



FCC Test Report

For

Applicant Name: INFINIX MOBILITY LIMITED
Address: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25
SHAN MEI STREET FOTAN NT HONGKONG
EUT Name: Mobile Phone
Brand Name: Infinix
Model Number: X6731B
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: BTF230807R00607
Test Standards: 47 CFR Part 15, Subpart B
FCC ID: 2AIZN-X6731B
Test Conclusion: Pass
Test Date: 2023-07-13 to 2023-08-04
Date of Issue: 2023-08-04

Prepared By:

Chris Liu

Date:

Chris Liu / Project Engineer
2023-08-04

Approved By:

Ryan.CJ

Date:

Ryan.CJ / EMC Manager
2023-08-04



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Revision History		
Version	Issue Date	Revisions Content
R_V0	2023-08-04	Original
<i>Note: Once the revision has been made, then previous versions reports are invalid.</i>		

Table of Contents

1	INTRODUCTION	4
1.1	Identification of Testing Laboratory	4
1.2	Identification of the Responsible Testing Location	4
1.3	Announcement	4
2	PRODUCT INFORMATION.....	5
2.1	Application Information	5
2.2	Manufacturer Information.....	5
2.3	General Description of Equipment under Test (EUT)	5
2.4	Technical Information	5
3	SUMMARY OF TEST RESULTS	6
3.1	Test Standards.....	6
3.2	Uncertainty of Test	6
3.3	Summary of Test Result	6
4	TEST CONFIGURATION	7
4.1	Test Equipment List	7
4.2	Test Auxiliary Equipment	9
4.3	Test Modes	9
5	EMISSION TEST RESULTS (EMI)	10
5.1	Conducted emissions on AC mains	10
5.1.1	E.U.T. Operation:	10
5.1.2	Test Setup Diagram:	10
5.1.3	Test Data:	11
5.2	Radiated emissions (Below 1GHz)	13
5.2.1	E.U.T. Operation:	13
5.2.2	Test Setup Diagram:	13
5.2.3	Test Data:	14
5.3	Radiated emissions (Above 1GHz).....	16
5.3.1	E.U.T. Operation:	16
5.3.2	Test Setup Diagram:	16
5.3.3	Test Data:	17

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:	INFINIX MOBILITY 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:	INFINIX MOBILITY LIMITED
Address:	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

2.3 General Description of Equipment under Test (EUT)

EUT Name:	Mobile Phone
Test Model Number:	X6731B
Series Model Number:	N/A

2.4 Technical Information

Power Supply:	Li-ion Battery: BL-49PX Rated Voltage: 3.87V Rated Capacity: 4900mAh/18.96Wh Limited Capacity: 5000mAh/19.35Wh Limited Charge Voltage: 4.45V
Power Adaptor:	Adapter: U450XSA Input: 100-240V~50/60Hz 1.8A Output: 5.0V ---2.0A, 11.0V ---4.1A MAX

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&SCHWA RZ	ESCI7	101032	2022-11-24	2023-11-23
SIGNAL ANALYZER	ROHDE&SCHWA RZ	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
Model 2	Video Playing
Mode 3	Exchange data with computer (the worst case)
Mode 4	GPS
Mode 5	FM

5 Emission Test Results (EMI)

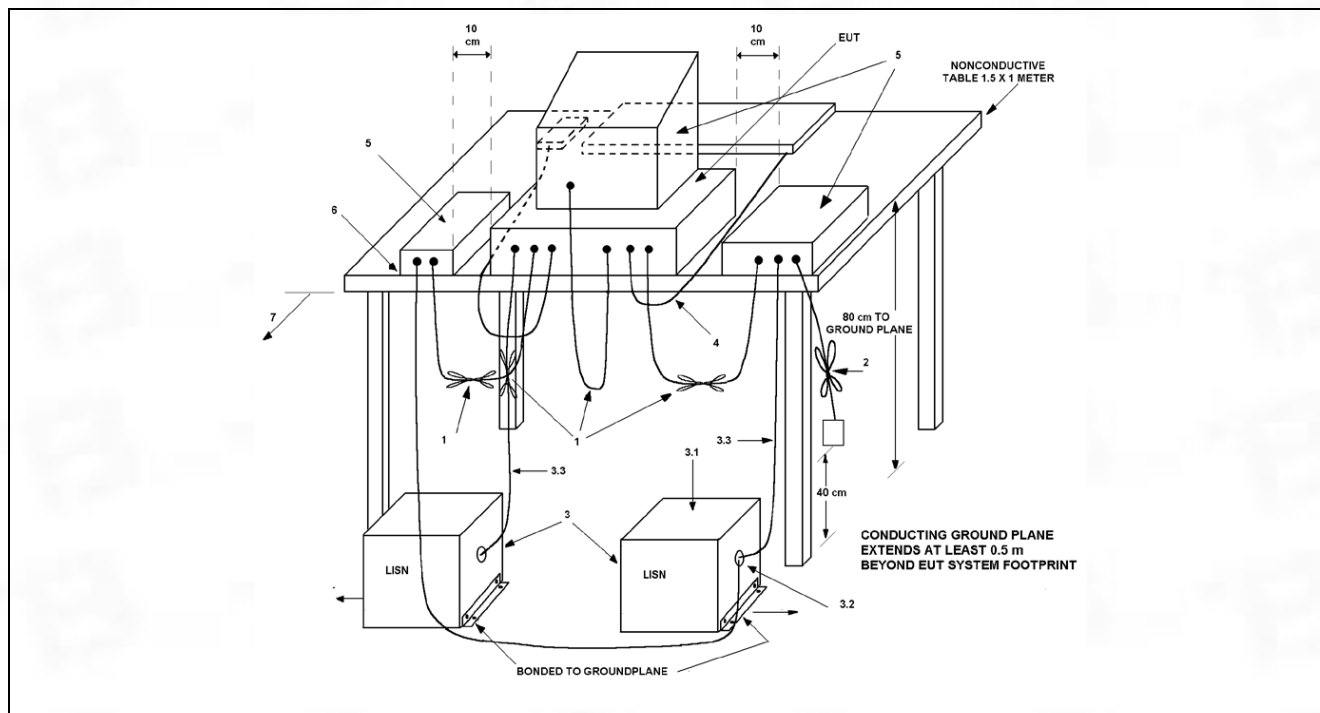
5.1 Conducted emissions on AC mains

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:	<p>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.</p> <p>Remark: Level= Read Level+ Cable Loss+ LISN Factor</p>		

5.1.1 E.U.T. Operation:

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

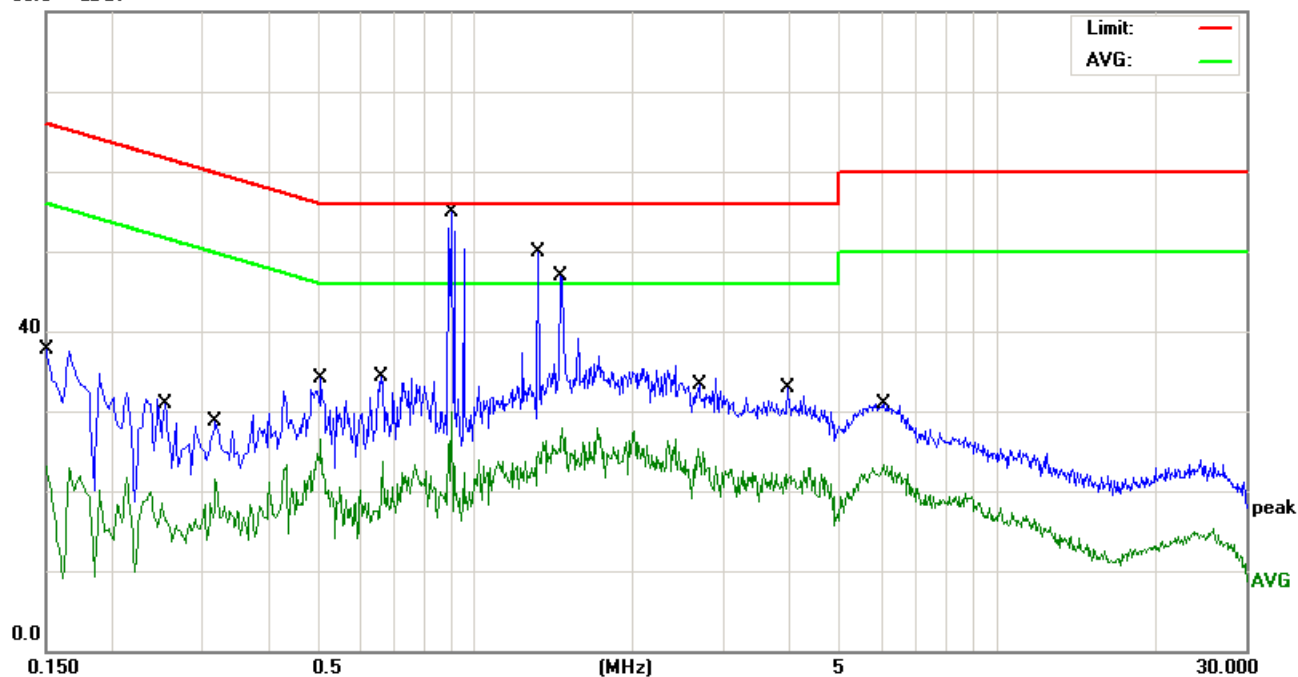
5.1.2 Test Setup Diagram:



5.1.3 Test Data:

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

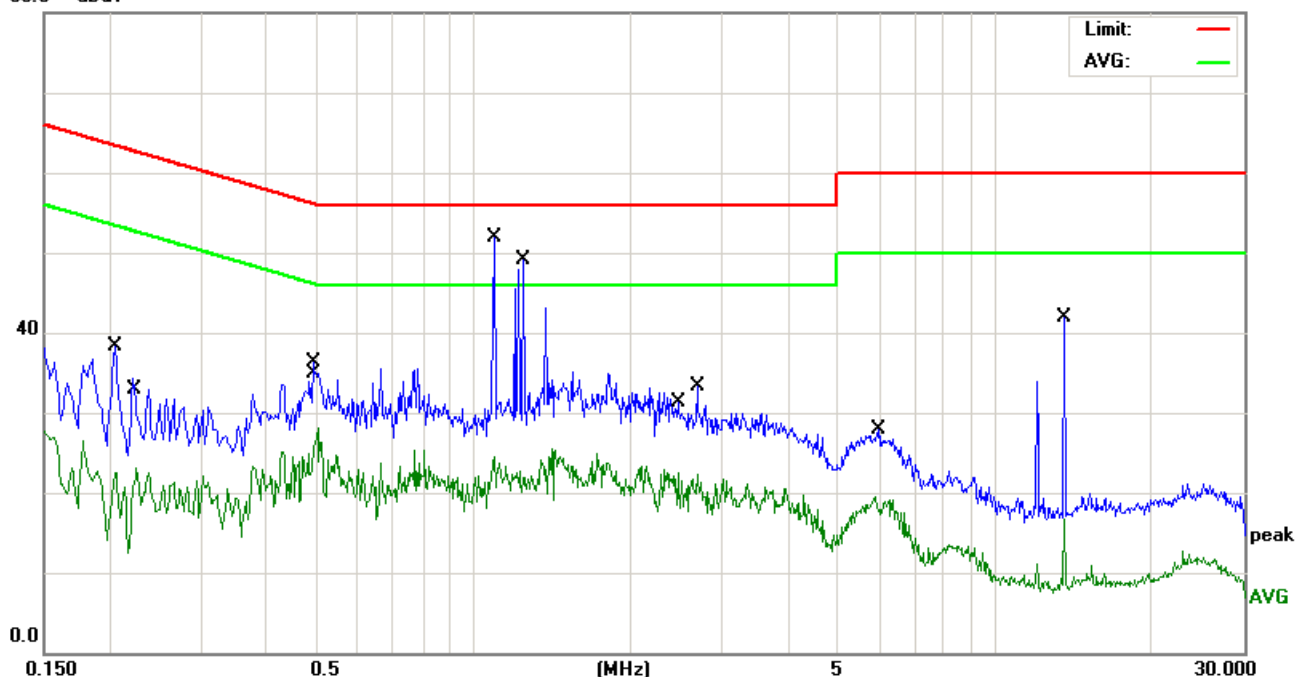
80.0 dBuV



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
		MHz	Level	Factor	ment			Detector
			dBuV	dB	dBuV	dBuV	dB	
1		0.1500	27.37	10.41	37.78	65.99	-28.21	QP
2		0.2540	20.52	10.42	30.94	61.62	-30.68	QP
3		0.3180	10.99	10.43	21.42	49.76	-28.34	AVG
4		0.5060	16.08	10.47	26.55	46.00	-19.45	AVG
5		0.6580	23.86	10.48	34.34	56.00	-21.66	QP
6		0.9020	14.29	10.50	24.79	56.00	-31.21	QP
7		0.9020	19.47	10.50	29.97	46.00	-16.03	AVG
8	*	1.3220	39.34	10.56	49.90	56.00	-6.10	QP
9		1.4660	17.24	10.58	27.82	46.00	-18.18	AVG
10		2.6700	14.59	10.67	25.26	46.00	-20.74	AVG
11		3.9660	22.16	10.68	32.84	56.00	-23.16	QP
12		6.0660	12.55	10.71	23.26	50.00	-26.74	AVG

TM1 / Line: Neutral

80.0 dBuV



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.2060	27.87	10.41	38.28	63.36	-25.08	QP
2		0.2260	12.60	10.42	23.02	52.59	-29.57	AVG
3		0.4940	25.75	10.47	36.22	56.10	-19.88	QP
4		0.5020	17.64	10.47	28.11	46.00	-17.89	AVG
5	*	1.0940	41.32	10.52	51.84	56.00	-4.16	QP
6		1.0940	13.94	10.52	24.46	46.00	-21.54	AVG
7		1.2460	38.49	10.55	49.04	56.00	-6.96	QP
8		2.4620	11.94	10.66	22.60	46.00	-23.40	AVG
9		2.6900	22.66	10.67	33.33	56.00	-22.67	QP
10		5.9260	8.70	10.71	19.41	50.00	-30.59	AVG
11		13.5580	30.85	10.98	41.83	60.00	-18.17	QP
12		13.5580	5.81	10.98	16.79	50.00	-33.21	AVG

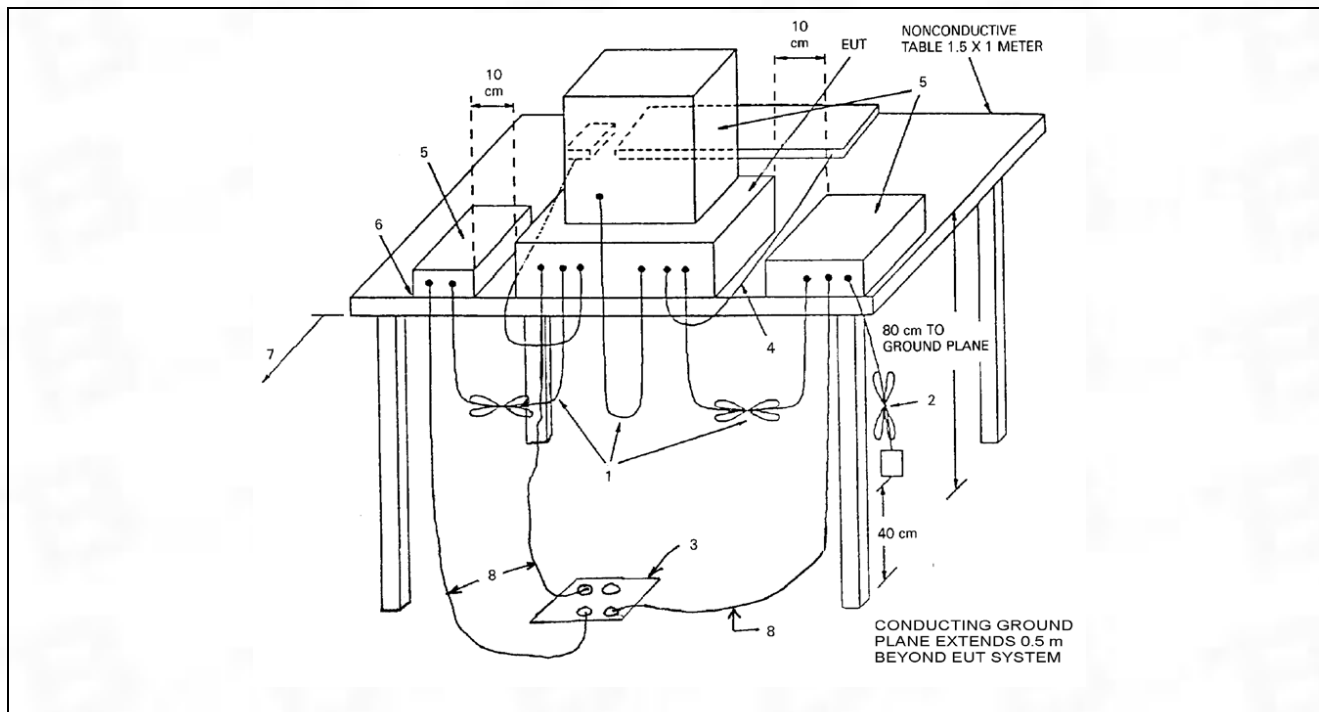
5.2 Radiated emissions (Below 1GHz)

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:	<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:	24.1 °C
Humidity:	48.7 %
Atmospheric Pressure:	1010 mbar

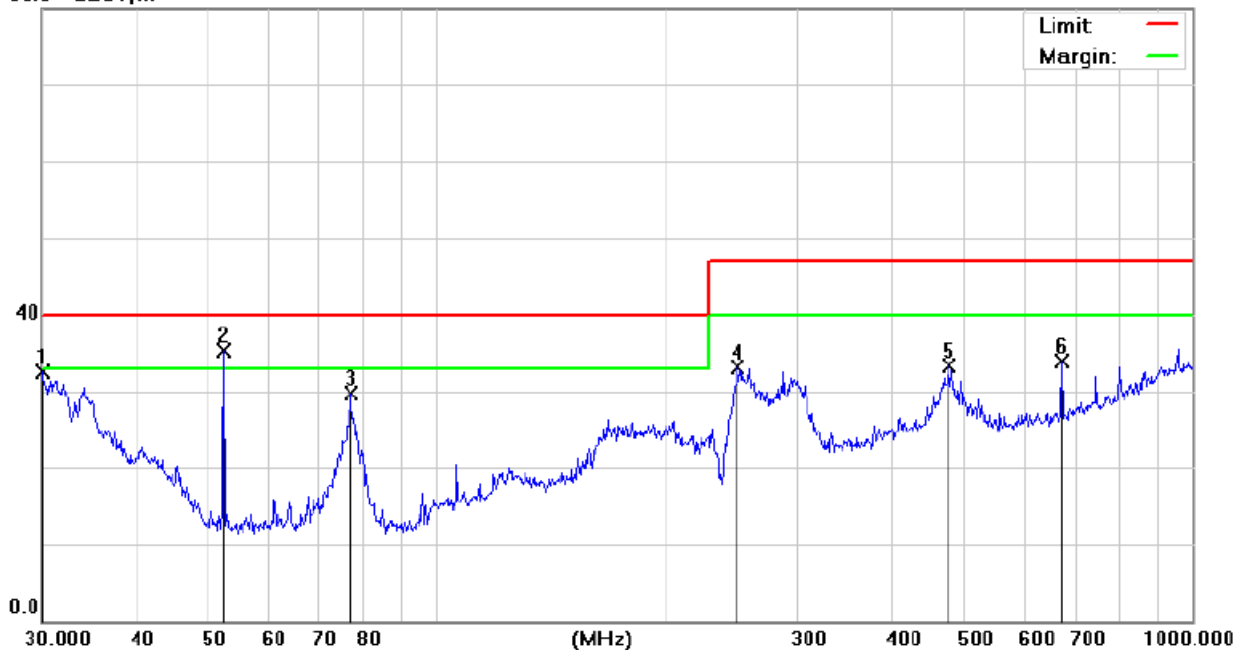
5.2.2 Test Setup Diagram:



5.2.3 Test Data:

TM1 / Polarization: Horizontal

80.0 dBuV/m



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		30.0000	27.04	5.49	32.53	40.00	-7.47	QP
2	*	52.2079	44.40	-9.08	35.32	40.00	-4.68	QP
3		76.7808	38.83	-9.14	29.69	40.00	-10.31	QP
4		250.3012	36.29	-3.10	33.19	47.00	-13.81	QP
5		475.4991	31.93	1.36	33.29	47.00	-13.71	QP
6		672.8444	29.88	4.01	33.89	47.00	-13.11	QP

TM1 / Polarization: Vertical

80.0 dBuV/m



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
		MHz	Level	Factor	ment			
			dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	*	30.0000	26.90	5.39	32.29	40.00	-7.71	QP
2		34.1561	27.42	3.78	31.20	40.00	-8.80	QP
3		78.1389	29.65	-6.65	23.00	40.00	-17.00	QP
4		252.0627	33.61	-4.41	29.20	47.00	-17.80	QP
5		475.4991	32.16	0.39	32.55	47.00	-14.45	QP
6		958.7943	30.77	7.29	38.06	47.00	-8.94	QP

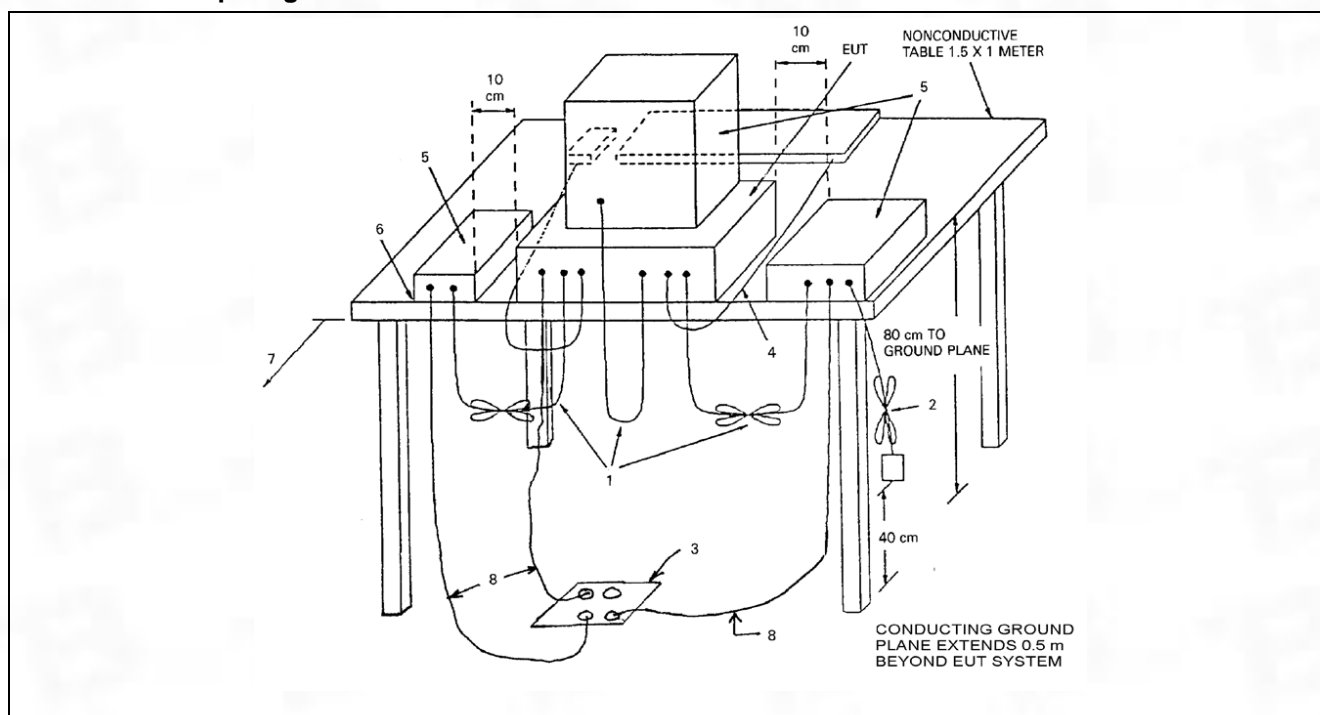
5.3 Radiated emissions (Above 1GHz)

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
1552.35	V	65.45	40.75	74	54	-8.55	-13.25
2399.95	V	61.35	39.58	74	54	-12.65	-14.42
1614.23	H	59.44	40.45	74	54	-14.56	-13.55
2333.72	H	59.47	40.47	74	54	-14.53	-13.53

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: BTF230807R00607



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-- END OF REPORT --