



Report No: FCC 1704045-05  
File reference No: 2017-04-19

Applicant: Shenzhen Jingwah Information Technology Co., Ltd.

Product: Tablet PC

Model No: M7057, 3GR, 3G-16, S813G, 3G-32, G10, Xtab 832

Trademark: N/A

Test Standards: FCC 47 CFR Part 2, 22(H), 24(E)

Test result: It is herewith confirmed and found to comply with the requirements set up by ANSI C63.4, FCC Part 22H and 24E for the evaluation of electromagnetic compatibility

Approved By

*Jack Chung*

Jack Chung  
Manager

Dated: April 19, 2017

**Results appearing herein relate only to the sample tested  
The technical reports is issued errors and omissions exempt and is subject to  
withdrawal at**

## SHENZHEN TIMEWAY TESTING LABORATORIES

Room 512-519, 5/F., East Tower, Building 4, Anhua Industrial Zone, Futian District,  
Shenzhen, Guangdong, China

Tel (755) 83448688, Fax (755) 83442996, E-Mail:info@timeway-lab.com



### **Special Statement:**

The testing quality ability of our laboratory meet with “Quality Law of People’s Republic of China” Clause 19.

The testing quality system of our laboratory meet with ISO/IEC-17025 requirements, which is approved by CNAL. This approval result is accepted by MRA of APLAC.

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

#### **CNAL-LAB Code: L2292**

The EMC Laboratory has been assessed and in compliance with CNAL/AC01:2002 accreditation criteria for testing Laboratories (identical to ISO/IEC 17025:1999 General Requirements) for the Competence of testing Laboratories.

#### **FCC-Registration No.: 899988**

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 899988.

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Test Report Conclusion  
Content

|            |  |    |
|------------|--|----|
| <b>1.0</b> | <b>General Details</b> .....   | 4  |
| 1.1        | Test Lab Details.....  | 4  |
| 1.2        | Applicant Details.....   | 4  |
| 1.3        | Description of EUT .....   | 4  |
| 1.4        | Submitted Sample.....  | 5  |
| 1.5        | Test Duration.....   | 5  |
| 1.6        | Test Uncertainty.....  | 5  |
| 1.7        | Test By.....   | 5  |
| <b>2.0</b> | <b>Test Configuration of Equipment Under Test</b> .....                          | 7  |
| 2.1        | Test Mode.....   | 7  |
| 2.2        | Connection Diagram of Test System.....   | 10 |
| <b>3.0</b> | <b>Technical Details</b> .....   | 11 |
| 3.1        | Conducted Output Power Measurement.....  | 11 |
| 3.2        | Effective Radiated Power and Effective Isotropic Radiated Power Measurement..... | 13 |
| 3.3        | Occupied Bandwidth Measurement.....  | 17 |
| 3.4        | Band Edge Measurement.....   | 37 |
| 3.5        | Conducted Emission Measurement.....  | 50 |
| 3.6        | Field Strength of Spurious Radiation Measurement.....                            | 63 |
| 3.7        | Frequency Stability Measurement.....   | 69 |
| 3.8        | Peak to Average Ratio.....   | 77 |
| 3.9        | Mains Conducted Emissions.....   | 79 |
| <b>4.0</b> | <b>Test Equipment</b> .....  | 82 |
| <b>5.0</b> | <b>Photographs</b> .....   | 83 |

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



## 1.0 General Details

### 1.1 Test Lab Details

Name : SHENZHEN TIMEWAY TESTING LABORATORIES.  
 Address: Room 512-519,5/F., East Tower,Building 4, Anhua Industrial Zone, Futian District,Shenzhen, Guangdong China  
 Telephone: (755) 83448688  
 Fax: (755) 83442996  
 Site on File with the Federal Communications Commission – United States  
 Registration Number: 899988  
 For 3m & 10 m OATS  
 Site Listed with Industry Canada of Ottawa, Canada  
 Registration Number: IC: 5205A-02  
 For 3m & 10 m OATS

### 1.2 Applicant Details

Applicant: Shenzhen Jingwah Information Technology Co., Ltd.  
 Address: 4F, Bldg 4, Jinghua Square, No.1 Huafa North Road, Futian District, Shenzhen, China  
 Telephone: --  
 Fax: --

### 1.3 Description of EUT

|                                 |  |
|---------------------------------|--|
| Product:                        | Tablet PC  |
| Manufacturer:                   | Shenzhen Jingwah Information Technology Co., Ltd.  |
| Address:                        | 4F, Bldg 4, Jinghua Square, No.1 Huafa North Road, Futian District, Shenzhen, China  |
| Brand Name:                     | N/A  |
| Model Number:                   | M7057  |
| Additional Model Number:        | 3GR, 3G-16, S813G, 3G-32, G10, Xtab 832  |
| Tx Frequency                    | GSM850 : 824.2 MHz ~ 848.8 MHz<br>GSM1900 : 1850.2 MHz ~ 1909.8 MHz<br>WCDMA Band V : 826.4 MHz ~ 846.6 MHz<br>WCDMA Band II : 1852.4 MHz ~ 1907.6 MHz |
| Rx Frequency                    | GSM850 : 869.2 MHz ~ 893.8 MHz<br>GSM1900 : 1930.2 MHz ~ 1989.8 MHz<br>WCDMA Band V : 871.4 MHz ~ 891.6 MHz<br>WCDMA Band II : 1932.4 MHz ~ 1987.6 MHz |
| Maximum Output Power to Antenna | GSM850 : 32.56dBm<br>GSM1900 : 29.38 dBm<br>WCDMA Band V : 23.75 dBm<br>WCDMA Band II : 23.85 dBm  |
| Antenna Type                    | Integral Antenna   |

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES, will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES, reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



|                     |   |
|---------------------|---|
| Antenna Peak Gain   | 824 ~ 849 MHz : 1.7dBi<br>1850~1910 MHz : 1.9dBi  |
| Type of Modulation  | GSM / GPRS : GMSK<br>EDGE : GMSK/8PSK<br>WCDMA : QPSK<br>HSDPA : QPSK / 16QAM<br>HSUPA : QPSK |
| EMISSION DESIGNATOR | GSM : 247KGXW<br>EGPRS : 246KG7W<br>WCDMA: 4M18F9W  |
| FCC ID:             | RBD-M7057   |

1.4 Submitted Sample: 2 Samples

1.5 Test Duration  
2017-04-10 to 2017-04-19

1.6 Test Uncertainty  
Conducted Emissions Uncertainty =3.6dB  
Radiated Emissions Uncertainty =4.7dB

1.7 Test Engineer  
The sample tested by Terry Tang

Print Name: Terry Tang

The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



## SUMMARY OF TEST RESULT

| Report Section | FCC Rule                            | Description                                   | Limit                   | Result | Remark |
|----------------|-------------------------------------|---|-------------------------|--------|--------|
| 3.1            | §2.1046                             | Conducted Output Power                        | N/A                     | PASS   | -      |
| 3.2            | §22.913(a)(2)                       | Effective Radiated Power                      | < 7 Watts               | PASS   | -      |
| 3.2            | §24.232(c)                          | Equivalent Isotropic Radiated Power           | < 2 Watts               | PASS   | -      |
| 3.3            | §2.1049<br>§22.917(a)<br>§24.238(a) | Occupied Bandwidth                            | N/A                     | PASS   | -      |
| 3.4            | §2.1051<br>§22.917(a)<br>§24.238(a) | Band Edge Measurement                         | < 43+10log10(P[Watts])  | PASS   | -      |
| 3.5            | §2.1051<br>§22.917(a)<br>§24.238(a) | Conducted Emission                            | < 43+10log10(P[Watts])  | PASS   | -      |
| 3.6            | §2.1053<br>§22.917(a)<br>§24.238(a) | Field Strength of Spurious Radiation          | < 43+10log10(P[Watts])  | PASS   | -      |
| 3.7            | §2.1055<br>§22.355<br>§24.235       | Frequency Stability for Temperature & Voltage | < 2.5 ppm               | PASS   | -      |
| 3.8            | §24.232(d)                          | Peak-to-Average Ratio                         | < 13 dB                 | PASS   | -      |
| 3.9            | Part 15B                            | Main Conducted Emissions                      | See part 15.107 and 207 | PASS   | -      |

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer. Supplier or other persons directly concerned, SHENZHEN TIMEWAY TESTING LABORATORIES, will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



## 2 Test Configuration of Equipment Under Test

### 2.1 Test Mode

During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range. Frequency range investigated for radiated emission is as follows:

1. 30 MHz to 9000 MHz for GSM850 and WCDMA Band V.
2. 30 MHz to 19000 MHz for GSM1900 and WCDMA Band II.

| Test Modes    |   |   |
|---------------|---|---|
| Band          | Radiated TCs  | Conducted TCs   |
| GSM 850       | <ul style="list-style-type: none"> <li>■ GSM Link</li> <li>■ EDGE 8 Link</li> </ul> | <ul style="list-style-type: none"> <li>■ GSM Link</li> <li>■ EDGE 8 Link</li> </ul> |
| GSM 1900      | <ul style="list-style-type: none"> <li>■ GSM Link</li> <li>■ EDGE 8 Link</li> </ul> | <ul style="list-style-type: none"> <li>■ GSM Link</li> <li>■ EDGE 8 Link</li> </ul> |
| WCDMA Band V  | <ul style="list-style-type: none"> <li>■ RMC 12.2Kbps Link</li> </ul>               | <ul style="list-style-type: none"> <li>■ RMC 12.2Kbps Link</li> </ul>               |
| WCDMA Band II | <ul style="list-style-type: none"> <li>■ RMC 12.2Kbps Link</li> </ul>               | <ul style="list-style-type: none"> <li>■ RMC 12.2Kbps Link</li> </ul>               |

**Note:** The maximum power levels are GSM mode for GSMK link, EDGE multi-slot class 8 mode for 8PSK link, RMC 12.2Kbps mode for WCDMA band V, and RMC 12.2Kbps mode for WCDMA band II, only these modes were used for all tests.

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



**The conducted power tables are as follows:**

| Burst Average Power (dBm) |         |       |       |          |        |        |
|---------------------------|---------|-------|-------|----------|--------|--------|
| Band                      | GSM 850 |       |       | PCS 1900 |        |        |
| Channel                   | 128     | 190   | 251   | 512      | 661    | 810    |
| Frequency (MHz)           | 824.2   | 836.6 | 848.8 | 1850.2   | 1880.0 | 1909.8 |
| GSM(GMSK, 1-Slot)         | 32.56   | 32.49 | 32.52 | 29.38    | 29.32  | 29.35  |
| GPRS (GMSK, 1-Slot)       | 32.41   | 32.38 | 32.39 | 29.21    | 29.20  | 29.17  |
| GPRS (GMSK, 2-Slot)       | 31.70   | 31.68 | 31.62 | 28.25    | 28.30  | 28.22  |
| GPRS (GMSK, 3-Slot)       | 30.23   | 30.27 | 30.25 | 27.13    | 27.11  | 27.06  |
| GPRS (GMSK, 4-Slot)       | 29.16   | 29.25 | 29.20 | 25.28    | 25.23  | 25.25  |
| EGPRS(8PSK, 1-Slot)       | 27.63   | 27.57 | 27.53 | 25.30    | 25.22  | 25.27  |
| EGPRS(8PSK, 2-Slot)       | 27.11   | 27.08 | 27.15 | 24.07    | 24.02  | 24.05  |
| EGPRS(8PSK, 3-Slot)       | 25.68   | 25.72 | 25.73 | 23.31    | 23.27  | 23.26  |
| EGPRS(8PSK, 4-Slot)       | 24.18   | 24.12 | 24.10 | 22.61    | 22.57  | 22.55  |

Remark: GPRS, CS4 coding scheme. EGPRS, MCS9 coding scheme.  
Multi-Slot Class 8 , Support Max 4 downlink, 1 uplink , 5 working link  
Multi-Slot Class 10 , Support Max 4 downlink, 2 uplink , 5 working link  
Multi-Slot Class 12 , Support Max 4 downlink, 4 uplink , 5 working link

| Band            | WCDMA Band V |       |       | WCDMA Band II |        |        |
|-----------------|--------------|-------|-------|---------------|--------|--------|
| Channel         | 4132         | 4183  | 4233  | 9262          | 9400   | 9538   |
| Frequency (MHz) | 826.4        | 836.6 | 846.6 | 1852.4        | 1880.0 | 1907.6 |
| RMC 12.2Kbps    | 23.68        | 23.71 | 23.75 | 23.80         | 23.85  | 23.83  |
| HSDPA Subtest-1 | 23.52        | 23.61 | 23.63 | 23.71         | 23.76  | 23.72  |
| HSDPA Subtest-2 | 23.32        | 23.35 | 23.49 | 23.56         | 23.62  | 23.55  |
| HSDPA Subtest-3 | 23.28        | 23.32 | 23.35 | 23.40         | 23.46  | 23.39  |
| HSDPA Subtest-4 | 23.40        | 23.47 | 23.46 | 23.48         | 23.55  | 23.52  |
| HSUPA Subtest-1 | 23.37        | 23.40 | 23.43 | 23.57         | 23.66  | 23.60  |
| HSUPA Subtest-2 | 23.29        | 23.35 | 23.36 | 23.35         | 23.41  | 23.33  |
| HSUPA Subtest-3 | 23.18        | 23.22 | 23.26 | 23.52         | 23.60  | 23.58  |
| HSUPA Subtest-4 | 23.14        | 23.18 | 23.16 | 23.45         | 23.52  | 23.51  |
| HSUPA Subtest-5 | 23.26        | 23.25 | 23.29 | 23.37         | 23.44  | 23.39  |

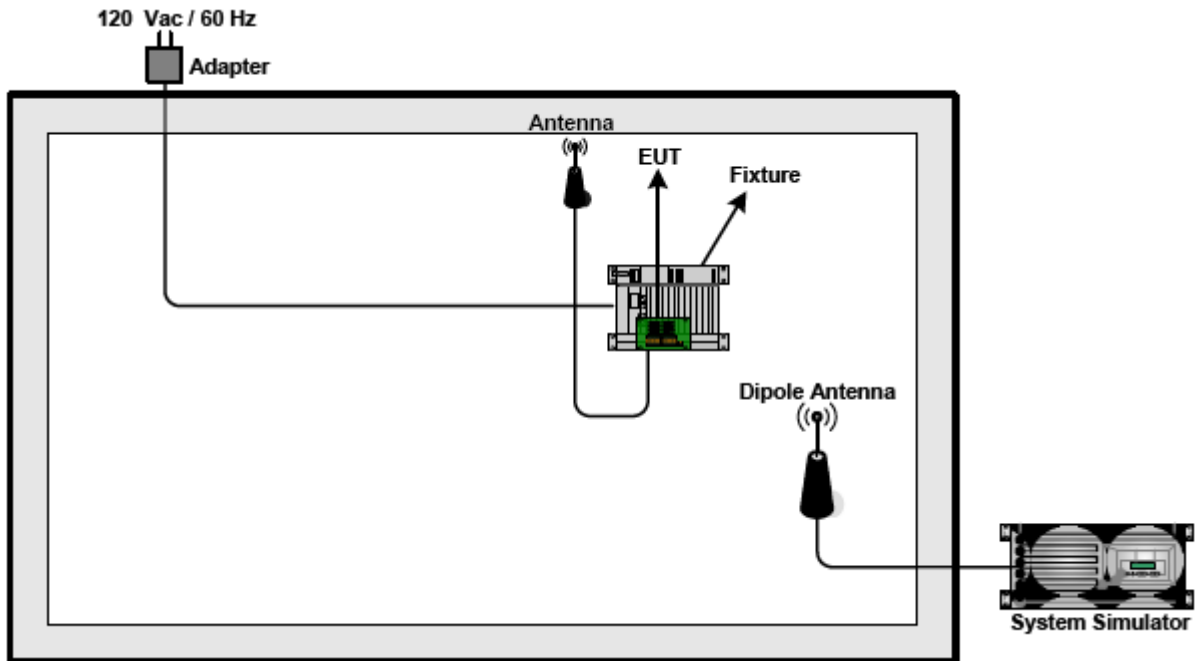
The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer, Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.





## 2.2 Connection Diagram of Test System



The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



### 3 Test Result

#### 3.1 Conducted Output Power Measurement

##### 3.1.1 Description of the Conducted Output Power Measurement

A base station simulator was used to establish communication with the EUT. Its parameters were set to transmit the maximum power on the EUT. The measured power in the radio frequency on the transmitter output terminals shall be reported.

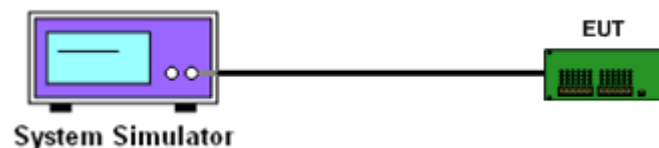
##### 3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

##### 3.1.3 Test Procedures

1. The transmitter output port was connected to base station.
2. Set EUT at maximum power through base station.
3. Select lowest, middle, and highest channels for each band and different modulation.

##### 3.1.4 Test Setup



The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer. Supplier or other persons directly concerned, SHENZHEN TIMEWAY TESTING LABORATORIES, will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



### 3.1.5 Test Result of Conducted Output Power

| Cellular Band               |             |                 |                       |                         |
|-----------------------------|-------------|-----------------|-----------------------|-------------------------|
| Modes                       | Channel     | Frequency (MHz) | Conducted Power (dBm) | Conducted Power (Watts) |
| GSM850 (GSM)                | 128 (Low)   | 824.2           | 32.56                 | 1.803                   |
|                             | 190 (Mid)   | 836.6           | 32.49                 | 1.774                   |
|                             | 251 (High)  | 848.8           | 32.52                 | 1.786                   |
| GSM850 (EDGE 8)             | 128 (Low)   | 824.2           | 27.63                 | 0.579                   |
|                             | 190 (Mid)   | 836.4           | 27.57                 | 0.571                   |
|                             | 251 (High)  | 848.8           | 27.53                 | 0.566                   |
| WCDMA Band V (RMC 12.2Kbps) | 4132 (Low)  | 826.4           | 23.68                 | 0.233                   |
|                             | 4183 (Mid)  | 836.6           | 23.71                 | 0.235                   |
|                             | 4233 (High) | 846.6           | 23.75                 | 0.237                   |

| PCS Band                     |             |                 |                       |                         |
|------------------------------|-------------|-----------------|-----------------------|-------------------------|
| Modes                        | Channel     | Frequency (MHz) | Conducted Power (dBm) | Conducted Power (Watts) |
| GSM1900 (GSM)                | 512 (Low)   | 1850.2          | 29.38                 | 0.867                   |
|                              | 661 (Mid)   | 1880.0          | 29.32                 | 0.855                   |
|                              | 810 (High)  | 1909.8          | 29.35                 | 0.861                   |
| GSM1900 (EDGE 8)             | 512 (Low)   | 1850.2          | 25.30                 | 0.339                   |
|                              | 661 (Mid)   | 1880.0          | 25.22                 | 0.333                   |
|                              | 810 (High)  | 1909.8          | 25.27                 | 0.337                   |
| WCDMA Band II (RMC 12.2Kbps) | 9262 (Low)  | 1852.4          | 23.80                 | 0.240                   |
|                              | 9400 (Mid)  | 1880.0          | 23.85                 | 0.243                   |
|                              | 9538 (High) | 1907.6          | 23.83                 | 0.242                   |

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer. Supplier or other persons directly concerned, SHENZHEN TIMEWAY TESTING LABORATORIES, will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



## 3.2 Effective Radiated Power and Effective Isotropic Radiated Power Measurement

### 3.2.1 Description of the ERP/EIRP Measurement

The substitution method, in ANSI / TIA / EIA-603-C-2004, was used for ERP/EIRP measurement, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r01. The ERP of mobile transmitters must not exceed 7 Watts and the EIRP of mobile transmitters are limited to 2 Watts.

### 3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

### 3.2.3 Test Procedures

1. The EUT was placed on a turntable with 1.5 meter height in a fully anechoic chamber.
2. The EUT was set at 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. GSM operating modes: Set RBW= 1MHz, VBW= 3MHz, RMS detector over burst;  
UMTS operating modes: Set RBW= 100 kHz, VBW= 300 kHz, RMS detector over frame, and use channel power option with bandwidth=5MHz, per KDB 971168 D01.
4. The table was rotated 360 degrees to determine the position of the highest radiated power.
5. The height of the receiving antenna is adjusted to look for the maximum ERP/EIRP.
6. Taking the record of maximum ERP/EIRP.
7. A dipole antenna was substituted in place of the EUT and was driven by a signal generator.
8. The conducted power at the terminal of the dipole antenna is measured.
9. Repeat step 3 to step 5 to get the maximum ERP/EIRP of the substitution antenna.
10.  $ERP/EIRP = P_s + E_t - E_s + G_s = P_s + R_t - R_s + G_s$

$P_s$  (dBm) : Input power to substitution antenna.

$G_s$  (dBi or dBd) : Substitution antenna Gain.

$E_t = R_t + AF$

$E_s = R_s + AF$

$AF$  (dB/m) : Receive antenna factor

$R_t$  : The highest received signal in spectrum analyzer for EUT.

$R_s$  : The highest received signal in spectrum analyzer for substitution antenna.

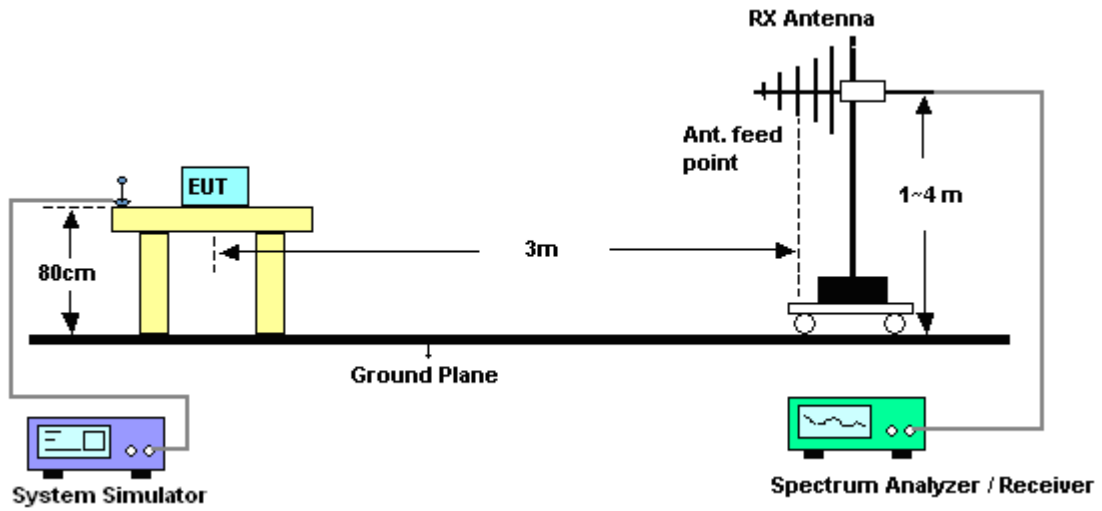
The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer. Supplier or other persons directly concerned, SHENZHEN TIMEWAY TESTING LABORATORIES, will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



### 3.2.4 Test Setup



The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer, Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES, will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report, The SHENZHEN TIMEWAY TESTING LABORATORIES, reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



### 3.3.5 Test Result of ERP

| GSM850 (GSM) Radiated Power ERP |              |       |              |       |        |
|---------------------------------|--------------|-------|--------------|-------|--------|
| Frequency (MHz)                 | ERP (dBm)    |       | ERP (W)      |       | Result |
|                                 | Polarization |       | Polarization |       |        |
|                                 | H            | V     | H            | V     |        |
| 824.20                          | 28.46        | 27.63 | 0.701        | 0.579 | Pass   |
| 836.60                          | 28.35        | 27.74 | 0.684        | 0.594 | Pass   |
| 848.80                          | 28.42        | 27.69 | 0.695        | 0.587 | Pass   |

| GSM850 (EDGE8) Radiated Power ERP |              |       |              |       |        |
|-----------------------------------|--------------|-------|--------------|-------|--------|
| Frequency (MHz)                   | ERP (dBm)    |       | ERP (W)      |       | Result |
|                                   | Polarization |       | Polarization |       |        |
|                                   | H            | V     | H            | V     |        |
| 824.20                            | 23.36        | 22.13 | 0.217        | 0.163 | Pass   |
| 836.60                            | 23.25        | 22.09 | 0.211        | 0.162 | Pass   |
| 848.80                            | 23.23        | 22.01 | 0.210        | 0.159 | Pass   |

| WCDMA Band V (RMC 12.2Kbps) Radiated Power ERP |              |       |              |        |        |
|--|--------------|-------|--------------|--------|--------|
| Frequency (MHz)                                | ERP (dBm)    |       | ERP (W)      |        | Result |
|  | Polarization |       | Polarization |        |        |
|  | H            | V     | H            | V      |        |
| 826.40   | 18.95        | 17.78 | 0.0785       | 0.0600 | Pass   |
| 836.60   | 19.06        | 17.81 | 0.0805       | 0.0604 | Pass   |
| 846.60   | 19.10        | 17.88 | 0.0813       | 0.0614 | Pass   |

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer, Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES, will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report, The SHENZHEN TIMEWAY TESTING LABORATORIES, reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



### 3.3.6 Test Result of EIRP

| GSM1900 (GSM) Radiated Power EIRP |              |       |              |       |        |
|-----------------------------------|--------------|-------|--------------|-------|--------|
| Frequency (MHz)                   | EIRP (dBm)   |       | EIRP (W)     |       | Result |
|                                   | Polarization |       | Polarization |       |        |
|                                   | H            | V     | H            | V     |        |
| 1850.20                           | 26.32        | 25.46 | 0.429        | 0.352 | Pass   |
| 1880.00                           | 26.24        | 25.37 | 0.421        | 0.344 | Pass   |
| 1909.80                           | 26.28        | 25.39 | 0.425        | 0.346 | Pass   |

| GSM1900 (EDGE class 8) Radiated Power EIRP |              |       |              |       |        |
|--|--------------|-------|--------------|-------|--------|
| Frequency (MHz)                            | EIRP (dBm)   |       | EIRP (W)     |       | Result |
|  | Polarization |       | Polarization |       |        |
|  | H            | V     | H            | V     |        |
| 1850.20                                    | 21.83        | 20.23 | 0.152        | 0.105 | Pass   |
| 1880.00                                    | 21.75        | 20.11 | 0.150        | 0.103 | Pass   |
| 1909.80                                    | 21.78        | 20.16 | 0.151        | 0.104 | Pass   |

| WCDMA Band II (RMC 12.2Kbps) Radiated Power EIRP |              |       |              |        |        |
|--|--------------|-------|--------------|--------|--------|
| Frequency (MHz)                                  | EIRP (dBm)   |       | EIRP (W)     |        | Result |
|  | Polarization |       | Polarization |        |        |
|  | H            | V     | H            | V      |        |
| 1852.40  | 19.37        | 18.09 | 0.0865       | 0.0644 | Pass   |
| 1880.00  | 19.46        | 18.17 | 0.0883       | 0.0656 | Pass   |
| 1907.60  | 19.50        | 18.29 | 0.0891       | 0.0675 | Pass   |

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer, Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES, will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report, The SHENZHEN TIMEWAY TESTING LABORATORIES, reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



### 3.3 Occupied Bandwidth Measurement

#### 3.3.1 Description of Occupied Bandwidth Measurement

The 99% occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The emission bandwidth is defined as the width of the signal between two points, located at the 2 sides of the carrier frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

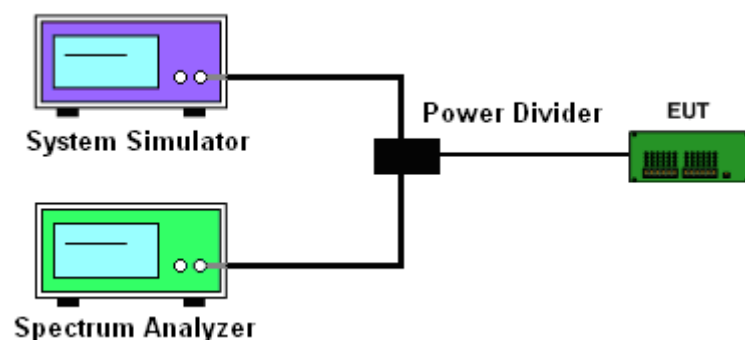
#### 3.3.2 Measuring Instruments

See list of measuring instruments of this test report.

#### 3.3.3 Test Procedures

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The 99% occupied bandwidth were measured, set RBW= 1% of span, VBW= 10\*RBW, Peak detector, trace maximum hold.
4. The 26dB bandwidth were measured, set RBW= 1% of EBW, VBW= 3\*RBW, peak detector, trace maximum hold.

#### 3.3.4 Test Setup



The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned, SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.





### 3.4.5 Test Result of Occupied Bandwidth and 26dB Bandwidth

| Cellular Band   |              |              |               |                       |              |               |
|-----------------|--------------|--------------|---------------|-----------------------|--------------|---------------|
| Modes           | GSM850 (GSM) |              |               | GSM850 (EDGE class 8) |              |               |
| Channel         | 128<br>(Low) | 190<br>(Mid) | 251<br>(High) | 128<br>(Low)          | 190<br>(Mid) | 251<br>(High) |
| Frequency (MHz) | 824.2        | 836.6        | 848.8         | 824.2                 | 836.6        | 848.8         |
| 99% OBW (kHz)   | 244.30       | 241.11       | 244.19        | 245.68                | 246.24       | 244.68        |
| 26dB BW (kHz)   | 326.72       | 314.94       | 319.94        | 312.15                | 317.00       | 312.64        |

| PCS Band        |               |              |               |                        |              |               |
|-----------------|---------------|--------------|---------------|------------------------|--------------|---------------|
| Modes           | GSM1900 (GSM) |              |               | GSM1900 (EDGE class 8) |              |               |
| Channel         | 512<br>(Low)  | 661<br>(Mid) | 810<br>(High) | 512<br>(Low)           | 661<br>(Mid) | 810<br>(High) |
| Frequency (MHz) | 1850.2        | 1880         | 1909.8        | 1850.2                 | 1880         | 1909.8        |
| 99% OBW (kHz)   | 247.06        | 235.53       | 244.54        | 243.63                 | 241.03       | 243.05        |
| 26dB BW (kHz)   | 315.31        | 307.42       | 316.08        | 317.17                 | 312.47       | 315.13        |

| Cellular Band   |                             |            |             |
|-----------------|-----------------------------|------------|-------------|
| Modes           | WCDMA Band V (RMC 12.2Kbps) |            |             |
| Channel         | 4132 (Low)                  | 4182 (Mid) | 4233 (High) |
| Frequency (MHz) | 826.4                       | 836.4      | 846.6       |
| 99% OBW (MHz)   | 4.16                        | 4.18       | 4.18        |
| 26dB BW (MHz)   | 4.70                        | 4.69       | 4.73        |

| PCS Band        |                              |            |             |
|-----------------|------------------------------|------------|-------------|
| Modes           | WCDMA Band II (RMC 12.2Kbps) |            |             |
| Channel         | 9262 (Low)                   | 9400 (Mid) | 9538 (High) |
| Frequency (MHz) | 1852.4                       | 1880       | 1907.6      |
| 99% OBW (MHz)   | 4.15                         | 4.16       | 4.18        |
| 26dB BW (MHz)   | 4.66                         | 4.69       | 4.69        |

The report refers only to the sample tested and does not apply to the bulk.

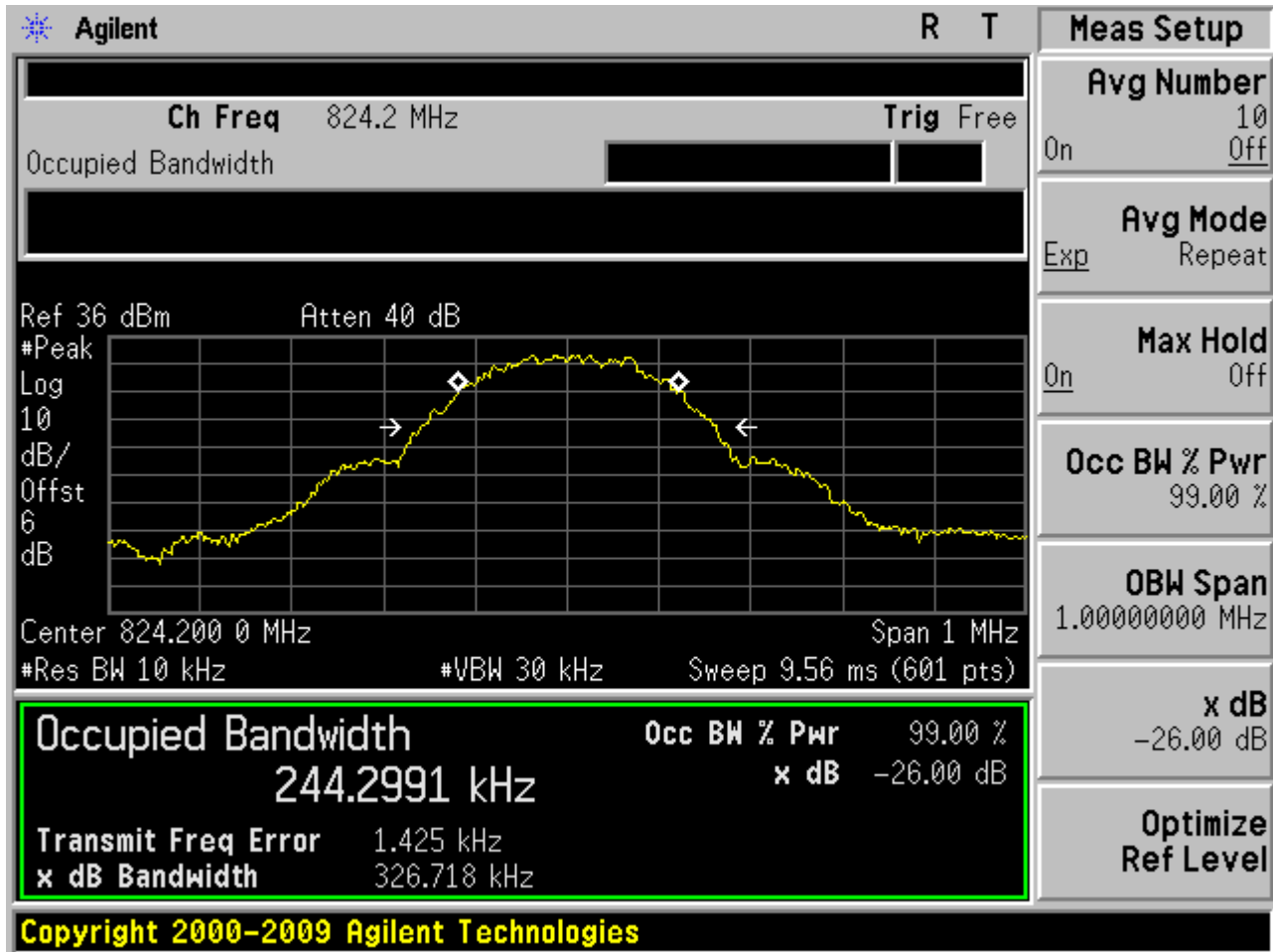
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer. Supplier or others persons directly concerned, SHENZHEN TIMEWAY TESTING LABORATORIES, will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report, The SHENZHEN TIMEWAY TESTING LABORATORIES, reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



### 3.4.6 Test Result (Plots) of Occupied Bandwidth and 26dB Bandwidth

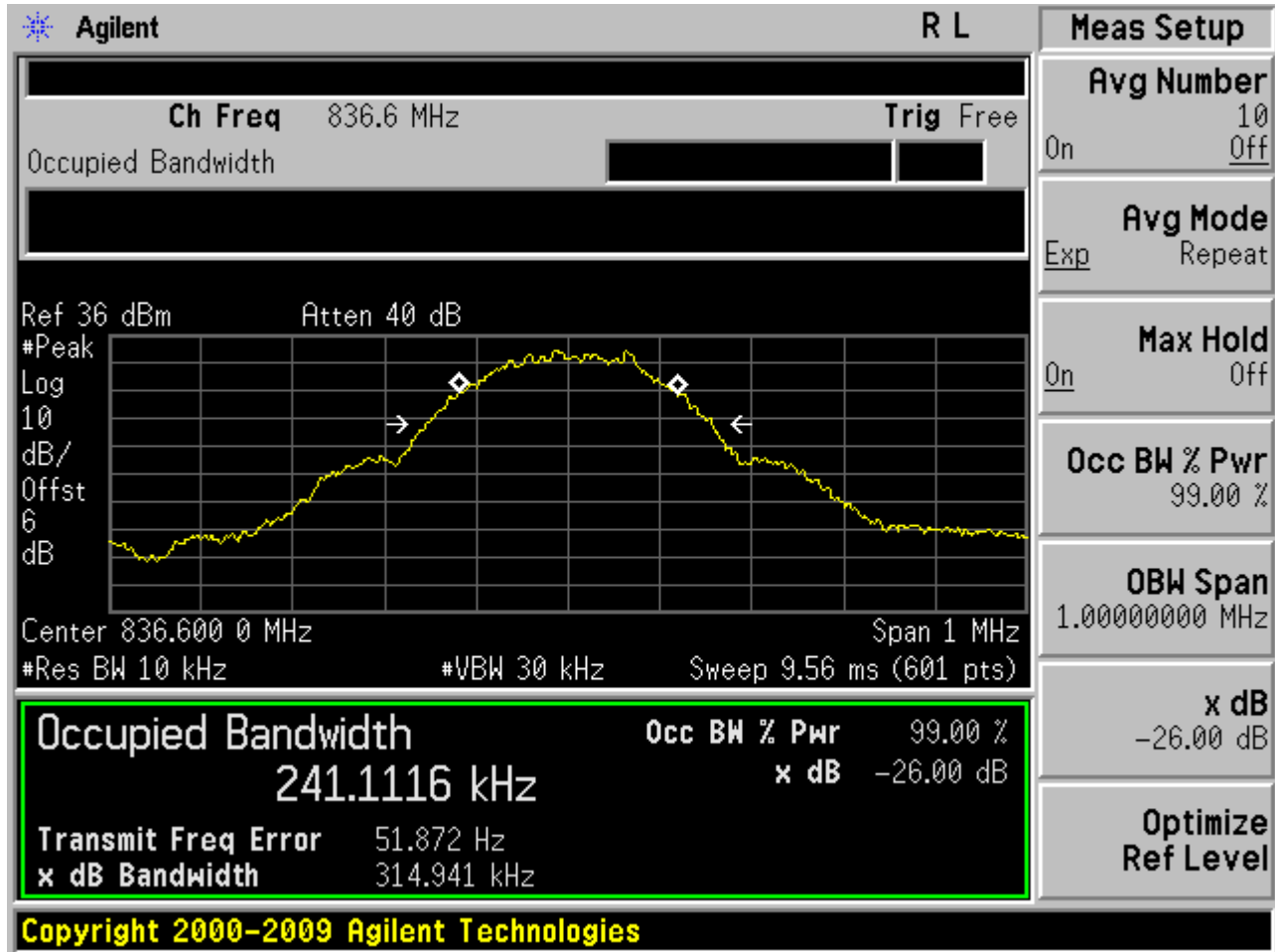
GSM 850MHz Channel = 128



The report refers only to the sample tested and does not apply to the bulk. This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or others persons directly concerned, SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



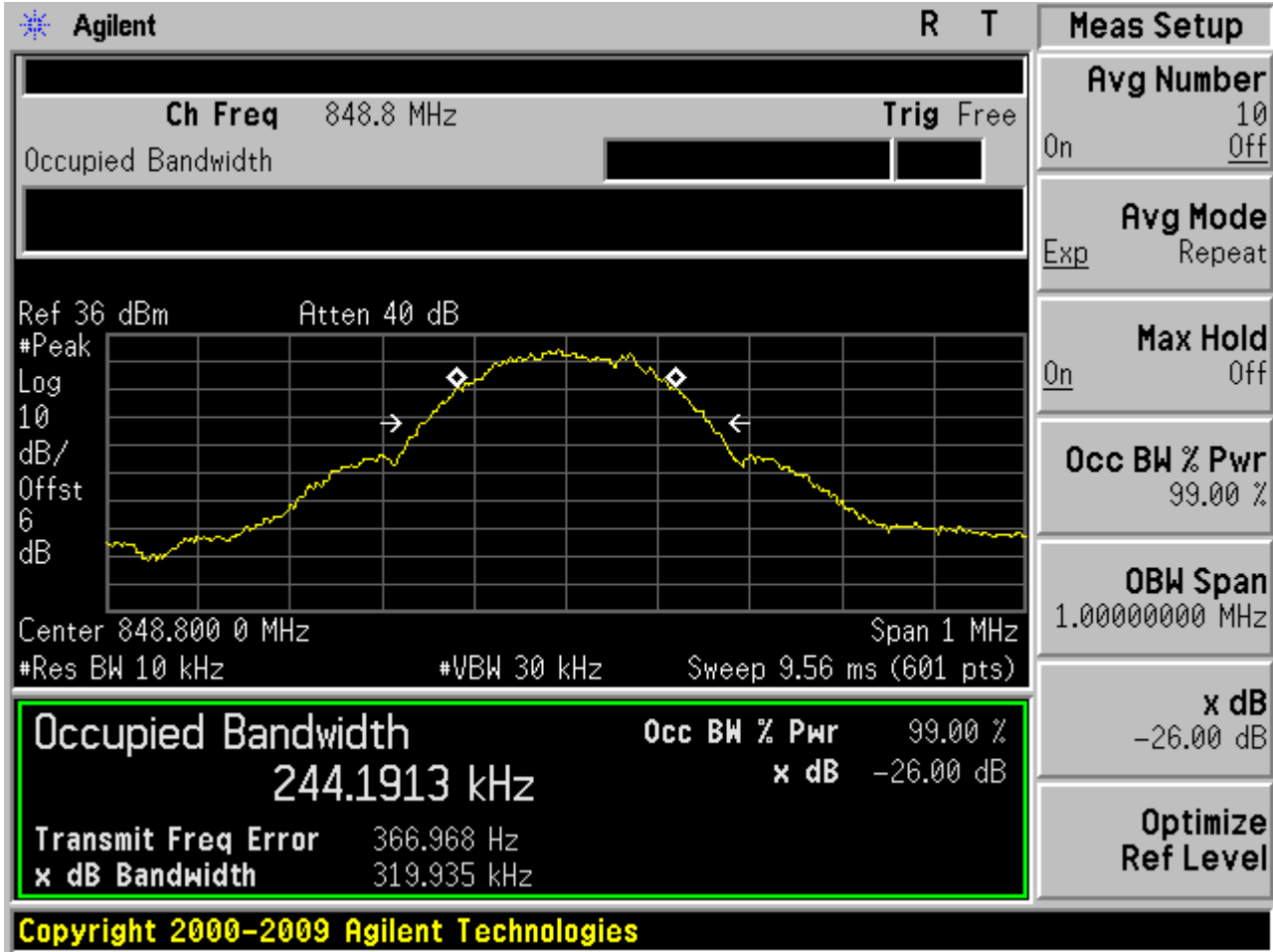
GSM 850MHz Channel = 190



The report refers only to the sample tested and does not apply to the bulk. This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



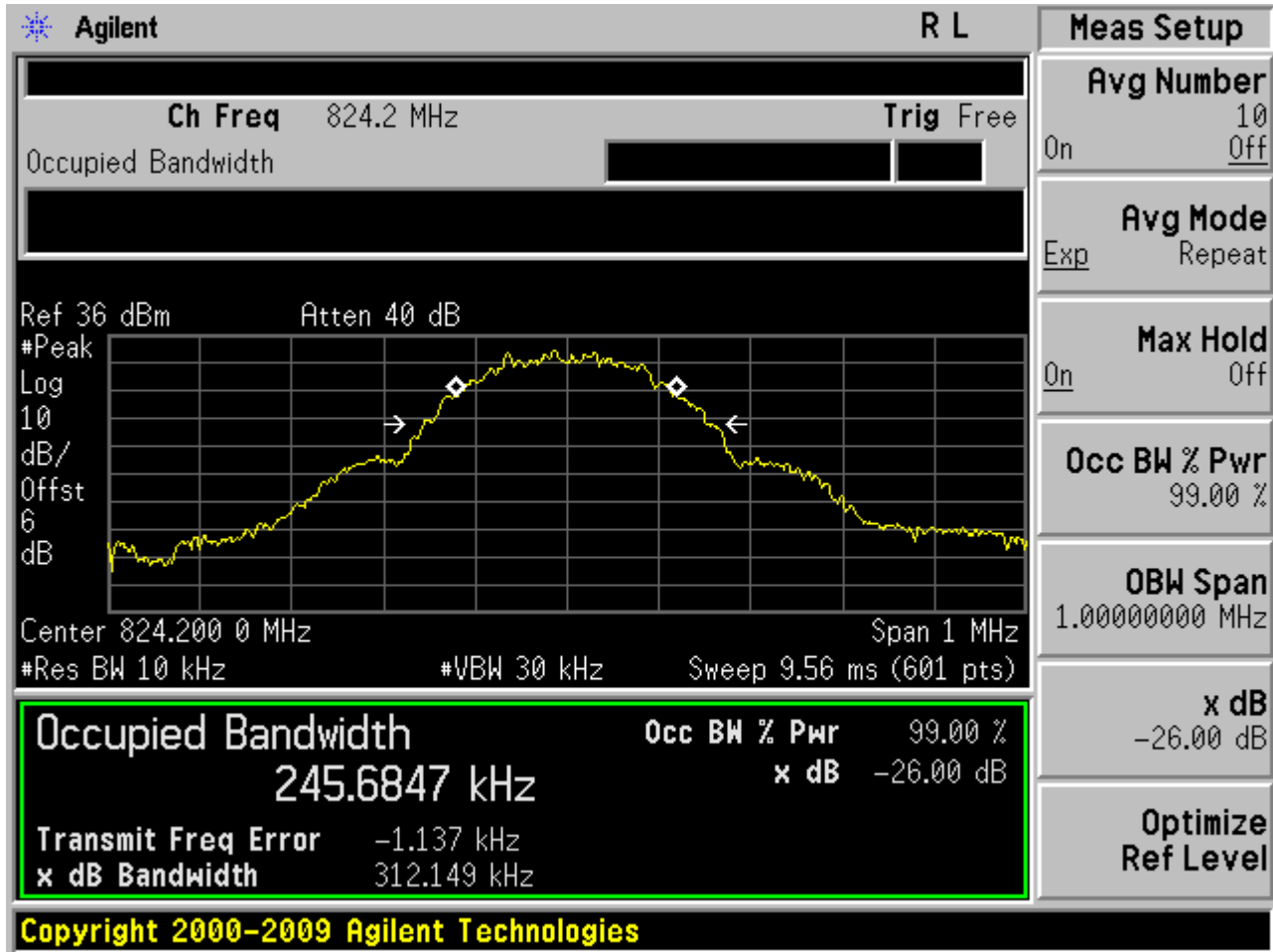
GSM 850MHz Channel = 251



The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



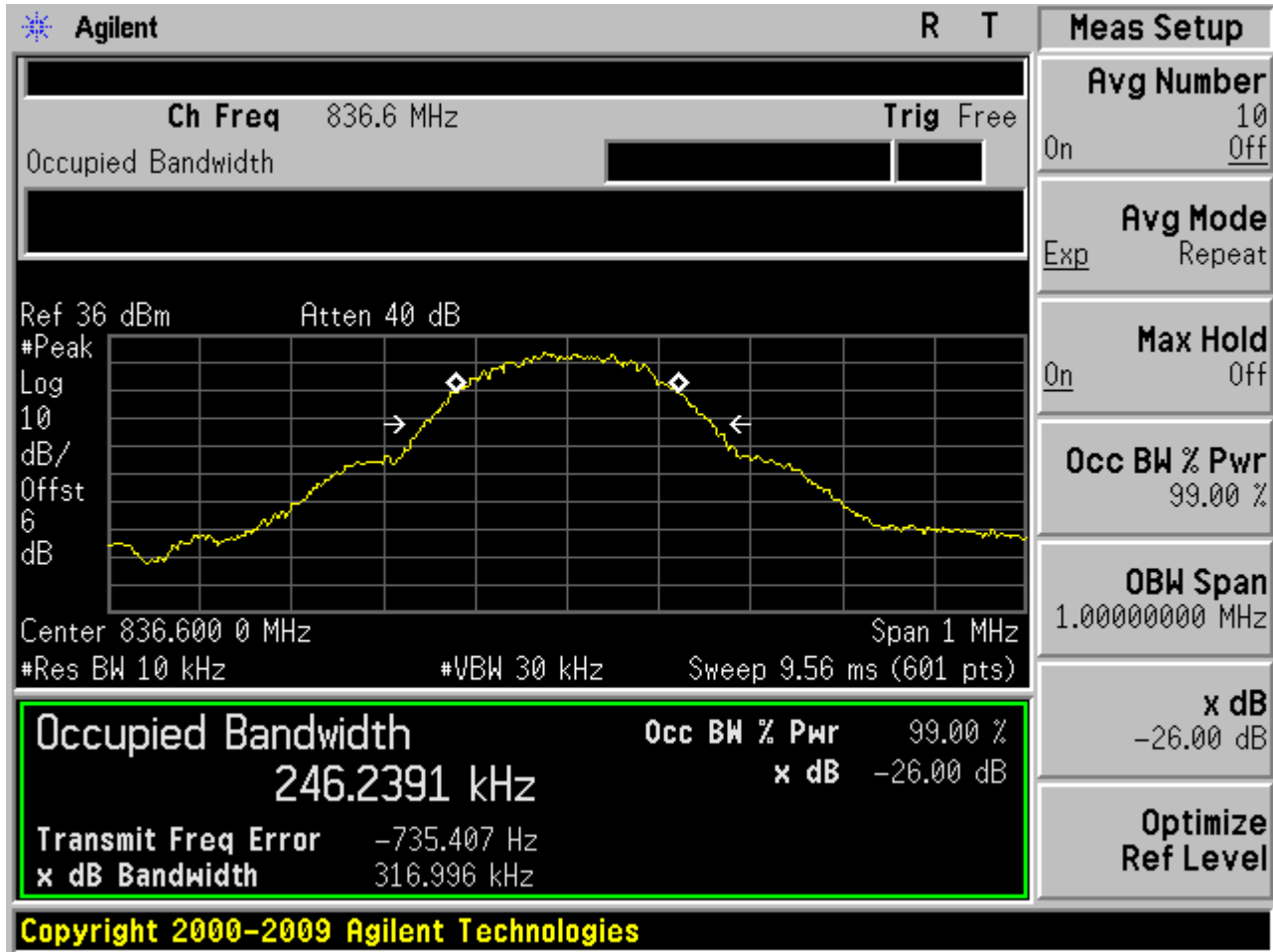
GSM850 EDGE Class8 Channel = 128



The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or others persons directly concerned, SHENZHEN TIMEWAY TESTING LABORATORIES, will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



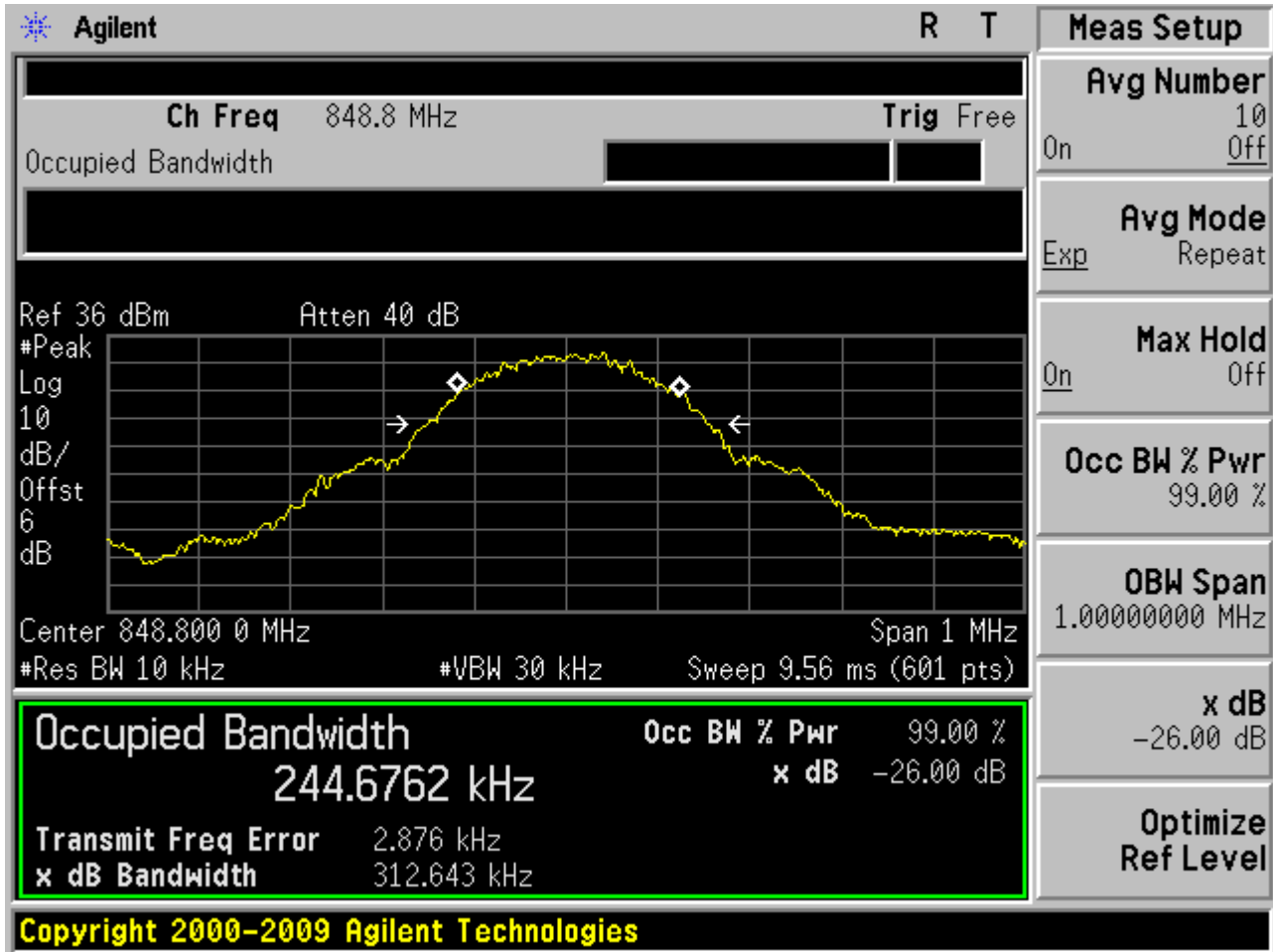
GSM850 EDGE Class8 EDGE Channel = 190



The report refers only to the sample tested and does not apply to the bulk. This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or others persons directly concerned, SHENZHEN TIMEWAY TESTING LABORATORIES, will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



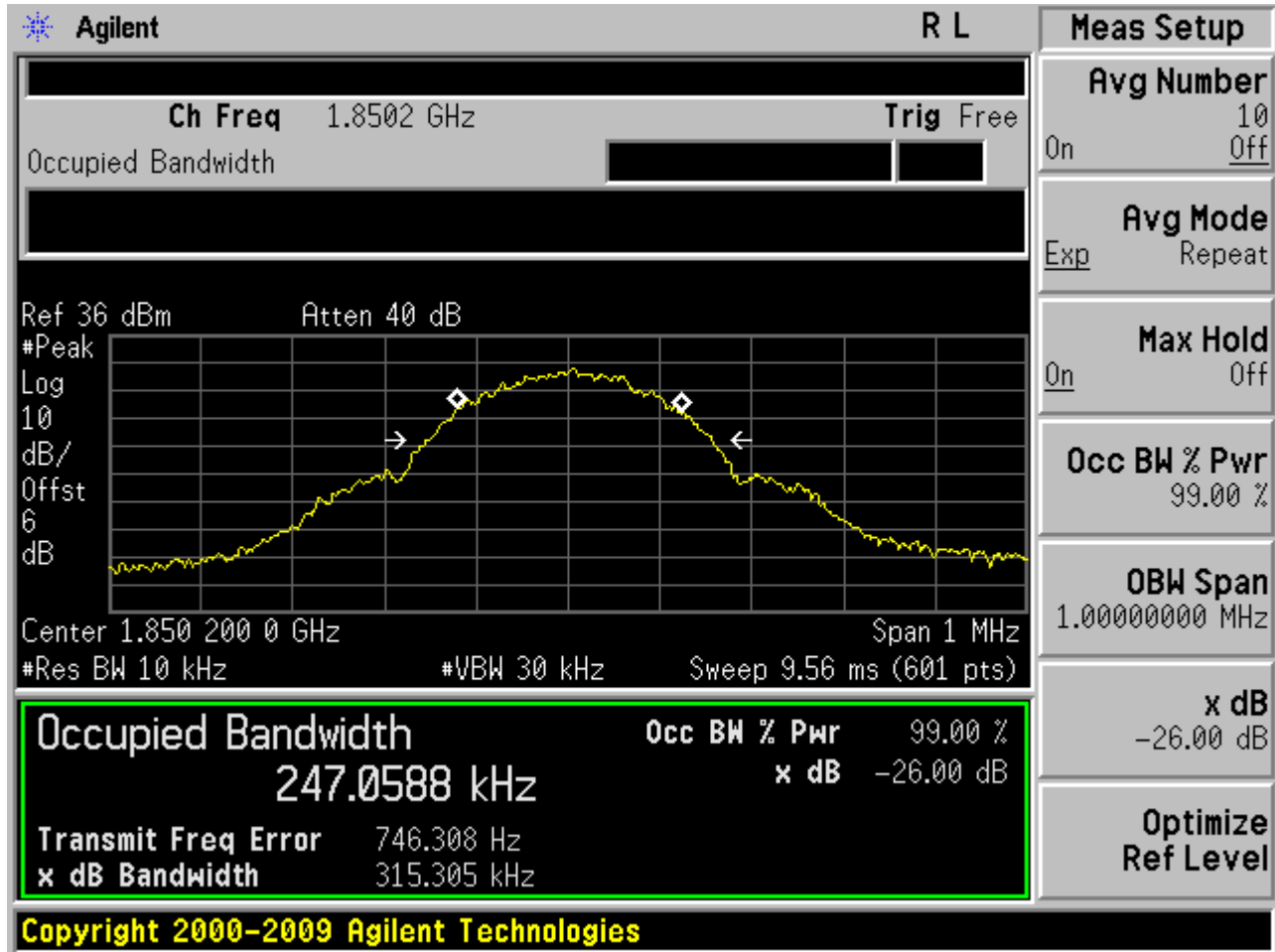
GSM850 EDGE Class8 EDGE Channel = 251



The report refers only to the sample tested and does not apply to the bulk. This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



GSM 1900MHz Channel = 512

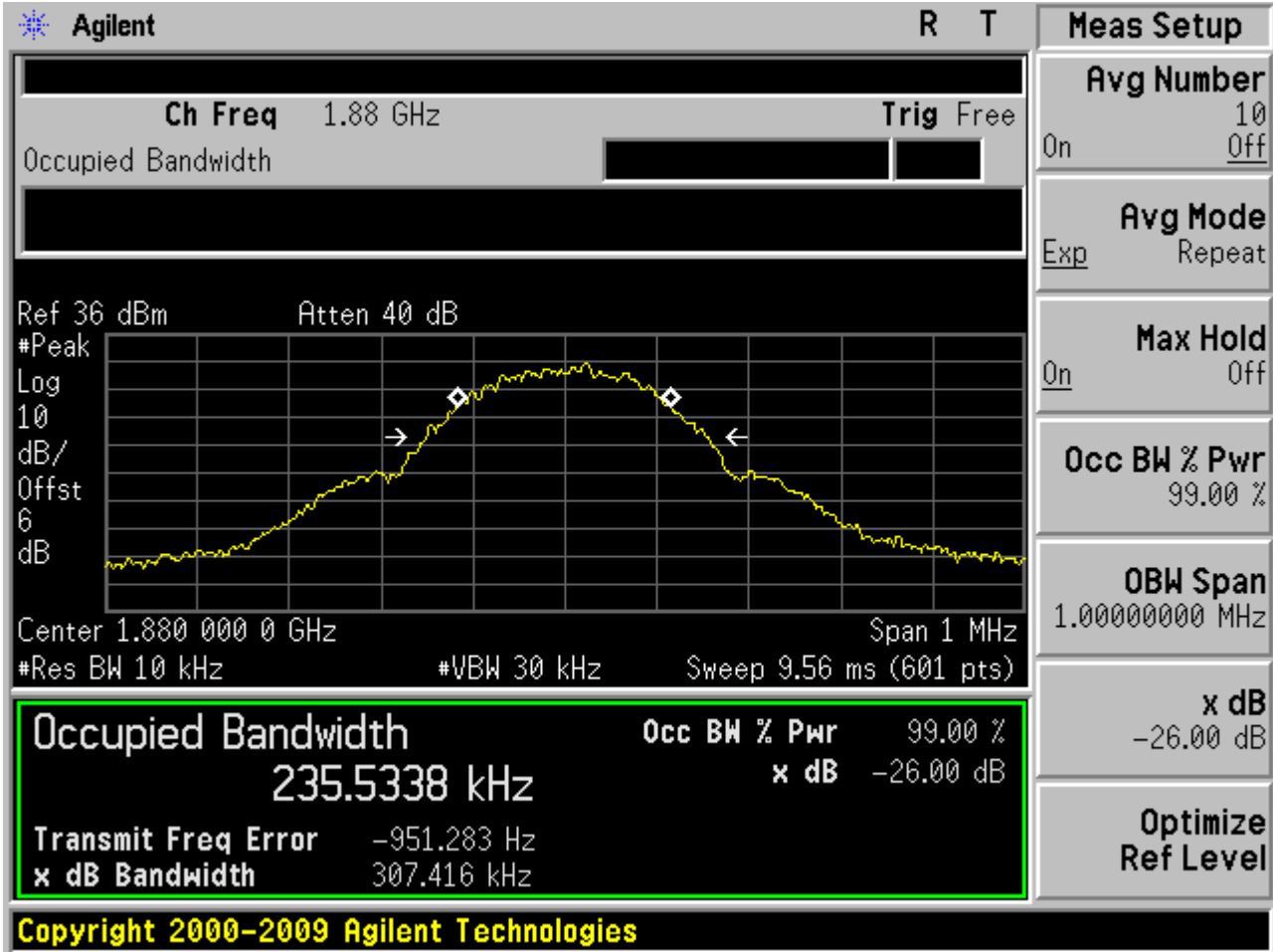


The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.





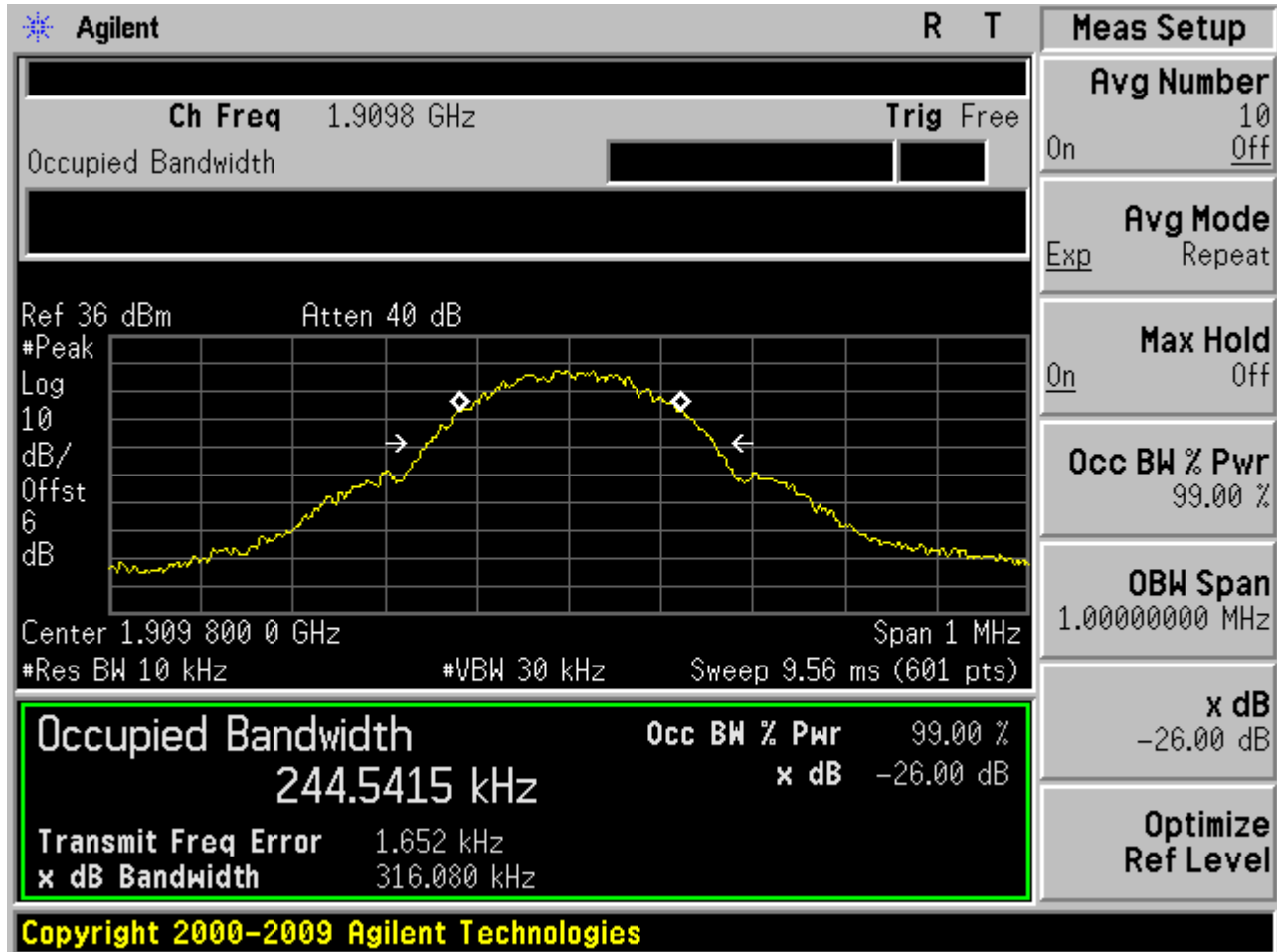
GSM 1900MHz Channel = 661



The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



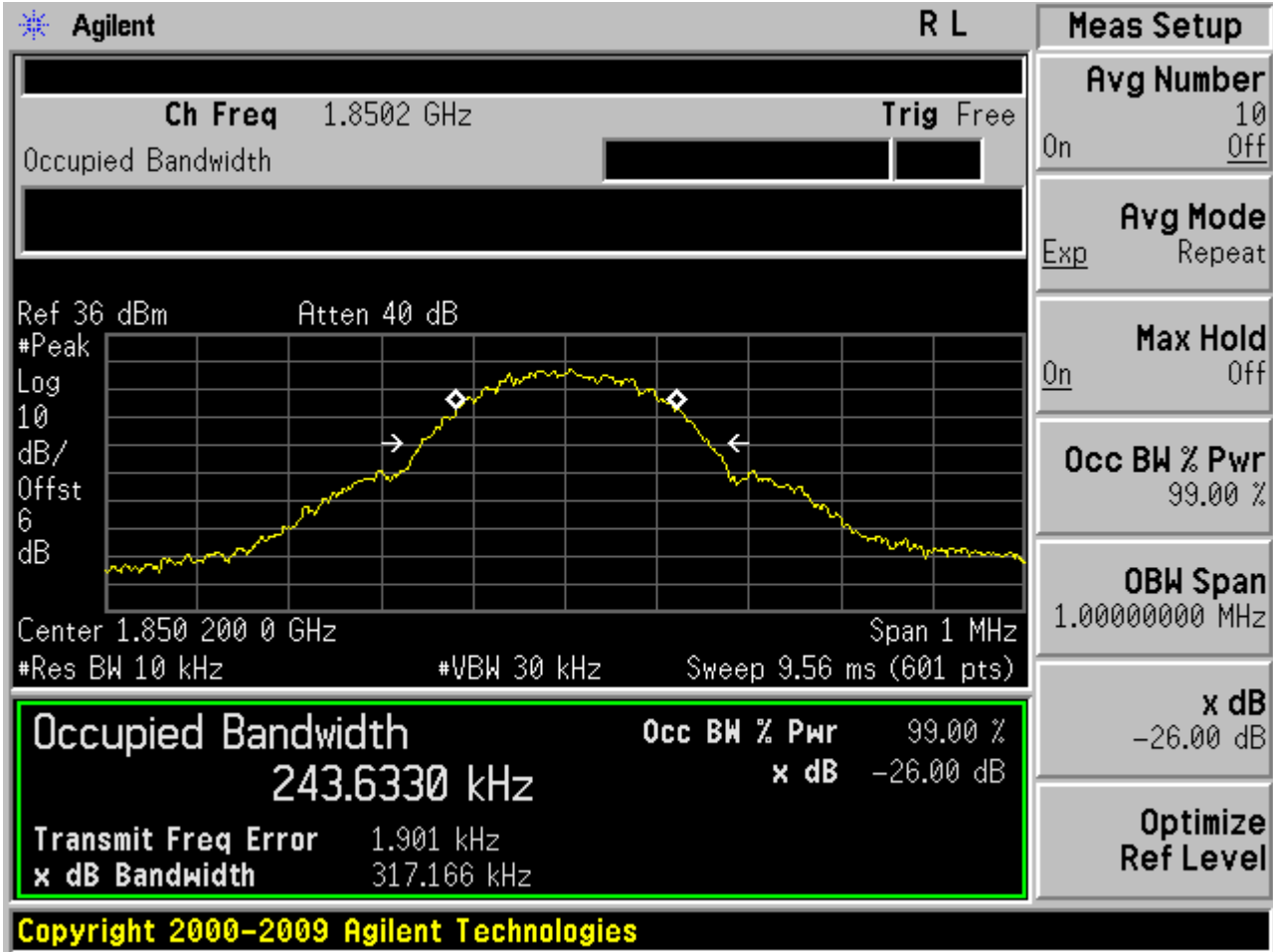
GSM 1900MHz Channel = 810



The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or others persons directly concerned, SHENZHEN TIMEWAY TESTING LABORATORIES, will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



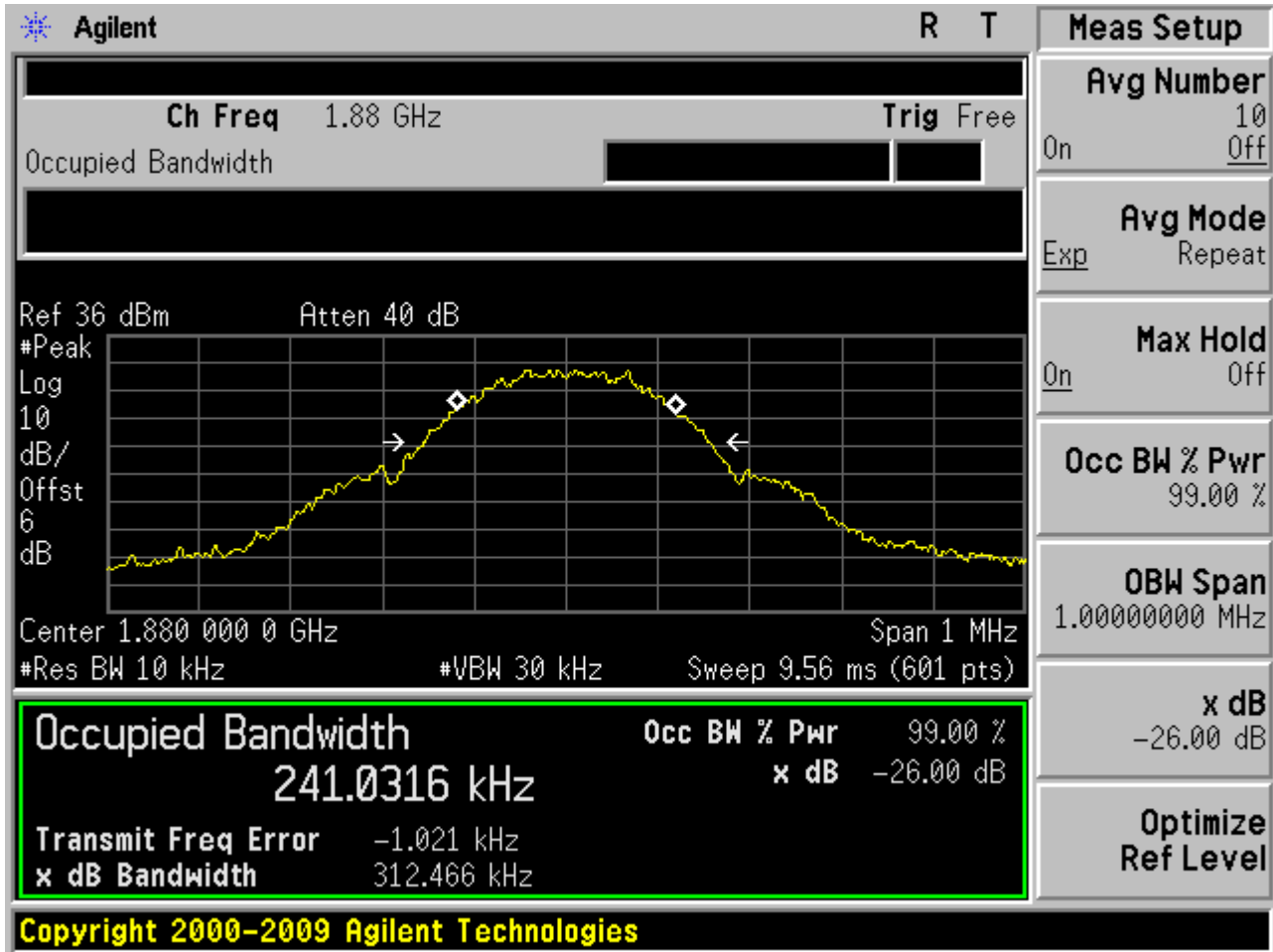
GSM1900 EDGE Class8 Channel =512



The report refers only to the sample tested and does not apply to the bulk. This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



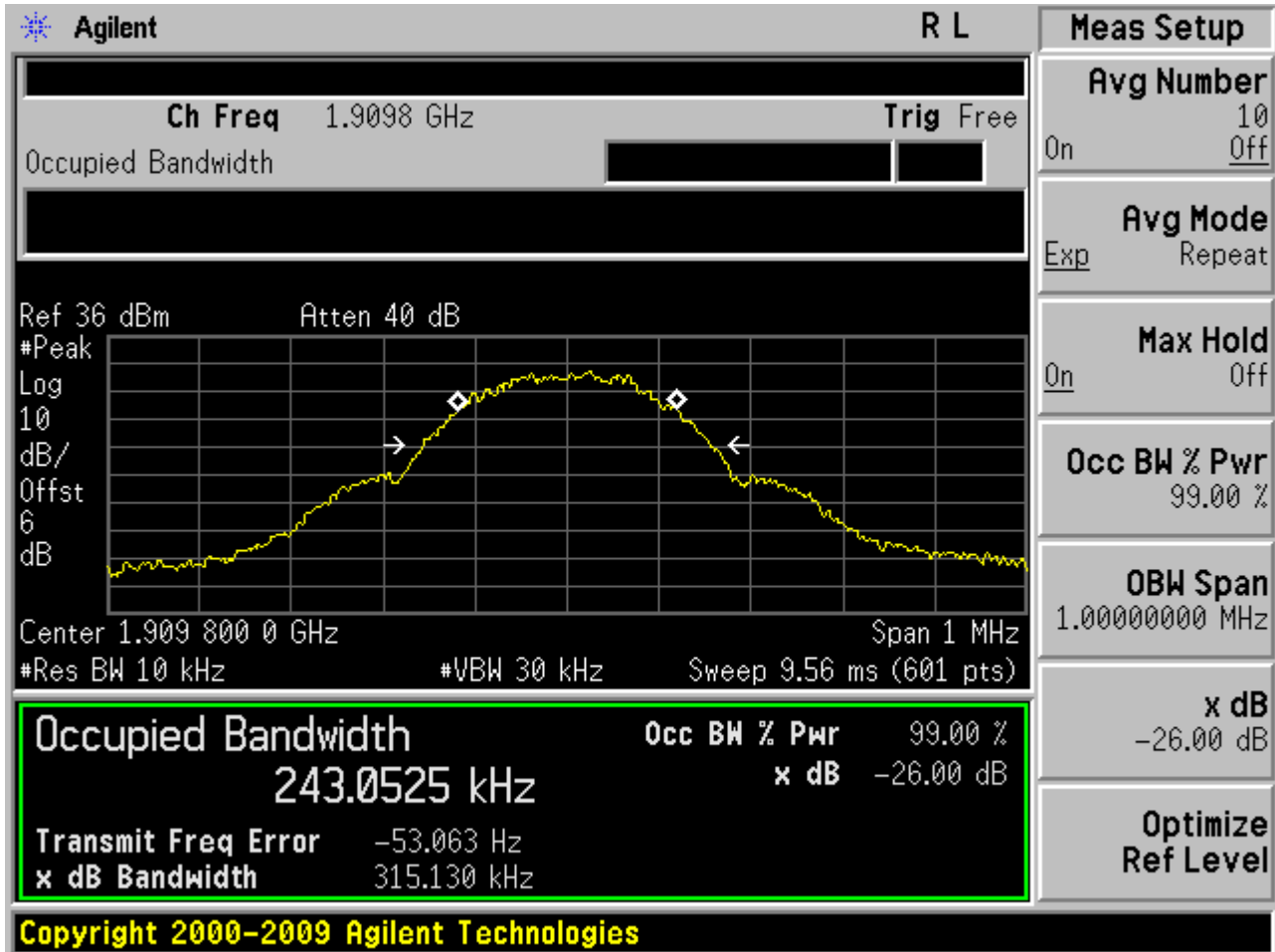
GSM1900 EDGE Class8 Channel =661



The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



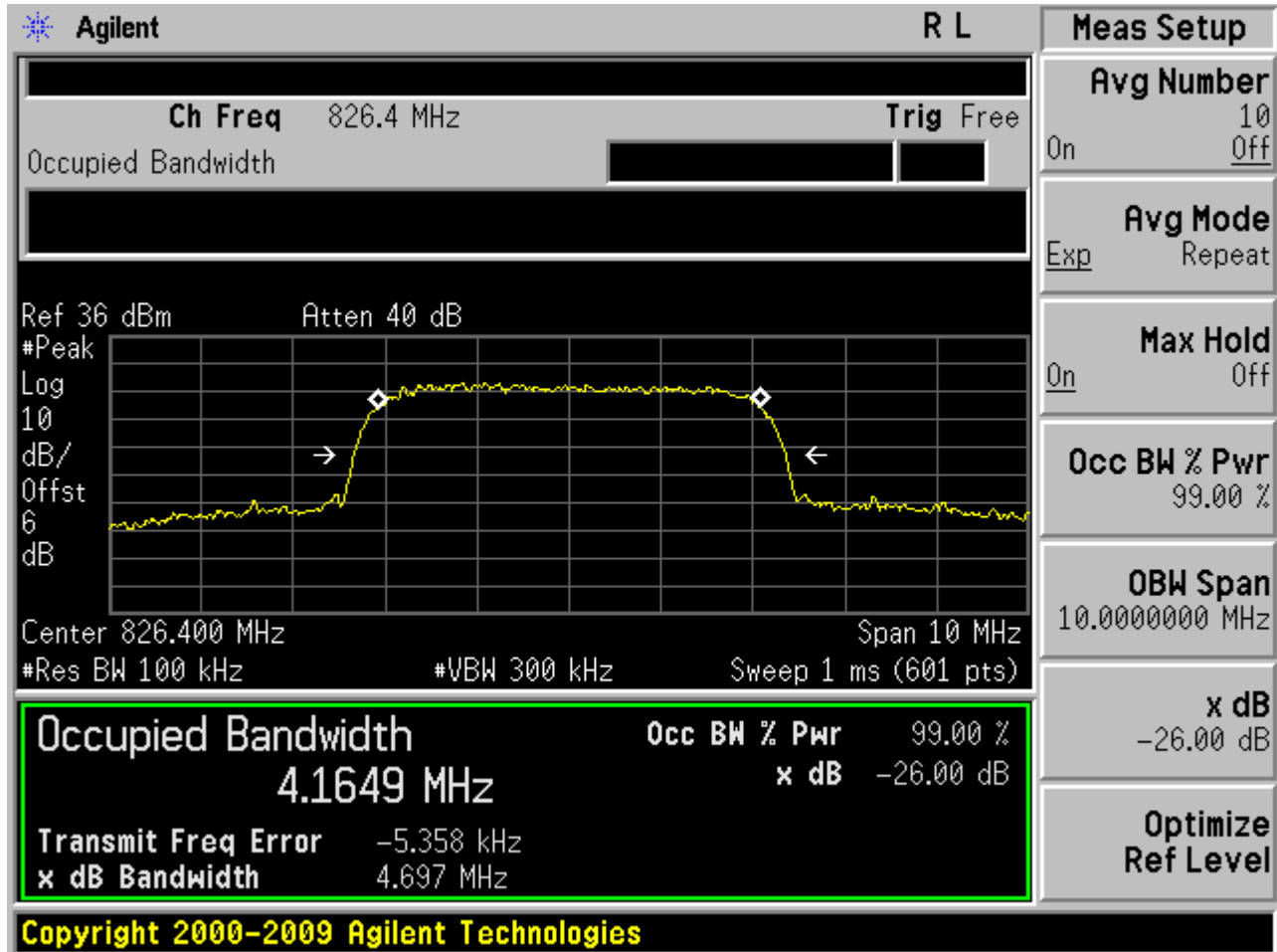
GSM1900 EDGE Class8 Channel =810



The report refers only to the sample tested and does not apply to the bulk. This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



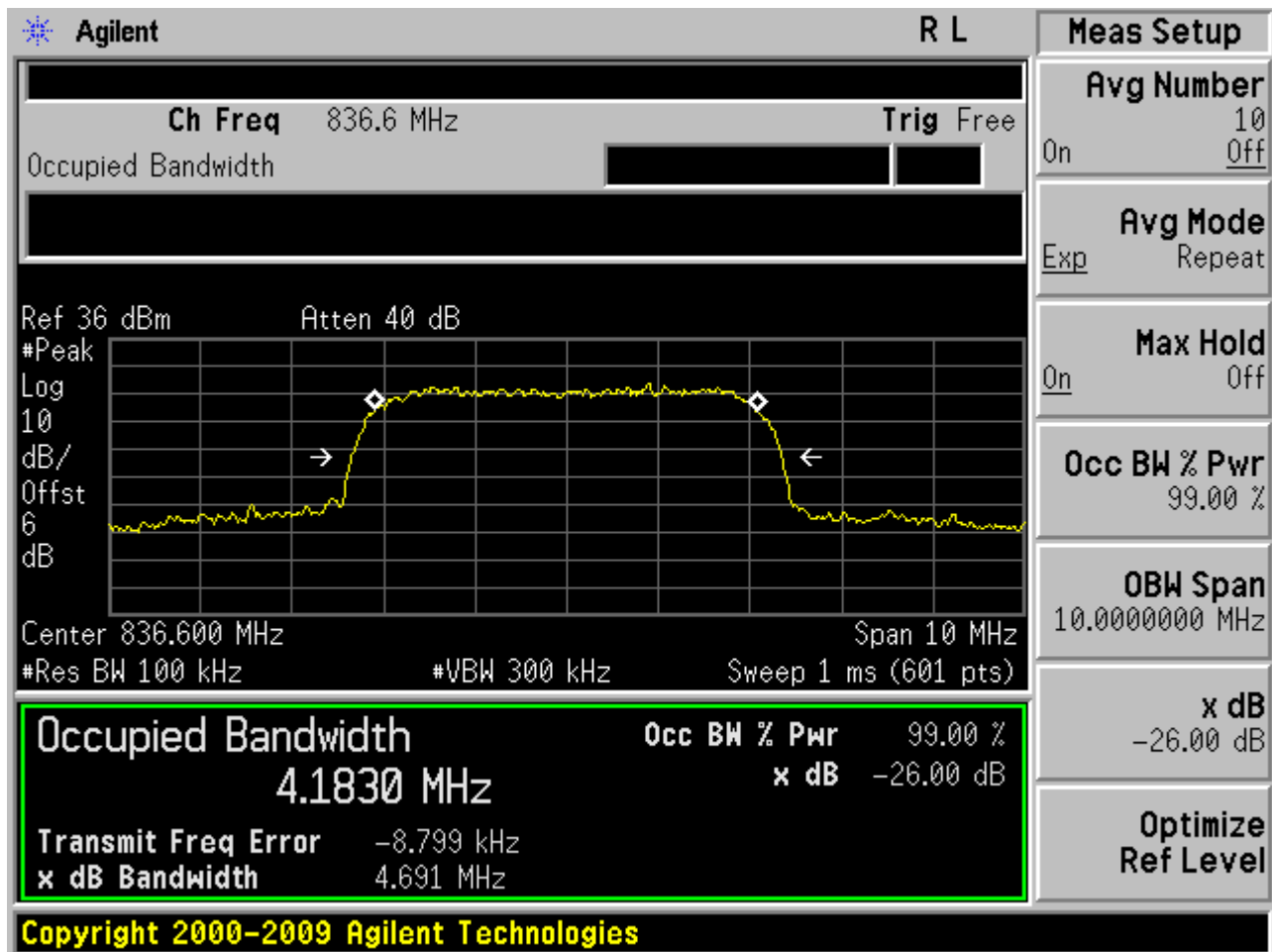
WCDMA 850MHz Channel = 4132



The report refers only to the sample tested and does not apply to the bulk. This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



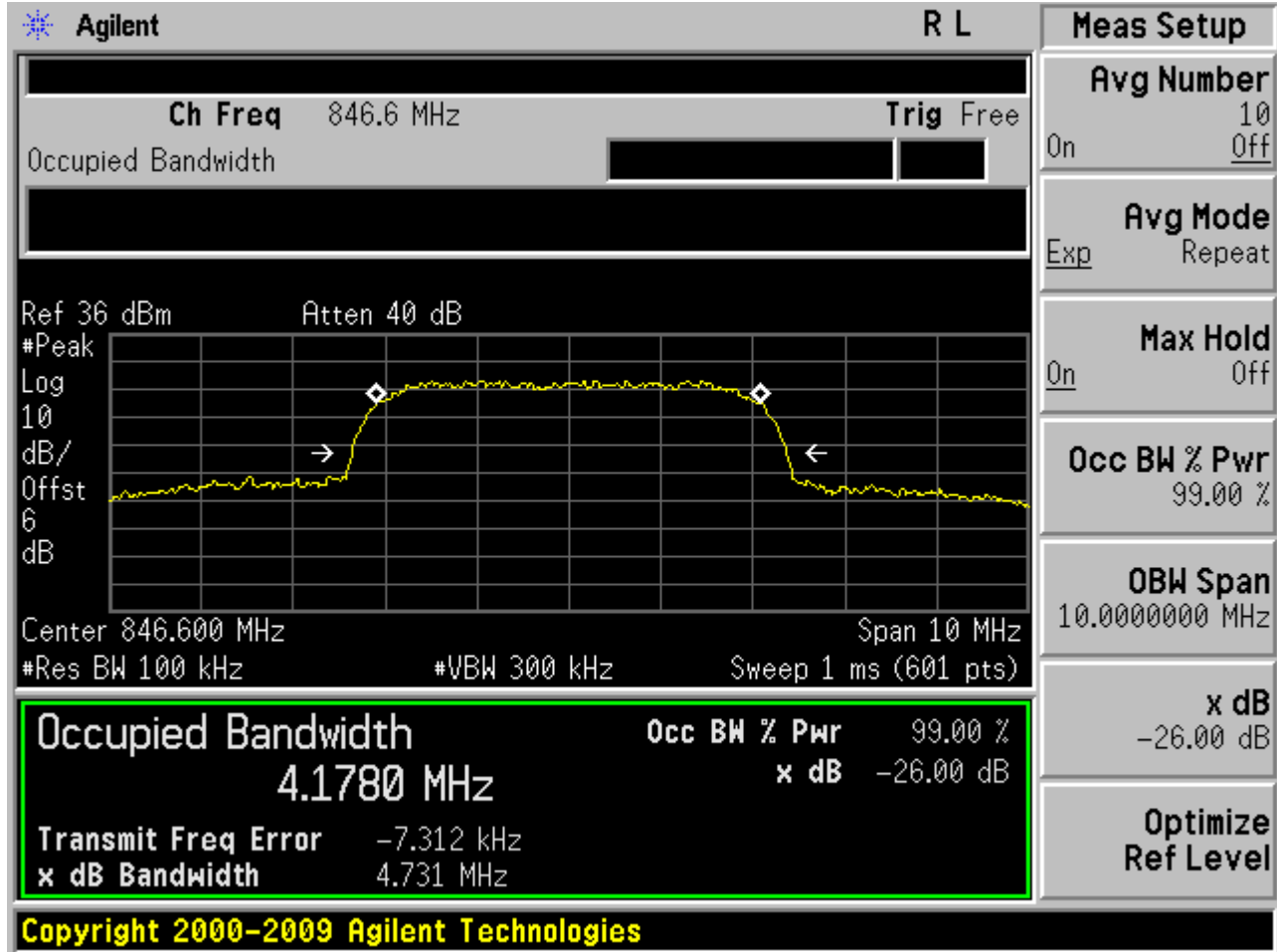
WCDMA 850MHz Channel = 4182



The report refers only to the sample tested and does not apply to the bulk. This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



WCDMA 850MHz Channel = 4233

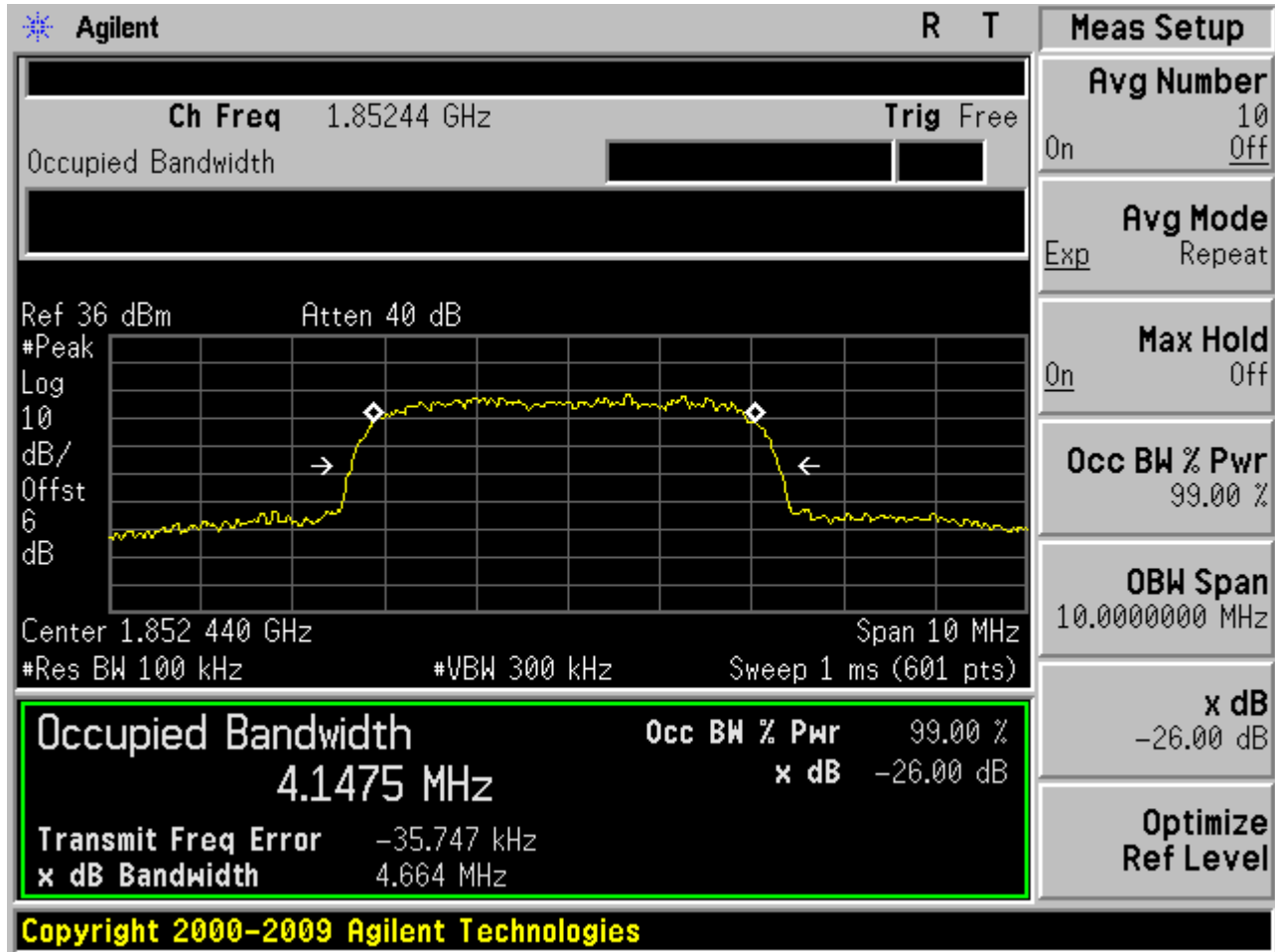


The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.





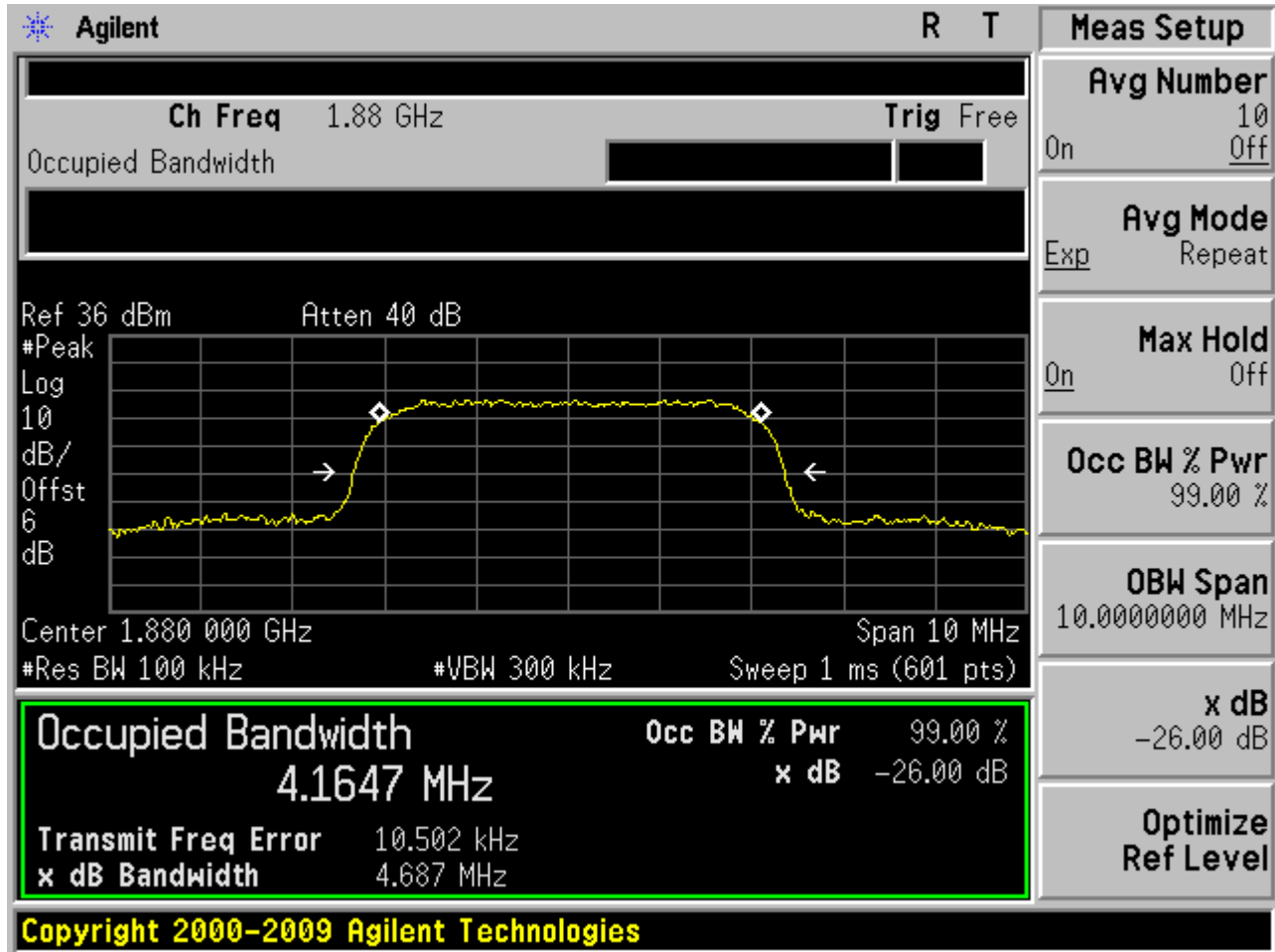
WCDMA 1900MHz Channel = 9262



The report refers only to the sample tested and does not apply to the bulk. This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



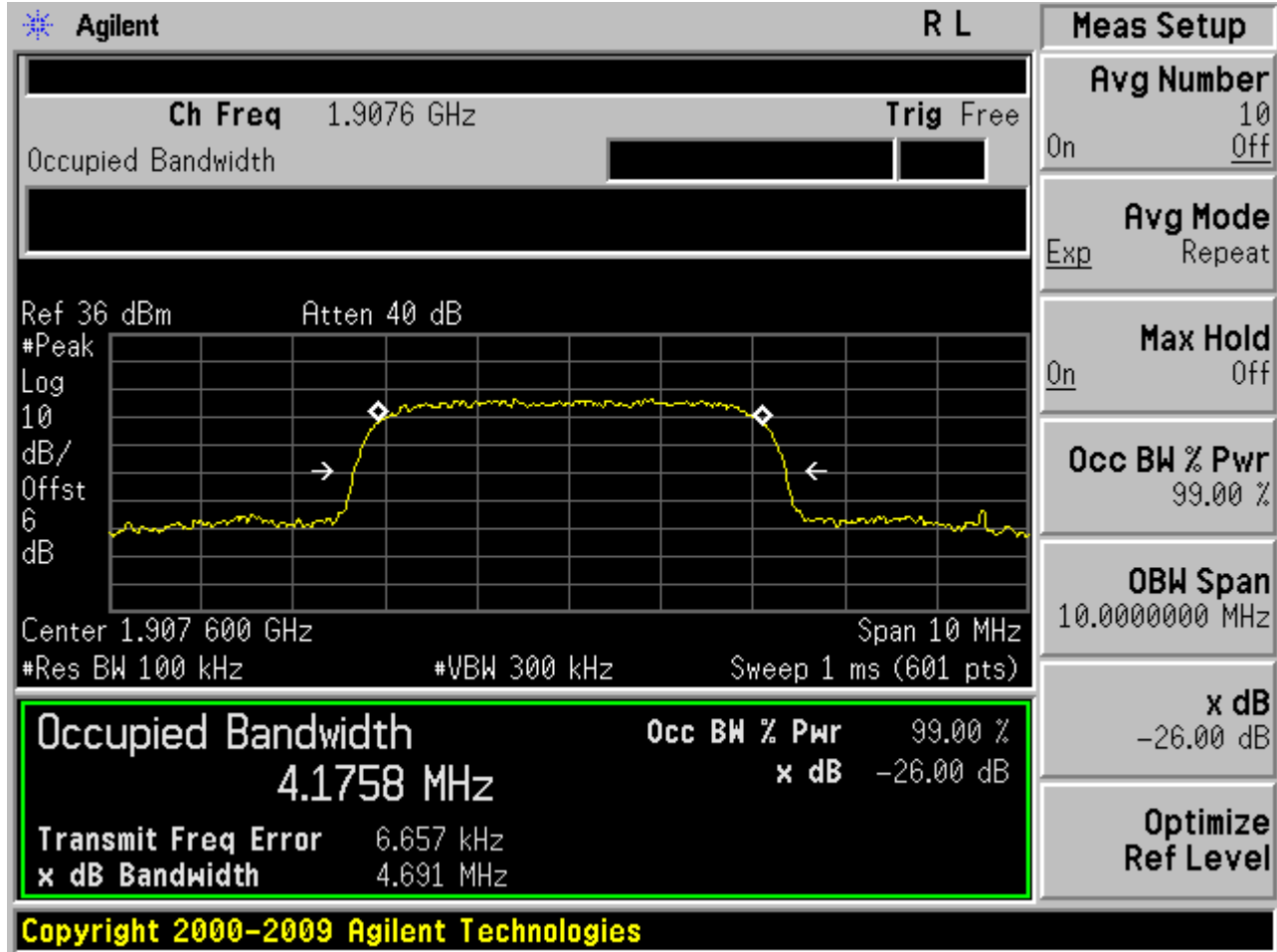
WCDMA 1900MHz Channel = 9400



The report refers only to the sample tested and does not apply to the bulk. This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



WCDMA 1900MHz Channel = 9538



The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

## 3.4 Band Edge Measurement

### 3.4.1 Description of Band Edge Measurement

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

### 3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

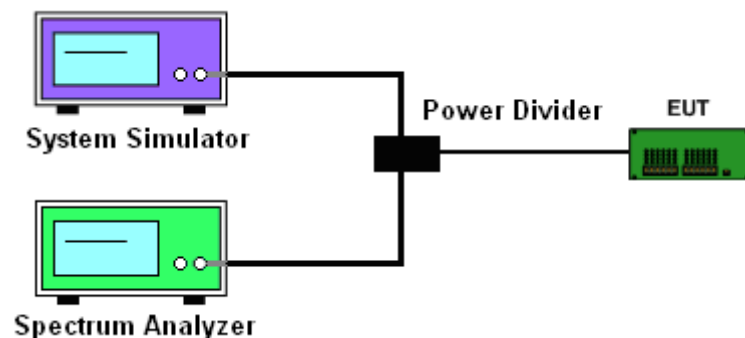
### 3.4.3 Test Procedures

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The band edges of low and high channels for the highest RF powers were measured. Setting RBW as roughly  $BW/100$ .
4. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
5. The limit line is derived from  $43 + 10 \log (P)$  dB below the transmitter power P(Watts)
 
$$= P(W) - [43 + 10 \log(P)] \text{ (dB)}$$

$$= [30 + 10 \log(P)] \text{ (dBm)} - [43 + 10 \log(P)] \text{ (dB)}$$

$$= -13 \text{ dBm.}$$

### 3.4.4 Test Setup



The report refers only to the sample tested and does not apply to the bulk.

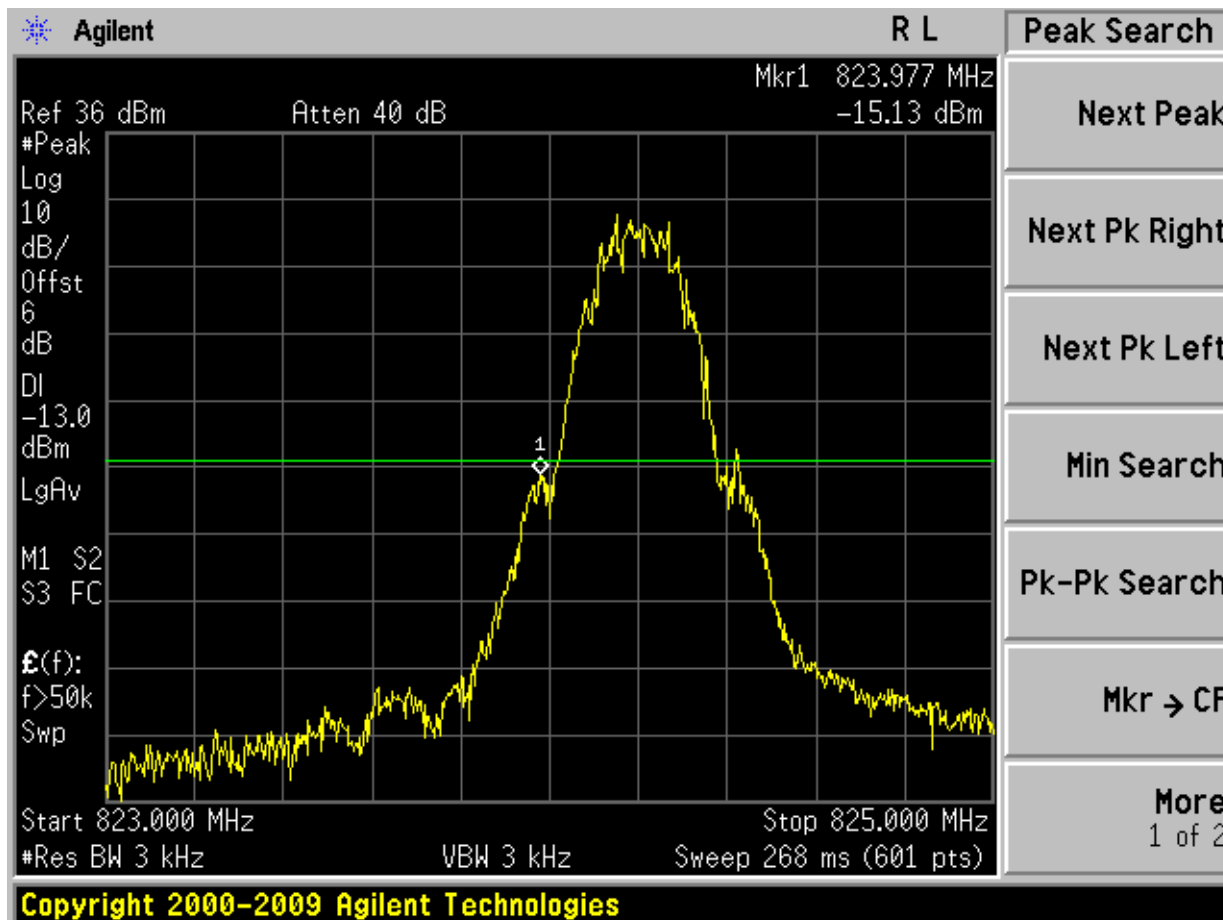
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES, will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES, reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



### 3.4.5 Test Result (Plots) of Conducted Band Edge

|                    |          |                      |      |
|--------------------|----------|----------------------|------|
| <b>Band :</b>      | GSM850   | <b>Power Stage :</b> | High |
| <b>Test Mode :</b> | GSM Link |                      |      |

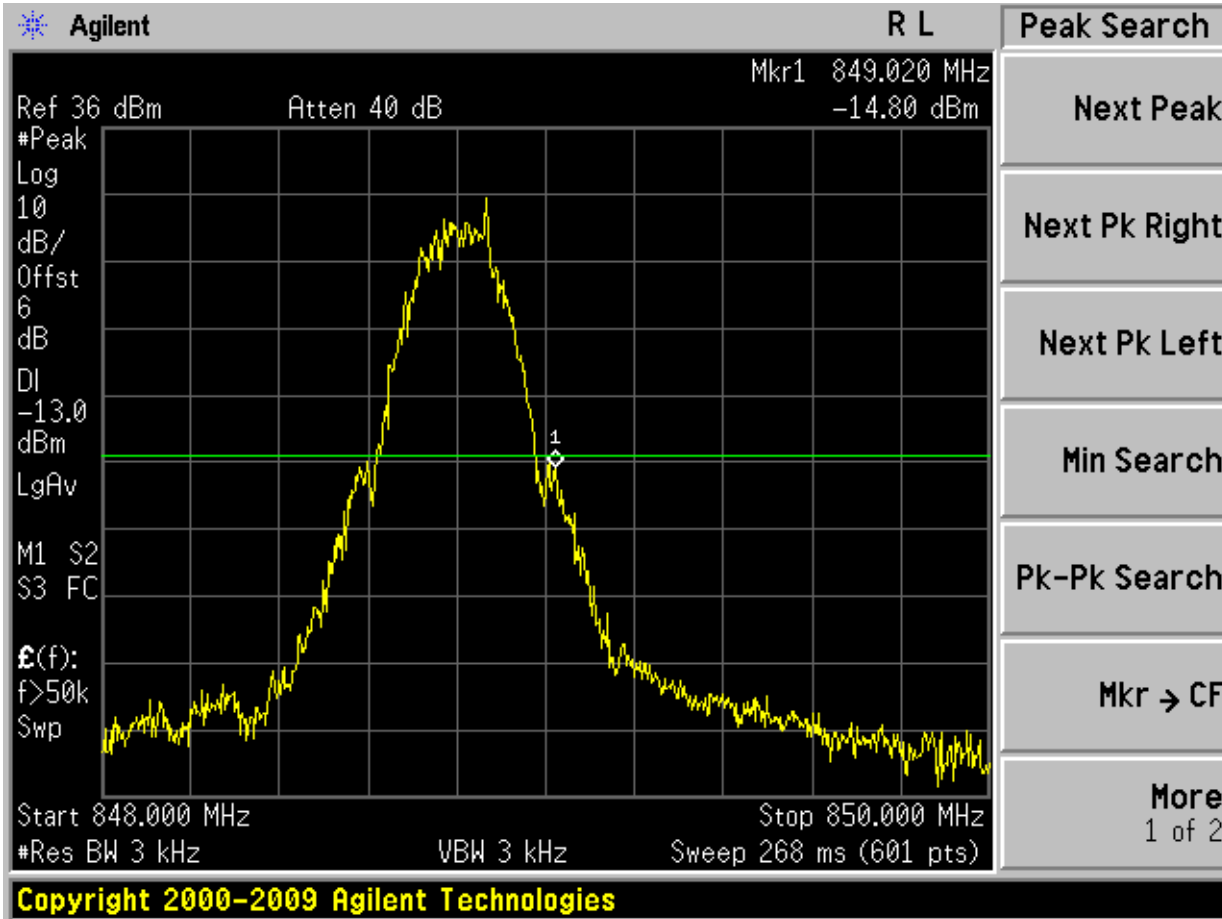
Lower Band Edge Plot on Channel 128



The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Higher Band Edge Plot on Channel 251

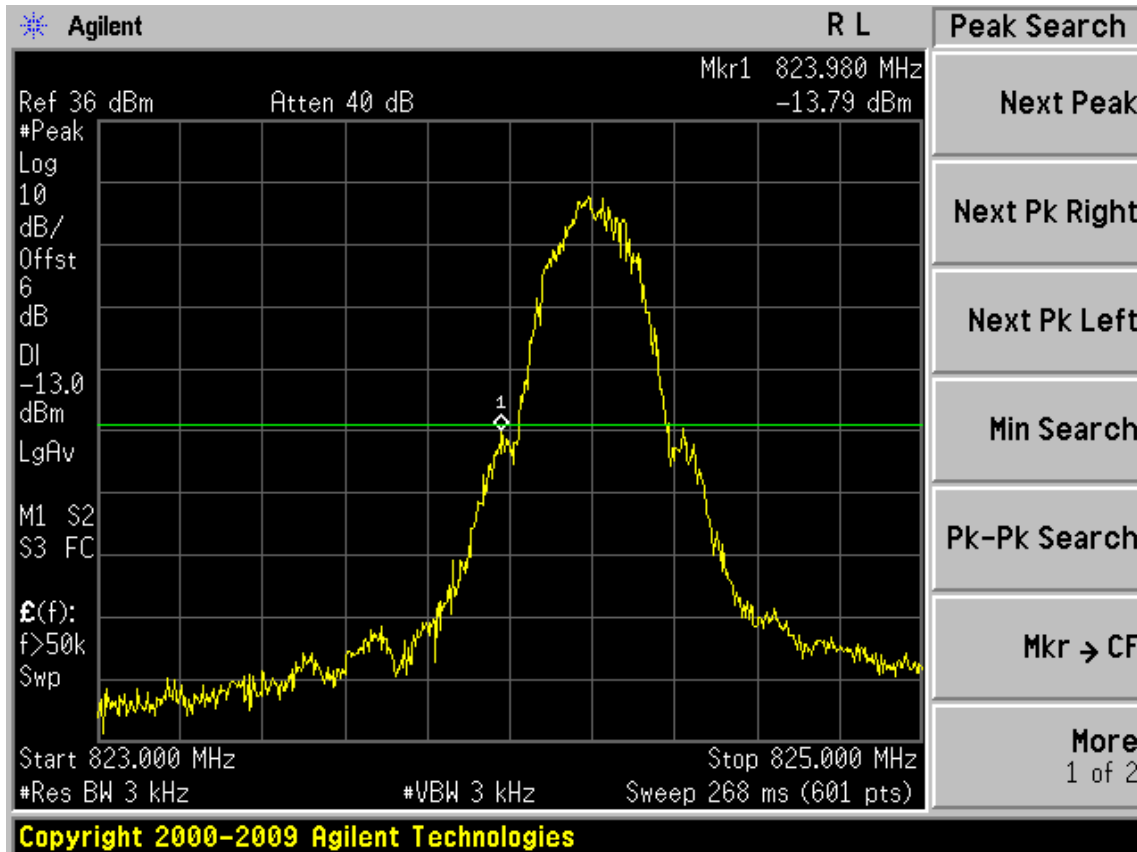


The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



|             |                   |               |      |
|-------------|-------------------|---------------|------|
| Band :      | GSM850            | Power Stage : | High |
| Test Mode : | EDGE Class 8 Link |               |      |

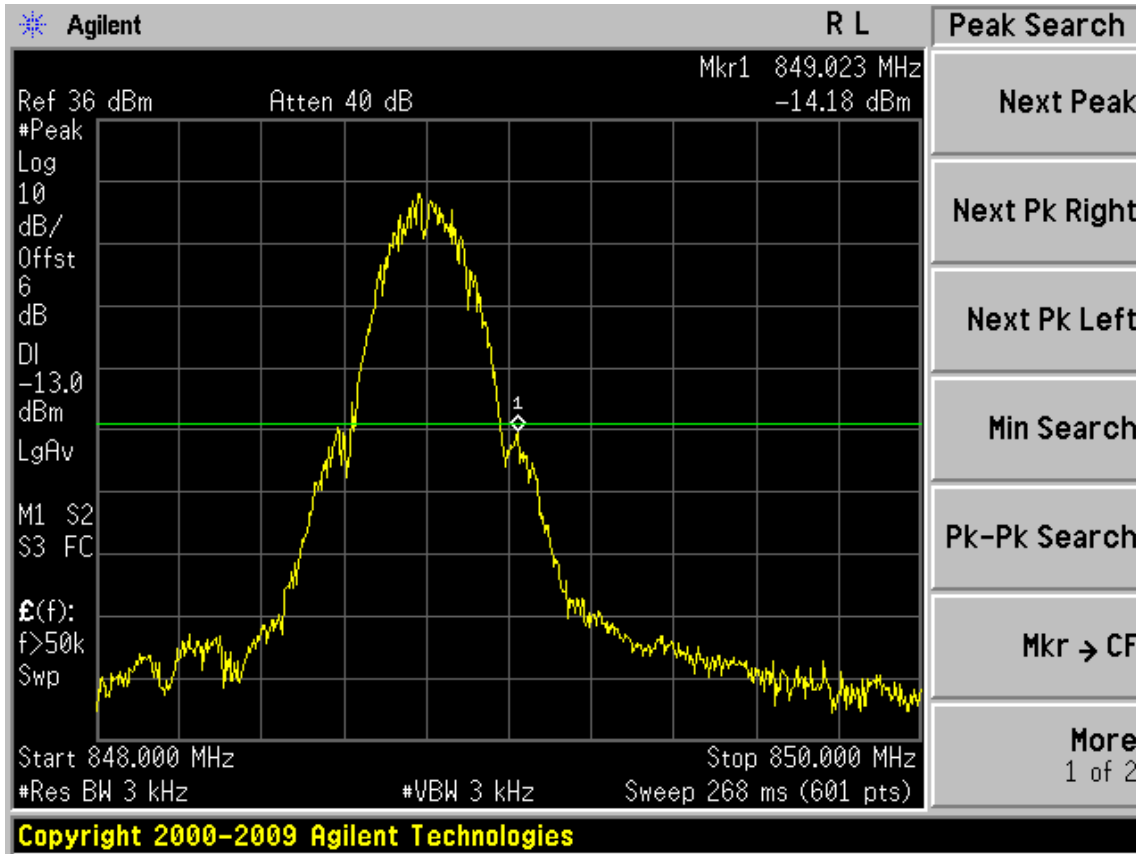
Lower Band Edge Plot on Channel 128



The report refers only to the sample tested and does not apply to the bulk. This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Higher Band Edge Plot on Channel 251



The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer, supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

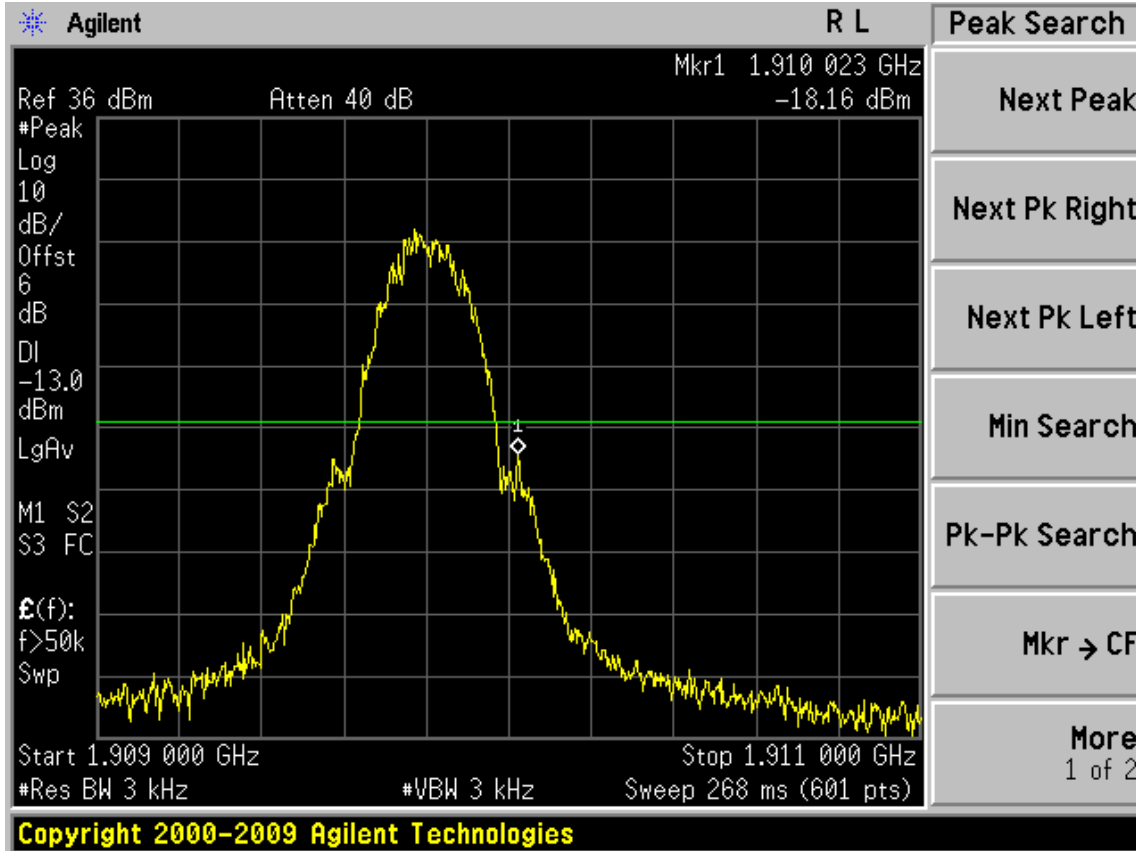
In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.







Higher Band Edge Plot on Channel 810

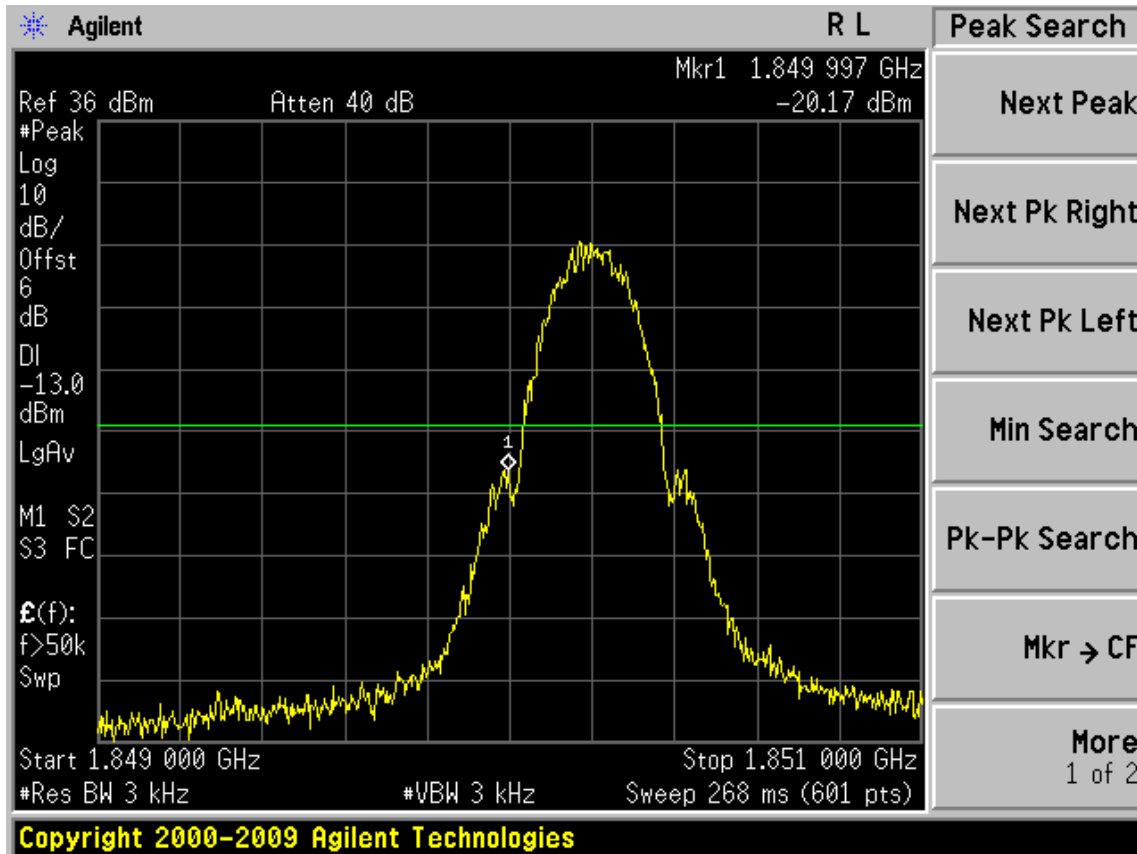


The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer, supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client, enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the right to withdraw it and to adopt any other remedies which may be appropriate.



|             |                   |               |      |
|-------------|-------------------|---------------|------|
| Band :      | GSM1900           | Power Stage : | High |
| Test Mode : | EDGE Class 8 Link |               |      |

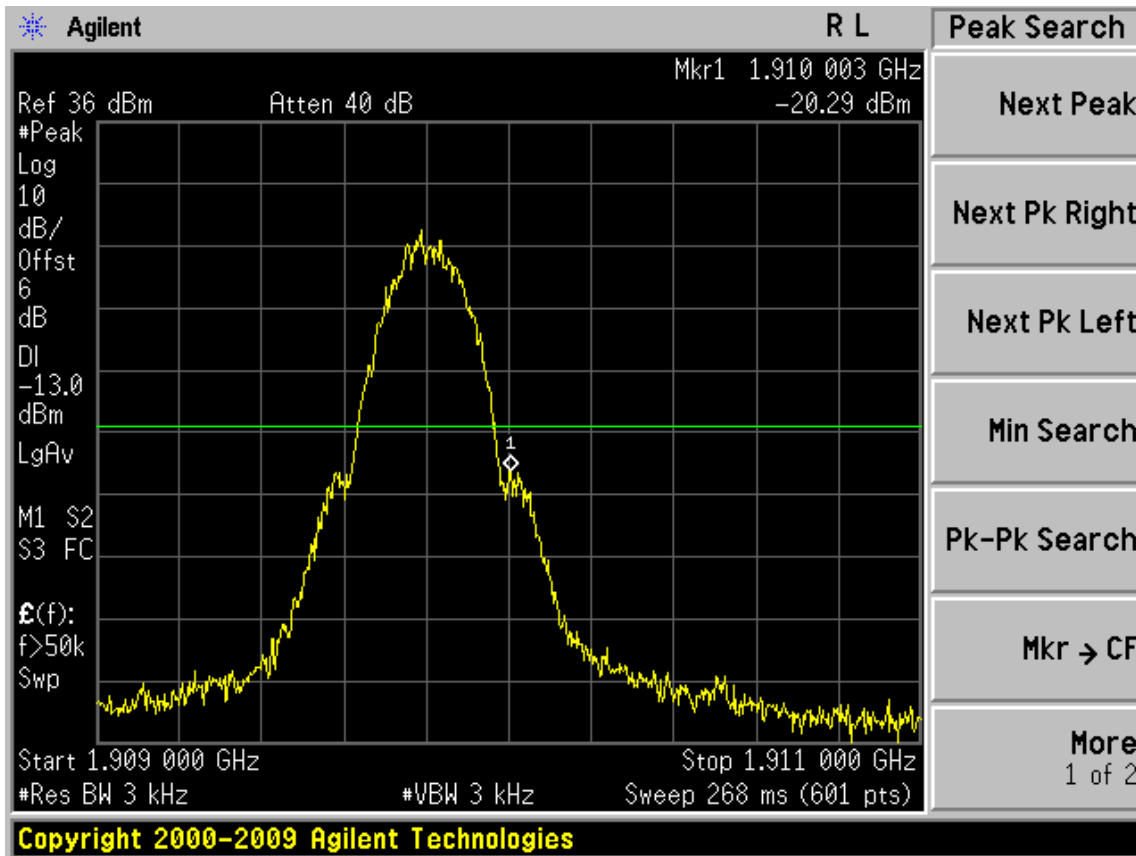
Lower Band Edge Plot on Channel 512



The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Higher Band Edge Plot on Channel 810

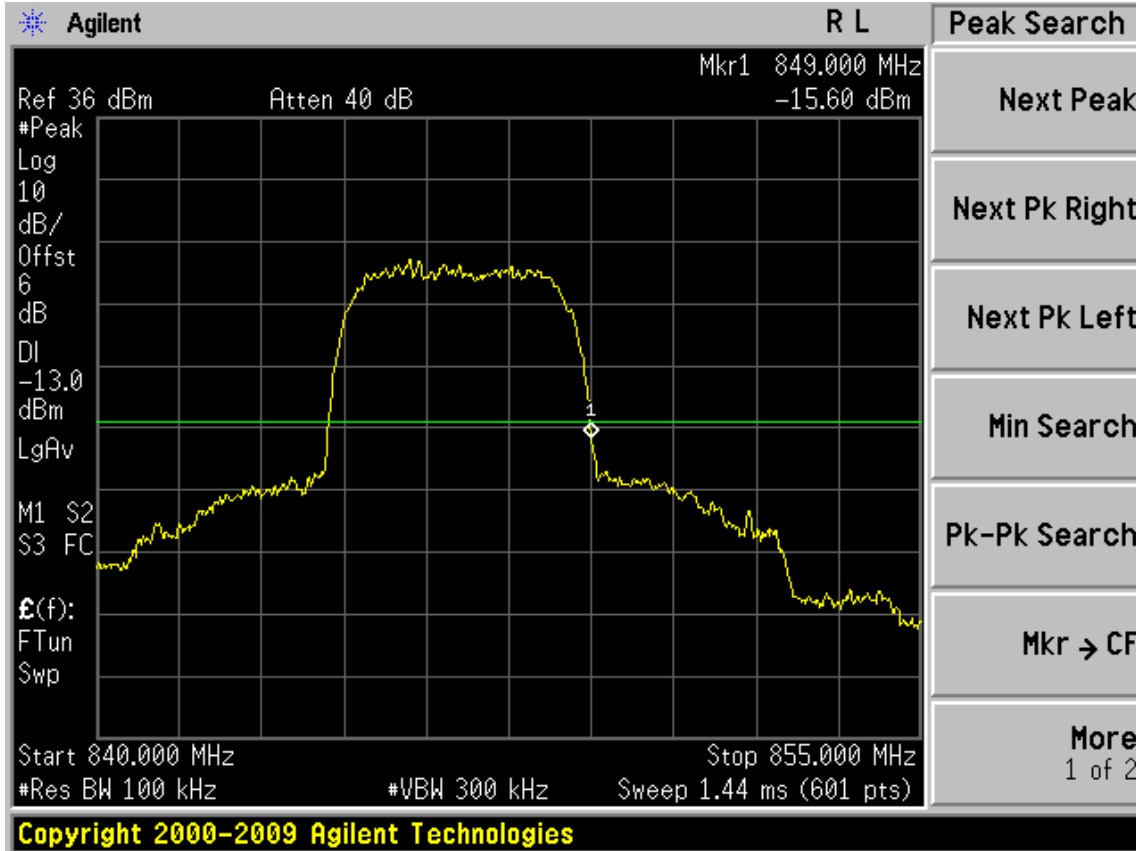


The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.





Higher Band Edge Plot on Channel 4233

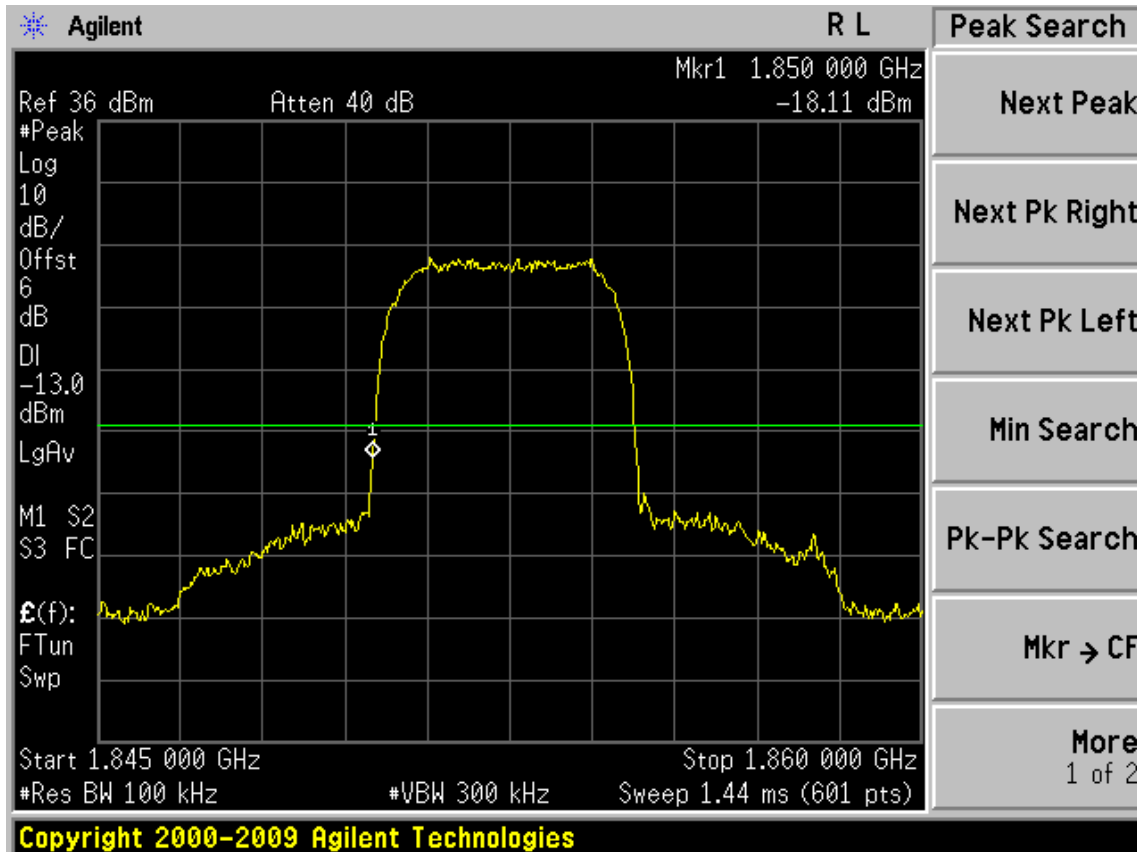


The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer, supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report, The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



|             |                   |               |      |
|-------------|-------------------|---------------|------|
| Band :      | WCDMA Band II     | Power Stage : | High |
| Test Mode : | RMC 12.2Kbps Link |               |      |

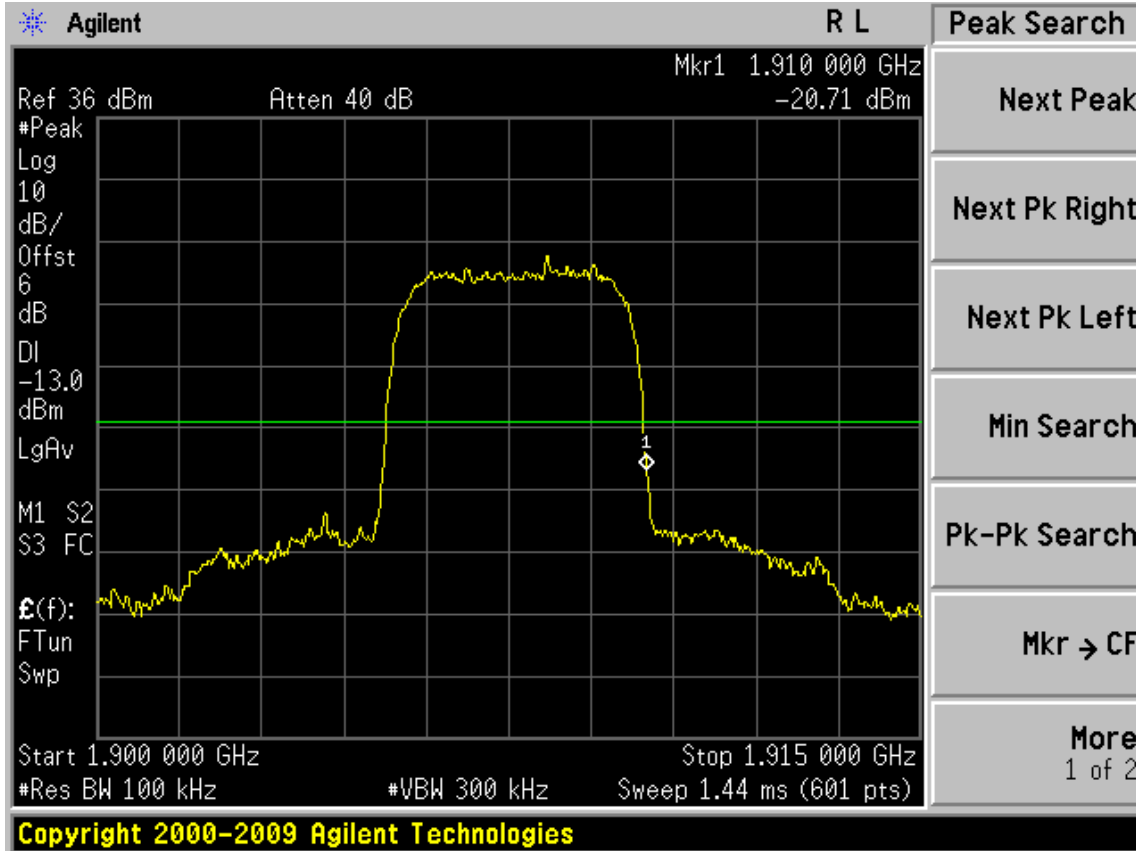
Lower Band Edge Plot on Channel 9262



The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Higher Band Edge Plot on Channel 9538



The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer, Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report, The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.





## 3.5 Conducted Emission Measurement

### 3.5.1 Description of Conducted Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter 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.

### 3.5.2 Measuring Instruments

See list of measuring instruments of this test report.

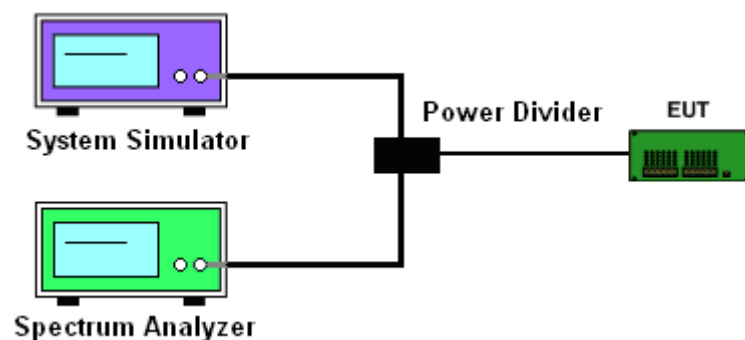
### 3.5.3 Test Procedures

1. The EUT was connected to spectrum analyzer and base station via power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
6. The limit line is derived from  $43 + 10\log(P)$  dB below the transmitter power P(Watts)
 
$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$

$$= -13\text{dBm}$$

### 3.5.4 Test Setup



The report refers only to the sample tested and does not apply to the bulk.

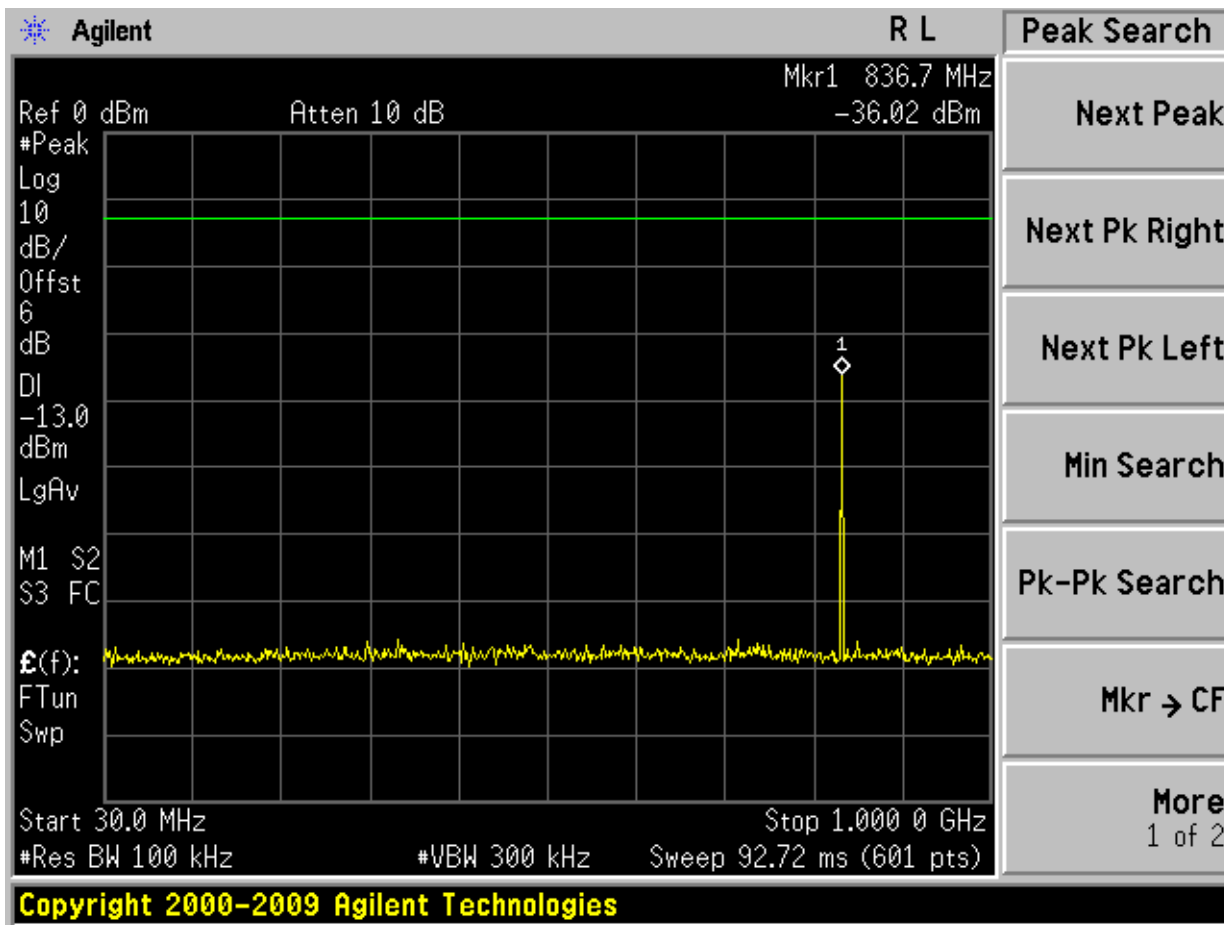
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES, will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES, reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



### 3.5.5 Test Result (Plots) of Conducted Emission

|             |          |           |       |
|-------------|----------|-----------|-------|
| Band :      | GSM850   | Channel : | CH190 |
| Test Mode : | GSM Link |           |       |

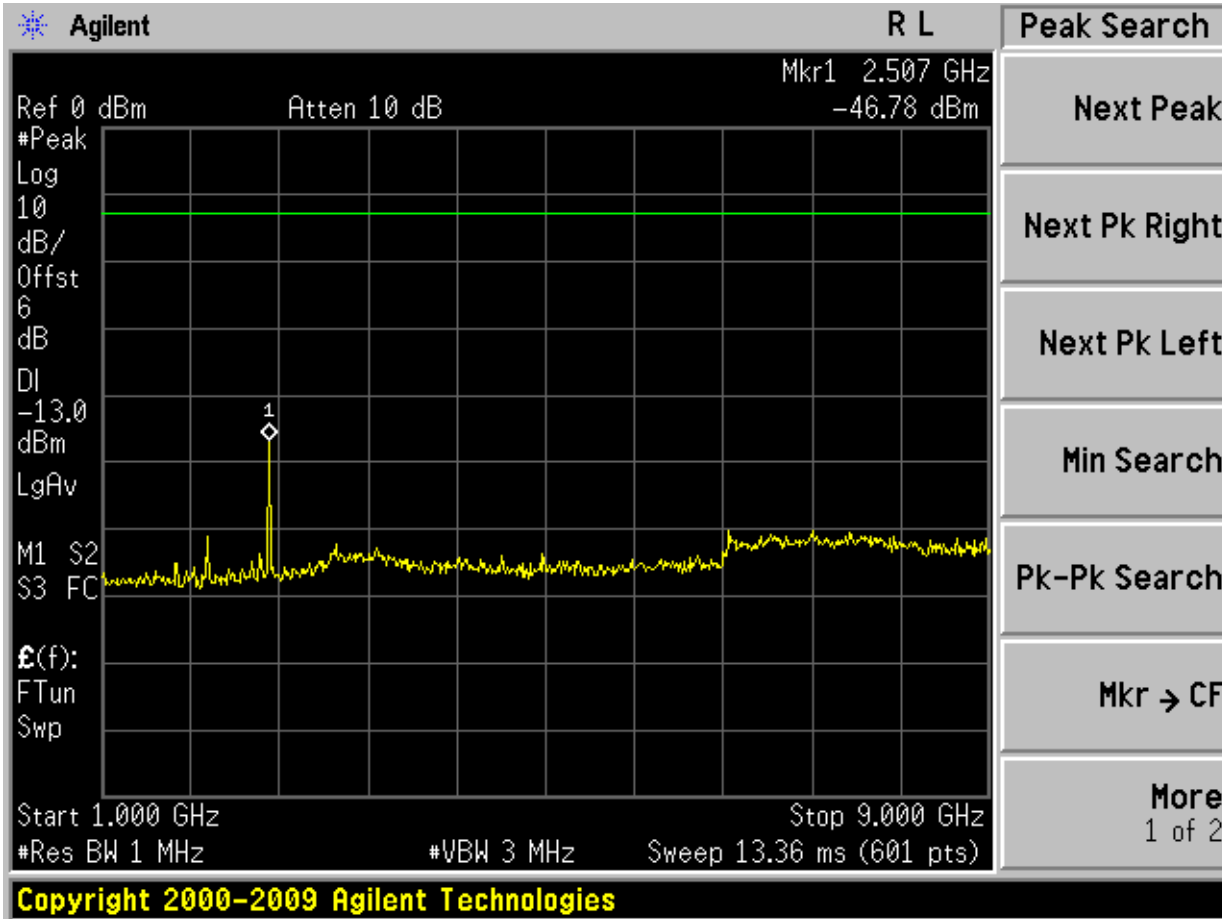
Conducted Emission Plot between 30MHz ~ 1GHz



The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer, Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report, The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Conducted Emission Plot between 1GHz ~ 9GHz

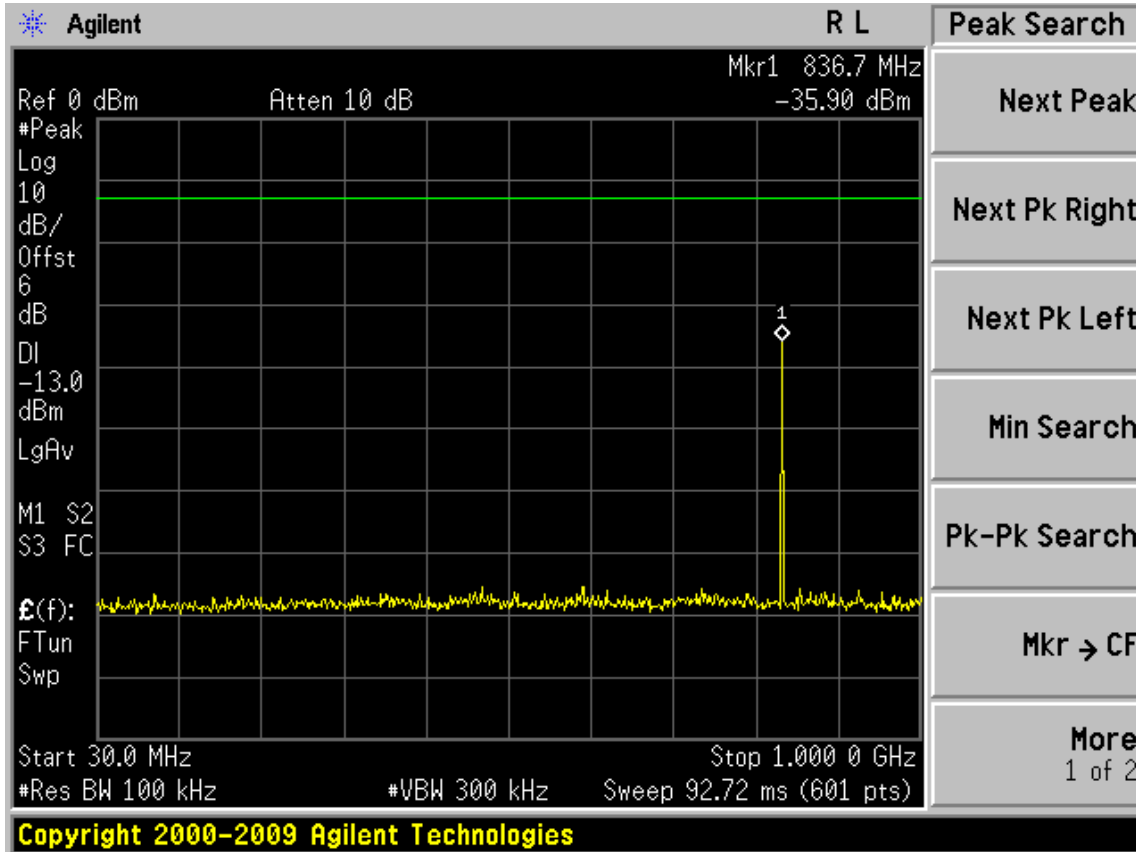


The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



|             |                   |           |       |
|-------------|-------------------|-----------|-------|
| Band :      | GSM850            | Channel : | CH190 |
| Test Mode : | EDGE Class 8 Link |           |       |

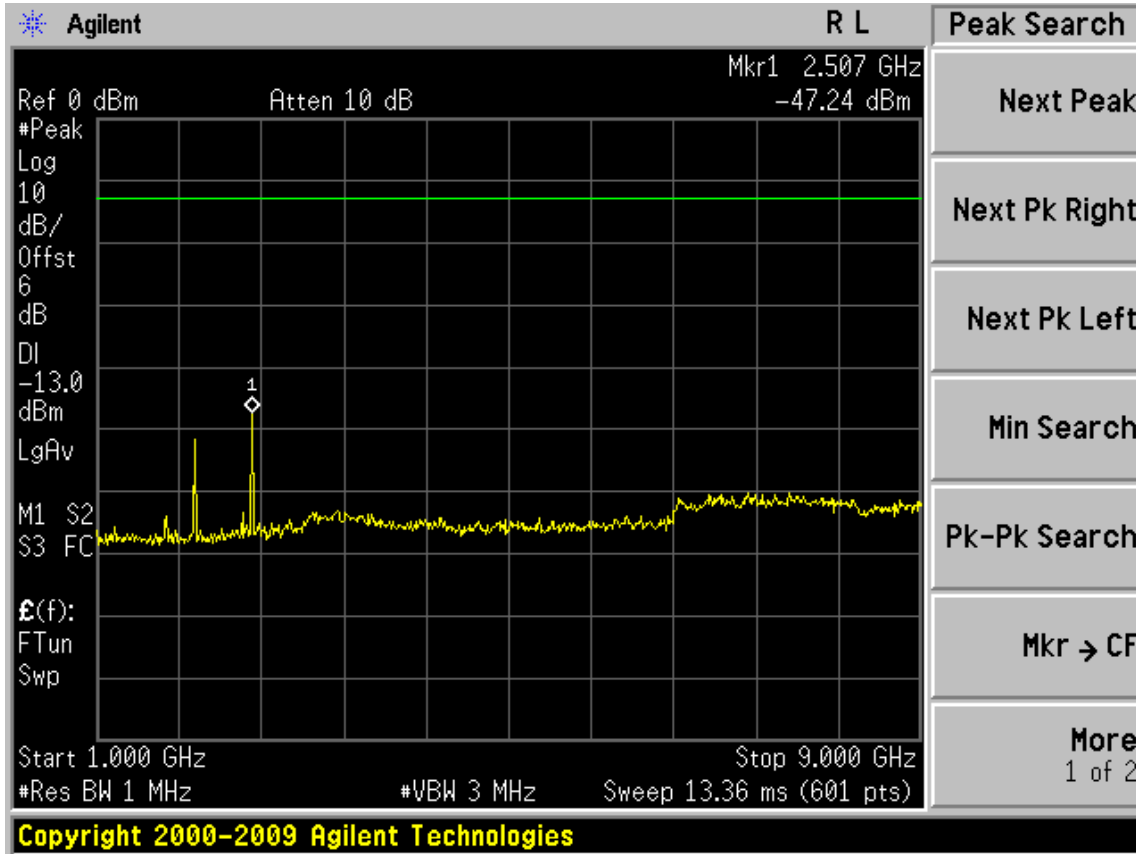
Conducted Emission Plot between 30MHz ~ 1GHz



The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer, supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the right to withdraw it and to adopt any other remedies which may be appropriate.



Conducted Emission Plot between 1GHz ~ 9GHz

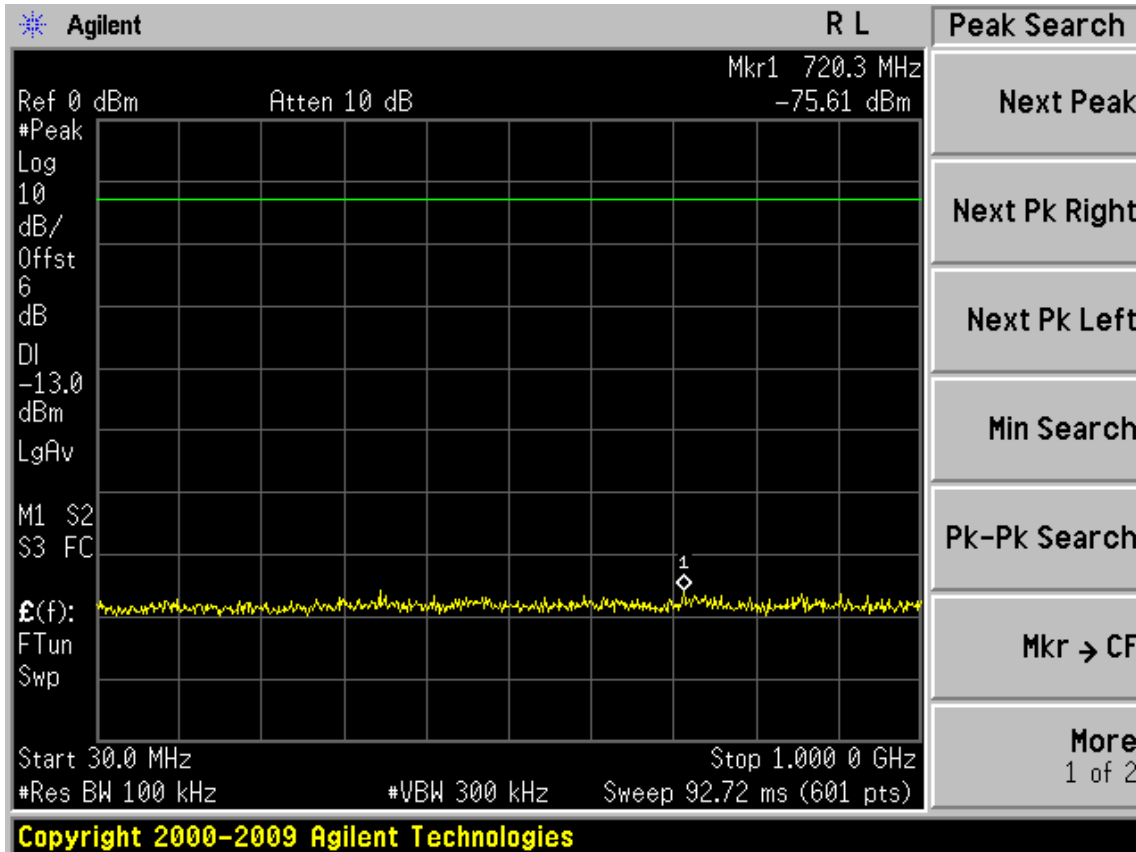


The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



|             |          |           |       |
|-------------|----------|-----------|-------|
| Band :      | GSM1900  | Channel : | CH661 |
| Test Mode : | GSM Link |           |       |

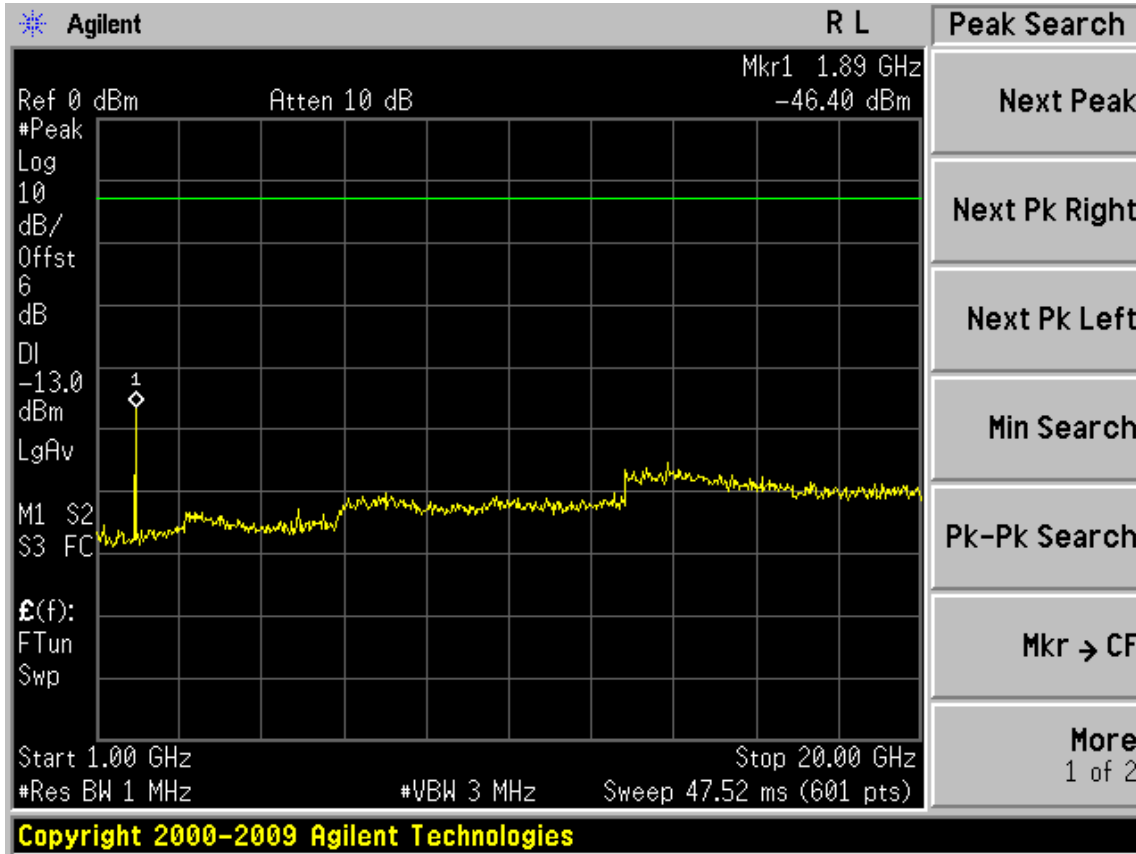
Conducted Emission Plot between 30MHz ~ 1GHz



The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Conducted Emission Plot between 1GHz ~ 20GHz

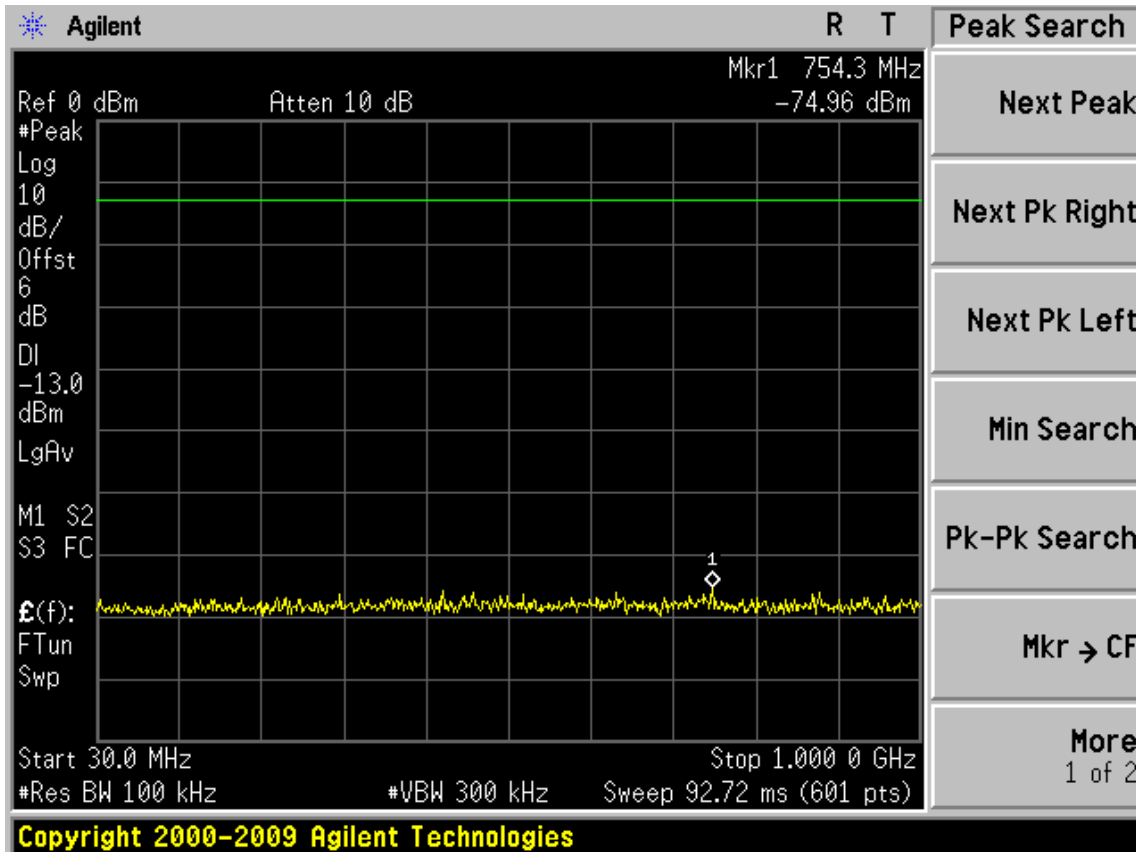


The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer, supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report, The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



|             |                   |           |       |
|-------------|-------------------|-----------|-------|
| Band :      | GSM1900           | Channel : | CH661 |
| Test Mode : | EDGE Class 8 Link |           |       |

Conducted Emission Plot between 30MHz ~ 1GHz

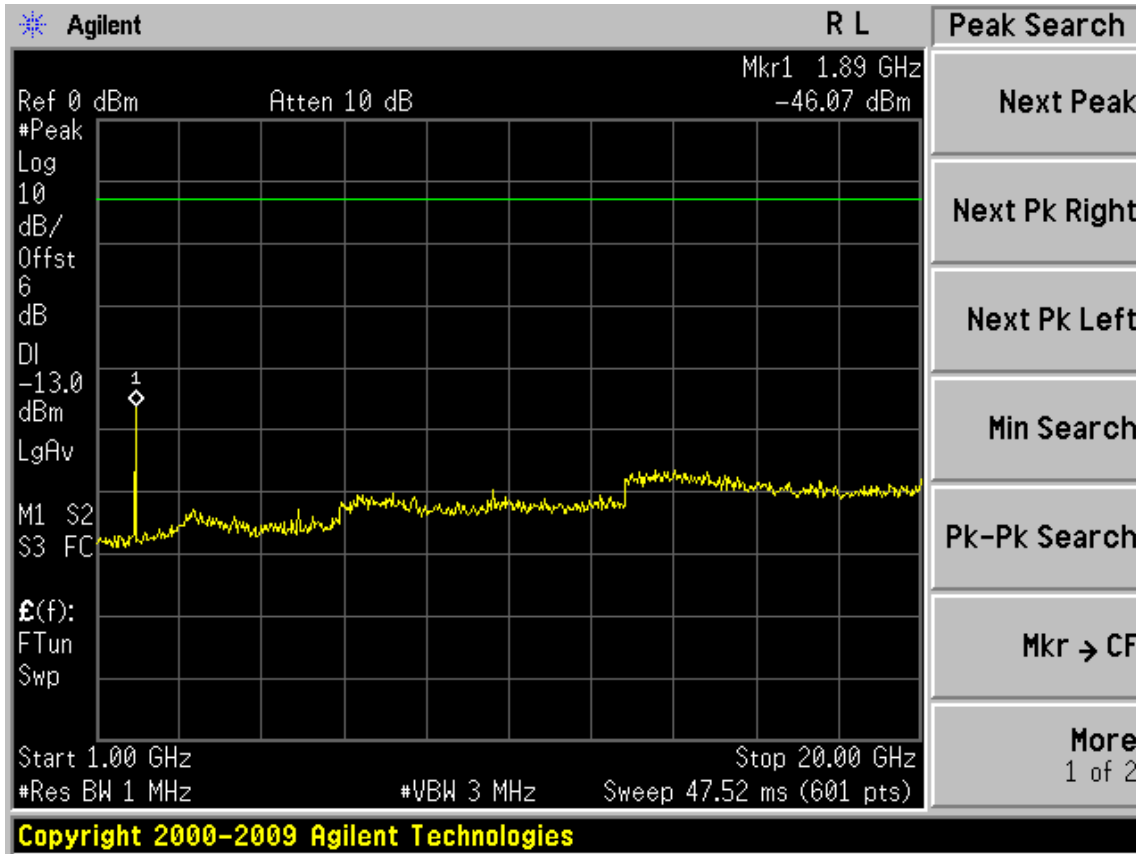


The report refers only to the sample tested and does not apply to the bulk. This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer, supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.





Conducted Emission Plot between 1GHz ~ 20GHz



The report refers only to the sample tested and does not apply to the bulk.

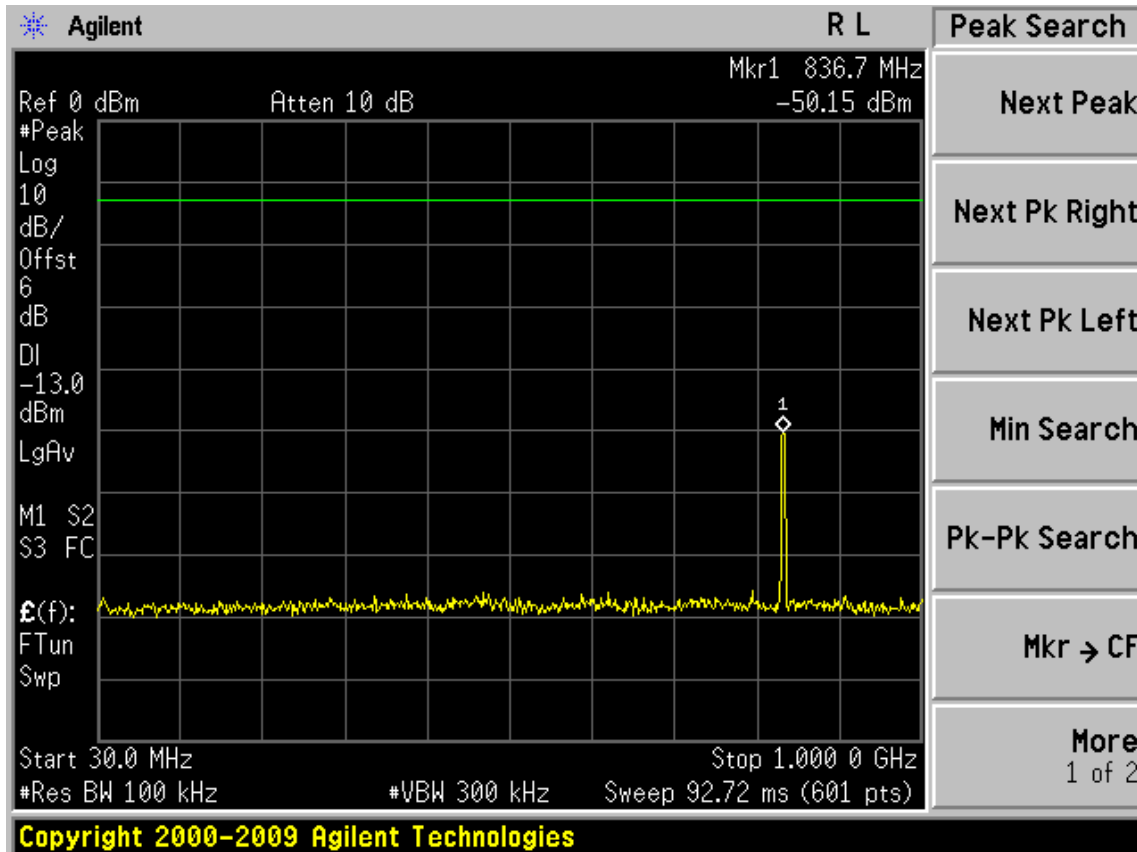
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer, supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



|             |                   |           |        |
|-------------|-------------------|-----------|--------|
| Band :      | WCDMA Band V      | Channel : | CH4183 |
| Test Mode : | RMC 12.2Kbps Link |           |        |

Conducted Emission Plot between 30MHz ~ 1GHz



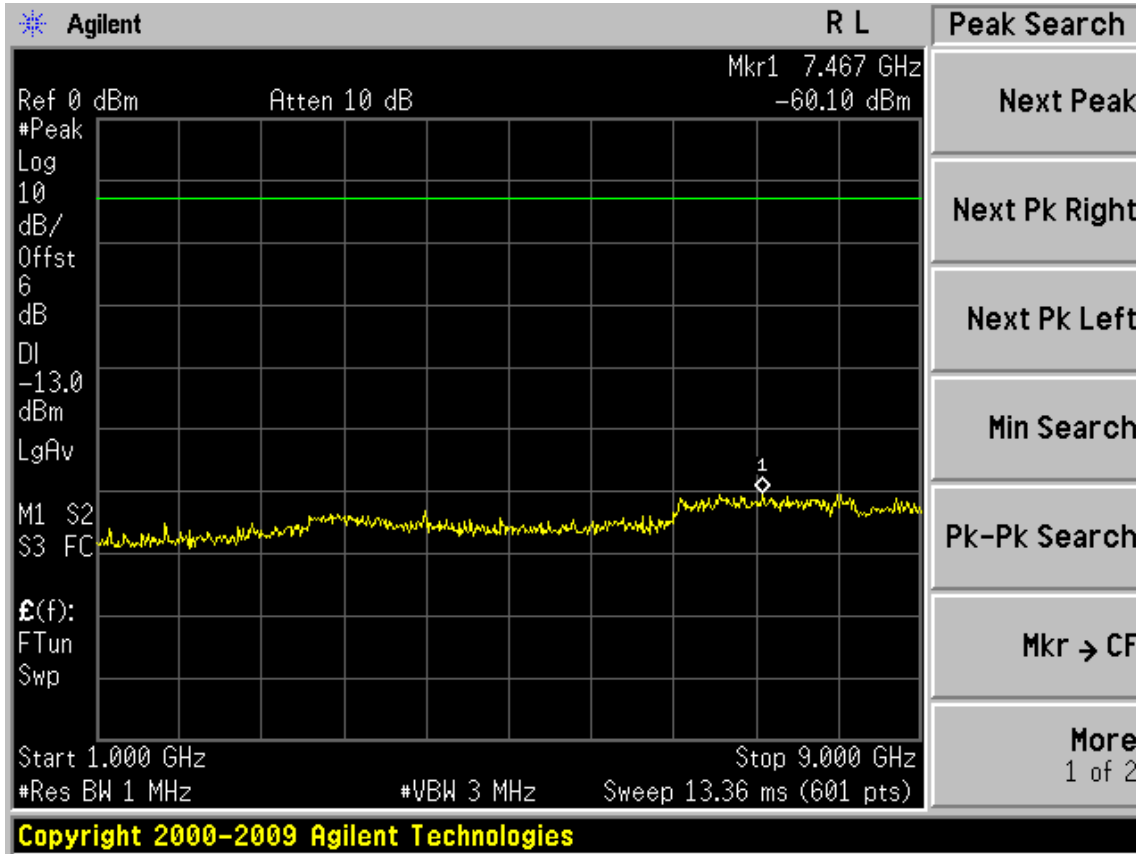
The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Conducted Emission Plot between 1GHz ~ 9GHz

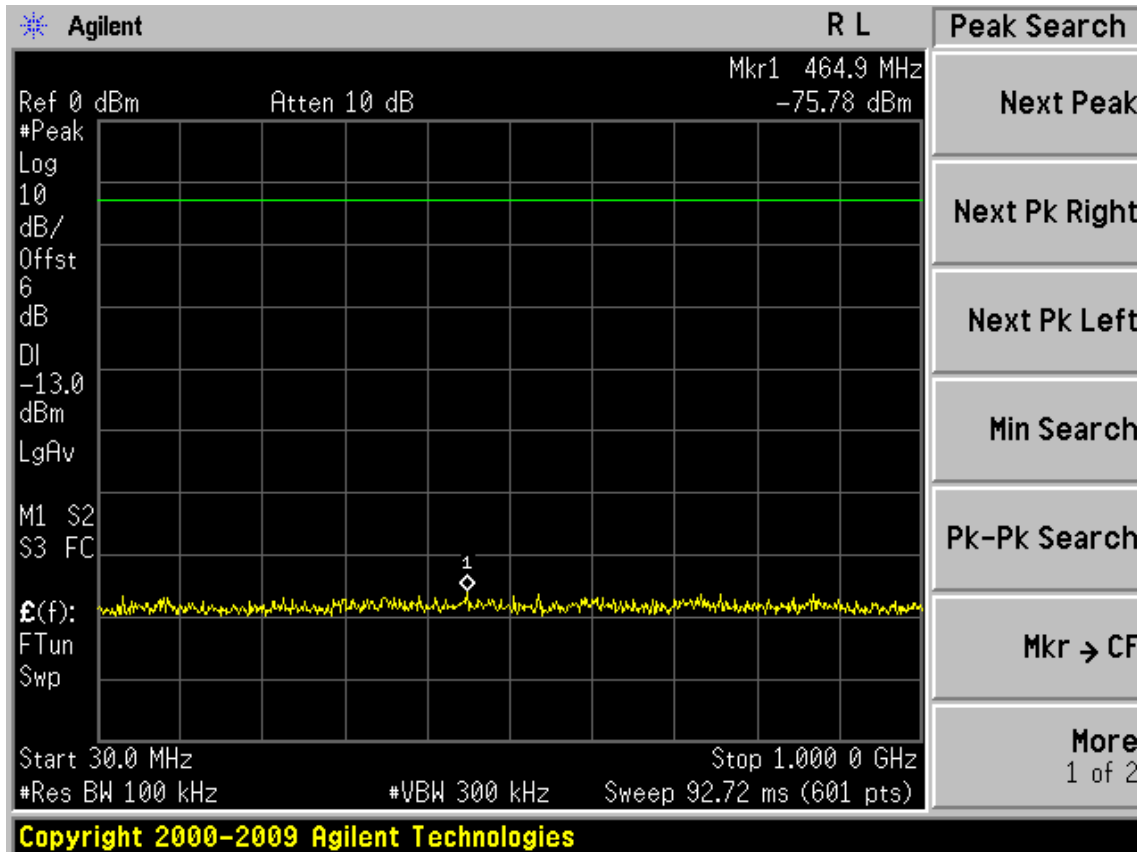


The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer, supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client, enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the right to withdraw it and to adopt any other remedies which may be appropriate.



|             |                   |           |        |
|-------------|-------------------|-----------|--------|
| Band :      | WCDMA Band II     | Channel : | CH9400 |
| Test Mode : | RMC 12.2Kbps Link |           |        |

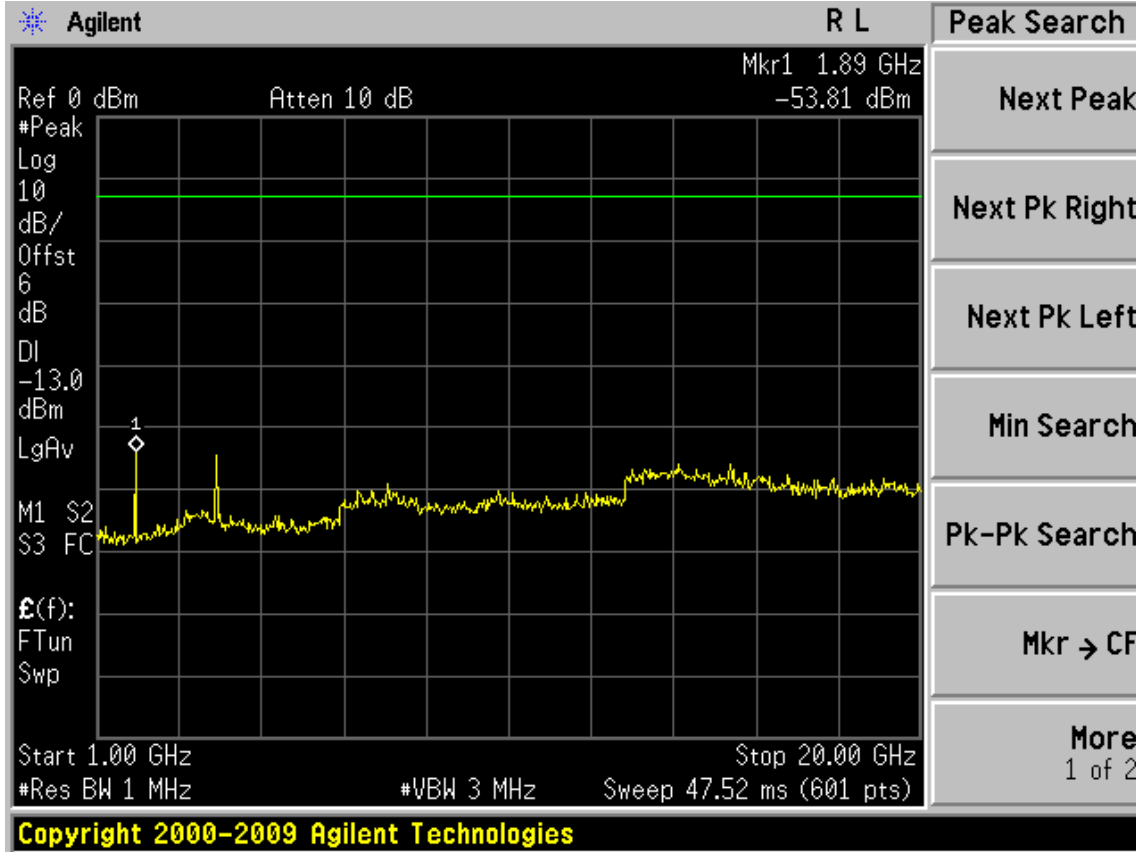
Conducted Emission Plot between 30MHz ~ 1GHz



The report refers only to the sample tested and does not apply to the bulk. This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Conducted Emission Plot between 1GHz ~ 20GHz



The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report, The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



## 3.6 Field Strength of Spurious Radiation Measurement

### 3.6.1 Description of Field Strength of Spurious Radiated Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least  $43 + 10 \log (P)$  dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

### 3.6.2 Measuring Instruments

See list of measuring instruments of this test report.

### 3.6.3 Test Procedures

1. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
11. The limit line is derived from  $43 + 10\log(P)$  dB below the transmitter power P(Watts)
 
$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$

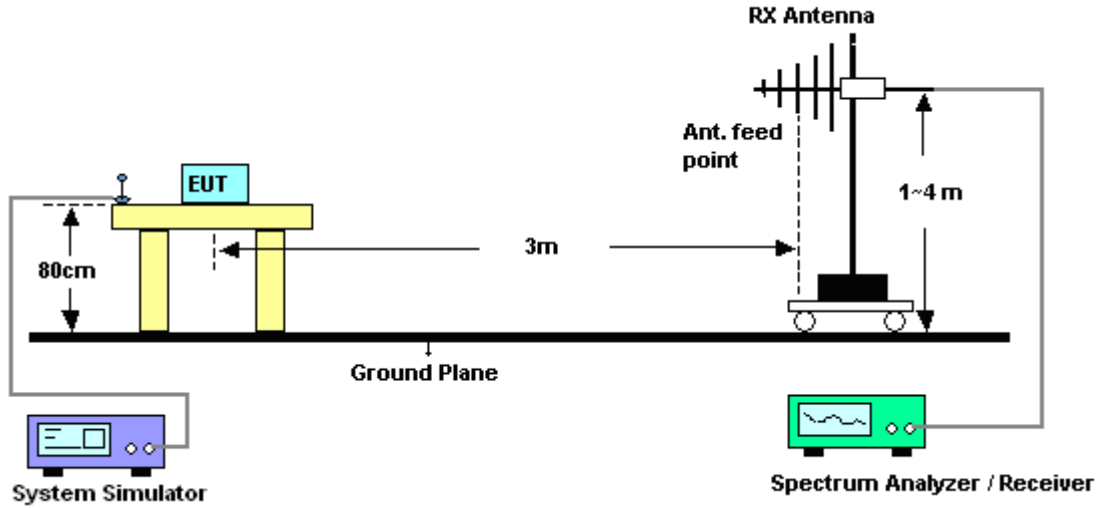
$$= -13\text{dBm}.$$
12. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
13. ERP (dBm) = EIRP - 2.15

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



### 3.6.4 Test Setup



The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer, supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the right to withdraw it and to adopt any other remedies which may be appropriate.



### 3.6.5 Test Result of Field Strength of Spurious Radiated

| Test Mode       | GSM850 GSM         |            | Test Channel | Low    |
|-----------------|--------------------|------------|--------------|--------|
| Frequency (MHz) | Spurious Emissions |            | Limit (dBm)  | Result |
|                 | Polarization       | Level(dBm) |              |        |
| 1648.40         | Vertical           | -34.17     | -13          | Pass   |
| 2472.60         | Vertical           | -41.22     | -13          | Pass   |
| 1648.40         | Horizontal         | -32.25     | -13          | Pass   |
| 2472.60         | Horizontal         | -46.81     | -13          | Pass   |

| Test Mode       | GSM850 GSM         |            | Test Channel | Middle |
|-----------------|--------------------|------------|--------------|--------|
| Frequency (MHz) | Spurious Emissions |            | Limit (dBm)  | Result |
|                 | Polarization       | Level(dBm) |              |        |
| 1673.20         | Vertical           | -35.93     | -13          | Pass   |
| 2509.80         | Vertical           | -40.06     | -13          | Pass   |
| 1673.20         | Horizontal         | -32.87     | -13          | Pass   |
| 2509.80         | Horizontal         | -46.10     | -13          | Pass   |

| Test Mode       | GSM850 GSM         |            | Test Channel | High   |
|-----------------|--------------------|------------|--------------|--------|
| Frequency (MHz) | Spurious Emissions |            | Limit (dBm)  | Result |
|                 | Polarization       | Level(dBm) |              |        |
| 1697.60         | Vertical           | -37.12     | -13          | Pass   |
| 2546.41         | Vertical           | -40.35     | -13          | Pass   |
| 1697.60         | Horizontal         | -32.86     | -13          | Pass   |
| 2546.41         | Horizontal         | -45.97     | -13          | Pass   |

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned, SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.





| Test Mode       | GSM1900 GSM        |            | Test Channel | Low    |
|-----------------|--------------------|------------|--------------|--------|
| Frequency (MHz) | Spurious Emissions |            | Limit (dBm)  | Result |
|                 | Polarization       | Level(dBm) |              |        |
| 3700.40         | Vertical           | -41.23     | -13          | Pass   |
| 5550.60         | Vertical           | -44.58     | -13          | Pass   |
| 3700.40         | Horizontal         | -35.62     | -13          | Pass   |
| 5550.60         | Horizontal         | -42.52     | -13          | Pass   |

| Test Mode       | GSM1900 GSM        |            | Test Channel | Middle |
|-----------------|--------------------|------------|--------------|--------|
| Frequency (MHz) | Spurious Emissions |            | Limit (dBm)  | Result |
|                 | Polarization       | Level(dBm) |              |        |
| 3760.00         | Vertical           | -41.25     | -13          | Pass   |
| 5640.00         | Vertical           | -46.47     | -13          | Pass   |
| 3760.00         | Horizontal         | -36.83     | -13          | Pass   |
| 5640.00         | Horizontal         | -42.50     | -13          | Pass   |

| Test Mode       | GSM1900 GSM        |            | Test Channel | High   |
|-----------------|--------------------|------------|--------------|--------|
| Frequency (MHz) | Spurious Emissions |            | Limit (dBm)  | Result |
|                 | Polarization       | Level(dBm) |              |        |
| 3819.60         | Vertical           | -41.15     | -13          | Pass   |
| 5729.40         | Vertical           | -45.86     | -13          | Pass   |
| 3819.60         | Horizontal         | -36.42     | -13          | Pass   |
| 5729.40         | Horizontal         | -42.49     | -13          | Pass   |

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



| Test Mode       | WCDMA Band V<br>RMC 12.2Kbps |            | Test Channel | Low    |
|-----------------|------------------------------|------------|--------------|--------|
| Frequency (MHz) | Spurious Emissions           |            | Limit (dBm)  | Result |
|                 | Polarization                 | Level(dBm) |              |        |
| 1652.80         | Vertical                     | -42.73     | -13          | Pass   |
| 2479.20         | Vertical                     | -47.86     | -13          | Pass   |
| 1652.80         | Horizontal                   | -40.95     | -13          | Pass   |
| 2479.20         | Horizontal                   | -44.21     | -13          | Pass   |

| Test Mode       | WCDMA Band V<br>RMC 12.2Kbps |            | Test Channel | Middle |
|-----------------|------------------------------|------------|--------------|--------|
| Frequency (MHz) | Spurious Emissions           |            | Limit (dBm)  | Result |
|                 | Polarization                 | Level(dBm) |              |        |
| 1673.20         | Vertical                     | -41.82     | -13          | Pass   |
| 2509.80         | Vertical                     | -46.75     | -13          | Pass   |
| 1673.20         | Horizontal                   | -40.86     | -13          | Pass   |
| 2509.80         | Horizontal                   | -43.74     | -13          | Pass   |

| Test Mode       | WCDMA Band V<br>RMC 12.2Kbps |            | Test Channel | High   |
|-----------------|------------------------------|------------|--------------|--------|
| Frequency (MHz) | Spurious Emissions           |            | Limit (dBm)  | Result |
|                 | Polarization                 | Level(dBm) |              |        |
| 1693.20         | Vertical                     | -43.01     | -13          | Pass   |
| 2539.80         | Vertical                     | -46.72     | -13          | Pass   |
| 1693.20         | Horizontal                   | -41.63     | -13          | Pass   |
| 2539.80         | Horizontal                   | -45.48     | -13          | Pass   |

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned, SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



| Test Mode       | WCDMA Band II<br>RMC 12.2Kbps |            | Test Channel | Low    |
|-----------------|-------------------------------|------------|--------------|--------|
| Frequency (MHz) | Spurious Emissions            |            | Limit (dBm)  | Result |
|                 | Polarization                  | Level(dBm) |              |        |
| 3704.80         | Vertical                      | -44.36     | -13          | Pass   |
| 5557.20         | Vertical                      | -48.25     | -13          | Pass   |
| 3704.80         | Horizontal                    | -42.73     | -13          | Pass   |
| 5557.20         | Horizontal                    | -45.12     | -13          | Pass   |

| Test Mode       | WCDMA Band V<br>RMC 12.2Kbps |            | Test Channel | Middle |
|-----------------|------------------------------|------------|--------------|--------|
| Frequency (MHz) | Spurious Emissions           |            | Limit (dBm)  | Result |
|                 | Polarization                 | Level(dBm) |              |        |
| 3760            | Vertical                     | -42.84     | -13          | Pass   |
| 5640            | Vertical                     | -47.95     | -13          | Pass   |
| 3760            | Horizontal                   | -42.33     | -13          | Pass   |
| 5640            | Horizontal                   | -45.11     | -13          | Pass   |

| Test Mode       | WCDMA Band V<br>RMC 12.2Kbps |            | Test Channel | High   |
|-----------------|------------------------------|------------|--------------|--------|
| Frequency (MHz) | Spurious Emissions           |            | Limit (dBm)  | Result |
|                 | Polarization                 | Level(dBm) |              |        |
| 3815.20         | Vertical                     | -43.47     | -13          | Pass   |
| 5722.80         | Vertical                     | -48.15     | -13          | Pass   |
| 3815.20         | Horizontal                   | -41.82     | -13          | Pass   |
| 5722.80         | Horizontal                   | -46.38     | -13          | Pass   |

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned, SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



## 3.7 Frequency Stability Measurement

### 3.7.1 Description of Frequency Stability Measurement

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.

### 3.7.2 Measuring Instruments

See list of measuring instruments of this test report.

### 3.7.3 Test Procedures for Temperature Variation

1. The EUT was set up in the thermal chamber and connected with the base station.
2. With power OFF, the temperature was decreased to  $-30^{\circ}\text{C}$  and the EUT was stabilized for three hours. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in  $10^{\circ}\text{C}$  step up to  $50^{\circ}\text{C}$ . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.
4. If the EUT can not be turned on at  $-30^{\circ}\text{C}$ , the testing lowest temperature will be raised in  $10^{\circ}\text{C}$  step until the EUT can be turned on.

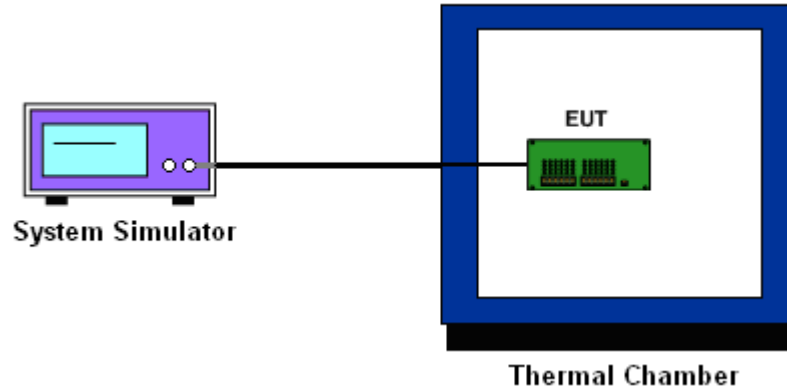
### 3.7.4 Test Procedures for Voltage Variation

1. The EUT was placed in a temperature chamber at  $25\pm 5^{\circ}\text{C}$  and connected with the base station.
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.

The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES, to his customer, Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES, will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES, reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



### 3.7.5 Test Setup



The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



### 3.7.6 Test Result of Temperature and Voltage Variation

#### GSM850, Middle Channel

| Middle channel, fo =836.6MHz |                    |                      |             |             |
|------------------------------|--------------------|----------------------|-------------|-------------|
| Temperature (°C)             | Power Supplied (V) | Frequency Error (Hz) | Error (ppm) | Limit (ppm) |
| -30                          | 3.1                | -47                  | -0.07       | 2.5         |
|                              | 3.7                | -43                  | -0.05       | 2.5         |
|                              | 4.3                | -36                  | -0.04       | 2.5         |
| -20                          | 3.1                | -23                  | -0.03       | 2.5         |
|                              | 3.7                | -29                  | -0.03       | 2.5         |
|                              | 4.3                | -24                  | -0.03       | 2.5         |
| -10                          | 3.1                | -48                  | -0.06       | 2.5         |
|                              | 3.7                | -40                  | -0.05       | 2.5         |
|                              | 4.3                | -26                  | -0.03       | 2.5         |
| 0                            | 3.1                | -32                  | -0.04       | 2.5         |
|                              | 3.7                | -35                  | -0.04       | 2.5         |
|                              | 4.3                | -30                  | -0.04       | 2.5         |
| 10                           | 3.1                | -31                  | -0.04       | 2.5         |
|                              | 3.7                | -23                  | -0.03       | 2.5         |
|                              | 4.3                | -34                  | -0.04       | 2.5         |
| 20                           | 3.1                | -49                  | -0.06       | 2.5         |
|                              | 3.7                | -28                  | -0.03       | 2.5         |
|                              | 4.3                | -33                  | -0.04       | 2.5         |
| 30                           | 3.1                | -57                  | -0.07       | 2.5         |
|                              | 3.7                | -38                  | -0.05       | 2.5         |
|                              | 4.3                | -43                  | -0.05       | 2.5         |
| 40                           | 3.1                | -32                  | -0.04       | 2.5         |
|                              | 3.7                | -35                  | -0.04       | 2.5         |
|                              | 4.3                | -24                  | -0.03       | 2.5         |
| 50                           | 3.1                | -46                  | -0.05       | 2.5         |
|                              | 3.7                | -41                  | -0.05       | 2.5         |
|                              | 4.3                | -55                  | -0.07       | 2.5         |

Note: The extreme voltage was declared by the manufacturer.

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

**EDGE Class 8, Middle Channel**

| Middle channel, fo =836.6MHz |                    |                      |             |             |
|------------------------------|--------------------|----------------------|-------------|-------------|
| Temperature (°C)             | Power Supplied (V) | Frequency Error (Hz) | Error (ppm) | Limit (ppm) |
| -30                          | 3.1                | -65                  | -0.08       | 2.5         |
|                              | 3.7                | -52                  | -0.06       | 2.5         |
|                              | 4.3                | -37                  | -0.04       | 2.5         |
| -20                          | 3.1                | -39                  | -0.05       | 2.5         |
|                              | 3.7                | -43                  | -0.05       | 2.5         |
|                              | 4.3                | -22                  | -0.03       | 2.5         |
| -10                          | 3.1                | -41                  | -0.05       | 2.5         |
|                              | 3.7                | -39                  | -0.05       | 2.5         |
|                              | 4.3                | -42                  | -0.05       | 2.5         |
| 0                            | 3.1                | -48                  | -0.06       | 2.5         |
|                              | 3.7                | -40                  | -0.05       | 2.5         |
|                              | 4.3                | -35                  | -0.04       | 2.5         |
| 10                           | 3.1                | -26                  | -0.03       | 2.5         |
|                              | 3.7                | -20                  | -0.02       | 2.5         |
|                              | 4.3                | -34                  | -0.04       | 2.5         |
| 20                           | 3.1                | -39                  | -0.05       | 2.5         |
|                              | 3.7                | -45                  | -0.05       | 2.5         |
|                              | 4.3                | -48                  | -0.06       | 2.5         |
| 30                           | 3.1                | -53                  | -0.06       | 2.5         |
|                              | 3.7                | -59                  | -0.07       | 2.5         |
|                              | 4.3                | -46                  | -0.05       | 2.5         |
| 40                           | 3.1                | -32                  | -0.04       | 2.5         |
|                              | 3.7                | -31                  | -0.04       | 2.5         |
|                              | 4.3                | -57                  | -0.07       | 2.5         |
| 50                           | 3.1                | -53                  | -0.06       | 2.5         |
|                              | 3.7                | -47                  | -0.06       | 2.5         |
|                              | 4.3                | -50                  | -0.06       | 2.5         |

Note: The extreme voltage was declared by the manufacturer.

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

**GSM1900 Middle Channel:**

| Middle channel, fo =1880.0MHz |                    |                      |             |             |
|-------------------------------|--------------------|----------------------|-------------|-------------|
| Temperature (°C)              | Power Supplied (V) | Frequency Error (Hz) | Error (ppm) | Limit (ppm) |
| -30                           | 3.1                | -61                  | -0.03       | 2.5         |
|                               | 3.7                | -75                  | -0.04       | 2.5         |
|                               | 4.3                | -65                  | -0.03       | 2.5         |
| -20                           | 3.1                | -59                  | -0.03       | 2.5         |
|                               | 3.7                | -64                  | -0.03       | 2.5         |
|                               | 4.3                | -70                  | -0.04       | 2.5         |
| -10                           | 3.1                | -57                  | -0.03       | 2.5         |
|                               | 3.7                | -43                  | -0.02       | 2.5         |
|                               | 4.3                | -56                  | -0.03       | 2.5         |
| 0                             | 3.1                | -73                  | -0.04       | 2.5         |
|                               | 3.7                | -62                  | -0.03       | 2.5         |
|                               | 4.3                | -54                  | -0.03       | 2.5         |
| 10                            | 3.1                | -46                  | -0.02       | 2.5         |
|                               | 3.7                | -51                  | -0.03       | 2.5         |
|                               | 4.3                | -44                  | -0.02       | 2.5         |
| 20                            | 3.1                | -58                  | -0.03       | 2.5         |
|                               | 3.7                | -61                  | -0.03       | 2.5         |
|                               | 4.3                | -42                  | -0.02       | 2.5         |
| 30                            | 3.1                | -33                  | -0.02       | 2.5         |
|                               | 3.7                | -52                  | -0.03       | 2.5         |
|                               | 4.3                | -45                  | -0.02       | 2.5         |
| 40                            | 3.1                | -39                  | -0.02       | 2.5         |
|                               | 3.7                | -41                  | -0.02       | 2.5         |
|                               | 4.3                | -68                  | -0.04       | 2.5         |
| 50                            | 3.1                | -46                  | -0.02       | 2.5         |
|                               | 3.7                | -51                  | -0.03       | 2.5         |
|                               | 4.3                | -67                  | -0.04       | 2.5         |

Note: The extreme voltage was declared by the manufacturer.

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



**EDGE Class 8 Middle Channel:**

| Middle channel, fo =1880.0MHz |                    |                      |             |             |
|-------------------------------|--------------------|----------------------|-------------|-------------|
| Temperature (°C)              | Power Supplied (V) | Frequency Error (Hz) | Error (ppm) | Limit (ppm) |
| -30                           | 3.3                | -75                  | -0.04       | 2.5         |
|                               | 3.7                | -83                  | -0.04       | 2.5         |
|                               | 4.3                | -76                  | -0.04       | 2.5         |
| -20                           | 3.3                | -51                  | -0.03       | 2.5         |
|                               | 3.7                | -60                  | -0.03       | 2.5         |
|                               | 4.3                | -57                  | -0.03       | 2.5         |
| -10                           | 3.3                | -78                  | -0.04       | 2.5         |
|                               | 3.7                | -54                  | -0.03       | 2.5         |
|                               | 4.3                | -59                  | -0.03       | 2.5         |
| 0                             | 3.3                | -66                  | -0.04       | 2.5         |
|                               | 3.7                | -63                  | -0.03       | 2.5         |
|                               | 4.3                | -54                  | -0.03       | 2.5         |
| 10                            | 3.3                | -68                  | -0.04       | 2.5         |
|                               | 3.7                | -52                  | -0.03       | 2.5         |
|                               | 4.3                | -57                  | -0.03       | 2.5         |
| 20                            | 3.3                | -44                  | -0.02       | 2.5         |
|                               | 3.7                | -60                  | -0.03       | 2.5         |
|                               | 4.3                | -61                  | -0.03       | 2.5         |
| 30                            | 3.3                | -53                  | -0.03       | 2.5         |
|                               | 3.7                | -71                  | -0.04       | 2.5         |
|                               | 4.3                | -59                  | -0.03       | 2.5         |
| 40                            | 3.3                | -38                  | -0.02       | 2.5         |
|                               | 3.7                | -52                  | -0.03       | 2.5         |
|                               | 4.3                | -57                  | -0.03       | 2.5         |
| 50                            | 3.3                | -84                  | -0.04       | 2.5         |
|                               | 3.7                | -65                  | -0.03       | 2.5         |
|                               | 4.3                | -77                  | -0.04       | 2.5         |

Note: The extreme voltage was declared by the manufacturer.

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

**WCDMA Band V**

| Middle channel, fo =836.6MHz |                    |                      |             |             |
|------------------------------|--------------------|----------------------|-------------|-------------|
| Temperature (°C)             | Power Supplied (V) | Frequency Error (Hz) | Error (ppm) | Limit (ppm) |
| -30                          | 3.3                | -28                  | -0.03       | 2.5         |
|                              | 3.7                | -46                  | -0.05       | 2.5         |
|                              | 4.3                | -53                  | -0.06       | 2.5         |
| -20                          | 3.3                | -42                  | -0.05       | 2.5         |
|                              | 3.7                | -57                  | -0.07       | 2.5         |
|                              | 4.3                | -55                  | -0.07       | 2.5         |
| -10                          | 3.3                | -41                  | -0.05       | 2.5         |
|                              | 3.7                | -33                  | -0.04       | 2.5         |
|                              | 4.3                | -39                  | -0.05       | 2.5         |
| 0                            | 3.3                | -46                  | -0.05       | 2.5         |
|                              | 3.7                | -28                  | -0.03       | 2.5         |
|                              | 4.3                | -50                  | -0.06       | 2.5         |
| 10                           | 3.3                | -34                  | -0.04       | 2.5         |
|                              | 3.7                | -21                  | -0.03       | 2.5         |
|                              | 4.3                | -37                  | -0.04       | 2.5         |
| 20                           | 3.3                | -26                  | -0.03       | 2.5         |
|                              | 3.7                | -48                  | -0.06       | 2.5         |
|                              | 4.3                | -35                  | -0.04       | 2.5         |
| 30                           | 3.3                | -42                  | -0.05       | 2.5         |
|                              | 3.7                | -53                  | -0.06       | 2.5         |
|                              | 4.3                | -31                  | -0.04       | 2.5         |
| 40                           | 3.3                | -37                  | -0.04       | 2.5         |
|                              | 3.7                | -29                  | -0.03       | 2.5         |
|                              | 4.3                | -46                  | -0.05       | 2.5         |
| 50                           | 3.3                | -68                  | -0.08       | 2.5         |
|                              | 3.7                | -56                  | -0.07       | 2.5         |
|                              | 4.3                | -33                  | -0.04       | 2.5         |

Note: The extreme voltage was declared by the manufacturer.

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

**WCDMA Band II**

| <b>Middle channel, fo =1880.0MHz</b> |                           |                             |                    |                    |
|--------------------------------------|---------------------------|-----------------------------|--------------------|--------------------|
| <b>Temperature (°C)</b>              | <b>Power Supplied (V)</b> | <b>Frequency Error (Hz)</b> | <b>Error (ppm)</b> | <b>Limit (ppm)</b> |
| -30                                  | 3.3                       | -62                         | -0.03              | 2.5                |
|                                      | 3.7                       | -75                         | -0.04              | 2.5                |
|                                      | 4.3                       | -70                         | -0.04              | 2.5                |
| -20                                  | 3.3                       | -52                         | -0.03              | 2.5                |
|                                      | 3.7                       | -79                         | -0.04              | 2.5                |
|                                      | 4.3                       | -46                         | -0.02              | 2.5                |
| -10                                  | 3.3                       | -63                         | -0.03              | 2.5                |
|                                      | 3.7                       | -68                         | -0.04              | 2.5                |
|                                      | 4.3                       | -71                         | -0.04              | 2.5                |
| 0                                    | 3.3                       | -74                         | -0.04              | 2.5                |
|                                      | 3.7                       | -38                         | -0.02              | 2.5                |
|                                      | 4.3                       | -50                         | -0.03              | 2.5                |
| 10                                   | 3.3                       | -49                         | -0.03              | 2.5                |
|                                      | 3.7                       | -77                         | -0.04              | 2.5                |
|                                      | 4.3                       | -46                         | -0.02              | 2.5                |
| 20                                   | 3.3                       | -42                         | -0.02              | 2.5                |
|                                      | 3.7                       | -53                         | -0.03              | 2.5                |
|                                      | 4.3                       | -57                         | -0.03              | 2.5                |
| 30                                   | 3.3                       | -61                         | -0.03              | 2.5                |
|                                      | 3.7                       | -76                         | -0.04              | 2.5                |
|                                      | 4.3                       | -52                         | -0.03              | 2.5                |
| 40                                   | 3.3                       | -48                         | -0.03              | 2.5                |
|                                      | 3.7                       | -65                         | -0.03              | 2.5                |
|                                      | 4.3                       | -71                         | -0.04              | 2.5                |
| 50                                   | 3.3                       | -59                         | -0.03              | 2.5                |
|                                      | 3.7                       | -64                         | -0.03              | 2.5                |
|                                      | 4.3                       | -78                         | -0.04              | 2.5                |

Note: The extreme voltage was declared by the manufacturer.

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

## 3.8 Peak-to-Average Ratio

### 3.8.1 Description of the PAR Measurement

The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

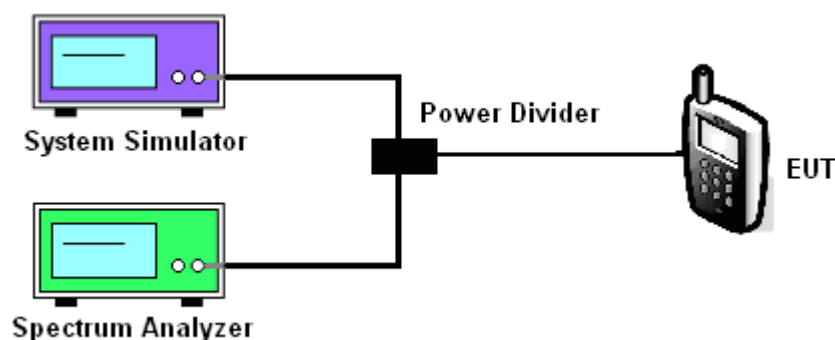
### 3.8.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

### 3.8.3 Test Procedures

1. The EUT was connected to Spectrum Analyzer and System Simulator via power divider.
2. For GSM/EGPRS operating modes:
  - a. Set EUT in maximum power output.
  - b. Set the RBW = 1MHz, VBW = 3MHz, Peak detector in spectrum analyzer for first trace.
  - c. Set the RBW = 1MHz, VBW = 3MHz, RMS detector in spectrum analyzer for second trace.
  - d. The wanted burst signal is triggered by spectrum analyzer, and measured respectively the peak level and Mean level without burst-off time, after system simulator synchronized with the spectrum analyzer.
3. For UMTS operating modes:
  - a. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
  - b. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
4. Record the deviation as Peak to Average Ratio.

### 3.8.4 Test Setup



The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



### 3.8.5 Test Result of Peak-to-Average Ratio

| PCS Band                   |               |           |            |                        |           |            |                              |            |             |
|----------------------------|---------------|-----------|------------|------------------------|-----------|------------|------------------------------|------------|-------------|
| Modes                      | GSM1900 (GSM) |           |            | GSM1900 (EDGE class 8) |           |            | WCDMA Band II (RMC 12.2Kbps) |            |             |
| Channel                    | 512 (Low)     | 661 (Mid) | 810 (High) | 512 (Low)              | 661 (Mid) | 810 (High) | 9262 (Low)                   | 9400 (Mid) | 9538 (High) |
| Frequency (MHz)            | 1850.2        | 1880      | 1909.8     | 1850.2                 | 1880      | 1909.8     | 1852.4                       | 1880       | 1907.6      |
| Peak-to-Average Ratio (dB) | 1.97          | 1.86      | 1.72       | 2.10                   | 2.25      | 2.06       | 2.18                         | 2.27       | 2.33        |

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



### 3.9 Mains Conducted Emissions

#### 3.9.1 Measurement Method

The measurement procedure specified in ANSI C63.4-2003 was used for testing. Conducted Emission was measured with travel charger.

#### 3.9.2 Provisions Applicable

| Frequency of Emission (MHz)                               | Conducted Limit(dBuV) |            |
|---|-----------------------|------------|
|   | Quasi-Peak            | Average    |
| 0.15 – 0.5  | 66 to 56 *            | 56 to 46 * |
| 0.5 – 5   | 56                    | 46         |
| 5 – 30  | 60                    | 50         |
| *Decreases with the logarithm of the frequency.           |                       |            |
| *The lower limit shall apply at the transition frequency. |                       |            |

**Note:** The GSM850 mode is the worst condition and the test result as following:

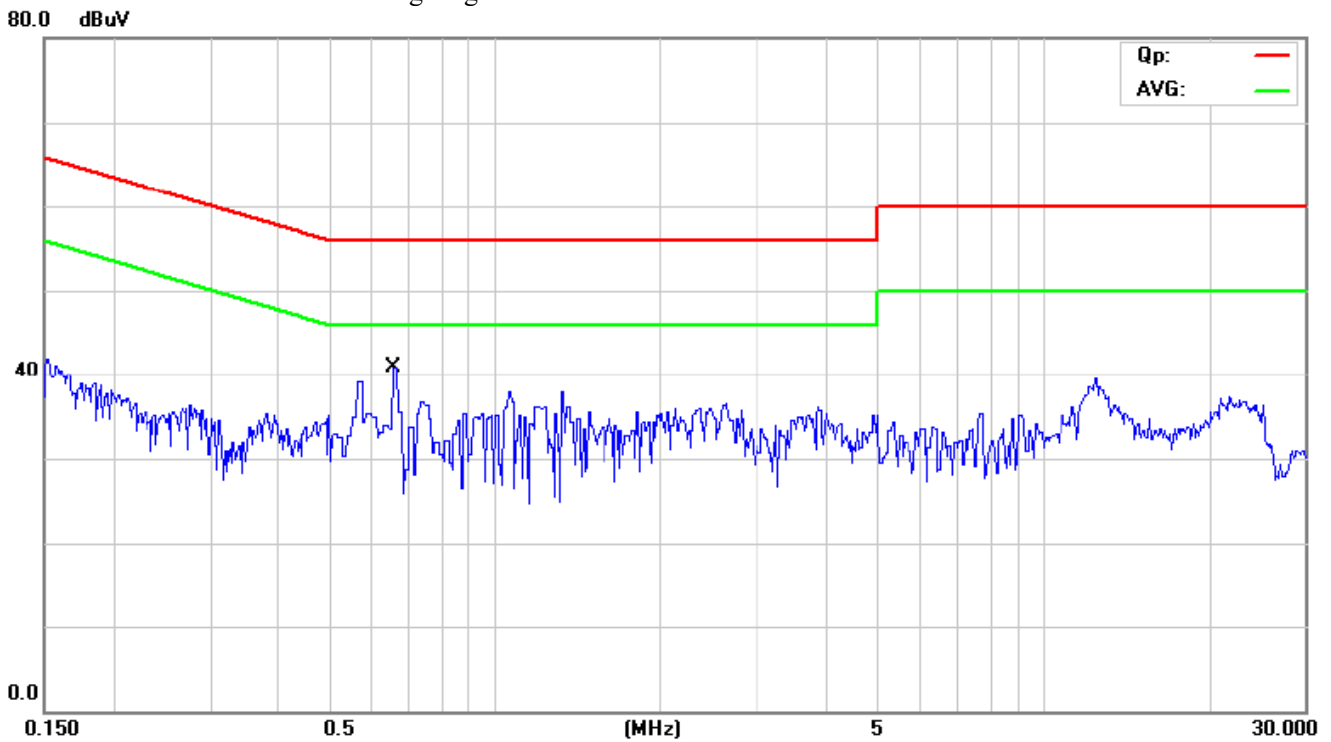
The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



**A: Conducted Emission on Live Terminal (150kHz to 30MHz)**  
**EUT Operating Environment**  
 Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 KPa  
**EUT set Condition: Charging and Communication by GSM850**  
**Equipment Level: Class B**  
**Results: PASS**  
 Please refer to following diagram for individual



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dBuV | Over<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1   | *   | 0.6561       | 20.60                    | 10.47                   | 31.07                    | 56.00         | -24.93     | QP       |         |
| 2   |     | 0.6561       | 0.90                     | 10.47                   | 11.37                    | 46.00         | -34.63     | AVG      |         |

The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



**B: Conducted Emission on Neutral Terminal (150kHz to 30MHz)**

**EUT Operating Environment**

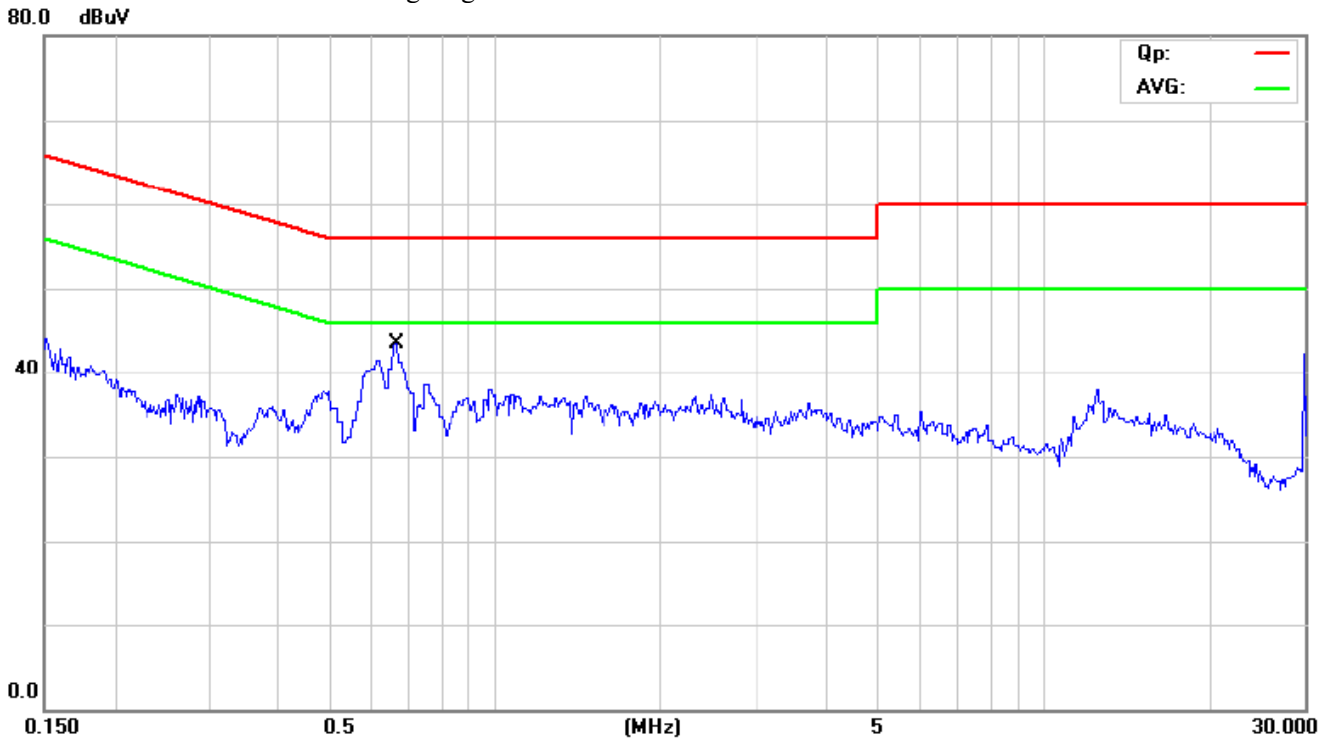
Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Charging and Communication by GSM850**

**Equipment Level: Class B**

**Results: PASS**

Please refer to following diagram for individual



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dBuV | Over<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1   | *   | 0.6586       | 30.50                    | 10.47                   | 40.97                    | 56.00         | -15.03     | QP       |         |
| 2   |     | 0.6586       | -6.90                    | 10.47                   | 3.57                     | 46.00         | -42.43     | AVG      |         |

The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.





#### 4 List of Measuring Equipment

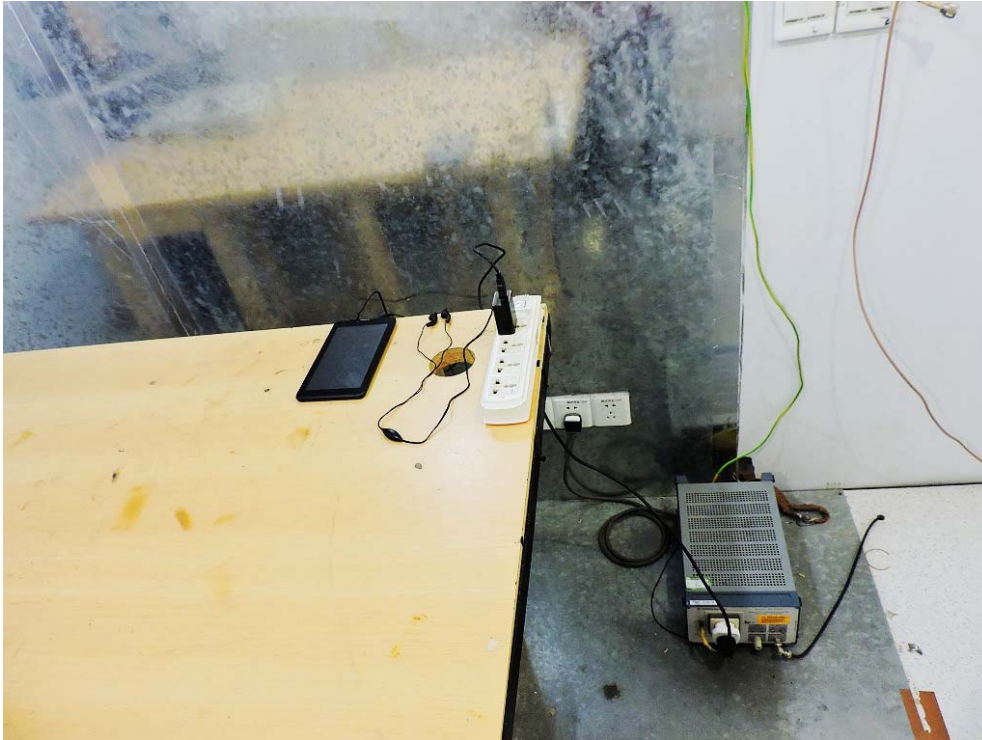
| 2.0 Test Equipments    |              |            |                   |              |            |
|------------------------|--------------|------------|-------------------|--------------|------------|
| Instrument Type        | Manufacturer | Model      | Serial No.        | Date of Cal. | Due Date   |
| ESPI Test Receiver     | R&S          | ESPI 3     | 100379            | 2016-08-22   | 2017-08-21 |
| TWO<br>Line-V-NETW     | R&S          | EZH3-Z5    | 100294            | 2016-08-22   | 2017-08-21 |
| TWO<br>Line-V-NETW     | R&S          | EZH3-Z5    | 100253            | 2016-08-22   | 2017-08-21 |
| Ultra Broadband<br>ANT | R&S          | HL562      | 100157            | 2016-08-23   | 2017-08-22 |
| ESDV Test Receiver     | R&S          | ESDV       | 100008            | 2016-08-22   | 2017-08-21 |
| Impuls-Begrenzer       | R&S          | ESH3-Z2    | 100281            | 2016-08-22   | 2017-08-21 |
| System Controller      | CT           | SC100      | -                 | --           | --         |
| Printer                | EPSON        | PHOTO EX3  | CFNH234850        | --           | --         |
| Computer               | IBM          | 8434       | 1S8434KCE99BLXLO* | -            | -          |
| Loop Antenna           | EMCO         | 6502       | 00042960          | 2016-08-23   | 2017-08-22 |
| ESPI Test Receiver     | R&S          | ESI26      | 838786/013        | 2016-08-22   | 2017-08-21 |
| 3m OATS                | --           | --         | N/A               | 2016-08-24   | 2017-08-23 |
| Horn Antenna           | R&S          | BBHA 9170  | BBHA9170265       | 2016-08-24   | 2017-08-23 |
| Horn Antenna           | R&S          | BBHA 9120D | 9120D-631         | 2016-08-24   | 2017-08-23 |
| Power meter            | Anritsu      | ML2487A    | 6K00003613        | 2016-08-22   | 2017-08-21 |
| Power sensor           | Anritsu      | MA2491A    | 32263             | 2016-08-22   | 2017-08-21 |
| Bilog Antenna          | Schwarebeck  | VULB9163   | 9163/340          | 2016-08-23   | 2017-08-21 |
| LISN                   | AFJ          | LS16C      | 10010947251       | 2016-08-22   | 2017-08-21 |
| LISN (Three Phase)     | Schwarebeck  | NSLK 8126  | 8126453           | 2016-08-23   | 2017-08-22 |
| 9*6*6 Anechoic         | --           | --         | N/A               | 2016-08-24   | 2017-08-23 |
| EMI Test Receiver      | RS           | ESCS30     | 100139            | 2016-08-22   | 2017-08-21 |

The report refers only to the sample tested and does not apply to the bulk.  
 This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



## 5.0 Photographs

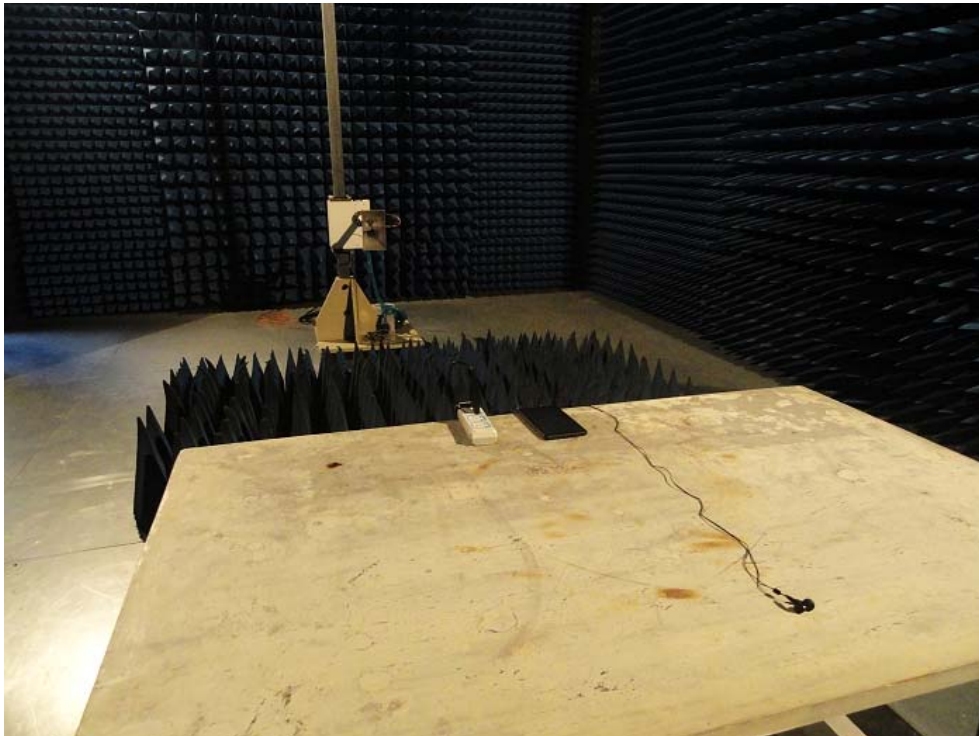
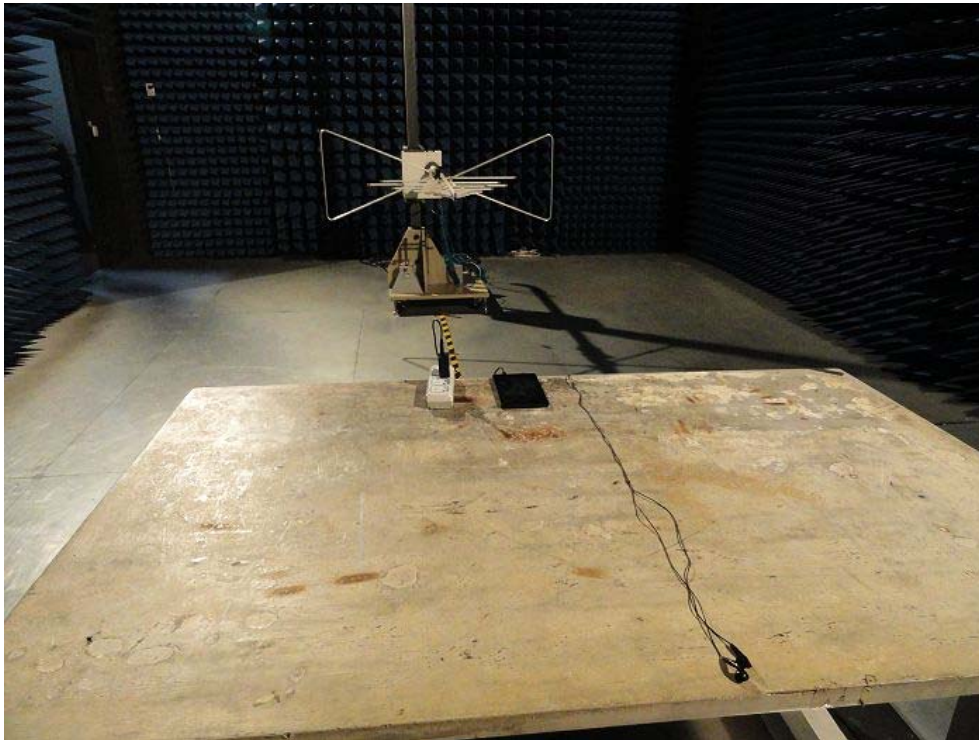
Conducted Emission Test Setup:



The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Radiated Emission Test Setup:



The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced either in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



### Photographs – EUT

Outside view



The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



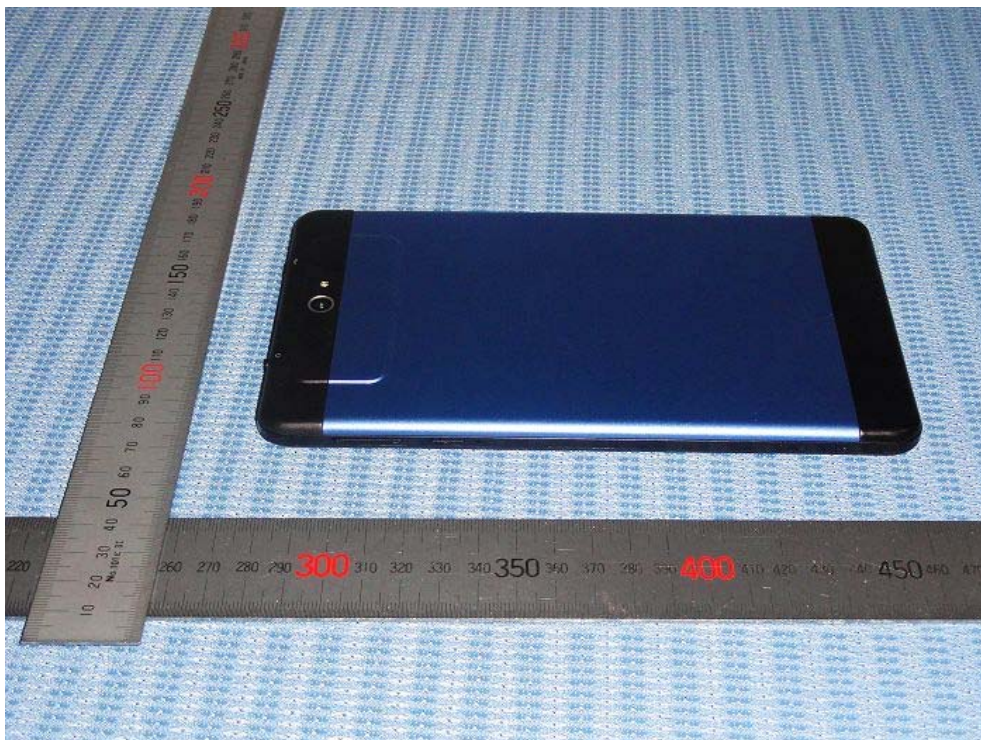
Outside view



The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



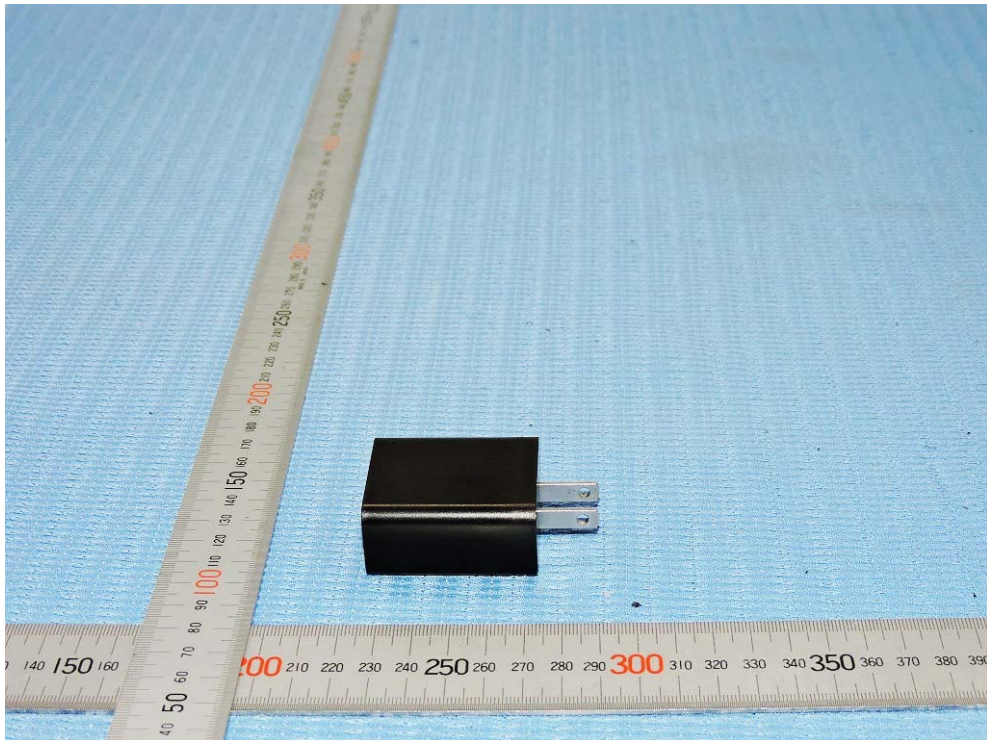
Outside view



The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

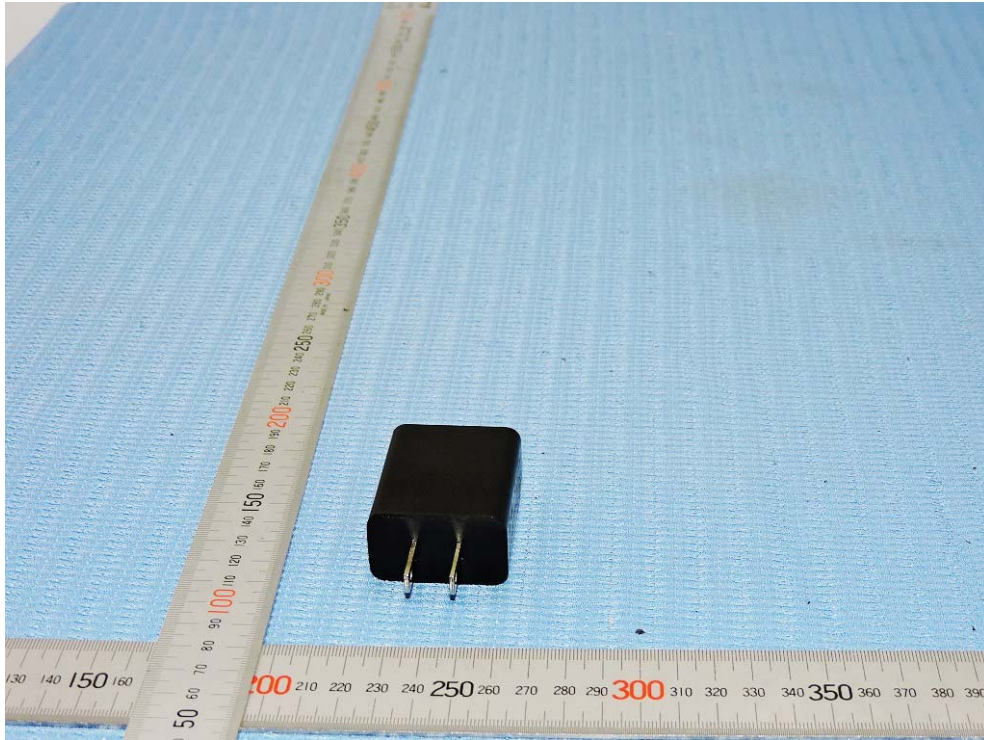


Outside view



The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Outside view

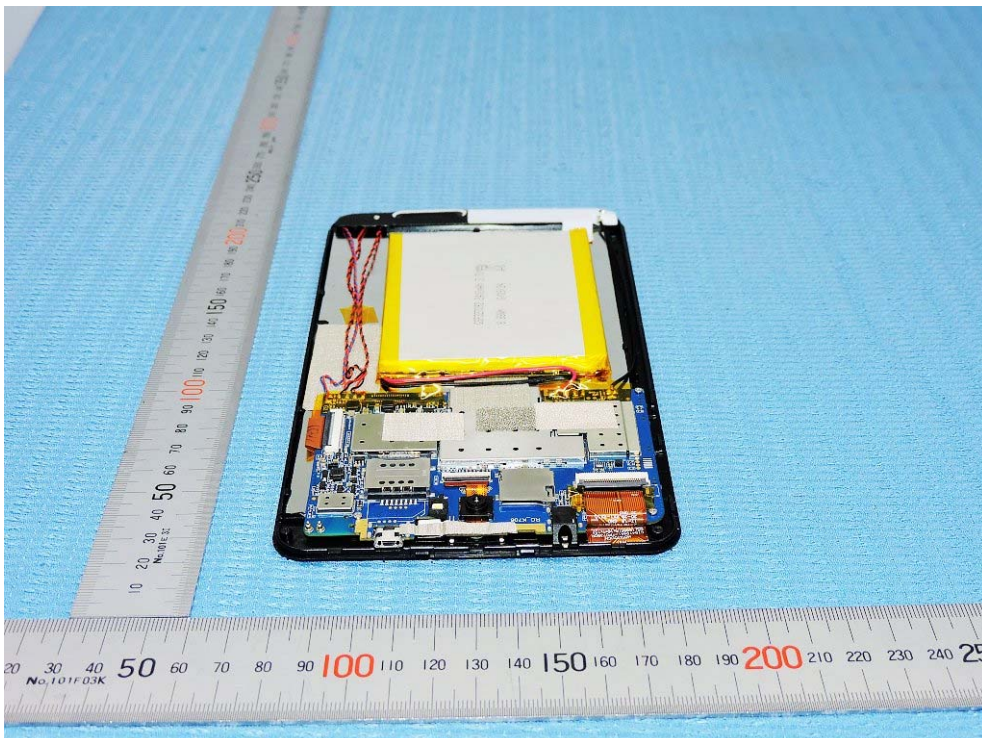


The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.





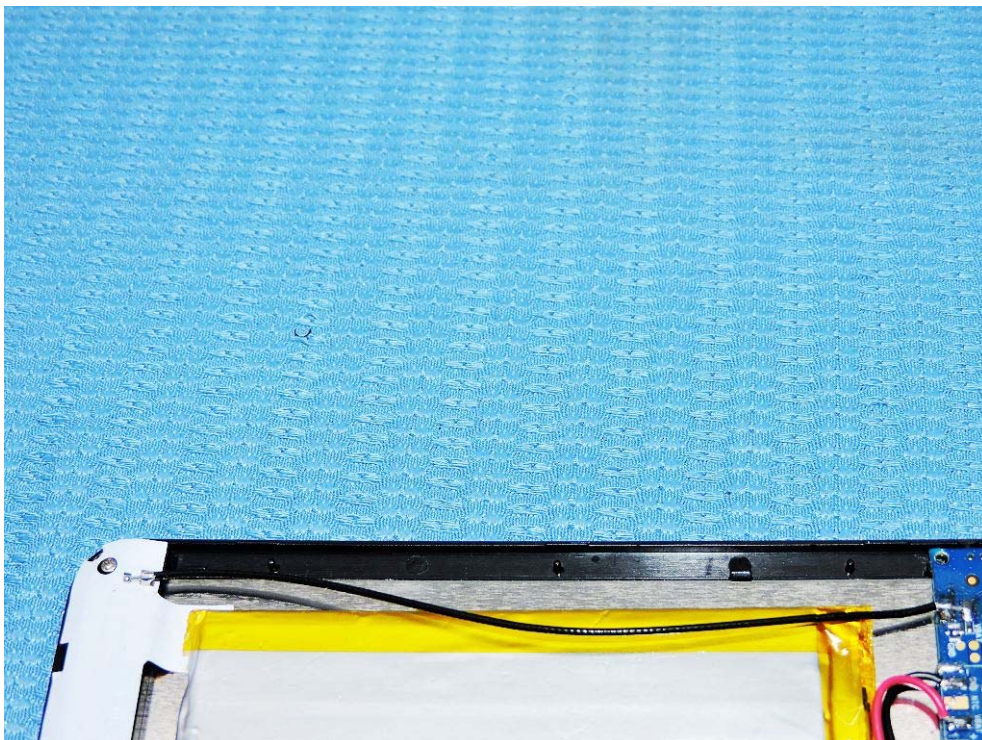
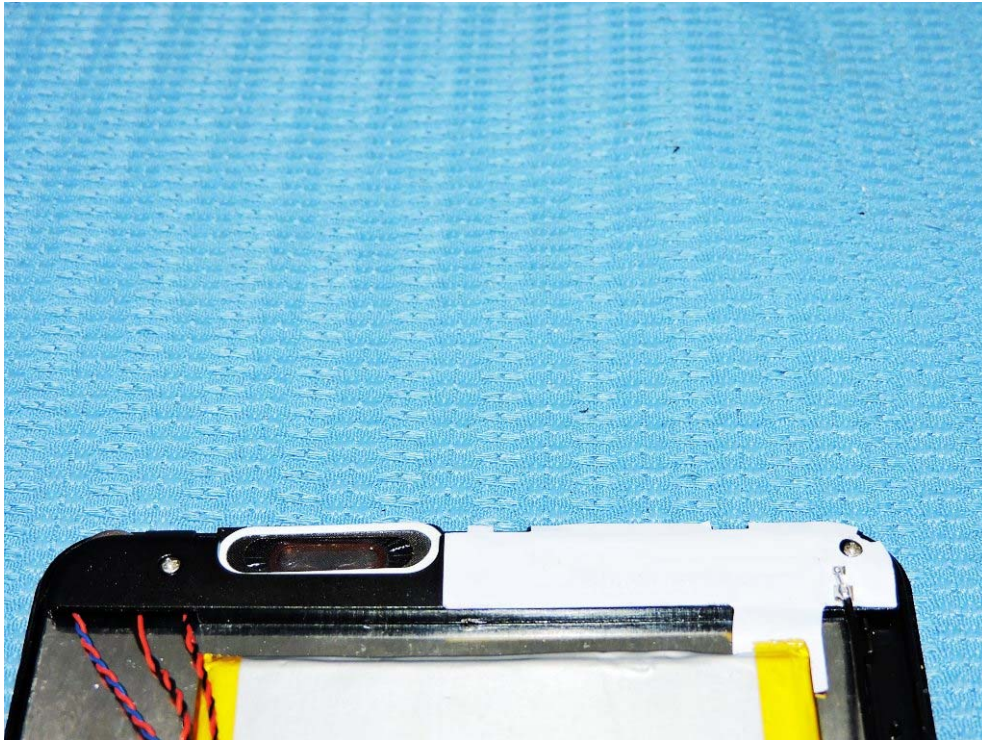
Inside view



The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



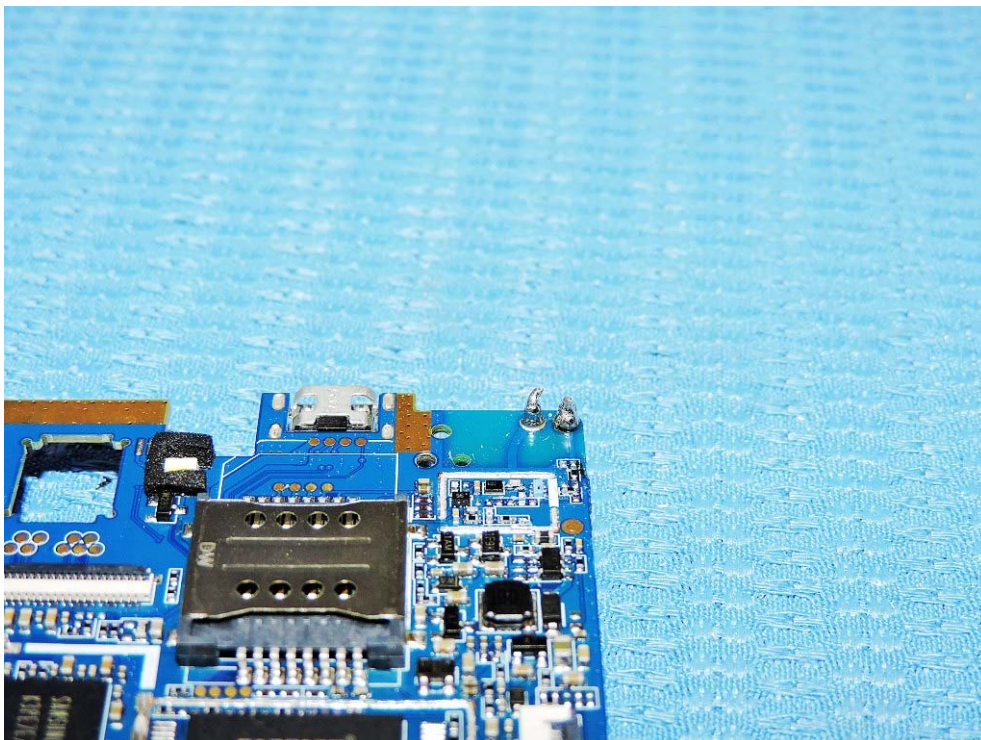
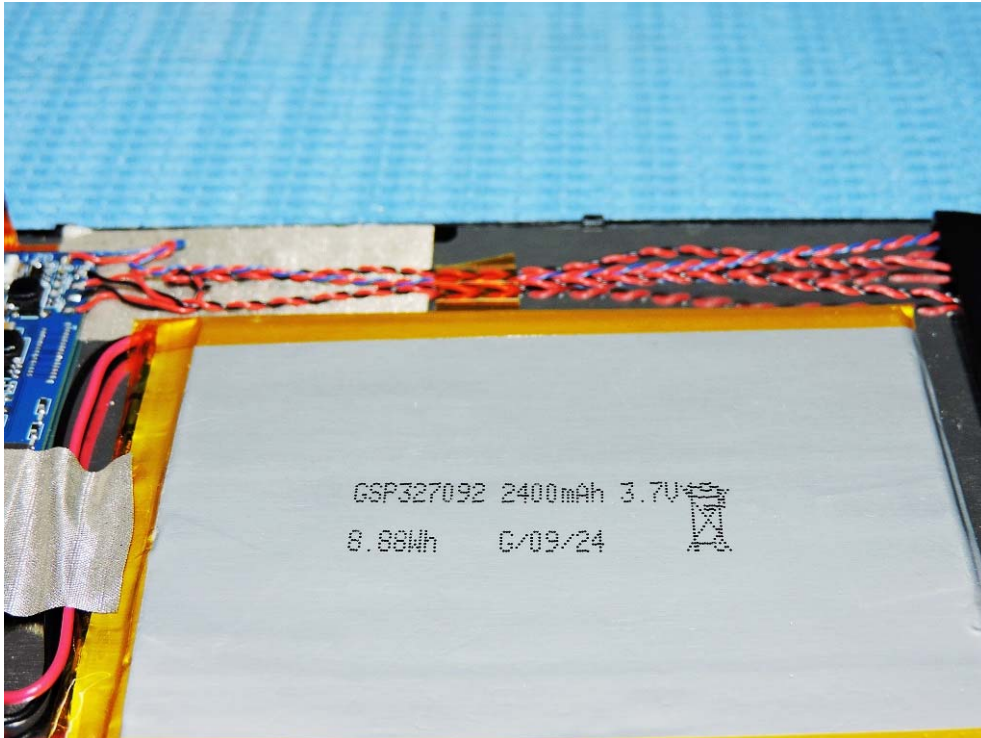
Inside view



The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



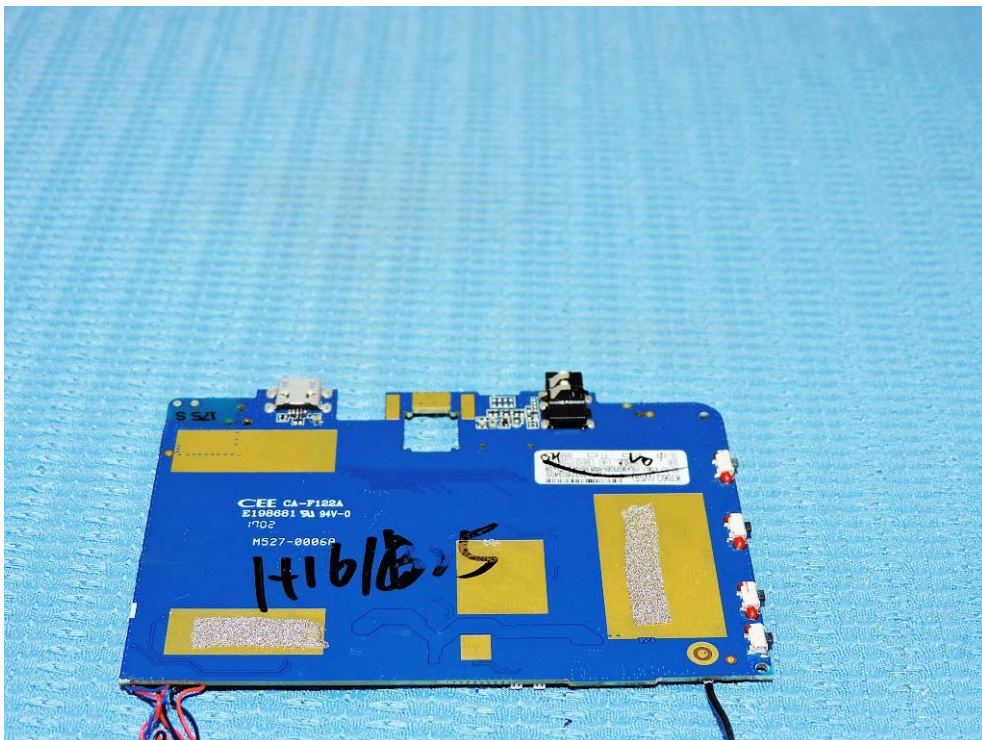
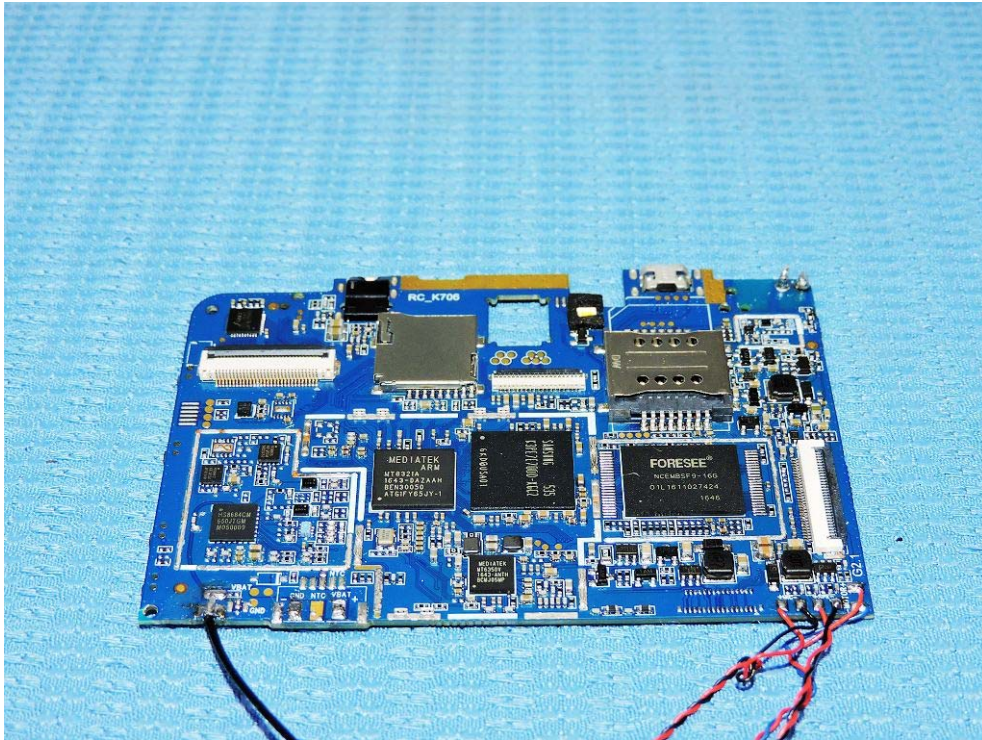
Inside view



The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



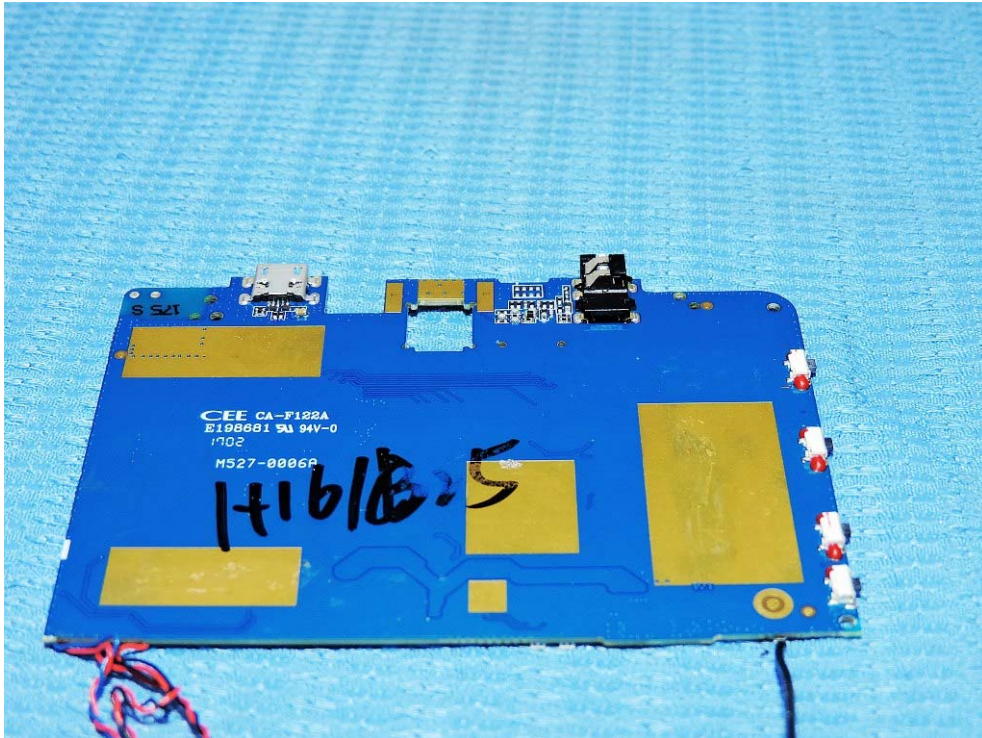
Inside view



The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



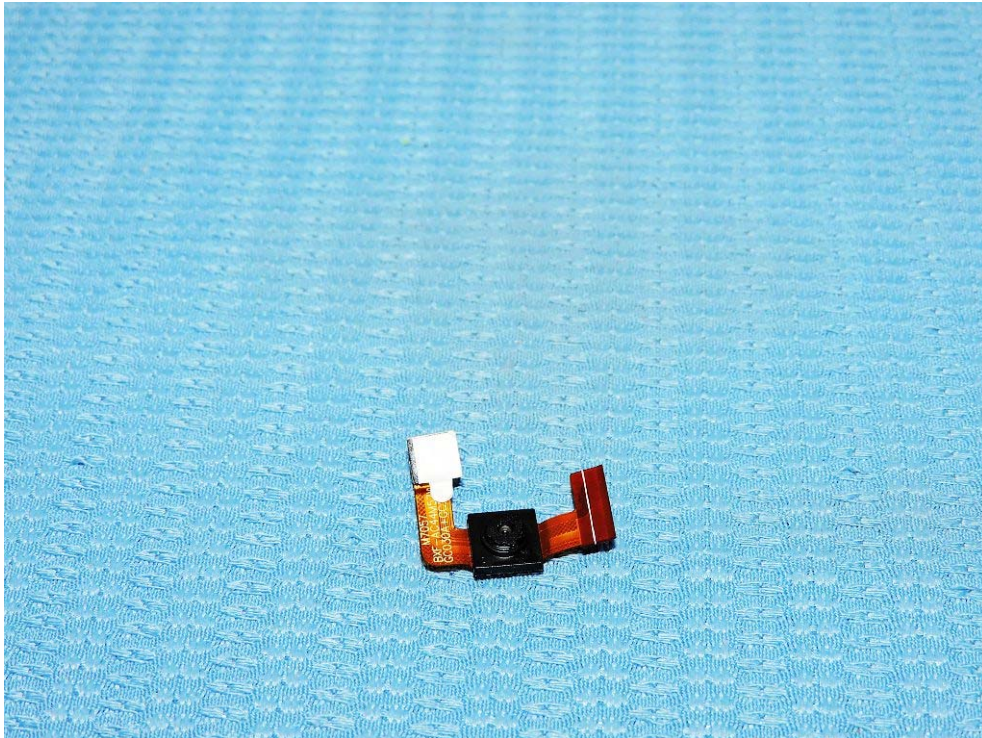
Inside view



The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer. Supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.



Inside view



**End of the report**

The report refers only to the sample tested and does not apply to the bulk.  
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced in its entirety or in part and it may not be used for advertising. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES to his customer, supplier or other persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES will not, without the consent of the client, enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report, the SHENZHEN TIMEWAY TESTING LABORATORIES reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.