Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: P886607

Luminaire Tested: ML310LSFL95FS1E-TIR4D40FL-TL3SDSL-850LM-2700K

Issue Date: 7/8/2024

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P886607
	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-2700K
Description:	3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, METALLIC SILVER TRIM
Light Source:	(1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	1154.1 lumens
Efficiency:	N/A
Efficacy:	84.9 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

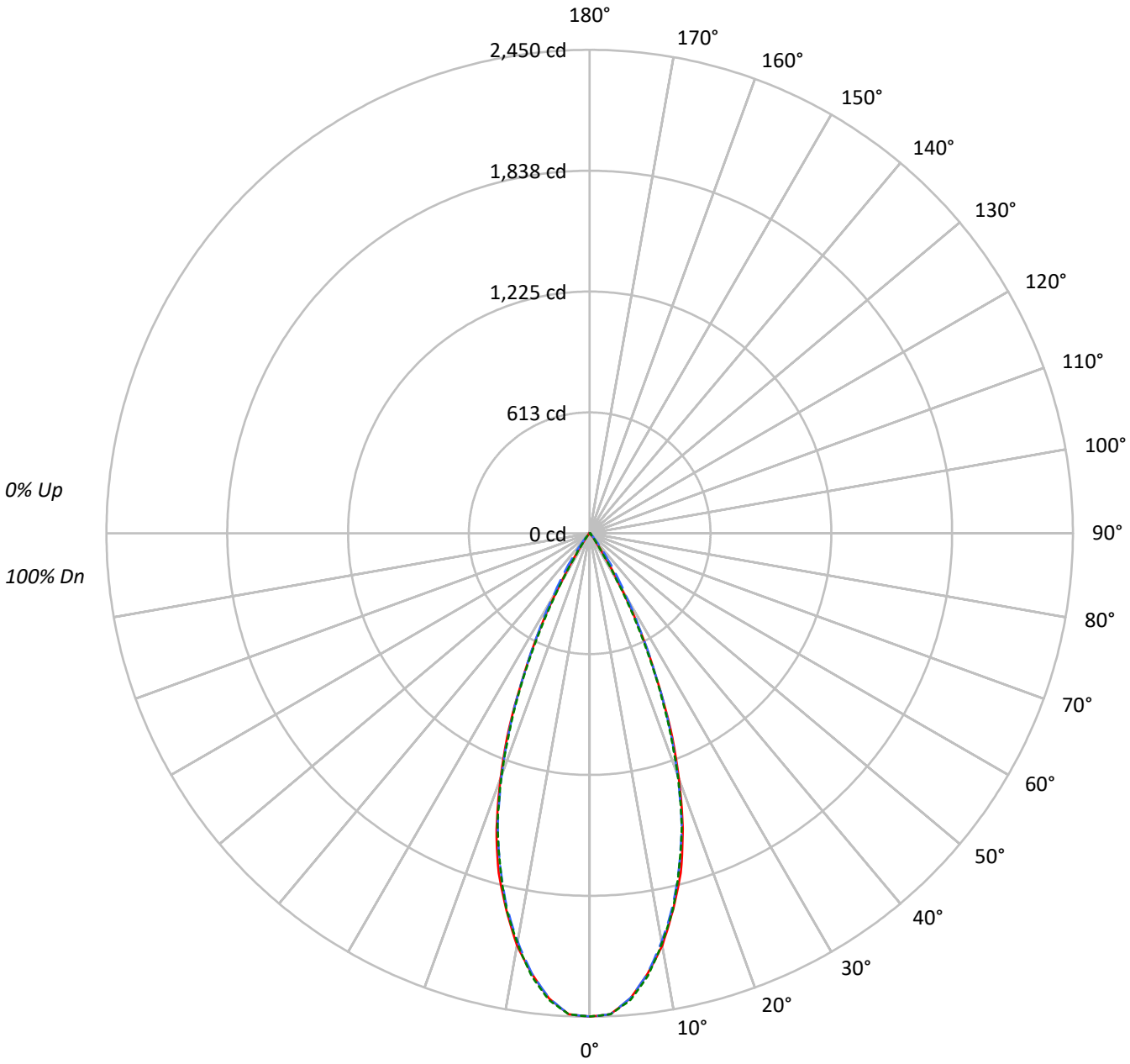
Input Watts (W):	13.6
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P886607
CATALOG NUMBER: ML310LSFL95FS1E-TIR4D40FL-TL3SDSL-850LM-2700K

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P886607
CATALOG NUMBER: ML310LSFL95FS1E-TIR4D40FL-TL3SDSL-850LM-2700K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	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	75	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°	421859	421859	421859
5°	409174	408845	410418
10°	370814	367474	369066
15°	317905	312396	312556
20°	242125	238790	239303
25°	148943	149456	146169
30°	60574	74316	55324
35°	12993	32882	12425
40°	4294	10634	4496
45°	1997	3775	1997
50°	1474	1956	1474
55°	1351	1651	1351
60°	1240	1550	1240
65°	1100	1467	1467
70°	1360	1360	1360
75°	1198	1198	1198
80°	893	893	1785
85°	1778	1778	1778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
Vertical Angle: 45°
Luminance: 3775 cd/sqm

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P886607
CATALOG NUMBER: ML310LSFL95FS1E-TIR4D40FL-TL3SDSL-850LM-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.6	18.9
10°-20°	482.9	41.8
20°-30°	356.7	30.9
30°-40°	76.7	6.6
40°-50°	9.8	0.9
50°-60°	4.4	0.4
60°-70°	3.3	0.3
70°-80°	2.1	0.2
80°-90°	0.7	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°	1057.2	91.6
0°-40°	1133.9	98.2
0°-60°	1148.1	99.5
0°-90°	1154.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1154.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2450	2450	2450	2450	2450	
5°	2367	2365	2365	2364	2374	218
15°	1783	1767	1752	1758	1753	487
25°	784	794	786	783	769	357
35°	62	89	156	79	59	60
45°	8	9	16	9	8	7
55°	4	4	6	4	4	4
65°	3	4	4	4	4	3
75°	2	2	2	2	2	2
85°	1	1	1	1	1	1
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P886607
CATALOG NUMBER: ML310LSFL95FS1E-TIR4D40FL-TL3SDSL-850LM-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	*2449.5*	*2449.5*	*2449.5*	*2449.5*	*2449.5*
2.5°	*2439.5*	2438.6	2439.5	2440.4	2439.5
5°	*2366.8*	2364.9	2364.9	2364.0	2374.0
7.5°	*2250.4*	2251.3	2249.5	2255.8	2262.2
10°	*2120.4*	2104.0	2101.3	2113.1	2110.4
12.5°	*1953.1*	1954.0	1940.3	1944.0	1950.3
15°	*1783.0*	1766.7	1752.1	1757.6	1753.0
17.5°	*1570.3*	1562.1	1550.3	1551.2	1553.9
20°	*1321.1*	1323.0	1302.9	1310.2	1305.7
22.5°	*1067.5*	1054.7	1050.2	1042.0	1037.4
25°	*783.8*	793.8	786.5	782.9	769.2
27.5°	*545.5*	547.4	556.5	537.4	508.3
30°	*304.6*	339.1	373.7	321.9	278.2
32.5°	*146.4*	181.8	249.1	168.2	129.1
35°	*61.8*	89.1	156.4	79.1	59.1
37.5°	*32.7*	42.7	87.3	40.0	30.9
40°	*19.1*	23.6	47.3	23.6	20.0
42.5°	*10.9*	14.5	26.4	14.5	11.8
45°	*8.2*	9.1	15.5	9.1	8.2
47.5°	*6.4*	7.3	9.1	7.3	6.4
50°	*5.5*	5.5	7.3	5.5	5.5
52.5°	*4.5*	5.5	5.5	5.5	5.5
55°	*4.5*	4.5	5.5	4.5	4.5
57.5°	*4.5*	4.5	4.5	4.5	4.5
60°	*3.6*	3.6	4.5	4.5	3.6
62.5°	*3.6*	3.6	3.6	3.6	3.6
65°	*2.7*	3.6	3.6	3.6	3.6
67.5°	*2.7*	2.7	3.6	2.7	2.7
70°	*2.7*	2.7	2.7	2.7	2.7
72.5°	*1.8*	1.8	2.7	2.7	2.7
75°	*1.8*	1.8	1.8	1.8	1.8
77.5°	*0.9*	1.8	1.8	1.8	1.8
80°	*0.9*	0.9	0.9	1.8	1.8
82.5°	*0.9*	0.9	0.9	0.9	0.9
85°	*0.9*	0.9	0.9	0.9	0.9
87.5°	*0.0*	0.0	0.0	0.0	0.0
90°	*0.0*	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

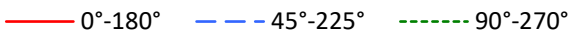
Report Generated By 670245859 / DESKTOP-T8S5UU9

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

(END OF REPORT)