

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: P886578

Luminaire Tested: ML310LSFL95FS1E-TIR4D25NFL-TL3SDSL-850LM-3000K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886578
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-3000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1024.8 lumens
Efficiency: N/A
Efficacy: 75.4 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')

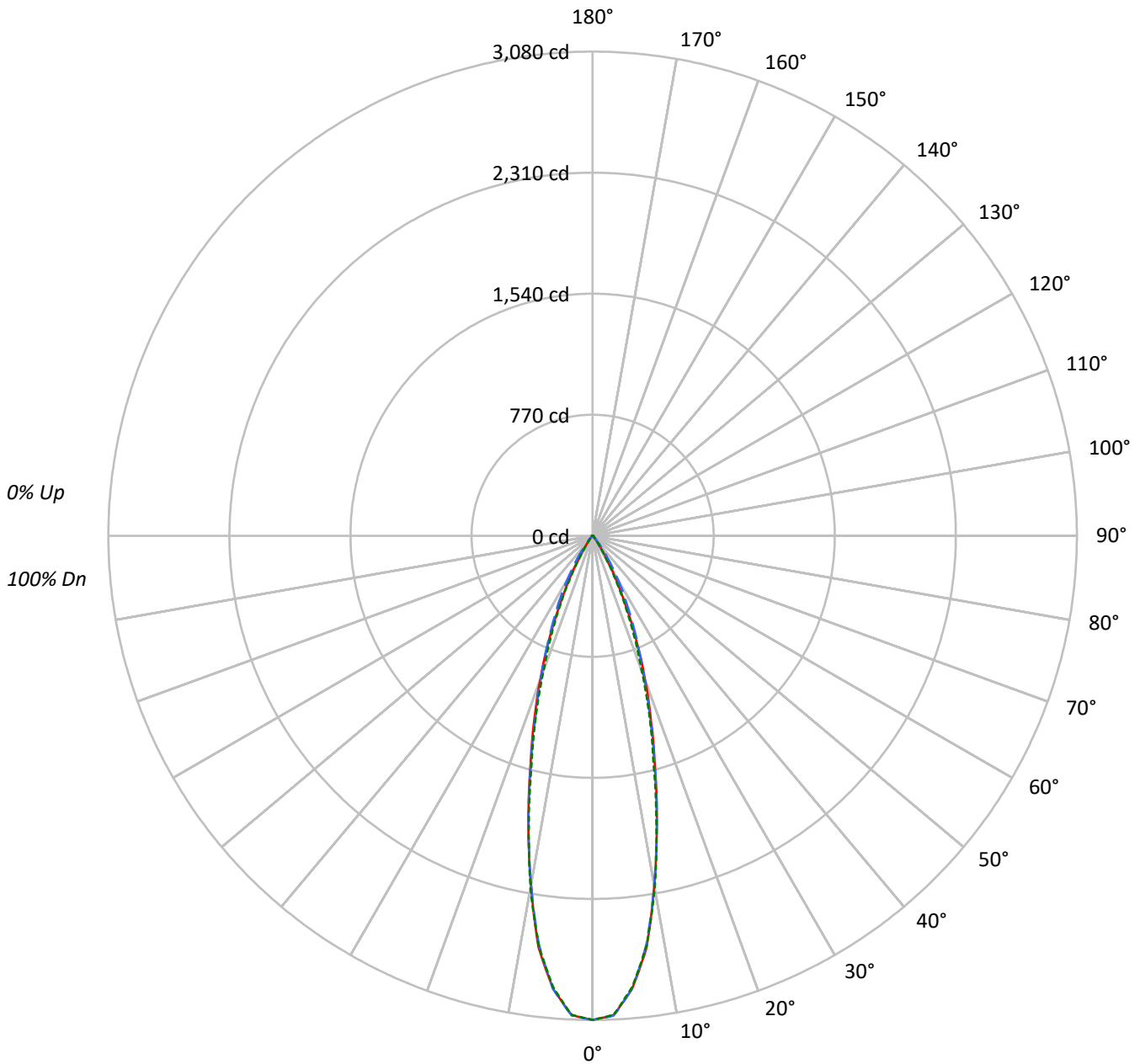
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	530377	530377	530377
5°	499884	499884	498086
10°	394790	394301	398078
15°	273366	271851	266823
20°	178950	174973	166524
25°	98852	109740	92942
30°	42458	63219	38898
35°	14044	29666	12846
40°	4451	10994	4856
45°	2752	4360	2971
50°	2277	2519	2277
55°	1982	2252	1982
60°	1929	1929	1929
65°	1549	1915	1915
70°	1410	1913	1913
75°	1264	1863	1863
80°	893	1884	1884
85°	1778	1778	1778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 4360 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.6	24.9
10°-20°	421.4	41.1
20°-30°	252.7	24.7
30°-40°	68.5	6.7
40°-50°	12.2	1.2
50°-60°	6.1	0.6
60°-70°	4.6	0.4
70°-80°	2.9	0.3
80°-90°	1.0	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°	929.6	90.7
0°-40°	998.1	97.4
0°-60°	1016.4	99.2
0°-90°	1024.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1024.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3080	3080	3080	3080	3080	
5°	2892	2894	2892	2888	2881	256
15°	1533	1529	1525	1506	1496	426
25°	520	555	578	527	489	244
35°	67	93	141	85	61	51
45°	11	12	18	13	12	9
55°	7	7	8	7	7	6
65°	4	5	5	5	5	4
75°	2	3	3	3	3	2
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°	3079.6	3079.6	3079.6	3079.6	3079.6
2.5°	3052.3	3054.2	3056.1	3052.3	3050.4
5°	2891.5	2894.3	2891.5	2887.7	2881.1
7.5°	2637.5	2620.6	2620.6	2602.7	2627.2
10°	2257.5	2268.8	2254.7	2257.5	2276.3
12.5°	1887.8	1874.7	1885.0	1867.1	1873.7
15°	1533.2	1529.4	1524.7	1505.9	1496.5
17.5°	1236.9	1217.2	1212.5	1197.4	1197.4
20°	976.4	978.2	954.7	938.7	908.6
22.5°	738.4	761.0	750.6	723.3	688.5
25°	520.2	555.0	577.5	526.7	489.1
27.5°	349.0	384.7	441.2	376.2	320.8
30°	213.5	250.2	317.9	240.8	195.6
32.5°	125.1	160.8	218.2	147.7	110.1
35°	66.8	93.1	141.1	84.7	61.1
37.5°	33.9	50.8	82.8	48.0	35.7
40°	19.8	26.3	48.9	28.2	21.6
42.5°	14.1	16.0	30.1	17.9	16.0
45°	11.3	12.2	17.9	13.2	12.2
47.5°	9.4	10.3	12.2	10.3	10.3
50°	8.5	8.5	9.4	8.5	8.5
52.5°	6.6	7.5	8.5	7.5	7.5
55°	6.6	6.6	7.5	6.6	6.6
57.5°	5.6	5.6	6.6	5.6	5.6
60°	5.6	5.6	5.6	5.6	5.6
62.5°	4.7	4.7	5.6	4.7	4.7
65°	3.8	4.7	4.7	4.7	4.7
67.5°	3.8	3.8	4.7	4.7	3.8
70°	2.8	3.8	3.8	3.8	3.8
72.5°	2.8	2.8	3.8	3.8	2.8
75°	1.9	2.8	2.8	2.8	2.8
77.5°	1.9	1.9	1.9	2.8	1.9
80°	0.9	1.9	1.9	1.9	1.9
82.5°	0.9	0.9	0.9	1.9	1.9
85°	0.9	0.9	0.9	0.9	0.9
87.5°	0.0	0.0	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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