

TEST REPORT

REPORT NUMBER: I09GE4359-FCC-PART15B

ON

Type of Equipment: HSUPA USB MODEM
Type of Designation: K3765-Z
Manufacturer: ZTE CORPORATION

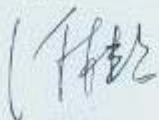
ACCORDING TO
Part 15B: Radio Frequency Devices, Sep 20, 2007

China Telecommunication Technology Labs.

Month date, year

Mar, 20, 2009

Signature

A handwritten signature in black ink, appearing to read 'He Guili', is written over a horizontal line.

He Guili
Director

FCC ID: Q78-K3765-Z

Report Date: 2009-3-20

Test Firm Name: China Telecommunication Technology Labs

Registration Number: 840587

Statement

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Parts 15B. The sample tested was found to comply with the requirements defined in the applied rules.

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1 General Information

1.1 Notes

All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Parts 15B.

The test results of this test report relate exclusively to the item(s) tested as specified in section 2.

The following deviation from, additions to, or exclusions from the test specifications have been made. See Annex C.

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FCC Parts 15B
Equipment: K3765-Z

REPORT NO.: I09GE4359-FCC-PART15B

1.2 Testers

Name: Yuan Yuan
Position: Engineer
Department: Department of EMC test
Signature: 袁园

Editor of this test report:

Name: Li Guoqing
Position: Engineer
Department: Department of EMC test
Date: 2009-3-20
Signature: 李国庆

Technical responsibility for area of testing:

Name: Zou Dongyi
Position: Manager
Department: Department of EMC test
Date: 2009-3-20
Signature: 邹东屹

1.3 Testing Laboratory information

1.3.1 Location

Name: China Telecommunication Technology Labs.

Address: No. 11, Yue Tan Nan Jie, Xi Cheng District
BEIJING

P. R. CHINA, 100083

Tel: +86 10 68094053

Fax: +86 10 68011404

Email: emc@chinattl.com

1.3.2 Details of accreditation status

Accredited by: China National Accreditation Service for Conformity
Assessment (CNAS)

Registration number: CNAS Registration No. CNAS L0570

Standard: ISO/IEC 17025:2005

1.3.3 Test location, where different from section 1.3.1

Name: -----

Street: -----

City: -----

Country: -----

Telephone: -----

Fax: -----

Postcode: -----

1.4 Details of applicant or manufacturer

1.4.1 Applicant

Name: ZTE CORPORATION

Address: ZTE Plaza, Keji Road South, Hi-Tech Industrial
Park, Nanshan District, Shenzhen, Guangdong,
518057, P.R.China

Country: China

Telephone: +86-21-50701080

Fax: +86-21-68895196

Contact: Li Dezi

Telephone: +86-21-50701080

Email: li.dz@zte.com.cn

1.4.2 Manufacturer (if different from applicant in section 1.4.1)

Name: ----

Address: ----

1.4.3 Manufactory (if different from applicant in section 1.4.1)

Name: ----

Address: ----

2 Test Item

2.1 General Information

Manufacturer: ZTE CORPORATION
Name: HSUPA USB MODEM
Model Number: K3765-Z
IMEI Number: 3536790300020012
Serial Number: --
Production Status: Production
Receipt date of test item: 2009-2-13

2.2 Outline of EUT

E.U.T. is a HSUPA USB MODEM.

2.3 Modifications Incorporated in EUT

The EUT has not been modified from what is described by the brand name and unique type identification stated above.

2.4 Equipment Configuration

Equipment configuration list:

Item	Generic Description	Manufacturer	Type	Serial No.	Remarks
A	HSUPA USB MODEM	ZTE CORPORATION	K3765-Z	--	None
B	adapter	--	--	--	None
C	battery	--	--	--	None
D	Earphone	--	--	--	None

Cables:

Item	Cable Type	Manufacturer	Length	Shield	Quantity	Remarks
1	DC cable on Adapter	Unknown	1.0 m	No	1	None

2.5 Other Information

Hardware version: P673A1-2.0.0

Software version: BD_VDFP673A1V1.0.0B02

3 Summary of Test Results

A brief summary of the tests carried out is shown as following.

Specification Clause	Name of Test	Result
15.109	Radiated Emission	Pass
15.107	Conducted Emission	Pass
Note: The EUT complies with the requirements of the Class B digital devices.		

4 Test Results

4.1 Radiated Emission

Specifications:	15.109, ANSI C63.4-2003					
Date of Tests	2009-3-11					
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa					
Operation Mode	TX on					
Test Results:	Pass					
Test equipment Used:						
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESI26	100211	2010-01-11	Normal
7330	Ultra Broadband Antenna	SCHWARZBECK	VULB 9160	--	2010-10-26	Normal
7330	Double-Ridged Horn Antenna	R/S	HF906	100037	2010-01-09	Normal
713	Fully-Anechoic Chamber	ETS	11.8m×6.5m×6.3m	--	2010-11-16	Normal
023	Wireless Communications Test Set	Agilent	8960(E5515C)	GB41450323	2009-06-13	Normal

Limit Level Construction:

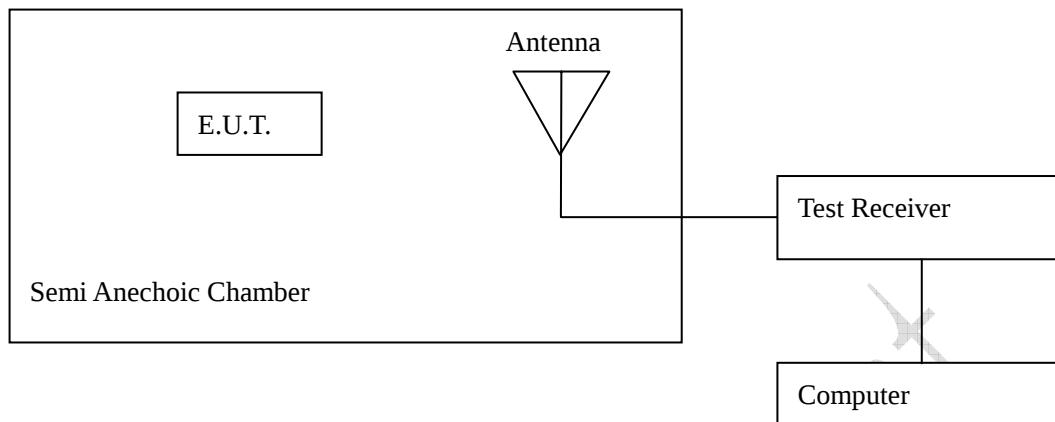
According to Part 15.109(a).

Limits

Frequency [MHz]	Field Strength [$\mu\text{V}/\text{m}$]	Field Strength [dB $\mu\text{V}/\text{m}$]	Measurement distance [m]
30 - 88	100	40.0	3
88 - 216	150	43.5	3
216 - 960	200	46.0	3
Above 960	500	54.0	3

Note: The tighter limit applies at the band edges.

Test Configuration



The measuring distance between E.U.T and antenna is 3m.

Test Setup:

The EUT was placed in an anechoic chamber, see figure RE. The EUT is tested as tabletop EUT. The EUT is positioned on an 80cm height wood table.

The EUT is used as the peripheral equipment of the PC.

The setup is according to Figure 11a of ANSI C63.4-2003.

The Wireless Communications Test Set (Test Simulator) was used to set the TX channel and power level and modulate the TX signal with different bit patterns. The test was done using an automated test system, where all test equipments were controlled by a computer.



Figure RE

Test Method

During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.4-2003. The measurement was done by the automated test system. According to ANSI C63.4-2003, frequency scans of the EUT field strength with both polarities of the measuring antenna are made at a step space of 22.5°. If directional radiation patterns are suspected, additional azimuth angles shall be examined.

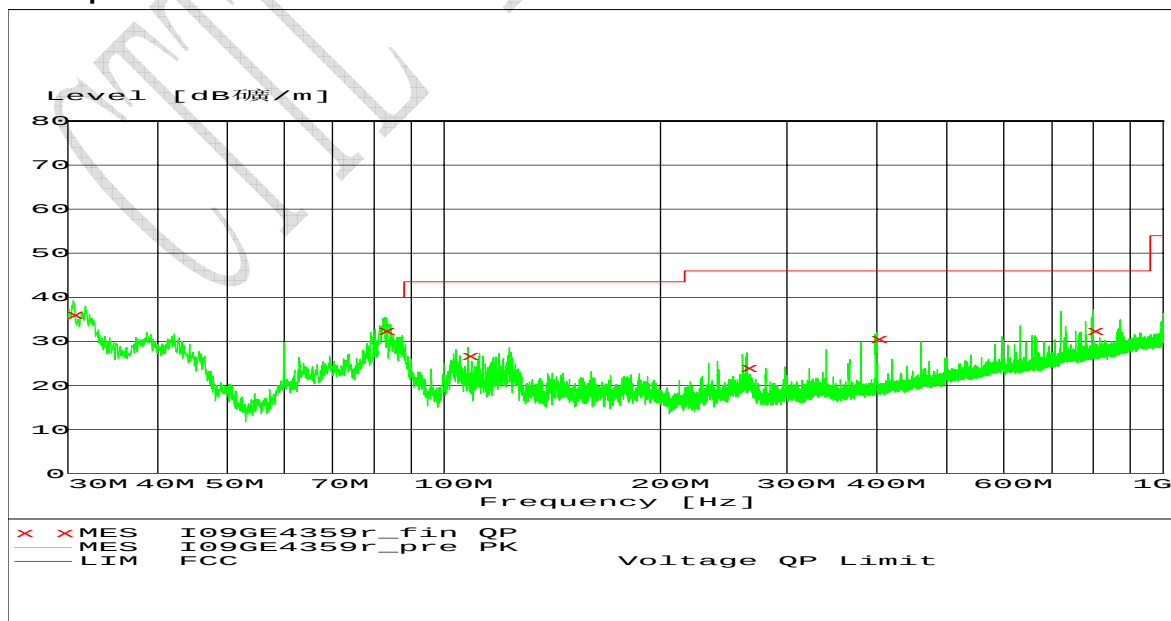
Note:

According to the applicant's statement, the highest frequency generated or used in the EUT or on which the EUT operates or tunes is lower than 108MHz, so the upper frequency spectrum investigated is 1GHz.

Test Data:

Frequency [MHz]	Level [dBμV/m]	Limit [dBμV/m]	Antenna Height [cm]	Turntable Azimuth [degree]	Antenna Polarisation (V/H)
30.540000	35.9	40	103	196	VERTICAL
82.680000	32.4	40	117	0	VERTICAL
108.000000	26.7	43	300	146	HORIZONTAL
264.000000	24.0	46	117	281	HORIZONTAL
399.660000	30.5	46	131	93	VERTICAL
799.440000	32.4	46	128	359	HORIZONTAL
Remarks: --					

Graphical Results:



Graphical results

4.2 Conducted Emission

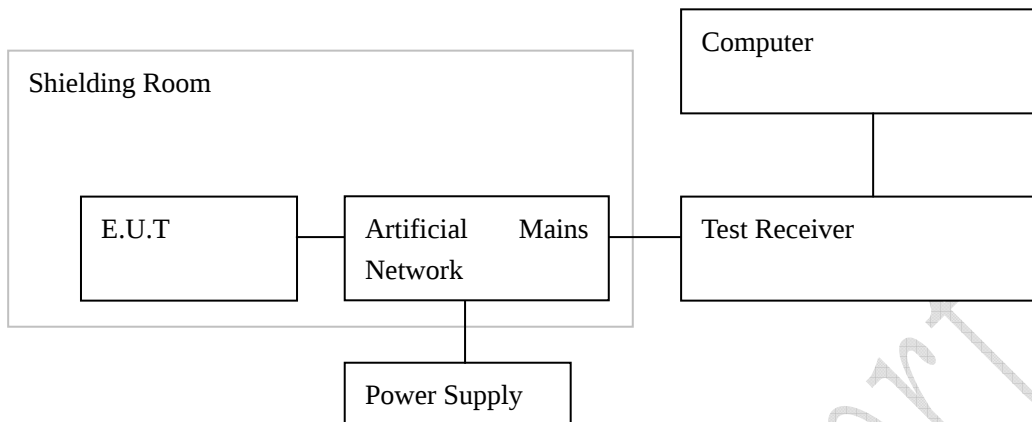
Specifications:	15.107, ANSI C63.4-2003					
Date of Tests	2009-3-19					
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa					
Operation Mode	TX on					
Test Results:	Pass					
Test equipment Used:						
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7330	EMI Test Receiver	R/S	ESI40	839283/007	2010-02-26	Normal
7330	Artificial Mains Network	R/S	ESH2-Z5	837480/002	2011-01-08	Normal
714	Shielding Room	ETS	--	19003	2010-11-16	Normal
023	Wireless Communications Test Set	Agilent	8960(E5515C)	GB41450323	2009-06-13	Normal

Limit Level Construction:
According to Part 15.107 (a)

Limits for Conducted Emission		
Frequency of Emission [MHz]	Conducted limit [dBμV]	
	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.

Test Configuration



Test Setup:

The EUT was placed in a shielding room, see figure CE. The EUT is positioned on an 80cm height wood table. The EUT is used as the peripheral equipment of the PC.

The setup is according to Figure 10a of ANSI C63.4-2003.

The Wireless Communications Test Set (Test Simulator) was used to set the TX channel and power level and modulate the TX signal with different bit patterns. The test was done using an automated test system, where all test equipments were controlled by a computer.



Figure CE

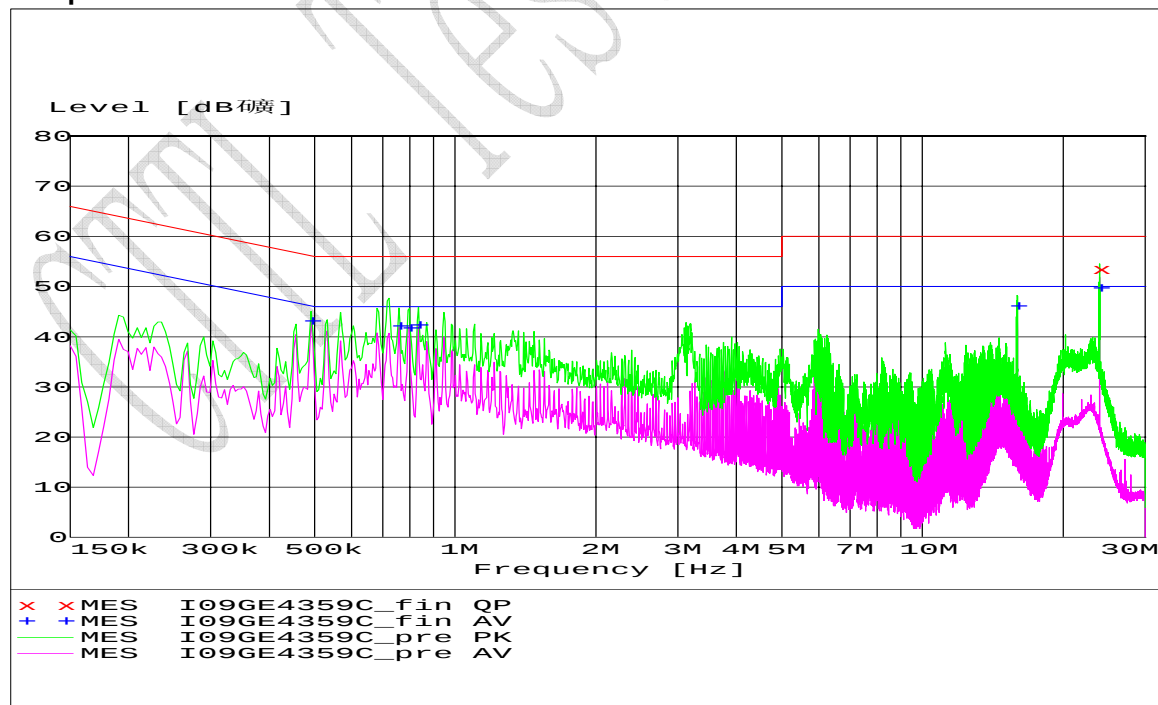
Test Method:

During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.4-2003. The AC power line of the Notebook was connected to the artificial mains network then to EMI receiver. The measurement was done by the automated test system.

Note: --

Test Data:

Detector (QP/AV)	Frequency (MHz)	Level (dB μ V)	Limit (dB μ V)	Margin (dB)	Line	PE
QP	23.950500	53.5	60	6.5	N	GND
AV	0.492000	43.1	46	3.0	N	GND
AV	0.757500	42.1	46	3.9	N	GND
AV	0.798000	41.7	46	4.3	N	GND
AV	0.834000	42.2	46	3.8	N	GND
AV	15.967500	46.1	50	3.9	N	GND
AV	23.950500	49.70	50	0.3	N	GND
Remarks: --						

Graphical results:

CE graphical results

Annex A External Photos

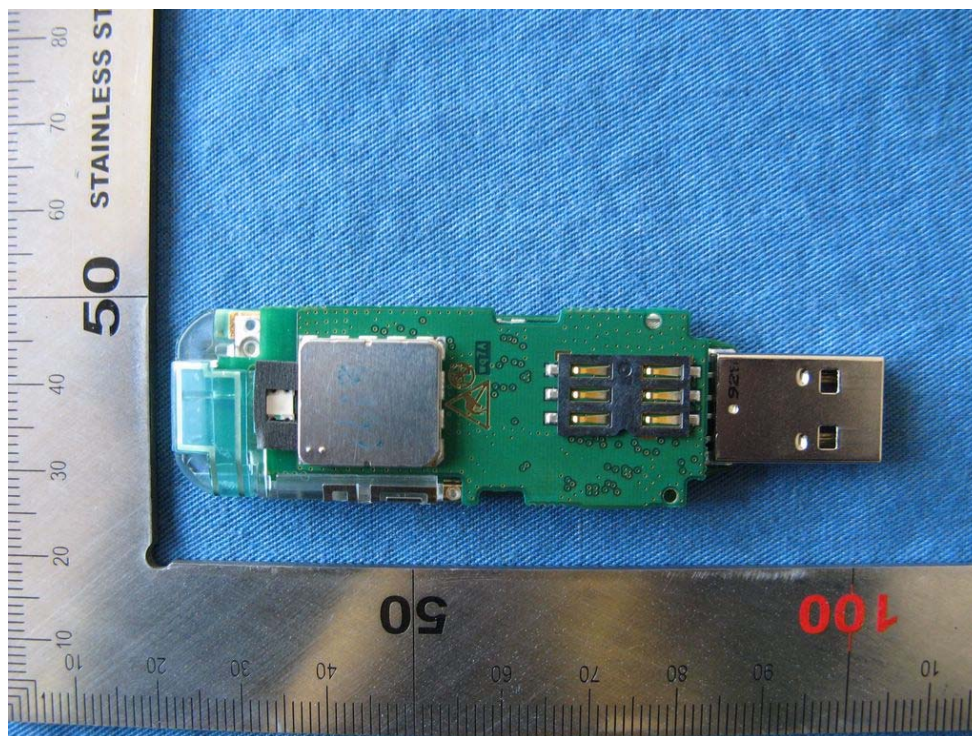


Front view

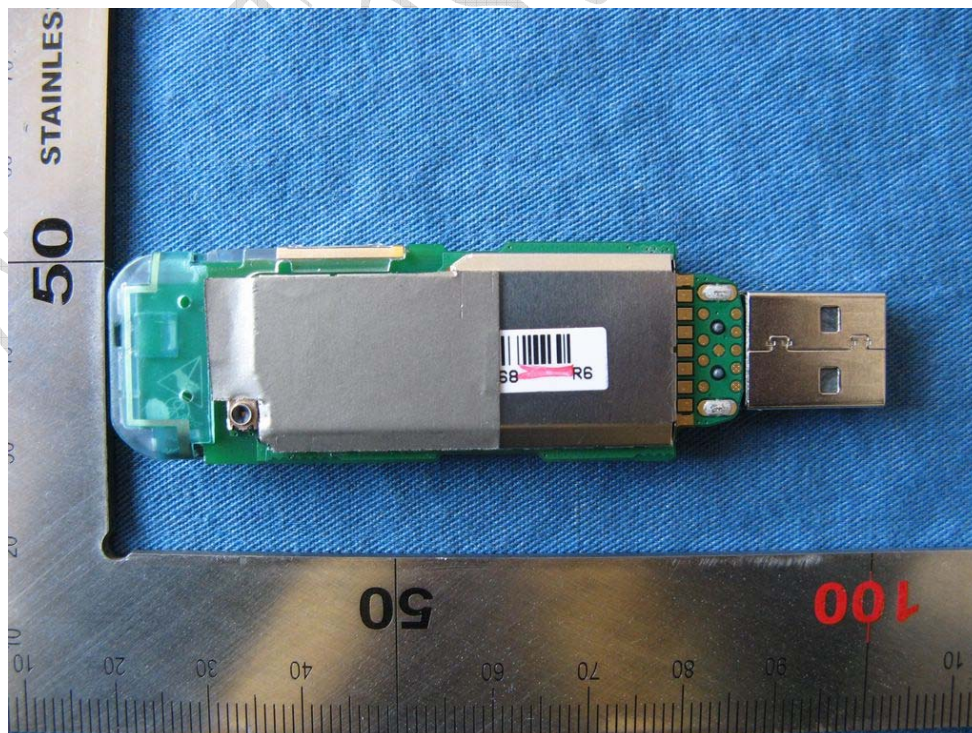


Back view

Annex B Internal Photos



Main board (face)



Main board (back)

ANNEX C Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

———— The End of this Report ————

CTL Test Report