

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: P886629

Luminaire Tested: ML310LSFL95FS1E-TIR4D55WFL-TL3SDMB-1000LM-3500K

Issue Date: 7/8/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886629  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-21)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 7/8/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML310LSFL95FS1E-TIR4D55WFL-TL3SDMB-1000LM-3500K  
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE BLACK TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

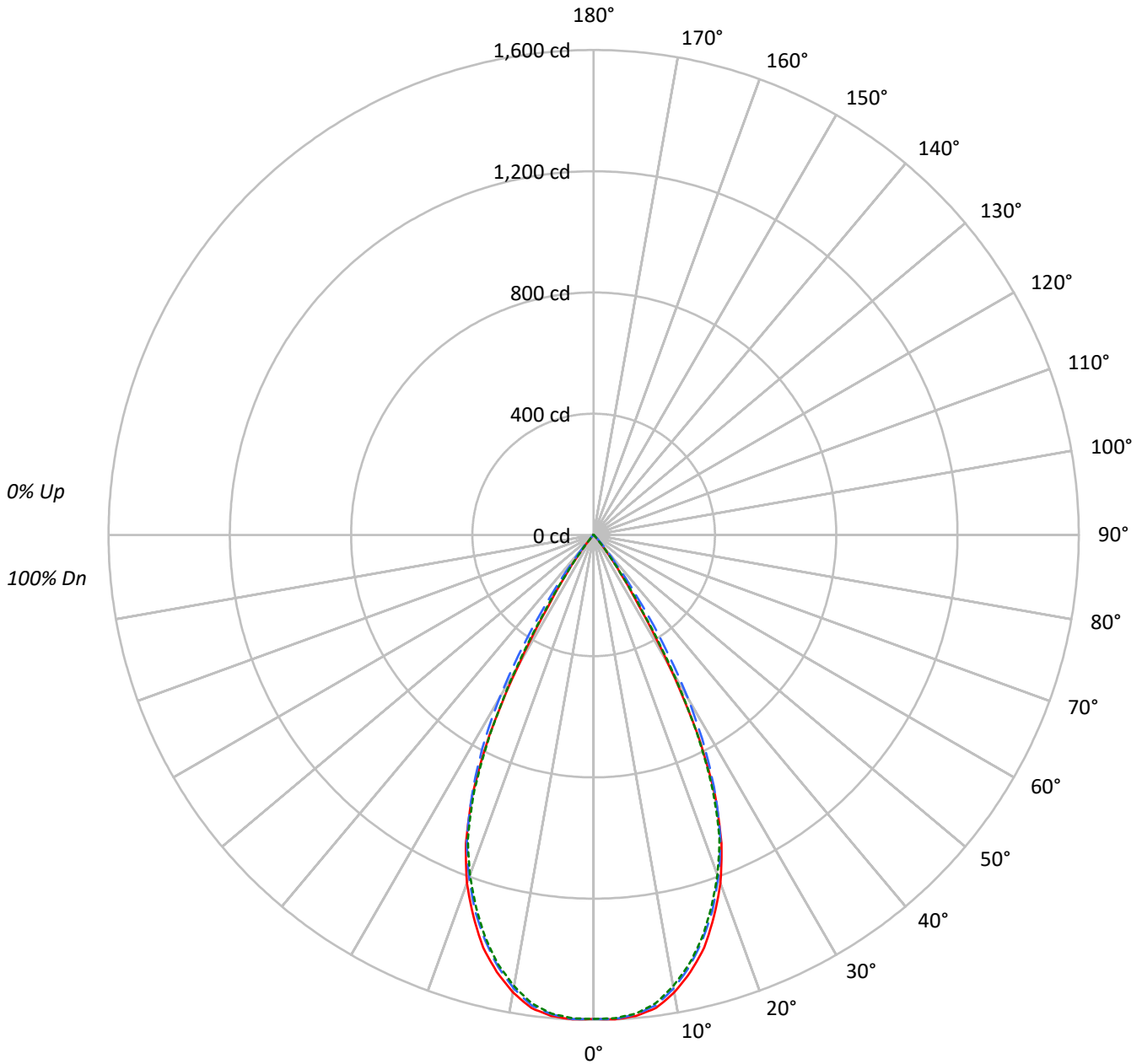
Lumens per Lamp: N/A  
Luminaire Lumens: 1103.9 lumens  
Efficiency: N/A  
Efficacy: 81.2 lumens/watt  
Spacing Criteria (0/90/45): 0.87 / 0.86 / 0.82  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 13.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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			100																
1	114	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95			95																
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	89			89																
3	104	99	94	91	103	97	93	90	95	91	89	92	90	87	90	88	86	84			84																
4	100	93	88	85	98	92	88	84	90	86	83	88	85	82	86	84	81	80			80																
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75			75																
6	92	84	78	74	90	83	78	74	81	77	74	80	76	73	79	75	73	71			71																
7	88	79	74	70	86	79	74	70	77	73	70	76	72	69	75	72	69	68			68																
8	84	75	70	66	83	75	70	66	74	69	66	73	69	66	72	68	65	64			64																
9	80	72	66	63	79	71	66	63	70	66	63	70	65	62	69	65	62	61			61																
10	77	68	63	60	76	68	63	60	67	63	60	67	62	59	66	62	59	58			58																

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	275040	275040	275040
5°	275416	274413	274067
10°	268055	265677	264313
15°	251293	246782	245570
20°	224109	220187	218574
25°	179898	180829	176953
30°	98379	123317	103609
35°	31684	52519	32483
40°	7419	12882	6115
45°	706	3800	706
50°	268	777	268
55°	0	300	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 3800 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	149.6	13.6
10°-20°	386.5	35.0
20°-30°	419.4	38.0
30°-40°	138.8	12.6
40°-50°	9.1	0.8
50°-60°	0.4	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	955.6	86.6
0°-40°	1094.4	99.1
0°-60°	1103.9	100.0
0°-90°	1103.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1103.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1597	1597	1597	1597	1597	
5°	1593	1591	1587	1586	1585	150
15°	1409	1401	1384	1380	1377	391
25°	947	956	952	945	931	413
35°	151	166	250	168	154	115
45°	3	5	16	5	3	6
55°	0	0	1	0	0	0
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1597.0	1597.0	1597.0	1597.0	1597.0
2.5°	1599.9	1599.9	1598.9	1598.0	1596.0
5°	1593.1	1591.2	1587.3	1586.3	1585.3
7.5°	1574.6	1572.7	1565.9	1559.1	1559.1
10°	1532.8	1531.9	1519.2	1515.3	1511.4
12.5°	1476.5	1472.6	1459.0	1454.1	1452.2
15°	1409.4	1400.6	1384.1	1380.2	1377.3
17.5°	1319.0	1315.1	1300.5	1293.7	1288.9
20°	1222.8	1214.0	1201.4	1196.5	1192.6
22.5°	1101.3	1096.4	1092.5	1089.6	1083.8
25°	946.7	955.5	951.6	944.8	931.2
27.5°	745.5	782.5	796.1	775.6	736.8
30°	494.7	572.5	620.1	560.8	521.0
32.5°	276.0	323.7	428.6	343.1	303.3
35°	150.7	166.2	249.8	168.2	154.5
37.5°	72.9	84.6	124.4	80.7	73.9
40°	33.0	39.9	57.3	37.9	27.2
42.5°	9.7	17.5	30.1	13.6	8.7
45°	2.9	4.9	15.6	4.9	2.9
47.5°	1.9	1.9	6.8	1.9	1.9
50°	1.0	1.0	2.9	1.0	1.0
52.5°	0.0	1.0	1.0	1.0	1.0
55°	0.0	0.0	1.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
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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