

Tune up procedure

The equipment under test is the transmitter of LTT X10, a Dual-band (850/1900) GSM PDA phone.

GSM850:

PCL =05, PWR = 32 ± 4 dBm
PCL =06, PWR = 30.5 ± 4 dBm
PCL =07, PWR = 29 ± 4 dBm
PCL =08, PWR = 27 ± 4 dBm
PCL =09, PWR = 25 ± 4 dBm
PCL =10, PWR = 23 ± 4 dBm
PCL =11, PWR = 21 ± 4 dBm
PCL =12, PWR = 19 ± 4 dBm
PCL =13, PWR = 17 ± 4 dBm
PCL =14, PWR = 15 ± 4 dBm
PCL =15, PWR = 13 ± 4 dBm
PCL =16, PWR = 11 ± 4 dBm
PCL =17, PWR = 09 ± 4 dBm
PCL =18, PWR = 07 ± 5 dBm
PCL =19, PWR = 05 ± 5 dBm

PCS1900:

PCL =00, PWR = 29 ± 4 dBm
PCL =01, PWR = 28 ± 4 dBm
PCL =02, PWR = 26 ± 4 dBm
PCL =03, PWR = 24 ± 4 dBm
PCL =04, PWR = 22 ± 4 dBm
PCL =05, PWR = 20 ± 4 dBm
PCL =06, PWR = 18 ± 4 dBm
PCL =07, PWR = 16 ± 4 dBm
PCL =08, PWR = 14 ± 4 dBm
PCL =09, PWR = 12 ± 4 dBm
PCL =10, PWR = 10 ± 4 dBm
PCL =11, PWR = 08 ± 4 dBm
PCL =12, PWR = 06 ± 4 dBm
PCL =13, PWR = 04 ± 5 dBm
PCL =14, PWR = 02 ± 5 dBm

PCL =15, PWR = 00 \pm 5 dBm

Then these 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 Rohde& Schwarz CMU200 base station simulator. Furthermore, the highest power level is verified afterwards in a call measurement on three channels (low, middle and high).