

TEST REPORT

No. 2008TAR022

for

TCT Mobile Suzhou Limited

Playboy Phone

Type: PB01

with

Hardware Version: PIO1

Software Version: V22D

Issued Date: Jun 12th, 2008



No. DAT-P-114/01-01

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of TMC Beijing.

Test Laboratory:

TMC Beijing, Telecommunication Metrology Center of Ministry of Information Industry

No. 52, Huayuan Bei Road, Haidian District, Beijing, P. R. China 100083.

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1. Test Laboratory

1.1. Testing Location

Company Name:

TMC Beijing, Telecommunication Metrology Center of MII

Address:

No 52, Huayuan beilu, Haidian District, Beijing, P.R. China

Postal Code:

100083

Telephone:

00861062303288

Fax:

00861062304793

1.2. Testing Environment

Normal Temperature:

15-35℃

Relative Humidity:

20-75%

1.3. Project data

Testing Start Date:

Jun 2th, 2008

Testing End Date:

Jun 2th, 2008

1.4. Signature

Zi Xiaogang

(Prepared this test report)

Sun Xiangqian

(Reviewed this test report)

Lu Bingsong

Deputy Director of the laboratory

(Approved this test report)



2. Client Information

2.1. Applicant Information

Company Name: TCT Mobile Suzhou Limited

Address /Post: 4F, South Building, No.2966, JinKe Road, Zhangjiang High-Tech Park

Shanghai 201203, P.R.China

City: Shanghai Postal Code: 201203 Country: China

Telephone: 0086-21-61460883 Fax: 0086-21-61460602

2.2. Manufacturer Information

Company Name: TCT Mobile Suzhou Limited

4F, South Building, No.2966, JinKe Road, Zhangjiang High-Tech Park

Shanghai 201203, P.R.China

City: Shanghai Postal Code: 201203 Country: China

Telephone: 0086-21-61460883 Fax: 0086-21-61460602



3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description Playboy Phone

Model PB01
FCC ID RAD085
Hardware status PIO1
Software status V22D

Power supply Battery or Charger (AC Adaptor)

The Playboy phone, PB01, supporting GSM850/GSM1900/GSM1800, manufactured by TCT Mobile Suzhou Limited is a variant of OT-V770A (LAVA A) for the test. Only the enclosure of the EUT had been changed. So only the Radiation test should be tested. The Conducted Emission test result is come from the OT-V770A (LAVA A).

Note: Photographs of EUT are shown in ANNEX A of this test report. Components list, please refer to documents of the manufacturer; it is also included in the original test record of Telecommunication Metrology Center of MII of People's Republic of China.

3.2. Internal Identification of EUT used during the test

EUT ID* SN or IMEI HW Version SW Version

EUT1 011432000090441 PIO1 V22D

4. LABORATORY ENVIRONMENT

Semi-anechoic chamber (23 meters × 17meters × 10meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 30 °C		
Relative humidity	Min. = 30 %, Max. = 60 %		
Shielding effectiveness	> 110 dB		
Electrical insulation	> 10 kΩ		
Ground system resistance	< 0.5 Ω		
Normalised site attenuation (NSA)	< ±3.2 dB, 10 m distance, from 30 to 1000 MHz		
Uniformity of field strength	Between 0 and 6 dB, from 80 to 2000 MHz		

Control room did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C		
Relative humidity	Min. =30 %, Max. = 60 %		
Shielding effectiveness	> 110 dB		
Electrical insulation	> 10 kΩ		
Ground system resistance	< 0.5 Ω		

^{*}EUT ID: is used to identify the test sample in the lab internally.



Conducted chamber did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 30 °C		
Relative humidity	Min. = 30 %, Max. = 60 %		
Shielding effectiveness	> 110 dB		
Electrical insulation	> 10 kΩ		
Ground system resistance	< 0.5 Ω		

Fully-anechoic chamber (6.8 meters × 3.08 meters × 3.53 meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 30 °C		
Relative humidity	Min. = 30 %, Max. = 60 %		
Shielding effectiveness	> 110 dB		
Electrical insulation	> 10 kΩ		
Ground system resistance	< 0.5 Ω		
Uniformity of field strength	Between 0 and 6 dB, from 80 to 2000 MHz		

5. SUMMARY OF TEST RESULTS

Abbreviations used in this clause:	
Р	Pass
NA	Not applicable
F	Fail

Clause	List	Clause in FCC rules	Verdict
1	Radiated Emission	15.109(a)	Р
2	Conducted Emission	15.107(a)	P

6. Test Equipments Utilized

NO.	NAME	TYPE	SERIES	PRODUCER	
			NUMBER		
1.	Test Receiver	ESS	847151/015	R&S	
2.	Test Receiver	ESI40	831564/002	R&S	
3.	BiLog Antenna	3142B	9908-1403	EMCO	
4.	BiLog Antenna	VUL9163	9163 175	Schwarzbeck	
5.	Signal Generator	SMT06	831285/005	R&S	
6.	Signal Generator	SMP04	100070	R&S	
7.	LISN	ESH2-Z5	829991/012	R&S	
8.	Spectrum Analyzer	E4440A	MY41000262	Agilent	
9.	Universal Radio	CMU200	100680s	R&S	
	Communication Tester				
10.	Dual-Ridge Waveguide Horn	3115	9906-5827	EMCO	
	Antenna				



11.	Dual-Ridge Waveguide Horn	3116	2663	EMCO
	Antenna			
12.	Dual-Ridge Waveguide Horn	3116	2661	EMCO
	Antenna			
13.	Climatic chamber	SH-241	92003546	ESPEC
14.	Spectrum Analyzer	FSU26	200030	R&S
15.	Bluetooth Tester	MT8852A	6K0002698	Anritsu



ANNEX A: EUT photograph

External Photo



Mobile Phone



Mobile Phone





Charger (AC/DC Adapter)



Label of Charger (AC/DC Adapter)





Battery



Battery



Internal Photo



Mobile phone Disassembly



Mobile phone Disassembly





Mobile phone Disassembly



Mobile phone Disassembly





Mobile phone Disassembly



ANNEX B: MEASUREMENT RESULTS

B.1 Radiated Emission (§15.109(a))

B.1.1 Method of measurement

The field strength of radiated emissions from the unintentional radiator (USB mode of MS) at a distance of 3 meters is tested. The test set-up please refers to Annex C.1.

B.1.2 EUT Operating Mode:

The MS is operating in the USB mode. During the test MS is connected to a laptop via a USB cable. The model of the laptop is IBM T42 2373-M6C, and the serial number of the laptop is 99-FV6P2. The software is used to let the laptop keep on copying data to MS, reading and erasing the data after copy action was finished.

B.1.3 Measurement Limit

Frequency of emission (MHz)	Field strength (microvolts/meter)
30-88	100
88-216	150
216-960	200
Above 960	500



B.1.4 Measurement Results

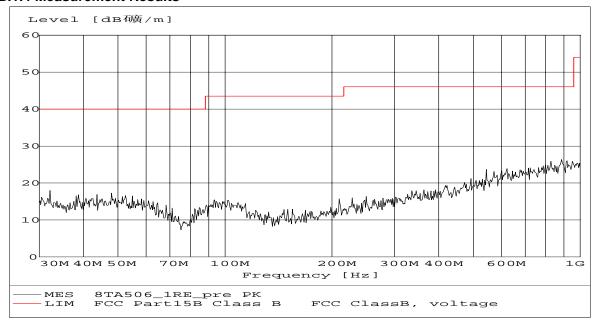


Figure B.1 Radiated Emission from 30MHz to 1GHz

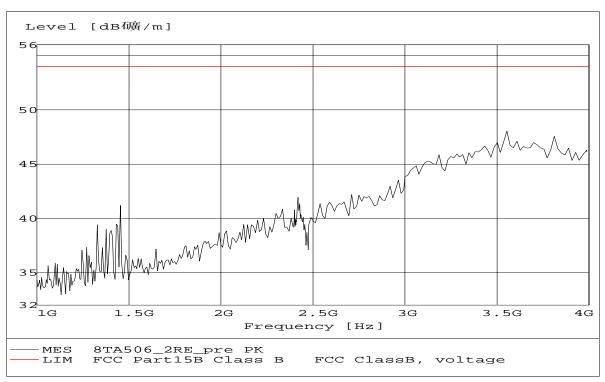


Figure B.2 Radiated Emission from 1GHz to 4GHz



B.2 Conducted Emission (§15.107(a))

B.2.1 Method of measurement

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150kHz to 30MHz shall not exceed the limits. The test set-up please refers to Annex C.2.

B.2.2 EUT Operating Mode:

The MS is operating in the USB mode. During the test MS is connected to a laptop via a USB cable. The model of the laptop is IBM T42 2373-M6C, and the serial number of the laptop is 99-FV6P2. The software is used to let the laptop keep on copying data to MS, reading and erasing the data after copy action was finished.

B.2.3 Measurement Limit

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				



B.2.4 Measurement Results

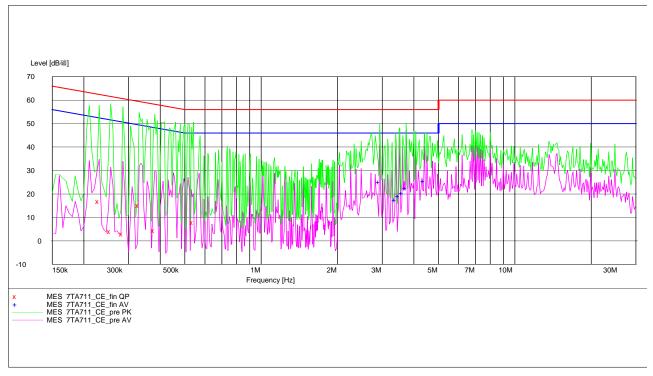


Figure A.3 Conducted Emission

MEASUREMENT RESULT: "7TA711_DC_fin QP"

Frequency	Level	Transd	Limit	Margin	Line	PE
MHz	dΒμV	dB	dΒμV	dB		
0.230000	16.80	10.1	62	45.7	L1	GND
0.255000	4.10	10.1	62	57.5	L1	FLO
0.285000	3.00	10.1	61	57.7	L1	GND
0.330000	15.00	10.1	60	44.4	L1	GND
0.380000	4.50	10.1	58	53.8	L1	GND
0.540000	7.90	10.1	56	48.1	L1	GND

MEASUREMENT RESULT: "7TA711_DC_fin AV"

Frequency	Level	Transd	Limit	Margin	Line	PE
MHz	dΒμV	dB	dΒμV	dB		
2.931808	25.20	10.1	46	20.8	L1	GND
3.383959	17.50	10.1	46	28.5	L1	GND
3.493552	19.10	10.1	46	26.9	L1	GND
3.606695	20.40	10.1	46	25.6	N	GND
3.723501	22.50	10.2	46	23.5	N	GND
4.401723	25.50	10.2	46	20.5	L1	GND



ANNEX C: TEST LAYOUT



Pic C-1 Radiated Spurious Emission



Pic C-2 Conducted Emission
END OF REPORT