47 CFR PART 15 SUBPART B

TEST REPORT

of

WCDMA/Dual GSM mobile phone

Model Name: WG-Ginny
Brand Name: TechFaith
Report No.: SZ08090054E02
FCC ID: UJQ-DST3G

prepared for

TechFaith Wireless Technology Group Limited.
No. 10A, Tower D2, IT Park, Electronic Town, Jiu Xian Qiao North Road,
Chao Yang District, Beijing, China (100015)

prepared by

Shenzhen Electronic Product Quality Testing Center
Morlab Laboratory
3/F, Electronic Testing Building, Shahe Road, Xili,
Nanshan District, Shenzhen, 518055 P. R. China
Tel: +86 755 8613 0398
Fax: +86 755 8613 0218

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1. TEST CERTIFICATION

Equipment under Test:	WCDMA/Dual GSM mobile phone
Brand Name:	TechFaith
Model Name:	WG-Ginny
FCC ID:	UJQ-DST3G
Applicant:	TechFaith Wireless Technology Group Limited. No. 10A, Tower D2, IT Park, Electronic Town, Jiu Xian Qiao North Road, Chao Yang District, Beijing, China (100015)
Manufacturer:	TechFaith Wireless Technology Group Limited. No. 10A, Tower D2, IT Park, Electronic Town, Jiu Xian Qiao North Road, Chao Yang District, Beijing, China (100015)
Test Standards:	47 CFR Part 2 47 CFR Part 15 Subpart B
Test Date(s):	November 1, 2008 –November 30, 2008
Test Result:	PASS

*** We Hereby Certify That:**

The equipment under test was tested by Shenzhen Electronic Product Quality Testing Center Morlab Laboratory. The test data, data evaluation, test procedures and equipment configurations shown in this report were made in accordance with the requirement of related FCC rules.

The test results of this report only apply for the tested sample equipment identified above. The test report shall be invalid without all the signatures of the test engineer, the reviewer and the approver.

Tested by: Li Yi Dated: 2009.1.9

Li Yi

Reviewed by: Wei Yanquan Dated: 2009.1.09

Wei Yanquan

Approved by: Shu Luan Dated: 2009.1.09

Shu Luan

2. GENERAL INFORMATION

2.1 EUT Description

EUT Type	WCDMA/Dual GSM mobile phone	
Model Name	WG-Ginny	
Serial No.	(n.a, marked #1 by test site)	
IMEI	352817025110587	
Hardware Version	SP	
Software Version	WG-0003	
Modulation Type.....	GMSK	
Emission Designators	300KGXW	
Power Supply	Battery	
	Model Name:	(n.a)
	Brand name:	XWORD, Desay
	Capacitance:	880mAh,1010mAh
	Rated voltage:	3.7V
	Manufacturer:	XWORD, Desay
Ancillary Equipments.....	AC Adapter (Charger for Battery)	
	Model Name:	TPCA-053065VY
	Brand Name:	TPi
	Serial No.:	(n.a. marked #1 by test site)
	Rated Input:	~ 100-240V, 0.2A,50/60Hz
	Rated Output:	⎓ 5.3V, 650mA
	Manufacturer:	(n.a)
	Wire Length:	150cm

Note 1: The EUT is the WCDMA/Dual GSM mobile phone, it support GSM 1900MHz, WCDMA 2100MHz, and only GSM 1900MHz was tested in this report.

Note 2: The EUT is equipped with a T-Flash card slot; equipped with a special port which can be connected to the ancillary equipments supplied by the manufacturer.

Note 3: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

2.2 Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 2, Part 15 and Part 24 for the EUT FCC ID Certification:

No.	Identity	Document Title
1	47 CFR Part 2 (10-1-05 Edition)	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 15 (10-1-05 Edition)	Radio Frequency Devices
3	47 CFR Part 24 (10-1-05 Edition)	Personal Communications Services

Test detailed items/section required by FCC rules and results are as below:

No.	Section	Description	Result
FCC Part 15 Requirement			
1	2.106 24.229	Frequencies	PASS
1	§15.107	Conducted Emissions	PASS
2	§15.109	Radiated Emissions	PASS
FCC Part 22 Requirement			
2	2.1046	Conducted RF Output Power	PASS
3	2.1049	20dB Occupied Bandwidth	PASS
4	2.1055 24.235	Frequency Stability	PASS
5	2.1051 2.1057 24.238	Conducted Out of Band Emissions	PASS
6	2.1051 2.1057 24.238	Band Edge	PASS
7	24.232	Transmitter Radiated Power (EIPR/ERP)	PASS
8	2.1053 2.1057 24.238	Radiated Out of Band Emissions	PASS

2.3 Facilities and Accreditations

2.3.1 Facilities

Shenzhen Electronic Product Quality Testing Center Morlab Laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.

All measurement facilities used to collect the measurement data are located at Electronic Testing Building, Shahe Road, Xili, Nanshan District, Shenzhen 518055 CHINA. The test site is constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22; the FCC registration number is 741109.

2.3.2 Test Environment Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	20 - 25
Relative Humidity (%):	40 - 60
Atmospheric Pressure (kPa):	96

3. 47 CFR PART 15B REQUIREMENTS

3.1 General Information

3.1.1 Test Mode

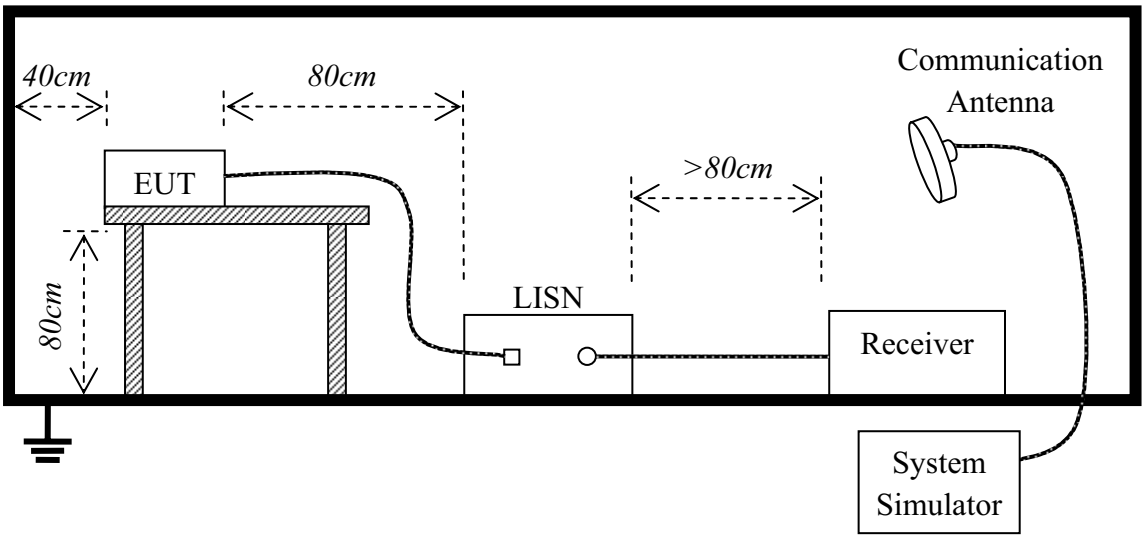
The test modes of the EUT are showed as below:

The EUT configuration of the emission tests is TransFlash Card + EUT + Battery + PC.

In this test mode, the EUT with a TransFlash Card embedded is connected with a PC via a special USB cable supplied by applicant. During the measurement, a communication link was established between the EUT and a System Simulator (SS), simultaneity, the date is transmitting between the PC and the TransFlash Card of the EUT.

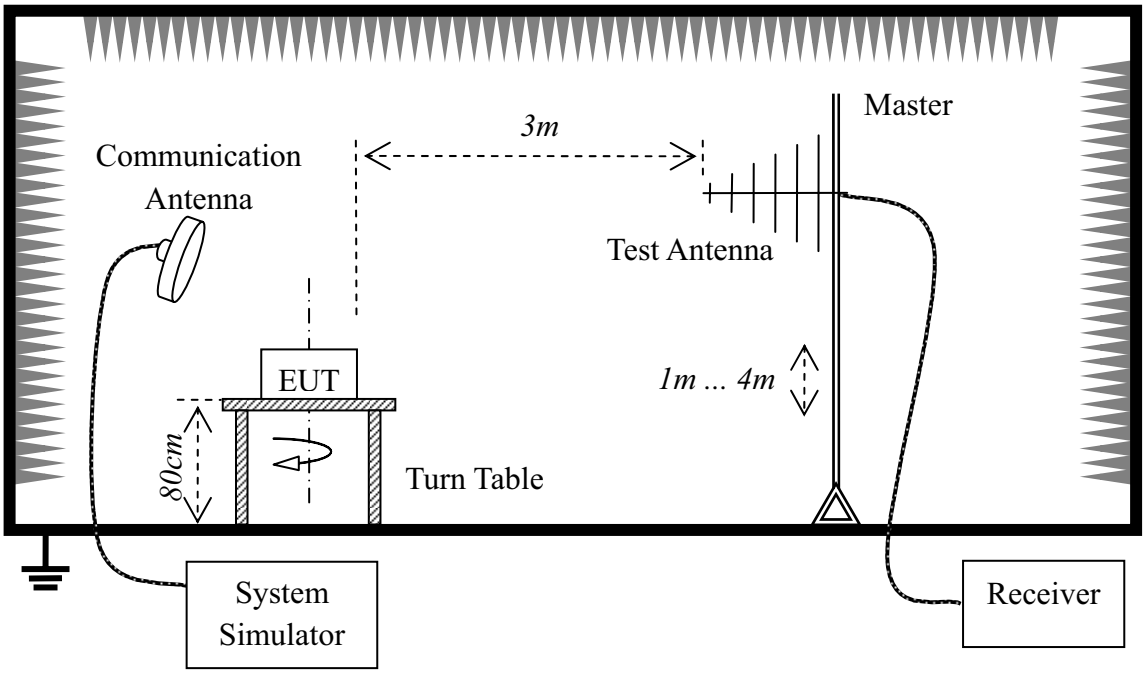
3.1.2 Test Setup

3.1.2.1 Conducted Emission Test



1. The test is performed in a Shield Room; the factors of the test system are calibrated to correct the reading.
2. The EUT is placed on a 0.8 meters high insulating table and keeps 0.4 meters away from the conducting wall of the Shield Room.
3. The EUT is connected to the power mains through a Line Impedance Stabilization Network (LISN). The LISN provides 50Ω/50μH of coupling impedance for the measuring instrument.

3.1.2.2 Radiated Emission Test



1. The test is performed in a Semi-anechoic Chamber; the factors of the test system are calibrated to correct the reading.
2. The EUT is placed on a 0.8 meters high insulating table and keeps 3 meters away from the trilogy Test Antenna, which is mounted on the top of a variable-height antenna Master tower.

NOTE:

1. The test method is the substitution method according to TIA-603-C.

3.2 Conducted Emission

3.2.1 Requirement

According to FCC §15.107, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50μH/50Ω line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dBμV)	
	Quasi-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

NOTE:

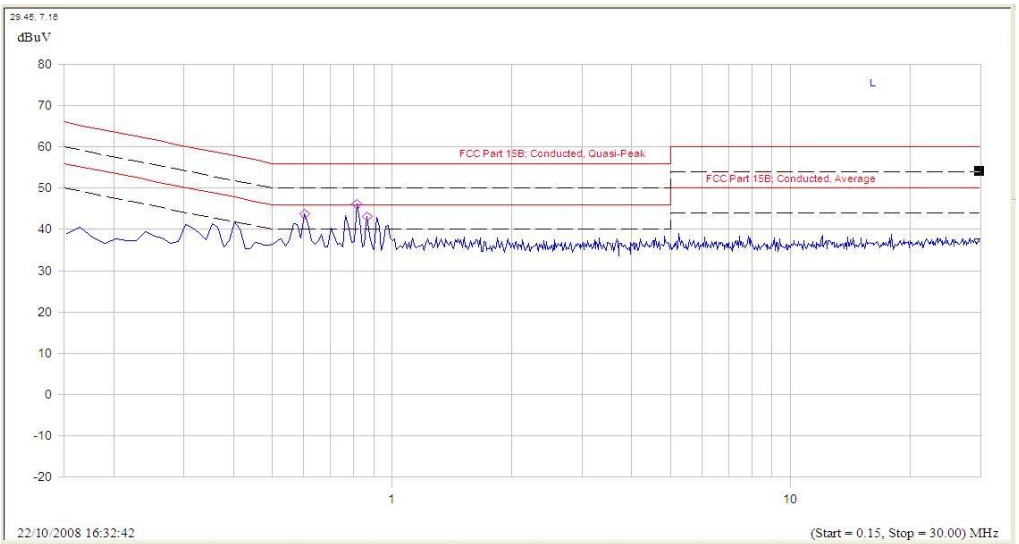
1. The limit subjects to the Class B digital device.
2. The lower limit shall apply at the band edges.
3. The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

3.2.2 Test Procedure

1. Perform test setup as described in section 3.1.2.1.
2. Each test mode in section 3.1.1 should be applied. At each test mode, the frequency range from 150 kHz to 30MHz is searched using the CISPR Quasi-Peak and/or the Average detector of the Receiver. If the emission levels measured with Quasi-Peak detector are lower than the Average Limit, it's not necessary to measure with Average detector.
3. The emission levels at both L phase and N phase should be tested.
4. Record the test result plot and distinct points.
5. In the test report show the worst test data.

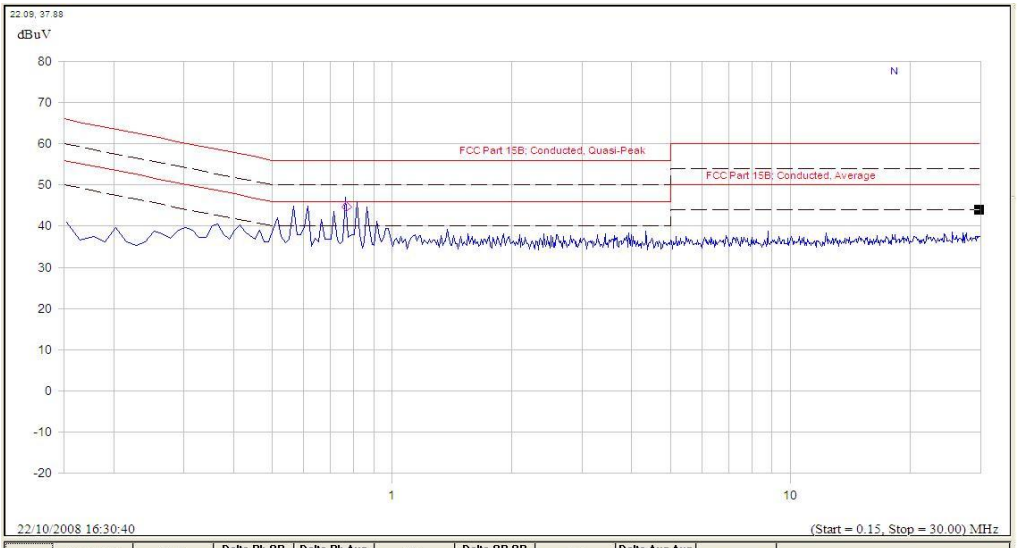
3.2.3 Test Result

1. Plot for L Phase:



	Frequency MHz	Peak dBuV	Delta Pk-QP Limit dB	Delta Pk-Avg Limit dB	QP dBuV	Delta QP-QP Limit dB	Avg dBuV	Delta Avg-Avg Limit dB	Trace Name	Comment
1	0.603	43.7	-12.3	-2.3					L	
2	0.815	46.1	-9.9	0.1					L	
3	0.865	43.1	-12.9	-2.9					L	

2. Plot for N Phase:



	Frequency MHz	Peak dBuV	Delta Pk-QP Limit dB	Delta Pk-Avg Limit dB	QP dBuV	Delta QP-QP Limit dB	Avg dBuV	Delta Avg-Avg Limit dB	Trace Name	Comment
1	0.769	44.7	-11.3	-1.3	42.1	-13.9	39.3	-6.7	N	

3.3 Radiated Emission

3.3.1 Requirement

According to FCC §15.109, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency range (MHz)	Field Strength	
	μV/m	dBμV/m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

NOTE:

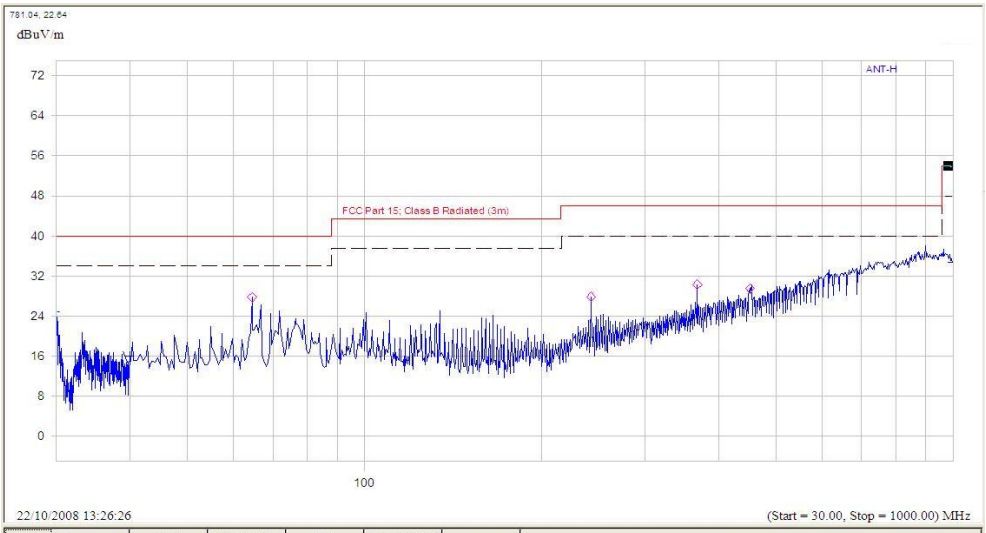
1. Field Strength (dBμV/m) = 20*log[Field Strength (μV/m)].
2. In the emission tables above, the tighter limit applies at the band edges.

3.3.2 Test Procedure

1. Perform test setup as described in section 3.1.2.2.
2. Each test mode in section 3.1.1 should be applied. At each test mode, the Turn Table turns from 0 degrees to 360 degrees to find the maximum reading; for the suspected points, the Test Antenna varies from 1 meter to 4 meters to determine the maximum value of the field strength.
3. The Receiver is set to Peak Detector function and specified bandwidth with maximum hold mode. If the emission level of the EUT in peak mode is 6dB lower than the limit specified, then testing could be stopped and the peak values would be reported; otherwise the emission less than 6dB margins would be retested one by one using the quasi-peak method.
4. The emission levels at both horizontal and vertical polarizations should be tested.
5. Record the test result plot and distinct points.
6. In the test report show the worst test data.

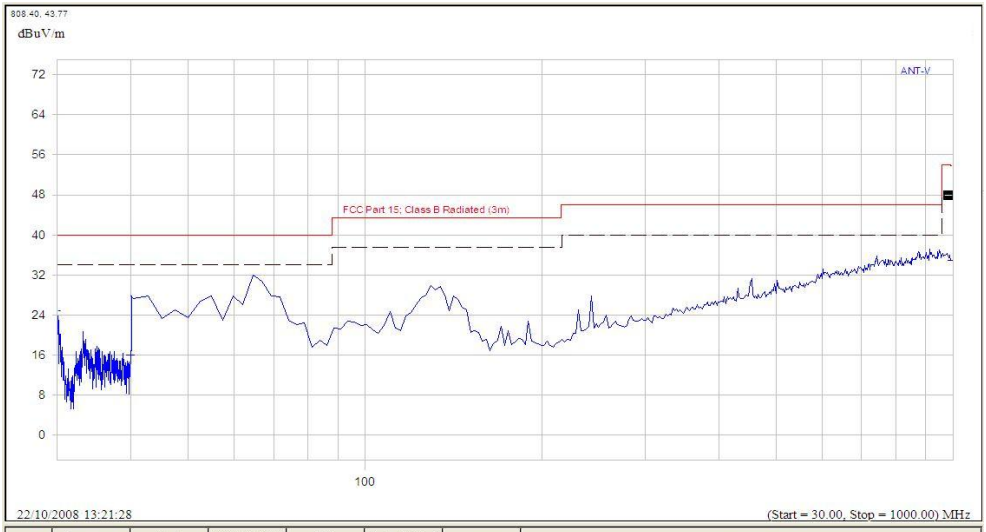
3.3.3 Test Result

1. Plot when Test Antenna at Vertical Polarization:



	Frequency MHz	Peak dBuV/m	Delta Pk-Limit dB	QP dBuV/m	Delta QP-Limit dB	Trace Name	Comment
1	64.510	27.8	-12.2			ANT-H	
2	242.850	27.9	-18.1			ANT-H	
3	368.170	30.3	-15.7			ANT-H	
4	452.520	29.5	-16.5			ANT-H	

2. Plot when Test Antenna at Horizontal Polarization:



	Frequency MHz	Peak dBuV/m	Delta Pk-Limit dB	QP dBuV/m	Delta QP-Limit dB	Trace Name	Comment
1	242.850	27.7	-18.3			ANT-V	
2	129.580	29.9	-13.6			ANT-V	
3	64.510	32.0	-8.0			ANT-V	
4	452.520	30.5	-15.5			ANT-V	

** END OF REPORT **