TEST REPORT N°: AQMP-ESH-P24110083B-A3

Supplement "A3" to test report No.: AQMP-ESH-P24110083B-A2 dated on 2025-02-27

EMC TEST REPORT

Applicant :	Ningbo Congyao Electric Appliance Co., LTD
Address :	Floor 1-5, Building 5, No.228, Pengmin Branch Road, Pengqiao Village, Henghe Town, Cixi City, Ningbo, Zhejiang Province, China
Manufacturer :	Ningbo Congyao Electric Appliance Co., LTD
Address :	Floor 1-5, Building 5, No.228, Pengmin Branch Road, Pengqiao Village, Henghe Town, Cixi City, Ningbo, Zhejiang Province, China
Factory :	Ningbo Congyao Electric Appliance Co., LTD
Address :	Floor 1-5, Building 5, No.228, Pengmin Branch Road, Pengqiao Village, Henghe Town, Cixi City, Ningbo, Zhejiang Province, China
This document includes : 35 pages	

Product :	Air fryer
Model name :	Refer to Clause 3.1
Trade mark :	--
Rated voltage :	AC 220-240V, 50-60Hz
Rated input power :	2200W
Highest clock frequency :	⩽15 MHz
Protection class :	I
Tests realised :	Refer to Clause 3.1
Test date :	Jun. 23 to Jun.24, 2025

Standards used (date) :	EN IEC 55014-1:2021 EN IEC 55014-2:2021 EN IEC 61000-3-2:2019+A1:2021+A2:2024 EN 61000-3-3:2013+A1:2019+A2:2021
Clauses examined :	All Clauses Relevant.

CONCLUSION :The sample does satisfy the clauses examined .

Test done by:	Approved by:
Name : Tony MAO Date : Jul.24, 2025	Name : Wen ZHU Date : Jul.24, 2025

TEST REPORT N°: AQMP-ESH-P24110083B-A3

Supplement "A3" to test report No.: AQMP-ESH-P24110083B-A2 dated on 2025-02-27

Table of Content

TEST REPORT N°: AQMP-ESH-P24110083B-A3

Supplement "A3" to test report No.: AQMP-ESH-P24110083B-A2 dated on 2025-02-27

Release control record

Report No.	Description	Date Issued
AQMP-ESH-P24110083B	Original release	25/12/2024
AQMP-ESH-P24110083B-A1	Updating standards	21/01/2025
AQMP-ESH-P24110083B-A2	Adding IEC standards	27/02/2025
AQMP-ESH-P24110083B-A3	Adding new models	24/07/2025

1 Summary of test results

No.	Item	Result
Emission part:		
1	Continuous disturbances	PASS
2	Magnetic field strength	NA
3	Disturbance power	PASS
4	Radiated disturbances electric field	PASS
5	Discontinuous disturbances	PASS
6	Harmonic current emission	PASS
7	Voltage fluctuation and flicker	PASS
Immunity part:		
8	Electrostatic discharge	PASS
9	RF electromagnetic fields	NA
10	Fast transients	PASS
11	Surge	PASS
12	Injected current	PASS
13	Voltage dips	PASS

2 General information of laboratory

2.1 Test facility

☐ **Laboratory name:** LCIE China Company Limited

Testing location: Building C, No. 829, Xinzhuan Road, Shanghai, P.R.China (201612)

☒ The tests done in this report are subcontracted to :

Laboratory name: Ningbo Customs District Technology Center

Testing location: Block E3 & G1, Ningbo Qianwan Integrated Free Trade Zone, Ningbo, Zhejiang, China (Electric Testing Laboratory Qianwan Branch)

2.2 Measurement uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

This lab's measurement uncertainty ULab, is low than UCispr , Table 1 – Values of UCispr of CISPR 16-4-2, therefore compliance is deemed to occur if no measured disturbance exceeds the disturbance limit.

No.	Item	Measurement Uncertainty
1	Conducted Emission at mains port using AMN	2.64dB (9kHz to 150kHz)
		2.64dB (150kHz to 30MHz)
2	Conducted Emission at mains port using VP	1.82dB (150kHz to 30MHz)
3	Conducted Emission at telecommunication port using AAN	4.41dB (150kHz to 30MHz)
4	Radiated Power	3.40dB
5	Radiated emission	Horizontal: 4.54dB (30MHz-1GHz) Vertical: 4.68dB (30MHz-1GHz)
		Horizontal: 3.88 dB (1GHz-6GHz) Vertical: 4.00 dB (1GHz-6GHz)
6	Click	2.72dB (150kHz to 30MHz)
7	Harmonic Current Emissions	2.38%
8	Voltage Fluctuations and Flicker	2.38%

3 General product information

3.1 Specification of product

Operating modes: ☒ Mode A: The apparatus was worked continuously.
☐ Mode B:
☐ Mode C:

Types of port: ☒ AC mains port
☐ auxiliary port
☐ wired network port
☐ fence port
☒ enclosure port

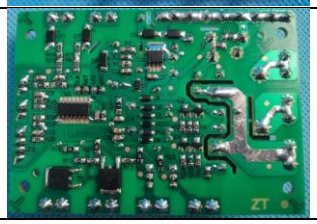
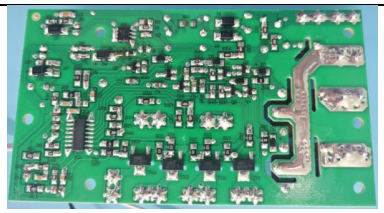
Special comments: This report is updated report based on history report AQMP-ESH-P24110083B-A2 for adding new models, which were marked in "**Bold**" in below model list. Alternative new main PCB 2 and display PCB 2 for all models. So all EMC tests were performed on model CY-10005-E with new main PCB 2 and display PCB 2. Other test results can refer to history report AQMP-ESH-P24110083B-A2.

Model list:

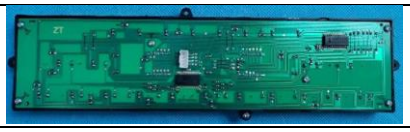
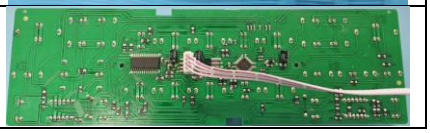
Model	Rated input Power	Rated Voltage / Frequency	Control type	Main board	Display board
CY-10001-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10005-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10006-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10007-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10008-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10009-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10010-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10011-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10012-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10013-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10014-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10015-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10016-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**

CY-10017-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10018-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10019-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10020-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10021-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10022-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10003-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10002-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**
CY-10004-E	2200W	220-240V 50-60Hz	electrical	PCB 1 or **PCB 2**	PCB 1 or **PCB 2**

Main board:

PCB 1	**PCB 2**
	
	

Display board:

PCB 1	**PCB 2**
	
	

3.2 Description of auxiliary equipment and associated equipment

N/A

3.3 Operation conditions

The EUT operating and testing at below conditions:

Ambient conditions:	Temperature	:	21-24 °C
	Relative humidity	:	48-55 %
	Atmospheric pressure	:	101 kPa

3.4 Photograph of sample

Refer to Appendix A

4 Test procedure and results for emission

4.1 Continuous disturbances, AC mains port (150 kHz – 30 MHz)

4.1.1 Test condition

Applicable Standard:	**EN IEC 55014-1:2021**	
Applied limit class:	☐	Table 2 (Equipment with active IPT function which are 100 V rated and without an earth connection); AC mains port
	☐	Table 2 (Equipment with active IPT function; Other appliances); AC mains port
	☒	Table 5 (Columns 2 and 3); AC mains port
	☐	Table 6 (Columns 2 and 3); AC mains port; P ≤ 700 W
	☐	Table 6 (Columns 4 and 5); AC mains port; 700 W < P ≤ 1000 W
	☐	Table 6 (Columns 6 and 7); AC mains port; P > 1000 W
	☐	Other: --
Test setup description:	☐	Setup Type A (40 cm distance to vertical ground plane, 80 cm over ground plane)
	☒	Setup Type B (40 cm distance to horizontal ground plane)
	☐	Floor standing equipment setup (10 cm over ground plane)
	☐	Other: --
	☐	Artificial hand applied
Test method applied:	☒	Artificial mains network
	☐	Other: --
Remark:	--	

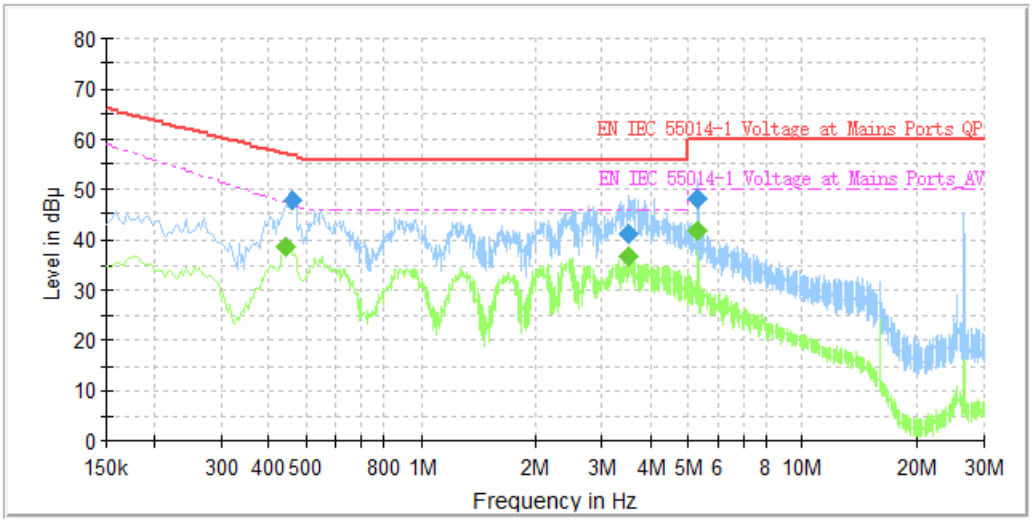
Limits for AC mains port of equipment with active IPT functions				
Frequency range (MHz)	**Appliances which are 100 V rated and without an earth connection**		**All other appliances**	
	Quasi-peak (dBµV)	**Average (dBµV)**	**Quasi-peak (dBµV)**	**Average (dBµV)**
0.009-0.05	122	-	110	-
0.05-0.15	Decreasing linearly with logarithm of frequency from: 102-92	-	Decreasing linearly with logarithm of frequency from: 90-80	-
0.15-0.5	Decreasing linearly with logarithm of frequency from:			
	72-62	62-52	66-56	56-46
0.5-5	56	46	56	46
5-30	60	50	60	50

General limits		
Frequency range (MHz)	**Quasi-peak (dBµV)**	**Average (dBµV)**
0.15-0.5	Decreasing linearly with logarithm of frequency from:	
	66-56	59-46
0.5-5	56	46
5-30	60	50

Tools						
	P ≤ 700 W		**700 W < P ≤ 1000**		**P > 1000 W**	
Frequency range (MHz)	**Quasi-peak (dBµV)**	**Average (dBµV)**	**Quasi-peak (dBµV)**	**Average (dBµV)**	**Quasi-peak (dBµV)**	**Average (dBµV)**
0.15-0.35	Decreasing linearly with logarithm of frequency from:					
	66-59	59-49	70-63	63-53	76-69	69-59
0.35-5	59	49	63	53	69	59
5-30	64	54	68	58	74	64

4.1.2 Test results

Model:	**CY-10005-E**
Test mode:	Mode A
Test voltage:	AC 230V, 50Hz



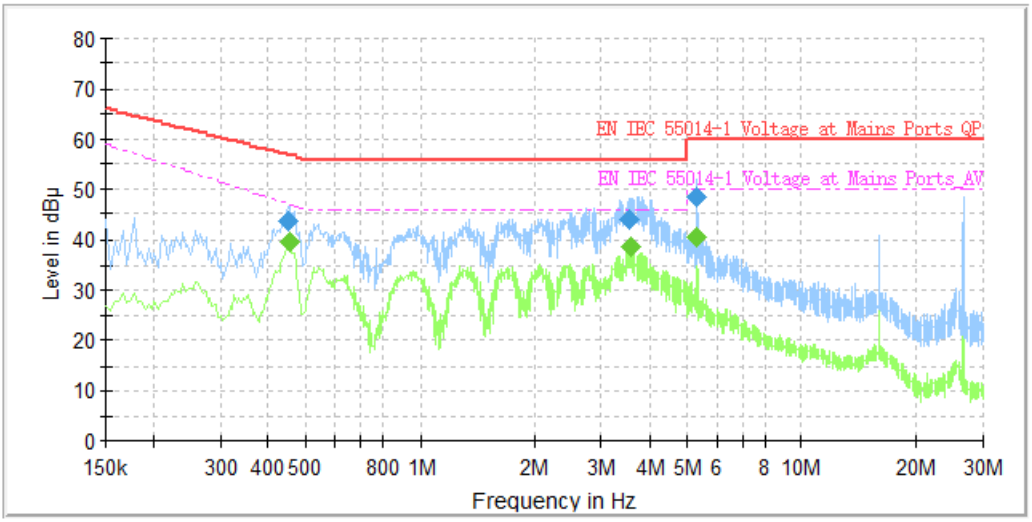
Final_Result

Frequency (MHz)	QuasiPeak (dB µV)	CAverage (dB µV)	Limit (dB µ	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter
0.442000	---	38.43	47.33	8.90	1000.0	9.000	L1	OFF
0.462000	47.63	---	56.66	9.03	1000.0	9.000	L1	OFF
3.482000	---	36.78	46.00	9.22	1000.0	9.000	L1	OFF
3.506000	41.20	---	56.00	14.80	1000.0	9.000	L1	OFF
5.334000	48.30	---	60.00	11.70	1000.0	9.000	L1	OFF
5.334000	---	41.82	50.00	8.18	1000.0	9.000	L1	OFF

(continuation of the "Final_Result" table from column 14 ...)

Frequency (MHz)	Corr. (dB)	Comment
0.442000	10.3	
0.462000	10.3	
3.482000	10.4	
3.506000	10.4	
5.334000	10.5	
5.334000	10.5	

Model:	**CY-10005-E**
Test mode:	Mode A
Test voltage:	AC 230V, 50Hz



Final_Result

Frequency (MHz)	QuasiPeak (dB µV)	CAverage (dB µV)	Limit (dB µ	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter
0.454000	43.62	---	56.80	13.18	1000.0	9.000	N	OFF
0.458000	---	39.59	46.95	7.36	1000.0	9.000	N	OFF
3.554000	44.16	---	56.00	11.84	1000.0	9.000	N	OFF
3.594000	---	38.46	46.00	7.54	1000.0	9.000	N	OFF
5.334000	48.40	---	60.00	11.60	1000.0	9.000	N	OFF
5.334000	---	40.49	50.00	9.51	1000.0	9.000	N	OFF

(continuation of the "Final_Result" table from column 14 ...)

Frequency (MHz)	Corr. (dB)	Comment
0.454000	10.2	
0.458000	10.2	
3.554000	10.4	
3.594000	10.4	
5.334000	10.5	
5.334000	10.5	

4.2 Continuous disturbances, Auxiliary port (150 kHz – 30 MHz)

4.2.1 Test condition

Applicable Standard:	**EN IEC 55014-1:2021**	
Applied limit class:	☐	Table 5 (Columns 4 and 5); Auxiliary port; Disturbance voltage
	☐	Table 5 (Columns 6 and 7); Auxiliary port; Disturbance current
	☐	Wired Network port according to CISPR 32 class B
	☐	Other: --
Test setup description:	☐	Setup Type A (40 cm distance to vertical ground plane, 80 cm over ground plane)
	☐	Setup Type B (40 cm distance to horizontal ground plane)
	☐	Floor standing equipment setup (10 cm over ground plane)
	☐	Other: --
	☐	Artificial hand applied
Test method applied:	☐	Voltage probe
	☐	Current probe according to CISPR 14-1
	☐	Wired network port: CDN according to IEC 61000-4-6
	☐	Wired network port: Current probe and capacitive voltage probe (CVP)
	☐	Wired network port: ISN
	☐	Wired network port (Shielded): 150 Ohm and current probe
	☐	Artificial mains network used as voltage probe
	☐	Other: --
Remark:	--	

Limits for auxiliary port				
Frequency range (MHz)	**Disturbance voltage**		**Disturbance current**	
	Quasi-peak (dBµV)	**Average (dBµV)**	**Quasi-peak (dBµA)**	**Average (dBµA)**
0.15-0.5	80	70	Decreasing linearly with logarithm of frequency from:	
			40-30	30-20
0.5-5	74	64	30	20
5-30	74	64		

4.2.2 Test results

N/A

4.3 Magnetic field strength (9 kHz – 30 MHz)

4.3.1 Test condition

Applicable Standard:	**EN IEC 55014-1:2021**	
Applied limit class:	☐	Table 3; Magnetic field; Equipment with active IPT function
	☐	Table 4; Magnetic field induced current; Equipment with active IPT function be fully encompassed by an imaginary sphere having a diameter less than or equal to 1.6 m
	☐	Other: --
Test set up description:	☐	Equipment on a table of 80 cm height
	☐	Equipment on the floor (isolated from ground plane)
	☐	Other: --
Test method applied:	☐	3 m distance, 0.6 m small loop antenna
	☐	2 m large loop antenna system (LLAS)
	☐	Other: --
Remark:	--	

Limits		
Magnetic field strength limits		
Frequency range (MHz)	**Quasi-peak (dBµA/m)**	
0.009-0.07	69	
0.07-0.15	Decreasing linearly with logarithm of frequency from: 69-39	
0.15-4	Decreasing linearly with logarithm of frequency from: 39-3	
4-30	3	
Magnetic field induced current limits		
Frequency range (MHz)	**Horizontal component Quasi-peak (dBµA)**	**Vertical component Quasi-peak (dBµA)**
0.009-0.07	88	106
0.07 -0.15	Decreasing linearly with logarithm of frequency from:	
	88-58	106-76
0.15-3	Decreasing linearly with logarithm of frequency from:	
	58-22	76-40

4.3.2 Test results

N/A

4.4 Disturbance power (30 MHz – 300 MHz)

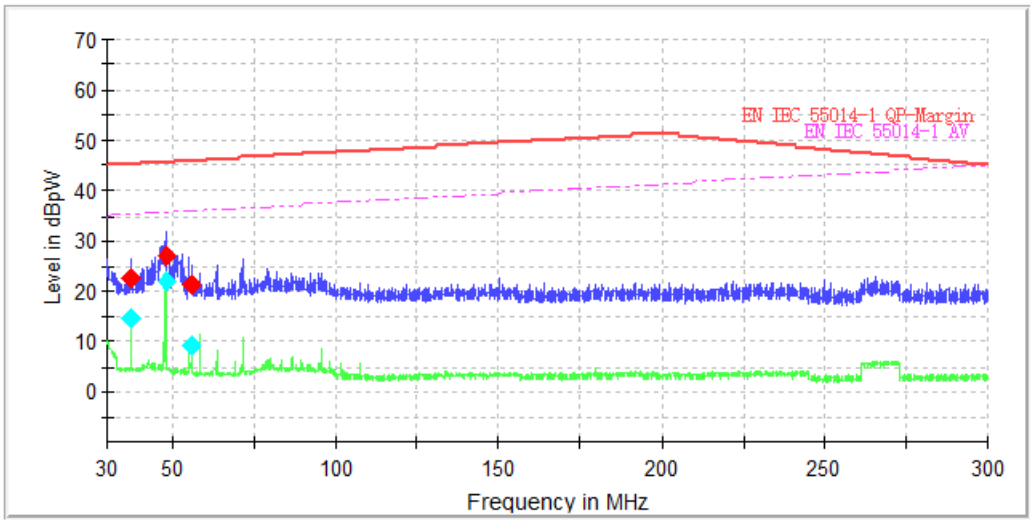
4.4.1 Test condition

Applicable Standard:	**EN IEC 55014-1:2021**	
Applied limit class:	☒	Table 7 (Columns 2 and 3); General
	☐	Table 7 (Columns 4 and 5); Tools, Power ≤ 700 W
	☐	Table 7 (Columns 6 and 7); Tools, 700 W < Power ≤ 1000 W
	☐	Table 7 (Columns 8 and 9); Tools, Power > 1000 W
Test set up description:	☒	Equipment on table of 80 cm height
	☐	Equipment on support of 10 cm height
	☐	Other: --
Supplementary test set-up description:	The distance between the clamp test set-up (the EUT, the mains lead and the absorbing clamp) and any other conductive objects (including persons, walls and ceiling, but excluding the floor) shall be at least 0,8 m. The EUT shall be placed on a non-metallic support parallel to the floor. The lead under test shall be placed in a straight line at a height of (0,8 ± 0,05) m from the floor for a length specified in 5.3.3.2.2.	
Conditions for exemption from measurements above 300 MHz:	☒	1) the disturbance power emission from the EUT is lower than the limits of Table 7 reduced by the values of Table 8;
	☒	2) the maximum clock frequency is less than 30 MHz
Remark:	The manufacturer chooses the disturbance power test method according to clause 4.3.4.2 in this standard.	

Limits						
General						
Frequency range (MHz)	**Quasi-peak (dBpw)**			**Average (dBpw)**		
30-300	Increasing linearly with the frequency from:					
	45-55			35-45		
Tools						
	P ≤ 700 W		**700 W < P ≤ 1000**		**P > 1000 W**	
Frequency range (MHz)	**Quasi-peak (dBpw)**	**Average (dBpw)**	**Quasi-peak (dBpw)**	**Average (dBpw)**	**Quasi-peak (dBpw)**	**Average (dBpw)**
30-300	Increasing linearly with the frequency from:					
	45-55	35-45	49-59	39-49	55-65	45-55

4.4.2 Test results

Model:	CY-10005-E
Test mode:	Mode A
Test voltage:	AC 230V, 50Hz



Limit and Margin-QP

Frequency (MHz)	QuasiPeak (dBpW)	Meas. Time (ms)	Bandwidth (kHz)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBpW)
37.320000	22.7	1000.0	120.000	5.3	22.6	45.3
48.000000	27.0	1000.0	120.000	4.6	18.7	45.7
55.640000	21.1	1000.0	120.000	4.5	24.9	46.0

Limit and Margin-CAV

Frequency (MHz)	CAverage (dBpW)	Meas. Time (ms)	Bandwidth (kHz)	Corr. (dB)	Margin - CAV (dB)	Limit - CAV (dBpW)
37.320000	14.6	1000.0	120.000	5.3	20.7	35.3
48.000000	21.7	1000.0	120.000	4.6	14.0	35.7
55.640000	9.4	1000.0	120.000	4.5	26.6	36.0

4.5 Radiated emission (below 1GHz)

4.5.1 Test condition

Applicable Standard:	**EN IEC 55014-1:2021**	
Applied limit class:	☐	Table 9; Radiated disturbance limits 30 MHz to 1000 MHz
	☐	Other: --
Test set up description:	☐	Equipment on a table of 80 cm height
	☐	Equipment on the floor (isolated from ground plane)
	☐	Other (e.g. height of pallet):
Supplementary test set-up description for **SAC**:	Measurements were made in semi-anechoic chamber that complies to CISPR 16. The EUT was rotated 360° about its azimuth with the receive antenna located at various heights in horizontal and vertical polarities. Final measurements with quasi-peak detector for below 1GHz were then performed by rotating the EUT 360° and adjusting the receive antenna height from 1 to 4 m. All frequencies were investigated in both horizontal and vertical antenna polarity, where applicable.	
Test method applied (30 MHz to 1000 MHz):	☐	OATS or SAC with measurement distance [m]: 3 m
	☐	FAR/FAC CISPR 16-2-3 with measurement distance [m]: 3 m
	☐	FAR/FAC IEC 61000-4-22 with measurement distance [m]: 3 m
	☐	TEM Waveguide according to IEC 61000-4-20
Remark:	The EUT does not contain any internal clock frequency or clock generator operating at frequency higher than 30MHz and the margin for the disturbance power test results between 200MHz and 300MHz fulfilled the margin's requirement in Table 8, the EUT is deemed to comply with this requirement without further testing.	

Limits for SAC 3 m distance	
Frequency range (MHz)	**Quasi-peak (dBµV/m)**
30-230	40
230-1000	47

4.5.2 Test results

N/A

4.6 Radiated emission (above 1GHz)

4.6.1 Test condition

Applicable Standard:	**EN IEC 55014-1:2021**	
Applied limit class:	☐	Table 11; Radiated electric field disturbance limits 1000 MHz to 6000 MHz
	☐	Other: --
Test set up description:	☐	Equipment on a table of 80 cm height
	☐	Equipment on the floor (isolated from ground plane)
	☐	Other:
Supplementary test set-up description for **SAC**:	Measurements were made in semi-anechoic chamber with RF absorber on the RGP which complies to CISPR 16. The EUT was rotated 360° about its azimuth with the receive antenna located at various heights in horizontal and vertical polarities. Final measurements with peak and average detector were then performed by rotating the EUT 360° and adjusting the receive antenna height from 1 to 4 m. All frequencies were investigated in both horizontal and vertical antenna polarity, where applicable.	
Test method applied (1000 MHz to 6000 MHz):	☐	FSOATS with measurement distance [m]: 3 m
	☐	SAC/OATS with RF absorbers on the RGP with measurement distance [m]: 3 m
	☐	FAR CISPR 16-2-3 with measurement distance [m]: 3 m
Remark:	--	

Limits for SAC with RF absorbers 3 m distance		
Frequency range (MHz)	**Peak (dBµV/m)**	**Average (dBµV/m)**
1000 – 3000	70	50
3000 – 6000	74	54

4.6.2 Test results

N/A

4.7 Discontinuous disturbances (9 kHz – 30 MHz)

4.7.1 Test condition

Applicable Standard:	**EN IEC 55014-1:2021**	
Test setup description:	☐	Setup Type A (40 cm distance to vertical ground plane, 80 cm over ground plane)
	☒	Setup Type B (40 cm distance to horizontal ground plane)
	☐	Floor standing equipment setup (10 cm over ground plane)
	☐	Other: --
	☐	Artificial hand applied
CDN applied:	☒	Artificial mains network
	☐	Artificial mains network used as voltage probe
	☐	Voltage probe
	☐	Other: --
Applied method for discontinuous disturbances:	☐	Click rate determined on base of switching operations
	☒	Click rate determined on base of clicks measurements
	☐	Other: --
Remark:	The measured click rate is not more than five and the duration of each click at 150 kHz or 500 kHz is not more than 10 ms. So requirement of clause 5.4.3.4 is met.	

4.7.2 Test results

Model:	**CY-10005-E**
Test mode:	Mode A
Test voltage:	AC 230V, 50Hz

Time Test: **00:54:45.05**

	150 kHz	500 kHz	1.4 MHz	30 MHz
First Run				
Limit [dBuV]	66	56	56	60
Short	40	0	0	0
Long	0	0	0	0
Long (10< t ≤20 ms)	0	0	0	0
Tot. Clicks Corr	40	0	0	0
Events	0	0	0	0
Time(s)	0.00	0.00	0.00	0.00
5.4.3.5 events	0	0	0	0
N	0.73	0.00	0.00	0.00
	PASS	**PASS**	**PASS**	**PASS**

4.8 Harmonics current emissions

4.8.1 Test condition

Applicable Standard:	**EN IEC 61000-3-2:2019+A1:2021+A2:2024**	
Test set up description:	Floor standing equipment set-up (10 cm over ground plane)	
Limit classification in accordance with the standard:	☒	Class A
	☐	Class B
	☐	Class C, rated power > 25 W
	☐	Class C, 5 W ≤ rated power ≤ 25 W
	☐	Class D
Observation period	2.5 min	
Remark:	--	

4.8.2 Test results

Model:	**CY-10005-E**
Test mode:	Mode A
Test voltage:	AC 230V, 50Hz

Current Harmonics (values at the end of test)

Harm No.	Harm. Ave.	Limit (100%)	% Of Limits	Result (Ave.)	Result (Max.)	Harm. Win.	Win. (150%)	% Of Max
2	0.0155	1.0800	1.4	PASS	PASS	0.0347	1.6200	2.1
3	0.0163	2.3000	0.7	PASS	PASS	0.0283	3.4500	0.8
4	0.0118	0.4300	2.7	PASS	PASS	0.0168	0.6450	2.6
5	0.0100	1.1400	0.9	PASS	PASS	0.0150	1.7100	0.9
6	0.0104	0.3000	3.5	PASS	PASS	0.0140	0.4500	3.1
7	0.0092	0.7700	1.2	PASS	PASS	0.0115	1.1550	1.0
8	0.0090	0.2300	3.9	PASS	PASS	0.0117	0.3450	3.4
9	0.0082	0.4000	2.1	PASS	PASS	0.0096	0.6000	1.6
10	0.0078	0.1840	4.3	PASS	PASS	0.0095	0.2760	3.4
11	0.0070	0.3300	2.1	PASS	PASS	0.0082	0.4950	1.6
12	0.0064	0.1533	4.2	PASS	PASS	0.0077	0.2300	3.4
13	0.0055	0.2100	2.6	PASS	PASS	0.0059	0.3150	1.9
14	0.0053	0.1314	4.0	PASS	PASS	0.0064	0.1971	3.3
15	0.0044	0.1500	2.9	PASS	PASS	0.0052	0.2250	2.3
16	0.0040	0.1150	3.4	PASS	PASS	0.0042	0.1725	2.5
17	0.0035	0.1324	2.7	PASS	PASS	0.0039	0.1986	1.9
18	0.0030	0.1022	3.0	PASS	PASS	0.0033	0.1533	2.1
19	0.0027	0.1184	2.3	PASS	PASS	0.0029	0.1776	1.6
20	0.0024	0.0920	2.6	PASS	PASS	0.0027	0.1380	1.9
21	0.0023	0.1071	2.1	PASS	PASS	0.0028	0.1607	1.7
22	0.0020	0.0836	2.4	PASS	PASS	0.0025	0.1254	2.0
23	0.0020	0.0978	2.1	PASS	PASS	0.0031	0.1467	2.1
24	0.0018	0.0767	2.4	PASS	PASS	0.0028	0.1151	2.4
25	0.0016	0.0900	1.8	PASS	PASS	0.0022	0.1350	1.6
26	0.0017	0.0708	2.4	PASS	PASS	0.0024	0.1062	2.3
27	0.0016	0.0833	1.9	PASS	PASS	0.0024	0.1250	1.9
28	0.0015	0.0657	2.3	PASS	PASS	0.0020	0.0986	2.0
29	0.0015	0.0776	1.9	PASS	PASS	0.0019	0.1164	1.6
30	0.0013	0.0613	2.1	PASS	PASS	0.0014	0.0920	1.5
31	0.0012	0.0720	1.6	PASS	PASS	0.0014	0.1080	1.3
32	0.0012	0.0575	2.1	PASS	PASS	0.0014	0.0863	1.7
33	0.0012	0.0682	1.8	PASS	PASS	0.0016	0.1023	1.6
34	0.0011	0.0541	2.0	PASS	PASS	0.0013	0.0812	1.6
35	0.0010	0.0643	1.6	PASS	PASS	0.0012	0.0965	1.2
36	0.0010	0.0511	1.9	PASS	PASS	0.0012	0.0767	1.5
37	0.0008	0.0608	1.4	PASS	PASS	0.0012	0.0912	1.3
38	0.0009	0.0484	1.8	PASS	PASS	0.0011	0.0726	1.6
39	0.0009	0.0577	1.5	PASS	PASS	0.0012	0.0866	1.4
40	0.0007	0.0460	1.5	PASS	PASS	0.0010	0.0690	1.4

4.9 Voltage fluctuation and flicker

4.9.1 Test condition

Applicable Standard:	**EN 61000-3-3:2013+A1:2019+A2:2021**	
Test set up description:	Floor standing equipment set-up (10 cm over ground plane)	
Test method:	☒	4.2.2 Flickermeter according to IEC 61000-4-15
	☐	4.2.3 Simulation
	☐	4.2.4 Analytical method
	☒	4.2.5 Use of P_{st} = 1 curve
	☐	4.3 Long-Term flicker value P_{lt}
Observation time selected:	☒	10 Minutes
	☐	120 Minutes
	☐	24 times switching
	☐	Other: --
Limit for d_{max} applied:	☒	4 %
	☐	6 %
	☐	7 %
Remark:	--	

4.9.2 Test results

Model:	CY-10005-E				
Test mode:	Mode A				
Test voltage:	AC 230V, 50Hz				
Parameter:	P_{lt}	P_{st}	dt (ms)	dc (%)	d_{max} (%)
Measured value:	NA	0.428	0.000	1.047	1.426
Limit value:	NA	1	500	3.30	4.00

5 Test condition and results for immunity

5.1 General information

Performance criteria as defined by the standard EN IEC 55014-2:2021	
Criterion	**Description from standard**
A	The apparatus shall continue to operate as intended during the test. No degradation of performance or loss of function is allowed below a performance level (or permissible loss of performance) specified by the manufacturer, when the apparatus is used as intended. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and from what the user may reasonably expect from the apparatus if used as intended.
B	The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level (or permissible loss of performance) specified by the manufacturer, when the apparatus is used as intended. During the test, degradation of performance is allowed, however no change of actual operating state or stored data is allowed to persist after the test. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and from what the user may reasonably expect from the apparatus if used as intended.
C	Temporary loss of function is allowed, provided the function is selfrecoverable or can be restored by the operation of the controls, or by any operation specified in the instructions for use.
Other:	--

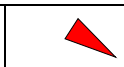
Category of test item:	☐	Category I: equipment containing no electronic control circuitry.
	☒	Category II: mains operated equipment containing electronic control circuitry with no clock frequency higher than 15 MHz.
	☐	Category III: battery operated equipment not included in Category I.
	☐	Category IV: mains operated equipment containing electronic control circuitry with a highest clock frequency greater than 15 MHz but lower than or equal to 200 MHz.
	☐	Category V: mains operated equipment containing electronic control circuitry with a highest clock frequency greater than 200 MHz.
Remark:	--	

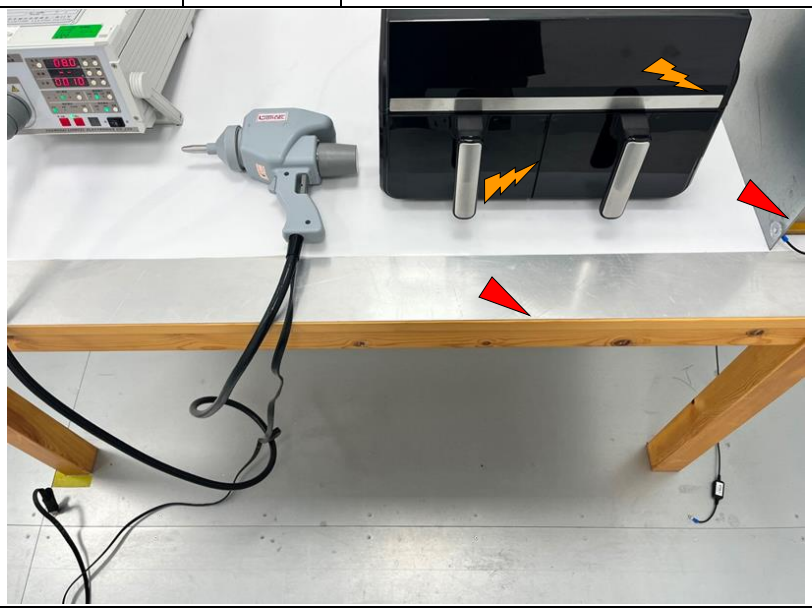
5.2 Electrostatic discharge immunity test (ESD)

5.2.1 Test condition

Basic standard:	**IEC 61000-4-2:2008 / EN 61000-4-2:2009**	
Test set up:	☒	Table-top equipment
	☐	Floor standing equipment
	☐	Wall or ceiling mounted equipment (Treated as table top)
Supplementary test set up description:	Measurements were made on a ground plane that extends 0.5 m minimum beyond all sides of the system under test and the minimum distance between the equipment under test and any laboratory walls or any other metallic surfaces shall be at least 1 m. Air discharges were applied to non-metallic parts of the system. Contact discharges were applied to all accessible metallic parts. Discharges were also applied to the Horizontal and Vertical Coupling Planes, where applicable.	
Discharge impedance:	330 ohm / 150 pF	
Size of horizontal coupling plate:	1.6 x 0.8 m	
Size of vertical coupling plate:	0.5 x 0.5 m	
Number of discharges for each test point:	10	
Discharge interval:	1 s	
Performance criterion:	☒	B
	☐	C (For toys not using score or data entered by the user)
Remark:	--	

5.2.2 Test results

Operating mode:	Mode A			
Ambient temperature:	20 ℃			
Relative humidity:	40 %			
Atmospheric pressure:	101.1 kPa			
Supplementary information:	--			
Location of discharge	**Test level (kV)**	**Polarity**	**Type**	**Observations**
Vertical coupling plate	4	+	Contact discharge	Note 1
Vertical coupling plate	4	-	Contact discharge	Note 1
Horizontal coupling plate	4	+	Contact discharge	Note 1
Horizontal coupling plate	4	-	Contact discharge	Note 1
Points on non-conductive surface as indicated in the picture below	8	+	Air discharge	Note 1
Points on non-conductive surface as indicated in the picture below	8	-	Air discharge	Note 1
Note 1: EUT worked as intended during and after test.				
Photos of test points:				
Symbols identifying discharge applied:		Contact discharge		
		Air discharge		



5.3 Radiated, Radio-frequency, Electromagnetic field immunity test (RS)

5.3.1 Test condition

Basic standard:	**IEC 61000-4-3:2020 / EN IEC 61000-4-3:2020**	
Test setup:	☐	Equipment on the table (0.8 m height)
	☐	Equipment standing on floor (0.05 m to 0.15 m height)
	☐	Other: --
Supplementary test set up description:	Measurements were made in a semi or full anechoic chamber or TEM or reverberation chamber and the indicated field strength was pre-calibrated prior to placement of the system under test. For semi or full anechoic chamber the tests were performed in both the horizontal and vertical polarities, where applicable. The antenna was placed between 1 and 3 m from the product under test.	
Antenna height:	1.5 m	
Distance antenna to EUT:	3 m	
Modulation:	80 % AM with 1 kHz	
Dwell time:	3 s	
Step size:	1%	
Applied testing method:	☐	IEC 61000-4-3 Radiated Field with Antenna
	☐	IEC 61000-4-22 Radiated emission and immunity measurements in fully anechoic rooms (FARs)
	☐	IEC 61000-4-20 Emission and immunity testing in transverse electromagnetic (TEM) waveguides
Performance criterion:	A	
Remark:	The highest clock frequency ≤15 MHz	

5.3.2 Test results

N/A

5.4 Electrical fast transient/Burst immunity test (EFT)

5.4.1 Test condition

Basic standard:	**IEC 61000-4-4:2012 / EN 61000-4-4:2012**	
Test setup:	☒	Equipment on the table (0.1 ± 0.01) m above ground plane
	☐	Equipment standing on floor at (0.1 ± 0.05) m above ground plane
	☐	Artificial hand applied
Supplementary test set up description:	The ground reference plane shall project beyond the EUT by at least 0.1 m on all sides. The minimum distance between the EUT and all other conductive structures (including the generator, AE and the walls of a shielded room), except the ground reference plane, shall be more than 0.5 m. All cables to the EUT shall be placed on the insulation support 0.1 m above the ground reference plane. Cables not subject to test shall be routed as far as possible from the cable under test to minimize the coupling between the cables. Either a direct coupling network or a capacitive clamp shall be used for the application of the test voltages.	
Test time:	1 min	
Repetition frequency:	5 kHz	
Impulse wave shape:	5/50 ns	
Burst duration:	15 ms for 5kHz repetition frequency	
Burst period:	300 ms	
Performance criterion:	B	
Remark:	--	

5.4.2 Test results

Operating mode:	Mode A				
Supplementary information:	--				
Port	**Test line**	**Test level (kV)**	**Polarity**	**Coupling method**	**Observations**
Input AC power ports	L1	1	+/-	CDN	Note 1
	N				
	PE				
	L1+N				
	L1+PE				
	N+PE				
	L1+N+PE				
Note 1: EUT worked as intended during and after test.					

5.5 Surges

5.5.1 Test condition

Basic Standard:	**IEC 61000-4-5:2014+A1:2017 / EN 61000-4-5:2014+A1:2017**	
Test set up description:	Floor standing equipment set-up (10 cm over ground plane)	
Supplementary test set up description:	Tests were conducted with the product connected to a Coupling/Decoupling Network (CDN)	
Wave-Shape:	1.2/50 µs open circuit voltage, 8/20 µs short circuit current	
Repetition rate:	60 s	
Number of pulses for each coupling:	5 positive and 5 negative	
Performance criterion:	☒	B
	☐	C (Exception 7.2.7 of EN IEC 55014-2:2021 applied)
		Technical justification: --
Remark:	--	

5.5.2 Test results

Operating mode:	Mode A				
Supplementary information:	--				
Port	**Coupling**	**Test level in kV**	**phase in degrees**	**Polarity**	**Observations**
Input AC power ports	L1 – N	1	90°	+	Note 1
Input AC power ports	L1 – N	1	270°	-	Note 1
Input AC power ports	L1 - PE	2	90°	+	Note 1
Input AC power ports	L1 - PE	2	270°	-	Note 1
Input AC power ports	N - PE	2	90°	+	Note 1
Input AC power ports	N - PE	2	270°	-	Note 1
Note 1: EUT worked as intended during and after test.					

5.6 Immunity to conducted disturbances induced by RF fields (CS), 0.15 MHz to 230 MHz

5.6.1 Test condition

Basic Standard:	**IEC 61000-4-6:2013 / EN 61000-4-6:2014**	
Test setup:	☒	Equipment located (0,1 ± 0,05) m above ground plane
	☐	Elevated ground plane.
	☐	Artificial hand applied.
Supplementary test set up description:	Measurements were made on a ground plane that extends 0.5 m minimum beyond all sides of the system under test. The EUT was located 0.1 m above the reference ground plane and any associated cables attached to the EUT were located between 30 - 50mm above the ground plane. The indicated field was pre-calibrated prior to placement of the system under test.	
Modulation:	80 % AM with 1 kHz	
Dwell time:	3 s	
Step size:	1%	
Performance criterion:	A	
Remark:	--	

5.6.2 Test results

Operating mode:	Mode A
Supplementary information:	--

Frequency range	Port	Test line	Test level (V)	CDN type	Observations
0.15 MHz – 230 MHz	Input AC power ports	AC mains line	3	CDN	Note 1
Note 1: EUT worked as intended during and after test.					

5.7 Voltage dips

5.7.1 Test condition

Basic Standard:	**IEC 61000-4-11:2020 / EN IEC 61000-4-11:2020**
Test set up description:	Floor standing equipment set-up (10 cm over ground plane)
Supplementary test set up description:	Testing was performed with the product connected directly to a generator capable of simulating the voltage drops.
Repetition rate:	10 s
Number of dips or interruptions:	3
Performance criterion:	C
Remark:	--

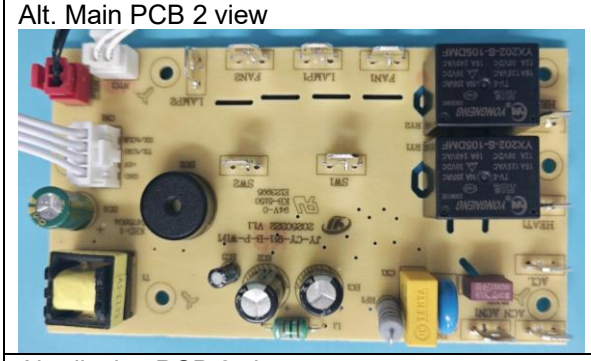
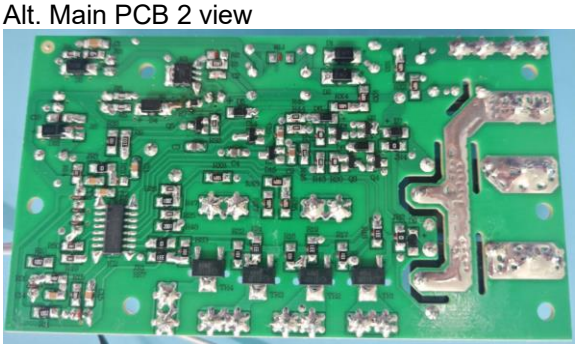
5.7.2 Test results

Operating mode:	Mode A			
Supplementary information:	--			
Applied mains voltage / frequency (U_N)	**Test level in % of U_N**	**Duration in cycles**	**Phase angle in degrees**	**Observations**
AC 230V, 50Hz	0	0.5	0°, 180°	Note 1
AC 230V, 50Hz	40	10	0°	Note 1
AC 230V, 50Hz	70	25	0°	Note 1
Note 1: EUT worked as intended during and after test.				

6 Conclusion

The apparatus Air fryer and models Refer to Clause 3.1 are in compliance with the requirements of the standards EN IEC 55014-1:2021, EN IEC 55014-2:2021, EN IEC 61000-3-2:2019+A1:2021+A2:2024 and EN 61000-3-3:2013+A1:2019+A2:2021.

Appendix A: Photograph of sample

Alt. Main PCB 2 view 	Alt. Main PCB 2 view 
Alt. display PCB 2 view 	Alt. display PCB 2 view