



**FCC 47 CFR PART 22 SUBPART H AND PART 24 SUBPART E  
&  
INDUSTRY CANADA RSS-132 & RSS-133  
(Class II Permissive Change)**

**TEST REPORT**

**For**

**HSPA+ Module**

**Trade Name: HUAWEI**

**Model: EM820W**

*Issued to*

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

*Issued by*

**Compliance Certification Services Inc.  
No. 11, Wu-Gong 6<sup>th</sup> Rd., Wugu Industrial Park,  
Taipei Hsien 248, Taiwan (R.O.C.)  
<http://www.ccsrf.com>  
[service@ccsrf.com](mailto:service@ccsrf.com)**



---

*Note: This report shall not be reproduced except in full, without the written approval of Compliance Certification Services Inc. This document may be altered or revised by Compliance Certification Services Inc. personnel only, and shall be noted in the revision section of the document.*



## TABLE OF CONTENTS

<b>1. TEST RESULT CERTIFICATION.....</b>	<b>3</b>
<b>2. EUT DESCRIPTION .....</b>	<b>4</b>
<b>3. TEST METHODOLOGY .....</b>	<b>5</b>
3.1 EUT CONFIGURATION .....	5
3.2 EUT EXERCISE .....	5
3.3 GENERAL TEST PROCEDURES .....	5
3.4 DESCRIPTION OF TEST MODES .....	6
<b>4. INSTRUMENT CALIBRATION.....</b>	<b>7</b>
4.1 MEASURING INSTRUMENT CALIBRATION .....	7
4.2 MEASUREMENT EQUIPMENT USED .....	8
4.3 MEASUREMENT UNCERTAINTY .....	9
<b>5. FACILITIES AND ACCREDITATIONS .....</b>	<b>10</b>
5.1 FACILITIES .....	10
5.2 EQUIPMENT .....	10
5.3 LABORATORY ACCREDITATIONS AND LISTING .....	10
5.4 TABLE OF ACCREDITATIONS AND LISTINGS .....	11
<b>6. SETUP OF EQUIPMENT UNDER TEST .....</b>	<b>12</b>
6.1 SETUP CONFIGURATION OF EUT .....	12
6.2 SUPPORT EQUIPMENT .....	12
<b>7. FCC PART 22 &amp; 24 REQUIREMENTS &amp; INDUSTRY CANADA RSS-132 &amp; RSS-133 ...</b>	<b>13</b>
7.1 ERP & EIRP MEASUREMENT .....	13
7.2 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT .....	20
7.3 RADIATED RECEIVER SPURIOUS EMISSIONS .....	106
7.4 POWERLINE CONDUCTED EMISSIONS .....	111
<b>APPENDIX II PHOTOGRAPHS OF TEST SETUP .....</b>	<b>114</b>
<b>APPENDIX 1 - PHOTOGRAPHS OF EUT</b>	



# 1. TEST RESULT CERTIFICATION

**Applicant:** Huawei Technologies Co.,Ltd  
Bantian, Longgang District Shenzhen China

**Manufacturer:** Huawei Technologies Co.,Ltd  
Bantian, Longgang District Shenzhen China

**Equipment Under Test:** HSPA+ Module

**Trade Name:** HUAWEI

**Model Number:** EM820W

**Date of Test:** December 16, 2010 ~ January 12, 2011

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
FCC 47 CFR PART 22 SUBPART H AND PART 24 SUBPART E & IC RSS-132 Issue 2: September 2005 and IC RSS-133 Issue 5: February 2009	No non-compliance noted

### We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in TIA/EIA-603-C and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rule FCC PART 22 Subpart H, PART 24 Subpart E, IC RSS-132 Issue 2 and IC RSS-133 Issue 4.

The test results of this report relate only to the tested sample identified in this report.

Approved by:

Reviewed by:

\_\_\_\_\_  
Rex Lai  
Section Manager  
Compliance Certification Services Inc.

\_\_\_\_\_  
Gina Lo  
Section Manager  
Compliance Certification Services Inc.



## 2. EUT DESCRIPTION

<b>Product</b>	HSPA+ Module				
<b>Trade Name</b>	HUAWEI				
<b>Model Number</b>	EM820W				
<b>Model Discrepancy</b>	N/A				
<b>Power Supply</b>	Powered by host device				
<b>Frequency Range</b>	GSM / GPRS / EDGE: 850: 824.2 ~ 848.8 MHz GSM / GPRS / EDGE: 1900: 1850.2 ~ 1909.8 MHz WCDMA / HSDPA / HSUPA / HSPA+ Band II: 1852.4 ~ 1907.6 MHz WCDMA / HSDPA / HSUPA / HSPA+ Band V: 826.4 ~ 846.6MHz				
<b>Transmit Power (ERP &amp; EIRP Power)</b>	GSM 850: 26.84dBm GSM 1900: 26.99 dBm GPRS 850: 21.87 dBm GPRS 1900: 23.36 dBm EDGE 850: 21.80 dBm EDGE 1900: 23.43 dBm WCDMA Band II: 23.09 dBm HSDPA Band II: 24.14 dBm HSUPA Band II: 22.75 dBm HSPA+ Band II: 24.20 dBm WCDMA Band V: 20.59 dBm HSDPA Band V: 17.72 dBm HSUPA Band V: 17.66 dBm HSPA + Band V: 17.83 dBm				
<b>Cellular Phone Protocol</b>	GSM: GMSK GPRS: GMSK EDGE: 8PSK WCDMA: Quadrature Phase Shift Keying (QPSK) with Root-raised cosine pulse shaping filters (roll off = 0.22)				
<b>Antenna Specification / Designation</b>	<b>Antenna Brand</b>	<b>Mean</b>	<b>Part Number</b>	<b>Antenna Type</b>	<b>Antenna Gain</b>
	ACON	Main	25.90A52.011	PIFA Antenna	0.75 dBi
	ACON	AUX	25.90A51.011	PIFA Antenna	-2.02 dBi
<b>Class II Permissive Change</b>	Add portable category for the Lenovo Bixby platform Product name: lenovo Ideapad S205 / Brand name: lenovo Model: 20105XXXX (X=0~9,A~Z or blank), 1038XXXX (X=0~9,A~Z or blank)				

### Remark:

1. The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.
2. This submittal(s) (test report) is intended for FCC ID: QISEM820W filing to comply with Part 22 and Part 24 of the FCC 47 CFR Rules.



### **3. TEST METHODOLOGY**

Both conducted and radiated testing were performed according to the procedures document on chapter 13 of ANSI C63.4: 2003, TIA/EIA-603-C: 2004 and FCC CFR 47, Part 2 and Part 22 Subpart H & Part 24 Subpart E.

The tests documented in this report were performed in accordance with IC RSS-132, SPSR503, RSS-133, SPSR510 and ANSI C63.4 and TIA/EIA-603-C.

#### **3.1 EUT CONFIGURATION**

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

#### **3.2 EUT EXERCISE**

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

#### **3.3 GENERAL TEST PROCEDURES**

##### **Conducted Emissions**

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4: 2003. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

##### **Radiated Emissions**

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4: 2003.



### 3.4 DESCRIPTION OF TEST MODES

The EUT (model: EM820W) had been tested under operating condition.

EUT staying in continuous transmitting mode was programmed.

After verification, all tests carried out are with the worst-case test modes as shown below except radiated spurious emission below 1GHz and power line conducted emissions below 30MHz, which worst case was in normal link mode and receiving radiated spurious emission above 1GHz, which worst case was in CH Mid mode only.

**GSM / GPRS / EDGE 850:**

Channel Low (CH128), Channel Mid (CH190) and Channel High (CH251) were chosen for full testing.

**GSM / GPRS / EDGE 1900:**

Channel Low (CH512), Channel Mid (CH661) and Channel High (CH810) were chosen for full testing.

**WCDMA Band II:**

Channel Low (CH9262), Channel Mid (CH9400) and Channel High (CH9538) were chosen for full testing.

**WCDMA Band V:**

Channel Low (CH4132), Channel Mid (CH4182) and Channel High (CH4233) were chosen for full testing.

**WCDMA / HSDPA Band II:**

Channel Low (CH9262), Channel Mid (CH9400) and Channel High (CH9538) were chosen for full testing.

**WCDMA / HSDPA Band V:**

Channel Low (CH4132), Channel Mid (CH4182) and Channel High (CH4233) were chosen for full testing.

**WCDMA / HSUPA Band II:**

Channel Low (CH9262), Channel Mid (CH9400) and Channel High (CH9538) were chosen for full testing.

**WCDMA / HSUPA Band V:**

Channel Low (CH4132), Channel Mid (CH4182) and Channel High (CH4233) were chosen for full testing.

**WCDMA / HSPA+ Band II:**

Channel Low (CH9262), Channel Mid (CH9400) and Channel High (CH9538) were chosen for full testing.

**WCDMA / HSPA+ Band V:**

Channel Low (CH4132), Channel Mid (CH4182) and Channel High (CH4233) were chosen for full testing.

Based on the above results from the different modulations, GSM850 / GSM1900 / GPRS 850 / GPRS1900 / EDGE 850 / EDGE 1900 / WCDMA Band II / WCDMA Band V / HSDPA Band II / HSDPA Band V / HSPA+ Band II / HSPA+ Band V were determined to be the worst-case scenario for all tests.



## **4. INSTRUMENT CALIBRATION**

### **4.1 MEASURING INSTRUMENT CALIBRATION**

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.



## 4.2 MEASUREMENT EQUIPMENT USED

### Equipment Used for Emissions Measurement

*Remark: Each piece of equipment is scheduled for calibration once a year and Loop Antenna is scheduled for calibration once three years.*

3M Semi Anechoic Chamber				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	US42510252	10/25/2011
EMI Test Receiver	R&S	ESCI	100064	02/04/2011
Pre-Amplifier	Mini-Circuits	ZFL-1000LN	SF350700823	01/12/2012
Pre-Amplifier	MITEQ	AFS44-00102650-42-10P-44	1415367	11/19/2011
Bilog Antenna	Sunol Sciences	JB3	A030105	09/10/2011
Horn Antenna	EMCO	3117	00055165	12/06/2011
Loop Antenna	EMCO	6502	8905/2356	06/10/2013
Turn Table	CCS	CC-T-1F	N/A	N.C.R
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R
Site NSA	CCS	N/A	N/A	12/30/2011
Test S/W	EZ-EMC (CCS-3A1RE)			

Powerline Conducted Emissions Test Site				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI Test Receiver 9kHz-30MHz	Rohde & Schwarz	ESHS30	828144/003	11/16/2011
Two-Line V-Network 9kHz-30MHz	Schaffner	NNB41	03/10013	06/09/2011
LISN 10kHz-100MHz	EMCO	3825/2	9106-1809	04/07/2011
Test S/W	LABVIEW (V 6.1)			



### 4.3 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
Powerline Conducted Emission	+/- 1.6202
3M Semi Anechoic Chamber / 30M~200M	+/- 4.0606
3M Semi Anechoic Chamber / 200M~1000M	+/- 3.9979
3M Semi Anechoic Chamber / 1G~8G	+/- 2.5790
3M Semi Anechoic Chamber / 8G~18G	+/- 2.5928
3M Semi Anechoic Chamber / 18G~26G	+/- 2.7212
3M Semi Anechoic Chamber / 26G~40G	+/- 2.9520

**Remark:** This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$ .



## 5. FACILITIES AND ACCREDITATIONS

### 5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

No.199, Chunghsen Road, Hsintien City, Taipei Hsien, Taiwan, R.O.C.

Tel: 886-2-2217-0894 / Fax: 886-2-2217-1029

No.11, Wugong 6th Rd., Wugu Industrial Park, Taipei Hsien 248, Taiwan

Tel: 886-2-2299-9720 / Fax: 886-2-2298-4045

No.81-1, Lane 210, Bade 2nd Rd., Luchu Hsiang, Taoyuan Hsien 338, Taiwan

Tel: 886-3-324-0332 / Fax: 886-3-324-5235

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4: 2003 and CISPR Publication 22.

### 5.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

### 5.3 LABORATORY ACCREDITATIONS AND LISTING

The test facilities used to perform radiated and conducted emissions tests are accredited by American Association for Laboratory Accreditation Program for the specific scope accreditation under Lab Code: 0824-01 to perform Electromagnetic Interference tests according to FCC Part 15 and CISPR 22 requirements. In addition, the test facilities are listed with Industry Canada, Certification and Engineering Bureau, IC 2324G-1 for 3M Semi Anechoic Chamber A, 2324G-2 for 3M Semi Anechoic Chamber B.



### 5.4 TABLE OF ACCREDITATIONS AND LISTINGS

Country	Agency	Scope of Accreditation	Logo
USA	FCC	3M Semi Anechoic Chamber (FCC MRA: TW1039) to perform FCC Part 15 measurements	 FCC MRA: TW1039
Taiwan	TAF	LP0002, RTTE01, FCC Method-47 CFR Part 15 Subpart C, D, E, RSS-210, RSS-310 IDA TS SRD, AS/NZS 4268, AS/NZS 4771, TS 12.1 & 12.2, ETSI EN 300 440-1, ETSI EN 300 440-2, ETSI EN 300 328, ETSI EN 300 220-1, ETSI EN 300 220-2, ETSI EN 301 893, ETSI EN 301 489-1/3/7/17 FCC OET Bulletin 65 + Supplement C, EN 50360, EN 50361, EN 50371, RSS 102, EN 50383, EN 50385, EN 50392, IEC 62209, CNS 14958-1, CNS 14959 FCC Method -47 CFR Part 15 Subpart B IEC / EN 61000-3-2, IEC / EN 61000-3-3, IEC / EN 61000-4-2/3/4/5/6/8/11	
Canada	Industry Canada	3M Semi Anechoic Chamber (IC 2324G-1 / IC 2324G-2) to perform	 IC 2324G-1 IC 2324G-2

*\* No part of this report may be used to claim or imply product endorsement by A2LA or any agency of the US Government.*



## 6. SETUP OF EQUIPMENT UNDER TEST

### 6.1 SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix II for the actual connections between EUT and support equipment.

### 6.2 SUPPORT EQUIPMENT

No.	Device Type	Brand	Model	Series No.	FCC ID	Data Cable	Power Cord
1.	LCD Monitor	DELL	2407WFPb	CN-0FC255-4663 3-675-22TJS	FCC DoC	Shielded, 1.8m with 2 cores	Unshielded, 1.8m
2.	320GB 2.5" HDD	Seagate	9ZA2MG-500	538224 2806	FCC DoC	Shielded, 1.8m	N/A
3.	320GB 2.5" HDD	Seagate	9ZA2MG-500	538224 2807	FCC DoC	Shielded, 1.8m	N/A
4.	USB Mouse	Logitech	M-UB48	DZL211137	FCC DoC	Shielded, 1.8m	N/A
5.	Earphone	LABTEC	980180-0121	N/A	FCC DoC	Unshielded, 1.8m	N/A
6.	SD Card	SANDISK	N/A	N/A	N/A	N/A	N/A
7.	Notebook PC (Remote)	DELL	PP19L	GK102 A00	QDS-BRCM1021	LAN Cable: Unshielded, 10m	AC I/P: Unshielded, 1.8m DC O/P: Unshielded, 1.8m with a core
8.	Notebook PC (Remote)	DELL	PP10L	61G6Q1S	FCC DoC	N/A	AC I/P: Unshielded, 1.8m DC O/P: Unshielded, 1.8m with a core
9	Wireless Pre-N Router (Remote)	BELKIN	F5D8230-4	N/A	SA3-AGN0901AP0100	N/A	AC I/P: Unshielded, 1.8m DC O/P: Unshielded, 1.8m with a core
10	Universal Radio Communication Tester (Remote)	R&S	CMU200	101245	N/A	N/A	Unshielded, 1.8m

#### **Remark:**

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.



## **7. FCC PART 22 & 24 REQUIREMENTS & INDUSTRY CANADA RSS-132 & RSS-133**

### **7.1 ERP & EIRP MEASUREMENT**

#### **LIMIT**

According to FCC §2.1046

FCC 22.913(b): The Effective Radiated Power (ERP) of mobile transmitters must not exceed 7 Watts.

RSS-132 § 4.4 The maximum (ERP) shall be 6.3 Watts for mobile stations.

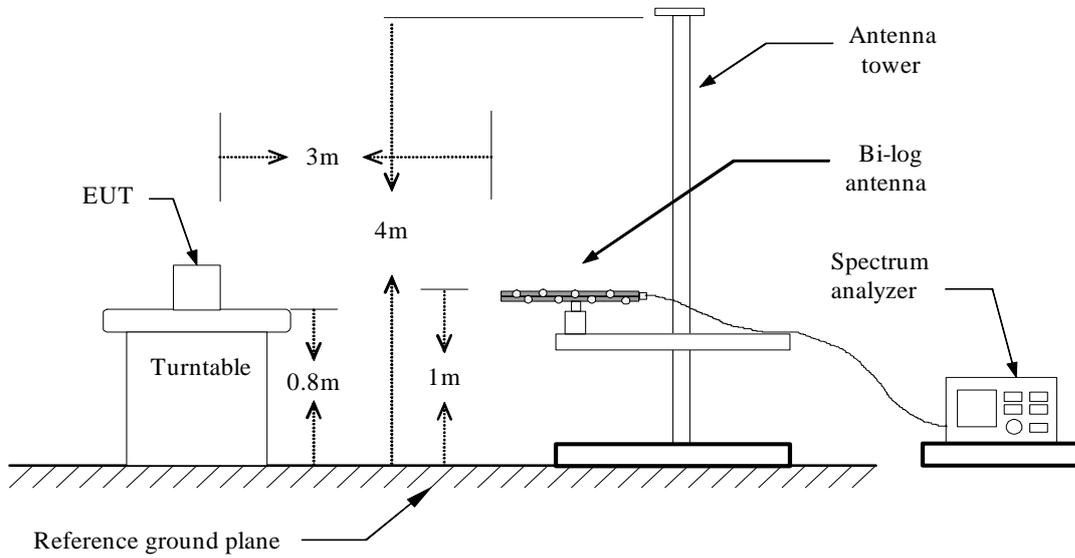
FCC 24.232(b): The equivalent Isotropic Radiated Power (EIRP) must not exceed 2 Watts.

RSS133 § 6.4: Mobile stations and hand-held portables are limited to 2 watts maximum (EIRP).

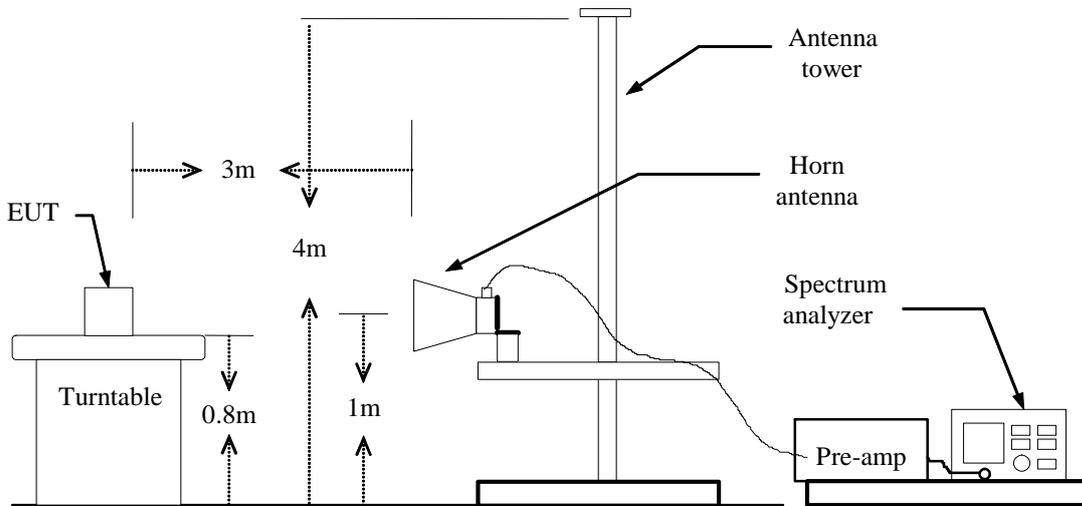


### Test Configuration

#### Below 1 GHz

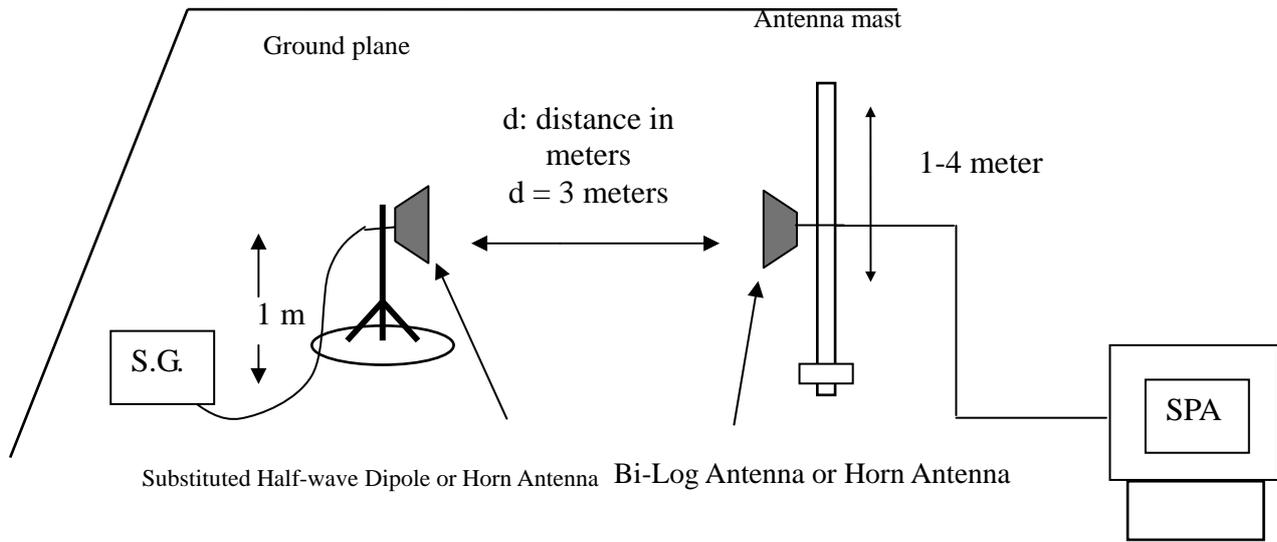


#### Above 1 GHz





### For Substituted Method Test Set-UP



### TEST PROCEDURE

The EUT was placed on a non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.

During the measurement of the EUT, the resolution bandwidth was set to 3MHz and the average bandwidth was set to 3MHz. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna. The reading was recorded and the field strength (E in dBuV/m) was calculated.

ERP in frequency band 824-849MHz, and EIRP in frequency band 1851.25 –1910MHz were measured using a substitution method. The EUT was replaced by half-wave dipole (824-849MHz) or horn antenna (1851.25-1910MHz) connected to a signal generator. The spectrum analyzer reading was recorded and ERP/EIRP was calculated as follows:

$$\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBd)} - \text{Cable (dB)}$$

$$\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable (dB)}$$

### TEST RESULTS

*No non-compliance noted.*

**GSM 850 Test Data**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
128	824.20	V	-8.68	34.62	25.93	38.45	-12.57
	824.20	H	-7.81	34.65	<b>*26.84</b>	38.45	-11.66
190	836.60	V	-8.68	34.53	25.85	38.45	-12.65
	836.60	H	-10.77	34.63	23.87	38.45	-14.63
251	848.80	V	-9.53	34.64	25.10	38.45	-13.40
	848.80	H	-8.29	34.75	26.45	38.45	-12.05

**GPRS 850 Test Data**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
128	824.20	V	-13.52	34.62	21.10	38.50	-17.40
	824.20	H	-12.78	34.65	<b>*21.87</b>	38.50	-16.63
190	836.60	V	-13.98	34.52	20.54	38.50	-17.96
	836.60	H	-13.33	34.63	21.30	38.50	-17.20
251	848.80	V	-15.07	34.64	19.57	38.50	-18.93
	848.80	H	-13.58	34.75	21.17	38.50	-17.33

**GSM 1900 Test Data**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
512	1850.20	V	-14.18	41.17	<b>*26.99</b>	33.00	-6.01
	1850.20	H	-15.05	40.79	25.74	33.00	-7.26
661	1880.00	V	-14.46	41.23	26.77	33.00	-6.23
	1880.00	H	-15.22	41.14	25.92	33.00	-7.08
810	1909.80	V	-15.81	41.30	25.49	33.00	-7.51
	1909.80	H	-16.52	41.38	24.85	33.00	-8.15

**GPRS 1900 Test Data**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
512	1850.20	V	-17.81	41.17	<b>*23.36</b>	33.00	-9.64
	1850.20	H	-18.94	40.79	21.85	33.00	-11.15
661	1880.00	V	-18.54	41.23	22.69	33.00	-10.31
	1880.00	H	-18.96	41.15	22.19	33.00	-10.81
810	1909.80	V	-19.06	41.30	22.25	33.00	-10.75
	1909.80	H	-20.32	41.37	21.05	33.00	-11.95

**EDGE 850 Test Data**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
128	824.20	V	-13.65	34.62	20.97	38.50	-17.53
	824.20	H	-12.85	34.65	<b>*21.80</b>	38.50	-16.70
190	836.60	V	-13.94	34.53	20.59	38.50	-17.91
	836.60	H	-13.32	34.63	21.32	38.50	-17.18
251	848.80	V	-15.12	34.64	19.52	38.50	-18.98
	848.80	H	-13.56	34.75	21.19	38.50	-17.31

**EDGE 1900 TEST DATA**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
512	1850.20	V	-17.74	41.17	<b>*23.43</b>	33.00	-9.57
	1850.20	H	-19.08	40.79	21.71	33.00	-11.29
661	1880.00	V	-18.61	41.23	22.62	33.00	-10.38
	1880.00	H	-18.68	41.15	22.46	33.00	-10.54
810	1909.80	V	-18.99	41.30	22.31	33.00	-10.69
	1909.80	H	-20.14	41.38	21.24	33.00	-11.76

**WCDMA BAND II Test Data**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
9262	1852.40	V	-20.15	41.17	21.02	33.00	-11.98
	1852.40	H	-19.93	40.81	20.89	33.00	-12.11
9400	1880.00	V	-19.65	41.23	21.58	33.00	-11.42
	1880.00	H	-19.12	41.15	22.03	33.00	-10.97
9538	1907.60	V	-19.63	41.30	21.67	-11.33	-11.33
	1907.60	H	-18.28	41.38	<b>*23.09</b>	33.00	-11.24

**WCDMA BAND V Test Data**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
4132	826.40	V	-15.70	34.60	18.90	38.50	-19.60
	826.40	H	-14.05	34.64	<b>*20.59</b>	38.50	-17.91
4182	836.40	V	-15.63	34.52	18.89	38.50	-19.61
	836.40	H	-14.39	34.63	20.24	38.50	-18.26
4233	846.60	V	-17.53	34.59	17.06	38.50	-21.44
	846.60	H	-15.02	34.72	19.70	38.50	-18.80

**HSDPA BAND II Test Data**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
9262	1852.40	V	-19.55	41.18	21.62	33.00	-11.38
	1852.40	H	-19.53	40.81	21.28	33.00	-11.72
9400	1880.00	V	-19.94	41.23	21.29	33.00	-11.71
	1880.00	H	-19.23	41.13	21.90	33.00	-11.10
9538	1907.60	V	-18.56	41.29	22.73	33.00	-10.27
	1907.60	H	-17.23	41.38	<b>*24.14</b>	33.00	-8.86

**HSDPA BAND V Test Data**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
4132	826.40	V	-17.24	34.61	17.37	38.50	-21.13
	826.40	H	-16.92	34.64	<b>*17.72</b>	38.50	-20.78
4182	836.40	V	-17.90	34.52	16.61	38.50	-21.89
	836.40	H	-17.44	34.63	17.19	38.50	-21.31
4233	846.60	V	-18.35	34.59	16.24	38.50	-22.26
	846.60	H	-17.56	34.71	17.15	38.50	-21.35

**HSUPA BAND II Test Data**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
9262	1852.40	V	-19.49	41.18	21.69	33.00	-11.31
	1852.40	H	-19.48	40.81	21.33	33.00	-11.67
9400	1880.00	V	-19.11	41.23	22.11	33.00	-10.89
	1880.00	H	-19.07	41.14	22.07	33.00	-10.93
9538	1907.60	V	-18.54	41.29	<b>*22.75</b>	33.00	-10.25
	1907.60	H	-18.86	41.38	22.52	33.00	-10.48

**HSUPA BAND V Test Data**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
4132	826.40	V	-17.61	34.60	16.99	38.50	-21.51
	826.40	H	-20.32	34.64	14.32	38.50	-24.18
4182	836.40	V	-17.82	34.53	16.72	38.50	-21.78
	836.40	H	-17.18	34.63	17.45	38.50	-21.05
4233	846.60	V	-16.95	34.61	<b>*17.66</b>	38.50	-20.84
	846.60	H	-17.65	34.71	17.06	38.50	-21.44



**HSPA+ BAND II Test Data**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
9262	1852.40	V	-19.83	41.17	21.34	33.00	-11.66
	1852.40	H	-19.55	40.81	21.26	33.00	-11.74
9400	1880.00	V	-19.49	41.23	21.74	33.00	-11.26
	1880.00	H	-19.44	41.13	21.70	33.00	-11.30
9538	1907.60	V	-18.67	41.30	22.62	33.00	-10.38
	1907.60	H	-17.18	41.38	<b>*24.20</b>	33.00	-8.80

**HSPA+ BAND V Test Data**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
4132	826.40	V	-17.07	34.60	17.54	38.50	-20.96
	826.40	H	-17.48	34.64	17.17	38.50	-21.33
4182	836.40	V	-17.71	34.52	16.81	38.50	-21.69
	836.40	H	-18.16	34.63	16.47	38.50	-22.03
4233	846.60	V	-16.76	34.60	<b>*17.83</b>	38.50	-20.67
	846.60	H	-17.36	34.71	17.35	38.50	-21.15



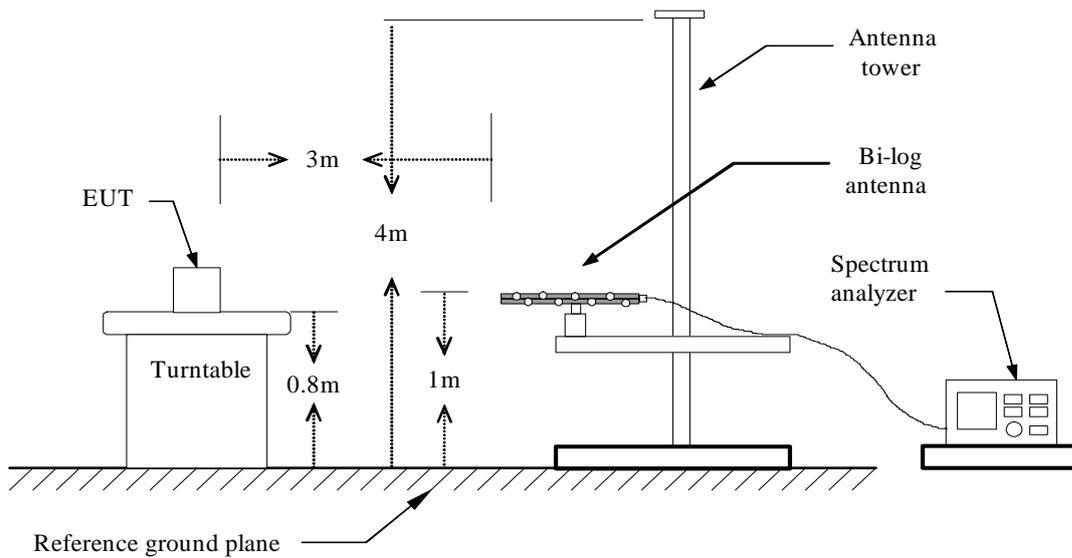
## 7.2 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

### LIMIT

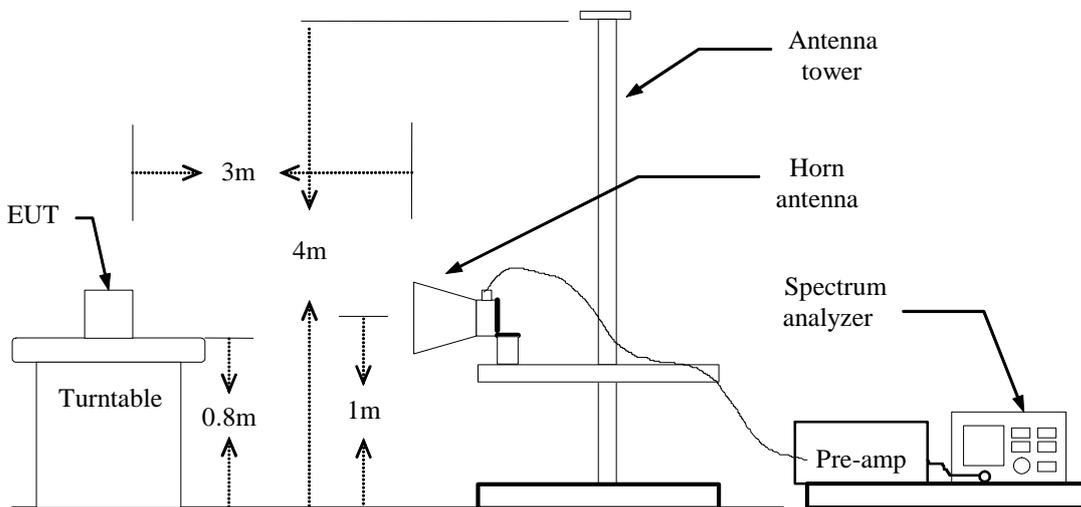
According to FCC §2.1053, RSS-132 (4.6) & RSS-133 (6.5).

### Test Configuration

#### Below 1 GHz

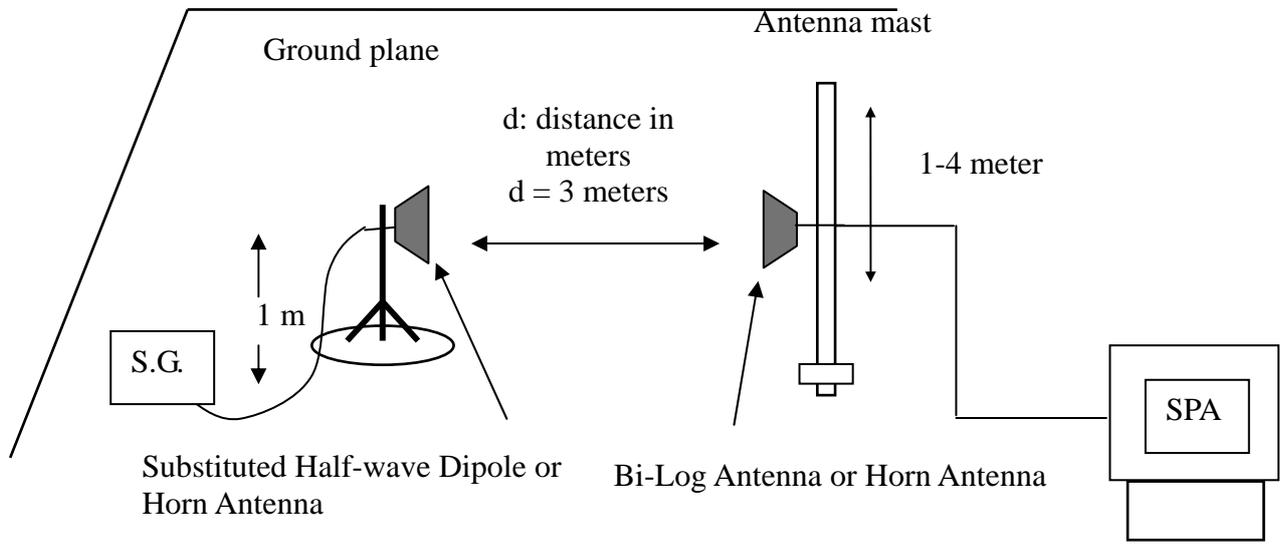


#### Above 1 GHz





## Substituted Method Test Set-up



## TEST PROCEDURE

The EUT was placed on a non-conductive, the measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission were identified, the power of the emission was determined using the substitution method.

The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.

$$\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBd)} - \text{Cable (dB)}$$

$$\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable (dB)}$$

## TEST RESULTS

*Refer to the attached tabular data sheets.*



**Radiated Spurious Emission Measurement Result / Below 1GHz**

**Operation Mode:** GSM 850 / TX / CH 128

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
60.07	-55.52	-16.07	-71.58	-13.00	-58.58	V
229.82	-54.10	-14.93	-69.03	-13.00	-56.03	V
431.58	-59.97	-10.50	-70.47	-13.00	-57.47	V
499.48	-60.12	-8.71	-68.83	-13.00	-55.83	V
566.41	-58.28	-7.94	-66.22	-13.00	-53.22	V
599.39	-61.26	-7.70	-68.96	-13.00	-55.96	V
211.39	-57.17	-15.23	-72.40	-13.00	-59.40	H
366.59	-59.34	-12.73	-72.07	-13.00	-59.07	H
399.57	-58.80	-11.72	-70.52	-13.00	-57.52	H
497.54	-62.73	-8.83	-71.56	-13.00	-58.56	H
566.41	-61.84	-7.81	-69.65	-13.00	-56.65	H
597.45	-63.28	-7.76	-71.04	-13.00	-58.04	H

**Remark:**

1. *The emission behaviour belongs to narrowband spurious emission.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** GSM 850 / TX / CH 190

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
218.18	-51.45	-16.18	-67.63	-13.00	-54.63	V
298.69	-59.18	-13.43	-72.62	-13.00	-59.62	V
433.52	-59.70	-10.45	-70.15	-13.00	-57.15	V
497.54	-57.70	-8.73	-66.43	-13.00	-53.43	V
566.41	-58.23	-7.94	-66.18	-13.00	-53.18	V
597.45	-61.25	-7.72	-68.97	-13.00	-55.97	V
366.59	-59.24	-12.73	-71.97	-13.00	-58.97	H
384.05	-61.02	-11.97	-72.99	-13.00	-59.99	H
399.57	-60.47	-11.72	-72.18	-13.00	-59.18	H
499.48	-62.44	-8.81	-71.25	-13.00	-58.25	H
566.41	-61.97	-7.81	-69.78	-13.00	-56.78	H
600.36	-63.00	-7.72	-70.72	-13.00	-57.72	H

**Remark:**

1. *The emission behaviour belongs to narrowband spurious emission.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** GSM 850 / TX / CH 251

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
227.88	-53.99	-15.16	-69.15	-13.00	-56.15	V
399.57	-58.71	-12.10	-70.81	-13.00	-57.81	V
497.54	-60.13	-8.73	-68.87	-13.00	-55.87	V
531.49	-61.55	-8.33	-69.87	-13.00	-56.87	V
566.41	-58.57	-7.94	-66.51	-13.00	-53.51	V
599.39	-62.12	-7.70	-69.82	-13.00	-56.82	V
365.62	-59.57	-12.78	-72.35	-13.00	-59.35	H
384.05	-60.54	-11.97	-72.51	-13.00	-59.51	H
399.57	-59.09	-11.72	-70.81	-13.00	-57.81	H
497.54	-63.30	-8.83	-72.13	-13.00	-59.13	H
566.41	-61.99	-7.81	-69.80	-13.00	-56.80	H
597.45	-63.12	-7.76	-70.88	-13.00	-57.88	H

**Remark:**

1. *The emission behaviour belongs to narrowband spurious emission.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** GPRS 850 / TX / CH 128

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
223.03	-53.22	-15.74	-68.96	-13.00	-55.96	V
399.57	-58.48	-12.10	-70.58	-13.00	-57.58	V
433.52	-59.74	-10.45	-70.19	-13.00	-57.19	V
497.54	-60.10	-8.73	-68.83	-13.00	-55.83	V
566.41	-59.16	-7.94	-67.11	-13.00	-54.11	V
633.34	-64.31	-6.72	-71.04	-13.00	-58.04	V
39.70	-62.09	-11.85	-73.95	-13.00	-60.95	H
208.48	-57.59	-14.93	-72.52	-13.00	-59.52	H
399.57	-58.39	-11.72	-70.11	-13.00	-57.11	H
497.54	-63.02	-8.83	-71.84	-13.00	-58.84	H
564.47	-62.76	-7.80	-70.56	-13.00	-57.56	H
630.43	-65.21	-6.73	-71.94	-13.00	-58.94	H

**Remark:**

1. *The emission behaviour belongs to narrowband spurious emission.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** GPRS 850 / TX / CH 190

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
227.88	-54.27	-15.16	-69.43	-13.00	-56.43	V
399.57	-58.24	-12.10	-70.34	-13.00	-57.34	V
433.52	-60.84	-10.45	-71.29	-13.00	-58.29	V
497.54	-61.48	-8.73	-70.21	-13.00	-57.21	V
566.41	-58.96	-7.94	-66.90	-13.00	-53.90	V
597.45	-60.60	-7.72	-68.33	-13.00	-55.33	V
235.64	-59.37	-14.01	-73.38	-13.00	-60.38	H
366.59	-59.99	-12.73	-72.72	-13.00	-59.72	H
399.57	-58.48	-11.72	-70.20	-13.00	-57.20	H
433.52	-62.69	-10.41	-73.10	-13.00	-60.10	H
499.48	-62.39	-8.81	-71.20	-13.00	-58.20	H
564.47	-62.40	-7.80	-70.20	-13.00	-57.20	H

**Remark:**

1. The emission behaviour belongs to narrowband spurious emission.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.



**Operation Mode:** GPRS 850 / TX / CH 251

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
223.03	-52.57	-15.74	-68.31	-13.00	-55.31	V
230.79	-52.48	-14.86	-67.34	-13.00	-54.34	V
433.52	-59.71	-10.45	-70.16	-13.00	-57.16	V
498.51	-58.48	-8.72	-67.20	-13.00	-54.20	V
566.41	-58.90	-7.94	-66.84	-13.00	-53.84	V
632.37	-63.77	-6.74	-70.50	-13.00	-57.50	V
43.58	-62.69	-11.71	-74.40	-13.00	-61.40	H
366.59	-60.74	-12.73	-73.47	-13.00	-60.47	H
399.57	-58.59	-11.72	-70.31	-13.00	-57.31	H
433.52	-61.80	-10.41	-72.21	-13.00	-59.21	H
497.54	-61.85	-8.83	-70.68	-13.00	-57.68	H
564.47	-62.74	-7.80	-70.54	-13.00	-57.54	H

**Remark:**

1. *The emission behaviour belongs to narrowband spurious emission.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** GSM 1900 / TX / CH 512

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
229.82	-53.54	-14.93	-68.47	-13.00	-55.47	V
469.41	-56.92	-9.40	-66.33	-13.00	-53.33	V
497.54	-61.20	-8.73	-69.93	-13.00	-56.93	V
566.41	-58.03	-7.94	-65.98	-13.00	-52.98	V
599.39	-61.65	-7.70	-69.35	-13.00	-56.35	V
814.73	-64.50	-4.82	-69.32	-13.00	-56.32	V
208.48	-55.09	-14.93	-70.01	-13.00	-57.01	H
399.57	-60.30	-11.72	-72.02	-13.00	-59.02	H
469.41	-56.52	-9.30	-65.82	-13.00	-52.82	H
566.41	-62.14	-7.81	-69.94	-13.00	-56.94	H
599.39	-62.77	-7.74	-70.51	-13.00	-57.51	H
814.73	-63.98	-4.92	-68.91	-13.00	-55.91	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** GSM 1900 / TX / CH 661

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
229.82	-53.88	-14.93	-68.81	-13.00	-55.81	V
498.51	-60.76	-8.72	-69.48	-13.00	-56.48	V
518.88	-53.79	-8.45	-62.23	-13.00	-49.23	V
566.41	-58.11	-7.94	-66.05	-13.00	-53.05	V
597.45	-60.59	-7.72	-68.32	-13.00	-55.32	V
859.35	-58.27	-4.45	-62.72	-13.00	-49.72	V
399.57	-58.79	-11.72	-70.51	-13.00	-57.51	H
497.54	-62.49	-8.83	-71.32	-13.00	-58.32	H
518.88	-54.81	-8.56	-63.37	-13.00	-50.37	H
564.47	-61.68	-7.80	-69.48	-13.00	-56.48	H
597.45	-62.98	-7.76	-70.73	-13.00	-57.73	H
859.35	-58.91	-4.43	-63.34	-13.00	-50.34	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** GSM 1900 / TX / CH 810

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
224.97	-53.62	-15.51	-69.13	-13.00	-56.13	V
366.59	-59.23	-13.02	-72.25	-13.00	-59.25	V
497.54	-58.99	-8.73	-67.73	-13.00	-54.73	V
566.41	-58.54	-7.94	-66.49	-13.00	-53.49	V
599.39	-60.56	-7.70	-68.26	-13.00	-55.26	V
903.97	-54.33	-3.83	-58.17	-13.00	-45.17	V
180.35	-58.38	-14.26	-72.64	-13.00	-59.64	H
365.62	-58.67	-12.78	-71.45	-13.00	-58.45	H
399.57	-60.83	-11.72	-72.55	-13.00	-59.55	H
564.47	-61.76	-7.80	-69.56	-13.00	-56.56	H
597.45	-62.82	-7.76	-70.57	-13.00	-57.57	H
903.97	-54.52	-3.75	-58.27	-13.00	-45.27	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** GPRS 1900 / TX / CH 512

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
229.82	-54.96	-14.93	-69.89	-13.00	-56.89	V
469.41	-55.71	-9.40	-65.12	-13.00	-52.12	V
497.54	-60.65	-8.73	-69.39	-13.00	-56.39	V
564.47	-58.57	-7.94	-66.51	-13.00	-53.51	V
625.58	-62.60	-6.84	-69.45	-13.00	-56.45	V
814.73	-64.80	-4.82	-69.61	-13.00	-56.61	V
384.05	-59.96	-11.97	-71.93	-13.00	-58.93	H
399.57	-58.01	-11.72	-69.72	-13.00	-56.72	H
433.52	-59.81	-10.41	-70.22	-13.00	-57.22	H
469.41	-57.45	-9.30	-66.75	-13.00	-53.75	H
566.41	-63.00	-7.81	-70.80	-13.00	-57.80	H
814.73	-64.87	-4.92	-69.79	-13.00	-56.79	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** GPRS 1900 / TX / CH 661

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
230.79	-55.41	-14.86	-70.27	-13.00	-57.27	V
433.52	-60.03	-10.45	-70.48	-13.00	-57.48	V
497.54	-58.75	-8.73	-67.48	-13.00	-54.48	V
518.88	-54.61	-8.45	-63.06	-13.00	-50.06	V
566.41	-58.24	-7.94	-66.19	-13.00	-53.19	V
859.35	-58.42	-4.45	-62.87	-13.00	-49.87	V
366.59	-58.26	-12.73	-70.99	-13.00	-57.99	H
398.60	-58.44	-11.73	-70.17	-13.00	-57.17	H
431.58	-61.03	-10.43	-71.46	-13.00	-58.46	H
518.88	-55.82	-8.56	-64.39	-13.00	-51.39	H
564.47	-62.30	-7.80	-70.10	-13.00	-57.10	H
859.35	-59.06	-4.43	-63.49	-13.00	-50.49	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** GPRS 1900 / TX / CH 810

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
224.00	-55.59	-15.62	-71.22	-13.00	-58.22	V
299.66	-57.83	-13.59	-71.41	-13.00	-58.41	V
431.58	-58.22	-10.50	-68.72	-13.00	-55.72	V
500.45	-58.74	-8.69	-67.44	-13.00	-54.44	V
566.41	-58.52	-7.94	-66.46	-13.00	-53.46	V
903.97	-54.30	-3.83	-58.13	-13.00	-45.13	V
240.49	-60.04	-13.67	-73.72	-13.00	-60.72	H
366.59	-59.80	-12.73	-72.53	-13.00	-59.53	H
399.57	-57.69	-11.72	-69.40	-13.00	-56.40	H
431.58	-59.63	-10.43	-70.06	-13.00	-57.06	H
566.41	-62.04	-7.81	-69.84	-13.00	-56.84	H
903.97	-56.48	-3.75	-60.22	-13.00	-47.22	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** EDGE 850 / TX / CH 128

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
225.94	-53.65	-15.39	-69.04	-13.00	-56.04	V
298.69	-57.09	-13.43	-70.52	-13.00	-57.52	V
399.57	-56.80	-12.10	-68.90	-13.00	-55.90	V
433.52	-59.34	-10.45	-69.79	-13.00	-56.79	V
497.54	-59.94	-8.73	-68.68	-13.00	-55.68	V
566.41	-58.55	-7.94	-66.50	-13.00	-53.50	V
179.38	-59.37	-14.23	-73.60	-13.00	-60.60	H
208.48	-57.81	-14.93	-72.73	-13.00	-59.73	H
398.60	-58.54	-11.73	-70.27	-13.00	-57.27	H
480.08	-63.18	-8.96	-72.14	-13.00	-59.14	H
497.54	-60.92	-8.83	-69.75	-13.00	-56.75	H
564.47	-62.34	-7.80	-70.15	-13.00	-57.15	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** EDGE 850 / TX / CH 190

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
61.04	-55.08	-16.02	-71.11	-13.00	-58.11	V
227.88	-54.34	-15.16	-69.50	-13.00	-56.50	V
298.69	-57.76	-13.43	-71.20	-13.00	-58.20	V
431.58	-58.84	-10.50	-69.34	-13.00	-56.34	V
497.54	-59.82	-8.73	-68.56	-13.00	-55.56	V
566.41	-57.88	-7.94	-65.82	-13.00	-52.82	V
35.82	-48.05	-14.34	-62.38	-13.00	-49.38	H
384.05	-59.71	-11.97	-71.68	-13.00	-58.68	H
399.57	-57.58	-11.72	-69.30	-13.00	-56.30	H
431.58	-61.57	-10.43	-72.00	-13.00	-59.00	H
497.54	-61.99	-8.83	-70.82	-13.00	-57.82	H
564.47	-61.90	-7.80	-69.70	-13.00	-56.70	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** EDGE 850 / TX / CH 251

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
62.98	-54.71	-15.94	-70.65	-13.00	-57.65	V
227.88	-54.41	-15.16	-69.57	-13.00	-56.57	V
398.60	-57.01	-12.15	-69.16	-13.00	-56.16	V
433.52	-59.32	-10.45	-69.77	-13.00	-56.77	V
499.48	-58.12	-8.71	-66.83	-13.00	-53.83	V
564.47	-58.22	-7.94	-66.16	-13.00	-53.16	V
35.82	-48.95	-14.34	-63.28	-13.00	-50.28	H
207.51	-57.20	-14.75	-71.94	-13.00	-58.94	H
399.57	-58.52	-11.72	-70.23	-13.00	-57.23	H
480.08	-62.67	-8.96	-71.63	-13.00	-58.63	H
497.54	-61.05	-8.83	-69.88	-13.00	-56.88	H
564.47	-61.98	-7.80	-69.78	-13.00	-56.78	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** EDGE 1900 / TX / CH 512

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
218.18	-54.41	-16.18	-70.58	-13.00	-57.58	V
299.66	-58.87	-13.59	-72.46	-13.00	-59.46	V
469.41	-55.73	-9.40	-65.14	-13.00	-52.14	V
497.54	-55.09	-8.73	-63.83	-13.00	-50.83	V
566.41	-58.62	-7.94	-66.56	-13.00	-53.56	V
814.73	-64.70	-4.82	-69.52	-13.00	-56.52	V
399.57	-59.93	-11.72	-71.65	-13.00	-58.65	H
469.41	-55.98	-9.30	-65.28	-13.00	-52.28	H
480.08	-63.44	-8.96	-72.40	-13.00	-59.40	H
497.54	-62.85	-8.83	-71.68	-13.00	-58.68	H
564.47	-62.94	-7.80	-70.74	-13.00	-57.74	H
814.73	-64.85	-4.92	-69.78	-13.00	-56.78	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** EDGE 1900 / TX / CH 661

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
225.94	-52.27	-15.39	-67.66	-13.00	-54.66	V
433.52	-59.09	-10.45	-69.54	-13.00	-56.54	V
497.54	-61.56	-8.73	-70.30	-13.00	-57.30	V
518.88	-54.13	-8.45	-62.58	-13.00	-49.58	V
566.41	-58.76	-7.94	-66.71	-13.00	-53.71	V
859.35	-58.14	-4.45	-62.58	-13.00	-49.58	V
43.58	-62.54	-11.71	-74.25	-13.00	-61.25	H
298.69	-58.67	-14.11	-72.78	-13.00	-59.78	H
384.05	-60.37	-11.97	-72.34	-13.00	-59.34	H
399.57	-58.28	-11.72	-70.00	-13.00	-57.00	H
518.88	-56.95	-8.56	-65.51	-13.00	-52.51	H
859.35	-59.09	-4.43	-63.52	-13.00	-50.52	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** EDGE 1900 / TX / CH 810

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
227.88	-55.62	-15.16	-70.79	-13.00	-57.79	V
399.57	-59.33	-12.10	-71.43	-13.00	-58.43	V
431.58	-59.95	-10.50	-70.45	-13.00	-57.45	V
497.54	-59.69	-8.73	-68.42	-13.00	-55.42	V
566.41	-58.29	-7.94	-66.24	-13.00	-53.24	V
903.97	-54.87	-3.83	-58.70	-13.00	-45.70	V
299.66	-59.66	-14.22	-73.88	-13.00	-60.88	H
399.57	-59.13	-11.72	-70.85	-13.00	-57.85	H
499.48	-63.28	-8.81	-72.10	-13.00	-59.10	H
564.47	-62.47	-7.80	-70.27	-13.00	-57.27	H
633.34	-64.81	-6.70	-71.50	-13.00	-58.50	H
903.97	-55.28	-3.75	-59.03	-13.00	-46.03	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA Band II / TX / CH 9262

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
226.91	-55.40	-15.28	-70.67	-13.00	-57.67	V
366.59	-58.21	-13.02	-71.23	-13.00	-58.23	V
399.57	-57.67	-12.10	-69.77	-13.00	-56.77	V
433.52	-60.37	-10.45	-70.82	-13.00	-57.82	V
531.49	-60.99	-8.33	-69.32	-13.00	-56.32	V
564.47	-58.36	-7.94	-66.30	-13.00	-53.30	V
597.45	-61.15	-7.72	-68.87	-13.00	-55.87	V
633.34	-62.57	-6.72	-69.29	-13.00	-56.29	V
232.73	-56.94	-14.27	-71.20	-13.00	-58.20	H
366.59	-54.55	-12.73	-67.28	-13.00	-54.28	H
399.57	-55.22	-11.72	-66.94	-13.00	-53.94	H
433.52	-60.23	-10.41	-70.64	-13.00	-57.64	H
566.41	-59.46	-7.81	-67.27	-13.00	-54.27	H
600.36	-63.31	-7.72	-71.03	-13.00	-58.03	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA Band II / TX / CH 9400

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
226.91	-55.55	-15.28	-70.83	-13.00	-57.83	V
399.57	-59.42	-12.10	-71.52	-13.00	-58.52	V
497.54	-61.61	-8.73	-70.34	-13.00	-57.34	V
564.47	-59.05	-7.94	-66.99	-13.00	-53.99	V
633.34	-63.46	-6.72	-70.19	-13.00	-57.19	V
858.38	-66.29	-4.46	-70.75	-13.00	-57.75	V
232.73	-56.54	-14.27	-70.81	-13.00	-57.81	H
366.59	-55.60	-12.73	-68.33	-13.00	-55.33	H
398.60	-58.49	-11.73	-70.22	-13.00	-57.22	H
431.58	-60.62	-10.43	-71.05	-13.00	-58.05	H
566.41	-59.89	-7.81	-67.70	-13.00	-54.70	H
861.29	-67.20	-4.38	-71.58	-13.00	-58.58	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA Band II / TX / CH 9538

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
224.00	-55.27	-15.62	-70.90	-13.00	-57.90	V
399.57	-59.96	-12.10	-72.06	-13.00	-59.06	V
431.58	-62.30	-10.50	-72.80	-13.00	-59.80	V
497.54	-62.17	-8.73	-70.91	-13.00	-57.91	V
564.47	-60.25	-7.94	-68.19	-13.00	-55.19	V
899.12	-60.99	-3.87	-64.86	-13.00	-51.86	V
30.00	-48.20	-18.94	-67.14	-13.00	-54.14	H
366.59	-60.79	-12.73	-73.52	-13.00	-60.52	H
399.57	-60.42	-11.72	-72.13	-13.00	-59.13	H
497.54	-62.28	-8.83	-71.11	-13.00	-58.11	H
564.47	-63.74	-7.80	-71.54	-13.00	-58.54	H
902.03	-64.75	-3.76	-68.51	-13.00	-55.51	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA Band V / TX / CH 4132

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
63.95	-55.90	-15.89	-71.79	-13.00	-58.79	V
232.73	-54.27	-14.74	-69.01	-13.00	-56.01	V
431.58	-58.07	-10.50	-68.57	-13.00	-55.57	V
499.48	-57.24	-8.71	-65.95	-13.00	-52.95	V
532.46	-60.09	-8.32	-68.41	-13.00	-55.41	V
566.41	-58.61	-7.94	-66.55	-13.00	-53.55	V
226.91	-56.55	-14.77	-71.31	-13.00	-58.31	H
366.59	-56.04	-12.73	-68.77	-13.00	-55.77	H
400.54	-59.45	-11.68	-71.13	-13.00	-58.13	H
431.58	-59.97	-10.43	-70.40	-13.00	-57.40	H
497.54	-59.12	-8.83	-67.95	-13.00	-54.95	H
564.47	-61.78	-7.80	-69.58	-13.00	-56.58	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA Band V / TX / CH 4182

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
40.67	-58.21	-12.66	-70.86	-13.00	-57.86	V
229.82	-54.00	-14.93	-68.93	-13.00	-55.93	V
397.63	-60.07	-12.19	-72.26	-13.00	-59.26	V
431.58	-59.38	-10.50	-69.89	-13.00	-56.89	V
498.51	-58.24	-8.72	-66.96	-13.00	-53.96	V
564.47	-58.20	-7.94	-66.14	-13.00	-53.14	V
366.59	-55.47	-12.73	-68.20	-13.00	-55.20	H
399.57	-59.53	-11.72	-71.25	-13.00	-58.25	H
433.52	-60.93	-10.41	-71.34	-13.00	-58.34	H
480.08	-61.95	-8.96	-70.91	-13.00	-57.91	H
499.48	-58.23	-8.81	-67.05	-13.00	-54.05	H
566.41	-61.71	-7.81	-69.52	-13.00	-56.52	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA Band V / TX / CH 4233

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
45.52	-58.31	-13.35	-71.65	-13.00	-58.65	V
224.97	-51.90	-15.51	-67.41	-13.00	-54.41	V
433.52	-60.03	-10.45	-70.48	-13.00	-57.48	V
499.48	-57.66	-8.71	-66.37	-13.00	-53.37	V
564.47	-57.82	-7.94	-65.76	-13.00	-52.76	V
637.22	-62.21	-6.66	-68.87	-13.00	-55.87	V
366.59	-55.32	-12.73	-68.05	-13.00	-55.05	H
398.60	-60.16	-11.73	-71.90	-13.00	-58.90	H
433.52	-59.39	-10.41	-69.80	-13.00	-56.80	H
480.08	-62.29	-8.96	-71.25	-13.00	-58.25	H
497.54	-59.38	-8.83	-68.21	-13.00	-55.21	H
564.47	-61.51	-7.80	-69.31	-13.00	-56.31	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



Operation Mode: WCDMA / HSDPA Band II / TX / CH 9262

Test Date: December 27, 2010

Temperature: 24°C

Tested by: David Lee

Humidity: 45 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
229.82	-56.92	-14.93	-71.86	-13.00	-58.86	V
399.57	-58.67	-12.10	-70.77	-13.00	-57.77	V
497.54	-60.33	-8.73	-69.06	-13.00	-56.06	V
531.49	-60.42	-8.33	-68.75	-13.00	-55.75	V
566.41	-59.49	-7.94	-67.44	-13.00	-54.44	V
630.43	-62.10	-6.77	-68.87	-13.00	-55.87	V
229.82	-57.83	-14.53	-72.35	-13.00	-59.35	H
365.62	-55.80	-12.78	-68.58	-13.00	-55.58	H
399.57	-59.02	-11.72	-70.74	-13.00	-57.74	H
480.08	-62.56	-8.96	-71.52	-13.00	-58.52	H
499.48	-61.06	-8.81	-69.88	-13.00	-56.88	H
566.41	-61.43	-7.81	-69.24	-13.00	-56.24	H

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.



**Operation Mode:** WCDMA / HSDPA Band II /  
TX / CH 9400

**Test Date:** December 27, 2010

**Temperature:** 24°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
61.04	-57.56	-16.02	-73.59	-13.00	-60.59	V
232.73	-57.65	-14.74	-72.39	-13.00	-59.39	V
497.54	-58.96	-8.73	-67.69	-13.00	-54.69	V
531.49	-62.83	-8.33	-71.16	-13.00	-58.16	V
564.47	-60.60	-7.94	-68.54	-13.00	-55.54	V
631.40	-62.32	-6.75	-69.08	-13.00	-56.08	V
366.59	-55.86	-12.73	-68.59	-13.00	-55.59	H
398.60	-58.81	-11.73	-70.55	-13.00	-57.55	H
480.08	-63.87	-8.96	-72.83	-13.00	-59.83	H
497.54	-61.09	-8.83	-69.92	-13.00	-56.92	H
531.49	-63.96	-8.41	-72.37	-13.00	-59.37	H
566.41	-62.35	-7.81	-70.16	-13.00	-57.16	H

**Remark:**

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*

**Operation Mode:** WCDMA / HSDPA Band II /  
TX / CH 9538**Test Date:** December 27, 2010**Temperature:** 24°C**Tested by:** David Lee**Humidity:** 45 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
225.94	-55.15	-15.39	-70.54	-13.00	-57.54	V
399.57	-57.80	-12.10	-69.91	-13.00	-56.91	V
497.54	-62.15	-8.73	-70.88	-13.00	-57.88	V
564.47	-60.57	-7.94	-68.52	-13.00	-55.52	V
633.34	-62.48	-6.72	-69.21	-13.00	-56.21	V
899.12	-63.06	-3.87	-66.94	-13.00	-53.94	V
366.59	-56.15	-12.73	-68.88	-13.00	-55.88	H
399.57	-59.86	-11.72	-71.58	-13.00	-58.58	H
497.54	-57.20	-8.83	-66.03	-13.00	-53.03	H
533.43	-61.21	-8.38	-69.59	-13.00	-56.59	H
566.41	-62.23	-7.81	-70.04	-13.00	-57.04	H
597.45	-63.77	-7.76	-71.52	-13.00	-58.52	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSDPA Band V / TX / CH 4132    **Test Date:** December 27, 2010  
**Temperature:** 24°C    **Tested by:** David Lee  
**Humidity:** 45 % RH    **Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
233.70	-55.25	-14.68	-69.92	-13.00	-56.92	V
497.54	-55.43	-8.73	-64.16	-13.00	-51.16	V
531.49	-60.63	-8.33	-68.96	-13.00	-55.96	V
565.44	-59.08	-7.94	-67.02	-13.00	-54.02	V
630.43	-60.41	-6.77	-67.17	-13.00	-54.17	V
N/A						
366.59	-54.48	-12.73	-67.21	-13.00	-54.21	H
399.57	-55.27	-11.72	-66.98	-13.00	-53.98	H
497.54	-58.35	-8.83	-67.18	-13.00	-54.18	H
533.43	-61.38	-8.38	-69.76	-13.00	-56.76	H
566.41	-61.71	-7.81	-69.52	-13.00	-56.52	H
597.45	-63.57	-7.76	-71.33	-13.00	-58.33	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSDPA Band V / TX / CH 4182      **Test Date:** December 27, 2010

**Temperature:** 24°C      **Tested by:** David Lee

**Humidity:** 45 % RH      **Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
229.82	-53.82	-14.93	-68.75	-13.00	-55.75	V
398.60	-57.63	-12.15	-69.78	-13.00	-56.78	V
499.48	-56.57	-8.71	-65.28	-13.00	-52.28	V
532.46	-60.45	-8.32	-68.76	-13.00	-55.76	V
564.47	-59.14	-7.94	-67.08	-13.00	-54.08	V
633.34	-61.20	-6.72	-67.93	-13.00	-54.93	V
366.59	-53.95	-12.73	-66.68	-13.00	-53.68	H
398.60	-58.52	-11.73	-70.25	-13.00	-57.25	H
480.08	-62.16	-8.96	-71.12	-13.00	-58.12	H
499.48	-58.30	-8.81	-67.12	-13.00	-54.12	H
566.41	-61.13	-7.81	-68.94	-13.00	-55.94	H
597.45	-62.66	-7.76	-70.42	-13.00	-57.42	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSDPA Band V / TX / CH 4233

**Test Date:** December 27, 2010

**Temperature:** 24°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
225.94	-54.08	-15.39	-69.47	-13.00	-56.47	V
398.60	-57.38	-12.15	-69.53	-13.00	-56.53	V
499.48	-56.39	-8.71	-65.10	-13.00	-52.10	V
531.49	-58.76	-8.33	-67.08	-13.00	-54.08	V
564.47	-60.44	-7.94	-68.38	-13.00	-55.38	V
633.34	-60.64	-6.72	-67.36	-13.00	-54.36	V
233.70	-56.91	-14.18	-71.09	-13.00	-58.09	H
366.59	-55.07	-12.73	-67.80	-13.00	-54.80	H
398.60	-57.81	-11.73	-69.54	-13.00	-56.54	H
499.48	-59.53	-8.81	-68.35	-13.00	-55.35	H
532.46	-62.19	-8.39	-70.59	-13.00	-57.59	H
564.47	-60.73	-7.80	-68.53	-13.00	-55.53	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSUPA Band II /  
TX / CH 9262

**Test Date:** December 27, 2010

**Temperature:** 24°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
226.91	-55.20	-15.28	-70.47	-13.00	-57.47	V
398.60	-59.68	-12.15	-71.82	-13.00	-58.82	V
499.48	-61.13	-8.71	-69.84	-13.00	-56.84	V
531.49	-61.61	-8.33	-69.94	-13.00	-56.94	V
564.47	-60.72	-7.94	-68.66	-13.00	-55.66	V
630.43	-61.91	-6.77	-68.68	-13.00	-55.68	V
366.59	-54.71	-12.73	-67.44	-13.00	-54.44	H
399.57	-57.73	-11.72	-69.45	-13.00	-56.45	H
499.48	-59.07	-8.81	-67.88	-13.00	-54.88	H
531.49	-63.24	-8.41	-71.64	-13.00	-58.64	H
566.41	-61.82	-7.81	-69.63	-13.00	-56.63	H
597.45	-64.16	-7.76	-71.92	-13.00	-58.92	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



Operation Mode: WCDMA / HSUPA Band II / TX / CH 9400

Test Date: December 27, 2010

Temperature: 24°C

Tested by: David Lee

Humidity: 45 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
61.04	-56.28	-16.02	-72.31	-13.00	-59.31	V
224.97	-56.62	-15.51	-72.13	-13.00	-59.13	V
399.57	-61.04	-12.10	-73.14	-13.00	-60.14	V
497.54	-60.97	-8.73	-69.71	-13.00	-56.71	V
564.47	-60.25	-7.94	-68.20	-13.00	-55.20	V
633.34	-61.79	-6.72	-68.51	-13.00	-55.51	V
366.59	-55.68	-12.73	-68.41	-13.00	-55.41	H
399.57	-57.81	-11.72	-69.52	-13.00	-56.52	H
431.58	-62.85	-10.43	-73.28	-13.00	-60.28	H
497.54	-59.21	-8.83	-68.04	-13.00	-55.04	H
531.49	-60.27	-8.41	-68.68	-13.00	-55.68	H
566.41	-61.09	-7.81	-68.90	-13.00	-55.90	H

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.



**Operation Mode:** WCDMA / HSUPA Band II /  
TX / CH 9538

**Test Date:** December 27, 2010

**Temperature:** 24°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
61.04	-55.34	-16.02	-71.36	-13.00	-58.36	V
497.54	-61.81	-8.73	-70.55	-13.00	-57.55	V
532.46	-62.58	-8.32	-70.90	-13.00	-57.90	V
564.47	-60.09	-7.94	-68.04	-13.00	-55.04	V
630.43	-61.80	-6.77	-68.57	-13.00	-55.57	V
902.03	-63.80	-3.85	-67.65	-13.00	-54.65	V
366.59	-56.89	-12.73	-69.62	-13.00	-56.62	H
399.57	-59.66	-11.72	-71.38	-13.00	-58.38	H
497.54	-59.99	-8.83	-68.82	-13.00	-55.82	H
532.46	-62.83	-8.39	-71.22	-13.00	-58.22	H
564.47	-61.87	-7.80	-69.67	-13.00	-56.67	H
899.12	-67.71	-3.77	-71.48	-13.00	-58.48	H

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.



**Operation Mode:** WCDMA / HSUPA Band V / TX / CH 4132      **Test Date:** December 27, 2010

**Temperature:** 24°C      **Tested by:** David Lee

**Humidity:** 45 % RH      **Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
197.81	-57.15	-14.44	-71.59	-13.00	-58.59	V
229.82	-52.13	-14.93	-67.06	-13.00	-54.06	V
398.60	-58.07	-12.15	-70.22	-13.00	-57.22	V
497.54	-56.65	-8.73	-65.38	-13.00	-52.38	V
566.41	-59.46	-7.94	-67.41	-13.00	-54.41	V
633.34	-61.19	-6.72	-67.91	-13.00	-54.91	V
232.73	-57.80	-14.27	-72.07	-13.00	-59.07	H
366.59	-55.24	-12.73	-67.97	-13.00	-54.97	H
399.57	-57.68	-11.72	-69.40	-13.00	-56.40	H
497.54	-60.20	-8.83	-69.03	-13.00	-56.03	H
531.49	-62.35	-8.41	-70.75	-13.00	-57.75	H
566.41	-61.98	-7.81	-69.79	-13.00	-56.79	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSUPA Band V / TX / CH 4182      **Test Date:** December 27, 2010

**Temperature:** 24°C      **Tested by:** David Lee

**Humidity:** 45 % RH      **Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
226.91	-56.11	-15.28	-71.39	-13.00	-58.39	V
398.60	-57.23	-12.15	-69.38	-13.00	-56.38	V
497.54	-58.01	-8.73	-66.75	-13.00	-53.75	V
532.46	-59.68	-8.32	-68.00	-13.00	-55.00	V
564.47	-59.28	-7.94	-67.22	-13.00	-54.22	V
633.34	-60.87	-6.72	-67.59	-13.00	-54.59	V
365.62	-54.06	-12.78	-66.84	-13.00	-53.84	H
398.60	-57.07	-11.73	-68.80	-13.00	-55.80	H
498.51	-57.77	-8.82	-66.59	-13.00	-53.59	H
531.49	-61.08	-8.41	-69.49	-13.00	-56.49	H
566.41	-60.90	-7.81	-68.71	-13.00	-55.71	H
597.45	-63.27	-7.76	-71.03	-13.00	-58.03	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSUPA Band V / TX / CH 4233      **Test Date:** December 27, 2010

**Temperature:** 24°C      **Tested by:** David Lee

**Humidity:** 45 % RH      **Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
230.79	-53.76	-14.86	-68.62	-13.00	-55.62	V
398.60	-59.62	-12.15	-71.77	-13.00	-58.77	V
497.54	-57.57	-8.73	-66.30	-13.00	-53.30	V
564.47	-60.25	-7.94	-68.19	-13.00	-55.19	V
598.42	-59.97	-7.71	-67.68	-13.00	-54.68	V
633.34	-61.29	-6.72	-68.01	-13.00	-55.01	V
366.59	-55.16	-12.73	-67.89	-13.00	-54.89	H
427.70	-53.12	-10.47	-63.59	-13.00	-50.59	H
480.08	-62.14	-8.96	-71.10	-13.00	-58.10	H
497.54	-59.08	-8.83	-67.91	-13.00	-54.91	H
531.49	-61.22	-8.41	-69.63	-13.00	-56.63	H
564.47	-60.81	-7.80	-68.61	-13.00	-55.61	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



Operation Mode: WCDMA / HSPA+ Band II / TX / CH 9262

Test Date: December 27, 2010

Temperature: 24°C

Tested by: David Lee

Humidity: 45 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
45.52	-58.70	-13.35	-72.04	-13.00	-59.04	V
61.04	-54.51	-16.02	-70.54	-13.00	-57.54	V
174.53	-59.51	-14.90	-74.41	-13.00	-61.41	V
231.76	-59.39	-14.80	-74.19	-13.00	-61.19	V
251.16	-55.85	-14.72	-70.57	-13.00	-57.57	V
564.47	-65.37	-7.94	-73.31	-13.00	-60.31	V
43.58	-62.70	-11.71	-74.41	-13.00	-61.41	H
61.04	-58.23	-16.71	-74.94	-13.00	-61.94	H
100.81	-57.62	-17.85	-75.47	-13.00	-62.47	H
215.27	-60.76	-15.28	-76.05	-13.00	-63.05	H
366.59	-65.44	-12.73	-78.17	-13.00	-65.17	H
480.08	-66.35	-8.96	-75.31	-13.00	-62.31	H

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



**Operation Mode:** WCDMA / HSPA+ Band II /  
TX / CH 9400

**Test Date:** December 27, 2010

**Temperature:** 24°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
35.82	-51.35	-14.95	-66.30	-13.00	-53.30	V
61.04	-56.18	-16.02	-72.20	-13.00	-59.20	V
224.97	-58.05	-15.51	-73.56	-13.00	-60.56	V
518.88	-66.53	-8.45	-74.97	-13.00	-61.97	V
576.11	-62.98	-7.95	-70.92	-13.00	-57.92	V
860.32	-66.89	-4.43	-71.32	-13.00	-58.32	V
45.52	-62.97	-12.08	-75.05	-13.00	-62.05	H
61.04	-58.33	-16.71	-75.05	-13.00	-62.05	H
108.57	-59.91	-16.48	-76.40	-13.00	-63.40	H
242.43	-61.91	-13.88	-75.80	-13.00	-62.80	H
338.46	-62.73	-13.83	-76.57	-13.00	-63.57	H
480.08	-66.87	-8.96	-75.83	-13.00	-62.83	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



Operation Mode: WCDMA / HSPA+ Band II / TX / CH 9538

Test Date: December 27, 2010

Temperature: 24°C

Tested by: David Lee

Humidity: 45 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
41.64	-60.14	-12.72	-72.86	-13.00	-59.86	V
61.04	-55.76	-16.02	-71.79	-13.00	-58.79	V
230.79	-58.44	-14.86	-73.30	-13.00	-60.30	V
579.02	-64.81	-7.95	-72.76	-13.00	-59.76	V
594.54	-64.33	-7.76	-72.09	-13.00	-59.09	V
902.03	-64.17	-3.85	-68.03	-13.00	-55.03	V
34.85	-58.28	-14.98	-73.26	-13.00	-60.26	H
44.55	-62.42	-11.72	-74.14	-13.00	-61.14	H
61.04	-58.90	-16.71	-75.61	-13.00	-62.61	H
110.51	-61.02	-16.12	-77.14	-13.00	-64.14	H
219.15	-60.91	-15.34	-76.24	-13.00	-63.24	H
902.03	-66.25	-3.76	-70.01	-13.00	-57.01	H

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



**Operation Mode:** WCDMA / HSPA+ Band V / TX / CH 4132      **Test Date:** December 27, 2010

**Temperature:** 24°C      **Tested by:** David Lee

**Humidity:** 45 % RH      **Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
45.52	-55.43	-13.35	-68.78	-13.00	-55.78	V
61.04	-52.76	-16.02	-68.79	-13.00	-55.79	V
109.54	-57.49	-16.09	-73.59	-13.00	-60.59	V
227.88	-54.94	-15.16	-70.10	-13.00	-57.10	V
480.08	-62.62	-8.98	-71.60	-13.00	-58.60	V
620.73	-62.41	-6.92	-69.33	-13.00	-56.33	V
45.52	-60.36	-12.08	-72.45	-13.00	-59.45	H
60.07	-58.57	-16.59	-75.16	-13.00	-62.16	H
108.57	-59.80	-16.48	-76.28	-13.00	-63.28	H
216.24	-61.24	-15.30	-76.54	-13.00	-63.54	H
244.37	-61.78	-14.09	-75.87	-13.00	-62.87	H
996.12	-66.69	-2.68	-69.37	-13.00	-56.37	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSPA+ Band V / TX / CH 4182      **Test Date:** December 27, 2010  
**Temperature:** 24°C      **Tested by:** David Lee  
**Humidity:** 45 % RH      **Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
61.04	-53.15	-16.02	-69.17	-13.00	-56.17	V
166.77	-59.84	-14.49	-74.33	-13.00	-61.33	V
228.85	-55.20	-15.05	-70.25	-13.00	-57.25	V
480.08	-64.43	-8.98	-73.41	-13.00	-60.41	V
577.08	-61.96	-7.95	-69.91	-13.00	-56.91	V
623.64	-62.25	-6.87	-69.13	-13.00	-56.13	V
40.67	-61.77	-11.67	-73.44	-13.00	-60.44	H
61.04	-56.73	-16.71	-73.44	-13.00	-60.44	H
103.72	-58.01	-17.34	-75.35	-13.00	-62.35	H
230.79	-60.25	-14.44	-74.69	-13.00	-61.69	H
365.62	-64.35	-12.78	-77.13	-13.00	-64.13	H
480.08	-65.08	-8.96	-74.04	-13.00	-61.04	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSPA+ Band V / TX / CH 4233

**Test Date:** December 27, 2010

**Temperature:** 24°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
34.85	-48.92	-15.50	-64.41	-13.00	-51.41	V
60.07	-53.93	-16.07	-70.00	-13.00	-57.00	V
172.59	-59.08	-14.77	-73.85	-13.00	-60.85	V
222.06	-55.83	-15.85	-71.69	-13.00	-58.69	V
480.08	-64.89	-8.98	-73.87	-13.00	-60.87	V
565.44	-62.43	-7.94	-70.37	-13.00	-57.37	V
43.58	-61.08	-11.71	-72.79	-13.00	-59.79	H
61.04	-55.96	-16.71	-72.67	-13.00	-59.67	H
226.91	-59.58	-14.77	-74.35	-13.00	-61.35	H
366.59	-63.55	-12.73	-76.28	-13.00	-63.28	H
480.08	-65.50	-8.96	-74.46	-13.00	-61.46	H
759.44	-67.48	-5.62	-73.10	-13.00	-60.10	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Above 1GHz**

**Operation Mode:** GSM 850 / TX / CH 128

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1651.00	-34.08	1.61	-32.46	-13.00	-19.46	V
1861.00	-54.55	1.74	-52.81	-13.00	-39.81	V
2470.00	-38.49	4.41	-34.09	-13.00	-21.09	V
3198.00	-55.38	7.76	-47.62	-13.00	-34.62	V
4248.00	-60.72	8.82	-51.90	-13.00	-38.90	V
N/A						
1651.00	-34.44	1.42	-33.02	-13.00	-20.02	H
2470.00	-36.54	4.43	-32.11	-13.00	-19.11	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*



Operation Mode: GSM 850 / TX / CH 190

Test Date: December 27, 2010

Temperature: 25°C

Tested by: David Lee

Humidity: 45 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1595.00	-47.38	1.58	-45.80	-13.00	-32.80	V
1672.00	-42.07	1.63	-40.45	-13.00	-27.45	V
2134.00	-54.10	2.56	-51.54	-13.00	-38.54	V
2512.00	-41.26	4.62	-36.64	-13.00	-23.64	V
2659.00	-58.52	5.21	-53.31	-13.00	-40.31	V
3198.00	-53.87	7.76	-46.11	-13.00	-33.11	V
1672.00	-49.80	1.40	-48.40	-13.00	-35.40	H
2512.00	-41.05	4.69	-36.36	-13.00	-23.36	H
5081.00	-60.76	10.13	-50.63	-13.00	-37.63	H
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.



**Operation Mode:** GSM 850 / TX / CH 251

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1602.00	-45.57	1.58	-43.99	-13.00	-30.99	V
1700.00	-35.43	1.64	-33.79	-13.00	-20.79	V
2547.00	-29.14	4.76	-24.38	-13.00	-11.38	V
3198.00	-50.38	7.76	-42.62	-13.00	-29.62	V
4255.00	-58.81	8.83	-49.98	-13.00	-36.98	V
N/A						
1700.00	-35.91	1.38	-34.53	-13.00	-21.53	H
2547.00	-29.36	4.82	-24.54	-13.00	-11.54	H
3191.00	-58.11	7.64	-50.46	-13.00	-37.46	H
3394.00	-58.22	8.76	-49.45	-13.00	-36.45	H
4262.00	-58.82	8.61	-50.21	-13.00	-37.21	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** GPRS 850 / TX / CH 128

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1595.00	-52.42	1.58	-50.84	-13.00	-37.84	V
1651.00	-44.22	1.61	-42.61	-13.00	-29.61	V
2127.00	-53.22	2.53	-50.69	-13.00	-37.69	V
2393.00	-55.32	3.98	-51.33	-13.00	-38.33	V
2470.00	-45.81	4.41	-41.41	-13.00	-28.41	V
3191.00	-54.93	7.72	-47.22	-13.00	-34.22	V
1651.00	-43.30	1.42	-41.88	-13.00	-28.88	H
1861.00	-57.63	1.26	-56.37	-13.00	-43.37	H
2127.00	-54.45	2.04	-52.40	-13.00	-39.40	H
2470.00	-48.52	4.43	-44.09	-13.00	-31.09	H
4262.00	-60.71	8.61	-52.10	-13.00	-39.10	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** GPRS 850 / TX / CH 190

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1364.00	-56.93	1.30	-55.63	-13.00	-42.63	V
1595.00	-47.81	1.58	-46.23	-13.00	-33.23	V
1672.00	-42.98	1.63	-41.35	-13.00	-28.35	V
2512.00	-40.01	4.62	-35.39	-13.00	-22.39	V
3198.00	-53.48	7.76	-45.72	-13.00	-32.72	V
4269.00	-61.76	8.86	-52.91	-13.00	-39.91	V
1672.00	-49.52	1.40	-48.12	-13.00	-35.12	H
2512.00	-42.11	4.69	-37.42	-13.00	-24.42	H
3198.00	-59.91	7.68	-52.22	-13.00	-39.22	H
4255.00	-60.66	8.60	-52.06	-13.00	-39.06	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*



Operation Mode: GPRS 850 / TX / CH 251

Test Date: December 27, 2010

Temperature: 25°C

Tested by: David Lee

Humidity: 45 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1595.00	-45.77	1.58	-44.19	-13.00	-31.19	V
1700.00	-38.66	1.64	-37.02	-13.00	-24.02	V
2547.00	-28.92	4.76	-24.16	-13.00	-11.16	V
3191.00	-53.48	7.72	-45.77	-13.00	-32.77	V
3394.00	-58.78	8.93	-49.85	-13.00	-36.85	V
4248.00	-59.56	8.82	-50.74	-13.00	-37.74	V
1700.00	-37.63	1.38	-36.25	-13.00	-23.25	H
2547.00	-30.35	4.82	-25.53	-13.00	-12.53	H
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: GSM 1900 / TX / CH 512

Test Date: December 22, 2010

Temperature: 25°C

Tested by: David Lee

Humidity: 45 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3198.00	-54.25	7.76	-46.49	-13.00	-33.49	V
3702.00	-57.18	9.11	-48.08	-13.00	-35.08	V
N/A						
3198.00	-58.84	7.68	-51.15	-13.00	-38.15	H
3702.00	-55.95	8.89	-47.06	-13.00	-34.06	H
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



**Operation Mode:** GSM 1900 / TX / CH 661

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3198.00	-54.33	7.76	-46.57	-13.00	-33.57	V
3758.00	-58.22	8.98	-49.24	-13.00	-36.24	V
4262.00	-57.40	8.84	-48.56	-13.00	-35.56	V
4997.00	-59.67	10.42	-49.25	-13.00	-36.25	V
7041.00	-60.11	15.20	-44.91	-13.00	-31.91	V
N/A						
3758.00	-58.99	8.76	-50.23	-13.00	-37.23	H
4255.00	-60.97	8.60	-52.37	-13.00	-39.37	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** GSM 1900 / TX / CH 810

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3198.00	-53.55	7.76	-45.79	-13.00	-32.79	V
3821.00	-59.05	8.83	-50.22	-13.00	-37.22	V
4262.00	-60.96	8.84	-52.11	-13.00	-39.11	V
N/A						
3821.00	-60.07	8.62	-51.45	-13.00	-38.45	H
7517.00	-61.89	16.91	-44.99	-13.00	-31.99	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** GPRS 1900 / TX / CH 512

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2666.00	-58.95	5.23	-53.72	-13.00	-40.72	V
3198.00	-52.67	7.76	-44.91	-13.00	-31.91	V
3604.00	-60.45	9.33	-51.12	-13.00	-38.12	V
4262.00	-61.41	8.84	-52.57	-13.00	-39.57	V
N/A						
3191.00	-61.03	7.64	-53.39	-13.00	-40.39	H
3702.00	-61.33	8.89	-52.44	-13.00	-39.44	H
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.



**Operation Mode:** GPRS 1900 / TX / CH 661

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3191.00	-52.83	7.72	-45.11	-13.00	-32.11	V
3590.00	-59.47	9.36	-50.11	-13.00	-37.11	V
7020.00	-61.68	15.12	-46.56	-13.00	-33.56	V
N/A						
3135.00	-61.40	7.34	-54.07	-13.00	-41.07	H
4976.00	-62.74	10.08	-52.66	-13.00	-39.66	H
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.



**Operation Mode:** GPRS 1900 / TX / CH 810

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3191.00	-55.45	7.72	-47.74	-13.00	-34.74	V
4430.00	-61.76	9.12	-52.64	-13.00	-39.64	V
N/A						
3513.00	-62.81	9.32	-53.49	-13.00	-40.49	H
6817.00	-62.90	14.33	-48.57	-13.00	-35.57	H
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: EDGE 850 / TX / CH 128

Test Date: December 27, 2010

Temperature: 25°C

Tested by: David Lee

Humidity: 45 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1595.00	-50.83	1.58	-49.25	-13.00	-36.25	V
1651.00	-44.43	1.61	-42.81	-13.00	-29.81	V
1868.00	-51.74	1.75	-50.00	-13.00	-37.00	V
2127.00	-50.30	2.53	-47.78	-13.00	-34.78	V
2470.00	-45.86	4.41	-41.45	-13.00	-28.45	V
3191.00	-52.24	7.72	-44.52	-13.00	-31.52	V
1651.00	-43.30	1.42	-41.89	-13.00	-28.89	H
2470.00	-46.72	4.43	-42.29	-13.00	-29.29	H
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.



**Operation Mode:** EDGE 850 / TX / CH 190

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1483.00	-56.96	1.49	-55.47	-13.00	-42.47	V
1595.00	-55.00	1.58	-53.42	-13.00	-40.42	V
1672.00	-41.33	1.63	-39.71	-13.00	-26.71	V
2127.00	-52.34	2.53	-49.81	-13.00	-36.81	V
2512.00	-43.62	4.62	-39.00	-13.00	-26.00	V
3198.00	-55.75	7.76	-47.99	-13.00	-34.99	V
1672.00	-39.18	1.40	-37.78	-13.00	-24.78	H
1868.00	-55.39	1.26	-54.13	-13.00	-41.13	H
2512.00	-42.88	4.69	-38.19	-13.00	-25.19	H
3198.00	-60.06	7.68	-52.38	-13.00	-39.38	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** EDGE 850 / TX / CH 251

**Test Date:** December 22, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1364.00	-56.98	1.30	-55.67	-13.00	-42.67	V
1595.00	-49.72	1.58	-48.14	-13.00	-35.14	V
1700.00	-51.62	1.64	-49.98	-13.00	-36.98	V
1861.00	-55.70	1.74	-53.96	-13.00	-40.96	V
2547.00	-41.72	4.76	-36.96	-13.00	-23.96	V
3198.00	-54.02	7.76	-46.26	-13.00	-33.26	V
1700.00	-54.79	1.38	-53.41	-13.00	-40.41	H
1861.00	-57.73	1.26	-56.47	-13.00	-43.47	H
2547.00	-38.33	4.82	-33.51	-13.00	-20.51	H
3198.00	-59.37	7.68	-51.69	-13.00	-38.69	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



Operation Mode: EDGE 1900 / TX / CH 512

Test Date: December 22, 2010

Temperature: 25°C

Tested by: David Lee

Humidity: 45 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2666.00	-59.04	5.23	-53.80	-13.00	-40.80	V
3191.00	-54.45	7.72	-46.73	-13.00	-33.73	V
4983.00	-61.90	10.39	-51.51	-13.00	-38.51	V
N/A						
3191.00	-60.25	7.64	-52.60	-13.00	-39.60	H
3590.00	-61.69	9.14	-52.54	-13.00	-39.54	H
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: EDGE 1900 / TX / CH 661

Test Date: December 22, 2010

Temperature: 25°C

Tested by: David Lee

Humidity: 45 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3198.00	-56.27	7.76	-48.51	-13.00	-35.51	V
N/A						
6145.00	-63.16	11.30	-51.87	-13.00	-38.87	H
7405.00	-63.02	16.53	-46.49	-13.00	-33.49	H
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: EDGE 1900 / TX / CH 810

Test Date: December 22, 2010

Temperature: 25°C

Tested by: David Lee

Humidity: 45 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3191.00	-56.43	7.72	-48.71	-13.00	-35.71	V
4983.00	-60.38	10.39	-50.00	-13.00	-37.00	V
N/A						
3583.00	-62.90	9.16	-53.74	-13.00	-40.74	H
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.



**Operation Mode:** WCDMA Band II / TX / CH 9262

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2526.00	-57.56	4.67	-52.88	-13.00	-39.88	V
3198.00	-46.81	7.76	-39.05	-13.00	-26.05	V
3457.00	-58.16	9.31	-48.85	-13.00	-35.85	V
3709.00	-54.41	9.09	-45.32	-13.00	-32.32	V
5116.00	-59.64	10.40	-49.25	-13.00	-36.25	V
N/A						
3198.00	-59.58	7.68	-51.90	-13.00	-38.90	H
3709.00	-54.63	8.87	-45.76	-13.00	-32.76	H
4269.00	-59.59	8.62	-50.97	-13.00	-37.97	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA Band II / TX / CH 9400

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2533.00	-56.34	4.70	-51.64	-13.00	-38.64	V
3198.00	-50.62	7.76	-42.86	-13.00	-29.86	V
3765.00	-52.91	8.96	-43.95	-13.00	-30.95	V
4255.00	-58.74	8.83	-49.90	-13.00	-36.90	V
5641.00	-61.58	10.40	-51.17	-13.00	-38.17	V
6691.00	-61.12	13.85	-47.27	-13.00	-34.27	V
2904.00	-60.11	6.22	-53.89	-13.00	-40.89	H
3191.00	-59.15	7.64	-51.50	-13.00	-38.50	H
3758.00	-52.19	8.76	-43.43	-13.00	-30.43	H
4255.00	-59.68	8.60	-51.08	-13.00	-38.08	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA Band II / TX / CH 9538

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2526.00	-56.31	4.67	-51.63	-13.00	-38.63	V
2932.00	-56.35	6.30	-50.05	-13.00	-37.05	V
3198.00	-51.46	7.76	-43.71	-13.00	-30.71	V
3821.00	-45.22	8.83	-36.39	-13.00	-23.39	V
N/A						
3198.00	-59.00	7.68	-51.32	-13.00	-38.32	H
3821.00	-46.18	8.62	-37.56	-13.00	-24.56	H
6635.00	-61.50	13.54	-47.96	-13.00	-34.96	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



Operation Mode: WCDMA Band V / TX / CH 4132

Test Date: December 27, 2010

Temperature: 25°C

Tested by: David Lee

Humidity: 45 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1462.00	-50.66	1.46	-49.20	-13.00	-36.20	V
1651.00	-45.53	1.61	-43.92	-13.00	-30.92	V
2127.00	-54.91	2.53	-52.39	-13.00	-39.39	V
2484.00	-51.31	4.48	-46.83	-13.00	-33.83	V
3198.00	-50.45	7.76	-42.69	-13.00	-29.69	V
N/A						
1651.00	-46.97	1.42	-45.55	-13.00	-32.55	H
2484.00	-51.10	4.53	-46.57	-13.00	-33.57	H
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.



**Operation Mode:** WCDMA Band V / TX / CH 4182

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1595.00	-49.08	1.58	-47.50	-13.00	-34.50	V
1672.00	-48.55	1.63	-46.92	-13.00	-33.92	V
2127.00	-51.49	2.53	-48.96	-13.00	-35.96	V
2505.00	-43.33	4.59	-38.74	-13.00	-25.74	V
3198.00	-47.58	7.76	-39.82	-13.00	-26.82	V
5998.00	-60.11	10.72	-49.39	-13.00	-36.39	V
1469.00	-56.92	1.46	-55.47	-13.00	-42.47	H
1672.00	-49.81	1.40	-48.40	-13.00	-35.40	H
1861.00	-57.01	1.26	-55.75	-13.00	-42.75	H
2512.00	-44.09	4.69	-39.40	-13.00	-26.40	H
3198.00	-58.55	7.68	-50.87	-13.00	-37.87	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA Band V / TX / CH 4233

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1595.00	-45.73	1.58	-44.15	-13.00	-31.15	V
1728.00	-48.38	1.66	-46.72	-13.00	-33.72	V
1861.00	-50.83	1.74	-49.09	-13.00	-36.09	V
2134.00	-50.57	2.56	-48.01	-13.00	-35.01	V
2540.00	-46.11	4.73	-41.38	-13.00	-28.38	V
3198.00	-50.93	7.76	-43.17	-13.00	-30.17	V
1462.00	-54.43	1.44	-52.99	-13.00	-39.99	H
1693.00	-51.67	1.39	-50.28	-13.00	-37.28	H
1868.00	-58.25	1.26	-56.99	-13.00	-43.99	H
2127.00	-55.58	2.04	-53.54	-13.00	-40.54	H
2540.00	-36.10	4.80	-31.30	-13.00	-18.30	H
3191.00	-60.25	7.64	-52.61	-13.00	-39.61	H

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSDPA Band II / TX / CH 9262

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3198.00	-53.90	7.76	-46.14	-13.00	-33.14	V
3709.00	-54.99	9.09	-45.90	-13.00	-32.90	V
5998.00	-57.77	10.72	-47.06	-13.00	-34.06	V
N/A						
3702.00	-56.67	8.89	-47.78	-13.00	-34.78	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



Operation Mode: WCDMA / HSDPA Band II / TX / CH 9400

Test Date: December 27, 2010

Temperature: 25°C

Tested by: David Lee

Humidity: 45 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2666.00	-56.86	5.23	-51.62	-13.00	-38.62	V
3184.00	-46.47	7.67	-38.80	-13.00	-25.80	V
3758.00	-55.13	8.98	-46.16	-13.00	-33.16	V
N/A						
3765.00	-57.42	8.75	-48.67	-13.00	-35.67	H
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.



Operation Mode: WCDMA / HSDPA Band II / TX / CH 9538

Test Date: December 27, 2010

Temperature: 25°C

Tested by: David Lee

Humidity: 45 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2932.00	-58.82	6.30	-52.52	-13.00	-39.52	V
3191.00	-51.79	7.72	-44.07	-13.00	-31.07	V
3814.00	-46.45	8.85	-37.60	-13.00	-24.60	V
N/A						
3198.00	-58.18	7.68	-50.50	-13.00	-37.50	H
3814.00	-45.55	8.63	-36.91	-13.00	-23.91	H
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.



**Operation Mode:** WCDMA / HSDPA Band V / TX / CH 4132      **Test Date:** December 27, 2010

**Temperature:** 25°C      **Tested by:** David Lee

**Humidity:** 45 % RH      **Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1658.00	-48.54	1.62	-46.92	-13.00	-33.92	V
1868.00	-51.44	1.75	-49.69	-13.00	-36.69	V
2134.00	-52.80	2.56	-50.23	-13.00	-37.23	V
2393.00	-53.13	3.98	-49.15	-13.00	-36.15	V
3191.00	-54.57	7.72	-46.85	-13.00	-33.85	V
4255.00	-61.12	8.83	-52.28	-13.00	-39.28	V
1651.00	-51.09	1.42	-49.67	-13.00	-36.67	H
1861.00	-59.42	1.26	-58.16	-13.00	-45.16	H
2127.00	-57.27	2.04	-55.22	-13.00	-42.22	H
3198.00	-59.90	7.68	-52.22	-13.00	-39.22	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSDPA Band V / TX / CH 4182      **Test Date:** December 27, 2010

**Temperature:** 25°C      **Tested by:** David Lee

**Humidity:** 45 % RH      **Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1511.00	-49.85	1.53	-48.32	-13.00	-35.32	V
1861.00	-47.99	1.74	-46.24	-13.00	-33.24	V
2127.00	-48.86	2.53	-46.33	-13.00	-33.33	V
2400.00	-53.18	4.02	-49.16	-13.00	-36.16	V
2925.00	-55.82	6.27	-49.55	-13.00	-36.55	V
3191.00	-52.36	7.72	-44.64	-13.00	-31.64	V
1602.00	-56.90	1.45	-55.45	-13.00	-42.45	H
1672.00	-53.62	1.40	-52.22	-13.00	-39.22	H
3198.00	-59.88	7.68	-52.19	-13.00	-39.19	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSDPA Band V / TX / CH 4233      **Test Date:** December 27, 2010

**Temperature:** 25°C      **Tested by:** David Lee

**Humidity:** 45 % RH      **Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1595.00	-50.30	1.58	-48.72	-13.00	-35.72	V
1868.00	-50.26	1.75	-48.51	-13.00	-35.51	V
2393.00	-58.24	3.98	-54.26	-13.00	-41.26	V
2526.00	-57.01	4.67	-52.33	-13.00	-39.33	V
3191.00	-49.83	7.72	-42.11	-13.00	-29.11	V
3590.00	-60.13	9.36	-50.77	-13.00	-37.77	V
1595.00	-58.01	1.46	-56.55	-13.00	-43.55	H
1693.00	-52.82	1.39	-51.43	-13.00	-38.43	H
2127.00	-58.78	2.04	-56.74	-13.00	-43.74	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSUPA Band II / TX / CH 9262 **Test Date:** December 27, 2010

**Temperature:** 25°C **Tested by:** David Lee

**Humidity:** 45 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3198.00	-44.86	7.76	-37.11	-13.00	-24.11	V
3702.00	-54.46	9.11	-45.35	-13.00	-32.35	V
4262.00	-56.43	8.84	-47.58	-13.00	-34.58	V
5998.00	-58.50	10.72	-47.78	-13.00	-34.78	V
N/A						
3191.00	-57.96	7.64	-50.31	-13.00	-37.31	H
3702.00	-56.62	8.89	-47.73	-13.00	-34.73	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSUPA Band II / TX / CH 9400 **Test Date:** December 27, 2010

**Temperature:** 25°C **Tested by:** David Lee

**Humidity:** 45 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2666.00	-53.87	5.23	-48.63	-13.00	-35.63	V
3191.00	-47.30	7.72	-39.59	-13.00	-26.59	V
3758.00	-55.53	8.98	-46.56	-13.00	-33.56	V
N/A						
3191.00	-59.96	7.64	-52.32	-13.00	-39.32	H
3765.00	-57.77	8.75	-49.02	-13.00	-36.02	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSUPA Band II / TX / CH 9538 **Test Date:** December 27, 2010

**Temperature:** 25°C **Tested by:** David Lee

**Humidity:** 45 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2659.00	-56.25	5.21	-51.04	-13.00	-38.04	V
3191.00	-47.38	7.72	-39.66	-13.00	-26.66	V
3821.00	-48.13	8.83	-39.30	-13.00	-26.30	V
N/A						
3814.00	-48.53	8.63	-39.89	-13.00	-26.89	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSUPA Band V / TX / CH 4132 **Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1595.00	-44.21	1.58	-42.63	-13.00	-29.63	V
1651.00	-47.76	1.61	-46.15	-13.00	-33.15	V
2127.00	-48.36	2.53	-45.83	-13.00	-32.83	V
2400.00	-56.27	4.02	-52.25	-13.00	-39.25	V
3191.00	-47.93	7.72	-40.22	-13.00	-27.22	V
N/A						
1651.00	-50.95	1.42	-49.53	-13.00	-36.53	H
1861.00	-54.45	1.26	-53.19	-13.00	-40.19	H
2127.00	-55.39	2.04	-53.35	-13.00	-40.35	H
3184.00	-57.06	7.61	-49.46	-13.00	-36.46	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSUPA Band V / TX / CH 4182 **Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1595.00	-48.63	1.58	-47.05	-13.00	-34.05	V
1728.00	-50.82	1.66	-49.16	-13.00	-36.16	V
1861.00	-50.56	1.74	-48.81	-13.00	-35.81	V
2932.00	-57.81	6.30	-51.52	-13.00	-38.52	V
3191.00	-51.51	7.72	-43.79	-13.00	-30.79	V
6831.00	-60.95	14.39	-46.56	-13.00	-33.56	V
1672.00	-53.93	1.40	-52.52	-13.00	-39.52	H
1868.00	-56.99	1.26	-55.73	-13.00	-42.73	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSUPA Band V / TX / CH 4233 **Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1595.00	-44.97	1.58	-43.39	-13.00	-30.39	V
1861.00	-52.70	1.74	-50.95	-13.00	-37.95	V
2127.00	-50.74	2.53	-48.22	-13.00	-35.22	V
2393.00	-52.93	3.98	-48.95	-13.00	-35.95	V
2918.00	-57.97	6.24	-51.73	-13.00	-38.73	V
3191.00	-51.63	7.72	-43.92	-13.00	-30.92	V
1693.00	-53.85	1.39	-52.46	-13.00	-39.46	H
1861.00	-57.30	1.26	-56.04	-13.00	-43.04	H
2127.00	-55.91	2.04	-53.87	-13.00	-40.87	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSPA+ Band II / TX / CH 9262

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2533.00	-54.36	4.70	-49.66	-13.00	-36.66	V
2932.00	-56.34	6.30	-50.04	-13.00	-37.04	V
3191.00	-50.66	7.72	-42.95	-13.00	-29.95	V
3457.00	-59.47	9.31	-50.16	-13.00	-37.16	V
3702.00	-56.64	9.11	-47.53	-13.00	-34.53	V
6894.00	-60.15	14.63	-45.52	-13.00	-32.52	V
3702.00	-56.33	8.89	-47.44	-13.00	-34.44	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSPA+ Band II / TX / CH 9400

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2526.00	-57.69	4.67	-53.01	-13.00	-40.01	V
2666.00	-58.16	5.23	-52.92	-13.00	-39.92	V
3184.00	-51.76	7.67	-44.09	-13.00	-31.09	V
3590.00	-58.10	9.36	-48.74	-13.00	-35.74	V
3758.00	-55.93	8.98	-46.96	-13.00	-33.96	V
N/A						
3191.00	-60.19	7.64	-52.55	-13.00	-39.55	H
3758.00	-54.74	8.76	-45.98	-13.00	-32.98	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSPA+ Band II / TX / CH 9538

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2659.00	-54.88	5.21	-49.67	-13.00	-36.67	V
2932.00	-58.55	6.30	-52.25	-13.00	-39.25	V
3198.00	-46.41	7.76	-38.65	-13.00	-25.65	V
3814.00	-45.17	8.85	-36.32	-13.00	-23.32	V
N/A						
3814.00	-45.59	8.63	-36.96	-13.00	-23.96	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSPA+ Band V / TX / CH 4132      **Test Date:** December 27, 2010

**Temperature:** 25°C      **Tested by:** David Lee

**Humidity:** 45 % RH      **Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1651.00	-47.67	1.61	-46.06	-13.00	-33.06	V
1861.00	-54.17	1.74	-52.43	-13.00	-39.43	V
2134.00	-53.70	2.56	-51.14	-13.00	-38.14	V
2659.00	-59.25	5.21	-54.05	-13.00	-41.05	V
3198.00	-57.48	7.76	-49.72	-13.00	-36.72	V
N/A						
1651.00	-50.32	1.42	-48.91	-13.00	-35.91	H
2134.00	-59.39	2.09	-57.30	-13.00	-44.30	H
3191.00	-58.08	7.64	-50.43	-13.00	-37.43	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSPA+ Band V / TX / CH 4182

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1595.00	-46.72	1.58	-45.14	-13.00	-32.14	V
2127.00	-54.77	2.53	-52.24	-13.00	-39.24	V
2400.00	-56.53	4.02	-52.51	-13.00	-39.51	V
3198.00	-51.44	7.76	-43.68	-13.00	-30.68	V
N/A						
1595.00	-55.23	1.46	-53.77	-13.00	-40.77	H
1672.00	-53.02	1.40	-51.62	-13.00	-38.62	H
1861.00	-58.48	1.26	-57.22	-13.00	-44.22	H
3191.00	-59.90	7.64	-52.26	-13.00	-39.26	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Operation Mode:** WCDMA / HSPA+ Band V / TX / CH 4233

**Test Date:** December 27, 2010

**Temperature:** 25°C

**Tested by:** David Lee

**Humidity:** 45 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1602.00	-49.22	1.58	-47.64	-13.00	-34.64	V
1693.00	-51.34	1.64	-49.70	-13.00	-36.70	V
1868.00	-52.44	1.75	-50.70	-13.00	-37.70	V
2134.00	-49.62	2.56	-47.05	-13.00	-34.05	V
2463.00	-58.17	4.37	-53.81	-13.00	-40.81	V
3184.00	-45.59	7.67	-37.92	-13.00	-24.92	V
1693.00	-52.56	1.39	-51.18	-13.00	-38.18	H
N/A						

**Remark:**

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



### **7.3 RADIATED RECEIVER SPURIOUS EMISSIONS**

#### **LIMIT**

According to RSS-132 (4.6) & RSS-133 (6.7).

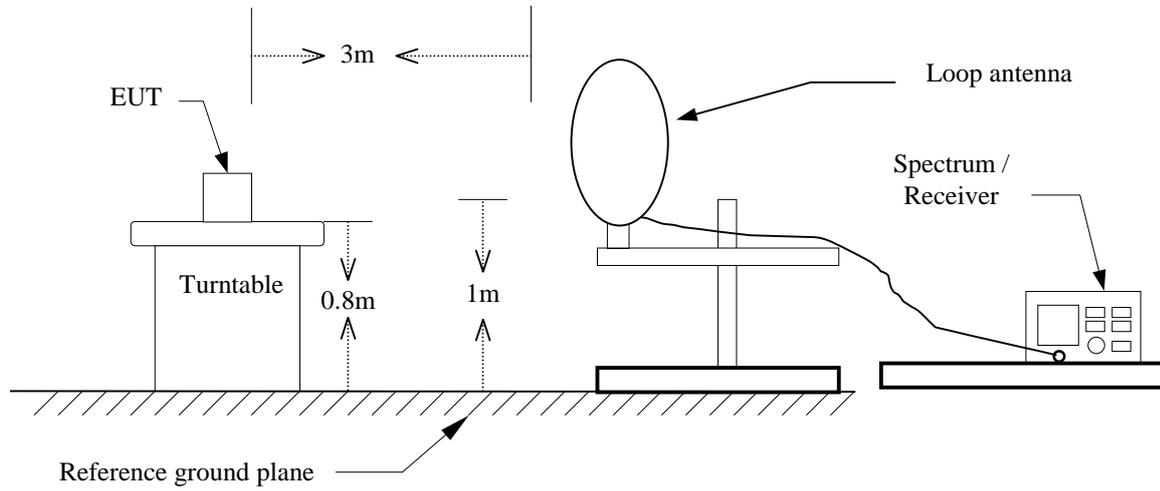
If a radiated measurement is made, all spurious emissions shall comply with the limits of Table below. The resolution bandwidth of the spectrum analyzer shall be 100 kHz for spurious emissions measurements below 1.0 GHz, and 1.0 MHz for measurements above 1.0 GHz.

<b>Spurious Frequency (MHz)</b>	<b>Field Strength (microvolts/m at 3 metres)</b>
30-88	100
88-216	150
216-960	200
Above 960	500

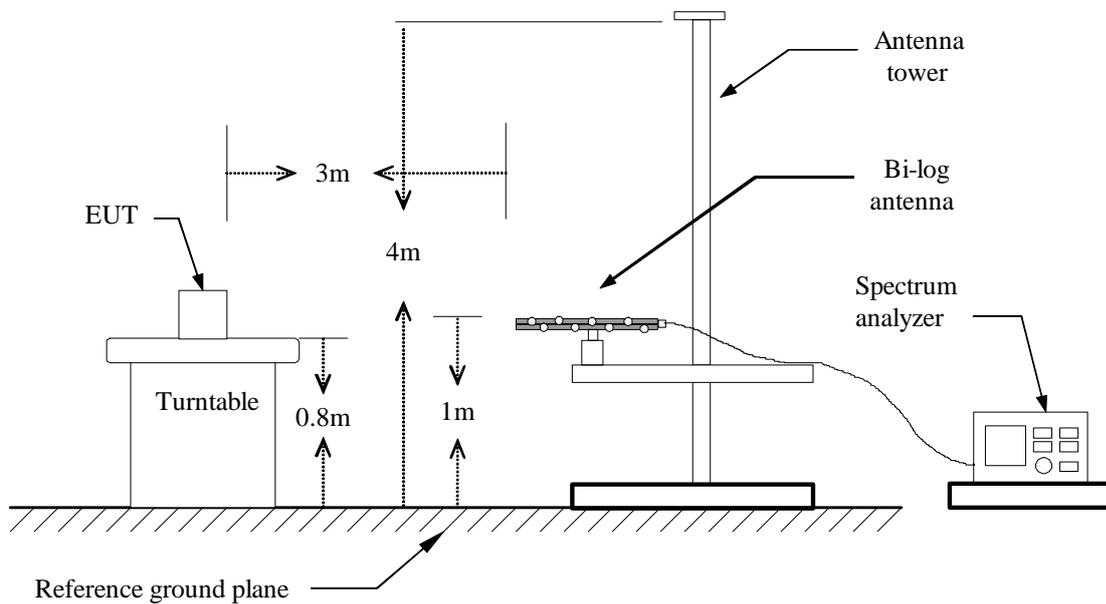


### Test Configuration

#### 9kHz ~ 30MHz

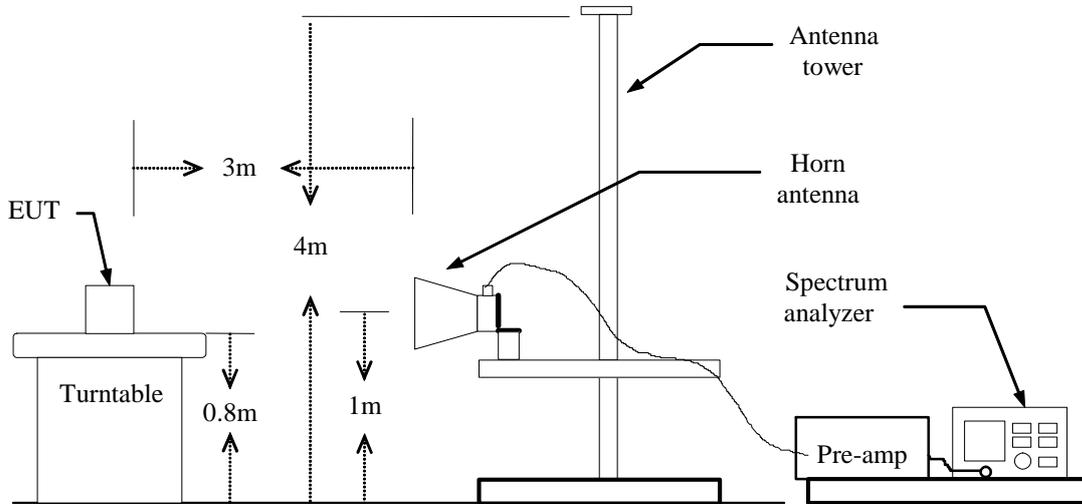


#### 30MHz ~ 1GHz





## Above 1 GHz



## TEST PROCEDURE

The search for spurious emissions shall be from the lowest frequency internally generated or used in the receiver (local oscillator frequency, intermediate frequency or carrier frequency), or 30 MHz, whichever is the higher, to at least 3 times the highest tunable and local oscillator frequencies.

## TEST RESULTS

*No non-compliance noted.*



**Radiated Spurious Emission Measurement Result / Below 1GHz**

**Operation Mode:** RX / CH 190

**Test Date:** January 12, 2011

**Temperature:** 22°C

**Tested by:** Leo Shi

**Humidity:** 49 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
39.70	38.73	-9.01	29.72	40.00	-10.28	V
209.45	42.49	-10.65	31.84	43.50	-11.66	V
269.27	37.09	-9.61	27.48	46.00	-18.52	V
665.35	36.71	-2.78	33.93	46.00	-12.07	V
799.53	30.67	-1.34	29.33	46.00	-16.67	V
930.48	33.09	-0.05	33.04	46.00	-12.96	V
204.60	47.94	-10.28	37.67	43.50	-5.83	H
228.85	44.25	-11.30	32.95	46.00	-13.05	H
254.72	41.28	-10.58	30.70	46.00	-15.30	H
298.37	33.55	-9.26	24.29	46.00	-21.71	H
665.35	30.15	-2.78	27.37	46.00	-18.63	H
796.30	30.92	-1.38	29.54	46.00	-16.46	H

**Remark:**

1. *The emission behaviour belongs to narrowband spurious emission.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.*



**Above 1GHz**

**Operation Mode:** RX / CH 190

**Test Date:** January 12, 2011

**Temperature:** 22°C

**Tested by:** Leo Shi

**Humidity:** 49 % RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark	Ant.Pol. (H/V)
1993.33	55.81	---	-5.54	50.27	---	74.00	54.00	-3.73	Peak	V
2350.00	53.70	---	-4.49	49.21	---	74.00	54.00	-4.79	Peak	V
3325.00	50.86	---	-1.31	49.55	---	74.00	54.00	-4.45	Peak	V
4141.67	50.14	---	0.90	51.04	---	74.00	54.00	-2.96	Peak	V
N/A										
2336.67	53.96	---	-4.54	49.42	---	74.00	54.00	-4.58	Peak	H
2636.67	52.69	---	-3.41	49.29	---	74.00	54.00	-4.71	Peak	H
4108.33	50.23	---	0.80	51.03	---	74.00	54.00	-2.97	Peak	H
4483.33	48.49	---	1.91	50.40	---	74.00	54.00	-3.60	Peak	H
N/A										

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.



## 7.4 POWERLINE CONDUCTED EMISSIONS

### LIMIT

According to §15.207(a) & RSS-Gen §7.2.2, except as shown in paragraphs (b) and (c) of this section, for an intentional radiator 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 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50  $\mu$ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency Range (MHz)	Limits (dB $\mu$ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

### Test Configuration

See test photographs attached in Appendix II for the actual connections between EUT and support equipment.

### TEST PROCEDURE

1. The EUT was placed on a table, which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.



**TEST RESULTS**

The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. Significant peaks are then marked as shown on the following data page, and these signals are then quasi-peaked.

**Test Data**

**Operation Mode:** Normal Link                      **Test Date:** December 16, 2010  
**Temperature:** 26°C                                      **Tested by:** Shawn Wu  
**Humidity:** 60% RH

Freq. (MHz)	QP Reading (dBuV)	AV Reading (dBuV)	Corr. factor (dB/m)	QP Result (dBuV/m)	AV Result (dBuV/m)	QP Limit (dBuV)	AV Limit (dBuV)	QP Margin (dB)	AV Margin (dB)	Note
0.1500	58.02	33.92	0.18	58.20	34.10	66.00	56.00	-7.80	-21.90	L1
0.2400	42.26	11.36	0.14	42.40	11.50	62.10	52.10	-19.70	-40.60	L1
0.5700	36.08	17.18	0.12	36.20	17.30	56.00	46.00	-19.80	-28.70	L1
3.1500	39.07	25.77	0.03	39.10	25.80	56.00	46.00	-16.90	-20.20	L1
5.1000	36.74	27.34	0.06	36.80	27.40	60.00	50.00	-23.20	-22.60	L1
28.1400	38.00	29.60	0.40	38.40	30.00	60.00	50.00	-21.60	-20.00	L1
0.1800	52.72	36.62	0.28	53.00	36.90	64.49	54.49	-11.49	-17.59	L2
0.2700	42.43	26.03	0.27	42.70	26.30	61.12	51.12	-18.42	-24.82	L2
0.5700	37.94	17.04	0.26	38.20	17.30	56.00	46.00	-17.80	-28.70	L2
2.9700	40.94	28.44	0.16	41.10	28.60	56.00	46.00	-14.90	-17.40	L2
4.9200	37.30	26.80	0.20	37.50	27.00	56.00	46.00	-18.50	-19.00	L2
25.6500	38.94	30.64	0.56	39.50	31.20	60.00	50.00	-20.50	-18.80	L2

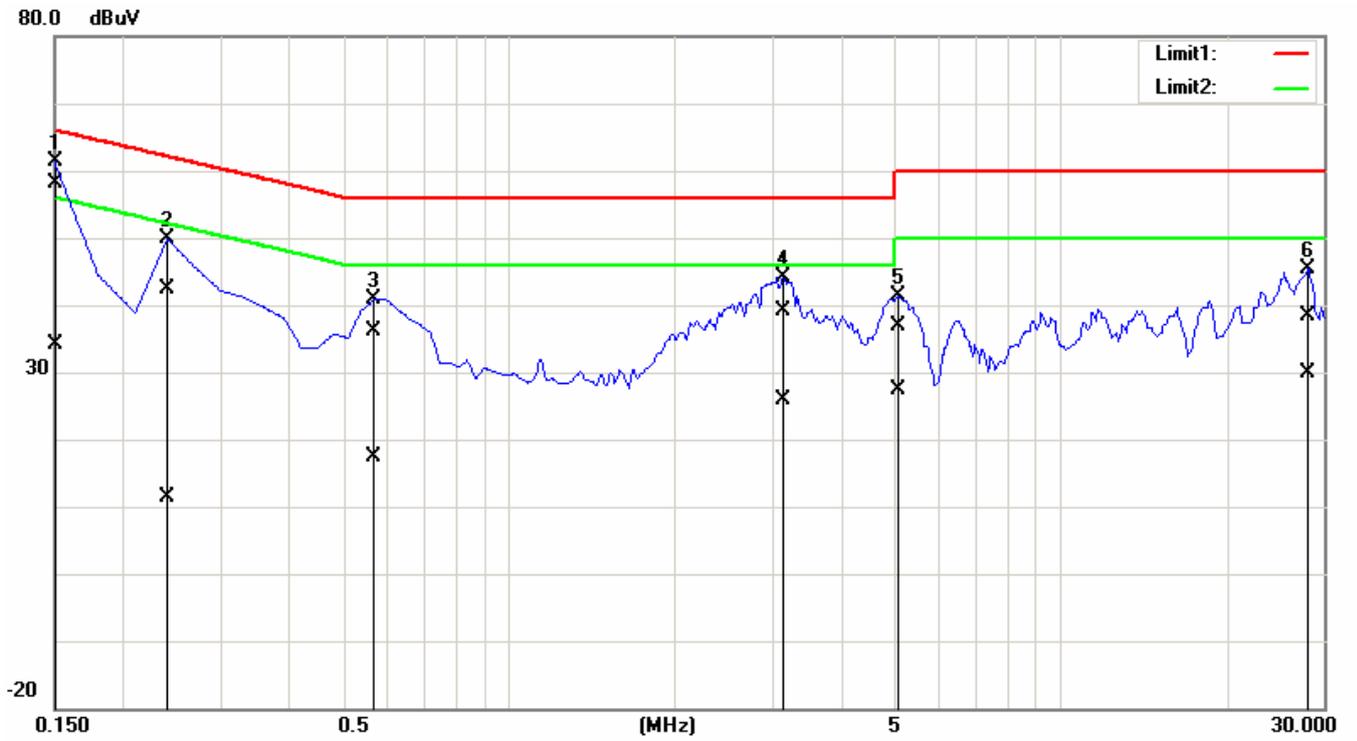
**Remark:**

1. Measuring frequencies from 0.15 MHz to 30MHz.
2. The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Quasi-peak detector and average detector.
3. The IF bandwidth of SPA between 0.15MHz to 30MHz was 10kHz; the IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9kHz;
4. L1 = Line One (Live Line) / L2 = Line Two (Neutral Line)



**Test Plots**

*Conducted emissions (Line 1)*



*Conducted emissions (Line 2)*

