: ML56 RR, 40D TIR OPTIC, 5" WHITE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

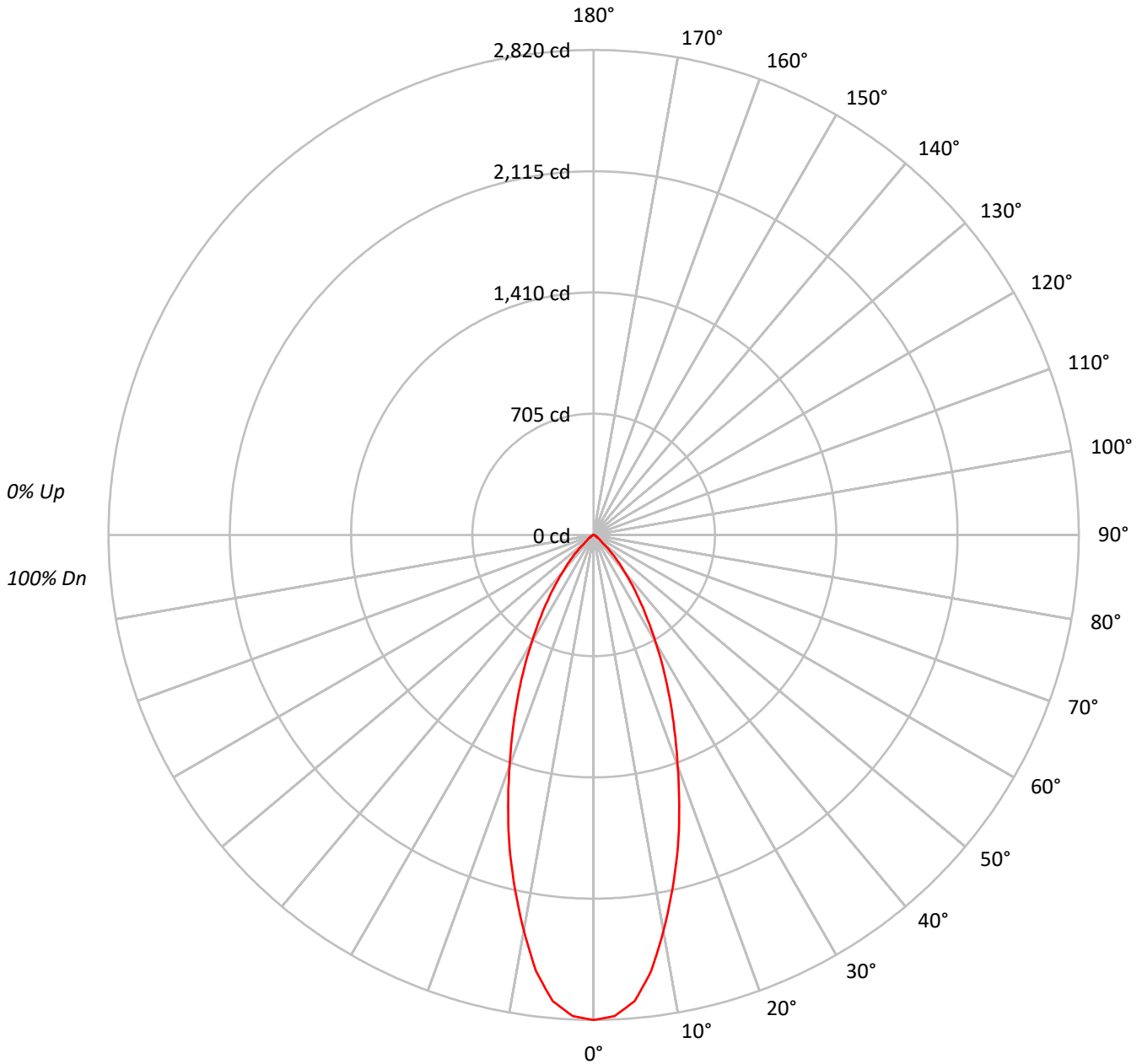
Lumens per Lamp: N/A
Luminaire Lumens: 1707.2 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 16.5
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



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Luminous Intensity Polar Plot





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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°	222645
5°	215643
10°	187315
15°	154282
20°	119853
25°	90917
30°	65712
35°	45014
40°	28318
45°	16601
50°	6644
55°	4335
60°	3079
65°	1961
70°	1731
75°	1830
80°	2046
85°	1359

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16601 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.2	14.5
10°-20°	520.8	30.5
20°-30°	478.5	28.0
30°-40°	295.4	17.3
40°-50°	115.5	6.8
50°-60°	29.8	1.7
60°-70°	11.8	0.7
70°-80°	5.9	0.3
80°-90°	2.2	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°	1246.4	73.0
0°-40°	1541.8	90.3
0°-60°	1687.2	98.8
0°-90°	1707.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1707.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2820	
5°	2721	247
15°	1888	521
25°	1044	478
35°	467	295
45°	149	115
55°	32	30
65°	10	12
75°	6	6
85°	2	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2820.4
2.5°	2800.9
5°	2721.3
7.5°	2559.1
10°	2336.8
12.5°	2111.5
15°	1887.8
17.5°	1653.5
20°	1426.7
22.5°	1225.5
25°	1043.8
27.5°	874.1
30°	720.9
32.5°	584.2
35°	467.1
37.5°	366.4
40°	274.8
42.5°	210.3
45°	148.7
47.5°	85.6
50°	54.1
52.5°	42.1
55°	31.5
57.5°	24.0
60°	19.5
62.5°	16.5
65°	10.5
67.5°	7.5
70°	7.5
72.5°	6.0
75°	6.0
77.5°	4.5
80°	4.5
82.5°	3.0
85°	1.5
87.5°	1.5
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

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— 0°-180°

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(END OF REPORT)