FCC TEST REPORT

Applicant:	Fengshuo Electronics (Shenzhen) Co., LTD.
Address:	512, Building 4, Zhuguang Innovation and Technology Park, Zhuguang Road, Zhuguang Community, Taoyuan Street, Nanshan District, Shenzhen, China
Manufacturer:	Fengshuo Electronics (Shenzhen) Co., LTD.
Address:	512, Building 4, Zhuguang Innovation and Technology Park, Zhuguang Road, Zhuguang Community, Taoyuan Street, Nanshan District, Shenzhen, China
EUT:	Type C Cable
Trade Mark:	N/A
Model Number:	Type C-1 Type C-2, Type C-3, Type C-4
Date of Receipt:	Oct. 09, 2024
Test Date:	Oct. 09, 2024 - Oct. 15, 2024
Date of Report:	Oct. 15, 2024
Prepared By:	Shenzhen DL Testing Technology Co., Ltd.
Address:	101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China
Applicable Standards:	FCC Part 15 Subpart B ANSI C63.4:2014
Test Result:	Pass
Report Number:	DL-241009022ER

Prepared (Test Engineer):	Erica Li
Reviewer (Supervisor):	Jack Bu
Approved (Manager):	Jade Yang

This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen DL Testing Technology Co., Ltd.

TABLE OF CONTENT

1. VERSION

Version No.	Date	Description
00	Oct. 15, 2024	Original

2. TEST SUMMARY

EMC Emission				
Standard	Test Item	Limit	Result	Remark
FCC PART 15 B	Conducted Emission at power ports	Class B	N/A	
	Radiated Emission below 1GHz	Class B	PASS	
	Radiated Emission above 1GHz	Class B	N/A	

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

(2) Test Facility: Shenzhen DL Testing Technology Co., Ltd.

Address: 101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China

3. ENERAL INFORMATION

3.1 Description of Device (EUT)

EUT:	Type C Cable
Trade Mark:	N/A
Model Number:	Type C-1 Type C-2, Type C-3, Type C-4
Test Model:	Type C-1
Model difference:	All models are same as the samples except model name, appearance and appearance color, they have the same structure and circuit.
Power Supply:	DC 5V
Working Frequency:	Below 108MHz

NOTE:
(1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
(2) The EUT's all information provided by client.

3.2 Tested System Details

None.

3.3 Block Diagram of Test Set-up

Notebook	EUT	Cellphone

3.4 Test Mode Description

Mode1. On Mode

3.5 Test Auxiliary Equipment

Notebook (Provide by test lab):
Manufacturer: DELL
Model: Vostro 3420
I/P: 19.5V 3.34A

Cell Phone(Provide by test lab):
Manufacturer: HONOR
Model: HONOR V20

3.6 Test Uncertainty

Conducted Emission Uncertainty : ±2.56dB

Radiated Emission Uncertainty : ±3.24dB

4. TEST INSTRUMENT USED

For Conducted Emission Test (843 Shielded Room)

Equipment	Manufacturer	Model	Serial	Last Cal.	Next Cal.
843 Shielded Room	YIHENG	843 Room	843	Nov. 05, 2023	Nov. 04, 2026
EMI Receiver	R&S	ESR	101421	Nov. 04, 2023	Nov. 03, 2024
LISN	R&S	ENV216	102417	Nov. 04, 2023	Nov. 03, 2024
Clamp	COM-POWER	CLA-050	431072	Nov. 04, 2023	Nov. 03, 2024
3-Loop Antenna	DAZE	ZN30401	13021	Nov. 04, 2023	Nov. 03, 2024
ISN T8	Schwarzbeck	NTFM 8158	101135	Nov. 04, 2023	Nov. 03, 2024
ISN T5	Schwarzbeck	NTFM 8158	101136	Nov. 04, 2023	Nov. 03, 2024
843 Cable 1#	ChengYu	CE Cable	001	Nov. 04, 2023	Nov. 03, 2024
843 Cable 1#	ChengYu	CE Cable	002	Nov. 04, 2023	Nov. 03, 2024

For Radiated Emission Test (966 chamber)

Equipment	Manufacturer	Model	Serial	Last Cal.	Next Cal.
966 chamber	YIHENG	966 Room	966	Nov. 06, 2023	Nov. 05, 2026
Spectrum Analyzer	Agilent	E4408B	MY50140780	Nov. 04, 2023	Nov. 03, 2024
EMI Receiver	R&S	ESRP7	101393	Nov. 04, 2023	Nov. 03, 2024
Amplifier	Schwarzbeck	BBV9743B	00153	Nov. 04, 2023	Nov. 03, 2024
Amplifier	EMEC	EM01G8GA	00270	Nov. 04, 2023	Nov. 03, 2024
Broadband Trilog Antenna	Schwarzbeck	VULB9162	00306	Nov. 04, 2023	Nov. 03, 2024
Horn Antenna	Schwarzbeck	BBHA9120D	02139	Nov. 04, 2023	Nov. 03, 2024
966 Cable 1#	ChengYu	966	004	Nov. 04, 2023	Nov. 03, 2024
966 Cable 2#	ChengYu	966	003	Nov. 04, 2023	Nov. 03, 2024

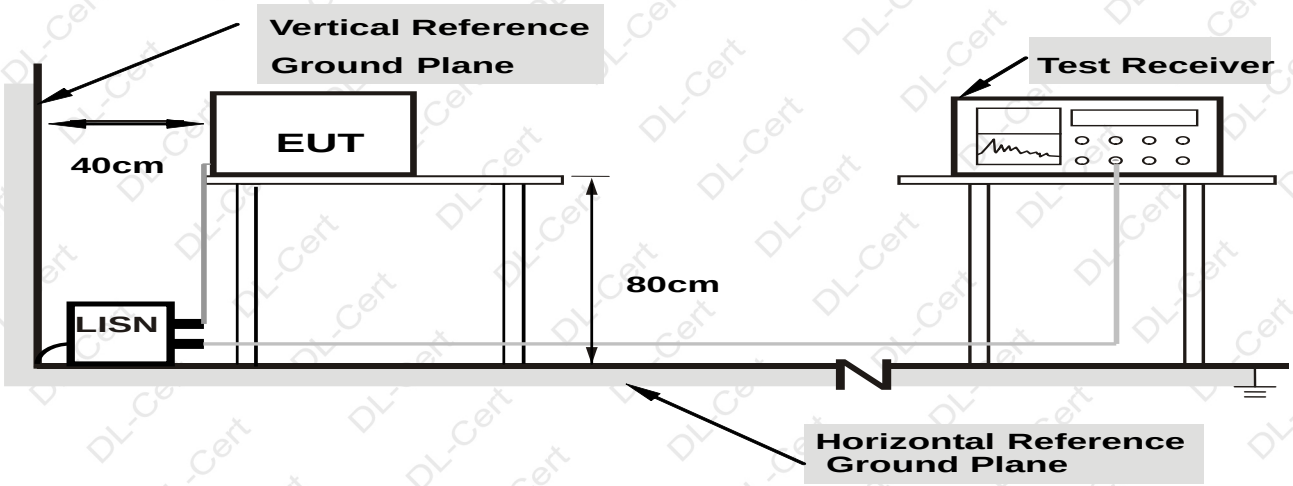
Other

Name	Manufacturer	Model	Software version
EMC Conduction Test System	FALA	EZ_EMC	EMC-CON 3A1.1
EMC radiation test system	FALA	EZ_EMC	FA-03A2

5. CONDUCTED EMISSION TEST

5.1 Block Diagram of Test Setup

For Mains Terminals Test



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

5.2 Test Standard and Limit

FCC PART 15 B

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15~0.50	66 ~ 56*	56 ~ 46*
0.50~5.00	56	46
5.00~30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

5.3 EUT Configuration on Test

The following equipment's are installed on conducted emission test to meet FCC PART 15 B requirement and operating in a manner which tends to maximize its emission characteristics in a normal application.

5.4 Operating Condition of EUT

5.4.1 Setup the EUT and simulators as shown in Section 5.1.

5.4.2 Turn on the power of all equipments.

5.4.3 Let the EUT work in test modes and test it.

5.5 Test Procedure

The EUT is put on the table and connected to the AC mains through a Artificial Mains Network (AMN) or ISN. This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are checked to find out the maximum conducted emission levels according to the **ANSI C63.4** regulations during conducted emission test.

The bandwidth of the test receiver (R&S Test Receiver ESR) is set at 10KHz.

The frequency range from 150 KHz to 30 MHz is investigated.

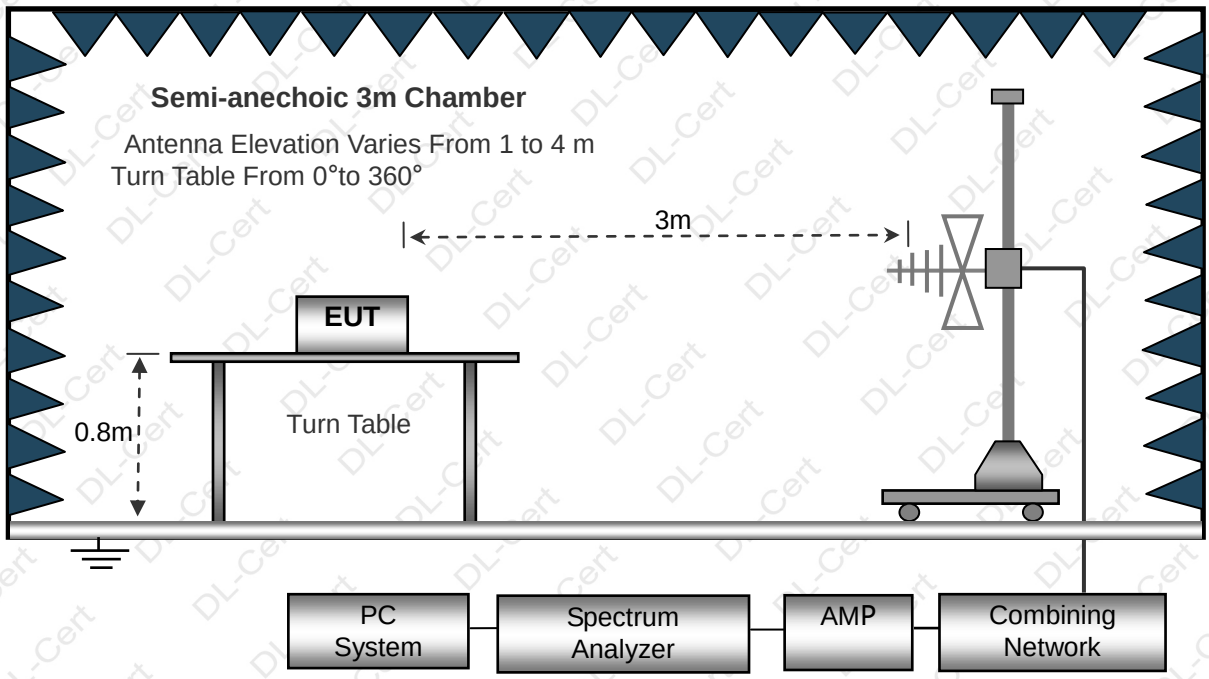
5.6 Test Result

The EUT is powered by DC, no requirements for this item.

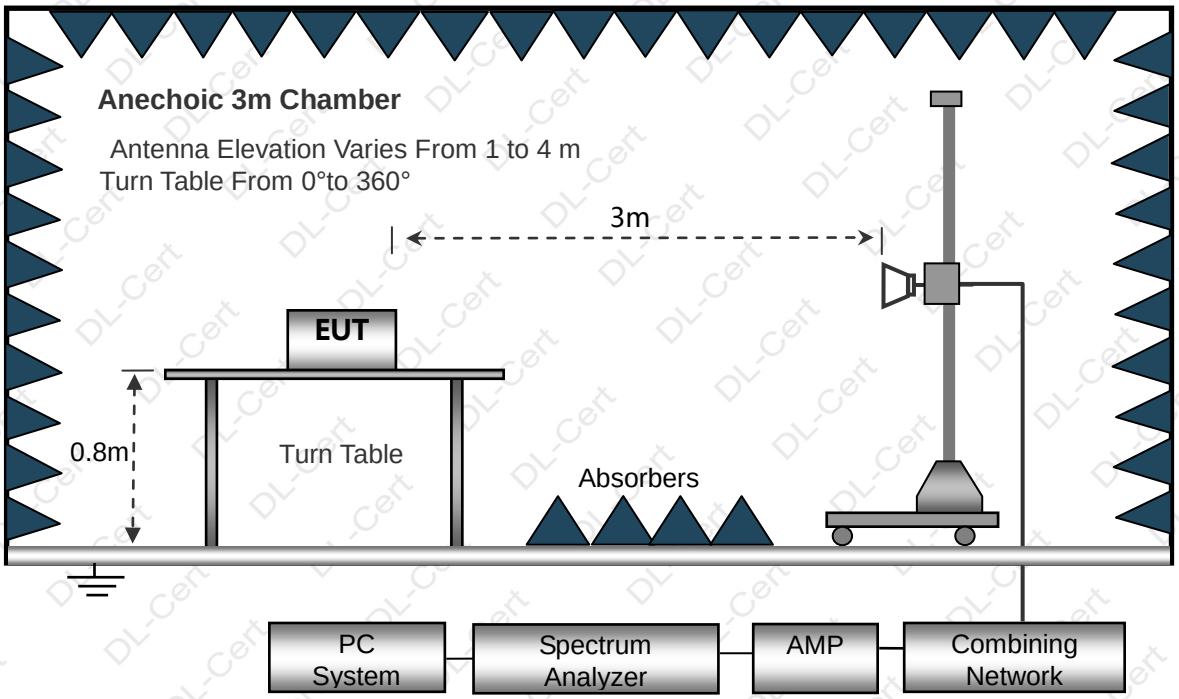
6. RADIATION EMISSION TEST

6.1 Block Diagram of Test Setup

Below 1GHz



Above 1GHz



6.2 Test Standard and Limit

FCC PART 15 B

Below 1GHz

Frequency (MHz)	Distance (Meters)	Field Strengths Limits (dBμV/m)
30 ~ 88	3	40.0
88 ~ 216	3	43.5
216 ~ 960	3	46.0
960 ~ 1000	3	54.0

Above 1GHz

Frequency MHz	Distance (Meters)	Field Strengths Limits dB(μV)/m	Detector
1000～6000	3	74.0	PEAK
1000～6000	3	54.0	AVERAGE

Remark:

(1) The smaller limit shall apply at the cross point between two frequency bands.

(2) Distance refers to the distance in meters between the measuring instrument, antenna and the closed point of any part of the device or system.

6.3 EUT Configuration on Test

The FCC PART 15 B regulations test method must be used to find the maximum emission during radiated emission test.

The configuration of EUT is the same as used in conducted emission test.

Please refer to Section 5.3.

6.4 Operating Condition of EUT

Same as conducted emission test, which is listed in Section 5.4 except the test set up replaced as Section 6.2.

6.5 Test Procedure

1) The radiated emissions test was conducted in a semi-anechoic chamber.

2) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, but separated from metallic contact with the ground reference plane by 0.1m of insulation.

3) Before final measurements of radiated emissions, a pre-scan was performed in the spectrum mode with the peak detector to find out the maximum emissions spectrum plots of the EUT.

4) The frequencies of maximum emission were determined in the final radiated emissions measurement. At each frequency, the EUT was rotated 360°, and the antenna was raised and lowered from 1 to 4 meters in order to determine the maximum disturbance. Measurements were performed for both horizontal and vertical antenna polarization.

5) The bandwidth setting on the field strength meter (R&S Test Receiver ESCI) is set at 120KHz.

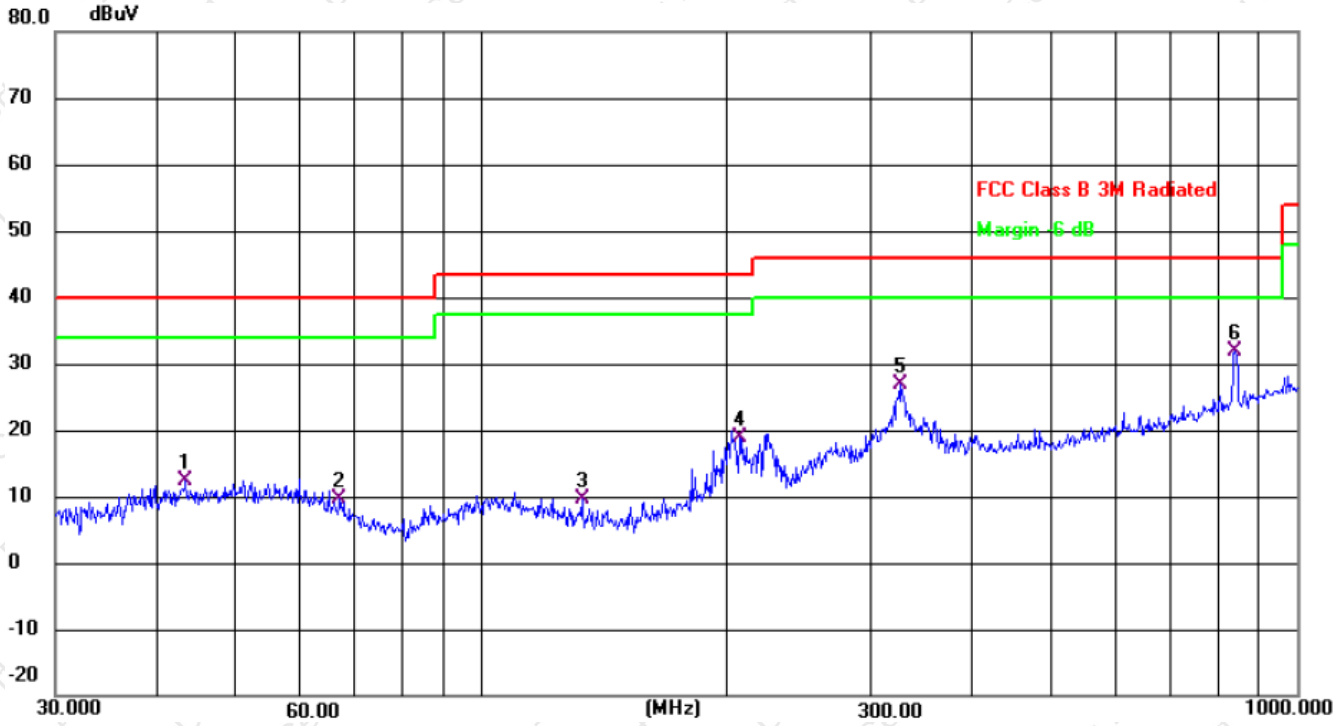
6) The frequency range from 30MHz to 1000MHz is checked.

6.6 Test Result

PASS

Please refer to the following page.

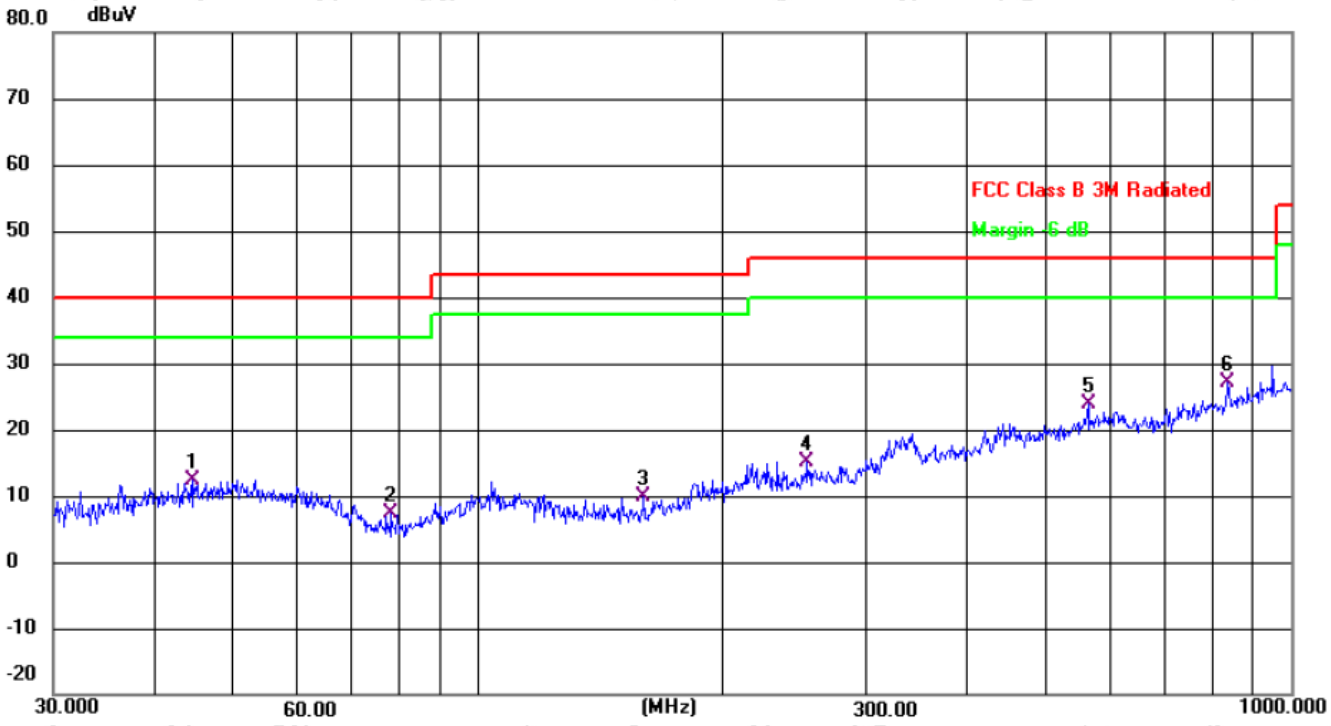
Radiation Emission Test Data			
Temperature:	24.5℃	Relative Humidity:	54%
Pressure:	1009hPa	Polarization:	Horizontal
Test Voltage:	DC 5V	Test Mode:	Mode 1



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	
		MHz	dBuV	dB	dBuV	dB	dB	Detector
1		43.3534	25.78	-13.38	12.40	40.00	-27.60	QP
2		66.9669	25.13	-15.49	9.64	40.00	-30.36	QP
3		132.6850	27.89	-18.15	9.74	43.50	-33.76	QP
4		207.1226	33.43	-14.66	18.77	43.50	-24.73	QP
5		325.5958	38.43	-11.48	26.95	46.00	-19.05	QP
6	*	839.1818	33.80	-1.84	31.96	46.00	-14.04	QP

Remark:
Correct Factor=Cable loss+Antenna factor-Preamplifier
Measurement Level = Reading Level + Correct Factor; Margin = Measurement Level- Limit;

Radiation Emission Test Data			
Temperature:	24.5℃	Relative Humidity:	54%
Pressure:	1009hPa	Polarization:	Vertical
Test Voltage:	DC 5V	Test Mode:	Mode 1



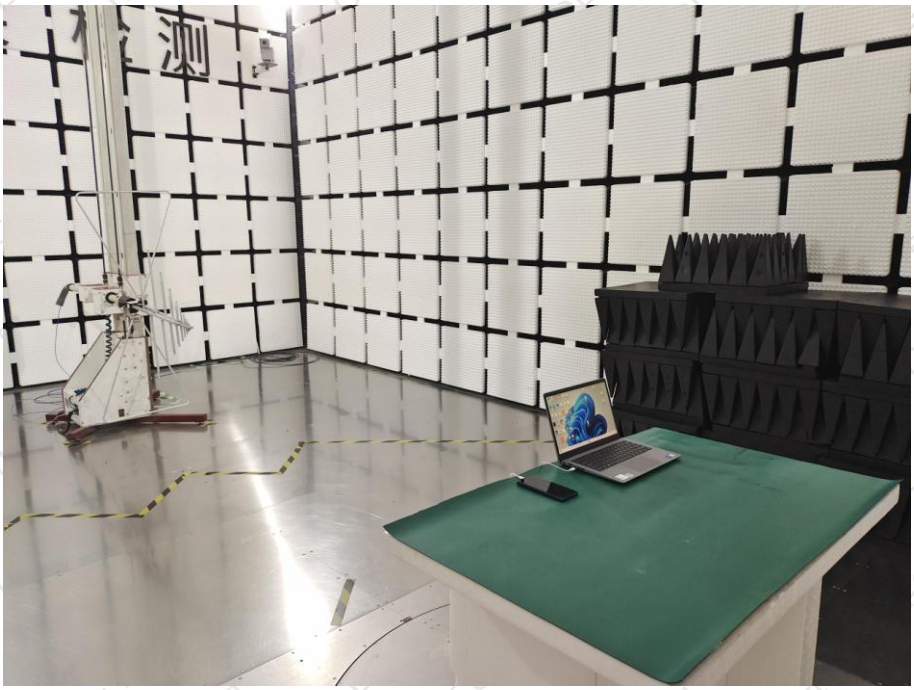
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	
		MHz	dBuV	dB	dBuV	dB	dB	Detector
1		44.5868	25.52	-13.18	12.34	40.00	-27.66	QP
2		78.1389	26.34	-19.03	7.31	40.00	-32.69	QP
3		159.7844	27.39	-17.41	9.98	43.50	-33.52	QP
4		253.8367	28.39	-13.20	15.19	46.00	-30.81	QP
5		562.6624	29.82	-6.05	23.77	46.00	-22.23	QP
6	*	836.2443	29.09	-1.98	27.11	46.00	-18.89	QP

Remark:

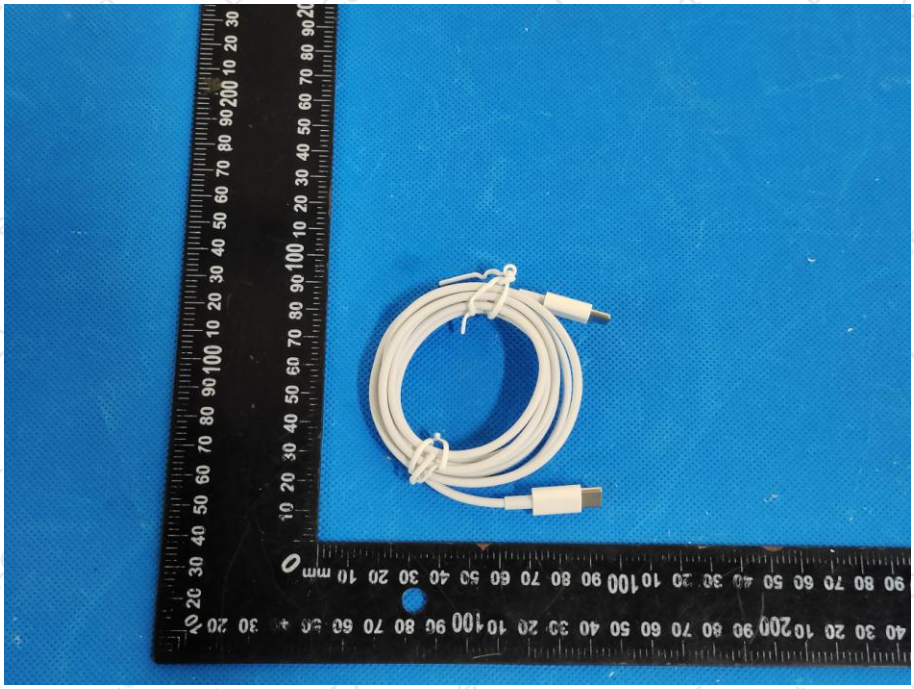
Correct Factor=Cable loss+Antenna factor-Preamplifier

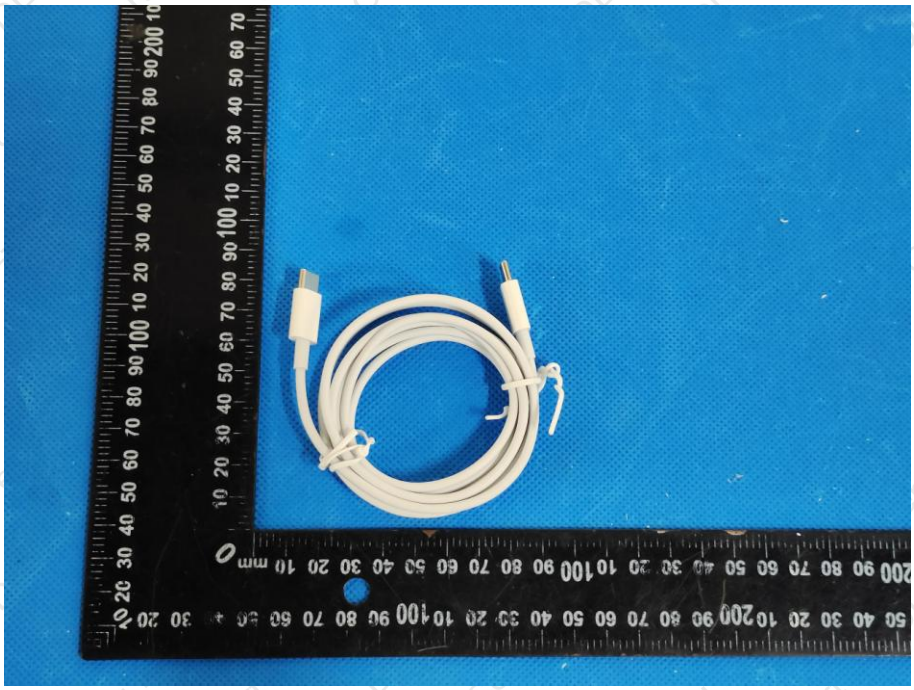
Measurement Level = Reading Level + Correct Factor; Margin = Measurement Level- Limit;

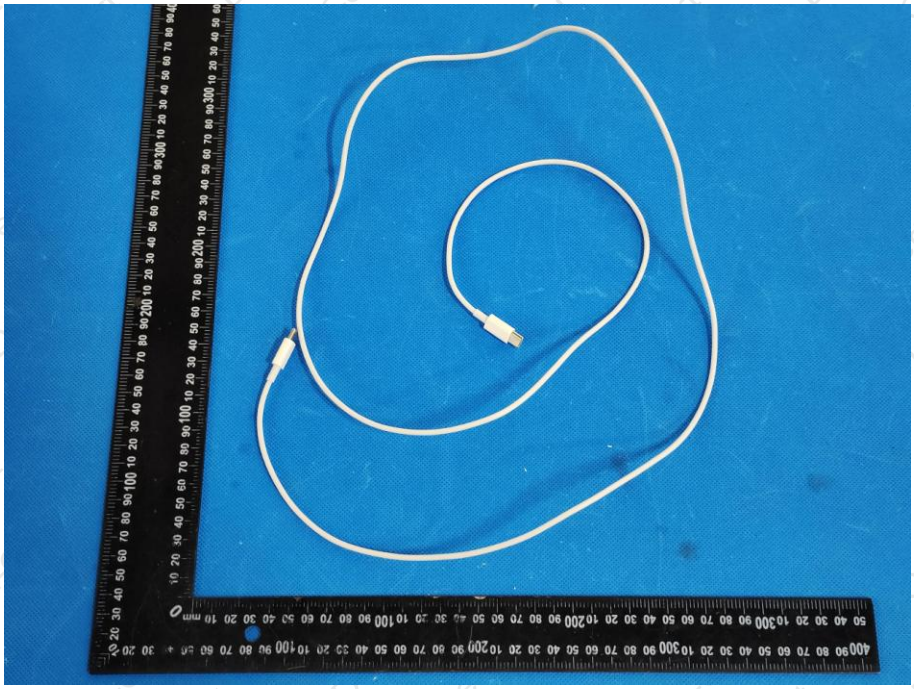
7. SETUP PHOTOGRAPHS

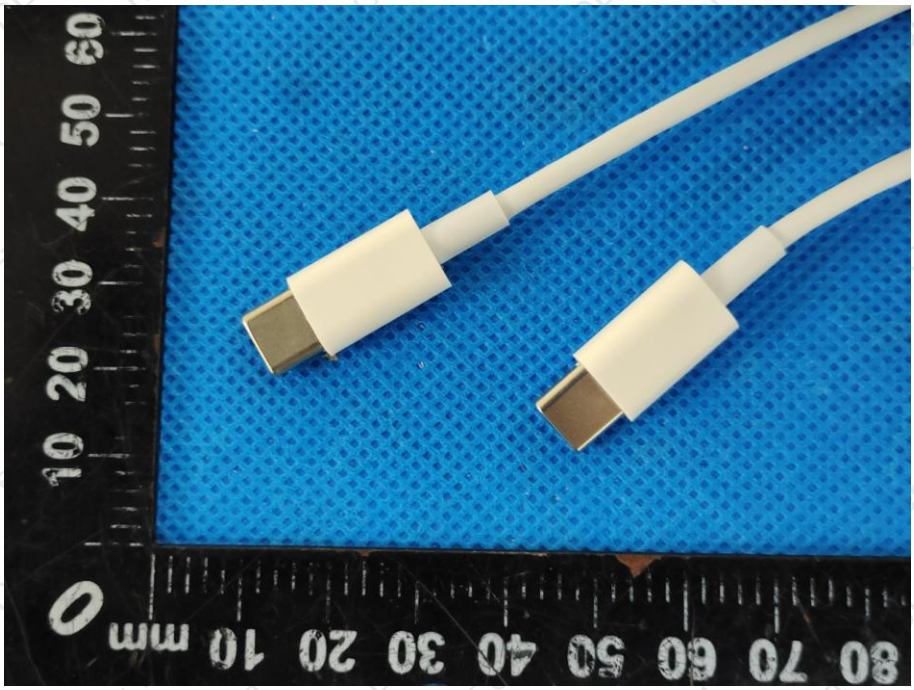


8. EUT PHOTOGRAPHS









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