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TEST REPORT

FCC Part 24 Subpart E

Report Reference No......: **CTL1402190208-WU**

Compiled by

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Tracy Qi

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Approved by

(position+printed name+signature)...: Manager Tracy Qi

Tracy Qi

Date of issue.....: Mar. 06, 2014

Test Firm.....: **Shenzhen CTL Testing Technology Co., Ltd.**

Address.....: Floor 1-A, Baisha Technology Park, No.3011, Shahexi Road, Nanshan District, Shenzhen, China 518055

Applicant's name.....: **HAIER INTERNATIONAL CO.,LTD**

Address.....: Unit 2815 28/F China Merchants Tower, Shun Tak Center, 168-200 Connuaght Road Central, Hong Kong

Test specification:

Standard: **FCC CFR Title 47 Part 2, Part 24E**

EIA/TIA 603-C: 2004

Master TRF.....: Dated 2011-01

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Test item description: **1.77inch 3G Feature Phone**

FCC ID.....: **2ABW9-B8305**

Trade Mark: Bitel

Model/Type reference.....: B8305

WCDMA

Transmit: WCDMA Band II: 1850-1910MHz

Receive: WCDMA Band II: 1930~1990MHz

Release Version: Rel-6

Type of modulation: QPSK

Bluetooth

Work frequency: 2402~2480MHz

Version.....: V2.1+EDR

Type of modulation: FHSS

Data Rate.....: 1Mbps(GFSK), 2Mbps(Pi/4 DQPSK), 3Mbps(8DPSK)

Antenna Gain	-3.0 dBi for WCDMA Band II
	-2.0 dBi for Bluetooth
Antenna type	Internal
IMEI	358688000000158
Hardware version	Z118_MB_H301_PBF
Software version.....	Z118_RH_VEN_QQVGA_V1.2.0
Result.....	Positive



TEST REPORT

Test Report No. :	CTL1402190208-WU	Mar. 06, 2014
		Date of issue

Equipment under Test : 1.77inch 3G Feature Phone

Model /Type : B8305

Applicant : **HAIER INTERNATIONAL CO.,LTD**

Address : Unit 2815 28/F China Merchants Tower, Shun Tak Center,
168-200 Connuaught Road Central, Hong Kong

Manufacturer : **HAIER INTERNATIONAL CO.,LTD**

Address : Unit 2815 28/F China Merchants Tower, Shun Tak Center,
168-200 Connuaught Road Central, Hong Kong

Test Result according to the
standards on page 5:

Positive

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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1. TEST STANDARDS

The tests were performed according to following standards:

[FCC Part 24 Subpart E:](#) Personal Communications Services

[EIA/TIA 603-C: 2004](#)

[FCC CFR Title 47 Part 2](#)



2. SUMMARY

2.1. General Remarks

Date of receipt of test sample	:	Feb. 22, 2014
Testing commenced on	:	Feb. 22, 2014
Testing concluded on	:	Mar. 05, 2014

2.2. Equipment Under Test

Power supply system utilised

Power supply voltage : ☒ 120V / 60 Hz ☐ 115V / 60Hz
☐ 12 V DC ☐ 24 V DC
☒ Other (specified in blank below)

DC 3.7V from battery

2.3. Short description of the Equipment under Test (EUT)

A 1.77inch 3G Feature Phone with UMTS1900MHz and Bluetooth function.

For more details, refer to the user's manual of the EUT.

Serial number: Prototype

2.4. EUT operation mode

CTL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: WCDMA Band II
Mode 2: HSDPA Band II
Mode 3: HSUPA Band II

Note:

1. Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.
2. For the ERP/EIRP and radiated emission test, every axis (X, Y, Z) was verified, and show the worst result on this report.

2.5. EUT configuration

The following pEIRPheral devices and interface cables were connected during the measurement:

- o - supplied by the manufacturer

- o - supplied by the lab

- 0 Manufacturer :
Model No. :

- 0 Manufacturer :
Model No. :

2.6. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **2ABW9-B8305** filing to comply with of the FCC Part 22 and Part 24 Rules.

2.7. Modifications

No modifications were implemented to meet testing criteria.

3. TEST ENVIRONMENT

3.1. Address of the test laboratory

Shenzhen CTL Testing Technology Co., Ltd.

Floor 1-A, Baisha Technology Park, No.3011, Shaheji Road, Nanshan District, Shenzhen, China 518055

The sites are constructed in conformance with the requirements of ANSI C6230, ANSI C63.4 (2003) and CISPR Publication 22.

3.2. Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

IC Registration No.: 9618B

The 3m alternate test site of Shenzhen CTL Testing Technology Co., Ltd. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration No.: 9618B on November 13, 2013.

FCC-Registration No.: 970318

Shenzhen CTL Testing Technology Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 970318, December 19, 2013.

3.3. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

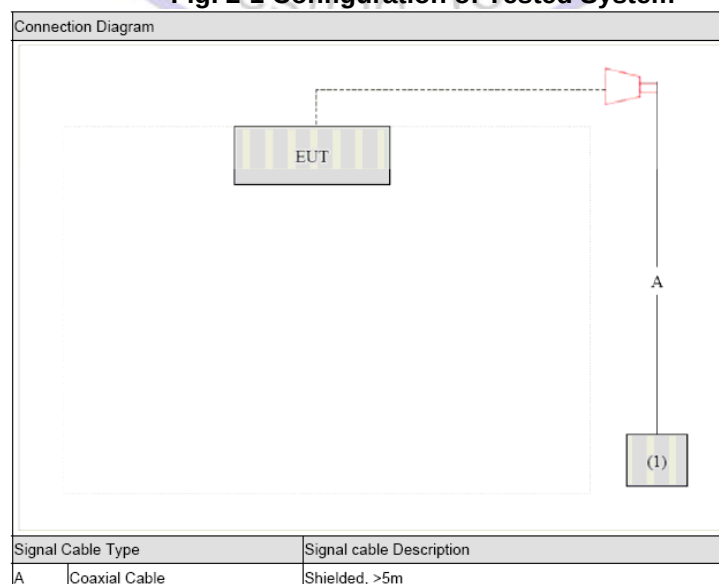
Temperature: 15-35 ° C

Humidity: 30-60 %

Atmospheric pressure: 950-1050mbar

3.4. Configuration of Tested System

Fig. 2-1 Configuration of Tested System



3.5. EUT Exercise Software

1. Setup the EUT and simulators as shown on above.
2. Turn on the power of all equipment.
3. EUT Communicate with CMU200, then select channel to test.

3.6. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 „Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements“ and is documented in the Shenzhen CTL Testing Technology Co., Ltd. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for CTL laboratory is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.10dB	(1)
Radiated Emission	Above 1GHz	4.32dB	(1)
Conducted Disturbance	0.15~30MHz	3.20dB	(1)

- (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.7. Equipments Used during the Test

Test Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date
Bilog Antenna	Sunol Sciences Corp.	JB1	A061713	2013/07/12	2014/07/11
EMI Test Receiver	R&S	ESCI3	103710	2013/07/10	2014/07/09
EMI Test Receiver	R&S	ESPI	1164.6407.07	2013/07/10	2014/07/09
Spectrum Analyzer	Agilent	E4407B	MY45108355	2013/07/06	2014/07/05
Controller	EM Electronics	Controller EM 1000	N/A	2013/07/06	2014/07/05
Horn Antenna	Sunol Sciences Corp.	DRH-118	A062013	2013/07/12	2014/07/11
Horn Antenna	SCHWARZBECK	BBHA9170	1562	2013/07/12	2014/07/11
Active Loop Antenna	SCHWARZBECK	FMZB1519	1519-037	2013/07/12	2014/07/11
LISN	R&S	ENV216	101316	2013/07/10	2014/07/09
LISN	SCHWARZBECK	NSLK8127	8127687	2013/07/10	2014/07/09
Microwave Preamplifier	HP	8349B	3155A00882	2013/07/10	2014/07/09
Amplifier	HP	8447D	3113A07663	2013/07/10	2014/07/09
Transient Limiter	Com-Power	LIT-153	532226	2013/07/10	2014/07/09
Wideband Peak Power Meter	Anritsu	ML2495A	6K00003382	2013/07/10	2014/07/09
Climate Chamber	ESPEC	EL-10KA	05107008	2013/07/10	2014/07/09
Radio Communication Tester	R&S	CMU200	106388	2013/07/10	2014/07/09
Tunable Bandreject filter	K&L	3TNF-800	422	2013/07/10	2014/07/09
Tunable Bandreject filter	K&L	5TNF-1700	277	2013/07/10	2014/07/09
High-Pass Filter	K&L	9SH10-2700/X127 50-O/O	21	2013/07/10	2014/07/09
High-Pass Filter	K&L	41H10-1375/U127 50-O/O	25	2013/07/10	2014/07/09
DC Power Supply	IDRC	CD-035-020PR	977352	2013/07/10	2014/07/09

3.8. Summary of Test Result

No deviations from the test standards

For WCDMA Band II (FCC Part 24E & Part 2)

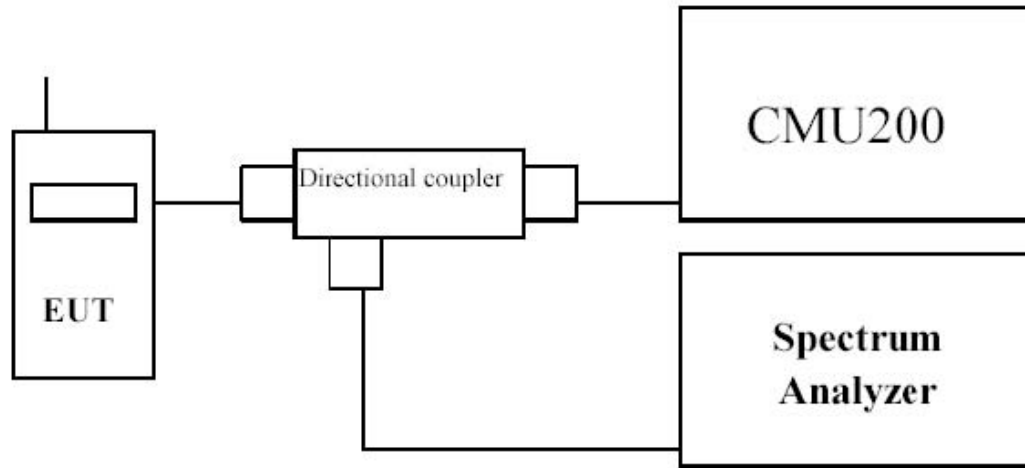
Emission			
Performed Item	Normative References	Test Performed	Deviation
Peak Output Power	FCC Part 24.232(b) and Part 2.1046 EIA/TIA 603-C	Yes	No
Modulation Characteristic	FCC Part 2.1047(d)	Yes	No
Occupied Bandwidth	FCC Part 24.238(b) and Part 2.1049	Yes	No
Spurious Emission At Antenna Terminals (+/- 1MHz)	FCC Part 24.238(a) and Part 2.1049	Yes	No
Spurious Emission	FCC Part 24.238(b) and Part 2.1051, 2.1053 EIA/TIA 603-C	Yes	No
Frequency Stability Under Temperature & Voltage	FCC Part 24.235 and 2.1055 EIA/TIA 603-C	Yes	No

4. TEST CONDITIONS AND RESULTS

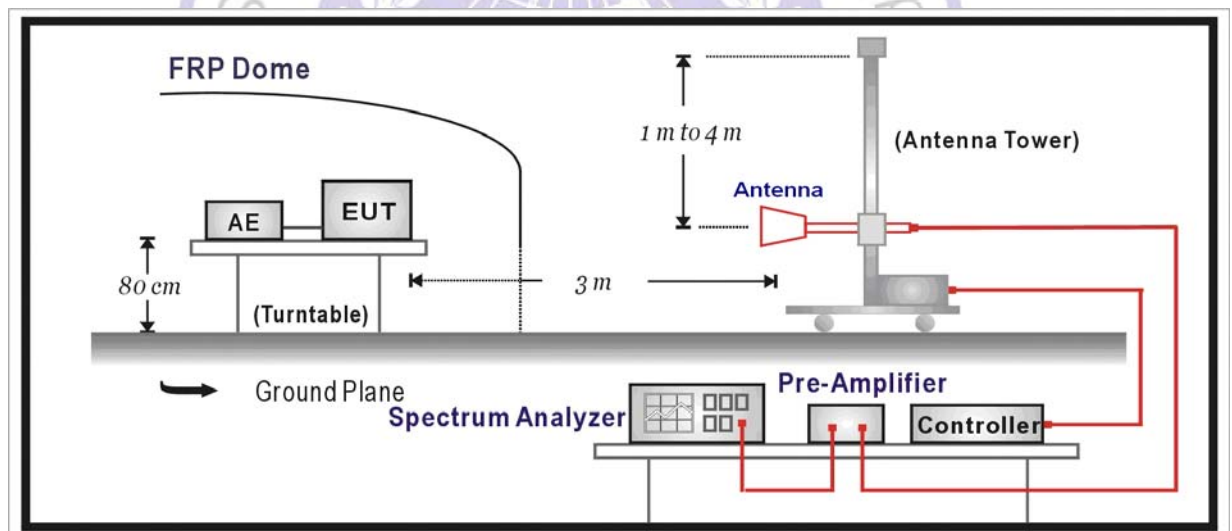
4.1. Peak Output Power

TEST CONFIGURATION

Conducted Power Measurement:



Radiated Power Measurement:



TEST PROCEDURE

The EUT was setup according to EIA/TIA 603C

Conducted Power Measurement:

- Place the EUT on a bench and set it in transmitting mode.
- Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMU200 by a Directional Couple.
- EUT Communicate with CMU200, then select a channel for testing.
- Add a correction factor to the display of spectrum, and then test.

Radiated Power Measurement:

- a) The EUT shall be placed at the specified height on a support, and in the position closest to normal use as declared by provider.
- b) The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter
- c) The output of the test antenna shall be connected to the measuring receiver.
- d) The transmitter shall be switched on and the measuring receiver shall be tuned to the frequency of the transmitter under test.
- e) The test antenna shall be raised and lowered through the specified range of height until a maximum signal level is detected by the measuring receiver.
- f) The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- g) The test antenna shall be raised and lowered again through the specified range of height until a maximum signal level is detected by the measuring receiver.
- h) The maximum signal level detected by the measuring receiver shall be noted.
- i) The transmitter shall be replaced by a substitution antenna.
- j) The substitution antenna shall be orientated for vertical polarization and the length of the substitution antenna shall be adjusted to correspond to the frequency of the transmitter.
- k) The substitution antenna shall be connected to a calibrated signal generator.
- l) If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- m) The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
- n) The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.
- o) The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.
- p) The measure of the effective radiated power is the larger of the two levels recorded at the input to the substitution antenna, corrected for gain of the substitution antenna if necessary.
- q) Test site anechoic chamber refer to ANSI C63.4: 2003.

Base station simulator settings for each test mode:

Configure the CMU-200 to support all WCDMA tests in respect to the 3GPP 34.121.
Measure the EUT output power at 1852.4MHz, 1880MHz and 1907.6MHz for WCDMA Band II.

For Rel 99

- Set a Test Mode 1 loop back with a 12.2kbps Reference Measurement Channel (RMC)
- Set and send continuously Up power control commands to the Gobi2000
- Measure the power at the Gobi2000 Module antenna connector by using CMU-200.

LIMIT

For FCC Part 22.913(a)(2):

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

For FCC Part 24.232(b):

The EIRP of mobile transmitters and auxiliary test transmitters must not exceed 2 Watts.

TEST RESULTS**Conducted Measurement**

Mode	Band II (1900MHz) Channel	Normal Power (dBm)	Max. Power (dBm)	Scaling Factor
WCDMA R99	9262	23.58	24.0	1.10
	9400	23.37	24.0	1.16
	9538	23.17	24.0	1.21
Rel5 HSDPA	9262	23.47	24.0	1.13
	9400	23.26	24.0	1.19
	9538	23.03	24.0	1.25
Rel6 HSUPA	9262	23.23	24.0	1.19
	9400	23.35	24.0	1.16
	9538	23.19	24.0	1.21

Note: All conducted measurements are based on a peak detector.

WCDMA/HSDPA/HSUPA

Mode	3GPP Subtest	Band II (1900MHz) Channel			MPR
		Conducted Power (dBm)			
		9262	9400	9538	
WCDMA R99	1	23.58	23.37	23.17	N/A
Rel5 HSDPA	1	23.47	23.26	23.03	0
	2	23.36	23.13	23.02	0
	3	22.96	23.05	23.00	0.5
	4	22.99	22.88	22.96	0.5
Rel6 HSUPA	1	23.23	23.35	23.19	0.0
	2	23.18	23.33	22.18	2.0
	3	23.02	23.06	22.09	1.0
	4	23.00	23.02	22.06	2.0
	5	23.19	23.22	23.22	0.0

Note: All conducted measurements are based on an RMS detector.

Radiated Measurement Power

WCDMA Band II

Frequency (MHz)	SA Reading (dBm)	Ant. Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 9262 (1852.40MHz)								
1852.4	8.04	H	15.24	2.70	7.88	20.42	33	-12.58
1852.4	4.48	V	10.42	2.70	10.10	17.82	33	-15.18
Middle Channel 9400 (1880.00MHz)								
1880	7.87	H	15.46	2.72	7.92	20.66	33	-12.34
1880	5.04	V	10.60	2.72	10.10	17.98	33	-15.02
High Channel 9538 (1907.60MHz)								
1907.6	7.24	H	15.02	2.75	8.06	20.33	33	-12.67
1907.6	3.71	V	9.75	2.75	10.10	17.10	33	-15.9

HSDPA Band II

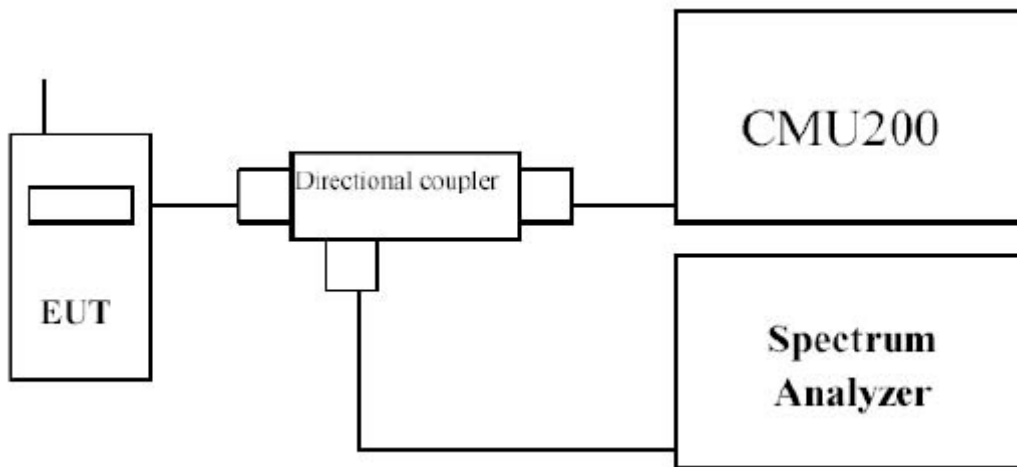
Frequency (MHz)	SA Reading (dBm)	Ant. Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 9262 (1852.40MHz)								
1852.4	7.87	H	15.07	2.70	7.88	20.25	33	-12.75
1852.4	3.73	V	9.67	2.70	10.10	17.07	33	-15.93
Middle Channel 9400 (1880.00MHz)								
1880	7.67	H	15.26	2.72	7.92	20.46	33	-12.54
1880	4.11	V	9.67	2.72	10.10	17.05	33	-15.95
High Channel 9538 (1907.60MHz)								
1907.6	7.31	H	15.09	2.75	8.06	20.40	33	-12.6
1907.6	4.04	V	10.08	2.75	10.10	17.43	33	-15.57

HSUPA Band II

Frequency (MHz)	SA Reading (dBm)	Ant. Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 9262 (1852.40MHz)								
1852.4	8.03	H	15.23	2.70	7.88	20.41	33	-12.59
1852.4	4.04	V	9.98	2.70	10.10	17.38	33	-15.62
Middle Channel 9400 (1880.00MHz)								
1880	7.96	H	15.55	2.72	7.92	20.75	33	-12.25
1880	4.21	V	9.77	2.72	10.10	17.15	33	-15.85
High Channel 9538 (1907.60MHz)								
1907.6	7.73	H	15.51	2.75	8.06	20.82	33	-12.18
1907.6	4.16	V	10.20	2.75	10.10	17.55	33	-15.45

4.2. Modulation Characteristic

TEST CONFIGURATION



LIMIT

N/A

TEST PROCEDURE

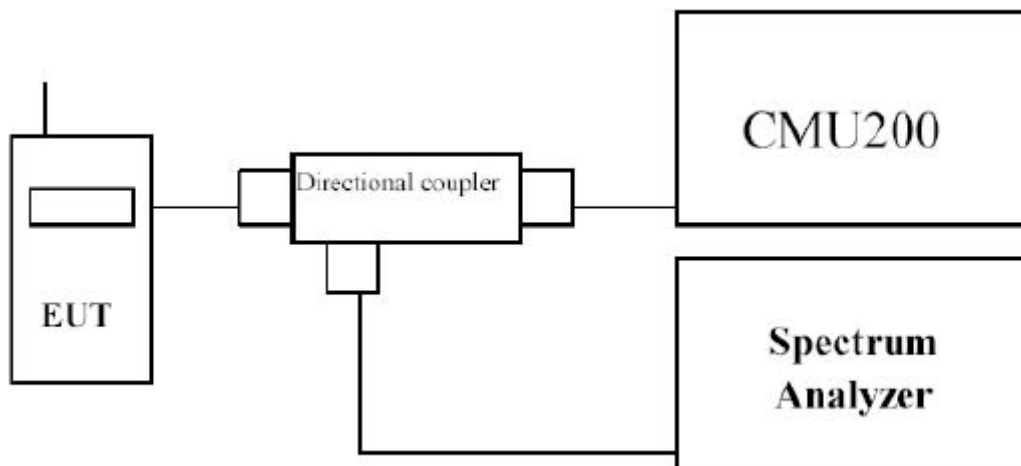
Connect the Mobile Phone to Universal Radio Communication Tester CMU200 via the antenna connector. The frequency band is set as WCDMA Band II, the Mobile Phone's output is matched with 50 Ω load, test method was according to 3GPP TS 51.010 and TS 34.121. The waveform quality and constellation of the Mobile Phone was tested.

TEST RESULTS

The modulation of WCDMA was verified and confirmed compliance with requirement.

4.3. Occupied Bandwidth

TEST CONFIGURATION



TEST PROCEDURE

Using Occupied Bandwidth measurement function of spectrum analyzer, and setting as follows:

For WCDMA FDD Band II test --- RBW = 50 kHz and VBW = 200 kHz

LIMIT

N/A

TEST RESULTS

Product	1.77inch 3G Feature Phone		
Test Item	Occupied Bandwidth		
Test Mode	WCDMA Band II Link		
Date of Test	2014/03/05	Test Site	AC-6

Channel No.	Frequency (MHz)	-26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
9262	1852.4	4.659	4.1516
9400	1880.0	4.658	4.1464
9538	1907.6	4.658	4.1551

Figure Channel 9262 (1852.4MHz)

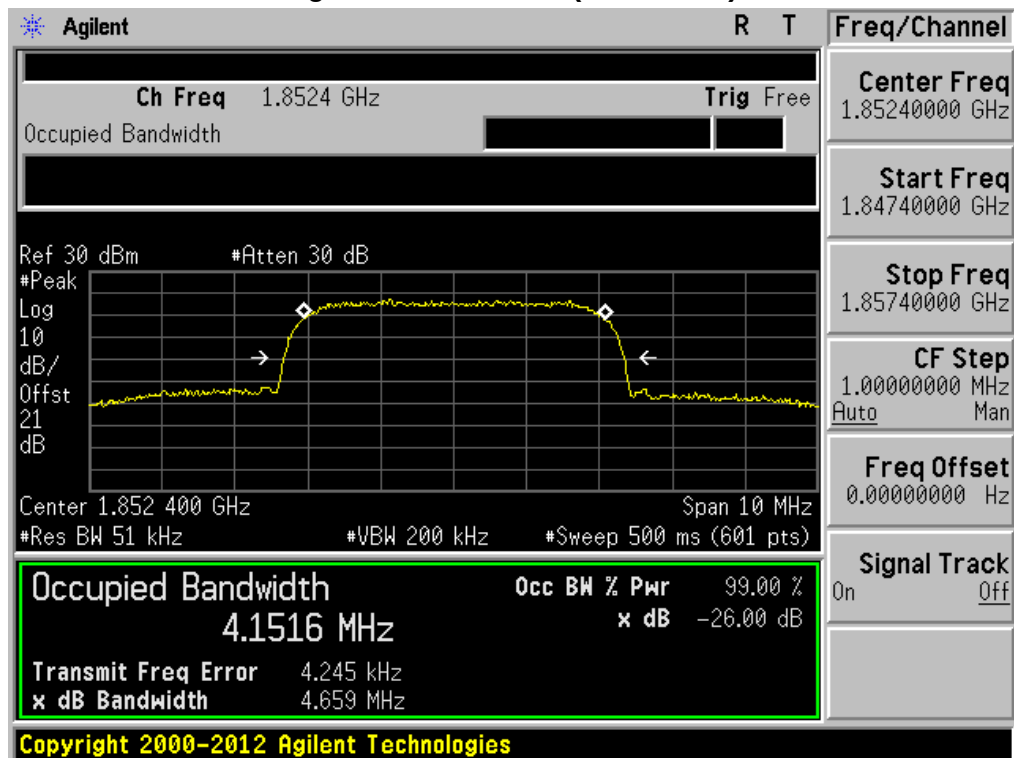


Figure Channel 9400 (1880.00MHz)

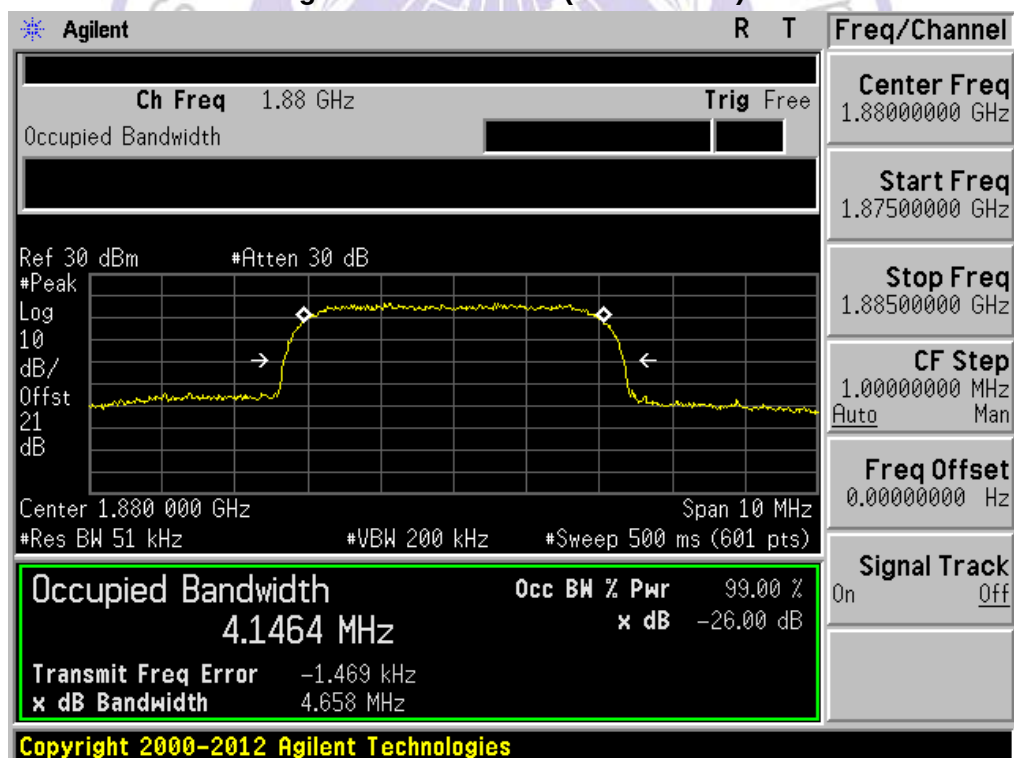
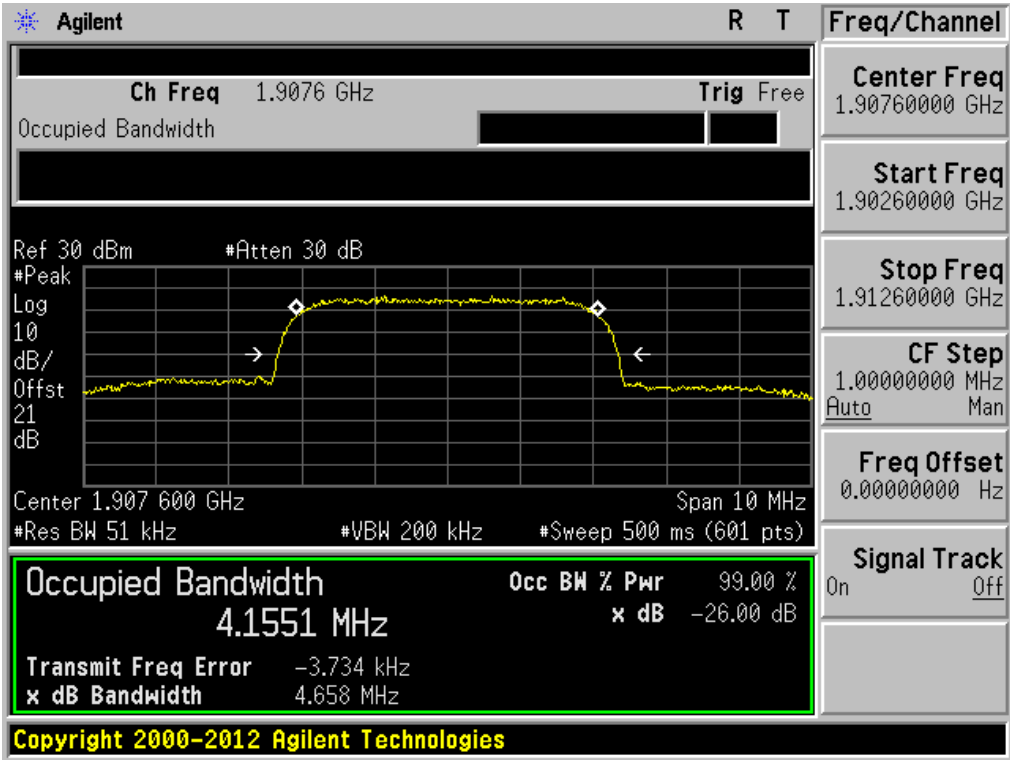


Figure Channel 9538 (1907.60MHz)



Product	1.77inch 3G Feature Phone		
Test Item	Occupied Bandwidth		
Test Mode	HSDPA Band II Link		
Date of Test	2014/03/05	Test Site	AC-6

Channel No.	Frequency (MHz)	-26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
9262	1852.4	4.637	4.1564
9400	1880.0	4.641	4.1577
9538	1907.6	4.644	4.1575

Figure Channel 9262 (1852.4MHz)

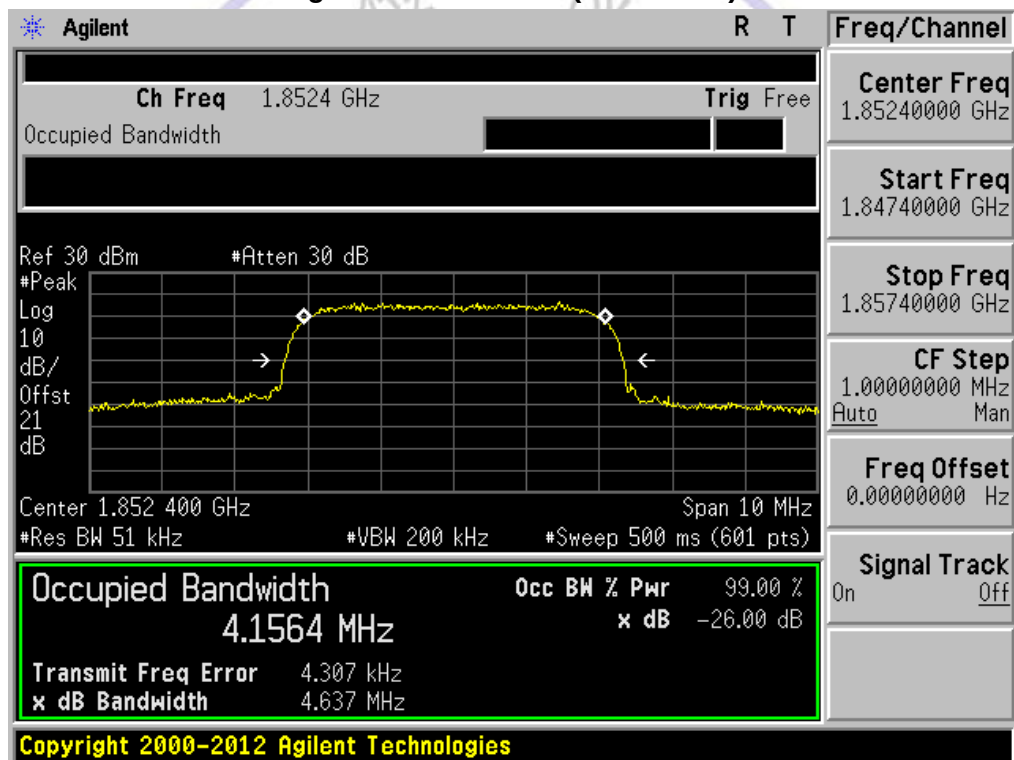


Figure Channel 9400 (1880.00MHz)

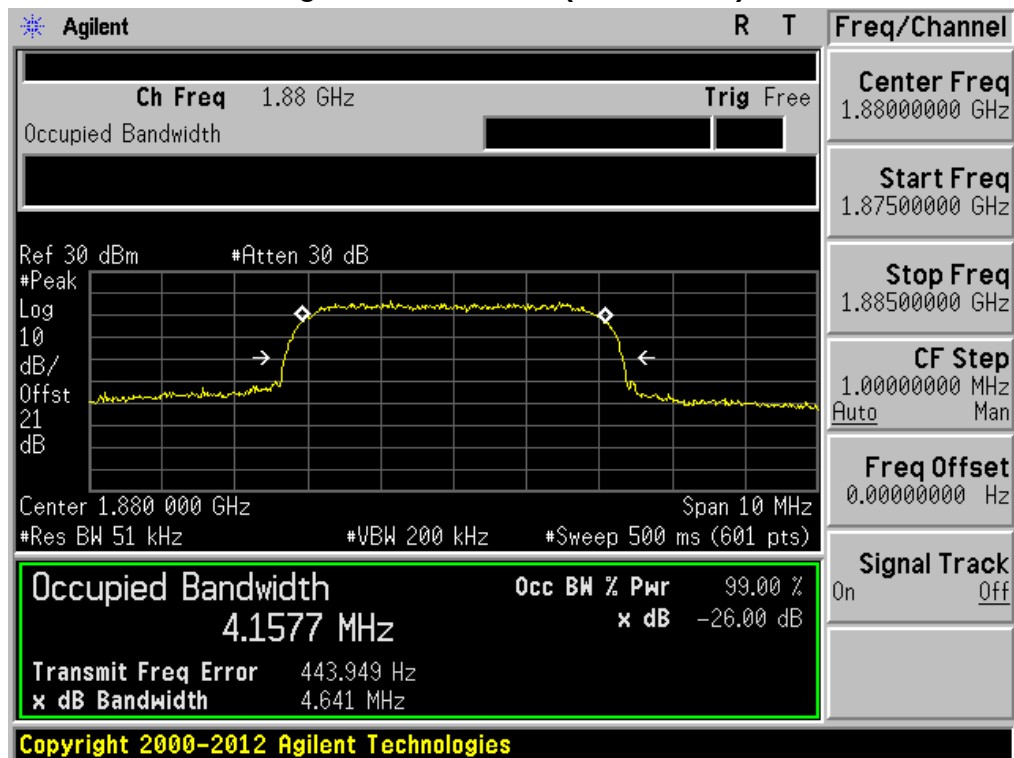
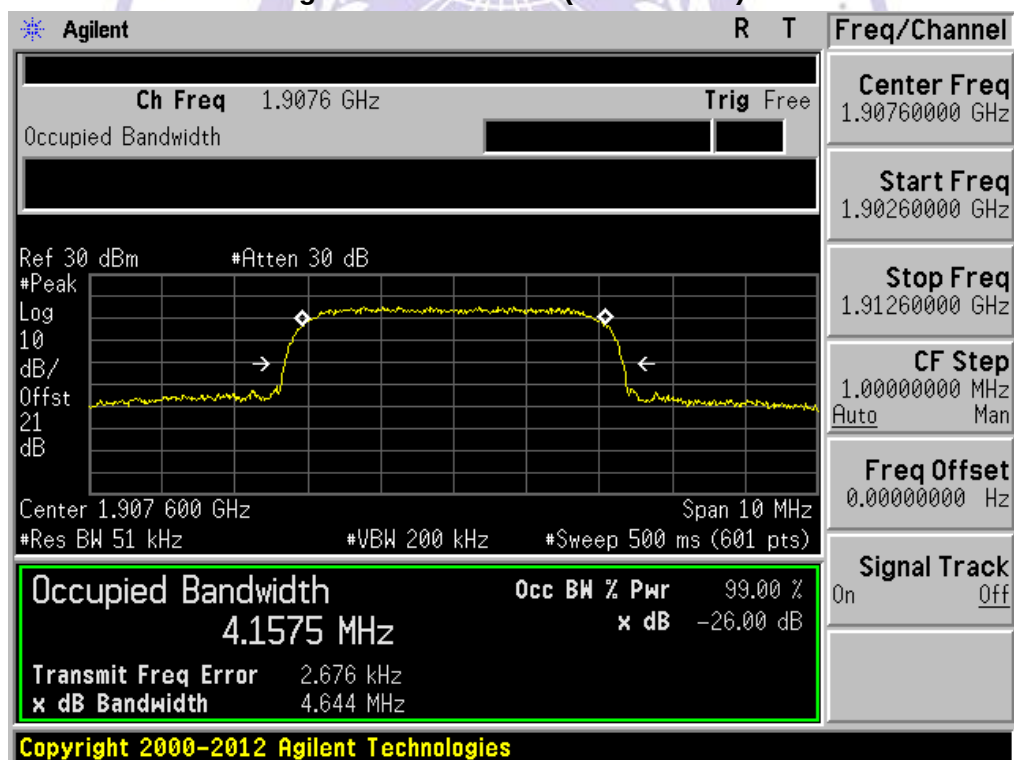


Figure Channel 9538 (1907.60MHz)



Product	1.77inch 3G Feature Phone		
Test Item	Occupied Bandwidth		
Test Mode	HSUPA Band II Link		
Date of Test	2014/03/05	Test Site	AC-6

Channel No.	Frequency (MHz)	-26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
9262	1852.4	4.652	4.1520
9400	1880.0	4.645	4.1585
9538	1907.6	4.649	4.1543

Figure Channel 9262 (1852.4MHz)

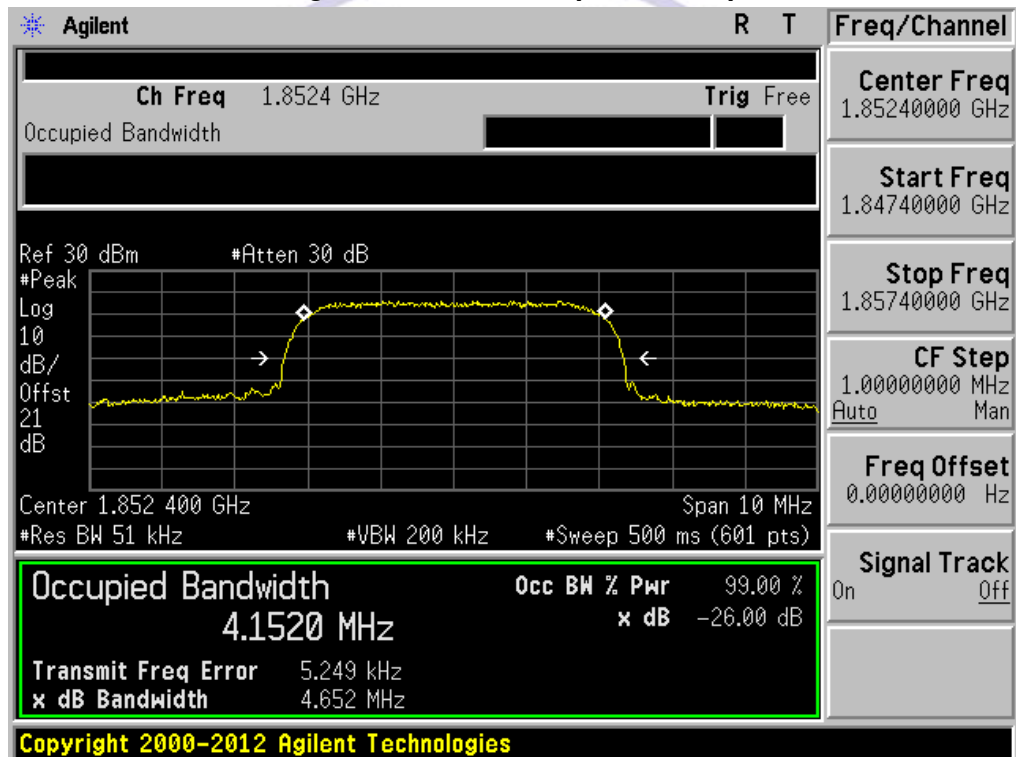


Figure Channel 9400 (1880.00MHz)

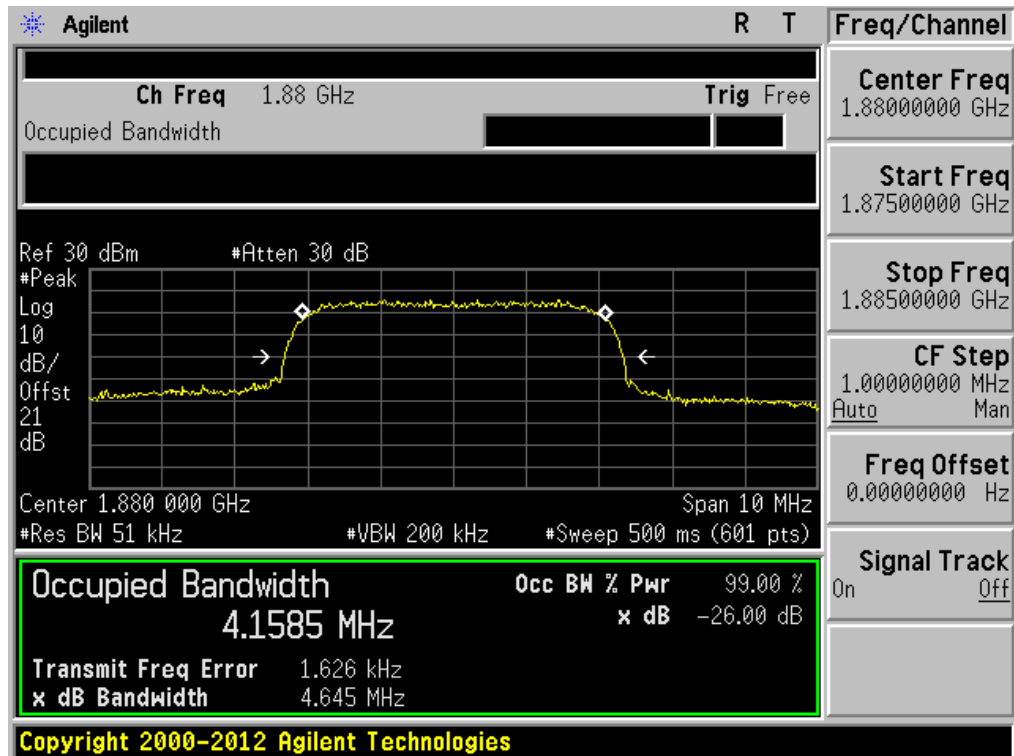
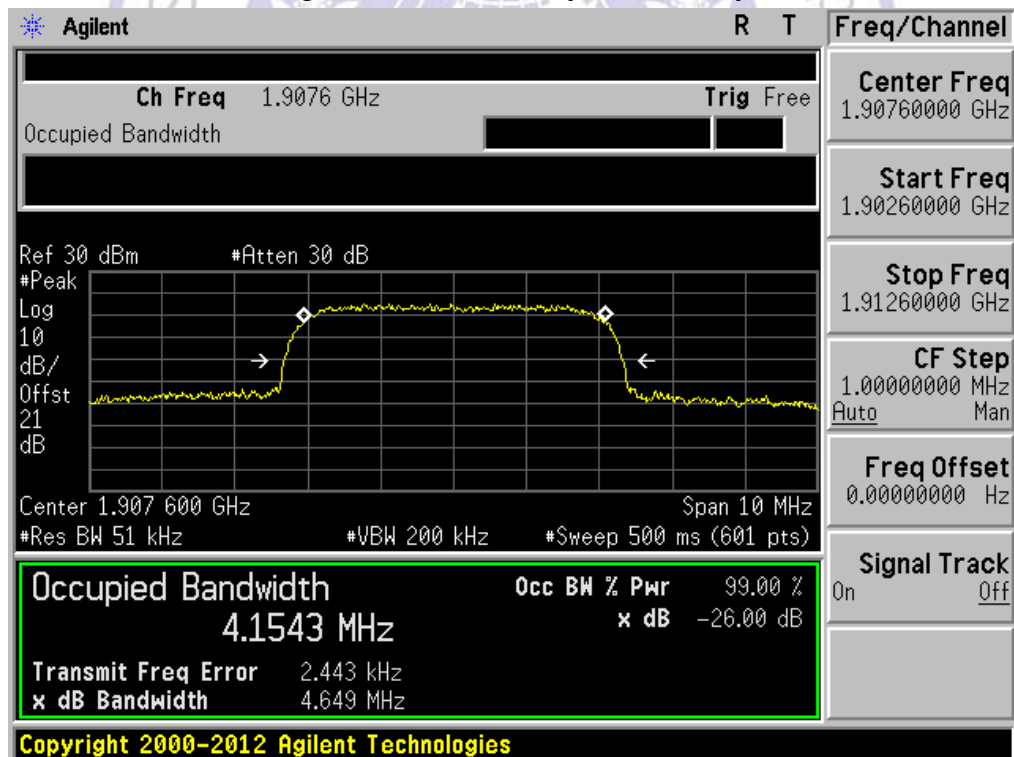
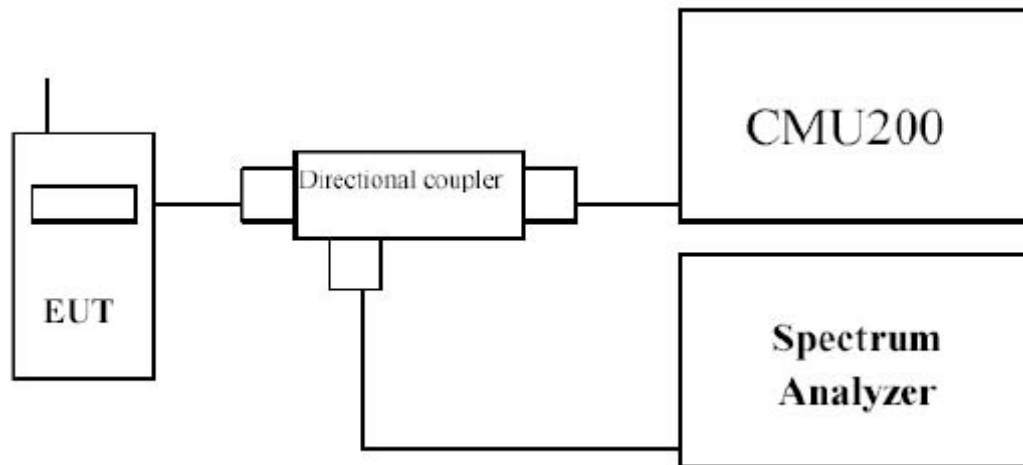


Figure Channel 9538 (1907.60MHz)



4.4. Spurious Emission At Antenna Terminals (+/- 1MHz)

TEST CONFIGURATION



TEST PROCEDURE

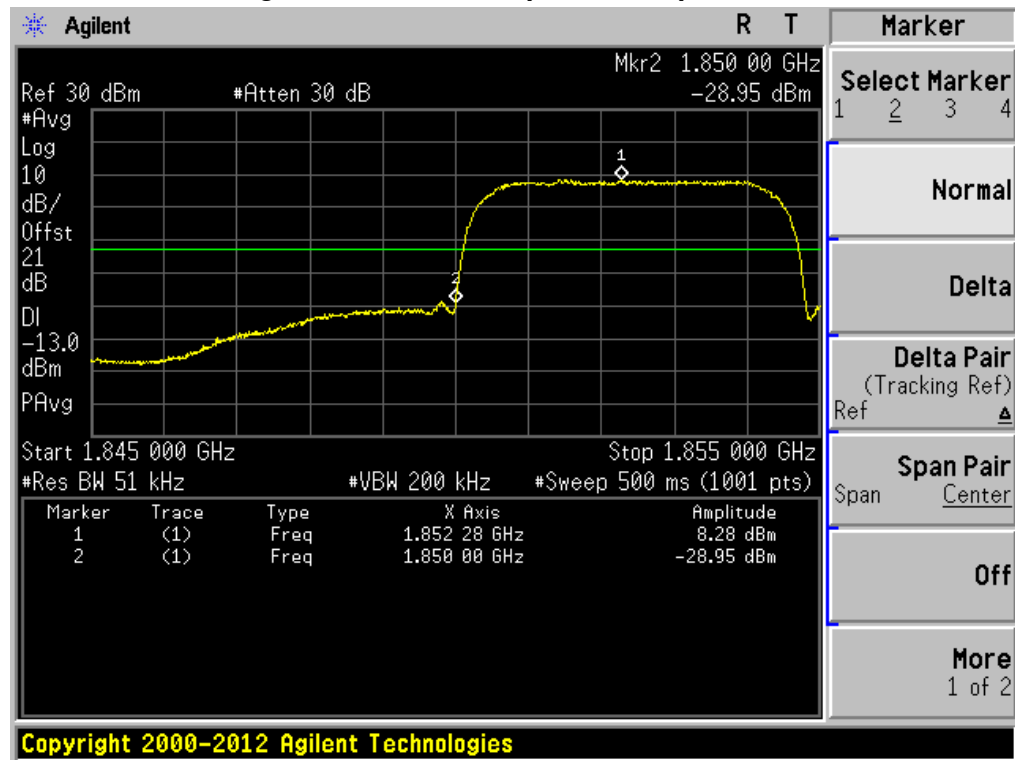
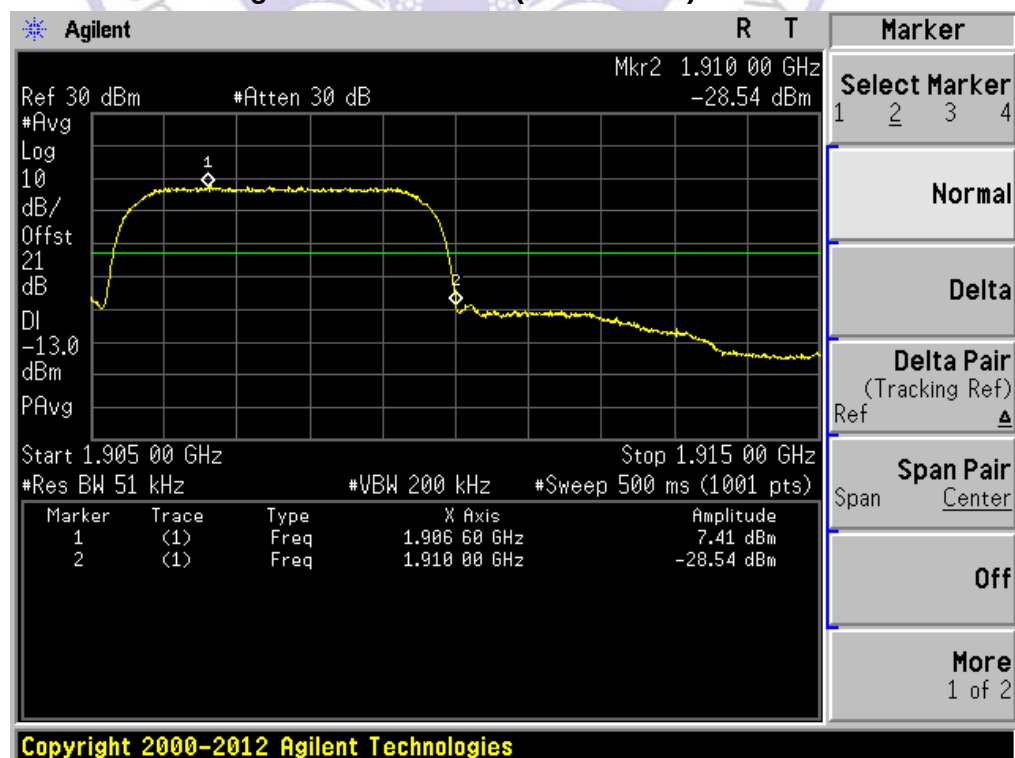
In the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions.

LIMIT

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.

TEST RESULTS

Product	1.77inch 3G Feature Phone		
Test Item	Spurious Emission At Antenna Terminals (+/- 1MHz)		
Test Mode	WCDMA Band II Link		
Date of Test	2014/03/05	Test Site	AC-6

Figure Channel 9262 (1852.4MHz)**Figure Channel 9538 (1907.60MHz)**

Product	1.77inch 3G Feature Phone		
Test Item	Spurious Emission At Antenna Terminals (+/- 1MHz)		
Test Mode	HSDPA Band II Link		
Date of Test	2014/03/05	Test Site	AC-6

Figure Channel 9262 (1852.4MHz)

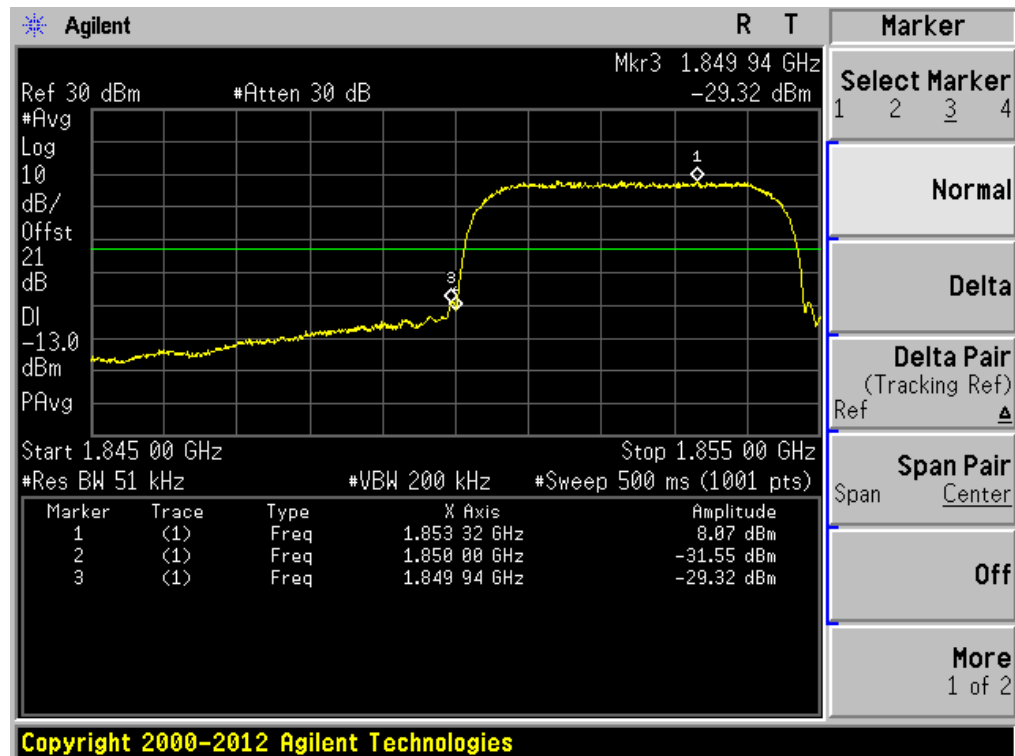
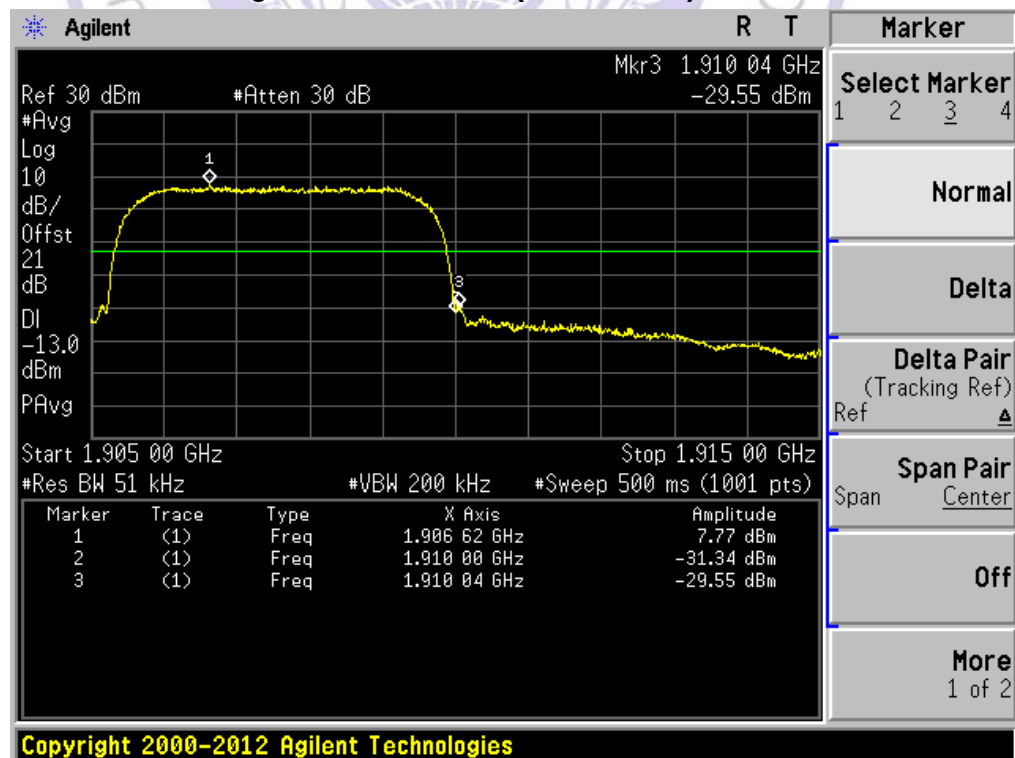


Figure Channel 9538 (1907.60MHz)



Product	1.77inch 3G Feature Phone		
Test Item	Spurious Emission At Antenna Terminals (+/- 1MHz)		
Test Mode	HSUPA Band II Link		
Date of Test	2014/03/05	Test Site	AC-6

Figure Channel 9262 (1852.4MHz)

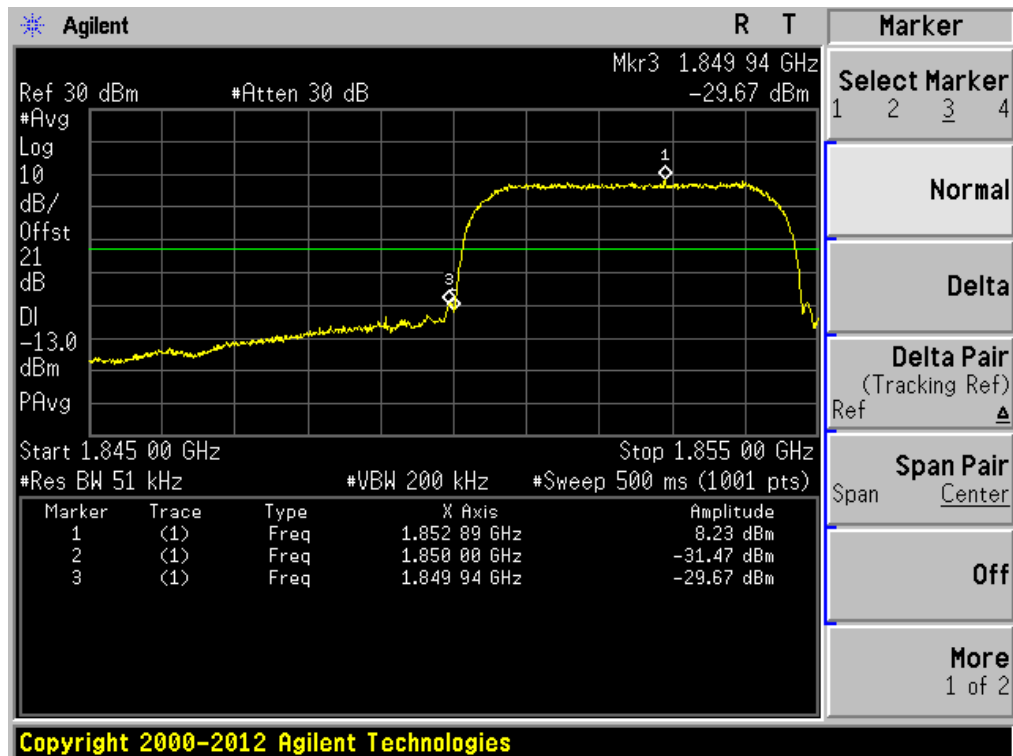
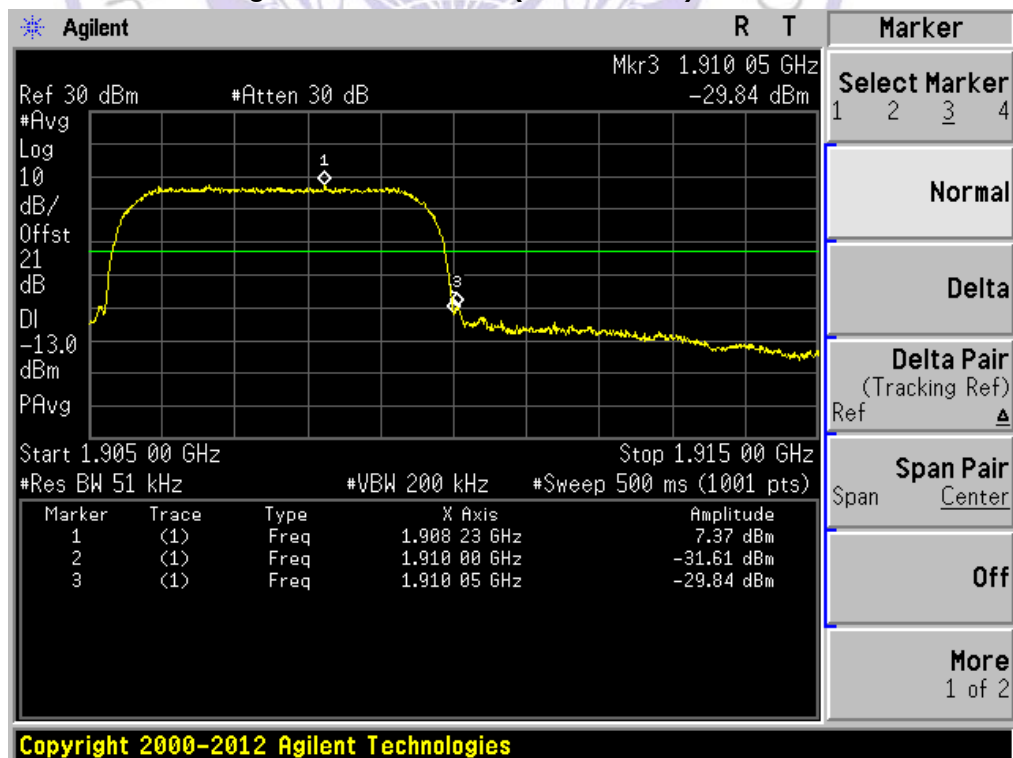


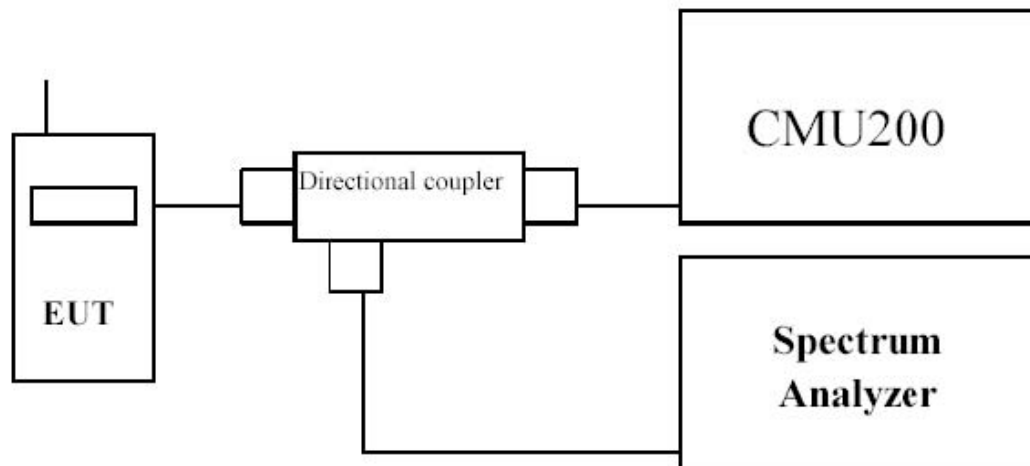
Figure Channel 9538 (1907.60MHz)



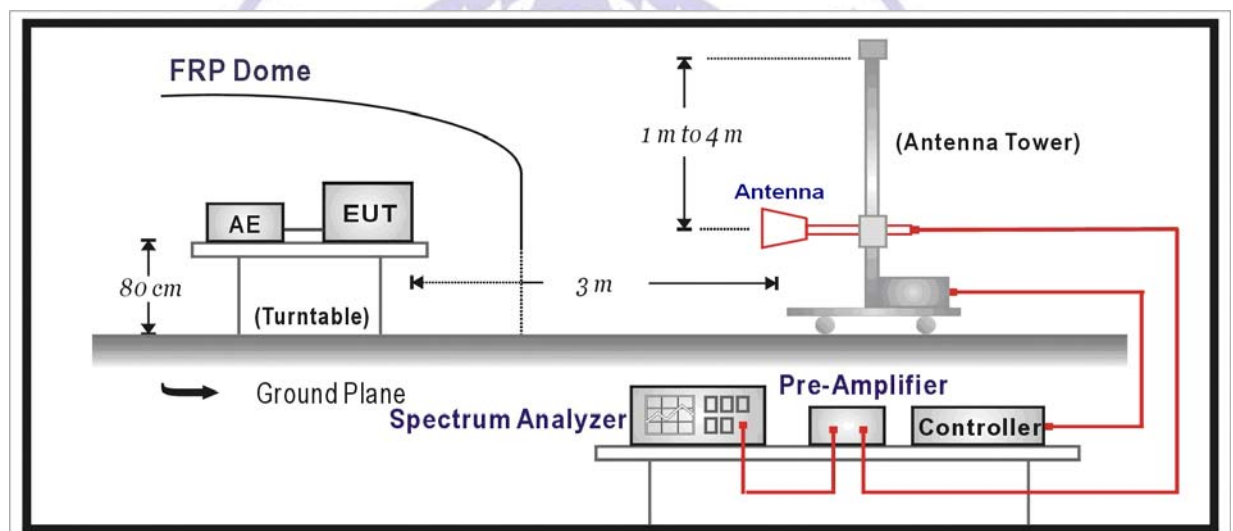
4.5. Spurious Emission

TEST CONFIGURATION

Conducted Spurious Measurement:



Radiated Spurious Measurement:



TEST PROCEDURE

The EUT was setup according to EIA/TIA 603C

Conducted Spurious Measurement:

- Place the EUT on a bench and set it in transmitting mode.
- Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMU200 by a Directional Couple.
- EUT Communicate with CMU200, then select a channel for testing.
- Add a correction factor to the display of spectrum, and then test.
- The resolution bandwidth of the spectrum analyzer was set at 100 kHz for Part 22 and 1MHz for Part 24, sufficient scans were taken to show the out of band Emission if any up to 10th harmonic.

Radiated Spurious Measurement:

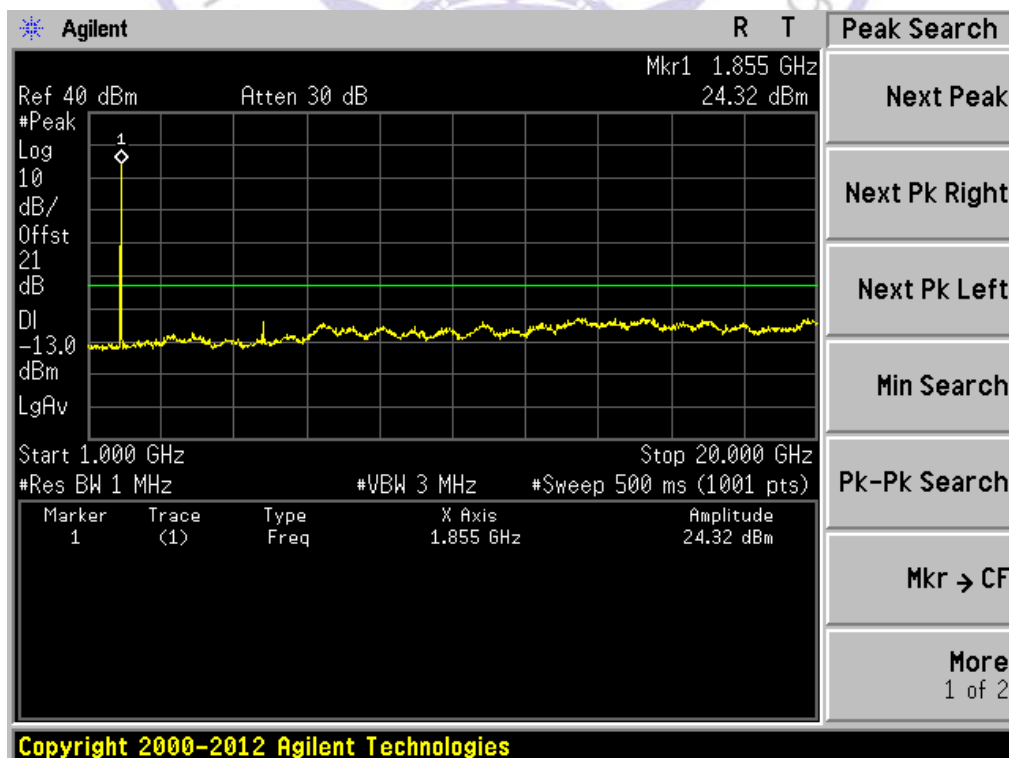
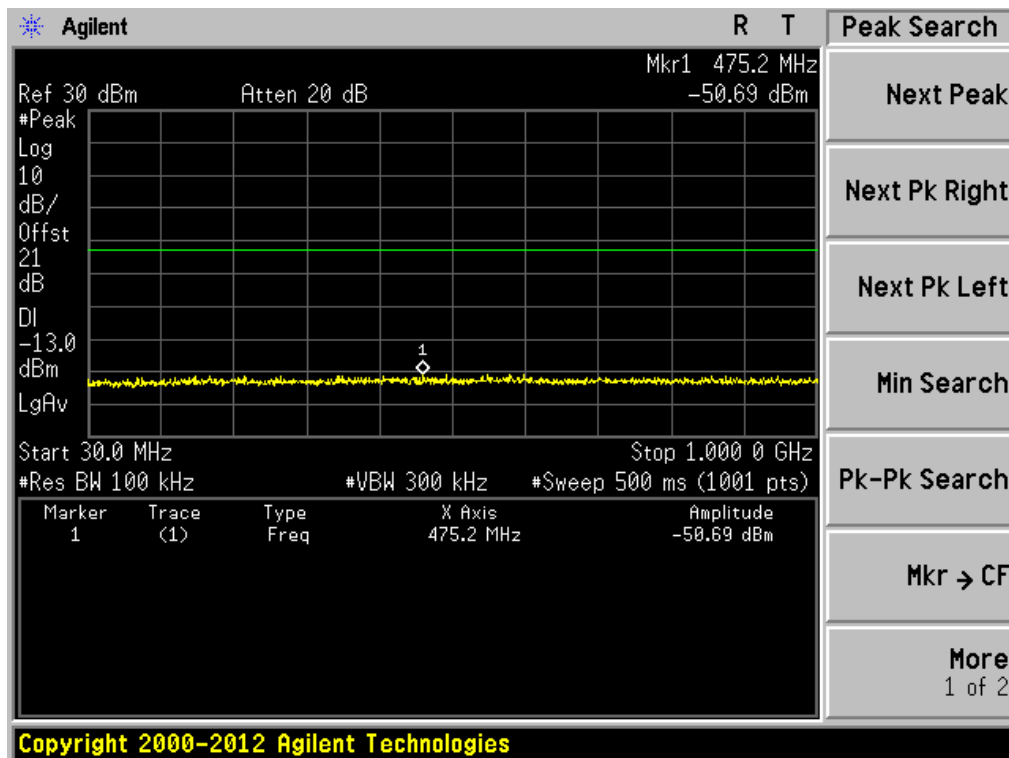
- a) The EUT shall be placed at the specified height on a support, and in the position closest to normal use as declared by provider.
- b) The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter
- c) The output of the test antenna shall be connected to the measuring receiver.
- d) The transmitter shall be switched on and the measuring receiver shall be tuned to the frequency of the transmitter under test.
- e) The test antenna shall be raised and lowered through the specified range of height until a maximum signal level is detected by the measuring receiver.
- f) The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- g) The test antenna shall be raised and lowered again through the specified range of height until a maximum signal level is detected by the measuring receiver.
- q) The maximum signal level detected by the measuring receiver shall be noted.
- h) The transmitter shall be replaced by a substitution antenna.
- i) The substitution antenna shall be orientated for vertical polarization and the length of the substitution antenna shall be adjusted to correspond to the frequency of the transmitter.
- j) The substitution antenna shall be connected to a calibrated signal generator.
- k) If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- l) The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
- m) The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.
- n) The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.
- o) The measure of the effective radiated power is the larger of the two levels recorded at the input to the substitution antenna, corrected for gain of the substitution antenna if necessary.
- p) The resolution bandwidth of the spectrum analyzer was set at 100 kHz for Part 22 and 1MHz for Part 24. The frequency range was checked up to 10th harmonic.
- q) Test site anechoic chamber refer to ANSI C63.4: 2009

LIMIT

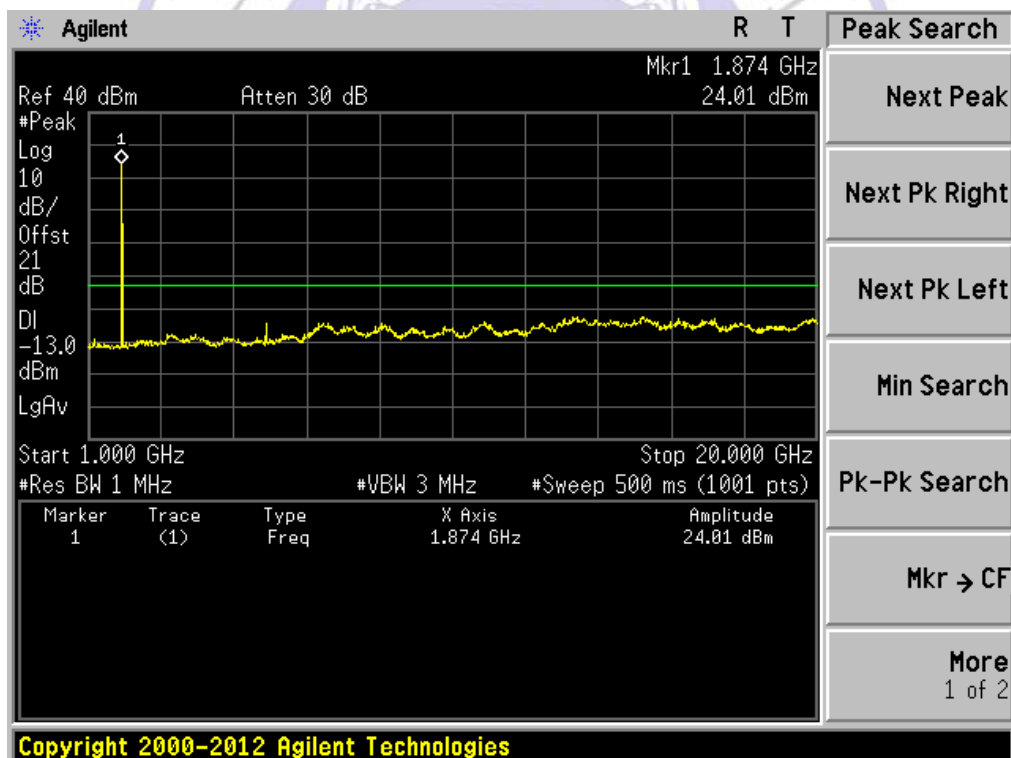
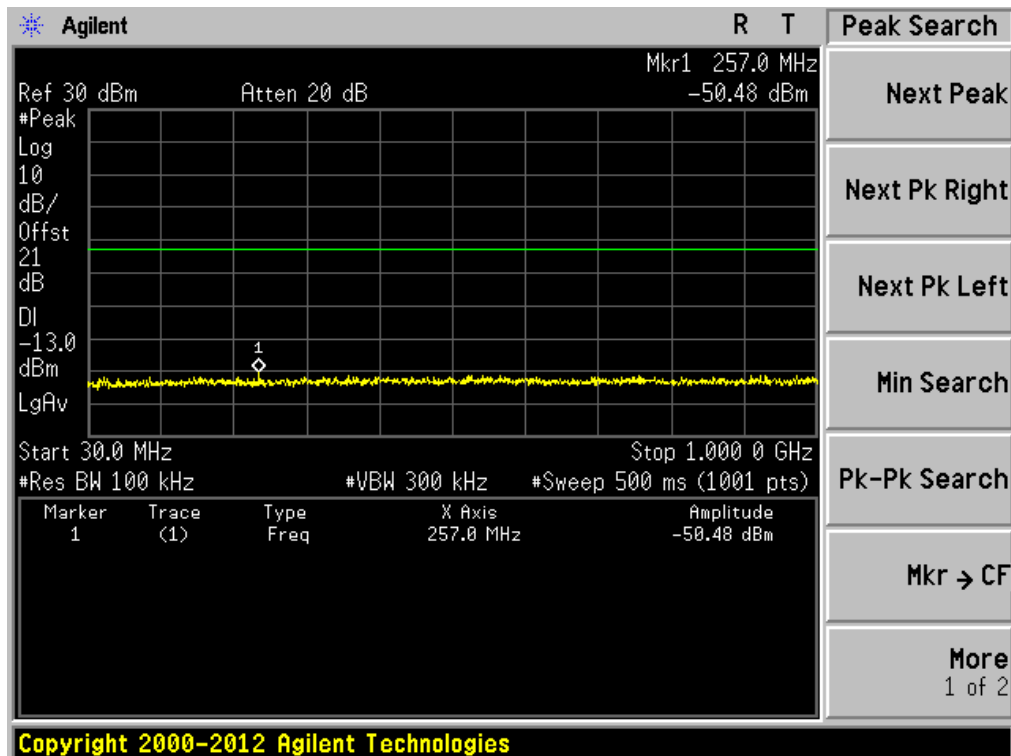
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB.

TEST RESULTS**Conducted Measurement**

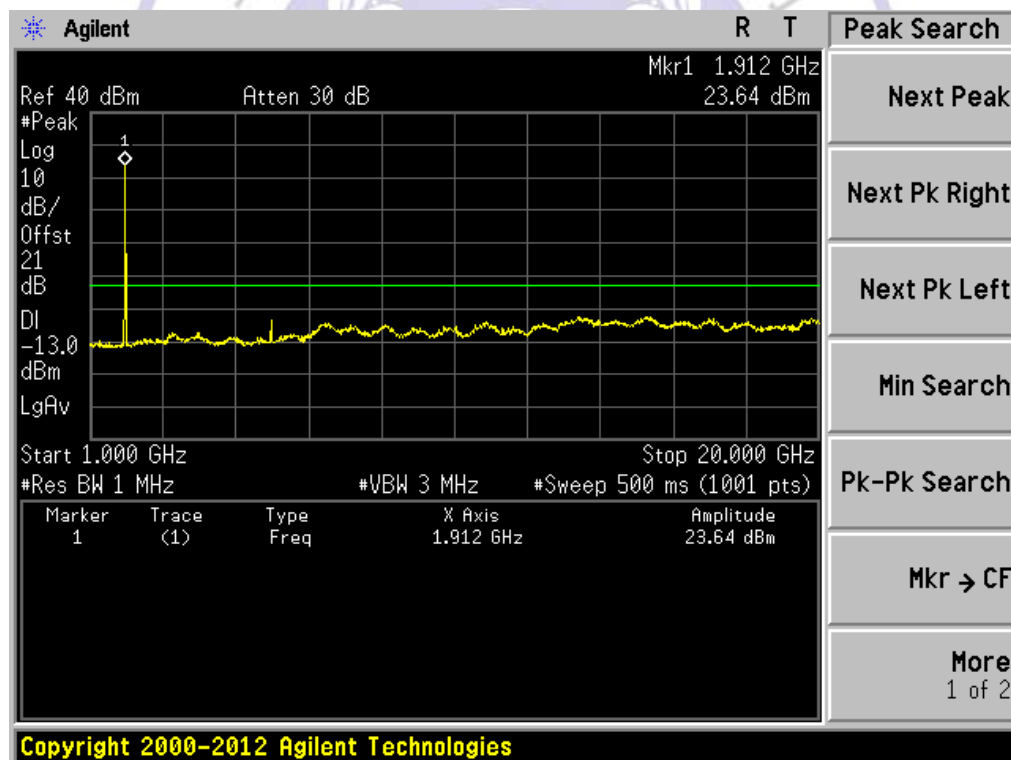
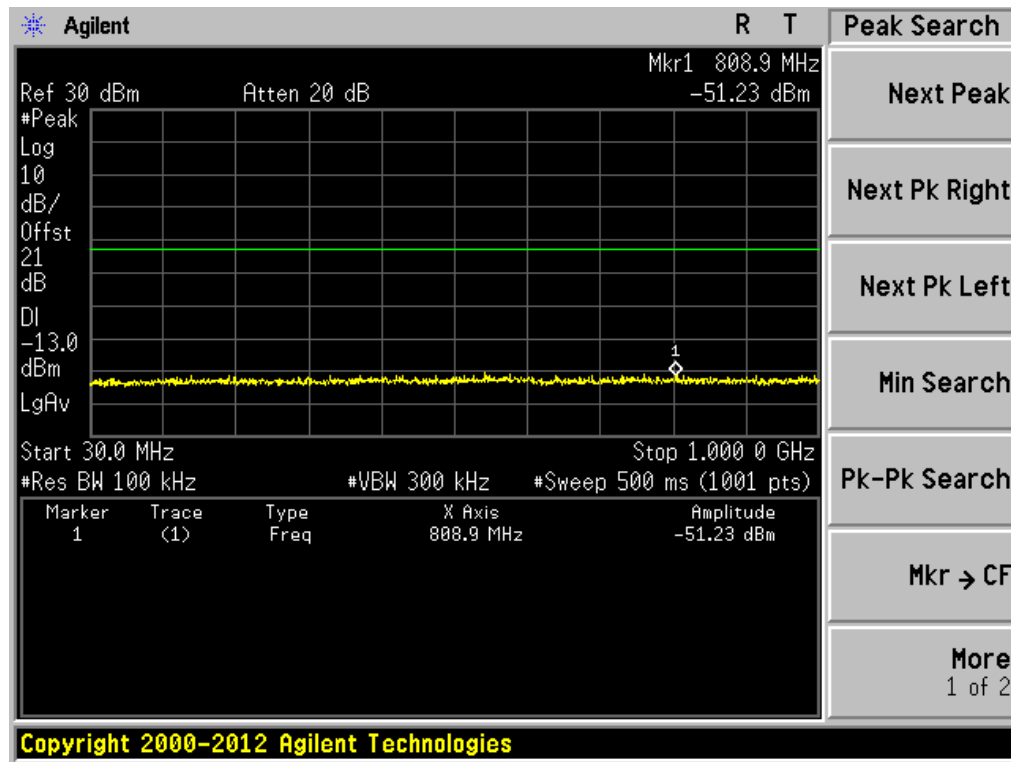
Product	1.77inch 3G Feature Phone		
Test Item	Spurious Emission		
Test Mode	WCDMA Band II Traffic		
Date of Test	2014/03/04	Test Site	AC-5

Low Channel 9262(1852.4MHz)

Mid Channel 9400(1880.0MHz)

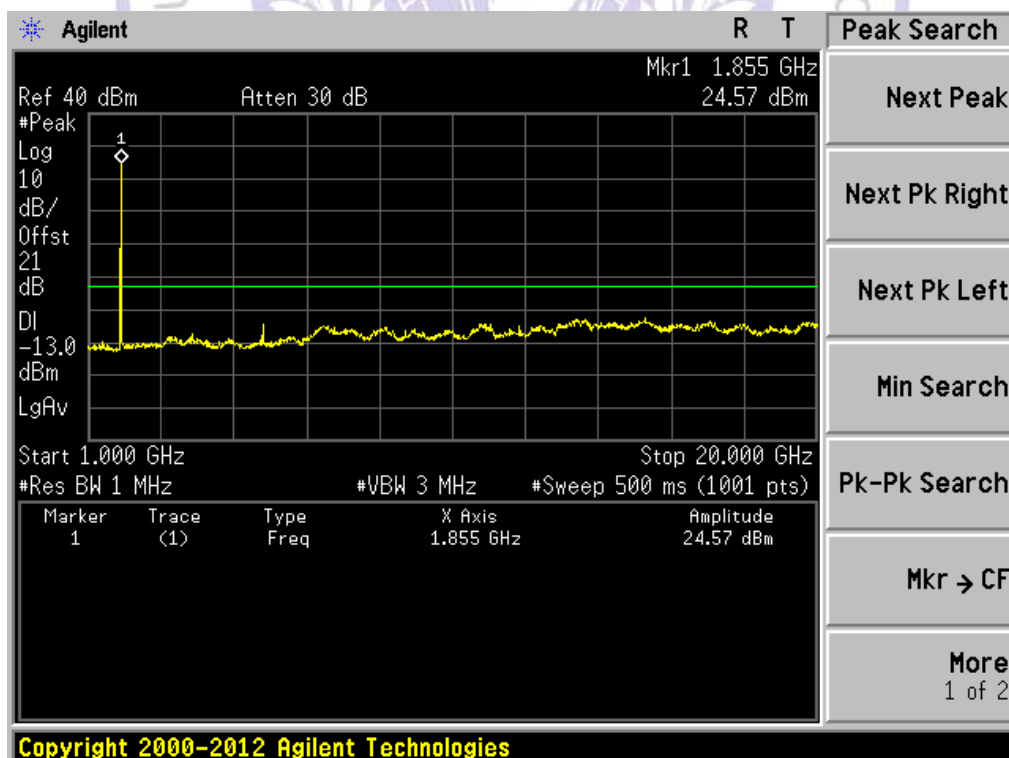
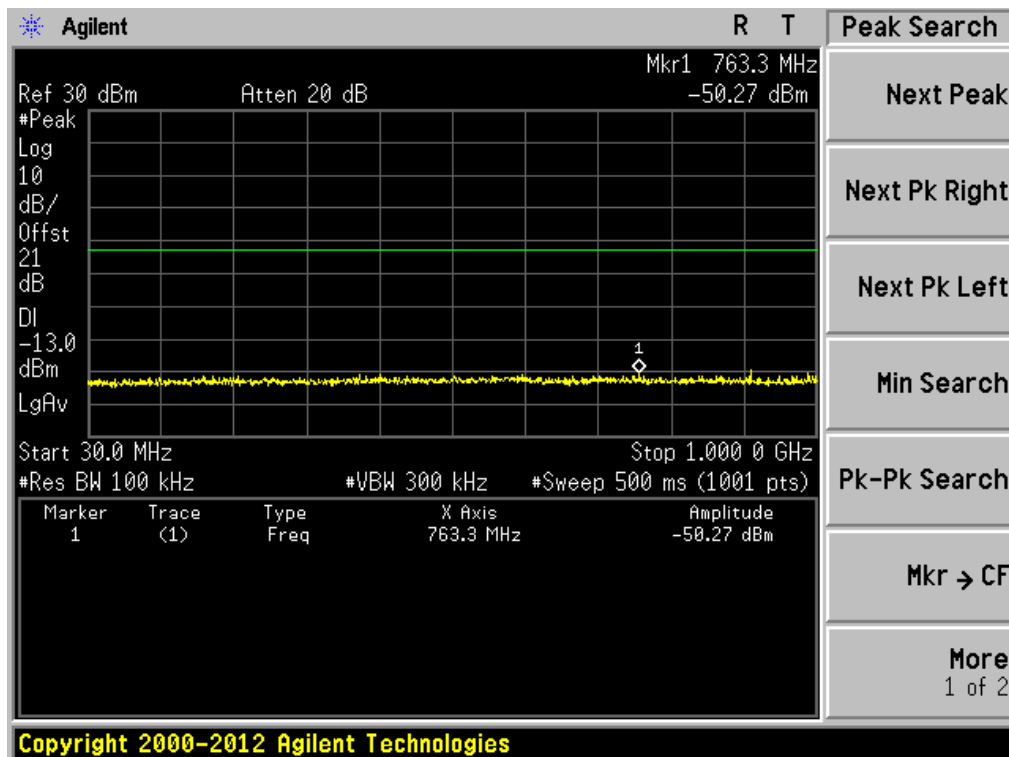


High Channel 9538(1907.6MHz)

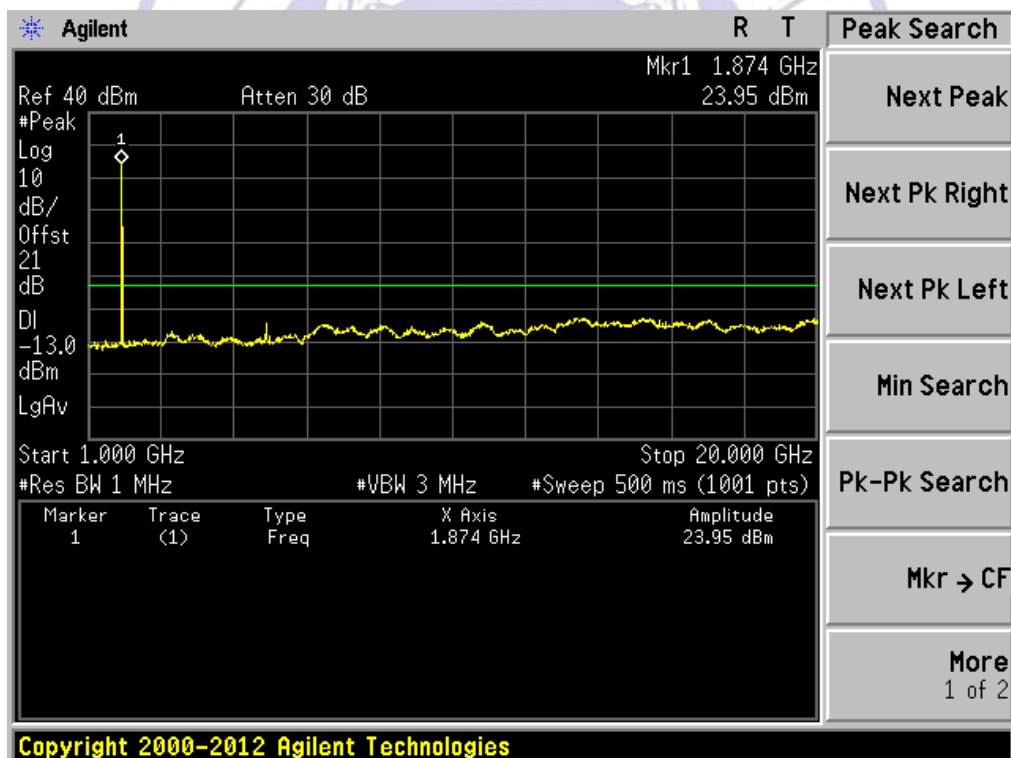
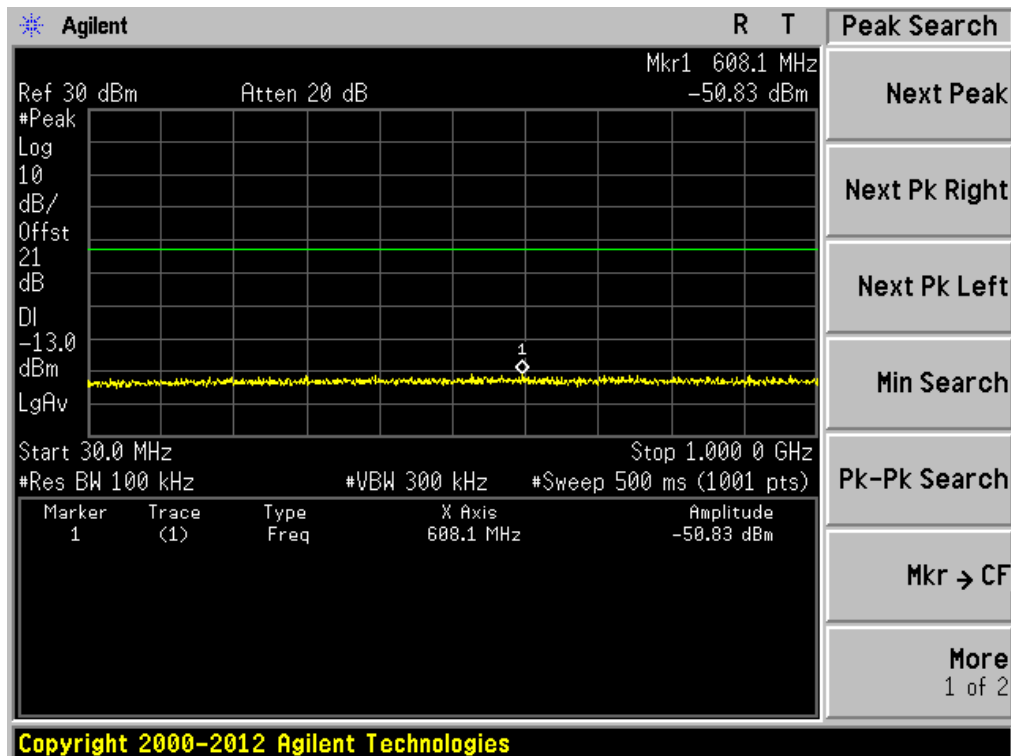


Product	1.77inch 3G Feature Phone		
Test Item	Spurious Emission		
Test Mode	HSDPA Band II Traffic		
Date of Test	2014/03/04	Test Site	AC-5

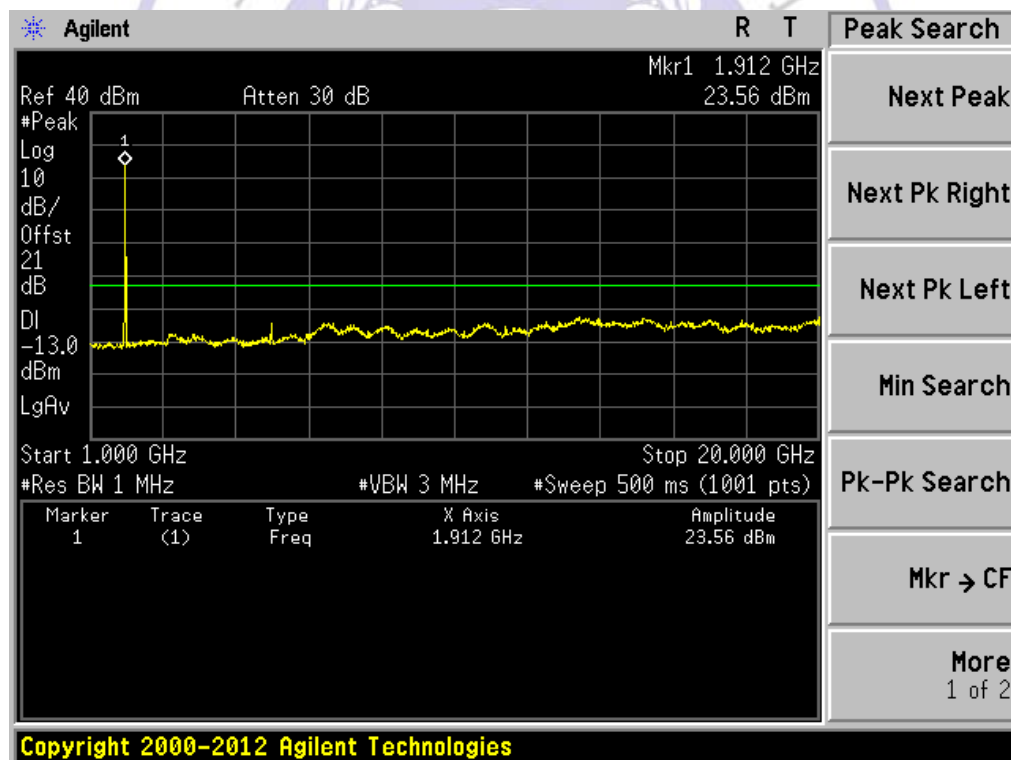
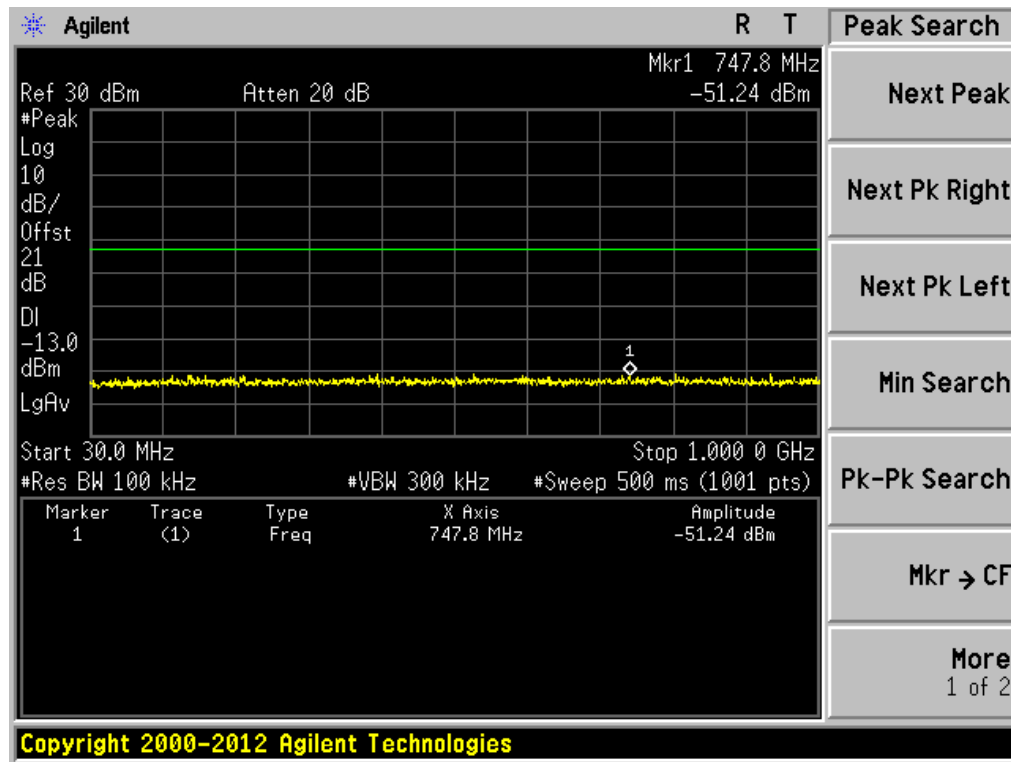
Low Channel 9262(1852.4MHz)



Mid Channel 9400(1880.0MHz)

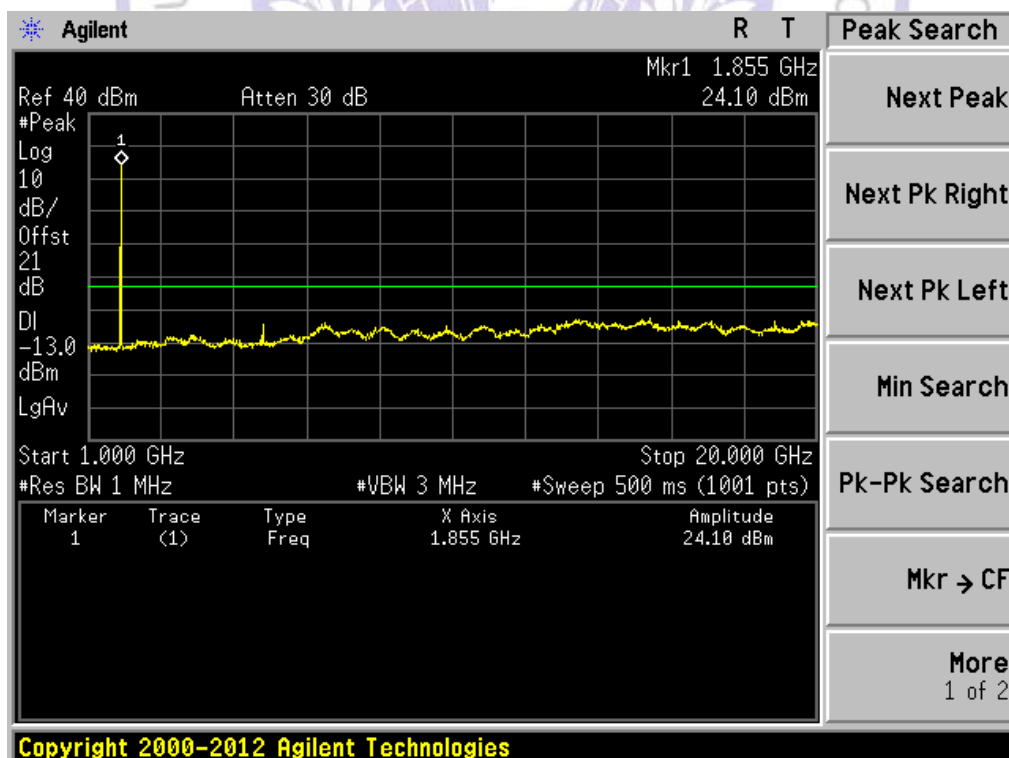
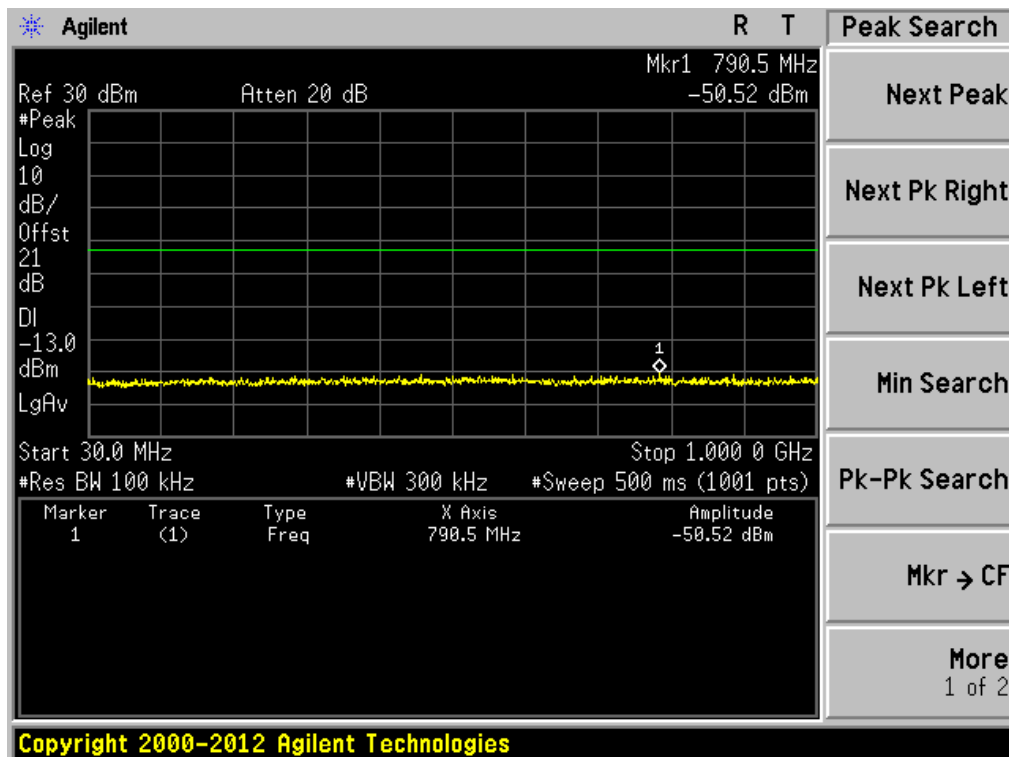


High Channel 9538(1907.6MHz)

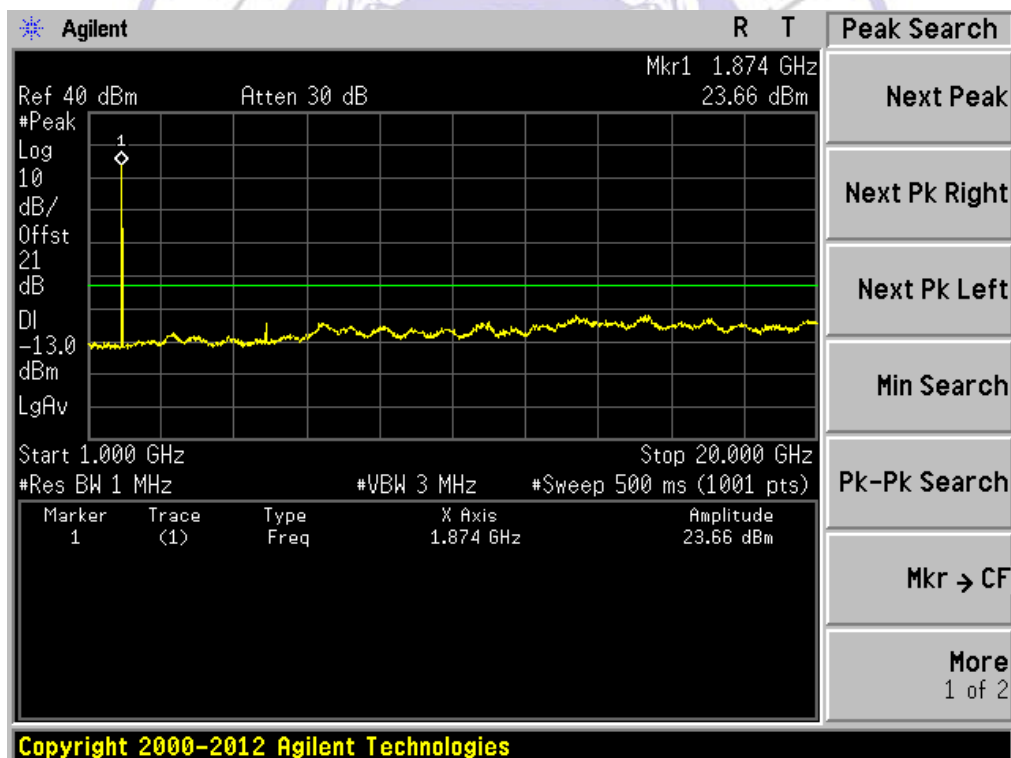
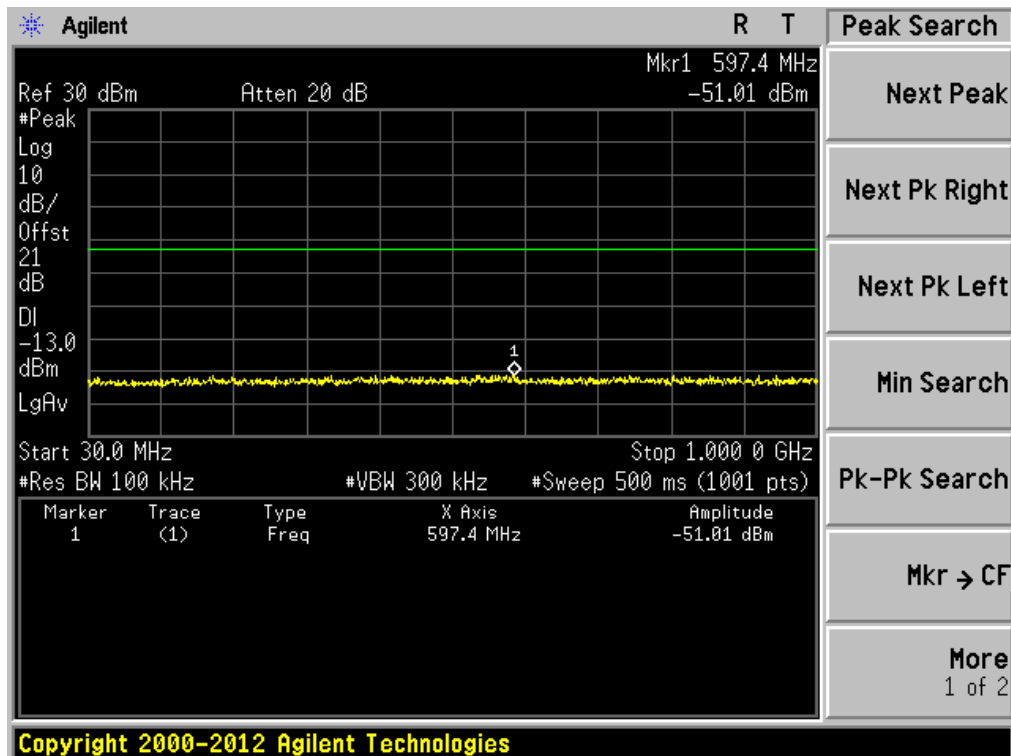


Product	1.77inch 3G Feature Phone		
Test Item	Spurious Emission		
Test Mode	HSUPA Band II Traffic		
Date of Test	2014/03/04	Test Site	AC-5

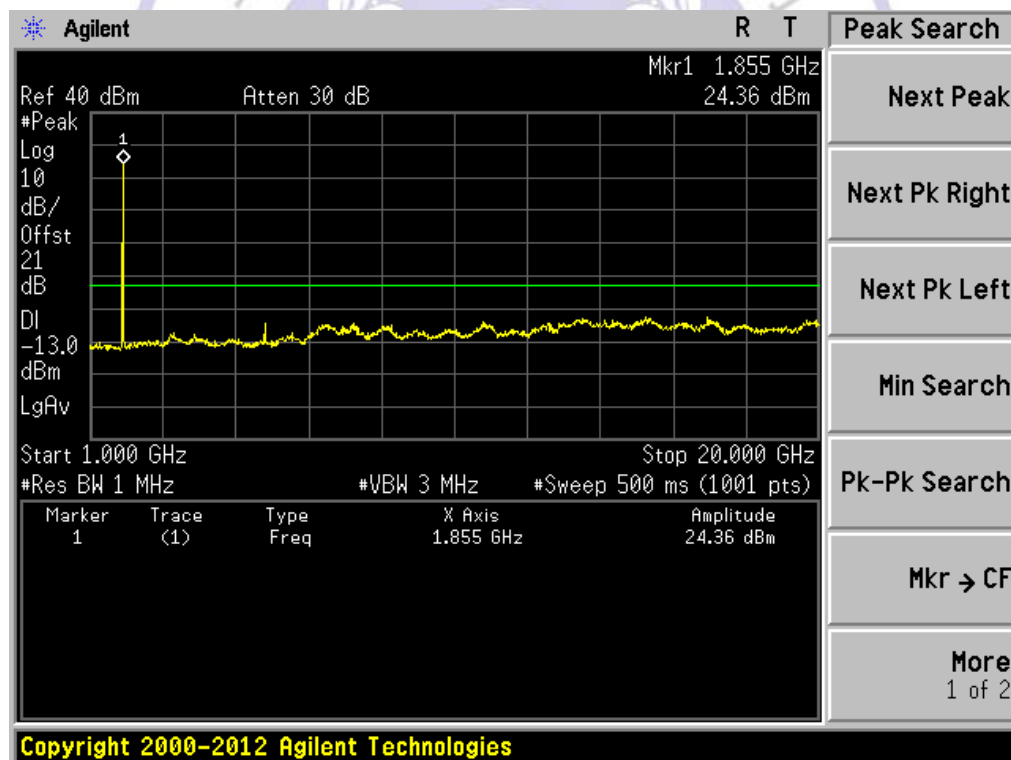
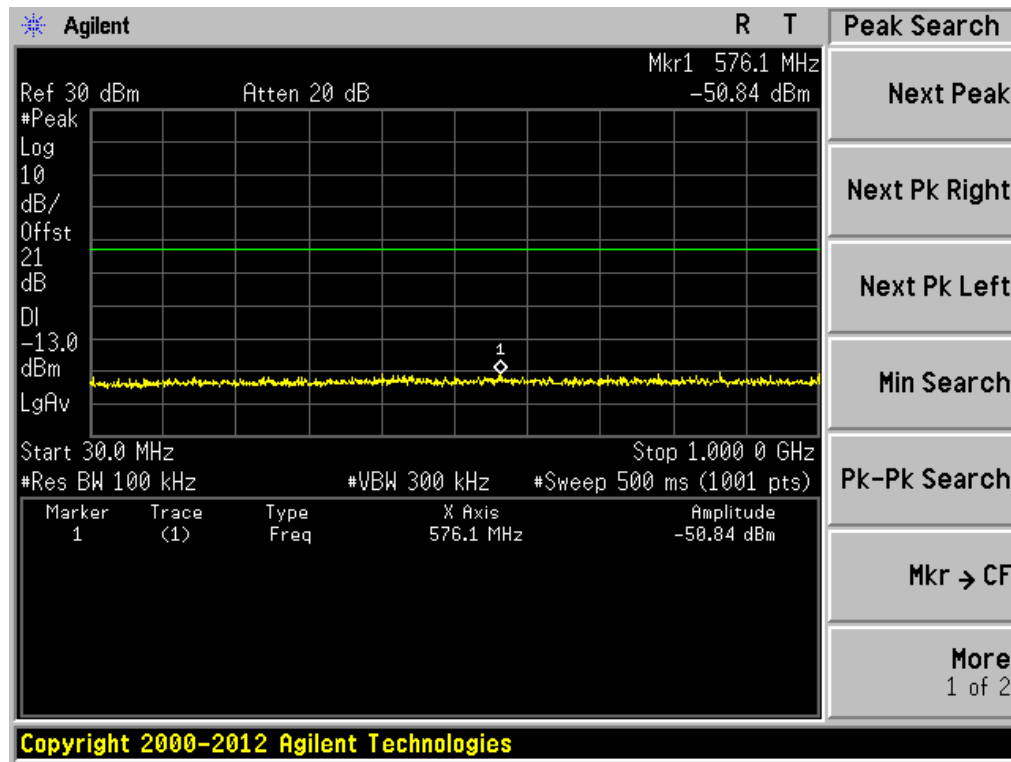
Low Channel 9262(1852.4MHz)



Mid Channel 9400(1880.0MHz)



High Channel 9538(1907.6MHz)



Radiated Measurement RSE

Product	1.77inch 3G Feature Phone		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: WCDMA Band II Link		
Date of Test	2014/03/04	Date of Test	2014/03/04

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 9262 (1852.40MHz)								
3704.8	-57.72	V	-44.88	3.90	7.88	-40.90	-13	-27.90
5557.2	-63.44	V	-49.41	4.83	10.10	-44.14	-13	-31.14
3704.8	-60.91	H	-47.95	3.90	7.88	-43.97	-13	-30.97
5557.2	-63.93	H	-49.67	4.83	10.10	-44.40	-13	-31.40
Middle Channel 9400 (1880.00MHz)								
3760	-62.77	V	-49.73	3.94	7.92	-45.75	-13	-32.75
5640	-64.6	V	-50.11	4.94	10.10	-44.95	-13	-31.95
3760	-59.45	H	-46.59	3.94	7.92	-42.61	-13	-29.61
5640	-64.07	H	-49.70	4.94	10.10	-44.54	-13	-31.54
High Channel 9538 (1907.60MHz)								
3815.2	-62.32	V	-49.17	3.98	8.06	-45.09	-13	-32.09
5722.8	-61.79	V	-47.38	5.00	10.10	-42.28	-13	-29.28
3815.2	-60.65	H	-47.42	3.98	8.06	-43.34	-13	-30.34
5722.8	-64.49	H	-49.96	5.00	10.10	-44.86	-13	-31.86

Product	1.77inch 3G Feature Phone		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 2: HSDPA Band II Traffic		
Date of Test	2014/03/04	Date of Test	2014/03/04

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 9262 (1852.40MHz)								
3704.8	-57.68	V	-44.84	3.90	7.88	-40.86	-13	-27.86
5557.2	-63.42	V	-49.39	4.83	10.10	-44.12	-13	-31.12
3704.8	-60.83	H	-47.87	3.90	7.88	-43.89	-13	-30.89
5557.2	-63.83	H	-49.57	4.83	10.10	-44.30	-13	-31.3
Middle Channel 9400 (1880.00MHz)								
3760	-62.73	V	-49.69	3.94	7.92	-45.71	-13	-32.71
5640	-64.52	V	-50.03	4.94	10.10	-44.87	-13	-31.87
3760	-59.44	H	-46.58	3.94	7.92	-42.6	-13	-29.6
5640	-64.14	H	-49.77	4.94	10.10	-44.61	-13	-31.61
High Channel 9538 (1907.60MHz)								
3815.2	-62.28	V	-49.13	3.98	8.06	-45.05	-13	-32.05
5722.8	-61.65	V	-47.24	5.00	10.10	-42.14	-13	-29.14
3815.2	-60.6	H	-47.37	3.98	8.06	-43.29	-13	-30.29
5722.8	-64.48	H	-49.95	5.00	10.10	-44.85	-13	-31.85

Product	1.77inch 3G Feature Phone		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 3: HSUPA Band II Traffic		
Date of Test	2014/03/04	Date of Test	2014/03/04

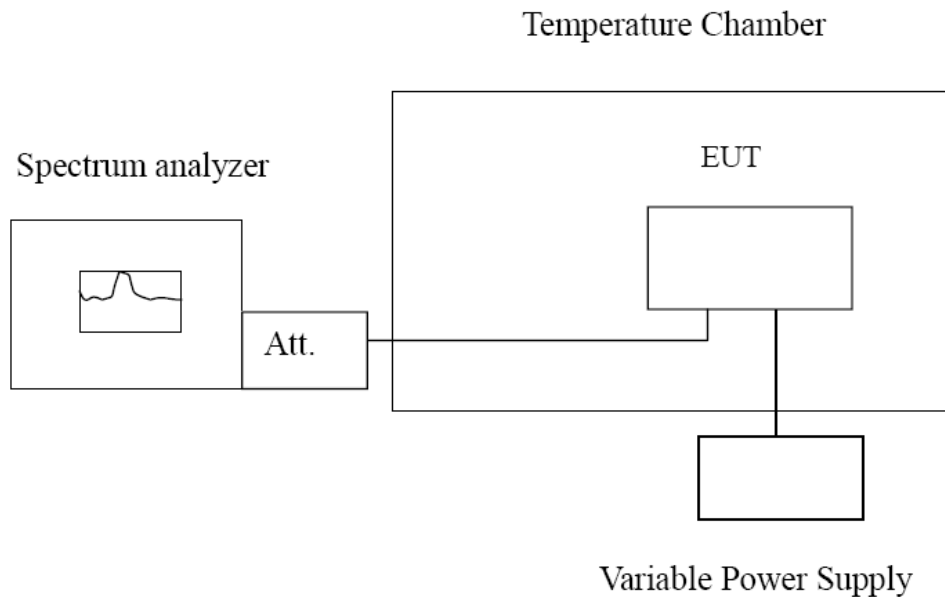
Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 9262 (1852.40MHz)								
3704.8	-56.33	V	-43.49	3.90	7.88	-39.51	-13	-26.51
5557.2	-61.67	V	-47.64	4.83	10.10	-42.37	-13	-29.37
3704.8	-57.46	H	-44.50	3.90	7.88	-40.52	-13	-27.52
5557.2	-62.14	H	-47.88	4.83	10.10	-42.61	-13	-29.61
Middle Channel 9400 (1880.00MHz)								
3760	-58.42	V	-45.38	3.94	7.92	-41.40	-13	-28.4
5640	-60.32	V	-45.83	4.94	10.10	-40.67	-13	-27.67
3760	-59.74	H	-46.88	3.94	7.92	-42.90	-13	-29.9
5640	-61.22	H	-46.85	4.94	10.10	-41.69	-13	-28.69
High Channel 9538 (1907.60MHz)								
3815.2	-61.45	V	-48.30	3.98	8.06	-44.22	-13	-31.22
5722.8	-60.22	V	-45.81	5.00	10.10	-40.71	-13	-27.71
3815.2	-62.22	H	-48.99	3.98	8.06	-44.91	-13	-31.91
5722.8	-58.36	H	-43.83	5.00	10.10	-38.73	-13	-25.73

Remark: All of the modes tested and the worst case mode were recorded in the report, other test results below the limit over 20dB.



4.6. Frequency Stability under Temperature & Voltage Variations

TEST CONFIGURATION



TEST PROCEDURE

The EUT was setup according to EIA/TIA 603C

Frequency Stability Under Temperature Variations:

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

LIMIT

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Limit < ± 2.5 ppm

TEST RESULTS

Product	1.77inch 3G Feature Phone		
Test Item	Frequency Stability Under Temperature & Voltage Variations		
Test Mode	Mode 1: WCDMA Band II Link		
Date of Test	2014/03/04	Test Site	SR1

Frequency Stability under Temperature

Temperature Interval (°C)	Test Frequency (MHz)	Deviation (Hz)	Limit (Hz)
-30	1880.00	-32	± 4700
-20	1880.00	-28	± 4700
-10	1880.00	-33	± 4700
0	1880.00	50	± 4700
10	1880.00	46	± 4700
20	1880.00	51	± 4700
30	1880.00	43	± 4700
40	1880.00	22	± 4700
50	1880.00	31	± 4700

Frequency Stability under Voltage

DC Voltage (V)	Test Frequency (MHz)	Deviation (Hz)	Limit (Hz)
4.200	1880.00	-36	± 4700
3.700	1880.00	-27	± 4700
3.600	1880.00	-53	± 4700

Product	1.77inch 3G Feature Phone		
Test Item	Frequency Stability Under Temperature & Voltage Variations		
Test Mode	Mode 2: HSDPA Band II Traffic		
Date of Test	2014/03/04	Test Site	SR1

Frequency Stability under Temperature

Temperature Interval (°C)	Test Frequency (MHz)	Deviation (Hz)	Limit (Hz)
-30	1880.00	-28	± 4700
-20	1880.00	-24	± 4700
-10	1880.00	-30	± 4700
0	1880.00	53	± 4700
10	1880.00	50	± 4700
20	1880.00	54	± 4700
30	1880.00	46	± 4700
40	1880.00	26	± 4700
50	1880.00	35	± 4700

Frequency Stability under Voltage

DC Voltage (V)	Test Frequency (MHz)	Deviation (Hz)	Limit (Hz)
4.200	1880.00	-32	± 4700
3.700	1880.00	-24	± 4700
3.600	1880.00	-49	± 4700

Product	1.77inch 3G Feature Phone		
Test Item	Frequency Stability Under Temperature & Voltage Variations		
Test Mode	Mode 3: HSUPA Band II Traffic		
Date of Test	2014/03/04	Test Site	SR1

Frequency Stability under Temperature

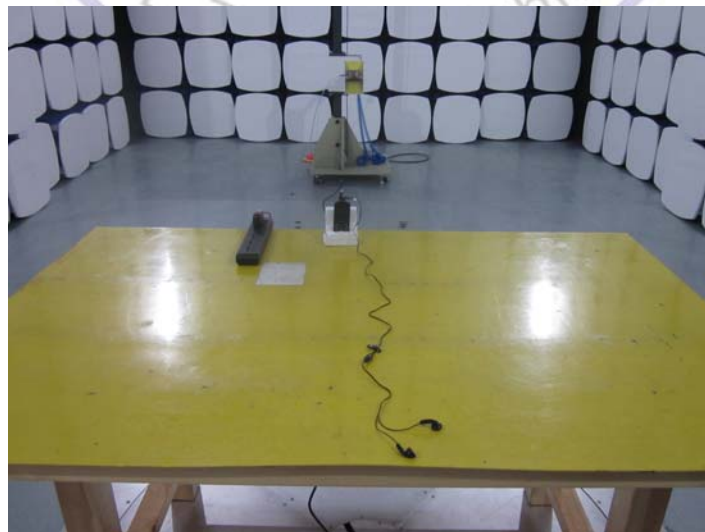
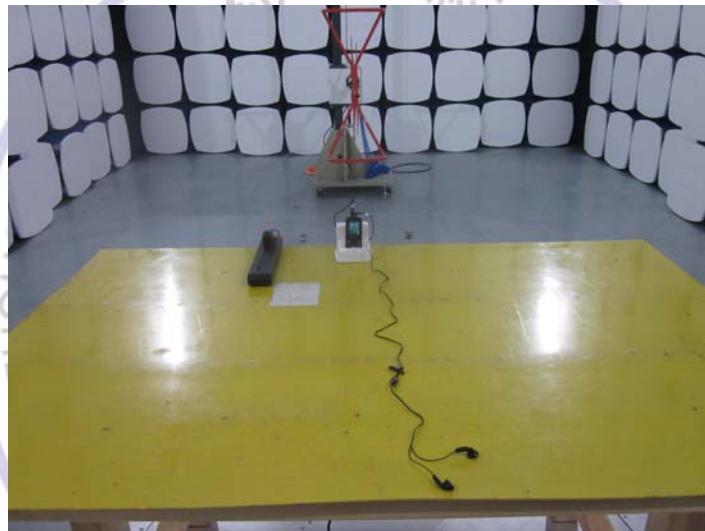
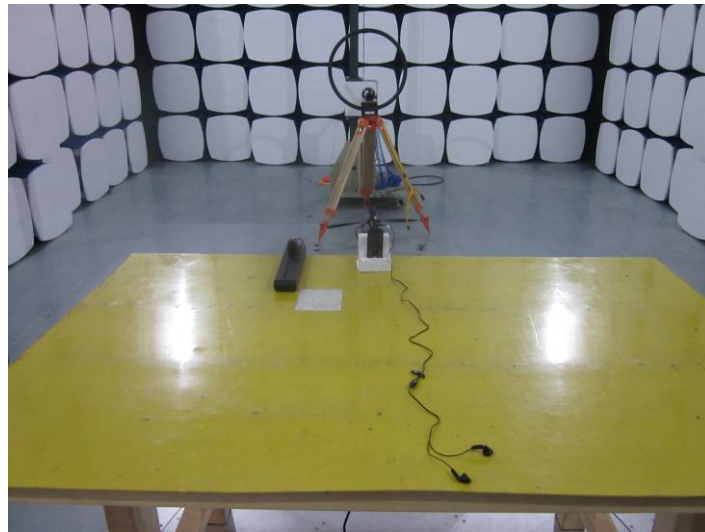
Temperature Interval (°C)	Test Frequency (MHz)	Deviation (Hz)	Limit (Hz)
-30	1880.00	-29	± 4700
-20	1880.00	-24	± 4700
-10	1880.00	-30	± 4700
0	1880.00	53	± 4700
10	1880.00	49	± 4700
20	1880.00	55	± 4700
30	1880.00	47	± 4700
40	1880.00	25	± 4700
50	1880.00	34	± 4700

Frequency Stability under Voltage

DC Voltage (V)	Test Frequency (MHz)	Deviation (Hz)	Limit (Hz)
4.200	1880.00	-33	± 4700
3.700	1880.00	-23	± 4700
3.600	1880.00	-50	± 4700

Note: Normal Voltage: 3.7V
Battery End Point(BEP) = 3.4V

5. Test Setup Photos of the EUT



6. External and Internal Photos of the EUT

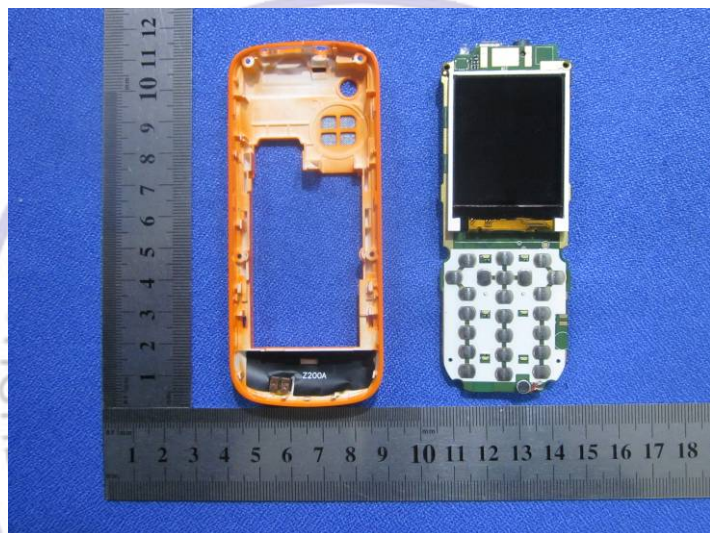
External Photos of EUT

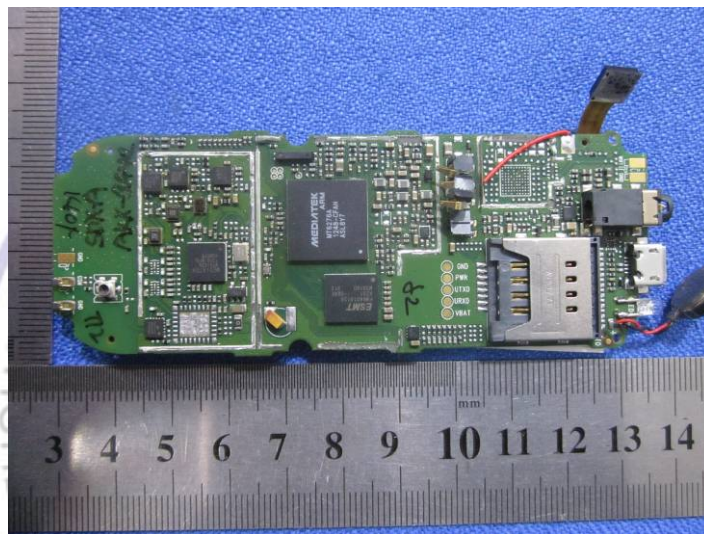
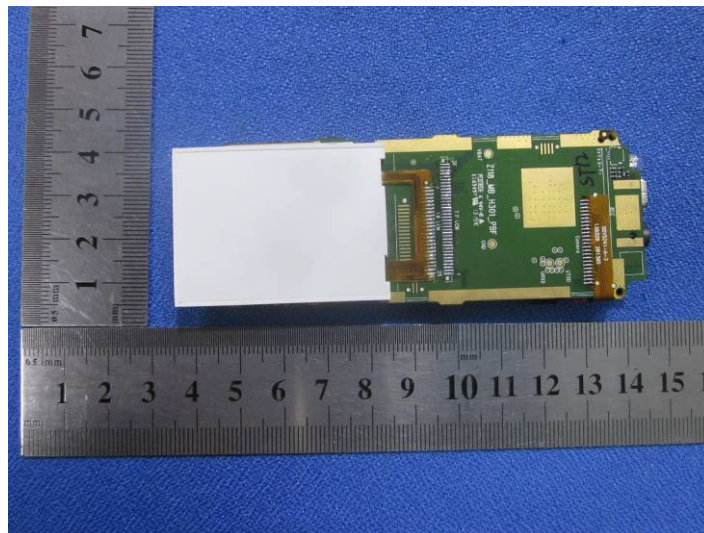


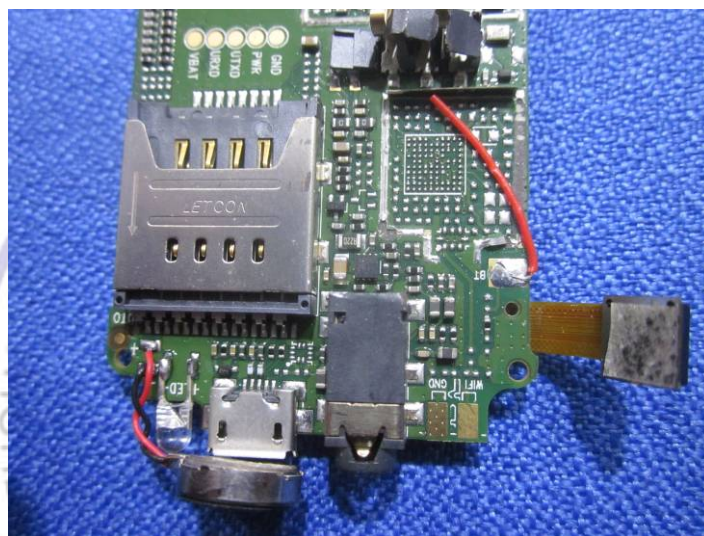




Internal Photos of EUT







.....End of Report.....