

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: P886575

Luminaire Tested: ML310LSFL95FS1E-TIR4D25NFL-TL3SDMW-850LM-4000K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886575
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: ML310LSFL95FS1E-TIR4D25NFL-TL3SDMW-850LM-4000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1098.6 lumens
Efficiency: N/A
Efficacy: 80.8 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')

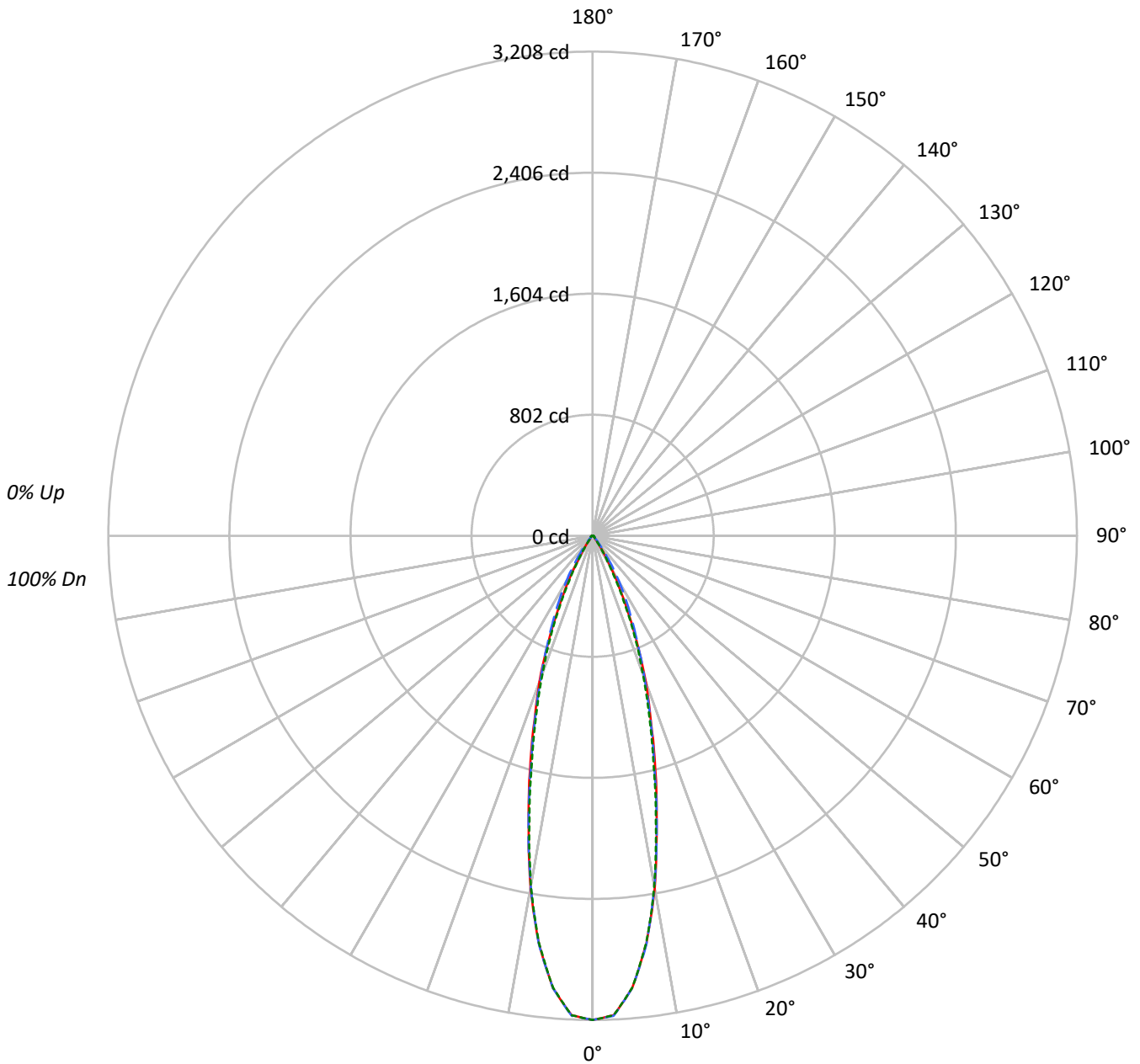
CIE Type: Direct

Input Watts (W): 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: P886575
CATALOG NUMBER: ML310LSFL95FS1E-TIR4D25NFL-TL3SDMW-850LM-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P886575

CATALOG NUMBER: ML310LSFL95FS1E-TIR4D25NFL-TL3SDMW-850LM-4000K

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	66	64																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	552490	552490	552490
5°	520094	520094	519748
10°	414359	412611	411719
15°	286347	280980	276861
20°	188627	184393	177227
25°	102747	116467	97408
30°	45878	69822	39694
35°	15810	31011	13918
40°	5868	13534	5868
45°	4652	6113	4652
50°	4019	4850	4019
55°	4204	4504	4204
60°	4133	4478	4133
65°	4075	4483	4483
70°	4028	4532	4532
75°	3993	3993	4658
80°	3967	3967	4959
85°	3952	3952	3952

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6113 cd/sqm



TEST NUMBER: P886575

CATALOG NUMBER: ML310LSFL95FS1E-TIR4D25NFL-TL3SDMW-850LM-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	266.1	24.2
10°-20°	439.2	40.0
20°-30°	267.3	24.3
30°-40°	75.3	6.9
40°-50°	17.8	1.6
50°-60°	13.0	1.2
60°-70°	10.8	1.0
70°-80°	6.9	0.6
80°-90°	2.2	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°	972.6	88.5
0°-40°	1047.9	95.4
0°-60°	1078.6	98.2
0°-90°	1098.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1098.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3208	3208	3208	3208	3208	
5°	3008	3009	3008	3008	3006	266
15°	1606	1591	1576	1568	1553	444
25°	541	591	613	571	513	257
35°	75	105	148	94	66	57
45°	19	20	25	20	19	15
55°	14	14	15	14	14	12
65°	10	11	11	11	11	10
75°	6	6	6	7	7	6
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



TEST NUMBER: P886575

CATALOG NUMBER: ML310LSFL95FS1E-TIR4D25NFL-TL3SDMW-850LM-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3208.0	3208.0	3208.0	3208.0	3208.0
2.5°	3179.9	3178.9	3183.9	3180.9	3179.9
5°	3008.4	3009.4	3008.4	3008.4	3006.4
7.5°	2724.5	2720.5	2729.5	2721.5	2720.5
10°	2369.4	2359.4	2359.4	2351.3	2354.3
12.5°	1957.1	1965.1	1963.1	1945.1	1936.0
15°	1606.0	1591.0	1575.9	1567.9	1552.8
17.5°	1277.0	1278.0	1265.9	1246.9	1242.9
20°	1029.2	1013.2	1006.1	993.1	967.0
22.5°	773.4	801.5	785.4	772.4	736.3
25°	540.7	590.8	612.9	570.8	512.6
27.5°	371.2	401.3	473.5	387.2	335.0
30°	230.7	275.9	351.1	255.8	199.6
32.5°	137.4	174.5	243.8	158.5	119.4
35°	75.2	105.3	147.5	94.3	66.2
37.5°	39.1	58.2	92.3	54.2	37.1
40°	26.1	33.1	60.2	31.1	26.1
42.5°	21.1	24.1	38.1	23.1	21.1
45°	19.1	20.1	25.1	20.1	19.1
47.5°	17.1	18.1	19.1	18.1	17.1
50°	15.0	17.1	18.1	17.1	15.0
52.5°	15.0	15.0	16.1	15.0	15.0
55°	14.0	14.0	15.0	14.0	14.0
57.5°	13.0	14.0	14.0	14.0	13.0
60°	12.0	13.0	13.0	13.0	12.0
62.5°	11.0	12.0	12.0	12.0	12.0
65°	10.0	11.0	11.0	11.0	11.0
67.5°	9.0	10.0	10.0	10.0	10.0
70°	8.0	9.0	9.0	9.0	9.0
72.5°	7.0	8.0	8.0	8.0	8.0
75°	6.0	6.0	6.0	7.0	7.0
77.5°	5.0	5.0	5.0	6.0	6.0
80°	4.0	4.0	4.0	5.0	5.0
82.5°	3.0	3.0	3.0	3.0	3.0
85°	2.0	2.0	2.0	2.0	2.0
87.5°	1.0	1.0	1.0	1.0	1.0
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



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)