

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: P886641

Luminaire Tested: ML310LSFL95FS1E-TIR4D55WFL-TL3SDSL-1000LM-5000K

Issue Date: 7/8/2024

Test Information

Test Method: LM-79-2019
Report Number: P886641
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-20)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/8/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL95FS1E-TIR4D55WFL-TL3SDSL-1000LM-5000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, METALLIC SILVER TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1251.0 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.84 / 0.81
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

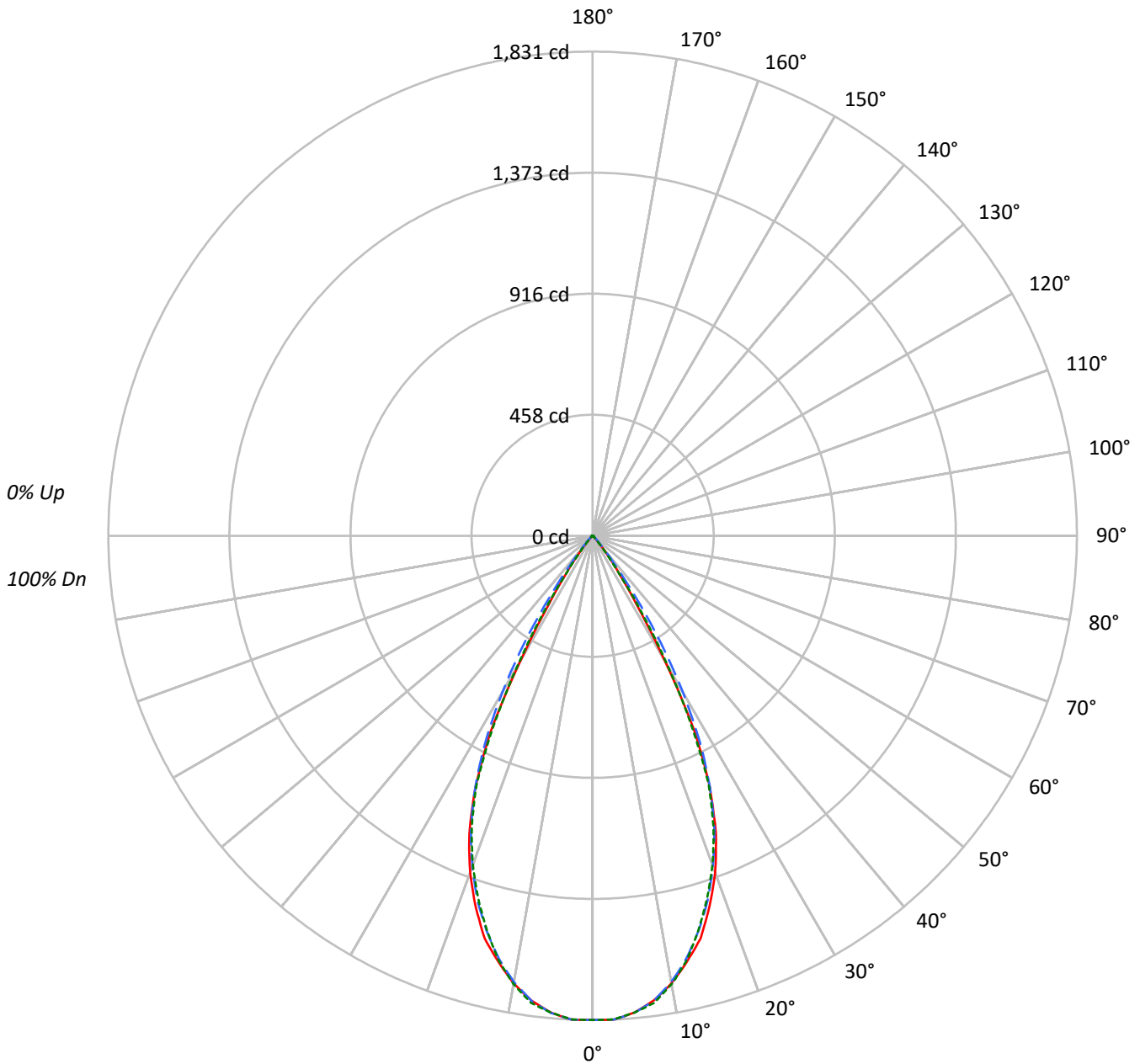
Input Watts (W): 13.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	114	111	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	94					94			
2	109	104	101	98	107	103	99	97	100	97	94	97	94	92	94	92	91	89					89			
3	104	98	94	90	102	97	93	89	94	91	88	92	89	87	90	87	85	84					84			
4	100	93	88	84	98	92	87	83	90	86	82	88	84	81	86	83	81	79					79			
5	95	88	82	78	94	87	82	78	85	81	77	83	80	77	82	79	76	75					75			
6	91	83	78	74	90	82	77	73	81	76	73	79	76	72	78	75	72	71					71			
7	87	79	73	69	86	78	73	69	77	72	69	76	72	69	75	71	68	67					67			
8	83	75	69	66	82	74	69	66	73	69	65	72	68	65	71	68	65	64					64			
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	62	60					60			
10	77	68	63	59	76	67	62	59	67	62	59	66	62	59	65	61	59	57					57			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	315391	315391	315391
5°	312966	313138	312966
10°	300548	299638	301107
15°	281087	275827	275256
20°	248210	243573	242602
25°	198920	199509	197115
30°	107845	135069	112876
35°	37192	59121	36309
40°	9465	15400	8296
45°	2314	5651	2557
50°	1688	2251	1983
55°	1892	1892	1892
60°	1826	1826	1826
65°	1304	1712	1712
70°	1611	1611	1611
75°	1397	2129	2129
80°	1091	2083	2083
85°	2174	2174	2174

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5651 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.9	13.6
10°-20°	432.1	34.5
20°-30°	464.6	37.1
30°-40°	155.9	12.5
40°-50°	15.0	1.2
50°-60°	5.6	0.4
60°-70°	4.2	0.3
70°-80°	2.7	0.2
80°-90°	0.9	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°	1066.6	85.3
0°-40°	1222.6	97.7
0°-60°	1243.1	99.4
0°-90°	1251.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1251.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1831	1831	1831	1831	1831	
5°	1810	1810	1811	1811	1810	170
15°	1576	1561	1547	1548	1544	436
25°	1047	1062	1050	1055	1037	458
35°	177	182	281	187	173	131
45°	10	12	23	13	10	11
55°	6	6	6	6	6	5
65°	3	4	4	4	4	4
75°	2	2	3	3	3	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°	1831.3	1831.3	1831.3	1831.3	1831.3
2.5°	1831.3	1830.3	1831.3	1831.3	1830.3
5°	1810.3	1810.3	1811.3	1811.3	1810.3
7.5°	1772.3	1772.3	1773.4	1779.7	1781.8
10°	1718.6	1715.5	1713.4	1717.6	1721.8
12.5°	1649.1	1647.0	1637.6	1636.5	1643.9
15°	1576.5	1560.7	1547.0	1548.0	1543.8
17.5°	1470.1	1463.8	1446.9	1446.9	1438.5
20°	1354.3	1340.6	1329.0	1330.0	1323.7
22.5°	1218.4	1218.4	1203.7	1212.1	1194.2
25°	1046.8	1061.5	1049.9	1055.2	1037.3
27.5°	837.2	862.5	877.2	865.6	811.9
30°	542.3	632.9	679.2	622.4	567.6
32.5°	307.5	365.4	479.2	380.2	352.8
35°	176.9	182.2	281.2	187.4	172.7
37.5°	91.6	96.9	141.1	93.7	87.4
40°	42.1	48.4	68.5	48.4	36.9
42.5°	16.8	26.3	39.0	21.1	16.8
45°	9.5	11.6	23.2	12.6	10.5
47.5°	8.4	8.4	13.7	9.5	8.4
50°	6.3	7.4	8.4	7.4	7.4
52.5°	6.3	6.3	7.4	6.3	6.3
55°	6.3	6.3	6.3	6.3	6.3
57.5°	5.3	5.3	6.3	6.3	5.3
60°	5.3	5.3	5.3	5.3	5.3
62.5°	4.2	4.2	5.3	5.3	5.3
65°	3.2	4.2	4.2	4.2	4.2
67.5°	3.2	3.2	4.2	4.2	4.2
70°	3.2	3.2	3.2	3.2	3.2
72.5°	2.1	3.2	3.2	3.2	3.2
75°	2.1	2.1	3.2	3.2	3.2
77.5°	1.1	2.1	2.1	2.1	2.1
80°	1.1	1.1	2.1	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	1.1	1.1
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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