TESTREPORT

Applicant Name :	INFINIX MOBILITY LIMITED
Address :	FLAT 39 8/F BLOCK D WAH LOK INDUSTRIAL CENTRE 31-35 SHAN MEI STREET FOTAN NT Hong Kong
ReportNumber:	SZNS220215-04527E-RF-00AA1
FCC ID:	2AIZN-X6812B

Test Standard (s)

FCC PART 15.225

Sample Description

Product Type:	Mobile Phone
Model No.:	X6812B
Multiple Model(s) No.:	N/A
Trade Mark:	Infinix
Date Received:	2022/02/15
Date of Test:	2022/02/22~2022/02/25
Report Date:	2022/03/01

Test Result:	Pass*

* In the configuration tested, the EUT complied with the standards above.

Prepared andChecked By:

Ting Lü
EMC Engineer

Approved By:

Robert Li
EMC Engineer

Note: This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "★ ".
Shenzhen Accurate Technology Co., Ltd. is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect testresults are marked with an asterisk '*'. Customer model name, addresses, names, trademarks etc. are not considered data.
This report cannot be reproduced except in full, without prior written approval of the Company. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

TABLE OF CONTENTS

GENERALINFORMATION

Product Description for Equipment under Test (EUT)

Frequency Range	13.56 MHz
Maximum Field Strength	82.19dBuV/m@3m
Modulation Technique	ASK
Voltage Range	DC 3.85V from battery or DC 5.0V or DC7.5V from adapter
Sample serial number	SZNS220215-04527E-RFA1-S1(Assigned by ATC)
Sample/EUT Status	Good condition
Adapterinformation	Model: U180XSA Input: AC 100-240V, 50/60Hz, 0.6A Output: DC 5.0V, 2.4A or DC7.5V,2.4A 18.0W Max

Objective

This Type approval report is in accordance with Part 2- Subpart J, and Part 15-Subparts A and C of the Federal Communication Commissions rules.

The objective is to determine the compliance of the EUT with FCC rules, section 15.203, 15.205, 15.207, 15.209 and 15.225.

This is a CIIPC application of the device; the differences between the original device and the current one are as follows:

(1) Adding one of Adapter.

Based on above differences, it will affected partial test data, so the changed items were performed.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

All emissions measurement was performed at Shenzhen Accurate Technology Co., Ltd. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		5%
RF Frequency		$0.082*10^{-7}$
RF output power, conducted		0.73dB
Unwanted Emission, conducted		1.6dB
AC Power Lines Conducted Emissions		2.72dB
Emissions, Radiated	9kHz - 30MHz	2.66dB
	30MHz - 1GHz	4.28dB
	1GHz - 18GHz	4.98dB
	18GHz -26.5GHz	5.06dB
	26.5GHz -40GHz	4.72dB
Temperature		1℃
Humidity		6%
Supply voltages		0.4%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 708358, the FCC Designation No.: CN1189. Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 429 7.01.

Listed by Innovation, Science and Economic Development Canada (ISEDC), the Registration Number is 5077A.

SYSTEM TEST CONFIGURATION

Justification

The system was configured for testing in a typical fashion (as normally used by a typical user).

EUT Exercise Software

No Exercise Software was used.

Equipment Modifications

No modification on the EUT.

Support Equipment List and Details

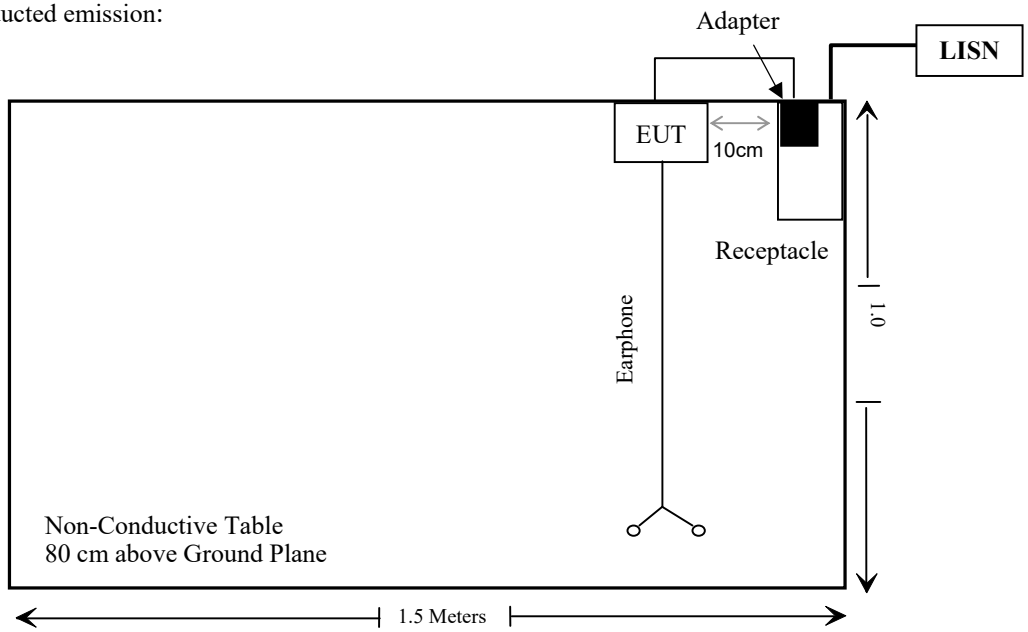
Manufacturer	Description	Model	Serial Number
Unknown	earphone	Unknown	Unknown

External I/O Cable

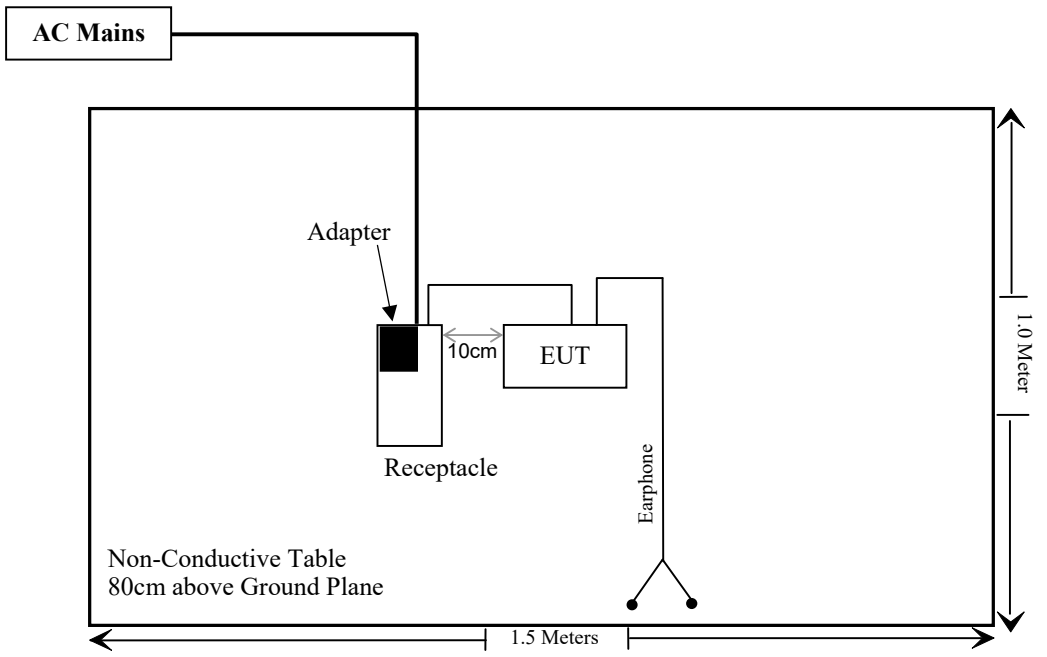
Cable Description	Length (m)	From Port	To
Un-shielding Detachable USB Cable	1.0	EUT	Adapter

Block Diagram of Test Setup

For conducted emission:



For Radiated Emissions (below 1GHz):



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliant*
§15.207	AC Line Conducted Emission	Compliant
§15.225 §15.209§15.205	Radiated Emission Test	Compliant
§15.225(e)	Frequency Stability	Compliant*
§15.215(c)	20dB Emission Bandwidth	Compliant*

Compliant*: Please refer to the original report: SZ1210813-34307E-RF-00E.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted emission test					
Rohde& Schwarz	EMI Test Receiver	ESCI	100784	2021/12/13	2022/12/12
Rohde & Schwarz	L.I.S.N.	ENV216	101314	2021/12/13	2022/12/12
Anritsu Corp	50 Coaxial Switch	MP59B	6100237248	2021/12/13	2022/12/12
Unknown	RF Coaxial Cable	No.17	N0350	2021/12/14	2022/12/13
Conducted Emission Test Software: e3 19821b (V9)					
Radiated emission test					
Rohde& Schwarz	Test Receiver	ESR	102725	2021/12/13	2022/12/12
SONOMA INSTRUMENT	Amplifier	310 N	186131	2021/11/09	2022/11/08
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2021/07/06	2024/07/05
SCHWARZBECK	LOOP ANTENNA	FMZB1516	1516131	2021/12/22	2024/12/21
Unknown	RF Coaxial Cable	No.12	N040	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.13	N300	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.14	N800	2021/12/14	2022/12/13
Radiated Emission Test Software: e3 19821b (V9)					

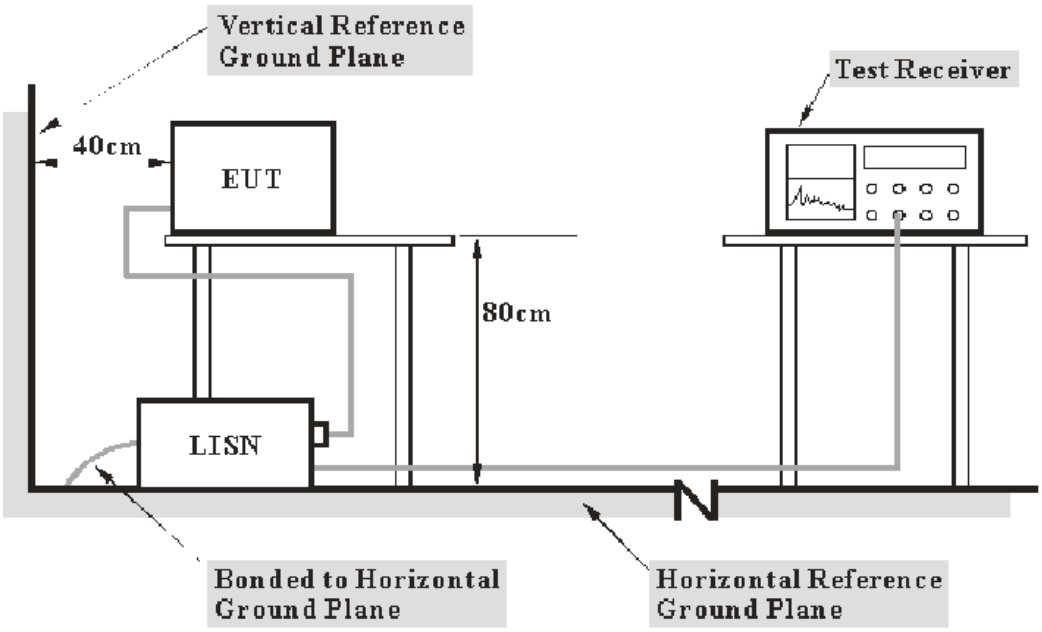
*** Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §15.207 – AC LINE CONDUCTED EMISSION

Applicable Standard

FCC§15.207

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30MHz	9 kHz

Test Procedure

During the conducted emission test, the adapter of Host was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

Corrected Factor & Margin Calculation

The Corrected factor is calculated by addingLISN VDF (Voltage Division Factor) and Cable Loss. The basic equation is as follows:

Factor = LISN VDF + Cable Loss

The "**Over Limit**" column of the following data tables indicates the degree of compliance with the applicablelimit. For example, an over limit of -7dB means the emission is 7 dB below the limit. The equation for margincalculation is as follows:

Over limit = Result – Limit
Result = Reading + Factor

Test Data

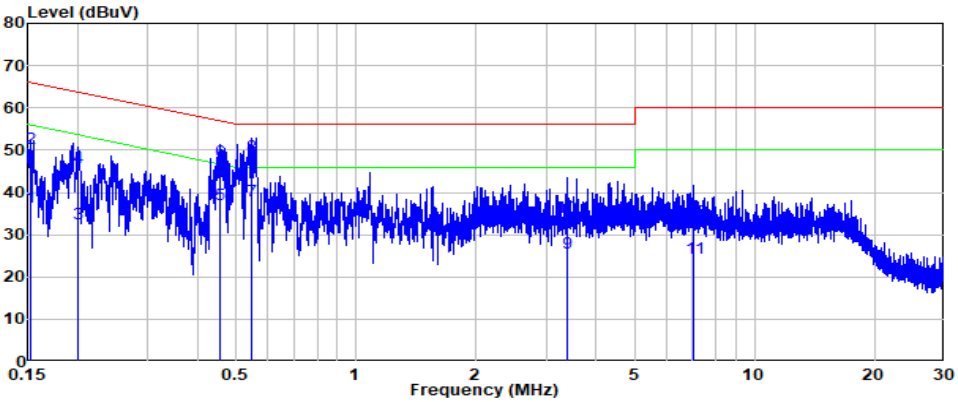
Environmental Conditions

Temperature:	23°C
Relative Humidity:	53%
ATM Pressure:	101.0 kPa

The testing was performed by Bin Duan on 2022-02-22.

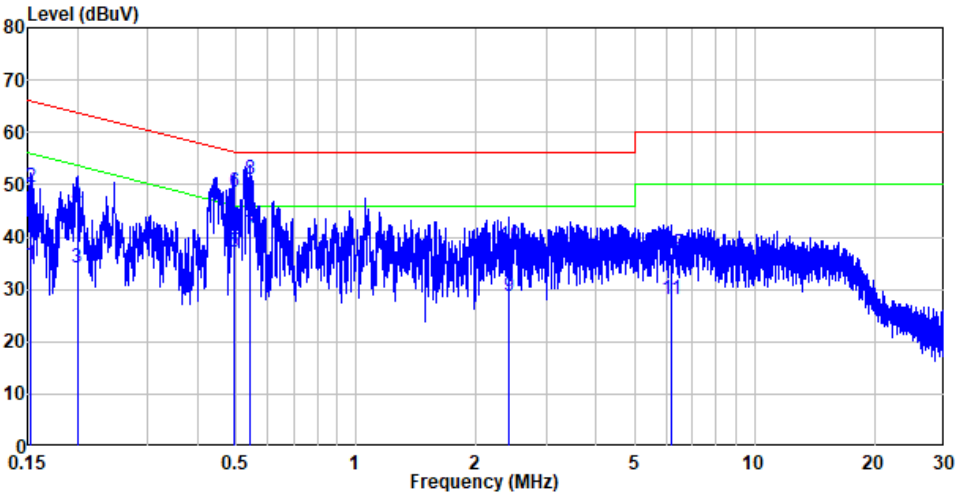
Test mode: Transmitting

AC 120 V/60 Hz, Line:



No.	Frequency	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.152	9.80	26.75	36.55	55.87	-19.32	Average
2	0.152	9.80	40.72	50.52	65.87	-15.35	QP
3	0.200	9.80	22.71	32.51	53.61	-21.10	Average
4	0.200	9.80	36.01	45.81	63.61	-17.80	QP
5	0.458	9.80	27.29	37.09	46.73	-9.64	Average
6	0.458	9.80	37.67	47.47	56.73	-9.26	QP
7	0.549	9.81	28.23	38.04	46.00	-7.96	Average
8	0.549	9.81	38.84	48.65	56.00	-7.35	QP
9	3.379	9.83	15.71	25.54	46.00	-20.46	Average
10	3.379	9.83	24.29	34.12	56.00	-21.88	QP
11	7.053	9.87	14.61	24.48	50.00	-25.52	Average
12	7.053	9.87	23.47	33.34	60.00	-26.66	QP

AC 120V/ 60 Hz, Neutral:



No.	Frequency	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.153	9.80	24.94	34.74	55.82	-21.08	Average
2	0.153	9.80	39.62	49.42	65.82	-16.40	QP
3	0.200	9.80	24.26	34.06	53.61	-19.55	Average
4	0.200	9.80	36.08	45.88	63.61	-17.73	QP
5	0.494	9.80	27.23	37.03	46.10	-9.07	Average
6	0.494	9.80	38.69	48.49	56.10	-7.61	QP
7	0.544	9.81	30.65	40.46	46.00	-5.54	Average
8	0.544	9.81	41.30	51.11	56.00	-4.89	QP
9	2.422	9.82	18.85	28.67	46.00	-17.33	Average
10	2.422	9.82	28.45	38.27	56.00	-17.73	QP
11	6.198	9.94	18.19	28.13	50.00	-21.87	Average
12	6.198	9.94	26.92	36.86	60.00	-23.14	QP

FCC§15.225, §15.205& §15.209 - RADIATED EMISSIONS TEST

Applicable Standard

As per FCC Part 15.225

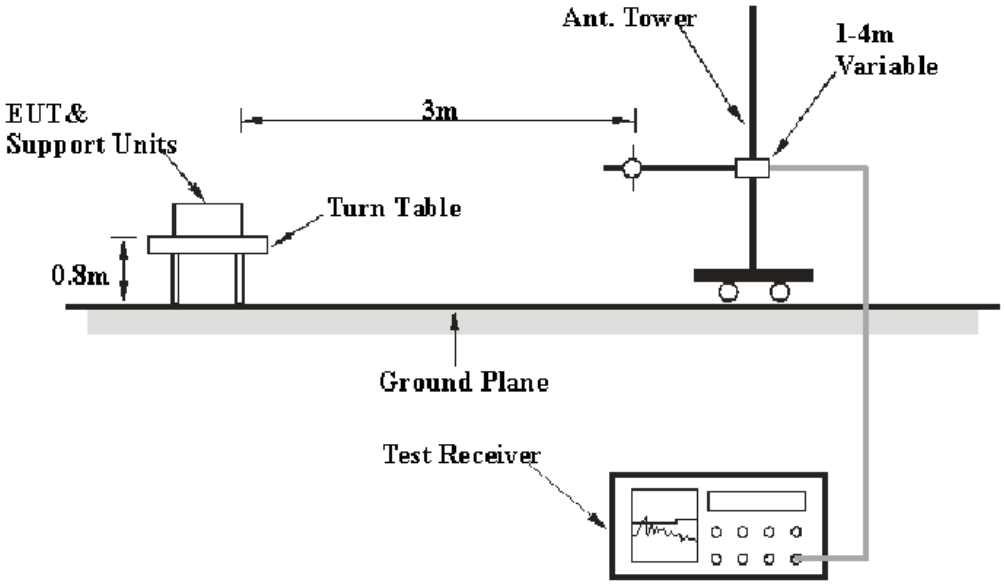
(a) The field strength of any emissions within the band 13.553–13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.

(b) Within the bands 13.410–13.553 MHz and 13.567–13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.

(c) Within the bands 13.110–13.410 MHz and 13.710–14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.

(d) The field strength of any emissions appearing outside of the 13.110–14.010 MHz band shall not exceed the general radiated emission limits in §15.209.

EUT Setup



Note: Antenna is set up at 1m during test for below 30MHz.

The radiated emission tests were performed in the 3-meter chamber a test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC Part Subpart C limits.

EMI Test Receiver Setup

According to FCC Rules, 47 CFR 15.33, the EUT emissions were investigated up to 1000 MHz.

During the radiated emission test, the EMI test Receiver was set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector
9 kHz – 150 kHz	300 Hz	1kHz	/	QP
150 kHz –30MHz	10 kHz	30 kHz	/	QP
30MHz – 1000 MHz	100 kHz	300 kHz	/	QP

Corrected Amplitude & Margin Calculation

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

Corrected Factor = Antenna Factor + Cable Loss- Amplifier Gain
Corrected Amplitude= Meter Reading + Corrected Factor

The "**Over Limit or Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, an over Limit / Margin of -7 dB means the emission is 7 dB below the limit. The equation for margin calculation is as follows:

Over Limit / Margin = Level / Result – Limit
Level / Result = Reading level + Factor

Test Data

Environmental Conditions

Temperature:	19°C
Relative Humidity:	58%
ATM Pressure:	101.0 kPa

The testing was performed by Chao Moon 2022-02-25 .

Test mode: Transmitting (Pre-scan in the X,Y and Z axes of orientation, the worst case X-axes of orientation was recorded)

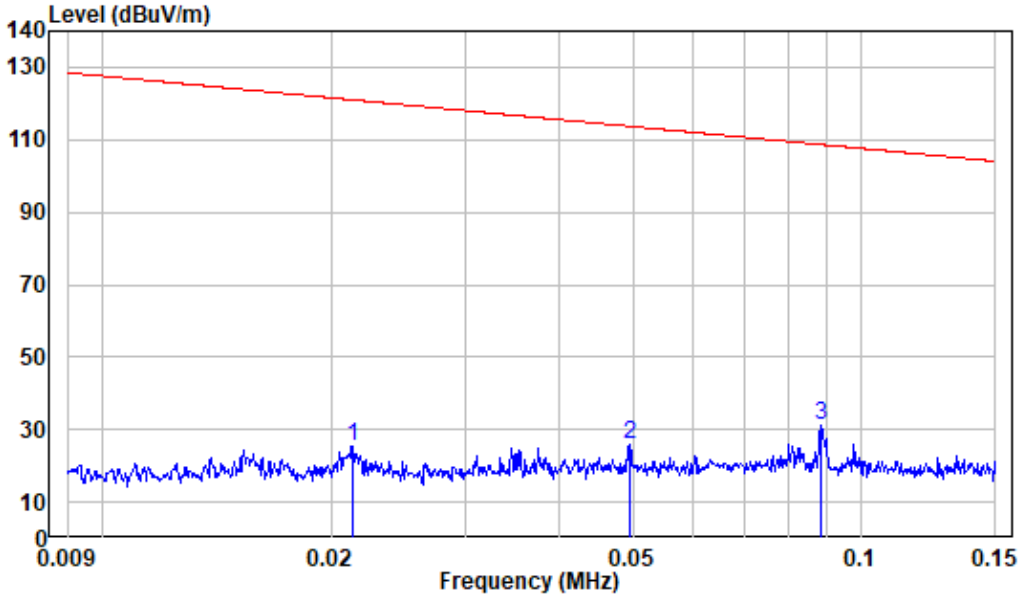
Note: when the result of Peak below the limit of QP more than 6dB, just the peak value was record.

1) Spurious Emissions (9 kHz~30 MHz):

Part 15 Section 15.31(f)(2) (9kHz-30MHz)
Limit @ 3m=Limit @ 300m-40*log(3(m)/300(m))
Limit @ 3m=Limit @ 30m-40*log(3(m)/30(m))

9 kHz~150 kHz

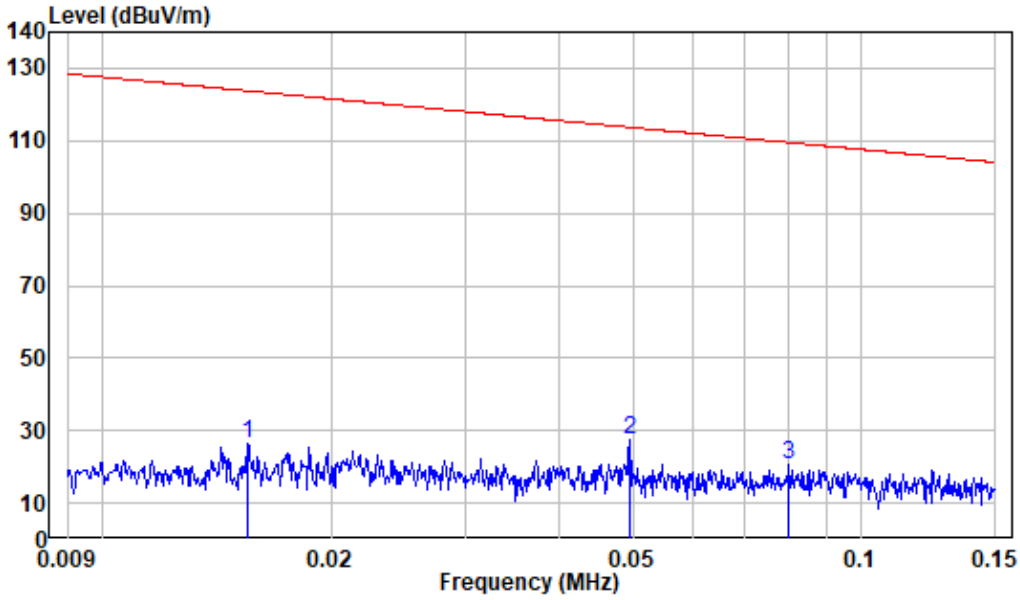
Coaxial:



Site : chamber
Condition: 3m
2Model : X6812B
Test Mode: NFC Transmitting
Pol : coaxial

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.021	-11.69	37.04	25.35	121.02	-95.67	Peak
2	0.050	-11.53	37.46	25.93	113.69	-87.76	Peak
3	0.089	-11.57	42.64	31.07	108.65	-77.58	Peak

Coplanar:

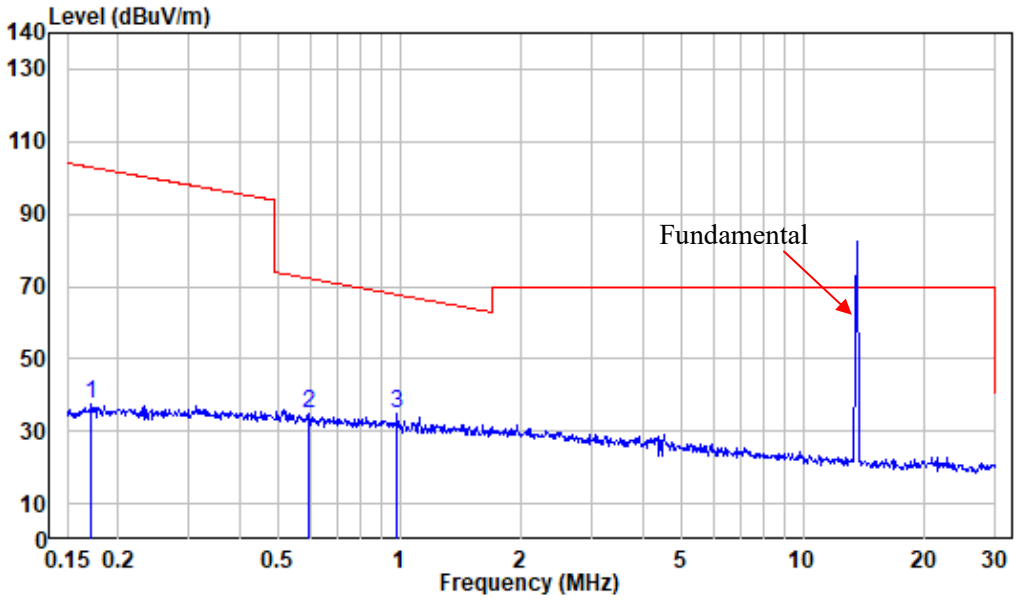


Site : chamber
Condition: 3m
2Model : X6812B
Test Mode: NFC Transmitting
Pol : coplanar

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.016	-11.54	37.78	26.24	123.75	-97.51	Peak
2	0.050	-11.53	38.99	27.46	113.71	-86.25	Peak
3	0.080	-11.58	32.32	20.74	109.53	-88.79	Peak

150 kHz~30 MHz

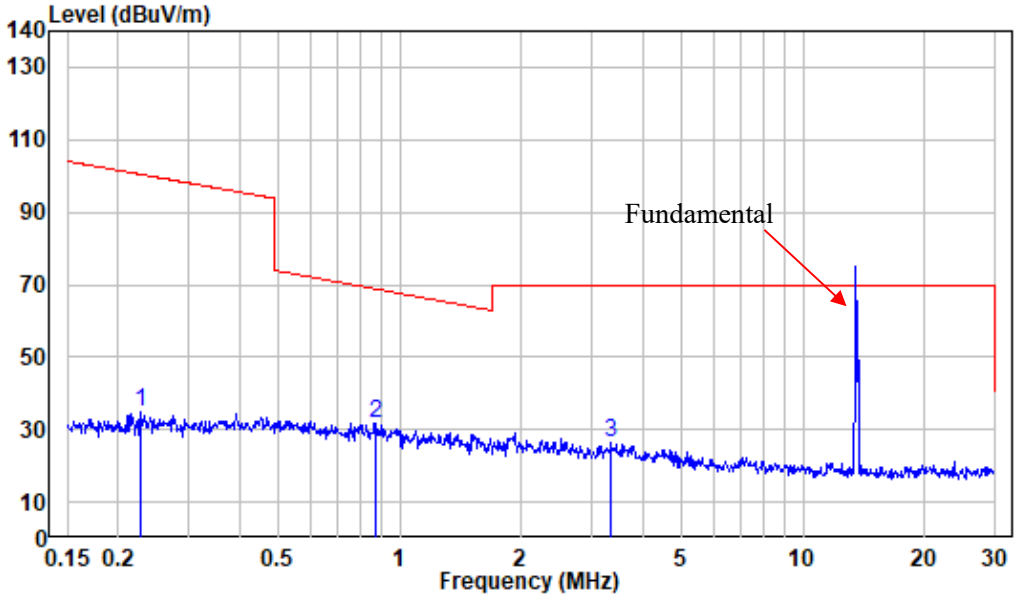
Coaxial:



Site : chamber
Condition: 3m
2Model : X6812B
Test Mode: NFC Transmitting
Pol : coaxial

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.172	-12.07	49.45	37.38	102.89	-65.51	Peak
2	0.595	-11.71	46.84	35.13	72.08	-36.95	Peak
3	0.984	-11.60	46.48	34.88	67.62	-32.74	Peak

Coplanar:

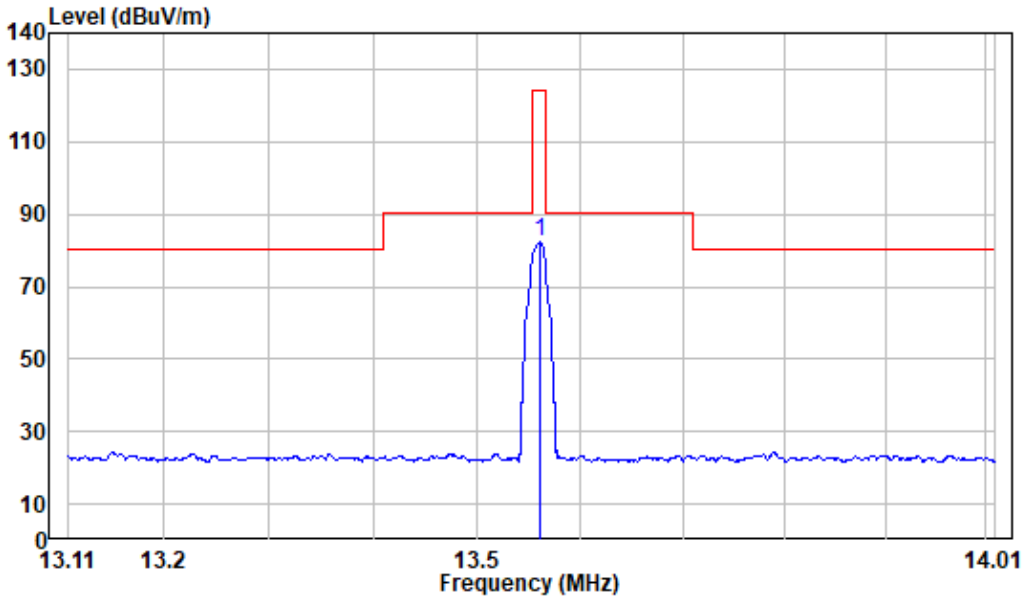


Site : chamber
Condition: 3m
2Model : X6812B
Test Mode: NFC Transmitting
Pol : coplanar

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.227	-11.95	46.81	34.86	100.49	-65.63	Peak
2	0.871	-11.74	43.44	31.70	68.70	-37.00	Peak
3	3.346	-11.81	38.04	26.23	69.54	-43.31	Peak

2) Emission Mask & Fundamental:

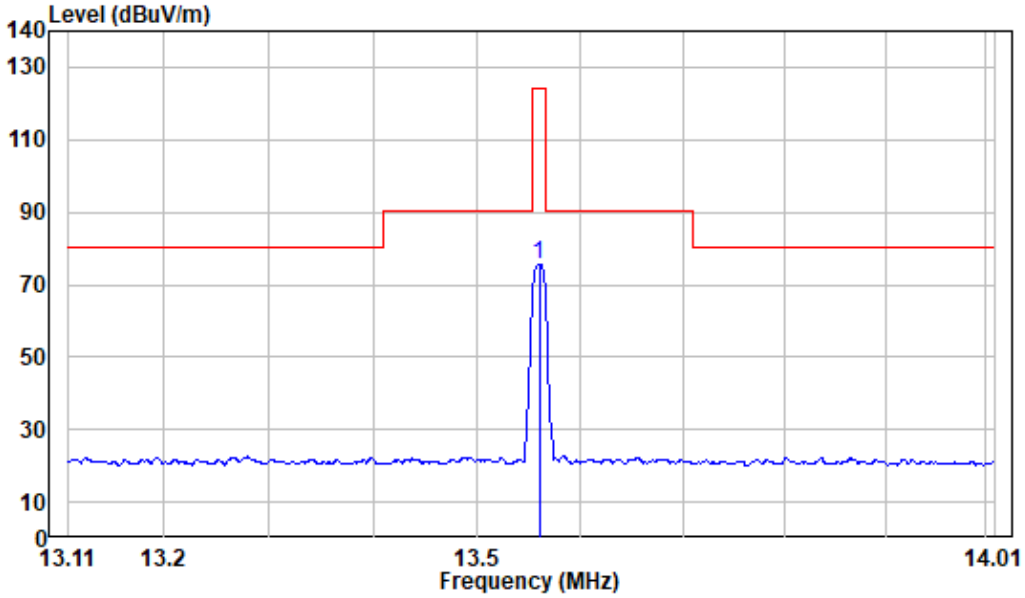
Coaxial:



Site : chamber
Condition: 3m
2Model : X6812B
Test Mode: NFC Transmitting
Pol : coaxial

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	13.561	-10.92	93.11	82.19	124.00	-41.81	Peak

Coplanar:

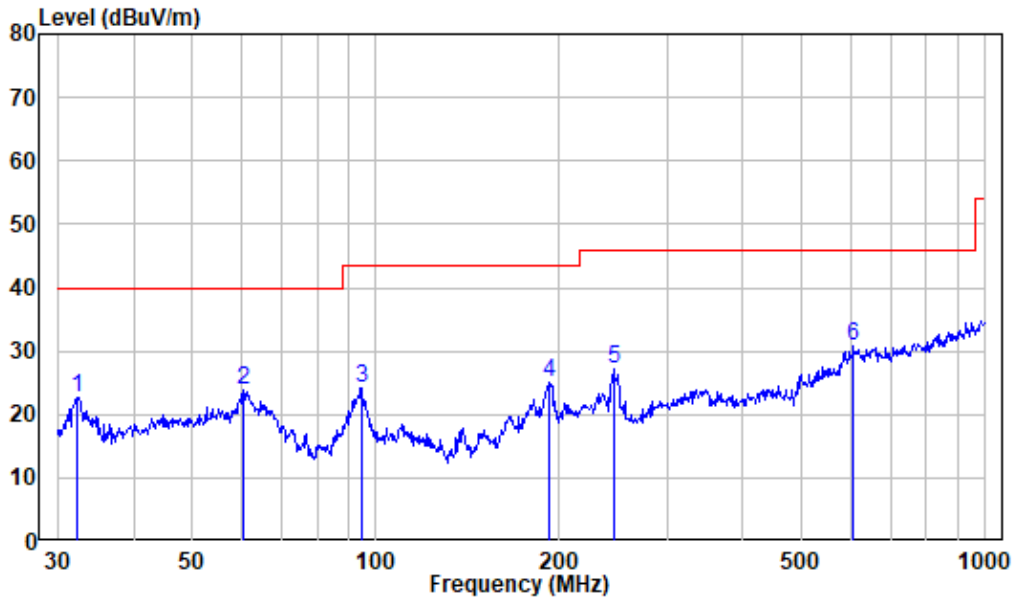


Site : chamber
Condition: 3m
2Model : X6812B
Test Mode: NFC Transmitting
Pol : coplanar

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	13.560	-10.92	86.65	75.73	124.00	-48.27	Peak

3) Spurious Emissions (30 MHz~1GHz):

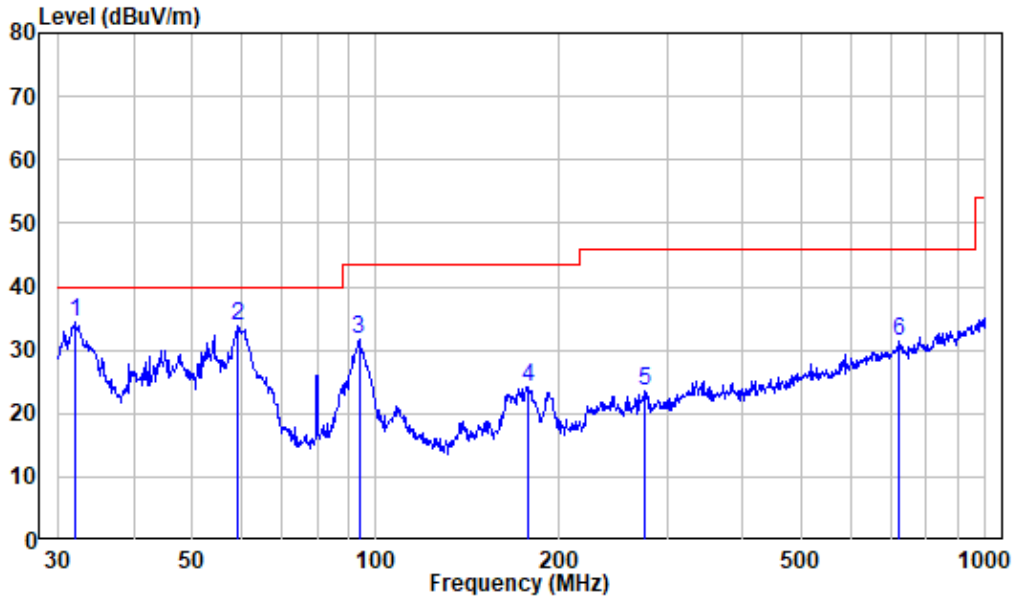
Horizontal:



Site : chamber
Condition: 3m HORIZONTAL
2Model : X6812B
Test Mode: NFC

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	32.293	-12.13	34.65	22.52	40.00	-17.48	Peak
2	60.704	-10.91	34.90	23.99	40.00	-16.01	Peak
3	94.760	-12.53	36.80	24.27	43.50	-19.23	Peak
4	191.745	-11.29	36.21	24.92	43.50	-18.58	Peak
5	245.090	-10.57	37.86	27.29	46.00	-18.71	Peak
6	607.787	-2.34	33.12	30.78	46.00	-15.22	Peak

Vertical:



Site : chamber
Condition: 3m VERTICAL
2Model : X6812B
Test Mode: NFC

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	32.067	-12.16	46.71	34.55	40.00	-5.45	Peak
2	59.441	-10.42	44.31	33.89	40.00	-6.11	Peak
3	93.768	-12.76	44.35	31.59	43.50	-11.91	Peak
4	177.509	-12.99	37.16	24.17	43.50	-19.33	Peak
5	276.124	-9.83	33.44	23.61	46.00	-22.39	Peak
6	721.726	-1.33	32.67	31.34	46.00	-14.66	Peak

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