Tune-Up Procedure and Power Tune-Up – Power Limiting

1.It must provide an operational voltage (3.5~4.2V DC) to turn on the phone and on one certain channel in service mode by means of company proprietary software.

2.Base station simulator (Rohde& Schwarz CMU200 or Agilent 8960) measures the GSM phone specific RF characteristics.

3.The maximum gain of each individual phone is adjusted until the target value met.

For GSM Ber < 2% at static condition

GSM 850 RX sensitivity < -106dBm

PCS1900 RX sensitivity < -105dBm

For GPRS Bler <10% at static condition

Type of channel	GSM850 GPRS	PCS1900 GPRS
CS1	-107	-106
CS2	-107	-106
CS3	-107	-106
CS4	-104	-103

Tune Up Procedure

1. GSM RX Gain Calibration

a. Put DUT in test mode

b. Put DUT in BCH mode

c. Put DUT in selected channel band

d. Total gain chain calibration at center ARFCN

e. Frequency Ripple calibration

f. Complete RX_AGC Gain table

2. GSM TX Power Calibration

a. Put DUT in test mode

b. Put DUT in BCH mode

c. Put DUT in selected channel band

d. Calibrate Rampscale value at center ARFCN

e. Frequency Ripple calibration

f. Complete TX_APC table

3. AFC calibration

a. Put DUT in test mode

b. Put DUT in selected channel band

c. Calibrate AFC at center ARFCN

d. Complete AFC result table

4. GPRS TX Power Calibration

a. Put DUT in test mode

b. Put DUT in BCH mode

c. Put DUT in selected channel band

d. Calibrate inter slot Ramp value at center ARFCN

e. Calibrate TX rollback value at center ARFCN

f. Complete GPRS TX Power table

Maximum Target Output Power

Max Target Power(dBm)			
Mode/Band	**Channel**		
	Low	**Middle**	**High**
GSM 850	28.4	28.4	28.4
PCS 1900	29.7	29.7	29.7
Bluetooth	1.9	1.9	1.9
BLE	1.9	1.9	1.9