Zen U5 2nd Gen 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 (3.4 ~ 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	32.0dBm±1dB
	GSM1900	29.0dBm±1dB
GPRS	GPRS850(1 slots)	32.0dBm±1dB
	GPRS850(2 slots)	32.0dBm±1dB
	GPRS850(3 slots)	30.0dBm±1dB
	GPRS850(4 slots)	29.0dBm±1dB
	GPRS1900(1 slots)	29.0dBm±1dB
	GPRS1900(2 slots)	29.0dBm±1dB
	GPRS1900(3 slots)	27.0dBm±1dB
	GPRS1900(4 slots)	26.0dBm±1dB
WCDMA Band V	RMC	22.0dBm±1dB
	HSDPA Subtest	21.0dBm±1dB
	HSUPA Subtest	21.0dBm±1dB
WCDMA Band II	RMC	22.0dBm±1dB
	HSDPA Subtest	21.0dBm±1dB
	HSUPA Subtest	21.0dBm±1dB
WIFI	2.4GHz	8.7dBm±1dB
BLE	2.4GHz-Low	-4.0dBm±1dB
	2.4GHz-Middle	-1.0dBm±1dB
	2.4GHz-High	-3.0dBm±1dB
BT	2.4GHz	3.5dBm±1dB
LTE Band 4	1.4 / 3 / 5 / 10 / 15 MHz-QPSK-Low CH	22.5dBm±1dB
	1.4 / 3 / 5 / 10 / 15 MHz-QPSK-Middle CH	22.0dBm±1dB
	1.4 / 3 / 5 / 10 / 15 MHz-QPSK-High CH	22.0dBm±1dB
	1.4 / 3 / 5 / 10 / 15 MHz-16QAM-Low CH	22.0dBm±1dB

	1.4 / 3 / 5 / 10 / 15 MHz-16QAM-Middle CH	21.0dBm±1dB
	1.4 / 3 / 5 / 10 / 15 MHz-16QAM-High CH	21.0dBm±1dB
	20MHz-QPSK-Low CH-RB No.=1	22.5dBm±1dB
	20MHz-QPSK-Low CH-RB No.=50&100	22.0dBm±1dB
	20MHz-QPSK-Middle CH	22.0dBm±1dB
	20MHz-QPSK-High CH	22.0dBm±1dB
	20MHz-16QAM-Low CH-RB No.=1	22.0dBm±1dB
	20MHz-16QAM-Low CH-RB No.=50&100	21.0dBm±1dB
	20MHz-16QAM-Middle CH	21.2dBm±1dB
	20MHz-16QAM-High CH	21.0dBm±1dB

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).