

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: P886631

Luminaire Tested: ML310LSFL95FS1E-TIR4D55WFL-TL3SDMB-1000LM-5000K

Issue Date: 7/8/2024

Test Information

Test Method: LM-79-2019
Report Number: P886631
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-5000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE BLACK TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 5000K CCT
Ballast/Driver: -

Summary

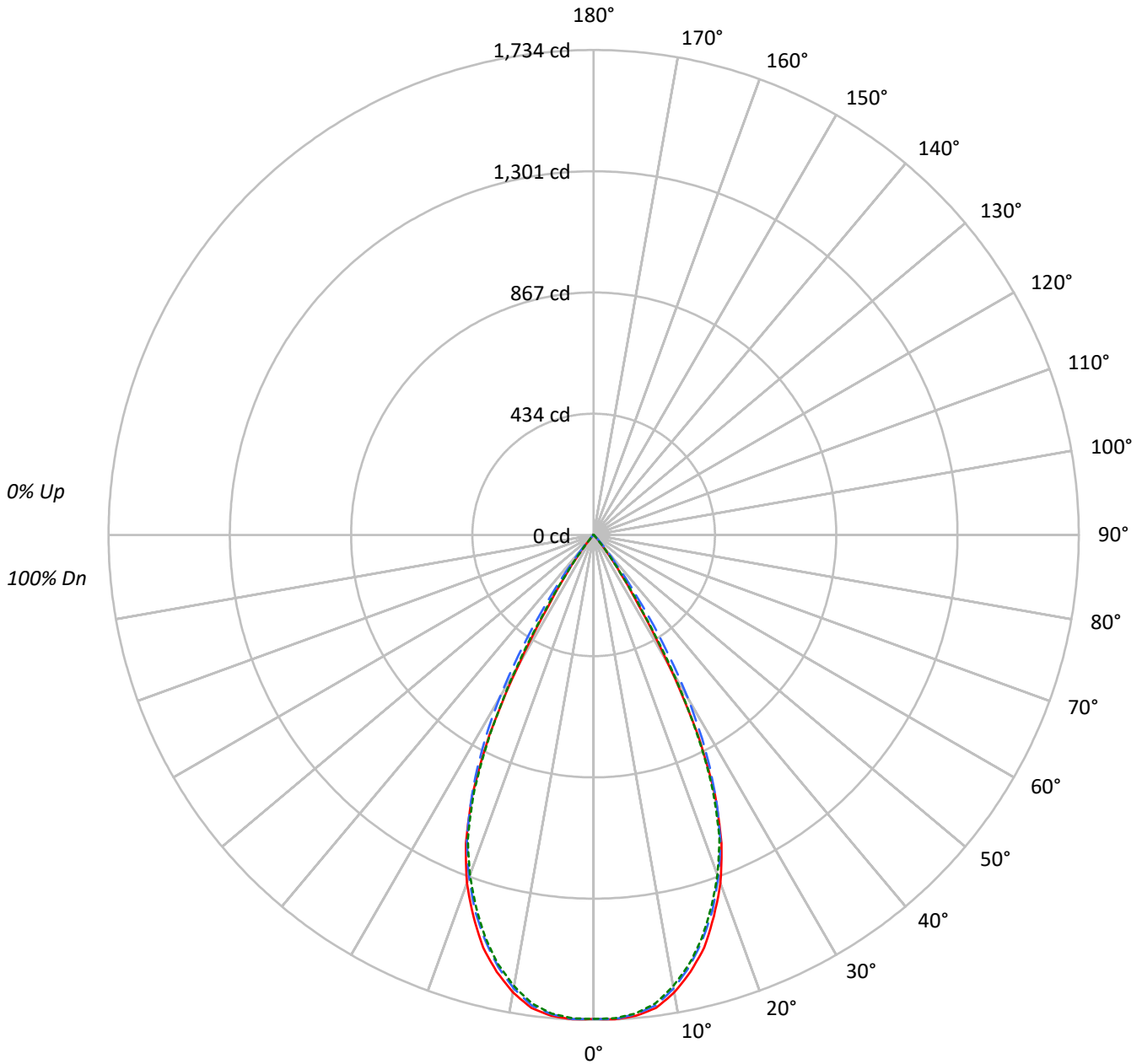
Lumens per Lamp: N/A
Luminaire Lumens: 1196.2 lumens
Efficiency: N/A
Efficacy: 88.0 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.86 / 0.82
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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					70					50					30				
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	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95		
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	89		
3	104	99	94	91	103	97	93	90	95	91	89	92	90	87	90	88	86	84		
4	100	93	88	85	98	92	88	84	90	86	83	88	85	82	86	84	81	80		
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75		
6	92	84	78	74	90	83	78	74	81	77	74	80	76	73	79	75	73	71		
7	88	79	74	70	86	79	74	70	77	73	70	76	72	69	75	72	69	68		
8	84	75	70	66	83	75	70	66	74	69	66	73	69	66	72	68	65	64		
9	80	72	66	63	79	71	66	63	70	66	63	70	65	62	69	65	62	61		
10	77	68	63	60	76	68	63	60	67	63	60	67	62	59	66	62	59	58		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	298031	298031	298031
5°	298426	297337	296974
10°	290457	287887	286418
15°	272297	267411	266092
20°	242840	238588	236847
25°	194929	195936	191737
30°	106612	133638	112260
35°	34333	56913	35216
40°	8049	13961	6632
45°	779	4116	779
50°	295	857	295
55°	0	330	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: 4116 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.1	13.6
10°-20°	418.8	35.0
20°-30°	454.5	38.0
30°-40°	150.4	12.6
40°-50°	9.9	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°	1035.4	86.6
0°-40°	1185.8	99.1
0°-60°	1196.2	100.0
0°-90°	1196.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1196.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1730	1730	1730	1730	1730	
5°	1726	1724	1720	1719	1718	163
15°	1527	1518	1500	1496	1492	424
25°	1026	1035	1031	1024	1009	447
35°	163	180	271	182	168	124
45°	3	5	17	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°	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1733.6	1733.6	1732.6	1731.5	1729.4
5°	1726.2	1724.1	1719.9	1718.9	1717.8
7.5°	1706.2	1704.1	1696.8	1689.4	1689.4
10°	1660.9	1659.9	1646.2	1642.0	1637.8
12.5°	1599.9	1595.6	1580.9	1575.6	1573.5
15°	1527.2	1517.7	1499.8	1495.6	1492.4
17.5°	1429.2	1425.0	1409.2	1401.8	1396.6
20°	1325.0	1315.5	1301.8	1296.5	1292.3
22.5°	1193.3	1188.0	1183.8	1180.7	1174.4
25°	1025.8	1035.3	1031.1	1023.7	1009.0
27.5°	807.8	847.9	862.6	840.5	798.3
30°	536.1	620.4	672.0	607.7	564.5
32.5°	299.1	350.7	464.5	371.8	328.6
35°	163.3	180.1	270.7	182.2	167.5
37.5°	79.0	91.6	134.8	87.4	80.0
40°	35.8	43.2	62.1	41.1	29.5
42.5°	10.5	19.0	32.7	14.7	9.5
45°	3.2	5.3	16.9	5.3	3.2
47.5°	2.1	2.1	7.4	2.1	2.1
50°	1.1	1.1	3.2	1.1	1.1
52.5°	0.0	1.1	1.1	1.1	1.1
55°	0.0	0.0	1.1	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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