# **FCC Report**

**Application Purpose** : Original grant

**Applicant Name:** : INFINIX MOBILITY LIMITED

**FCC ID** : 2AIZN-X522

**Equipment Type** : Mobile phone

Model Name : X522

**Report Number**: FCC17010001A-4

**Standard(S)** : FCC Part 15 Subpart B

Date Of Receipt : January 04, 2017

**Date Of Issue** : February 15, 2017

Test By :

(Daisy Qin)

Reviewed By :

(Sol Oin)

Authorized by :

<u>(</u>Michal Ling)

Prepared by : QTC Certification & Testing Co., Ltd.

2nd Floor, Bl Building, Fengyeyuan Industrial Plant,,

Liuxian 2st. Road, Xin'an Street, Bao'an

District,,Shenzhen,518000

**Registration Number: 588523** 

EPORT RE	ISE RECORD			
port Version		Issued Date	Valid Version	Notes
V1.0	/	February 15, 2017	Valid	Original Repor
	1		,	

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# 1. GENERAL INFORMATION

Test Model	X522
Applicant	INFINIX MOBILITY LIMITED
Address	RMS 05-15, 13A/F SOUTH TOWER WORLD FINANCE CTR HARBOUR CITY 17 CANTON RD TST KLN HONG KONG
Manufacturer	SHENZHEN TECNO TECHNOLOGY CO.,LTD.
Address	1-4th Floor,3rd Building,Pacific Industrial Park,No.2088,Shenyan Road,Yantian District,Shenzhen,Guangdong,China
Equipment Type	Mobile phone
Brand Name	Infinix
Hardware	H539_B1_V1.2
Software	X522-H539D1-M-161206V23
Battery information:	Li-Polymer Battery : BL-30SX Voltage: 3.85V Capacity: 3000mAh Limited Charge Voltage: 4.4V
Adapter Information:	Adapter: A88-502000 Input: 100~240V 50/60Hz 350mA Output: 5V~2A
Data of receipt	January 04, 2017
Date of test	January 05, 2017 to February 14 , 2017
Deviation	None
Condition of Test Sample	Normal

We hereby certify that:
The above equipment was tested by QTC Certification & Testing Co., Ltd.
2nd Floor,Bl Building,Fengyeyuan Industrial Plant,, Liuxian 2st. Road, Xin'an Street, Bao'an District,,Shenzhen,518000 Registration Number: 588523
The data evaluation, test procedures, and equipment configurations shown in this report were made in
accordance with the procedures given in ANSI C 63.4:2014. The sample tested as described in this report
is in compliance with the FCC Rules Part15 Subpart B.
The test results of this report relate only to the tested sample identified in this report.

# 2. TEST DESCRIPTION

# **2.1 MEASUREMENT UNCERTAINTY**

The reported uncertainty of measurement  $\mathbf{y} \pm \mathbf{U}$ , where expended uncertainty  $\mathbf{U}$  is based on a standard uncertainty multiplied by a coverage factor of  $\mathbf{k=2}$ , providing a level of confidence of approximately 95 %  $^{\circ}$ 

No.	Item	Uncertainty
1	Conducted Emission Test	±3.2dB
2	RF power, conducted	±0.16dB
3	Spurious emissions, conducted	±0.21dB
4	All emissions, radiated(<1G)	±4.7dB
5	All emissions, radiated(>1G)	±4.7dB
6	Temperature	±0.5°C
7	Humidity	±2%

#### 2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

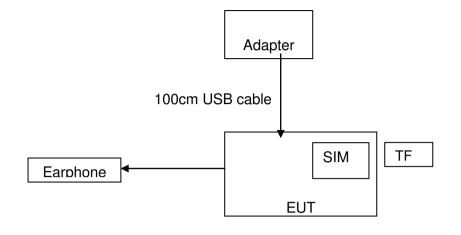
Pretest Mode	Description	
Mode 1	Video Recording	
Model 2	Video Playing	
Mode 3	Exchange data with computer	
Mode 4	GPS	
Mode 5	FM	

For Conducted Emission				
Final Test Mode	Test with Keyboard and Mouse			
Mode 1	Video Recording			
Model 2	Video Playing			
Mode 3	Exchange data with computer			
Mode 4	GPS			
Mode 5	FM			

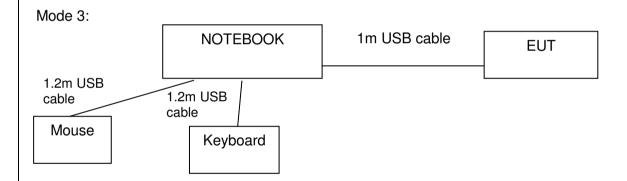
For Radiated Emission				
Final Test Mode	Test with Keyboard and Mouse			
Mode 1	Video Recording			
Model 2	Video Playing			
Mode 3	Exchange data with computer			
Mode 4	GPS			
Mode 5	FM			

#### 2.3 CONFIGURATION OF SYSTEM UNDER TEST

#### Mode 1&2&4&5:



(EUT: Mobile phone)



(EUT: Mobile phone)

I/O Port of EUT					
I/O Port Type Q'TY Cable Tested with					
Power	1	1m USB cable, unshielded	1		
Earphone	1	1m USB cable, unshielded	1		

# 2.4 DESCRIPTION OF SUPPORT UNITS (CONDUCTED MODE)

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

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
1	Adapter	/	A88-502000	/	/
2	Keyboard	HP	SK-2880	435302-AA-	/
3	Mouse	DELL	MS111-1	/	/

### Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in Length column.

# 3. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 , Subpart B					
Standard Section	Test Item	Judgment	Remark		
15.107	CONDUCTED EMISSION	PASS			
15.109	RADIATED EMISSION	PASS			

# NOTE:

(1)" N/A" denotes test is not applicable in this test report.

# 4. MEASUREMENT INSTRUMENTS

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibrated	Calibrated until
ESCI Test Receiver	R&S	ESCI	100005	08/19/2016	08/18/2017
LISN	AFJ	LS16	16010222119	08/19/2016	08/18/2017
LISN(EUT)	Mestec	AN3016	04/10040	08/19/2016	08/18/2017
pre-amplifier	CDSI	PAP-1G18-38		08/19/2016	08/18/2017
System Controller	СТ	SC100	-	08/19/2016	08/18/2017
Bi-log Antenna	Chase	CBL6111C	2576	08/19/2016	08/18/2017
Spectrum analyzer	R&S	FSU26	200409	08/19/2016	08/18/2017
Horn Antenna	SCHWARZBECK	9120D	1141	08/19/2016	08/18/2017
Bi-log Antenna	SCHWAREBECK	VULB9163	9163/340	08/19/2016	08/18/2017
Pre Amplifier	H.P.	HP8447E	2945A02715	10/13/2016	10/12/2017
9*6*6 Anechoic				08/21/2016	08/20/2017

# **5. EMC EMISSION TEST**

#### **5.1 CONDUCTED EMISSION MEASUREMENT**

# 5.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B	(dBuV)	Standard
PREQUENCY (MINZ)	Quasi-peak	Average	Quasi-peak	Average	Stariuaru
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

#### Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

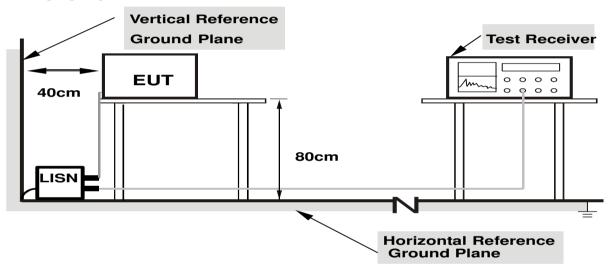
#### **5.1.2 TEST PROCEDURE**

- a. The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

#### **5.1.3 DEVIATION FROM TEST STANDARD**

No deviation

#### 5.1.4 TEST SETUP



Note: 1.Support units were connected to second LISN.

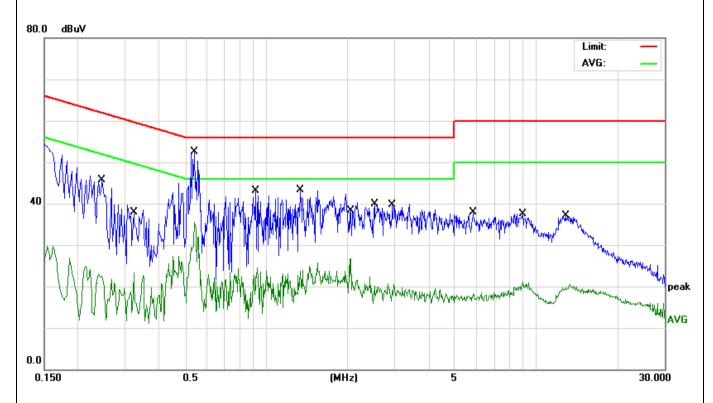
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

#### **5.1.5 EUT OPERATING CONDITIONS**

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

#### **5.1.6 TEST RESULTS** EUT Mobile phone Model Name X522 Temperature 26 ℃ Relative Humidity 54% 1010hPa Phase Pressure Test Date January 06, 2017 Test Mode Mode 1 80.0 dBuV Limit: AVG: 0.0 0.5 (MHz) 30.000 0.150 Reading Correct Measure-Limit Over No. Mk. Freq. Level Factor ment dBuV dB dBuV MHz dBuV dB Detector 11.50 1 0.1819 38.89 50.39 64.39 -14.00QP 2 0.2380 10.41 11.16 21.57 52.16 -30.59 AVG 3 0.5340 25.12 10.70 35.82 46.00 -10.18 AVG 4 0.5380 40.65 10.70 51.35 56.00 -4.65QΡ 5 0.8860 14.20 10.69 24.89 46.00 -21.11 AVG 6 1.0500 30.09 10.68 40.77 56.00 -15.23 QP 7 1.5700 13.13 10.63 23.76 46.00 -22.24 AVG 2.7100 29.19 39.79 -16.21 QΡ 10.60 56.00 8 9 7.1460 26.11 10.57 36.68 60.00 -23.32 QP AVG 10 8.9540 10.62 10.60 21.22 50.00 -28.78 12.7420 7.34 17.97 -32.03 AVG 11 10.63 50.00 12 12.9660 26.22 10.63 36.85 60.00 -23.15 QΡ

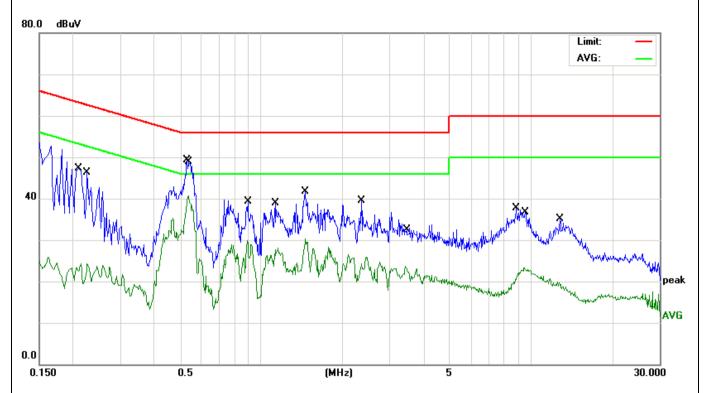
EUT	Mobile phone	Model Name	X522
Temperature	26 ℃	Relative Humidity	54%
Pressure	1010hPa	Phase	N
Test Date	January 06, 2017	Test Mode	Mode 1



No. M	lk. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.2460	34.57	11.15	45.72	61.89	-16.17	QP
2	0.3220	12.33	11.02	23.35	49.65	-26.30	AVG
3 *	0.5420	36.86	10.69	47.55	56.00	-8.45	QP
4	0.5420	24.81	10.69	35.50	46.00	-10.50	AVG
5	0.9260	13.77	10.69	24.46	46.00	-21.54	AVG
6	1.3340	32.54	10.66	43.20	56.00	-12.80	QP
7	2.0340	16.15	10.61	26.76	46.00	-19.24	AVG
8	2.5220	29.27	10.60	39.87	56.00	-16.13	QP
9	2.9700	9.91	10.57	20.48	46.00	-25.52	AVG
10	5.8500	27.34	10.54	37.88	60.00	-22.12	QP
11	8.9220	10.44	10.60	21.04	50.00	-28.96	AVG
12	12.8780	26.56	10.63	37.19	60.00	-22.81	QP

Temperate Pressure Test Date 80.0 di	1	Mobile phone 26 °C 1010hPa			Relative F	lumidity	54%	
Test Date					i telative i	lullilulty	J-70	l
					Phase		L	
80.0 dl	_	January 06,	2017		Test Mode	9	Mode 2	
	BuV							Limit: —
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1	lo. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
	1	0.2300	33.74	11.18	44.92	62.45	-17.53	QP
	2	0.2300	11.27	11.18	22.45	52.45	-30.00	AVG
	3 *	0.5380	35.17	10.70	45.87	56.00	-10.13	QP
	4	0.5380	24.61	10.70	35.31		-10.69	AVG
_	5	1.1500	14.08	10.67	24.75		-21.25	AVG
	6	1.4460	33.12	10.66	43.78		-12.22	QP
	7	2.4700	11.95	10.60	22.55	46.00	-23.45	AVG
	8	3.4500	31.86	10.56	42.42	56.00	-13.58	QP
	9	5.6460	28.16	10.52	38.68	60.00	-21.32	QP
	10	7.7020	10.05	10.59	20.64	50.00	-29.36	AVG
	11	12.9700	26.50	10.63	37.13	60.00	-22.87	QP
	12	13.1460	8.69	10.62	19.31	50.00	-30.69	AVG

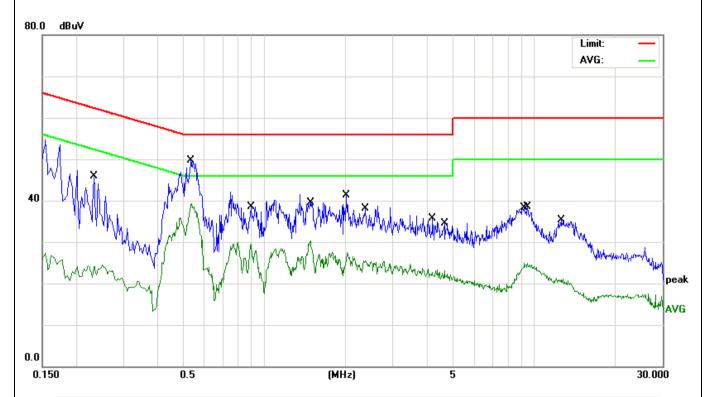
EUT	Mobile phone	Model Name	X522
Temperature	26 ℃	Relative Humidity	54%
Pressure	1010hPa	Phase	N
Test Date	January 06, 2017	Test Mode	Mode 2



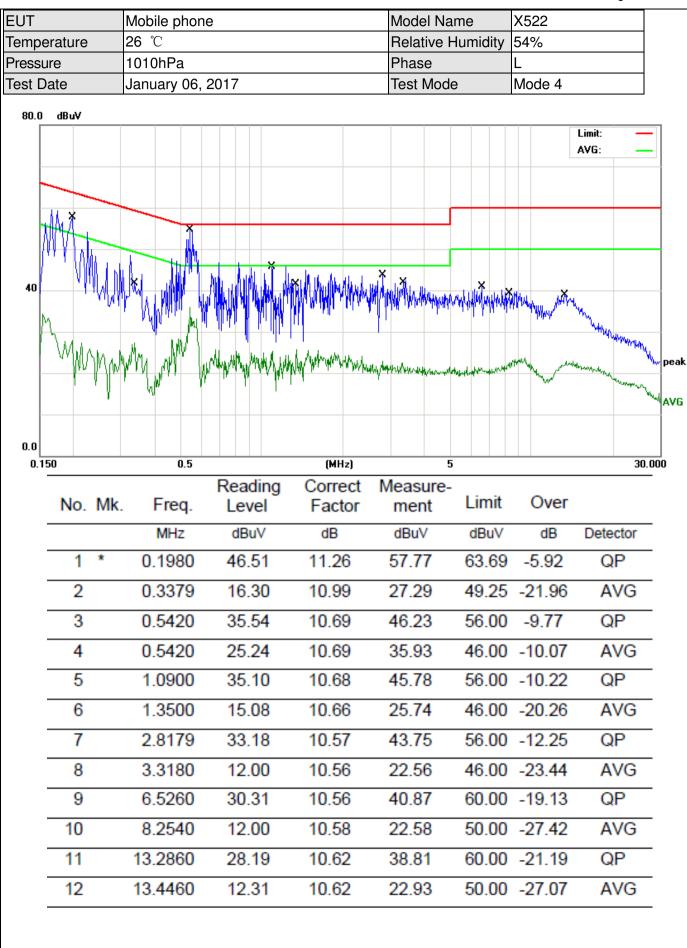
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.2100	36.16	11.21	47.37	63.20	-15.83	QP
2		0.2260	13.13	11.18	24.31	52.59	-28.28	AVG
3		0.5299	38.70	10.70	49.40	56.00	-6.60	QP
4	*	0.5380	29.95	10.70	40.65	46.00	-5.35	AVG
5		0.8860	19.31	10.69	30.00	46.00	-16.00	AVG
6		1.1340	28.18	10.67	38.85	56.00	-17.15	QP
7		1.4580	19.62	10.66	30.28	46.00	-15.72	AVG
8		2.3500	28.82	10.60	39.42	56.00	-16.58	QP
9		3.4300	13.10	10.56	23.66	46.00	-22.34	AVG
10		8.8299	27.17	10.60	37.77	60.00	-22.23	QP
11		9.4539	12.76	10.59	23.35	50.00	-26.65	AVG
12		12.8499	24.46	10.63	35.09	60.00	-24.91	QP

EUT		Mobile phor	ne		Model Na	me	X522	
emperat	ure	<b>26</b> ℃			Relative H	lumidity	54%	
Pressure		1010hPa			Phase		L	
Test Date	)	January 06,	2017		Test Mode	9	Mode 3	
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0.150		0.5		(MHz)	5			30.0
N	o. Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
	1	0.2020	36.51	11.23	47.74	63.52	-15.78	QP
	2	0.2460	10.72	11.15	21.87	51.89	-30.02	AVG
	3	0.5260	33.55	10.70	44.25	56.00	-11.75	QP
	4 *	0.5380	25.10	10.70	35.80	46.00	-10.20	AVG
	5	0.8860	14.06	10.69	24.75		-21.25	AVG
	6	1.1260	30.41	10.67	41.08		-14.92	QP
	7	1.4660	14.98	10.66	25.64	46.00	-20.36	AVG
	8	2.6340	29.56	10.60	40.16		) -15.84	QP
	9	3.4380	9.63	10.56	20.19		-25.81	AVG
	0	7.2140	26.19	10.57	36.76		) -23.24	QP
	1	9.0140	10.65	10.60	21.25		) -28.75	AVG
	2	13.0500	25.26	10.63	35.89		) -24.11	QP

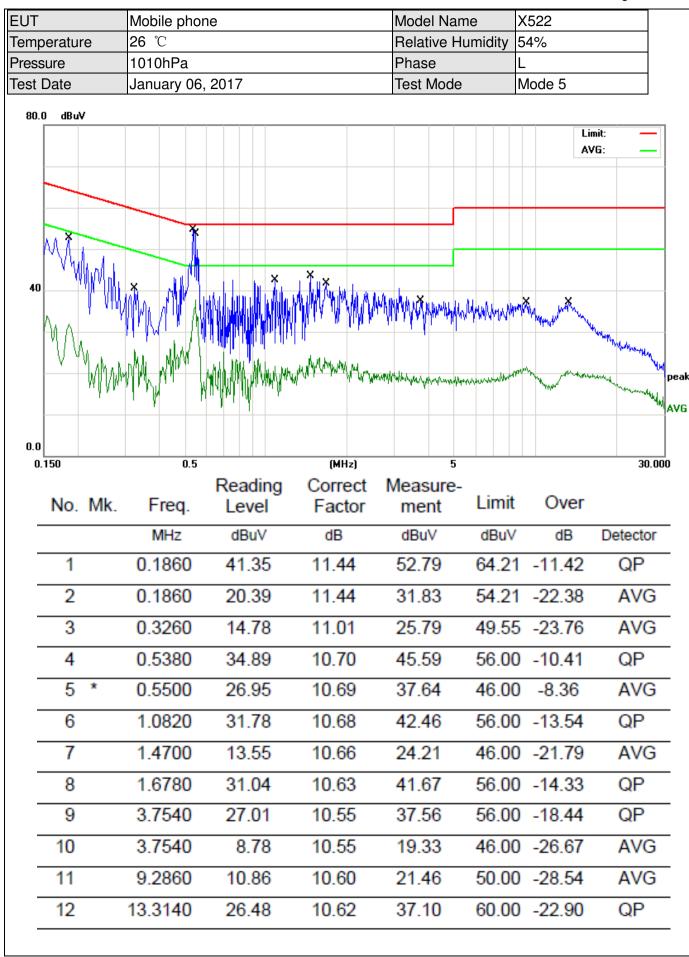
EUT	Mobile phone	Model Name	X522
Temperature	26 ℃	Relative Humidity	54%
Pressure	1010hPa	Phase	N
Test Date	January 06, 2017	Test Mode	Mode 3



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.2340	34.80	11.17	45.97	62.30	-16.33	QP
2 *	0.5340	38.91	10.70	49.61	56.00	-6.39	QP
3	0.5380	28.68	10.70	39.38	46.00	-6.62	AVG
4	0.8980	18.86	10.69	29.55	46.00	-16.45	AVG
5	1.4819	19.58	10.66	30.24	46.00	-15.76	AVG
6	2.0140	30.77	10.61	41.38	56.00	-14.62	QP
7	2.3780	14.99	10.60	25.59	46.00	-20.41	AVG
8	4.2060	25.05	10.55	35.60	56.00	-20.40	QP
9	4.6620	12.50	10.52	23.02	46.00	-22.98	AVG
10	9.2100	14.26	10.60	24.86	50.00	-25.14	AVG
11	9.4860	27.90	10.59	38.49	60.00	-21.51	QP
12	12.6140	24.77	10.63	35.40	60.00	-24.60	QP



EUT	Mobile phon	е		Model Na	ıme	X522	
Temperature	26 °C			Relative I		54%	
Pressure	1010hPa			Phase		N	
Test Date	January 06,	2017		Test Mod	е	Mode 4	4
80.0 dBuV							
¥ X X X X X X X X X X X X X X X X X X X				Www.hapela Williams	Mary a destroy de production de la constantina del constantina de la constantina de la constantina del constantina de la constantina del constantina del constantina del constantina de la constantina del constantina del constantina del constantina del constantina d		AVG: — AV
0.0	0.5		(MHz)	5			30.000
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0.150		_	Correct	Measure-	Limit	Over	30.000
0.150	k. Freq.	Level	Correct Factor	Measure- ment	dBuV		
0.150 No. M	k. Freq.	Level dBuV	Correct Factor	Measure- ment	dBuV 62.30	dB	Detector QP
0.150 No. M	k. Freq. MHz 0.2340	dBuV 34.80	Correct Factor dB 11.17	Measure- ment dBuV 45.97 49.61	dBuV 62.30 56.00	dB -16.33	Detector QP QP
0.150 No. M	k. Freq. MHz 0.2340 0.5340	dBuV 34.80 38.91	Correct Factor dB 11.17 10.70	Measure- ment dBuV 45.97 49.61 39.38	dBuV 62.30 56.00 46.00	dB -16.33 -6.39	Detector QP QP AVG
0.150  No. M  1  2 *	k. Freq. MHz 0.2340 0.5340 0.5380	dBuV 34.80 38.91 28.68	Correct Factor dB 11.17 10.70	Measure- ment dBuV 45.97 49.61 39.38 29.55	dBuV 62.30 56.00 46.00	dB -16.33 -6.39 -6.62	Detector QP QP AVG AVG
0.150  No. M  1 2 * 3 4	k. Freq. MHz 0.2340 0.5340 0.5380 0.8980	dBuV 34.80 38.91 28.68 18.86	Correct Factor dB 11.17 10.70 10.70	Measure- ment dBuV 45.97 49.61 39.38 29.55 30.24	dBuV 62.30 56.00 46.00 46.00	dB -16.33 -6.39 -6.62 -16.45	Detector QP QP AVG AVG
0.150  No. M  1 2 * 3 4 5	k. Freq. MHz 0.2340 0.5340 0.5380 0.8980 1.4819	Level dBuV 34.80 38.91 28.68 18.86 19.58	Correct Factor dB 11.17 10.70 10.70 10.69 10.66	Measure- ment dBuV 45.97 49.61 39.38 29.55 30.24 41.38	dBuV 62.30 56.00 46.00 46.00 56.00	dB -16.33 -6.39 -6.62 -16.45 -15.76	Detector QP QP AVG AVG AVG QP
0.150  No. M  1 2 * 3 4 5 6	k. Freq. MHz 0.2340 0.5340 0.5380 0.8980 1.4819 2.0140	Level  dBuV  34.80  38.91  28.68  18.86  19.58  30.77	Correct Factor dB 11.17 10.70 10.70 10.69 10.66 10.61	Measure- ment dBuV 45.97 49.61 39.38 29.55 30.24 41.38 25.59	dBuV 62.30 56.00 46.00 46.00 56.00	dB -16.33 -6.39 -6.62 -16.45 -15.76 -14.62	Detector QP QP AVG AVG AVG QP AVG
No. M  1 2 * 3 4 5 6 7	k. Freq. MHz 0.2340 0.5340 0.5380 0.8980 1.4819 2.0140 2.3780	Level  dBuV  34.80  38.91  28.68  18.86  19.58  30.77  14.99	Correct Factor dB 11.17 10.70 10.70 10.69 10.66 10.61	Measure- ment dBuV 45.97 49.61 39.38 29.55 30.24 41.38 25.59	dBuV 62.30 56.00 46.00 46.00 56.00 56.00	dB -16.33 -6.39 -6.62 -16.45 -15.76 -14.62 -20.41	Detector QP QP AVG AVG AVG QP AVG
No. M  1 2 * 3 4 5 6 7	k. Freq. MHz 0.2340 0.5340 0.5380 0.8980 1.4819 2.0140 2.3780 4.2060	Level  dBuV  34.80  38.91  28.68  18.86  19.58  30.77  14.99  25.05	Correct Factor dB 11.17 10.70 10.69 10.66 10.61 10.60 10.55	Measure- ment dBuV 45.97 49.61 39.38 29.55 30.24 41.38 25.59 35.60	dBuV 62.30 56.00 46.00 46.00 56.00 46.00	dB -16.33 -6.39 -6.62 -16.45 -15.76 -14.62 -20.41 -20.40	Detector QP QP AVG AVG AVG QP AVG QP AVG
0.150  No. M  1 2 * 3 4 5 6 7 8 9	k. Freq.  MHz  0.2340  0.5340  0.5380  0.8980  1.4819  2.0140  2.3780  4.2060  4.6620	Level  dBuV  34.80  38.91  28.68  18.86  19.58  30.77  14.99  25.05  12.50	Correct Factor dB 11.17 10.70 10.69 10.66 10.61 10.60 10.55 10.52	Measure- ment dBuV 45.97 49.61 39.38 29.55 30.24 41.38 25.59 35.60 23.02 24.86	dBuV 62.30 56.00 46.00 46.00 56.00 46.00 56.00 56.00	dB -16.33 -6.39 -6.62 -16.45 -15.76 -14.62 -20.41 -20.40 -22.98	Detector QP QP AVG AVG AVG QP AVG QP AVG AVG



EUT	Mobile phor	ne		Model N	lame	X522	
Temperature	26 ℃			Relative	Humidity	54%	
Pressure	1010hPa			Phase		N	
Test Date	January 06,	2017		Test Mo	de	Mode	5
80.0 dBuV							
							Limit: — AVG: —
X							
X V	×						
40			المراكبة المراكبة	ali i v		XX AX	
h A	MANA MANA	NINA, Minoralabed	Py/"  "V""\\"\\Y\\\\\\\\\\\\\\\\\\\\\\\\\\\	MALAHAMAHA TUKKA	Made of the state of the	" " "	W. Jahren Marker
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		· 1)			horaspage that a compage of the	"	The state of the s
0.0							
0.150	0.5		(MHz)	5			30.000
No. M	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
140. 101	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.1700	24.97	11.67	36.64	54.96	-18.32	AVG
2	0.1780	46.63	11.56	58.19	64.57	-6.38	QP
3	0.5380	38.05	10.70	48.75	56.00	-7.25	QP
4 *	0.5540	29.02	10.71	39.73		-6.27	AVG
5	0.9340	18.78	10.69	29.47		-16.53	AVG
6	1.3420	29.60	10.66	40.26		-15.74	QP
<del>7</del> 8	1.9180 4.3180	15.58 24.91	10.61	26.19 35.43		-19.81 -20.57	AVG QP
9	9.2340	27.24	10.60	37.84		-22.16	QP
	9.6020	13.22	10.61	23.83		-26.17	AVG
10							
10	13.5180	10.29	10.62	20.91	50.00	-29.09	AVG

#### **5.2 RADIATED EMISSION MEASUREMENT**

# 5.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

The field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequencies	Field Strength	Measurement Distance
(MHz)	(micorvolts/meter)	(meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

# LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

EDEOLIENCY (MH-)	Limit (dBuV/m) (at 3M)				
FREQUENCY (MHz)	PEAK	AVERAGE			
Above 1000	74	54			

#### Notes:

- (1) The limit for radiated test was performed according to FCC PART 15B.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted	1 MI I= /1 MI I= for Dock 1 MI I= /11 I= for Average
band)	1 MHz / 1 MHz for Peak, 1 MHz / 1Hz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

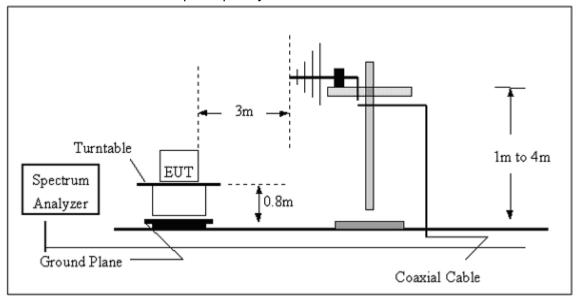
#### **5.2.2 TEST PROCEDURE**

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.

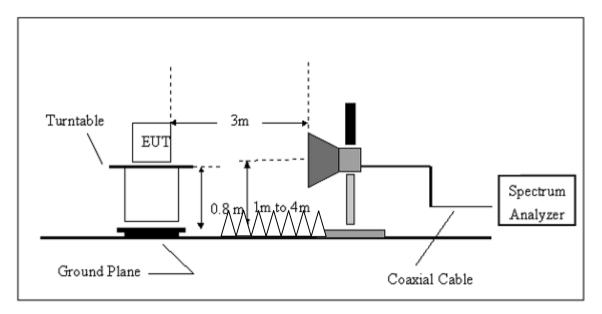
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement
performed.  f. For the actual test configuration, please refer to the related Item –EUT Test Photos.
Note:
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported
5.2.3 DEVIATION FROM TEST STANDARD
No deviation

# 5.2.4 TEST SETUP

(A) Radiated Emission Test-Up Frequency 30MHz~1GHz



(B) Radiated Emission Test-Up Frequency Above 1GHz

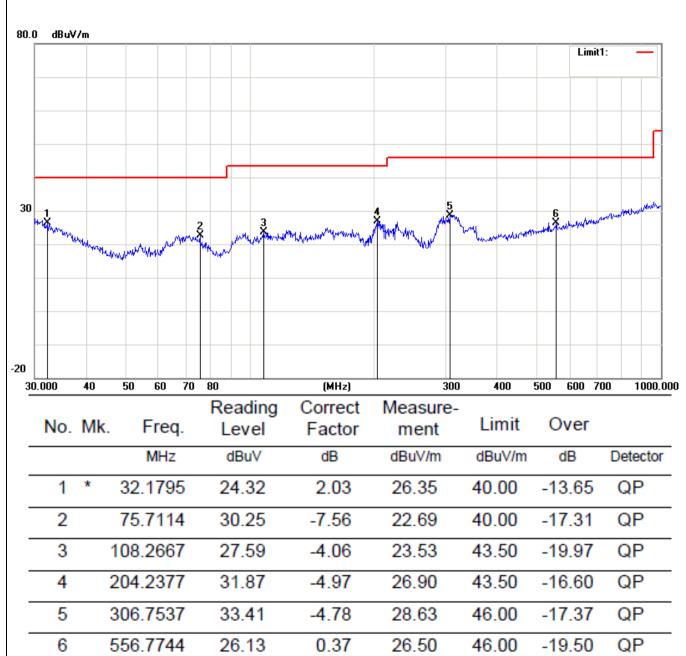


# **5.2.5 EUT OPERATING CONDITIONS**

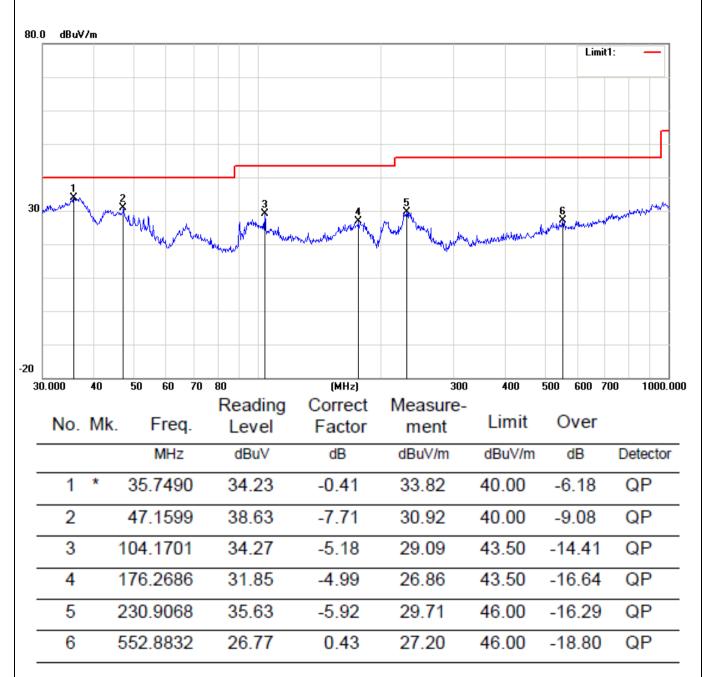
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

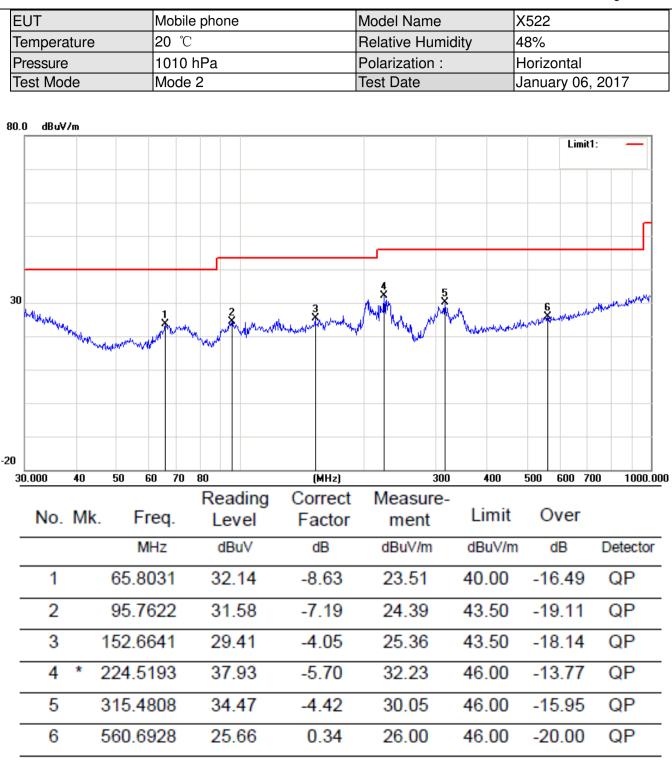
# **5.2.5.1 TEST RESULTS (BETWEEN 30M – 1000 MHZ)**

EUT	Mobile phone	Model Name	X522
Temperature	<b>20</b> ℃	Relative Humidity	48%
Pressure	1010 hPa	Polarization:	Horizontal
Test Mode	Mode 1	Test Date	January 06, 2017

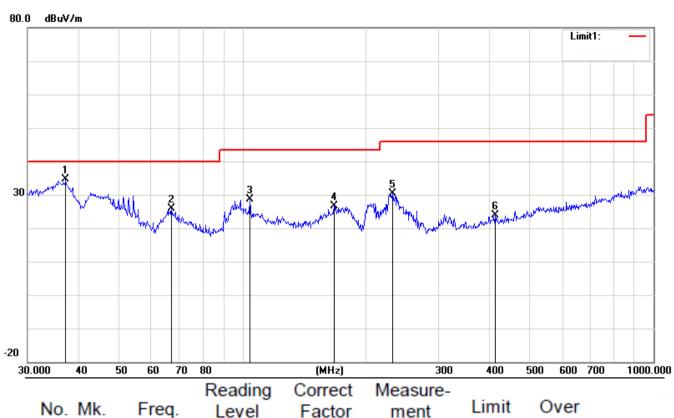


EUT	Mobile phone	Model Name	X522
Temperature	20 ℃	Relative Humidity	48%
Pressure	1010 hPa	Polarization:	Vertical
Test Mode	Mode 1	Test Date	January 06, 2017





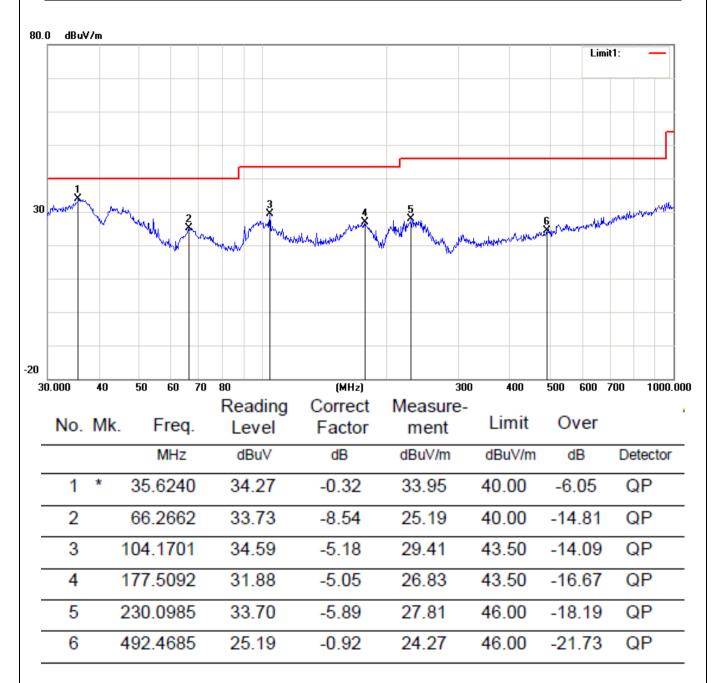
EUT	Mobile phone	Model Name	X522
Temperature	20 ℃	Relative Humidity	48%
Pressure	1010 hPa	Polarization :	Vertical
Test Mode	Mode 2	Test Date	January 06, 2017



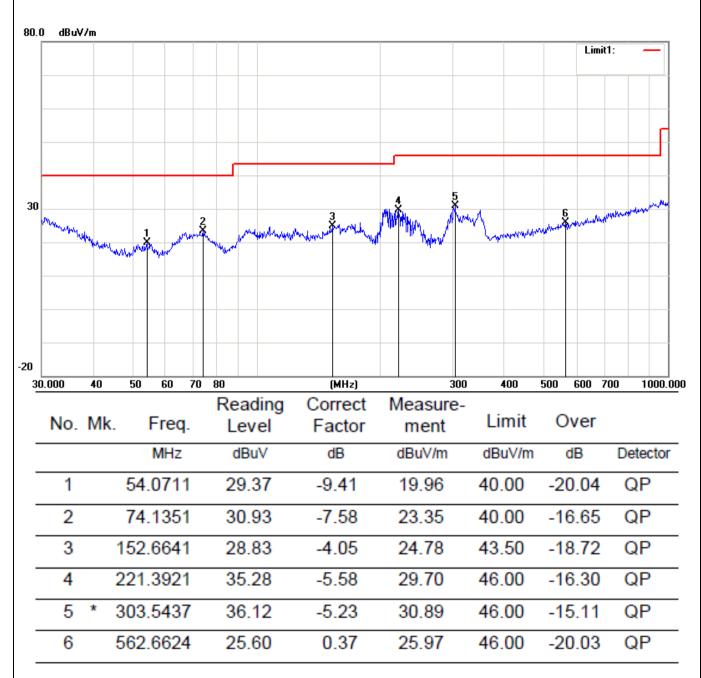
No.	Mk.	Freq.	Level	Factor	ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	*	37.1550	36.05	-1.43	34.62	40.00	-5.38	QP
2		67.2022	34.15	-8.36	25.79	40.00	-14.21	QP
3	,	104.1701	33.87	-5.18	28.69	43.50	-14.81	QP
4	,	167.2368	31.35	-4.60	26.75	43.50	-16.75	QP
5	2	231.7179	36.22	-5.95	30.27	46.00	-15.73	QP
6	4	111.8240	25.86	-2.02	23.84	46.00	-22.16	QP

EUT	•							Model Name Relative Humidity					X522							
Tempe	rature	е		20	$^{\circ}$ C						Rela	tive H	umic	dity		48%				
Pressui	re			1010 hPa Polarization :			1010 hPa Polarization :			Horizontal										
Test M	ode			Mc	de (	3					Test	Date				January 06, 2017			017	
0.0 dBu	JV/m																Lir	mit1:	_	<u>-</u>
O Mourely	h/\.				2				3 X		4 Mywil	la .	5	Μ, .		Januar Marie	6	whateredi	agh broken	~w
Mount	· Market	Vinde	adir s	haden Ind		waynah		adh (piragiga)	Žu <sub>na</sub> ny.						ombyte val					
					70 1			ada Programa						-AMAIN		500	600	700	10	00 0
	40		io			30				(MHz)	Me	easu	300	-AMAIN	400	500	600	700	10	00.0
30.000		5	50			Re:	ad	ing el	Co			easu	300 re-	**************************************			600 Over		10	00.0
30.000	40	5	io F	60		Re:	ad	ing el	Cor	(MHz)			300 re-	Lii	400	0			10	
30.000	40 ). MI	5 <b>k</b> .	50 F	60 req	-	Re Le	ad	ing el	Col	(MHz) rrect actor	d	ment	300 re-	Lii	nit	0	ver	D		
30.000 No	40 ). MI	5 k.	F N 54.0	req.		30 Re- Le- d	ad eve	ing el V	Col Fa	(MHz) rrect actor	d 1	ment Bu∨/m	300 re-	Lii	mit uV/m	-20	ver	D	etect	
30.000 No	40 ). MI	5 k.	F M 54.0	req. //Hz		Re Le d	adi eve Bu\	ing el v	Cor Fa	(MHz) rrect actor dB	d 1	ment BuV/m 9.78	300 re-	Lii dBi 40.	mit uv/m 00	-20 -10	ver dB 0.22	D (	etect QP	
30.000 No 1 2 3	40 ). MI	5 k. 5 7	F M 54.0	60 Freq. MHz 0711	3	Re Le d 29 31 20	adi eve Bu\ 9.1	ing el v 9	-9 -7	rrect actor dB .41	d 1 2 2 2 2	9.78 9.78 3.73 4.40	300 re-	Lii dBt 40.	mit uV/m 00 00	-20 -10	over dB 0.22 6.27	D ? () ()	etect QP QP QP	
30.000 No	40 ). MI	5 k. 7 12 22	F M 70.0 25.8	60 Freq. MHz 0711	3	29 31 26	adi eve Bu <sup>v</sup> 9.1	ing el v 9 4 4	-9 -7 -2 -5	(MHz) rrect actor :B .41 .81	d 1 2 2 2 2 2 2	ment 9.78 3.73 4.40	300 re-	Lii dBu 40. 40.	mit uv/m 00 00 50	-20 -10 -19	0.22 6.27 9.10	D (	etect QP QP QP	

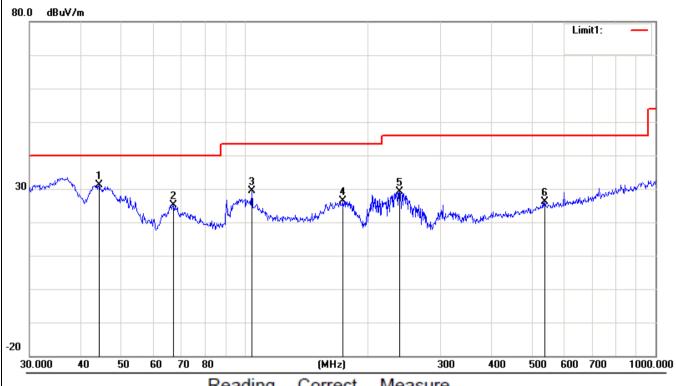
EUT	Mobile phone	Model Name	X522
Temperature	20 ℃	Relative Humidity	48%
Pressure	1010 hPa	Polarization:	Vertical
Test Mode	Mode 3	Test Date	January 06, 2017



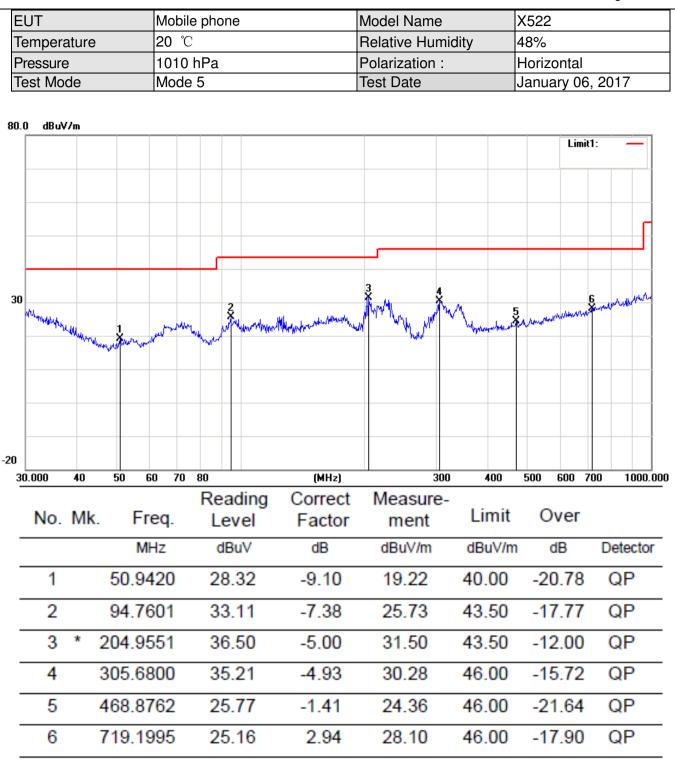
EUT	Mobile phone	Model Name	X522
Temperature	20 ℃	Relative Humidity	48%
Pressure	1010 hPa	Polarization:	Horizontal
Test Mode	Mode 4	Test Date	January 06, 2017



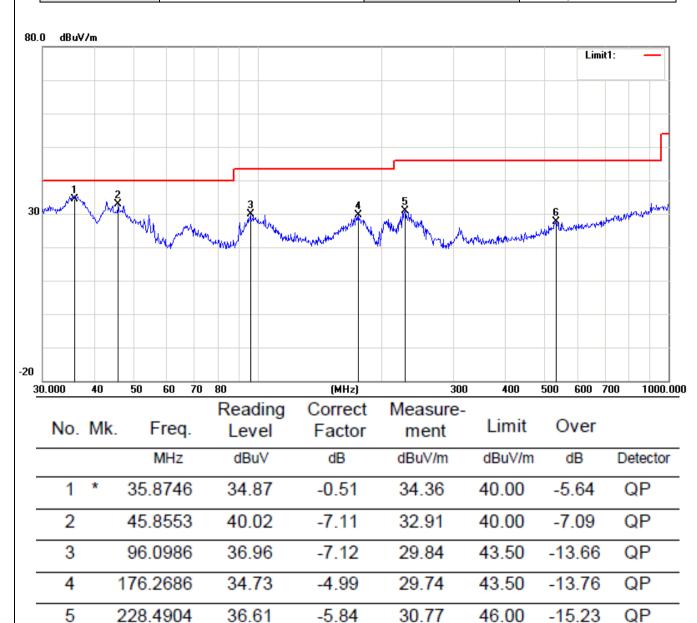
EUT	Mobile phone	Model Name	X522
Temperature	20 ℃	Relative Humidity	48%
Pressure	1010 hPa	Polarization:	Vertical
Test Mode	Mode 4	Test Date	January 06, 2017



N	o. N	∕lk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
	1 *	t	44.2752	37.35	-6.25	31.10	40.00	-8.90	QP
	2		67.2022	33.45	-8.36	25.09	40.00	-14.91	QP
	3	1	04.1701	34.65	-5.18	29.47	43.50	-14.03	QP
	4	1	73.2051	31.28	-4.85	26.43	43.50	-17.07	QP
	5	2	38.3102	35.23	-6.19	29.04	46.00	-16.96	QP
	6	5	37.5891	26.30	-0.20	26.10	46.00	-19.90	QP



EUT	Mobile phone	Model Name	X522
Temperature	20 ℃	Relative Humidity	48%
Pressure	1010 hPa	Polarization:	Vertical
Test Mode	Mode 5	Test Date	January 06, 2017



-0.25

27.56

46.00

-18.44

QP

533.8321

27.81

6

## 5.2.5.2 TEST RESULTS (1GHZ TO 6GHZ)

EUT	Mobile phone	Model Name	X522
Temperature	120 (	Relative Humidity	48%
Pressure	1010 hPa	Test Mode	Mode 1
Test Date	January 06, 2017		

Freq.	Ant.	Emission		Limit		Over(dB)	
(MHz)	Pol.	Level(dBuV)		3m(dBuV/m)			
	H/V	PK	AV	PK	AV	PK	AV
1632.45	V	58.68	41.15	74	54	-15.32	-12.85
2829.27	V	58.32	40.50	74	54	-15.68	-13.50
1684.52	Н	58.23	40.39	74	54	-15.77	-13.61
2831.6	Н	59.11	40.11	74	54	-14.89	-13.89

#### Remark:

All emissions not reported were more than 20dB below the specified limit or in the noise floor. Factor = Antenna Factor + Cable Loss - Pre-amplifier.

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

EUT	Mobile phone	Model Name	X522
Temperature	120 (	Relative Humidity	48%
Pressure	1010 hPa	Test Mode	Mode 2
Test Date	January 06, 2017		

Freq.	Ant.	Emission		Limit		Over(dB)	
(MHz)	Pol.	Level(dBuV)		3m(dBuV/m)			
	H/V	PK	AV	PK	AV	PK	AV
1583.35	V	60.26	40.90	74	54	-13.74	-13.10
2641.52	V	59.80	40.94	74	54	-14.20	-13.06
1628.42	Н	59.22	40.30	74	54	-14.78	-13.70
2810.39	Н	59.75	40.75	74	54	-14.25	-13.25

#### Remark:

All emissions not reported were more than 20dB below the specified limit or in the noise floor. Factor = Antenna Factor + Cable Loss - Pre-amplifier.

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

EUT	Mobile phone	Model Name	X522
Temperature	120 (	Relative Humidity	48%
Pressure	1010 hPa	Test Mode	Mode 3
Test Date	January 06, 2017		

Freq. (MHz)	Ant. Pol.	Emission Level(dBuV)		Limit 3m(dBuV/m)		Over(dB)	
(1411.12)	H/V	PK	AV	PK	AV	PK	AV
1577.35	V	60.98	39.03	74	54	-13.02	-14.97
2652.38	V	58.63	39.35	74	54	-15.37	-14.65
1699.33	Н	58.05	39.28	74	54	-15.95	-14.72
2739.42	Н	59.73	40.73	74	54	-14.27	-13.27

#### Remark:

All emissions not reported were more than 20dB below the specified limit or in the noise floor. Factor = Antenna Factor + Cable Loss - Pre-amplifier.

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

EUT	Mobile phone	Model Name	X522
Temperature	120 (	Relative Humidity	48%
Pressure	1010 hPa	Test Mode	Mode 4
Test Date	January 06, 2017		

Freq.	Ant.	Emission Level(dBuV)		Limit		Over(dB)	
(MHz)	Pol.	Levei	ubuv)	3III(ubu	3m(dBuV/m)		
	H/V	PK	AV	PK	AV	PK	AV
1583.35	V	58.12	39.56	74	54	-15.88	-14.44
2641.52	V	59.15	39.54	74	54	-14.85	-14.46
1628.42	Н	58.61	39.32	74	54	-15.39	-14.68
2810.39	H	58.87	39.87	74	54	-15.13	-14.13

#### Remark:

All emissions not reported were more than 20dB below the specified limit or in the noise floor. Factor = Antenna Factor + Cable Loss - Pre-amplifier.

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

EUT	Mobile phone	Model Name	X522
Temperature	120 (	Relative Humidity	48%
Pressure	1010 hPa	Test Mode	Mode 5
Test Date	January 06, 2017		

Freq.	Ant.	Emission		Limit		Over(dB)	
(MHz)	Pol.	Level(dBuV)		3m(dBuV/m)			
	H/V	PK	AV	PK	AV	PK	AV
1577.35	V	59.04	39.41	74	54	-14.96	-14.59
2652.38	V	58.43	39.70	74	54	-15.57	-14.30
1699.33	Н	58.45	39.99	74	54	-15.55	-14.01
2739.42	Н	58.25	39.25	74	54	-15.75	-14.75

## Remark:

All emissions not reported were more than 20dB below the specified limit or in the noise floor. Factor = Antenna Factor + Cable Loss – Pre-amplifier. All the x/y/z orientation has been investigated, and only worst case is presented in this report.

# 6. EUT TEST PHOTO

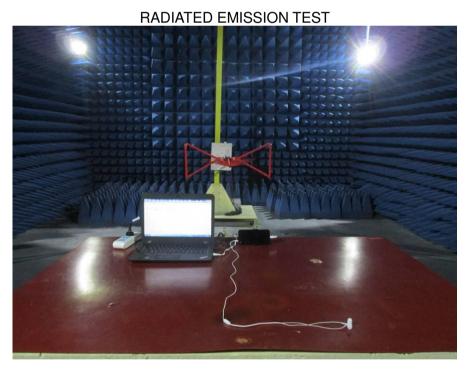


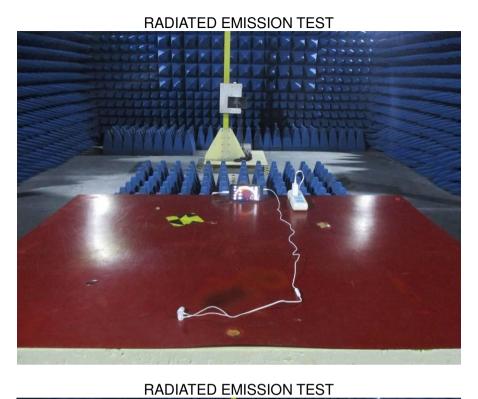


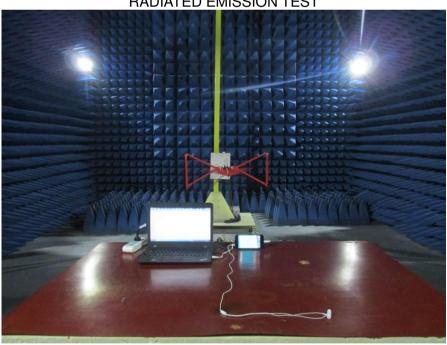
CONDUCTED EMISSION TEST

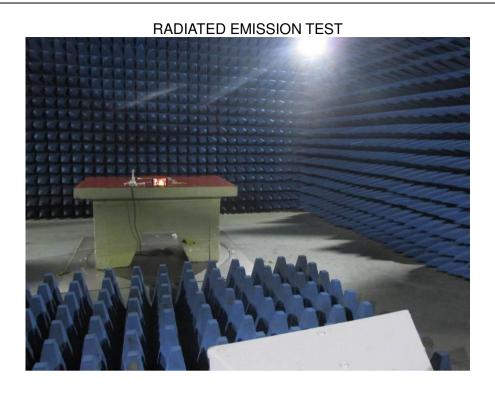


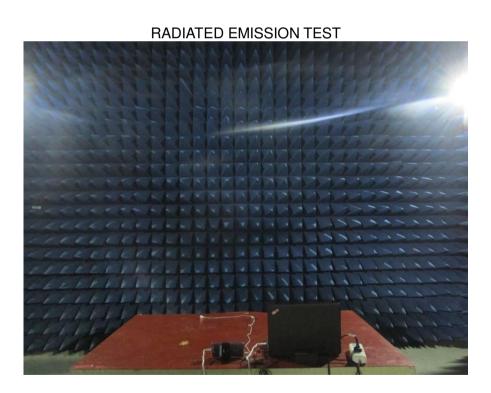












## 7. PHOTOGRAPHS OF EUT

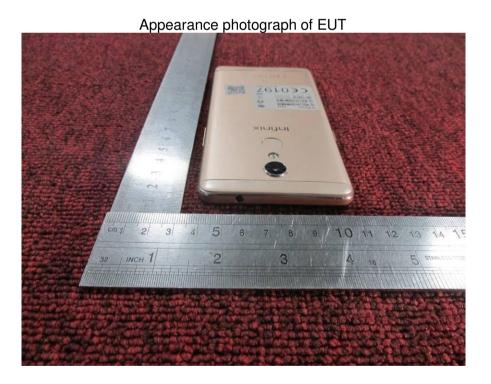








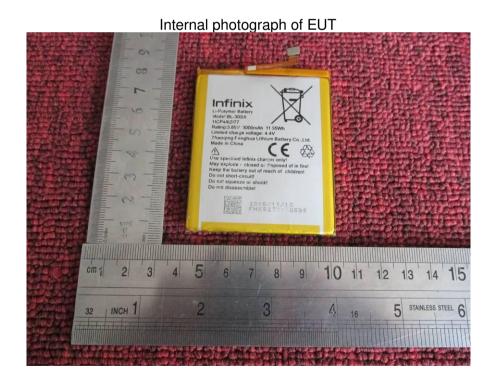




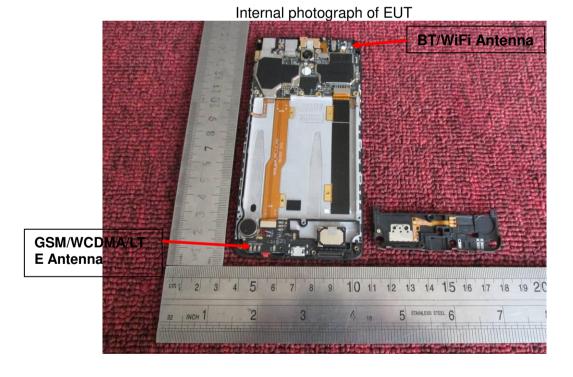




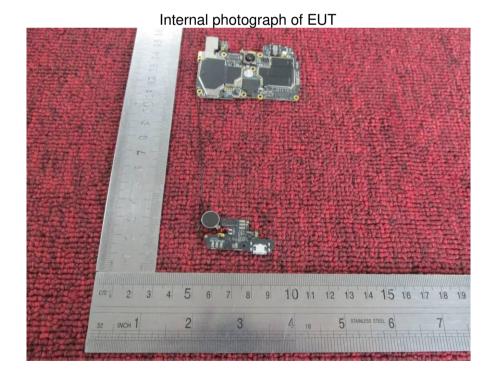


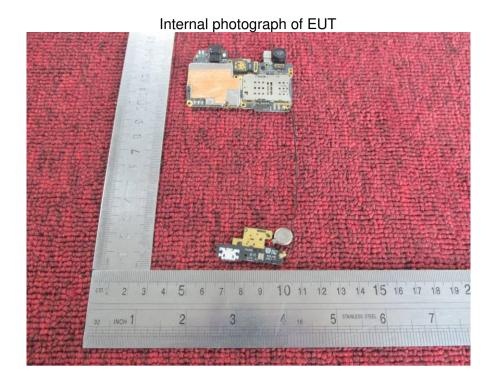


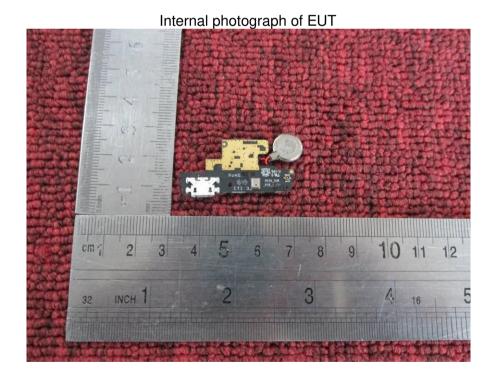


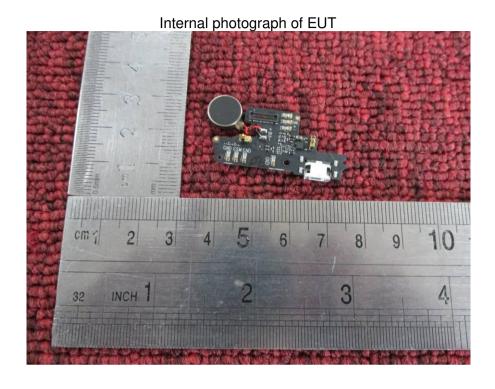


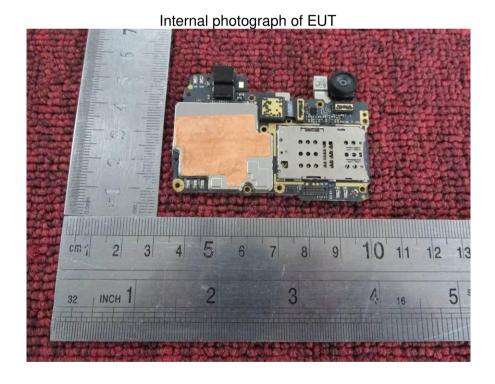


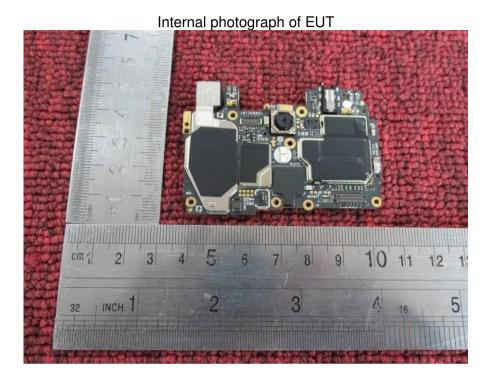


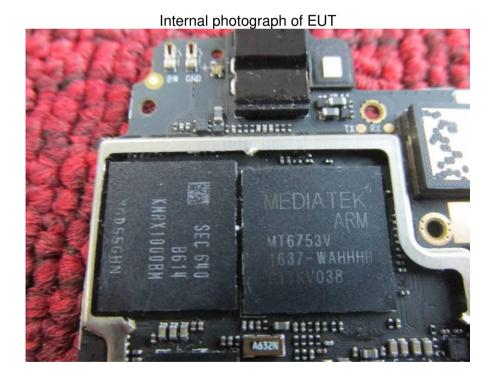








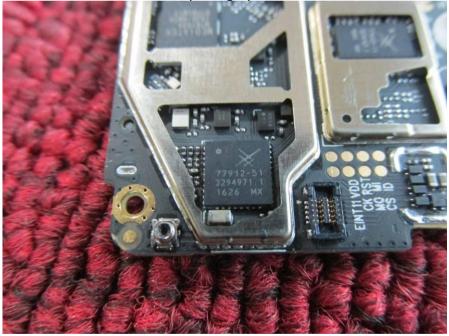


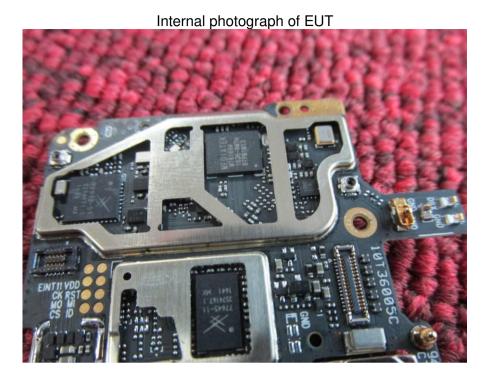


# Internal photograph of EUT









---END OF REPORT---