Tune Up Procedure

1. It must provide an operational voltage (10.8VDC~26.4V DC) to turn on the Router antenna and on one certain channel in service mode by means of company proprietary software(this ensures that the user has no access to change these settings).

2. Base station simulator (Rohde& Schwarz CMW500) measures the WCDMA,LTE Router antenna specific RF characteristics.

3. The maximum gain of each individualRouter antennaare adjusted until the target values are met.

Band	Tune-up power tolerance(dBm)
WCDMA 850	Max output power =23.5(+1/-2)
WCDMA 1700	Max output power =23 (+1/-2)
WCDMA 1900	Max output power =23.5(+1/-2)
LTEBAND 2 (QPSK)	Max output power =22+-0.5(1RB)
LTEBAND 4 (QPSK)	Max output power =22+-0.5(1RB)
LTEBAND 5 (QPSK)	Max output power =22.5+-0.5(1RB)
LTE BAND 17 (QPSK)	Max output power =23+-0.5(1RB)
802.11b（ANT1）	Max output power =17+-0.5
802.11b（ANT2）	Max output power =15.5+-0.5
802.11g（ANT1）	Max output power =18+-0.5
802.11g（ANT2）	Max output power =17+-0.5
802.11n20（MIMO）	Max output power =20+-0.5
802.11n40（MIMO）	Max output power =19+-0.5

4. Then the appropriate gain settings are stored in each Router antenna individually.

5. During manufacturing each Router antenna will be individually tested andcalibrated.The measurement is done in a fully calibrated setup, which is based on a Rohde& Schwarz CMW500base station simulator.Furthermore, the highest power level is verified afterwards in a call measurement on three channels (low, middle and high).