Tune up procedure

1. It must provide an operational voltage 3.8V DC to turn on the phone and on one certain channel in service mode by means of company proprietary software.

2. Base station simulator (Agilent 8960) measures the GSM phone specific RF characteristics.

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

PCL = 0, PCL = 5, PWR = 32.27 ± 0.2 dBm

PCL = 0, PCL =6, PWR = 30 ± 0.2 dBm

PCL = 0, PCL =7, PWR = 28 ± 0.2 dBm

PCL = 0, PCL =8, PWR = 26 ± 0.2 dBm

PCL = 0, PCL =9, PWR = 24 ± 0.2 dBm

PCL = 0, PCL =10, PWR = 22 ± 0.2 dBm

PCL = 0, PCL =11, PWR = 20 ± 0.2 dBm

PCL = 0, PCL =12, PWR = 18 ± 0.2 dBm

PCL = 0, PCL =13, PWR = 16 ± 0.2 dBm

PCL = 0, PCL =14, PWR = 14 ± 0.2 dBm

PCL = 0, PCL =15, PWR = 12 ± 0.2 dBm

PCL = 0, PCL =16, PWR = 10 ± 0.2 dBm

PCL = 0, PCL =17, PWR = 8 ± 0.2 dBm

PCL = 0, PCL =18, PWR = 6 ± 0.2 dBm

PCL = 0, PCL =19, PWR = 4 ± 0.2 dBm

then this appropriate gain settings are stored in each phone individually.

The user has no possibility to change these settings later on, and during manufacturing each phone will be individual calibrated. The measurement is done in fully calibrated setup, which is based on a Agilent 8960 base station simulator. Furthermore, the highest, middle and lowest power levels are verified afterwards in a call measurement on three channels (low, middle and high).