

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: P886725

Luminaire Tested: ML310LSFL9FS1E-TIR4D40FL-TL3RDSL-1000LM-4000K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886725
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL9FS1E-TIR4D40FL-TL3RDSL-1000LM-4000K
Description: 3IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, METALLIC SILVER TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

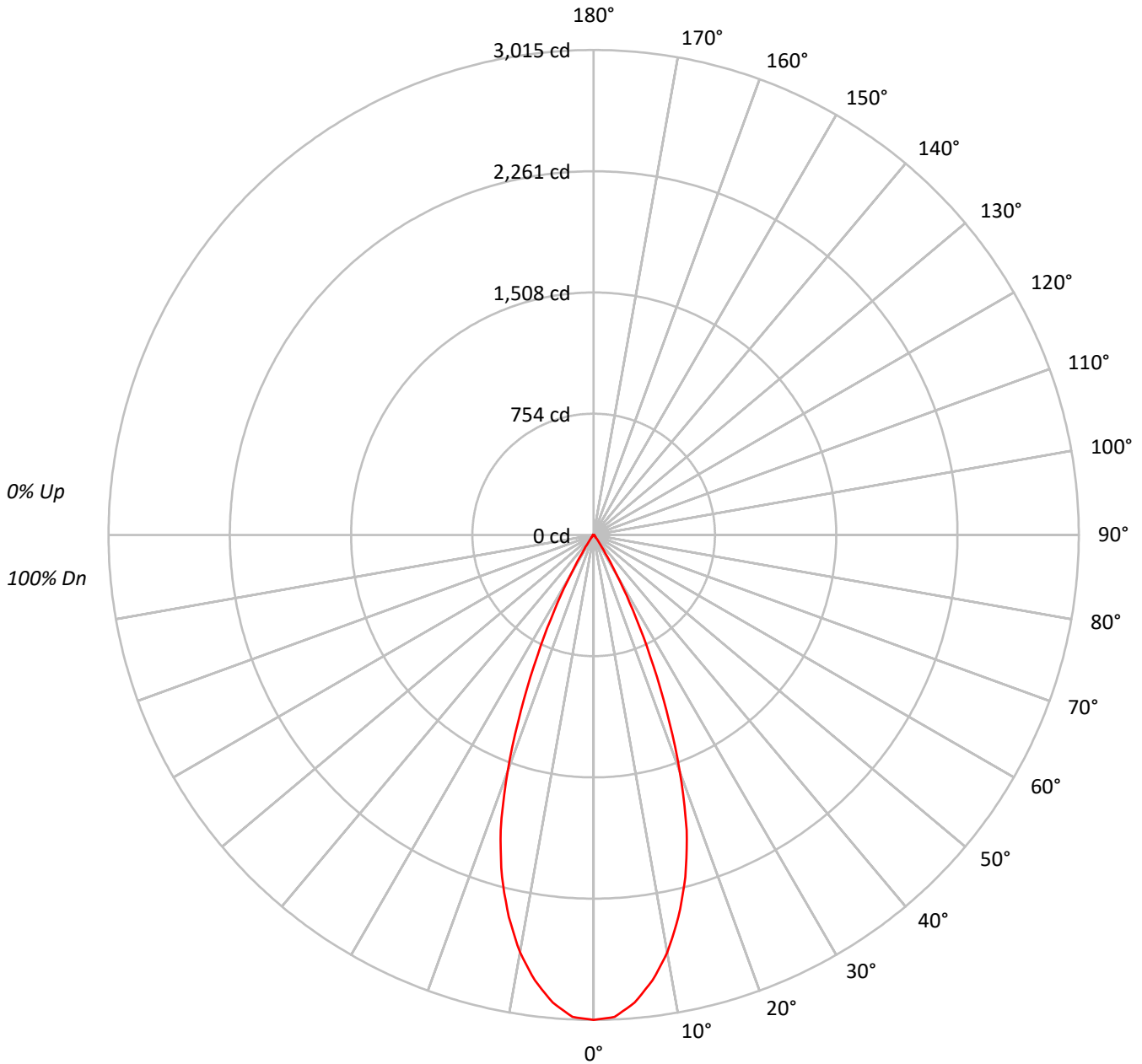
Lumens per Lamp: N/A
Luminaire Lumens: 1333.6 lumens
Efficiency: N/A
Efficacy: 96.6 lumens/watt
Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.63
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 13.8
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	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95																			
2	110	106	103	100	108	104	101	99	101	99	96	98	96	94	95	94	92	91																			
3	106	100	96	93	104	99	95	92	97	94	91	94	92	90	92	90	88	87																			
4	102	96	91	88	100	95	90	87	93	89	86	91	88	85	89	86	84	83																			
5	98	91	87	83	97	90	86	83	89	85	82	87	84	81	86	83	81	79																			
6	94	87	83	79	93	87	82	79	85	81	78	84	80	78	83	80	77	76																			
7	91	84	79	75	90	83	78	75	82	78	75	81	77	75	80	77	74	73																			
8	88	80	75	72	87	80	75	72	79	75	72	78	74	71	77	74	71	70																			
9	85	77	72	69	84	77	72	69	76	72	69	75	71	69	74	71	68	67																			
10	82	74	70	67	81	74	69	66	73	69	66	72	69	66	72	68	66	65																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	661197
5°	642349
10°	586874
15°	499867
20°	364452
25°	199487
30°	71555
35°	16249
40°	6641
45°	3070
50°	2627
55°	2523
60°	2895
65°	2854
70°	2821
75°	2796
80°	2778
85°	2768

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 82.5°
 Luminance: 3696 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.5	20.2
10°-20°	598.4	44.9
20°-30°	382.4	28.7
30°-40°	57.4	4.3
40°-50°	9.2	0.7
50°-60°	6.3	0.5
60°-70°	5.5	0.4
70°-80°	3.8	0.3
80°-90°	1.2	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°	1250.3	93.8
0°-40°	1307.6	98.1
0°-60°	1323.1	99.2
0°-90°	1333.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1333.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3015	
5°	2918	270
15°	2202	598
25°	824	382
35°	61	57
45°	10	9
55°	7	6
65°	6	5
75°	3	4
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	3015.3
2.5°	2999.9
5°	2918.2
7.5°	2794.6
10°	2635.7
12.5°	2433.7
15°	2201.9
17.5°	1923.8
20°	1561.8
22.5°	1181.0
25°	824.5
27.5°	527.6
30°	282.6
32.5°	133.5
35°	60.7
37.5°	36.4
40°	23.2
42.5°	14.3
45°	9.9
47.5°	8.8
50°	7.7
52.5°	7.7
55°	6.6
57.5°	6.6
60°	6.6
62.5°	5.5
65°	5.5
67.5°	5.5
70°	4.4
72.5°	4.4
75°	3.3
77.5°	3.3
80°	2.2
82.5°	2.2
85°	1.1
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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