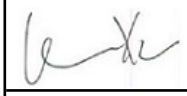
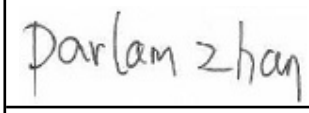
TEST REPORT

Application No.:	SHEM2503001865HS
Applicant:	Cixi Meiteng Electrical Appliance Co., Ltd.
Address of Applicant:	No. 8, Shangniqiao, Mayan Village, Henghe Town, Cixi City, Zhejiang Province, 315318, China
Manufacturer:	Cixi Meiteng Electrical Appliance Co., Ltd.
Address of Manufacturer:	No. 8, Shangniqiao, Mayan Village, Henghe Town, Cixi City, Zhejiang Province, 315318, China
Factory:	Cixi Meiteng Electrical Appliance Co., Ltd.
Address of Factory:	No. 8, Shangniqiao, Mayan Village, Henghe Town, Cixi City, Zhejiang Province, 315318, China
Equipment Under Test (EUT):	
EUT Name:	Garment Steamer
Model No.:	RL-2408, ZG-MT05, RL-2408-2, RL-2408-1, RL-2408-3, RL-2408-5, RL-2408-4
Remark:	Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
Standard(s):	EN IEC 55014-1: 2021 EN IEC 61000-3-2: 2019+A1:2021+A2:2024 EN 61000-3-3: 2013+ A1:2019+A2:2021 EN IEC 55014-2: 2021
Date of Receipt:	2025-05-06
Date of Test:	2025-05-07 to 2025-05-09
Date of Issue:	2025-05-16
Test Result:	**Pass***

* In the configuration tested, the EUT complied with the standards specified above.

Revision Record			
Version	**Description**	**Date**	**Remark**
00	Original	2025-05-16	/

Authorized for issue by:				
Tested By				
		Leo Xu/Project Engineer		
Approved By				
		Parlam Zhan /Reviewer		

2 Test Summary

Emission Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Conducted Emissions at AC Mains Power Port (150kHz-30MHz)	EN IEC 55014-1: 2021	CISPR 16-2-1	Table 5	Pass
Discontinuous Disturbance (150kHz-30MHz)		EN IEC 55014-1: 2021	Clause 4.4.2	Pass
Disturbance Power		CISPR 16-2-2	Table 7 & 8	Pass
Harmonic Current Emission	EN IEC 61000-3-2: 2019+A1:2021+A2: 2024	EN IEC 61000-3-2: 2019+A1:2021+A2:2024	Class A	Pass
Voltage Fluctuations and Flicker	EN 61000-3-3: 2013+ A1:2019+A2:2021	EN 61000-3-3: 2013+ A1:2019+A2:2021	Clause 5	Pass

Immunity Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Electrostatic Discharge	EN IEC 55014-2: 2021	EN 61000-4-2:2009	4kV Contact Discharge, 8kV Air Discharge	Pass
Electrical Fast Transients Burst at AC Mains Power Port		EN 61000-4-4:2012	1kV, 5/50ns Tr/Td, 5kHz Repetition Frequency	Pass
Surge at AC Mains Power Port		EN 61000-4-5:2014+A1:2017	1.2/50μs Tr/Td, 1kV Line to Line	Pass
Conducted Immunity at AC Mains Power Port (150kHz-230MHz)		EN 61000-4-6: 2014	3Vrms (emf),80%,1kHz Amp. Mod.	Pass
Voltage Dips and Interruptions		EN IEC 61000-4-11: 2020	For 50Hz: 0 % UT for 0.5cycle, 40 % UT for 10cycles, 70 % UT for 25cycles, UT is Supply Voltage	Pass

Note: There are series models mentioned in this report, and they are the identical in electrical and electronic characters. Only the model RL-2408 was tested since their differences were the model Number power rated and appearance.

3 Contents

4 General Information

4.1 Details of E.U.T.

Power supply:	AC 220-240V, 50-60Hz, 1500W Sample No.:SHEM2503001865HS-M1
Test Voltage:	AC 230V 50Hz
Max. Clock Frequency:	＜15MHz

4.2 Description of Support Units

The EUT has been tested as an independent unit.

Description	Manufacturer	Model No.	Serial No.
/	/	/	/

4.3 Measurement Uncertainty & Decision Rule

Measurement Uncertainty:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission (chamber 1)	30~1000MHz	±4.60dB	(1)
Conducted Emission	0.15~30MHz	±2.80dB	(1)
Disturbance Power	30~300MHz	±2.60dB	(1)

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

Decision Rule:

• CISPR 16-4-2 for emission measurements is as below described.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.

U_{LAB} less than U_{CISPR}, therefore:

– compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;

– non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

4.4 Test Location

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. E&E Lab
588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China
Tel: +86 21 6191 5666 Fax: +86 21 6191 5678
Witness at:
Ningbo Drotek Testing Service Co., Ltd.
Building 18 and 2 / F North of R&D Center, No. 518, Xinmei Road, High-tech Zone, Ningbo City, Zhejiang Province, R.P. China
Note:
1. SGS is not responsible for wrong test results due to incorrect information (e.g. max. clock frequency, highest internal frequency, antenna gain, cable loss, etc) is provided by the applicant. (if applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (if applicable).
3. Sample source: sent by customer.

4.5 Deviation from Standards

None

4.6 Abnormalities from Standard Conditions

None

4.7 Monitoring of EUT for All Immunity Test

Visual: Working status of EUT.

5 Equipment List

Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	EMI Test Receiver	ROHDE & SCHWARZ	ESR	102969	2024.07.05	2025.07.04
2	LISN	ROHDE & SCHWARZ	ENV 216	102835	2024.07.05	2025.07.04
3	Cable	H&S/Swiss	CBL-RE-18	NBZT001-E-36	2024.07.05	2025.07.04

Disturbance power						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	EMI Test Receiver	ROHDE & SCHWARZ	ESR	102969	2024.07.05	2025.07.04
2	Absorbing Clamp	Schwarzbeck /Germany	MDS 21C	00025	2024.07.09	2025.07.08

Discontinuous Disturbance(150kHz-30MHz)						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	Digital Discontinuous Analyzer	AFJ	DIA1512D	21001	2025.02.28	2026.02.27
2	LISN	ROHDE & SCHWARZ	ENV 216	102835	2024.07.05	2025.07.04

Harmonic Current/ Voltage Fluctuation and Flicker						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	Harmonic current and voltage scintillation measurement system	CI /USA	5001iX-CTS-400-413	NBZT001-E-15	2025.01.21	2026.01.20

Electrostatic Discharge						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	ESD Simulator	Teseq/Germany	NSG 437	1765	2024.07.09	2025.07.08

Conducted Susceptibility (CS)						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	Conducted Disturbances test system	Etest/China	ES-608	220511	2024.07.30	2025.07.29
2	EM CLAMP	Etest/China	ES-TS120	220701	2024.07.05	2025.07.04

3	CDN	Etest/China	ES-CDN-M2& ES-CDN-M3	220604&220605	2024.07.05	2025.07.04

Electrical Fast Transient						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	Ultra Compact Simulator	Etest/China	ES-415A	220508	2024.07.05	2025.07.04

Surge						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	Ultra Compact Simulator	Etest/China	ES-516A	220503	2024.07.30	2025.07.29

Dips						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
1	Ultra Compact Simulator	Prima/China	DRP61011TCX	PR21126647	2024.07.05	2025.07.04

6 Emission Test Results

6.1 Conducted Emissions at AC Mains Power Port (150kHz-30MHz)

Test Requirement: EN IEC 55014-1: 2021

Test Method: CISPR 16-2-1

Limit:

0.15M-0.5MHz	66dB(μV)-56dB(μV) quasi-peak, 59dB(μV)-46dB(μV) average
0.5M-5MHz	56dB(μV) quasi-peak, 46dB(μV) average
5M-30MHz	60dB(μV) quasi-peak, 50dB(μV) average
Detector:	Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz

6.1.1 E.U.T. Operation

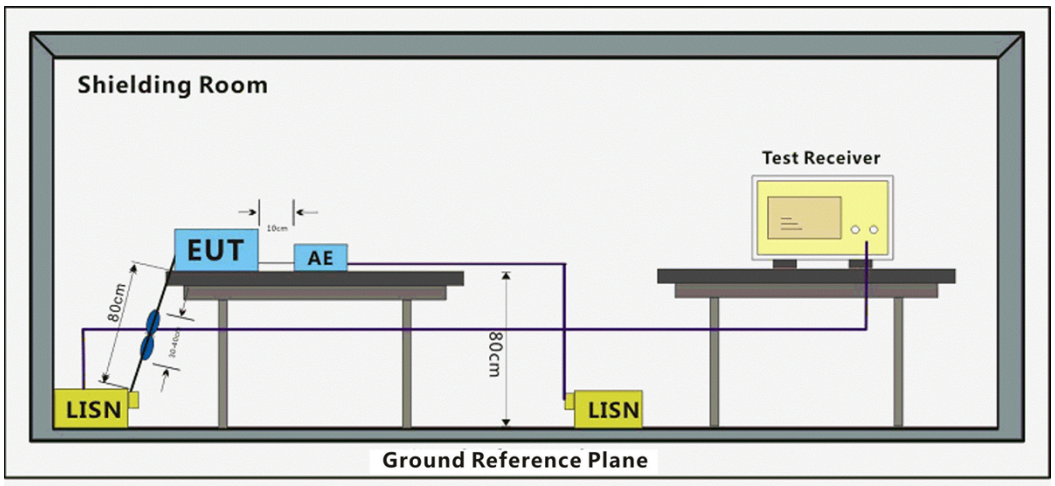
Operating Environment:

Temperature: 25 °C Humidity: 49 % RH Atmospheric Pressure: 1010 mbar

6.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Keep EUT Running & heating

6.1.3 Test Setup Diagram



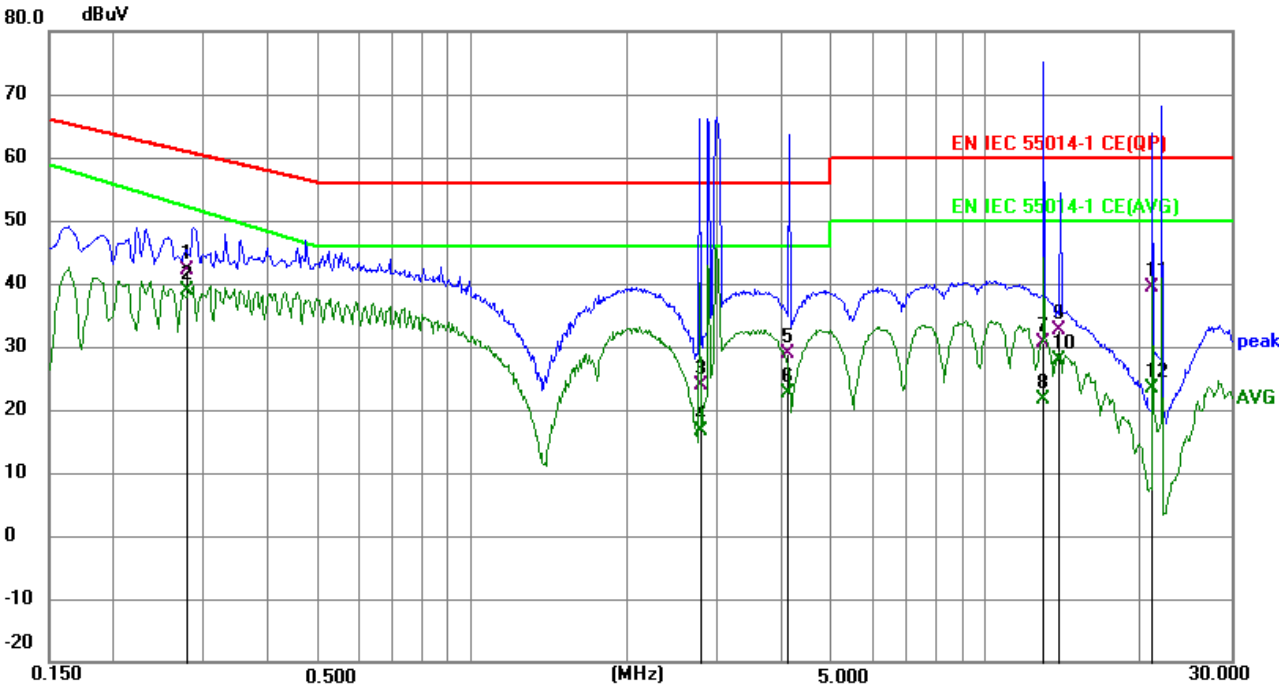
6.1.4 Measurement Procedure and Data

Frequency Range: 150kHz to 30MHz

An initial pre-scan was performed with peak detector.Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected.The red line show in graphic is the limit in standard used in this section.

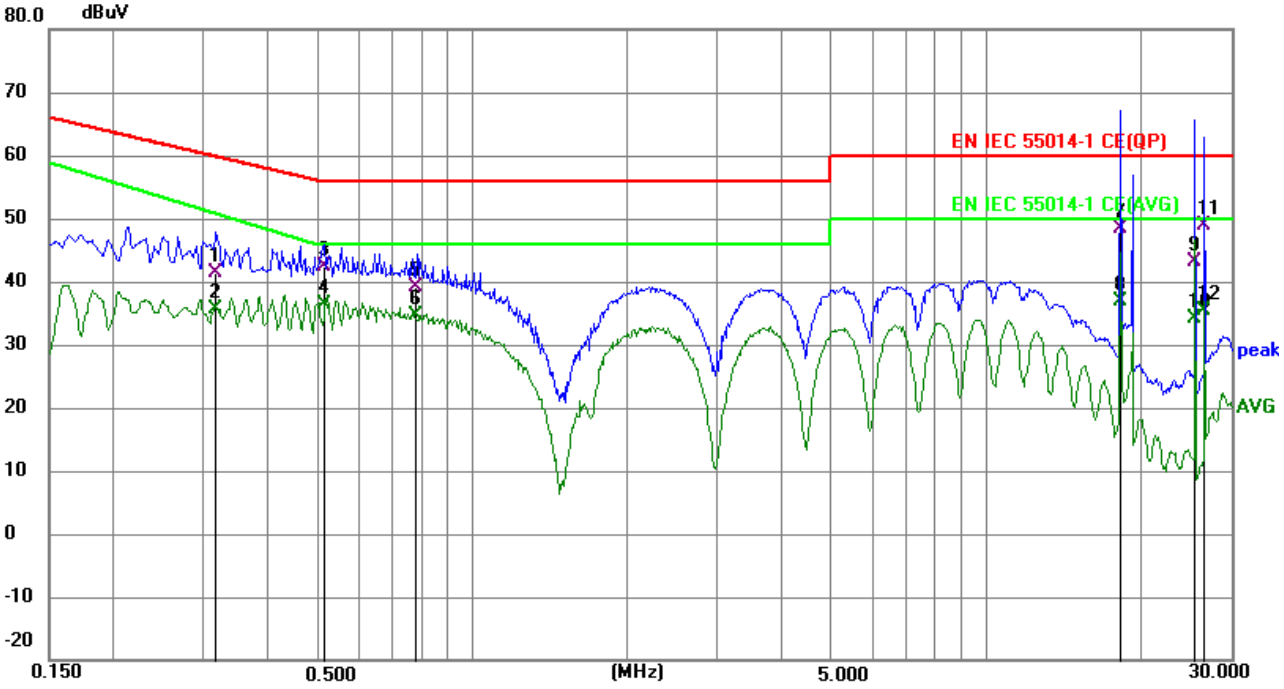
Measured Level = Read level + Cable Loss + LISN Factor

Test Mode:00; Line:Live Line



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2781	31.87	10.29	42.16	60.87	-18.71	QP	P	
2 *	0.2781	28.51	10.29	38.80	54.24	-15.44	AVG	P	
3	2.7896	13.96	9.92	23.88	56.00	-32.12	QP	P	
4	2.7896	6.80	9.92	16.72	46.00	-29.28	AVG	P	
5	4.1465	19.16	9.84	29.00	56.00	-27.00	QP	P	
6	4.1465	12.83	9.84	22.67	46.00	-23.33	AVG	P	
7	12.9275	20.79	9.74	30.53	60.00	-29.47	QP	P	
8	12.9275	11.92	9.74	21.66	50.00	-28.34	AVG	P	
9	13.9200	23.04	9.70	32.74	60.00	-27.26	QP	P	
10	13.9200	18.18	9.70	27.88	50.00	-22.12	AVG	P	
11	21.0946	29.52	9.86	39.38	60.00	-20.62	QP	P	
12	21.0946	13.45	9.86	23.31	50.00	-26.69	AVG	P	

Test Mode:00; Line:Neutral Line



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.3165	31.20	10.27	41.47	59.80	-18.33	QP	P	
2	0.3165	25.36	10.27	35.63	52.82	-17.19	AVG	P	
3	0.5141	32.25	10.06	42.31	56.00	-13.69	QP	P	
4 *	0.5141	26.40	10.06	36.46	46.00	-9.54	AVG	P	
5	0.7799	29.30	9.95	39.25	56.00	-16.75	QP	P	
6	0.7799	24.58	9.95	34.53	46.00	-11.47	AVG	P	
7	18.2580	38.63	9.76	48.39	60.00	-11.61	QP	P	
8	18.2580	27.14	9.76	36.90	50.00	-13.10	AVG	P	
9	25.5884	33.49	9.74	43.23	60.00	-16.77	QP	P	
10	25.5884	24.51	9.74	34.25	50.00	-15.75	AVG	P	
11	26.6370	39.20	9.76	48.96	60.00	-11.04	QP	P	
12	26.6370	25.69	9.76	35.45	50.00	-14.55	AVG	P	

6.2 Discontinuous Disturbance (150kHz-30MHz)

Test Requirement: EN IEC 55014-1: 2021
Test Method: EN IEC 55014-1: 2021

Limit:

Provision	Click Rate (N)		
1	All clicks ⩽ 20 ms	90 % click ≤ 10 ms	N≤5
2	N < 0,2	L_q [b]= L^a + 44	Clicks [c] ≤ 25% exceed L_q [b]
3	30 > N ≥ 0,2	L_q [b]= L^a + 20 lg(30/N)	Clicks [c] ≤ 25% exceed L_q [b]
[a] The limits L of Conducted Emissions apply also to discontinuous disturbances from all equipment which produce: 1) disturbances other than clicks, or 2) clicks with a click rate *N* equal to or greater than 30 [b] The click limit Lq is calculated by increasing the relevant quasi-peak limit L for continuous disturbances by certain value. The click limit applies to the disturbance assessed according to the upper quartile method [c] a quarter of the number of the clicks registered during the observation time T is allowed to exceed the click limit Lq			

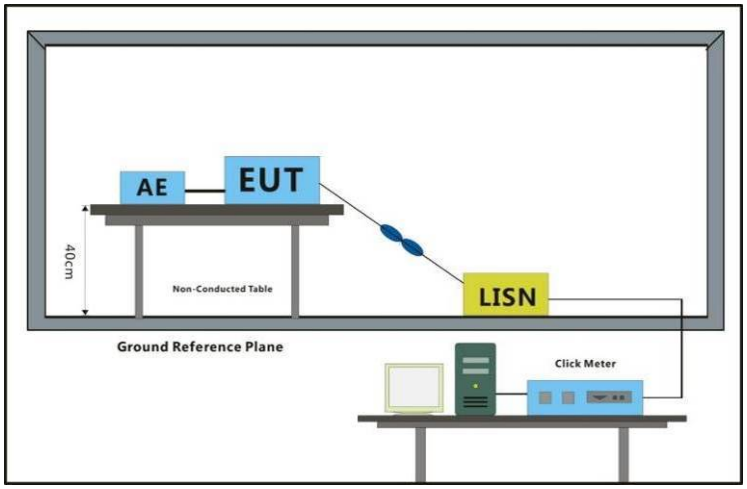
6.2.1 E.U.T. Operation

Operating Environment:
Temperature: 25 °C Humidity: 49 % RH Atmospheric Pressure: 1010 mbar

6.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Keep EUT Running & heating

6.2.3 Test Setup Diagram



6.2.4 Measurement Procedure and Data

Frequency Range: 150kHz to 30MHz

Test Mode: 00

Run A run time= 120mins				
Frequency(MHz)	150kHz	500kHz	1.4MHz	30MHz
Limit(dBuV)	66	56	56	60
Short Clicks n1 (≤10ms)	10	10	0	0
Medium Clicks n2 (10-20ms)	0	0	0	0
Long Clicks n3 (20-200ms)	0	0	0	0
Total(Short+Medium+Long) n=n1+n2+n3	10	10	0	0
Events(≥200ms)	0.00	0.00	0.00	0.00
Switching Operation	/			
Factor(f)	/			
Click rates	0.08	0.08	0.00	0.00
☒ Click rate N≤5, 90% click rate duration less than 10ms and all click rate duration less than 20ms shall be deemed to comply the limits				

Run B run time= / mins				
Frequency(MHz)	150kHz	500kHz	1.4MHz	30MHz
Limit(dBuV)	/	/	/	/
Short Clicks n1 (≤10ms)	/	/	/	/
Medium+ Long Clicks n2 (10-200ms)	/	/	/	/
Total(Short+Medium+Long) n=n1+n2	/	/	/	/
Limit=Run A/4	/	/	/	/

6.3 Disturbance Power

Test Requirement: EN IEC 55014-1: 2021
Test Method: CISPR 16-2-2

Limit:

30MHz- 300MHz:	45dB(pW)-55dB(pW) quasi-peak, 35dB(pW)-45dB(pW) average
200MHz- 300MHz:	0dB(pW)-10dB(pW) quasi-peak (reduction limit)
Detector:	Peak for pre-scan (120kHz resolution bandwidth) 30MHz to 300MHz

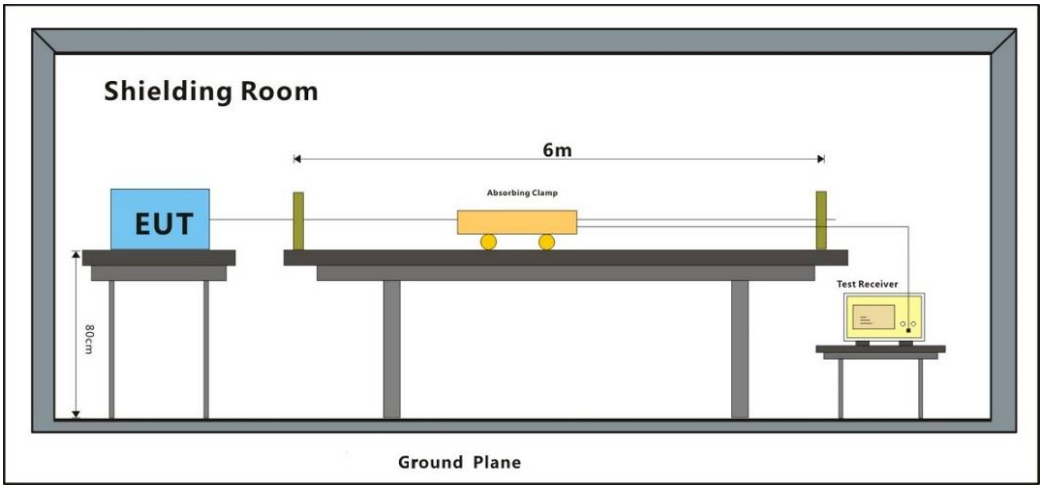
6.3.1 E.U.T. Operation

Operating Environment:
Temperature: 25 °C Humidity: 49 % RH Atmospheric Pressure: 1010 mbar

6.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Keep EUT running & heating.

6.3.3 Test Setup Diagram



6.3.4 Measurement Procedure and Data

Frequency Range: 30MHz to 300MHz
An initial pre-scan was performed with peak detector.Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected.The red line show in graphic is the limit in standard used in this section.
Measured Level = Read level + Cable Loss + Clamp Factor

Test Mode: 00

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBpW)	Limit (dBpW)	Margin (dB)	Detector	Position (cm)	P/F	Remark
1	32.2490	13.51	20.04	33.55	45.08	-11.53	QP		P	
2	32.2490	-0.03	20.04	20.01	35.08	-15.07	AVG		P	
3	34.1345	11.25	20.08	31.33	45.15	-13.82	QP		P	
4	34.1345	-0.99	20.08	19.09	35.15	-16.06	AVG		P	
5	36.8573	15.20	20.14	35.34	45.25	-9.91	QP		P	
6	36.8573	0.68	20.14	20.82	35.25	-14.43	AVG		P	
7 *	40.4524	18.65	20.14	38.79	45.39	-6.60	QP		P	
8	40.4524	4.87	20.14	25.01	35.39	-10.38	AVG		P	
9	46.7505	17.00	19.26	36.26	45.62	-9.36	QP		P	
10	46.7505	3.63	19.26	22.89	35.62	-12.73	AVG		P	
11	56.8839	1.27	17.28	18.55	46.00	-27.45	QP		P	
12	56.8839	-6.34	17.28	10.94	36.00	-25.06	AVG		P	

6.4 Harmonic Current Emission

Test Requirement: EN IEC 61000-3-2: 2019+A1:2021+A2:2024

Test Method: EN IEC 61000-3-2: 2019+A1:2021+A2:2024

6.4.1 E.U.T. Operation

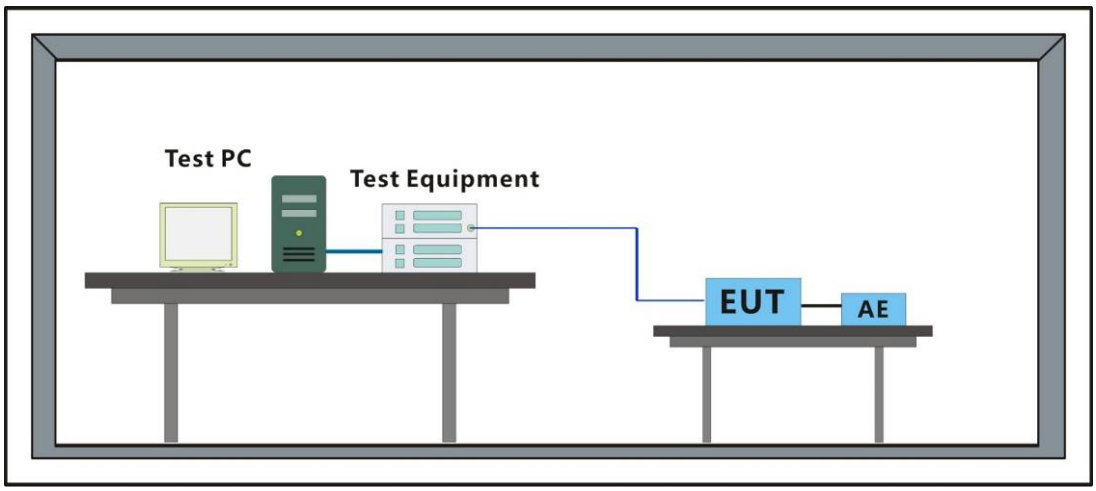
Operating Environment:

Temperature: 23 °C Humidity: 48 % RH Atmospheric Pressure: 1010 mbar

6.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Keep EUT Running & heating

6.4.3 Test Setup Diagram



6.4.4 Measurement Procedure and Data

Frequency Range: 100Hz to 2kHz

Test Mode: 00

THC(A): 0.021 I-THD(%): 0.3 POHC(A): 0.003 POHC Limit(A): 0.251

Highest parameter values during test:

V_RMS (Volts):	230.07	Frequency(Hz):	50.00
I_Peak (Amps):	10.012	I_RMS (Amps):	6.786
I_Fund (Amps):	6.762	Crest Factor:	24.140
Power (Watts):	1555.0	Power Factor:	1.000

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.009	1.080	N/A	0.052	1.620	N/A	Pass
3	0.015	2.300	N/A	0.043	3.450	N/A	Pass
4	0.003	0.430	N/A	0.016	0.645	N/A	Pass
5	0.006	1.140	N/A	0.019	1.710	N/A	Pass
6	0.002	0.300	N/A	0.010	0.450	N/A	Pass
7	0.004	0.770	N/A	0.013	1.155	N/A	Pass
8	0.004	0.230	N/A	0.007	0.345	N/A	Pass
9	0.001	0.400	N/A	0.010	0.600	N/A	Pass
10	0.002	0.184	N/A	0.008	0.276	N/A	Pass
11	0.003	0.330	N/A	0.008	0.495	N/A	Pass
12	0.002	0.153	N/A	0.005	0.230	N/A	Pass
13	0.002	0.210	N/A	0.006	0.315	N/A	Pass
14	0.002	0.131	N/A	0.008	0.197	N/A	Pass
15	0.002	0.150	N/A	0.008	0.225	N/A	Pass
16	0.002	0.115	N/A	0.006	0.173	N/A	Pass
17	0.002	0.132	N/A	0.005	0.198	N/A	Pass
18	0.002	0.102	N/A	0.005	0.153	N/A	Pass
19	0.002	0.118	N/A	0.006	0.178	N/A	Pass
20	0.001	0.092	N/A	0.004	0.138	N/A	Pass
21	0.001	0.107	N/A	0.004	0.161	N/A	Pass
22	0.001	0.084	N/A	0.003	0.125	N/A	Pass
23	0.001	0.098	N/A	0.003	0.147	N/A	Pass
24	0.001	0.077	N/A	0.003	0.115	N/A	Pass
25	0.001	0.090	N/A	0.003	0.135	N/A	Pass
26	0.001	0.071	N/A	0.003	0.107	N/A	Pass
27	0.001	0.083	N/A	0.002	0.125	N/A	Pass
28	0.001	0.066	N/A	0.003	0.099	N/A	Pass
29	0.001	0.078	N/A	0.002	0.116	N/A	Pass
30	0.001	0.061	N/A	0.003	0.092	N/A	Pass
31	0.001	0.073	N/A	0.003	0.109	N/A	Pass
32	0.001	0.058	N/A	0.004	0.086	N/A	Pass
33	0.001	0.068	N/A	0.003	0.102	N/A	Pass
34	0.001	0.054	N/A	0.003	0.081	N/A	Pass
35	0.001	0.064	N/A	0.002	0.096	N/A	Pass
36	0.001	0.051	N/A	0.003	0.077	N/A	Pass
37	0.000	0.061	N/A	0.002	0.091	N/A	Pass
38	0.001	0.048	N/A	0.002	0.073	N/A	Pass
39	0.001	0.058	N/A	0.002	0.087	N/A	Pass
40	0.001	0.046	N/A	0.002	0.069	N/A	Pass

N/A: Harmonic currents less than 0.6% of the input current measured under the test conditions, or less than 5mA, whichever is greater, are disregarded.

Harm#	Harmonics V-rms	Limit V-rms	% of Limit	Status
2	0.078	0.460	16.94	OK
3	0.644	2.070	31.12	OK
4	0.052	0.460	11.28	OK
5	0.155	0.920	16.86	OK
6	0.047	0.460	10.13	OK
7	0.064	0.690	9.23	OK
8	0.055	0.460	11.94	OK
9	0.058	0.460	12.67	OK
10	0.036	0.460	7.75	OK
11	0.022	0.230	9.40	OK
12	0.014	0.230	6.21	OK
13	0.016	0.230	6.84	OK
14	0.007	0.230	3.19	OK
15	0.012	0.230	5.32	OK
16	0.007	0.230	3.25	OK
17	0.019	0.230	8.09	OK
18	0.007	0.230	2.88	OK
19	0.013	0.230	5.87	OK
20	0.007	0.230	3.20	OK
21	0.007	0.230	3.15	OK
22	0.005	0.230	2.25	OK
23	0.010	0.230	4.28	OK
24	0.004	0.230	1.88	OK
25	0.006	0.230	2.52	OK
26	0.005	0.230	2.33	OK
27	0.009	0.230	3.71	OK
28	0.007	0.230	2.90	OK
29	0.007	0.230	2.86	OK
30	0.006	0.230	2.49	OK
31	0.007	0.230	2.98	OK
32	0.007	0.230	3.26	OK
33	0.006	0.230	2.71	OK
34	0.008	0.230	3.29	OK
35	0.006	0.230	2.71	OK
36	0.007	0.230	3.13	OK
37	0.006	0.230	2.73	OK
38	0.006	0.230	2.65	OK
39	0.009	0.230	3.91	OK
40	0.006	0.230	2.41	OK

6.5 Voltage Fluctuations and Flicker

Test Requirement: EN 61000-3-3: 2013+ A1:2019+A2:2021
Test Method: EN 61000-3-3: 2013+ A1:2019+A2:2021

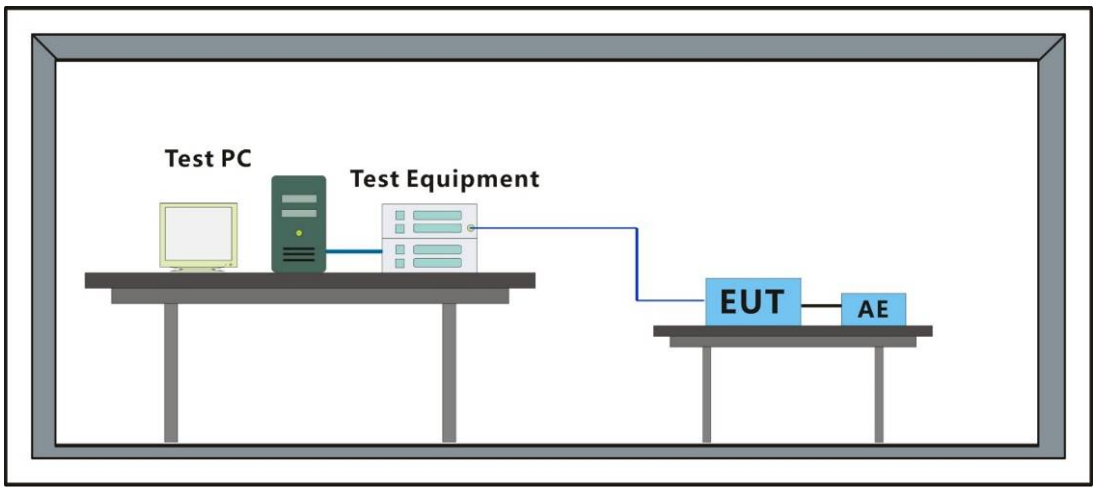
6.5.1 E.U.T. Operation

Operating Environment:
Temperature: 23 °C Humidity: 48 % RH Atmospheric Pressure: 1010 mbar

6.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Keep EUT Running & heating

6.5.3 Test Setup Diagram



6.5.4 Measurement Procedure and Data

Test Mode: 00

Vrms at the end of test (Volt):	230.01			
Highest dt (%):		Test limit (%):		
T-max (mS):	0	Test limit (mS):	500.0	Pass
Highest dc (%):	1.25	Test limit (%):	3.30	Pass
Highest dmax (%):	1.27	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.612	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.267	Test limit:	0.650	Pass

7 Immunity Test Results

Performance Criteria Description

Criterion 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.

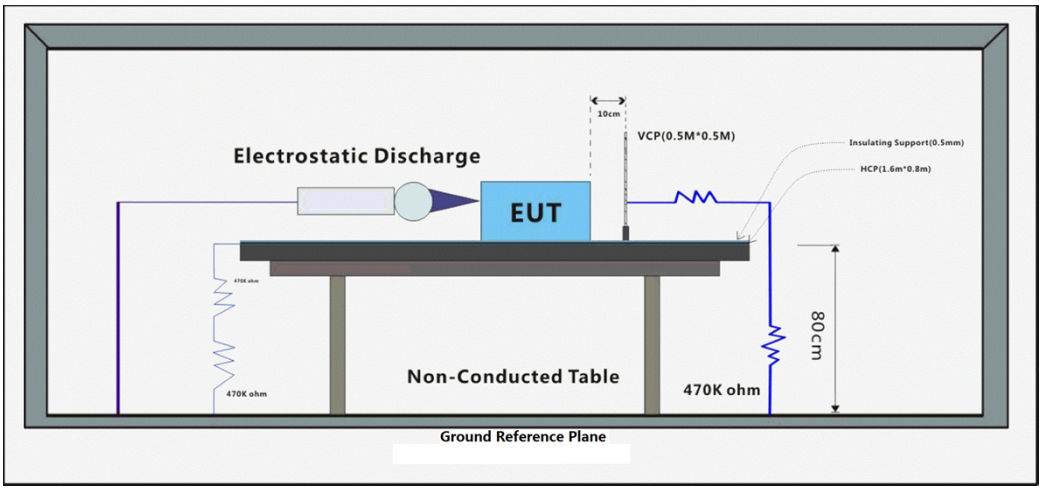
Criterion B: The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level (or permissible loss of performance) specified by the manufacturer, when the apparatus is used as intended. During the test, degradation of performance is allowed, however. No change of actual operating state or stored data is allowed. 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.

Criterion C: Temporary loss of function is allowed, provided the function is self recoverable or can be restored by the operation of the controls, or by any operation specified in the instructions for use.

7.1 Electrostatic Discharge

Test Requirement: EN IEC 55014-2: 2021
Test Method: EN 61000-4-2:2009

7.1.1 Test Setup Diagram



7.1.2 E.U.T. Operation

Operating Environment:
Temperature: 22 °C Humidity: 46 % RH Atmospheric Pressure: 1010 mbar

7.1.3 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Keep EUT running & heating.

7.1.4 Test Condition and Results:

Performance Criterion: B
Discharge Impedance: 330 Ω / 150 pF
Discharge Voltage: Air Discharge: 8 kV; Contact Discharge:4 kV; VCP/HCP: 4 kV.
Polarity: Positive & Negative
Number of Discharge: Minimum 10 times at each test point
Discharge Mode: Single Discharge
Discharge Period: 1 second minimum
Test Point 1: All insulated enclosure & seams.
Test Point 2: All accessible metal parts of the enclosure.
Test Point 3: All sides.

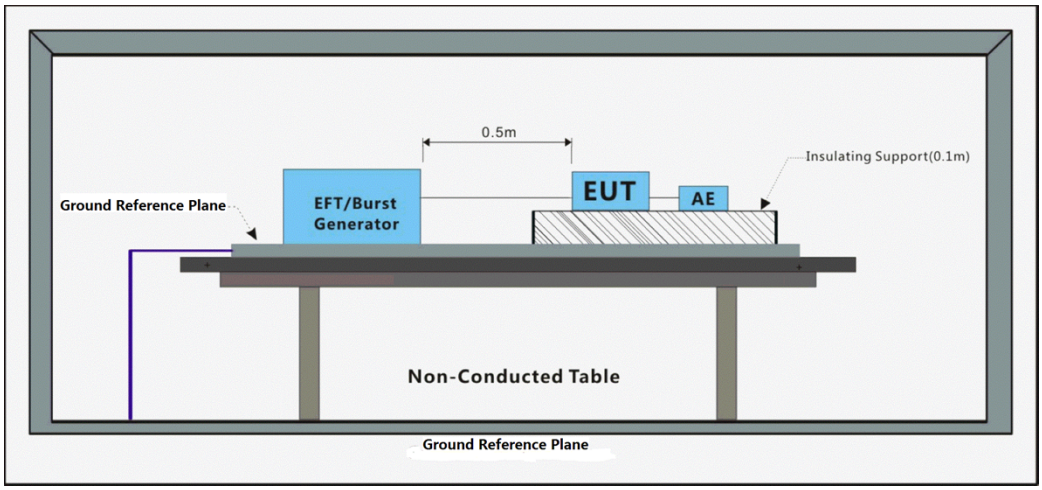
Discharge type	Level (kV)	Polarity	Test Point	Result / Observations
Air Discharge	8	+	1	A
Air Discharge	8	-	1	A
Contact Discharge	4	+	2	A
Contact Discharge	4	-	2	A
Horizontal Coupling	4	+	3	A
Horizontal Coupling	4	-	3	A
Vertical Coupling	4	+	3	A

Vertical Coupling	4	-	3	A
A: No degradation in the performance of the EUT was observed				

7.2 Electrical Fast Transients Burst at AC Mains Power Port

Test Requirement: EN IEC 55014-2: 2021
Test Method: EN 61000-4-4:2012

7.2.1 Test Setup Diagram



7.2.2 E.U.T. Operation

Operating Environment:
Temperature: 23 °C Humidity: 48 % RH Atmospheric Pressure: 1010 mbar

7.2.3 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Keep EUT running & heating.

7.2.4 Test Condition and Results:

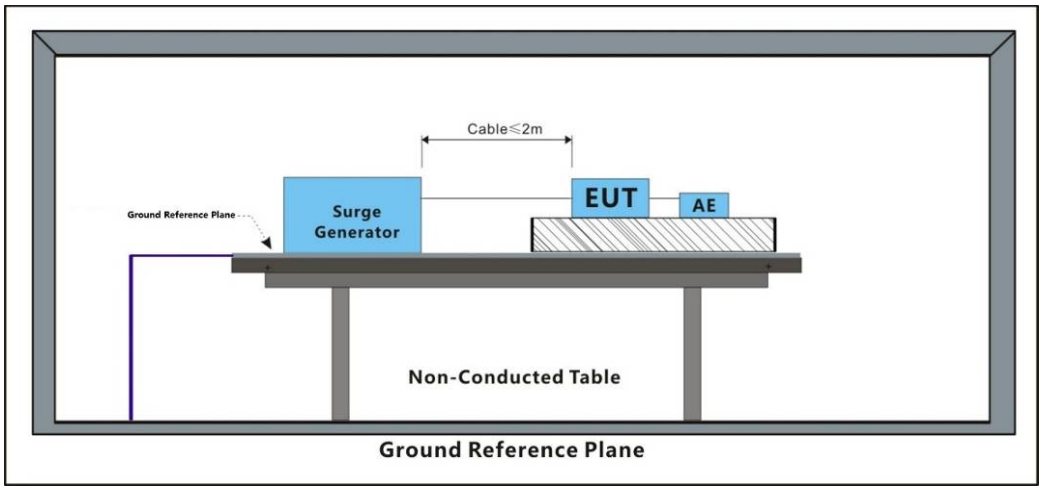
Performance Criterion: B
Repetition Frequency: 5kHz
Burst Period: 300ms
Test Duration: 2 minute per level & polarity
Test Level: 1.0kV
Polarity: Positive & Negative

Test Line	Level (kV)	Polarity	CDN/Clamp	Result / Observations
AC power port	1	+	CDN	A
AC power port	1	-	CDN	A
A: No degradation in the performance of the EUT was observed				

7.3 Surge at AC Mains Power Port

Test Requirement: EN IEC 55014-2: 2021
Test Method: EN 61000-4-5:2014+A1:2017

7.3.1 Test Setup Diagram



7.3.2 E.U.T. Operation

Operating Environment:
Temperature: 23 °C Humidity: 48 % RH Atmospheric Pressure: 1010 mbar

7.3.3 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Keep EUT running & heating.

7.3.4 Test Condition and Results:

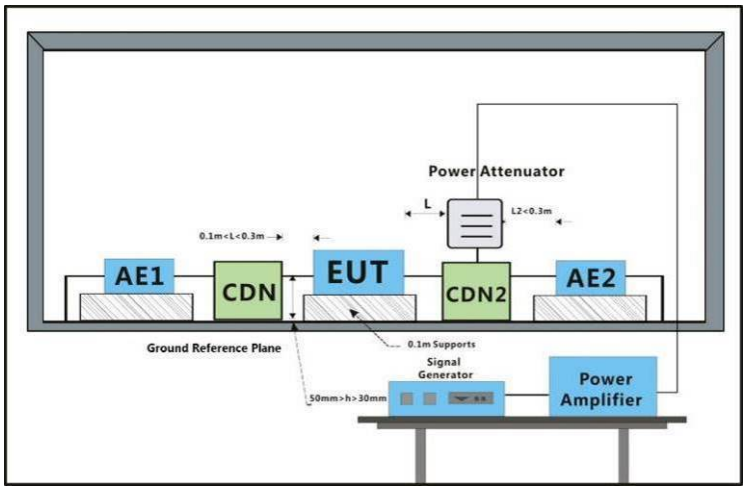
Performance Criterion: B
Interval: 60s between each surge
Test Level: ±1kV Live to Neutral; ±2kV Live, Neutral to Earth
Polarity: Positive & Negative
Generator source impedance: 2Ω
CDN coupling impedance(Line-to-ground):10Ω
Trigger Mode: Internal
No. of surges: 5 positive at 90°, 5 negative at 270°.

Test Line	Level (kV)	Polarity	Phase (deg)	Result / Observations
L-N	1	+	90°	A
L-N	1	-	270°	A
N-PE	2	+	90°	A
N-PE	2	-	270°	A
L-PE	2	+	90°	A
L-PE	2	-	270°	A
A: No degradation in the performance of the EUT was observed				

7.4 Conducted Immunity at AC Mains Power Port (150kHz-230MHz)

Test Requirement: EN IEC 55014-2: 2021
Test Method: EN 61000-4-6: 2014

7.4.1 Test Setup Diagram



7.4.2 E.U.T. Operation

Operating Environment:

Temperature: 23 °C Humidity: 48 % RH Atmospheric Pressure: 1010 mbar

7.4.3 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Keep EUT running & heating.

7.4.4 Test Condition and Results:

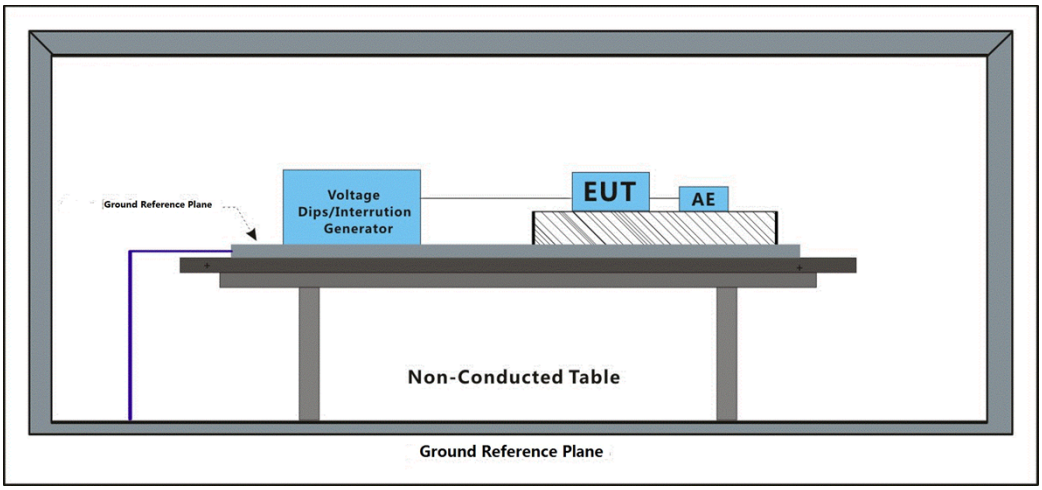
Performance Criterion: A
Step Size: 1%
Frequency Range: 0.15MHz to 230MHz
Modulation: 80%, 1kHz Amplitude Modulation

Cable Port	Level (Vrms)	CDN/Clamp	Dwell time	Result / Observations
AC power port	3	CDN	3s	A
A: No degradation in the performance of the EUT was observed				

7.5 Voltage Dips and Interruptions

Test Requirement: EN IEC 55014-2: 2021
Test Method: EN IEC 61000-4-11: 2020

7.5.1 Test Setup Diagram



7.5.2 E.U.T. Operation

Operating Environment:

Temperature: 23 °C Humidity: 48 % RH Atmospheric Pressure: 1010 mbar

7.5.3 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	Keep EUT running & heating.

7.5.4 Test Condition and Results:

Performance Criterion:

For 50Hz: 0% of UT (Rated Voltage) for 0.5 Cycle: C; 40% of UT for 10 Cycles: C; 70% of UT for 25 Cycles: C.

For 60Hz: 0% of UT (Rated Voltage) for 0.5 Cycle: C; 40% of UT for 12 Cycles: C; 70% of UT for 30 Cycles: C.

No. of Dips / Interruptions: 3 per Level

Time between dropout: 10s

Level % UT	Phase (deg)	Duration	No. of Dips / Interruptions	Result / Observations
0	0°	0.5 Cycle for 50Hz	3	A
0	180°	0.5 Cycle for 50Hz	3	A
40	0°	10 Cycles for 50Hz	3	A
40	180°	10 Cycles for 50Hz	3	A
70	0°	25 Cycles for 50Hz	3	A
70	180°	25 Cycles for 50Hz	3	A
A: No degradation in the performance of the EUT was observed.				

8 Test Setup Photo

Conducted Emissions at AC Mains Power Port (150kHz-30MHz)

Discontinuous Disturbance (150kHz-30MHz)

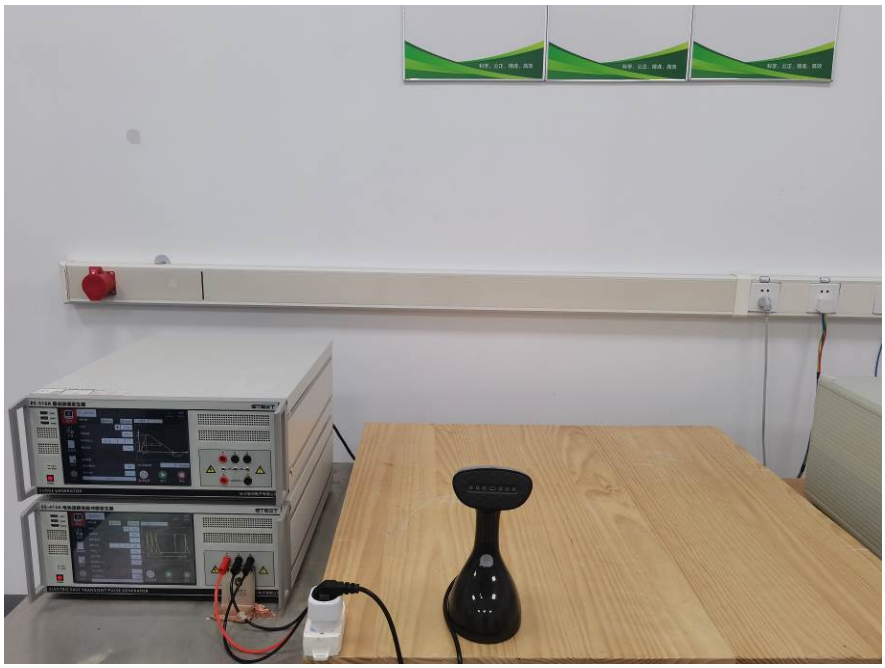
Disturbance Power

Harmonic Current Emission

Voltage Fluctuations and Flicker

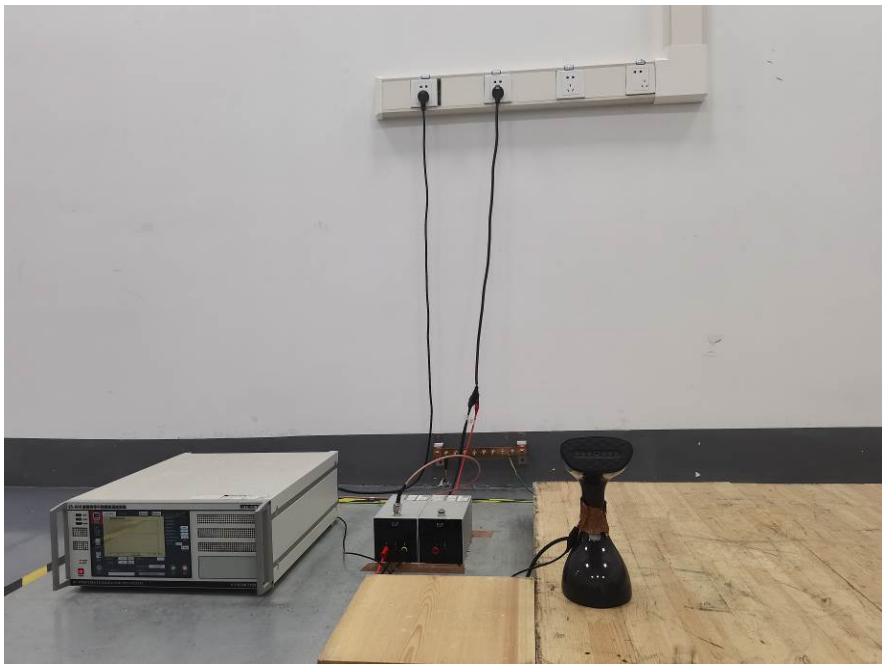
Electrostatic Discharge

Electrical Fast Transients Burst at AC Mains Power Port



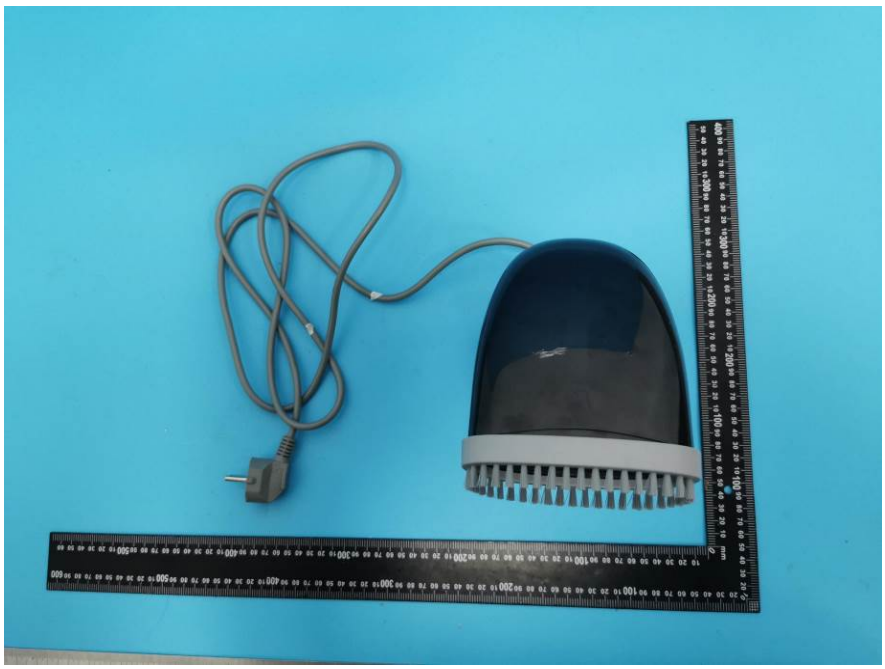
Surge at AC Mains Power Port

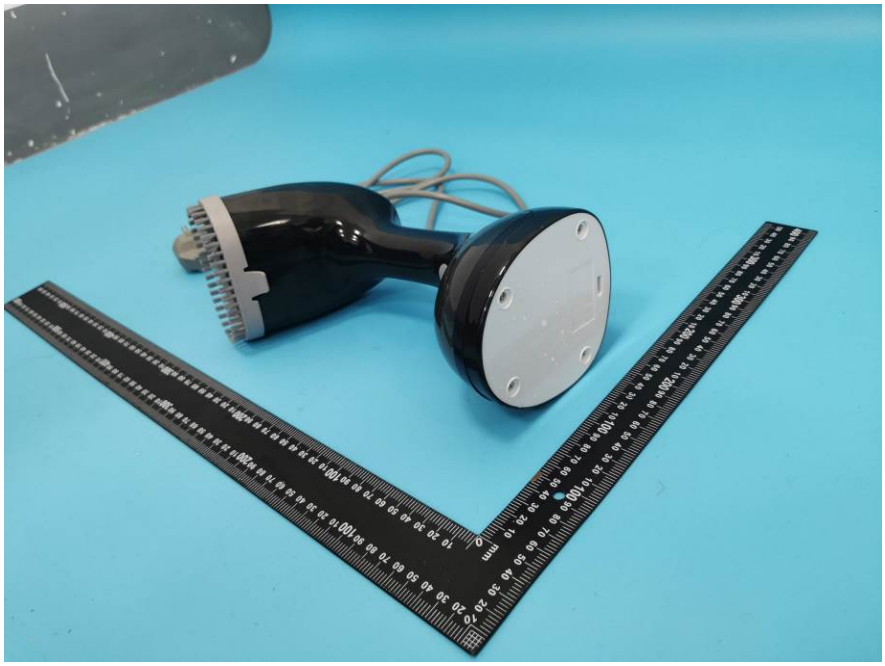
Conducted Immunity at AC Mains Power Port (150kHz-230MHz)

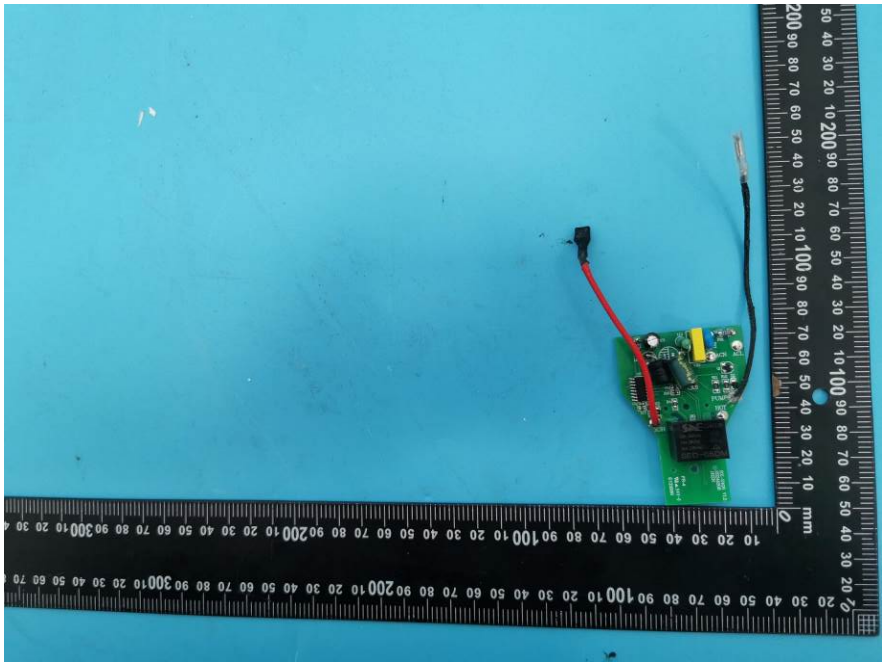


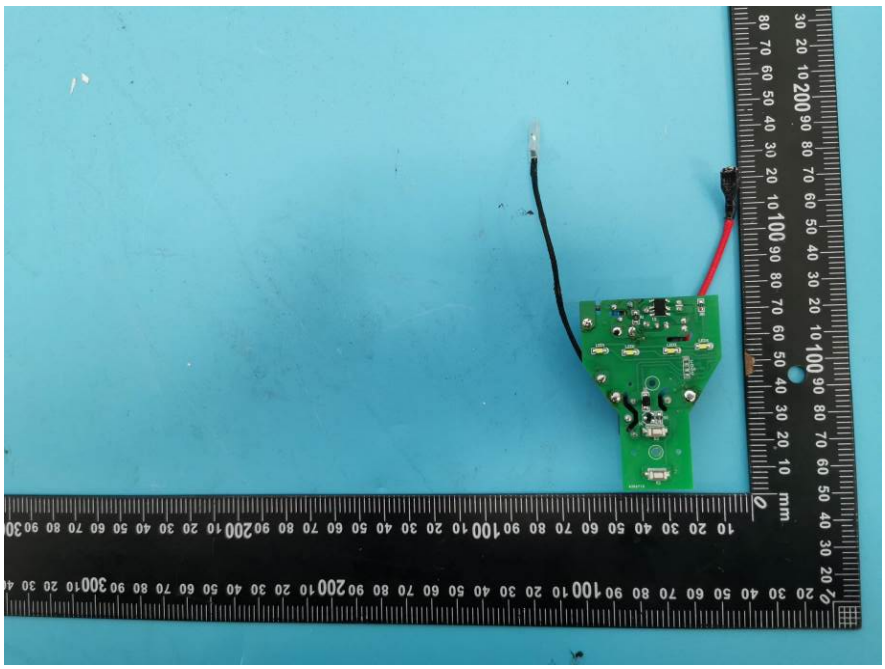
Voltage Dips and Interruptions

9 EUT Constructional Details (EUT Photos)









- End of the Report -