

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: P885818

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMW-400LM-2700K

Issue Date: 7/18/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885818  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-118)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 7/18/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMW-400LM-2700K  
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

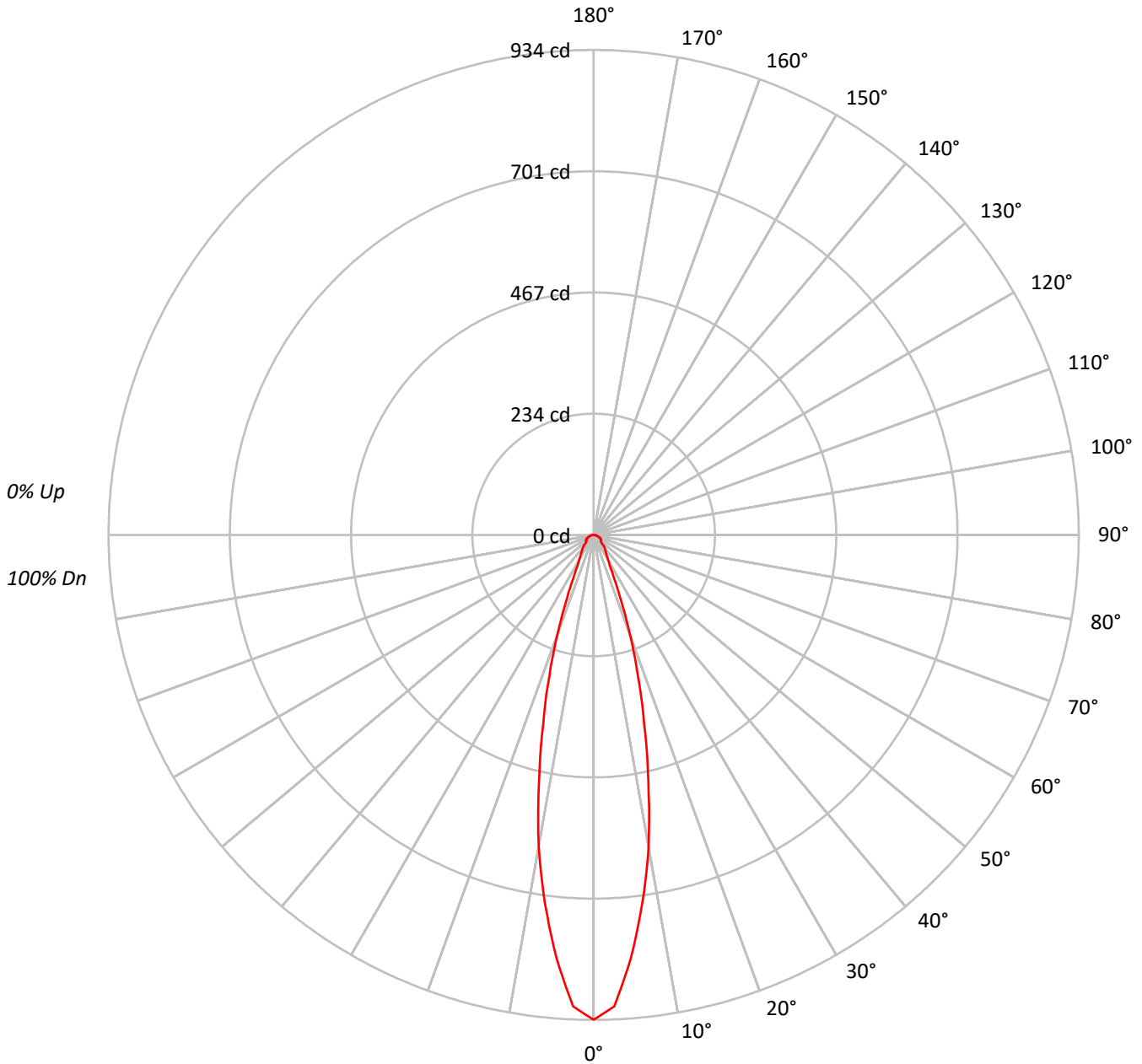
Lumens per Lamp: N/A  
Luminaire Lumens: 305.5 lumens  
Efficiency: N/A  
Efficacy: 50.9 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.46  
Luminous Opening: Circular (Dia: 0.08' x H: 0')  
CIE Type: Direct

Input Watts (W): 6  
Input Voltage (V): NR  
Input Current (Ain): 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																			
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92																			
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85																			
3	102	95	90	86	100	94	89	85	91	87	84	89	85	83	86	84	81	80																			
4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75																			
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71																			
6	89	80	74	70	87	79	74	70	78	73	70	77	72	69	75	72	69	67																			
7	85	77	71	67	84	76	70	67	75	70	66	73	69	66	72	68	66	64																			
8	82	73	68	64	81	73	67	64	72	67	63	71	66	63	70	66	63	62																			
9	79	70	65	61	78	70	64	61	69	64	61	68	64	61	67	63	60	59																			
10	76	67	62	59	75	67	62	59	66	62	58	66	61	58	65	61	58	57																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	1842499
5°	1621514
10°	1221230
15°	766594
20°	428651
25°	204909
30°	125337
35°	98779
40°	85017
45°	58611
50°	58335
55°	61934
60°	63153
65°	60707
70°	57703
75°	53376
80°	45461
85°	45288

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 60°  
 Luminance: 63153 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.5	23.4
10°-20°	104.0	34.0
20°-30°	47.9	15.7
30°-40°	26.1	8.5
40°-50°	18.0	5.9
50°-60°	15.8	5.2
60°-70°	12.6	4.1
70°-80°	7.4	2.4
80°-90°	2.2	0.7
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°	223.4	73.1
0°-40°	249.5	81.7
0°-60°	283.4	92.7
0°-90°	305.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	305.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	934	
5°	818	72
15°	375	104
25°	94	48
35°	41	26
45°	21	18
55°	18	16
65°	13	13
75°	7	7
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	933.6
2.5°	908.6
5°	818.5
7.5°	716.4
10°	609.4
12.5°	485.3
15°	375.2
17.5°	283.2
20°	204.1
22.5°	139.1
25°	94.1
27.5°	68.0
30°	55.0
32.5°	47.0
35°	41.0
37.5°	36.0
40°	33.0
42.5°	28.0
45°	21.0
47.5°	19.0
50°	19.0
52.5°	18.0
55°	18.0
57.5°	17.0
60°	16.0
62.5°	14.0
65°	13.0
67.5°	11.0
70°	10.0
72.5°	8.0
75°	7.0
77.5°	6.0
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)