

FCC Part22H&24E Test Report

Product Name : GSM Mobile Phone
Model No. : HUAWEI G6609
FCC ID : QISG6609

Applicant : HUAWEI TECHNOLOGIES CO., LTD
Address : Administration Building, Huawei Base, Bantian,
Longgang District, Shenzhen 518129

Date of Receipt : 20/12/2011
Test Date : 20/12/2011~29/12/2011
Issued Date : 29/12/2011
Report No. : 11CS072R-HP-US-P07V01
Report Version : V 1.1

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF, NVLAP, NIST or any agency of the Government.

The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Test Report Certification

Issued Date : 29/12/2011

Report No. : 11CS072R-HP-US-P07V01



Product Name : GSM Mobile Phone
Applicant : HUAWEI TECHNOLOGIES CO., LTD
Address : Administration Building, Huawei Base, Bantian, Longgang
District, Shenzhen 518129
Manufacturer : HUAWEI TECHNOLOGIES CO., LTD
Address : Administration Building, Huawei Base, Bantian, Longgang
District, Shenzhen 518129
Model No. : HUAWEI G6609
FCC ID : QISG6609
EUT Voltage : DC 3.7V
Brand Name : HUAWEI
Applicable Standard : FCC CFR Title 47 Part 2, TIA/EIA 603-C
FCC Part 22.913(a) & 917(b), FCC Part 24.232(b) & 238(b)
Test Result : Complied
Performed Location : Suzhou EMC Laboratory
No.99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech
Development Zone., Suzhou, China
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098
FCC Registration Number: 800392

Documented By : Alice Ni
(Engineering ADM: Alice Ni)
Reviewed By : Robin Wu
(Engineering Supervisor: Robin Wu)
Approved By : Marlin Chen
(Engineering Manager: Marlin Chen)

Laboratory Information

We, **QuietTek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

Taiwan R.O.C.	: BSMI, NCC, TAF
Germany	: TUV Rheinland
Norway	: Nemko, DNV
USA	: FCC, NVLAP
Japan	: VCCI

The related certificate for our laboratories about the test site and management system can be downloaded from QuietTek Corporation's Web Site : <http://www.quietek.com/tw/ctg/cts/accreditations.htm>
 The address and introduction of QuietTek Corporation's laboratories can be founded in our Web site : <http://www.quietek.com/>
 If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

HsinChu Testing Laboratory :

No.75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan, R.O.C.
 TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : service@quietek.com



LinKou Testing Laboratory :

No. 5-22, Ruei-Shu Valley, Ruei-Ping Tsuen, Lin-Kou Shiang, Taipei, Taiwan, R.O.C.
 TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com



Suzhou (China) Testing Laboratory :

No. 99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., Suzhou,China.
 TEL : +86-512-6251-5088 / FAX : +86-512-6251-5098 E-Mail : service@quietek.com



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1. General Information

1.1. EUT Description

Product Name	GSM Mobile Phone
Model No.	HUAWEI G6609
Device Category	Portable
RF Exposure Environment	Uncontrolled
Antenna Type	Internal
2G	
Support Band	GSM850 /PCS1900
GPRS Type	Class B
GPRS Class	Class 12
Tx Frequency Range	GSM 850: 824~849MHz PCS 1900: 1850~1910MHz
Rx Frequency Range	GSM 850: 869~894MHz PCS 1900: 1930~1990MHz
Release Version	GSM: R99
Type of modulation	GMSK for GSM/GPRS 8PSK for EDGE
Antenna Gain	0.43dBi for GSM850 0.72dBi for PCS1900
Bluetooth	
Bluetooth Frequency	2402~2480MHz
Bluetooth Version	V2.1 + EDR
Type of modulation	FHSS
Data Rate	1Mbps(GFSK), 2Mbps(Pi/4 DQPSK), 3Mbps (8DPSK)
Antenna Gain	0.33dBi
Wi-Fi	
Wi-Fi Frequency	2412~2462MHz
Type of modulation	802.11b: DSSS 802.11g: OFDM
Data Rate	802.11b: 1/2/5.5/11 Mbps 802.11g: 6/9/12/18/24/36/48/54 Mbps
Antenna Gain	0.37dBi
Components	

Headset Model Number	HT-1350002-11KA16
Battery	Brand Name: HUAWEI M/N: HB4J1 Rated Voltage and Capacitance: 3.7V/1050mAh
Adapter	Manufacturer: HUAWEI M/N: HS-050040U6 Input: 100-240V~50/60Hz 0.2A Output: 5Vdc, 400mA

Note: This is a series of cases, the first report number is 117S048R. The mobile phone just modifies the GSM antenna, but the gain is not changed.

1.2. Mode of Operation

Quietek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: GSM 850 Link
Mode 2: PCS 1900 Link
Mode 3: EDGE 850 Link
Mode 4: EDGE 1900 Link

Note:

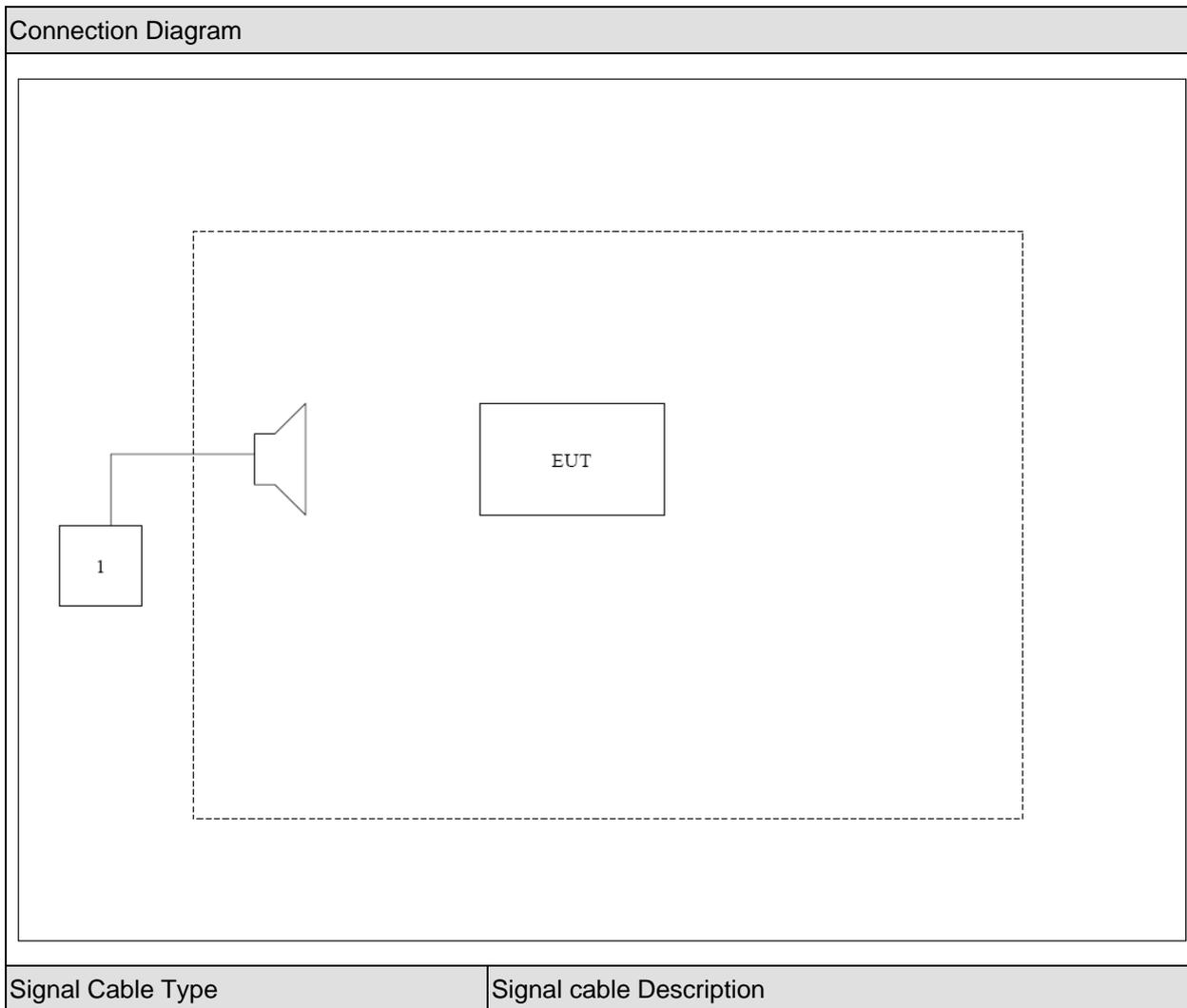
1. Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.
2. Radiated power output working at GSM link was higher than that working at GPRS link, so all of test items were done working at GSM mode. Refer to peak power output for more details.
3. For the ERP/EIRP and radiated emission test, every axis (X, Y, Z) was verified, and show the worst result on this report.

1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	CMU200	R&S	CMU200	N/A	N/A

1.4. Configuration of Tested System



1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of all equipment.
3	EUT Communicate with CMU200, then select channel to test.

2. Technical Test

2.1. Summary of Test Result

- No deviations from the test standards
- Deviations from the test standards as below description:

For GSM 850 (FCC Part 22H & Part 2)

Emission			
Performed Item	Normative References	Test Performed	Deviation
Peak Output Power	FCC Part 22.913(a)(2) and Part 2.1046	Yes	No
Spurious Emission	FCC Part 22.917(b) and Part 2.1051, 2.1053	Yes	No

For PCS 1900 (FCC Part 24E & Part 2)

Emission			
Performed Item	Normative References	Test Performed	Deviation
Peak Output Power	FCC Part 24.232(b) and Part 2.1046	Yes	No
Spurious Emission	FCC Part 24.238(b) and Part 2.1051, 2.1053	Yes	No

2.2. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	23
Humidity (%RH)	25-75	52
Barometric pressure (mbar)	860-1060	950-1000

3. Peak Output Power

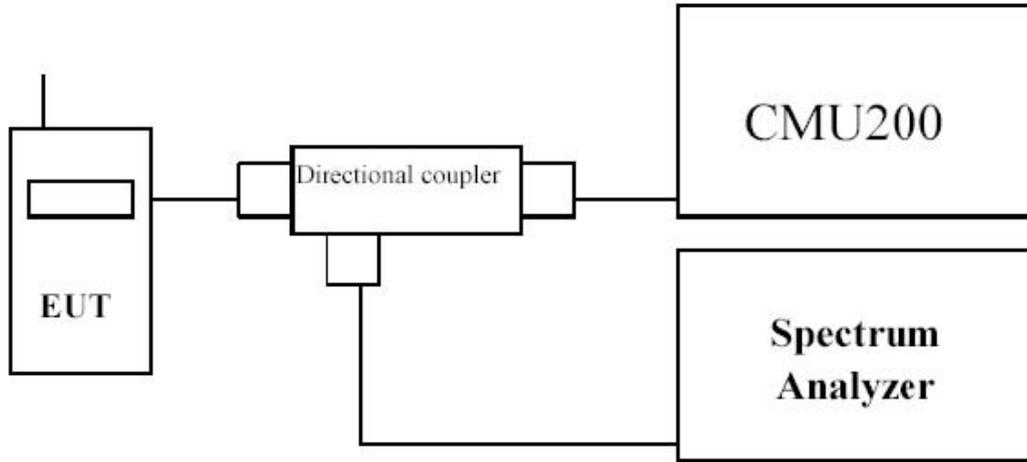
3.1. Test Equipment

Peak Output Power / AC-5

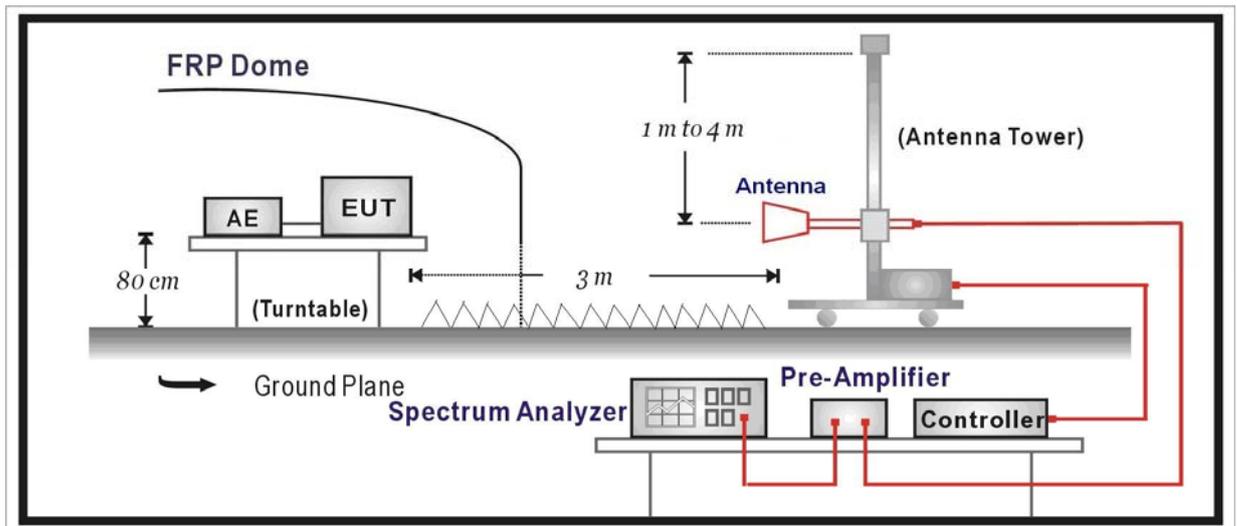
Instrument	Manufacturer	Type No.	Serial No	Cali. Due Date
PSA Series Spectrum Analyzer	Agilent	E4440A	MY49420184	2012.04.10
Radio Communication Tester	R&S	CMU 200	117088	2012.04.29
Dual Directional Coupler	Agilent	778D	20160	2012.04.20
10dB Coaxial Coupler	Agilent	87300C	MY44300299	2012.04.20
PSG Analog Signal Generator	Agilent	E8257D	MY44321116	2012.04.23
Preamplifier	QuieTek	AP-025C	CHM-0503006	2012.05.05
Preamplifier	Miteq	NSP1800-25	1364185	2012.05.05
Bilog Antenna	Teseq GmbH	CBL6112D	27612	2012.10.18
Half Wave Tuned Dipole Antenna	COM-POWER	AD-100	40137	2012.11.24
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	737	2012.11.24
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	499	2012.06.11
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC5-TH	2012.01.14

3.2. Test Setup

Conducted Power Measurement:



Radiated Power Measurement:



3.3. Limit

For FCC Part 22.913(a)(2):

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

For FCC Part 24.232(b):

The EIRP of mobile transmitters and auxiliary test transmitters must not exceed 2 Watts.

3.4. Test Procedure

Conducted Power Measurement:

- a) Place the EUT on a bench and set it in transmitting mode.
- b) Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMU200 by a Directional Couple.
- c) EUT Communicate with CMU200, then selects a channel for testing.
- d) Add a correction factor to the display of spectrum, and then test.

Radiated Power Measurement:

- e) The EUT shall be placed at the specified height on a support, and in the position closest to normal use as declared by provider.
- f) The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter
- g) The output of the test antenna shall be connected to the measuring receiver.
- h) The transmitter shall be switched on and the measuring receiver shall be tuned to the frequency of the transmitter under test.
- i) The test antenna shall be raised and lowered through the specified range of height until a maximum signal level is detected by the measuring receiver.
- j) The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- k) The test antenna shall be raised and lowered again through the specified range of height until a maximum signal level is detected by the measuring receiver.
- l) The maximum signal level detected by the measuring receiver shall be noted.
- m) The transmitter shall be replaced by a substitution antenna.
- n) The substitution antenna shall be orientated for vertical polarization and the length of the substitution antenna shall be adjusted to correspond to the frequency of the transmitter.
- o) The substitution antenna shall be connected to a calibrated signal generator.
- p) If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- q) The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
- r) The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.
- s) The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.
- t) The measure of the effective radiated power is the larger of the two levels recorded at the input to the substitution antenna, corrected for gain of the substitution antenna if

necessary.

- u) Test site anechoic chamber refer to ANSI C63.4: 2009.

3.5. Uncertainty

The measurement uncertainty is defined as for Conducted Power Measurement ± 1.2 dB,
for Radiated Power Measurement ± 3.2 dB

3.6. Test Result

Table 1

No. of timeslots	1	2	3	4
Duty Cycle	1 : 8	1 : 4	1 : 2.66	1 : 2
Timebased avg. power compared to slotted avg. power	-9 dB	-6 dB	-4.25 dB	-3 dB

The following table shows the conducted power measured and time based average power calculated:

Table 2

GSM850

Channel No.	Frequency (MHz)	Modulation	Avg. Burst Power (dBm)	Duty Cycle Factor (dB)	Frame Power (dBm)	ERP (dBm)	Limit (dBm)
128	824.2	GMSK	32.21	-9	23.21	30.65	38.50
189	836.4	GMSK	32.18	-9	23.18	29.90	38.50
251	848.8	GMSK	32.21	-9	23.21	30.48	38.50

PCS1900

Channel No.	Frequency (MHz)	Modulation	Avg. Burst Power (dBm)	Duty Cycle Factor (dB)	Frame Power (dBm)	EIRP (dBm)	Limit (dBm)
512	1850.2	GMSK	29.27	-9	20.27	28.32	33.00
661	1880.0	GMSK	29.23	-9	20.23	27.11	33.00
810	1909.8	GMSK	29.18	-9	20.18	27.24	33.00

Note: The maximum PAR for PCS1900 is 9.96dB less than 13 dB.

GPRS 850

Channel No.	Frequency (MHz)	Modulation	Avg. Burst Power (dBm)	Duty Cycle Factor (dB)	Frame Power (dBm)	ERP (dBm)	Limit (dBm)
128	824.2	GMSK	32.18	-9	23.23	30.24	38.50
189	836.4	GMSK	32.14	-9	23.20	29.87	38.50
251	848.8	GMSK	32.17	-9	23.22	30.49	38.50

GPRS1900

Channel No.	Frequency (MHz)	Modulation	Avg. Burst Power (dBm)	Duty Cycle Factor (dB)	Frame Power (dBm)	EIRP (dBm)	Limit (dBm)
512	1850.2	GMSK	29.26	-9	20.26	28.22	33.00
661	1880.0	GMSK	29.20	-9	20.20	27.99	33.00
810	1909.8	GMSK	29.15	-9	20.15	28.04	33.00

Note: The maximum PAR for GPRS1900 is 9.8dB less than 13 dB.

EDGE 850

Channel No.	Frequency (MHz)	Modulation	Avg. Burst Power (dBm)	Duty Cycle Factor (dB)	Frame Power (dBm)	ERP (dBm)	Limit (dBm)
128	824.2	8PSK	26.97	-9	17.97	25.33	38.50
189	836.4	8PSK	26.92	-9	17.92	24.60	38.50
251	848.8	8PSK	26.98	-9	17.98	25.22	38.50

EDGE1900

Channel No.	Frequency (MHz)	Modulation	Avg. Burst Power (dBm)	Duty Cycle Factor (dB)	Frame Power (dBm)	EIRP (dBm)	Limit (dBm)
512	1850.2	8PSK	25.30	-9	16.70	24.21	33.00
661	1880.0	8PSK	25.22	-9	16.62	24.20	33.00
810	1909.8	8PSK	25.05	-9	16.45	23.96	33.00

Note: The maximum PAR for EDGE1900 is 9.1dB less than 13 dB.

Radiated Measurement

GSM850

Frequency (MHz)	SA Reading (dBm)	Ant. Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 128 (824.20MHz)								
824.2	-21.94	H	11.75	1.76	-0.02	9.97	38.50	-28.53
824.2	-2.00	V	32.43	1.76	-0.02	30.65	38.50	-7.85
Middle Channel 189 (836.40MHz)								
836.4	-16.14	H	17.65	1.75	0.10	16.00	38.50	-22.50
836.4	-3.11	V	31.55	1.75	0.10	29.90	38.50	-8.60
High Channel 251 (848.80MHz)								
848.8	-15.30	H	18.70	1.78	0.13	17.05	38.50	-21.45
848.8	-2.45	V	32.13	1.78	0.13	30.48	38.50	-8.02

PCS1900

Frequency (MHz)	SA Reading (dBm)	Ant. Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 512 (1850.20MHz)								
1850.2	19.92	H	17.99	2.68	10.4	25.71	33	-7.29
1850.2	22.72	V	20.60	2.68	10.4	28.32	33	-4.68
Middle Channel 661 (1880.00MHz)								
1880.0	19.78	H	17.83	2.68	10.43	25.58	33	-7.42
1880.0	21.65	V	19.36	2.68	10.43	27.11	33	-5.89
High Channel 810 (1909.80MHz)								
1909.8	19.84	H	18.07	2.70	10.44	25.81	33	-7.19
1909.8	21.72	V	19.50	2.70	10.44	27.24	33	-5.76

GPRS 850

Frequency (MHz)	SA Reading (dBm)	Ant. Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 128 (824.20MHz)								
824.2	-16.34	H	17.35	1.76	-0.02	15.57	38.5	-22.93
824.2	-2.41	V	32.02	1.76	-0.02	30.24	38.5	-8.26
Middle Channel 189 (836.40MHz)								
836.4	-16.11	H	17.68	1.75	0.10	16.03	38.5	-22.47
836.4	-3.14	V	31.52	1.75	0.10	29.87	38.5	-8.63
High Channel 251 (848.80MHz)								
848.8	-15.39	H	18.60	1.78	0.13	16.95	38.5	-21.55
848.8	-2.45	V	32.14	1.78	0.13	30.49	38.5	-8.01

GPRS1900

Frequency (MHz)	SA Reading (dBm)	Ant .Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 512 (1850.20MHz)								
1850.2	20.39	H	18.46	2.68	10.4	26.18	33	-6.82
1850.2	22.62	V	20.50	2.68	10.4	28.22	33	-4.78
Middle Channel 661 (1880.00MHz)								
1880.0	20.02	H	18.06	2.68	10.43	25.81	33	-7.19
1880.0	22.53	V	20.24	2.68	10.43	27.99	33	-5.01
High Channel 810 (1909.80MHz)								
1909.8	19.87	H	18.10	2.70	10.44	25.84	33	-7.16
1909.8	22.52	V	20.30	2.70	10.44	28.04	33	-4.96

EDGE 850

Frequency (MHz)	SA Reading (dBm)	Ant. Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 128 (824.20MHz)								
824.2	-20.66	H	13.03	1.76	-0.02	11.25	38.5	-27.25
824.2	-7.32	V	27.11	1.76	-0.02	25.33	38.5	-13.17
Middle Channel 189 (836.40MHz)								
836.4	-22.43	H	11.36	1.75	0.10	9.71	38.5	-28.79
836.4	-8.41	V	26.25	1.75	0.10	24.60	38.5	-13.90
High Channel 251 (848.80MHz)								
848.8	-21.36	H	12.63	1.78	0.13	10.98	38.5	-27.52
848.8	-7.71	V	26.87	1.78	0.13	25.22	38.5	-13.28

EDGE1900

Frequency (MHz)	SA Reading (dBm)	Ant .Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 512 (1850.20MHz)								
1850.2	16.53	H	14.60	2.68	10.4	22.32	33	-10.68
1850.2	18.61	V	16.49	2.68	10.4	24.21	33	-8.79
Middle Channel 661 (1880.00MHz)								
1880.0	17.72	H	15.77	2.68	10.43	23.52	33	-9.48
1880.0	18.74	V	16.45	2.68	10.43	24.20	33	-8.80
High Channel 810 (1909.80MHz)								
1909.8	15.66	H	13.89	2.70	10.44	21.63	33	-11.37
1909.8	18.43	V	16.22	2.70	10.44	23.96	33	-9.04

3.7. Test Photograph

Description: ERP Test Setup



Description: Substitution Antenna for ERP Test



Description: EIRP Test Setup



Description: Substitution Antenna for EIRP Test



4. Spurious Emission

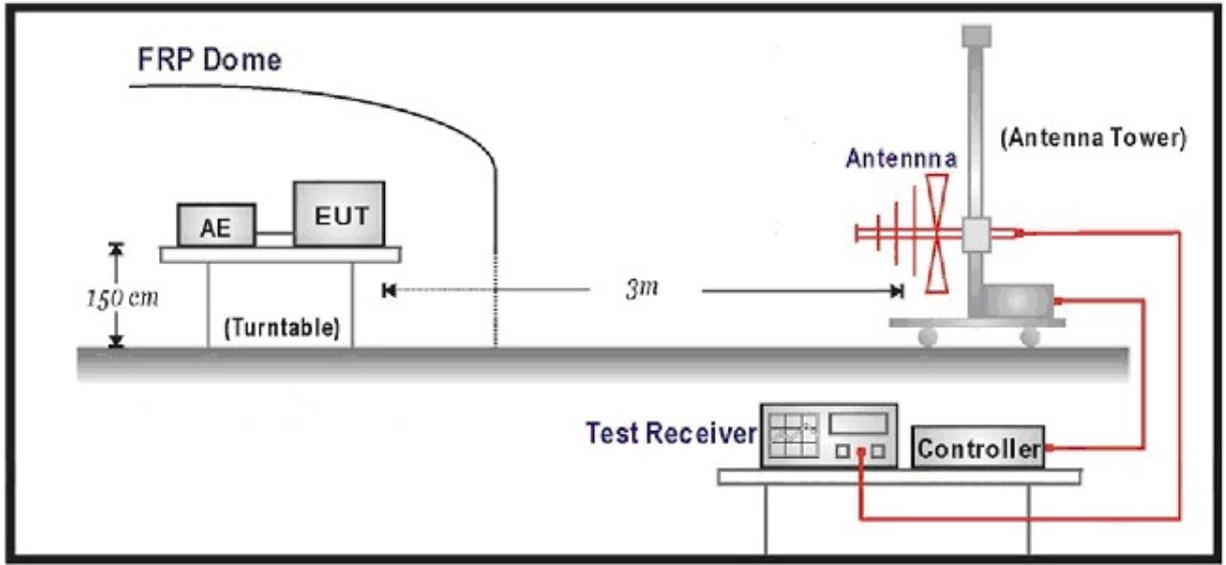
4.1. Test Equipment

Spurious Emission / AC-5

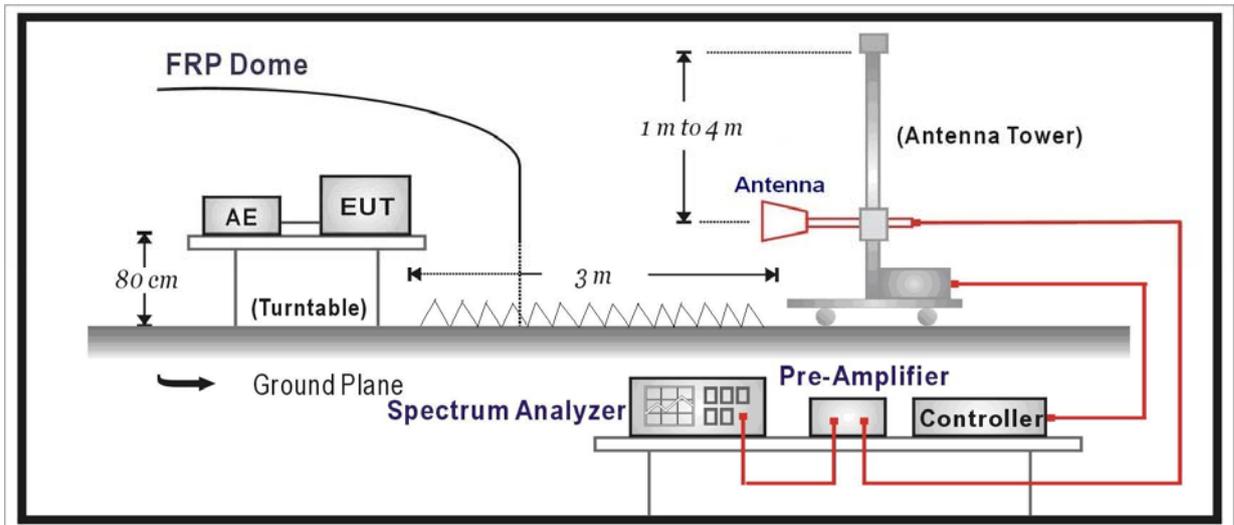
Instrument	Manufacturer	Type No.	Serial No	Cali. Due Date
PSA Series Spectrum Analyzer	Agilent	E4440A	MY49420184	2012.04.10
Radio Communication Tester	R&S	CMU 200	117088	2012.04.29
Dual Directional Coupler	Agilent	778D	20160	2012.04.20
10dB Coaxial Coupler	Agilent	87300C	MY44300299	2012.04.20
PSG Analog Signal Generator	Agilent	E8257D	MY44321116	2012.04.23
Preamplifier	QuieTek	AP-025C	CHM-0503006	2012.05.05
Preamplifier	Miteq	NSP1800-25	1364185	2012.05.05
Bilog Antenna	Teseq GmbH	CBL6112D	27612	2012.10.18
Half Wave Tuned Dipole Antenna	COM-POWER	AD-100	40137	2012.11.24
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	737	2012.11.24
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	499	2012.06.11
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC5-TH	2012.01.14

4.2. Test Setup

Radiated Spurious Measurement: below 1GHz



Radiated Spurious Measurement: above 1GHz



4.3. Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB.

4.4. Test Procedure

Conducted Spurious Measurement:

- a) Place the EUT on a bench and set it in transmitting mode.
- b) Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMU200 by a Directional Couple.
- c) EUT Communicate with CMU200, then select a channel for testing.
- d) Add a correction factor to the display of spectrum, and then test.
- e) The resolution bandwidth of the spectrum analyzer was set at 1 MHz, sufficient scans were taken to show the out of band Emission if any up to 10th harmonic.

Radiated Spurious Measurement:

- a) The EUT shall be placed at the specified height on a support, and in the position closest to normal use as declared by provider.
- b) The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter
- c) The output of the test antenna shall be connected to the measuring receiver.
- d) The transmitter shall be switched on and the measuring receiver shall be tuned to the frequency of the transmitter under test.
- e) The test antenna shall be raised and lowered through the specified range of height until a maximum signal level is detected by the measuring receiver.
- f) The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- g) The test antenna shall be raised and lowered again through the specified range of height until a maximum signal level is detected by the measuring receiver.
- v) The maximum signal level detected by the measuring receiver shall be noted.
- h) The transmitter shall be replaced by a substitution antenna.
- i) The substitution antenna shall be orientated for vertical polarization and the length of the substitution antenna shall be adjusted to correspond to the frequency of the transmitter.
- j) The substitution antenna shall be connected to a calibrated signal generator.
- k) If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- l) The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
- m) The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.

- n) The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.
- o) The measure of the effective radiated power is the larger of the two levels recorded at the input to the substitution antenna, corrected for gain of the substitution antenna if necessary.
- p) The frequency range was checked up to 10th harmonic.
- q) Test site anechoic chamber refer to ANSI C63.4: 2009

4.5. Uncertainty

The measurement uncertainty is defined as 3.2 dB for Radiated Power Measurement.

4.6. Test Result

Product	GSM Mobile Phone		
Test Item	Spurious Emission		
Test Mode	Mode 1: GSM850 Traffic		
Date of Test	2011/12/29	Test Site	AC-5

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 128 (824.20MHz)								
1646.00	-42.43	V	-45.09	2.50	9.75	-37.84	-13.00	-24.84
3296.80	-37.07	V	-35.03	4.02	12.75	-26.30	-13.00	-13.30
3296.80	-38.75	H	-33.86	4.02	9.75	-28.13	-13.00	-15.13
4121.00	-49.39	H	-46.63	3.12	12.64	-37.11	-13.00	-24.11
Middle Channel 189 (836.40MHz)								
1671.50	-46.95	V	-49.61	2.52	9.95	-42.18	-13.00	-29.18
3345.60	-41.89	V	-40.20	4.22	12.86	-31.56	-13.00	-18.56
3345.60	-42.54	H	-40.70	4.22	12.86	-32.06	-13.00	-19.06
4182.00	-51.88	H	-46.83	5.17	12.68	-39.32	-13.00	-26.32
High Channel 251 (848.80MHz)								
3395.20	-47.09	V	-45.40	4.45	12.95	-36.90	-13.00	-23.90
5092.80	-57.44	V	-48.65	5.25	12.74	-41.16	-13.00	-28.16
3395.20	-46.38	H	-44.95	4.45	12.95	-36.45	-13.00	-23.45
4244.00	-52.85	H	-47.76	5.00	12.71	-40.05	-13.00	-27.05

Product	GSM Mobile Phone		
Test Item	Spurious Emission		
Test Mode	Mode 2: PCS1900 Traffic		
Date of Test	2011/12/29	Test Site	AC-5

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 512 (1850.20MHz)								
3703.00	-46.81	V	-43.35	3.84	12.69	-34.50	-13.00	-21.50
7400.80	-57.16	V	-40.02	6.86	11.02	-35.86	-13.00	-22.86
3703.00	-40.74	H	-37.37	3.84	12.69	-28.52	-13.00	-15.52
7400.80	-58.21	H	-41.33	6.86	11.02	-37.17	-13.00	-24.17
Middle Channel 661 (1880.00MHz)								
3762.50	-45.20	V	-41.98	3.73	12.72	-32.99	-13.00	-19.99
7520.00	-55.73	V	-39.00	6.73	11.28	-34.45	-13.00	-21.45
3762.50	-37.99	H	-34.69	3.73	12.72	-25.70	-13.00	-12.70
7520.00	-58.53	H	-41.80	6.73	11.28	-37.25	-13.00	-24.25
High Channel 810 (1909.80MHz)								
3822.00	-43.56	V	-39.84	4.02	12.73	-31.13	-13.00	-18.13
7639.20	-58.77	V	-42.59	6.61	11.46	-37.74	-13.00	-24.74
3822.00	-41.77	H	-37.90	4.02	12.73	-29.19	-13.00	-16.19
7639.20	-57.84	H	-42.00	6.61	11.46	-37.15	-13.00	-24.15

Product	GSM Mobile Phone		
Test Item	Spurious Emission		
Test Mode	Mode 3: EDGE 850 Link		
Date of Test	2011/12/29	Test Site	AC-5

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 128 (824.20MHz)								
1646.00	-44.84	V	-47.41	2.50	9.75	-40.16	-13.00	-27.16
5769.40	-42.85	V	-39.40	5.93	13.10	-32.23	-13.00	-19.23
3296.80	-43.60	H	-41.56	4.02	12.75	-32.83	-13.00	-19.83
4121.00	-53.53	H	-49.32	4.67	12.64	-41.35	-13.00	-28.35
Middle Channel 189 (836.40MHz)								
3345.90	-48.89	V	-47.21	4.22	12.86	-38.57	-13.00	-25.57
5854.80	-61.17	V	-51.71	5.71	13.07	-44.35	-13.00	-31.35
3345.90	-46.59	H	-44.75	4.22	12.86	-36.11	-13.00	-23.11
4182.00	-52.58	H	-47.53	5.17	12.68	-40.02	-13.00	-27.02
High Channel 251 (848.80MHz)								
3395.20	-50.52	V	-48.83	4.45	12.95	-40.33	-13.00	-27.33
4244.00	-56.52	V	-51.76	5.00	12.71	-44.05	-13.00	-31.05
3395.20	-49.68	H	-48.25	4.45	12.95	-39.75	-13.00	-26.75
4244.00	-54.05	H	-48.96	5.00	12.71	-41.25	-13.00	-28.25

Product	GSM Mobile Phone		
Test Item	Spurious Emission		
Test Mode	Mode 4: EDGE1900 Traffic		
Date of Test	2011/12/29	Test Site	AC-5

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 512 (1850.20MHz)								
3703.00	-47.07	V	-43.61	3.84	12.69	-34.76	-13.00	-21.76
7400.80	-55.62	V	-38.49	6.86	11.02	-34.33	-13.00	-21.33
3703.00	-41.95	H	-38.57	3.84	12.69	-29.72	-13.00	-16.72
7400.80	-57.60	H	-40.71	6.86	11.02	-36.55	-13.00	-23.55
Middle Channel 661 (1880.00MHz)								
3762.50	-45.59	V	-42.37	3.73	12.72	-33.38	-13.00	-20.38
7520.00	-56.33	V	-39.61	6.73	11.28	-35.06	-13.00	-22.06
3762.50	-40.63	H	-37.33	3.73	12.72	-28.34	-13.00	-15.34
7520.00	-57.70	H	-40.96	6.73	11.28	-36.41	-13.00	-23.41
High Channel 810 (1909.80MHz)								
3822.00	-46.39	V	-42.67	4.02	12.73	-33.96	-13.00	-20.96
7639.20	-58.12	V	-41.95	6.61	11.46	-37.10	-13.00	-24.10
3822.00	-42.46	H	-38.59	4.02	12.73	-29.88	-13.00	-16.88
7639.20	-56.70	H	-40.86	6.61	11.46	-36.01	-13.00	-23.01