

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: P640789

Luminaire Tested: ML5612LSFL4097FS1E - 693BB - 600LM - 4000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640789
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 - 600LM - 4000K
Description: ML56 RR, 40D TIR OPTIC, 6" BLACK BAFFLE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

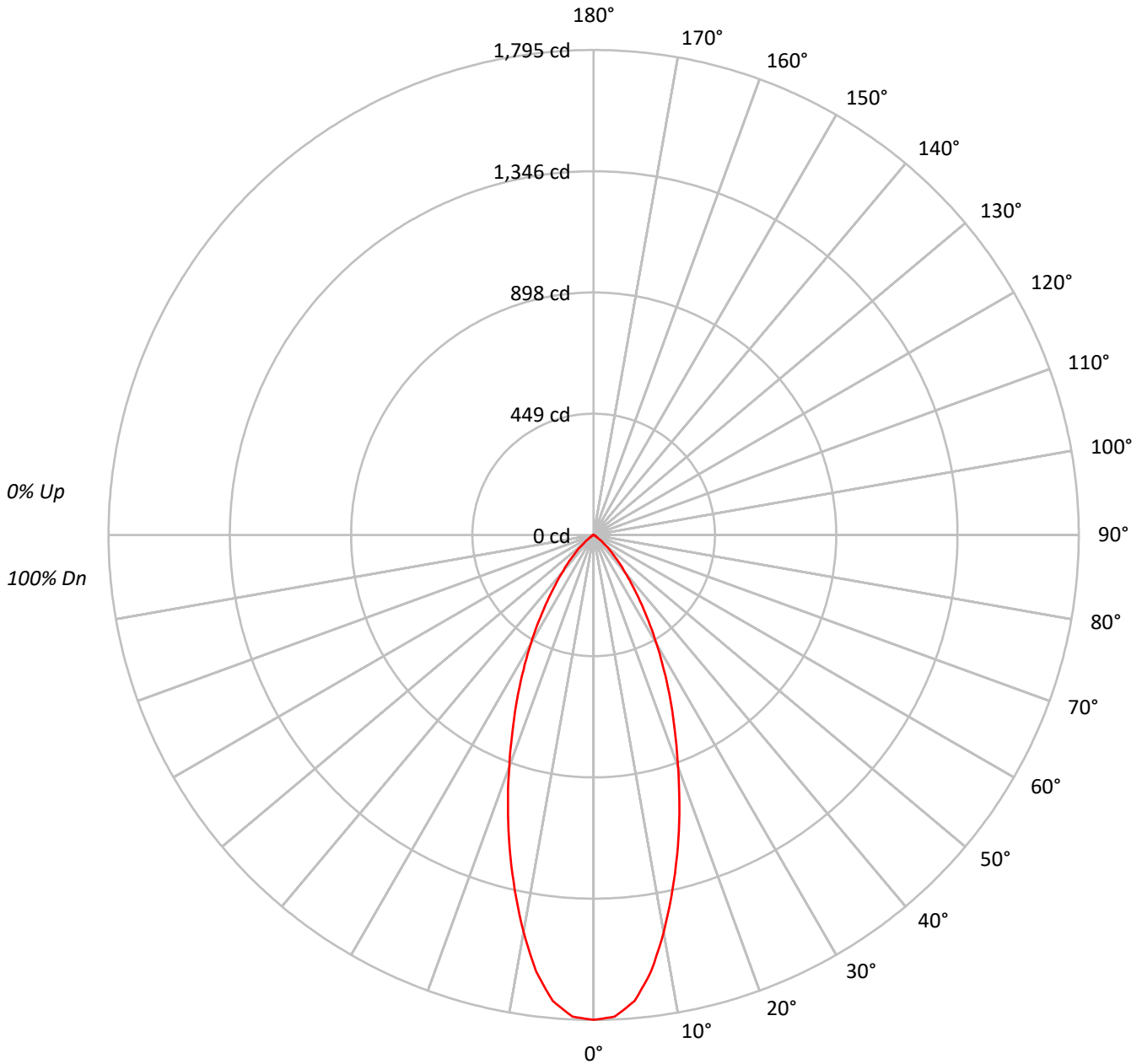
Lumens per Lamp: N/A
Luminaire Lumens: 1088.5 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 10.3
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



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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
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	102	101	100	99	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	88	83	80	86	82	79	84	81	78	77		
5	93	85	80	76	92	84	79	75	83	78	75	81	77	74	79	76	73	72		
6	89	80	75	70	88	80	74	70	78	73	70	77	73	69	75	72	69	67		
7	85	76	70	66	84	75	70	66	74	69	66	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	59	76	68	62	59	67	62	58	66	61	58	65	61	58	57		
10	74	65	59	55	73	64	59	55	64	59	55	63	58	55	62	58	55	54		

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	98386
5°	95306
10°	83109
15°	68162
20°	53251
25°	40472
30°	29378
35°	19997
40°	12874
45°	7869
50°	3957
55°	1567
60°	954
65°	376
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7869 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.5	14.5
10°-20°	332.1	30.5
20°-30°	306.8	28.2
30°-40°	189.8	17.4
40°-50°	81.5	7.5
50°-60°	17.6	1.6
60°-70°	3.2	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°	796.4	73.2
0°-40°	986.2	90.6
0°-60°	1085.4	99.7
0°-90°	1088.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1088.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1795	
5°	1732	157
15°	1201	332
25°	669	307
35°	299	190
45°	102	82
55°	16	18
65°	3	3
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1794.7
2.5°	1785.0
5°	1731.9
7.5°	1629.4
10°	1493.0
12.5°	1347.0
15°	1201.0
17.5°	1054.0
20°	912.8
22.5°	784.2
25°	669.1
27.5°	561.8
30°	464.1
32.5°	376.2
35°	298.8
37.5°	234.0
40°	179.9
42.5°	139.2
45°	101.5
47.5°	74.5
50°	46.4
52.5°	24.2
55°	16.4
57.5°	11.6
60°	8.7
62.5°	5.8
65°	2.9
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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(END OF REPORT)