

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: P640784

Luminaire Tested: ML5612LSFL4097FS1E - 693BB - 1200LM - 4000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640784
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-41)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSFL4097FS1E - 693BB - 1200LM - 4000K
Description: ML56 RR, 40D TIR OPTIC, 6" BLACK BAFFLE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

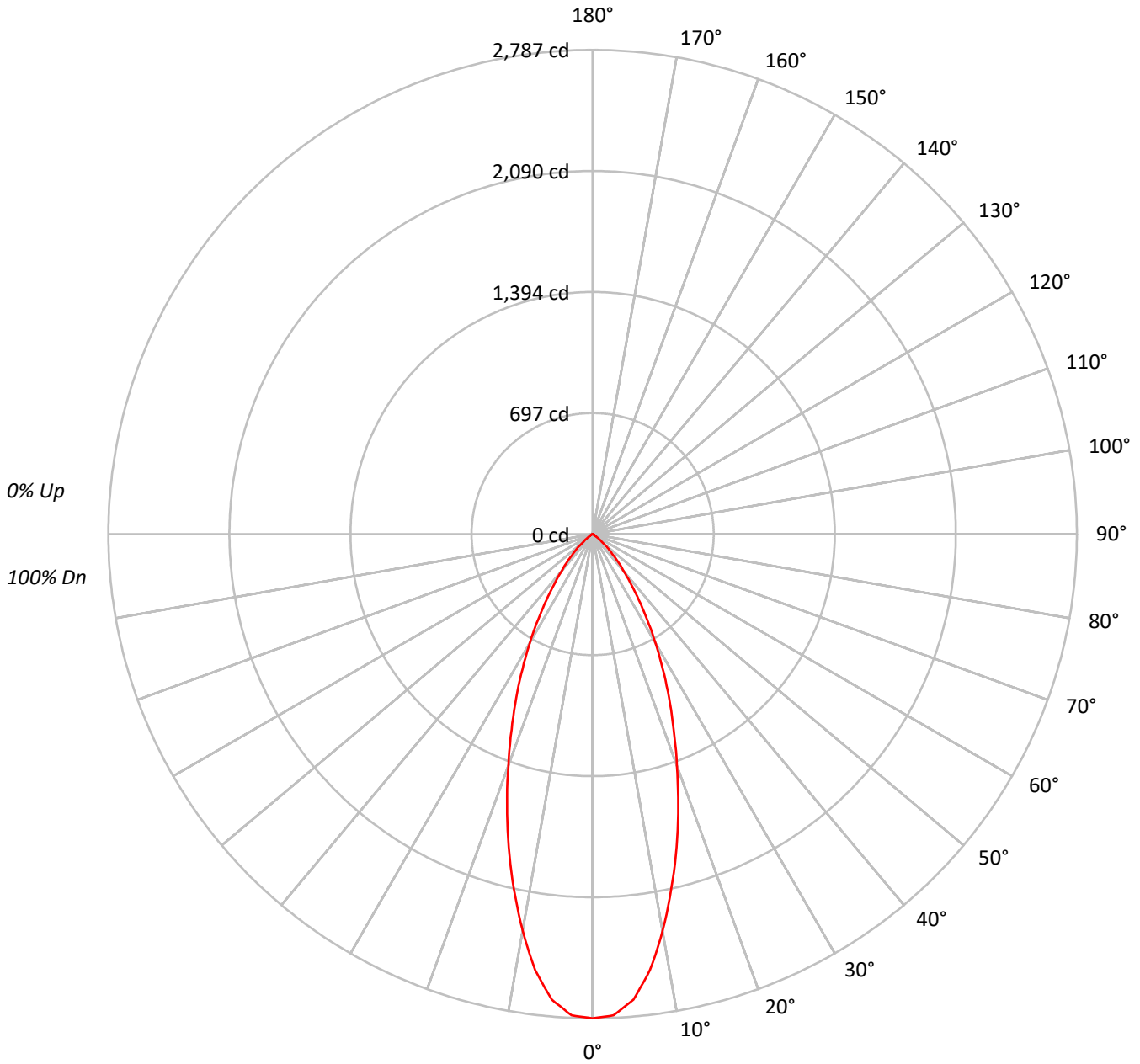
Lumens per Lamp: N/A
Luminaire Lumens: 1690.6 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (A_{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	50	30	10	0													
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100						100													
1	114	111	109	106	111	109	107	105	105	103	102	101	100	99	98	97	96	94						94													
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88						88													
3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	86	83	82						82													
4	98	91	85	81	96	90	85	81	88	83	80	86	82	79	84	81	78	77						77													
5	93	85	80	76	92	84	79	75	83	78	75	81	77	74	79	76	73	72						72													
6	89	80	75	70	88	80	74	70	78	73	70	77	73	69	75	72	69	67						67													
7	85	76	70	66	84	75	70	66	74	69	66	73	68	65	72	68	65	63						63													
8	81	72	66	62	80	71	66	62	70	65	62	69	65	61	68	64	61	60						60													
9	77	68	62	59	76	68	62	59	67	62	58	66	61	58	65	61	58	57						57													
10	74	65	59	55	73	64	59	55	64	59	55	63	58	55	62	58	55	54						54													

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	152806
5°	148013
10°	129078
15°	105858
20°	82706
25°	62865
30°	45634
35°	31059
40°	19987
45°	12226
50°	6149
55°	2437
60°	1480
65°	584
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12226 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.6	14.5
10°-20°	515.8	30.5
20°-30°	476.5	28.2
30°-40°	294.8	17.4
40°-50°	126.6	7.5
50°-60°	27.3	1.6
60°-70°	4.9	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°	1236.9	73.2
0°-40°	1531.7	90.6
0°-60°	1685.7	99.7
0°-90°	1690.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1690.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2787	
5°	2690	245
15°	1865	516
25°	1039	477
35°	464	295
45°	158	127
55°	26	27
65°	4	5
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2787.4
2.5°	2772.3
5°	2689.7
7.5°	2530.6
10°	2318.8
12.5°	2092.0
15°	1865.2
17.5°	1637.0
20°	1417.7
22.5°	1218.0
25°	1039.3
27.5°	872.6
30°	720.9
32.5°	584.2
35°	464.1
37.5°	363.4
40°	279.3
42.5°	216.3
45°	157.7
47.5°	115.6
50°	72.1
52.5°	37.5
55°	25.5
57.5°	18.0
60°	13.5
62.5°	9.0
65°	4.5
67.5°	0.0
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

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— 0°-180°

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