

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: P640545

Luminaire Tested: ML5612LSFL4097FS1E - 591WB - 1200LM - 5000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640545
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-24)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSFL4097FS1E - 591WB - 1200LM - 5000K
Description: ML56 RR, 40D TIR OPTIC, 5" DEADFRONT TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

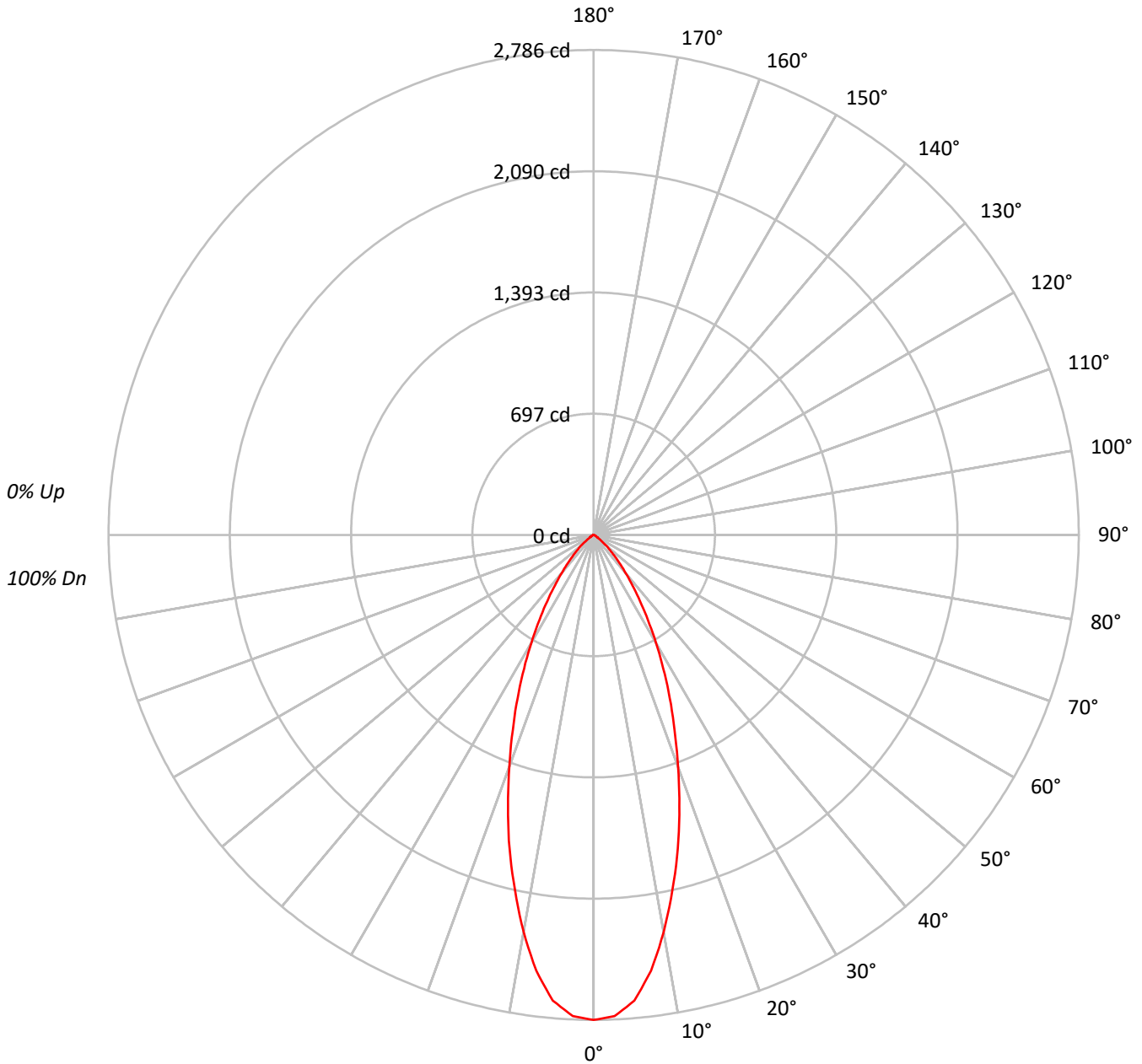
Lumens per Lamp: N/A
Luminaire Lumens: 1712.3 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (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



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Luminous Intensity Polar Plot





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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	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	99	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	88	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	73	69	76	72	69	75	71	68	67			
7	84	75	69	65	83	75	69	65	73	68	65	72	68	64	71	67	64	63			
8	80	71	65	61	79	71	65	61	70	65	61	69	64	61	68	63	60	59			
9	77	67	62	58	76	67	62	58	66	61	58	65	61	57	64	60	57	56			
10	74	64	59	55	73	64	58	55	63	58	55	62	58	54	61	57	54	53			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	219945
5°	212814
10°	185656
15°	152582
20°	118862
25°	90011
30°	65174
35°	44725
40°	29256
45°	18443
50°	10697
55°	4542
60°	3079
65°	1961
70°	1039
75°	915
80°	1364
85°	1359

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18443 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.2	14.3
10°-20°	515.4	30.1
20°-30°	473.9	27.7
30°-40°	294.2	17.2
40°-50°	131.8	7.7
50°-60°	36.7	2.1
60°-70°	11.1	0.6
70°-80°	3.4	0.2
80°-90°	1.6	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°	1233.5	72.0
0°-40°	1527.7	89.2
0°-60°	1696.2	99.1
0°-90°	1712.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1712.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2786	
5°	2686	244
15°	1867	515
25°	1033	474
35°	464	294
45°	165	132
55°	33	37
65°	10	11
75°	3	3
85°	2	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2786.2
2.5°	2766.7
5°	2685.6
7.5°	2524.9
10°	2316.1
12.5°	2089.3
15°	1867.0
17.5°	1635.7
20°	1414.9
22.5°	1213.6
25°	1033.4
27.5°	865.2
30°	715.0
32.5°	578.3
35°	464.1
37.5°	365.0
40°	283.9
42.5°	219.3
45°	165.2
47.5°	121.7
50°	87.1
52.5°	54.1
55°	33.0
57.5°	25.5
60°	19.5
62.5°	15.0
65°	10.5
67.5°	7.5
70°	4.5
72.5°	3.0
75°	3.0
77.5°	3.0
80°	3.0
82.5°	1.5
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)