

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: P886293

Luminaire Tested: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMB-550LM-4000K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886293  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-91)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMB-550LM-4000K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 478.3 lumens  
Efficiency: N/A  
Efficacy: 60.5 lumens/watt  
Spacing Criteria (0/90/45): 0.46 / 0.46 / 0.53  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

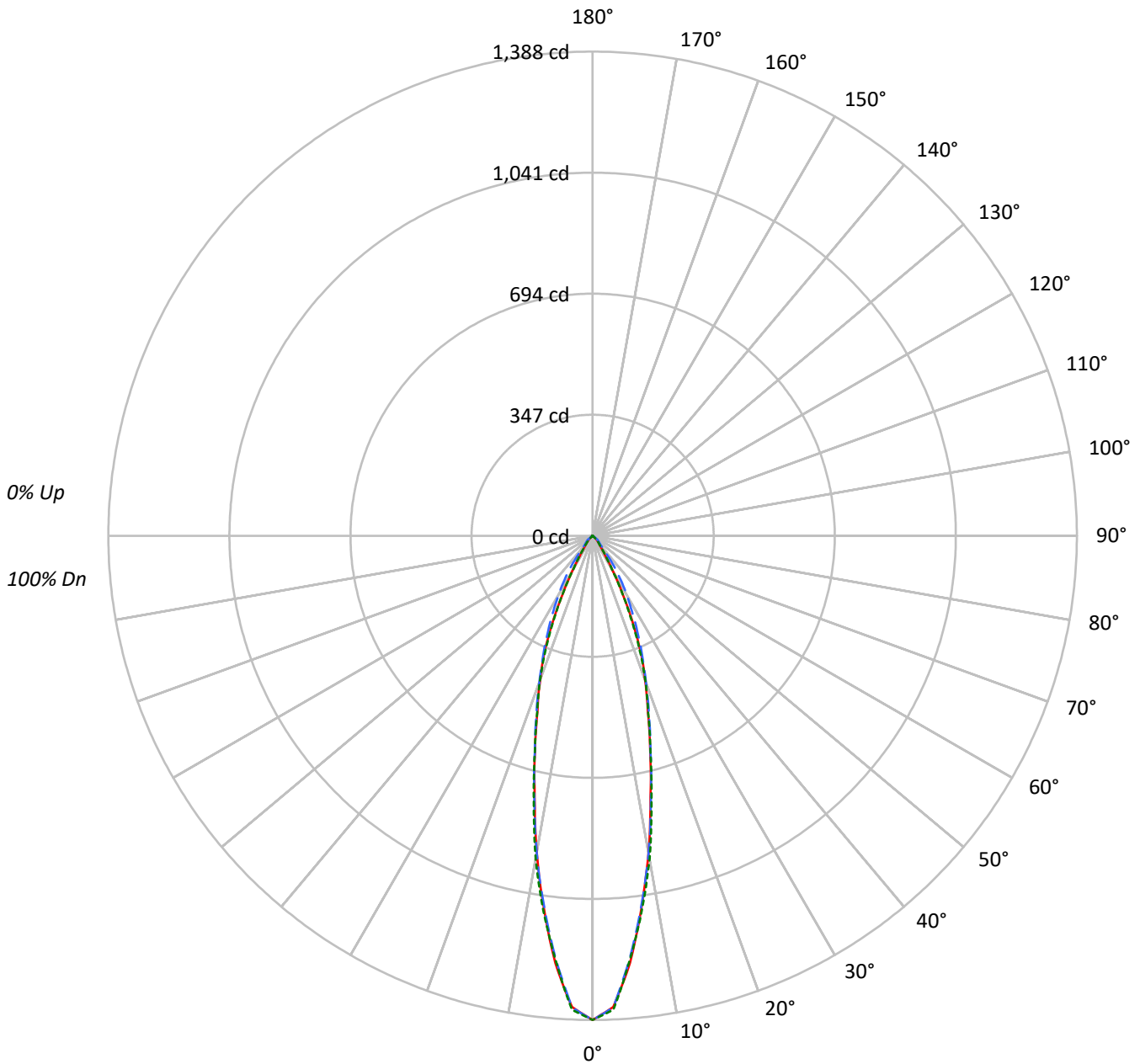
Input Watts (W): 7.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P886293

CATALOG NUMBER: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMB-550LM-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P886293

CATALOG NUMBER: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMB-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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95								
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	94	92	91								
3	105	100	96	93	104	99	95	92	96	93	90	94	91	89	92	90	88	86								
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82								
5	97	90	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	78								
6	94	86	81	78	92	86	81	77	84	80	77	83	79	76	82	78	76	75								
7	90	82	77	74	89	82	77	74	81	76	73	80	76	73	79	75	73	72								
8	87	79	74	71	86	78	74	70	77	73	70	77	73	70	76	72	70	69								
9	84	76	71	68	83	75	71	67	74	70	67	74	70	67	73	69	67	66								
10	81	73	68	65	80	72	68	65	72	67	65	71	67	64	70	67	64	63								

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

	0°	45°	90°
0°	537810	537810	537810
5°	478406	473233	474944
10°	362629	363494	370026
15°	255785	257109	256668
20°	181360	183628	181813
25°	113388	129465	110096
30°	50427	87520	49443
35°	21429	50711	22470
40°	12848	20133	12848
45°	7288	13919	6083
50°	663	10670	663
55°	0	2229	743
60°	0	0	0
65°	0	0	0
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: 13919 cd/sqm



TEST NUMBER: P886293

CATALOG NUMBER: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMB-550LM-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.3	22.4
10°-20°	179.0	37.4
20°-30°	129.9	27.2
30°-40°	46.8	9.8
40°-50°	13.7	2.9
50°-60°	1.7	0.4
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°	416.3	87.0
0°-40°	463.0	96.8
0°-60°	478.3	100.0
0°-90°	478.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	478.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1388	1388	1388	1388	1388	
5°	1230	1219	1217	1227	1221	107
15°	638	638	641	633	640	178
25°	265	293	303	284	258	121
35°	45	62	107	62	48	33
45°	13	18	25	18	11	9
55°	0	1	3	1	1	0
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P886293

CATALOG NUMBER: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMB-550LM-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1387.9	1387.9	1387.9	1387.9	1387.9
2.5°	1352.5	1349.2	1353.6	1354.7	1360.3
5°	1229.9	1218.8	1216.6	1226.6	1221.0
7.5°	1074.1	1075.2	1069.6	1081.8	1082.9
10°	921.6	922.7	923.8	928.2	940.4
12.5°	766.9	770.2	771.3	769.1	779.0
15°	637.6	637.6	640.9	633.2	639.8
17.5°	526.0	530.4	535.9	529.3	528.2
20°	439.8	443.1	445.3	444.2	440.9
22.5°	361.3	368.0	370.2	361.3	349.2
25°	265.2	292.8	302.8	284.0	257.5
27.5°	180.1	217.7	243.1	210.0	177.9
30°	112.7	144.8	195.6	144.8	110.5
32.5°	68.5	90.6	150.3	93.9	71.8
35°	45.3	61.9	107.2	61.9	47.5
37.5°	33.2	43.1	63.0	43.1	34.3
40°	25.4	29.8	39.8	30.9	25.4
42.5°	19.9	23.2	29.8	23.2	18.8
45°	13.3	17.7	25.4	17.7	11.1
47.5°	2.2	9.9	22.1	8.8	5.5
50°	1.1	1.1	17.7	3.3	1.1
52.5°	1.1	1.1	9.9	1.1	1.1
55°	0.0	1.1	3.3	1.1	1.1
57.5°	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
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)