

## FCC 47 CFR PART 22H and 24E

Product Type : Smartphone  
Applicant : HTC Corporation  
Address : No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330,  
Taiwan  
Trade Name : HTC  
Model Number : PG76240  
Test Specification : FCC 47 CFR PART 22H: Oct, 2009  
FCC 47 CFR PART 24E: Oct, 2009  
ANSI/TIA-603-C 2004  
Issue Date : Jun. 15, 2011

### Issue by

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Taiwan Accreditation Foundation accreditation number: 1330

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**Revision History**

| <b>Rev.</b> | <b>Issue Date</b> | <b>Revisions</b> | <b>Revised By</b> |
|-------------|-------------------|------------------|-------------------|
| 00          | Jun. 15, 2011     | Initial Issue    |                   |
|             |                   |                  |                   |
|             |                   |                  |                   |
|             |                   |                  |                   |

## Verification of Compliance

Issued Date: 2011/06/15

Product Type : Smartphone  
Applicant : HTC Corporation  
Address : No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330,  
Taiwan  
Trade Name : HTC  
Model Number : PG76240  
FCC ID : NM8PG76240  
EUT Rated Voltage : DC 5.0V, 1.0A  
Test Voltage : 120 Vac / 60 Hz  
Applicable : FCC 47 CFR PART 22H: Oct, 2009  
Standard : FCC 47 CFR PART 24E: Oct, 2009  
ANSI/TIA-603-C 2004

Test Result : Complied

Performing Lab. : A Test Lab Techno Corp.

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Taoyuan County 334, Taiwan R.O.C.

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<http://www.atl-lab.com.tw/e-index.htm>

The above equipment was tested by A Test Lab Techno Corp. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4: 2003 and the energy emitted by the sample tested as described in this report is in compliance with the requirements of FCC Rules Part 22H, Part 24E.  
The test results of this report relate only to the tested sample identified in this report.

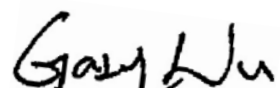
Approved By :



(Manager)

(Miller Lee)

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(Testing Engineer)

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# 1 General Information

## 1.1. EUT Description

| Applicant            |                | HTC Corporation  |                    |                    |            |
|----------------------|----------------|--|--------------------|--------------------|------------|
| Applicant Address    |                | No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan  |                    |                    |            |
| Manufacturer         |                | HTC Corporation  |                    |                    |            |
| Manufacturer Address |                | No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan  |                    |                    |            |
| Product Type         |                | Smartphone   |                    |                    |            |
| Trade Name           |                | HTC  |                    |                    |            |
| Model Number         |                | PG76240  |                    |                    |            |
| FCC ID               |                | NM8PG76240   |                    |                    |            |
| Mode                 | GSM/GPRS/EGPRS | Band   | UL Frequency (MHz) | DL Frequency (MHz) | Modulation |
|                      |                | 850  | 824.2 ~ 848.8      | 869.2 ~ 893.8      | GMSK/8PSK  |
|                      |                | 1900   | 1850.2 ~ 1909.8    | 1930.2 ~ 1989.8    | GMSK/8PSK  |
| Channel Control      |                | Auto   |                    |                    |            |
| Type of Antenna      |                | PIFA Antenna   |                    |                    |            |
| Antenna Gain (dBi)   |                | GSM/GPRS/EGPRS 850: -1.50 dBi<br>GSM/GPRS/EGPRS 1900: 1.00 dBi   |                    |                    |            |
| Max. RF Output power |                | GSM/GPRS 850: 32.80 dBm / 1.905 W, EGPRS 850: 30.50 dBm / 1.122 W<br>GSM/GPRS 1900: 30.50 dBm / 1.122 W, EGPRS 1900: 29.70 dBm / 0.933 W |                    |                    |            |
| Max. ERP/EIRP        |                | GSM/GPRS 850: 27.66 dBm / 0.583 W, EGPRS 850: 22.94 dBm / 0.534 W<br>GSM/GPRS 1900: 32.31 dBm / 1.701 W, EGPRS 1900: 28.84 dBm / 0.765 W |                    |                    |            |
| Emission Designator  |                | GSM/GPRS 850: 245KGXW, EGPRS 850: 246KG7W<br>GSM/GPRS 1900: 247KGXW, EGPRS 1900: 246KG7W   |                    |                    |            |

## 1.2. Mode of Operation

ATL 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: GSM 850 Link    |
| Mode 2: GSM 1900 Link   |
| Mode 3: EGPRS 850 Link  |
| Mode 4: EGPRS 1900 Link |

Note: 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.

### Tested System Details

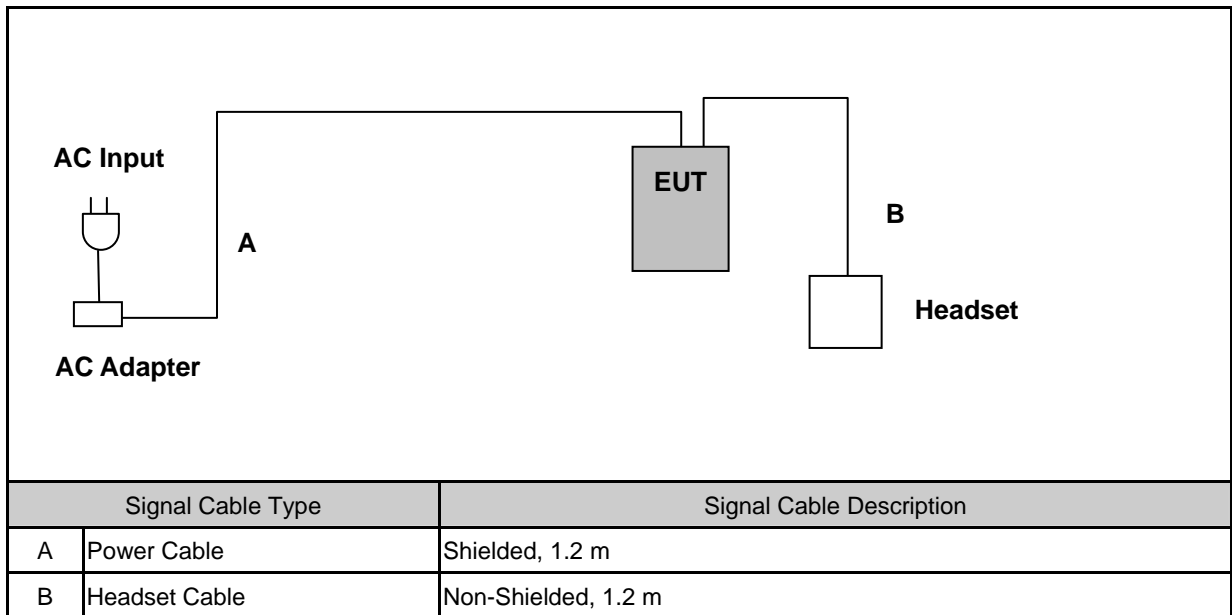
The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

|    | Product                              | Manufacturer | Model Number | Serial Number | Power Cord |
|----|--------------------------------------|--------------|--------------|---------------|------------|
| 1. | Universal Radio Communication Tester | R&S          | CMU200       | 109369        | N/A        |

### 1.3. EUT Exercise Software

|    |  |
|----|--|
| 1. | Setup the EUT and Base Station (CMU200) as shown on 1.4. |
| 2. | Turn on the power of all equipment.                      |

### 1.4. Configuration of Test System Details



### 1.5. Test Site Environment

| Items                      | Required (IEC 68-1) | Actual |
|----------------------------|---------------------|--------|
| Temperature (°C)           | 15-35               | 26     |
| Humidity (%RH)             | 25-75               | 60     |
| Barometric pressure (mbar) | 860-1060            | 950    |

**1.6. Summary of Test Result**

| Description                                   | FCC Rule                            | IC Rule                              | Limit                                    | Result |
|---|-------------------------------------|--------------------------------------|--|--------|
| Conducted Output Power                        | §2.1046                             | N/A                                  | N/A                                      | Pass   |
| Effective Radiated Power                      | §22.913(a)(2)                       | RSS-132(4.4)<br>SRSP-503(5.1.3)      | < 7 Watts for FCC<br>(<6.3 Watts for IC) | Pass   |
| Equivalent Isotropic Radiated Power           | §24.232(c)                          | RSS-133 (6.4)<br>SRSP-510(5.1.2)     | < 2 Watts                                | Pass   |
| Occupied Bandwidth                            | §2.1049<br>§22.917(a)<br>§24.238(a) | N/A                                  | N/A                                      | Pass   |
| Band Edge Measurement                         | §2.1051<br>§22.917(a)<br>§24.238(a) | RSS-132<br>(4.5.1)RSS-133<br>(6.5.1) | < 43+10log <sub>10</sub> (P[Watts])      | Pass   |
| Conducted Emission                            | §2.1051<br>§22.917(a)<br>§24.238(a) | RSS-132 (4.5.1)<br>RSS-133 (6.5.1)   | < 43+10log <sub>10</sub> (P[Watts])      | Pass   |
| Field Strength of Spurious Radiation          | §2.1053<br>§22.917(a)<br>§24.238(a) | RSS-132 (4.5.1)<br>RSS-133 (6.5.1)   | < 43+10log <sub>10</sub> (P[Watts])      | Pass   |
| Frequency Stability for Temperature & Voltage | §2.1055<br>§22.355<br>§24.235       | RSS-132(4.3)<br>RSS-133(6.3)         | < 2.5 ppm                                | Pass   |



## 2 RF Output Power Test

### 2.1. Limit

N/A

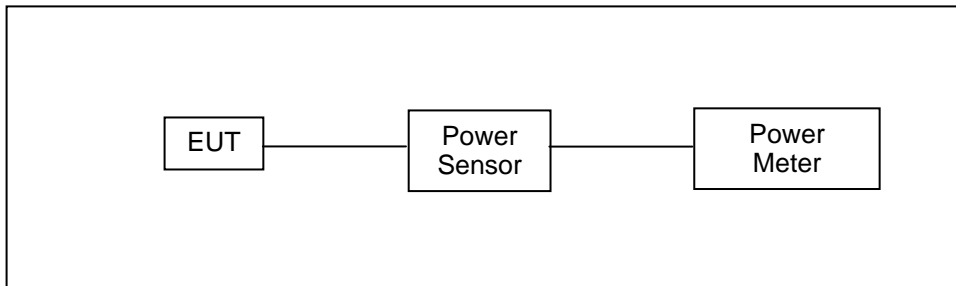
### 2.2. Test Instruments

| Describe                             | Manufacturer    | Model No. | Serial No. | Cal. Date  | Remark |
|--------------------------------------|-----------------|-----------|------------|------------|--------|
| Universal Radio Communication Tester | ROHDE & SCHWARZ | CMU200    | 109369     | 08/10/2010 | (2)    |
| Single Channel PK Power Sensor       | Agilent         | N1911A    | MY45101619 | 07/19/2010 | (1)    |
| Wideband Power Meter                 | Agilent         | N1921A    | MY45241957 | 07/19/2010 | (1)    |
| Test Site                            | ATL             | TE02      | TE02       | N.C.R.     | -----  |

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

### 2.3. Test Setup



### 2.4. Test Procedure

The measurement is made according to ANSI/TIA-603-C-2004 as follows:

1. The transmitter output was connected to power meter and base station through power divider.
2. Set base station for EUT at GSM 850: PCL=5 and PCS 1900: PCL=0.
3. Set base station for EUT at WCDMA Band V and WCDMA Band II, power level was set to maximum.
4. Select lowest, middle, and highest channels for each band.

## 2.5. Uncertainty

The measurement uncertainty is defined as for RF output power measurement is 1.2 dB.

## 2.6. Test Result

| Model Number | PG76240              |                 |               |           |              |              |
|--------------|----------------------|-----------------|---------------|-----------|--------------|--------------|
| Test Item    | RF Output Power      |                 |               |           |              |              |
| Test Mode    | Mode 1: GSM 850 Link |                 |               |           |              |              |
| Date of Test | 06/02/2011           |                 |               | Test Site | TE02         |              |
| Bands        | Data Rate            | Frequency (MHz) | Average Power |           | Peak Power   |              |
|              |                      |                 | (dBm)         | (W)       | (dBm)        | (W)          |
| GSM 850      | -----                | 824.2           | 32.50         | 1.778     | 32.70        | 1.862        |
|              |                      | 836.6           | 32.60         | 1.820     | <b>32.80</b> | <b>1.905</b> |
|              |                      | 848.8           | 32.70         | 1.862     | <b>32.80</b> | <b>1.905</b> |
| GRRS 850     | 4Down1Up             | 824.2           | 32.60         | 1.820     | 32.70        | 1.862        |
|              |                      | 836.6           | 32.70         | 1.862     | 32.80        | 1.905        |
|              |                      | 848.8           | 32.70         | 1.862     | 32.80        | 1.905        |
|              | 3Down2Up             | 824.2           | 31.50         | 1.413     | 31.60        | 1.445        |
|              |                      | 836.6           | 31.60         | 1.445     | 31.70        | 1.479        |
|              |                      | 848.8           | 31.70         | 1.479     | 31.80        | 1.514        |
| EGPRS 850    | 4Down1Up             | 824.2           | 27.10         | 0.513     | 30.30        | 1.072        |
|              |                      | 836.6           | 27.20         | 0.525     | 30.40        | 1.096        |
|              |                      | 848.8           | 27.30         | 0.537     | <b>30.50</b> | <b>1.122</b> |
|              | 3Down2Up             | 824.2           | 26.10         | 0.407     | 29.40        | 0.871        |
|              |                      | 836.6           | 26.20         | 0.417     | 29.40        | 0.871        |
|              |                      | 848.8           | 26.30         | 0.427     | 29.50        | 0.891        |

Note: The peak power testing result was used peak detector.

| Model Number | PG76240               |                 |               |           |              |              |
|--------------|-----------------------|-----------------|---------------|-----------|--------------|--------------|
| Test Item    | RF Output Power       |                 |               |           |              |              |
| Test Mode    | Mode 2: GSM 1900 Link |                 |               |           |              |              |
| Date of Test | 06/02/2011            |                 |               | Test Site | TE02         |              |
| Bands        | Data Rate             | Frequency (MHz) | Average Power |           | Peak Power   |              |
|              |                       |                 | (dBm)         | (W)       | (dBm)        | (W)          |
| GSM 1900     | -----                 | 1850.20         | 30.40         | 1.096     | <b>30.50</b> | <b>1.122</b> |
|              |                       | 1880.00         | 30.20         | 1.047     | 30.30        | 1.072        |
|              |                       | 1909.80         | 29.90         | 0.977     | 30.10        | 1.023        |
| GRRS 1900    | 4Down1Up              | 1850.20         | 30.40         | 1.096     | 30.50        | 1.122        |
|              |                       | 1880.00         | 30.20         | 1.047     | 30.30        | 1.072        |
|              |                       | 1909.80         | 29.90         | 0.977     | 30.00        | 1.000        |
|              | 3Down2Up              | 1850.20         | 28.80         | 0.759     | 28.90        | 0.776        |
|              |                       | 1880.00         | 28.60         | 0.724     | 28.70        | 0.741        |
|              |                       | 1909.80         | 28.40         | 0.692     | 28.50        | 0.708        |
| EGPRS 1900   | 4Down1Up              | 1850.20         | 26.50         | 0.447     | <b>29.70</b> | <b>0.933</b> |
|              |                       | 1880.00         | 26.30         | 0.427     | 29.50        | 0.891        |
|              |                       | 1909.80         | 26.10         | 0.407     | 29.30        | 0.851        |
|              | 3Down2Up              | 1850.20         | 25.40         | 0.347     | 28.60        | 0.724        |
|              |                       | 1880.00         | 25.20         | 0.331     | 28.50        | 0.708        |
|              |                       | 1909.80         | 25.00         | 0.316     | 28.20        | 0.661        |

Note: The peak power testing result was used peak detector.

### 3 Effective Radiated Power / Equivalent Isotropic Radiated Power Test

#### 3.1. Limit

For FCC Part 22.913(a)(2): The E.R.P. of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

For FCC Part 24.232(b): The E.I.R.P. of mobile transmitters and auxiliary test transmitters must not exceed 2 Watts.

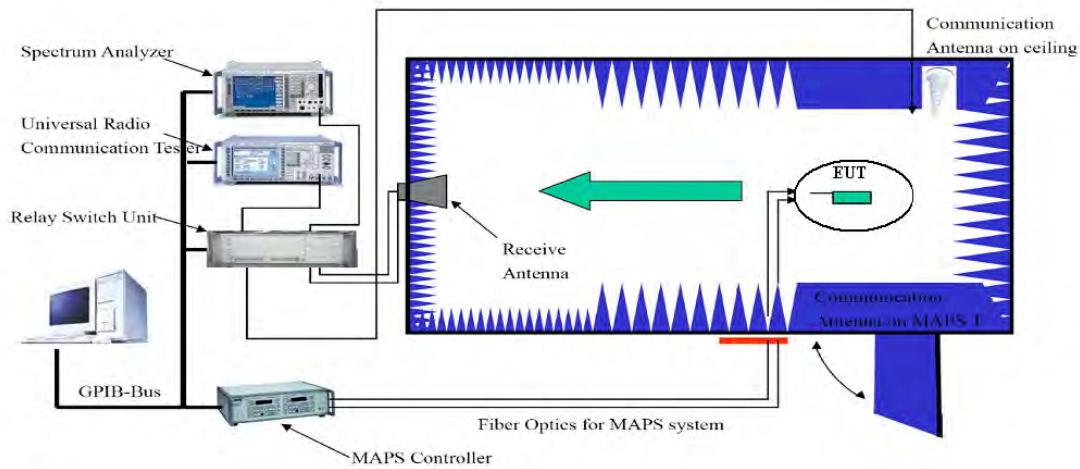
#### 3.2. Test Instruments

| Describe                                    | Manufacturer    | Model No.           | Serial No. | Cal. Date  | Remark |
|---|-----------------|---------------------|------------|------------|--------|
| Universal Radio Communication Tester        | ROHDE & SCHWARZ | CMU200              | 109369     | 08/10/2010 | (2)    |
| Spectrum Analyzer                           | Agilent         | E4445A              | MY45300744 | 12/28/2010 | (2)    |
| Loop Dipole                                 | ETS-Lindgren    | 3127-1880           | 00052640   | 08/10/2009 | (2)    |
| Loop Dipole                                 | ETS-Lindgren    | 3127-836            | 00055272   | 08/10/2009 | (2)    |
| Sleeve Dipole                               | ETS-Lindgren    | 3126-1845           | 00083335   | 09/24/2010 | (2)    |
| Sleeve Dipole                               | ETS-Lindgren    | 3126-880            | 00064344   | 09/24/2010 | (2)    |
| Circularly Polarized Communication Antennas | EMCO            | 3102                | 00051714   | N.C.R.     | -----  |
| Antenna Positioner Controller               | EMCO            | 2090                | 00052447   | N.C.R.     | -----  |
| MAPS Positioner                             | EMCO            | 2010/2015           | NA         | N.C.R.     | -----  |
| Pattern Measurement Software                | ETS-Lindgren    | EMQuest™<br>EMQ-100 | NA         | N.C.R.     | -----  |
| Desktop Computer with Windows XP            | DELL            | Dell Computers      | NA         | N.C.R.     | -----  |
| Anechoic Chamber                            | ETS-Lindgren    | AMS 8500            | 102165     | N.C.R.     | -----  |

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

### 3.3. Test Setup



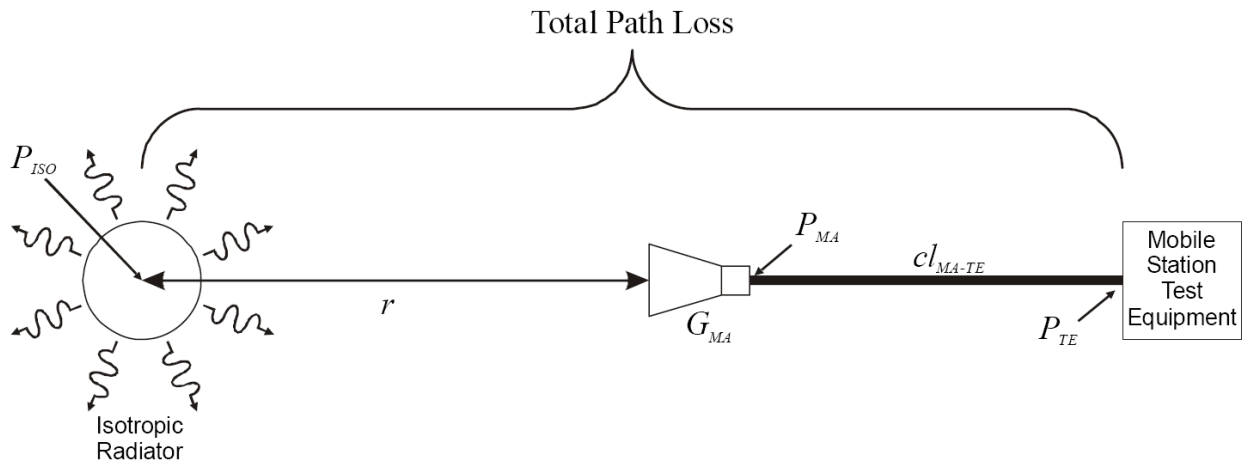
### 3.4. Test Procedure

The phone was tested in an anechoic chamber with a 3-axis position system that permits taking complete spherical scans of the EUT's 3-axis radiation patterns. For all tests, the phone was supported in a free space type environment, vertically oriented in the chamber. Tests were done for GSM 850 three frequencies (824.2, 836.6 and 848.8 MHz) and GSM 1900 three frequencies (1850.2, 1880.00, and 1909.80 MHz).

GSM measurements were made with the phone placed in a call using the CMU200 mobile station test set. The phone was weakly coupled to the test set and configured to transmit in full data rate mode.

The radiated power was measured using ETS-LINDGREN OTA Chamber in "Peak" mode. From these measurements, the software calculates the angle at which maximum radiated power occurs for each case, and the radiated power at this angle was extracted from the data.

Each individual data point in a radiated power or sensitivity measurement is referred to as the effective isotropic radiated power or effective isotropic sensitivity. That is, the desired information is how the measured quantity relates to the same quantity from an isotropic radiator. Thus, the reference measurement must relate the power received or transmitted at the EUT test equipment (spectrum analyzer or communication tester) back to the power transmitted or received at a theoretical isotropic radiator. The total path loss then, is just the difference in dB between the power transmitted or received at the isotropic radiator and that seen at the test equipment (see follow Figure 1).



**Figure 1. THEORETICAL CASE FOR DETERMINING PATH LOSS**

In equation form, this becomes:

Equation 1

$$PL = P_{ISO} - P_{TE}$$

where PL is the total path loss,  $P_{ISO}$  is the power radiated by the theoretical isotropic radiator, and  $P_{TE}$  is the power received at the test equipment port. As can be seen in Figure 1, this quantity includes the range path loss due to the range length  $r$ , the gain of the measurement antenna, and any loss terms associated with the cabling, connections, amplifiers, splitters, etc. between the measurement antenna and the test equipment port.

Figure 2 shows a typical real world configuration for measuring the path loss. In this case, a reference antenna with known gain is used in place of the theoretical isotropic source. The path loss may then be determined from the power into the reference antenna by adding the gain of the reference antenna.

That is:

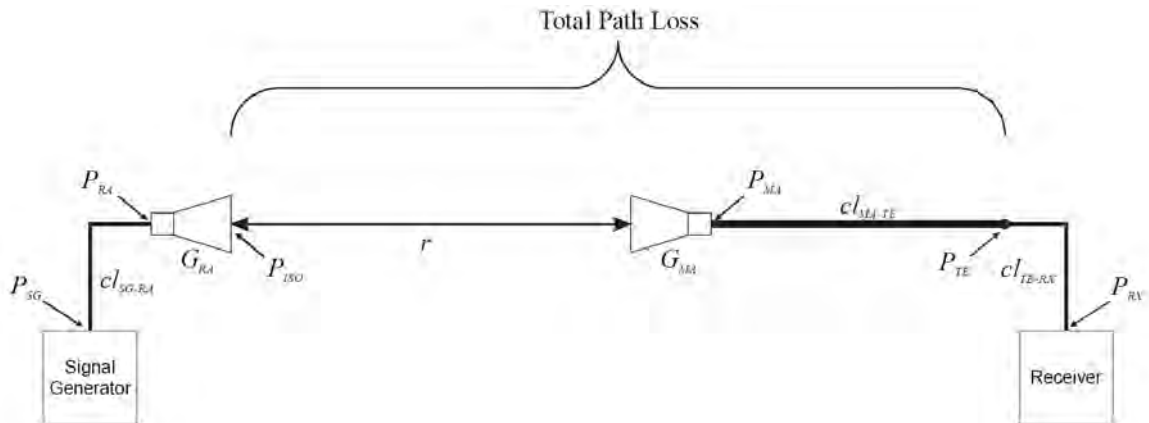
Equation 2

$$P_{ISO} = P_{RA} + G_{RA}$$

where  $P_{RA}$  is the power radiated by reference antenna, and  $G_{RA}$  is the gain of the reference antenna, so that:

Equation 3

$$PL = P_{RA} + G_{RA} - P_{TE}$$

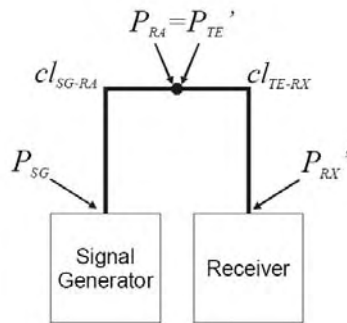


**Figure 2. TYPICAL CONFIGURATION FOR MEASURING PATH LOSS**

In order to determine  $P_{RA}$ , it is necessary to perform a cable reference measurement to remove the effects of the cable loss between signal generator and reference antenna, and between the test equipment port and the receiver. This establishes a reference point at the input to the reference antenna. Figure 3 illustrates the cable reference measurement configuration. Assuming the power level at the signal generator is fixed, it is easy to show that the difference between  $P_{RA}$  and  $P_{TE}$  in Figure 2 is given by:

Equation 4

$$P_{RA} - P_{TE} = P_{RX'} - P_{RX}$$



**Figure 3. CABLE REFERENCE CALIBRATION CONFIGURATION**

Where  $P_{RX'}$  is the power measured at the receiver during the cable reference test, and  $P_{RX}$  is the power measured at the receiver during the range path loss measurement in Figure 2. Thus, the path loss is then just given by:

Equation 5

$$PL = G_{RA} + P_{RX'} - P_{RX}$$

$$EIRP = P_t + P_L$$

$P_t$  = Often referred to as antenna output power

### 3.5. Uncertainty

The measurement uncertainty is defined as for Radiated Power measurement list below:

| Band | Uncertainty |
|------|-------------|
| Cell | 1.08 dB     |
| PCS  | 1.42 dB     |
| GPRS | 1.44 dB     |

### 3.6. Test Result

| Model Number | PG76240              |                  |                         |              |              |           |
|--------------|----------------------|------------------|-------------------------|--------------|--------------|-----------|
| Test Item    | E.R.P.               |                  |                         |              |              |           |
| Test Mode    | Mode 1: GSM 850 Link |                  |                         |              |              |           |
| Date of Test | 06/08/2011           |                  |                         | Test Site    | TC03         |           |
| Bands        | Frequency (MHz)      | Read Level (dBm) | Correction factor (dBm) | E.R.P.       |              | Limit (W) |
|              |                      |                  |                         | (dBm)        | (W)          |           |
| GSM 850      | 824.2                | 76.64            | -49.50                  | 27.14        | 0.517        | < 7       |
|              | 836.6                | 77.23            | -49.70                  | 27.53        | 0.566        | < 7       |
|              | 848.8                | 77.36            | -49.70                  | <b>27.66</b> | <b>0.583</b> | < 7       |
| EGPRS 850    | 824.2                | 78.34            | -49.50                  | 22.19        | 0.765        | < 7       |
|              | 836.6                | 78.51            | -49.70                  | 22.68        | 0.760        | < 7       |
|              | 848.8                | 76.98            | -49.70                  | <b>22.94</b> | <b>0.534</b> | < 7       |

| Model Number | PG76240               |                  |                         |              |              |           |
|--------------|-----------------------|------------------|-------------------------|--------------|--------------|-----------|
| Test Item    | E.I.R.P.              |                  |                         |              |              |           |
| Test Mode    | Mode 2: GSM 1900 Link |                  |                         |              |              |           |
| Date of Test | 06/08/2011            |                  |                         | Test Site    | TE01         |           |
| Bands        | Frequency (MHz)       | Read Level (dBm) | Correction factor (dBm) | E.I.R.P.     |              | Limit (W) |
|              |                       |                  |                         | (dBm)        | (W)          |           |
| GSM 1900     | 1850.20               | 87.71            | -55.40                  | <b>32.31</b> | <b>1.701</b> | < 2       |
|              | 1880.00               | 87.56            | -55.60                  | 31.96        | 1.569        | < 2       |
|              | 1909.80               | 86.14            | -55.70                  | 30.44        | 1.106        | < 2       |
| EGPRS 1900   | 1850.20               | 84.24            | -55.40                  | <b>28.84</b> | <b>0.765</b> | < 2       |
|              | 1880.00               | 84.41            | -55.60                  | 28.81        | 0.760        | < 2       |
|              | 1909.80               | 82.98            | -55.70                  | 27.28        | 0.534        | < 2       |

Note: 1. E.R.P./E.I.R.P. = Read Level + Correction factor.

2. For WCDMA signals, a peak detector is used with RBW = VBW = 5MHz.

3. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW= 1 MHz.



## 4 Occupied Bandwidth Test

### 4.1. Limit

**The Occupied Bandwidth Limit:**

N/A.

**The Band Edge 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.

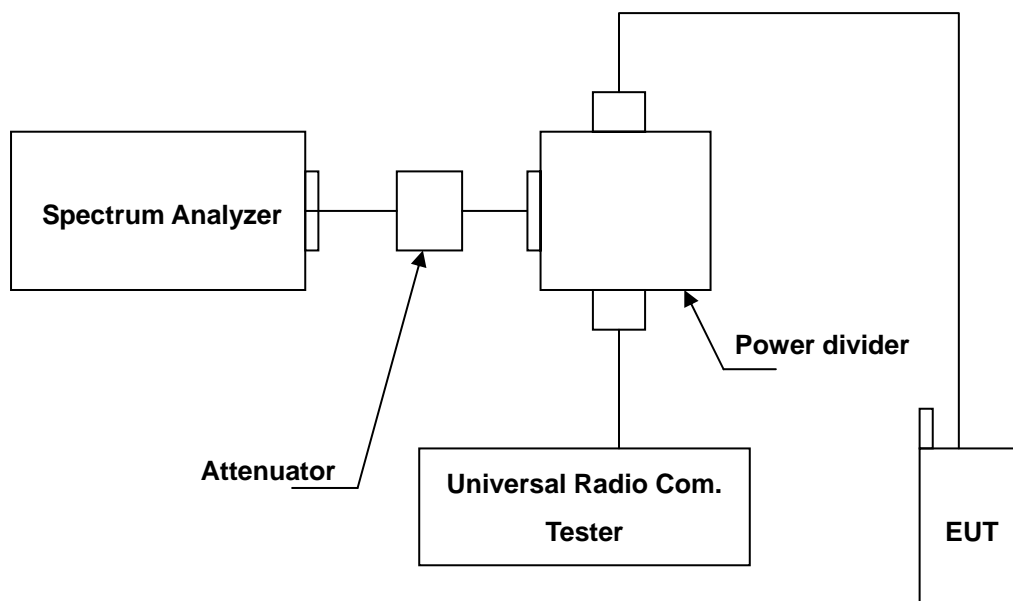
### 4.2. Test Instruments

| Describe                             | Manufacturer    | Model No. | Serial No. | Cal. Date  | Remark |
|--------------------------------------|-----------------|-----------|------------|------------|--------|
| Spectrum Analyzer                    | Agilent         | E4445A    | MY46181986 | 05/16/2011 | (2)    |
| Universal Radio Communication Tester | ROHDE & SCHWARZ | CMU200    | 109369     | 08/10/2010 | (2)    |
| Attenuator                           | RADIALL         | R41572000 | 0603033073 | N.C.R.     | -----  |
| Power divider                        | Agilent         | 87302C    | 3239A00760 | N.C.R.     | -----  |
| Test Site                            | ATL             | TE02      | TE02       | N.C.R.     | -----  |

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

### 4.3. Setup



#### 4.4. Test Procedure

The measurement is made according to FCC rules part 22 and 24:

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The occupied bandwidth of middle channel for the highest and lowest RF powers was measured.
3. The band edge of low and high channels for the highest RF powers within the transmitting frequency band were measured. Setting RBW as roughly BW/100.
4. The band edge setting:
  - a. RB=3 kHz; VB=3 kHz for GSM 850 and PCS 1900.
  - b. RB=100 kHz; VB=100 kHz for WCDMA Band V and WCDMA Band II.

#### 4.5. Uncertainty

The measurement uncertainty is defined as  $\pm 10\text{Hz}$

#### 4.6. Test Result

##### 99% Occupied Bandwidth

| Model Number | PG76240              |                     |                      |
|--------------|----------------------|---------------------|----------------------|
| Test Item    | Occupied Bandwidth   |                     |                      |
| Test Mode    | Mode 1: GSM 850 Link |                     |                      |
| Date of Test | 06/02/2011           | Test Site           | TE02                 |
| Channel No.  | Frequency (MHz)      | 99% Bandwidth (kHz) | Note                 |
| 128          | 824.2                | 245.2302            | RBW:3KHz , VBW:10KHz |
| 190          | 836.6                | 243.2995            | RBW:3KHz , VBW:10KHz |
| 251          | 848.8                | 245.3317            | RBW:3KHz , VBW:10KHz |

Figure Channel 128

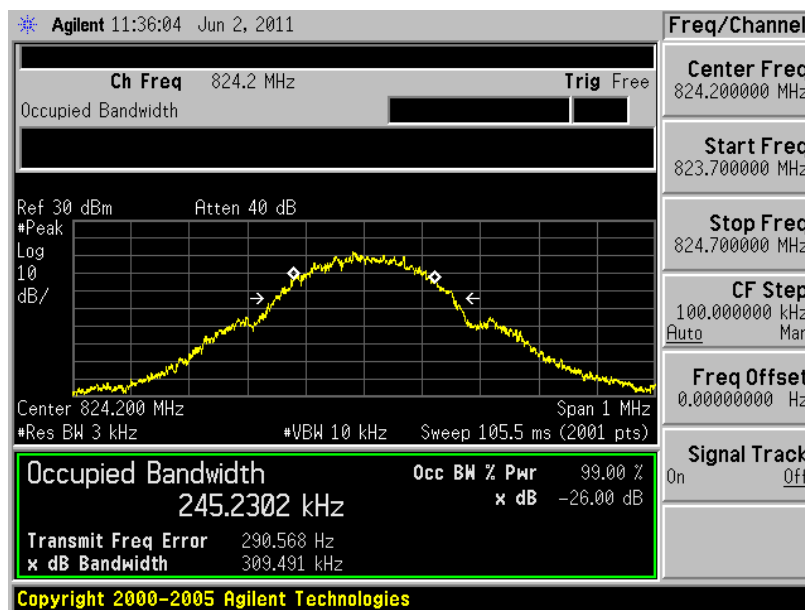


Figure Channel 190

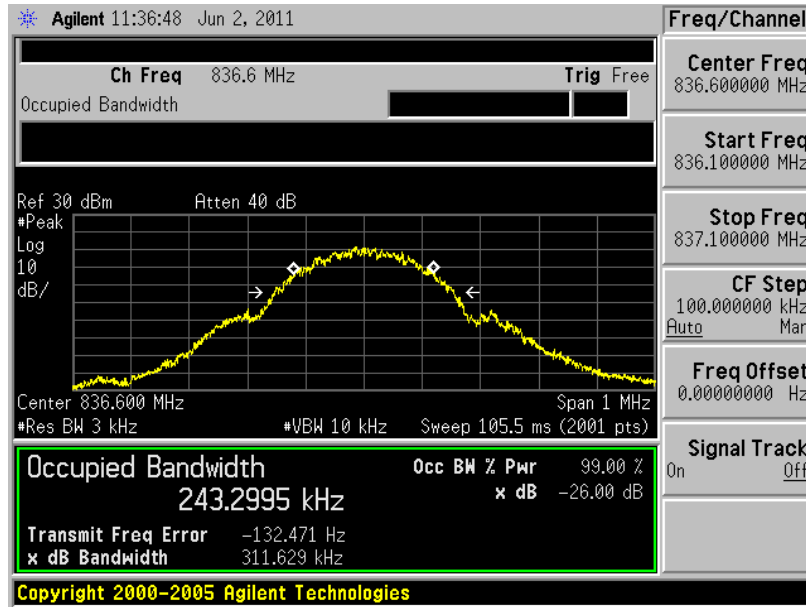
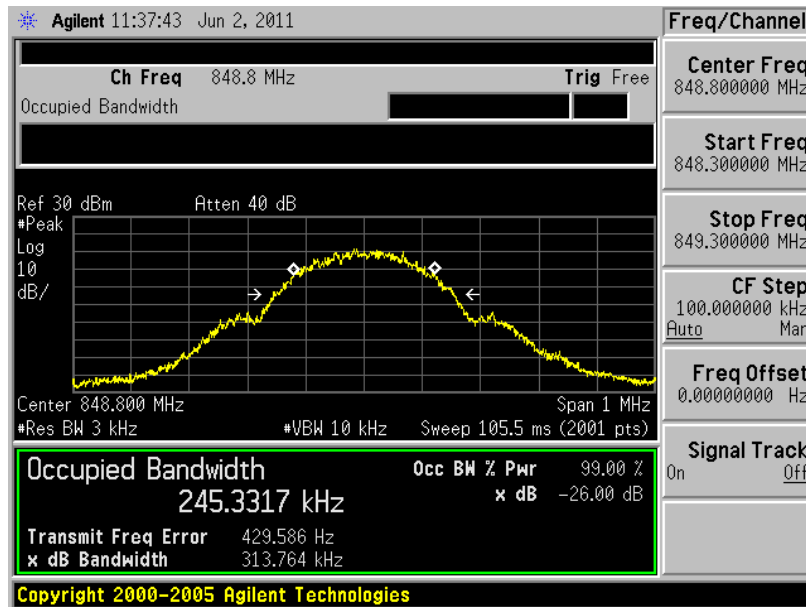


Figure Channel 251



| Model Number | PG76240               |                     |                      |
|--------------|-----------------------|---------------------|----------------------|
| Test Item    | Occupied Bandwidth    |                     |                      |
| Test Mode    | Mode 2: GSM 1900 Link |                     |                      |
| Date of Test | 06/02/2011            | Test Site           | TE02                 |
| Channel No.  | Frequency (MHz)       | 99% Bandwidth (kHz) | Note                 |
| 512          | 1850.20               | 247.2553            | RBW:3KHz , VBW:10KHz |
| 661          | 1880.00               | 245.3572            | RBW:3KHz , VBW:10KHz |
| 810          | 1909.80               | 241.8519            | RBW:3KHz , VBW:10KHz |

Figure Channel 512

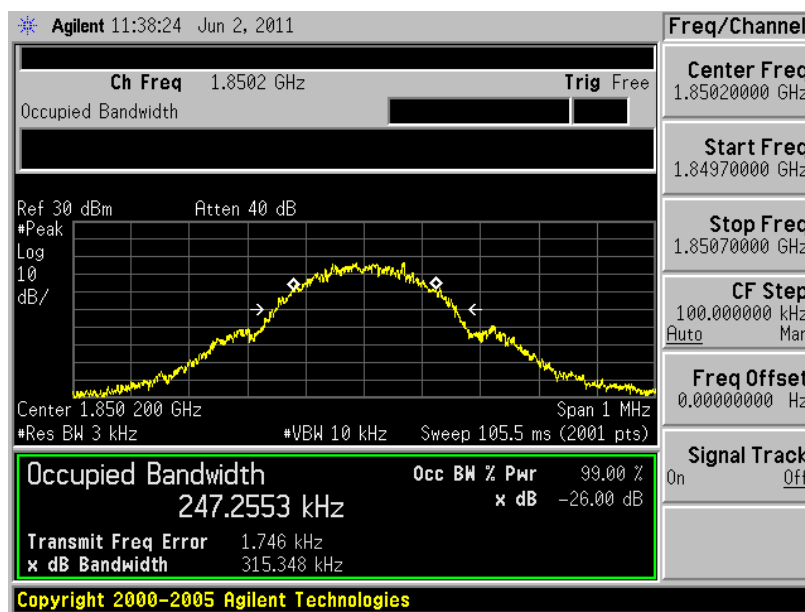


Figure Channel 661

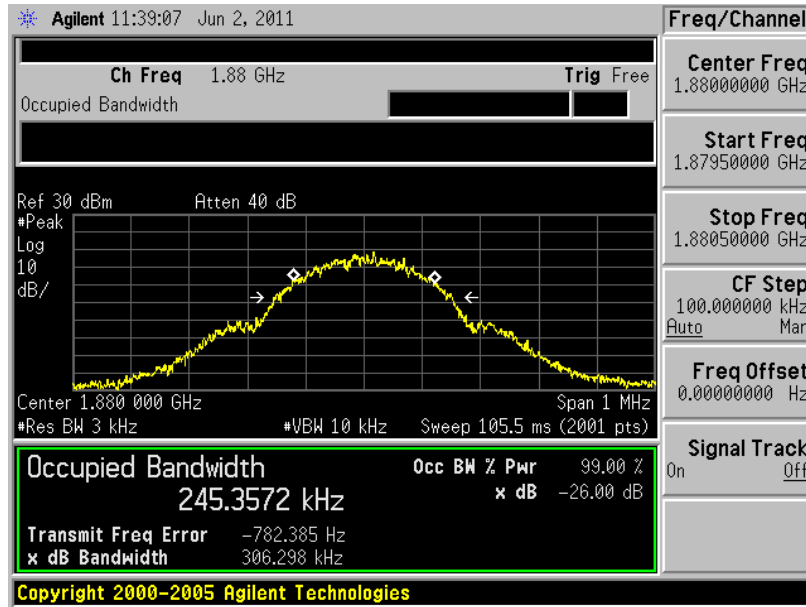
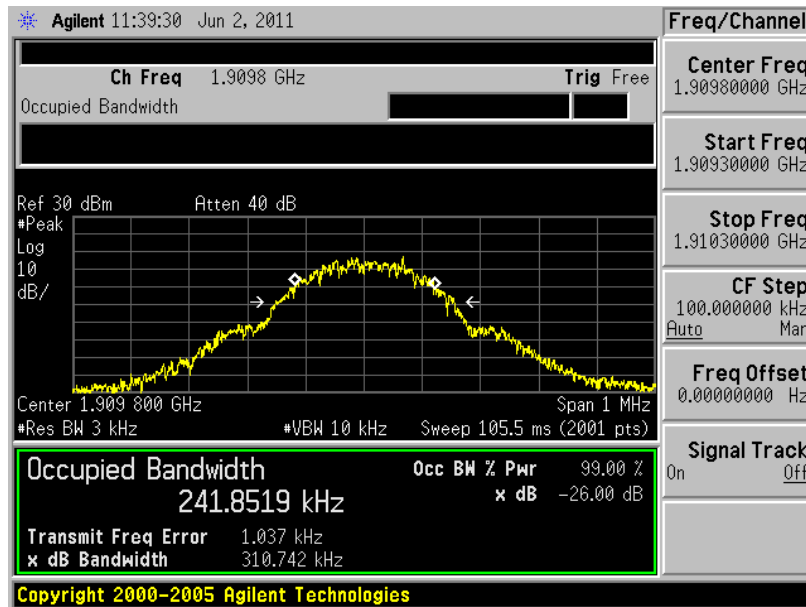


Figure Channel 810



| Model Number | PG76240                |                     |                      |
|--------------|------------------------|---------------------|----------------------|
| Test Item    | Occupied Bandwidth     |                     |                      |
| Test Mode    | Mode 3: EGPRS 850 Link |                     |                      |
| Date of Test | 06/02/2011             | Test Site           | TE02                 |
| Channel No.  | Frequency (MHz)        | 99% Bandwidth (kHz) | Note                 |
| 128          | 824.2                  | 243.2776            | RBW:3KHz , VBW:10KHz |
| 190          | 836.6                  | 241.3766            | RBW:3KHz , VBW:10KHz |
| 251          | 848.8                  | 245.7940            | RBW:3KHz , VBW:10KHz |

Figure Channel 128

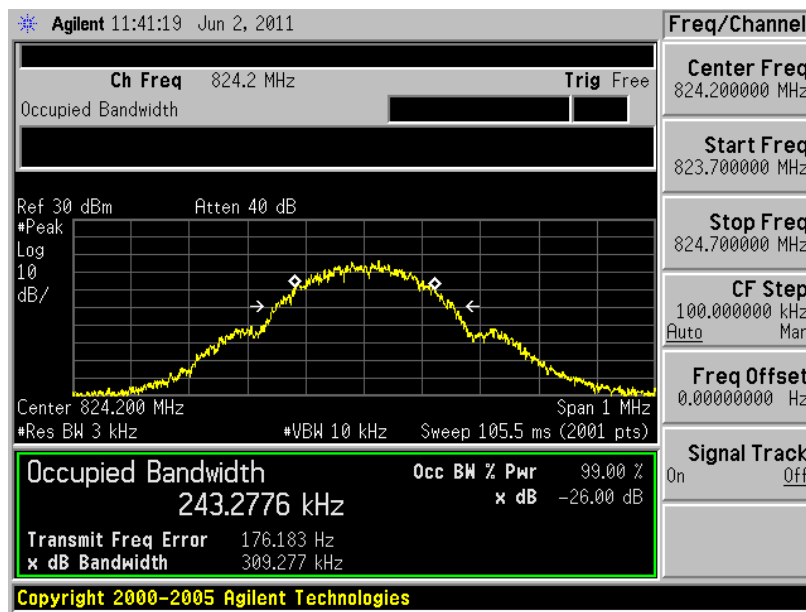


Figure Channel 190

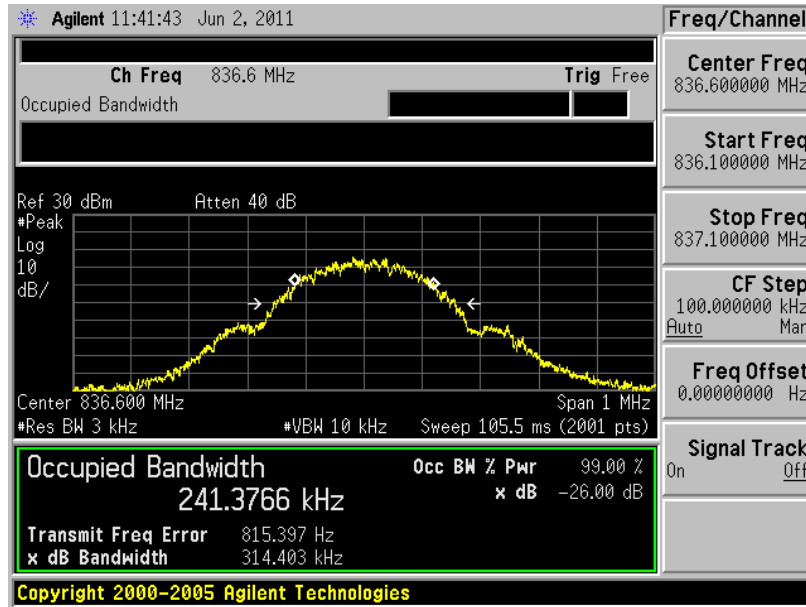
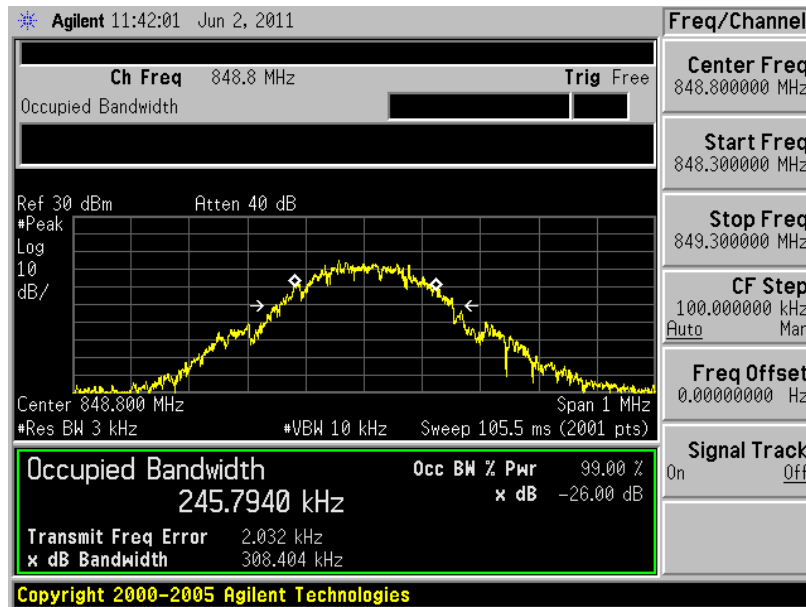


Figure Channel 251





| Model Number | PG76240                 |                     |                      |
|--------------|-------------------------|---------------------|----------------------|
| Test Item    | Occupied Bandwidth      |                     |                      |
| Test Mode    | Mode 4: EGPRS 1900 Link |                     |                      |
| Date of Test | 06/02/2011              | Test Site           | TE02                 |
| Channel No.  | Frequency (MHz)         | 99% Bandwidth (kHz) | Note                 |
| 512          | 1850.20                 | 245.1456            | RBW:3KHz , VBW:10KHz |
| 661          | 1880.00                 | 245.8376            | RBW:3KHz , VBW:10KHz |
| 810          | 1909.80                 | 245.4515            | RBW:3KHz , VBW:10KHz |

Figure Channel 512

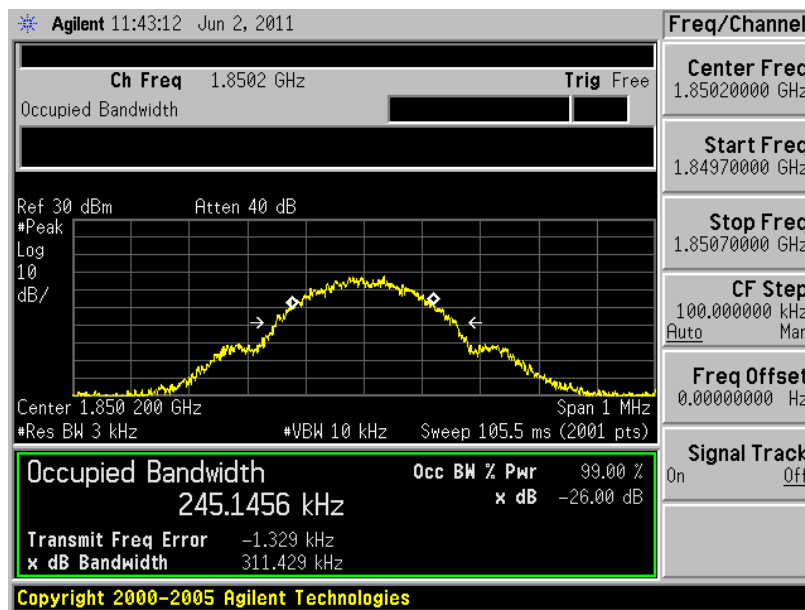


Figure Channel 661

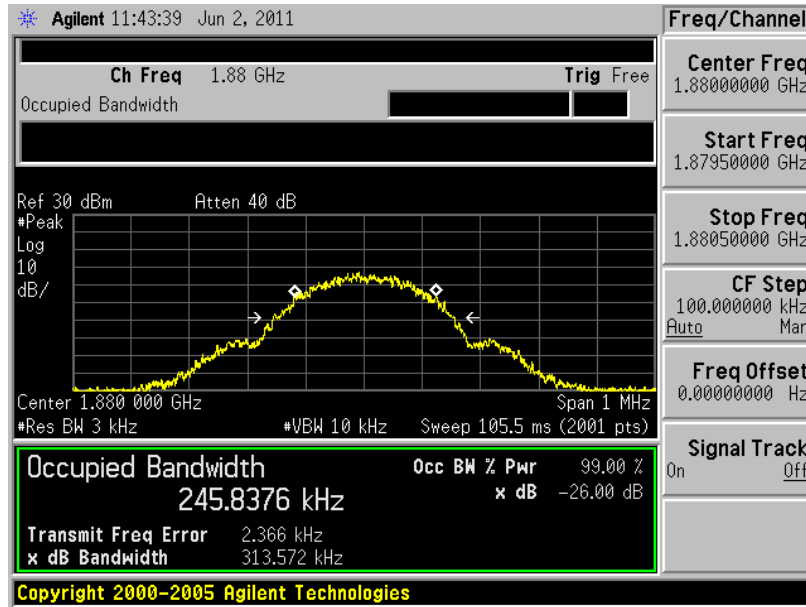
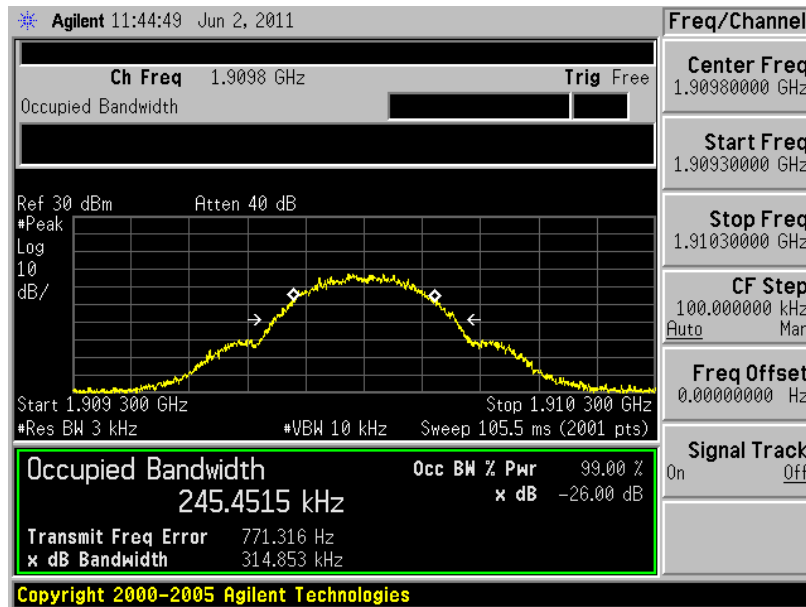


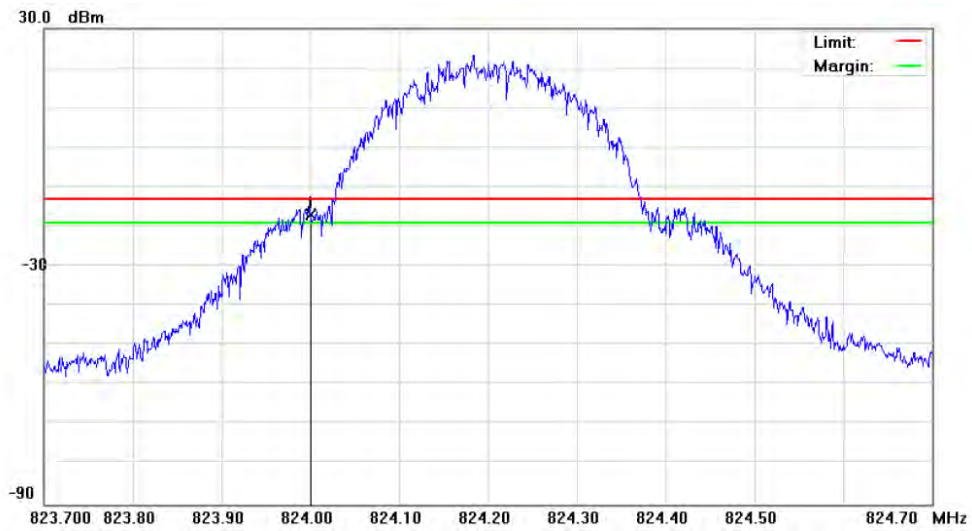
Figure Channel 810



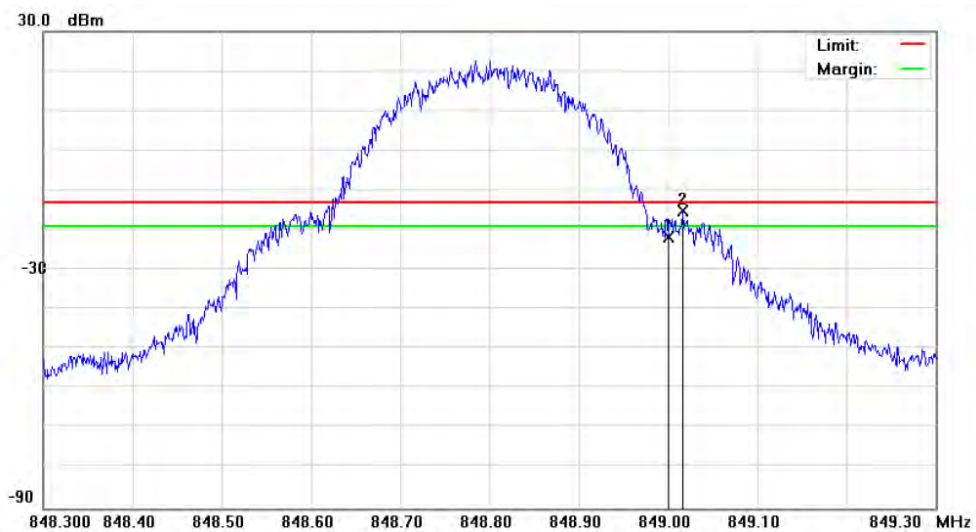
**Band Edge**

| Model Number | PG76240              |                 |                 |             |        |
|--------------|----------------------|-----------------|-----------------|-------------|--------|
| Test Item    | Band Edge            |                 |                 |             |        |
| Test Mode    | Mode 1: GSM 850 Link |                 |                 |             |        |
| Date of Test | 06/02/2011           |                 | Test Site       | TE02        |        |
| Band         | Channel              | Frequency (MHz) | Bandwidth (dBm) | Limit (dBm) | Result |
| Lower        | 128                  | 824.0000        | -17.06          | -13         | Pass   |
| Higher       | 251                  | 849.0000        | -15.09          | -13         | Pass   |

Lower Band

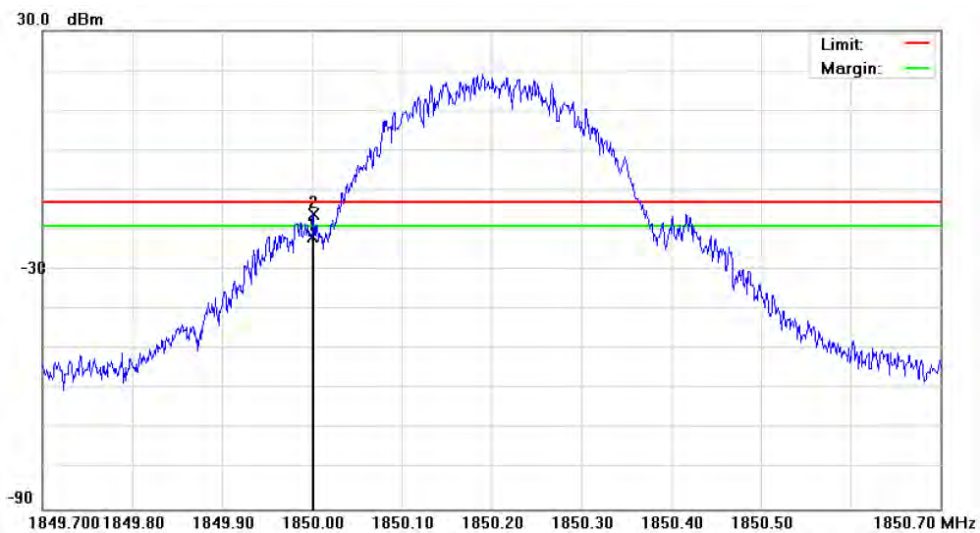


Higher Band

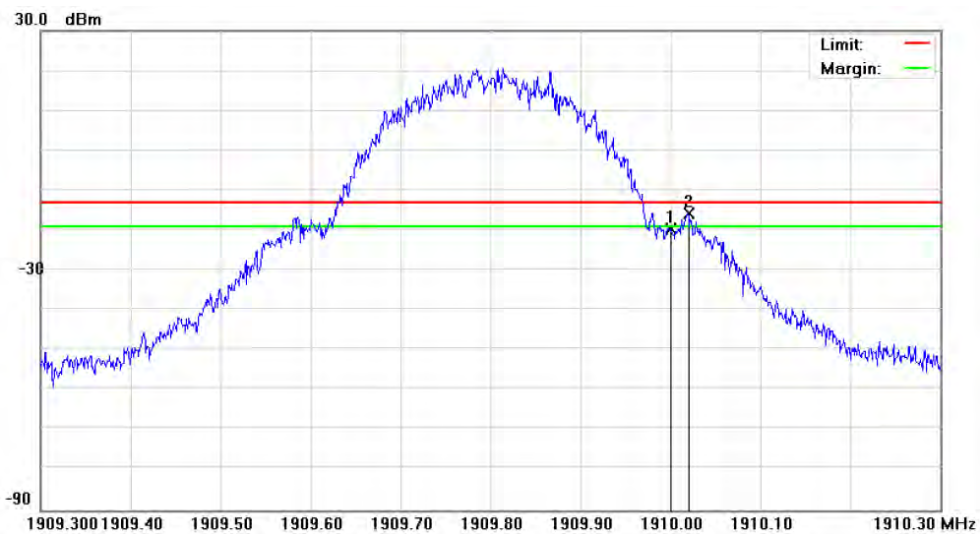


|              |                       |                 |                 |             |        |
|--------------|-----------------------|-----------------|-----------------|-------------|--------|
| Model Number | PG76240               |                 |                 |             |        |
| Test Item    | Band Edge             |                 |                 |             |        |
| Test Mode    | Mode 2: GSM 1900 Link |                 |                 |             |        |
| Date of Test | 06/02/2011            |                 | Test Site       | TE02        |        |
| Band         | Channel               | Frequency (MHz) | Bandwidth (dBm) | Limit (dBm) | Result |
| Lower        | 512                   | 1850.000        | -16.19          | -13         | Pass   |
| Higher       | 810                   | 1910.000        | -15.73          | -13         | Pass   |

Lower Band



Higher Band



## 5 Conducted Emission Test

### 5.1. 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.

### 5.2. Test Instruments

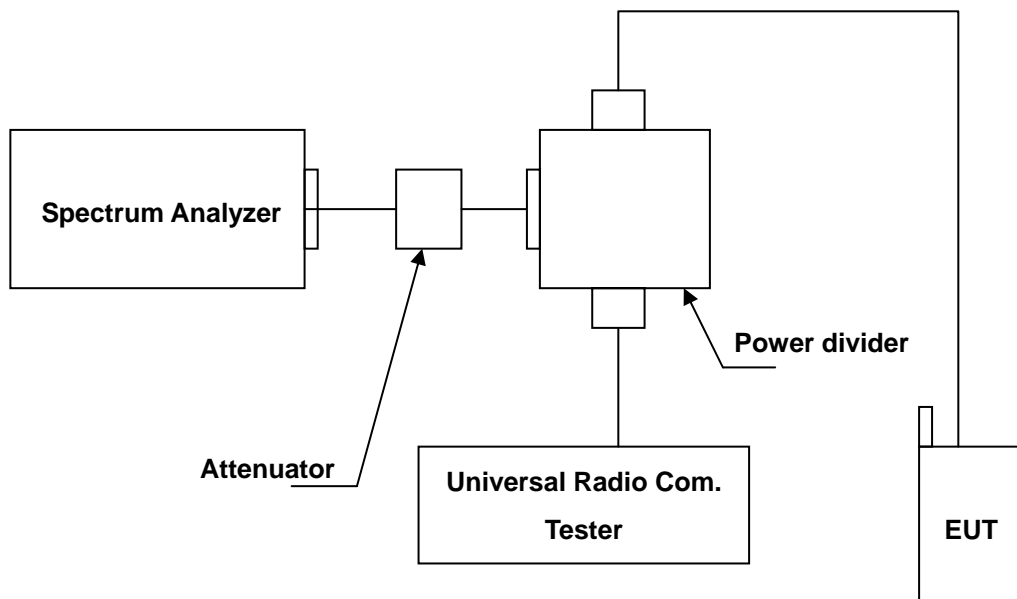
| Describe                             | Manufacturer    | Model No. | Serial No. | Cal. Date  | Remark |
|--------------------------------------|-----------------|-----------|------------|------------|--------|
| Spectrum Analyzer                    | Agilent         | E4445A    | MY46181986 | 05/16/2011 | (2)    |
| Universal Radio Communication Tester | ROHDE & SCHWARZ | CMU200    | 109369     | 08/10/2010 | (2)    |
| Attenuator                           | RADIALL         | R41572000 | 0603033073 | N.C.R.     | -----  |
| Power divider                        | Agilent         | 87302C    | 3239A00760 | N.C.R.     | -----  |
| Test Site                            | ATL             | TE02      | TE02       | N.C.R.     | -----  |

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

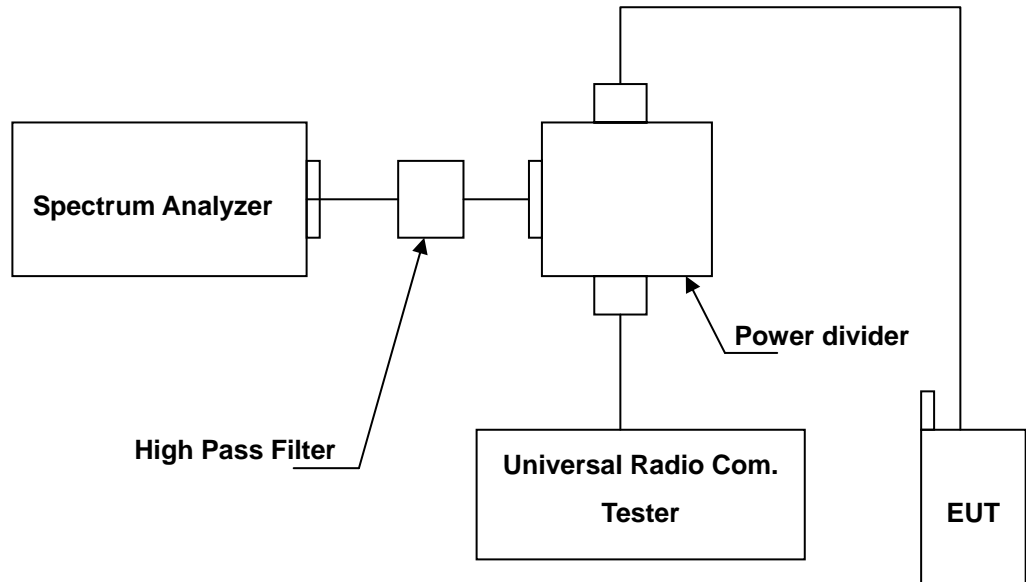
NOTE: N.C.R. = No Calibration Request.

### 5.3. Setup

Below 2.8GHz



**Above 2.8GHz**



**5.4. Test Procedure**

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The middle channel for the highest RF power within the transmitting frequency was measured.
3. The conducted spurious emission for the whole frequency range was taken.
4. Test setting at GSM 850 RB>100 kHz, VB>100 kHz; PCS 1900 RB>1MHz, VB>1MHz.

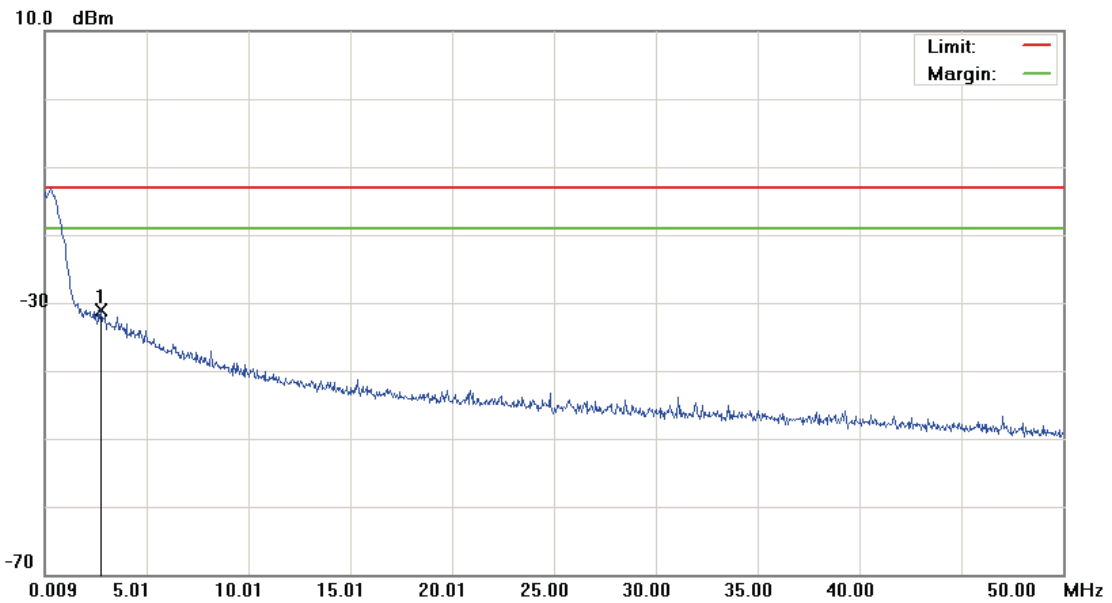
**5.5. Uncertainty**

The measurement uncertainty is evaluated as  $\pm 2.24$  dB.

**5.6. Test Result**

|              |   |           |      |
|--------------|---|-----------|------|
| Model Number | PG76240                                       |           |      |
| Test Item    | Conducted Emission                            |           |      |
| Mode         | Mode 1: GSM 850 Link<br>Mode 2: GSM 1900 Link |           |      |
| Date of Test | 06/02/2011                                    | Test Site | TE02 |

File: PG76240(CH128)      Data: #1      Date: 2011/6/2      Time: 下午 01:47:14



|   |                                   |                             |
|---|-----------------------------------|-----------------------------|
| Site: : RF Conducted                    | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 22 conducted(9k-12.75G) | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone                         | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                            |                                   |                             |
| Mode: GSM 850                           |                                   |                             |
| Note: CH128(824.2MHz)                   |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 2.7585       | -61.66                  | 30.52                   | -31.14                  | -13.00       | -18.14     | peak                    |                           |         |

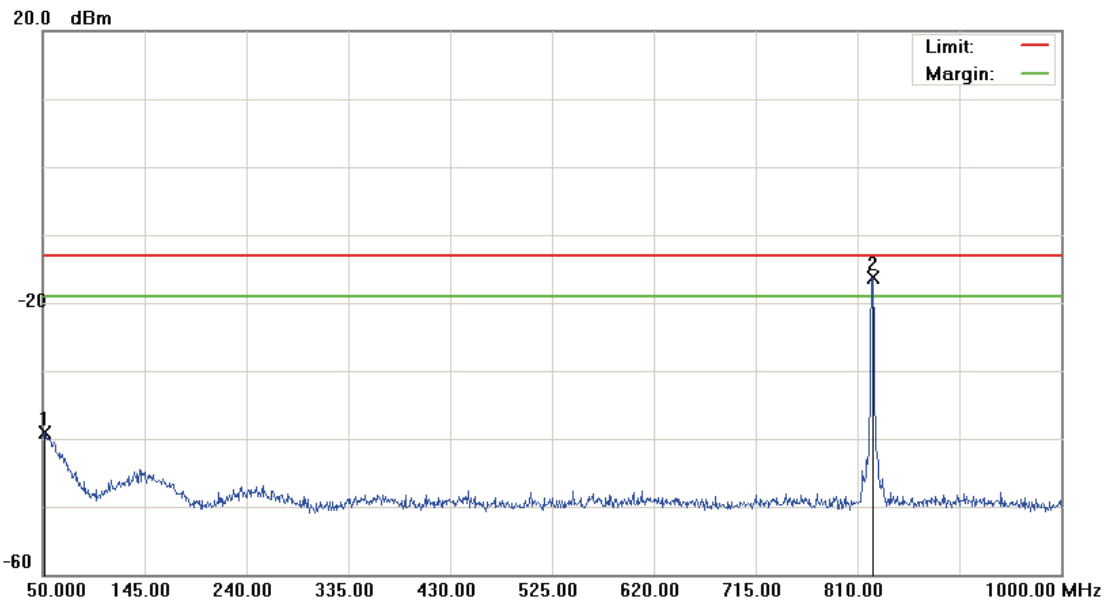
\*:Maximum data    x:Over limit    !:over margin

File : PG76240(CH128)

Data : #2

Date : 2011/6/2

Time : 下午 01:47:38



|   |                                   |                             |
|---|-----------------------------------|-----------------------------|
| Site: : RF Conducted                    | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 22 conducted(9k-12.75G) | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone                         | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                            |                                   |                             |
| Mode: GSM 850                           |                                   |                             |
| Note: CH128(824.2MHz)                   |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|----------|---------|
| 1   |     | 51.9000      | -53.39                  | 14.36                   | -39.03                  | -13.00       | -26.03     |                         |                 | peak     |         |
| 2   | *   | 824.2500     | -20.16                  | 3.84                    | -16.32                  | -13.00       | -3.32      |                         |                 | peak     | TX      |

\*:Maximum data x:Over limit !:over margin

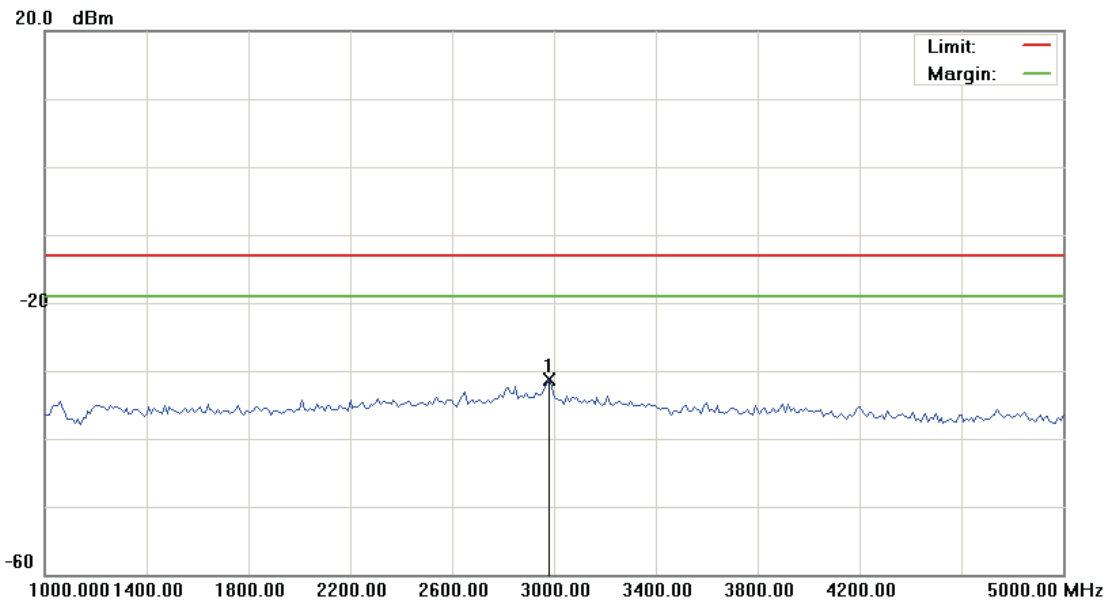


File : PG76240(CH128)

Data : #3

Date: 2011/6/2

Time: 下午 01:59:52

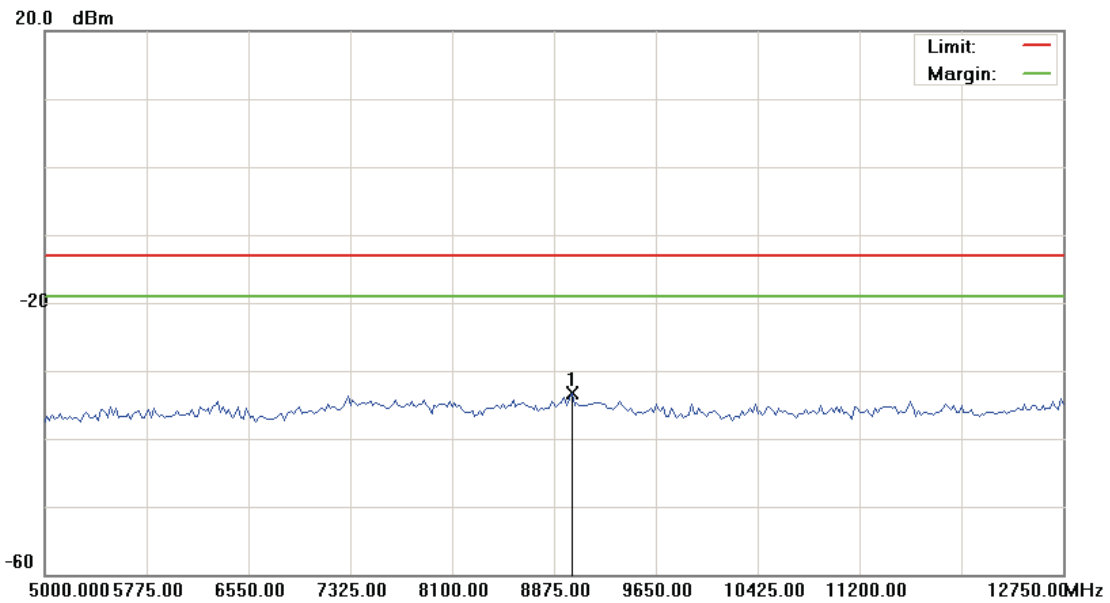


|   |                                   |                             |
|---|-----------------------------------|-----------------------------|
| Site: : RF Conducted                    | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 22 conducted(9k-12.75G) | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone                         | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                            |                                   |                             |
| Mode: GSM 850                           |                                   |                             |
| Note: CH128(824.2MHz)                   |                                   |                             |

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       |
| 1   | *   | 2980.000 | -35.85        | 4.54           | -31.31      | -13.00 | -18.31 | peak           |              |

\*:Maximum data    x:Over limit    !:over margin

File: PG76240(CH128)      Data: #4      Date: 2011/6/2      Time: 下午 02:00:18

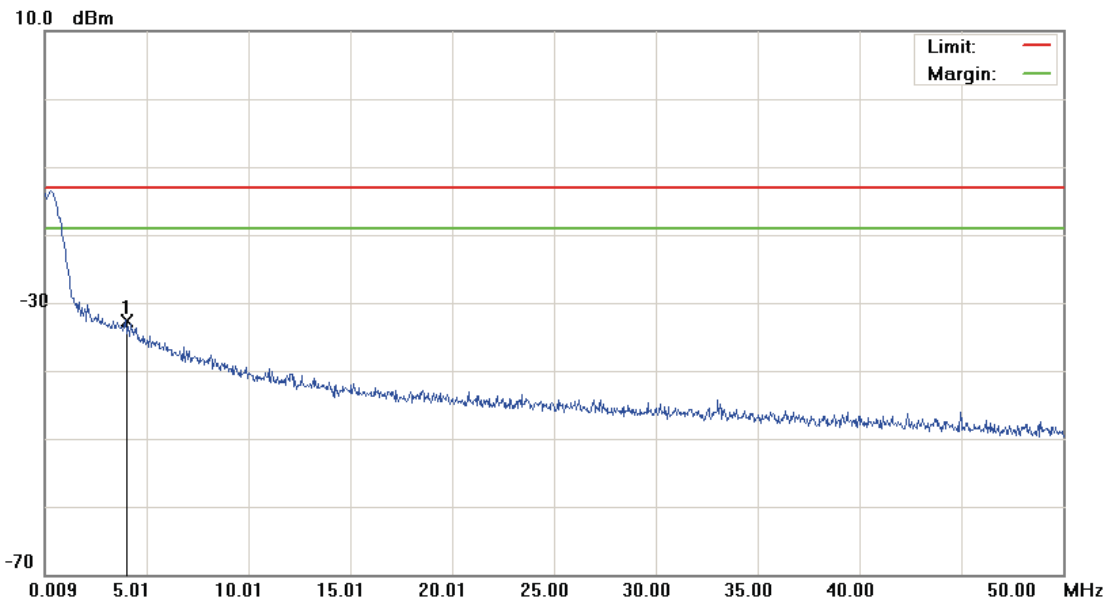


|   |                                   |                             |
|---|-----------------------------------|-----------------------------|
| Site: : RF Conducted                    | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 22 conducted(9k-12.75G) | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone                         | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                            |                                   |                             |
| Mode: GSM 850                           |                                   |                             |
| Note: CH128(824.2MHz)                   |                                   |                             |

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree | Detector | Comment |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|----------|---------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       |          |         |
| 1   | *   | 9010.625 | -38.91        | 5.52           | -33.39      | -13.00 | -20.39 |                |              | peak     |         |

\*:Maximum data    x:Over limit    !:over margin

File :PG76240(CH190)                      Data :#1                      Date: 2011/6/2                      Time: 下午 01:51:13



|   |                                   |                             |
|---|-----------------------------------|-----------------------------|
| Site: : RF Conducted                    | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 22 conducted(9k-12.75G) | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone                         | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                            |                                   |                             |
| Mode: GSM 850                           |                                   |                             |
| Note: CH190(836.6MHz)                   |                                   |                             |
| 加Notch(3TNF-800)                        |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 3.9833       | -62.22                  | 29.62                   | -32.60                  | -13.00       | -19.60     | peak                    |                           |         |

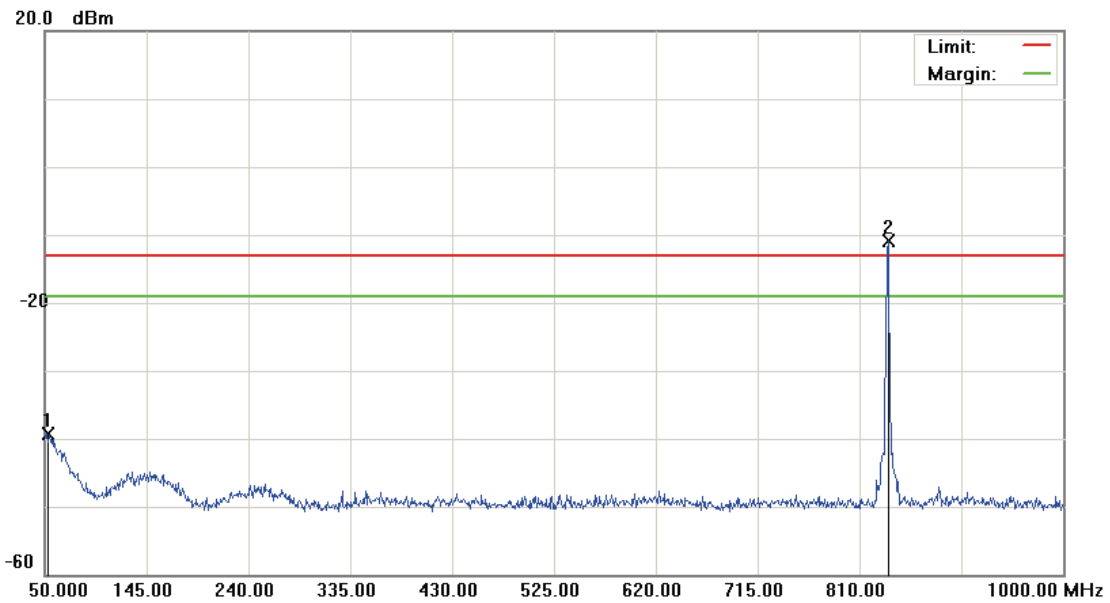
\*:Maximum data    x:Over limit    !:over margin

File : PG76240(CH190)

Data : #2

Date: 2011/6/2

Time: 下午 01:51:37



Site : RF Conducted

 Polarization: *Conducted po*

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Smartphone

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: PG76240

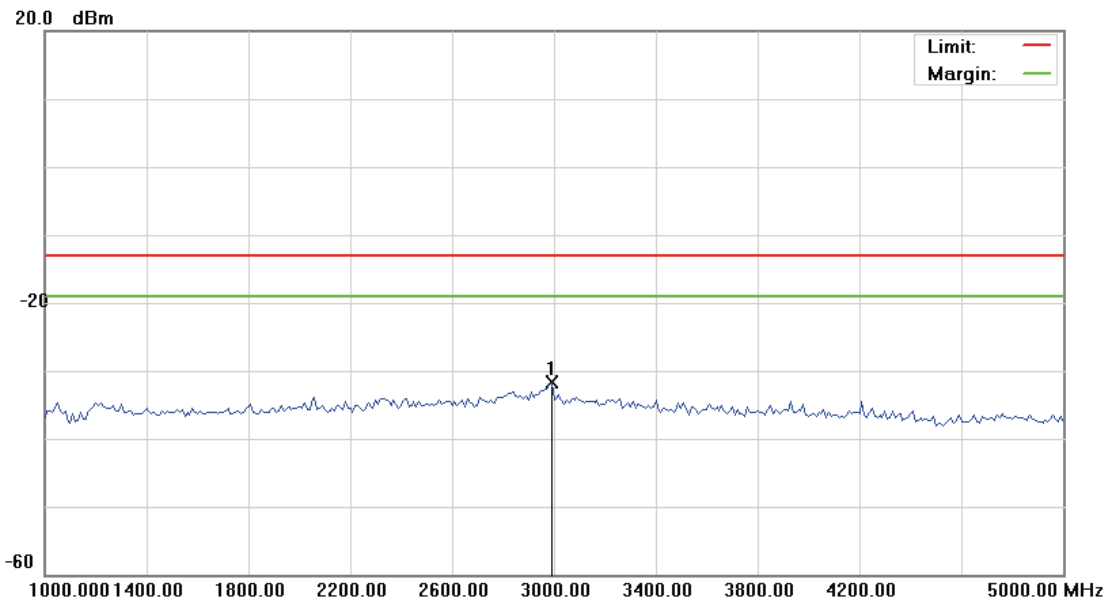
Mode: GSM 850

Note: CH190(836.6MHz)

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   |     | 52.3750      | -53.47                  | 14.27                   | -39.20                  | -13.00       | -26.20     | peak                    |                           |         |
| 2   | *   | 836.6000     | -14.95                  | 3.96                    | -10.99                  | -13.00       | 2.01       | peak                    |                           | TX      |

\*:Maximum data    x:Over limit    !:over margin

File: PG76240(CH190)      Data: #3      Date: 2011/6/2      Time: 下午 02:01:13



|   |                                   |                             |
|---|-----------------------------------|-----------------------------|
| Site: : RF Conducted                    | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 22 conducted(9k-12.75G) | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone                         | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                            |                                   |                             |
| Mode: GSM 850                           |                                   |                             |
| Note: CH190(836.6MHz)                   |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|----------|---------|
| 1   | *   | 2990.000     | -36.14                  | 4.53                    | -31.61                  | -13.00       | -18.61     |                         |                 | peak     |         |

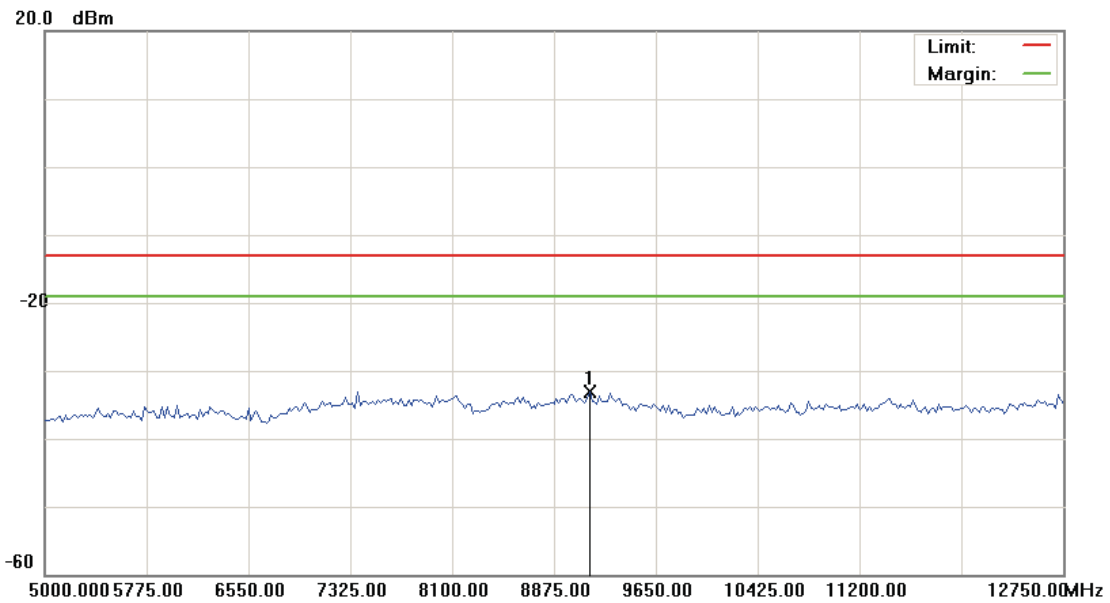
\*:Maximum data    x:Over limit    !:over margin

File: PG76240(CH190)

Data: #4

Date: 2011/6/2

Time: 下午 02:01:39

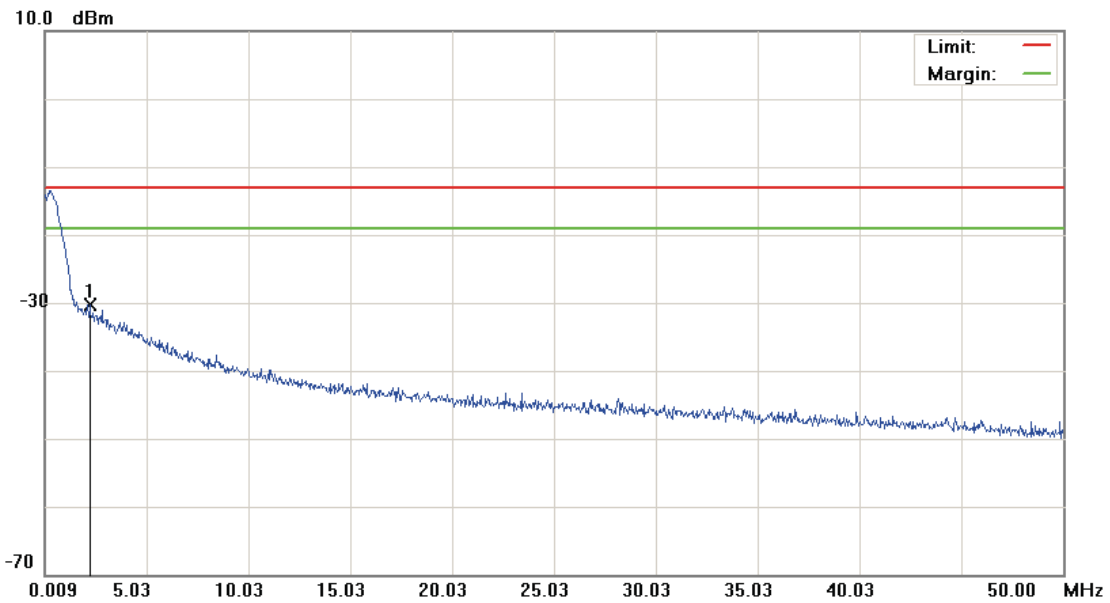


|   |                                   |                             |
|---|-----------------------------------|-----------------------------|
| Site: : RF Conducted                    | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 22 conducted(9k-12.75G) | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone                         | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                            |                                   |                             |
| Mode: GSM 850                           |                                   |                             |
| Note: CH190(836.6MHz)                   |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 9146.250     | -39.22                  | 6.04                    | -33.18                  | -13.00       | -20.18     | peak                    |                           |         |

\*:Maximum data    x:Over limit    !:over margin

File: PG76240(CH251)      Data: #1      Date: 2011/6/2      Time: 下午 01:52:58



|   |                                   |                             |
|---|-----------------------------------|-----------------------------|
| Site: : RF Conducted                    | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 22 conducted(9k-12.75G) | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone                         | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                            |                                   |                             |
| Mode: GSM 850                           |                                   |                             |
| Note: CH251(848.8MHz)                   |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|----------|---------|
| 1   | *   | 2.2336       | -61.57                  | 31.20                   | -30.37                  | -13.00       | -17.37     |                         |                 | peak     |         |

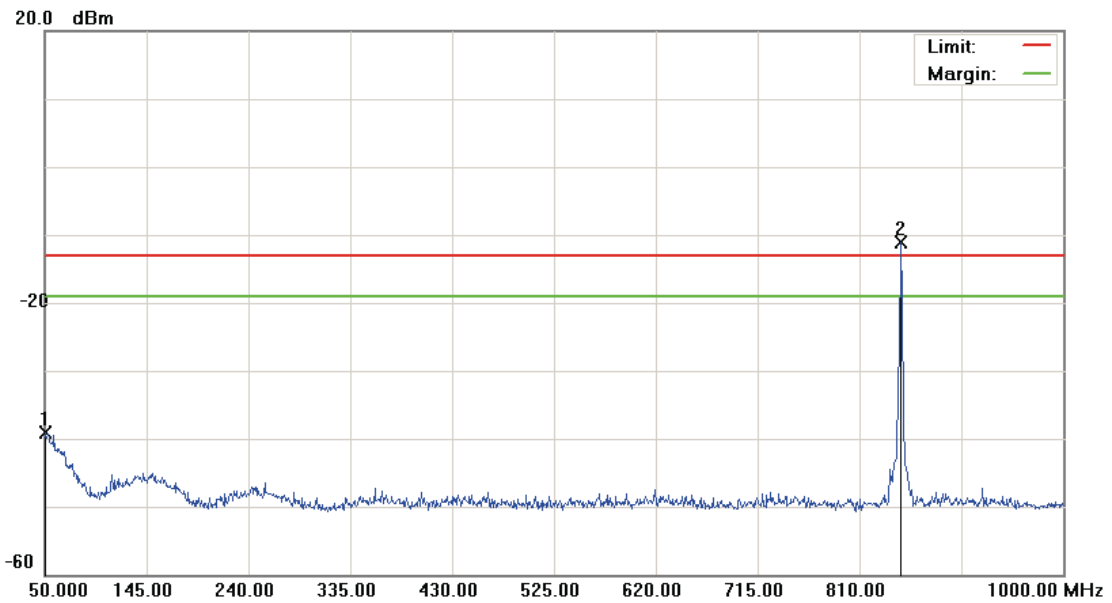
\*:Maximum data    x:Over limit    !:over margin

File : PG76240(CH251)

Data : #2

Date: 2011/6/2

Time: 下午 01:53:22



|   |                                   |                             |
|---|-----------------------------------|-----------------------------|
| Site: : RF Conducted                    | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 22 conducted(9k-12.75G) | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone                         | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                            |                                   |                             |
| Mode: GSM 850                           |                                   |                             |
| Note: CH251(848.8MHz)                   |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   |     | 50.0000      | -53.88                  | 14.69                   | -39.19                  | -13.00       | -26.19     | peak                    |                           |         |
| 2   | *   | 848.9500     | -15.12                  | 3.98                    | -11.14                  | -13.00       | 1.86       | peak                    |                           | TX      |

\*:Maximum data    x:Over limit    !:over margin

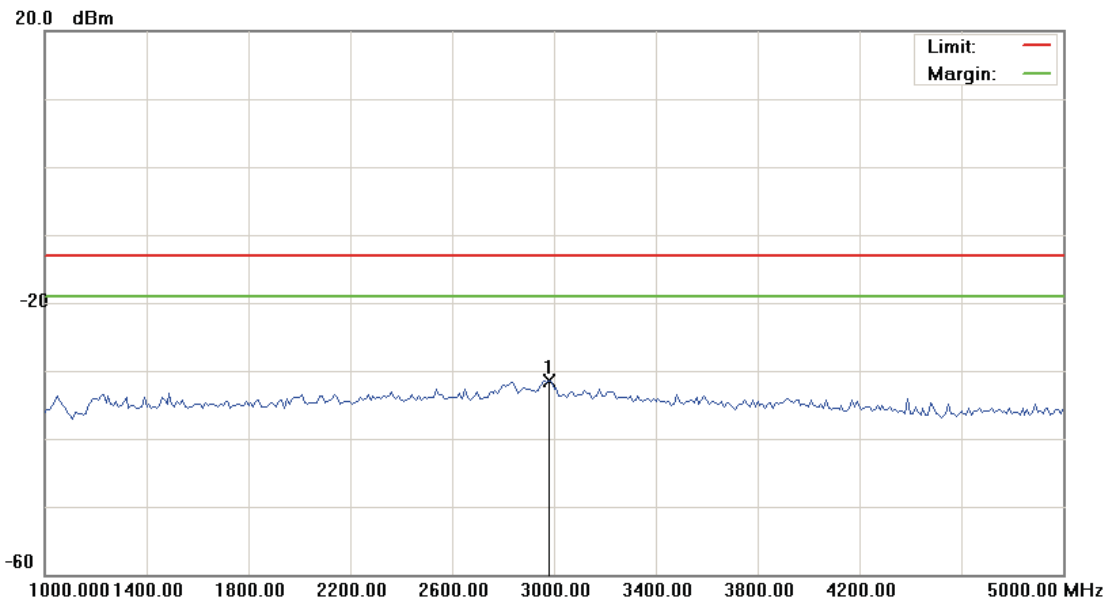


File : PG76240(CH251)

Data : #3

Date: 2011/6/2

Time: 下午 02:03:35

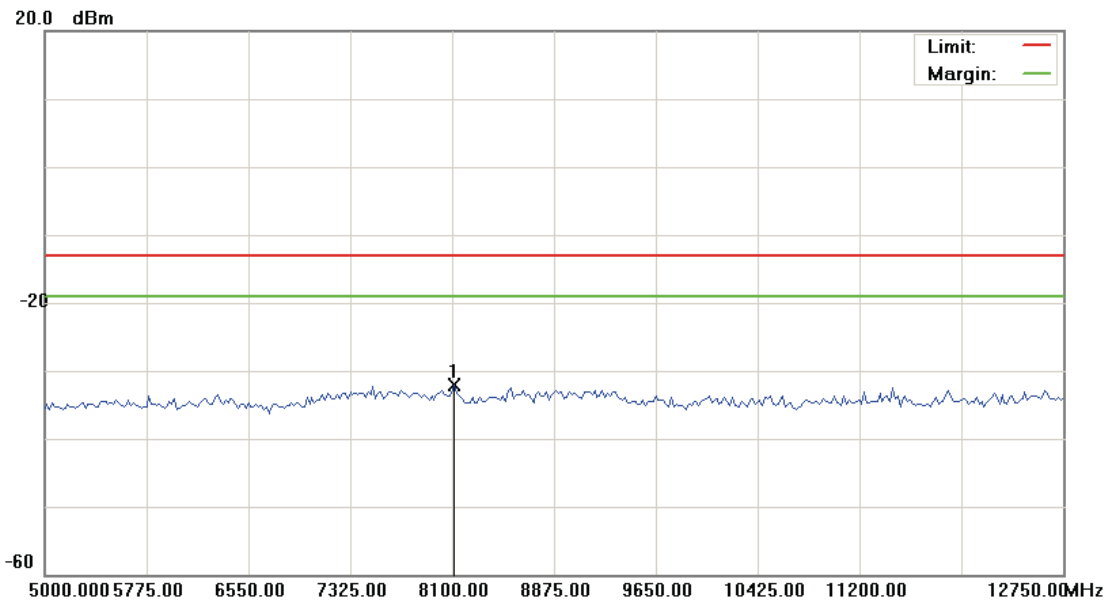


|   |                                   |                             |
|---|-----------------------------------|-----------------------------|
| Site: : RF Conducted                    | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 22 conducted(9k-12.75G) | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone                         | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                            |                                   |                             |
| Mode: GSM 850                           |                                   |                             |
| Note: CH251(848.8MHz)                   |                                   |                             |

| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       |
| 1   | *   | 2980.000 | -35.97        | 4.54           | -31.43      | -13.00 | -18.43 | peak           |              |

\*:Maximum data    x:Over limit    !:over margin

File :PG76240(CH251)                      Data :#4                      Date: 2011/6/2                      Time: 下午 02:04:00



|   |                                   |                             |
|---|-----------------------------------|-----------------------------|
| Site: : RF Conducted                    | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 22 conducted(9k-12.75G) | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone                         | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                            |                                   |                             |
| Mode: GSM 850                           |                                   |                             |
| Note: CH251(848.8MHz)                   |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 8119.375     | -37.91                  | 5.75                    | -32.16                  | -13.00       | -19.16     | peak                    |                           |         |

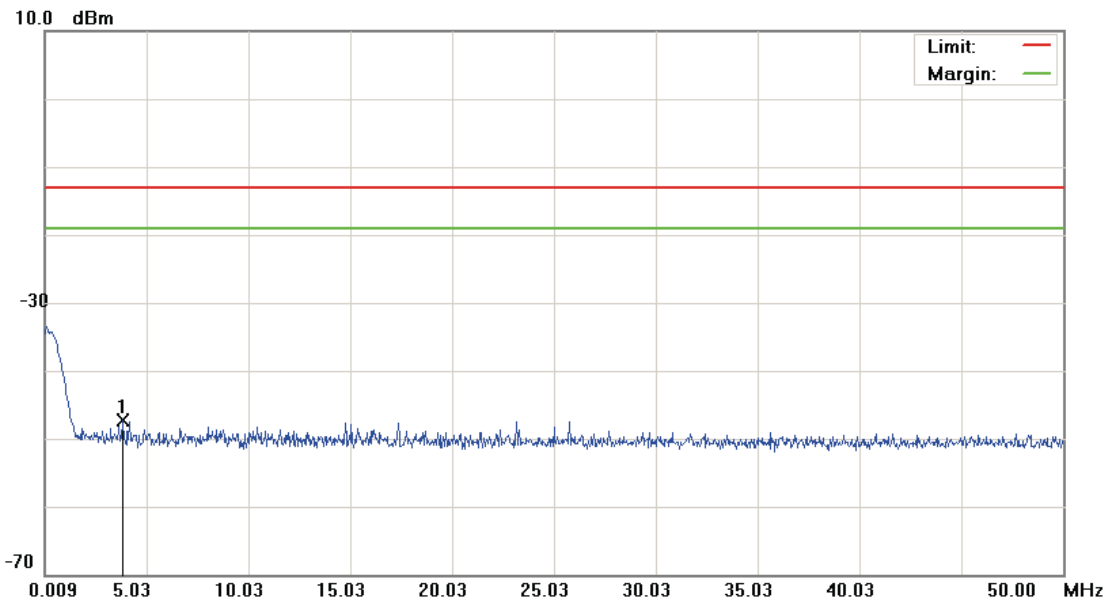
\*:Maximum data    x:Over limit    !:over margin

File: PG76240(CH512)

Data: #1

Date: 2011/6/2

Time: 下午 01:24:15



|                              |                                   |                             |
|------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted         | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 24 conducted | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone              | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                 |                                   |                             |
| Mode: PCS 1900               |                                   |                             |
| Note: CH512(1850.2MHz)       |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 3.8332       | -60.51                  | 13.20                   | -47.31                  | -13.00       | -34.31     | peak                    |                           |         |

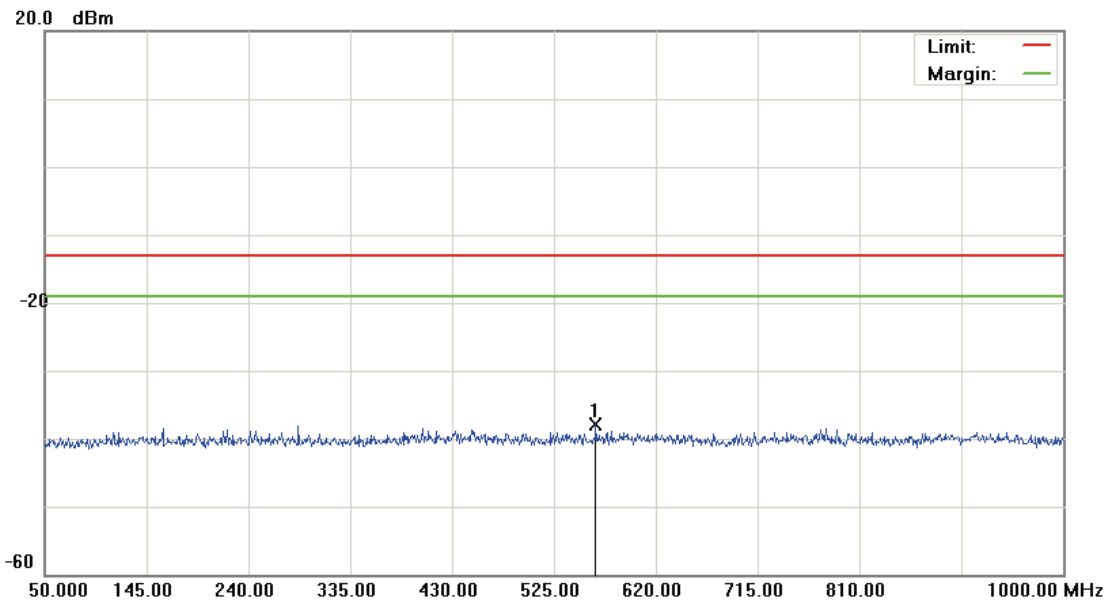
\*:Maximum data    x:Over limit    !:over margin

File : PG76240(CH512)

Data : #2

Date: 2011/6/2

Time: 下午 01:24:39



|                              |                                   |                             |
|------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted         | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 24 conducted | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone              | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                 |                                   |                             |
| Mode: PCS 1900               |                                   |                             |
| Note: CH512(1850.2MHz)       |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 563.9500     | -50.95                  | 13.11                   | -37.84                  | -13.00       | -24.84     | peak                    |                           |         |

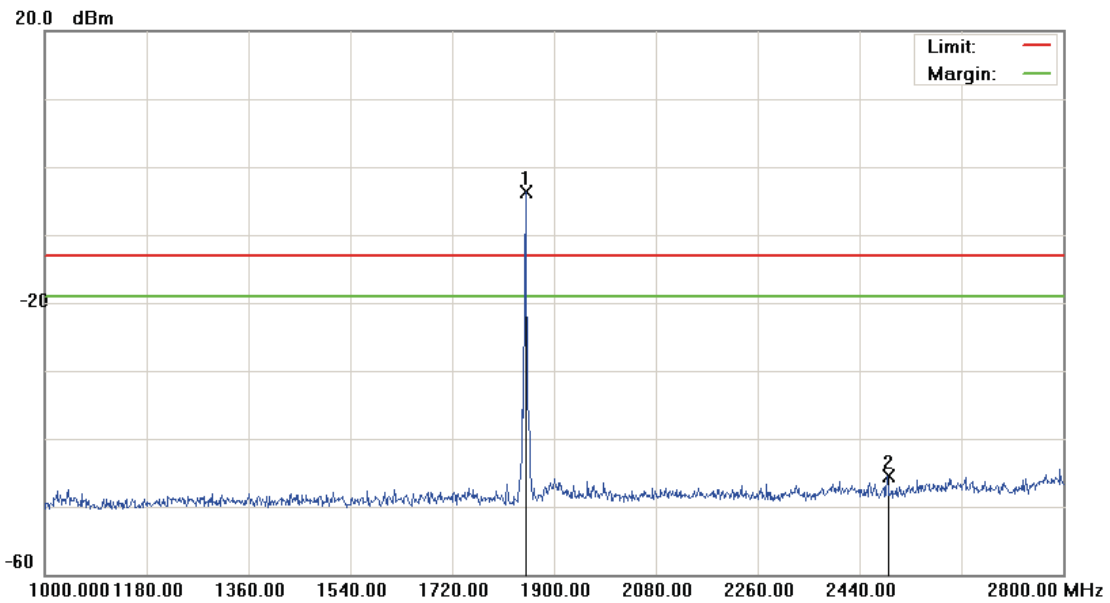
\*:Maximum data    x:Over limit    !:over margin

File : PG76240(CH512)

Data : #3

Date : 2011/6/2

Time : 下午 01:41:56



|                              |                                   |                             |
|------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted         | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 24 conducted | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone              | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                 |                                   |                             |
| Mode: PCS 1900               |                                   |                             |
| Note: CH512(1850.2MHz)       |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Detector | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|----------|-------------------------|---------------------------|---------|
| 1   | *   | 1850.500     | -8.02                   | 4.26                    | -3.76                   | -13.00       | 9.24       | peak     |                         |                           | TX      |
| 2   |     | 2489.500     | -49.94                  | 4.35                    | -45.59                  | -13.00       | -32.59     | peak     |                         |                           |         |

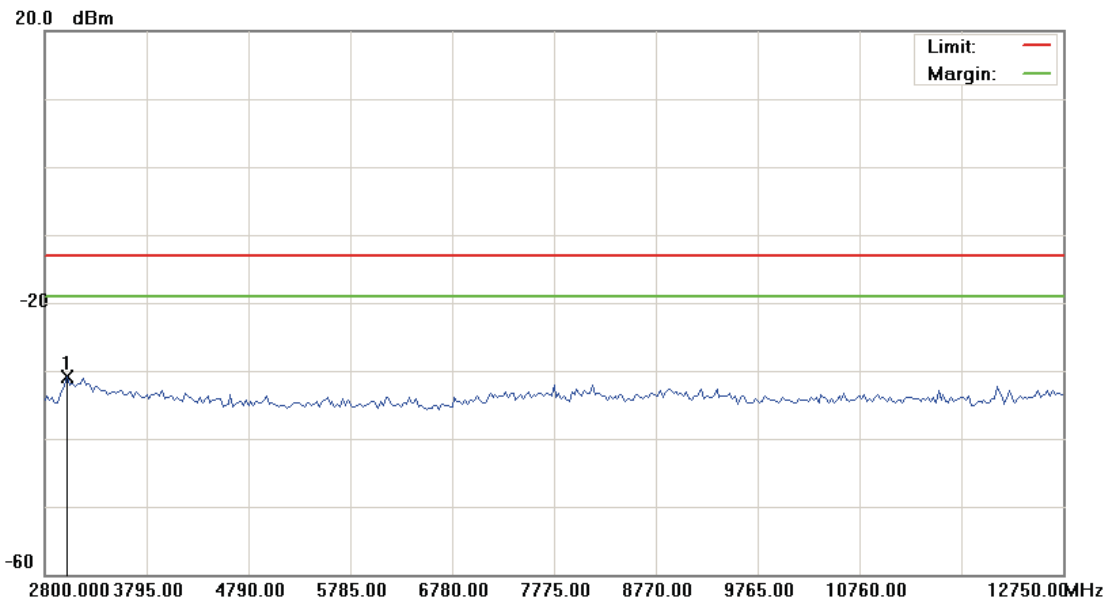
\*:Maximum data    x:Over limit    !:over margin

File : PG76240(CH512)

Data : #4

Date: 2011/6/2

Time: 下午 02:05:24



|                              |                                   |                             |
|------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted         | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 24 conducted | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone              | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                 |                                   |                             |
| Mode: PCS 1900               |                                   |                             |
| Note: CH512(1850.2MHz)       |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 3023.875     | -36.36                  | 5.48                    | -30.88                  | -13.00       | -17.88     | peak                    |                           |         |

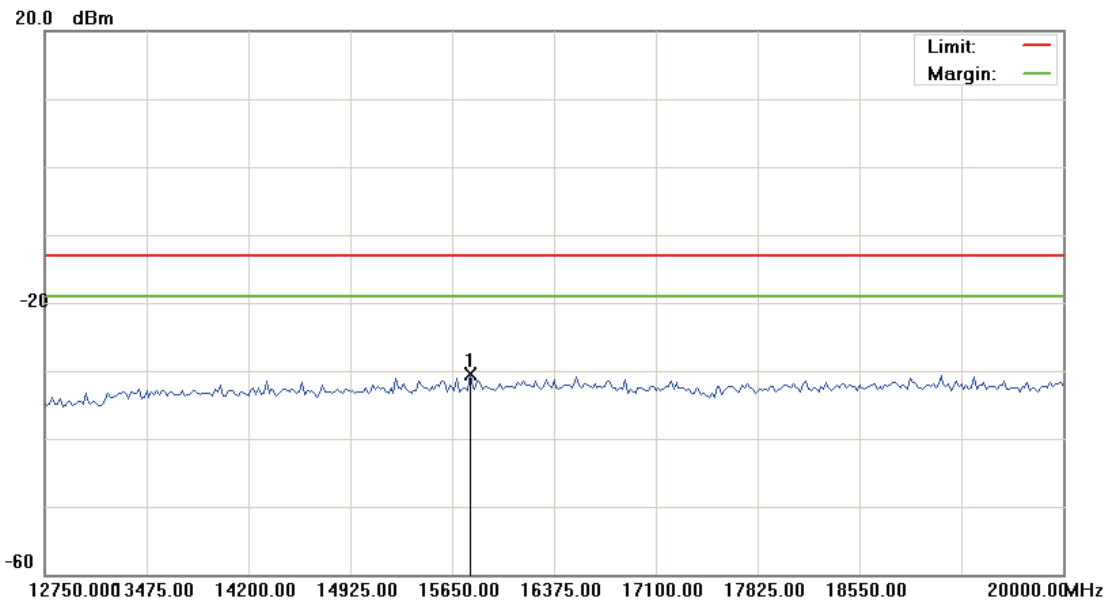
\*:Maximum data    x:Over limit    !:over margin

File : PG76240(CH512)

Data : #5

Date: 2011/6/2

Time: 下午 02:05:49



|                              |                                   |                             |
|------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted         | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 24 conducted | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone              | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                 |                                   |                             |
| Mode: PCS 1900               |                                   |                             |
| Note: CH512(1850.2MHz)       |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 15776.875    | -36.70                  | 6.23                    | -30.47                  | -13.00       | -17.47     | peak                    |                           |         |

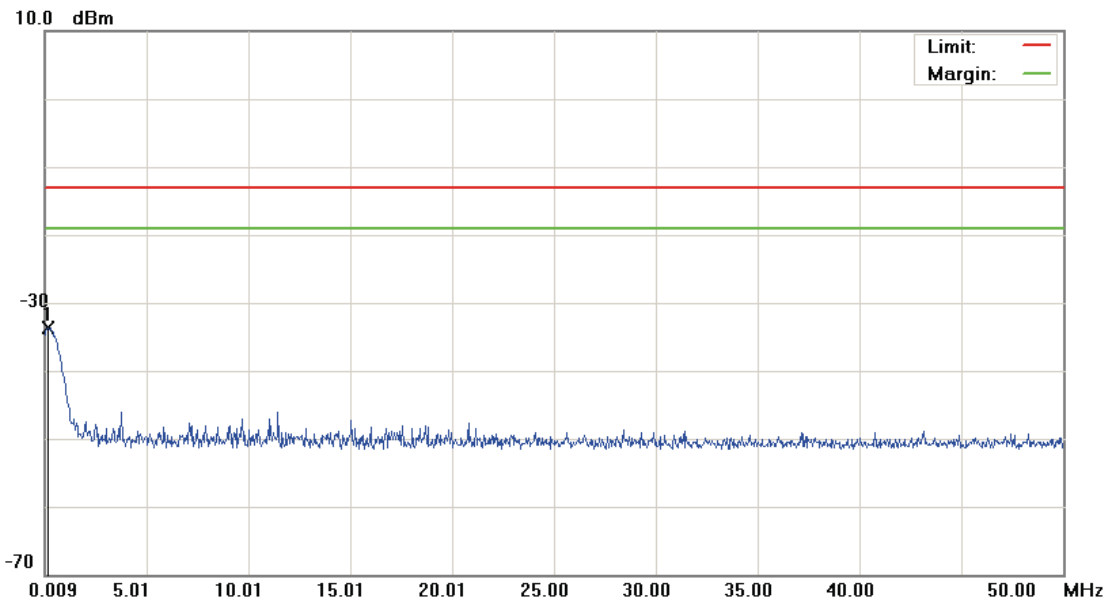
\*:Maximum data x:Over limit !:over margin

File: PG76240(CH661)

Data: #1

Date: 2011/6/2

Time: 下午 01:25:34



|                              |                                   |                             |
|------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted         | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 24 conducted | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone              | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                 |                                   |                             |
| Mode: PCS 1900               |                                   |                             |
| Note: CH661(1880MHz)         |                                   |                             |

| No. | Mk. | Freq.  | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree | Detector | Comment |
|-----|-----|--------|---------------|----------------|-------------|--------|--------|----------------|--------------|----------|---------|
|     |     | MHz    | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       |          |         |
| 1   | *   | 0.1590 | -46.07        | 12.46          | -33.61      | -13.00 | -20.61 |                |              | peak     |         |

\*:Maximum data    x:Over limit    !:over margin

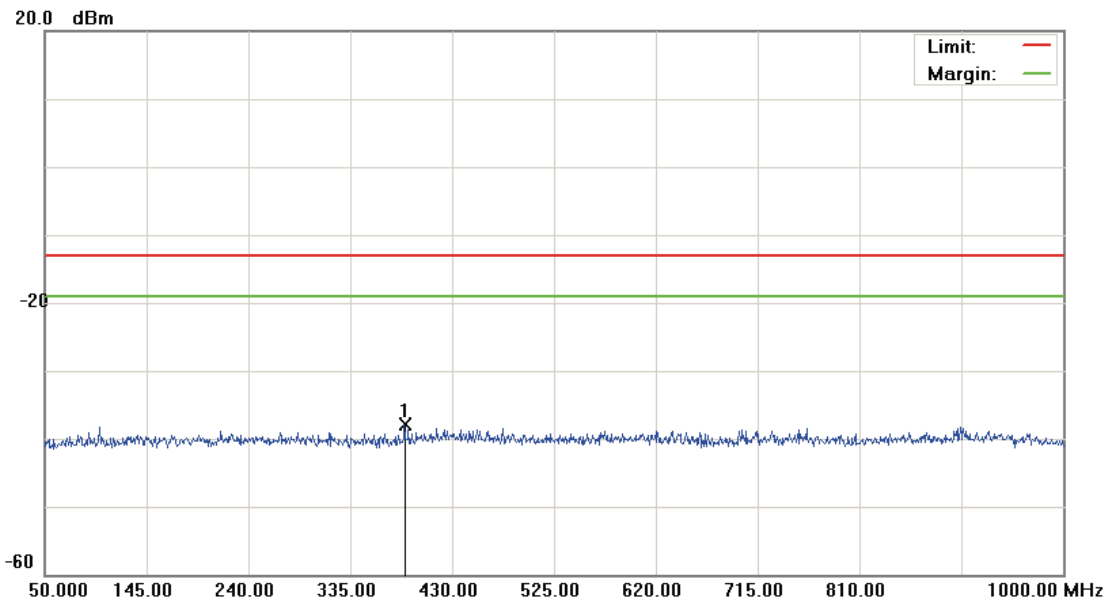


File :PG76240(CH661)

Data :#2

Date: 2011/6/2

Time: 下午 01:25:59



|                              |                                   |                             |
|------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted         | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 24 conducted | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone              | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                 |                                   |                             |
| Mode: PCS 1900               |                                   |                             |
| Note: CH661(1880MHz)         |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 385.8250     | -51.04                  | 13.19                   | -37.85                  | -13.00       | -24.85     | peak                    |                           |         |

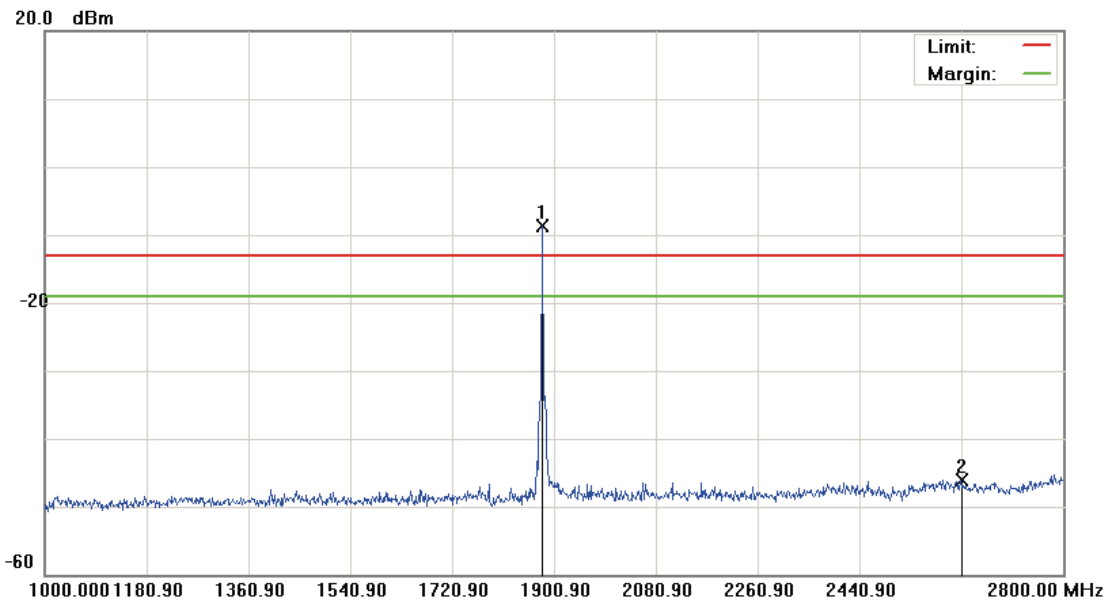
\*:Maximum data    x:Over limit    !:over margin

File: PG76240(CH661)

Data: #3

Date: 2011/6/2

Time: 下午 01:43:03



Site: : RF Conducted

 Polarization: *Conducted po*

Temperature: 26 °C

Limit: FCC Part 24 conducted

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Smartphone

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: PG76240

Mode: PCS 1900

Note: CH661(1880MHz)

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 1880.200     | -13.26                  | 4.65                    | -8.61                   | -13.00       | 4.39       | peak                    |                           | TX      |
| 2   |     | 2619.100     | -51.46                  | 5.44                    | -46.02                  | -13.00       | -33.02     | peak                    |                           |         |

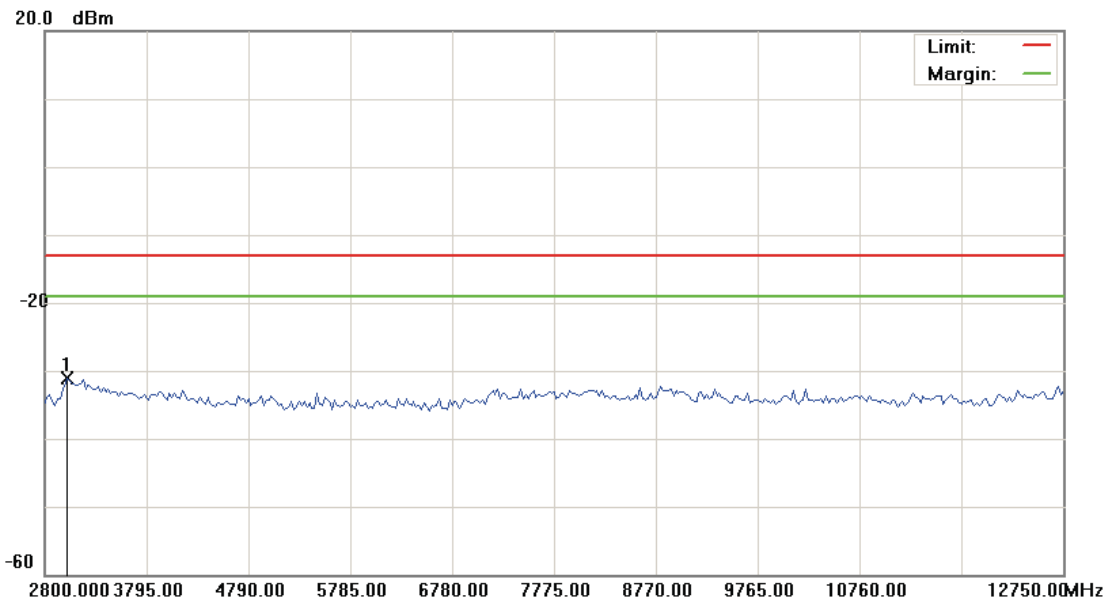
\*:Maximum data    x:Over limit    !:over margin

File : PG76240(CH661)

Data : #4

Date: 2011/6/2

Time: 下午 02:06:32



|                              |                                   |                             |
|------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted         | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 24 conducted | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone              | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                 |                                   |                             |
| Mode: PCS 1900               |                                   |                             |
| Note: CH661(1880MHz)         |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 3023.875     | -36.61                  | 5.48                    | -31.13                  | -13.00       | -18.13     | peak                    |                           |         |

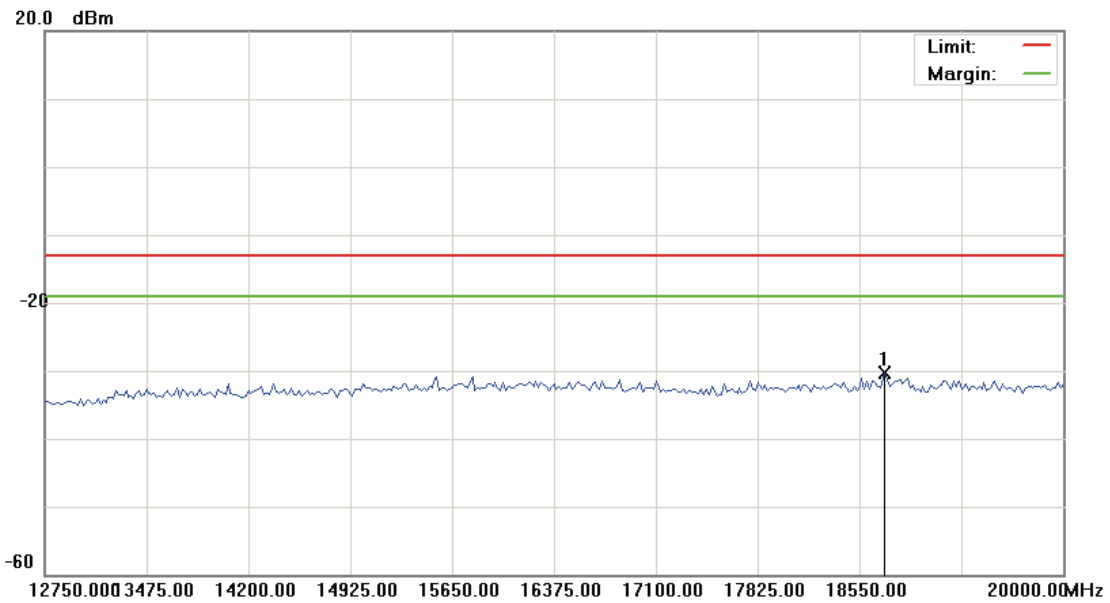
\*:Maximum data    x:Over limit    !:over margin

File :PG76240(CH661)

Data :#5

Date: 2011/6/2

Time: 下午 02:06:57

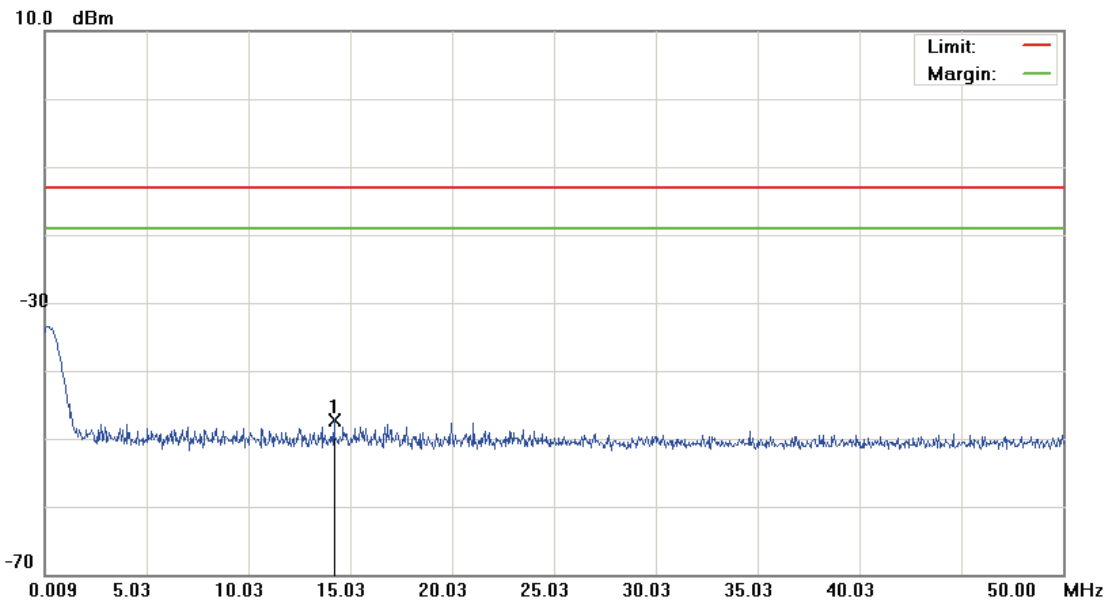


|                              |                                   |                             |
|------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted         | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 24 conducted | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone              | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                 |                                   |                             |
| Mode: PCS 1900               |                                   |                             |
| Note: CH661(1880MHz)         |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 18731.250    | -37.31                  | 7.08                    | -30.23                  | -13.00       | -17.23     | peak                    |                           |         |

\*:Maximum data    x:Over limit    !:over margin

File: PG76240(CH810)      Data: #1      Date: 2011/6/2      Time: 下午 01:26:50



|                              |                                   |                             |
|------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted         | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 24 conducted | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone              | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                 |                                   |                             |
| Mode: PCS 1900               |                                   |                             |
| Note: CH810(1909.8MHz)       |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 14.2314      | -60.47                  | 13.27                   | -47.20                  | -13.00       | -34.20     | peak                    |                           |         |

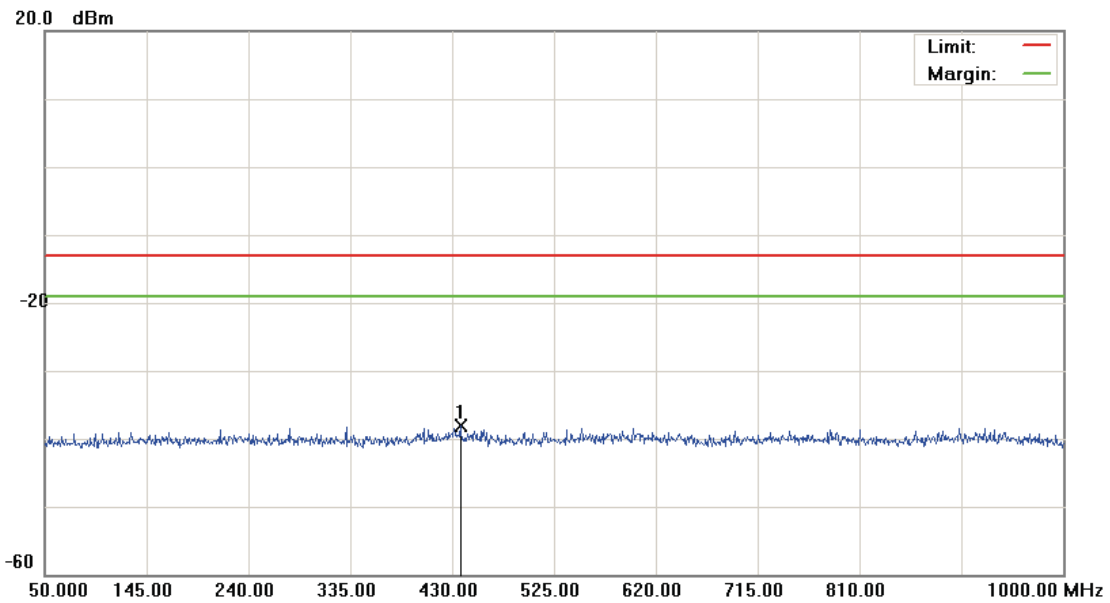
\*:Maximum data    x:Over limit    !:over margin

File :PG76240(CH810)

Data :#2

Date: 2011/6/2

Time: 下午 01:27:14



|                              |                                   |                             |
|------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted         | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 24 conducted | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone              | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                 |                                   |                             |
| Mode: PCS 1900               |                                   |                             |
| Note: CH810(1909.8MHz)       |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 437.6000     | -51.29                  | 13.22                   | -38.07                  | -13.00       | -25.07     | peak                    |                           |         |

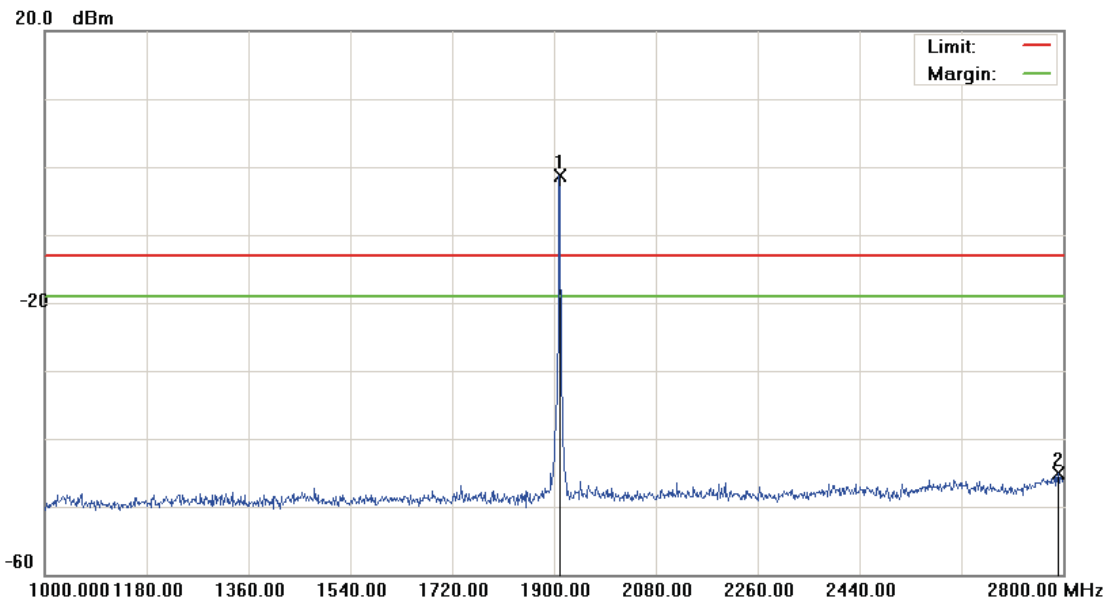
\*:Maximum data    x:Over limit    !:over margin

File : PG76240(CH810)

Data : #3

Date: 2011/6/2

Time: 下午 01:44:14



|                              |                                   |                             |
|------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted         | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 24 conducted | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone              | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                 |                                   |                             |
| Mode: PCS 1900               |                                   |                             |
| Note: CH810(1909.8MHz)       |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 1909.900     | -6.94                   | 5.71                    | -1.23                   | -13.00       | 11.77      | peak                    |                           | TX      |
| 2   |     | 2791.000     | -50.92                  | 5.90                    | -45.02                  | -13.00       | -32.02     | peak                    |                           |         |

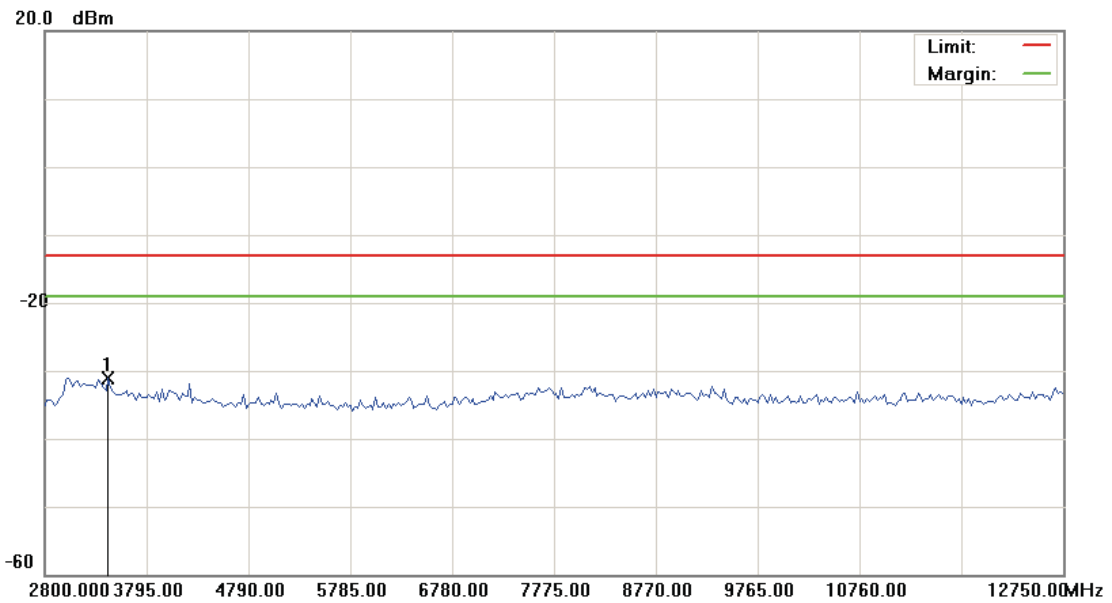
\*:Maximum data    x:Over limit    !:over margin

File : PG76240(CH810)

Data : #4

Date: 2011/6/2

Time: 下午 02:08:24



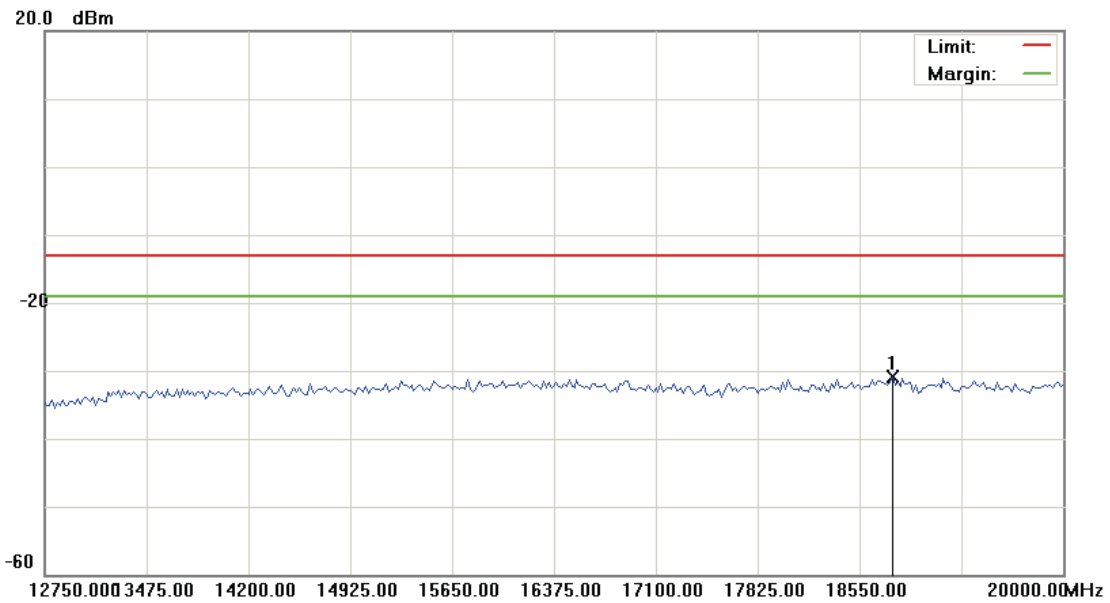
|                              |                                   |                             |
|------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted         | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 24 conducted | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone              | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                 |                                   |                             |
| Mode: PCS 1900               |                                   |                             |
| Note: CH810(1909.8MHz)       |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 3421.875     | -36.14                  | 5.06                    | -31.08                  | -13.00       | -18.08     | peak                    |                           |         |

\*:Maximum data x:Over limit !:over margin



File: PG76240(CH810)      Data: #5      Date: 2011/6/2      Time: 下午 02:08:49



|                              |                                   |                             |
|------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted         | Polarization: <i>Conducted po</i> | Temperature: 26 °C          |
| Limit: FCC Part 24 conducted | Power: AC 120V/60Hz               | Humidity: 55 %              |
| EUT: Smartphone              | Distance:                         | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: PG76240                 |                                   |                             |
| Mode: PCS 1900               |                                   |                             |
| Note: CH810(1909.8MHz)       |                                   |                             |

| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Antenna<br>Height<br>cm | Table<br>Degree<br>degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|---------------------------|---------|
| 1   | *   | 18785.625    | -37.97                  | 7.09                    | -30.88                  | -13.00       | -17.88     | peak                    |                           |         |

\*:Maximum data    x:Over limit    !:over margin

## 6 Field Strength of Spurious Radiation Test

### 6.1. 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.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10<sup>th</sup> harmonic.

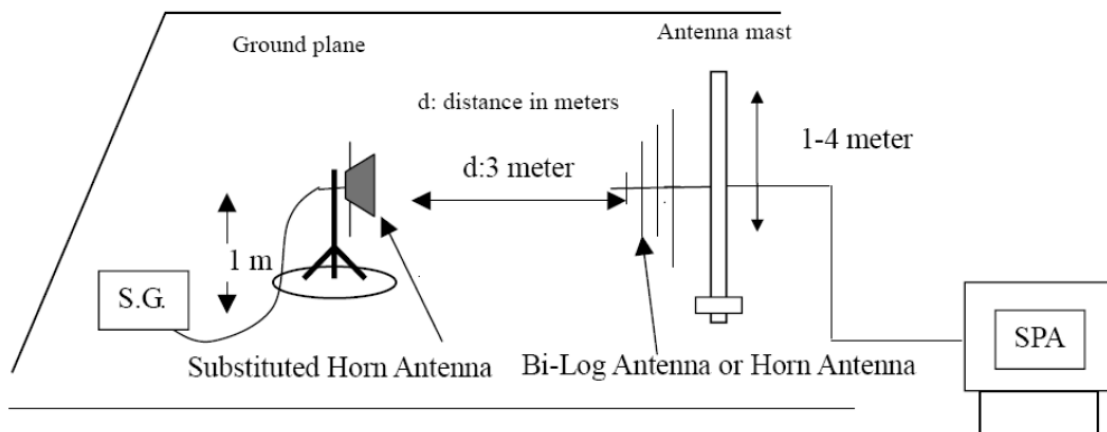
### 6.2. Test Instruments

| 3 Meter Chamber                   |                                |           |            |            |        |
|-----------------------------------|--------------------------------|-----------|------------|------------|--------|
| Equipment                         | Manufacturer                   | Model No. | Serial No. | Cal. Date  | Remark |
| RF Pre-selector                   | Agilent                        | N9039A    | MY46520256 | 01/18/2011 | (2)    |
| Spectrum Analyzer                 | Agilent                        | E4446A    | MY46180578 | 01/18/2011 | (1)    |
| Pre Amplifier                     | Agilent                        | 8449B     | 3008A02237 | 02/23/2011 | (1)    |
| Pre Amplifier                     | Agilent                        | 8447D     | 2944A10961 | 02/23/2011 | (1)    |
| Broadband Antenna<br>(30MHz~1GHz) | SCHWARZBECK<br>MESS-ELEKTRONIK | VULB9163  | 9163-270   | 08/02/2010 | (1)    |
| Horn Antenna<br>(1~18GHz)         | SCHWARZBECK<br>MESS-ELEKTRONIK | BBHA9120D | 9120D-550  | 06/29/2010 | (1)    |
| Horn Antenna<br>(18~40GHz)        | SCHWARZBECK<br>MESS-ELEKTRONIK | BBHA9170  | 9170-320   | 06/29/2010 | (1)    |
| Test Site                         | ATL                            | TE01      | 888001     | 07/30/2010 | (1)    |

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

### 6.3. Setup



## 6.4. Test Procedure

The measurement is made according to ANSI/TIA-603-C-2004 as follows:

The equipment under test is placed inside the semi-anechoic chamber on a wooden table at the turntable center. For each spurious frequency, the antenna mast is raised and lowered from 1 to 4 meters and the turntable is rotated 360 degrees to obtain a maximum reading on the spectrum analyzer. This is repeated for both horizontal and vertical polarizations of the receive antenna.

The equipment under test is then replaced with a substitution antenna fed by a signal generator. With the signal generator tuned to a particular spurious frequency, the antenna mast is raised and lowered from 1 to 4 meters to obtain a maximum reading at the spectrum analyzer. The output of the signal generator is then adjusted until a reading identical to that obtained with the actual transmitter is achieved.

The power in dBm of each spurious emission is calculated by correcting the signal generator level for cable loss and gain of the substitution antenna referenced to a dipole. A fully charged battery was used for the supply voltage.

The settings of the receiver were as follows:

|                      |       |
|----------------------|-------|
| Units                | dBm   |
| Resolution Bandwidth | 1 MHz |
| Video Bandwidth      | Auto  |
| Sweep Time           | Auto  |

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

## 6.5. Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is  $\pm 3.072$  dB.

## 6.6. Test Result

|            |                   |                      |              |
|------------|-------------------|----------------------|--------------|
| Standard:  | FCC Part 22       | Test Distance:       | 3m           |
| Test item: | Radiated Emission | Power:               | AC 120V/60Hz |
| Model:     | PG76240           | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:      | Mode 1            | Date:                | 06/08/2011   |
| Frequency: | 824.2 MHz         | Test By:             | Gary Wu      |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct<br>Factor(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
|-----|--------------------|------------------|-----------------------|-----------------|----------------|----------------|--------|---------------------|
| 1   | 52.0000            | -75.64           | 7.23                  | -68.41          | -13.00         | -55.41         | peak   | H                   |
| 2   | 93.0000            | -78.12           | -0.52                 | -78.64          | -13.00         | -65.64         | peak   | H                   |
| 3   | 236.5000           | -75.73           | -1.67                 | -77.40          | -13.00         | -64.40         | peak   | H                   |
| 4   | 320.0000           | -66.05           | -0.92                 | -66.97          | -13.00         | -53.97         | peak   | H                   |
| 5   | 605.5000           | -78.69           | 7.87                  | -70.82          | -13.00         | -57.82         | peak   | H                   |
| 6   | 928.5000           | -80.23           | 14.79                 | -65.44          | -13.00         | -52.44         | peak   | H                   |
| 7   | 1672.000           | -55.40           | 10.39                 | -45.01          | -13.00         | -32.01         | peak   | H                   |
| 8   | 2512.000           | -61.38           | 12.04                 | -49.34          | -13.00         | -36.34         | peak   | H                   |
| 9   | 7780.000           | -70.56           | 29.50                 | -41.06          | -13.00         | -28.06         | peak   | H                   |
| 1   | 31.0000            | -58.59           | -9.60                 | -68.19          | -13.00         | -55.19         | peak   | V                   |
| 2   | 133.5000           | -78.13           | 12.47                 | -65.66          | -13.00         | -52.66         | peak   | V                   |
| 3   | 159.5000           | -81.55           | 12.45                 | -69.10          | -13.00         | -56.10         | peak   | V                   |
| 4   | 206.0000           | -80.36           | 9.44                  | -70.92          | -13.00         | -57.92         | peak   | V                   |
| 5   | 619.5000           | -77.88           | 8.85                  | -69.03          | -13.00         | -56.03         | peak   | V                   |
| 6   | 768.0000           | -78.87           | 11.09                 | -67.78          | -13.00         | -54.78         | peak   | V                   |
| 7   | 1672.000           | -46.70           | 6.88                  | -39.82          | -13.00         | -26.82         | peak   | V                   |
| 8   | 4912.000           | -69.33           | 23.05                 | -46.28          | -13.00         | -33.28         | peak   | V                   |
| 9   | 12364.000          | -73.66           | 39.11                 | -34.55          | -13.00         | -21.55         | peak   | V                   |

|            |                   |                      |              |
|------------|-------------------|----------------------|--------------|
| Standard:  | FCC Part 22       | Test Distance:       | 3m           |
| Test item: | Radiated Emission | Power:               | AC 120V/60Hz |
| Model:     | PG76240           | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:      | Mode 1            | Date:                | 06/08/2011   |
| Frequency: | 836.6 MHz         | Test By:             | Gary Wu      |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct<br>Factor(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
|-----|--------------------|------------------|-----------------------|-----------------|----------------|----------------|--------|---------------------|
| 1   | 39.5000            | -78.84           | 9.50                  | -69.34          | -13.00         | -56.34         | peak   | H                   |
| 2   | 54.0000            | -78.46           | 6.59                  | -71.87          | -13.00         | -58.87         | peak   | H                   |
| 3   | 242.5000           | -69.25           | -2.62                 | -71.87          | -13.00         | -58.87         | peak   | H                   |
| 4   | 346.0000           | -73.49           | -0.38                 | -73.87          | -13.00         | -60.87         | peak   | H                   |
| 5   | 615.5000           | -77.01           | 7.75                  | -69.26          | -13.00         | -56.26         | peak   | H                   |
| 6   | 769.5000           | -78.35           | 9.61                  | -68.74          | -13.00         | -55.74         | peak   | H                   |
| 7   | 1672.000           | -58.76           | 10.39                 | -48.37          | -13.00         | -35.37         | peak   | H                   |
| 8   | 2512.000           | -61.05           | 12.04                 | -49.01          | -13.00         | -36.01         | peak   | H                   |
| 9   | 12220.000          | -72.44           | 36.82                 | -35.62          | -13.00         | -22.62         | peak   | H                   |
| 1   | 31.5000            | -58.95           | -9.55                 | -68.50          | -13.00         | -55.50         | peak   | V                   |
| 2   | 130.5000           | -80.49           | 14.10                 | -66.39          | -13.00         | -53.39         | peak   | V                   |
| 3   | 160.5000           | -80.48           | 12.20                 | -68.28          | -13.00         | -55.28         | peak   | V                   |
| 4   | 200.5000           | -81.64           | 10.08                 | -71.56          | -13.00         | -58.56         | peak   | V                   |
| 5   | 615.5000           | -75.34           | 8.56                  | -66.78          | -13.00         | -53.78         | peak   | V                   |
| 6   | 769.5000           | -75.32           | 11.11                 | -64.21          | -13.00         | -51.21         | peak   | V                   |
| 7   | 1672.000           | -47.10           | 6.88                  | -40.22          | -13.00         | -27.22         | peak   | V                   |
| 8   | 5380.000           | -70.06           | 23.43                 | -46.63          | -13.00         | -33.63         | peak   | V                   |
| 9   | 10096.000          | -71.40           | 31.15                 | -40.25          | -13.00         | -27.25         | peak   | V                   |

|            |                   |                      |              |
|------------|-------------------|----------------------|--------------|
| Standard:  | FCC Part 22       | Test Distance:       | 3m           |
| Test item: | Radiated Emission | Power:               | AC 120V/60Hz |
| Model:     | PG76240           | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:      | Mode 1            | Date:                | 06/08/2011   |
| Frequency: | 848.8 MHz         | Test By:             | Gary Wu      |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct<br>Factor(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
|-----|--------------------|------------------|-----------------------|-----------------|----------------|----------------|--------|---------------------|
| 1   | 53.0000            | -68.31           | 6.91                  | -61.40          | -13.00         | -48.40         | peak   | H                   |
| 2   | 247.0000           | -65.54           | -3.57                 | -69.11          | -13.00         | -56.11         | peak   | H                   |
| 3   | 342.0000           | -70.30           | -0.49                 | -70.79          | -13.00         | -57.79         | peak   | H                   |
| 4   | 617.0000           | -74.11           | 7.74                  | -66.37          | -13.00         | -53.37         | peak   | H                   |
| 5   | 770.5000           | -76.11           | 9.67                  | -66.44          | -13.00         | -53.44         | peak   | H                   |
| 6   | 944.0000           | -80.77           | 14.85                 | -65.92          | -13.00         | -52.92         | peak   | H                   |
| 7   | 1696.000           | -49.23           | 10.40                 | -38.83          | -13.00         | -25.83         | peak   | H                   |
| 8   | 7588.000           | -71.81           | 29.23                 | -42.58          | -13.00         | -29.58         | peak   | H                   |
| 9   | 11620.000          | -73.64           | 36.89                 | -36.75          | -13.00         | -23.75         | peak   | H                   |
| 1   | 31.5000            | -57.64           | -9.55                 | -67.19          | -13.00         | -54.19         | peak   | V                   |
| 2   | 130.0000           | -80.74           | 14.37                 | -66.37          | -13.00         | -53.37         | peak   | V                   |
| 3   | 160.5000           | -79.77           | 12.20                 | -67.57          | -13.00         | -54.57         | peak   | V                   |
| 4   | 208.5000           | -79.62           | 9.13                  | -70.49          | -13.00         | -57.49         | peak   | V                   |
| 5   | 621.5000           | -75.94           | 8.88                  | -67.06          | -13.00         | -54.06         | peak   | V                   |
| 6   | 699.5000           | -78.24           | 10.17                 | -68.07          | -13.00         | -55.07         | peak   | V                   |
| 7   | 1696.000           | -45.21           | 7.07                  | -38.14          | -13.00         | -25.14         | peak   | V                   |
| 8   | 6928.000           | -70.72           | 25.47                 | -45.25          | -13.00         | -32.25         | peak   | V                   |
| 9   | 11740.000          | -74.40           | 38.65                 | -35.75          | -13.00         | -22.75         | peak   | V                   |

|            |                   |                      |              |
|------------|-------------------|----------------------|--------------|
| Standard:  | FCC Part 24       | Test Distance:       | 3m           |
| Test item: | Radiated Emission | Power:               | AC 120V/60Hz |
| Model:     | PG76240           | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:      | Mode 2            | Date:                | 06/08/2011   |
| Frequency: | 1850.2 MHz        | Test By:             | Gary Wu      |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct<br>Factor(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
|-----|--------------------|------------------|-----------------------|-----------------|----------------|----------------|--------|---------------------|
| 1   | 54.0000            | -78.81           | 6.59                  | -72.22          | -13.00         | -59.22         | peak   | H                   |
| 2   | 159.5000           | -82.28           | 1.30                  | -80.98          | -13.00         | -67.98         | peak   | H                   |
| 3   | 200.0000           | -83.10           | 2.95                  | -80.15          | -13.00         | -67.15         | peak   | H                   |
| 4   | 379.0000           | -79.51           | 0.74                  | -78.77          | -13.00         | -65.77         | peak   | H                   |
| 5   | 529.0000           | -80.27           | 7.94                  | -72.33          | -13.00         | -59.33         | peak   | H                   |
| 6   | 627.0000           | -79.15           | 7.39                  | -71.76          | -13.00         | -58.76         | peak   | H                   |
| 7   | 3700.000           | -60.61           | 15.75                 | -44.86          | -13.00         | -31.86         | peak   | H                   |
| 8   | 5548.000           | -58.93           | 21.80                 | -37.13          | -13.00         | -24.13         | peak   | H                   |
| 9   | 7396.000           | -58.90           | 28.81                 | -30.09          | -13.00         | -17.09         | peak   | H                   |
| 1   | 131.0000           | -80.71           | 13.83                 | -66.88          | -13.00         | -53.88         | peak   | V                   |
| 2   | 162.0000           | -81.50           | 10.79                 | -70.71          | -13.00         | -57.71         | peak   | V                   |
| 3   | 200.5000           | -82.44           | 10.08                 | -72.36          | -13.00         | -59.36         | peak   | V                   |
| 4   | 615.0000           | -78.83           | 8.54                  | -70.29          | -13.00         | -57.29         | peak   | V                   |
| 5   | 748.0000           | -80.82           | 10.68                 | -70.14          | -13.00         | -57.14         | peak   | V                   |
| 6   | 868.5000           | -80.47           | 11.30                 | -69.17          | -13.00         | -56.17         | peak   | V                   |
| 7   | 3700.000           | -60.87           | 19.81                 | -41.06          | -13.00         | -28.06         | peak   | V                   |
| 8   | 5548.000           | -48.54           | 23.40                 | -25.14          | -13.00         | -12.14         | peak   | V                   |
| 9   | 7396.000           | -59.60           | 26.24                 | -33.36          | -13.00         | -20.36         | peak   | V                   |

|            |                   |                      |              |
|------------|-------------------|----------------------|--------------|
| Standard:  | FCC Part 24       | Test Distance:       | 3m           |
| Test item: | Radiated Emission | Power:               | AC 120V/60Hz |
| Model:     | PG76240           | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:      | Mode 2            | Date:                | 06/08/2011   |
| Frequency: | 1880.0 MHz        | Test By:             | Gary Wu      |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct<br>Factor(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
|-----|--------------------|------------------|-----------------------|-----------------|----------------|----------------|--------|---------------------|
| 1   | 41.0000            | -80.22           | 9.47                  | -70.75          | -13.00         | -57.75         | peak   | H                   |
| 2   | 54.0000            | -78.45           | 6.59                  | -71.86          | -13.00         | -58.86         | peak   | H                   |
| 3   | 160.0000           | -79.59           | 1.45                  | -78.14          | -13.00         | -65.14         | peak   | H                   |
| 4   | 201.5000           | -82.57           | 2.61                  | -79.96          | -13.00         | -66.96         | peak   | H                   |
| 5   | 508.0000           | -80.75           | 7.24                  | -73.51          | -13.00         | -60.51         | peak   | H                   |
| 6   | 624.0000           | -79.35           | 7.52                  | -71.83          | -13.00         | -58.83         | peak   | H                   |
| 7   | 3760.000           | -66.62           | 15.89                 | -50.73          | -13.00         | -37.73         | peak   | H                   |
| 8   | 5644.000           | -59.21           | 22.05                 | -37.16          | -13.00         | -24.16         | peak   | H                   |
| 9   | 7516.000           | -64.65           | 29.13                 | -35.52          | -13.00         | -22.52         | peak   | H                   |
| 1   | 131.5000           | -82.34           | 13.57                 | -68.77          | -13.00         | -55.77         | peak   | V                   |
| 2   | 159.0000           | -83.12           | 12.19                 | -70.93          | -13.00         | -57.93         | peak   | V                   |
| 3   | 201.0000           | -83.40           | 10.04                 | -73.36          | -13.00         | -60.36         | peak   | V                   |
| 4   | 618.0000           | -78.86           | 8.75                  | -70.11          | -13.00         | -57.11         | peak   | V                   |
| 5   | 811.5000           | -80.95           | 11.53                 | -69.42          | -13.00         | -56.42         | peak   | V                   |
| 6   | 992.0000           | -81.30           | 12.94                 | -68.36          | -13.00         | -55.36         | peak   | V                   |
| 7   | 3760.000           | -62.58           | 19.98                 | -42.60          | -13.00         | -29.60         | peak   | V                   |
| 8   | 5644.000           | -48.98           | 23.25                 | -25.73          | -13.00         | -12.73         | peak   | V                   |
| 9   | 7516.000           | -63.53           | 26.41                 | -37.12          | -13.00         | -24.12         | peak   | V                   |



|            |                   |                      |              |
|------------|-------------------|----------------------|--------------|
| Standard:  | FCC Part 24       | Test Distance:       | 3m           |
| Test item: | Radiated Emission | Power:               | AC 120V/60Hz |
| Model:     | PG76240           | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:      | Mode 2            | Date:                | 06/08/2011   |
| Frequency: | 1909.8 MHz        | Test By:             | Gary Wu      |

| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correct<br>Factor(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
|-----|--------------------|------------------|-----------------------|-----------------|----------------|----------------|--------|---------------------|
| 1   | 36.5000            | -79.40           | 8.59                  | -70.81          | -13.00         | -57.81         | peak   | H                   |
| 2   | 54.5000            | -77.34           | 6.44                  | -70.90          | -13.00         | -57.90         | peak   | H                   |
| 3   | 91.0000            | -79.55           | -0.16                 | -79.71          | -13.00         | -66.71         | peak   | H                   |
| 4   | 204.0000           | -80.67           | 2.02                  | -78.65          | -13.00         | -65.65         | peak   | H                   |
| 5   | 620.5000           | -78.11           | 7.68                  | -70.43          | -13.00         | -57.43         | peak   | H                   |
| 6   | 910.0000           | -80.96           | 14.40                 | -66.56          | -13.00         | -53.56         | peak   | H                   |
| 7   | 3820.000           | -68.50           | 16.03                 | -52.47          | -13.00         | -39.47         | peak   | H                   |
| 8   | 5728.000           | -52.79           | 22.26                 | -30.53          | -13.00         | -17.53         | peak   | H                   |
| 9   | 7888.000           | -71.53           | 29.65                 | -41.88          | -13.00         | -28.88         | peak   | H                   |
| 1   | 129.5000           | -82.61           | 13.88                 | -68.73          | -13.00         | -55.73         | peak   | V                   |
| 2   | 160.5000           | -82.58           | 12.20                 | -70.38          | -13.00         | -57.38         | peak   | V                   |
| 3   | 206.5000           | -81.52           | 9.37                  | -72.15          | -13.00         | -59.15         | peak   | V                   |
| 4   | 617.5000           | -77.82           | 8.71                  | -69.11          | -13.00         | -56.11         | peak   | V                   |
| 5   | 737.5000           | -80.24           | 10.53                 | -69.71          | -13.00         | -56.71         | peak   | V                   |
| 6   | 834.5000           | -80.89           | 11.33                 | -69.56          | -13.00         | -56.56         | peak   | V                   |
| 7   | 3820.000           | -58.84           | 20.13                 | -38.71          | -13.00         | -25.71         | peak   | V                   |
| 8   | 5728.000           | -53.07           | 23.11                 | -29.96          | -13.00         | -16.96         | peak   | V                   |
| 9   | 7636.000           | -65.79           | 26.44                 | -39.35          | -13.00         | -26.35         | peak   | V                   |

## 7 Frequency Stability (Temperature Variation) Test

### 7.1. Limit

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage 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.

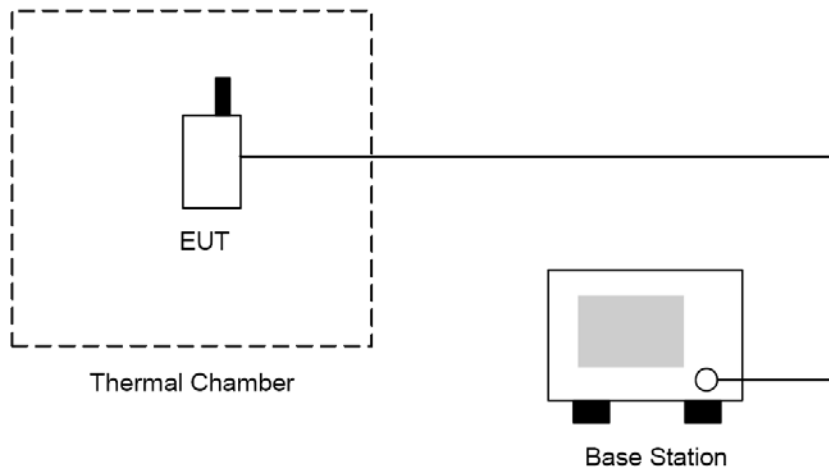
### 7.2. Test Instruments

| Describe                             | Manufacturer    | Model No. | Serial No. | Cal. Date  | Remark |
|--------------------------------------|-----------------|-----------|------------|------------|--------|
| Universal Radio Communication Tester | ROHDE & SCHWARZ | CMU200    | 109369     | 08/10/2010 | (2)    |
| Temperature & Humidity Chamber       | TAICHY          | MHU-225LA | 980729     | 08/26/2009 | (2)    |
| Test Site                            | ATL             | TE02      | TE02       | N.C.R.     | -----  |

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

### 7.3. Setup



#### **7.4. Test Procedure**

The measurement is made according to FCC rules part 22 and 24:

1. The EUT and test equipment were set up as shown on the following section.
2. With all power removed, the temperature was decreased to  $-30^{\circ}\text{C}$  and permitted to stabilize for three hours. Power was applied and the maximum change in frequency was note within one minute.
3. With power OFF, the temperature was raised in  $10^{\circ}\text{C}$  steps. The sample was permitted to stabilize at each step for at least one-half hour. Power was applied and the maximum frequency change was noted within one minute.
4. The temperature tests were performed for the worst case.
5. Test data was recorded.

#### **7.5. Uncertainty**

The measurement uncertainty is defined as for Frequency Stability (Temperature Variation) measurement is  $\pm 10\text{Hz}$ .

**7.6. Test Result**

| Model Number     | PG76240                                     |                 |             |        |
|------------------|---|-----------------|-------------|--------|
| Test Item        | Frequency Stability (Temperature Variation) |                 |             |        |
| Test Mode        | Mode 1: GSM 850 Link                        |                 |             |        |
| Date of Test     | 06/02/2011                                  |                 | Test Site   | TE02   |
| Temperature (°C) | Deviation (Hz)                              | Deviation (ppm) | Limit (ppm) | Result |
| -30              | -19   | -0.023          | ±2.5        | Pass   |
| -20              | -22   | -0.026          | ±2.5        | Pass   |
| -10              | -23   | -0.027          | ±2.5        | Pass   |
| 0                | -18   | -0.022          | ±2.5        | Pass   |
| 10               | -19   | -0.023          | ±2.5        | Pass   |
| 20               | -23   | -0.027          | ±2.5        | Pass   |
| 30               | -22   | -0.026          | ±2.5        | Pass   |
| 40               | -19   | -0.023          | ±2.5        | Pass   |
| 50               | -20   | -0.024          | ±2.5        | Pass   |

| Model Number     | PG76240                                     |                 |             |        |
|------------------|---|-----------------|-------------|--------|
| Test Item        | Frequency Stability (Temperature Variation) |                 |             |        |
| Test Mode        | Mode 2: GSM 1900 Link                       |                 |             |        |
| Date of Test     | 06/02/2011                                  |                 | Test Site   | TE02   |
| Temperature (°C) | Deviation (Hz)                              | Deviation (ppm) | Limit (ppm) | Result |
| -30              | -42   | -0.022          | ±2.5        | Pass   |
| -20              | -40   | -0.021          | ±2.5        | Pass   |
| -10              | -44   | -0.023          | ±2.5        | Pass   |
| 0                | -38   | -0.020          | ±2.5        | Pass   |
| 10               | -39   | -0.021          | ±2.5        | Pass   |
| 20               | -45   | -0.024          | ±2.5        | Pass   |
| 30               | -37   | -0.020          | ±2.5        | Pass   |
| 40               | -36   | -0.019          | ±2.5        | Pass   |
| 50               | -41   | -0.022          | ±2.5        | Pass   |

## 8 Frequency Stability (Voltage Variation) Test

### 8.1. Limit

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage 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.

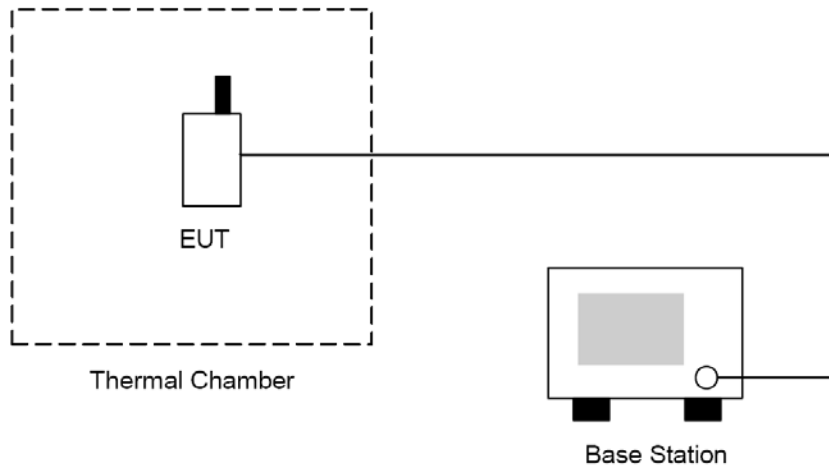
### 8.2. Test Instruments

| Describe                             | Manufacturer    | Model No. | Serial No. | Cal. Date  | Remark |
|--------------------------------------|-----------------|-----------|------------|------------|--------|
| Universal Radio Communication Tester | ROHDE & SCHWARZ | CMU200    | 109369     | 08/10/2010 | (2)    |
| Temperature & Humidity Chamber       | TAICHY          | MHU-225LA | 980729     | 08/26/2009 | (2)    |
| Test Site                            | ATL             | TE02      | TE02       | N.C.R.     | -----  |

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

### 8.3. Setup



### 8.4. Test Procedure

1. The EUT was placed in a temperature chamber at  $25 \pm 5^\circ\text{C}$  and connected as the following section.
2. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

## 8.5. Uncertainty

The measurement uncertainty is defined as for Frequency Stability (Voltage Variation) measurement is  $\pm 10\text{Hz}$ .

## 8.6. Test Result

|                       |   |                |                 |             |        |
|-----------------------|---|----------------|-----------------|-------------|--------|
| Model Number          | PG76240                                 |                |                 |             |        |
| Test Item             | Frequency Stability (Voltage Variation) |                |                 |             |        |
| Test Mode             | Mode 1: GSM 850 Link                    |                |                 |             |        |
| Date of Test          | 06/02/2011                              |                | Test Site       | TE02        |        |
| Level                 | Voltage [V]                             | Deviation [Hz] | Deviation [ppm] | Limit [ppm] | Result |
| Battery full point    | 4.07                                    | -21            | -0.025          | $\pm 2.5$   | Pass   |
| Normal                | 3.70                                    | -22            | -0.026          | $\pm 2.5$   | Pass   |
| Battery cut-off point | 3.33                                    | -21            | -0.025          | $\pm 2.5$   | Pass   |

|                       |   |                |                 |             |        |
|-----------------------|---|----------------|-----------------|-------------|--------|
| Model Number          | PG76240                                 |                |                 |             |        |
| Test Item             | Frequency Stability (Voltage Variation) |                |                 |             |        |
| Test Mode             | Mode 2: GSM 1900 Link                   |                |                 |             |        |
| Date of Test          | 06/02/2011                              |                | Test Site       | TE02        |        |
| Level                 | Voltage [V]                             | Deviation [Hz] | Deviation [ppm] | Limit [ppm] | Result |
| Battery full point    | 4.07                                    | -40            | -0.021          | $\pm 2.5$   | Pass   |
| Normal                | 3.70                                    | -42            | -0.022          | $\pm 2.5$   | Pass   |
| Battery cut-off point | 3.33                                    | -39            | -0.021          | $\pm 2.5$   | Pass   |

## 9 AC Power Conducted Emissions Test

### 9.1. Limit

| Frequency range (MHz) | Limits (dBuV) |          |
|-----------------------|---------------|----------|
|                       | Quasi-peak    | Average  |
| 0.15 to 0.50          | 66 to 56      | 56 to 46 |
| 0.50 to 5.0           | 56            | 46       |
| 5.0 to 30             | 60            | 50       |

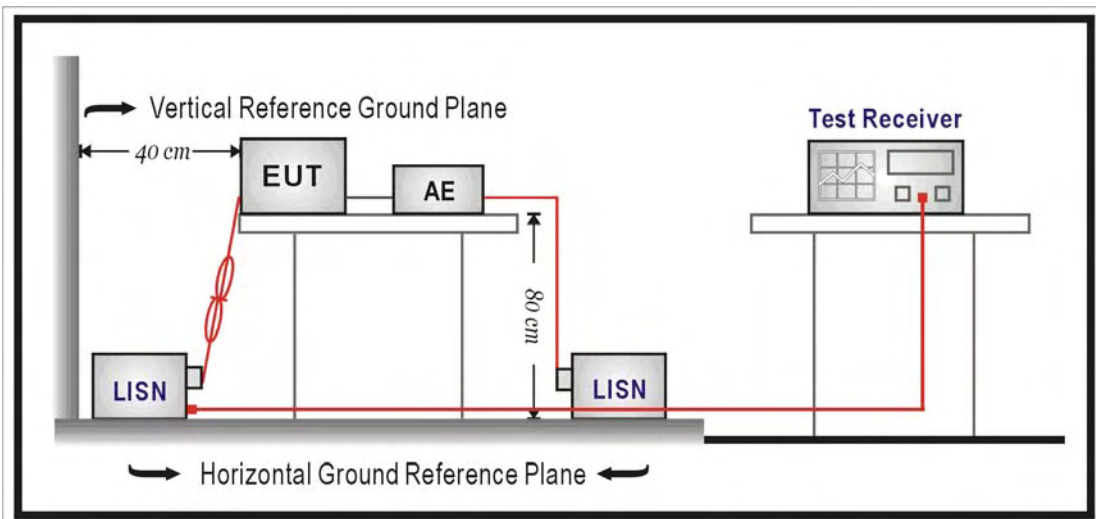
### 9.2. Test Instruments

| Describe      | Manufacturer | Model No. | Serial No. | Cal. Date  | Remark |
|---------------|--------------|-----------|------------|------------|--------|
| Test Receiver | R&S          | ESCI      | 100367     | 07/01/2010 | (1)    |
| LISN          | R&S          | ENV216    | 101040     | 03/04/2011 | (1)    |
| LISN          | R&S          | ENV216    | 101041     | 03/04/2011 | (1)    |
| Test Site     | ATL          | TE02      | TE02       | N.C.R.     | -----  |

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

### 9.3. Setup



#### **9.4. Test Procedure**

The measurement is made according to FCC rules 15.207:

The power line conducted emission measurements were performed in a shielded enclosure. The EUT was assembled on a wooden table which is 80 centimeters high, was placed 40 centimeters from the back wall and at least 1 meter from the sidewall.

Power was fed to the EUT from the public utility power grid through a line filter and EMCO Model 3162/2 SH Line Impedance Stabilization Networks (LISN). The LISN housing, measuring instrumentation case, ground plane, etc., were electrically bonded together at the same RF potential. The Spectrum analyzer was connected to the AC line through an isolation transformer. The 50-ohm output of the LISN was connected to the spectrum analyzer directly. Conducted emission levels were in the CISPR quasi-peak detection mode. The analyzer's 6 dB bandwidth was set to 9 KHz. No post-detector video filter was used.

The spectrum was scanned from 150 KHz to 30 MHz. The physical arrangement of the test system and associated cabling was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude and frequency. All spurious emission frequencies were observed. The highest emission amplitudes relative to the appropriate limit were measured and have been recorded in section 10.6.

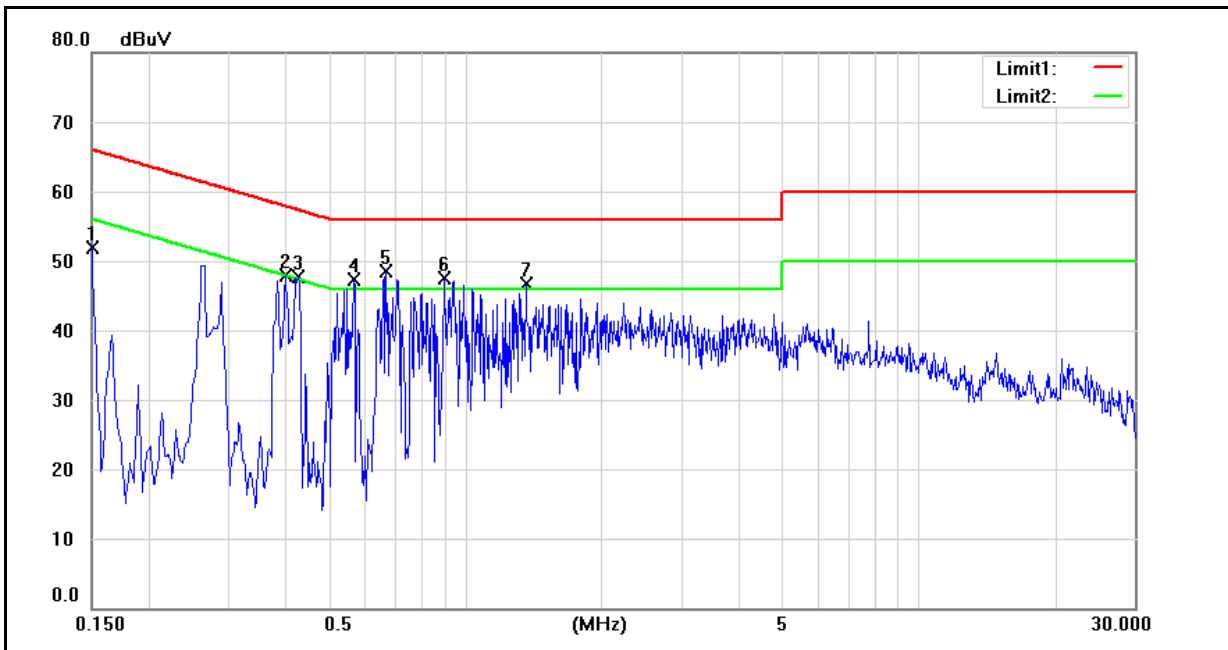
#### **9.5. Uncertainty**

The measurement uncertainty is defined as for AC power conducted emission measurement is  $\pm 2.24$  dB.



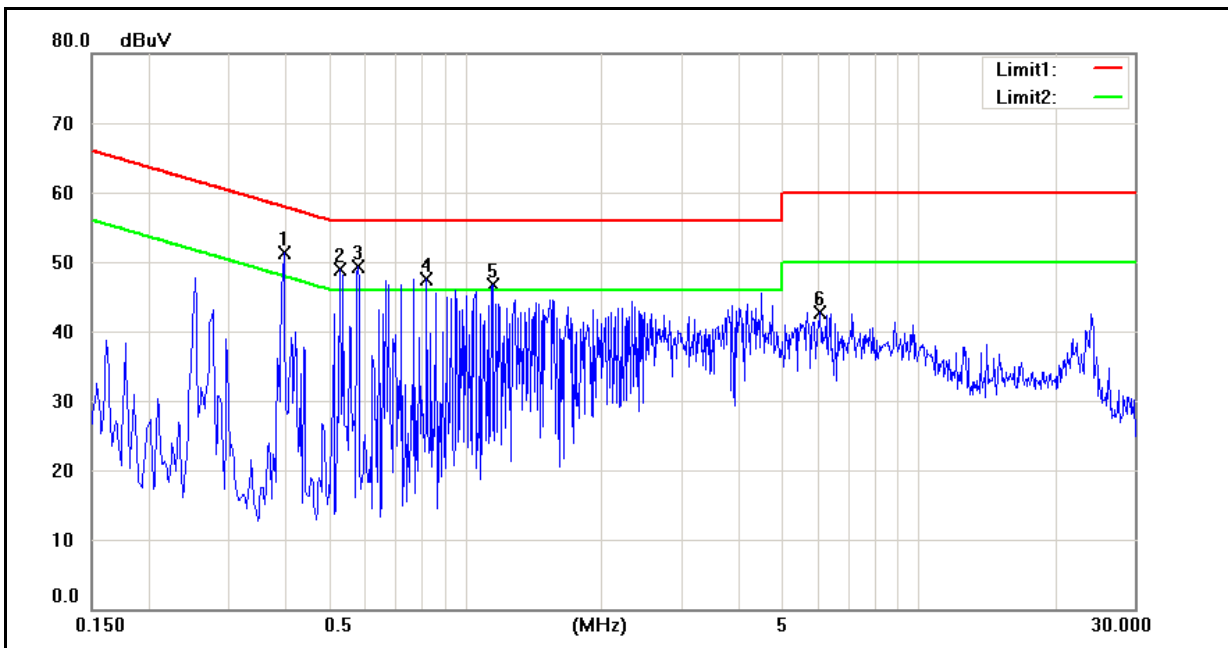
### 9.6. Test Result

|              |                    |                      |              |
|--------------|--------------------|----------------------|--------------|
| Standard:    | FCC Part 22H       | Line:                | L1           |
| Test item:   | Conducted Emission | Power:               | AC 120V/60Hz |
| Model:       | PG76240            | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:        | Mode 1             | Date:                | 2010/06/07   |
|              |                    | Test By:             | Gary Wu      |
| Description: |                    |                      |              |



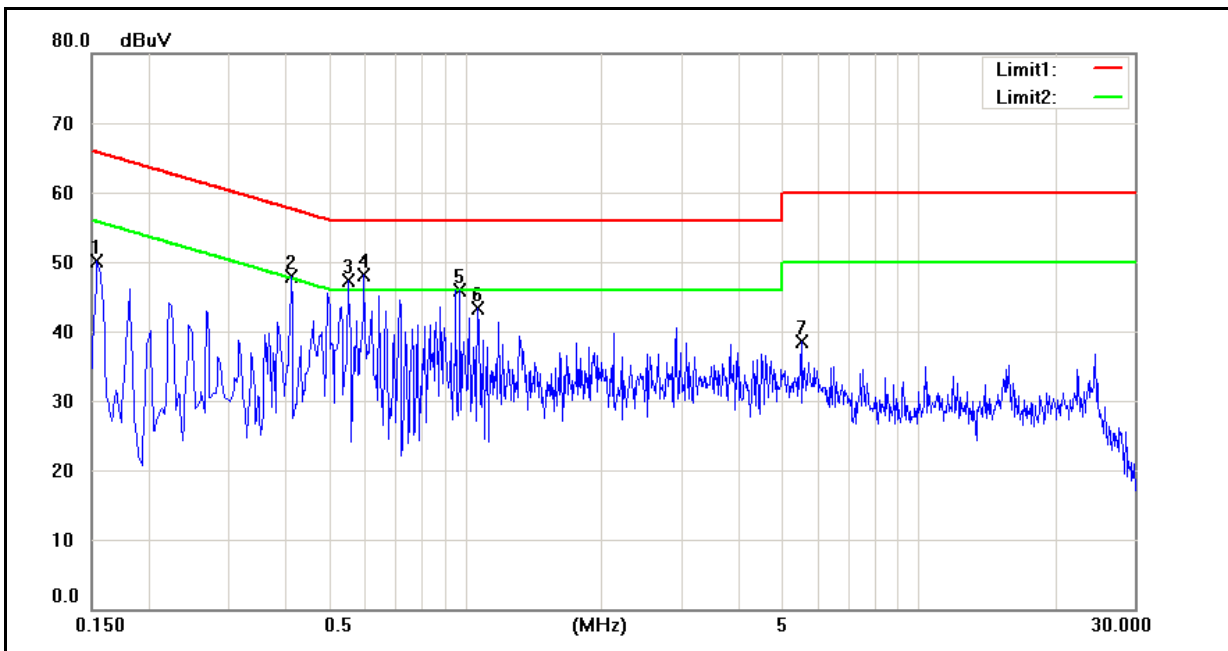
| No. | Frequency (MHz) | QP reading (dBuV) | AVG reading (dBuV) | Correction factor (dB) | QP result (dBuV) | AVG result (dBuV) | QP limit (dBuV) | AVG limit (dBuV) | QP margin (dB) | AVG margin (dB) | Remark |
|-----|-----------------|-------------------|--------------------|------------------------|------------------|-------------------|-----------------|------------------|----------------|-----------------|--------|
| 1   | 0.1500          | 38.51             | 16.17              | 10.07                  | 48.58            | 26.24             | 66.00           | 56.00            | -17.42         | -29.76          | Pass   |
| 2   | 0.4020          | 33.37             | 17.42              | 9.97                   | 43.34            | 27.39             | 57.81           | 47.81            | -14.47         | -20.42          | Pass   |
| 3   | 0.4300          | 33.46             | 16.49              | 9.96                   | 43.42            | 26.45             | 57.25           | 47.25            | -13.83         | -20.80          | Pass   |
| 4   | 0.5700          | 32.61             | 13.70              | 9.90                   | 42.51            | 23.60             | 56.00           | 46.00            | -13.49         | -22.40          | Pass   |
| 5   | 0.6700          | 32.29             | 13.72              | 9.86                   | 42.15            | 23.58             | 56.00           | 46.00            | -13.85         | -22.42          | Pass   |
| 6   | 0.9020          | 31.70             | 13.47              | 9.77                   | 41.47            | 23.24             | 56.00           | 46.00            | -14.53         | -22.76          | Pass   |
| 7   | 1.3660          | 28.11             | 13.72              | 9.69                   | 37.80            | 23.41             | 56.00           | 46.00            | -18.20         | -22.59          | Pass   |

|              |                    |                      |              |
|--------------|--------------------|----------------------|--------------|
| Standard:    | FCC Part 22H       | Line:                | N            |
| Test item:   | Conducted Emission | Power:               | AC 120V/60Hz |
| Model:       | PG76240            | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:        | Mode 1             | Date:                | 2010/06/14   |
|              |                    | Test By:             | Gary Wu      |
| Description: |                    |                      |              |



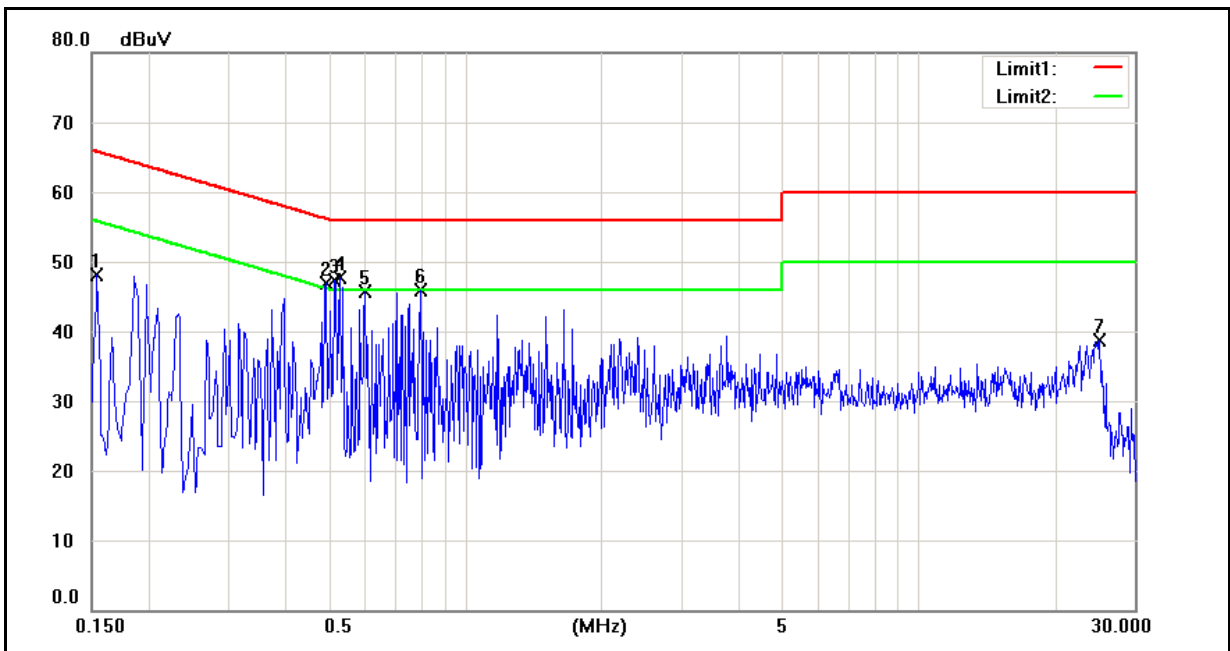
| No. | Frequency (MHz) | QP reading (dBuV) | AVG reading (dBuV) | Correction factor (dB) | QP result (dBuV) | AVG result (dBuV) | QP limit (dBuV) | AVG limit (dBuV) | QP margin (dB) | AVG margin (dB) | Remark |
|-----|-----------------|-------------------|--------------------|------------------------|------------------|-------------------|-----------------|------------------|----------------|-----------------|--------|
| 1   | 0.3980          | 33.01             | 12.55              | 10.05                  | 43.06            | 22.60             | 57.90           | 47.90            | -14.84         | -25.30          | Pass   |
| 2   | 0.5300          | 34.13             | 10.58              | 10.00                  | 44.13            | 20.58             | 56.00           | 46.00            | -11.87         | -25.42          | Pass   |
| 3   | 0.5820          | 32.82             | 7.46               | 9.98                   | 42.80            | 17.44             | 56.00           | 46.00            | -13.20         | -28.56          | Pass   |
| 4   | 0.8220          | 31.82             | 7.83               | 9.87                   | 41.69            | 17.70             | 56.00           | 46.00            | -14.31         | -28.30          | Pass   |
| 5   | 1.1500          | 30.64             | 9.17               | 9.79                   | 40.43            | 18.96             | 56.00           | 46.00            | -15.57         | -27.04          | Pass   |
| 6   | 6.0780          | 24.21             | 11.41              | 9.86                   | 34.07            | 21.27             | 60.00           | 50.00            | -25.93         | -28.73          | Pass   |

|              |                    |                      |              |
|--------------|--------------------|----------------------|--------------|
| Standard:    | FCC Part 24E       | Line:                | L1           |
| Test item:   | Conducted Emission | Power:               | AC 120V/60Hz |
| Model:       | PG76240            | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:        | Mode 2             | Date:                | 2010/06/14   |
|              |                    | Test By:             | Gary Wu      |
| Description: |                    |                      |              |



| No. | Frequency (MHz) | QP reading (dBuV) | AVG reading (dBuV) | Correction factor (dB) | QP result (dBuV) | AVG result (dBuV) | QP limit (dBuV) | AVG limit (dBuV) | QP margin (dB) | AVG margin (dB) | Remark |
|-----|-----------------|-------------------|--------------------|------------------------|------------------|-------------------|-----------------|------------------|----------------|-----------------|--------|
| 1   | 0.1540          | 36.50             | 18.32              | 10.07                  | 46.57            | 28.39             | 65.78           | 55.78            | -19.21         | -27.39          | Pass   |
| 2   | 0.4140          | 29.32             | 12.90              | 9.97                   | 39.29            | 22.87             | 57.57           | 47.57            | -18.28         | -24.70          | Pass   |
| 3   | 0.5540          | 27.91             | 12.10              | 9.91                   | 37.82            | 22.01             | 56.00           | 46.00            | -18.18         | -23.99          | Pass   |
| 4   | 0.5980          | 30.71             | 18.31              | 9.89                   | 40.60            | 28.20             | 56.00           | 46.00            | -15.40         | -17.80          | Pass   |
| 5   | 0.9780          | 27.52             | 14.30              | 9.74                   | 37.26            | 24.04             | 56.00           | 46.00            | -18.74         | -21.96          | Pass   |
| 6   | 1.0700          | 26.02             | 12.46              | 9.72                   | 35.74            | 22.18             | 56.00           | 46.00            | -20.26         | -23.82          | Pass   |
| 7   | 5.5140          | 20.27             | 11.60              | 9.79                   | 30.06            | 21.39             | 60.00           | 50.00            | -29.94         | -28.61          | Pass   |

|              |                    |                      |              |
|--------------|--------------------|----------------------|--------------|
| Standard:    | FCC Part 24E       | Line:                | N            |
| Test item:   | Conducted Emission | Power:               | AC 120V/60Hz |
| Model:       | PG76240            | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode:        | Mode 2             | Date:                | 2010/06/14   |
|              |                    | Test By:             | Gary Wu      |
| Description: |                    |                      |              |



| No. | Frequency (MHz) | QP reading (dBuV) | AVG reading (dBuV) | Correction factor (dB) | QP result (dBuV) | AVG result (dBuV) | QP limit (dBuV) | AVG limit (dBuV) | QP margin (dB) | AVG margin (dB) | Remark |
|-----|-----------------|-------------------|--------------------|------------------------|------------------|-------------------|-----------------|------------------|----------------|-----------------|--------|
| 1   | 0.1540          | 36.08             | 17.78              | 10.15                  | 46.23            | 27.93             | 65.78           | 55.78            | -19.55         | -27.85          | Pass   |
| 2   | 0.4940          | 31.71             | 13.28              | 10.01                  | 41.72            | 23.29             | 56.10           | 46.10            | -14.38         | -22.81          | Pass   |
| 3   | 0.5180          | 34.91             | 16.85              | 10.00                  | 44.91            | 26.85             | 56.00           | 46.00            | -11.09         | -19.15          | Pass   |
| 4   | 0.5300          | 34.26             | 15.44              | 10.00                  | 44.26            | 25.44             | 56.00           | 46.00            | -11.74         | -20.56          | Pass   |
| 5   | 0.6020          | 29.80             | 12.97              | 9.97                   | 39.77            | 22.94             | 56.00           | 46.00            | -16.23         | -23.06          | Pass   |
| 6   | 0.7980          | 27.41             | 9.99               | 9.88                   | 37.29            | 19.87             | 56.00           | 46.00            | -18.71         | -26.13          | Pass   |
| 7   | 25.1580         | 16.83             | 1.58               | 10.49                  | 27.32            | 12.07             | 60.00           | 50.00            | -32.68         | -37.93          | Pass   |