

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: P886373

Luminaire Tested: ML204LSFL9FS1E-TIR1D40FL-TL2SDSL-550LM-4000K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886373  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-96)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL9FS1E-TIR1D40FL-TL2SDSL-550LM-4000K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, METALLIC SILVER TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

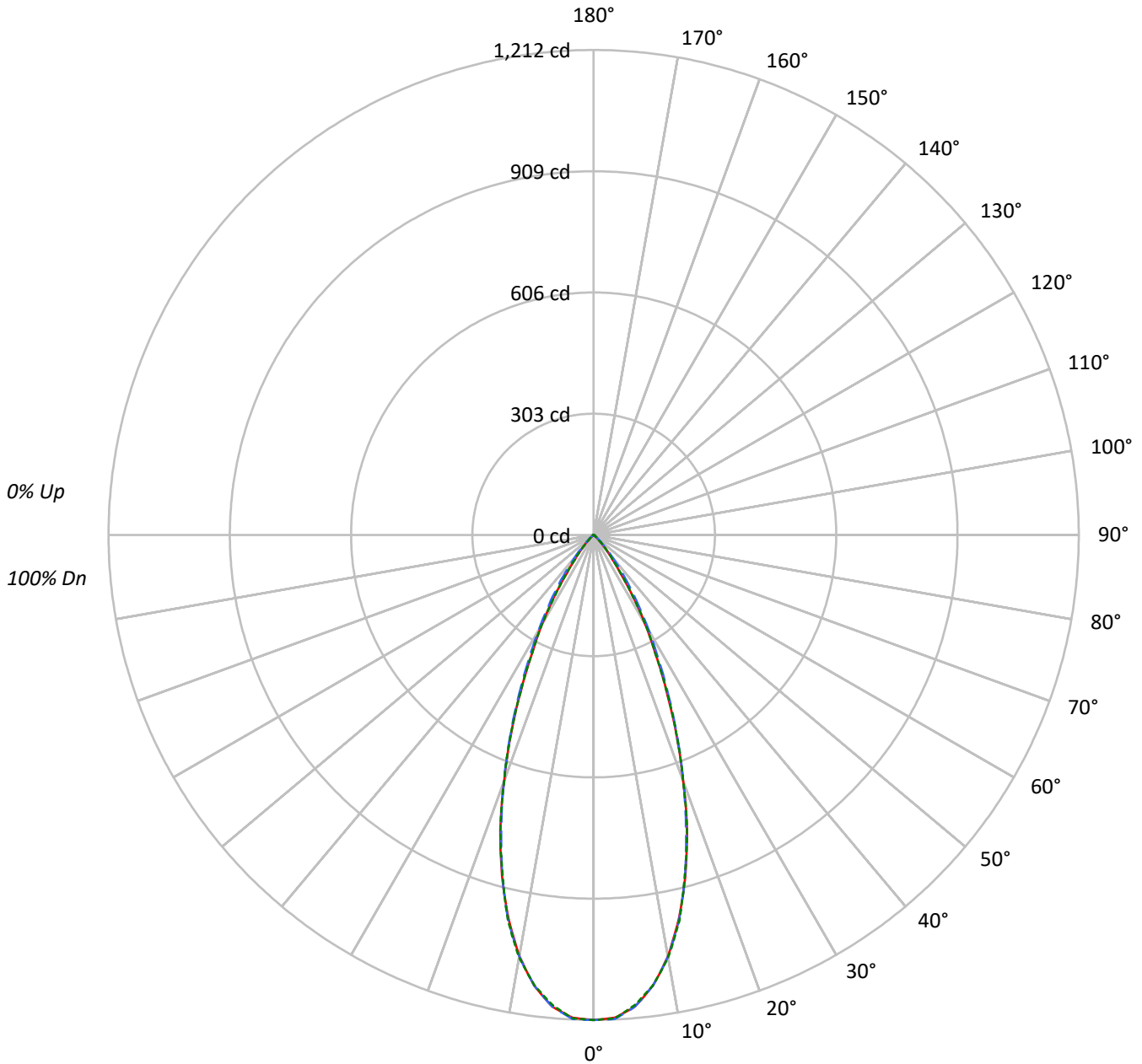
Lumens per Lamp: N/A  
Luminaire Lumens: 664.3 lumens  
Efficiency: N/A  
Efficacy: 84.1 lumens/watt  
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.68  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 7.9  
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: P886373  
CATALOG NUMBER: ML204LSFL9FS1E-TIR1D40FL-TL2SDSL-550LM-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P886373

CATALOG NUMBER: ML204LSFL9FS1E-TIR1D40FL-TL2SDSL-550LM-4000K

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	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	100	100	100	100		
	1	114	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95	95	95	95	95	95		
	2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	89	89	89	89	89	89		
	3	105	99	94	91	103	97	93	90	95	91	89	93	90	87	90	88	86	85	85	85	85	85	85		
	4	100	93	88	85	98	92	88	84	90	86	83	88	85	82	86	84	81	80	80	80	80	80	80		
	5	96	88	83	79	94	87	83	79	86	82	78	84	81	78	83	80	77	76	76	76	76	76	76		
	6	92	84	79	75	90	83	78	74	82	77	74	80	76	74	79	76	73	72	72	72	72	72	72		
	7	88	80	74	71	87	79	74	70	78	73	70	77	73	70	76	72	69	68	68	68	68	68	68		
	8	84	76	71	67	83	75	70	67	74	70	67	73	69	66	72	69	66	65	65	65	65	65	65		
	9	81	72	67	64	80	72	67	64	71	66	63	70	66	63	69	66	63	62	62	62	62	62	62		
	10	78	69	64	61	77	69	64	61	68	63	60	67	63	60	67	63	60	59	59	59	59	59	59		

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

	0°	45°	90°
0°	117452	117452	117452
5°	115109	115109	114682
10°	105128	105246	105462
15°	88679	88458	88238
20°	67454	67567	67454
25°	45952	47256	46187
30°	28804	30661	29051
35°	13719	18035	14251
40°	6563	9219	6424
45°	2274	3932	2274
50°	829	1492	829
55°	372	372	372
60°	213	213	213
65°	252	252	252
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 3932 cd/sqm



TEST NUMBER: P886373

CATALOG NUMBER: ML204LSFL9FS1E-TIR1D40FL-TL2SDSL-550LM-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.3	16.4
10°-20°	242.0	36.4
20°-30°	201.0	30.3
30°-40°	89.0	13.4
40°-50°	19.8	3.0
50°-60°	2.4	0.4
60°-70°	0.8	0.1
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°	552.2	83.1
0°-40°	641.2	96.5
0°-60°	663.5	99.9
0°-90°	664.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	664.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1212	1212	1212	1212	1212	
5°	1184	1184	1184	1183	1179	109
15°	884	879	882	879	880	242
25°	430	439	442	440	432	198
35°	116	135	152	135	120	81
45°	17	22	29	21	17	16
55°	2	2	2	2	2	2
65°	1	1	1	1	1	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P886373

CATALOG NUMBER: ML204LSFL9FS1E-TIR1D40FL-TL2SDSL-550LM-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1212.4	1212.4	1212.4	1212.4	1212.4
2.5°	1208.0	1209.1	1211.3	1208.0	1209.1
5°	1183.7	1183.7	1183.7	1182.6	1179.3
7.5°	1136.2	1135.1	1136.2	1134.0	1135.1
10°	1068.7	1072.1	1069.9	1069.9	1072.1
12.5°	982.5	992.5	985.9	984.8	988.1
15°	884.2	878.7	882.0	878.7	879.8
17.5°	775.9	764.8	767.0	771.4	775.9
20°	654.3	656.5	655.4	656.5	654.3
22.5°	540.5	547.1	544.9	544.9	542.7
25°	429.9	438.8	442.1	439.9	432.1
27.5°	333.8	339.3	351.5	340.4	332.7
30°	257.5	263.0	274.1	261.9	259.7
32.5°	184.6	196.7	207.8	195.6	181.3
35°	116.0	134.8	152.5	134.8	120.5
37.5°	76.3	86.2	109.4	86.2	78.5
40°	51.9	57.5	72.9	56.4	50.8
42.5°	32.1	37.6	46.4	36.5	32.1
45°	16.6	22.1	28.7	21.0	16.6
47.5°	8.8	9.9	18.8	11.1	7.7
50°	5.5	5.5	9.9	5.5	5.5
52.5°	3.3	3.3	4.4	3.3	3.3
55°	2.2	2.2	2.2	2.2	2.2
57.5°	1.1	1.1	2.2	1.1	1.1
60°	1.1	1.1	1.1	1.1	1.1
62.5°	1.1	1.1	1.1	1.1	1.1
65°	1.1	1.1	1.1	1.1	1.1
67.5°	1.1	1.1	0.0	0.0	1.1
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	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







— 0°-180°    - - 45°-225°    - - - - 90°-270°

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)