

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: P886805

Luminaire Tested: ML310LSFLD2W1E-TIR4D40FL-TL3SDMW-600LM-3000K

Issue Date: 7/5/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886805  
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-3000K  
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 858.1 lumens  
Efficiency: N/A  
Efficacy: 90.3 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')

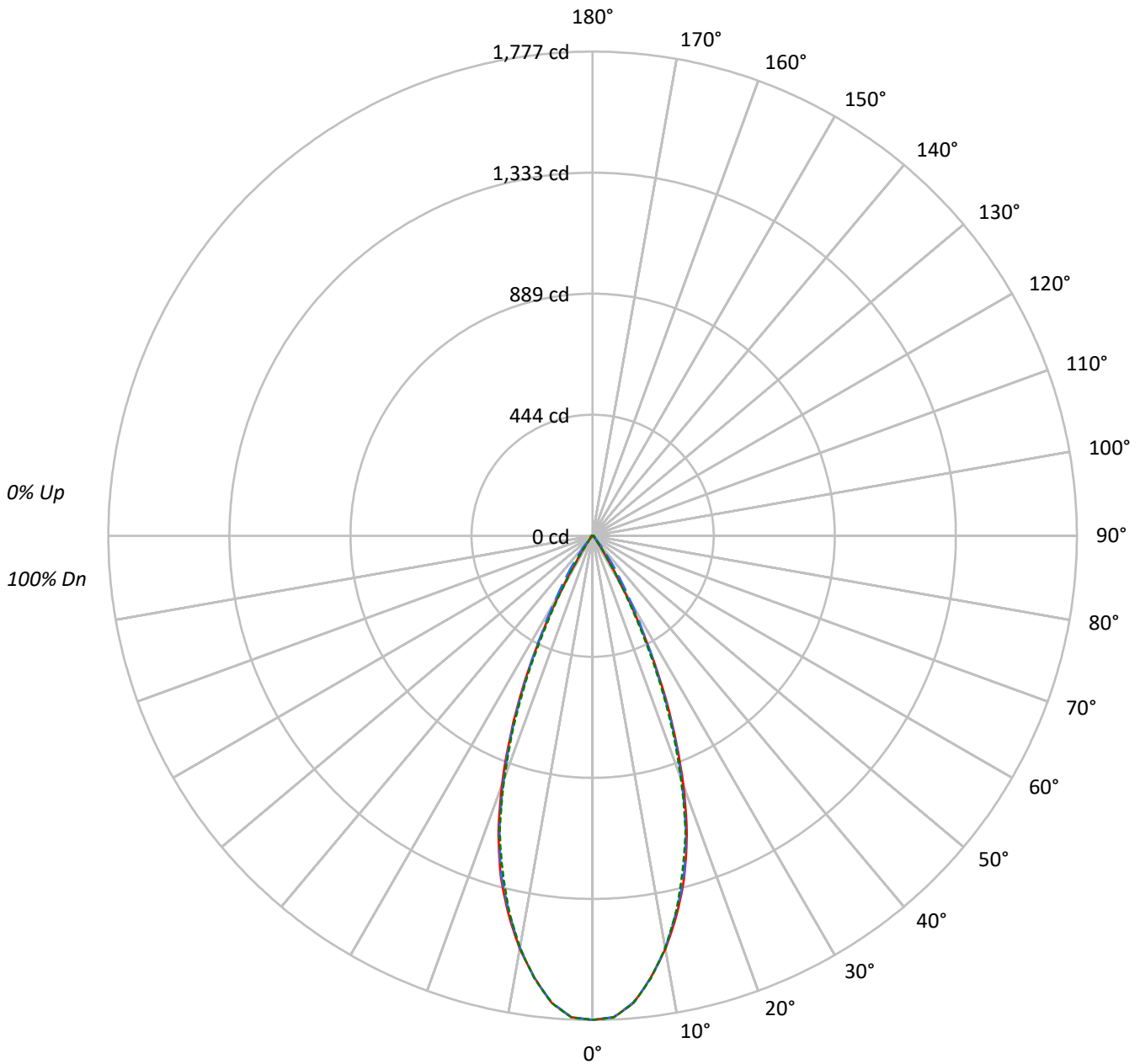
CIE Type: Direct  
  
Input Watts (W): 9.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 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				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	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°	305971	305971	305971
5°	297562	297095	297562
10°	269105	268405	268510
15°	231609	230646	227401
20°	178400	175065	173324
25°	112059	109360	106282
30°	43532	55623	40171
35°	10218	24430	9945
40°	3957	8813	3957
45°	2314	3775	2314
50°	1983	2358	2170
55°	2222	2222	2222
60°	2342	2342	2342
65°	2201	2486	2201
70°	2065	2367	2367
75°	2262	2262	2262
80°	1984	1984	2678
85°	1383	2766	2766

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 3775 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.1	18.4
10°-20°	352.6	41.1
20°-30°	261.3	30.5
30°-40°	58.7	6.8
40°-50°	10.2	1.2
50°-60°	6.6	0.8
60°-70°	5.7	0.7
70°-80°	3.6	0.4
80°-90°	1.3	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°	771.9	90.0
0°-40°	830.7	96.8
0°-60°	847.5	98.8
0°-90°	858.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	858.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1777	1777	1777	1777	1777	
5°	1721	1720	1718	1717	1721	158
15°	1299	1290	1294	1276	1275	355
25°	590	582	576	568	559	263
35°	49	69	116	66	47	45
45°	10	11	16	11	10	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°	1776.6	1776.6	1776.6	1776.6	1776.6
2.5°	1768.5	1769.8	1768.5	1768.5	1769.2
5°	1721.2	1720.5	1718.5	1717.1	1721.2
7.5°	1635.4	1637.4	1636.8	1638.8	1637.4
10°	1538.8	1532.7	1534.8	1532.1	1535.4
12.5°	1424.6	1423.3	1415.9	1413.8	1412.5
15°	1299.0	1290.2	1293.6	1276.0	1275.4
17.5°	1149.0	1143.0	1136.9	1134.2	1134.2
20°	973.4	970.7	955.2	953.8	945.7
22.5°	782.2	770.8	771.4	769.4	757.2
25°	589.7	581.6	575.5	568.1	559.3
27.5°	392.5	408.0	408.7	391.1	360.0
30°	218.9	252.0	279.7	235.8	202.0
32.5°	108.1	140.5	184.4	129.7	102.7
35°	48.6	68.9	116.2	65.5	47.3
37.5°	26.3	35.1	69.6	33.8	25.7
40°	17.6	20.9	39.2	20.9	17.6
42.5°	12.2	14.2	23.6	14.2	12.8
45°	9.5	10.8	15.5	10.8	9.5
47.5°	8.1	8.8	11.5	8.8	8.8
50°	7.4	8.1	8.8	8.1	8.1
52.5°	7.4	7.4	8.1	7.4	7.4
55°	7.4	7.4	7.4	7.4	7.4
57.5°	6.8	6.8	7.4	6.8	6.8
60°	6.8	6.8	6.8	6.8	6.8
62.5°	6.1	6.1	6.1	6.1	6.1
65°	5.4	6.1	6.1	6.1	5.4
67.5°	4.7	5.4	5.4	5.4	5.4
70°	4.1	4.7	4.7	4.7	4.7
72.5°	4.1	4.1	4.1	4.1	4.1
75°	3.4	3.4	3.4	3.4	3.4
77.5°	2.7	2.7	2.7	3.4	2.7
80°	2.0	2.0	2.0	2.7	2.7
82.5°	1.4	1.4	1.4	2.0	2.0
85°	0.7	1.4	1.4	1.4	1.4
87.5°	0.7	0.7	0.7	0.7	0.7
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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