Star Tune up procedure

Tune up procedure shall be over the power range or at specific operating power levels.

1. It must provide an operational voltage (3.3 ~4.2V DC) to turn on the device and on one certain channel in service mode by means of company proprietary software.
2. Base station simulator (CMU200) measures the Mobile phone device specific RF characteristics.
3. The maximum gains of each individual device are adjusted until the target value met.

Tune-up Power		
Mode	Frequency Bands	Tune-up Power
GSM	GSM 850	33.0 dBm±1.0
GPRS	GPRS 850 1Txslot	32.0 dBm±1.0
	GPRS 850 2Txslot	32.0 dBm±1.0
	GPRS 850 3Txslot	31.0 dBm±1.0
	GPRS 850 4Txslot	30.0 dBm±1.0
GSM	GSM 1900	29.0 dBm±1.0
GPRS	GPRS 1900 1Txslot	29.0 dBm±1.0
	GPRS 1900 2Txslot	28.0 dBm±1.0
	GPRS 1900 3Txslot	27.0 dBm±1.0
	GPRS 1900 4Txslot	26.0 dBm±1.0
WCDMA Band II	RMC 12.2Kbps	21.0 dBm±1.0
	HSDPA	21.0 dBm±1.0
	HSUPA	20.0 dBm±1.0
WCDMA Band IV	RMC 12.2Kbps	23.0 dBm±1.0
	HSDPA	22.0 dBm±1.0
	HSUPA	21.0 dBm±1.0
WCDMA Band V	RMC 12.2Kbps	23.0 dBm±1.0
	HSDPA	23.0 dBm±1.0
	HSUPA	22.0 dBm±1.0
WIFI	802.11b	11.5 dBm±1.5
	802.11g	10.0 dBm±1.5
	802.11n(HT20)	10.0 dBm±1.5
	802.11n(HT40)	9.0 dBm±1.5
Bluetooth	GFSK	0 dBm±2.5
	Pi/4QPSK	0 dBm±2.5
	8DPSK	0 dBm±2.5
BLE	GFSK	-1 dBm±1.5

Then these appropriate gain settings are stored in each device individually.

The user has no possibility to change these settings later on, and during manufacturing each device will be individual calibrated. The measurement is done in fully calibrated setup, which is based on a CMU200 base station simulator. Furthermore, the highest power level is verified afterwards in a call measurement on three channels (low, middle and high).