Test Report

Product Name ： 800MHz CDMA Mobile Phone

Model No. ： CC602

FCC ID ： U58CC602

Applicant ： FIC Communications (Shanghai) Inc.

Address ： G 12F, He Ghuan Tower, No. 2016, YiShan Road, Shanghai

Date of Receipt ： 2007/03/16

Issued Date ： 2007/03/20

Report No. ： 073S017-HP-US-P07V01

Test Report Certification

Issued Date : 2007/03/20
Report No. : 073S017-HP-US-P07V01

QuieTek

Product Name	:	800MHz CDMA Mobile Phone
Applicant	:	FIC Communications (Shanghai) Inc.
Address	:	G 12F, He Ghuan Tower, No. 2016, YiShan Road, Shanghai
Manufacturer	:	FIC Communications (Shanghai) Inc.
Model No.	:	CC602
FCC ID	:	U58CC602
Rated Voltage	:	AC 230 V / 50 Hz
EUT Voltage	:	DC 3.7V
Trade Name	:	FIC
Applicable Standard	:	FCC CFR Title 47 Part 2, Part 22H
Test Result	:	Complied
Performed Location	:	SuZhou EMC laboratory No.99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., SuZhou, China TEL: +86-512-6251-5088 / FAX:+86-512-6251-5098 FCC Registration number: 800392

Documented By : Mandy Liu (Mandy Liu)

Reviewed By : Dream Cao (Dream Cao)

Approved By : Gene Chang (Gene Chang)

Laboratory Information

We , **QuieTek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited by the following accreditation Bodies in compliance with ISO 17025, EN 45001 and Guide 25:

Taiwan R.O.C.	**:**	**BSMI, DGT, CNLA**
Germany	**:**	**TUV Rheinland**
Norway	**:**	**Nemko, DNV**
USA	**:**	**FCC, NVLAP**
Japan	**:**	**VCCI**

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : http://tw.quietek.com/modules/myalbum/
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/
If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

HsinChu Testing Laboratory :

No.75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan, R.O.C.
TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : service@quietek.com

NVLAP Lab Code : 200347-0
1313

LinKou Testing Laboratory :

No. 5-22, Ruei-Shu Valley, Ruei-Ping Tsuen, Lin-Kou Shiang, Taipei, Taiwan, R.O.C.
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com

NVLAP Lab Code: 200533-0
0914

Suzhou Testing Laboratory :

No.99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., SuZhou, China
TEL : +86-512-6251-5088 / FAX : 86-512-6251-5098 E-Mail : service@quietek.com

NVLAP Lab Code : 200743-0
1596

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Description Page

1. General Information

1.1. EUT Description

Product Name	800MHz CDMA Mobile Phone
Trade Name	FIC
Model No.	CC602
FCC ID	U58CC602
Working Voltage	DC 3.7V
Tx Frequency Range	CDMA 850: 824.73MHz to 848.19MHz
Rx Frequency Range	CDMA 850: 869.73MHz to 893.19MHz
Channel Number	CDMA 850: 797
Type of Modulation	QPSK
Channel Control	Auto
Antenna type	Pifar
Antenna Gain	CDMA 850: -2dBb
Hardware version	1sh-cc602-01a-v1
Software version	2.0.26.61

Component	
AC Adapter	Manufacturer: BLUE BAMBOO M/N: LSA-80A8 Input: AC 100-240V~50/60Hz 0.2A Output: DC 5.0V, 0.6A

1.2. Mode of Operation

QuieTek 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:

Pre-Test Mode	
Mode 1: CDMA 850	
Final Test Mode	
	Mode 1: CDMA 850

Note:

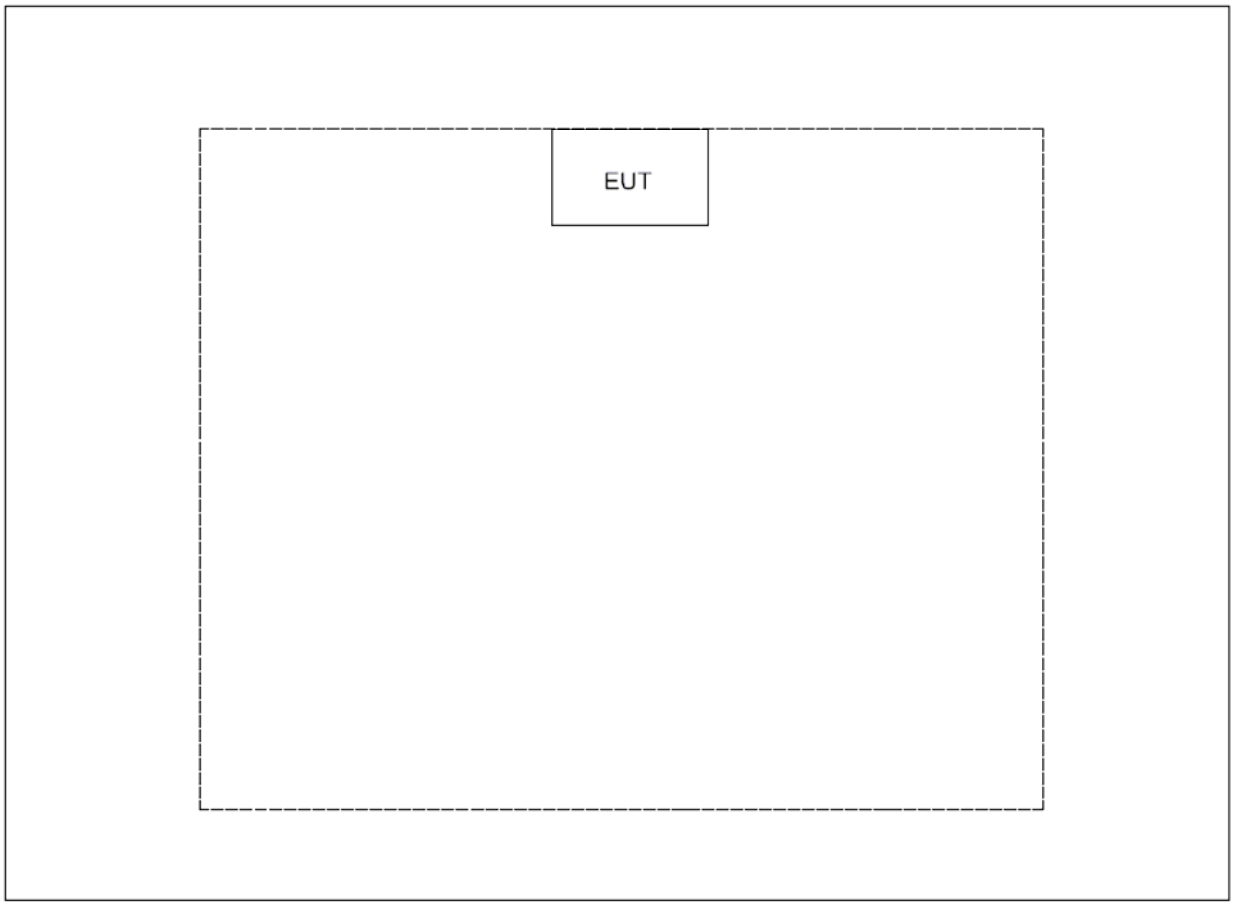
1. Regards to the frequency band operation: the lowest、middle and highest frequency of channel were selected to perform the test, then shown on this report.
2. This device is a composite device in accordance with Part 15 Subpart B regulations. The function for the receiver was measured and made a test report that the report number is 073S017-HP-US-P01V02, certified under Declaration of Conformity.

1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	N/A	N/A	N/A	N/A	N/A

1.4. Configuration of Tested System

Connection Diagram


Signal Cable Type		Signal cable Description
N/A	N/A	N/A

1.5. EUT Exercise Software

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

2. Technical Test

2.1. Summary of Test Result

☒ No deviations from the test standards
☐ Deviations from the test standards as below description:

For CDMA 850 (FCC Part 22H & Part 2)

Emission			
Performed Item	Normative References	Test Performed	Deviation
Peak Output Power	FCC Part 22.913(a)(2) and Part 2.1046	Yes	No
Modulation Characteristic	FCC Part 2.1047(d)	Yes	No
Occupied Bandwidth	FCC Part 2.1049	Yes	No
Spurious Emission At Antenna Terminals (+/- 1MHz)	FCC Part 22.917(a) and Part 2.1049	Yes	No
Spurious Emission	FCC Part 22.917(b) and Part 2.1051, 2.1053	Yes	No
Frequency Stability Under Temperature & Voltage Variations	FCC Part 22.355 and 2.1055	Yes	No

2.2. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	23
Humidity (%RH)	25-75	52
Barometric pressure (mbar)	860-1060	950-1000

3. Peak Output Power

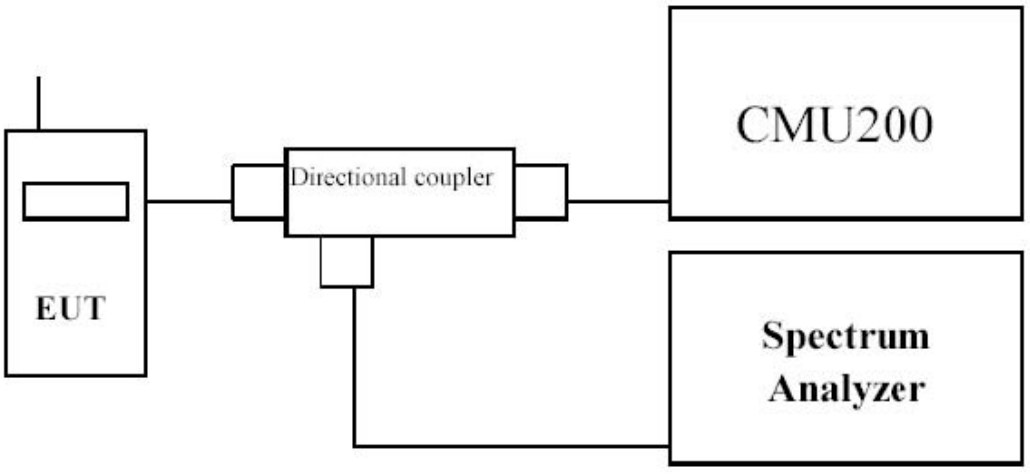
3.1. Test Equipment

Peak Output Power / AC-3

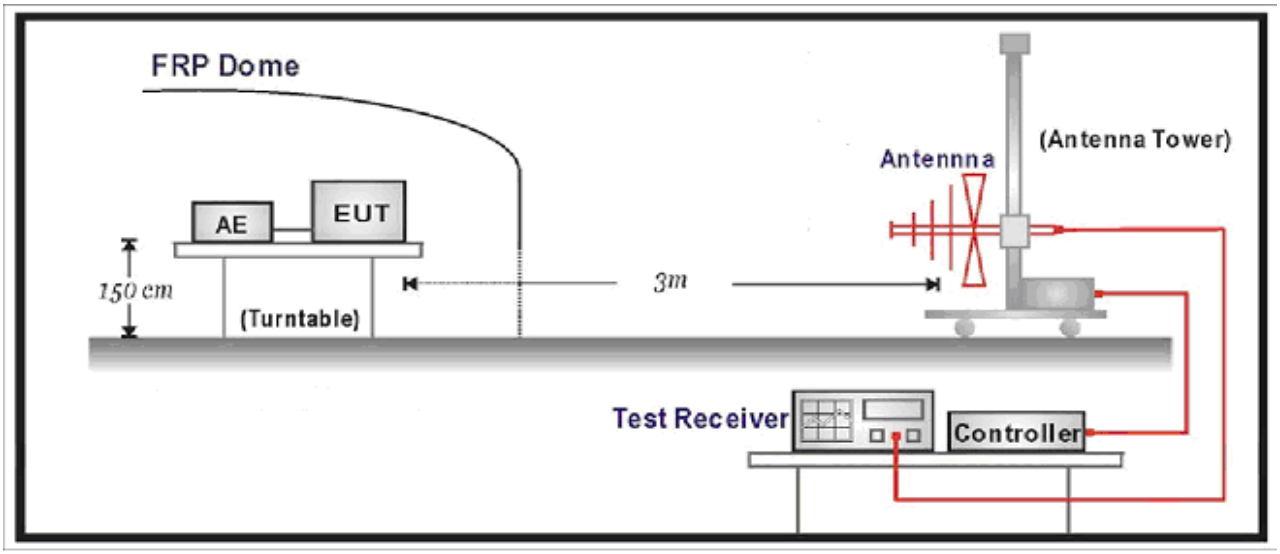
Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2006/03/23
Radio Communication Tester	R&S	CMU 200	106388	2006/11/22
Directional Couple	Agilent	87300C	MY44300299	2007/02/08
Directional Couple	Agilent	778D	20160	2007/02/23
PSG Analog S.G.	Agilent	E8257D	MY44321116	2006/11/23
Preamplifier	Agilent	87405B	MY39500331	2006/11/25
RF Preamplifier	QuieTek	QTK-AMP-180	0001	2006/03/21
Bilog Type Antenna	Schaffner	CBL6141A	4278	2006/11/25
Half Wave Tuned Dipole Antenna	COM-POWER	AD-100	40137	2006/09/20
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2006/11/25
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	499	2006/11/25
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2005/11/25
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	295	2005/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	2006/03/30

3.2. Test Setup

Conducted Power Measurement:



Radiated Power Measurement:



3.3. Limit

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

3.4. Test Procedure

Conducted Power Measurement:

a) Place the EUT on a bench and set it in transmitting mode.
b) Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMU200 by a Directional Couple.
c) EUT Communicate with CMU200, then select a channel for testing.
d) 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.

3.5. Uncertainty

The measurement uncertainty is defined as for Conducted Power Measurement ± 1.2 dB, for Radiated Power Measurement ± 3.2 dB

3.6. Test Result

Product	800MHz CDMA Mobile Phone		
Test Item	Peak Output Power		
Test Mode	Mode 1: CDMA 850		
Date of Test	2007/03/18	Test Site	AC-3

Channel No.	Frequency (MHz)	Modulation	Conducted Peak Output Power Measurement (dBm)	Radiated Peak Output Power Measurement (dBm)	Limit (dBm)	Result
1014	824.73	CDMA	26.87	23.22	38.50	Pass
380	836.40	CDMA	26.62	24.79	38.50	Pass
773	848.19	CDMA	26.54	23.69	38.50	Pass

Figure Channel 1014 (824.73MHz)

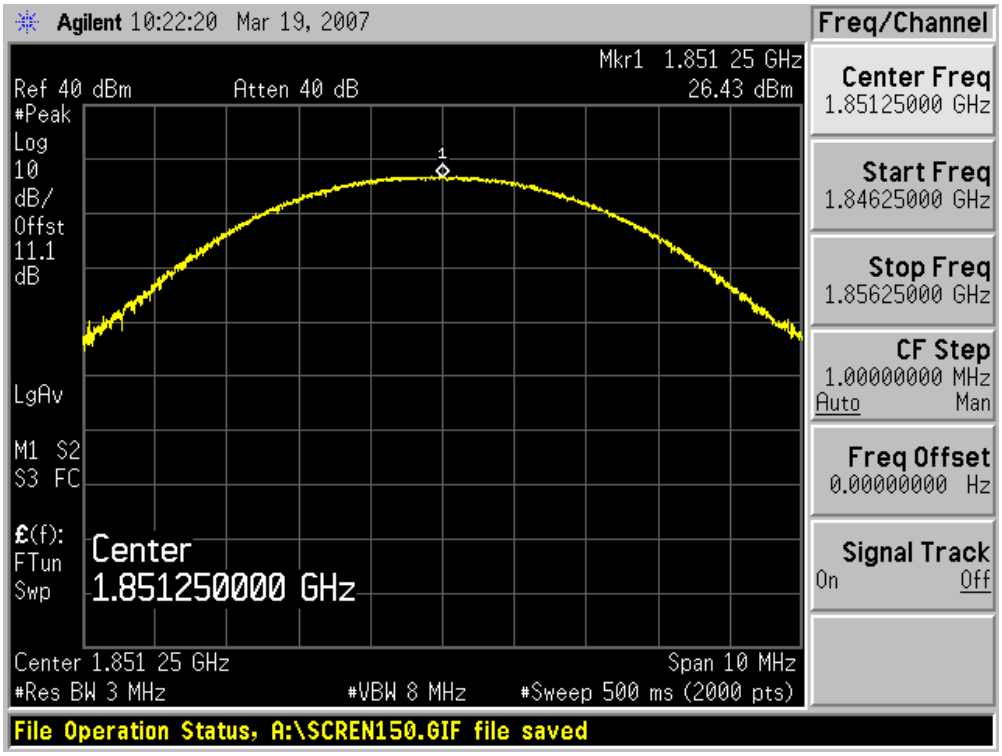


Figure Channel 380 (836.40MHz)

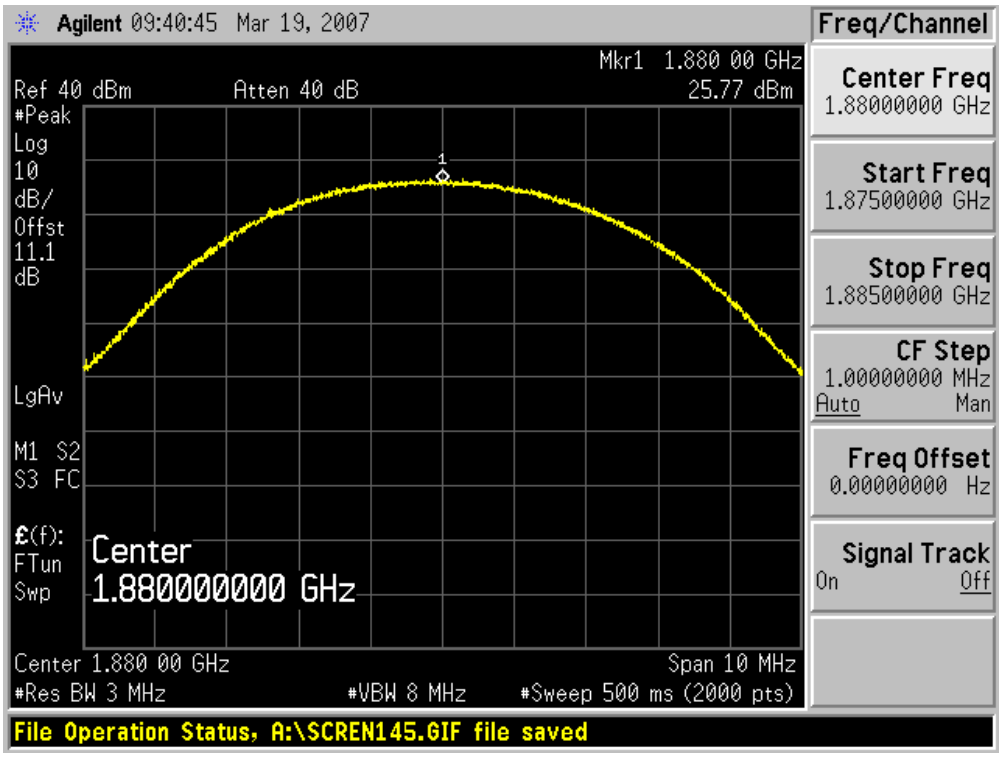
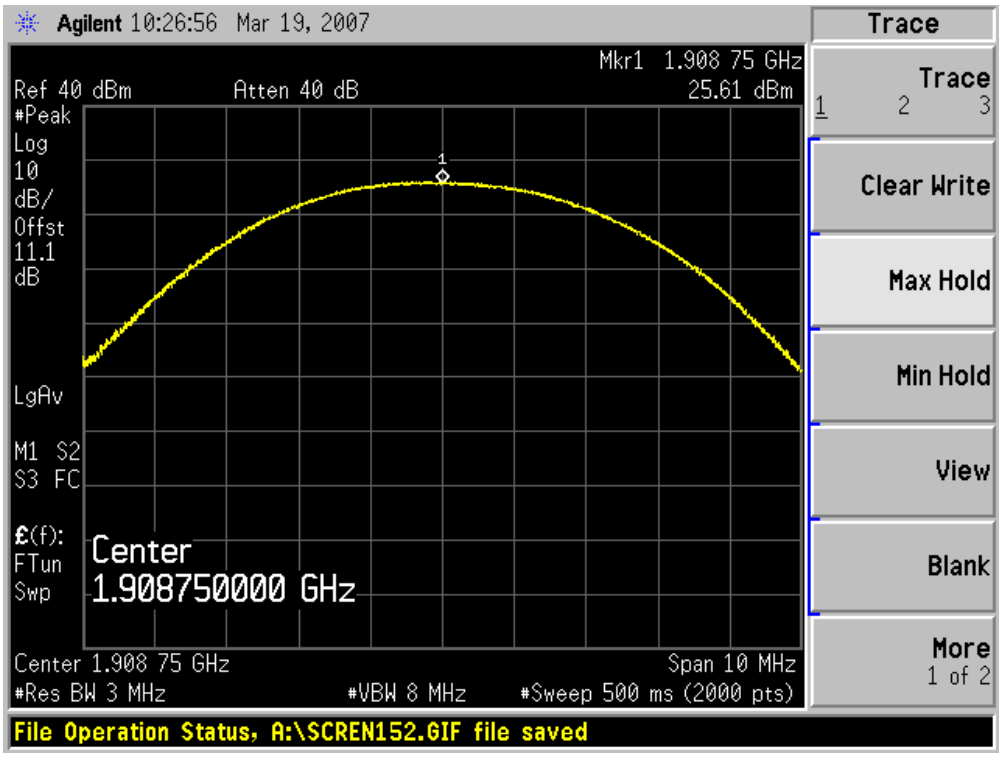


Figure Channel 773 (848.19MHz)



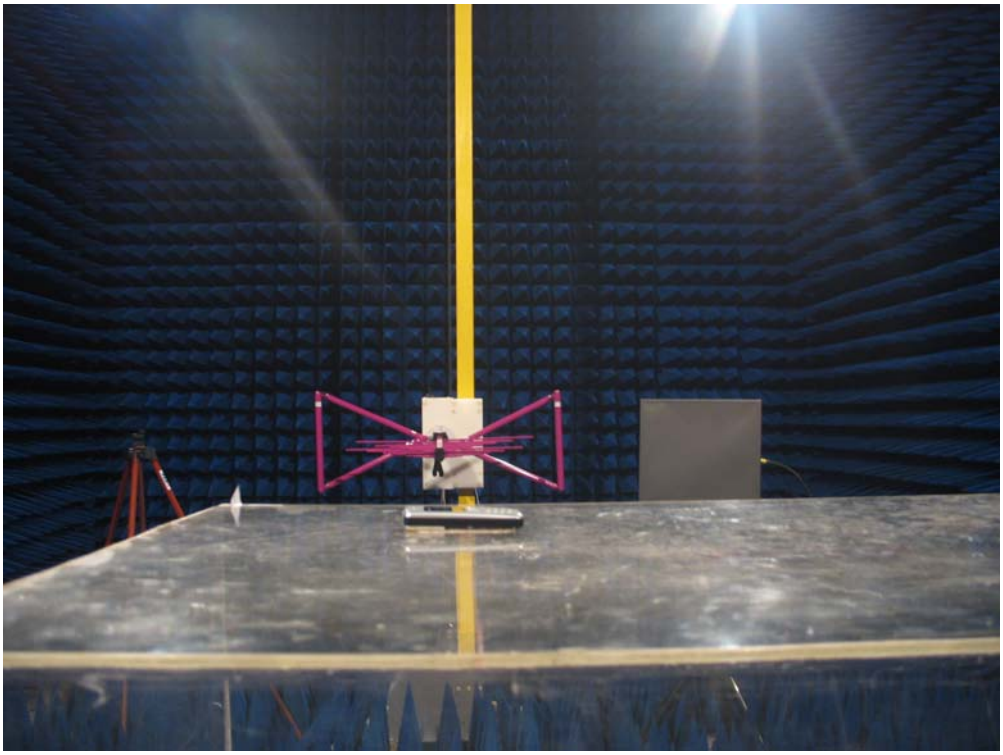
Radiated Measurement

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 1014 (824.73MHz)								
824.73	-11.76	H	26.24	3.09	0.07	23.22	38.50	-15.28
824.73	-20.21	V	18.98	3.09	0.07	16.03	38.50	-22.47
Middle Channel 380 (836.40MHz)								
836.40	-10.74	H	27.71	3.02	0.10	24.79	38.50	-13.71
836.40	-19.06	V	20.50	3.02	0.10	17.58	38.50	-20.92
High Channel 773 (848.19MHz)								
848.19	-11.29	H	26.58	3.11	0.22	23.69	38.50	-14.81
848.19	-20.10	V	19.96	3.11	0.22	17.07	38.50	-21.43

3.7. Test Photograph

Test Mode: Mode 1: CDMA 850

Description: Radiated Peak Output Power Test Setup



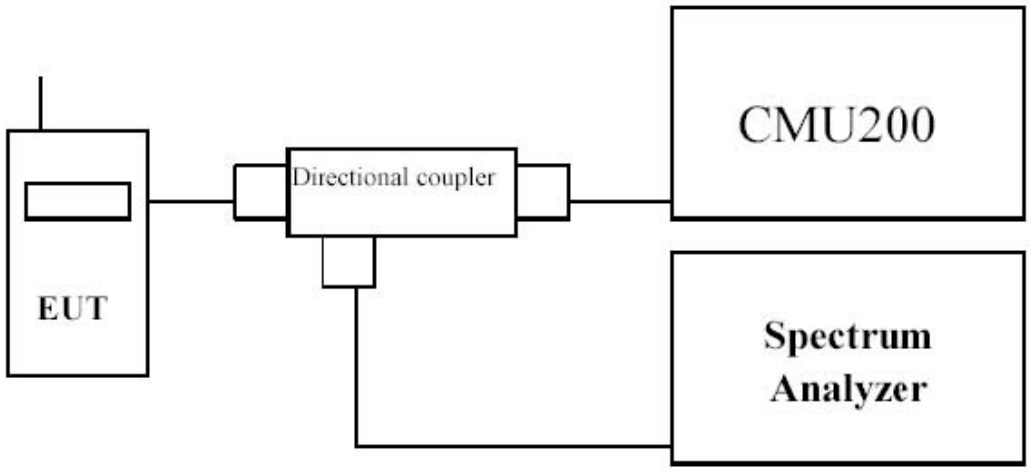
4. Modulation Characteristic

4.1. Test Equipment

Modulation Characteristic / AC-3

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2006/03/23
Radio Communication Tester	R&S	CMU 200	106388	2006/11/22
Directional Couple	Agilent	87300C	MY44300299	2007/02/08
Directional Couple	Agilent	778D	20160	2007/02/23
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	2006/03/30

4.2. Test Setup



4.3. Limit

N/A

4.4. Test Procedure

GMSK is a form of binary signaling schemes which represent digital states as a shift between discrete sinusoidal frequencies called Frequency Shift Keying (FSK). Minimum Shift Keying (MSK) is continuous phase FSK with the smallest possible modulation index h. Modulation index is defined as: h = 2*F*Tb
where F = Peak frequency deviation in Hz and Tb = Bit period in seconds

Two discrete frequencies, representing two distinct digital states, with equal phases at switch time t = 0 requires a minimum value of h = 0.5. The Gaussian part of GMSK describes the fact that the digital pulses are filtered in the time domain. This results in bits which are sinusoidal rather than square. The effective spectrum is then compressed with the average carrier frequency in the center of the passband. This is a great advantage because of the significantly reduced bandwidth. GMSK is utilized because of these bandwidth conservation properties.

The bandwidth for GSM is a 60 MHz up-link at 1850-1910 MHz and down-link at 1930-1990 MHz. The 65 MHz is divided into 299 channels, each of which is 200 kHz wide. Slight spectral spillage is allowed into neighboring channels (which is minimized by GMSK). This separated transmit/receive frequencies scheme under GSM enables easier duplex filtering.

Within the bandwidth, individual channels are subdivided into multiframes (made of 26 frames), frames (made of 8 time slots), and time slots (made of 8 fields). The time slots are 0.57 ms long allowing 156.25 bits of information including overhead.

The modulation used in GPRS is the same used in GSM. A GSM channel contains eight timeslots, each timeslot is dedicated to one circuit switched call. For GPRS the timeslots are assigned on an as needed basis, and more than one timeslot can be assigned for a particular transmission depending on the network and the device.

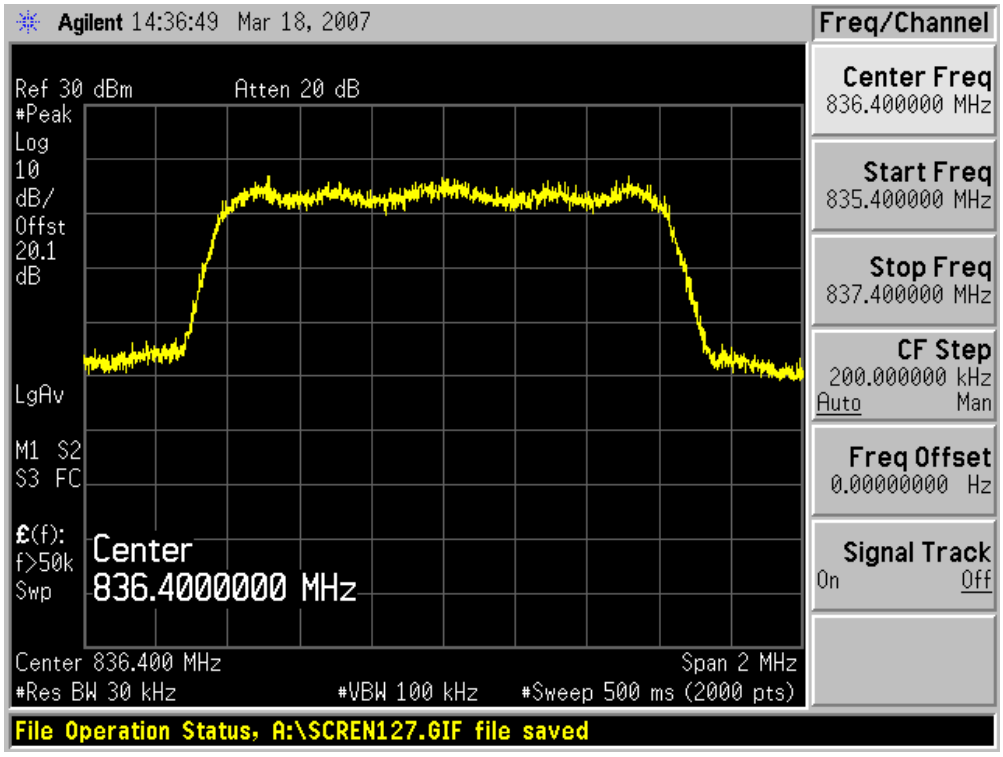
4.5. Uncertainty

The measurement uncertainty is defined as 0.1%

4.6. Test Result

Product	800MHz CDMA Mobile Phone		
Test Item	Modulation Characteristic		
Test Mode	Mode 1: CDMA 850		
Date of Test	2007/03/18	Test Site	AC-3

Figure (CDMA 850)



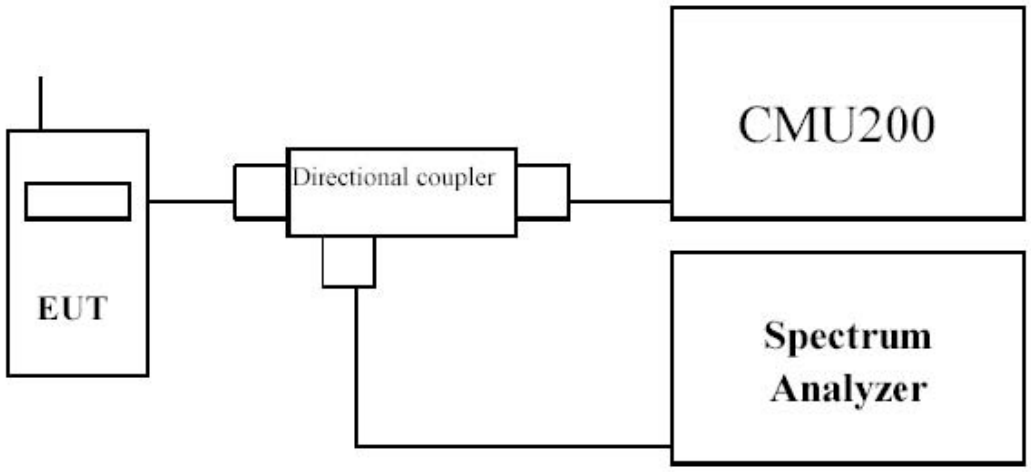
5. Occupied Bandwidth

5.1. Test Equipment

Occupied Bandwidth / AC-3

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2006/03/23
Radio Communication Tester	R&S	CMU 200	106388	2006/11/22
Directional Couple	Agilent	87300C	MY44300299	2007/02/08
Directional Couple	Agilent	778D	20160	2007/02/23
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	2006/03/30

5.2. Test Setup



5.3. Limit

N/A

5.4. Test Procedure

Using a resolution bandwidth of 3kHz and a video bandwidth of 10kHz, the -26dBc points were established and the emission bandwidth determined. The plots below show the resultant display from the Spectrum Analyzer.

5.5. Uncertainty

The measurement uncertainty is defined as ± 10 Hz

5.6. Test Result

Product	800MHz CDMA Mobile Phone		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: CDMA 850		
Date of Test	2007/03/18	Test Site	AC-3

Channel No.	Frequency (MHz)	Measurement of -26dB Bandwidth (kHz)
1014	824.73	1408
380	836.40	1408
773	848.19	1398

Figure Channel 1014 (824.73MHz)

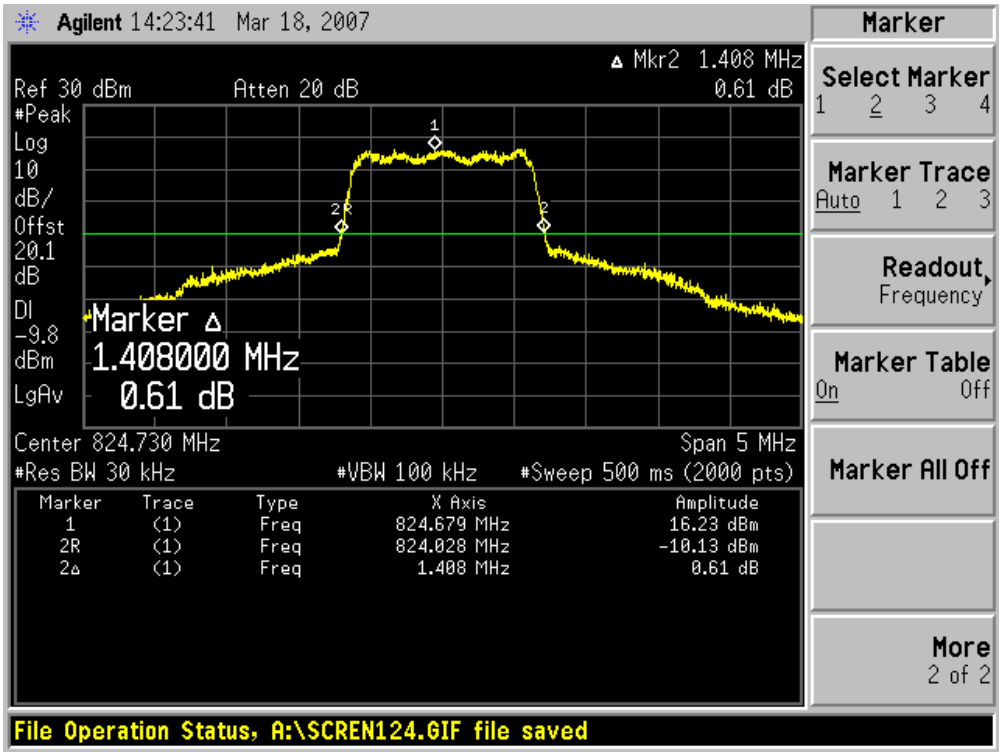


Figure Channel 380 (836.40MHz)

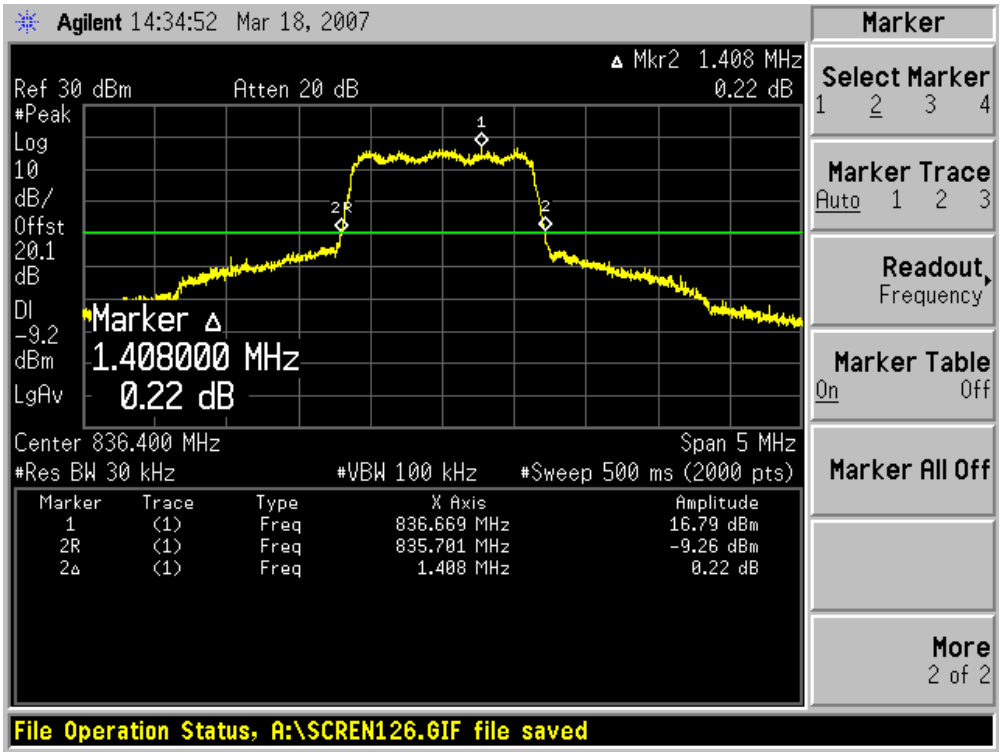
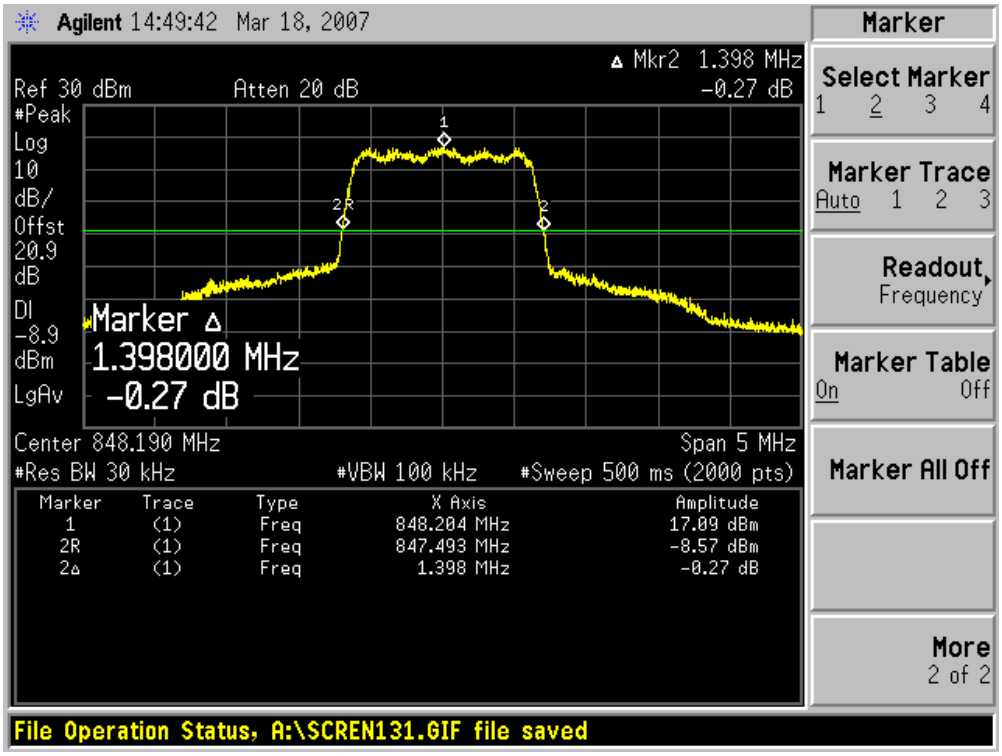


Figure Channel 773 (848.19MHz)



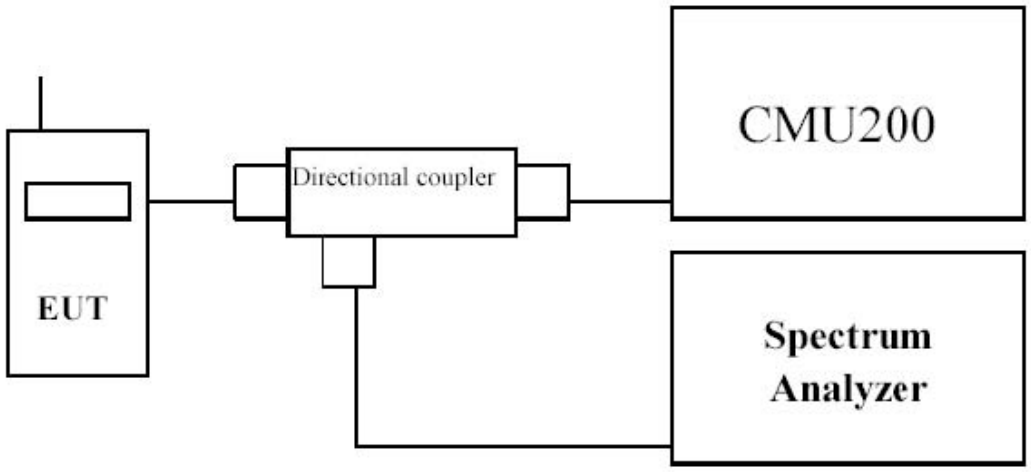
6. Spurious Emission At Antenna Terminals (+/- 1MHz)

6.1. Test Equipment

Spurious Emission At Antenna Terminals (+/- 1MHz) / AC-3

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2006/03/23
Radio Communication Tester	R&S	CMU 200	106388	2006/11/22
Directional Couple	Agilent	87300C	MY44300299	2007/02/08
Directional Couple	Agilent	778D	20160	2007/02/23
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	2006/03/30

6.2. Test Setup



6.3. 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 + 10log(P) dB.

6.4. 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.

6.5. Uncertainty

The measurement uncertainty is defined as ± 1.2 dB.

6.6. Test Result

Product	800MHz CDMA Mobile Phone		
Test Item	Spurious Emission At Antenna Terminals (+/- 1MHz)		
Test Mode	Mode 1: CDMA 850		
Date of Test	2007/03/18	Test Site	AC-3

Figure Channel 1014 (824.73MHz)

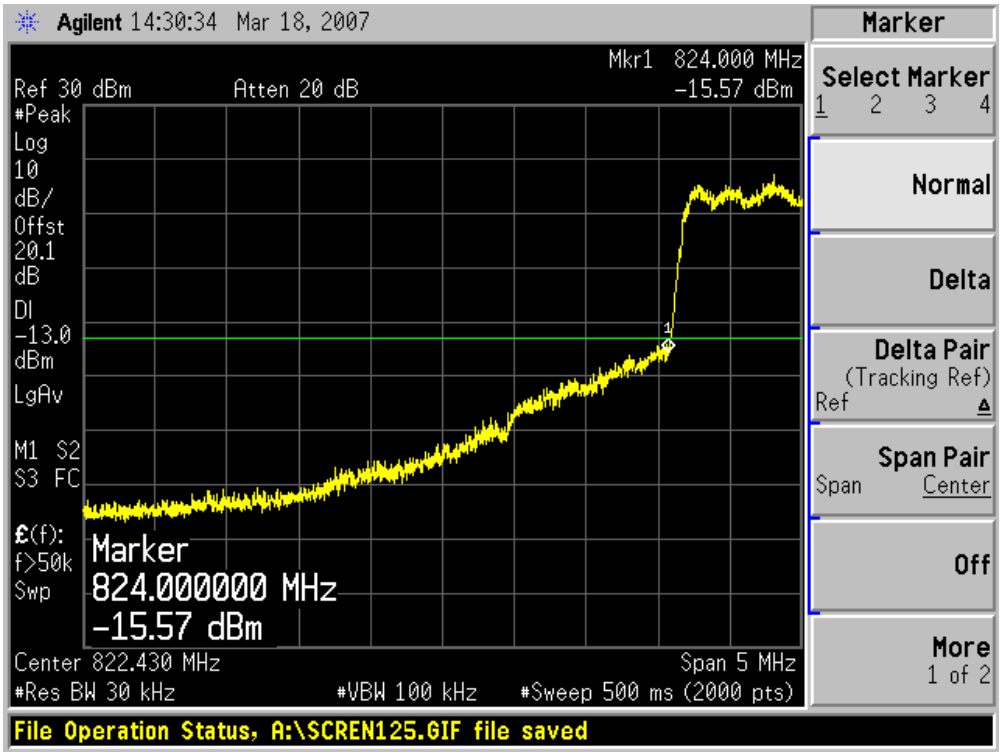
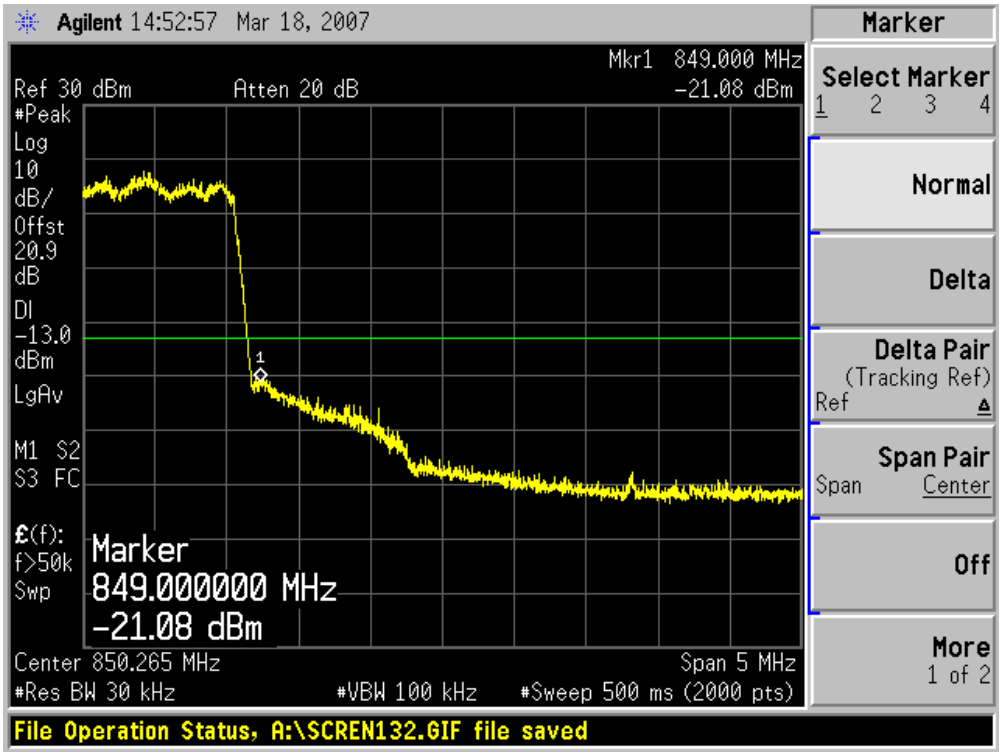


Figure Channel 773 (848.19MHz)



7. Spurious Emission

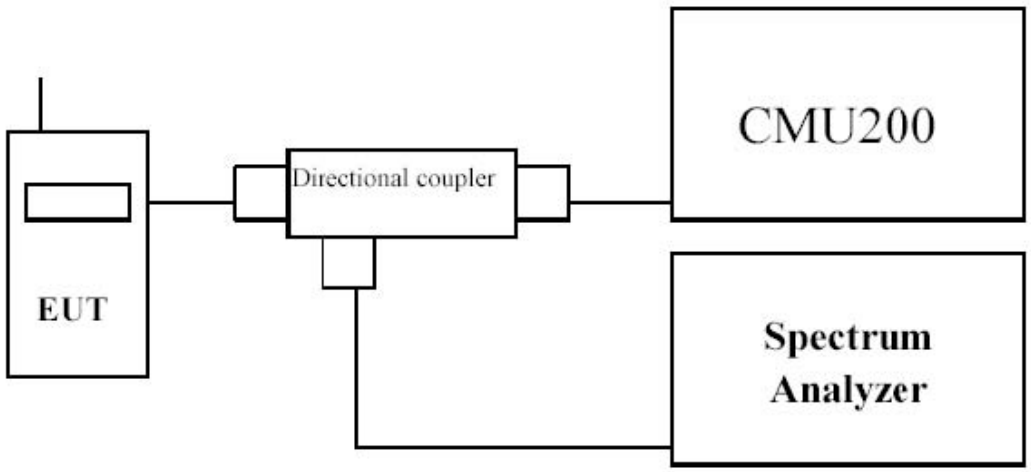
7.1. Test Equipment

Spurious Emission / AC-3

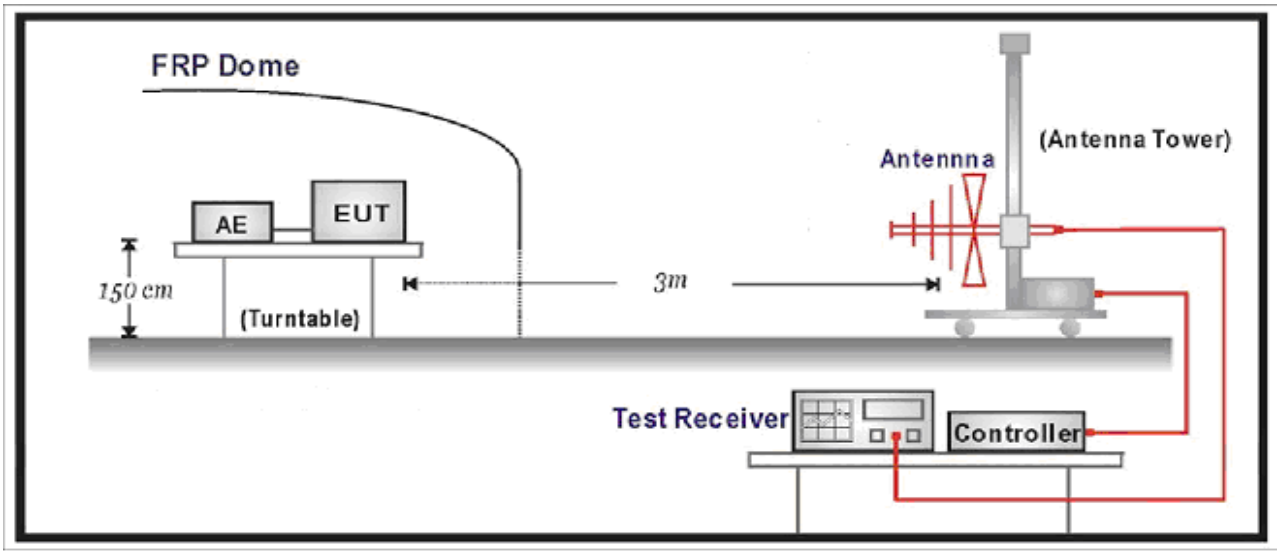
Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2006/03/23
Radio Communication Tester	R&S	CMU 200	106388	2006/11/22
Directional Couple	Agilent	87300C	MY44300299	2007/02/08
Directional Couple	Agilent	778D	20160	2007/02/23
PSG Analog S.G.	Agilent	E8257D	MY44321116	2006/11/23
Preamplifier	Agilent	87405B	MY39500331	2006/11/25
RF Preamplifier	QuieTek	QTK-AMP-180	0001	2006/03/21
Bilog Type Antenna	Schaffner	CBL6141A	4278	2006/11/25
Half Wave Tuned Dipole Antenna	COM-POWER	AD-100	40137	2006/09/20
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2006/11/25
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	499	2006/11/25
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2006/11/25
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	295	2006/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	2006/03/30

7.2. Test Setup

Conducted Spurious Measurement:



Radiated Spurious Measurement:



7.3. 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 + 10log(P) dB.

7.4. Test Procedure

Conducted Spurious Measurement:

a) Place the EUT on a bench and set it in transmitting mode.
b) Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMU200 by a Directional Couple.
c) EUT Communicate with CMU200, then select a channel for testing.
d) Add a correction factor to the display of spectrum, and then test.
e) The resolution bandwidth of the spectrum analyzer was set at 1 MHz, 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 frequency range was checked up to 10^{th} harmonic.

7.5. Uncertainty

The measurement uncertainty is defined as for Conducted Power Measurement ± 1.2 dB, for Radiated Power Measurement ± 3.2 dB

7.6. Test Result

Product	800MHz CDMA Mobile Phone		
Test Item	Spurious Emission		
Test Mode	Mode 1: CDMA 850		
Date of Test	2007/03/18	Test Site	AC-3

Figure Channel 1014 (824.73MHz)

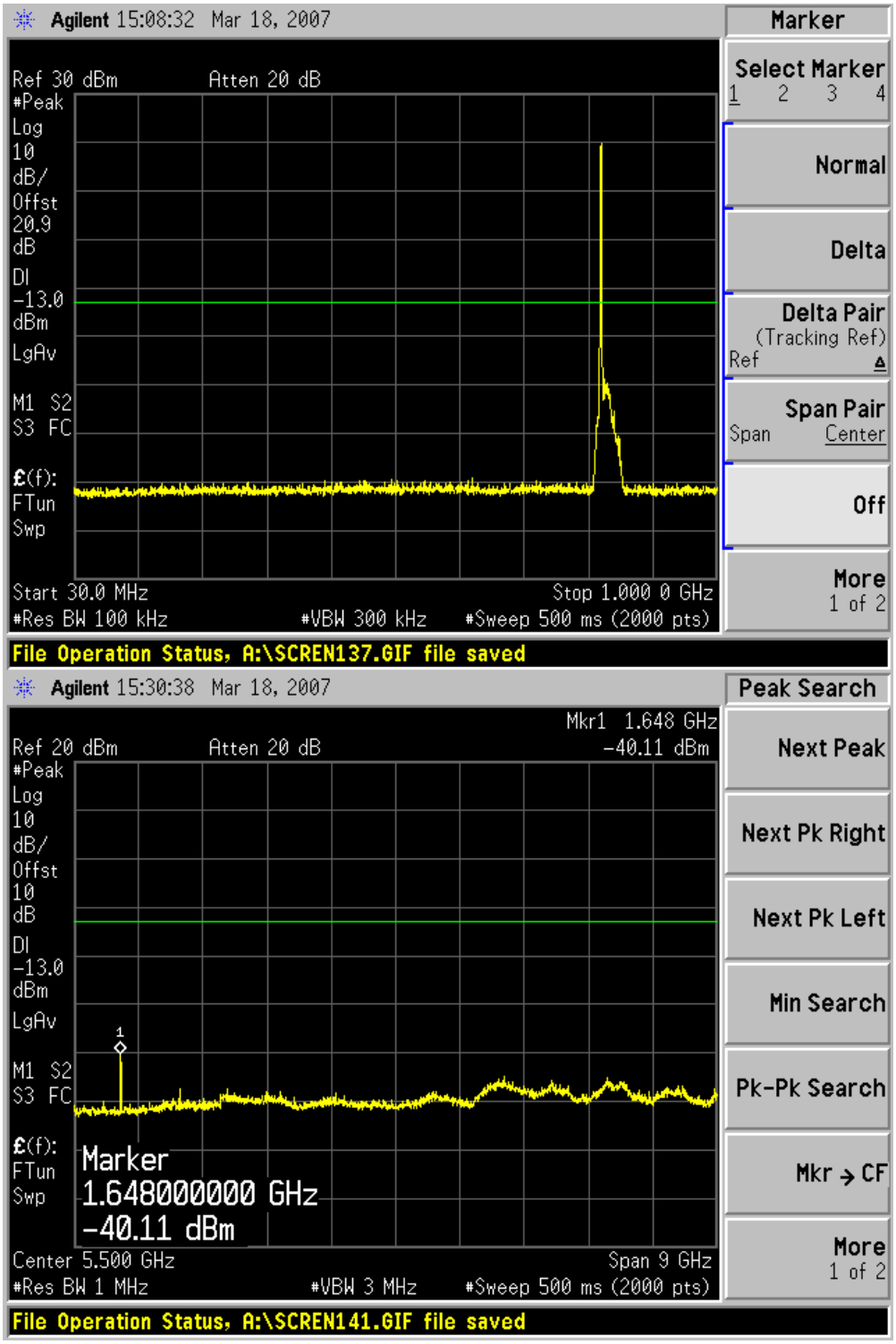
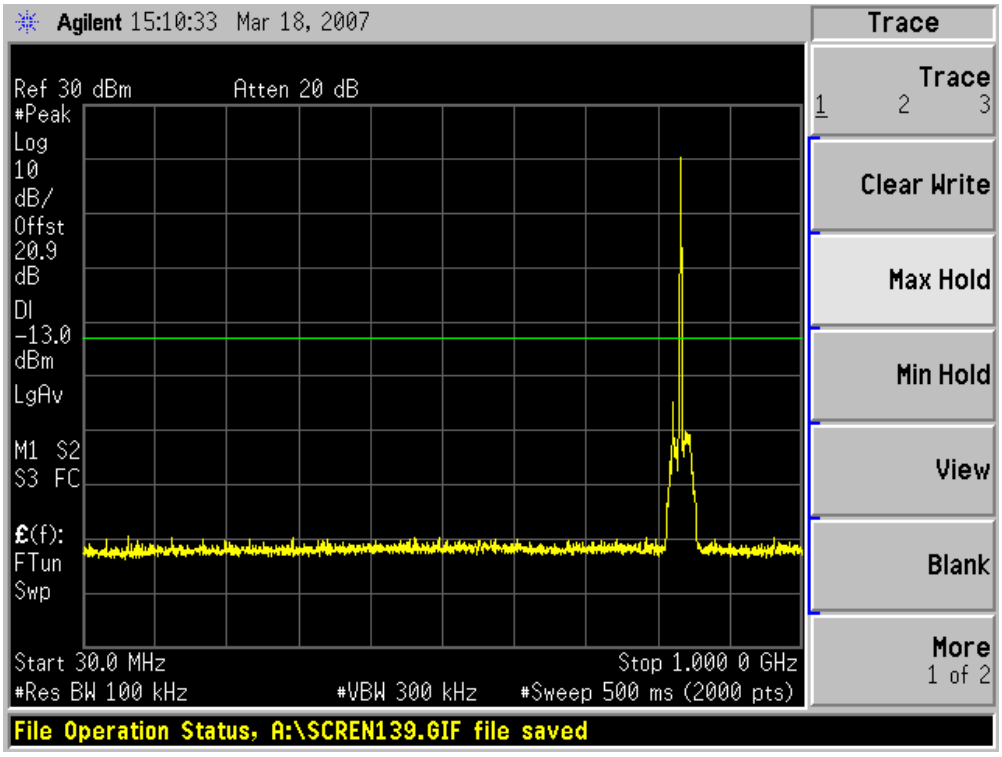


Figure Channel 380 (836.40MHz)



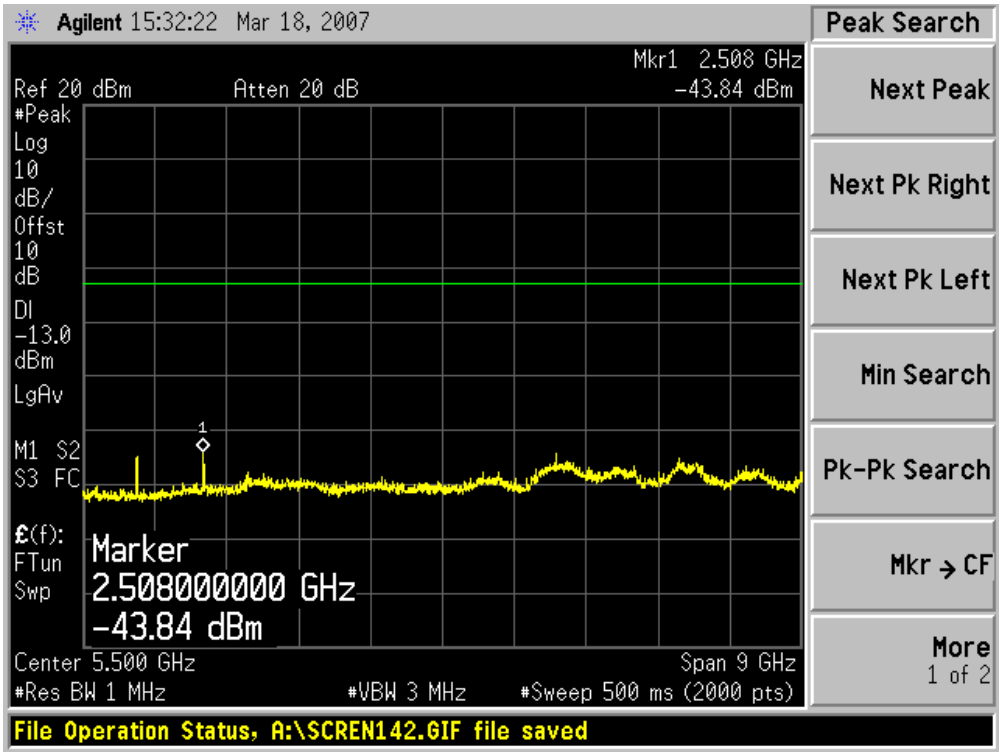
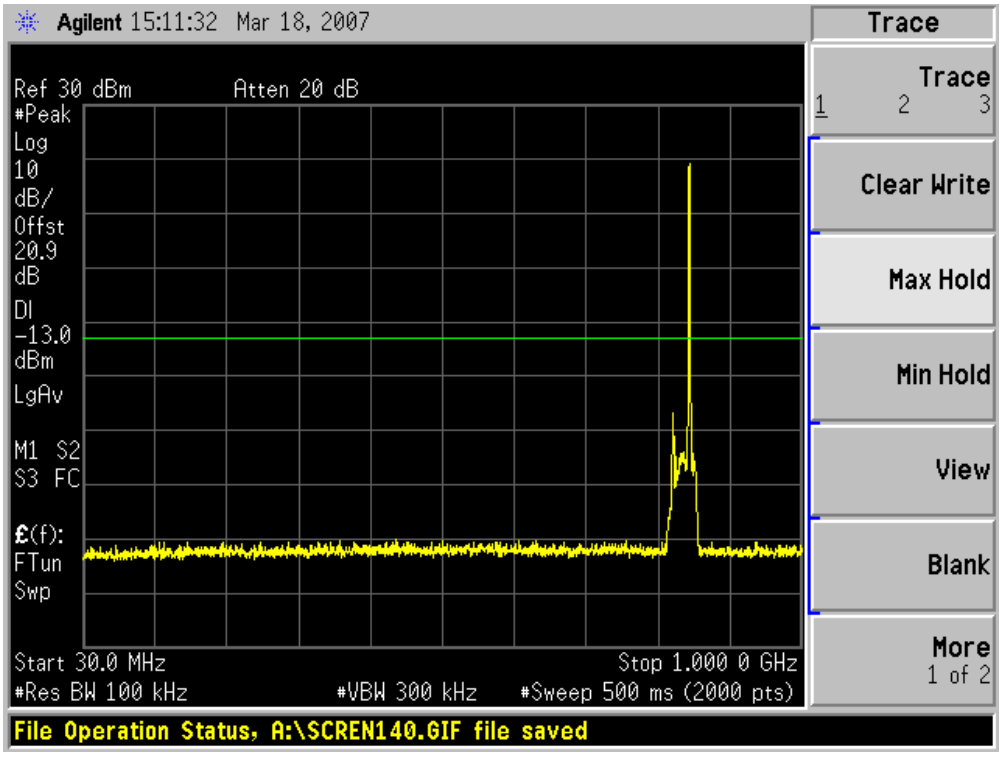
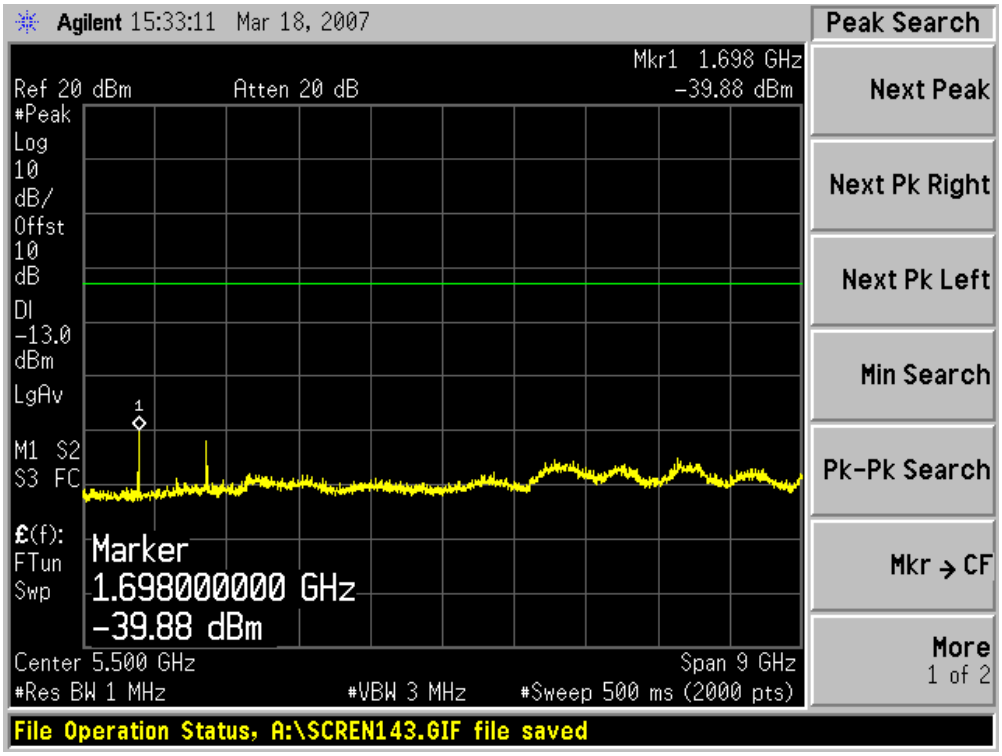


Figure Channel 773 (848.19MHz)



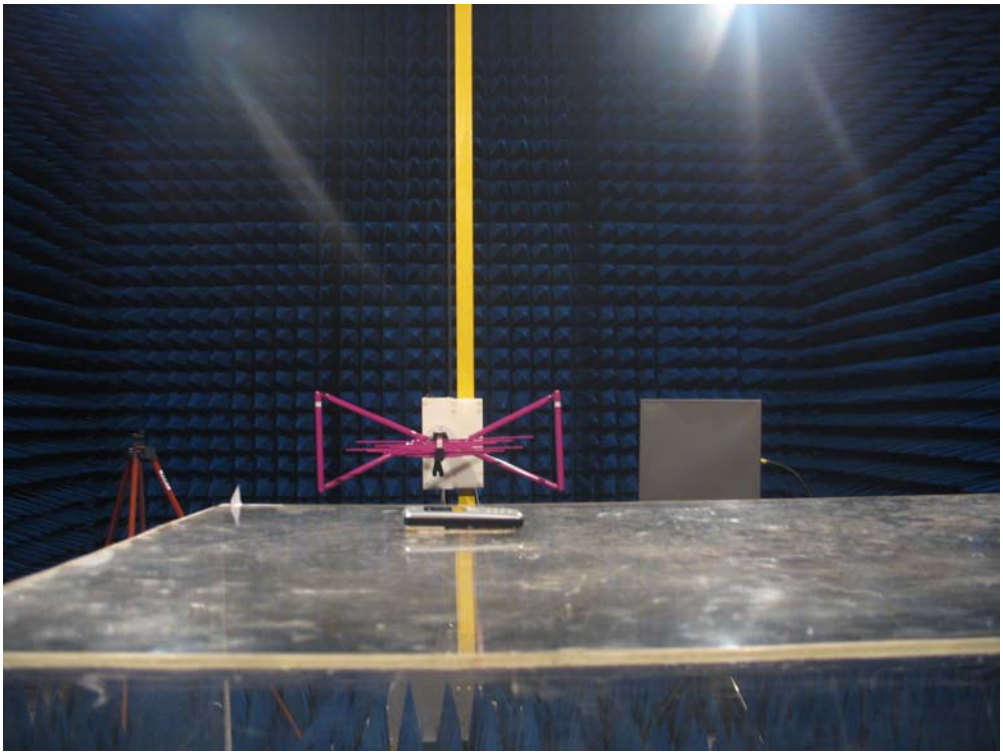


Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 1014 (824.73MHz)								
1645.000	-44.244	V	-43.828	3.619	9.753	-37.694	-13.000	-24.694
1645.000	-55.214	H	-56.039	3.619	9.753	-49.905	-13.000	-36.905
3295.000	-65.698	H	-60.578	5.230	12.750	-53.058	-13.000	-40.058
5215.000	-69.087	H	-56.921	6.838	12.870	-50.889	-13.000	-37.889
Middle Channel 380 (836.40MHz)								
1675.000	-54.782	V	-54.236	3.654	9.955	-47.935	-13.000	-34.935
1675.000	-60.803	H	-60.677	3.654	9.955	-54.376	-13.000	-41.376
3340.000	-66.975	H	-62.077	5.266	12.849	-54.494	-13.000	-41.494
High Channel 773 (848.19MHz)								
1690.000	-50.493	V	-49.882	3.672	10.061	-43.493	-13.000	-30.493
3400.000	-66.130	V	-61.385	5.322	12.943	-53.764	-13.000	-40.764
1690.000	-57.428	H	-57.231	3.672	10.061	-50.842	-13.000	-37.842
3400.000	-66.652	H	-62.009	5.322	12.943	-54.388	-13.000	-41.388
5365.000	-70.426	H	-57.770	7.103	13.085	-51.788	-13.000	-38.788

7.7. Test Photograph

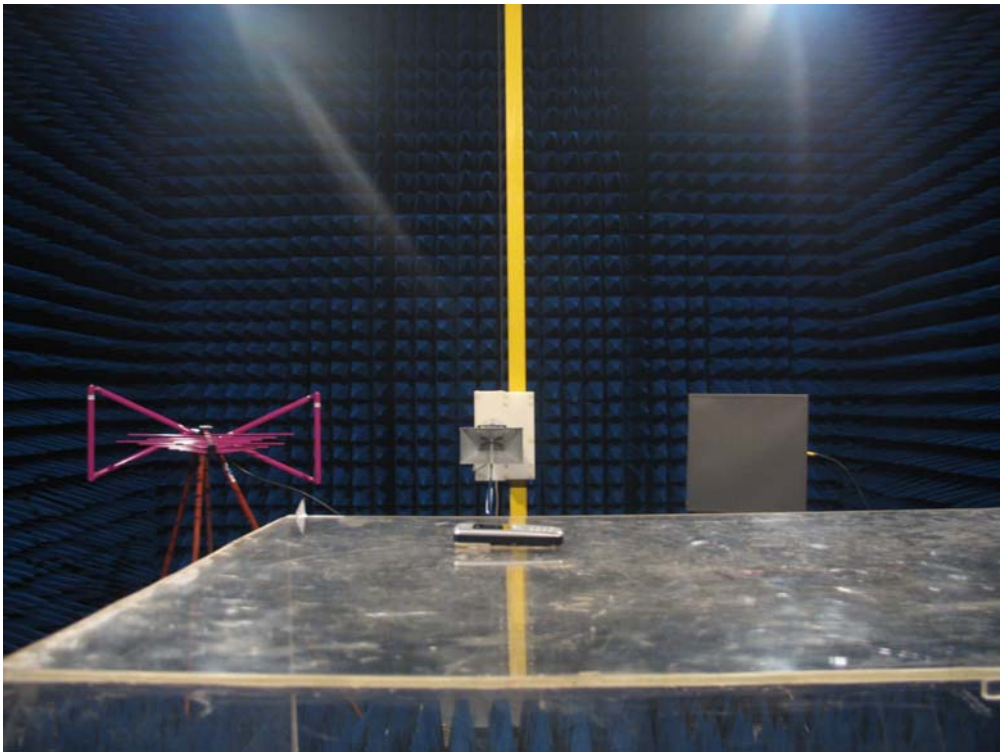
Test Mode: Mode 1: CDMA 850

Description: Radiated Spurious Emission Test Setup for Under 1 GHz



Test Mode: Mode 1: CDMA 850

Description: Radiated Spurious Emission Test Setup for Above 1 GHz



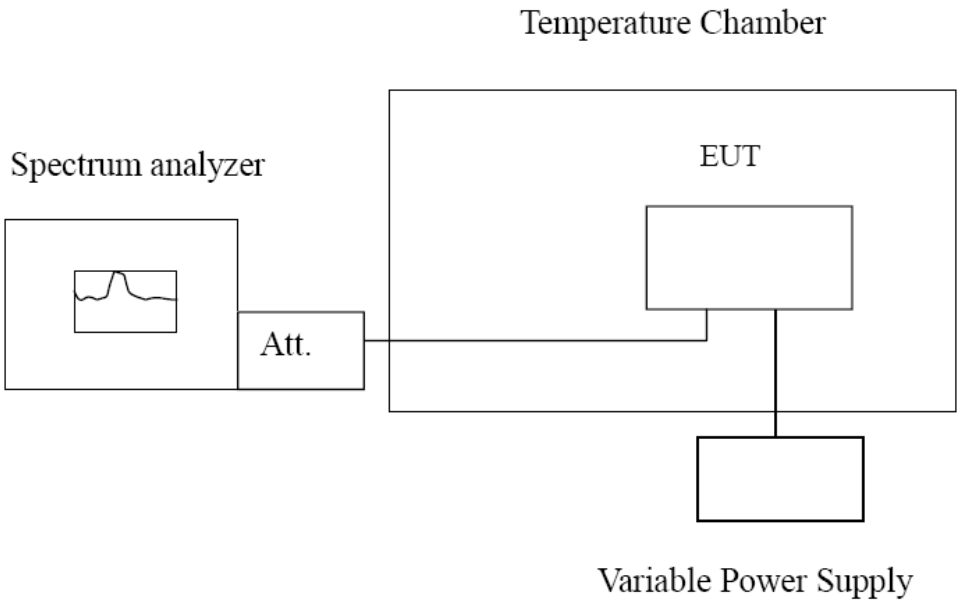
8. Frequency Stability Under Temperature & Voltage Variations

8.1. Test Equipment

Spurious Emission At Antenna Terminals (+/- 1MHz) / AC-3

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Radio Communication Tester	R&S	CMU 200	106388	2006/11/22
Directional Couple	Agilent	87300C	MY44300299	2007/02/08
Directional Couple	Agilent	778D	20160	2007/02/23
AC Power Supply	IDRC	CF-500TP	979422	2006/03/15
DC Power Supply	IDRC	CD-035-020PR	977272	2006/02/17
Programmable Temperature & Humidity Chamber	Gaoyu	TH-1P-B	WIT-05121302	2006/01/24
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	2006/03/30

8.2. Test Setup



8.3. Limit

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

Limit	< ± 2.5 ppm

8.4. Test Procedure

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℃ operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30℃. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10℃ increased per stage until the highest temperature of +50℃ reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20℃. 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 (±15%) and endpoint, record the maximum frequency change.

8.5. Uncertainty

The measurement uncertainty is defined as ± 10 Hz.

8.6. Test Result

Product	800MHz CDMA Mobile Phone		
Test Item	Frequency Stability Under Temperature & Voltage Variations		
Test Mode	Mode 1: GPRS 850		
Date of Test	2007/03/18	Test Site	AC-3

Frequency Stability Under Temperature

Temperature Interval (℃)	Test Frequency (MHz)	Deviation (Hz)	Limit (Hz)
-30	836.40	33	± 2091
-20	836.40	26	± 2091
-10	836.40	19	± 2091
0	836.40	24	± 2091
10	836.40	28	± 2091
20	836.40	20	± 2091
30	836.40	22	± 2091
40	836.40	26	± 2091
50	836.40	20	± 2091

Frequency Stability Under Voltage

DC Voltage (V)	Test Frequency (MHz)	Deviation (Hz)	Limit (KHz)
3.14	836.40	26	± 2091
3.70	836.40	15	± 2091
4.25	836.40	31	± 2091