



# Part 22

# TEST REPORT

<b>Product Name</b>	HSPA+ Module
<b>Model Name</b>	DTL718-W
<b>FCC ID</b>	RHZDTL718-W
<b>Client</b>	AnyDATA Shanghai Co., Ltd

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**GENERAL SUMMARY**

<b>Product Name</b>	HSPA+ Module	<b>Model Name</b>	DTL718-W
<b>FCC ID</b>	RHZDTL718-W		
<b>Report No.</b>	RXA1211-1096RF01R1		
<b>Client</b>	AnyDATA Shanghai Co., Ltd		
<b>Manufacturer</b>	AnyDATA Shanghai Co., Ltd		
<b>Reference Standard(s)</b>	<p><b>FCC CFR47 Part 2 (2012-12)</b> Frequency Allocations And Radio Treaty Matters; General Rules And Regulations</p> <p><b>FCC CFR 47 Part 22H (2012-12)</b> Public Mobile Services(850MHz)</p> <p><b>ANSI/TIA-603-C(2004)</b> Land mobile FM or PM Communications Equipment Measurements and Performance Standards.</p> <p><b>KDB 412172 D01 Determining ERP and EIRP v01</b> Guidelines for Determining the Effective Radiated Power (ERP) and Equivalent Isotropically Radiated Power (EIRP) of a RF Transmitting System</p>		
<b>Conclusion</b>	<p>This portable wireless equipment has been measured in all cases requested by the relevant standards. Test results in Chapter 2 of this test report are below limits specified in the relevant standards.</p> <p>General Judgment: <b>Pass</b></p> <div style="text-align: center;">  <p>(Stamp)</p> <p>Date of issue: January 18<sup>th</sup>, 2013</p> </div>		
<b>Comment</b>	The test result only responds to the measured sample.		

Approved by 杨伟中

Director

Revised by 徐凯

RF Manager

Performed by 王峰

RF Engineer

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### 1. General Information

#### 1.1. Notes of the test report

**TA Technology (Shanghai) Co., Ltd.** has obtained the accreditation of China National Accreditation Service for Conformity Assessment (CNAS), and accreditation number: L2264.

**TA Technology (Shanghai) Co., Ltd.** has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements. The site recognition number is 428261.

**TA Technology (Shanghai) Co., Ltd.** has been listed by industry Canada to perform electromagnetic emission measurement. The site recognition number is 8510A.

**TA Technology (Shanghai) Co., Ltd.** guarantees the reliability of the data presented in this test report, which is the results of measurements and tests performed for the items under test on the date and under the conditions stated in this test report and is based on the knowledge and technical facilities available at TA Technology (Shanghai) Co., Ltd. at the time of execution of the test.

**TA Technology (Shanghai) Co., Ltd.** is liable to the client for the maintenance by its personnel of the confidentiality of all information related to the items under test and the results of the test. This report only refers to the item that has undergone the test.

This report standalone does not constitute or imply by its own an approval of the product by the certification Bodies or competent Authorities. This report cannot be used partially or in full for publicity and/or promotional purposes without previous written approval of **TA Technology (Shanghai) Co., Ltd.** and the Accreditation Bodies, if it applies.

If the electrical report is inconsistent with the printed one, it should be subject to the latter.

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### 1.2. Testing laboratory

Company: TA Technology (Shanghai) Co., Ltd.  
Address: No.145, Jintang Rd, Tangzhen Industry Park, Pudong  
City: Shanghai  
Post code: 201201  
Country: P. R. China  
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Website: <http://www.ta-shanghai.com>  
E-mail: [yangweizhong@ta-shanghai.com](mailto:yangweizhong@ta-shanghai.com)

### 1.3. Applicant Information

Company: AnyDATA Shanghai Co., Ltd  
Address: 489 SongTao Road, Sector B, 1st FL. Pudong ZhangJiang Hi-Tech Park, Shanghai  
City: Shanghai  
Postal Code: 201203  
Country: China

### 1.4. Manufacturer Information

Company: AnyDATA Shanghai Co., Ltd  
Address: 489 SongTao Road, Sector B, 1st FL. Pudong ZhangJiang Hi-Tech Park, Shanghai  
City: Shanghai  
Postal Code: 201203  
Country: China

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### 1.5. Information of EUT

#### General information

Name of EUT:	HSPA+ Module		
IMEI :	356423043018807		
Hardware Version:	DTL718-W_V3.0		
Software Version:	DTL718_MD6200A_1233_10_R07C_CN		
Device Operating Configurations:			
Operating Mode(s):	WCDMA Band V;(tested)		
Test Modulation:	(WCDMA)QPSK		
Maximum E.R.P.	WCDMA Band V: 15.60 dBm		
Power Supply:	DC Power		
Rated Power Supply Voltage:	3.8V		
Extreme Voltage:	Minimum: 3.3V    Maximum: 4.2V		
Extreme Temperature:	Lowest: -20°C    Highest: +60°C		
Test Channel: (Low - Middle - High)	4132 - 4183 - 4233    (WCDMA Band V)    (tested)		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	WCDMA Band V	826.4 ~ 846.6	871.4 ~ 891.6

Equipment Under Test (EUT) is a HSPA+ Module. The EUT is tested for WCDMA Band V in this report.

The sample under test was selected by the Client.

Components list please refer to documents of the manufacturer.

### 1.6. Test Date

The test performed from December 10, 2012 to December 14, 2012.

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## 2. Test Information

### 2.1. Summary of test results

Number	Test Case	Clause in FCC rules	Verdict
1	RF power output	2.1046	PASS
2	Effective Radiated Power	22.913(a)(2)	PASS
3	Occupied Bandwidth	2.1049	PASS
4	Band Edge Compliance	22.917	PASS
5	Frequency Stability	2.1055 / 22.355	PASS
6	Spurious Emissions at Antenna Terminals	2.1051 / 22.917(a)	PASS
7	Radiates Spurious Emission	2.1053 / 22.917 (a)	PASS

PASS: The EUT complies with the essential requirements in the standard.

FAIL: The EUT does not comply with the essential requirements in the standard.

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## 2.2. RF Power Output

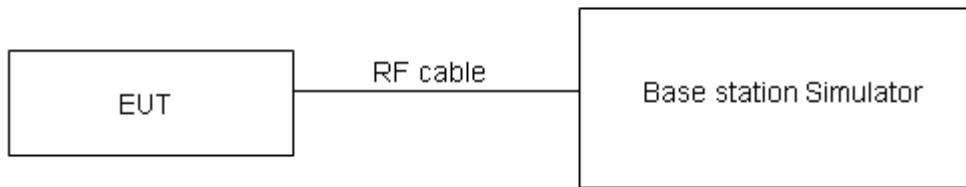
### Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

### Methods of Measurement

During the process of the testing, The EUT is controlled by the Base Station Simulator to ensure max power transmission and proper modulation.

### Test Setup



The loss between RF output port of the EUT and the input port of the tester has been taken into consideration.

### Limits

No specific RF power output requirements in part 2.1046.

### Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 2$ ,  $U = 0.4$  dB.

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**Test Results**

<b>WCDMA Band V</b>		<b>Conducted Power(dBm)</b>		
		Channel 4132	Channel 4183	Channel 4233
		826.4(MHz)	836.6(MHz)	846.6(MHz)
<b>RMC</b>		22.94	22.98	22.96
<b>HSDPA</b>	Sub - Test 1	23.11	23.05	23.11
	Sub - Test 2	23.08	23.14	23.32
	Sub - Test 3	23.05	23.13	23.07
	Sub - Test 4	23.16	23.25	23.13
<b>HSUPA</b>	Sub - Test 1	22.49	21.99	22.36
	Sub - Test 2	20.74	20.9	20.95
	Sub - Test 3	20.93	21.24	21.09
	Sub - Test 4	21.34	20.97	21.19
	Sub - Test 5	22.01	22.1	22.07

## 2.3. Effective Radiated Power

### Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

### Methods of Measurement

For modules, the measurement procedures in KDB 412172 are used.

Step 1:

EIRP and ERP are similarly defined as the product of the power supplied to the antenna and the antenna gain (when the power and gain are represented in linear terms). The primary difference between them is that for ERP, the antenna gain is expressed relative to an ideal half-wave dipole antenna whereas with EIRP, the antenna gain is expressed relative to an ideal (theoretical) isotropic antenna. The EIRP and ERP can be expressed mathematically as follows:

Power Approach (logarithmic terms):

$$\mathbf{ERP/EIRP = P_T + G_T - L_c} \quad (1)$$

where;

**ERP/EIRP** = effective (or equivalent) radiated power (in same units as PT, typically dBW, dBm, or power spectral density (psd)), relative to either a dipole antenna (ERP) or an isotropic antenna (EIRP);

**P<sub>T</sub>** = transmitter output power, in dBW, dBm, or psd (power over a specified reference bandwidth);

**G<sub>T</sub>** = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

**L<sub>c</sub>** = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

Step 2:

For DUT power measured in a conducted test configuration:

When the DUT power is measured using a direct connection between the transmitter antenna port and the measurement instrumentation via a coaxial cable (conducted test), and the transmit antenna gain is a known quantity, then the ERP/EIRP can be calculated by direct application of Equation 1 and using the relationships defined in Equations 2, 3, as appropriate.

Alternatively, the EIRP can be determined from Equation 1 and then converted to ERP based on the maximum antenna gain relationship by applying the following equation:

$$\mathbf{ERP = EIRP - 2.15 dB.} \quad (2)$$

Similarly, the EIRP can be determined from the ERP as follows:

$$\mathbf{EIRP = ERP + 2.15 dB.} \quad (3)$$

The value to be used for PT in these equations is the measured power level (in dBm, dBW or psd), adjusted to account for external test peripherals (cable loss, external attenuation, and/or external amplification).

The value to be used for GT is the gain associated with the DUT transmit antenna, expressed in either dBd (ERP) or dBi (EIRP).

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**Limits**

Rule Part 22.913(a) specifies that "Mobile/portable stations are limited to 7 watts ERP".

Limit	$\leq 7 \text{ W}$ (38.45 dBm)
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**Measurement Uncertainty**

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 2$ ,  $U = 1.19 \text{ dB}$

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**Test Results:Pass**

	Channel	GT (dBi)	PT (dBm)	LC(dB)	E.I.R.P (dBm)	E.R.P. (dBm)
WCDMA Band V	4132	4.5	22.94	0	27.44	25.29
	4183	4.5	22.98	0	27.48	25.33
	4233	4.5	22.96	0	27.46	25.31

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### 2.4. Occupied Bandwidth

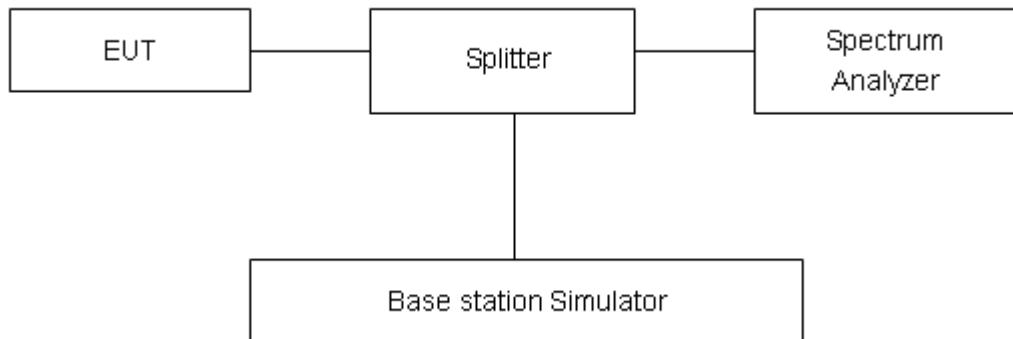
#### Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

#### Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The occupied bandwidth is measured using spectrum analyzer. RBW is set to 51kHz, VBW is set to 100kHz for WCDMA Band V. 99% power and -26dBc occupied bandwidths are recorded. Spectrum analyzer plots are included on the following pages.

#### Test Setup



#### Limits

No specific occupied bandwidth requirements in part 2.1049.

#### Measurement Uncertainty

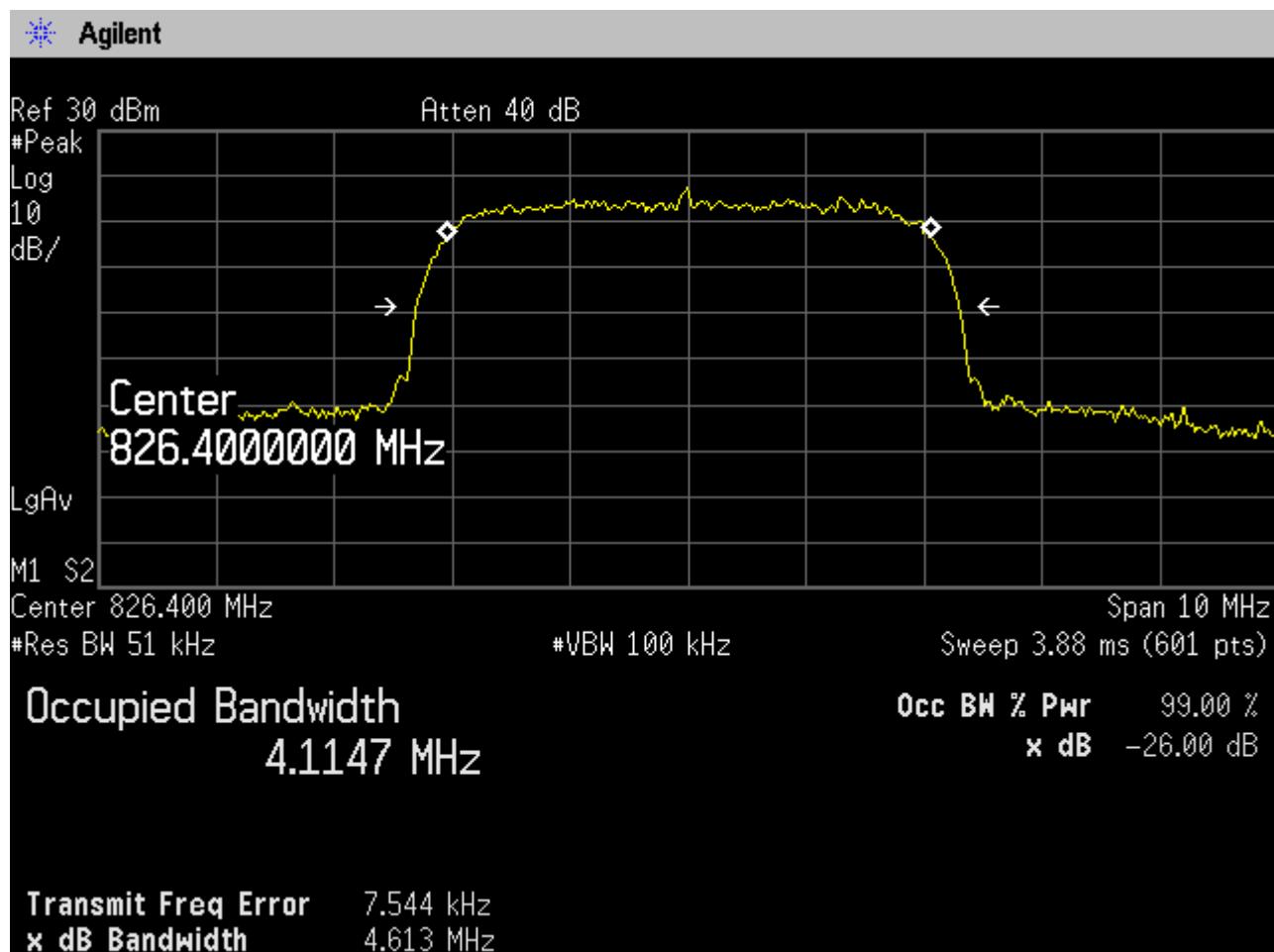
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 2$ ,  $U = 624\text{Hz}$ .

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	Channel	Frequency (MHz)	99% Power Bandwidth (MHz)	-26dBc Bandwidth(MHz)
WCDMA Band V	4132	826.4	4.1147	4.613
	4183	836.6	4.1233	4.622
	4233	846.6	4.1307	4.627
WCDMA Band V HSDPA	4132	826.4	4.1242	4.633
	4183	836.6	4.1228	4.624
	4233	846.6	4.1319	4.628
WCDMA Band V HSUPA	4132	826.4	4.1206	4.614
	4183	836.6	4.1211	4.627
	4233	846.6	4.1353	4.637

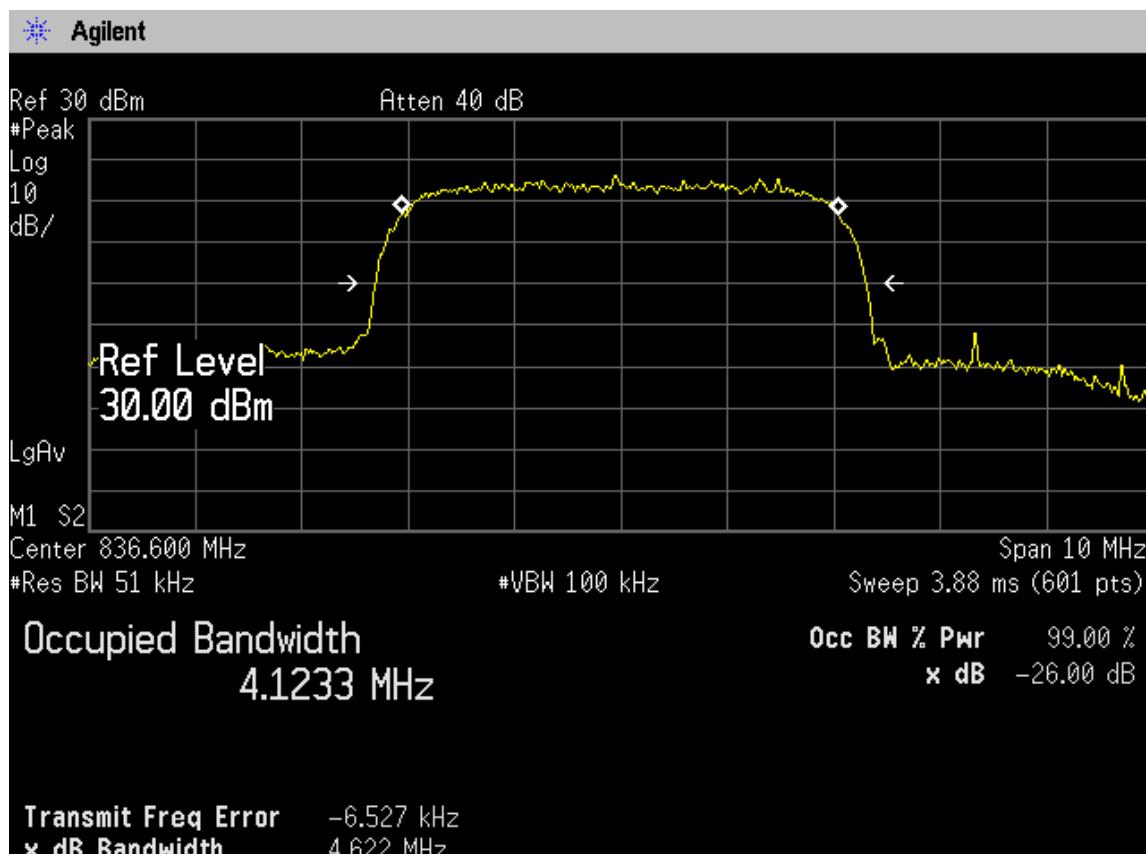


WCDMA Band V CH4132 Occupied Bandwidth

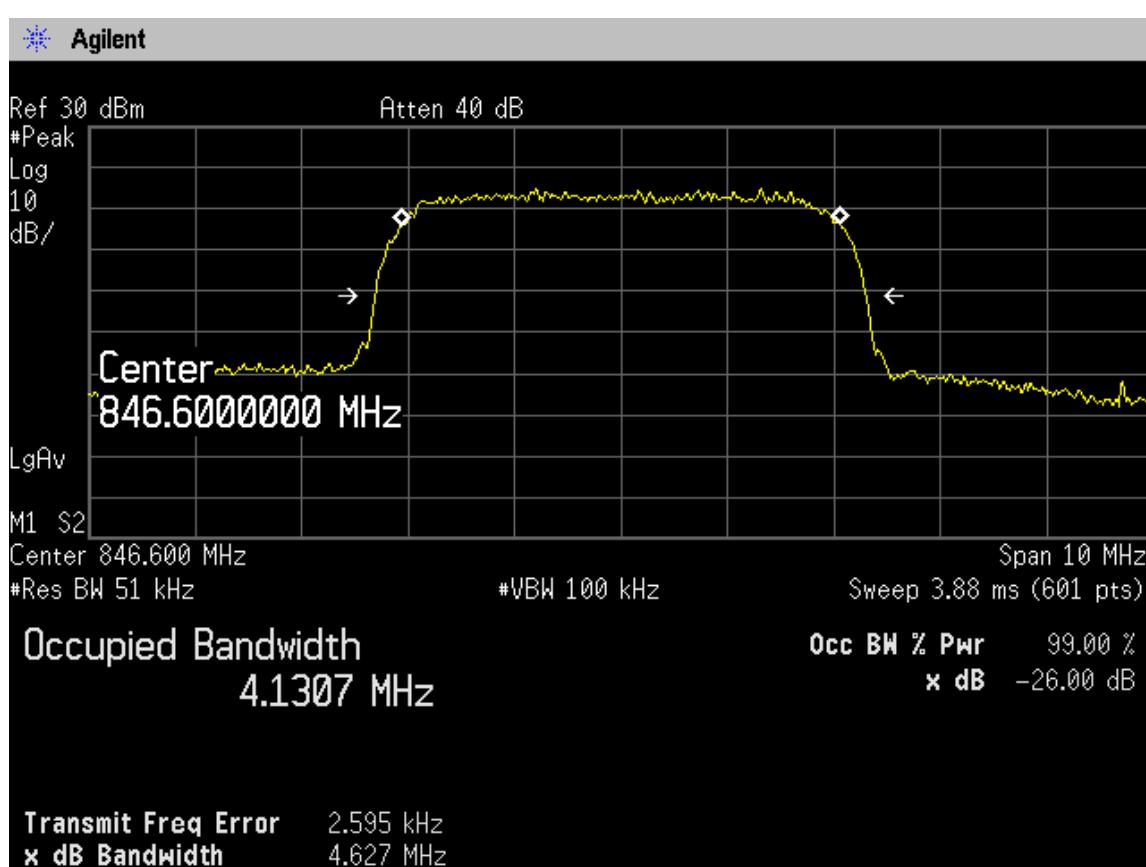
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WCDMA Band V CH4183 Occupied Bandwidth

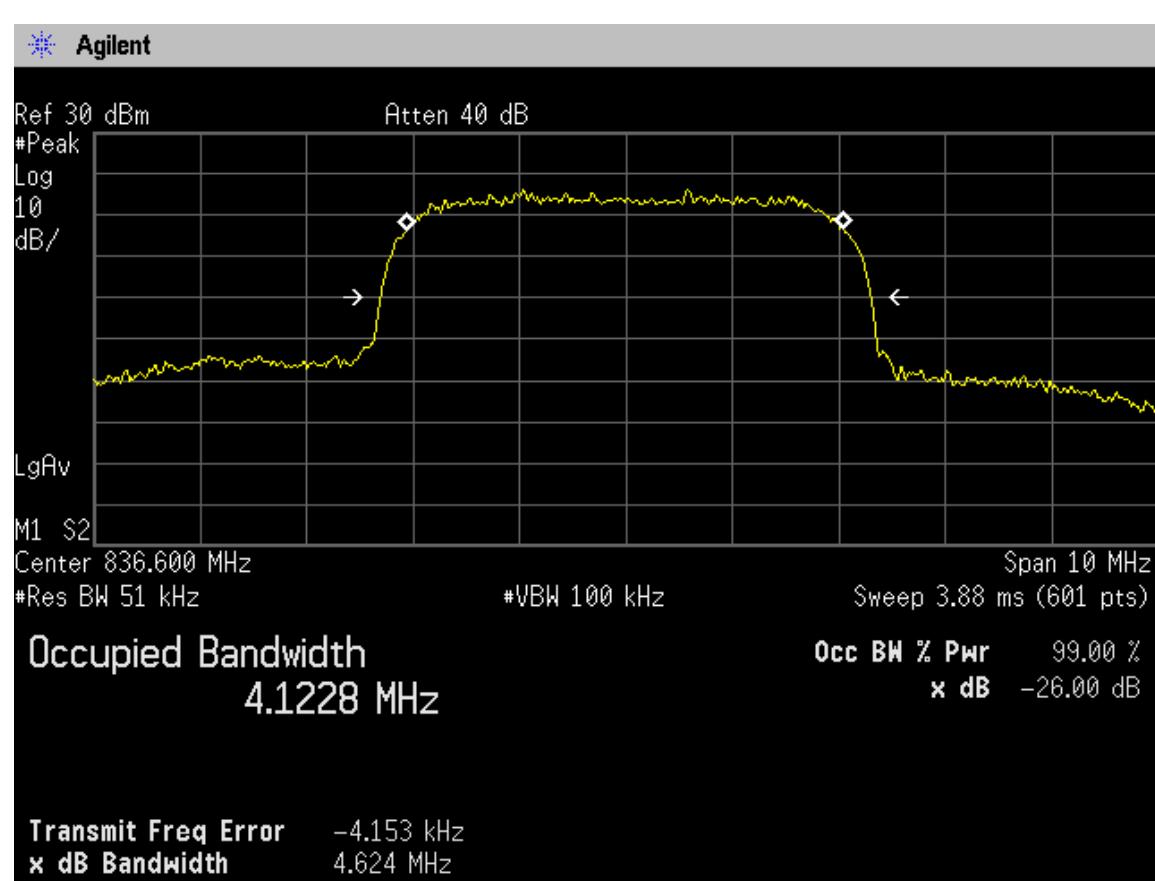
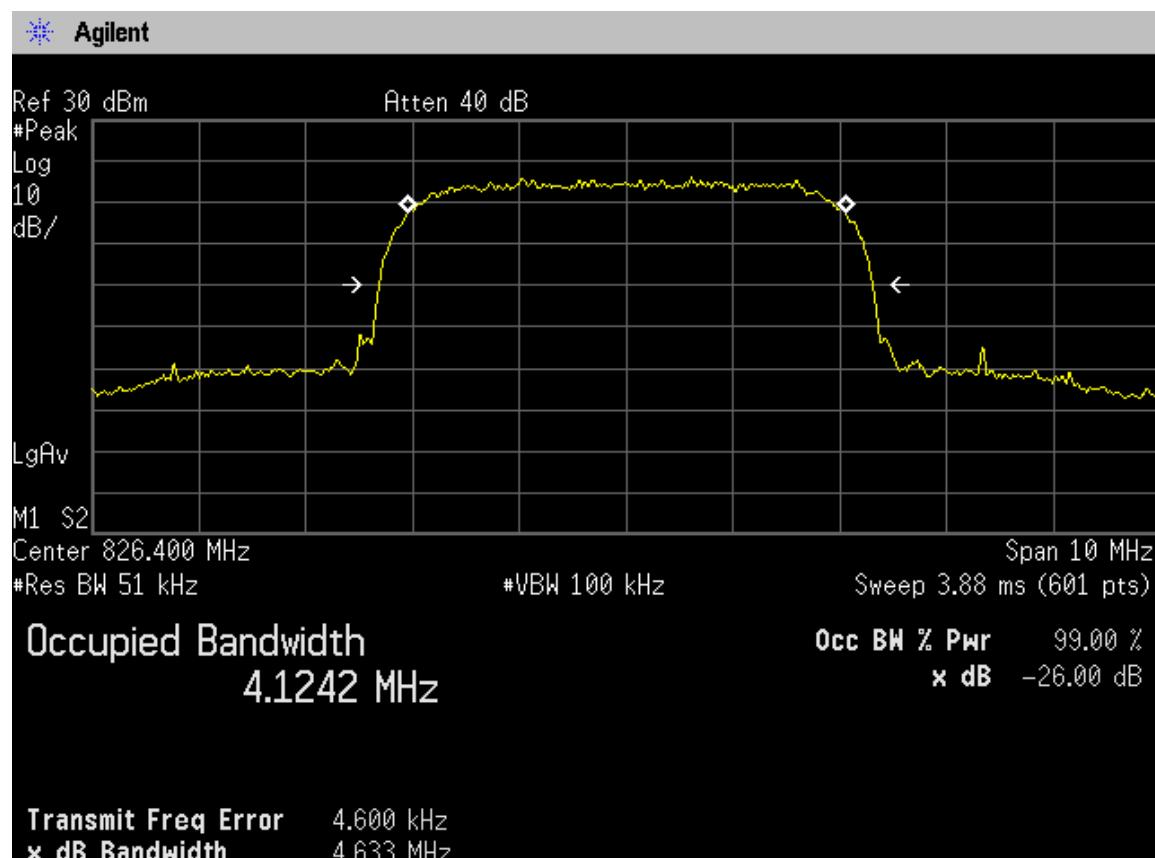


WCDMA Band V CH4233 Occupied Bandwidth

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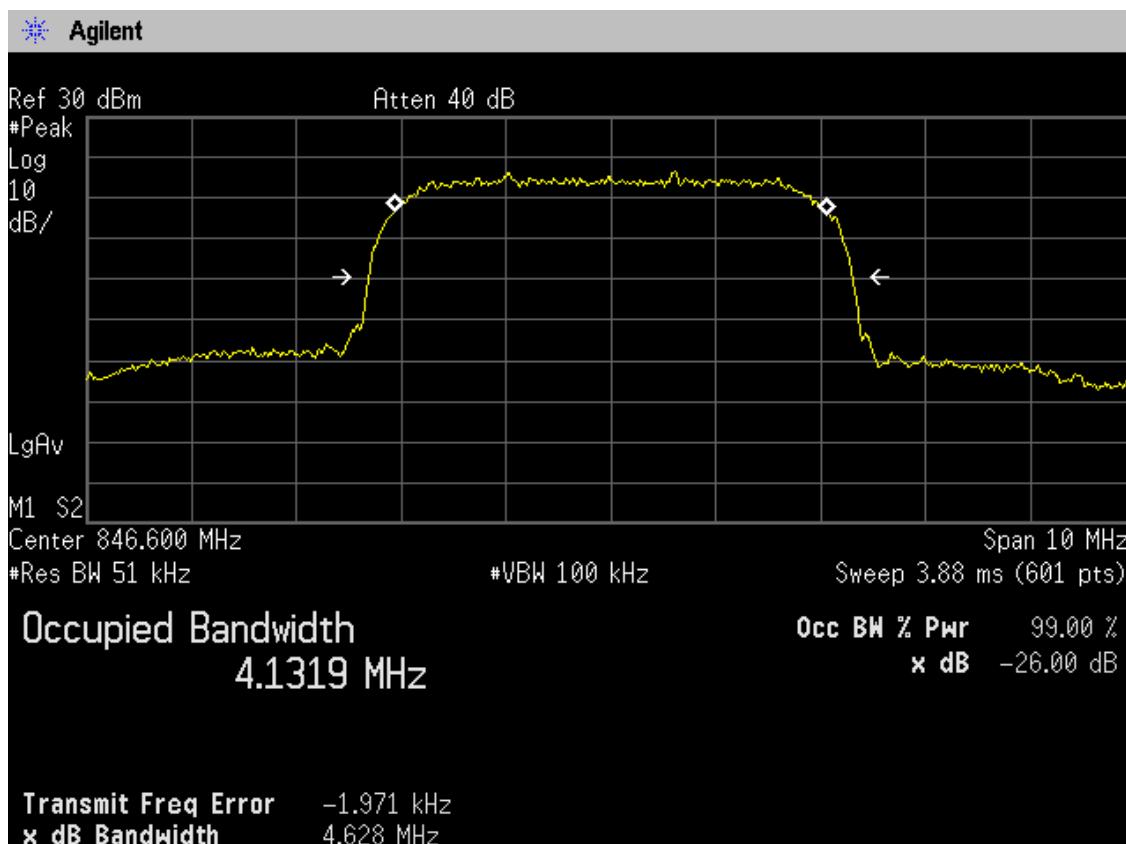
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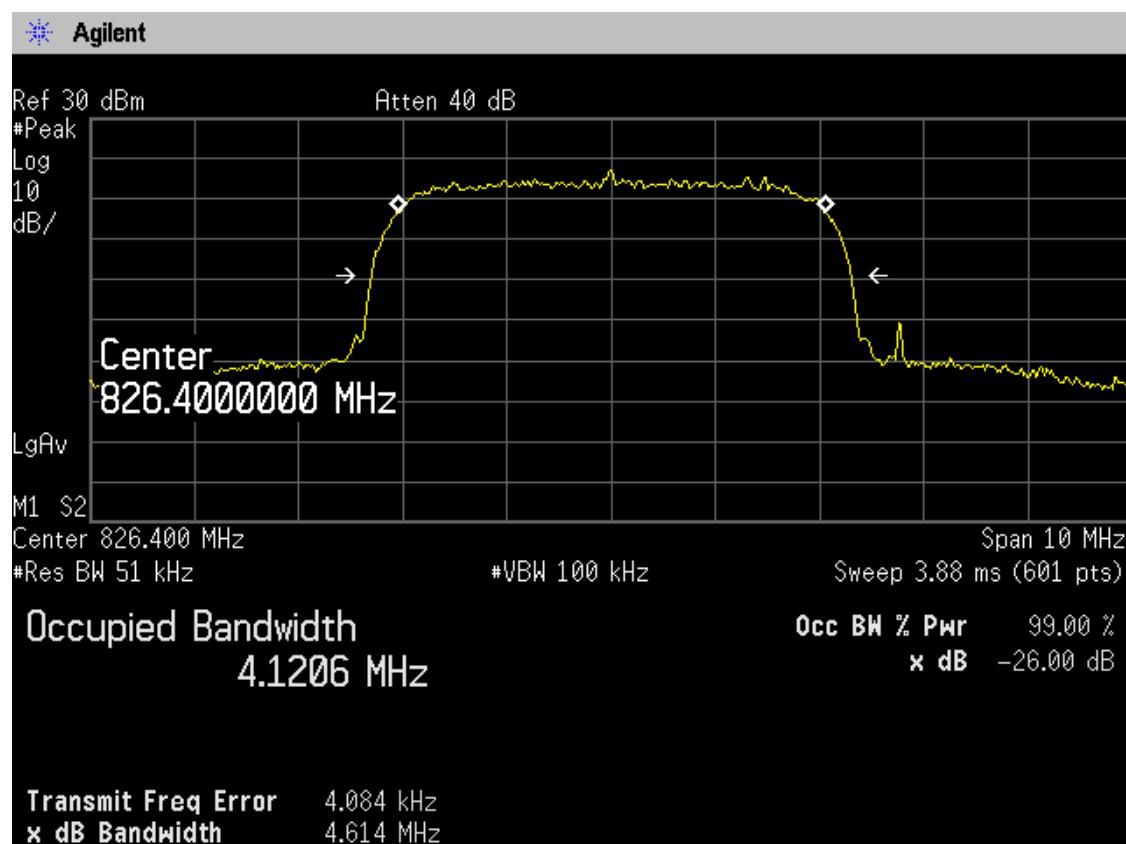
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WCDMA Band V HSDPA CH4233 Occupied Bandwidth

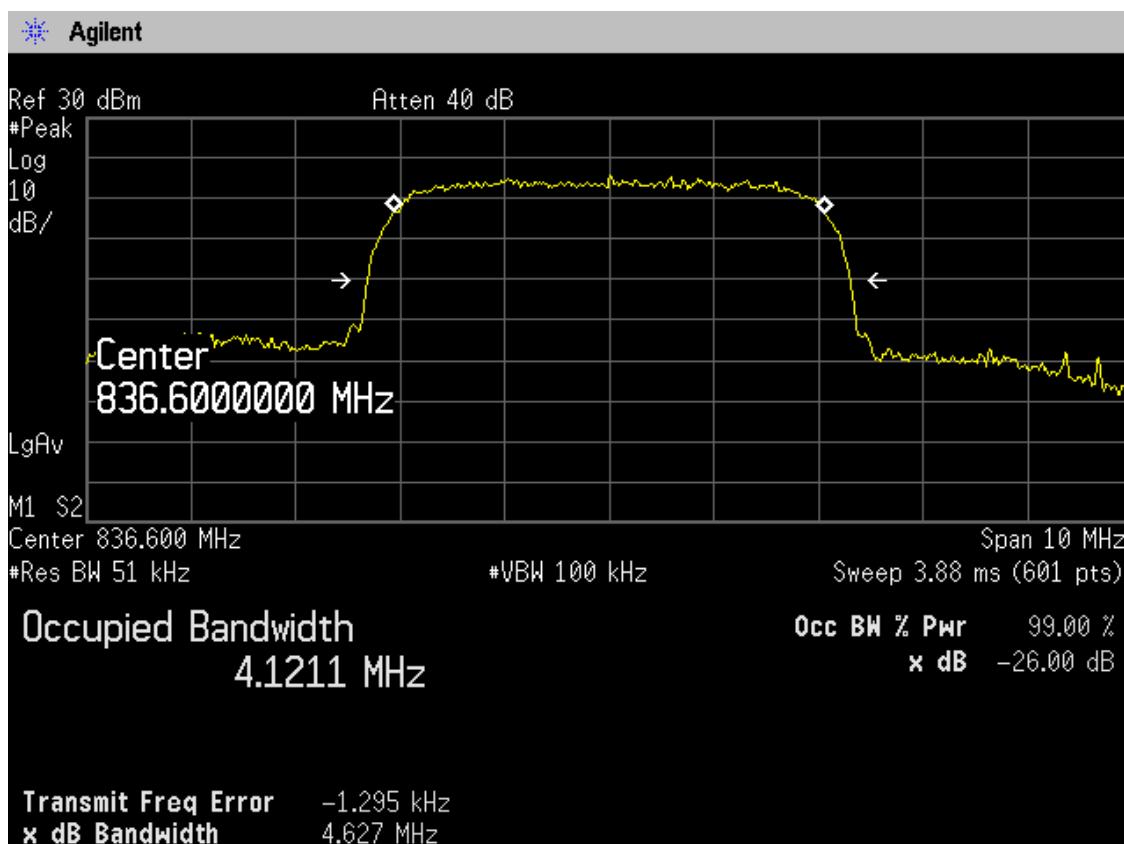


WCDMA Band V HSUPA CH4132 Occupied Bandwidth

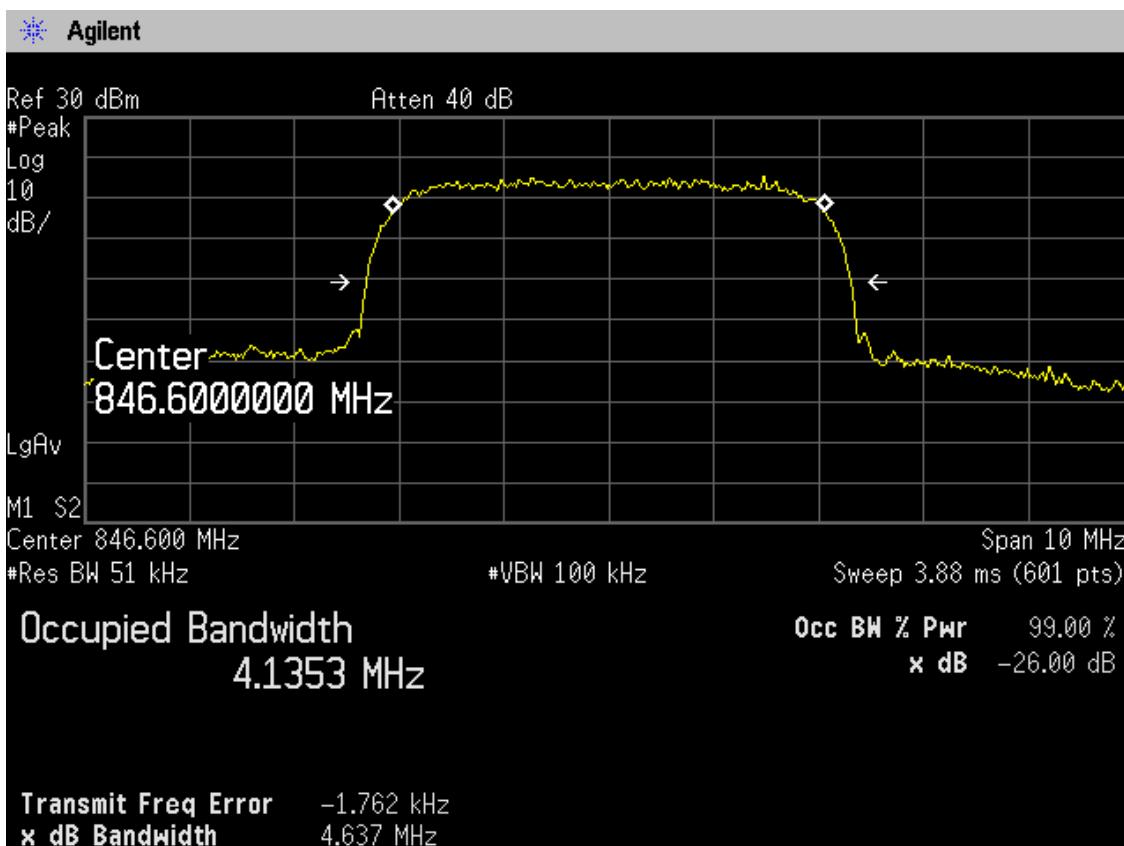
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WCDMA Band V HSUPA CH4183 Occupied Bandwidth



WCDMA Band V HSUPA CH4233 Occupied Bandwidth

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### 2.5. Band Edge Compliance

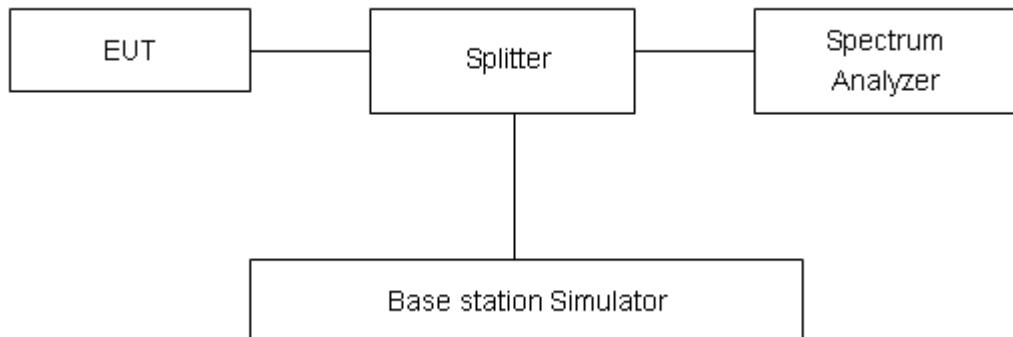
#### Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

#### Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The band edge of the lowest and highest channels were measured. The average detector is used. RBW is set to 51kHz, VBW is set to 100kHz for WCDMA Band V. Spectrum analyzer plots are included on the following pages.

#### Test Setup



#### Limits

Rule Part 22.917(a) specifies that “The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB.”

Limit	-13 dBm
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#### Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 1.96$ ,  $U=0.684$ dB.

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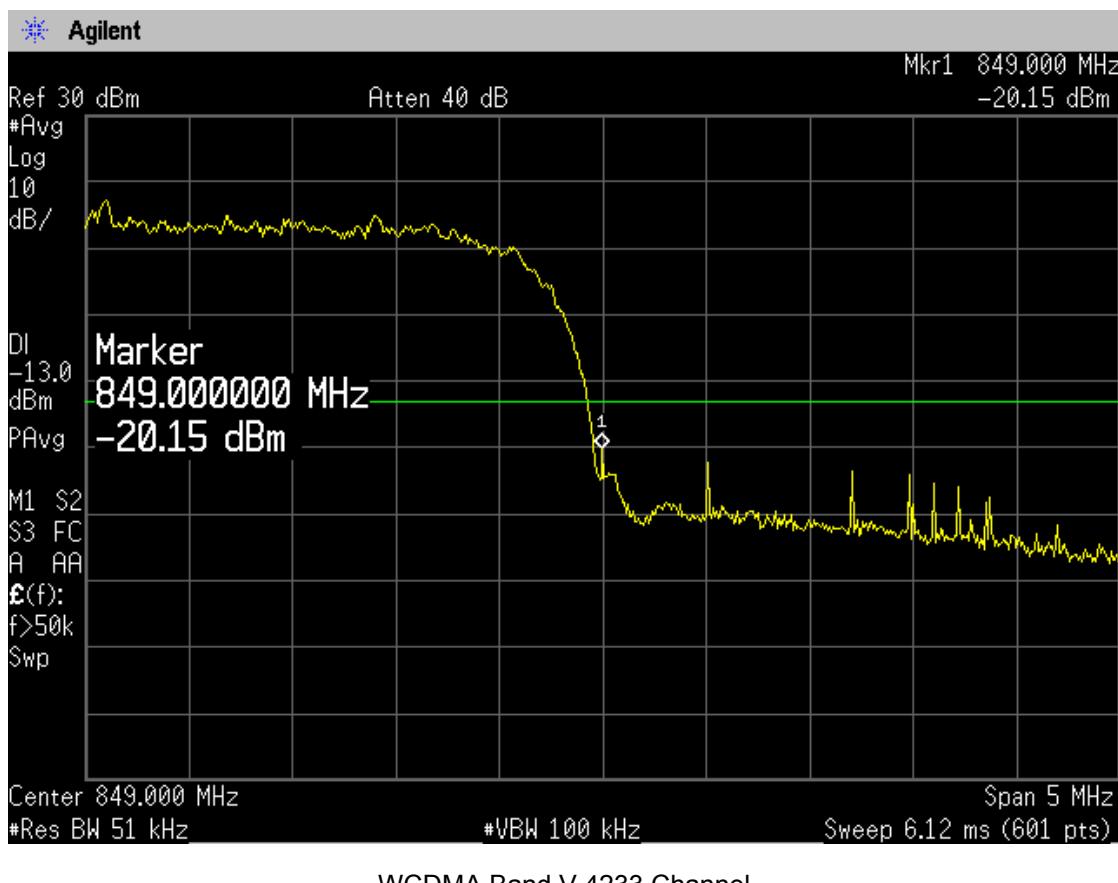
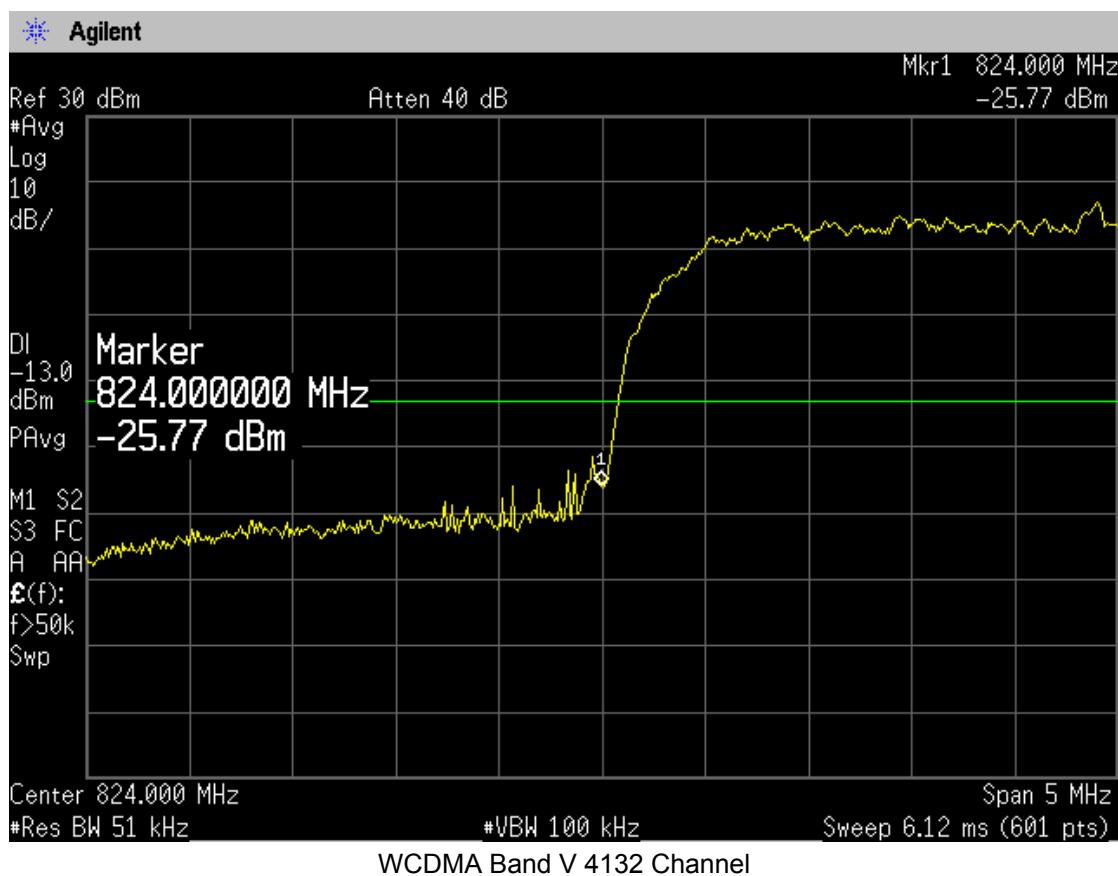
**Test Result:**

	<b>Carrier frequency (MHz)</b>	<b>Reference value (dBm)</b>	<b>Limit</b>	<b>Conclusion</b>
<b>WCDMA Band V</b>	824.0	-25.77	-13	PASS
	849.0	-20.15	-13	PASS
<b>WCDMA Band V HSDPA</b>	824.0	-25.16	-13	PASS
	849.0	-25.16	-13	PASS
<b>WCDMA Band V HSUPA</b>	824.0	-25.93	-13	PASS
	849.0	-24.52	-13	PASS

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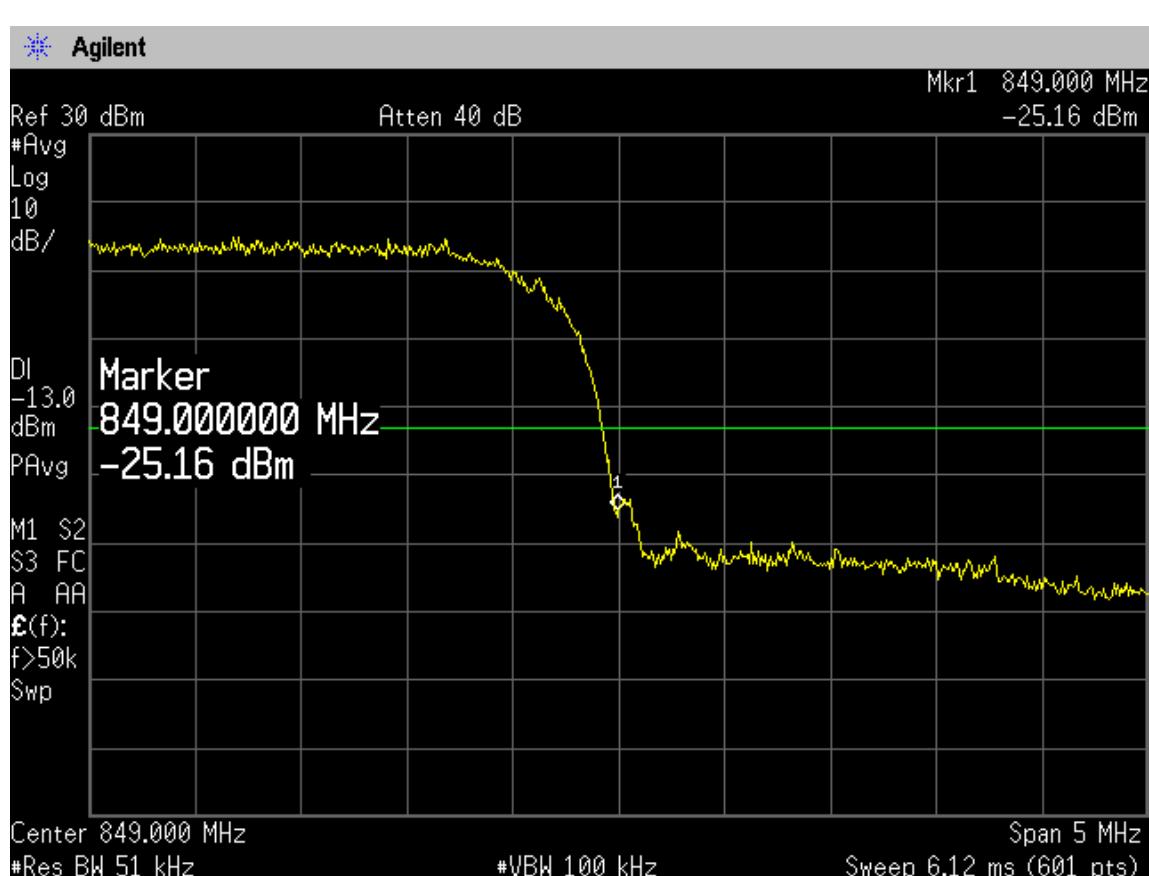
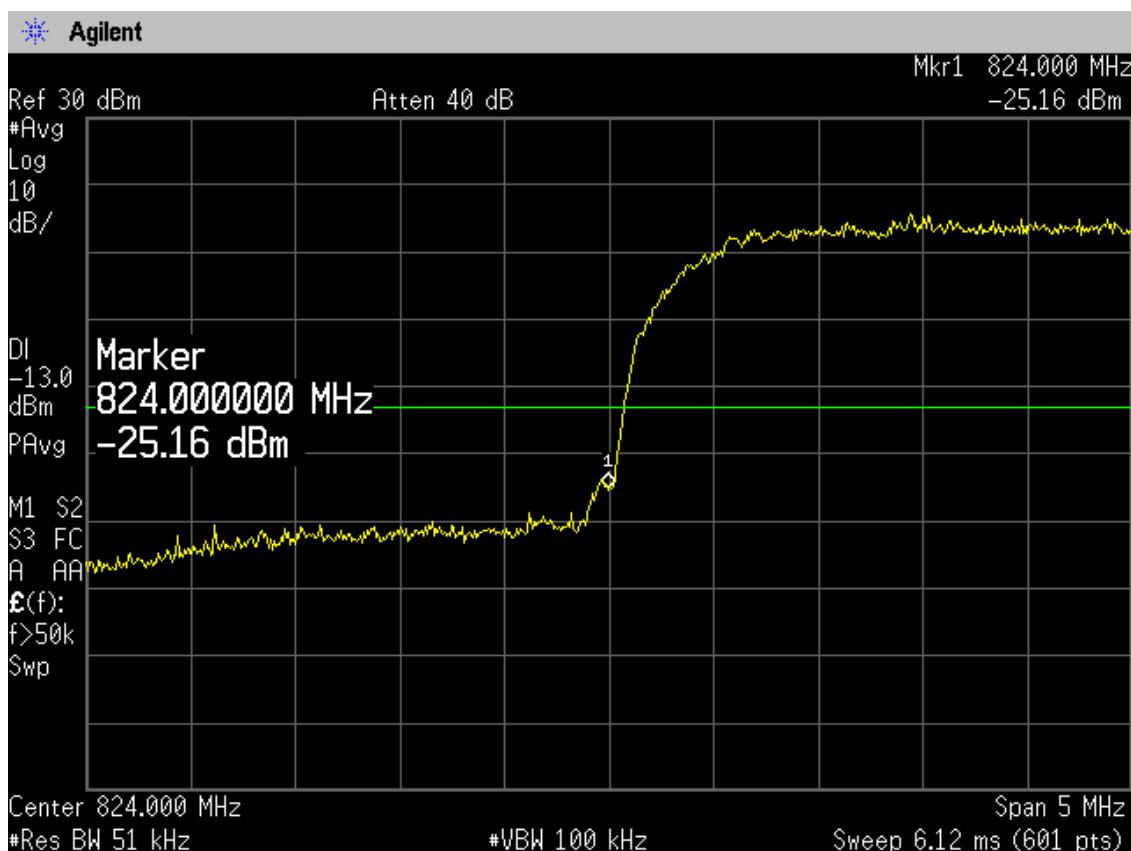
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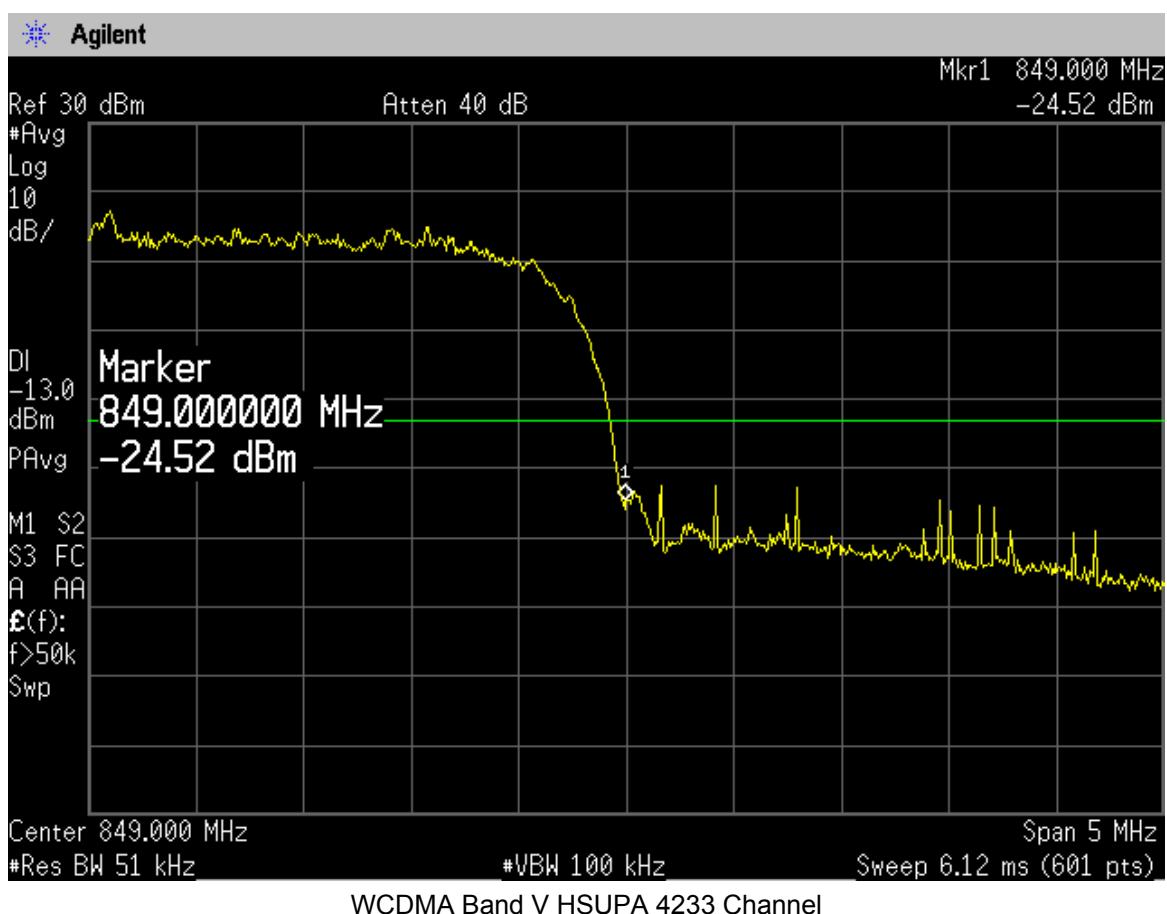
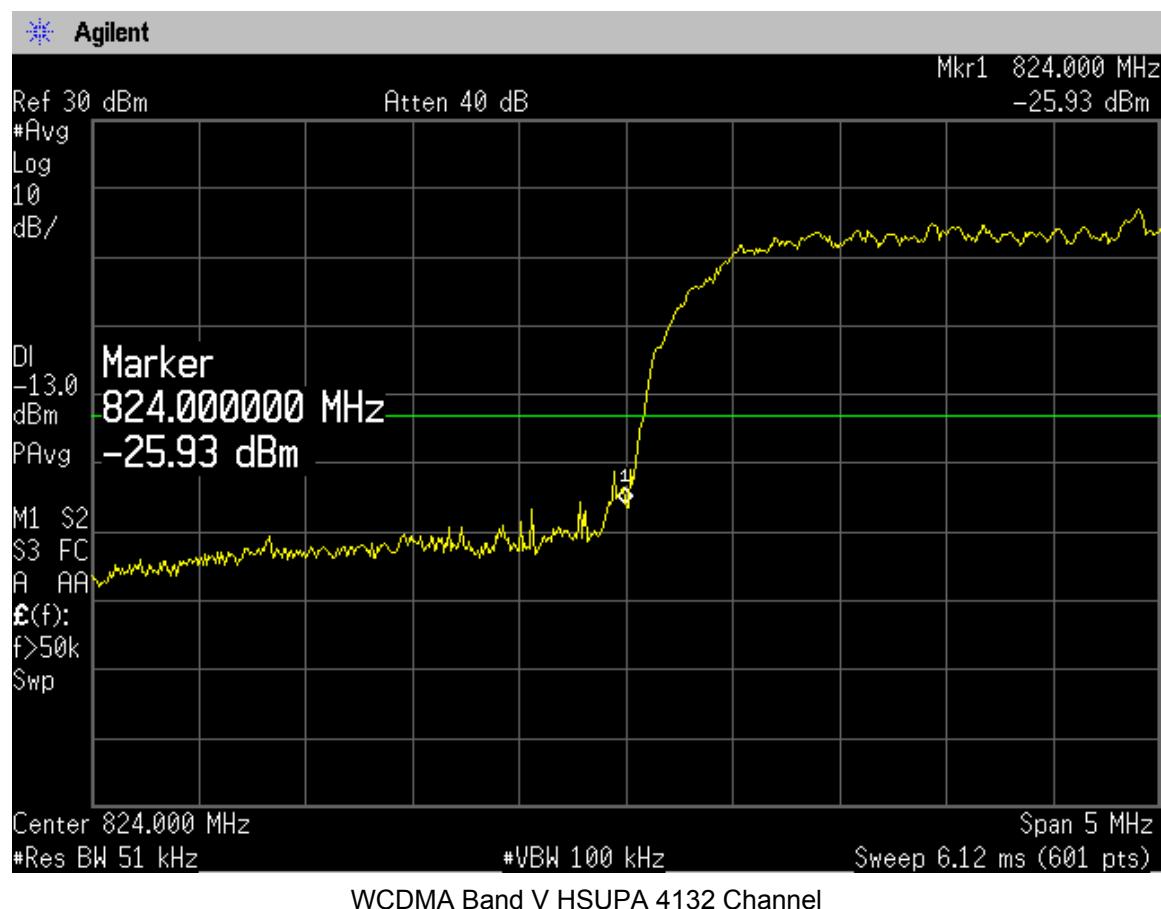
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## 2.6. Frequency Stability

### Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

### Method of Measurement

#### 1. Frequency Stability (Temperature Variation)

The temperature inside the climate chamber is varied from -30°C to +50°C in 10°C step size,

(1) With all power removed, the temperature was decreased to -30°C and permitted to stabilize for three hours.

(2) Measure the carrier frequency with the test equipment in a "call mode". These measurements should be made within 1 minute of powering up the mobile station, to prevent significant self warming.

(3) Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, un-powered, before making measurements.

#### 2. Frequency Stability (Voltage Variation)

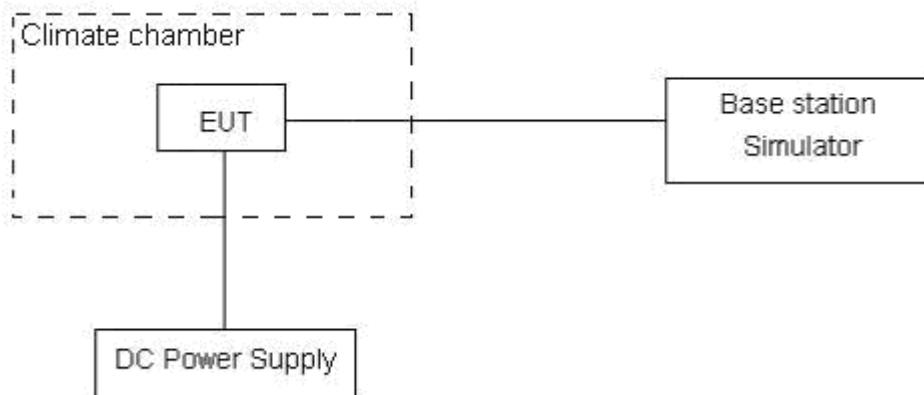
The frequency stability shall be measured with variation of primary supply voltage as follows:

(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.

(2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery-operating end point which shall be specified by the manufacturer.

This transceiver is specified to operate with an input voltage of between 3.3 V and 4.2 V, with a nominal voltage of 3.8V.

### Test setup



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### Limits

According to the Sec. 22.355, the frequency stability of the carrier shall be accurate to within 2.5 ppm of the received frequency for mobile stations.

Limits	≤ 2.5 ppm
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### Measurement Uncertainty

The assessed measurement uncertainty to ensure 99.75% confidence level for the normal distribution is with the coverage factor  $k = 3, U = 0.01\text{ppm}$ .

### Test Result

#### WCDMA Band V

Temperature (°C)	Test Results (ppm) / 3.8V Power supply
	Channel 4183
-30	0.0069
-20	0.0053
-10	0.0078
0	0.0063
10	0.0065
20	0.0040
30	0.0056
40	0.0055
50	0.0077

Voltage (V)	Test Results(ppm) / 20°C
	Channel 4183
3.3	0.0042
3.8	0.0040
4.2	0.0065

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### 2.7. Spurious Emissions at Antenna Terminals

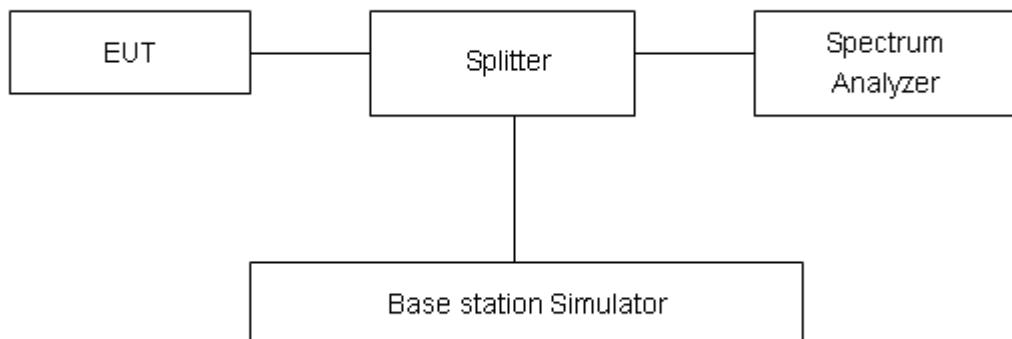
#### Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

#### Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The measurement is carried out using a spectrum analyzer. The spectrum analyzer scans from 30MHz to the 10th harmonic of the carrier. The peak detector is used. For WCDMA Band V, RBW and VBW are set to 100 kHz for the carrier frequency, or RBW and VBW are set to 1MHz(other frequency), Sweep is set to ATUO.

#### Test setup



#### Limits

Rule Part 22.917(a) specifies that "The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log (P) \text{ dB}$ ."

Limit	-13 dBm

#### Measurement Uncertainty

The assessed measurement uncertainty to ensure 99.75 % confidence level for the normal distribution is with the coverage factor  $k = 1.96$ .

Frequency	Uncertainty
100kHz-2GHz	0.684 dB
2GHz-12.75GHz	1.407 dB

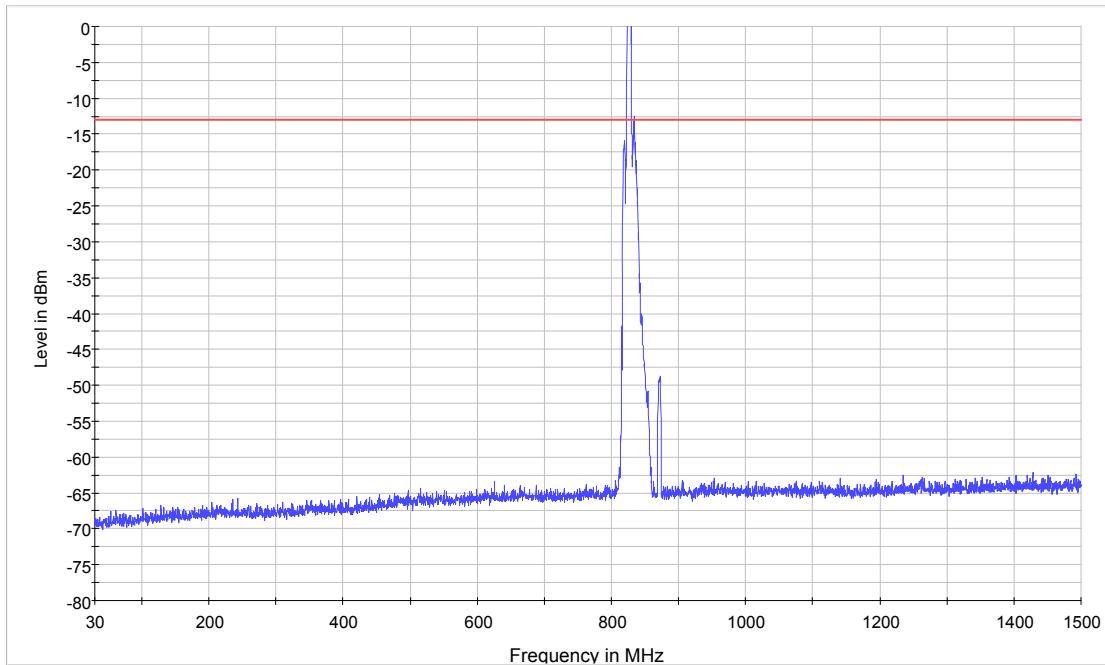
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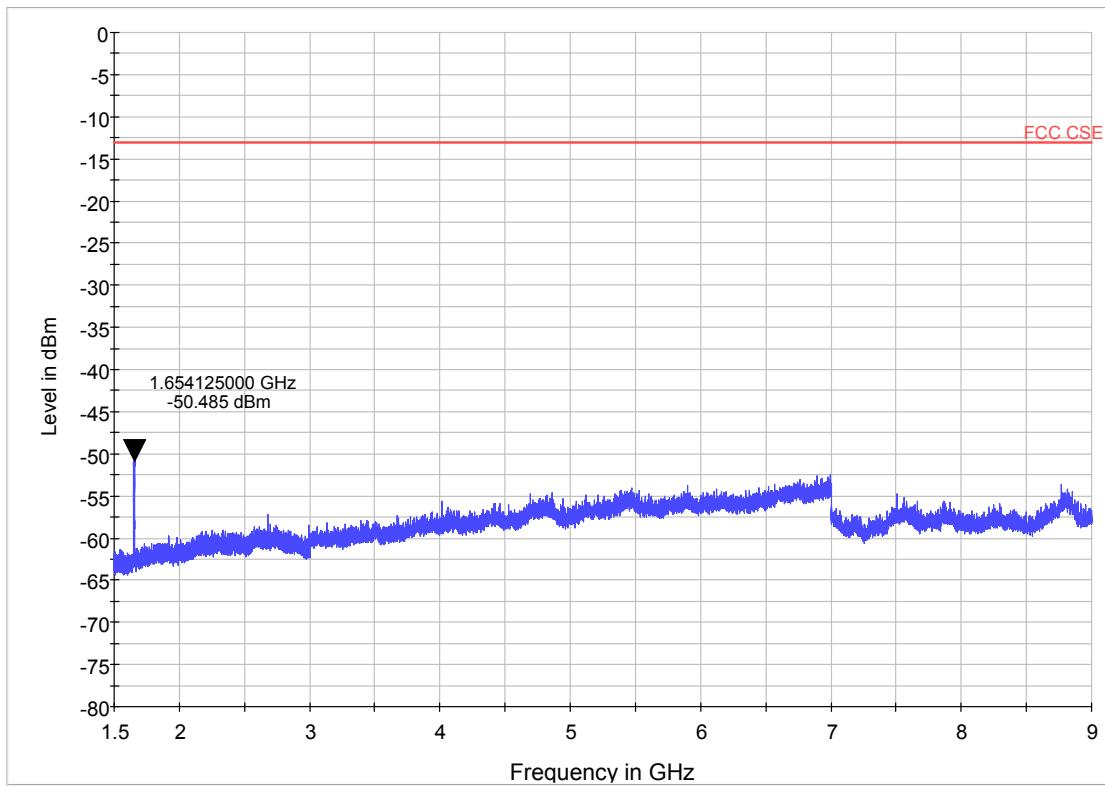
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**Test Result**

WCDMA Band V CH4132



Note: The signal beyond the limit is carrier  
WCDMA Band V 4132 Channel 30MHz~1.5GHz



WCDMA Band V 4132 Channel 1.5GHz ~9GHz

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Harmonic	TX ch.4132 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
2	1654.13	-50.49	-13	37.49
3	2479.2	Nf	-13	/
4	3305.6	Nf	-13	/
5	4132	Nf	-13	/
6	4958.4	Nf	-13	/
7	5784.8	Nf	-13	/
8	6611.2	Nf	-13	/
9	7437.6	Nf	-13	/
10	8264	Nf	-13	/
Nf: noise floor				

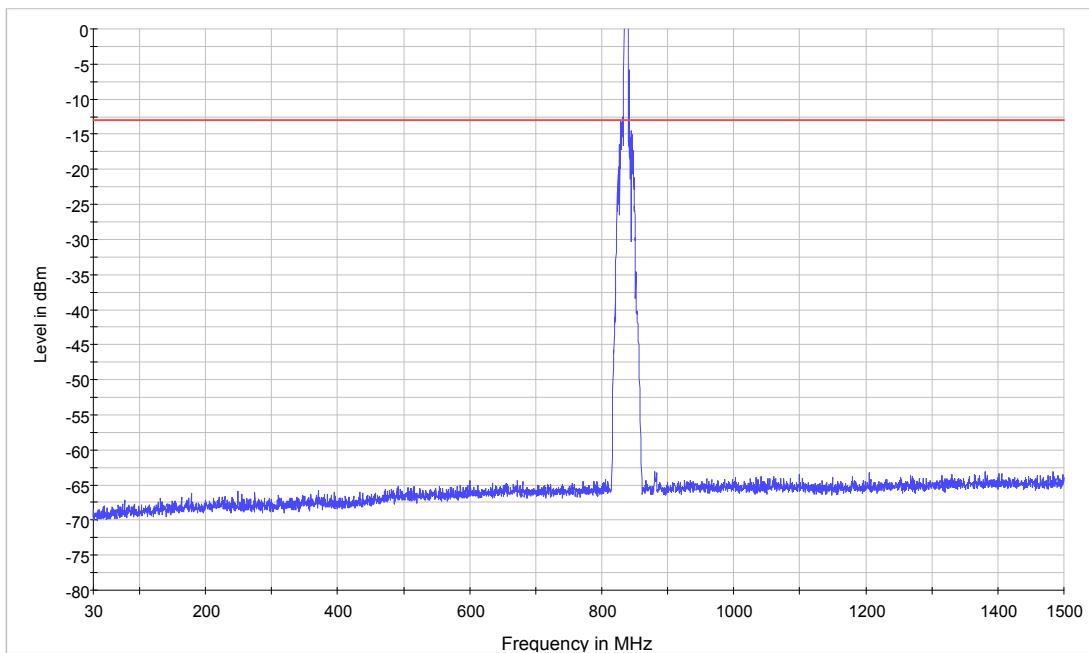
Note: The other Spurious RF conducted emissions level is no more than noise floor.

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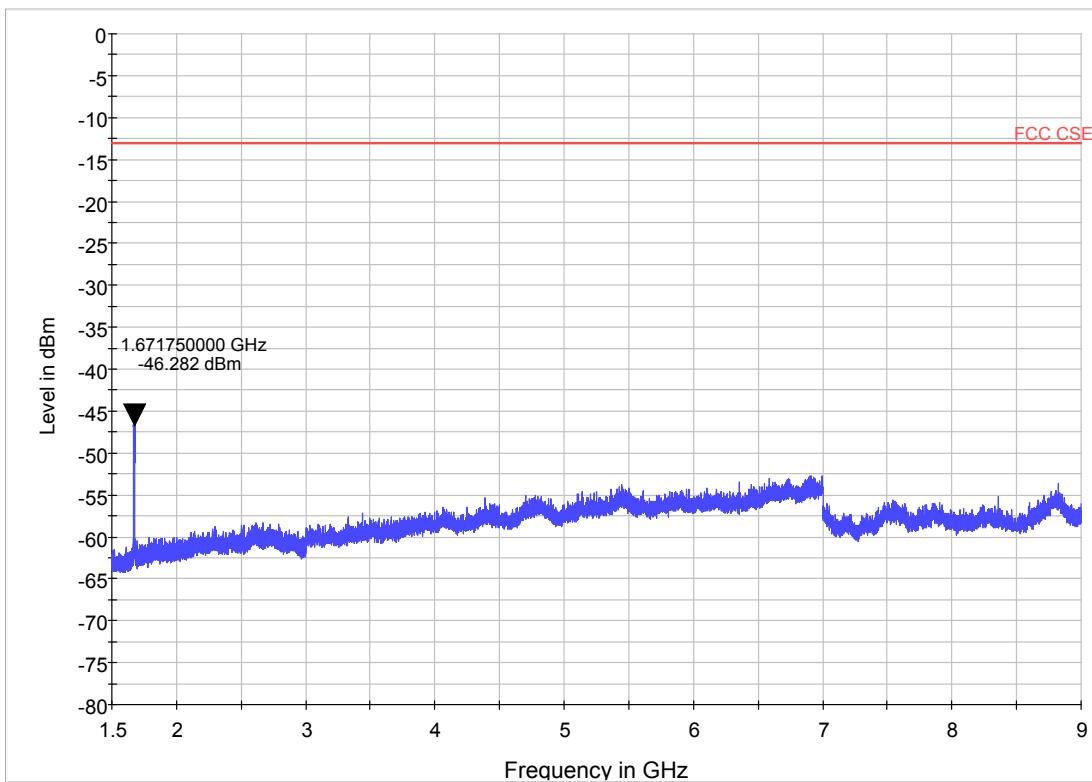
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WCDMA Band V CH4183



Note: The signal beyond the limit is carrier  
WCDMA Band V 4183 Channel 30MHz~1.5GHz



WCDMA Band V 4183 Channel 1.5GHz ~9GHz

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Harmonic	TX ch.4183 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
2	1671.8	-46.28	-13	33.28
3	2509.8	Nf	-13	/
4	3346.4	Nf	-13	/
5	4183	Nf	-13	/
6	5019.6	Nf	-13	/
7	5856.2	Nf	-13	/
8	6692.8	Nf	-13	/
9	7529.4	Nf	-13	/
10	8366	Nf	-13	/

Nf: noise floor

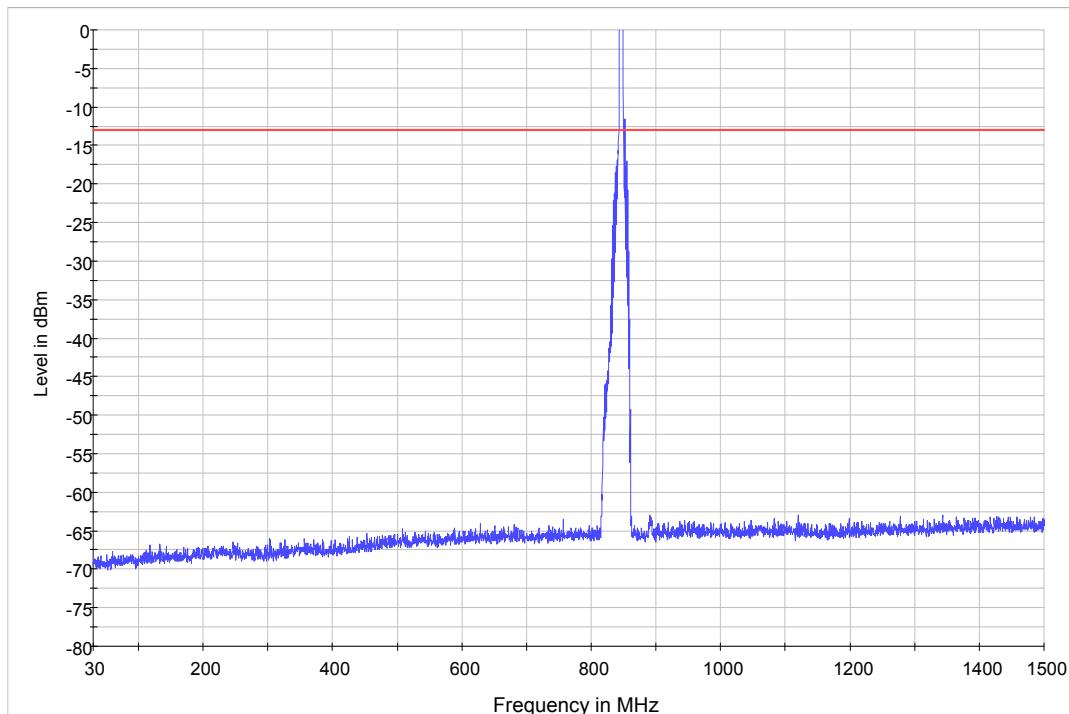
Note: The other Spurious RF conducted emissions level is no more than noise floor.

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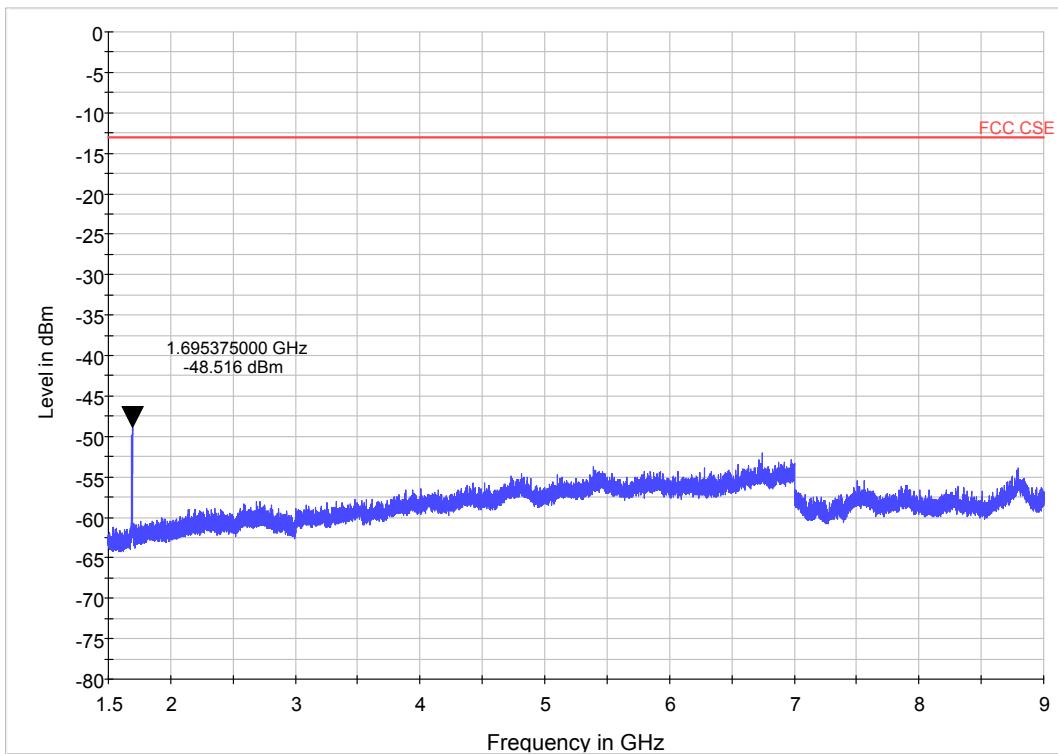
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WCDMA Band V CH4233



Note: The signal beyond the limit is carrier  
WCDMA Band V 4233 Channel 30MHz~1.5GHz



WCDMA Band V 4233 Channel 1.5GHz ~9GHz

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Harmonic	TX ch.4233 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
2	1695.4	-48.52	-13	35.52
3	2539.8	Nf	-13	/
4	3386.4	Nf	-13	/
5	4233	Nf	-13	/
6	5079.6	Nf	-13	/
7	5926.2	Nf	-13	/
8	6772.8	Nf	-13	/
9	7619.4	Nf	-13	/
10	8466	Nf	-13	/

Nf: noise floor

Note: The other Spurious RF conducted emissions level is no more than noise floor.

## 2.8. Radiates Spurious Emission

### Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

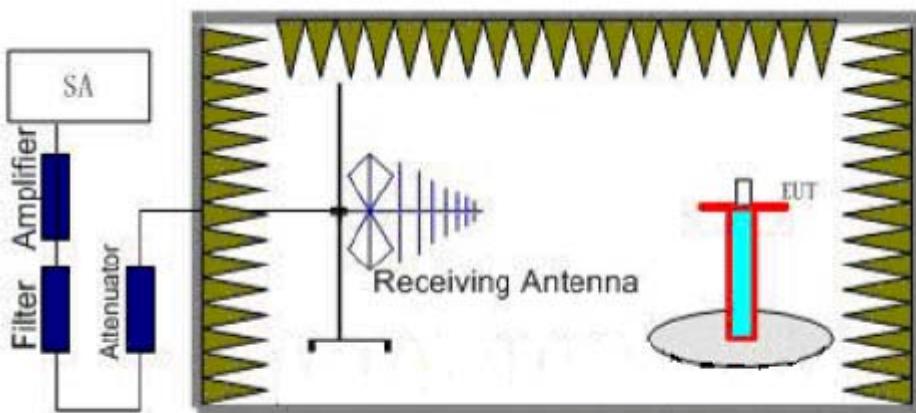
### Method of Measurement

The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment.

The procedure of Radiates Spurious Emission is as follows:

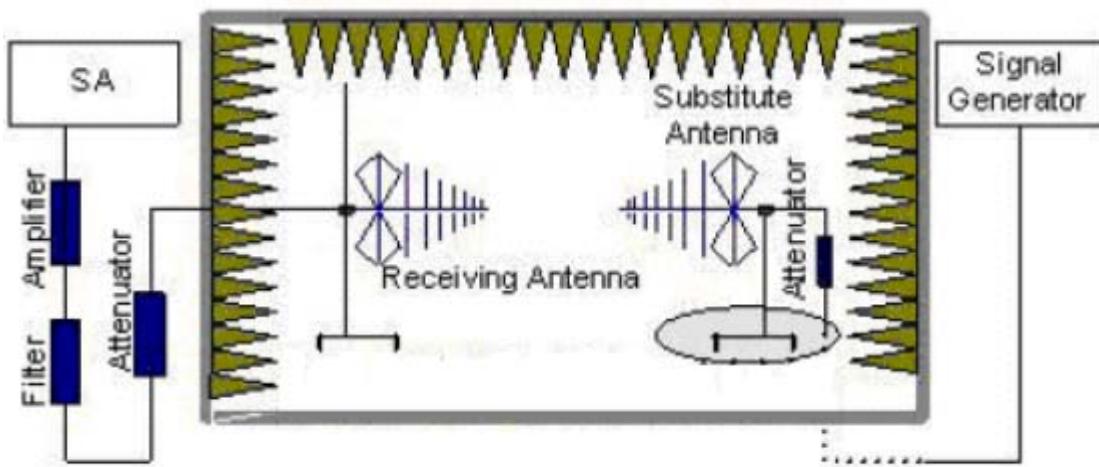
#### Step 1:

The measurement is carried out in the semi-anechoic chamber. EUT was placed on a 1.5 meters high non-conductive table at a 3 meters test distance from the test receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT. A radio link shall be established between EUT and Tester. The output power of the cell signal of the tester will be decreased until the output power of the EUT reach a maximum value. A peak detector is used while RBW and VBW are both set to 3MHz. During the measurement, the highest emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna moved up and down over a range from 1 to 4 meters in both horizontally and vertically polarized orientations. The test setup refers to figure below.



#### Step 2:

A dipole antenna shall be substituted in place of the EUT. The antenna will be driven by a signal generator with a adjustable S.G. applied through a Tx cable. Adjust the level of the signal generator output until the value of the receiver reach the previously recorded analyzer power level (LVL). Then The E.R.P. /E.I.R.P. of the EUT can be calculated through the level of the signal generator, Tx cable loss and the gain of the substitution antenna. The test setup refers to figure below.



E.R.P (peak power) = S.G. - Tx Cable loss + Substitution antenna gain - 2.15.

EIRP = E.R.P + 2.15

The field strength of spurious emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Z axis) and the antenna is vertical.

### Limits

Rule Part 22.917(a) specifies that "The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB."

Limit	-13 dBm
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### Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 1.96$ ,  $U = 3.55$  dB.

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**Test Result**

WCDMA Band V CH4132

Harmonic	TX ch.4132 Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1654.9	-46.16	2.00	8.00	-42.31	-13	29.31	180
3	2478.0	-40.46	2.51	9.20	-35.92	-13	22.92	135
4	3305.6	/	/	/	Nf	-13	/	/
5	4132.0	/	/	/	Nf	-13	/	/
6	4958.4	/	/	/	Nf	-13	/	/
7	5784.8	/	/	/	Nf	-13	/	/
8	6611.2	/	/	/	Nf	-13	/	/
9	7437.6	/	/	/	Nf	-13	/	/
10	8264.0	/	/	/	Nf	-13	/	/

Nf: noise floor

Note: The other Spurious RF Radiated emissions level is no more than noise floor.

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WCDMA Band V CH4183

Harmonic	TX ch.4183 Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1675.3	-40.53	8.6	10.75	-40.53	-13	27.53	135
3	2505.0	-44.59	8.9	11.05	-44.59	-13	31.59	315
4	3346.4	/	/	/	Nf	-13	/	/
5	4183	/	/	/	Nf	-13	/	/
6	5019.6	/	/	/	Nf	-13	/	/
7	5856.2	/	/	/	Nf	-13	/	/
8	6692.8	/	/	/	Nf	-13	/	/
9	7529.4	/	/	/	Nf	-13	/	/
10	8366	/	/	/	Nf	-13	/	/

Nf: noise floor

Note: The other Spurious RF Radiated emissions level is no more than noise floor.

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WCDMA Band V CH4233

Harmonic	TX ch.4233 Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1695.6	-46.76	2.00	10.15	-40.76	-13	27.76	135
3	2539.5	-50.46	2.51	11.05	-44.07	-13	31.07	135
4	3386.4	/	/	/	Nf	-13	/	/
5	4233	/	/	/	Nf	-13	/	/
6	5079.6	/	/	/	Nf	-13	/	/
7	5926.2	/	/	/	Nf	-13	/	/
8	6772.8	/	/	/	Nf	-13	/	/
9	7619.4	/	/	/	Nf	-13	/	/
10	8466	/	/	/	Nf	-13	/	/

Nf: noise floor

Note: The other Spurious RF Radiated emissions level is no more than noise floor.

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### 3. Main Test Instruments

No.	Name	Type	Manufacturer	Serial Number	Calibration Date	Valid Period
01	Base Station Simulator	CMU200	R&S	118133	2012-06-30	One year
02	Power Splitter	SHX-GF2-2-13	Hua Xiang	10120101	NA	NA
03	Spectrum Analyzer	E4445A	Agilent	MY46181146	2012-06-30	One year
04	Universal Radio Communication Tester	E5515C	Agilent	MY48367192	2012-06-30	One year
05	Signal Analyzer	FSV30	R&S	100815	2012-06-30	One year
06	Signal generator	SMB 100A	R&S	102594	2012-06-30	One year
07	EMI Test Receiver	ESCI	R&S	100948	2012-06-30	One year
08	Trilog Antenna	VUBL 9163	SCHWARZB ECK	9163-201	2010-06-20	Three years
09	Horn Antenna	HF907	R&S	100126	2012-07-01	Three years
10	Climatic Chamber	PT-30B	Re Ce	20101891	2010-09-10	Three years
11	Semi-Anechoic Chamber	9.6*6.7*6.6m	ETS-Lindgren	NA	NA	NA
12	EMI test software	ES-K1	R&S	NA	NA	NA

\*\*\*\*\*END OF REPORT BODY\*\*\*\*\*

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**ANNEX A: EUT Appearance and Test Setup**

**A.1 EUT Appearance**



a: EUT

Picture 1 EUT

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**A.2 Test Setup**



**Picture 2: Radiated Spurious Emissions Test setup**