

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: P886636

Luminaire Tested: ML310LSFL95FS1E-TIR4D55WFL-TL3SDMW-1000LM-5000K

Issue Date: 7/8/2024

Test Information

Test Method: LM-79-2019
Report Number: P886636
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-5000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1257.3 lumens
Efficiency: N/A
Efficacy: 92.4 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')

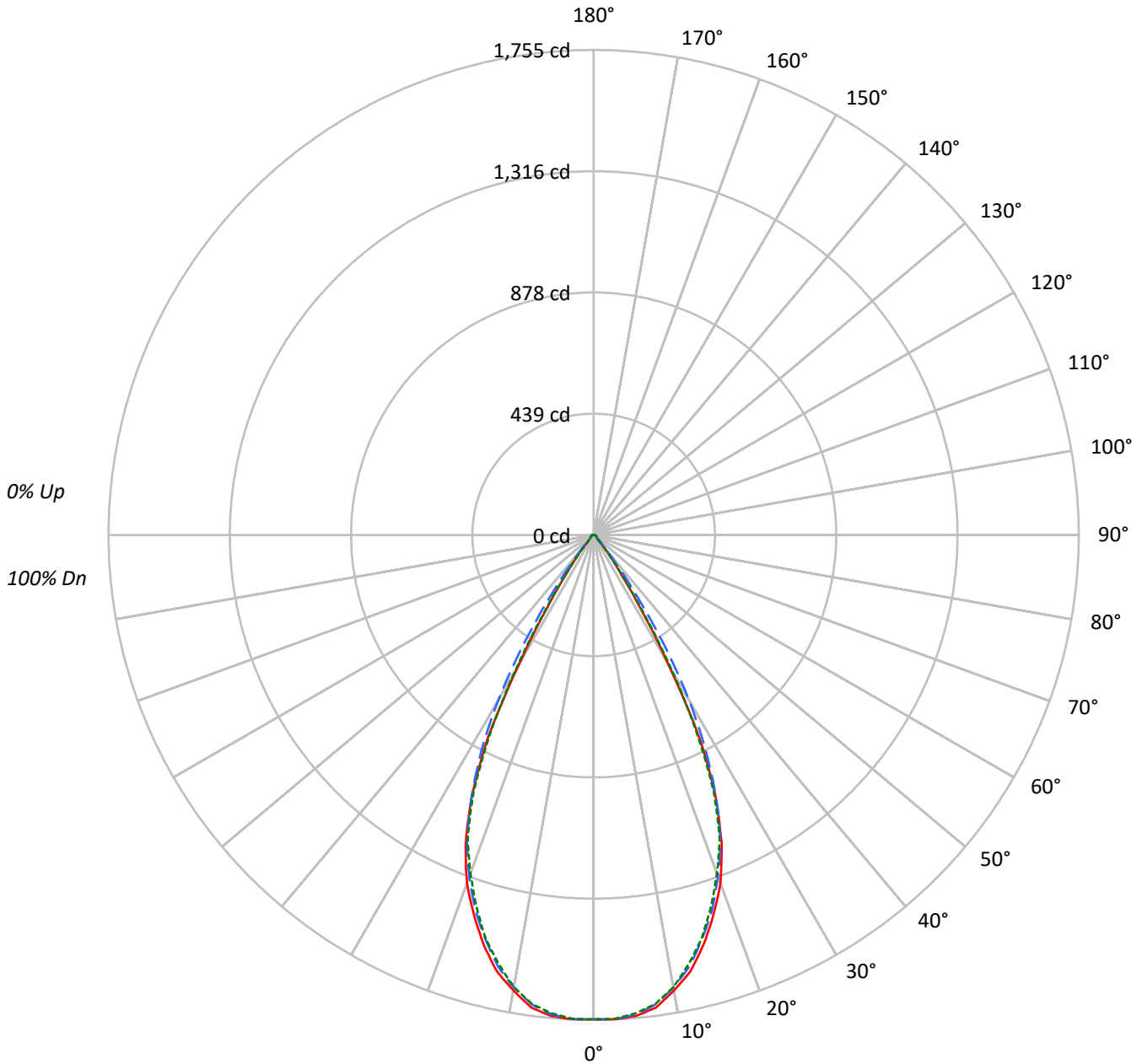
CIE Type: Direct

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					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°	301855	301855	301855
5°	302091	301175	300449
10°	292696	290842	290475
15°	273812	270050	269301
20°	245736	241117	238790
25°	198350	198749	195556
30°	106612	137416	112478
35°	36541	60677	38096
40°	11129	17041	9240
45°	3848	7429	4116
50°	3671	4233	3671
55°	3783	4114	3783
60°	3996	3996	3996
65°	3871	3871	3871
70°	3726	3726	4230
75°	3527	4192	4192
80°	3174	4166	4166
85°	4150	4150	4150

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 7429 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.9	13.0
10°-20°	423.2	33.7
20°-30°	461.5	36.7
30°-40°	158.9	12.6
40°-50°	20.1	1.6
50°-60°	11.5	0.9
60°-70°	9.6	0.8
70°-80°	6.3	0.5
80°-90°	2.3	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°	1048.6	83.4
0°-40°	1207.5	96.0
0°-60°	1239.2	98.6
0°-90°	1257.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1257.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1753	1753	1753	1753	1753	
5°	1747	1745	1742	1738	1738	165
15°	1536	1532	1515	1515	1510	427
25°	1044	1052	1046	1040	1029	455
35°	174	190	289	195	181	132
45°	16	19	30	18	17	16
55°	13	13	14	13	13	11
65°	10	10	10	10	10	9
75°	5	5	6	6	6	6
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°	1752.7	1752.7	1752.7	1752.7	1752.7
2.5°	1754.8	1754.8	1753.7	1753.7	1752.7
5°	1747.4	1745.3	1742.1	1737.9	1737.9
7.5°	1725.3	1719.0	1713.7	1711.6	1711.6
10°	1673.7	1674.7	1663.1	1657.9	1661.0
12.5°	1617.8	1609.4	1599.9	1594.7	1589.4
15°	1535.7	1532.5	1514.6	1514.6	1510.4
17.5°	1440.9	1439.8	1423.0	1417.7	1410.3
20°	1340.8	1327.1	1315.6	1312.4	1302.9
22.5°	1210.2	1201.8	1198.6	1194.4	1190.2
25°	1043.8	1052.2	1045.9	1039.6	1029.1
27.5°	831.0	863.7	877.4	860.5	810.0
30°	536.1	628.8	691.0	624.6	565.6
32.5°	312.8	371.8	482.4	382.3	341.3
35°	173.8	189.6	288.6	194.9	181.2
37.5°	96.9	104.3	147.5	99.0	92.7
40°	49.5	56.9	75.8	53.7	41.1
42.5°	23.2	32.7	46.3	27.4	22.1
45°	15.8	19.0	30.5	17.9	16.9
47.5°	14.7	15.8	21.1	15.8	14.7
50°	13.7	13.7	15.8	13.7	13.7
52.5°	12.6	13.7	13.7	13.7	12.6
55°	12.6	12.6	13.7	12.6	12.6
57.5°	11.6	12.6	12.6	12.6	11.6
60°	11.6	11.6	11.6	11.6	11.6
62.5°	10.5	10.5	10.5	10.5	10.5
65°	9.5	9.5	9.5	10.5	9.5
67.5°	8.4	8.4	8.4	9.5	8.4
70°	7.4	7.4	7.4	8.4	8.4
72.5°	6.3	6.3	7.4	7.4	7.4
75°	5.3	5.3	6.3	6.3	6.3
77.5°	4.2	4.2	5.3	5.3	5.3
80°	3.2	4.2	4.2	4.2	4.2
82.5°	2.1	3.2	3.2	3.2	3.2
85°	2.1	2.1	2.1	2.1	2.1
87.5°	1.1	1.1	1.1	1.1	1.1
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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