

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: P886713

Luminaire Tested: ML310LSFL9FS1E-TIR4D40FL-TL3RDMB-1000LM-3000K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886713
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL9FS1E-TIR4D40FL-TL3RDMB-1000LM-3000K
Description: 3IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

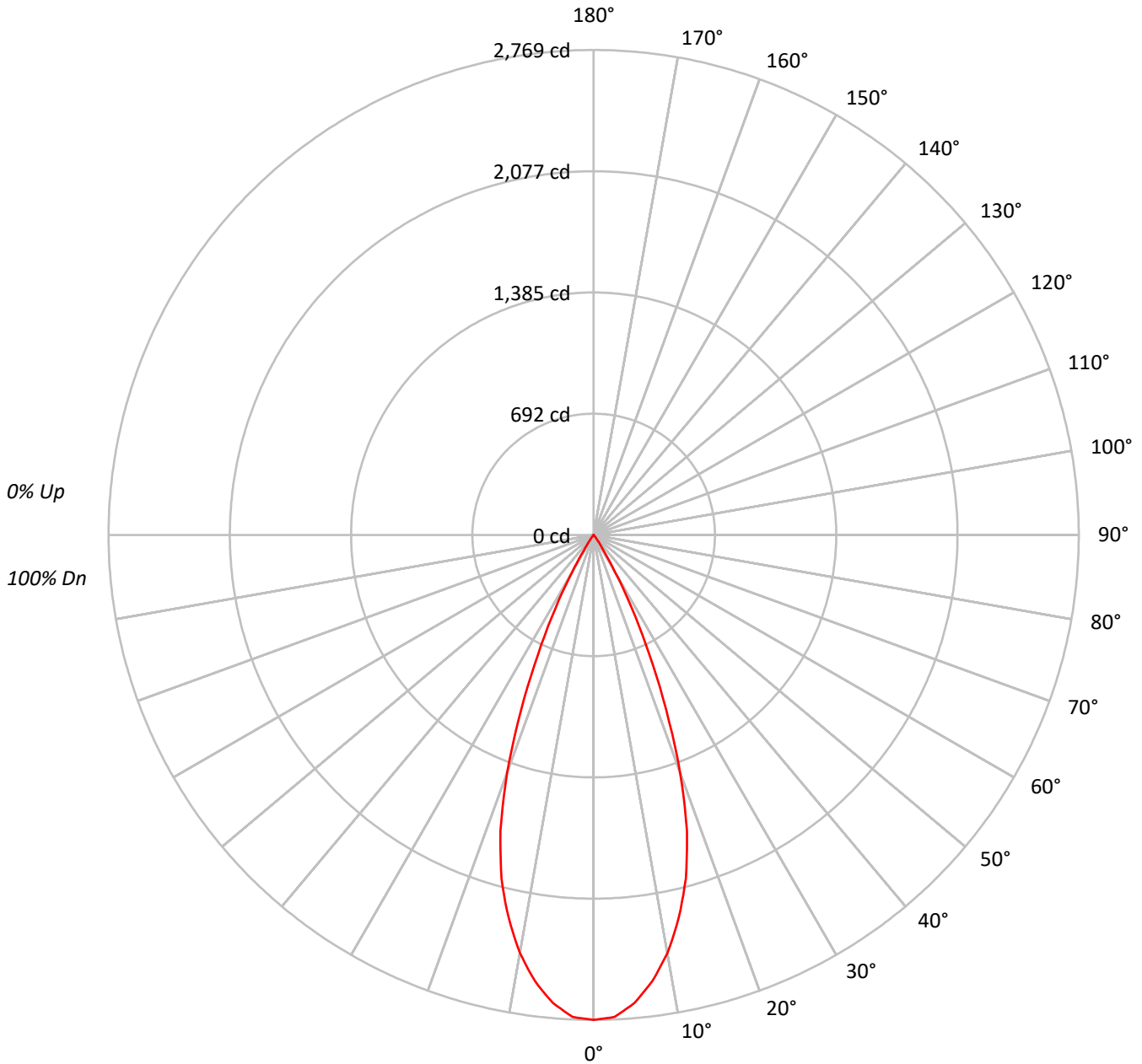
Lumens per Lamp: N/A
Luminaire Lumens: 1192.9 lumens
Efficiency: N/A
Efficacy: 86.4 lumens/watt
Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.62
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	115	112	110	108	112	110	108	107	106	105	103	103	101	100	99	98	98	96				96															
2	110	106	103	100	108	105	102	99	102	99	97	99	97	95	96	95	93	92				92															
3	106	101	97	94	105	100	96	93	97	94	92	95	93	91	93	91	89	88				88															
4	102	97	92	89	101	95	91	88	93	90	87	92	89	86	90	87	85	84				84															
5	99	92	88	84	97	91	87	84	90	86	83	88	85	83	87	84	82	81				81															
6	95	88	84	80	94	88	83	80	86	82	80	85	82	79	84	81	79	77				77															
7	92	85	80	77	91	84	80	77	83	79	76	82	78	76	81	78	76	74				74															
8	89	81	77	74	88	81	77	73	80	76	73	79	75	73	78	75	73	72				72															
9	86	78	74	71	85	78	74	71	77	73	70	76	73	70	76	72	70	69				69															
10	83	75	71	68	82	75	71	68	74	70	68	74	70	67	73	70	67	66				66															

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	607232
5°	590379
10°	539781
15°	461433
20°	336263
25°	181462
30°	61655
35°	11645
40°	3263
45°	651
50°	0
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°	247.7	20.8
10°-20°	551.2	46.2
20°-30°	347.5	29.1
30°-40°	44.0	3.7
40°-50°	2.4	0.2
50°-60°	0.0	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°	1146.5	96.1
0°-40°	1190.5	99.8
0°-60°	1192.9	100.0
0°-90°	1192.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1192.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2769	
5°	2682	248
15°	2033	551
25°	750	348
35°	44	44
45°	2	2
55°	0	0
65°	0	0
75°	0	0
85°	0	0
90°	0	



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CATALOG NUMBER: ML310LSFL9FS1E-TIR4D40FL-TL3RDDB-1000LM-3000K

CANDELA DISTRIBUTION (FULL):

	0°
0°	2769.2
2.5°	2754.7
5°	2682.1
7.5°	2569.2
10°	2424.2
12.5°	2240.8
15°	2032.6
17.5°	1769.4
20°	1441.0
22.5°	1079.5
25°	750.0
27.5°	472.4
30°	243.5
32.5°	102.6
35°	43.5
37.5°	22.8
40°	11.4
42.5°	4.1
45°	2.1
47.5°	1.0
50°	0.0
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)