

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: P886638

Luminaire Tested: ML310LSFL95FS1E-TIR4D55WFL-TL3SDSL-1000LM-3000K

Issue Date: 7/8/2024

Test Information

Test Method: LM-79-2019
Report Number: P886638
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-3000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, METALLIC SILVER TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1118.0 lumens
Efficiency: N/A
Efficacy: 82.2 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

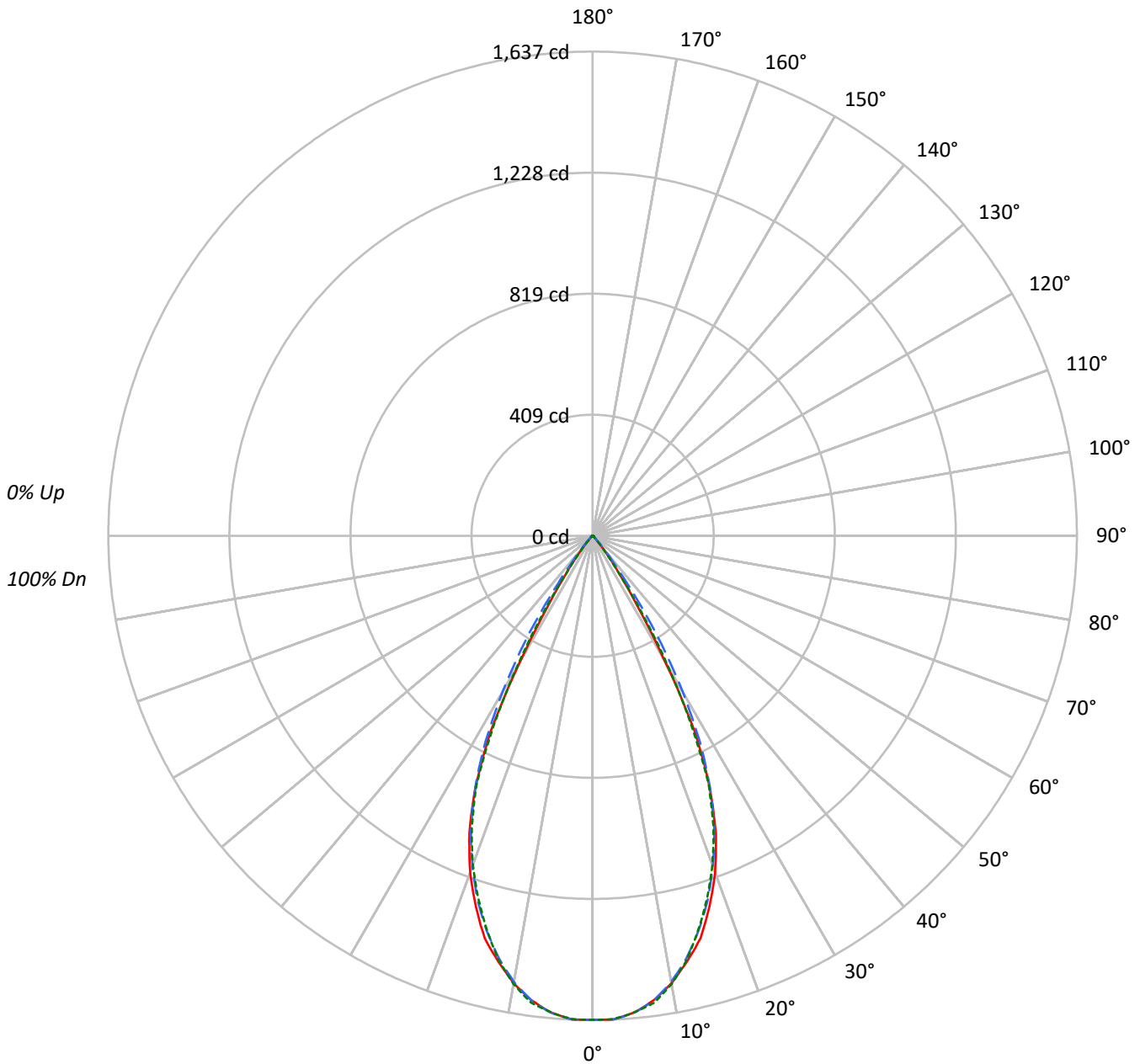
Input Watts (W): 13.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	281877	281877	281877
5°	279703	279859	279703
10°	268615	267793	269105
15°	251222	246515	246016
20°	221837	217695	216833
25°	177770	178321	176174
30°	96390	120731	100885
35°	33240	52835	32462
40°	8453	13759	7397
45°	2070	5042	2289
50°	1500	2009	1768
55°	1681	1681	1681
60°	1619	1619	1619
65°	1141	1549	1549
70°	1410	1410	1410
75°	1264	1863	1863
80°	893	1884	1884
85°	1778	1778	1778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5042 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.9	13.6
10°-20°	386.2	34.5
20°-30°	415.3	37.1
30°-40°	139.3	12.5
40°-50°	13.4	1.2
50°-60°	5.0	0.4
60°-70°	3.8	0.3
70°-80°	2.4	0.2
80°-90°	0.8	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°	953.3	85.3
0°-40°	1092.6	97.7
0°-60°	1111.0	99.4
0°-90°	1118.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1118.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1637	1637	1637	1637	1637	
5°	1618	1618	1619	1619	1618	152
15°	1409	1395	1383	1384	1380	390
25°	936	949	938	943	927	409
35°	158	163	251	168	154	117
45°	8	10	21	11	9	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°	1636.7	1636.7	1636.7	1636.7	1636.7
2.5°	1636.7	1635.8	1636.7	1636.7	1635.8
5°	1617.9	1617.9	1618.8	1618.8	1617.9
7.5°	1584.0	1584.0	1585.0	1590.6	1592.5
10°	1536.0	1533.2	1531.3	1535.1	1538.8
12.5°	1473.9	1472.0	1463.5	1462.6	1469.2
15°	1409.0	1394.8	1382.6	1383.5	1379.8
17.5°	1313.9	1308.2	1293.2	1293.2	1285.7
20°	1210.4	1198.1	1187.8	1188.7	1183.1
22.5°	1089.0	1089.0	1075.8	1083.3	1067.3
25°	935.5	948.7	938.4	943.1	927.1
27.5°	748.2	770.8	784.0	773.7	725.7
30°	484.7	565.7	607.1	556.2	507.3
32.5°	274.8	326.6	428.2	339.8	315.3
35°	158.1	162.8	251.3	167.5	154.4
37.5°	81.9	86.6	126.1	83.8	78.1
40°	37.6	43.3	61.2	43.3	32.9
42.5°	15.1	23.5	34.8	18.8	15.1
45°	8.5	10.4	20.7	11.3	9.4
47.5°	7.5	7.5	12.2	8.5	7.5
50°	5.6	6.6	7.5	6.6	6.6
52.5°	5.6	5.6	6.6	5.6	5.6
55°	5.6	5.6	5.6	5.6	5.6
57.5°	4.7	4.7	5.6	5.6	4.7
60°	4.7	4.7	4.7	4.7	4.7
62.5°	3.8	3.8	4.7	4.7	4.7
65°	2.8	3.8	3.8	3.8	3.8
67.5°	2.8	2.8	3.8	3.8	3.8
70°	2.8	2.8	2.8	2.8	2.8
72.5°	1.9	2.8	2.8	2.8	2.8
75°	1.9	1.9	2.8	2.8	2.8
77.5°	0.9	1.9	1.9	1.9	1.9
80°	0.9	0.9	1.9	1.9	1.9
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	0.9	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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