

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: P885937

Luminaire Tested: ML104LSFL9FS1E-TIR1D55WFL-TL1RDMBB-400LM-5000K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885937  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-135)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/19/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML104LSFL9FS1E-TIR1D55WFL-TL1RDMMB-400LM-5000K  
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE BLACK BAFFLED TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

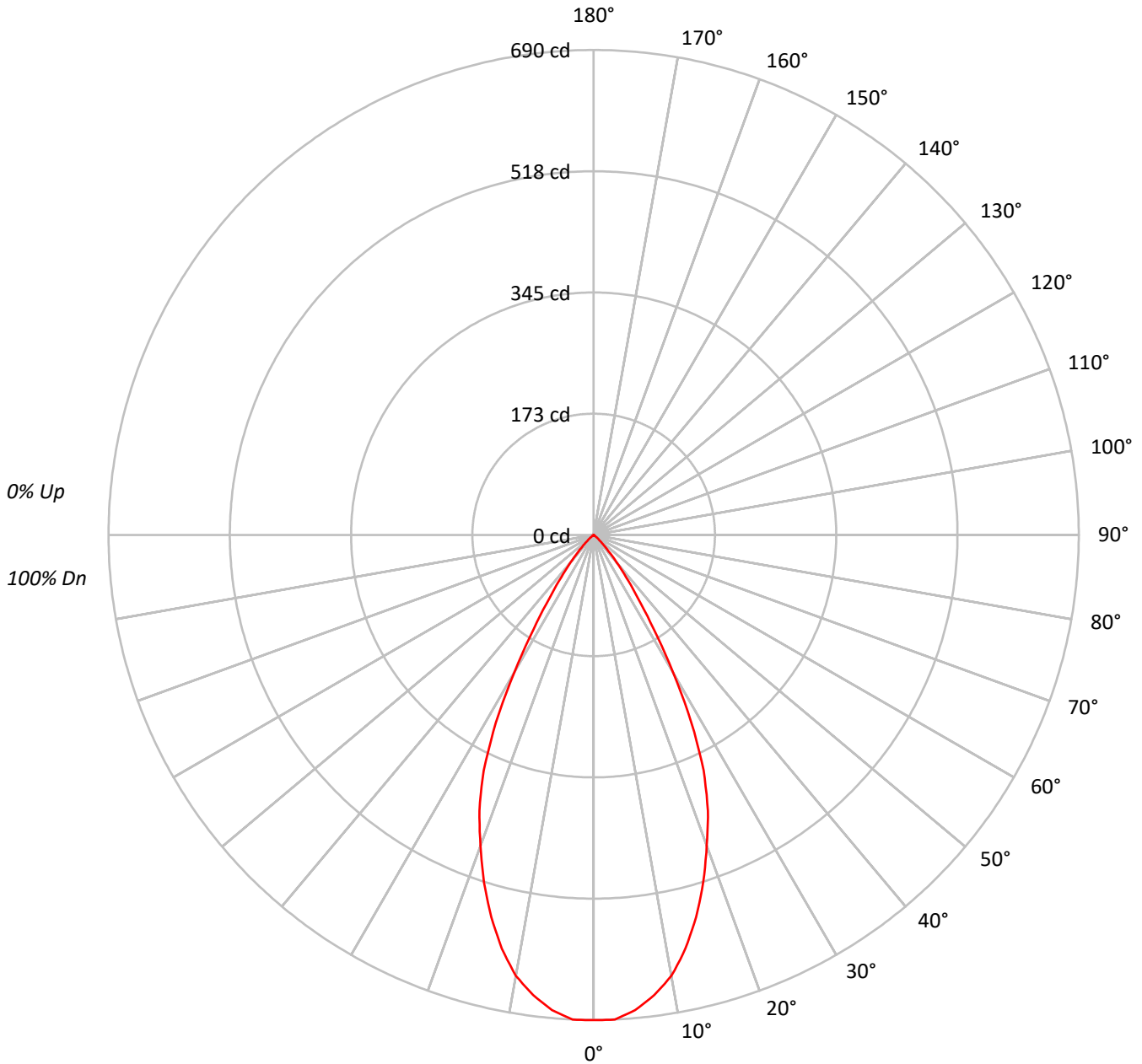
Lumens per Lamp: N/A  
Luminaire Lumens: 474.6 lumens  
Efficiency: N/A  
Efficacy: 79.1 lumens/watt  
Spacing Criteria (0/90/45): 0.81 / 0.81 / 0.78  
Luminous Opening: Circular (Dia: 0.08' x H: 0')  
CIE Type: Direct

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				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	111	109	107	111	109	107	105	105	104	102	101	100	99	98	97	96	94			
2	109	104	101	97	107	103	99	96	99	97	94	96	94	92	94	92	90	89			
3	104	98	93	90	102	97	92	89	94	90	88	92	89	86	89	87	85	83			
4	99	92	87	83	97	91	86	83	89	85	82	87	84	81	85	82	80	78			
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74			
6	90	82	77	73	89	81	76	72	80	75	72	79	75	71	77	74	71	70			
7	86	78	72	68	85	77	72	68	76	71	68	75	71	67	74	70	67	66			
8	83	74	68	64	81	73	68	64	72	67	64	71	67	64	70	66	64	62			
9	79	70	65	61	78	70	64	61	69	64	61	68	64	60	67	63	60	59			
10	76	67	61	58	75	66	61	58	65	61	57	65	60	57	64	60	57	56			

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

	0°
0°	1362336
5°	1344361
10°	1276339
15°	1149687
20°	987514
25°	805480
30°	513425
35°	260440
40°	130875
45°	50796
50°	15965
55°	4473
60°	0
65°	0
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 50796 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.4	13.4
10°-20°	156.2	32.9
20°-30°	163.7	34.5
30°-40°	73.4	15.5
40°-50°	16.6	3.5
50°-60°	1.4	0.3
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°	383.3	80.8
0°-40°	456.6	96.2
0°-60°	474.6	100.0
0°-90°	474.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	474.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	690	
5°	679	63
15°	563	156
25°	370	164
35°	108	73
45°	18	17
55°	1	1
65°	0	0
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	690.3
2.5°	690.3
5°	678.6
7.5°	660.4
10°	636.9
12.5°	603.0
15°	562.7
17.5°	518.4
20°	470.2
22.5°	424.6
25°	369.9
27.5°	300.9
30°	225.3
32.5°	158.9
35°	108.1
37.5°	75.5
40°	50.8
42.5°	31.3
45°	18.2
47.5°	10.4
50°	5.2
52.5°	2.6
55°	1.3
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)