FCC CFR47 PART 22 SUBPART H
AND PART 24 SUBPART E
CERTIFICATION TEST REPORT

FOR

WIRELESS MODEM

MODEL NUMBER: AIRCARD 880U

FCC ID: N7NMC8780U

REPORT NUMBER: 07U11062-2

ISSUE DATE: JULY 12, 2007

Prepared for
SIERRA WIRELESS INC.
13811 WIRELESS WAY
RICHMOND, BC V6V 3A4 CANADA

Prepared by
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	07/12/07	Initial Issue	T.Chan

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SIERRA WIRELESS
13811 WIRELESS WAY
RICHMOND, BC V6V 3A4 CANADA

EUT DESCRIPTION: WIRELESS MODEM

MODEL: AIRCARD 880U

SERIAL NUMBER: MODEM: CS01960, CRADLE: CS 01962

DATE TESTED: MAY 04-JULY 06, 2007

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 22 SUBPART H	NO NON-COMPLIANCE NOTED
FCC PART 24 SUBPART E	NO NON-COMPLIANCE NOTED

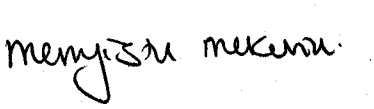
Compliance Certification Services, Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by Compliance Certification Services and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Compliance Certification Services will constitute fraud and shall nullify the document. No part of this report may be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any government agency.

Approved & Released For CCS By:

THU CHAN
EMC SUPERVISOR
COMPLIANCE CERTIFICATION SERVICES

Tested By:



MENGISTU MEKURIA
EMC ENGINEER
COMPLIANCE CERTIFICATION SERVICES

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with TIA/EIA 603C (2004), ANSI C63.4-2003, FCC CFR 47 Part 2, FCC CFR 47 Part 15 and FCC CFR 47 Part 22H and 24E.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA. The sites are constructed in conformance with the requirements of ANSI C63.4, ANSI C63.7 and CISPR Publication 22. All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

CCS is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://www.ccsemc.com.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Radiated Emission, 30 to 200 MHz	+/- 3.3 dB
Radiated Emission, 200 to 1000 MHz	+4.5 / -2.9 dB
Radiated Emission, 1000 to 2000 MHz	+4.5 / -2.9 dB
Radiated Emission, Above 2000 MHz	+/- 4.3 dB
Power Line Conducted Emission	+/- 2.9 dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a multiband wireless modem operating on the GSM/GPRS/EDGE/UMTS network. In the US and Canada, only cellular and PCS bands are used for GSM/GPRS/EDGE/UMTS operation, so this test report only contains data for those two bands (850MHz and 1900MHz). The EUT was tested in all modes of operation: GMSK, 8PSK, and WCDMA modulations.

5.2. MAXIMUM OUTPUT POWER

The transmitter has maximum ERP and EIRP output powers as follows:

Part 22 (824 - 849MHz) & Part 24 (1850 - 1910MHz) Authorized Band:

Frequency Range (MHz)	Modulation	ERP Peak Power (dBm)	ERP Peak Power (mW)
824.2 - 848.8	GPRS	29.50	891.25
824.2 - 848.8	EGPRS	27.70	588.84
826.4 - 846.6	WCDMA	25.40	346.74
826.4 - 846.6	HSDPA	25.80	380.19

Frequency Range (MHz)	Modulation	EIRP Peak Power (dBm)	EIRP Peak Power (mW)
1850.2 - 1909.8	GPRS	27.90	616.60
1850.2 - 1909.8	EGPRS	26.00	398.11
1852.4 - 1907.6	WCDMA	26.70	467.74
1852.4 - 1907.6	HSDPA	27.30	537.03

NOTE: RBW=VBW=8MHz

5.3. SOFTWARE AND FIRMWARE

The test utility software used during testing was ProcommPlus 4.8 @ Copyright 1999 by Symantec Corporation, Build 71 for GSM and EDGE modulations, and the communication test set is used for WCDMA modulation to configure as below:

The following settings were used to configure the Wireless Communications Test Set, Agilent 8960 Series 10, E5515C.

Instrument information: (by press SYSTEM CONFIG)

Application:	WCDMA Lap App C
	E6703C C.03.11
Format:	WCDMA

Call Control: (by press CALL SETUP)

2 of 4 Cell Parameters:	PS Domain Information > Present
	ATT (IMSI Attach) Flag State > Set
4 of 4 Security Info:	Security Parameter - System Operations > None

Call Parms: (by press CALL SETUP)

1 of 3

Channel Type:	12.2k RMC
Paging Service:	RB Test Mode

HSDPA Parameters:

1 of 2
HSDPA RB Test Mode Setup
FRC Type > H-Set 5 QPSK
CN Domain > PS Domain
Uplink 64k DTCH for HSDPA Loopback State > On
HS-DSCH Data Pattern > CCITT PRBS15
RLC Header on HS-DSCH > Present

Channel (UARFCN) Parms:	DL Channel: 4357 / 4407 / 4458
	UL Channel: 4132 / 4182 / 4233
	UL Sep (Band) > 400MHz (Band 4)
	Freq Bnad Ind > On

2 of 3

DL DTCH Data:	ALL ONES
RLC Reestablish:	Off
Call Limit State:	Off
Call Drop Timer:	Off
SRB Config.:	13.6k DCCH

3 of 3

UE Target Power:	-5 dBm
UL CL Pwr Ctrl Parms:	Active bits (Select “All Up bits” after linked to get maximum power)
DL Channel:	9662 / 9800 / 9938 / 4357 / 4407 / 4458
UL Channel:	9262 / 9400 / 9538 / 4132 / 4182 / 4233

5.4. WORST-CASE CONFIGURATION AND MODE

Based on all test cases, GPRS has the worst case between GPRS & EGPRS modulations.
The worst-case channel is determined as the channel with the highest output power. The highest measured output power was at high channel for CELL band and low channel for PCS band the worst case on HSDPA mode for WCDMA modulation

For the worst case position, EUT at Y position in the cradle is determined to be the worst case for the Cell band and, with EUT at X-position connected directly to the Laptop is the worst case for PCS band

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Test Peripherals				
Device Type	Manufacturer	Model Number	Serial Number	FCC ID
Laptop	Compaq	Presario R3000	CND5011HNJ	DoC
AC Adapter	HP	PPP017L	4Z01237302	DoC
Communications Test Set	Agilent	E5515C	GB46160222	DoC

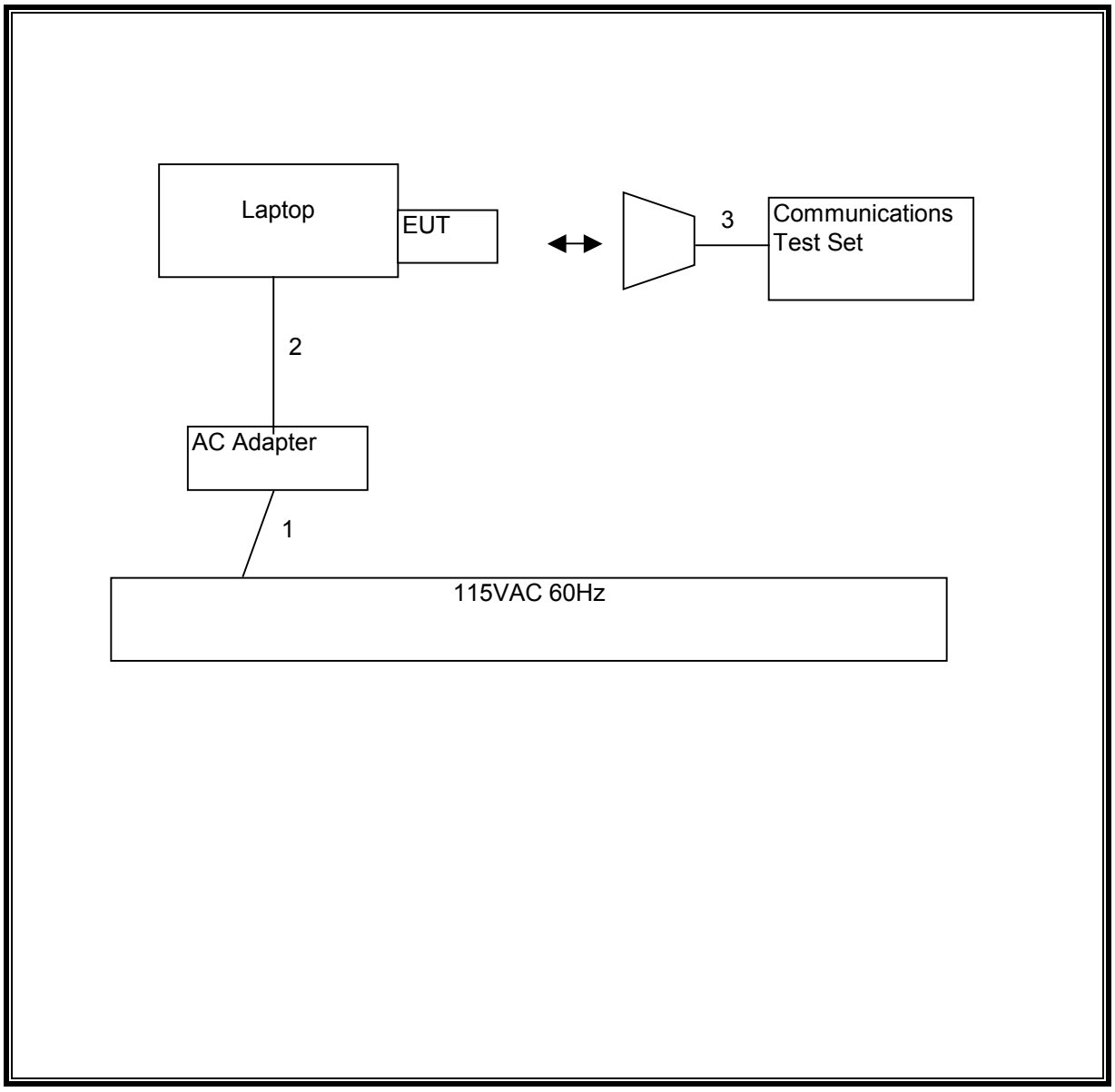
I/O CABLES

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC	1	US 115V	Un-shielded	2 m	NA
2	DC	1	DC	Un-shielded	2m	Ferrite on DC end
3	RF In/Out	1	SMA	Un-shielded	1m	NA

TEST SETUP

The EUT is connected directly to the laptop or through a cradle during the tests. The Wireless Communication test set exercised the EUT.

RADIATED TEST SETUP DIAGRAM



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**Cal Due**
Antenna, Bilog 30 MHz ~ 2 Ghz	Sunol Sciences	JB1	A121003	09/06/07
Antenna, Horn 1 ~ 18 GHz	EMCO	3115	6717	04/15/08
Antenna Biconical	EMCO	5116	9103163	03/11/08
Antenna, Horn 1 ~ 18 GHz	EMCO	3115	6717	04/15/08
Signal Generator 2 -40 GHz	R & S	SMP04	DE 34210	10/08/07
Signal Generator 1024 MHz	R & S	SMY01	DE 12311	12/12/07
Dipole	ETS	3121C-DB2	22435	06/08/08
2.7GHz HPF	MicroTronic	HPM13194	2	CNR
1.5GHz HPF	MicroTronic	HPM13195	1	CNR
Communication Test Set	Agilent	E5515C	91936	06/29/08

7. LIMITS AND RESULTS

7.1. RADIATED RF POWER OUTPUT

LIMIT

22.913(a) The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.
24.232(b) Mobile/portable stations are limited to 2 watts e.i.r.p. peak power and the equipment must employ means to limit the power to the minimum necessary for successful communications.

TEST PROCEDURE

ANSI / TIA / EIA 603 Clause 2.2.17

RESULTS

No non-compliance noted.

850 MHz GPRS Mode

Channel	Frequency (MHz)	ERP Peak Power (dBm)	ERP Peak Power (mW)
Low	824.2	28.20	660.69
Middle	837	29.40	870.96
High	848.8	29.50	891.25

1900 MHz GPRS Mode

Channel	Frequency (MHz)	EIRP Peak Power (dBm)	EIRP Peak Power (mW)
Low	1850.2	27.90	616.60
Middle	1880.00	26.30	426.58
High	1909.8	27.80	602.56

NOTE: RBW=VBW=8MHz.

850 MHz EGPRS Mode

Channel	Frequency (MHz)	ERP Peak Power (dBm)	ERP Peak Power (mW)
Low	824.2	27.50	562.34
Middle	837	27.70	588.84
High	848.8	27.00	501.19

1900 MHz EGPRS Mode

Channel	Frequency (MHz)	EIRP Peak Power (dBm)	EIRP Peak Power (mW)
Low	1850.2	24.90	309.03
Middle	1880.00	23.40	218.78
High	1909.8	26.00	398.11

850 MHz WCDMA Modulation

Channel	Frequency (MHz)	ERP Peak Power (dBm)	ERP Peak Power (mW)
Low	826.4	23.70	234.42
Middle	836.4	25.00	316.23
High	846.6	25.40	346.74

1900 MHz WCDMA Modulation

Channel	Frequency (MHz)	EIRP Peak Power (dBm)	EIRP Peak Power (mW)
Low	1852.4	26.70	467.74
Middle	1880.00	25.70	371.54
High	1907.6	25.20	331.13

NOTE: RBW=VBW=8MHz

850 MHz WCDMA+HSDPA Modulation

Channel	Frequency (MHz)	ERP Peak Power (dBm)	ERP Peak Power (mW)
Low	826.4	25.80	380.19
Middle	836.4	25.10	323.59
High	846.6	25.10	323.59

1900 MHz WCDMA+HSDPA Modulation

Channel	Frequency (MHz)	EIRP Peak Power (dBm)	EIRP Peak Power (mW)
Low	1852.4	27.30	537.03
Middle	1880.00	26.30	426.58
High	1907.6	25.60	363.08

NOTE: RBW=VBW=8MHz

GPRS Output Power (ERP)

Cellular Fundamental Substitution Measurement
Compliance Certification Services, Fremont Immunity Chamber

Company: Sierra Wireless INC - YW
Project #: 07U11027
Date: 05/07/2007
Test Engineer: Anoop Singh
Configuration: EUT with Cradle only (Worst Case)
Mode: TX, EUT Vertical Cell 850 Gprs

Test Equipment:
Receiving: EMCO LP T17, and 12 ft Chin SMA Cable (Setup this one for testing EUT)
Substitution: Dipole ETS S/N: 1629, and 6ft SMA Cable Warehouse S/N: 208947 002

f MHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Channel									
824.20	102.8	V	28.7	0.5	0.0	28.2	38.5	-10.2	
824.20	97.1	H	23.3	0.5	0.0	22.8	38.5	-15.7	
Mid Channel									
837.00	103.4	V	30.0	0.6	0.0	29.4	38.5	-9.0	
837.00	98.4	H	25.3	0.6	0.0	24.7	38.5	-13.8	
High Channel									
848.80	103.1	V	30.2	0.7	0.0	29.5	38.5	-9.0	
848.80	97.3	H	24.3	0.7	0.0	23.6	38.5	-14.8	

EGPRS Output Power (ERP)

Cellular Fundamental Substitution Measurement
Compliance Certification Services, Fremont Immunity Chamber

Company: Sierra Wireless INC - YW
Project #: 07U11027
Date: 05/07/2007
Test Engineer: Anoop Singh
Configuration: EUT with Cradle Only (Worst Case)
Mode: TX, EUT Vertical Cell 850 EGPRS

Test Equipment:
Receiving: EMCO LP T17, and 12 ft Chin SMA Cable (Setup this one for testing EUT)
Substitution: Dipole ETS S/N: 1629, and 6ft SMA Cable Warehouse S/N: 208947 002

f MHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Channel									
824.20	102.1	V	28.0	0.5	0.0	27.5	38.5	-10.9	
824.20	95.1	H	21.2	0.5	0.0	20.7	38.5	-17.7	
Mid Channel									
837.00	101.7	V	28.3	0.6	0.0	27.7	38.5	-10.7	
837.00	95.5	H	22.3	0.6	0.0	21.7	38.5	-16.7	
High Channel									
848.80	100.6	V	27.7	0.7	0.0	27.0	38.5	-11.5	
848.80	95.3	H	22.3	0.7	0.0	21.6	38.5	-16.8	

WCDMA Output Power (ERP)

Cellular Fundamental Substitution Measurement
Compliance Certification Services, Fremont Immunity Chamber

Company: Sierra Wireless INC - YW
Project #: 07U11027
Date: 05/03/2007
Test Engineer: Anoop Singh
Configuration: EUT Only
Mode: TX, EUT Vertical Cell 850 WCDMA

Test Equipment:
Receiving: EMCO LP T17, and 12 ft Chin SMA Cable (Setup this one for testing EUT)
Substitution: Dipole ETS S/N: 1629, and 6ft SMA Cable Warehouse S/N: 208947 002

f MHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Channel									
826.40	98.2	V	24.2	0.5	0.0	23.7	38.5	-14.8	
826.40	92.2	H	18.4	0.5	0.0	17.9	38.5	-20.6	
Mid Channel									
836.40	99.0	V	25.6	0.6	0.0	25.0	38.5	-13.4	
836.40	91.9	H	18.8	0.6	0.0	18.2	38.5	-20.3	
High Channel									
846.60	99.0	V	26.1	0.7	0.0	25.4	38.5	-13.1	
846.60	92.3	H	19.3	0.7	0.0	18.6	38.5	-19.8	

WCDMA+HSDPA Output Power (ERP)

Cellular Fundamental Substitution Measurement
Compliance Certification Services, Fremont Immunity Chamber

Company: Sierra Wireless INC - YW
Project #: 07U11027
Date: 05/03/2007
Test Engineer: Anoop Singh
Configuration: EUT Only
Mode: TX, EUT Vertical Cell 850 WCDMA+HSDPA

Test Equipment:
Receiving: EMCO LP T17, and 12 ft Chin SMA Cable (Setup this one for testing EUT)
Substitution: Dipole ETS S/N: 1629, and 6ft SMA Cable Warehouse S/N: 208947 002

f MHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Channel									
826.40	100.4	V	26.3	0.5	0.0	25.8	38.5	-12.6	
826.40	90.9	H	17.1	0.5	0.0	16.6	38.5	-21.9	
Mid Channel									
836.40	99.1	V	25.7	0.6	0.0	25.1	38.5	-13.4	
836.40	92.4	H	19.3	0.6	0.0	18.7	38.5	-19.8	
High Channel									
846.60	98.7	V	25.8	0.7	0.0	25.1	38.5	-13.4	
846.60	91.1	H	18.1	0.7	0.0	17.4	38.5	-21.0	

GPRS Output Power (EIRP)

High Frequency Fundamental Measurement
Compliance Certification Services, Fremont 5m Chamber Site

Company: Sierra Wireless INC - YW
Project #: 07U11027
Date: 05/03/2007
Test Engineer: Mengistu Mekuria
Configuration: EUT Only
Mode: PCS TX, GPRS Mode (Worst Case)

Test Equipment:
Receiving: Horn T73, and 12ft S/N: 197209005 (Setup this one for testing EUT)
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse S/N: 177081002

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
1.850	93.9	V	20.5	0.9	8.3	27.9	33.0	-5.1	
1.850	87.7	H	13.8	0.9	8.3	21.2	33.0	-11.8	
1.880	93.2	V	18.9	0.9	8.3	26.3	33.0	-6.7	
1.880	88.4	H	13.6	0.9	8.3	21.0	33.0	-12.0	
1.910	93.6	V	20.3	0.9	8.4	27.8	33.0	-5.2	
1.910	88.4	H	15.6	0.9	8.4	23.1	33.0	-9.9	

Rev. 1.24.7

EGPRS Output Power (EIRP)

High Frequency Fundamental Measurement
Compliance Certification Services, Fremont 5m Chamber Site

Company: Sierra Wireless INC - YW
Project #: 07U11027
Date: 05/03/2007
Test Engineer: Mengistu Mekuria
Configuration: EUT Only
Mode: PCS TX, EGPRS Mode (Worst Case)

Test Equipment:
Receiving: Horn T73, and 12ft S/N: 197209005 (Setup this one for testing EUT)
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse S/N: 177081002

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
1.850	90.9	V	17.5	0.9	8.3	24.9	33.0	-8.1	
1.850	87.5	H	13.6	0.9	8.3	21.0	33.0	-12.0	
1.880	90.3	V	16.0	0.9	8.3	23.4	33.0	-9.6	
1.880	88.4	H	13.6	0.9	8.3	21.0	33.0	-12.0	
1.910	91.8	V	18.5	0.9	8.4	26.0	33.0	-7.0	
1.910	88.4	H	15.6	0.9	8.4	23.1	33.0	-9.9	

Rev. 1.24.7

WCDMA Output Power (EIRP)

High Frequency Fundamental Measurement
Compliance Certification Services, Fremont 5m Chamber Site

Company: Sierra Wireless INC - YW
Project #: 07U11027
Date: 05/03/2007
Test Engineer: Mengistu Mekuria
Configuration: EUT Only
Mode: PCS TX, WCDMA Mode (Worst Case)

Test Equipment:
Receiving: Horn T73, and 12ft S/N: 197209005 (Setup this one for testing EUT)
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse S/N: 177081002

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
1.852	92.7	V	19.3	0.9	8.3	26.7	33.0	-6.3	
1.852	90.5	H	16.6	0.9	8.3	24.0	33.0	-9.0	
1.880	92.6	V	18.3	0.9	8.3	25.7	33.0	-7.3	
1.880	90.6	H	15.8	0.9	8.3	23.3	33.0	-9.7	
1.908	91.0	V	17.7	0.9	8.4	25.2	33.0	-7.8	
1.908	88.3	H	15.5	0.9	8.4	23.0	33.0	-10.0	

Rev. 1.24.7

WCDMA+HSDPA Output Power (EIRP)

High Frequency Fundamental Measurement
Compliance Certification Services, Fremont 5m Chamber Site

Company: Sierra Wireless INC - YW
Project #: 07U11027
Date: 05/03/2007
Test Engineer: Mengistu Mekuria
Configuration: EUT Only
Mode: PCS TX, HSDPA Mode (Worst Case)

Test Equipment:
Receiving: Horn T73, and 12ft S/N: 197209005 (Setup this one for testing EUT)
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse S/N: 177081002

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
1.853	93.3	V	19.9	0.9	8.3	27.3	33.0	-5.7	
1.853	90.2	H	16.3	0.9	8.3	23.7	33.0	-9.3	
1.880	93.2	V	18.9	0.9	8.3	26.3	33.0	-6.7	
1.880	90.3	H	15.5	0.9	8.3	23.0	33.0	-10.0	
1.908	91.4	V	18.1	0.9	8.4	25.6	33.0	-7.4	
1.908	88.7	H	15.8	0.9	8.4	23.3	33.0	-9.7	

Rev. 1.24.7

7.2. FIELD STRENGTH OF SPURIOUS EMISSION

LIMIT

§22.917 (e) and §24.238 (a) Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

TEST PROCEDURE

ANSI / TIA / EIA 603 Clause 3.2.12, FCC 22.917 (h), & FCC 24.238 (b)

RESULTS

No non-compliance noted.

Note: No emissions were found within 30-1000MHz

CELL Band GPRS Spurious & Harmonic (ERP)

High Frequency Substitution Measurement
Compliance Certification Services, Fremont 5m A-Chamber

Company: SIERRA WIRELESS INC - YW
Project #: 07U11062
Date: 7/6/2007
Test Engineer: MENGSITU MEKURIA
Configuration: EUT PLUGED INTO SUPPORT LAPTOP
Mode: TX, EUT HORIZONTAL CELL 850MHz GPRS

Test Equipment:

EMCO Horn 1-18GHz: T60; S/N: 2238 @3m
Horn > 18GHz:
Limit: FCC 22
High Pass Filter: ☑
Hi Frequency Cables: ☐ (2 ft) ☐ (2 ~ 3 ft) ☐ (4 ~ 6 ft) ☑ (12 ft)
Pre-amplifer 1-26GHz: T144 Miteq 3008A0(
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
LOW CH										
1.648	55.2	V	-51.9	3.8	7.1	4.9	-50.8	-13.0	-37.8	
2.473	50.4	V	-53.8	4.9	9.3	7.1	-51.6	-13.0	-38.6	
3.297	46.2	V	-54.2	5.6	9.4	7.3	-52.5	-13.0	-39.5	
4.121	48.8	V	-48.6	6.3	10.0	7.8	-47.1	-13.0	-34.1	
1.648	51.6	H	-54.7	3.8	7.1	4.9	-53.7	-13.0	-40.7	
2.473	47.7	H	-56.4	4.9	9.3	7.1	-54.2	-13.0	-41.2	
3.297	46.6	H	-53.8	5.6	9.4	7.3	-52.1	-13.0	-39.1	
4.121	47.0	H	-50.1	6.3	10.0	7.8	-48.6	-13.0	-35.6	
Mid Ch										
1.674	55.3	V	-51.7	3.9	7.2	5.0	-50.6	-13.0	-37.6	
1.729	51.1	V	-55.7	3.9	7.3	5.2	-54.5	-13.0	-41.5	
1.858	54.6	V	-51.9	4.1	7.8	5.7	-50.3	-13.0	-37.3	
1.952	60.5	V	-45.7	4.2	8.1	6.0	-44.0	-13.0	-31.0	
2.389	56.6	V	-48.0	4.8	9.2	7.1	-45.8	-13.0	-32.8	
2.511	48.2	V	-55.8	4.9	9.3	7.1	-53.6	-13.0	-40.6	
2.527	50.9	V	-53.1	4.9	9.3	7.1	-50.9	-13.0	-37.9	
2.802	52.6	V	-50.0	5.2	9.3	7.1	-48.1	-13.0	-35.1	
3.054	53.4	V	-48.0	5.4	9.3	7.2	-46.2	-13.0	-33.2	
3.329	51.9	V	-48.4	5.6	9.5	7.3	-46.7	-13.0	-33.7	
3.348	45.2	V	-55.0	5.6	9.5	7.3	-53.3	-13.0	-40.3	
3.583	47.3	V	-52.0	5.8	9.6	7.4	-50.4	-13.0	-37.4	
4.185	48.5	V	-48.8	6.4	10.0	7.9	-47.3	-13.0	-34.3	
1.674	52.7	H	-53.6	3.9	7.2	5.0	-52.5	-13.0	-39.5	
1.729	50.7	H	-55.4	3.9	7.3	5.2	-54.1	-13.0	-41.1	
1.858	52.4	H	-53.3	4.1	7.8	5.7	-51.8	-13.0	-38.8	
1.952	68.5	H	-37.0	4.2	8.1	6.0	-35.2	-13.0	-22.2	
2.389	52.3	H	-52.2	4.8	9.2	7.1	-49.9	-13.0	-36.9	
2.511	49.9	H	-54.0	4.9	9.3	7.1	-51.7	-13.0	-38.7	
2.802	48.0	H	-54.3	5.2	9.3	7.1	-52.4	-13.0	-39.4	
3.054	50.7	H	-50.6	5.4	9.3	7.2	-48.8	-13.0	-35.8	
3.348	46.9	H	-53.2	5.6	9.5	7.3	-51.5	-13.0	-38.5	
3.583	49.2	H	-50.0	5.8	9.6	7.4	-48.4	-13.0	-35.4	
4.185	49.3	H	-47.7	6.4	10.0	7.9	-46.2	-13.0	-33.2	
HI CH										
1.698	53.5	V	-53.4	3.9	7.2	5.1	-52.2	-13.0	-39.2	
2.546	49.2	V	-54.7	4.9	9.3	7.1	-52.5	-13.0	-39.5	
3.395	46.6	V	-53.5	5.7	9.5	7.3	-51.8	-13.0	-38.8	
4.244	47.5	V	-49.8	6.4	10.1	8.0	-48.3	-13.0	-35.3	
1.698	51.5	H	-54.7	3.9	7.2	5.1	-53.5	-13.0	-40.5	
2.546	47.0	H	-56.7	4.9	9.3	7.1	-54.5	-13.0	-41.5	
3.395	45.8	H	-54.2	5.7	9.5	7.3	-52.5	-13.0	-39.5	
4.244	46.3	H	-50.7	6.4	10.1	8.0	-49.1	-13.0	-36.1	

Rev. 4.12.7

CELL Band EGPRS Spurious & Harmonic (ERP)

High Frequency Substitution Measurement
Compliance Certification Services, Fremont 5m A-Chamber

Company: SIERRA WIRELESS INC - YW
Project #: 07U11062
Date: 7/6/2007
Test Engineer: MENGSITU MEKURIA
Configuration: EUT PLUGED INTO SUPPORT LAPTOP
Mode: TX, EUT HORIZONTAL CELL 850MHz EGPRS

Test Equipment:

EMCO Horn 1-18GHz: T60; S/N: 2238 @3m
Horn > 18GHz:
Limit: FCC 22
High Pass Filter: ☑
Hi Frequency Cables: ☐ (2 ft) ☐ (2 ~ 3 ft) ☐ (4 ~ 6 ft) ☑ (12 ft)
Pre-amplifer 1-26GHz: T144 Miteq 3008A0(
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
LOW CH										
1.648	52.6	V	-54.4	3.8	7.1	4.9	-53.4	-13.0	-40.4	
2.473	48.0	V	-56.3	4.9	9.3	7.1	-54.1	-13.0	-41.1	
3.297	44.7	V	-55.8	5.6	9.4	7.3	-54.1	-13.0	-41.1	
4.121	45.8	V	-51.6	6.3	10.0	7.8	-50.1	-13.0	-37.1	
1.648	52.6	H	-53.8	3.8	7.1	4.9	-52.7	-13.0	-39.7	
2.473	48.3	H	-55.8	4.9	9.3	7.1	-53.5	-13.0	-40.5	
3.297	46.9	H	-53.5	5.6	9.4	7.3	-51.8	-13.0	-38.8	
4.121	47.2	H	-49.9	6.3	10.0	7.8	-48.4	-13.0	-35.4	
Mid Ch										
1.654	61.0	V	-46.0	3.9	7.1	4.9	-45.0	-13.0	-32.0	
1.674	54.5	V	-52.5	3.9	7.2	5.0	-51.4	-13.0	-38.4	
1.858	54.4	V	-52.0	4.1	7.8	5.7	-50.5	-13.0	-37.5	
1.952	61.8	V	-44.4	4.2	8.1	6.0	-42.6	-13.0	-29.6	
2.389	56.7	V	-48.0	4.8	9.2	7.1	-45.7	-13.0	-32.7	
2.511	47.6	V	-56.5	4.9	9.3	7.1	-54.3	-13.0	-41.3	
2.527	49.1	V	-54.9	4.9	9.3	7.1	-52.7	-13.0	-39.7	
2.802	53.5	V	-49.1	5.2	9.3	7.1	-47.1	-13.0	-34.1	
3.054	53.5	V	-47.9	5.4	9.3	7.2	-46.1	-13.0	-33.1	
3.329	49.9	V	-50.4	5.6	9.5	7.3	-48.8	-13.0	-35.8	
3.348	45.8	V	-54.4	5.6	9.5	7.3	-52.7	-13.0	-39.7	
3.583	47.4	V	-51.9	5.8	9.6	7.4	-50.3	-13.0	-37.3	
4.185	47.2	V	-50.1	6.4	10.0	7.9	-48.6	-13.0	-35.6	
1.674	52.3	H	-54.0	3.9	7.2	5.0	-52.9	-13.0	-39.9	
1.729	51.1	H	-55.1	3.9	7.3	5.2	-53.8	-13.0	-40.8	
1.858	51.1	H	-54.7	4.1	7.8	5.7	-53.1	-13.0	-40.1	
1.952	70.1	H	-35.3	4.2	8.1	6.0	-33.6	-13.0	-20.6	
2.389	53.2	H	-51.3	4.8	9.2	7.1	-49.0	-13.0	-36.0	
2.511	48.6	H	-55.3	4.9	9.3	7.1	-53.1	-13.0	-40.1	
2.802	47.8	H	-54.6	5.2	9.3	7.1	-52.6	-13.0	-39.6	
3.054	49.5	H	-51.8	5.4	9.3	7.2	-50.0	-13.0	-37.0	
3.348	46.0	H	-54.1	5.6	9.5	7.3	-52.4	-13.0	-39.4	
3.583	48.5	H	-50.7	5.8	9.6	7.4	-49.1	-13.0	-36.1	
4.185	48.3	H	-48.7	6.4	10.0	7.9	-47.2	-13.0	-34.2	
HI CH										
1.698	52.8	V	-54.1	3.9	7.2	5.1	-52.9	-13.0	-39.9	
2.546	48.8	V	-55.0	4.9	9.3	7.1	-52.9	-13.0	-39.9	
3.395	45.7	V	-54.3	5.7	9.5	7.3	-52.6	-13.0	-39.6	
4.244	45.1	V	-52.1	6.4	10.1	8.0	-50.6	-13.0	-37.6	
1.698	51.2	H	-55.0	3.9	7.2	5.1	-53.8	-13.0	-40.8	
2.546	46.8	H	-56.9	4.9	9.3	7.1	-54.7	-13.0	-41.7	
3.395	43.6	H	-56.4	5.7	9.5	7.3	-54.7	-13.0	-41.7	
4.244	44.4	H	-52.5	6.4	10.1	8.0	-51.0	-13.0	-38.0	

Rev. 4.12.7

CELL Band WCDMA Spurious & Harmonic (ERP)

High Frequency Substitution Measurement
Compliance Certification Services, Fremont 5m A-Chamber

Company: SIERRA WIRELESS INC - YW
Project #: 07U11062
Date: 7/5/2007
Test Engineer: MENGSITU MEKURIA
Configuration: EUT PLUGED INTO SUPPORT LAPTOP
Mode: TX, EUT HORIZONTAL CELL 850MHz WCDMA

Test Equipment:

EMCO Horn 1-18GHz: T60; S/N: 2238 @3m
Horn > 18GHz:
Limit: FCC 22
High Pass Filter: ☑
Hi Frequency Cables: ☐ (2 ft) ☐ (2 ~ 3 ft) ☐ (4 ~ 6 ft) ☑ (12 ft)
Pre-amplifer 1-26GHz: T144 Miteq 3008A0(
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
LOW CH										
1.653	51.4	V	-55.6	3.8	7.1	4.9	-54.6	-13.0	-41.6	
2.479	49.6	V	-54.6	4.9	9.3	7.1	-52.4	-13.0	-39.4	
3.306	50.3	V	-50.1	5.6	9.4	7.3	-48.4	-13.0	-35.4	
4.132	47.6	V	-49.9	6.3	10.0	7.8	-48.3	-13.0	-35.3	
1.653	48.8	H	-57.6	3.8	7.1	4.9	-56.5	-13.0	-43.5	
2.479	47.7	H	-56.3	4.9	9.3	7.1	-54.1	-13.0	-41.1	
3.306	48.3	H	-52.0	5.6	9.4	7.3	-50.3	-13.0	-37.3	
4.132	46.4	H	-50.7	6.3	10.0	7.8	-49.2	-13.0	-36.2	
Mid Ch										
1.673	51.2	V	-55.8	3.9	7.2	5.0	-54.7	-13.0	-41.7	
1.759	53.8	V	-53.0	4.0	7.5	5.3	-51.7	-13.0	-38.7	
1.858	53.6	V	-52.9	4.1	7.8	5.7	-51.3	-13.0	-38.3	
1.955	53.8	V	-52.3	4.2	8.1	6.0	-50.6	-13.0	-37.6	
2.389	56.4	V	-48.3	4.8	9.2	7.1	-46.0	-13.0	-33.0	
2.527	49.1	V	-54.9	4.9	9.3	7.1	-52.7	-13.0	-39.7	
2.802	50.7	V	-51.9	5.2	9.3	7.1	-49.9	-13.0	-36.9	
3.346	50.2	V	-50.1	5.6	9.5	7.3	-48.4	-13.0	-35.4	
4.182	47.8	V	-49.5	6.3	10.0	7.9	-48.0	-13.0	-35.0	
1.673	50.3	H	-56.0	3.9	7.2	5.0	-54.8	-13.0	-41.8	
1.729	50.7	H	-55.5	3.9	7.3	5.2	-54.2	-13.0	-41.2	
1.858	49.9	H	-55.9	4.1	7.8	5.7	-54.3	-13.0	-41.3	
1.955	53.4	H	-52.0	4.2	8.1	6.0	-50.3	-13.0	-37.3	
2.389	54.8	H	-49.7	4.8	9.2	7.1	-47.4	-13.0	-34.4	
2.527	46.9	H	-56.8	4.9	9.3	7.1	-54.6	-13.0	-41.6	
2.802	51.7	H	-50.7	5.2	9.3	7.1	-48.7	-13.0	-35.7	
3.346	48.0	H	-52.2	5.6	9.5	7.3	-50.5	-13.0	-37.5	
4.182	46.0	H	-51.0	6.3	10.0	7.9	-49.5	-13.0	-36.5	
HI CH										
1.693	49.4	V	-57.6	3.9	7.2	5.1	-56.4	-13.0	-43.4	
2.540	48.4	V	-55.5	4.9	9.3	7.1	-53.3	-13.0	-40.3	
3.386	46.9	V	-53.2	5.7	9.5	7.3	-51.6	-13.0	-38.6	
4.233	46.0	V	-51.3	6.4	10.1	7.9	-49.7	-13.0	-36.7	
1.693	49.9	H	-56.3	3.9	7.2	5.1	-55.1	-13.0	-42.1	
2.540	47.0	H	-56.7	4.9	9.3	7.1	-54.5	-13.0	-41.5	
3.386	44.7	H	-55.3	5.7	9.5	7.3	-53.6	-13.0	-40.6	
4.233	45.2	H	-51.7	6.4	10.1	7.9	-50.2	-13.0	-37.2	

Rev. 4.12.7

CELL Band WCDMA+HSDPA Spurious & Harmonic (ERP)

High Frequency Substitution Measurement
Compliance Certification Services, Fremont 5m A-Chamber

Company: SIERRA WIRELESS INC - YW
Project #: 07U11062
Date: 7/5/2007
Test Engineer: MENGSITU MEKURIA
Configuration: EUT PLUGED INTO SUPPORT LAPTOP
Mode: TX, EUT HORIZONTAL CELL 850MHz HSDPA

Test Equipment:

EMCO Horn 1-18GHz: T60; S/N: 2238 @3m
Horn > 18GHz:
Limit: FCC 22
High Pass Filter: ☑
Hi Frequency Cables: ☐ (2 ft) ☐ (2 ~ 3 ft) ☐ (4 ~ 6 ft) ☑ (12 ft)
Pre-amplifer 1-26GHz: T144 Miteq 3008A0(
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
LOW CH										
1.653	50.2	V	-56.8	3.8	7.1	4.9	-55.8	-13.0	-42.8	
2.479	48.3	V	-55.9	4.9	9.3	7.1	-53.7	-13.0	-40.7	
1.653	49.0	H	-57.3	3.8	7.1	4.9	-56.3	-13.0	-43.3	
2.479	47.3	H	-56.7	4.9	9.3	7.1	-54.5	-13.0	-41.5	
Mid Ch										
1.673	50.2	V	-56.8	3.9	7.2	5.0	-55.6	-13.0	-42.6	
1.728	53.1	V	-53.7	3.9	7.3	5.2	-52.4	-13.0	-39.4	
1.858	53.8	V	-52.7	4.1	7.8	5.7	-51.1	-13.0	-38.1	
1.990	52.9	V	-53.1	4.3	8.3	6.1	-51.3	-13.0	-38.3	
2.389	55.3	V	-49.3	4.8	9.2	7.1	-47.0	-13.0	-34.0	
2.527	48.5	V	-55.5	4.9	9.3	7.1	-53.3	-13.0	-40.3	
2.802	50.6	V	-52.0	5.2	9.3	7.1	-50.0	-13.0	-37.0	
3.058	54.9	V	-46.5	5.4	9.3	7.2	-44.7	-13.0	-31.7	
4.182	47.0	V	-50.4	6.3	10.0	7.9	-48.8	-13.0	-35.8	
1.673	48.4	H	-57.9	3.9	7.2	5.0	-56.8	-13.0	-43.8	
1.729	51.5	H	-54.6	3.9	7.3	5.2	-53.4	-13.0	-40.4	
1.858	52.9	H	-52.9	4.1	7.8	5.7	-51.3	-13.0	-38.3	
1.955	54.3	H	-51.2	4.2	8.1	6.0	-49.4	-13.0	-36.4	
2.389	55.5	H	-49.0	4.8	9.2	7.1	-46.7	-13.0	-33.7	
2.579	49.7	H	-53.8	5.0	9.3	7.1	-51.6	-13.0	-38.6	
2.802	49.5	H	-52.9	5.2	9.3	7.1	-50.9	-13.0	-37.9	
3.594	49.8	H	-49.4	5.8	9.6	7.4	-47.8	-13.0	-34.8	
4.182	46.6	H	-50.4	6.3	10.0	7.9	-48.9	-13.0	-35.9	
HI CH										
1.693	56.1	V	-50.8	3.9	7.2	5.1	-49.6	-13.0	-36.6	
2.540	49.5	V	-54.4	4.9	9.3	7.1	-52.3	-13.0	-39.3	
1.693	53.3	H	-52.9	3.9	7.2	5.1	-51.8	-13.0	-38.8	
2.540	46.6	H	-57.1	4.9	9.3	7.1	-55.0	-13.0	-42.0	

Rev. 4.12.7

PCS Band GPRS Spurious & Harmonic (EIRP)

High Frequency Substitution Measurement
Compliance Certification Services, Fremont 5m A-Chamber

Company: SIERRA WIRELESS INC - YW
Project #: 07U11062
Date: 7/5/2007
Test Engineer: MENGSITU MEKURIA
Configuration: EUT PLUGED INTO SUPPORT LAPTOP
Mode: TX, EUT HORIZONTAL PCS 1900 GPRS

Test Equipment:

EMCO Horn 1-18GHz: T60; S/N: 2238 @3m
Horn > 18GHz:
Limit: FCC 24
High Pass Filter
Hi Frequency Cables: (2 ft) (2 ~ 3 ft) (4 ~ 6 ft) (12 ft)
Pre-amplifer 1-26GHz: T144 Miteq 3008A0(
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
LOW CH										
3.700	48.8	V	-50.1	5.9	9.7	7.5	-46.4	-13.0	-33.4	
3.700	47.3	H	-51.5	5.9	9.7	7.5	-47.8	-13.0	-34.8	
Mid Ch										
3.060	53.0	V	-48.4	5.4	9.3	7.2	-44.5	-13.0	-31.5	
3.330	52.6	V	-47.8	5.6	9.5	7.3	-43.9	-13.0	-30.9	
3.600	48.1	V	-51.2	5.8	9.6	7.5	-47.5	-13.0	-34.5	
3.760	47.6	V	-51.1	6.0	9.7	7.5	-47.4	-13.0	-34.4	
3.060	47.4	H	-53.9	5.4	9.3	7.2	-50.0	-13.0	-37.0	
3.330	51.4	H	-48.8	5.6	9.5	7.3	-45.0	-13.0	-32.0	
3.600	50.2	H	-49.0	5.8	9.6	7.5	-45.2	-13.0	-32.2	
3.760	47.1	H	-51.5	6.0	9.7	7.5	-47.8	-13.0	-34.8	
MID CH										
3.820	50.5	V	-47.9	6.0	9.7	7.6	-44.2	-13.0	-31.2	
3.820	48.9	H	-49.4	6.0	9.7	7.6	-45.7	-13.0	-32.7	

Rev. 4.12.7

PCS Band EGPRS Spurious & Harmonic (EIRP)

High Frequency Substitution Measurement
Compliance Certification Services, Fremont 5m A-Chamber

Company: SIERRA WIRELESS INC - YW
Project #: 07U11062
Date: 7/5/2007
Test Engineer: MENGSITU MEKURIA
Configuration: EUT PLUGED INTO SUPPORT LAPTOP
Mode: TX, EUT HORIZONTAL PCS 1900 EGPRS

Test Equipment:

EMCO Horn 1-18GHz: T60; S/N: 2238 @3m
Horn > 18GHz:
Limit: FCC 24
High Pass Filter
Hi Frequency Cables: (2 ft) (2 ~ 3 ft) (4 ~ 6 ft) (12 ft)
Pre-amplifer 1-26GHz: T144 Miteq 3008A0(
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
LOW CH										
3.700	49.0	V	-49.9	5.9	9.7	7.5	-46.2	-13.0	-33.2	
3.700	46.1	H	-52.7	5.9	9.7	7.5	-48.9	-13.0	-35.9	
Mid Ch										
3.060	52.5	V	-48.9	5.4	9.3	7.2	-45.0	-13.0	-32.0	
3.330	51.6	V	-48.8	5.6	9.5	7.3	-44.9	-13.0	-31.9	
3.600	49.5	V	-49.8	5.8	9.6	7.5	-46.1	-13.0	-33.1	
3.760	48.1	V	-50.5	6.0	9.7	7.5	-46.8	-13.0	-33.8	
4.190	46.7	V	-50.7	6.4	10.0	7.9	-47.0	-13.0	-34.0	
4.780	46.0	V	-50.6	6.9	10.8	8.6	-46.7	-13.0	-33.7	
3.060	46.4	H	-54.9	5.4	9.3	7.2	-50.9	-13.0	-37.9	
3.330	47.2	H	-53.1	5.6	9.5	7.3	-49.2	-13.0	-36.2	
3.600	50.8	H	-48.4	5.8	9.6	7.5	-44.6	-13.0	-31.6	
3.760	45.7	H	-52.8	6.0	9.7	7.5	-49.1	-13.0	-36.1	
MID CH										
3.820	49.3	V	-49.1	6.0	9.7	7.6	-45.4	-13.0	-32.4	
3.820	48.3	H	-50.0	6.0	9.7	7.6	-46.3	-13.0	-33.3	

Rev. 4.12.7

PCS Band WCDMA Spurious & Harmonic (EIRP)

High Frequency Substitution Measurement
Compliance Certification Services, Fremont 5m A-Chamber

Company: SIERRA WIRELESS INC - YW
Project #: 07U11062
Date: 7/5/2007
Test Engineer: MENGSITU MEKURIA
Configuration: EUT PLUGED INTO SUPPORT LAPTOP
Mode: TX, EUT HORIZONTAL PCS 1900 WCDMA

Test Equipment:

EMCO Horn 1-18GHz: T60; S/N: 2238 @3m
Horn > 18GHz:
Limit: FCC 24
High Pass Filter
Hi Frequency Cables: (2 ft) (2 ~ 3 ft) (4 ~ 6 ft) (12 ft)
Pre-amplifer 1-26GHz: T144 Miteq 3008A0(
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
LOW CH										
3.705	48.4	V	-50.5	5.9	9.7	7.5	-46.8	-13.0	-33.8	
3.705	46.2	H	-52.6	5.9	9.7	7.5	-48.9	-13.0	-35.9	
Mid Ch										
3.058	52.0	V	-49.5	5.4	9.3	7.2	-45.5	-13.0	-32.5	
3.325	49.5	V	-50.9	5.6	9.5	7.3	-47.0	-13.0	-34.0	
3.592	48.0	V	-51.4	5.8	9.6	7.4	-47.6	-13.0	-34.6	
3.760	53.0	V	-45.7	6.0	9.7	7.5	-42.0	-13.0	-29.0	
4.192	45.6	V	-51.8	6.4	10.0	7.9	-48.1	-13.0	-35.1	
4.800	45.9	V	-50.7	6.9	10.8	8.7	-46.8	-13.0	-33.8	
3.058	47.2	H	-54.1	5.4	9.3	7.2	-50.2	-13.0	-37.2	
3.325	45.0	H	-55.3	5.6	9.5	7.3	-51.4	-13.0	-38.4	
3.592	47.8	H	-51.5	5.8	9.6	7.4	-47.7	-13.0	-34.7	
3.760	50.9	H	-47.6	6.0	9.7	7.5	-43.9	-13.0	-30.9	
4.192	45.3	H	-51.8	6.4	10.0	7.9	-48.1	-13.0	-35.1	
4.317	43.5	H	-53.4	6.5	10.2	8.1	-49.7	-13.0	-36.7	
MID CH										
3.815	56.3	V	-42.2	6.0	9.7	7.6	-38.5	-13.0	-25.5	
3.815	53.8	V	-44.6	6.0	9.7	7.6	-41.0	-13.0	-28.0	

Rev. 4.12.7

PCS Band WCDMA+HSDPA Spurious & Harmonic (EIRP)

High Frequency Substitution Measurement
Compliance Certification Services, Fremont 5m A-Chamber

Company: SIERRA WIRELESS INC - YW
Project #: 07U11062
Date: 7/5/2007
Test Engineer: MENGSITU MEKURIA
Configuration: EUT PLUGED INTO SUPPORT LAPTOP
Mode: TX, EUT HORIZONTAL PCS 1900 HSDPA

Test Equipment:

EMCO Horn 1-18GHz: T60; S/N: 2238 @3m
Horn > 18GHz:
Limit: FCC 24
High Pass Filter
Hi Frequency Cables: (2 ft) (2 ~ 3 ft) (4 ~ 6 ft) (12 ft)
Pre-amplifer 1-26GHz: T144 Miteq 3008A0(
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
LOW CH										
3.705	50.5	V	-48.4	5.9	9.7	7.5	-44.7	-13.0	-31.7	
3.705	50.6	H	-48.2	5.9	9.7	7.5	-44.5	-13.0	-31.5	
Mid Ch										
3.058	53.6	V	-47.9	5.4	9.3	7.2	-43.9	-13.0	-30.9	
3.260	48.8	V	-51.8	5.6	9.4	7.3	-48.0	-13.0	-35.0	
3.330	51.4	V	-48.9	5.6	9.5	7.3	-45.1	-13.0	-32.1	
3.590	49.5	V	-49.8	5.8	9.6	7.4	-46.1	-13.0	-33.1	
3.760	47.5	V	-51.2	6.0	9.7	7.5	-47.5	-13.0	-34.5	
3.058	46.0	H	-55.4	5.4	9.3	7.2	-51.4	-13.0	-38.4	
3.325	45.9	H	-54.4	5.6	9.5	7.3	-50.6	-13.0	-37.6	
3.592	48.9	H	-50.3	5.8	9.6	7.4	-46.6	-13.0	-33.6	
3.760	48.6	H	-50.0	6.0	9.7	7.5	-46.3	-13.0	-33.3	
MID CH										
3.815	55.5	V	-42.9	6.0	9.7	7.6	-39.3	-13.0	-26.3	
3.815	53.6	H	-44.8	6.0	9.7	7.6	-41.1	-13.0	-28.1	

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