

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: P886611

Luminaire Tested: ML310LSFL95FS1E-TIR4D40FL-TL3SDSL-850LM-5000K

Issue Date: 7/8/2024

Test Information

Test Method: LM-79-2019
Report Number: P886611
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/8/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL95FS1E-TIR4D40FL-TL3SDSL-850LM-5000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, METALLIC SILVER TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1337.3 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.67 / 0.65
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

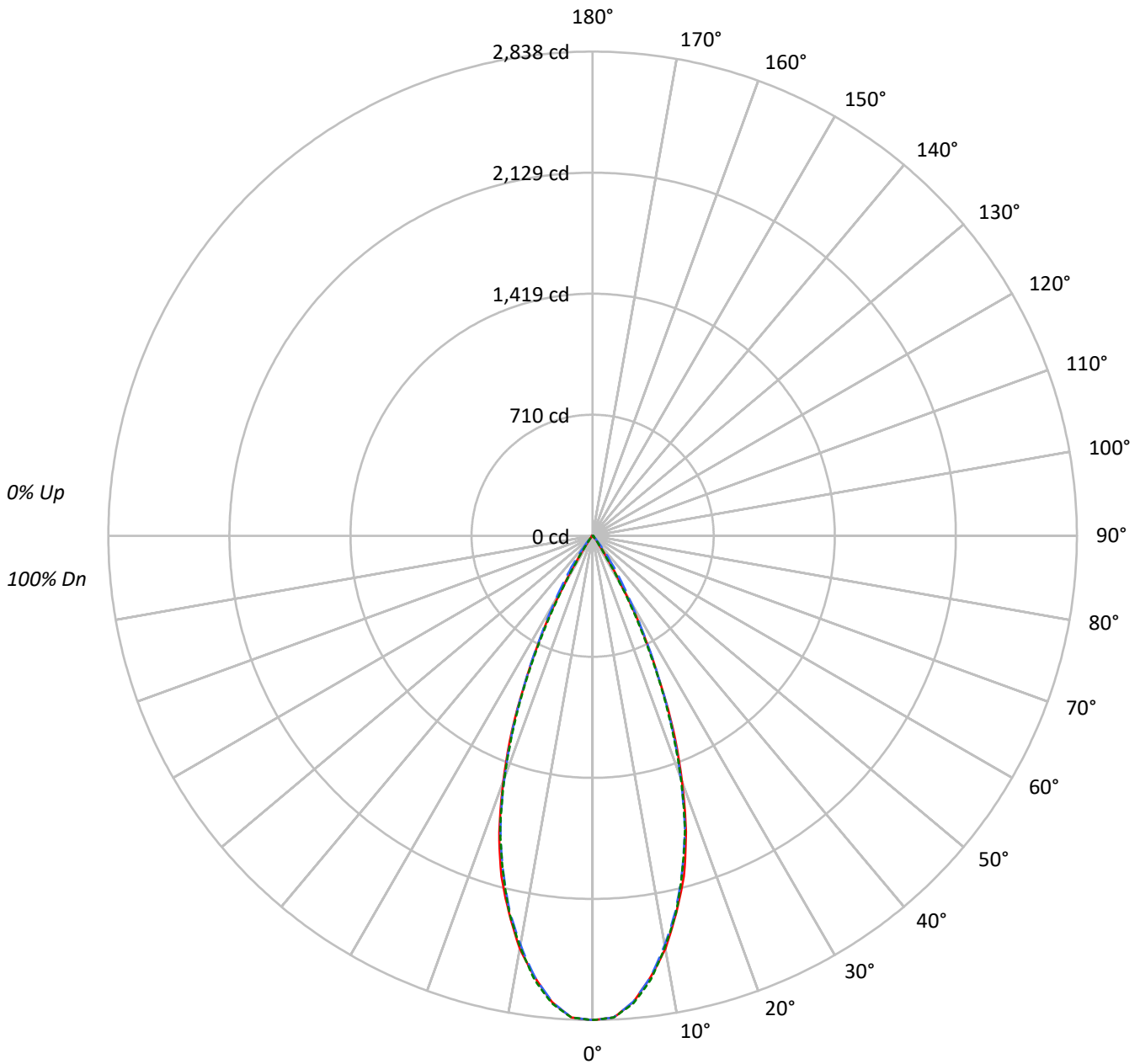
Input Watts (W): 13.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	102	99	108	104	101	98	101	98	96	98	96	94	95	94	92	91																			
3	105	100	96	93	104	99	95	92	96	93	90	94	91	89	92	89	88	86																			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	84	82																			
5	97	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	78																			
6	94	86	81	78	92	86	81	78	84	80	77	83	79	77	82	79	76	75																			
7	90	83	78	74	89	82	77	74	81	77	74	80	76	73	79	75	73	72																			
8	87	79	74	71	86	79	74	71	78	73	70	77	73	70	76	72	70	69																			
9	84	76	71	68	83	75	71	68	74	70	67	74	70	67	73	69	67	66																			
10	81	73	68	65	80	72	68	65	72	67	65	71	67	64	70	67	64	63																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	488785	488785	488785
5°	474090	473727	475542
10°	429644	425762	427615
15°	368346	361963	362159
20°	280540	276691	277259
25°	172563	173171	169371
30°	70180	86109	64114
35°	15054	38096	14402
40°	4969	12320	5216
45°	2314	4360	2314
50°	1688	2251	1688
55°	1591	1892	1591
60°	1447	1826	1447
65°	1304	1712	1712
70°	1611	1611	1611
75°	1397	1397	1397
80°	1091	1091	2083
85°	2174	2174	2174

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 4360 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.1	18.9
10°-20°	559.5	41.8
20°-30°	413.3	30.9
30°-40°	88.9	6.6
40°-50°	11.4	0.9
50°-60°	5.1	0.4
60°-70°	3.9	0.3
70°-80°	2.4	0.2
80°-90°	0.8	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°	1224.9	91.6
0°-40°	1313.8	98.2
0°-60°	1330.2	99.5
0°-90°	1337.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1337.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2838	2838	2838	2838	2838	
5°	2742	2740	2740	2739	2751	252
15°	2066	2047	2030	2036	2031	564
25°	908	920	911	907	891	414
35°	72	103	181	92	68	70
45°	10	10	18	10	10	8
55°	5	5	6	5	5	5
65°	3	4	4	4	4	4
75°	2	2	2	2	2	2
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°	2838.1	2838.1	2838.1	2838.1	2838.1
2.5°	2826.5	2825.5	2826.5	2827.6	2826.5
5°	2742.3	2740.2	2740.2	2739.1	2750.7
7.5°	2607.4	2608.5	2606.4	2613.7	2621.1
10°	2456.8	2437.8	2434.6	2448.3	2445.2
12.5°	2262.9	2264.0	2248.2	2252.4	2259.8
15°	2065.9	2047.0	2030.1	2036.4	2031.2
17.5°	1819.4	1809.9	1796.2	1797.3	1800.4
20°	1530.7	1532.8	1509.7	1518.1	1512.8
22.5°	1236.8	1222.1	1216.8	1207.3	1202.0
25°	908.1	919.7	911.3	907.1	891.3
27.5°	632.1	634.2	644.7	622.6	588.9
30°	352.9	393.0	433.0	372.9	322.4
32.5°	169.6	210.7	288.7	194.9	149.6
35°	71.6	103.2	181.2	91.7	68.5
37.5°	37.9	49.5	101.1	46.4	35.8
40°	22.1	27.4	54.8	27.4	23.2
42.5°	12.6	16.9	30.6	16.9	13.7
45°	9.5	10.5	17.9	10.5	9.5
47.5°	7.4	8.4	10.5	8.4	7.4
50°	6.3	6.3	8.4	6.3	6.3
52.5°	5.3	6.3	6.3	6.3	6.3
55°	5.3	5.3	6.3	5.3	5.3
57.5°	5.3	5.3	5.3	5.3	5.3
60°	4.2	4.2	5.3	5.3	4.2
62.5°	4.2	4.2	4.2	4.2	4.2
65°	3.2	4.2	4.2	4.2	4.2
67.5°	3.2	3.2	4.2	3.2	3.2
70°	3.2	3.2	3.2	3.2	3.2
72.5°	2.1	2.1	3.2	3.2	3.2
75°	2.1	2.1	2.1	2.1	2.1
77.5°	1.1	2.1	2.1	2.1	2.1
80°	1.1	1.1	1.1	2.1	2.1
82.5°	1.1	1.1	1.1	1.1	1.1
85°	1.1	1.1	1.1	1.1	1.1
87.5°	0.0	0.0	0.0	0.0	0.0
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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