

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: P886717

Luminaire Tested: ML310LSFL9FS1E-TIR4D40FL-TL3RDMW-1000LM-2700K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886717
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL9FS1E-TIR4D40FL-TL3RDMW-1000LM-2700K
Description: 3IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

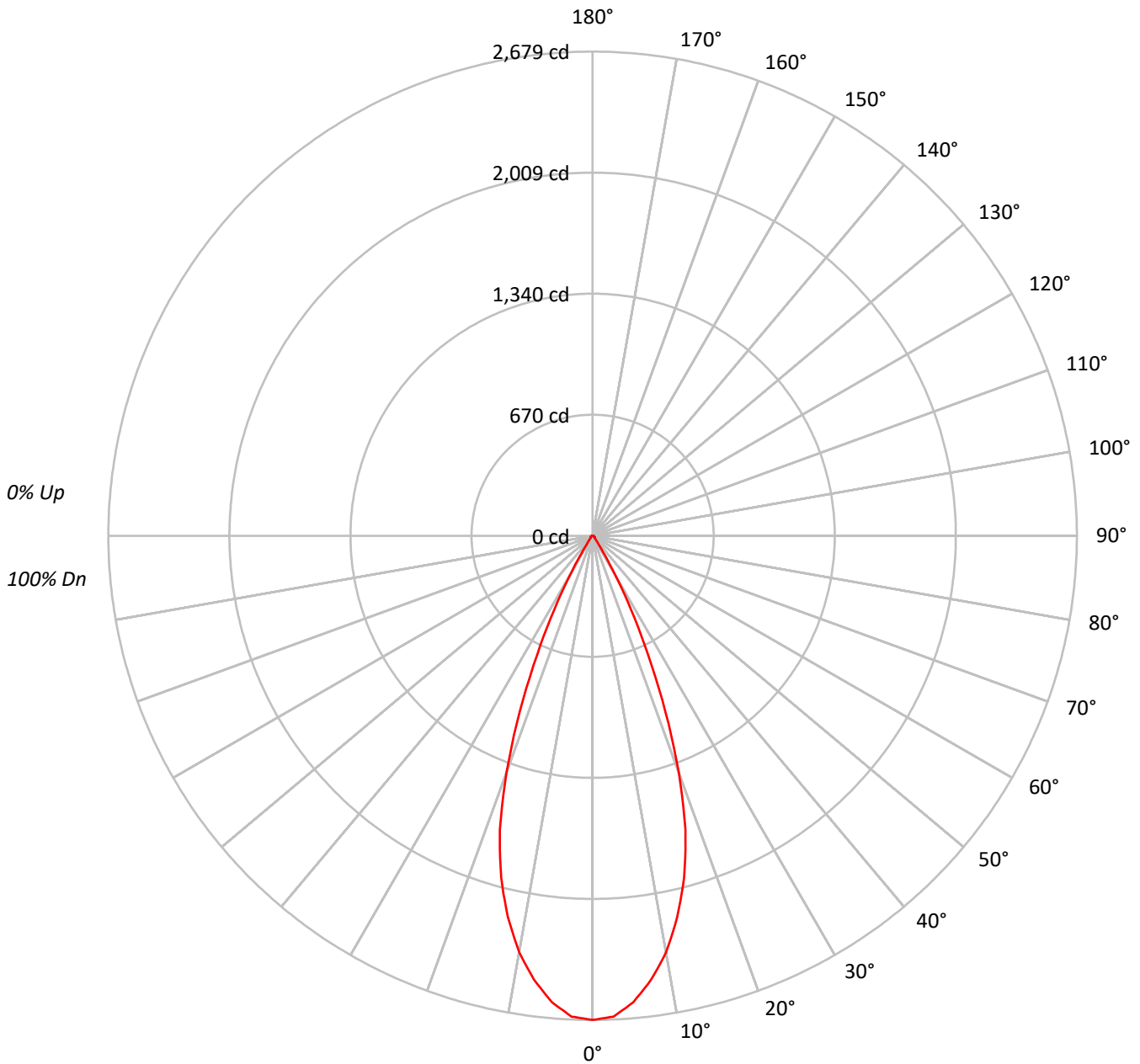
Lumens per Lamp: N/A
Luminaire Lumens: 1199.0 lumens
Efficiency: N/A
Efficacy: 86.9 lumens/watt
Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.62
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 13.8
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





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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	104	103	102	101	100	99	98	97	95			95																
2	110	105	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90			90																
3	105	100	96	92	103	99	95	92	96	93	90	94	91	89	92	89	87	86			86																
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82			82																
5	97	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	79			79																
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75			75																
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72			72																
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69			69																
9	84	76	72	68	83	76	71	68	75	71	68	74	71	68	74	70	68	67			67																
10	81	74	69	66	81	73	69	66	72	68	65	72	68	65	71	68	65	64			64																

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	587409
5°	570062
10°	520988
15°	444225
20°	324572
25°	174421
30°	60769
35°	14455
40°	6870
45°	4652
50°	4435
55°	4970
60°	4824
65°	5189
70°	5129
75°	5083
80°	5051
85°	5032

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 62.5°
 Luminance: 5224 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.1	19.9
10°-20°	531.5	44.3
20°-30°	336.7	28.1
30°-40°	49.8	4.2
40°-50°	12.4	1.0
50°-60°	11.2	0.9
60°-70°	9.8	0.8
70°-80°	6.3	0.5
80°-90°	2.2	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°	1107.3	92.4
0°-40°	1157.1	96.5
0°-60°	1180.7	98.5
0°-90°	1199.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1199.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2679	
5°	2590	239
15°	1957	531
25°	721	337
35°	54	50
45°	15	12
55°	13	11
65°	10	10
75°	6	6
85°	2	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2678.8
2.5°	2662.8
5°	2589.8
7.5°	2477.8
10°	2339.8
12.5°	2161.8
15°	1956.8
17.5°	1705.9
20°	1390.9
22.5°	1051.9
25°	720.9
27.5°	458.0
30°	240.0
32.5°	110.0
35°	54.0
37.5°	36.0
40°	24.0
42.5°	17.0
45°	15.0
47.5°	14.0
50°	13.0
52.5°	13.0
55°	13.0
57.5°	12.0
60°	11.0
62.5°	11.0
65°	10.0
67.5°	9.0
70°	8.0
72.5°	7.0
75°	6.0
77.5°	5.0
80°	4.0
82.5°	3.0
85°	2.0
87.5°	1.0
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)