

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 10th harmonic.

6.3 Test Equipment

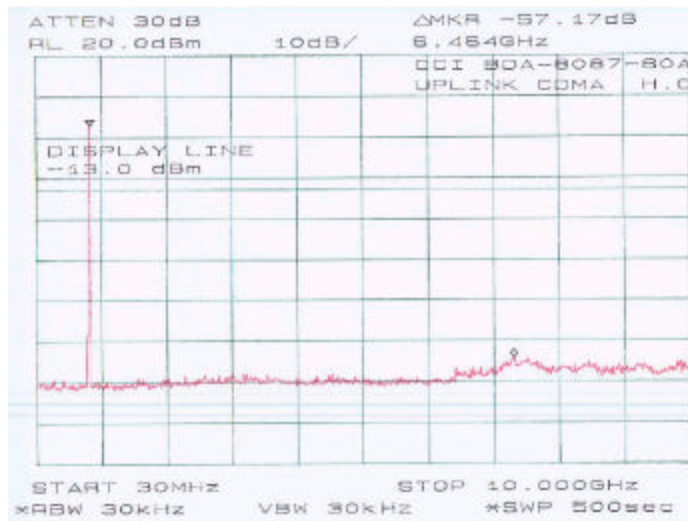
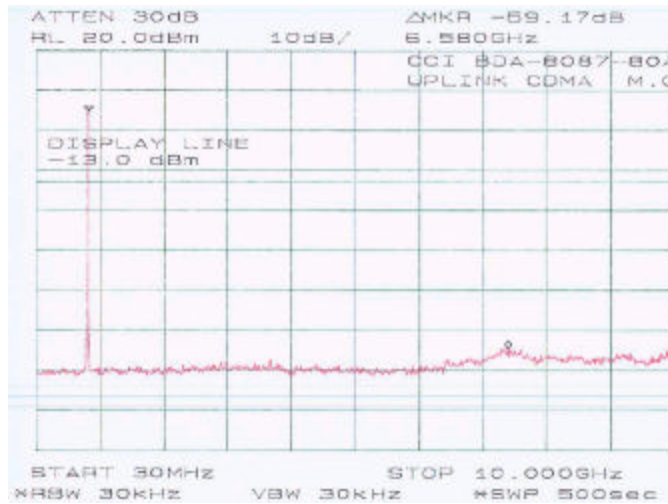
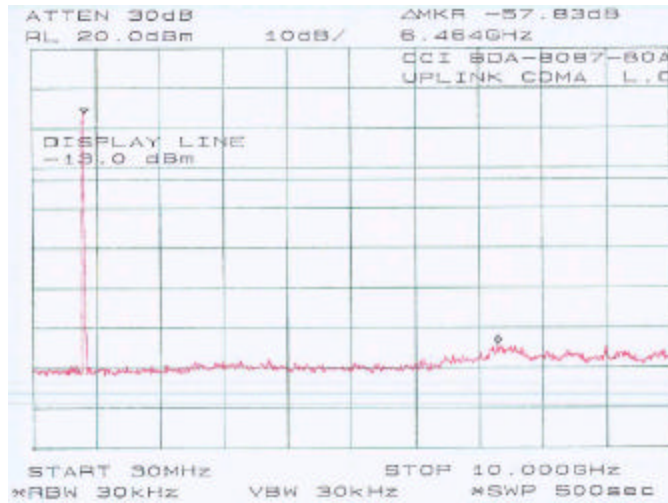
Hewlett Packard HP8566B Spectrum Analyzer
 Hewlett Packard HP 7470A Plotter
 Rohde & Schwarz SMIQ03B Signal Generator
 Rohde & Schwarz AMIQ I/Q Modulation Generator

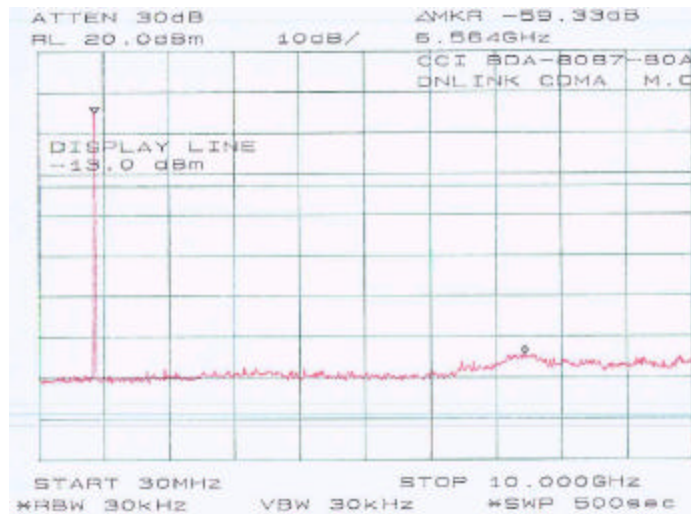
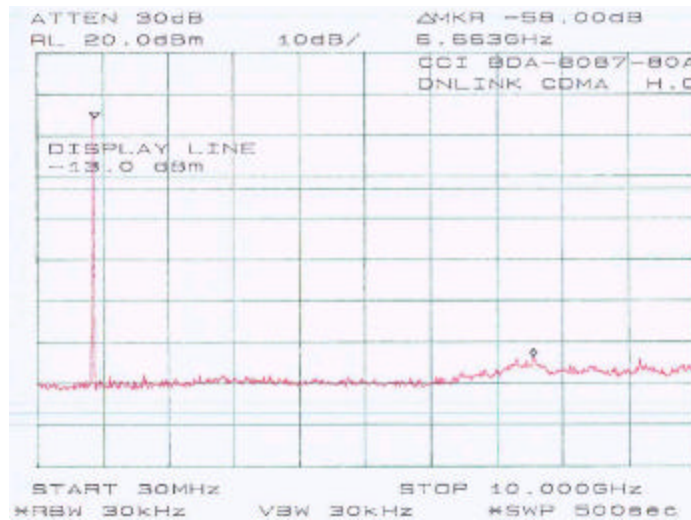
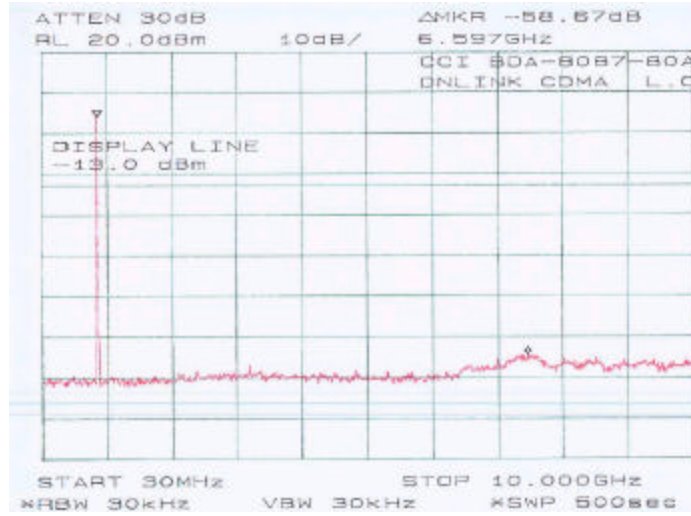
6.4 Test Results

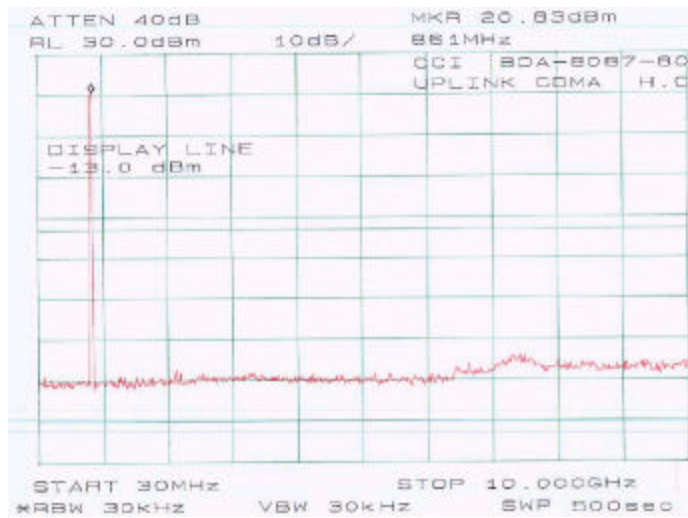
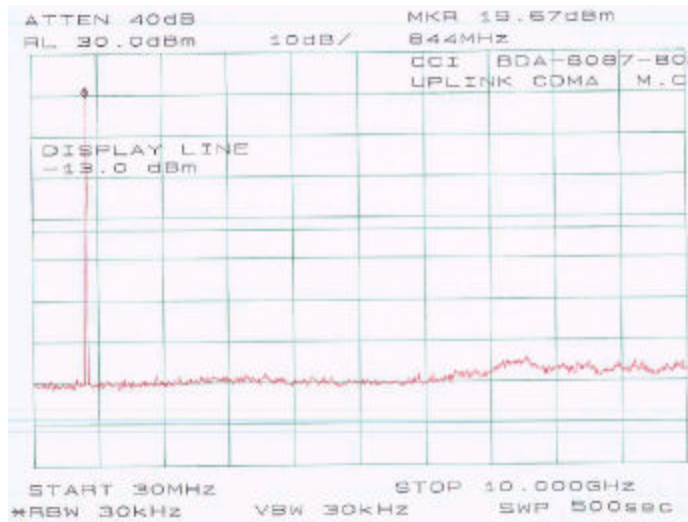
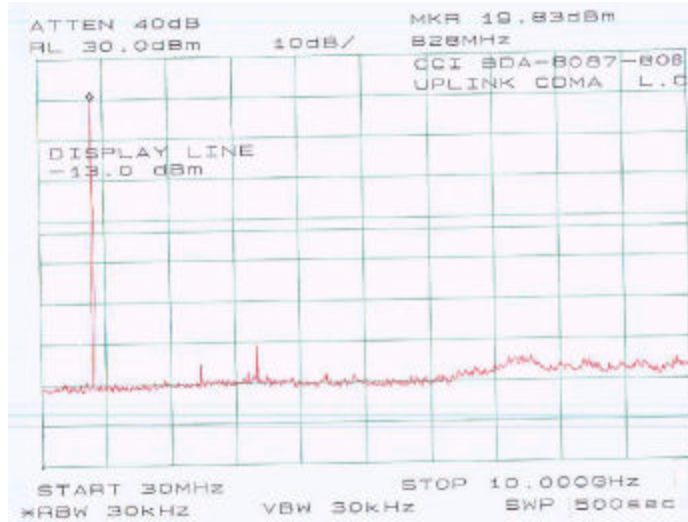
Model	Modulation	Mode	Channel	Measured	
BDA-8087-80-Cell A+A'	CDMA	Up-link	Low	825	< -13dBm
			Mid	835	< -13dBm
			High	845	< -13dBm
		Down-link	Low	870	< -13dBm
			Mid	880	< -13dBm
			High	890	< -13dBm
BDA-8087-80-Cell B+B'	CDMA	Up-link	Low	835	< -13dBm
			Mid	840	< -13dBm
			High	845	< -13dBm
		Down-link	Low	880	< -13dBm
			Mid	885	< -13dBm
			High	890	< -13dBm
BDA-8087-80-SMR800	iDEN	Up-link	Low	810	< -13dBm
			Mid	815	< -13dBm
			High	820	< -13dBm
		Down-link	Low	855	< -13dBm
			Mid	860	< -13dBm
			High	865	< -13dBm
BDA-8087-80-SMR900	GSM	Up-link	Low	897	< -13dBm
			High	900	< -13dBm
		Down-link	Low	936	< -13dBm
			High	939	< -13dBm

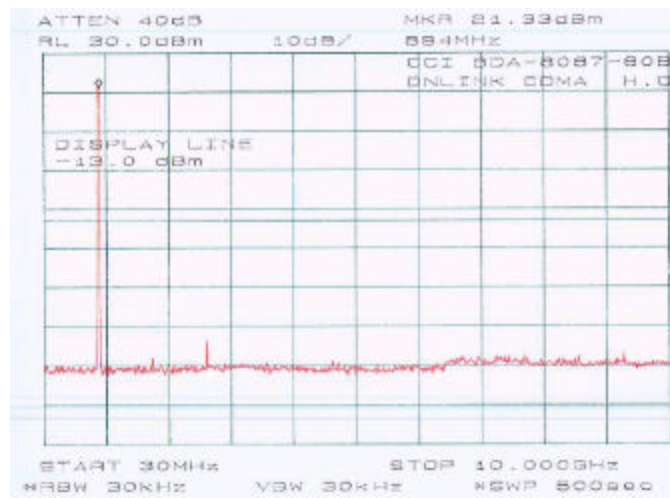
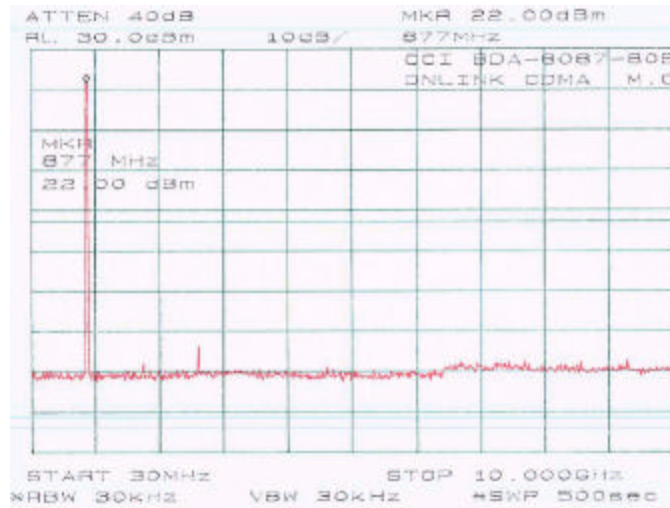
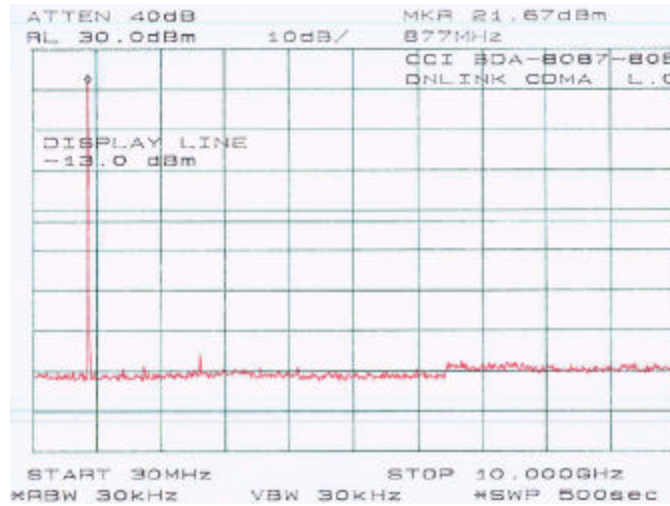
6.5 Plots of Out-of-Band Emissions at Antenna Terminal

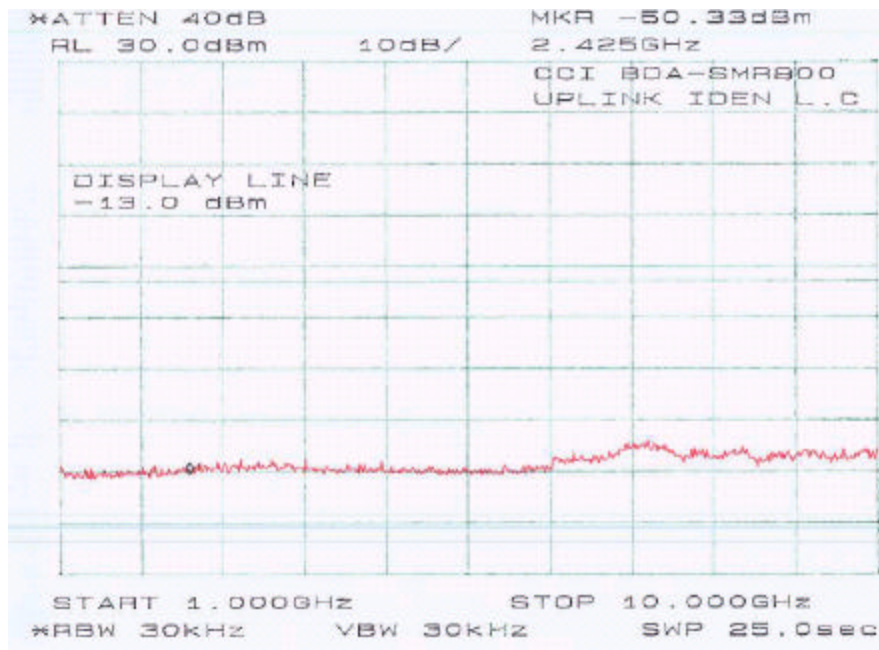
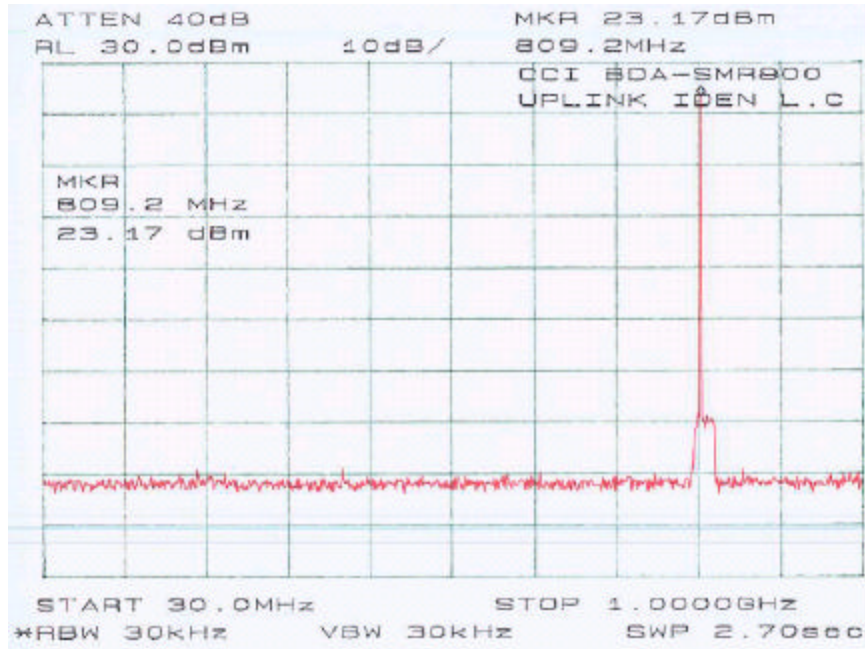
Please refer to plots hereinafter.

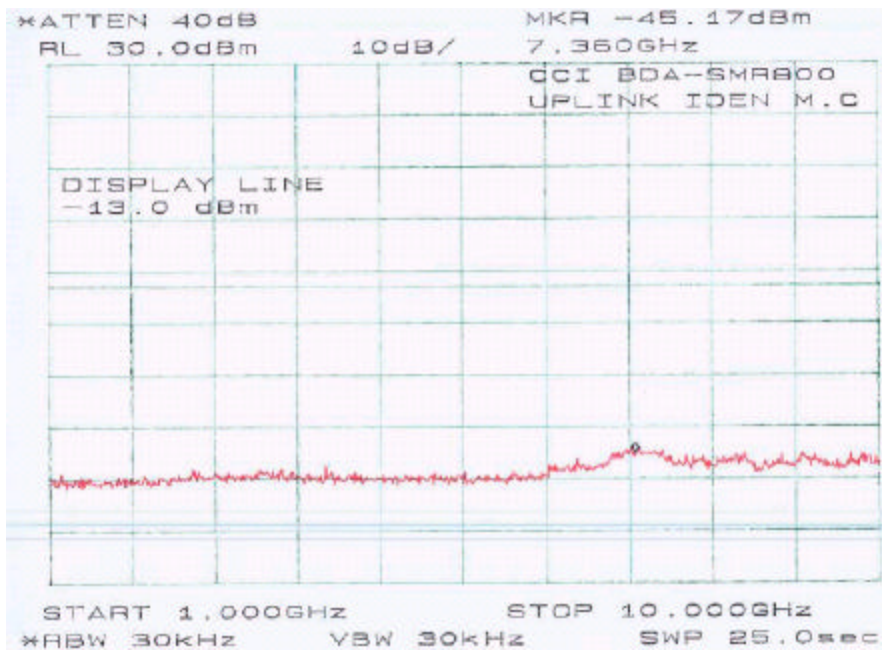
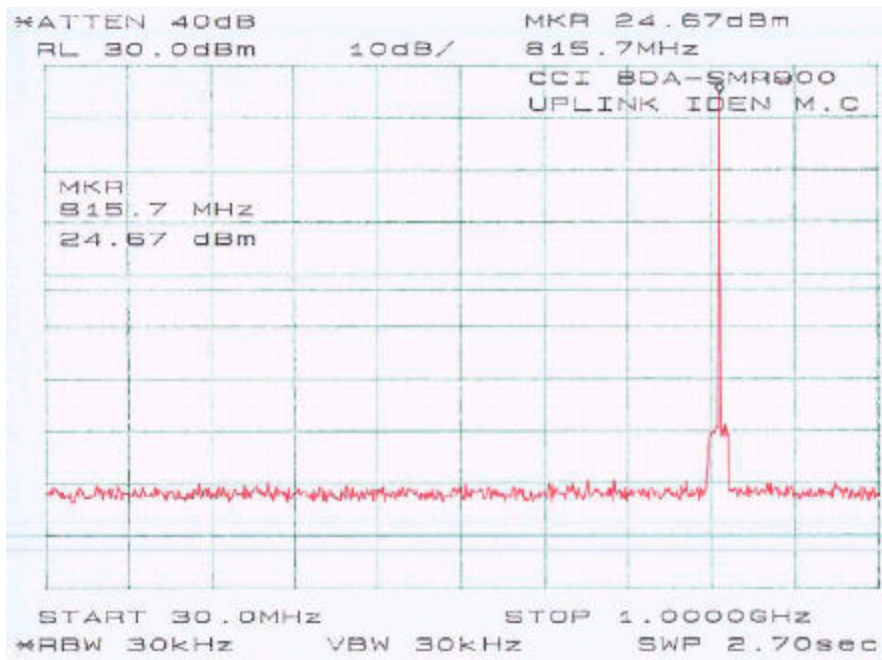


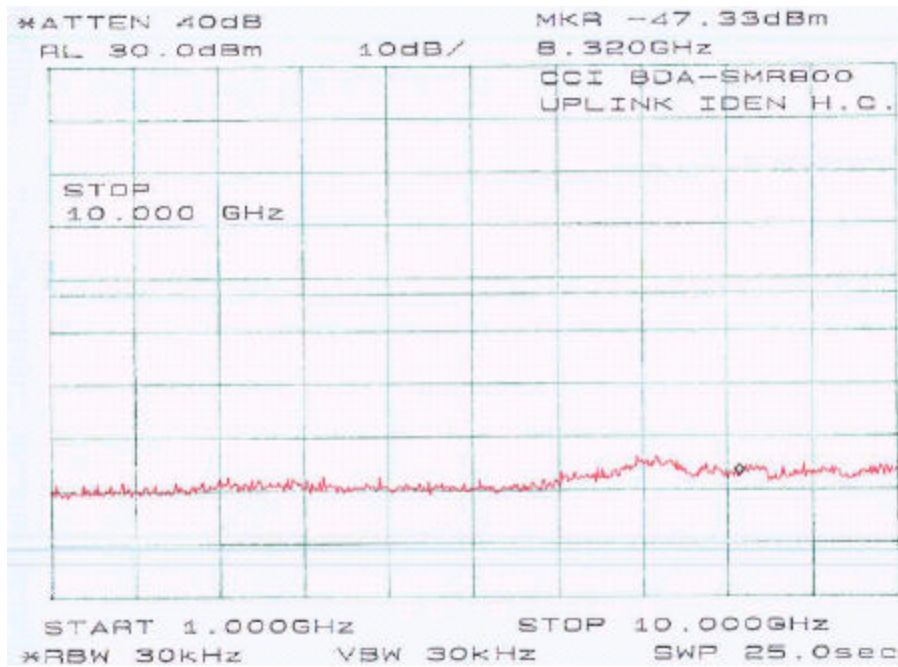
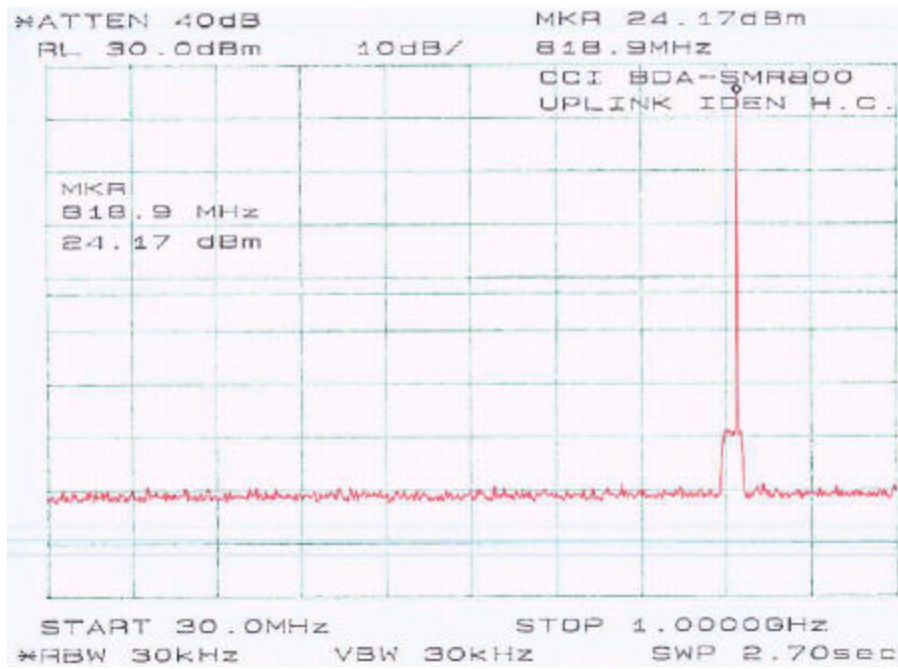


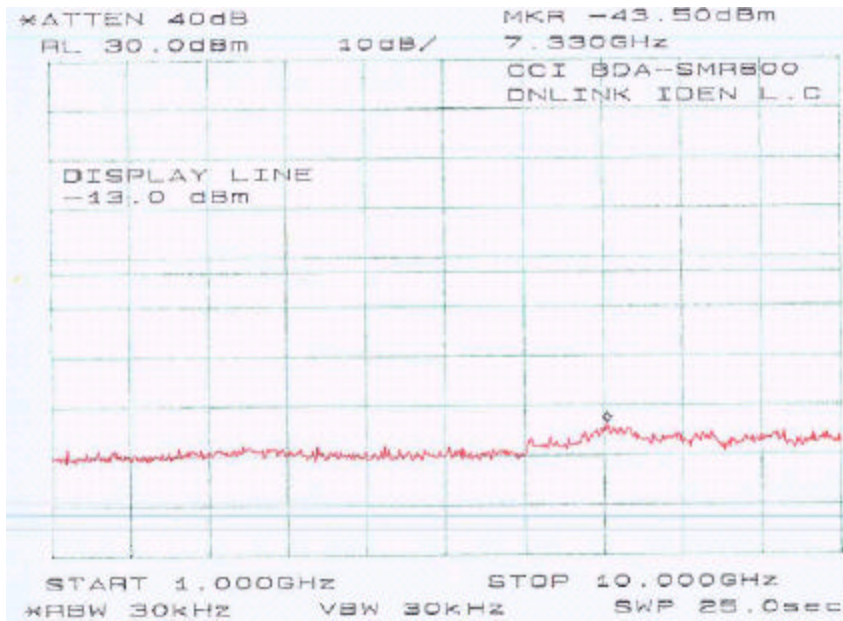
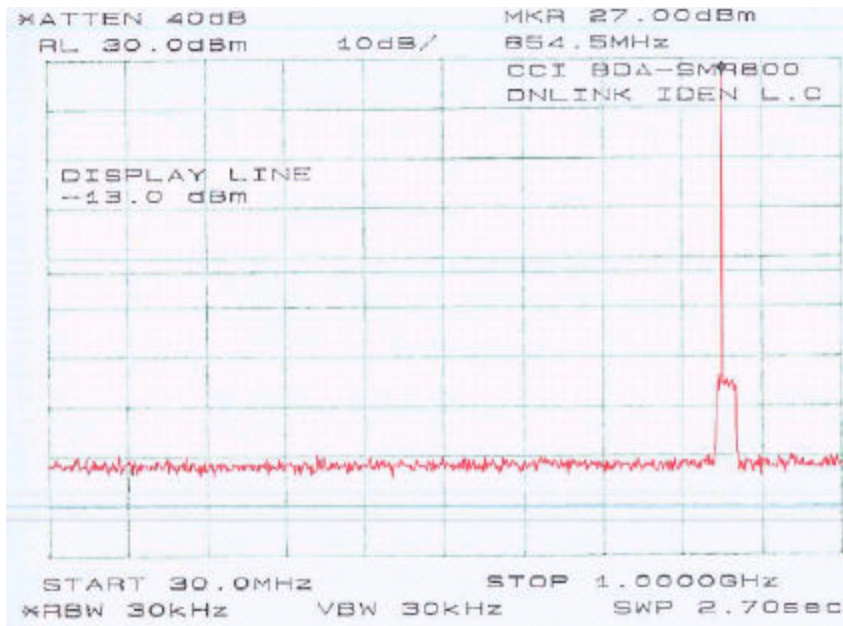


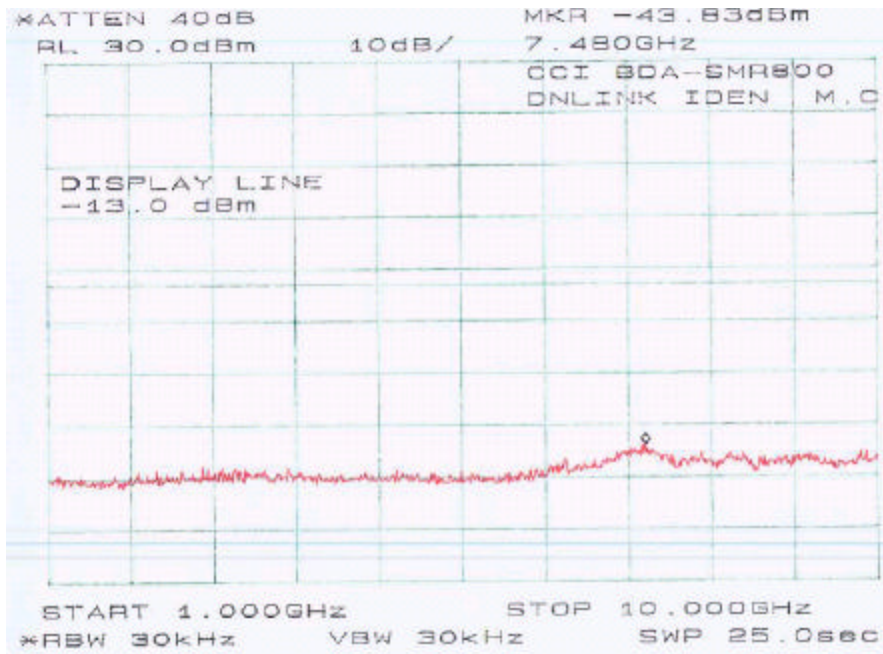
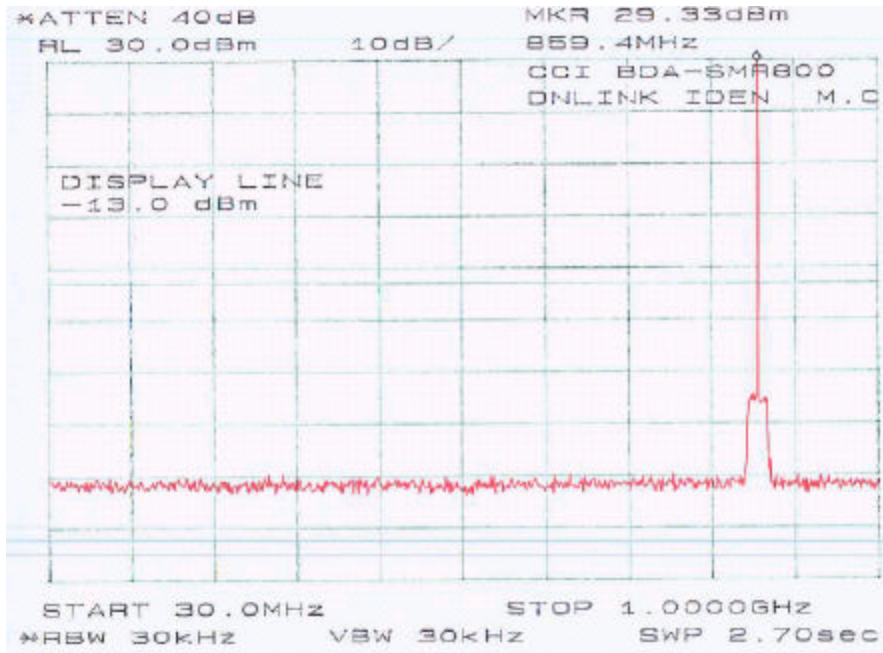


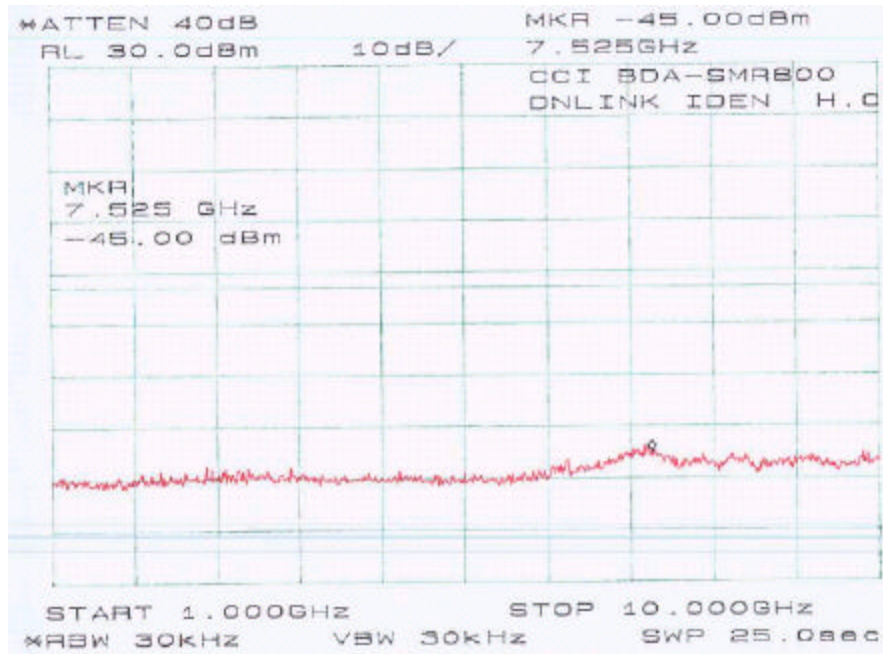
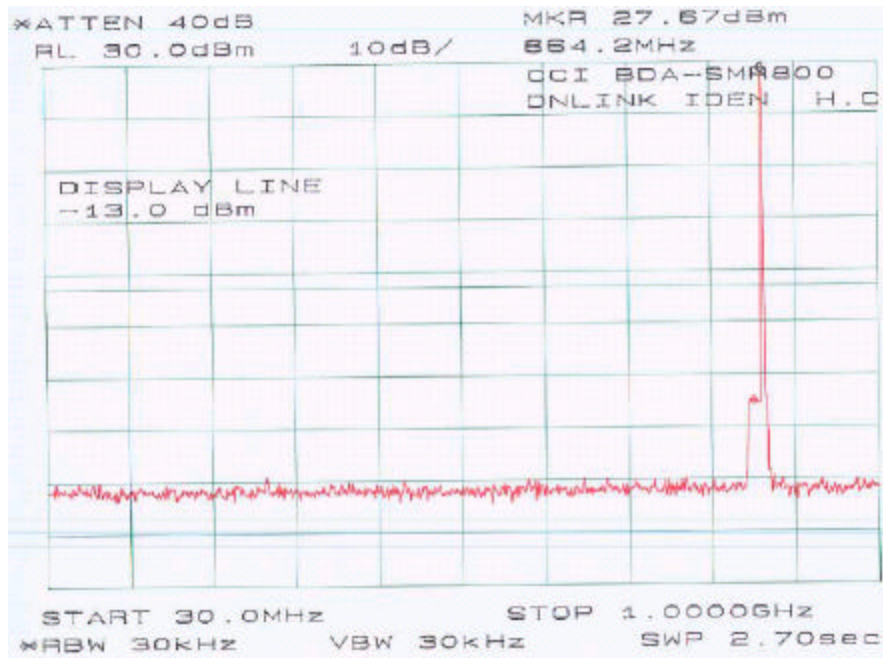


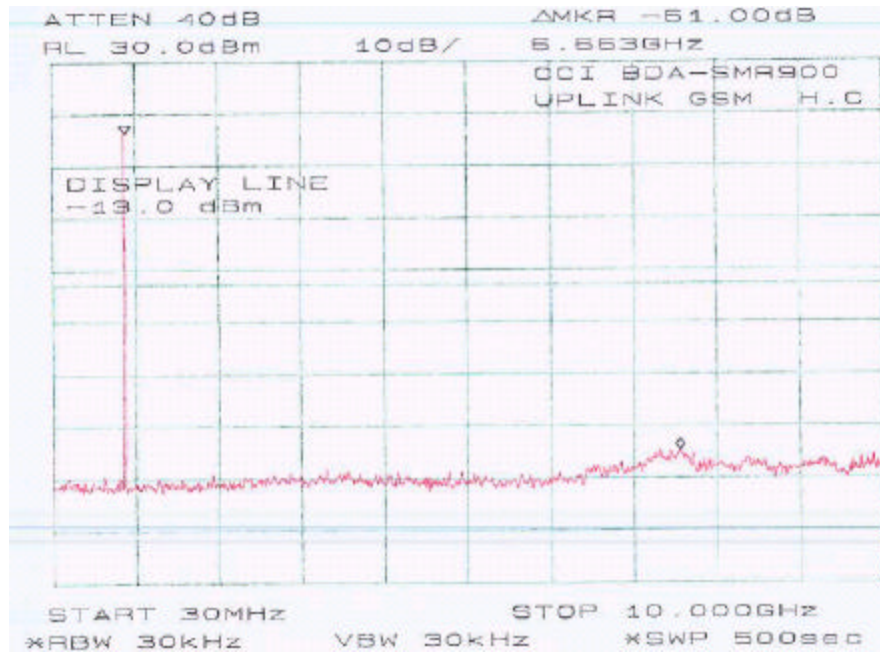
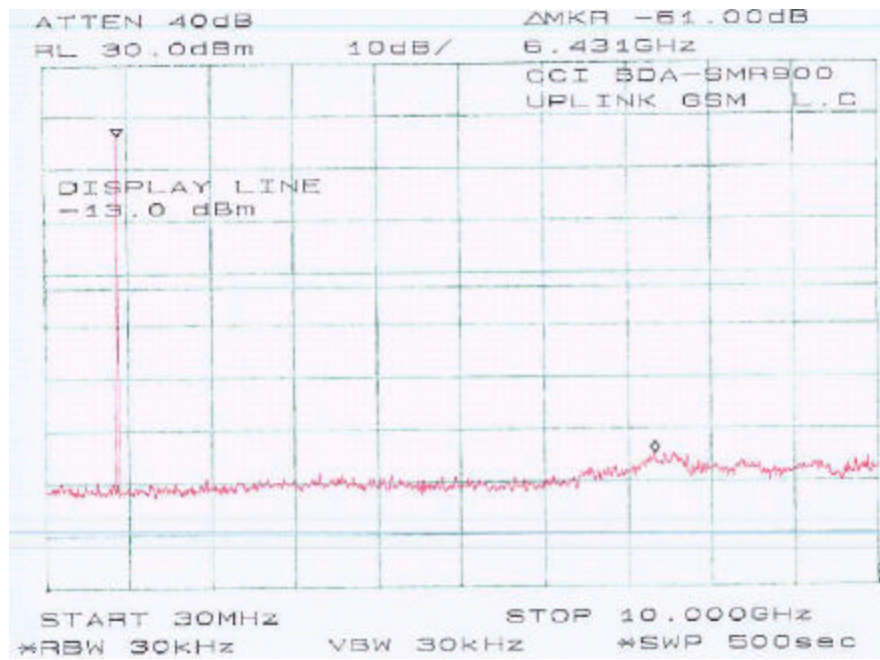


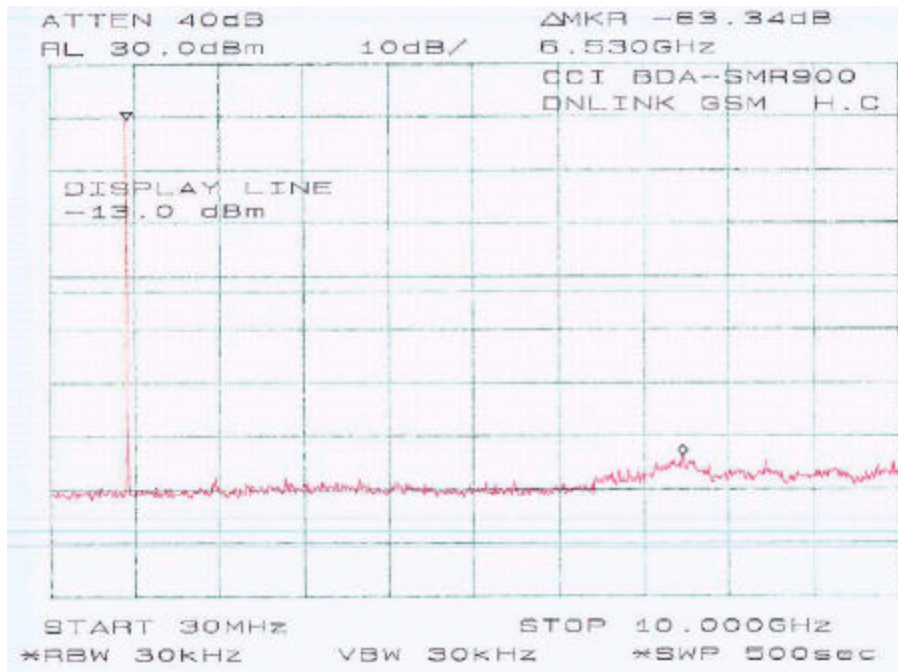
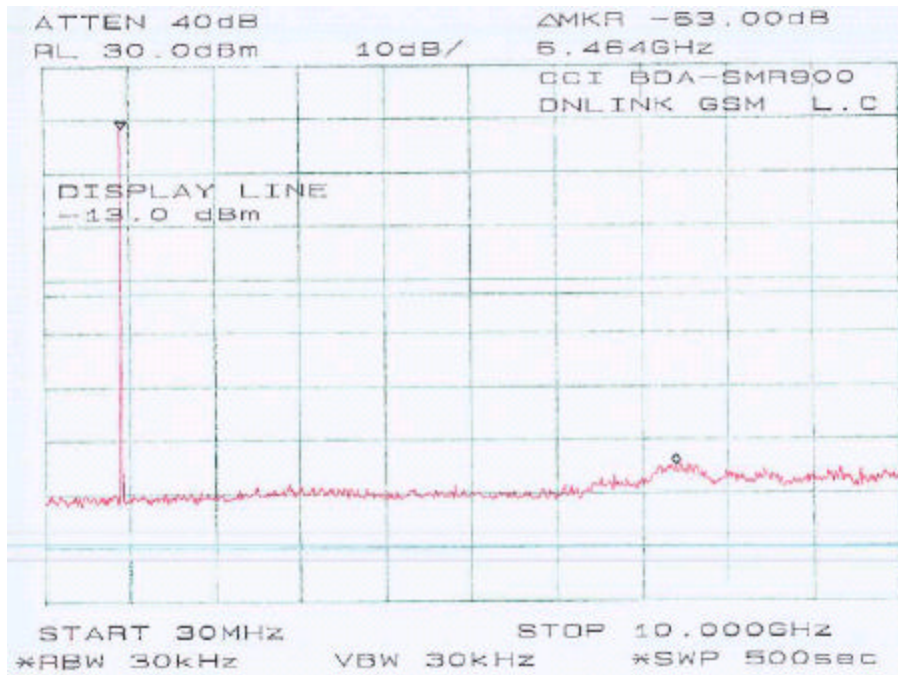












7 - TWO-TONE TEST

7.1 Applicable Standards

According to IS-138A (3.4.4), Intermodulation products must be attenuated below the rated power of the EUT by at least $43 + 10\log(P)$, equivalent to -13 dBm.

7.2 Test Procedure

The RF output of the EUT was connected to a spectrum analyzer through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 30 kHz. Sufficient scans were taken to show any out of band emissions up to 10th harmonic. Two input signals are equal in level (and can be raised equally), were sent to the EUT.

7.3 Test Equipment

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

7.4 Test Results

Model	Modulation	Mode	Channel	Measured
BDA-8087-80-Cell A+A'	CDMA	Up-link	Mid	< -13dBm
		Down-link	Mid	< -13dBm
BDA-8087-80-Cell B+B'	CDMA	Up-link	Mid	< -13dBm
		Down-link	Mid	< -13dBm
BDA-8087-80-SMR800	iDEN	Up-link	Low	< -13dBm
			Mid	< -13dBm
			High	< -13dBm
		Down-link	Low	< -13dBm
			Mid	< -13dBm
			High	< -13dBm
BDA-8087-80-SMR900	GSM	Up-link	Low	< -13dBm
			High	< -13dBm
		Down-link	Low	< -13dBm
			High	< -13dBm

7.5 Plots of Two-Tone Test Result

Please refer to plots hereinafter.

