

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: P886723

Luminaire Tested: ML310LSFL9FS1E-TIR4D40FL-TL3RDSL-1000LM-3000K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886723
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-3000K
Description: 3IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, METALLIC SILVER TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1250.9 lumens
Efficiency: N/A
Efficacy: 90.6 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

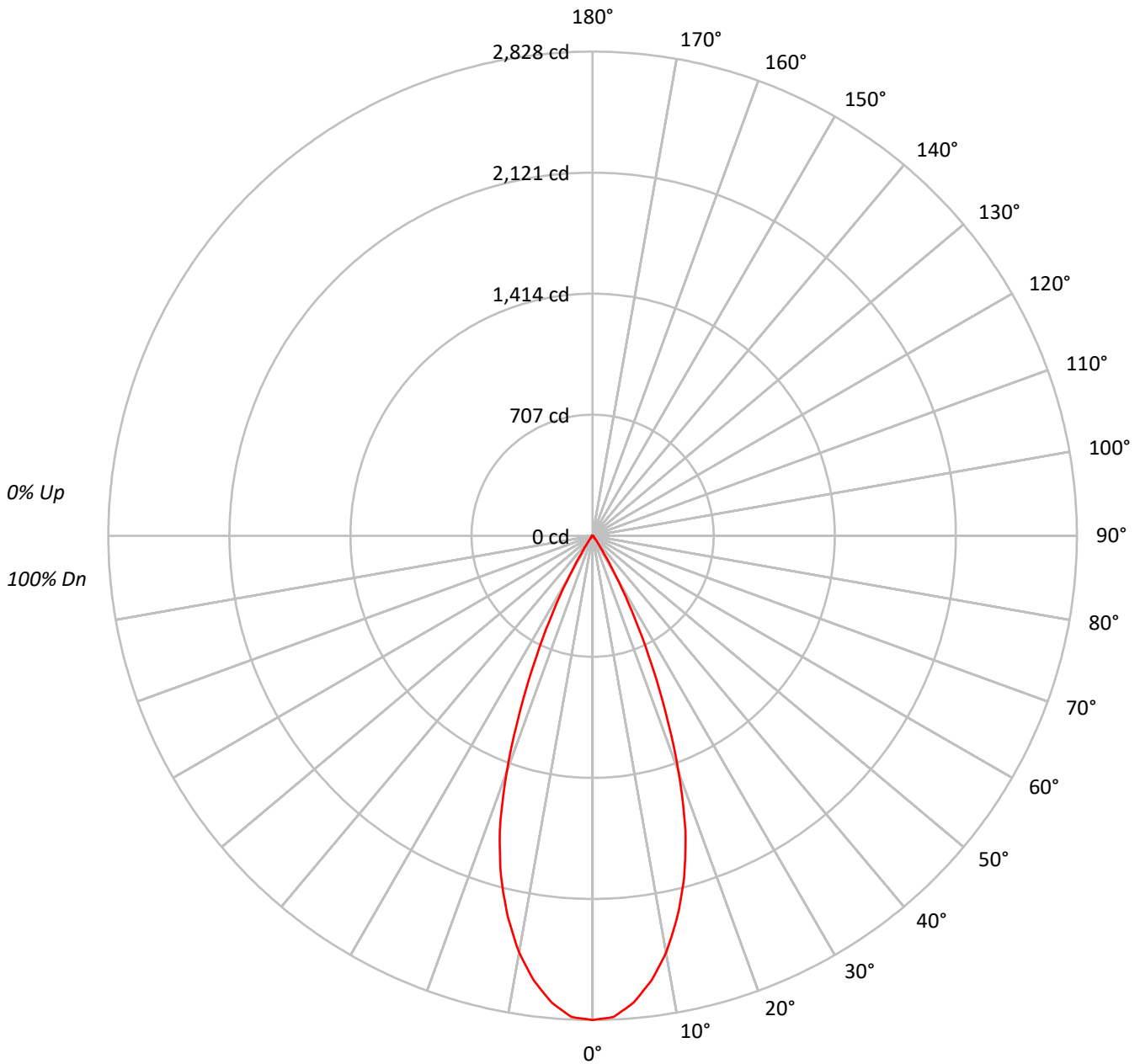
Input Watts (W): 13.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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			100																
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95			95																
2	110	106	103	100	108	104	101	99	101	99	96	98	96	94	95	94	92	91			91																
3	106	100	96	93	104	99	95	92	97	94	91	94	92	90	92	90	88	87			87																
4	102	96	91	88	100	95	90	87	93	89	86	91	88	85	89	86	84	83			83																
5	98	91	87	83	97	90	86	83	89	85	82	87	84	81	86	83	81	79			79																
6	94	87	82	79	93	87	82	79	85	81	78	84	80	78	83	80	77	76			76																
7	91	84	79	75	90	83	78	75	82	78	75	81	77	75	80	77	74	73			73																
8	88	80	75	72	87	80	75	72	79	75	72	78	74	71	77	74	71	70			70																
9	85	77	72	69	84	77	72	69	76	72	69	75	71	69	74	71	68	67			67																
10	82	74	70	66	81	74	69	66	73	69	66	72	69	66	72	68	66	65			65																

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	620213
5°	602530
10°	550491
15°	468879
20°	341840
25°	187124
30°	67099
35°	15232
40°	6212
45°	2884
50°	2456
55°	2370
60°	2719
65°	2698
70°	2629
75°	2626
80°	2652
85°	2516

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 82.5°
 Luminance: 3528 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.8	20.2
10°-20°	561.3	44.9
20°-30°	358.6	28.7
30°-40°	53.8	4.3
40°-50°	8.7	0.7
50°-60°	5.9	0.5
60°-70°	5.1	0.4
70°-80°	3.5	0.3
80°-90°	1.1	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°	1172.7	93.8
0°-40°	1226.5	98.1
0°-60°	1241.1	99.2
0°-90°	1250.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1250.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2828	
5°	2737	253
15°	2065	561
25°	773	359
35°	57	54
45°	9	9
55°	6	6
65°	5	5
75°	3	4
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2828.4
2.5°	2813.9
5°	2737.3
7.5°	2621.3
10°	2472.3
12.5°	2282.8
15°	2065.4
17.5°	1804.5
20°	1464.9
22.5°	1107.8
25°	773.4
27.5°	494.9
30°	265.0
32.5°	125.3
35°	56.9
37.5°	34.2
40°	21.7
42.5°	13.5
45°	9.3
47.5°	8.3
50°	7.2
52.5°	7.2
55°	6.2
57.5°	6.2
60°	6.2
62.5°	5.2
65°	5.2
67.5°	5.2
70°	4.1
72.5°	4.1
75°	3.1
77.5°	3.1
80°	2.1
82.5°	2.1
85°	1.0
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)