

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: P886601

Luminaire Tested: ML310LSFL95FS1E-TIR4D40FL-TL3SDMB-850LM-5000K

Issue Date: 7/8/2024

Test Information

Test Method: LM-79-2019
Report Number: P886601
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-18)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/8/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL95FS1E-TIR4D40FL-TL3SDMB-850LM-5000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1287.8 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.65
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

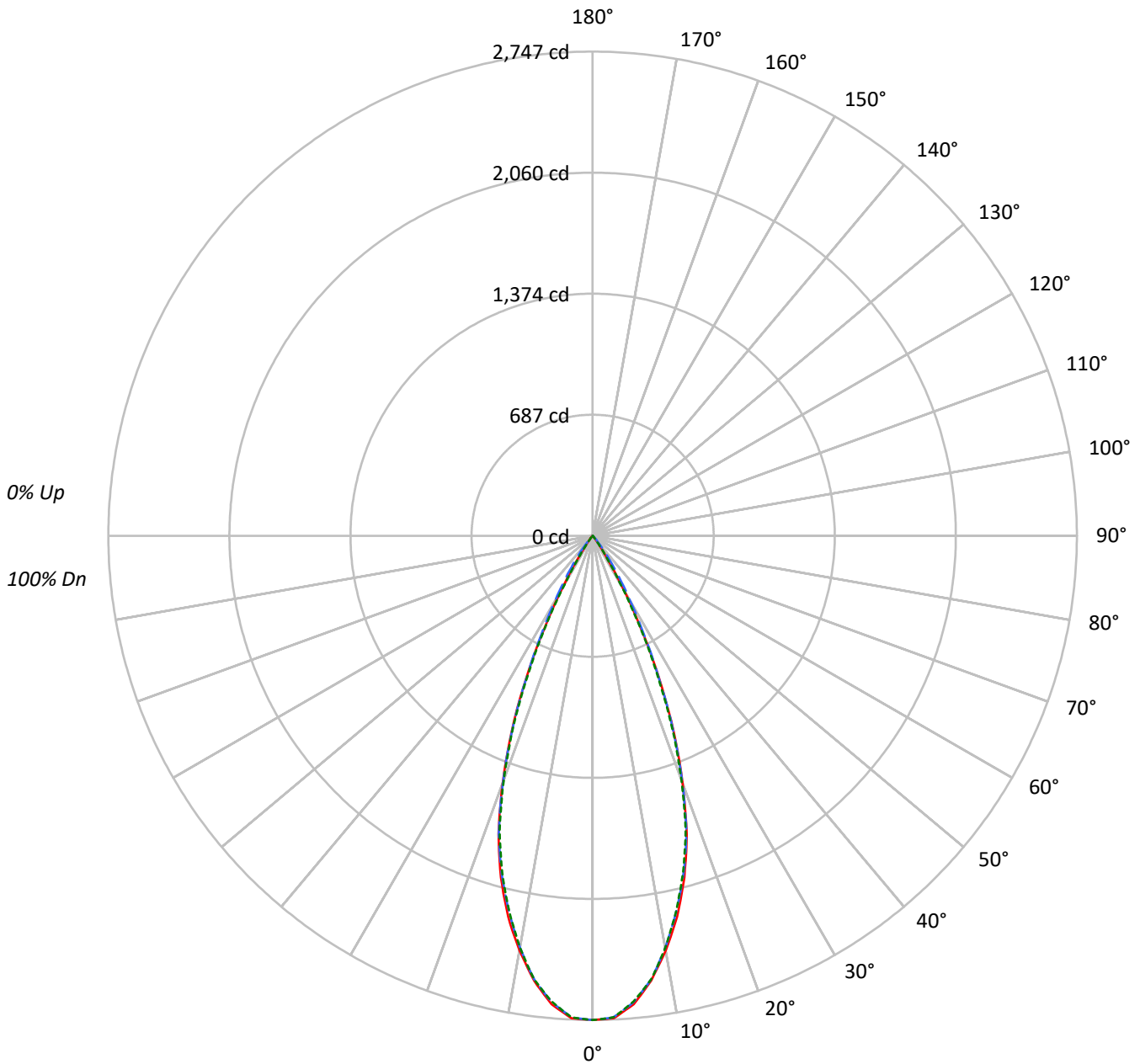
Input Watts (W): 13.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	473164	473164	473164
5°	461297	459292	458756
10°	417612	415041	415041
15°	358129	354760	353066
20°	273099	272531	270020
25°	169219	168212	163803
30°	68947	84239	61191
35°	14402	36330	13077
40°	3552	11129	3552
45°	779	3069	1023
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: 3069 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.8	19.0
10°-20°	546.3	42.4
20°-30°	403.5	31.3
30°-40°	85.7	6.7
40°-50°	7.1	0.6
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°	1194.6	92.8
0°-40°	1280.3	99.4
0°-60°	1287.8	100.0
0°-90°	1287.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1287.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2747	2747	2747	2747	2747	
5°	2668	2661	2657	2656	2654	246
15°	2009	2008	1990	1983	1980	550
25°	890	896	885	884	862	401
35°	68	99	173	91	62	66
45°	3	5	13	5	4	4
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°	2747.4	2747.4	2747.4	2747.4	2747.4
2.5°	2740.0	2737.9	2734.7	2734.7	2734.7
5°	2668.3	2661.0	2656.7	2655.7	2653.6
7.5°	2545.0	2536.6	2538.7	2538.7	2538.7
10°	2388.0	2377.5	2373.3	2373.3	2373.3
12.5°	2214.1	2215.2	2187.8	2187.8	2183.6
15°	2008.6	2007.6	1989.7	1983.3	1980.2
17.5°	1775.7	1774.7	1770.5	1754.7	1753.6
20°	1490.1	1495.4	1487.0	1476.4	1473.3
22.5°	1201.4	1196.1	1193.0	1193.0	1178.2
25°	890.5	895.8	885.2	884.2	862.0
27.5°	594.4	632.3	627.0	600.7	574.3
30°	346.7	389.9	423.6	361.5	307.7
32.5°	162.3	206.6	279.3	193.9	148.6
35°	68.5	99.1	172.8	90.6	62.2
37.5°	32.7	45.3	97.0	43.2	29.5
40°	15.8	22.1	49.5	22.1	15.8
42.5°	8.4	11.6	25.3	10.5	8.4
45°	3.2	5.3	12.6	5.3	4.2
47.5°	2.1	2.1	5.3	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	0.0
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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