

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: P886574

Luminaire Tested: ML310LSFL95FS1E-TIR4D25NFL-TL3SDMW-850LM-3500K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886574
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-13)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL95FS1E-TIR4D25NFL-TL3SDMW-850LM-3500K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1064.1 lumens
Efficiency: N/A
Efficacy: 78.2 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

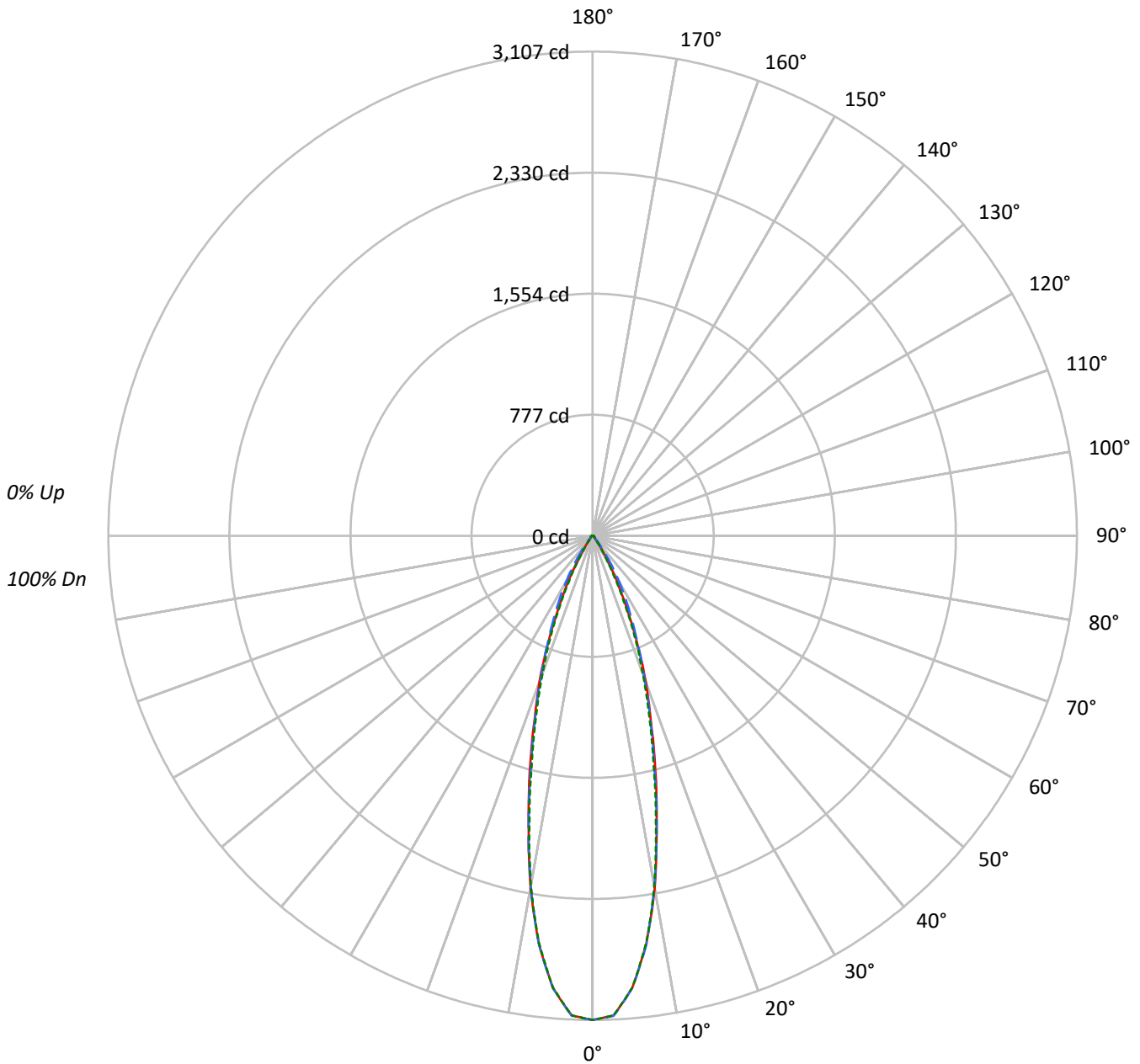
Input Watts (W): 13.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	98	98	97	95								
2	110	105	102	99	107	104	101	98	101	98	96	98	96	94	95	93	92	90								
3	105	100	96	92	103	98	95	91	96	93	90	94	91	89	91	89	87	86								
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	85	83	82								
5	97	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	78								
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75								
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72								
8	87	80	75	71	86	79	75	71	78	74	71	77	74	71	76	73	71	69								
9	85	77	72	69	84	76	72	69	75	71	68	75	71	68	74	70	68	67								
10	82	74	69	66	81	74	69	66	73	69	66	72	68	66	71	68	65	64								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	535130	535130	535130
5°	503739	503739	503411
10°	401331	399635	398778
15°	277343	272154	268160
20°	182707	178602	171656
25°	99517	112800	94348
30°	44446	67634	38441
35°	15327	30023	13477
40°	5688	13107	5688
45°	4506	5918	4506
50°	3912	4689	3912
55°	4084	4384	4084
60°	4030	4340	4030
65°	3953	4360	4360
70°	3928	4381	4381
75°	3859	3859	4525
80°	3868	3868	4860
85°	3754	3754	3754

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5918 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.7	24.2
10°-20°	425.4	40.0
20°-30°	258.9	24.3
30°-40°	72.9	6.8
40°-50°	17.2	1.6
50°-60°	12.6	1.2
60°-70°	10.4	1.0
70°-80°	6.7	0.6
80°-90°	2.2	0.2
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°	942.0	88.5
0°-40°	1014.9	95.4
0°-60°	1044.7	98.2
0°-90°	1064.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1064.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3107	3107	3107	3107	3107	
5°	2914	2915	2914	2914	2912	258
15°	1556	1541	1526	1519	1504	430
25°	524	572	594	553	496	249
35°	73	102	143	91	64	55
45°	18	19	24	19	18	14
55°	14	14	15	14	14	12
65°	10	11	11	11	11	10
75°	6	6	6	7	7	6
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3107.2	3107.2	3107.2	3107.2	3107.2
2.5°	3080.0	3079.0	3083.9	3080.9	3080.0
5°	2913.8	2914.8	2913.8	2913.8	2911.9
7.5°	2638.9	2635.0	2643.7	2635.9	2635.0
10°	2294.9	2285.2	2285.2	2277.4	2280.3
12.5°	1895.6	1903.4	1901.4	1883.9	1875.2
15°	1555.5	1541.0	1526.4	1518.6	1504.0
17.5°	1236.8	1237.8	1226.2	1207.7	1203.8
20°	996.9	981.3	974.5	961.9	936.6
22.5°	749.1	776.3	760.8	748.1	713.2
25°	523.7	572.3	593.6	552.8	496.5
27.5°	359.5	388.6	458.6	375.0	324.5
30°	223.5	267.2	340.1	247.8	193.3
32.5°	133.1	169.1	236.1	153.5	115.6
35°	72.9	102.0	142.8	91.3	64.1
37.5°	37.9	56.4	89.4	52.5	35.9
40°	25.3	32.1	58.3	30.1	25.3
42.5°	20.4	23.3	36.9	22.3	20.4
45°	18.5	19.4	24.3	19.4	18.5
47.5°	16.5	17.5	18.5	17.5	16.5
50°	14.6	16.5	17.5	16.5	14.6
52.5°	14.6	14.6	15.5	14.6	14.6
55°	13.6	13.6	14.6	13.6	13.6
57.5°	12.6	13.6	13.6	13.6	12.6
60°	11.7	12.6	12.6	12.6	11.7
62.5°	10.7	11.7	11.7	11.7	11.7
65°	9.7	10.7	10.7	10.7	10.7
67.5°	8.7	9.7	9.7	9.7	9.7
70°	7.8	8.7	8.7	8.7	8.7
72.5°	6.8	7.8	7.8	7.8	7.8
75°	5.8	5.8	5.8	6.8	6.8
77.5°	4.9	4.9	4.9	5.8	5.8
80°	3.9	3.9	3.9	4.9	4.9
82.5°	2.9	2.9	2.9	2.9	2.9
85°	1.9	1.9	1.9	1.9	1.9
87.5°	1.0	1.0	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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