

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: P886361

Luminaire Tested: ML204LSFL9FS1E-TIR1D40FL-TL2SDMW-550LM-3000K

Issue Date: 6/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P886361
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-95)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML204LSFL9FS1E-TIR1D40FL-TL2SDMW-550LM-3000K
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 627.8 lumens
Efficiency: N/A
Efficacy: 79.5 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

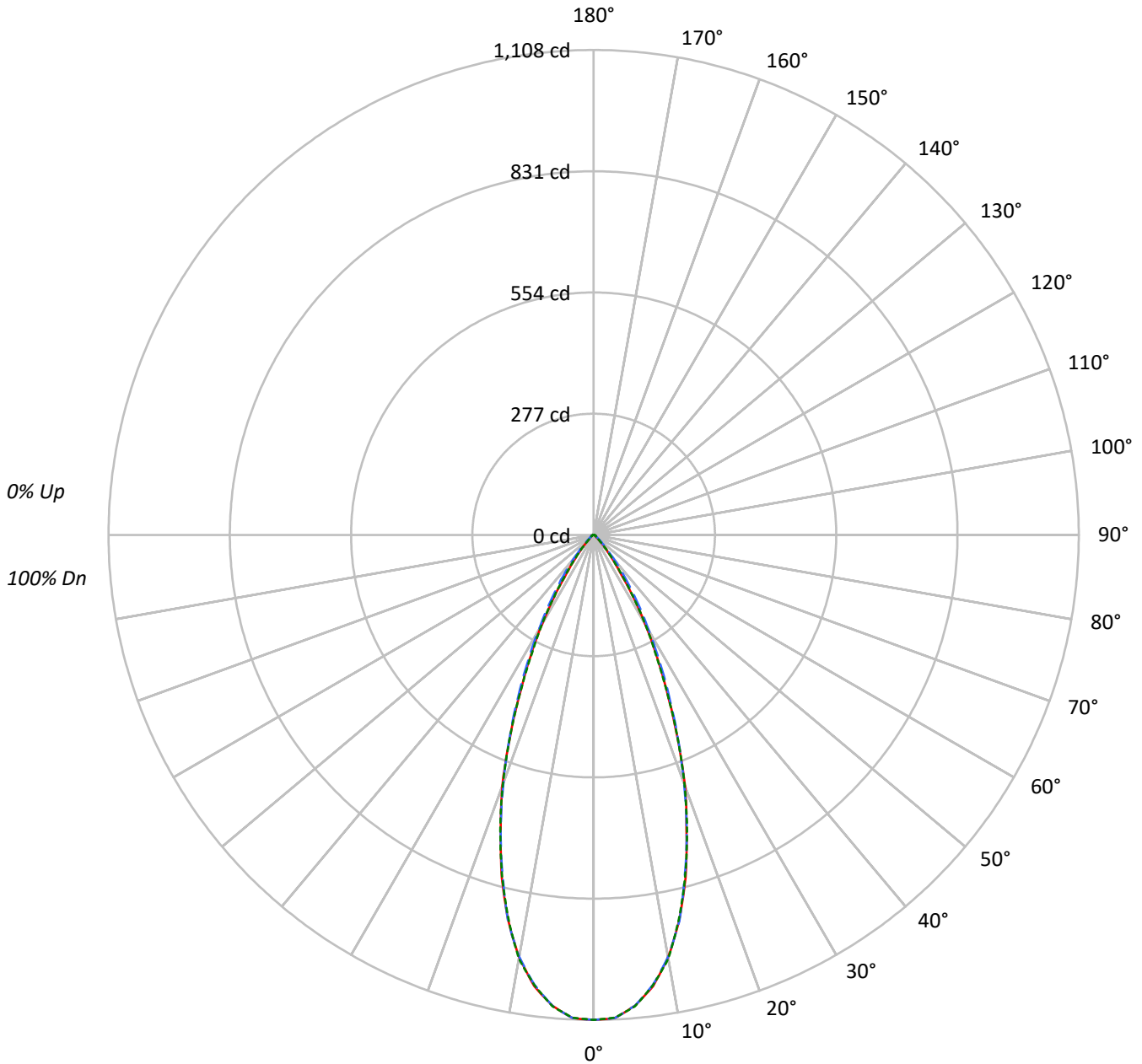
Input Watts (W): 7.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P886361

CATALOG NUMBER: ML204LSFL9FS1E-TIR1D40FL-TL2SDMW-550LM-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P886361

CATALOG NUMBER: ML204LSFL9FS1E-TIR1D40FL-TL2SDMW-550LM-3000K

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								
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94								
2	109	104	100	97	107	102	99	96	99	96	94	96	94	92	94	92	90	88								
3	104	98	93	90	102	96	92	89	94	90	87	91	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	91	83	77	73	89	82	77	73	80	76	72	79	75	72	78	74	71	70								
7	87	78	73	69	86	78	73	69	76	72	68	75	71	68	74	71	68	66								
8	83	75	69	65	82	74	69	65	73	68	65	72	68	65	71	67	64	63								
9	80	71	66	62	79	71	65	62	70	65	62	69	65	62	68	64	61	60								
10	77	68	63	59	76	67	62	59	67	62	59	66	62	59	65	61	58	57								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	107338	107338	107338
5°	105035	105035	105142
10°	96402	96294	96707
15°	81297	80676	80986
20°	62917	62175	62495
25°	42275	43601	42275
30°	26455	28189	26332
35°	12701	16852	13553
40°	6399	8878	6399
45°	2548	4384	2836
50°	1402	2336	1552
55°	1047	1402	1216
60°	1008	1201	1008
65°	940	1192	940
70°	878	1161	878
75°	1160	1160	1160
80°	1172	1172	1172
85°	1112	1112	1112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 4384 cd/sqm



TEST NUMBER: P886361

CATALOG NUMBER: ML204LSFL9FS1E-TIR1D40FL-TL2SDMW-550LM-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	15.9
10°-20°	221.8	35.3
20°-30°	185.1	29.5
30°-40°	83.3	13.3
40°-50°	21.9	3.5
50°-60°	7.1	1.1
60°-70°	4.7	0.8
70°-80°	3.0	0.5
80°-90°	1.0	0.2
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°	506.7	80.7
0°-40°	590.0	94.0
0°-60°	619.1	98.6
0°-90°	627.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	627.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1108	1108	1108	1108	1108	
5°	1080	1081	1080	1080	1081	100
15°	811	808	804	805	808	222
25°	396	403	408	404	396	184
35°	107	125	142	127	115	75
45°	19	25	32	25	21	18
55°	6	7	8	7	7	6
65°	4	5	5	5	4	4
75°	3	3	3	3	3	3
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



TEST NUMBER: P886361

CATALOG NUMBER: ML204LSFL9FS1E-TIR1D40FL-TL2SDMW-550LM-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1108.0	1108.0	1108.0	1108.0	1108.0
2.5°	1104.9	1104.9	1104.9	1105.9	1103.9
5°	1080.1	1081.2	1080.1	1080.1	1081.2
7.5°	1039.9	1039.9	1036.8	1037.8	1037.8
10°	980.0	977.9	978.9	977.9	983.1
12.5°	902.5	903.5	903.5	905.6	899.4
15°	810.6	807.5	804.4	805.4	807.5
17.5°	705.3	705.3	706.3	704.3	709.4
20°	610.3	606.2	603.1	598.9	606.2
22.5°	498.8	500.8	501.9	498.8	499.8
25°	395.5	402.7	407.9	403.8	395.5
27.5°	311.9	311.9	325.3	316.0	306.7
30°	236.5	242.7	252.0	242.7	235.4
32.5°	168.3	180.7	193.1	181.7	169.4
35°	107.4	124.9	142.5	127.0	114.6
37.5°	73.3	83.6	103.3	84.7	76.4
40°	50.6	55.8	70.2	56.8	50.6
42.5°	33.0	38.2	47.5	38.2	33.0
45°	18.6	24.8	32.0	24.8	20.7
47.5°	11.4	14.5	22.7	15.5	13.4
50°	9.3	11.4	15.5	10.3	10.3
52.5°	8.3	9.3	10.3	9.3	8.3
55°	6.2	7.2	8.3	7.2	7.2
57.5°	6.2	6.2	7.2	6.2	6.2
60°	5.2	6.2	6.2	6.2	5.2
62.5°	5.2	5.2	5.2	5.2	5.2
65°	4.1	5.2	5.2	5.2	4.1
67.5°	4.1	4.1	4.1	4.1	4.1
70°	3.1	4.1	4.1	4.1	3.1
72.5°	3.1	3.1	3.1	3.1	3.1
75°	3.1	3.1	3.1	3.1	3.1
77.5°	2.1	2.1	2.1	2.1	2.1
80°	2.1	2.1	2.1	2.1	2.1
82.5°	1.0	1.0	1.0	1.0	1.0
85°	1.0	1.0	1.0	1.0	1.0
87.5°	0.0	1.0	0.0	1.0	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)