

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: P886600

Luminaire Tested: ML310LSFL95FS1E-TIR4D40FL-TL3SDMB-850LM-4000K

Issue Date: 7/8/2024

Test Information

Test Method: LM-79-2019
Report Number: P886600
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-4000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1227.0 lumens
Efficiency: N/A
Efficacy: 90.2 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

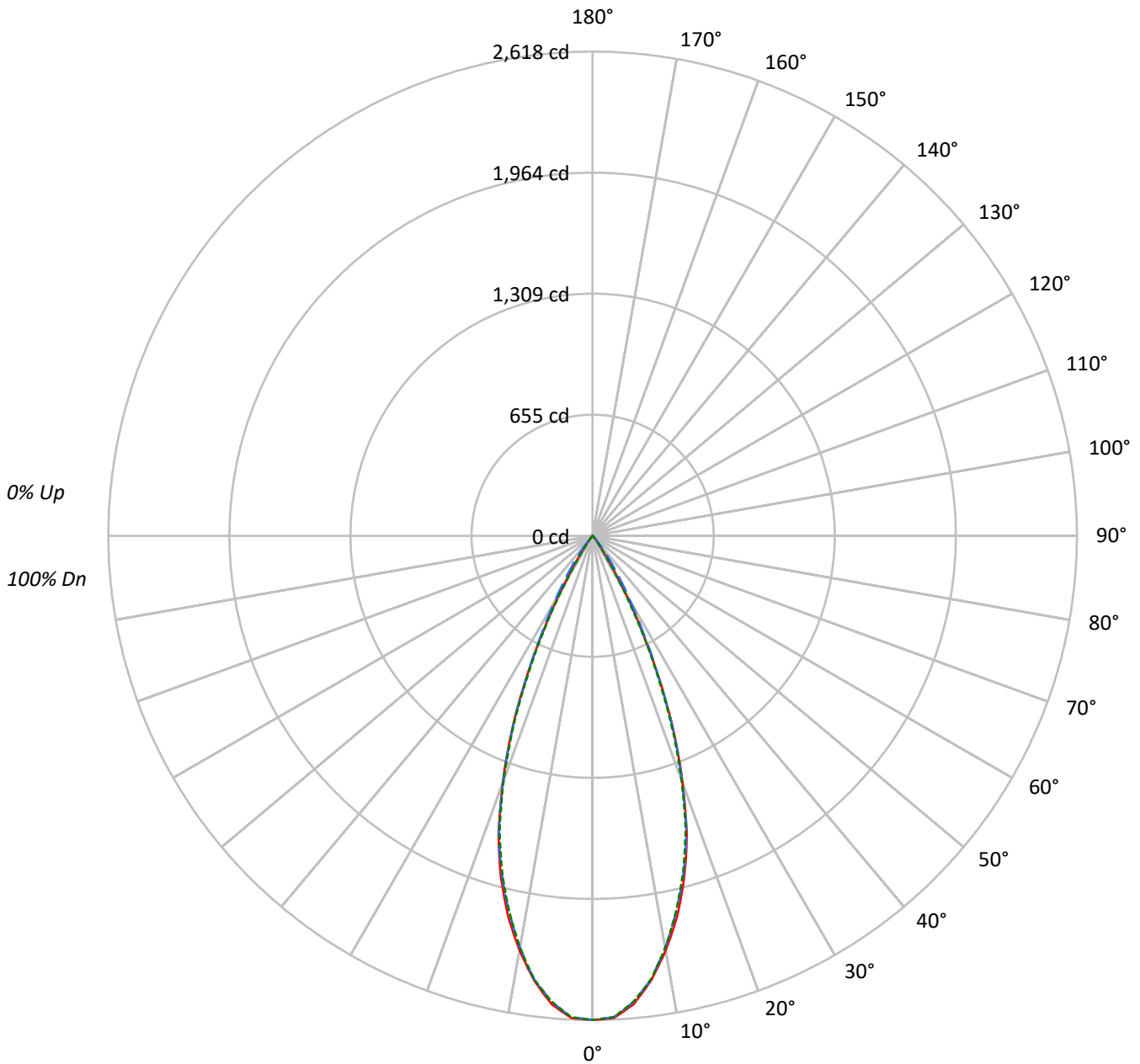
Input Watts (W): 13.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	450827	450827	450827
5°	439531	437630	437111
10°	397903	395455	395455
15°	341245	338017	336395
20°	260215	259665	257282
25°	161238	160287	156088
30°	65705	80282	58307
35°	13729	34627	12447
40°	3395	10612	3395
45°	731	2923	974
50°	268	804	268
55°	0	300	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: 2923 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.3	19.0
10°-20°	520.5	42.4
20°-30°	384.5	31.3
30°-40°	81.6	6.7
40°-50°	6.8	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°	1138.3	92.8
0°-40°	1219.9	99.4
0°-60°	1227.0	100.0
0°-90°	1227.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1227.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2618	2618	2618	2618	2618	
5°	2542	2535	2531	2530	2528	234
15°	1914	1913	1896	1890	1887	524
25°	848	854	844	842	821	382
35°	65	94	165	86	59	63
45°	3	5	12	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°	2617.7	2617.7	2617.7	2617.7	2617.7
2.5°	2610.7	2608.7	2605.7	2605.7	2605.7
5°	2542.4	2535.4	2531.4	2530.4	2528.4
7.5°	2424.9	2416.9	2418.9	2418.9	2418.9
10°	2275.3	2265.3	2261.3	2261.3	2261.3
12.5°	2109.7	2110.7	2084.6	2084.6	2080.5
15°	1913.9	1912.8	1895.8	1889.8	1886.7
17.5°	1691.9	1690.9	1686.9	1671.9	1670.9
20°	1419.8	1424.8	1416.8	1406.8	1403.8
22.5°	1144.7	1139.7	1136.7	1136.7	1122.6
25°	848.5	853.5	843.5	842.5	821.4
27.5°	566.3	602.5	597.5	572.3	547.2
30°	330.4	371.5	403.7	344.4	293.2
32.5°	154.6	196.8	266.1	184.8	141.6
35°	65.3	94.4	164.7	86.4	59.2
37.5°	31.1	43.2	92.4	41.2	28.1
40°	15.1	21.1	47.2	21.1	15.1
42.5°	8.0	11.0	24.1	10.0	8.0
45°	3.0	5.0	12.0	5.0	4.0
47.5°	2.0	2.0	5.0	2.0	2.0
50°	1.0	1.0	3.0	1.0	1.0
52.5°	0.0	1.0	1.0	1.0	0.0
55°	0.0	0.0	1.0	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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