



May 23, 2011

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Dear Mr.Guocai Wu:

Enclosed you will find your file copy of an Original Grant of Part 22 and Part 24 Certification report (FCC ID: YROG152I). Model: G152i.

For your reference, TCB will normally take another 2 weeks for reviewing the report. Approval will then be granted when no query is sorted.

Please contact me if you have any questions regarding the enclosed material.

Sincerely,

A handwritten signature in blue ink, appearing to read "Wai Leung".

Leung Wai Leung, Tommy  
Deputy General Manager

Enclosure

**Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch**

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## List of Exhibits

| <b>Exhibit Type</b>     | <b>File Description</b>              | <b>Filename</b>   |
|-------------------------|--------------------------------------|---|
| Test Report             | Test Report                          | report.pdf  |
| Operational Description | Technical Description                | descri.pdf  |
| Test Setup Photo        | Radiated Emission Test Configuration | config photos.pdf   |
| Test Report             | Bandwidth Plot                       | 99% bw.pdf  |
| Test Report             | Spurious Emissions                   | cspurious.pdf   |
| Test Report             | Bandedge Plot                        | be.pdf  |
| RF Exposure Info        | SAR Report                           | sar report 1 of 3.pdf<br>sar report 2 of 3.pdf<br>sar report 3 of 3.pdf |
| Cover Letter            | SAR Justification                    | sar justification.pdf   |
| External Photos         | External Photo                       | external photos.pdf   |
| Internal Photos         | Internal Photo                       | internal photos.pdf   |
| ID Label/Location Info  | Label Artwork and Location           | label.pdf   |
| Cover Letter            | Label Location Justification         | justification.pdf   |
| Block Diagrams          | Block Diagram                        | block.pdf   |
| Schematics              | Circuit Diagram                      | circuit.pdf   |
| User Manual             | User Manual                          | manual.pdf  |
| Part List/Tune Up Info  | Tune Up Procedure                    | tuneup.pdf  |
| Part List/Tune Up Info  | Part List                            | partlist.pdf  |
| Cover Letter            | Letter of Agency                     | letter of agency.pdf  |
| Cover Letter            | Confidentiality Request              | request.pdf   |

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## TEST REPORT

**Report Number: SZ11050102-2**

Application  
for  
Original Grant  
of 47 CFR Part 22 and Part 24 Certification

Mobile Phone with Bluetooth

**FCC ID: YROG152I**

Prepared and Checked by:

Approved by:



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Billy Li  
Project Engineer  
May 23, 2011



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Leung Wai Leung, Tommy  
Deputy General Manager  
May 23, 2011

- The test results reported in this test report shall refer only to the sample actually tested and shall not refer or be deemed to refer to bulk from which such a sample may be said to have been obtained.
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- For Terms And Conditions of the services, it can be provided upon request.
- The evaluation data of the report will be kept for 3 years from the date of issuance.

TRF No.: FCC 22H&24E\_a

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## INTERTEK TESTING SERVICES

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### GENERAL INFORMATION

|                                    |   |
|------------------------------------|---|
| <b>Applicant Name:</b>             | Z.T.S. International Industrial Co., Ltd              |
| <b>Applicant Address:</b>          | 12 BC, Jinrun Building, Chegongmiao,<br>Shennan Road, |
| <b>FCC Specification Standard:</b> | FCC Part 22: 2009<br>FCC Part 24: 2009                |
| <b>FCC ID:</b>                     | YROG152I  |
| <b>FCC Model(s):</b>               | G152i   |
| <b>Type of EUT:</b>                | GSM 850/1900 Transceiver with<br>Bluetooth            |
| <b>Description of EUT:</b>         | Mobile Phone  |
| <b>Serial Number:</b>              | N/A   |
| <b>Sample Receipt Date:</b>        | May 09, 2011  |
| <b>Date of Test:</b>               | May 20, 2011  |
| <b>Report Date:</b>                | May 23, 2011  |
| <b>Environmental Conditions:</b>   | Temperature: 25 ± 10°C<br>Humidity: 10 to 90%         |

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# INTERTEK TESTING SERVICES

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## Appendix – Exhibits for Application of Certification

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## INTERTEK TESTING SERVICES

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### 1.0 Summary of Test Results

| Test Items                                       | FCC Section                          | Results | Details see section |
|--|--------------------------------------|---------|---------------------|
| Channels for Cellular and Broadband PCS Services | 22.905<br>24.229                     | Pass    | 4.1                 |
| RF Output Power                                  | 2.1046<br>22.913<br>24.232           | Pass    | 4.3                 |
| Occupied Bandwidth                               | 2.1049                               | Pass    | 4.4                 |
| Spurious Emissions at Antenna Terminals          | 2.1051<br>2.1057<br>22.917<br>24.238 | Pass    | 4.5                 |
| Power of Spurious Emissions                      | 2.1053<br>2.1057<br>22.917<br>24.238 | Pass    | 4.6                 |
| Blockage at antenna terminal                     | 22.917<br>24.238                     | Pass    | 4.7                 |
| Frequency Stability                              | 2.1055<br>22.355<br>24.235           | Pass    | 4.8                 |
| RF Exposure                                      | 1.1307<br>2.1093                     | Pass    | 4.9                 |

### 1.1 Statement of Compliance

The equipment under test is found to be complying with the applicable requirements of following standards:

FCC Part 22: 2009  
FCC Part 24: 2009

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### 2.0 General Description

#### 2.1 Product Description

The G152i is a Mobile Phone with Bluetooth.

The Cellular radiotelephone service and personal communications services frequency ranges of the EUT are as below:

##### GSM 850MHz:

Tx: 824.20 - 848.80MHz (at intervals of 200kHz)

Rx: 869.20 - 893.80MHz (at intervals of 200kHz)

##### GSM 1900MHz:

Tx: 1850.20 - 1909.80MHz (at intervals of 200kHz)

Rx: 1930.20 - 1989.80MHz (at intervals of 200kHz)

The EUT is powered by a Lithium type rechargeable battery pack (3.7VDC).

The antenna used in the EUT is integral, and the test sample is a prototype.

The circuit description is attached in the Appendix and saved with filename: descri.pdf.

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### 2.3 Test Methodology

Preliminary radiated scans and all radiated measurements were performed in semi-anechoic chamber. All Radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "**Justification Section**" of this Application. All measurements were made in accordance with the procedures in 47 CFR Part 2, Part 22, Part 24 and TIA-603-C.

### 2.4 Test Facility

The facilities used to collect the radiated data and conducted data are in **Interterk Testing Services Shenzhen Ltd. Kejiyuan Branch** and located at 6F, D Block, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China. This test facility and site measurement data have been fully placed on file with the FCC.



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### 3.0 **System Test Configuration**

#### 3.1 Justification

For radiated emissions testing, the equipment under test (EUT) was controlled by communication tester to produce maximum power. Care was taken to ensure proper power supply voltages during testing. During testing, all cables (if any) were manipulated to produce worst case emissions.

The EUT was powered by a Lithium type rechargeable battery (3.7VDC, 800mAh )

For the measurements, the EUT is attached to a plastic stand if necessary and placed on the wooden turntable. If the EUT attaches to peripherals, they are connected and operational to simulate typical use.

The signal is maximized through rotation and placement in the three orthogonal axes. The antenna polarization are varied during the search for maximum signal level. Only the worst-case polarization is reported. For each spurious, raise and lower the test antenna from 1m to 4m to obtain a maximum reading on the spectrum analyzer. Radiated emissions are taken at three meters. If necessary, a pre-amplifier is used and/or the test is conducted at a closer distance.

The power level of EUT is set by the communication tester as follows:

850MHz band: Power Control Level (PCL) = 5 (Power class 4)

1900MHz band: Power Control Level (PCL) = 0 (Power class 1)

Which are the maximum power levels emitted by the EUT.

For the 850MHz band, according to 22.917, compliance with the rule is based on the use of instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter is employed. The 26dB emission bandwidth taken in section 4.4 is used for calculating the resolution bandwidth.

For the 1900MHz band, according to 24.238, compliance with the rule is based on the use of instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter is employed. The 26dB emission bandwidth taken in section 4.4 is used for calculating the resolution bandwidth.

Emission that are directly caused by digital circuits in the transmit path and transmitter portion are measured, and the limit are according to FCC Part 15 Section 15.109.

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### 3.1 Justification - Cont'd

Detector function for radiated emissions is in peak mode.

All relevant operation modes have been tested, and the worst case data is included in this report.

Simultaneous transmission (Bluetooth in this case) was investigated and no new emissions were found.

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### 3.2 Details of EUT and Description of Accessories

#### Details of EUT:

A battery (provided with the unit) was used to power the device. Their description are listed below.

- (1) Handset: A Lithium type rechargeable battery (3.7VDC, 800mAh) (Supplied by Client).

#### Description of Accessories:

- (1) A headset for telephone use with 1.2m unshielded cable (Supplied by Client).
- (2) Charger: An AC adaptor (100-240VAC to 5.0 VDC, 450mA, Model: CM-2.0A) (Supplied by Client).

### 3.3 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty of test has been considered.

Uncertainty and Compliance - Unless the standard specifically states that measured values are to be extended by the measurement uncertainty in determining compliance, all compliance determinations are based on the actual measured value.

### 3.4 Equipment Modification

Any modifications installed previous to testing by Z.T.S. International Industrial Co., Ltd will be incorporated in each production model sold/leased in the United States.

No modifications were installed by Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch.

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### 4.0 Test Results

Data is included of the worst case configuration (the configuration which resulted in the highest emission levels). Configuration photographs and data tables of the emissions are included.

#### 4.1 Channels for Cellular and Broadband PCS Services (FCC Part 22.905, Part 24.229)

The following frequency bands are allocated for assignment to service providers in the Cellular Radiotelephone and Broadband PCS Services by FCC:

##### 850MHz band

###### (a) Channel Block A:

869 - 880 MHz paired with 824 - 835 MHz

890 - 891.5 MHz paired with 845 - 846.5 MHz

###### (b) Channel Block B:

880 - 890 MHz paired with 835 - 845 MHz

891.5 - 894 MHz paired with 846 - 849 MHz

##### 1900MHz band

The following frequency blocks are available for assignment on a Major Trading Areas (MTA) basis:

Block A: 1850 - 1865 MHz paired with 1930 - 1945 MHz; and

Block B: 1870 - 1885 MHz paired with 1950 - 1965 MHz.

The following frequency blocks are available for assignment on a Basic Trading Areas (BTA) basis:

Block C: 1895 - 1910 MHz paired with 1975 - 1990 MHz

Block D: 1865 - 1870 MHz paired with 1945 - 1950 MHz

Block E: 1885 - 1890 MHz paired with 1965 - 1970 MHz

Block F: 1890 - 1895 MHz paired with 1970 - 1975 MHz

The frequency range of the EUT is as below:

##### GSM 850MHz:

Tx: 824.20 - 848.80MHz (at intervals of 200kHz)

Rx: 869.20 - 893.80MHz (at intervals of 200kHz)

##### GSM 1900MHz:

Tx: 1850.20 - 1909.80MHz (at intervals of 200kHz)

Rx: 1930.20 - 1989.80MHz (at intervals of 200kHz)

As a result, the frequency range of the EUT fits into the allocated frequency blocks.

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### 4.2 RF Power Output (FCC Part 2.1046, 22.913 & 24.232 )

The RF power output is measured at the RF output terminal. The limit is as follows:

Part 22.913 (for 850MHz band):

[ ] ≤ 500W ERP (57dBm) for base stations and cellular repeaters

[√] ≤ 7W ERP (38.5dBm) for mobile and auxiliary test transmitters

Part 24.232 (for 1900MHz band):

[ ] ≤ 1640W e.i.r.p. (62.1dBm) for base stations up to 300m HAAT;

[√] ≤ 2W e.i.r.p. (33dBm) peak output power for portable mobile

Test results:

| Band        | ARFCN | Frequency (MHz) | Antenna Gain (dBi) | Measured output power (dBm) | *ERP (dBm) | Limit (dBm) | Verdict |
|-------------|-------|-----------------|--------------------|-----------------------------|------------|-------------|---------|
| GSM 850MHz  | 190   | 836.6           | 1.0                | 33.00                       | 31.85      | 38.5        | PASS    |
| GPRS 850MHz | 190   | 836.6           | 1.0                | 33.09                       | 31.94      | 38.5        | PASS    |

| Band         | ARFCN | Frequency (MHz) | Antenna Gain (dBi) | Measured output power (dBm) | #EIRP (dBm) | Limit (dBm) | Verdict |
|--------------|-------|-----------------|--------------------|-----------------------------|-------------|-------------|---------|
| GSM 1900MHz  | 661   | 1880.0          | 1.0                | 29.35                       | 30.35       | 33.0        | PASS    |
| GPRS 1900MHz | 661   | 1880.0          | 1.0                | 29.47                       | 30.47       | 33.0        | PASS    |

\*ERP (dBm) = Conducted Power (dBm) + Antenna Gain (dBi) - 2.15dB

#EIRP (dBm) = Conducted Power (dBm) + Antenna Gain (dBi)

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### 4.3 Occupied Bandwidth (FCC Part 2.1049)

From 2.1049, occupied bandwidth is defined as the measured spectral width of an emission. The measurement determines occupied bandwidth as the difference between upper and lower frequencies where 0.5% of the emission power is above the upper frequency and 0.5% of the emission power is below the lower frequency.

The 26dB bandwidth is also recorded to determine the resolution bandwidth used in measurements, as specified in 22.917 and 24.238.

Test results:

| Band         | ARFCN | Frequency (MHz) | 99% Bandwidth (kHz) | 26dB Bandwidth (kHz) |
|--------------|-------|-----------------|---------------------|----------------------|
| GSM 850MHz   | 190   | 836.6           | 245                 | 291                  |
| GSM 1900MHz  | 661   | 1880.0          | 245                 | 293                  |
| GPRS 850MHz  | 190   | 836.6           | 245                 | 292                  |
| GPRS 1900MHz | 661   | 1880.0          | 245                 | 294                  |

The plots of 99% bandwidth are saved in the file 99% bw.pdf.

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### 4.4 Spurious Emissions at Antenna Terminals (FCC Part 22.1051, 2.1057, 22.917, 24.238)

The conducted spurious emission is measured from 9kHz up to the 10<sup>th</sup> harmonic of fundamental emission.

According to 22.917 and 24.238, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10\log(P)$  dB, i.e. at or below -13dBm.

Test results:

| Band         | ARFCN | Channel Frequency (MHz) | Verdict |
|--------------|-------|-------------------------|---------|
| GSM 850MHz   | 190   | 836.6                   | PASS    |
| GSM 1900MHz  | 661   | 1880.0                  | PASS    |
| GPRS 850MHz  | 190   | 836.6                   | PASS    |
| GPRS 1900MHz | 661   | 1880.0                  | PASS    |

The plots are saved in the file cspurious.pdf.

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### 4.5 Power of Spurious Emissions (FCC Part 2.1053, 2.1057, 22.917, 24.238)

The radiated spurious emissions are measured from 30MHz up to the 10<sup>th</sup> harmonic of fundamental emission.

According to 22.917, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10\log(P)$  dB, i.e. at or below -13dBm.

Test results:

GSM 850MHz (ARFCN = 190, Channel frequency = 836.6MHz):

| Polarization | Frequency (MHz) | Measured ERP (dBm) | Limit ERP (dBm) | Margin (dB) |
|--------------|-----------------|--------------------|-----------------|-------------|
| V            | \               | \                  | \               | \           |
| H            | \               | \                  | \               | \           |

GSM 1900MHz (ARFCN = 661, Channel frequency = 1880.0MHz):

| Polarization | Frequency (MHz) | *Measured ERP (dBm) | *Calculated EIRP (dBm) | Limit EIRP (dBm) | Margin (dB) |
|--------------|-----------------|---------------------|------------------------|------------------|-------------|
| H            | \               | \                   | \                      | \                | \           |
| V            | \               | \                   | \                      | \                | \           |

\*EIRP = ERP+2.15dB



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GPRS 850MHz (ARFCN = 190, Channel frequency = 836.6MHz):

| Polarization | Frequency (MHz) | Measured ERP (dBm) | Limit ERP (dBm) | Margin (dB) |
|--------------|-----------------|--------------------|-----------------|-------------|
| H            | \               | \                  | \               | \           |
| V            | \               | \                  | \               | \           |

GPRS 1900MHz (ARFCN = 661, Channel frequency = 1880.0MHz):

| Polarization | Frequency (MHz) | *Measured ERP (dBm) | *Calculated EIRP (dBm) | Limit EIRP (dBm) | Margin (dB) |
|--------------|-----------------|---------------------|------------------------|------------------|-------------|
| H            | \               | \                   | \                      | \                | \           |
| V            | \               | \                   | \                      | \                | \           |

\*EIRP = ERP+2.15dB

Remarks: the magnitudes of spurious emission which are attenuated more than 20 dB below the permissible value are not reported.

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### 4.6 Blockage at Antenna Terminals (FCC Part 22.917, 24.238)

In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter is employed. The 26dB emission bandwidth taken in section 4.4 is used for calculating the resolution bandwidth.

The power of any emission at the blockage must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10\log(P)$  dB, i.e. at or below -13dBm.

#### Test results:

| Band         | ARFCN | Channel Frequency (MHz) | Worst case bandedge emission (dBm) | Limit (dBm) | Verdict |
|--------------|-------|-------------------------|------------------------------------|-------------|---------|
| GSM 850MHz   | 128   | 824.2                   | -13.91                             | -13         | PASS    |
|              | 251   | 848.8                   | -14.60                             | -13         | PASS    |
| GSM 1900MHz  | 512   | 1850.2                  | -17.50                             | -13         | PASS    |
|              | 810   | 1909.8                  | -15.94                             | -13         | PASS    |
| GPRS 850MHz  | 128   | 824.2                   | -14.18                             | -13         | PASS    |
|              | 251   | 848.8                   | -15.49                             | -13         | PASS    |
| GPRS 1900MHz | 512   | 1850.2                  | -18.03                             | -13         | PASS    |
|              | 810   | 1909.8                  | -15.91                             | -13         | PASS    |

The plots are saved in the file be.pdf.

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### 4.7 Frequency Stability (FCC Part 2.1055, 22.355, 24.235)

The frequency stability is measured with the temperature variation range of -30°C to +50°C (10°C increment), and voltage supply variation range of 85% to 115% of nominal AC supply voltage, and/or nominal to battery end points for hand-carried battery-powered supplies.

[ ] AC nominal supply voltage: 120VAC

[√] Battery nominal voltage: 3.7 VDC; End points: 3.6 VDC

20°C is taken as temperature in normal condition.

For the 850MHz band, according to 22.355, the stability requirements are: ±1.5ppm for mobile units and ±2.5ppm for portable units.

For the 1900MHz band, according to 24.235, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test results:

GSM 850MHz (AFRCN = 190, Channel frequency = 836.6MHz):

| Input voltage (VDC) | Temperature (°C) | Frequency deviation (Hz) | Limit (Hz) | Limit (ppm) | Verdict |
|---------------------|------------------|--------------------------|------------|-------------|---------|
| 3.7                 | -30              | 11                       | ±2091.5    | ±2.5        | PASS    |
|                     | -20              | 13                       |            |             | PASS    |
|                     | -10              | 8                        |            |             | PASS    |
|                     | 0                | 11                       |            |             | PASS    |
|                     | +10              | 15                       |            |             | PASS    |
|                     | +20              | 12                       |            |             | PASS    |
|                     | +30              | 10                       |            |             | PASS    |
|                     | +40              | 13                       |            |             | PASS    |
|                     | +50              | 9                        |            |             | PASS    |
| 3.6                 | +20              | 14                       |            |             | PASS    |

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GSM 1900MHz (AFRCN = 512, Channel frequency = 1850.2MHz):

| Input voltage (VDC) | Temperature (°C) | Frequency deviation (Hz) | Limit (Hz) | Limit (ppm) | Verdict |
|---------------------|------------------|--------------------------|------------|-------------|---------|
| 3.7                 | -30              | 13                       | 4625.5     | ±2.5        | PASS    |
|                     | -20              | 15                       |            |             | PASS    |
|                     | -10              | 11                       |            |             | PASS    |
|                     | 0                | 10                       |            |             | PASS    |
|                     | +10              | 9                        |            |             | PASS    |
|                     | +20              | 15                       |            |             | PASS    |
|                     | +30              | 16                       |            |             | PASS    |
|                     | +40              | 15                       |            |             | PASS    |
|                     | +50              | 11                       |            |             | PASS    |
| 3.6                 | +20              | 10                       |            |             | PASS    |

GSM 1900MHz (AFRCN = 810, Channel frequency = 1909.8MHz):

| Input voltage (VDC) | Temperature (°C) | Frequency deviation (Hz) | Limit (Hz) | Limit (ppm) | Verdict |
|---------------------|------------------|--------------------------|------------|-------------|---------|
| 3.7                 | -30              | 12                       | 4772       | ±2.5        | PASS    |
|                     | -20              | 10                       |            |             | PASS    |
|                     | -10              | 11                       |            |             | PASS    |
|                     | 0                | 10                       |            |             | PASS    |
|                     | +10              | 15                       |            |             | PASS    |
|                     | +20              | 10                       |            |             | PASS    |
|                     | +30              | 9                        |            |             | PASS    |
|                     | +40              | 6                        |            |             | PASS    |
|                     | +50              | 9                        |            |             | PASS    |
| 3.6                 | +20              | 10                       |            |             | PASS    |

GPRS 850MHz (AFRCN = 190, Channel frequency = 836.6MHz):

| Input voltage (VDC) | Temperature (°C) | Frequency deviation (Hz) | Limit (Hz) | Limit (ppm) | Verdict |
|---------------------|------------------|--------------------------|------------|-------------|---------|
| 3.7                 | -30              | 13                       | ±2091.5    | ±2.5        | PASS    |
|                     | -20              | 5                        |            |             | PASS    |
|                     | -10              | -6                       |            |             | PASS    |
|                     | 0                | 8                        |            |             | PASS    |
|                     | +10              | 7                        |            |             | PASS    |
|                     | +20              | 10                       |            |             | PASS    |
|                     | +30              | 13                       |            |             | PASS    |
|                     | +40              | -11                      |            |             | PASS    |
|                     | +50              | -10                      |            |             | PASS    |
| 3.6                 | +20              | -6                       |            |             | PASS    |

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## INTERTEK TESTING SERVICES

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GPRS 1900MHz (AFRCN = 512, Channel frequency = 1850.2MHz):

| Input voltage (VDC) | Temperature (°C) | Frequency deviation (Hz) | Limit (Hz) | Limit (ppm) | Verdict |
|---------------------|------------------|--------------------------|------------|-------------|---------|
| 3.7                 | -30              | -10                      | 4625.5     | ±2.5        | PASS    |
|                     | -20              | -13                      |            |             | PASS    |
|                     | -10              | -11                      |            |             | PASS    |
|                     | 0                | -12                      |            |             | PASS    |
|                     | +10              | -15                      |            |             | PASS    |
|                     | +20              | -12                      |            |             | PASS    |
|                     | +30              | -14                      |            |             | PASS    |
|                     | +40              | -18                      |            |             | PASS    |
|                     | +50              | -10                      |            |             | PASS    |
| 3.6                 | +20              | -13                      |            |             | PASS    |

GPRS 1900MHz (AFRCN = 810, Channel frequency = 1909.8MHz):

| Input voltage (VDC) | Temperature (°C) | Frequency deviation (Hz) | Limit (Hz) | Limit (ppm) | Verdict |
|---------------------|------------------|--------------------------|------------|-------------|---------|
| 3.7                 | -30              | -13                      | 4772       | ±2.5        | PASS    |
|                     | -20              | -15                      |            |             | PASS    |
|                     | -10              | -17                      |            |             | PASS    |
|                     | 0                | -10                      |            |             | PASS    |
|                     | +10              | -10                      |            |             | PASS    |
|                     | +20              | -10                      |            |             | PASS    |
|                     | +30              | -15                      |            |             | PASS    |
|                     | +40              | -13                      |            |             | PASS    |
|                     | +50              | -15                      |            |             | PASS    |
| 3.6                 | +20              | -12                      |            |             | PASS    |

## INTERTEK TESTING SERVICES

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### 4.8 Radio Frequency Exposure Compliance

EUT is subject to the radio frequency exposure requirements specified in FCC Rule § 1.1307(b), 2.1093. It shall be considered to operate in a “general population / uncontrolled” environment.

- [ x ] Portable unit: EUT was evaluated for Specific Absorption Rate (SAR) evaluation compliance according to OET Bulletin 65, Supplement C (Edition 01-01). It is in compliance with the SAR evaluation requirements. The caution statement is saved as filename: RF exposure info.pdf. A SAR test report was submitted at same time and saved as SAR Report.pdf.
- [ ] Mobile unit: EUT was evaluated for Maximum Permissible Exposure (MPE) evaluation compliance according to OET Bulletin 65(Edition 97-01). The evaluation calculation results are saved as filename: RF exposure info.pdf.

## INTERTEK TESTING SERVICES

### 5.0 Equipment List

|                      |                  |               |                   |
|----------------------|------------------|---------------|-------------------|
| Equipment            | BiConLog Antenna | Horn Antenna  | EMI Test Receiver |
| Registration No.     | SZ061-03         | SZ061-08      | SZ185-02          |
| Manufacturer         | ETS              | ETS           | R&S               |
| Model No.            | 3142C            | 3115          | ESCI              |
| Calibration Date     | Nov. 25, 2009    | Mar. 15, 2010 | Nov. 12, 2010     |
| Calibration Due Date | May. 25, 2011    | Sep. 15, 2011 | Nov. 12, 2011     |

|                      |                   |                   |                                      |
|----------------------|-------------------|-------------------|--------------------------------------|
| Equipment            | EMI Test Receiver | Spectrum Analyzer | Universal Radio Communication Tester |
| Registration No.     | SZ185-01          | SZ056-03          | SZ065-1                              |
| Manufacturer         | R&S               | R&S               | R&S                                  |
| Model No.            | ESCI              | FSP30             | CMU200                               |
| Calibration Date     | Mar 08, 2011      | Mar. 08, 2011     | June. 23, 2011                       |
| Calibration Due Date | Mar 08, 2012      | Mar. 08, 2012     | June. 23, 2012                       |

|                      |                |                                |                  |
|----------------------|----------------|--------------------------------|------------------|
| Equipment            | RF Power Meter | Temperature & Humidity Chamber | Roberts Antennas |
| Registration No.     | SZ182-01       | SZ016-02                       | EW-0159          |
| Manufacturer         | BOONTON        | Dongzhix                       | CDI              |
| Model No.            | 4232A          | WGD/SJ-415-A                   | A100             |
| Calibration Date     | Mar 08, 2011   | 12-Nov-2010                    | 13-May-2011      |
| Calibration Due Date | Mar 08, 2012   | 12-Nov-2011                    | 13-May-2012      |

|                      |               |                         |                 |
|----------------------|---------------|-------------------------|-----------------|
| Equipment            | Notch Filter  | Notch Filter            | Highpass Filter |
| Registration No.     | SZ067-05      | SZ067-08                | SZ067-11        |
| Manufacturer         | Micro-Tronics | Wainwright              | Wainwright      |
| Model No.            | BRM50707-02   | WRCT800/960-0.2/40-8SSK | WHKX1.0/15G-10S |
| Calibration Date     | 25-Mar-2011   | 1-Mar-2011              | 15-Jul-2010     |
| Calibration Due Date | 25-Sep-2011   | 1-Sep-2011              | 15-Jul-2011     |

**END OF TEST REPORT**

## **INTERTEK TESTING SERVICES**

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### **APPENDIX EXHIBITS OF APPLICATION FOR CERTIFICATION**