

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: P886599

Luminaire Tested: ML310LSFL95FS1E-TIR4D40FL-TL3SDMB-850LM-3500K

Issue Date: 7/8/2024

Test Information

Test Method: LM-79-2019
Report Number: P886599
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-18)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/8/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL95FS1E-TIR4D40FL-TL3SDMB-850LM-3500K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1188.5 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.65
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')

CIE Type: Direct

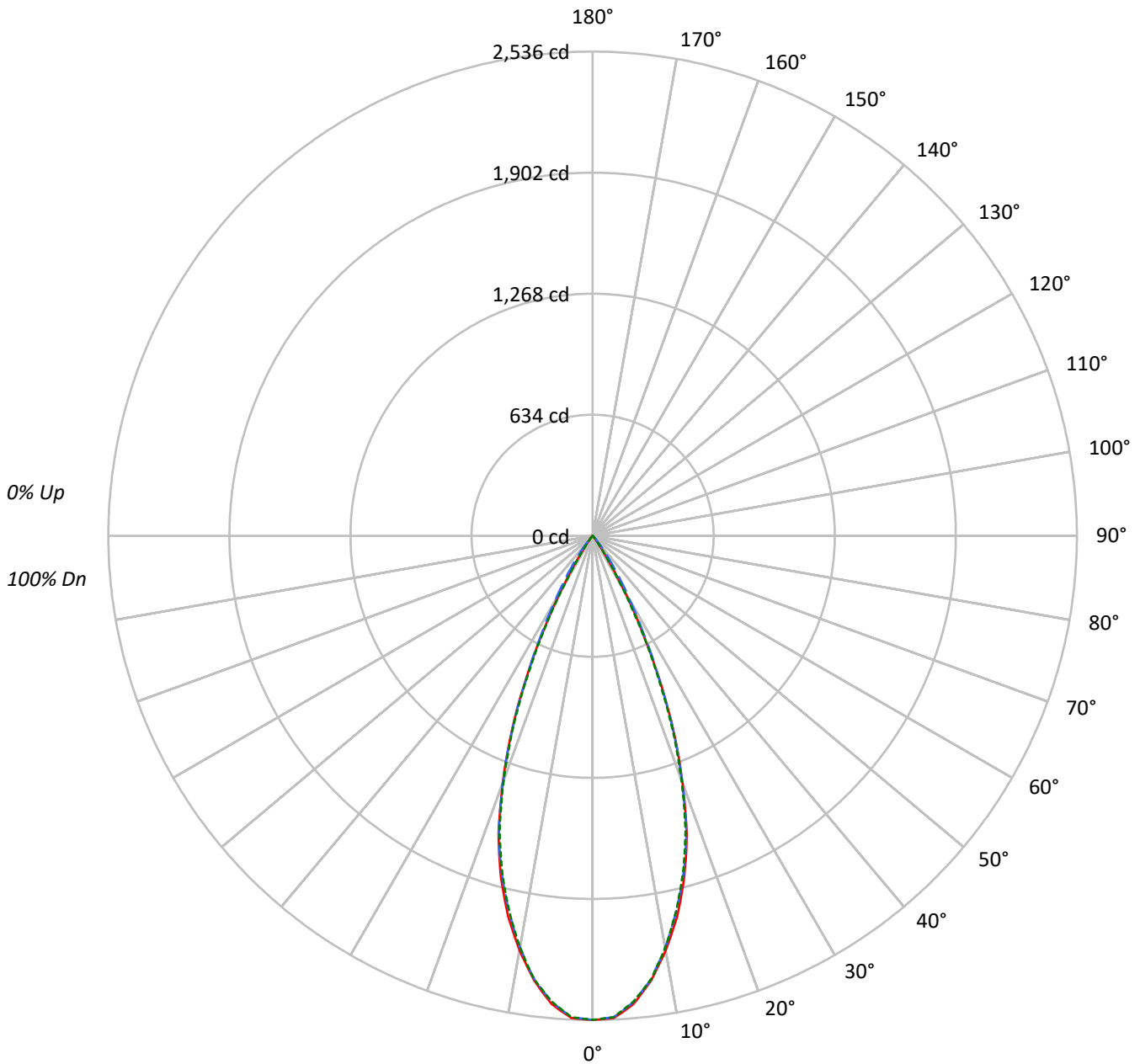
Input Watts (W): 13.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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					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	94	96	94	93	91					91			
3	106	100	96	93	104	99	95	92	97	94	91	94	92	90	92	90	88	87					87			
4	102	96	91	88	100	94	90	87	92	89	86	91	88	85	89	86	84	83					83			
5	98	91	86	83	96	90	86	82	88	85	82	87	84	81	85	83	80	79					79			
6	94	87	82	79	93	86	82	78	85	81	78	84	80	77	82	79	77	76					76			
7	91	83	78	75	90	83	78	75	81	77	74	80	77	74	79	76	74	72					72			
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69					69			
9	84	76	72	68	83	76	71	68	75	71	68	74	71	68	74	70	68	66					66			
10	81	73	69	65	80	73	68	65	72	68	65	72	68	65	71	67	65	64					64			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	436671	436671	436671
5°	425718	423868	423367
10°	385399	383021	383021
15°	330511	327391	325822
20°	252040	251509	249181
25°	156164	155252	151185
30°	63637	77756	56478
35°	13287	33534	12068
40°	3282	10274	3282
45°	706	2850	950
50°	268	777	268
55°	0	300	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 2850 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.9	19.0
10°-20°	504.2	42.4
20°-30°	372.4	31.3
30°-40°	79.0	6.7
40°-50°	6.6	0.6
50°-60°	0.4	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	1102.5	92.8
0°-40°	1181.5	99.4
0°-60°	1188.5	100.0
0°-90°	1188.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1188.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2536	2536	2536	2536	2536	
5°	2462	2456	2452	2451	2449	227
15°	1854	1853	1836	1830	1827	507
25°	822	827	817	816	796	370
35°	63	91	160	84	57	61
45°	3	5	12	5	4	4
55°	0	0	1	0	0	0
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2535.5	2535.5	2535.5	2535.5	2535.5
2.5°	2528.7	2526.7	2523.8	2523.8	2523.8
5°	2462.5	2455.7	2451.8	2450.9	2448.9
7.5°	2348.7	2341.0	2342.9	2342.9	2342.9
10°	2203.8	2194.1	2190.2	2190.2	2190.2
12.5°	2043.4	2044.3	2019.0	2019.0	2015.1
15°	1853.7	1852.7	1836.2	1830.4	1827.4
17.5°	1638.8	1637.8	1633.9	1619.3	1618.3
20°	1375.2	1380.1	1372.3	1362.6	1359.6
22.5°	1108.7	1103.9	1100.9	1100.9	1087.3
25°	821.8	826.7	817.0	816.0	795.6
27.5°	548.5	583.5	578.7	554.4	530.0
30°	320.0	359.8	391.0	333.6	284.0
32.5°	149.8	190.6	257.7	179.0	137.1
35°	63.2	91.4	159.5	83.6	57.4
37.5°	30.1	41.8	89.5	39.9	27.2
40°	14.6	20.4	45.7	20.4	14.6
42.5°	7.8	10.7	23.3	9.7	7.8
45°	2.9	4.9	11.7	4.9	3.9
47.5°	1.9	1.9	4.9	1.9	1.9
50°	1.0	1.0	2.9	1.0	1.0
52.5°	0.0	1.0	1.0	1.0	0.0
55°	0.0	0.0	1.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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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