



Shenzhen Huaxia Testing Technology Co., Ltd.

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

Telephone: +86-755-26544737

Fax: +86-755-26648637

Website: www.cqa-cert.com

Report Template Version: V05

Report Template Revision Date: 2021-11-03

TEST REPORT

Report No.: CQASZ20250300400E
Applicant: Shenzhen Chuangtong Electronic Instruments Co., Ltd.
Address of Applicant: 1501, Shenzhen Luohu Investment Holding Building B,
112 Qingshuihe 1st Road, Luohu District, Shenzhen, Guangdong, China
Equipment Under Test (EUT):
EUT Name: MYTREX MEDI NECK
Model No.: MT-MDN24B
Test Model No.: MT-MDN24B
Brand Name: MYTREX
Standards: EN IEC 55014-1:2021
EN 61000-3-3:2013/A2:2021
EN IEC 61000-3-2:2019/A1:2021
EN IEC 55014-2:2021
Date of Receipt: 2025-3-3
Date of Test: 2025-3-3 to 2025-4-7
Date of Issue: 2025-4-9
Test Result: Pass*

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

Tested By:

(Joe Wang)

Reviewed By:

(Timo Lei)

Approved By:

(Jack Ai)



The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of COA, this report can't be reproduced except in full.

1 Version

Revision History of Report

Report No.	Version	Description	Issue Date
CQASZ20250300400E	Rev. 01	Initial report	2025-4-9

2 Test Summary

Test Item	Standard	Test Method	Class / Severity	Result
Disturbance voltage from AC mains port	EN IEC 55014-1:2021	CISPR 16-1-4	Table 5	Pass
Disturbance power	EN IEC 55014-1:2021	CISPR 16-2-2	Table 7 & Table 8	Pass
Harmonic current emission	EN IEC 61000-3-2:2019/A1:2021	EN IEC 61000-3-2:2019/A1:2021	Class A	N/A ¹⁾
Voltage fluctuations and flicker	EN 61000-3-3:2013/A2:2021	EN 61000-3-3:2013/A2:2021	Clause 4	Pass
Electrostatic discharge	EN IEC 55014-2:2021	EN 61000-4-2:2009	Clause 7.2	Pass
Radio frequency electromagnetic fields	EN IEC 55014-2:2021	EN IEC 61000-4-3:2020	Clause 7.2	Pass
Fast transients for AC power ports	EN IEC 55014-2:2021	EN 61000-4-4:2012	Clause 7.2	Pass
Surges for AC power ports	EN IEC 55014-2:2021	EN 61000-4-5:2014+A1:2017	Clause 7.2	Pass
Injected currents for AC power ports	EN IEC 55014-2:2021	EN 61000-4-6:2014	Clause 7.2	Pass
Voltage dips	EN IEC 55014-2:2021	EN IEC 61000-4-11:2020	Clause 7.2	Pass

N/A¹⁾: Because the rated power of this product is less than 75W.

3 Contents

	Page
1 VERSION	2
2 TEST SUMMARY	3
3 CONTENTS	4
4 GENERAL INFORMATION	6
4.1 CLIENT INFORMATION	6
4.2 GENERAL DESCRIPTION OF EUT	6
4.3 DESCRIPTION OF SUPPORT UNITS	6
4.4 TEST MODE	6
4.5 TEST LOCATION	6
4.6 TEST FACILITY	6
4.7 DEVIATION FROM STANDARDS	7
4.8 ABNORMALITIES FROM STANDARD CONDITION	7
4.9 OTHER INFORMATION REQUESTED BY THE CUSTOMER	7
4.10 MEASUREMENT UNCERTAINTY (95% CONFIDENCE LEVELS, K=2)	7
5 EQUIPMENT LIST	8
6 EMISSION TEST RESULTS (EMI)	10
6.1 DISTURBANCE VOLTAGE FROM AC MAINS PORT	10
6.1.1 E.U.T. Operation:	10
6.1.2 Test Setup Diagram:	10
6.1.3 Test Data:	11
6.2 DISTURBANCE POWER	13
6.2.1 E.U.T. Operation:	13
6.2.2 Test Data:	14
6.3 VOLTAGE FLUCTUATIONS AND FLICKER	15
6.3.1 E.U.T. Operation:	15
6.3.2 Test Setup Diagram:	15
6.3.3 Test Data:	16
7 IMMUNITY TEST RESULTS (EMS)	17
7.1 ELECTROSTATIC DISCHARGE	18
7.1.1 E.U.T. Operation:	18
7.1.2 Test Setup Diagram:	18
7.1.3 Test Data:	18
7.2 RADIO FREQUENCY ELECTROMAGNETIC FIELDS	20
7.2.1 E.U.T. Operation:	20
7.2.2 Test Setup Diagram:	20
7.2.3 Test Data:	20
7.3 FAST TRANSIENTS FOR AC POWER PORTS	22
7.3.1 E.U.T. Operation:	22
7.3.2 Test Setup Diagram:	22
7.3.3 Test Data:	22
7.4 SURGES FOR AC POWER PORTS	23
7.4.1 E.U.T. Operation:	23
7.4.2 Test Setup Diagram:	23
7.4.3 Test Data:	23
7.5 VOLTAGE DIPS	24
7.5.1 E.U.T. Operation:	24

7.5.2 Test Setup Diagram:.....	24
7.5.3 Test Data:.....	24
7.6 INJECTED CURRENTS FOR AC POWER PORTS.....	25
7.6.1 E.U.T. Operation:.....	25
7.6.2 Test Setup Diagram:.....	25
7.6.3 Test Data:.....	25
8 TEST SETUP PHOTOS.....	26
9 PHOTOGRAPHS OF EUT.....	29

4 General Information

4.1 Client Information

Applicant:	Shenzhen Chuangtong Electronic Instruments Co., Ltd.
Address of Applicant:	1501,Shenzhen Luohu Investment Holding Building B, 112 Qingshuihe 1st Road, Luohu District, Shenzhen,GuangDong,China
Manufacturer:	Shenzhen Chuangtong Electronic Instruments Co., Ltd.
Address of Manufacturer:	1501,Shenzhen Luohu Investment Holding Building B, 112 Qingshuihe 1st Road, Luohu District, Shenzhen,GuangDong,China
Factory:	Jiangsu Alphay Medical Device Co.,Ltd
Address of Factory:	No.95 zhenxing Road, Economic&Technological Development Zone, Nantong, Jiangsu

4.2 General Description of EUT

Product Name:	MYTREX MEDI NECK
Model No.:	MT-MDN24B
Test Model No.:	MT-MDN24B
Trade Mark:	MYTREX
Power Supply:	Power by adapter INPUT:100-240V~ 50/60Hz 0.35A OUTPUT: 12.0V \equiv 1.0A 12.0W
Difference:	/

4.3 Description of Support Units

The EUT was tested as an independent device.

4.4 Test Mode

No	Title	Description
TM1	Normal working	Keep the EUT in Normal working

4.5 Test Location

Shenzhen Huaxia Testing Technology Co., Ltd.

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

4.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- IC Registration No.: 22984-1

The 3m Semi-anechoic chamber of Shenzhen Huaxia Testing Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing

- CNAS (No. CNAS L5785)

CNAS has accredited Shenzhen Huaxia Testing Technology Co., Ltd. Shenzhen Branch EMC

Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the

competence in the field of testing.

- A2LA (Certificate No. 4742.01)

Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4742.01.

- FCC Registration No.: 522263

Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.:522263

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Condition

None

4.9 Other Information Requested by the Customer

None.

4.10 Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Measurement Uncertainty
Conducted Emission (9k ~ 150kHz)	3.74dB
Conducted Emission (150kHz ~ 30MHz)	3.34dB
Conducted Immunity	0.92dB

5 Equipment List

Disturbance voltage from AC mains port					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EMI Test Receiver	R&S	ESR7	CQA-005	2024/9/2	2025/9/1
LISN	R&S	ENV216	CQA-003	2024/9/2	2025/9/1
Coaxial cable (9KHz~300MHz)	CQA	N/A	C021	2024/9/2	2025/9/1
Three-ring antenna	Da zhe	ZN30401	CQA-010	2024/9/2	2025/9/1
Power absorbing clamp	R&S	MDS21	CQA-004	2024/9/4	2025/9/3
Coaxial cable	CQA	N/A	C012	2024/9/4	2025/9/3
Shield room	CQA	843	CQA-008	2024/9/8	2025/9/7

Disturbance power					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EMI Test Receiver	R&S	ESR7	CQA-005	2024/9/2	2025/9/1
LISN	R&S	ENV216	CQA-003	2024/9/2	2025/9/1
Coaxial cable (9KHz~300MHz)	CQA	N/A	C021	2024/9/2	2025/9/1
Three-ring antenna	Da zhe	ZN30401	CQA-010	2024/9/2	2025/9/1
Power absorbing clamp	R&S	MDS21	CQA-004	2024/9/4	2025/9/3
Coaxial cable	CQA	N/A	C012	2024/9/4	2025/9/3
Shield room	CQA	843	CQA-008	2024/9/8	2025/9/7

Harmonic current emission					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Harmonic And Flicker Analyzer	CI	PACS-3	CQA-021	2024/9/2	2025/9/1
AC Power Supply	CI	5001 ix	CQA-073	2024/9/2	2025/9/1

Voltage fluctuations and flicker					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Harmonic And Flicker Analyzer	CI	PACS-3	CQA-021	2024/9/2	2025/9/1
AC Power Supply	CI	5001 ix	CQA-073	2024/9/2	2025/9/1

Electrostatic Discharge					
Equipment	Manufacturer	Model No	Inventory No.	Cal Date	Cal Due Date
ESD Simulator	EM TEST	DITO	CQA-001	2024/9/7	2025/9/6

Radio frequency electromagnetic fields					
Equipment	Manufacturer	Model No	Inventory No.	Cal Date	Cal Due Date
Full anechoic chamber	Cheng Yu	966	CQA-009	2024/3/8	2027/3/7

Signal Generator	ANRITSU	MG3692B	CQA-019	2024/9/2	2025/9/1
Signal Generator	R&S	SME06	CQA-024	2024/9/2	2025/9/1
Power amplifier	Micotop	MPA-80-1000-250	CQA-085	2024/9/7	2025/9/6
Power amplifier	Micotop	MPA-1000-6000-100	CQA-086	2024/9/7	2025/9/6
Bilog Antenna	R&S	HL562	CQA-011	2023/9/7	2026/9/6
Stacked Double Log-Per. Antenna	Schwarzbeck	STLP9149	CQA-087	2023/9/8	2026/9/7
Power meter	R&S	NRVD	CQA-029	2024/9/2	2025/9/1
Power Sensor	R&S	URV5-Z2	CQA-031	2024/9/2	2025/9/1

Fast transients for AC power ports

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EMS test system	HTEC	ECOMPACT 7	CQA-002	2024/9/2	2025/9/1
Communications surge generator	HTEC	HTSG 70	CQA-063	2024/9/2	2025/9/1
Capacitive Coupling Clamp	HTEC	H3C	CQA-018	2024/9/2	2025/9/1

Surges for AC power ports

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EMS test system	HTEC	ECOMPACT 7	CQA-002	2024/9/2	2025/9/1
Communications surge generator	HTEC	HTSG 70	CQA-063	2024/9/2	2025/9/1
Capacitive Coupling Clamp	HTEC	H3C	CQA-018	2024/9/2	2025/9/1

Voltage dips

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EMS test system	HTEC	ECOMPACT 7	CQA-002	2024/9/2	2025/9/1
Communications surge generator	HTEC	HTSG 70	CQA-063	2024/9/2	2025/9/1
Capacitive Coupling Clamp	HTEC	H3C	CQA-018	2024/9/2	2025/9/1

Injected currents for AC power ports

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
RF-Generator	EM TEST	CWS 500	CQA-016	2024/9/2	2025/9/1
6db Attenuator	EM TEST	ATT6/75	CQA-049	2024/9/2	2025/9/1
CDN	SCHWARZBECK	CDN M2/M3PE	CQA-050	2024/9/2	2025/9/1

6 Emission Test Results (EMI)

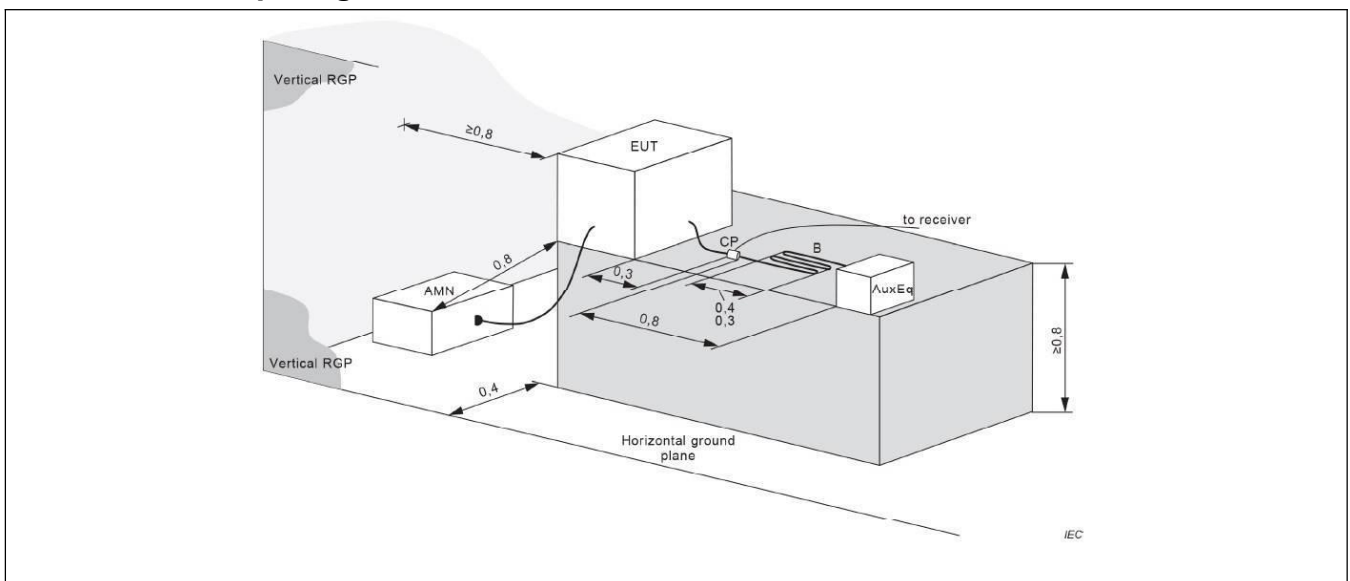
6.1 Disturbance voltage from AC mains port

Test Requirement:	Table 5		
Test Method:	CISPR 16-1-4		
Test Limit:	Frequency range	Mains ports Disturbance voltage	
	MHz	Quasi-peak dB μ V	Average dB μ V
	0,15 to 0,50	Decreasing linearly with the logarithm of the frequency from:	
		66 to 56	59 to 46
	0,50 to 5	56	46
	5 to 30	60	50
The lower limit applies at the transition frequencies. The test report shall state which test method was used and which limits were applied.			
Procedure:	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. Remark: Level= Read Level+ Cable Loss+ LISN Factor		

6.1.1 E.U.T. Operation:

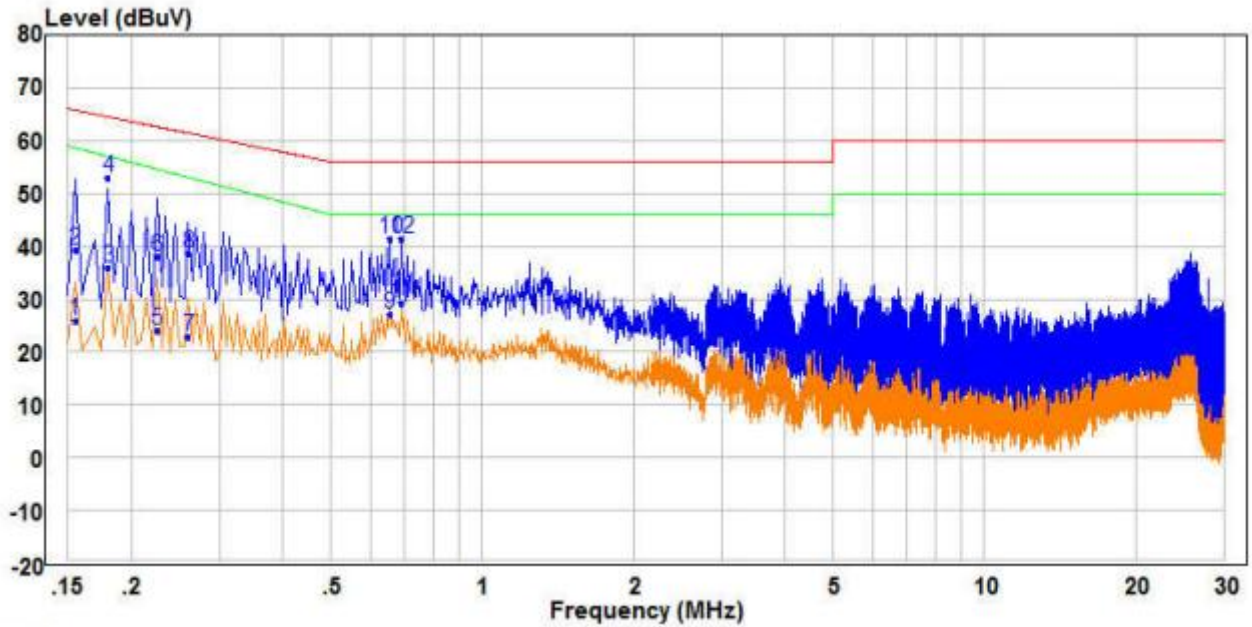
Operating Environment:	
Temperature:	25.5 °C
Humidity:	55 %
Atmospheric Pressure:	100.1kPa
Pre test mode:	TM1
Final test mode:	TM1

6.1.2 Test Setup Diagram:



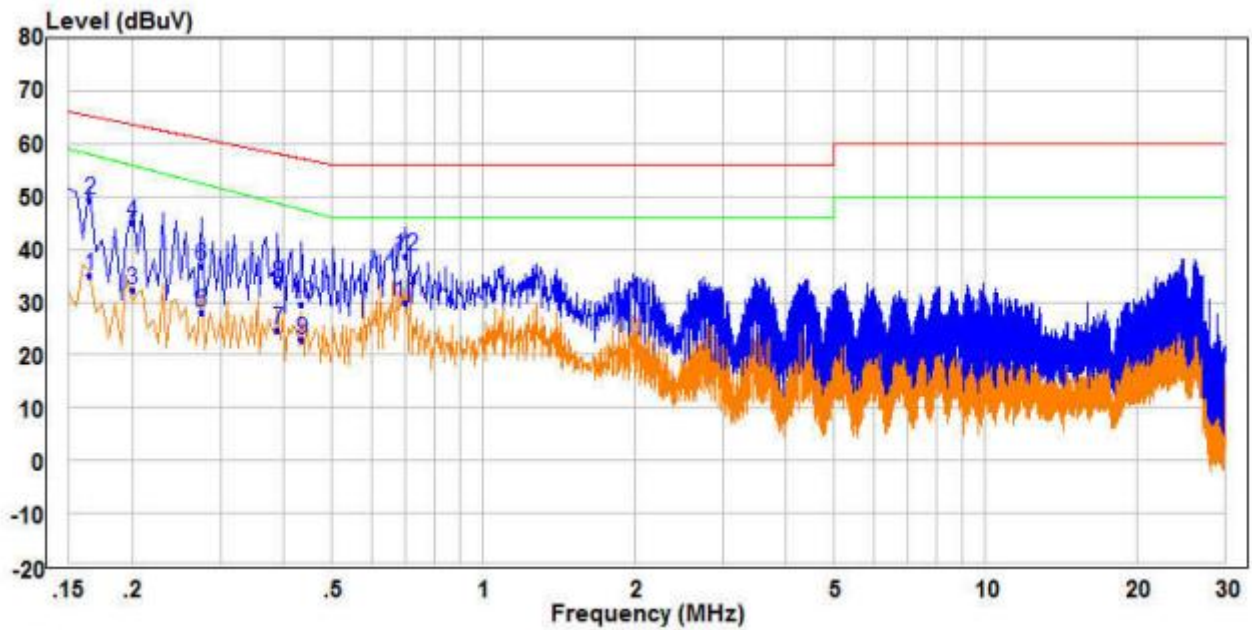
6.1.3 Test Data:

TM1 / Line: Line



	Read Freq	Read Level	Factor	Limit Level	Over Limit	Remark	Pol/Phase	
	MHz	dBuV	dB	dBuV	dB			
1	0.155	16.57	9.49	26.06	58.65	-32.59	Average	Line
2	0.155	29.80	9.49	39.29	65.73	-26.44	QP	Line
3	0.180	26.35	9.49	35.84	57.03	-21.19	Average	Line
4 PP	0.180	43.39	9.49	52.88	64.49	-11.61	QP	Line
5	0.225	14.63	9.49	24.12	54.62	-30.50	Average	Line
6	0.225	28.44	9.49	37.93	62.63	-24.70	QP	Line
7	0.260	13.27	9.49	22.76	53.06	-30.30	Average	Line
8	0.260	29.27	9.49	38.76	61.43	-22.67	QP	Line
9	0.655	17.28	9.80	27.08	46.00	-18.92	Average	Line
10	0.655	31.64	9.80	41.44	56.00	-14.56	QP	Line
11 AV	0.690	19.33	9.85	29.18	46.00	-16.82	Average	Line
12	0.690	31.46	9.85	41.31	56.00	-14.69	QP	Line

TM1 / Line: Neutral



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.165	25.41	9.67	35.08	57.97	-22.89	Average	Neutral
2 PP	0.165	39.58	9.67	49.25	65.21	-15.96	QP	Neutral
3	0.200	22.57	9.61	32.18	55.89	-23.71	Average	Neutral
4	0.200	35.37	9.61	44.98	63.61	-18.63	QP	Neutral
5	0.275	18.63	9.51	28.14	52.46	-24.32	Average	Neutral
6	0.275	27.44	9.51	36.95	60.97	-24.02	QP	Neutral
7	0.390	14.96	9.59	24.55	48.68	-24.13	Average	Neutral
8	0.390	24.05	9.59	33.64	58.06	-24.42	QP	Neutral
9	0.435	13.22	9.64	22.86	47.50	-24.64	Average	Neutral
10	0.435	19.80	9.64	29.44	57.16	-27.72	QP	Neutral
11 AV	0.700	19.84	9.90	29.74	46.00	-16.26	Average	Neutral
12	0.700	28.80	9.90	38.70	56.00	-17.30	QP	Neutral

6.2 Disturbance power

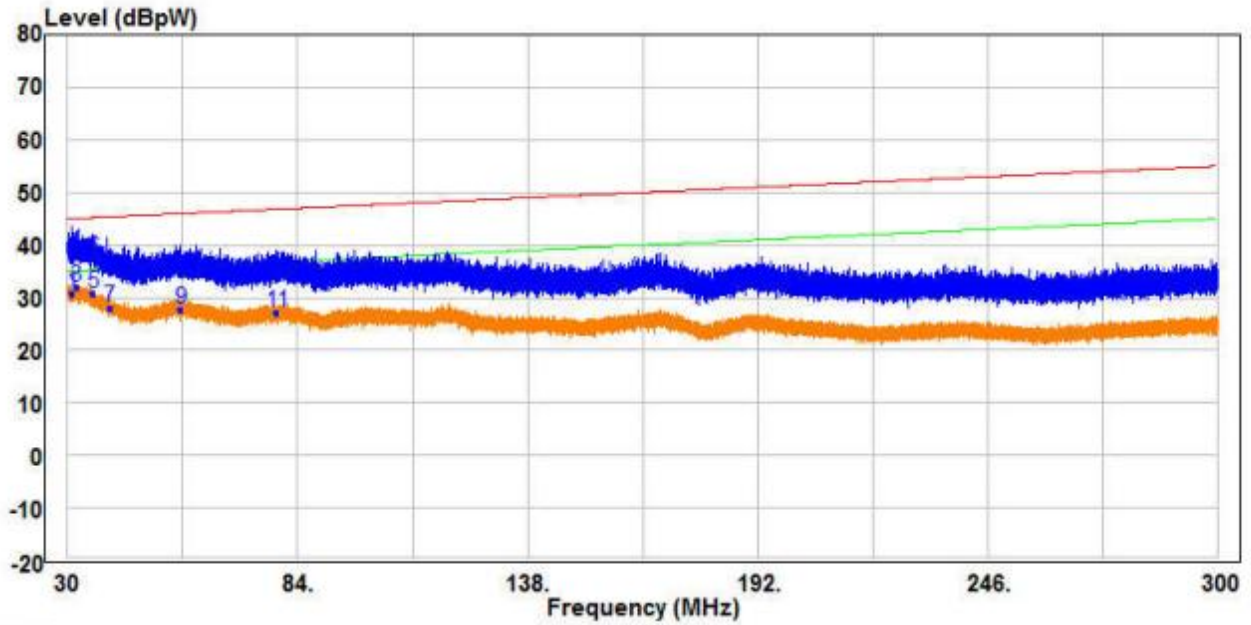
Test Requirement:	Table 7 & Table 8		
Test Method:	CISPR 16-2-2		
Test Limit:	Frequency range	General	
	MHz	Quasi-peak dBpW	Average dBpW
	30 to 300	Increasing linearly with the frequency from:	
		45 to 55	35 to 45
	200 to 300	0 to 10	0
	Key <i>P</i> = rated power of the motor only. Additional limits of 200 to 300 for reduction applicable to Table 7 limits.		
Procedure:	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. Measured Level = Read level + Cable Loss + Clamp Factor		

6.2.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.5 °C
Humidity:	55 %
Atmospheric Pressure:	100.3kPa
Pre test mode:	TM1
Final test mode:	TM1

6.2.2 Test Data:

TM1



	Read Freq	Read Level	Factor	Limit Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBpW	dB	dBpW	dBpW	dB		
1	31.075	2.43	28.28	30.71	35.04	-4.33	Average	Line1
2	31.075	8.94	28.28	37.22	45.04	-7.82	QP	Line1
3	32.030	3.82	28.20	32.02	35.08	-3.06	Average	Line1
4	32.030	10.33	28.20	38.53	45.08	-6.55	QP	Line1
5	36.015	3.35	27.49	30.84	35.22	-4.38	Average	Line1
6	36.015	9.96	27.49	37.45	45.22	-7.77	QP	Line1
7	39.815	2.27	25.88	28.15	35.36	-7.21	Average	Line1
8	39.815	8.84	25.88	34.72	45.36	-10.64	QP	Line1
9	56.580	2.08	25.70	27.78	35.98	-8.20	Average	Line1
10	56.580	8.75	25.70	34.45	45.98	-11.53	QP	Line1
11	79.120	2.23	24.92	27.15	36.82	-9.67	Average	Line1
12	79.120	8.71	24.92	33.63	46.82	-13.19	QP	Line1

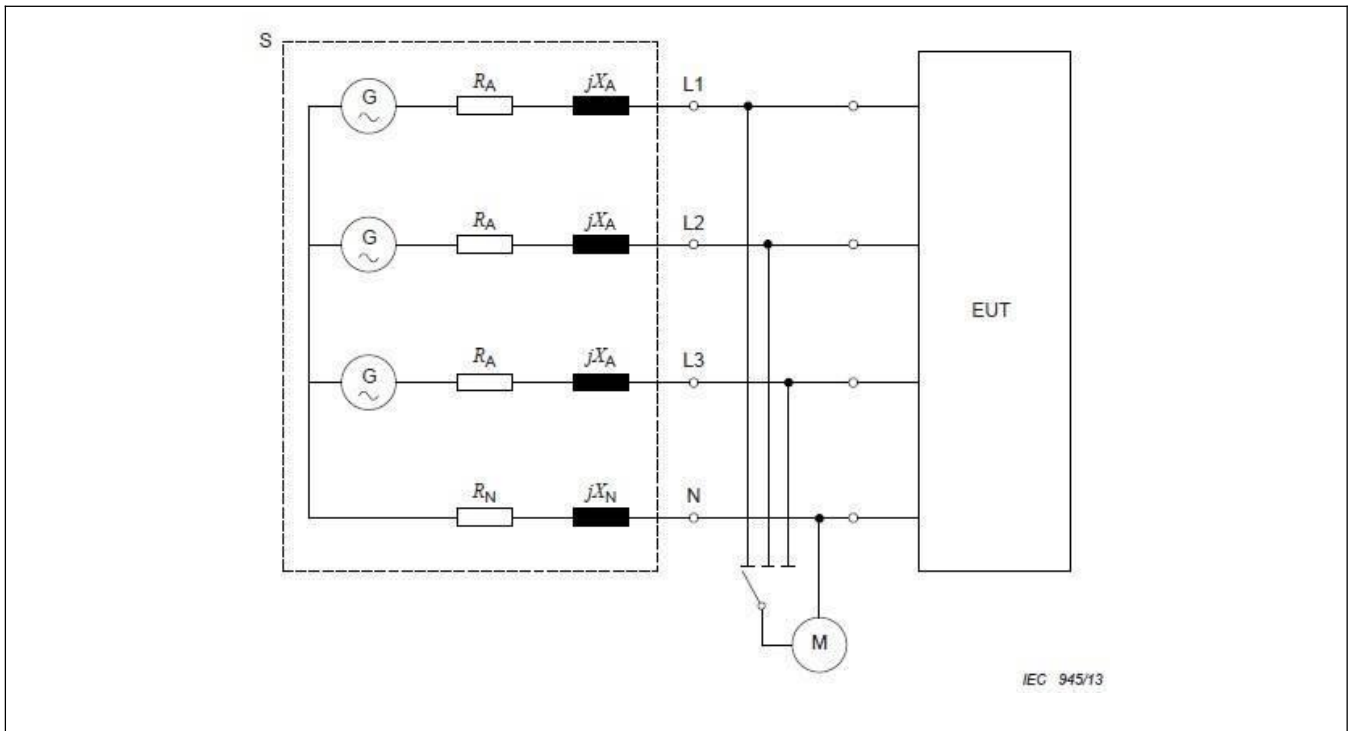
6.3 Voltage fluctuations and flicker

Test Requirement:	Clause 4
Test Method:	EN 61000-3-3:2013/A2:2021
Test Limit:	Clause 5

6.3.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.5 °C
Humidity:	55 %
Atmospheric Pressure:	100.1kPa
Pre test mode:	TM1
Final test mode:	TM1

6.3.2 Test Setup Diagram:



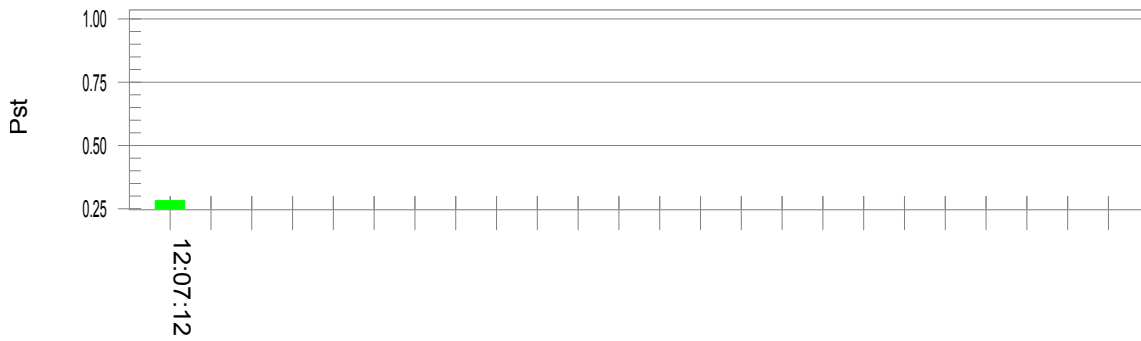
6.3.3 Test Data:

Test Result: Pass

Status: Test Completed

Pst_i and limit line

European Limits



Plt and limit line



Parameter values recorded during the test:

Vrms at the end of test (Volt): 229.38

Highest dt (%):

T-max (mS): 0

Highest dc (%): 0.00

Highest dmax (%): 0.00

Highest Pst (10 min. period): 0.286

Highest Plt (2 hr. period): 0.125

Test limit (%):

Test limit (mS): 500.0 Pass

Test limit (%): 3.30 Pass

Test limit (%): 4.00 Pass

Test limit: 1.000 Pass

Test limit: 0.650 Pass

7 Immunity Test Results (EMS)

Performance Criteria Description in EN IEC 55014-2 Performance Criteria

Performance 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.

Performance 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 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.

Performance criterion B/C

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.
Performance criterion C may be applied to toys not using score or data entered by the user.

Performance criterion 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.

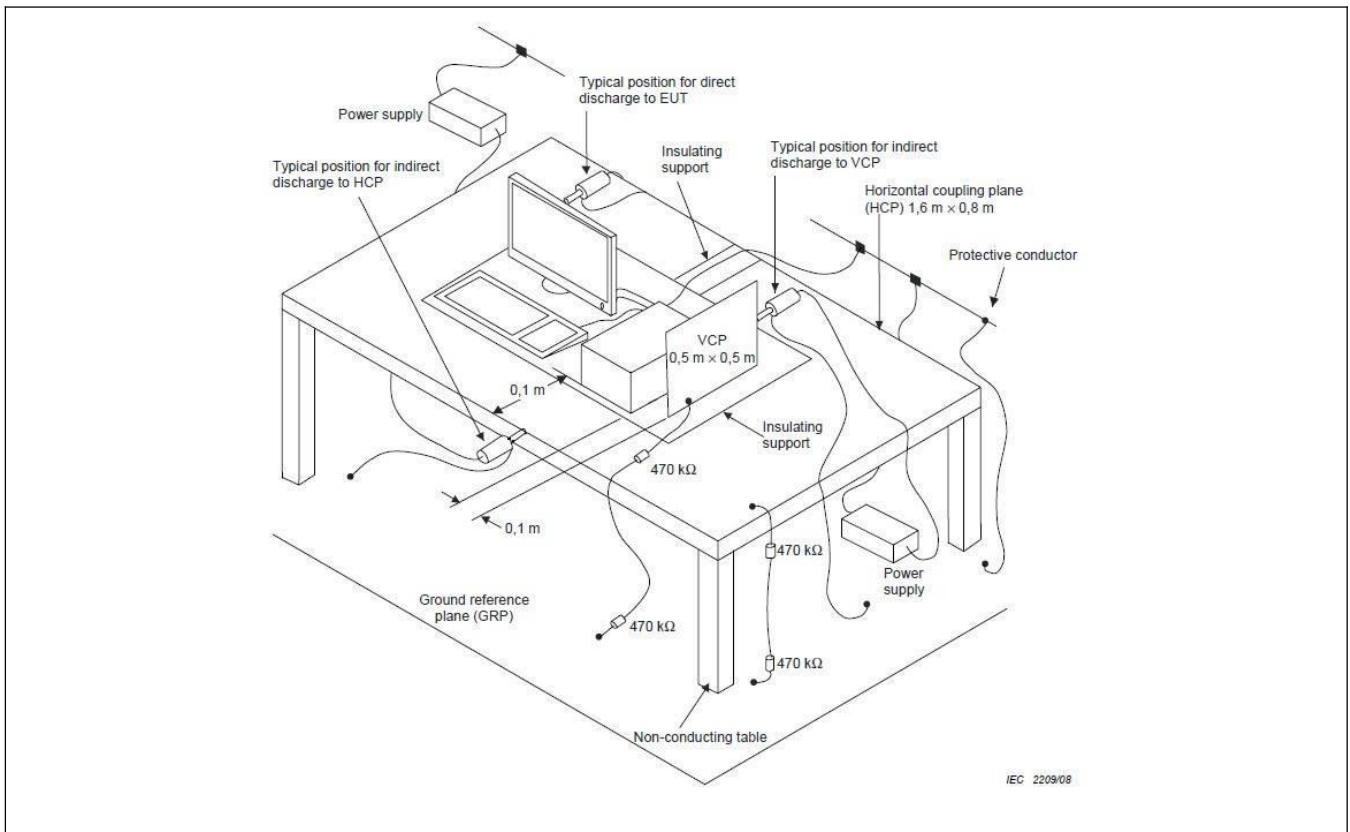
7.1 Electrostatic discharge

Test Requirement:	Clause 7.2
Test Method:	EN 61000-4-2:2009
Procedure:	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
Performance Criteria:	B

7.1.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.5 °C
Humidity:	55 %
Atmospheric Pressure:	100.1kPa
Pre test mode:	TM1
Final test mode:	TM1

7.1.2 Test Setup Diagram:



7.1.3 Test Data:

Discharge type	Volt (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

Test Point: 1. All insulated enclosure and seams.

2. All accessible metal parts of the enclosure.

3. All side.

A: No degradation in the performance of the EUT was observed.

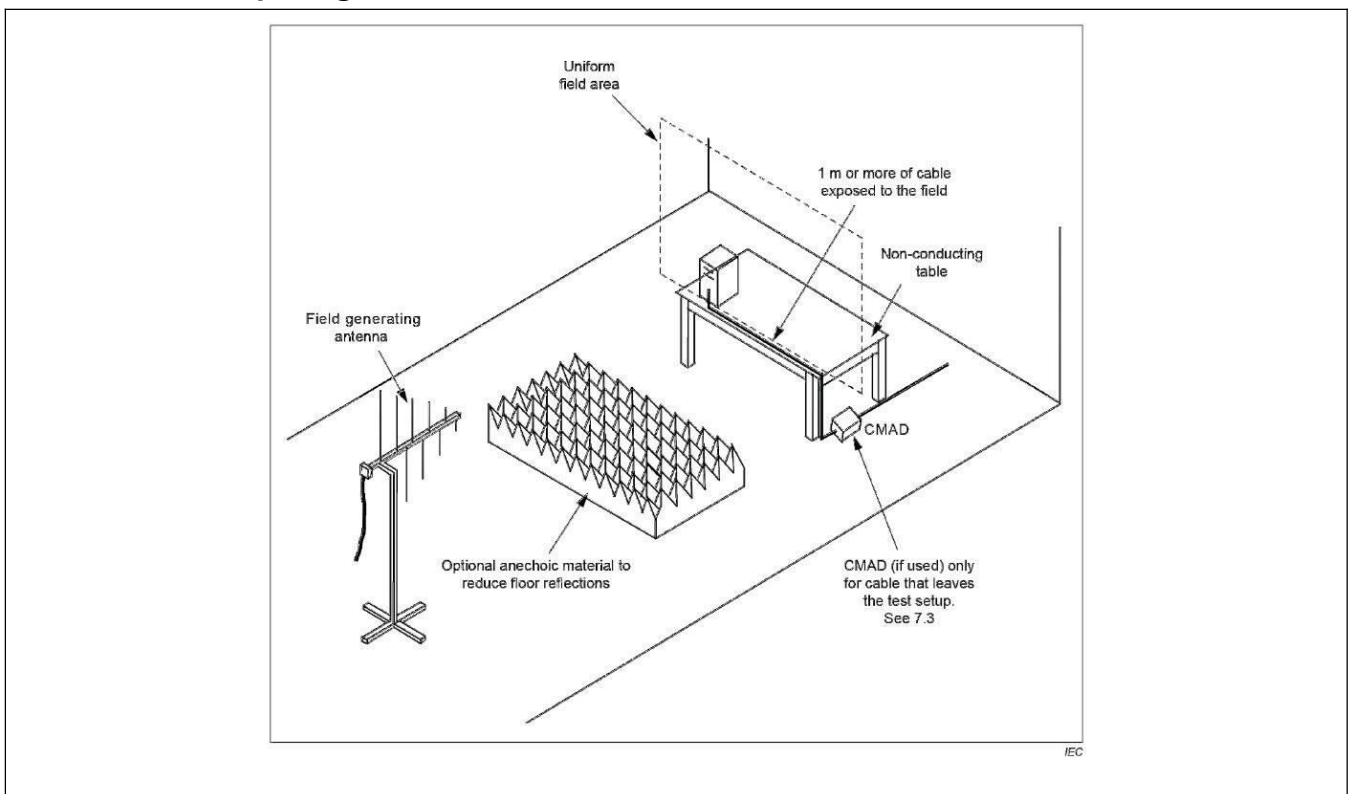
7.2 Radio frequency electromagnetic fields

Test Requirement:	Clause 7.2
Test Method:	EN IEC 61000-4-3:2020
Procedure:	Frequency Range: 80MHz to 6GHz Antenna Polarisation: Vertical and Horizontal Signal: Modulation 1kHz, 80% AM, 1% increment, 3V/m(RMS) unmodulated
Performance Criteria:	A

7.2.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.5 °C
Humidity:	55 %
Atmospheric Pressure:	100.1kPa
Pre test mode:	TM1
Final test mode:	TM1

7.2.2 Test Setup Diagram:



7.2.3 Test Data:

Frequency	Field Strength (V/m)	EUT face	Dwell time	Result/ Observations
80MHz-6GHz	3	Front	2s	A
80MHz-6GHz	3	Back	2s	A
80MHz-6GHz	3	Left	2s	A
80MHz-6GHz	3	Right	2s	A
80MHz-6GHz	3	Top	2s	A
80MHz-6GHz	3	Bottom	2s	A

A: No degradation in the performance of the EUT was observed.

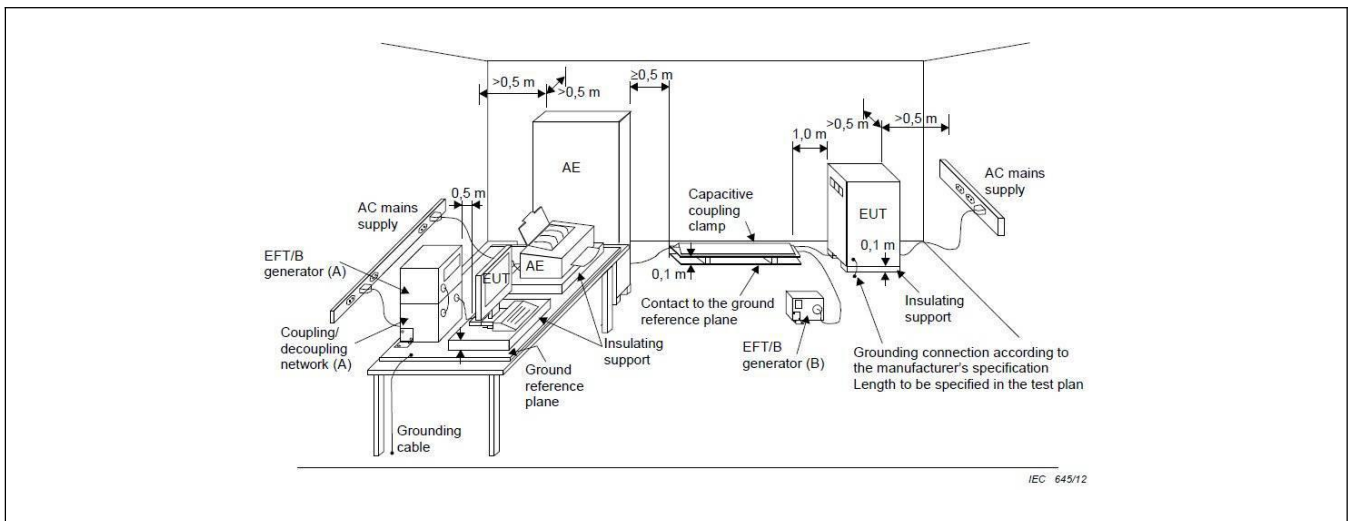
7.3 Fast transients for AC power ports

Test Requirement:	Clause 7.2
Test Method:	EN 61000-4-4:2012
Procedure:	Repetition Frequency: 5kHz Burst Period: 300ms Test Duration: 2 minute per level & polarity Test Level: 1.0kV Polarity: Positive & Negative
Performance Criteria:	B

7.3.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.5 °C
Humidity:	55 %
Atmospheric Pressure:	100.1kPa
Pre test mode:	TM1
Final test mode:	TM1

7.3.2 Test Setup Diagram:



7.3.3 Test Data:

Port	Votl (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.

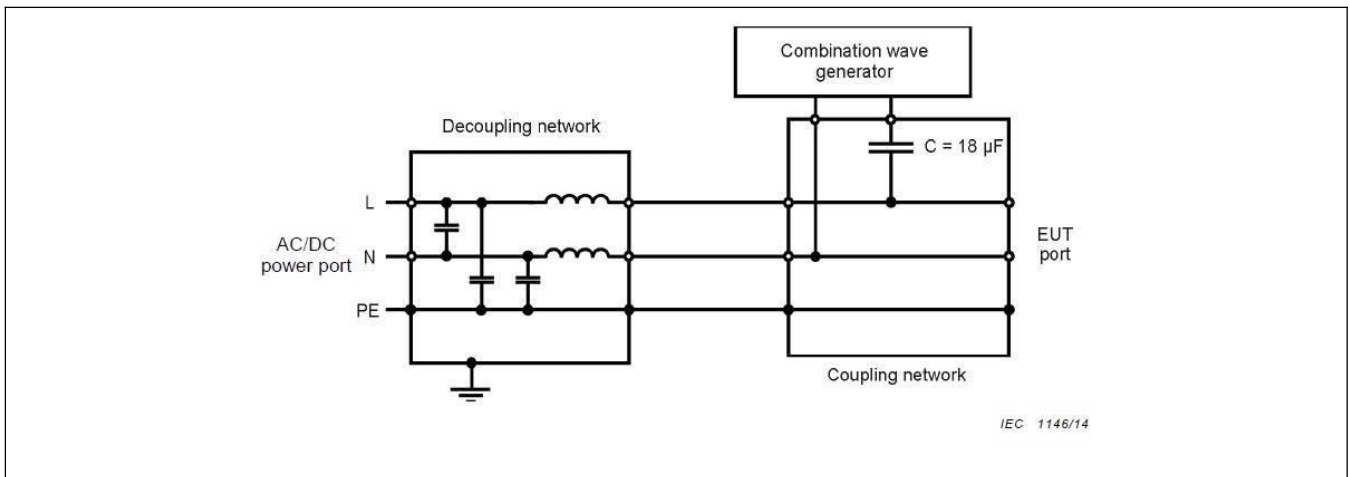
7.4 Surges for AC power ports

Test Requirement:	Clause 7.2
Test Method:	EN 61000-4-5:2014+A1:2017
Procedure:	Interval: 60s between each surge Test Level: $\pm 1\text{kV}$ Live to Neutral Polarity: Positive & Negative Generator source impedance: 2Ω Trigger Mode: Internal No. of surges: 5 positive at 90° , 5 negative at 270° .
Performance Criteria:	B

7.4.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.5 °C
Humidity:	55 %
Atmospheric Pressure:	100.1kPa
Pre test mode:	TM1
Final test mode:	TM1

7.4.2 Test Setup Diagram:



7.4.3 Test Data:

Port	VotI (kV)	Polarity	Phase(degree)	Result/ Observations
L-N	1	+	90°	A
L-N	1	-	270°	A

A: No degradation in the performance of the EUT was observed.

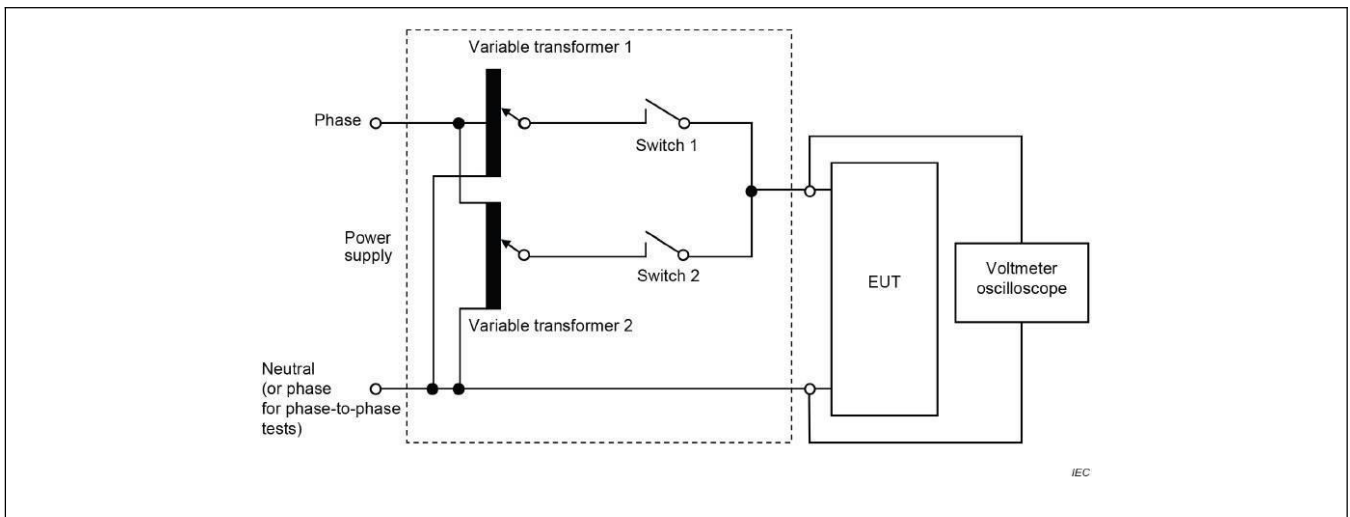
7.5 Voltage dips

Test Requirement:	Clause 7.2
Test Method:	EN IEC 61000-4-11:2020
Procedure:	0% of UT for 0.5 Cycle(50Hz) & 0.5 Cycle(60Hz) 40% of UT for 10 Cycle(50Hz) & 12 Cycle(60Hz) 70% of UT for 25 Cycle(50Hz) & 30 Cycle(60Hz) No. of Dips / Interruptions: 3 per Level Time between dropout 10s
Performance Criteria:	C

7.5.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.5 °C
Humidity:	55 %
Atmospheric Pressure:	100.1kPa
Pre test mode:	TM1
Final test mode:	TM1

7.5.2 Test Setup Diagram:



7.5.3 Test Data:

Level %UT	Phase (degree)	Duration	No. of Dips/ Interruptions	Result/ Observations
0	0°	0.5 Cycles	3	A
0	180°	0.5 Cycles	3	A
40	0°	10 Cycles	3	A
40	180°	10 Cycles	3	A
70	0°	25 Cycles	3	A
70	180°	25 Cycles	3	A
0	0°	0.5 Cycles	3	A
0	180°	0.5 Cycles	3	A
40	0°	12 Cycles	3	A
40	180°	12 Cycles	3	A
70	0°	30 Cycles	3	A
70	180°	30 Cycles	3	A

A: No degradation in the performance of the EUT was observed.

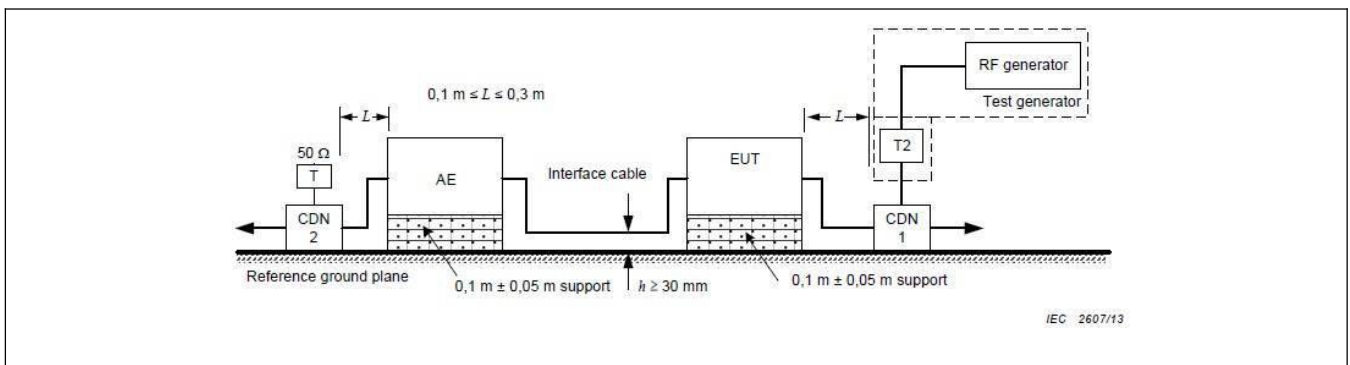
7.6 Injected currents for AC power ports

Test Requirement:	Clause 7.2
Test Method:	EN 61000-4-6:2014
Procedure:	0,15 MHz to 230 MHz RF current common mode 1 kHz, 80 % AM 3 V (RMS) (unmodulated) 150 Ω source impedance
Performance Criteria:	A

7.6.1 E.U.T. Operation:

Operating Environment:	
Temperature:	26.9 °C
Humidity:	54 %
Atmospheric Pressure:	100.1kPa
Pre test mode:	TM1
Final test mode:	TM1

7.6.2 Test Setup Diagram:



7.6.3 Test Data:

Port	Strength (Vrms)	CDN/Clamp	Dwell Time	Result /Observation
AC port	3	CDN	2s	A

A: No degradation in the performance of the EUT was observed.

8 Test Setup Photos

Disturbance voltage from AC mains port



Disturbance power



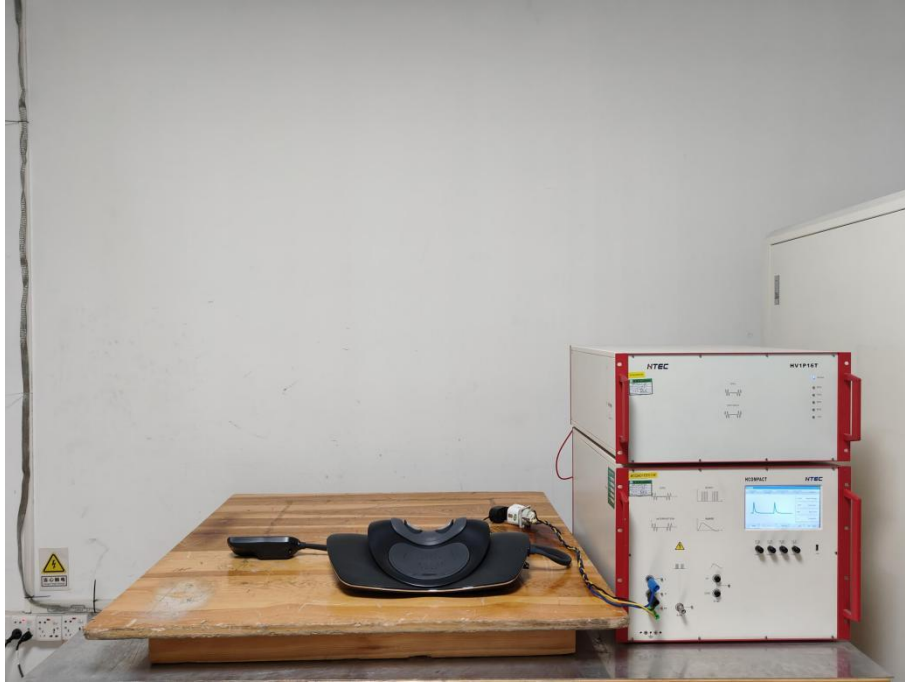
Voltage fluctuations and flicker



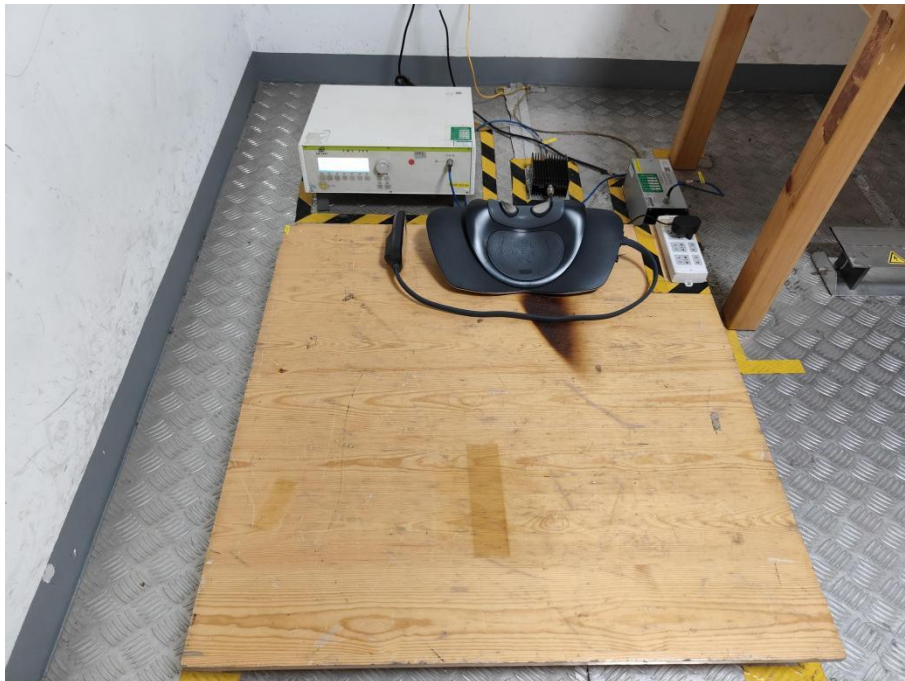
Electrostatic discharge



**Fast transients for AC power ports
Surges for AC power ports
Voltage dips**



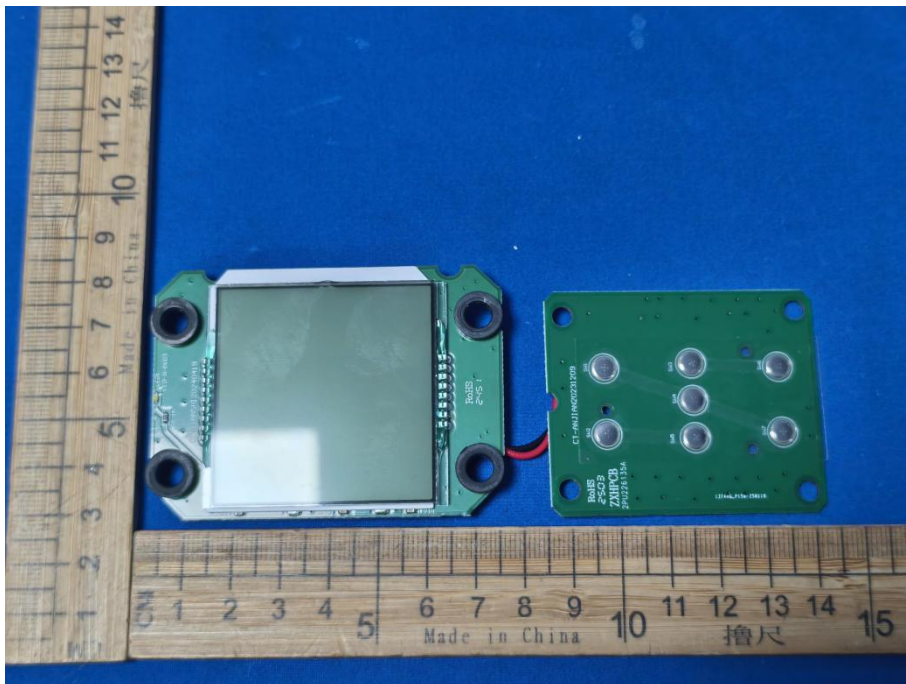
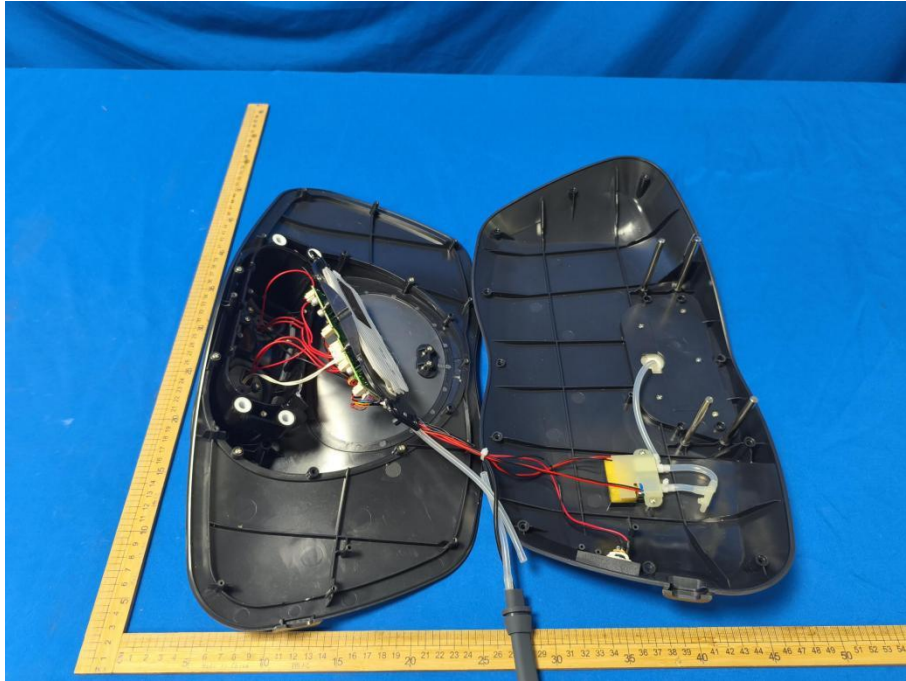
Injected currents for AC power ports

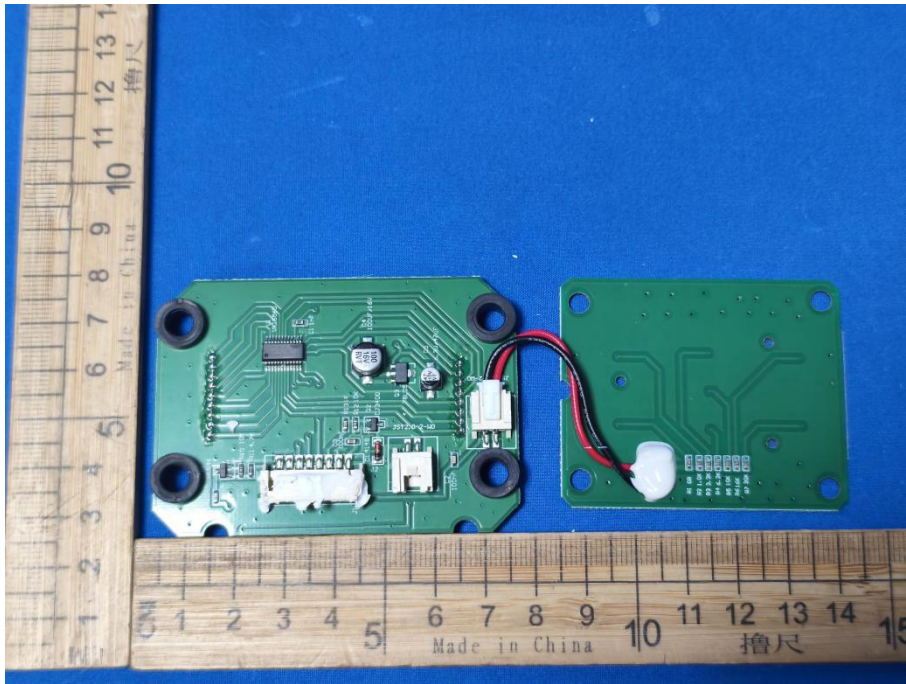


9 Photographs of EUT

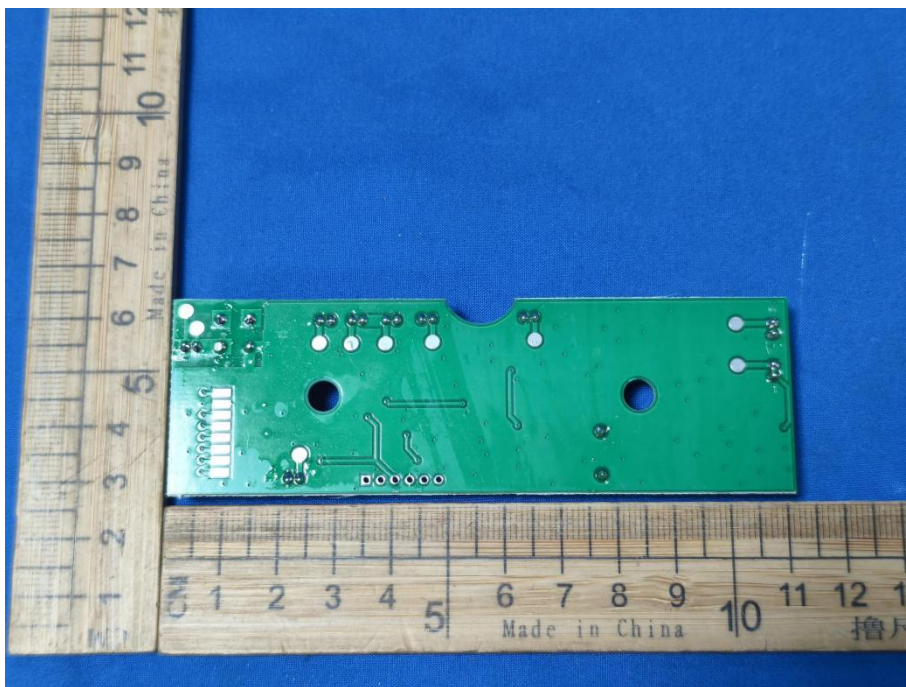
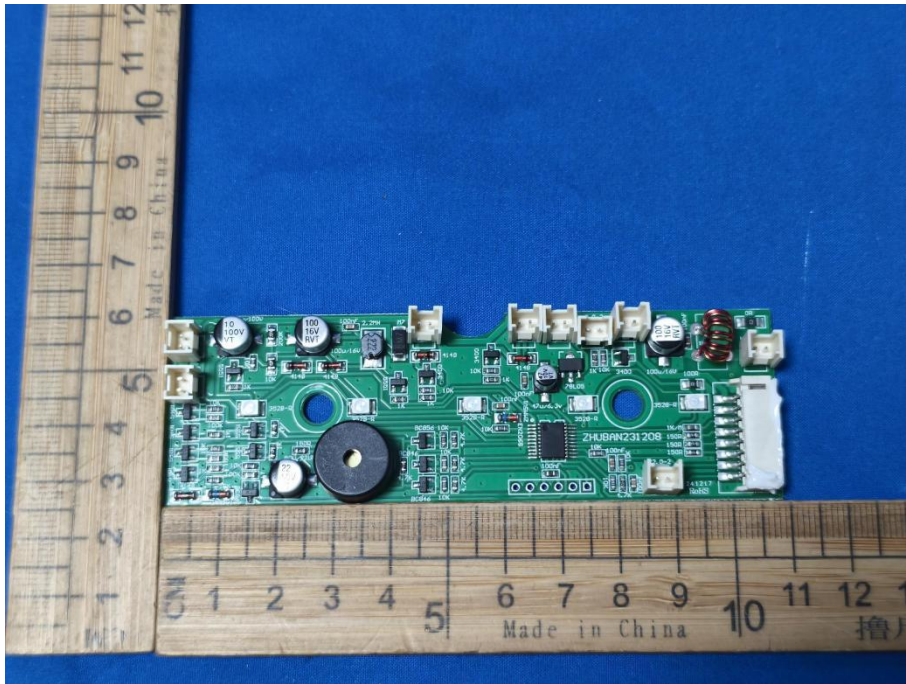














--- End of Report ---