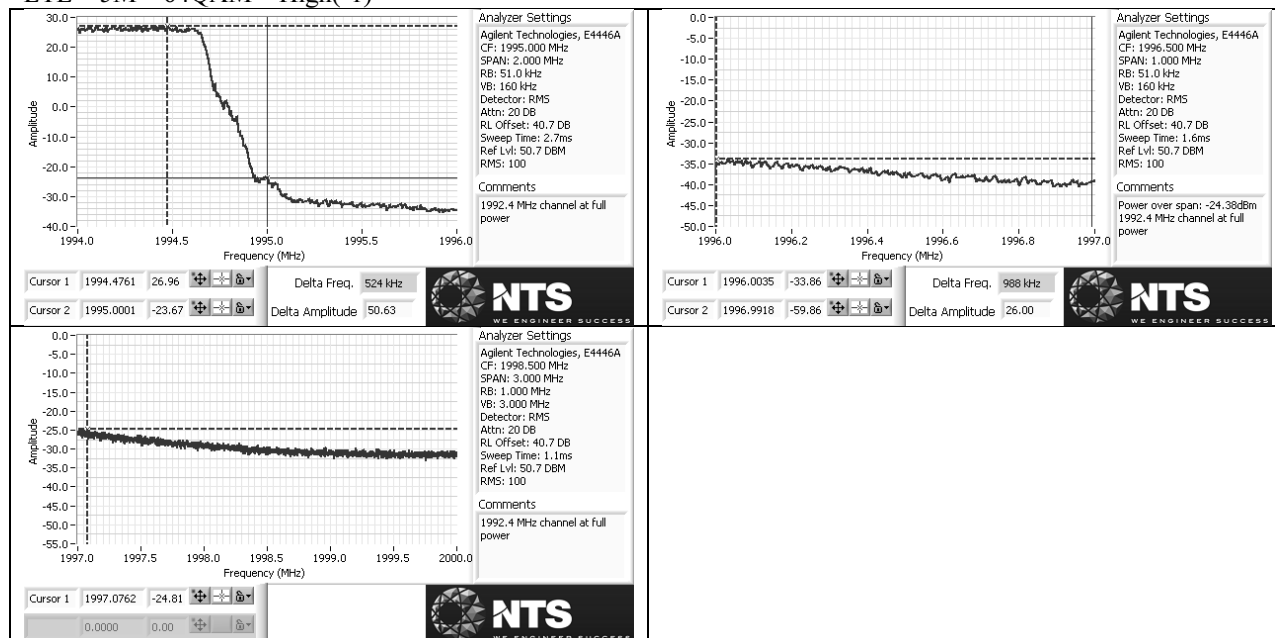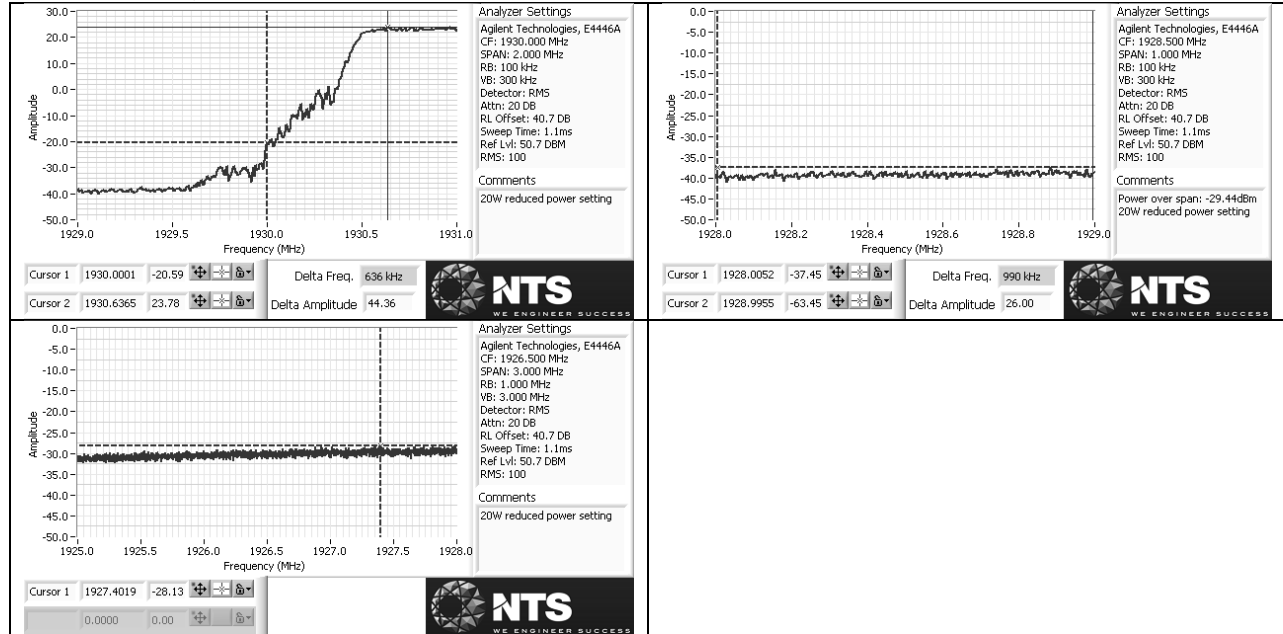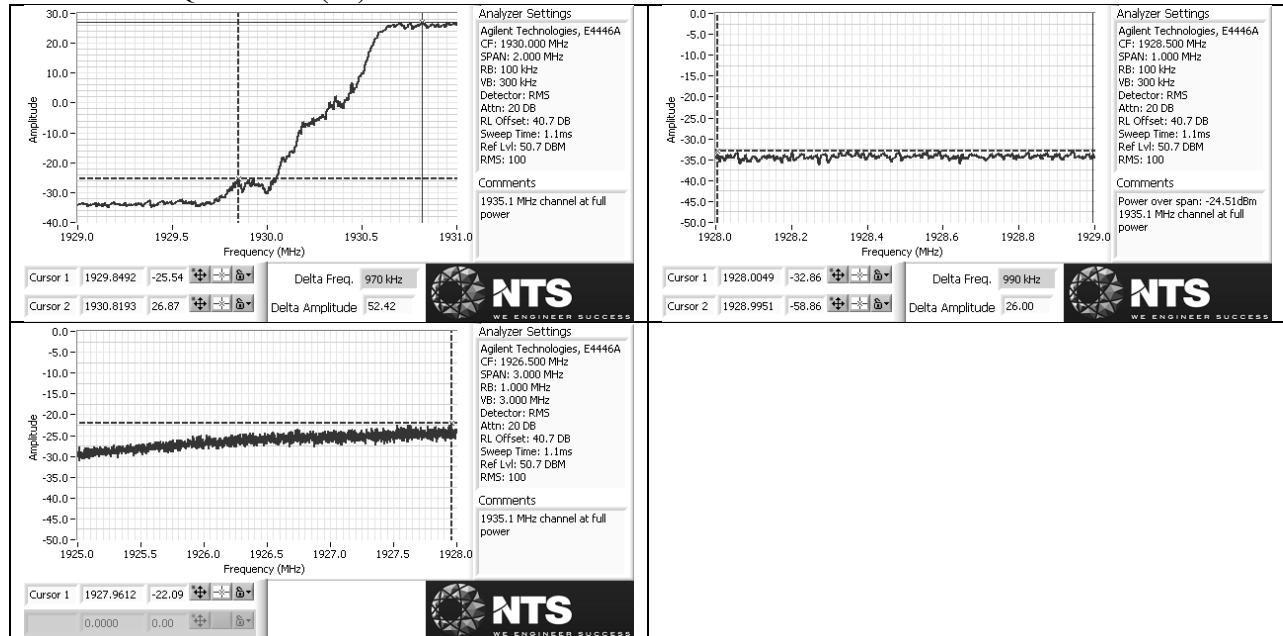## LTE – 5M – 64QAM – High

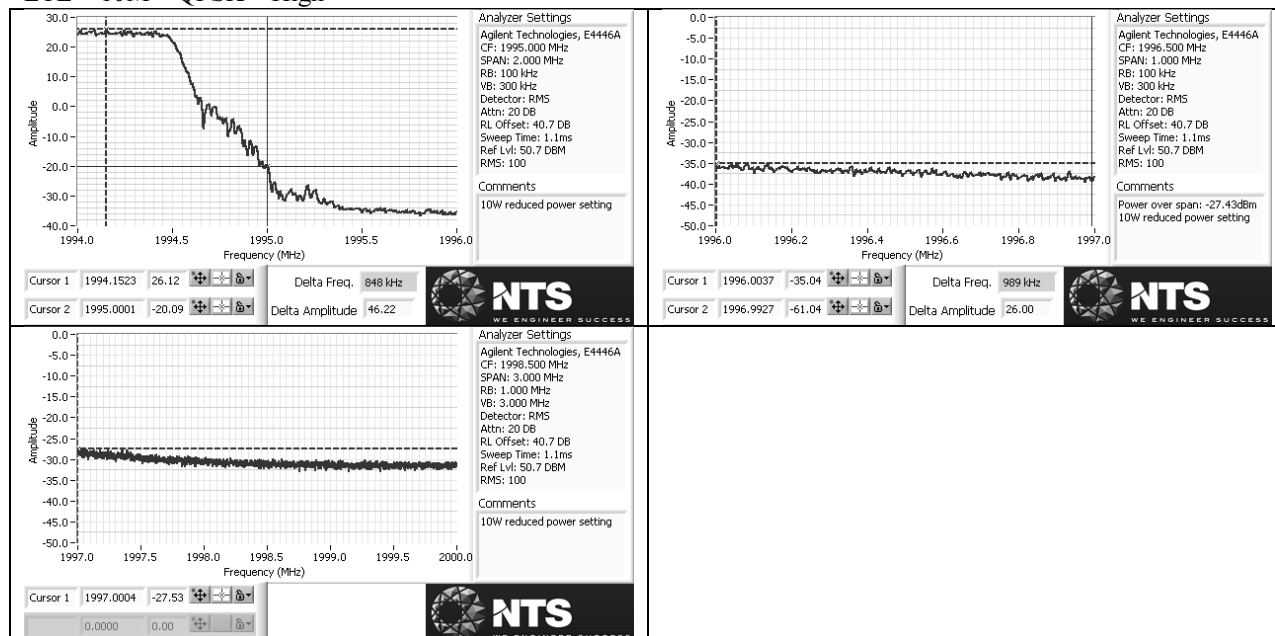## LTE – 5M – 64QAM – High(-1)
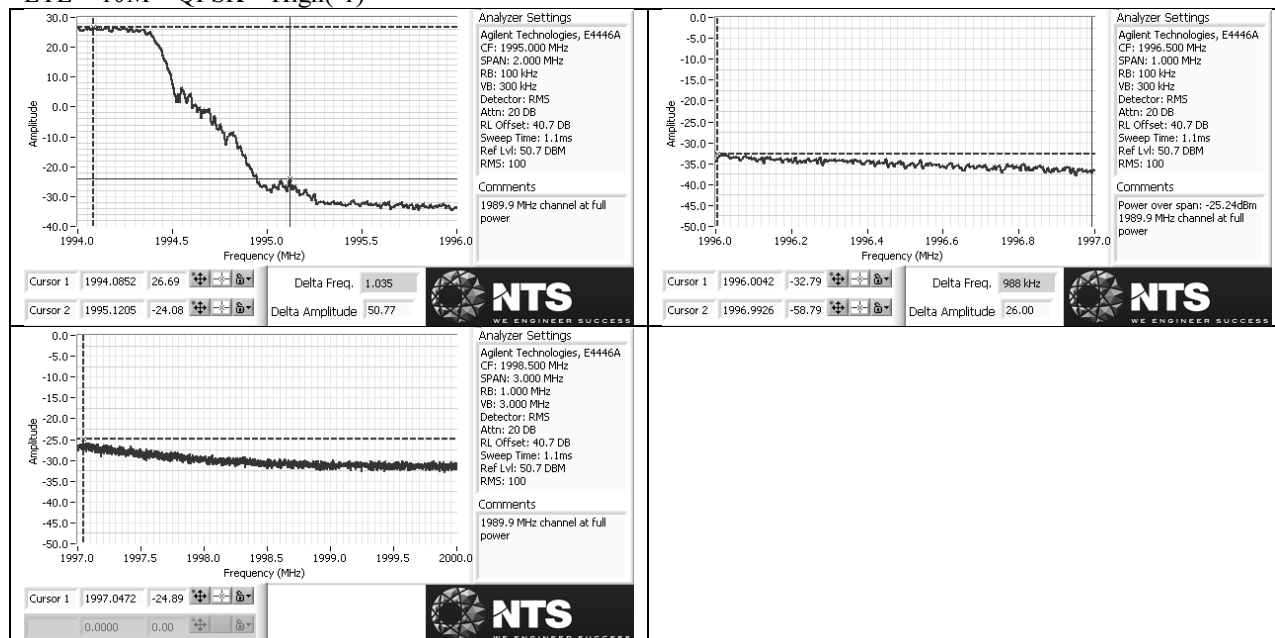
LTE – 10M – QPSK – Low

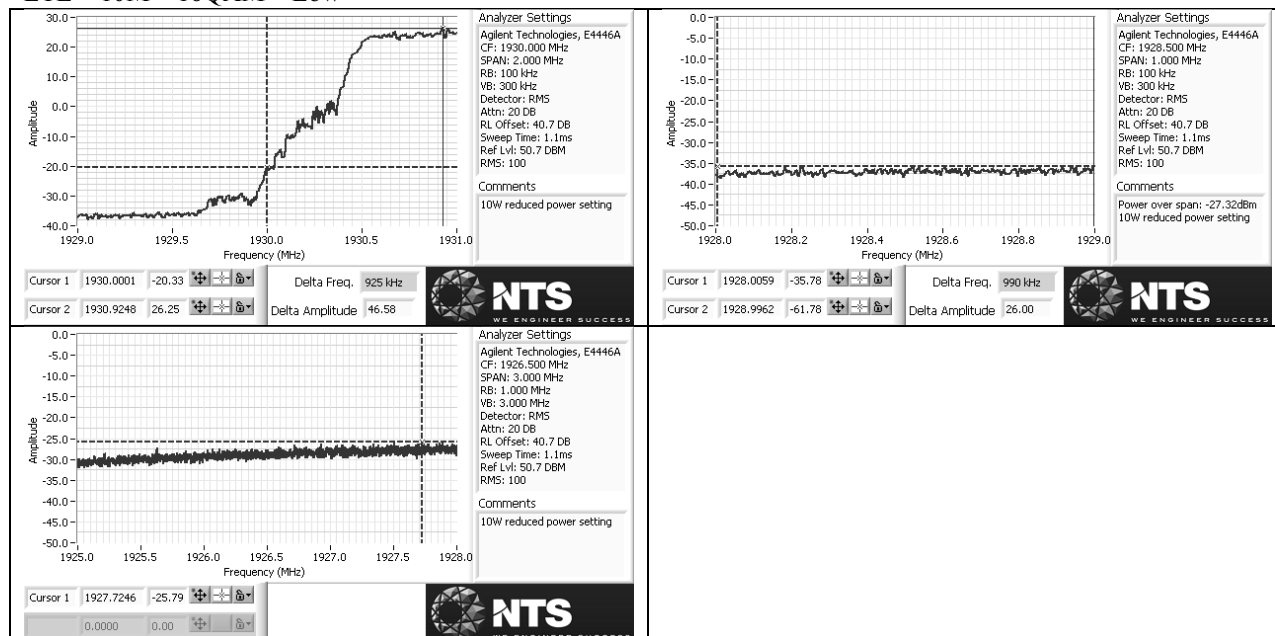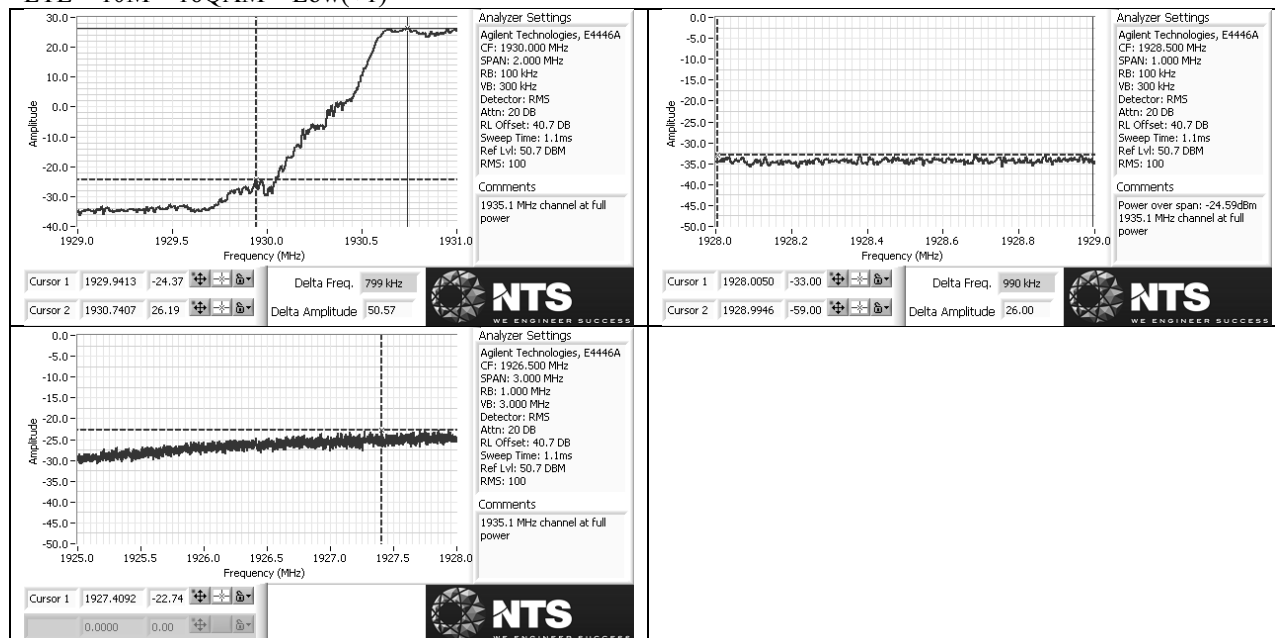LTE – 10M – QPSK – Low(+1)

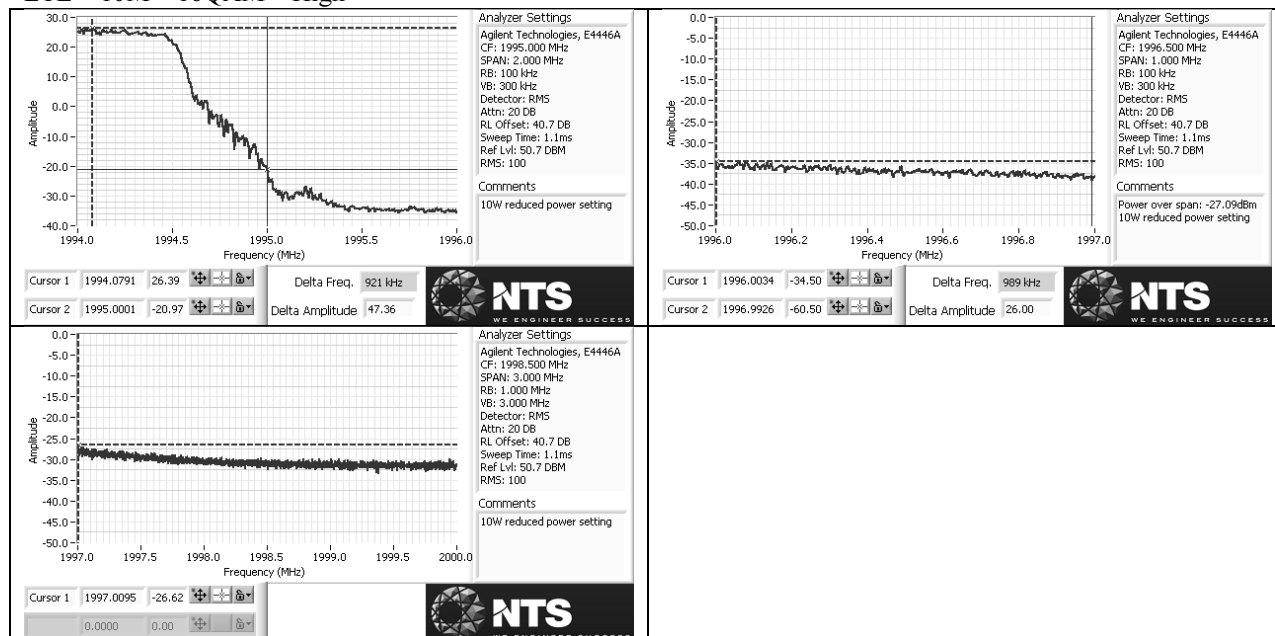LTE – 10M – QPSK – High

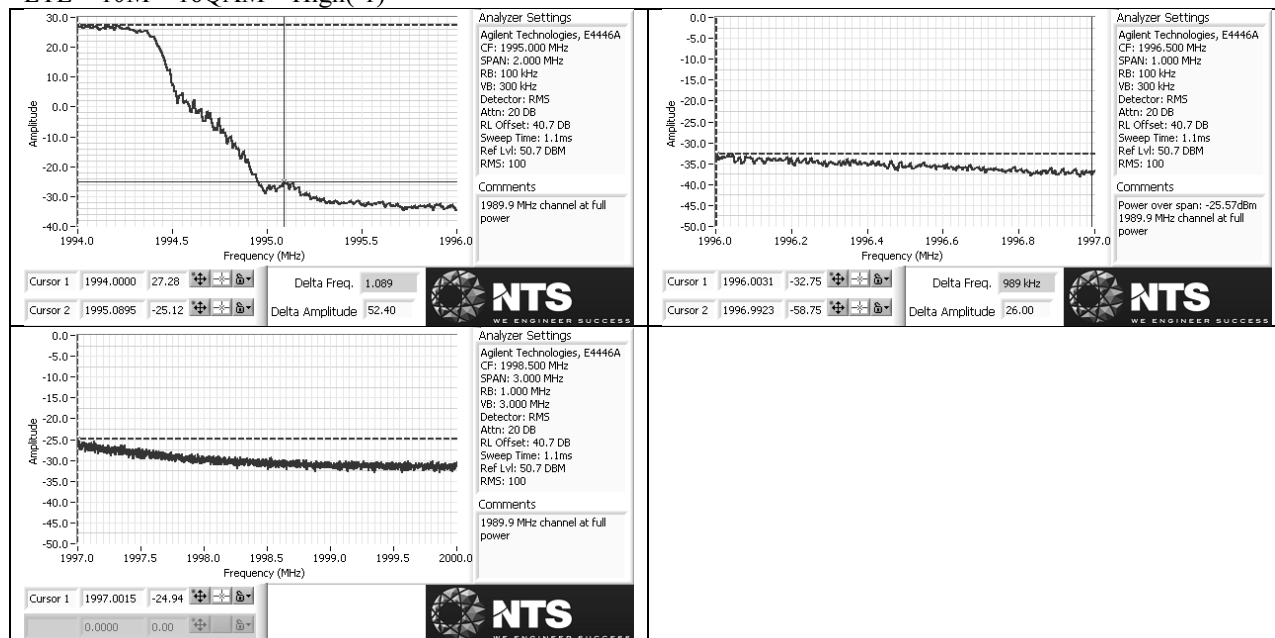LTE – 10M – QPSK – High(-1)

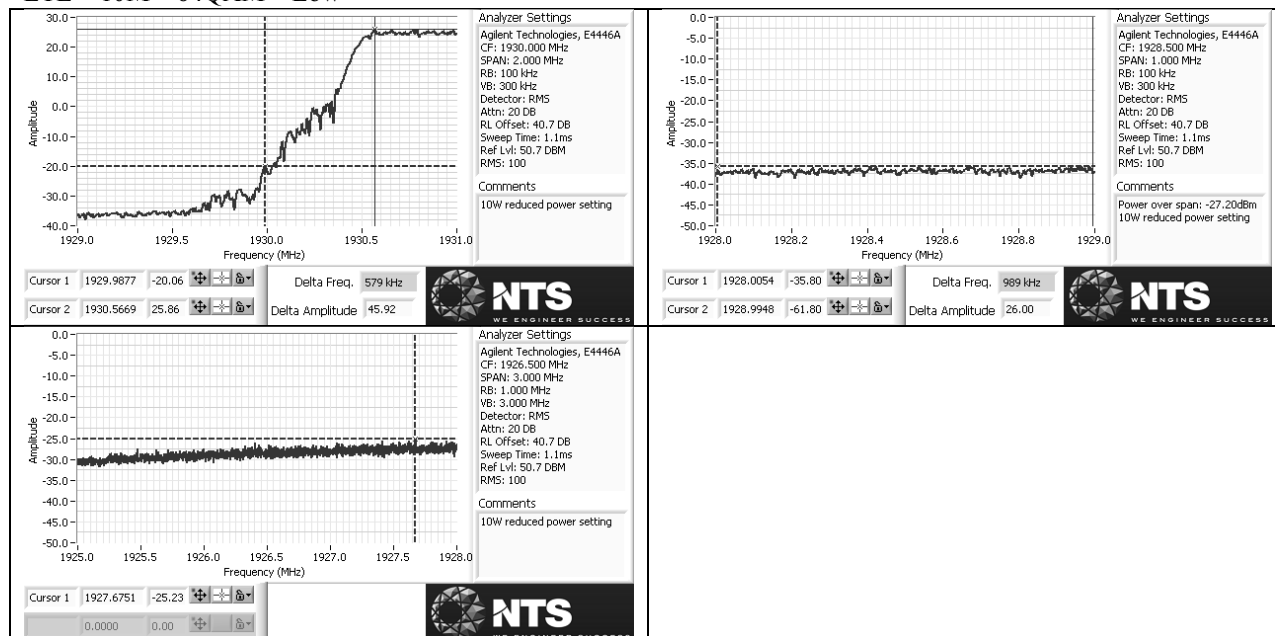LTE – 10M – 16QAM – Low

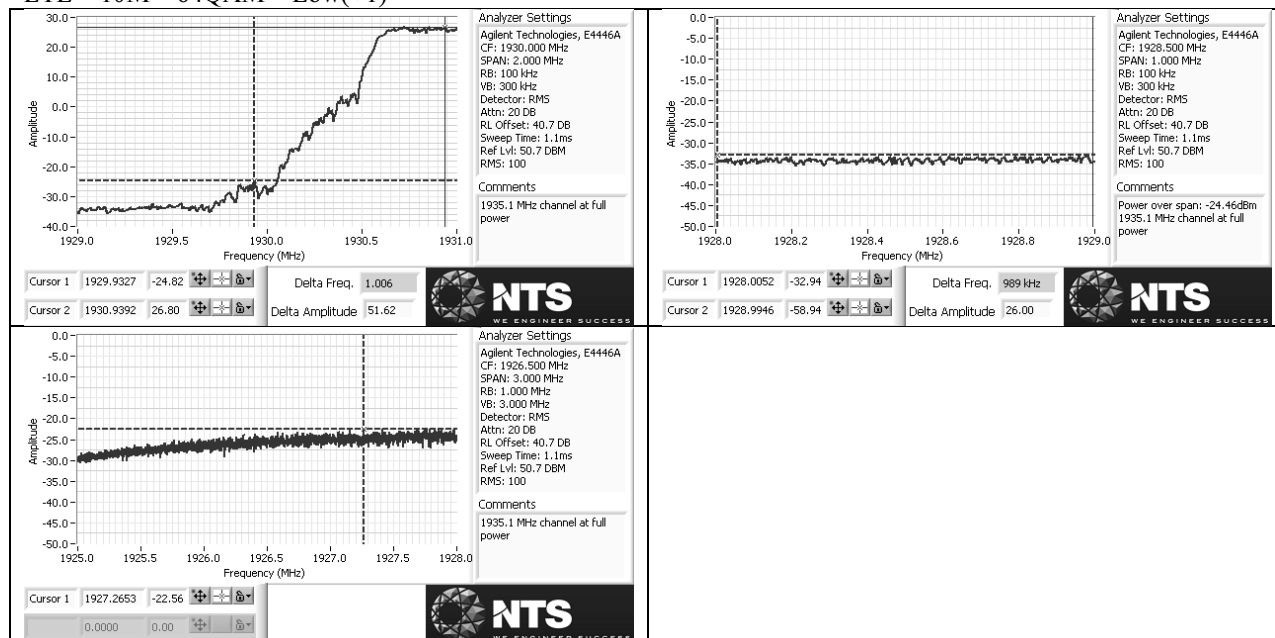LTE – 10M – 16QAM – Low(+1)

LTE – 10M – 16QAM – High
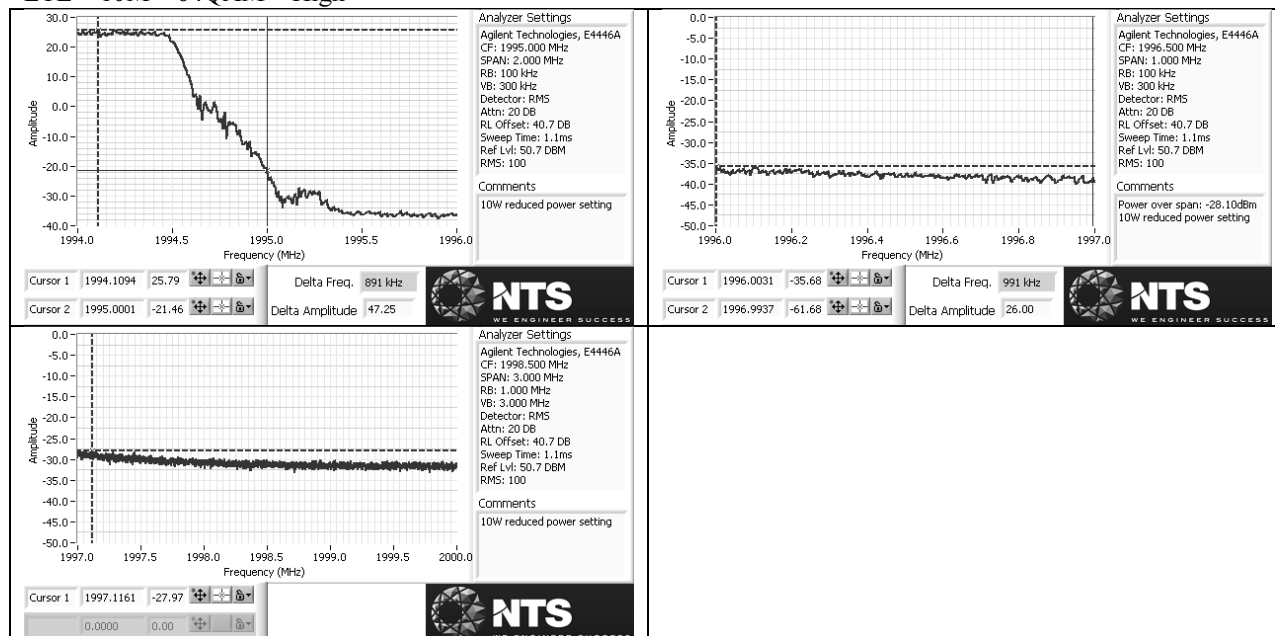

LTE – 10M – 16QAM – High(-1)
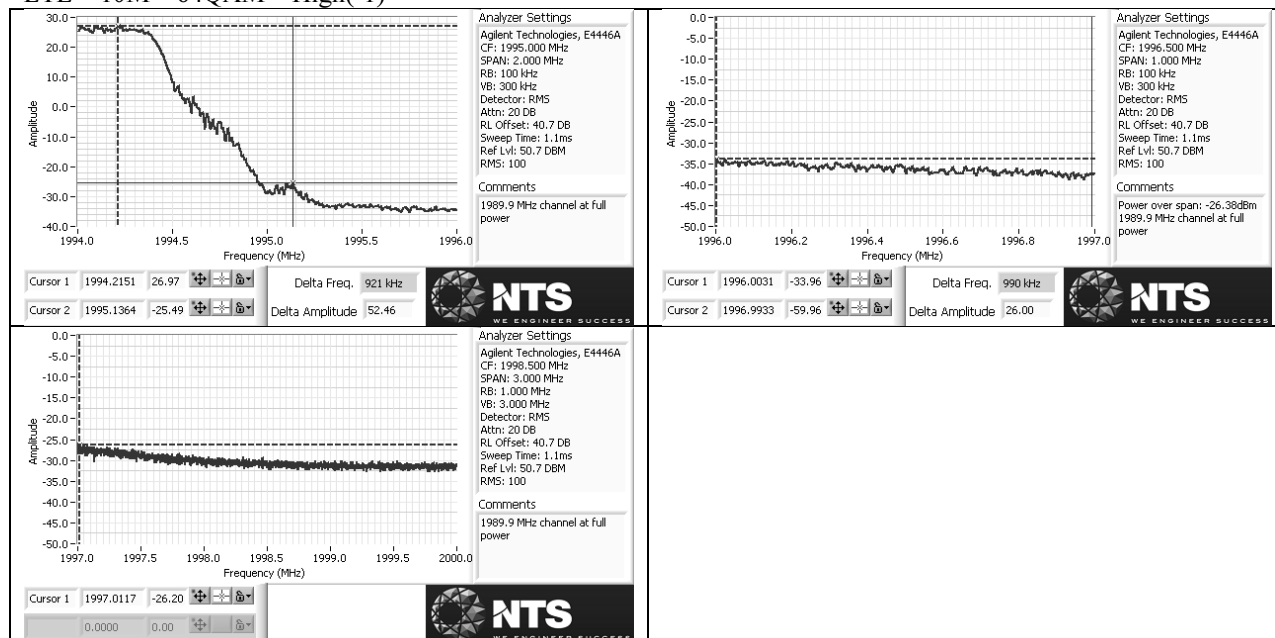
LTE – 10M – 64QAM – Low
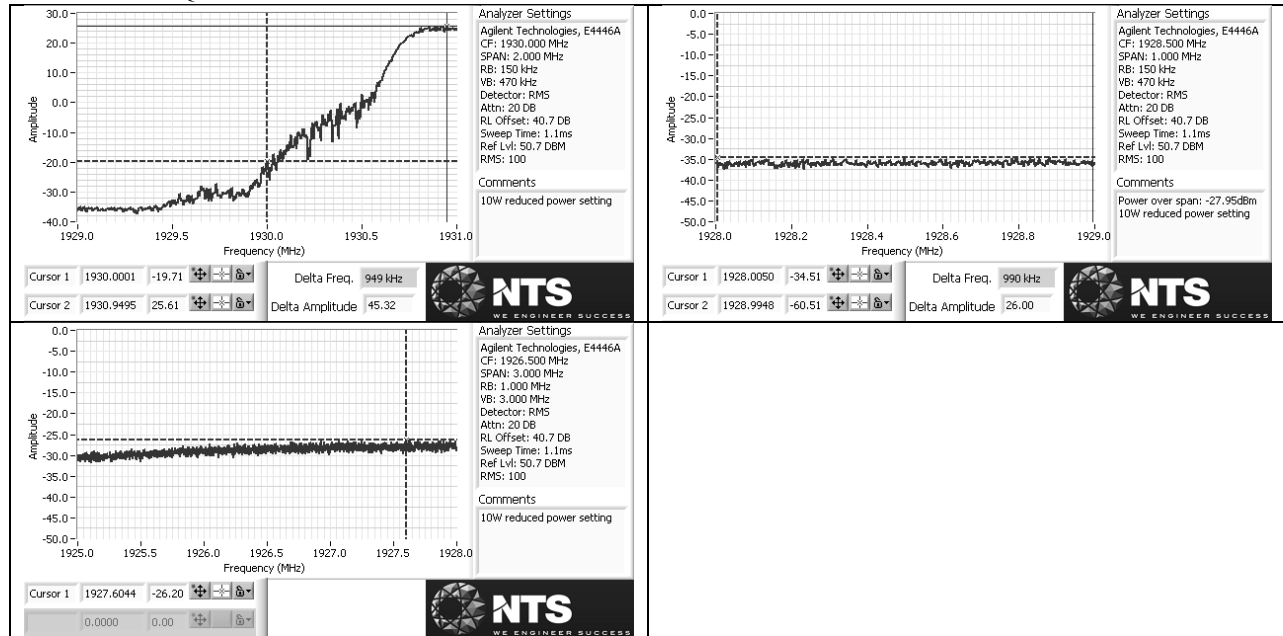

LTE – 10M – 64QAM – Low(+1)
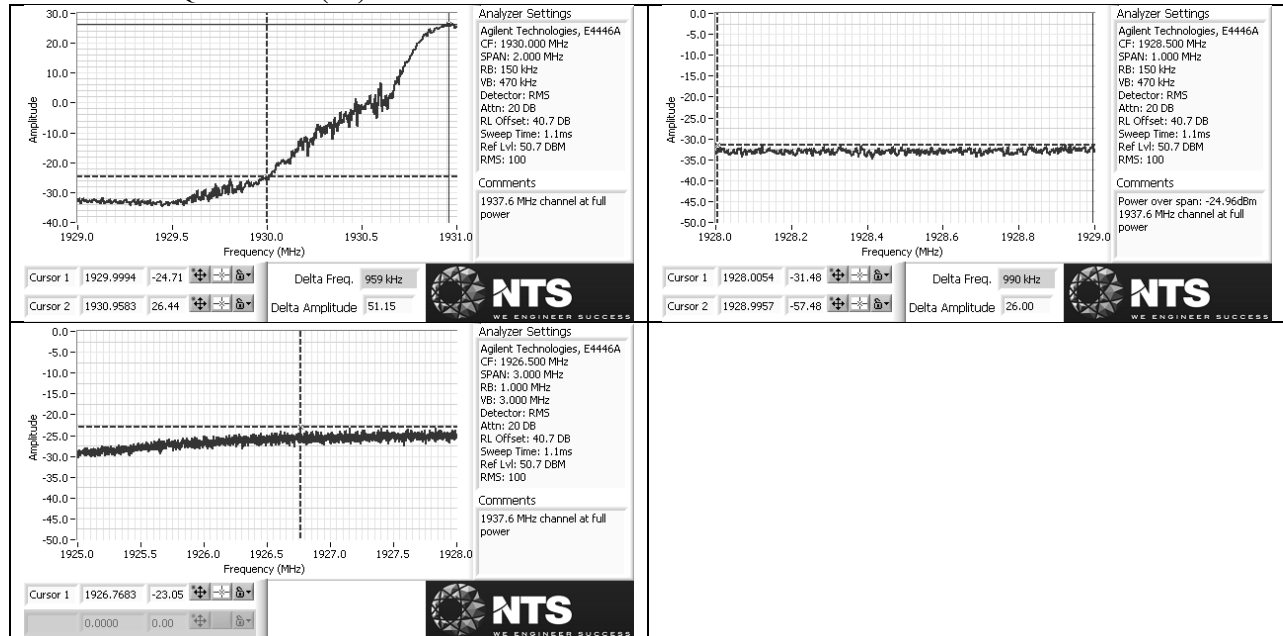
LTE – 10M – 64QAM – High
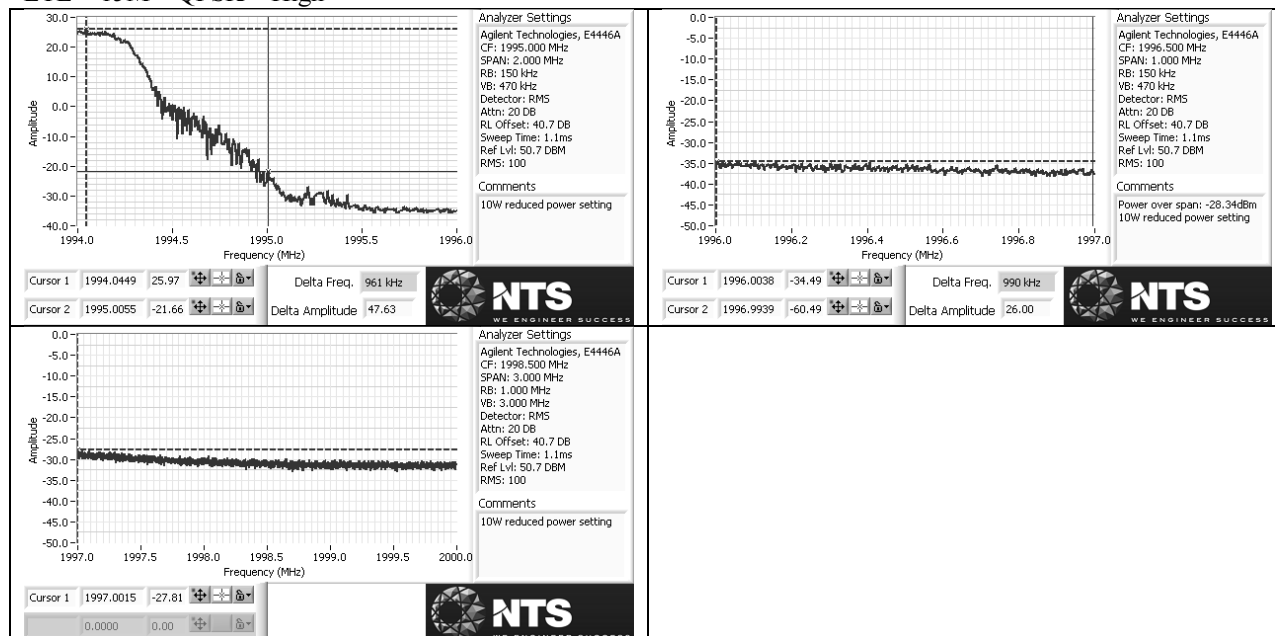

LTE – 10M – 64QAM – High(-1)
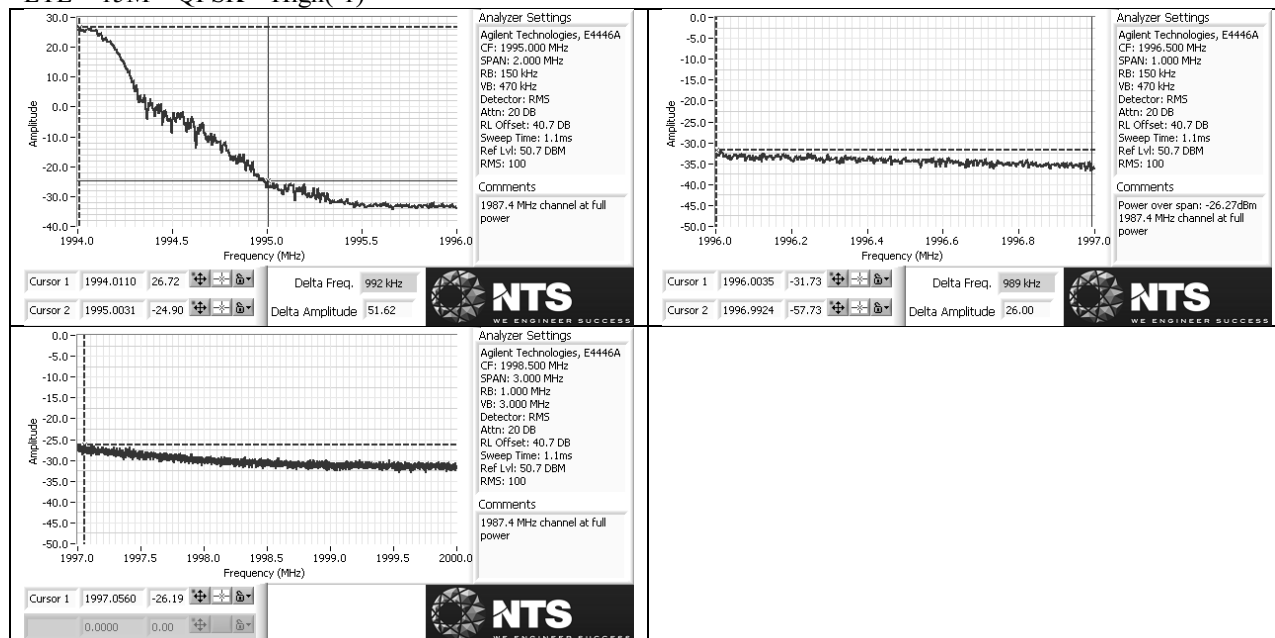
LTE – 15M – QPSK – Low

Analyzer Settings
Agilent Technologies, E4446A
CF: 1930.000 MHz
SPAN: 2.000 MHz
RB: 150 kHz
VB: 470 kHz
Detector: RMS
Attn: 20 DB
RL Offset: 40.7 DB
Sweep Time: 1.1ms
Ref Lvl: 50.7 DBM
RMS: 100

Comments
10W reduced power setting

Cursor 1 1930.0001 -19.71   Delta Freq. 949 kHz
Cursor 2 1930.9495 25.61   Delta Amplitude 45.32

Analyzer Settings
Agilent Technologies, E4446A
CF: 1928.500 MHz
SPAN: 1.000 MHz
RB: 150 kHz
VB: 470 kHz
Detector: RMS
Attn: 20 DB
RL Offset: 40.7 DB
Sweep Time: 1.1ms
Ref Lvl: 50.7 DBM
RMS: 100

Comments
Power over span: -27.95dBm
10W reduced power setting

Cursor 1 1928.0050 -34.51   Delta Freq. 990 kHz
Cursor 2 1928.9948 -60.51   Delta Amplitude 26.00

Analyzer Settings
Agilent Technologies, E4446A
CF: 1926.500 MHz
SPAN: 3.000 MHz
RB: 1.000 MHz
VB: 3.000 MHz
Detector: RMS
Attn: 20 DB
RL Offset: 40.7 DB
Sweep Time: 1.1ms
Ref Lvl: 50.7 DBM
RMS: 100

Comments
10W reduced power setting

Cursor 1 1927.6044 -26.20
          0.0000   0.00

LTE – 15M – QPSK – Low(+1)

Analyzer Settings
Agilent Technologies, E4446A
CF: 1930.000 MHz
SPAN: 2.000 MHz
RB: 150 kHz
VB: 470 kHz
Detector: RMS
Attn: 20 DB
RL Offset: 40.7 DB
Sweep Time: 1.1ms
Ref Lvl: 50.7 DBM
RMS: 100

Comments
1937.6 MHz channel at full
power

Cursor 1 1929.9994 -24.71   Delta Freq. 959 kHz
Cursor 2 1930.9583 26.44   Delta Amplitude 51.15

Analyzer Settings
Agilent Technologies, E4446A
CF: 1928.500 MHz
SPAN: 1.000 MHz
RB: 150 kHz
VB: 470 kHz
Detector: RMS
Attn: 20 DB
RL Offset: 40.7 DB
Sweep Time: 1.1ms
Ref Lvl: 50.7 DBM
RMS: 100

Comments
Power over span: -24.96dBm
1937.6 MHz channel at full
power

Cursor 1 1928.0054 -31.48   Delta Freq. 990 kHz
Cursor 2 1928.9957 -57.48   Delta Amplitude 26.00

Analyzer Settings
Agilent Technologies, E4446A
CF: 1926.500 MHz
SPAN: 3.000 MHz
RB: 1.000 MHz
VB: 3.000 MHz
Detector: RMS
Attn: 20 DB
RL Offset: 40.7 DB
Sweep Time: 1.1ms
Ref Lvl: 50.7 DBM
RMS: 100

Comments
1937.6 MHz channel at full
power

Cursor 1 1926.7683 -23.05
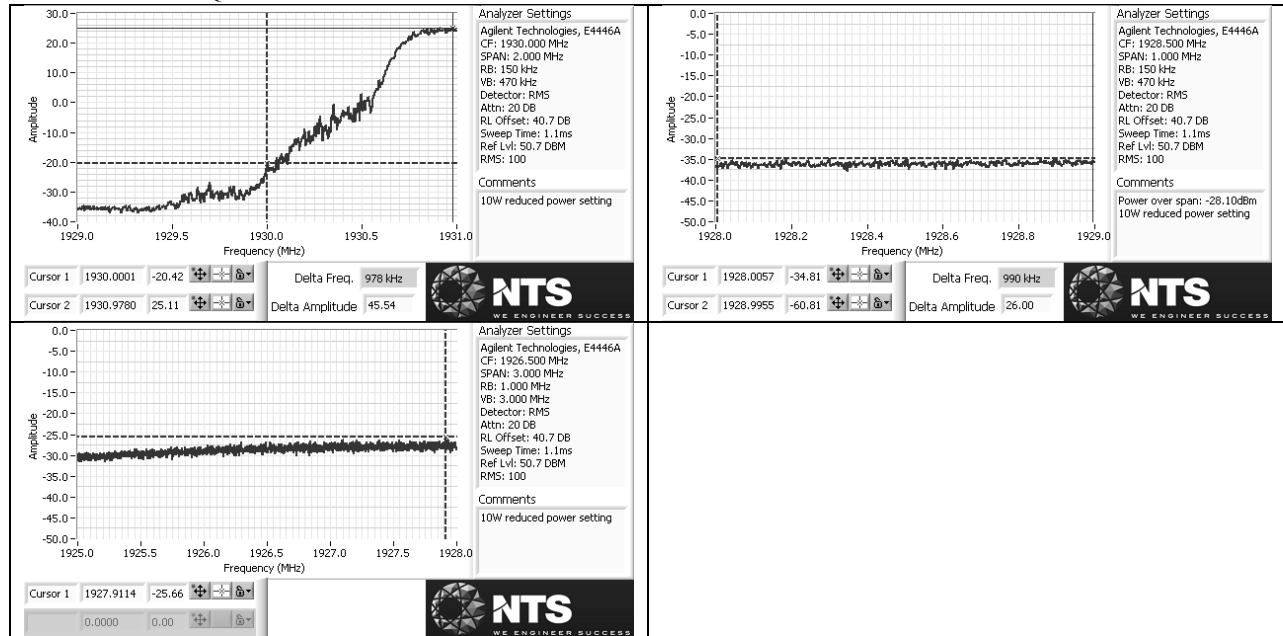   0.0000   0.00
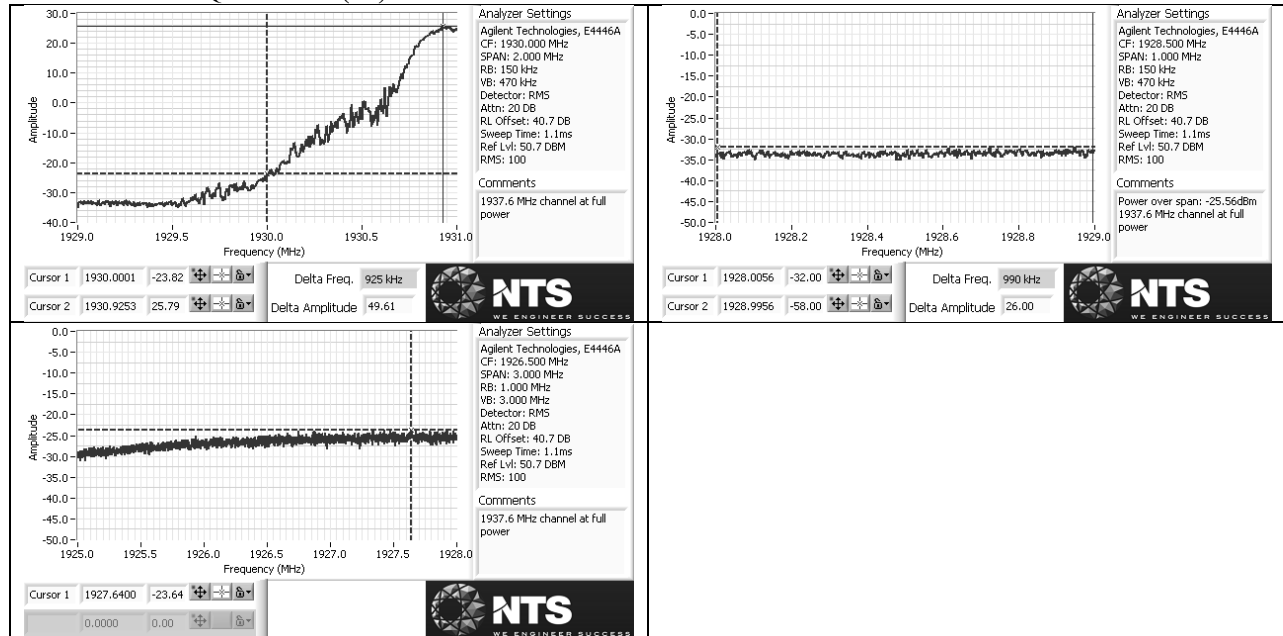
LTE – 15M – QPSK – High
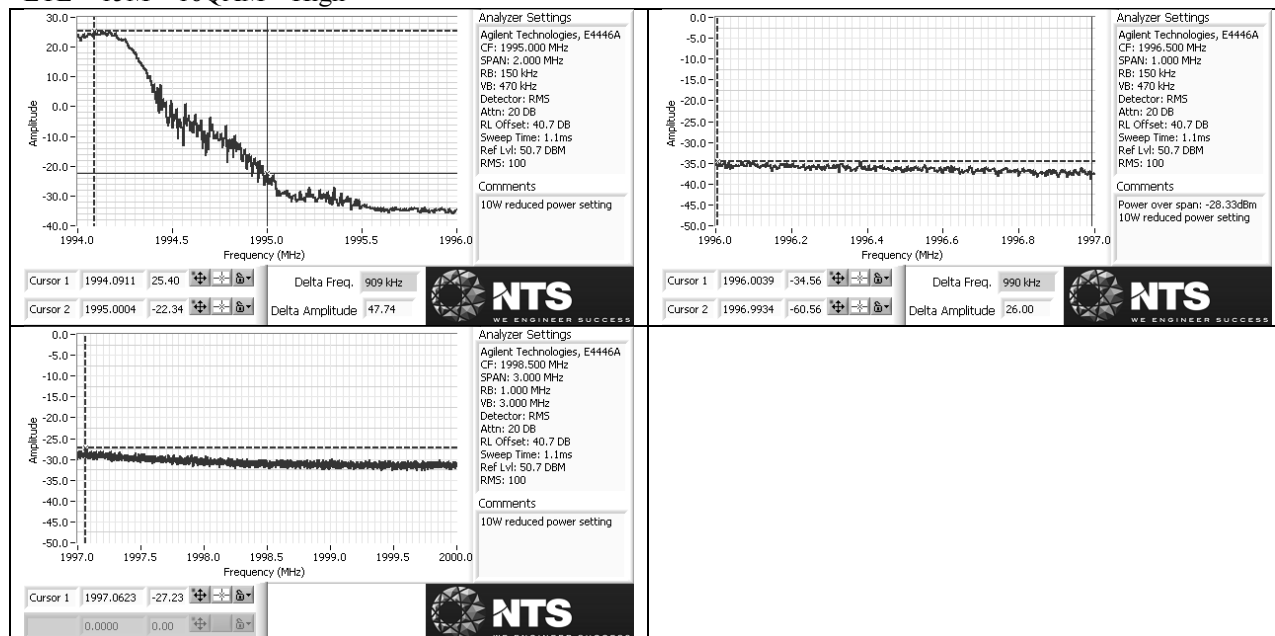

LTE – 15M – QPSK – High(-1)
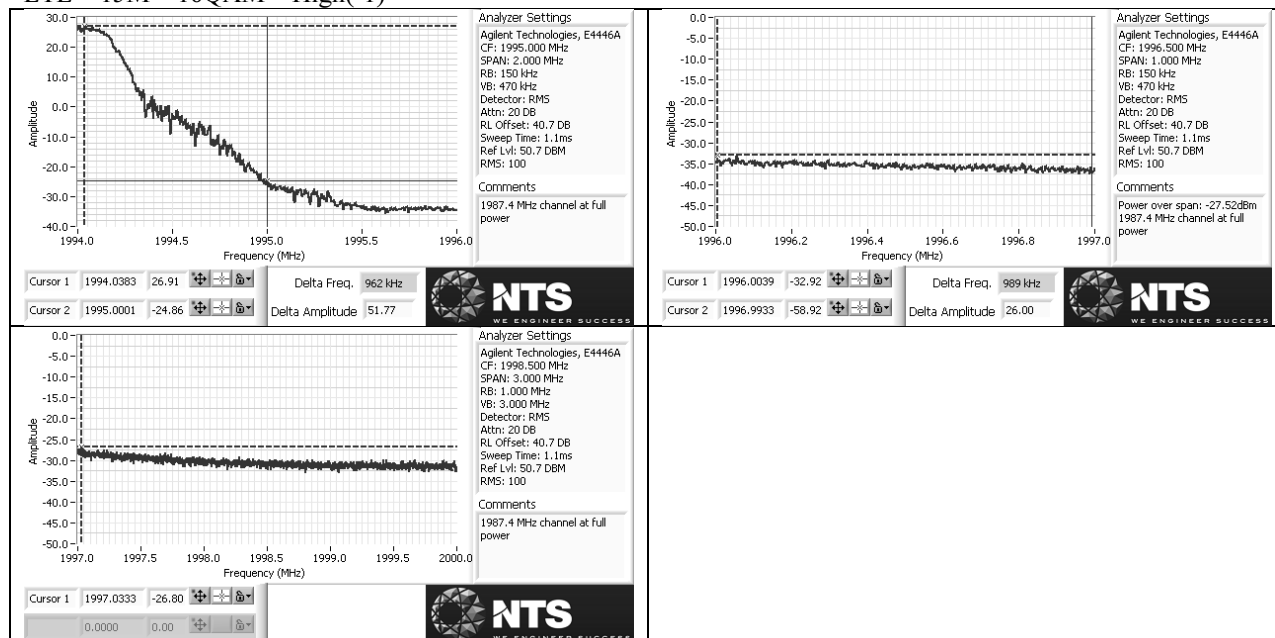
LTE – 15M – 16QAM – Low
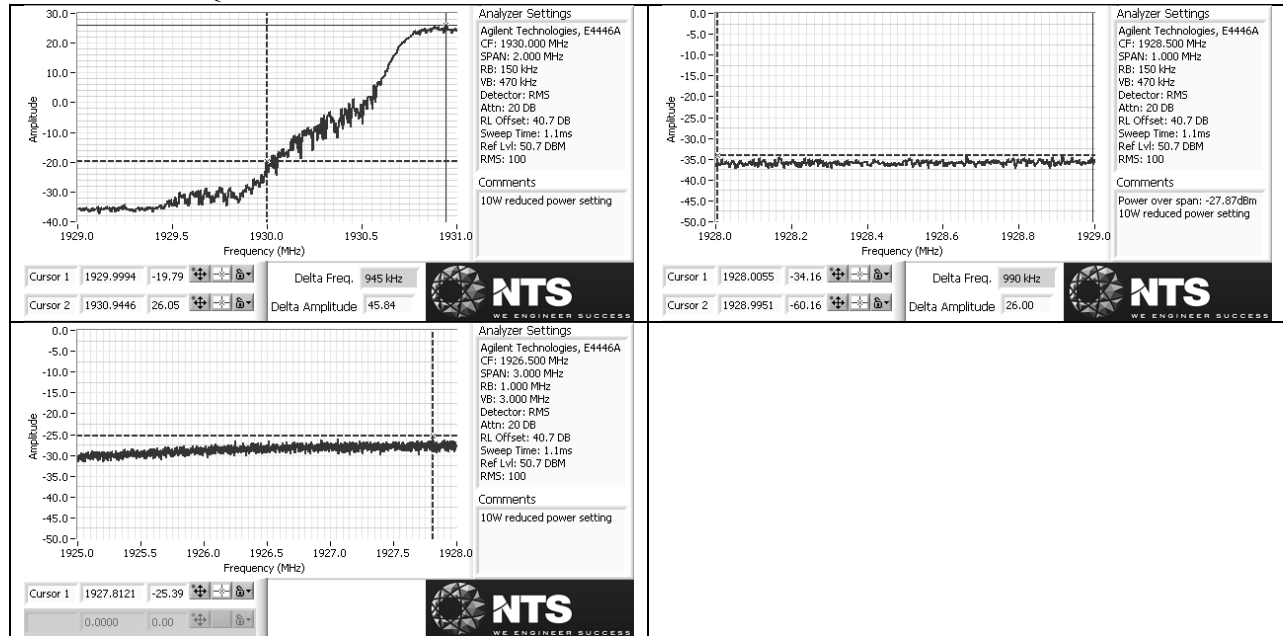

LTE – 15M – 16QAM – Low(+1)
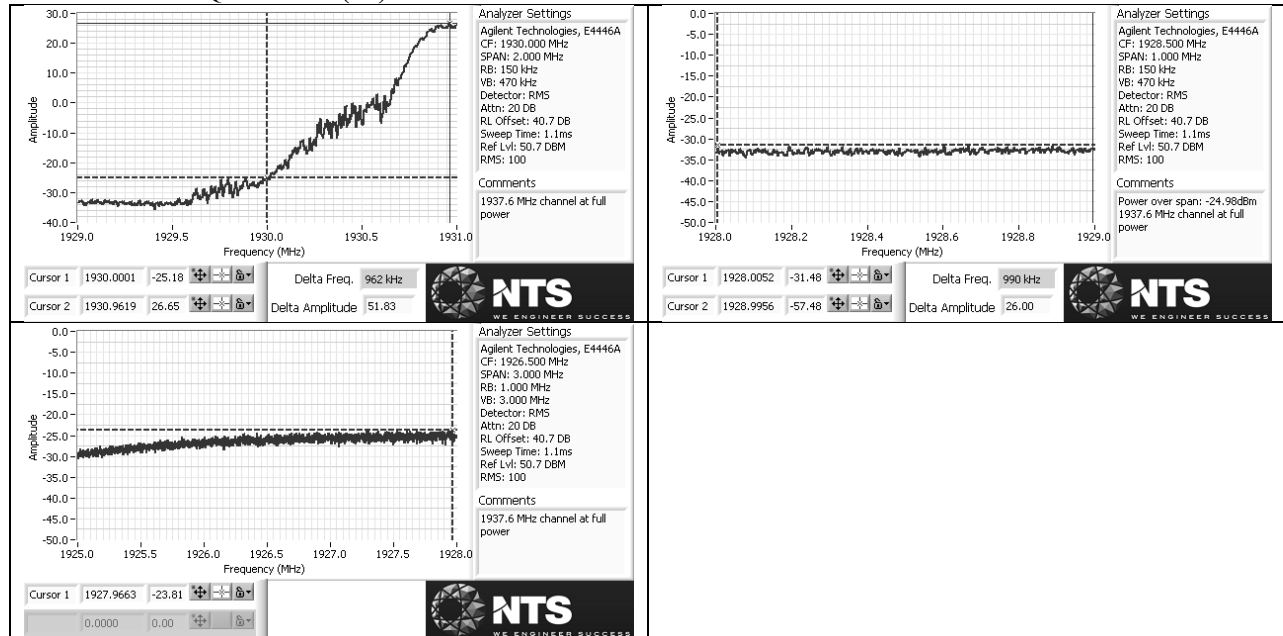
LTE – 15M – 16QAM – High

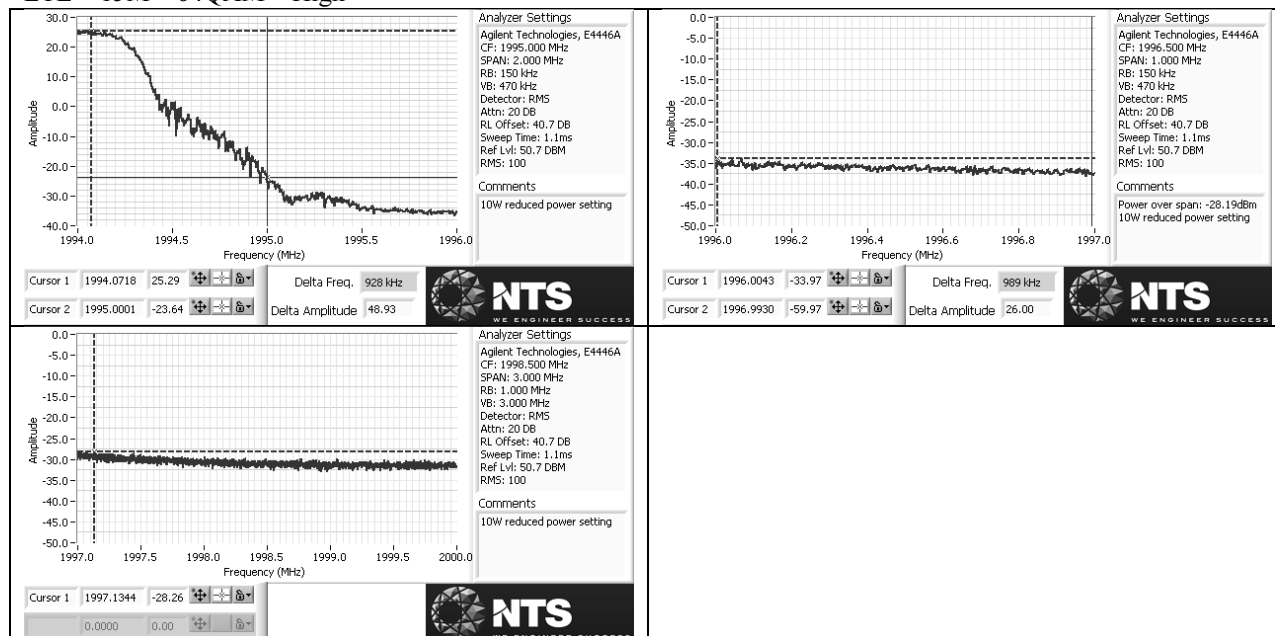LTE – 15M – 16QAM – High(-1)

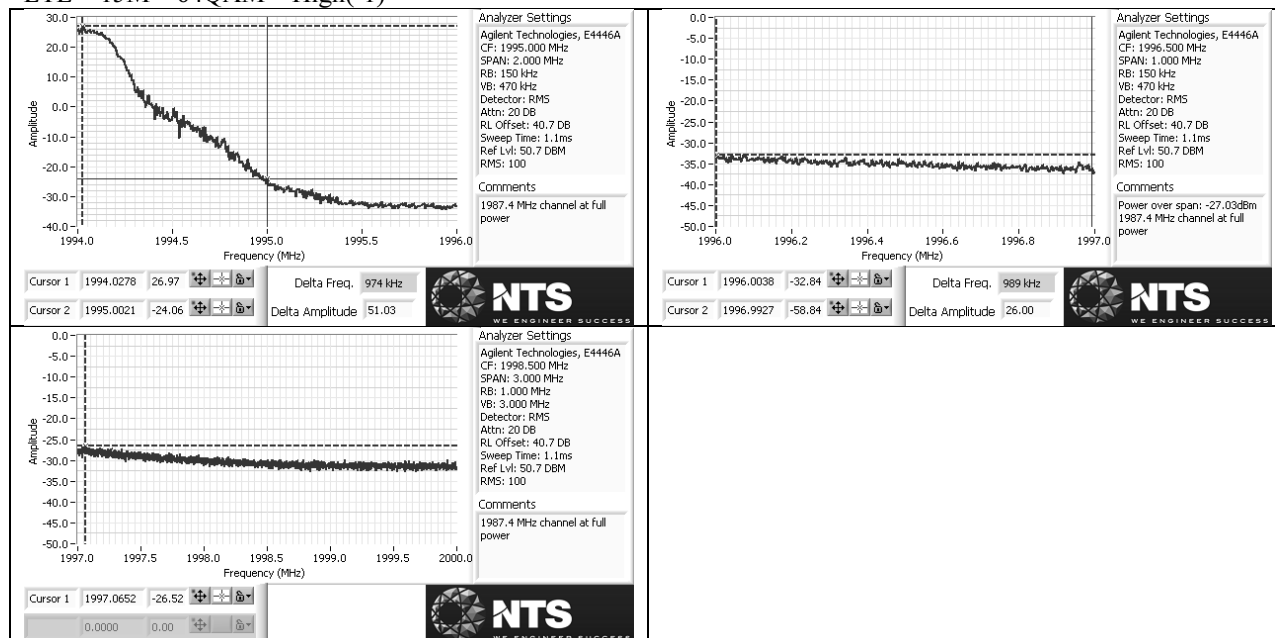LTE – 15M – 64QAM – Low

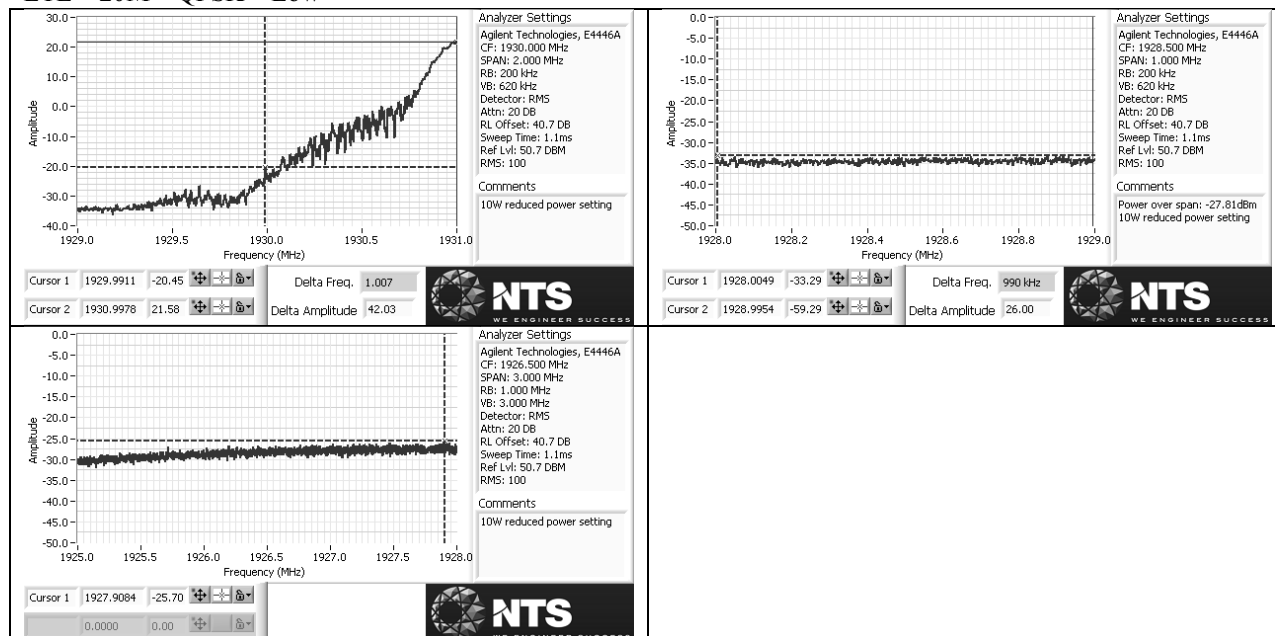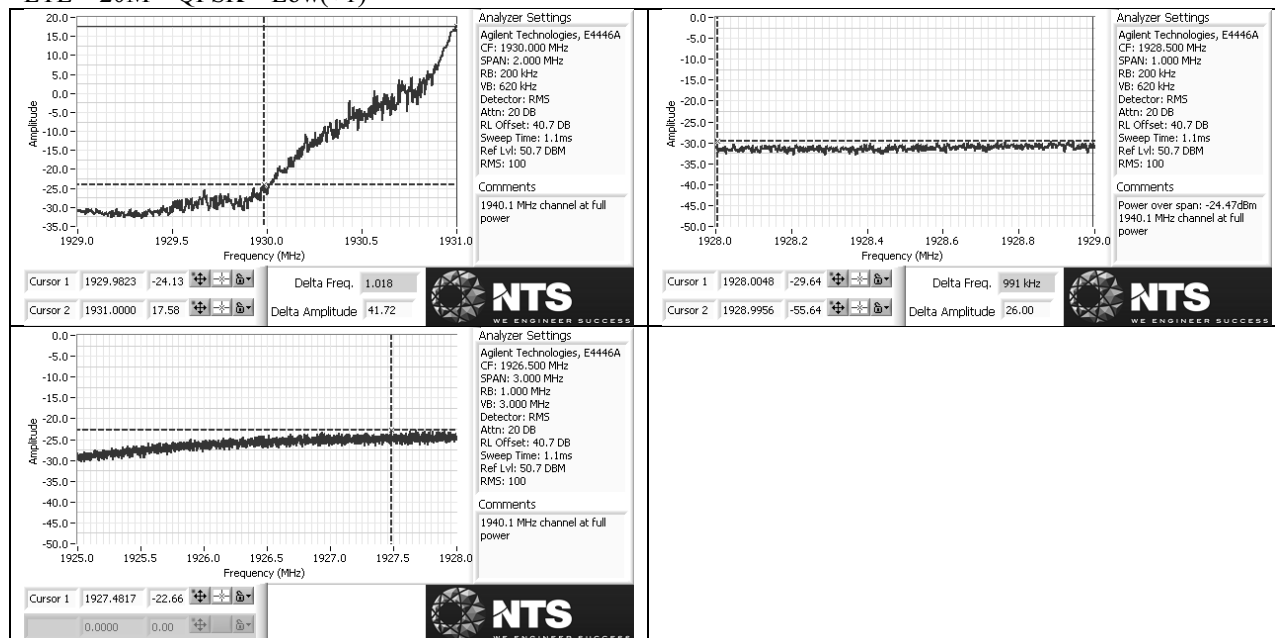LTE – 15M – 64QAM – Low(+1)

LTE – 15M – 64QAM – High

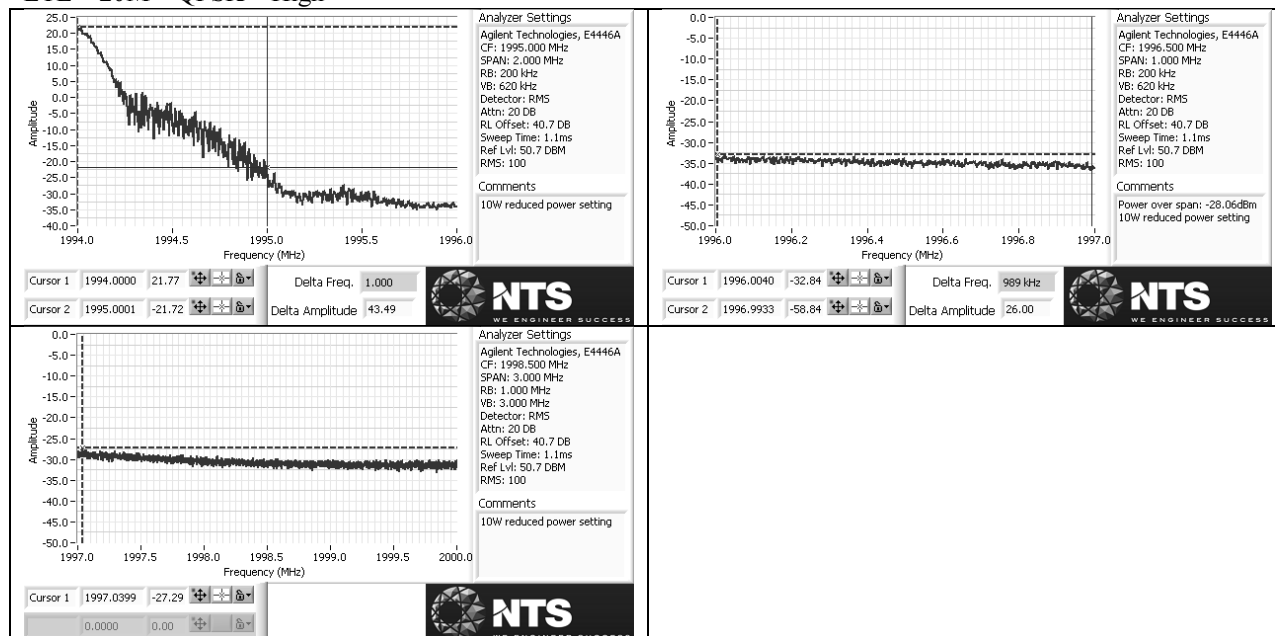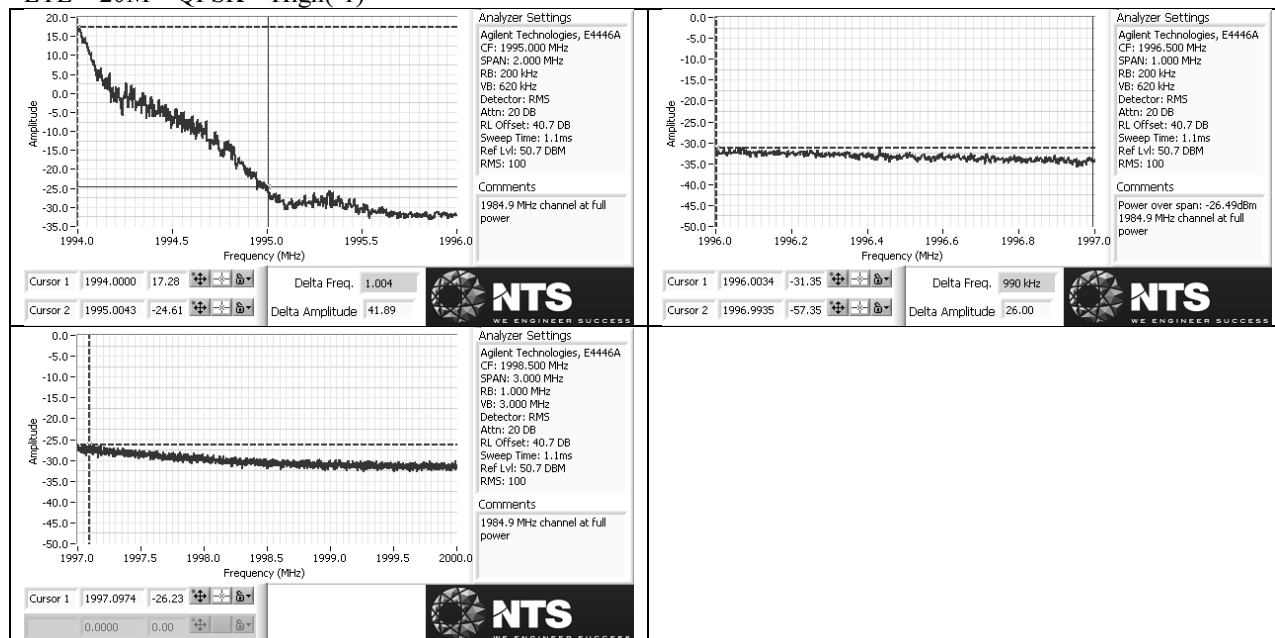LTE – 15M – 64QAM – High(-1)

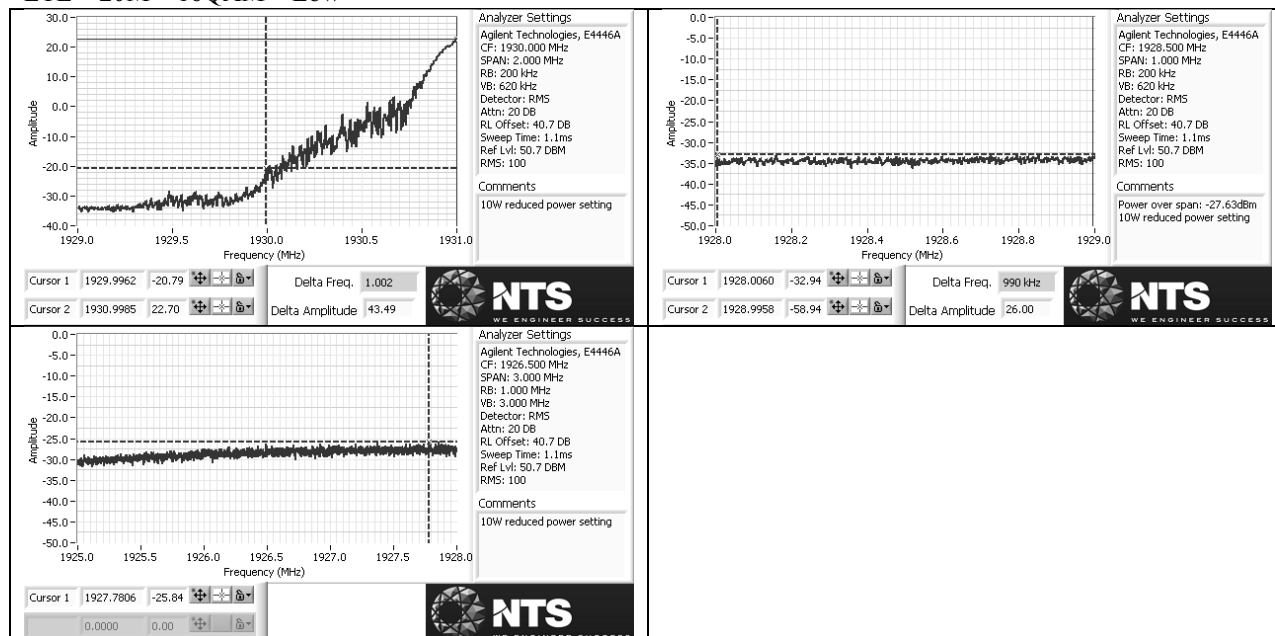LTE – 20M – QPSK – Low

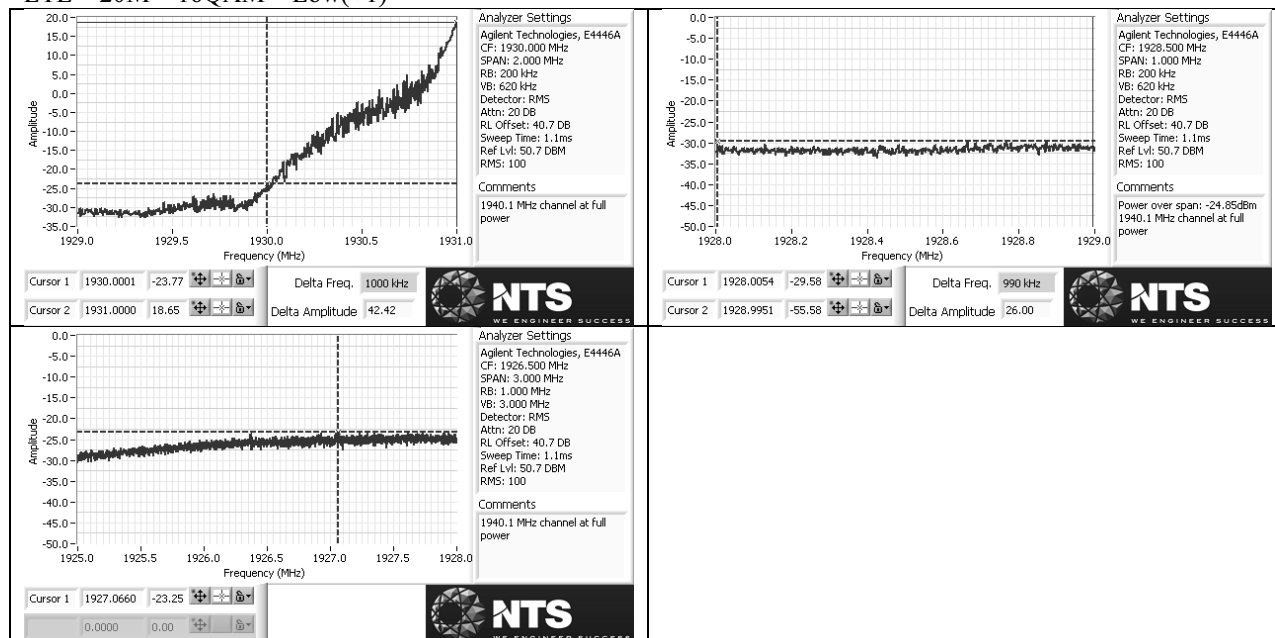LTE – 20M – QPSK – Low(+1)

LTE – 20M – QPSK – High
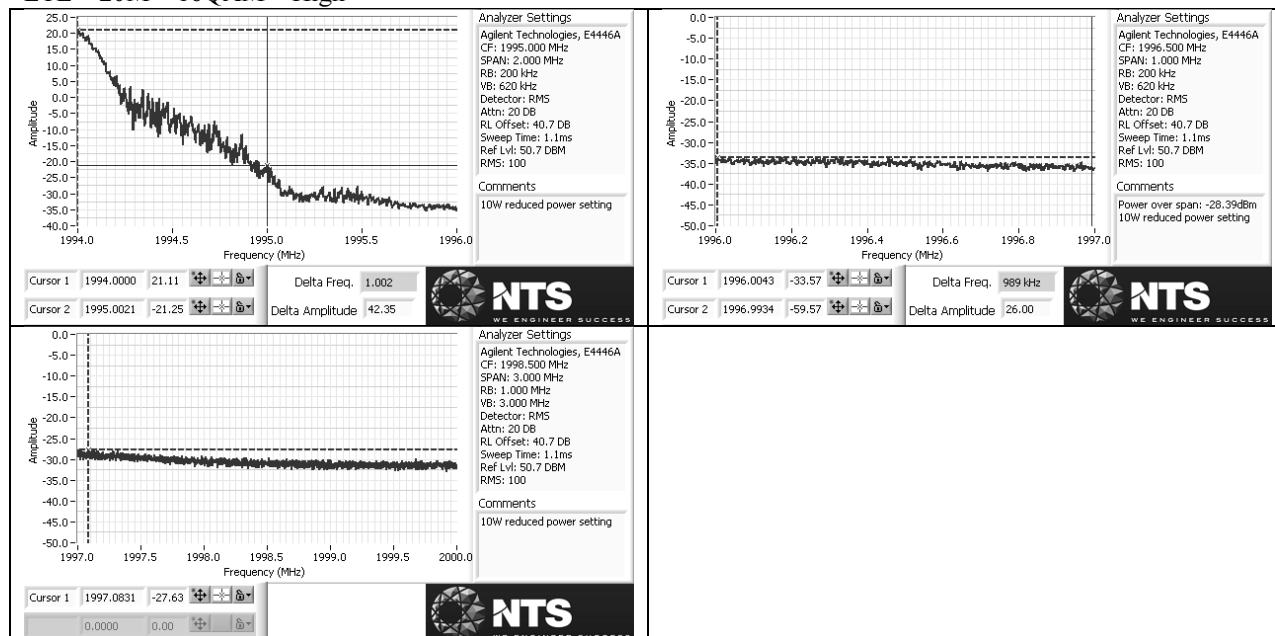

LTE – 20M – QPSK – High(-1)
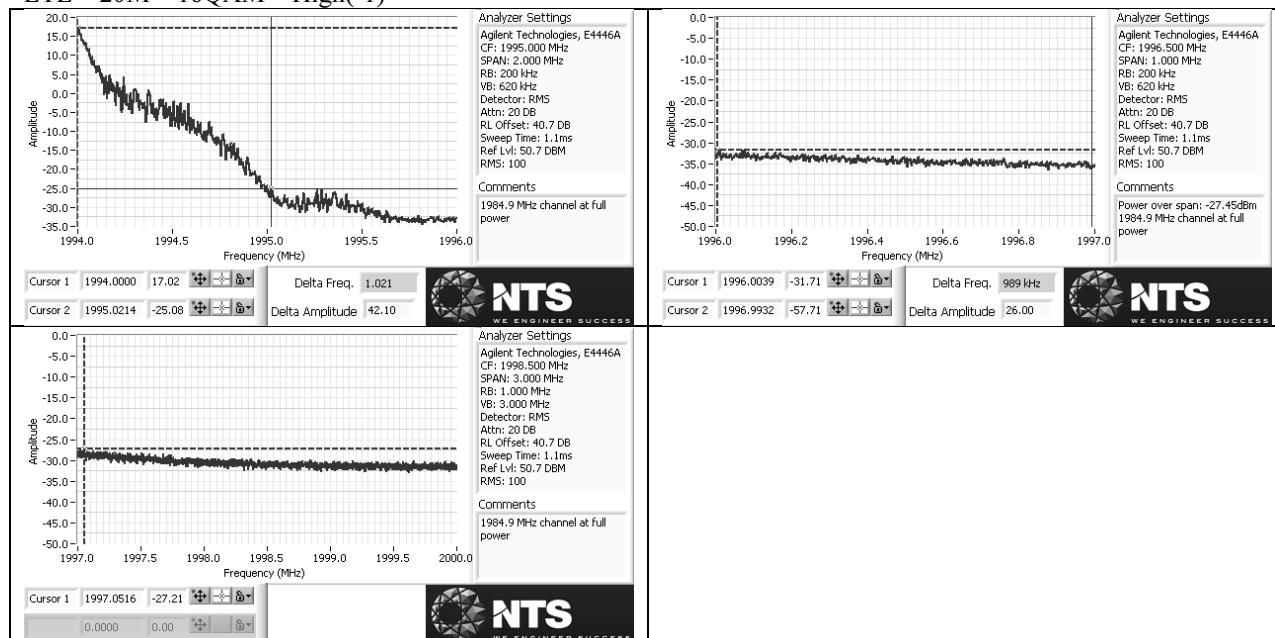
LTE – 20M – 16QAM – Low
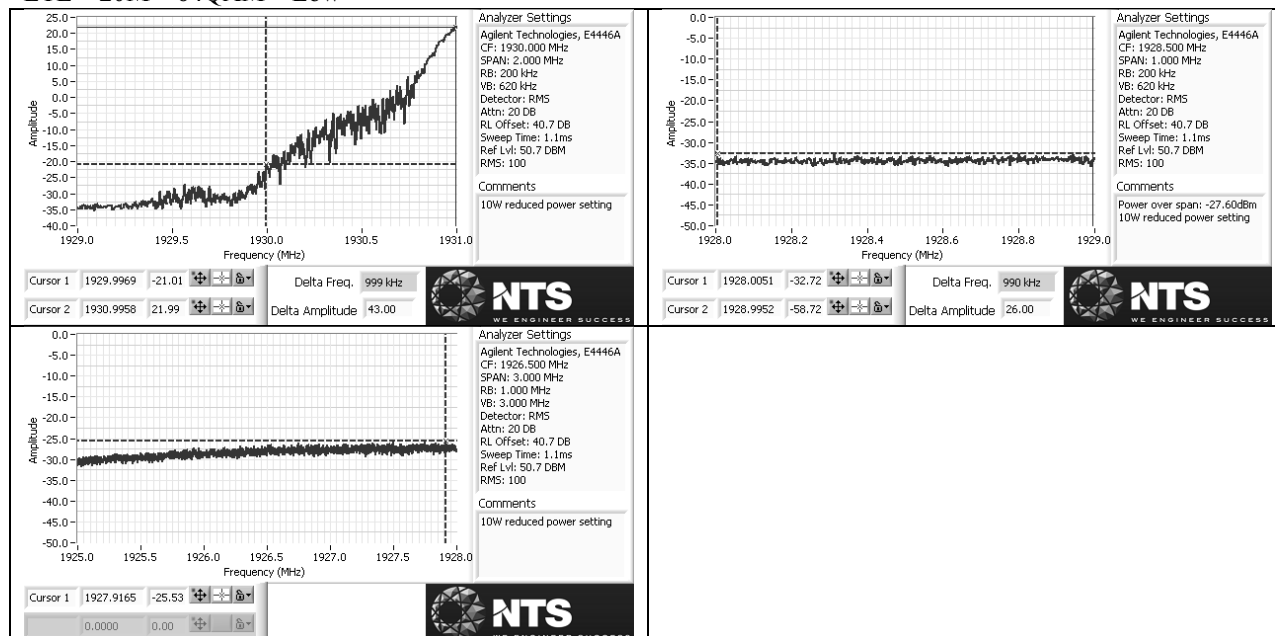

LTE – 20M – 16QAM – Low(+1)
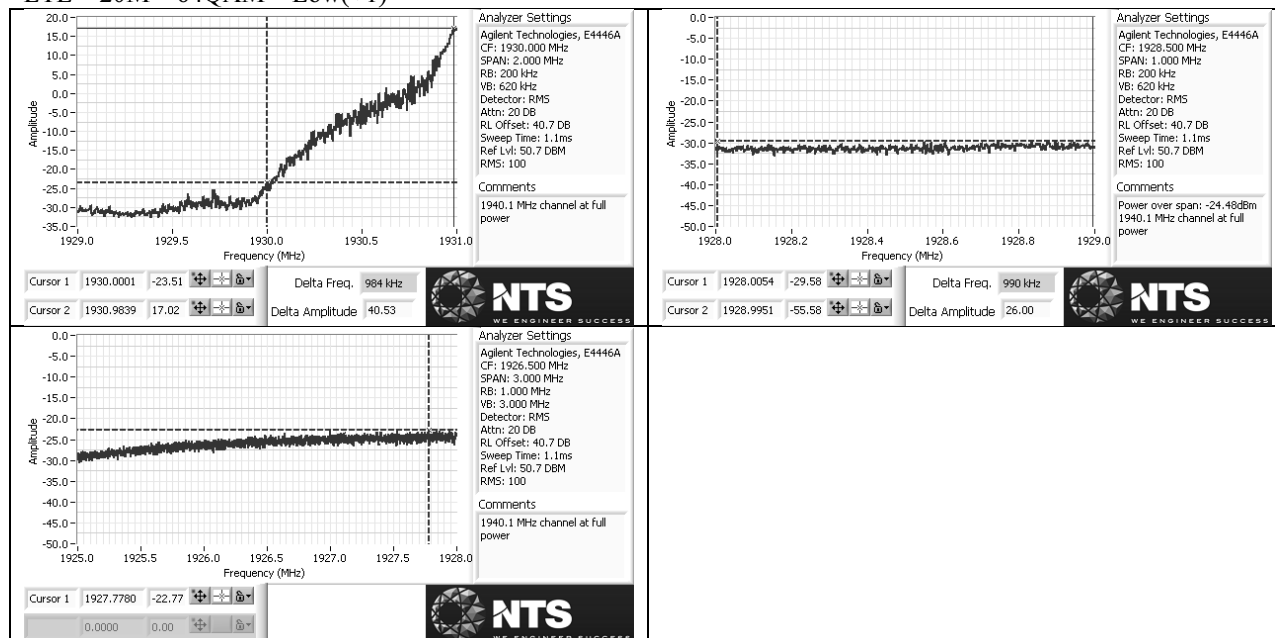
LTE – 20M – 16QAM – High
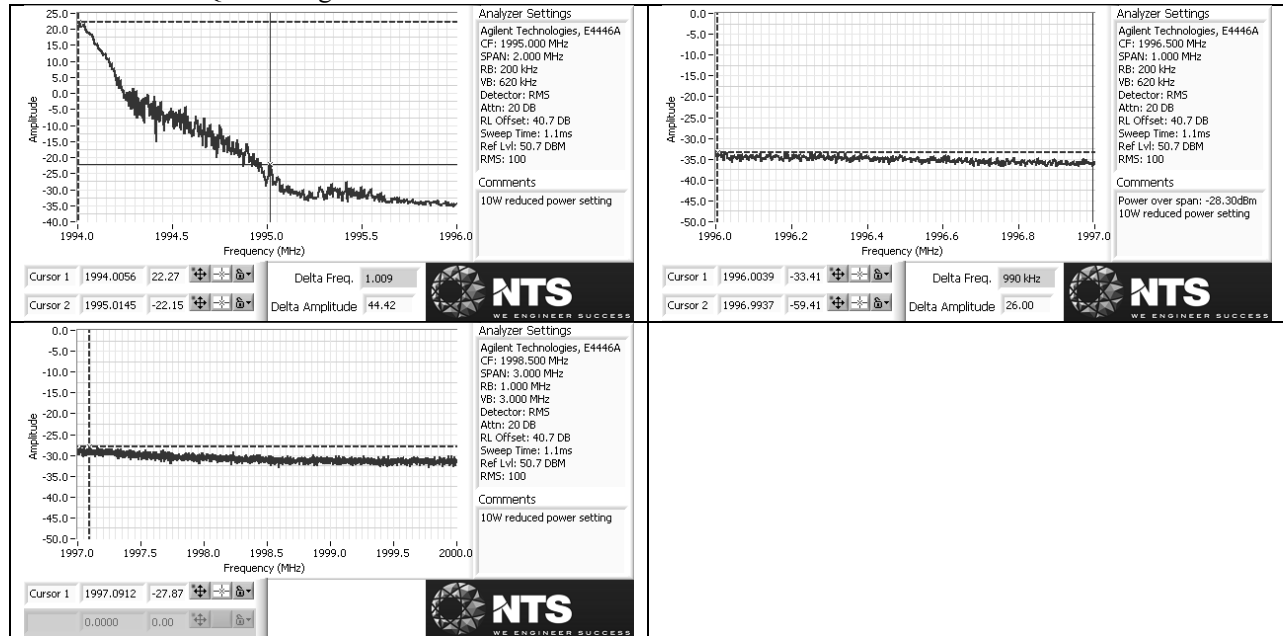

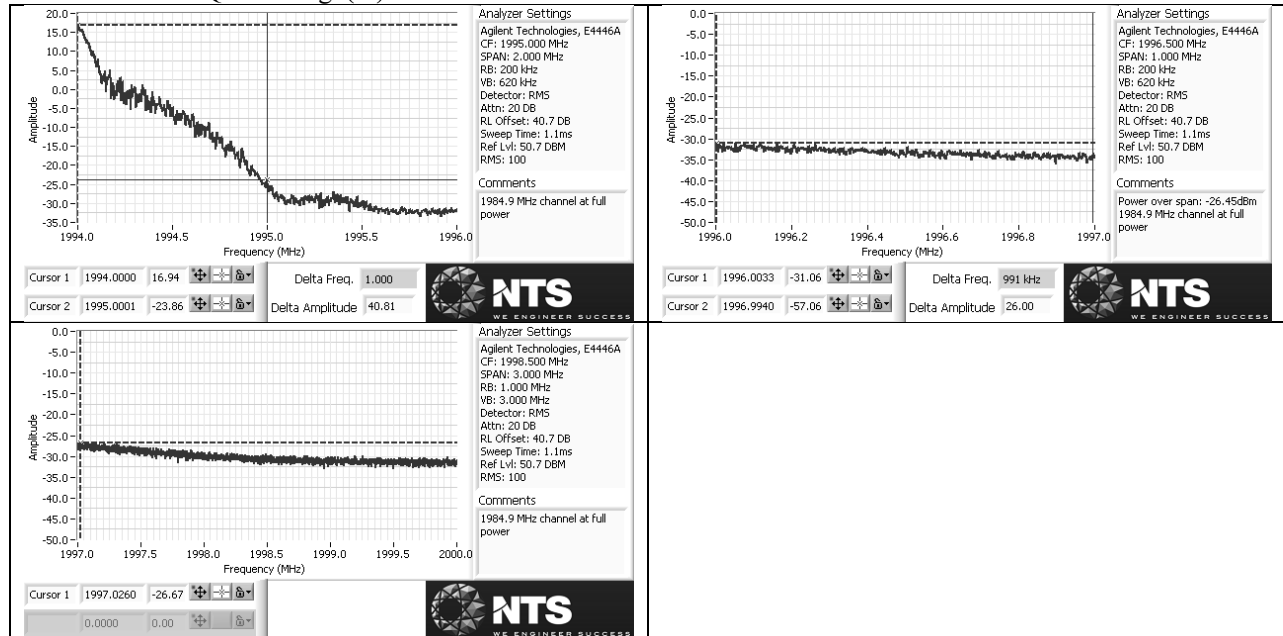LTE – 20M – 16QAM – High(-1)

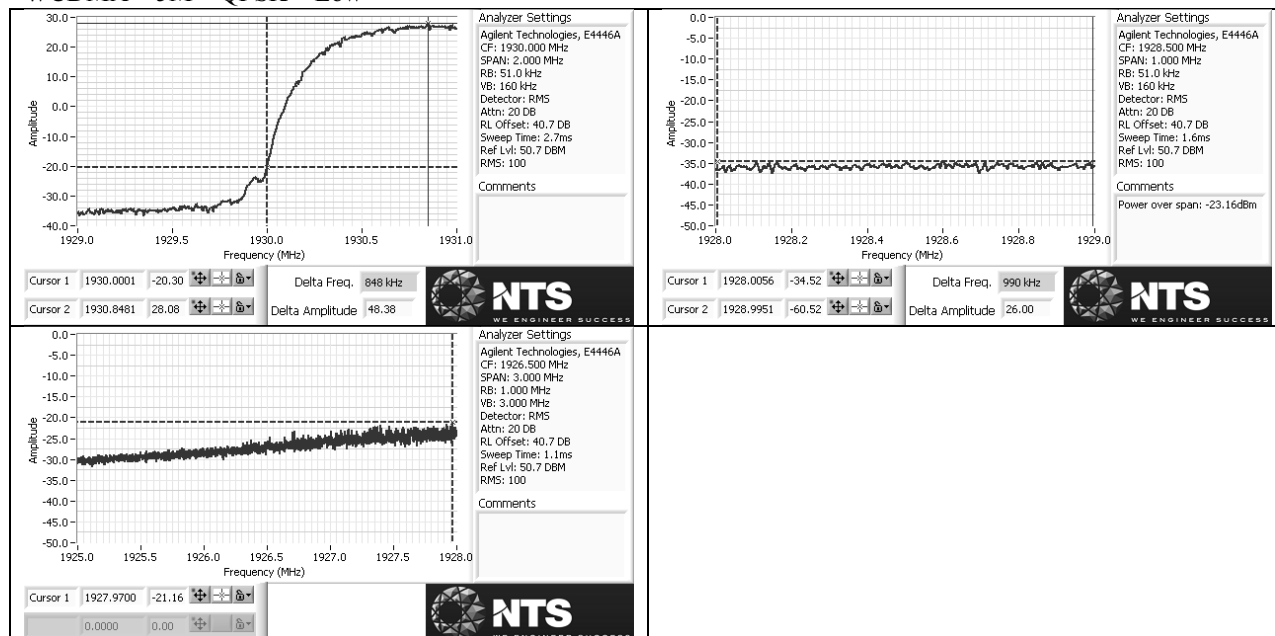LTE – 20M – 64QAM – Low

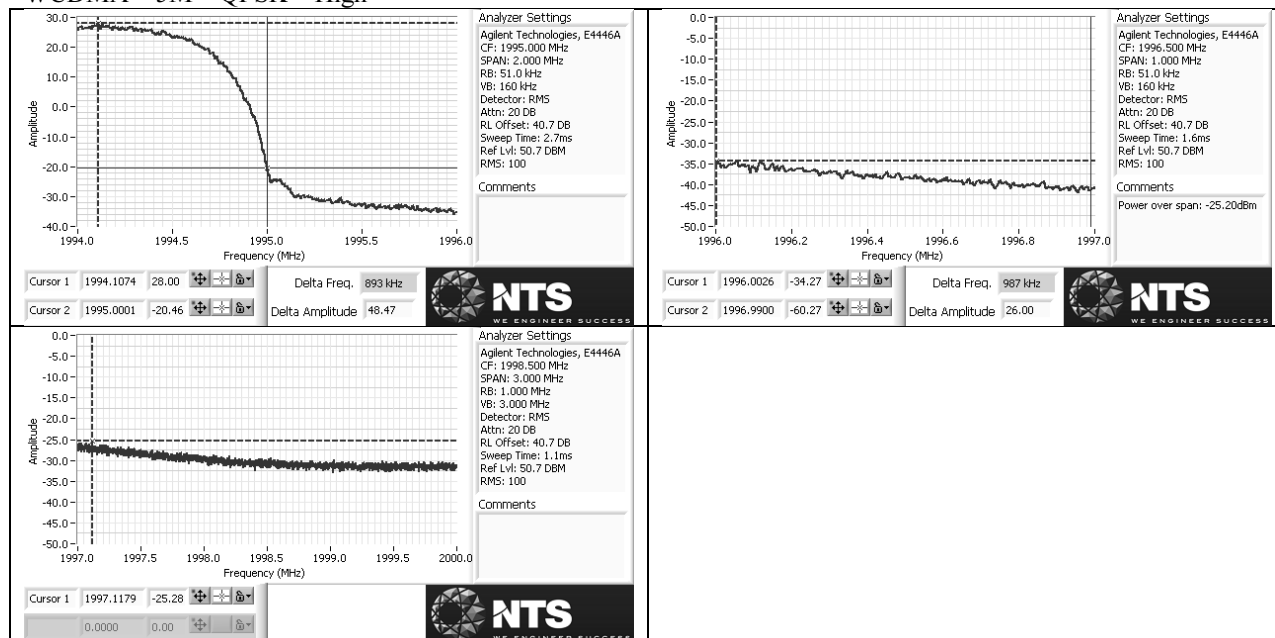LTE – 20M – 64QAM – Low(+1)

LTE – 20M – 64QAM – High

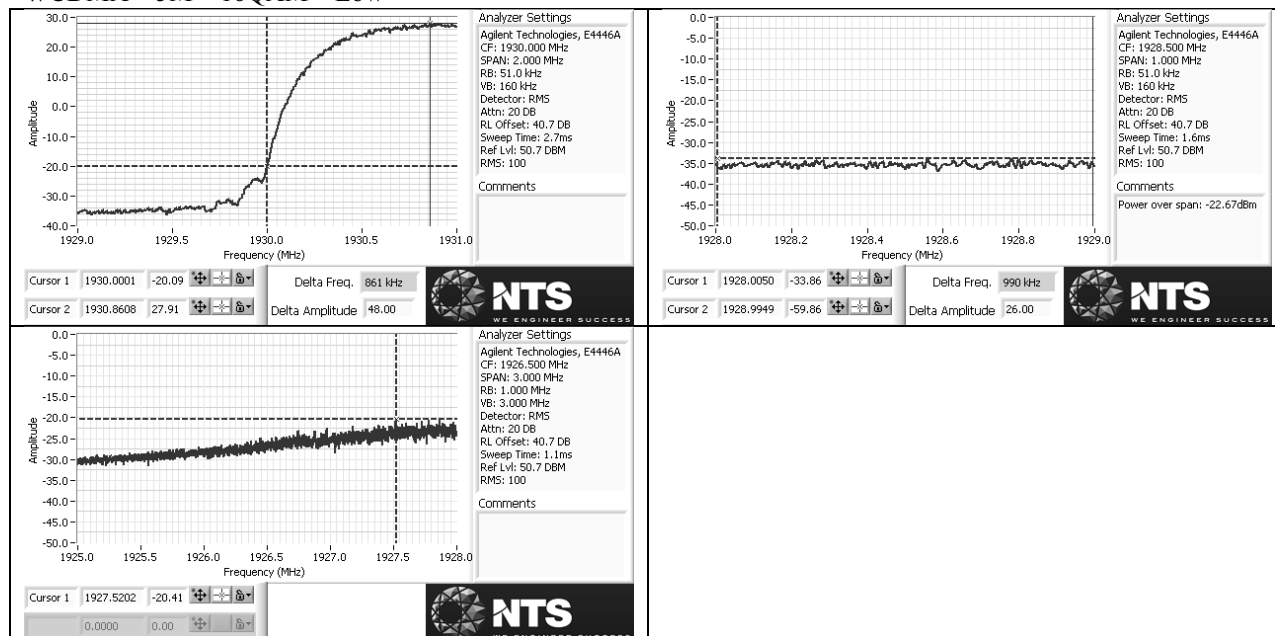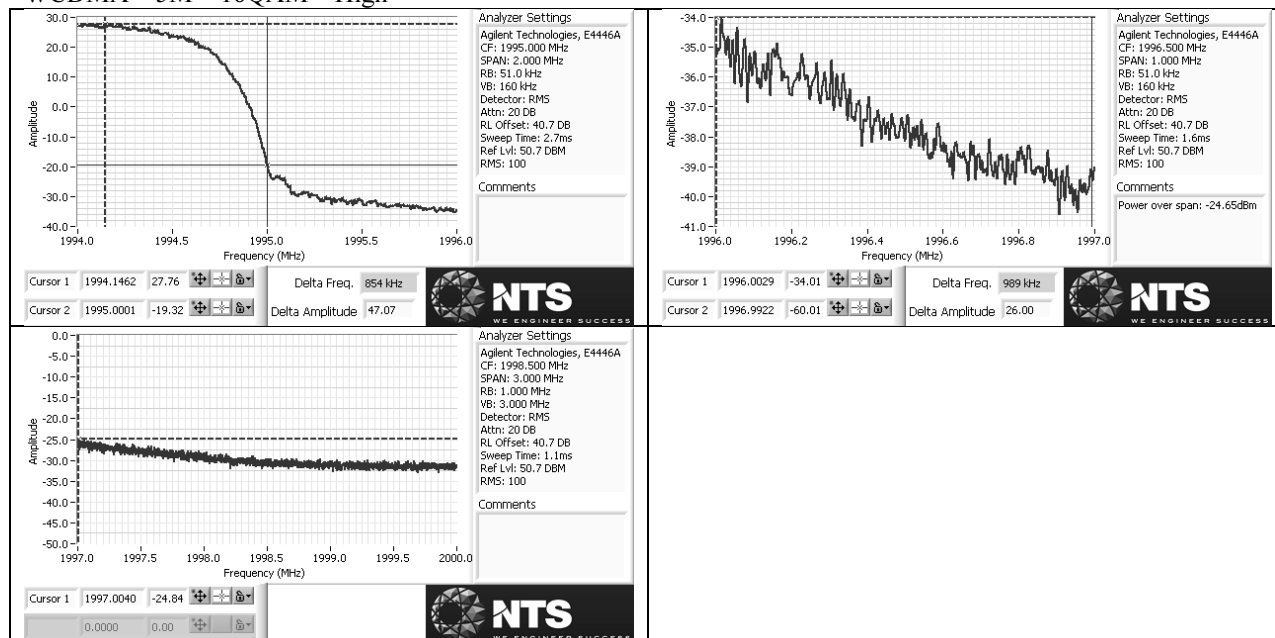
LTE – 20M – 64QAM – High(-1)
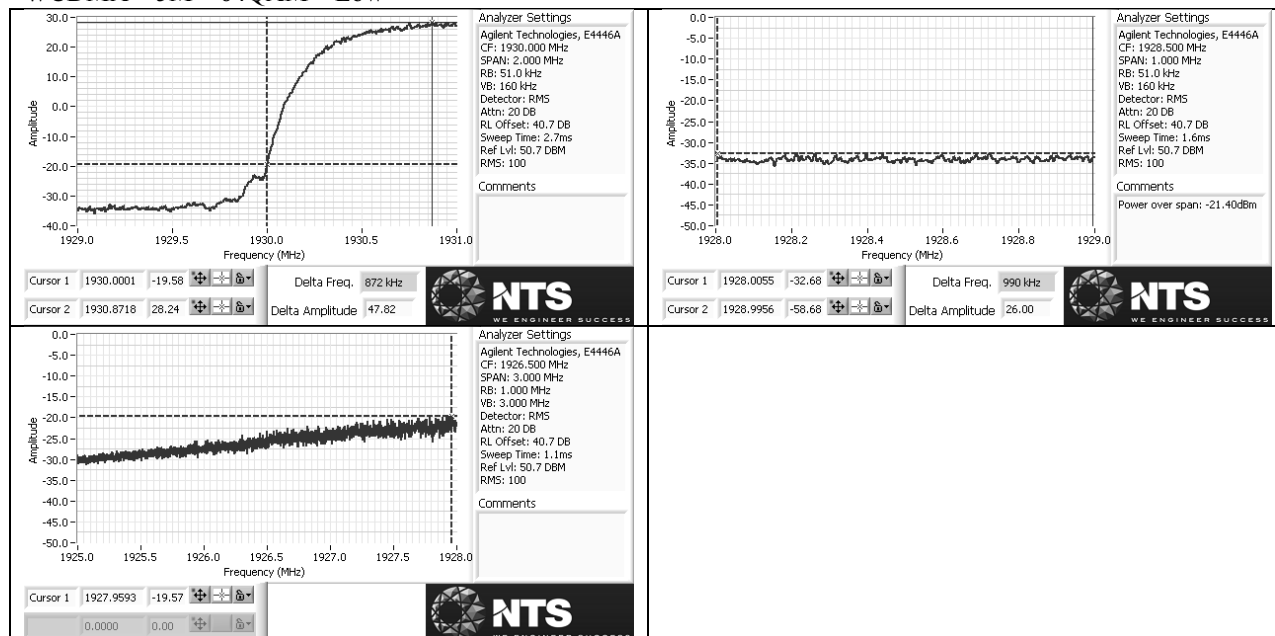
WCDMA – 5M – QPSK – Low

WCDMA – 5M – QPSK – High
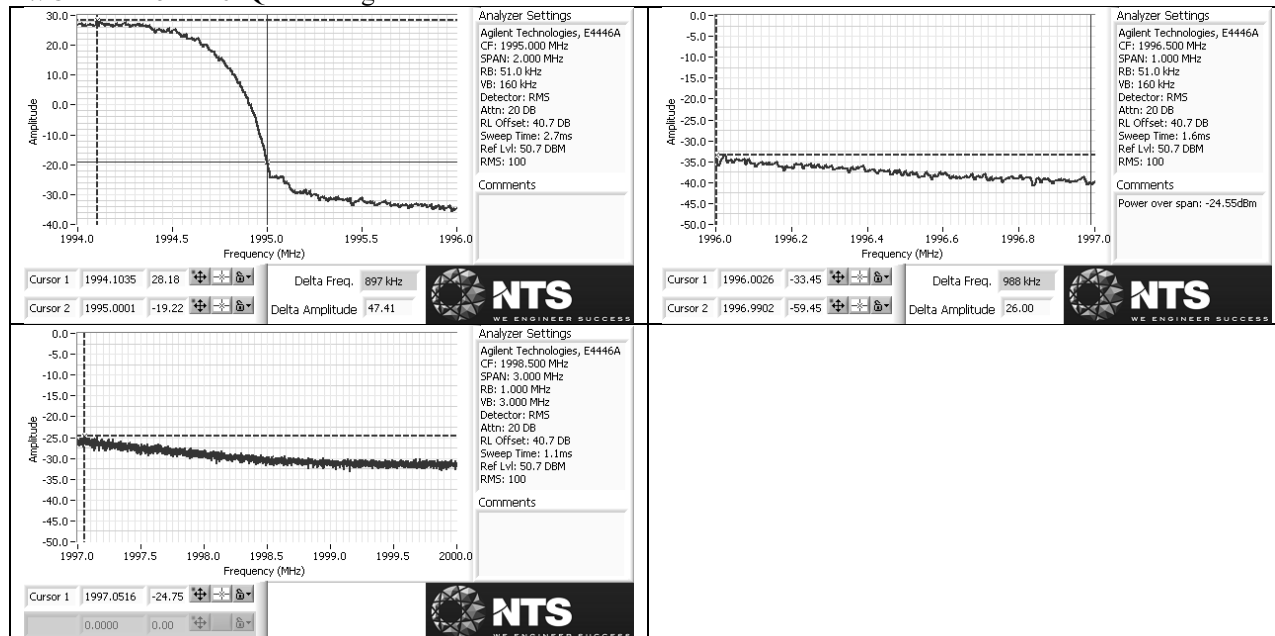
WCDMA – 5M – 16QAM – Low
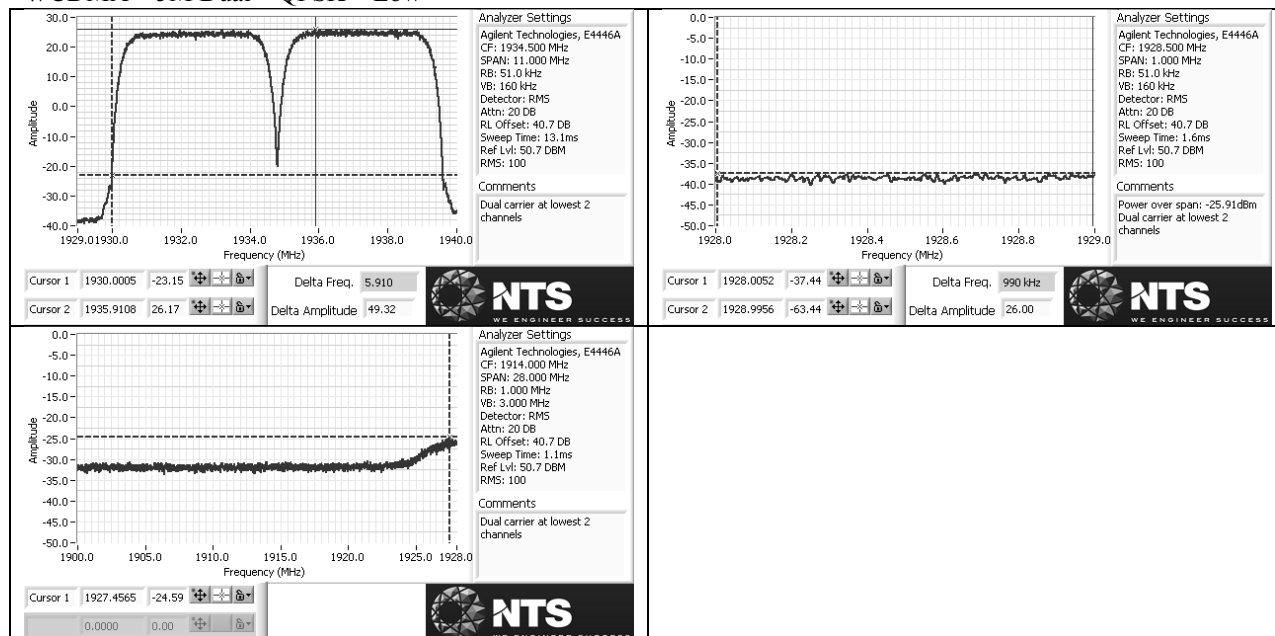

WCDMA – 5M – 16QAM – High
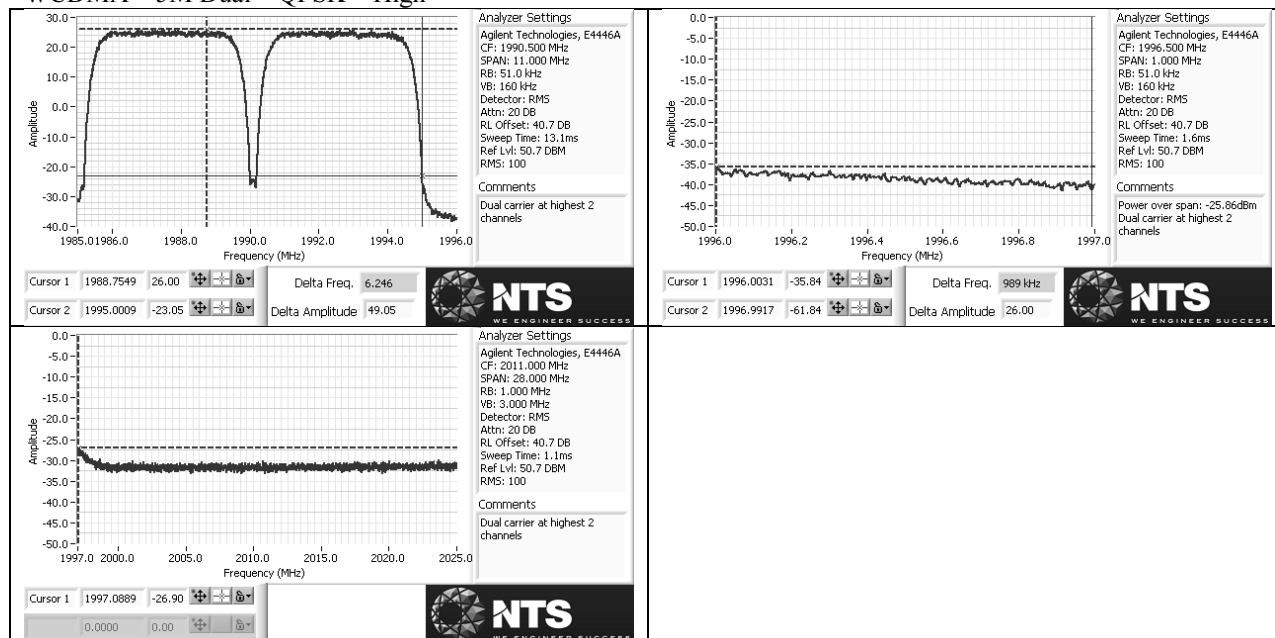
WCDMA – 5M – 64QAM – Low

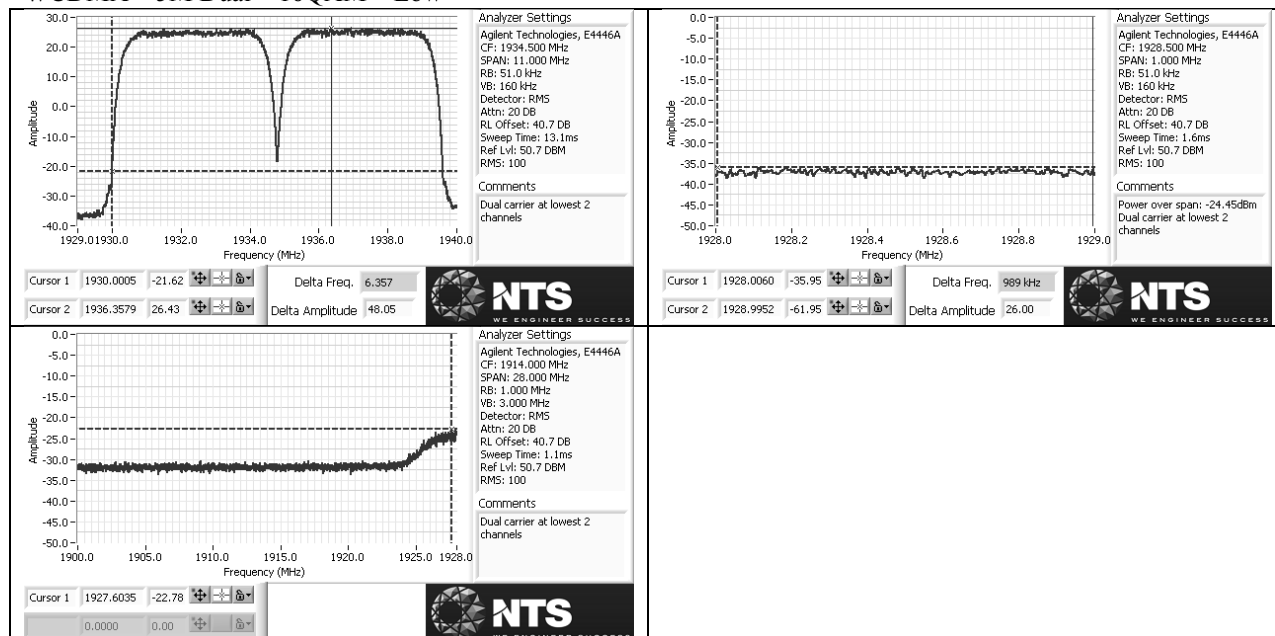## WCDMA – 5M – 64QAM – High

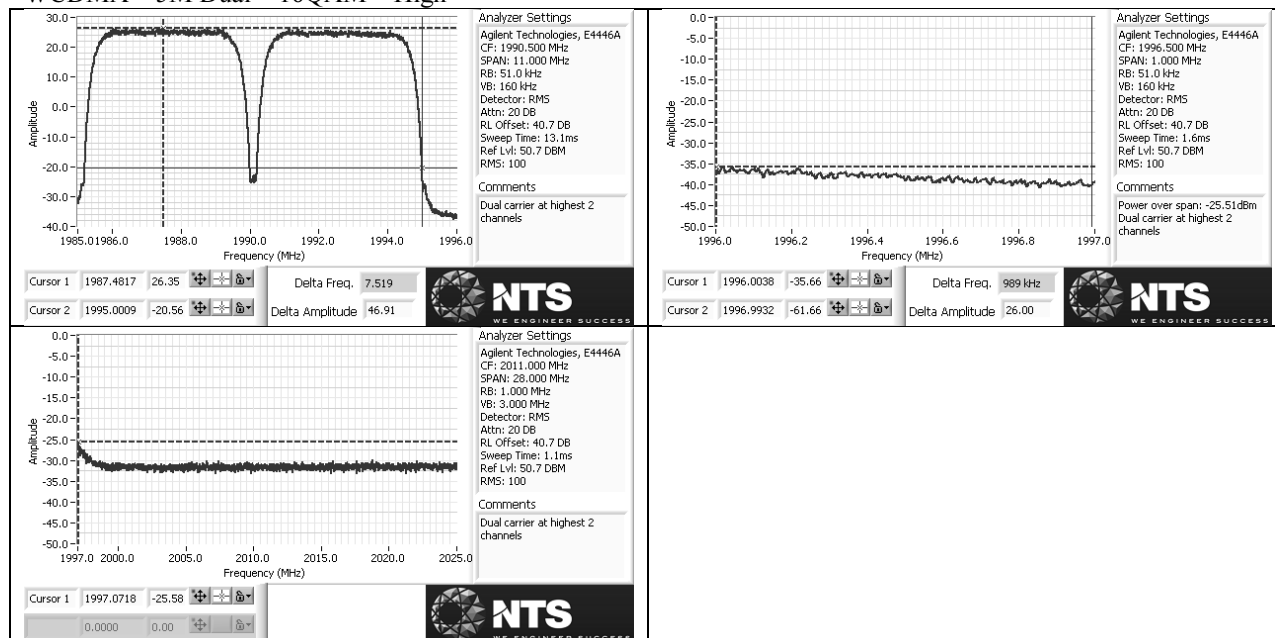## WCDMA – 5M Dual – QPSK – Low

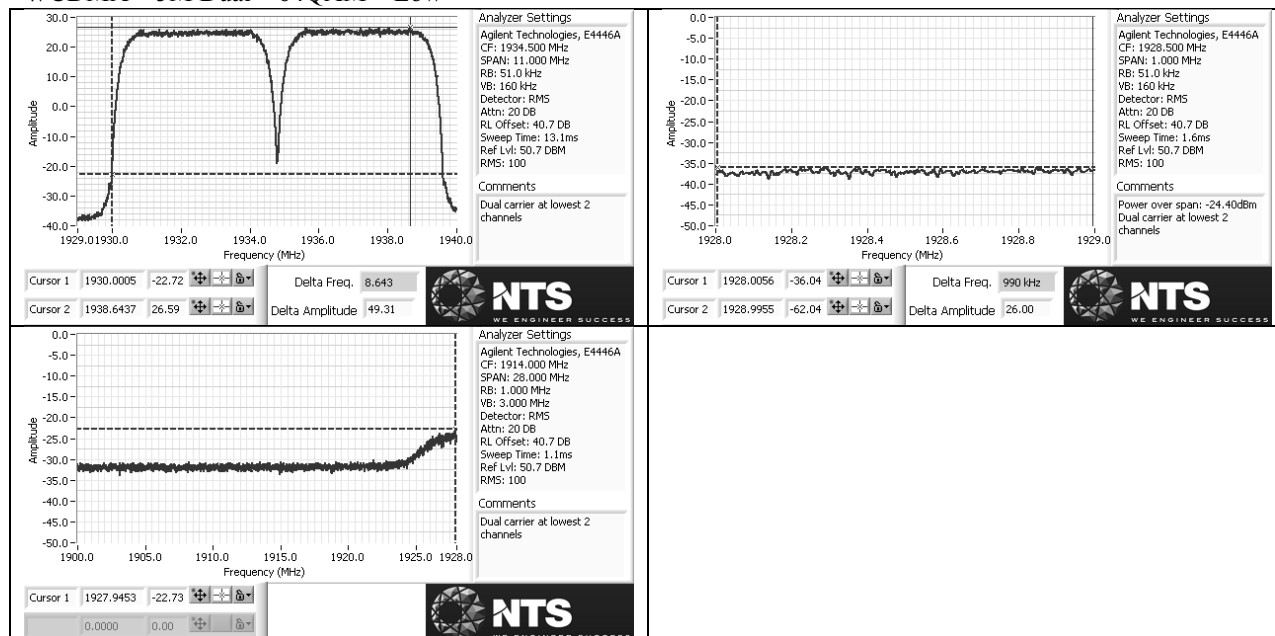## WCDMA – 5M Dual – QPSK – High

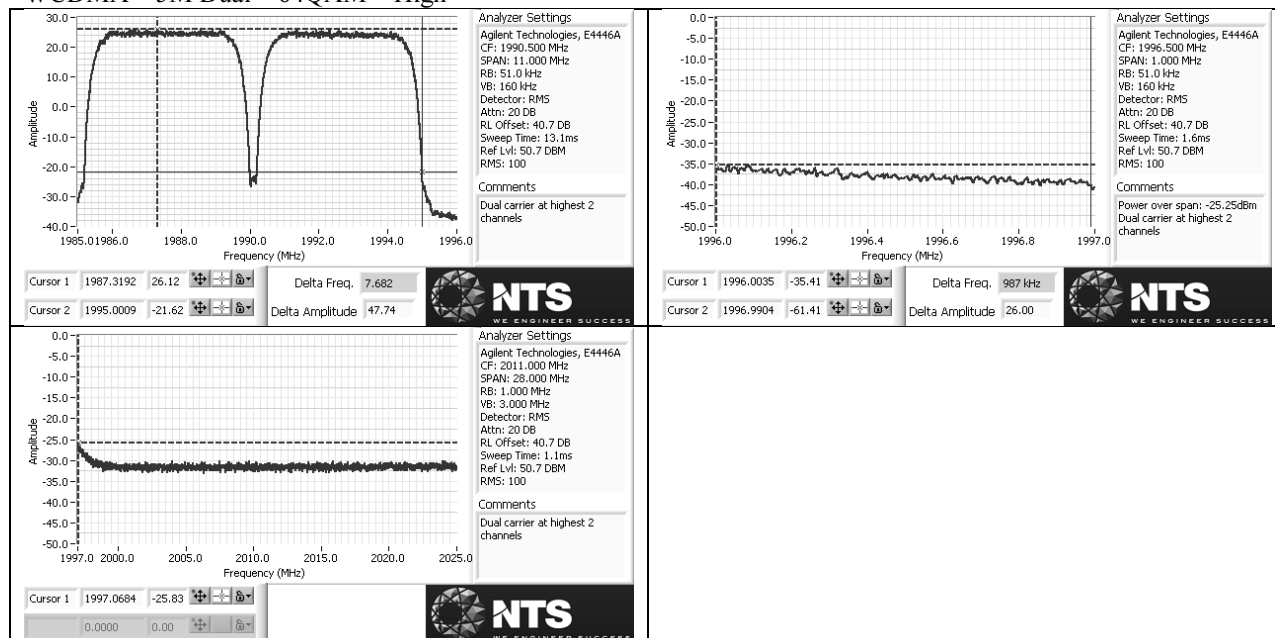## WCDMA – 5M Dual – 16QAM – Low

WCDMA – 5M Dual – 16QAM – High

WCDMA – 5M Dual – 64QAM – Low

WCDMA – 5M Dual – 64QAM – High

Transmitter Antenna Port Conducted Spurious Emissions

Tests performed at Port 4 on center channel for all modulations and bandwidth modes. Due to 4x4 MIMO operation, limit is -19.03dBm (-13dBm – 10*log(4)) per FCC KDB 662911D01 v02r01.
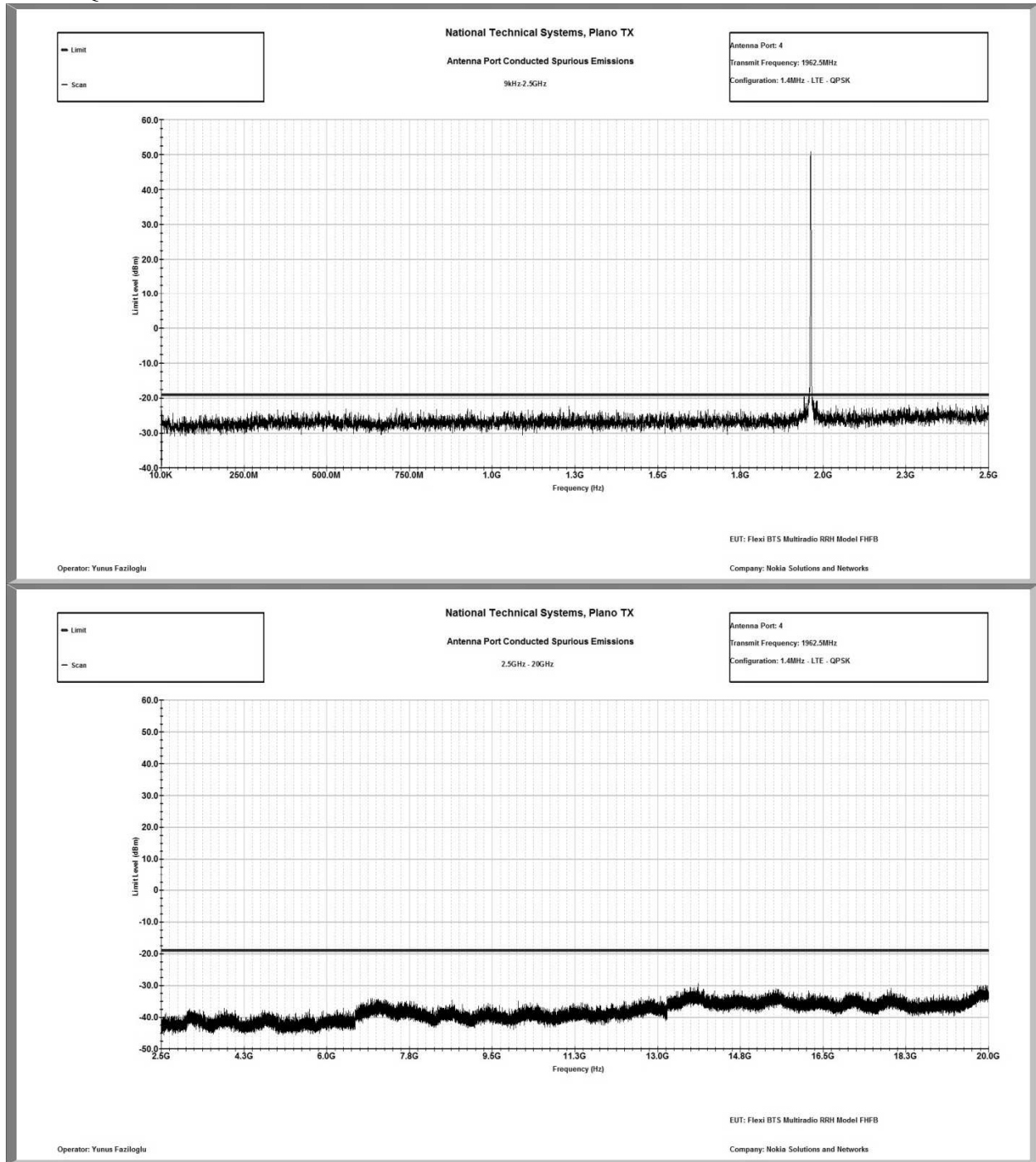
TILE6 measurement software was used during testing. A high-pass filter was used above 2.5GHz to block the fundamental and reduce the instrumentation noise floor. Except for the fundamental, all the readings were at noise floor.
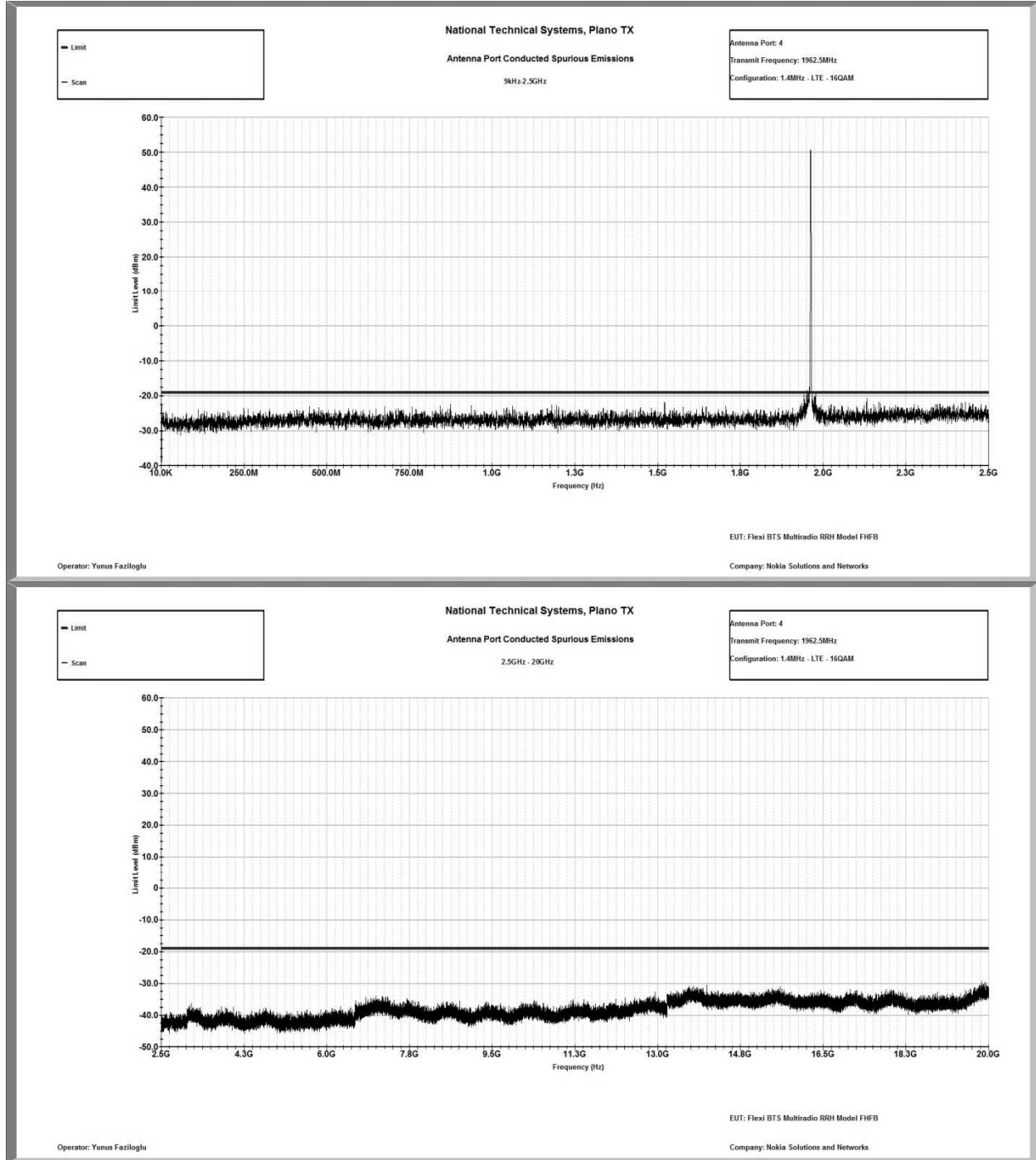
Measurements taken with the following settings:

Frequency Range	RBW	VBW	Number of data points	Divided into	Detector	Sweep Time	Max hold over
9kHz-150kHz	1kHz	3kHz	8000	1 segment	Peak	Auto	50 sweeps
150kHz-1.5MHz	100kHz	300kHz	8000	1 segment	Peak	Auto	50 sweeps
1.5MHz-20GHz	1MHz	3MHz	8000	10 segments	Peak	Auto	50 sweeps

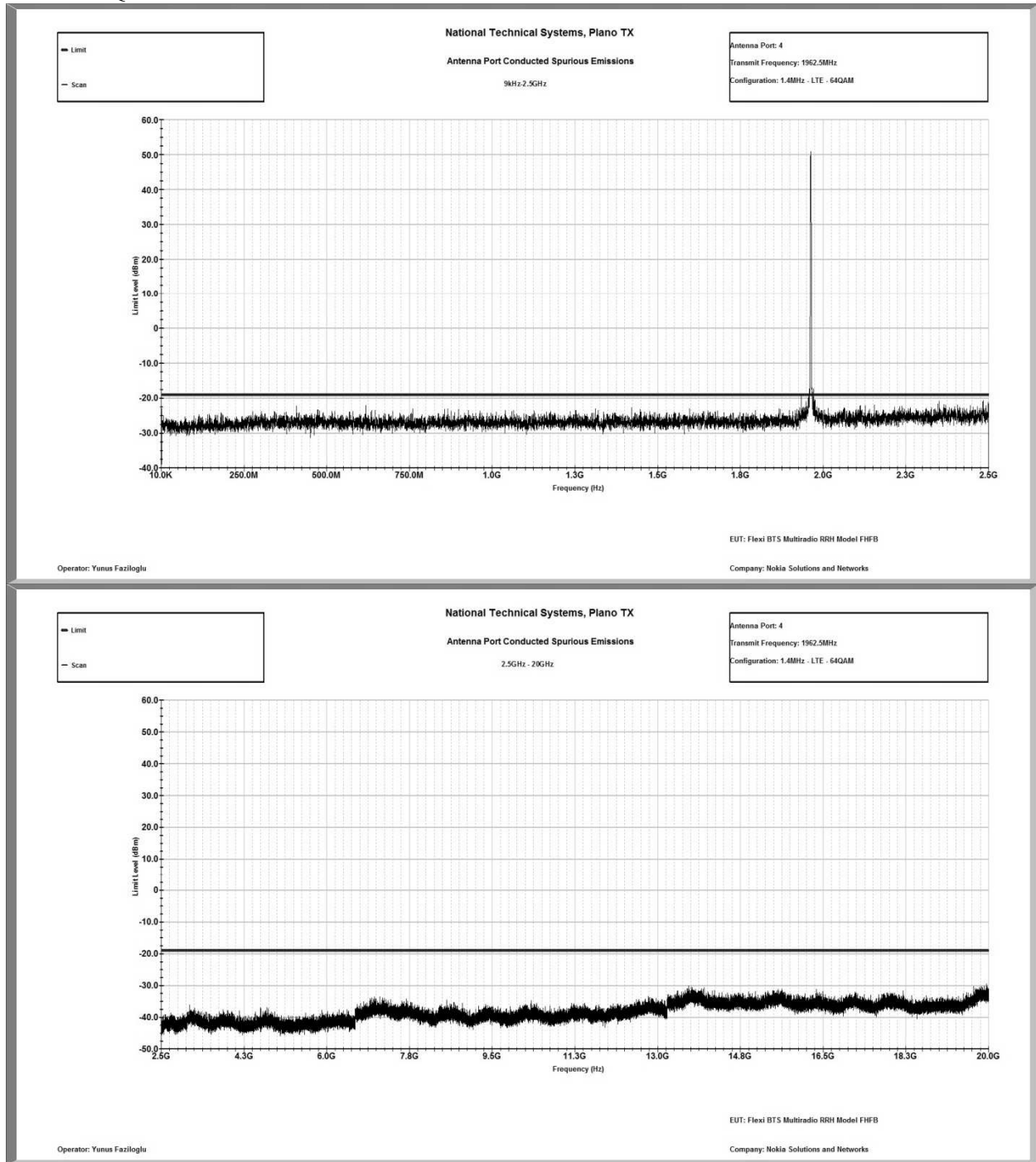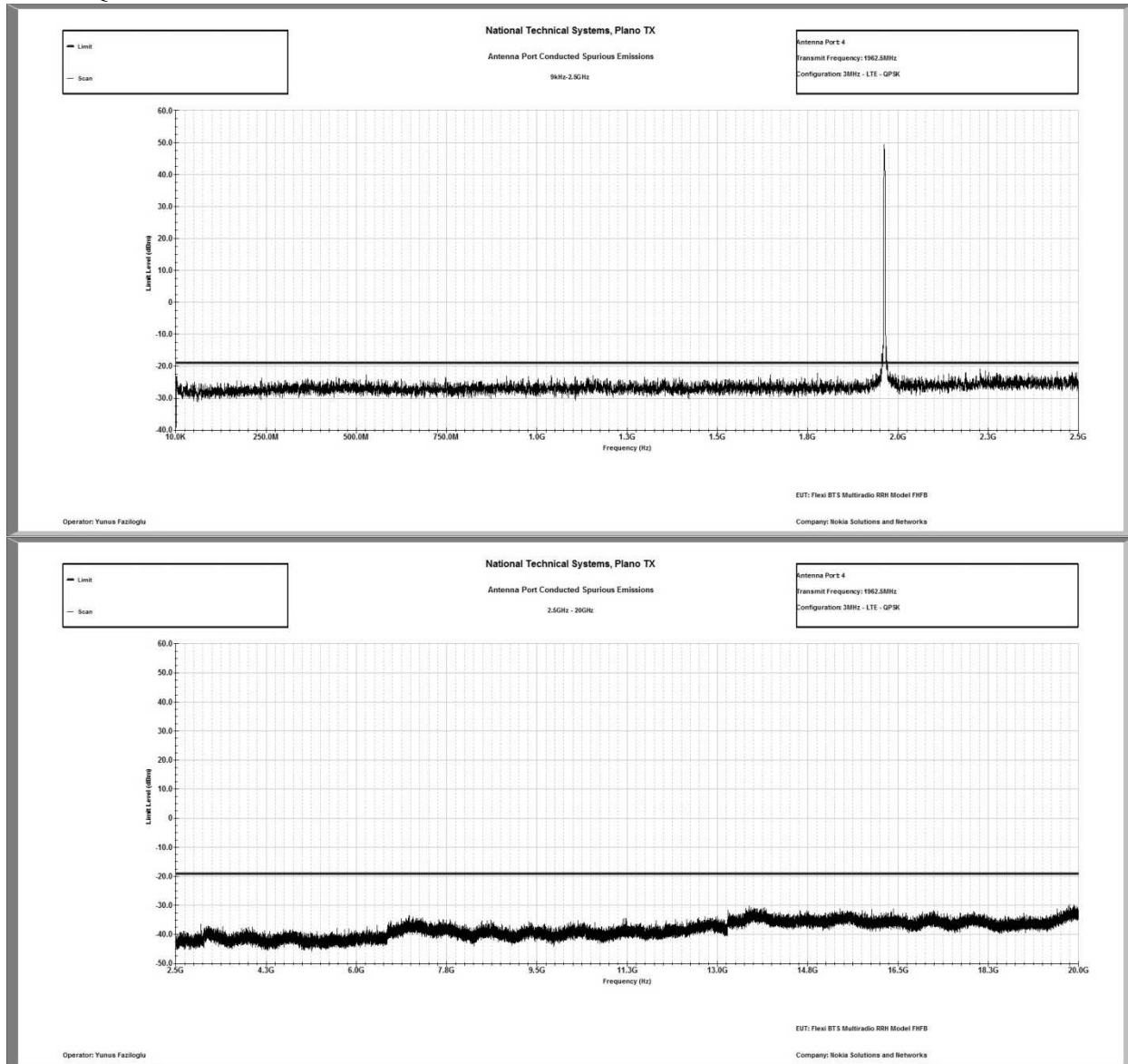Corresponding plots are included on the following pages.
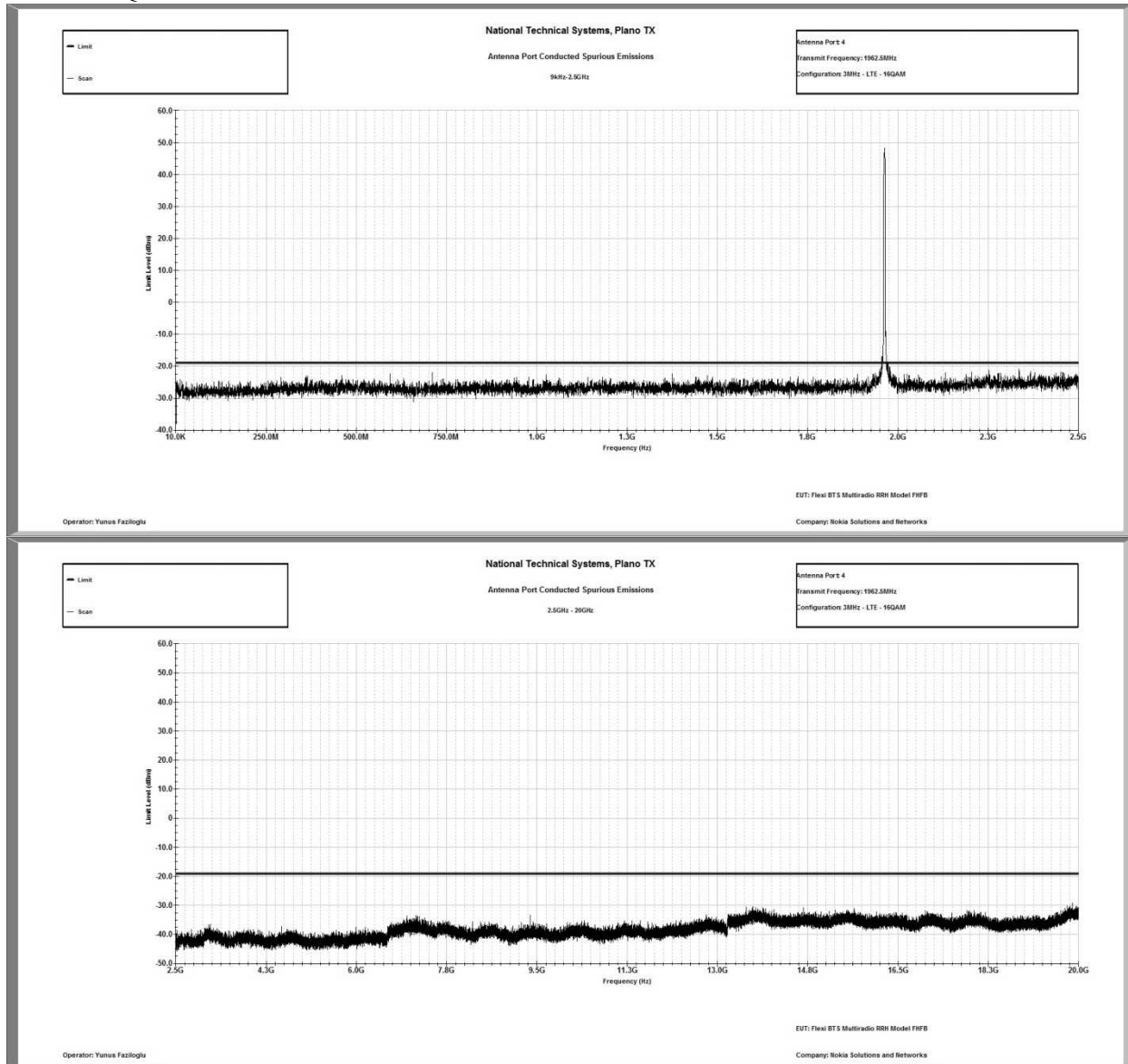
LTE – QPSK – 1.4M

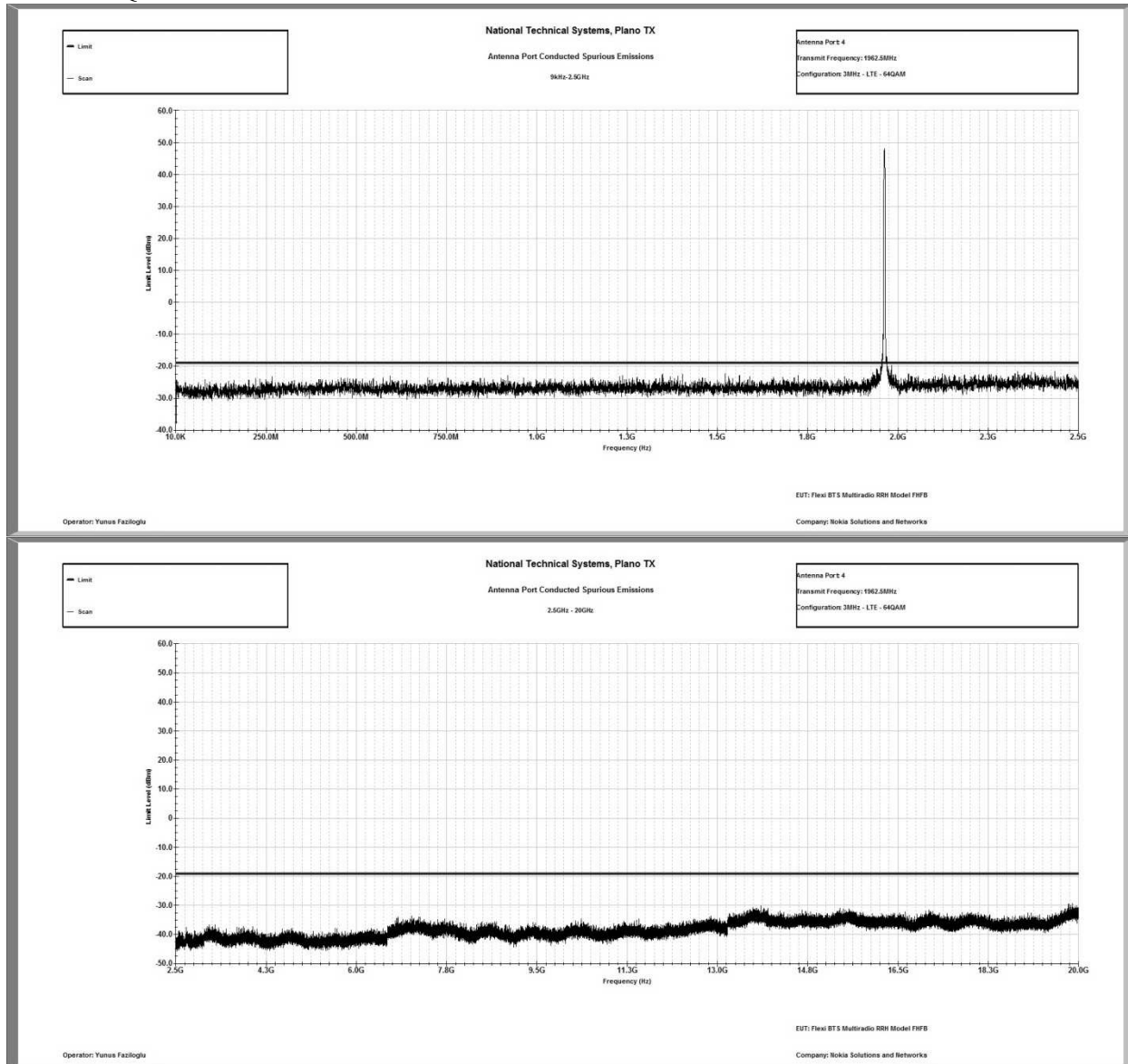## LTE – 16QAM – 1.4M

LTE – 64QAM – 1.4M

LTE – QPSK – 3M

LTE – 16QAM – 3M

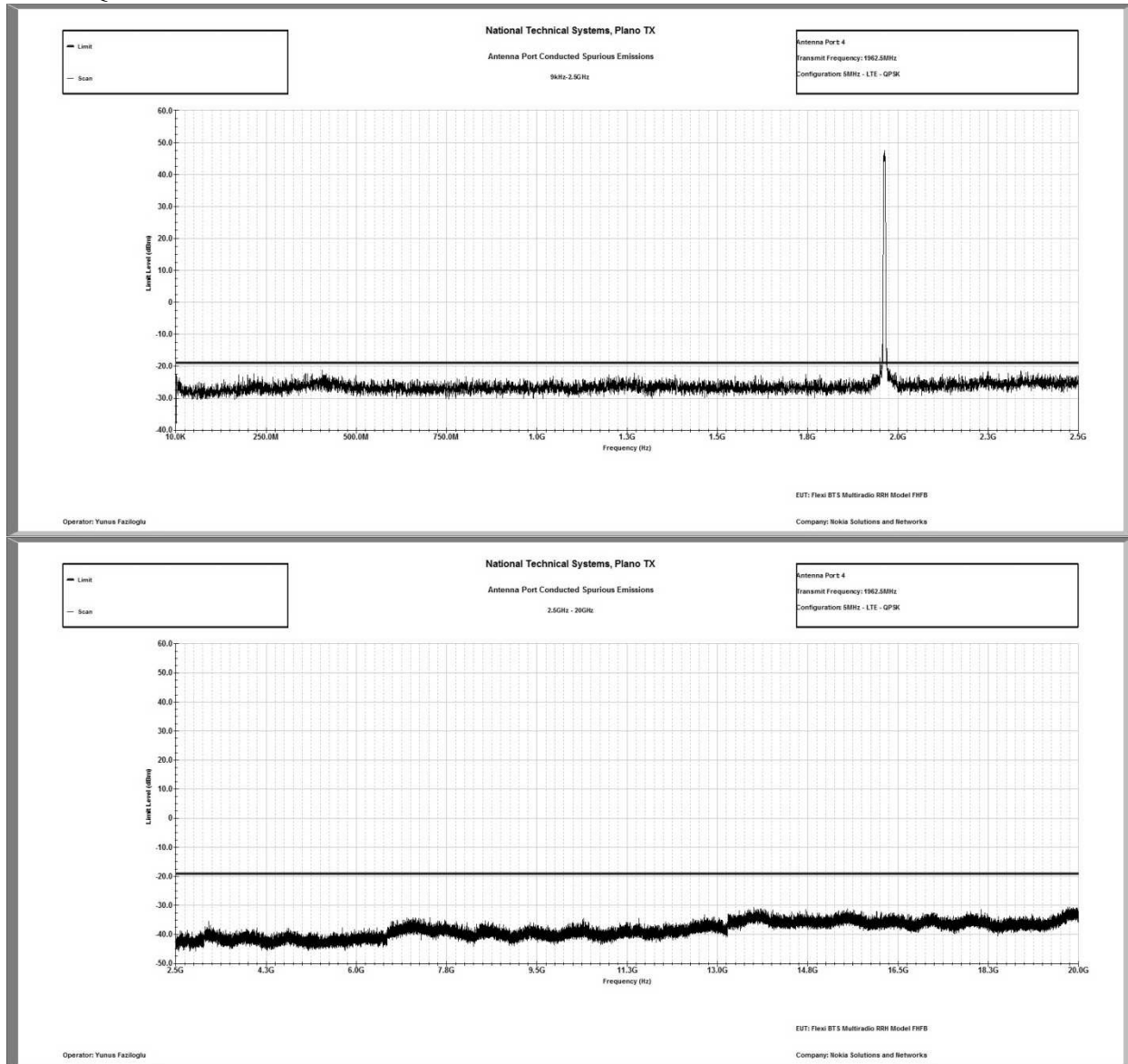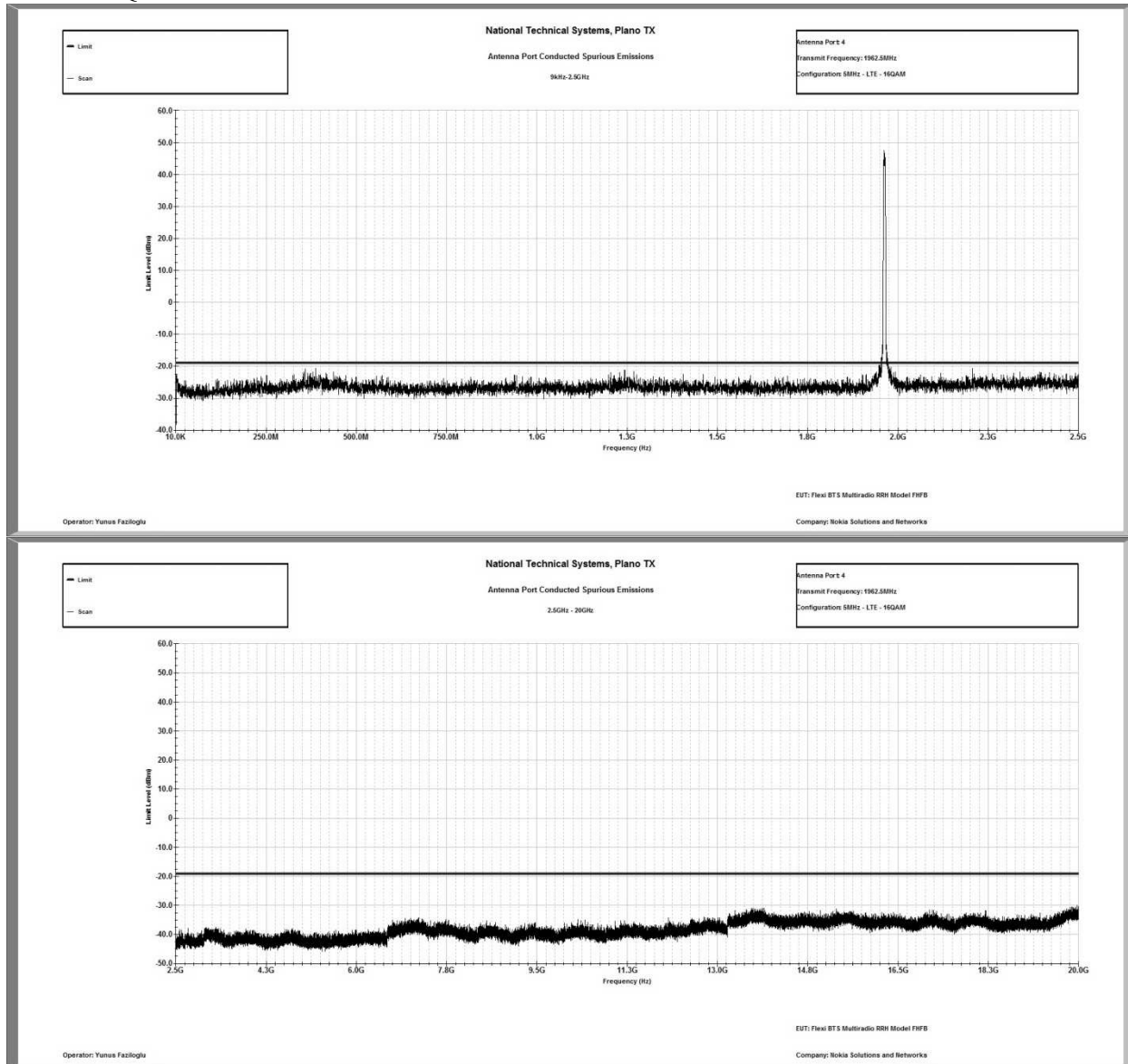## LTE – 64QAM – 3M

LTE – QPSK – 5M

LTE – 16QAM – 5M

LTE – 64QAM – 5M