FCC CFR47 PART 22 SUBPART H
AND PART 24 SUBPART E
CLASS II PERMISSIVE CHANGE
TEST REPORT

FOR

850/900/1800/1900/2100 MHZ 5-BAND MINICARD MODULE

MODEL NUMBER: MC8755

FCC ID: N7NMC8755

REPORT NUMBER: 06U10630-1B

ISSUE DATE: OCTOBER 25, 2006

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

Prepared by
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LAB CODE:200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	10/20/06	Initial Issue	Thu
B	10/25/06	Correction on Section 7.1	Thu

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	SIERRA WIRELESS 3811 WIRELESS WAY RICHMOND, BC V6V 3A4, CANADA
EUT DESCRIPTION:	850/900/1800/1900/2100 MHZ 5-BAND MINICARD MODULE
MODEL:	MC8755
SERIAL NUMBER:	358635000068248
DATE TESTED:	SEPTEMBER 30 - OCTOBER 3, 2006

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:

THANH NGUYEN
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 561F Monterey Road, Morgan Hill, 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
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 an 850/900/1800/1900/2100 MHz 5-band module and manufactured by Sierra Wireless, Inc.

Only the 850/1900 MHz frequency bands were investigated under this project, and the test result documented in this report only applies to EUT operating in the 850/1900 MHz frequency bands. This device contains 900 MHz /1800 MHz/2100 MHz functions but these frequency bands are not operational in the U.S. territories.

5.2. CLASS II PERMISSIVE CHANGE DESCRIPTION

Add a portable configuration with the radio card installed in a Lenovo ThinkPad X60 Tablet Series Laptop with12 inch TFT Screen.

5.3. MAXIMUM OUTPUT POWER

Maximum conducted output power has been verified to be the same as indicated on the original grant. The transmitter has maximum ERP and EIRP output powers as follows:

850 MHz GPRS Mode

Channel	Frequency (MHz)	ERP Peak Power (dBm)	ERP Peak Power (mW)
Low	824.2	22.50	177.83
Middle	836.5	25.60	363.08
High	848.8	24.60	288.40

850 MHz EGPRS Mode

Channel	Frequency (MHz)	EIRP Peak Power (dBm)	EIRP Peak Power (mW)
Low	824.2	20.80	120.23
Middle	836.5	21.80	151.36
High	848.8	22.30	169.82

NOTE: RBW=VBW=1MHz

5.4. SOFTWARE AND FIRMWARE

The test utility software used during testing was ProcommPlus 4.8, Built 71 by Symantec Corporation for GSM, GPRS and EDGE modulations.

5.5. WORST-CASE CONFIGURATION AND MODE

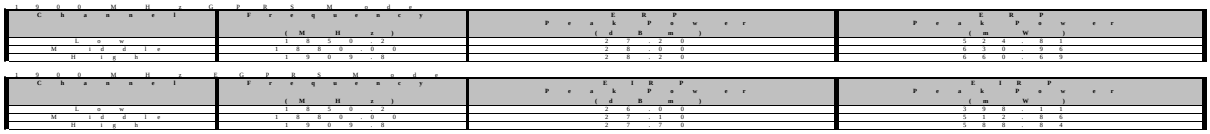
Based on all test cases, GPRS has the worst case between GPRS & EGPRS modulations.
The worst-case channel is determined as the channel with the highest output power. The highest measured output power was at 1910 MHz.

The worst-case channel is determined as the channel with the highest output power. The highest measured output power was at low channel for Cellular band & mid channel for PCS band.

The positions for both mobile and portable configuration, the mobile configuration of EUT with sitting on the cradle has the worst position.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT



1900 MHz GPRS Mode			
Channel	Frequency (MHz)	ERP Peak Power (dBm)	ERP Peak Power (mW)
Low	1850.2	27.20	524.61
Middle	1880.0	28.00	630.96
High	1909.8	28.20	660.69

1900 MHz EGPRS Mode			
Channel	Frequency (MHz)	EIRP Peak Power (dBm)	EIRP Peak Power (mW)
Low	1850.2	26.00	398.11
Middle	1880.0	27.10	512.86
High	1909.8	27.70	588.84

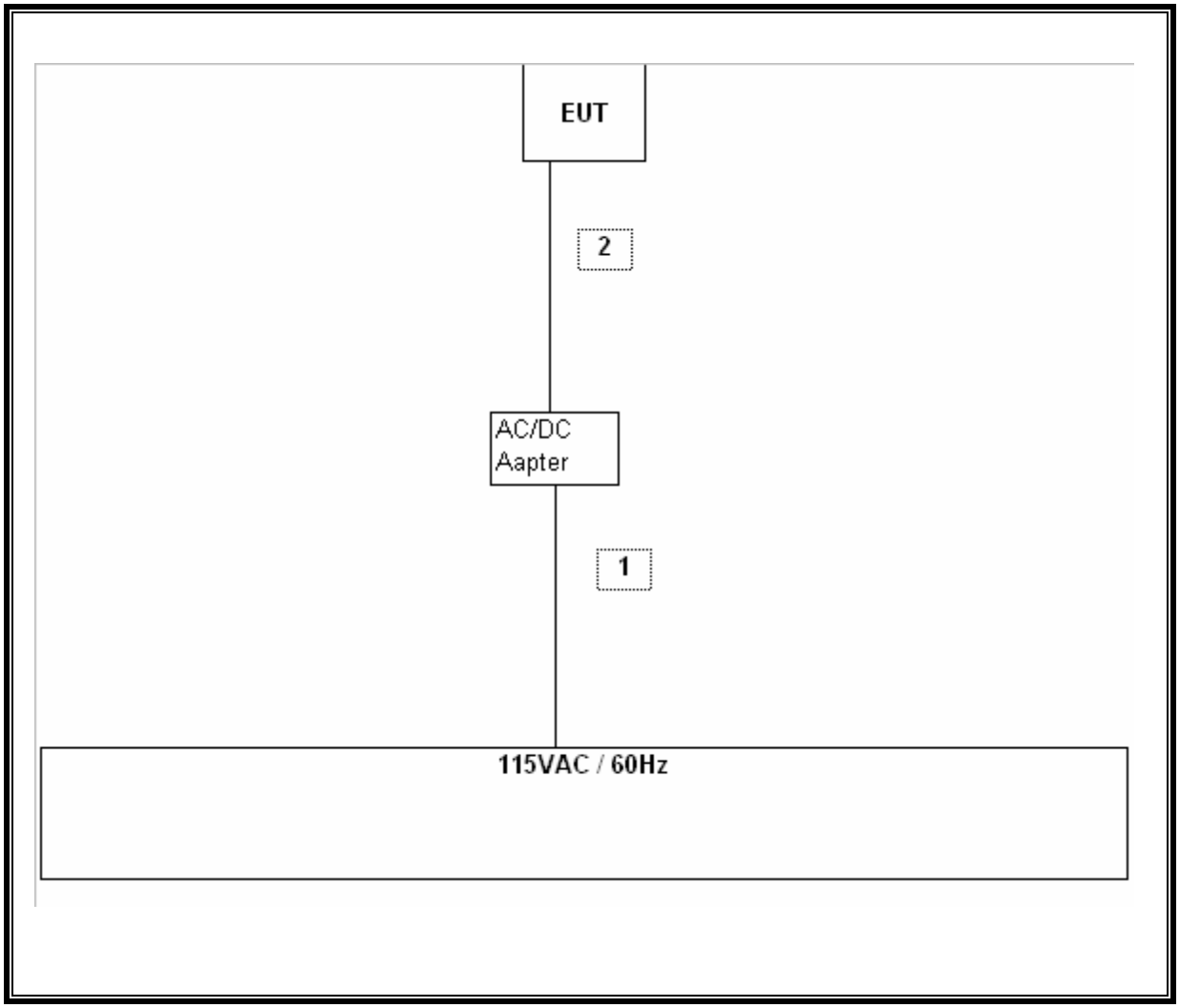
I/O CABLES

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC	1	US 115V	Un-shielded	1m	No
2	DC	1	DC Plug	Un-shielded	2m	No

TEST SETUP

The EUT is installed in the host laptop computer during the tests. The ProcommPlus set exercised the EUT.

SETUP DIAGRAM FOR TESTS



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	12/3/06
Antenna, Horn 1 ~ 18 GHz	EMCO	3115	6717	4/22/07
EMI Receiver, 9 kHz ~ 2.9 GHz	Agilent / HP	8542E	3942A00286	2/4/07
RF Filter Section	Agilent / HP	85420E	3705A00256	2/4/07
Peak Power Meter	Agilent / HP	E4416A	GB41291160	12/2/07
Peak / Average Power Sensor	Agilent	E9327A	US40440755	12/2/07
Antenna, Horn 1 ~ 18 GHz	EMCO	3115	6717	4/22/07
Signal Generator 2 -40 GHz	R & S	SMP04	DE 34210	6/2/07
Signal Generator 1024 MHz	R & S	SMY01	DE 12311	5/11/07
Dipole	EMCO	3121C-DB2	22435	5/7/07
2.7GHz HPF	MicroTronic	HPM13194	2	CNR
1.5GHz HPF	MicroTronic	HPM13195	1	CNR

7. LIMITS AND RESULTS

7.1. 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	22.50	177.83
Middle	836.5	25.60	363.08
High	848.8	24.60	288.40

850 MHz EGPRS Mode

Channel	Frequency (MHz)	EIRP Peak Power (dBm)	EIRP Peak Power (mW)
Low	824.2	20.80	120.23
Middle	836.5	21.80	151.36
High	848.8	22.30	169.82

NOTE: RBW=VBW=1MHz.

1900 MHz GPRS Mode

Channel	Frequency (MHz)	ERP Peak Power (dBm)	ERP Peak Power (mW)
Low	1850.2	27.20	524.81
Middle	1880.00	28.00	630.96
High	1909.8	28.20	660.69

1900 MHz EGPRS Mode

Channel	Frequency (MHz)	EIRP Peak Power (dBm)	EIRP Peak Power (mW)
Low	1850.2	26.00	398.11
Middle	1880.00	27.10	512.86
High	1909.8	27.70	588.84

NOTE: RBW=VBW=1MHz

GSM850 GPRS Mode Output Power (ERP)

Cellular Fundamental Substitution Measurement
Compliance Certification Services, Morgan Hill Immunity Chamber

Company: SIERRA WIRELESS
Project #: 06U10630
Date: SEPTEMBER 29, 2006
Test Engineer: Thanh Nguyen
Configuration: EUT, Normal Position(worst position)
Mode: GSM850 GPRS mode
RBW=VBW=1MHz, Peak Detection

Test Equipment:
Receiving: EMCO LP T17, and 12 ft Chin SMA Cable.
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	97.4	V	23.0	0.5	0.0	22.5	38.5	-16.0	
824.20	96.4	H	22.1	0.5	0.0	21.6	38.5	-16.9	
Mid Channel_Normal									
837.00	100.8	V	26.2	0.6	0.0	25.6	38.5	-12.8	
837.00	95.3	H	20.9	0.6	0.0	20.3	38.5	-18.2	
High Channel									
848.80	99.9	V	25.3	0.7	0.0	24.6	38.5	-13.8	
848.80	97.1	H	22.5	0.7	0.0	21.8	38.5	-16.7	

GSM850 EGPRS Mode Output Power (ERP)

Cellular Fundamental Substitution Measurement
Compliance Certification Services, Morgan Hill Immunity Chamber

Company: SIERRA WIRELESS
Project #: 06U10630
Date: SEPTEMBER 29, 2006
Test Engineer: Thanh Nguyen
Configuration: EUT , Normal Position(worst position)
Mode: GSM850 EGPRS mode.
RBW=VBW=1MHz, Peak Detection

Test Equipment:
Receiving: EMCO LP T17, and 12 ft Chin SMA Cable.
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	95.7	V	21.3	0.5	0.0	20.8	38.5	-17.6	
824.20	94.6	H	20.3	0.5	0.0	19.8	38.5	-18.6	
Mid Channel Normal									
837.00	97.0	V	22.4	0.6	0.0	21.8	38.5	-16.6	
837.00	95.4	H	20.9	0.6	0.0	20.3	38.5	-18.1	
High Channel									
848.80	97.6	V	23.0	0.7	0.0	22.3	38.5	-16.1	
848.80	96.3	H	21.7	0.7	0.0	21.0	38.5	-17.4	

GSM1900 GPRS Mode Output Power (EIRP)

PCS Fundamental Substitution Measurement
Compliance Certification Services, Morgan Hill Immunity Chamber

Company: Sierra Wireless
Project #: 06U10630
Date: September 29, 2006
Test Engineer: Thanh Nguyen
Configuration: EUT, Normal Position
Mode: GSM1900 GPRS
RBW=VBW=1MHz, Peak Detection

Test Equipment:
Receiving: Horn T59, and Chin SMA Cables 2 & 12 ft (Setup this one for testing EUT)
Substitution: Horn T60, and 6ft SMA Cable Warehouse S/N: 208947 002

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Channel									
1.850	93.7	V	19.8	0.9	8.3	27.2	33.0	-5.8	
1.850	95.0	H	19.0	0.9	8.3	26.4	33.0	-6.6	
Mid Channel									
1.880	91.2	V	18.1	0.9	8.3	25.6	33.0	-7.5	
1.880	95.4	H	20.6	0.9	8.3	28.0	33.0	-5.0	
High Channel									
1.910	93.9	V	20.6	0.9	8.4	28.1	33.0	-5.0	
1.910	95.8	H	20.7	0.9	8.4	28.2	33.0	-4.8	

GSM1900 EGPRS Mode Output Power (EIRP)

PCS Fundamental Substitution Measurement
Compliance Certification Services, Morgan Hill Immunity Chamber

Company: Sierra Wireless
Project #: 06U10630
Date: September 29, 2006
Test Engineer: Thanh Nguyen
Configuration: EUT, Normal Position
Mode: GSM1900 EGPRS
RBW=VBW=1MHz, Peak Detection

Test Equipment:
Receiving: Horn T59, and Chin SMA Cables 2 & 12 ft (Setup this one for testing EUT)
Substitution: Horn T60, and 6ft SMA Cable Warehouse S/N: 208947 002

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Channel									
1.850	92.6	V	18.6	0.9	8.3	26.0	33.0	-7.0	
1.850	94.1	H	18.1	0.9	8.3	25.5	33.0	-7.5	
Mid Channel									
1.880	91.5	V	18.4	0.9	8.3	25.8	33.0	-7.2	
1.880	94.5	H	19.7	0.9	8.3	27.1	33.0	-5.9	
High Channel									
1.910	91.0	V	17.7	0.9	8.4	25.2	33.0	-7.8	
1.910	95.4	H	20.3	0.9	8.4	27.7	33.0	-5.3	

7.2. FIELD STRENGTH OF SPURIOUS RADIATION

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 & after the third harmonic of 20dB below the system noise.

850MHz Band GSM Spurious & Harmonic (ERP))

Cellular Harmonic Substitution Measurement
Compliance Certification Services, Morgan Hill Immunity Chamber

Company: Sierra Wireless, Inc.
Project #: 06U10630
Date: September 29, 2006
Test Engineer: Thanh Nguyen
Configuration: EUT in Thinkpad
Mode: GSM850 (Edge) GPRS mode
RBW=VBW=1MHz, Peak Detection

Test Equipment:
Receiving: Horn T59, Pre-amp T34, T154 1.5G High Pass Filter, Chin SMA Cables 2 & 12 ft.
Substitution: Horn T60, 6ft SMA Cable Warehouse S/N: 208947 002

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Channel (824.2MHz)									
1.648	65.4	V	-47.9	0.8	4.9	-43.8	-13.0	-30.8	
2.472	58.3	V	-52.1	1.0	7.1	-46.0	-13.0	-33.0	
3.296	55.4	V	-50.1	1.2	7.3	-44.0	-13.0	-31.0	
4.121	54.7	V	-50.8	1.2	7.3	-44.7	-13.0	-31.7	
5.769	52.5	V	-53.0	1.2	7.3	-46.9	-13.0	-33.9	
6.593	52.4	V	-53.1	1.2	7.3	-47.0	-13.0	-34.0	
1.648	63.3	H	-50.0	0.8	4.9	-45.9	-13.0	-32.9	
2.472	60.3	H	-50.1	1.0	7.1	-43.9	-13.0	-30.9	
3.296	52.4	H	-53.1	1.2	7.3	-46.9	-13.0	-33.9	
4.121	47.5	H	-58.0	1.2	7.3	-51.9	-13.0	-38.9	
5.769	45.3	H	-60.2	1.2	7.3	-54.0	-13.0	-41.0	Noise Floor
Mid Channel (837.0MHz)									
1.674	65.0	V	-48.1	0.8	5.0	-43.9	-13.0	-30.9	
2.511	67.2	V	-42.3	1.0	7.1	-36.1	-13.0	-23.1	
3.346	53.5	V	-53.3	1.2	7.3	-47.1	-13.0	-34.1	
4.185	54.2	H	-52.6	1.2	7.3	-46.4	-13.0	-33.4	
1.674	64.6	H	-40.9	1.4	7.9	-34.4	-13.0	-21.4	
2.511	65.4	H	-38.2	1.5	8.9	-30.8	-13.0	-17.8	
3.346	50.8	H	-56.0	1.2	7.3	-49.9	-13.0	-36.9	
4.185	50.3	H	-56.5	1.2	7.3	-50.4	-13.0	-37.4	
High Channel (848.8MHz)									
1.697	66.1	V	-46.8	0.8	5.1	-42.6	-13.0	-29.6	
2.546	66.8	V	-42.0	1.0	7.1	-35.8	-13.0	-22.8	
3.393	51.3	V	-55.2	1.2	7.4	-49.1	-13.0	-36.1	
4.244	53.1	V	-53.4	1.2	7.4	-47.2	-13.0	-34.2	
5.092	48.3	V	-57.6	1.4	8.0	-50.9	-13.0	-37.9	
5.942	56.1	V	-46.8	1.5	8.9	-39.4	-13.0	-26.4	
1.697	65.5	H	-47.4	0.8	5.1	-43.1	-13.0	-30.1	
2.546	67.9	H	-40.9	1.0	7.1	-34.7	-13.0	-21.7	
3.393	50.6	H	-55.9	1.2	7.4	-49.7	-13.0	-36.7	
4.244	48.0	H	-58.5	1.2	7.4	-52.3	-13.0	-39.3	
5.092	45.0	H	-60.9	1.4	8.0	-54.3	-13.0	-41.3	
5.942	49.7	H	-53.2	1.5	8.9	-45.9	-13.0	-32.9	

850MHz Band EDGE Spurious & Harmonic (ERP)

Cellular Harmonic Substitution Measurement
Compliance Certification Services, Morgan Hill Immunity Chamber

Company: Sierra Wireless, Inc.
Project #: 06U10630
Date: September 29, 2006
Test Engineer: Thanh Nguyen
Configuration: EUT in Thinkpad
Mode: GSM850 (Edge) EGPRS mode
RBW=VBW=1MHz, Peak Detection

Test Equipment:
Receiving: Horn T59, Pre-amp T34, T154 1.5G High Pass Filter, Chin SMA Cables 2 & 12 ft.
Substitution: Horn T60, 6ft SMA Cable Warehouse S/N: 208947 002

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Channel (824.2MHz)									
1.648	61.4	V	-51.9	0.8	4.9	-47.8	-13.0	-34.8	
2.472	55.9	V	-54.5	1.0	7.1	-48.3	-13.0	-35.3	
3.296	51.2	V	-54.3	1.2	7.3	-48.2	-13.0	-35.2	
4.121	51.2	V	-54.3	1.2	7.3	-48.2	-13.0	-35.2	
5.769	48.5	V	-57.0	1.2	7.3	-50.9	-13.0	-37.9	
6.593	48.1	V	-57.4	1.2	7.3	-51.3	-13.0	-38.3	
1.648	59.7	H	-53.6	0.8	4.9	-49.5	-13.0	-36.5	
2.472	56.3	H	-54.0	1.0	7.1	-47.9	-13.0	-34.9	
3.296	49.2	H	-56.3	1.2	7.3	-50.1	-13.0	-37.1	
4.121	45.3	H	-60.2	1.2	7.3	-54.0	-13.0	-41.0	
5.769	42.6	H	-62.9	1.2	7.3	-56.7	-13.0	-43.7	Noise Floor
Mid Channel (837.0MHz)									
1.674	61.6	V	-51.6	0.8	5.0	-47.4	-13.0	-34.4	
2.511	65.8	V	-43.6	1.0	7.1	-37.5	-13.0	-24.5	
3.346	48.3	V	-58.5	1.2	7.3	-52.4	-13.0	-39.4	
4.185	50.2	H	-56.6	1.2	7.3	-50.5	-13.0	-37.5	
1.674	63.6	H	-41.9	1.4	7.9	-35.3	-13.0	-22.3	
2.511	63.9	H	-39.6	1.5	8.9	-32.2	-13.0	-19.2	
3.346	48.8	H	-58.0	1.2	7.3	-51.9	-13.0	-38.9	
4.185	47.7	H	-59.1	1.2	7.3	-52.9	-13.0	-39.9	
High Channel (848.8MHz)									
1.697	61.4	V	-51.5	0.8	5.1	-47.2	-13.0	-34.2	
2.546	64.6	V	-44.2	1.0	7.1	-38.1	-13.0	-25.1	
3.393	46.5	V	-60.0	1.2	7.4	-53.8	-13.0	-40.8	
4.244	50.1	V	-56.4	1.2	7.4	-50.2	-13.0	-37.2	
5.092	45.5	V	-60.4	1.4	8.0	-53.8	-13.0	-40.8	
5.942	53.9	V	-49.0	1.5	8.9	-41.7	-13.0	-28.7	
1.697	62.5	H	-50.4	0.8	5.1	-46.1	-13.0	-33.1	
2.546	68.7	H	-40.1	1.0	7.1	-33.9	-13.0	-20.9	
3.393	48.9	H	-57.6	1.2	7.4	-51.4	-13.0	-38.4	
4.244	46.8	H	-59.7	1.2	7.4	-53.6	-13.0	-40.6	
5.092	44.0	H	-61.9	1.4	8.0	-55.3	-13.0	-42.3	
5.942	47.2	H	-55.7	1.5	8.9	-48.4	-13.0	-35.4	

1900MHz Band GSM Spurious & Harmonic (ERP))

PCS Harmonic Substitution Measurement
Compliance Certification Services, Morgan Hill Immunity Chamber

Company: Sierra Wireless, Inc.
Project #: 06U10630
Date: SEPTEMBER 29, 2006
Test Engineer: Thanh Nguyen
Configuration: EUT, Normal Position
Mode: GSM1900 GPRS mode
RBW=VBW=1MHz, Peak Detection

Test Equipment:
Receiving: Horn T59, Pre-amp T145, and Chin SMA Cables 2 & 12 ft (Setup this one for testing EUT)
Substitution: Horn T60, and 6ft SMA Cable Warehouse S/N: 208947 002

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Channel (1850.2MHz)									
3.700	62.0	V	-43.0	1.2	9.7	-34.6	-13.0	-21.6	
5.550	52.6	V	-49.9	1.6	11.0	-40.5	-13.0	-27.5	
9.250	47.3	V	-55.2	1.6	11.0	-45.8	-13.0	-32.8	
3.700	60.6	H	-37.2	2.1	12.7	-26.5	-13.0	-13.5	
5.550	47.7	H	-49.0	2.3	13.8	-37.5	-13.0	-24.5	
9.250	46.3	H	-56.2	1.6	11.0	-46.8	-13.0	-33.8	
Mid Channel (1880MHz)									
3.760	60.1	V	-44.5	1.3	9.7	-36.0	-13.0	-23.0	
5.640	51.9	V	-50.9	1.7	11.2	-41.4	-13.0	-28.4	
9.400	47.9	V	-47.9	2.3	13.9	-36.4	-13.0	-23.4	
13.160	56.9	V	-38.9	2.3	13.9	-27.3	-13.0	-14.3	
3.760	60.8	H	-35.7	2.1	12.7	-25.1	-13.0	-12.1	
5.640	49.2	H	-46.6	2.3	13.9	-35.1	-13.0	-22.1	
9.400	45.8	H	-50.0	2.3	13.9	-38.4	-13.0	-25.4	
13.160	48.8	H	-47.0	2.3	13.9	-35.5	-13.0	-22.5	
High Channel (1909.8MHz)									
3.819	56.5	V	-47.8	1.3	9.7	-39.3	-13.0	-26.3	
5.729	56.8	V	-45.7	1.7	11.3	-36.1	-13.0	-23.1	
7.639	48.4	V	-54.2	1.7	11.3	-44.5	-13.0	-31.5	
9.549	48.6	V	-53.9	1.7	11.3	-44.3	-13.0	-31.3	
13.369	56.3	V	-46.2	1.7	11.3	-36.5	-13.0	-23.5	
3.819	59.8	H	-44.4	1.3	9.7	-35.9	-13.0	-22.9	
5.729	44.9	H	-57.6	1.7	11.3	-48.0	-13.0	-35.0	
7.639	45.9	H	-56.7	1.7	11.3	-47.0	-13.0	-34.0	
9.549	45.9	H	-56.6	1.7	11.3	-47.0	-13.0	-34.0	
13.369	51.4	H	-51.1	1.7	11.3	-41.5	-13.0	-28.5	

1900MHz Band EDGE Spurious & Harmonic (ERP)

PCS Harmonic Substitution Measurement
Compliance Certification Services, Morgan Hill Immunity Chamber

Company: Sierra Wireless, Inc.
Project #: 06U10630
Date: SEPTEMBER 29, 2006
Test Engineer: Thanh Nguyen
Configuration: EUT, Normal Position
Mode: GSM1900 EGPRS mode
RBW=VBW=1MHz, Peak Detection

Test Equipment:
Receiving: Horn T59, Pre-amp T145, and Chin SMA Cables 2 & 12 ft (Setup this one for testing EUT)
Substitution: Horn T60, and 6ft SMA Cable Warehouse S/N: 208947 002

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Channel (1850.2MHz)									
3.700	61.4	V	-43.6	1.2	9.7	-35.2	-13.0	-22.2	
5.550	52.0	V	-50.5	1.6	11.0	-41.1	-13.0	-28.1	
9.250	46.5	V	-56.0	1.6	11.0	-46.7	-13.0	-33.7	
3.700	60.4	H	-37.4	2.1	12.7	-26.8	-13.0	-13.8	
5.550	47.2	H	-49.5	2.3	13.8	-38.1	-13.0	-25.1	
9.250	45.9	H	-56.6	1.6	11.0	-47.2	-13.0	-34.2	
Mid Channel (1880MHz)									
3.760	59.4	V	-45.1	1.3	9.7	-36.7	-13.0	-23.7	
5.640	51.3	V	-51.5	1.7	11.2	-42.0	-13.0	-29.0	
9.400	47.0	V	-48.9	2.3	13.9	-37.3	-13.0	-24.3	
13.160	56.3	V	-39.5	2.3	13.9	-27.9	-13.0	-14.9	
3.760	60.2	H	-36.3	2.1	12.7	-25.6	-13.0	-12.6	
5.640	48.5	H	-47.3	2.3	13.9	-35.8	-13.0	-22.8	
9.400	45.2	H	-50.7	2.3	13.9	-39.1	-13.0	-26.1	
13.160	48.0	H	-47.8	2.3	13.9	-36.2	-13.0	-23.2	
High Channel (1909.8MHz)									
3.819	55.4	V	-48.8	1.3	9.7	-40.4	-13.0	-27.4	
5.729	56.0	V	-46.5	1.7	11.3	-36.8	-13.0	-23.8	
7.639	47.3	V	-55.2	1.7	11.3	-45.5	-13.0	-32.5	
9.549	48.7	V	-53.8	1.7	11.3	-44.2	-13.0	-31.2	
13.369	55.9	V	-46.7	1.7	11.3	-37.0	-13.0	-24.0	
3.819	59.2	H	-45.0	1.3	9.7	-36.6	-13.0	-23.6	
5.729	44.3	H	-58.2	1.7	11.3	-48.6	-13.0	-35.6	
7.639	45.2	H	-57.3	1.7	11.3	-47.7	-13.0	-34.7	
9.549	45.3	H	-57.2	1.7	11.3	-47.6	-13.0	-34.6	
13.369	50.5	H	-52.1	1.7	11.3	-42.4	-13.0	-29.4	