



683-3, Yubang-Dong, Yongin-Si, Kyunggi-Do, Korea. 449-080  
 Tel: +82-31-321-2664 Fax: +82-31-321-1664  
<http://www.digitalemc.com>

**CERTIFICATE OF COMPLIANCE**  
**FCC Part 24 Certification**

Dates of Tests: April 28 ~ May 4, 2006  
 Test Report S/N:DR50110605D  
 Test Site : DIGITAL EMC CO., LTD.

Model No.

**T6QGM608**

APPLICANT

**KC Mobile Co., Ltd.**

|                              |  |
|------------------------------|--|
| <b>Classification:</b>       | Licensed Portable Transmitter Held to Ear (PCE)                |
| <b>FCC Rule Part(s):</b>     | <b>§24(E), §2</b>  |
| <b>EUT Type:</b>             | Tri-band GSM/GPRS handset                                      |
| <b>Model name:</b>           | <b>GM608</b>   |
| <b>Serial number:</b>        | Identical prototype  |
| <b>TX Frequency Range:</b>   | <b>1850.2 ~ 1909.8 MHz</b>                                     |
| <b>RX Frequency Range:</b>   | <b>1930.2 ~ 1989.8 MHz</b>                                     |
| <b>Max. RF Output Power:</b> | <b>0.492 W EIRP GSM1900 (26.92dBm)</b>                         |
| <b>Max. SAR Measurement:</b> | <b>1.340W/kg GSM1900 Head SAR / 0.162W/kg GSM1900 Body SAR</b> |
| <b>Date of Issue:</b>        | <b>May 8, 2006</b>   |

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# MEASUREMENT REPORT

## 1. Scope

Measurement and determination of electromagnetic emissions (EME) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission.

## §2.1033 General Information

**Applicant: KC Mobile Co., Ltd.**

**Address: 3F., Seochoworld Officetel, 1355-3, SeoCho-Dong, SeoCho-Gu, Seoul 137-862, Korea**

**Attention: Kil-Joo Lee (Hardware Manager)**

- FCC ID: T6QGM608
- Quantity: The mass product
- Tx Freq. Range: 1850.2 ~ 1909.8 MHz
- Rx Freq. Range: 1930.2 ~ 1989.8 MHz
- Max. Power Rating: 0.492 W EIRP GSM1900 (26.92dBm)
- FCC Classification(s): Licensed Portable Transmitter Held to Ear (PCE)
- Equipment (EUT) Type: Tri-band GSM/GPRS handset
- Modulation(s): GMSK
- Frequency Tolerance:  $\pm 0.00025\%$  (2.5ppm)
- FCC Rule Part(s): §24(E), §2
- Dates of Tests: Dates of Tests: April 28 ~ May 4, 2006
- Place of Tests: DIGITAL EMC
- Test Report S/N: DR50110605D

## 2. Introduction

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This report contains the result of tests performed by:

DIGITAL EMC CO., LTD.

Address : 683-3, Yubang-Dong, Yongin-Si, Kyunggi-Do, Korea. 449-080

<http://www.digitalemc.com> E-mail : demc@unitel.co.kr

Tel: +82-31-321-2664 Fax: +82-31-321-1664

Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the

“General requirements for the competent of calibration and testing laboratory”.

This laboratory is accredited by NVLAP for NVLAP Lab. Code : 200559-0.

**Test operator: engineer**



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|             |              |           |
|-------------|--------------|-----------|
| May 8, 2006 | Won-Jung LEE |           |
| Data        | Name         | Signature |

**Report Reviewed By: manager**



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|             |             |           |
|-------------|-------------|-----------|
| May 8, 2006 | Harvey Sung |           |
| Data        | Name        | Signature |

**Ordering party:**

|               |   |  |
|---------------|---|--|
| Company name  | : | KC Mobile Co., Ltd.  |
| Address       | : | 3F., Seochoworld Officetel, 1355-3, SeoCho-Dong, SeoCho-Gu |
| Zipcode       | : | 137-862  |
| City/town     | : | Seoul  |
| Country       | : | Korea  |
| Date of order | : | April 18, 2006   |

### 3. Test Report

#### 3.1 Summary of tests

| FCC Part<br>Section(s) | Parameter                            | Status<br>(note 1) |
|------------------------|--------------------------------------|--------------------|
| 24.232(b) / 2.1046     | Power Output                         | C                  |
| 24.238 / 2.1049(h)(i)  | Occupied Bandwidth                   | C                  |
| 24.238(b)              | Emission Bandwidth                   | C                  |
| 24.238 / 2.1051        | Emission Limits Transmitter          | C                  |
| 2.1053 (a)             | Field Strength of Spurious Radiation | C                  |
| 2.1055                 | Frequency Stability                  | C                  |

Note 1: C= Complies    NC=Not Complies    NT=Not Tested    NA=Not Applicable

The sample was tested according to the following specification:

FCC Parts §24(E), §2; ANSI C-63.4-2003

## 3.2 Requirements

### 3.2.1 Output Power

FCC ID : **T6QGM608**  
 Specification : 47 CFR 2.1046 (a)  
 Tested Frequency : 1850.2MHz, 1880.0MHz and 1909.8MHz for GSM1900

#### Measurement Procedure:

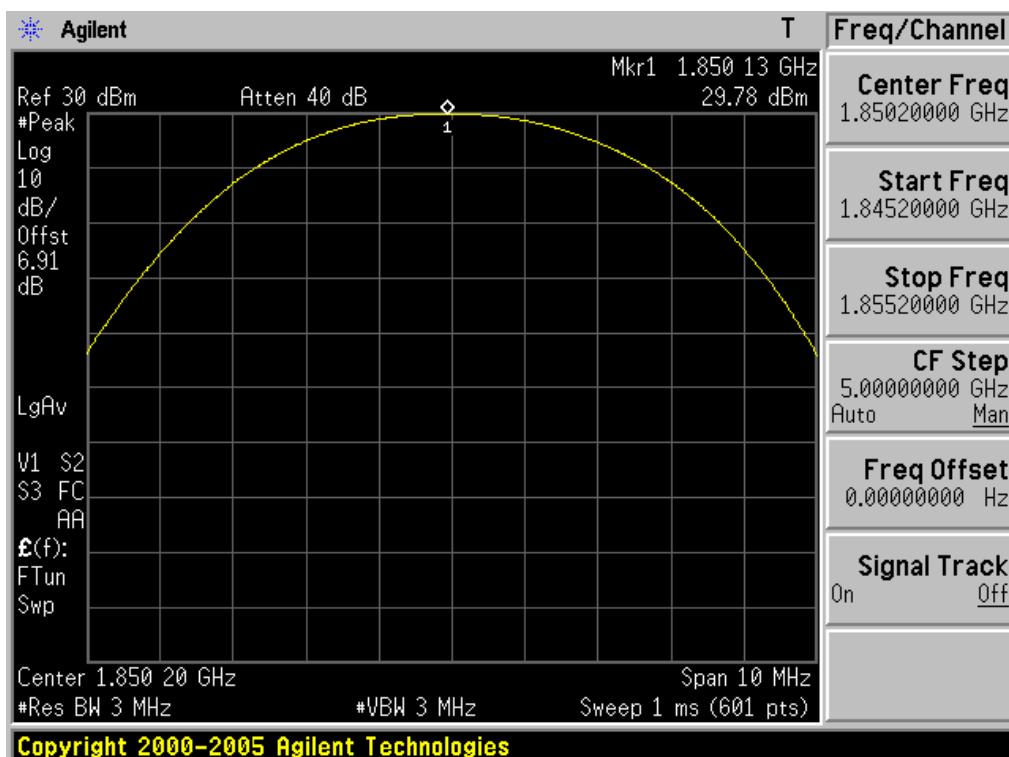
- During the process of testing, the EUT was controlled via Radio Communication tester to ensure max. power transmission and proper modulation.
- Power output was measured at the RF output terminals when the transmitter is adjusted in accordance with communication tester (or the tune-up procedure).

#### Measurement Data:

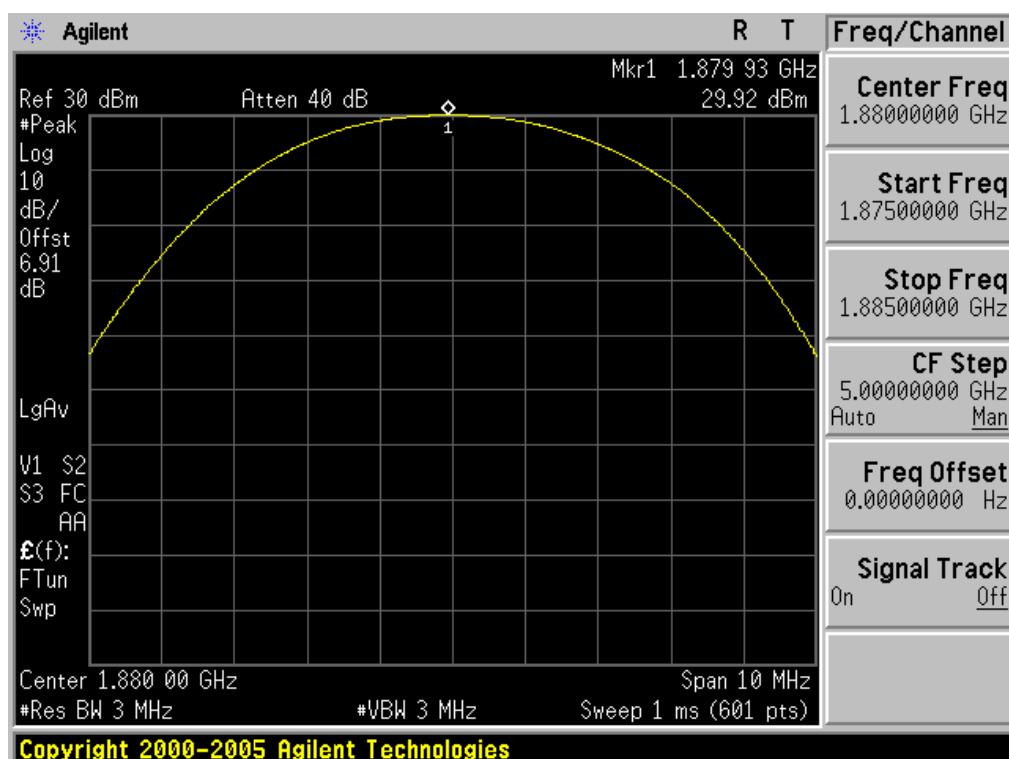
##### GSM1900

| Channel | Frequency (MHz) | TEST CONDITIONS | Power Step: 0 |
|---------|-----------------|-----------------|---------------|
|         |                 | (dBm)           |               |
| 512     | 1850.2          |                 | <b>29.78</b>  |
| 661     | 1880.0          |                 | <b>29.92</b>  |
| 810     | 1909.8          |                 | <b>30.00</b>  |

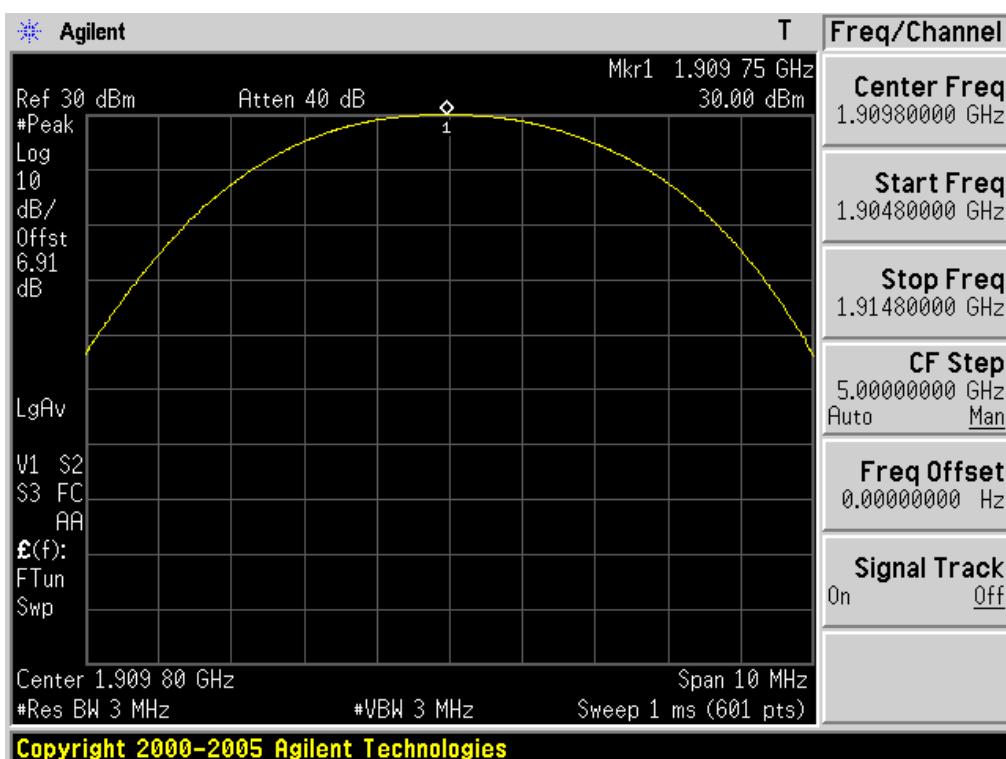
## POWER OUT. GSM1900 Ch.512



## POWER OUT. GSM1900 Ch.661



## POWER OUT. GSM1900 Ch.810



**EIRP (GSM1900)**

|                  |   |  |
|------------------|---|--|
| FCC ID           | : | <b>T6QGM608</b>                                |
| Specification    | : | 47 CFR 24.232(b)                               |
| Tested Frequency | : | 1850.2MHz, 1880.0MHz and 1909.8MHz for GSM1900 |
| RBW=VBW          | : | 3MHz   |

**Measurement Procedure:**Effective Radiated Power Output Measurements by Substitution Methodaccording to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

The EUT was placed on a wooden turntable 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. The conducted power at the terminals of the dipole is measured. The ERP is recorded.

**Measurement Data:****GSM1900**

| Channel    | Frequency (MHz) | TEST CONDITIONS  |            |              |              | Power Step: 0   |
|------------|-----------------|------------------|------------|--------------|--------------|-----------------|
|            |                 | Ref. level (dBm) | Pol. (H/V) | EIRP (dBm)   | EIRP (W)     | Battery         |
| 512        | 1850.2          | -13.40           | H          | 26.46        | 0.442        | Standard        |
| <b>661</b> | <b>1880.0</b>   | <b>-13.13</b>    | <b>H</b>   | <b>26.92</b> | <b>0.492</b> | <b>Standard</b> |
| 810        | 1909.8          | -13.18           | H          | 26.15        | 0.413        | Standard        |

### 3.2.2 Occupied Bandwidth

FCC ID : **T6QGM608**  
 Specification : 47 CFR 2.1049 (h)(i)  
 Tested Frequency : 1850.2MHz, 1880.0MHz and 1909.8MHz for GSM1900

#### Measurement Procedure:

- The 99% power bandwidth was measured with a calibrated spectrum analyzer.
- Spectrum analyzer plots are included on the following pages.

#### Measurement Data:

##### GSM1900

| Channel | Frequency<br>(MHz) | 99% Bandwidth |
|---------|--------------------|---------------|
|         |                    | (kHz)         |
| 512     | 1850.2             | <b>247.58</b> |
| 661     | 1880.0             | <b>245.73</b> |
| 810     | 1909.8             | <b>246.23</b> |

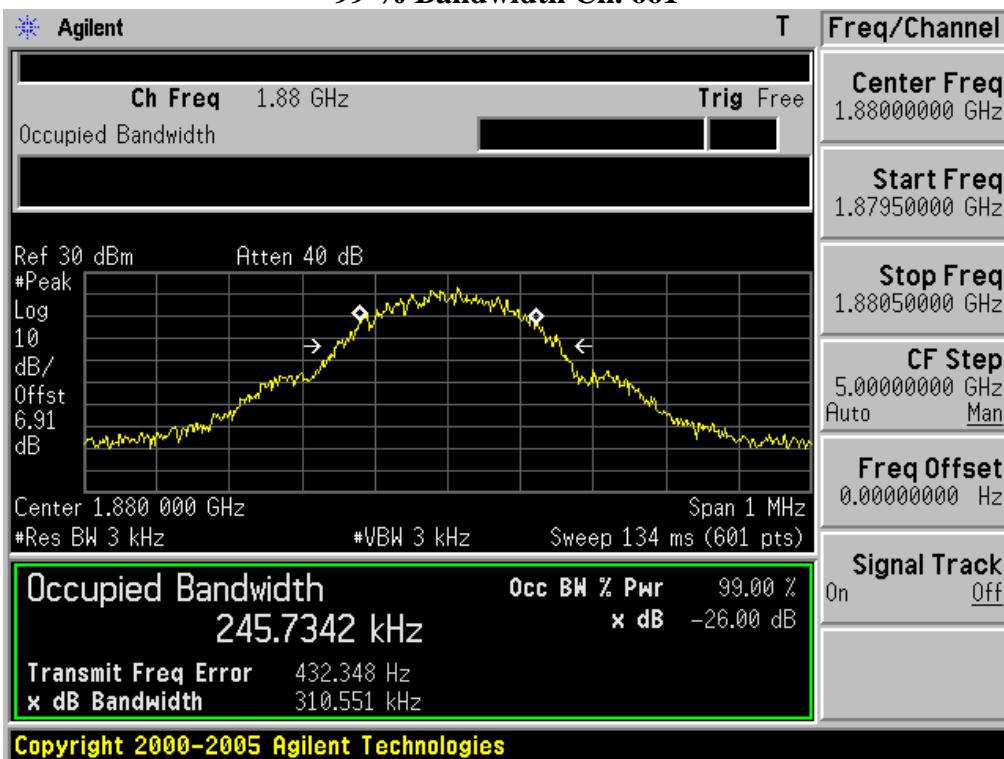
## GSM1900

## 99 % Bandwidth Ch. 512



## GSM1900

## 99 % Bandwidth Ch. 661



GSM1900

99 % Bandwidth Ch. 810



### 3.2.3 Occupied Bandwidth Emission Limits

FCC ID : **T6QGM608**  
 Specification : 47 CFR 24.238(b)  
 Tested Frequency : 1850.2MHz, 1880.0MHz and 1909.8MHz for GSM1900

#### Measurement Procedure:

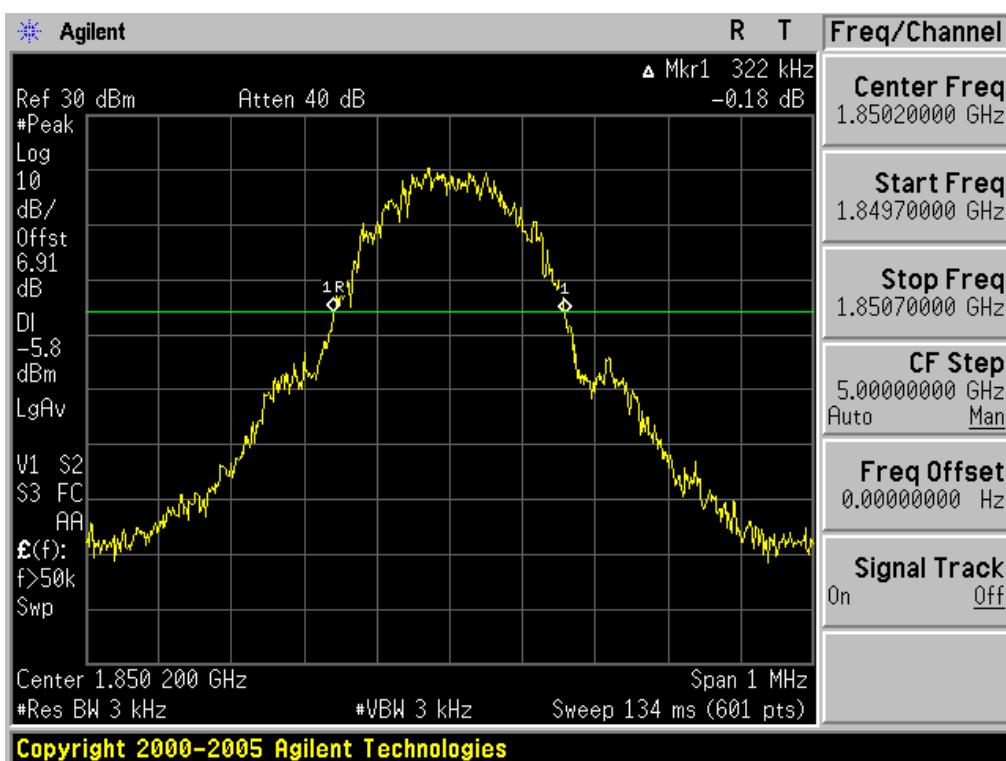
- (a) On any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least  $43+10\log(P)$  dB.
- (b) Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1MHz or greater. However, 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. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26dB below the transmitter power.
- (c) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the licensee's frequency block edges, both upper and lower, as the design permits.
- The measurement of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power.
- Spectrum analyzer plots are included on the following pages.

#### Measurement Data:

| Channel | Frequency (MHz) | -26dBc Bandwidth |            |
|---------|-----------------|------------------|------------|
|         |                 | (kHz)            |            |
| 512     | 1850.2          |                  | <b>322</b> |
| 661     | 1880.0          |                  | <b>320</b> |
| 810     | 1909.8          |                  | <b>314</b> |

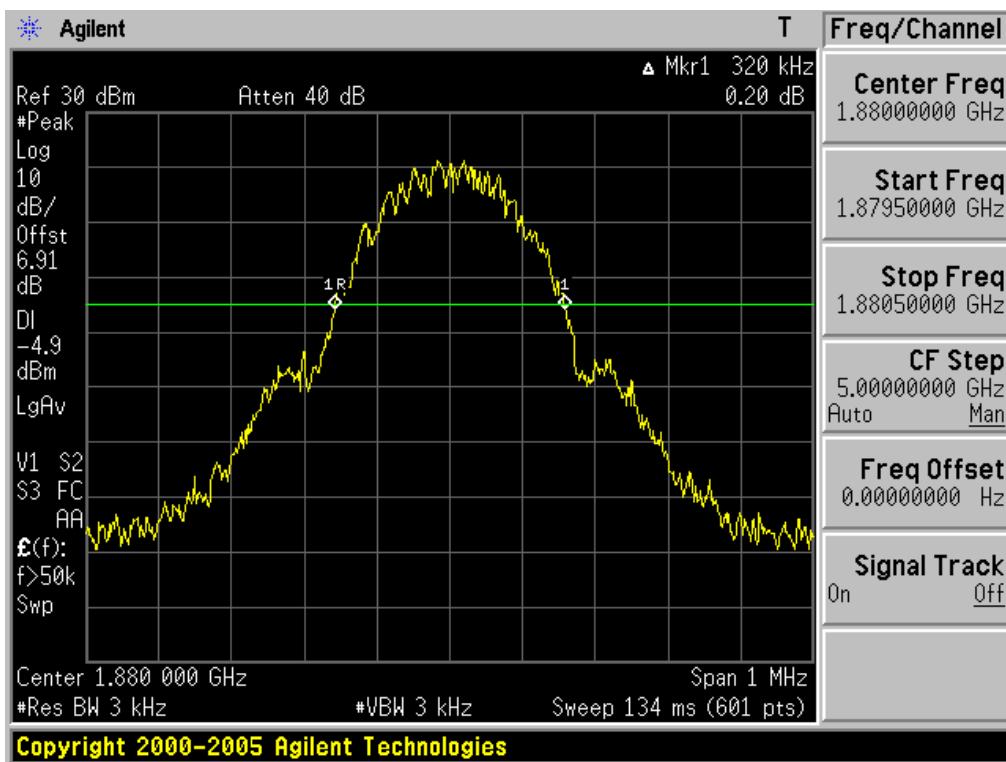
## GSM1900

## -26dBc Bandwidth Ch. 512



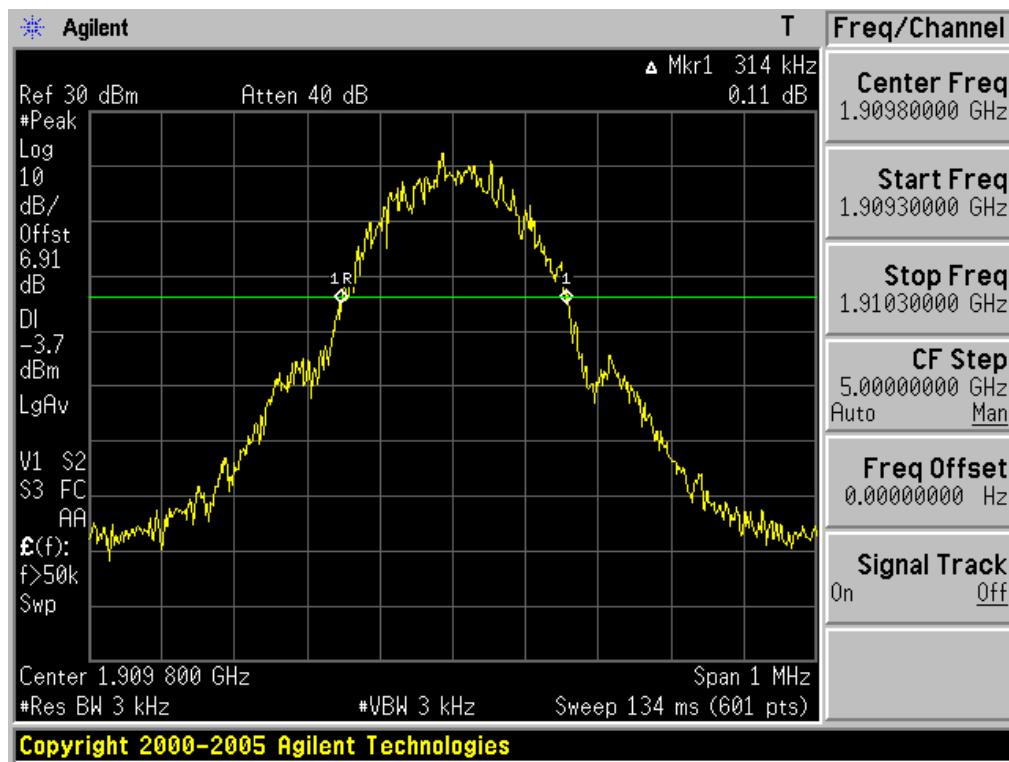
## GSM1900

## -26dBc Bandwidth Ch. 661



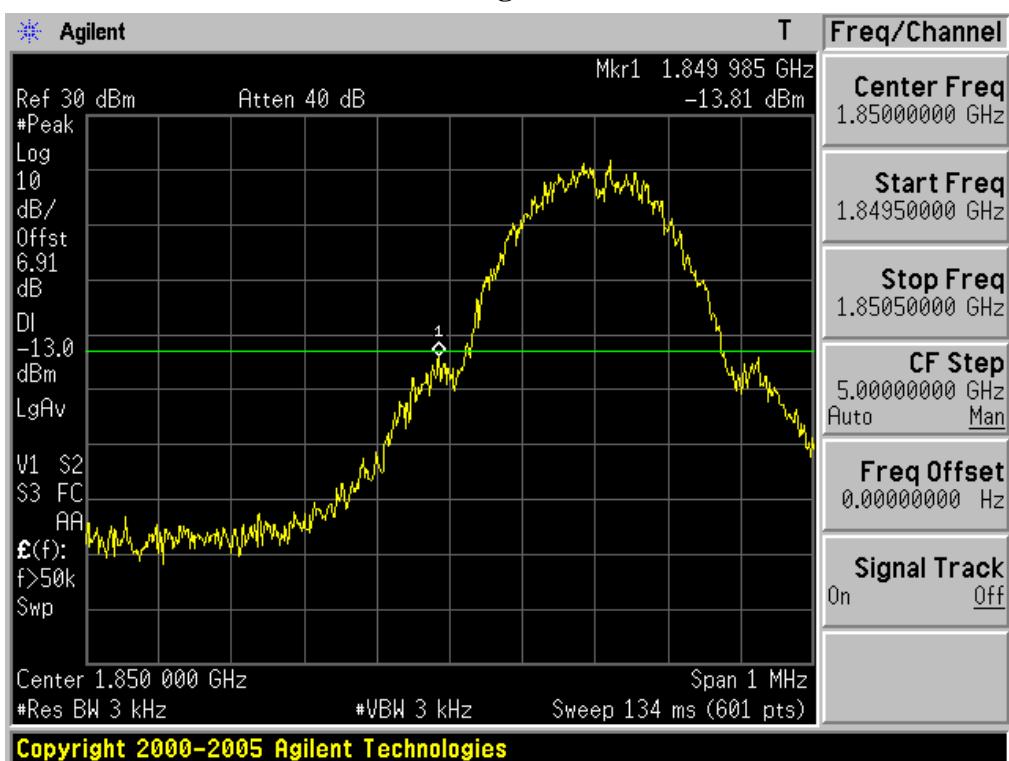
GSM1900

-26dBc Bandwidth Ch. 810



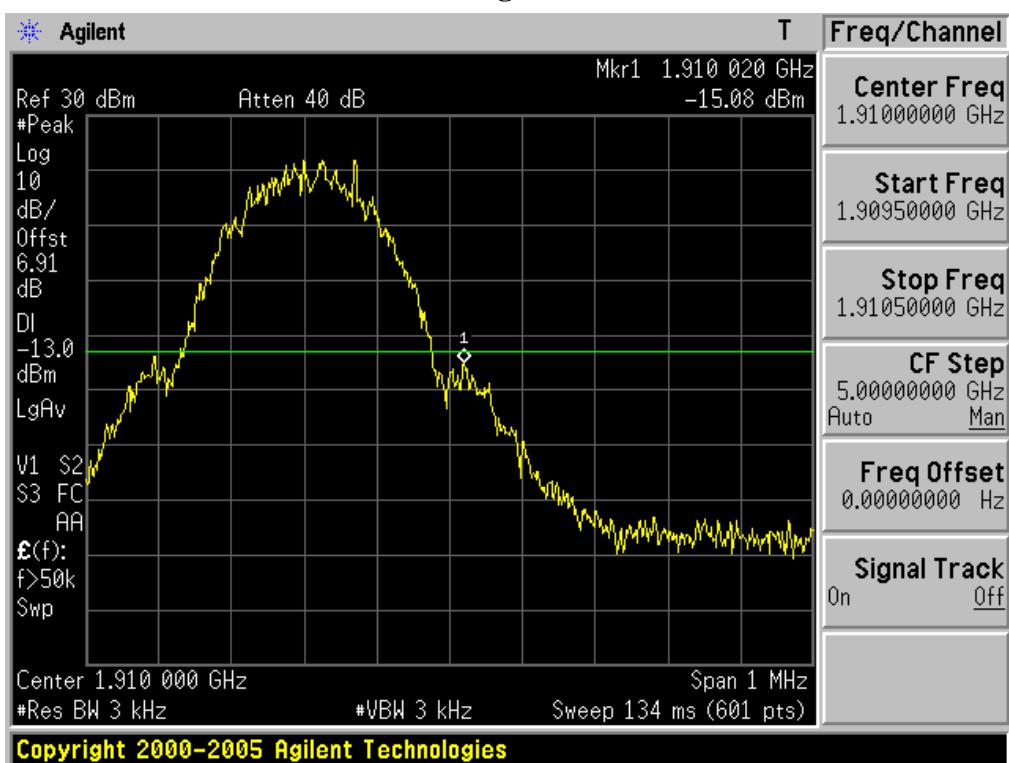
## GSM1900

## Band Edge Ch. 512



## GSM1900

## Band Edge Ch. 810



### **3.2.4 Spurious Emissions at Antenna Terminal**

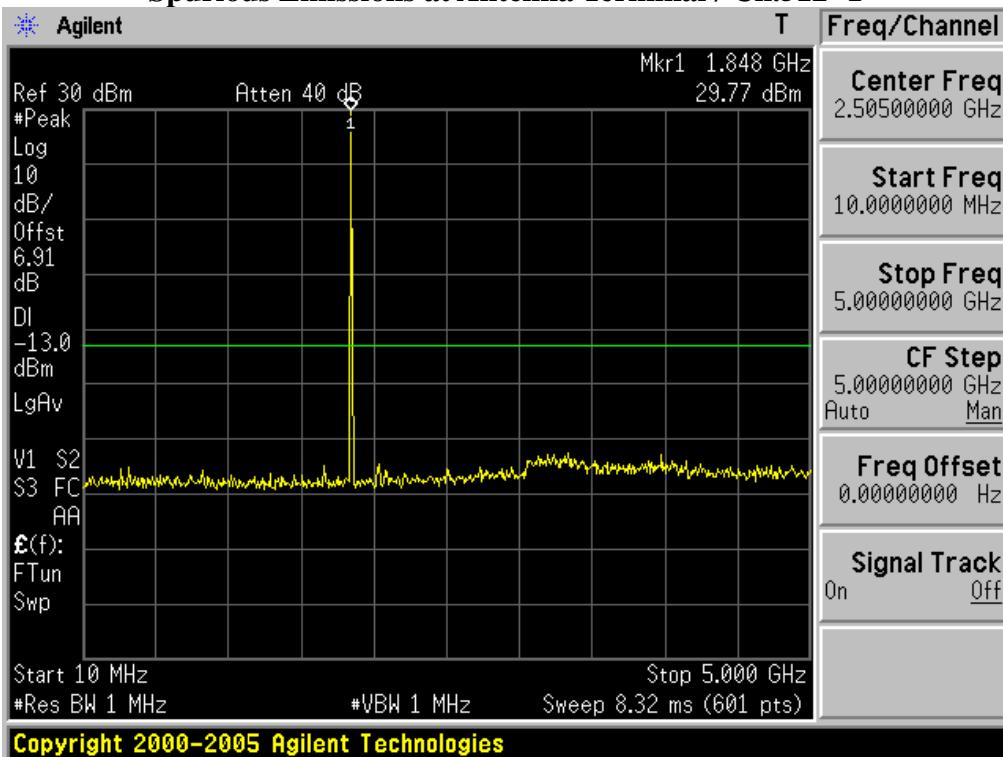
|                  |  |
|------------------|--|
| FCC ID           | : <b>T6QGM608</b>                                |
| Specification    | : 47 CFR 2.1051, 24.238(a)                       |
| Tested Frequency | : 1850.2MHz, 1880.0MHz and 1909.8MHz for GSM1900 |

#### **Measurement Procedure:**

- The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer.
- The spectrum is scanned from the lowest frequency generated in the equipment up to 10'th harmonics of the highest frequency.
- Spectrum analyzer plots are included on the following pages.

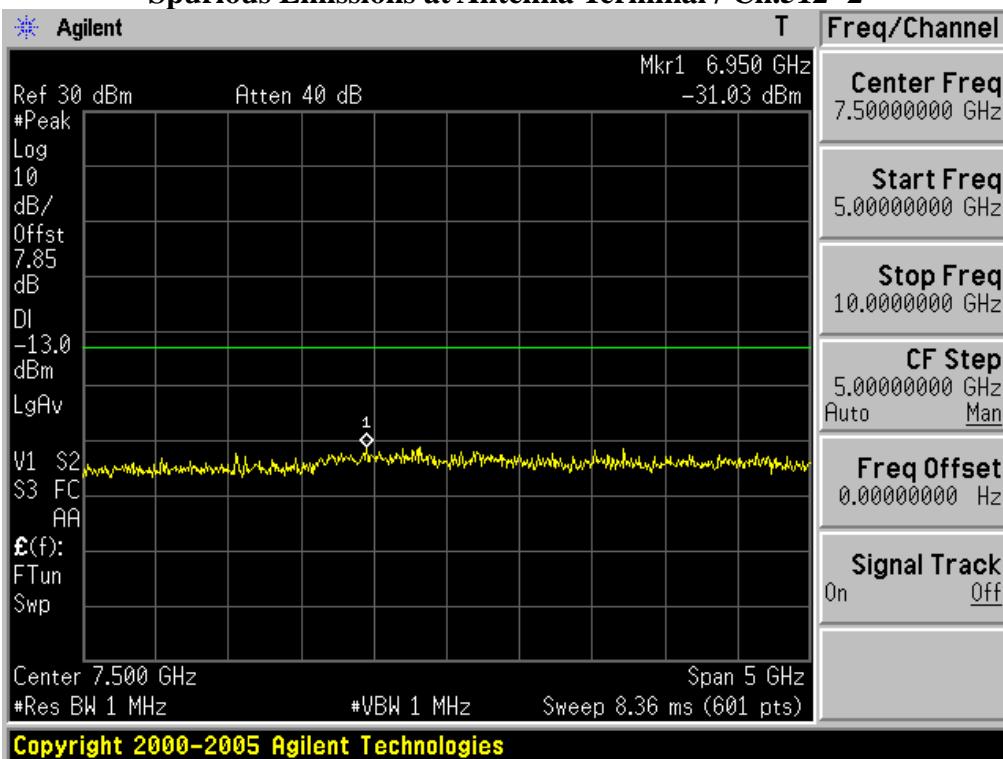
GSM1900

## Spurious Emissions at Antenna Terminal / Ch.512 -1



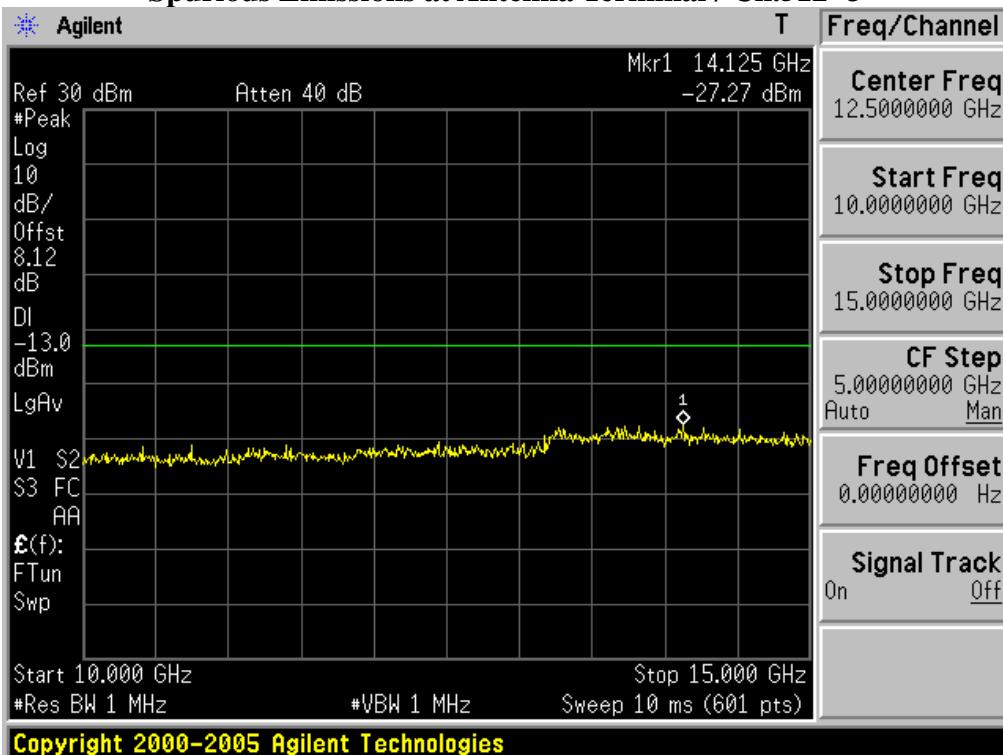
GSM1900

## Spurious Emissions at Antenna Terminal / Ch.512 -2



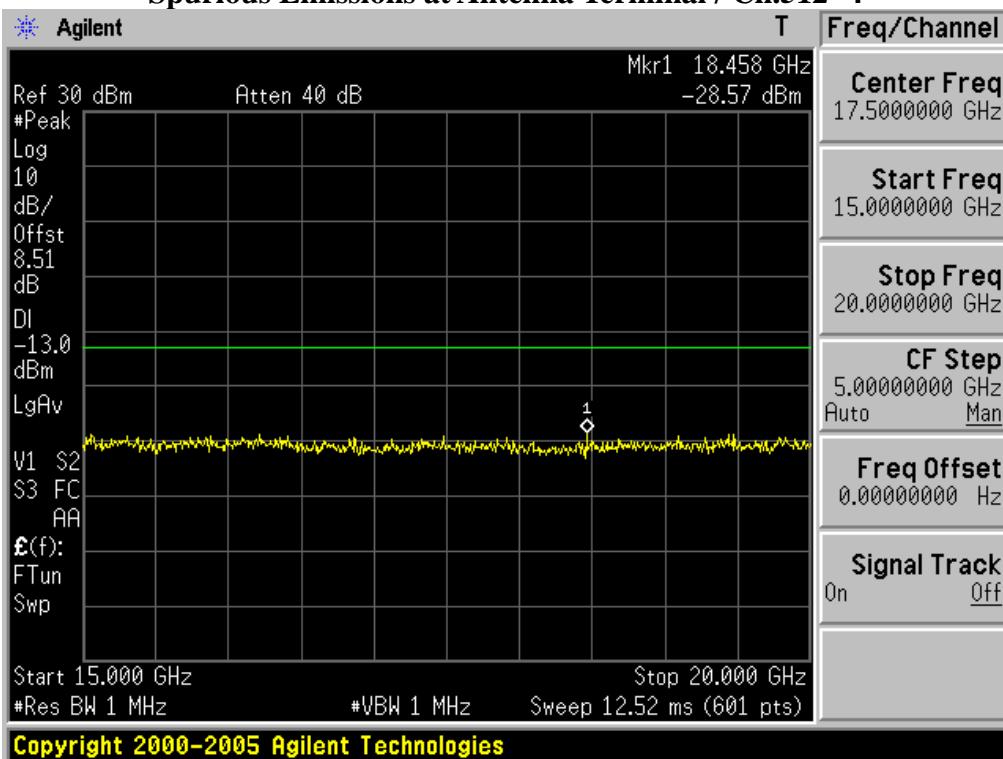
GSM1900

## Spurious Emissions at Antenna Terminal / Ch.512 -3



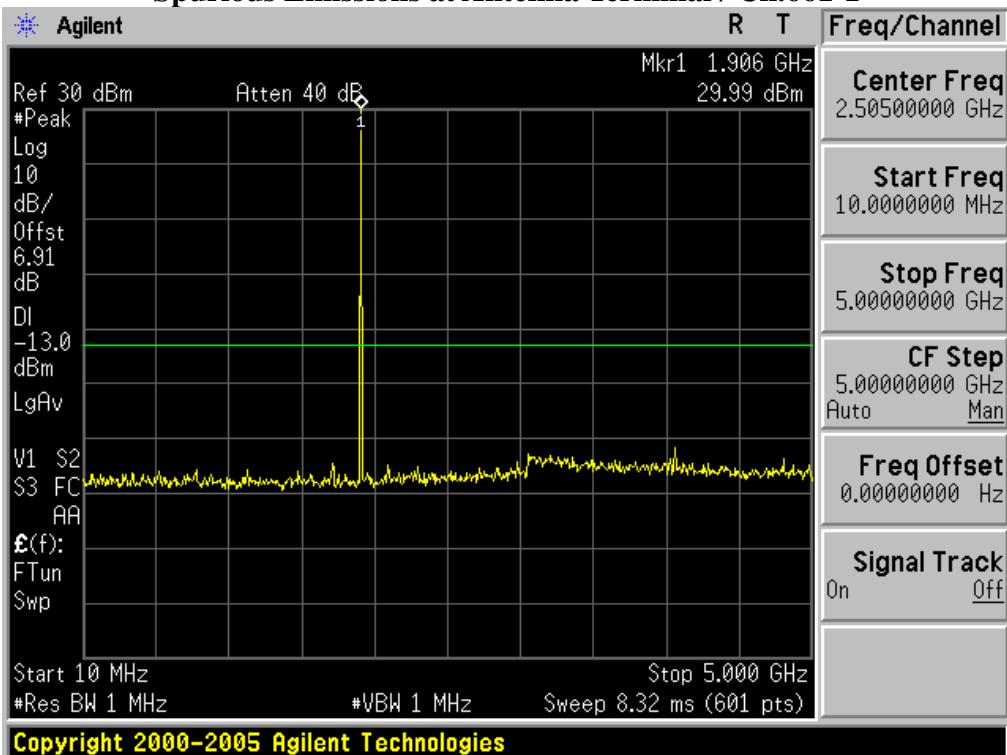
GSM1900

## Spurious Emissions at Antenna Terminal / Ch.512 -4



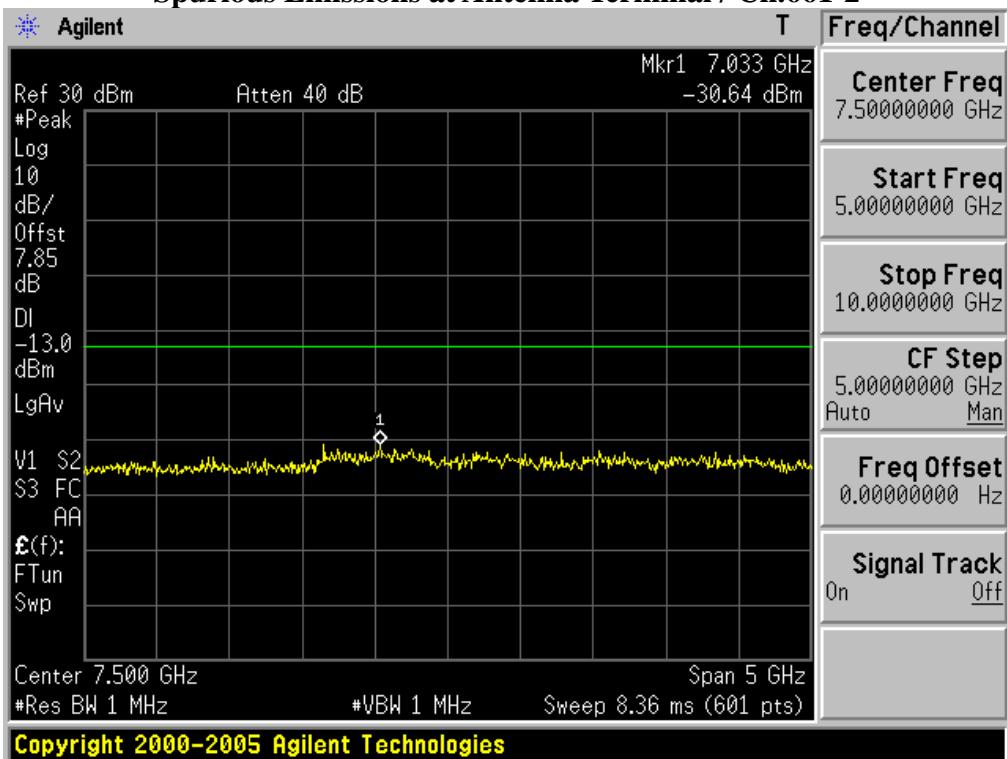
GSM1900

## Spurious Emissions at Antenna Terminal / Ch.661-1



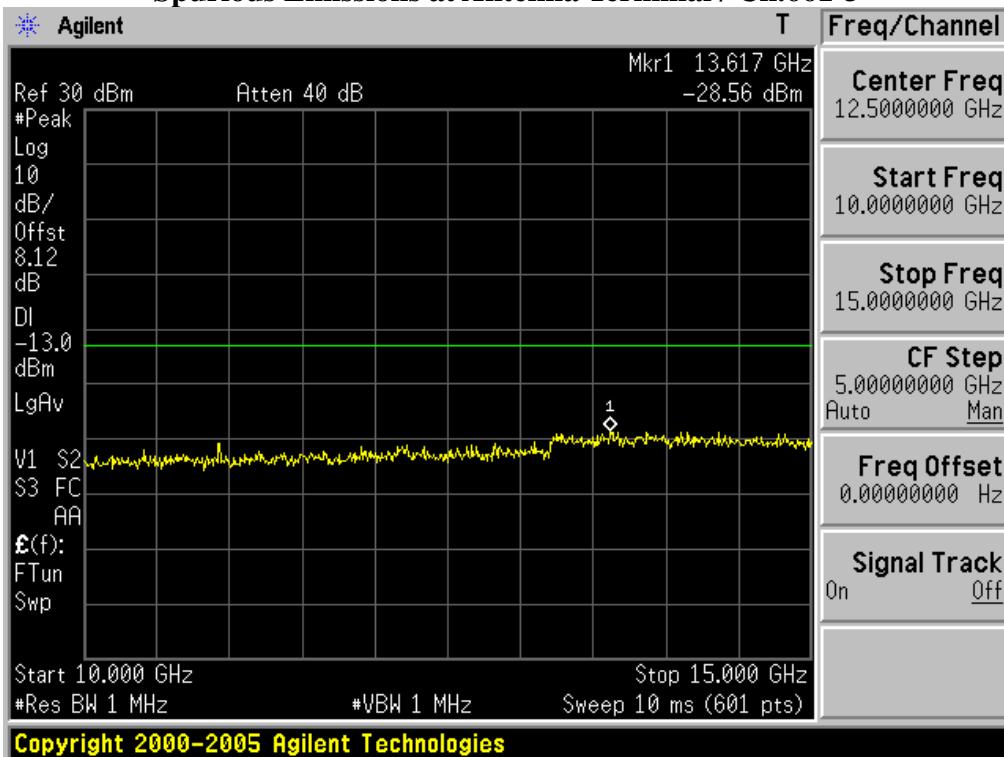
GSM1900

## Spurious Emissions at Antenna Terminal / Ch.661-2



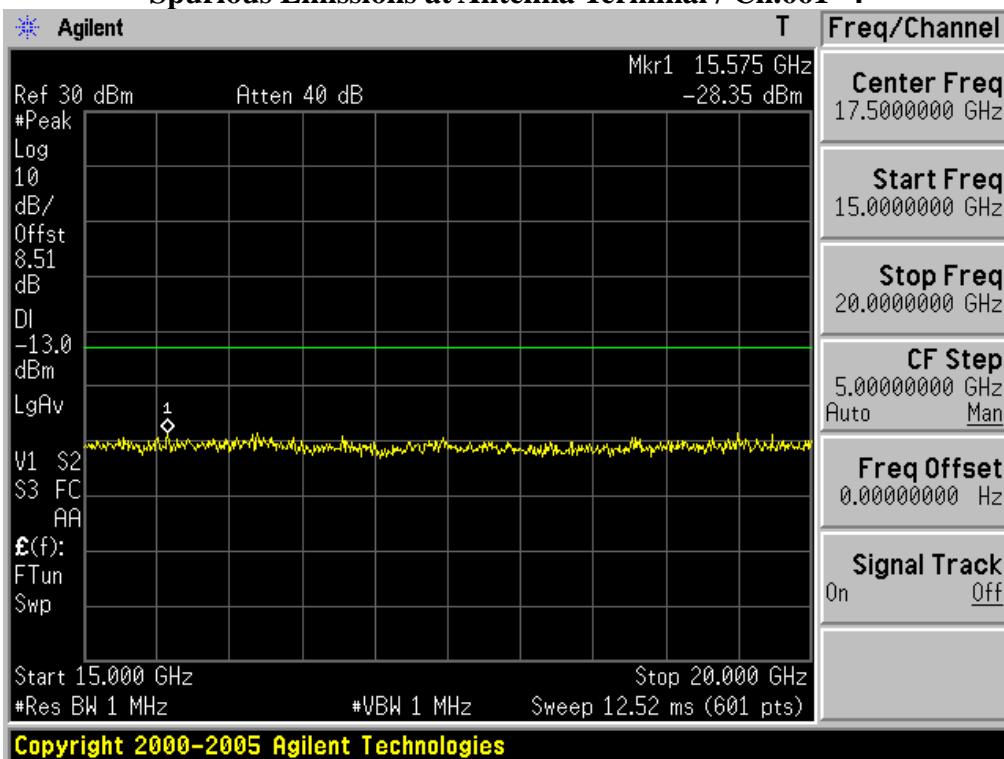
GSM1900

## Spurious Emissions at Antenna Terminal / Ch.661-3



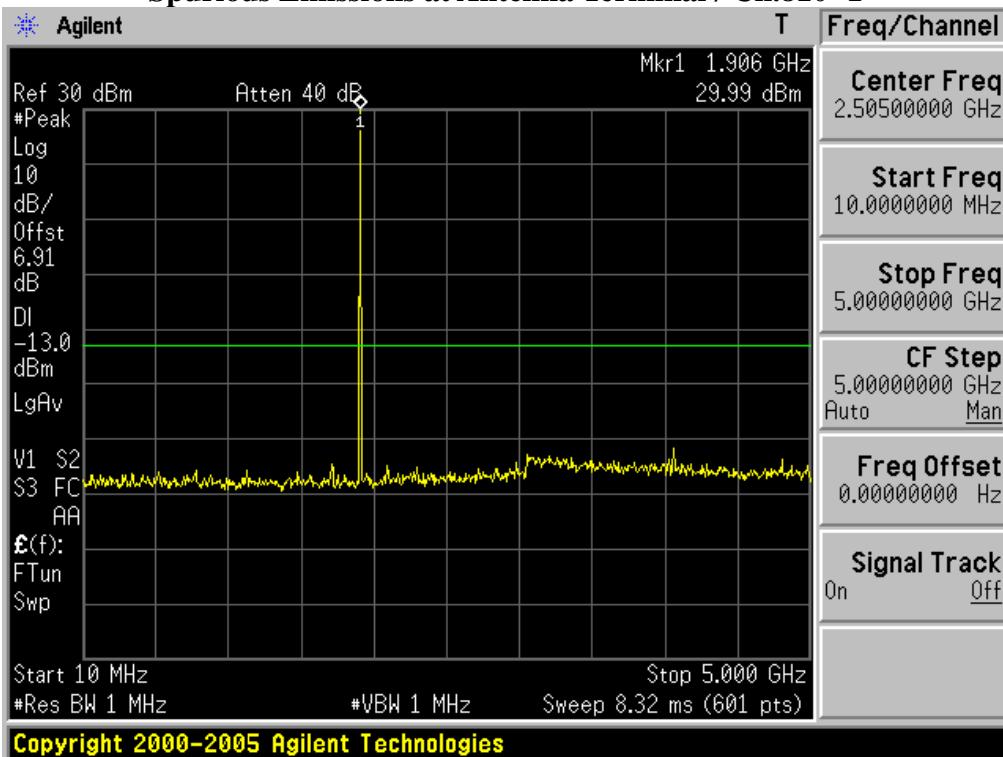
GSM1900

## Spurious Emissions at Antenna Terminal / Ch.661 -4



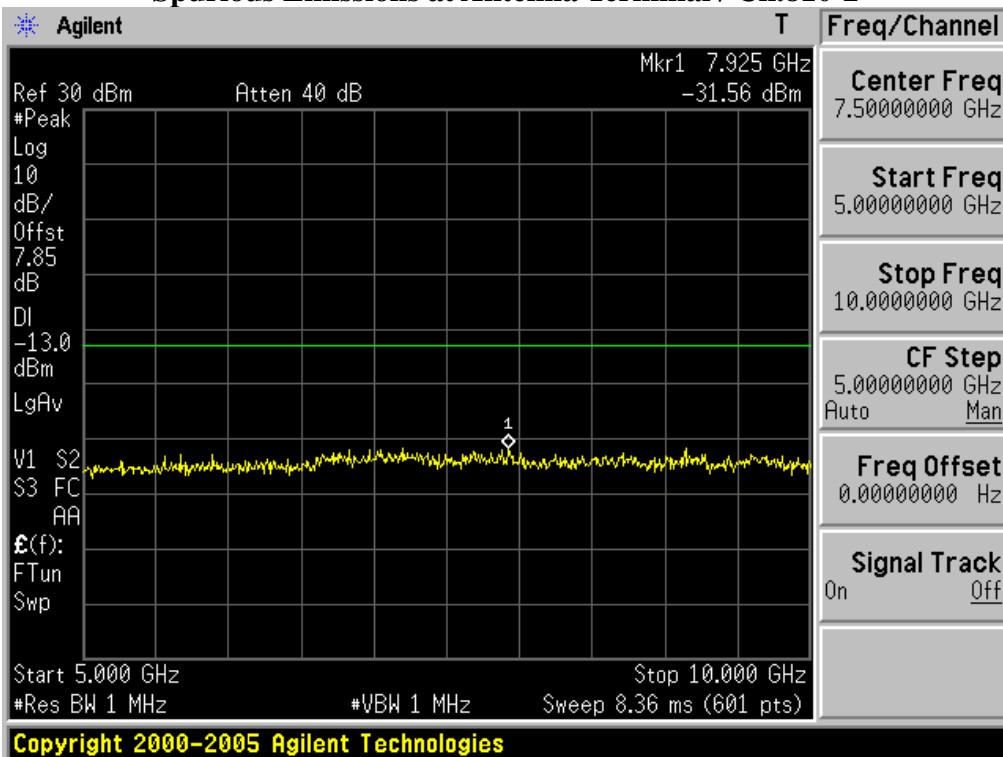
GSM1900

## Spurious Emissions at Antenna Terminal / Ch.810 -1



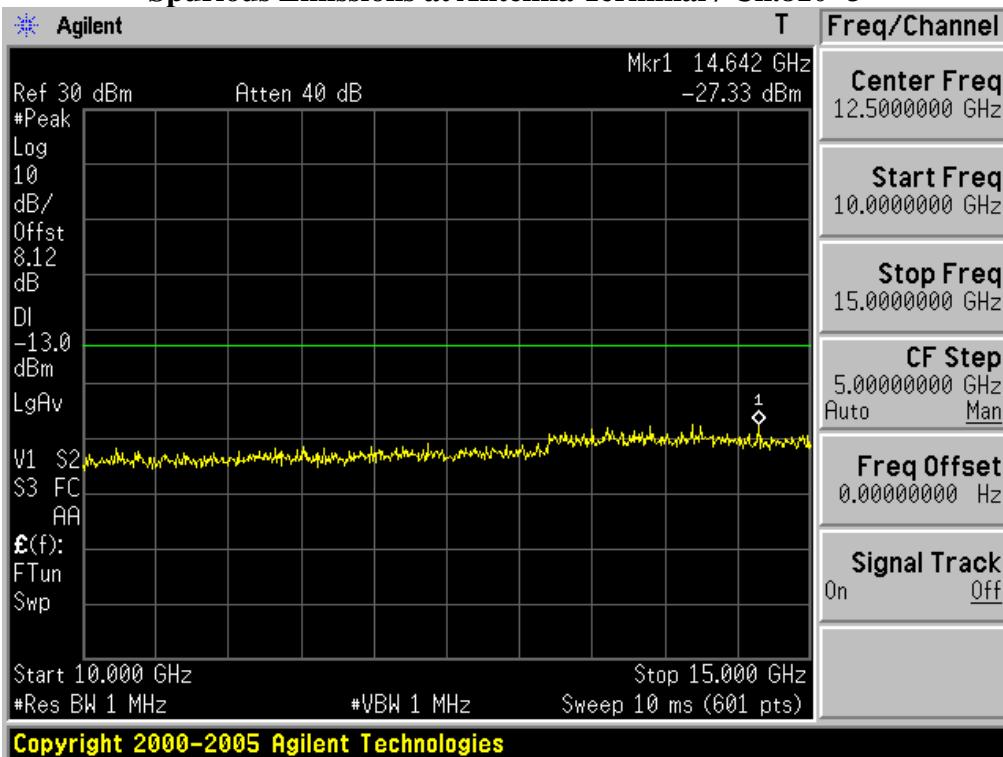
GSM1900

## Spurious Emissions at Antenna Terminal / Ch.810-2



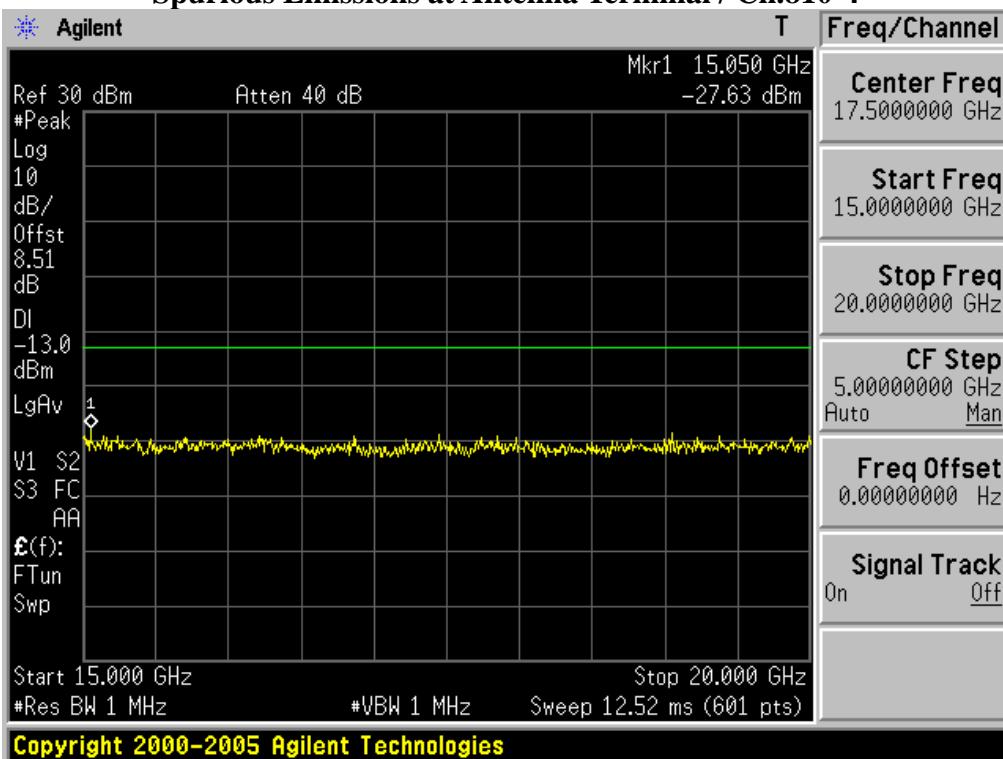
GSM1900

## Spurious Emissions at Antenna Terminal / Ch.810 -3



GSM1900

## Spurious Emissions at Antenna Terminal / Ch.810-4



### 3.2.5 Field Strength of Spurious Radiation

|                  |   |  |
|------------------|---|--|
| FCC ID           | : | <b>T6QGM608</b>                                |
| Specification    | : | 47 CFR 2.1053(a)                               |
| Tested Frequency | : | 1850.2MHz, 1880.0MHz and 1909.8MHz for GSM1900 |

#### Measurement Procedure:

- Radiation and harmonic emissions are measured outdoors at our 3-meter test range. The equipment under test is placed on a wooden turntable 3-meters from the receive antenna. The receive antenna height and turntable rotations were adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator with the level of the signal generator being adjusted to obtain the same receive spectrum analyzer reading. This level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

**GSM1900 Field Strength of SPURIOUS Radiation**

OPERATING FREQUENCY : 1850.2 MHz  
 CHANNEL : 512(Low)  
 MEASURED OUTPUT POWER : 26.92 dBm = 0.492 W  
 MODULATION SIGNAL : GSM (Internal)  
 DISTANCE : 3 meters  
 LIMIT :  $43 + 10 \log_{10} (W) =$  39.92 dBc

| Freq.<br>(MHz) | LEVEL@<br>ANTENNA<br>TERMINALS<br>(dBm) | SUBSTITUTE<br>ANTENNA<br>GAIN<br>(dBd) | CORRECT<br>GENERATOR<br>LEVEL<br>(dBm) | POL<br>(H/V) | (dBc) |
|----------------|---|--|--|--------------|-------|
| 3700.4         | -46.35                                  | 9.78                                   | -36.57                                 | H            | 63.49 |
| -              | -                                       | -                                      | -                                      | -            | -     |

**NOTE**

Radiated Spurious Emission Measurements by Substitution Method  
according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This spurious level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

**GSM1900 Field Strength of SPURIOUS Radiation**

OPERATING FREQUENCY : 1880.0 MHz  
 CHANNEL : 661(Mid)  
 MEASURED OUTPUT POWER : 26.92 dBm = 0.492 W  
 MODULATION SIGNAL : GSM (Internal)  
 DISTANCE : 3 meters  
 LIMIT :  $43 + 10 \log_{10} (W) =$  39.92 dBc

| Freq.<br>(MHz) | LEVEL@<br>ANTENNA<br>TERMINALS<br>(dBm) | SUBSTITUTE<br>ANTENNA<br>GAIN<br>(dBd) | CORRECT<br>GENERATOR<br>LEVEL<br>(dBm) | POL<br>(H/V) | (dBc) |
|----------------|---|--|--|--------------|-------|
| 3760.0         | -47.07                                  | 9.79                                   | -37.28                                 | H            | 64.20 |
| -              | -                                       | -                                      | -                                      | -            | -     |

**NOTE**

Radiated Spurious Emission Measurements by Substitution Method  
according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This spurious level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

**GSM1900 Field Strength of SPURIOUS Radiation**

OPERATING FREQUENCY : 1909.8 MHz  
 CHANNEL : 810(High)  
 MEASURED OUTPUT POWER : 26.92 dBm = 0.492 W  
 MODULATION SIGNAL : GSM (Internal)  
 DISTANCE : 3 meters  
 LIMIT :  $43 + 10 \log_{10} (W) =$  39.92 dBc

| Freq.<br>(MHz) | LEVEL@<br>ANTENNA<br>TERMINALS<br>(dBm) | SUBSTITUTE<br>ANTENNA<br>GAIN<br>(dBd) | CORRECT<br>GENERATOR<br>LEVEL<br>(dBm) | POL<br>(H/V) | (dBc) |
|----------------|---|--|--|--------------|-------|
| 3819.6         | -47.74                                  | 9.79                                   | -37.95                                 | H            | 64.87 |
| -              | -                                       | -                                      | -                                      | -            | -     |

**NOTE**

Radiated Spurious Emission Measurements by Substitution Method  
according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This spurious level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

### 3.2.6 Frequency Stability/Temperature Variation.

|                  |                          |
|------------------|--------------------------|
| FCC ID           | : <b>T6QGM608</b>        |
| Specification    | : 47 CFR 2.1055 , 24.235 |
| Tested Frequency | : 1880.0MHz for GSM1900  |

#### Measurement Procedure:

The frequency stability of the transmitter is measured by:

- a) **Temperature** :The temperature is varied from -30°C to + 60°C using an environmental chamber.
- b) **Primary Supply Voltage** :The primary supply voltage is varied from 85% to 115% of the voltage Normally at the input to the device or at the power supply terminals if cables are not normally supplied.

Specification —The minimum frequency stability shall be +/- 0.00025% at any time during normal operation.

Specification — The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within  $\pm 0.00025\% (\pm 2.5\text{ppm})$  of the center frequency.

#### Time Period and Procedure:

1. The carrier frequency of the transmitter and the individual oscillators is measured at room temperature (25°C to 27 °C to provide a reference)
2. The equipment is subjected to an overnight “soak” at -30°C without any power applied.
3. After the overnight “soak” at -30°C(usually 14-16 hours),the equipment is turned on in a “standby” condition for one minute before applying power to the transmitter. Measurement of the carrier frequency to the transmitter and the individual oscillators is made within a three minute interval after applying power to the transmitter.
4. Frequency measurements is made at 10°C interval up to room temperature. At least a period of one and one half hour is provided to allow stabilization of the equipment at each temperature level.
5. Again the transmitter carrier frequency and the individual oscillators is measured at room temperature to begin measurement of the upper temperature levels.
6. Frequency were made at 10 intervals starting at -30°C up to +50°C allowing at least two hours at each temperature for stabilization. In all measurements the frequency is measured within three minutes after applying power to the transmitter.
7. The artificial load is mounted external to the temperature chamber.

**NOTE : The EUT is tested down to the battery endpoint.**

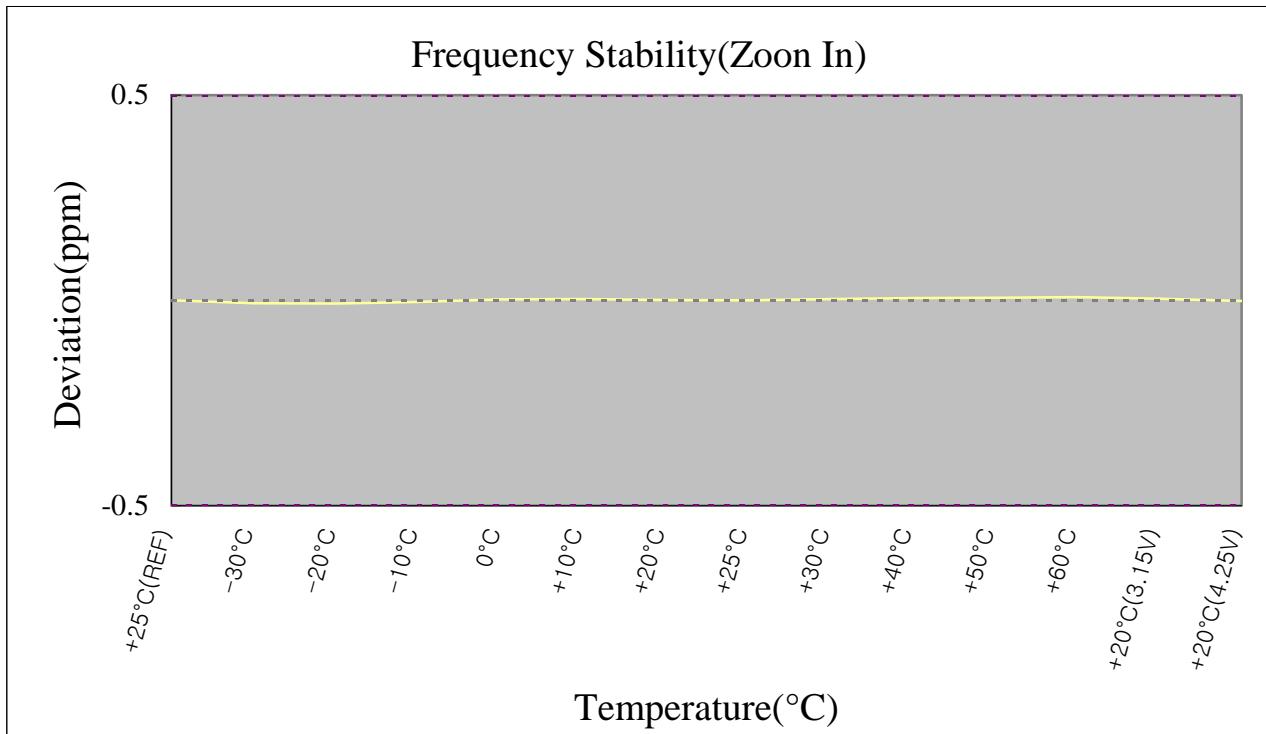
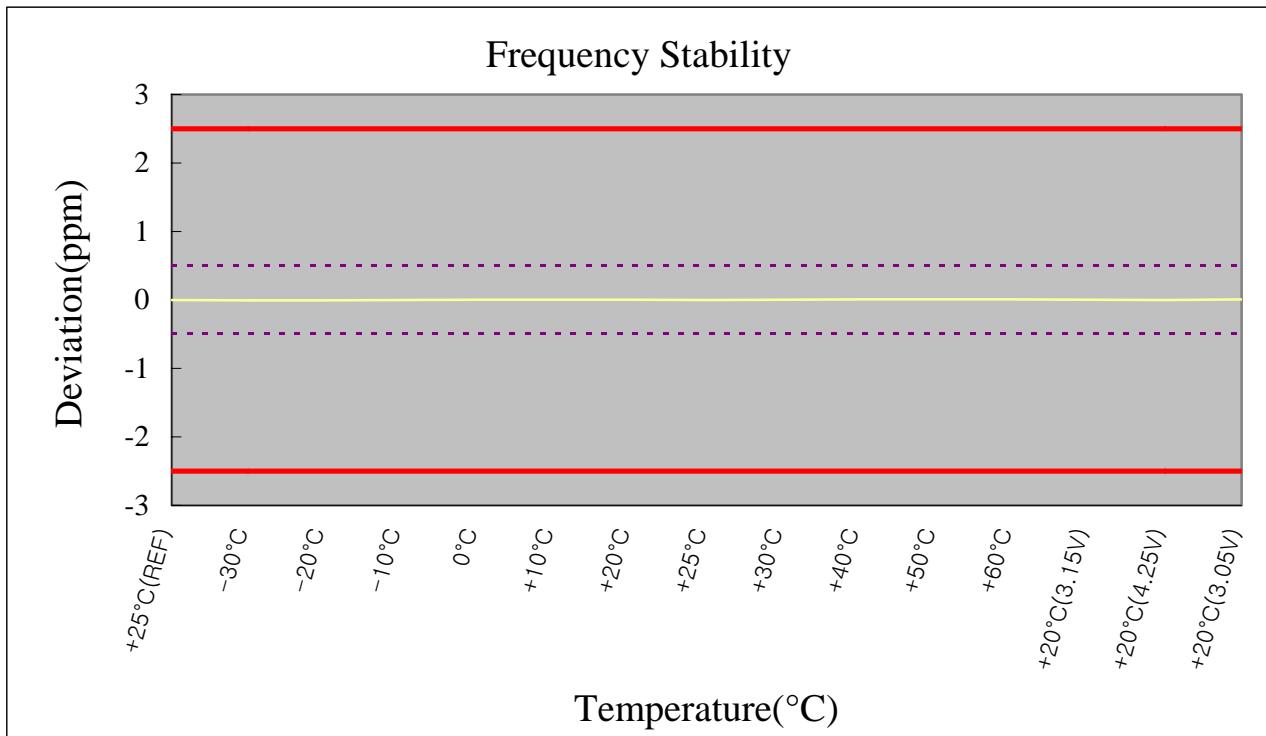
## Frequency Stability

OPERATING FREQUENCY : 1,879,999,960 Hz  
 CHANNEL : 661(Mid)  
 REFERENCE VOLTAGE : 3.7 VDC  
 DEVIATION LIMIT : ± 0.00025 % or 2.5 ppm

| VOLTAGE<br>(%) | POWER<br>(VDC) | TEMP<br>(dB) | FREQ<br>(Hz)  | Deviation<br>(%) |
|----------------|----------------|--------------|---------------|------------------|
| 100%           | 3.7            | REF(+25)     | 1,879,999,960 | 0.000000         |
| 100%           |                | -30          | 1,879,999,947 | -0.000001        |
| 100%           |                | -20          | 1,879,999,946 | -0.000001        |
| 100%           |                | -10          | 1,879,999,953 | 0.000000         |
| 100%           |                | 0            | 1,879,999,964 | 0.000000         |
| 100%           |                | 10           | 1,879,999,966 | 0.000000         |
| 100%           |                | 20           | 1,879,999,962 | 0.000000         |
| 100%           |                | 25           | 1,879,999,960 | 0.000000         |
| 100%           |                | 30           | 1,879,999,966 | 0.000000         |
| 100%           |                | 40           | 1,879,999,970 | 0.000001         |
| 100%           |                | 50           | 1,879,999,972 | 0.000001         |
| 100%           |                | 60           | 1,879,999,975 | 0.000001         |
| 85%            | 3.15V          | 20           | 1,879,999,967 | 0.000000         |
| 115%           | 4.25V          | 20           | 1,879,999,957 | 0.000000         |
| BATT.ENDPOINT  | 3.05V          | 20           | 1,879,999,972 | 0.000001         |

## Frequency Stability

(continued...)



## 4. TEST EQUIPMENT

|    | Type                                 | Manufacturer        | Model    | Cal.Due.Date<br>(dd/mm/yy) | S/N           |
|----|--------------------------------------|---------------------|----------|----------------------------|---------------|
| 01 | Spectrum Analyzer                    | Agilent             | E4404B   | 21/03/07                   | US41061134    |
| 02 | Spectrum Analyzer                    | Agilent             | E4440A   | 05/10/07                   | MY45304199    |
| 03 | Spectrum Analyzer                    | H.P                 | 8563E    | 06/10/07                   | 3551A04634    |
| 04 | Power Meter                          | H.P                 | EPM-442A | 04/07/06                   | GB37170413    |
| 05 | Power Sensor                         | H.P                 | 8481A    | 05/07/06                   | 3318A96332    |
| 06 | Frequency Counter                    | H.P                 | 5342A    | 21/10/06                   | 2119A04450    |
| 07 | Multifunction Synthesizer            | H.P                 | 8904A    | 21/10/06                   | 3633A08404    |
| 08 | Signal Generator                     | Rohde Schwarz       | SMR20    | 22/03/07                   | 101251        |
| 09 | Signal Generator                     | H.P                 | E4421A   | 05/07/06                   | US37230529    |
| 10 | Audio Analyzer                       | H.P                 | 8903B    | 07/07/06                   | 3011A0944B    |
| 11 | Modulation Analyzer                  | H.P                 | 8901B    | 05/07/06                   | 3028A03029    |
| 12 | Oscilloscope                         | Tektronix           | TDS3052  | 01/10/06                   | B016821       |
| 13 | CDMA Mobile Station Test Set         | H.P                 | 8924C    | 21/10/06                   | US35360688    |
| 14 | Universal Radio communication tester | Rohde Schwarz       | CMU200   | 21/03/07                   | 107631        |
| 15 | MULTISYSTEM UE TESTER                | Japan Radio Co.,Ltd | NJZ-2000 | 14/11/06                   | ET00095       |
| 16 | Power Splitter                       | WEINSCHEL           | 1593     | 21/10/06                   | 332           |
| 17 | BAND Reject Filter                   | Microwave Circuits  | N0308372 | 21/10/06                   | 3125-01DC0312 |
| 18 | BAND Reject Filter                   | Wainwright          | WRCG1750 | 21/10/06                   | SN2           |
| 19 | AC Power supply                      | DAEKWANG            | 5KVA     | 20/03/07                   | N/A           |
| 20 | DC Power Supply                      | H.P                 | 6622A    | 21/03/07                   | 465487        |
| 21 | Attenuator (30dB)                    | H.P                 | 8498A    | 21/10/06                   | 50101         |
| 22 | Attenuator (10dB)                    | WEINSCHEL           | 23-10-34 | 21/10/06                   | BP4387        |
| 23 | HORN ANT                             | EMCO                | 3115     | 06/03/07                   | 6419          |
| 24 | HORN ANT                             | EMCO                | 3115     | 25/04/07                   | 21097         |
| 25 | HORN ANT                             | A.H.Systems         | SAS-574  | 09/11/06                   | 154           |
| 26 | HORN ANT                             | A.H.Systems         | SAS-574  | 09/11/06                   | 155           |
| 27 | Dipole Antenna                       | Schwarzbeck         | VHA9103  | 18/10/06                   | 2116          |
| 28 | Dipole Antenna                       | Schwarzbeck         | VHA9103  | 18/10/06                   | 2117          |
| 29 | Dipole Antenna                       | Schwarzbeck         | UHA9105  | 18/10/06                   | 2261          |
| 30 | Dipole Antenna                       | Schwarzbeck         | UHA9105  | 18/10/06                   | 2262          |

**4. TEST EQUIPMENT (CONTINUED)**

|    | Type                      | Manufacturer  | Model       | Cal.Due.Date<br>(dd/mm/yy) | S/N            |
|----|---------------------------|---------------|-------------|----------------------------|----------------|
| 31 | RFI/FIELD Intensity Meter | Kyorits       | KNM-504D    | 07/07/06                   | SN-161-4       |
| 32 | Frequency Converter       | Kyorits       | KCV-604C    | 07/07/06                   | 4-230-3        |
| 33 | TEMP & HUMIDITY Chamber   | JISCO         | J-RHC2      | 13/09/06                   | 021031         |
| 34 | Log Periodic Antenna      | Schwarzbeck   | UHALP9108A1 | 29/09/06                   | 1098           |
| 35 | Biconical Antenna         | Schwarzbeck   | VHA9103     | 18/11/06                   | VHA91031946    |
| 36 | Digital Multimeter        | H.P           | 34401A      | 20/03/07                   | 3146A13475     |
| 37 | Attenuator (10dB)         | WEINSCHEL     | 23-10-34    | 21/10/06                   | BP4386         |
| 38 | High-Pass Filter          | ANRITSU       | MP526       | 12/05/06                   | M27756         |
| 39 | Attenuator (3dB)          | Agilent       | 8491B       | 21/10/06                   | 58177          |
| 40 | Amplifier (25dB)          | Agilent       | 8447D       | 12/04/07                   | 2944A10144     |
| 41 | Amplifier (30dB)          | Agilent       | 8449B       | 21/10/06                   | 3008A01590     |
| 42 | Position Controller       | TOKIN         | 5901T       | N/A                        | 14173          |
| 43 | Driver                    | TOKIN         | 5902T2      | N/A                        | 14174          |
| 44 | Spectrum Analyzer         | H.P           | 8591E       | 21/03/07                   | 3649A05889     |
| 45 | RFI/FIELD Intensity Meter | Kyorits       | KNW-2402    | 04/07/06                   | 4N-170-3       |
| 46 | LISN                      | Kyorits       | KNW-407     | 11/08/06                   | 8-317-8        |
| 47 | LISN                      | Kyorits       | KNW-242     | 11/08/06                   | 8-654-15       |
| 48 | CVCF                      | NF Electronic | 4400        | N/A                        | 344536 4420064 |
| 49 | Software                  | ToYo EMI      | EP5/RE      | N/A                        | Ver 2.0.800    |
| 50 | Software                  | ToYo EMI      | EP5/CE      | N/A                        | Ver 2.0.801    |
| 51 | Software                  | AUDIX         | e3          | N/A                        | Ver 3.0        |
| 52 | Software                  | Agilent       | Benchlink   | N/A                        | A.01.09 021211 |

## **5. SAMPLE CALCULATIONS**

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### **A. Emission Designator**

#### **GSM1900**

Emission Designator = 248KGXW

GSM BW = 247.58 KHz

G = Phase Modulation

X = Cases not otherwise covered

W = Combination (Audio/Data)

(Measured at the 99.75% power bandwidth)

## **6. CONCLUSION**

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The data collected shows that the **KC Mobile Co., Ltd.** Dual band GSM phone **FCC ID: T6QGM608** complies with all the requirements of Parts 2 and 24 of the FCC rules.