

# **TEST REPORT**

REPORT NUMBER: I08GE4437-FCC-PART15B

### ON

Type of Equipment:

GSM/GPRS Mobile Phone

Type of Designation: MASS2

Manufacturer:

Ezze Mobile Tech.,Inc

**ACCORDING TO** 

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

China Telecommunication Technology Labs.

Month date, year Mar, 14, 2008

Signature

He Guili Director



FCC Parts 15B
Equipment: MASS2 REPORT NO.: I08GE4437-FCC-PART15B

FCC ID: RV2MASS2

**Report Date:** 2008-03-14

**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.



#### REPORT NO.: I08GE4437-FCC-PART15B

# **CONTENTS**

1 GENERAL INFORMATION	4
1.1 Notes	Δ
1.2 Testers	
1.3 Testing Laboratory information	
1.4 DETAILS OF APPLICANT OR MANUFACTURER	7
2 TEST ITEM	8
2.1 GENERAL INFORMATION	8
2.3 Modifications Incorporated in EUT	8
2.4 EQUIPMENT CONFIGURATION	8
2.5 OTHER INFORMATION	8
3 SUMMARY OF TEST RESULTS	9
4 TEST RESULTS	10
4.1 RADIATED EMISSION	10
4.2 CONDUCTED EMISSION	14
ANNEX A EXTERNAL PHOTOS	18
ANNEX B INTERNAL PHOTOS	22
ANNEX C DEVIATIONS FROM PRESCRIBED TEST METHODS	23



FCC Parts 15B
Equipment: MASS2 REPORT NO.: I08GE4437-FCC-PART15B

### 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.

China Telecommunication Technology Labs. (CTTL) authorizes the applicant or manufacturer (see section 1.4) to reproduce this report provided, and the test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of CTTL Mr. He Guili.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. CTTL accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.



REPORT NO.: 108GE4437-FCC-PART15B

#### 1.2 Testers

Name:

Yuan Yuan

Position:

Engineer

Department:

Department of EMC test

Signature:

喜图

Name:

Li Guoqing

Position:

Engineer

Department:

Department of EMC test

Signature:

李国庆

Editor of this test report:

Name:

Li Guoqing

Position:

Engineer

Department:

Department of EMC test

Date:

2008-3,14

Signature:

本国庆

Technical responsibility for area of testing:

Name:

Zou Dongyi

Position:

Manager

Department:

Department of EMC test

Date:

2008.5.14

Signature:

都去、此



FCC Parts 15B
Equipment: MASS2 REPORT NO.: 108GE4437-FCC-PART15B

### 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: <a href="mailto:emc@chinattl.com">emc@chinattl.com</a>

#### 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: -----



FCC Parts 15B
Equipment: MASS2 REPORT NO.: I08GE4437-FCC-PART15B

### 1.4 Details of applicant or manufacturer

1.4.1 Applicant

Name: Ezze Mobile Tech.,Inc

Address: 1F, Bubmusa Bldg., 151-31, Nonhyun-dong,

Kangnam-ku, Seoul

Country: Korea

Telephone: 82-2-519-7700

Fax: 82-2-519-7882

Contact: Anny

Telephone: +82-2-519-7805

Email: eosahn@ezzemobile.com

1.4.2 Manufacturer (if different from applicant in section 1.4.1)

Name: --

Address: --

City: --

Country: --

1.4.3 Manufactory (if different from applicant in section 1.4.1)

Name: Ezze Mobile Tech

Address: BL 17-1 LT ,633-1 , Seonggok-dong ,Danwon-gu ,

Ansan-si, Gyeonggi-do, Korea (423-833)



FCC Parts 15B
Equipment: MASS2 REPORT NO.: 108GE4437-FCC-PART15B

### 2 Test Item

### 2.1 General Information

Manufacturer: Ezze Mobile Tech., Inc

Name: GSM/GPRS Mobile phone

Model Number: MASS2

Serial Number: --

Production Status: Production

Receipt date of test item: 2008-02-25

### 2.2 Outline of EUT

E.U.T. is a GSM/GPRS Mobile phone.

### 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	Туре	Serial No.	Remarks
Α	handset	Ezze Mobile Tech	MASS2		None
В	adapter	Yu Feng	USB Type		None
С	battery	ZHIYIN	Li-ion		None
D	Carphono	Diah atar	Wire		None
	Earphone	Rich star	Type(Stereo)		None

#### Cables:

Item	Cable Type	Manufacturer	Length	Shield	Quantity	Remarks
1	DC cable on	Unknown	1.0 m	No	1	None
ı	Adapter	OTIKHOWIT	1.0 111	NO	ı	None

### 2.5 Other Information

None.



REPORT NO.: I08GE4437-FCC-PART15B

# **3 Summary of Test Results**

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

	3				
Specification Clause	Specification Clause Name of Test				
15.109 Radiated Emission		Pass			
15.107 Conducted Emission		Pass			
Note: The EUT comp	Note: The EUT complies with the requirements of the Class B digital devices.				



#### REPORT NO.: I08GE4437-FCC-PART15B

# **4 Test Results**

### 4.1 Radiated Emission

Specifi	cations:	15.109, AN	ISI C63.4-200	3					
Date o	f Tests	2008.03.13							
Test co	onditions:	Ambient Te	emperature: 15	°C-35°C					
		Relative Hu	umidity: 30%- <i>6</i>	50%					
	Air pressure: 86-106kPa								
Operat	Operation Mode TX on								
Test R	esults:	Pass			101				
Test e	quipment Use	d:				7			
Asset									
Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State			
7805	EMI Test Receiver	R/S	ESI26	100211	2009-01-03	Normal			
7330	Ultra Broadband Antenna	R/S	HL562	100013	2008-07-24	Normal			
7330	Double-Ridged Horn Antenna	R/S	HF906	100037	2009-01-14	Normal			
713	Fully-Anechoic Chamber	ETS	11.8m×6.5m×6 .3m	-	2010-11-17	Normal			
023	Wireless Communications Test Set	Agilent	8960(E5515C)	GB41450323	2008-06-13	Normal			
Ancilla	ry Equipment	used							
996	PC	HP	VL400	CN11205610		Normal			
0889	Printer	HP	C4254A	CNZQ326478		Normal			

According to Part 15.109(a).

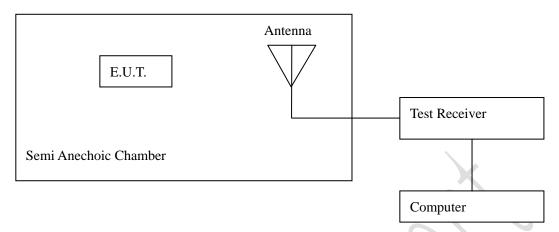
### Limits

Frequency	Field Strength	Field Strength	Measurement		
[MHz]	[ μ <b>V/m</b> ]	[dB	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 a	pplies at the band edg	jes.			



#### REPORT NO.: I08GE4437-FCC-PART15B

# **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 Setup face



#### REPORT NO.: 108GE4437-FCC-PART15B



Figure RE: Test setup back

### 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.

Note: --

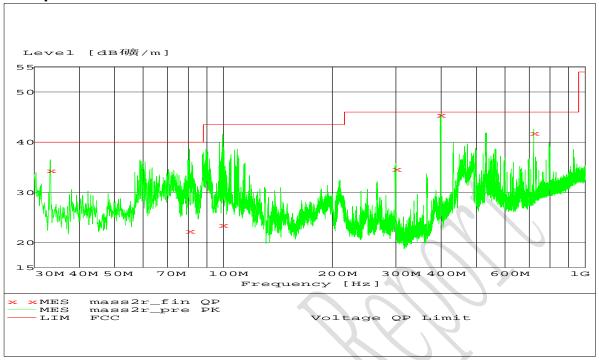
# Test Data:

Frequency [MHz]	Level [dBµV/m]	Limit [dBµV/m]	Antenna Height [cm]	Turntable Azimuth [degree]	Antenna Polarisation (V/H)
33.300000	34.3	40.0	100	314	VERTICAL
80.580000	22.3	40.0	100	45	VERTICAL
99.420000	23.4	43.5	100	135	VERTICAL
299.760000	34.6	46.0	100	72	HORIZONTAL
397.740000	45.4	46.0	100	75	HORIZONTAL
720.120000	41.8	46.0	105	45	VERTICAL
Remarks:					



#### REPORT NO.: 108GE4437-FCC-PART15B

### **Graphical Results:**



**Graphical results** 



Normal

Normal

FCC Parts 15B Equipment: MASS2

#### REPORT NO.: I08GE4437-FCC-PART15B

### **4.2 Conducted Emission**

Specifi	cations:	15.107, ANSI C63.4-2003						
Date o	f Tests	2008.03.13						
Test co	onditions:	Ambient Te	mperature: 15°C	C-35℃				
		Relative Hu	ımidity: 30%-60	)%				
		Air pressure: 86-106kPa						
Operat	tion Mode	TX on						
Test R	esults:	Pass						
Test ed	quipment Use	d:			X			
Asset	Description	Manufacturer	Model Number	Serial Number	Cal Due	State		
Number	Description	Manufacturei	Model Number	Serial Nulliber	Cai Due	State		
7330	EMI Test Receiver	R/S	ESI40	839283/007	2009-02-03	Normal		
7330	Artificial Mains Network	R/S	ESH2-Z5	837480/002	2009-01-09	Normal		
714	Shielding Room	ETS		19003	2010-11-17	Normal		
023	Wireless Communications Test Set	Agilent	8960(E5515C)	GB41450323	2008-06-13	Normal		

### **Limit Level Construction:**

According to Part 15.107 (a)

**Ancillary Equipment used** 

PC

Printer

996

0889

Limits for Conducted Emission								
Frequency of Emission		cted limit B µ V]						
[MHz]	Quasi-peak	Average						
0.15 – 0.5	66 to 56*	56 to 46*						
0.5 - 5	56	46						
5 - 30	60	50						

VL400

C4254A

CN11205610

CNZQ326478

ΗP

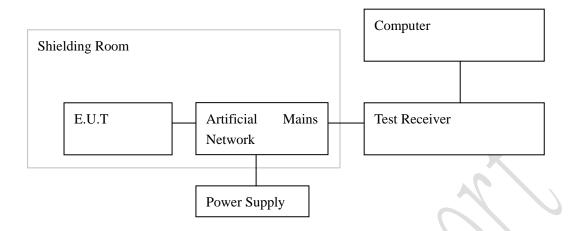
ΗР

<sup>\*</sup> Decreases with the logarithm of the frequency.



#### REPORT NO.: I08GE4437-FCC-PART15B

# **Test Configuration**





FCC Parts 15B
Equipment: MASS2 REPORT NO.: 108GE4437-FCC-PART15B

### **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: --

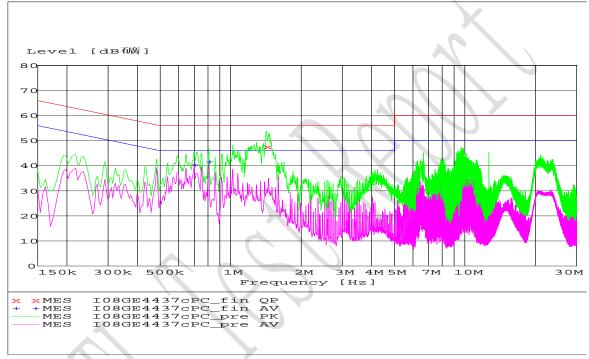


#### REPORT NO.: 108GE4437-FCC-PART15B

### **Test Data:**

Detector (QP/AV)	Frequency (MHz)	Level (dBµV)	Limit (dBµV)	Margin (dB)	Line	PE
QP	1.426000	47.6	56	8.4	L1	GND
AV	0.698000	40.5	46	5.5	L1	GND
AV	0.806000	41.6	46	4.4	N	GND
Remarks:						

### **Graphical results:**



CE graphical results



REPORT NO.: I08GE4437-FCC-PART15B

# **Annex A External Photos**

Front view with clip colse

Front view with clip open



REPORT NO.: 108GE4437-FCC-PART15B

Back view

Adaptor



REPORT NO.: 108GE4437-FCC-PART15B

Cable

Battery



REPORT NO.: 108GE4437-FCC-PART15B

Earphone



REPORT NO.: I08GE4437-FCC-PART15B

# **Annex B Internal Photos**

Main board (face)

Main borar (back)



REPORT NO.: I08GE4437-FCC-PART15B

# **ANNEX C Deviations from Prescribed Test Methods**

No deviation from Prescribed Test Methods.

