

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: P886695

Luminaire Tested: ML310LSFL9FS1E-TIR4D25NFL-TL3RDSL-1000LM-4000K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P886695
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/18/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL9FS1E-TIR4D25NFL-TL3RDSL-1000LM-4000K
Description: 3IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

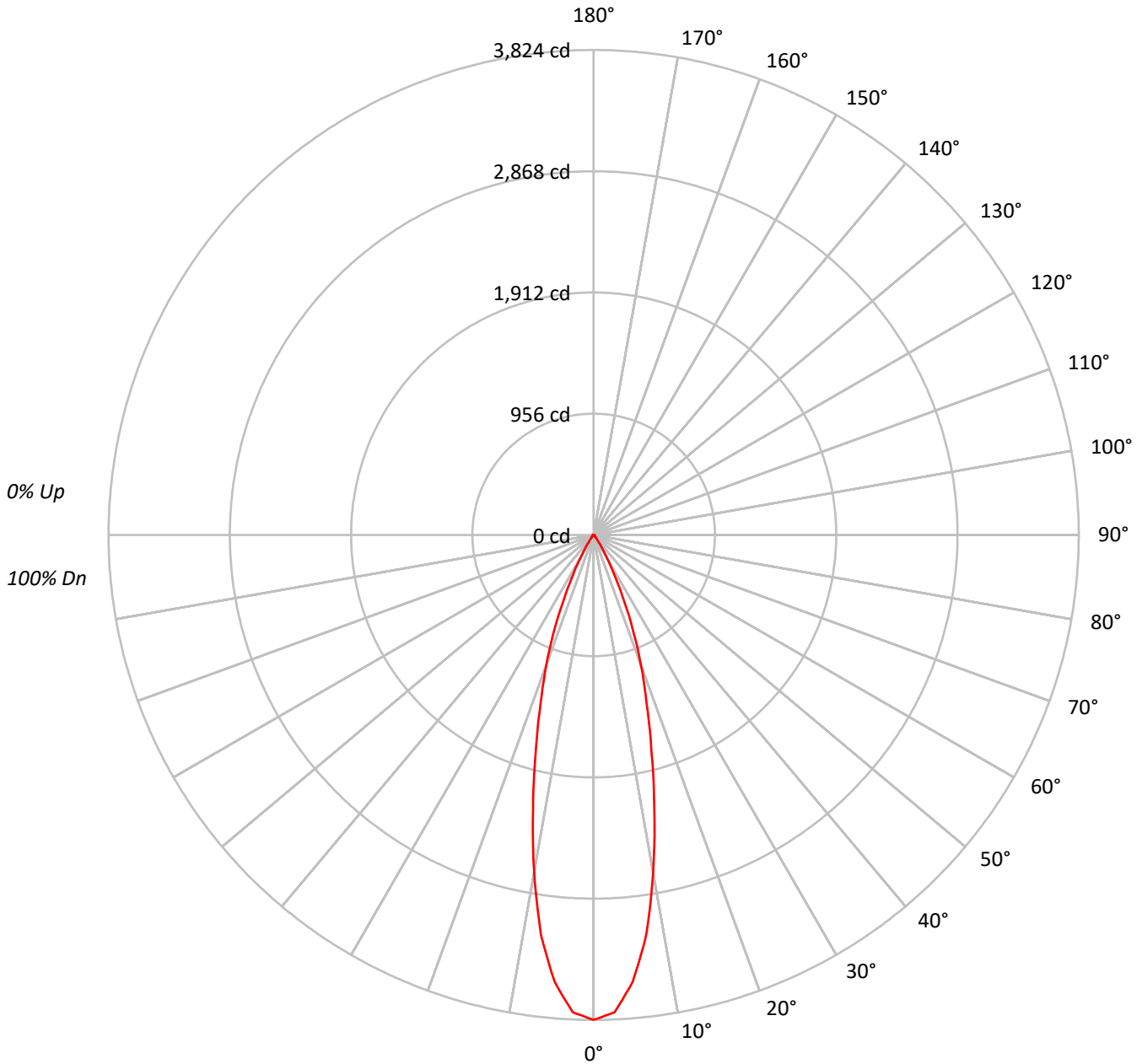
Lumens per Lamp: N/A
Luminaire Lumens: 1149.2 lumens
Efficiency: N/A
Efficacy: 83.3 lumens/watt
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.5
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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									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	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	105	103	102	101	100	99	98	97	96																											
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91																											
3	106	101	97	94	104	100	96	93	97	94	92	95	92	90	93	91	89	87																											
4	102	96	92	89	101	95	91	88	93	90	87	91	88	86	90	87	85	84																											
5	99	92	88	84	97	91	87	84	90	86	83	88	85	83	87	84	82	81																											
6	95	89	84	81	94	88	83	80	86	83	80	85	82	79	84	81	79	78																											
7	92	85	80	77	91	85	80	77	83	79	77	82	79	76	81	78	76	75																											
8	89	82	77	74	88	82	77	74	81	77	74	80	76	74	79	76	73	72																											
9	87	79	75	72	86	79	74	71	78	74	71	77	74	71	76	73	71	70																											
10	84	77	72	69	83	76	72	69	75	72	69	75	71	69	74	71	69	68																											

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	838442
5°	778426
10°	601525
15°	399162
20°	254122
25°	130677
30°	52565
35°	17748
40°	6956
45°	5148
50°	4537
55°	4205
60°	4342
65°	4566
70°	4231
75°	4660
80°	4167
85°	2768

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5148 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.0	27.1
10°-20°	490.1	42.7
20°-30°	258.5	22.5
30°-40°	50.9	4.4
40°-50°	13.4	1.2
50°-60°	10.2	0.9
60°-70°	8.3	0.7
70°-80°	5.4	0.5
80°-90°	1.3	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°	1059.7	92.2
0°-40°	1110.6	96.6
0°-60°	1134.2	98.7
0°-90°	1149.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1149.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3824	
5°	3536	311
15°	1758	490
25°	540	259
35°	66	51
45°	17	13
55°	11	10
65°	9	8
75°	6	5
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	3823.6
2.5°	3767.3
5°	3536.4
7.5°	3179.7
10°	2701.5
12.5°	2207.8
15°	1758.3
17.5°	1386.1
20°	1089.0
22.5°	806.2
25°	540.1
27.5°	344.6
30°	207.6
32.5°	120.4
35°	66.3
37.5°	35.3
40°	24.3
42.5°	19.9
45°	16.6
47.5°	14.4
50°	13.3
52.5°	12.1
55°	11.0
57.5°	11.0
60°	9.9
62.5°	8.8
65°	8.8
67.5°	7.7
70°	6.6
72.5°	5.5
75°	5.5
77.5°	4.4
80°	3.3
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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(END OF REPORT)