

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: P886688

Luminaire Tested: ML310LSFL9FS1E-TIR4D25NFL-TL3RDMW-1000LM-3000K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P886688
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/18/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL9FS1E-TIR4D25NFL-TL3RDMW-1000LM-3000K
Description: 3IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1084.3 lumens
Efficiency: N/A
Efficacy: 78.6 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

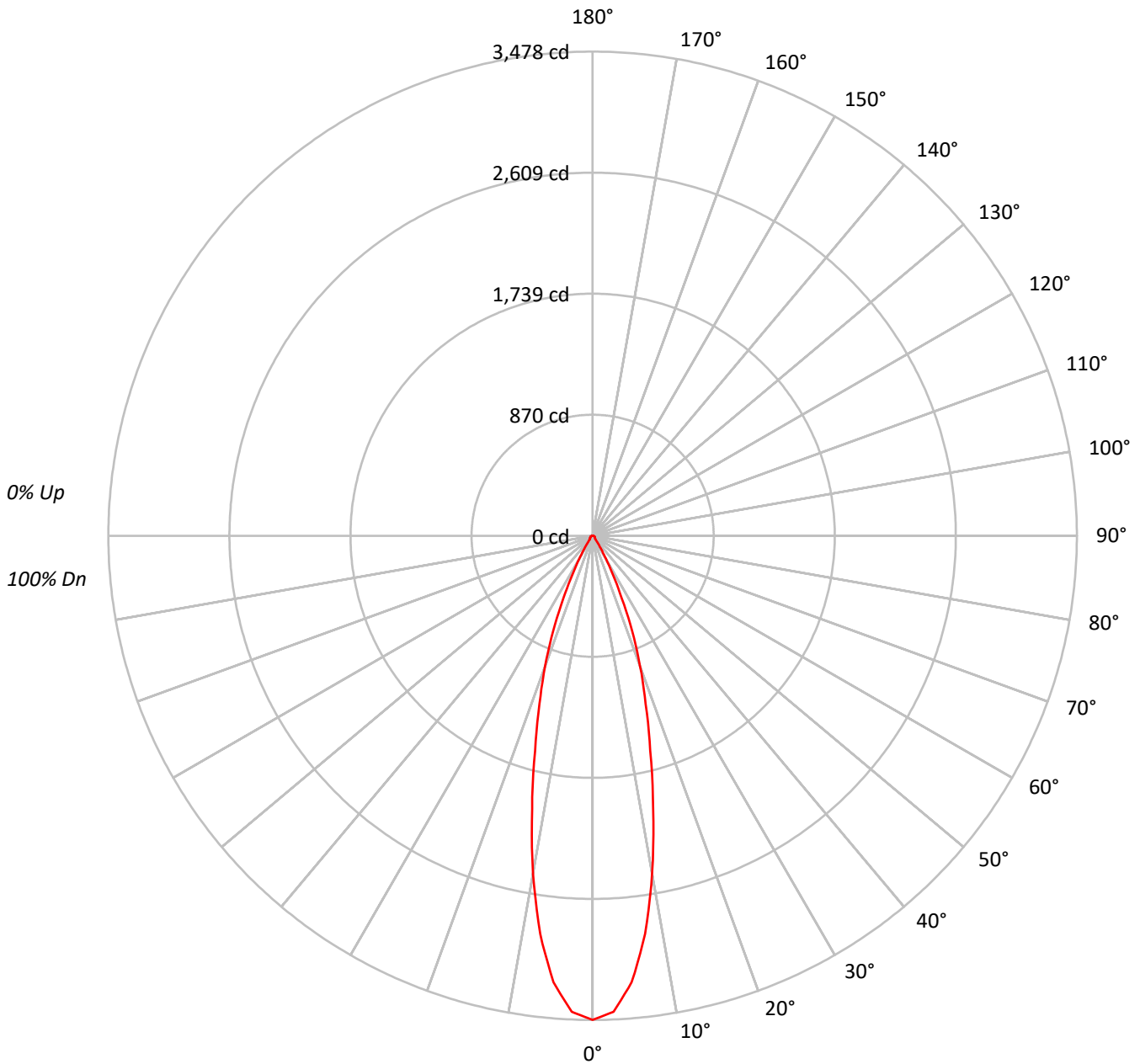
Input Watts (W): 13.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	112	109	107	112	109	107	106	105	104	102	102	101	99	98	97	97	95			
2	110	105	102	99	107	104	100	98	100	98	96	97	95	93	95	93	92	90			
3	105	100	95	92	103	98	95	91	96	93	90	94	91	89	91	89	87	86			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82			
5	98	91	86	82	96	90	85	82	88	84	81	87	83	81	85	82	80	79			
6	94	87	82	78	93	86	82	78	85	81	78	83	80	77	82	79	77	76			
7	91	83	79	75	90	83	78	75	82	78	75	81	77	74	80	76	74	73			
8	88	80	75	72	87	80	75	72	79	75	72	78	74	71	77	74	71	70			
9	85	77	73	69	84	77	72	69	76	72	69	75	72	69	75	71	69	68			
10	82	75	70	67	82	74	70	67	74	70	67	73	69	67	72	69	66	65			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	762592
5°	708473
10°	548465
15°	362522
20°	232397
25°	119596
30°	48286
35°	17748
40°	8616
45°	7722
50°	7437
55°	7914
60°	8201
65°	8613
70°	8655
75°	8811
80°	7829
85°	7799

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 75°
 Luminance: 8811 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.8	26.1
10°-20°	446.7	41.2
20°-30°	236.9	21.8
30°-40°	49.9	4.6
40°-50°	19.6	1.8
50°-60°	18.5	1.7
60°-70°	16.0	1.5
70°-80°	10.5	1.0
80°-90°	3.4	0.3
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°	966.3	89.1
0°-40°	1016.3	93.7
0°-60°	1054.3	97.2
0°-90°	1084.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1084.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3478	
5°	3219	283
15°	1597	447
25°	494	237
35°	66	50
45°	25	20
55°	21	18
65°	17	16
75°	10	11
85°	3	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	3477.7
2.5°	3422.8
5°	3218.6
7.5°	2885.0
10°	2463.2
12.5°	2009.3
15°	1596.9
17.5°	1267.4
20°	995.9
22.5°	739.9
25°	494.3
27.5°	316.1
30°	190.7
32.5°	114.0
35°	66.3
37.5°	39.4
40°	30.1
42.5°	26.9
45°	24.9
47.5°	23.8
50°	21.8
52.5°	21.8
55°	20.7
57.5°	19.7
60°	18.7
62.5°	17.6
65°	16.6
67.5°	14.5
70°	13.5
72.5°	11.4
75°	10.4
77.5°	8.3
80°	6.2
82.5°	5.2
85°	3.1
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)