

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: P886687

Luminaire Tested: ML310LSFL9FS1E-TIR4D25NFL-TL3RDMW-1000LM-2700K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P886687
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-2700K
Description: 3IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

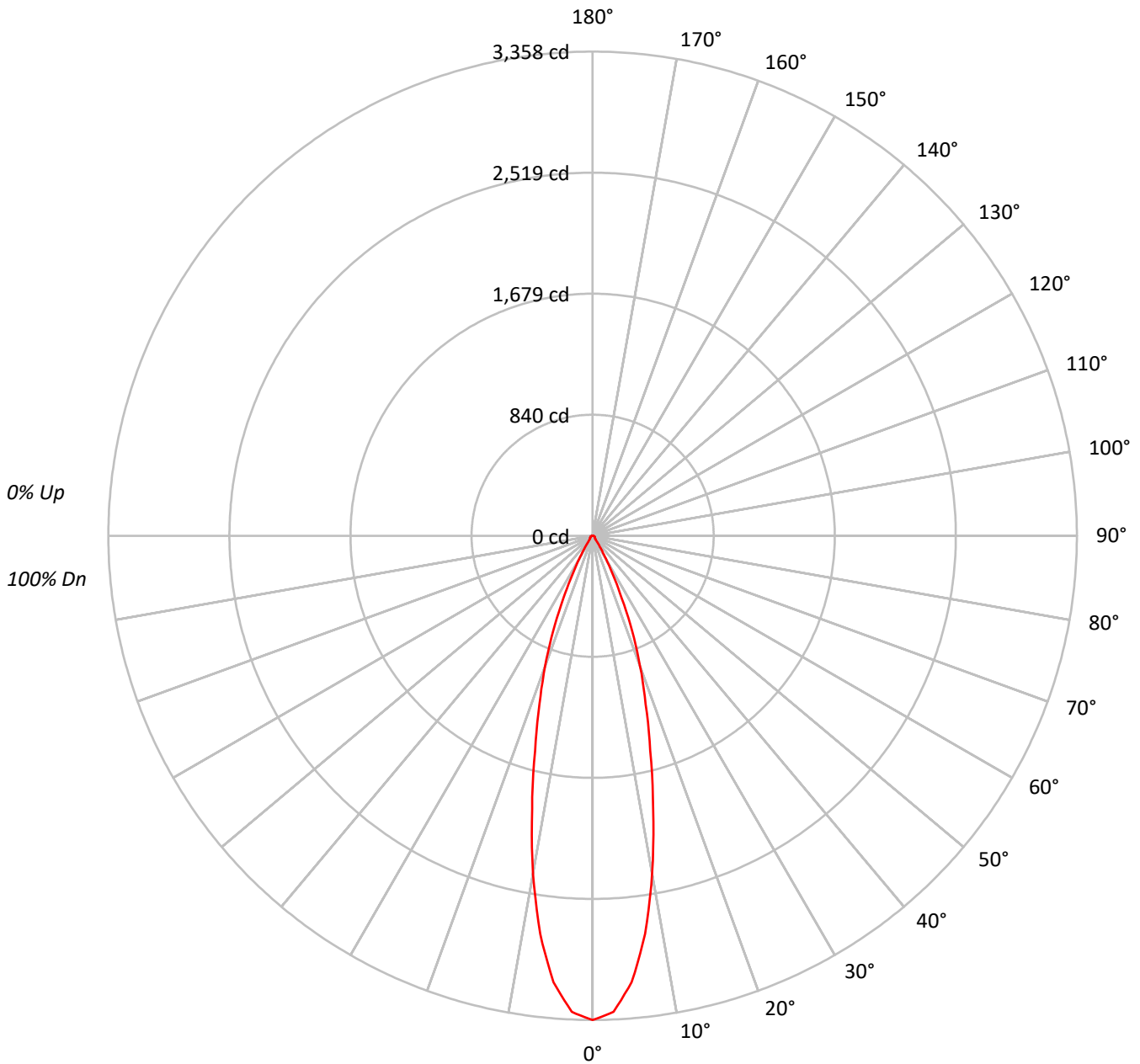
Lumens per Lamp: N/A
Luminaire Lumens: 1046.9 lumens
Efficiency: N/A
Efficacy: 75.9 lumens/watt
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.5
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	94	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	70	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°	736432
5°	684172
10°	529650
15°	350081
20°	224416
25°	115482
30°	46615
35°	17132
40°	8301
45°	7443
50°	7164
55°	7646
60°	7894
65°	8302
70°	8335
75°	8472
80°	7577
85°	7548

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 75°
 Luminance: 8472 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.1	26.1
10°-20°	431.3	41.2
20°-30°	228.8	21.9
30°-40°	48.2	4.6
40°-50°	18.9	1.8
50°-60°	17.8	1.7
60°-70°	15.5	1.5
70°-80°	10.2	1.0
80°-90°	3.3	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°	933.2	89.1
0°-40°	981.3	93.7
0°-60°	1018.0	97.2
0°-90°	1046.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1046.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3358	
5°	3108	273
15°	1542	431
25°	477	229
35°	64	48
45°	24	19
55°	20	18
65°	16	15
75°	10	10
85°	3	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	3358.4
2.5°	3305.3
5°	3108.2
7.5°	2786.0
10°	2378.7
12.5°	1940.4
15°	1542.1
17.5°	1223.9
20°	961.7
22.5°	714.5
25°	477.3
27.5°	305.2
30°	184.1
32.5°	110.1
35°	64.0
37.5°	38.0
40°	29.0
42.5°	26.0
45°	24.0
47.5°	23.0
50°	21.0
52.5°	21.0
55°	20.0
57.5°	19.0
60°	18.0
62.5°	17.0
65°	16.0
67.5°	14.0
70°	13.0
72.5°	11.0
75°	10.0
77.5°	8.0
80°	6.0
82.5°	5.0
85°	3.0
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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