

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: P886639

Luminaire Tested: ML310LSFL95FS1E-TIR4D55WFL-TL3SDSL-1000LM-3500K

Issue Date: 7/8/2024

Test Information

Test Method: LM-79-2019
Report Number: P886639
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-20)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/8/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL95FS1E-TIR4D55WFL-TL3SDSL-1000LM-3500K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, METALLIC SILVER TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3500K CCT
Ballast/Driver: -

Summary

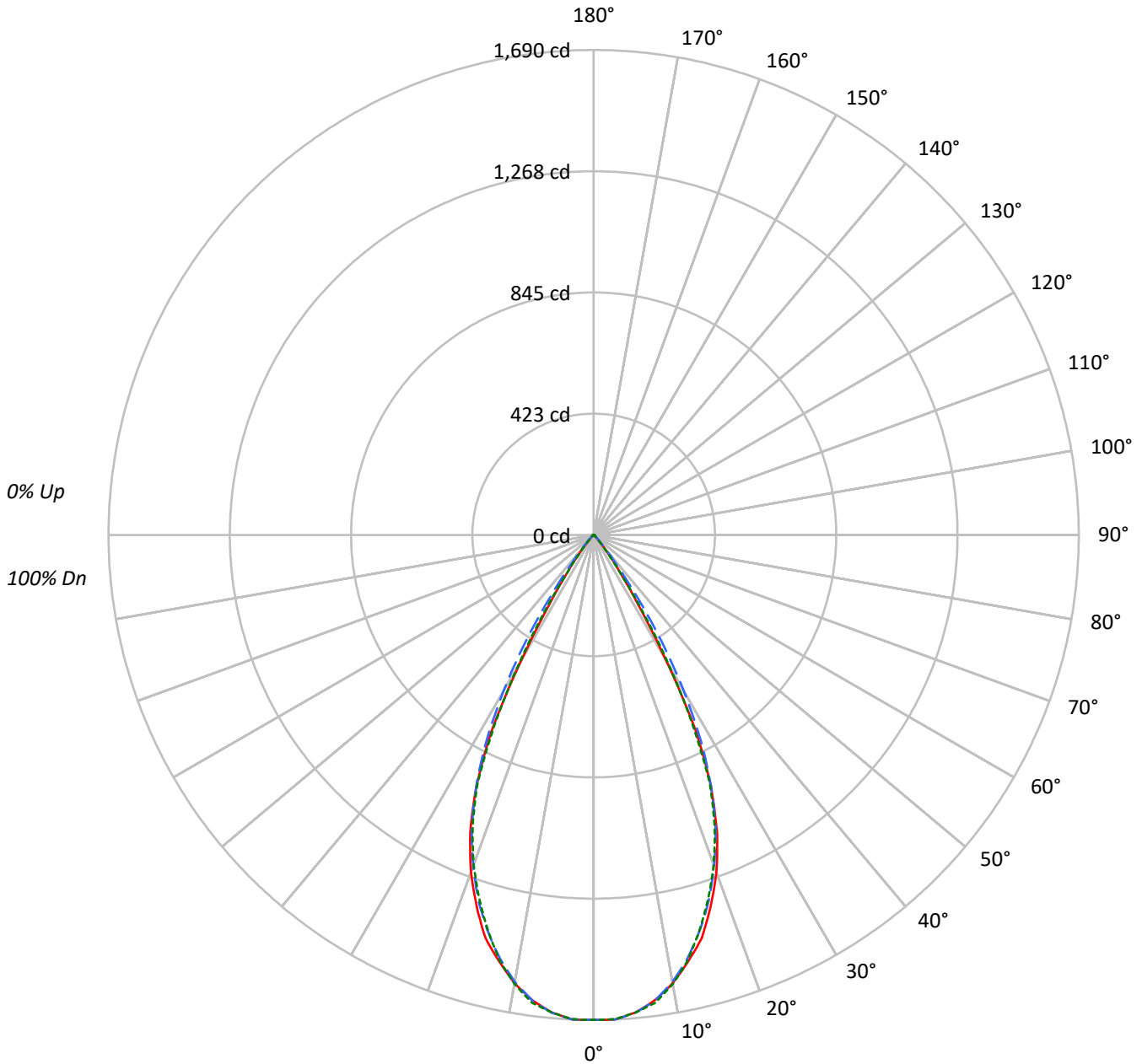
Lumens per Lamp: N/A
Luminaire Lumens: 1154.5 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.84 / 0.81
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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	112	109	107	105	105	104	102	102	100	99	98	97	96	94					94			
2	109	104	101	98	107	103	99	97	100	97	94	97	94	92	94	92	91	89					89			
3	104	98	94	90	102	97	93	89	94	91	88	92	89	87	90	87	85	84					84			
4	100	93	88	84	98	92	87	83	90	86	82	88	84	81	86	83	81	79					79			
5	95	88	82	78	94	87	82	78	85	81	77	83	80	77	82	79	76	75					75			
6	91	83	78	74	90	82	77	73	81	76	73	79	76	73	78	75	72	71					71			
7	87	79	73	69	86	78	73	69	77	72	69	76	72	69	75	71	68	67					67			
8	83	75	69	66	82	74	69	66	73	69	65	72	68	65	71	68	65	64					64			
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	62	60					60			
10	77	68	63	59	76	67	62	59	67	62	59	66	62	59	65	61	59	57					57			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	291073	291073	291073
5°	288814	288987	288814
10°	277376	276519	277883
15°	259406	254556	254021
20°	229058	224787	223889
25°	183566	184117	181913
30°	99532	124649	104166
35°	34333	54559	33513
40°	8746	14209	7644
45°	2119	5212	2363
50°	1554	2090	1822
55°	1742	1742	1742
60°	1688	1688	1688
65°	1182	1589	1589
70°	1460	1460	1460
75°	1264	1930	1930
80°	992	1884	1884
85°	1976	1976	1976

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5212 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.8	13.6
10°-20°	398.8	34.5
20°-30°	428.8	37.1
30°-40°	143.9	12.5
40°-50°	13.8	1.2
50°-60°	5.2	0.4
60°-70°	3.9	0.3
70°-80°	2.5	0.2
80°-90°	0.9	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°	984.4	85.3
0°-40°	1128.3	97.7
0°-60°	1147.2	99.4
0°-90°	1154.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1154.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1690	1690	1690	1690	1690	
5°	1671	1671	1672	1672	1671	157
15°	1455	1440	1428	1429	1425	403
25°	966	980	969	974	957	423
35°	163	168	260	173	159	121
45°	9	11	21	12	10	10
55°	6	6	6	6	6	5
65°	3	4	4	4	4	3
75°	2	2	3	3	3	2
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1690.1	1690.1	1690.1	1690.1	1690.1
2.5°	1690.1	1689.1	1690.1	1690.1	1689.1
5°	1670.6	1670.6	1671.6	1671.6	1670.6
7.5°	1635.6	1635.6	1636.6	1642.4	1644.4
10°	1586.1	1583.2	1581.2	1585.1	1589.0
12.5°	1521.9	1520.0	1511.2	1510.3	1517.1
15°	1454.9	1440.3	1427.7	1428.6	1424.7
17.5°	1356.7	1350.9	1335.3	1335.3	1327.6
20°	1249.8	1237.2	1226.5	1227.5	1221.6
22.5°	1124.4	1124.4	1110.8	1118.6	1102.1
25°	966.0	979.6	968.9	973.8	957.3
27.5°	772.6	796.0	809.6	798.9	749.3
30°	500.5	584.1	626.8	574.4	523.8
32.5°	283.8	337.2	442.2	350.8	325.6
35°	163.3	168.1	259.5	173.0	159.4
37.5°	84.6	89.4	130.2	86.5	80.7
40°	38.9	44.7	63.2	44.7	34.0
42.5°	15.5	24.3	36.0	19.4	15.5
45°	8.7	10.7	21.4	11.7	9.7
47.5°	7.8	7.8	12.6	8.7	7.8
50°	5.8	6.8	7.8	6.8	6.8
52.5°	5.8	5.8	6.8	5.8	5.8
55°	5.8	5.8	5.8	5.8	5.8
57.5°	4.9	4.9	5.8	5.8	4.9
60°	4.9	4.9	4.9	4.9	4.9
62.5°	3.9	3.9	4.9	4.9	4.9
65°	2.9	3.9	3.9	3.9	3.9
67.5°	2.9	2.9	3.9	3.9	3.9
70°	2.9	2.9	2.9	2.9	2.9
72.5°	1.9	2.9	2.9	2.9	2.9
75°	1.9	1.9	2.9	2.9	2.9
77.5°	1.0	1.9	1.9	1.9	1.9
80°	1.0	1.0	1.9	1.9	1.9
82.5°	1.0	1.0	1.0	1.0	1.0
85°	1.0	1.0	1.0	1.0	1.0
87.5°	0.0	0.0	0.0	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



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Scaled Data Report





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

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