



Part 24

TEST REPORT

Product Name HSPA+ Module

Model Name DTL718-W

FCC ID RHZDTL718-W

Client AnyDATA Shanghai Co., Ltd

TA Technology (Shanghai) Co., Ltd.

GENERAL SUMMARY

Product Name	HSPA+ Module	Model Name	DTL718-W
FCC ID	RHZDTL718-W		
Report No.	RXA1211-1096RF02		
Client	AnyDATA Shanghai Co., Ltd		
Manufacturer	AnyDATA Shanghai Co., Ltd		
Reference Standard(s)	<p>FCC CFR47 Part 2 (2012-12) Frequency Allocations And Radio Treaty Matters; General Rules And Regulations</p> <p>FCC CFR47 Part 24E (2012-12) Personal Communications Services</p> <p>ANSI/TIA-603-C(2004) Land mobile FM or PM Communications Equipment Measurements and Performance Standards.</p> <p>KDB 412172 D01 Determining ERP and EIRP v01 Guidelines for Determining the Effective Radiated Power (ERP) and Equivalent Isotropically Radiated Power (EIRP) of a RF Transmitting System</p>		
Conclusion	<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: Pass</p>		
Comment	The test result only responds to the measured sample.		

Approved by _____

Director

Revised by _____

RF Manager

Performed by _____

RF Engineer

(Stamp)

Date of issue: January 18th, 2013

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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
Contact: Yang Weizhong
Telephone: +86-021-50791141/2/3
Fax: +86-021-50791141/2/3-8000
Website: <http://www.ta-shanghai.com>
E-mail: 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: P.R.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: P.R.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 II; (tested)		
Test Modulation:	(WCDMA)QPSK		
Maximum E.I.R.P.	WCDMA Band II: 14.35dBm		
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)	9262 – 9400 – 9538 (WCDMA Band II) (tested)		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	WCDMA Band II	1852.4 ~ 1907.6	1932.4 ~ 1987.6

Equipment under Test (EUT) is a HSPA+ Module. The EUT is tested for WCDMA Band II 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 17, 2012.

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 Isotropic Radiated power	24.232	PASS
3	Occupied Bandwidth	2.1049	PASS
4	Band Edge Compliance	24.238	PASS
5	Frequency Stability	2.1055 / 24.235	PASS
6	Spurious Emissions at Antenna Terminals	2.1051 / 24.238	PASS
7	Radiates Spurious Emission	2.1053 / 24.238	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.

2.2. RF Power Output

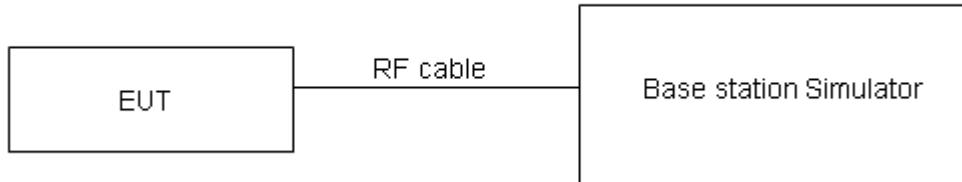
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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

WCDMA Band II		Conducted Power(dBm)		
		Channel 9262	Channel 9400	Channel 9538
		1852.4(MHz)	1880(MHz)	1907.6(MHz)
RMC		22.05	22.58	22.28
HSDPA	Sub - Test 1	23.35	23.04	23.03
	Sub - Test 2	22.79	23.01	22.99
	Sub - Test 3	22.74	23.06	22.95
	Sub - Test 4	22.81	23.02	23.01
HSUPA	Sub - Test 1	21.16	21.98	21.84
	Sub - Test 2	19.95	20.49	20.44
	Sub - Test 3	20.14	20.59	20.57
	Sub - Test 4	20.45	20.83	20.77
	Sub - Test 5	21.24	21.71	21.73

2.3. Effective Isotropic Radiated Power

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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):

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

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_T = transmitter output power, in dBW, dBm, or psd (power over a specified reference bandwidth);

G_T = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

L_c = 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:

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

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

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

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).

Limits

Rule Part 24.232(b) specifies that "Mobile/portable stations are limited to 2 watts EIRP. Peak power" and Rule Part 24.232(c) specifies that "Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage".

Limit (EIRP)	$\leq 2 \text{ W} \quad (33 \text{ dBm})$
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Measurement Uncertainty

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

Test Results:Pass

	Channel	GT (dBi)	PT (dBm)	LC(dB)	E.I.R.P(dBm)
WCDMA Band II	9262	4.5	22.05	0	26.55
	9400	4.5	22.58	0	27.08
	9538	4.5	22.28	0	26.78

2.4. Occupied Bandwidth

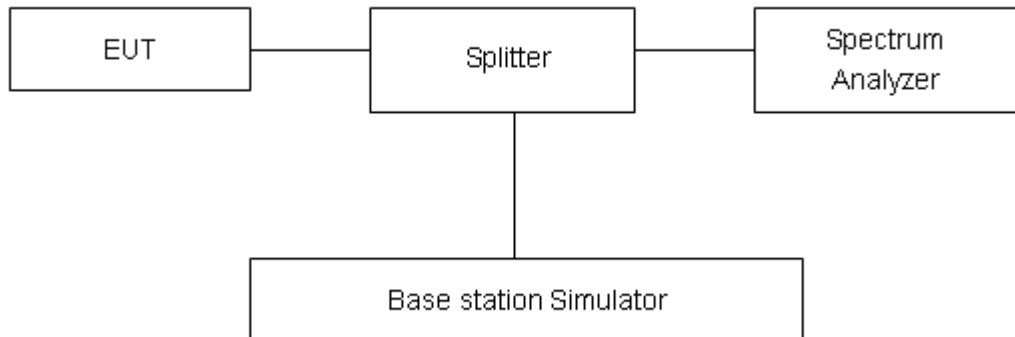
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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 and VBW is set to 100kHz for WCDMA Band II. 99% power and -26dBc occupied bandwidths are recorded. Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

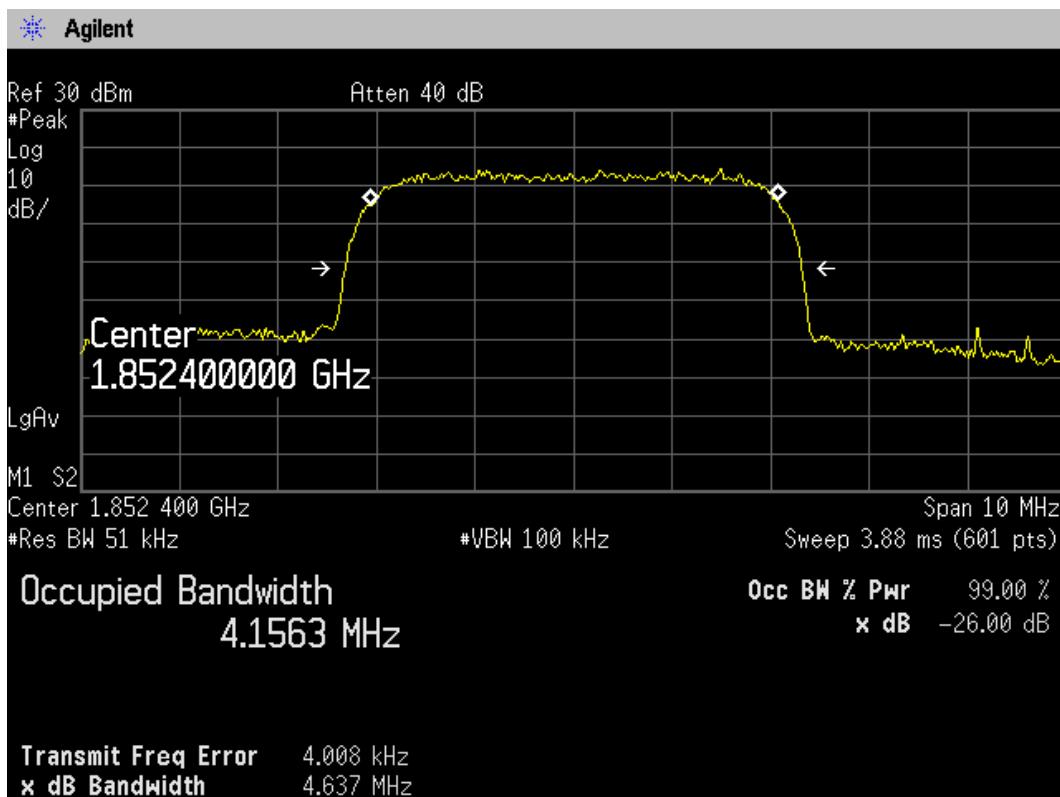
No specific occupied bandwidth requirements in part 2.1049.

Measurement Uncertainty

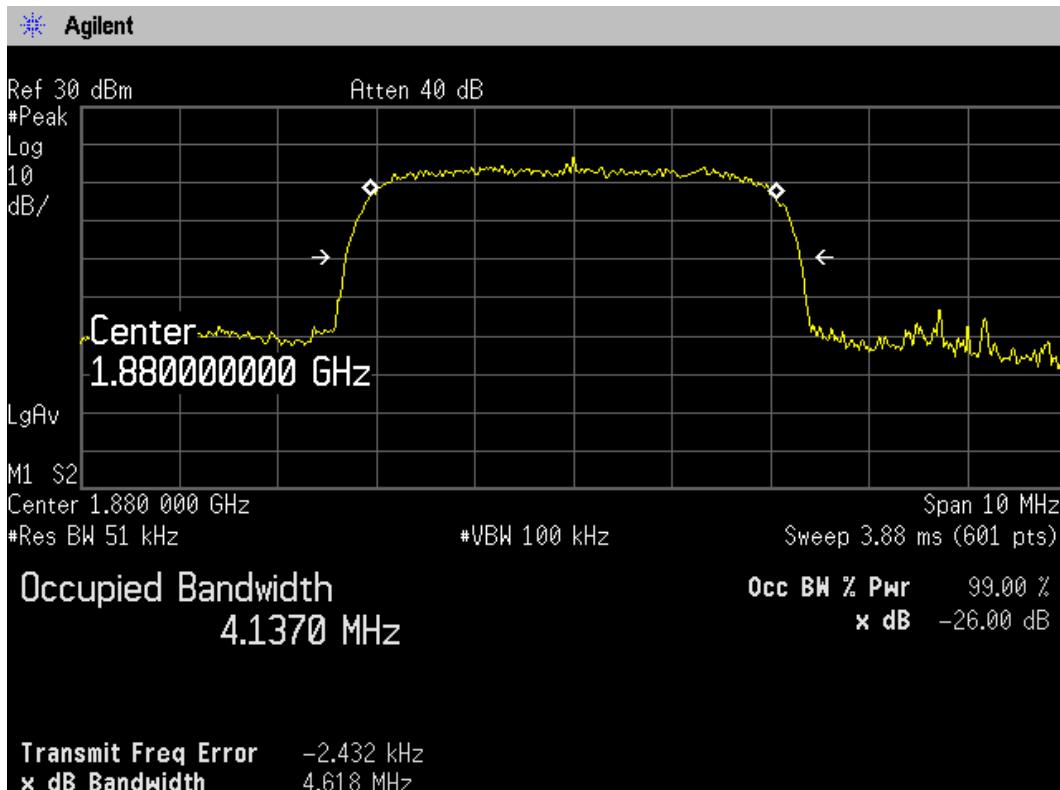
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 624\text{Hz}$.

Test Result

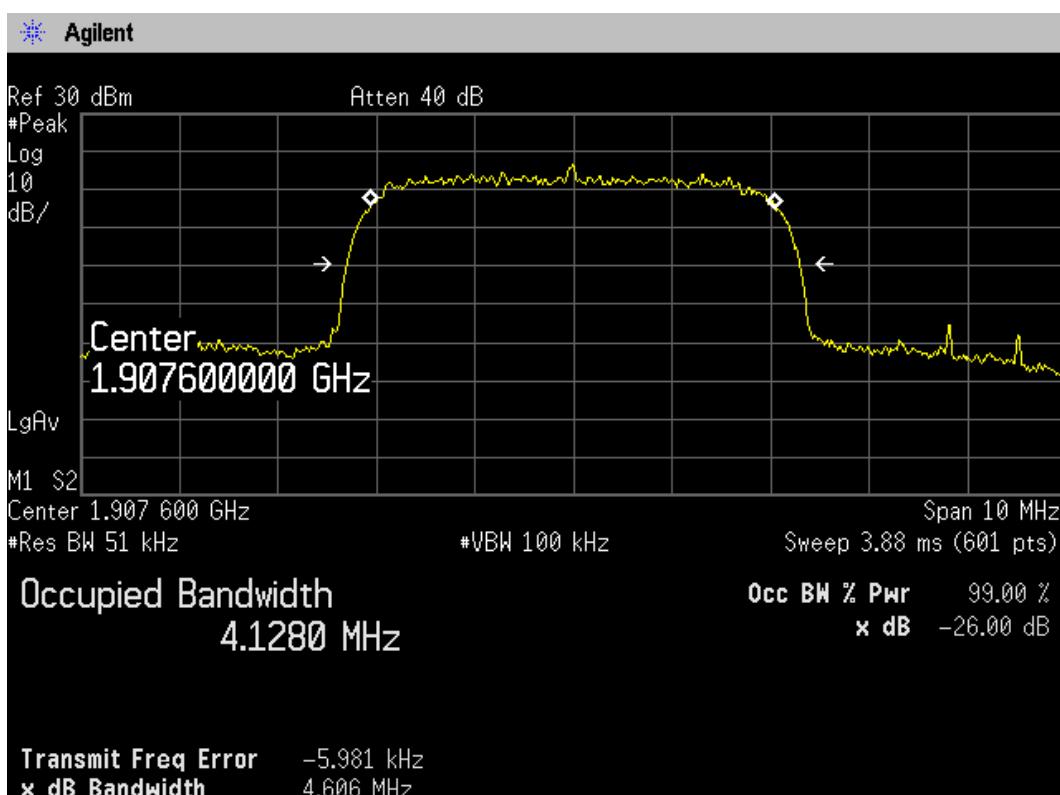
Band	Channel	Frequency (MHz)	99% Power Bandwidth (MHz)	-26dBc Bandwidth(MHz)
WCDMA Band II	9262	1852.4	4.1563	4.637
	9400	1880	4.137	4.618
	9538	1907.6	4.128	4.606
WCDMA Band II HSDPA	9262	1852.4	4.1549	4.648
	9400	1880	4.1582	4.641
	9538	1907.6	4.1351	4.630
WCDMA Band II HSUPA	9262	1852.4	4.1492	4.640
	9400	1880	4.1489	4.657
	9538	1907.6	4.1405	4.650



WCDMA Band II CH9262 Occupied Bandwidth



WCDMA Band II CH9400 Occupied Bandwidth

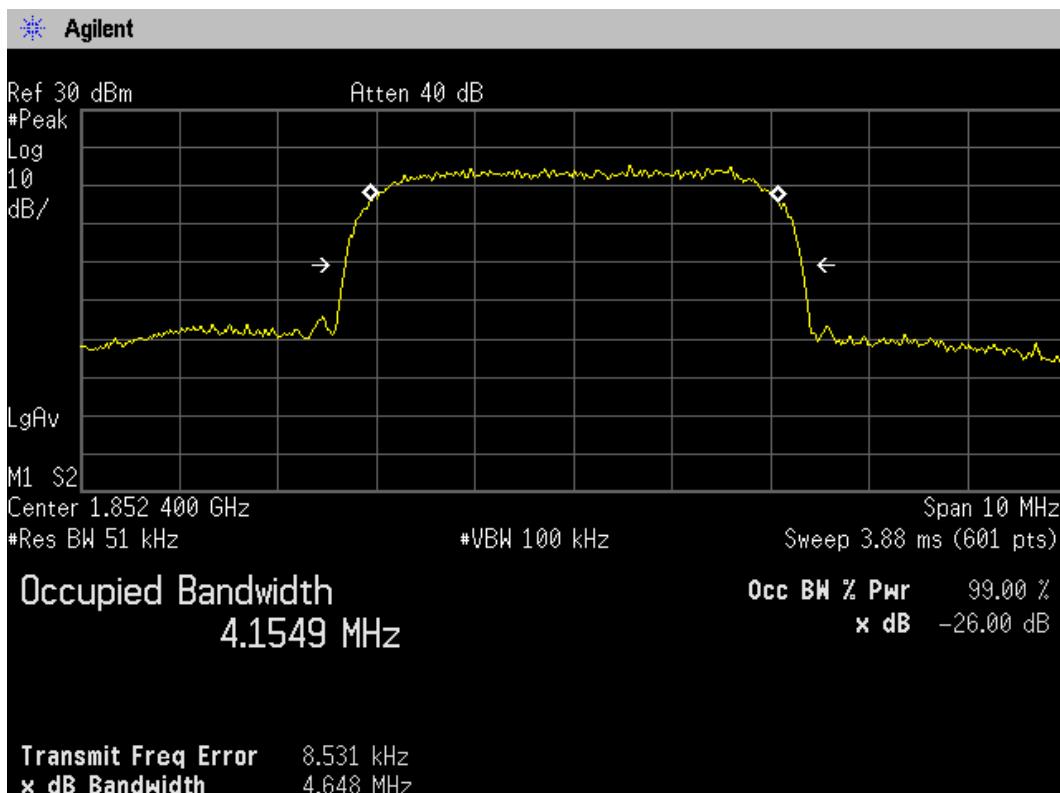


WCDMA Band II CH9538 Occupied Bandwidth

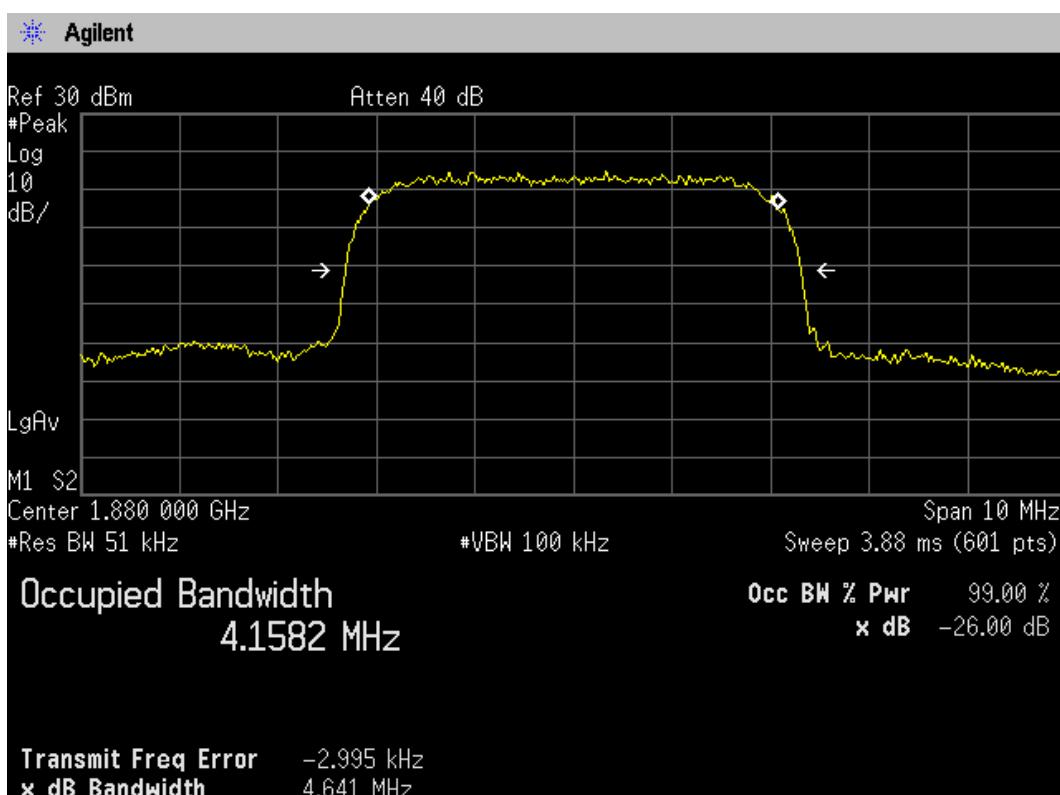
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WCDMA Band II HSDPA CH9262 Occupied Bandwidth

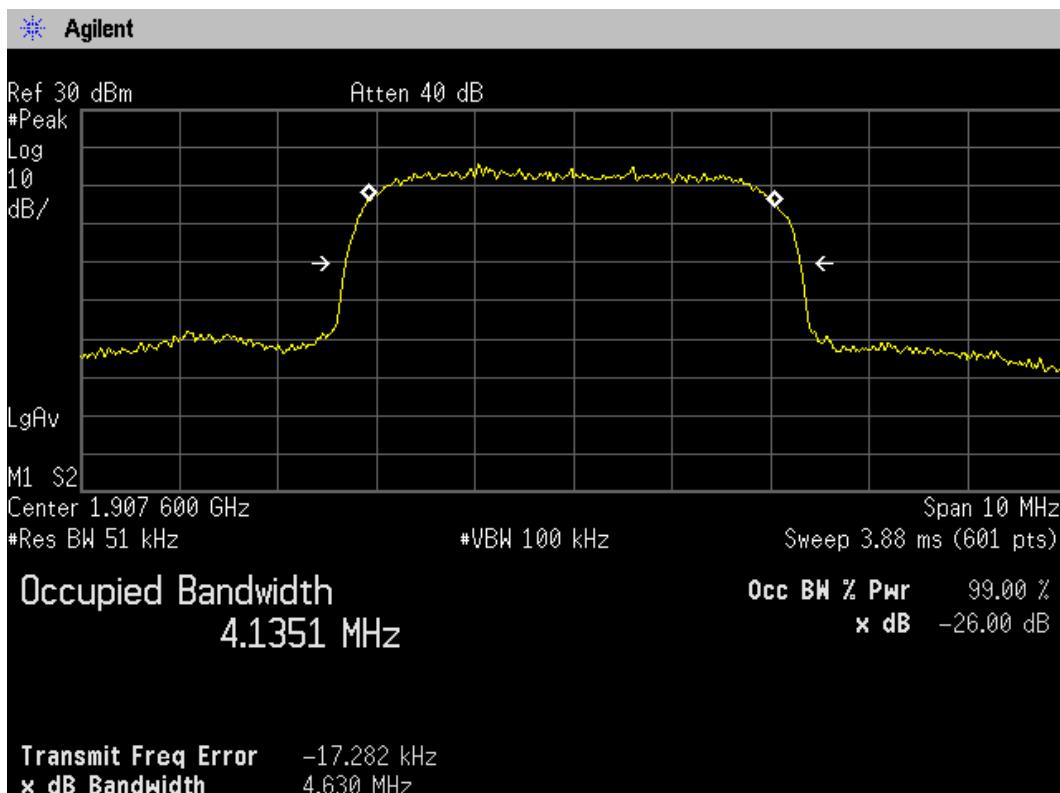


WCDMA Band II HSDPA CH9400 Occupied Bandwidth

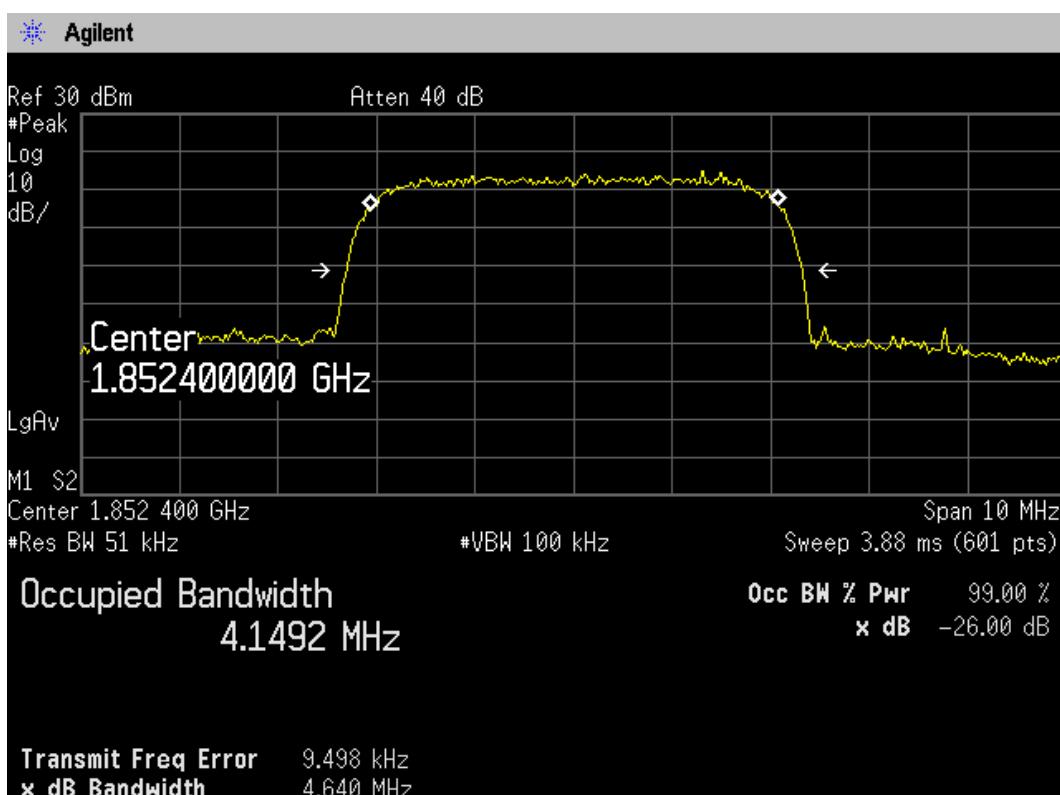
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WCDMA Band II HSDPA CH9538 Occupied Bandwidth

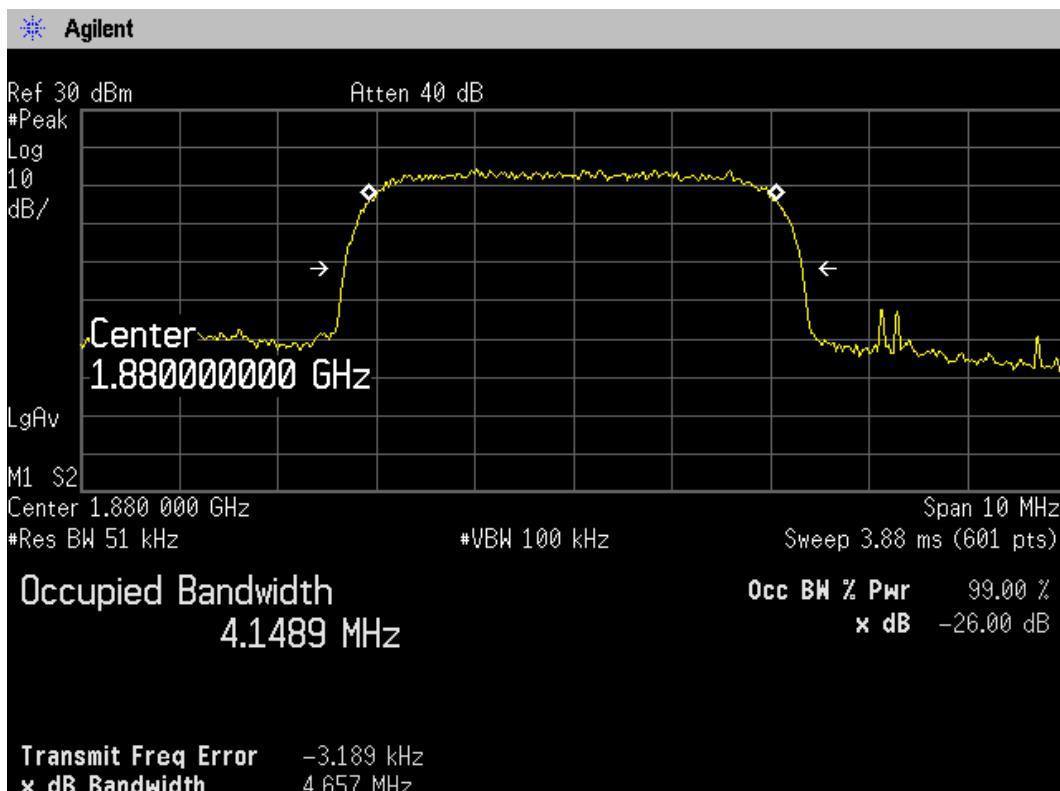


WCDMA Band II HSUPA CH9262 Occupied Bandwidth

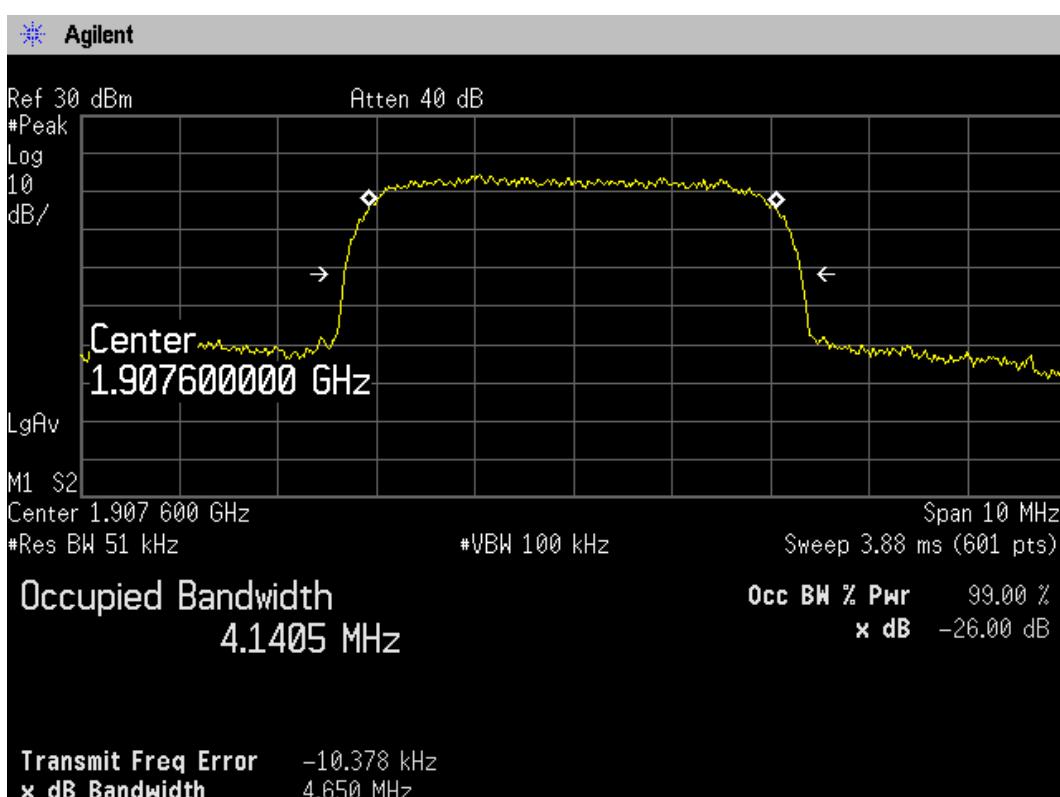
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WCDMA Band II HSUPA CH9400 Occupied Bandwidth



WCDMA Band II HSUPA CH9538 Occupied Bandwidth

2.5. Band Edge Compliance

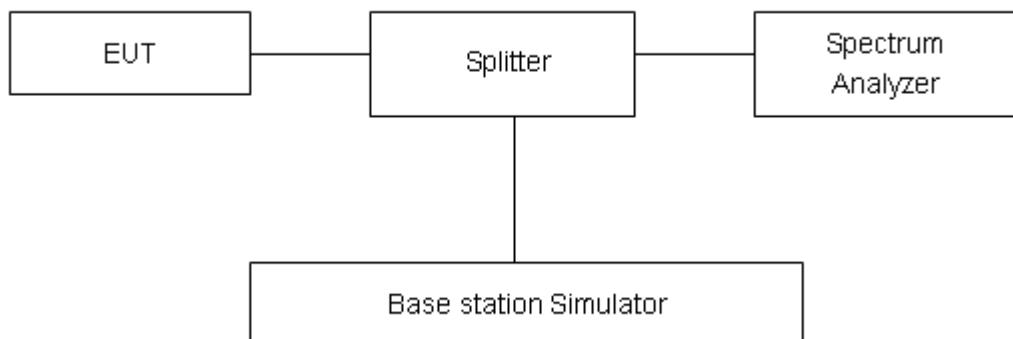
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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 and RBW is set to 51kHz, VBW is set to 100kHz for WCDMA Band II. Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

Rule Part 24.238(a) specifies that "on any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10} (P)$ dB."

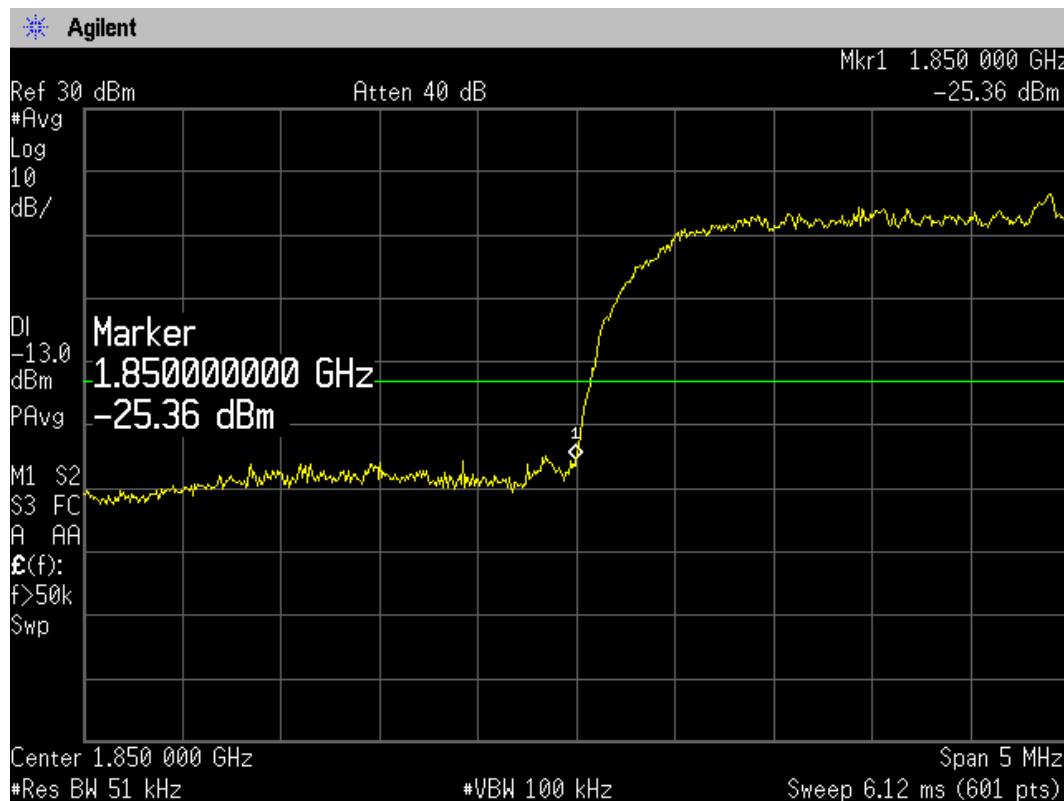
Limit	-13 dBm
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Measurement Uncertainty

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.

Test Result:

	Carrier frequency (MHz)	Reference value (dBm)	Limit	Conclusion
WCDMA Band II	1850	-25.36	-13	PASS
	1910	-28.07	-13	PASS
WCDMA Band II HSDPA	1850	-25.98	-13	PASS
	1910	-27.35	-13	PASS
WCDMA Band II HSUPA	1850	-25.75	-13	PASS
	1910	-28.33	-13	PASS

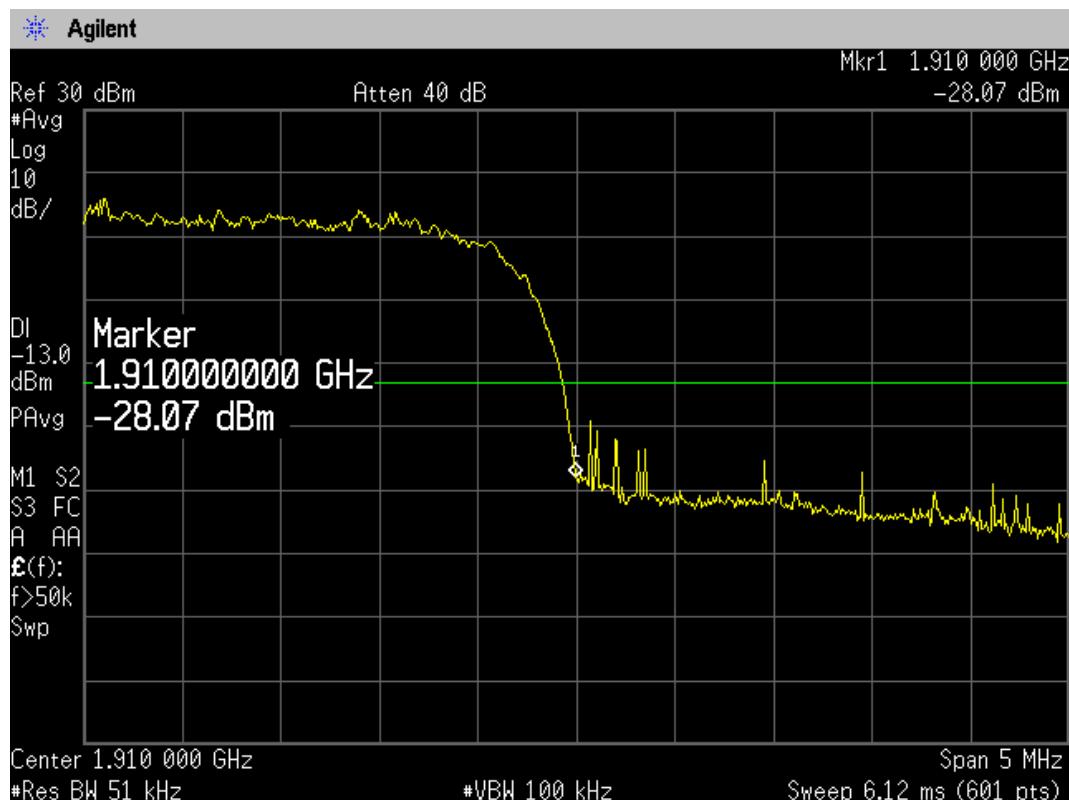


WCDMA Band II CH9262 Channel

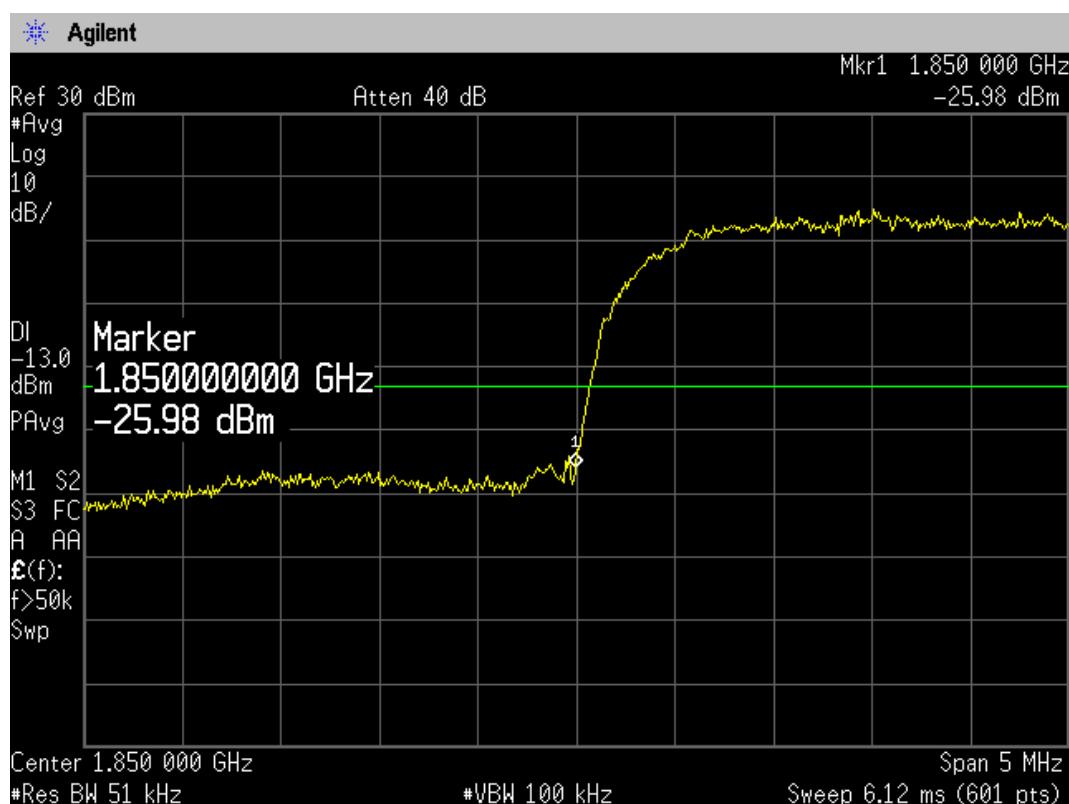
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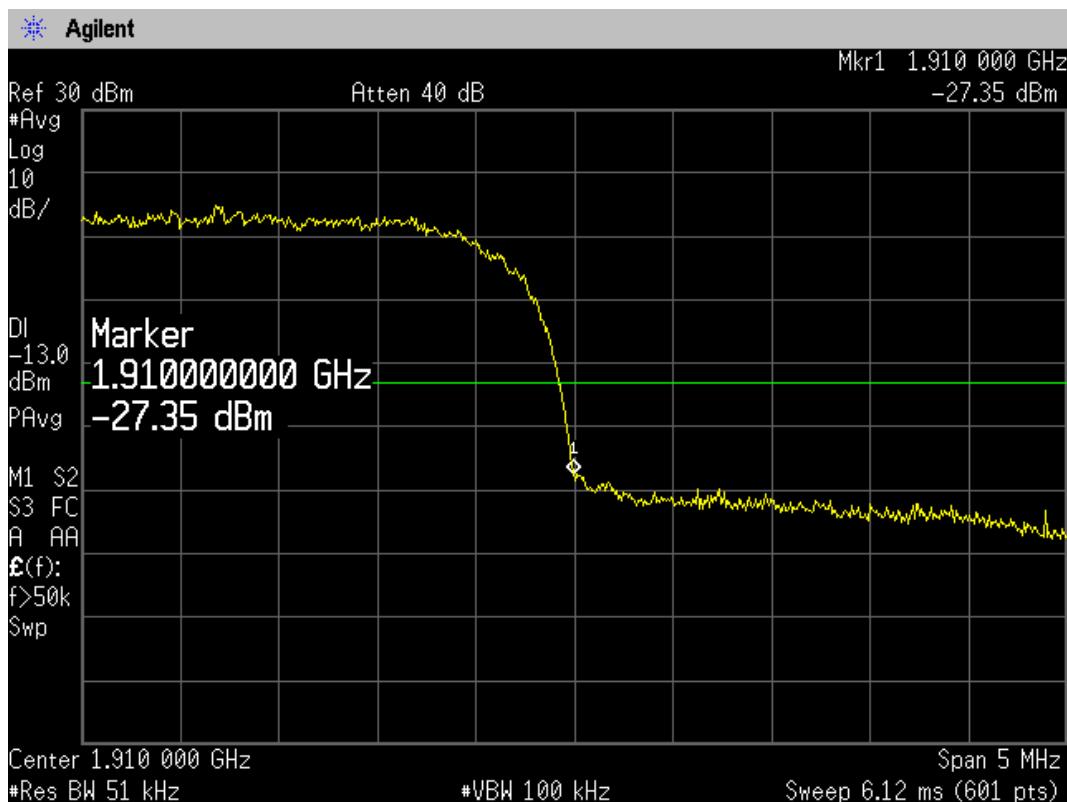
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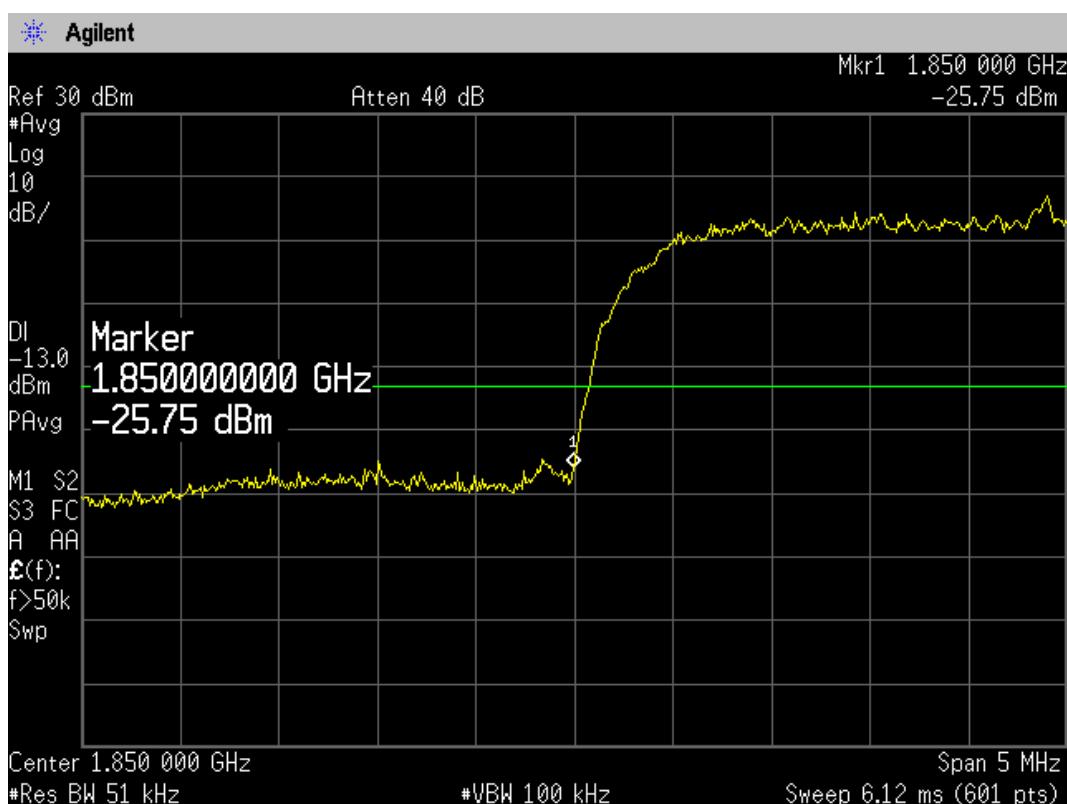
WCDMA Band II CH9538 Channel



WCDMA Band II HSDPA CH9262 Channel



WCDMA Band II HSDPA CH9538 Channel

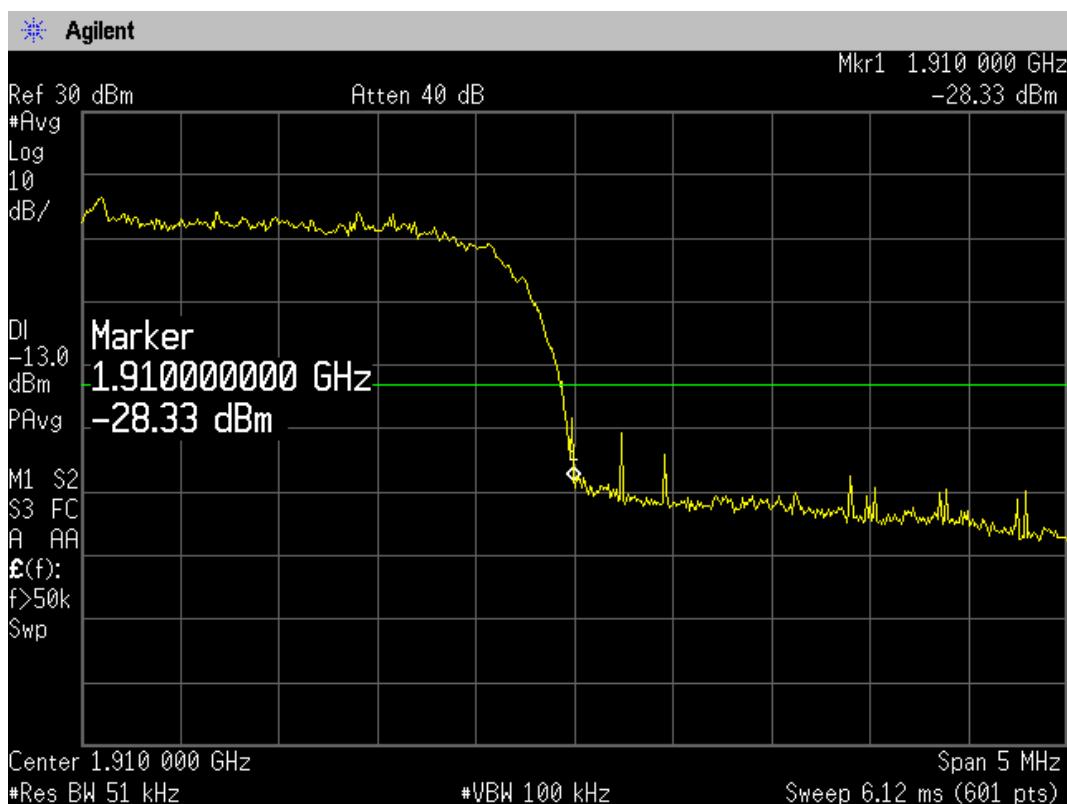


WCDMA Band II HSUPA CH9262 Channel

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WCDMA Band II HSUPA CH9538 Channel

2.6. Frequency Stability

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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)

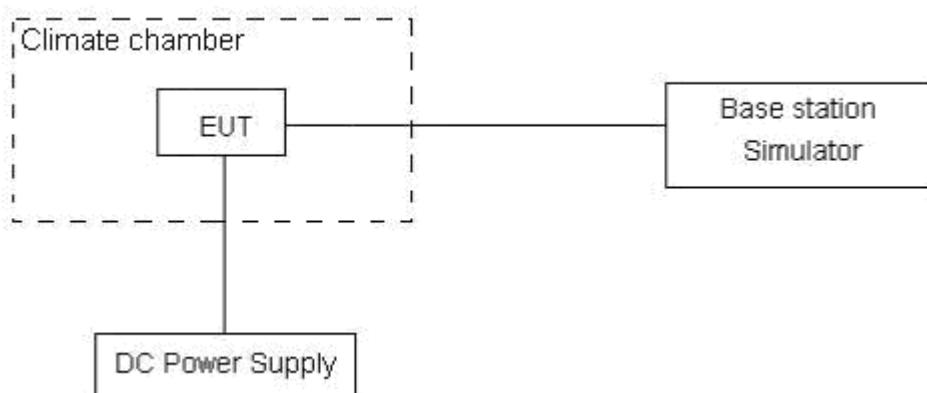
The frequency stability shall be measured with variation of primary supply voltage as follows:

(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

No specific frequency stability requirements in part 24.235

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 II

Temperature (°C)	Test Results (ppm) / 3.8 V Power supply
	Channel 9400
-30	0.0034
-20	0.0030
-10	0.0041
0	0.0023
10	0.0015
20	0.0019
30	0.0012
40	0.0026
50	0.0020

Voltage (V)	Test Results(ppm) / 20°C
	Channel 9400
3.3	0.0024
3.8	0.0019
4.2	0.0014

2.7. Spurious Emissions at Antenna Terminals

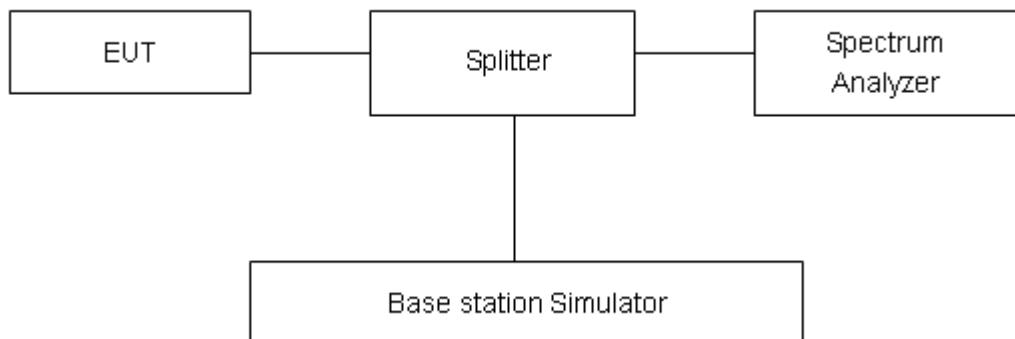
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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. For WCDMA Band II, 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 24.238(a) specifies that "on any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10} (P)$ 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

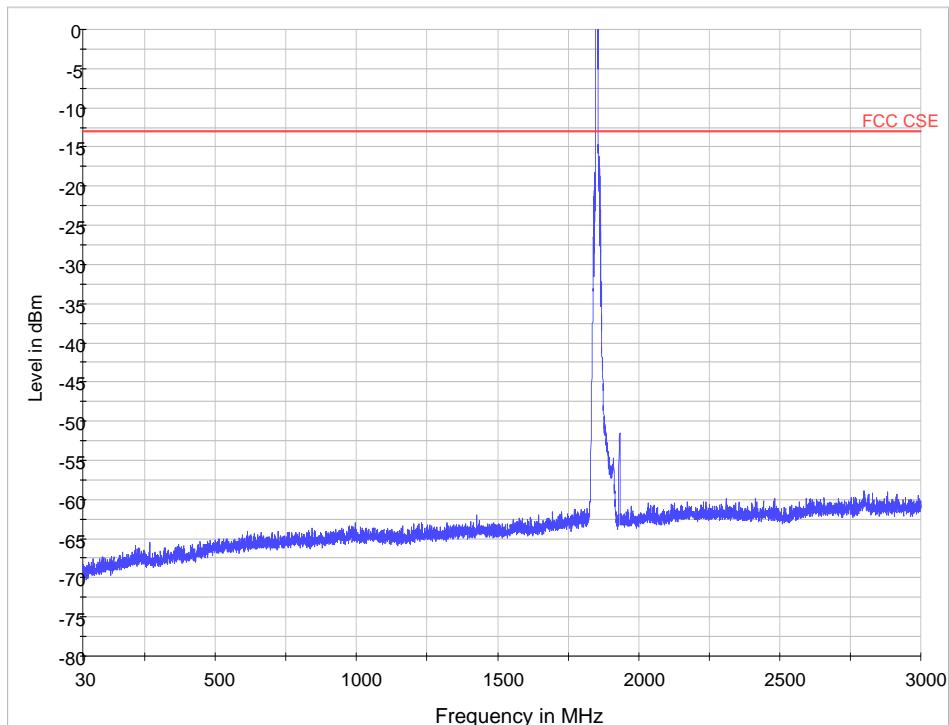
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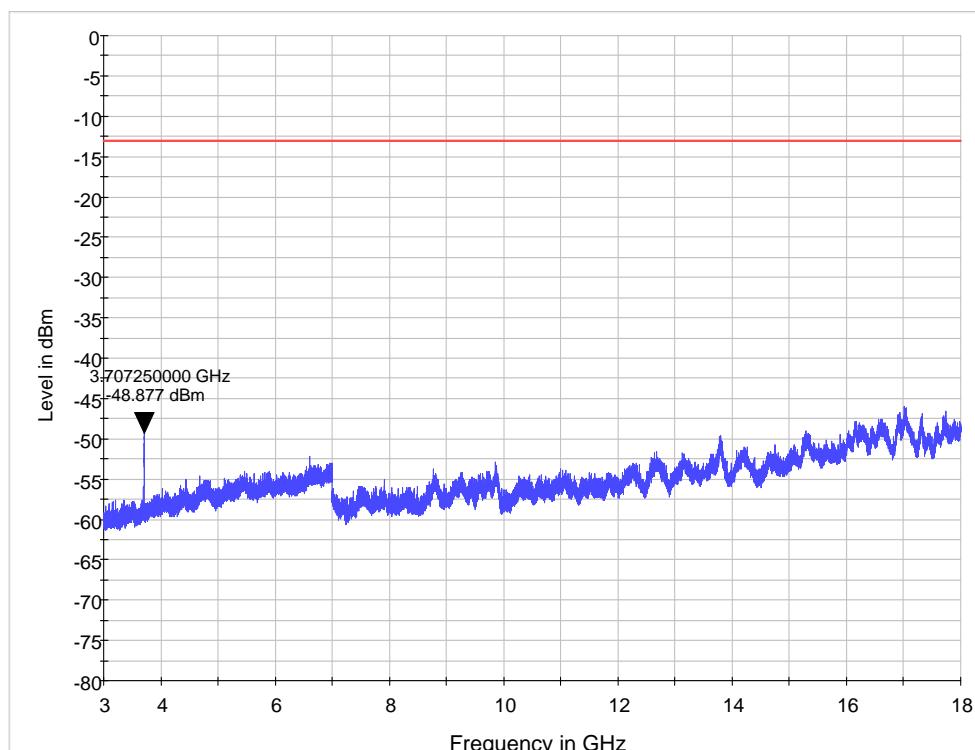
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Test Result

WCDMA Band II CH9262



Note: The signal beyond the limit is carrier.
WCDMA Band II CH9262 Channel 30MHz~3GHz

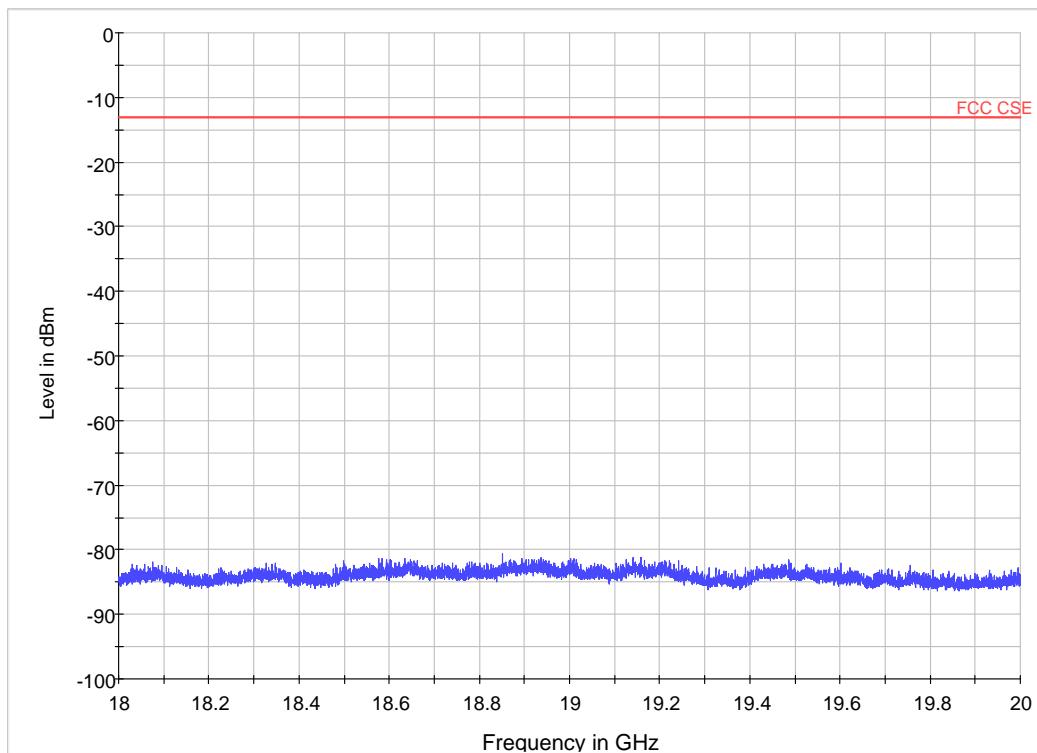


WCDMA Band II CH9262 Channel 3GHz~18GHz

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WCDMA Band II CH9262 Channel 18GHz~20GHz

Harmonic	TX ch.9262 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
2	3707.3	-48.88	-13	35.88
3	5557.2	Nf	-13	/
4	7409.6	Nf	-13	/
5	9262	Nf	-13	/
6	11114.4	Nf	-13	/
7	12966.8	Nf	-13	/
8	14819.2	Nf	-13	/
9	16671.6	Nf	-13	/
10	18524	Nf	-13	/

Nf: noise floor

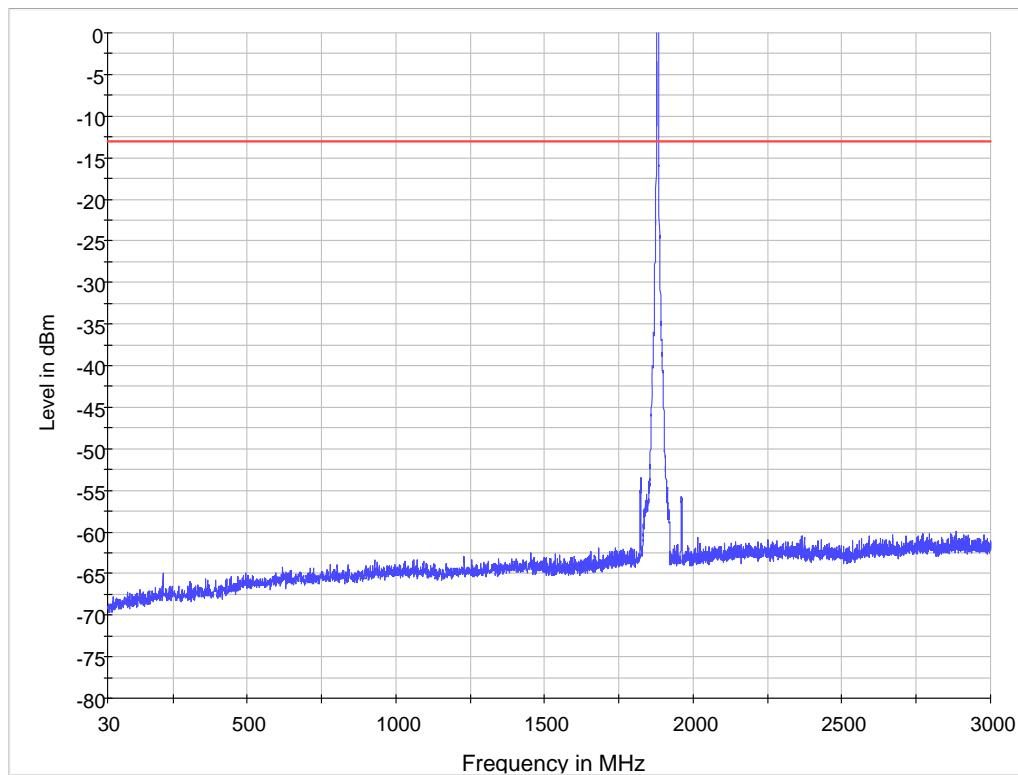
Note: The other Spurious RF conducted emissions level is no more than noise floor.

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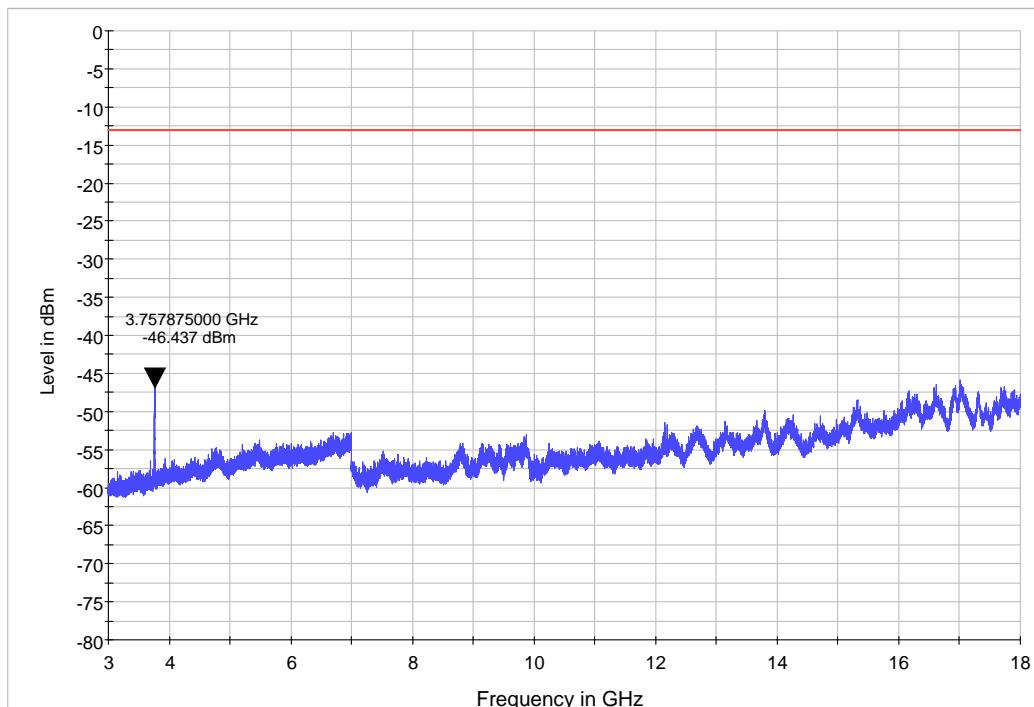
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WCDMA Band II CH9400



Note: The signal beyond the limit is carrier.
WCDMA Band II CH9400 Channel 30MHz~3GHz

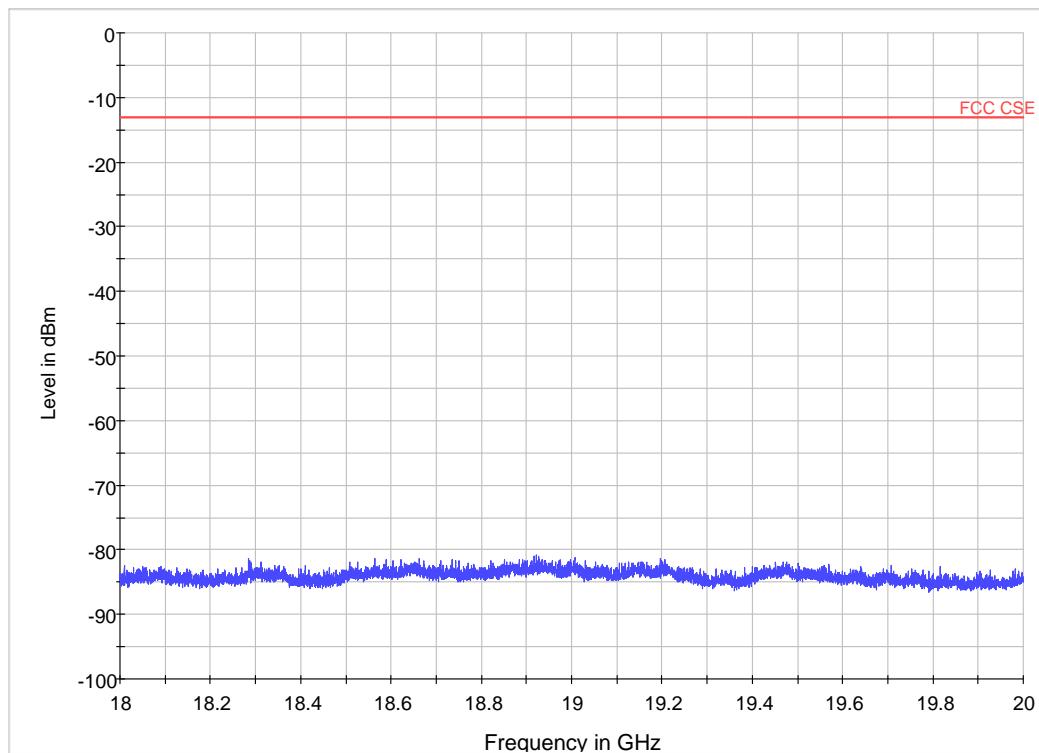


WCDMA Band II CH9400 Channel 3GHz~18GHz

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WCDMA Band II CH9400 Channel 18GHz~20GHz

Harmonic	TX ch.9400 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
2	3757.9	-46.44	-13	33.44
3	5640	Nf	-13	/
4	7520	Nf	-13	/
5	9400	Nf	-13	/
6	11280	Nf	-13	/
7	13160	Nf	-13	/
8	15040	Nf	-13	/
9	16920	Nf	-13	/
10	18800	Nf	-13	/

Nf: noise floor

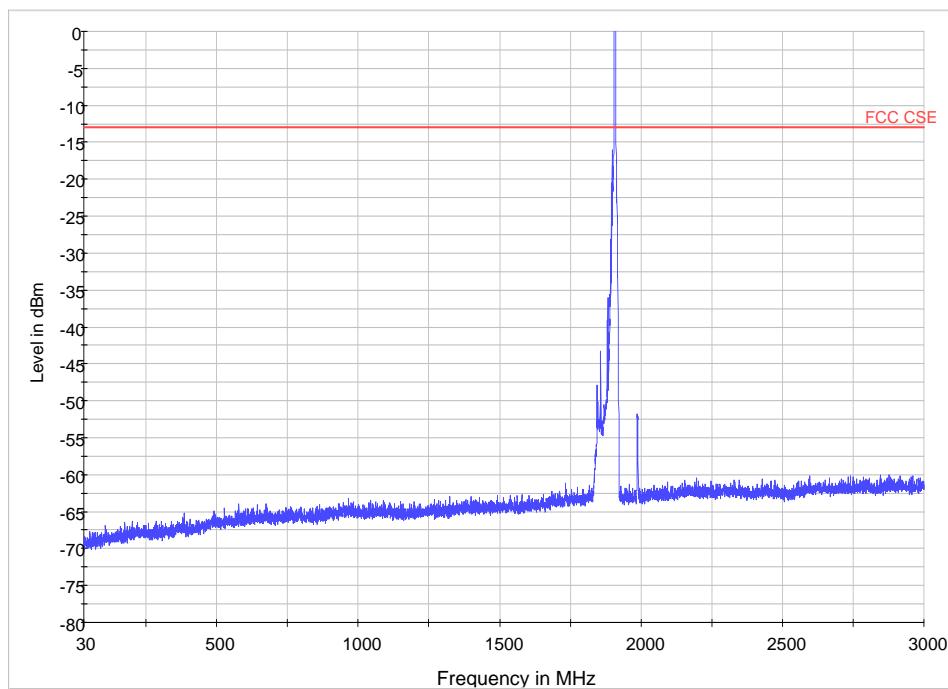
Note: The other Spurious RF conducted emissions level is no more than noise floor.

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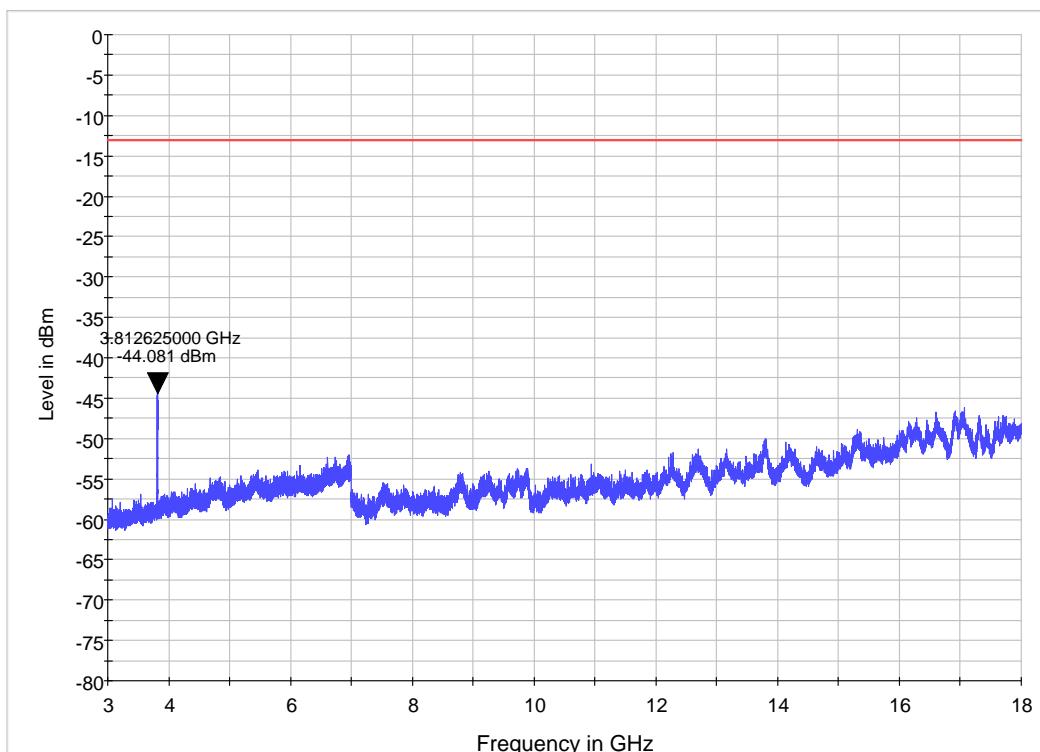
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WCDMA Band II CH9538



Note: The signal beyond the limit is carrier.
WCDMA Band II CH9538 Channel 30MHz~3GHz

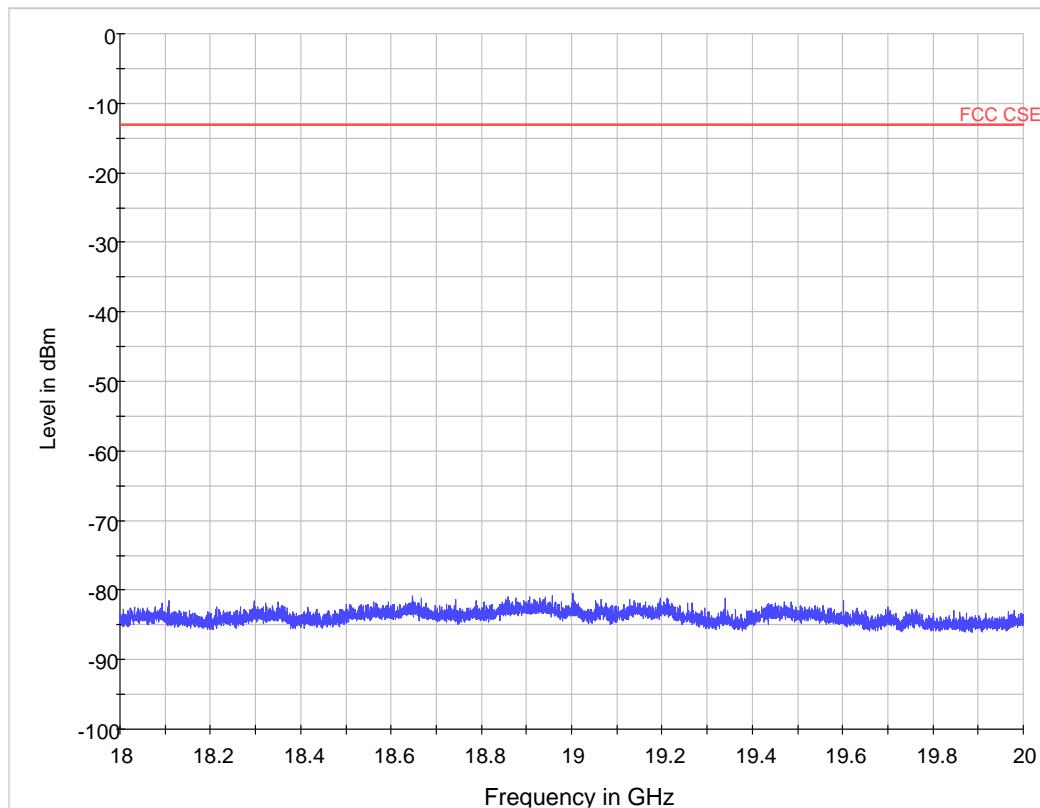


WCDMA Band II CH9538 Channel 3GHz~18GHz

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WCDMA Band II CH9538 Channel 18GHz~20GHz

Harmonic	TX ch.9538 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
2	3812.6	-44.08	-13	31.08
3	5722.8	Nf	-13	/
4	7630.4	Nf	-13	/
5	9538	Nf	-13	/
6	11445.6	Nf	-13	/
7	13353.2	Nf	-13	/
8	15260.8	Nf	-13	/
9	17168.4	Nf	-13	/
10	19076	Nf	-13	/

Nf: noise floor

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

2.1. Radiates Spurious Emission

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

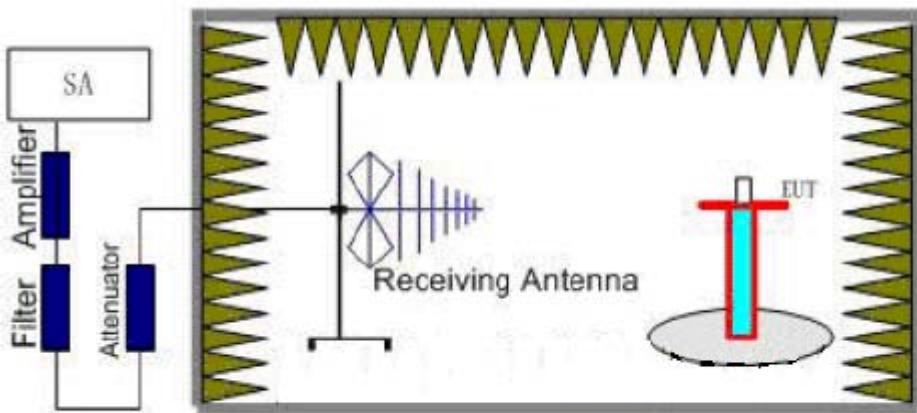
The measurements procedures in TIA -603C are used.

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:

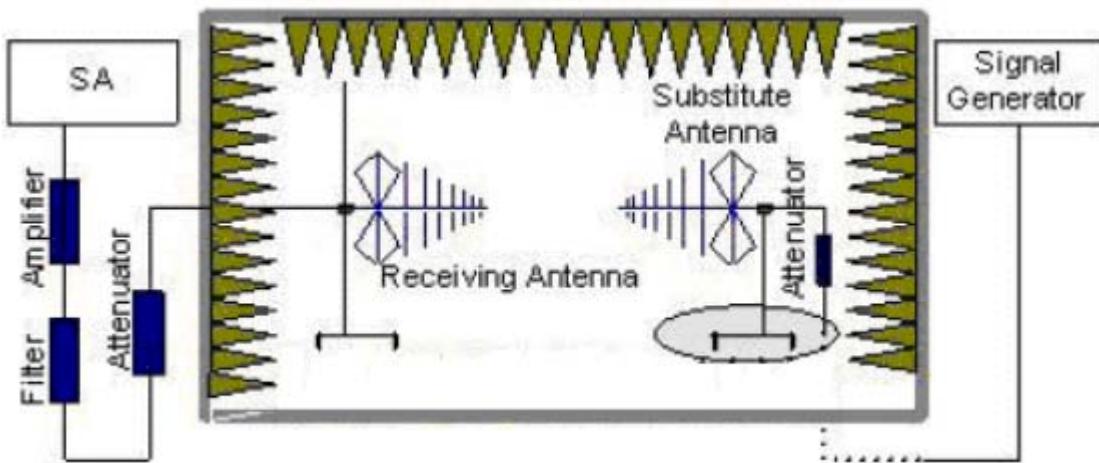
Step 1:

The measurement is carried out in the semi-anechoic chamber. EUT was placed on a 0.8 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.



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

$$\text{EIRP} = \text{E.R.P} + 2.15$$

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 24.238(a) specifies that "on any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10} (P)$ 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.

Test Result

WCDMA Band II CH9262

Harmonic	TX ch.9262 Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3706.5	-52.3	5.1	11.05	-48.50	-13	35.50	180
3	5561.3	-51.88	5.42	12.65	-46.80	-13	33.80	90
4	7409.6	/	/	/	Nf	-13	/	/
5	9262	/	/	/	Nf	-13	/	/
6	11114.4	/	/	/	Nf	-13	/	/
7	12966.8	/	/	/	Nf	-13	/	/
8	14819.2	/	/	/	Nf	-13	/	/
9	16671.6	/	/	/	Nf	-13	/	/
10	18524	/	/	/	Nf	-13	/	/

Nf: noise floor

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

WCDMA Band II CH9400

Harmonic	TX ch.9400 Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3761.6	-51.52	5.1	11.05	-47.72	-13	34.72	0
3	5637.0	-52.34	5.42	12.65	-47.26	-13	34.26	90
4	7520	/	/	/	Nf	-13	/	/
5	9396	/	/	/	Nf	-13	/	/
6	11272.5	/	/	/	Nf	-13	/	/
7	13150.6	/	/	/	Nf	-13	/	/
8	15040	/	/	/	Nf	-13	/	/
9	16920	/	/	/	Nf	-13	/	/
10	18800	/	/	/	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 II CH9538

Harmonic	TX ch.9538 Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3813.4	-49.51	6.1	11.05	-46.71	-13	33.71	135
3	5720.3	-51.49	5.7	12.65	-46.69	-13	33.69	90
4	7624.9	/	/	/	Nf	-13	/	/
5	9538	/	/	/	Nf	-13	/	/
6	11438	/	/	/	Nf	-13	/	/
7	13353.2	/	/	/	Nf	-13	/	/
8	15260.8	/	/	/	Nf	-13	/	/
9	17168.4	/	/	/	Nf	-13	/	/
10	19076	/	/	/	Nf	-13	/	/

Nf: noise floor

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

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*****

ANNEX A: EUT Appearance and Test Setup

A.1 EUT Appearance



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A.2 Test Setup



Radiated Spurious Emissions Test setup