

# TEST REPORT

1.5V Li-ion Battery Charger

Test Model: C4-AA

Report Number : LCSB12095007E

Applicant : Shenzhen XTAR Electronics Co., Ltd  
Address : 5th Floor, No.77 Xinhe Rd, Shangmugu, Pinghu Area,  
Longgang District, Shenzhen, Guangdong, China

Manufacturer : Shenzhen XTAR Electronics Co., Ltd  
Address : 5th Floor, No.77 Xinhe Rd, Shangmugu, Pinghu Area,  
Longgang District, Shenzhen, Guangdong, China

Prepared by : Shenzhen Southern LCS Compliance Testing Co., Ltd.  
Address : 101-201, Building 39, Xialang Industrial Zone, Heshuikou  
Community, Matian Street, Guangming District, Shenzhen,  
China.




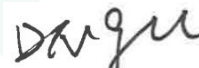
Date of receipt sample : December 10, 2025  
Date of test : December 10, 2025 to December 18, 2025  
Date of issue : December 19, 2025

**Remarks:**

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full. without prior written permission of the company, The report would be invalid without specific stamp of test institute and the signatures of approver.



## TEST REPORT

<b>Testing Laboratory</b> ..... :	Shenzhen Southern LCS Compliance Testing Co., Ltd. 101-201, Building 39, Xialang Industrial Zone, Heshuikou Community, Matian Street, Guangming District, Shenzhen, China.	
<b>Test Specification:</b>		
<b>Standard</b> ..... :	CFR47 FCC Part 15 Subpart B ANSI C63.4-2014	
<b>Equipment Under Test</b> ..... :	1.5V Li-ion Battery Charger	
<b>Trademark</b> ..... :		
<b>Test Model/Type</b> ..... :	C4-AA	
<b>Rating</b> ..... :	Input: DC 5V 2A Output: DC 5V 0.5A*4	
<b>Test Results</b> .....	<b>PASS</b>	
<b>Compiled by</b> ..... :	Kris Mai (Engineer)	
<b>Check by</b> ..... :	Amy Liu (Technique principal)	
<b>Approved by</b> ..... :	DM Gu (Manager)	
<b>Test Report Form No</b> ..... :	TRF-4-E-001 Ver. A/1	
<b>TRF Originator</b> ..... :	Shenzhen Southern LCS Compliance Testing Co., Ltd.	
<b>Master TRF</b> ..... :	/	

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## ENVIRONMENTAL CONDITIONS

The climatic conditions during the test are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. the climatic conditions during the test were in the following Limits:

Ambient temperature	10°C - 40°C
Relative Humidity air	10% - 90%

Climate values will be recorded and recorded separately if specifically required in the base standard or application product/product series standard.

## POSSIBLE TEST CASE VERDICTS

Test cases does not apply to test object	N/A
Test object does meet requirement	P(Pass) / PASS
Test object does not meet requirement	F(Fail) / FAIL
Not measured	N/M

## DEFINITION OF SYMBOLS USED IN THIS TEST REPORT

<input checked="" type="checkbox"/> Indicate that the conditions, standards or equipment listed is applicable to this report / test / EUT.
<input type="checkbox"/> Indicate that the conditions, standards or equipment listed is not applicable to this report / test / EUT.

## REVISION HISTORY

Revision	Issue Date	Revision Content	Revised by
000	December 19, 2025	Initial Issue	-

Remark:  
000) : “---”

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## 1. GENERAL INFORMATION

### 1.1. GENERAL DESCRIPTION OF THE ITEM(S)

Equipment Under Test	1.5V Li-ion Battery Charger
Test Model/Type	C4-AA
Additional Models/Type	/
Description of Model difference	/
Rating	Input: DC 5V 2A Output: DC 5V 0.5A*4
Classification of device	<input type="checkbox"/> Class A <input checked="" type="checkbox"/> Class B
The Frequency of EUT	< 108 MHz
<p>Remarks:</p> <p>The applicant and manufacturer information, product name, model, trademark and other information in this report are all provided by the applicant, and this laboratory is not responsible for verifying its authenticity.</p>	

#### Model List:

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## 1.2. OPERATING MODE(S) USED OF TESTS

During the tests, the following operating mode(s) has(have) been used.

Operating Mode	Operating Mode description	Used for testing
1	Working	<input checked="" type="checkbox"/>
Remarks: The laboratory conducted pre-scan of all operation modes of the EUT. This report only records the measurement data of the worst mode.		

## 1.3. SUPPORT / AUXILIARY EQUIPMENT FOR THE EUT

EUT has been tested using the following auxiliary equipment :

Auxeq	Model/Type	Manufacturer	Supplied by
Adapter	/	Xiaomi	/

## 1.4. DESCRIPTION OF TEST FACILITY

Test Location	Shenzhen Southern LCS Compliance Testing Co., Ltd. 101-201, Building 39, Xialang Industrial Zone, Heshuikou Community, Matian Street, Guangming District, Shenzhen, China.
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S L C S

## 2. STATEMENT OF THE MEASUREMENT UNCERTAINTY

The data and results referenced in this document are true and accurate. the reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. the measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods - Part 4: Uncertainty in EMC Measurements" and is documented in the LCS quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. the manufacturer has the sole responsibility of continued compliance of the device.

Measurement	Uncertainty ( $U_{lab}$ )	Uncertainty ( $U_{cispr}$ )
Conducted disturbance (150kHz - 30MHz)	$\pm 2.80$ dB	$\pm 3.6$ dB
Radiated disturbance (30MHz - 200MHz)	$\pm 4.66$ dB	$\pm 5.2$ dB
Radiated disturbance (200MHz - 1GHz)	$\pm 4.64$ dB	$\pm 5.0$ dB

### Supplementary information:

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor of  $k=2$ , which for a normal distribution corresponds to a coverage probability of approximately 95%.



### 3. MEASURING DEVICES AND TEST EQUIPMENT

CONDUCTED DISTURBANCE						
Item	Test equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	Shield Room #1	CHENGYU	843	#1	2023-04-26	2028-04-25
2	EMI Test Receiver	R&S	ESCI	101142	2025-04-18	2026-04-17
3	10dB Attenuator	SCHWARZBECK	VTSD9561-F	9561-F159	2025-04-18	2026-04-17
4	Artificial Mains Network	SCHWARZBECK	NSLK 8127	8127716	2025-04-18	2026-04-17
5	Artificial Mains Network	SCHWARZBECK	NSLK 8163	00043	2025-04-18	2026-04-17
6	Impedance Stabilization Network	SCHWARZBECK	NTFM 8158	#120	2025-04-18	2026-04-17
7	Voltage Probe	SCHWARZBECK	KT 9420	9420401	2025-04-18	2026-04-17
8	Current Probe	R&S	EZ-17	101921	2025-02-21	2026-02-20
9	EMI Test Software	Farad	EZ_EM	1.1.4.4	/	/

RADIATED DISTURBANCE						
Item	Test equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	Semi Anechoic Chamber #1	CHENGYU	SAC-3m	03CH03-HY	2024-04-28	2029-04-27
2	EMI Test Receiver	R&S	ESCI3	101010	2025-04-18	2026-04-17
3	Loop Antenna	SCHWARZBECK	FMZB 1519B	00005	2024-07-13	2027-07-12
4	Log-periodic Antenna	SCHWARZBECK	VULB9163	5094	2025-04-19	2028-04-18
5	Horn Antenna	ETS	3115	EABF-018	2025-07-19	2028-07-18
6	Spectrum Analyzer	Agilent	N9020A	MY49061051	2025-07-16	2026-07-15
7	EMI Test Software	Farad	EZ_EM	1.1.4.4	/	/
8	Controller System	SKET	SKC1000	/	/	/

## 4. VERDICT SUMMARY SECTION

This chapter present an overview of the standards and results. Refer the next chapter for details of measured test results and applied test levels.

### 4.1. STANDARD(S)

CFR47 FCC Part 15 Subpart B - Radio frequency devices Subpart B - Unintentional radiators.

ANSI C63.4-2014 - American national standard for methods of measurement of radio noise emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz.

### 4.2. OVERVIEW OF RESULTS

EMISSION TESTS - CFR47 FCC Part 15 Subpart B		
Requirement - Test case	Limit	Verdict
Conducted Disturbance	Clause 15.107	PASS
Radiated Disturbance	Clause 15.109	PASS

Supplementary information : ---





## 5.2. RADIATED DISTURBANCE

Standard	CFR47 FCC Part 15 Subpart B
Referenced Standard(s)	ANSI C63.4-2014
Test method	Semi Anechoic Chamber (SAC)

### SAC Radiated disturbance limit for Class B equipment (3 m distance)

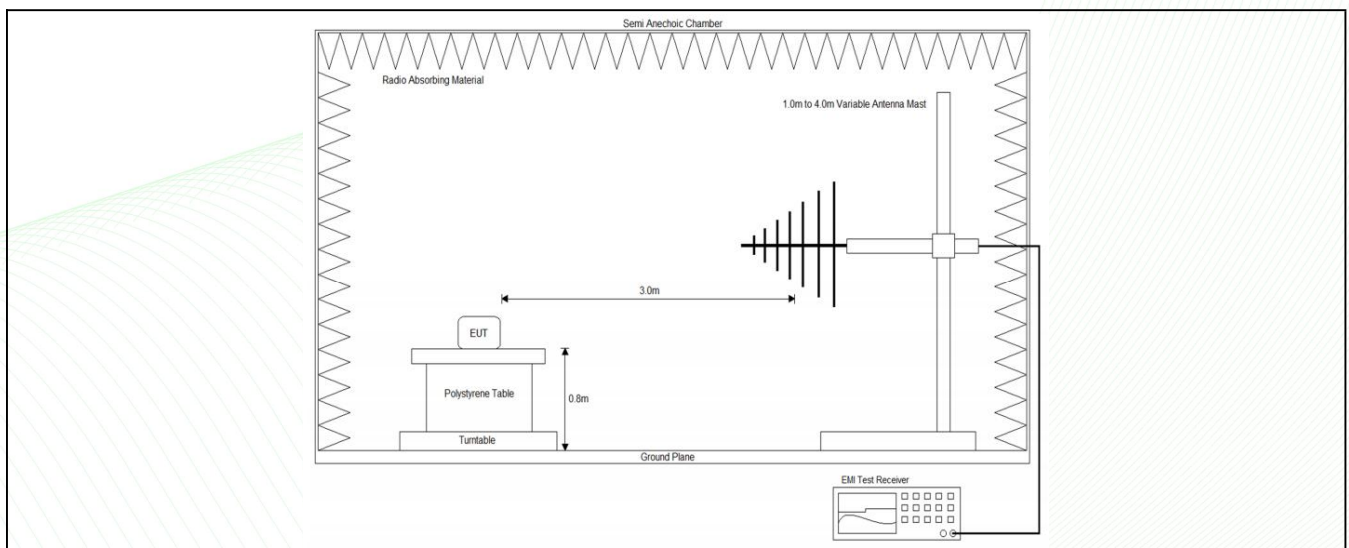
Frequency range [MHz]	Limit: Quasi-peak		IF BW
	[ $\mu\text{V/m}$ ]	[dB( $\mu\text{V/m}$ )]	
30 - 88	100	40	120 KHz
88 - 216	150	43.5	
216 - 960	200	46	
960 - 1000	500	54	
Frequency range [MHz]	Limit:[dB( $\mu\text{V/m}$ )]		IF BW
	Peak	Average	
Above 1000MHz	74	54	1MHz

### SAC Radiated disturbance limit for Class A equipment (10 m distance)

Frequency range [MHz]	Limit: Quasi-peak		IF BW
	[ $\mu\text{V/m}$ ]	[dB( $\mu\text{V/m}$ )]	
30 - 88	90	39	120 KHz
88 - 216	150	43.5	
216 - 960	210	46.5	
960 - 1000	300	49.5	
Frequency range [MHz]	Limit:[dB( $\mu\text{V/m}$ )]		IF BW
	Peak	Average	
Above 1000MHz	69.5	49.5	1MHz

1) At the transition frequency, the lower limit applies.

### Test configuration



**Test Procedure Description**

Radiated Emissions were measured 3 metres away from the EUT in the Semi Anechoic Chamber facility, which is an ANSI C63.4 compliant semi-anechoic chamber with ground plane. The EUT was placed on a non-conductive table, at a height of 0.8m above the ground plane. the turntable can rotate 360 degrees to determine the position of the maximum emission level. the EUT is set 3 meters away from the receiving antenna, which is mounted on an antenna tower. the antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Log-periodic antenna or horn antenna is used as a receiving antenna. both horizontal and vertical polarization of the antenna is set on test.

**Test Results** refer to Annex A.2

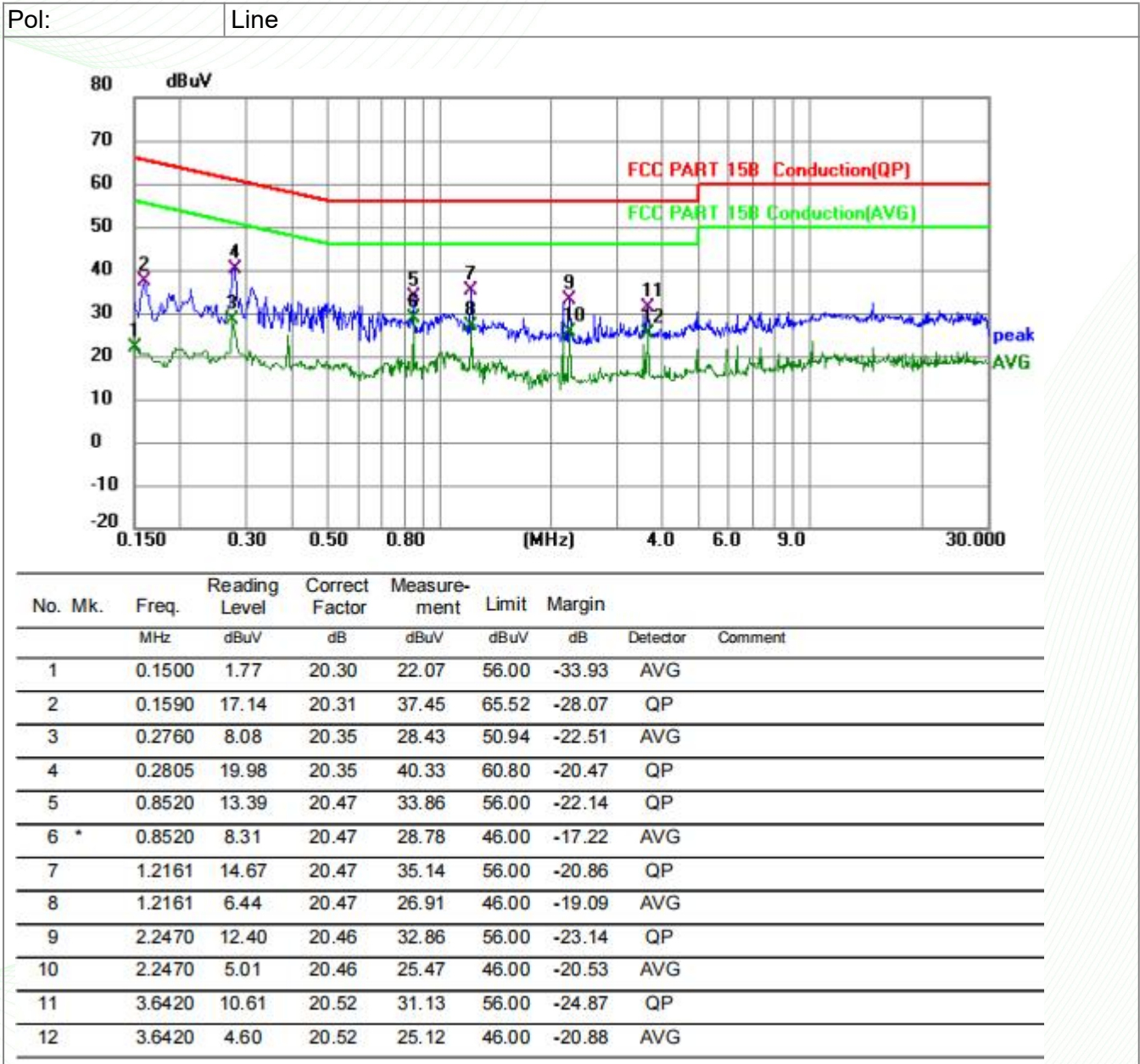


## ANNEX A - TEST RESULTS

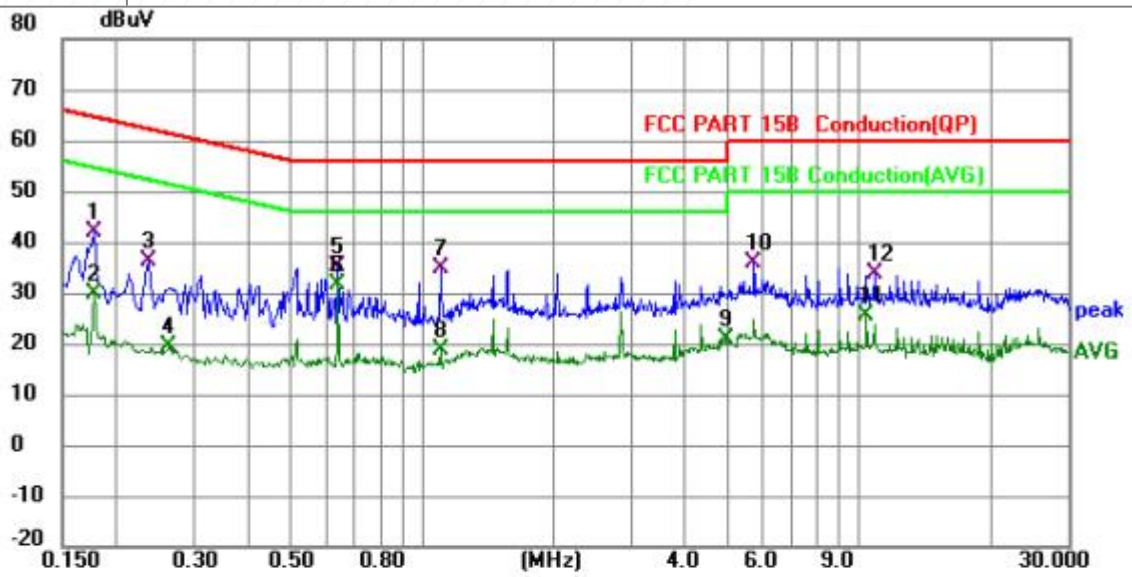
### A.1. CONDUCTED DISTURBANCE TEST RESULTS

This Test Environment Conditions: 22.5°C , 53.7%RH

M/N: C4-AA  
 Input voltage: 00000  
 Operating mode: Mode 1



Pol: Neutral



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1770	21.66	20.33	41.99	64.63	-22.64	QP	
2	0.1770	9.66	20.33	29.99	54.63	-24.64	AVG	
3	0.2353	15.94	20.34	36.28	62.26	-25.98	QP	
4	0.2625	-0.99	20.35	19.36	51.35	-31.99	AVG	
5	0.6401	14.85	20.27	35.12	56.00	-20.88	QP	
6 *	0.6401	11.43	20.27	31.70	46.00	-14.30	AVG	
7	1.1040	14.19	20.46	34.65	56.00	-21.35	QP	
8	1.1040	-1.70	20.46	18.76	46.00	-27.24	AVG	
9	4.9515	0.42	20.52	20.94	46.00	-25.06	AVG	
10	5.7300	15.23	20.54	35.77	60.00	-24.23	QP	
11	10.3740	5.07	20.60	25.67	50.00	-24.33	AVG	
12	10.8375	13.31	20.59	33.90	60.00	-26.10	QP	

Remark:

Level=Reading Level + Correction Factor

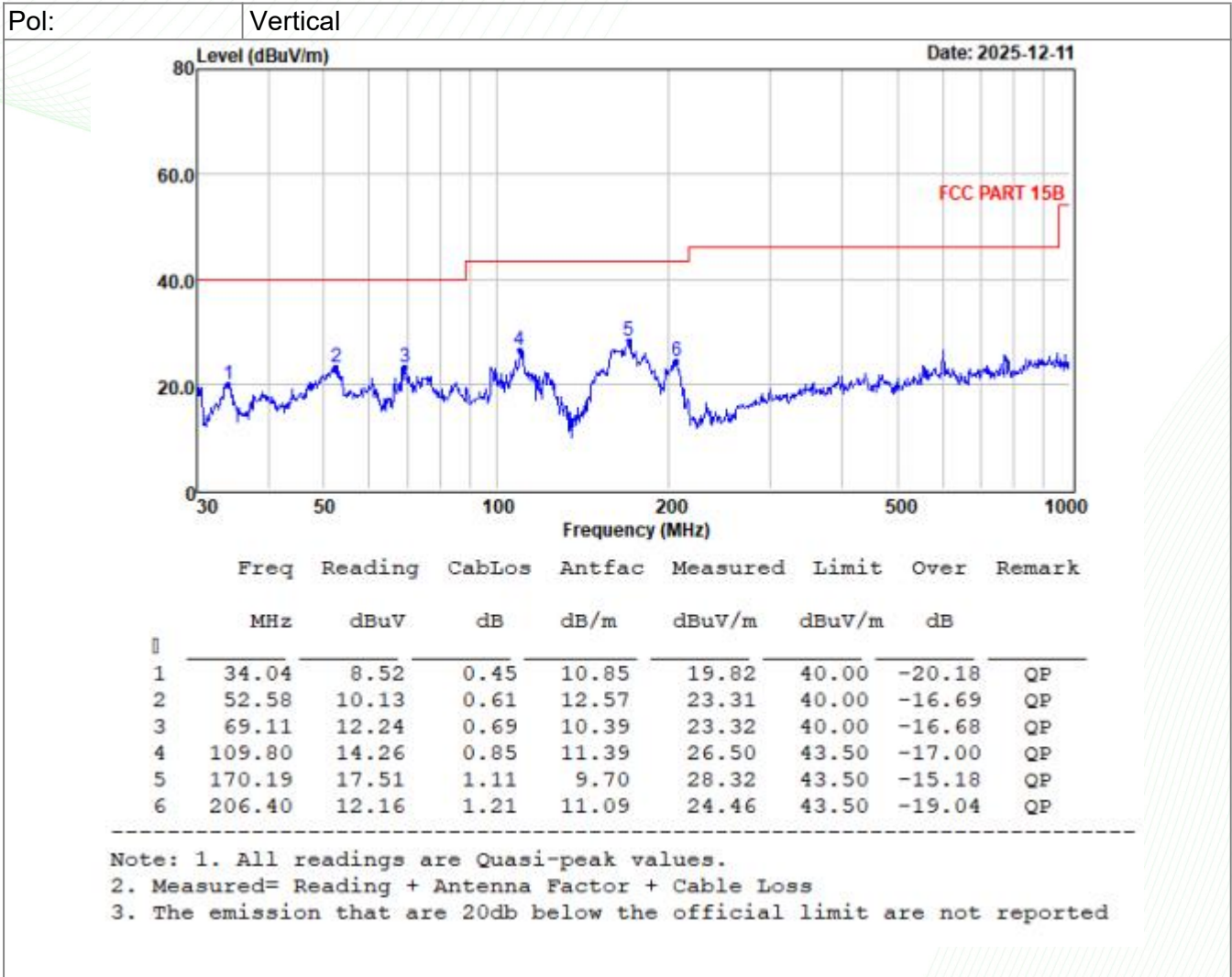
Correction Factor=Cable Loss + LISN Factor

(The Reading Level is recorded by software which is not shown in the sheet)

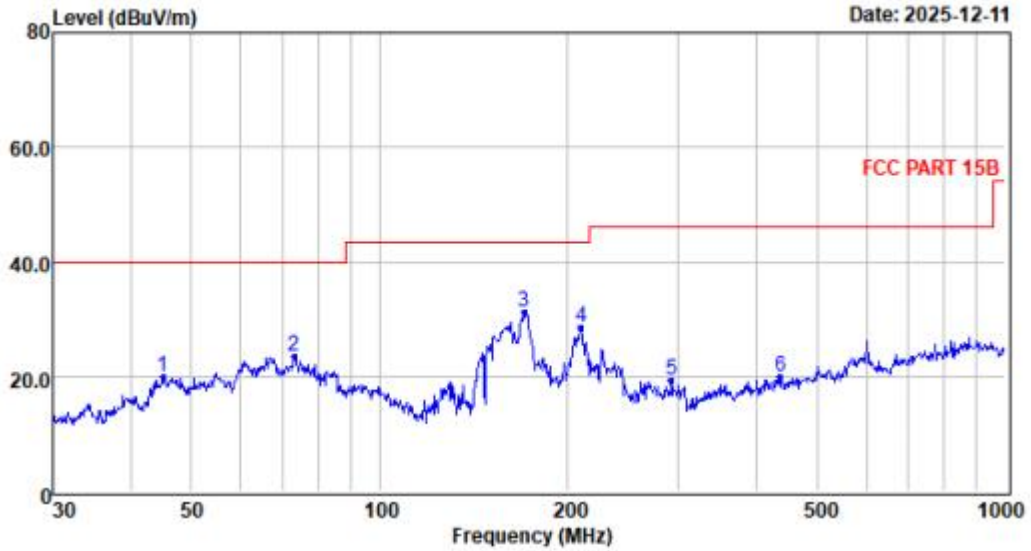
## A.2. RADIATED DISTURBANCE TEST RESULTS

This Test Environment Conditions: 22.3°C , 53%RH

M/N: C4-AA  
 Input voltage: AC 120V/60Hz  
 Operating mode: Mode 1



Pol: Horizontal

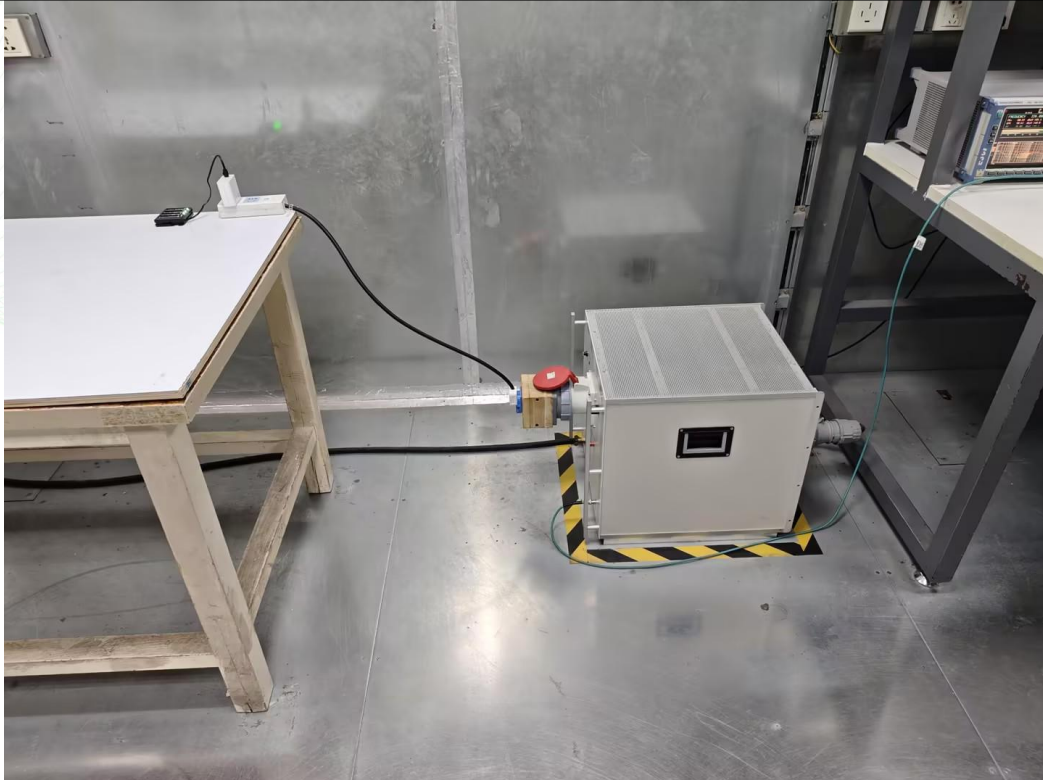


	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	45.06	8.07	0.56	11.41	20.04	40.00	-19.96	QP
2	73.10	12.79	0.71	10.07	23.57	40.00	-16.43	QP
3	170.19	20.50	1.11	9.70	31.31	43.50	-12.19	QP
4	210.05	15.99	1.21	11.26	28.46	43.50	-15.04	QP
5	293.08	4.39	1.31	13.57	19.27	46.00	-26.73	QP
6	437.12	2.78	1.44	15.65	19.87	46.00	-26.13	QP

- Note: 1. All readings are Quasi-peak values.  
 2. Measured= Reading + Antenna Factor + Cable Loss  
 3. The emission that are 20db below the official limit are not reported

## ANNEX B - TEST PHOTOS

### B.1. Conducted Disturbance



### B.2. Radiated Disturbance



## ANNEX C - EXTERNAL AND INTERNAL PHOTOS OF THE EUT



Photo.1

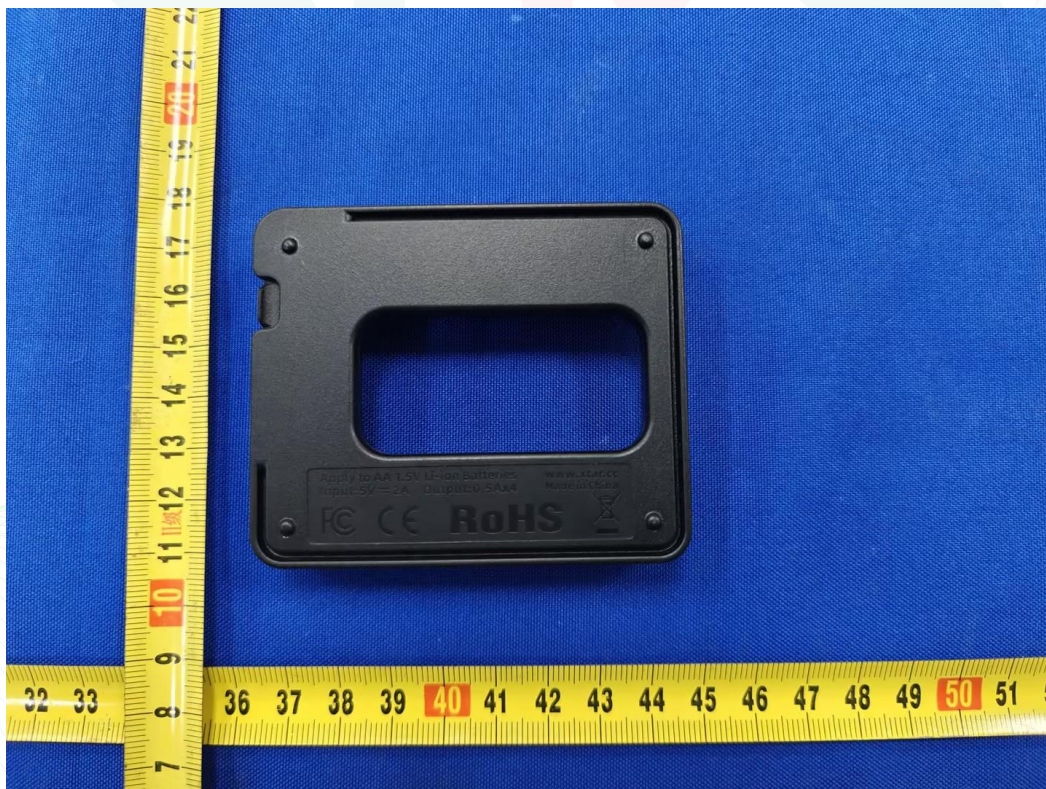


Photo.2

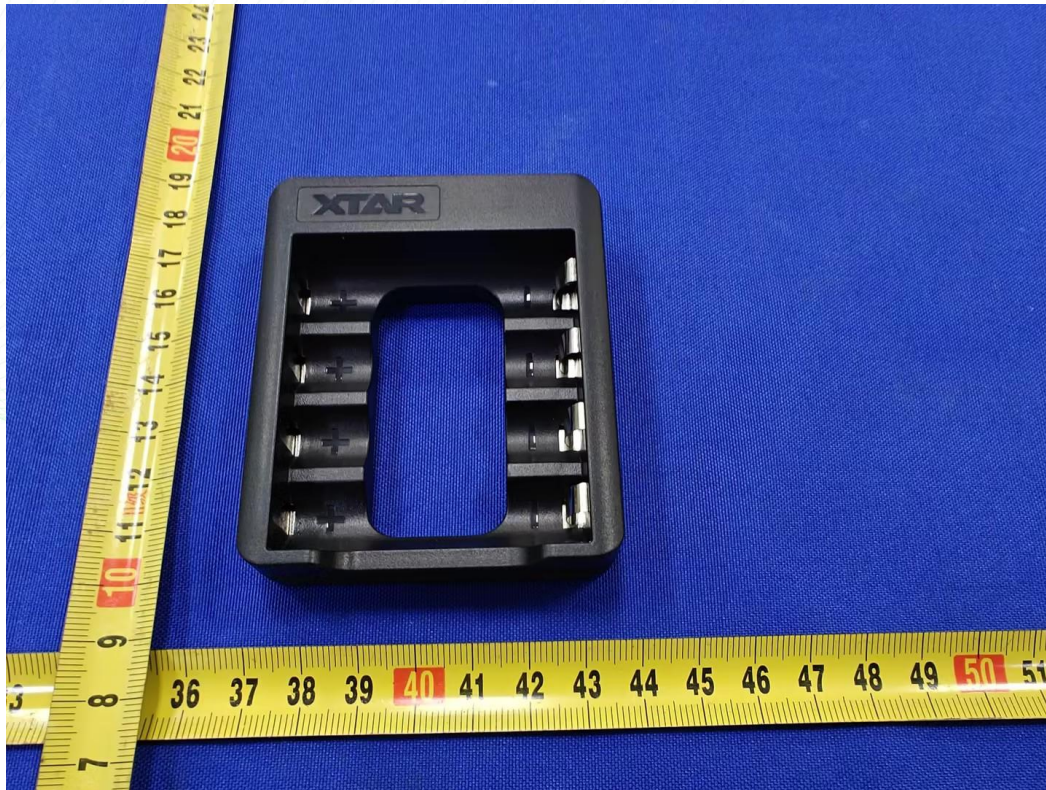


Photo.3



Photo.4



Photo.5

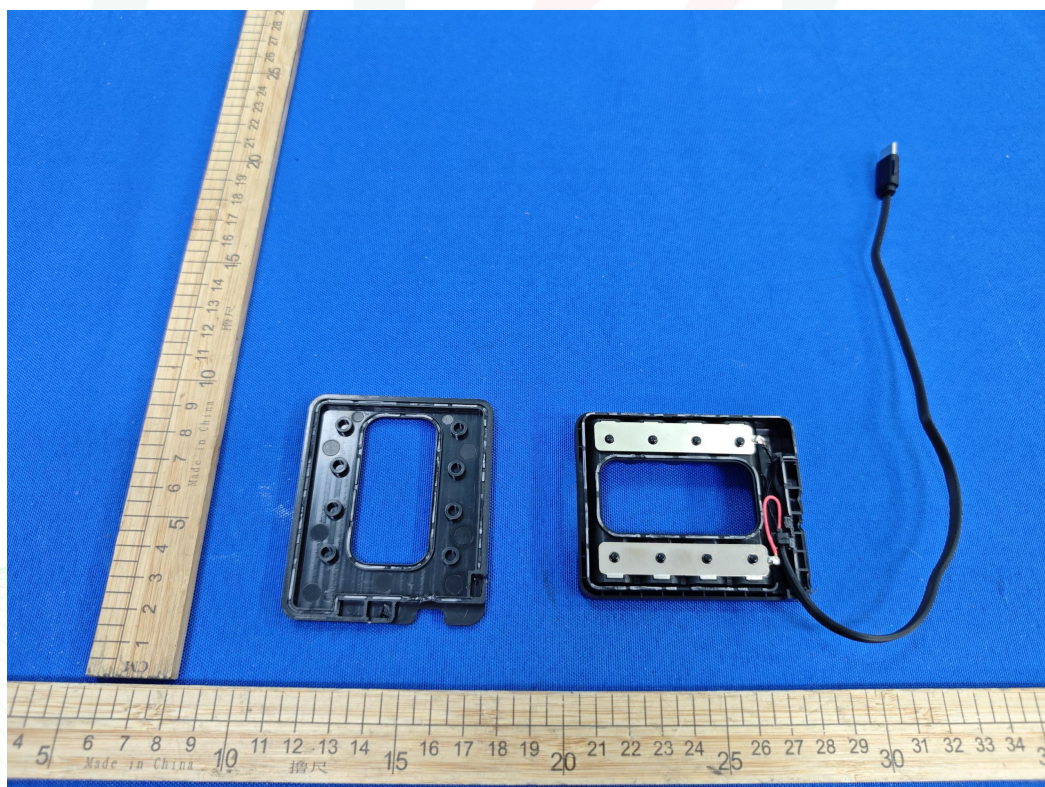


Photo.6

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