

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: P886678

Luminaire Tested: ML310LSFL9FS1E-TIR4D25NFL-TL3RDMB-600LM-3000K

Issue Date: 7/18/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886678  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-3)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 7/18/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML310LSFL9FS1E-TIR4D25NFL-TL3RDMB-600LM-3000K  
Description: 3IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

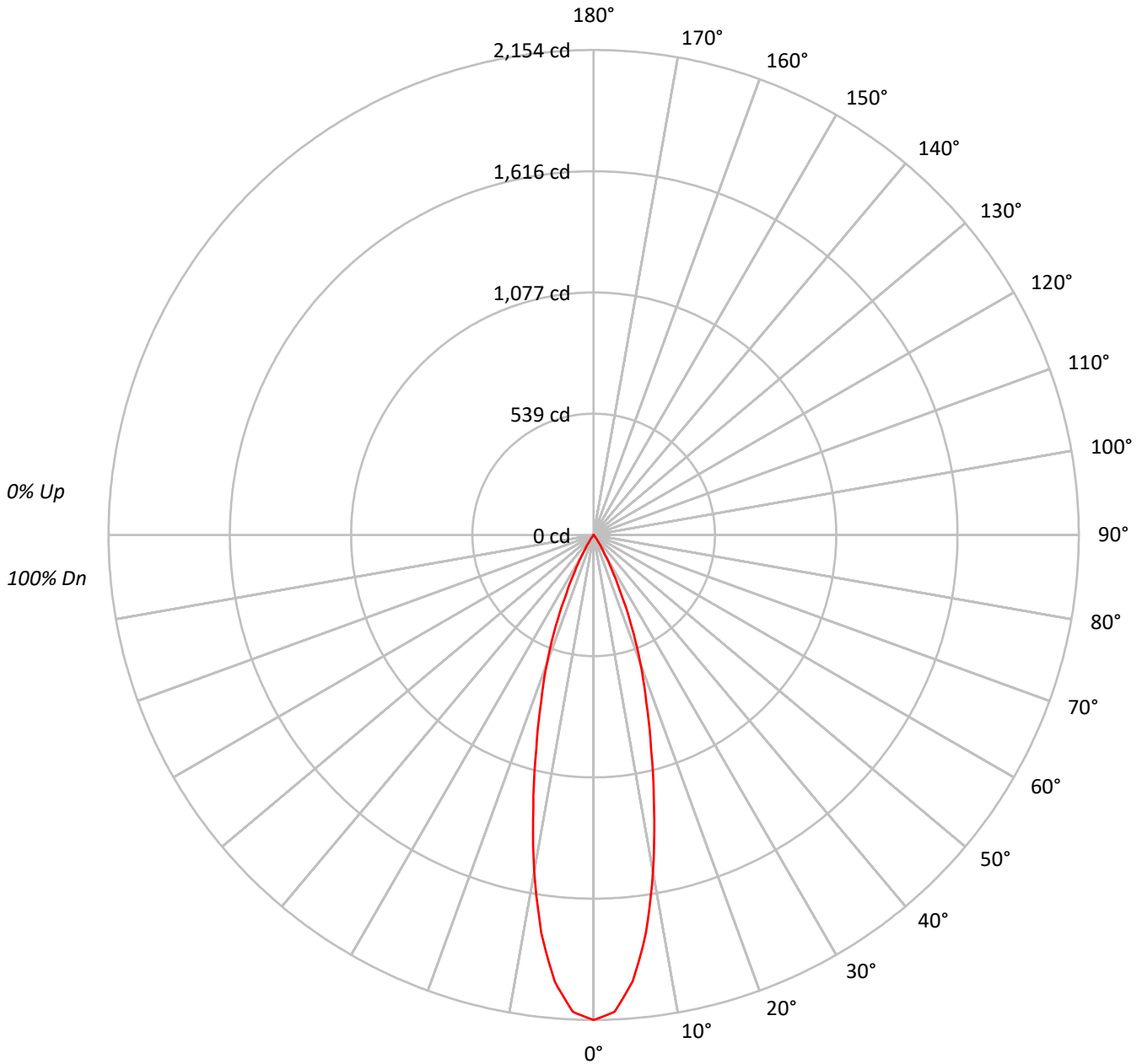
Lumens per Lamp: N/A  
Luminaire Lumens: 611.2 lumens  
Efficiency: N/A  
Efficacy: 75.5 lumens/watt  
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.5  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 8.1  
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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CATALOG NUMBER: ML310LSFL9FS1E-TIR4D25NFL-TL3RDDB-600LM-3000K

**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	100	100	100
1	115	113	111	109	112	111	109	107	107	105	104	103	102	101	100	99	98	96	96	96	96
2	111	107	104	101	109	105	103	100	102	100	98	100	98	96	97	95	94	93	93	93	93
3	107	102	99	96	105	101	98	95	99	96	93	96	94	92	94	92	91	89	89	89	89
4	104	98	94	91	102	97	93	90	95	92	89	93	90	88	91	89	87	86	86	86	86
5	100	94	90	87	99	93	89	86	92	88	86	90	87	85	89	86	84	83	83	83	83
6	97	91	86	83	96	90	86	83	88	85	82	87	84	82	86	83	81	80	80	80	80
7	94	87	83	80	93	87	83	80	86	82	79	85	81	79	84	81	78	77	77	77	77
8	91	84	80	77	90	84	80	77	83	79	76	82	79	76	81	78	76	75	75	75	75
9	89	81	77	74	88	81	77	74	80	77	74	79	76	74	79	76	73	73	73	73	73
10	86	79	75	72	85	79	74	72	78	74	72	77	74	71	77	73	71	70	70	70	70

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

	0°
0°	472418
5°	438145
10°	338025
15°	223384
20°	141272
25°	69198
30°	25548
35°	6880
40°	1460
45°	589
50°	205
55°	0
60°	0
65°	0
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 589 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.7	28.6
10°-20°	274.5	44.9
20°-30°	138.8	22.7
30°-40°	21.4	3.5
40°-50°	1.7	0.3
50°-60°	0.1	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°	588.0	96.2
0°-40°	609.4	99.7
0°-60°	611.2	100.0
0°-90°	611.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	611.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2154	
5°	1990	175
15°	984	275
25°	286	139
35°	26	21
45°	2	2
55°	0	0
65°	0	0
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2154.4
2.5°	2120.3
5°	1990.5
7.5°	1781.6
10°	1518.1
12.5°	1238.5
15°	984.0
17.5°	776.4
20°	605.4
22.5°	441.6
25°	286.0
27.5°	178.7
30°	100.9
32.5°	54.6
35°	25.7
37.5°	10.3
40°	5.1
42.5°	3.2
45°	1.9
47.5°	1.3
50°	0.6
52.5°	0.0
55°	0.0
57.5°	0.0
60°	0.0
62.5°	0.0
65°	0.0
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
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)