

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: P886750

Luminaire Tested: ML310LSFL9FS1E-TIR4D55WFL-TL3RDMW-1000LM-4000K

Issue Date: 7/5/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886750  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-7)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 7/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML310LSFL9FS1E-TIR4D55WFL-TL3RDMW-1000LM-4000K  
Description: 3IN ROUND ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

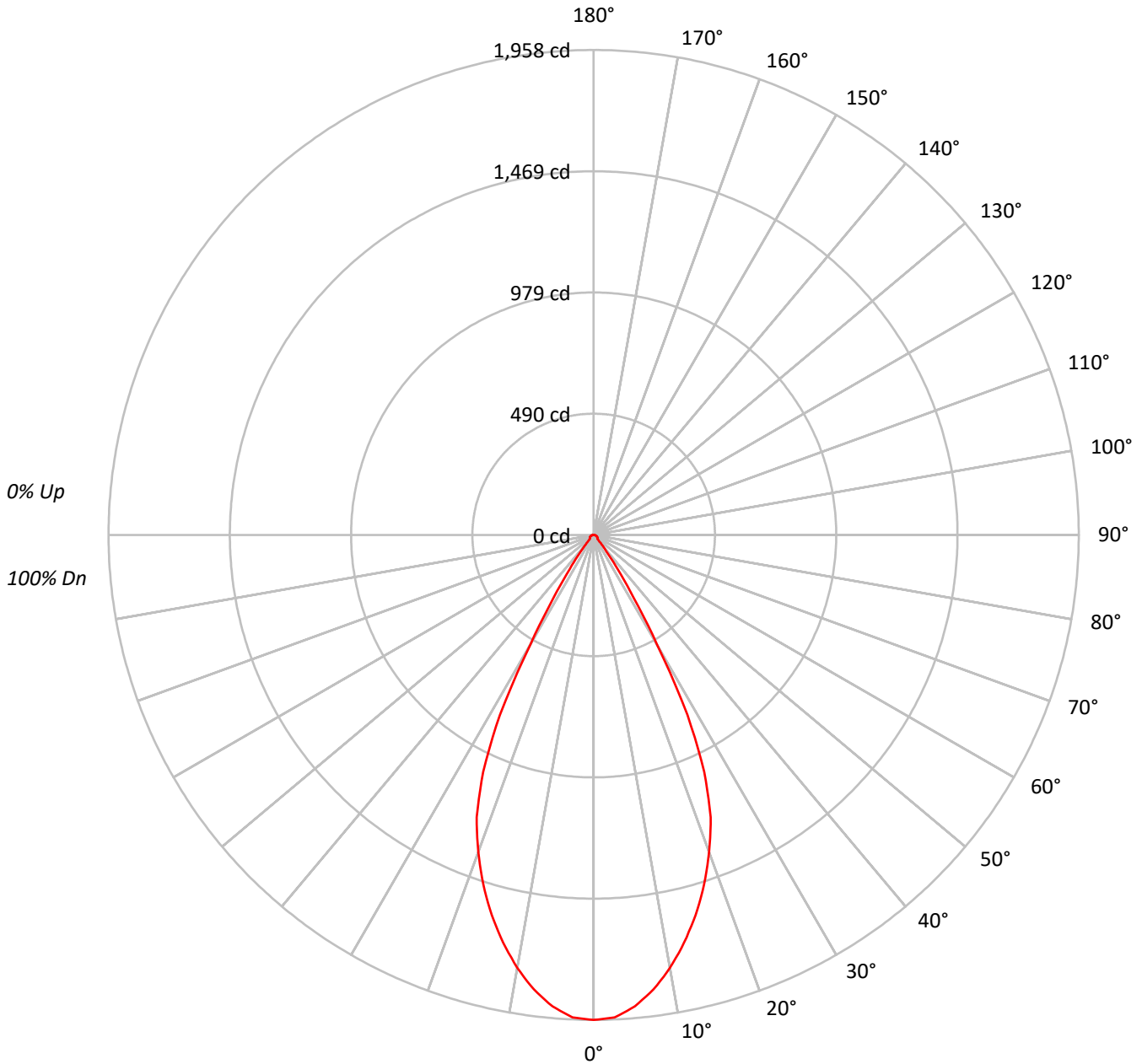
Lumens per Lamp: N/A  
Luminaire Lumens: 1265.2 lumens  
Efficiency: N/A  
Efficacy: 91.7 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.82 / 0.76  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 13.8  
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	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	106	111	109	107	105	105	103	102	101	100	99	98	97	96	94			
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88			
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	84	83			
4	99	92	87	83	97	91	86	83	89	85	82	87	83	81	85	82	80	78			
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74			
6	91	82	77	73	89	82	76	73	80	76	72	79	75	72	78	74	71	70			
7	87	78	73	69	85	78	72	69	76	72	68	75	71	68	74	70	68	66			
8	83	74	69	65	82	74	69	65	73	68	65	72	68	65	71	67	64	63			
9	80	71	65	62	79	70	65	62	70	65	62	69	64	61	68	64	61	60			
10	76	68	62	59	76	67	62	59	66	62	59	66	61	58	65	61	58	57			

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

	0°
0°	429373
5°	420558
10°	395183
15°	360819
20°	317828
25°	255305
30°	129387
35°	44919
40°	13912
45°	6853
50°	6789
55°	7187
60°	7280
65°	7420
70°	7758
75°	7456
80°	6945
85°	5535

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 77.5°  
 Luminance: 7801 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.0	14.1
10°-20°	442.3	35.0
20°-30°	456.6	36.1
30°-40°	125.7	9.9
40°-50°	19.7	1.6
50°-60°	16.5	1.3
60°-70°	14.2	1.1
70°-80°	9.3	0.7
80°-90°	2.8	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°	1077.0	85.1
0°-40°	1202.7	95.1
0°-60°	1238.8	97.9
0°-90°	1265.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1265.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1958	
5°	1911	178
15°	1589	442
25°	1055	457
35°	168	126
45°	22	20
55°	19	16
65°	14	14
75°	9	9
85°	2	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1958.1
2.5°	1950.3
5°	1910.6
7.5°	1851.0
10°	1774.8
12.5°	1686.5
15°	1589.4
17.5°	1481.2
20°	1362.0
22.5°	1234.0
25°	1055.2
27.5°	819.0
30°	511.0
32.5°	298.0
35°	167.8
37.5°	89.4
40°	48.6
42.5°	25.4
45°	22.1
47.5°	21.0
50°	19.9
52.5°	18.8
55°	18.8
57.5°	17.7
60°	16.6
62.5°	15.5
65°	14.3
67.5°	13.2
70°	12.1
72.5°	9.9
75°	8.8
77.5°	7.7
80°	5.5
82.5°	4.4
85°	2.2
87.5°	1.1
90°	0.0

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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Scaled Data Report



(END OF REPORT)