

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: P886628

Luminaire Tested: ML310LSFL95FS1E-TIR4D55WFL-TL3SDMB-1000LM-3000K

Issue Date: 7/8/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886628  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-21)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 7/8/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML310LSFL95FS1E-TIR4D55WFL-TL3SDMB-1000LM-3000K  
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE BLACK TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1069.1 lumens  
Efficiency: N/A  
Efficacy: 78.6 lumens/watt  
Spacing Criteria (0/90/45): 0.87 / 0.86 / 0.82  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')

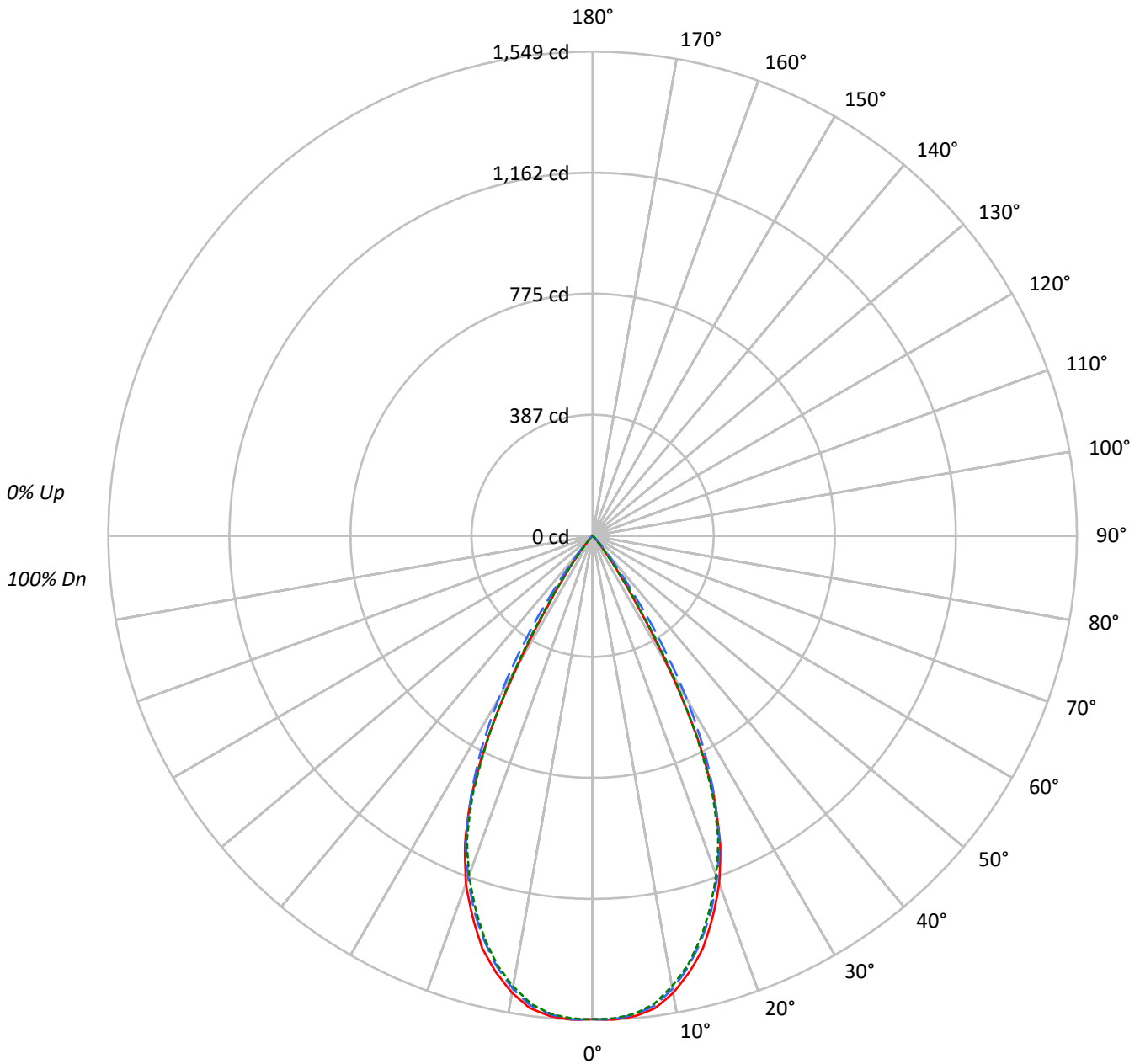
CIE Type: Direct

Input Watts (W): 13.6  
Input Voltage (V): NR  
Input Current (A<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	109	107	106	105	104	102	102	100	99	98	97	96	95																			
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	89																			
3	104	99	94	91	103	97	93	90	95	91	89	92	90	87	90	88	86	84																			
4	100	93	88	85	98	92	88	84	90	86	83	88	85	82	86	84	81	80																			
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75																			
6	92	84	78	74	90	83	78	74	81	77	74	80	76	73	79	75	73	71																			
7	88	79	74	70	86	79	74	70	77	73	70	76	72	69	75	72	69	68																			
8	84	75	70	66	83	75	70	66	74	69	66	73	69	66	72	68	65	64																			
9	80	72	66	63	79	71	66	63	70	66	63	70	65	62	69	65	62	61																			
10	77	68	63	60	76	68	63	60	67	63	60	67	62	59	66	62	59	58																			

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

	0°	45°	90°
0°	266360	266360	266360
5°	266720	265752	265423
10°	259609	257300	255971
15°	243359	238991	237814
20°	217035	213241	211683
25°	174216	175110	171366
30°	95276	119439	100328
35°	30675	50858	31474
40°	7194	12478	5935
45°	682	3678	682
50°	241	750	241
55°	0	270	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: 3678 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.9	13.6
10°-20°	374.3	35.0
20°-30°	406.2	38.0
30°-40°	134.4	12.6
40°-50°	8.9	0.8
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°	925.4	86.6
0°-40°	1059.8	99.1
0°-60°	1069.1	100.0
0°-90°	1069.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1069.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1547	1547	1547	1547	1547	
5°	1543	1541	1537	1536	1535	146
15°	1365	1356	1340	1337	1334	379
25°	917	925	922	915	902	400
35°	146	161	242	163	150	111
45°	3	5	15	5	3	6
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°	1546.6	1546.6	1546.6	1546.6	1546.6
2.5°	1549.4	1549.4	1548.5	1547.5	1545.6
5°	1542.8	1540.9	1537.2	1536.2	1535.3
7.5°	1524.9	1523.0	1516.5	1509.9	1509.9
10°	1484.5	1483.5	1471.3	1467.5	1463.7
12.5°	1429.9	1426.1	1412.9	1408.2	1406.3
15°	1364.9	1356.4	1340.4	1336.7	1333.8
17.5°	1277.4	1273.6	1259.5	1252.9	1248.2
20°	1184.2	1175.7	1163.5	1158.8	1155.0
22.5°	1066.5	1061.8	1058.0	1055.2	1049.6
25°	916.8	925.3	921.5	915.0	901.8
27.5°	722.0	757.8	770.9	751.2	713.5
30°	479.1	554.4	600.6	543.1	504.5
32.5°	267.3	313.5	415.1	332.3	293.7
35°	145.9	161.0	241.9	162.8	149.7
37.5°	70.6	81.9	120.5	78.1	71.5
40°	32.0	38.6	55.5	36.7	26.4
42.5°	9.4	16.9	29.2	13.2	8.5
45°	2.8	4.7	15.1	4.7	2.8
47.5°	1.9	1.9	6.6	1.9	1.9
50°	0.9	0.9	2.8	0.9	0.9
52.5°	0.0	0.9	0.9	0.9	0.9
55°	0.0	0.0	0.9	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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