

**SGS-CSTC Standards  
Technical Services Co., Ltd.**

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMO071200013IT  
Page 1 of 22

## ***FCC TEST REPORT***

**Application No.:** SHEMO071200013IT

**Applicant:** T&A Mobile Phones

**Equipment Under Test (EUT):**

**NOTE:** The following sample(s) submitted was/were identified on behalf of the client as

**EUT Name:** GSM Mobile Phone

**Model No.:** Bubble US

**Marketing Name:** OT-V270A

**Item No.:** Not supplied by client

**Serial No.:** Not supplied by client

**Standards:** CFR 47 part 2: 2004,  
CFR 47 Part 15: 2005,  
ANSI C63.4: 2003

**Date of Receipt:** December 12, 2007

**Date of Test:** December 12, 2007 to December 21, 2007


**Date of Issue:** December 21, 2007

<b>Test Result :</b>	<b>PASS</b>
----------------------	-------------

Authorized Signature:



Tino Pan  
E&E Section Manager  
SGS-CSTC Co., Ltd.



Jathy Huang  
E&E EMC Engineer  
SGS-CSTC Co., Ltd

This report refers to the General Conditions for Inspection and Testing Services, printed overleaf

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the SGS PRODUCT CERTIFICATION MARK.. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

All test results in this report can be traceable to National or International Standards.

**SGS-CSTC Standards  
Technical Services Co., Ltd.**

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMO071200013IT  
Page 2 of 22

## 2 Test Summary

<b>Test</b>	<b>Test Requirement</b>	<b>Test Method</b>	<b>Class / Severity</b>	<b>Result</b>
Radiated Emission 30MHz-1000MHz	CFR 47 Part 15	ANSI C63.4: 2003	Class B	PASS
Conducted Emission 150KHz-30MHz	CFR 47 Part 15	ANSI C63.4: 2003	Class B	PASS

# SGS-CSTC Standards Technical Services Co., Ltd.

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMO071200013IT  
Page 3 of 22

## 3 Contents

	Page
<b>1 COVER PAGE.....</b>	<b>1</b>
<b>2 TEST SUMMARY.....</b>	<b>2</b>
<b>3 CONTENTS .....</b>	<b>3</b>
<b>4 GENERAL INFORMATION.....</b>	<b>4</b>
4.1 CLIENT INFORMATION.....	4
4.2 GENERAL DESCRIPTION OF E.U.T.....	4
4.3 DETAILS OF E.U.T. ....	4
4.4 DESCRIPTION OF SUPPORT UNITS.....	4
4.5 STANDARDS APPLICABLE FOR TESTING .....	4
4.6 TEST LOCATION.....	5
4.6 DEVIATION FROM STANDARDS.....	5
4.7 ABNORMALITIES FROM STANDARD CONDITIONS .....	5
4.8 MONITORING OF EUT FOR ALL IMMUNITY TEST .....	5
4.9 TEST CONFIDENT LEVEL .....	5
<b>5 EQUIPMENTS USED DURING TEST.....</b>	<b>6</b>
<b>6 EMISSION TEST RESULTS .....</b>	<b>7</b>
6.1 RADIATED EMISSIONS, 30MHZ TO 1GHZ .....	7
6.1.1 <i>E.U.T. Operation</i> .....	7
6.1.2 <i>Test setup:</i> .....	7
6.1.3 <i>Test Result:</i> .....	8
6.2 CONDUCTED EMISSIONS, 150KHZ TO 30MHZ .....	14
6.2.1 <i>E.U.T. Operation</i> .....	14
6.2.2 <i>Test Result and Partial Measurement Data</i> .....	14
<b>7 PHOTOGRAPHS.....</b>	<b>19</b>
7.1 RADIATED EMISSION TEST SETUP.....	19
7.2 CONDUCTED EMISSION TEST SETUP .....	20
7.3 EUT CONSTRUCTIONAL DETAILS .....	21

# SGS-CSTC Standards Technical Services Co., Ltd.

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMO071200013IT  
Page 4 of 22

## 4 General Information

### 4.1 Client Information

Applicant: T&A Mobile Phones  
Address of Applicant: 3/F, B2 BLOCK, DIGITAL TECHNOLOGY YARD, GAOXIN  
NAN QI ROAD, NAN SHAN DISTRICT, SHENZHEN,  
GUANGDONG, P.R.CHINA

### 4.2 General Description of E.U.T.

EUT Name: GSM Mobile Phone  
Model No.: Bubble US  
Marketing Name: OT-V270A  
Brand Name: Not supplied by client  
Serial No.: Not supplied by client

### 4.3 Details of E.U.T.

Power Supply: AC to DC charger (Model NO: T5001448AGAA Input: AC 100V-  
240V~, 50/60Hz 100mA Output:DC 4.5V, 300mA)  
Manufactures: Tenpao  
Power Cord: 2m  
Earphone: Model NO: T5001578AAAA  
Battery: DC 3.7V / 750mAh  
P/N: T5001298AAAA (BYD)  
P/N: T5001298AAAA (JINNENG)

### 4.4 Description of Support Units

Name / Function	Model No	Remark
N/A	N/A	N/A

### 4.5 Standards Applicable for Testing

The customer requested EMC tests for a GSM Mobile Phone.

The standards used was CFR 47 part 2: 2004 and CFR 47 part 15: 2005:

**Table : Tests Carried Out Under CFR 47 Part 15: 2005 :**

Standard	Status
FCC Part 15 Subpart B: 2005 Radiated Emission	√
FCC Part 15 Subpart B: 2005 Conducted Emission	√

× Indicates that the test is not applicable  
√ Indicates that the test is applicable

# SGS-CSTC Standards Technical Services Co., Ltd.

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMO071200013IT  
Page 5 of 22

## 4.6 Test Location

Radiated Emission was performed at:

SIMT EMC Laboratory, 1/F, Building No.1, Agriculture Machinery Materials Company  
No.716 Yi shan Road, Shanghai, P.R.China.

Tel: +86 21 64701390 Fax: +86 21 64514252

Conducted Emission was performed at SGS E&E EMC lab

SGS-CSTC EMC Laboratory, No.889 Yishan Road, Shanghai, P.R.China

Tel:+86 21 61402666 Fax: +86 21 54500954

## 4.6 Deviation from Standards

None.

## 4.7 Abnormalities from Standard Conditions

None.

## 4.8 Monitoring of EUT for All Immunity Test

N/A

## 4.9 Test Confident level

Test Confident level is recognized, certified, or accredited by the following organizations:

### **NVLAP – Lab Code: 200632-0**

SIMT EMC Laboratory is recognized under the National Voluntary Laboratory Accreditation Program (NVLAP/NIST).  
NVLAP Code: 200632-0. Effective through December 31, 2004.

### **VCCI**

The 10m Semi-anechoic chamber and Shielded Room of SIMT have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: 1153.

Date of Registration: May 29, 2004. Valid until May 18, 2007

### **CNAL – LAB Code: L0134**

SIMT EMC Laboratory has been assessed and in compliance with CNAL/AC01:2002 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:1999 General Requirements) for the Competence of Testing Laboratories.

### **FCC – Registration No.: 142171**

SIMT EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 142171, Dcember 9, 2002.

With the above and NVLAP, SIMT is an authorized test laboratory for the DoC process.

**SGS-CSTC Standards  
Technical Services Co., Ltd.**

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMO071200013IT  
Page 6 of 22

## 5 Equipments Used during Test

**Radiated Emission Test in  
Chamber CFR 47 part 15: 2005**

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Date
1	HORN ANTENNA	R&S	HF 906	100023	2007.07.24	2008.07.23
2	BROADBAND ANTENNA	R&S	HL 562	100019	2007.10.10	2008.10.09
3	EMI TEST RECEIVER	R&S	ESI 26	838786/011	2007.08.13	2008.08.13
4	UNIVERSAL RADIO COMMUNICATION TESTER	R&S	CMU 200	SHEM04-1	2007.09.01	2008.08.31

**Conducted Emission CFR 47 part 15: 2005**

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Date
1	EMI TEST RECEIVER	R&S	ESCS 30	100070	2007.08.28	2008.08.27
2	ARTIFICIAL MAINS NETWORK	R&S	ESH2-Z5	100030	2007.09.19	2008.09.18
3	UNIVERSAL RADIO COMMUNICATION TESTER	R&S	CMU 200	SHEM04-1	2007.09.01	2008.08.31

**General Equipment**

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Date
1	Temperature, Humidity & Barometer	Oregon Scientific	BA-888	EMC0001 to EMC0004	2007.07.25	2008.07.24
2	DMM	Fluke	73	70681569 or 70671122	2007.07.23	2008.07.22

# SGS-CSTC Standards Technical Services Co., Ltd.

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMO071200013IT  
Page 7 of 22

## 6 Emission Test Results

### 6.1 Radiated Emissions, 30MHz to 1GHz

Test Requirement:	CFR 47 Part 15
Test Method:	ANSI C63.4, CISPR 22
Test Date:	December 12, 2007 to December 21, 2007
Frequency Range:	30MHz to 1GHz
Measurement Distance:	3m for ANSI C63.4 and 10m for CISPR 22
Class:	N/A
Detector:	Peak for pre-scan (120kHz resolution bandwidth)

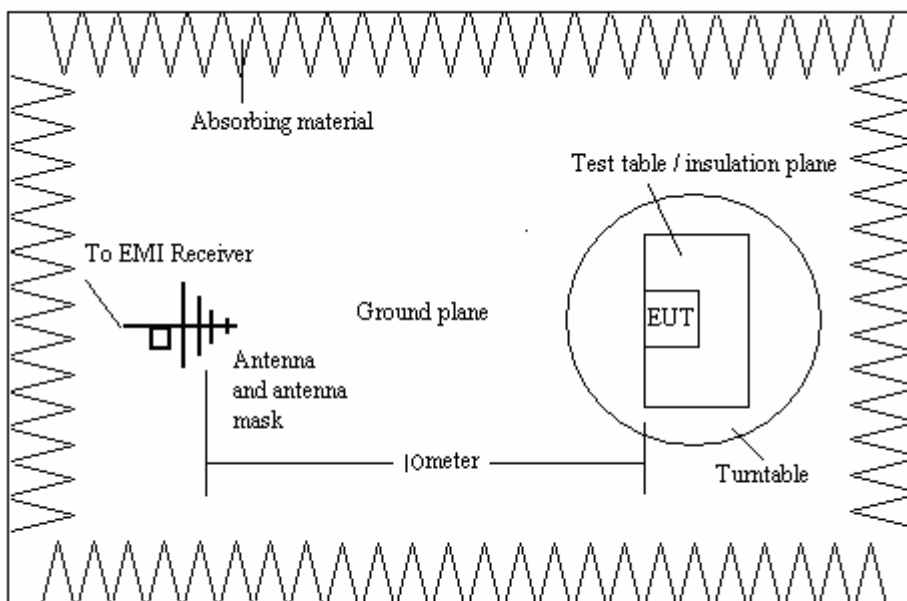
#### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25.0°C Humidity: 55 % RH Atmospheric Pressure: 1004 mbar

EUT Operation: EUT allocated channel mode Charging, GSM850, PCS 1900.

#### 6.1.2 Test setup:



# SGS-CSTC Standards Technical Services Co., Ltd.

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

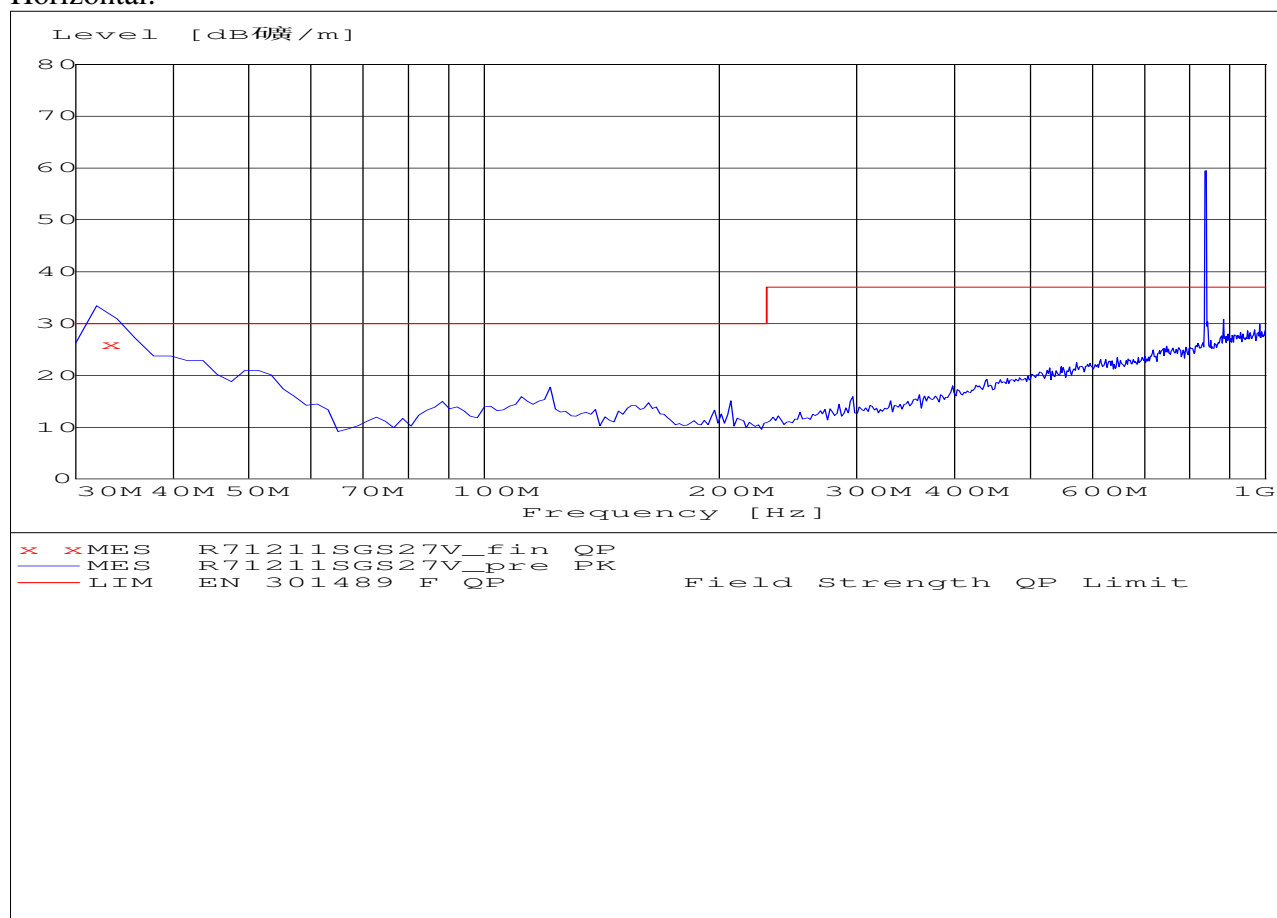
Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMA071200013IT  
Page 8 of 22

## 6.1.3 Test Result:

GSM 850 connected(test Mobile with T5001448AGAA of Tenpao power adaptor.)

Horizontal:



Frequency MHz	Level dB $\mu$ V/m	Height cm	Azimuth deg	Polarisation	Limit dB $\mu$ V/m	Margin dB
33.106212	25.79	100.0	180.00	VERTICAL	30.00	4.21



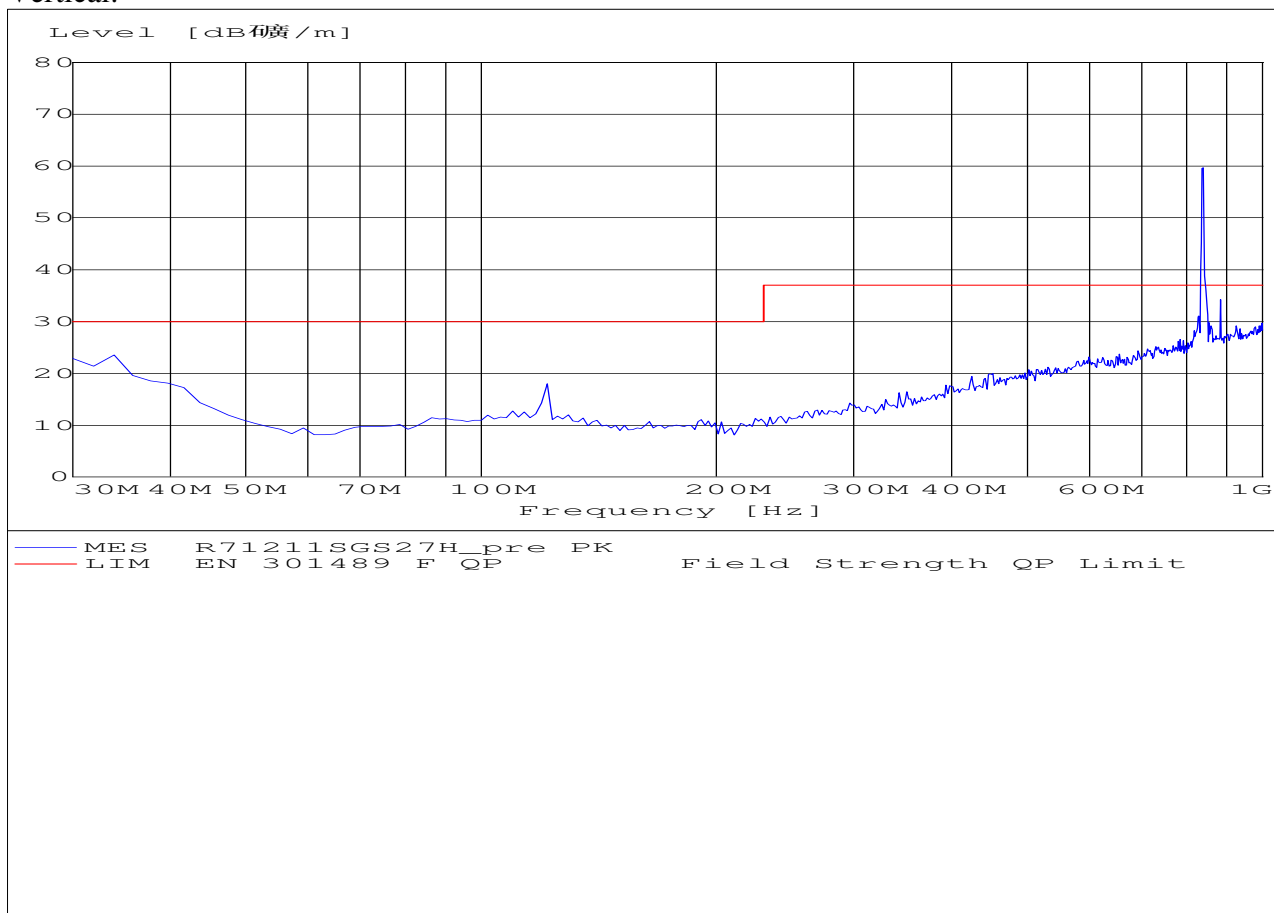
# SGS-CSTC Standards Technical Services Co., Ltd.

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMA071200013IT  
Page 9 of 22

## Vertical:



# SGS-CSTC Standards Technical Services Co., Ltd.

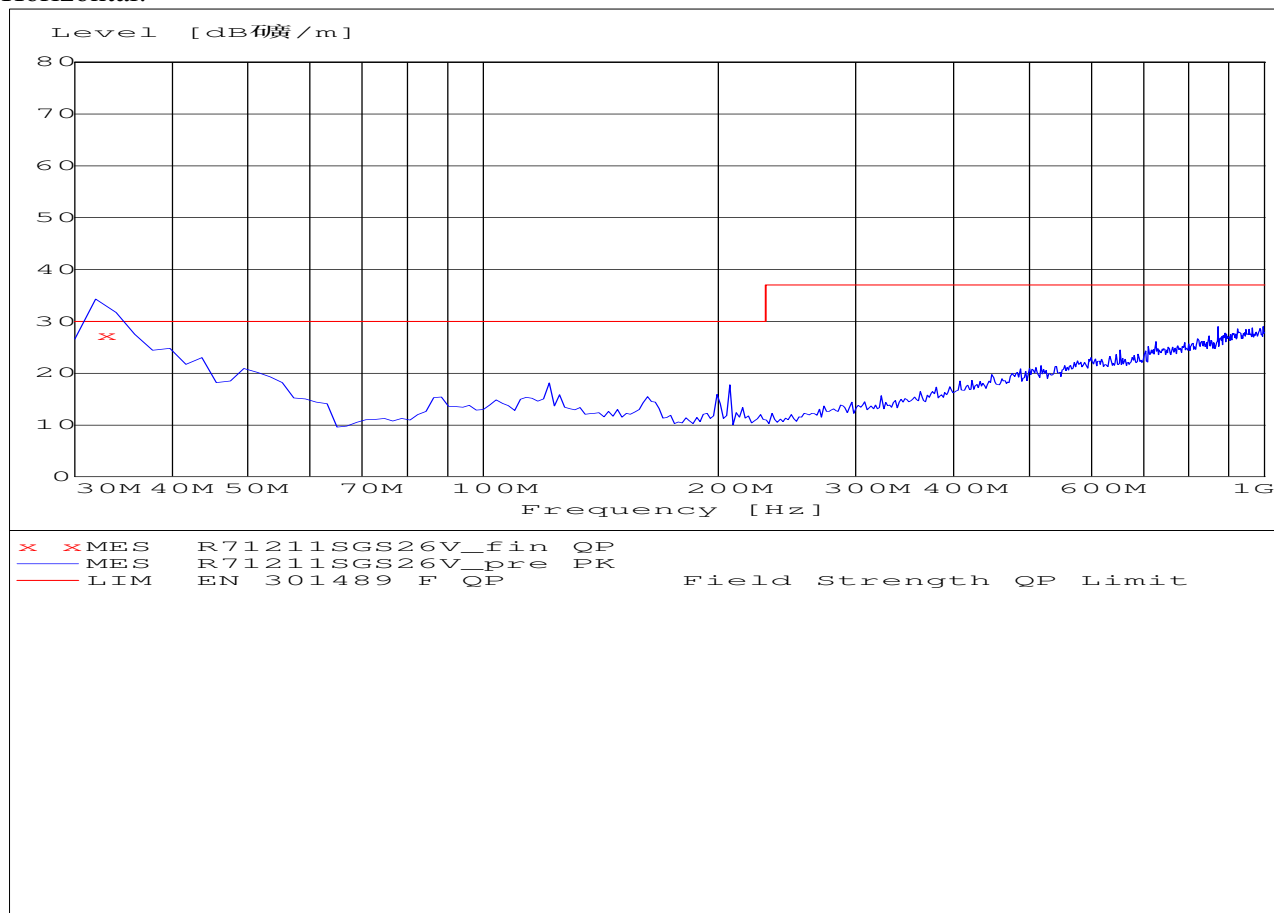
1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMA071200013IT  
Page 10 of 22

PCS 1900 connected: (test Mobile with T5001448AGAA of Tenpao power adaptor.)

Horizontal:



Frequency MHz	Level dB $\mu$ V/m	Height cm	Azimuth deg	Polarisation	Limit dB $\mu$ V/m	Margin dB
32.785571	27.20	100.0	180.00	VERTICAL	30.00	2.80

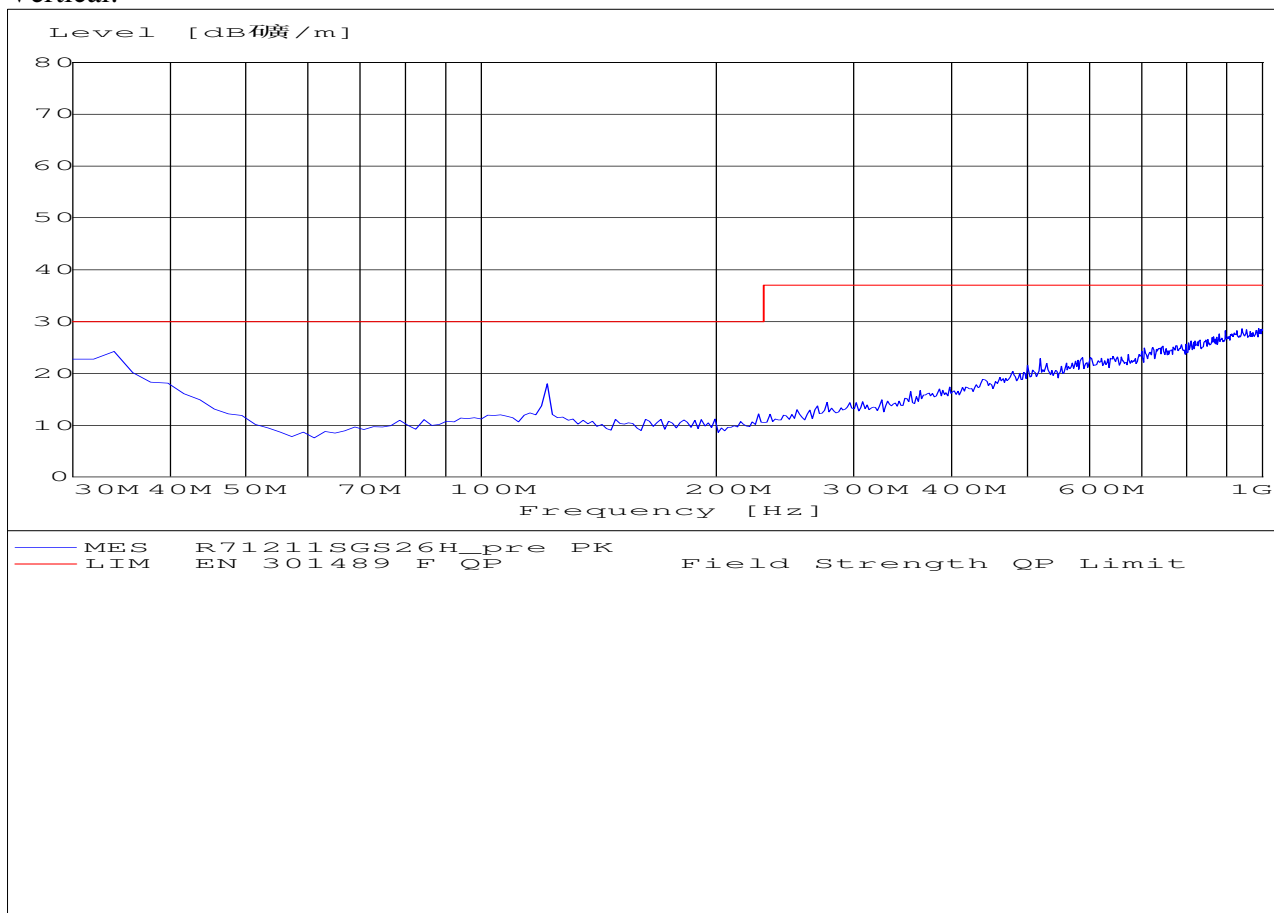
# SGS-CSTC Standards Technical Services Co., Ltd.

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMO071200013IT  
Page 11 of 22

## Vertical:



# SGS-CSTC Standards Technical Services Co., Ltd.

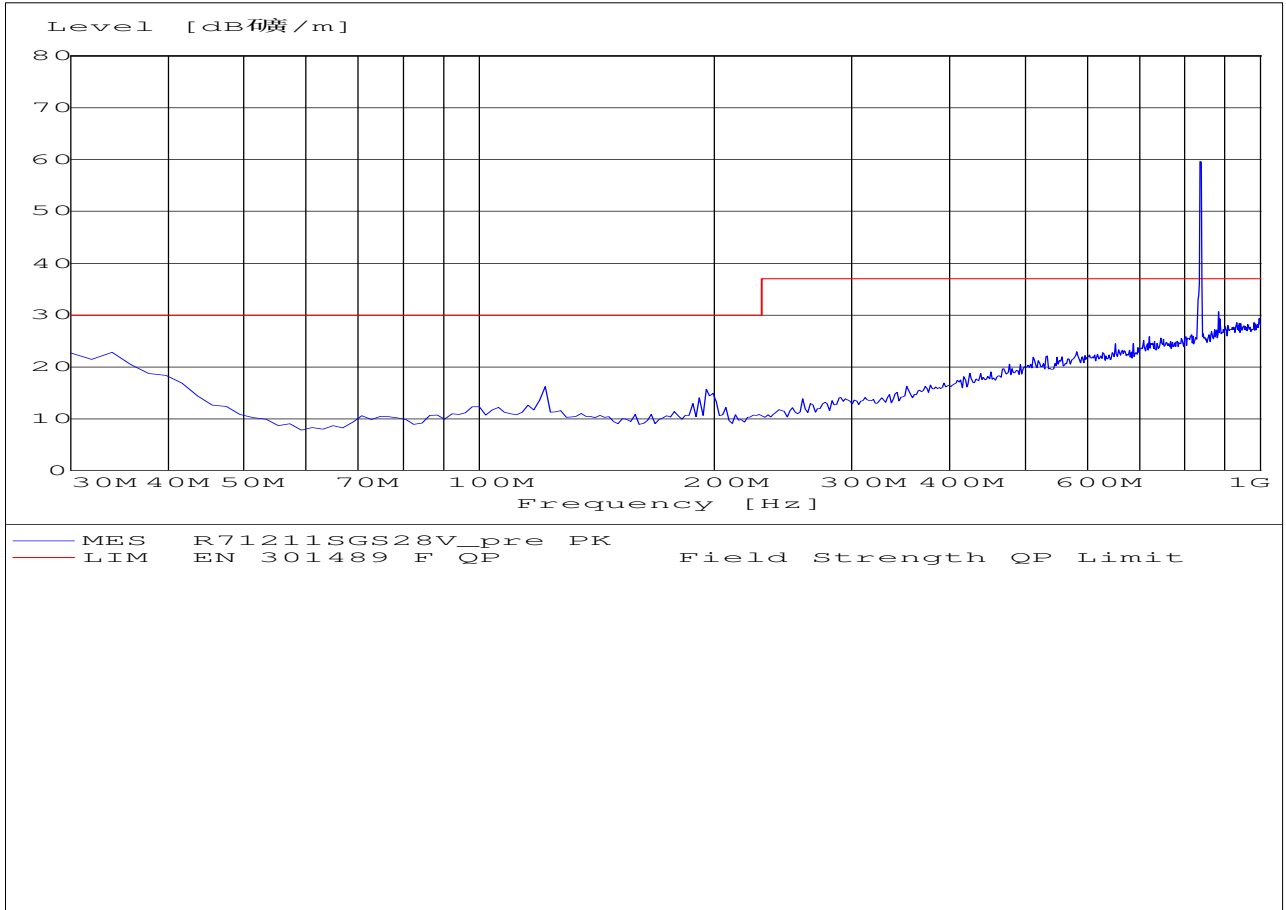
1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMA071200013IT  
Page 12 of 22

PCS 1900 connected: (test Mobile with earphone.)

Horizontal:



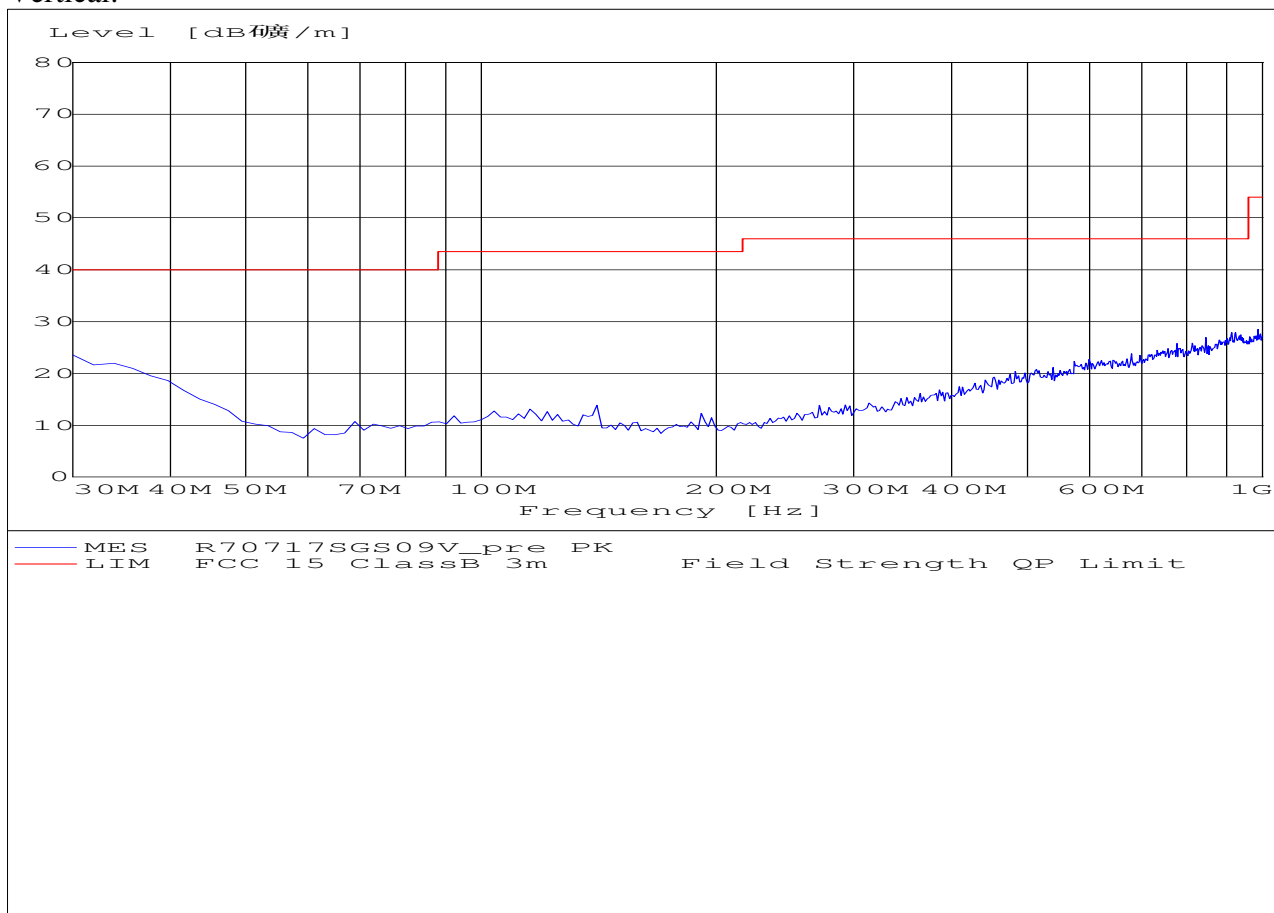
# SGS-CSTC Standards Technical Services Co., Ltd.

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMA0071200013IT  
Page 13 of 22

## Vertical:



# SGS-CSTC Standards Technical Services Co., Ltd.

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMO071200013IT  
Page 14 of 22

## 6.2 Conducted Emissions, 150kHz to 30MHz

Test Requirement:	CFR 47 part 15
Test Method:	ANSI C63.4
Test Date:	December 12, 2007 to December 21, 2007
Frequency Range:	150kHz to 30MHz
Class:	N/A
Limit:	66 dB $\mu$ V - 56 dB $\mu$ V between 150kHz & 500kHz Quasi-peak 56 dB $\mu$ V between 0.5MHz & 5MHz Quasi-peak 60 dB $\mu$ V between 5MHz & 30MHz Quasi-peak

### 6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0°C Humidity: 58% RH Atmospheric Pressure: 1012 mbar  
EUT Operation: Test EUT is the in the allocated channel mode Charging, GSM850, PCS  
1900 with headset.

### 6.2.2 Test Result and Partial Measurement Data

**Pass**

An initial pre-scan was performed in the Shielding room using the receiver in peak detection mode. The EUT was measured for 2 orthogonal polarities and peak emissions from the EUT were detected within 6dB of the class B limit line.

# SGS-CSTC Standards Technical Services Co., Ltd.

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

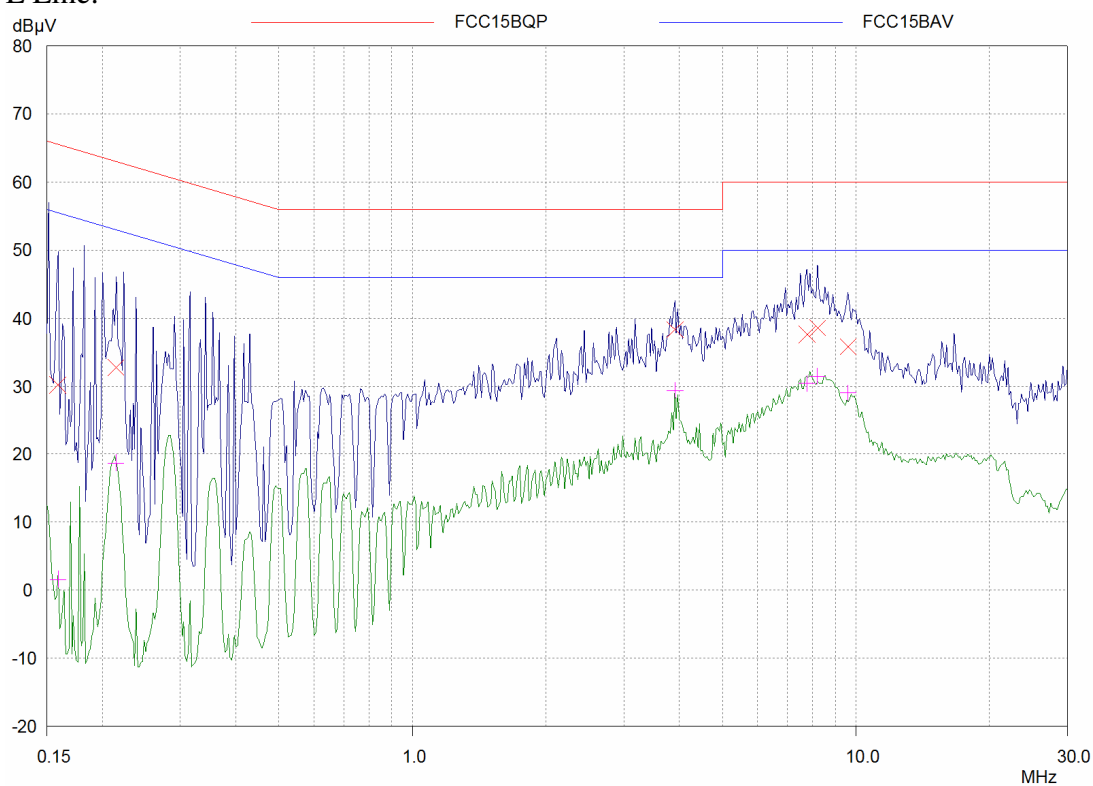
Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMO071200013IT  
Page 15 of 22

**Power Supply:** AC to DC charger (Model NO: T5001448AGAA Input: AC 100V-240V~, 50/60Hz 0.1A Output:DC 4.5V, 0.3A)  
**Manufactures:** TenPao

**GSM 850 connected:**

**L Line:**



**Final Measurement Results**

Frequency MHz	QP Level dBµV	QP Limit dBµV	QP Delta dB
0.1586	30.23	65.54	35.31
0.21469	32.79	63.02	30.23
3.90345	38.37	56.00	17.63
7.74559	37.67	60.00	22.33
8.18989	38.57	60.00	21.43
9.60481	35.85	60.00	24.15

Frequency MHz	AV Level dBµV	AV Limit dBµV	AV Delta dB
0.1586	1.55	55.54	53.99
0.21469	18.64	53.02	34.38
3.90345	29.39	46.00	16.61
7.74559	30.45	50.00	19.55
8.18989	31.52	50.00	18.48
9.60481	29.04	50.00	20.96

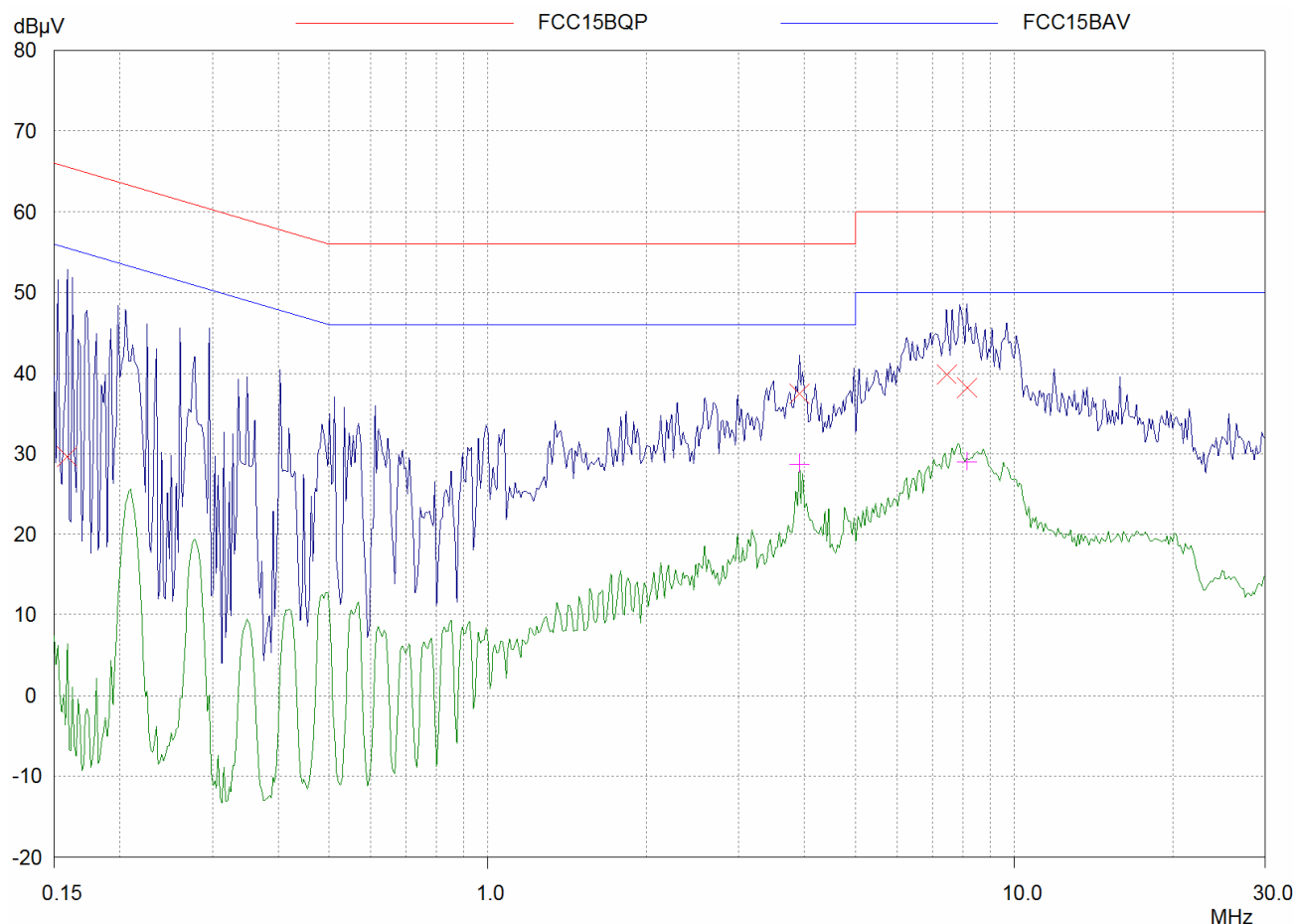
# SGS-CSTC Standards Technical Services Co., Ltd.

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMA071200013IT  
Page 16 of 22

## N Line:



### Final Measurement Results

Frequency MHz	QP Level dBµV	QP Limit dBµV	QP Delta dB
0.1586	29.65	65.54	35.89
3.90345	37.45	56.00	18.55
7.44306	39.87	60.00	20.13
8.12489	38.19	60.00	21.81

Frequency MHz	AV Level dBµV	AV Limit dBµV	AV Delta dB
3.90345	28.78	46.00	17.22
8.12489	29.02	50.00	20.98



# SGS-CSTC Standards Technical Services Co., Ltd.

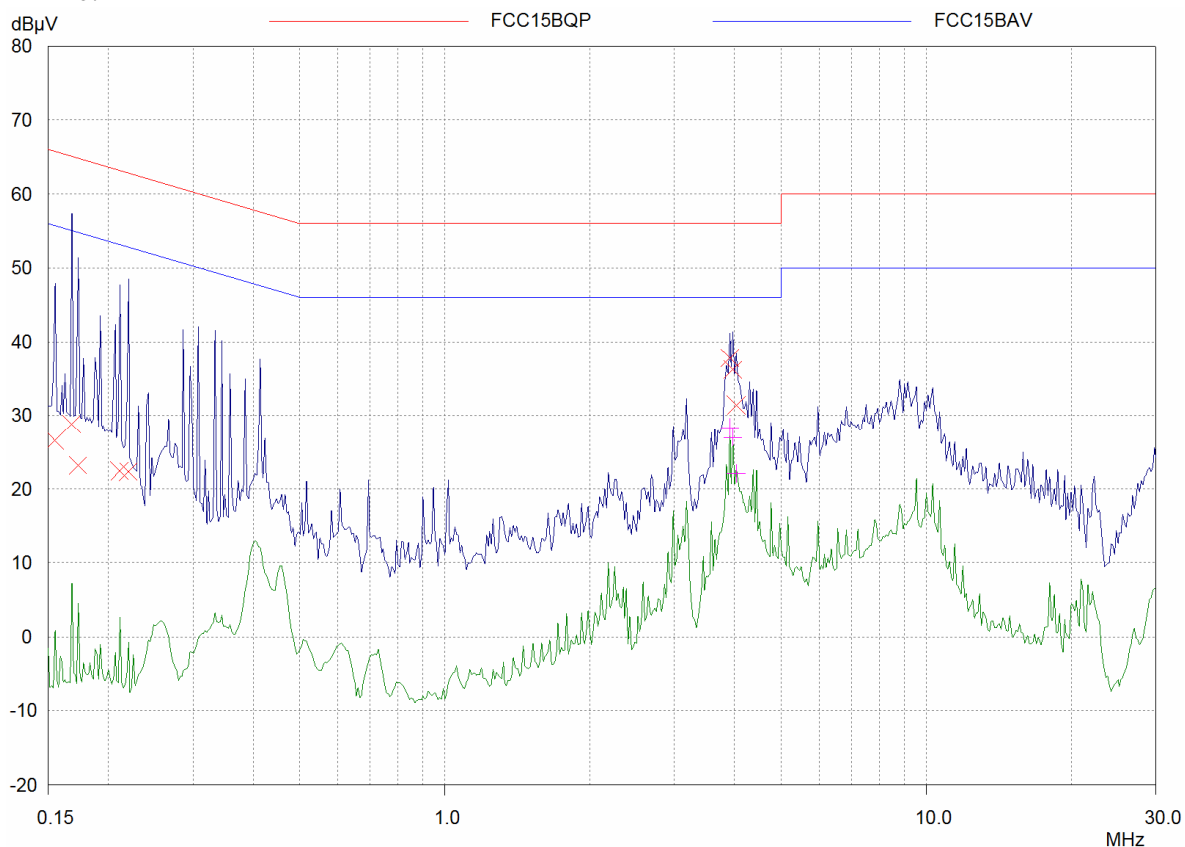
1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMO071200013IT  
Page 17 of 22

PCS 1900 connected:

L Line:



**Final Measurement Results**

Frequency MHz	QP Level dμV	QP Limit dμV	QP Delta dB
0.15485	26.55	65.74	39.19
0.1677	28.77	65.07	36.30
0.17313	23.14	64.81	41.67
0.21129	22.38	63.15	40.77
0.21988	22.29	62.82	40.53
3.90345	37.77	56.00	18.23
3.96615	36.23	56.00	19.77
4.02986	31.41	56.00	24.59

Frequency MHz	AV Level dμV	AV Limit dμV	AV Delta dB
3.90345	28.36	46.00	17.64
3.96615	26.98	46.00	19.02
4.02986	22.05	46.00	23.95

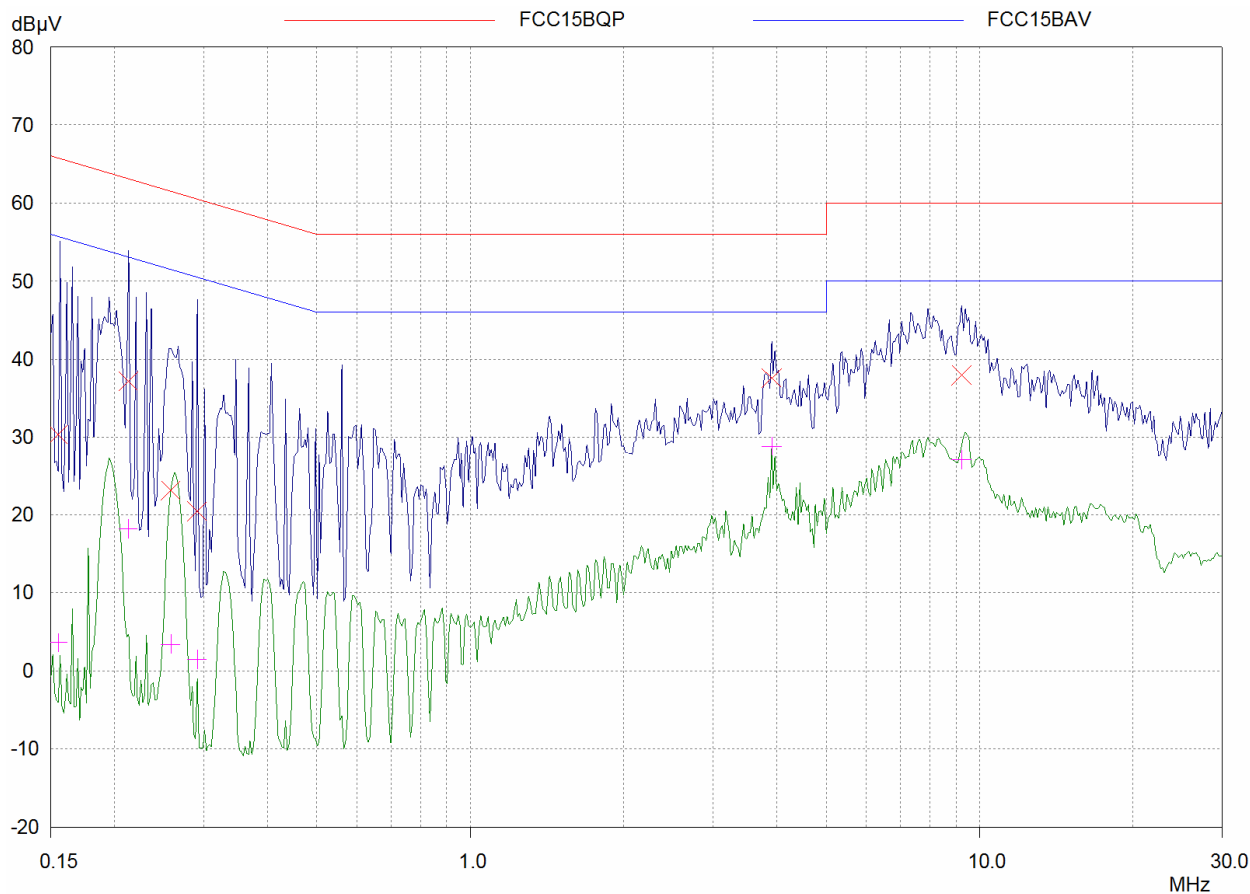
# SGS-CSTC Standards Technical Services Co., Ltd.

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMA071200013IT  
Page 18 of 22

## N Line:



### Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB
0.15485	30.33	65.74	35.41
0.21298	37.19	63.09	25.90
0.25787	23.08	61.50	38.42
0.29061	20.41	60.51	40.10
3.90345	37.55	56.00	18.45
9.22967	37.92	60.00	22.08

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB
0.15485	3.54	55.74	52.20
0.21298	18.12	53.09	34.97
0.25787	3.36	51.50	48.14
0.29061	1.42	50.51	49.09
3.90345	28.78	46.00	17.22
9.22967	27.03	50.00	22.97

# SGS-CSTC Standards Technical Services Co., Ltd.

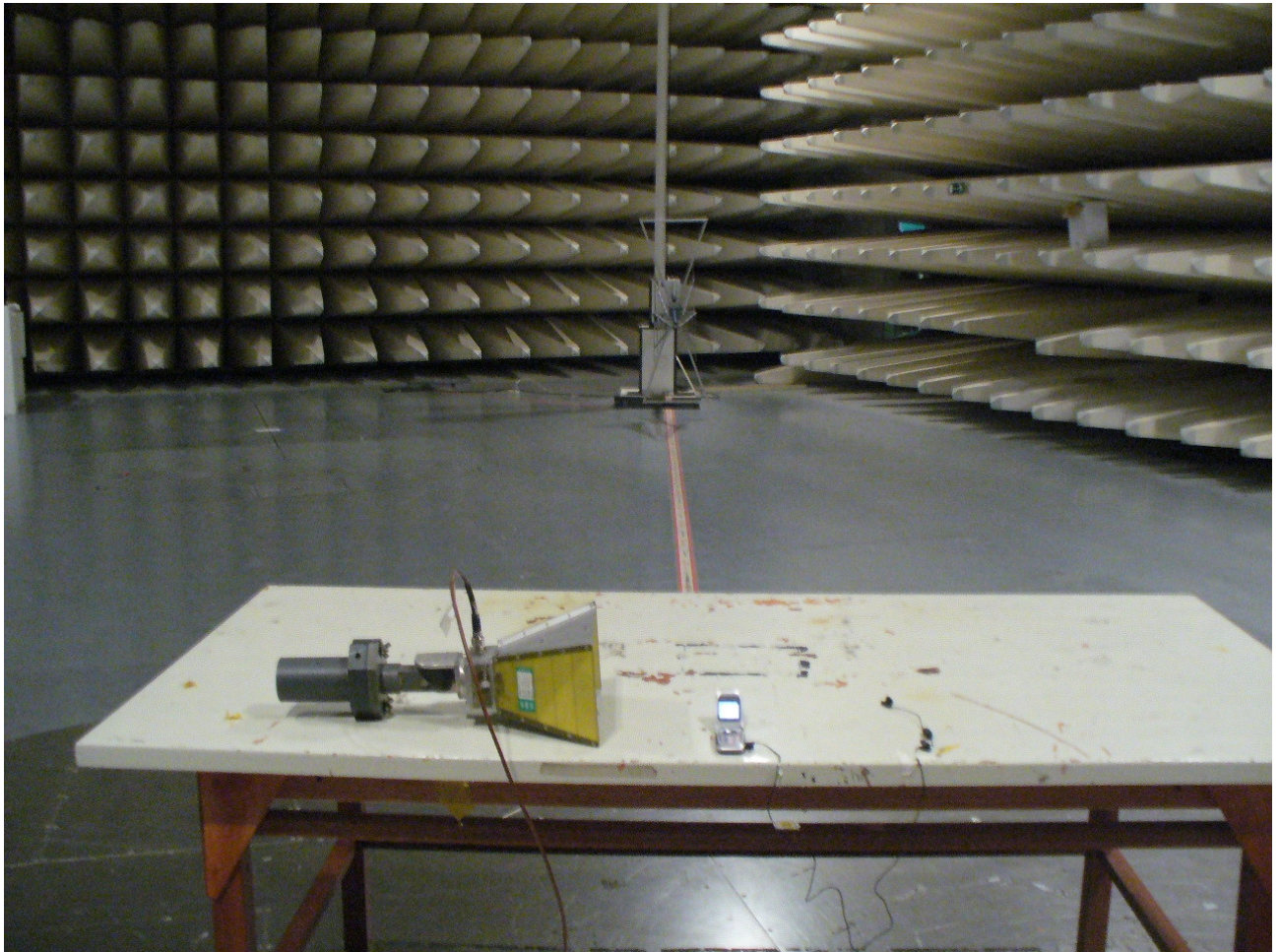
1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMA071200013IT  
Page 19 of 22

## 7 Photographs

### 7.1 Radiated Emission Test Setup



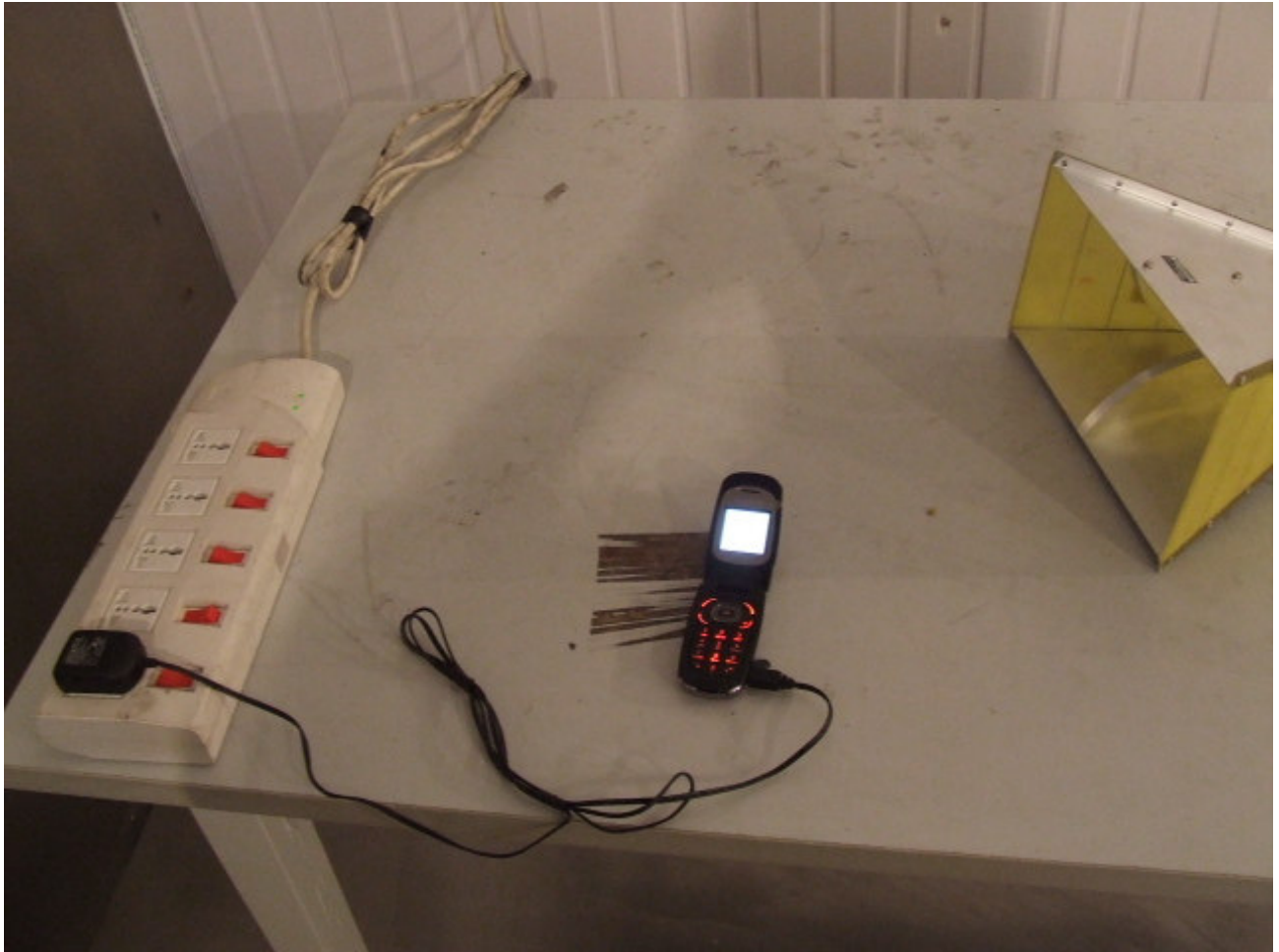
# SGS-CSTC Standards Technical Services Co., Ltd.

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMO071200013IT  
Page 20 of 22

## 7.2 Conducted Emission Test Setup



# SGS-CSTC Standards Technical Services Co., Ltd.

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMO071200013IT  
Page 21 of 22

## 7.3 EUT Constructional Details



**SGS-CSTC Standards  
Technical Services Co., Ltd.**

1/F, 4/F, 5/F, 6/F, 7/F, 8/F, 9/F, 10/F, the 3rd Building No. 889,  
Yishan Road, Xuhui District, Shanghai, China

Telephone: +86 (0) 21 6495 1616  
Fax: +86 (0) 21 5450 0954  
Tino\_Pan@sgs.com

Report No.: SHEMO071200013IT  
Page 22 of 22



**THE END OF REPORT**