

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: P885892

Luminaire Tested: ML104LSFL9FS1E-TIR1D40FL-TL1RDSL-400LM-5000K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885892  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-125)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/19/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML104LSFL9FS1E-TIR1D40FL-TL1RDSL-400LM-5000K  
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, METALLIC SILVER TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

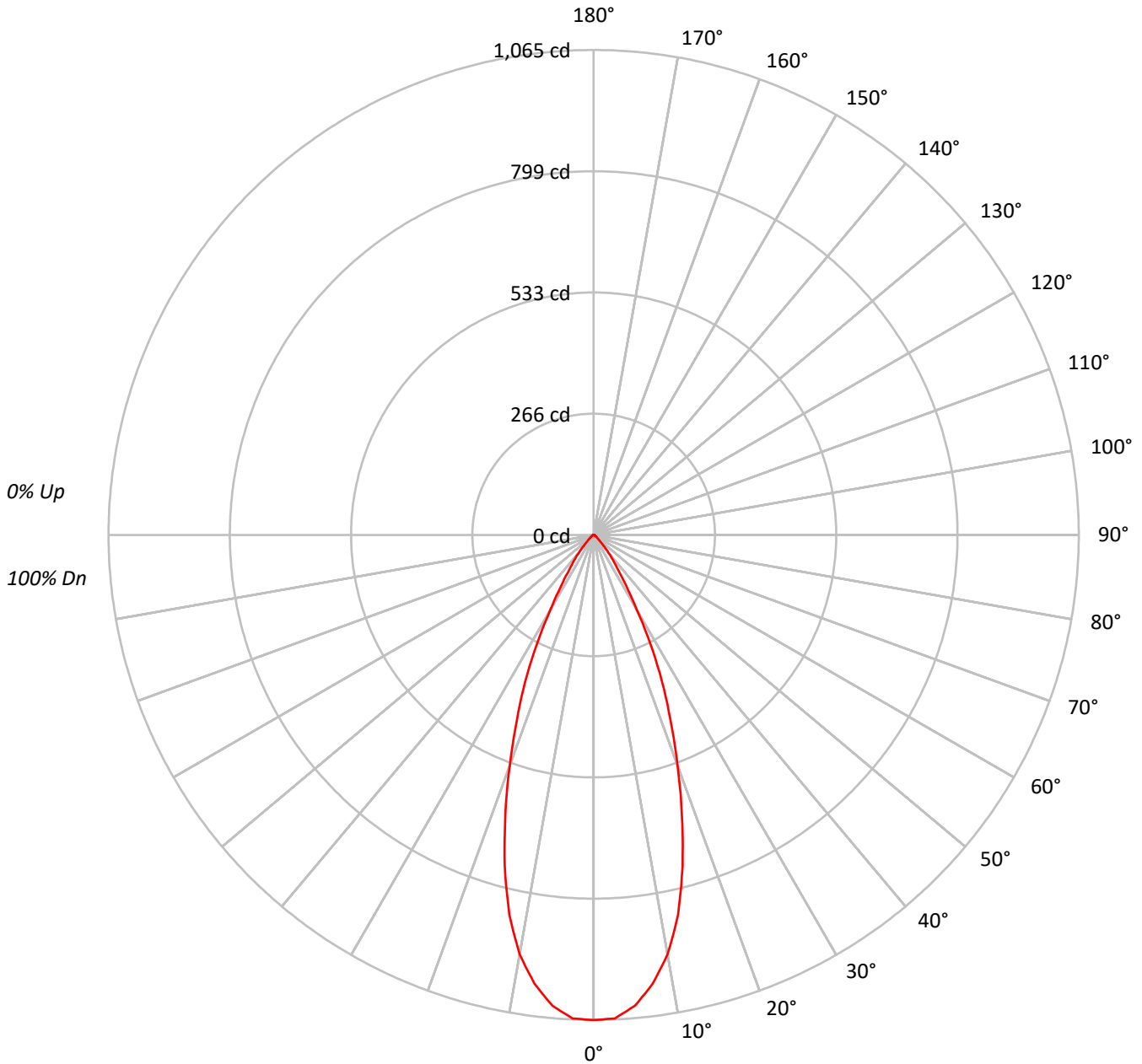
Lumens per Lamp: N/A  
Luminaire Lumens: 553.9 lumens  
Efficiency: N/A  
Efficacy: 92.3 lumens/watt  
Spacing Criteria (0/90/45): 0.65 / 0.65 / 0.66  
Luminous Opening: Circular (Dia: 0.08' x H: 0')  
CIE Type: Direct

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	114	111	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95																			
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89																			
3	104	99	94	91	102	97	93	90	95	91	88	92	89	87	90	88	86	84																			
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80																			
5	96	88	83	79	94	87	82	79	86	81	78	84	80	78	83	79	77	76																			
6	92	84	78	75	90	83	78	74	82	77	74	80	76	73	79	76	73	72																			
7	88	80	74	71	87	79	74	70	78	73	70	77	73	70	76	72	69	68																			
8	84	76	71	67	83	75	70	67	74	70	67	73	69	66	73	69	66	65																			
9	81	73	67	64	80	72	67	64	71	67	64	70	66	63	70	66	63	62																			
10	78	69	64	61	77	69	64	61	68	64	61	68	63	61	67	63	60	59																			

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

	0°
0°	2102414
5°	2056362
10°	1874329
15°	1539522
20°	1129487
25°	772381
30°	432298
35°	225265
40°	127268
45°	54425
50°	31931
55°	22365
60°	15394
65°	12141
70°	7501
75°	9913
80°	14775
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 54425 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.7	17.3
10°-20°	206.0	37.2
20°-30°	160.5	29.0
30°-40°	63.6	11.5
40°-50°	18.0	3.2
50°-60°	5.9	1.1
60°-70°	2.6	0.5
70°-80°	1.4	0.2
80°-90°	0.2	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°	462.2	83.4
0°-40°	525.9	94.9
0°-60°	549.8	99.3
0°-90°	553.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	553.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1065	
5°	1038	96
15°	754	206
25°	355	161
35°	94	64
45°	20	18
55°	6	6
65°	3	3
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1065.3
2.5°	1062.7
5°	1038.0
7.5°	993.8
10°	935.3
12.5°	854.8
15°	753.5
17.5°	644.3
20°	537.8
22.5°	440.4
25°	354.7
27.5°	268.9
30°	189.7
32.5°	132.5
35°	93.5
37.5°	70.2
40°	49.4
42.5°	31.2
45°	19.5
47.5°	14.3
50°	10.4
52.5°	7.8
55°	6.5
57.5°	5.2
60°	3.9
62.5°	2.6
65°	2.6
67.5°	2.6
70°	1.3
72.5°	1.3
75°	1.3
77.5°	1.3
80°	1.3
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)