



# FCC RADIO TEST REPORT

**FCC ID: 2AC343396993T703B**

Of

**Product Name: WCDMA Smart Phone**

**Brand Name: Cellacom**

**Model No.: T703b**

**Series Model: T703x (x= bcdefg)**

**Test Report Number: STS1409017F03**

Issued for

**Cellacom incorporation**

**20955 pathfinder road, ste 200, diamond bar, ca 91765, USA**

Issued by

**Shenzhen STS Test Services Co., Ltd.**

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**All Test Data Presented in this report is only applicable to presented Test sample.**

## TEST RESULT CERTIFICATION

**Applicant's name** ..... : Cellacom incorporation  
 Address ..... : 20955 pathfinder road, ste 200, diamond bar, ca 91765, USA  
**Manufacture's Name** ..... : Shenzhen Joinhold Communication Technology Ltd.  
 Address ..... : Unit 3, Bldg. D2, TCL International E City, 1001 Zhongshanyuan Park Rd., Nanshan, Shenzhen, China

**Product description**

Product name ..... : WCDMA Smart Phone  
 Band name ..... : Cellacom  
 Model and/or type reference : T703b  
 Serial Model..... : T703x ( x= bcdefg )

**Standards** ..... : FCC Part15.247

Test procedure ..... ANSI C63.10-2009

This device described above has been tested by STS, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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**Date of Test**..... :

Date (s) of performance of tests..... : September 03, 2014 ~ September 18, 2014

Date of Issue ..... : September 19, 2014

Test Result ..... : **Pass**

Testing Engineer :   
 \_\_\_\_\_  
 (Tony Liu)

Technical Manager :   
 \_\_\_\_\_  
 (Vita Li)

Authorized Signatory :   
 \_\_\_\_\_  
 (Bovey Yang)



Table of Contents	Page
<b>1 . SUMMARY OF TEST RESULTS</b>	<b>5</b>
1.1 TEST FACILITY	6
1.2 MEASUREMENT UNCERTAINTY	6
<b>2 . GENERAL INFORMATION</b>	<b>7</b>
2.1 GENERAL DESCRIPTION OF EUT	7
2.2 DESCRIPTION OF TEST MODES	9
2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	10
2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)	11
2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS	12
<b>3 . EMC EMISSION TEST</b>	<b>13</b>
3.1 CONDUCTED EMISSION MEASUREMENT	13
3.1.1 POWER LINE CONDUCTED EMISSION LIMITS	13
3.1.2 TEST RESULTS	14
3.2 RADIATED EMISSION MEASUREMENT	16
3.2.1 RADIATED EMISSION LIMITS	16
3.2.2 TEST PROCEDURE	17
3.2.3 DEVIATION FROM TEST STANDARD	17
3.2.4 TEST SETUP	18
3.2.5 EUT OPERATING CONDITIONS	19
3.2.6 TEST RESULTS (BETWEEN 9KHZ – 30 MHZ)	20
3.2.7 TEST RESULTS (BETWEEN 30MHZ – 1GHZ)	21
3.2.8 TEST RESULTS (ABOVE 1000 MHZ)	23
3.2.9 TEST RESULTS (BAND EDGE)	35
<b>4. CONDUCTED SPURIOUS EMISSIONS</b>	<b>43</b>
4.1 APPLIED PROCEDURES / LIMIT	43
4.1.1 TEST PROCEDURE	43
4.1.2 DEVIATION FROM STANDARD	43
4.1.3 TEST SETUP	43
4.1.4 EUT OPERATION CONDITIONS	43
4.1.5 TEST RESULTS	44
<b>5. POWER SPECTRAL DENSITY TEST</b>	<b>56</b>
5.1 APPLIED PROCEDURES / LIMIT	56
5.1.1 TEST PROCEDURE	56
5.1.2 DEVIATION FROM STANDARD	56
5.1.3 TEST SETUP	56
5.1.4 EUT OPERATION CONDITIONS	56
5.1.5 TEST RESULTS	57

<b>Table of Contents</b>	<b>Page</b>
<b>6. BANDWIDTH TEST</b>	<b>65</b>
<b>6.1 APPLIED PROCEDURES / LIMIT</b>	<b>65</b>
6.1.1 TEST PROCEDURE	65
6.1.2 DEVIATION FROM STANDARD	65
6.1.3 TEST SETUP	65
6.1.4 EUT OPERATION CONDITIONS	65
6.1.5 TEST RESULTS	66
<b>7. PEAK OUTPUT POWER TEST</b>	<b>74</b>
<b>7.1 APPLIED PROCEDURES / LIMIT</b>	<b>74</b>
7.1.1 TEST PROCEDURE	74
7.1.2 DEVIATION FROM STANDARD	74
7.1.3 TEST SETUP	74
7.1.4 EUT OPERATION CONDITIONS	74
7.1.5 TEST RESULTS	75
<b>8. ANTENNA REQUIREMENT</b>	<b>76</b>
8.1 STANDARD REQUIREMENT	76
8.2 EUT ANTENNA	76
<b>EUT TEST PHOTO</b>	<b>77</b>
<b>APPENDIX-PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS</b>	

**1. SUMMARY OF TEST RESULTS**

Test procedures according to the technical standards:

<b>FCC Part15 (15.247) , Subpart C</b>			
<b>Standard Section</b>	<b>Test Item</b>	<b>Judgment</b>	<b>Remark</b>
15.207	Conducted Emission	PASS	
15.247 (a)(2)	6dB Bandwidth	PASS	
15.247 (b)	Peak Output Power	PASS	
15.247 (c)	Radiated Spurious Emission	PASS	
15.247 (d)	Conducted Spurious Emission	PASS	
15.247 (e)	Power Spectral Density	PASS	
15.205	Band Edge Emission	PASS	
15.203	Antenna Requirement	PASS	

**NOTE:**

(1) "N/A" denotes test is not applicable in this Test Report

## 1.1 TEST FACILITY

Shenzhen STS Test Services Co., Ltd.  
 Add. : 1/F, Building 2, Zhuoke Science Park, Chongqing Road, Fuyong,  
 Baoan District, Shenzhen, China  
 FCC Registration No.: 842334

## 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately **95 %**.

No.	Item	Uncertainty
1	Conducted Emission Test	$\pm 1.38\text{dB}$
2	RF power,conducted	$\pm 0.16\text{dB}$
3	Spurious emissions,conducted	$\pm 0.21\text{dB}$
4	All emissions,radiated(<1G)	$\pm 4.68\text{dB}$
5	All emissions,radiated(>1G)	$\pm 4.89\text{dB}$
6	Temperature	$\pm 0.5^{\circ}\text{C}$
7	Humidity	$\pm 2\%$

## 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

Equipment	WCDMA Smart Phone	
Trade Name	Cellacom	
Model Name	T703b	
Serial Model	T703x ( x= bcdefg )	
Model Difference	Only difference in model name	
Product Description	The EUT is a WCDMA Smart Phone	
	Operation Frequency:	802.11b/g/n 20: 2412~2462 MHz 802.11n 40: 2422~2452MHz
	Modulation Type:	CCK/OFDM/DBPSK/DAPSK
	Bit Rate of Transmitter	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6Mbps 802.11n(20/40MHz):300/150/144.44/130/117/115.56/104/86.67/78/52/6.5Mbps
	Number Of Channel	802.11b/g/n20: 11CH 802.11n 40: 7CH
	Antenna Designation:	Please see Note 3.
	Antenna Gain (dBi)	0.5 dBi
	Channel List	Please refer to the Note 2.
Ratings	DC 3.7V from battery	
Adapter	Input:AC 100-240V,50/60Hz,0.2A Output:DC 5V,1000mA	
Battery	Rated Voltage: 3.7V Charge Limit: 4.2V capacity :1450mAh	
Hardware version number	--	
Software versioning number	--	
Connecting I/O Port(s)	Please refer to the User's Manual	

Note:

- For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.

Channel List for 802.11b/g/n(20MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

Channel List for 802.11n(40MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
03	2422	06	2437	09	2452		
04	2427	07	2442				
05	2432	08	2447				

3.

Table for Filed Antenna

Ant	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
A	N/A	N/A	PIFA Antenna	NA	0.5	WIFI Antenna



## 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	802.11b CH1/ CH6/ CH11
Mode 2	802.11g CH1/ CH6/ CH11
Mode 3	802.11n(20)CH1/ CH6/ CH11
Mode 4	802.11n(40) CH3/ CH6/ CH9
Mode 5	Link Mode

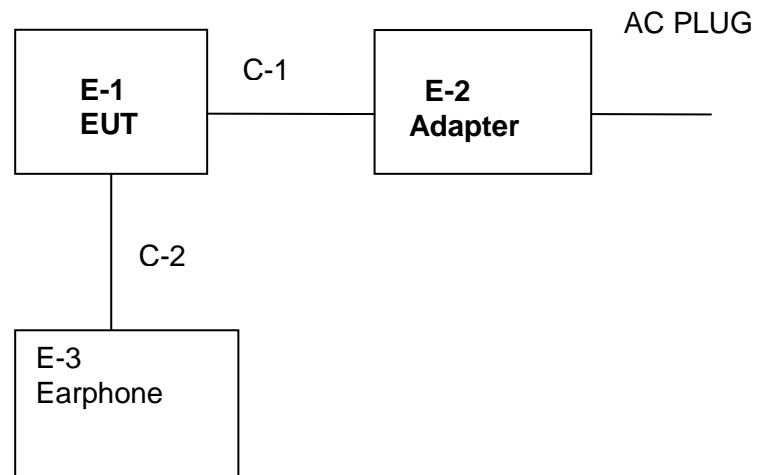
For Conducted Emission	
Final Test Mode	Description
Mode 5	Link Mode

For Radiated Emission	
Final Test Mode	Description
Mode 1	802.11b CH1/ CH6/ CH11
Mode 2	802.11g CH1/ CH6/ CH11
Mode 3	802.11n CH1/ CH6/ CH11
Mode 4	802.11n(40) CH3/ CH6/ CH9
Mode 5	Link Mode

Note:

- (1) The measurements are performed at the highest, middle, lowest available channels.
- (2) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported

### 2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



## 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	Model No.	Series Model	ID or Specification	Note
E-1	WCDMA Smart Phone	T703b	T703x (x= bcdefg)	2AC343396993T703B	EUT

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	YES	1.5m	
C-2	NO	NO	1.2m	

**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.

**2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS**

## Radiation Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Spectrum Analyzer	Agilent	E4407B	MY45108040	2014.07.06	2015.07.05	1 year
2	Test Receiver	R&S	ESPI	101318	2014.06.07	2015.06.06	1 year
3	Bilog Antenna	TESEQ	CBL6111D	31216	2014.07.06	2015.07.05	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2014.06.07	2015.06.06	1 year
5	Spectrum Analyzer	ADVANTEST	R3132	150900201	2014.06.07	2015.06.06	1 year
6	Horn Antenna	EM	EM-AH-10180	2011071402	2014.07.06	2015.07.05	1 year
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2014.07.06	2015.07.05	1 year
8	Amplifier	EM	EM-30180	060538	2013.12.22	2014.12.21	1 year
9	Loop Antenna	ARA	PLA-1030/B	1029	2014.06.08	2015.06.07	1 year
10	Power Meter	R&S	NRVS	100696	2014.07.06	2015.07.05	1 year
11	Power Sensor	R&S	URV5-Z4	0395.1619.05	2014.07.06	2015.07.05	1 year

## Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	2014.06.06	2015.06.05	1 year
2	LISN	R&S	ENV216	101313	2014.08.24	2015.08.23	1 year
3	LISN	EMCO	3816/2	00042990	2014.08.24	2015.08.23	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2014.06.07	2015.06.06	1 year
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	2014.06.07	2015.06.06	1 year
6	Absorbing clamp	R&S	MOS-21	100423	2014.06.08	2015.06.07	1 year

### 3. EMC EMISSION TEST

#### 3.1 CONDUCTED EMISSION MEASUREMENT

##### 3.1.1 POWER LINE CONDUCTED EMISSION Limits

(FREQUENCY RANGE 150KHZ-30MHZ)

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

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

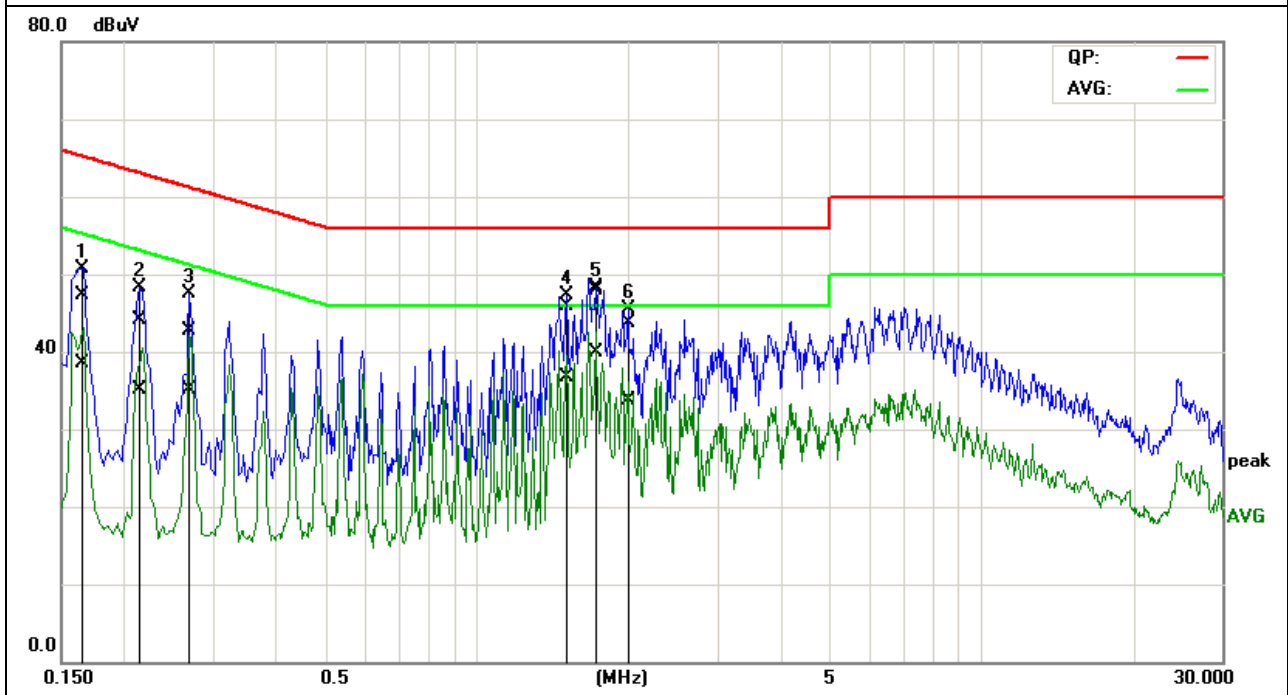
### 3.1.2 TEST RESULTS

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	23 °C	Relative Humidity :	50%
Pressure :	1010hPa	Phase :	L
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode :	Link Mode

Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark
0.1624	27.64	18.67	19.76	47.40	38.43	65.34	55.34	-17.94	-16.91	Pass
0.2145	24.56	15.51	19.61	44.17	35.12	63.03	53.03	-18.86	-17.91	Pass
0.2673	23.02	15.42	19.65	42.67	35.07	61.20	51.20	-18.53	-16.13	Pass
1.5068	26.00	16.77	19.89	45.89	36.66	56.00	46.00	-10.11	-9.34	Pass
1.7207	27.98	19.94	19.90	47.88	39.84	56.00	46.00	-8.12	-6.16	Pass
1.9882	23.77	13.72	19.93	43.70	33.65	56.00	46.00	-12.30	-12.35	Pass

Remark:

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

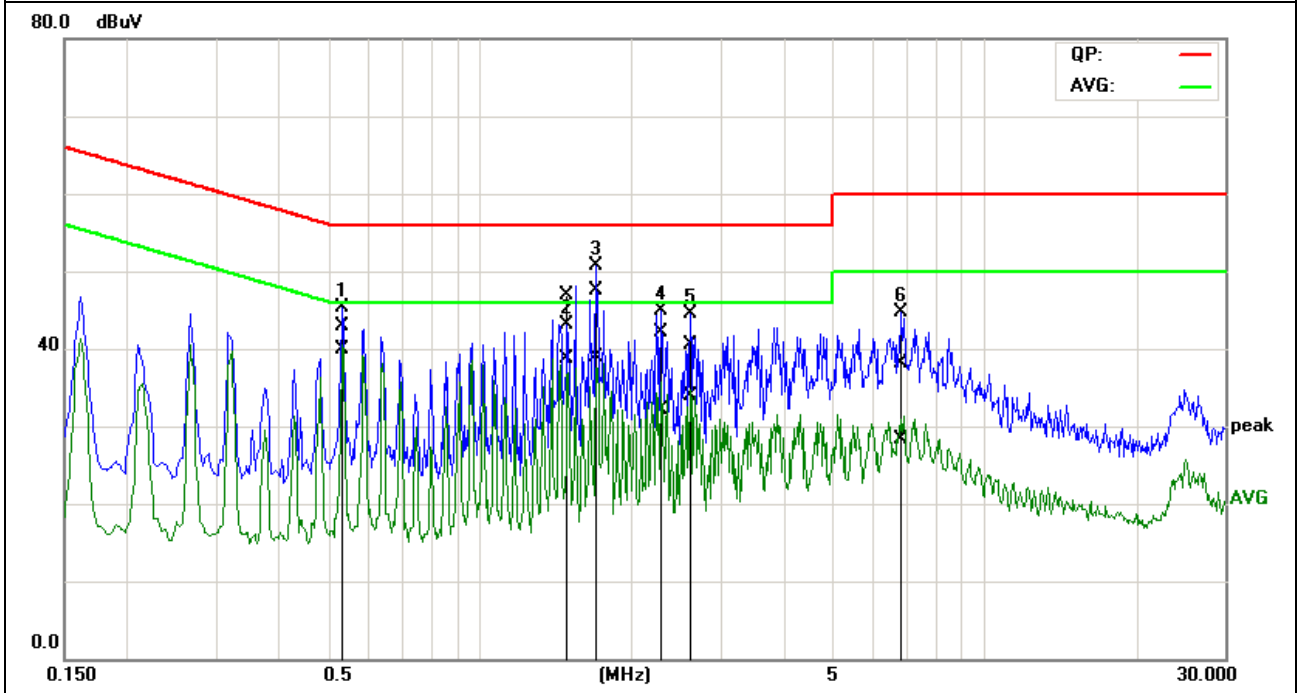


EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	23 °C	Relative Humidity :	50%
Pressure :	1010hPa	Phase :	N
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode :	Link Mode

Frequency	QuasiPeak reading	Average reading	Correction factor	QuasiPeak result	Average result	QuasiPeak limit	Average limit	QuasiPeak margin	Average margin	Remark
(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	(dB)	
0.5323	22.98	20.15	19.85	42.83	40.00	56.00	46.00	-13.17	-6.00	Pass
1.4916	26.95	18.76	19.89	46.84	38.65	56.00	46.00	-9.16	-7.35	Pass
1.7055	27.62	18.96	19.93	47.55	38.89	56.00	46.00	-8.45	-7.11	Pass
2.2872	22.20	12.05	20.00	42.20	32.05	56.00	46.00	-13.80	-13.95	Pass
2.6093	20.39	13.79	20.04	40.43	33.83	56.00	46.00	-15.57	-12.17	Pass
6.8549	17.63	7.89	20.49	38.12	28.38	60.00	50.00	-21.88	-21.62	Pass

Remark:

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



### 3.2 RADIATED EMISSION MEASUREMENT

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

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micovolts/meter)	Measurement Distance (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)

FREQUENCY (MHz)	Class A (dBuV/m) (at 3M)		Class B (dBuV/m) (at 3M)	
	PEAK	AVERAGE	PEAK	AVERAGE
Above 1000	80	60	74	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (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 band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz 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



### **3.2.2 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:

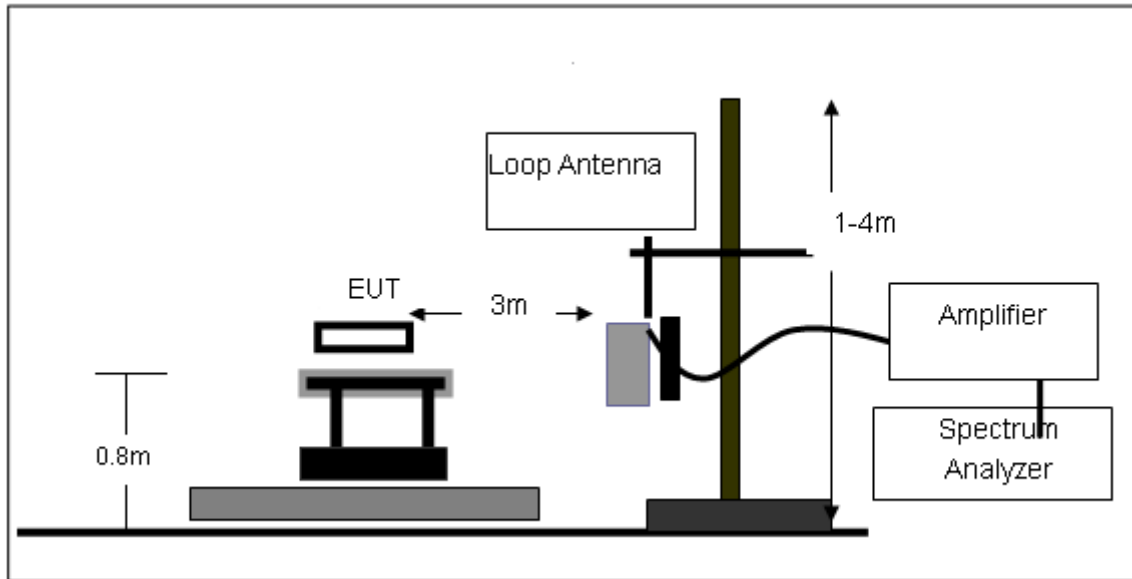
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

### **3.2.3 DEVIATION FROM TEST STANDARD**

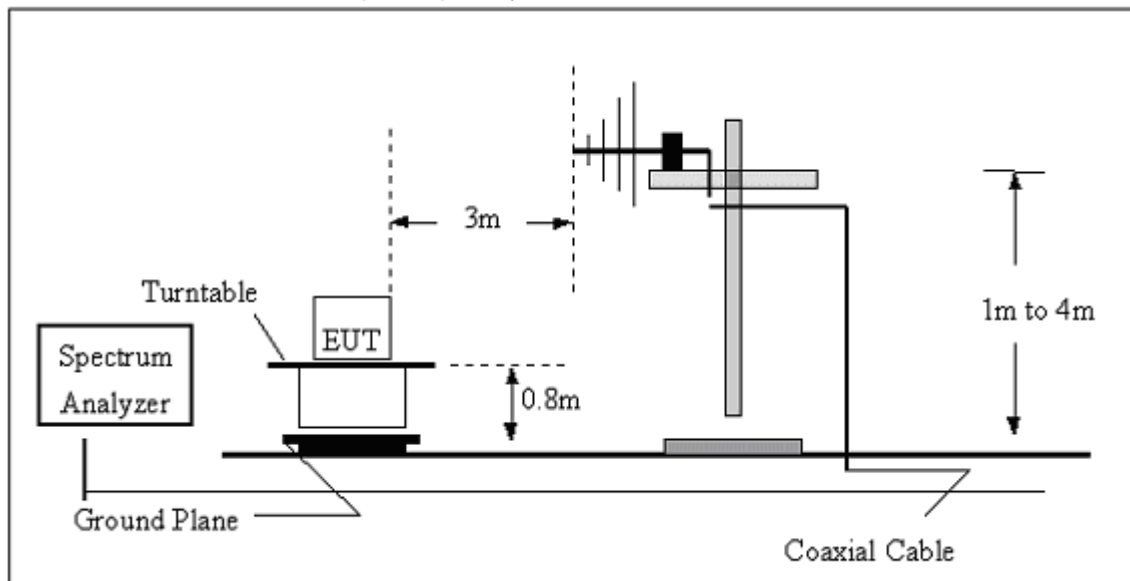
No deviation

### 3.2.4 TEST SETUP

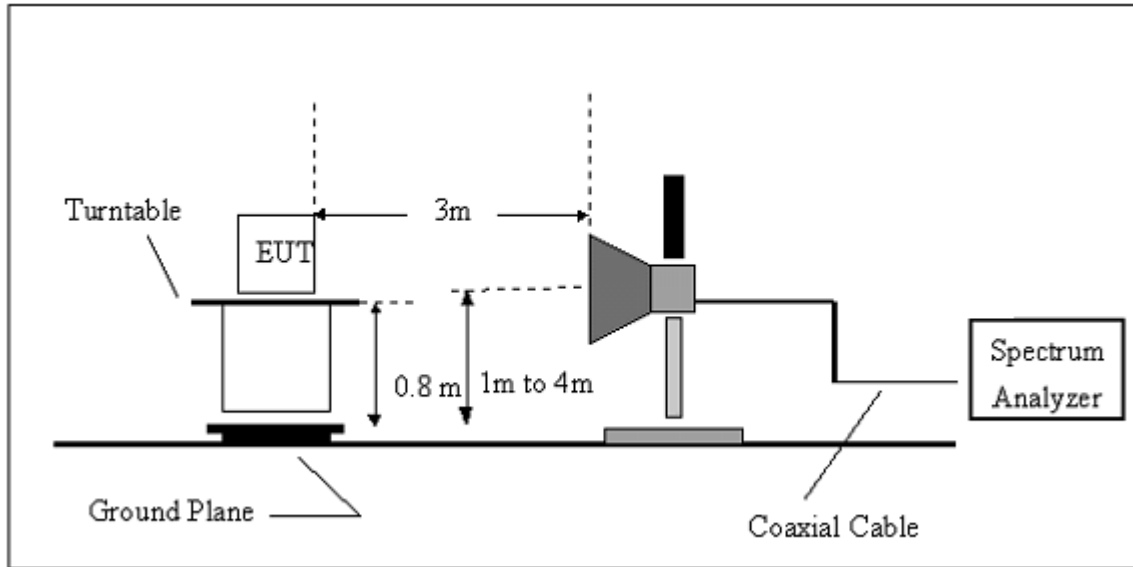
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



## (C) Radiated Emission Test-Up Frequency Above 1GHz

**3.2.5 EUT OPERATING CONDITIONS**

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

**3.2.6 TEST RESULTS (BETWEEN 9KHZ – 30 MHZ)**

EUT:	WCDMA Smart Phone	Model Name. :	T703b
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	Link mode	Polarization :	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

**NOTE:**

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =  $40 \log (\text{specific distance}/\text{test distance})(\text{dB})$ ;

Limit line = specific limits(dBuv) + distance extrapolation factor.

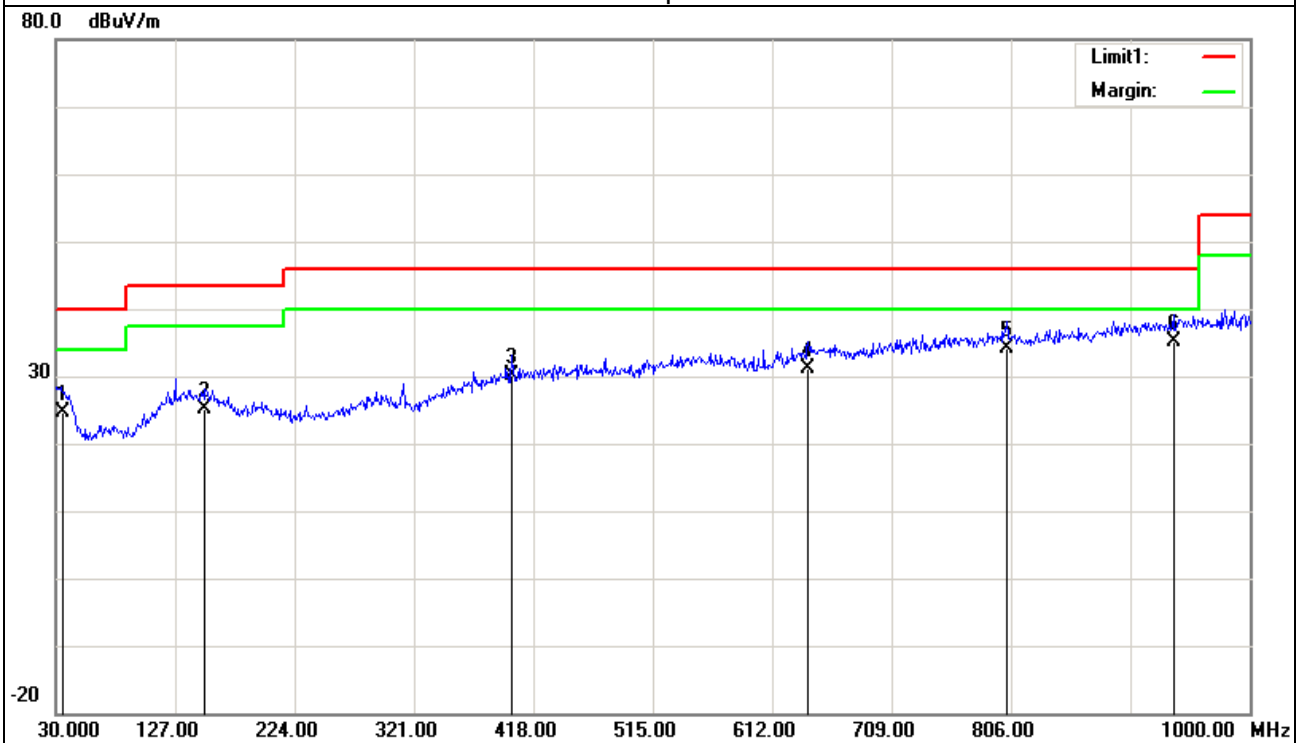
**3.2.7 TEST RESULTS (BETWEEN 30MHZ – 1GHZ)**

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	Link mode	Polarization :	Horizontal

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
655.6500	13.59	21.71	35.30	46.00	-10.70	200	0	QP
732.2800	14.00	22.40	36.40	46.00	-9.60	100	100	QP
773.9900	13.95	22.89	36.84	46.00	-9.16	100	237	QP
828.3100	15.88	23.02	38.90	46.00	-7.10	100	261	QP
886.5100	13.69	23.99	37.68	46.00	-8.32	300	360	QP
941.8000	14.41	25.07	39.48	46.00	-6.52	300	188	QP

Remark:

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

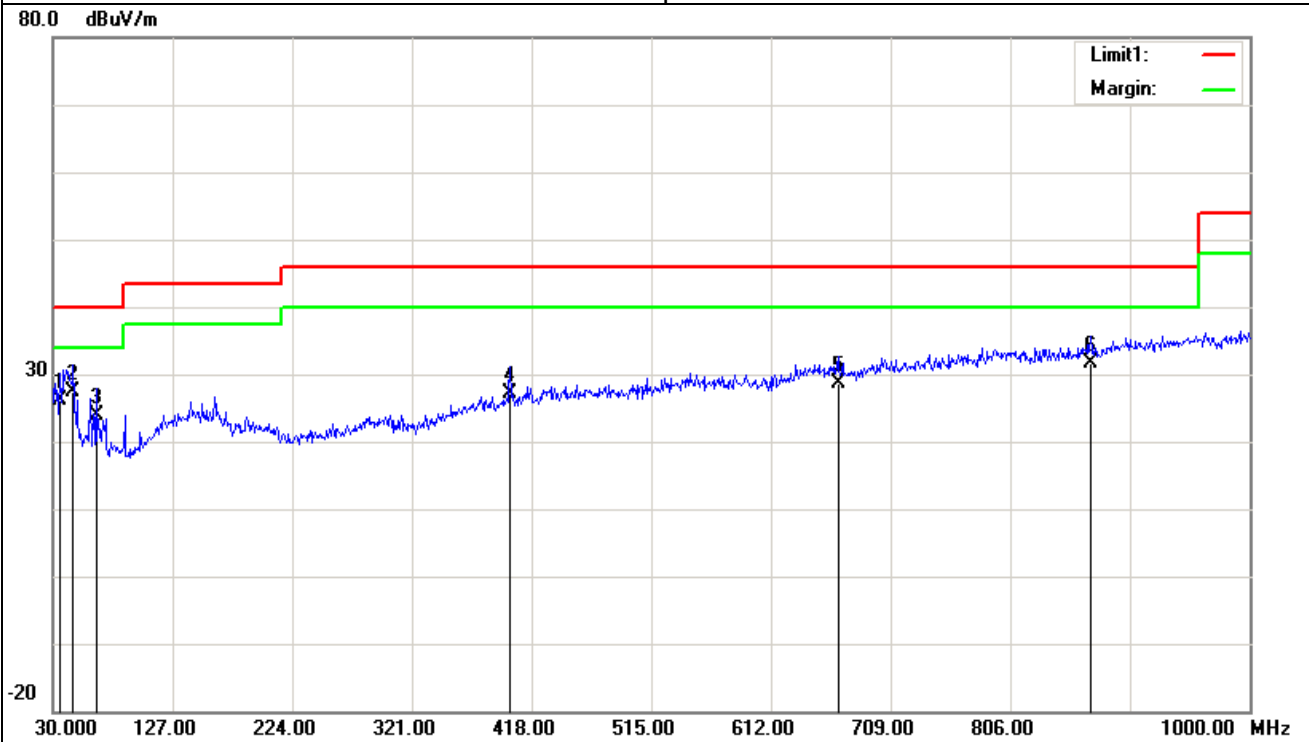


EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	Link mode	Polarization :	Vertical

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
38.7300	17.00	14.22	31.22	40.00	-8.78	100	189	QP
66.8600	21.40	8.80	30.20	40.00	-9.80	100	198	QP
766.2300	14.60	22.88	37.48	46.00	-8.52	200	0	QP
867.1100	14.33	23.55	37.88	46.00	-8.12	100	165	QP
903.0000	14.82	24.33	39.15	46.00	-6.85	100	292	QP
946.6500	15.35	25.17	40.52	46.00	-5.48	100	127	QP

Remark:

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



**3.2.8 TEST RESULTS (ABOVE 1000 MHZ)**

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH1 (802.11b Mode)/2412	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4824.103	46.23	10.44	56.67	74	-17.33	peak
4824.103	31.43	10.44	41.87	54	-12.13	AVG
7236.133	47.43	12.39	59.82	74	-14.18	peak
7236.133	32.54	12.39	44.93	54	-9.07	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH1 (802.11b Mode)/2412	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4874.061	56.23	10.4	66.63	74	-7.37	peak
4874.079	33.45	10.4	43.85	54	-10.15	AVG
7311.077	48.32	12.75	61.07	74	-12.93	peak
7311.136	30.25	12.75	43	54	-11	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH6 (802.11b Mode)/2437	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4874.064	48.21	10.4	58.61	74	-15.39	peak
4874.064	32.54	10.4	42.94	54	-11.06	AVG
7311.132	45.32	12.75	58.07	74	-15.93	peak
7311.132	31.21	12.75	43.96	54	-10.04	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH6 (802.11b Mode)/2437	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4924.049	51.78	10.39	62.17	74	-11.83	peak
4924.049	33.67	10.44	44.11	54	-9.89	AVG
7386.072	46.18	12.68	58.86	74	-15.14	peak
7386.072	33.59	12.68	46.27	54	-7.73	AVG

Remark:

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

No emission detected above 18GHz



EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH11 (802.11b Mode)/2462	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4924.072	48.34	10.39	58.73	74	-15.27	peak
4924.072	33.21	10.39	43.6	54	-10.4	AVG
7386.074	45.23	12.68	57.91	74	-16.09	peak
7386.074	27.34	12.68	40.02	54	-13.98	AVG

Remark:

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

2. No emission detected above 18GHz

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH11 (802.11b Mode)/2462	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4924.111	48.12	10.39	58.51	74	-15.49	peak
4924.111	35.34	10.39	45.73	54	-8.27	AVG
7386.090	47.25	12.68	59.93	74	-14.07	peak
7386.090	32.13	12.68	44.81	54	-9.19	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH1 (802.11g Mode)/2412	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4824.146	46.21	10.44	56.65	74	-17.35	peak
4824.146	36.43	10.44	46.87	54	-7.13	AVG
7236.201	46.43	12.39	58.82	74	-15.18	peak
7236.201	31.54	12.39	43.93	54	-10.07	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH1 (802.11g Mode)/2412	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4824.144	54.32	10.44	64.76	74	-9.24	peak
4824.144	32.23	10.44	42.67	54	-11.33	AVG
7236.090	44.45	12.39	56.84	74	-17.16	peak
7236.090	32.54	12.39	44.93	54	-9.07	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH6 (802.11g Mode)/2437	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4874.095	46.21	10.4	56.61	74	-17.39	peak
4874.095	26.64	10.4	37.04	54	-16.96	AVG
7311.110	44.75	12.75	57.5	74	-16.5	peak
7311.110	25.44	12.75	38.19	54	-15.81	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH6 (802.11g Mode)/2437	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4874.124	48.32	10.4	58.72	74	-15.28	peak
4874.124	35.21	10.4	45.61	54	-8.39	AVG
7311.078	49.26	12.75	62.01	74	-11.99	peak
7311.078	33.43	12.75	46.18	54	-7.82	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH11 (802.11g Mode)/2462	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4924.113	50.43	10.39	60.82	74	-13.18	peak
4924.113	33.43	10.39	43.82	54	-10.18	AVG
7386.130	47.21	12.68	59.89	74	-14.11	peak
7386.130	30.82	12.68	43.5	54	-10.5	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH11(802.11g Mode)/2462	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4924.065	46.21	10.39	56.6	74	-17.4	peak
4924.065	34.34	10.39	44.73	54	-9.27	AVG
7386.082	46.24	12.68	58.92	74	-15.08	peak
7386.082	33.42	12.68	46.1	54	-7.9	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH1(802.11n Mode)/20MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4824.098	47.21	10.44	57.65	74	-16.35	peak
4824.098	36.34	10.44	46.78	54	-7.22	AVG
7236.069	43.35	12.39	55.74	74	-18.26	peak
7236.069	28.21	12.39	40.6	54	-13.4	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH1(802.11n Mode)/20MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4824.126058	46.23	10.44	56.67	74	-17.33	peak
4824.055491	37.21	10.44	47.65	54	-6.35	AVG
7236.06408	52.43	12.39	64.82	74	-9.18	peak
7236.06408	31.12	12.39	43.51	54	-10.49	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH6(802.11n Mode)/20MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4874.111	50.32	10.4	60.72	74	-13.28	peak
4874.111	32.23	10.4	42.63	54	-11.37	AVG
7311.093	49.54	12.75	62.29	74	-11.71	peak
7311.093	27.43	12.75	40.18	54	-13.82	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH6(802.11n Mode)/20MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4874.150	47.23	10.4	57.63	74	-16.37	peak
4874.150	32.22	10.4	42.62	54	-11.38	AVG
7311.113	47.53	12.75	60.28	74	-13.72	peak
7311.113	27.62	12.75	40.37	54	-13.63	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH11(802.11n Mode)/20MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4924.136	47.23	10.39	57.62	74	-16.38	peak
4924.136	35.15	10.39	45.54	54	-8.46	AVG
7386.119	43.67	12.68	56.35	74	-17.65	peak
7386.119	32.32	12.68	45	54	-9	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH11(802.11n Mode)/20MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4924.108	52.56	10.39	62.95	74	-11.05	peak
4924.108	35.43	10.39	45.82	54	-8.18	AVG
7386.161	41.32	12.68	54	74	-20	peak
7386.161	28.54	12.68	41.22	54	-12.78	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH3(802.11n Mode)/40MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4844.109	46.87	10.5	57.37	74	-16.63	peak
4844.109	31.63	10.5	42.13	54	-11.87	AVG
7266.292	47.43	12.5	59.93	74	-14.07	peak
7266.292	31.23	12.5	43.73	54	-10.27	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH3(802.11n Mode)/40MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4844.245	48.23	10.5	58.73	74	-15.27	peak
4844.245	30.25	10.5	40.75	54	-13.25	AVG
7266.164	48.34	12.5	60.84	74	-13.16	peak
7266.164	29.32	12.5	41.82	54	-12.18	AVG

Remark:

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



EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH6(802.11n Mode)/40MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4874.155	48.43	10.4	58.83	74	-15.17	peak
4874.155	33.54	10.4	43.94	54	-10.06	AVG
7311.063	48.23	12.75	60.98	74	-13.02	peak
7311.063	32.54	12.75	45.29	54	-8.71	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH6(802.11n Mode)/40MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4874.492	48.43	10.4	58.83	74	-15.17	peak
4874.492	34.56	10.4	44.96	54	-9.04	AVG
7311.557	47.71	12.75	60.46	74	-13.54	peak
7311.557	35.32	12.75	48.07	54	-5.93	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH9(802.11n Mode)/40MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4904.345	48.23	10.29	58.52	74	-15.48	peak
4904.345	35.21	10.29	45.5	54	-8.5	AVG
7356.232	47.45	12.79	60.24	74	-13.76	peak
7356.232	31.56	12.79	44.35	54	-9.65	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	CH9(802.11n Mode)/40MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
4904.079	51.34	10.29	61.63	74	-12.37	peak
4904.130	34.56	10.29	44.85	54	-9.15	AVG
7356.334	47.54	12.79	60.33	74	-13.67	peak
7356.334	32.21	12.79	45	54	-9	AVG

Remark:

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

**3.2.9 TEST RESULTS (BAND EDGE)**

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH1(802.11b Mode)	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
2399.9	76.73	-13	63.73	74	-10.27	peak
2399.9	58.47	-13	45.47	54	-5.54	AVG
2400	77.42	-12.99	64.43	74	-4.41	peak
2400	57.34	-12.99	44.35	54	-5.74	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH1(802.11b Mode)	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
2399.9	81.43	-13	68.43	74	-5.57	peak
2399.9	61.23	-13	48.23	54	-5.77	AVG
2400	78.45	-12.99	65.46	74	-8.54	peak
2400	59.43	-12.99	46.44	54	-7.56	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH11(802.11b Mode)	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
2483.5	78.54	-12.78	65.76	74	-8.24	peak
2483.5	60.32	-12.78	47.54	54	-6.46	AVG
2483.6	79.56	-12.77	66.79	74	-7.21	peak
2483.6	60.54	-12.78	47.76	54	-6.24	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH11(802.11b Mode)	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
2483.5	77.54	-12.78	64.76	74	-9.24	peak
2483.5	60.32	-12.78	47.54	54	-6.46	AVG
2483.6	78.54	-12.77	65.77	74	-8.23	peak
2483.6	59.45	-12.77	46.68	54	-7.32	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH1(802.11g Mode)	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
2399.9	76.21	-13	63.21	74	-10.79	peak
2399.9	59.43	-13	46.43	54	-7.57	AVG
2400	78.15	-12.99	65.16	74	-8.84	peak
2400	58.43	-12.99	45.44	54	-8.56	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH1(802.11gMode)	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
2399.9	78.23	-13	65.23	74	-8.77	peak
2399.9	60.21	-13	47.21	54	-6.79	AVG
2400	78.25	-12.99	65.26	74	-8.74	peak
2400	62.24	-12.99	49.25	54	-4.75	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH11(802.11g Mode)	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
2483.5	77.35	-12.78	64.57	74	-9.43	peak
2483.5	61.56	-12.78	48.78	54	-5.22	AVG
2483.6	76.64	-12.77	63.87	74	-10.13	peak
2483.6	60.64	-12.77	47.87	54	-6.13	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH11(802.11g Mode)	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
2483.5	78.54	-12.78	65.76	74	-8.24	peak
2483.5	60.43	-12.78	47.65	54	-6.35	AVG
2483.6	76.65	-12.77	63.88	74	-10.12	peak
2483.6	61.34	-12.77	48.57	54	-5.43	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH1(802.11n Mode)/20MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
2399.9	76.45	-13	63.45	74	-10.55	peak
2399.9	58.26	-13	45.26	54	-8.74	AVG
2400	78.22	-12.99	65.23	74	-8.77	peak
2400	58.54	-12.99	45.55	54	-8.45	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH1(802.11n Mode)/20M	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
2399.9	77.32	-13	64.32	74	-9.68	peak
2399.9	58.34	-13	45.34	54	-8.66	AVG
2400	76.35	-12.99	63.36	74	-10.64	peak
2400	59.45	-12.99	46.46	54	-7.54	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH11(802.11n Mode)/20MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
2483.5	77.43	-12.78	64.65	74	-9.35	peak
2483.5	56.75	-12.78	43.97	54	-10.03	AVG
2483.6	75.32	-12.77	62.55	74	-11.45	peak
2483.6	57.35	-12.77	44.58	54	-9.42	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH11(802.11n Mode)/20MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
2483.5	73.54	-12.78	60.45	74	-13.55	peak
2483.5	59.54	-12.78	46.84	54	-7.16	AVG
2483.6	73.23	-12.78	60.45	74	-13.55	peak
2483.6	59.54	-12.78	46.84	54	-7.16	AVG

Remark:

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



EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH3(802.11n Mode)/40M	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
2399.9	79.23	-13	66.23	74	-7.77	peak
2399.9	58.21	-13	45.21	54	-8.79	AVG
2400	78.34	-12.99	65.35	74	-8.65	peak
2400	59.54	-12.99	46.55	54	-7.45	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH3(802.11n Mode)/40MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
2399.9	80.13	-13	67.13	74	-6.87	peak
2399.9	55.54	-13	42.54	54	-11.46	AVG
2400	78.34	-12.99	65.35	74	-8.65	peak
2400	55.23	-12.99	42.24	54	-11.76	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH9(802.11n Mode)/40MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
2483.5	76.43	-12.78	63.65	74	-10.35	peak
2483.5	59.54	-12.78	46.76	54	-7.24	AVG
2483.6	77.67	-12.77	64.9	74	-9.1	peak
2483.6	61.43	-12.77	48.66	54	-5.34	AVG

Remark:

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

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5V FROM ADAPTER WITH AC 120V/60HZ
Test Mode :	CH9(802.11n Mode)/40MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Value Type
2483.5	78.45	-12.78	65.67	74	-8.33	peak
2483.5	60.43	-12.78	47.65	54	-6.35	AVG
2483.6	78.26	-12.78	65.48	74	-8.52	peak
2483.6	59.17	-12.78	46.39	54	-7.61	AVG

Remark:

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

## 4. CONDUCTED SPURIOUS EMISSIONS

### 4.1 APPLIED PROCEDURES / LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

#### 4.1.1 TEST PROCEDURE

Spectrum Parameter	Setting
Detector	Peak
Start Frequency	30 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	100 KHz/300 KHz
Trace-Mode:	Max hold

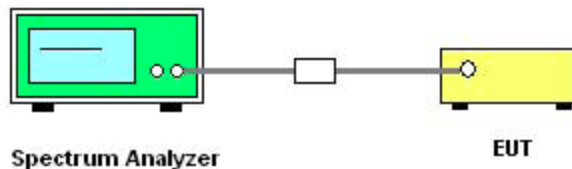
For Band edge

Spectrum Parameter	Setting
Attenuation	Auto
Start/Stop Frequency	Lower Band Edge: 2300 – 2430 MHz Upper Band Edge: 2450 – 2500 MHz
RB / VB (emission in restricted band)	100 KHz/300 KHz
Trace-Mode:	Max hold

#### 4.1.2 DEVIATION FROM STANDARD

No deviation.

#### 4.1.3 TEST SETUP



The EUT which is powered by the Battery, is coupled to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW.

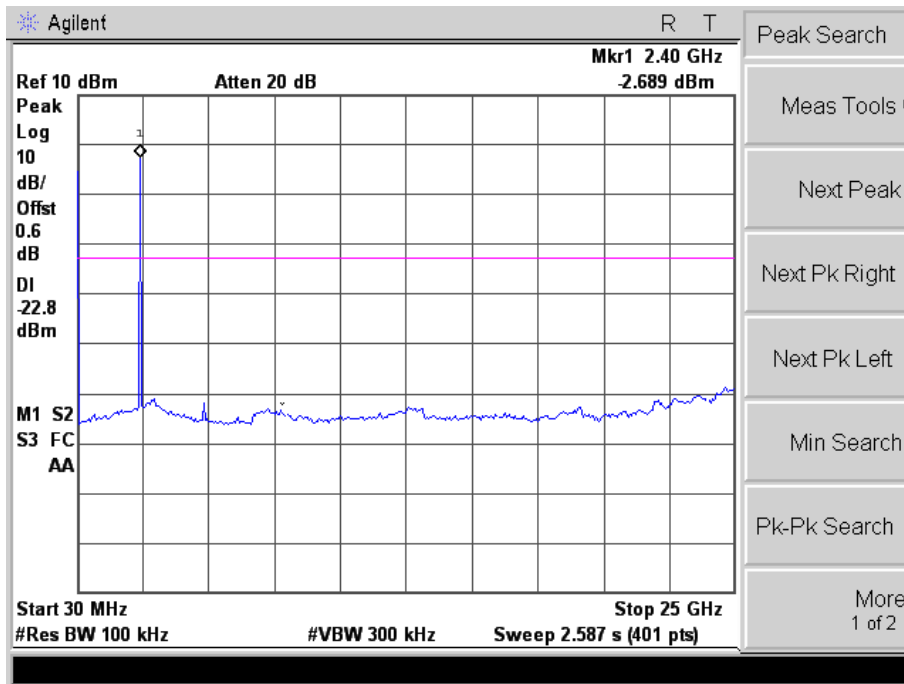
#### 4.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

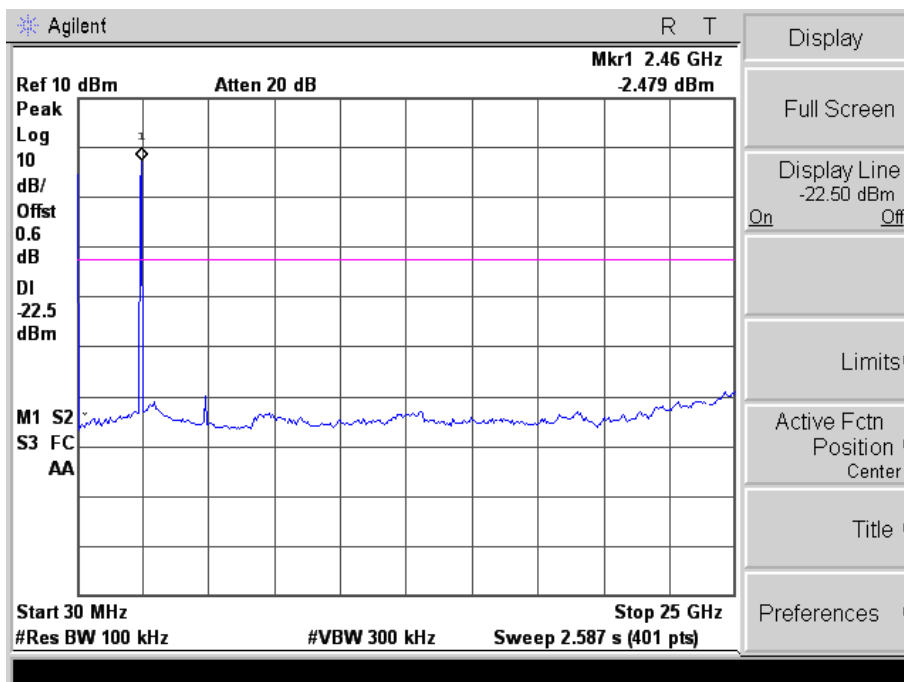
### 4.1.5 TEST RESULTS

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX b Mode /CH01, CH06, CH11		

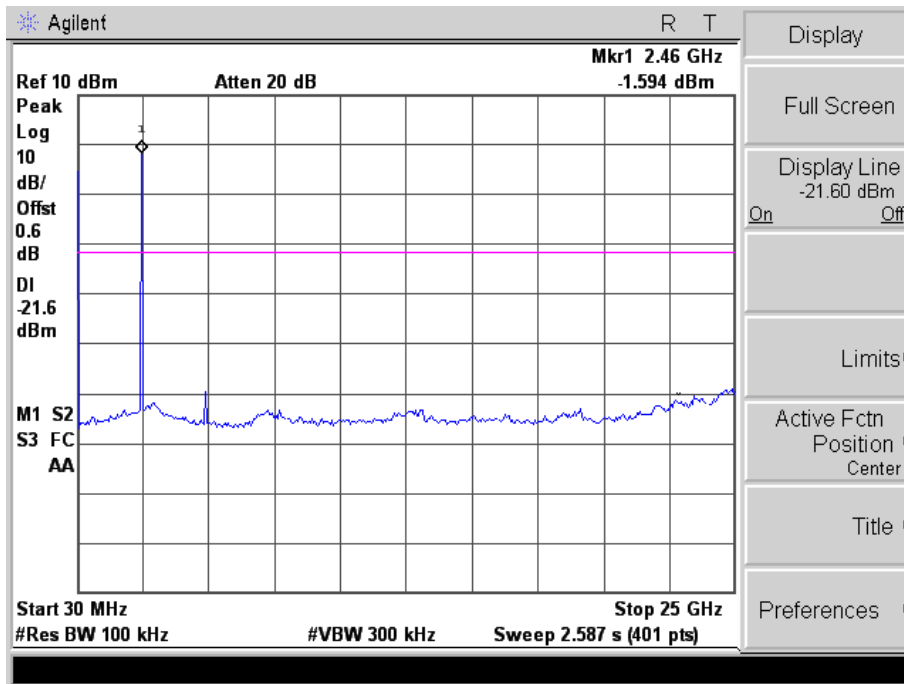
CH 01



CH 06

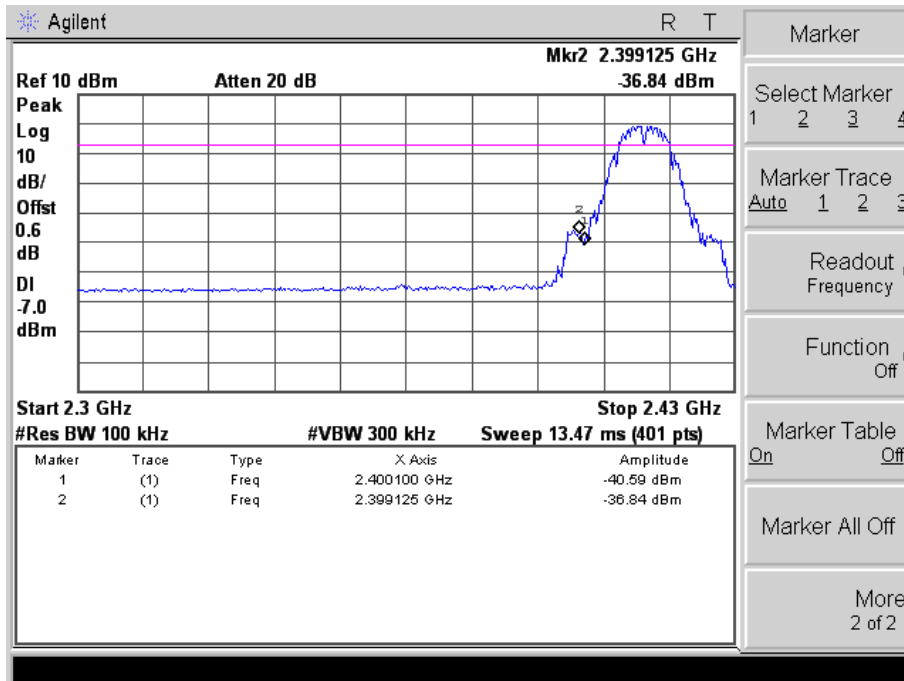


CH 11

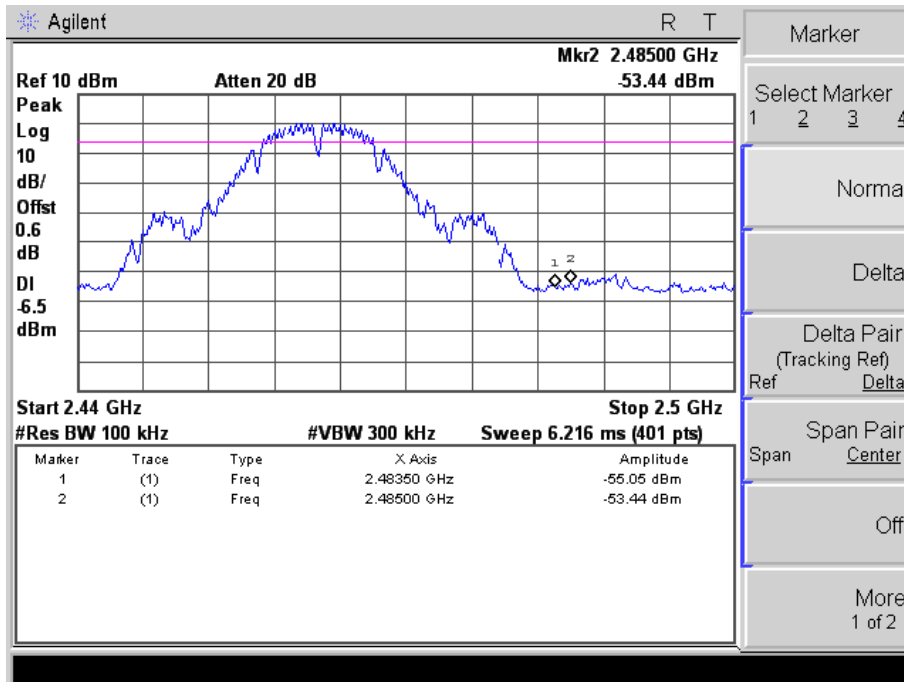


Band edge

CH 01

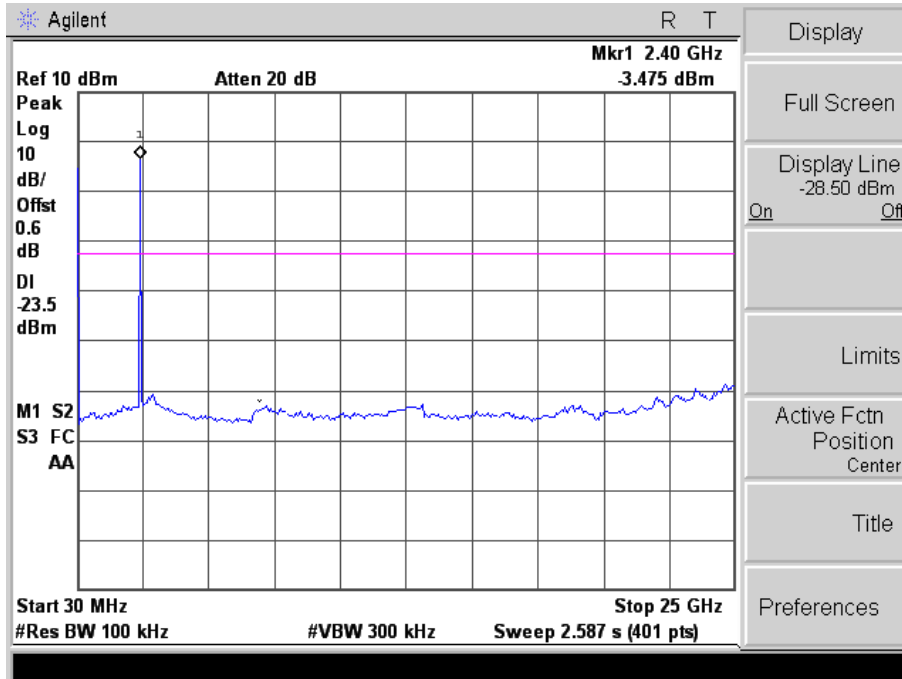


CH 11

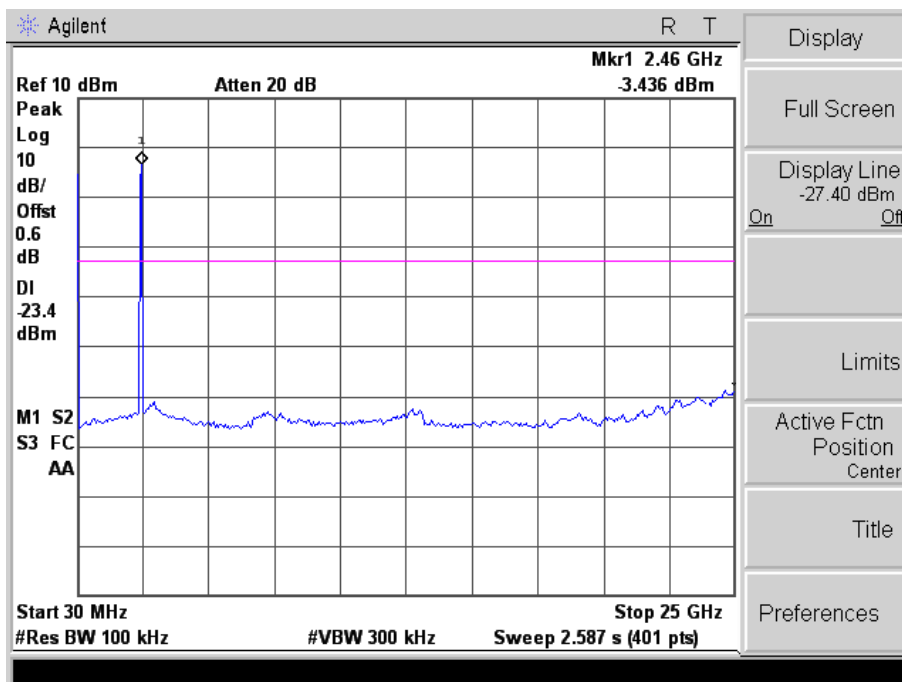


EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX g Mode /CH01, CH06, CH11		

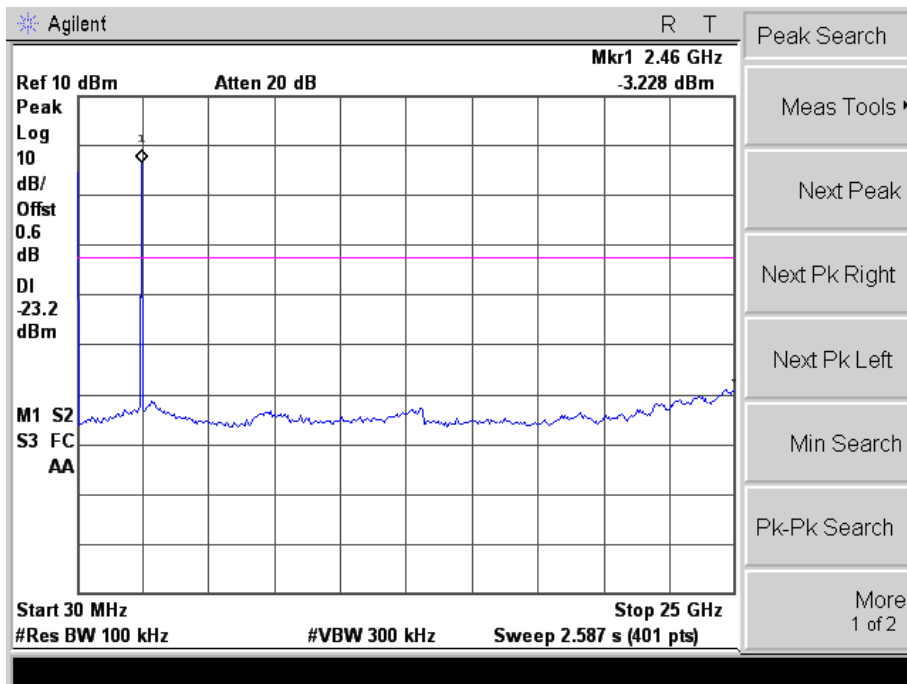
CH 01



CH 06

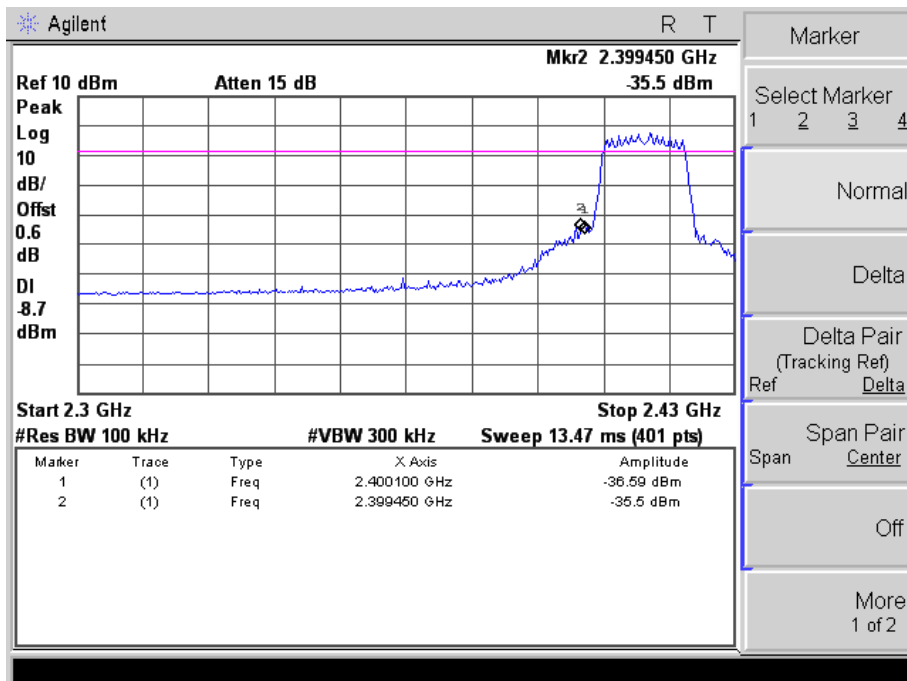


CH 11



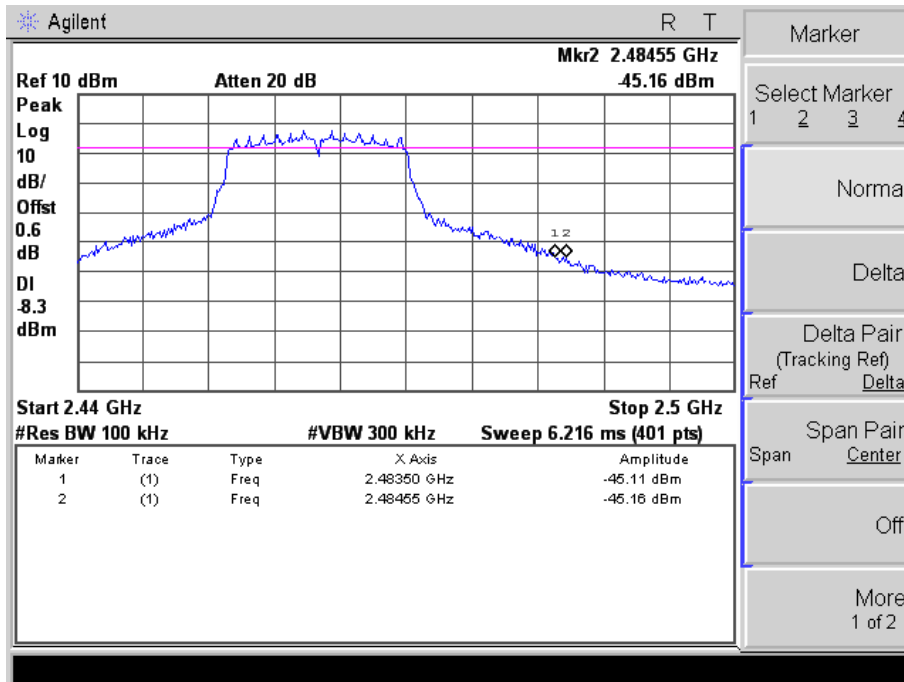
Band edge

CH 01



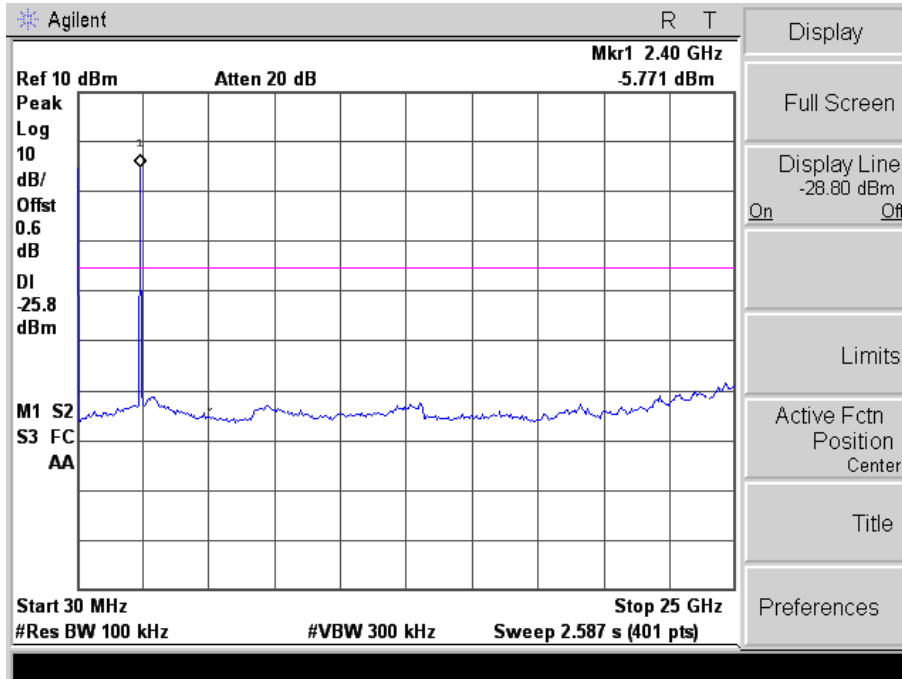


CH11

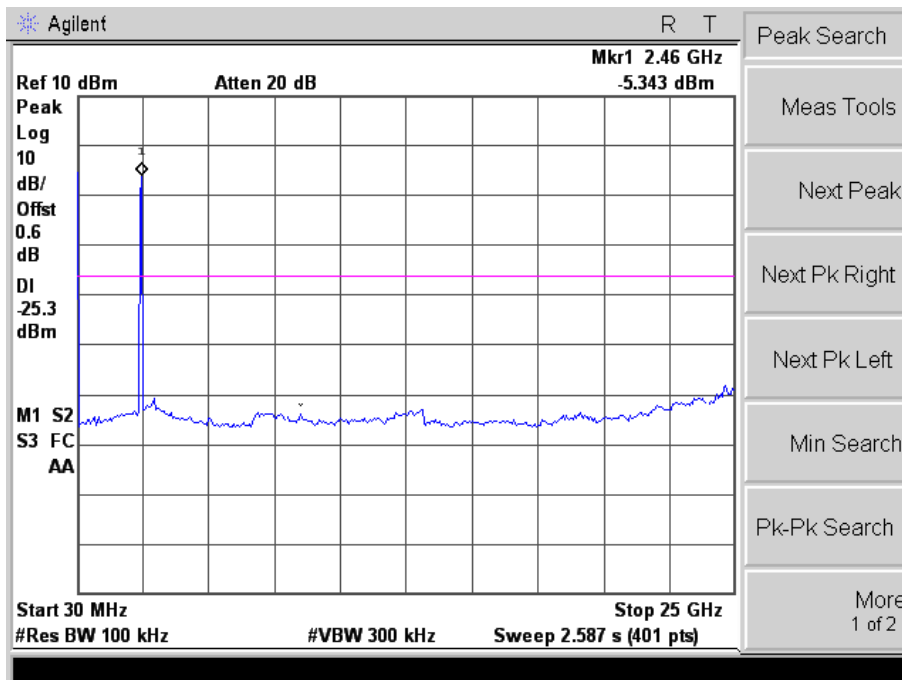


EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX n Mode(20M) /CH01, CH06, CH11		

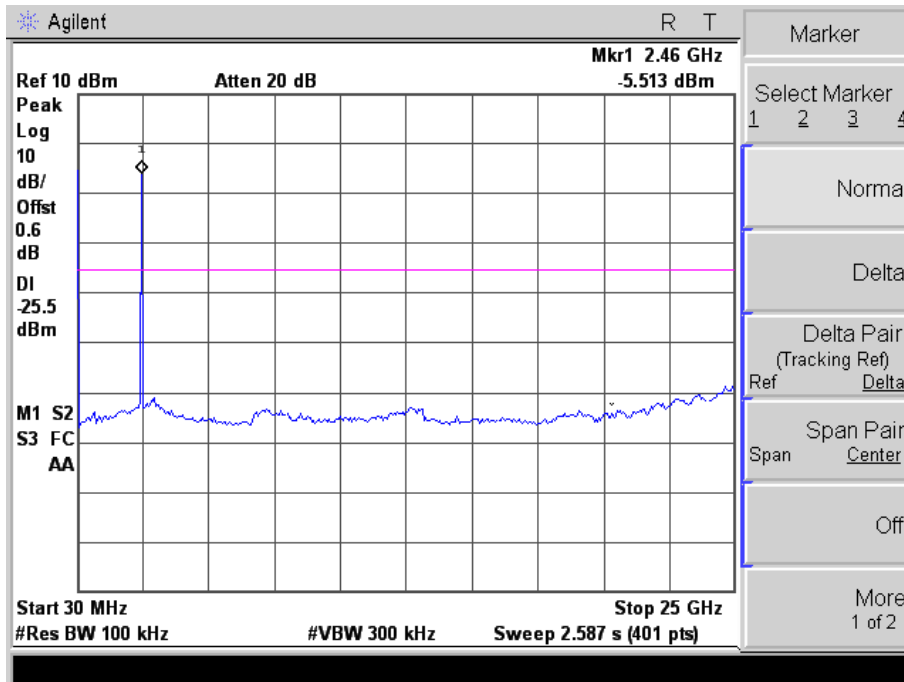
CH 01



CH 06

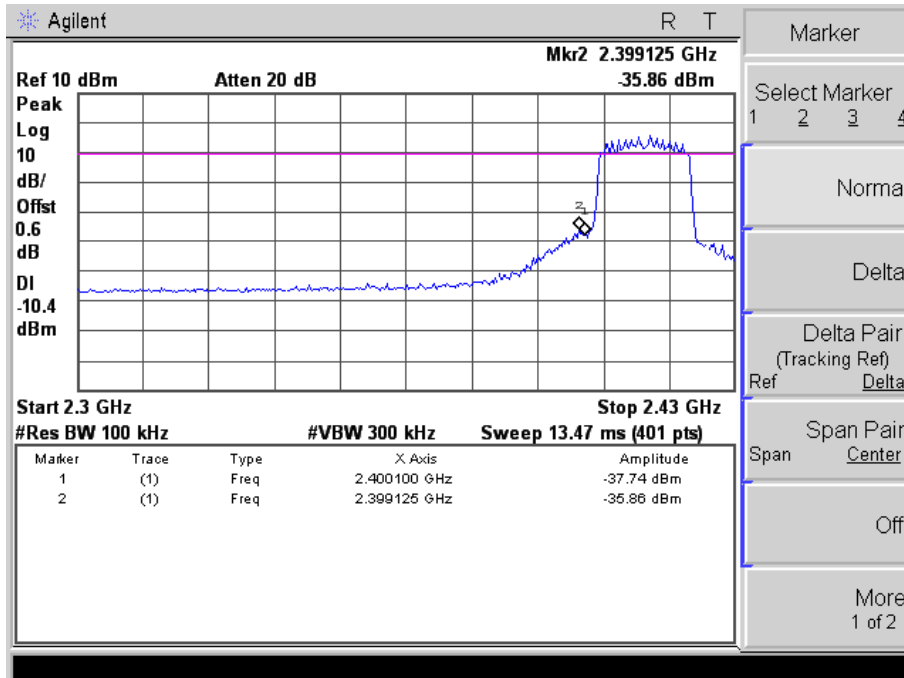


CH 11

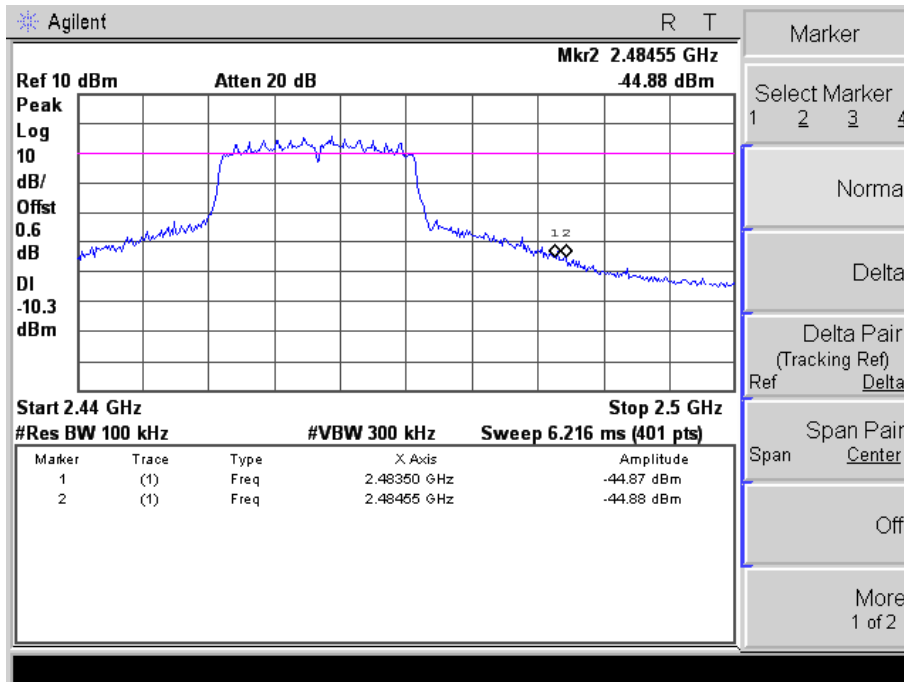


Band edge

CH 01

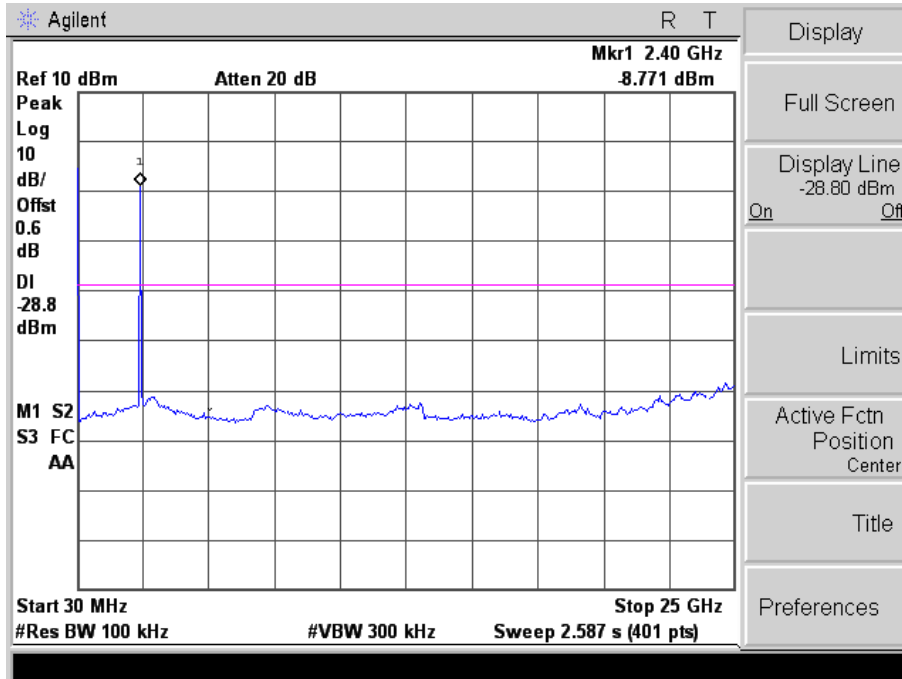


CH 11

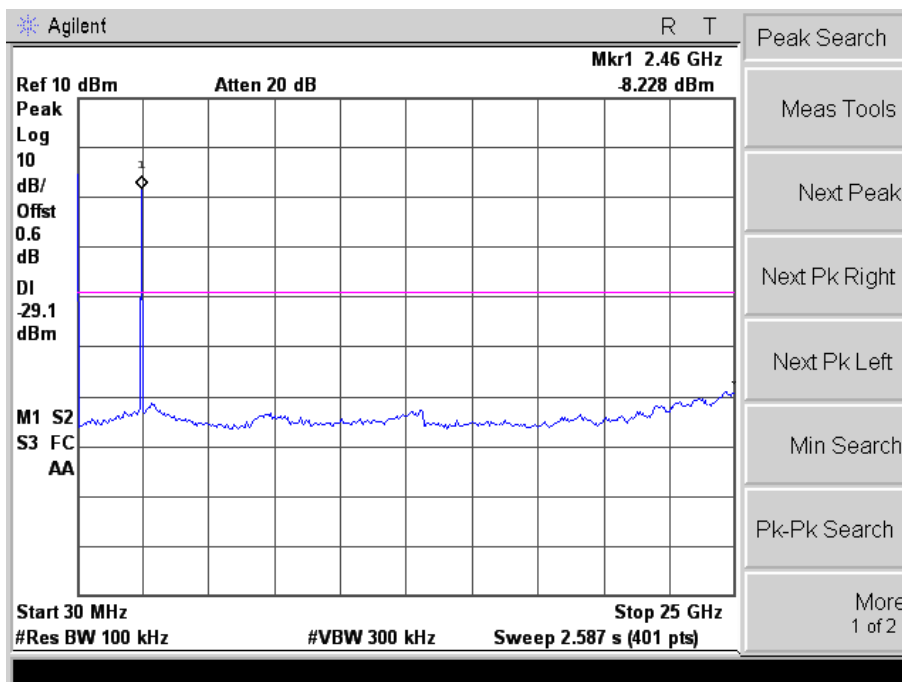


EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX n Mode(40M) /CH03, CH06, CH09		

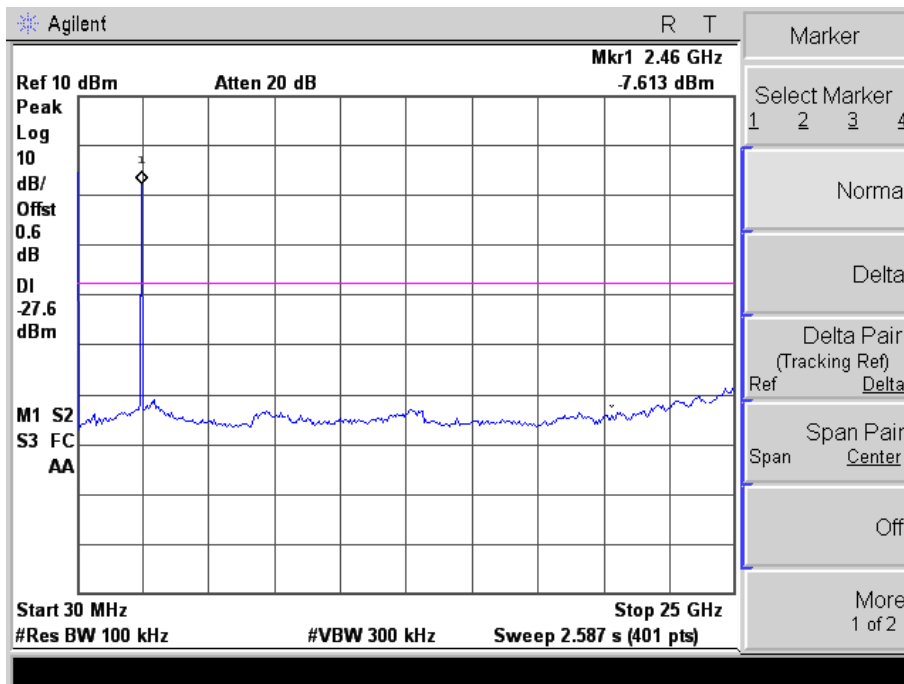
CH 03



CH06

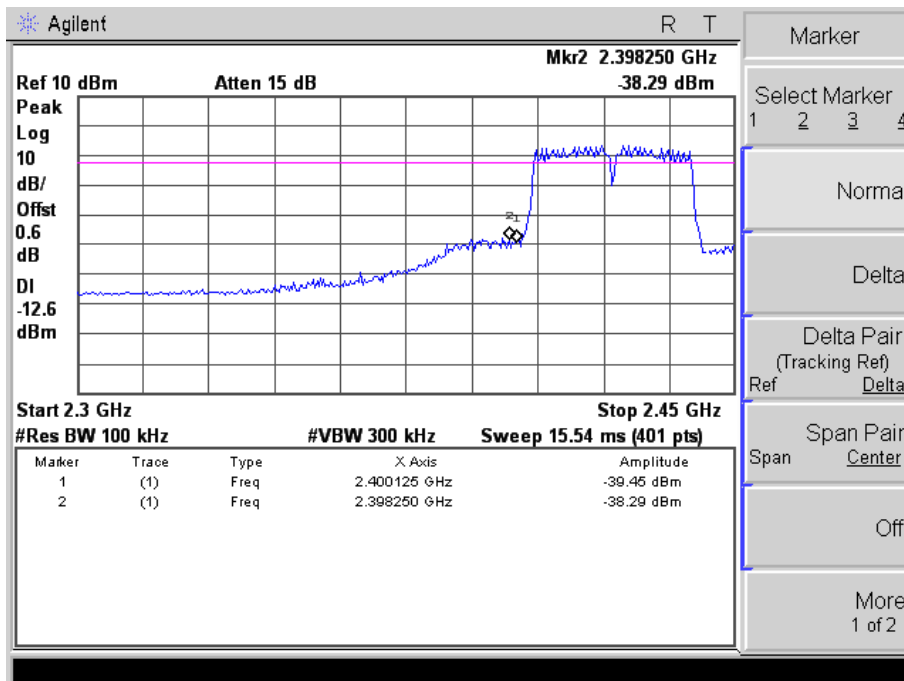


CH09

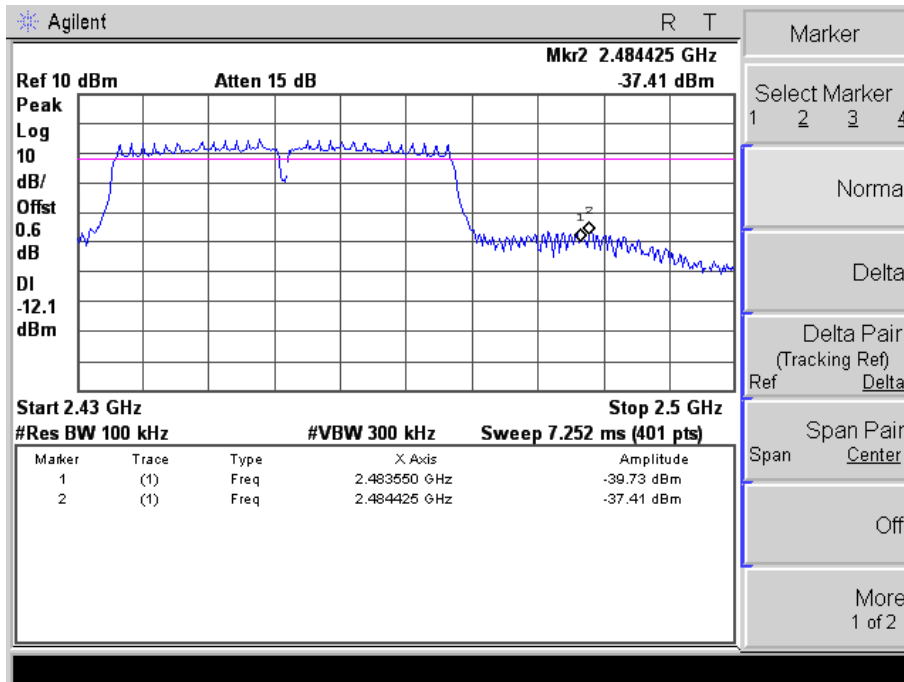


Band edge

CH03



CH 09



## 5. POWER SPECTRAL DENSITY TEST

### 5.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

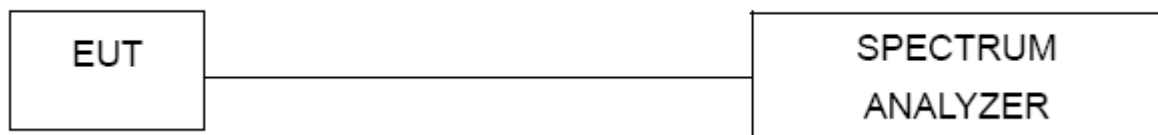
#### 5.1.1 TEST PROCEDURE

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the RBW  $\geq$  3 kHz.
4. Set the VBW  $\geq$  3 x RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

#### 5.1.2 DEVIATION FROM STANDARD

No deviation.

#### 5.1.3 TEST SETUP



#### 5.1.4 EUT OPERATION CONDITIONS

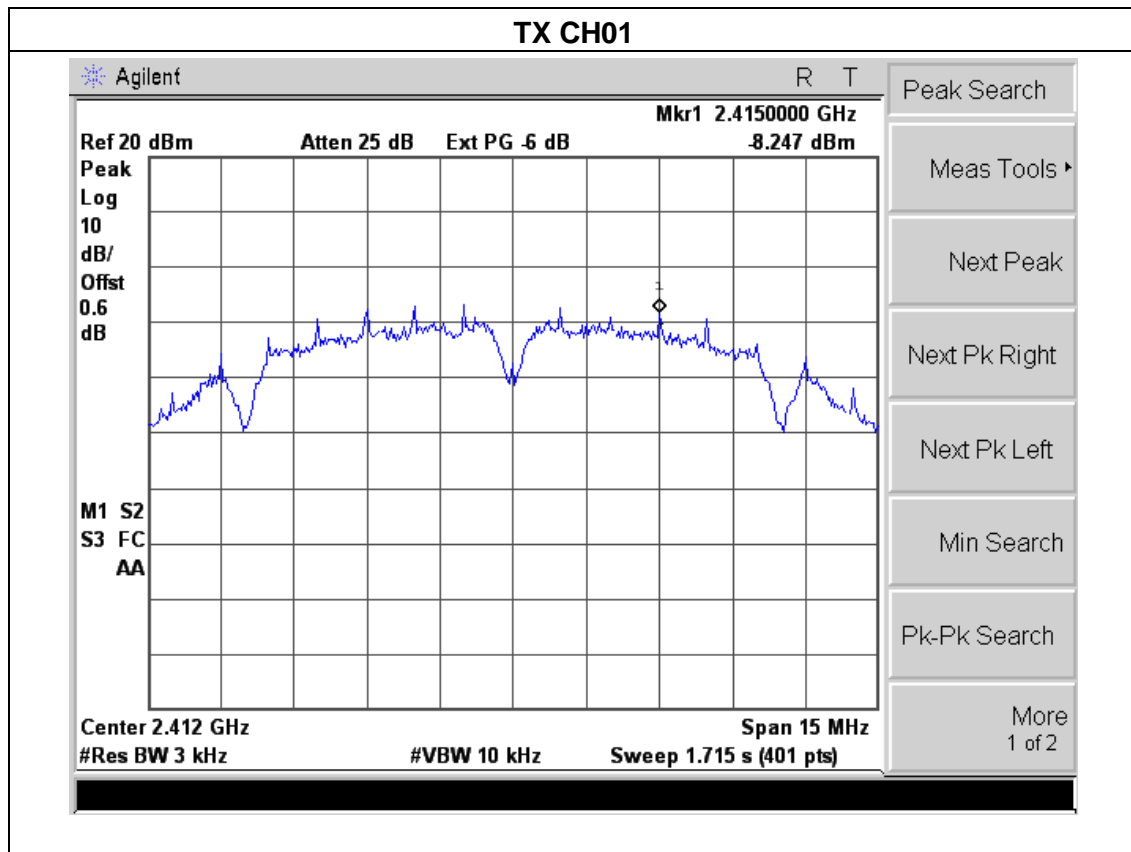
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

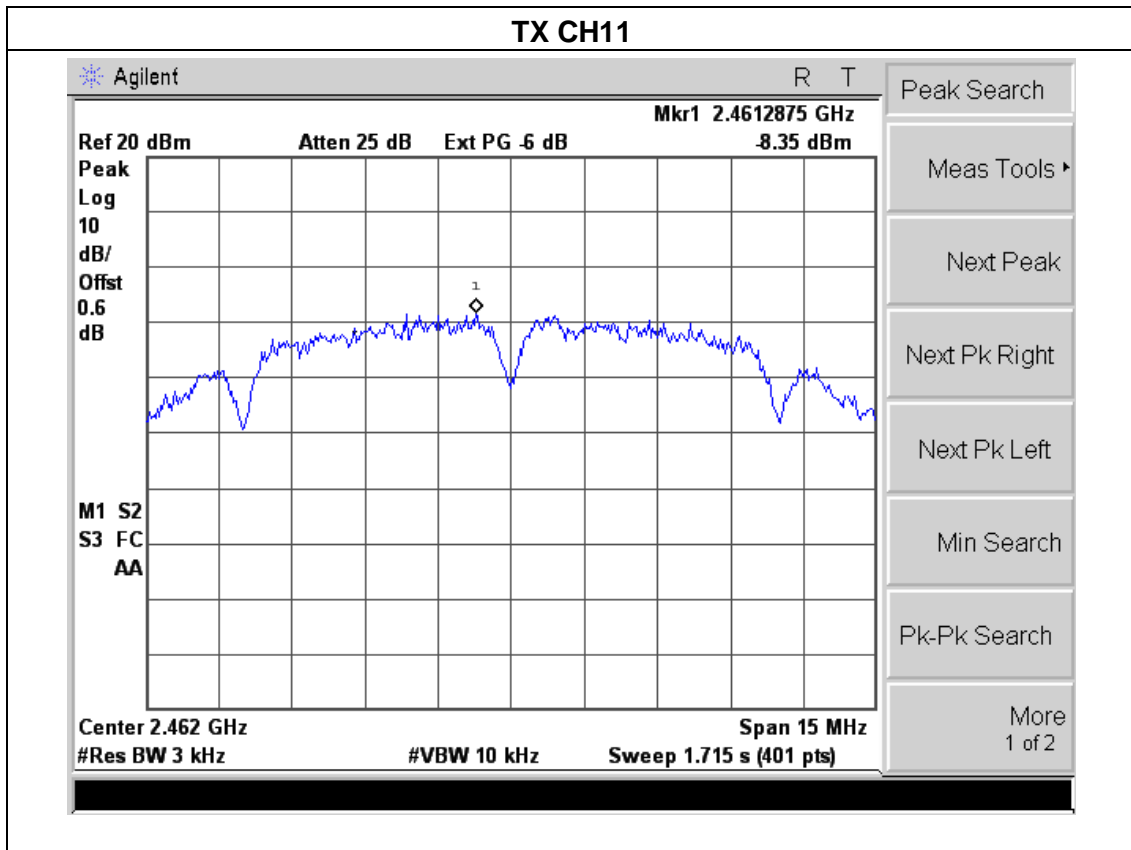
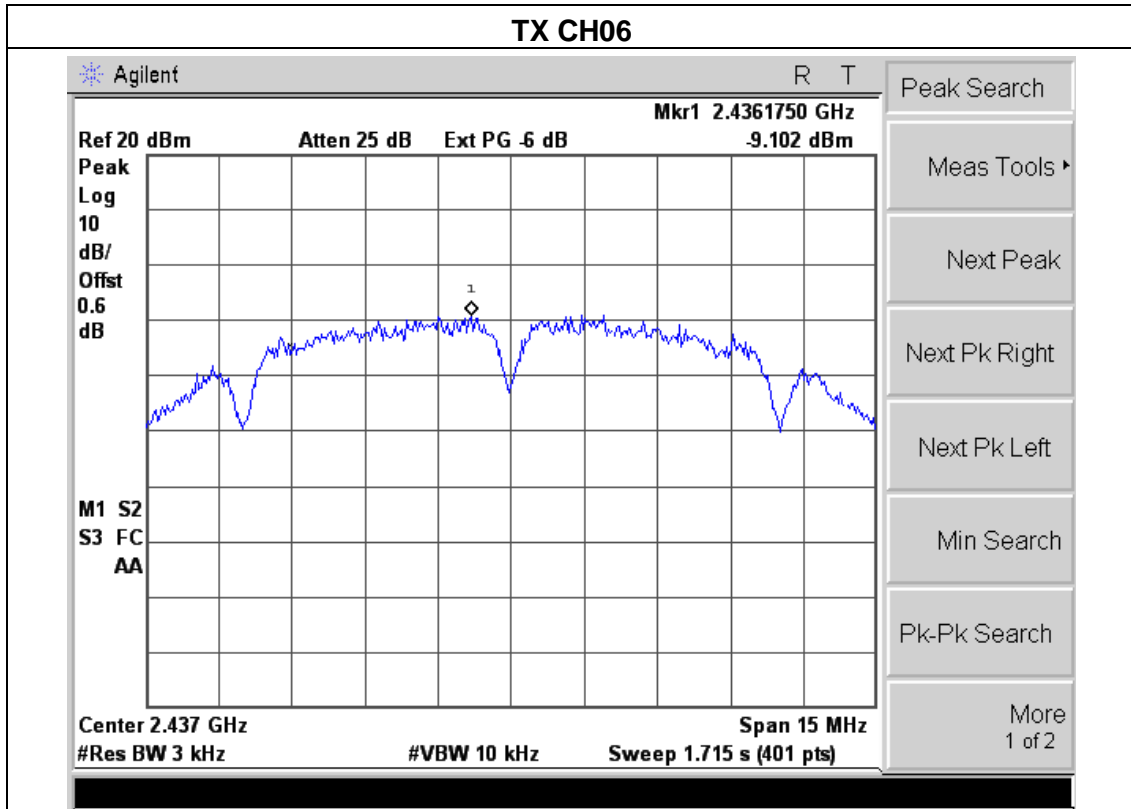


### 5.1.5 TEST RESULTS

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX b Mode /CH01, CH06, CH11		

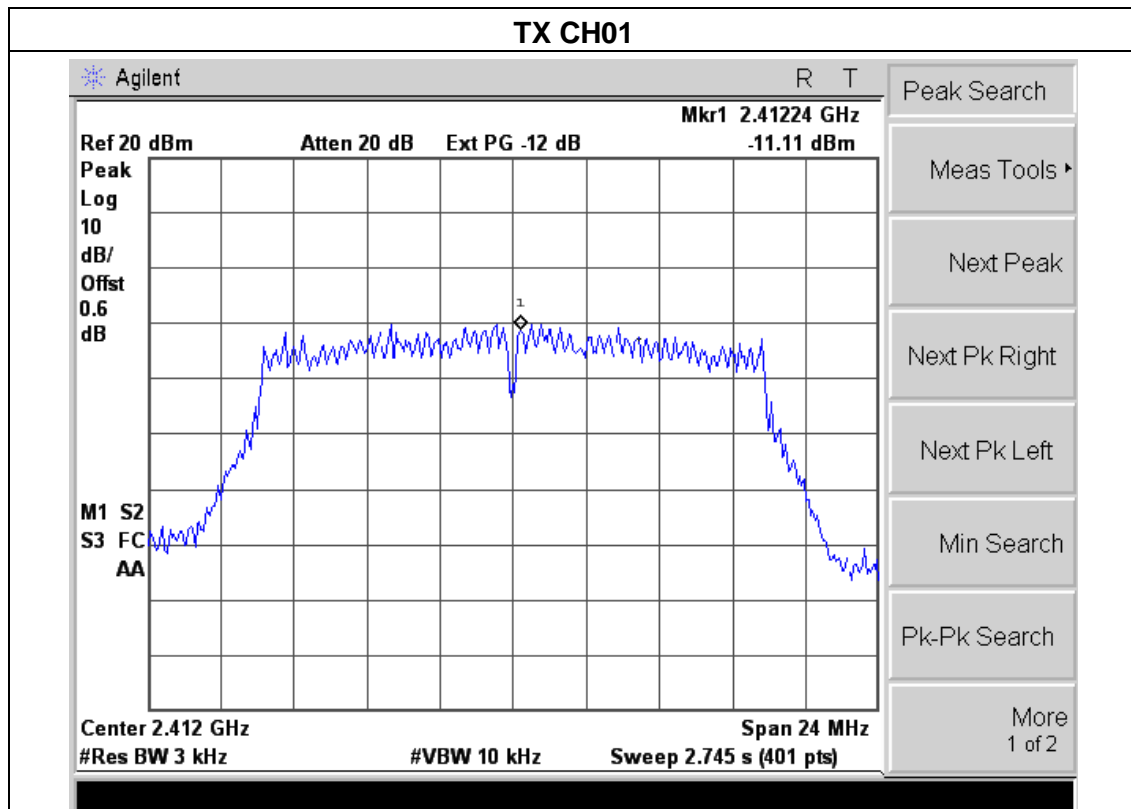
Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-8.247	8	<b>PASS</b>
2437 MHz	-9.102	8	<b>PASS</b>
2462 MHz	-8.35	8	<b>PASS</b>

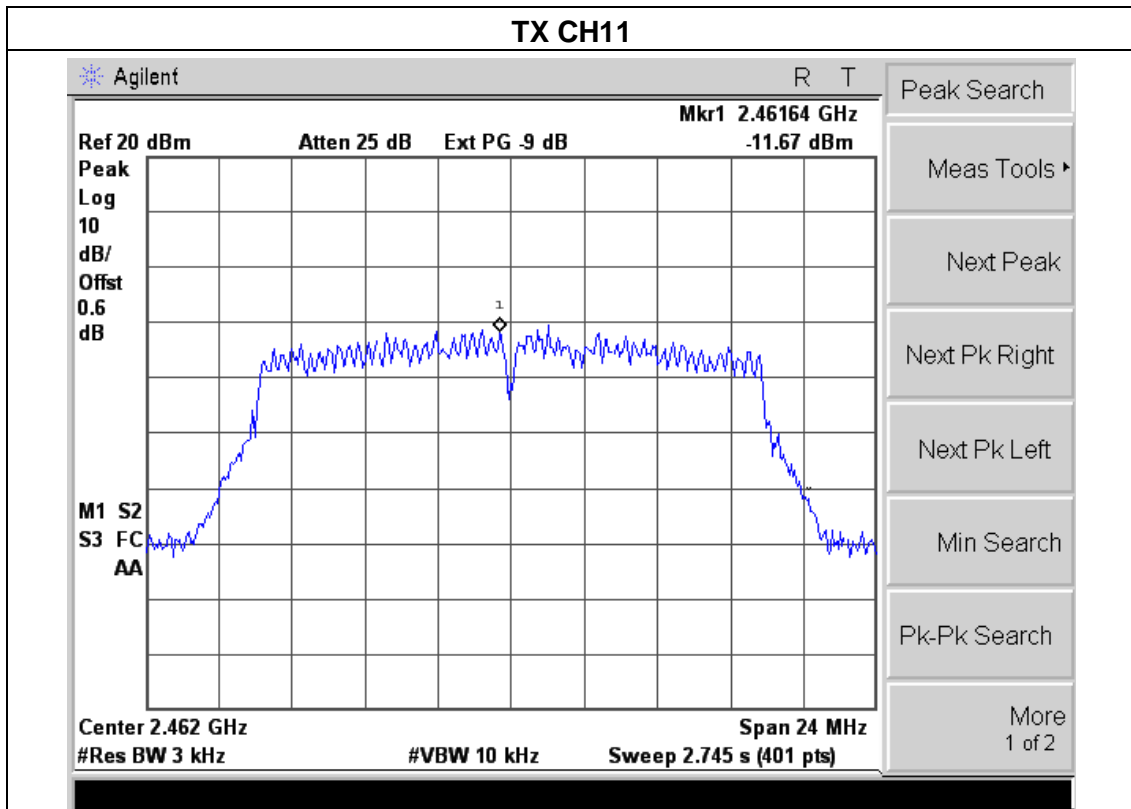
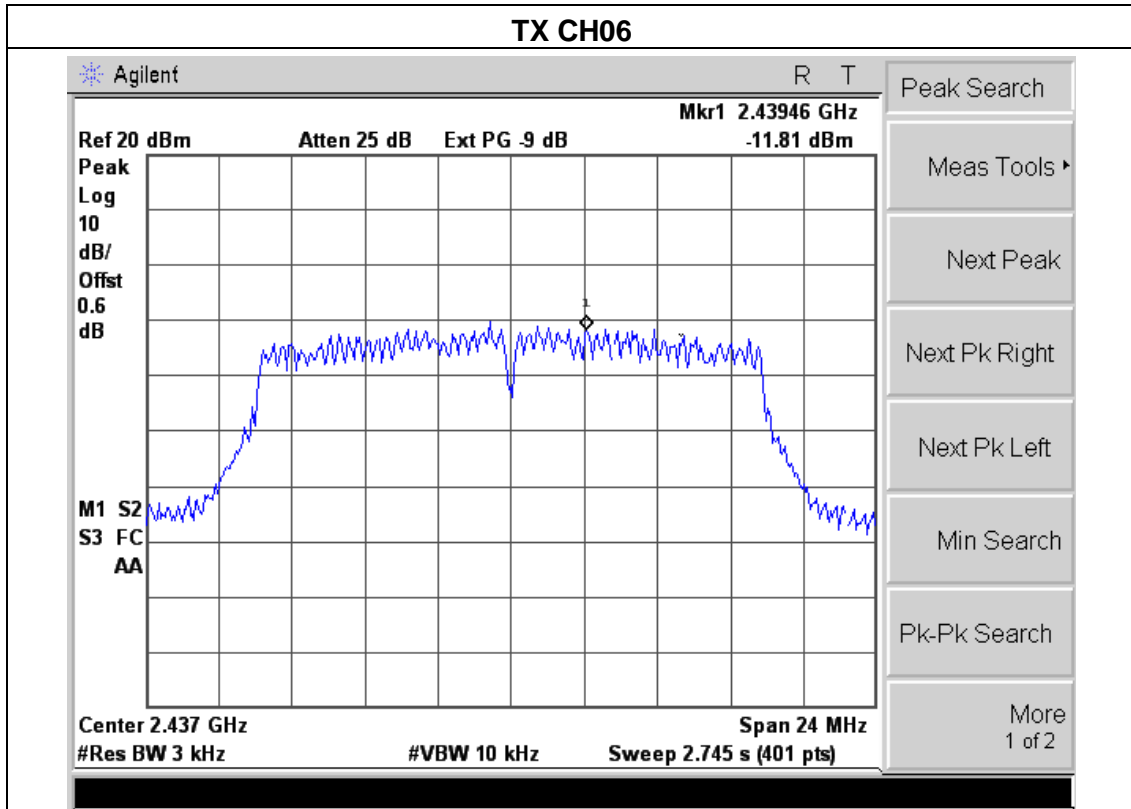




EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX g Mode /CH01, CH06, CH11		

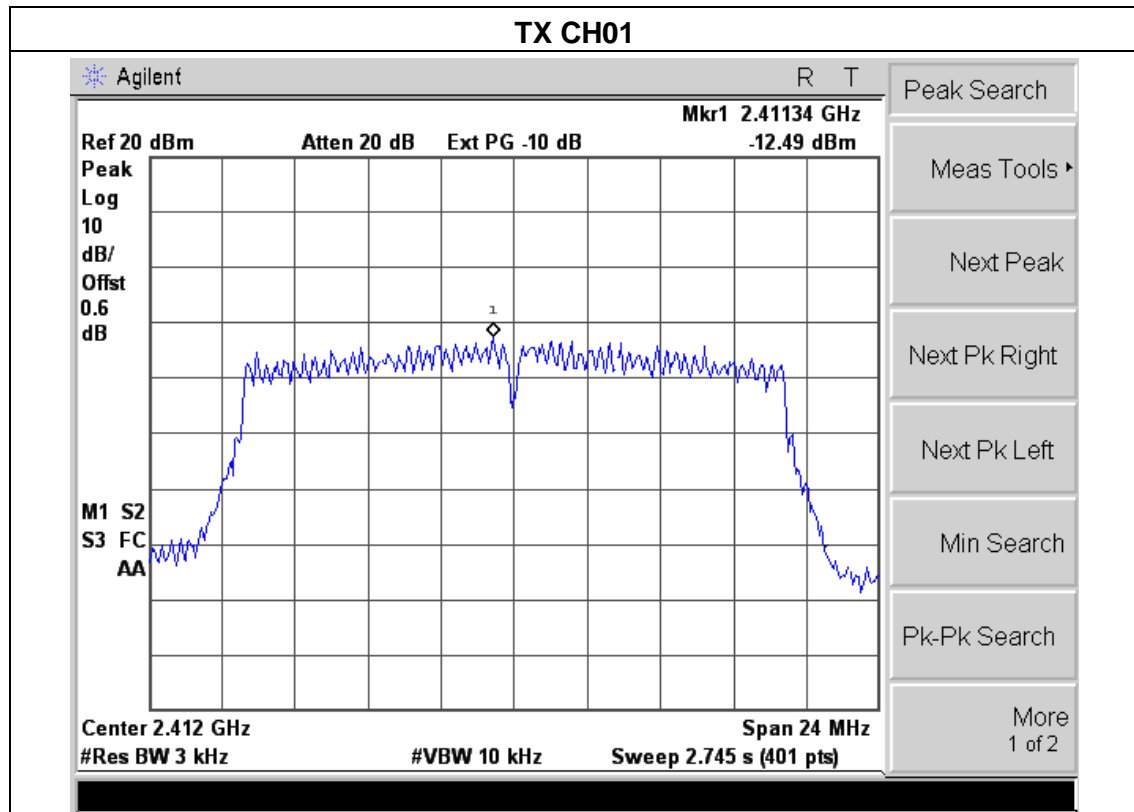
Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-11.11	8	<b>PASS</b>
2437 MHz	-11.81	8	<b>PASS</b>
2462 MHz	-11.67	8	<b>PASS</b>

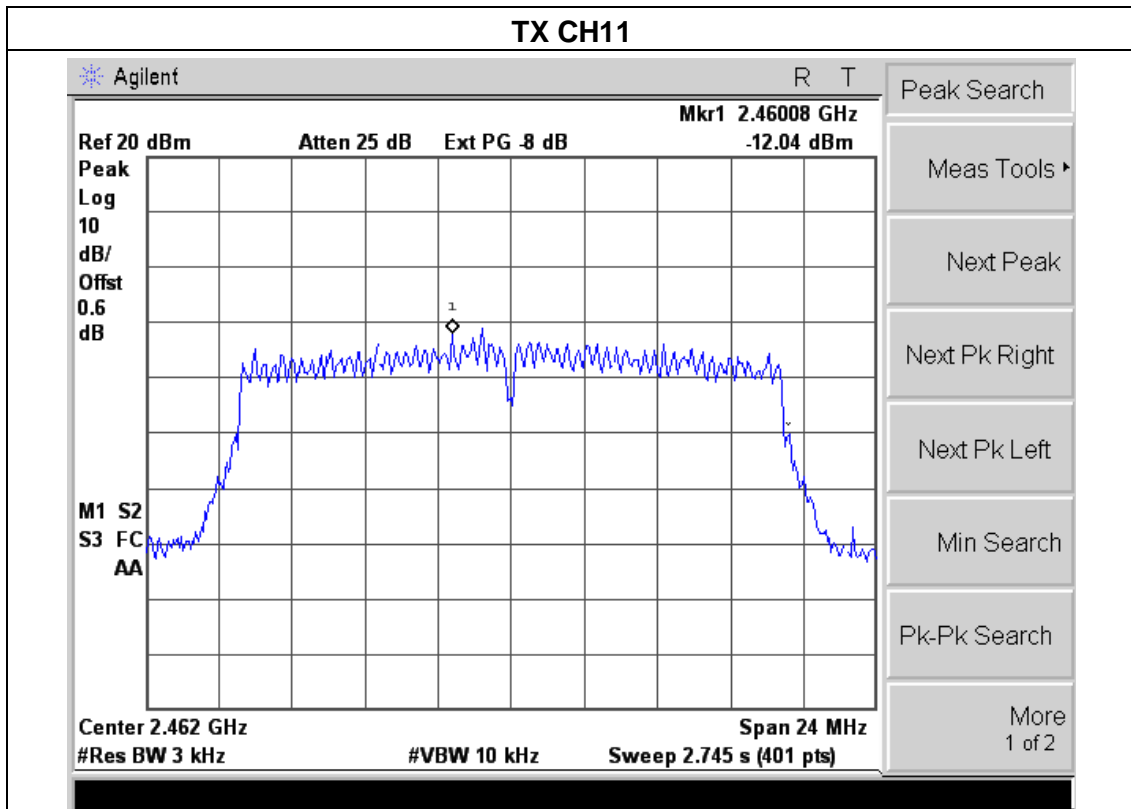
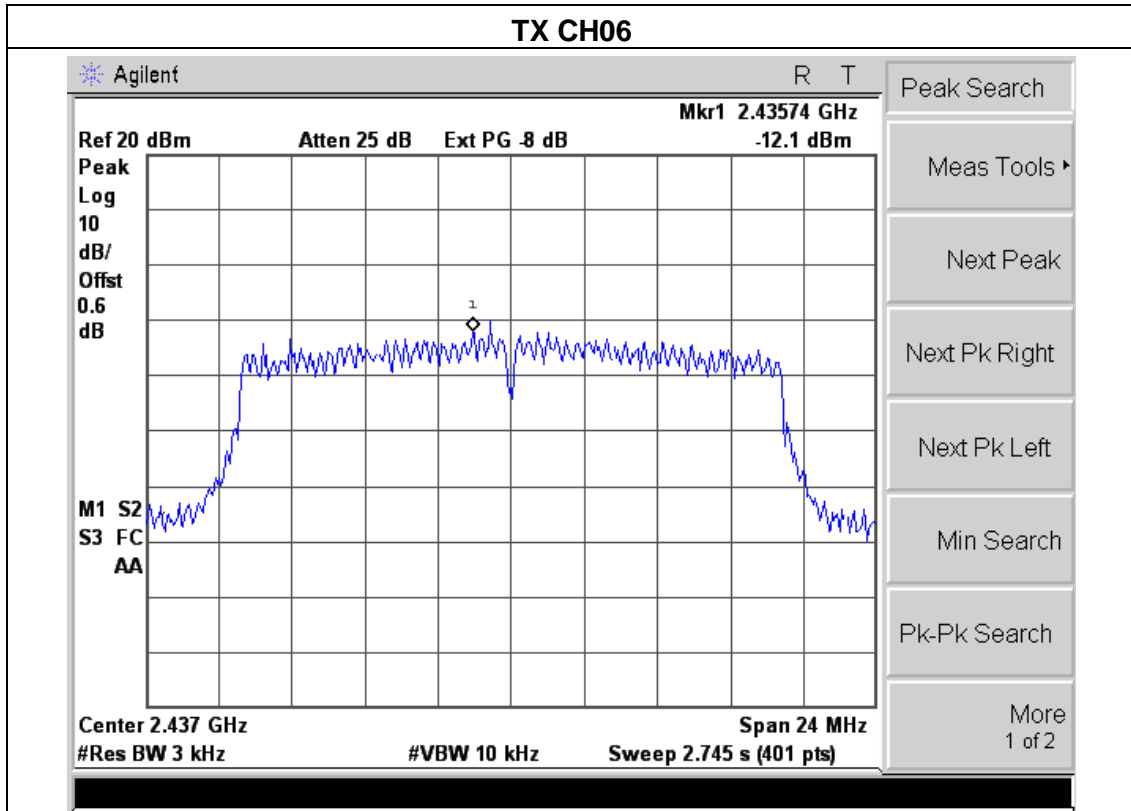




EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX n Mode(20M) /CH01, CH06, CH11		

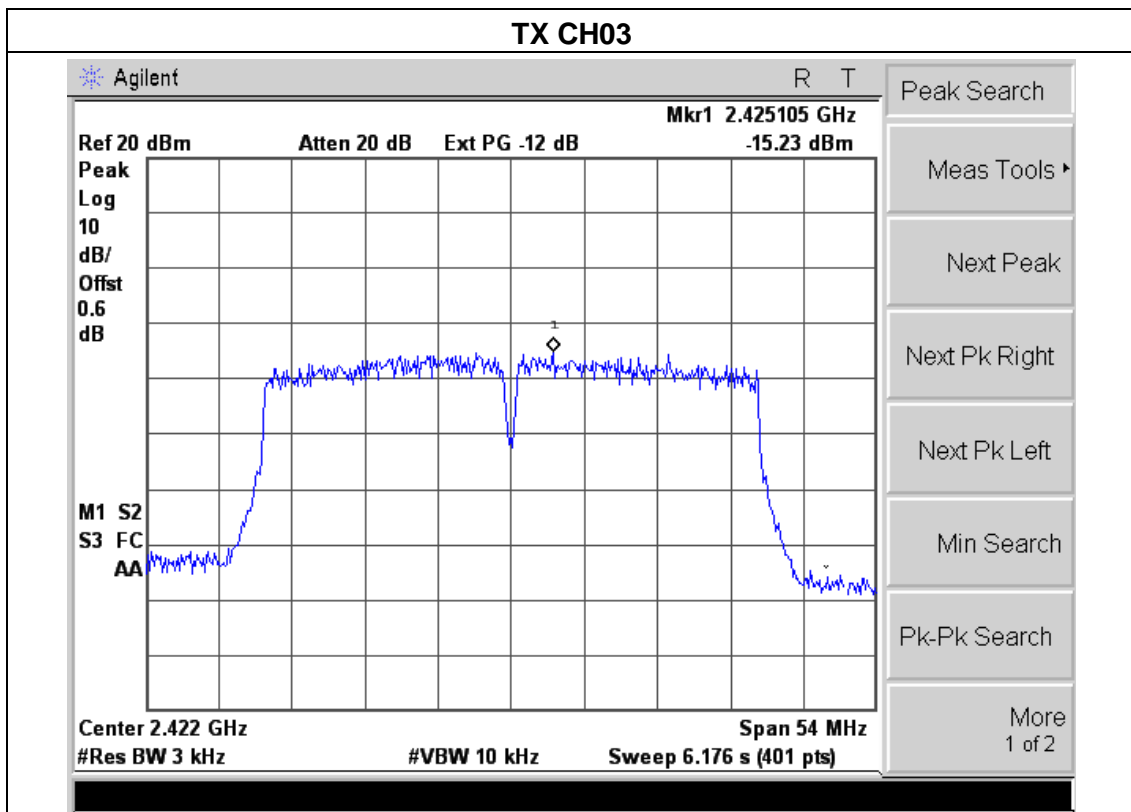
Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-12.49	8	<b>PASS</b>
2437 MHz	-12.1	8	<b>PASS</b>
2462 MHz	-12.04	8	<b>PASS</b>





EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX n Mode(40M) /CH03, CH06, CH09		

Frequency	Power Density (dBm)	Limit (dBm)	Result
2422 MHz	-15.23	8	PASS
2437 MHz	-15.03	8	PASS
2452 MHz	-15.91	8	PASS







## 6. BANDWIDTH TEST

### 6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	$\geq 500\text{KHz}$ (6dB bandwidth)	2400-2483.5	PASS

#### 6.1.1 TEST PROCEDURE

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW)  $\geq 3 \times$  RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

#### 6.1.2 DEVIATION FROM STANDARD

No deviation.

#### 6.1.3 TEST SETUP



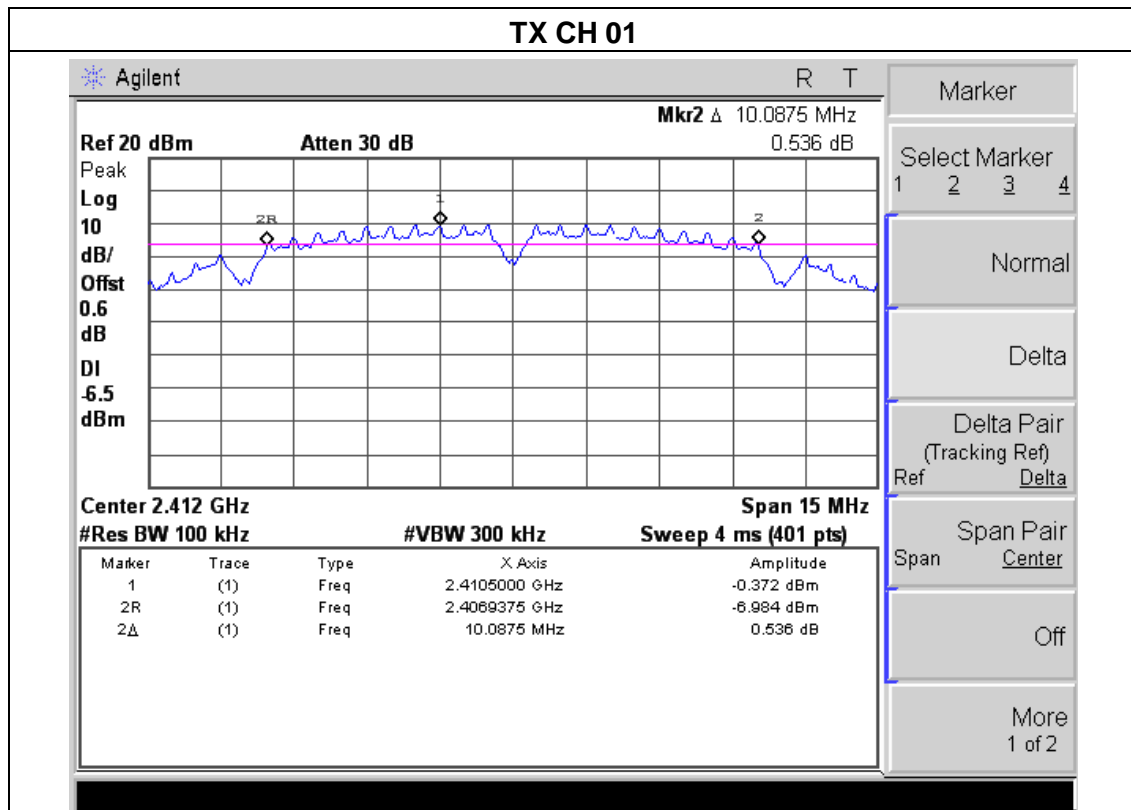
#### 6.1.4 EUT OPERATION CONDITIONS

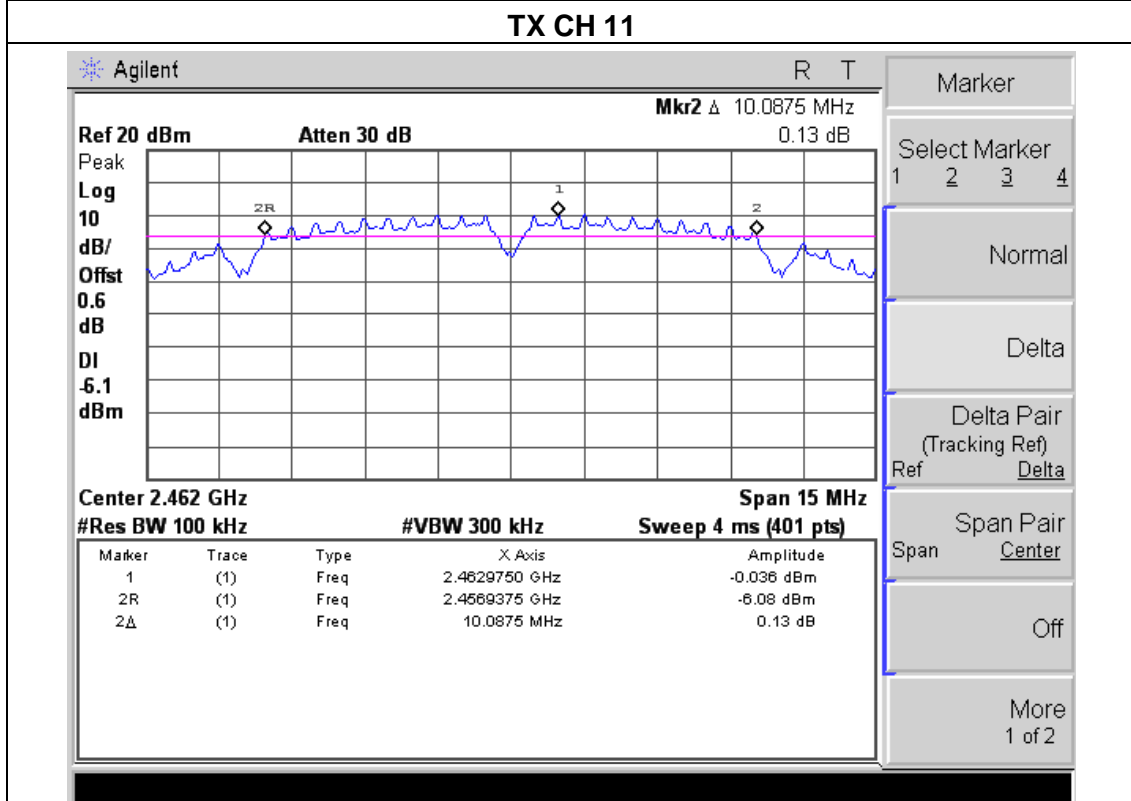
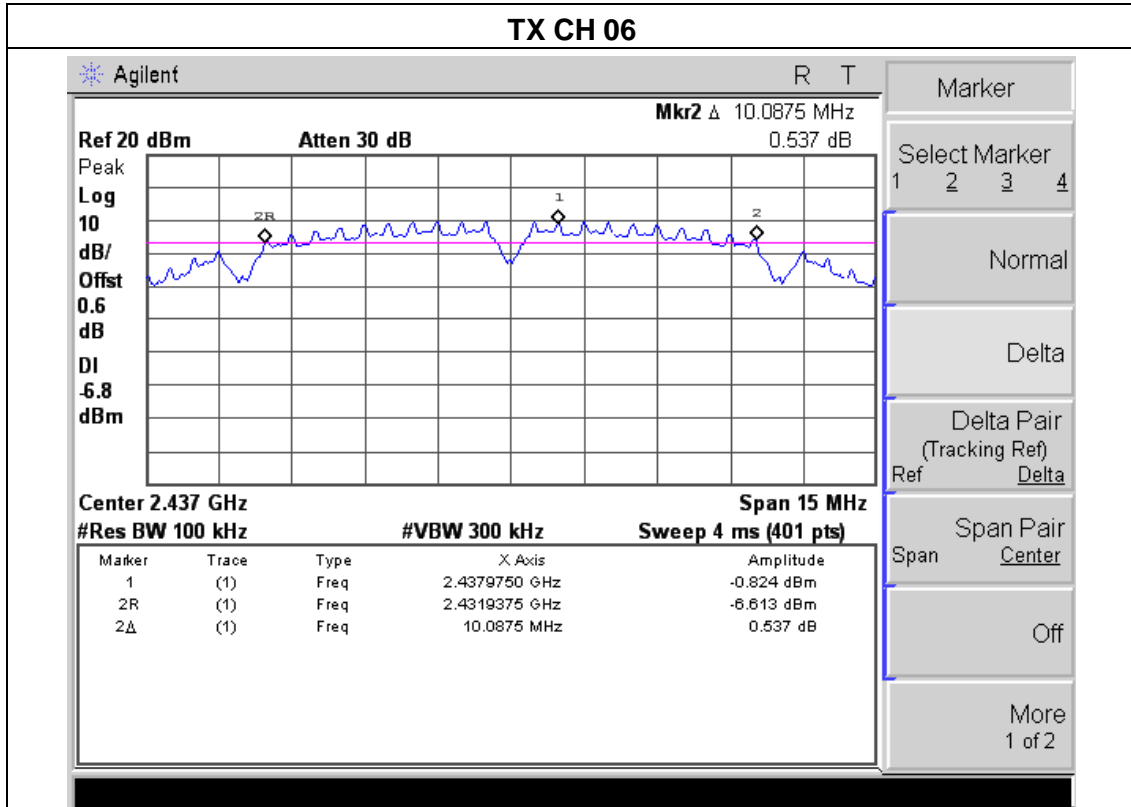
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

**6.1.5 TEST RESULTS**

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX b Mode /CH01, CH06, CH11		

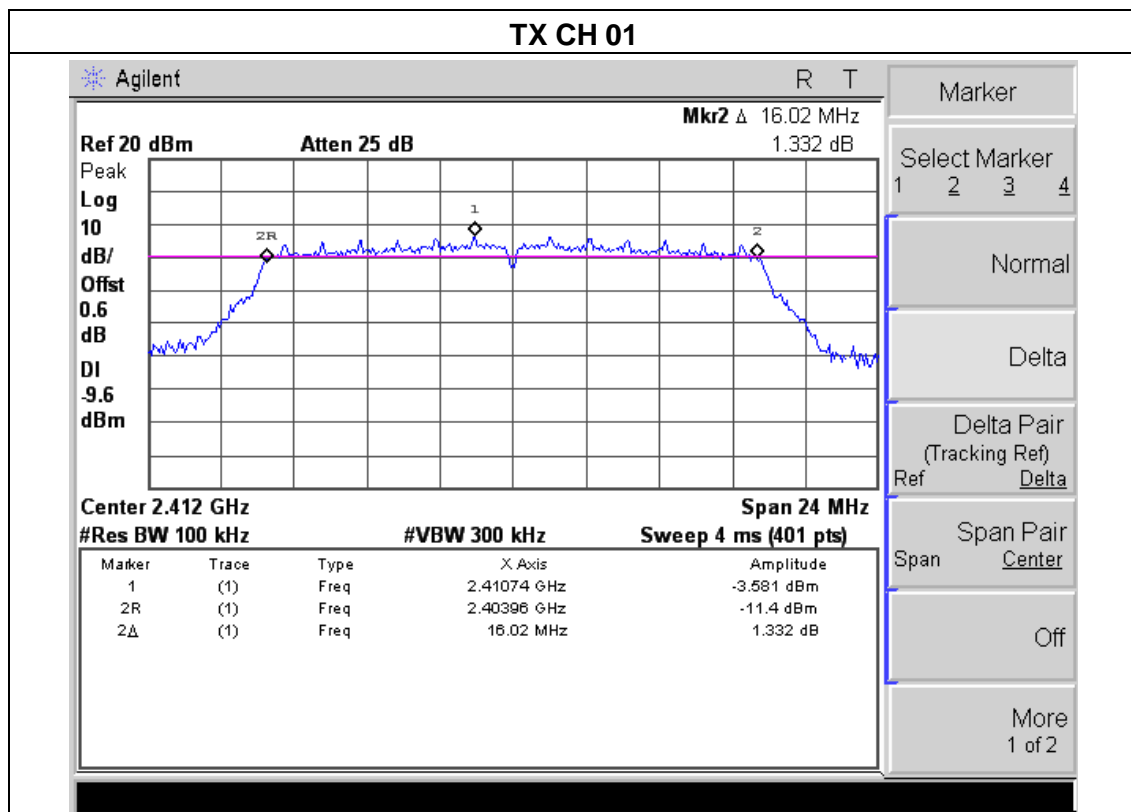
Frequency	6dB Bandwidth (MHz)	Channel Separation (MHz)	Result
2412 MHz	10.087	>=500KHz	<b>PASS</b>
2437 MHz	10.087	>=500KHz	<b>PASS</b>
2462 MHz	10.087	>=500KHz	<b>PASS</b>



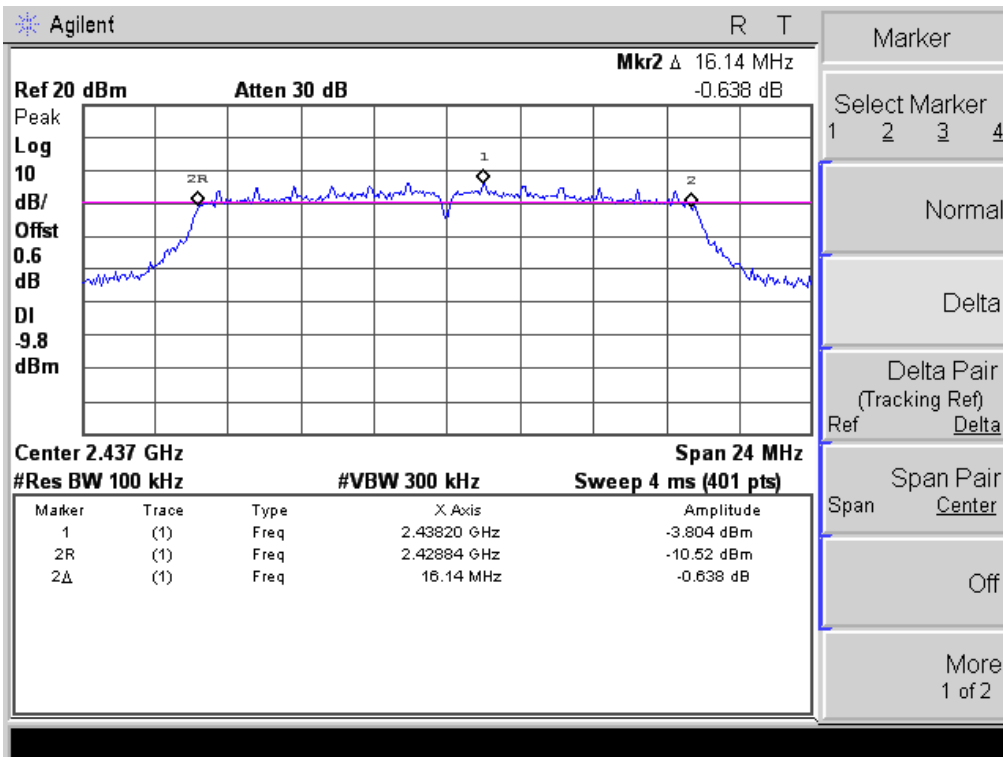


EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX g Mode /CH01, CH06, CH11		

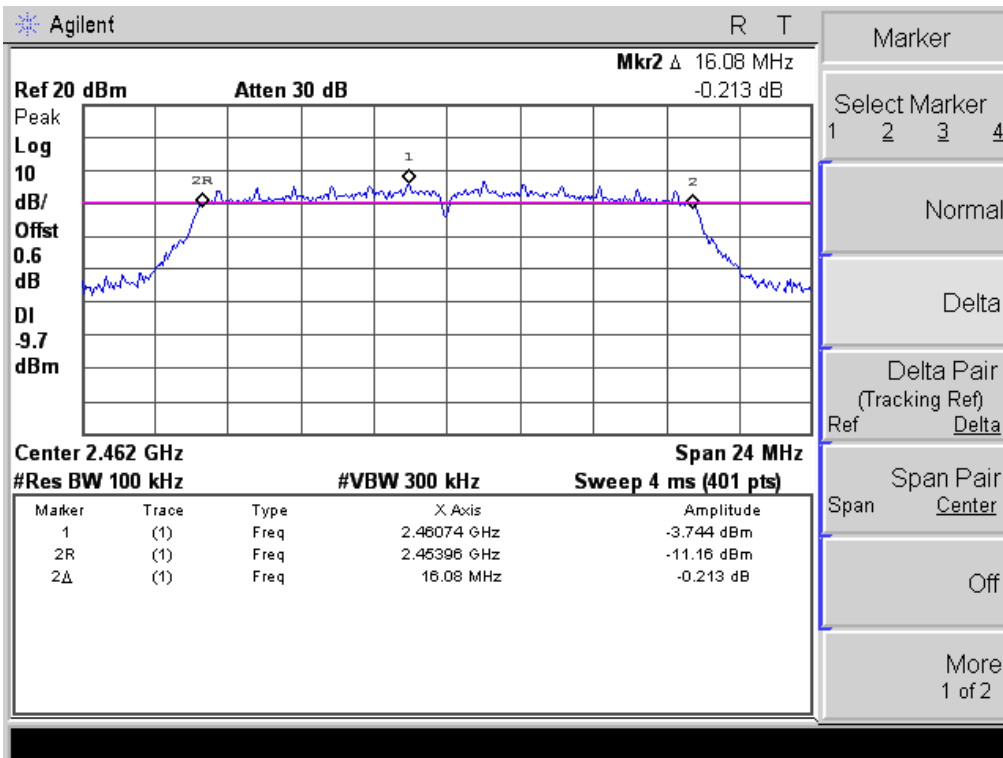
Frequency	6dB Bandwidth (MHz)	Channel Separation (MHz)	Result
2412 MHz	16.02	>=500KHz	<b>PASS</b>
2437 MHz	16.14	>=500KHz	<b>PASS</b>
2462 MHz	16.08	>=500KHz	<b>PASS</b>



### TX CH 06

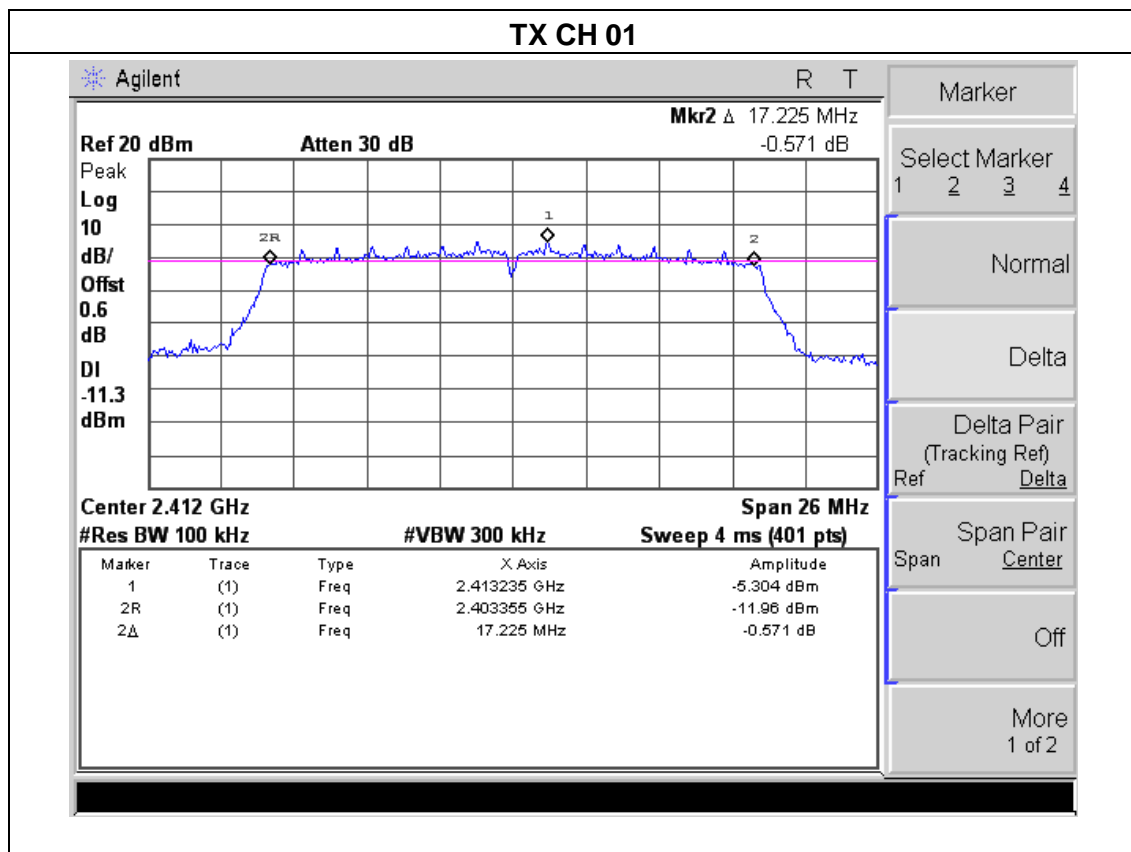


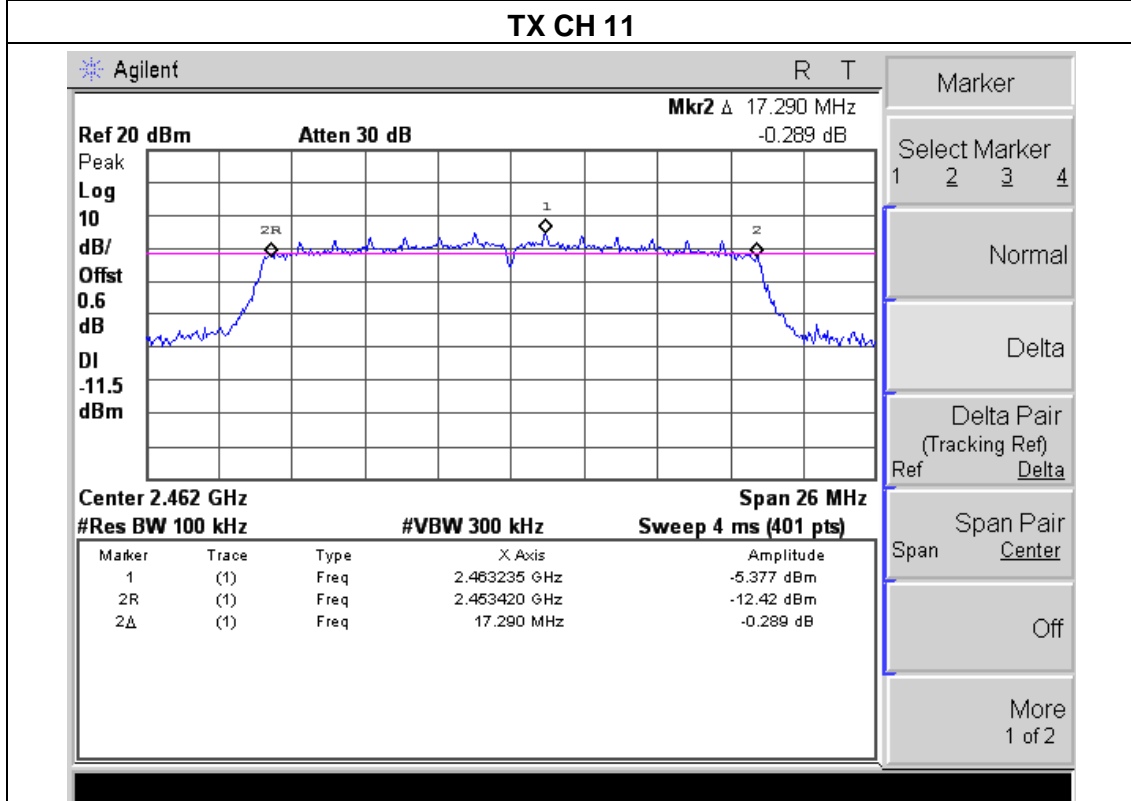
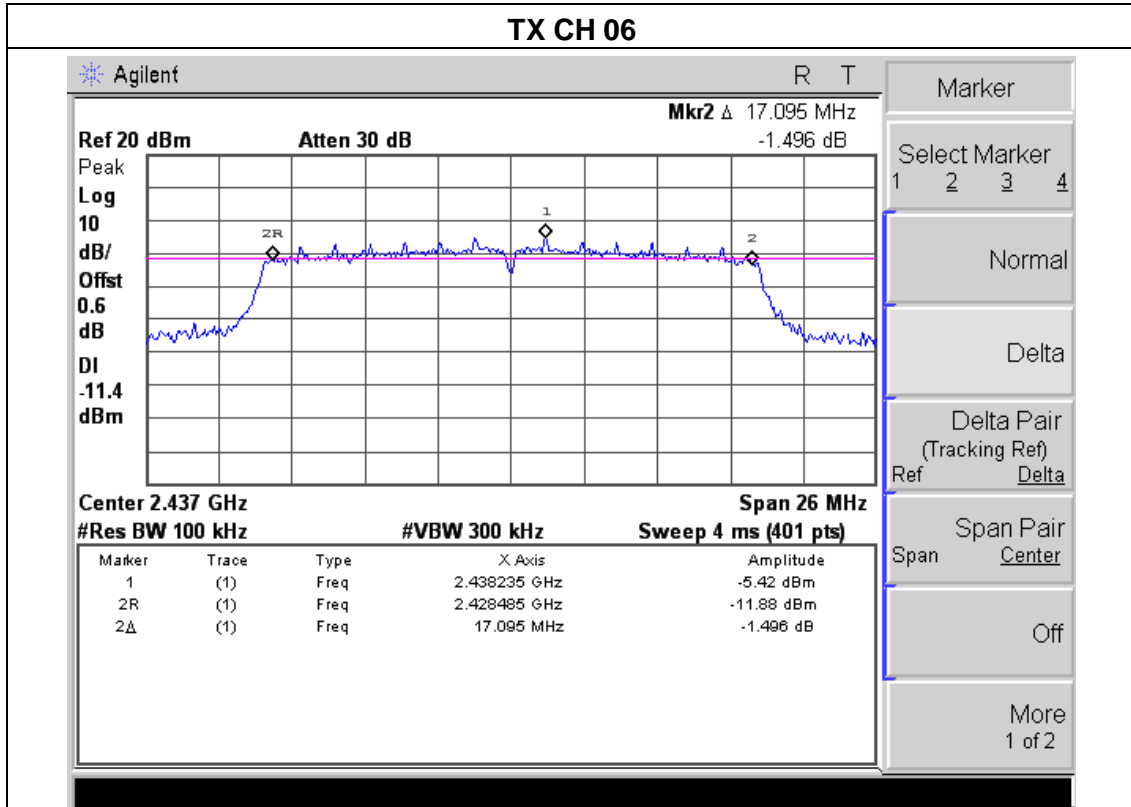
### TX CH 11



EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX n Mode(20M) /CH01, CH06, CH11		

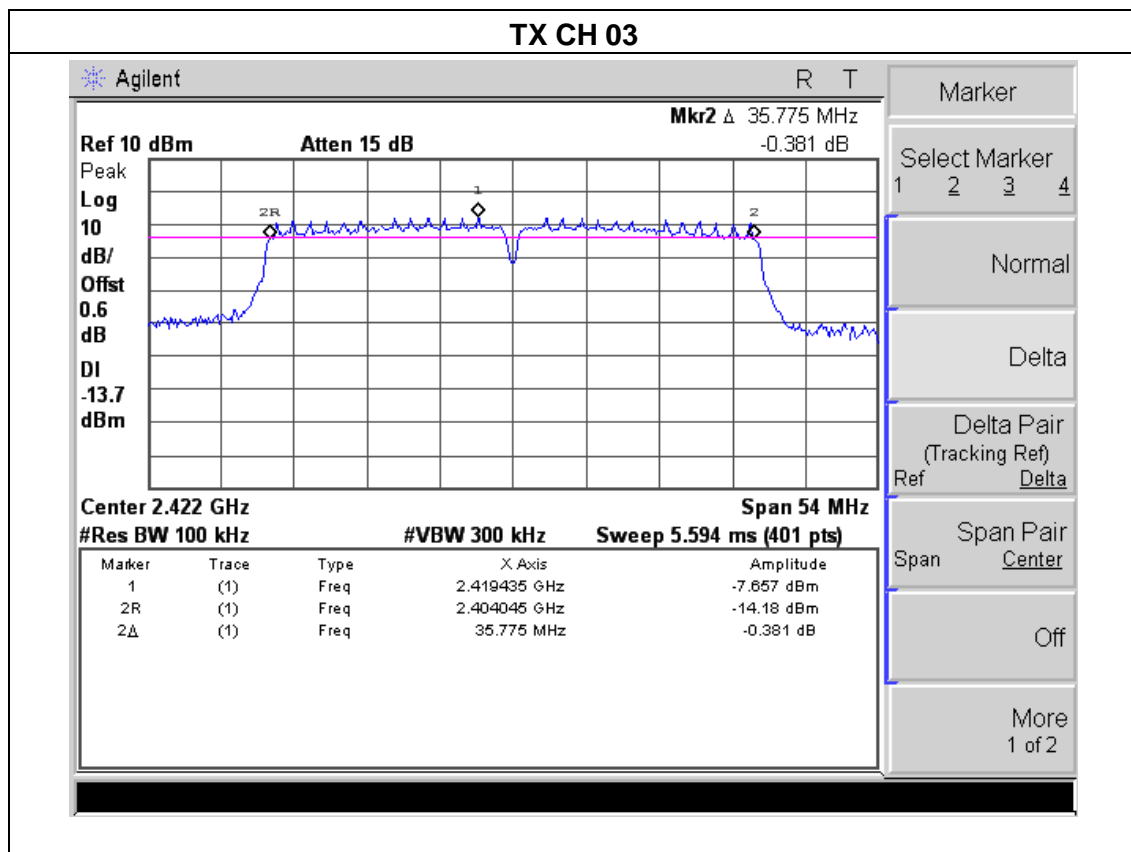
Frequency	6dB Bandwidth (MHz)	Channel Separation (MHz)	Result
2412 MHz	17.225	>=500KHz	<b>PASS</b>
2437 MHz	17.095	>=500KHz	<b>PASS</b>
2462 MHz	17.290	>=500KHz	<b>PASS</b>





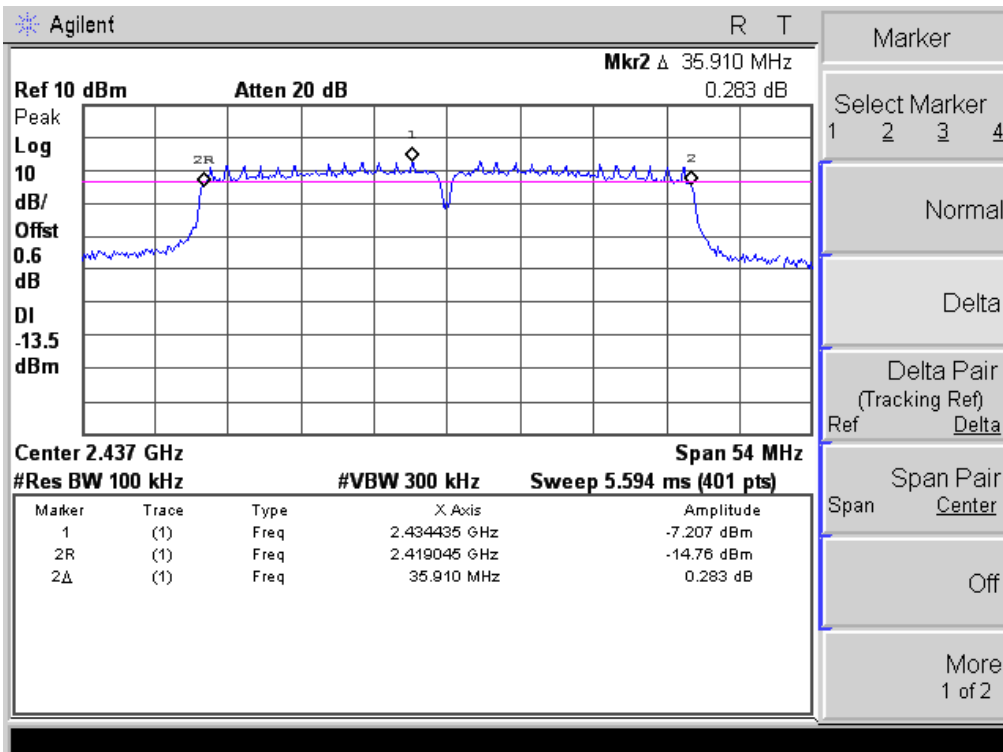
EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX n Mode(40M) /CH03, CH06, CH09		

Frequency	6dB Bandwidth (MHz)	Channel Separation (MHz)	Result
2422 MHz	36.331	>=500KHz	<b>PASS</b>
2437 MHz	36.054	>=500KHz	<b>PASS</b>
2452 MHz	36.183	>=500KHz	<b>PASS</b>

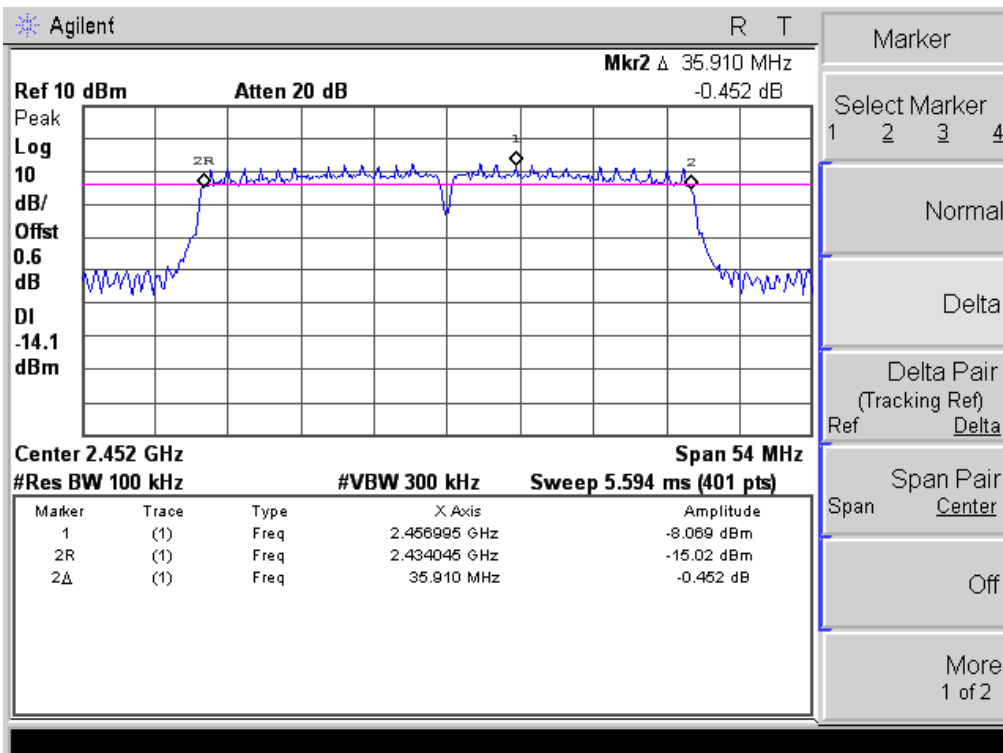




### TX CH 06



### TX CH 09



## 7. PEAK OUTPUT POWER TEST

### 7.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Peak Output Power	1 watt or 30dBm	2400-2483.5	PASS

#### 7.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the Power meter

#### 7.1.2 DEVIATION FROM STANDARD

No deviation.

#### 7.1.3 TEST SETUP



#### 7.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

**7.1.5 TEST RESULTS**

EUT :	WCDMA Smart Phone	Model Name. :	T703b
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 5V from Adapter with AC 120V/60Hz
Test Mode :	TX b/g/n(20M,40M) Mode /CH01, CH06, CH11		

<b>TX 802.11b Mode</b>			
Test Channe	Frequency	Peak Conducted Output Power	LIMIT
	(MHz)	(dBm)	dBm
CH01	2412	12.01	30
CH06	2437	11.88	30
CH11	2462	11.64	30
<b>TX 802.11g Mode</b>			
CH01	2412	10.29	30
CH06	2437	10.48	30
CH11	2462	10.18	30
<b>TX 802.11n20 Mode</b>			
CH01	2412	8.89	30
CH06	2437	9.01	30
CH11	2462	8.85	30
<b>TX 802.11n40 Mode</b>			
CH03	2422	8.25	30
CH06	2437	8.31	30
CH09	2452	8.53	30

## **8. ANTENNA REQUIREMENT**

### **8.1 STANDARD REQUIREMENT**

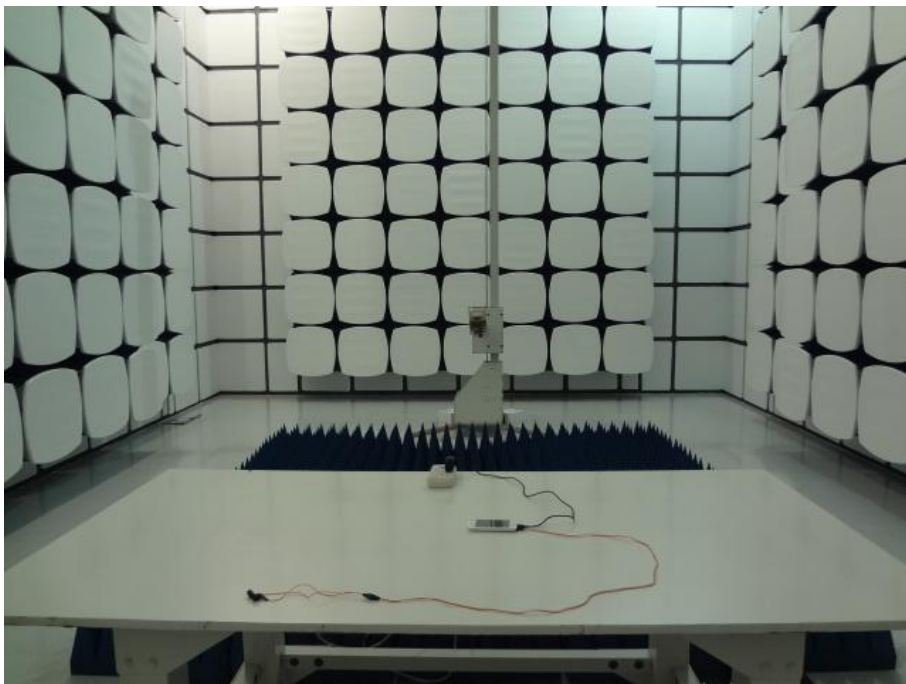
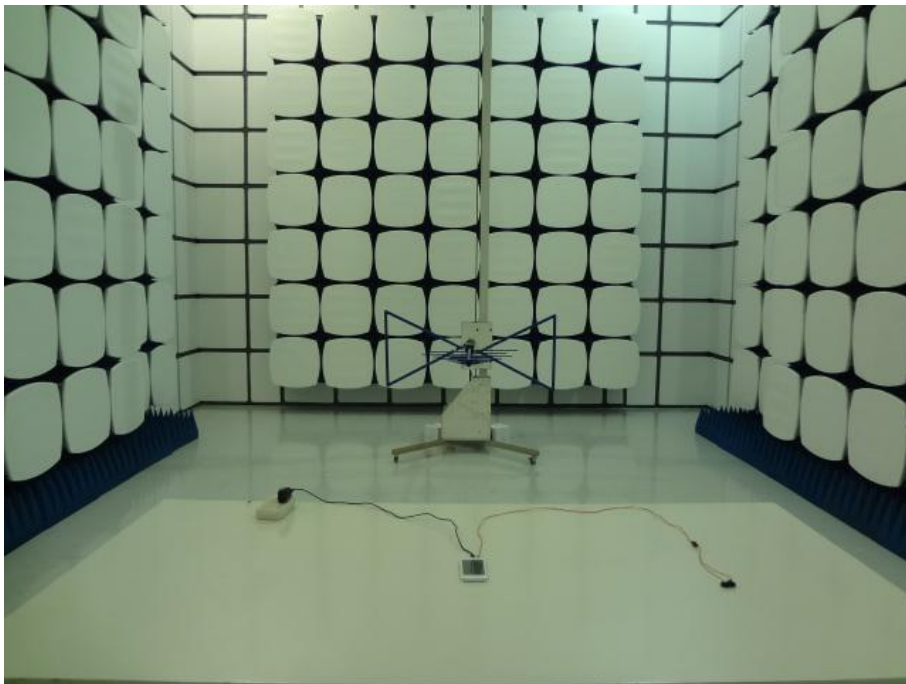
15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

### **8.2 EUT ANTENNA**

The EUT antenna is PIFA Antenna. It comply with the standard requirement.

**EUT TEST PHOTO**

**Radiated Measurement Photos**



### Conducted Measurement Photos

