Tune up procedure

Tune up procedure shall be over the power range or at specific operating power levels.
It must provide an operational voltage (DC 3.8V by battery) to turn on the device and on one certain channel in service mode by means of company proprietary software.
spectrum analyzer(Agilent, E440B) and Power meter
(R&S,NRVS)measures the 2.4G device specific RF characteristics and Tow way radio device specific RF characteristics.
Base station simulator (CMU 200) measures the 2G device specific RF characteristics.
The maximum gains of each individual device are adjusted until the target value met.

Maximum RF Conducted Output Power			
Frequency Bands	Service	PCL/Class	Target Value (dBm; Average)
Bluetooth V4.0 BLE	GFSK	/	-4 ± 1.0
Bluetooth V4.0	GFSK	/	4 ± 1.0
	π/4-DQPSK	/	3.5 ± 1.0
	8-DPSK	/	3.5 ± 1.0
WIFI	802.11b	1Mbps	14.5 ± 1.0
	802.11g	6Mbps	14.0 ± 1.0
	802.11n(HT20)	6.5Mbps	14.0 ± 1.0
	802.11n(HT40)	13.5Mbps	13.5 ± 1.0
RFID	ASK	/	24.0 ± 1.0
GSM 850 Band	GSM	5 / Class 4	33.00 ± 1.0
	GPRS (Slot 1)	5 / Class 4	33.00 ± 1.0
	GPRS (Slot 2)	5 / Class 4	31.00 ± 1.0
	GPRS (Slot 3)	5 / Class 4	29.00 ± 1.0
	GPRS (Slot 4)	5 / Class 4	28.00 ± 1.0
PCS 1900 Band	GSM	0 / Class 1	30.00 ± 1.0
	GPRS (Slot 1)	0 / Class 1	29.50 ± 1.0
	GPRS (Slot 2)	0 / Class 1	28.00 ± 1.0
	GPRS (Slot 3)	0 / Class 1	26.00 ± 1.0
	GPRS (Slot 4)	0 / Class 1	25.00 ± 1.0

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, spectrum analyzer(Agilent, E440B) and Power meter. Furthermore, the highest power level is verified afterwards in a call measurement on three channels (low, middle and high).