

# TEST REPORT

# **No.** 2007TAR016

Product	OT-C717A
Model	C7SA
Client	T&A Mobile Phones

**Telecommunication Metrology Center**of Ministry of Information Industry

### **Notice**

- 1. The test report shall be invalid if there is no "specified stamp for the test report" or the stamp of the test organization on it.
- 2. Copies of the test report shall be invalid if there is no "specified stamp for the test report" or the stamp of the test organization on it.
- 3. The test report shall be invalid if there are no signatures of the testing person, reviewing person and approving person on it.
- 4. The test report shall be invalid if it is altered.
- Any demurral about the test shall be put forward to the testing organization within 15 days after the receiving of the test report.
- 6. This test report standalone dose not constitute or imply by its own an approval of the product by any Certification Authorities or Competent Bodies.
- 7. This report is only valid if complete, and test report shall not be reproduced except in full, without written approval of the laboratory.
- 8. This report cannot be used partially or in full for publicity and/or promotional purposes without previous written approval of Telecommunication Metrology Center of MII and the Accreditation Bodies, if it applies.

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

(Telecommunication Metrology Center of MII)

Post code: 100083

Telephone: +86 10 62302041 Fax: +86 10 62304793

Web site: http://www.emcite.com

E-mail: welcome@emcite.com

# **TABLE OF CONTENT**

1. COMPETENCE AND WARRANTIES	5
2. Testing Laboratory	5
2.1 Testing Location	5
2.2 Testing Environment	5
2.3 Testing Period	6
3. Applicant Information	6
3.1 Client Information	6
3.2 Manufacture Information	7
4. Equipment Under Test (EUT) and Ancillary Equipment (AE)	7
4.1 About EUT	7
4.2 Internal Identification of EUT used during the test	7
4.3 Photographs of EUT	7
5. SUMMARY OF TEST RESULTS	
6. MAIN TEST INSTRUMENTS	8
ANNEX A MEASUREMENT RESULTS	
ANNEX B PHOTOGRAPH OF EUT	
ANNEX CITEST LAYOUT	20

No. 2007TAR016

Page 4 of 20

	OT-C717A	Model	C7SA
Product		Trade mark	075A
Client	T&A Mobile Phones		
Manufacturer		T&A Mobile Phone	es
Arrival Date of sample	July 16 <sup>th</sup> , 2007	Carrier of the samples	Ying Kong
Quantity of the samples	1	Date of product	1
Series number	EUT1: 011095000001815		,
Standard(s)	FCC Part 15 (10-1-06 Edit	tion)	
Conclusion	Final Judgment: Pass		Date of issue: 2007-08-06
Comment	The test result relates only	y to the tested sa	mples.

Approved by_	3ª ws fz	_Reviewed by_	导家人	Tested by	THE PARTY OF THE P	
,	(Lu Bingsong)		(Song Chongwen)		(Zi Xiaogar	ıg)

(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

No. 2007TAR016

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

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 °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 26 to 1000 MHz

Page 5 of 20

No. 2007TAR016 Page 6 of 20

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

Temperature	Min. = 15 ℃, Max. = 35 ℃
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:	July 18,2007	
Testing End Date:	July 28,2007	

# 3. Applicant Information

### 3.1 Client Information

Name or Company	T&A Mobile Phones
Address/Post	4F, South Building, No.2966, JinKe Road, Zhangjiang High-Tech Park
City	Shanghai
Postal Code	201203
Country	China
Telephone	0086-21-61460853
Fax	0086-21-61460602

No. 2007TAR016 Page 7 of 20

### 3.2 Manufacture Information

Name or Company	T&A Mobile Phones
Address/Post	4F, South Building, No.2966, JinKe Road, Zhangjiang High-Tech Park
City	Shanghai
Postal Code	201203
Country	China
Telephone	0086-21-61460853
Fax	0086-21-61460602

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

### 4.1 About EUT

Model	C7SA
Description	OT-C717A
FCC ID	RAD055
Hardware status	PIO
Software status	V521
Power supply	Battery or Charger (AC Adaptor)

### 4.2 Internal Identification of EUT used during the test

EUT ID	EUT ID SN or IMEI		SW Version	
EUT1	011095000001815	PIO	V521	

### 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

No. 2007TAR016 Page 8 of 20

# **6. MAIN TEST INSTRUMENTS**

NO.	Description	TYPE	SERIES	MANUFACTUR	CAL DUE
NO.			NUMBER	E	DATE
1	Test Receiver	ESS	847151/015	R&S	2007-10-30
2	Test Receiver	ESI40	831564/002	R&S	2008-2-11
3	BiLog Antenna	3142B	9908-1403	EMCO	2008-1-16
4	BiLog Antenna	VUL9163	9163 175	Schwarzbeck	2009-9-19
5	Signal Generator	SMT06	831285/005	R&S	2007-12-26
6	Signal Generator	SMP04	100070	R&S	2008-4-20
7	LISN	ESH2-Z5	829991/012	R&S	2007-8-13
8	Spectrum Analyzer	E4440A	MY41000262	Agilent	2008-4-18
9	Universal Radio Communication Tester	CMU200	100680	R&S	2007-8-23
10	Dual-Ridge Waveguide Horn Antenna	3115	9906-5827	EMCO	2008-3
11	Dual-Ridge Waveguide Horn Antenna	3116	2663	EMCO	2008-3
12	Dual-Ridge Waveguide Horn Antenna	3116	2661	EMCO	2008-3
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

No. 2007TAR016 Page 9 of 20

### 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

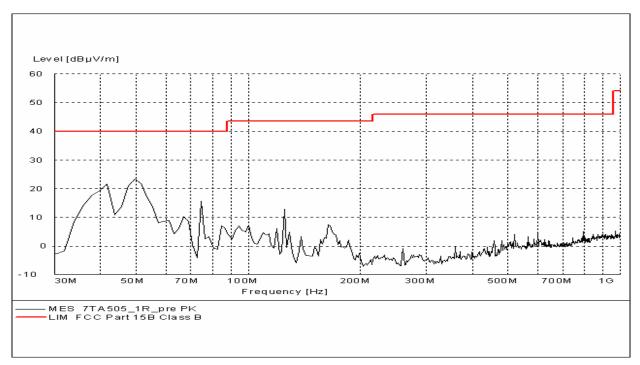


Figure A.1 Radiated Emission from 30MHz to 1GHz

No. 2007TAR016 Page 10 of 20

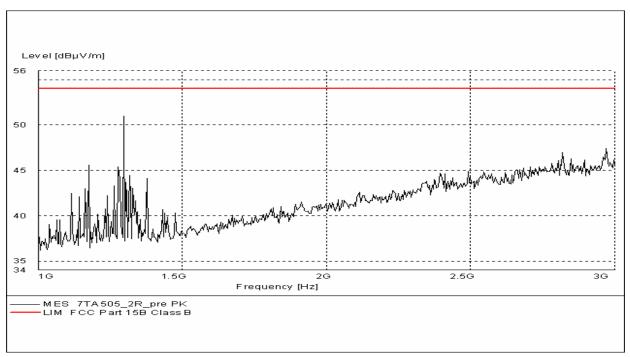


Figure A.2 Radiated Emission from 1GHz to 3GHz

### 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:

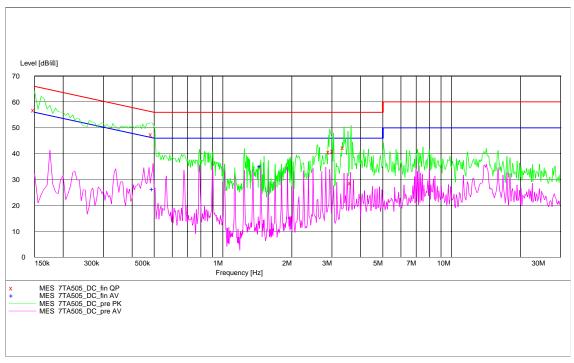
The MS is operating in the USB mode. During the test MS is connected to a laptop via a USB cable. The model of the laptop is IBM T42 2373-M6C, and the serial number of the laptop is 99-FV6P2. The software is used to let the laptop keep on copying data to MS, reading and erasing the data after copy action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

No. 2007TAR016 Page 11 of 20

### **A.2.4 Measurement Results**



**Figure A.3 Conducted Emission** 

### MEASUREMENT RESULT: "7TA506\_DC\_fin QP"

Frequency	Level	Transd	Limit	Margin	Line	PE
MHz	dΒμV	dB	dΒμV	dB		
0.150000	56.90	10.1	66	9.1	L1	FLO
0.490000	47.40	10.1	56	8.8	N	FLO
2.931808	40.60	10.1	56	15.4	L1	GND
3.050972	41.10	10.1	56	14.9	N	GND
3.383959	42.30	10.1	56	13.7	N	GND
3.635548	28.60	10.1	56	27.4	N	FLO

### MEASUREMENT RESULT: "7TA506\_DC\_fin AV"

Frequency	Level	Transd	Limit	Margin	Line	PE
MHz	dΒμV	dB	dΒμV	dB		
0.495000	26.30	10.1	46	19.8	L1	FLO
1.465000	35.20	10.1	46	10.8	L1	GND

No. 2007TAR016 Page 12 of 20

### ANNEX B PHOTOGRAPH OF EUT

### **External Photo**



**Mobile Phone** 



**Mobile Phone** 

No. 2007TAR016 Page 13 of 20



**Mobile Phone** 



**Charger (AC/DC Adapter)** 

No. 2007TAR016 Page 14 of 20



Label of Charger (AC/DC Adapter)



**USB Cable** 

No. 2007TAR016 Page 15 of 20



Headset

### **Internal Photo**



**Mobile phone Disassembly** 

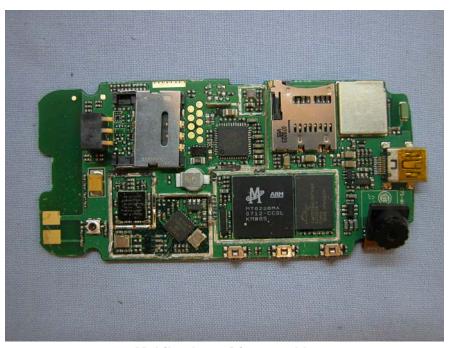


**Mobile phone Disassembly** 

No. 2007TAR016 Page 17 of 20



**Mobile phone Disassembly** 



**Mobile phone Disassembly** 

No. 2007TAR016 Page 18 of 20



**Mobile phone Disassembly** 



**Mobile phone Disassembly** 

No. 2007TAR016 Page 19 of 20



**Mobile phone Disassembly** 

No. 2007TAR016 Page 20 of 20

## **ANNEX C TEST LAYOUT**



Pic C.1 Radiated Emission



**Pic C.2 Conducted Emission** 

\*\*\*END OF REPORT BODY\*\*\*