

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: P886606

Luminaire Tested: ML310LSFL95FS1E-TIR4D40FL-TL3SDMW-850LM-5000K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886606
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL95FS1E-TIR4D40FL-TL3SDMW-850LM-5000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1337.3 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 0.69 / 0.68 / 0.65
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

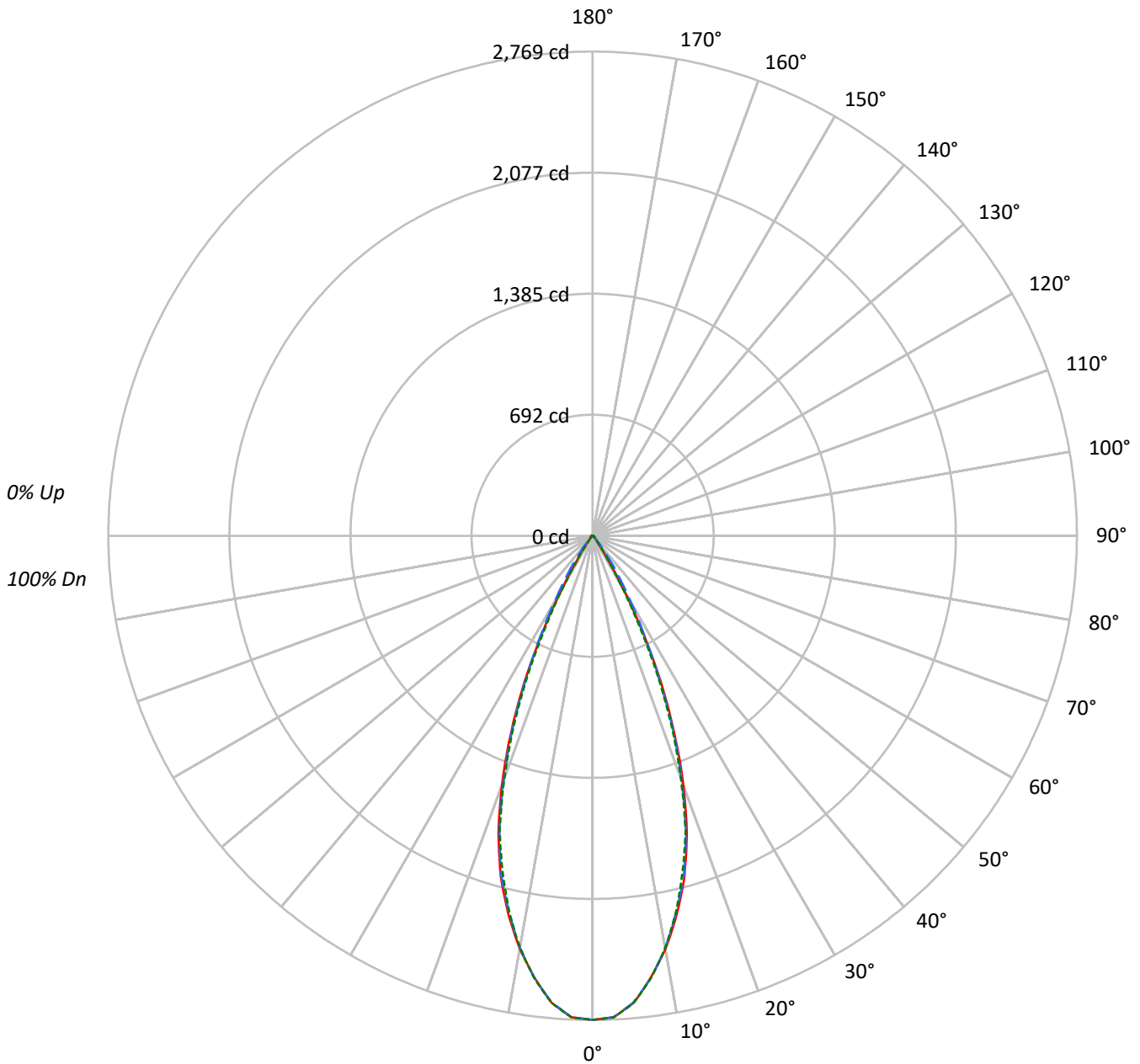
Input Watts (W): 13.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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					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								
1	114	112	109	107	112	110	108	106	106	104	102	102	101	99	98	97	97	95								
2	109	105	102	99	107	103	100	98	100	98	95	97	95	93	95	93	91	90								
3	105	99	95	92	103	98	94	91	96	92	90	93	90	88	91	89	87	85								
4	101	94	90	86	99	93	89	85	91	87	85	89	86	84	87	85	83	81								
5	97	90	85	81	95	89	84	81	87	83	80	86	82	79	84	81	79	77								
6	93	86	80	77	92	85	80	77	83	79	76	82	78	76	81	78	75	74								
7	90	82	77	73	88	81	76	73	80	76	73	79	75	72	78	74	72	71								
8	86	78	73	70	85	78	73	70	77	72	69	76	72	69	75	71	69	68								
9	83	75	70	67	82	74	70	66	74	69	66	73	69	66	72	68	66	65								
10	80	72	67	64	79	72	67	64	71	66	64	70	66	63	69	66	63	62								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	476850	476850	476850
5°	463752	463026	463752
10°	419396	418294	418487
15°	360964	359467	354403
20°	278047	272824	270130
25°	174654	170454	165646
30°	67833	86686	62603
35°	15937	38075	15495
40°	6160	13737	6160
45°	3580	5894	3580
50°	3108	3671	3376
55°	3483	3483	3483
60°	3617	3617	3617
65°	3423	3871	3423
70°	3172	3726	3726
75°	3527	3527	3527
80°	3174	3174	4166
85°	2174	4150	4150

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5894 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.4	18.4
10°-20°	549.5	41.1
20°-30°	407.2	30.5
30°-40°	91.5	6.8
40°-50°	15.9	1.2
50°-60°	10.3	0.8
60°-70°	8.9	0.7
70°-80°	5.7	0.4
80°-90°	2.0	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°	1203.1	90.0
0°-40°	1294.6	96.8
0°-60°	1320.7	98.8
0°-90°	1337.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1337.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2769	2769	2769	2769	2769	
5°	2682	2681	2678	2676	2682	246
15°	2024	2011	2016	1989	1988	554
25°	919	906	897	885	872	410
35°	76	107	181	102	74	70
45°	15	17	24	17	15	13
55°	12	12	12	12	12	10
65°	8	10	10	10	8	8
75°	5	5	5	5	5	5
85°	1	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°	2768.8	2768.8	2768.8	2768.8	2768.8
2.5°	2756.2	2758.3	2756.2	2756.2	2757.2
5°	2682.5	2681.4	2678.3	2676.2	2682.5
7.5°	2548.8	2552.0	2550.9	2554.1	2552.0
10°	2398.2	2388.8	2391.9	2387.7	2393.0
12.5°	2220.3	2218.2	2206.6	2203.5	2201.4
15°	2024.5	2010.8	2016.1	1988.7	1987.7
17.5°	1790.8	1781.3	1771.8	1767.6	1767.6
20°	1517.1	1512.9	1488.6	1486.5	1473.9
22.5°	1219.1	1201.2	1202.3	1199.1	1180.2
25°	919.1	906.4	897.0	885.4	871.7
27.5°	611.7	635.9	636.9	609.6	561.1
30°	341.1	392.7	435.9	367.4	314.8
32.5°	168.4	219.0	287.4	202.1	160.0
35°	75.8	107.4	181.1	102.1	73.7
37.5°	41.1	54.7	108.4	52.6	40.0
40°	27.4	32.6	61.1	32.6	27.4
42.5°	19.0	22.1	36.8	22.1	20.0
45°	14.7	16.8	24.2	16.8	14.7
47.5°	12.6	13.7	17.9	13.7	13.7
50°	11.6	12.6	13.7	12.6	12.6
52.5°	11.6	11.6	12.6	11.6	11.6
55°	11.6	11.6	11.6	11.6	11.6
57.5°	10.5	10.5	11.6	10.5	10.5
60°	10.5	10.5	10.5	10.5	10.5
62.5°	9.5	9.5	9.5	9.5	9.5
65°	8.4	9.5	9.5	9.5	8.4
67.5°	7.4	8.4	8.4	8.4	8.4
70°	6.3	7.4	7.4	7.4	7.4
72.5°	6.3	6.3	6.3	6.3	6.3
75°	5.3	5.3	5.3	5.3	5.3
77.5°	4.2	4.2	4.2	5.3	4.2
80°	3.2	3.2	3.2	4.2	4.2
82.5°	2.1	2.1	2.1	3.2	3.2
85°	1.1	2.1	2.1	2.1	2.1
87.5°	1.1	1.1	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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