



FCC SDoC Test Report

For

Applicant Name: TECHNOSOURCE HK LIMITED
Address: 2F, Building B, Sulandscape Industrial park, Shiyan Town, Bao'an District, Shenzhen China
EUT Name: 3G Tablet
Brand Name: ADVANCE
Model Number: PR6173

Issued By

Company Name: BTF Testing Lab (Shenzhen) Co., Ltd.
Address: F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China
Report Number: BTF230324E00901
Test Standards: 47 CFR Part 15, Subpart B
Test Conclusion: Pass
FCC ID: 2AV3BPR6173
Test Date: 2023-03-24 to 2023-04-02
Date of Issue: 2023-04-03

Prepared By:

Chris Liu / Project Engineer
2023-04-03

Chris Liu / Project Engineer
2023-04-03


Date:

Approved By:

Date:

Ryan.CJ / EMC Manager
2023-04-03

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Test Report Number: BTF230324E00901

Revision History		
Version	Issue Date	Revisions Content
R_V0	2023-04-03	Original
<i>Note: Once the revision has been made, then previous versions reports are invalid.</i>		

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1 Introduction

1.1 Identification of Testing Laboratory

Company Name:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China
Phone Number:	+86-0755-23146130
Fax Number:	+86-0755-23146130

1.2 Identification of the Responsible Testing Location

Company Name:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China
Phone Number:	+86-0755-23146130
Fax Number:	+86-0755-23146130
FCC Registration Number:	518915
Designation Number:	CN1330

1.3 Announcement

- (1) The test report reference to the report template version v0.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) This document may not be altered or revised in any way unless done so by BTF and all revisions are duly noted in the revisions section.
- (5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- (6) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2 Product Information

2.1 Application Information

Company Name:	TECHNOSOURCE HK LIMITED
Address:	2F, Building B, Sulandscape Industrial park, Shiyan Town, Bao'an District, Shenzhen China

2.2 Manufacturer Information

Company Name:	TECHNOSOURCE HK LIMITED
Address:	2F, Building B, Sulandscape Industrial park, Shiyan Town, Bao'an District, Shenzhen China

2.3 Factory Information

Company Name:	TECHNOSOURCE HK LIMITED
Address:	2F, Building B, Sulandscape Industrial park, Shiyan Town, Bao'an District, Shenzhen China

2.4 General Description of Equipment under Test (EUT)

EUT Name:	3G Tablet
Test Model Number:	PR6173

2.5 Technical Information

Power Supply:	DC 5V From Adaptor
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3 Summary of Test Results

3.1 Test Standards

The tests were performed according to following standards:
47 CFR Part 15, Subpart B: Unintentional Radiators

3.2 Uncertainty of Test

Item	Measurement Uncertainty
Conducted Emission (150 kHz-30 MHz)	±2.64dB
All emissions, radiated (<1GHz)	±4.12dB

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.3 Summary of Test Result

Item	Standard	Requirement	Result
Conducted emissions on AC mains	47 CFR Part 15, Subpart B	15.107, Class B	Pass
Radiated emissions (Below 1GHz)	47 CFR Part 15, Subpart B	15.109, Class B	Pass
Radiated emissions (Above 1GHz)	47 CFR Part 15, Subpart B	15.109, Class B	Pass

4 Test Configuration

4.1 Test Equipment List

Conducted emissions on AC mains					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Pulse Limiter	SCHWARZBECK	VTSD 9561-F	00953	2022-11-24	2023-11-23
Coaxial Switcher	SCHWARZBECK	CX210	CX210	2022-11-24	2023-11-23
V-LISN	SCHWARZBECK	NSLK 8127	01073	2022-11-24	2023-11-23
LISN	AFJ	LS16/110VAC	16010020076	2023-02-23	2024-02-22
EMI Receiver	ROHDE&SCHWABERZ	ESCI3	101422	2022-11-24	2023-11-23

Radiated emissions (Below 1GHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Coaxial cable Multiflex 141	Schwarzbeck	N/SMA 0.5m	517386	2023-03-24	2024-03-23
Preamplifier	SCHWARZBECK	BBV9744	00246	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF1-SMASMAM-10m	21101566	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF2-NMNM-10m	21101570	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF1-SMASMAM-1m	21101568	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF2-NMNM-1m	21101576	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF2-NMNM-2.5m	21101573	2022-11-24	2023-11-23
POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/
Horn Antenna	SCHWARZBECK	BBHA9170	01157	2021-11-28	2023-11-27
EMI TEST RECEIVER	ROHDE&SCHWABERZ	ESCI7	101032	2022-11-24	2023-11-23
SIGNAL ANALYZER	ROHDE&SCHWABERZ	FSQ40	100010	2022-11-24	2023-11-23
POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/
Broadband Preamplifier	SCHWARZBECK	BBV9718D	00008	2023-03-24	2024-03-23
Horn Antenna	SCHWARZBECK	BBHA9120D	2597	2022-05-22	2024-05-21
EZ_EMC	Frad	FA-03A2 RE+	/	/	/
POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/
Log periodic antenna	SCHWARZBECK	VULB 9168	01328	2021-11-28	2023-11-27

Radiated emissions (Above 1GHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Coaxial cable Multiflex 141	Schwarzbeck	N/SMA 0.5m	517386	2023-03-24	2024-03-23
Preamplifier	SCHWARZBECK	BBV9744	00246	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF1-SMASMAM-10m	21101566	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF2-NMNM-10m	21101570	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF1-SMASMAM-1m	21101568	2022-11-24	2023-11-23



RE Cable	REBES Talent	UF2-NMNM-1m	21101576	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF2-NMNM-2.5m	21101573	2022-11-24	2023-11-23
POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/
Horn Antenna	SCHWARZBECK	BBHA9170	01157	2021-11-28	2023-11-27
EMI TEST RECEIVER	ROHDE&SCHWABERZ	ESCI7	101032	2022-11-24	2023-11-23
SIGNAL ANALYZER	ROHDE&SCHWABERZ	FSQ40	100010	2022-11-24	2023-11-23
POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/
Broadband Preamplifier	SCHWARZBECK	BBV9718D	00008	2023-03-24	2024-03-23
Horn Antenna	SCHWARZBECK	BBHA9120D	2597	2022-05-22	2024-05-21
EZ EMC	Frad	FA-03A2 RE+	/	/	/
POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/
Log periodic antenna	SCHWARZBECK	VULB 9168	01328	2021-11-28	2023-11-27

4.2 Test Auxiliary Equipment

Title	Manufacturer	Model No.	Serial No.
Adapter	Huawei	HW-059200CHQ	/
USB Cable	/	/	0.4m

4.3 Test Modes

No.	Test Modes	Description
TM1	Charging + Video play	
TM2	Charging + Video recording	
TM3	Date transmission	

5 Emission Test Results (EMI)

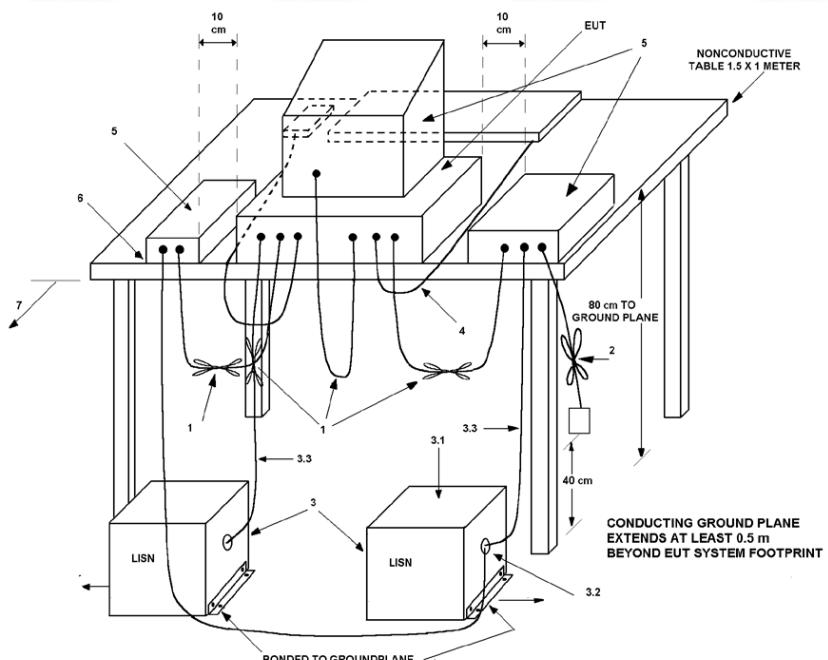
5.1 Conducted emissions on AC mains

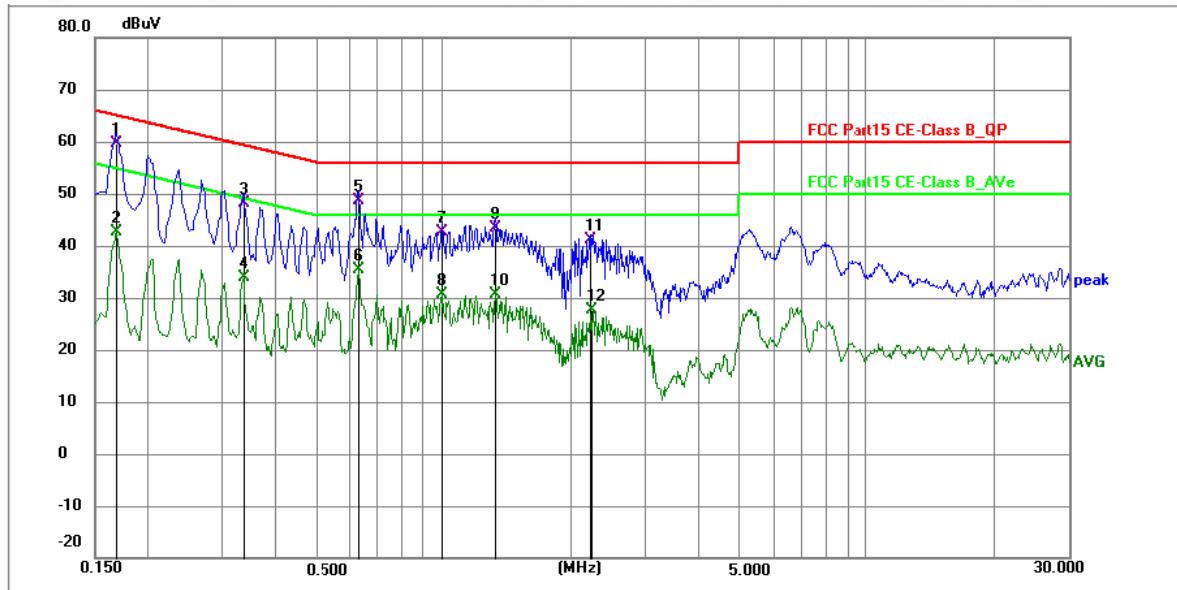
Test Requirement:	15.107, Class B		
Test Method:	ANSI C63.4		
Test Limit:	Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average	
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
Procedure:	5-30	60	50
	*Decreases with the logarithm of the frequency.		
An initial pre-scan was performed with 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			

5.1.1 E.U.T. Operation:

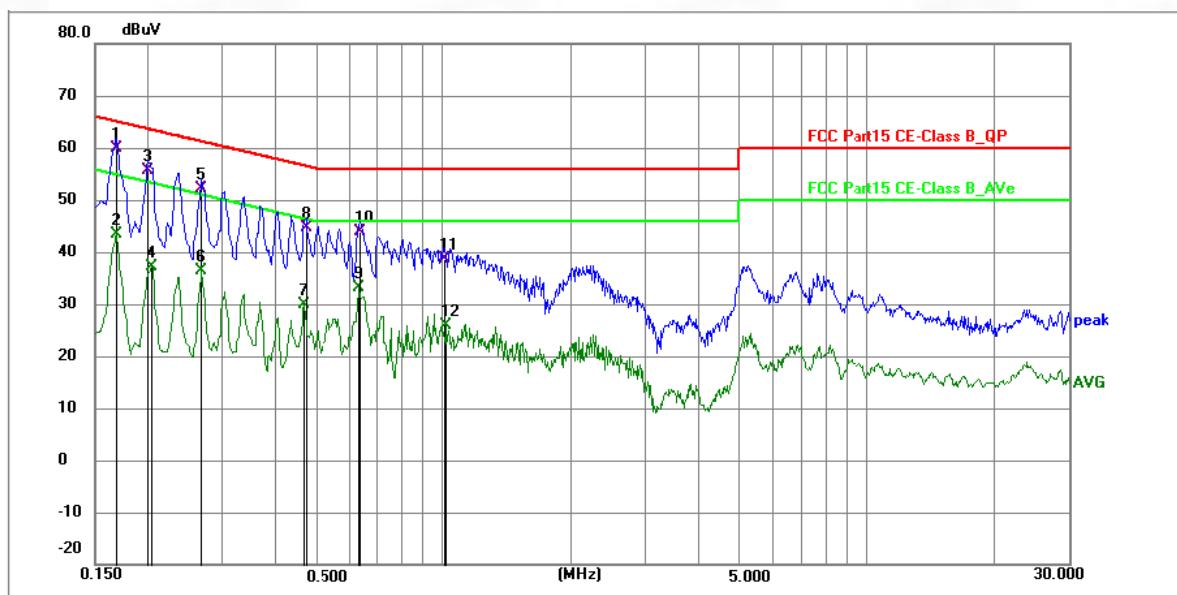
Operating Environment:	
Temperature:	23.5 °C
Humidity:	52.6 %
Atmospheric Pressure:	1010 mbar

5.1.2 Test Setup Diagram:



5.1.3 Test Data:
TM2 / Line: Line


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.1680	49.19	10.55	59.74	65.06	-5.32	QP	P	
2	0.1680	32.02	10.55	42.57	55.06	-12.49	AVG	P	
3	0.3345	37.41	10.62	48.03	59.34	-11.31	QP	P	
4	0.3345	23.37	10.62	33.99	49.34	-15.35	AVG	P	
5	0.6314	37.90	10.69	48.59	56.00	-7.41	QP	P	
6	0.6314	24.69	10.69	35.38	46.00	-10.62	AVG	P	
7	0.9960	31.77	10.78	42.55	56.00	-13.45	QP	P	
8	0.9960	19.92	10.78	30.70	46.00	-15.30	AVG	P	
9	1.3245	32.53	10.75	43.28	56.00	-12.72	QP	P	
10	1.3245	19.99	10.75	30.74	46.00	-15.26	AVG	P	
11	2.2244	31.68	9.57	41.25	56.00	-14.75	QP	P	
12	2.2559	18.16	9.42	27.58	46.00	-18.42	AVG	P	

TM2 / Line: Neutral


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.1680	49.24	10.55	59.79	65.06	-5.27	QP	P	
2	0.1680	32.76	10.55	43.31	55.06	-11.75	AVG	P	
3	0.1995	44.97	10.63	55.60	63.63	-8.03	QP	P	
4	0.2040	26.41	10.63	37.04	53.45	-16.41	AVG	P	
5	0.2670	41.61	10.63	52.24	61.21	-8.97	QP	P	
6	0.2670	25.78	10.63	36.41	51.21	-14.80	AVG	P	
7	0.4650	19.39	10.61	30.00	46.60	-16.60	AVG	P	
8	0.4693	33.98	10.61	44.59	56.53	-11.94	QP	P	
9	0.6313	22.48	10.69	33.17	46.00	-12.83	AVG	P	
10	0.6360	33.08	10.69	43.77	56.00	-12.23	QP	P	
11	1.0095	27.78	10.78	38.56	56.00	-17.44	QP	P	
12	1.0183	15.06	10.78	25.84	46.00	-20.16	AVG	P	

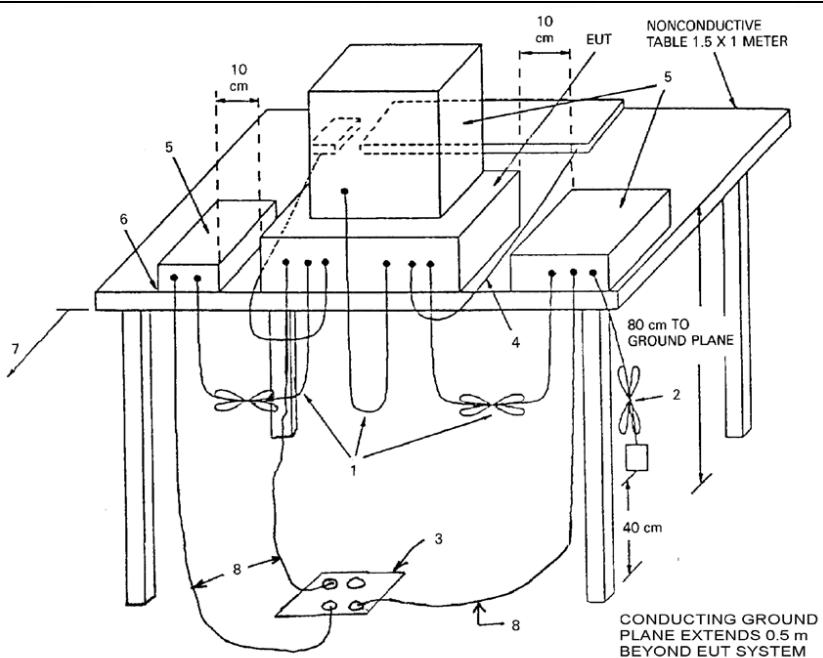
5.2 Radiated emissions (Below 1GHz)

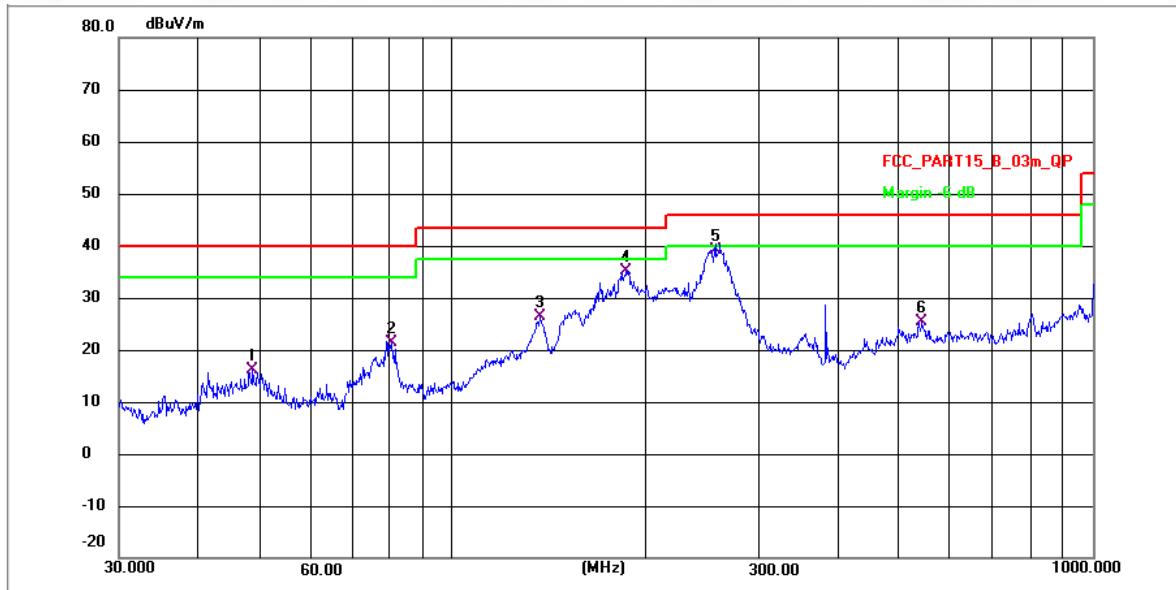
Test Requirement:	15.109, Class B			
Test Method:	ANSI C63.4			
	Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:			
Test Limit:	Frequency of emission (MHz)	Field strength @3m (uV/m)	Field strength @3m (dBuV/m)	Field strength @10m (uV/m)
	30 – 88	100	40	30
	88 – 216	150	43.5	45
	216 – 960	200	46	60
	Above 960	500	54	150
Procedure:	<p>An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.</p> <p>Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor</p>			

5.2.1 E.U.T. Operation:

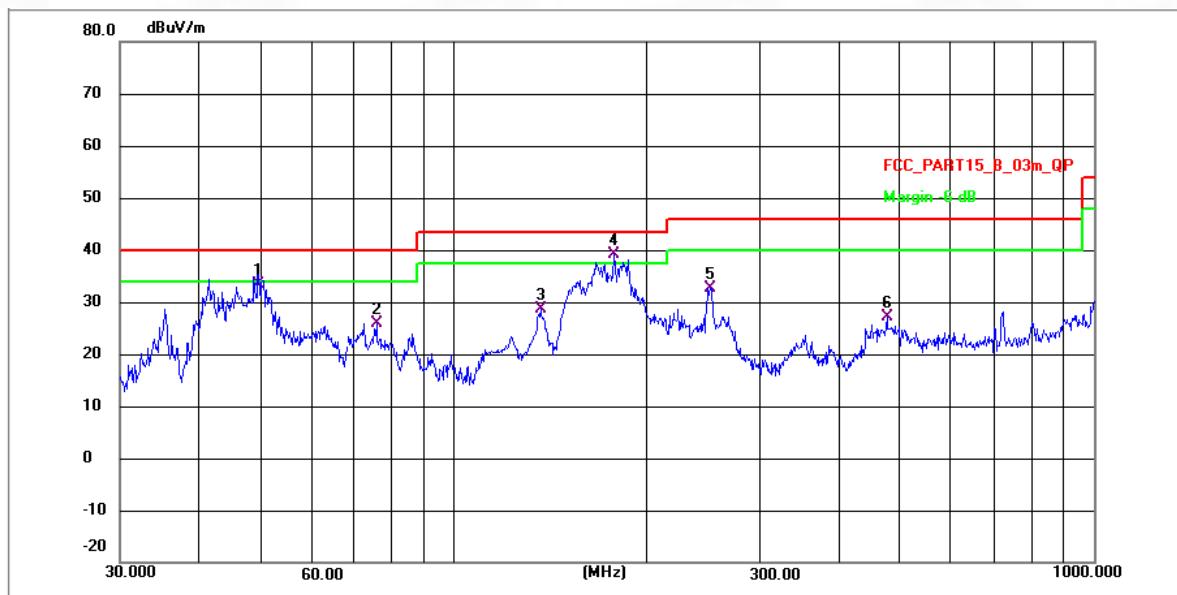
Operating Environment:			
Temperature:	23.5 °C		
Humidity:	52.6 %		
Atmospheric Pressure:	1010 mbar		

5.2.2 Test Setup Diagram:



5.2.3 Test Data:
TM1 / Polarization: Horizontal


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	48.6719	34.37	-18.29	16.08	40.00	-23.92	QP	P
2	80.3619	39.23	-17.97	21.26	40.00	-18.74	QP	P
3	137.1795	54.25	-27.90	26.35	43.50	-17.15	QP	P
4	187.0958	62.54	-27.45	35.09	43.50	-8.41	QP	P
5 *	256.9712	64.98	-25.79	39.19	46.00	-6.81	QP	P
6	542.3225	46.97	-21.58	25.39	46.00	-20.61	QP	P

TM1 / Polarization: Vertical


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	49.4460	53.69	-20.33	33.36	40.00	-6.64	QP	P
2	75.9773	45.83	-19.89	25.94	40.00	-14.06	QP	P
3	136.4598	56.44	-27.90	28.54	43.50	-14.96	QP	P
4 *	178.1326	66.54	-27.52	39.02	43.50	-4.48	QP	P
5	251.6212	58.57	-25.84	32.73	46.00	-13.27	QP	P
6	475.4991	48.81	-21.70	27.11	46.00	-18.89	QP	P

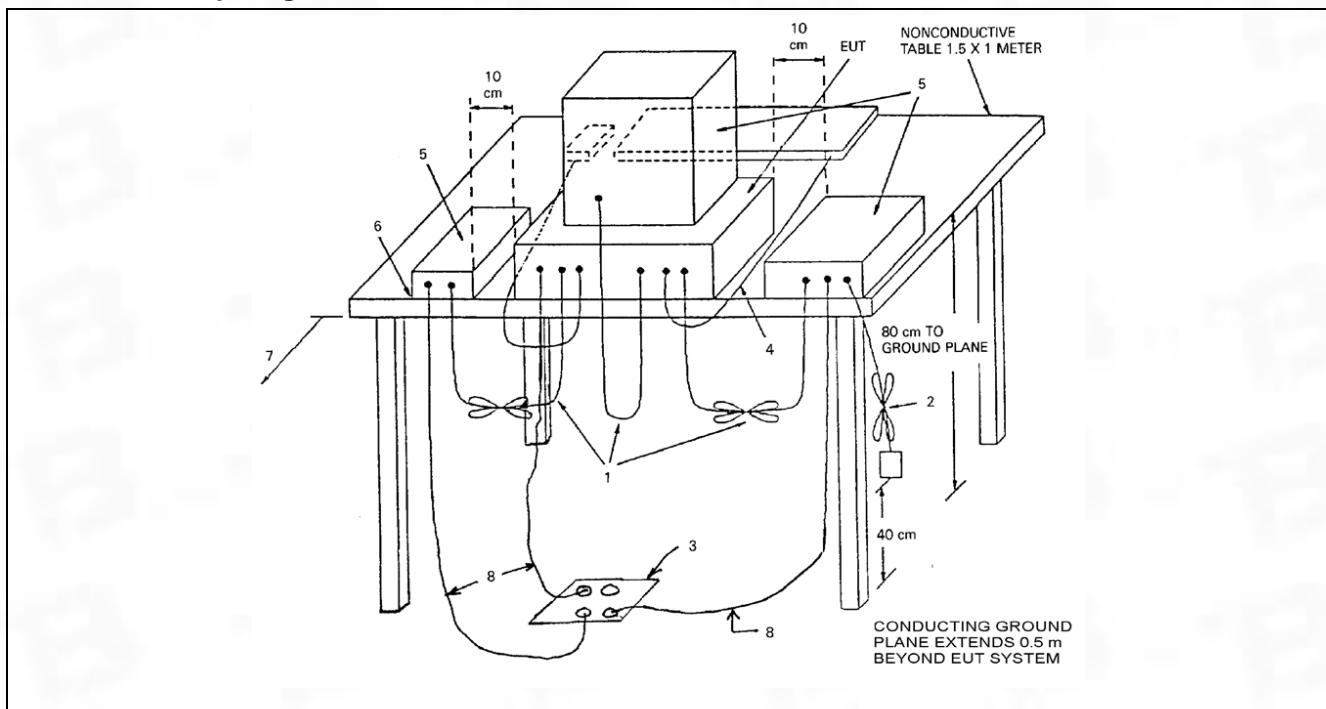
5.3 Radiated emissions (Above 1GHz)

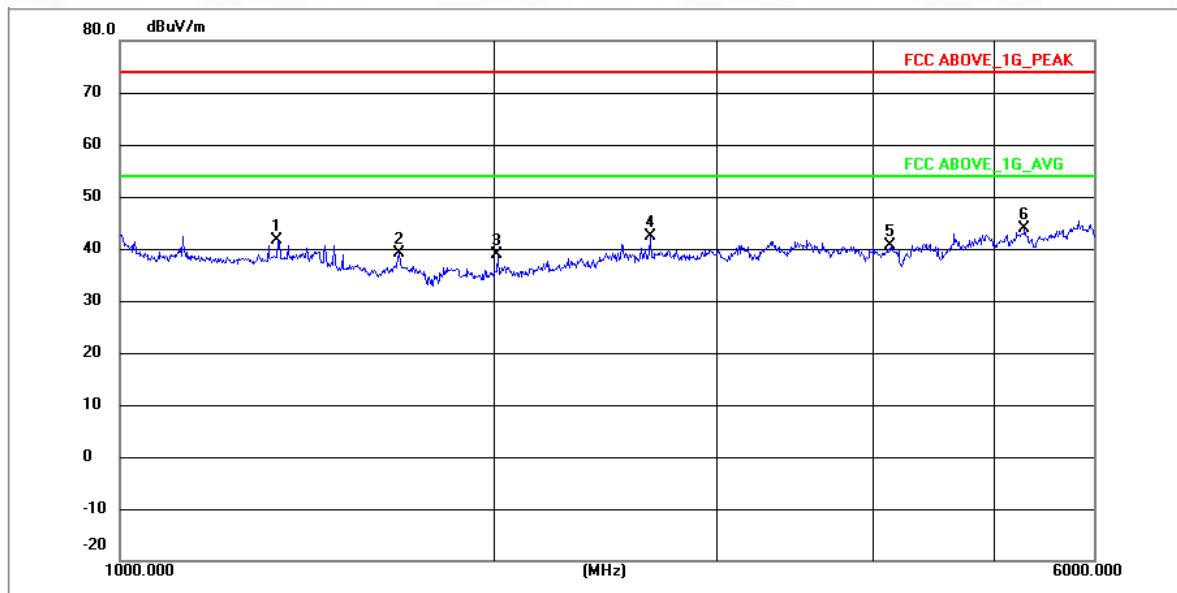
Test Requirement:	15.109, Class B			
Test Method:	ANSI C63.4			
Test Limit:	Frequency of emission (MHz)		Field strength @3m	
	Average (uV/m)	Average (dBuV/m)	Peak (dBuV/m)	
	Above 1GHz	500	54	74
Procedure:	<p>An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. For below 1GHz test, Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities. For above 1GHz test, Average measurements were conducted based on the peak sweep graph. The EUT was measured by Horn antenna with 2 orthogonal polarities.</p> <p>Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor</p>			

5.3.1 E.U.T. Operation:

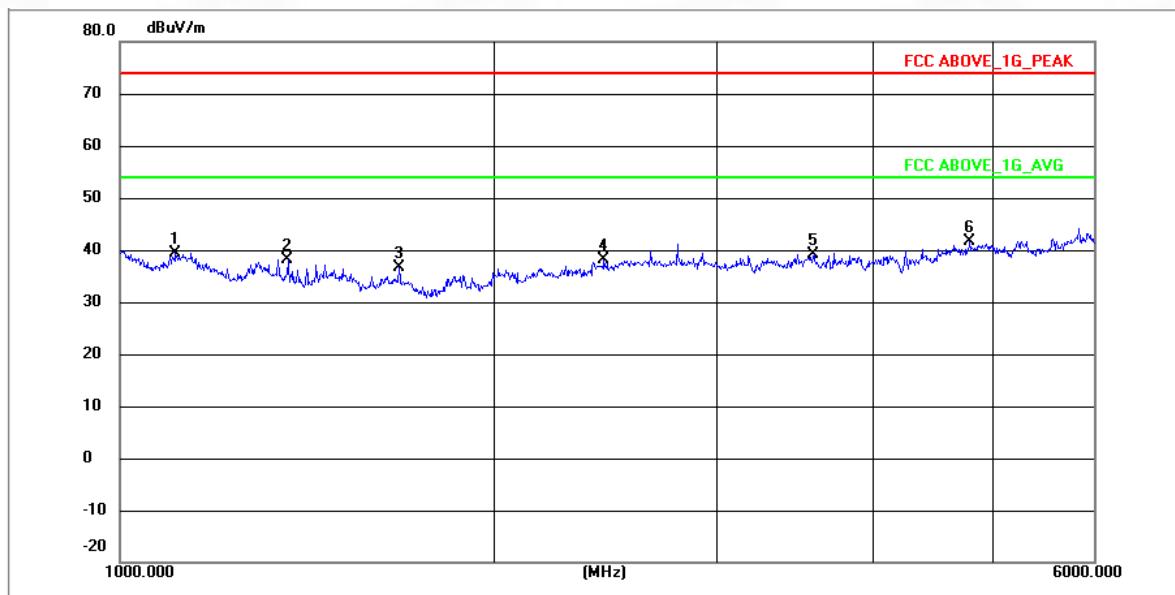
Operating Environment:			
Temperature:	23.5 °C		
Humidity:	52.6 %		
Atmospheric Pressure:	1010 mbar		

5.3.2 Test Setup Diagram:



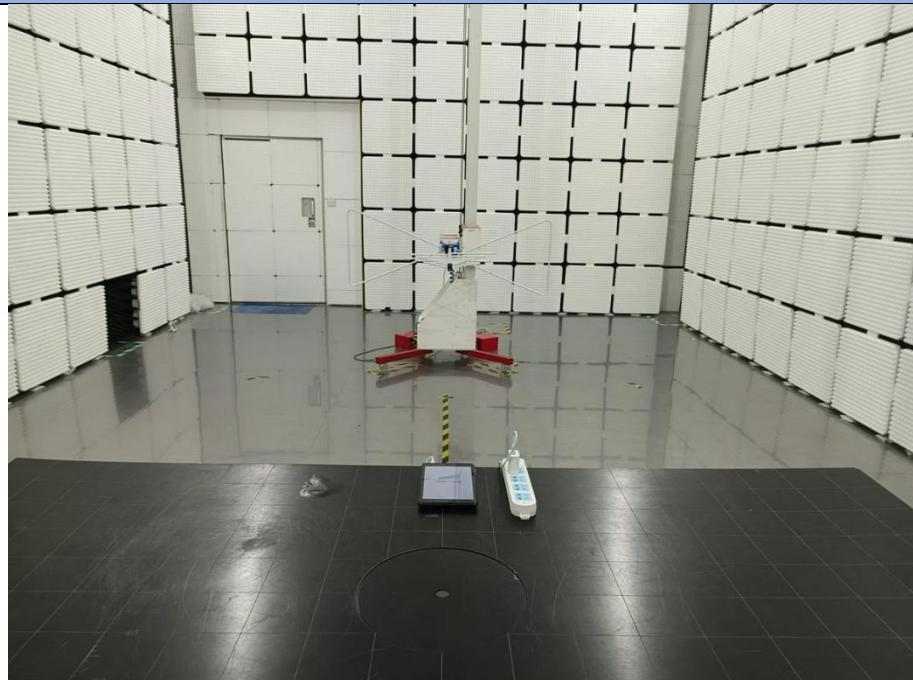
5.3.3 Test Data:
TM1 / Polarization: Horizontal


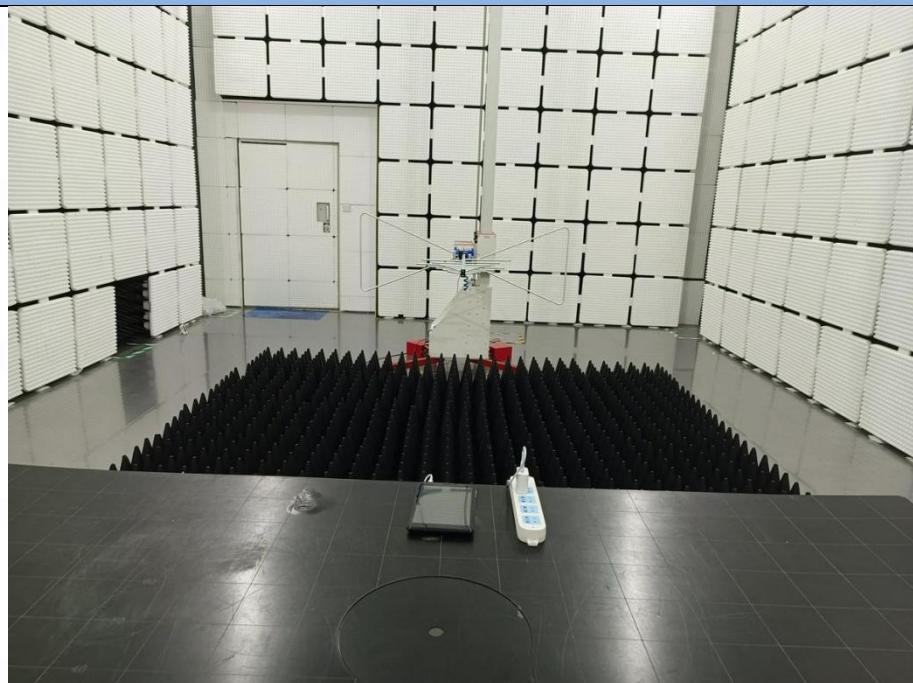
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	1338.939	72.47	-30.83	41.64	74.00	-32.36	peak	P
2	1673.258	70.52	-31.44	39.08	74.00	-34.92	peak	P
3	2007.709	69.91	-30.92	38.99	74.00	-35.01	peak	P
4	2653.744	72.46	-30.11	42.35	74.00	-31.65	peak	P
5	4139.218	69.63	-28.94	40.69	74.00	-33.31	peak	P
6 *	5292.741	71.05	-27.12	43.93	74.00	-30.07	peak	P

TM1 / Polarization: Vertical


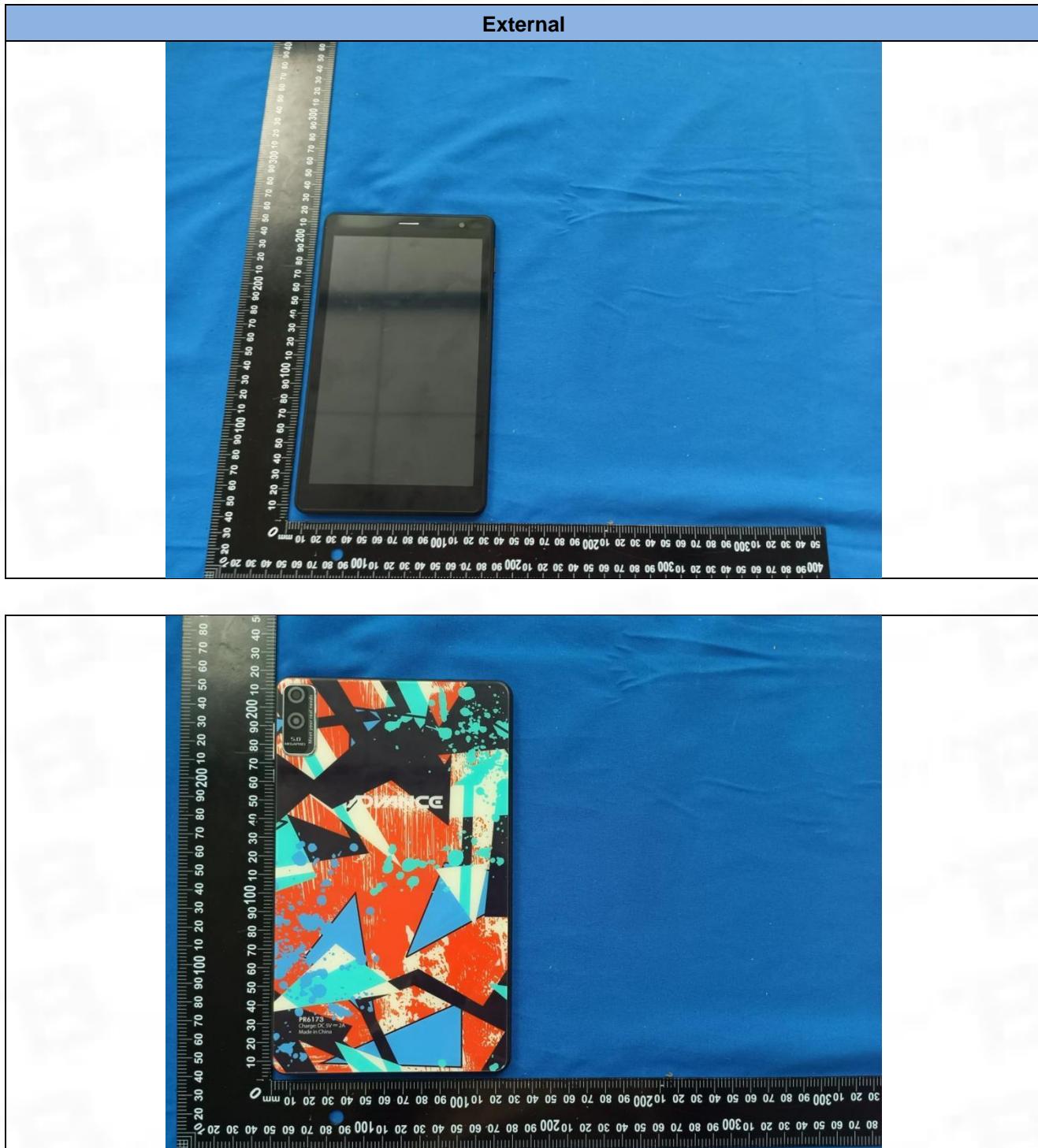
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	1108.123	68.88	-29.57	39.31	74.00	-34.69	peak	P
2	1362.413	69.21	-30.96	38.25	74.00	-35.75	peak	P
3	1673.558	68.12	-31.44	36.68	74.00	-37.32	peak	P
4	2436.358	68.47	-30.45	38.02	74.00	-35.98	peak	P
5	3582.608	68.18	-29.05	39.13	74.00	-34.87	peak	P
6 *	4779.735	69.60	-27.99	41.61	74.00	-32.39	peak	P

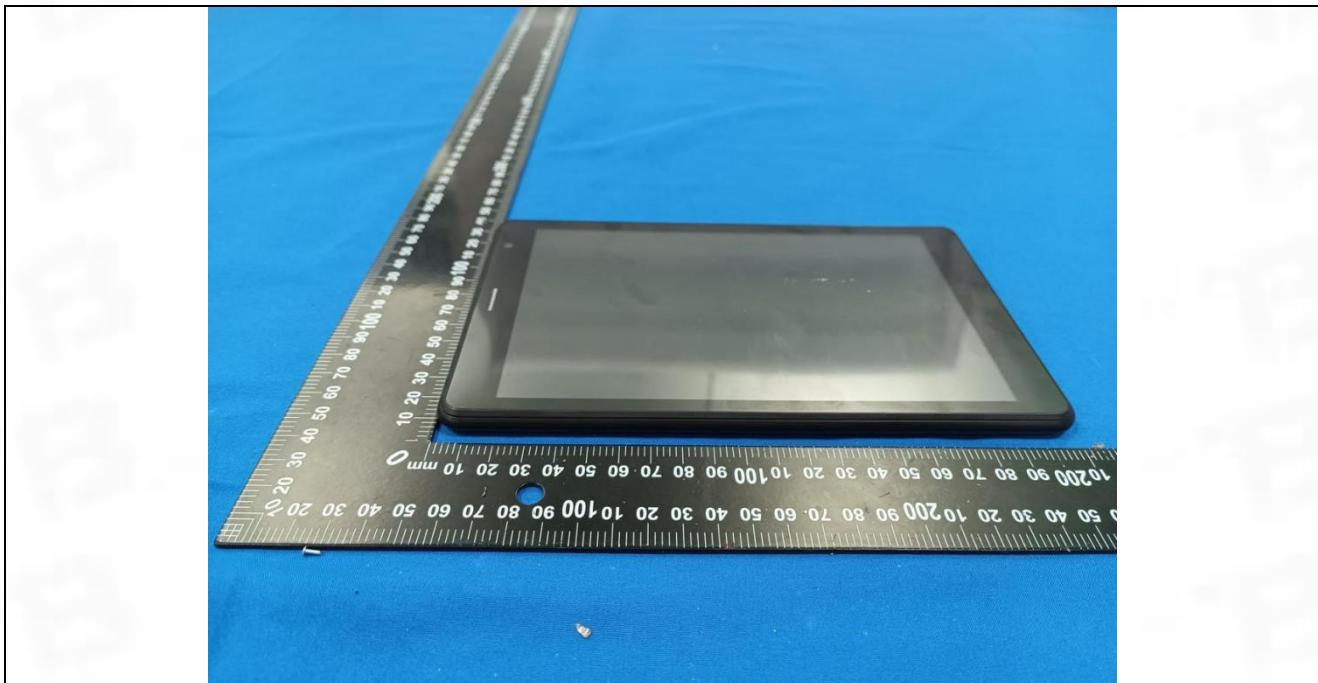
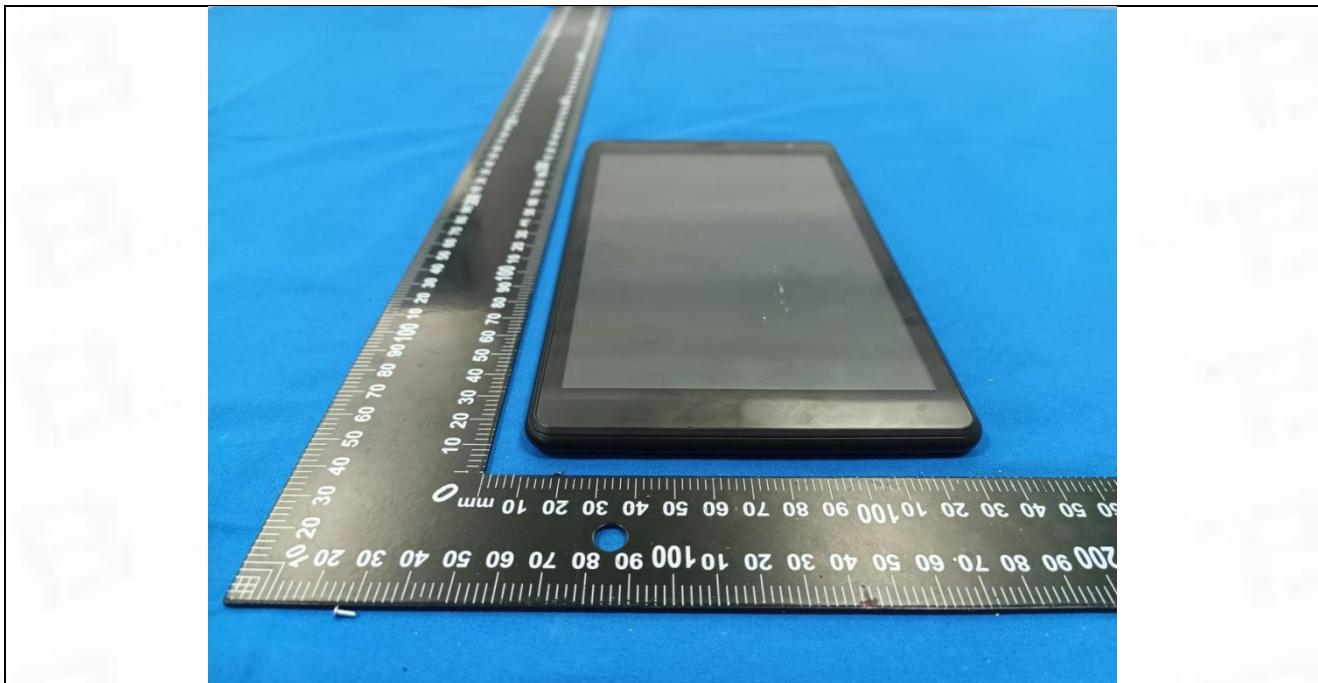
6 Test Setup Photos

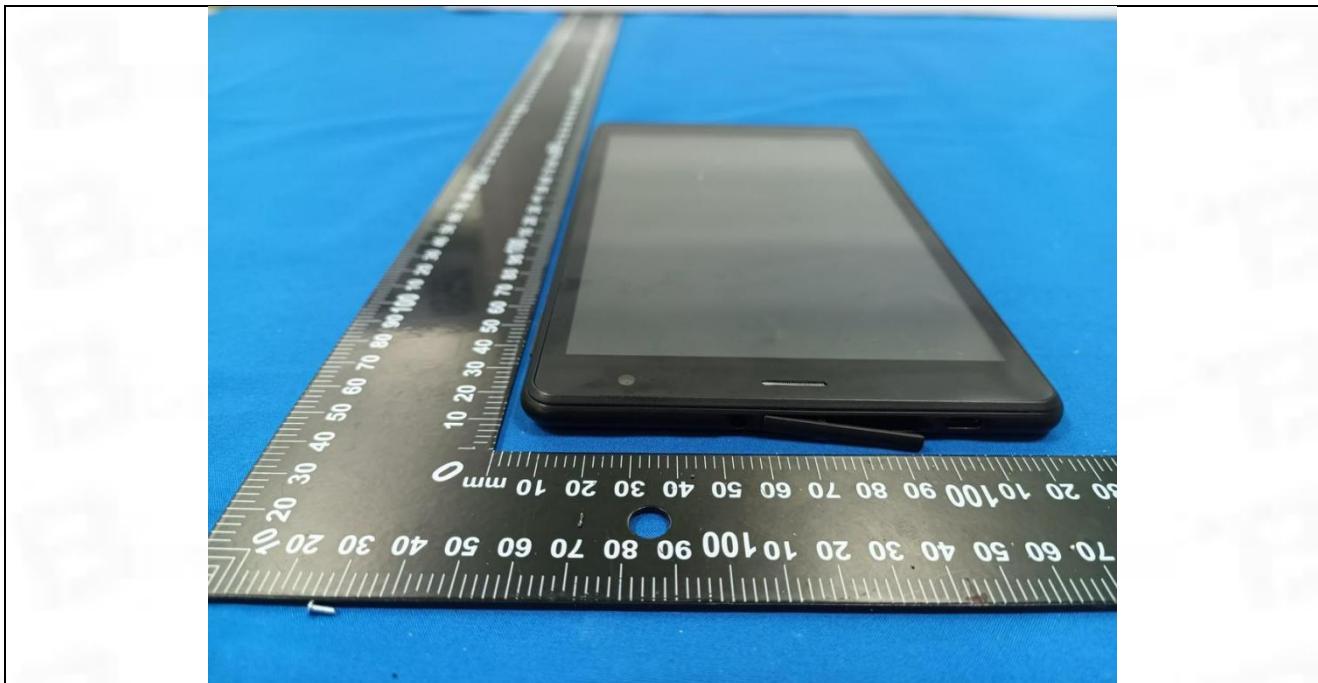
Conducted emissions on AC mains**Radiated emissions (Below 1GHz)**

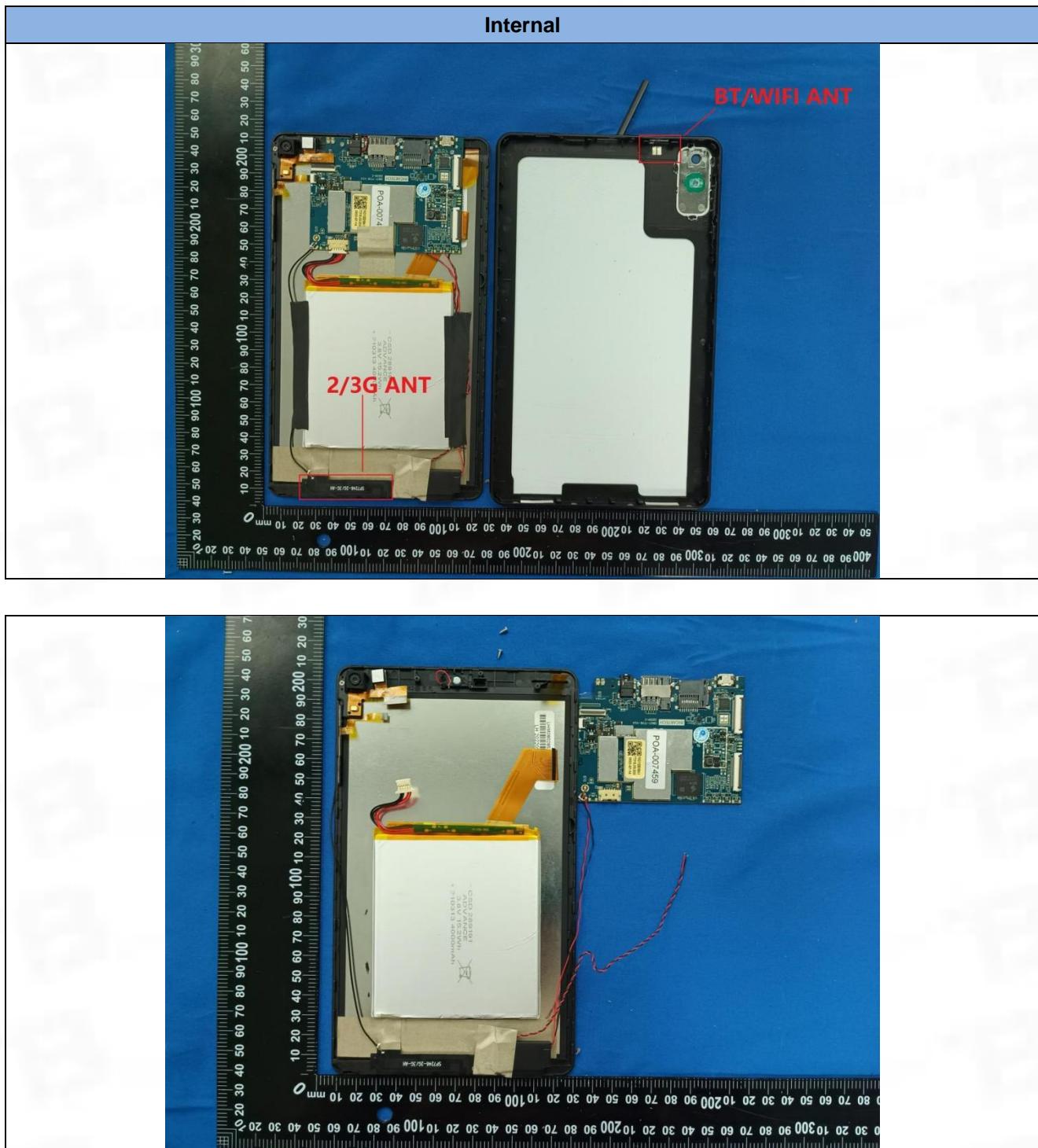
Radiated emissions (Above 1GHz)

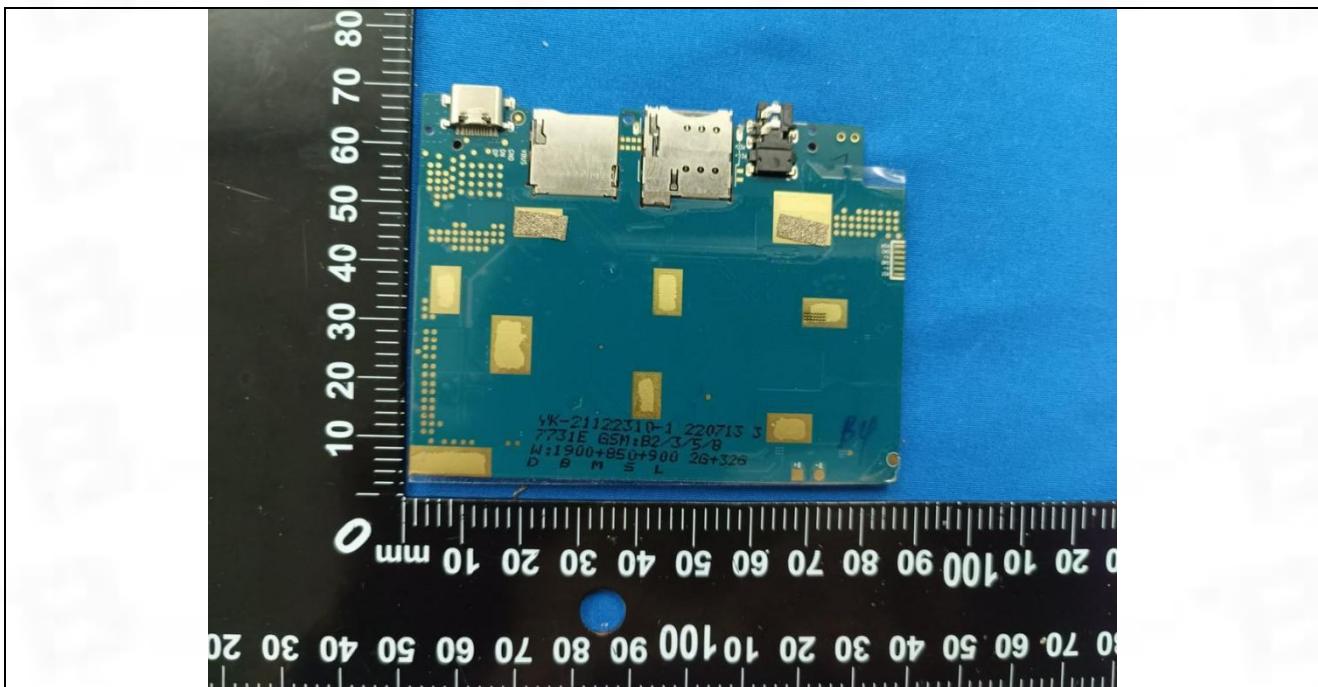
7 EUT Constructional Details (EUT Photos)

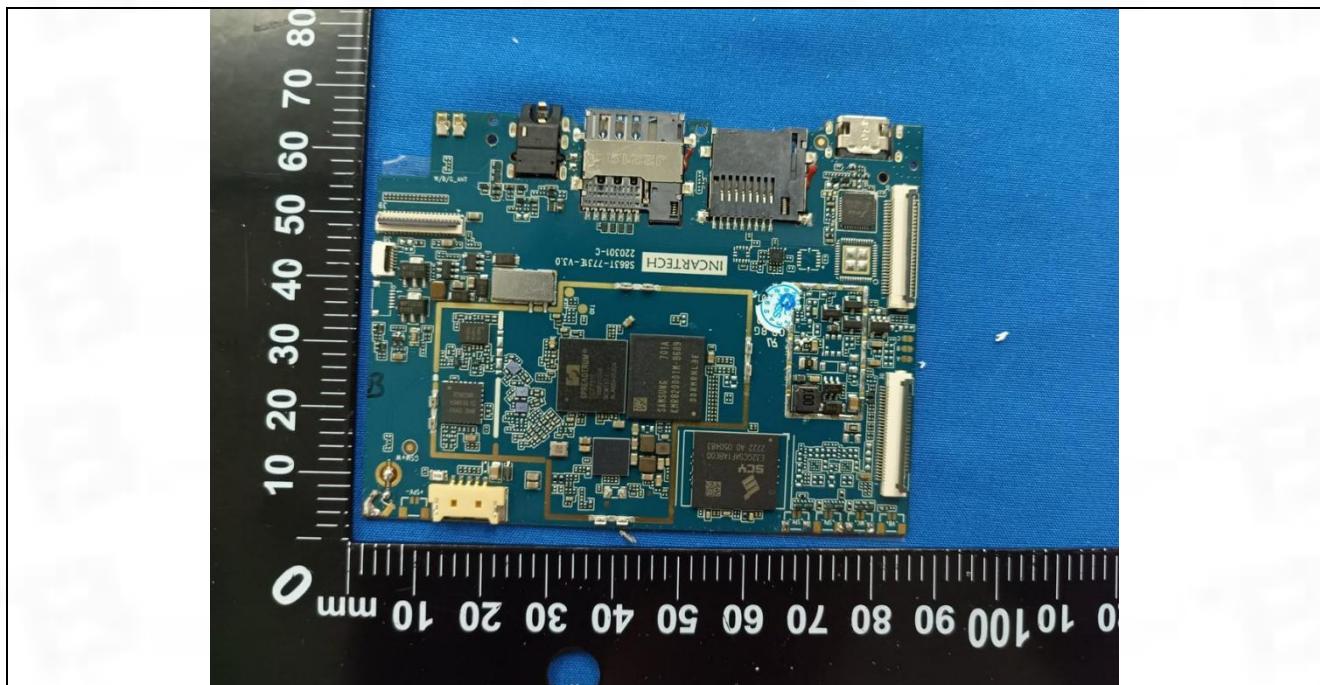
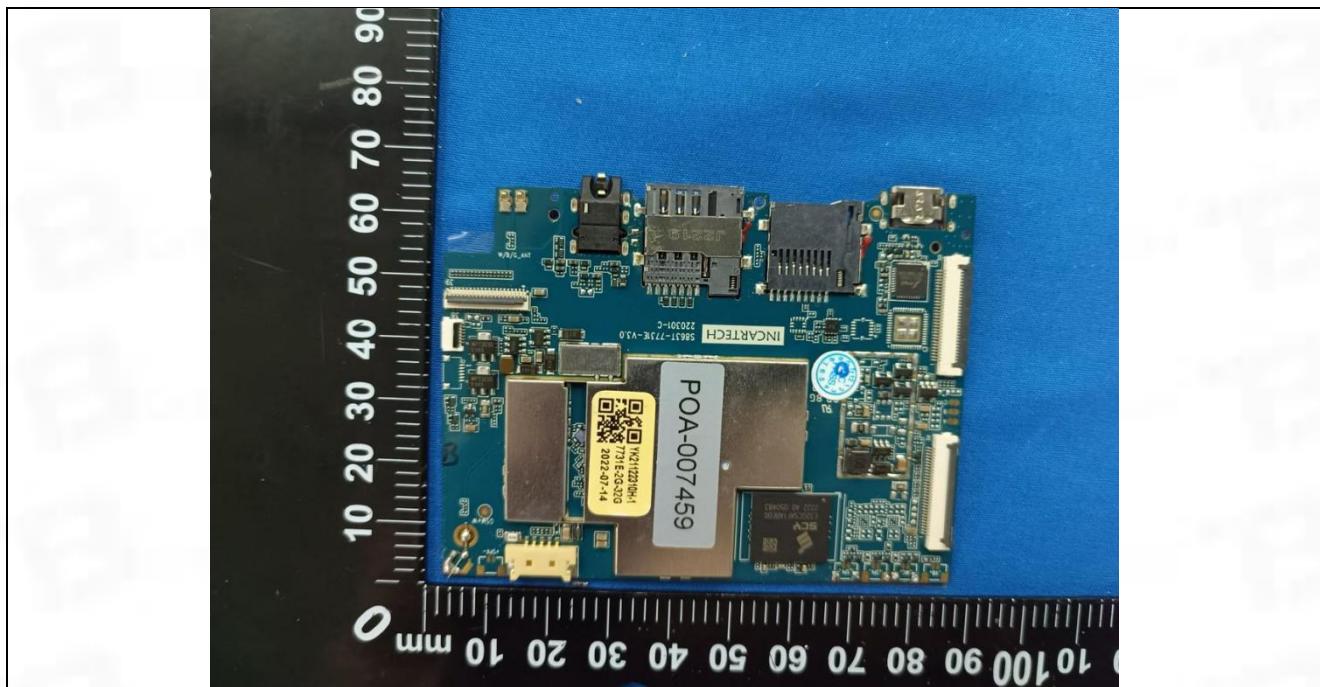














Test Report Number: BTF230324E00901



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Bao'an District, Shenzhen, China

www.btf-lab.com

-- END OF REPORT --