

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P885936

Luminaire Tested: ML104LSFL9FS1E-TIR1D55WFL-TL1RDMBB-400LM-4000K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885936  
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-4000K  
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE BLACK BAFFLED TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

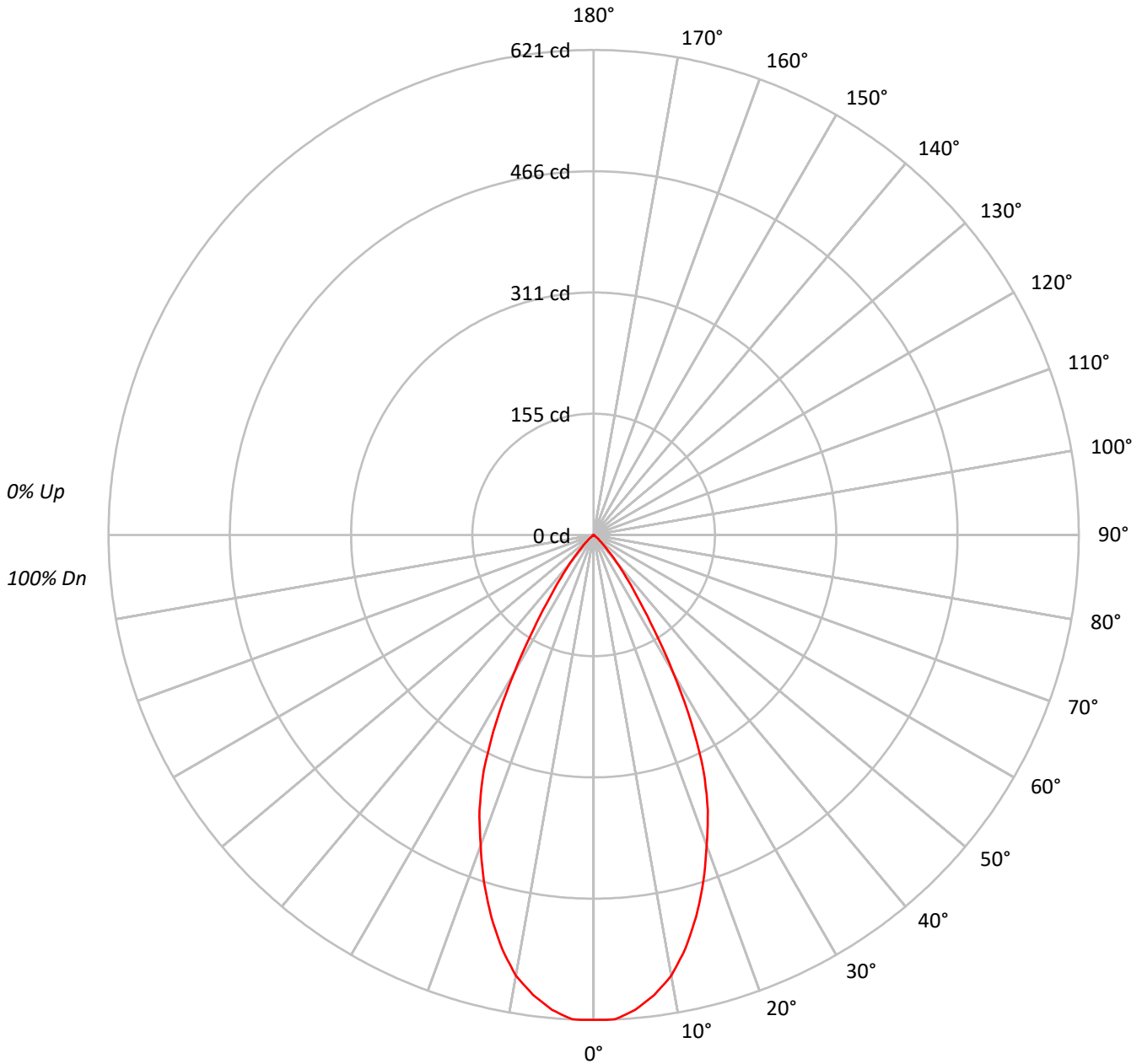
Lumens per Lamp: N/A  
Luminaire Lumens: 427.0 lumens  
Efficiency: N/A  
Efficacy: 71.2 lumens/watt  
Spacing Criteria (0/90/45): 0.81 / 0.81 / 0.78  
Luminous Opening: Circular (Dia: 0.08' x H: 0')  
CIE Type: Direct

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



TEST NUMBER: P885936  
CATALOG NUMBER: ML104LSFL9FS1E-TIR1D55WFL-TL1RDMMB-400LM-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P885936  
 CATALOG NUMBER: ML104LSFL9FS1E-TIR1D55WFL-TL1RDMMBB-400LM-4000K

**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	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°	1225570
5°	1209450
10°	1148285
15°	1034248
20°	888384
25°	724693
30°	461923
35°	234420
40°	117736
45°	45773
50°	14430
55°	4129
60°	0
65°	0
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 45773 cd/sqm



TEST NUMBER: P885936

CATALOG NUMBER: ML104LSFL9FS1E-TIR1D55WFL-TL1RDMMBB-400LM-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.1	13.4
10°-20°	140.5	32.9
20°-30°	147.2	34.5
30°-40°	66.0	15.5
40°-50°	14.9	3.5
50°-60°	1.3	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°	344.8	80.7
0°-40°	410.8	96.2
0°-60°	427.0	100.0
0°-90°	427.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	427.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	621	
5°	610	57
15°	506	140
25°	333	147
35°	97	66
45°	16	15
55°	1	1
65°	0	0
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P885936

CATALOG NUMBER: ML104LSFL9FS1E-TIR1D55WFL-TL1RDMMB-400LM-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	621.0
2.5°	621.0
5°	610.5
7.5°	594.1
10°	573.0
12.5°	542.5
15°	506.2
17.5°	466.4
20°	423.0
22.5°	382.0
25°	332.8
27.5°	270.7
30°	202.7
32.5°	143.0
35°	97.3
37.5°	68.0
40°	45.7
42.5°	28.1
45°	16.4
47.5°	9.4
50°	4.7
52.5°	2.3
55°	1.2
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

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report





Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



— 0°-180°

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)