

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: P886576

Luminaire Tested: ML310LSFL95FS1E-TIR4D25NFL-TL3SDMW-850LM-5000K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886576
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-5000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1153.0 lumens
Efficiency: N/A
Efficacy: 84.8 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

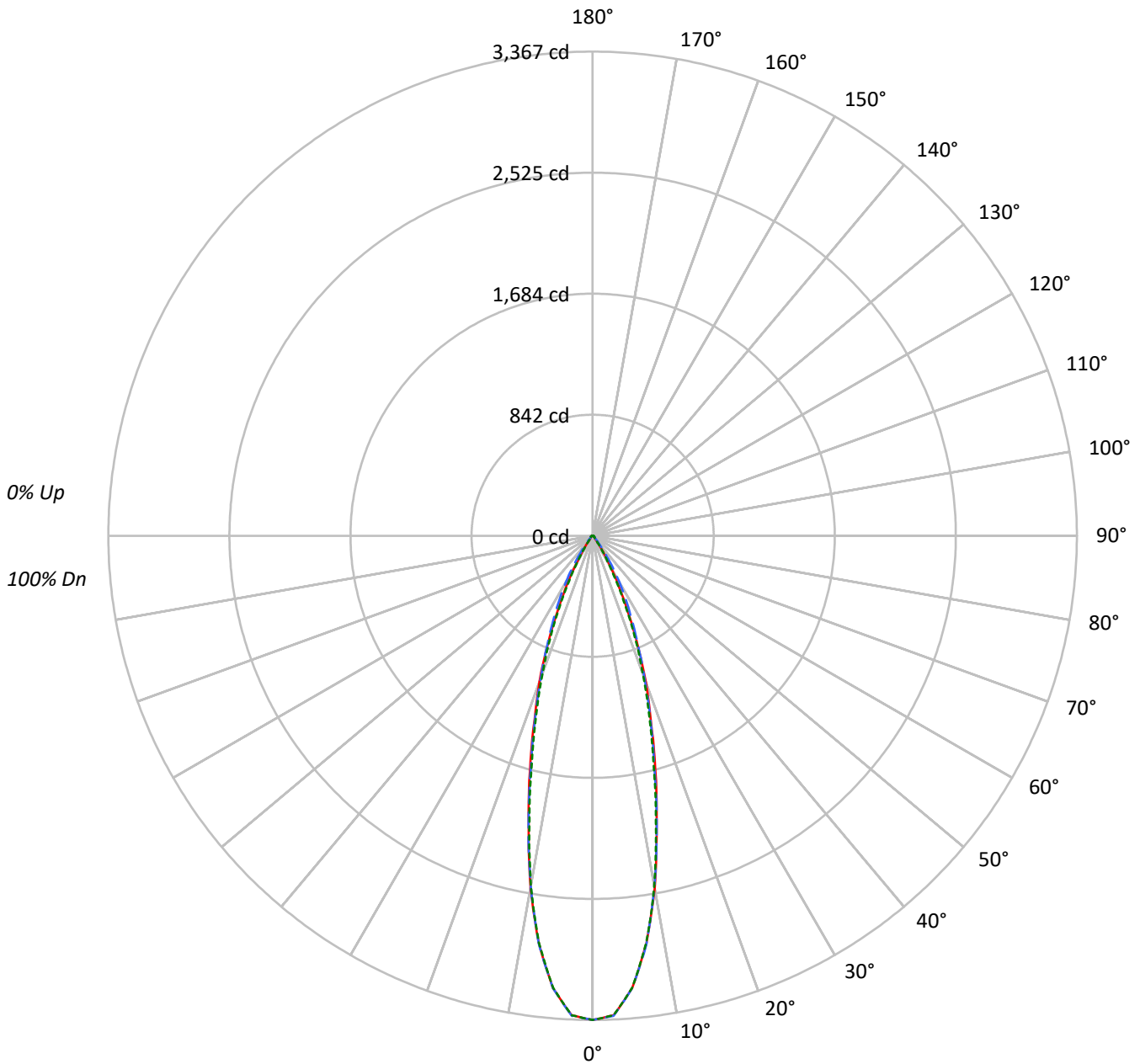
Input Watts (W): 13.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	579856	579856	579856
5°	545853	545853	545490
10°	434873	433037	432110
15°	300521	294905	290572
20°	197974	193539	186006
25°	107840	122244	102234
30°	48145	73282	41662
35°	16609	32546	14612
40°	6160	14209	6160
45°	4871	6406	4871
50°	4233	5091	4233
55°	4414	4744	4414
60°	4340	4719	4340
65°	4279	4727	4279
70°	4230	4784	4230
75°	4192	4192	4924
80°	4166	4166	5256
85°	4150	4150	4150

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6406 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.3	24.2
10°-20°	461.0	40.0
20°-30°	280.5	24.3
30°-40°	79.0	6.9
40°-50°	18.7	1.6
50°-60°	13.7	1.2
60°-70°	11.3	1.0
70°-80°	7.3	0.6
80°-90°	2.4	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°	1020.8	88.5
0°-40°	1099.7	95.4
0°-60°	1132.1	98.2
0°-90°	1153.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1153.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3367	3367	3367	3367	3367	
5°	3157	3158	3157	3157	3155	280
15°	1686	1670	1654	1646	1630	466
25°	568	620	643	599	538	270
35°	79	110	155	99	70	60
45°	20	21	26	21	20	16
55°	15	15	16	15	15	13
65°	10	12	12	12	12	10
75°	6	6	6	7	7	7
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°	3366.9	3366.9	3366.9	3366.9	3366.9
2.5°	3337.4	3336.3	3341.6	3338.4	3337.4
5°	3157.4	3158.4	3157.4	3157.4	3155.3
7.5°	2859.4	2855.2	2864.7	2856.3	2855.2
10°	2486.7	2476.2	2476.2	2467.8	2470.9
12.5°	2054.0	2062.4	2060.3	2041.4	2031.9
15°	1685.5	1669.7	1654.0	1645.5	1629.7
17.5°	1340.2	1341.3	1328.6	1308.6	1304.4
20°	1080.2	1063.3	1056.0	1042.3	1014.9
22.5°	811.7	841.2	824.3	810.7	772.8
25°	567.5	620.1	643.3	599.0	538.0
27.5°	389.5	421.1	496.9	406.4	351.6
30°	242.1	289.5	368.5	268.5	209.5
32.5°	144.2	183.2	255.8	166.3	125.3
35°	79.0	110.5	154.8	99.0	69.5
37.5°	41.1	61.1	96.9	56.9	39.0
40°	27.4	34.7	63.2	32.6	27.4
42.5°	22.1	25.3	40.0	24.2	22.1
45°	20.0	21.1	26.3	21.1	20.0
47.5°	17.9	19.0	20.0	19.0	17.9
50°	15.8	17.9	19.0	17.9	15.8
52.5°	15.8	15.8	16.8	15.8	15.8
55°	14.7	14.7	15.8	14.7	14.7
57.5°	13.7	14.7	14.7	14.7	13.7
60°	12.6	13.7	13.7	13.7	12.6
62.5°	11.6	12.6	12.6	12.6	12.6
65°	10.5	11.6	11.6	11.6	11.6
67.5°	9.5	10.5	10.5	10.5	10.5
70°	8.4	9.5	9.5	9.5	9.5
72.5°	7.4	8.4	8.4	8.4	8.4
75°	6.3	6.3	6.3	7.4	7.4
77.5°	5.3	5.3	5.3	6.3	6.3
80°	4.2	4.2	4.2	5.3	5.3
82.5°	3.2	3.2	3.2	3.2	3.2
85°	2.1	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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