

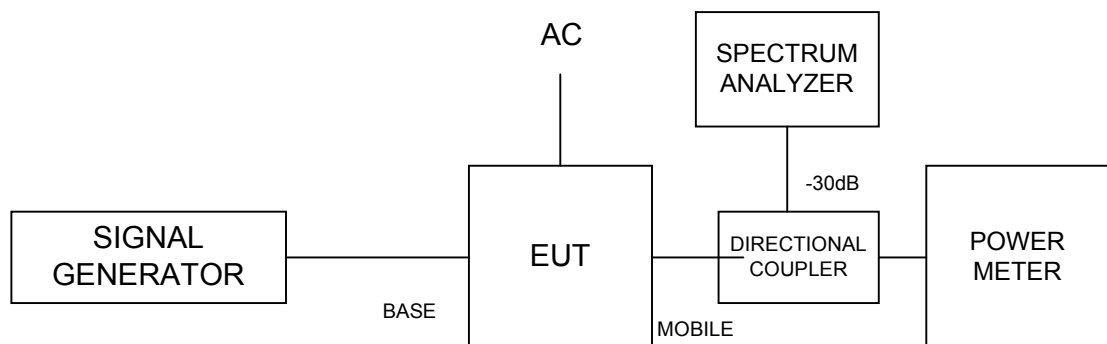
16.09.03

AGC tune up procedure for BDA-ESMR-50W90

1. Required test equipment:

- Spectrum Analyzer – HP 8563E or equivalent
- Signal Generator - Agilent E4432B or equivalent
- Power Meter – HP E4419B or equivalent

2. Test setup



3. Downlink AGC tuning:

- Set downlink GAIN to maximum (ATTN. at position "0").
- Set downlink AGC switch to OFF.
- Turn AC power ON.
- Set signal generator to (-)50 dBm at 858 MHz with iDEN modulated carrier.
- Increase input signal to get (+)43 dBm at output.
- Set downlink AGC switch ON.
- Adjust AGC trimmer to get (+)40 dBm reading on the power meter.
- Decrease input power by 3 dB, then increase the input power by 15dB in 1dB steps. Make sure that output power is within ± 1 dB of the nominal value.
- Turn power OFF

4. Uplink AGC tuning:

- a. Exchange MOBILE and BASE ports connections.
- b. Set uplink GAIN to maximum (ATTN. at position "0").
- c. Set uplink AGC switch to OFF.
- d. Turn AC power ON.
- e. Set signal generator to (-)60 dBm at 813 MHz with iDEN modulated carrier.
- f. Increase input signal to get (+)33 dBm at output.
- g. Set Uplink AGC switch ON.
- h. Adjust AGC trimmer to get (+)30 dBm reading on the power meter.
- i. Decrease input power by 3 dB, then increase the input power by 20 dB in 1dB steps. Make sure that output power is within ± 1 dB of the nominal value.
- j. Turn power OFF.