

TEST REPORT

Radio Frequency Devices-Intentional Radiators

for

Products Name: Ai mobile power bank

Model No.: Ai1, BFPB4

FCC ID: 2A48S-AI1

Report No.: SST2507E1099

Issued Date: July 24, 2025

Issued for

Shenzhenshi weiduli Technology Co.,Ltd.

4h Floor, Building 4, Dejin industrial Zone, No. 40, Fuyuan 1st Road, Heping Community, Fuhai Street, Bao'an District Shenzhen, China

Issued by

GuangDong Set Sail Testing Co., Ltd.

101, No.19, Tianxin Hudie 1st Road, Huangjiang Town, Dongguan, Guangdong, China

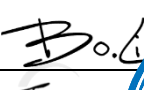
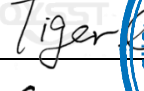
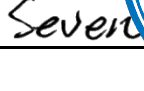
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1. Basic Introduction

Applicant's name :	Shenzhenwei weiduli Technology Co.,Ltd.	
Address	4h Floor, Building 4, Dejin industrial Zone, No. 40, Fuyuan 1st Road, Heping Community, Fuhai Street, Bao'an District Shenzhen, China	
Manufacturer's name	Shenzhenwei weiduli Technology Co.,Ltd.	
Address	4h Floor, Building 4, Dejin industrial Zone, No. 40, Fuyuan 1st Road, Heping Community, Fuhai Street, Bao'an District Shenzhen, China	
Factory's name	Shenzhenwei weiduli Technology Co.,Ltd.	
Address	4h Floor, Building 4, Dejin industrial Zone, No. 40, Fuyuan 1st Road, Heping Community, Fuhai Street, Bao'an District Shenzhen, China	
Products Name :	Ai mobile power bank	
Model No. :	Ai1, BFPB4	
Trade Mark	/	
Rating(s) :	Battery Capacity: 5000mAh Type-C IN: DC 5V-3A, 9V-2A Type-C Out: DC 5V-3A, 9V-2.22A, 12V-1.67A Wireless charger Out: 5W/7.5W/10W/15W	
Date of sample receipt :	July 18, 2025	
Date of Test :	July 18~23, 2025	
Standard(s)	FCC 47 CFR PART 15 Subpart C ANSI C63.10-2020	
Tested by (+signature) :	Bo Li	
Check by (+signature) :	Tiger Chen	
Approved by (+signature) :	Seven Zhan	



2. General description

2.1. EUT description

Products Name	Ai mobile power bank			
Model No.	Ai1, BFPB4			
Rating(s)	Battery Capacity: 5000mAh Type-C IN: DC 5V-3A, 9V-2A Type-C Out: DC 5V-3A, 9V-2.22A, 12V-1.67A Wireless charger Out: 5W/7.5W/10W/15W			
Software version.....	/			
Hardware version	/			
Operation frequency.....	111kHz~205kHz			
Modulation technology	ASK			
Antenna type	Coil antenna			
Cable	Port(s)	Specified length in (m)	Attached during test	Shielded
	/	/	☐	☐

2.2. Serial model(s) and model difference

Main model(s)	Ai1
Serial model(s)	BFPB4
Model difference	Both same as the PCB layout, internal structure and circuit, only the model number difference

2.3. Auxiliary equipment

Support equipment list			
Description	Manufacturer	Model No.	Serial No.
Adapter	Lenovo	XXC100G	/
WPT Load	YBZ	EPP15	/
Support cable list			
Description	Specified length(m)	Shielded	Unshielded
		☐	☐

2.4. Description of test modes

Prescan Operating Mode		
No.	Detailed description of the operating mode	Test voltage
1	Charging+ WPT 5W out(Max)	Adapter's input
2	WPT 7.5W	DC 3.85V
3	WPT 10W	DC 3.85V
4	WPT 15W	DC 3.85V
5	Standby	DC 3.85V

Final Report Mode		
No.	Detailed description of the operating mode	Test voltage
4	WPT 15W(worst condition)	DC 3.85V

2.5. Test environmental conditions

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment.		
The climatic conditions during the tests were within the following limits:		
Ambient temperature	Relative humidity	Atmospheric pressure
15 °C ~ 35 °C	30 % ~ 60 %	86 kPa ~ 106 kPa
If explicitly required in the basic standard or applied product standard the climatic values are recorded and documented separately in this test report.		

2.6. Statement of Measurement Uncertainty

Test Item	Uncertainty
Uncertainty for Conducted emissions	3.31 dB
Uncertainty for Radiated emission (9 kHz to 30 MHz)	3.1 dB
Uncertainty for Radiated emission (30 MHz to 1 GHz)	4.53 dB
Measurement Uncertainty Decision Rule Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115: 2023, clause 4.3.3 and 4.3.4.	

2.7. Report modification record

Report No.	Issue Date	Description
SST2507E1099	July 24, 2025	Original Report

2.8. Test Facility

The test facility is recognized, certified, or accredited by the following organizations:	
A2LA	Certificate No.:7057.01
FCC	Designation Number: CN1359
	Test Firm Registration Number: 638130
IC	Company Number: 30419
	CAB identifier: CN0154
Location	GuangDong Set Sail Testing Co., Ltd. 101, No.19, Tianxin Hudie 1st Road, Huangjiang Town, Dongguan, Guangdong, China

2.9. Other information

The laboratory responsible for all the information provided in the report, except those information provided by the applicant.

The applicant shall fully responsible for the information they provided.

The report would be invalid without a stamp of test laboratory and the signatures of compiler and approver.

The laboratory has not been responsible for the sampling stage; the test report merely corresponds to the test sample received.

Any objection to the test report shall submitted to the test laboratory within 15 days from the date of receipt of the report.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

3. Verdict summary section

FCC 47 CFR PART 15 Subpart C		
Requirement – Test case	Basic standard	Verdict
Antenna requirement	FCC part 15.203	Pass
AC Power Line Conducted Emission	FCC part 15.207	Pass
Radiated Emissions	FCC part 15.209	Pass
Emission bandwidth	FCC part 15.215	Pass, report only

Test case verdicts	
- Test case does not apply to the test object	N/A
- Test object does meet the requirement	P (Pass)
- Test object does not meet the requirement	F (Fail)

4. List of Test Equipment

Equipment	Manufacturer	Model No.	Serial No.	Cal. Due
Connected emissions				
EMI Test Receiver	R&S	ESR3	103057	2026/04/16
LISN	R&S	ENV 216	102832	2026/04/16
Test Software	Tonscend	TS+	V4.0	/
Radiated emissions				
Broadband Antenna	Schwarzbeck	VULB 9162	00556	2026/04/18
Horn Antenna	Schwarzbeck	BBHA 9120 D	02783	2026/04/18
Horn Antenna	Schwarzbeck	BBHA9170	01306	2026/04/18
EMI Test Receiver	R&S	ESU8	100372	2026/04/16
Spectrum Analyzer	R&S	FSV40-N	101791	2026/04/16
Amplifier	Schwarzbeck	BBV 9744	00327	2026/04/16
Amplifier	TSTPASS	LNA10180G45	TSAM2303003	2026/04/17
3m Anechoic Chamber	BOST	966	/	2026/01/06
Test Software	Tonscend	TS+	V5.0	/
RF conducted				
Spectrum Analyzer	keysight	N9020A	MY51280659	2026/04/16
Signal Generator	Agilent	N5181A	MY48180054	2026/04/16
Signal Generator	keysight	N5172B	MY57281610	2026/04/16
Spectrum Analyzer	R&S	FSV40-N	101791	2026/04/16
Wideband Radio Communication Tester	R&S	CMW500	123123	2026/04/16
RF Switch Box	TST PASS	TST V2	/	2026/04/16
Test Software	TST PASS	TST PASS	V2.0	/

5. Technical Requirement and Measurement Data

5.1. Generally requirement

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The coil antenna was permanently attached, Reference to the appendix II for details

5.2. Connected emissions

5.2.1. Limits

Frequency (MHz)	Quasi-peak	Average
0.15 to 0.5	66 to 56	56 to 46
0.5 to 5	56	46
5 to 30	60	50

5.2.2. Test method

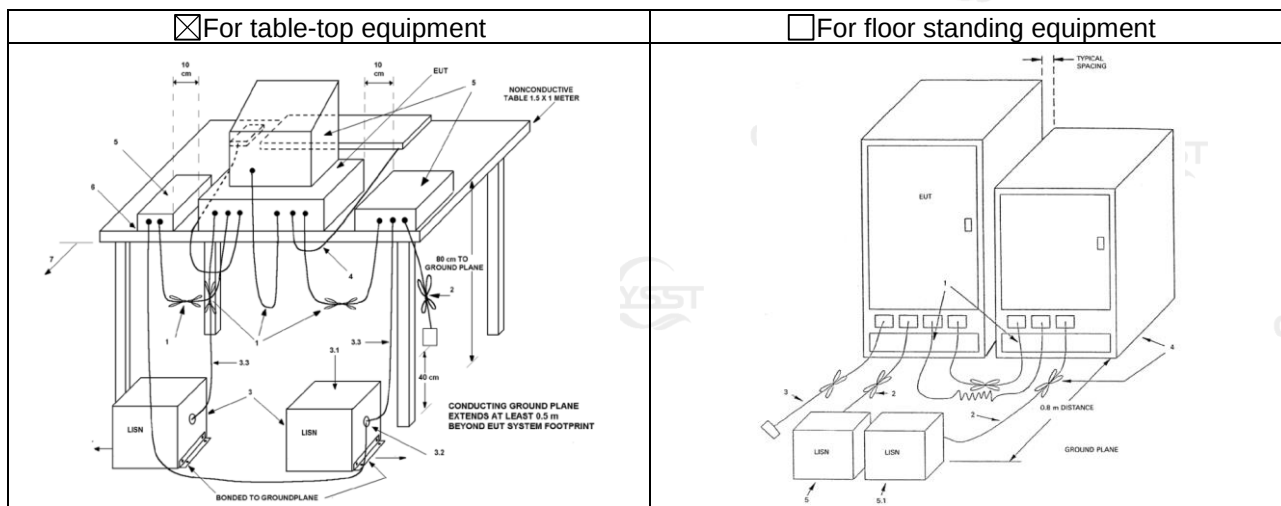
The measurement was performed in a shield room.

Measured levels of ac power-line conducted emission shall be the radio-noise voltage from the voltage probe, where permitted, or across the 50 Ω LISN port (to which the EUT is connected), as terminated into a 50 Ω EMI receiver or spectrum analyzer. All radio-noise voltage and current measurements shall be made on each current-carrying conductor at the plug end of the EUT power cord or calibrated extension cord by the use of mating plugs and receptacles on the EUT and LISN, if used. The manufacturer shall test equipment with power cords that are normally supplied or recommended by the manufacturer and that have electrical and shielding characteristics that are the same as those cords normally supplied or recommended. For measurements using a LISN, the 50 Ω measuring port is terminated into a 50 Ω EMI receiver or spectrum analyzer. All other ports are terminated into 50 Ω loads.

Table top devices shall be placed on a platform of nominal size 1 m by 1.5 m, raised 80 cm above the reference ground plane. The vertical conducting plane or wall of an RF-shielded (screened) room shall be located 40 cm to the rear of the EUT. Floor-standing devices shall be placed either directly on the reference ground-plane or on insulating material as described in ANSI C63.4. All other surfaces of tabletop or floor-standing EUTs shall be at least 80 cm from any other grounded conducting surface, including the case or cases of one or more LISNs.

The bandwidth of the test receiver is set at 9 kHz.

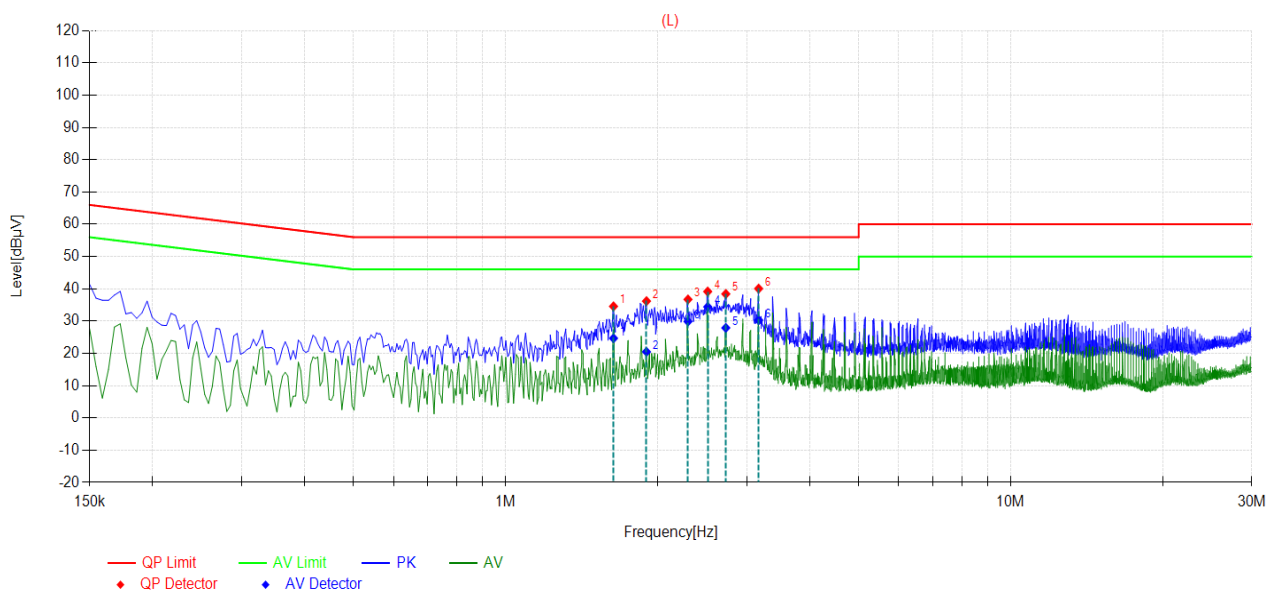
5.2.3. Block diagram of test setup



5.2.4. Test information

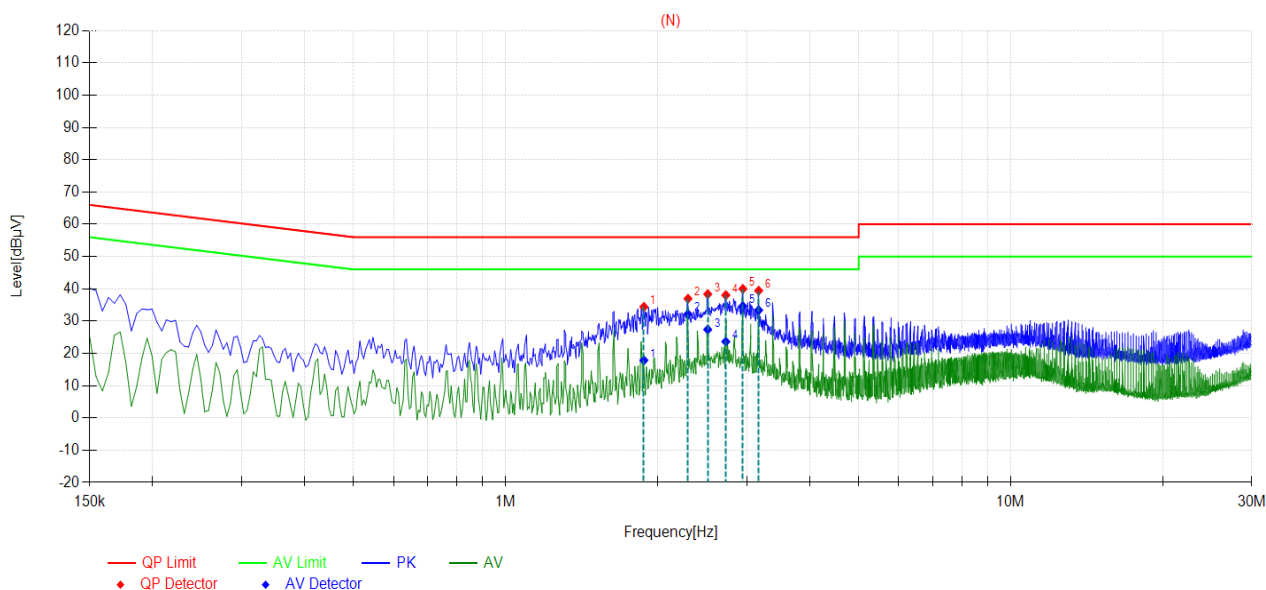
Ambient temperature:	26.4 °C
Relative humidity:	39 %
EUT operation mode:	Mode 1
Test results:	Pass
Remark:	Correct Factor Value = Attenuator Factor + Cable Loss + LISN Factor Measurement Value = Reading Level Value + Correct Factor Value Over Value = Measurement Value - Limit Value

Measurement data and Graphical presentation of the result



Final Data List

NO.	Freq. [MHz]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict	Type
1	1.635	34.56	56.00	21.44	24.68	46.00	21.32	PASS	L
2	1.9005	36.19	56.00	19.81	20.48	46.00	25.52	PASS	L
3	2.2965	36.72	56.00	19.28	29.87	46.00	16.13	PASS	L
4	2.5125	39.15	56.00	16.85	34.42	46.00	11.58	PASS	L
5	2.7285	38.40	56.00	17.60	27.90	46.00	18.10	PASS	L
6	3.1695	40.06	56.00	15.94	30.30	46.00	15.70	PASS	L



Final Data List

NO.	Freq. [MHz]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict	Type
1	1.878	34.41	56.00	21.59	17.84	46.00	28.16	PASS	N
2	2.2965	36.94	56.00	19.06	32.16	46.00	13.84	PASS	N
3	2.5125	38.34	56.00	17.66	27.37	46.00	18.63	PASS	N
4	2.7285	38.04	56.00	17.96	23.64	46.00	22.36	PASS	N
5	2.949	39.99	56.00	16.01	34.62	46.00	11.38	PASS	N
6	3.1695	39.42	56.00	16.58	33.37	46.00	12.63	PASS	N

5.3. Radiated emissions

5.3.1. Limits

Frequency (MHz)	Field Strength(microvolts/meter)	Measurement distance(meters)
0.009~0.49	2400/F(kHz)	300
0.49~1.705	24000/F(kHz)	30
1.705~30	30	30
30~88	100**	3
88~216	150**	3
216~960	200**	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54–72 MHz, 76–88 MHz, 174–216 MHz or 470–806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.

5.3.2. Test method

Measurements were made in semi-anechoic chamber or Open Area Test Site that complies to CISPR 16.

Preliminary (peak) measurements. The EUT was rotated 360° about its azimuth with the receive antenna located at various heights in horizontal and vertical polarities. Final measurements (quasi-peak detector below 1 GHz and average detector above 1 GHz) 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.

While testing for spurious emission higher than 1GHz, the pre-amplifier (and high pass filter if necessary) is equipped just at the output terminal of the antenna.

The distance from EUT to receiving antenna is 3 meters.

The radiated emission was measured using the test receiver with the resolutions bandwidth set as:

RBW:

9kHz~150kHz: 300Hz

150kHz~30MHz: 10kHz

30MHz~1GHz: 100kHz

VBW: $\geq 3 \times \text{RBW}$

Sweep time: Auto couple

Detector: Peak

Trace: Max hold, Trace allowed to stabilize.

The limit is converted from microvolts/meter to decibel microvolts/meter.

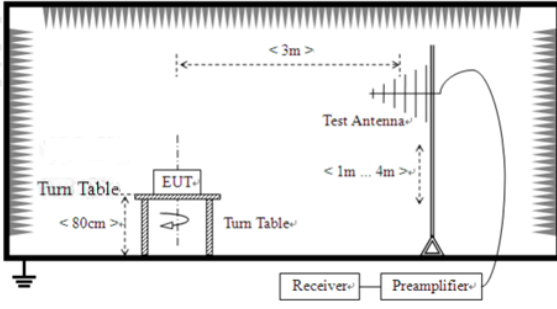
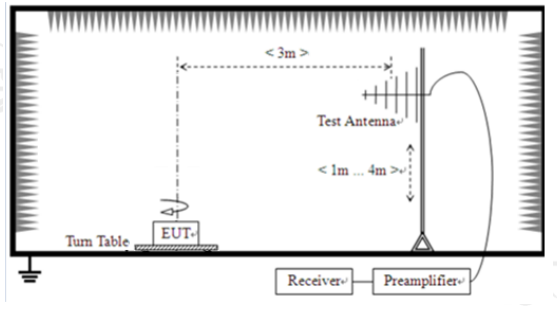
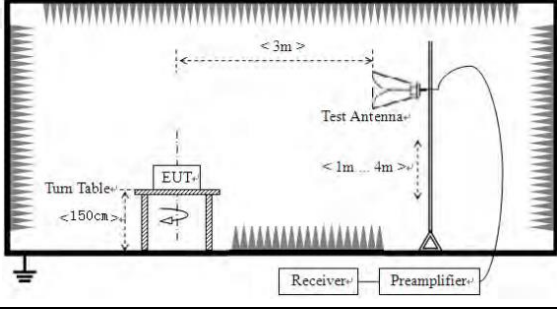
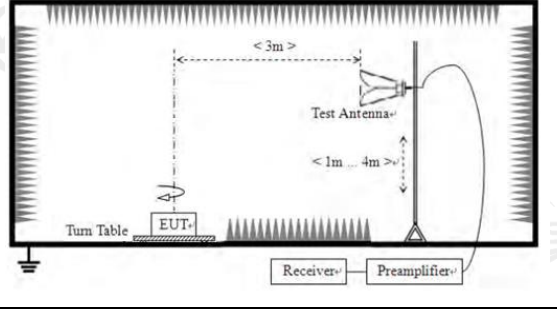
Limit(dBuV/m @3m)=Limit(dBuV/m)+Distance correction

Distance Correction:

0.009MHz~0.49MHz: $40 \times \log(300\text{m}/3\text{m})=80\text{dB}$

0.49MHz~30MHz: $40 \times \log(30\text{m}/3\text{m})=40\text{dB}$

5.3.3. Block diagram of test setup

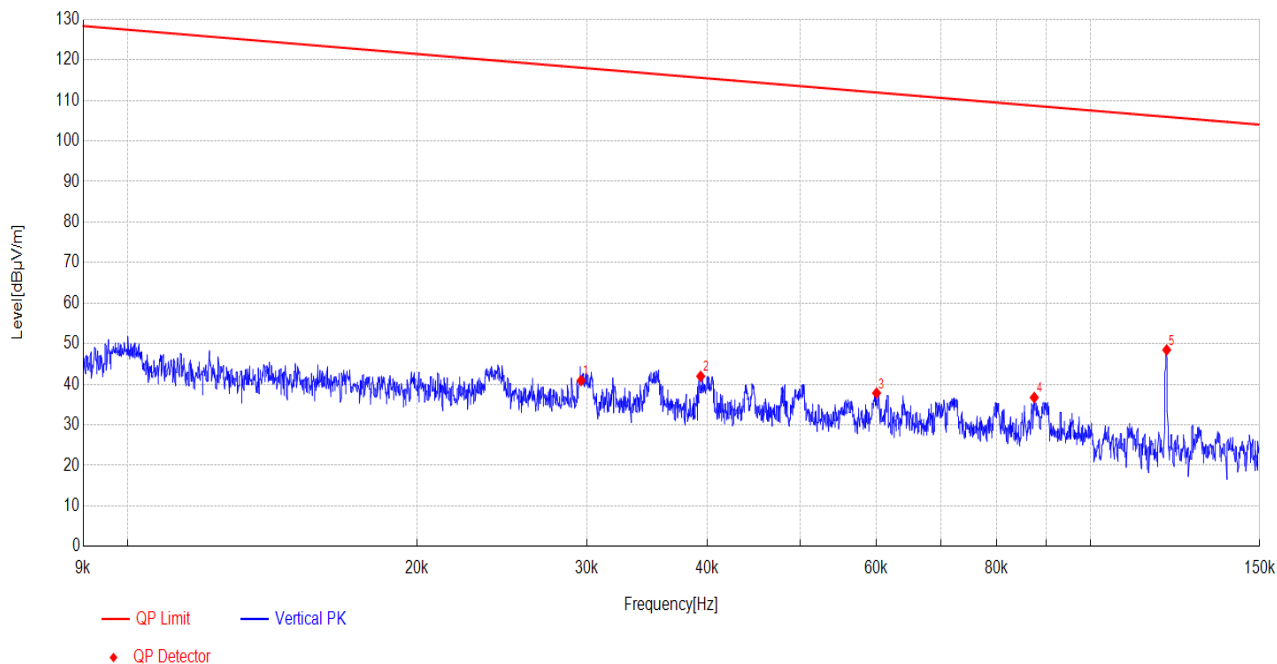
☒ For table-top equipment	☐ For floor standing equipment
For radiated emissions from 9kHz to 30MHz	
错误!不能通过编辑域代码创建对象。	错误!不能通过编辑域代码创建对象。
For radiated emissions from 30MHz to 1GHz	
	
For radiated emissions above 1GHz	
	

5.3.4. Test information

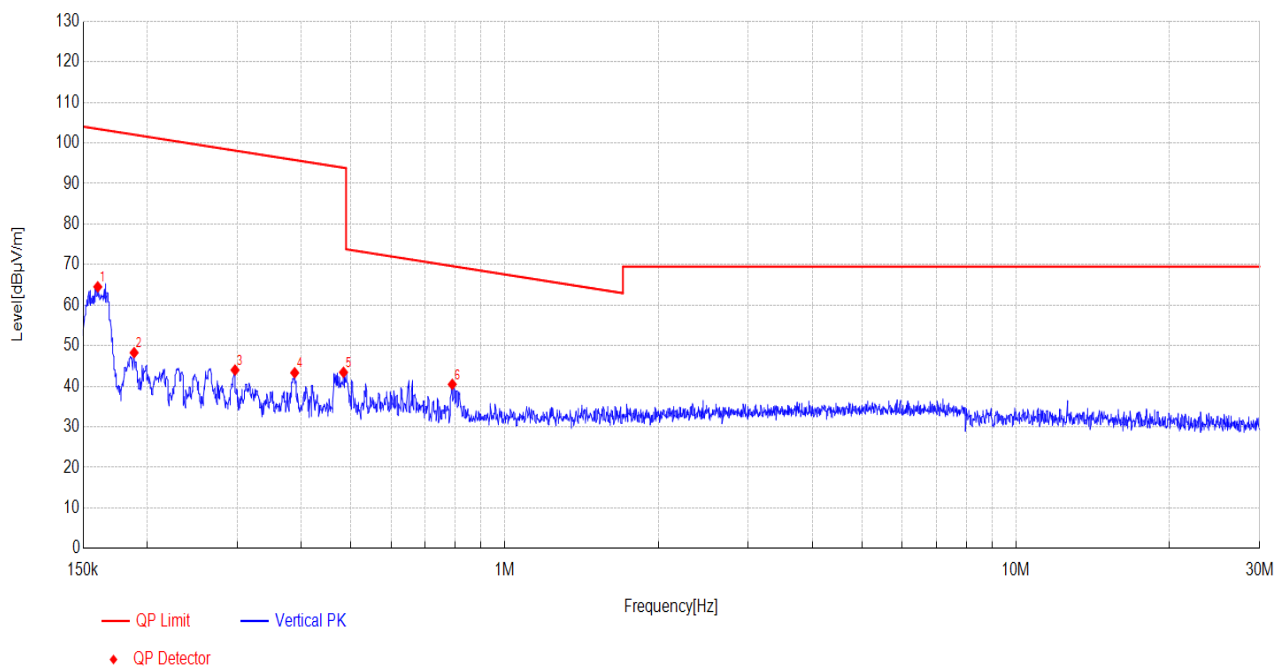
Ambient temperature:	28.4 °C
Relative humidity:	40 %
EUT operation mode:	Mode 4
Test results:	Pass
Remark:	Factor Value = Antenna Factor + Cable Loss - Preamplifier Factor Level Value = Reading Value + Factor Value Margin Value = Level Value - Limit Value

Measurement data and Graphical presentation of the result

Coaxial:

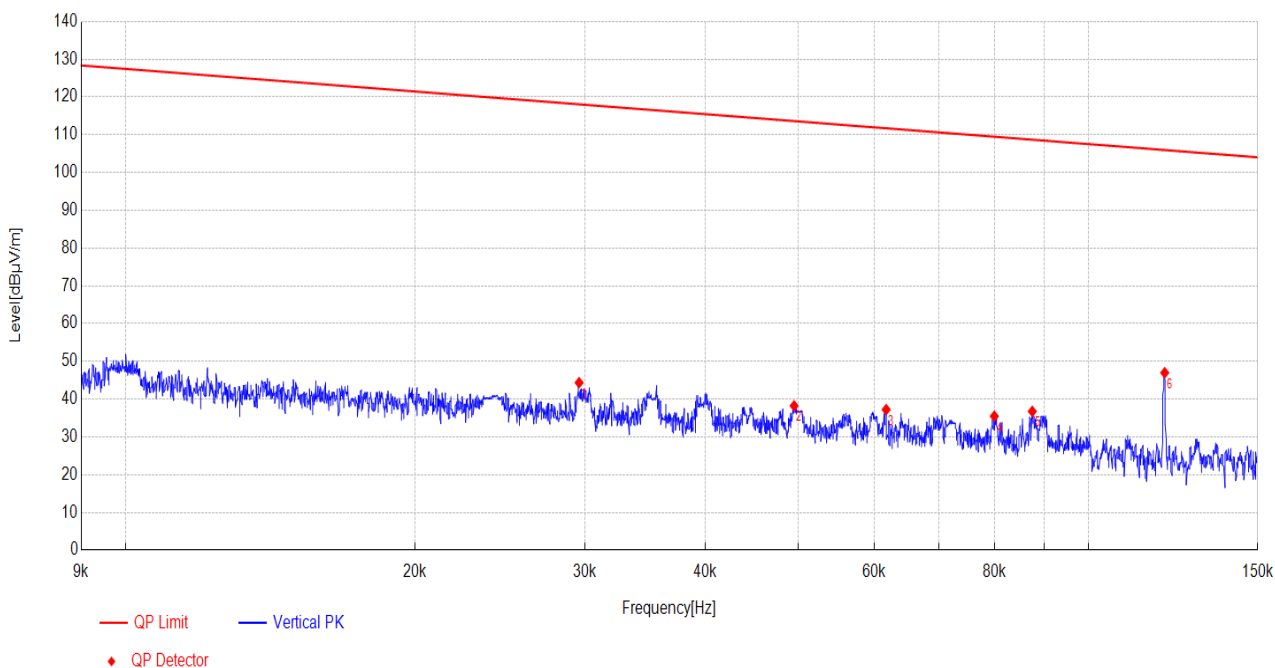


NO.	Freq. [MHz]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Verdict
1	0.0296	40.93	118.07	73.71	PK	PASS
2	0.0394	41.98	115.60	73.62	PK	PASS
3	0.06	37.84	111.96	74.12	PK	PASS
4	0.0875	36.75	108.69	71.94	PK	PASS
5	0.1201	48.48	105.95	57.47	PK	PASS

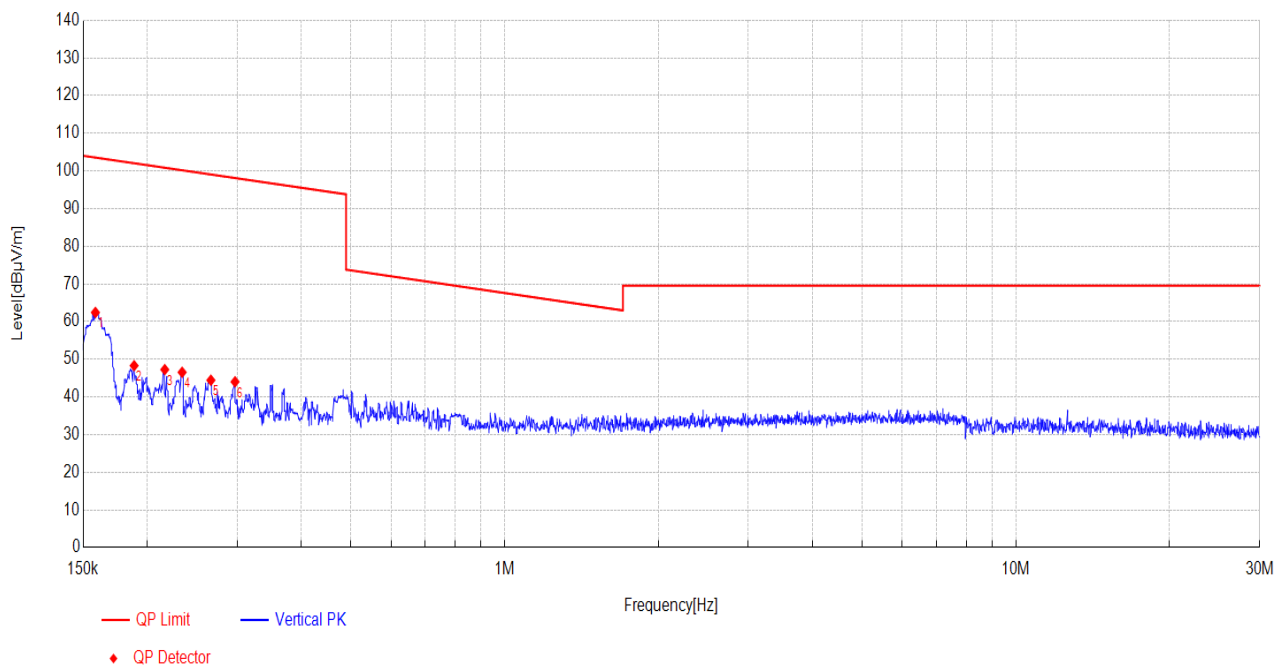


NO.	Freq. [MHz]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Verdict
1	0.1601	64.53	103.47	38.94	PK	PASS
2	0.1886	48.29	102.05	53.76	PK	PASS
3	0.2971	44.02	98.13	54.11	PK	PASS
4	0.3887	43.34	95.80	52.46	PK	PASS
5	0.4842	43.46	93.90	50.44	PK	PASS
6	0.7904	40.50	69.65	29.15	PK	PASS

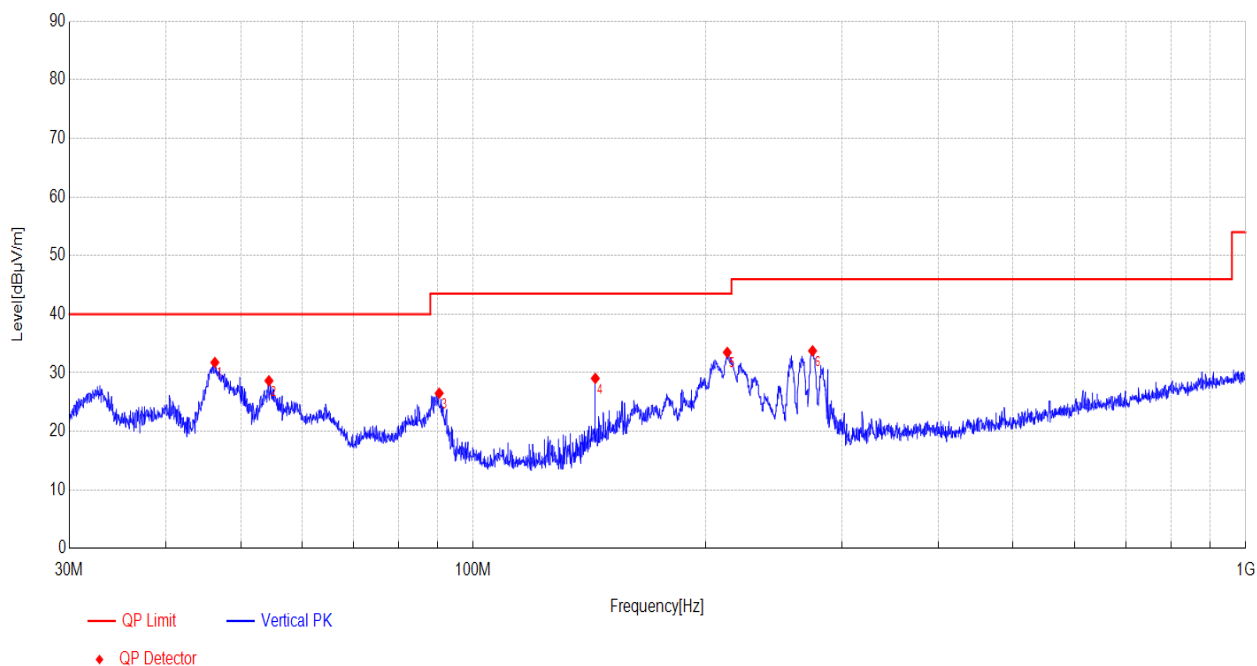
Coplanar:



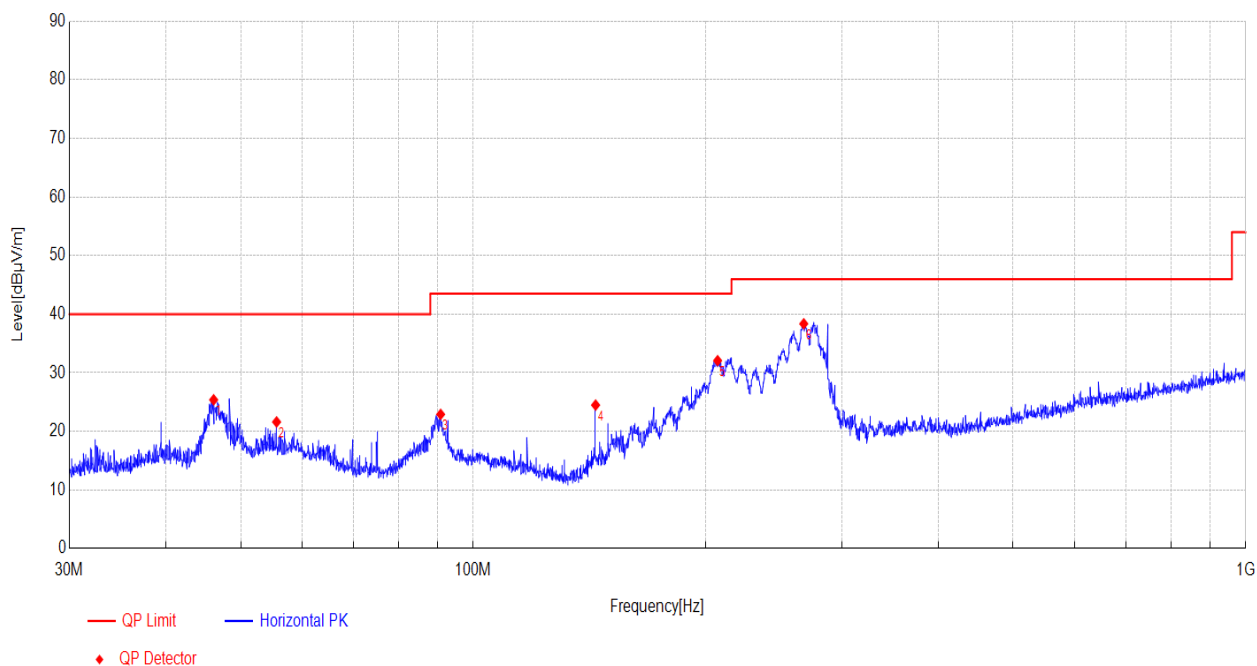
NO.	Freq. [MHz]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Verdict
1	0.0296	44.36	118.06	73.70	PK	PASS
2	0.0495	38.22	113.61	75.39	PK	PASS
3	0.0617	37.23	111.71	74.48	PK	PASS
4	0.0799	35.48	109.48	74.00	PK	PASS
5	0.0875	36.75	108.69	71.94	PK	PASS
6	0.1201	46.98	105.95	58.97	PK	PASS



NO.	Freq. [MHz]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Verdict
1	0.1584	62.43	103.56	41.13	PK	PASS
2	0.1886	48.29	102.05	53.76	PK	PASS
3	0.2165	47.27	100.86	53.59	PK	PASS
4	0.2341	46.55	100.18	53.63	PK	PASS
5	0.2665	44.44	99.06	54.62	PK	PASS
6	0.2971	44.02	98.12	54.10	PK	PASS



NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Polarity	Verdict
1	46.2946	13.79	31.77	40.00	8.23	Vertical	PASS
2	54.3958	13.95	28.64	40.00	11.36	Vertical	PASS
3	90.3539	10.11	26.52	43.50	16.98	Vertical	PASS
4	143.8993	8.97	29.05	43.50	14.45	Vertical	PASS
5	213.2843	12.52	33.49	43.50	10.01	Vertical	PASS
6	275.0047	14.50	33.75	46.00	12.25	Vertical	PASS



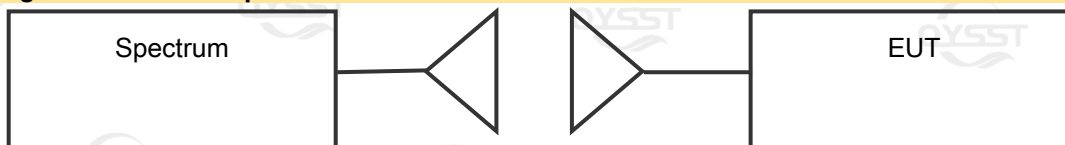
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Polarity	Verdict
1	46.1326	13.77	25.40	40.00	14.60	Horizontal	PASS
2	55.6495	13.86	21.62	40.00	18.38	Horizontal	PASS
3	90.7507	10.20	22.91	43.50	20.59	Horizontal	PASS
4	144.0254	8.97	24.49	43.50	19.01	Horizontal	PASS
5	207.2041	12.32	32.08	43.50	11.42	Horizontal	PASS
6	267.8683	14.27	38.37	46.00	7.63	Horizontal	PASS

5.4. Emission Bandwidth

Limit

Report only

Block diagram of Test Setup



Test Procedures

Since the measured signal is CW-like, it is not practical to adjust the RBW according to C63.10, as the measured bandwidth will always follow the RBW, resulting in approximately twice the RBW.

Analyser frequency set to the wanted transmitting frequency

RBW: >200Hz

VBW: $\geq 3 \times$ RBW

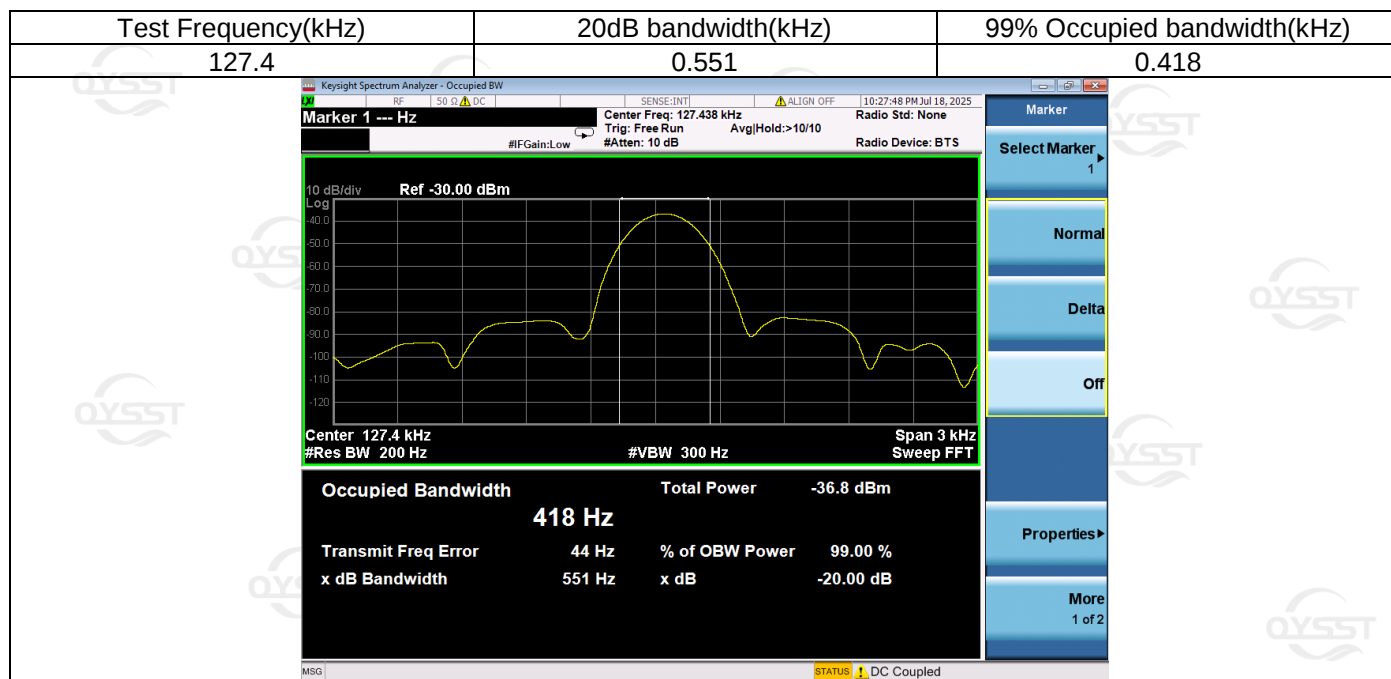
Sweep time: Auto couple

Detector: Peak

Trace: Max hold, trace was allowed to stabilize.

Verdict

Pass



6. Test setup photo

Refer to appendix I for details

7. Photo of the EUT

Refer to appendix II for details

*****End of report*****