



FCC Test Report



For

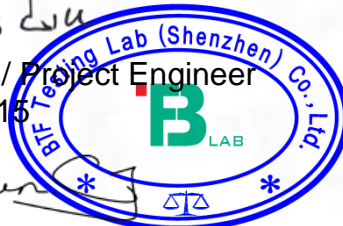
Applicant Name: TECNO MOBILE LIMITED
Address: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25
SHAN MEI STREET FOTAN NT HONGKONG
EUT Name: Laptop
Brand Name: TECNO
Model Number: S15AM
Series Model Number: Refer to section 2

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: BTF230612R00406
Test Standards: 47 CFR Part 15, Subpart B
FCC ID: 2ADYY-S15AM
Test Conclusion: Pass
Test Date: 2023-03-06 to 2023-05-29
Date of Issue: 2023-06-15

Prepared By: 
Chris Liu / Project Engineer
Date: 2023-06-15
Approved By: 
Ryan.CJ / EMC Manager
Date: 2023-06-15



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Revision History		
Version	Issue Date	Revisions Content
R_V0	2023-06-15	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:	TECNO MOBILE LIMITED
Address:	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

2.2 Manufacturer Information

Company Name:	TECNO MOBILE LIMITED
Address:	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

2.3 Factory Information

Company Name:	GUANGXI SHANCHAUN TECHNOLOGY CO LTD
Address:	2nd floor of building1 in zone 3、building2 in zone 3, 1st floor of building 2 in zone 4, Guangxi 3nod Smart Industrial Park, No. 3 Gaoke Road, Haicheng District, Beihai City, Guangxi Zhuang Autonomous Region

2.4 General Description of Equipment under Test (EUT)

EUT Name:	Laptop
Test Model Number:	S15AM
Series Model Number:	N/A

2.5 Technical Information

Power Supply:	Li-ion Battery: S1 Nominal Voltage: 11.55V Rated Capacity: 6060mAh/70Wh Typical Capacity: 6160 mAh/71.14Wh Limited Charge Voltage: 13.2V
Power Adaptor:	Adapter1: TCW-A 61S-65W Input: 100-240V~50/60Hz 1.5A Max Output: PD: 5V ---3A 9V ---3A 12V ---3A 15V ---3A 20V ---3.25A PPS: 3.3-11V ---5A Max Adapter2: DS65-2 Input: 100-240V~50/60Hz 1.5A Max Output: PD: 5V ---3A 9V ---3A 12V ---3A 15V ---3A 20V ---3.25A 65W

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)	$\pm 2.64\text{dB}$
All emissions, radiated (<1GHz)	$\pm 4.12\text{dB}$

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&SCHWARZ	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&SCHWARZ	ESCI7	101032	2022-11-24	2023-11-23
SIGNAL ANALYZER	ROHDE&SCHWARZ	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	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&SCHWARZ	ESCI7	101032	2022-11-24	2023-11-23
SIGNAL ANALYZER	ROHDE&SCHWARZ	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

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

4.3 Test Modes

Pretest Mode	Description
Mode 1	Video Recording
Mode 2	Video Playing
Mode 3	Transferring with USB Disk (the worst case)
Mode 4	TF Card Playing

5 Emission Test Results (EMI)

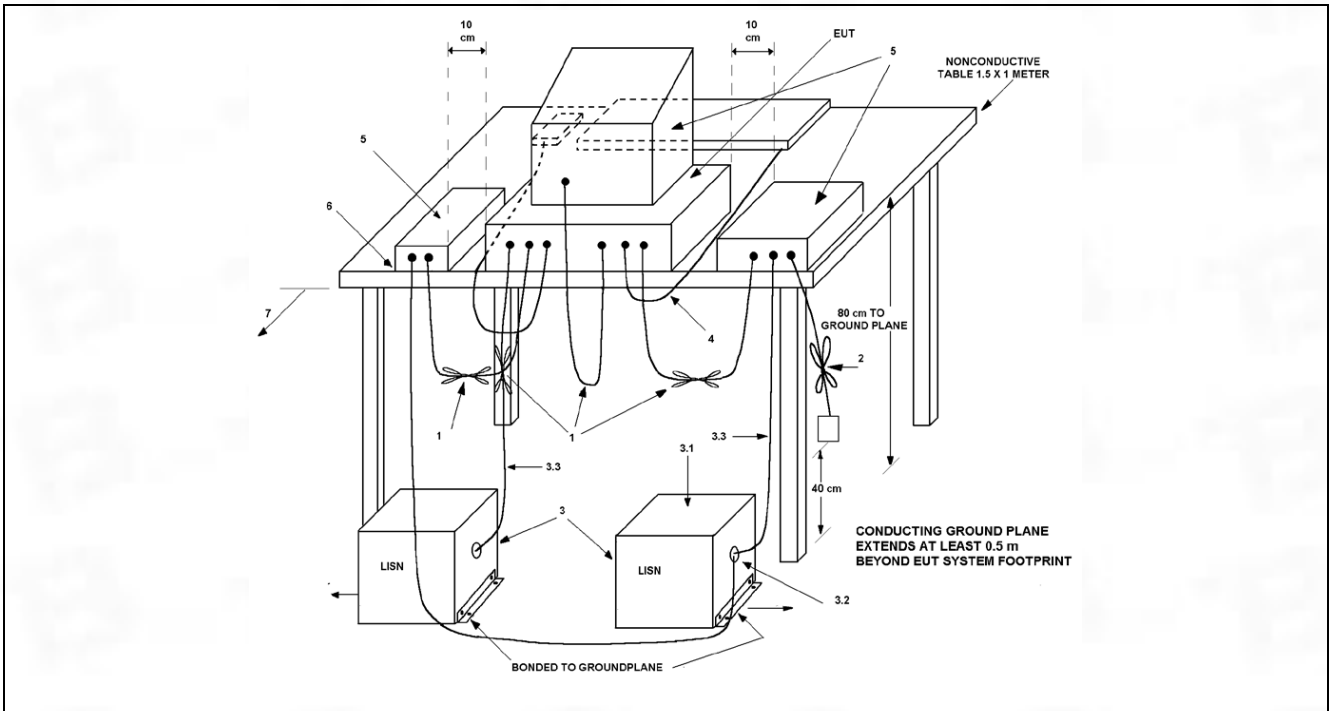
5.1 Conducted emissions on AC mains

Test Requirement:	15.107, Class B		
Test Method:	ANSI C63.4		
Test Limit:	Frequency of emission (MHz)	Conducted limit (dBμV)	
		Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	5-30	60	50
	*Decreases with the logarithm of the frequency.		
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		

5.1.1 E.U.T. Operation:

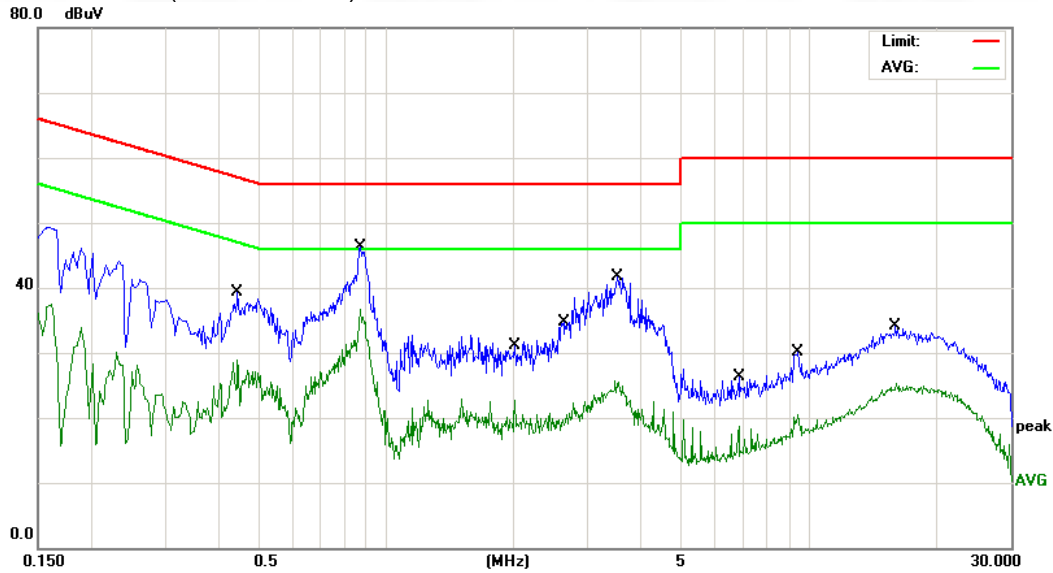
Operating Environment:	
Temperature:	24.1 °C
Humidity:	48.7 %
Atmospheric Pressure:	1010 mbar

5.1.2 Test Setup Diagram:



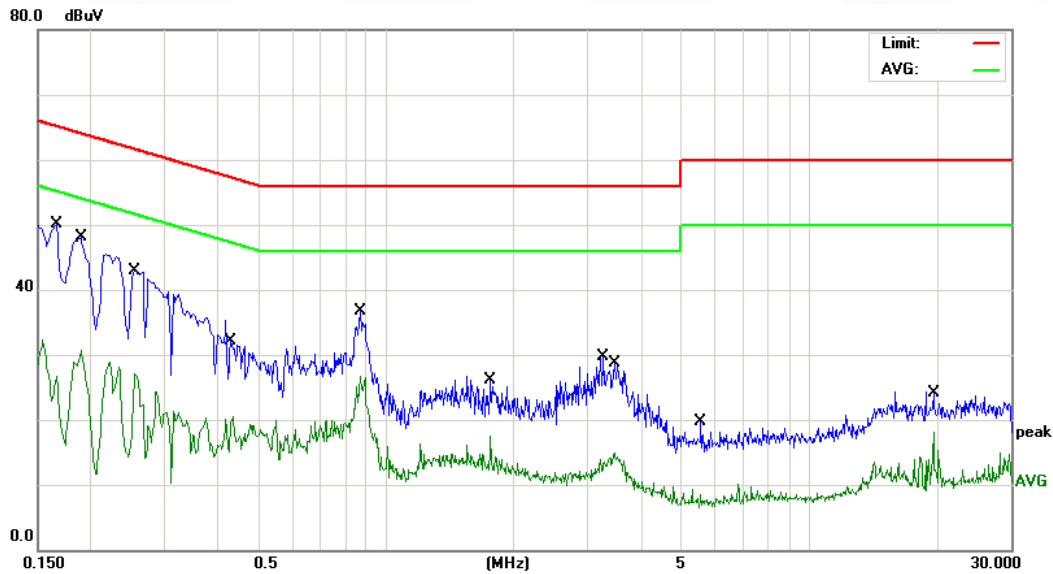
5.1.3 Test Data:

TM1 / Line: Line Mode 3(the worst case)



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.4460	28.83	10.51	39.34	56.95	-17.61	QP
2		0.4460	18.43	10.51	28.94	46.95	-18.01	AVG
3		0.8700	35.81	10.54	46.35	56.00	-9.65	QP
4	*	0.8700	26.23	10.54	36.77	46.00	-9.23	AVG
5		2.0180	11.96	10.71	22.67	46.00	-23.33	AVG
6		2.6020	23.76	10.72	34.48	56.00	-21.52	QP
7		3.4820	14.95	10.72	25.67	46.00	-20.33	AVG
8		3.5260	30.92	10.73	41.65	56.00	-14.35	QP
9		6.8060	7.85	10.77	18.62	50.00	-31.38	AVG
10		9.4060	19.24	10.82	30.06	60.00	-29.94	QP
11		16.0459	22.90	11.17	34.07	60.00	-25.93	QP
12		16.0860	14.10	11.17	25.27	50.00	-24.73	AVG

TM1 / Line: Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1	*	0.1660	39.62	10.45	50.07	65.15	-15.08	QP
2		0.1900	20.19	10.45	30.64	54.03	-23.39	AVG
3		0.2540	32.49	10.46	42.95	61.62	-18.67	QP
4		0.4340	10.08	10.50	20.58	47.18	-26.60	AVG
5		0.8700	26.09	10.54	36.63	56.00	-19.37	QP
6		0.8700	16.09	10.54	26.63	46.00	-19.37	AVG
7		1.7700	6.85	10.67	17.52	46.00	-28.48	AVG
8		3.2740	18.95	10.72	29.67	56.00	-26.33	QP
9		3.4620	4.14	10.72	14.86	46.00	-31.14	AVG
10		5.5460	8.86	10.75	19.61	60.00	-40.39	QP
11		19.7099	13.00	11.06	24.06	60.00	-35.94	QP
12		19.7099	6.98	11.06	18.04	50.00	-31.96	AVG

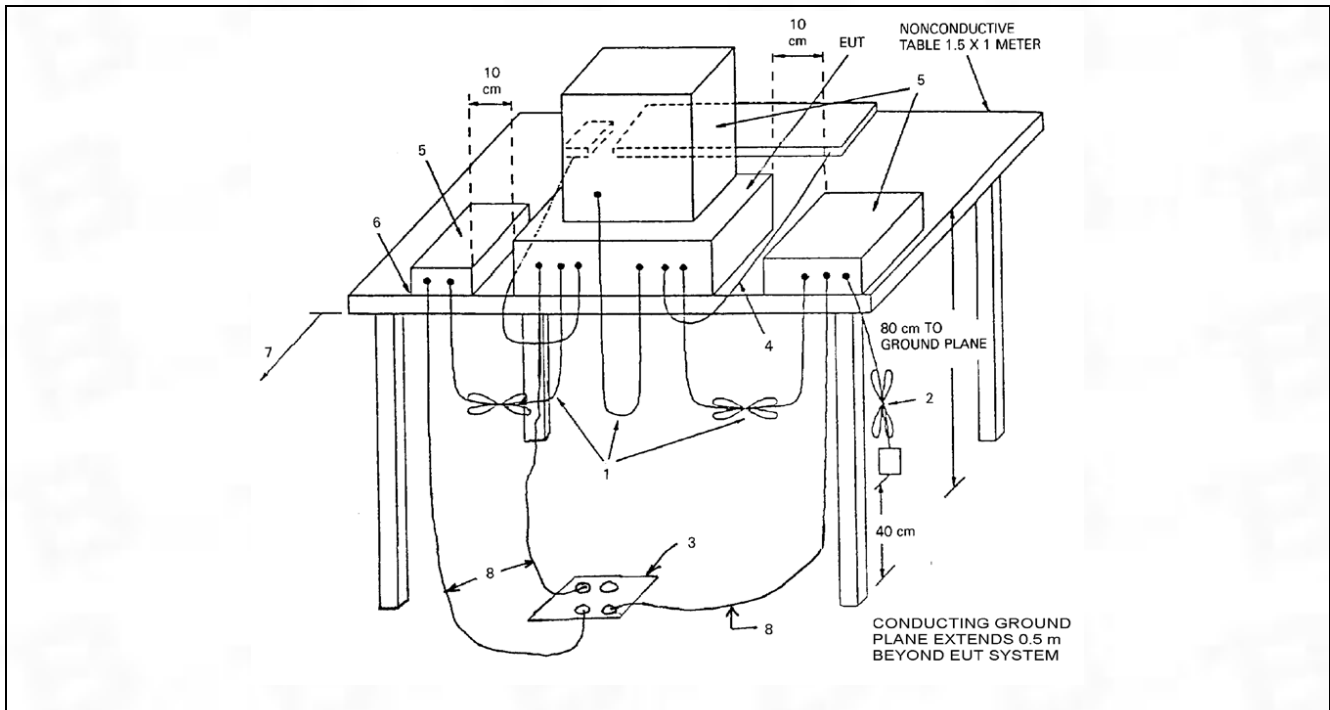
5.2 Radiated emissions (Below 1GHz)

Test Requirement:	15.109, Class B				
Test Method:	ANSI C63.4				
Test Limit:	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:				
	Frequency of emission (MHz)	Field strength @3m		Field strength @10m	
		(uV/m)	(dBuV/m)	(uV/m)	(dBuV/m)
	30 – 88	100	40	30	29.5
	88 – 216	150	43.5	45	33.1
216 – 960	200	46	60	35.6	
Above 960	500	54	150	43.5	
Procedure:	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. Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor				

5.2.1 E.U.T. Operation:

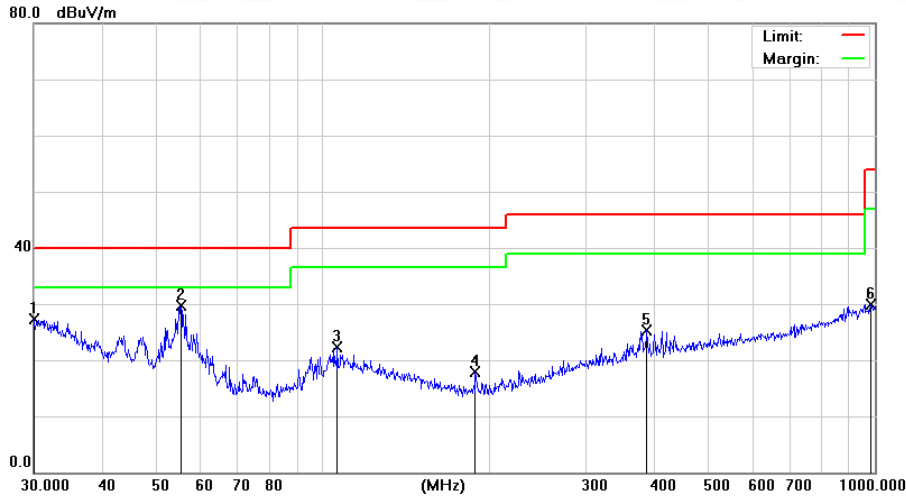
Operating Environment:	
Temperature:	24.1 °C
Humidity:	48.7 %
Atmospheric Pressure:	1010 mbar

5.2.2 Test Setup Diagram:



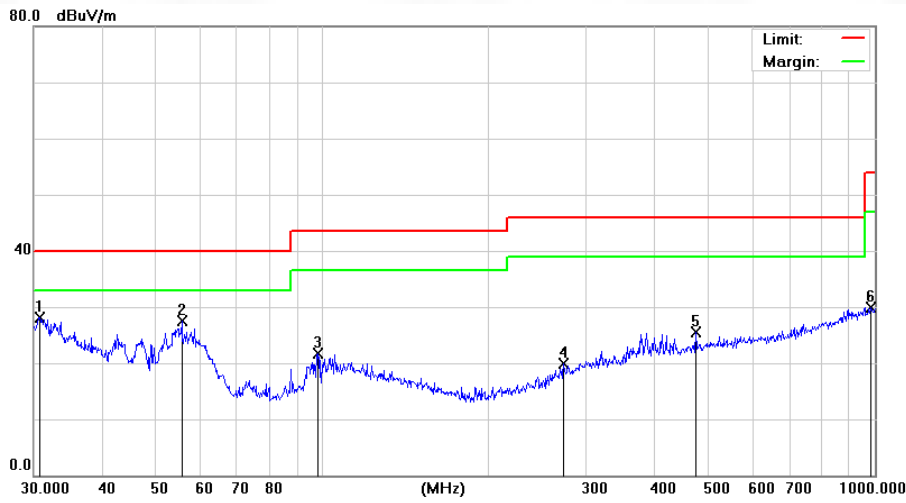
5.2.3 Test Data:

TM1 / Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		30.0000	22.52	4.79	27.31	40.00	-12.69	QP
2	*	55.4147	35.45	-5.66	29.79	40.00	-10.21	QP
3		106.3850	24.78	-2.57	22.21	43.50	-21.29	QP
4		189.0743	25.07	-7.18	17.89	43.50	-25.61	QP
5		386.6338	26.47	-1.14	25.33	46.00	-20.67	QP
6		982.6200	22.96	7.01	29.97	54.00	-24.03	QP

TM1 / Polarization: Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	30.7455	23.70	4.50	28.20	40.00	-11.80	QP
2		55.6094	33.17	-5.69	27.48	40.00	-12.52	QP
3		98.1419	25.87	-4.21	21.66	43.50	-21.84	QP
4		273.2341	23.37	-3.54	19.83	46.00	-26.17	QP
5		473.8347	25.41	0.10	25.51	46.00	-20.49	QP
6		982.6200	22.96	7.01	29.97	54.00	-24.03	QP

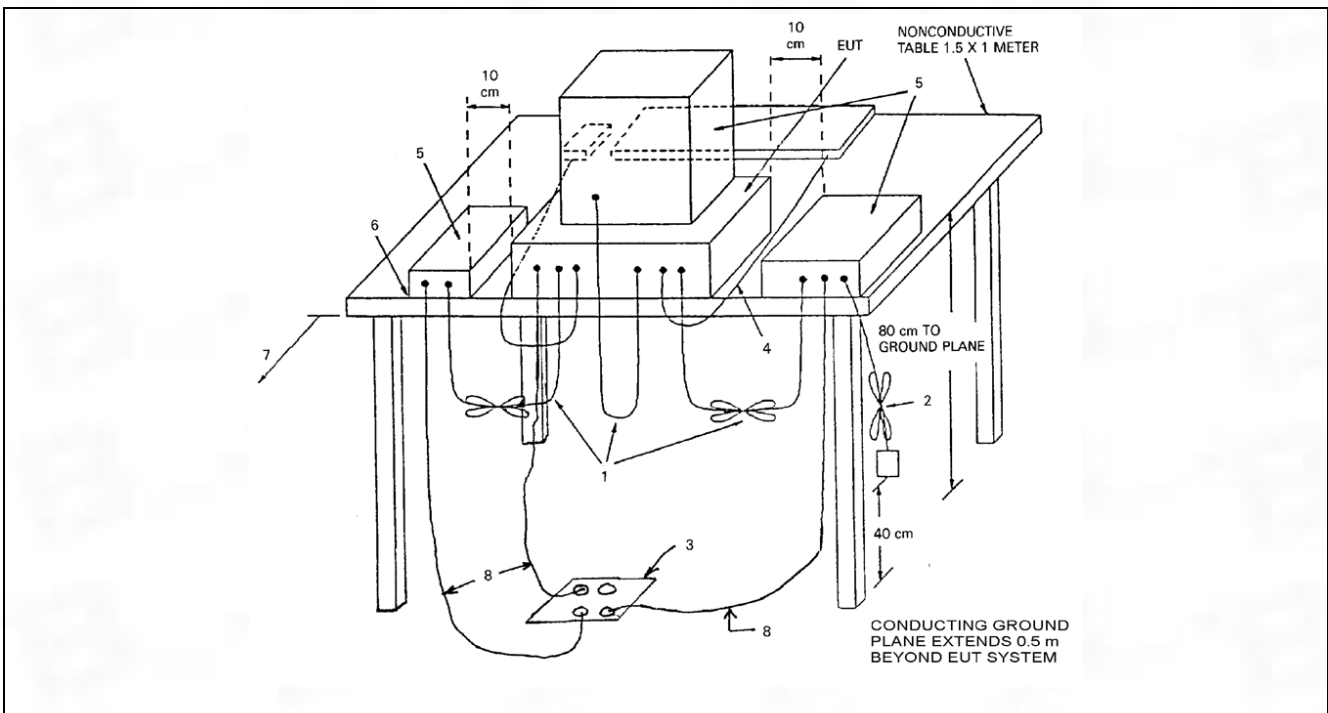
5.3 Radiated emissions (Above 1GHz)

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:	22.2 °C
Humidity:	54.7 %
Atmospheric Pressure:	1010 mbar

5.3.2 Test Setup Diagram:



5.3.3 Test Data:**TEST RESULTS**

Above 1GHz(1~6GHz) :(Mode 3—worst case)

Freq. (MHz)	Ant. Pol.	Emission Level(dBuV)		Limit 3m(dBuV/m)		Over(dB)	
	H/V	PK	AV	PK	AV	PK	AV
1754.45	V	59.22	40.32	74	54	-14.78	-13.68
2942.65	V	58.34	39.34	74	54	-15.66	-14.66
1867.48	H	58.14	40.02	74	54	-15.86	-13.98
2883.40	H	58.11	39.11	74	54	-15.89	-14.89

Remark:

All emissions not reported were more than 20dB below the specified limit or in the noise floor.

Freq. = Emission frequency in MHz

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

Over= Emission Level - Limit.

All the x/y/z orientation has been investigated, and only worst case is presented in this report.



Test Report Number: BTF230612R00406



BTF Testing Lab (Shenzhen) Co., Ltd.

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Bao'an District, Shenzhen, China

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-- END OF REPORT --