

## 6 – SPURIOUS EMISSIONS AT ANTENNA TERMINALS

### 6.1 Applicable Standards

According to FCC §2.1049, §22.917(a) and §90.210, on any frequency outside of the authorized operating frequency range, the power of any emission shall be attenuated below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB.

### 6.2 Test Procedure

The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 1 MHz. Sufficient scans were taken to show any out of band emissions up to 10<sup>th</sup> harmonic.

### 6.3 Test Equipment

Hewlett Packard HP8566B Spectrum Analyzer  
 Hewlett Packard HP 7470A Plotter  
 Rohde & Schwarz SMIQ03B Signal Generator  
 Rohde & Schwarz AMIQ I/Q Modulation Generator

### 6.4 Test Results

#### 6.4.1 Test results for FCC Part 22, 824 – 849 MHz Uplink, 869 – 894 MHz Downlink

Modulation	Mode	Channel	Frequency (MHz)	Measured
CDMA	Up-link	Low	825.4	< -13dBm
		Mid	835.1	< -13dBm
		High	844.8	< -13dBm
	Down-link	Low	870.7	< -13dBm
		Mid	880.4	< -13dBm
		High	890.1	< -13dBm

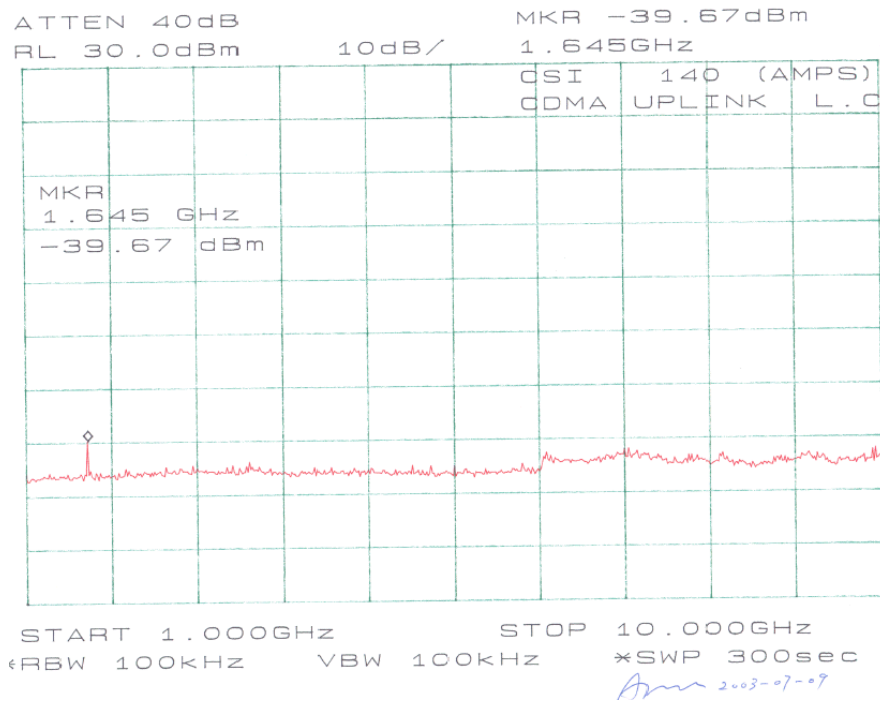
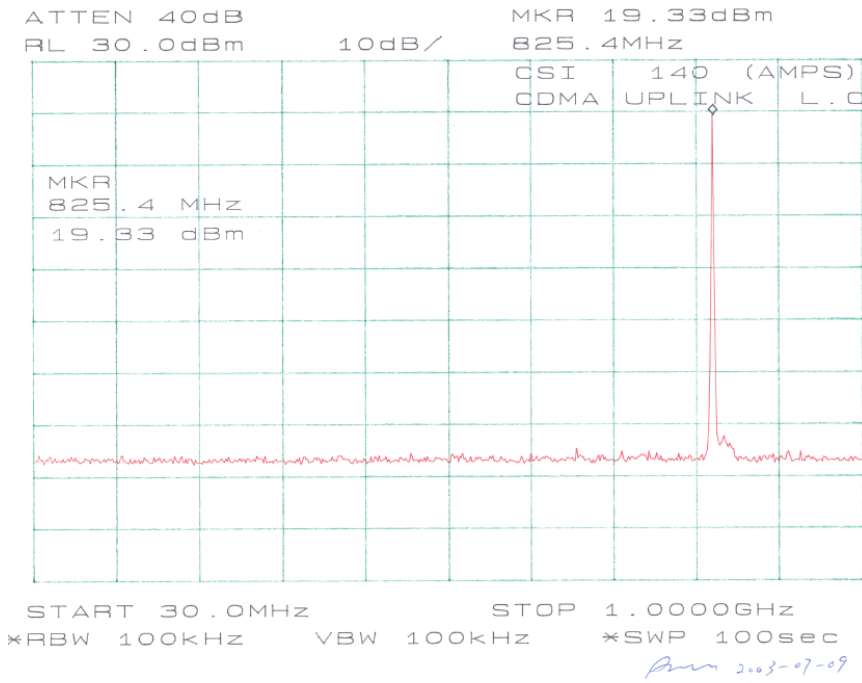
#### 6.4.2 Test results for FCC Part 90, 806 – 824 MHz Uplink, 851 – 869 MHz Downlink

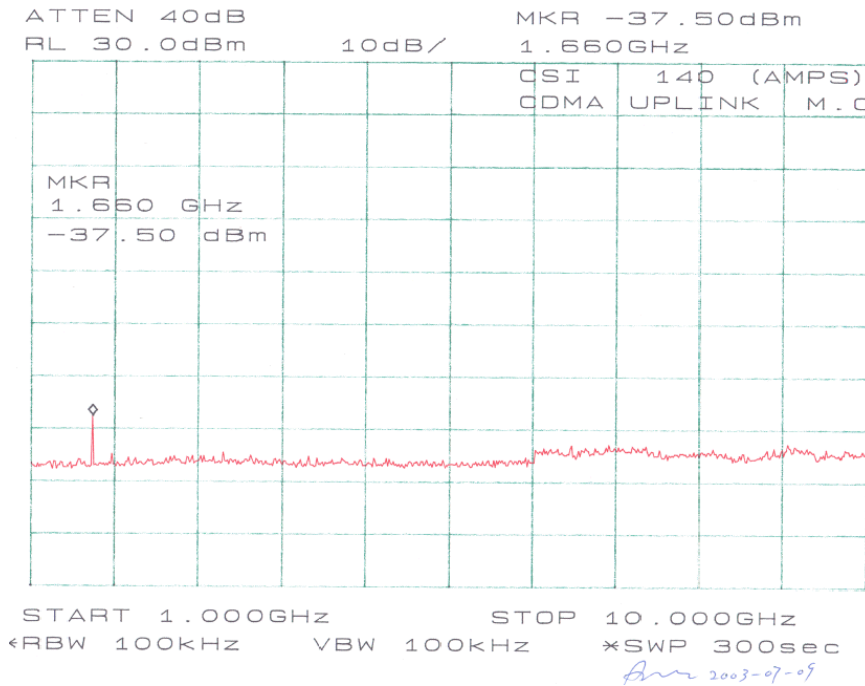
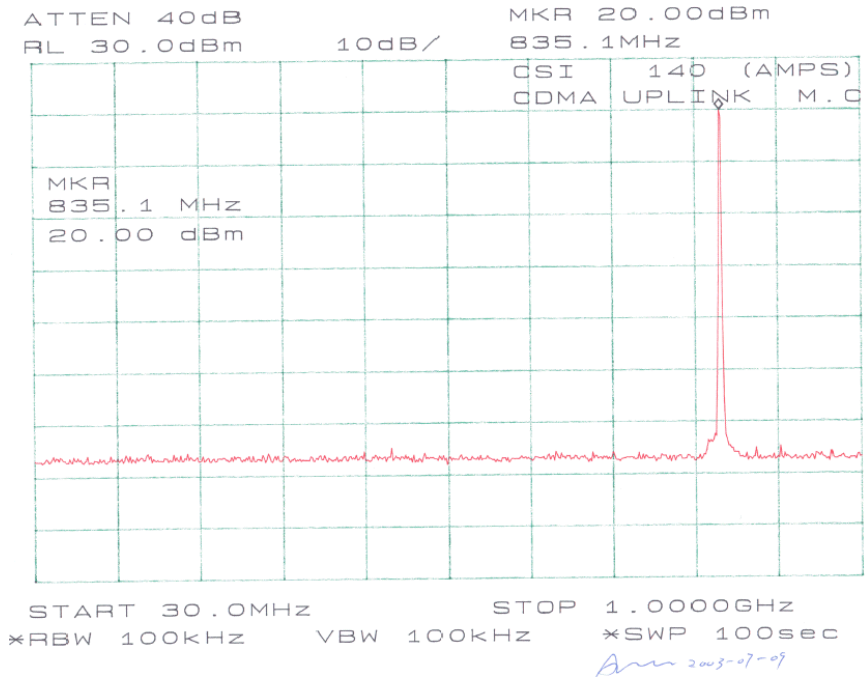
Modulation	Mode	Channel	Frequency (MHz)	Measured
TDMA	Up-link	Low	810.9	< -13dBm
		Mid	815.7	< -13dBm
		High	818.9	< -13dBm
	Down-link	Low	854.5	< -13dBm
		Mid	859.4	< -13dBm
		High	864.2	< -13dBm

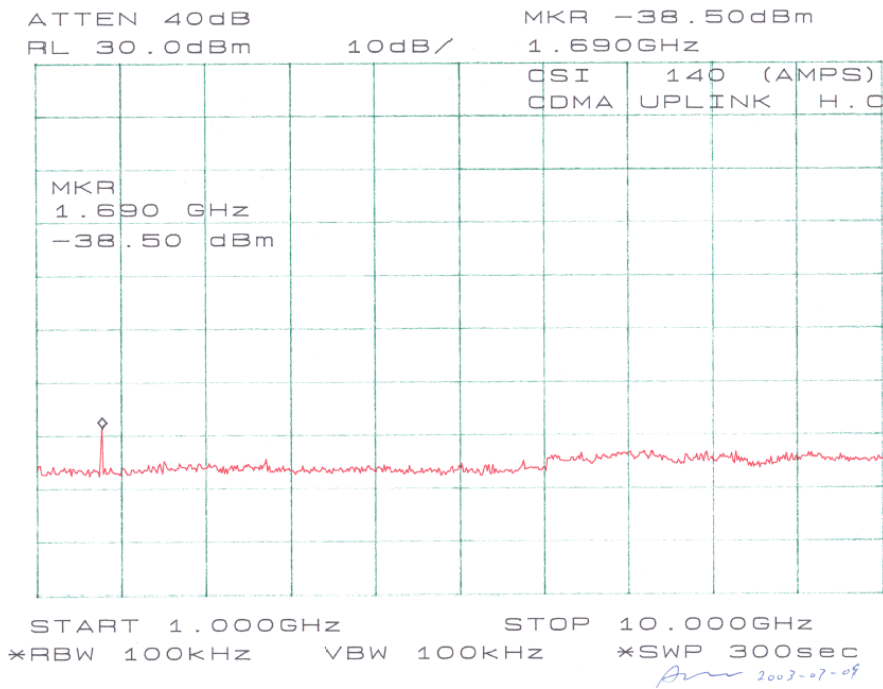
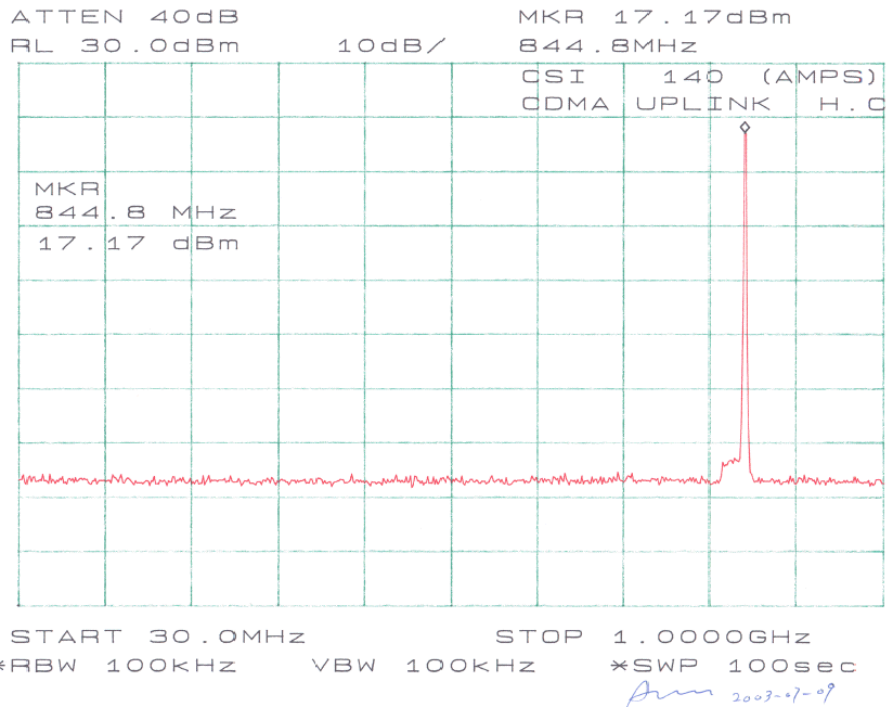
### 6.5 Plots of Out-of-Band Emissions at Antenna Terminal

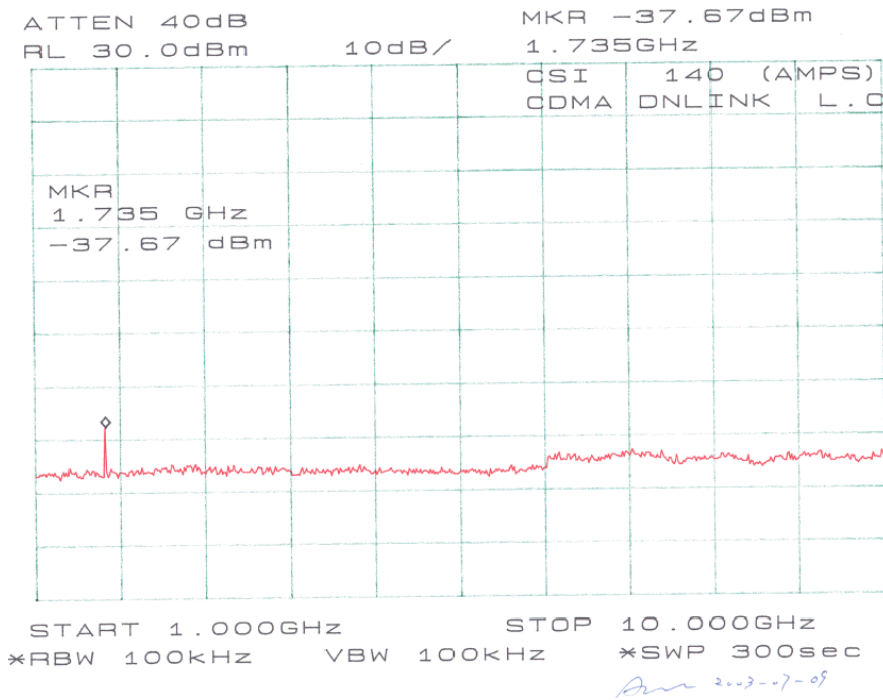
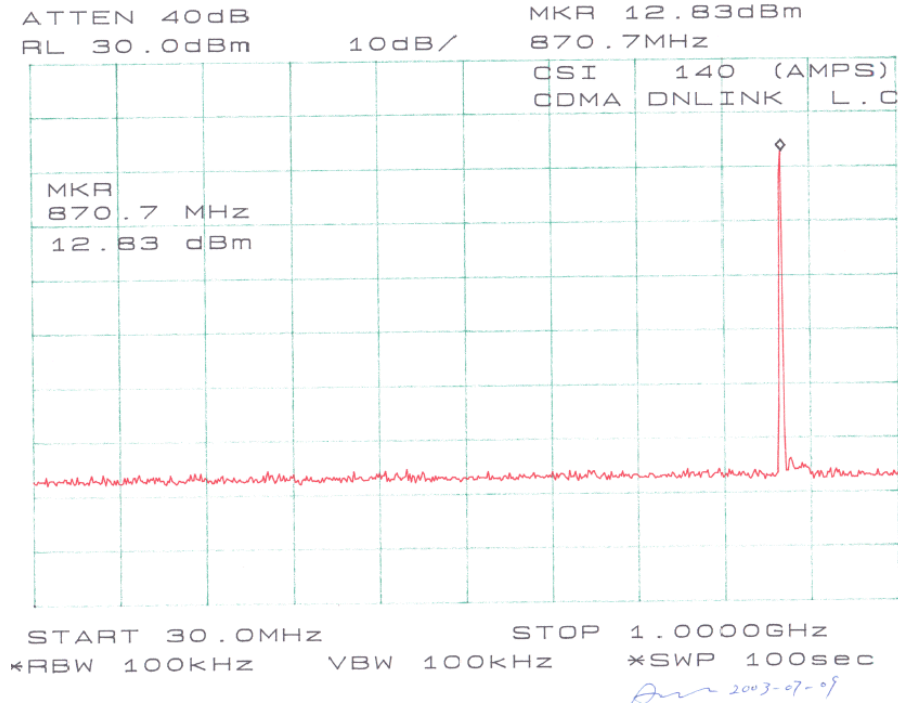
Please refer to plots hereinafter.

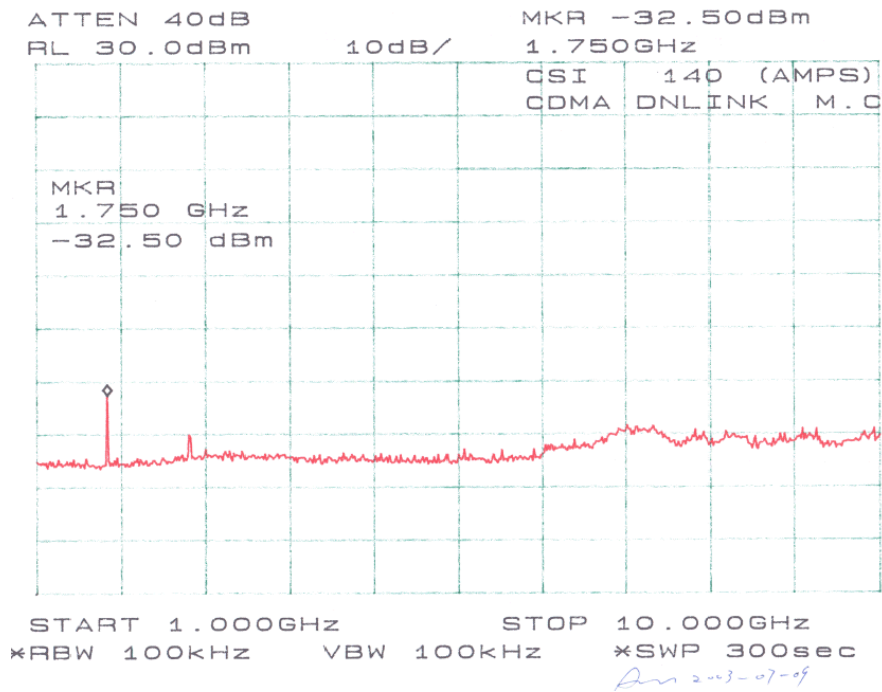
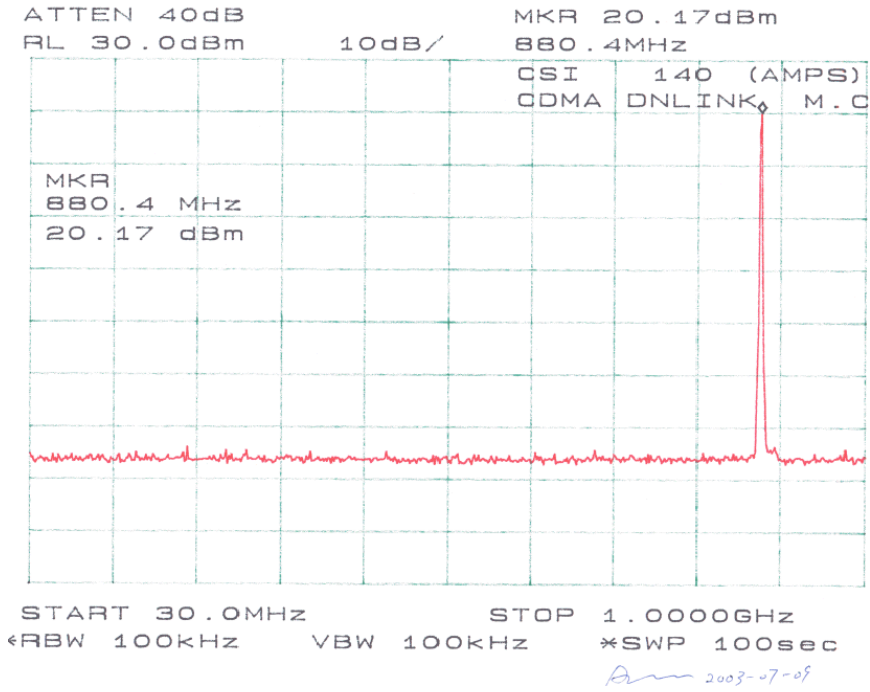
Plots for Part 22, 824 – 849 MHz Uplink, 869 – 894 MHz Downlink

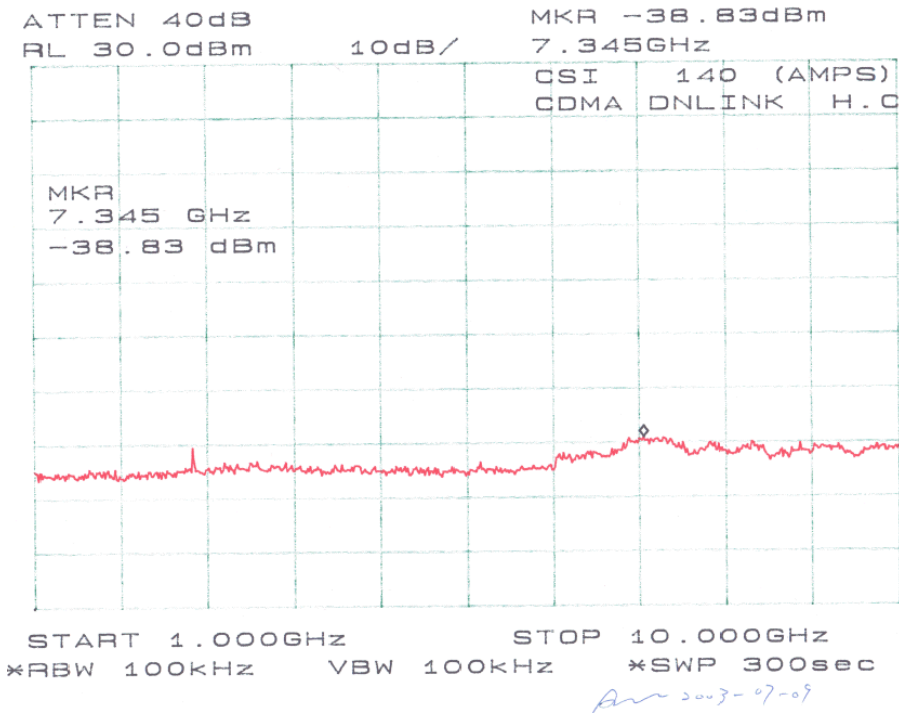
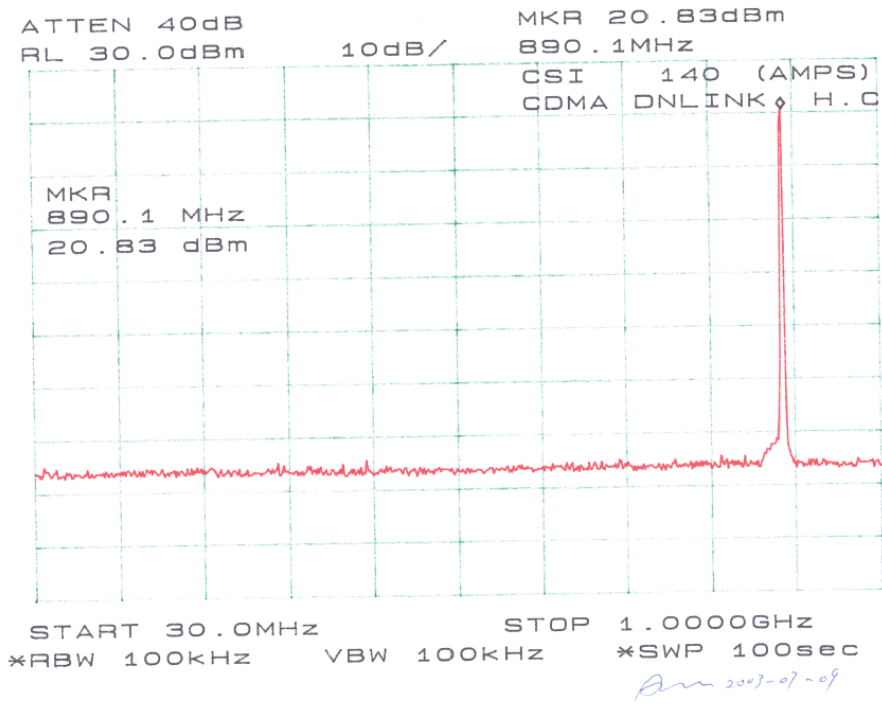




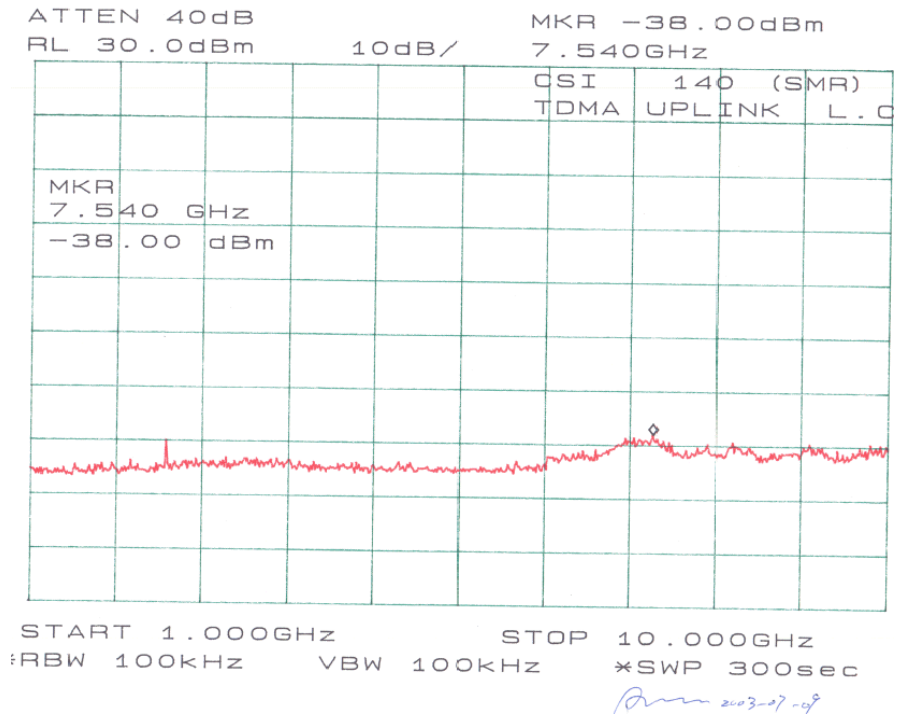
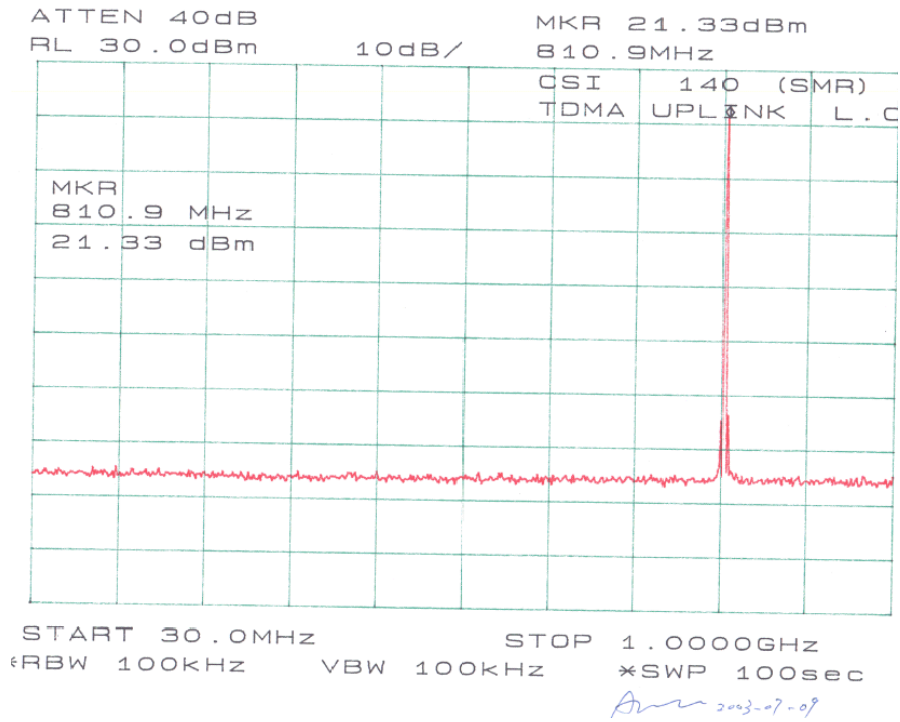




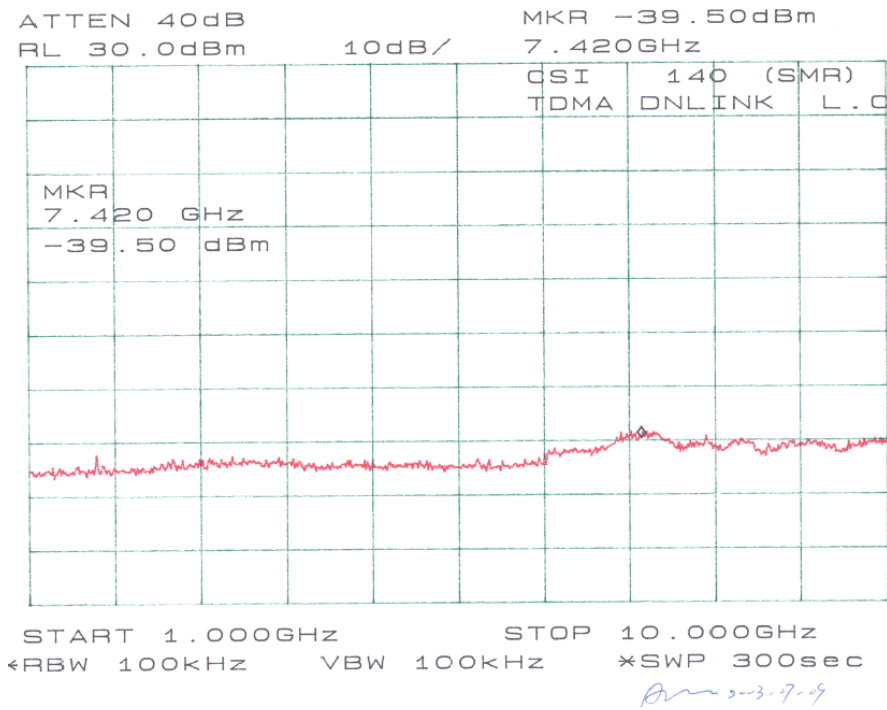
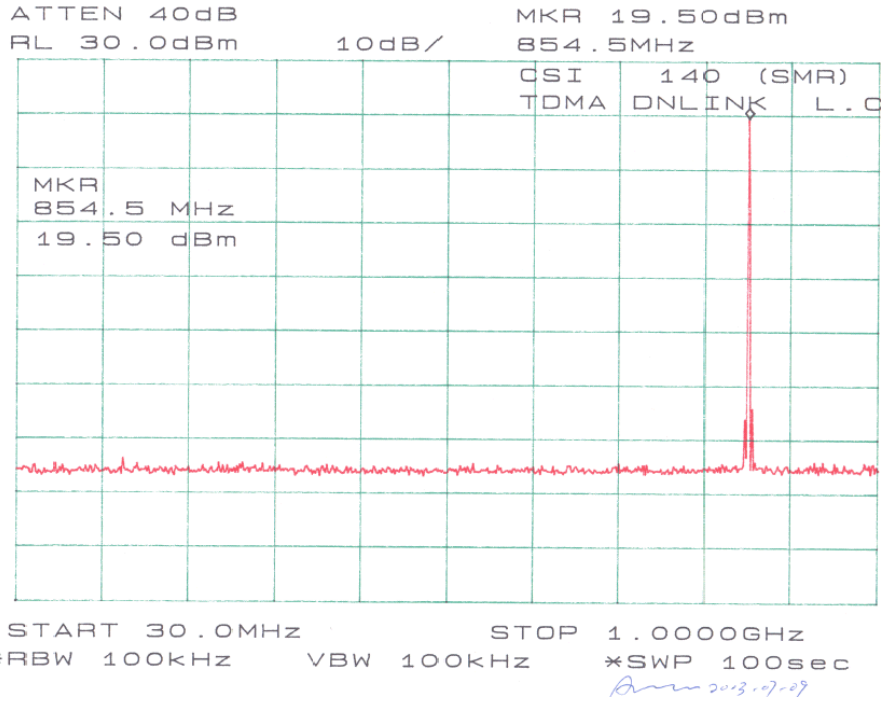


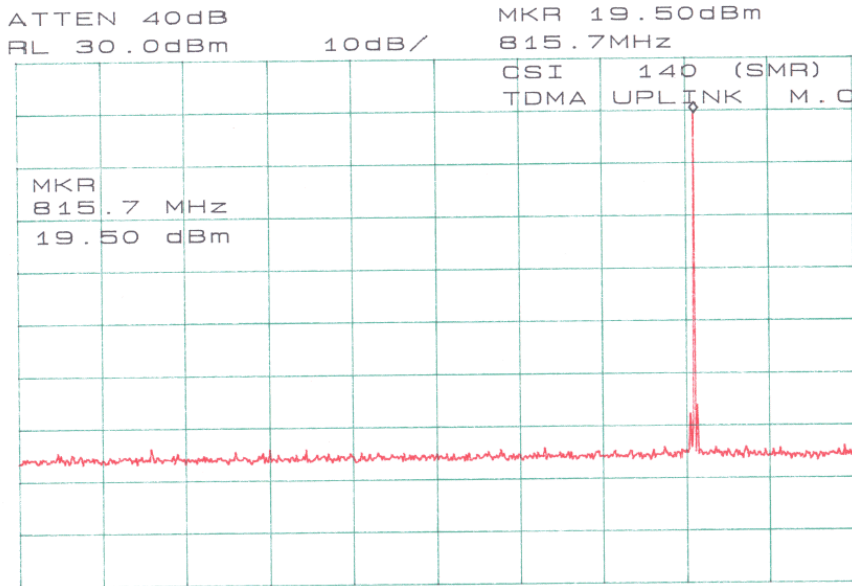


Plots for Part 90, 806 – 824 MHz Uplink, 851 – 869 MHz Downlink

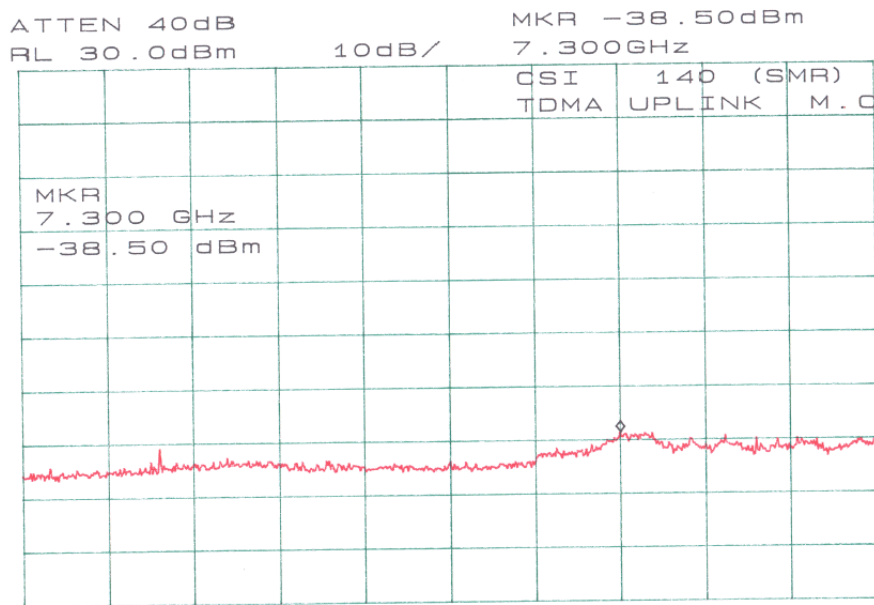








START 30.0MHz STOP 1.0000GHz  
\*RBW 100kHz VBW 100kHz \*SWP 100sec  
*Am 2007-07-09*



START 1.000GHz STOP 10.000GHz  
\*RBW 100kHz VBW 100kHz \*SWP 300sec  
*Am 2007-07-09*

