

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: P886632

Luminaire Tested: ML310LSFL95FS1E-TIR4D55WFL-TL3SDMW-1000LM-2700K

Issue Date: 7/8/2024

Test Information

Test Method: LM-79-2019
Report Number: P886632
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-2700K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 2700K CCT
Ballast/Driver: -

Summary

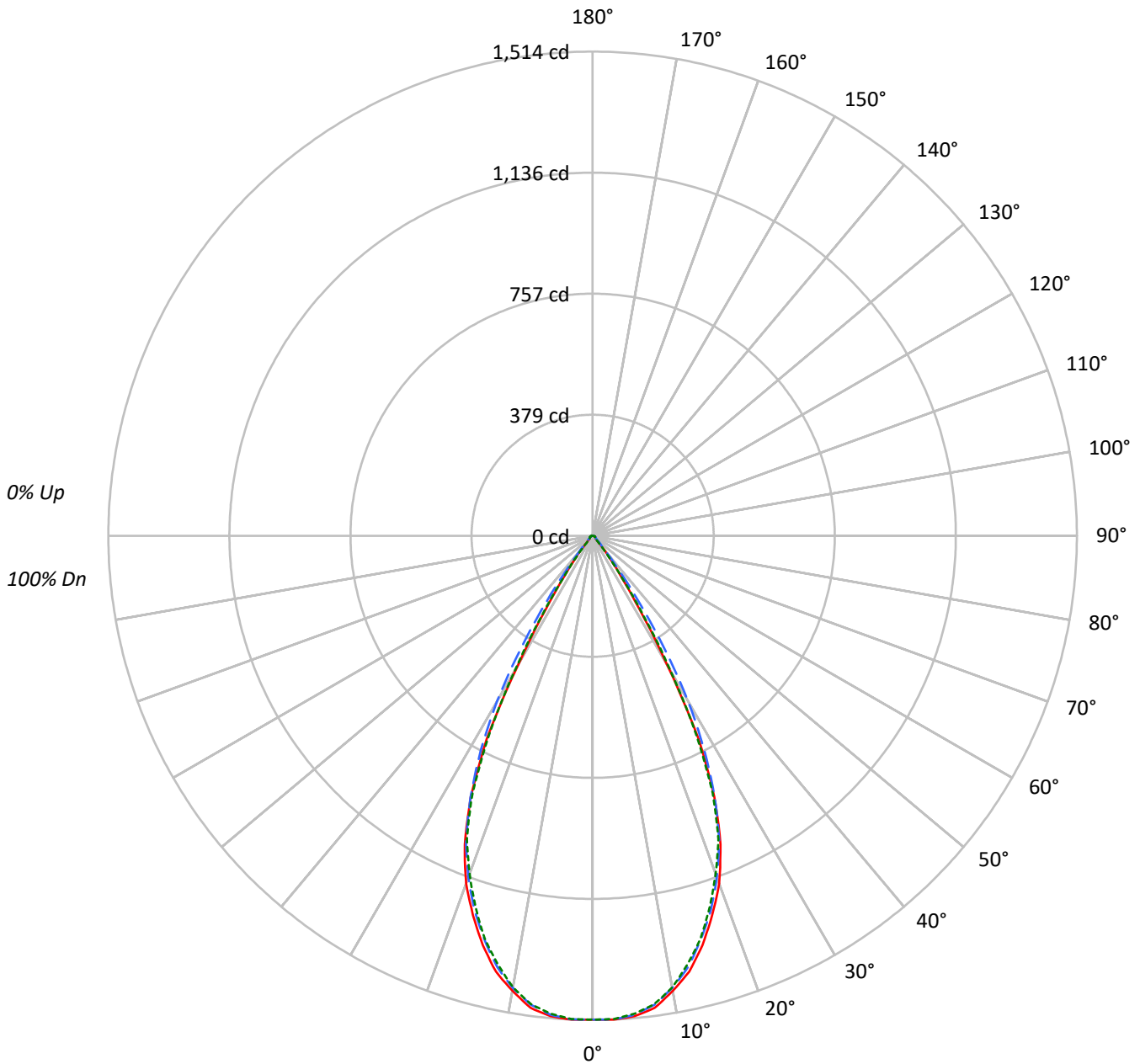
Lumens per Lamp: N/A
Luminaire Lumens: 1085.1 lumens
Efficiency: N/A
Efficacy: 79.8 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.86 / 0.82
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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



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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																			
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94																			
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	92	90	88																			
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	84	83																			
4	99	92	87	83	97	91	86	82	89	85	81	87	83	80	85	82	80	78																			
5	94	87	81	77	93	86	81	77	84	80	76	82	79	76	81	78	75	74																			
6	90	82	77	73	89	81	76	72	80	75	72	78	74	71	77	74	71	70																			
7	86	78	72	68	85	77	72	68	76	71	68	75	71	67	74	70	67	66																			
8	83	74	68	64	81	73	68	64	72	67	64	71	67	64	70	66	64	62																			
9	79	70	65	61	78	70	65	61	69	64	61	68	64	61	67	63	60	59																			
10	76	67	61	58	75	66	61	58	66	61	58	65	61	58	64	60	57	56																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	260521	260521	260521
5°	260721	259943	259303
10°	252613	251022	250707
15°	236316	233071	232429
20°	212086	208091	206093
25°	171195	171537	168763
30°	92015	118584	97086
35°	31537	52372	32882
40°	9600	14726	7981
45°	3312	6430	3532
50°	3162	3644	3162
55°	3273	3543	3273
60°	3444	3444	3444
65°	3342	3342	3342
70°	3223	3223	3676
75°	2994	3660	3660
80°	2678	3570	3570
85°	3557	3557	3557

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6430 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.5	13.0
10°-20°	365.2	33.7
20°-30°	398.3	36.7
30°-40°	137.1	12.6
40°-50°	17.4	1.6
50°-60°	10.0	0.9
60°-70°	8.3	0.8
70°-80°	5.4	0.5
80°-90°	1.9	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°	905.0	83.4
0°-40°	1042.2	96.0
0°-60°	1069.5	98.6
0°-90°	1085.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1085.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1513	1513	1513	1513	1513	
5°	1508	1506	1504	1500	1500	142
15°	1325	1323	1307	1307	1304	369
25°	901	908	903	897	888	393
35°	150	164	249	168	156	114
45°	14	16	26	16	14	14
55°	11	11	12	11	11	10
65°	8	8	8	9	8	8
75°	4	4	6	6	6	5
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1512.7	1512.7	1512.7	1512.7	1512.7
2.5°	1514.5	1514.5	1513.6	1513.6	1512.7
5°	1508.1	1506.3	1503.6	1499.9	1499.9
7.5°	1489.0	1483.6	1479.0	1477.2	1477.2
10°	1444.5	1445.4	1435.4	1430.9	1433.6
12.5°	1396.3	1389.0	1380.9	1376.3	1371.8
15°	1325.4	1322.7	1307.2	1307.2	1303.6
17.5°	1243.6	1242.7	1228.1	1223.6	1217.2
20°	1157.2	1145.4	1135.4	1132.7	1124.5
22.5°	1044.5	1037.2	1034.5	1030.9	1027.2
25°	900.9	908.1	902.7	897.2	888.1
27.5°	717.2	745.4	757.2	742.7	699.1
30°	462.7	542.7	596.3	539.1	488.2
32.5°	270.0	320.9	416.3	330.0	294.5
35°	150.0	163.6	249.1	168.2	156.4
37.5°	83.6	90.0	127.3	85.5	80.0
40°	42.7	49.1	65.5	46.4	35.5
42.5°	20.0	28.2	40.0	23.6	19.1
45°	13.6	16.4	26.4	15.5	14.5
47.5°	12.7	13.6	18.2	13.6	12.7
50°	11.8	11.8	13.6	11.8	11.8
52.5°	10.9	11.8	11.8	11.8	10.9
55°	10.9	10.9	11.8	10.9	10.9
57.5°	10.0	10.9	10.9	10.9	10.0
60°	10.0	10.0	10.0	10.0	10.0
62.5°	9.1	9.1	9.1	9.1	9.1
65°	8.2	8.2	8.2	9.1	8.2
67.5°	7.3	7.3	7.3	8.2	7.3
70°	6.4	6.4	6.4	7.3	7.3
72.5°	5.5	5.5	6.4	6.4	6.4
75°	4.5	4.5	5.5	5.5	5.5
77.5°	3.6	3.6	4.5	4.5	4.5
80°	2.7	3.6	3.6	3.6	3.6
82.5°	1.8	2.7	2.7	2.7	2.7
85°	1.8	1.8	1.8	1.8	1.8
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



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Scaled Data Report





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

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