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 (3.5 ~ 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 (CMU 200) 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	GSM850	32.5dBm±0.5dB
	GSM1900	28.5dBm±0.5dB
GPRS	GPRS850(1 slots)	32.5dBm±0.5dB
	GPRS850(2 slots)	28.5dBm±0.5dB
	GPRS850(3 slots)	29.0dBm±0.5dB
	GPRS850(4 slots)	27.5dBm±0.5dB
	GPRS1900(1 slots)	28.5dBm±0.5dB
	GPRS1900(2 slots)	25.0dBm±0.5dB
	GPRS1900(3 slots)	24.5dBm±0.5dB
	GPRS1900(4 slots)	23.5dBm±0.5dB
EGPRS	EGPRS850(1 slots)	28.5dBm±0.5dB
	EGPRS850(2 slots)	24.0dBm±0.5dB
	EGPRS850(3 slots)	24.0dBm±0.5dB
	EGPRS850(4 slots)	24.0dBm±0.5dB
	EGPRS1900(1 slots)	25.0dBm±0.5dB
	EGPRS1900(2 slots)	21.0dBm±0.5dB
	EGPRS1900(3 slots)	21.0dBm±0.5dB
	EGPRS1900(4 slots)	21.0dBm±0.5dB
WCDMA Band II	RMC 12.2Kbps	22.0dBm±1.0dB
	HSDPA	21.0dBm±1.0dB
	HSUPA	21.0dBm±1.0dB
WCDMA Band V	RMC 12.2Kbps	22.0dBm±1.5dB
	HSDPA	21.5dBm±1.5dB
	HSUPA	21.5dBm±1.5dB
802.11	802.11b	18.0dB ±1.0dB
	802.11g	14.0dB±1.5dB
	802.11n(HT20)	14.0dB±2.0dB
	802.11n(HT40)	14.0dB±2.0dB
BT	DSS	6.0dBm±1.0dB

BLE	DTS	0dBm±2dB

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 CMU 200 base station simulator. Furthermore, the highest power level is verified afterwards in a call measurement on three channels (low, middle and high).