

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: P886572

Luminaire Tested: ML310LSFL95FS1E-TIR4D25NFL-TL3SDMW-850LM-2700K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886572
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-13)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL95FS1E-TIR4D25NFL-TL3SDMW-850LM-2700K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 995.1 lumens
Efficiency: N/A
Efficacy: 73.2 lumens/watt
Spacing Criteria (0/90/45): 0.5 / 0.49 / 0.52
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')

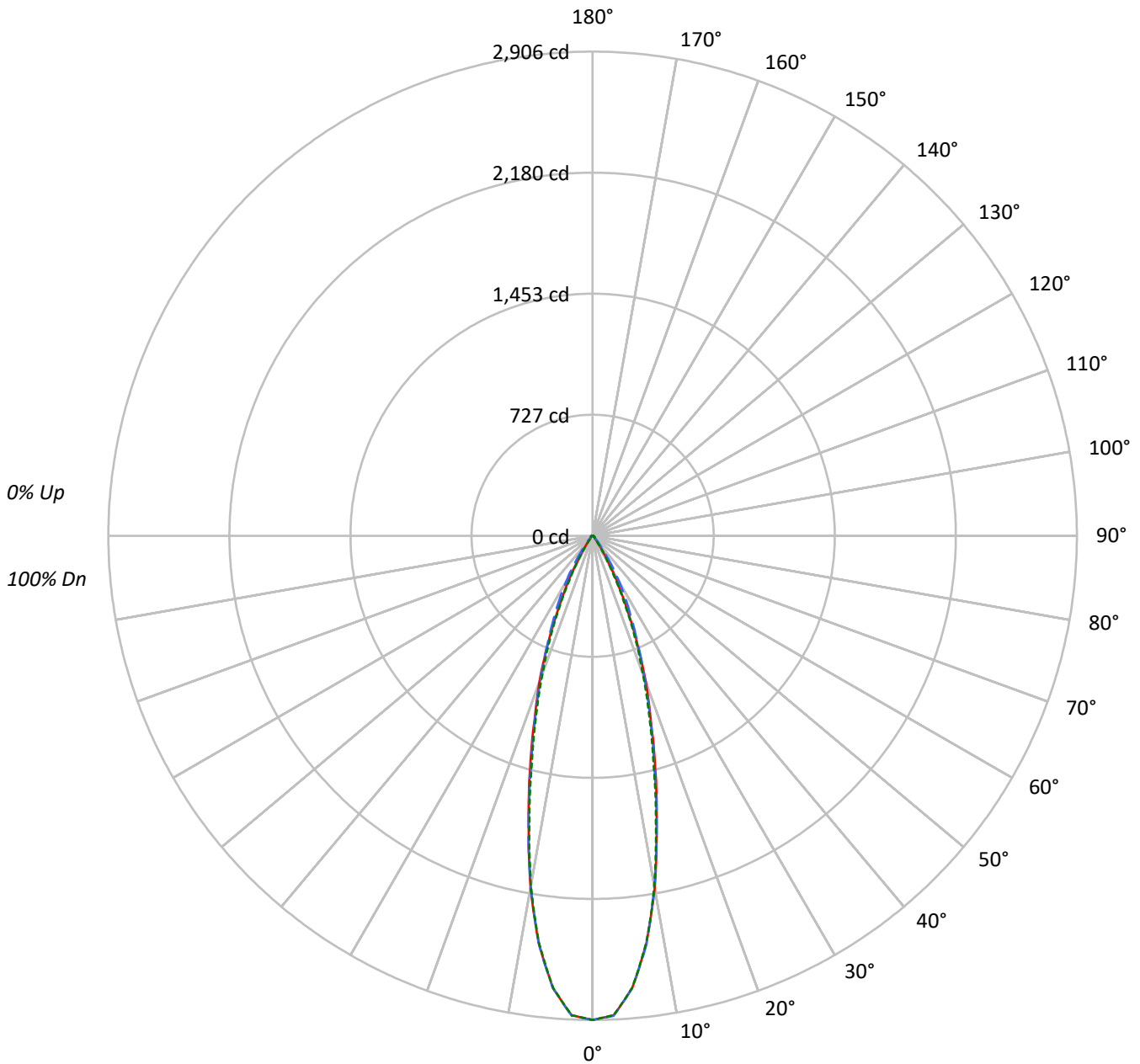
CIE Type: Direct
Input Watts (W): 13.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	112	110	108	112	110	108	106	106	104	103	102	101	100	98	98	97	95																			
2	110	105	102	99	107	104	101	98	101	98	96	98	96	94	95	93	92	90																			
3	105	100	96	92	103	98	95	91	96	93	90	94	91	89	91	89	87	86																			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	85	83	82																			
5	97	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	78																			
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75																			
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72																			
8	87	80	75	71	86	79	75	71	78	74	71	77	74	71	76	73	71	69																			
9	85	77	72	69	84	76	72	69	75	71	68	75	71	68	74	70	68	67																			
10	82	74	69	66	81	74	69	66	73	69	66	72	68	66	71	68	65	64																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	500445	500445	500445
5°	471099	471099	470788
10°	375326	373735	372948
15°	259370	254520	250794
20°	170868	167037	160531
25°	93075	105503	88229
30°	41563	63239	35955
35°	14318	28089	12615
40°	5306	12253	5306
45°	4214	5529	4214
50°	3644	4394	3644
55°	3813	4084	3813
60°	3754	4064	3754
65°	3708	4075	4075
70°	3676	4129	4129
75°	3660	3660	4259
80°	3570	3570	4463
85°	3557	3557	3557

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5529 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.0	24.2
10°-20°	397.9	40.0
20°-30°	242.1	24.3
30°-40°	68.2	6.8
40°-50°	16.1	1.6
50°-60°	11.8	1.2
60°-70°	9.8	1.0
70°-80°	6.3	0.6
80°-90°	2.0	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°	881.0	88.5
0°-40°	949.2	95.4
0°-60°	977.0	98.2
0°-90°	995.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	995.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2906	2906	2906	2906	2906	
5°	2725	2726	2725	2725	2723	241
15°	1455	1441	1428	1420	1407	402
25°	490	535	555	517	464	233
35°	68	95	134	85	60	52
45°	17	18	23	18	17	14
55°	13	13	14	13	13	11
65°	9	10	10	10	10	9
75°	6	6	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°	2905.8	2905.8	2905.8	2905.8	2905.8
2.5°	2880.4	2879.5	2884.0	2881.3	2880.4
5°	2725.0	2725.9	2725.0	2725.0	2723.2
7.5°	2467.9	2464.2	2472.4	2465.1	2464.2
10°	2146.2	2137.1	2137.1	2129.9	2132.6
12.5°	1772.8	1780.0	1778.2	1761.9	1753.7
15°	1454.7	1441.1	1427.5	1420.2	1406.6
17.5°	1156.7	1157.6	1146.7	1129.4	1125.8
20°	932.3	917.7	911.4	899.6	875.9
22.5°	700.6	726.0	711.5	699.7	666.9
25°	489.8	535.2	555.2	517.0	464.3
27.5°	336.2	363.5	428.9	350.7	303.5
30°	209.0	249.9	318.0	231.7	180.8
32.5°	124.5	158.1	220.8	143.6	108.1
35°	68.1	95.4	133.6	85.4	60.0
37.5°	35.4	52.7	83.6	49.1	33.6
40°	23.6	30.0	54.5	28.2	23.6
42.5°	19.1	21.8	34.5	20.9	19.1
45°	17.3	18.2	22.7	18.2	17.3
47.5°	15.4	16.4	17.3	16.4	15.4
50°	13.6	15.4	16.4	15.4	13.6
52.5°	13.6	13.6	14.5	13.6	13.6
55°	12.7	12.7	13.6	12.7	12.7
57.5°	11.8	12.7	12.7	12.7	11.8
60°	10.9	11.8	11.8	11.8	10.9
62.5°	10.0	10.9	10.9	10.9	10.9
65°	9.1	10.0	10.0	10.0	10.0
67.5°	8.2	9.1	9.1	9.1	9.1
70°	7.3	8.2	8.2	8.2	8.2
72.5°	6.4	7.3	7.3	7.3	7.3
75°	5.5	5.5	5.5	6.4	6.4
77.5°	4.5	4.5	4.5	5.5	5.5
80°	3.6	3.6	3.6	4.5	4.5
82.5°	2.7	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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