

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: P886581

Luminaire Tested: ML310LSFL95FS1E-TIR4D25NFL-TL3SDSL-850LM-5000K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886581
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-14)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL95FS1E-TIR4D25NFL-TL3SDSL-850LM-5000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1146.8 lumens
Efficiency: N/A
Efficacy: 84.3 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')

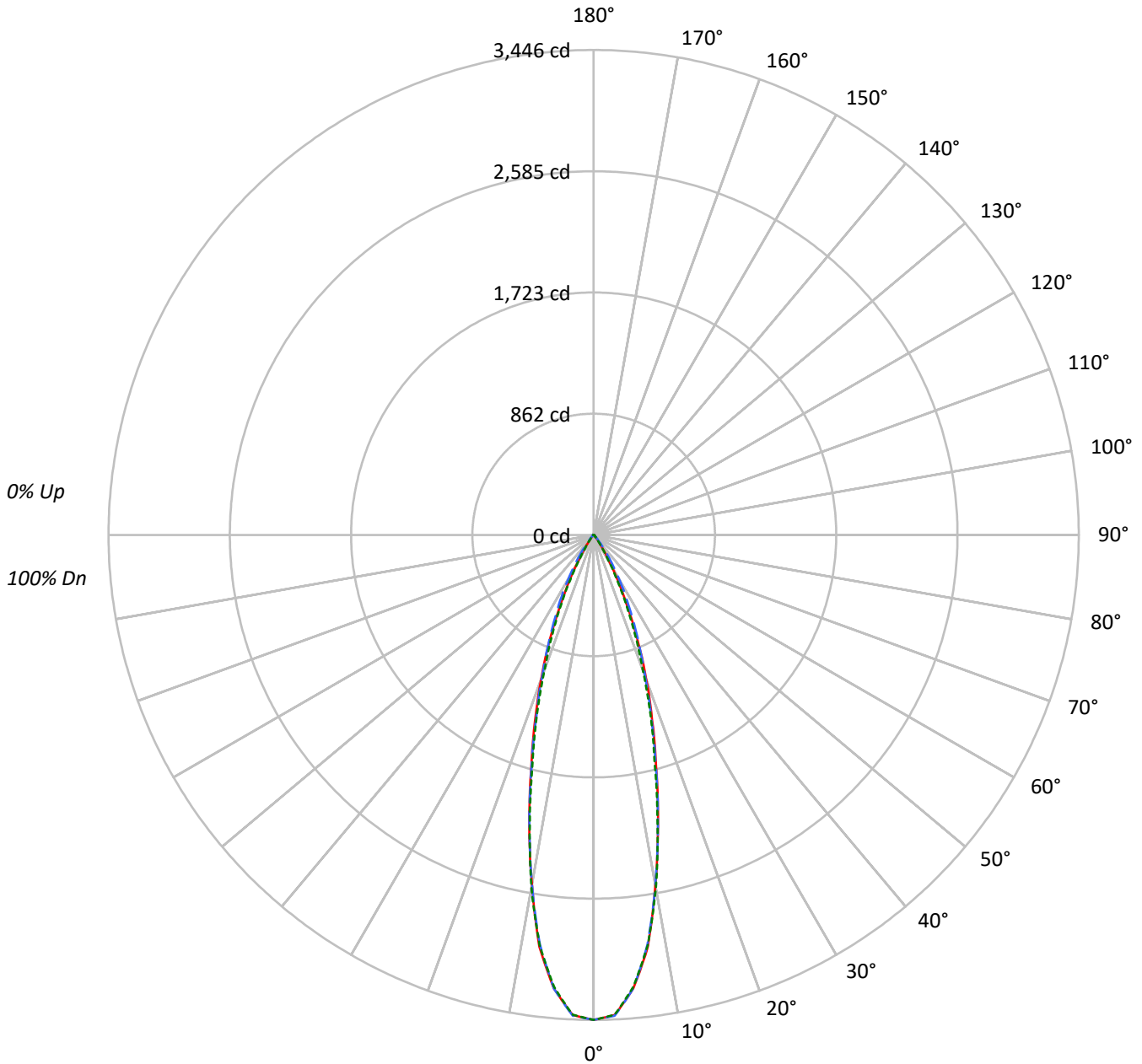
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	593428	593428	593428
5°	559303	559303	557315
10°	441728	441168	445400
15°	305870	304176	298560
20°	200210	195775	186336
25°	110596	122795	104002
30°	47509	70736	43532
35°	15705	33198	14381
40°	4969	12298	5441
45°	3069	4871	3337
50°	2545	2813	2545
55°	2222	2522	2222
60°	2170	2170	2170
65°	1712	2160	2160
70°	1611	2115	2115
75°	1397	2129	2129
80°	1091	2083	2083
85°	2174	2174	2174

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 4871 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	286.0	24.9
10°-20°	471.5	41.1
20°-30°	282.7	24.7
30°-40°	76.6	6.7
40°-50°	13.6	1.2
50°-60°	6.9	0.6
60°-70°	5.1	0.4
70°-80°	3.2	0.3
80°-90°	1.2	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°	1040.2	90.7
0°-40°	1116.8	97.4
0°-60°	1137.3	99.2
0°-90°	1146.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1146.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3446	3446	3446	3446	3446	
5°	3235	3238	3235	3231	3224	287
15°	1716	1711	1706	1685	1674	477
25°	582	621	646	589	547	274
35°	75	104	158	95	68	58
45°	13	14	20	15	14	10
55°	7	7	8	7	7	6
65°	4	5	5	5	5	5
75°	2	3	3	3	3	3
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°	3445.7	3445.7	3445.7	3445.7	3445.7
2.5°	3415.2	3417.3	3419.4	3415.2	3413.1
5°	3235.2	3238.4	3235.2	3231.0	3223.7
7.5°	2951.1	2932.1	2932.1	2912.1	2939.5
10°	2525.9	2538.5	2522.7	2525.9	2546.9
12.5°	2112.3	2097.5	2109.1	2089.1	2096.5
15°	1715.5	1711.3	1706.0	1685.0	1674.5
17.5°	1384.0	1361.9	1356.6	1339.8	1339.8
20°	1092.4	1094.6	1068.2	1050.3	1016.7
22.5°	826.2	851.4	839.9	809.3	770.4
25°	582.0	620.9	646.2	589.4	547.3
27.5°	390.5	430.5	493.6	421.0	358.9
30°	238.9	280.0	355.7	269.4	218.9
32.5°	140.0	180.0	244.2	165.2	123.1
35°	74.7	104.2	157.9	94.7	68.4
37.5°	37.9	56.8	92.6	53.7	40.0
40°	22.1	29.5	54.7	31.6	24.2
42.5°	15.8	17.9	33.7	20.0	17.9
45°	12.6	13.7	20.0	14.7	13.7
47.5°	10.5	11.6	13.7	11.6	11.6
50°	9.5	9.5	10.5	9.5	9.5
52.5°	7.4	8.4	9.5	8.4	8.4
55°	7.4	7.4	8.4	7.4	7.4
57.5°	6.3	6.3	7.4	6.3	6.3
60°	6.3	6.3	6.3	6.3	6.3
62.5°	5.3	5.3	6.3	5.3	5.3
65°	4.2	5.3	5.3	5.3	5.3
67.5°	4.2	4.2	5.3	5.3	4.2
70°	3.2	4.2	4.2	4.2	4.2
72.5°	3.2	3.2	4.2	4.2	3.2
75°	2.1	3.2	3.2	3.2	3.2
77.5°	2.1	2.1	2.1	3.2	2.1
80°	1.1	2.1	2.1	2.1	2.1
82.5°	1.1	1.1	1.1	2.1	2.1
85°	1.1	1.1	1.1	1.1	1.1
87.5°	0.0	0.0	1.1	1.1	1.1
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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