

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: P886793

Luminaire Tested: ML310LSFLD2W1E-TIR4D25NFL-TL3SDMW-600LM-3000K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886793
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-13)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFLD2W1E-TIR4D25NFL-TL3SDMW-600LM-3000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 739.9 lumens
Efficiency: N/A
Efficacy: 77.9 lumens/watt
Spacing Criteria (0/90/45): 0.5 / 0.49 / 0.52
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')

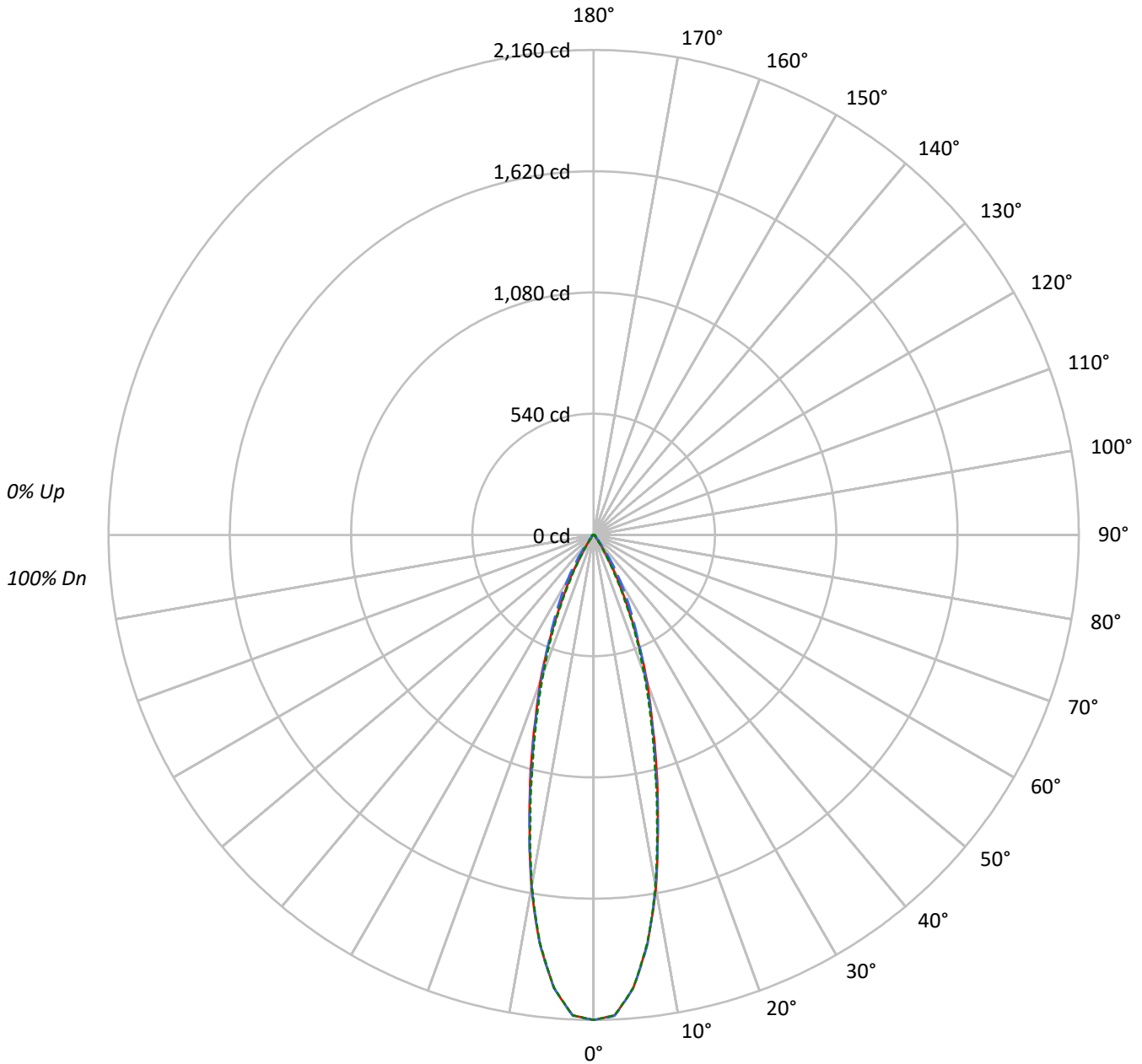
CIE Type: Direct

Input Watts (W): 9.5
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	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	98	98	97	95																			
2	110	105	102	99	107	104	101	98	101	98	96	98	96	94	95	93	92	90																			
3	105	100	96	92	103	98	95	91	96	93	90	94	91	89	91	89	87	86																			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	85	83	82																			
5	97	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	78																			
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75																			
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72																			
8	87	80	75	71	86	79	75	71	78	74	71	77	74	71	76	73	71	69																			
9	85	77	72	69	84	76	72	69	75	71	68	75	71	68	74	70	68	67																			
10	82	74	69	66	81	74	69	66	73	69	66	72	68	66	71	68	65	64																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	372053	372053	372053
5°	350239	350239	349997
10°	279038	277848	277254
15°	192829	189210	186446
20°	127028	124169	119349
25°	69189	78424	65597
30°	30904	47012	26728
35°	10659	20877	9377
40°	3957	9105	3957
45°	3118	4116	3118
50°	2706	3269	2706
55°	2852	3033	2852
60°	2790	3031	2790
65°	2771	3016	3016
70°	2719	3072	3072
75°	2728	2728	3127
80°	2678	2678	3372
85°	2766	2766	2766

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 4116 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.2	24.2
10°-20°	295.8	40.0
20°-30°	180.0	24.3
30°-40°	50.7	6.8
40°-50°	12.0	1.6
50°-60°	8.8	1.2
60°-70°	7.3	1.0
70°-80°	4.7	0.6
80°-90°	1.5	0.2
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°	655.0	88.5
0°-40°	705.6	95.4
0°-60°	726.4	98.2
0°-90°	739.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	739.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2160	2160	2160	2160	2160	
5°	2026	2027	2026	2026	2024	179
15°	1082	1071	1061	1056	1046	299
25°	364	398	413	384	345	173
35°	51	71	99	64	45	39
45°	13	14	17	14	13	10
55°	10	10	10	10	10	8
65°	7	7	7	7	7	7
75°	4	4	4	5	5	4
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2160.3	2160.3	2160.3	2160.3	2160.3
2.5°	2141.4	2140.7	2144.1	2142.1	2141.4
5°	2025.9	2026.6	2025.9	2025.9	2024.5
7.5°	1834.7	1832.0	1838.1	1832.7	1832.0
10°	1595.6	1588.8	1588.8	1583.4	1585.4
12.5°	1317.9	1323.3	1322.0	1309.8	1303.8
15°	1081.5	1071.4	1061.2	1055.8	1045.7
17.5°	859.9	860.6	852.5	839.7	837.0
20°	693.1	682.3	677.5	668.8	651.2
22.5°	520.8	539.7	528.9	520.2	495.8
25°	364.1	397.9	412.7	384.4	345.2
27.5°	249.9	270.2	318.8	260.8	225.6
30°	155.4	185.8	236.4	172.3	134.4
32.5°	92.5	117.5	164.2	106.7	80.4
35°	50.7	70.9	99.3	63.5	44.6
37.5°	26.3	39.2	62.1	36.5	25.0
40°	17.6	22.3	40.5	20.9	17.6
42.5°	14.2	16.2	25.7	15.5	14.2
45°	12.8	13.5	16.9	13.5	12.8
47.5°	11.5	12.2	12.8	12.2	11.5
50°	10.1	11.5	12.2	11.5	10.1
52.5°	10.1	10.1	10.8	10.1	10.1
55°	9.5	9.5	10.1	9.5	9.5
57.5°	8.8	9.5	9.5	9.5	8.8
60°	8.1	8.8	8.8	8.8	8.1
62.5°	7.4	8.1	8.1	8.1	8.1
65°	6.8	7.4	7.4	7.4	7.4
67.5°	6.1	6.8	6.8	6.8	6.8
70°	5.4	6.1	6.1	6.1	6.1
72.5°	4.7	5.4	5.4	5.4	5.4
75°	4.1	4.1	4.1	4.7	4.7
77.5°	3.4	3.4	3.4	4.1	4.1
80°	2.7	2.7	2.7	3.4	3.4
82.5°	2.0	2.0	2.0	2.0	2.0
85°	1.4	1.4	1.4	1.4	1.4
87.5°	0.7	0.7	0.7	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



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Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270°

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