

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: P886579

Luminaire Tested: ML310LSFL95FS1E-TIR4D25NFL-TL3SDSL-850LM-3500K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886579
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-3500K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

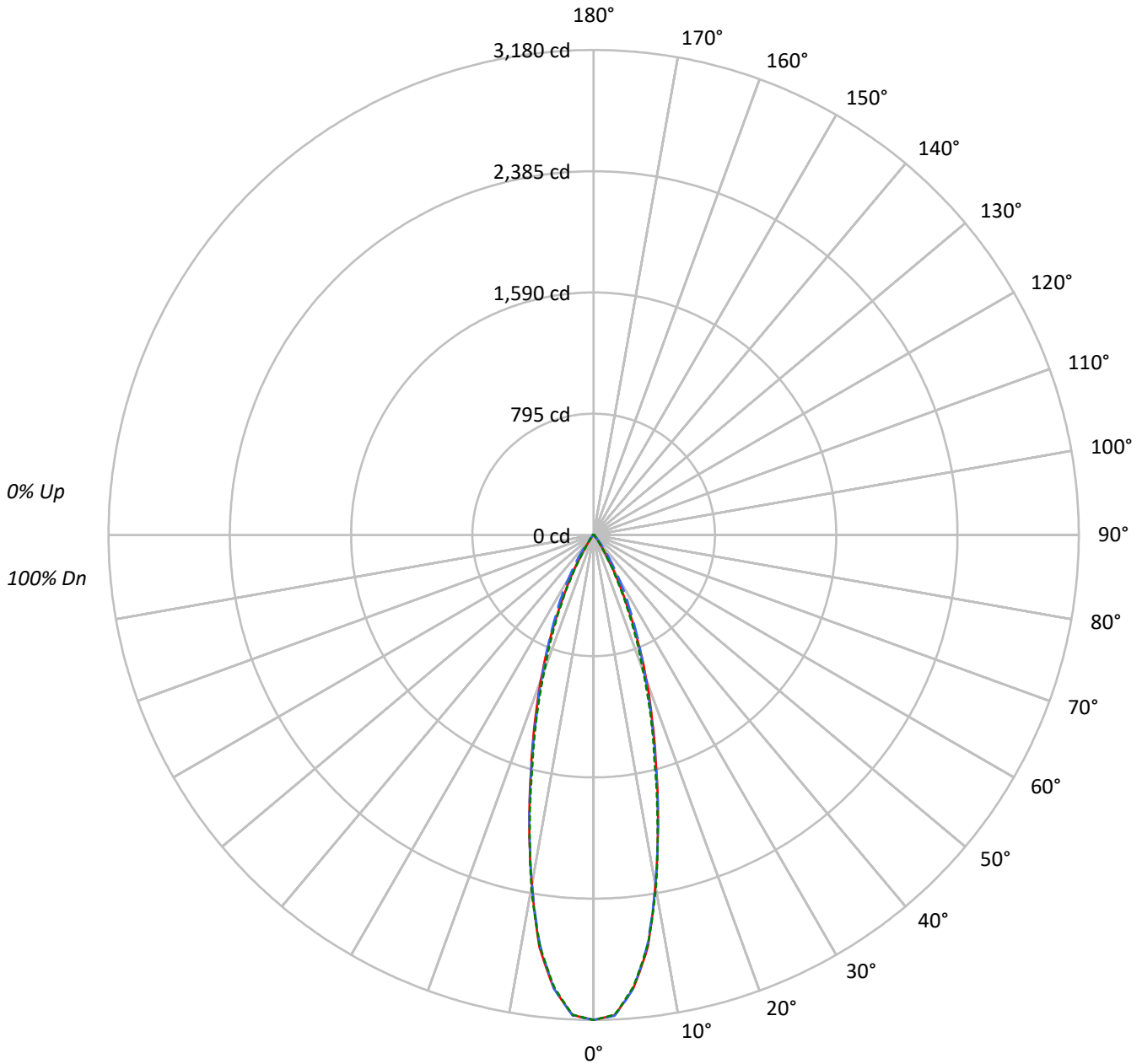
Lumens per Lamp: N/A
Luminaire Lumens: 1058.3 lumens
Efficiency: N/A
Efficacy: 77.8 lumens/watt
Spacing Criteria (0/90/45): 0.5 / 0.49 / 0.52
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')CIE Type: Direct

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°	547668	547668	547668
5°	516169	516169	514319
10°	407661	407137	411054
15°	282281	280712	275524
20°	184778	180673	171967
25°	102063	113332	95982
30°	43850	65288	40171
35°	14507	30633	13266
40°	4586	11353	5014
45°	2850	4506	3069
50°	2331	2599	2331
55°	2042	2342	2042
60°	1998	1998	1998
65°	1589	1997	1997
70°	1460	1964	1964
75°	1264	1930	1930
80°	992	1884	1884
85°	1976	1976	1976

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 4506 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.9	24.9
10°-20°	435.1	41.1
20°-30°	260.9	24.7
30°-40°	70.7	6.7
40°-50°	12.6	1.2
50°-60°	6.3	0.6
60°-70°	4.7	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°	959.9	90.7
0°-40°	1030.6	97.4
0°-60°	1049.6	99.2
0°-90°	1058.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1058.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3180	3180	3180	3180	3180	
5°	2986	2989	2986	2982	2975	265
15°	1583	1579	1574	1555	1545	440
25°	537	573	596	544	505	252
35°	69	96	146	87	63	53
45°	12	13	18	14	13	10
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°	3180.0	3180.0	3180.0	3180.0	3180.0
2.5°	3151.8	3153.7	3155.7	3151.8	3149.8
5°	2985.7	2988.6	2985.7	2981.8	2975.0
7.5°	2723.5	2706.0	2706.0	2687.5	2712.8
10°	2331.1	2342.7	2328.1	2331.1	2350.5
12.5°	1949.4	1935.8	1946.4	1928.0	1934.8
15°	1583.2	1579.3	1574.4	1555.0	1545.3
17.5°	1277.2	1256.8	1252.0	1236.4	1236.4
20°	1008.2	1010.1	985.8	969.3	938.3
22.5°	762.5	785.8	775.1	746.9	711.0
25°	537.1	573.1	596.4	543.9	505.1
27.5°	360.3	397.3	455.5	388.5	331.2
30°	220.5	258.4	328.3	248.6	202.0
32.5°	129.2	166.1	225.3	152.5	113.6
35°	69.0	96.2	145.7	87.4	63.1
37.5°	35.0	52.4	85.5	49.5	36.9
40°	20.4	27.2	50.5	29.1	22.3
42.5°	14.6	16.5	31.1	18.5	16.5
45°	11.7	12.6	18.5	13.6	12.6
47.5°	9.7	10.7	12.6	10.7	10.7
50°	8.7	8.7	9.7	8.7	8.7
52.5°	6.8	7.8	8.7	7.8	7.8
55°	6.8	6.8	7.8	6.8	6.8
57.5°	5.8	5.8	6.8	5.8	5.8
60°	5.8	5.8	5.8	5.8	5.8
62.5°	4.9	4.9	5.8	4.9	4.9
65°	3.9	4.9	4.9	4.9	4.9
67.5°	3.9	3.9	4.9	4.9	3.9
70°	2.9	3.9	3.9	3.9	3.9
72.5°	2.9	2.9	3.9	3.9	2.9
75°	1.9	2.9	2.9	2.9	2.9
77.5°	1.9	1.9	1.9	2.9	1.9
80°	1.0	1.9	1.9	1.9	1.9
82.5°	1.0	1.0	1.0	1.9	1.9
85°	1.0	1.0	1.0	1.0	1.0
87.5°	0.0	0.0	1.0	1.0	1.0
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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