

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: P886680

Luminaire Tested: ML310LSFL9FS1E-TIR4D25NFL-TL3RDMB-600LM-4000K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P886680
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-4000K
Description: 3IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

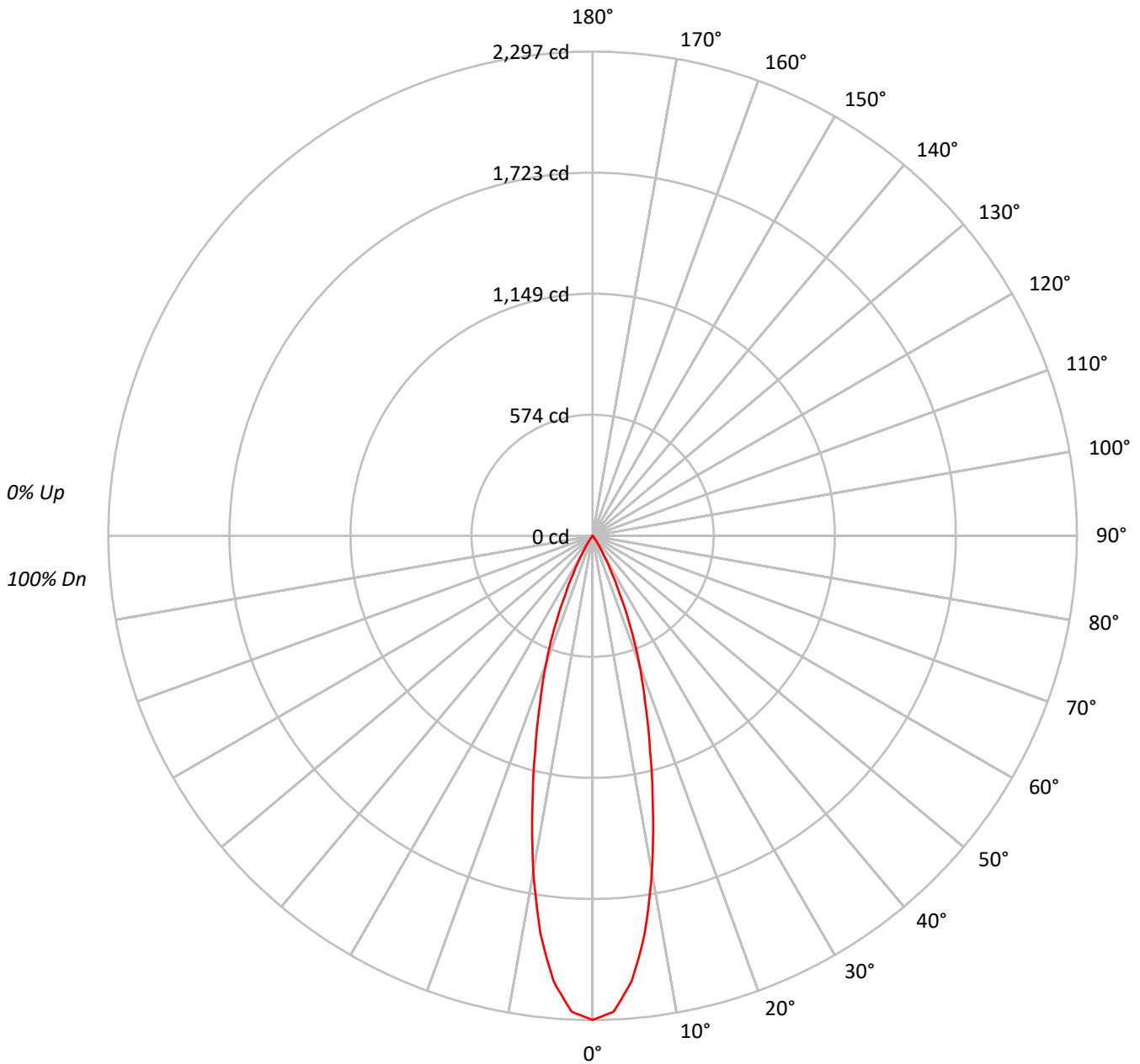
Lumens per Lamp: N/A
Luminaire Lumens: 651.7 lumens
Efficiency: N/A
Efficacy: 80.5 lumens/watt
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.5
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 8.1
Input Voltage (V): NR
Input Current (A_{in}): 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





TEST NUMBER: P886680

CATALOG NUMBER: ML310LSFL9FS1E-TIR4D25NFL-TL3RDDB-600LM-4000K

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

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	503644
5°	467113
10°	360381
15°	238163
20°	150630
25°	73770
30°	27245
35°	7335
40°	1574
45°	651
50°	239
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: 651 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.3	28.6
10°-20°	292.7	44.9
20°-30°	148.0	22.7
30°-40°	22.8	3.5
40°-50°	1.9	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°	626.9	96.2
0°-40°	649.7	99.7
0°-60°	651.7	100.0
0°-90°	651.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	651.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2297	
5°	2122	186
15°	1049	293
25°	305	148
35°	27	23
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°	2296.8
2.5°	2260.5
5°	2122.1
7.5°	1899.4
10°	1618.5
12.5°	1320.4
15°	1049.1
17.5°	827.7
20°	645.5
22.5°	470.7
25°	304.9
27.5°	190.5
30°	107.6
32.5°	58.2
35°	27.4
37.5°	11.0
40°	5.5
42.5°	3.4
45°	2.1
47.5°	1.4
50°	0.7
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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