

## TEST REPORT

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Report No.: SRMC2009-H024-E0024

Product Name: CDMA 1X Digital Fixed Wireless Phone

Product Model: ZTE WF832

Applicant: ZTE Corporation

Manufacturer: ZTE Corporation

Specification: FCC Part15B July 10, 2008 (Verification)

FCC ID: Q78-ZTEWF832

The State Radio Monitoring Center

State Radio Spectrum Monitoring and Testing Center

No.80 Beilishi Road Xicheng District Beijing, China

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## 1. General information

### 1.1 Notes of the test report

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The test results relate only to individual items of the samples which have been tested.

### 1.2 Information about the testing laboratory

Company: The State Radio Monitoring Center  
State Radio Spectrum Monitoring and Testing Center  
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### 1.3 Applicant's details

Company: ZTE Corporation  
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City: Xi'an  
Country or Region: P.R.China  
Grantee Code: Q78  
Contacted person: Li Dezi  
Tel: +86-29-88723223  
Fax: +86-29-88723249  
Email: li.dezi@zte.com.cn

### 1.4 Manufacturer's details

Company: ZTE Corporation  
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City: Xi'an  
Country or Region: P.R.China  
Grantee Code: Q78  
Contacted person: Li Dezi  
Tel: +86-29-88723223  
Fax: +86-29-88723249  
Email: li.dezi@zte.com.cn

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## 1.5 Application details

Date of reception of test sample: 17<sup>th</sup> Aug 2009

Date of test: 24<sup>th</sup> Aug 2009 to 27<sup>th</sup> Aug 2009

## 1.6 Reference specification

FCC Part 15B July 10, 2008 (Verification)

## 1.7 Information of EUT

### 1.7.1 General information

|                            |                                      |
|----------------------------|--------------------------------------|
| Name of EUT                | CDMA 1X Digital Fixed Wireless Phone |
| FCC ID                     | Q78-ZTEWF832                         |
| Frequency range            | Tx:824~849MHz<br>Rx:869~894MHz       |
| Rated output power         | 24.0dBm                              |
| E.R.P.                     | 21.6dBm                              |
| Modulation type            | OQPSK                                |
| Emission Designator        | 1M25F9W                              |
| Duplex mode                | FDD                                  |
| Equipment Class            | Class B                              |
| Duplex spacing             | 45MHz                                |
| Antenna type               | External                             |
| Power Supply               | Battery or charger                   |
| Rated Power Supply Voltage | 7.2V                                 |
| Extreme Temperature        | Lowest: -30°C<br>Highest: +50°C      |
| Extreme Voltage            | Minimum: 7.5V<br>Maximum: 8.5V       |
| HW Version                 | f60A                                 |
| SW Version                 | YERP_WF832FHQ2V1.0.0B02              |

### 1.7.2 EUT details

| Name                                 | Model     | IMEI         |
|--------------------------------------|-----------|--------------|
| CDMA 1X Digital Fixed Wireless Phone | ZTE WF832 | 321592040100 |

### 1.7.3 Auxiliary equipment details

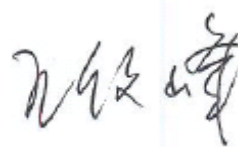
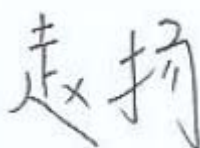
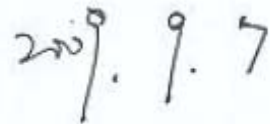
| Equipment    | Charger                                      |
|--------------|----------------------------------------------|
| Manufacturer | shenzhen RUIDE electronic industrial co.LTD. |
| Model Number | STC-A2O12080C55                              |

| Equipment     | Battery                               |
|---------------|---------------------------------------|
| Manufacturer  | shenzhen highpower technology co.LTD. |
| Model Number  | Ni7215T60P3S534431                    |
| Capacity      | 1500mAh                               |
| Rated Voltage | 7.2V                                  |

## 2. Test information

### 2.1 Summary of the test results

| No. | Test case           | FCC reference | Verdict |
|-----|---------------------|---------------|---------|
| 1   | Conducted emissions | 15.107        | Pass    |
| 2   | Radiated emissions  | 15.109        | Pass    |

|                                                                                                                                                                  |                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| This Test Report Is Issued by:<br>Mr. Song Qizhu, Director of the test lab<br> | Checked by:<br>   |
| Tested by:<br>                                                                | Issued date:<br> |

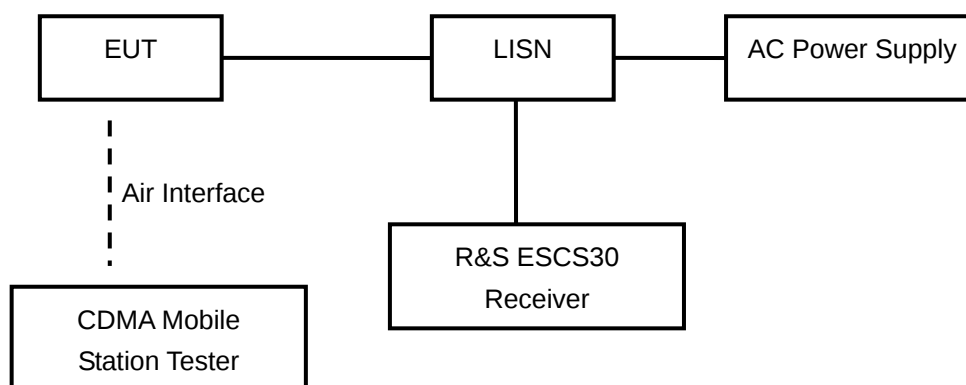
## 2.2 Test result

### 2.2.1 Conducted Emissions-FCC Part15.107

Ambient condition:

| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 25°C        | 53%               | 101.2kPa |

Test Setup:



Test Procedure:

The EUT is placed on a non-metallic table 0.8m above the horizontal metal reference ground plane. The EUT is connected with LISN via the charger. The LISN is connected to the reference ground. The accessories of the EUT are connected with the EUT such as headset etc. The test set-up and the test methods are performed according to ANSI C63.4:2003. The measurement should be done both L line and N line. The receiver uses both average detector and Quasi-peak detector. The EUT works in idle mode.

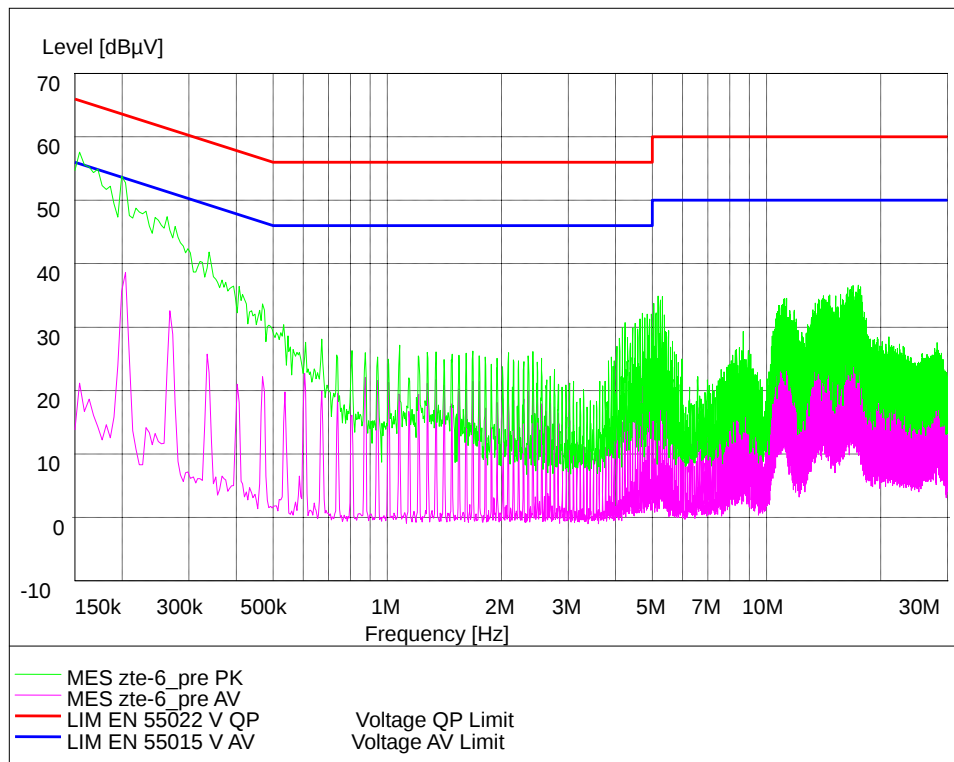
Limit:

| Frequency of Emission(MHz) | Limits(dB $\mu$ V) |           |
|----------------------------|--------------------|-----------|
|                            | Quasi-peak         | Average   |
| 0.15~0.5                   | 66 to 56*          | 56 to 46* |
| 0.5~5                      | 56                 | 46        |
| 5~30                       | 60                 | 50        |

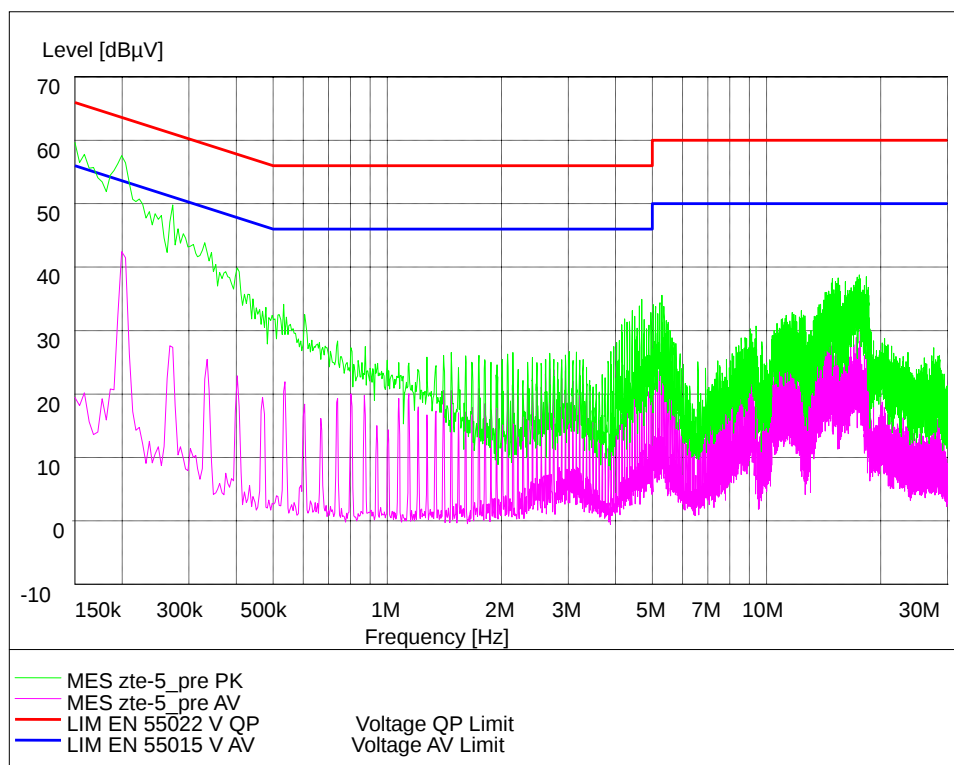
Note: \* Decreases with the logarithm of the frequency

Test result:

Refer to the following figures.



L Line



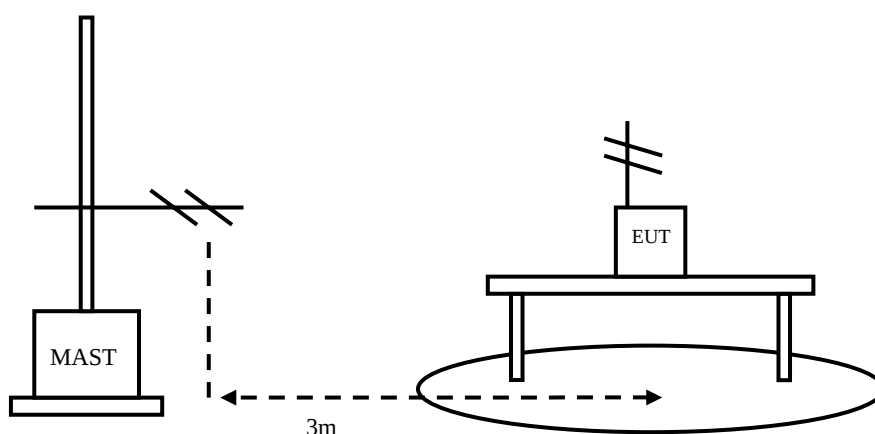
N Line

## 2.2.2 Radiated Emissions-FCC Part15.109

Ambient condition:

| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 25°C        | 53%               | 101.2kPa |

Test Setup:



Test Procedure:

The EUT should be placed on a non-metallic table 80cm above the ground plane. The receive antennas shall be moved from 1 to 4 meters. The distance between EUT and receive antenna should be 3 meters.

The EUT should work in idle mode. The accessories of the EUT are connected with the EUT such as headset etc. The test set-up and the test methods are performed according to ANSI C63.4:2003.

Then start the test software ES-K1. Sweep the whole frequency band through the range from 30MHz to 1GHz, using receive log period antenna HL562.

During the test, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna.

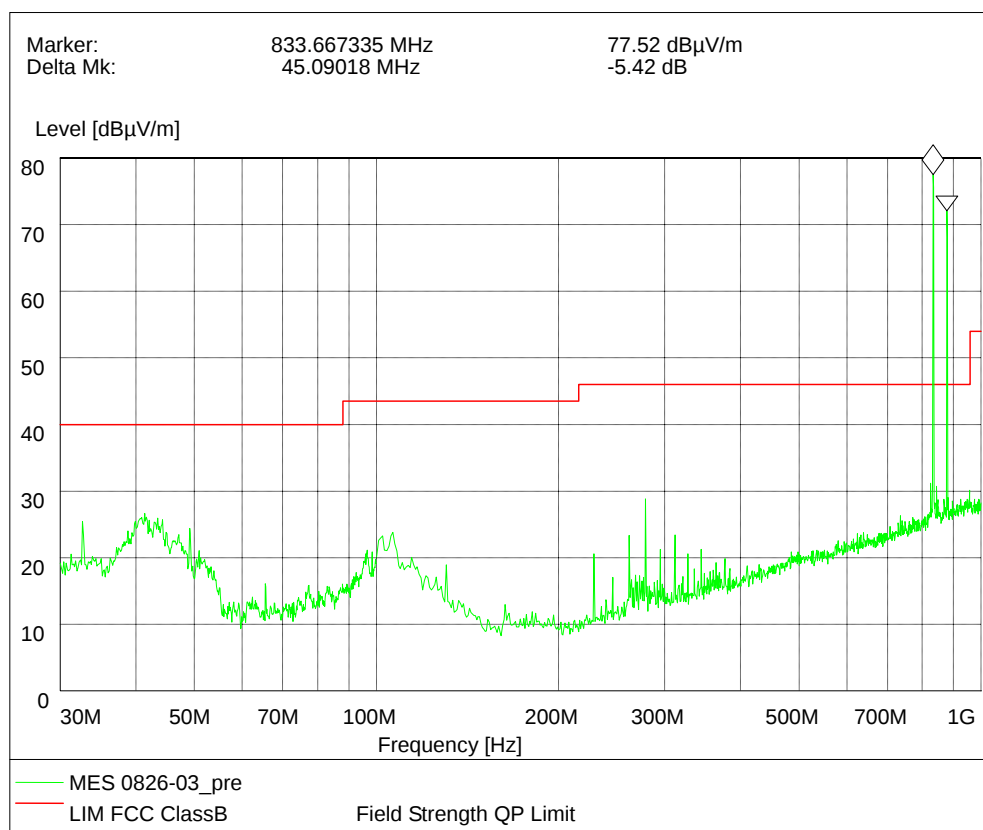
The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.

Limit:

| Frequency of Emission(MHz)                                              | Limits     |                     |
|-------------------------------------------------------------------------|------------|---------------------|
|                                                                         | Detector   | Unit (dB $\mu$ V/m) |
| 30~88                                                                   | Quasi-peak | 40                  |
| 88~216                                                                  | Quasi-peak | 43.5                |
| 216~960                                                                 | Quasi-peak | 46                  |
| 960~1000                                                                | Quasi-peak | 54                  |
| 1000~5th harmonic of the highest frequency or 40GHz, whichever is lower | Average    | 54                  |
|                                                                         | Peak       | 74                  |

Test result:

Refer to the following figures.



Note: The signal beyond the limit is the signal of base station simulator and the carrier occasional.

For measurement above 1GHz, all emissions level measured were more than 10dB below the limit.

### 2.3. List of test equipments

| No. | Name/Model                                  | Manufacturer | S/N         | Calibration Due Date       |
|-----|---------------------------------------------|--------------|-------------|----------------------------|
| 1   | 23.18m×16.88m×9.60m Semi-Anechoic Chamber   | FRANKONIA    | -----       | 19 <sup>th</sup> Aug. 2010 |
| 2   | ESI 40 EMI test receiver                    | R&S          | 100015      | 19 <sup>th</sup> Aug. 2010 |
| 3   | E5515C(8960) Mobile Station Tester          | Agilent      | GB44050904  | 19 <sup>th</sup> Aug. 2010 |
| 4   | 9.080m×5.255m×3.525m Shielding room         | FRANKONIA    | -----       | 19 <sup>th</sup> Aug. 2010 |
| 5   | ESCS30 EMI test receiver                    | R&S          | 100029      | 19 <sup>th</sup> Aug. 2010 |
| 6   | HL562 Ultra log test antenna                | R&S          | 100016      | 19 <sup>th</sup> Aug. 2010 |
| 7   | ESH3-Z2 Pulse limiter                       | R&S          | 10002       | 19 <sup>th</sup> Aug. 2010 |
| 8   | ESH3-Z5 Attenuator                          | R&S          | 100020      | 19 <sup>th</sup> Aug. 2010 |
| 9   | ESH2Z11 LISN                                | R&S          | 50FH-020-10 | 19 <sup>th</sup> Aug. 2010 |
| 10  | HF 906 Double-Ridged Waveguide Horn Antenna | R&S          | 100030      | 19 <sup>th</sup> Aug. 2010 |
| 11  | HF 906 Double-Ridged Waveguide Horn Antenna | R&S          | 100029      | 19 <sup>th</sup> Aug. 2010 |
| 12  | PS2000 Turn Table                           | FRANKONIA    | -----       | 19 <sup>th</sup> Aug. 2010 |
| 13  | MA260 Antenna Master                        | FRANKONIA    | -----       | 19 <sup>th</sup> Aug. 2010 |
| 14  | ES-K1EMI test software                      | R&S          | -----       | 19 <sup>th</sup> Aug. 2010 |
| 15  | HL562 Receive antenna                       | R&S          | 100167      | 19 <sup>th</sup> Aug. 2010 |

## **Appendix**