

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: P886819

Luminaire Tested: ML310LSFLD2W1E-TIR4D55WFL-TL3SDSL-600LM-3000K

Issue Date: 7/8/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886819  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-20)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 7/8/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML310LSFLD2W1E-TIR4D55WFL-TL3SDSL-600LM-3000K  
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, METALLIC SILVER TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

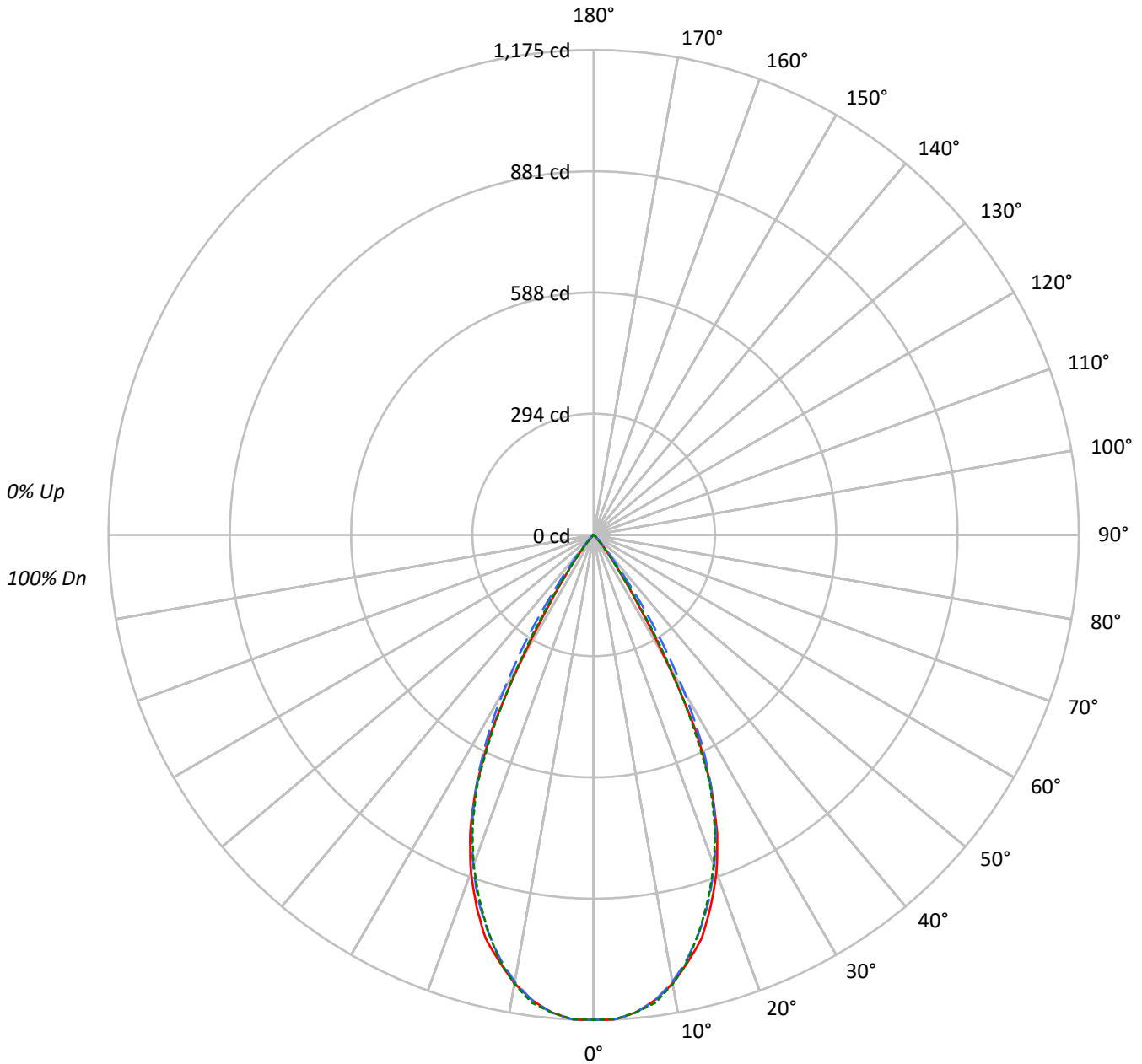
Lumens per Lamp: N/A  
Luminaire Lumens: 802.7 lumens  
Efficiency: N/A  
Efficacy: 84.5 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.84 / 0.81  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')

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	111	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	94																			
2	109	104	101	98	107	103	99	97	100	97	94	97	94	92	94	92	91	89																			
3	104	98	94	90	102	97	93	89	94	91	88	92	89	87	90	87	85	84																			
4	100	93	88	84	98	92	87	83	90	86	82	88	84	81	86	83	81	79																			
5	95	88	82	78	94	87	82	78	85	81	77	83	80	77	82	79	76	75																			
6	91	83	78	74	90	82	77	73	81	76	73	79	76	72	78	75	72	71																			
7	87	79	73	69	86	78	73	69	77	72	69	76	72	69	75	71	68	67																			
8	83	75	69	66	82	74	69	66	73	69	65	72	68	65	71	68	65	64																			
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	62	60																			
10	77	68	63	59	76	67	62	59	67	62	59	66	62	59	65	61	59	57																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	202362	202362	202362
5°	200801	200922	200801
10°	192840	192262	193207
15°	180348	176979	176622
20°	159266	156279	155674
25°	127622	128021	126482
30°	69205	86666	72427
35°	23863	37928	23295
40°	6070	9870	5306
45°	1486	3629	1656
50°	1099	1447	1259
55°	1231	1231	1231
60°	1171	1171	1171
65°	815	1100	1100
70°	1007	1007	1007
75°	932	1331	1331
80°	694	1389	1389
85°	1383	1383	1383

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 3629 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.0	13.6
10°-20°	277.2	34.5
20°-30°	298.1	37.1
30°-40°	100.0	12.5
40°-50°	9.6	1.2
50°-60°	3.6	0.5
60°-70°	2.7	0.3
70°-80°	1.7	0.2
80°-90°	0.6	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°	684.4	85.3
0°-40°	784.4	97.7
0°-60°	797.7	99.4
0°-90°	802.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	802.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1175	1175	1175	1175	1175	
5°	1162	1162	1162	1162	1162	109
15°	1012	1001	993	993	991	280
25°	672	681	674	677	666	294
35°	114	117	180	120	111	84
45°	6	7	15	8	7	7
55°	4	4	4	4	4	3
65°	2	3	3	3	3	2
75°	1	1	2	2	2	1
85°	1	1	1	1	1	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1175.0	1175.0	1175.0	1175.0	1175.0
2.5°	1175.0	1174.4	1175.0	1175.0	1174.4
5°	1161.5	1161.5	1162.2	1162.2	1161.5
7.5°	1137.2	1137.2	1137.9	1141.9	1143.3
10°	1102.7	1100.7	1099.4	1102.1	1104.8
12.5°	1058.1	1056.8	1050.7	1050.0	1054.8
15°	1011.5	1001.4	992.6	993.3	990.6
17.5°	943.3	939.2	928.4	928.4	923.0
20°	869.0	860.2	852.7	853.4	849.4
22.5°	781.8	781.8	772.3	777.7	766.2
25°	671.6	681.1	673.7	677.1	665.6
27.5°	537.2	553.4	562.9	555.4	521.0
30°	348.0	406.1	435.8	399.3	364.2
32.5°	197.3	234.5	307.4	243.9	226.4
35°	113.5	116.9	180.4	120.3	110.8
37.5°	58.8	62.2	90.5	60.1	56.1
40°	27.0	31.1	43.9	31.1	23.6
42.5°	10.8	16.9	25.0	13.5	10.8
45°	6.1	7.4	14.9	8.1	6.8
47.5°	5.4	5.4	8.8	6.1	5.4
50°	4.1	4.7	5.4	4.7	4.7
52.5°	4.1	4.1	4.7	4.1	4.1
55°	4.1	4.1	4.1	4.1	4.1
57.5°	3.4	3.4	4.1	4.1	3.4
60°	3.4	3.4	3.4	3.4	3.4
62.5°	2.7	2.7	3.4	3.4	3.4
65°	2.0	2.7	2.7	2.7	2.7
67.5°	2.0	2.0	2.7	2.7	2.7
70°	2.0	2.0	2.0	2.0	2.0
72.5°	1.4	2.0	2.0	2.0	2.0
75°	1.4	1.4	2.0	2.0	2.0
77.5°	0.7	1.4	1.4	1.4	1.4
80°	0.7	0.7	1.4	1.4	1.4
82.5°	0.7	0.7	0.7	0.7	0.7
85°	0.7	0.7	0.7	0.7	0.7
87.5°	0.0	0.0	0.0	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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