

**APPLICATION FOR  
TYPE ACCEPTANCE  
Supplemental Information**

**Sierra Wireless Inc.**

**FCC ID: N7NACRD2**

**MODEL: AIRCARD 2**

Prepared by:  
**Sierra Wireless Inc.**

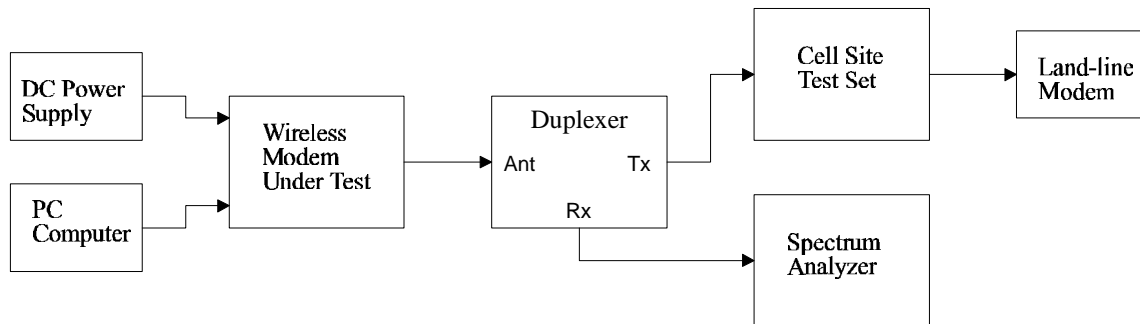
#260 - 13151 Vanier Place  
Richmond, B.C.  
V6V 2J2

Dec 1, 1998

## Spurious Emissions at Antenna Terminal (2.991)

<b>Name of Test:</b>	Spurious Emissions at Antenna Terminal
<b>FCC ID:</b>	N7NACRD2
<b>Grantee:</b>	Sierra Wireless
<b>Serial No.:</b>	CE000221
<b>Minimum Standard Specified</b>	Para. 22.917 (f)
<b>Test Results</b>	Equipment is Compliant with Standard
<b>Equipment Authorization Procedure</b>	Para 2.989 (c)(1)
<b>Test Equipment:</b>	HP8594E Spectrum Analyzer HP8921A Cell Site Test Set Astron VS20M DC Power Supply Zegna 486 PC Computer Mini-Circuits splitter, model ZA3PD-1.5 Land-line modem: shop built (unit # 1) RF attenuators, model PE7016-30, and CAT-3

### Test Setup Block Diagram



### Measurement Data

**Spectrum Analyzer:**

**Settings:**

Hewlett Packard 8594E  
 Resolution Bandwidth 30 kHz  
 Video Filter 30 kHz  
 Scan Time 58 msec  
 Start Frequency 869 MHz  
 Stop Frequency 894 MHz

**Data Or Signaling Type**

1) CDPD, Cellular Digital Packet Data (19.2 kbaud)

**Tx Deviation**

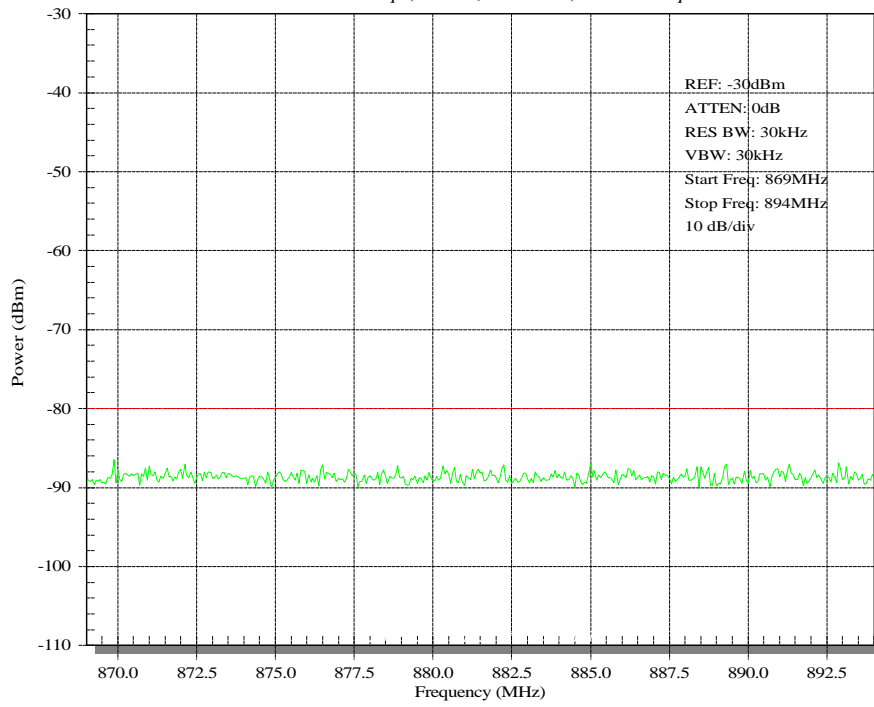
4.8 kHz

**Emission Designator**

31K5FXW

### Spurious Emissions at Antenna Terminals - 2.991

12/01/98 CE000221 19.2kbps, 4.8kHz Deviation, 28dBm Output Power



## Test Equipment List

### Sierra Wireless, Inc.

<b>Type</b>	<b>Manufacturer and Model No.</b>	<b>Serial no.</b>	<b>Accuracy</b>
Spectrum Analyzer	Hewlett Packard HP8562A	08562-60062	
Pre-Amp	Hewlett-Packard 83006A	3104A00167	
Amplifier 9 kHz-1300MHz	Hewlett Packard 8447F OPT H64	2727A02208	
Service Monitor	IFR FM/AM 500A	4103	0.2PPM
Oscilloscope	Kikusui C055060	6132295	
Power Supply	Astron VS35	8601266	
Voltmeter	Fluke 8020A	N2420658	DCV +/- 0.1%
Multimeter	Fluke 25	3710310	DCV +/- 0.1%
Wattmeter	Bird 43	56227	+/-5%FS
RF Termination	Bird 8135	10004	1.1 VSWR
Dual Phase LISN 50 ohm/50 uH	STI per MP-4	O2	
Dual Phase LISN 50 ohm/50 uH	Compliance Design	9=8012-50R-24-BNC	
Audio Generator	Hewlett-Packard 205-AG	8689	
Attenuators	Texscan FP45-20 Texscan FP45-10 Weinshel 40-10-33 Mini-Circuits CAT30 Pomona 4108-10	CZ682 8419 01	+/-1% to 1.5 GHz
Thermometer	Fluke 52	3965185	+/(0.1% reading +/-0.7 deg C)
Test Line Simulator	Teltone TLS-2	none	
Turn Table, RC	EMCO 1060-2M	8912-1415	
Antenna Mast, RC	Compliance Design, Inc.	M100	
Antennas	Singer/Empire Devices		

---

Two Di-Pole Sets	Models: DM-105-T1, T2, T3	STI Modified w/Roberts Baluns
Bi-Conical	STI per Mil. Spec. 461	BCSTI-201
Bi-Conical	EMCO 3104	3763
Bi-Conical	EMCO 3104 C	9401-4635
Log-Periodic	EMCO 3146	1754
Active Loop	EMCO 6502	9107-2645
Dual Ridged Guide Horn	Electro-Metrics	EM-6961/RGA-60
Pyramidal Feed/	EmpireDevices AT-112	none
Para. Dish	LPA-112, HF-112	
RGA-60	Electro-Metrics	6225