

# TEST REPORT

REPORT NUMBER: B07GE6790-FCC-BT

**ON**

**Type of Equipment:** Mobile Phone  
**Type of Designation:** MEGA2  
**Manufacturer:** Ezze Mobile Tech

**ACCORDING TO**

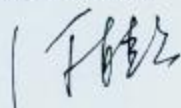
**FCC Part 15, FREQUENCY Hopping Spread Spectrum  
Transceiver**

**PART 15 subpart C 15.247**

**China Telecommunication Technology Labs.**

*Month date, year*  
2007-11-30

*Signature*



He Guili  
**Director**

**FCC ID:** RV2MEGA2  
**Report Date:** 2007-11-30

**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 Parts 15, subpart C 15.247. The sample tested was found to comply with the requirements defined in the applied rules.

## CONTENTS

<b>1 GENERAL INFORMATION .....</b>	<b>4</b>
1.1 NOTES .....	4
1.2 TESTERS .....	5
1.3 TESTING LABORATORY INFORMATION .....	6
1.4 DETAILS OF APPLICANT OR MANUFACTURER .....	7
<b>2 TEST ITEM .....</b>	<b>8</b>
2.1 GENERAL INFORMATION .....	8
2.2 OUTLINE OF EUT .....	8
2.3 MODIFICATIONS INCORPORATED IN EUT .....	8
2.4 EQUIPMENT CONFIGURATION .....	8
2.5 OTHER INFORMATION .....	9
<b>3 SUMMARY OF TEST RESULTS .....</b>	<b>10</b>
<b>4 TEST RESULTS .....</b>	<b>11</b>
4.1 PEAK POWER .....	11
4.2 BAND EDGES MEASUREMENT .....	14
4.2.1 BAND EDGES MEASUREMENT (RADIATED) .....	16
4.3 FREQUENCY SEPARATION .....	21
4.4 NUMBER OF HOPPING FREQUENCY .....	24
4.5 TIME OF OCCUPANCY .....	26
4.6 SPURIOUS EMISSION .....	29
4.6.1 CONDUCTED SPURIOUS MEASUREMENT .....	29
4.6.1 RADIATED SPURIOUS MEASUREMENT .....	32
4.7 POWER LINE CONDUCTED EMISSIONS .....	34
<b>ANNEX A EUT PHOTOS .....</b>	<b>36</b>
<b>ANNEX B DEVIATIONS FROM PRESCRIBED TEST METHODS .....</b>	<b>42</b>

## 1 General Information

### 1.1 Notes

All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC Parts 15, subpart C 15.247.

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 B.

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 director 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.

FCC Parts 15 subpart C 15.247  
Equipment: MEGA2

REPORT NO.: B07GE6790-FCC-BT

## 1.2 Testers

Name: An Shaogeng  
Position: Engineer  
Department: Department of EMC test  
Duration of the test: From 2007-11-15 to 2007-11-20  
Signature: 

Editor of this test report:

Name: An Shaogeng  
Position: Engineer  
Department: Department of EMC test  
Date: 2007-11-30  
Signature: 

Technical responsibility for area of testing:

Name: Zou Dongyi  
Position: Manager  
Department: Department of EMC test  
Date: 2007-11-30  
Signature: 

### 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](mailto:emc@chinattl.com)

#### 1.3.2 Details of accreditation status

Accredited by: China National Accreditation for Laboratory (CNAL)  
Registration number: CNAL Registration No.L0570  
Standard: ISO/IEC 17025

#### 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: Ezze Mobile Tech  
Address: 1F, Bubmusa Bldg., 151-31.  
Nonhyun-Dong, Kangnam-Ku, Seoul, Korea  
Country: Korea  
Telephone: +82-2-519-7807  
Fax: +82-2-519-7882  
Contact: Byoung Dae Ahn  
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: --

## 2 Test Item

### 2.1 General Information

Manufacturer: Ezze Mobile Tech

Name: Mobile Phone

Model Number: MEGA2

Serial Number: None

Production Status: None

Receipt date of test item: Production

### 2.2 Outline of EUT

EUT is a GSM850/ PCS1900 Dual-band Terminal Equipment with Bluetooth function.

### 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	Mobile Station	Ezze Mobile Tech	MEGA2	--	None
B	Adapter	Yu Feng	USB type charger	--	None
C	Battery	ZhiYin	LiO+	--	None
D	Headset	Rich star	Wire type		

Cables:

Item	Cable Type	Manufacturer	Length	Shield	Quantity	Remarks
1	DC cable on Adapter	Unknown	1.80m	No	1	None



## 2.5 Other Information

None

TTL Test Report

### 3 Summary of Test Results

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

	Name of Test	Result
1、	Peak power	Pass
2、	Band edges measurement	Pass
3、	Frequency separation	Pass
4、	Number of hopping frequency	Pass
5、	Time of occupancy	Pass
6、	Spurious emission	Pass
7、	Powerline Conducted Emissions	Pass
Note: none		

CITL Test Report

## 4 Test Results

### 4.1 Peak power

<b>Specifications:</b>	15.247 (b)(3)(i),(ii)and(iii)					
<b>Date of Tests</b>	2007.11.26					
<b>Test conditions:</b>	Ambient Temperature: 15°C -35°C Relative Humidity: 30%-60% Air pressure: 86-106kPa					
<b>Operation Mode</b>	Fix channel transmit					
<b>Test Results:</b>	Pass					
<b>Test equipment Used:</b>						
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESI26	100211	2008-01-03	Normal
713	Fully-Anechoic Chamber	ETS	11.8m×6.5m×6.3 m	--	2010-11-16	Normal
7330	Universal Radio Communications Tester	R&S	CMU200	100233	2008-02-22	Normal

#### Test Setup:

The EUT was placed in an anechoic chamber. The CMU 200 was used to set the TX channel and power level. The transmitter output is connected to Spectrum analyzer through a coupling.

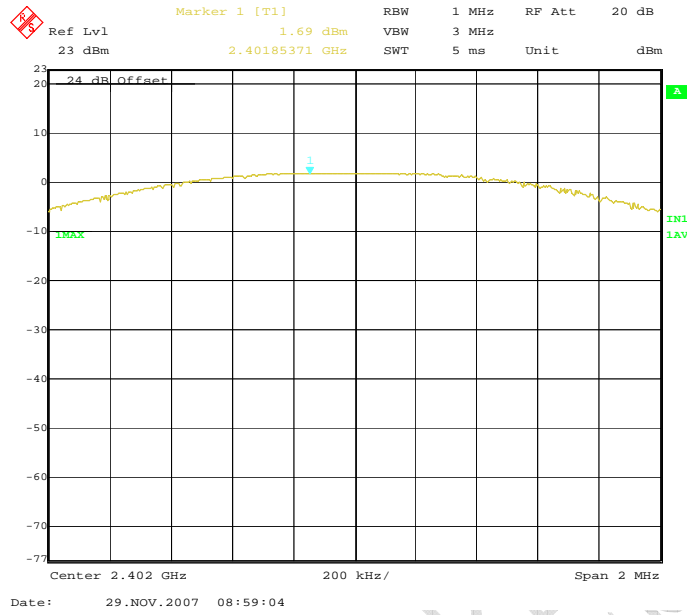
#### Test Results:

channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Result
0	2402	1.69	30	Pass
39	2441	1.17	30	Pass
78	2480	2.50	30	pass

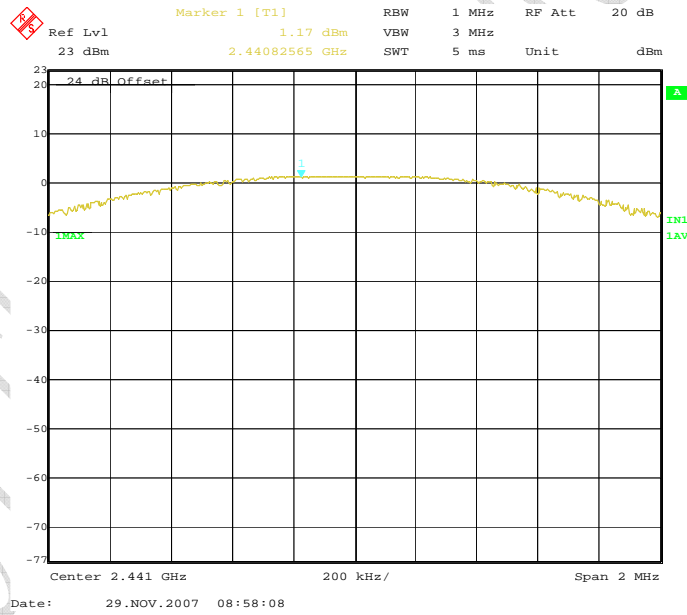
FCC Parts 15 subpart C 15.247  
Equipment: MEGA2

REPORT NO.: B07GE6790-FCC-BT

Test Data:  
Channel 0:



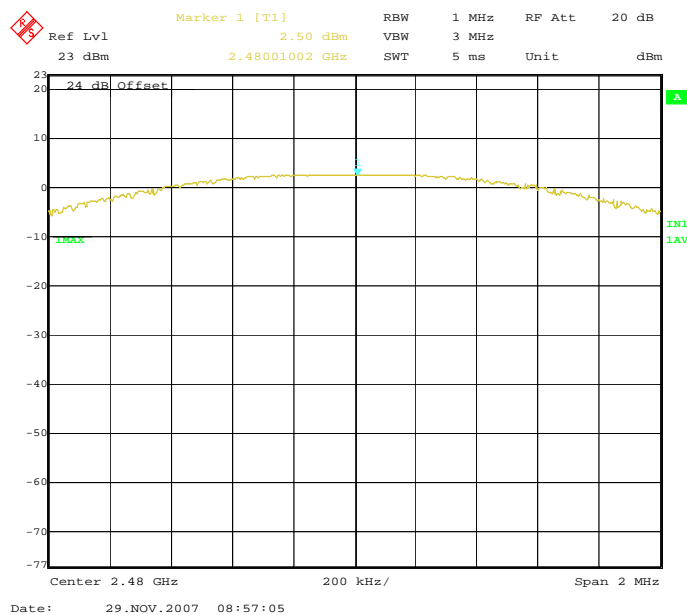
Channel 39



FCC Parts 15 subpart C 15.247  
Equipment: MEGA2

REPORT NO.: B07GE6790-FCC-BT

Channel 78



CITL TEST REPORT

### 4.2 Band edges measurement

<b>Specifications:</b>	15.247 (d)					
<b>Date of Tests</b>	2007.11.26					
<b>Test conditions:</b>	Ambient Temperature: 15°C-35°C Relative Humidity: 30%-60% Air pressure: 86-106kPa					
<b>Operation Mode</b>	Fix channel transmit					
<b>Test Results:</b>	Pass					
<b>Test equipment Used:</b>						
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESI26	100211	2008-01-03	Normal
713	Fully-Anechoic Chamber	ETS	11.8m×6.5m×6.3m	--	2010-11-16	Normal
7330	Universal Radio Communications Tester	R&S	CMU200	100233	2008-02-22	Normal

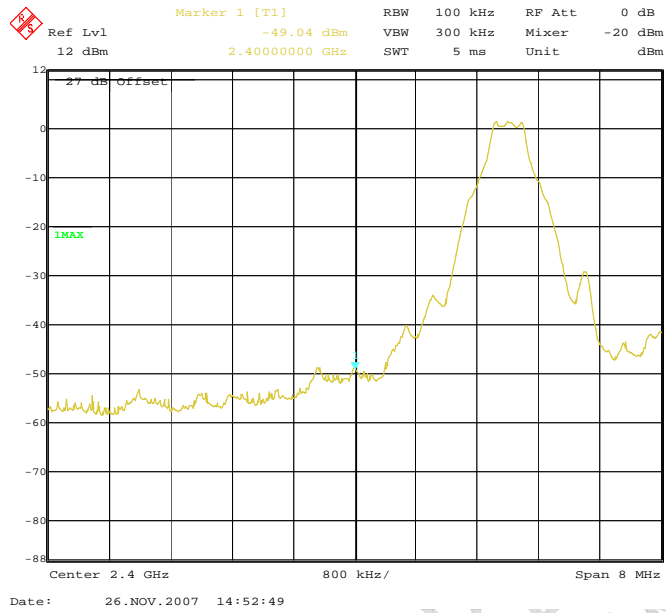
#### Test Setup:

The EUT was placed in an anechoic chamber. The CMU 200 was used to set the TX channel and power level. The transmitter output is connected to Spectrum analyzer through a coupling.

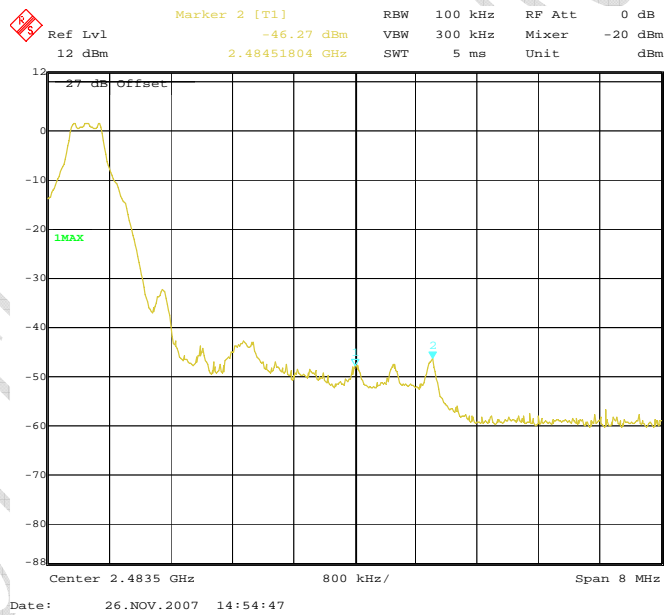
FCC Parts 15 subpart C 15.247  
Equipment: MEGA2

REPORT NO.: B07GE6790-FCC-BT

Test data:  
Channel 0



Channel 78



### 4.2.1 Band edges measurement (Radiated)

<b>Specifications:</b>	15.247 (c); 15.205(a) and 15.209(a)					
<b>Date of Tests</b>	2007.11.26					
<b>Test conditions:</b>	Ambient Temperature: 15°C -35°C Relative Humidity: 30%-60% Air pressure: 86-106kPa					
<b>Operation Mode</b>	Fix channel transmit					
<b>Test Results:</b>	Pass					
<b>Test equipment Used:</b>						
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESI26	100211	2008-01-03	Normal
7330	Horn Antenna	R/S	HF906	100037	2008-01-09	Normal
713	Fully-Anechoic Chamber	ETS	11.8m×6.5m×6.3m	--	2010-11-16	Normal
7330	Universal Radio Communications Tester	R&S	CMU200	100233	2008-02-22	Normal

#### Test Setup:

The EUT was placed in an anechoic chamber. The CMU 200 was used to set the TX channel and power level. The transmitter output is connected to Spectrum analyzer through a Horn antenna.

#### Test method:

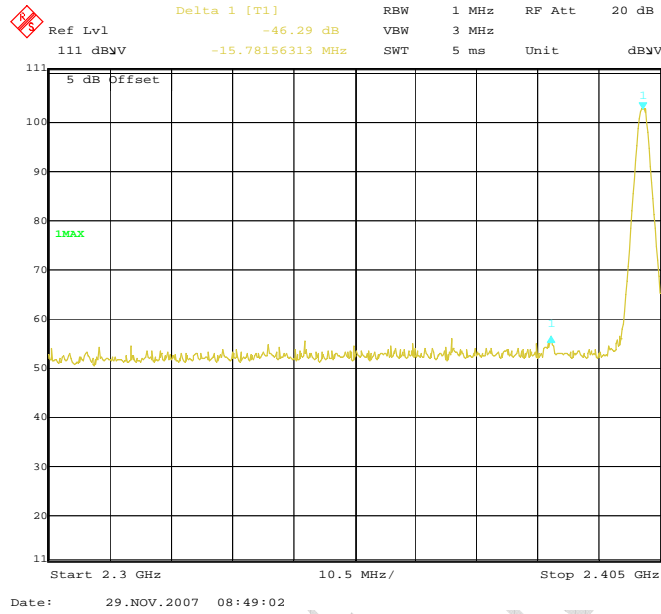
Use peak and average detector to measure band edges.  
Test should be performing under Vertical and Horizontal modes.



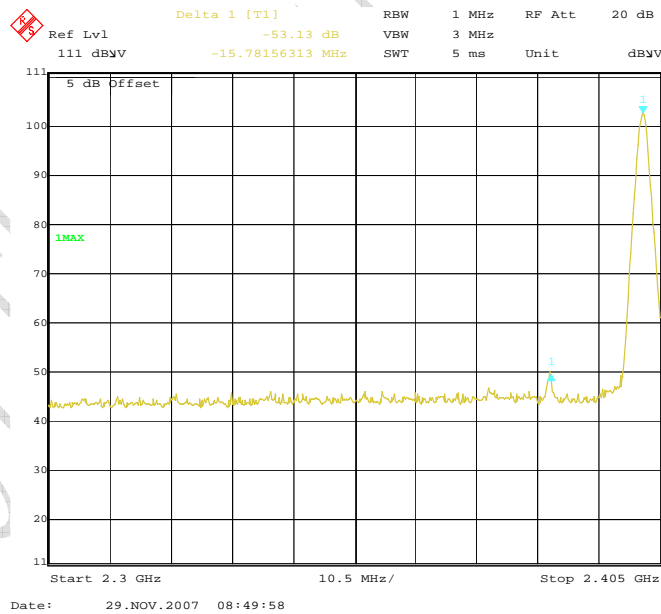
FCC Parts 15 subpart C 15.247  
Equipment: MEGA2

REPORT NO.: B07GE6790-FCC-BT

Test data:  
Channel 0  
Vertical  
Peak mode:



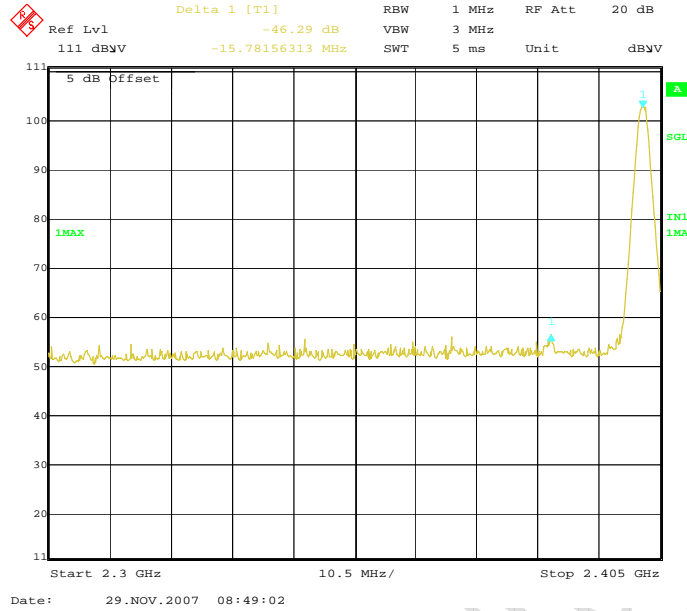
Average mode:



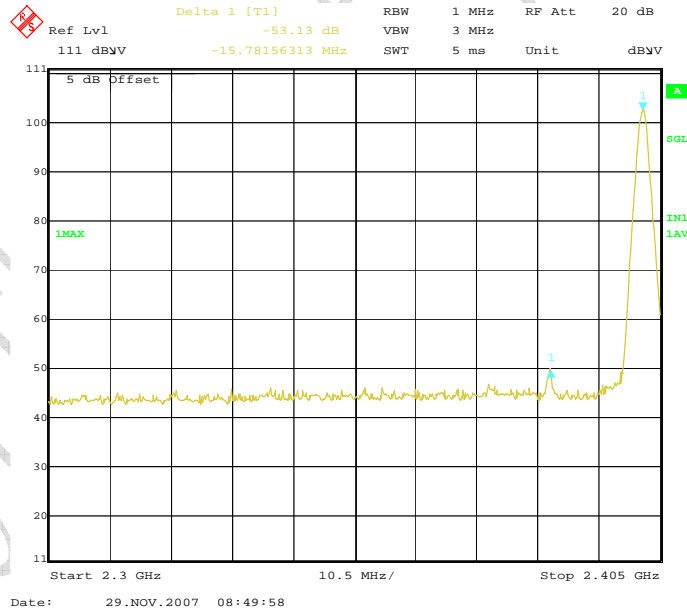
FCC Parts 15 subpart C 15.247  
Equipment: MEGA2

REPORT NO.: B07GE6790-FCC-BT

Channel 0  
Horizontal  
Peak mode:



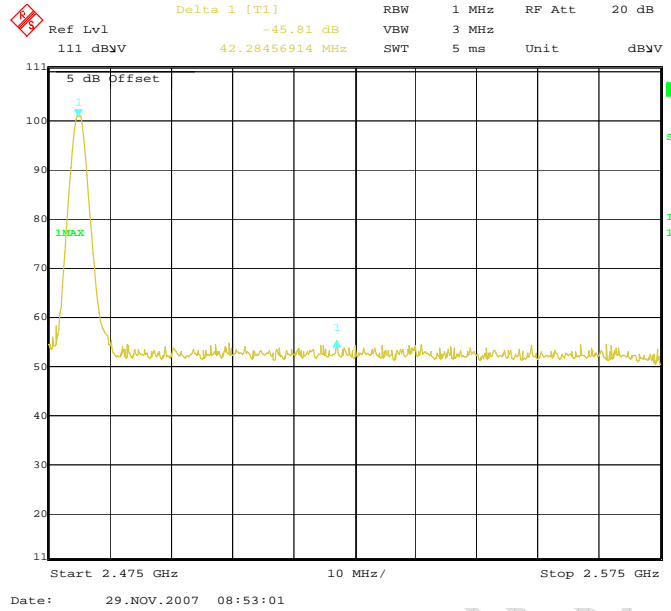
Average mode:



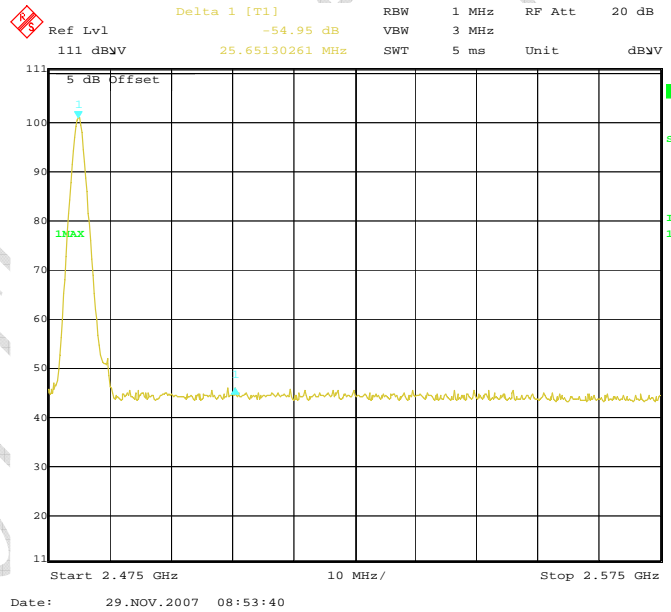
FCC Parts 15 subpart C 15.247  
Equipment: MEGA2

REPORT NO.: B07GE6790-FCC-BT

Channel 78  
Vertical  
Peak mode:



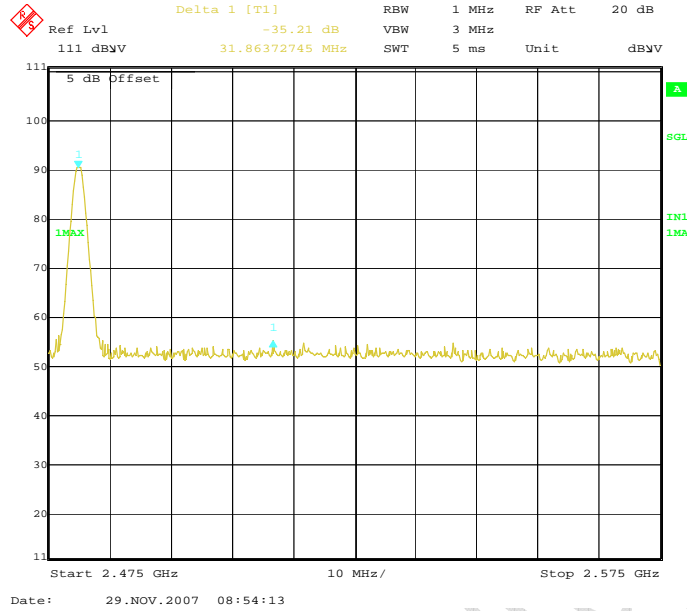
Average mode:



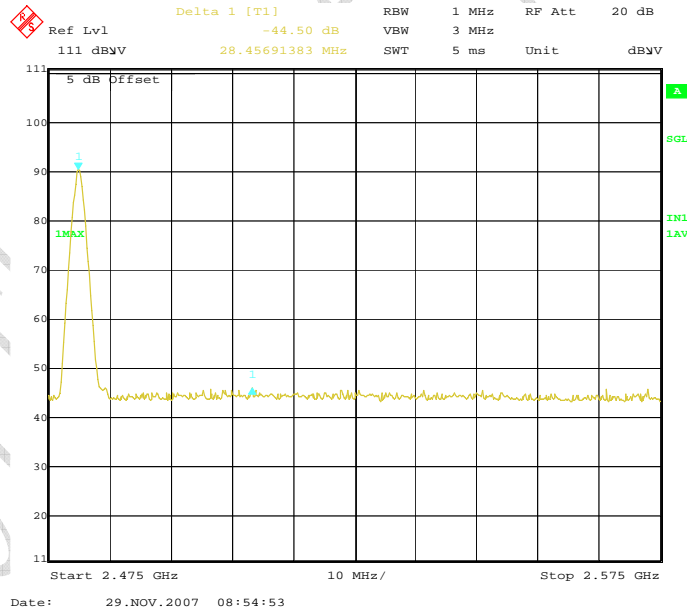
FCC Parts 15 subpart C 15.247  
Equipment: MEGA2

REPORT NO.: B07GE6790-FCC-BT

Channel 78  
Horizontal  
Peak mode:



Average mode:



### 4.3 Frequency separation

<b>Specifications:</b>	15.247(a)(1)					
<b>Date of Test</b>	2007.11.26z					
<b>Test conditions:</b>	Ambient Temperature: 15°C-35°C Relative Humidity: 30%-60% Air pressure: 86-106kPa					
<b>Operation Mode</b>	Fix channel transmit					
<b>Test Results:</b>	Pass					
<b>Test equipment Used:</b>						
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESI26	100211	2008-01-03	Normal
713	Fully-Anechoic Chamber	ETS	11.8m×6.5m×6.3m	--	2010-11-16	Normal
7330	Universal Radio Communications Tester	R&S	CMU200	100233	2008-02-22	Normal

### Test Setup

The EUT was placed in an anechoic chamber. The CMU 200 was used to set the TX channel and power level. The transmitter output is connected to Spectrum analyzer through a coupling.

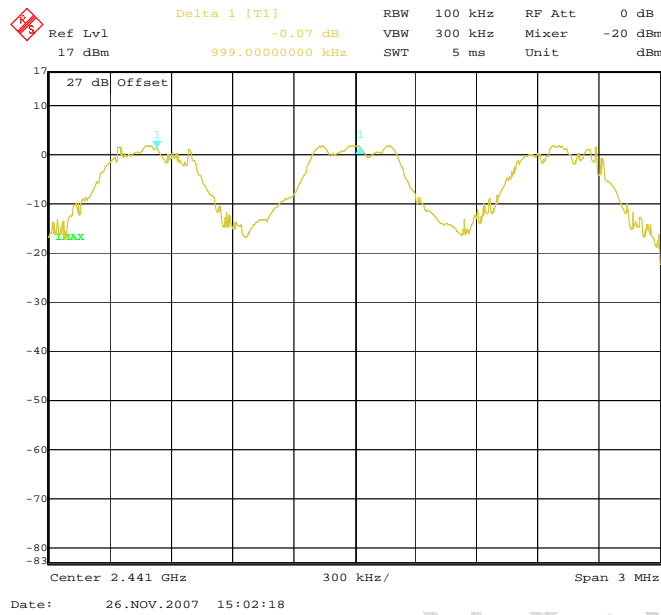
### Test Result:

Channel separation (MHz)	20dB Bandwidth (kHz)		Limit (kMz)	Result
0.999	Ch 0	961.9	>25	Pass
0.999	Ch 39	949.8	>25	Pass
0.999	Ch 78	919.8	>25	Pass

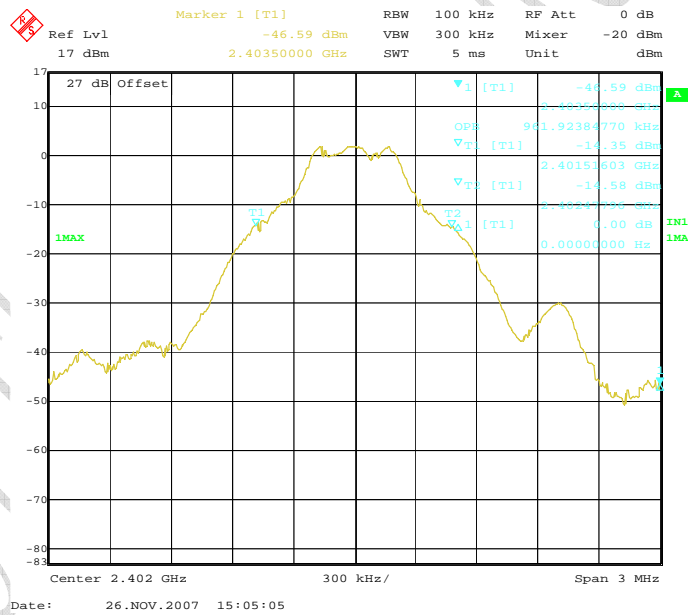
FCC Parts 15 subpart C 15.247  
Equipment: MEGA2

REPORT NO.: B07GE6790-FCC-BT

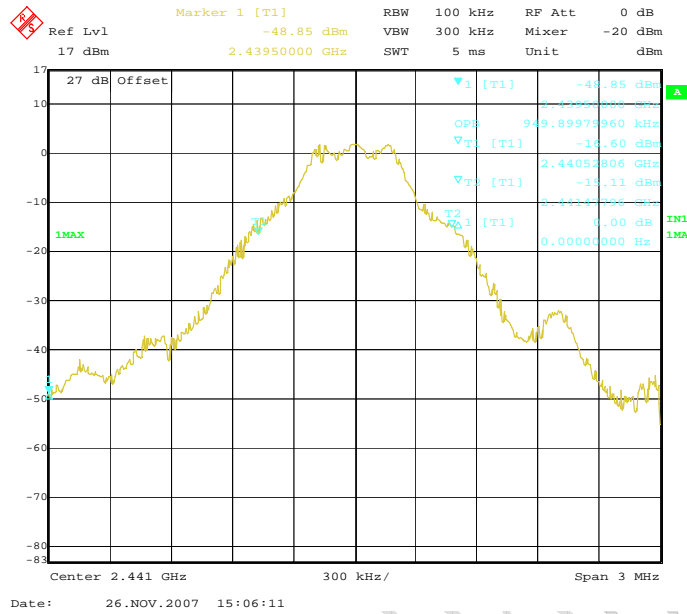
Test data:  
Channel Separation



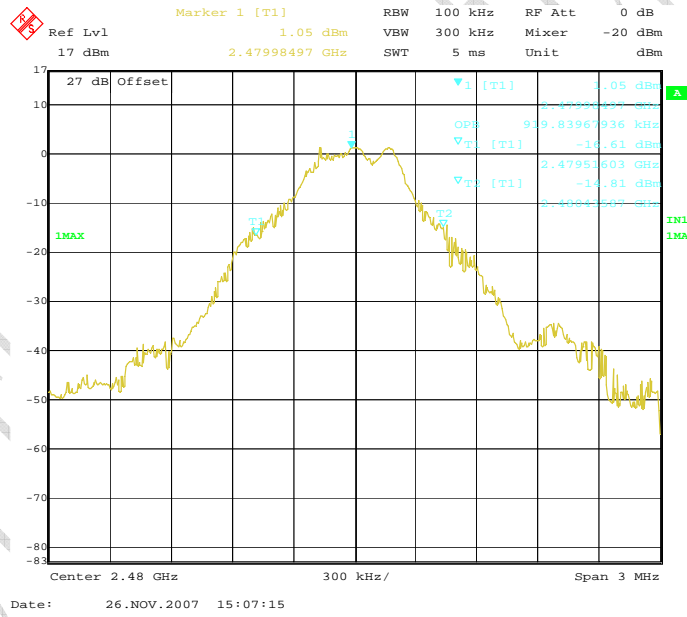
20dB Bandwidth (Ch 0)



### 20dB Bandwidth (Ch 39)



### 20dB Bandwidth (Ch 78)



### 4.4 Number of hopping frequency

<b>Specifications:</b>	15.247(a)(1)(ii)					
<b>Date of Test</b>	2007.11.26					
<b>Test conditions:</b>	Ambient Temperature: 15°C-35°C Relative Humidity: 30%-60% Air pressure: 86-106kPa					
<b>Operation Mode</b>	hopping					
<b>Test Results:</b>	Pass					
<b>Test equipment Used:</b>						
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESI26	100211	2008-01-03	Normal
713	Fully-Anechoic Chamber	ETS	11.8m×6.5m×6.3m	--	2010-11-16	Normal
7330	Universal Radio Communications Tester	R&S	CMU200	100233	2008-02-22	Normal

### Test Setup

The EUT was placed in an anechoic chamber. The CMU 200 was used to set the TX channel and power level. The transmitter output is connected to Spectrum analyzer through a coupling.

### Test Result:

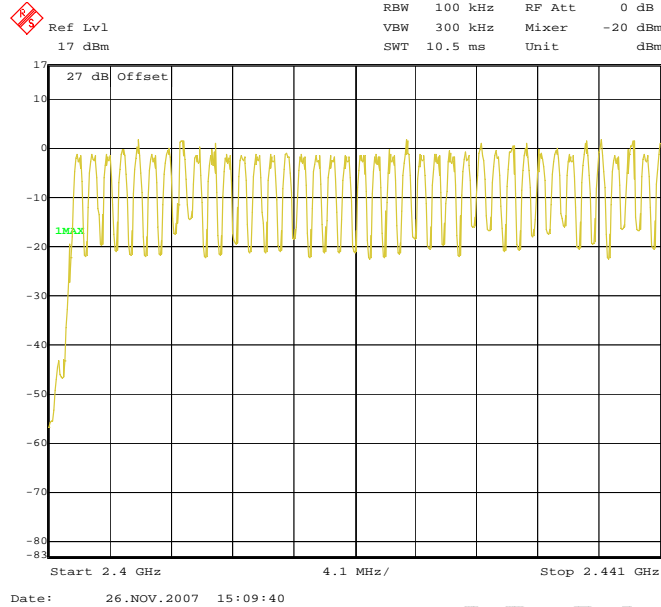
Result (No. of Ch)	Limit (No. of Ch)	Result
79	>75	Pass



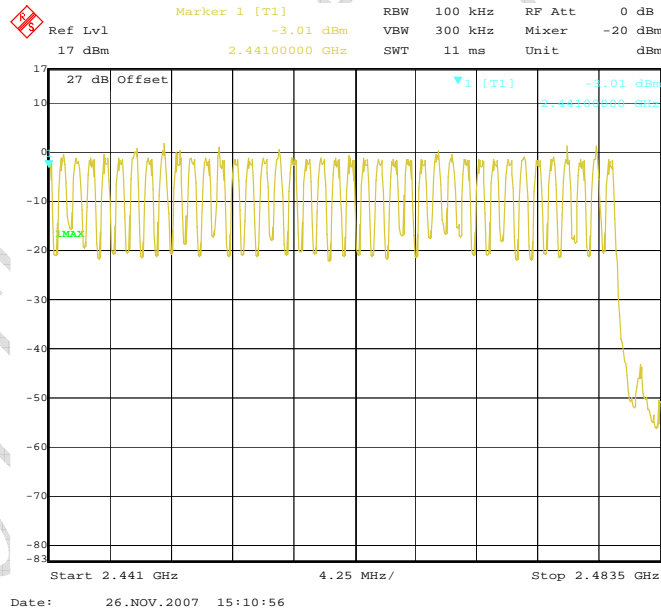
FCC Parts 15 subpart C 15.247  
Equipment: MEGA2

REPORT NO.: B07GE6790-FCC-BT

Test data:  
Channel Number  
2.4GHz-2.441GHz



2.441GHz-2.4835GHz



### 4.5 Time of occupancy

<b>Specifications:</b>	15.247(a)(1)(iii)					
<b>Date of Test</b>	2007.11.26					
<b>Test conditions:</b>	Ambient Temperature: 15°C-35°C Relative Humidity: 30%-60% Air pressure: 86-106kPa					
<b>Operation Mode</b>	Fix channel					
<b>Test Results:</b>	Pass					
<b>Test equipment Used:</b>						
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESI26	100211	2008-01-03	Normal
713	Fully-Anechoic Chamber	ETS	11.8m×6.5m×6.3 m	--	2010-11-16	Normal
7330	Universal Radio Communications Tester	R&S	CMU200	100233	2008-02-22	Normal

### Test Setup

The EUT was placed in an anechoic chamber. The CMU 200 was used to set the TX channel and power level. The transmitter output is connected to Spectrum analyzer through a coupling.

### Test Result:

#### Function:

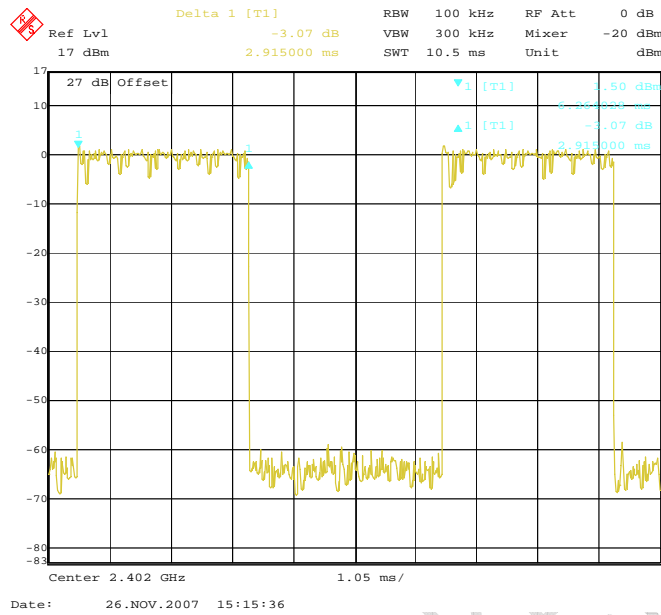
$$\text{Total Dwell Time} = \text{pulsetime} \times \left(\frac{1600}{6}\right) / 79 \times 31.6$$

Channel	Pulse Time (ms)	Total of Dwell (ms)	Period Time (s)	Limit (ms)	Result
0	2.915	310.93	31.6	400	Pass
39	2.915	310.93	31.6		Pass
78	2.915	310.93	31.6		Pass

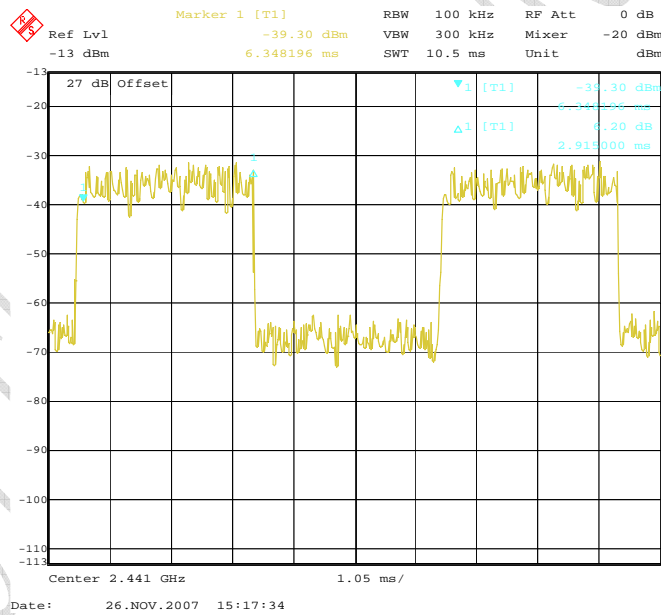
FCC Parts 15 subpart C 15.247  
Equipment: MEGA2

REPORT NO.: B07GE6790-FCC-BT

Test data:  
Channel 0



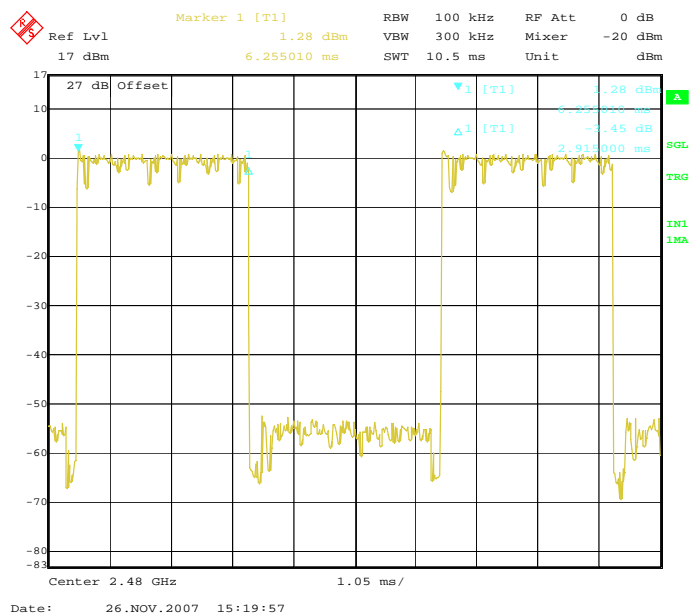
Channel 39



FCC Parts 15 subpart C 15.247  
Equipment: MEGA2

REPORT NO.: B07GE6790-FCC-BT

Channel 78



EMI TEST REPORT

## 4.6 Spurious emission

### 4.6.1 Conducted Spurious Measurement

<b>Specifications:</b>	15.209(a) and 15.205(a)					
<b>Date of Test</b>	2007.11.26					
<b>Test conditions:</b>	Ambient Temperature: 15°C-35°C Relative Humidity: 30%-60% Air pressure: 86-106kPa					
<b>Operation Mode</b>	Fix channel transmit					
<b>Test Results:</b>	Pass					
<b>Test equipment Used:</b>						
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESI26	100211	2008-01-03	Normal
713	Fully-Anechoic Chamber	ETS	11.8m×6.5m×6.3 m	--	2010-11-16	Normal
7330	Universal Radio Communications Tester	R&S	CMU200	100233	2008-02-22	Normal

### Test Setup

The EUT was placed in an anechoic chamber. The CMU 200 was used to set the TX channel and power level. The transmitter output is connected to Spectrum analyzer through a coupling.

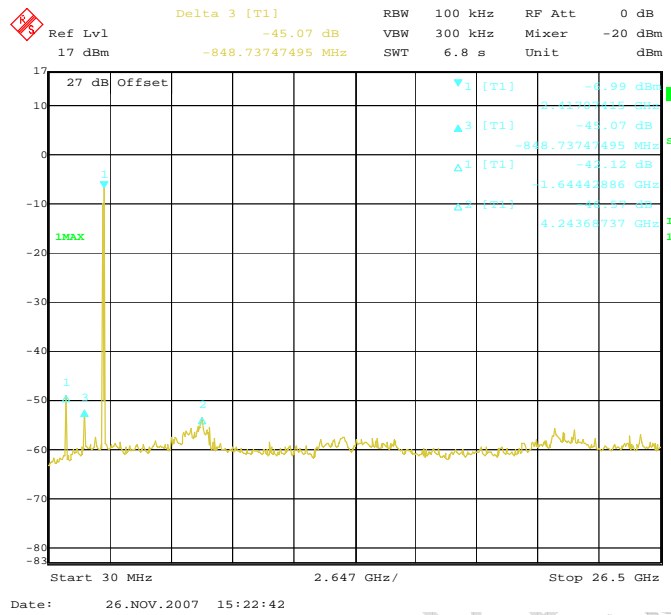
### Test Result:

Channel	Result
0	Pass
39	Pass
78	Pass

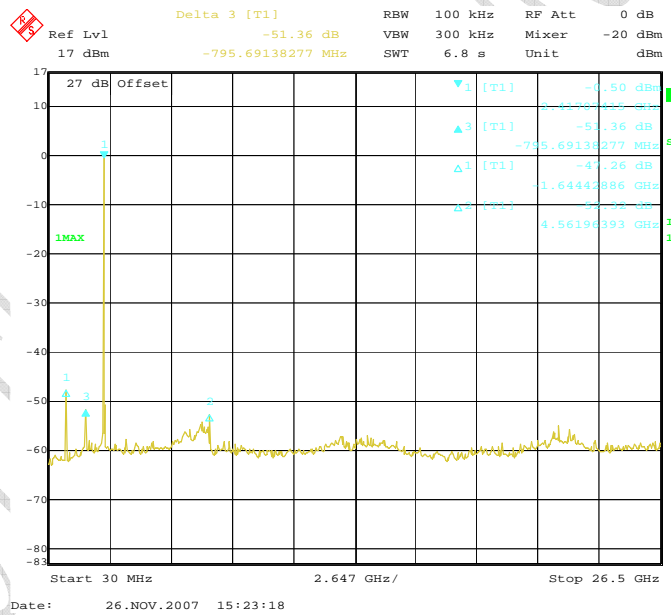
FCC Parts 15 subpart C 15.247  
Equipment: MEGA2

REPORT NO.: B07GE6790-FCC-BT

Test data:  
Channel 0



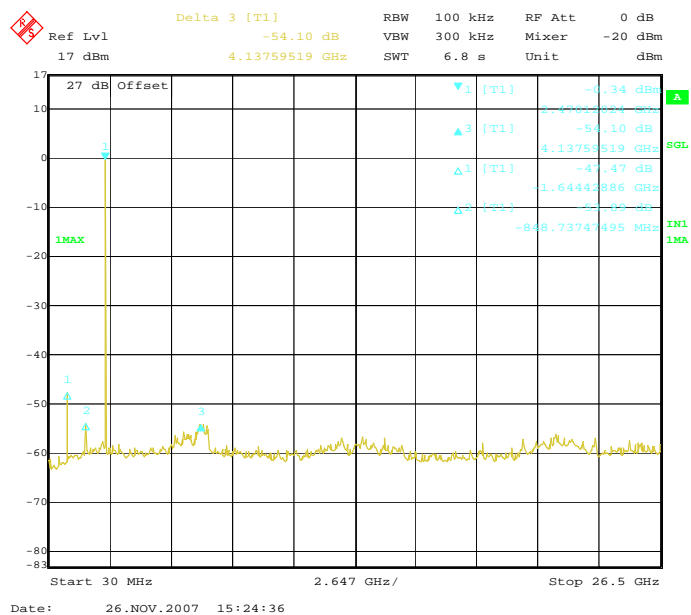
Channel 39



FCC Parts 15 subpart C 15.247  
Equipment: MEGA2

REPORT NO.: B07GE6790-FCC-BT

Channel 78



CIL TEST REPORT

### 4.6.1 Radiated Spurious Measurement

<b>Specifications:</b>	15.209(a) and 15.205(a)					
<b>Date of Test</b>	2007.11.26					
<b>Test conditions:</b>	Ambient Temperature: 15°C-35°C Relative Humidity: 30%-60% Air pressure: 86-106kPa					
<b>Operation Mode</b>	hopping					
<b>Test Results:</b>	Pass					
<b>Test equipment Used:</b>						
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESI26	100211	2008-01-03	Normal
713	Fully-Anechoic Chamber	ETS	11.8m×6.5m×6.3m	--	2010-11-16	Normal
7330	Universal Radio Communications Tester	R&S	CMU200	100233	2008-02-22	Normal

### Test Setup

The EUT was placed in an anechoic chamber. The CMU 200 was used to set the TX channel and power level. The transmitter output is connected to Spectrum analyzer through a Bilog antenna (for frequency under 1GHz) and a horn antenna (for frequency above 1GHz).

### Limit:

Frequency (MHz)	Field Strength (mV/m)	Measurement Distance (m)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3



FCC Parts 15 subpart C 15.247  
Equipment: MEGA2

REPORT NO.: B07GE6790-FCC-BT

Test result:  
9kHz-30MHz

There is No frequency exceeds and near limit line in 20dB scope blow.

30MHz-1GHz

frequency	level	limit	Antenna height	Turntable azimuth	Antenna polarization
875.220	33.90	46.4	263	36	VERTICAL
876.840	33.00	46.4	307	314	HORIZONTAL
941.340	38.70	46.4	100	28	VERTICAL

Above 1GHz

Test from 1GHz up to 10<sup>th</sup> harmonic of transmit frequency.

Working frequency in 2.4GHz is exempt to test.

There is No frequency exceeds and near limit line in 20dB scope blow.

TTL Test Report

### 4.7 Power line Conducted Emissions

<b>Specifications:</b>	CISPR 22 voltage mains test					
<b>Date of Test</b>	2007.11.26					
<b>Test conditions:</b>	Ambient Temperature: 15°C-35°C Relative Humidity: 30%-60% Air pressure: 86-106kPa					
<b>Operation Mode</b>	Hopping					
<b>Test Results:</b>	Pass					
<b>Test equipment Used:</b>						
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESI26	100211	2008-01-03	Normal
7330	Artificial Mains Network	R/S	ESH2-Z5	837480/002	2009-01-9	Normal
714	Shielding Room	ETS	--	19003	2010-11-16	Normal
7330	Universal Radio Communications Tester	R&S	CMU200	100233	2008-02-22	Normal

### Test Setup

The EUT was placed in an shielding room. The CMU 200 was used to set the TX channel and power level. The ac adapter output is connected to Spectrum analyzer through an AMN(Artificial Mains Network).

#### Limits of the conducted disturbance at the AC mains ports:

Frequency range	Limit(Quasi-peak)	Limit(Average)
0.15 MHz to 0.5 MHz	66 dBµV – 56 dBµV	56 dBµV – 46 dBµV
>0.5 MHz to 5MHz	56 dBµV	46 dBµV
>5 MHz to 30 MHz	60 dBµV	50 dBµV

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

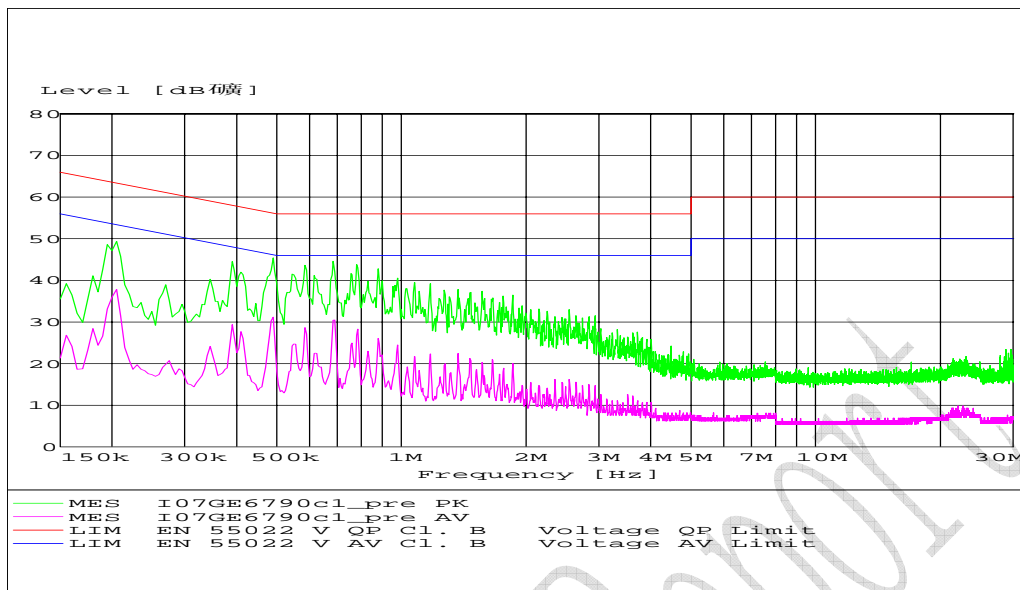
### Test Result:

<b>Pass</b>					
Detector (QP/AV)	Frequency (MHz)	Level (dBµV)	Limit (dBµV)	Line	PE
--	--	--	--	--	--
Remarks: No frequency exceeds the limit.					

FCC Parts 15 subpart C 15.247  
Equipment: MEGA2

REPORT NO.: B07GE6790-FCC-BT

Test data:



TTL Test Report

## Annex A EUT Photos



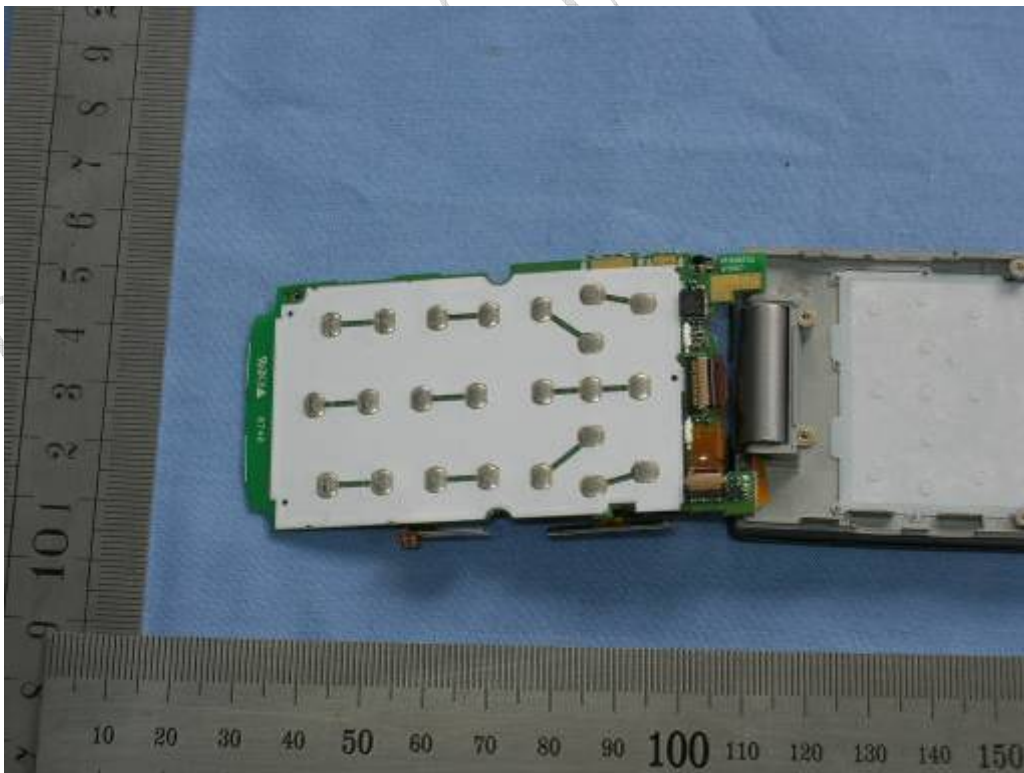
Picture 1 Front



Picture 2 Back



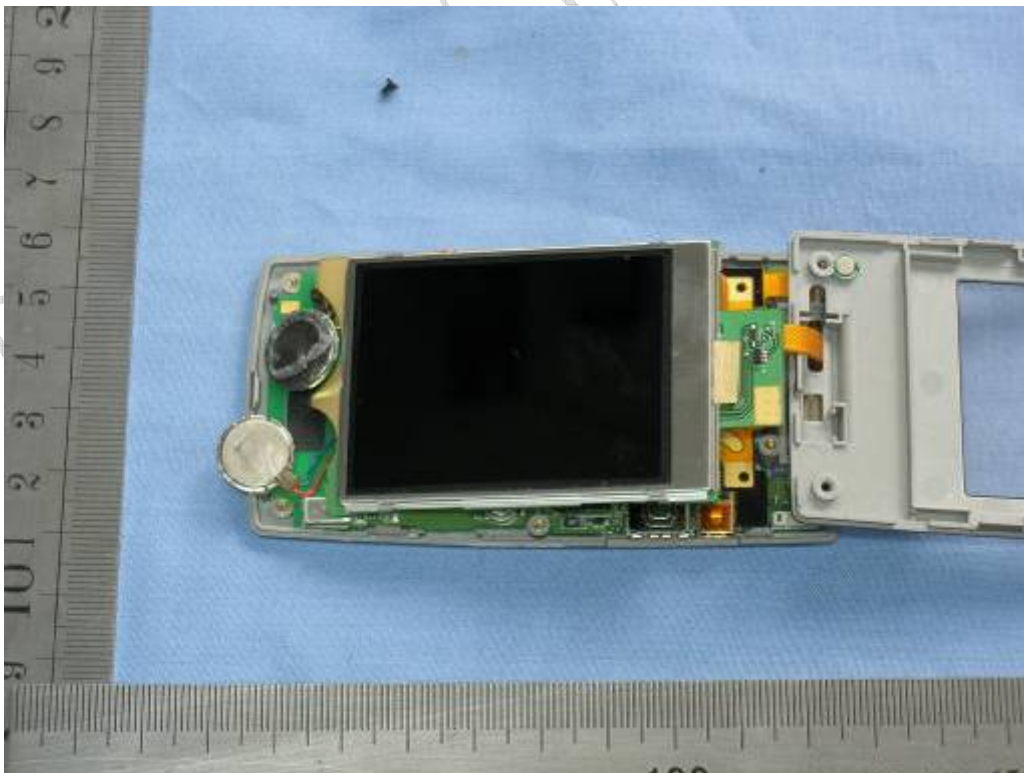
Picture 3 Open



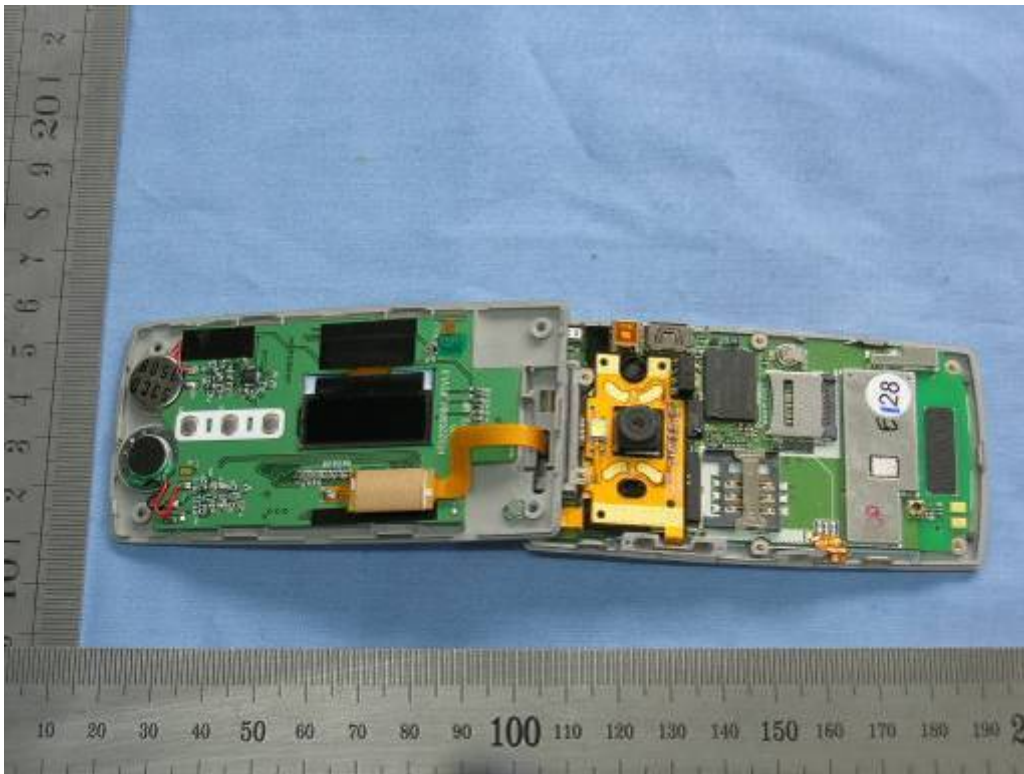
Picture 4 Mainboard face



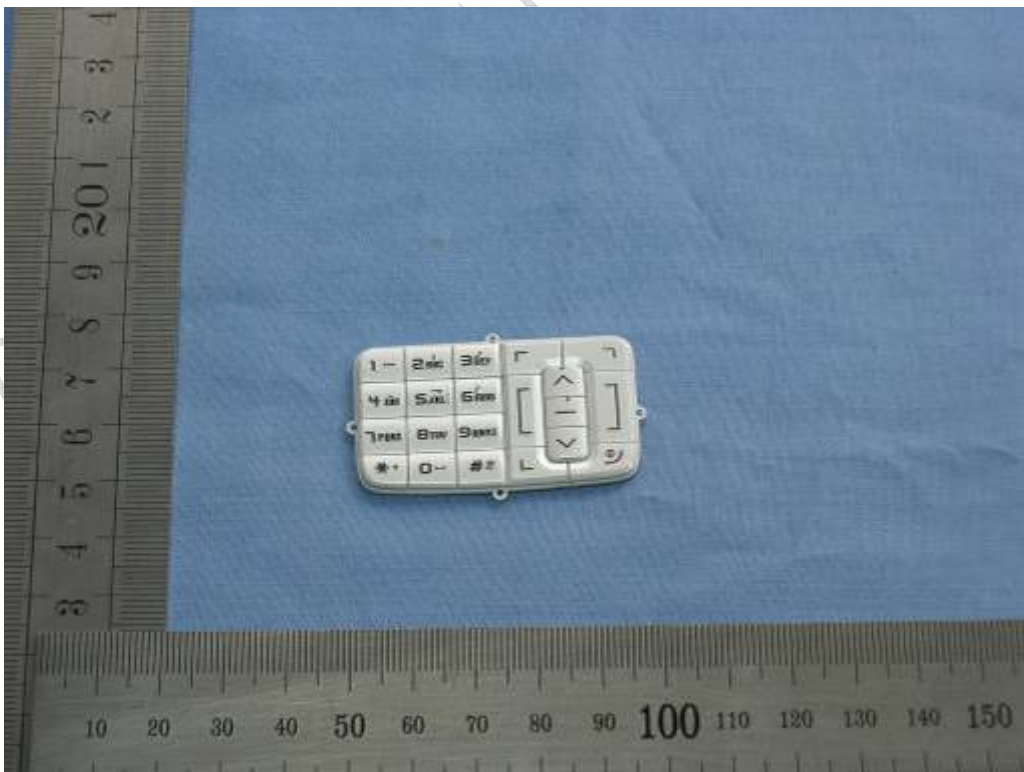
Picture 5 Mainboard (inverse)



Picture 6 Screen 1



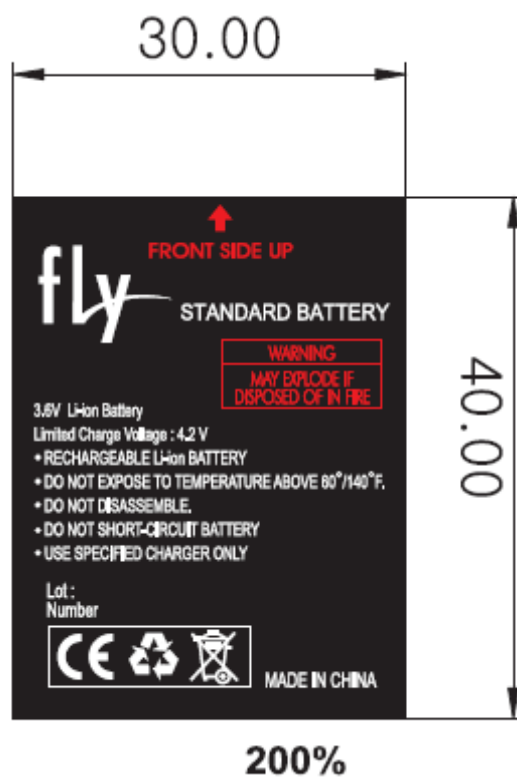
Picture 7 Screen and Mainboard



Picture 8 Keyboard

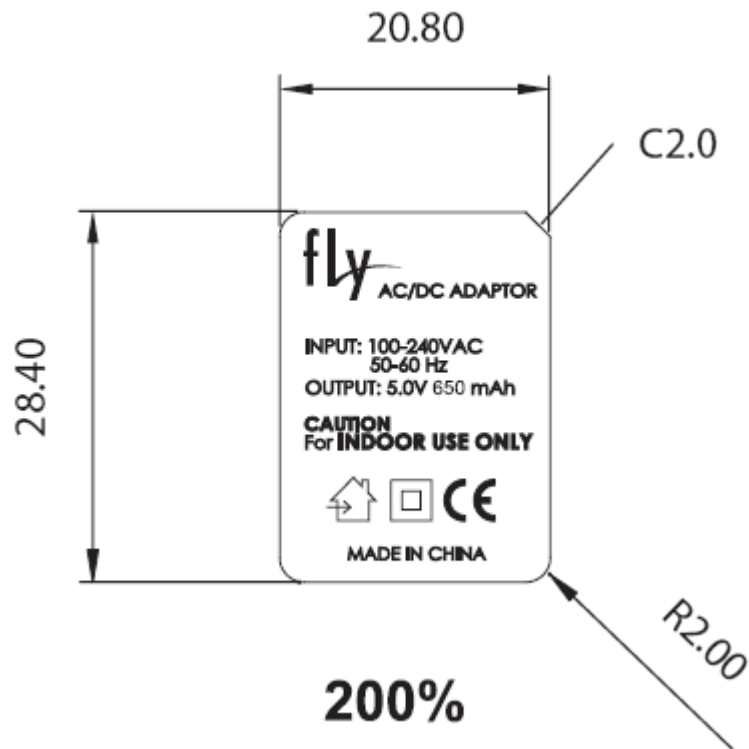


Picture 9 Adapter



Picture 10 Label of battery





Picture 11 Label of Adapter

## ANNEX B Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

————— **The End of this Report** —————

*TTL Test Report*