

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:

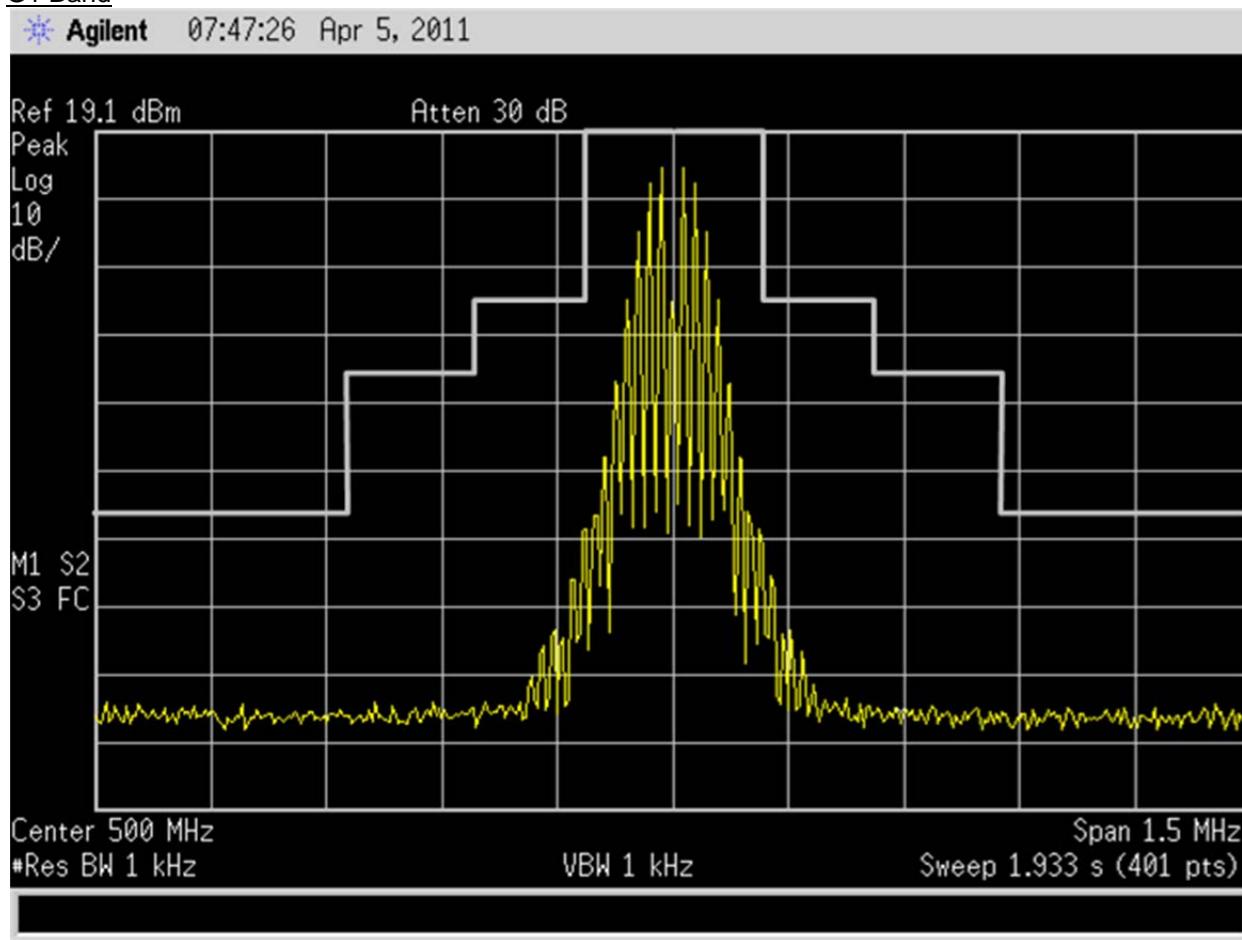
On any frequency removed from the carrier frequency by more than 50% up to and including 100% of the authorized bandwidth: at least 25 dB.

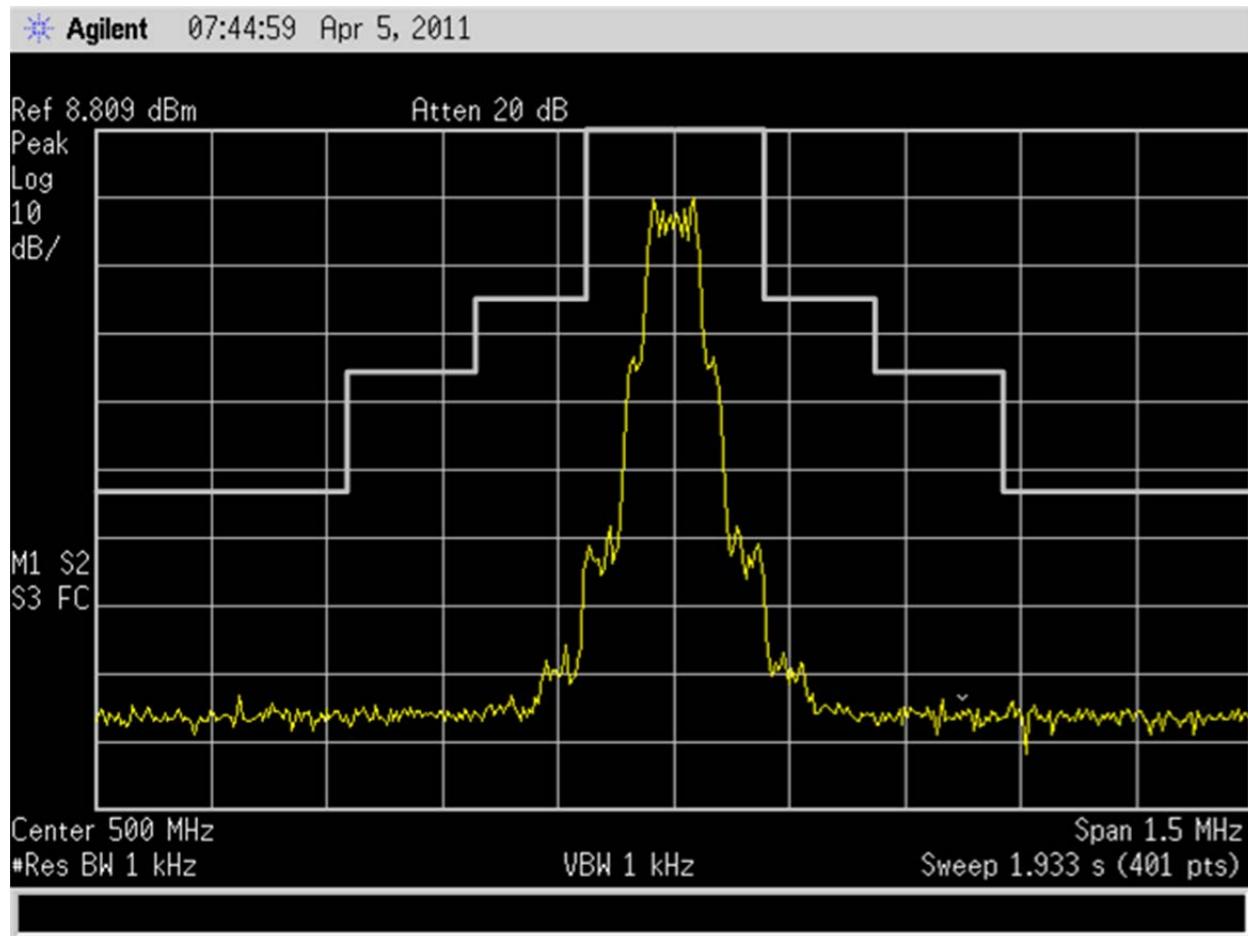
On any frequency removed from the carrier frequency by more than 100% up to and including 250% of the authorized bandwidth: at least 35 dB.

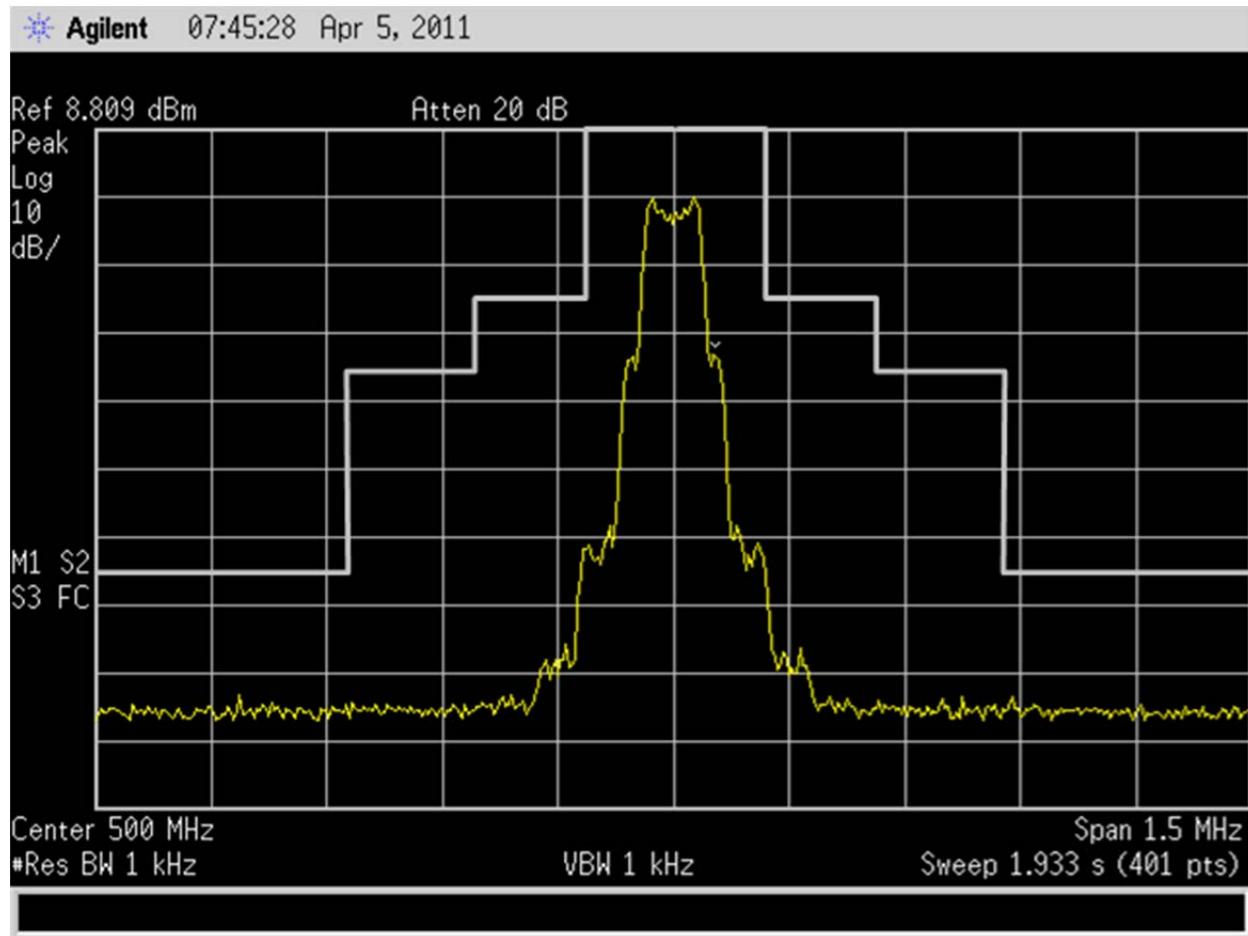
On any frequency removed from the carrier frequency by more than 250% of the authorized bandwidth: at least $55 + 10 \log (P)$ dB

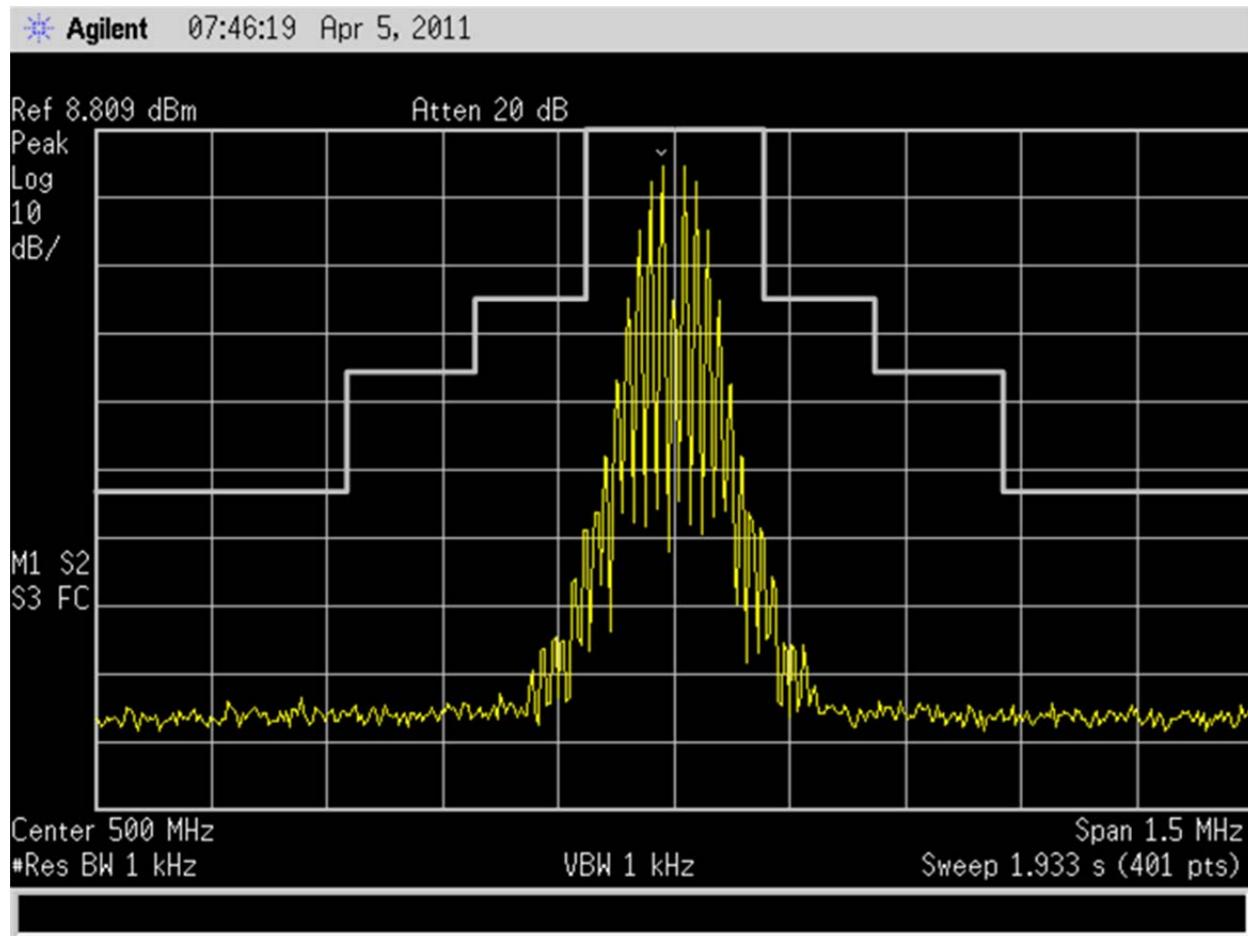
3.2 AXT100 Plots

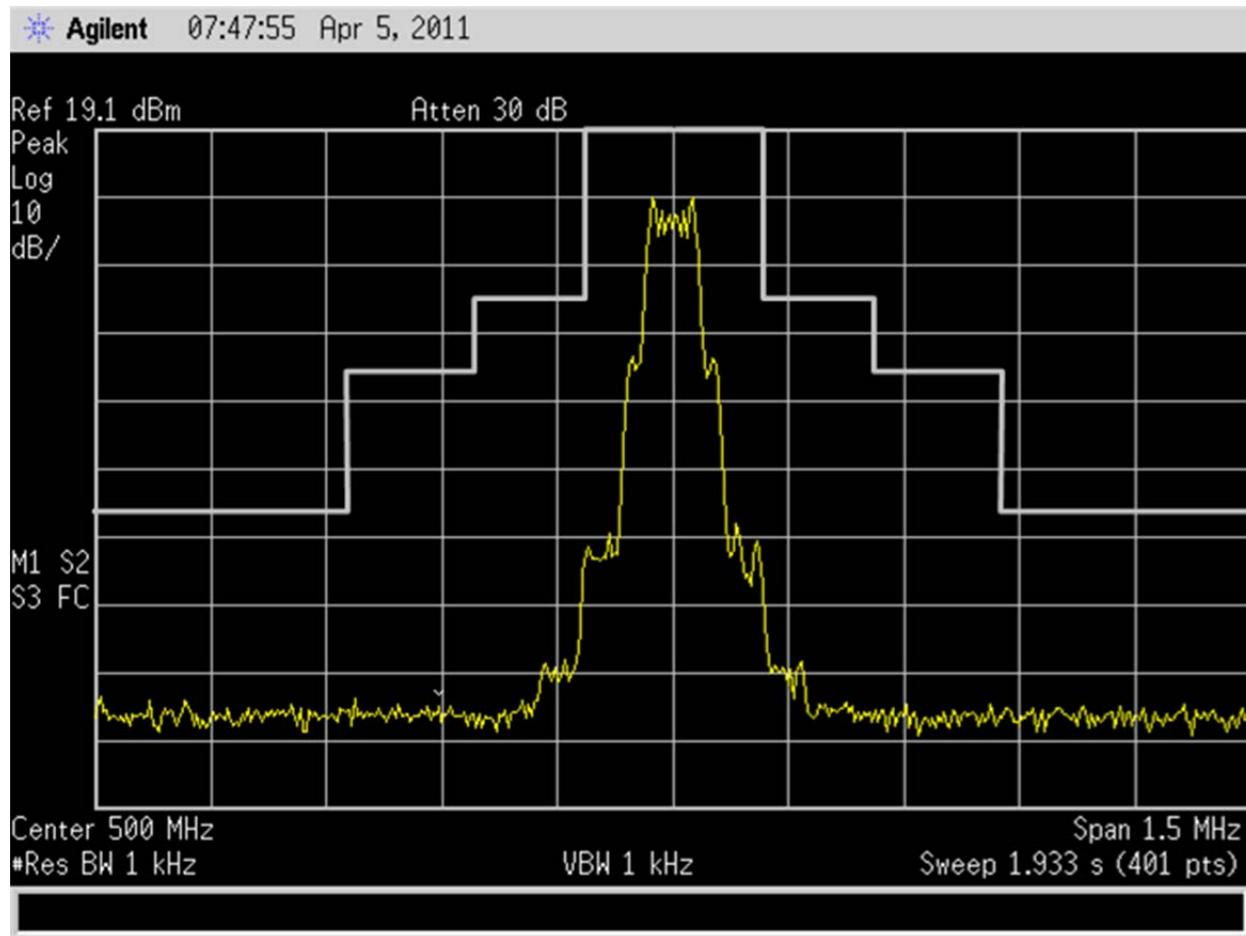
G1 Band

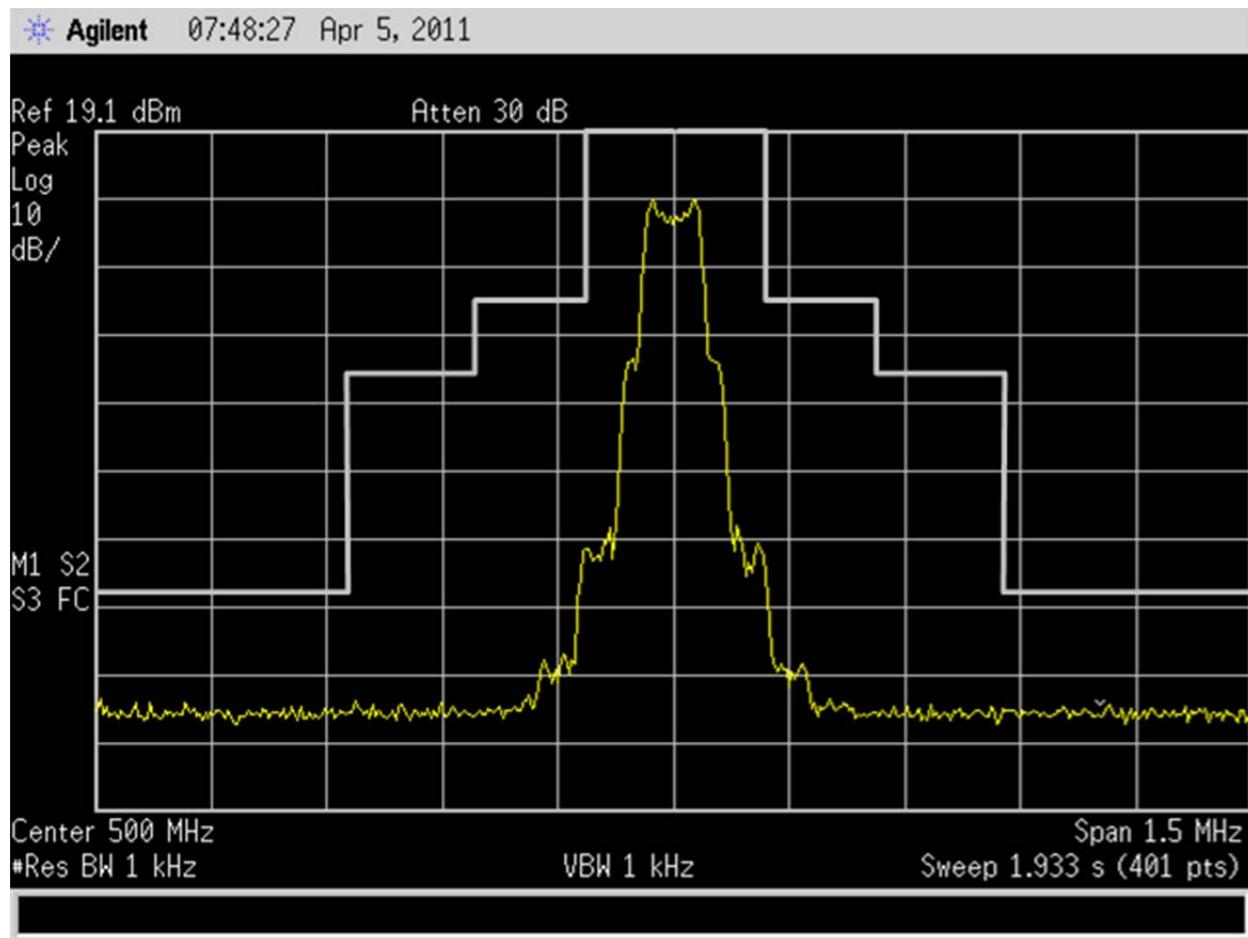




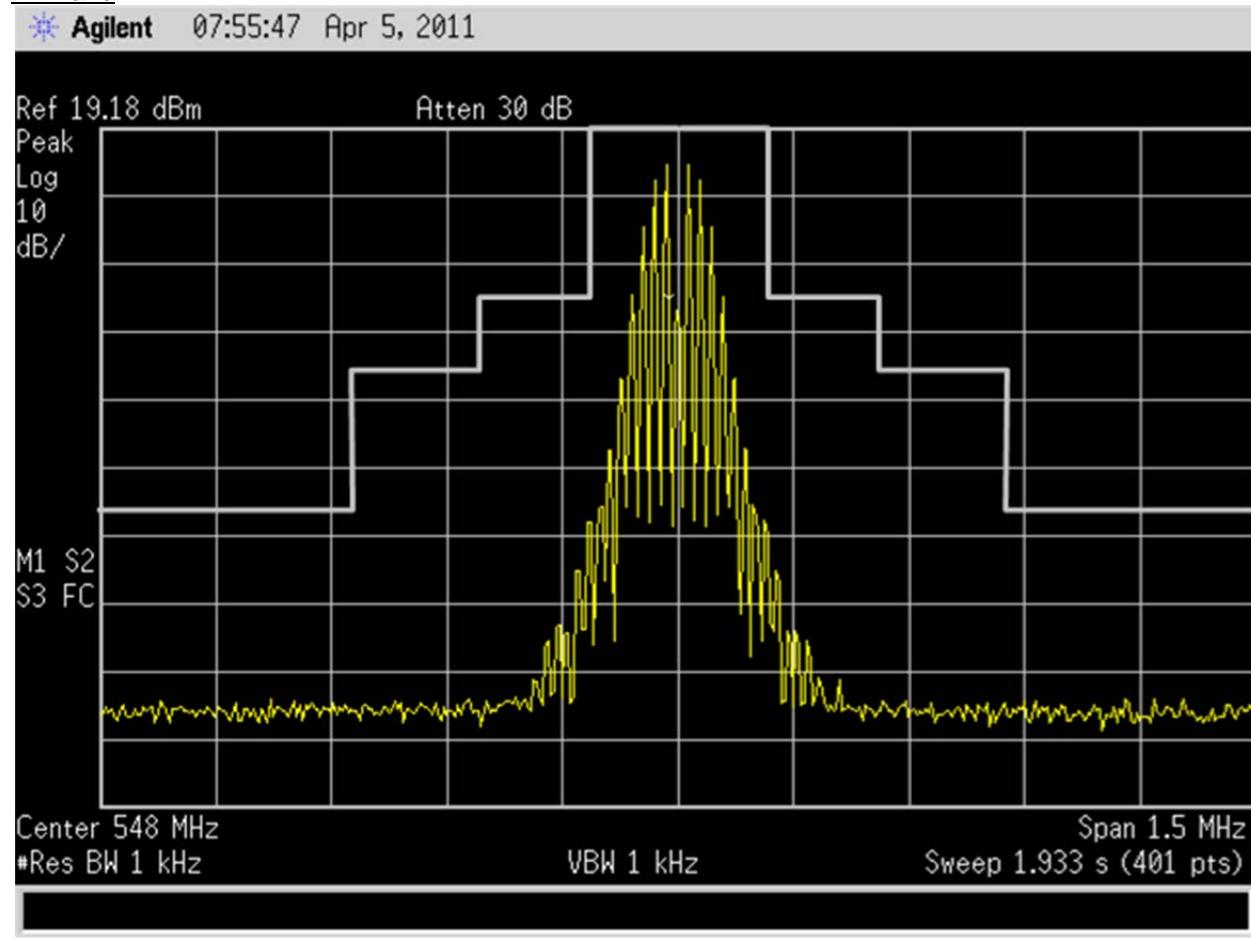


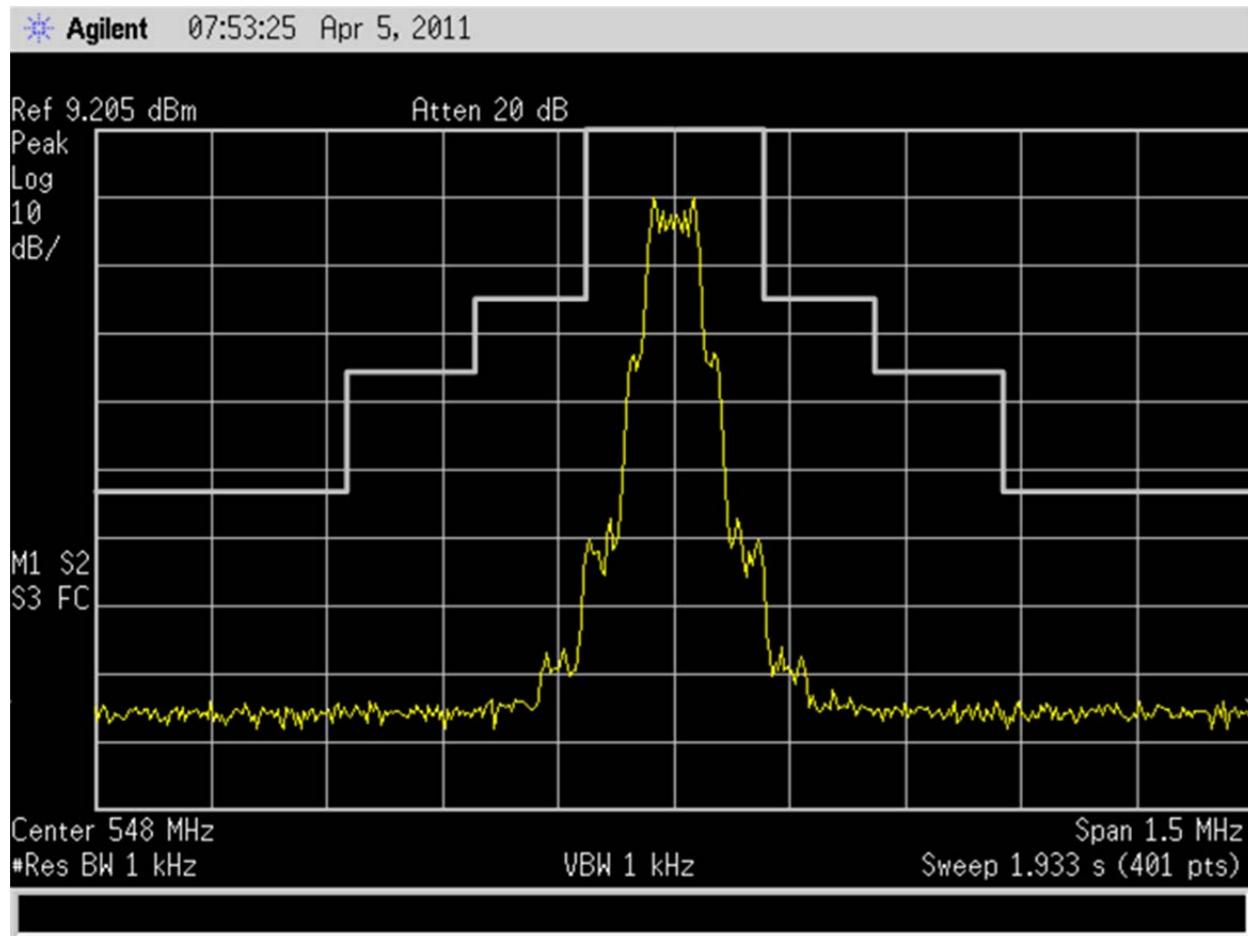


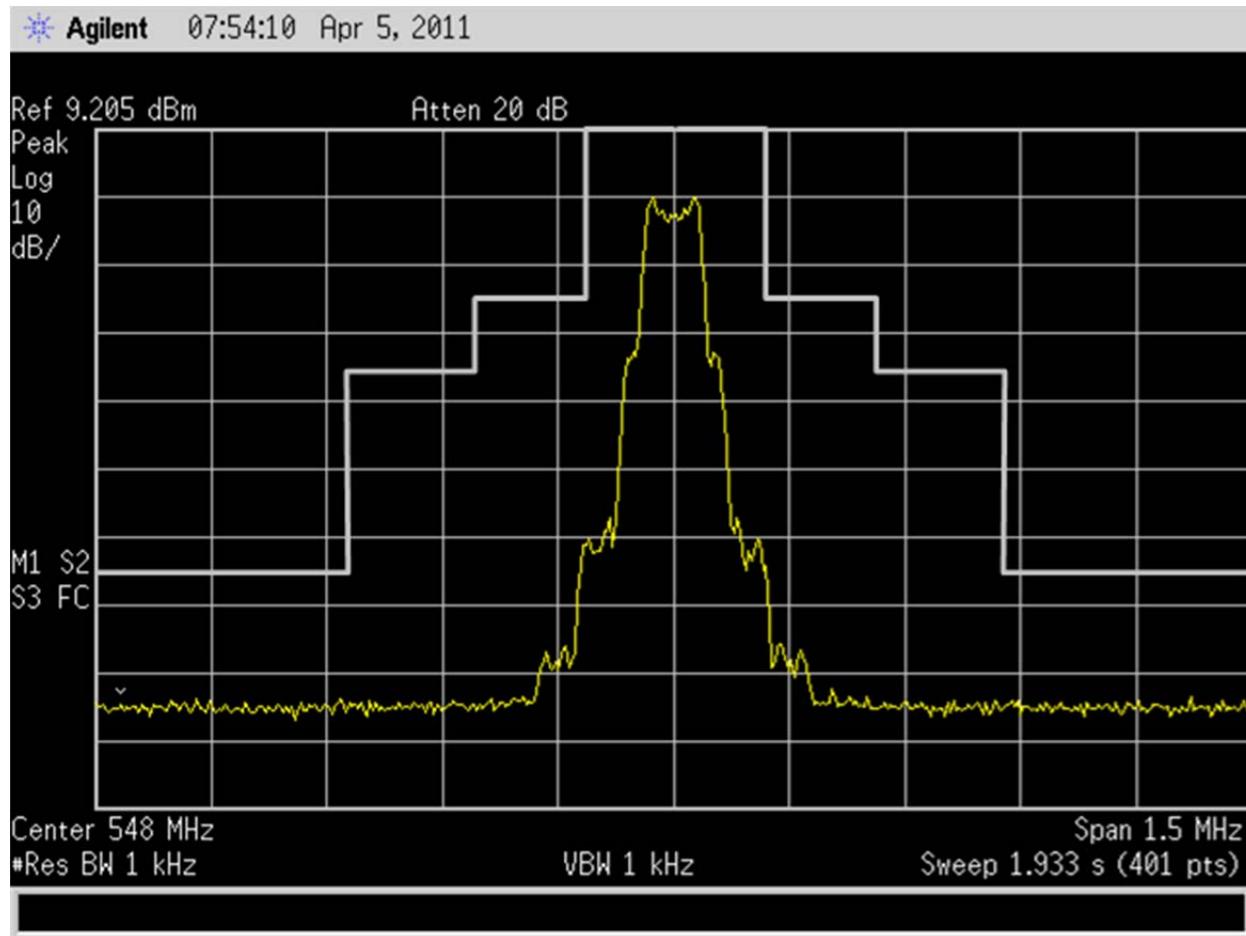


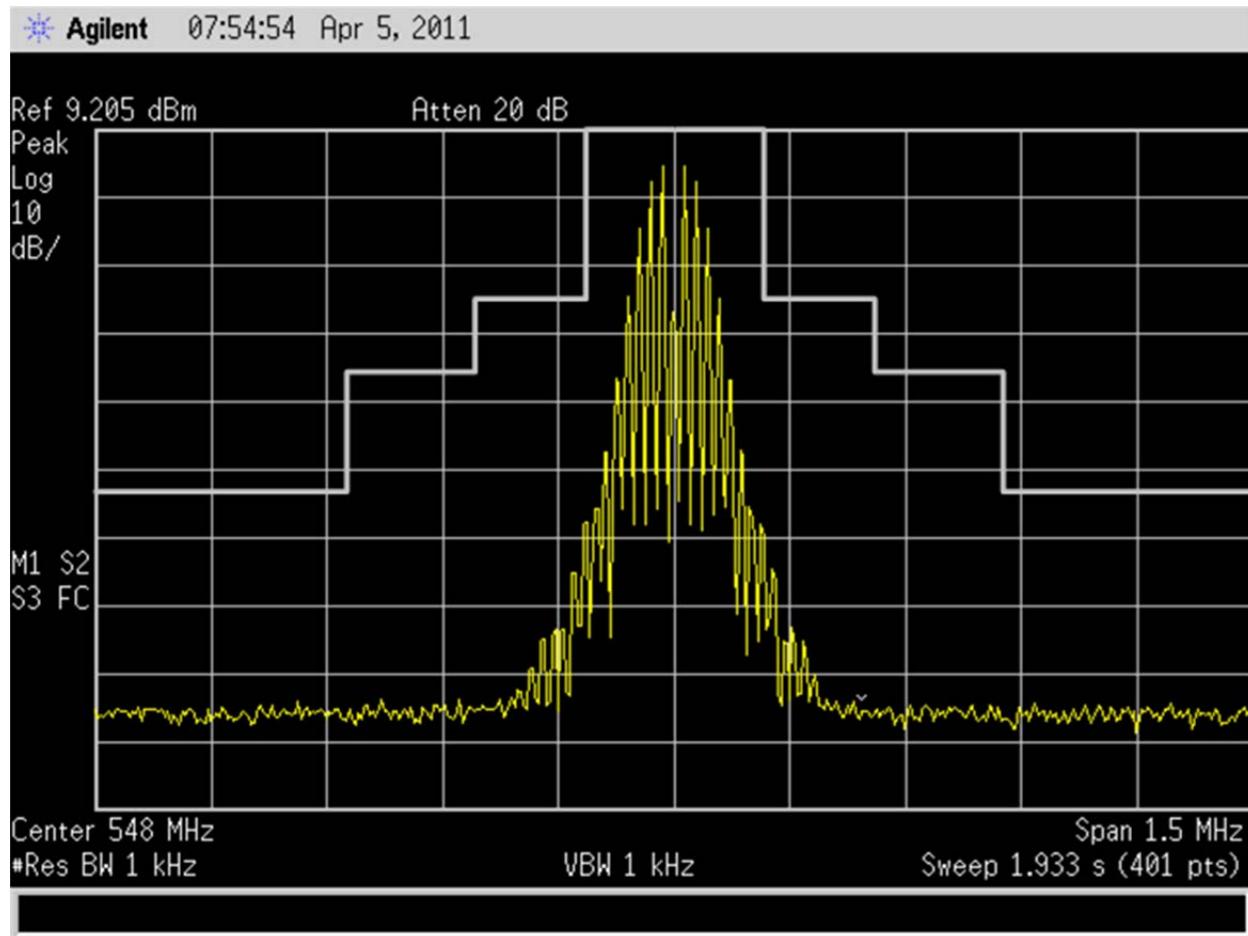


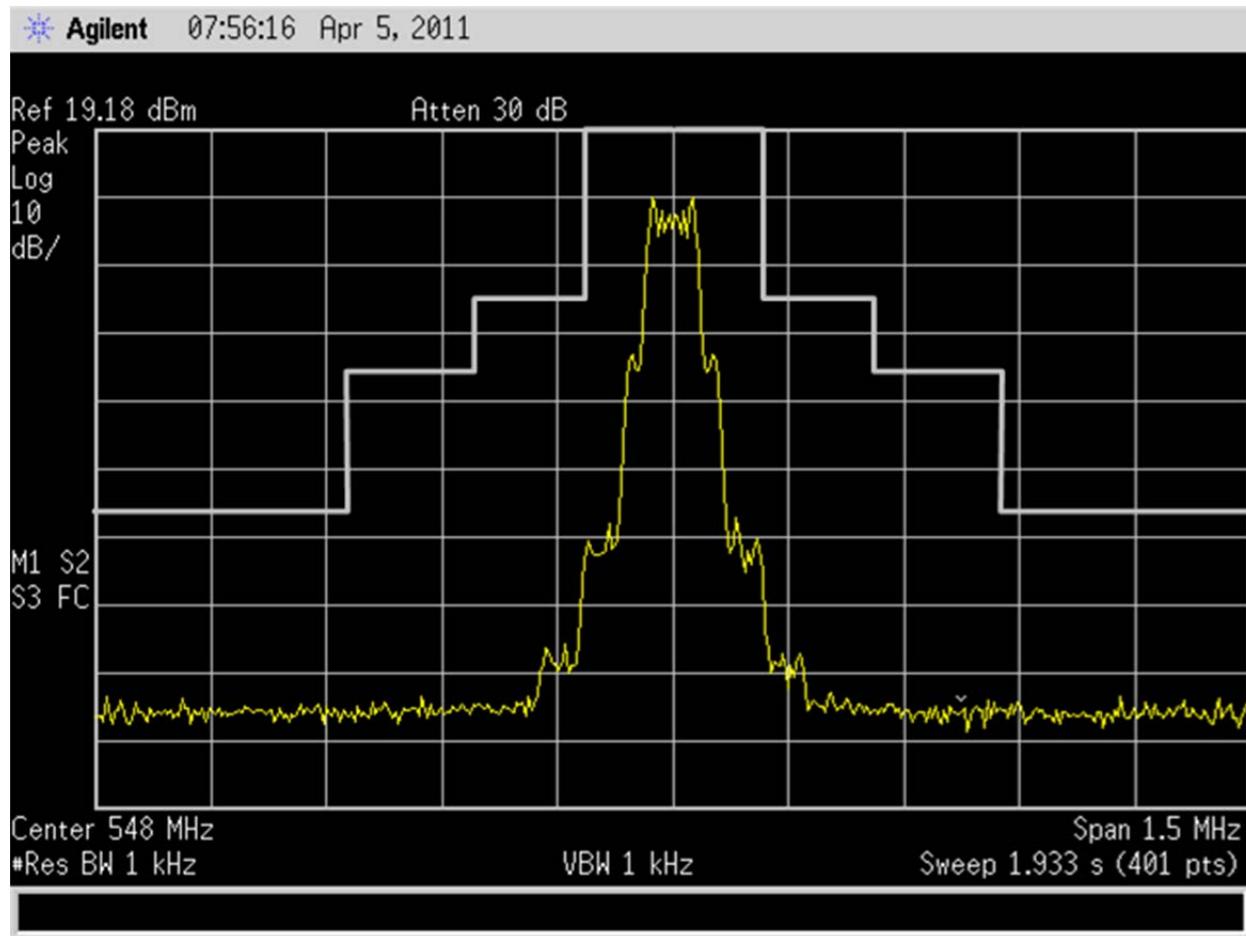
H4 Band

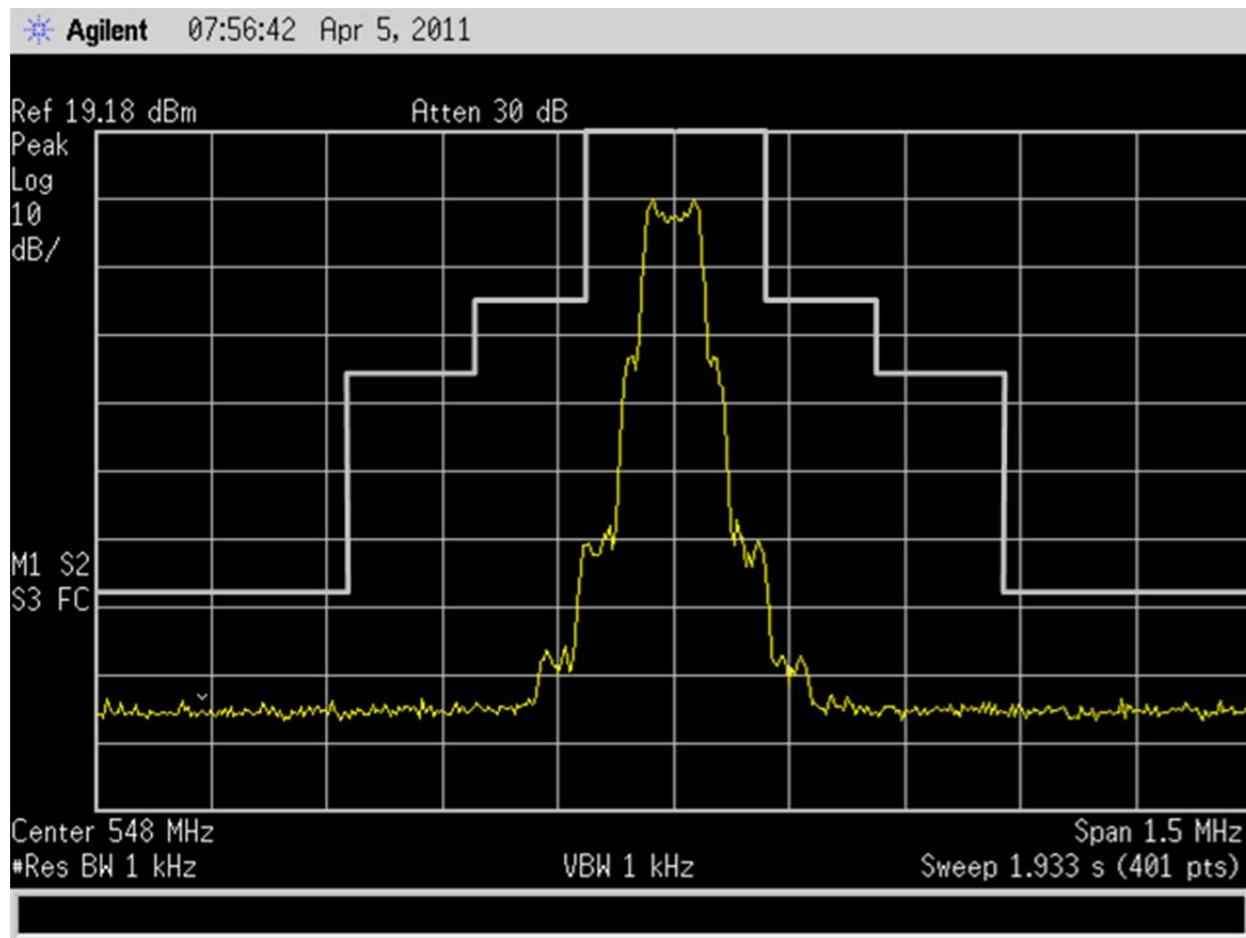




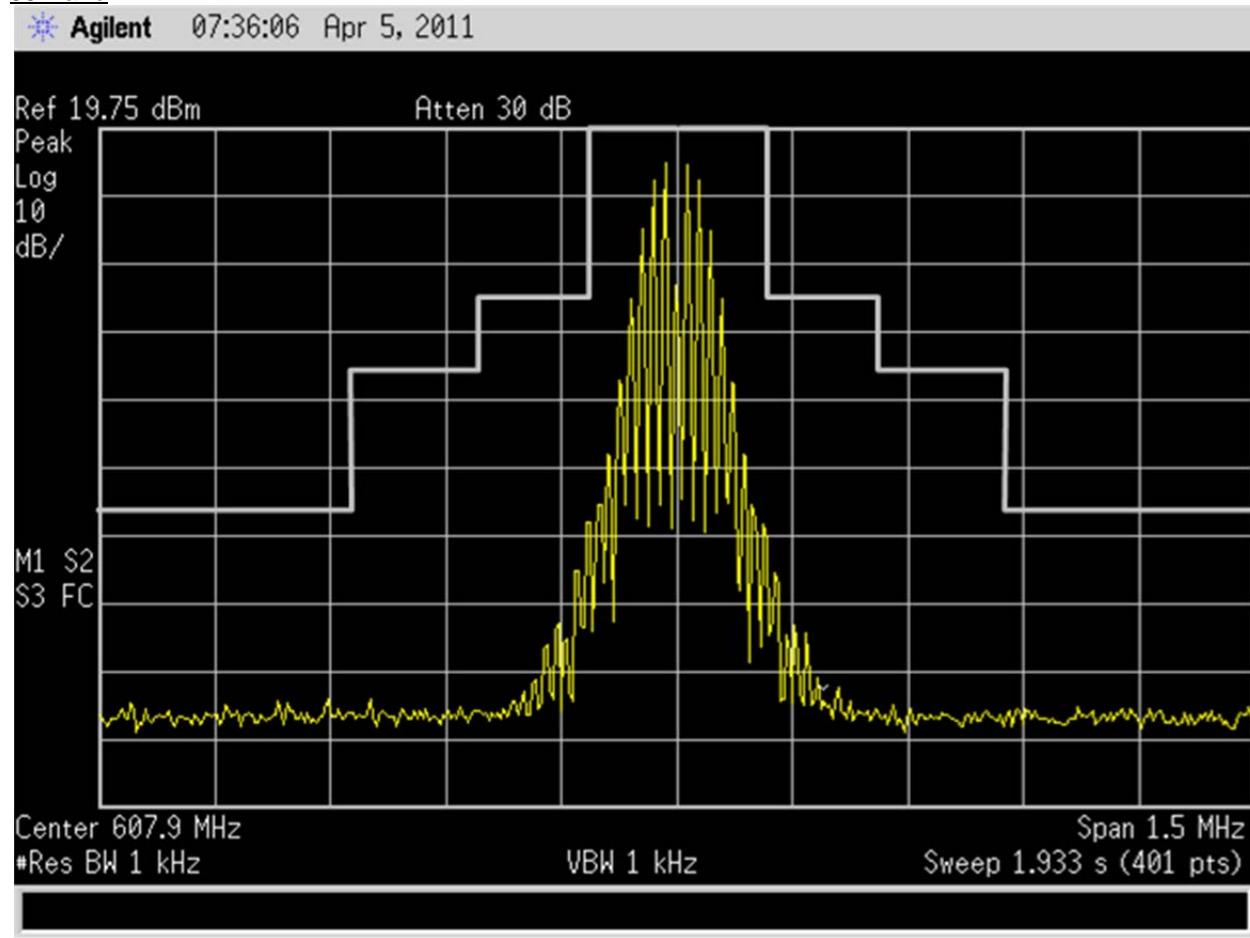


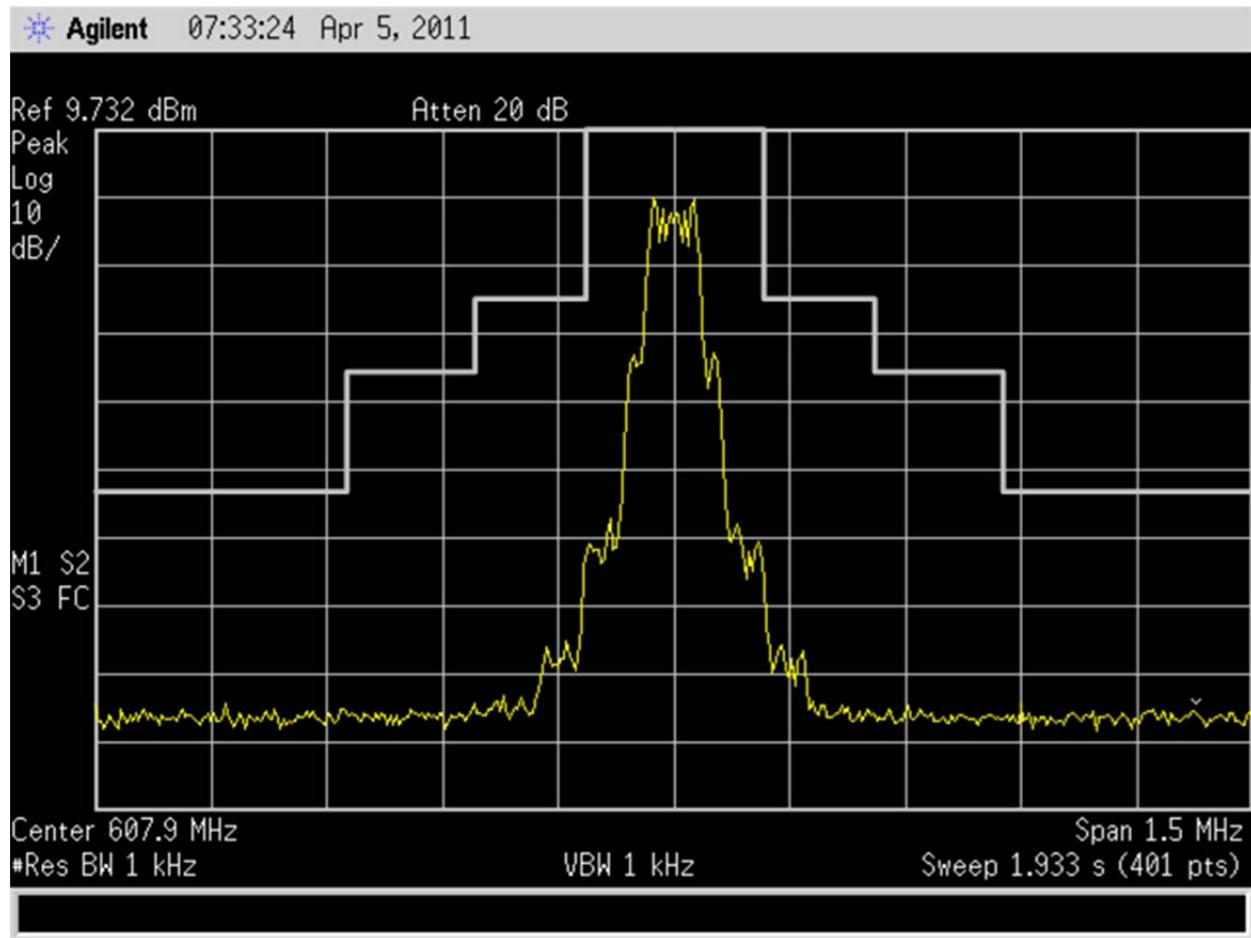


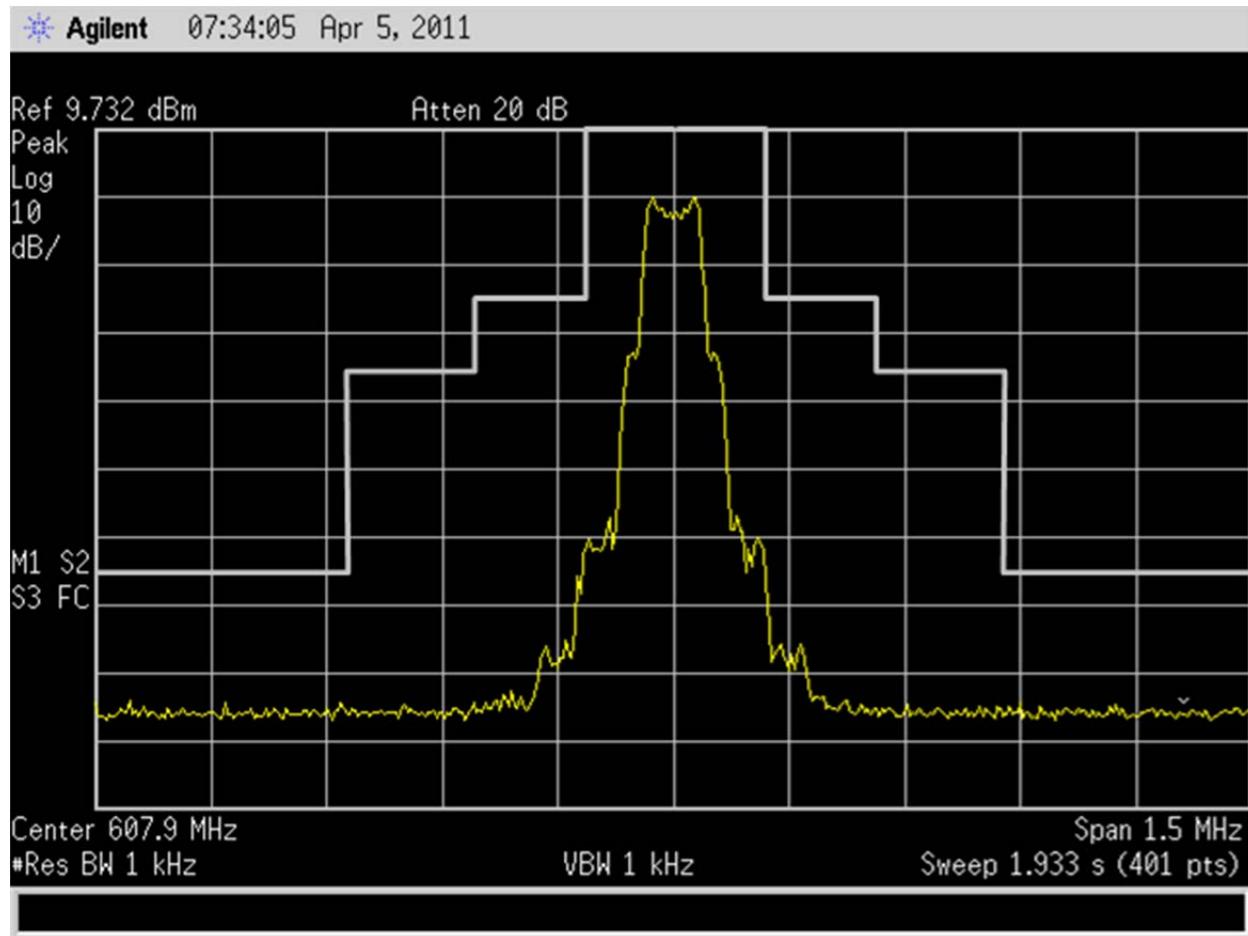


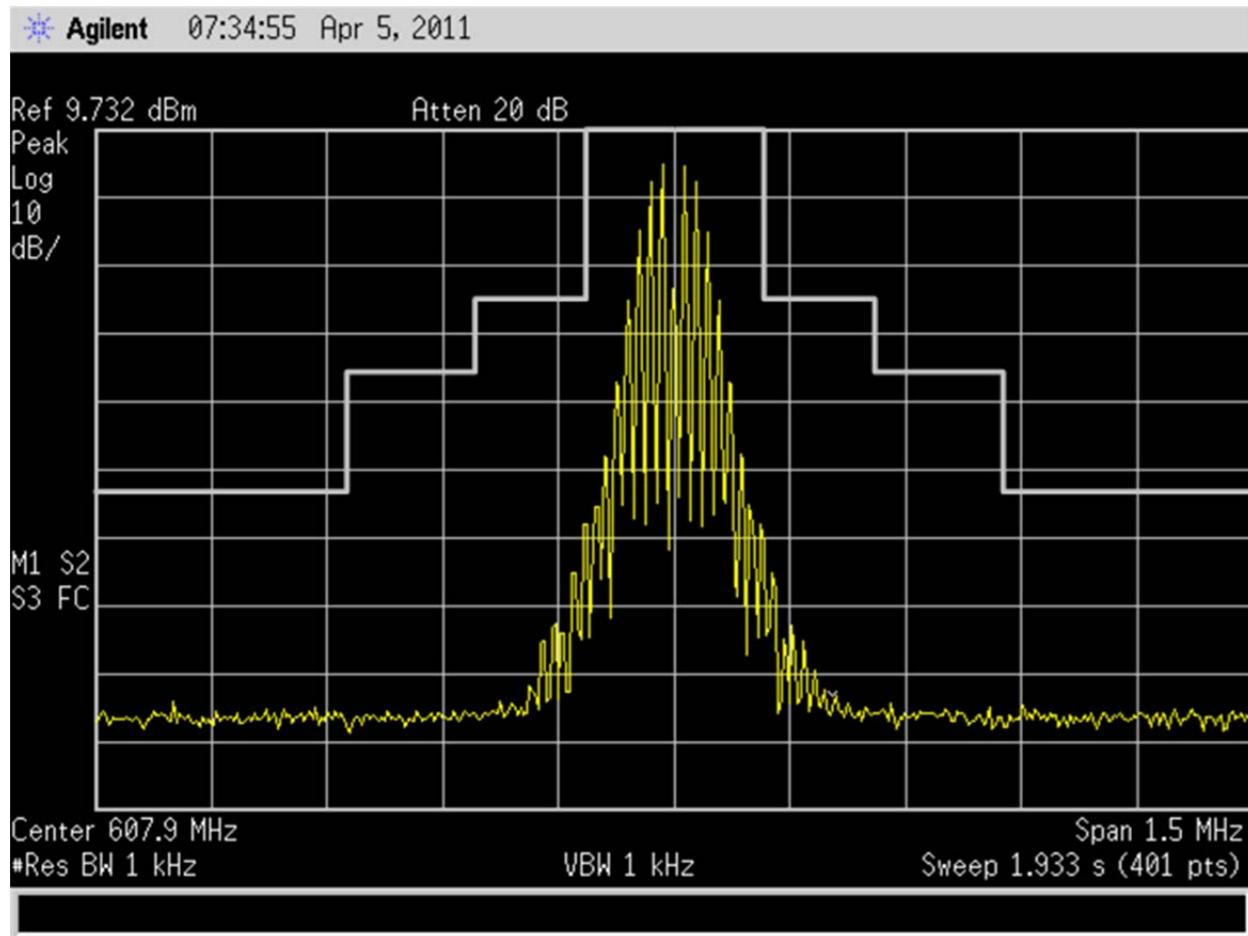


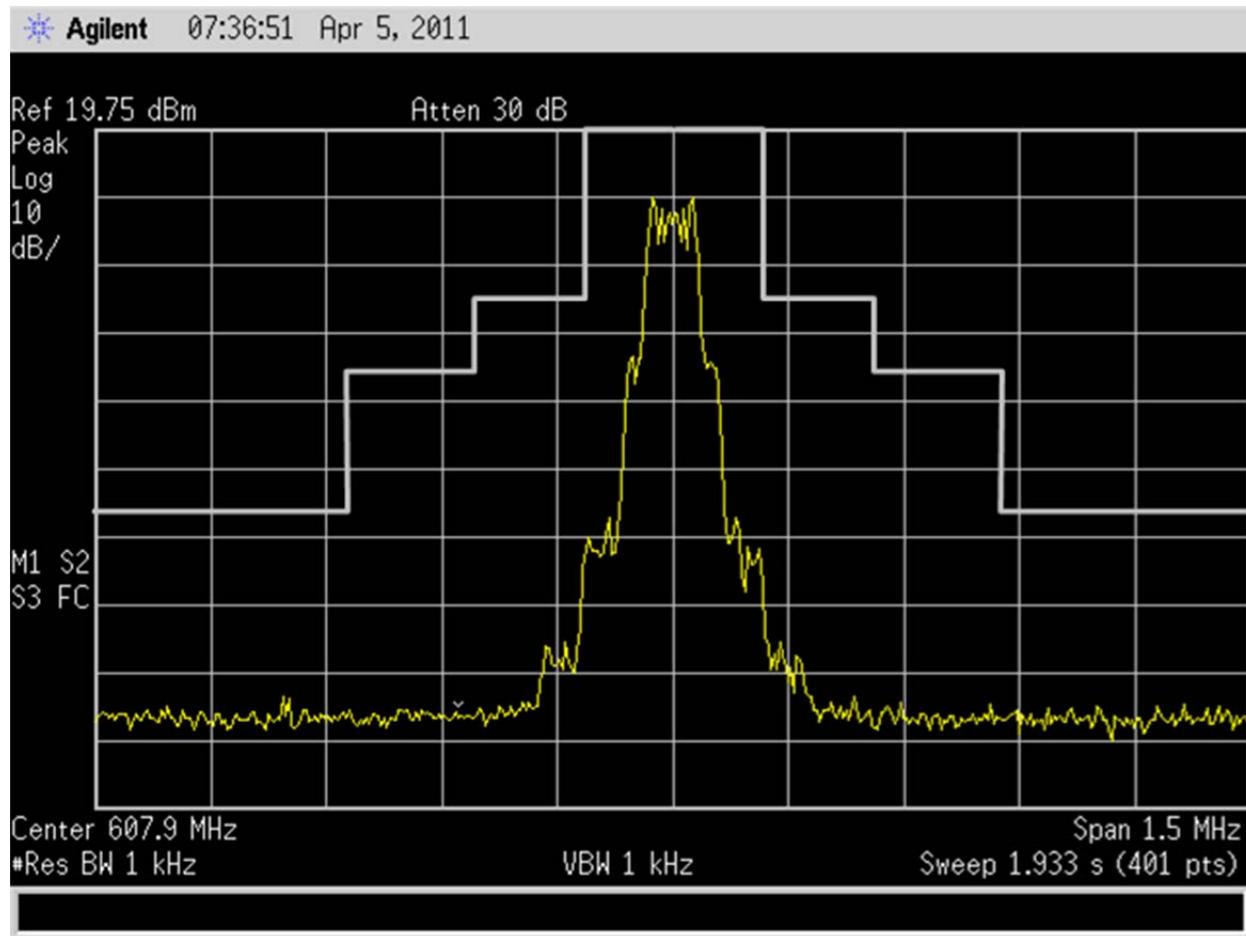
J5 Band

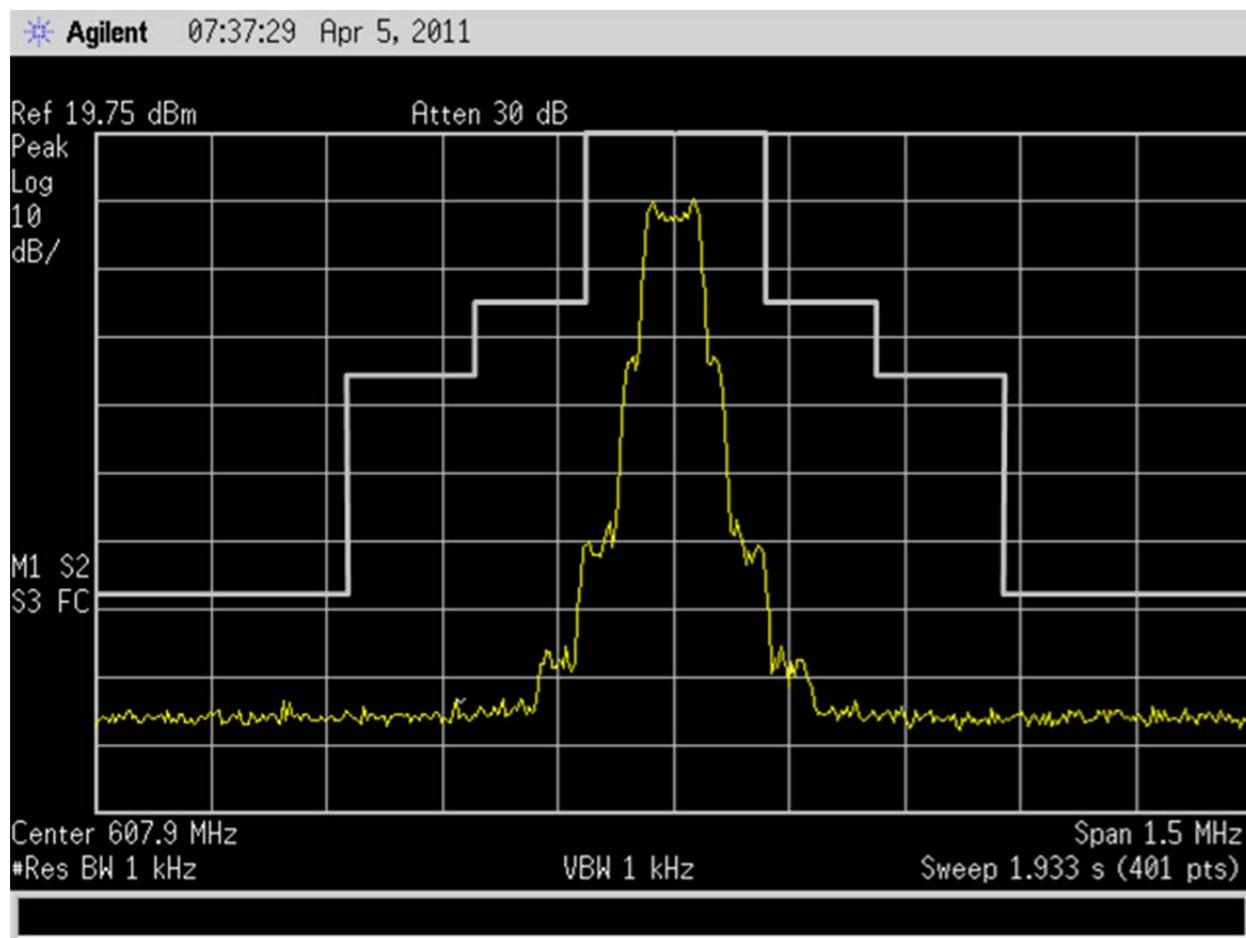




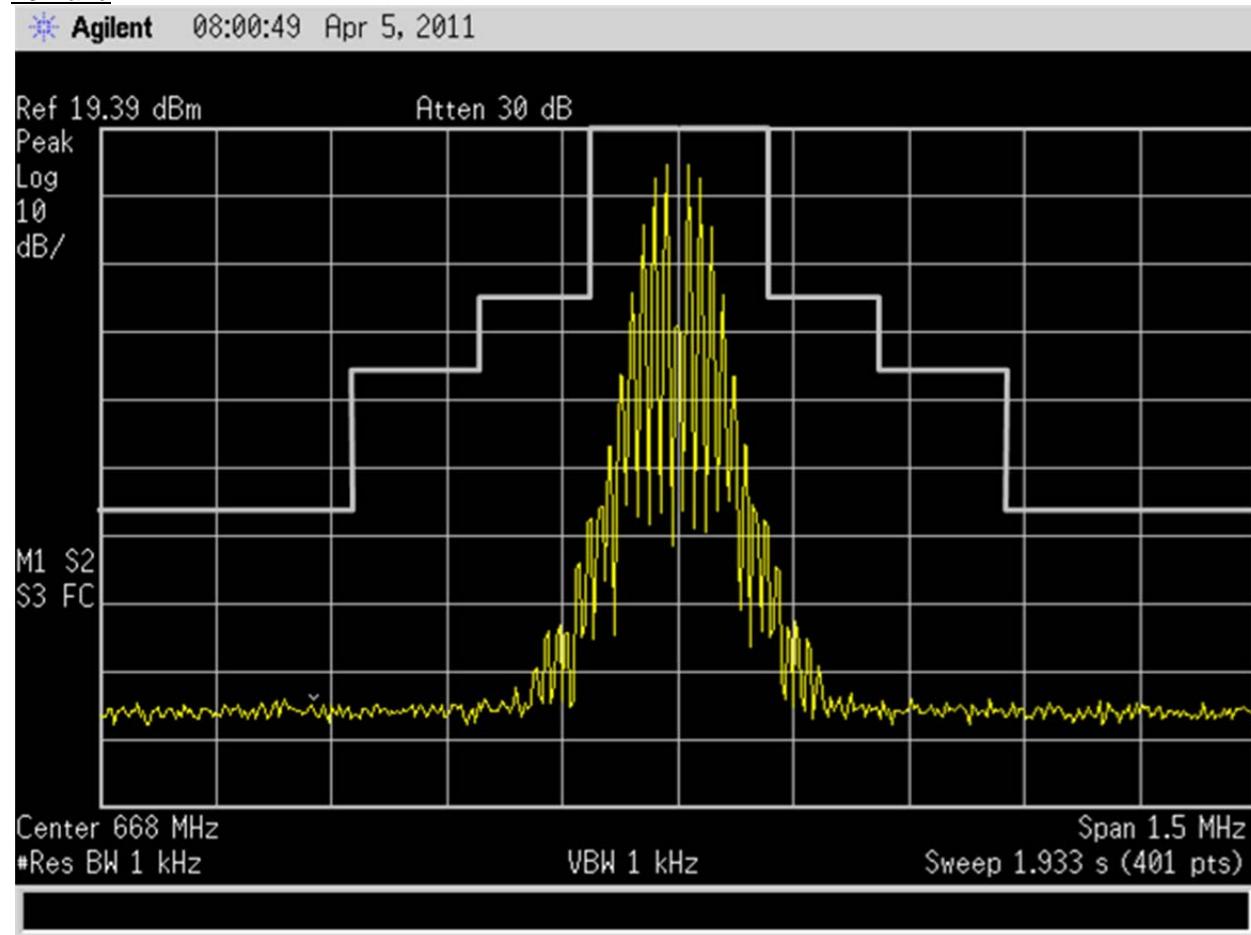


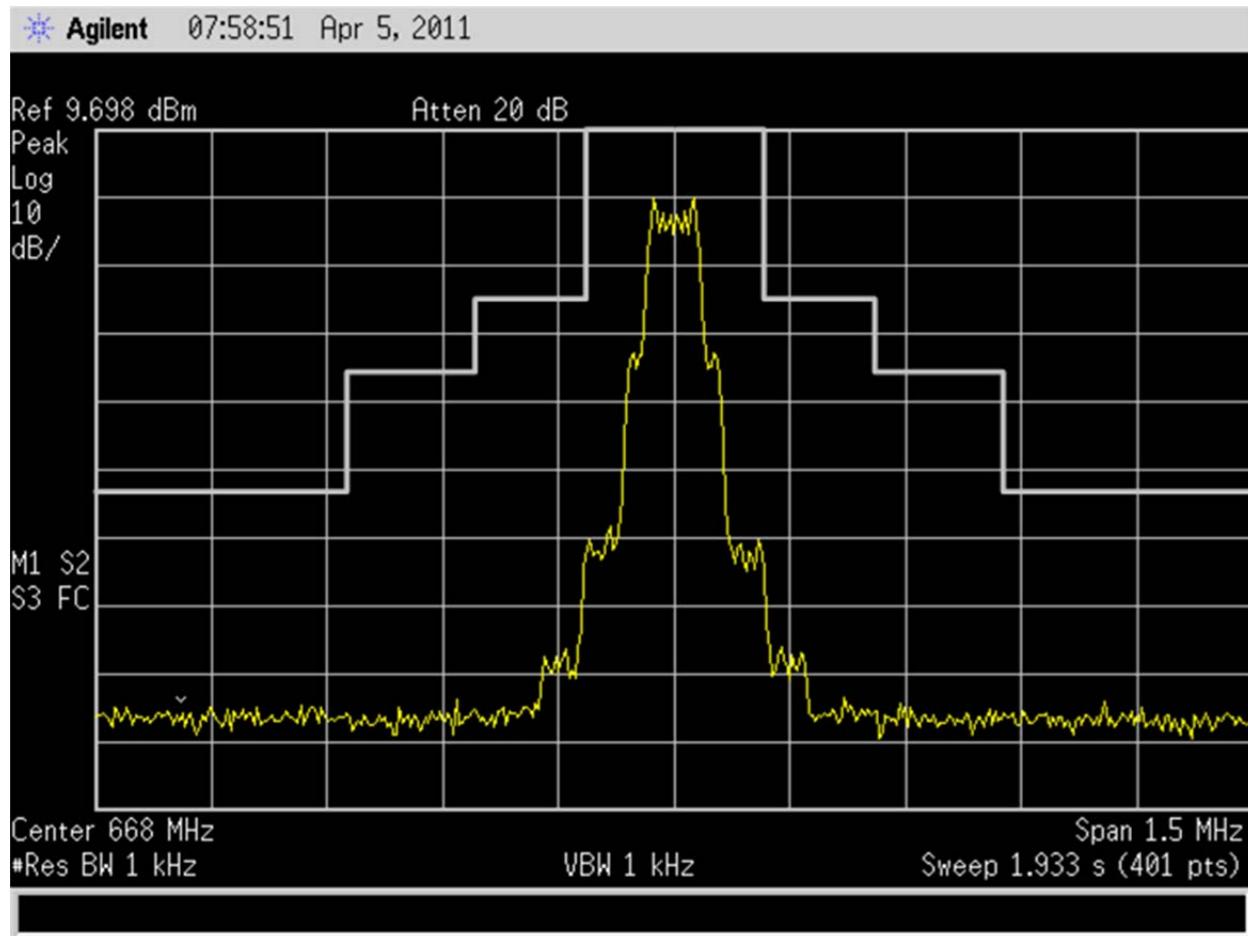


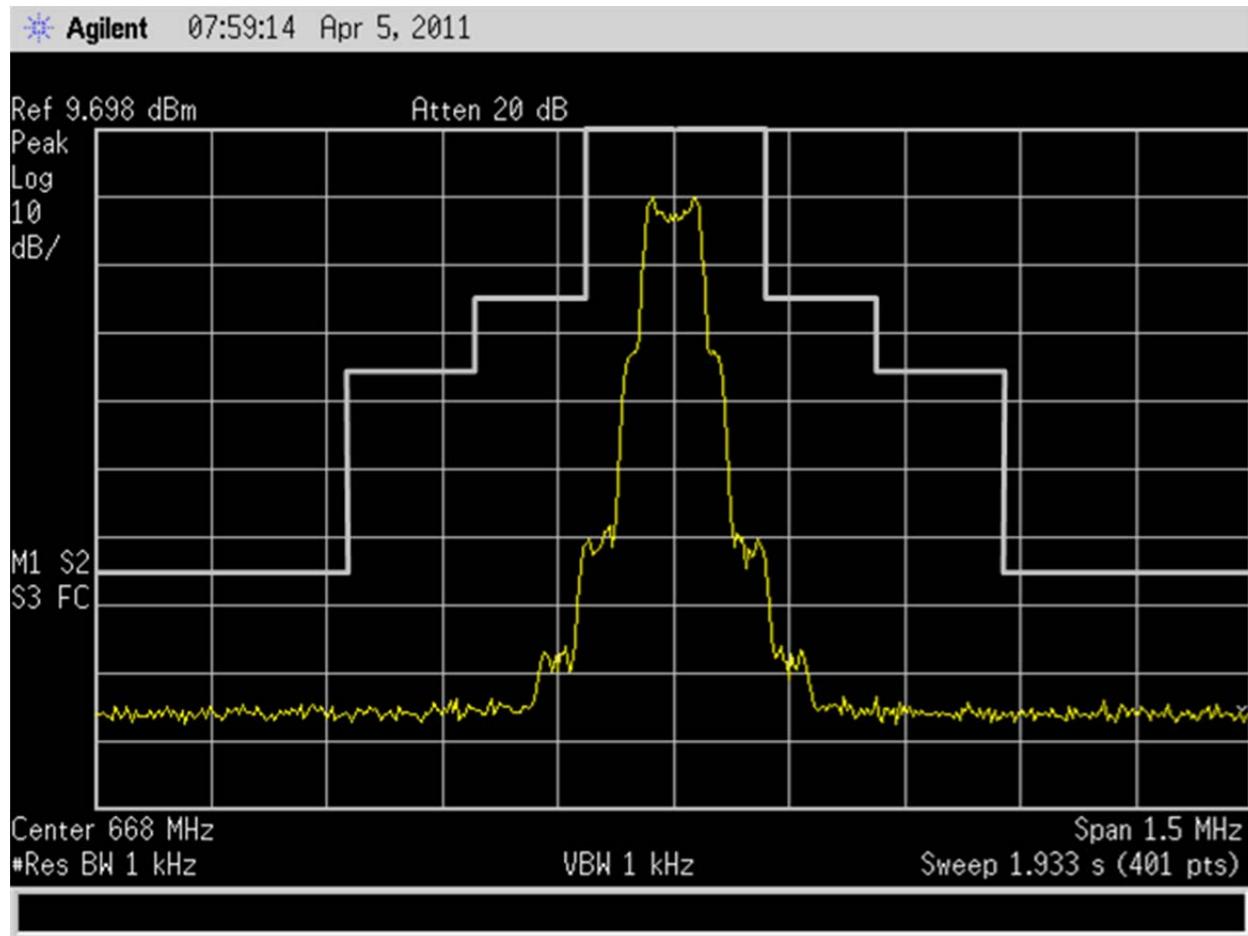


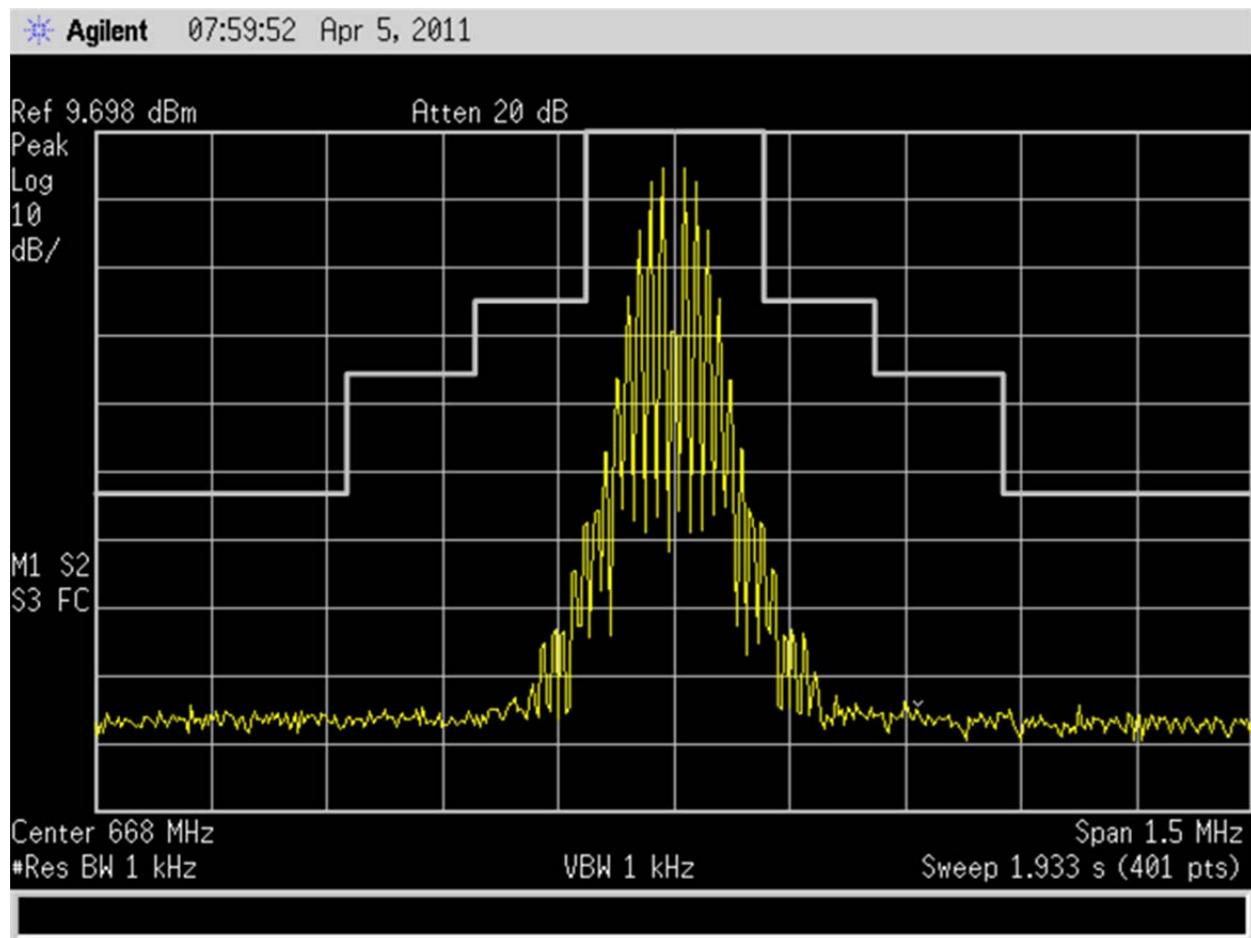


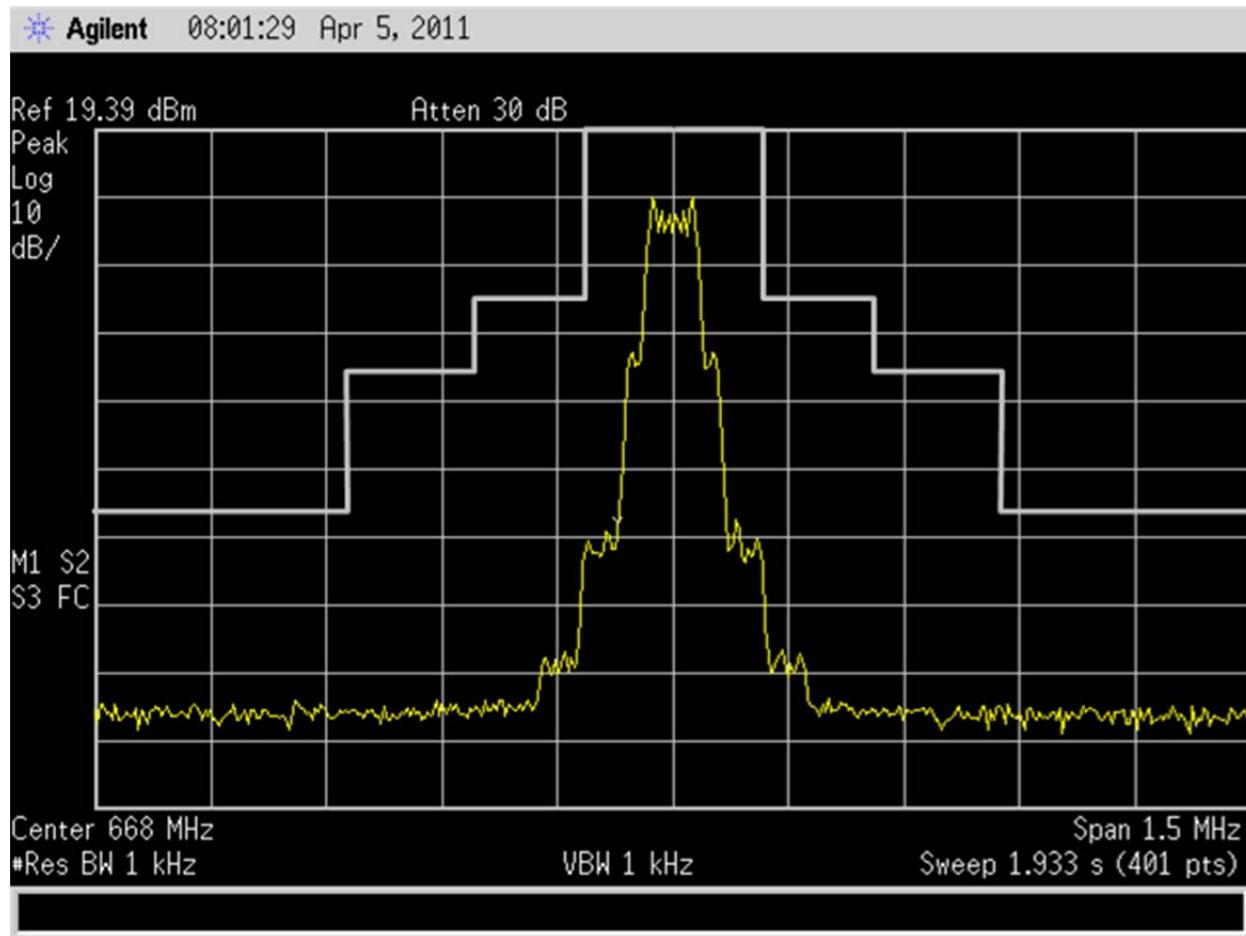
L3 Band

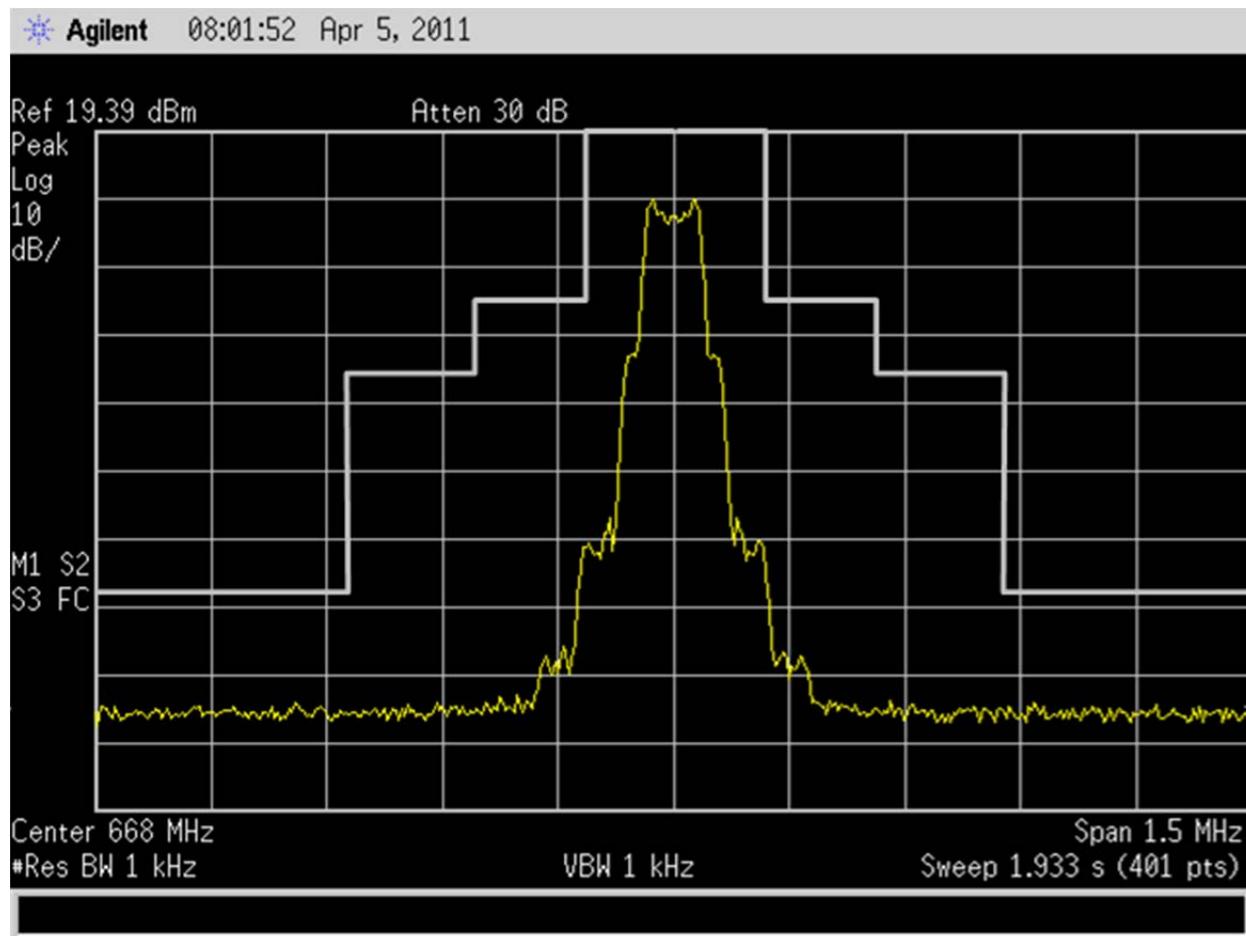






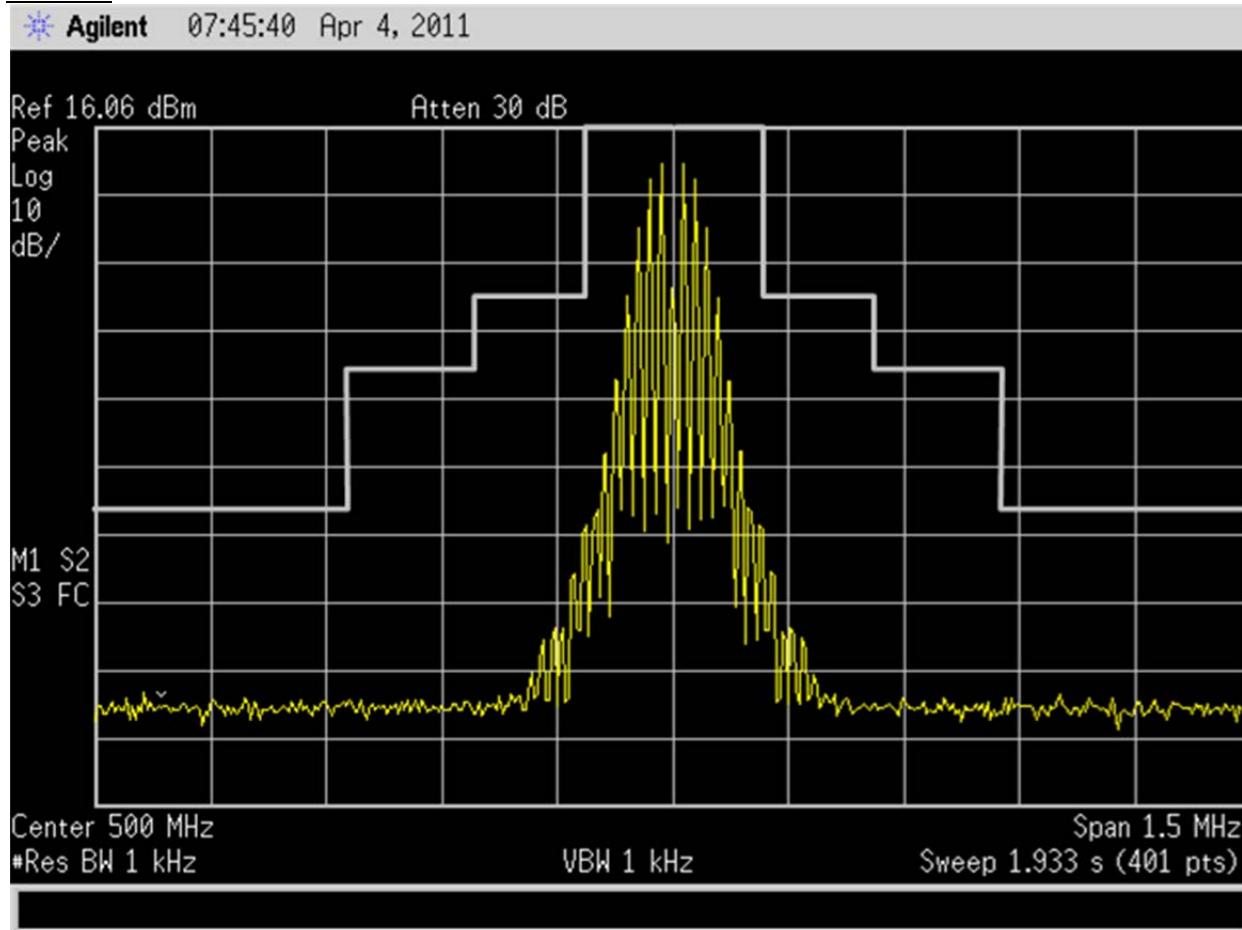


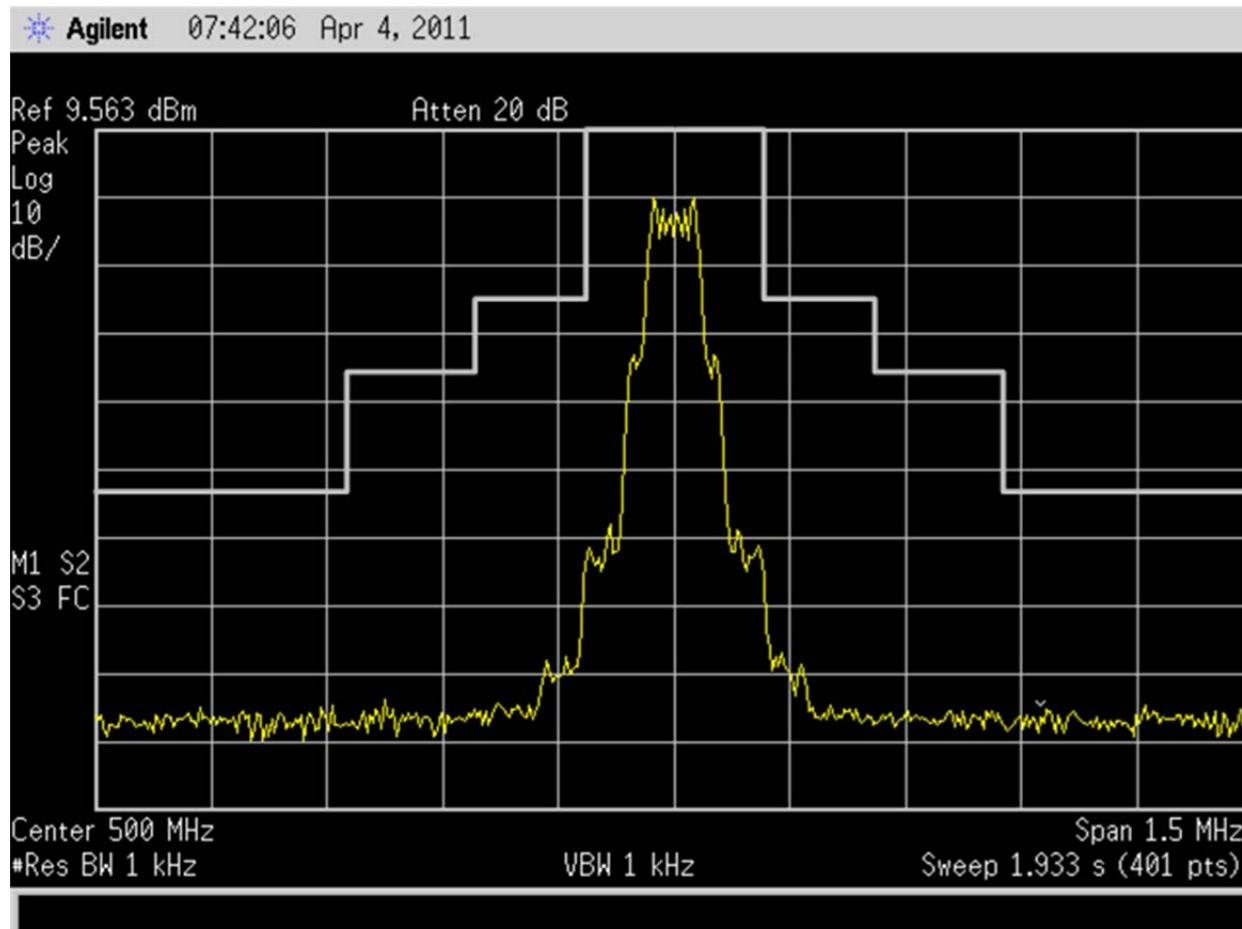


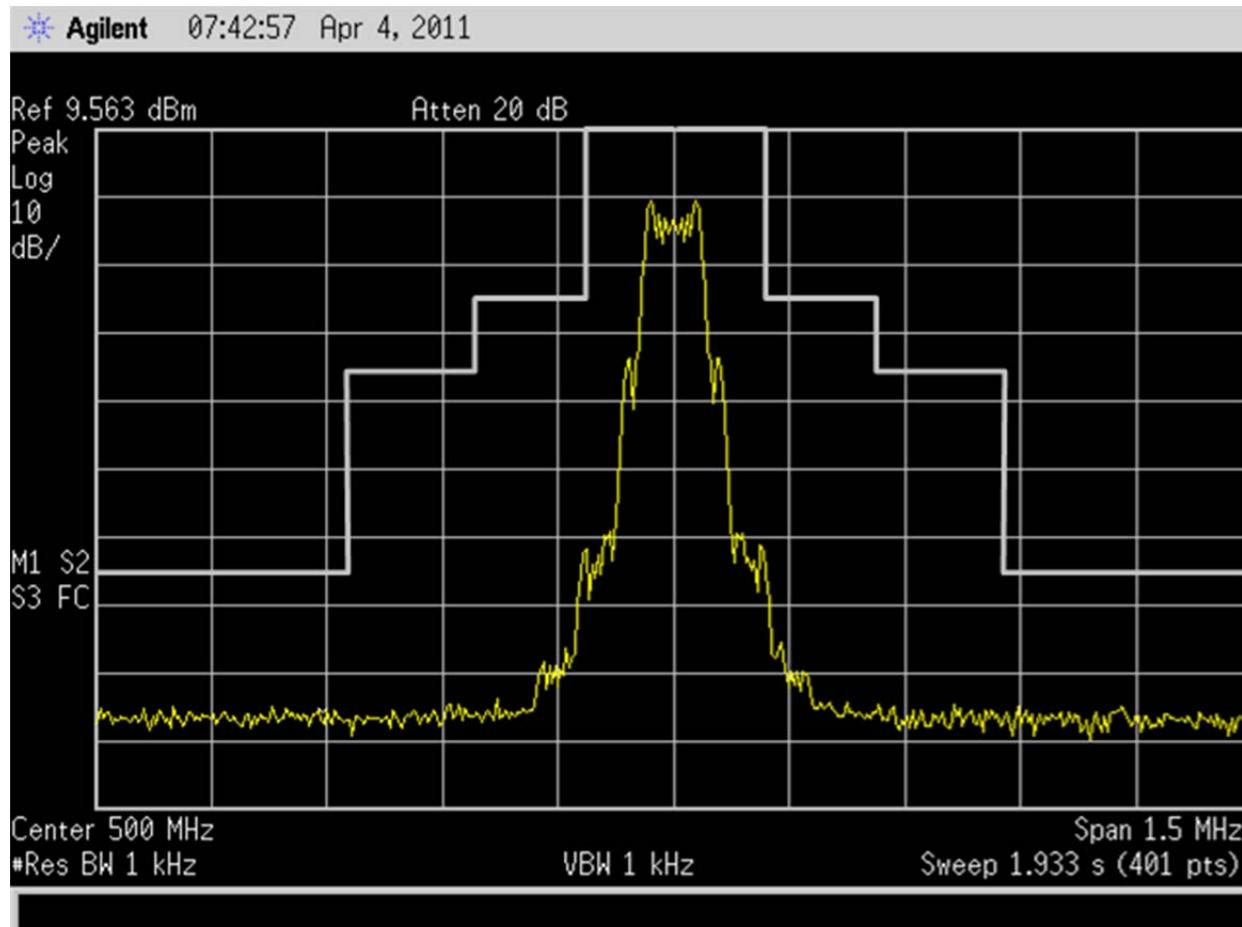


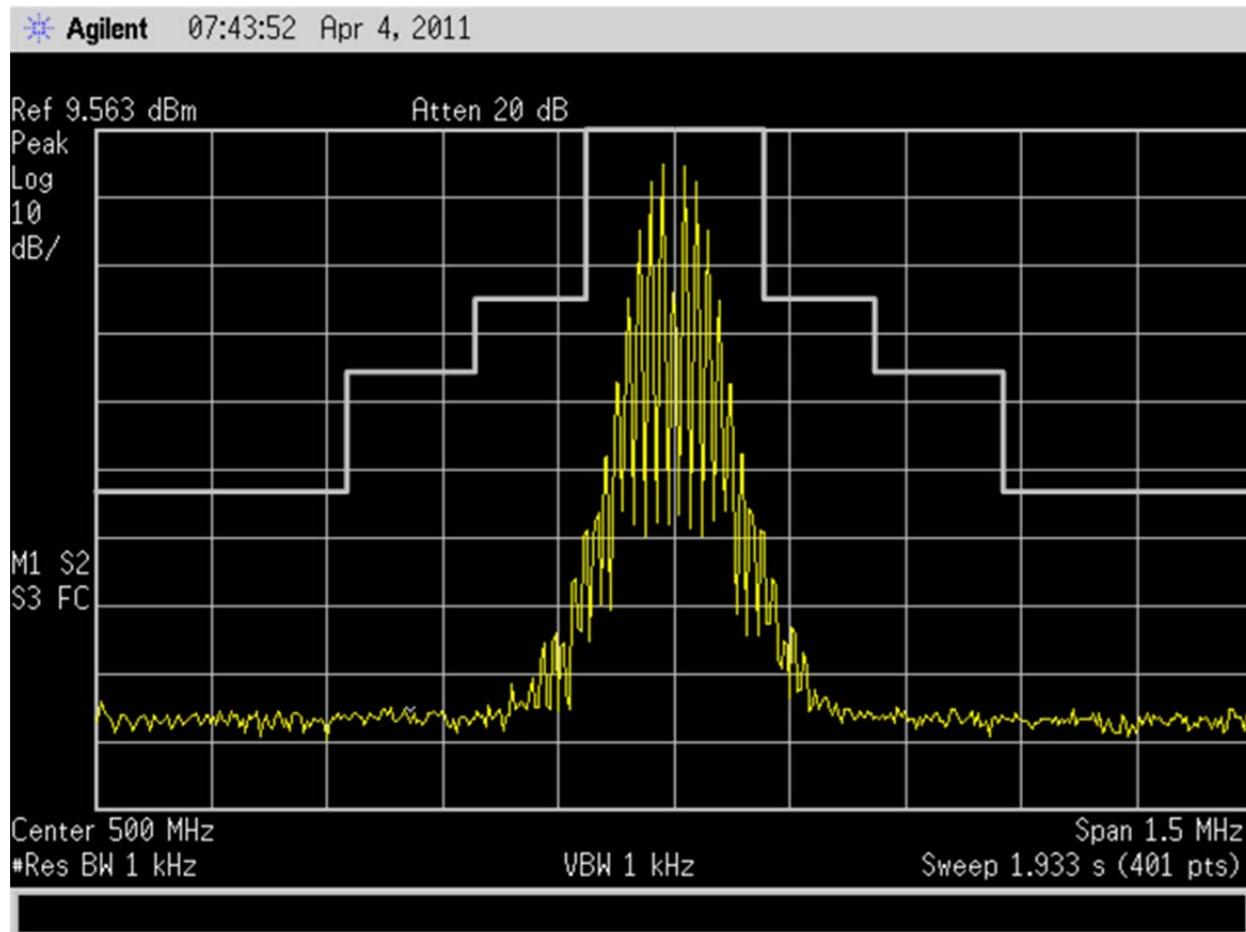
3.3 AXT200 Plots

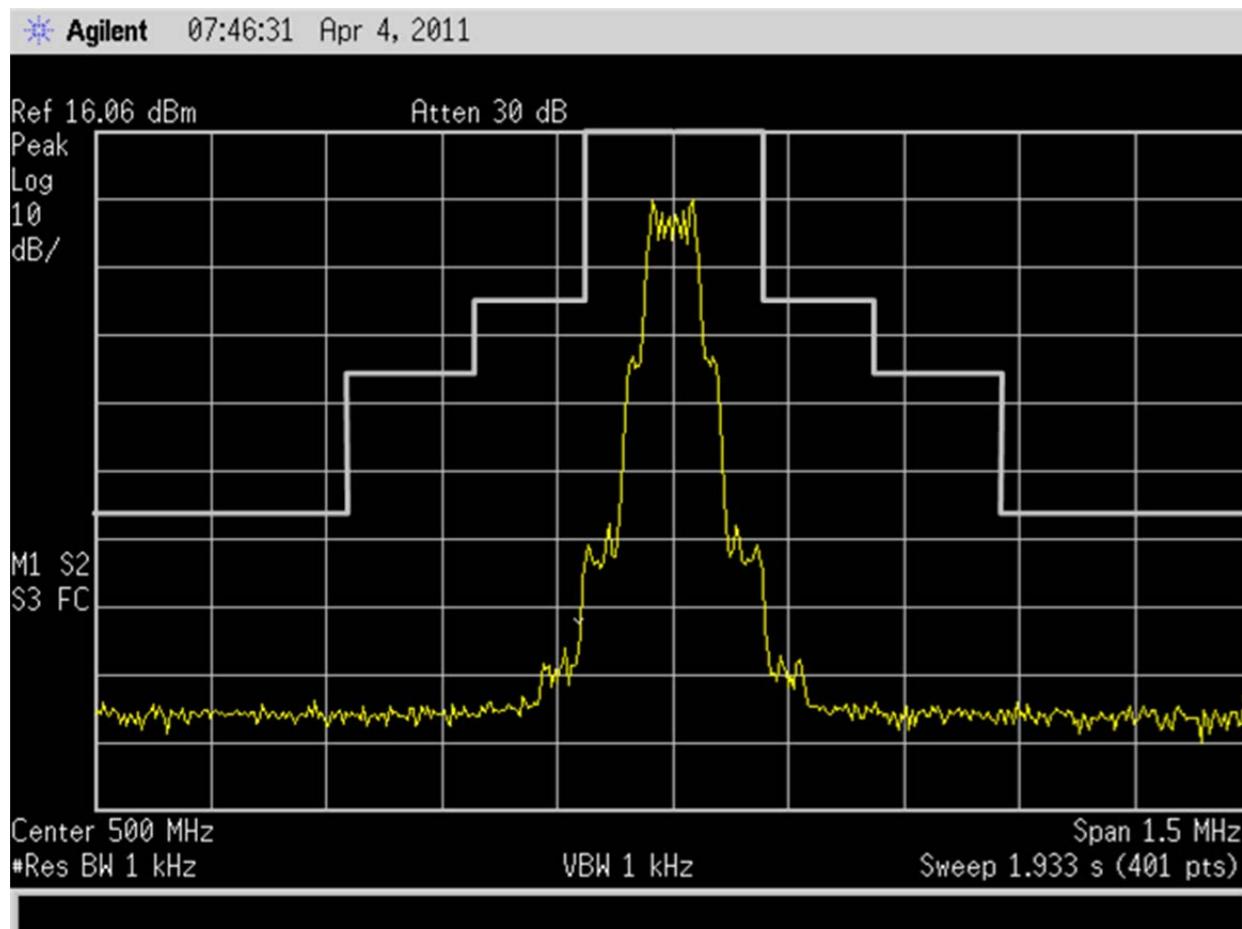
G1 Band

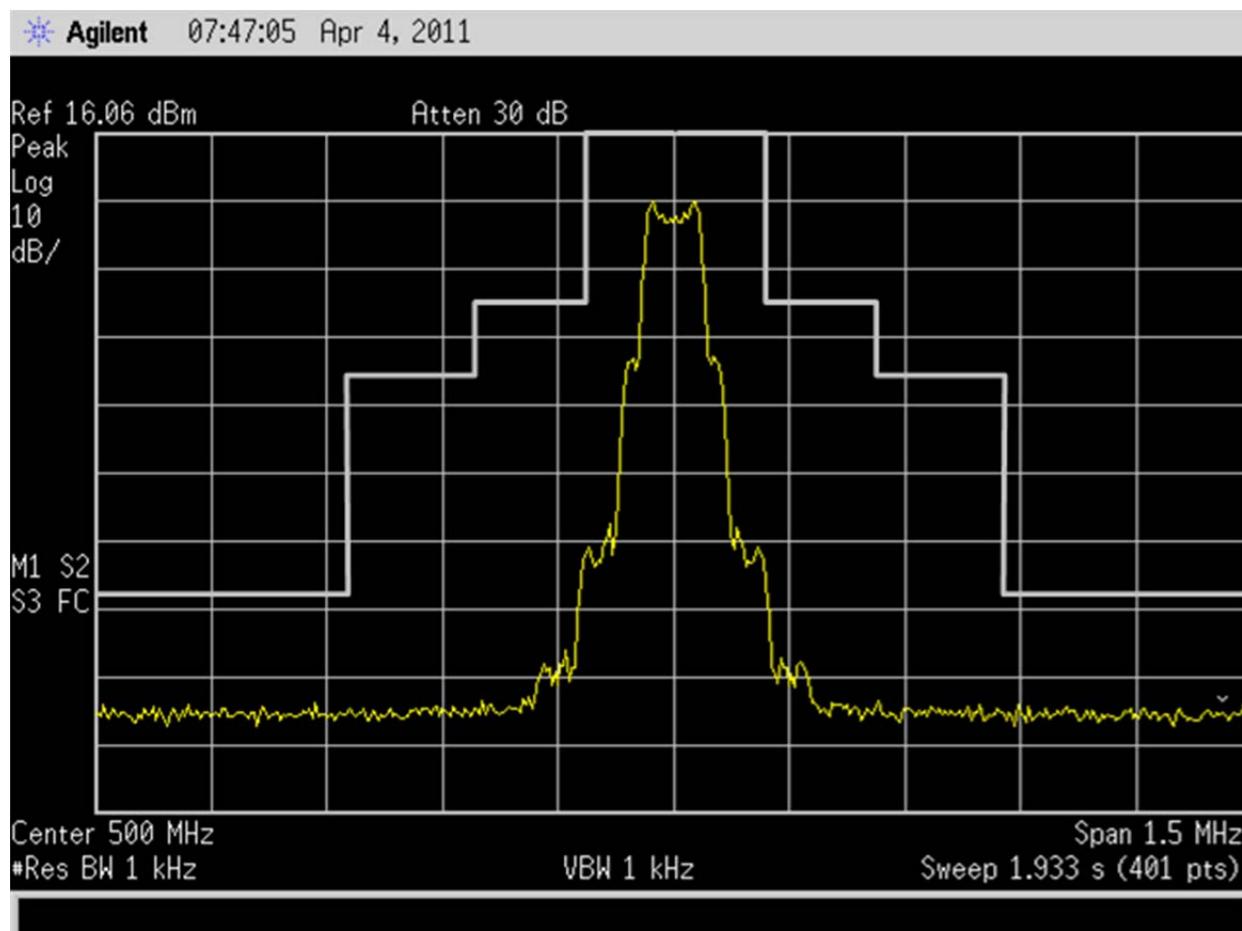




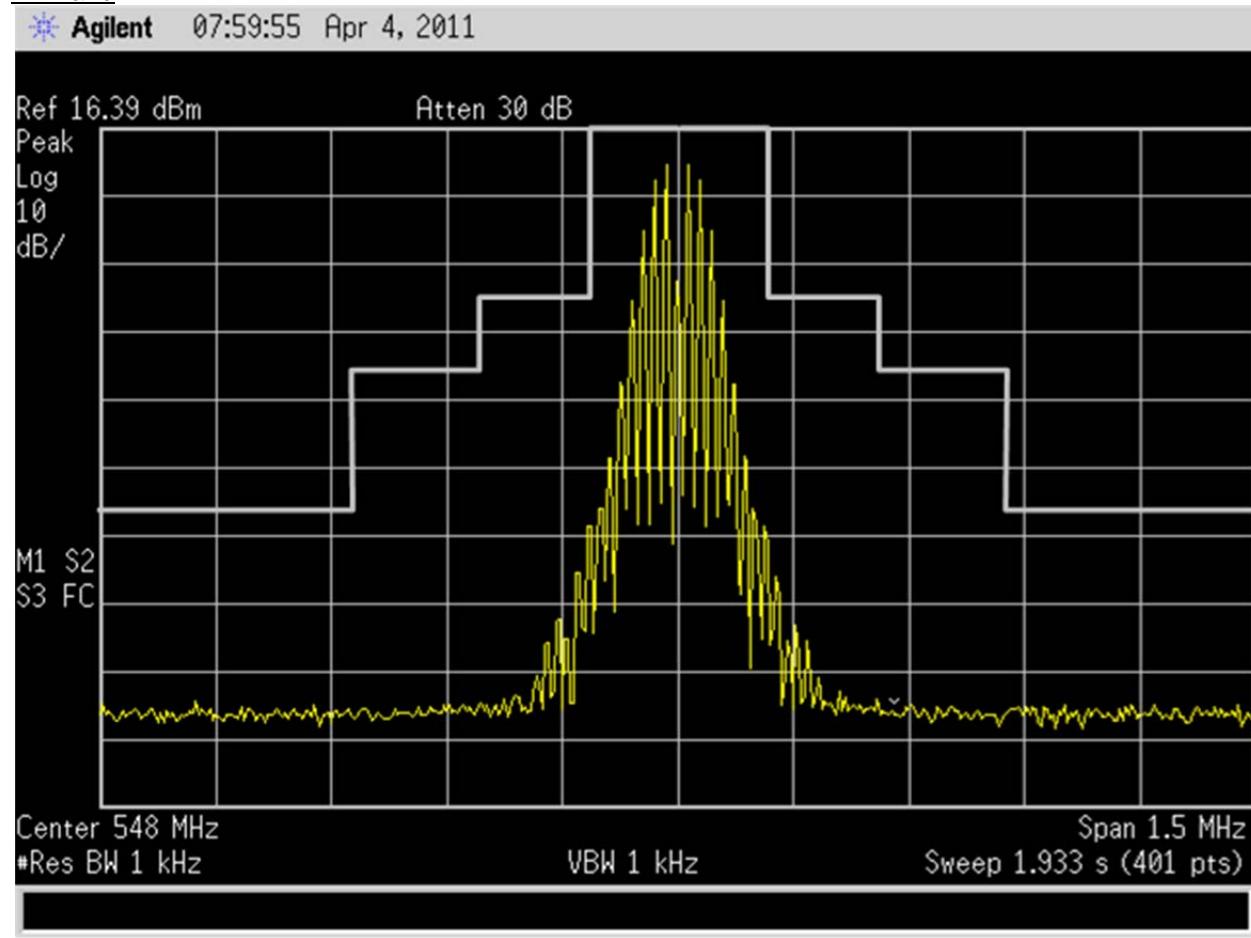


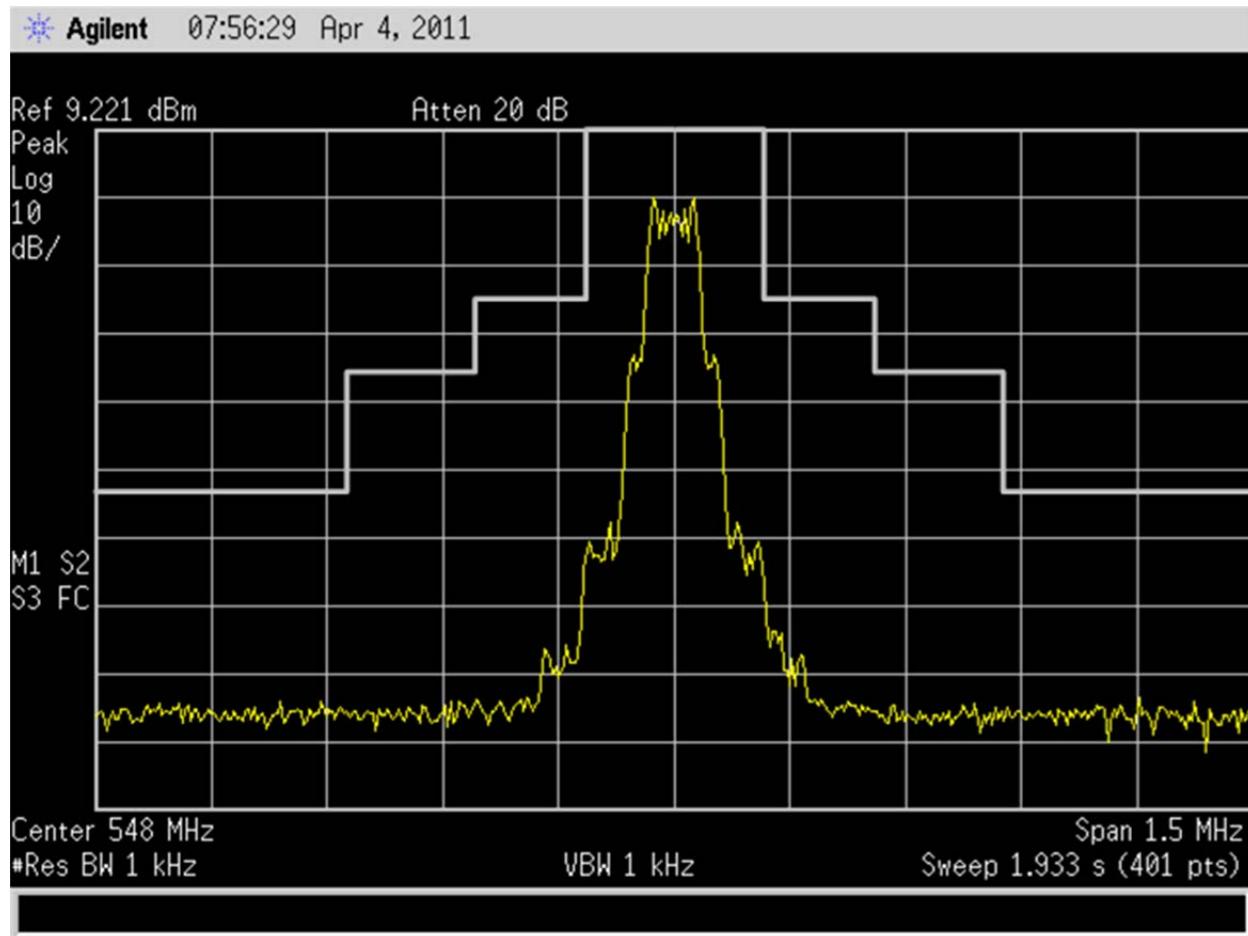


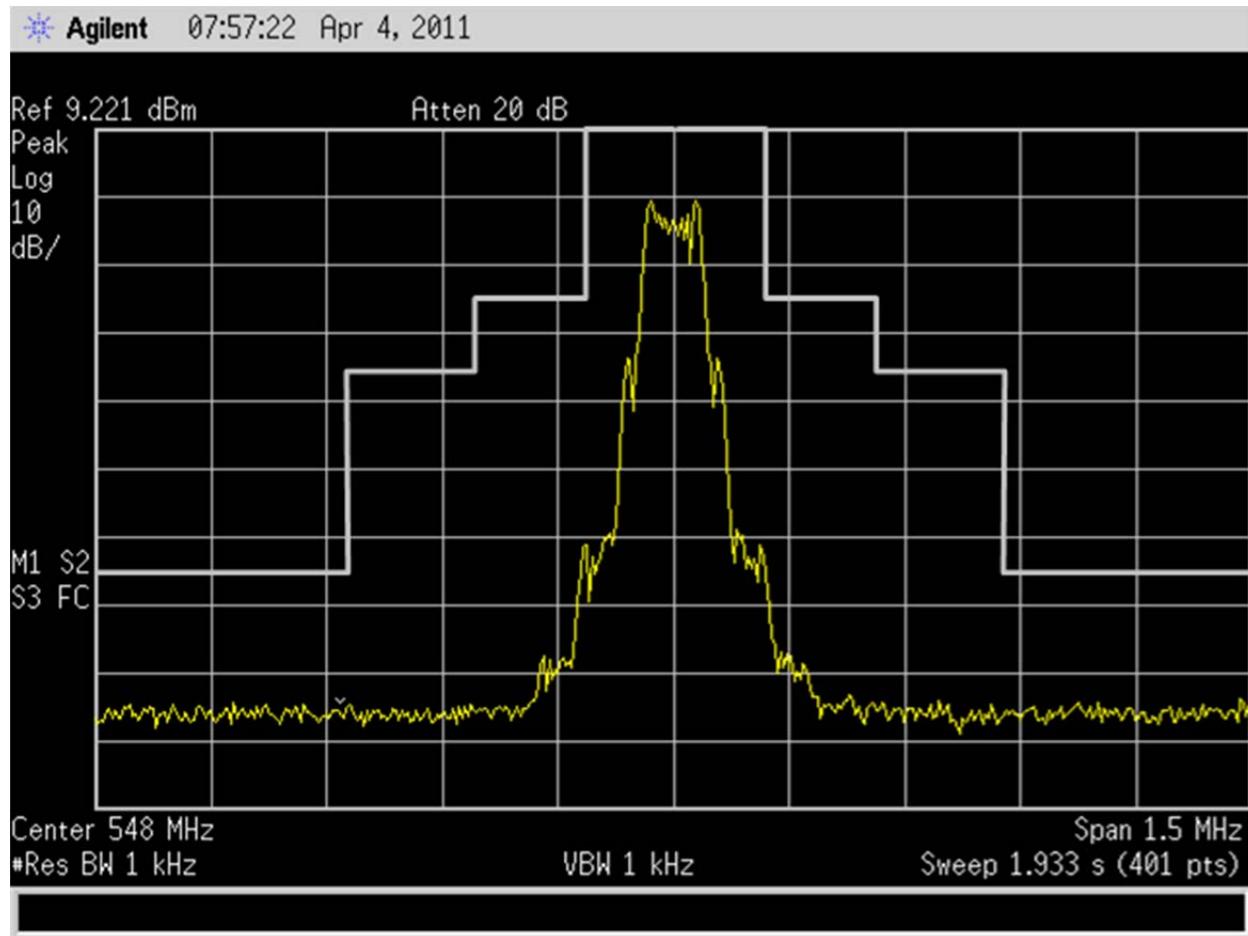


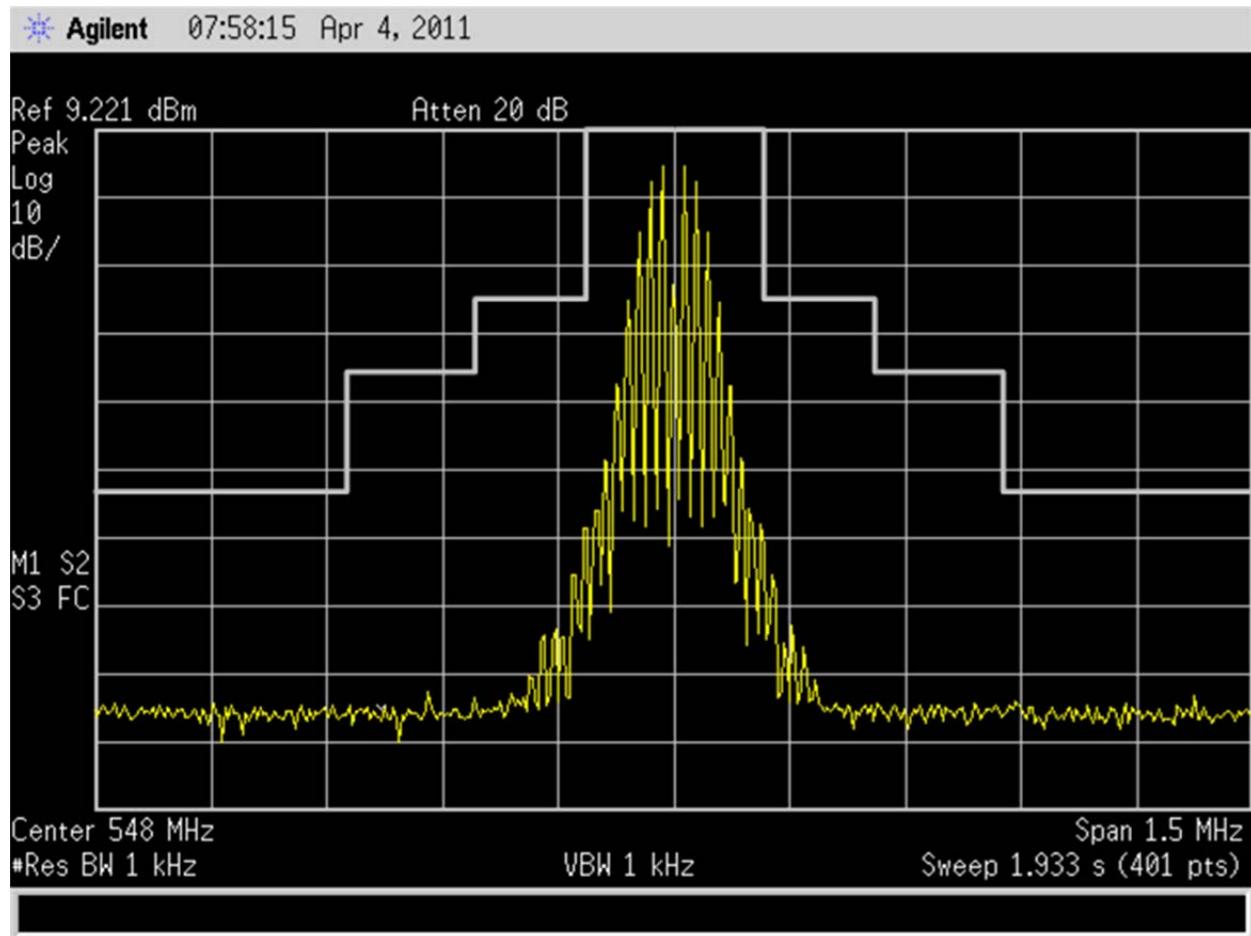


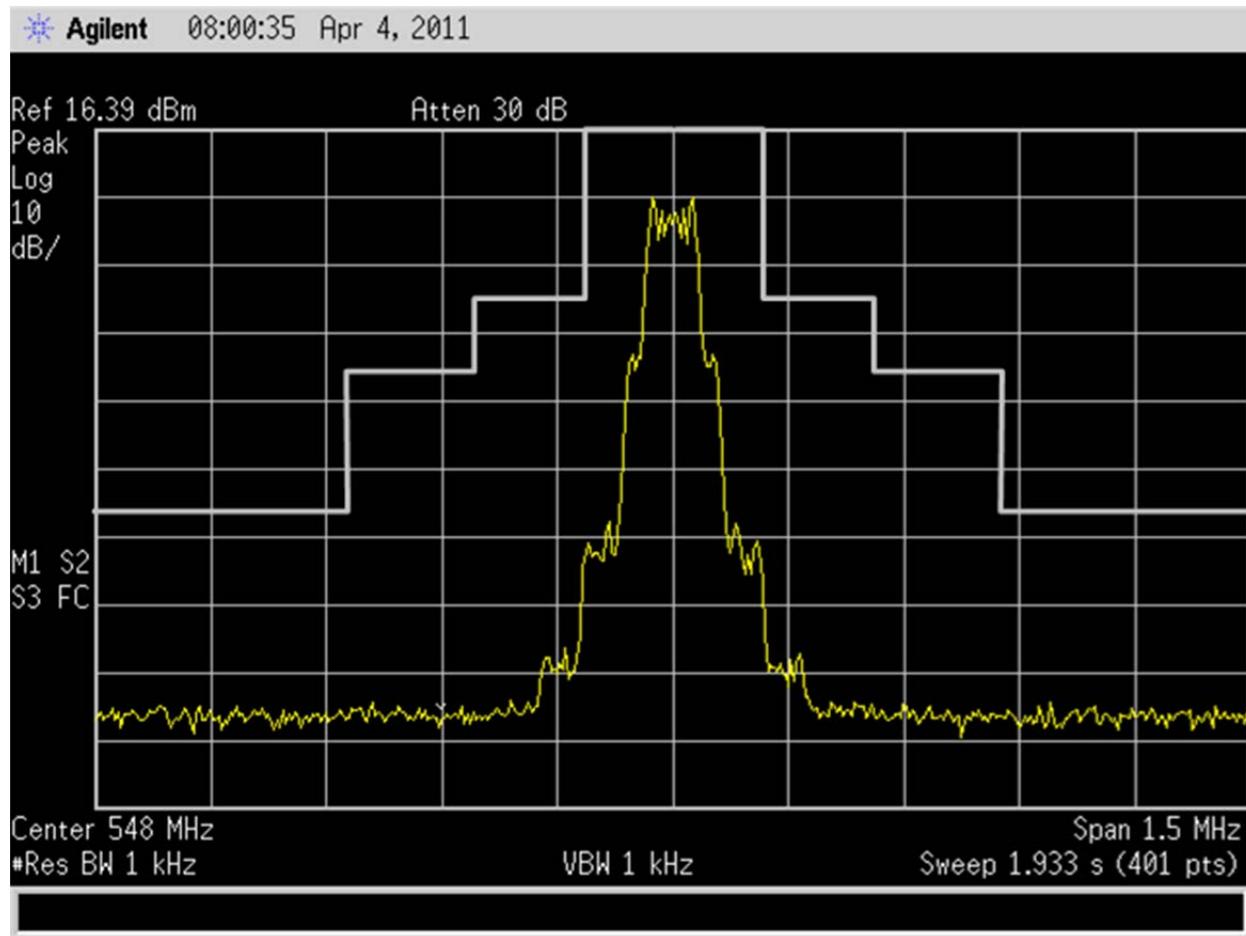
H4 Band

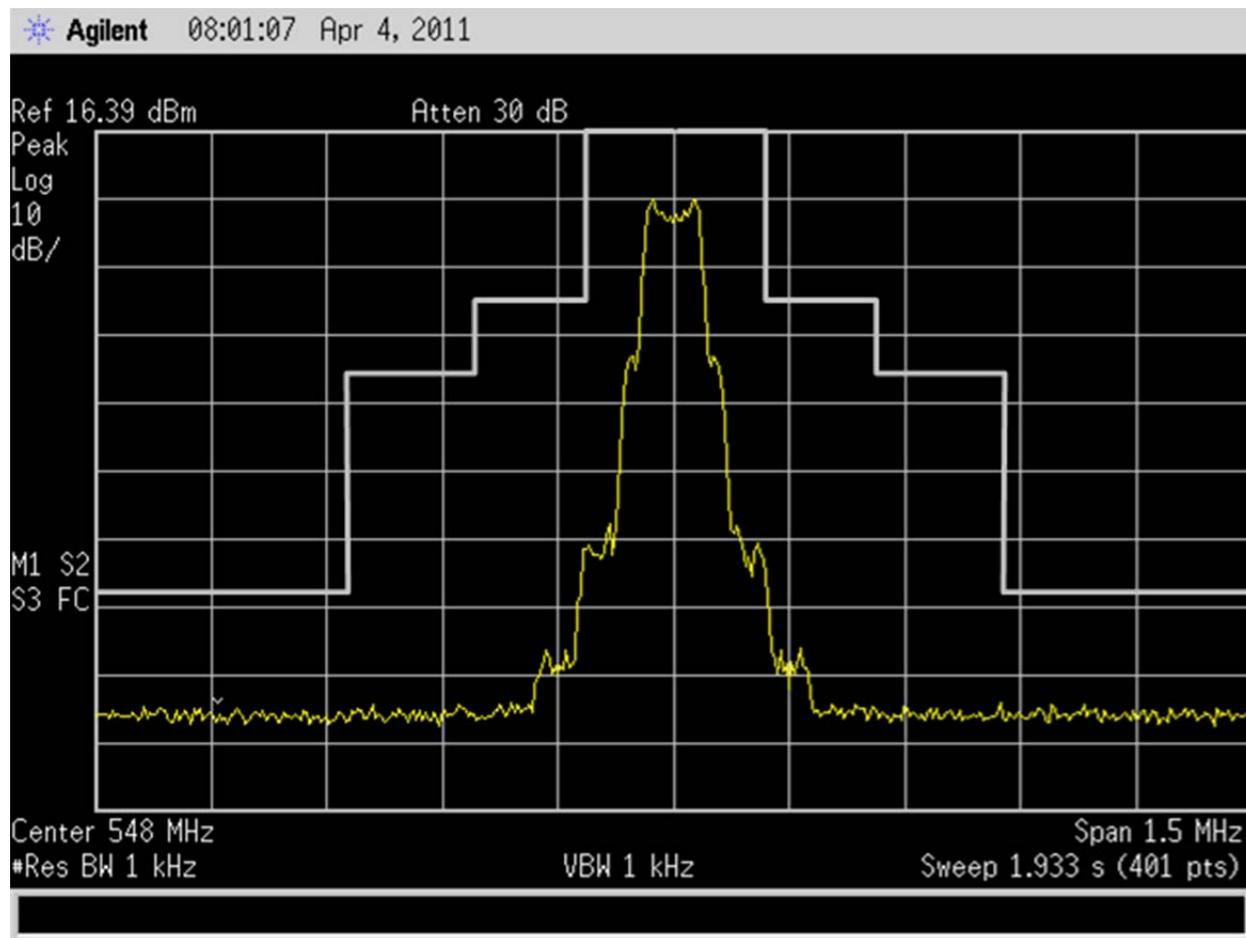




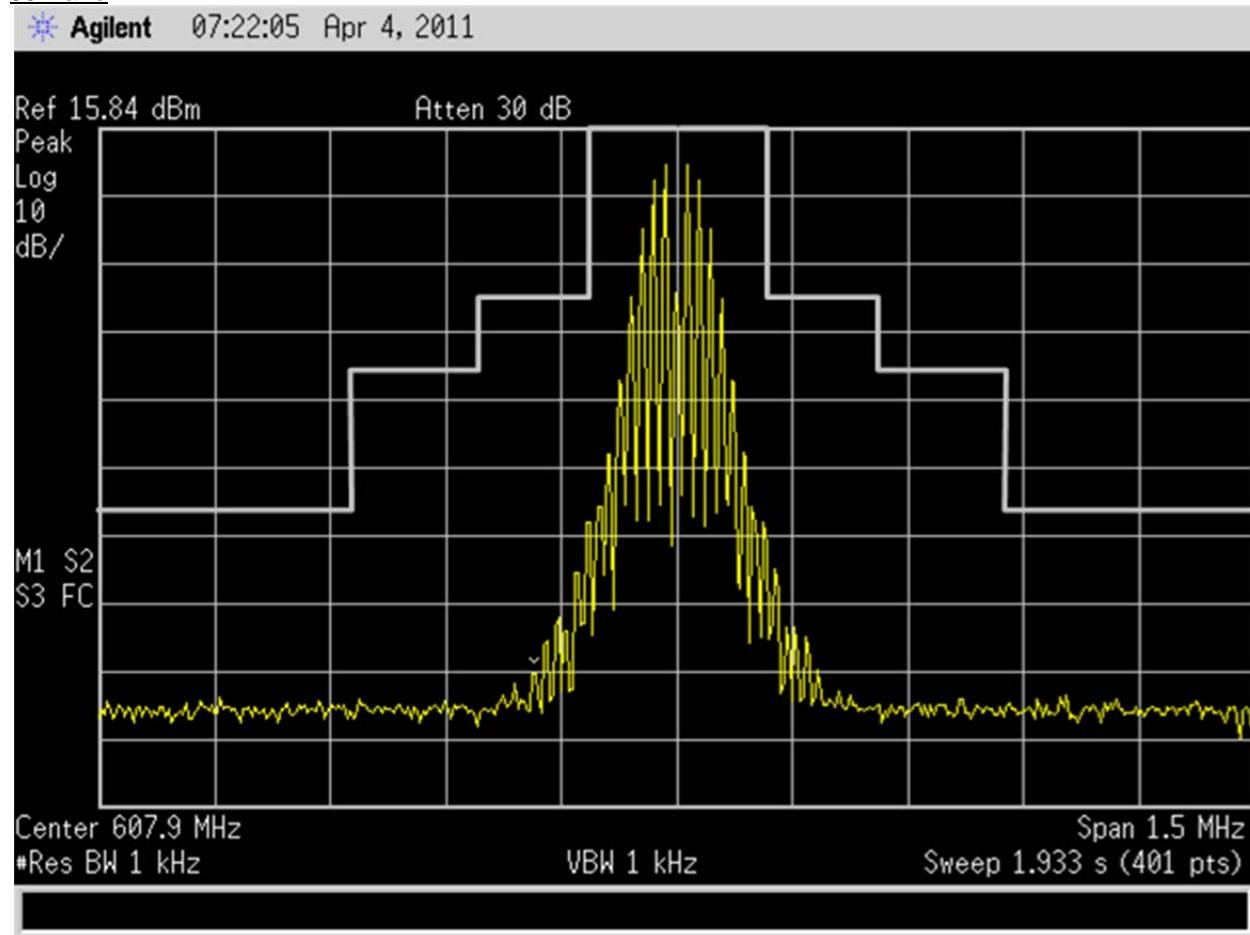


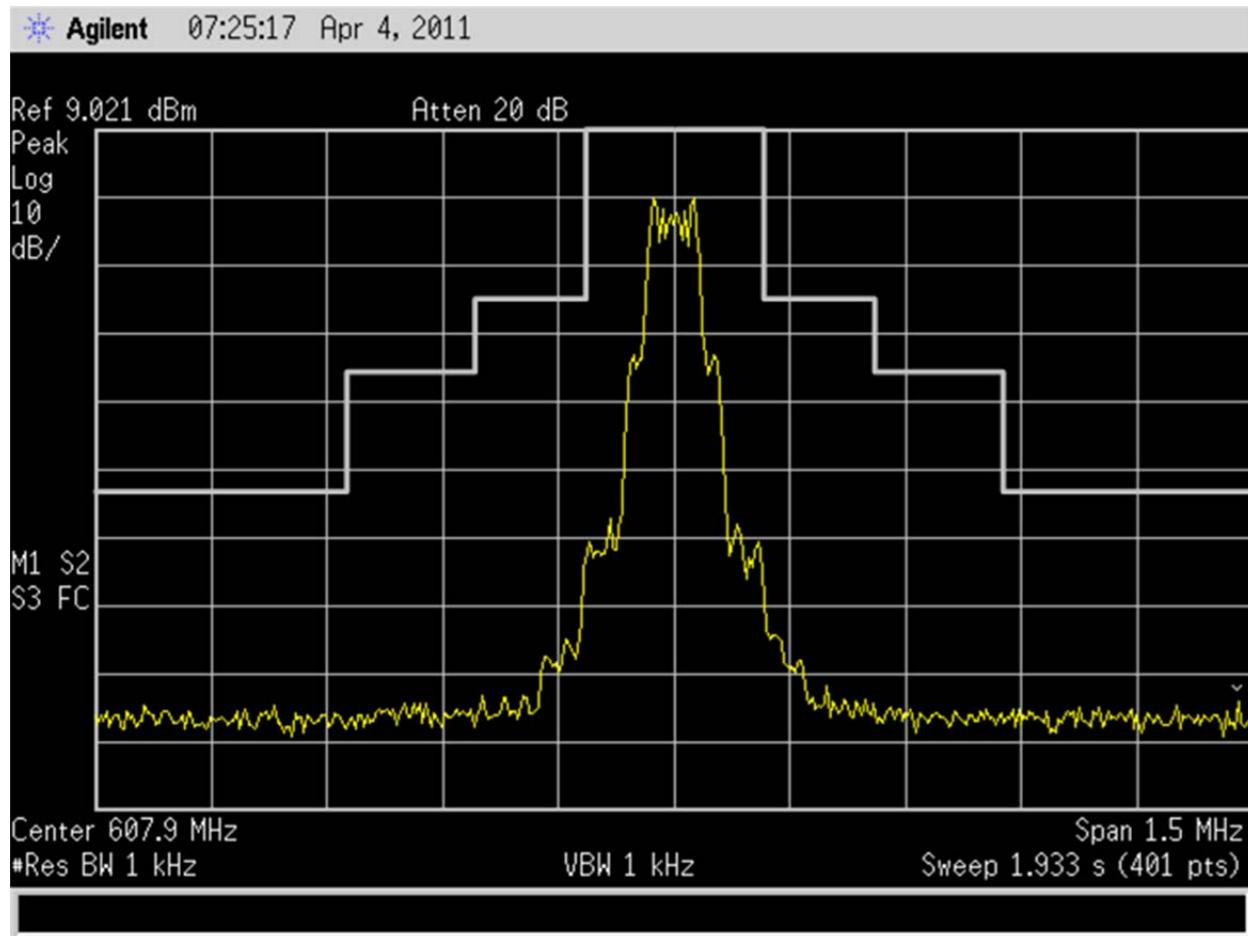


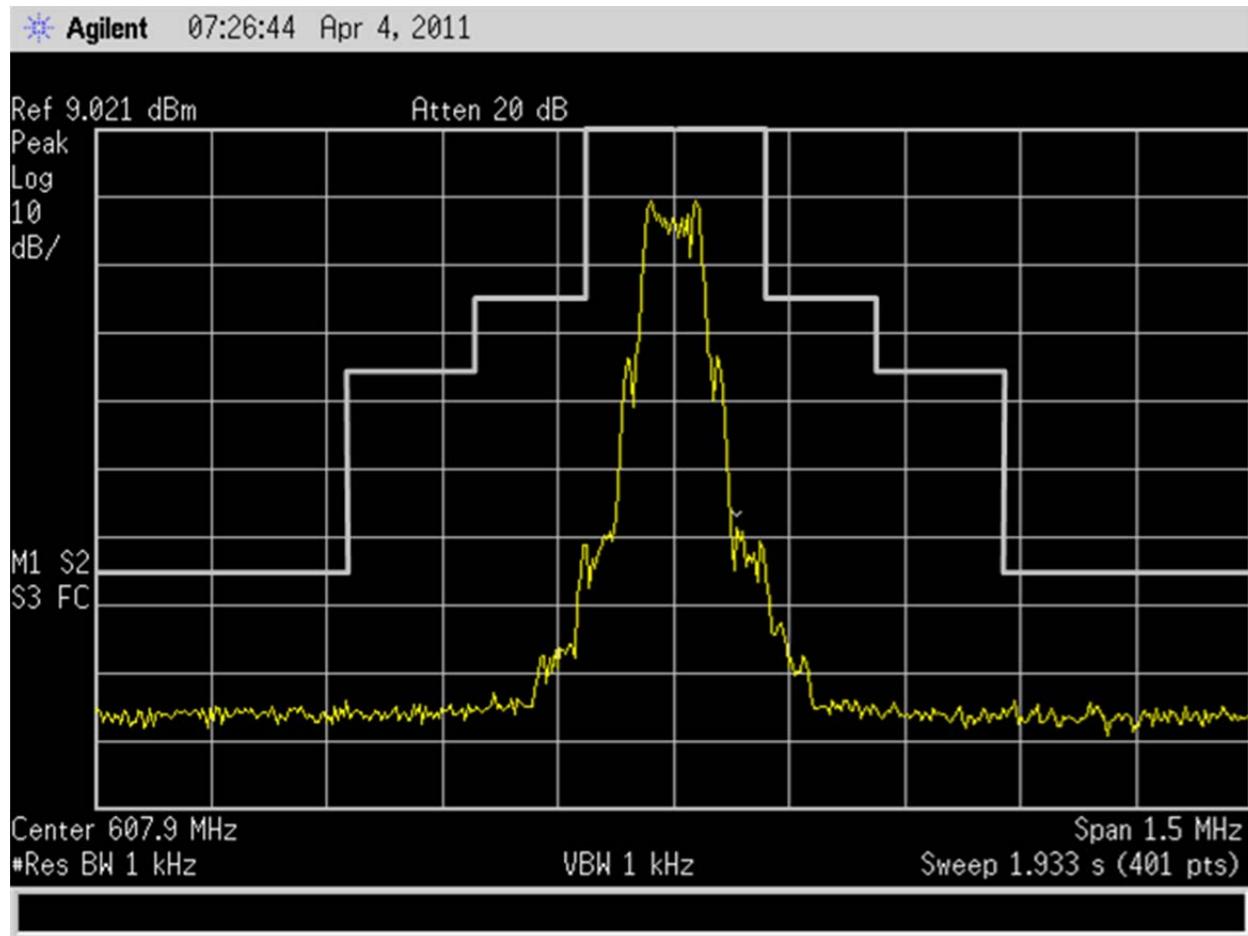


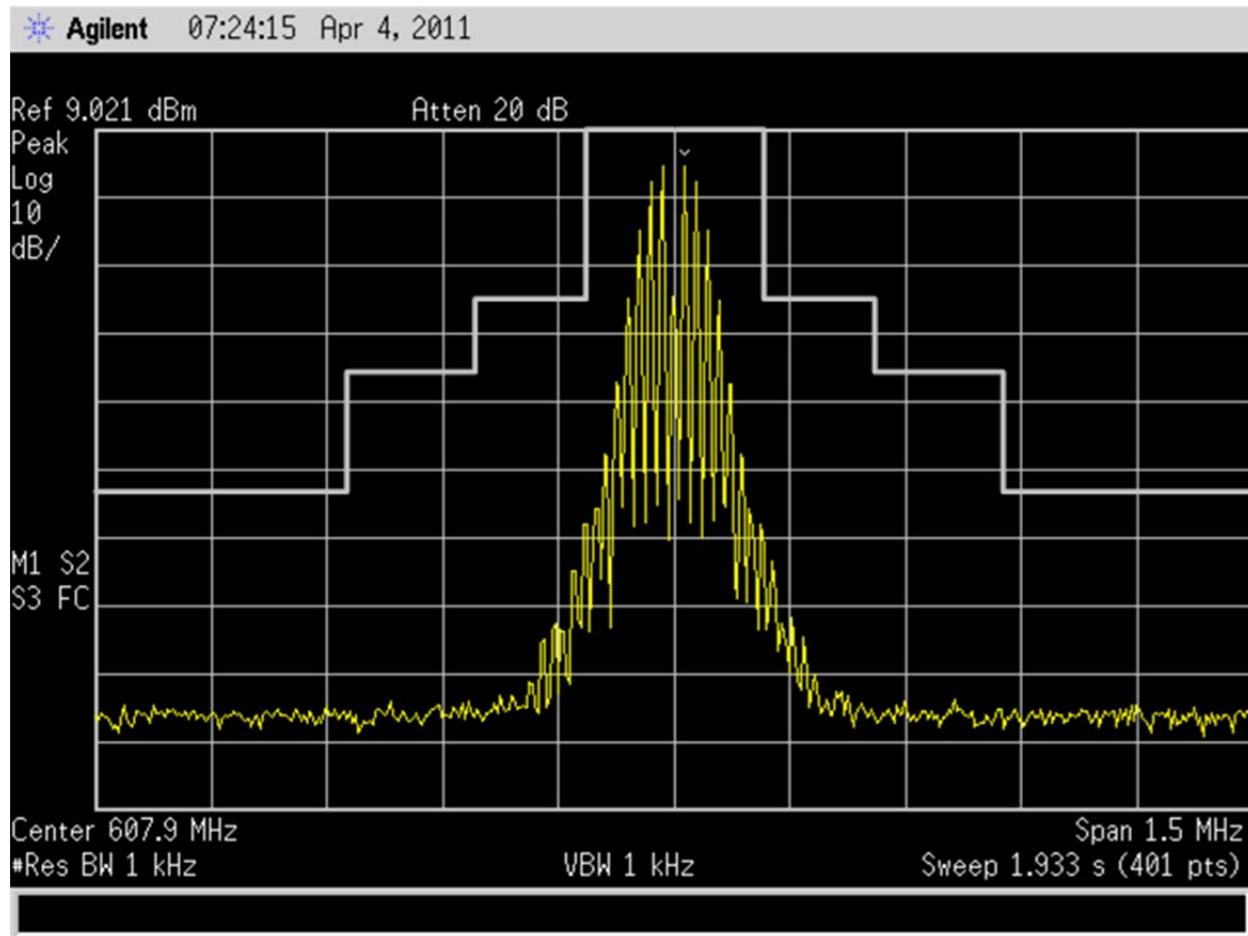


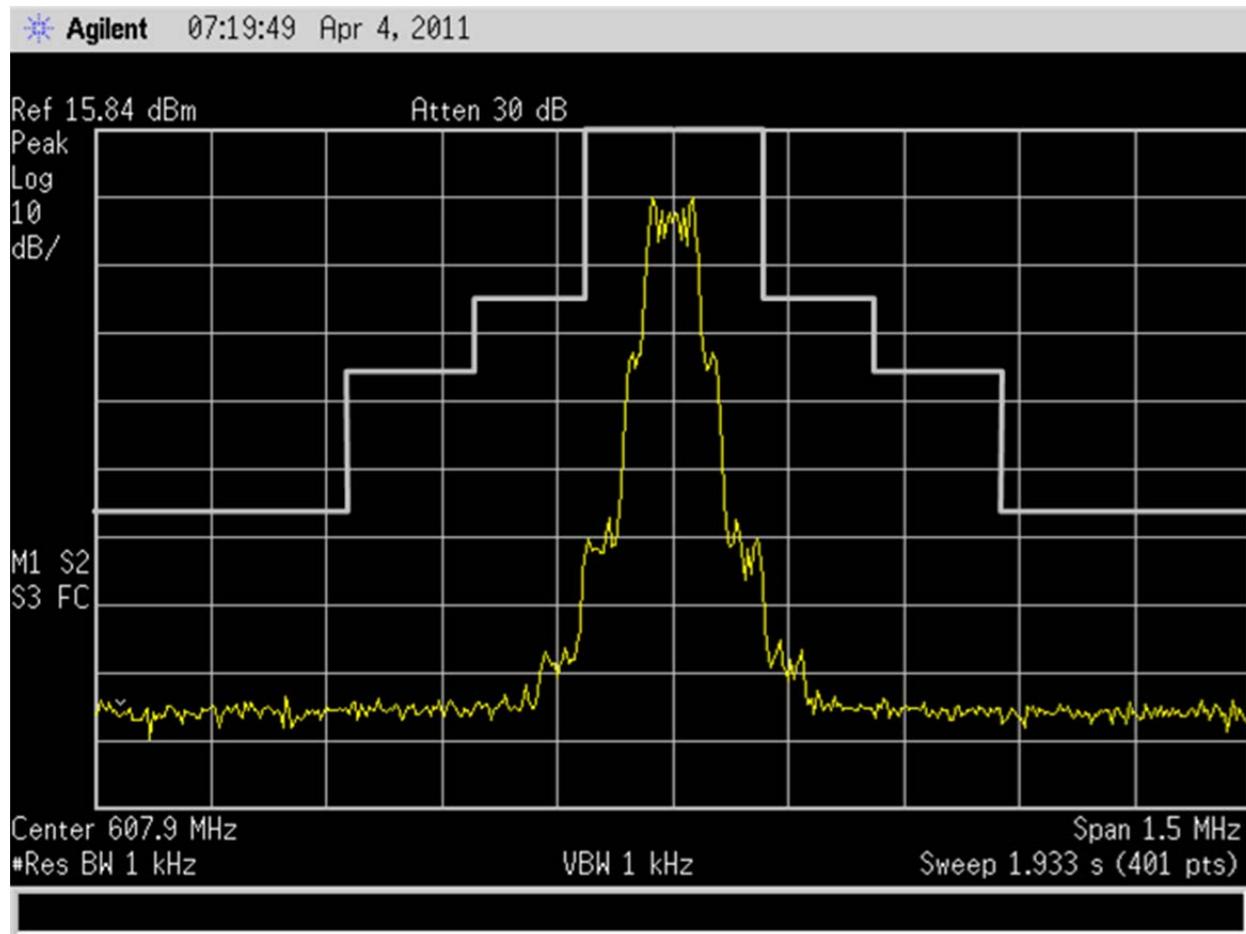
J5 Band

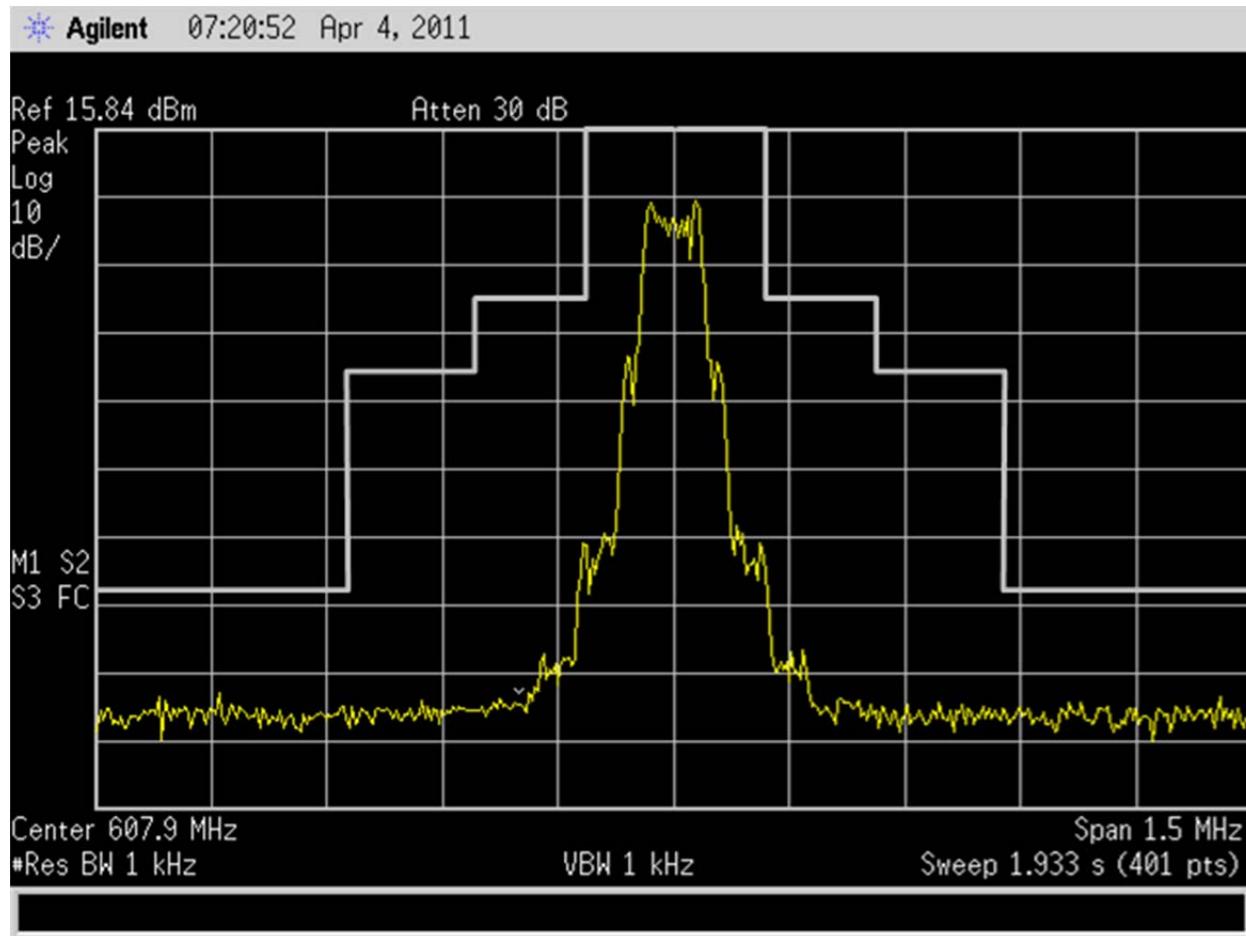












L3 Band

