

# **Axient TX– Occupied BW Testing**

*FCC, IC, and ETSI Data – Plots for Elite*

## 1. Equipment List

Agilent E4407B Spectrum Analyzer (SIMCO calibration date: 4/14/11)

Boonton 8200 Modulation Analyzer (SIMCO calibration date: 1/18/11)

Audio Precision Portable One Audio Analyzer/Generator (SIMCO calibration date: 4/13/11)

Testing performed by Ryan Perkofski

Signature: 

## 2. ETSI Plots

### 2.1 Set Up

AXT100 Settings: Gain = 0dB

-8dB lim point = -51dBu

+12dB lim point = -31dBu (corresponds to -0dBV white noise using Minirator into the ETSI filter box)

AXT200 Settings: Gain = 0dB

-8dB lim point = -57dBu

+12dB lim point = -37dBu (corresponds to -6dBV white noise using Minirator into the ETSI filter box)

ETSI SPECTRAL BANDWIDTH MASK

### **3. FCC and IC Plots**

#### **3.1 Set Up**

AXT100 Settings: Gain = 0dB, AXT200 Settings: Gain = 0dB

FCC:

- test at mid-band frequency
- 2.5kHz at 50% + 16dB = -20dBu input
- 15kHz at 85% = -19dBu input

Canada (IC):

- test at mid-band frequency
- 2.5kHz at 85% = -14dBu input

FCC Part 74 Limits:

On any frequency removed from the operating frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth: at least 25 dB;

On any frequency removed from the operating frequency by more than 100 percent up to and including 250 percent of the authorized bandwidth: at least 35 dB;

On any frequency removed from the operating frequency by more than 250 percent of the authorized bandwidth: at least  $43 + 10 \log_{10}$  (mean output power in watts) dB.

IC RSS-123 Limits:

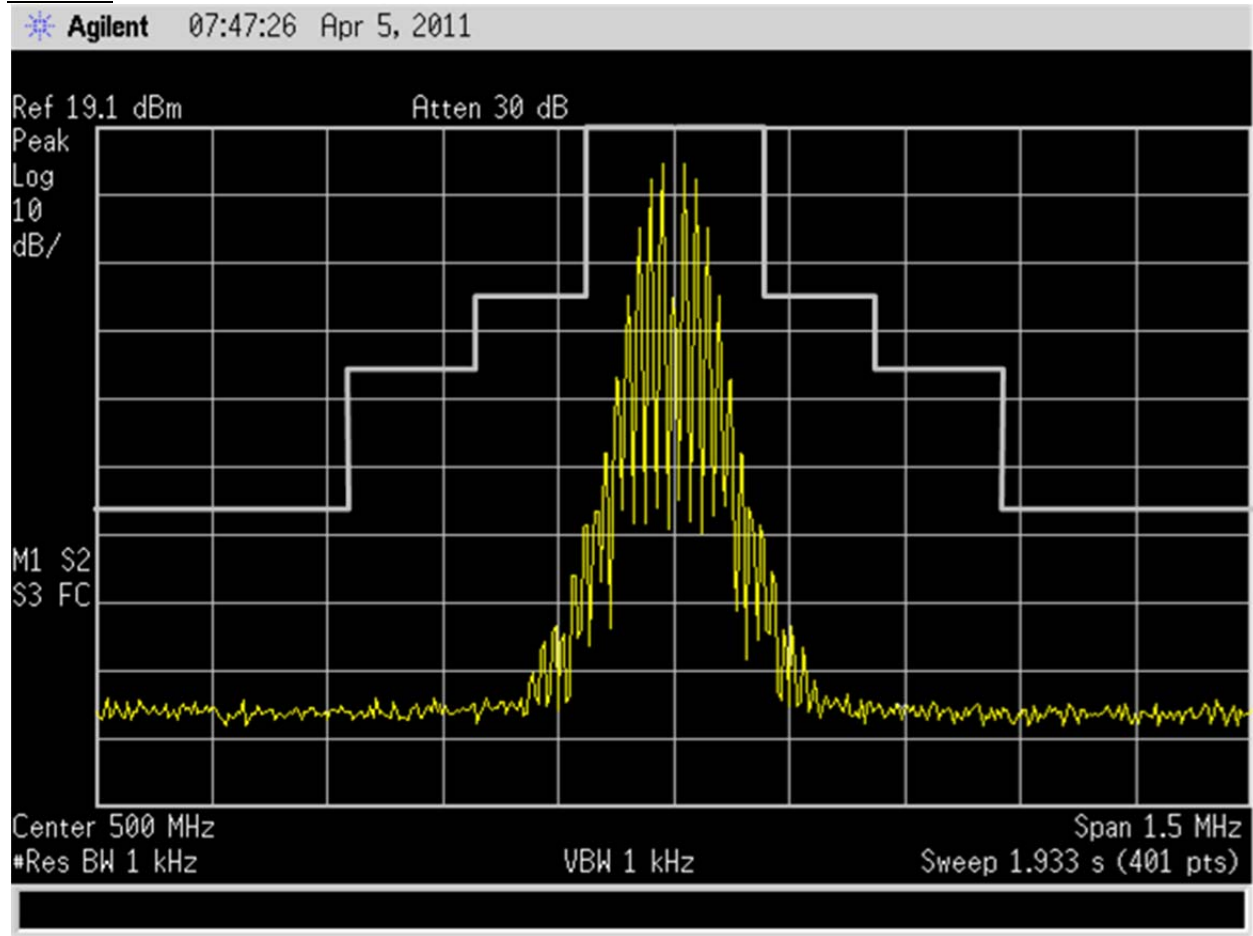
On any frequency removed from the carrier frequency by more than 50% up to and including 100% of the authorized bandwidth: at least 25 dB.

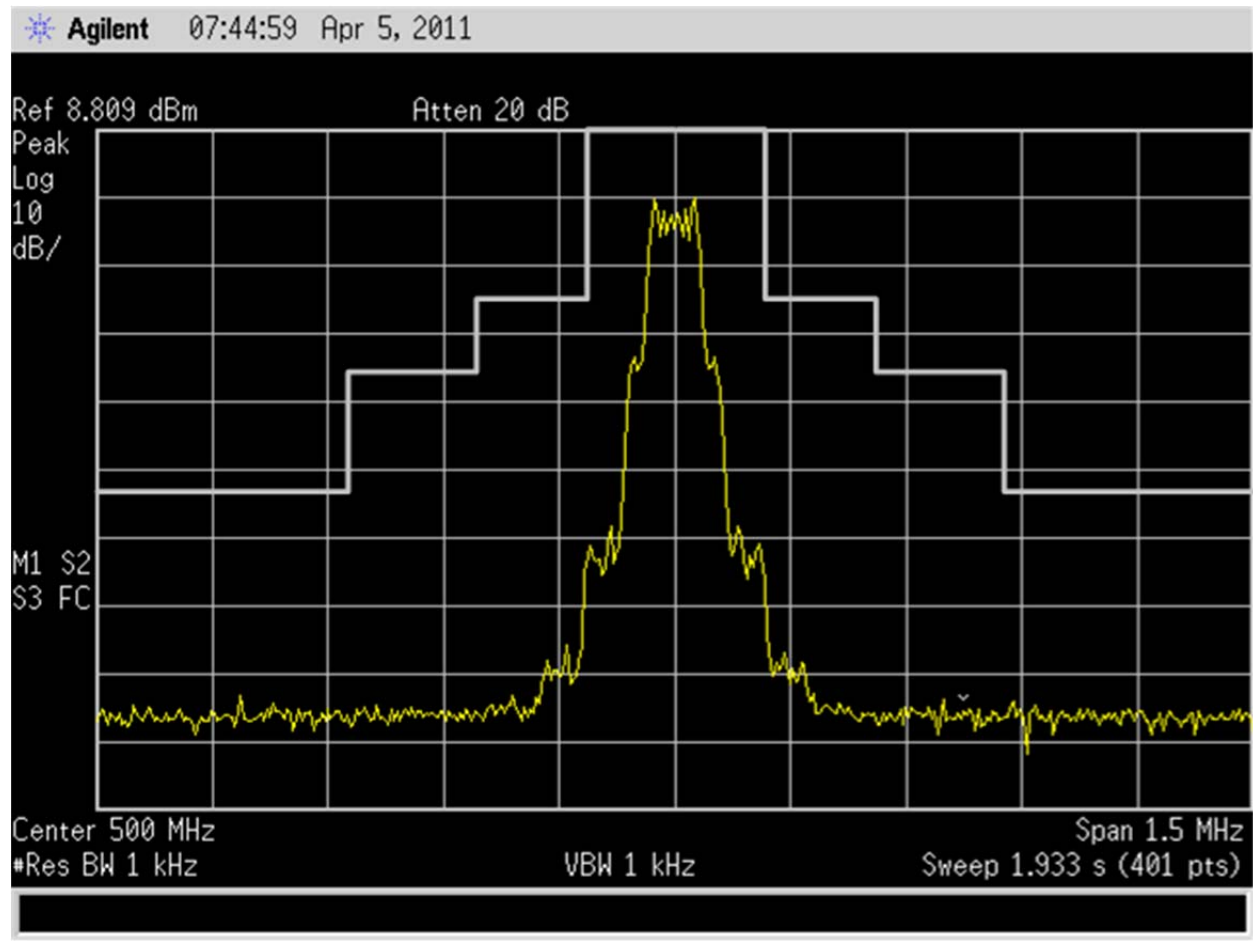
On any frequency removed from the carrier frequency by more than 100% up to and including 250% of the authorized bandwidth: at least 35 dB.

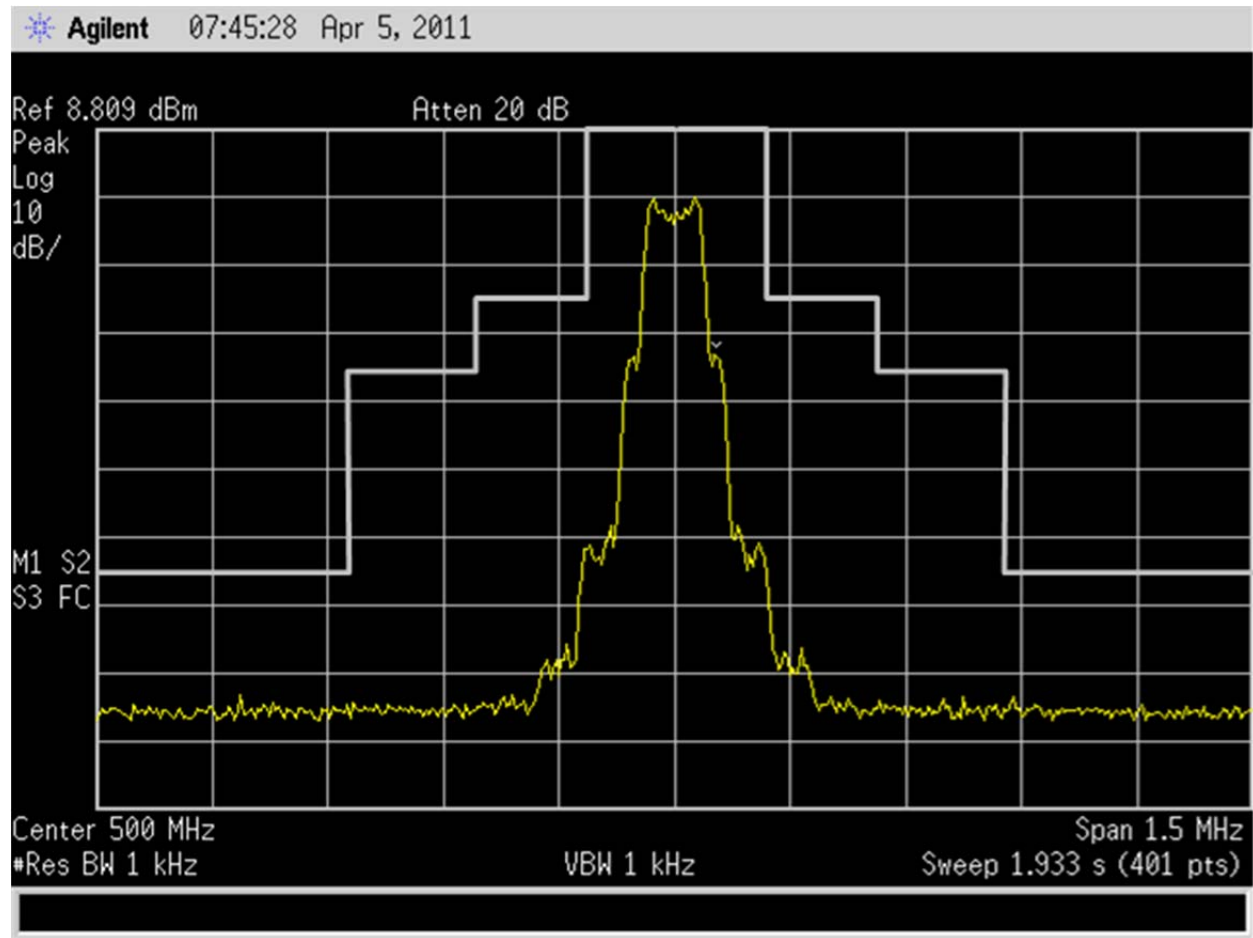
On any frequency removed from the carrier frequency by more than 250% of the authorized bandwidth: at least  $55 + 10 \log (P)$  dB

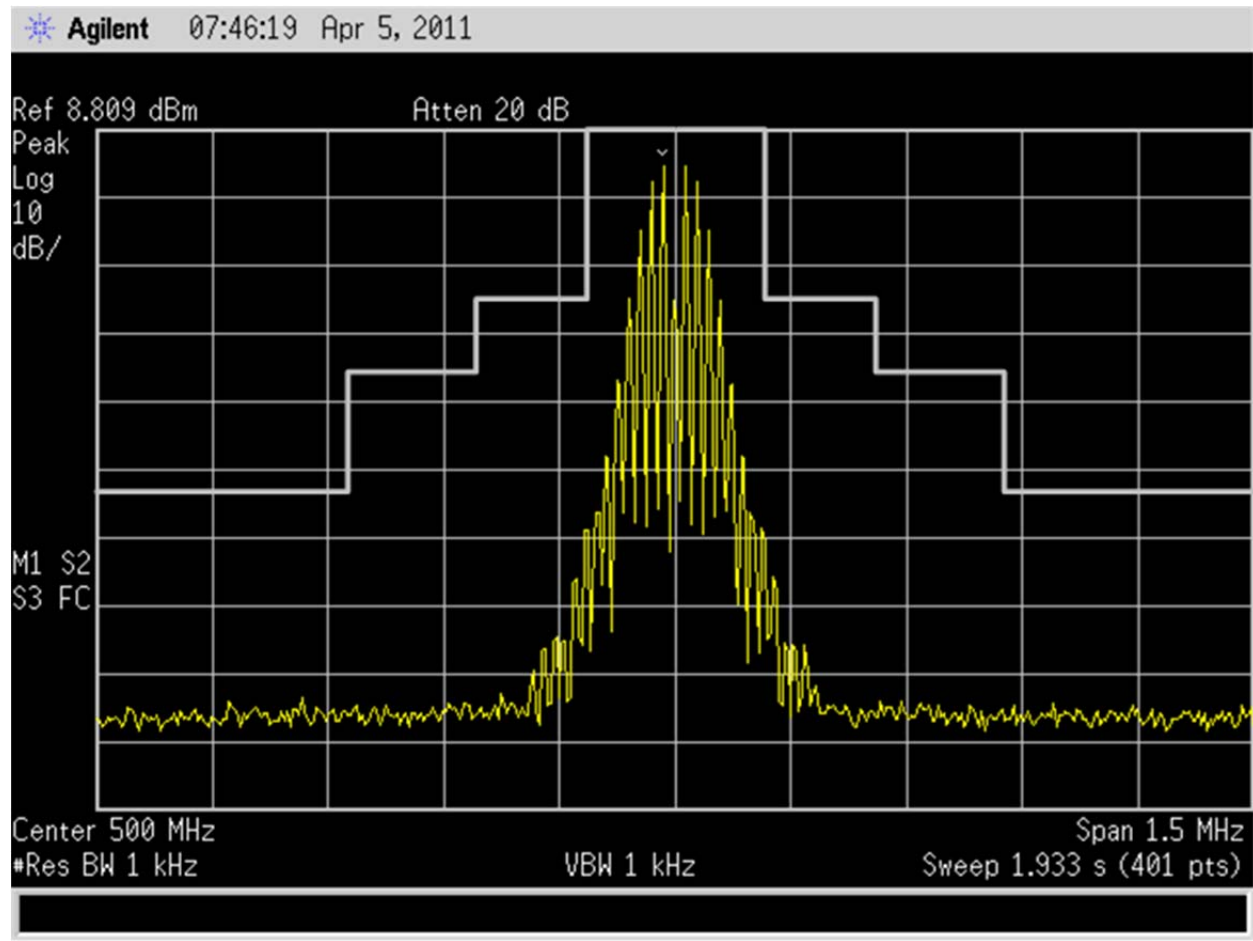
### 3.2 AXT100 Plots

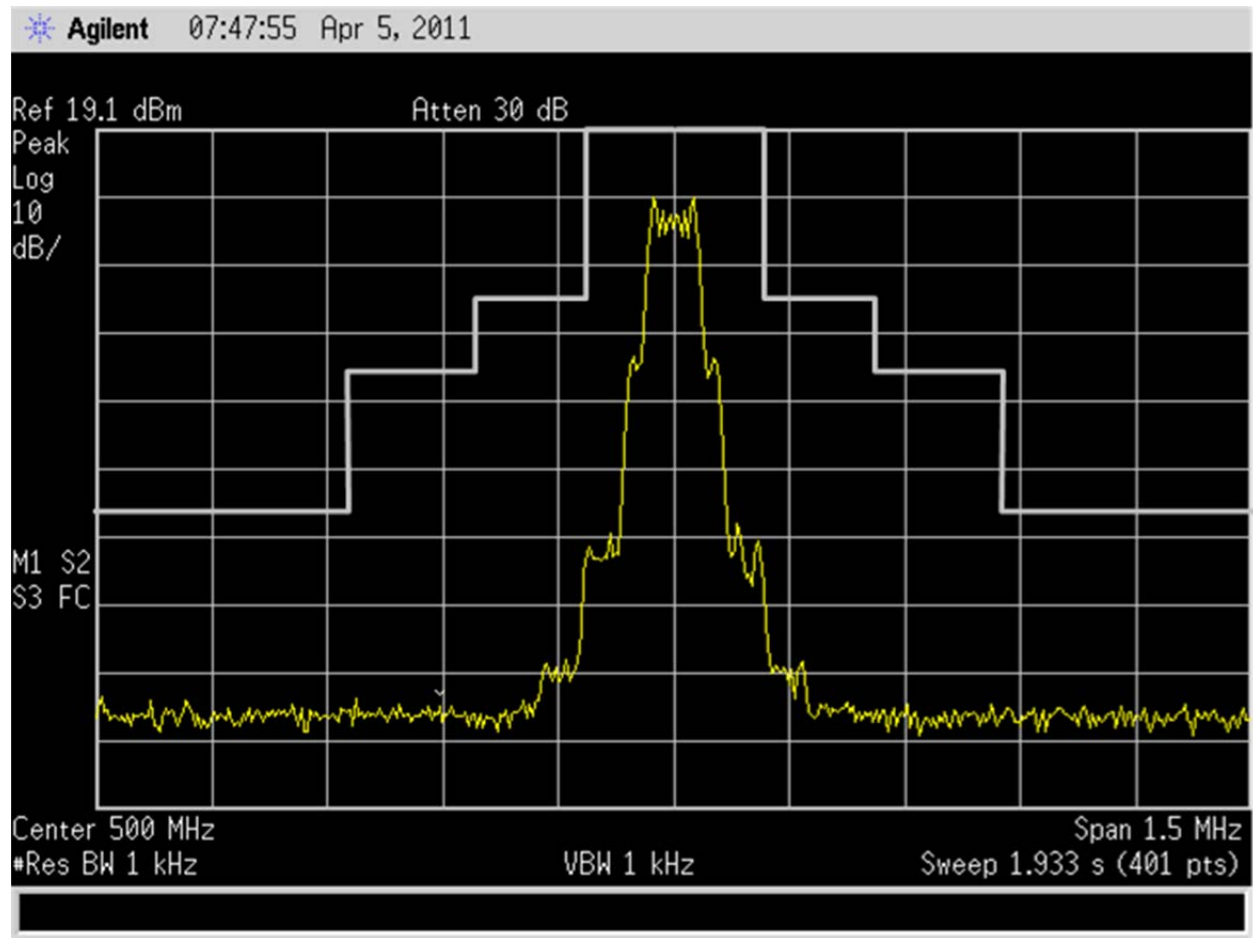
G1 Band



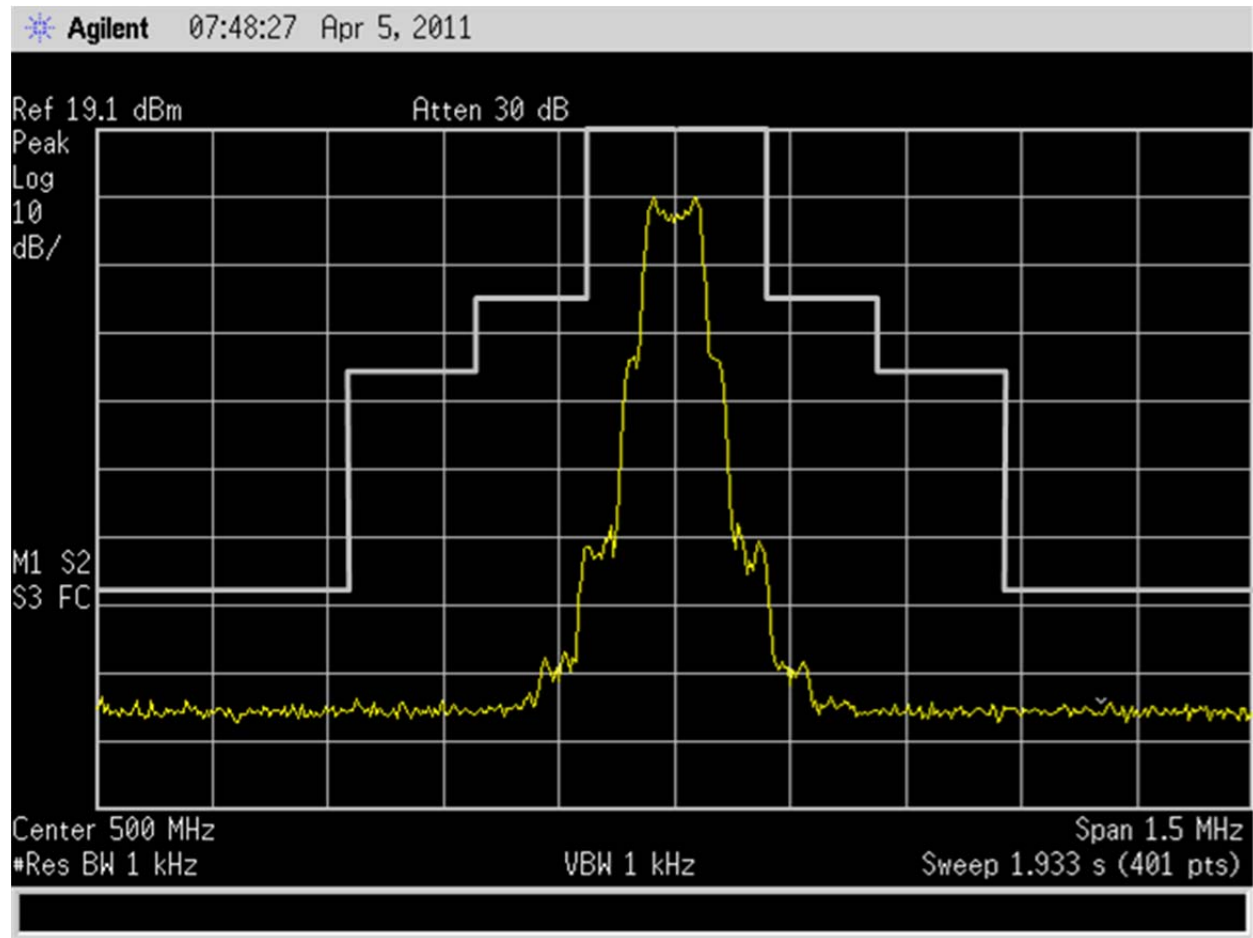




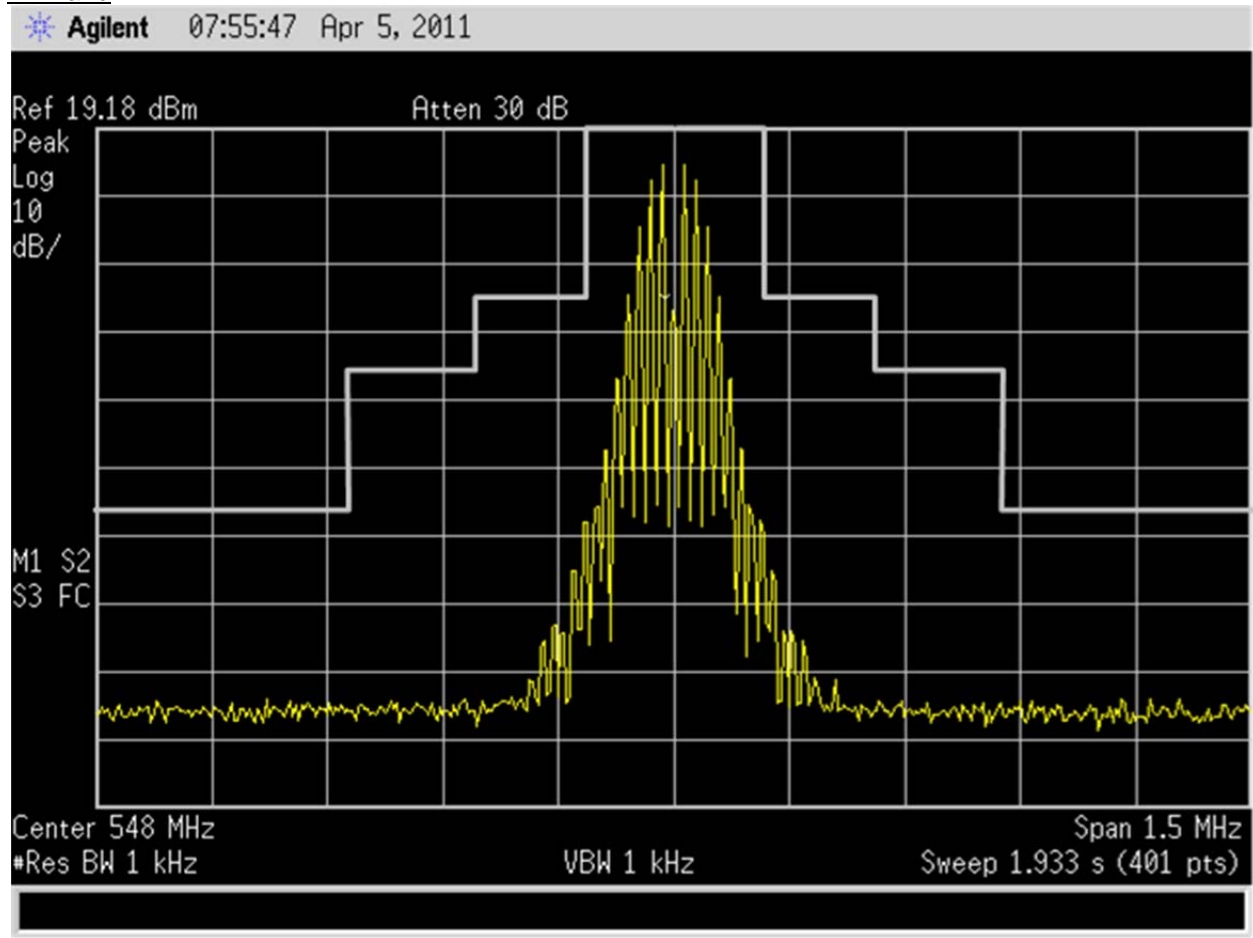


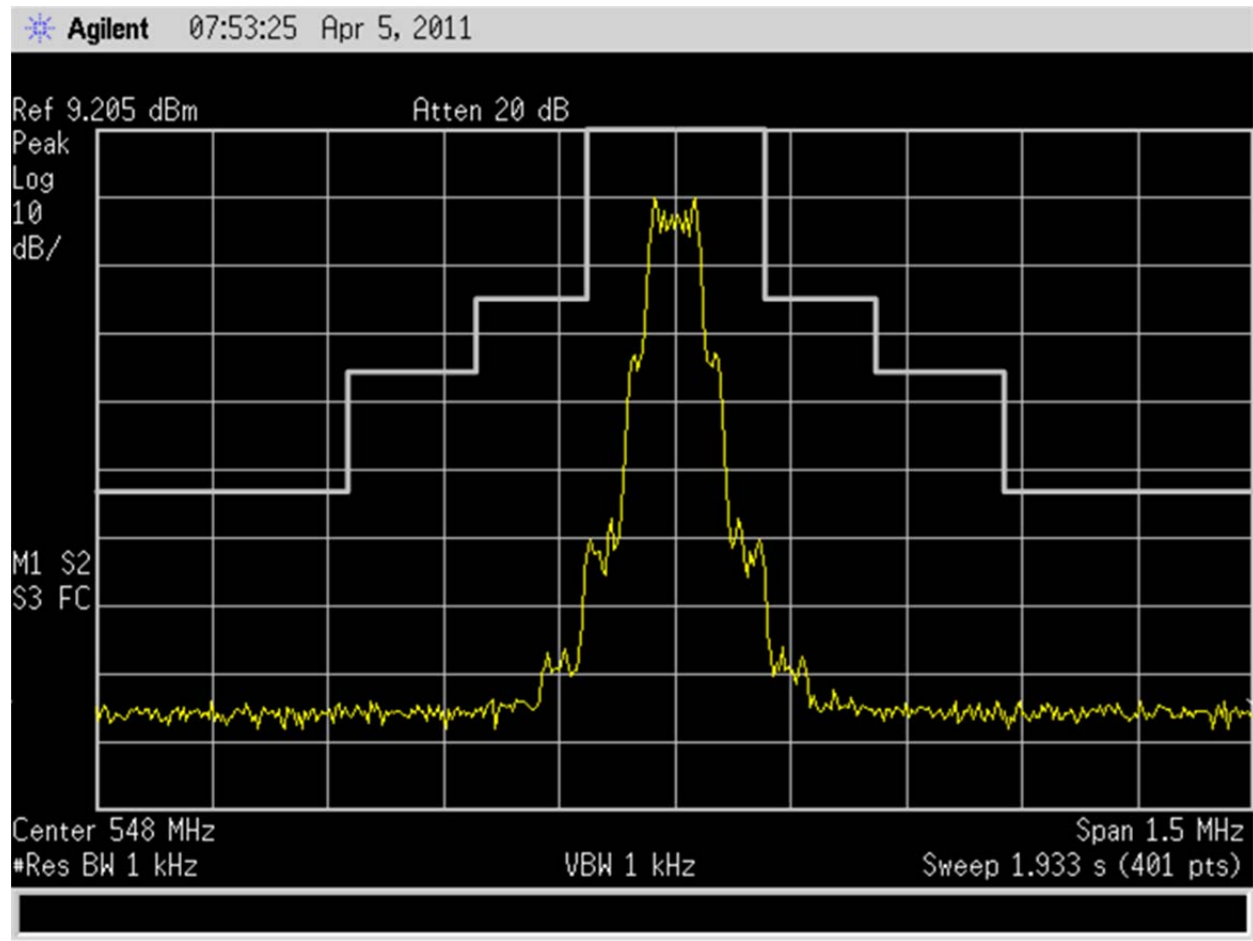


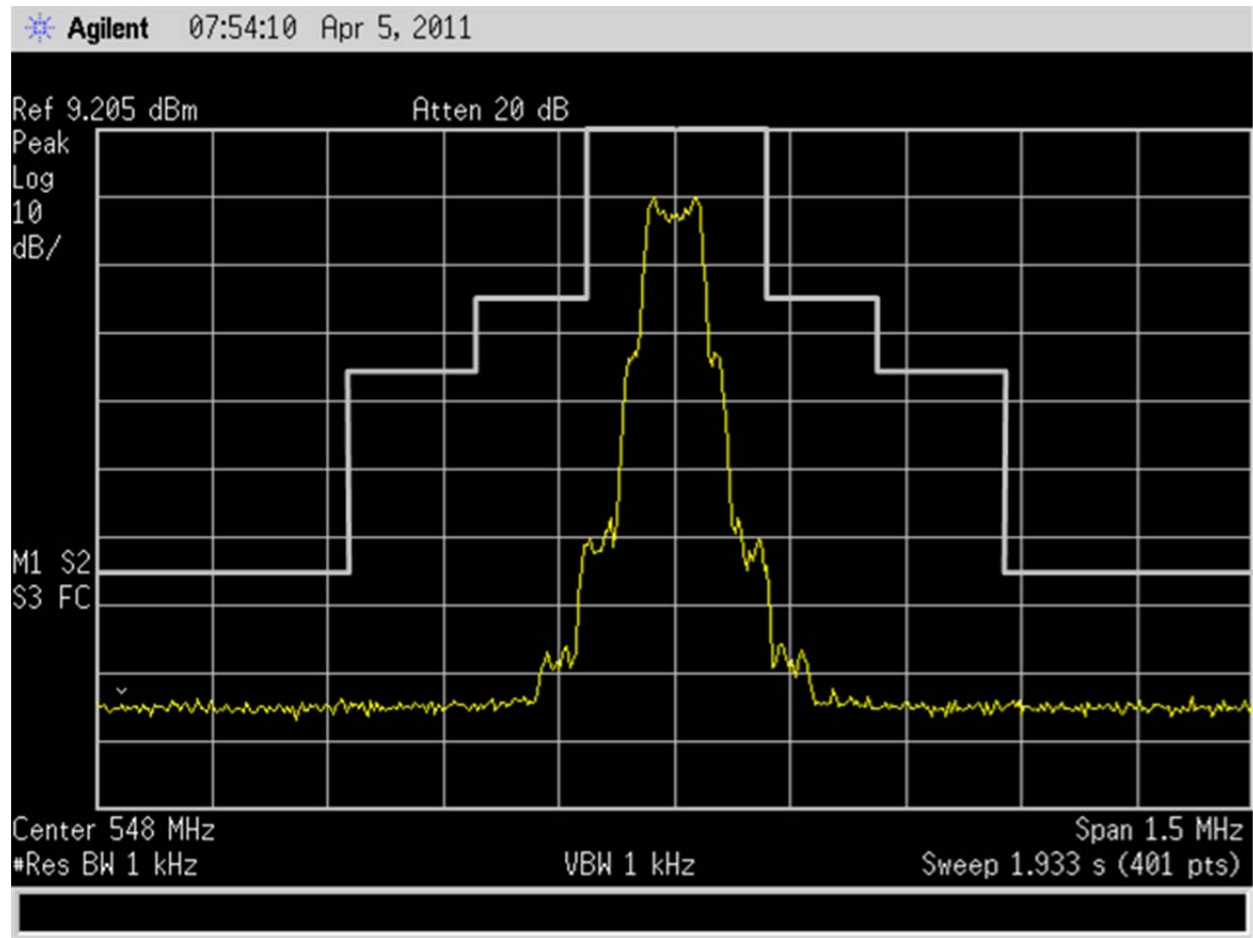


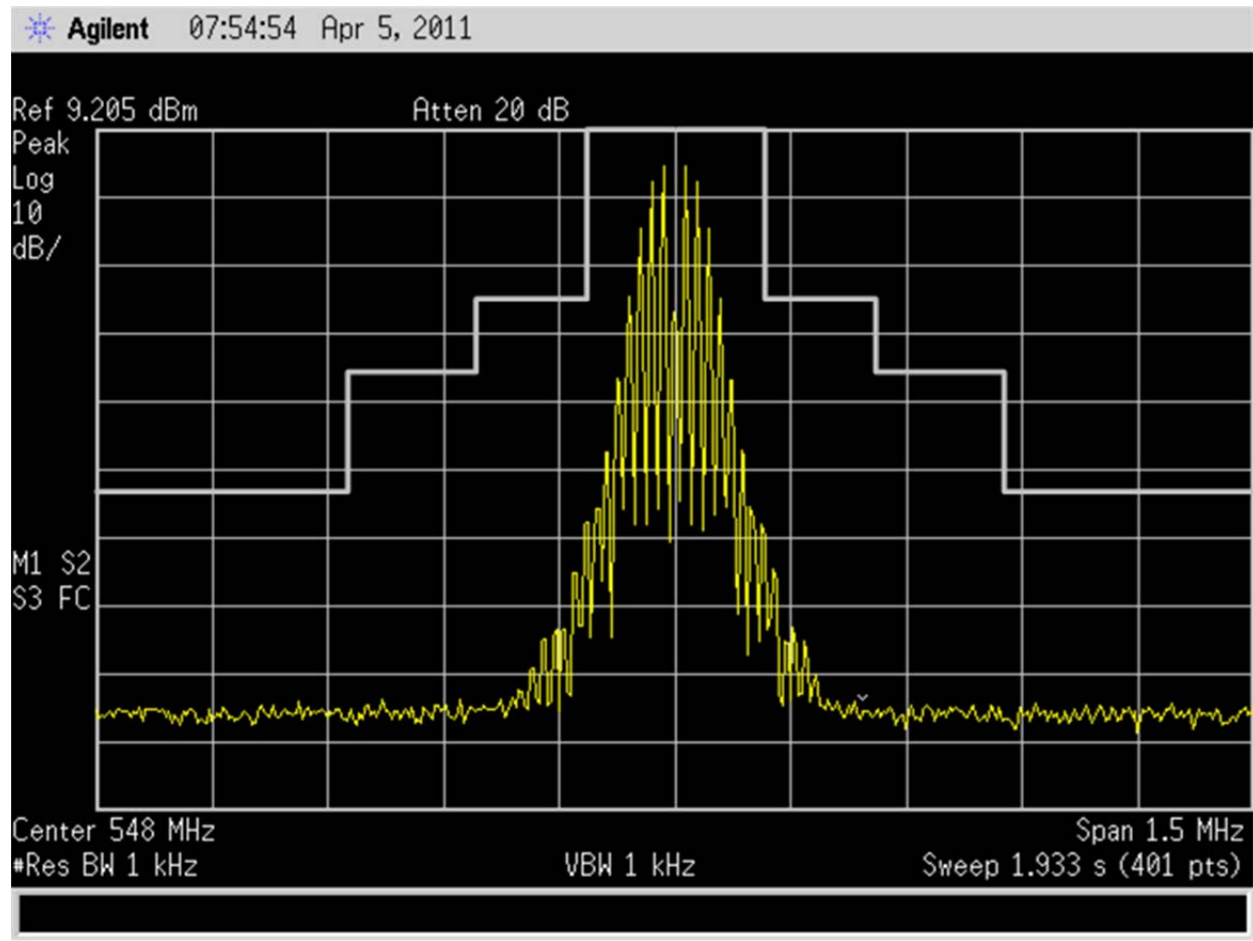


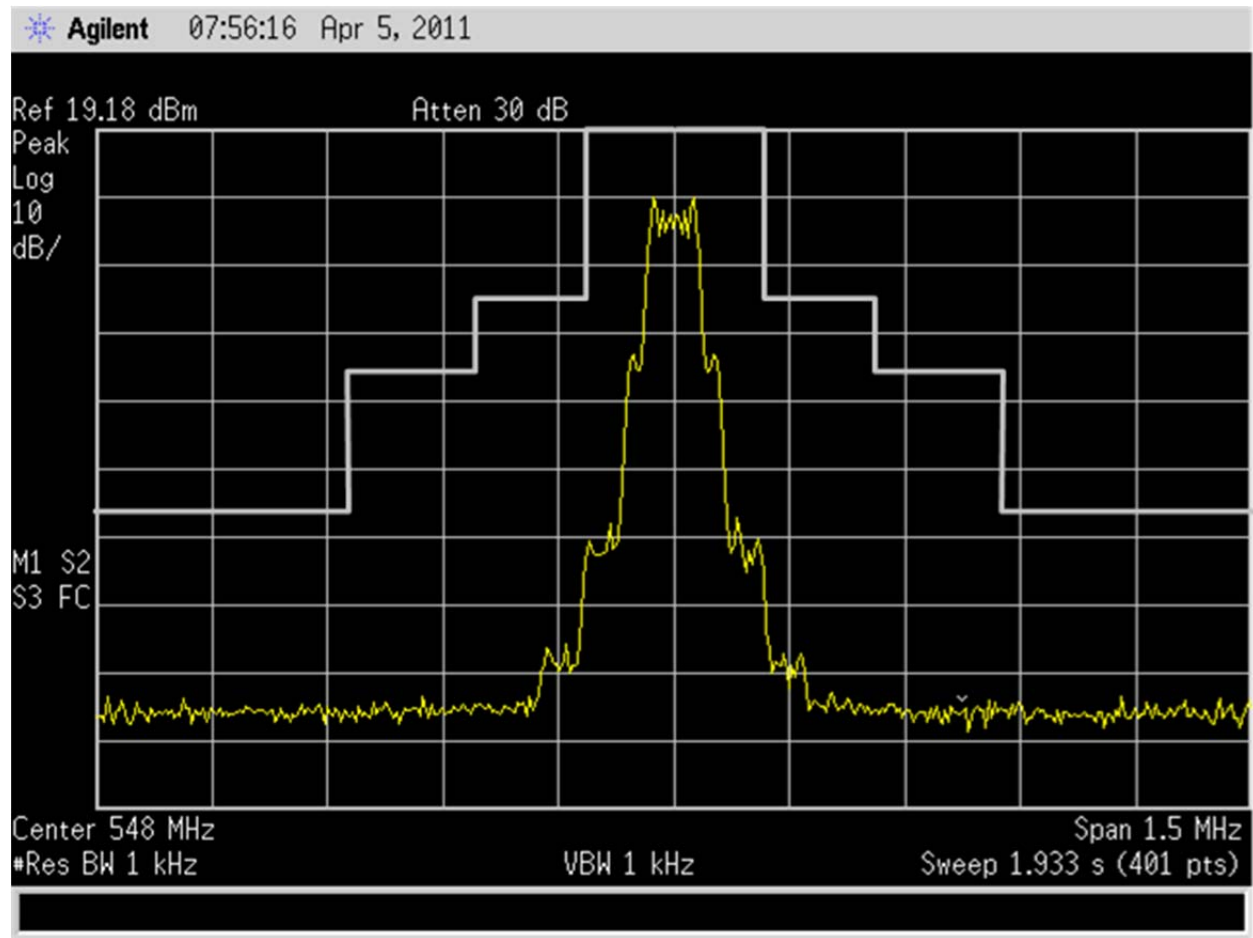
H4 Band

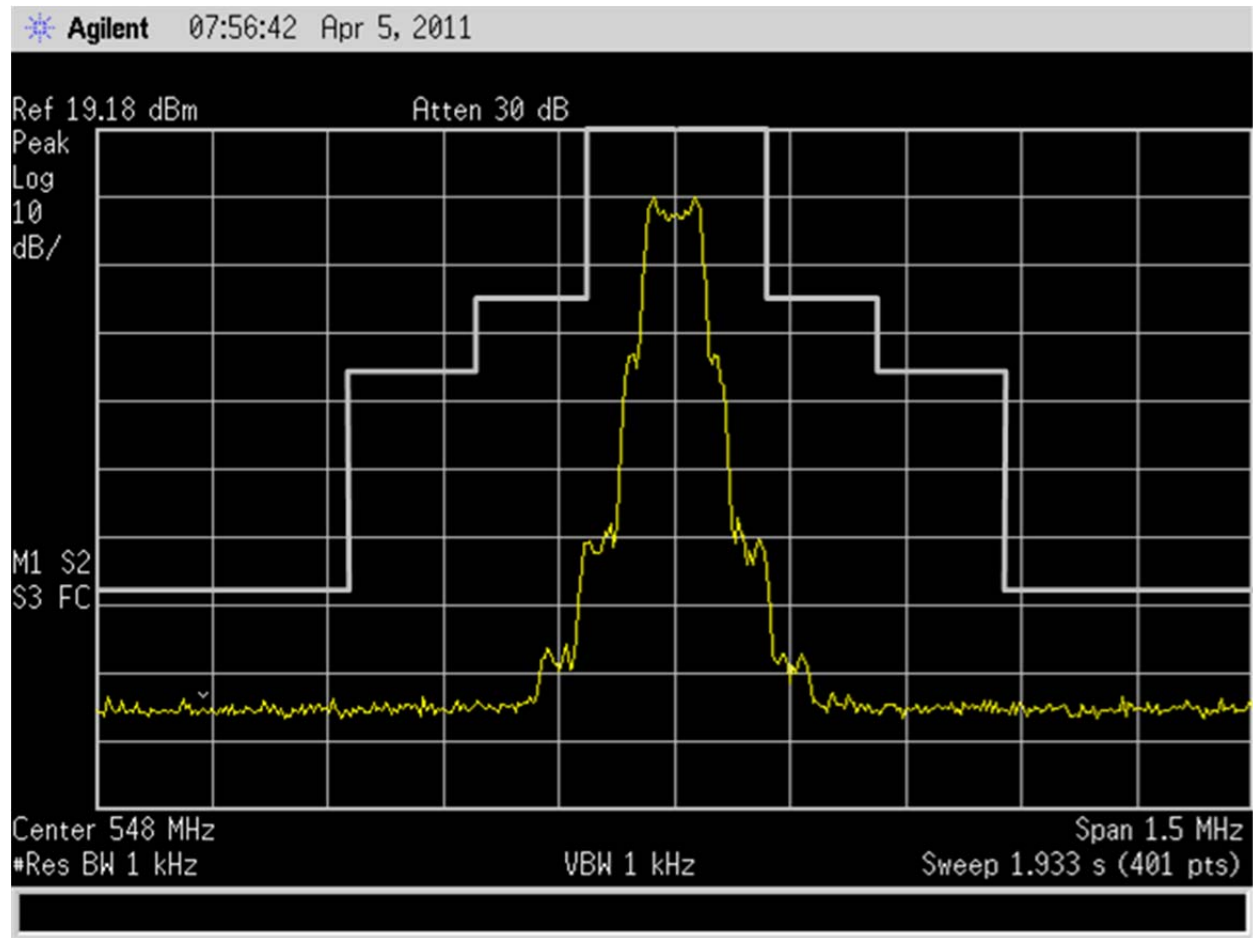




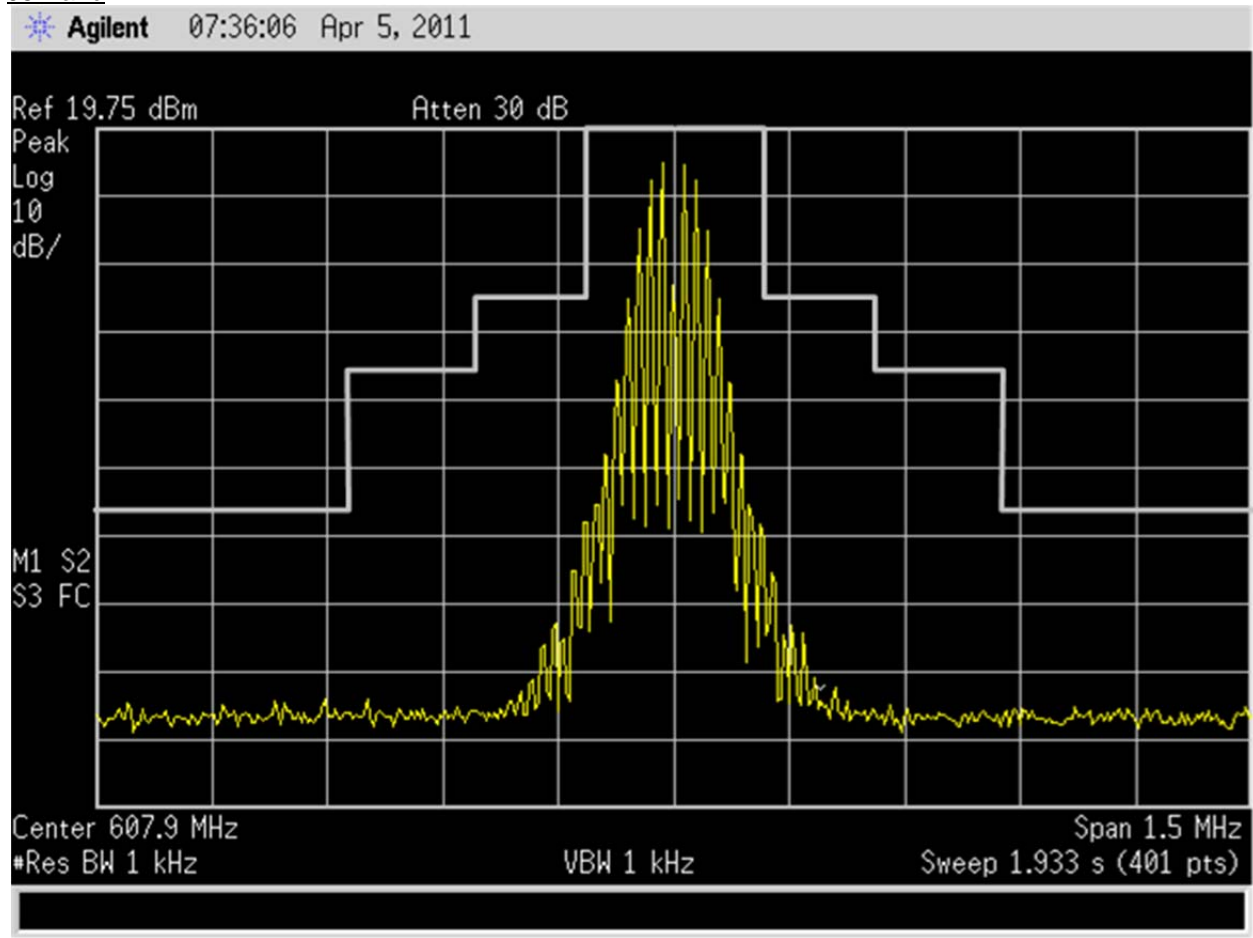




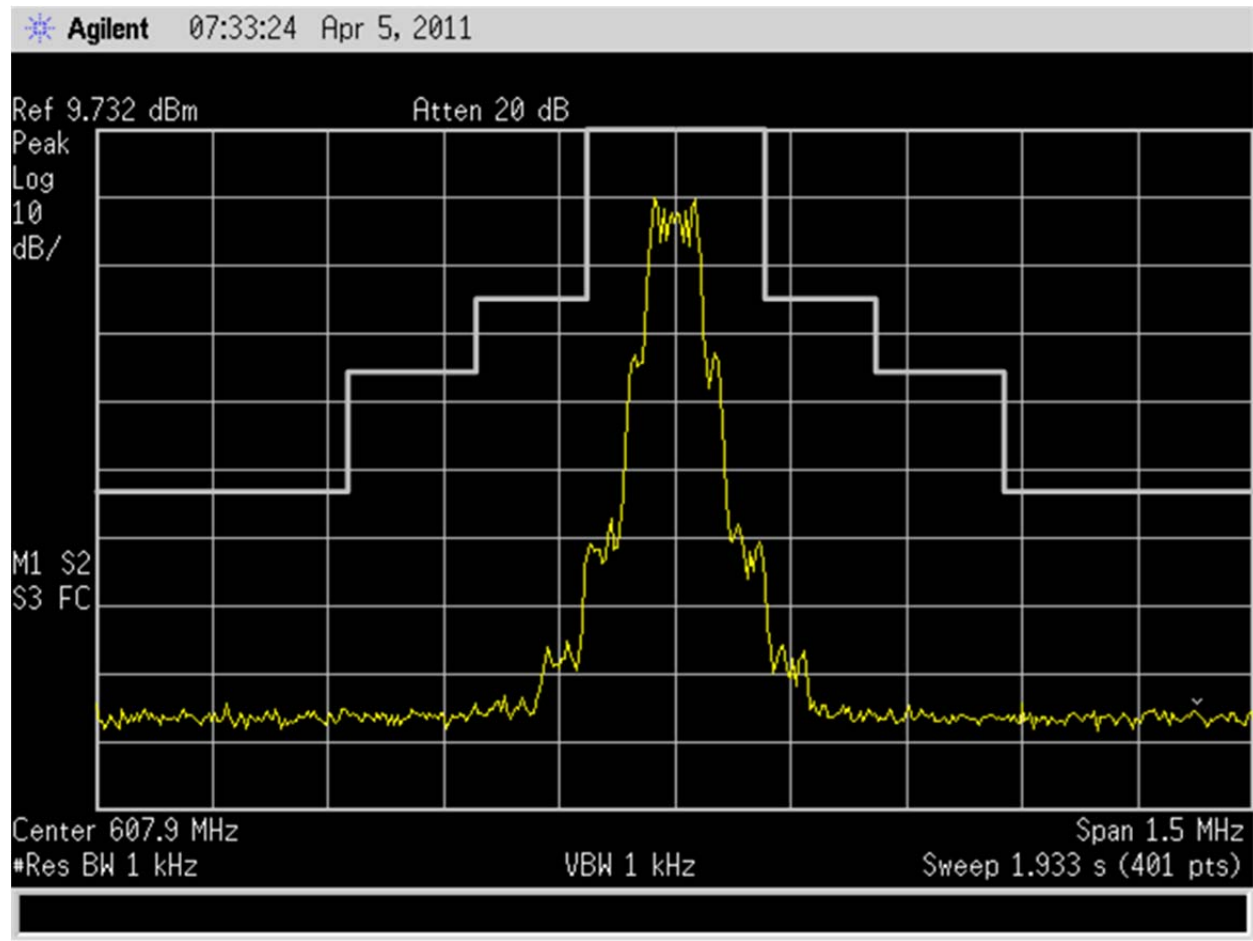


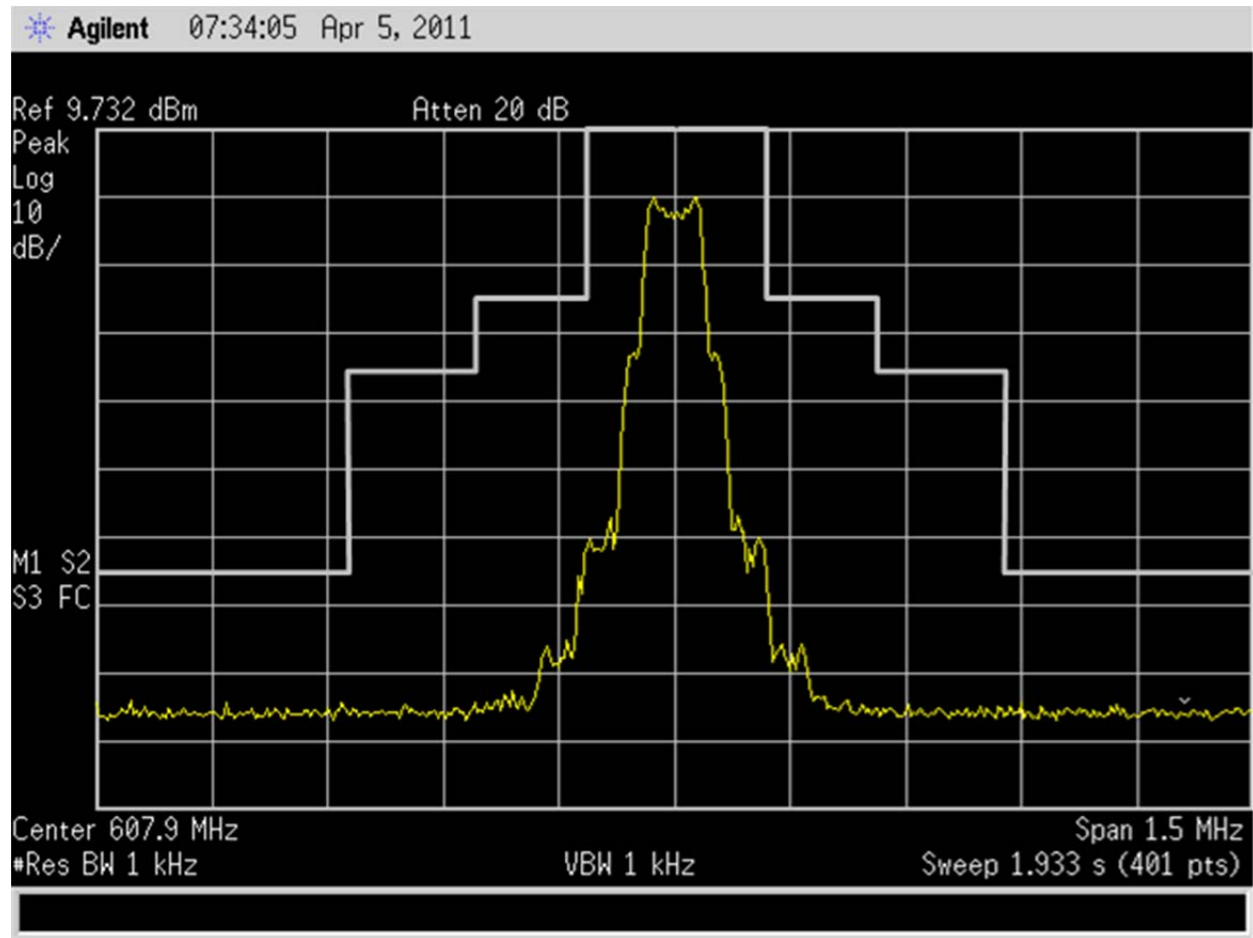


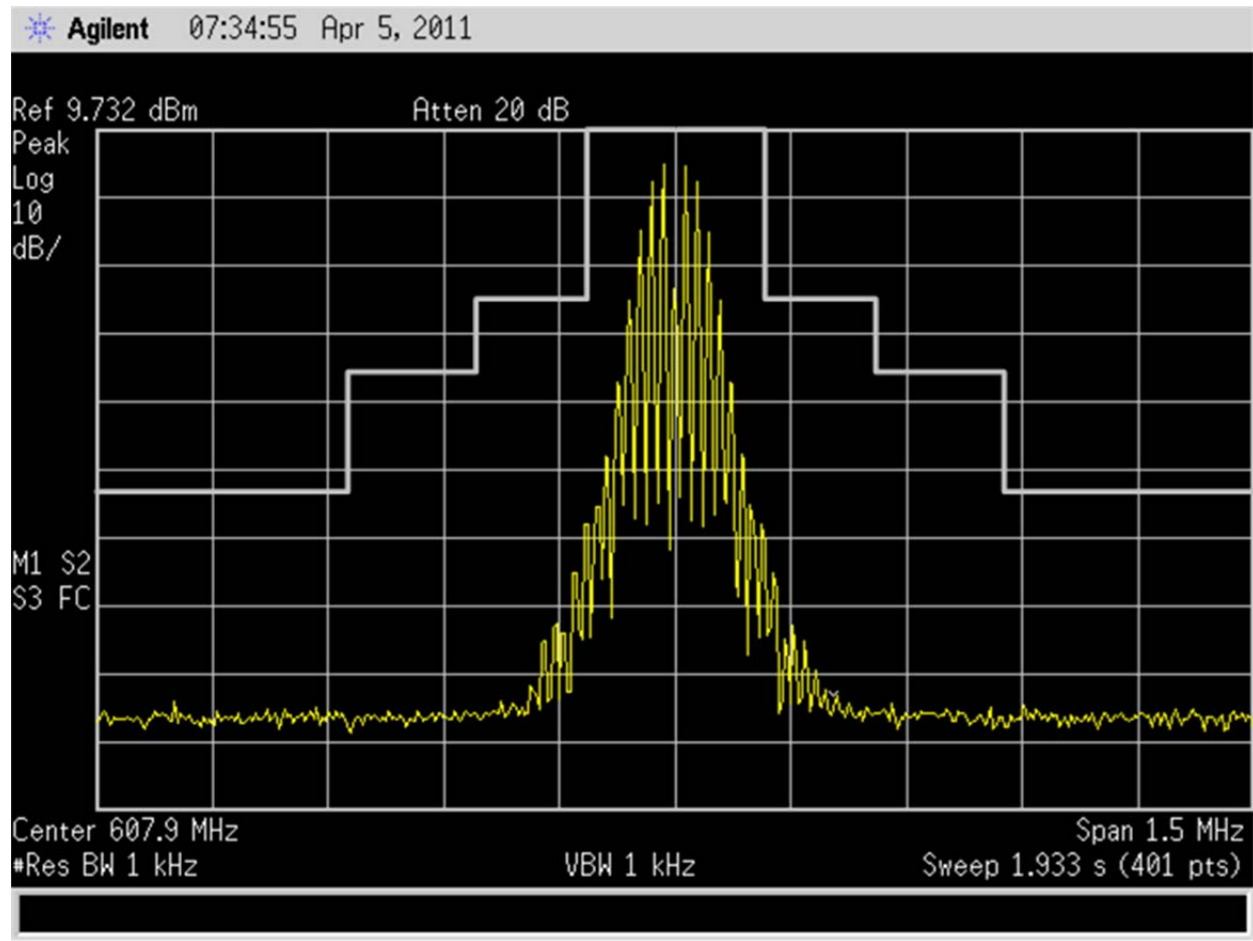
J5 Band

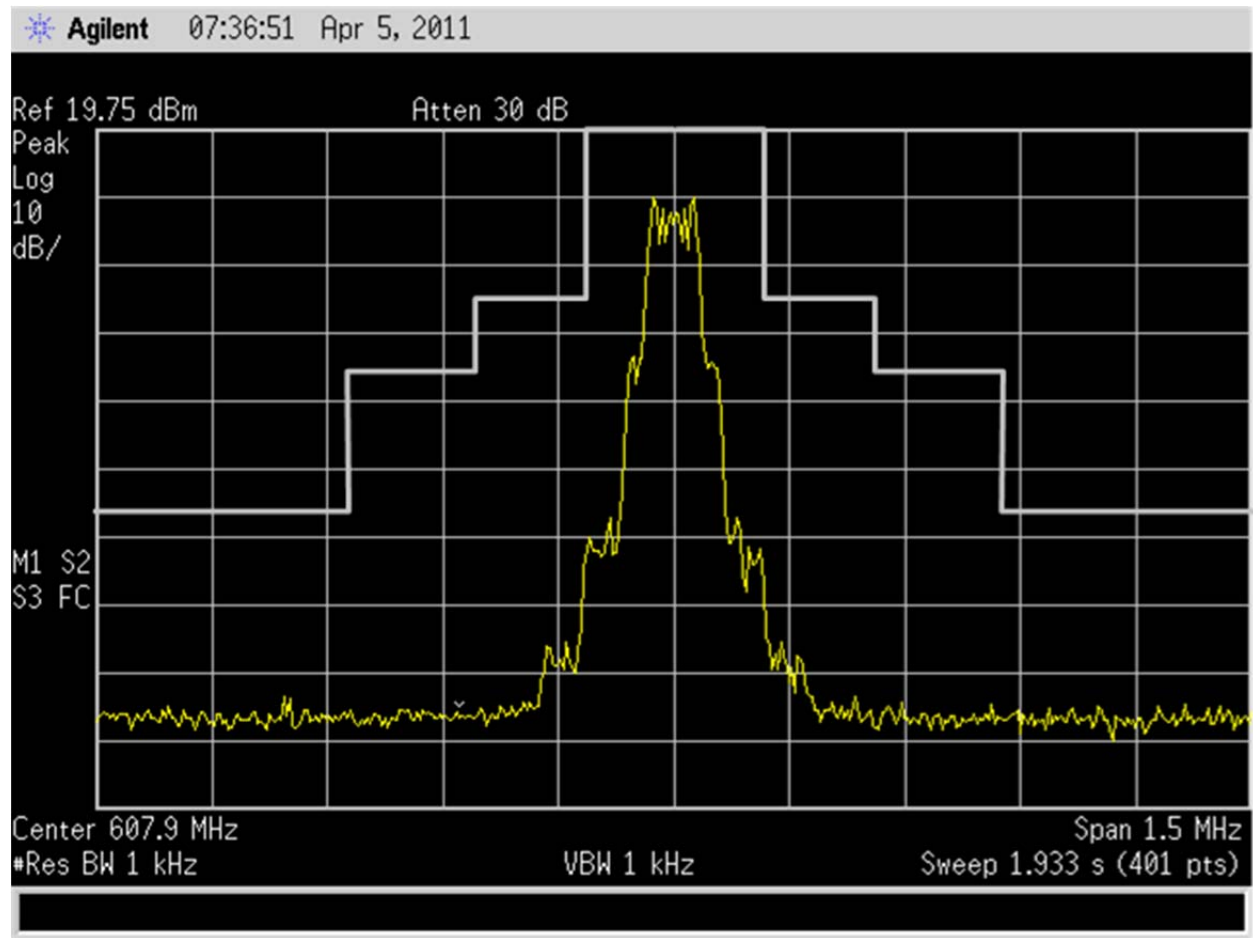


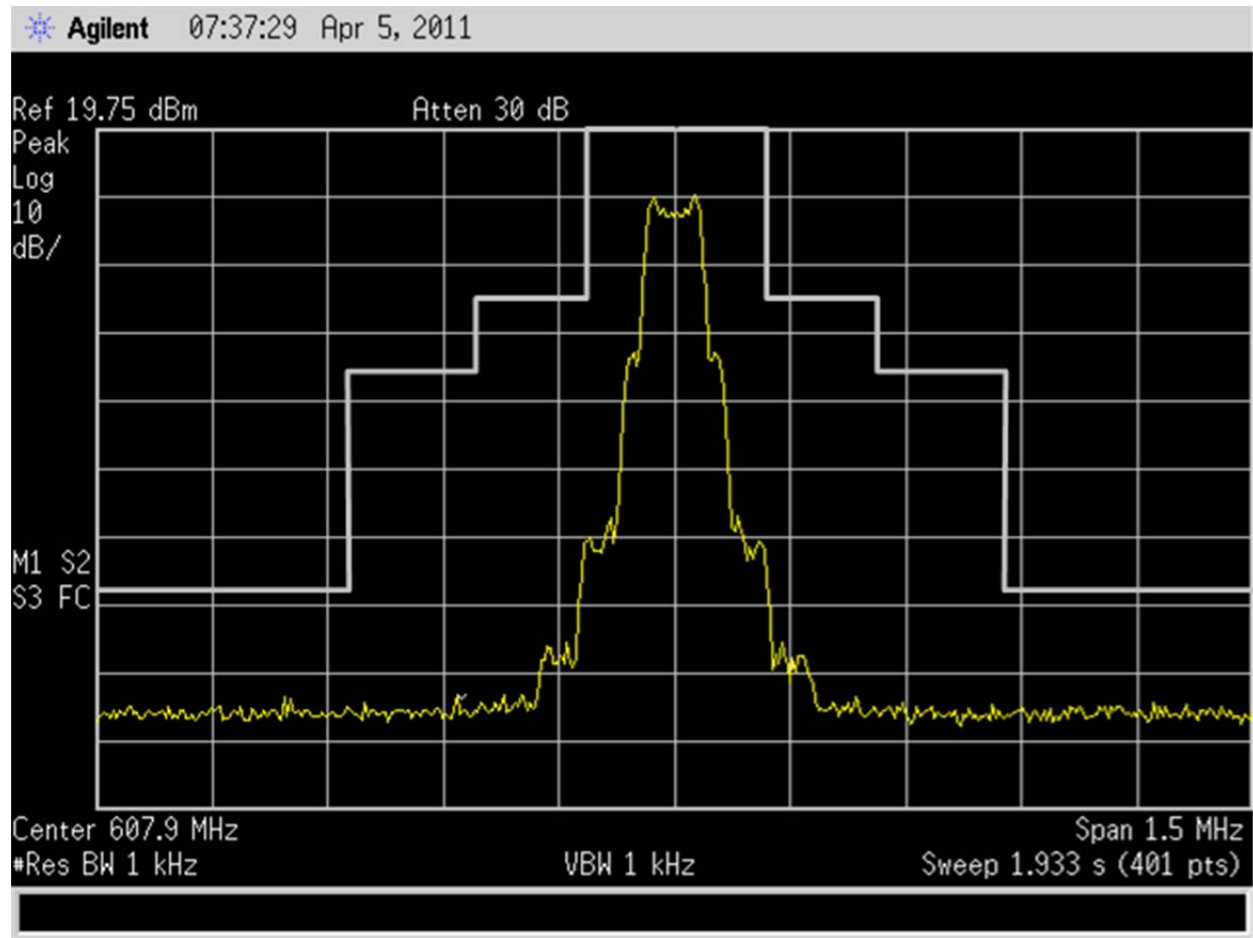




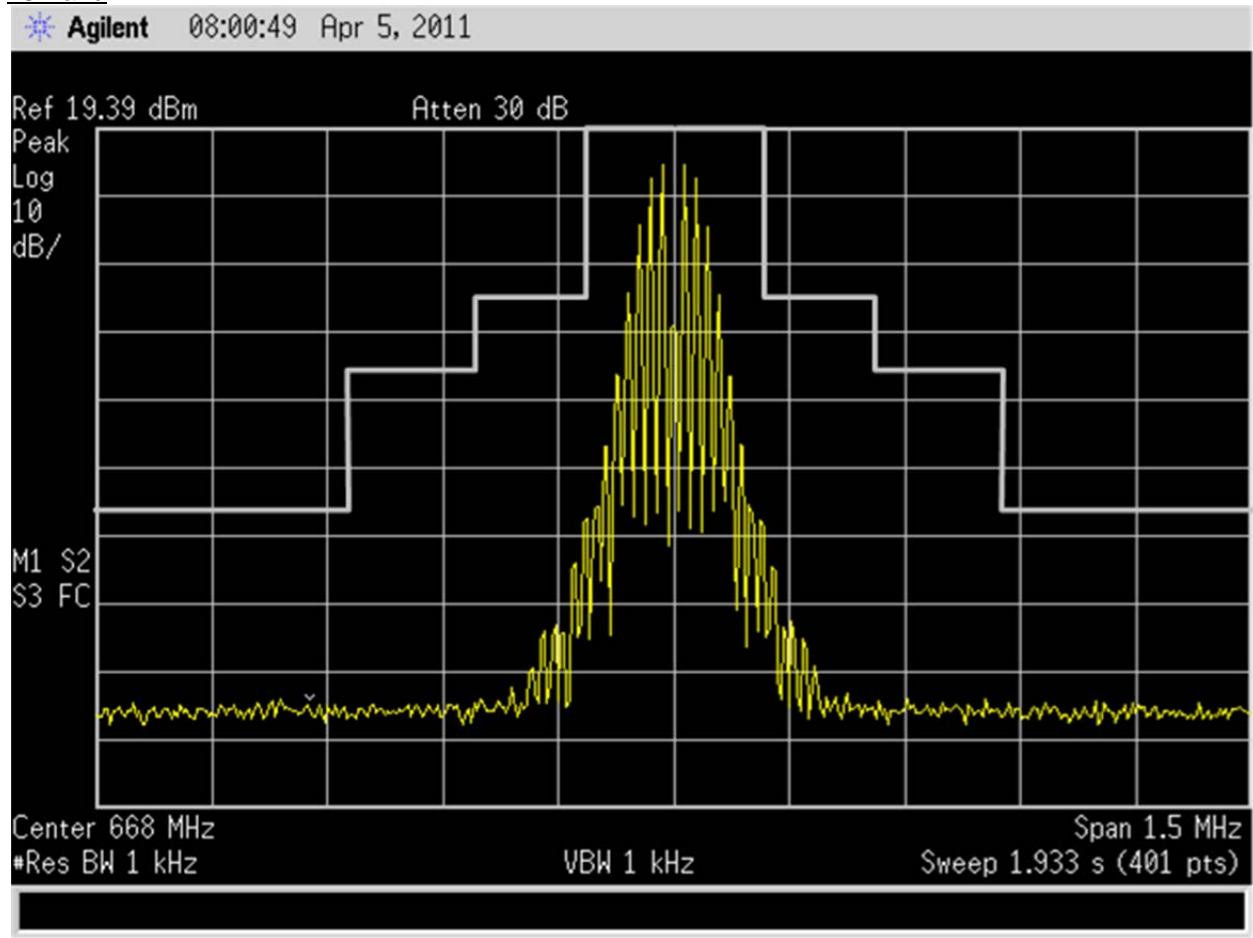


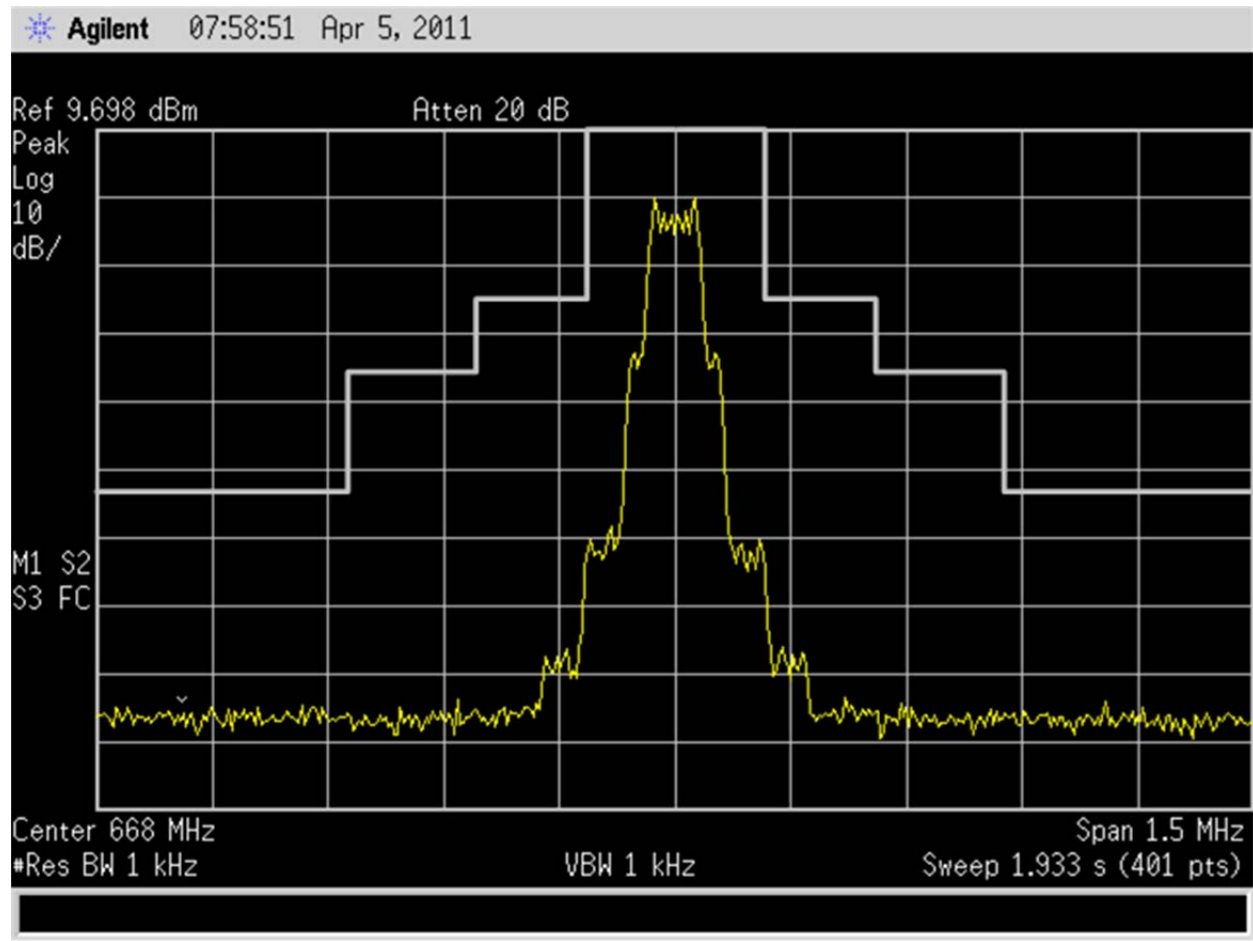


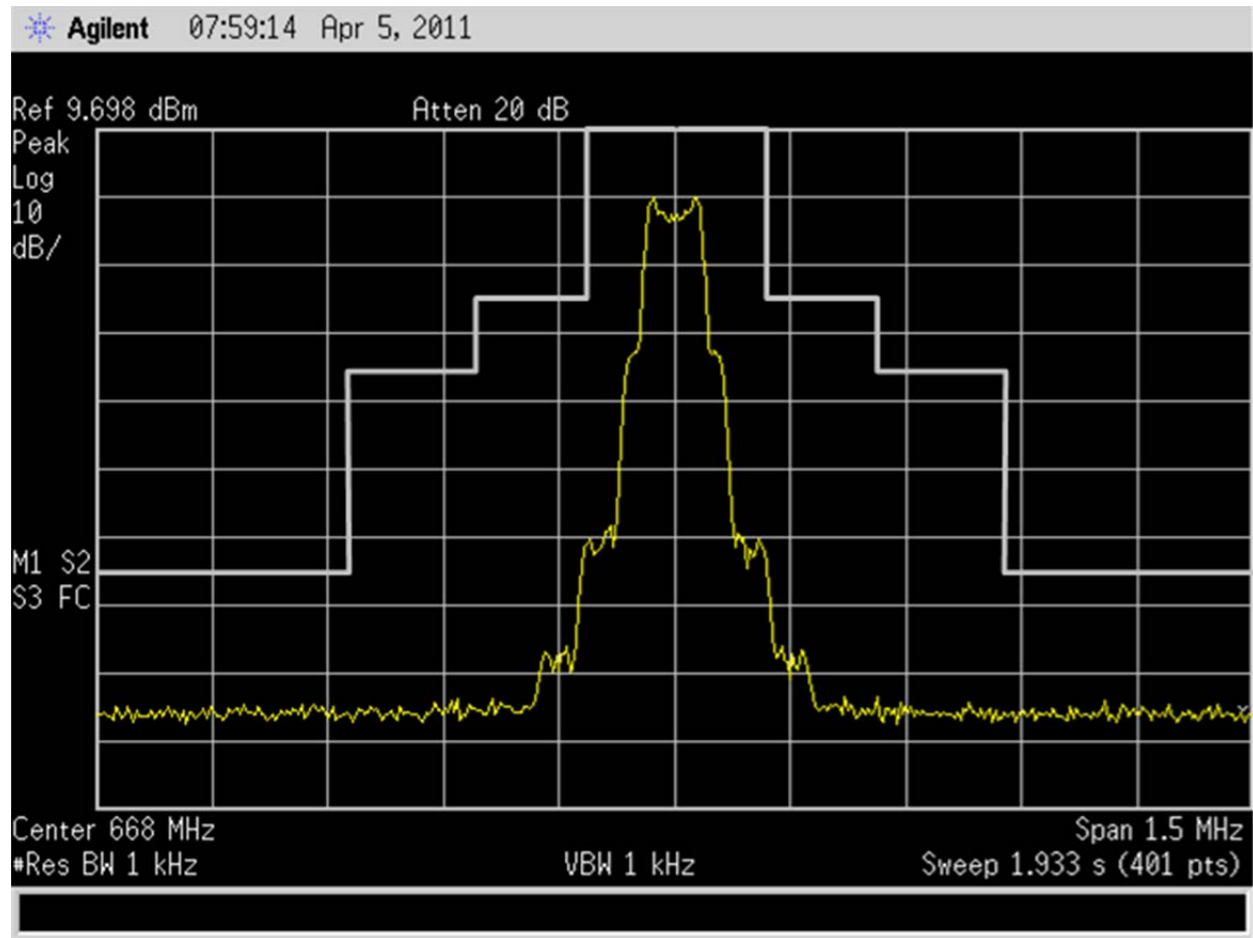




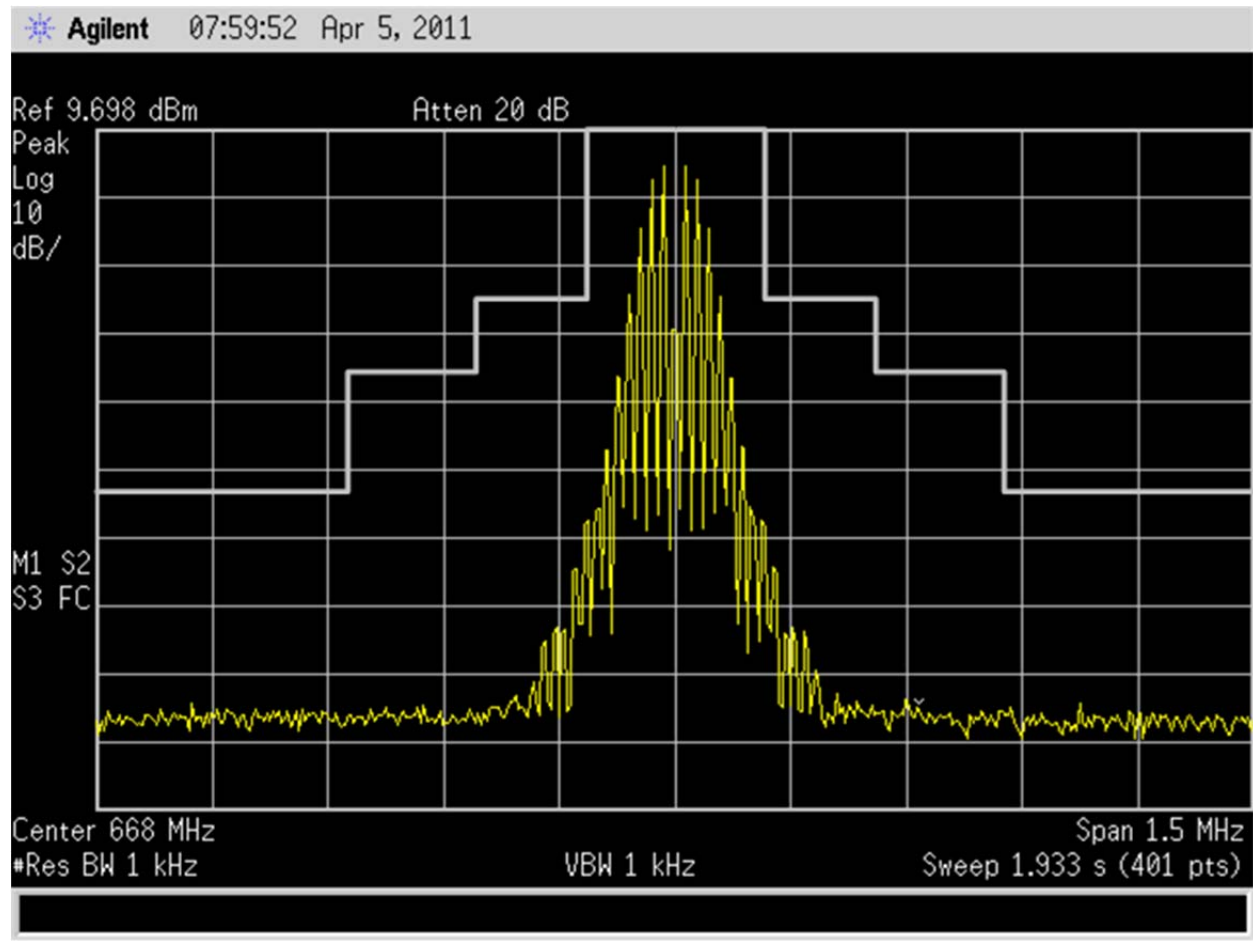
L3 Band

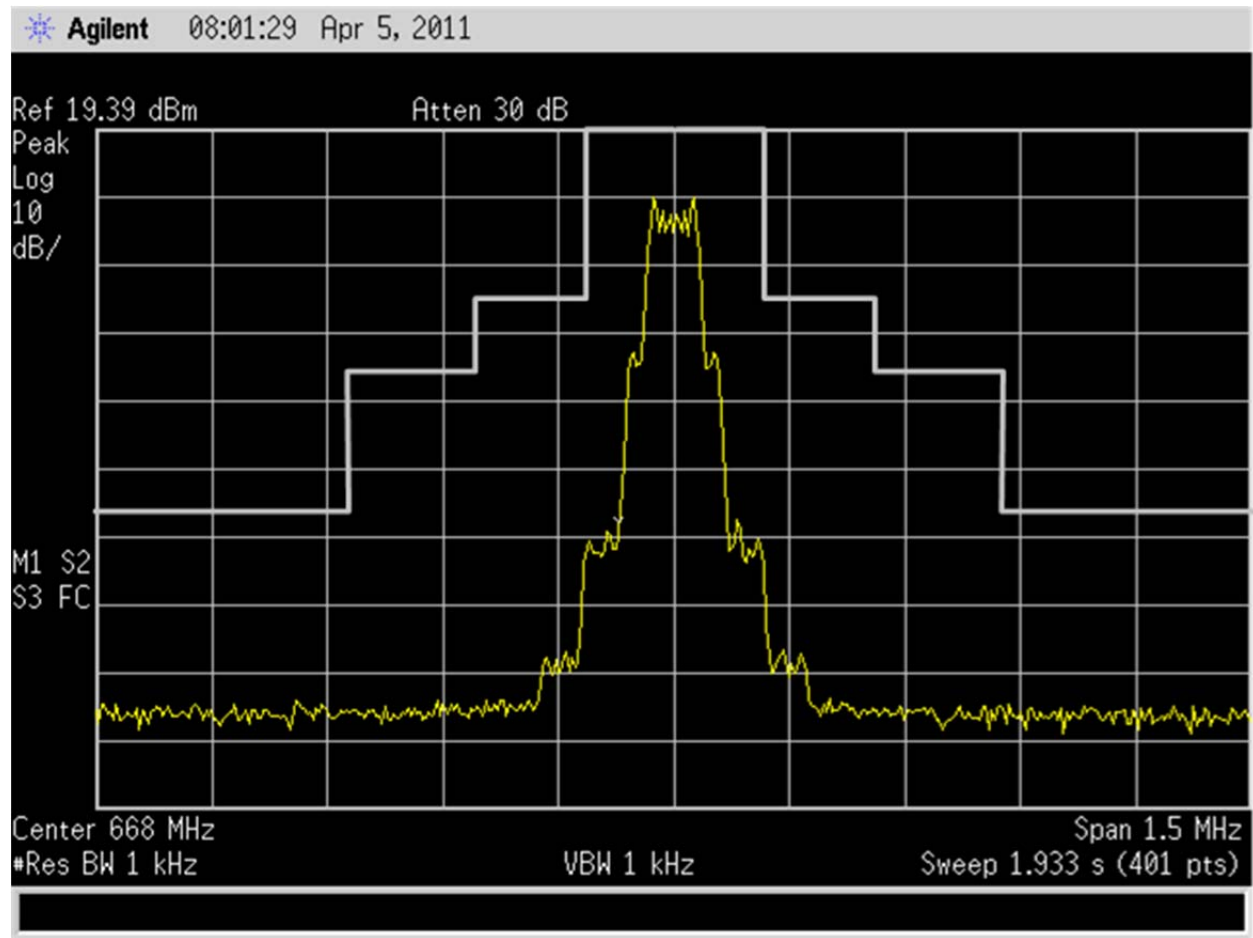


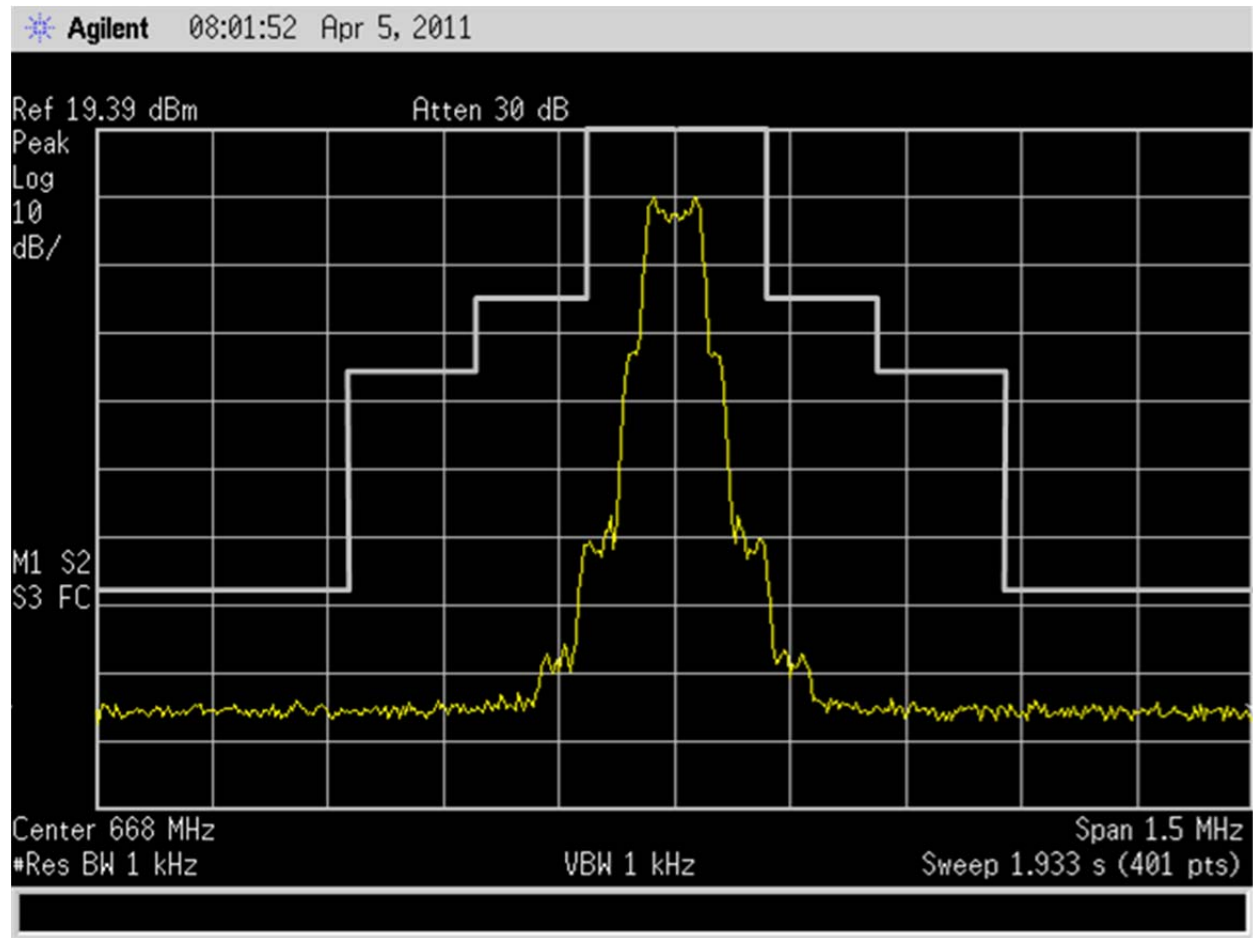






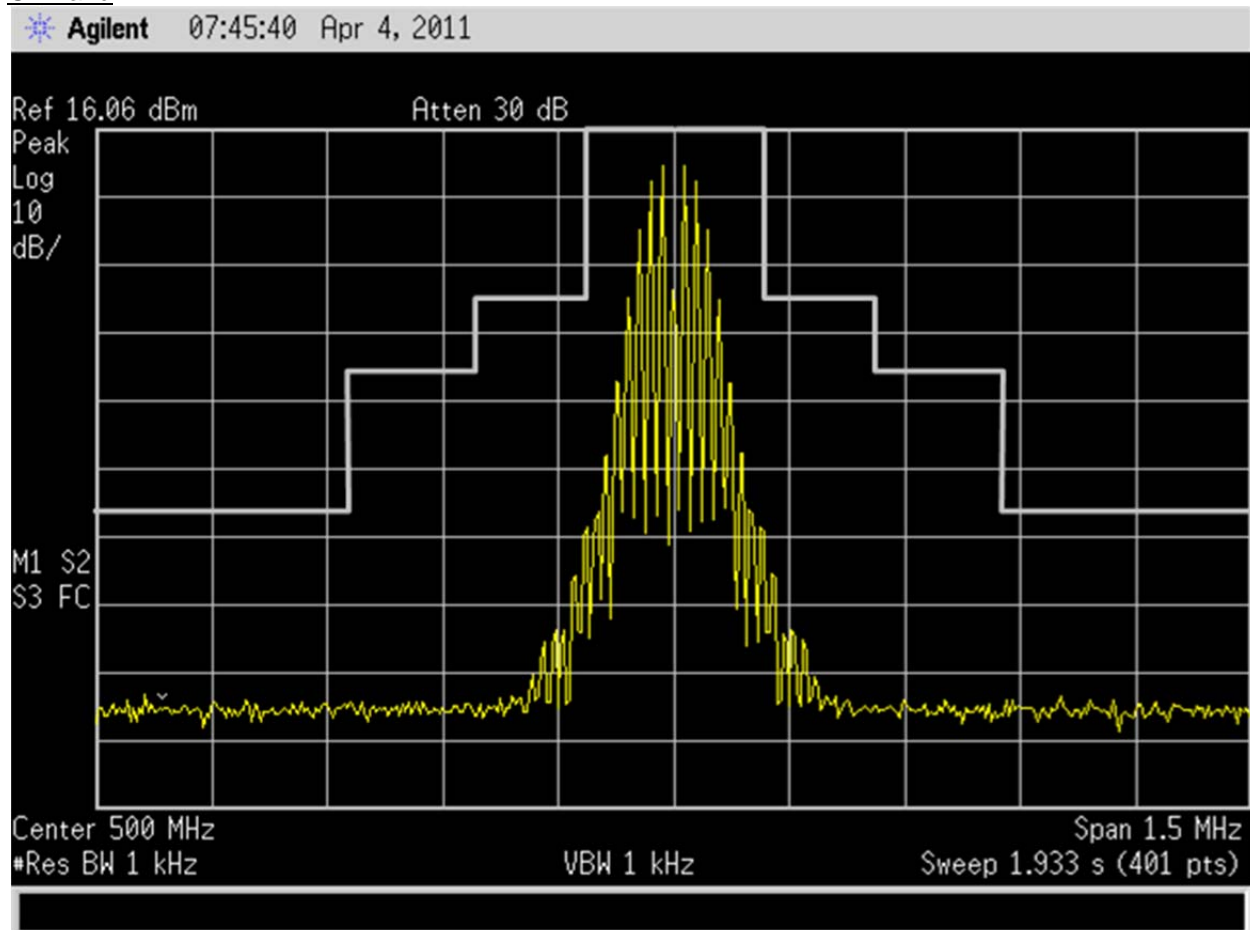


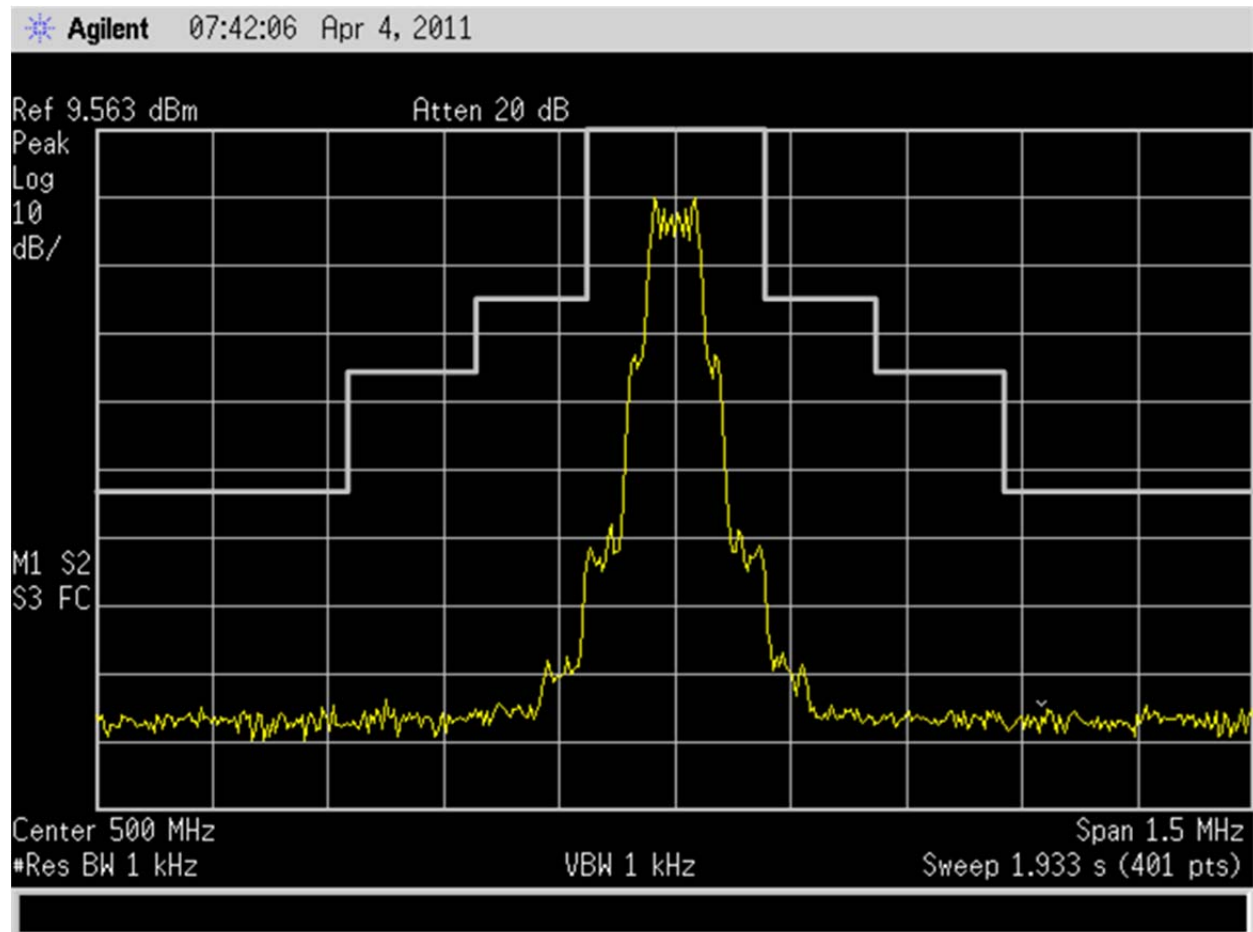


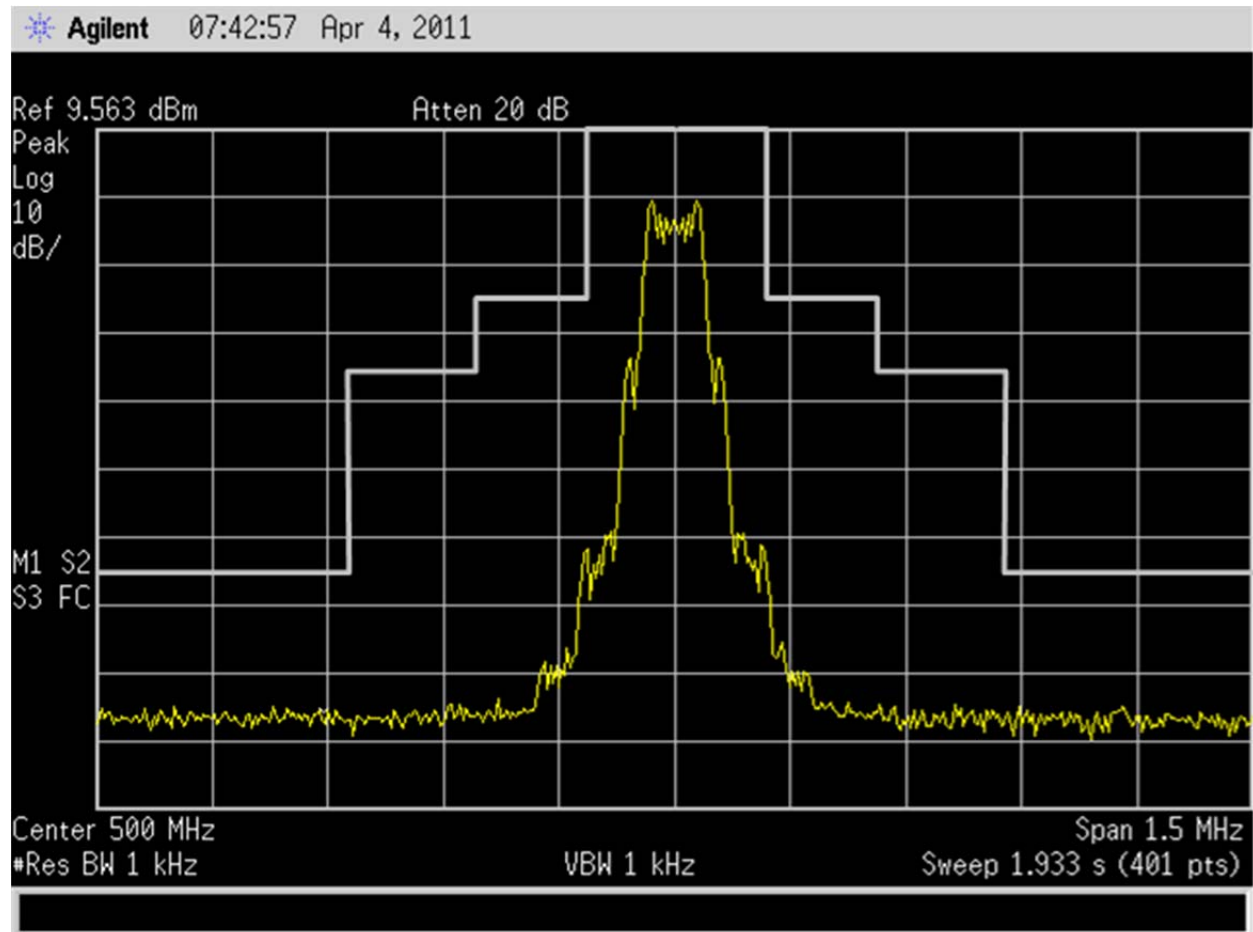


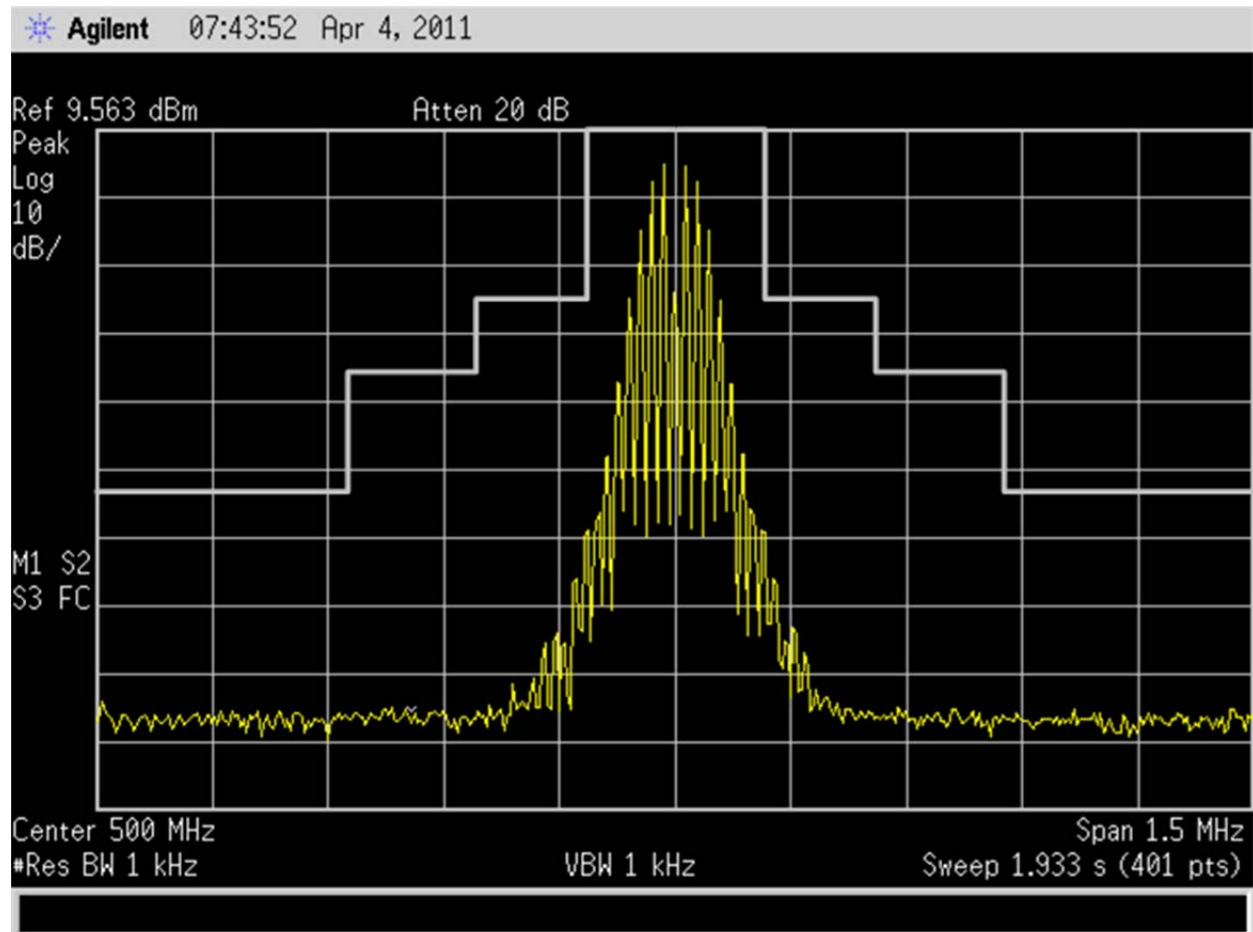
### 3.3 AXT200 Plots

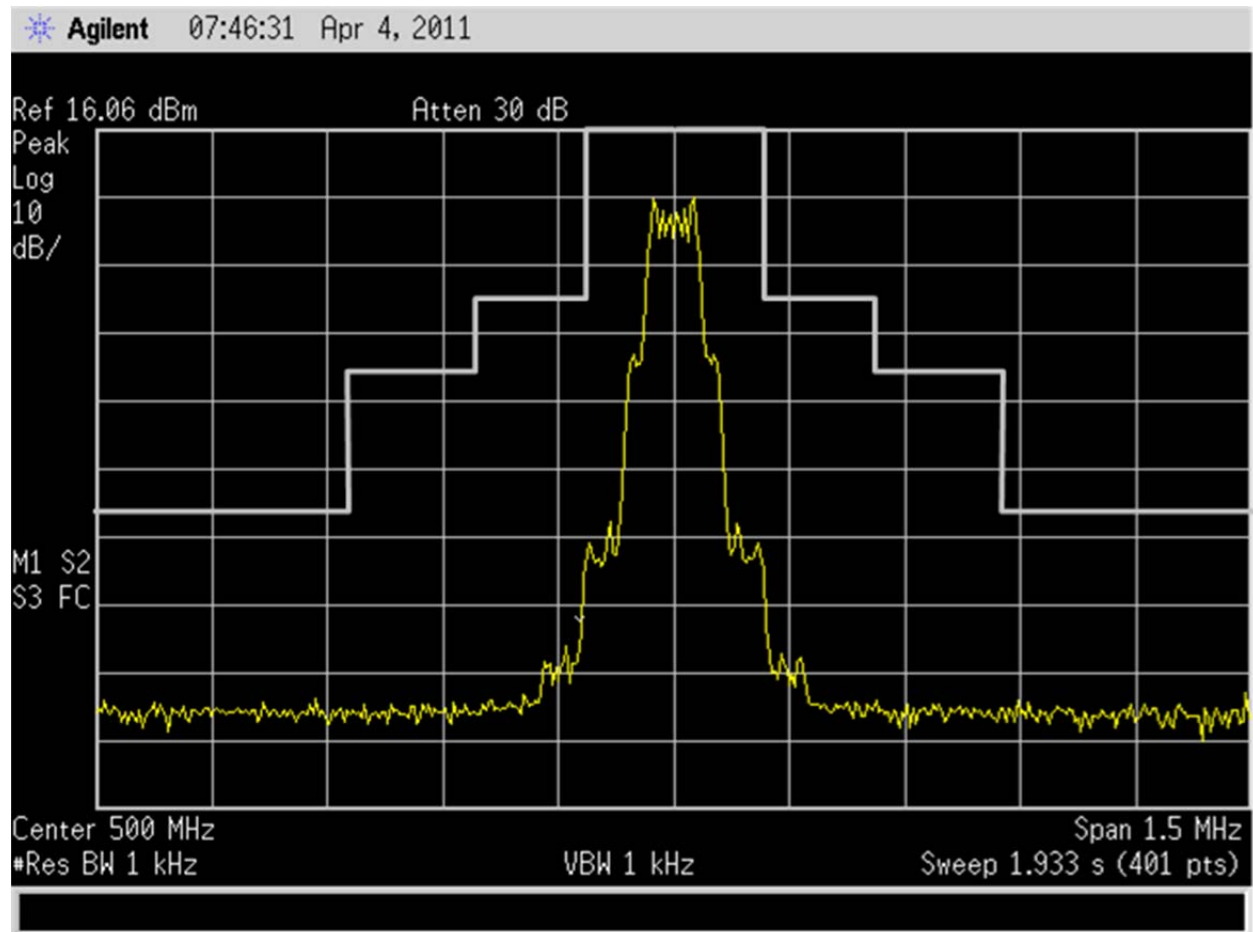
G1 Band



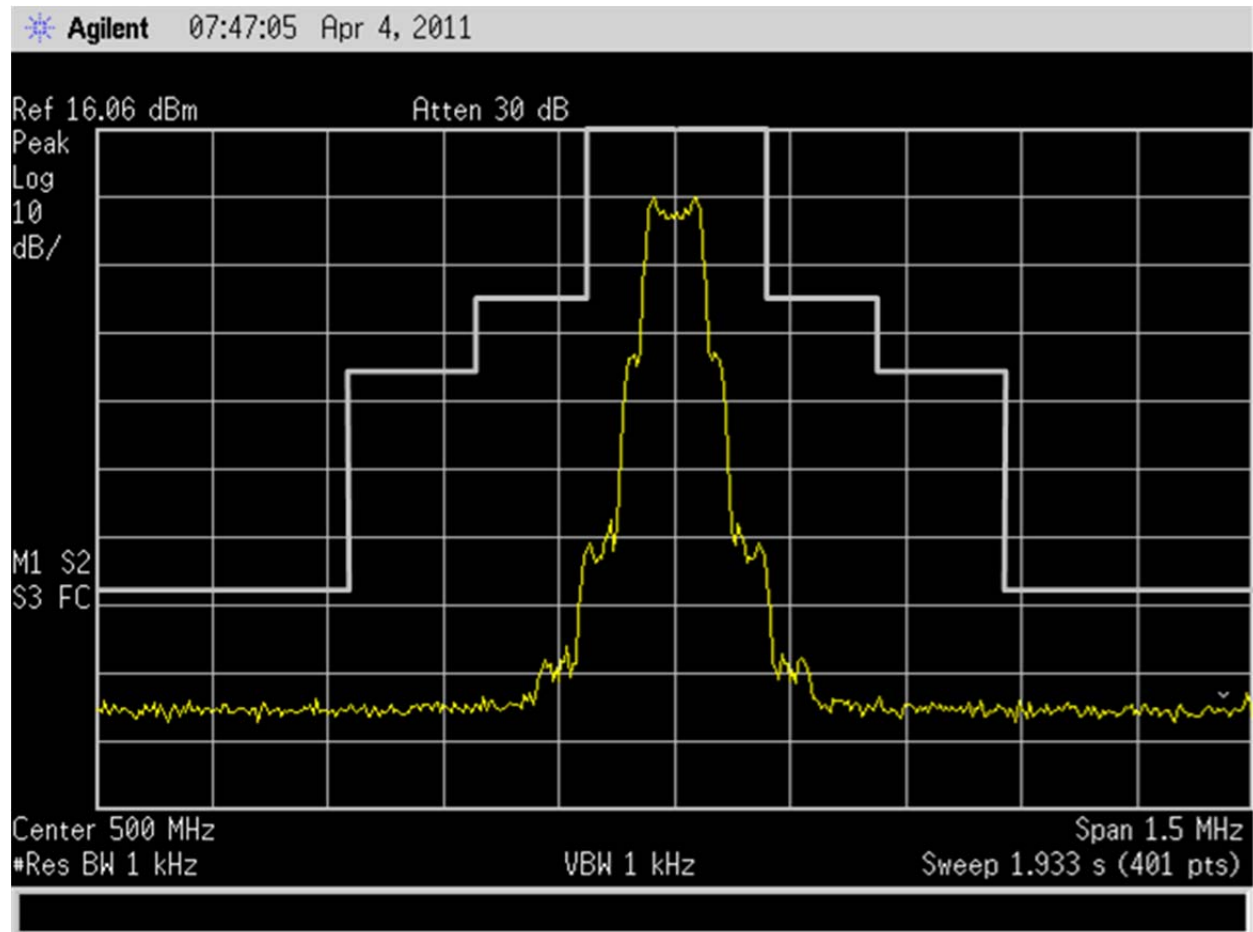




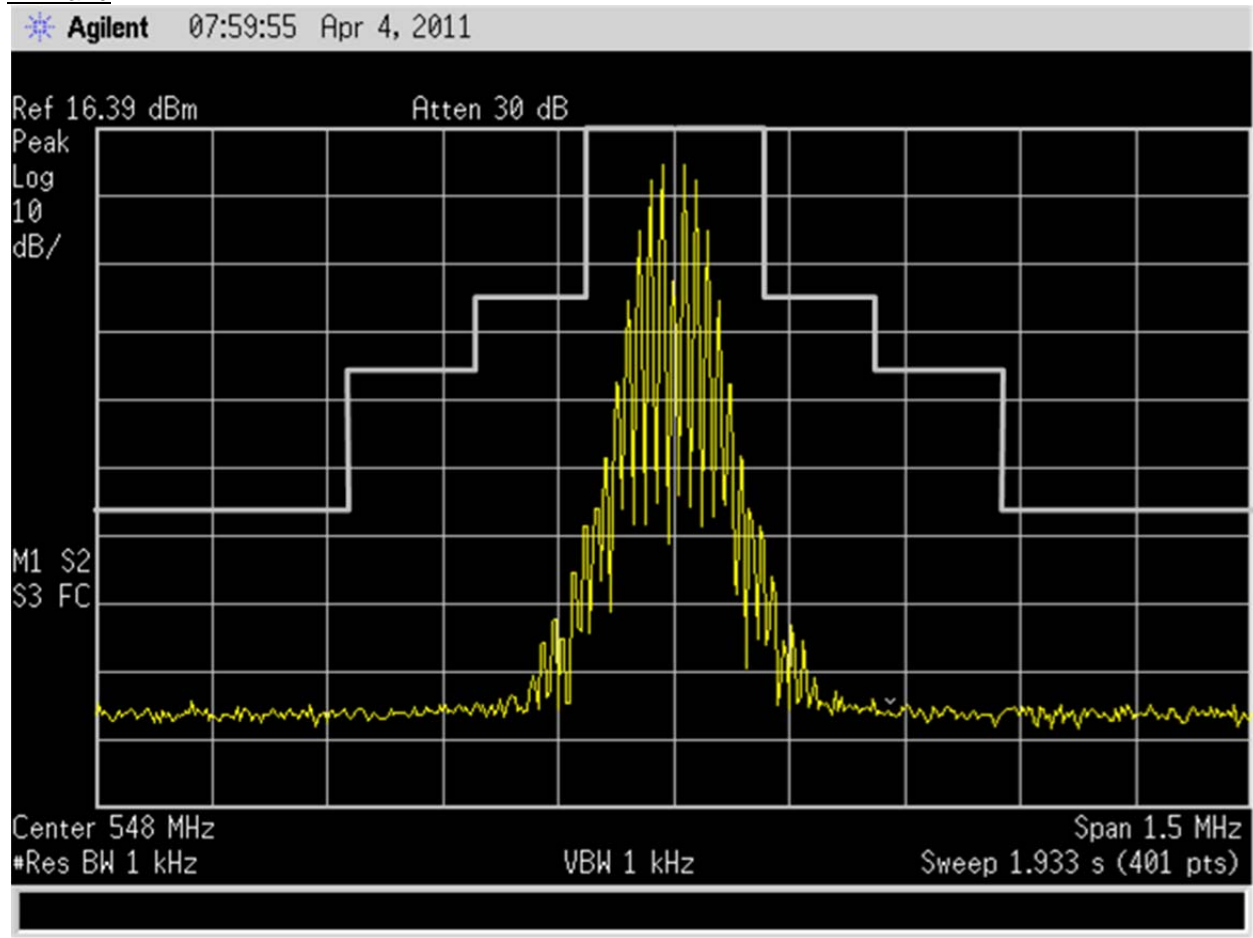


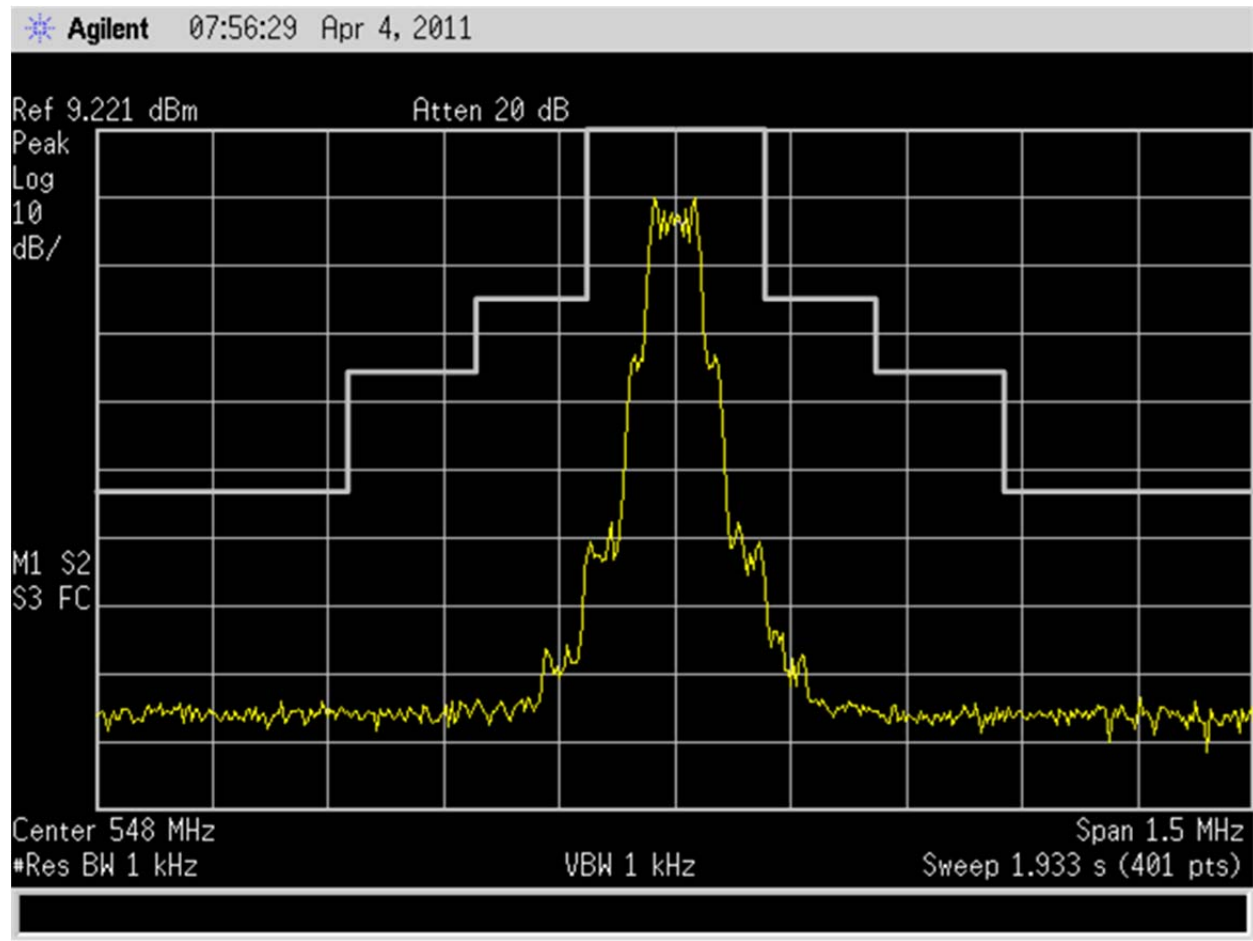


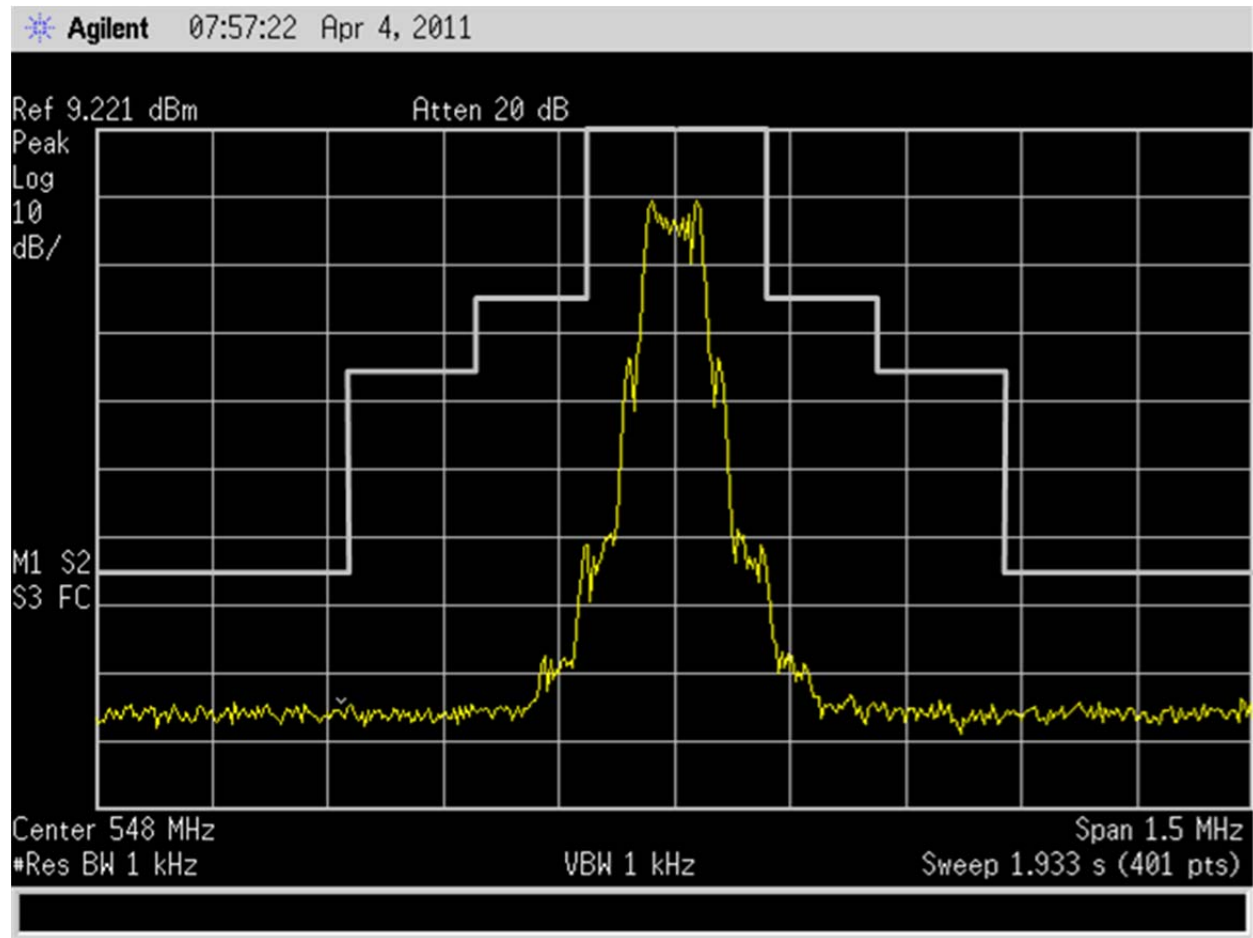


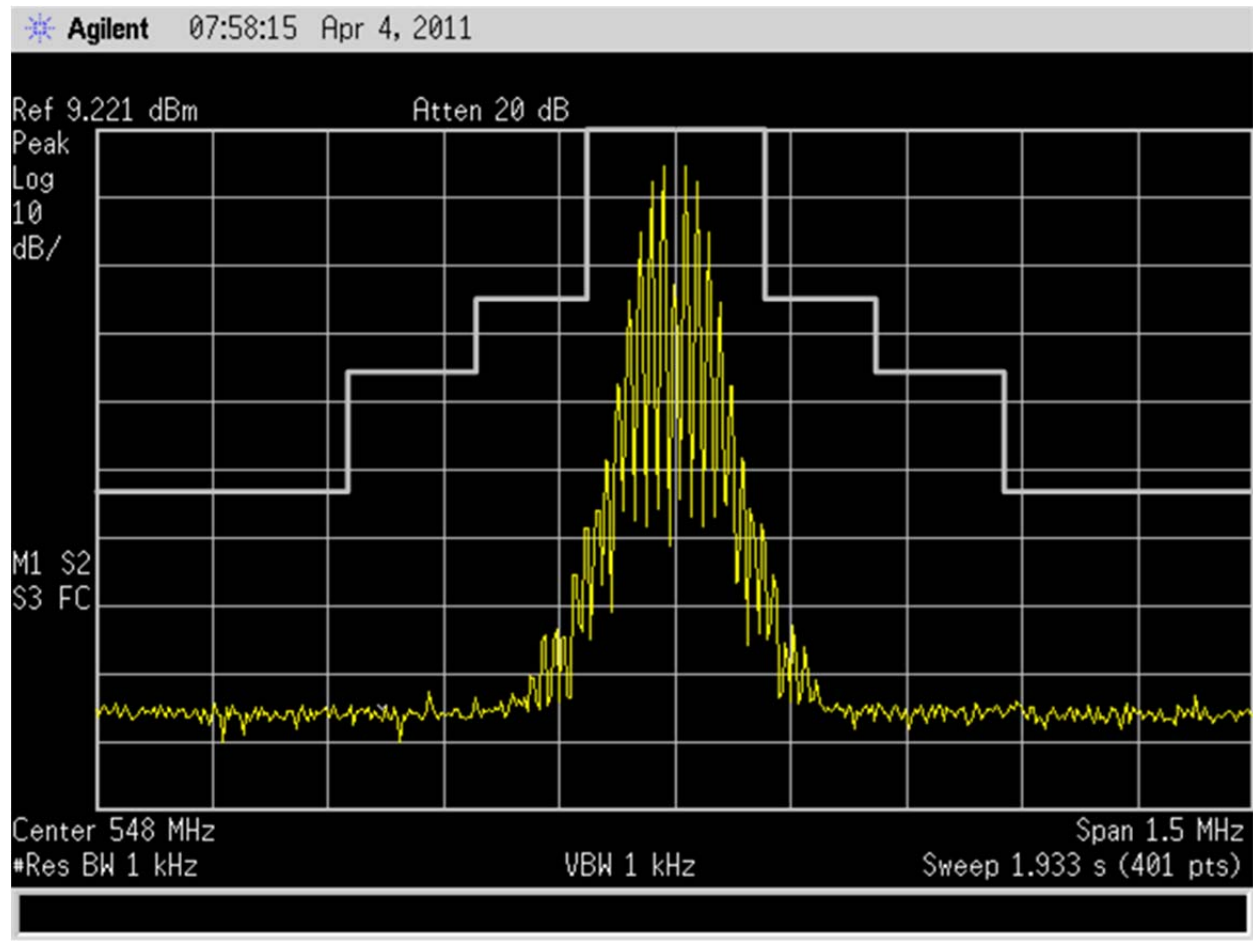


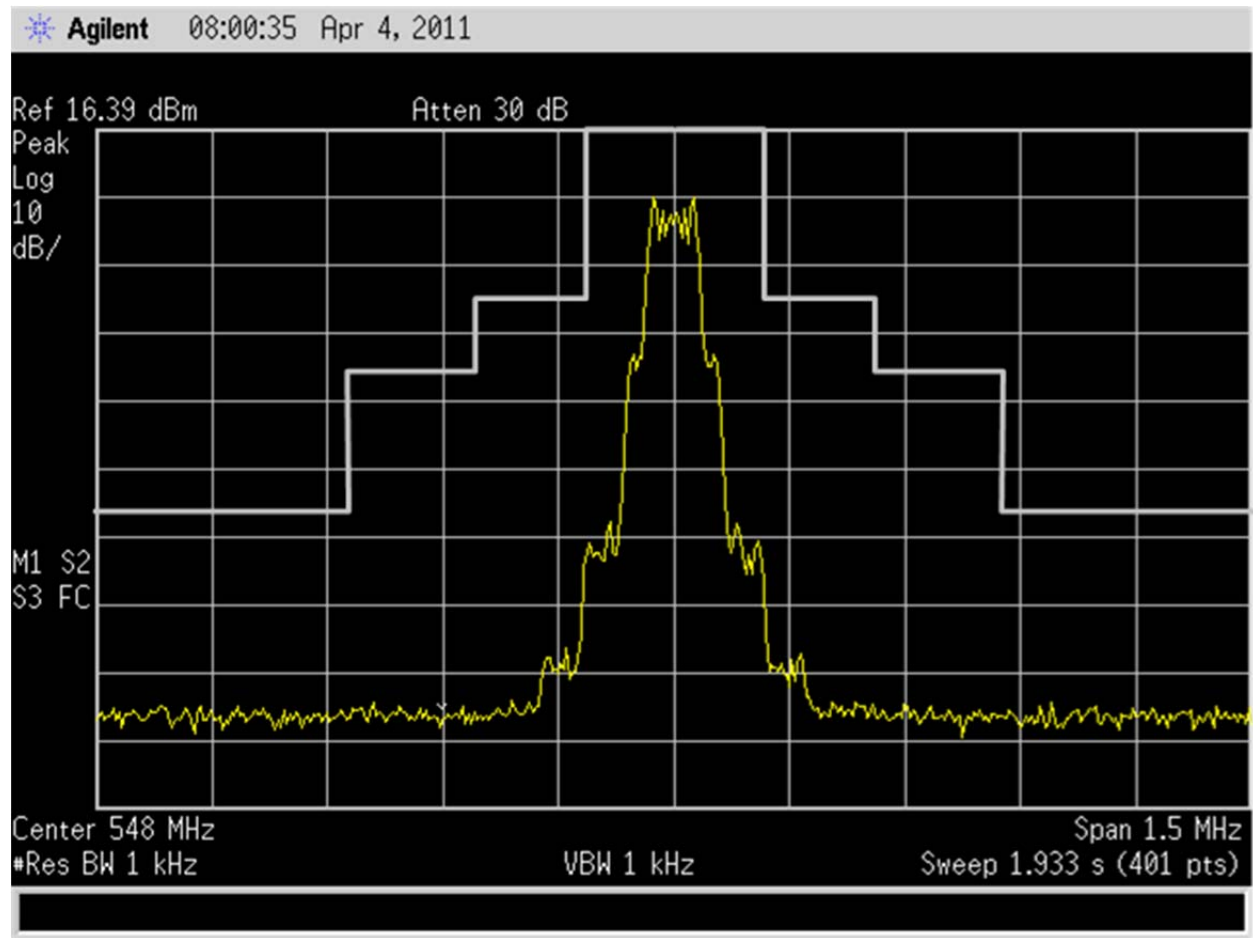
H4 Band

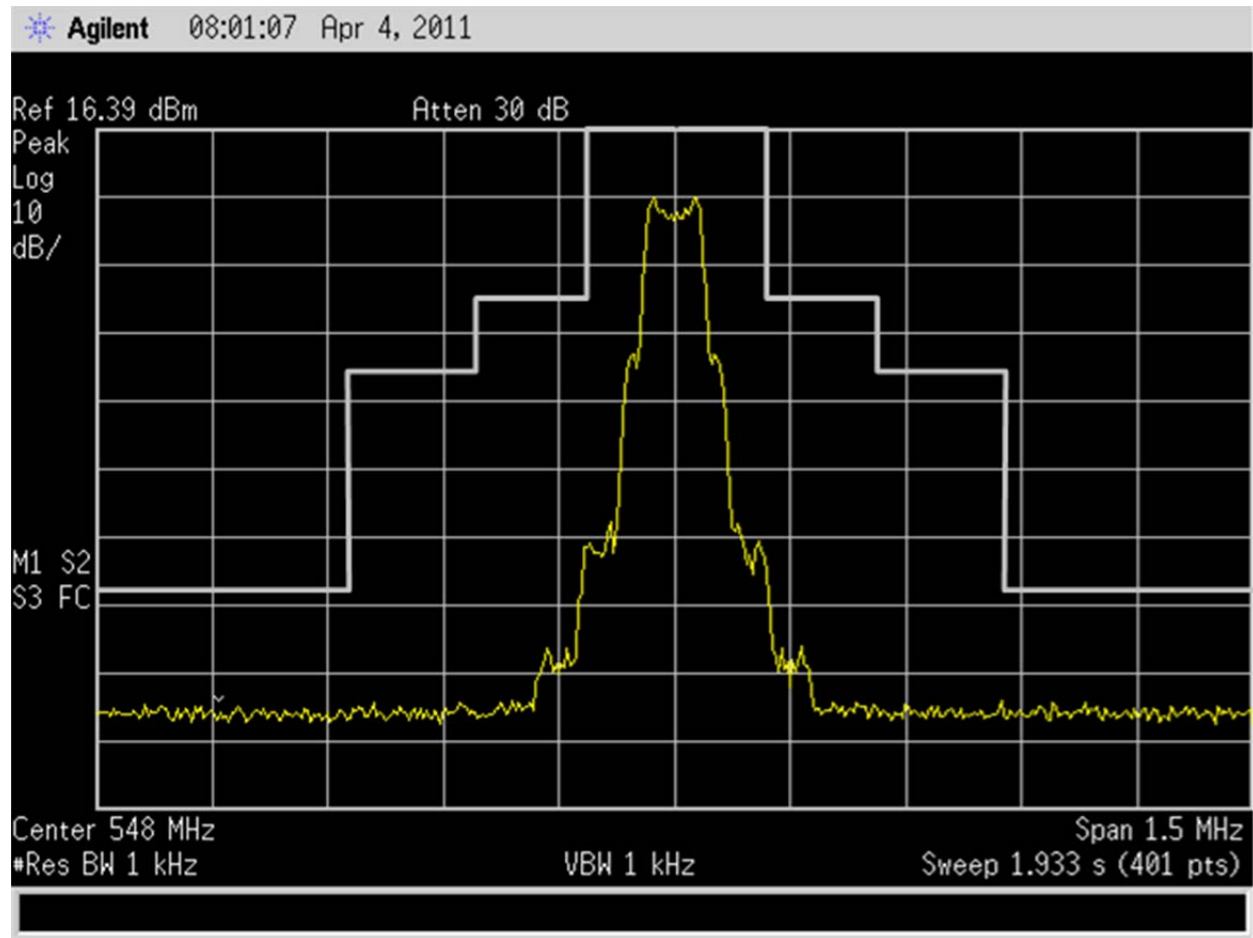




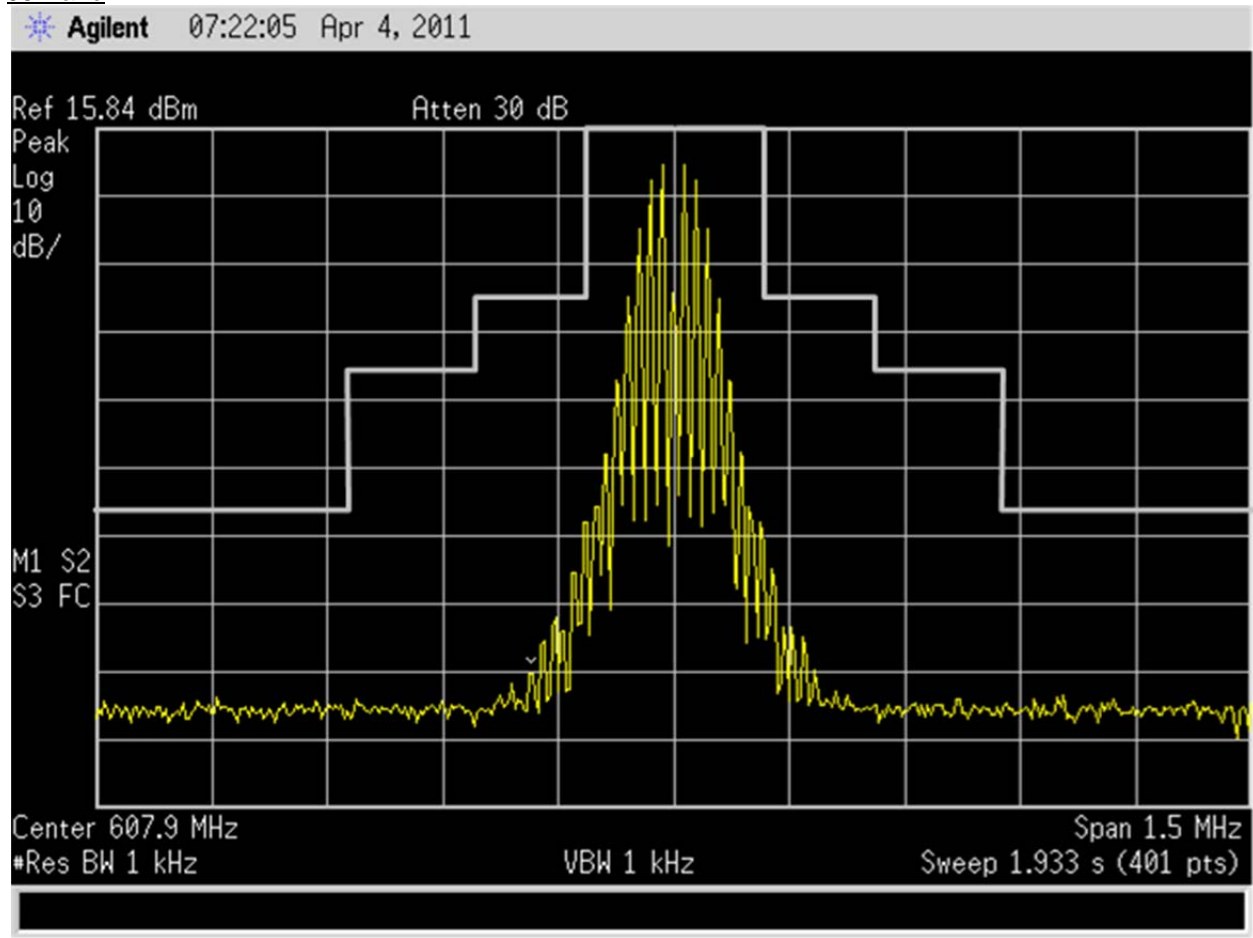




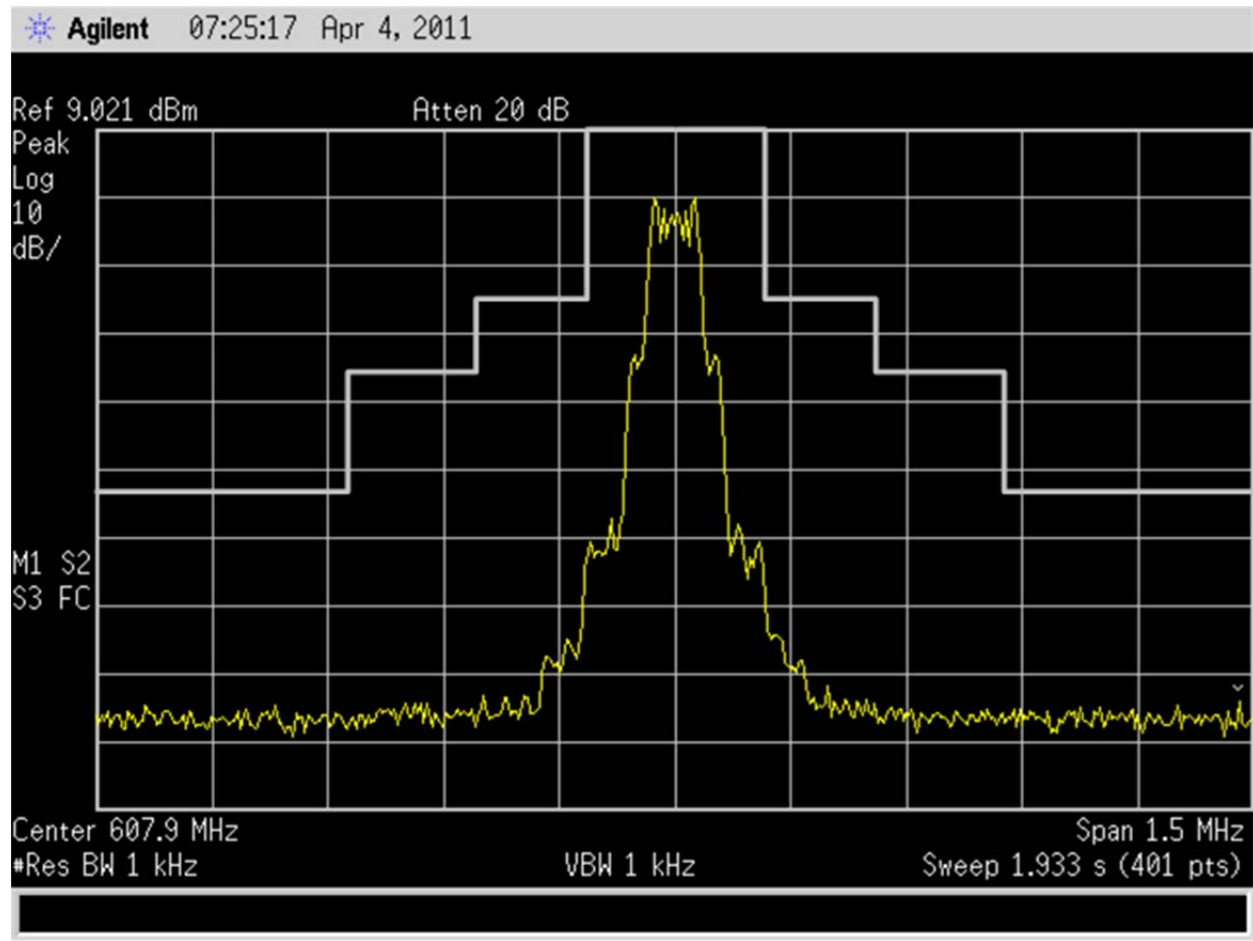


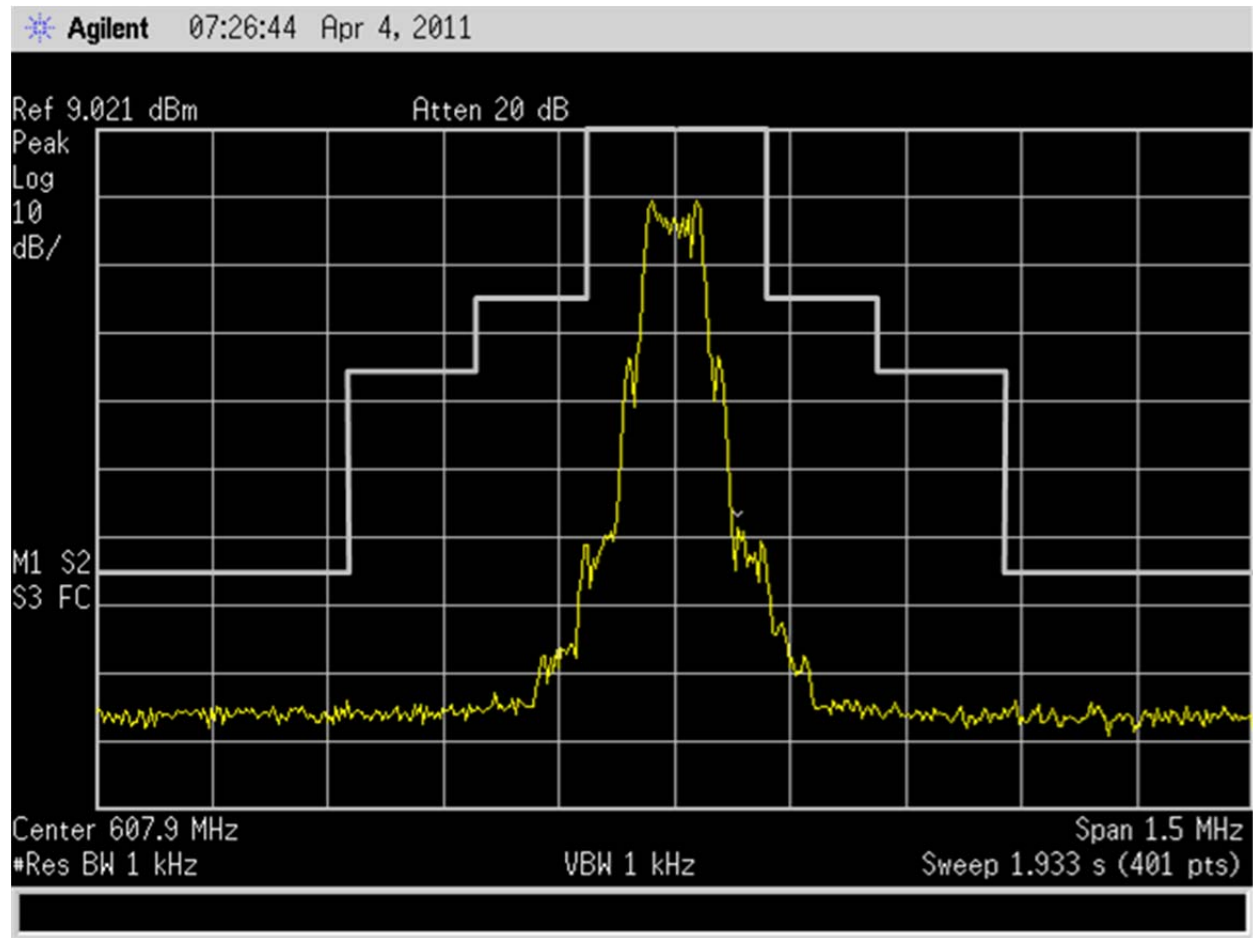


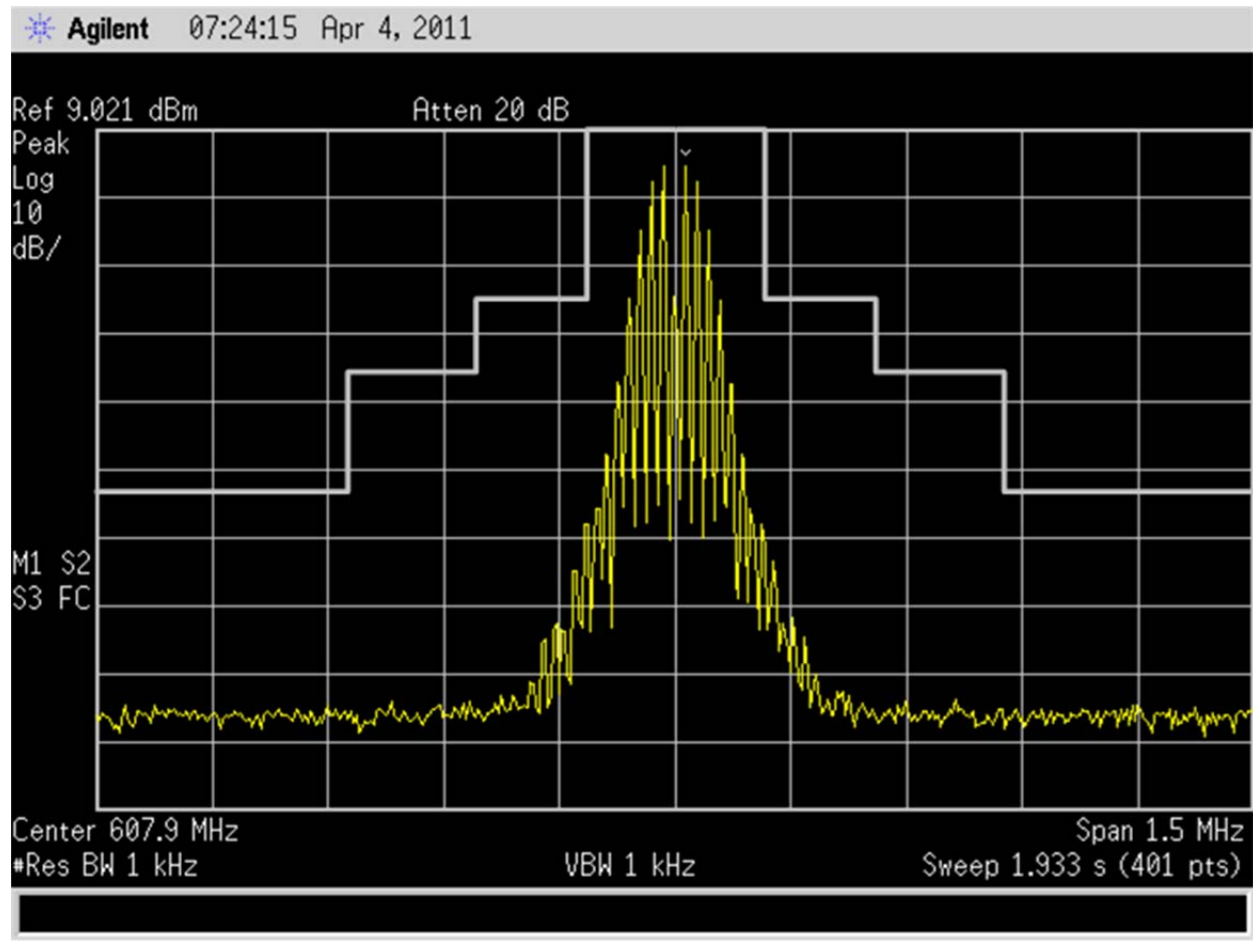
J5 Band

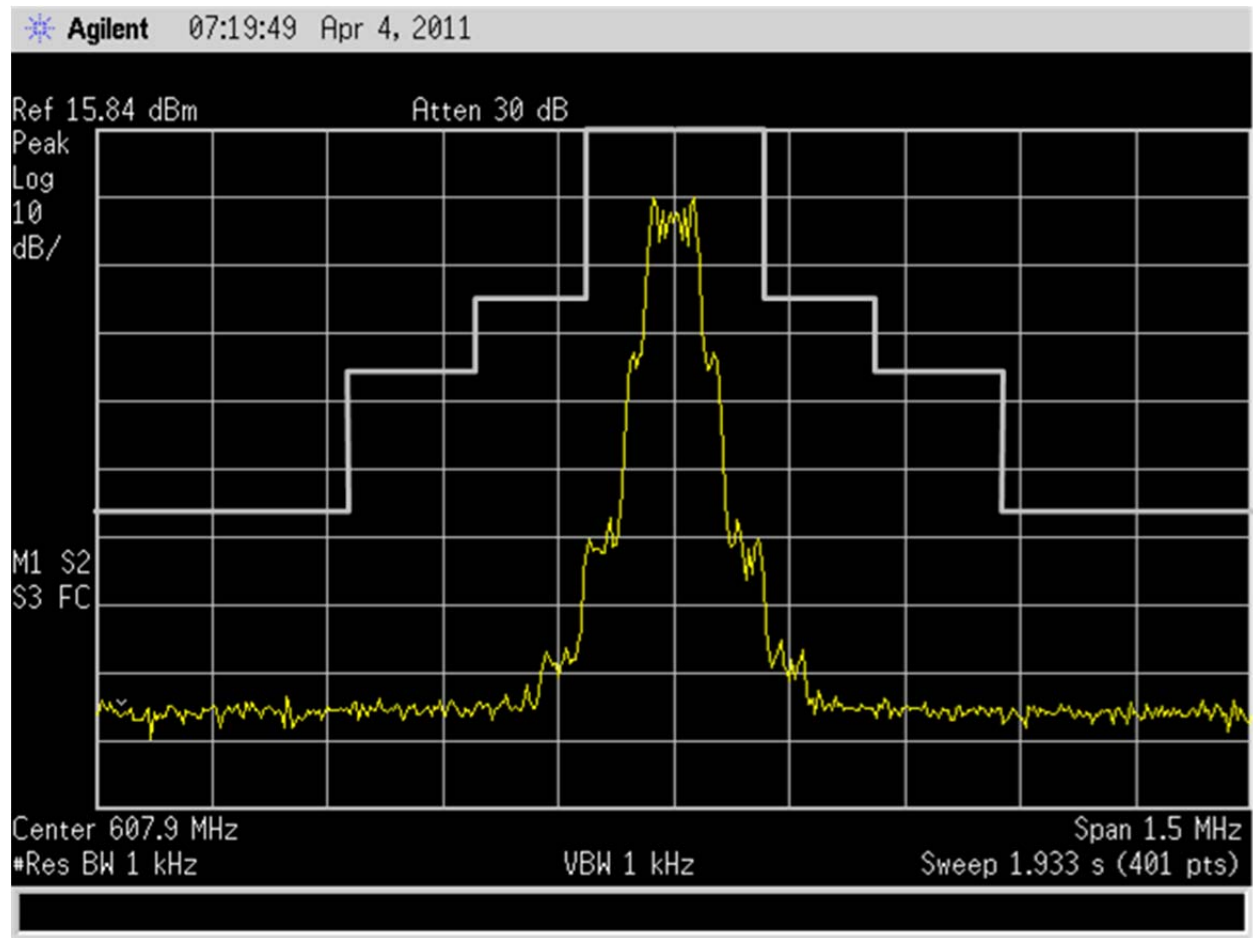


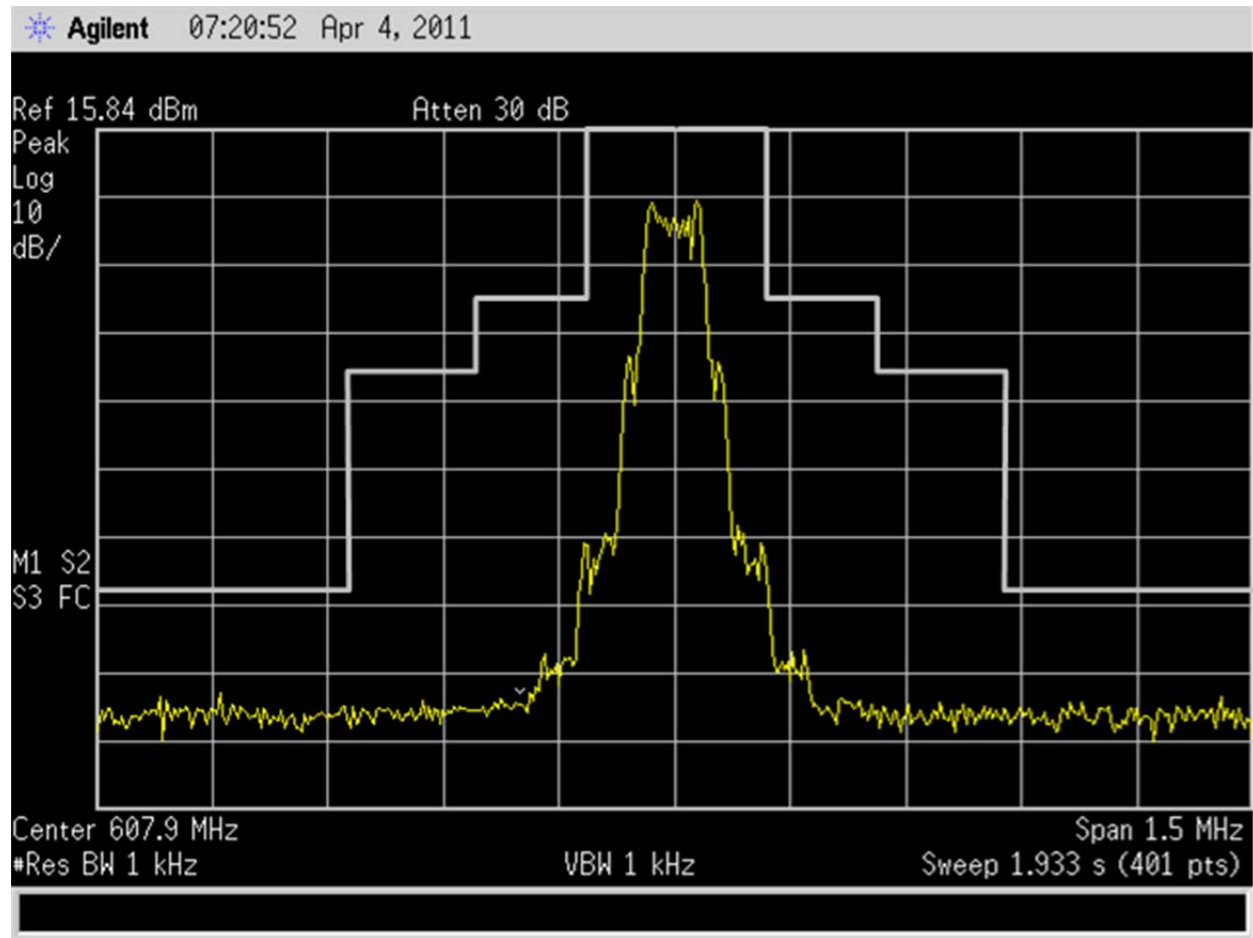












L3 Band

