

19 March, 2012

Huawei Technologies Co.,Ltd Bantian, Longgang District, Shenzhen, China

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Dear Mr. Zhang Xinghai:

Enclosed you will find your file copy of an Original Grant of Part 22 and Part 24 Certification report (FCC ID: QISG5000). Model: HUAWEI G5000.

For your reference, TCB will normally take another 2 weeks for reviewing the report. Approval will then be granted when no query is sorted.

Please contact me if you have any questions regarding the enclosed material.

Sincerely,

Leung Wai Leung, Tommy Deputy General Manager

**Enclosure** 



# List of Exhibits

Exhibit Type	File Description	Filename
Test Report	Test Report	report.pdf
Operational Description	Technical Description	descri.pdf
Test Report	Bandwidth Plot	bw.pdf
Test Report	Spurious Emissions	cspurious.pdf
Test Report	Bandedge Plot	be.pdf
RF Exposure Info	SAR Report	sar report. pdf
Cover Letter	SAR Justification	sar justification.pdf
External Photos	External Photo	external photos.pdf
Internal Photos	Internal Photo	internal photos.pdf
ID Label/Location Info	Label Artwork and Location	label.pdf
Cover Letter	Label Location Justification	justification.pdf
Block Diagrams	Block Diagram	block.pdf
Schematics	Circuit Diagram	circuit.pdf
User Manual	User Manual	manual.pdf
Part List/Tune Up Info	Tune Up Procedure	tuneup.pdf
Part List/Tune Up Info	Part List	partlist.pdf
Cover Letter	Letter of Agency	letter of agency.pdf
Cover Letter	Confidentiality Request	request.pdf



#### **TEST REPORT**

Report Number: SZ12030095-1

Application
for
Original Grant
of 47 CFR Part 22 and Part 24 Certification

**GSM Mobile Phone** 

FCC ID: QISG5000

Prepared and Checked by:

Approved by:

Billy Li Team Leader 19 March, 2012

Leung Wai Leung, Tommy Deputy General Manager 19 March, 2012

- The test results reported in this test report shall refer only to the sample actually tested and shall not refer or be deemed to refer to bulk from which such a sample may be said to have been obtained.
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- For Terms And Conditions of the services, it can be provided upon request.
- The evaluation data of the report will be kept for 3 years from the date of issuance.

TRF No.: FCC 22H&24E\_a

# **GENERAL INFORMATION**

Applicant Name:	Huawei Technologies Co.,Ltd
Applicant Address:	Bantian, Longgang District, Shenzhen,
	China
FCC Specification Standard:	FCC Part 22: 2011
	FCC Part 24: 2011
FCC ID:	QISG5000
FCC Model(s):	HUAWEI G5000
Type of EUT:	GSM 850/1900 Transceiver with Bluetooth
Description of EUT:	GSM Mobile Phone
Serial Number:	N/A
Sample Receipt Date:	05 March, 2012
Date of Test:	19 March, 2012
Report Date:	19 March, 2012
Environmental Conditions:	Temperature: 25 ± 10℃
	Humidity: 10 to 90%

TRF: FCC 22H&24E\_a

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# **Appendix – Exhibits for Application of Certification**

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# 1.0 **Summary of Test Results**

Test Items	FCC Section	Results	Details see section	
Channels for Cellular and Broadband	22.905 24.229	Pass	4.1	
PCS Services	24.229			
RF Output Power	22.913	Pass	4.3	
·	24.232			
Occupied Bandwidth	2.1049	Pass	4.4	
	2.1051			
Spurious Emissions at Antenna	2.1057	Pass	4.5	
Terminals	22.917	1 433	4.5	
	24.238			
	2.1053			
Power of Spurious Emissions	2.1057	Pass	4.6	
Power of Spurious Emissions	22.917	F 455	4.0	
	24.238			
	22.917	_		
Blockedge at antenna terminal	24.238	Pass	4.7	
	2.1055			
Frequency Stability	22.355	Pass	4.8	
	24.235			
DE Evacura	1.1307	Door	4.0	
RF Exposure	2.1093	Pass	4.9	

#### 1.1 Statement of Compliance

The equipment under test is found to be complying with the applicable requirements of following standards:

FCC Part 22: 2011 FCC Part 24: 2011

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#### 2.0 **General Description**

## 2.1 Product Description

The HUAWEI G5000 is a GSM Mobile Phone.

The Cellular radiotelephone service and personal communications services frequency ranges of the EUT are as below:

#### GSM 850MHz:

Tx: 824.20 - 848.80MHz (at intervals of 200kHz) Rx: 869.20 - 893.80MHz (at intervals of 200kHz)

#### **GSM 1900MHz:**

Tx: 1850.20 - 1909.80MHz (at intervals of 200kHz) Rx: 1930.20 - 1989.80MHz (at intervals of 200kHz)

The EUT is powered by Lithium type rechargeable battery pack (3.7VDC).

The antenna used in the EUT is integral, and the test sample is a prototype.

The circuit description is attached in the Appendix and saved with filename: descri.pdf.

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## 2.3 Test Methodology

Preliminary radiated scans and all radiated measurements were performed in semianechoic chamber. All Radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "**Justification Section**" of this Application. All measurements were made in accordance with the procedures in 47 CFR Part 2, Part 22, Part 24 and TIA-603-C.

#### 2.4 Test Facility

The facilities used to collect the radiated data and conducted data are in **Interterk Testing Services Shenzhen Ltd. Kejiyuan Branch** and located at 6F, D Block, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China. This test facility and site measurement data have been fully placed on file with the FCC.

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## 3.0 **System Test Configuration**

#### 3.1 Justification

For radiated emissions testing, the equipment under test (EUT) was controlled by communication tester to produce maximum power. Care was taken to ensure proper power supply voltages during testing. During testing, all cables (if any) were manipulated to produce worst case emissions.

The EUT was powered separately by the fully charged Lithium batteries described in page 8 and only the worst case was reported (The worst case configuration is the EUT with Model 1 battery & Model 1 adapter).

For the measurements, the EUT is attached to a plastic stand if necessary and placed on the wooden turntable. If the EUT attaches to peripherals, they are connected and operational to simulate typical use.

The signal is maximized through rotation and placement in the three orthogonal axes. The antenna polarization are varied during the search for maximum signal level. Only the worst-case polarization is reported. For each spurious, raise and lower the test antenna from 1m to 4m to obtain a maximum reading on the spectrum analyzer. Radiated emissions are taken at three meters. If necessary, a pre-amplifier is used and/or the test is conducted at a closer distance.

The power level of EUT is set by the communication tester as follows: 850MHz band: Power Control Level (PCL) = 5 (Power class 4) 1900MHz band: Power Control Level (PCL) = 0 (Power class 1) Which are the maximum power levels emitted by the EUT.

For the 850MHz band, according to 22.917, compliance with the rule is based on the use of instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter is employed. The 26dB emission bandwidth taken in section 4.4 is used for calculating the resolution bandwidth.

For the 1900MHz band, according to 24.238, compliance with the rule is based on the use of instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter is employed. The 26dB emission bandwidth taken in section 4.4 is used for calculating the resolution bandwidth.

Emission that are directly caused by digital circuits in the transmit path and transmitter portion are measured, and the limit are according to FCC Part 15 Section 15.109.

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#### 3.1 Justification - Cont'd

Detector function for radiated emissions is in peak mode.

All relevant operation modes have been tested, and the worst case data is included in this report.

Simultaneous transmission (Bluetooth in this case) was investigated and no new emissions were found.

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## 3.2 Details of EUT and Description of Accessories

#### Details of EUT:

The Lithium type rechargeable batteries (provided with the unit) were used to power the device. Their descriptions are listed below.

Model 1: HB5A3, 3.7V 1000mAh Model 2: HB5A3, 3.7V 1000mAh Model 3: HHB5A3L, 3.7V 800mAh Model 4: HBG3511, 3.7V 650mAh

Note: The model 1 & 2 described above are made by different manufacturer.

## **Description of Accessories:**

- (1) Two type headsets for mobile phone use with 1.5m unshielded cable.
- (2) AC adapter: (100-240VAC, 50~60Hz, 0.2A to 5.0 VDC, 550mA) Model 1: ZWN003AU05000551, with 1.0m unshielded USB Cable. Model 2: A361-0500550U, with 1.0 shielded USB cable.

#### 3.3 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty of test has been considered.

Uncertainty and Compliance - Unless the standard specifically states that measured values are to be extended by the measurement uncertainty in determining compliance, all compliance determinations are based on the actual measured value.

#### 3.4 Equipment Modification

Any modifications installed previous to testing by Huawei Technologies Co.,Ltd will be incorporated in each production model sold/leased in the United States.

No modifications were installed by Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch.

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#### 4.0 Test Results

Data is included of the worst case configuration (the configuration which resulted in the highest emission levels). Configuration photographs and data tables of the emissions are included.

4.1 Channels for Cellular and Broadband PCS Services (FCC Part 22.905, Part 24.229)

The following frequency bands are allocated for assignment to service providers in the Cellular Radiotelephone and Broadband PCS Services by FCC:

#### 850MHz band

(a) Channel Block A:

869 - 880 MHz paired with 824 - 835 MHz 890 - 891.5 MHz paired with 845 - 846.5 MHz

(b) Channel Block B:

880 - 890 MHz paired with 835 - 845 MHz 891.5 - 894 MHz paired with 846 - 849 MHz

#### 1900MHz band

The following frequency blocks are available for assignment on a Major Trading Areas (MTA) basis:

Block A: 1850 - 1865 MHz paired with 1930 - 1945 MHz; and Block B: 1870 - 1885 MHz paired with 1950 - 1965 MHz.

The following frequency blocks are available for assignment on a Basic Trading Areas (BTA) basis:

Block C: 1895 - 1910 MHz paired with 1975 - 1990 MHz Block D: 1865 - 1870 MHz paired with 1945 - 1950 MHz Block E: 1885 - 1890 MHz paired with 1965 - 1970 MHz Block F: 1890 - 1895 MHz paired with 1970 - 1975 MHz

The frequency range of the EUT is as below:

#### GSM 850MHz:

Tx: 824.20 - 848.80MHz (at intervals of 200kHz) Rx: 869.20 - 893.80MHz (at intervals of 200kHz)

#### **GSM 1900MHz:**

Tx: 1850.20 - 1909.80MHz (at intervals of 200kHz) Rx: 1930.20 - 1989.80MHz (at intervals of 200kHz)

As a result, the frequency range of the EUT fits into the allocated frequency blocks.

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## 4.2 RF Power Output (FCC Part 2.1046, 22.913 & 24.232)

The RF power output is measured at the RF output terminal. The limit is as follows: Part 22.913 (for 850MHz band):

- [ ] ≤ 500W ERP (57dBm) for base stations and cellular repeaters
- [ $\sqrt{\ }$ ]  $\leq$  7W ERP (38.5dBm) for mobile and auxiliary test transmitters Part 24.232 (for 1900MHz band):
  - [ ]  $\leq$  1640W e.i.r.p. (62.1dBm) for base stations up to 300m HAAT;
  - [ $\sqrt{\ }$ ]  $\leq$  2W e.i.r.p. (33dBm) peak output power for portable mobile

#### Test results:

Band	ARFCN	Frequency (MHz)	Antenna Gain (dBi)	Measured output power (dBm)	*ERP (dBm)	Limit (dBm)	Verdict
GSM 850MHz	190	836.6	-0.55	31.6	28.9	38.5	PASS
GPRS 850MHz	190	836.6	-0.55	31.4	28.7	38.5	PASS

Band	ARFCN	Frequency (MHz)	Antenna Gain (dBi)	Measured output power (dBm)	#EIRP (dBm)	Limit (dBm)	Verdict
GSM 1900MHz	661	1880.0	-0.93	28.0	27.1	33.0	PASS
GPRS 1900MHz	661	1880.0	-0.93	27.8	26.9	33.0	PASS

<sup>\*</sup>ERP (dBm) = Conducted Power (dBm) + Antenna Gain (dBi) - 2.15dB

#EIRP (dBm) = Conducted Power (dBm) + Antenna Gain (dBi)

Remark: RMS detector was used for output power measurement.

The PAR of the transmission is 10.6dB.

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## 4.3 Occupied Bandwidth (FCC Part 2.1049)

From 2.1049, occupied bandwidth is defined as the measured spectral width of an emission. The measurement determines occupied bandwidth as the difference between upper and lower frequencies where 0.5% of the emission power is above the upper frequency and 0.5% of the emission power is below the lower frequency.

The 26dB bandwidth is also recorded to determine the resolution bandwidth used in measurements, as specified in 22.917 and 24.238.

#### Test results:

Band	ARFCN	Frequency (MHz)	99% Bandwidth (kHz)	26dB Bandwidth (kHz)
GSM 850MHz	190	836.6	246	322
GSM 1900MHz	661	1880.0	246	320
GPRS 850MHz	190	836.6	244	324
GPRS 1900MHz	661	1880.0	244	316

The plots of 99% and 26dB bandwidth are saved in the file bw.pdf.

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4.4 Spurious Emissions at Antenna Terminals (FCC Part 22.1051, 2.1057, 22.917, 24.238)

The conducted spurious emissions are measured from 9kHz up to the 10<sup>th</sup> harmonic of fundamental emission.

According to 22.917 and 24.238, 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 + 10log(P) dB, i.e. at or below -13dBm.

#### Test results:

Band	ARFCN	Channel Frequency (MHz)	Verdict
GSM 850MHz	190	836.6	PASS
GSM 1900MHz	661	1880.0	PASS
GPRS 850MHz	190	836.6	PASS
GPRS 1900MHz	661	1880.0	PASS

The plots are saved in the file cspurious.pdf.

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#### 4.5 Power of Spurious Emissions (FCC Part 2.1053, 2.1057, 22.917, 24.238)

The radiated spurious emissions are tested per TIA/EIA-603 using the Substitution Method and measured from 9KHz up to the 10<sup>th</sup> harmonic of fundamental emission.

According to 22.917, 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 + 10log(P) dB, i.e. at or below -13dBm.

#### Test results:

GSM 850MHz (ARFCN = 190, Channel frequency = 836.6MHz):

Polarization	Frequency (MHz)	Measured ERP	Limit ERP	Margin (dB)
		(dBm)	(dBm)	
Н	1673.2	-38.43	-13	-25.43
V	\	\	\	\

## GSM 1900MHz (ARFCN = 661, Channel frequency = 1880.0MHz):

Polarization	Frequency	*Measured	*Calculated	Limit EIRP	Margin
	(MHz)	ERP	EIRP	(dBm)	(dB)
	, ,	(dBm)	(dBm)	, ,	, ,
Н	5640.0	-35.30	-33.15	-13	-20.15
V	\	\	\	\	\

<sup>\*</sup>EIRP = ERP + 2.15dB

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# GPRS 850MHz (ARFCN = 190, Channel frequency = 836.6MHz):

Polarization	Frequency (MHz)	Measured ERP	Limit ERP	Margin (dB)
		(dBm)	(dBm)	. ,
Н	1673.2	-39.25	-13	-26.25
V	\	\	\	/

# GPRS 1900MHz (ARFCN = 661, Channel frequency = 1880.0MHz):

Polarization	Frequency (MHz)	*Measured ERP	*Calculated EIRP	Limit EIRP (dBm)	Margin (dB)
		(dBm)	(dBm)	( ,	(- )
Н	5640.0	-35.92	-33.77	-13	-20.77
V	\	\	\	\	\

<sup>\*</sup>EIRP = ERP+2.15dB

Remarks: the magnitudes of spurious emission which are attenuated more than 20 dB below the permissible value are not reported.

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#### 4.6 Blockedge at Antenna Terminals (FCC Part 22.917, 24.238)

In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter is employed. The 26dB emission bandwidth taken in section 4.4 is used for calculating the resolution bandwidth.

The power of any emission at the blockedge must be attenuated below the transmitting power (P) by a factor of at least 43 +10 Log (P) dB, i.e. at or below -13dBm when using 1% emissions bandwidth.

According to the FCC KDB with Publication Number: 890810, measurements using narrower resolution bandwidths are acceptable and must sum the power from all contiguous reduced resolution bandwidths within the 1% resolution specified, an alternative is to add an additional correction factor of 10 Log (RBW1/ RBW2) to the 43 +10 Log (P) limit. RBW1 is the narrower measurement resolution bandwidth and RBW2 is the 1% emissions bandwidth.

The correction factor = 10 Log (RBW1/RBW2) = 10 Log (3/3.24) = -0.33 dB

#### Test results:

1 Oct 1 Codito:							
Band	ARFCN	Channel Frequency (MHz)	Worst case bandedge emission with RBW 3KHz(dBm)	Correction Factor (dB)	Worst case bandedge emission with RBW 3.24KHz(dBm)	Limit (dBm)	Verdict
GSM 850MHz	128	824.2	-16.84	0.33	-16.51	-13	PASS
GSIVI 630IVII 12	251	848.8	-14.34	0.33	-14.01	-13	PASS
GSM 1900MHz	512	1850.2	-21.47	0.33	-21.14	-13	PASS
GSIVI 1900IVII 12	810	1909.8	-20.13	0.33	-19.80	-13	PASS
GPRS 850MHz	128	824.2	-14.73	0.33	-14.40	-13	PASS
GFRS 650IVITIZ	251	848.8	-15.12	0.33	-14.79	-13	PASS
GPRS 1900MHz	512	1850.2	-19.05	0.33	-18.72	-13	PASS
GERO 1900IVINZ	810	1909.8	-20.12	0.33	-19.79	-13	PASS

The plots are saved in the file be.pdf.

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## 4.7 Frequency Stability (FCC Part 2.1055, 22.355, 24.235)

The frequency stability is measured with the temperature variation range of -30°C to +50°C (10°C increment), and voltage supply variation range of 85% to 115% of nominal AC supply voltage, and/or nominal to battery end points for hand-carried battery-powered supplies.

[		] AC nominal supply voltag	je: 120V <i>i</i>	AC		
[	$\sqrt{}$	Battery nominal voltage: _	3.7	_VDC; End points: _	3.6	_VDC

20°C is taken as temperature in normal condition.

For the 850MHz band, according to 22.355, the stability requirements are: ±1.5ppm for mobile units and ±2.5ppm for portable units.

For the 1900MHz band, according to 24.235, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test results:

GSM 850MHz (AFRCN = 190, Channel frequency = 836.6MHz):

Input voltage (VDC)	Temperature (°C)	Frequency deviation (Hz)	Limit (Hz)	Verdict
,	-30	10		PASS
	-20	11		PASS
	-10	9		PASS
	0	8		PASS
3.7	+10	10	±2091.5	PASS
	+20	9	±2091.5	PASS
	+30	11		PASS
	+40	12		PASS
	+50	11		PASS
3.6	+20	11		PASS

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GSM 1900MHz (AFRCN = 512, Channel frequency = 1850.2MHz):

•			/	
Input voltage (VDC)	Temperature (°C)	Measured Frequency (MHz)	Limit (MHz)	Verdict
(VDC)	\ /	_ , , ,		
	-30	1850.200012		PASS
	-20	1850.200015		PASS
	-10	1850.200011		PASS
3.7	0	1850.200009		PASS
	+10	1850.200011	1850 - 1910	PASS
	+20	1850.200012		PASS
	+30	1850.200014		PASS
	+40	1850.200012		PASS
	+50	1850.200011		PASS
3.6	+20	1850.200008		PASS

GSM 1900MHz (AFRCN = 810, Channel frequency = 1909.8MHz):

COM 1000M12 (711 1014 - 010, Orlainer requestoy - 1000.0M12).					
Input voltage	Temperature	Measured	Limit (MHz)	Verdict	
(VDC)	(°C)	Frequency (MHz)		Verdict	
	-30	1909.800012		PASS	
	-20	1909.800011		PASS	
	-10	1909.800012		PASS	
3.7	3.7 0 +10 +20 +30	1909.800014		PASS	
		1909.800012	1850 - 1910	PASS	
		1909.800014		PASS	
		1909.800012		PASS	
	+40	1909.800010		PASS	
	+50	1909.800008		PASS	
3.6	+20	1909.800009		PASS	

GPRS 850MHz (AFRCN = 190, Channel frequency = 836.6MHz):

Input voltage (VDC)	Temperature (°C)	Frequency deviation (Hz)	Limit (Hz)	Verdict
	-30	12		PASS
	-20	13		PASS
	-10	12		PASS
	0	10		PASS
3.7	+10	8	±2091.5	PASS
	+20	8	±2091.5	PASS
	+30	9		PASS
	+40	-6		PASS
	+50	-9		PASS
3.6	+20	10		PASS

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GPRS 1900MHz (AFRCN = 512, Channel frequency = 1850.2MHz):

Input voltage	Temperature	Measured Limit (MHz)		Verdict	
(VDC)	(°C)	Frequency (MHz)		Verdict	
	-30	1850.200014		PASS	
	-20	1850.200012		PASS	
	-10	1850.200011		PASS	
	0	1850.200009		PASS	
3.7	+10	1850.200012	1850 - 1910	PASS	
	+20	1850.200012	1650 - 1910	PASS	
	+30	1850.200014		PASS	
	+40	1850.200012		PASS	
	+50	1850.200012		PASS	
3.6	+20	1850.200010		PASS	

GPRS 1900MHz (AFRCN = 810, Channel frequency = 1909.8MHz):

,		· _ · _ · _ ·	· ·	
Input voltage	Temperature	Measured	Limit (MHz)	Verdict
(VDC)	(°C)	Frequency (MHz)		Verdict
	-30	1909.800012		PASS
	-20	1909.800014		PASS
	-10	1909.800014		PASS
	0	1909.800012		PASS
3.7	+10	1909.800012	1850 - 1910	PASS
	+20 +30	1909.800013	1650 - 1910	PASS
		1909.800010		PASS
	+40	1909.800011		PASS
	+50	1909.800014		PASS
3.6	+20	1909.800011		PASS

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## 4.8 Radio Frequency Exposure Compliance

EUT is subject to the radio frequency exposure requirements specified in FCC Rule §§ 1.1307(b), 2.1093. It shall be considered to operate in a "general population / uncontrolled" environment.

- [x] Portable unit: EUT was evaluated for Specific Absorption Rate (SAR) evaluation compliance according to OET Bulletin 65, Supplement C (Edition 01-01). It is in compliance with the SAR evaluation requirements. The caution statement is saved as filename: RF exposure info.pdf. A SAR test report was submitted at same time and saved as SAR Report.pdf.
- [ ] Mobile unit: EUT was evaluated for Maximum Permissible Exposure (MPE) evaluation compliance according to OET Bulletin 65(Edition 97-01). The evaluation calculation results are saved as filename: RF exposure info.pdf.

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# 5.0 **Equipment List**

Equipment	EMI Test	EMI Test	Spectrum	Universal Radio
	Receiver	Receiver	Analyzer	Communication
			-	Tester
Registration No.	SZ185-02	SZ185-01	SZ056-03	SZ065-1
Manufacturer	R&S	R&S	R&S	R&S
Model No.	ESCI	ESCI	FSP30	CMU200
Calibration Date	05-Nov-2011	11-Mar-2012	11-Mar-2012	23-Jun-2011
Calibration Due Date	05-Nov-2012	11-Mar-2013	11-Mar-2013	23-Jun-2012

Equipment	BiConLog	Horn Antennas	Signal	Active Loop
	Antenna		Generator	Antenna
Registration No.	SZ061-03	SZ061-08		SZ185-02
		SZ061-09	SZ180-01	
Manufacturer	ETS	ETS	R&S	Electro-Metrics
Model No.	3142C	3115	SML03	EM-6876
Calibration Date	02-Jul-2011	15-Oct-2011	11-Mar-2012	17-May-2011
Calibration Due Date	02-Jul-2012	15-Oct-2012	11-Mar-2013	17-May-2012

Equipment	RF Power Meter	Temperature &	Roberts Antennas
		Humidity Chamber	
Registration No.	SZ182-01	SZ016-02	EW-0159
Manufacturer	BOONTON	Dongzhix	CDI
Model No.	4232A	WGD/SJ-415-A	A100
Calibration Date	11-Mar-2012	19-Nov-2011	13-May-2011
Calibration Due Date	11-Mar-2013	19-Nov-2012	13-May-2012

Equipment	Notch Filter	Notch Filter	Highpass Filter
Registration No.	SZ067-05	SZ067-08	SZ067-11
Manufacturer	Micro-Tronics	Wainwright	Wainwright
Model No.	BRM50707-02	WRCT800/960-0.2/40-	WHKX1.0/15G-10S
		8SSK	
Calibration Date	15-Jul-2011	25-Feb-2012	15-Jul-2011
Calibration Due Date	15-Jul-2012	25-Aug-2012	15-Jul-2012

# **END OF TEST REPORT**

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# APPENDIX EXHIBITS OF APPLICATION FOR CERTIFICATION

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