

No. DAT-P-114/01-01

TEST REPORT No. 2008TAR012

Product	GSM/GPRS 850/1900 dual band mobile phone
Model	OT-S520A
Client	T&A Mobile Phones

Telecommunication Metrology Center

of Ministry of Information Industry

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Product	GSM/GPRS 850/1900 dual band mobile phone	Model Trade mark	OT-S520A
Client		&A Mobile Phone	es
Manufacturer		&A Mobile Phone	es
Arrival Date of sample	Apr 21th, 2008	Carrier of the samples	Dong Fei
Quantity of the samples	1	Date of product	/
Series number	EUT1: 011439000003522		
Standard(s)	FCC Part 15 (10-1-06 Edit	ion)	
Conclusion	Final Judgment: Pass		Date of issue: 2008-5-13
Comment	The test result relates only	to the tested sam	nples.

当地与本当 Approved by Reviewed by Tested by (Lu Bingsong) (Song Chongwen) (Zi Xiaogang)

(Lu Bingsong - Deputy Director of the laboratory)

1. COMPETENCE AND WARRANTIES

Telecommunication Metrology Center of Ministry of Information Industry(hereinafter TMC) is

a test laboratory accredited by DAR (DATech) – Deutschen Akkreditierungs Rat (Deutsche Akkreditierungsstelle Technik), for the tests indicated in the Certificate No. **DAT-P-114/01-01**.

TMC is a test laboratory accredited by CNAL – Accreditation Certificate of China National Accreditation Board for Laboratories, for the tests indicated in the Certificate No. **L0442**.

TMC is FCC listed lab. FCC listed number is 733176.

The test site in **TMC** is registered in Industry Canada. The IC registration number is **6629**.

TMC is a testing laboratory competent to carry out the tests described in this report.

TMC guarantees the reliability of the data presented in this report, which is the result of measurements and tests performed to the item under test on the date and under the conditions stated on the report and is based on the knowledge and technical facilities available at TMC at the time of execution of the test.

TMC is liable to the client for the maintenance by its personnel of the confidentiality of all information related to the item under test and the results of the test.

2. Testing Laboratory

2.1 Testing Location

Company Name:	Telecommunication Metrology Center of Ministry of Information Industry
Address:	No 52, Huayuan beilu, Haidian District, Beijing, P.R.China
Postal Code:	100083
Telephone:	00861062303288
Fax:	00861062304793

2.2 Testing Environment

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

Temperature	Min. = 15 ℃, Max. = 30 ℃
Relative humidity	Min. = 30 %, Max. = 60 %
Shielding effectiveness	> 110 dB
Electrical insulation	> 10 kΩ
Ground system resistance	< 0.5 Ω
Normalised site attenuation (NSA)	< \pm 3.2 dB, 10 m distance, from 30 to 1000 MHz
Uniformity of field strength	Between 0 and 6 dB, from 26 to 1000 MHz

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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	
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 26 to 1000 MHz

2.3 Testing Period

Testing Start Date:	May 5,2008
Testing End Date:	May 5,2008

3. Applicant Information

3.1 Client Information

Name or Company	T&A Mobile Phones
Address/Post	4/F, South Building, No.2966, Jinke Road, Zhangjiang High-Tech Park,
Address/POSt	Pudong,Shanghai, 201203, P.R.China
City	Shanghai
Postal Code	201203
Country	China
Telephone	8621-61460627
Fax	8621-61460602

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3.2 Manufacture Information

Name or Company	T&A Mobile Phones
Address/Post	4/F, South Building, No.2966, Jinke Road, Zhangjiang High-Tech Park,
///////////////////////////////////////	Pudong,Shanghai, 201203, P.R.China
City	Shanghai
Postal Code	201203
Country	China
Telephone	8621-61460627
Fax	8621-61460602

4. Equipment under Test (EUT) and Ancillary Equipment (AE)

4.1 About EUT

Model	OT-S520A
FCC ID	RAD070
Hardware status	PIO3
Software status	V425
Power supply	Battery or Charger (AC Adaptor)

4.2 Internal Identification of EUT used during the test

EUT ID	SN or IMEI	HW Version	SW Version	
EUT1	011439000003522	PIO3	V425	

4.3 Photographs of EUT

Photographs of MS Hand Telephone Set and Charger are respectively shown in ANNEX B of this test report.

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)	Р

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6. MAIN TEST INSTRUMENTS

NO.	Description	ТҮРЕ	SERIES	MANUFACTUR	CAL DUE
NO.		ITPE	NUMBER	E	DATE
1	Test Receiver	ESS	847151/015	R&S	2008-10-30
2	Test Receiver	ESI40	831564/002	R&S	2009-2-11
3	BiLog Antenna	3142B	9908-1403	EMCO	2009-1-16
4	BiLog Antenna	VUL9163	9163 175	Schwarzbeck	2009-9-19
5	Signal Generator	SMT06	831285/005	R&S	2008-12-26
6	Signal Generator	SMP04	100070	R&S	2009-4-20
7	LISN	ESH2-Z5	829991/012	R&S	2008-8-13
8	Spectrum Analyzer	E4440A	MY41000262	Agilent	2009-4-18
	Universal Radio				
9	Communication	CMU200	100680	R&S	2008-8-23
	Tester				
	Dual-Ridge				2009-3
10	Waveguide Horn	3115	9906-5827	EMCO	
	Antenna				
	Dual-Ridge				2009-3
11	Waveguide Horn	3116	2663	EMCO	
	Antenna				
	Dual-Ridge				2009-3
12	Waveguide Horn	3116	2661	EMCO	
	Antenna				
13	Climatic chamber	SH-241	92003546	ESPEC	2008-5-15
14	Spectrum Analyzer	FSU26	200030	R&S	2008-6-19
15	Bluetooth Tester	MT8852A	6K0002698	Anritsu	2009-3-19

ANNEX A MEASUREMENT RESULTS

A.1 Radiated Emission (§15.109(a))

A.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.

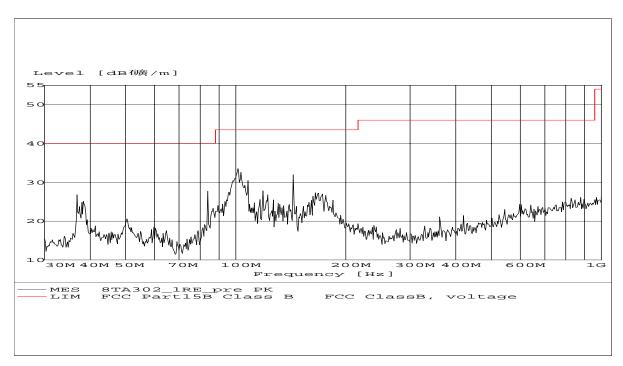
A.1.2 EUT Operating Mode:

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.

A.1.3 Measurement Limit

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

A.1.4 Measurement Results





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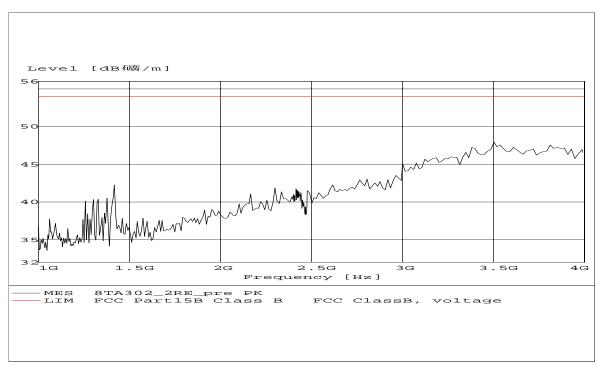


Figure A.2 Radiated Emission from 1GHz to 4GHz

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A.2 Conducted Emission (§15.107(a))

A.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.

A.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.

A.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					

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A.2.4 Measurement Results

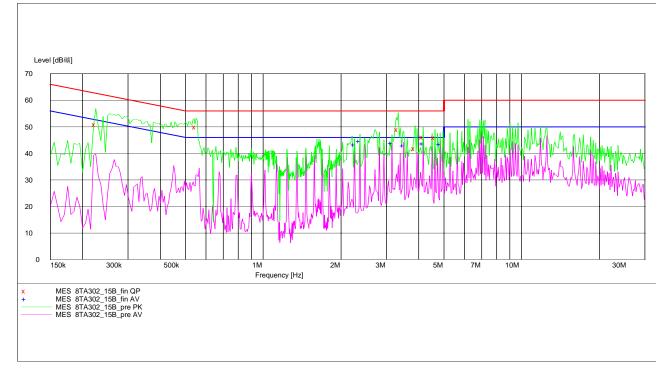


Figure A.3 Conducted Emission

MEASUREMENT RESULT: "8TA302_15B_fin QP"

Frequency	Level	Transd	Limit	Margin	Line	PE
MHz	dBµV	dB	dBµV	dB		
0.225000	50.80	10.1	63	11.8	L1	FLO
0.550000	49.90	10.1	56	6.1	N	GND
3.330459	48.90	10.1	56	7.1	L1	GND
3.874843	41.90	10.1	56	14.1	L1	GND
4.162928	46.20	10.1	56	9.8	N	GND
4.617276	45.90	10.2	56	10.1	Ν	GND

MEASUREMENT RESULT: "8TA302_15B_fin AV"

Frequency	Level	Transd	Limit	Margin	Line	PE
MHz	dBµV	dB	dBµV	dB		
2.253917	43.30	10.1	46	2.8	L1	GND
2.364292	44.60	10.1	46	1.4	L1	GND
3.149781	43.90	10.1	46	2.1	L1	GND
3.493552	43.00	10.1	46	3.0	L1	GND
4.162928	43.80	10.1	46	2.2	Ν	GND
4.843386	43.50	10.2	46	2.5	Ν	GND

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ANNEX B PHOTOGRAPH OF EUT

External Photo



Mobile Phone



Mobile Phone

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Charger (AC/DC Adapter)



Label of Charger (AC/DC Adapter)

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Battery 1



Battery 1

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Battery 2



Battery 2

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Internal Photo



Mobile phone Disassembly



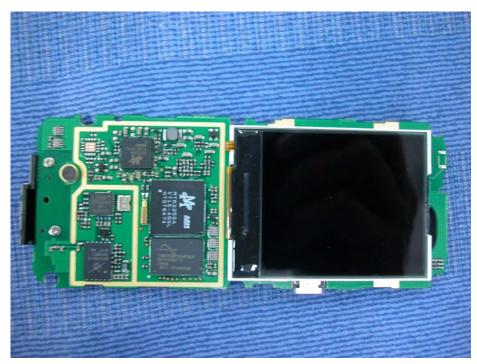
Mobile phone Disassembly

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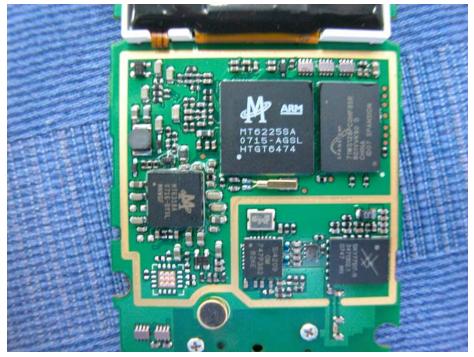
Mobile phone Disassembly



Mobile phone Disassembly

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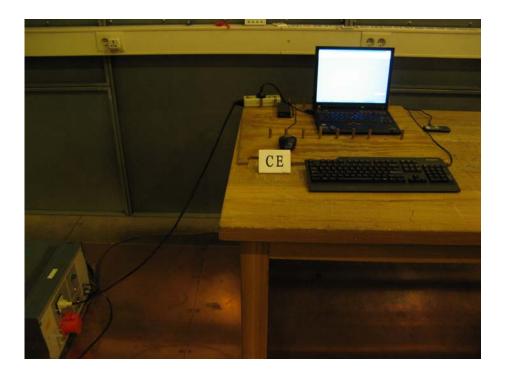
Mobile phone Disassembly

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ANNEX C TEST LAYOUT



Pic C.1 Radiated Emission



Pic C.2 Conducted Emission

END OF REPORT BODY