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 ~ 4.35V DC)to turn on the device and on one certain channel in service mode by means of company proprietary software.
2. . The Base station simulator measures this device for their specific RF characteristics.
3. The maximum gains of each individual device are adjusted until the target value met.

RF average conduct power range：

2.4GWIFI (MAIN ANT1)
802.11b Max output power =19.0±1.0dBm
802.11g Max output power =18.5±1.0dBm
802.11n (HT20) Max output power =19.0±1.0dBm
802.11n (HT40) Max output power =19.0±1.0dBm

2.4GWIFI (MAIN ANT2)
802.11b Max output power =18.0±1.0dBm
802.11g Max output power =17.5±1.0dBm
802.11n (HT20) Max output power =17.0±1.0dBm
802.11n (HT40) Max output power =17.5±1.0dBm

2.4GWIFI(MIMOMode)
802.11n (HT20) Max output power =21.5±1.0dBm
802.11n (HT40) Max output power =21.5±1.0dBm

U-NII-1(5150-5250)
802.11ac-VHT20 Max output power =17.0±1.0dBm
802.11n-HT40 Max output power =20.0±1.0dBm
802.11n-HT40 Max output power =21.0±1.0dBm

U-NII-2a(5250-5350)
802.11 n-HT20 Max output power =17.0 ±1.0dBm
802.11a Max output power =17.5±1.0dBm
802.11n-HT20 Max output power =20.0±1.0dBm

U-NII-2c(5470-5725)
802.11 ac-VHT20 Max output power =17.0±1.0dBm
802.11a Max output power =17.5±1.0dBm
802.11ac-VHT20 Max output power =19.5±1.0dBm

U-NII-3(5725-5825)
802.11ac-VHT20 Max output power =18.0±1.0dBm
802.11ac-VHT20 Max output power =18.0±1.0dBm
802.11ac-VHT20 Max output power =21.0±1.0dBm

BT
GFSK: Max output power =10.5±1.0dBm
π/4DQPSK: Max output power =10.5±1.0dBm
8DPSK: Max output power =10.5±1.0dBm

BLE
1Mbps: Max output power =8.0±1.0dBm
2Mbps: Max output power =8.0±1.0dBm

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