EMC
Measurement and Test Report

For

Vonino ELectronics LTD.

Miramar Tower 10F-No.1010, 132 Nathan Road, Tsim Sha Tsui , Kowloon,

Hong Kong

Test Standards:	EN 301 489-1 V1.9.2 (2011-09) EN 301 489-3 V1.6.1 (2013-08) EN 301 489-7 V1.3.1 (2005-11) EN 301 489-17 V2.2.1 (2012-09) EN 301 489-24 V1.5.1 (2010-10)
Product Description:	Smart Phone
Tested Model:	VOLT X
Report No.:	STR16128114E-7
Tested Date:	2016-12-12 to 2016-12-21
Issued Date:	2016-12-22
Tested By:	Iven Guo / Engineer
Reviewed By:	Silin Chen / EMC Manager
Approved & Authorized By:	Jandy So / PSQ Manager
Prepared By:	**Shenzhen SEM.Test Technology Co., Ltd.** 1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C.（518101） Tel.: +86-755-33663308 Fax.: +86-755-33663309 Website: www.semtest.com.cn

Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by Shenzhen SEM. Test Technology Co., Ltd.

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	Vonino ELectronics LTD.
Address of applicant:	Miramar Tower 10F-No.1010, 132 Nathan Road, Tsim Sha Tsui , Kowloon, Hong Kong
Manufacturer:	Gui zhou Fortuneship Technology Co., Ltd.
Address of manufacturer:	No. 4 Plant, High-tech Industrial Park, Xinpu Economic Development Zone) Jingkai Road, Xinpu Jingkai District, Xinpu New District, Zunyi City, Guizhou Province, P. R. China

General Description of EUT	
Product Name:	Smart Phone
Brand Name:	vonino
Model No.:	VOLT X
Adding Model(s):	/
Rated Voltage:	DC 3.8V by Battery
Battery Capacity:	4000mAh
Adapter Model:	JT288-05100 Input: 100-240Vac, 50/60Hz, 0.15A Output: 5.0V⎓, 1A
Software Version:	Vonino_v1.1.1_20161130
Hardware Version:	F1-4G-V60-CF9-KS670
Note: The test data is gathered from a production sample, provided by the manufacturer.	

Technical Characteristics of EUT	
2G	
Support Networks:	GSM, GPRS, EDGE
Support Bands:	GSM900, DCS1800
Frequency Range:	GSM900: Tx: 880-915MHz, Rx: 925-960MHz
	DCS1800: Tx: 1710-1785MHz, Rx: 1805-1880MHz
RF Output Power:	GSM900: 31.36dBm, GSM1800: 28.89dBm EDGE900: 23.55Bm,EDGE1800: 22.87dBm
Modulation Type:	GMSK, 8PSK
Type of Antenna:	Integral Antenna
Antenna Gain:	GSM900: -0.4dBi, DCS1800:0.5dBi
GPRS/EDGE Class:	Class 12
3G	
Support Networks:	WCDMA, HSDPA, HSUPA
Support Bands:	WCDMA Band 1, WCDMA Band 8
Frequency Range:	WCDMA Band 1: Tx: 1920-1980MHz, Rx: 2110-2170MHz
	WCDMA Band 8: Tx: 880-915MHz, Rx: 925-960MHz
RF Output Power:	WCDMA Band 1: 22.48dBm, WCDMA Band 8: 22.44dBm
Modulation Type:	BPSK, QPSK, 16QAM
Antenna Type:	Integral Antenna
Antenna Gain:	WCDMA Band 1: 0dBi, WCDMA Band 8: -0.3dBi
4G	
Support Bands:	FDD-LTE Band 1, 3, 7, 20 TDD-LTE Band 38
Frequency Range:	FDD-LTE Band 1: Tx: 1920-1980MHz, Rx: 2110-2170MHz
	FDD-LTE Band 3: Tx: 1710-1785MHz, Rx: 1805-1880MHz
	FDD-LTE Band 7: Tx: 2500-2570MHz, Rx: 2620-2690MHz
	FDD-LTE Band 20: Tx: 832-862MHz, Rx: 791-821MHz
	TDD-LTE Band 38: Tx: 2570-2620MHz, Rx: 2570-2620MHz
Max.RF Output Power:	FDD-LTE Band 1: 23.98dBm,FDD-LTE Band 3: 24.32dBm FDD-LTE Band 7: 22.46dBm, FDD-LTE Band 20: 24.72dBm, TDD-LTE Band 38: 24.25dBm
Modulation Type:	QPSK, 16QAM
Antenna Type:	Integral Antenna
Antenna Gain:	FDD-LTE Band 1: -0.1dBi, FDD-LTE Band 3: 0.6dBi, FDD-LTE Band 7: 0.2dBi, FDD-LTE Band 20: -1.3dBi TDD-LTE Band 38: 0.2dBi

Bluetooth	
Bluetooth Version:	V4.0
Frequency Range:	2402-2480MHz
Max.RF Output Power:	4.18dBm (EIRP)
Type of Modulation:	GFSK, Pi/4 DQPSK, 8DPSK
Data Rate:	1Mbps, 2Mbps, 3Mbps
Quantity of Channels	79/40
Channel Separation:	1MHz/2MHz
Type of Antenna:	Integral Antenna
Antenna Gain:	-0.72dBi
Wi-Fi	
Support Standards:	802.11b, 802.11g, 802.11n-HT20,802.11n-HT40
Frequency Range:	2412-2472MHz for 802.11b/g/n(HT20) 2422-2462MHz for 802.11b/g/n(HT40)
Max.RF Output Power:	13.97dBm (EIRP)
Type of Modulation:	CCK, OFDM, QPSK, BPSK, 16QAM, 64QAM
Data Rate:	1-11Mbps, 6-54Mbps, up to 150Mbps
Quantity of Channels:	13 for 802.11b/g/n(HT20), 9 for 802.11b/g/n(HT40)
Channel Separation:	5MHz
Type of Antenna:	Integral Antenna
Antenna Gain:	-0.72dBi
GPS	
Frequency Range:	1575.42MHz

1.2 Test Standards

The following report is prepared on behalf of the Vonino ELectronics LTD. In accordance with ETSI EN 301 489-1 V1.9.2, Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; ETSI EN 301 489-3, Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz.; ETSI EN 301 489-7 V1.3.1, Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 7: Specific conditions for mobile and portable radio and ancillary equipment of digital cellular radio telecommunications systems (GSM and DCS); and ETSI EN 301 489-17 V2.2.1, Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment and and ETSI EN 301 489-24 V1.5.1, Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 24: Specific conditions for IMT-2000 CDMA Direct Spread (UTRA) for Mobile andportable (UE) radio and ancillary equipment.

The objective of the manufacturer is to demonstrate compliance with the standards ETSI EN 301489-1, ETSI EN301 489-3, ETSI EN 301489-7, ETSI EN 301489-17 and ETSI EN 301 489-24.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product maybe which result in lowering the emission/immunity should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with the standard ETSI EN 301489-1, Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements.

1.4 Test Facility

- **FCC – Registration No.: 934118**
  Shenzhen SEM.Test Technology Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files and the Registration is 934118.

- **Industry Canada (IC) Registration No.: 11464A**
  The 3m Semi-anechoic chamber of Shenzhen SEM.Test Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

- **CNAS Registration No.: L4062**

Shenzhen SEM.Test Technology Co., Ltd. is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L4062. All measurement facilities used to collect the measurement data are located at 1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C (518101)

1.5 EUT Setup and Operation Mode

The equipment under test (EUT) was configured to measure its highest possible emission/immunity level. The test modes were adapted according to the operation manual for use, more detailed description as follows:

Test Mode List		
Test Mode	Description	Remark
TM1	Charging & Playing	Connected to Adapter
TM2	Downloading	Connected to PC
TM3	Camera On	worse case back camera
TM4	FM	Receive 98MHz
TM5	GPS	Receive 1575.42MHz
TM6	GSM900	TT, CT, TR, CR for EMS testing
TM7	GSM1800	TT, CT, TR, CR for EMS testing
TM8	GPRS900	TT, CT, TR, CR for EMS testing
TM9	GPRS1800	TT, CT, TR, CR for EMS testing
TM10	EDGE900	TT, CT, TR, CR for EMS testing
TM11	EDGE1800	TT, CT, TR, CR for EMS testing
TM12	WCDMA Band 1	TT, CT, TR, CR for EMS testing
TM13	HSDPA Band 1	TT, CT, TR, CR for EMS testing
TM14	HSUPA Band 1	TT, CT, TR, CR for EMS testing
TM15	WCDMA Band 8	TT, CT, TR, CR for EMS testing
TM16	HSDPA Band 8	TT, CT, TR, CR for EMS testing
TM17	HSUPA Band 8	TT, CT, TR, CR for EMS testing
TM18	FDD-LTE Band 1	TT, CT, TR, CR for EMS testing
TM19	FDD-LTE Band 3	TT, CT, TR, CR for EMS testing
TM20	FDD-LTE Band 7	TT, CT, TR, CR for EMS testing
TM21	FDD-LTE Band 20	TT, CT, TR, CR for EMS testing
TM22	TDD-LTE Band 38	TT, CT, TR, CR for EMS testing
TM23	Bluetooth	TT, CT, TR, CR for EMS testing
TM24	Wi-Fi	TT, CT, TR, CR for EMS testing

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
USB Cable	1.0	Shielded	Without Ferrite
Earplug Cable	1.2	Unshielded	Without Ferrite

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
Notebook	Lenovo	T410	/

1.6 Performance Criteria for EMS

According Clause 6.1 of EN 301 489-3, the performance criteria are:

-performance criteria A for immunity tests with phenomena of a continuous nature;

-performance criteria B for immunity tests with phenomena of a transient nature;

-performance criteria C for immunity tests with power interruptions exceeding a certain time.

Device Type 1		
Criteria	**During test**	**After test**
A	Operate as intended No loss of function For equipment with primary function type II the minimum performance shall be 12 dB SINAD No unintentional responses	Operate as intended For equipment with primary function type II the communication link shall be maintained No loss of function No degradation of performance No loss of stored data or user programmable functions
B	May be loss of function (one or more) No unintentional responses	Operate as intended Lost function(s) shall be self-recoverable No degradation of performance No loss of stored data or user programmable functions
Device Type 2		
Criteria	**During test**	**After test**
A	Operate as intended No loss of function For equipment with primary function type II the minimum performance shall be 6 dB SINAD No unintentional responses	Operate as intended For equipment with primary function type II the communication link shall be maintained No loss of function No degradation of performance No loss of stored data or user programmable functions
B	May be loss of function (one or more) No unintentional responses	Operate as intended Lost function(s) shall be self-recoverable No degradation of performance No loss of stored data or user programmable functions

Device Type 3		
Criteria	**During test**	**After test**
A and B	May be loss of function (one or more) No unintentional responses	Operate as intended, for equipment with primary function type II the communication link may be lost, but shall be recoverable by user No degradation of performance Lost functions shall be self-recoverable

According to the section 6.1 to 6.4 of EN301489-7, the test data has been collected, reduced, and analyzed within this report in accordance with Immunity requires the following as specific performance criteria:

6.1 Performance criteria for Continuous phenomena applied to Transmitters (CT)

A communication link shall be established at the start of the test, and maintained during the test, see clauses 4.2.2 to 4.2.5.

During the test, the uplink speech output level shall be at least 35 dB less than the previously recorded reference levels, when measured through an audio band pass filter of width 200 Hz, centred on 1 kHz (audio breakthrough check).

NOTE: When there is a high level background noise present the filter bandwidth can be reduced down to a minimum of 40 Hz.

At the conclusion of the test, the EUT shall operate as intended with no loss of user control functions or stored data, and the communication link shall have been maintained. In addition to confirming the above performance during a call, the test shall also be performed in idle mode, and the transmitter shall not unintentionally operate.

6.2 Performance criteria for Transient phenomena applied to Transmitters (TT)

A communications link shall be established at the start of the test, see clauses 4.2.2 to 4.2.5.

At the conclusion of each exposure the EUT shall operate with no user noticeable loss of the communication link.

At the conclusion of the total test comprising the series of individual exposures, the EUT shall operate as intended with no loss of user control functions or stored data, as declared by the manufacturer, and the communication link shall have been maintained.

In addition to confirming the above performance during a call, the test shall also be performed in idle mode, and the transmitter shall not unintentionally operate.

6.3 Performance criteria for Continuous phenomena applied to Receivers (CR)

A communications link shall be established at the start of the test, clauses 4.2.1 to 4.2.4.

During the test, the RXQUAL of the downlink shall not exceed the value of three, measured during each individual exposure in the test sequence.

During the test, the downlink speech output level shall be at least 35 dB less than the previously recorded reference levels, when measured through an audio band pass filter of width 200 Hz, centred on 1 kHz (audio breakthrough check).

NOTE: When there is a high level background noise present the filter bandwidth can be reduced down to a minimum of 40 Hz.

At the conclusion of the test, the EUT shall operate as intended with no loss of user control functions or stored data, and the communication link shall have been maintained.

6.4 Performance criteria for Transient phenomena applied to Receivers (TR)

A communications link shall be established at the start of the test, clauses 4.2.1 to 4.2.4.

At the conclusion of each exposure the EUT shall operate with no user noticeable loss of the communication link.

At the conclusion of the total test comprising the series of individual exposures, the EUT shall operate as intended with no loss of user control functions or stored data, as declared by the manufacturer, and the communication link shall have been maintained.

According Clause 6.1 of EN 301 489-17,

The performance criteria are:

-performance criteria A for immunity tests with phenomena of a continuous nature;

-performance criteria B for immunity tests with phenomena of a transient nature;

-performance criteria C for immunity tests with power interruptions exceeding a certain time.

Table 1: Performance criteria

Criteria	During test	After test
A	Shall operate as intended May show degradation of performance (note 1) Shall be no loss of function Shall be no unintentional transmissions	Shall operate as intended Shall be no degradation of performance (note 2) Shall be no loss of function Shall be no loss of stored data or user programmable functions
B	May show loss of function (one or more) May show degradation of performance (note 1) No unintentional transmissions	Functions shall be self-recoverable Shall operate as intended after recovering Shall be no degradation of performance (note 2) Shall be no loss of stored data or user programmable functions
C	May be loss of function (one or more)	Functions shall be recoverable by the operator Shall operate as intended after recovering Shall be no degradation of performance (note 2)

NOTE 1: Degradation of performance during the test is understood as a degradation to a level not below a minimum performance level specified by the manufacturer for the use of the apparatus as intended. In some cases the specified minimum performance level may be replaced by a permissible degradation of performance.
If the minimum performance level or the permissible performance degradation is not specified by the manufacturer then either of these may be derived from the product description and documentation (including leaflets and advertising) and what the user may reasonably expect from the apparatus if used as intended.

NOTE 2: No degradation of performance after the test is understood as no degradation below a minimum performance level specified by the manufacturer for the use of the apparatus as intended. In some cases the specified minimum performance level may be replaced by a permissible degradation of performance. After the test no change of actual operating data or user retrievable data is allowed.
If the minimum performance level or the permissible performance degradation is not specified by the manufacturer then either of these may be derived from the product description and documentation (including leaflets and advertising) and what the user may reasonably expect from the apparatus if used as intended.

According to the section 6.1 and 6.2 EN301489-24, the test data has been collected, reduced, and analyzed within this report in accordance with Immunity requires the following as specific performance criteria:

6.1 Performance criteria for continuous phenomena

A communication link shall be established at the start of the test, and maintained during the test, clauses 4.1 and 4.2.

In the data transfer mode, the performance criteria can be one of the following:

- if the BER (as referred in TS 134 109 [8]) is used, it shall not exceed 0,001 during the test sequence;
- if the BLER (as referred in TS 134 109 [8]) is used, it shall not exceed 0,01 during the test sequence.

The BLER calculation shall be based on evaluating the CRC on each transport block.

In the speech mode, the performance criteria shall be that the up link and downlink speech output levels shall be at least 35 dB less than the recorded reference levels, when measured through an audio band pass filter of width 200 Hz, centred on 1 kHz (annex B).

NOTE: When there is a high level of background audio noise present, the filter bandwidth can be reduced down to a minimum of 40 Hz.

At the conclusion of the test, the EUT shall operate as intended with no loss of user control functions or stored data, and the communication link shall have been maintained.

In addition to confirming the above performance in traffic mode, the test shall be performed in idle mode, and the transmitter shall not unintentionally operate.

6.2 Performance criteria for Transient phenomena

A communications link shall be established at the start of the test, clauses 4.1 and 4.2.

At the conclusion of each exposure the EUT shall operate with no user noticeable loss of the communication link.

At the conclusion of the total test comprising the series of individual exposures, the EUT shall operate as intended with no loss of user control functions or stored data, as declared by the manufacturer, and the communication link shall have been maintained.

In addition to confirming the above performance in traffic mode, the test shall also be performed in idle mode, and the transmitter shall not unintentionally operate.

1.7 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal Date	Due Date
Spectrum Analyzer	Rohde & Schwarz	FSP	836079/035	2016-06-04	2017-06-03
EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2016-06-04	2017-06-03
Amplifier	Agilent	8447F	3113A06717	2016-06-04	2017-06-03
Amplifier	C&D	PAP-1G18	2002	2016-06-04	2017-06-03
Broadband Antenna	Schwarz beck	VULB9163	9163-333	2016-06-04	2017-06-03
Horn Antenna	ETS	3117	00086197	2016-06-04	2017-06-03
Loop Antenna	Schwarz beck	FMZB 1516	9773	2016-06-04	2017-06-03
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2016-06-04	2017-06-03
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2016-06-04	2017-06-03
AC LISN	Schwarz beck	NSLK8126	8126-224	2016-06-04	2017-06-03
DC LISN	Schwarz beck	NNBM8126D	279	2016-06-04	2017-06-03
8-WIRE LISN	Schwarz beck	8158	CAT3-8158-0059	2016-06-04	2017-06-03
8-WIRE LISN	Schwarz beck	8158	CAT5-8158-0117	2016-06-04	2017-06-03
Digital Power Analyzer	California Instrument	PACS-1	72831	2016-06-04	2017-06-03
Power Source	California Instrument	5001iX	25965	2016-06-04	2017-06-03
ESD Generator	TESQ AG	NSG 437	161	2016-06-04	2017-06-03
Signal Generator	Rohde & Schwarz	SMT03	100059	2016-06-04	2017-06-03
Voltage Probe	Rohde & Schwarz	URV5-Z2	100013	2016-06-04	2017-06-03
Power Amplifier	AR	150W1000	300999	2016-06-04	2017-06-03
Power Amplifier	AR	25S1G4AM1	305993	2016-06-04	2017-06-03
Transient 2000	EMC PARTNER	TRA2000	863	2016-06-04	2017-06-03
CW Simulator	EM Test	CWS 500C	0900-03	2016-06-04	2017-06-03
EMCPRO	KEYTEK	EMCPro	0509124	2016-06-04	2017-06-03
Coil	KEYTEK	F-1000-4-8	0533	2016-06-04	2017-06-03
Audio analyzer	Rohde & Schwarz	UPA	829743/001	2016-06-04	2017-06-03
GSM Tester	Rhode & Schwarz	CMU200	112012	2016-06-04	2017-06-03
Communication Tester	Rohde & Schwarz	CMW500	148650	2016-06-04	2017-06-03
Audio Power Amplifier	B&K	2716-C-001	/	2016-06-04	2017-06-03
Conditioning Amplifier	B&K	2690-0S2	/	2016-06-04	2017-06-03
Mouth Simulator	B&K	4227	/	2016-06-04	2017-06-03
Sound Calibrator	B&K	4231	/	2016-06-04	2017-06-03
1/2″ Pressure-field Microphone	B&K	4192	/	2016-06-04	2017-06-03
Ear Simulator for Telephonometry	B&K	4185	/	2016-06-04	2017-06-03
Telephone Test Head	B&K	4206 B	/	2016-06-04	2017-06-03
Anechoic chamber	Albatross Projects	MCDC	----	2016-06-04	2017-06-03

2. SUMMARY OF TEST RESULTS

Standards	Reference	Description of Test Item	Result
EN 301489-1 V1.9.2 (2011-09)	8.2	Radiated Emissions	Pass
	8.3	Conducted Emissions for DC Power Port	N/A
	8.4	Conducted Emissions for AC Power Port	Pass
	8.5	Harmonic Current Emissions	Pass
	8.6	Voltage Fluctuations and Flicker	Pass
	8.7	Telecommunication Ports	N/A
	9.2	Radio Frequency Electromagnetic Field	Pass
	9.3	Electrostatic Discharge	Pass
	9.4	Fast Transients, Common Mode	Pass
	9.5	Radio Frequency, Common Mode	Pass
	9.6	Transient and Surges in the Vehicular Environment	N/A
	9.7	Voltage Dips and Interruptions	Pass
	9.8	Surges	Pass

Pass: The EUT complies with the essential requirements in the standard
Fail: The EUT does not comply with the essential requirements in the standard
N/A: not applicable

3. Conducted Emissions

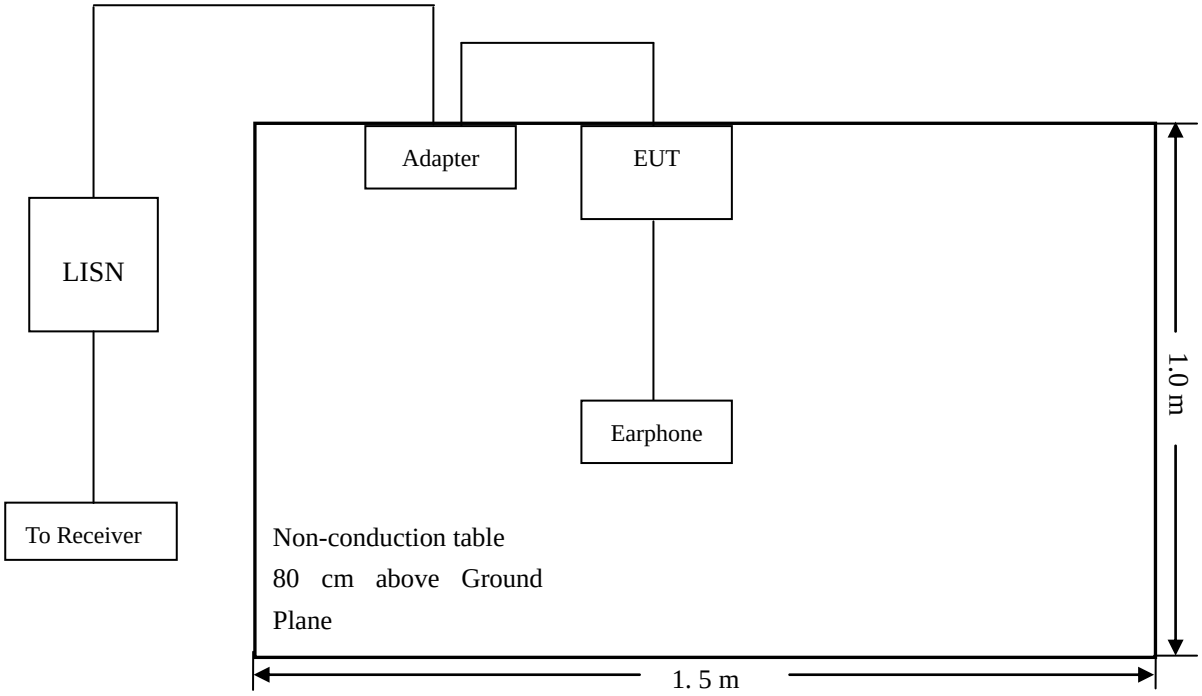
3.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement is ± 2.88 dB.

3.2 Test Procedure

Test is conducting under the description of EN55022 Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement.

3.3 Basic Test Setup Block Diagram



3.4 Environmental Conditions

Temperature:	22 ° C
Relative Humidity:	55 %
ATM Pressure:	1015 mbar

3.5 Summary of Test Results/Plots

According to the data in section 3.7, the EUT complied with the EN 301489 Conducted margin for a Class B device, with the *worst* margin reading of:

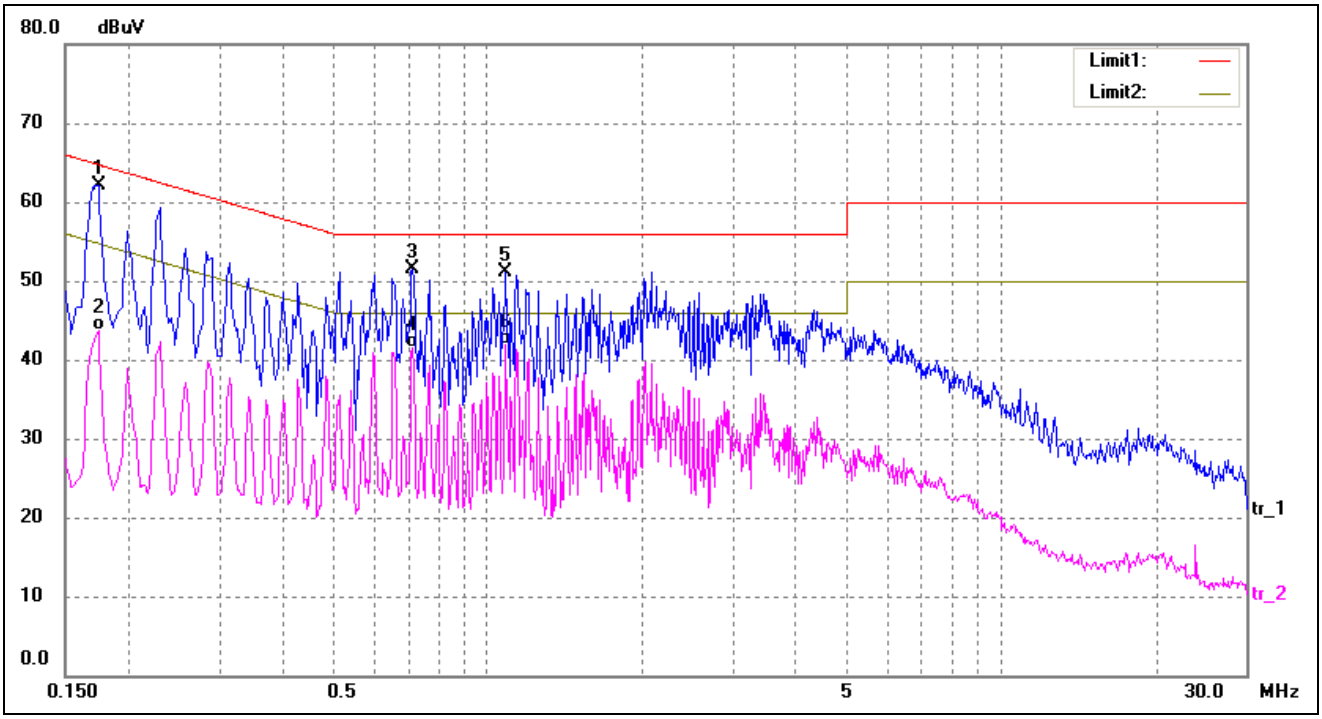
-2.62 dB at 0.1740 MHz in the **Neutral** Mode**, QP** detector, **0.15-30MHz**

3.6 Conducted Emissions Test Data

Plot of Conducted Emissions Test Data

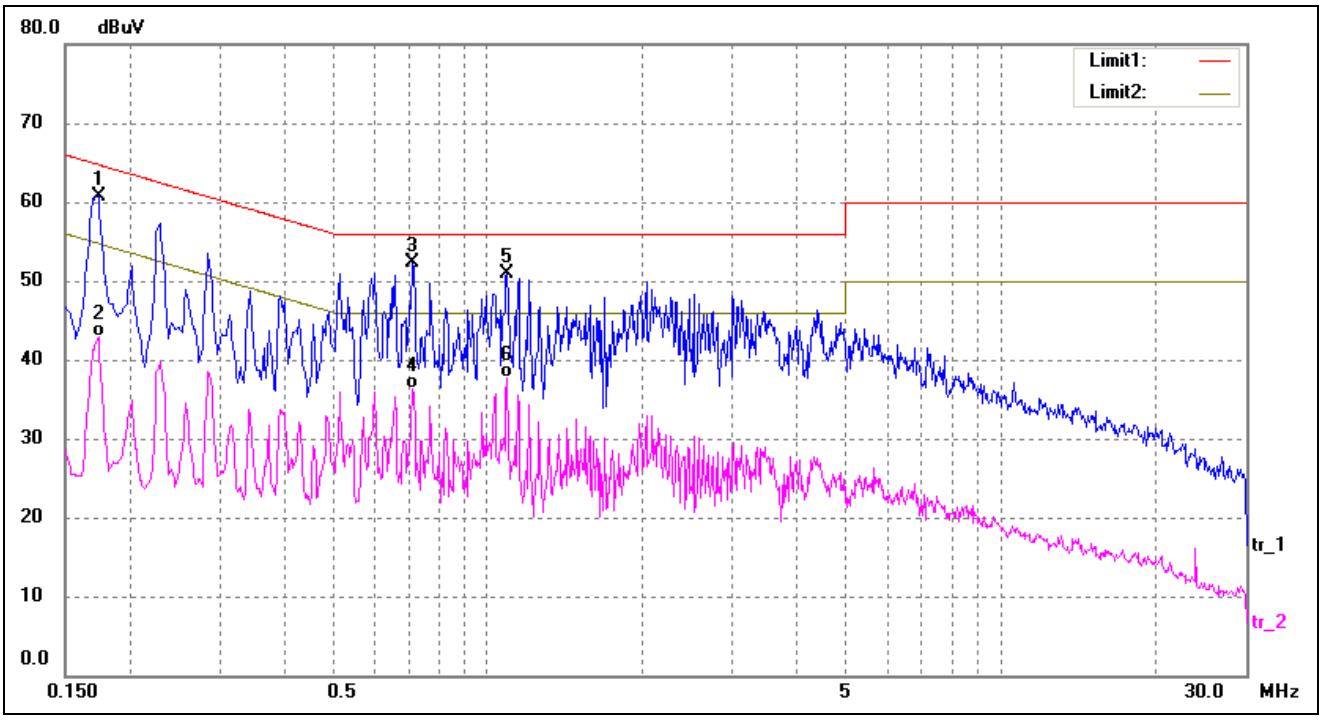
EUT: *Smart Phone*
Tested Model: *VOLT X*
Operating Condition: *TM1*
Comment: *DC 5V*

Test Specification: *Neutral*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1*	0.1740	52.32	9.83	62.15	64.77	-2.62	QP
2	0.1740	33.91	9.83	43.74	54.77	-11.03	AVG
3	0.7140	41.69	9.78	51.47	56.00	-4.53	QP
4	0.7140	31.70	9.78	41.48	46.00	-4.52	AVG
5	1.0860	41.32	9.76	51.08	56.00	-4.92	QP
6	1.0860	32.20	9.76	41.96	46.00	-4.04	AVG

Test Specification: *Line*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.1740	50.91	9.83	60.74	64.77	-4.03	QP
2	0.1740	33.13	9.83	42.96	54.77	-11.81	AVG
3*	0.7140	42.46	9.78	52.24	56.00	-3.76	QP
4	0.7140	26.49	9.78	36.27	46.00	-9.73	AVG
5	1.0900	41.23	9.76	50.99	56.00	-5.01	QP
6	1.0900	27.90	9.76	37.66	46.00	-8.34	AVG

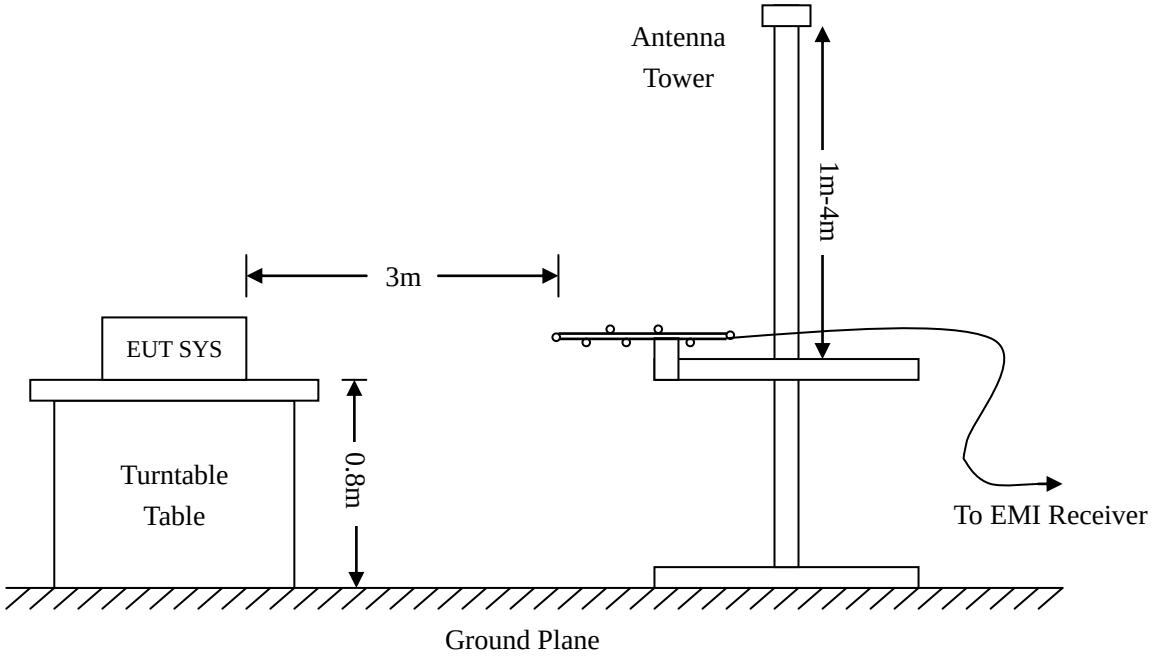
4. Radiated Emissions

4.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement is ± 5.10 dB.

4.2 Test Procedure

Test is conducting under the description of EN55022 Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement.



4.3 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Antenna Factor + Cable Factor - Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit for Class B device. The equation for margin calculation is as follows:

Margin = Corr. Ampl. – EN 301489 Class B Limit

4.4 Environmental Conditions

Temperature:	23° C
Relative Humidity:	53%
ATM Pressure:	1011 mbar

4.5 Summary of Test Results/Plots

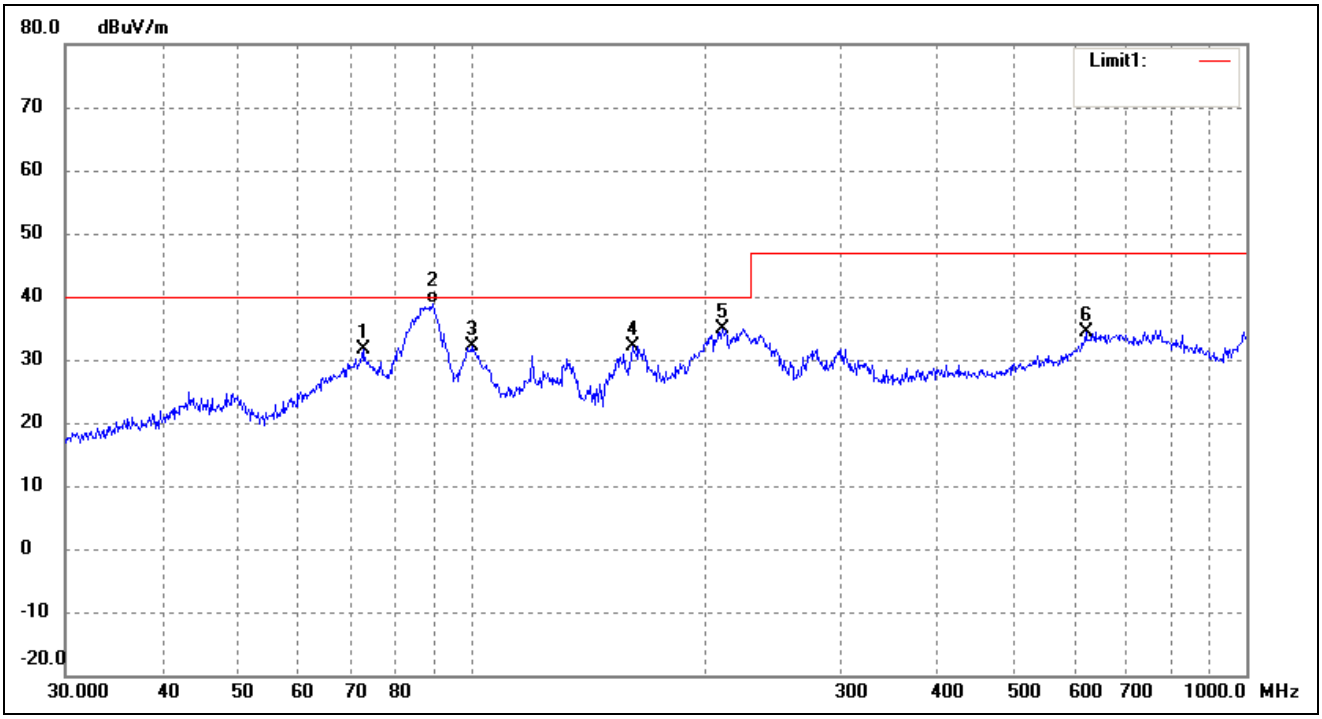
According to the data in section 4.6, the EUT complied with the EN 301489 Class B standards, and had the worst margin is:

-1.10 dB at **89.2764 MHz** in the **Horizontal** polarization, **TM1** mode, **30 MHz to 6 GHz, 3Meters**

Plot of Radiated Emissions Test Data (Below 1GHz)

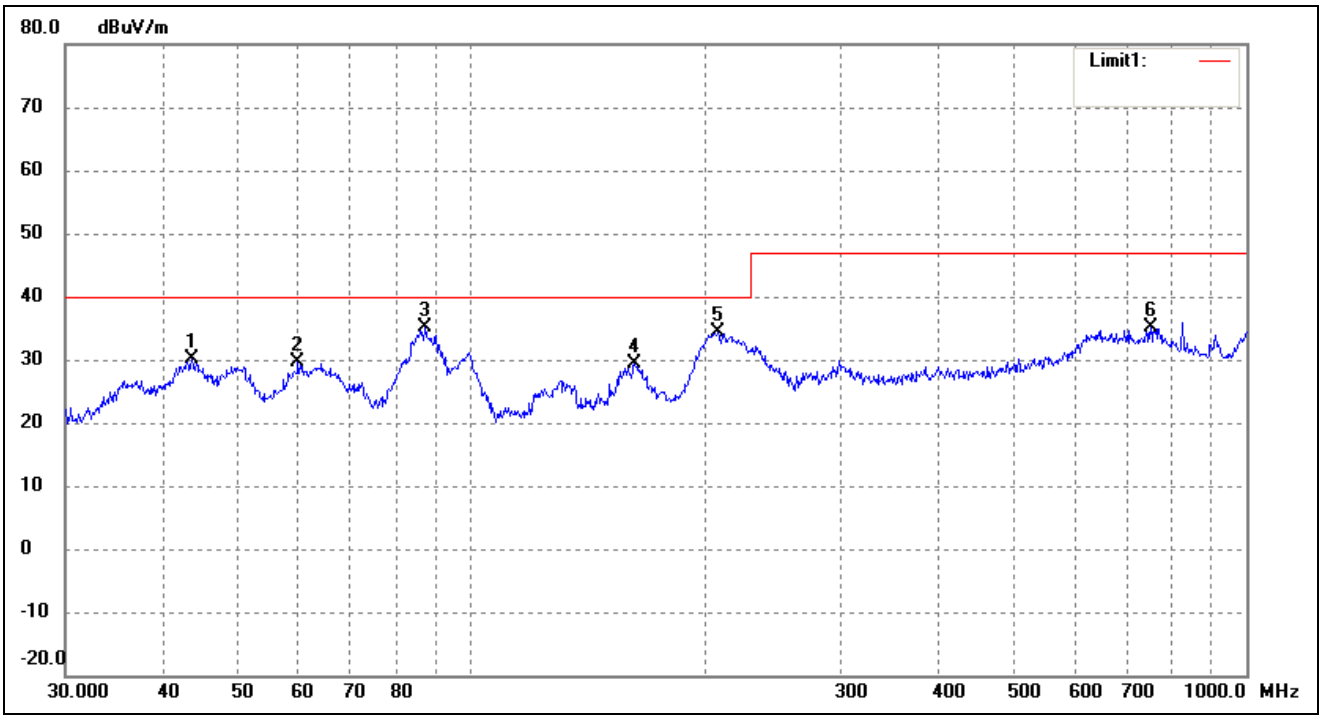
EUT: *Smart Phone*
Tested Model: *VOLT X*
Operating Condition: *TM1*
Comment: *DC 5V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	72.5916	28.95	2.57	31.52	40.00	-8.48	63	100	QP
2	89.2764	35.62	3.28	38.90	40.00	-1.10	147	100	QP
3	100.2286	27.11	4.93	32.04	40.00	-7.96	251	100	QP
4	161.4742	29.77	2.41	32.18	40.00	-7.82	90	100	QP
5	210.7860	29.28	5.69	34.97	40.00	-5.03	66	100	QP
6	620.7096	17.00	17.38	34.38	47.00	-12.62	337	100	QP

Test Specification: *Vertical*

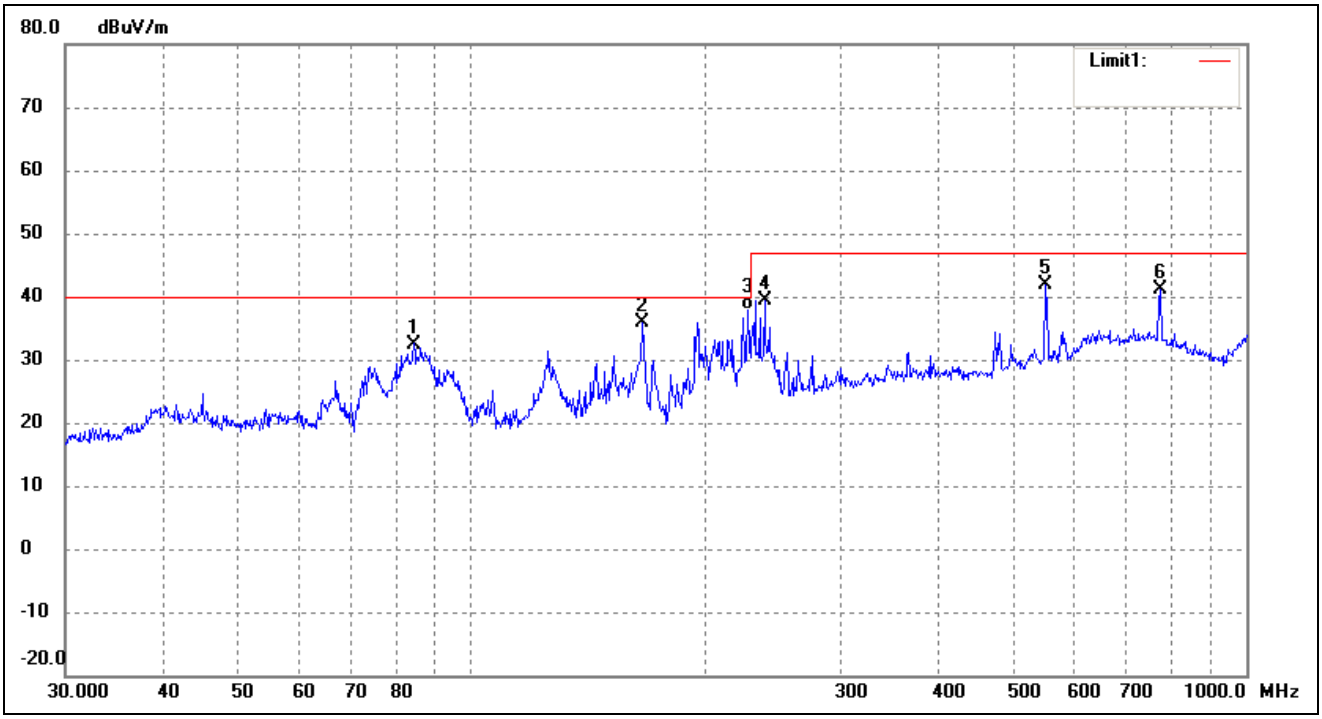


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	43.6585	25.21	4.94	30.15	40.00	-9.85	105	100	QP
2	59.8588	24.61	5.03	29.64	40.00	-10.36	320	100	QP
3	87.4177	32.05	2.96	35.01	40.00	-4.99	257	100	QP
4	162.6106	27.00	2.42	29.42	40.00	-10.58	83	100	QP
5	208.5803	29.05	5.22	34.27	40.00	-5.73	285	100	QP
6	752.7432	16.62	18.47	35.09	47.00	-11.91	161	100	QP

Plot of Radiated Emissions Test Data (Below 1GHz)

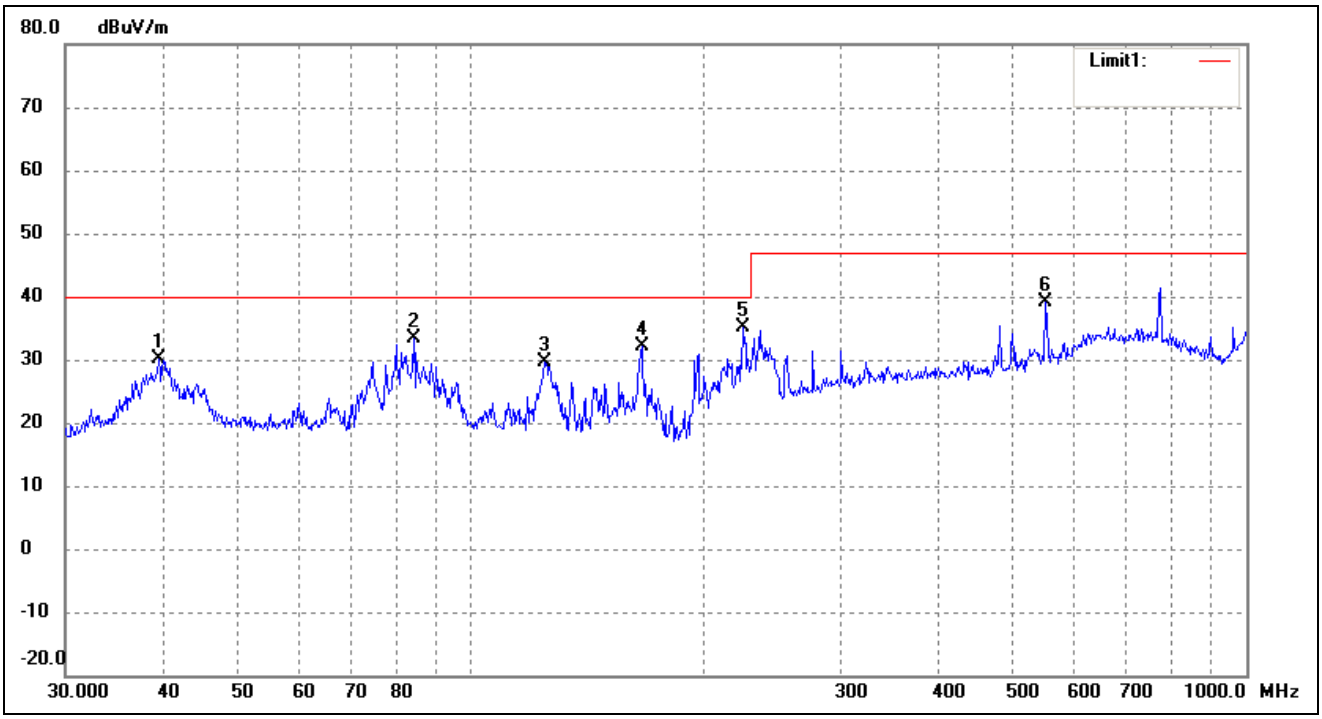
EUT: *Smart Phone*
Tested Model: *VOLT X*
Operating Condition: *TM2*
Comment: *DC 5V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	84.4054	30.05	2.45	32.50	40.00	-7.50	109	100	QP
2	166.6514	33.53	2.46	35.99	40.00	-4.01	314	100	QP
3	227.6906	29.77	8.14	37.91	40.00	-2.09	130	100	QP
4	239.1473	30.53	8.87	39.40	47.00	-7.60	92	100	QP
5	550.9480	28.02	13.93	41.95	47.00	-5.05	158	100	QP
6	774.1584	24.00	17.19	41.19	47.00	-5.81	342	100	QP

Test Specification: *Vertical*

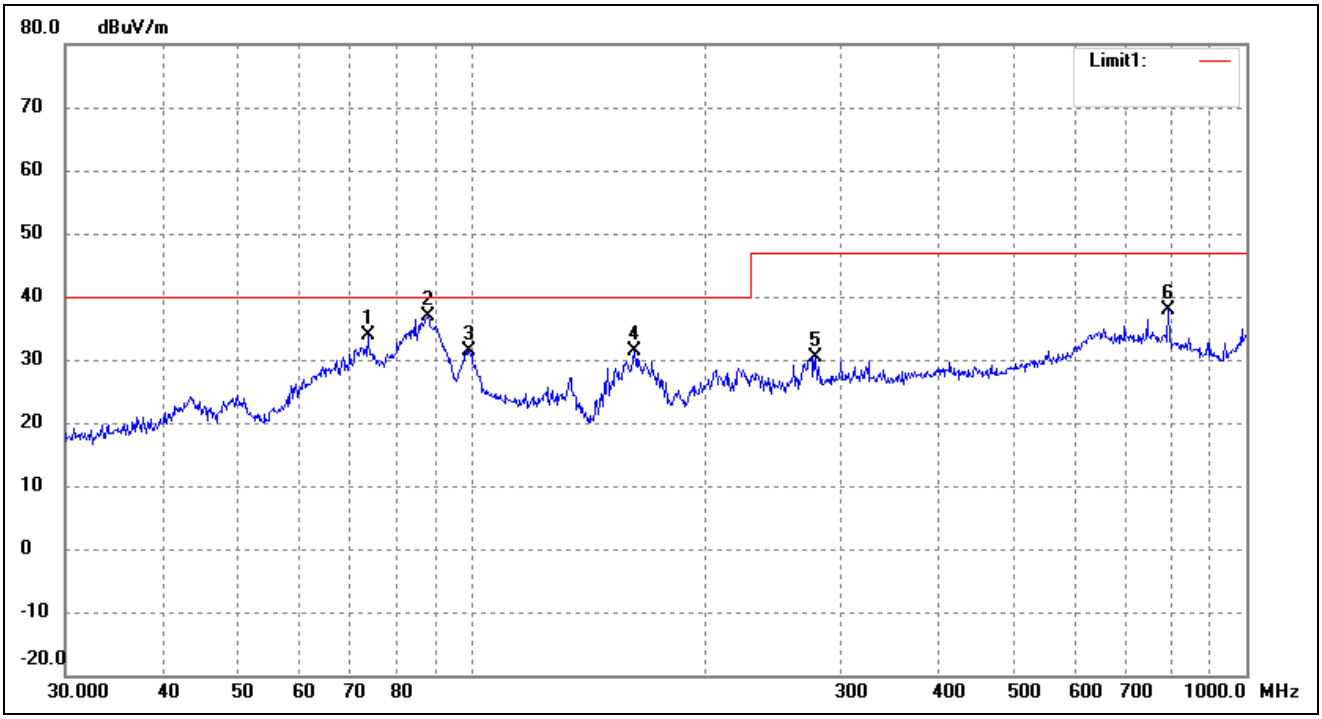


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	39.5757	25.27	4.87	30.14	40.00	-9.86	176	100	QP
2	84.4054	30.92	2.45	33.37	40.00	-6.63	333	100	QP
3	124.5690	25.08	4.44	29.52	40.00	-10.48	279	100	QP
4	166.0680	29.73	2.45	32.18	40.00	-7.82	68	100	QP
5	224.5193	27.10	7.95	35.05	40.00	-4.95	322	100	QP
6	550.9480	25.13	13.93	39.06	47.00	-7.94	273	100	QP

Plot of Radiated Emissions Test Data (Below 1GHz)

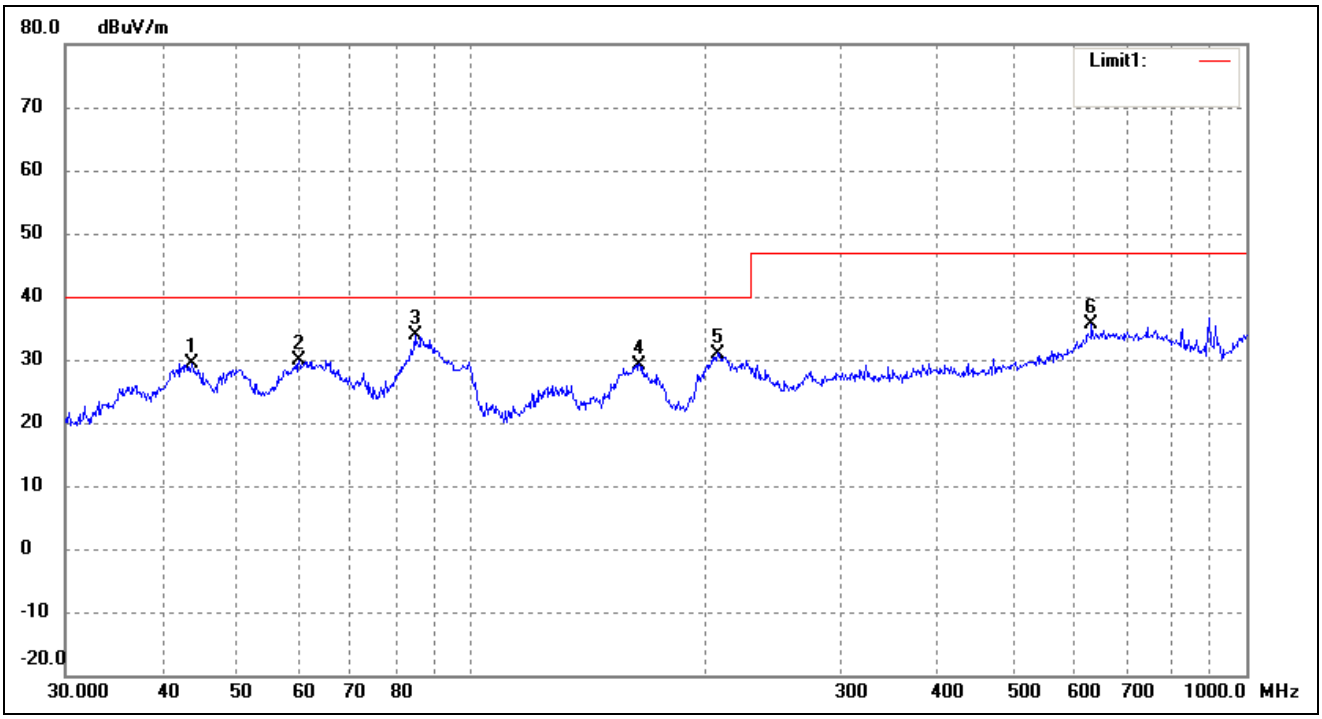
EUT: *Smart Phone*
Tested Model: *VOLT X*
Operating Condition: *TM3*
Comment: *DC 5V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	73.6170	31.31	2.45	33.76	40.00	-6.24	157	100	QP
2	88.0329	33.78	3.07	36.85	40.00	-3.15	280	100	QP
3	99.5281	26.53	4.86	31.39	40.00	-8.61	80	100	QP
4	162.6106	29.02	2.42	31.44	40.00	-8.56	66	100	QP
5	278.0669	19.46	11.00	30.46	47.00	-16.54	248	100	QP
6	793.3960	21.48	16.48	37.96	47.00	-9.04	189	100	QP

Test Specification: *Vertical*

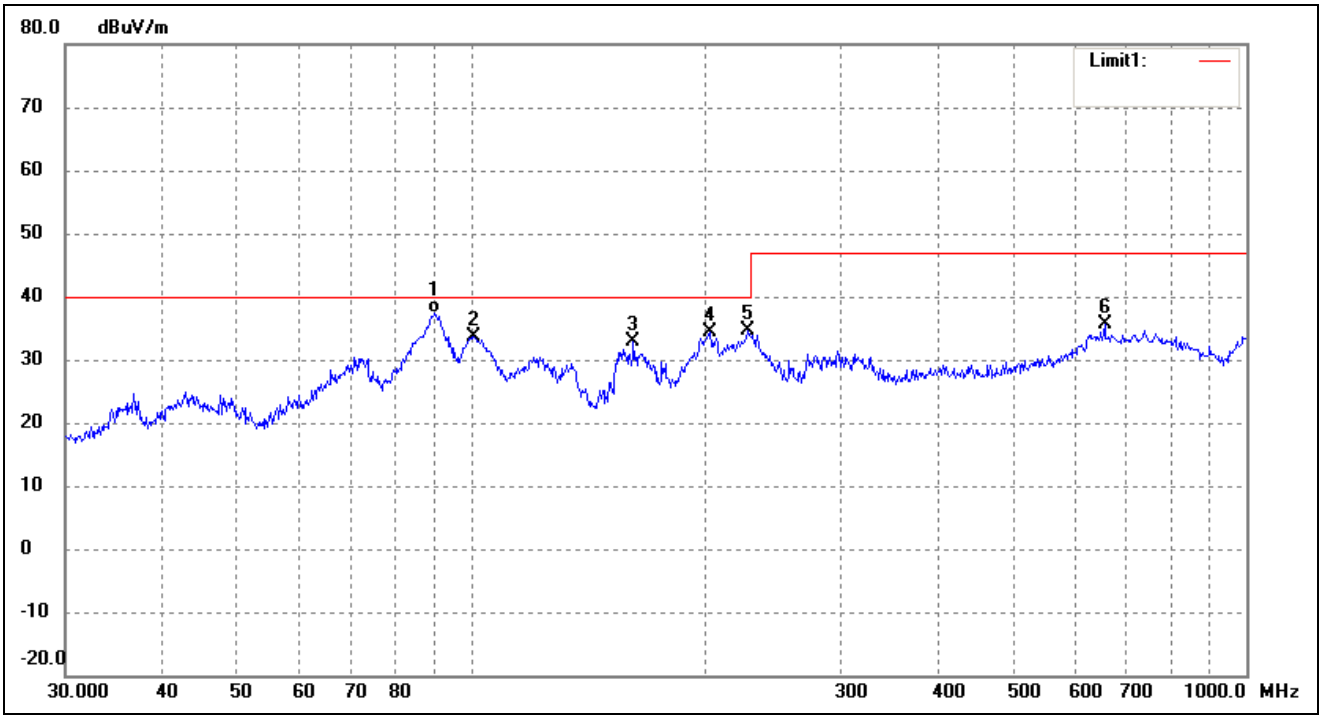


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	43.6584	24.37	4.94	29.31	40.00	-10.69	195	100	QP
2	60.0691	24.84	5.02	29.86	40.00	-10.14	234	100	QP
3	84.7019	31.32	2.50	33.82	40.00	-6.18	201	100	QP
4	164.9075	26.81	2.44	29.25	40.00	-10.75	68	100	QP
5	208.5803	25.78	5.22	31.00	40.00	-9.00	91	100	QP
6	631.6884	17.89	17.78	35.67	47.00	-11.33	175	100	QP

Plot of Radiated Emissions Test Data (Below 1GHz)

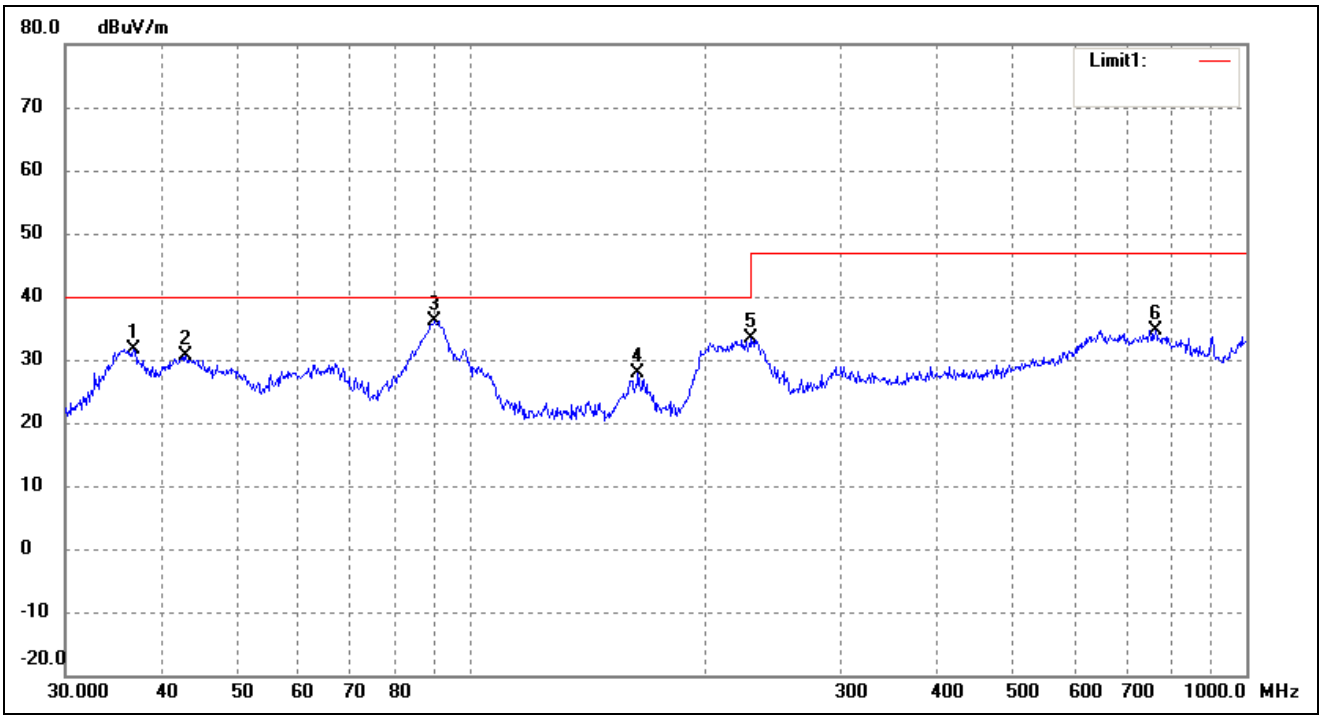
EUT: *Smart Phone*
Tested Model: *VOLT X*
Operating Condition: *TM4*
Comment: *DC 5V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	89.9047	34.09	3.38	37.47	40.00	-2.53	81	100	QP
2	100.9340	28.62	4.92	33.54	40.00	-6.46	247	100	QP
3	162.0414	30.42	2.41	32.83	40.00	-7.17	107	100	QP
4	203.5228	30.13	4.13	34.26	40.00	-5.74	83	100	QP
5	227.6906	26.44	8.14	34.58	40.00	-5.42	86	100	QP
6	656.5300	17.91	17.67	35.58	47.00	-11.42	258	100	QP

Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	36.7662	27.23	4.45	31.68	40.00	-8.32	199	100	QP
2	42.8998	25.76	4.94	30.70	40.00	-9.30	253	100	QP
3	89.9047	32.85	3.38	36.23	40.00	-3.77	153	100	QP
4	164.3302	25.54	2.44	27.98	40.00	-12.02	71	100	QP
5	230.0985	25.13	8.31	33.44	47.00	-13.56	170	100	QP
6	763.3757	16.73	17.95	34.68	47.00	-12.32	220	100	QP

Emissions 1 - 6 GHz

During measurements from 1 GHz to 6 GHz, only base noise was detected.

5. Harmonic Current Emissions

5.1 Test Procedure

Test is conducting under the description of EN61000-3-2.

5.2 Test Standards

EN61000-3-2, Clause 7.1 Limits for Class A equipment.

Environmental Conditions

Temperature:	22 °C
Relative Humidity:	48%
ATM Pressure:	1022 mbar

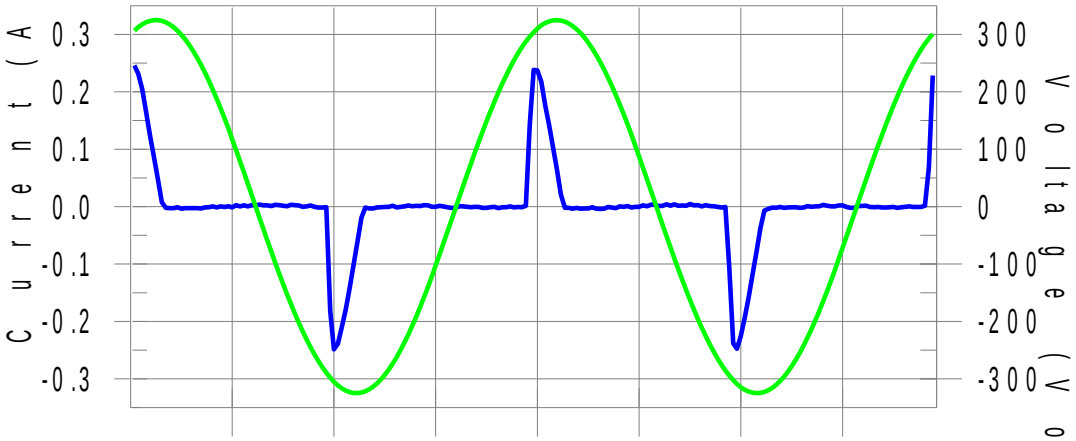
5.3 Harmonic Current Emissions Test Data

Harmonics – Class-A per Ed. 3.2 (2009)(Run time)

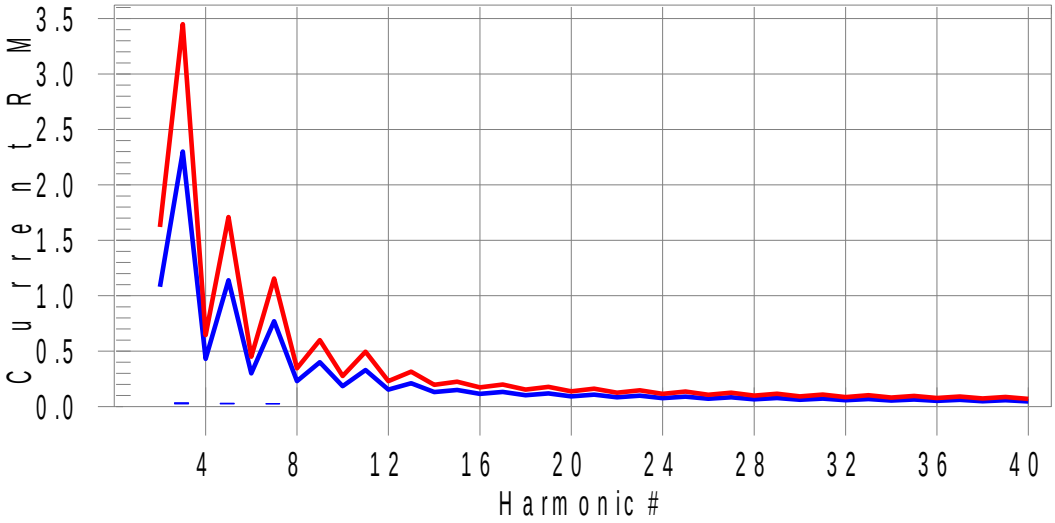
EUT: Smart Phone **Tested by: Iven**
Test category: Class-A per Ed. 3.2 (2009) (European limits) **Test Margin: 100**
Test date: 2016-12-16 **Start time: 02:07:49 PM** **End time: 02:10:40 PM**
Test duration (min): 2.5 **Data file name: H-000638.cts_data**
Comment: TM1
Customer: Vonino ELectronics LTD.

Test Result: Pass **Source qualification: Normal**

Current & voltage waveforms



Harmonics and Class A limit line **European Limits**



Test result: Pass **Worst harmonic was #19 with 5.00% of the limit.**

Current Test Result Summary (Run time)

EUT: Smart Phone **Tested by: Iven**
Test category: Class-A per Ed. 3.2 (2009) (European limits) **Test Margin: 100**
Test date: 2016-12-16 **Start time: 02:07:49 PM** **End time: 02:10:40 PM**
Test duration (min): 2.5 **Data file name: H-000638.cts_data**
Comment: TM1
Customer: Vonino ELectronics LTD.

Test Result: Pass **Source qualification: Normal**
THC(A): 0.06 **I-THD(%): 157.76** **POHC(A): 0.005** **POHC Limit(A): 0.309**
Highest parameter values during test:

V_RMS (Volts):	**229.80**	**Frequency(Hz):**	**50.00**
I_Peak (Amps):	**0.256**	**I_RMS (Amps):**	**0.071**
I_Fund (Amps):	**0.038**	**Crest Factor:**	**3.645**
Power (Watts):	**8.4**	**Power Factor:**	**0.522**

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.001	1.080	0.0	0.001	1.620	0.05	Pass
3	0.035	2.300	1.5	0.036	3.450	1.04	Pass
4	0.000	0.430	0.0	0.001	0.645	0.08	Pass
5	0.031	1.140	2.7	0.031	1.710	1.80	Pass
6	0.000	0.300	0.0	0.000	0.450	0.06	Pass
7	0.025	0.770	3.2	0.025	1.155	2.16	Pass
8	0.000	0.230	0.0	0.000	0.345	0.05	Pass
9	0.019	0.400	4.6	0.019	0.600	3.11	Pass
10	0.000	0.184	0.0	0.000	0.276	0.07	Pass
11	0.013	0.330	3.9	0.013	0.495	2.60	Pass
12	0.000	0.153	0.0	0.000	0.230	0.06	Pass
13	0.008	0.210	4.0	0.008	0.315	2.69	Pass
14	0.000	0.131	0.0	0.000	0.197	0.04	Pass
15	0.006	0.150	4.2	0.006	0.225	2.83	Pass
16	0.000	0.115	0.0	0.000	0.173	0.07	Pass
17	0.006	0.132	4.6	0.006	0.199	3.07	Pass
18	0.000	0.102	0.0	0.000	0.153	0.10	Pass
19	0.006	0.118	5.0	0.006	0.178	3.37	Pass
20	0.000	0.092	0.0	0.000	0.138	0.09	Pass
21	0.005	0.107	4.9	0.005	0.161	3.34	Pass
22	0.000	0.084	0.0	0.000	0.125	0.08	Pass
23	0.004	0.098	0.0	0.004	0.147	2.95	Pass
24	0.000	0.077	0.0	0.000	0.115	0.08	Pass
25	0.003	0.090	0.0	0.003	0.135	2.46	Pass
26	0.000	0.071	0.0	0.000	0.106	0.10	Pass
27	0.003	0.083	0.0	0.003	0.125	2.22	Pass

28	0.000	0.066	0.0	0.000	0.099	0.15	Pass
29	0.003	0.078	0.0	0.003	0.116	2.34	Pass
30	0.000	0.061	0.0	0.000	0.092	0.12	Pass
31	0.003	0.073	0.0	0.003	0.109	2.47	Pass
32	0.000	0.058	0.0	0.000	0.086	0.16	Pass
33	0.002	0.068	0.0	0.002	0.102	2.41	Pass
34	0.000	0.054	0.0	0.000	0.081	0.10	Pass
35	0.002	0.064	0.0	0.002	0.096	2.16	Pass
36	0.000	0.051	0.0	0.000	0.077	0.09	Pass
37	0.002	0.061	0.0	0.002	0.091	1.84	Pass
38	0.000	0.048	0.0	0.000	0.073	0.12	Pass
39	0.001	0.058	0.0	0.001	0.087	1.68	Pass
40	0.000	0.046	0.0	0.000	0.069	0.13	Pass

Voltage Source Verification Data (Run time)

EUT: Smart Phone **Tested by: Iven**
Test category: Class-A per Ed. 3.2 (2009) (European limits) **Test Margin: 100**
Test date: 2016-12-16 **Start time: 02:07:49 PM** **End time: 02:10:40 PM**
Test duration (min): 2.5 **Data file name: H-000638.cts_data**
Comment: TM1
Customer: Vonino ELectronics LTD.

Test Result: Pass **Source qualification: Normal**

Highest parameter values during test:

Voltage (Vrms):	**229.80**	**Frequency(Hz):**	**50.00**
I_Peak (Amps):	**0.256**	**I_RMS (Amps):**	**0.071**
I_Fund (Amps):	**0.038**	**Crest Factor:**	**3.645**
Power (Watts):	**8.4**	**Power Factor:**	**0.522**

Harm#	Harmonics V-rms	Limit V-rms	% of Limit	Status
2	0.059	0.460	12.94	OK
3	0.538	2.068	26.03	OK
4	0.057	0.460	12.48	OK
5	0.071	0.919	7.77	OK
6	0.028	0.460	6.00	OK
7	0.021	0.689	3.00	OK
8	0.014	0.459	3.14	OK
9	0.014	0.460	3.11	OK
10	0.010	0.459	2.25	OK
11	0.022	0.230	9.41	OK
12	0.009	0.230	4.10	OK
13	0.011	0.230	4.85	OK
14	0.003	0.230	1.50	OK
15	0.012	0.230	5.35	OK
16	0.008	0.230	3.49	OK
17	0.015	0.230	6.56	OK
18	0.010	0.230	4.19	OK
19	0.011	0.230	4.70	OK
20	0.014	0.230	6.18	OK
21	0.012	0.230	5.26	OK
22	0.005	0.230	2.00	OK
23	0.009	0.230	3.74	OK
24	0.002	0.230	0.77	OK
25	0.007	0.230	3.17	OK
26	0.002	0.230	0.66	OK
27	0.008	0.230	3.61	OK

28	**0.003**	**0.230**	**1.33**	**OK**
29	**0.004**	**0.230**	**1.77**	**OK**
30	**0.003**	**0.230**	**1.12**	**OK**
31	**0.005**	**0.230**	**2.00**	**OK**
32	**0.002**	**0.230**	**1.00**	**OK**
33	**0.004**	**0.230**	**1.91**	**OK**
34	**0.002**	**0.230**	**0.70**	**OK**
35	**0.005**	**0.230**	**2.09**	**OK**
36	**0.001**	**0.230**	**0.52**	**OK**
37	**0.007**	**0.230**	**2.97**	**OK**
38	**0.002**	**0.230**	**0.72**	**OK**
39	**0.006**	**0.230**	**2.67**	**OK**
40	**0.008**	**0.230**	**3.41**	**OK**

6. Voltage Fluctuation and Flicker

6.1 Test Procedure

Test is conducting under the description of EN61000-3-3.

6.2 Test Standards

EN61000-3-3, Limit: Clause 5.

Environmental Conditions

Temperature:	22 °C
Relative Humidity:	48%
ATM Pressure:	1022 mbar

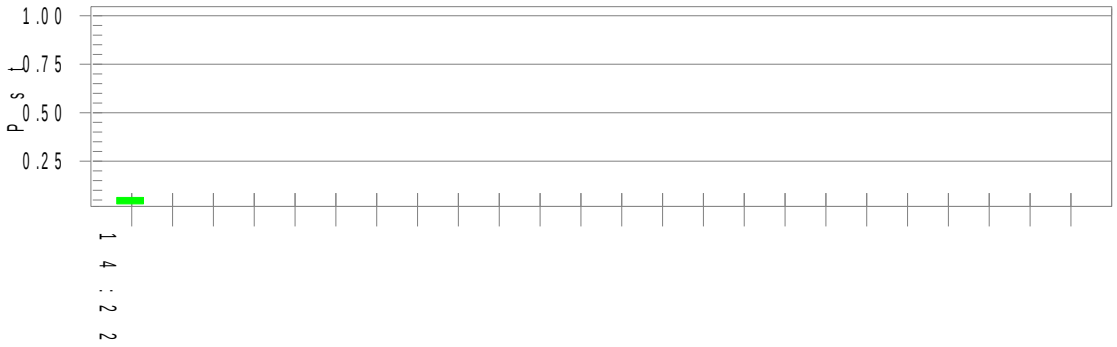
6.3 Voltage Fluctuation and Flicker Test Data

Flicker Test Summary per EN/IEC61000-3-3 (Run time)

EUT: Smart Phone **Tested by: Iven**
Test category: All parameters (European limits) **Test Margin: 100**
Test date: 2016-12-16 **Start time: 02:12:16 PM** **End time: 02:22:37 PM**
Test duration (min): 10 **Data file name: F-000639.cts_data**
Comment: TM1
Customer: Vonino ELectronics LTD.

Test Result: Pass **Status: Test Completed**

Pst and limit line **European Limits**



Plt and limit line

Parameter values recorded during the test:

Vrms at the end of test (Volt):	**229.77**			
Highest dt (%):	**0.00**	**Test limit (%):**	**3.30**	**Pass**
Time(mS) > dt:	**0.0**	**Test limit (mS):**	**500.0**	**Pass**
Highest dc (%):	**0.00**	**Test limit (%):**	**3.30**	**Pass**
Highest dmax (%):	**0.00**	**Test limit (%):**	**4.00**	**Pass**
Highest Pst (10 min. period):	**0.064**	**Test limit:**	**1.000**	**Pass**
Highest Plt (2 hr. period):	**0.028**	**Test limit:**	**0.650**	**Pass**

7. Electrostatic Discharge (ESD)

7.1 Test Procedure

Test is conducting under the description of IEC61000-4-2.

7.2 Test Performance

Performance Criterion: Pass for GSM, GPRS_CT, CR, EDGE _CT, CR
Pass for WCDMA, HSDPA, HSUPA_CT, CR
Pass for LTE_TT, TR
A for BT, Wi-Fi _CT, CR
A for GPS_CR
A for Charging & Playing
A for Downloading
A for Camera On
A for FM Mode

Environmental Conditions

Temperature:	26 °C
Relative Humidity:	55%
ATM Pressure:	1011 mbar

7.3 Electrostatic Discharge Immunity Test Data

Test mode: GSM900 _TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: GSM1800 _TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: GPRS900 _TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: GPRS1800 _TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: EDGE900 _TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: EDGE1800 _TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: WCDMA Band 1_TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: WCDMA Band 8_TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: HSDPA Band 1_TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: HSDPA Band 8_TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: HSUPA Band 1_TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: HSUPA Band 8_TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: FDD-LTE Band 1_TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: FDD-LTE Band 3_TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: FDD-LTE Band 7_TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: FDD-LTE Band 20_TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: TDD-LTE Band 38_TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Buttons	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
loudspeaker	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
I/O Port	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Camera	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Flashlight	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Top Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Back Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Left Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Right Side	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: BT_TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	B	B	B	B	B	B	B	B
Buttons	B	B	B	B	B	B	B	B
loudspeaker	B	B	B	B	B	B	B	B
I/O Port	B	B	B	B	B	B	B	B
Camera	B	B	B	B	B	B	B	B
Flashlight	B	B	B	B	B	B	B	B
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	A	A	A	A	A	A	A	A
Top Side	A	A	A	A	A	A	A	A
Back Side	A	A	A	A	A	A	A	A
Left Side	A	A	A	A	A	A	A	A
Right Side	A	A	A	A	A	A	A	A

Test mode: Wi-Fi _TT & TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	B	B	B	B	B	B	B	B
Buttons	B	B	B	B	B	B	B	B
loudspeaker	B	B	B	B	B	B	B	B
I/O Port	B	B	B	B	B	B	B	B
Camera	B	B	B	B	B	B	B	B
Flashlight	B	B	B	B	B	B	B	B
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	A	A	A	A	A	A	A	A
Top Side	A	A	A	A	A	A	A	A
Back Side	A	A	A	A	A	A	A	A
Left Side	A	A	A	A	A	A	A	A
Right Side	A	A	A	A	A	A	A	A

Test mode: GPS_TR

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	B	B	B	B	B	B	B	B
Buttons	B	B	B	B	B	B	B	B
loudspeaker	B	B	B	B	B	B	B	B
I/O Port	B	B	B	B	B	B	B	B
Camera	B	B	B	B	B	B	B	B
Flashlight	B	B	B	B	B	B	B	B
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	A	A	A	A	A	A	A	A
Top Side	A	A	A	A	A	A	A	A
Back Side	A	A	A	A	A	A	A	A
Left Side	A	A	A	A	A	A	A	A
Right Side	A	A	A	A	A	A	A	A

Test mode: Charging & Playing

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	B	B	B	B	B	B	B	B
Buttons	B	B	B	B	B	B	B	B
loudspeaker	B	B	B	B	B	B	B	B
I/O Port	B	B	B	B	B	B	B	B
Camera	B	B	B	B	B	B	B	B
Flashlight	B	B	B	B	B	B	B	B
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	A	A	A	A	A	A	A	A
Top Side	A	A	A	A	A	A	A	A
Back Side	A	A	A	A	A	A	A	A
Left Side	A	A	A	A	A	A	A	A
Right Side	A	A	A	A	A	A	A	A

Test mode: Downloading

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	B	B	B	B	B	B	B	B
Buttons	B	B	B	B	B	B	B	B
loudspeaker	B	B	B	B	B	B	B	B
I/O Port	B	B	B	B	B	B	B	B
Camera	B	B	B	B	B	B	B	B
Flashlight	B	B	B	B	B	B	B	B
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	A	A	A	A	A	A	A	A
Top Side	A	A	A	A	A	A	A	A
Back Side	A	A	A	A	A	A	A	A
Left Side	A	A	A	A	A	A	A	A
Right Side	A	A	A	A	A	A	A	A

Test mode: Camera On

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	B	B	B	B	B	B	B	B
Buttons	B	B	B	B	B	B	B	B
loudspeaker	B	B	B	B	B	B	B	B
I/O Port	B	B	B	B	B	B	B	B
Camera	B	B	B	B	B	B	B	B
Flashlight	B	B	B	B	B	B	B	B
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	A	A	A	A	A	A	A	A
Top Side	A	A	A	A	A	A	A	A
Back Side	A	A	A	A	A	A	A	A
Left Side	A	A	A	A	A	A	A	A
Right Side	A	A	A	A	A	A	A	A

Test mode: FM Mode

EN 61000-4-2 Test Points	Test Levels (Kv)							
	-2	+2	-4	+4	-6	+6	-8	+8
Air Discharge								
Screen	B	B	B	B	B	B	B	B
Buttons	B	B	B	B	B	B	B	B
loudspeaker	B	B	B	B	B	B	B	B
I/O Port	B	B	B	B	B	B	B	B
Camera	B	B	B	B	B	B	B	B
Flashlight	B	B	B	B	B	B	B	B
Direct Contact Discharge								
/	/	/	/	/				

EN 61000-4-2 Test Points	Test Levels (kV)							
	Indirect Contact Discharge (HCP)				Indirect Contact Discharge (VCP)			
	-2	+2	-4	+4	-2	+2	-4	+4
Front Side	A	A	A	A	A	A	A	A
Top Side	A	A	A	A	A	A	A	A
Back Side	A	A	A	A	A	A	A	A
Left Side	A	A	A	A	A	A	A	A
Right Side	A	A	A	A	A	A	A	A

Test Result: Pass

8. Radio Frequency Electromagnetic Field (R/S)

8.1 Test Procedure

Test is conducting under the description of IEC61000-4-3.

8.2 Test Performance

Performance Criterion: Pass for GSM, GPRS_CT, CR, EDGE _CT, CR
Pass for WCDMA, HSDPA, HSUPA_CT, CR
Pass for LTE_TT, TR
A for BT, Wi-Fi _CT, CR
A for GPS_CR
A for Charging & Playing
A for Downloading
A for Camera On
A for FM Mode

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	52%
ATM Pressure:	1010 mbar

8.3 Continuous Radiated Disturbances Test Data

Frequency step: 1% of fundamental
Dwell time: 1 second
Modulation: AM by 1kHz sine wave with 80% modulation depth

Test mode: GSM900_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: GSM1800_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: GPRS900_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: GPRS1800_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: EDGE900_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: EDGE1800_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: WCDMA Band 1_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: WCDMA Band 8_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: HSDPA Band 1_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: HSDPA Band 8_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: HSUPA Band 1_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: HSUPA Band 8_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: FDD-LTE Band 1_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: FDD-LTE Band 3_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: FDD-LTE Band 7_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: FDD-LTE Band 20_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: TDD-LTE Band 38_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1400-2700	3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Test mode: BT_CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	A	A	A	A	A	A	A	A
1400-2700	3	A	A	A	A	A	A	A	A

Test mode: Wi-Fi _CT, CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	A	A	A	A	A	A	A	A
1400-2700	3	A	A	A	A	A	A	A	A

Test mode: GPS_CR

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	A	A	A	A	A	A	A	A
1400-2700	3	A	A	A	A	A	A	A	A

Test mode: Charging & Playing

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	A	A	A	A	A	A	A	A
1400-2700	3	A	A	A	A	A	A	A	A

Test mode: Downloading

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	A	A	A	A	A	A	A	A
1400-2700	3	A	A	A	A	A	A	A	A

Test mode: Camera On

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	A	A	A	A	A	A	A	A
1400-2700	3	A	A	A	A	A	A	A	A

Test mode: FM Mode

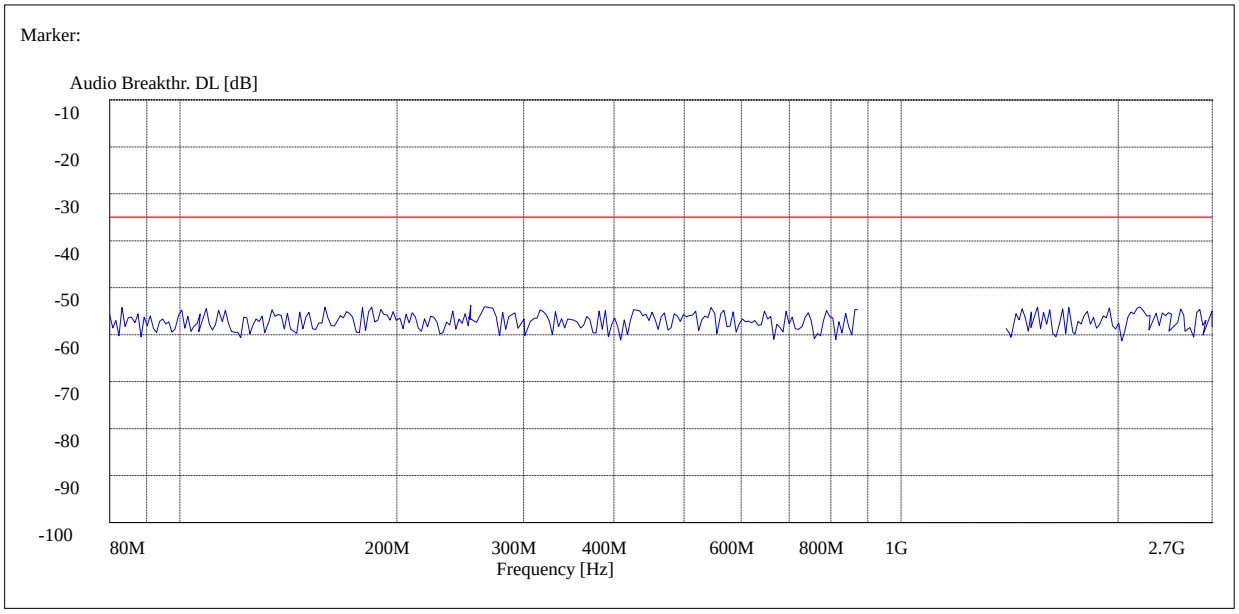
Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	A	A	A	A	A	A	A	A
1400-2700	3	A	A	A	A	A	A	A	A

For LTE data mode Throughput(%)

Band	Throughput Measure (%)	Throughput Limit (%)
Band1	97.43	>95
Band3	97.15	>95
Band7	97.22	>95
Band20	97.76	>95
Band38	97.56	>95

Test Result: Pass

GSM900 Mode: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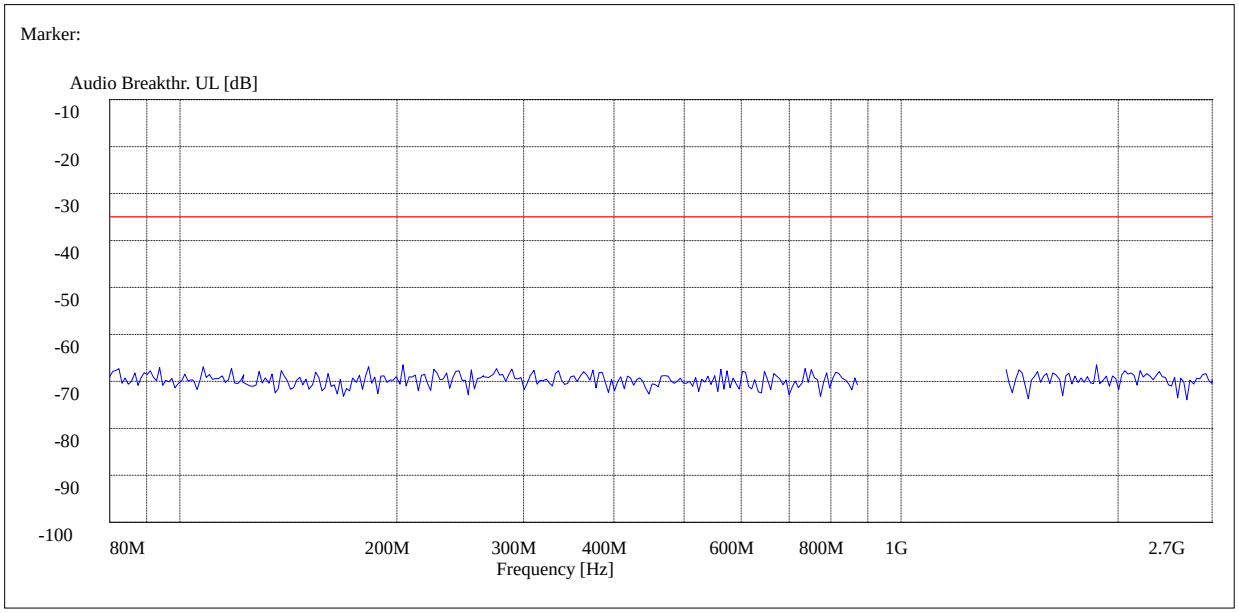
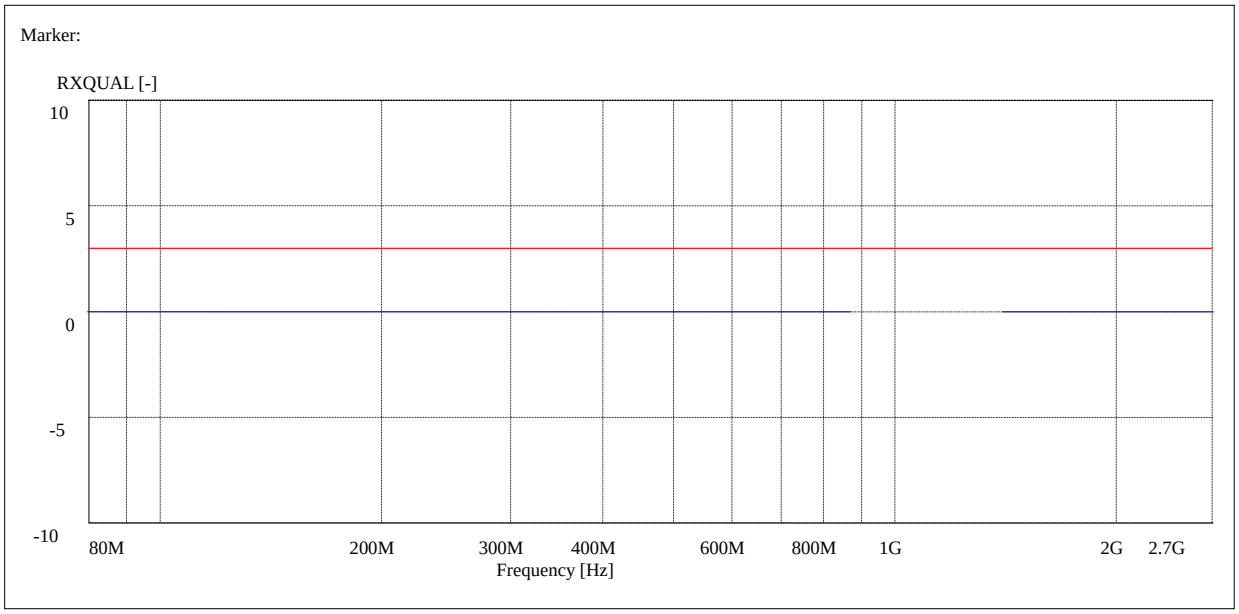
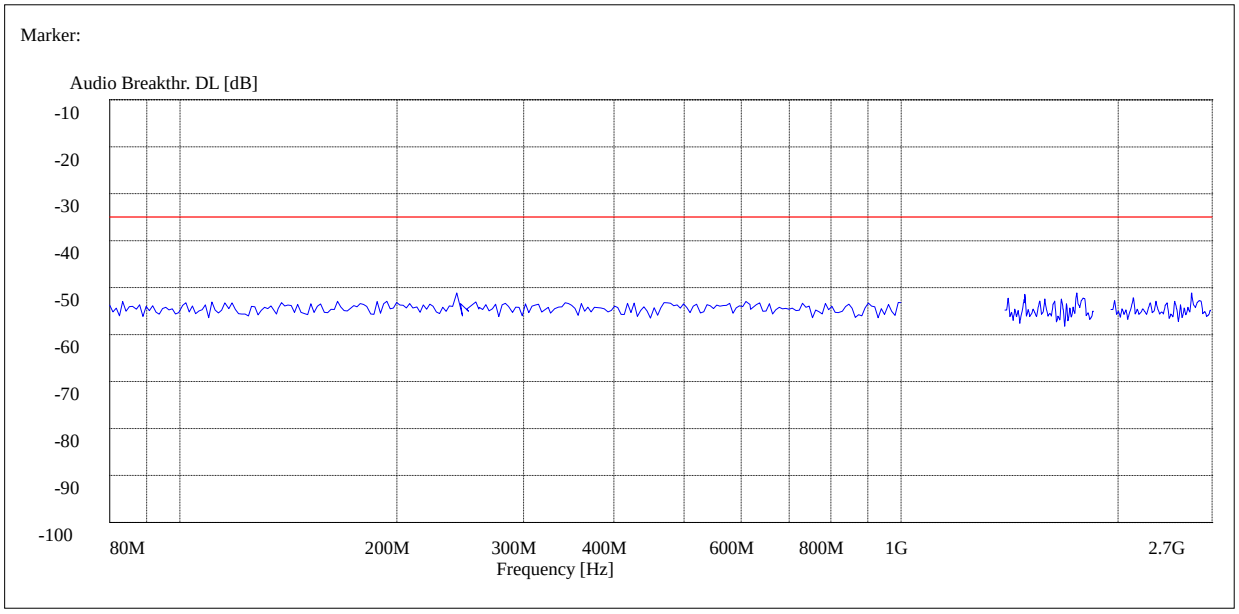
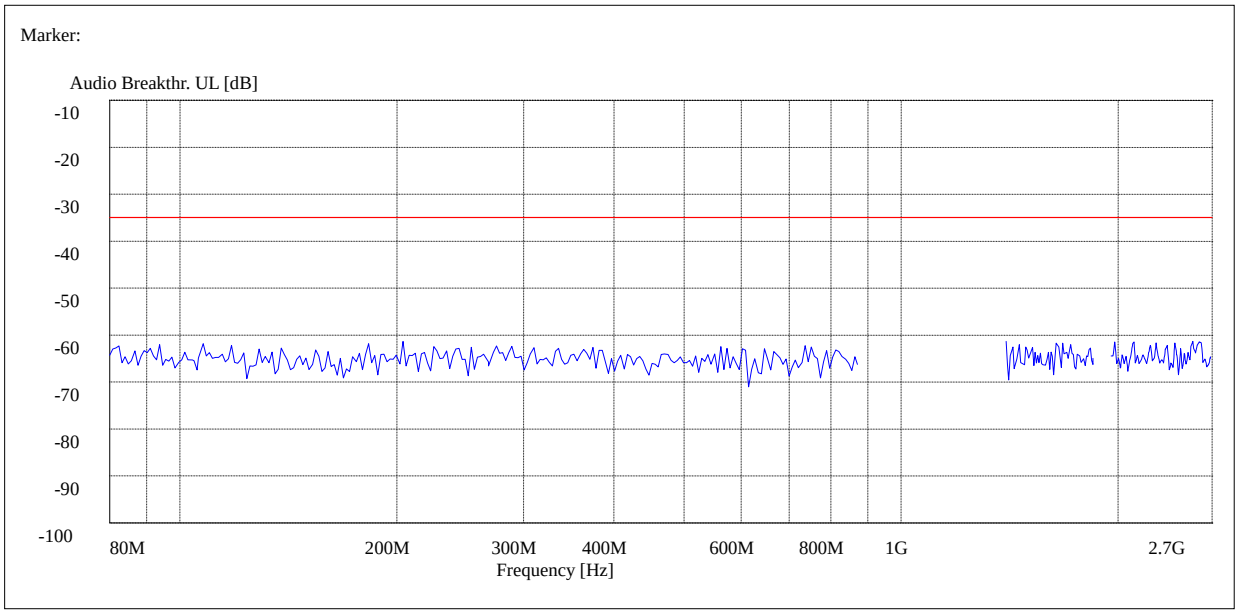
Audio Breakthr. DL [dB]
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
80M
200M
300M
400M
600M
800M
1G
2.7G
Frequency [Hz]

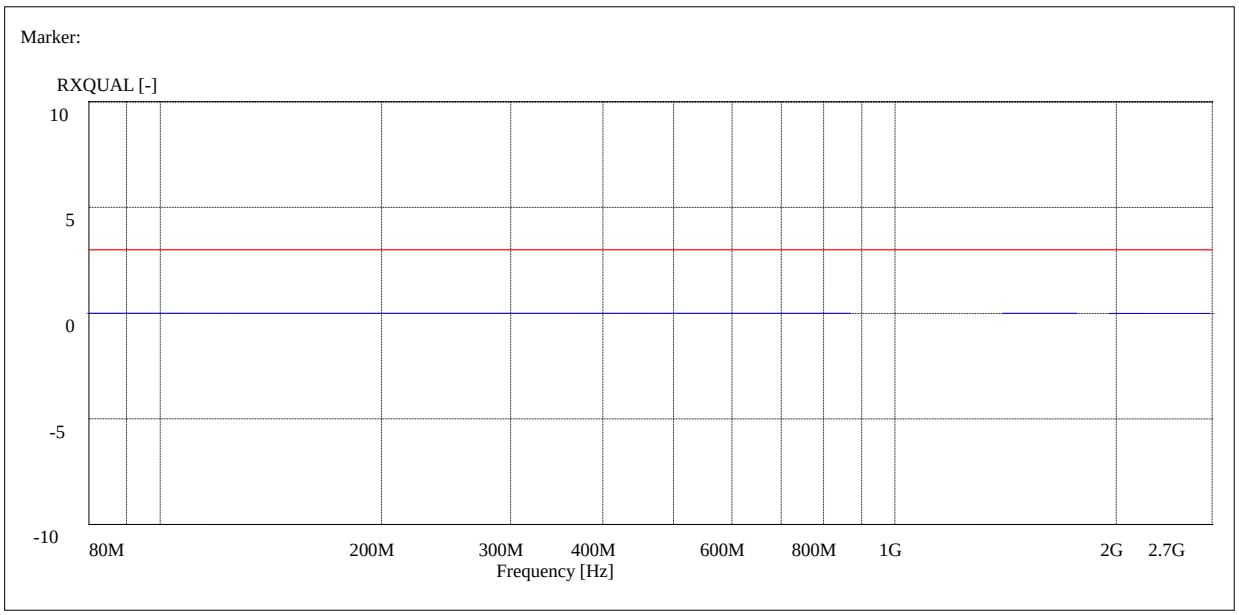

Marker:
Audio Breakthr. UL [dB]
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
80M
200M
300M
400M
600M
800M
1G
2.7G
Frequency [Hz]



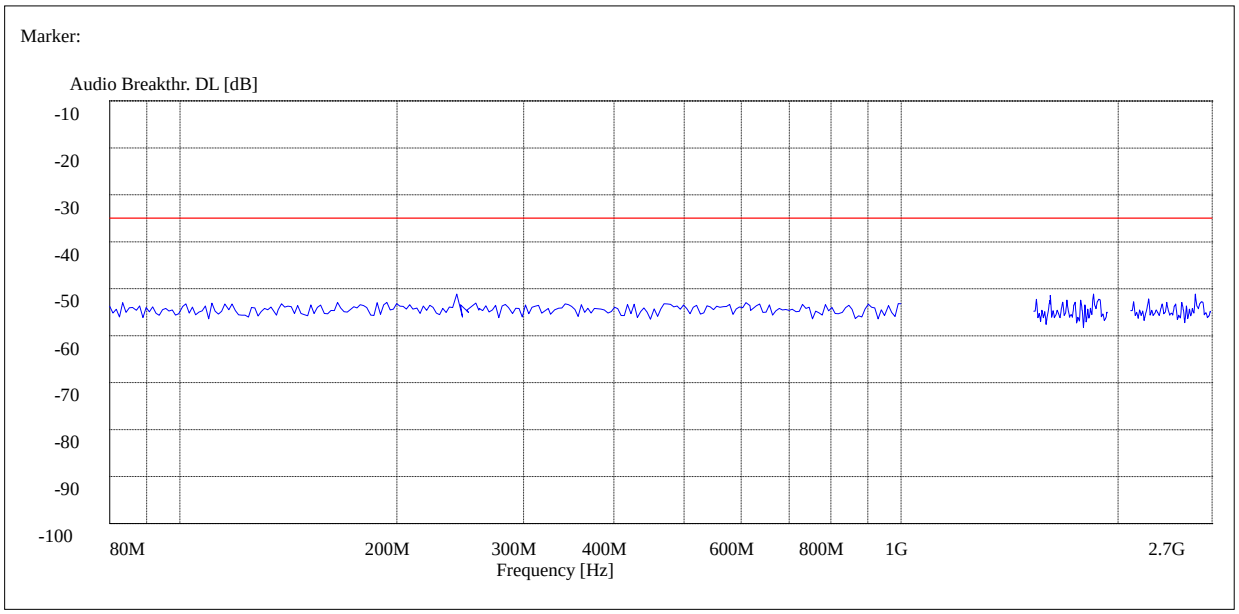
DCS1800 Mode:

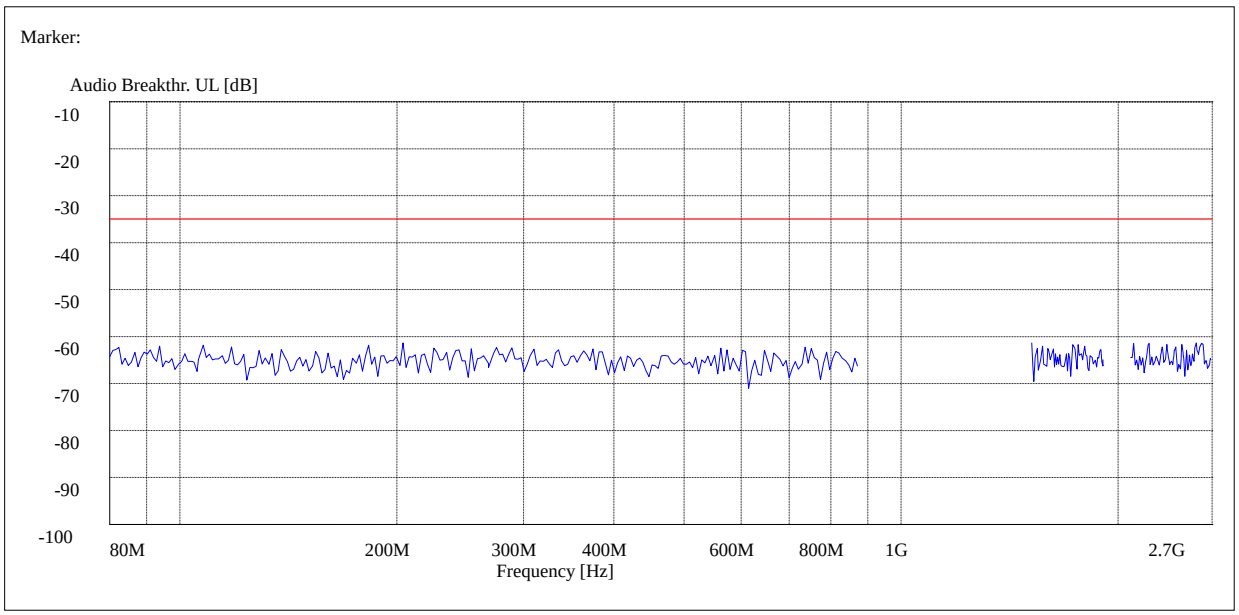


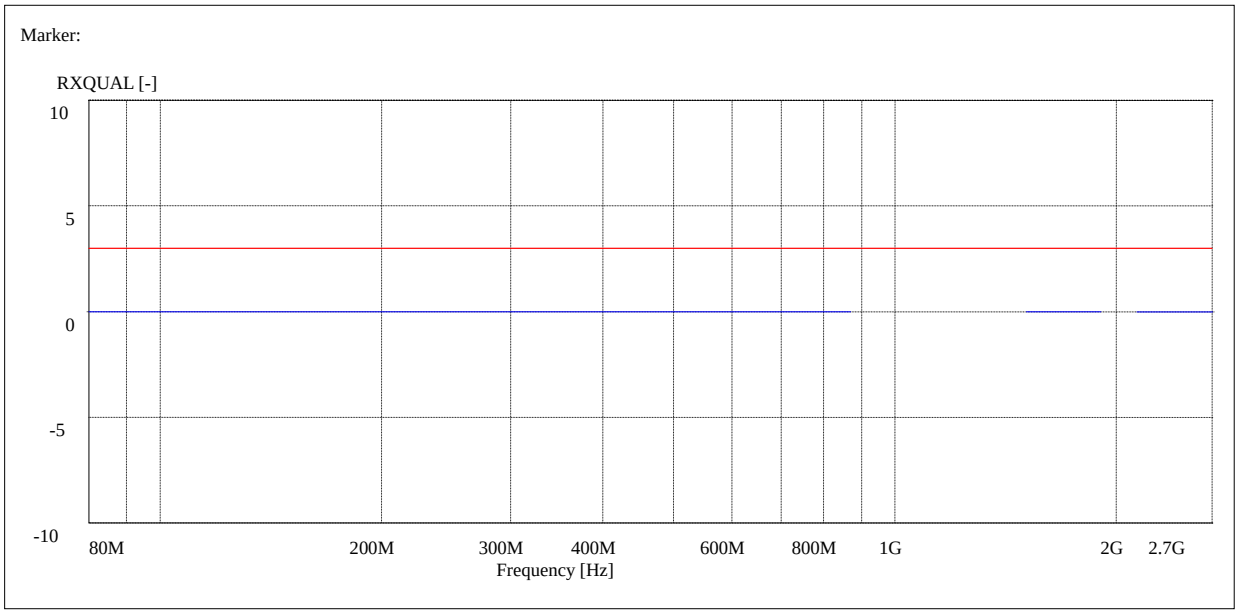

Marker:
Audio Breakthr. UL [dB]
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
80M
200M
300M
400M
600M
800M
1G
2.7G
Frequency [Hz]


Marker:
RXQUAL [-]
10
5
0
-5
-10
80M
200M
300M
400M
600M
800M
1G
2G
2.7G
Frequency [Hz]

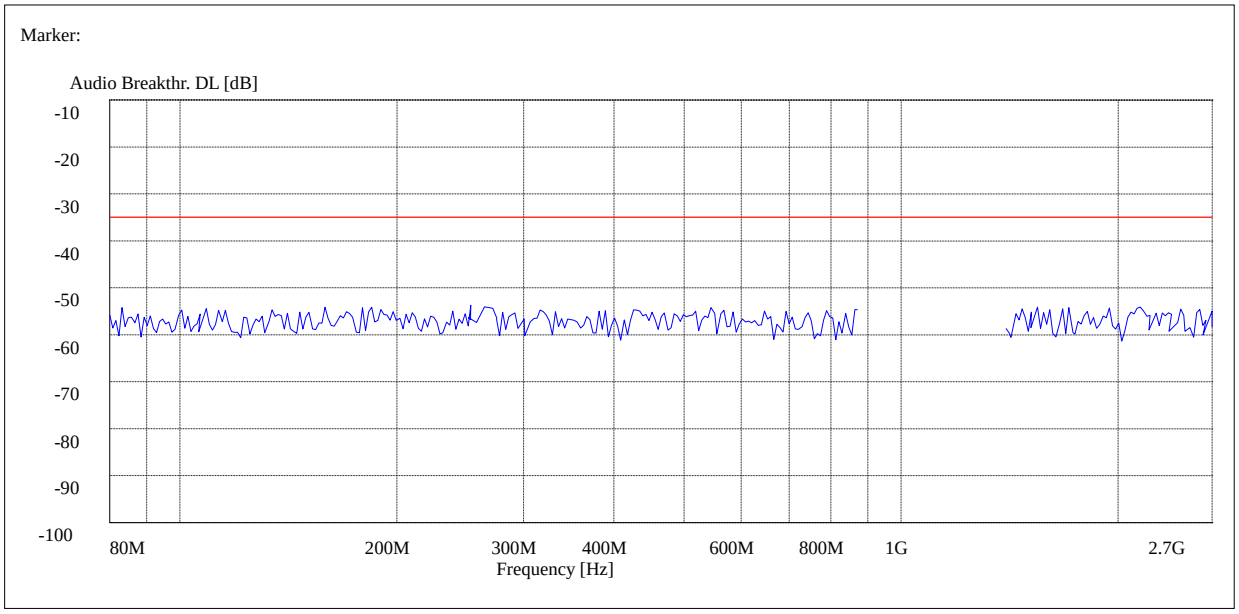
WCDMA2100 Mode:

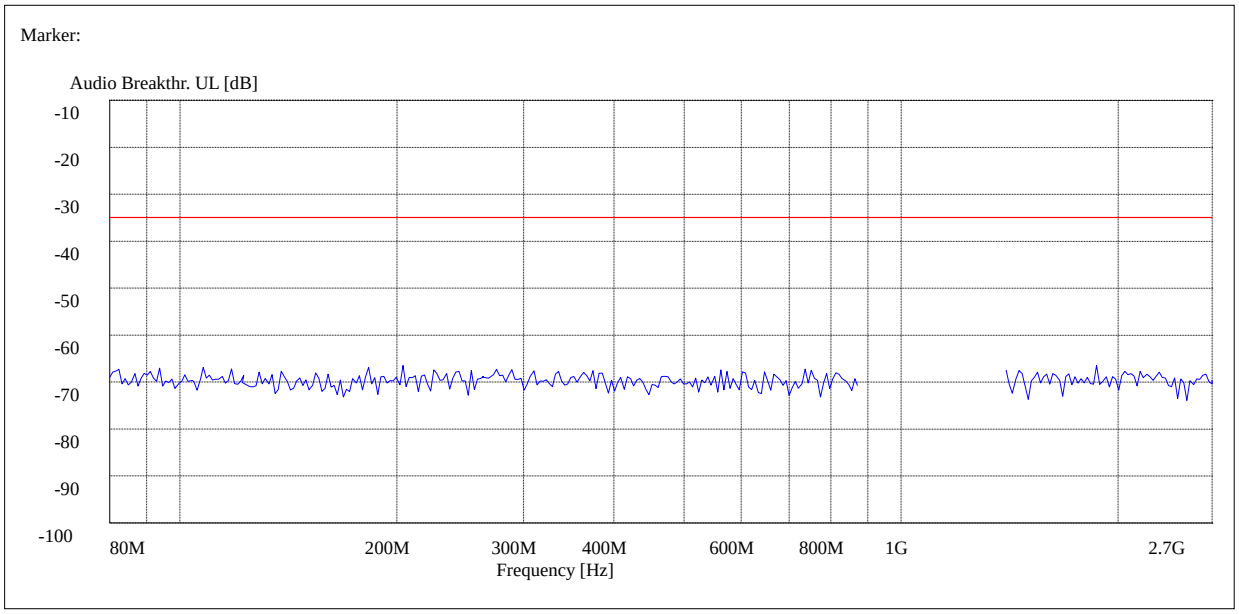


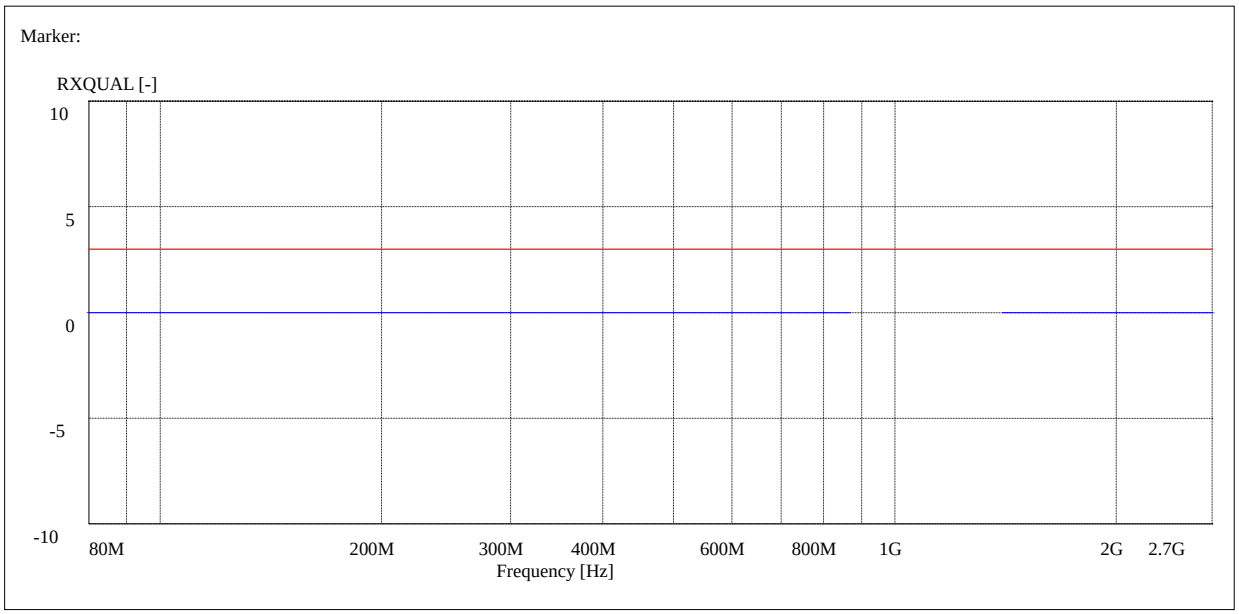



Marker:
RXQUAL [-]
10
5
0
-5
-10
80M
200M
300M
400M
600M
800M
1G
2G
2.7G
Frequency [Hz]

WCDMA 900


Marker:
Audio Breakthr. DL [dB]
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
80M
200M
300M
400M
600M
800M
1G
2.7G
Frequency [Hz]





Idle mode cannot get any unintentionally operation.

Test Result: Pass

9. Fast Transients, Common Mode (EFT)

9.1 Test Procedure

Test is conducting under the description of IEC61000-4-4.

9.2 Test Performance

Performance Criterion: Pass for GSM, GPRS_CT, CR, EDGE _CT, CR
Pass for WCDMA, HSDPA, HSUPA_CT, CR
Pass for LTE_TT, TR
A for BT, Wi-Fi _CT, CR
A for GPS_CR
A for Charging & Playing
A for Downloading
A for Camera On
A for FM Mode

Environmental Conditions

Temperature:	22 °C
Relative Humidity:	53%
ATM Pressure:	1011 mbar

9.3 Electrical Fast Transients Test Data

Test mode: GSM900_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: GSM1800_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: GPRS900_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: GPRS1800_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: EDGE900_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: EDGE1800_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: WCDMA Band 1_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: WCDMA Band 8_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: HSDPA Band 1_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: HSDPA Band 8_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: HSUPA Band 1_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: HSUPA Band 8_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: FDD LTE Band 1_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: FDD LTE Band 3_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: FDD LTE Band 7_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: FDD LTE Band 20_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: TDD LTE Band 38_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	Pass	Pass	Pass	Pass	/	/	/	/
	L2	Pass	Pass	Pass	Pass	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	Pass	Pass	Pass	Pass	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: BT_TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	B	B	B	B	/	/	/	/
	L2	B	B	B	B	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	B	B	B	B	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: Wi-Fi _TT, TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	-0.5	+1.0	-1.0	+2.0	-2.0	+4.0	-4.0
Power Supply Power Port of EUT	L1	B	B	B	B	/	/	/	/
	L2	B	B	B	B	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	B	B	B	B	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: GPS_TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	-0.5	+1.0	-1.0	+2.0	-2.0	+4.0	-4.0
Power Supply Power Port of EUT	L1	B	B	B	B	/	/	/	/
	L2	B	B	B	B	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	B	B	B	B	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: Charging & Playing

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	B	B	B	B	/	/	/	/
	L2	B	B	B	B	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	B	B	B	B	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: Downloading

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	B	B	B	B	/	/	/	/
	L2	B	B	B	B	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	B	B	B	B	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: Camera On

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	B	B	B	B	/	/	/	/
	L2	B	B	B	B	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	B	B	B	B	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test mode: FM Mode

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	B	B	B	B	/	/	/	/
	L2	B	B	B	B	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	B	B	B	B	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test Result: Pass

10. Surges

10.1 Test Procedure

Test is conducting under the description of IEC 61000-4-5.

10.2 Test Performance

Performance Criterion: Pass for GSM, GPRS_CT, CR, EDGE _CT, CR
Pass for WCDMA, HSDPA, HSUPA_CT, CR
Pass for LTE_TT, TR
A for BT, Wi-Fi _CT, CR
A for GPS_CR
A for Charging & Playing
A for Downloading
A for Camera On
A for FM Mode

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	53%
ATM Pressure:	1011 mbar

10.3 Surge Test Data

Test mode: GSM900_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: GSM1800_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: GPRS900_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: GPRS1800_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: EDGE900_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: EDGE 1800_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: WCDMA Band 1_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: WCDMA Band 8_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: HSDPA Band 1_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: HSDPA Band 8_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: HSUPA Band 1_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: HSUPA Band 8_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: FDD-LTE Band 1_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: FDD-LTE Band 3_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: FDD-LTE Band 7_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: FDD-LTE Band 20_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: TDD-LTE Band 38_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	Pass	/
2	1kV	±	L-N	Pass	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: BT_TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	B	/
2	1kV	±	L-N	B	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: Wi-Fi _TT, TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	B	/
2	1kV	±	L-N	B	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: GPS_TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	B	/
2	1kV	±	L-N	B	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: Charging & Playing

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	B	/
2	1kV	±	L-N	B	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: Downloading

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	B	/
2	1kV	±	L-N	B	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: Camera On

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	B	/
2	1kV	±	L-N	B	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test mode: FM Mode

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	B	/
2	1kV	±	L-N	B	/
3	2kV	±	L-N, L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test Result: Pass

11. Radio Frequency, Common Mode (C/S)

11.1 Test Procedure

Test is conducting under the description of IEC 61000-4-6.

11.2 Test Performance

Performance Criterion: Pass for GSM, GPRS_CT, CR, EDGE _CT, CR
Pass for WCDMA, HSDPA, HSUPA_CT, CR
Pass for LTE_TT, TR
A for BT, Wi-Fi _CT, CR
A for GPS_CR
A for Charging & Playing
A for Downloading
A for Camera On
A for FM Mode

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	53%
ATM Pressure:	1011 mbar

11.3 Continuous Conducted Disturbances Test Data

Sweep frequency range: 150kHz~80MHz
Frequency step: 1% of fundamental
Dwell time: 1 second

Test mode: GSM900_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: GSM1800_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: GPRS900_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: GPRS1800_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: EDGE900_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: EDGE1800_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: WCDMA Band 1_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: WCDMA Band 8_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: HSDPA Band 1_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: HSDPA Band 8_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: HSUPA Band 1_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: HSUPA Band 8_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: FDD LTE Band 1_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: FDD LTE Band 3_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: FDD LTE Band 7_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: FDD LTE Band 20_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: TDD LTE Band 38_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	Pass	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: BT_CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	A	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: Wi-Fi _CT, CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	A	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: GPS_CR

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	A	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: Charging & Playing

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	A	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: Downloading

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	A	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: Camera On

Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	A	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test mode: FM Mode

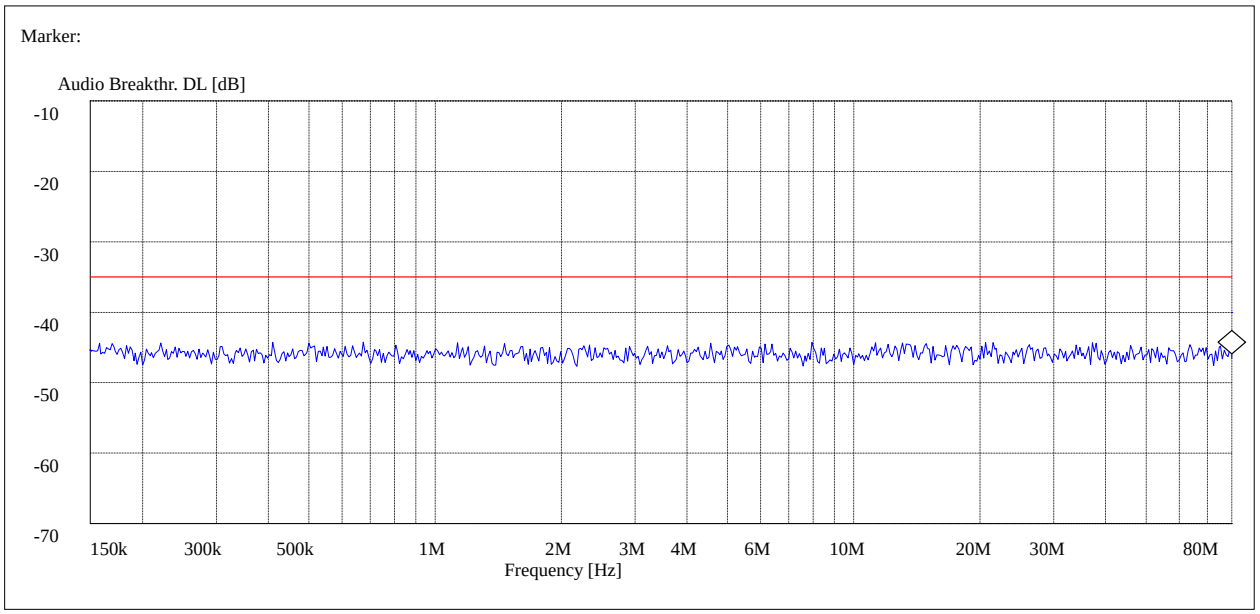
Level	Voltage (V) (rms, unmodulated)	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	A	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

For LTE data mode Throughput(%)

Band	Throughput Measure (%)	Throughput Limit (%)
Band1	97.87	>95
Band3	97.56	>95
Band7	97.87	>95
Band20	97.70	>95
Band38	97.25	>95

Test Result: Pass

GSM900 Mode: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Audio Breakthr. DL [dB]
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-20
-30
-40
-50
-60
-70
150k
300k
500k
1M
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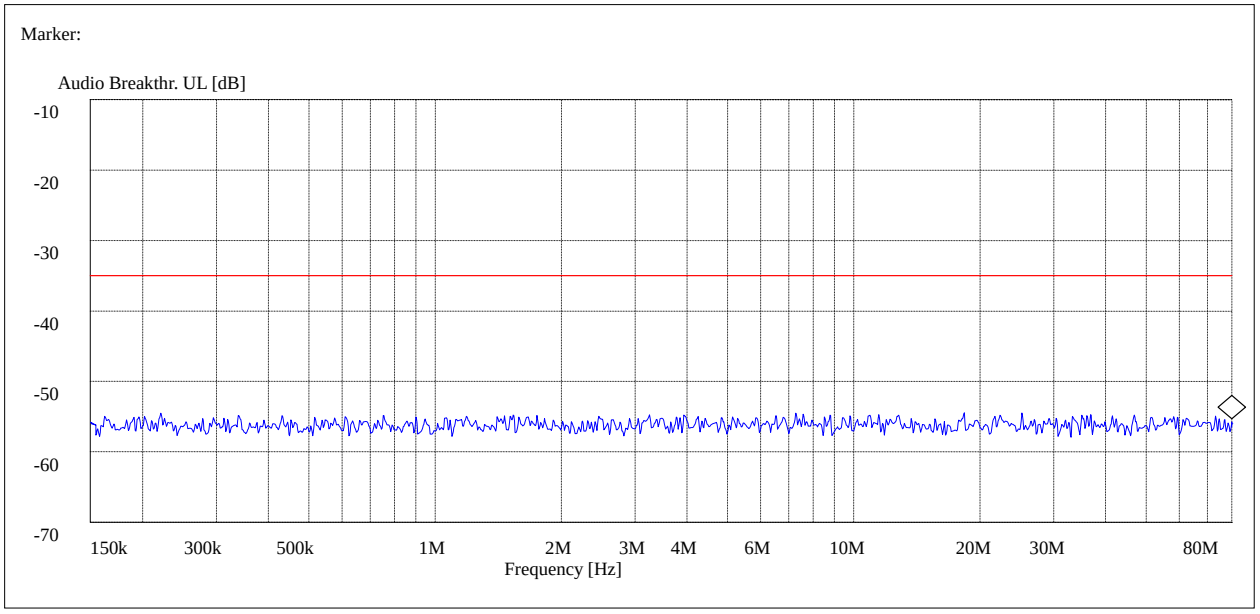
3M
4M
6M
10M
20M
30M
80M
Frequency [Hz]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Audio Breakthr. UL [dB]
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-20
-30
-40
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-60
-70
150k
300k
500k
1M
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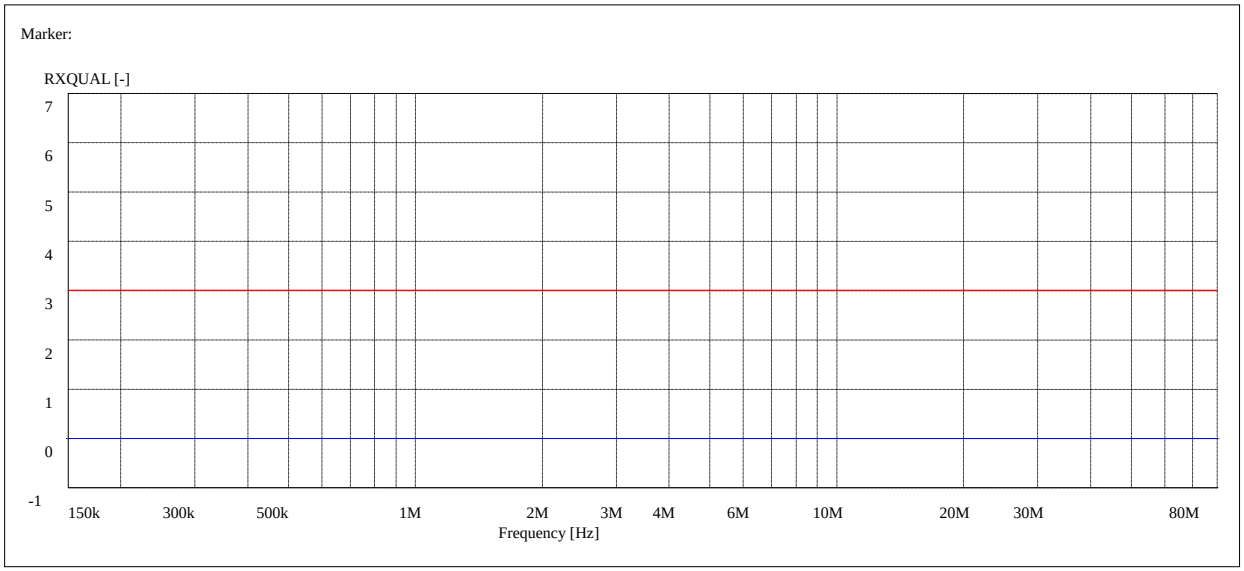
4M
6M
10M
20M
30M
80M
Frequency [Hz]


Marker:
RXQUAL [-]
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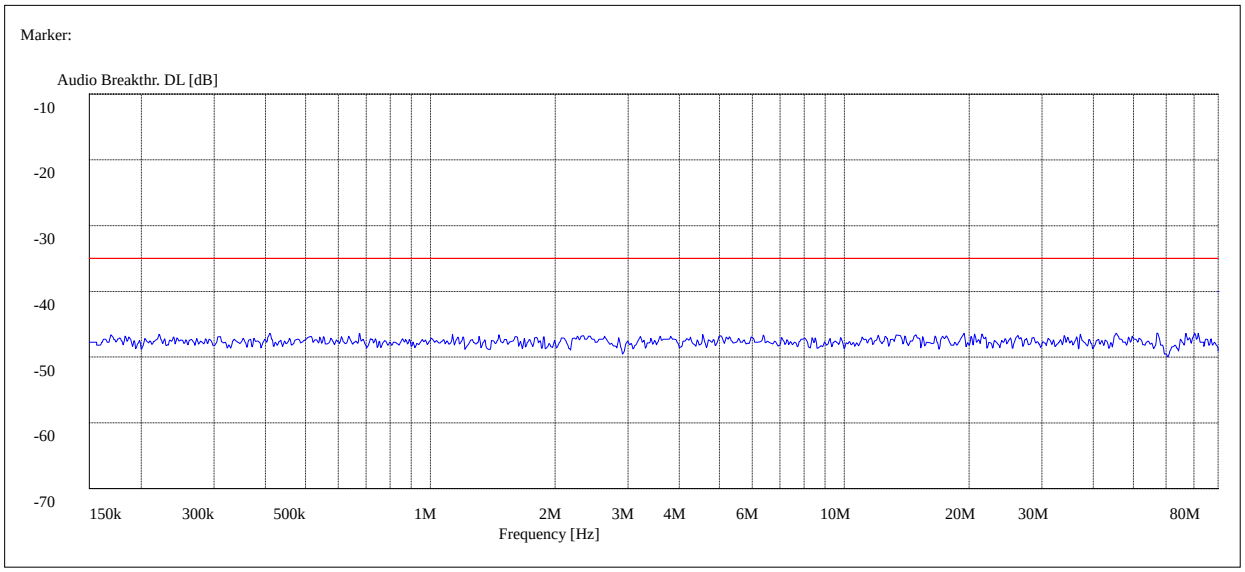
6
5
4
3
2
1
0
-1
150k
300k
500k
1M
2M
3M
4M
6M
10M
20M
30M
80M
Frequency [Hz]

DCS1800: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-20
-30
-40
-50
-60
-70
150k
300k
500k
1M
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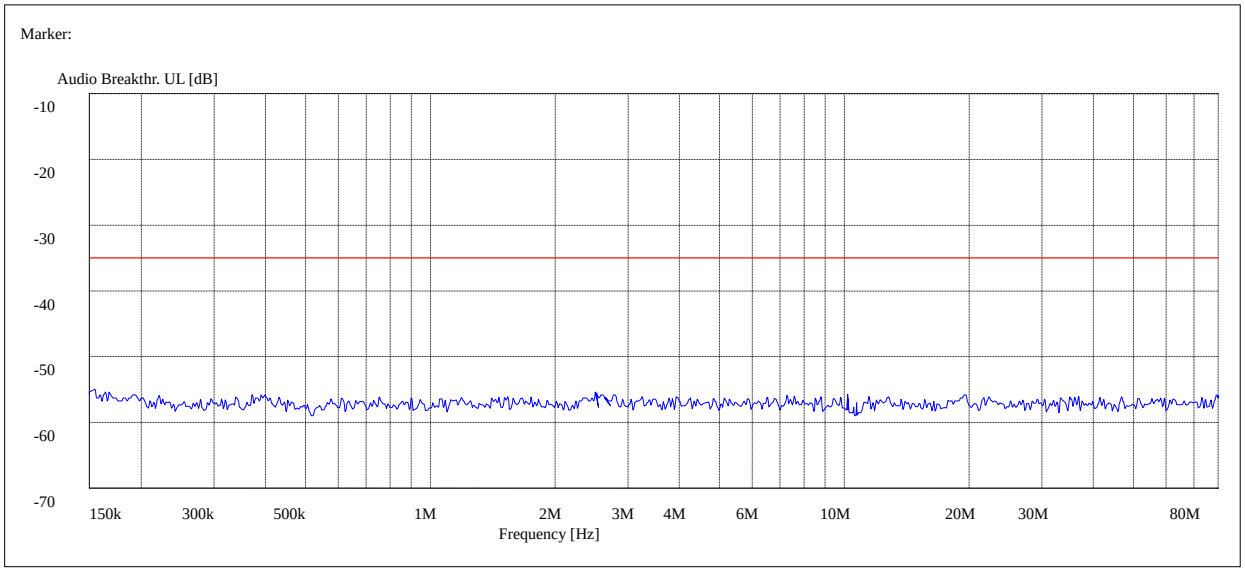
4M
6M
10M
20M
30M
80M
Frequency [Hz]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-20
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300k
500k
1M
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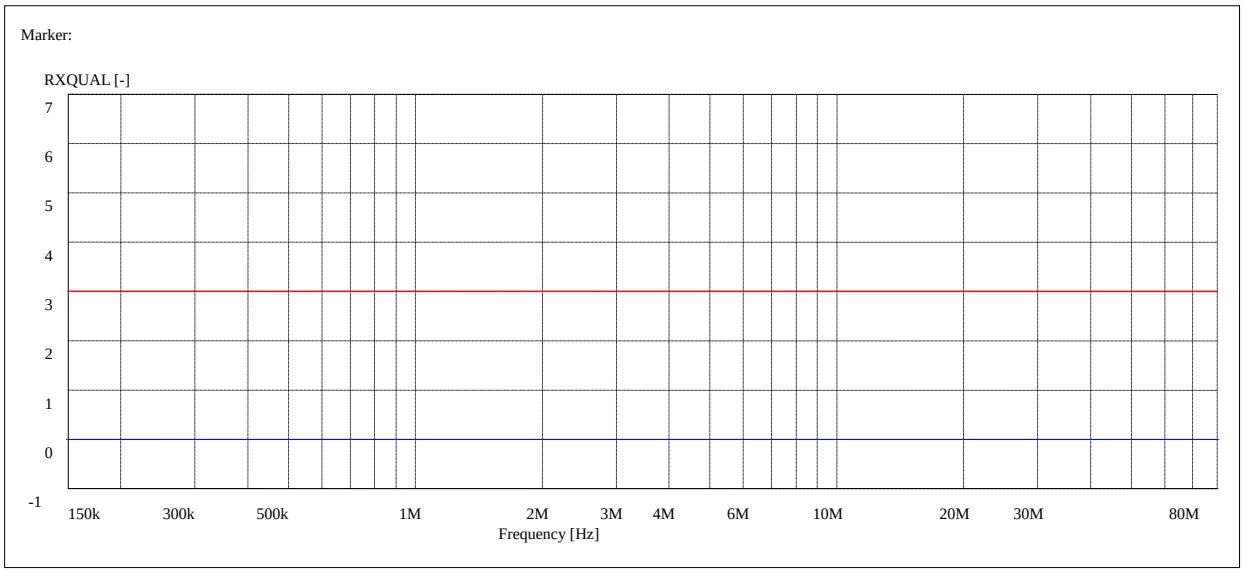
4M
6M
10M
20M
30M
80M
Frequency [Hz]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6
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1
0
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150k
300k
500k
1M
2M
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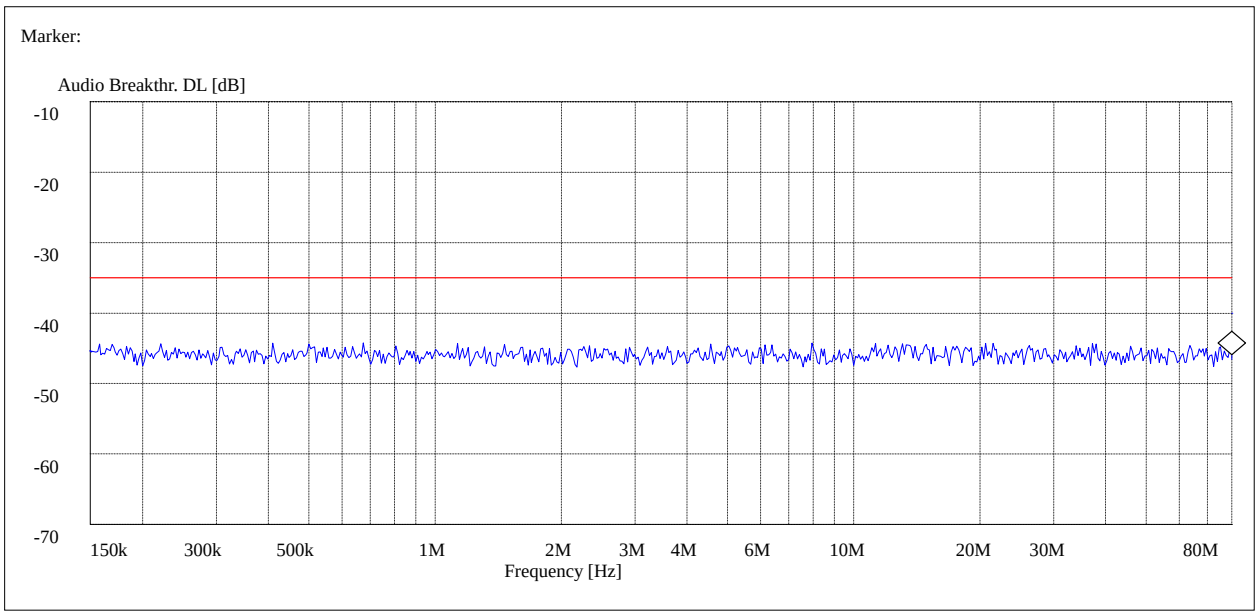
6M
10M
20M
30M
80M
Frequency [Hz]

WCDMA 900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-20
-30
-40
-50
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-70
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300k
500k
1M
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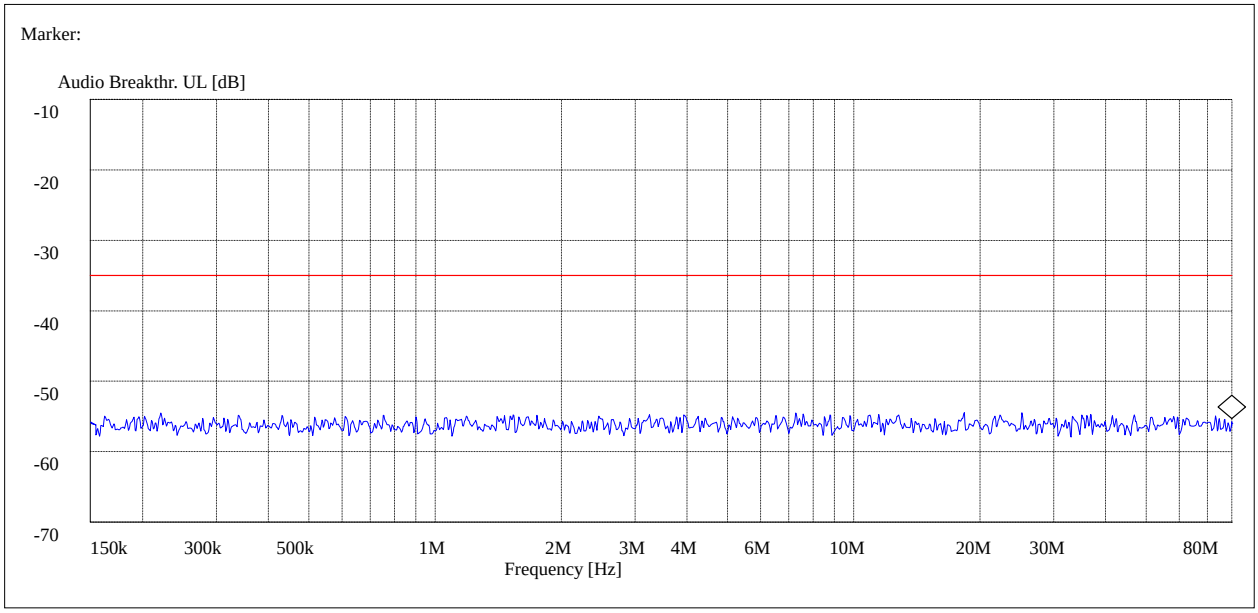
4M
6M
10M
20M
30M
80M
Frequency [Hz]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-40
-50
-60
-70
150k
300k
500k
1M
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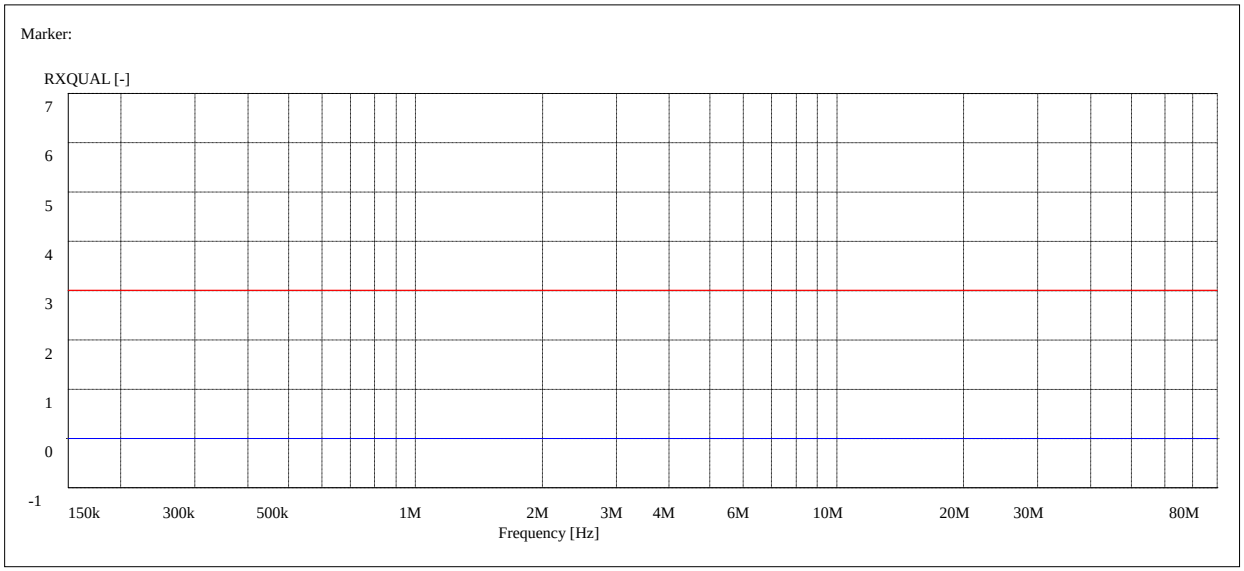
4M
6M
10M
20M
30M
80M
Frequency [Hz]


Marker:
RXQUAL [-]
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6
5
4
3
2
1
0
-1
150k
300k
500k
1M
2M
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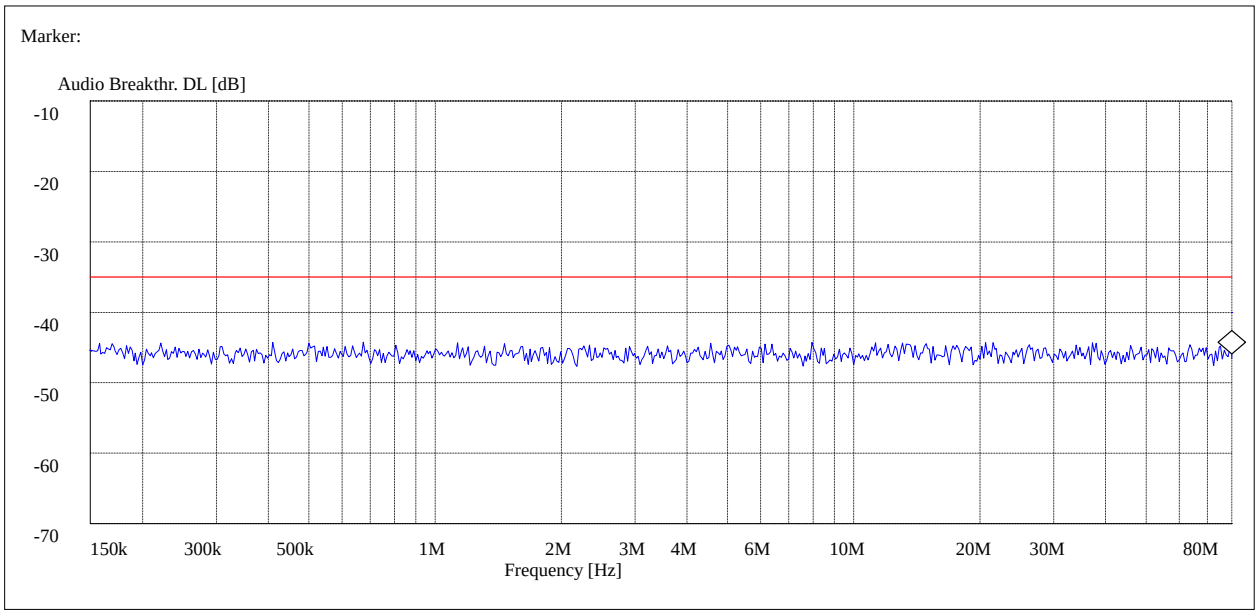
4M
6M
10M
20M
30M
80M
Frequency [Hz]

WCDMA 2100


Marker:
Audio Breakthr. DL [dB]
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-20
-30
-40
-50
-60
-70
150k
300k
500k
1M
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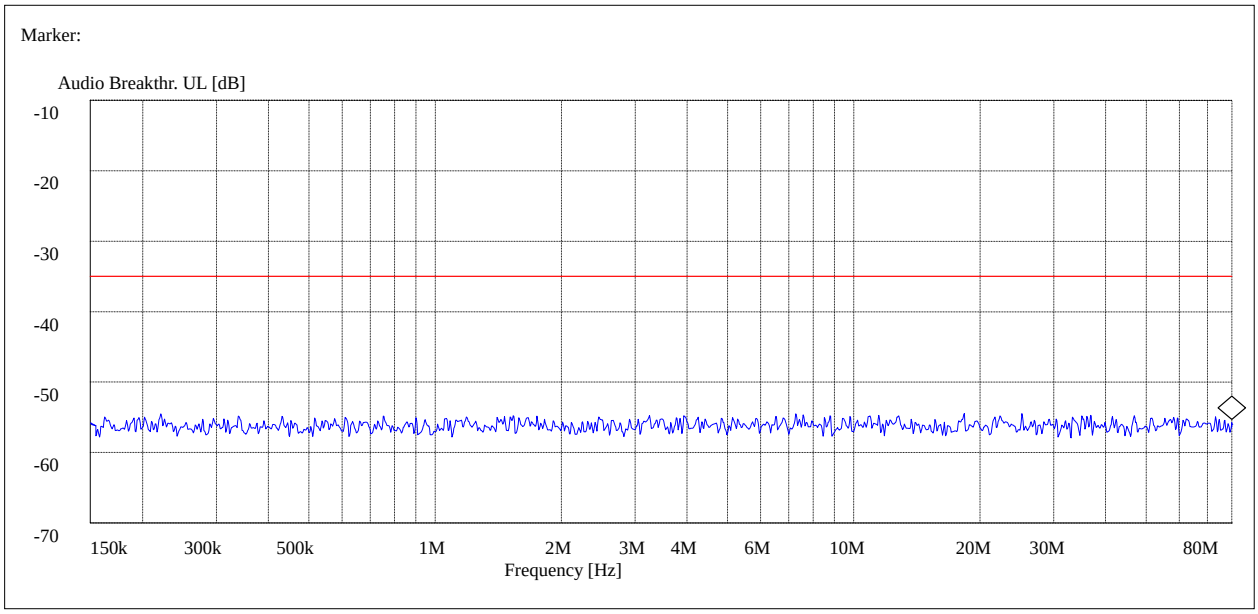
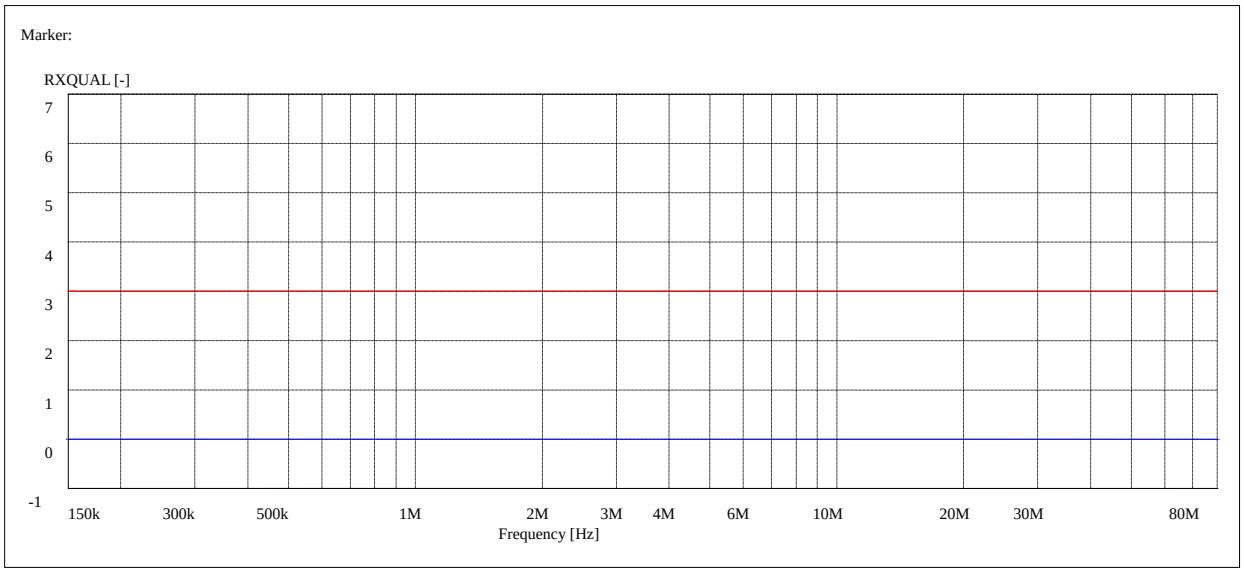
4M
6M
10M
20M
30M
80M
Frequency [Hz]





Idle mode cannot get any unintentionally operation.

Test Result: Pass

12. Voltage Dips and Interruptions

12.1 Test Procedure

Test is conducting under the description of IEC 61000-4-11.

Test Performance

Performance Criterion: PASS

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	50%
ATM Pressure:	1011 mbar

12.2 Voltage Dips And Interruptions Test Data

U: Vlotage dips in % U_T (U_T is rated voltage for the EUT)

T: Test duration

TM1(Worst case)

Level	U	T	Phase Angle	N	Pass	Fail
1	100%	10ms	0/90/180/270	3	PASS	/
2	100%	20ms	0/90/180/270	3	PASS	/
3	30%	500ms	0/90/180/270	3	PASS	/
4	100%	5000ms	0/90/180/270	3	PASS	/

EXHIBIT 1 - PRODUCT LABELING

Proposed CE Label Format

Smart Phone
Model: VOLT X
Input: 5V⎓, 1A or Powered by 3.8V, 4000mAh
Rechargeable Li-polymer Battery
CE 0700
Gui zhou Fortuneship Technology Co., Ltd.

Specifications: Text is Black in color and is justified. Labels are printed in indelible ink on permanent adhesive backing or silk-screened onto the EUT or shall be affixed at a conspicuous location on the EUT. The 'CE' marking must be affixed to the EUT or to its data plate. Where this is not possible or not warranted on account of the nature of the apparatus, it must be affixed to the packaging, if any, and to the accompanying documents. The 'CE' marking is allowed less than 5 mm but must clear. If the 'CE' marking is reduced or enlarged the proportions given in the above graduated drawing must be respected. The Importer name, address and Manufacturer name and address should indicate on marking label or packaging or in a document accompanying

Proposed Label Location on EUT

CE Label Location

EXHIBIT 2 - EUT PHOTOGRAPHS

EUT View 1

EUT View 2

EUT View 3

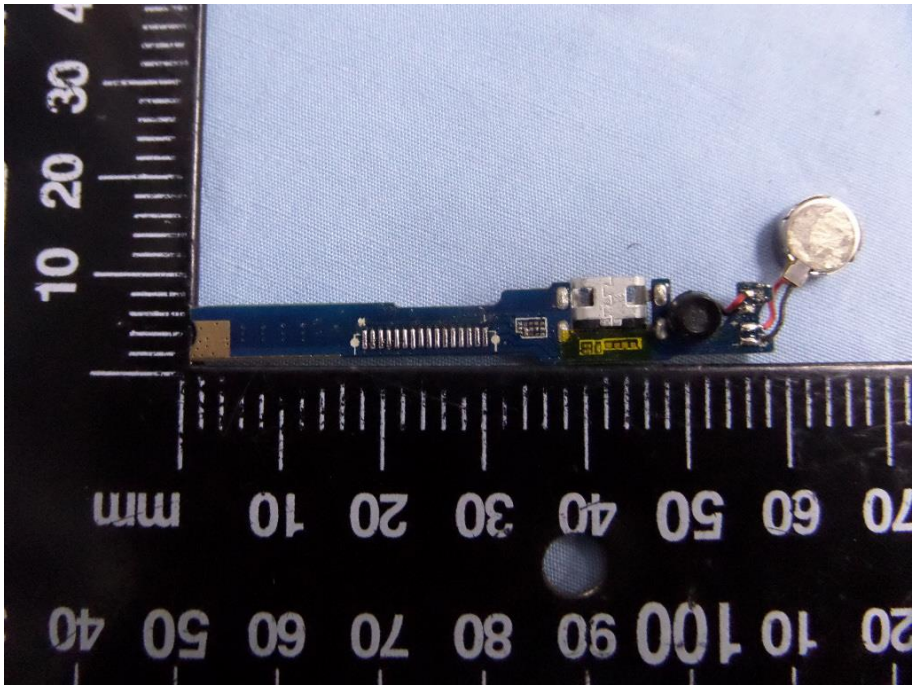
EUT Housing and Board View 1

EUT Housing and Board View 2

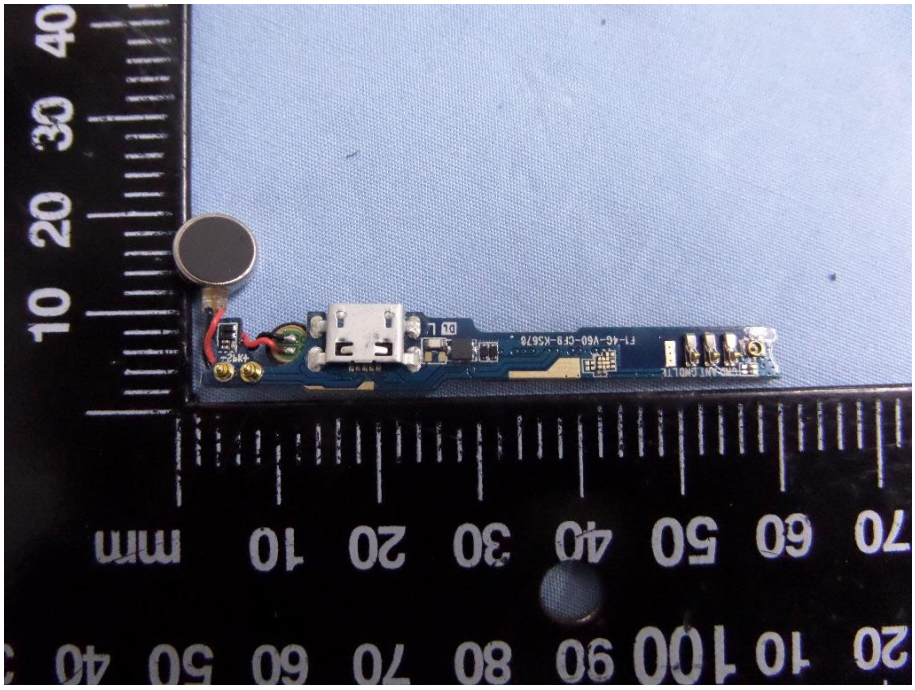
EUT Housing and Board View 3

EUT Housing and Board View 4

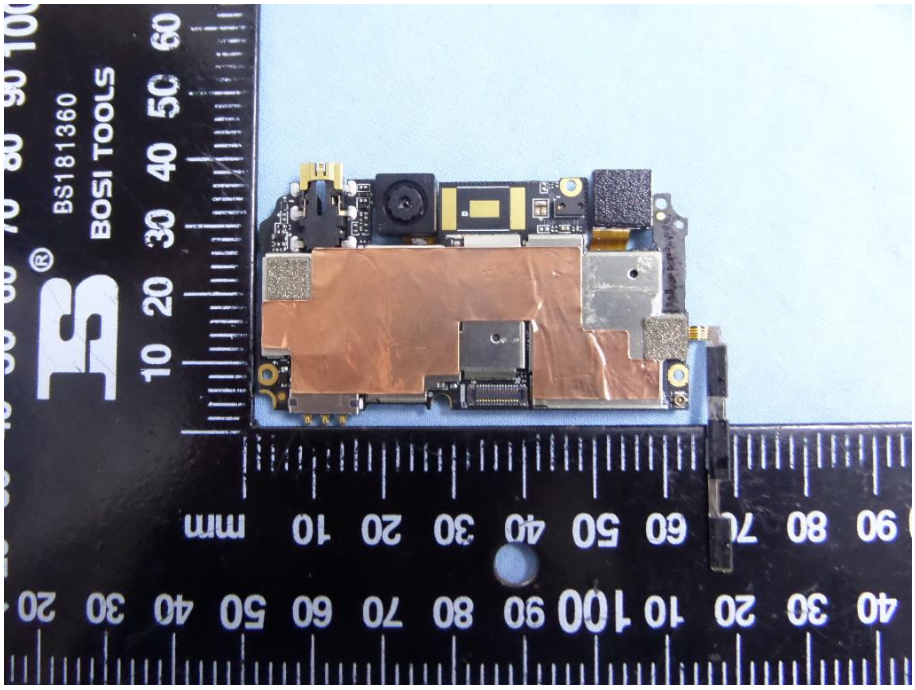
Solder Board-Component View 1



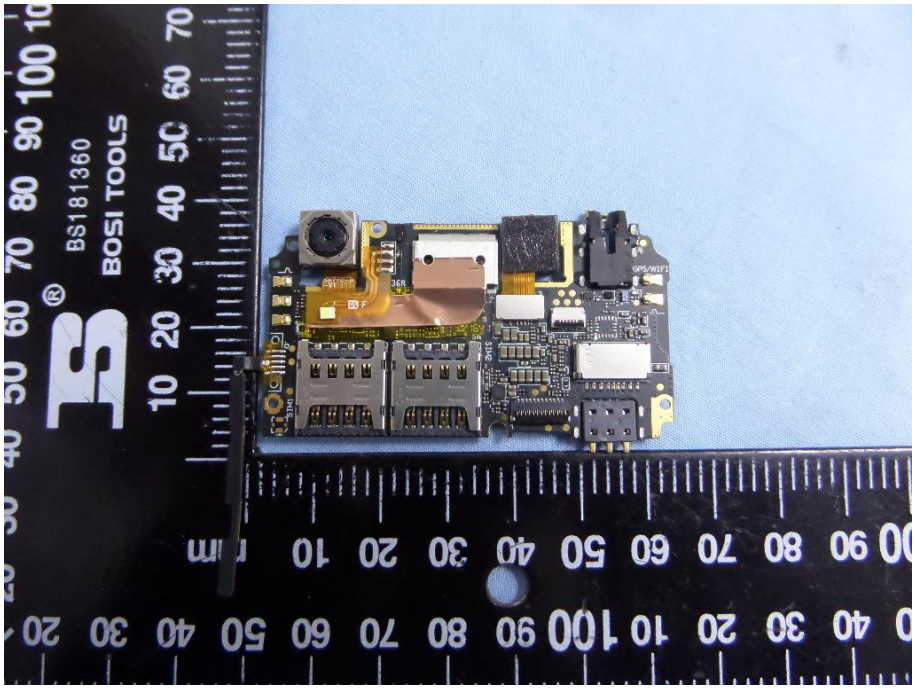
Solder Board-Component View 2



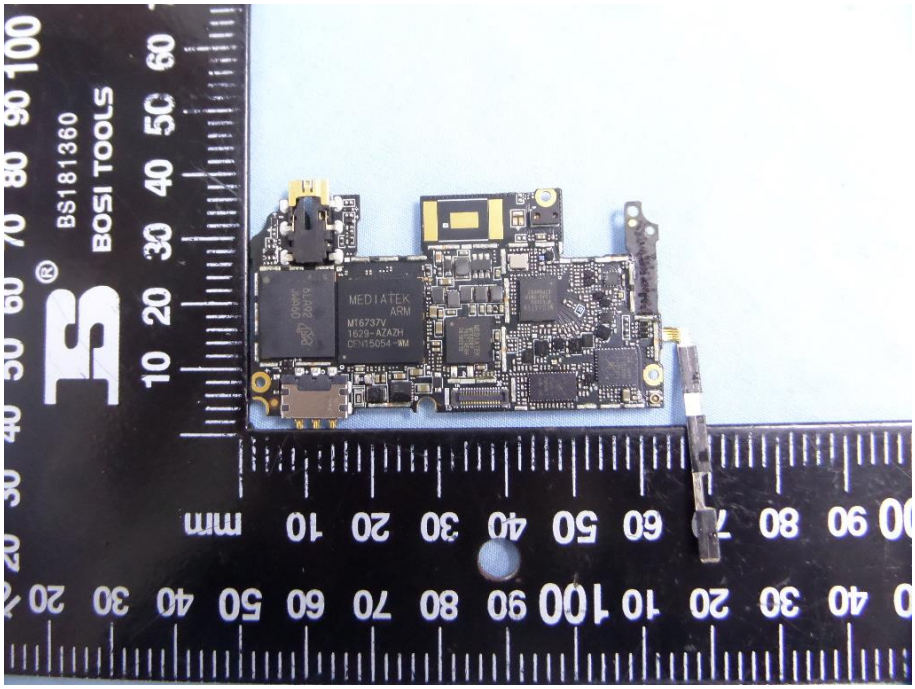
Solder Board-Component View 3



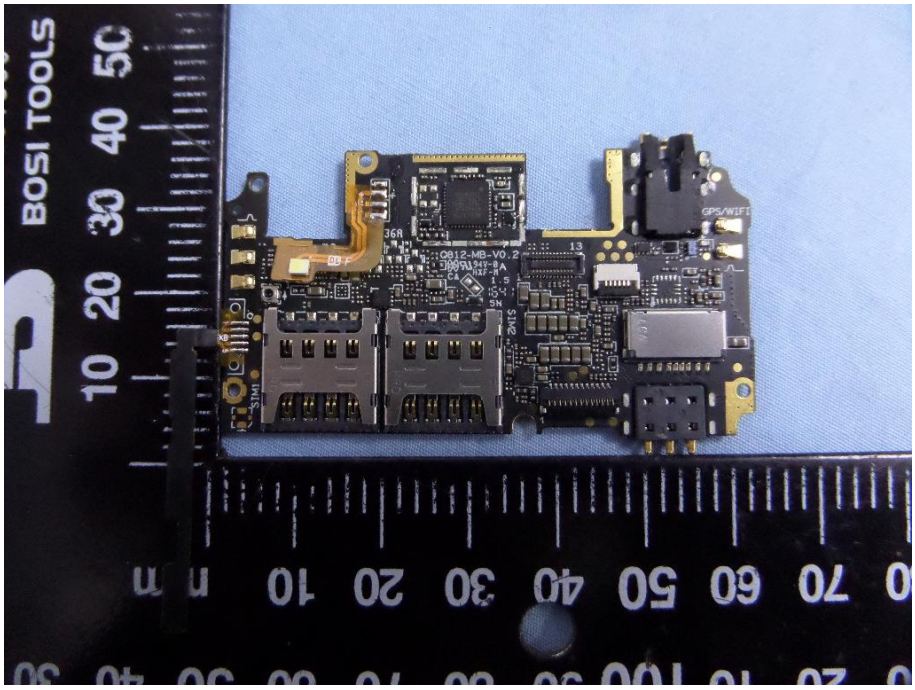
Solder Board-Component View 4



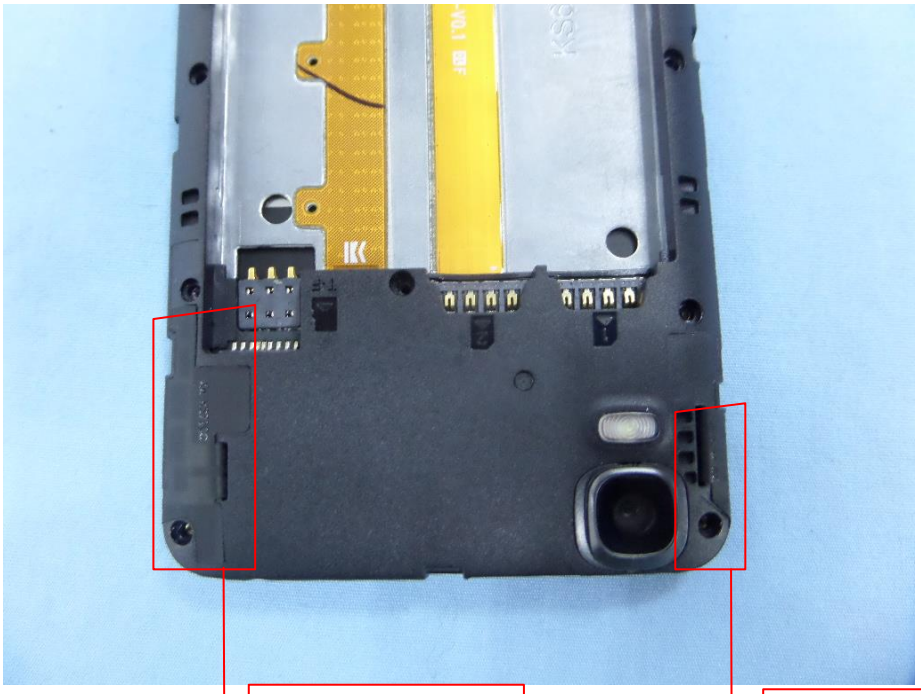
Solder Board-Component View 5



Solder Board-Component View 6



Antenna View



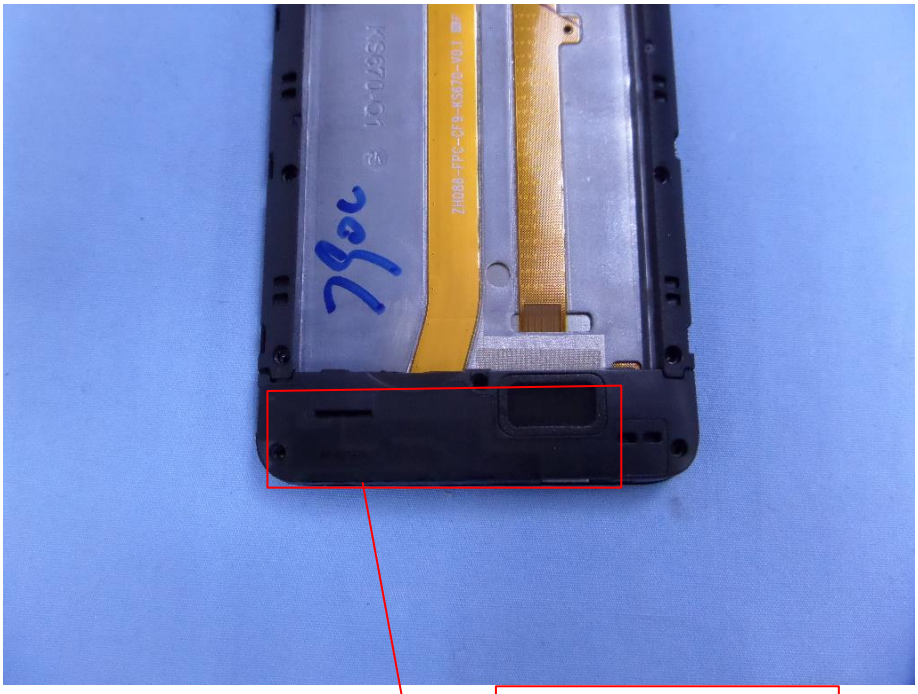
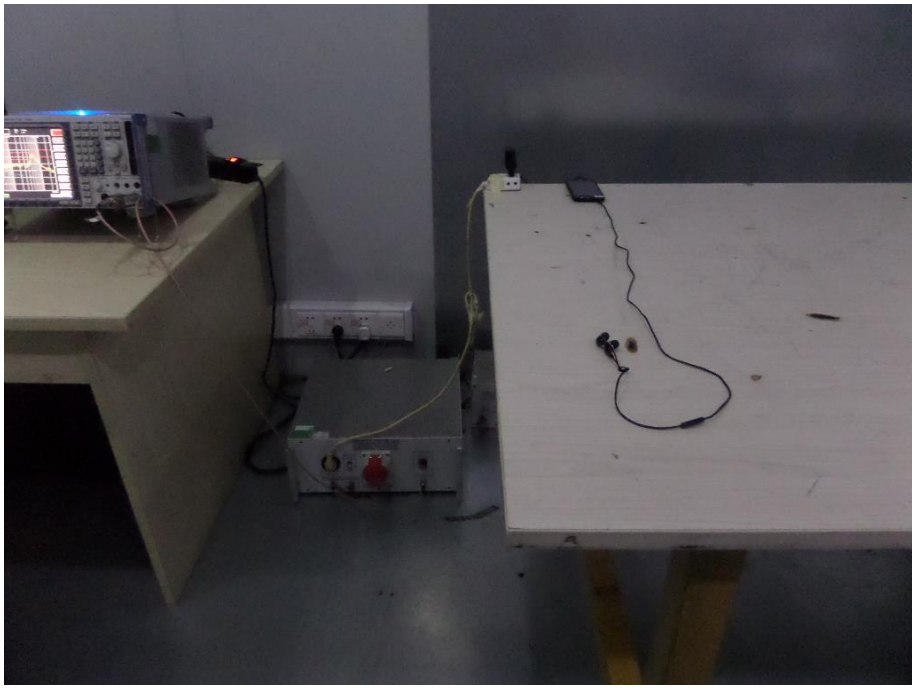
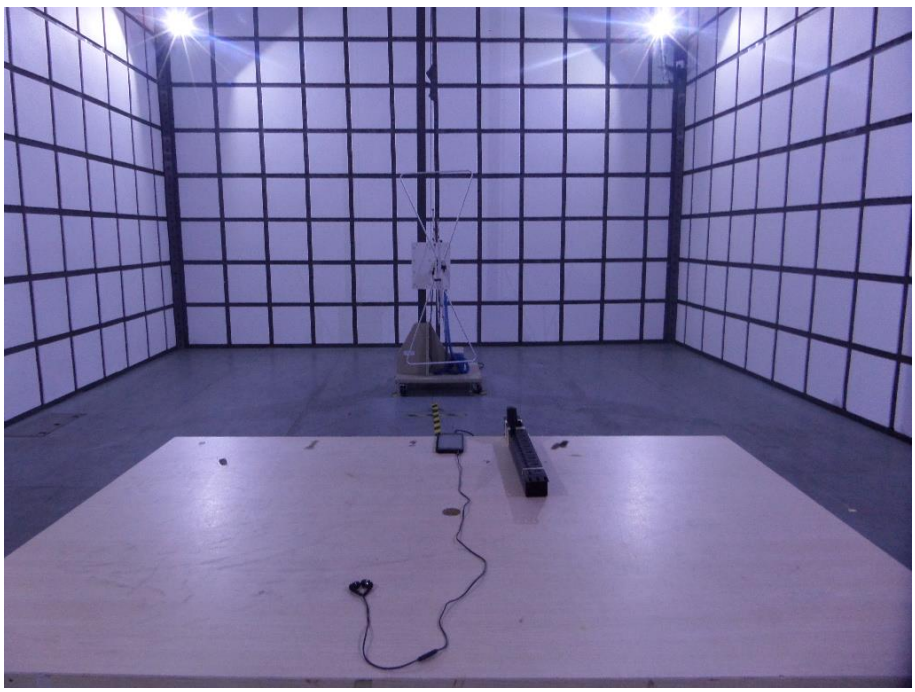


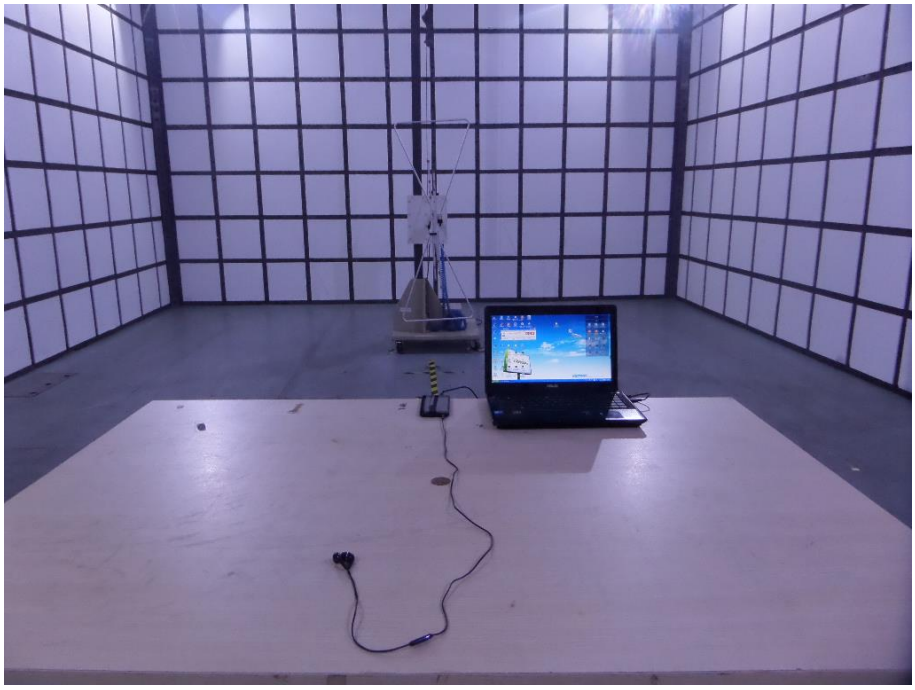
EXHIBIT 3 - TEST SETUP PHOTOGRAPHS

Conduction Emission Test View

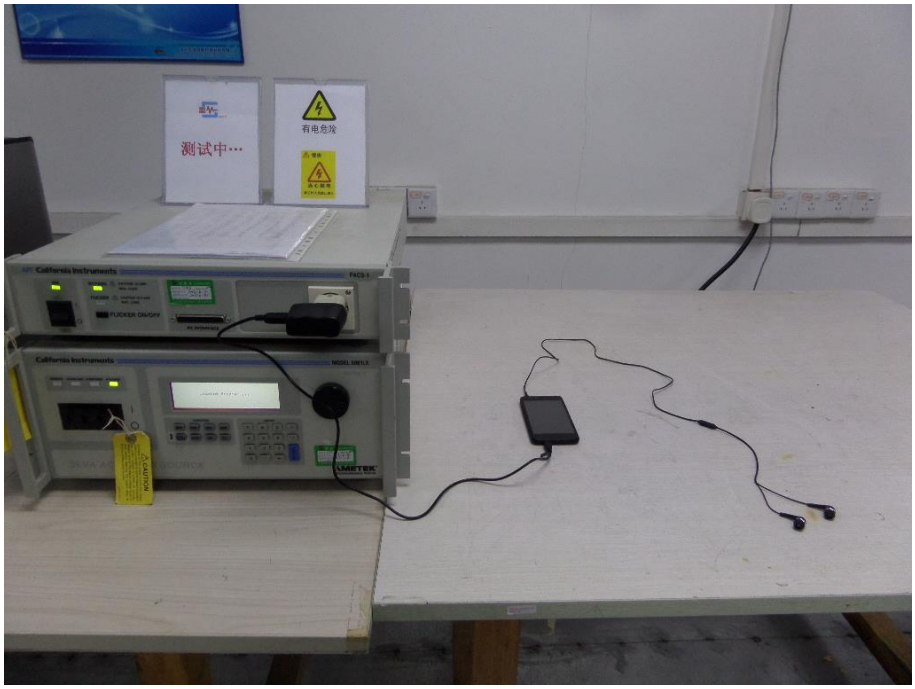


Radiation Emission Test View

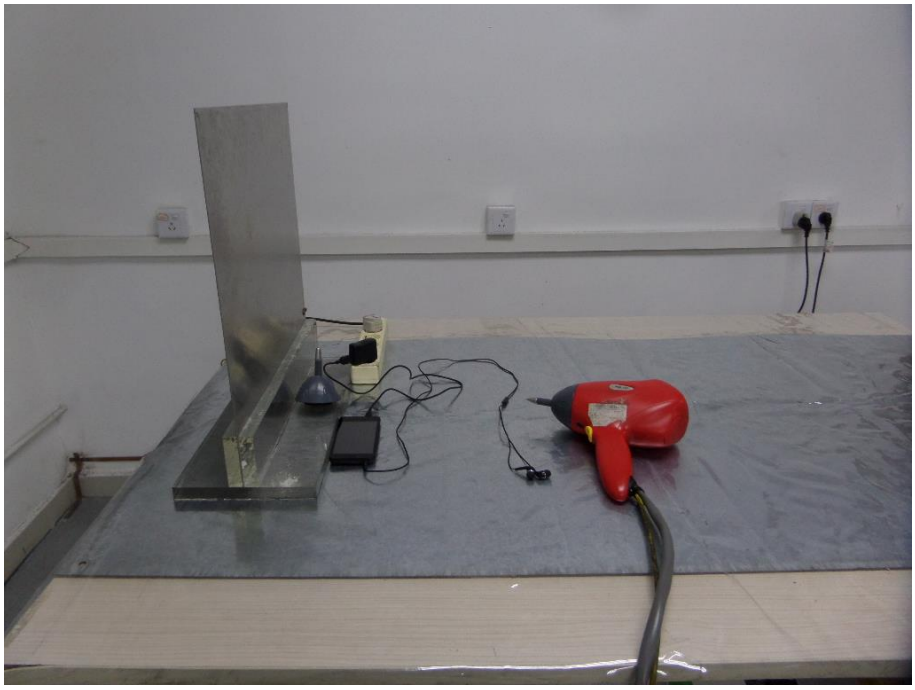


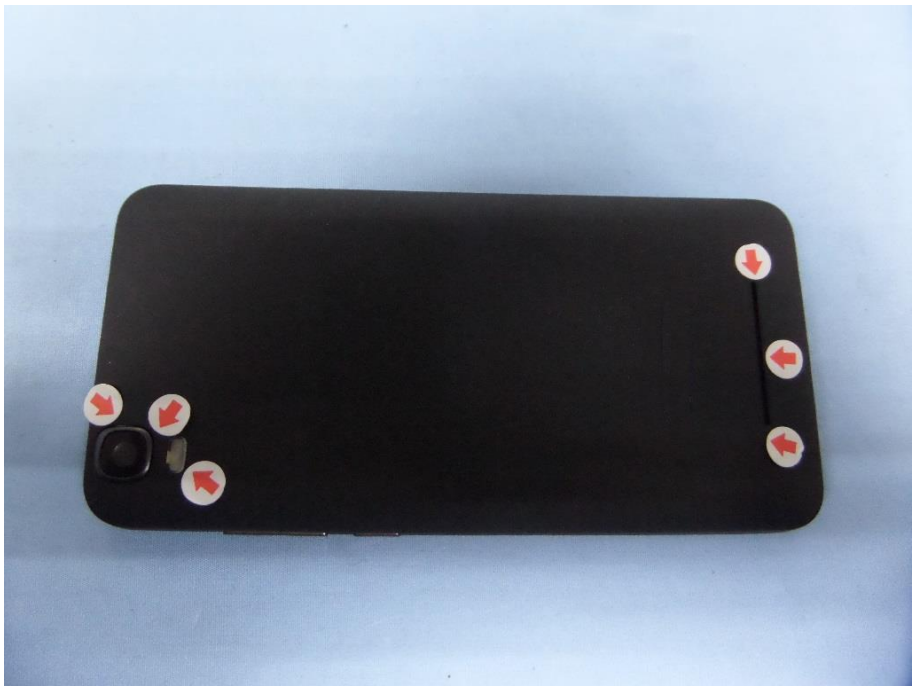


Harmonic/Flicker Test View

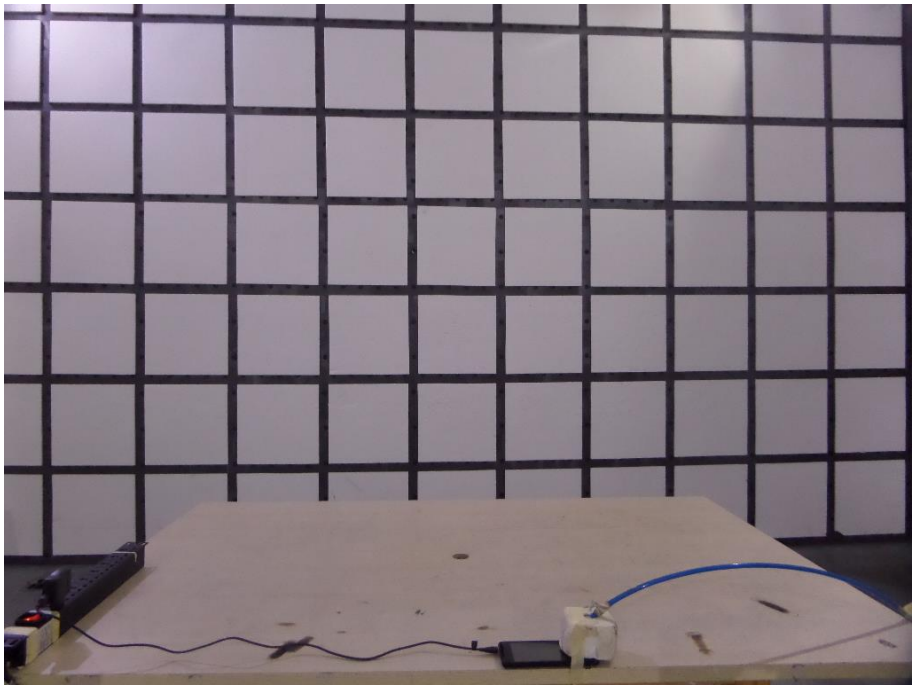


IEC61000-4-2 Test View

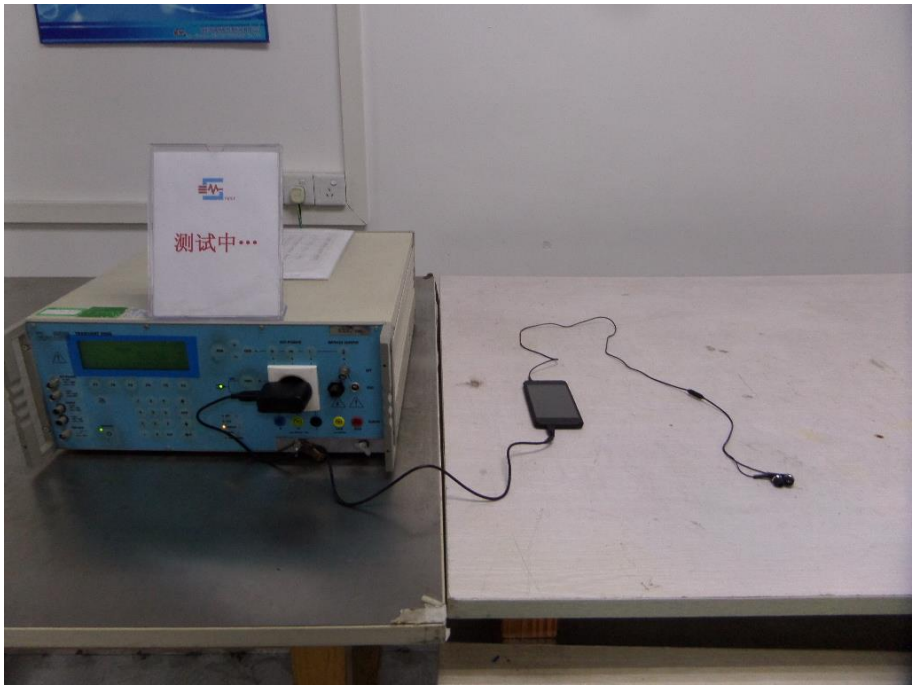




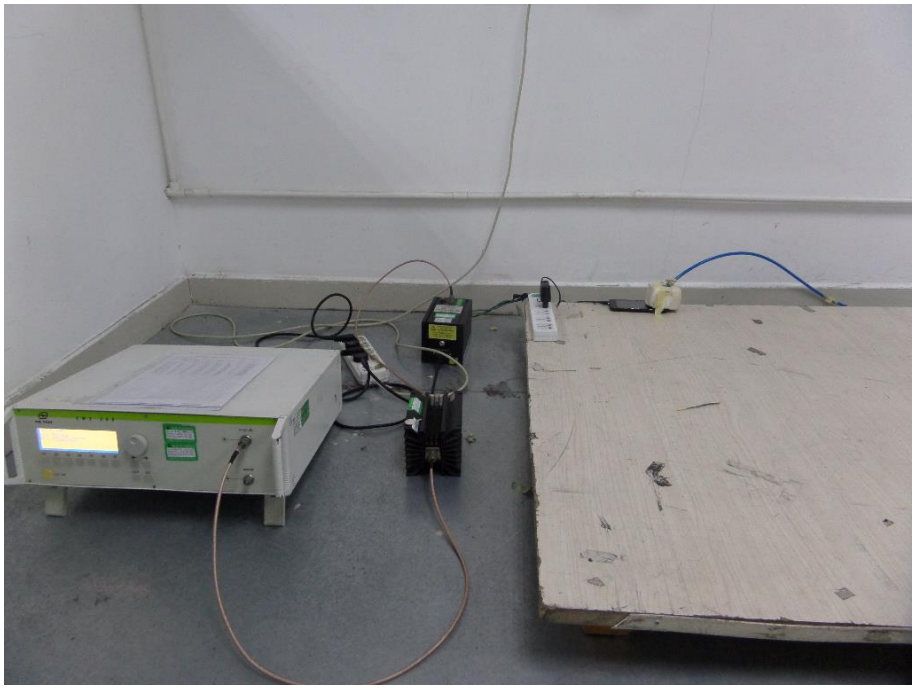
IEC61000-4-3 Test View

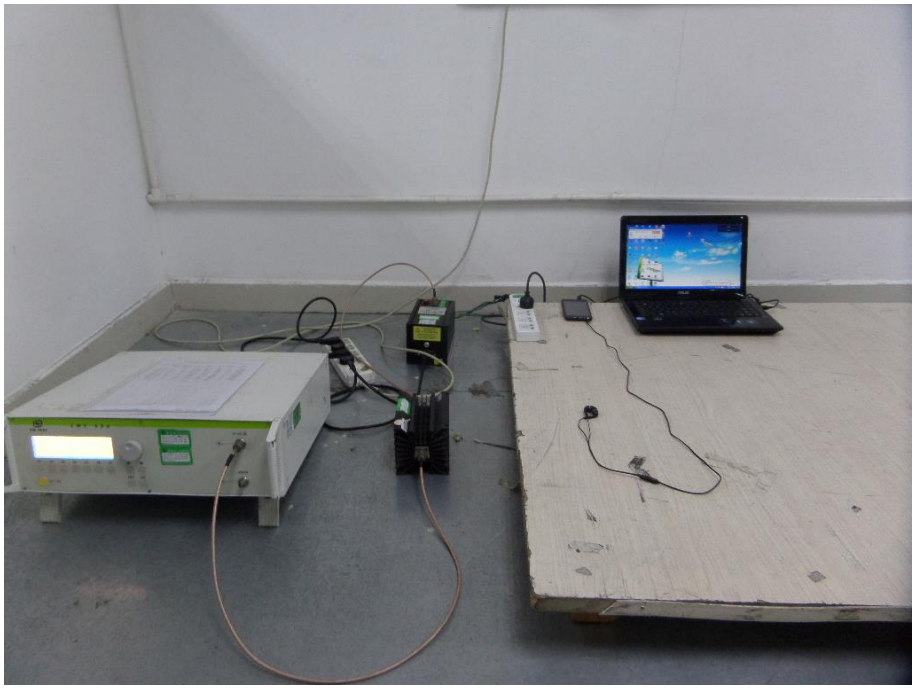


IEC61000-4-4/5/11 Test View



IEC61000-4-6 Test View





******* END OF REPORT *******