Application Note

Subject : How to measure PER(Sensitivity) using non-signaling

Benefit of non-signaling test

Faster than signaling(real communication) test

Preparation for non-signaling test

Set the DUT to always 'listen' the pre-defined packet(all zeros, all ones, etc.)

Tester transmits pre-defined numbers of packet

Preparation for PER test using the non-signaling mode of RWC5020A

RWC5020A provides user with a special function called user command mapper that can transmit user defined commands.

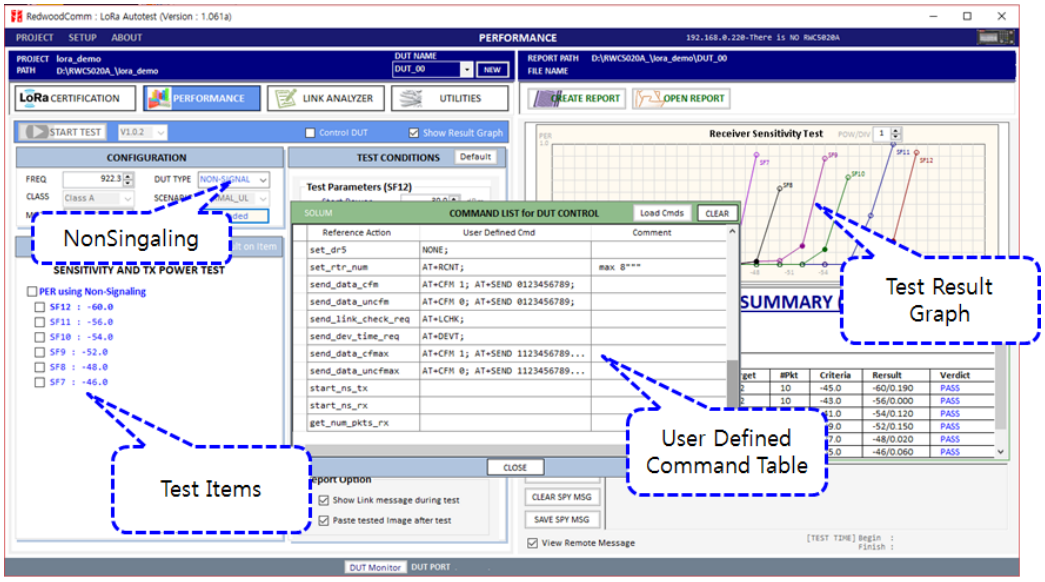
Fill DUT Command Table with DUT control commands matched to reference actions

Reference action for non-signaling test

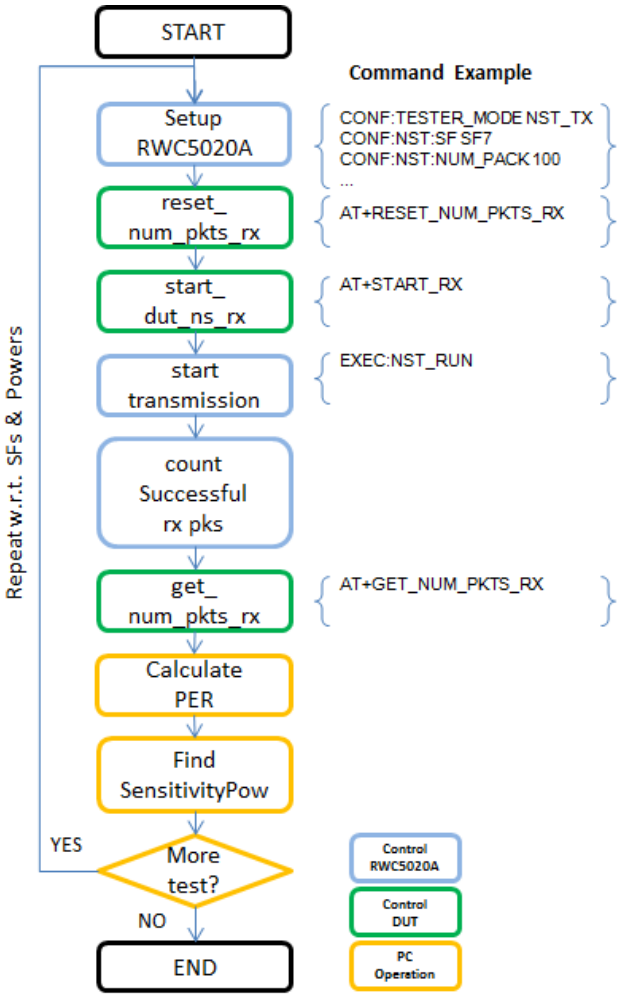
start_dut_ns_rx

reset_ num_pkts_rx

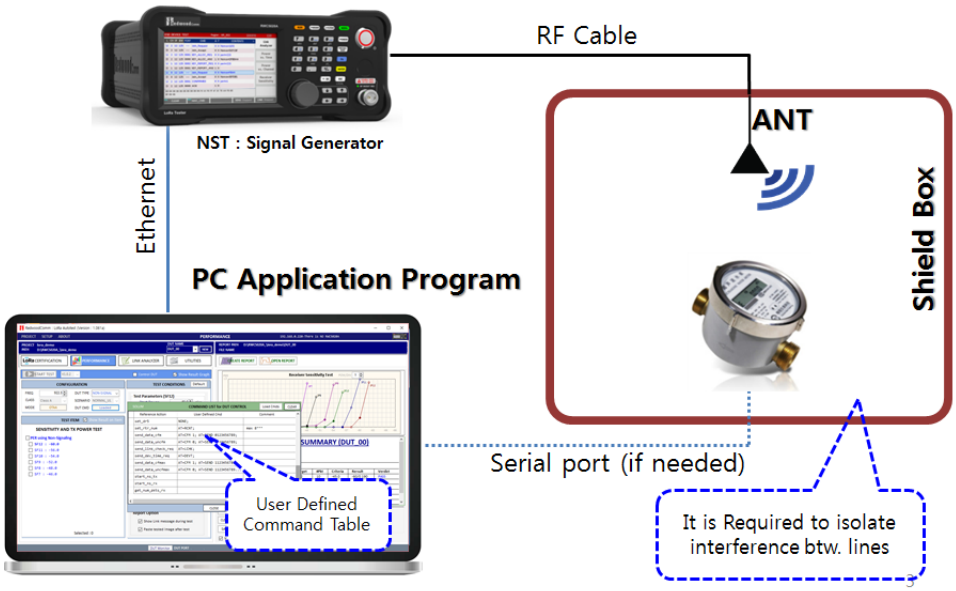
get_num_pkts_rx



Flow Chart for non-signaling test



Test Setup using Non-signaling mode



How to setup DUT control command

Step 1) Make dut_control_cmd file using Template

Step 2) Make open the dut_control_cmd file using [load cmd] function

How to connect DUT to PC software

Before run Non-signaling test User have to setup RS232 and EOL type of command

In dut_control_com file, user have to fill the speed of RS232 and EOL type.

'EOL=n' means that it will send '/n' as the end of line

'EOL=r' means that it will send '/r' as the end of line

'EOL=nr' means that it will send '/n/r' as the end of line

'EOL=rn' means that it will send '/r/n' as the end of line