

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: P886696

Luminaire Tested: ML310LSFL9FS1E-TIR4D25NFL-TL3RDSL-1000LM-5000K

Issue Date: 7/18/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886696  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 7/18/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML310LSFL9FS1E-TIR4D25NFL-TL3RDSL-1000LM-5000K  
Description: 3IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

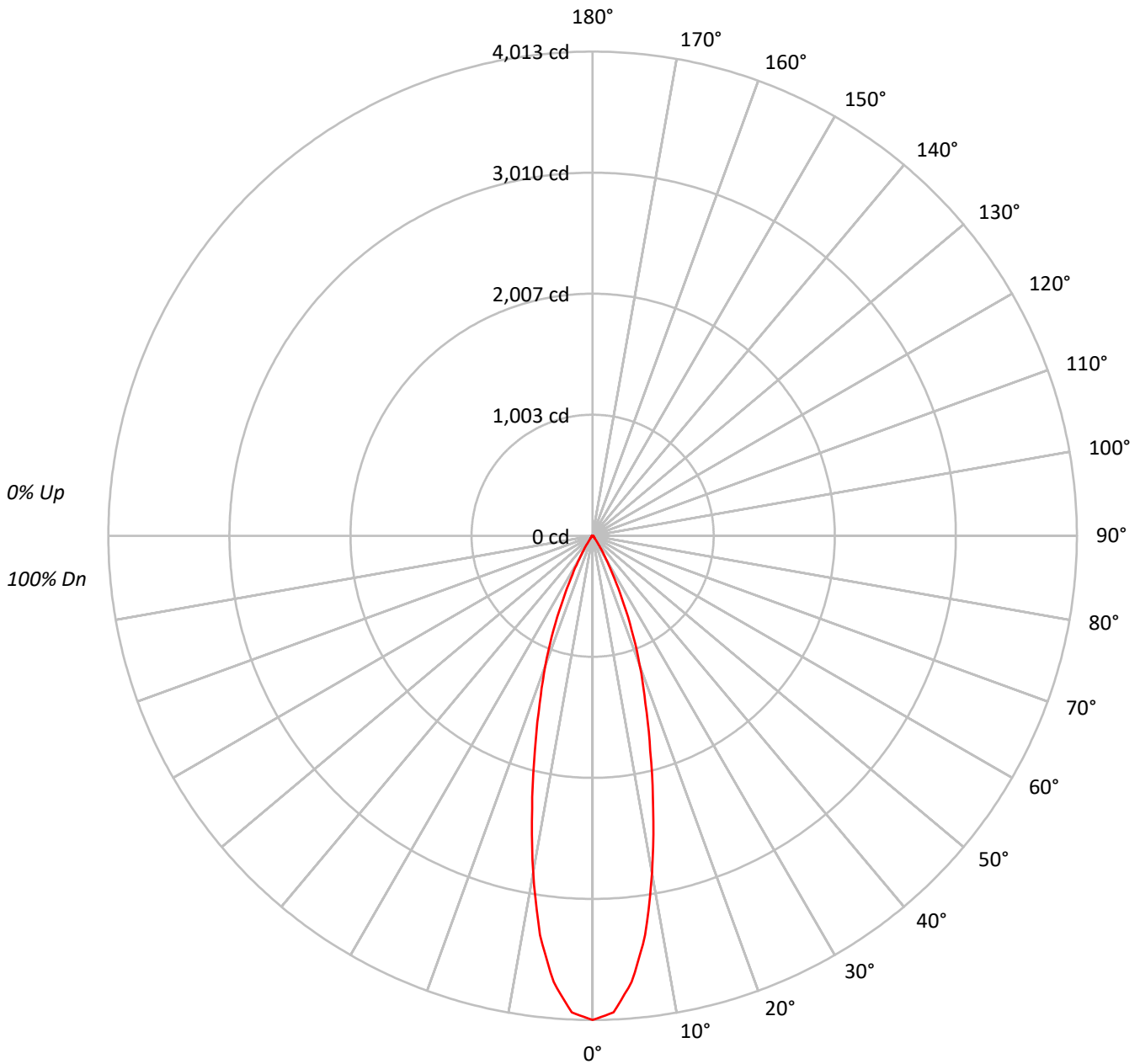
Lumens per Lamp: N/A  
Luminaire Lumens: 1206.2 lumens  
Efficiency: N/A  
Efficacy: 87.4 lumens/watt  
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.5  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

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									
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			100																
1	114	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	96			96																
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91			91																
3	106	101	97	94	104	100	96	93	97	94	92	95	92	90	93	91	89	87			87																
4	102	96	92	89	101	95	91	88	93	90	87	91	88	86	90	87	85	84			84																
5	99	92	88	84	97	91	87	84	90	86	83	88	85	83	87	84	82	81			81																
6	95	89	84	81	94	88	83	80	86	83	80	85	82	79	84	81	79	78			78																
7	92	85	80	77	91	85	80	77	83	79	77	82	79	76	81	78	76	75			75																
8	89	82	77	74	88	82	77	74	81	77	74	80	76	74	79	76	73	72			72																
9	87	79	75	72	86	79	74	71	78	74	71	77	74	71	76	73	71	70			70																
10	84	77	72	69	83	76	72	69	75	72	69	75	71	69	74	71	69	68			68																

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

	0°
0°	879951
5°	816991
10°	631318
15°	418913
20°	266700
25°	137137
30°	55173
35°	18605
40°	7299
45°	5396
50°	4742
55°	4435
60°	4561
65°	4825
70°	4488
75°	4914
80°	4420
85°	3019

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5396 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	326.4	27.1
10°-20°	514.4	42.6
20°-30°	271.3	22.5
30°-40°	53.4	4.4
40°-50°	14.0	1.2
50°-60°	10.8	0.9
60°-70°	8.8	0.7
70°-80°	5.7	0.5
80°-90°	1.4	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°	1112.1	92.2
0°-40°	1165.5	96.6
0°-60°	1190.3	98.7
0°-90°	1206.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1206.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4013	
5°	3712	326
15°	1845	514
25°	567	271
35°	70	53
45°	17	14
55°	12	11
65°	9	9
75°	6	6
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4012.9
2.5°	3953.8
5°	3711.6
7.5°	3337.2
10°	2835.3
12.5°	2317.1
15°	1845.3
17.5°	1454.7
20°	1142.9
22.5°	846.2
25°	566.8
27.5°	361.7
30°	217.9
32.5°	126.3
35°	69.5
37.5°	37.1
40°	25.5
42.5°	20.9
45°	17.4
47.5°	15.1
50°	13.9
52.5°	12.8
55°	11.6
57.5°	11.6
60°	10.4
62.5°	9.3
65°	9.3
67.5°	8.1
70°	7.0
72.5°	5.8
75°	5.8
77.5°	4.6
80°	3.5
82.5°	2.3
85°	1.2
87.5°	0.0
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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(END OF REPORT)