

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: P886633

Luminaire Tested: ML310LSFL95FS1E-TIR4D55WFL-TL3SDMW-1000LM-3000K

Issue Date: 7/8/2024

Test Information

Test Method: LM-79-2019
Report Number: P886633
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-19)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/8/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL95FS1E-TIR4D55WFL-TL3SDMW-1000LM-3000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1123.6 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.86 / 0.82
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')

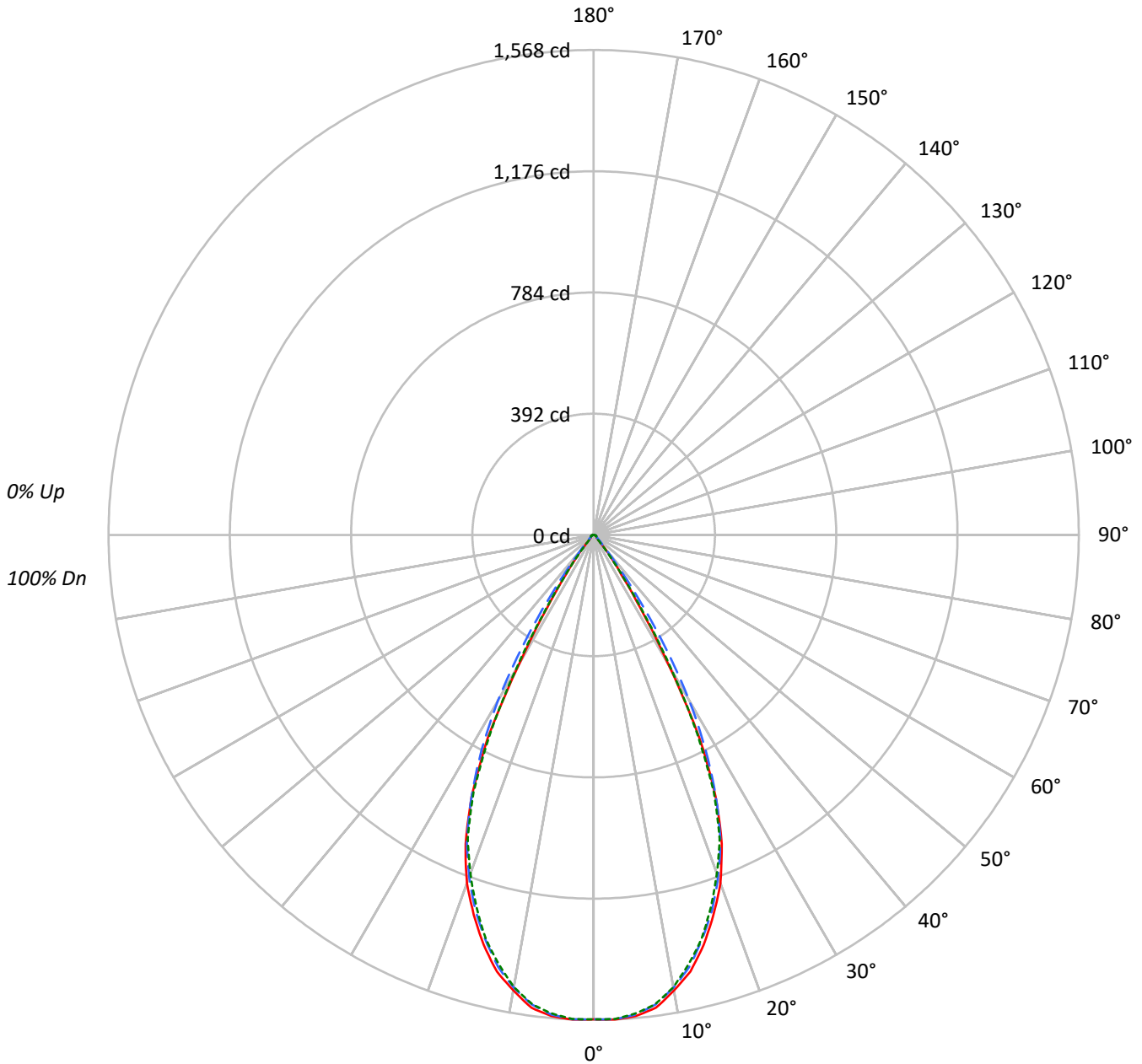
CIE Type: Direct

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



TEST NUMBER: P886633
CATALOG NUMBER: ML310LSFL95FS1E-TIR4D55WFL-TL3SDMW-1000LM-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P886633

CATALOG NUMBER: ML310LSFL95FS1E-TIR4D55WFL-TL3SDMW-1000LM-3000K

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	111	109	107	105	105	103	102	101	100	99	98	97	96	94					94			
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	92	90	88					88			
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	84	83					83			
4	99	92	87	83	97	91	86	82	89	85	81	87	83	80	85	82	80	78					78			
5	94	87	81	77	93	86	81	77	84	80	76	82	79	76	81	78	75	74					74			
6	90	82	77	73	89	81	76	72	80	75	72	78	74	71	77	74	71	70					70			
7	86	78	72	68	85	77	72	68	76	71	68	75	71	67	74	70	67	66					66			
8	83	74	68	64	81	73	68	64	72	67	64	71	67	64	70	66	64	62					62			
9	79	70	65	61	78	70	65	61	69	64	61	68	64	61	67	63	60	59					59			
10	76	67	61	58	75	66	61	58	66	61	58	65	61	58	64	60	57	56					56			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	269770	269770	269770
5°	269987	269175	268518
10°	261585	259941	259609
15°	244714	241362	240684
20°	219637	215495	213424
25°	177276	177637	174768
30°	95296	122799	100527
35°	32651	54222	34039
40°	9937	15243	8251
45°	3434	6649	3678
50°	3269	3778	3269
55°	3393	3663	3393
60°	3582	3582	3582
65°	3464	3464	3464
70°	3323	3323	3777
75°	3127	3726	3726
80°	2777	3769	3769
85°	3754	3754	3754

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6649 cd/sqm



TEST NUMBER: P886633

CATALOG NUMBER: ML310LSFL95FS1E-TIR4D55WFL-TL3SDMW-1000LM-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.5	13.0
10°-20°	378.2	33.7
20°-30°	412.5	36.7
30°-40°	142.0	12.6
40°-50°	18.0	1.6
50°-60°	10.3	0.9
60°-70°	8.6	0.8
70°-80°	5.6	0.5
80°-90°	2.0	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°	937.2	83.4
0°-40°	1079.2	96.0
0°-60°	1107.5	98.6
0°-90°	1123.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1123.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1566	1566	1566	1566	1566	
5°	1562	1560	1557	1553	1553	147
15°	1372	1370	1354	1354	1350	382
25°	933	940	935	929	920	407
35°	155	169	258	174	162	118
45°	14	17	27	16	15	14
55°	11	11	12	11	11	10
65°	8	8	8	9	8	8
75°	5	5	6	6	6	5
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



TEST NUMBER: P886633

CATALOG NUMBER: ML310LSFL95FS1E-TIR4D55WFL-TL3SDMW-1000LM-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1566.4	1566.4	1566.4	1566.4	1566.4
2.5°	1568.3	1568.3	1567.4	1567.4	1566.4
5°	1561.7	1559.8	1557.0	1553.2	1553.2
7.5°	1541.9	1536.3	1531.6	1529.7	1529.7
10°	1495.8	1496.8	1486.4	1481.7	1484.5
12.5°	1445.9	1438.4	1429.9	1425.2	1420.5
15°	1372.5	1369.7	1353.7	1353.7	1349.9
17.5°	1287.8	1286.8	1271.8	1267.1	1260.5
20°	1198.4	1186.1	1175.8	1172.9	1164.5
22.5°	1081.6	1074.1	1071.3	1067.5	1063.7
25°	932.9	940.4	934.8	929.1	919.7
27.5°	742.7	771.9	784.2	769.1	723.9
30°	479.2	562.0	617.5	558.2	505.5
32.5°	279.6	332.3	431.1	341.7	305.0
35°	155.3	169.4	257.9	174.2	161.9
37.5°	86.6	93.2	131.8	88.5	82.8
40°	44.2	50.8	67.8	48.0	36.7
42.5°	20.7	29.2	41.4	24.5	19.8
45°	14.1	16.9	27.3	16.0	15.1
47.5°	13.2	14.1	18.8	14.1	13.2
50°	12.2	12.2	14.1	12.2	12.2
52.5°	11.3	12.2	12.2	12.2	11.3
55°	11.3	11.3	12.2	11.3	11.3
57.5°	10.4	11.3	11.3	11.3	10.4
60°	10.4	10.4	10.4	10.4	10.4
62.5°	9.4	9.4	9.4	9.4	9.4
65°	8.5	8.5	8.5	9.4	8.5
67.5°	7.5	7.5	7.5	8.5	7.5
70°	6.6	6.6	6.6	7.5	7.5
72.5°	5.6	5.6	6.6	6.6	6.6
75°	4.7	4.7	5.6	5.6	5.6
77.5°	3.8	3.8	4.7	4.7	4.7
80°	2.8	3.8	3.8	3.8	3.8
82.5°	1.9	2.8	2.8	2.8	2.8
85°	1.9	1.9	1.9	1.9	1.9
87.5°	0.9	0.9	0.9	0.9	0.9
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



Report Generated By 670245859 / DESKTOP-T8S5UU9

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

Scaled Data Report





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

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

Scaled Data Report



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

Scaled Data Report



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

Scaled Data Report



(END OF REPORT)