

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: P886804

Luminaire Tested: ML310LSFLD2W1E-TIR4D40FL-TL3SDMW-600LM-2700K

Issue Date: 7/5/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886804  
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: ML310LSFLD2W1E-TIR4D40FL-TL3SDMW-600LM-2700K  
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 799.8 lumens  
Efficiency: N/A  
Efficacy: 84.2 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

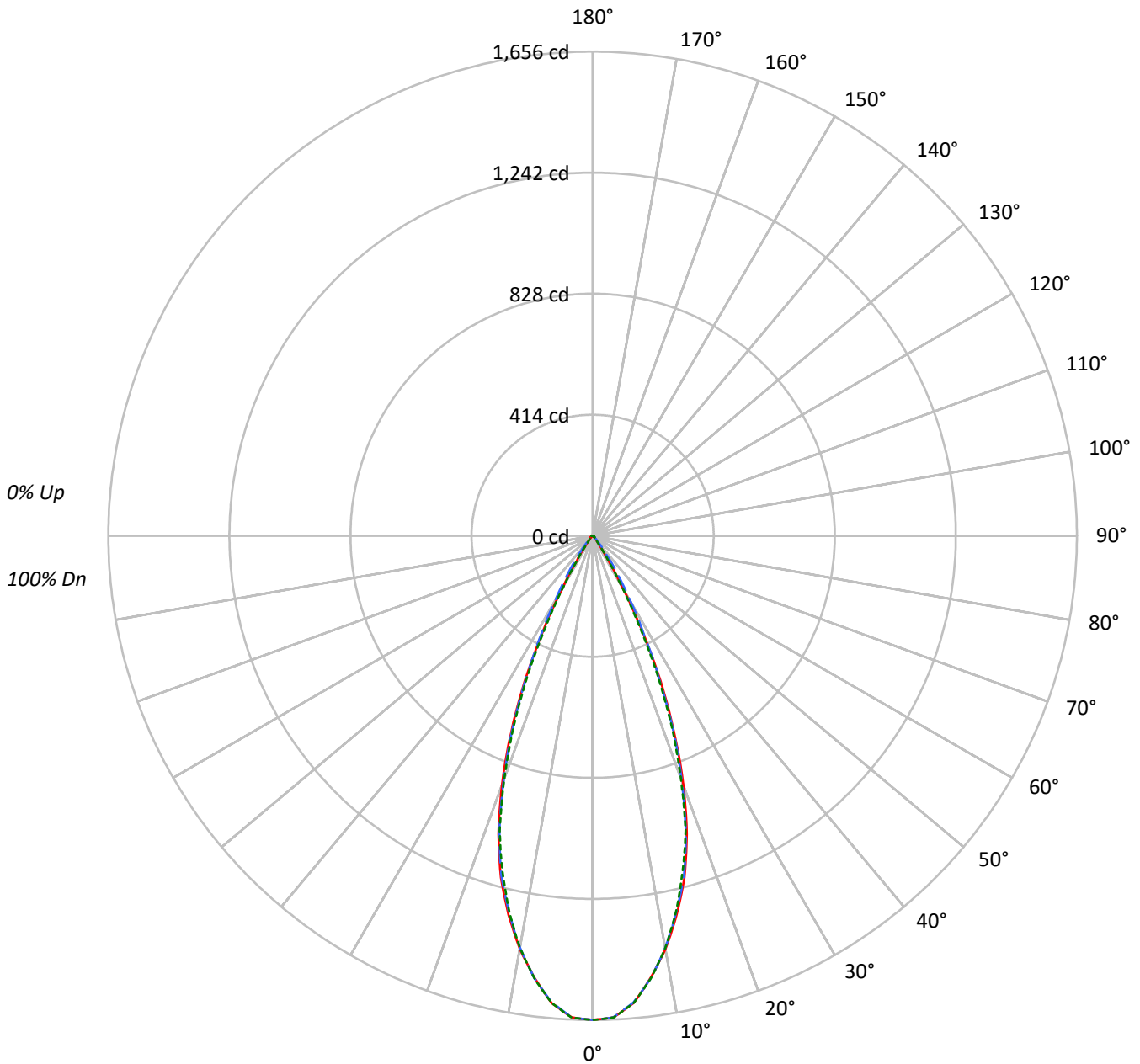
Input Watts (W): 9.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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									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	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	92	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	86	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°	285201	285201	285201
5°	277369	276937	277369
10°	250847	250183	250305
15°	215901	214992	211961
20°	166304	163189	161557
25°	104458	101949	99080
30°	40569	51844	37446
35°	9524	22770	9272
40°	3687	8206	3687
45°	2143	3532	2143
50°	1849	2197	2036
55°	2072	2072	2072
60°	2170	2170	2170
65°	2038	2323	2038
70°	1913	2216	2216
75°	2063	2063	2063
80°	1884	1884	2479
85°	1186	2569	2569

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 3532 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.4	18.4
10°-20°	328.6	41.1
20°-30°	243.6	30.5
30°-40°	54.7	6.8
40°-50°	9.5	1.2
50°-60°	6.1	0.8
60°-70°	5.3	0.7
70°-80°	3.4	0.4
80°-90°	1.2	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°	719.6	90.0
0°-40°	774.3	96.8
0°-60°	790.0	98.8
0°-90°	799.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	799.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1656	1656	1656	1656	1656	
5°	1604	1604	1602	1601	1604	147
15°	1211	1203	1206	1190	1189	331
25°	550	542	536	530	521	245
35°	45	64	108	61	44	42
45°	9	10	14	10	9	8
55°	7	7	7	7	7	6
65°	5	6	6	6	5	5
75°	3	3	3	3	3	3
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°	1656.0	1656.0	1656.0	1656.0	1656.0
2.5°	1648.5	1649.8	1648.5	1648.5	1649.1
5°	1604.4	1603.8	1601.9	1600.6	1604.4
7.5°	1524.4	1526.3	1525.7	1527.6	1526.3
10°	1434.4	1428.7	1430.6	1428.1	1431.3
12.5°	1328.0	1326.7	1319.8	1317.9	1316.7
15°	1210.9	1202.7	1205.8	1189.5	1188.8
17.5°	1071.1	1065.4	1059.7	1057.2	1057.2
20°	907.4	904.8	890.4	889.1	881.5
22.5°	729.2	718.5	719.1	717.2	705.9
25°	549.7	542.2	536.5	529.6	521.4
27.5°	365.8	380.3	381.0	364.6	335.6
30°	204.0	234.9	260.7	219.8	188.3
32.5°	100.7	131.0	171.9	120.9	95.7
35°	45.3	64.2	108.3	61.1	44.1
37.5°	24.6	32.7	64.9	31.5	23.9
40°	16.4	19.5	36.5	19.5	16.4
42.5°	11.3	13.2	22.0	13.2	12.0
45°	8.8	10.1	14.5	10.1	8.8
47.5°	7.6	8.2	10.7	8.2	8.2
50°	6.9	7.6	8.2	7.6	7.6
52.5°	6.9	6.9	7.6	6.9	6.9
55°	6.9	6.9	6.9	6.9	6.9
57.5°	6.3	6.3	6.9	6.3	6.3
60°	6.3	6.3	6.3	6.3	6.3
62.5°	5.7	5.7	5.7	5.7	5.7
65°	5.0	5.7	5.7	5.7	5.0
67.5°	4.4	5.0	5.0	5.0	5.0
70°	3.8	4.4	4.4	4.4	4.4
72.5°	3.8	3.8	3.8	3.8	3.8
75°	3.1	3.1	3.1	3.1	3.1
77.5°	2.5	2.5	2.5	3.1	2.5
80°	1.9	1.9	1.9	2.5	2.5
82.5°	1.3	1.3	1.3	1.9	1.9
85°	0.6	1.3	1.3	1.3	1.3
87.5°	0.6	0.6	0.6	0.6	0.6
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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