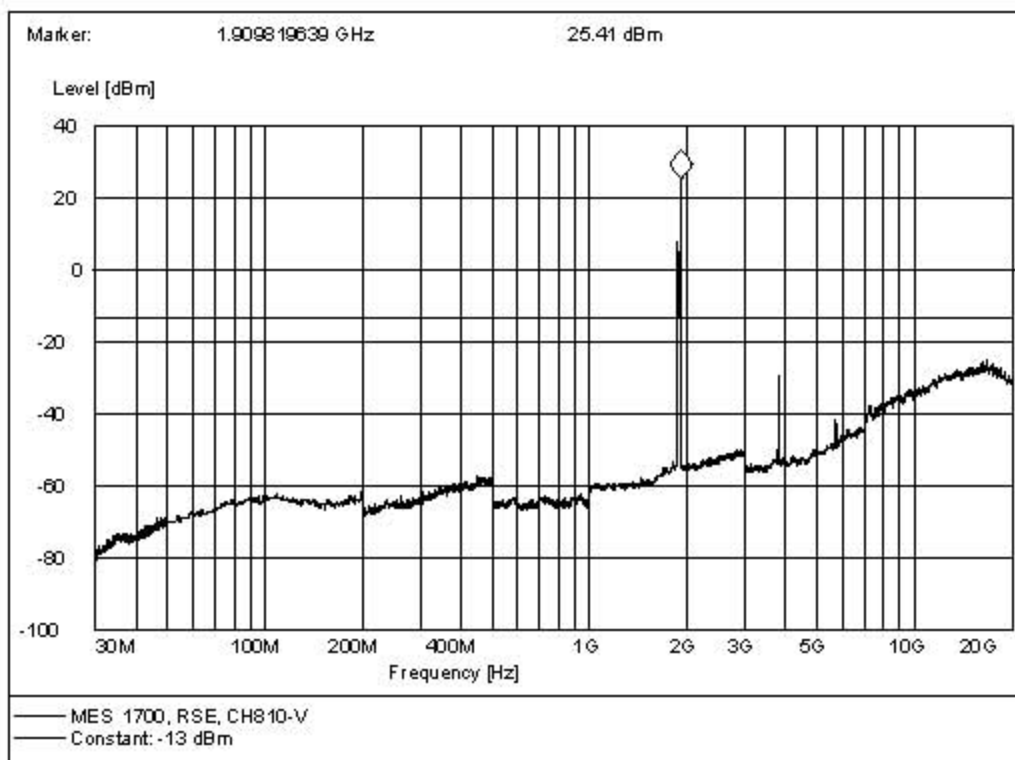
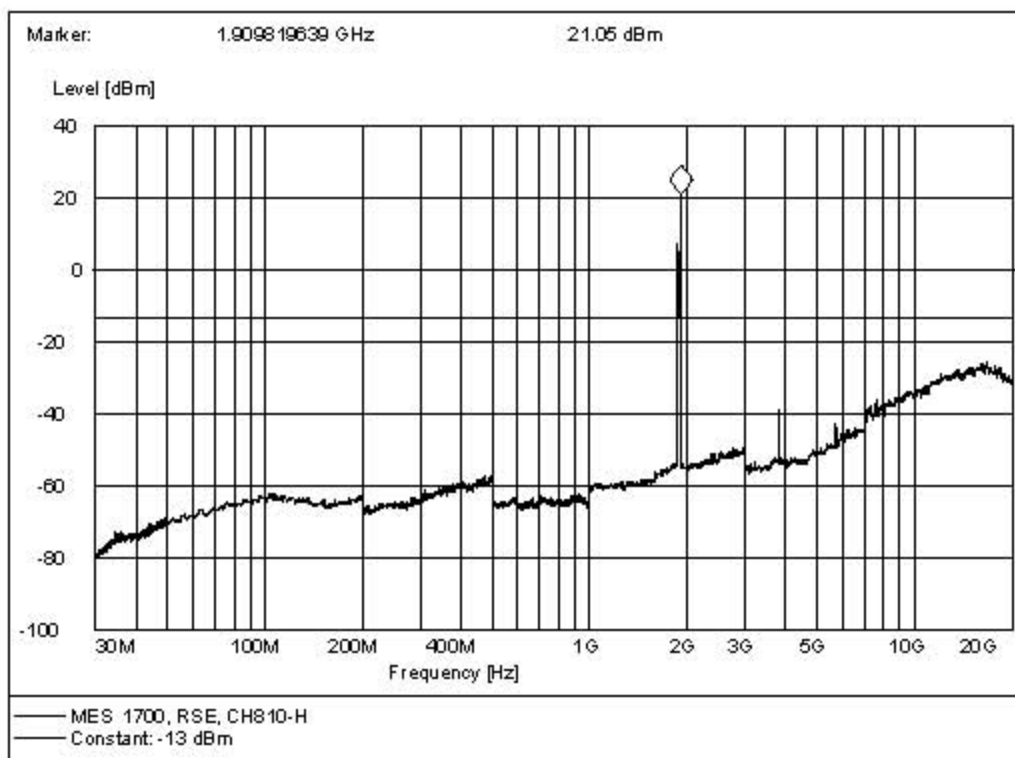


5. Highest channel No.810, antenna vertical



6. Highest channel No.810, antenna horizontal



11 Frequency Stability Test

11.1 Requirement of Frequency Stability

According to FCC §22.355, the carrier frequency of each transmitter (821-896MHz, $\leq 3W$) must be maintained within $\pm 2.5\text{ppm}$.

According to FCC §24.235, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

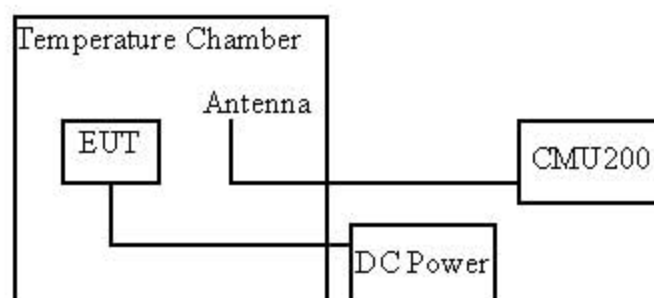
According to FCC §2.1055, the test conditions are:

- **Temperature:** The temperature is varied from -30°C to $+50^{\circ}\text{C}$ at intervals of not more than 10°C .
- **Primary Supply Voltage:** For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

11.2 Test Procedure

- a. The temperature was varied from -30°C to $+50^{\circ}\text{C}$ at intervals of 10°C . At each temperature level, the EUT was powered off and put in the temperature chamber for 2 hour.
- b. After sufficient stabilization, the EUT was turned on and a communication link was established. The frequency was measured within three minutes.
- c. For extreme supply voltage measurement, the EUT was tested at room temperature.

11.3 Test Setup



11.4 EUT Setup and Operating Conditions

The EUT configuration of the emission tests was MS + DC power supply.

A communication link was established between the MS and a System Simulator (SS).

The MS operated at the maximum output power: level 5 for GSM 850 MHz; level 0 for PCS 1900.

The low, middle and high channels were measured respectively: channel No.128 (low), 190 (middle) and 251 (high) for GSM 850 MHz; channel No.512 (low), 661 (middle) and 810 (high) for PCS 1900.

11.5 Test Results

I. GSM 850 MHz Band

No.	Test Conditions		Frequency Deviation (Hz)			Limit ($\pm 2.5\text{ppm}$)
	Volatage	Temperature ($^{\circ}\text{C}$)	128CH	190CH	251CH	
1	3.7V (V_{nom})	-30	-14	-12	-10	128CH, $\pm 2060\text{Hz}$ 190CH, $\pm 2096\text{Hz}$ 251CH, $\pm 3055\text{Hz}$
2		-20	+15	+14	+4	
3		-10	-2	-6	-6	
4		0	-10	0	+8	
5		+10	+9	-9	-14	
6		+20	-3	-6	+11	
7		+30	+11	+9	+1	
8		+40	-15	-13	+4	
9		+50	-7	-13	+6	
10	4.2V (V_{max})	+22	-8	+12	-4	
11	3.4V (V_{min})	+22	+12	-11	-15	

II. PCS 1900 MHz Band

No.	Test Conditions		Frequency Deviation (Hz)			
	Volatage	Temperature (°C)	512CH	661CH	810CH	Limit (± 1ppm)
1	3.7V (V_{nom})	-30	-4	+21	-1	512CH, ±1850Hz 661CH, ±1880Hz 810CH, ±1910Hz
2		-20	+16	-8	-12	
3		-10	+12	+16	+21	
4		0	+19	-3	+17	
5		+10	+6	+2	-15	
6		+20	+9	+14	+13	
7		+30	-1	-12	+2	
8		+40	-9	+6	-3	
9		+50	+15	-12	+15	
10	4.2V (V_{max})	+22	+2	+2	+13	
11	3.4V (V_{min})	+22	-2	-7	-3	

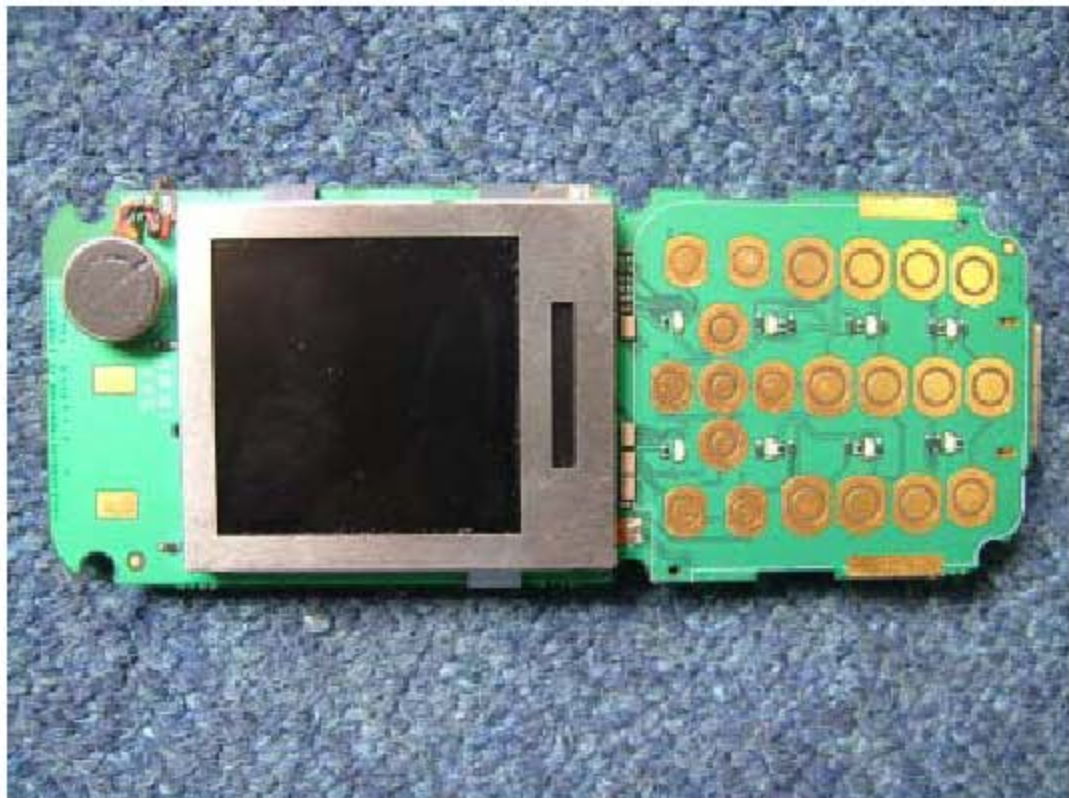
Appendix I: Photographs of the EUT

1. Appearance of the MS



2. Inside of the MS



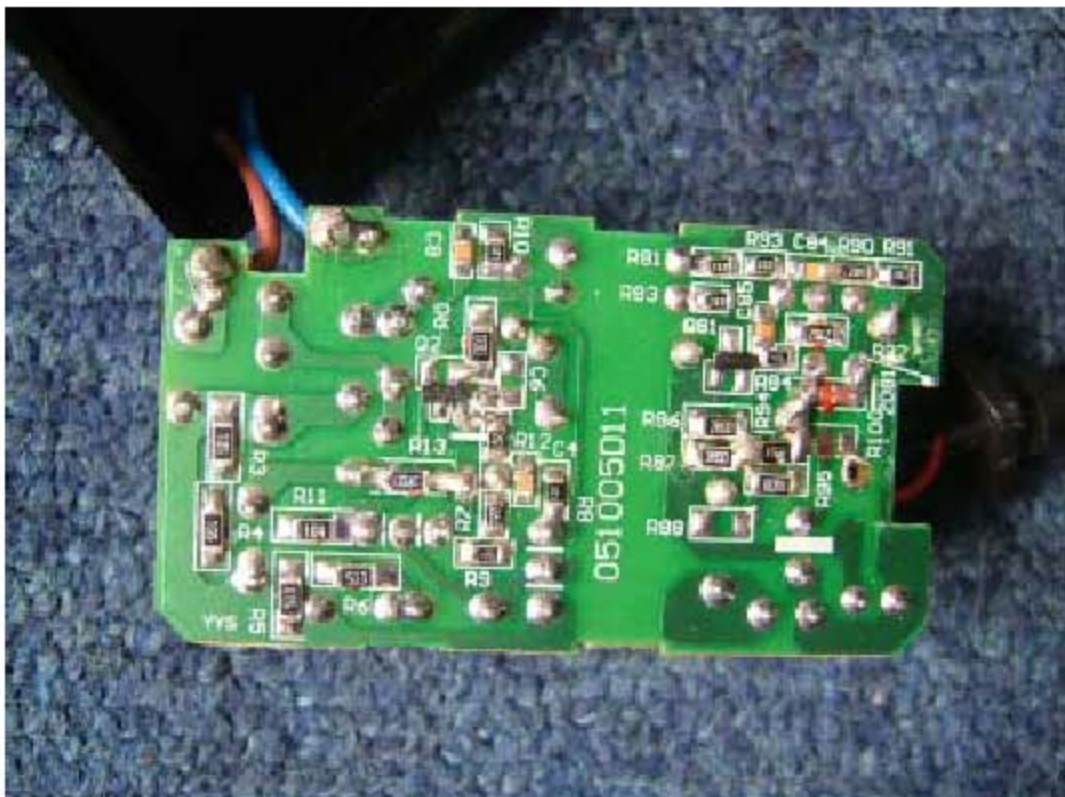
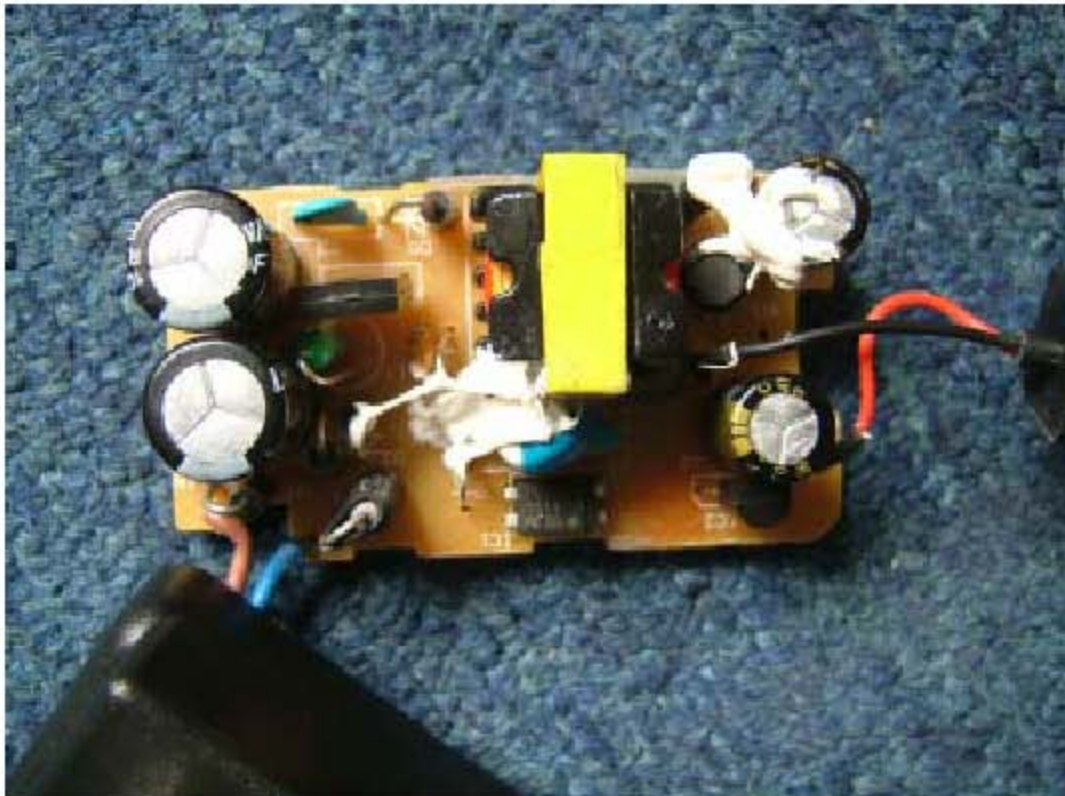




3. Appearance of the Charger



4. Inside of the Charger



Appendix II: Photographs of the Test Configuration

1. Conducted Emission Test



2. Radiated Emission Test



3. Conducted RF Test



4. Radiated RF Test



5. Radiated RF Test (9kHz~30MHz)

