TABLE 2
TEST INSTRUMENTS

EQUIPMENT	MODEL NUMBER	MANUFACTURER	SERIAL NUMBER	DATE OF LAST CALIBRATION
SPECTRUM ANALYZER	8593E	HEWLETT-PACKARD	3205A00124	7/05/05
SIGNAL GENERATOR	8648B	HEWLETT-PACKARD	3642U01679	9/15/05
RF PREAMP	8447D	HEWLETT-PACKARD	2944A06291	4/6/05
BICONICAL ANTENNA	3110B	EMCO	9307-1431	5/31/05
LOG PERIODIC	3146	EMCO	3110-3236	6/3/05
LISN (x 2) 8028-50-TS24-BNC	8028	SOLAR ELE.	910494 & 910495	3/29/06
HORN ANTENNA	SAS-571	A. H. SYSTEMS	605	04/1/05
PREAMP	8449B	HEWLETT PACKARD	3008A00480	06/30/05
CALCULATION PROGRAM	N/A	N/A	Ver. 6.0	N/A

2.5 Antenna Description (Paragraph 15.203)

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

Cirronet Corporation will sell the WIT2410G with one of the following antennas.

MANUFACTURER	TYPE OF ANTENNA	MODEL	GAIN dB	TYPE OR CONNECTOR
Fixed Antennas				
Andrews	Parabolic Dish	26T-2400A	24 dBi	Reverse N to MMCX via adapter cable
Hyperlink Technologies, Inc.	Parabolic Dish	2424GC	24 dBi	Reverse N to MMCX via adapter cable
Andrews	Parabolic Dish	18T-2400 A	18 dBi	Reverse N to MMCX via adapter cable
Mobile Antennas				
ACE	Dipole	ACE-2400NF	2 dBi	Reverse SMA to MMCX via adapter cable
Cushcraft	Yagi	PC2415-RTNF	15 dBi	Reverse TNC to MMCX via adapter cable
Mobile Mark	Omni-Directional	OD6-2400-RNTC	6 dBi	Reverse TNC to MMCX via adapter cable
Mobile Mark	Corner Reflector	SCR14-2400PTA-RTNC	14 dBi	Reverse TNC to MMCX via adapter cable
Mobile Mark	Corner Reflector	SCR9-2400-RN	9 dBi	Reverse N to MMCX via adapter cable
Mobile Mark	Vehicle Mount Stub	RM3-2400-RTNC	2.5 dBi	Reverse TNC to MMCX via adapter cable
Mobile Mark	Omni	OD9-2400MUF24005	9 dBi	Reverse TNC to MMCX via adapter cable
MaxRad	Whip	MUF24005.RTNC	5 dBi	Reverse TNC to MMCX via adapter cable
MaxRad	Whip Magnetic Mount (Mobile Vehicle Whip)	MUF24005.RTNC	5 dBi	Reverse TNC to MMCX via adapter cable
Digital Wireless Corporation	Patch	PA2400	Appx. 3 dBi	Reverse TNC to MMCX via adapter cable
Cirronet Corporation	Patch	GA Tech	12 dBi	Non-standard MMCX
Cirronet Corporation	Patch	PA2410	6dBi	Non-standard MMCX

For the purposes of this application, the following antennas were tested as representative of the antennas listed above and tested to the requirements of FCC Part 15.

MANUFACTURER	TYPE OF ANTENNA	MODEL	GAIN dB	TYPE OR CONNECTOR
ACE	Dipole	ACE-2400NF	2 dBi	Reverse SMA to MMCX via adapter cable
Cushcraft	Yagi	PC2415-RTNF	15 dBi	Reverse TNC to MMCX via adapter cable
Mobile Mark	Corner Reflector	SCR14-2400PTA-RTNC	14 dBi	Reverse TNC to MMCX via adapter cable
Hyperlink Technologies, Inc.	Parabolic Dish	2424GC	24 dBi	Reverse N to MMCX via adapter cable
Mobile Mark	Omni	OD9-2400MUF24005	9 dBi	Reverse TNC to MMCX via adapter cable
Cirronet	Patch	GA Tech	12 dBi	Non-standard MMCX
MaxRad	Whip Magnetic Mount (Mobile Vehicle Whip)	MUF24005.RTNC	5 dBi	Reverse TNC to MMCX via adapter cable

To ensure compliance with 15.203, Cirronet Corporation attaches reverse-sex TNC or N connectors to all antennas except the 12 dBi and 6 dBi Patch antennas.

Cirronet Corporation. has arranged for the manufacturers of the antennas to provide reverse-sex TNC or N connectors for these antennas. OEM customers wanting to use one of these antennas in their product will first need to obtain a special part number from Cirronet Corporation to give to the antenna manufacturer. The manufacturer, upon receipt of this number, will know to attach the reverse-sex TNC or N connector (or SMA in the case of the dipole) to the end of the antenna cable before shipping.

The customer then purchases an adapter cable from Cirronet Corporation that will connect the MMCX port on the module to the reverse-sex connector on the antenna. No other type of commercially available antenna will attach to this reverse-sex TNC or N connector (or SMA for the case of the dipole). Given the nonstandard nature of the interconnect between module and antenna and the difficulty involved in circumventing that connection, Cirronet Corporation feel that this procedure meets the requirements called out in 15.203.

2.5 Antenna Description (Continued)

The sixth antenna included in their application, the DWC patch, already has a nonstandard MMCX mating connector attached to it. It cannot be connected to anything else but a MMCX connector. No adapter cable is needed when using this antenna – the antenna snaps directly to the module.

2.6 Peak power within the band 2400 – 2483.5 GHz per FCC Section 15.247(b)

Peak power within the band 2400-2483.5 GHz has been measured with a spectrum analyzer by connecting the spectrum analyzer directly via a short cable to the antenna output terminals or across the antenna leads on the PCB as specified by the manufacturer. The spectrum analyzer was set for a 50 Ω impedance with the VBW ≥ RBW 6 dB bandwidth. The results of the measurements are given in Table 3 and Figure 3a through Figure 3c.

Fundamental Frequencies were measured at Low Channel, Mid Channel, and High Channel.

TABLE 3
PEAK POWER OUTPUT

Test Date: February 13, 2006
UST Project: 05-0311
Customer: Cirronet
Model: WIT2410

Frequency of Fundamental (MHz)	Measurement (dBm)*	Measurement (mW)*	FCC Limit (Watt)
2400.15	17.10	51.29	1.0
2435.63	17.83	60.67	1.0
2469.81	18.39	69.02	1.0

*** Measurement includes 0.1 dB for cable loss**

Tester Signature: Austin Thompson **Name:** Austin Thonpson

Figure 3a.
Peak Power per FCC Section 15.247(b) Low Channel

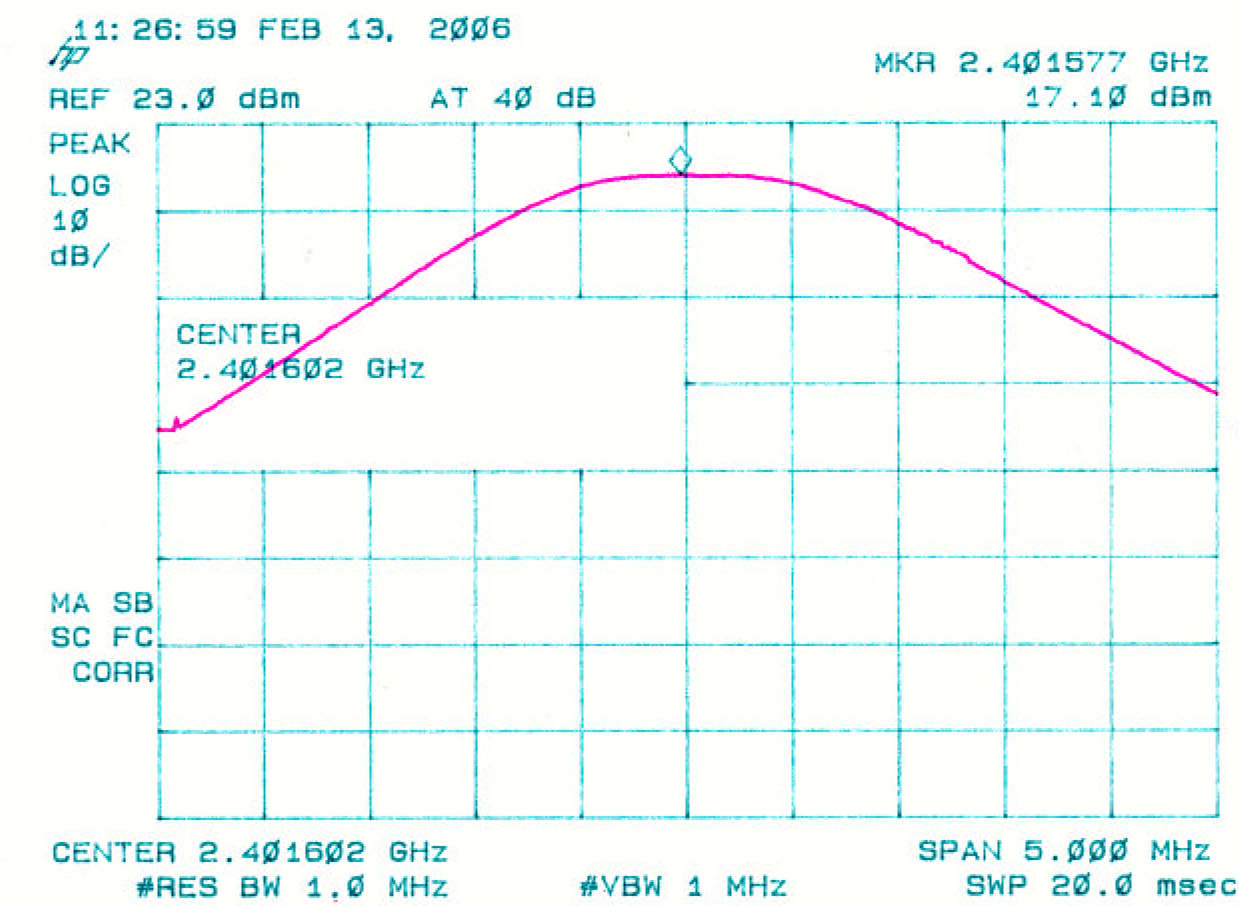


Figure 3b.
Peak Power per FCC Section 15.247(b) Mid Channel

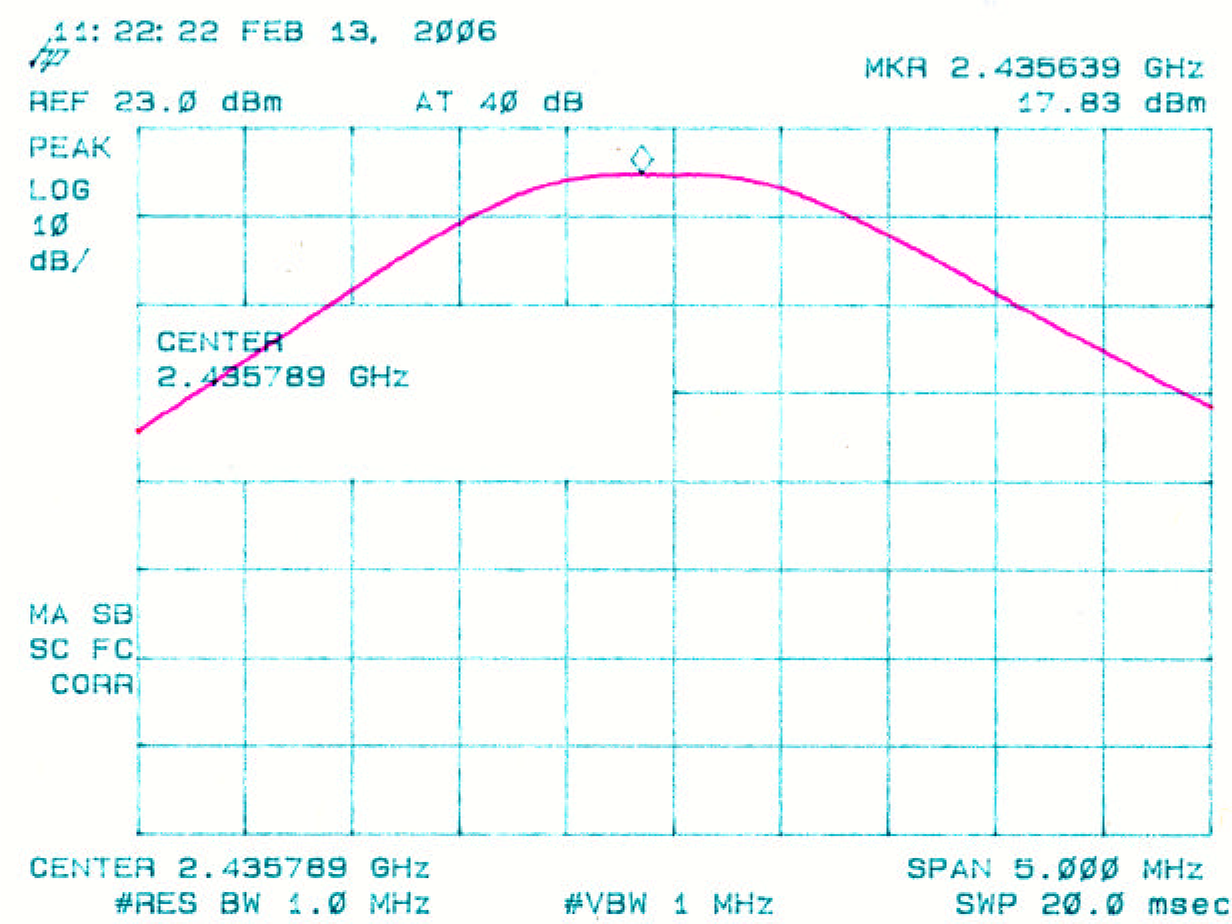
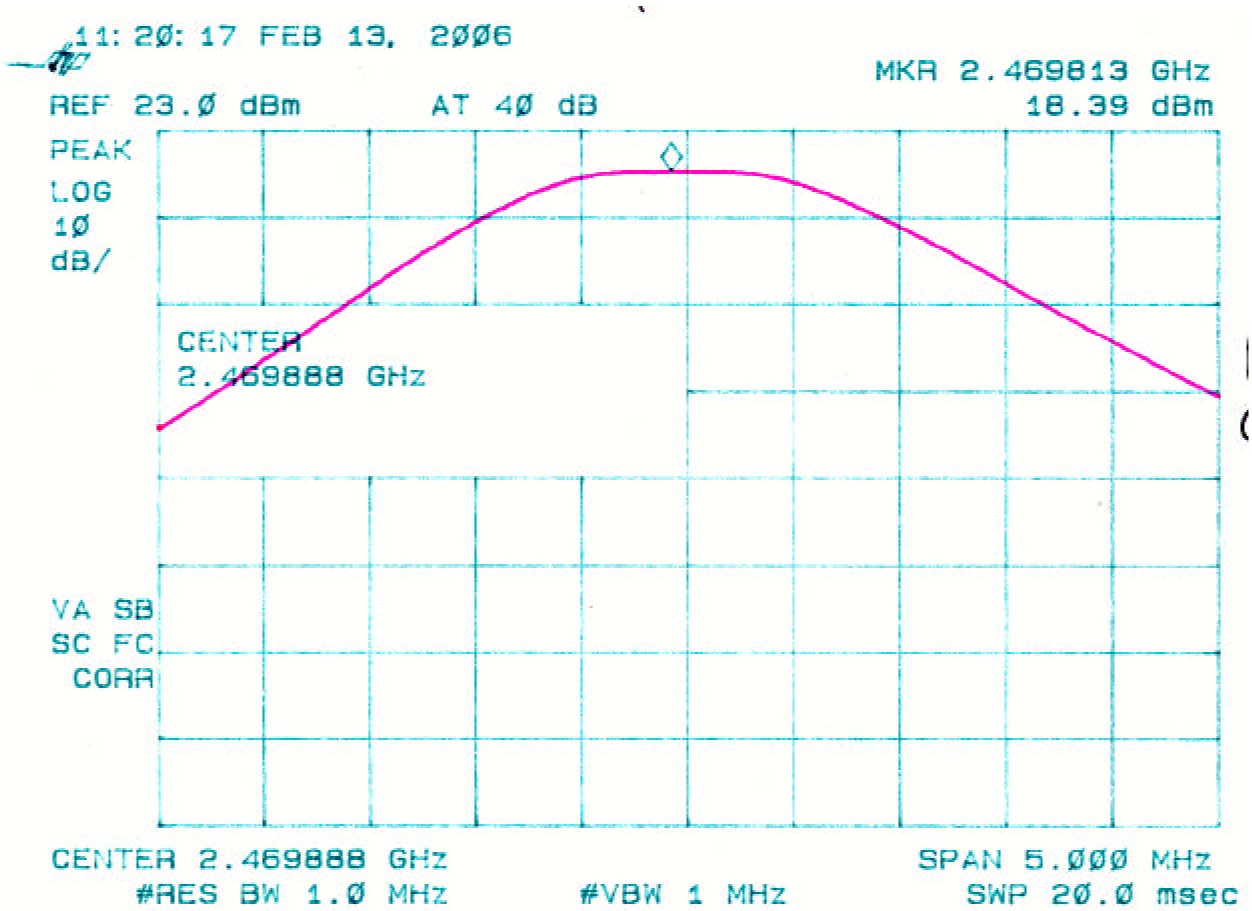


Figure 3c.
Peak Power per FCC Section 15.247(b) High Channel



2.7 Antenna Conducted Spurious Emission the Frequency Range 30 – 25000 MHz (FCC Section 15.247(c))

Spurious emissions in the frequency range 30 – 25000 MHz have been measured with a spectrum analyzer by connecting the spectrum analyzer directly via a short cable to the antenna output terminals or across the antenna leads on the PCB as specified by the manufacturer. The spectrum analyzer was set for a 50 Ω impedance with the RBW = 100 kHz & VBW> RBW. All spurious emissions were measured to be greater than 20 dB down from the fundamental. The results or conducted spurious emissions are given in Figure 4a through 4l.

Figure 4a
Antenna Conducted Spurious Emissions 15.247(c) Low

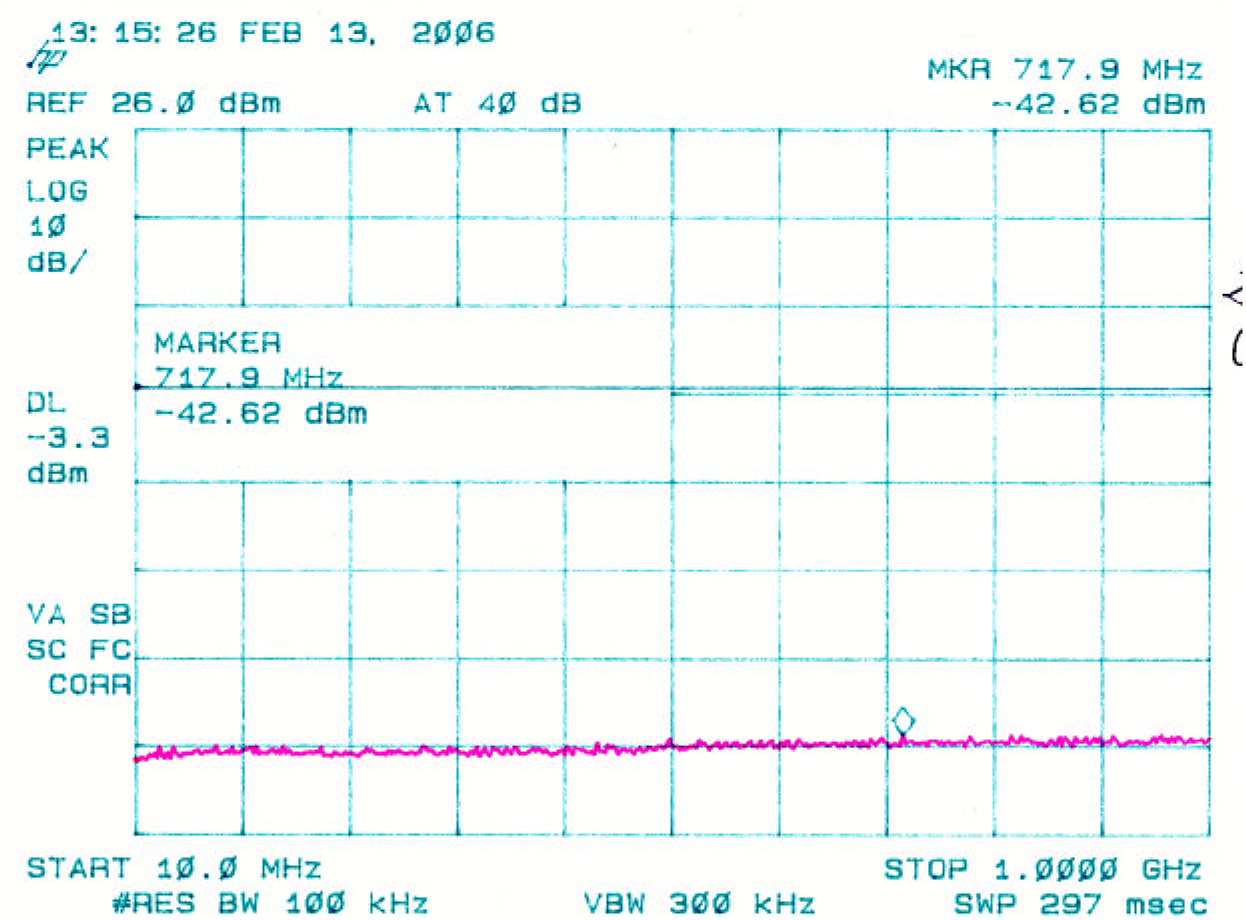
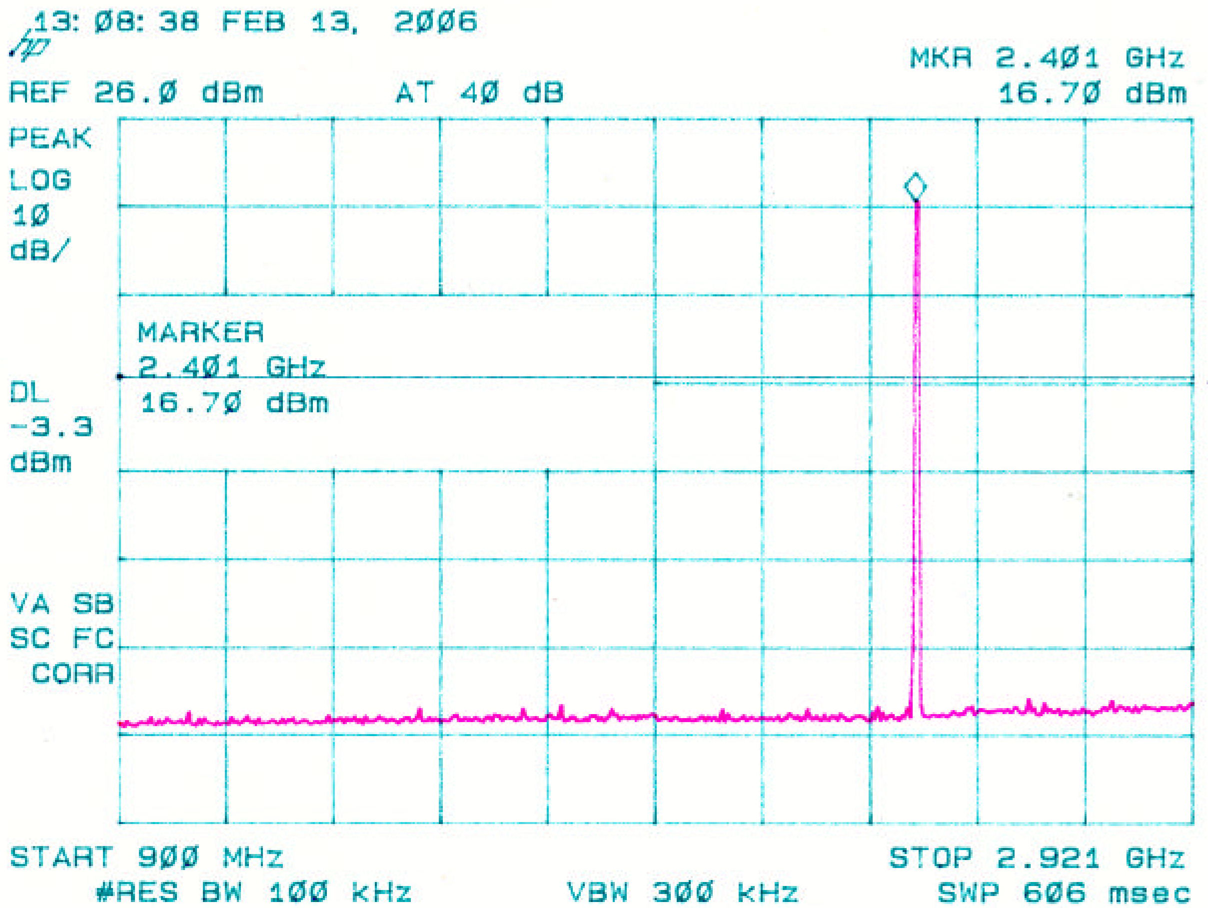


Figure 4b
Antenna Conducted Spurious Emissions 5.247(c) Low



Note: Signal shown represents Fundamental Frequency.

Figure 4c
Antenna Conducted Spurious Emissions 15.247(c) Low

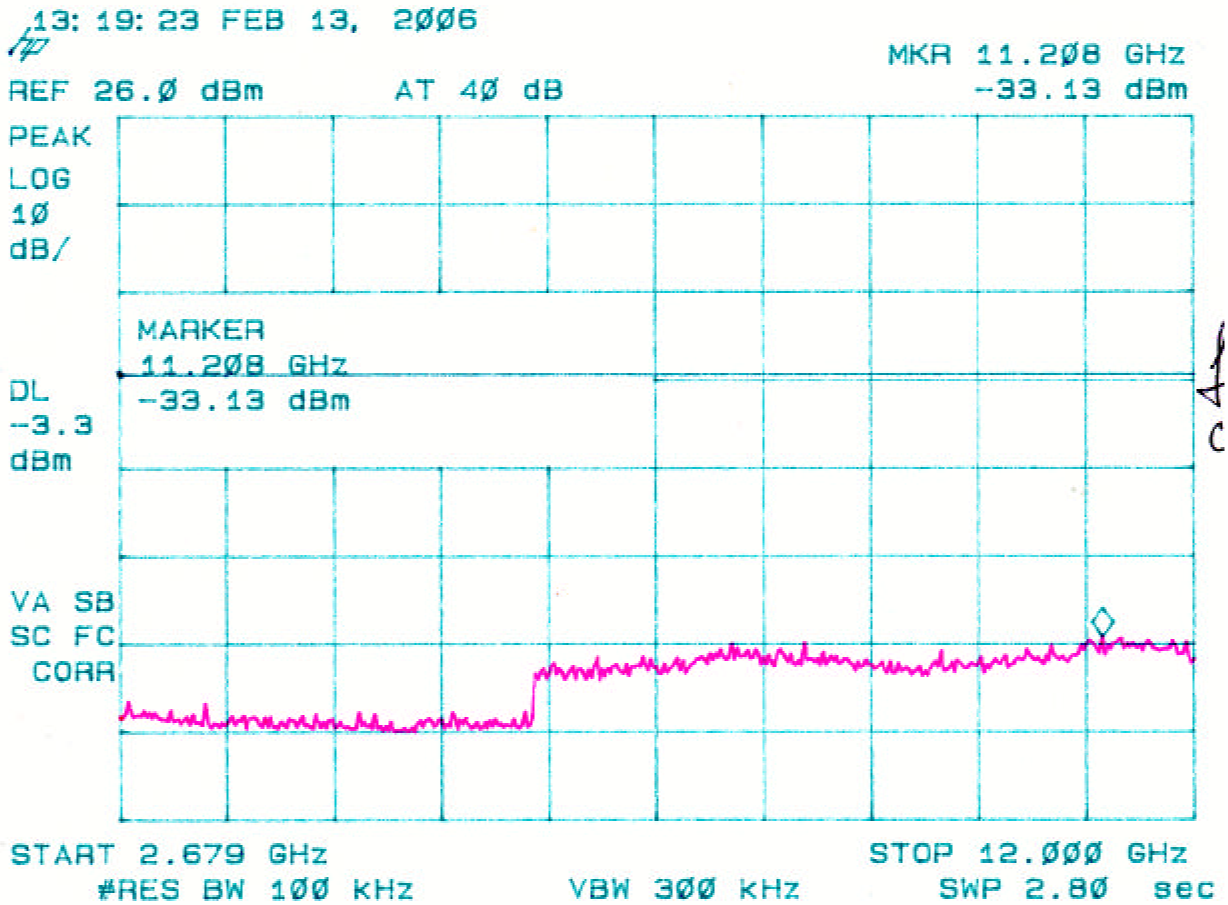


Figure 4d
Antenna Conducted Spurious Emissions 15.247(c) Low

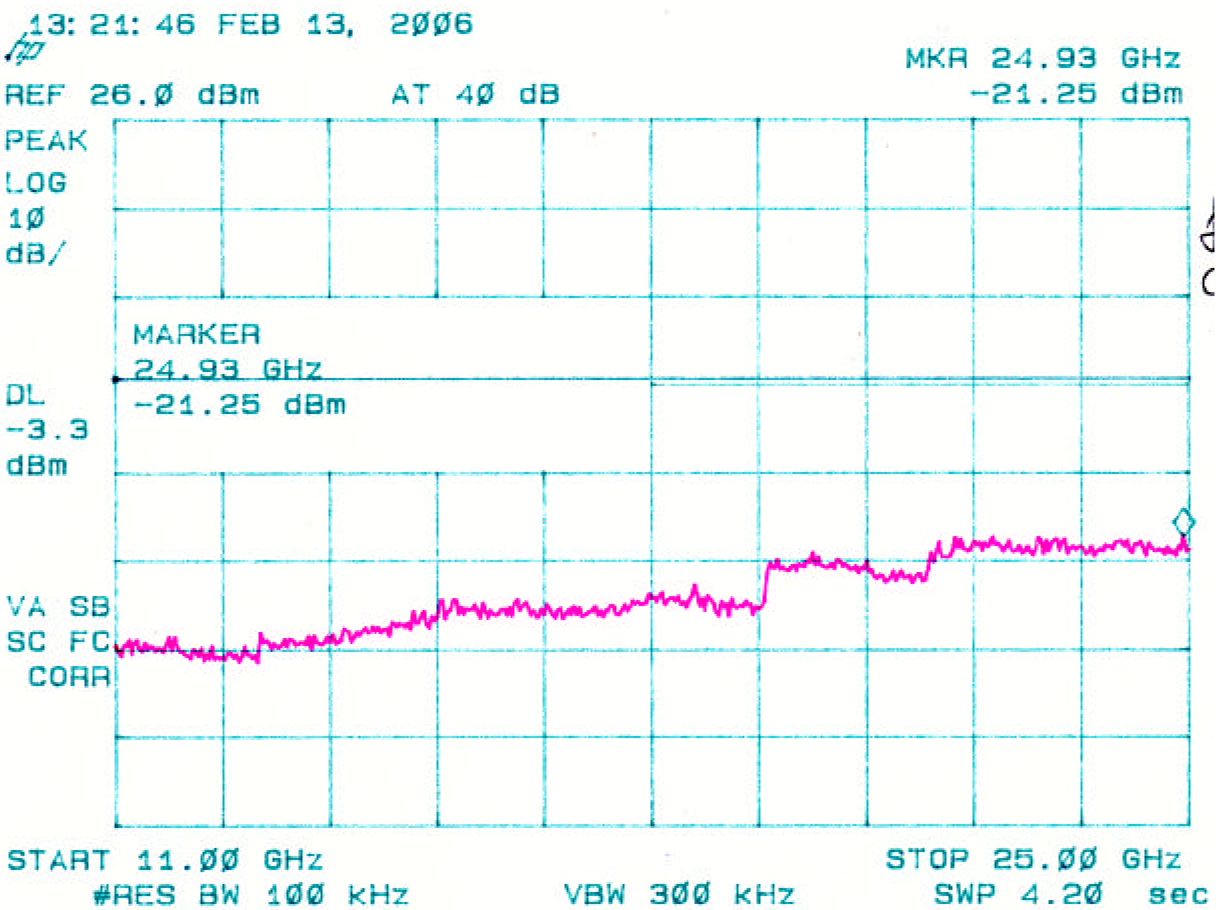


Figure 4e
Antenna Conducted Spurious Emissions 15.247(c) Mid

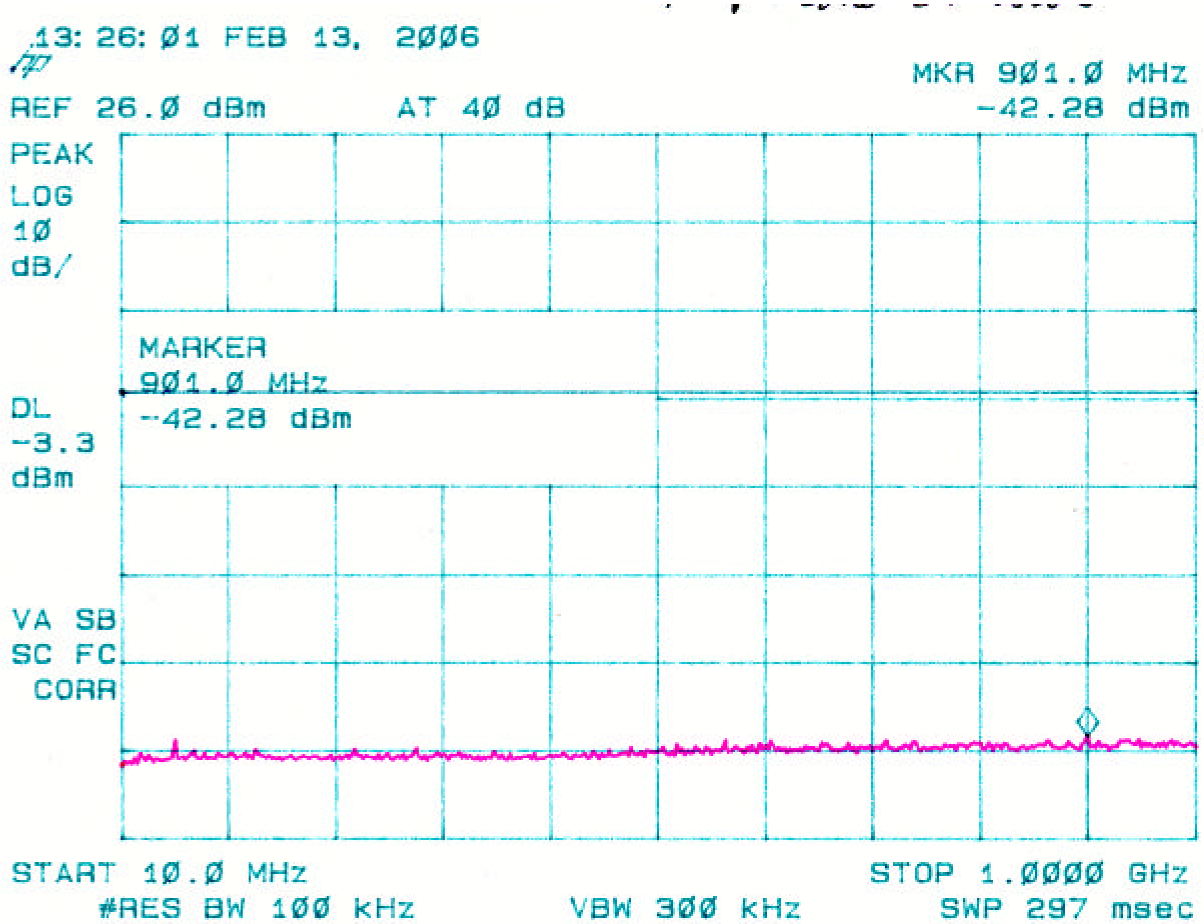
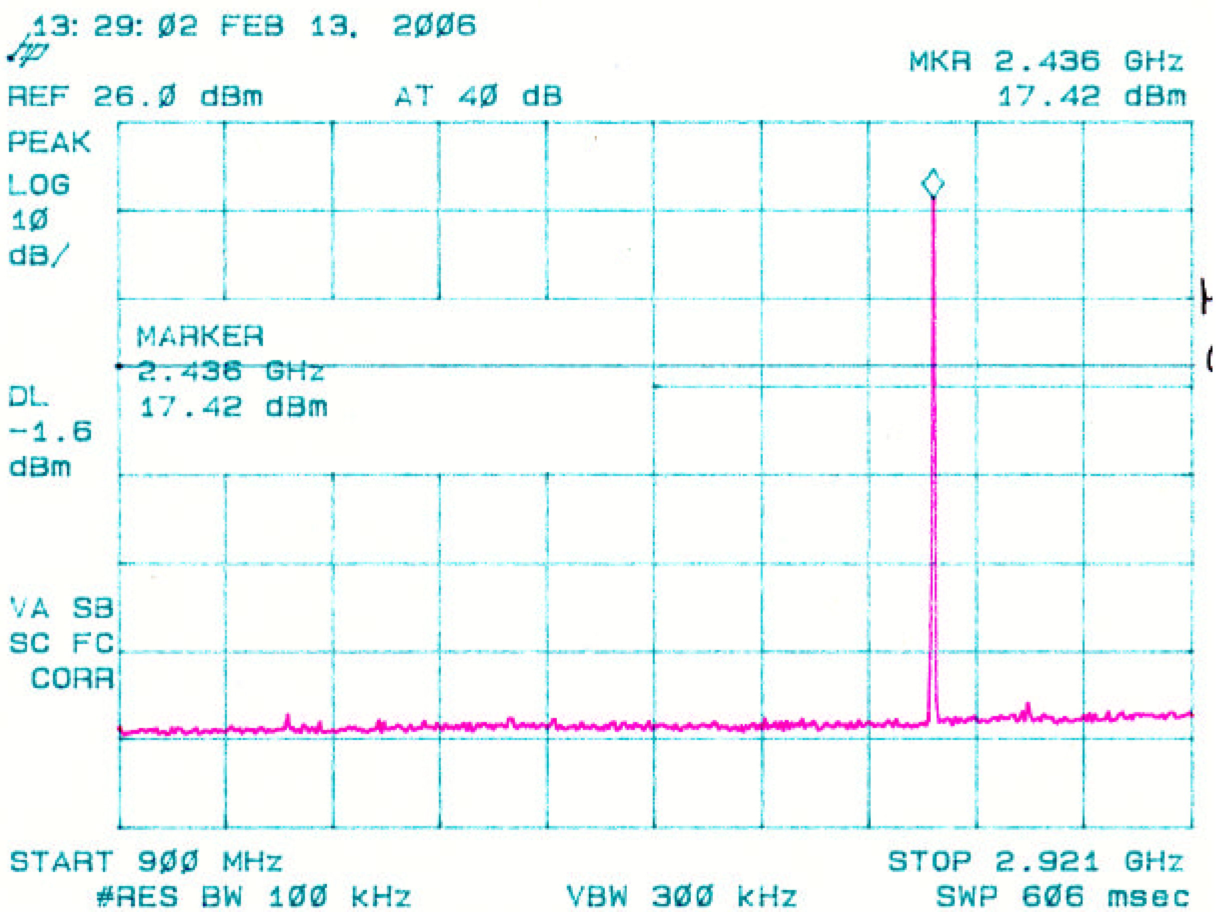


Figure 4f
Antenna Conducted Spurious Emissions 15.247(c) Mid



Note: Signal shown represents Fundamental Frequency.

Figure 4g
Antenna Conducted Spurious Emissions 15.247(c) Mid

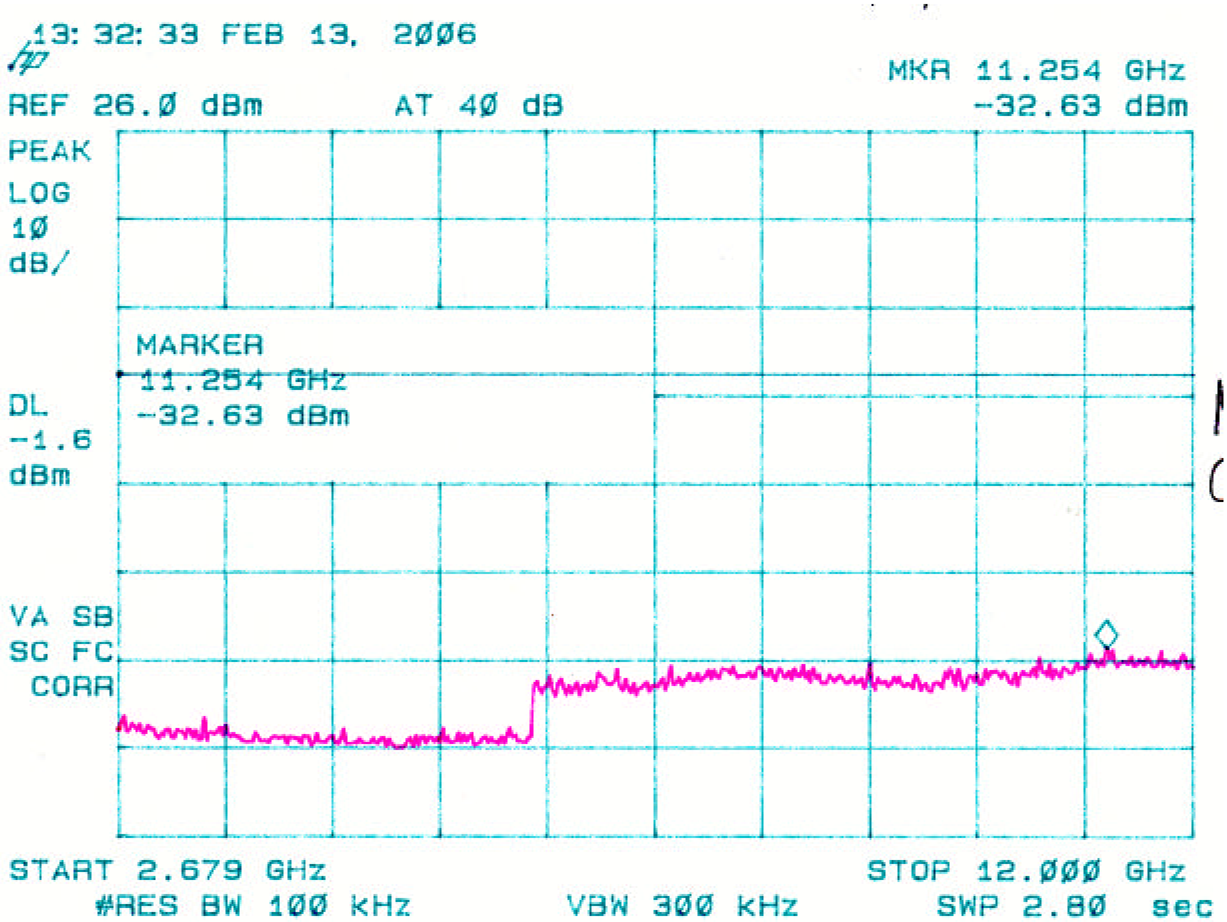


Figure 4h
Antenna Conducted Spurious Emissions 15.247(c) Mid