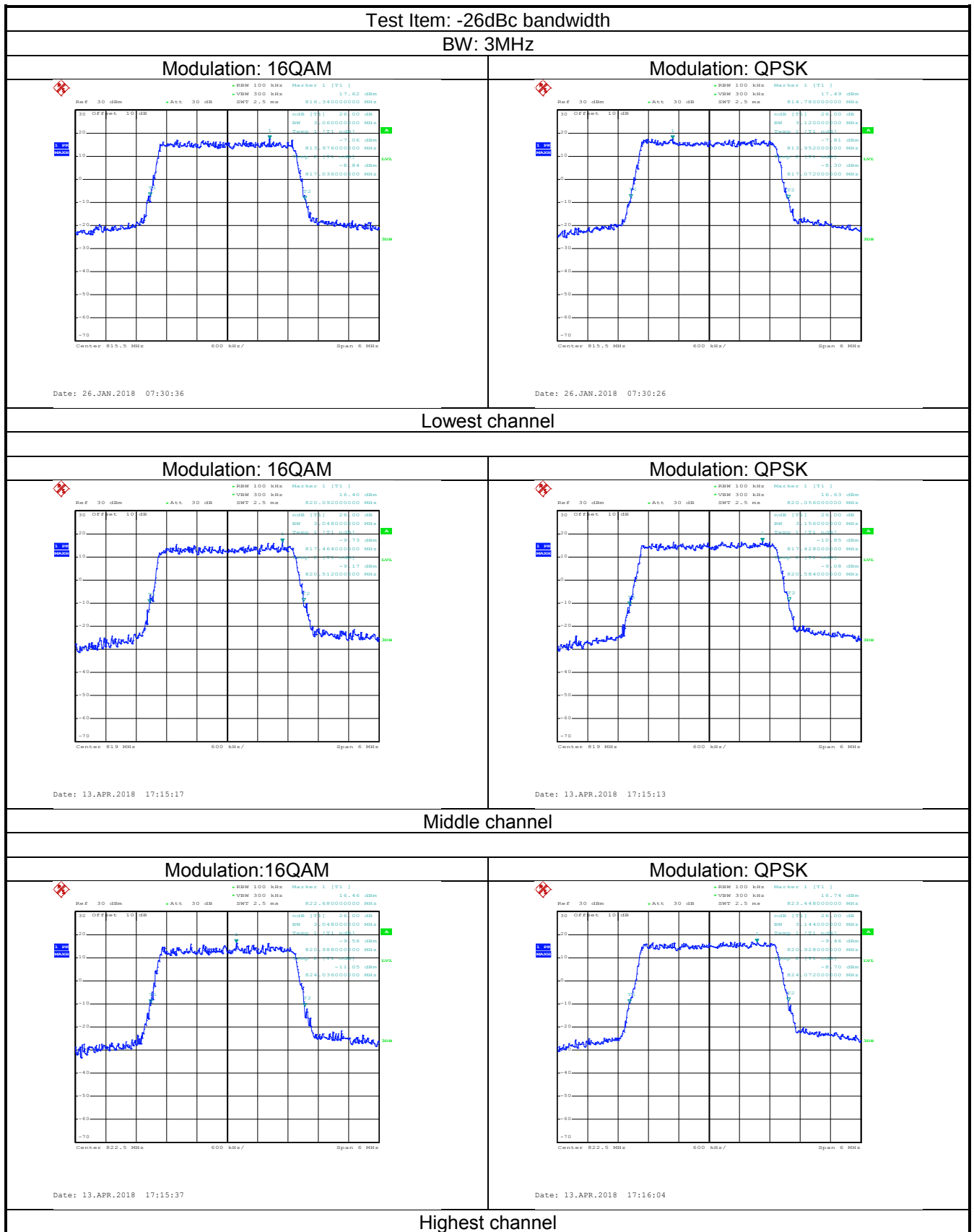
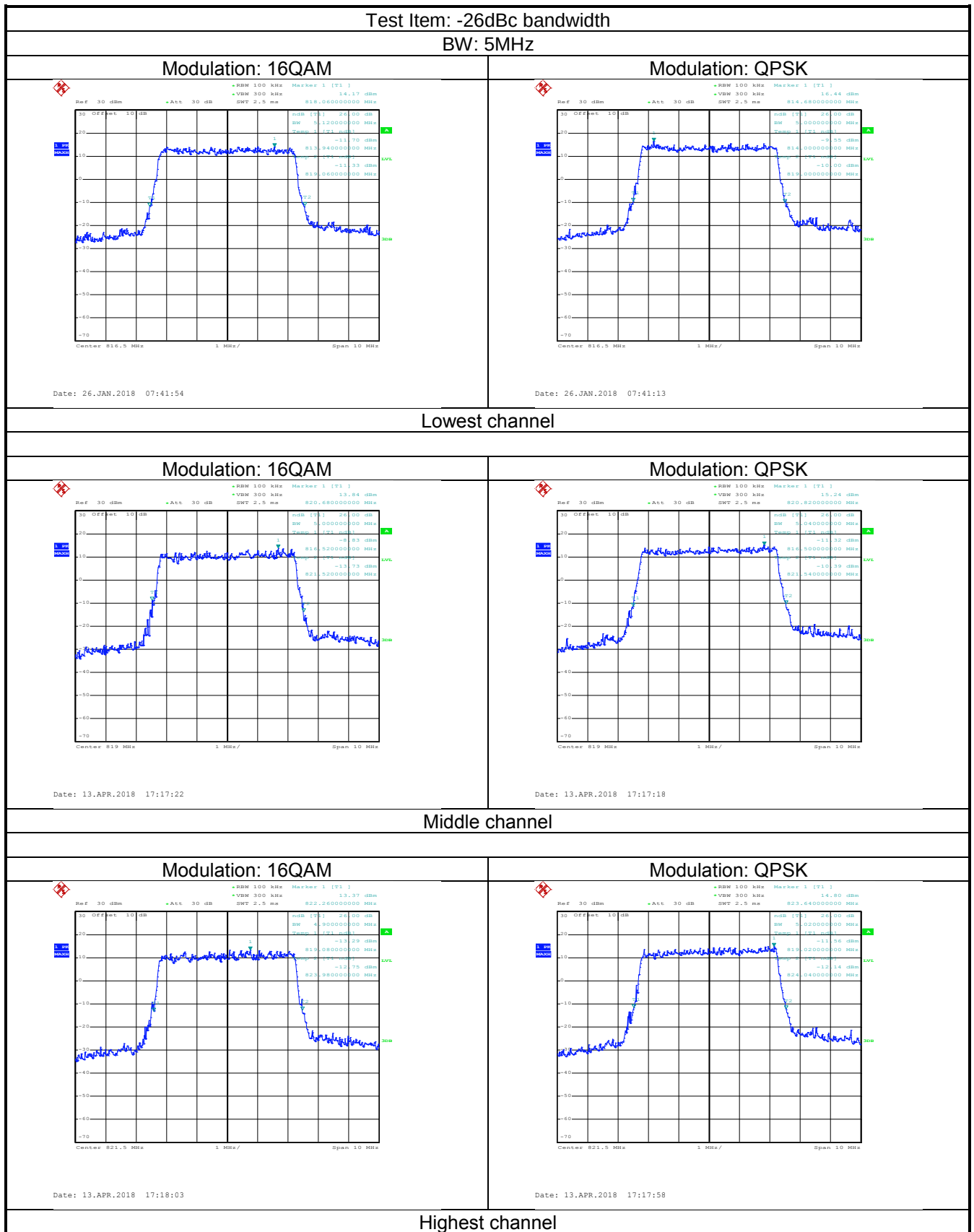
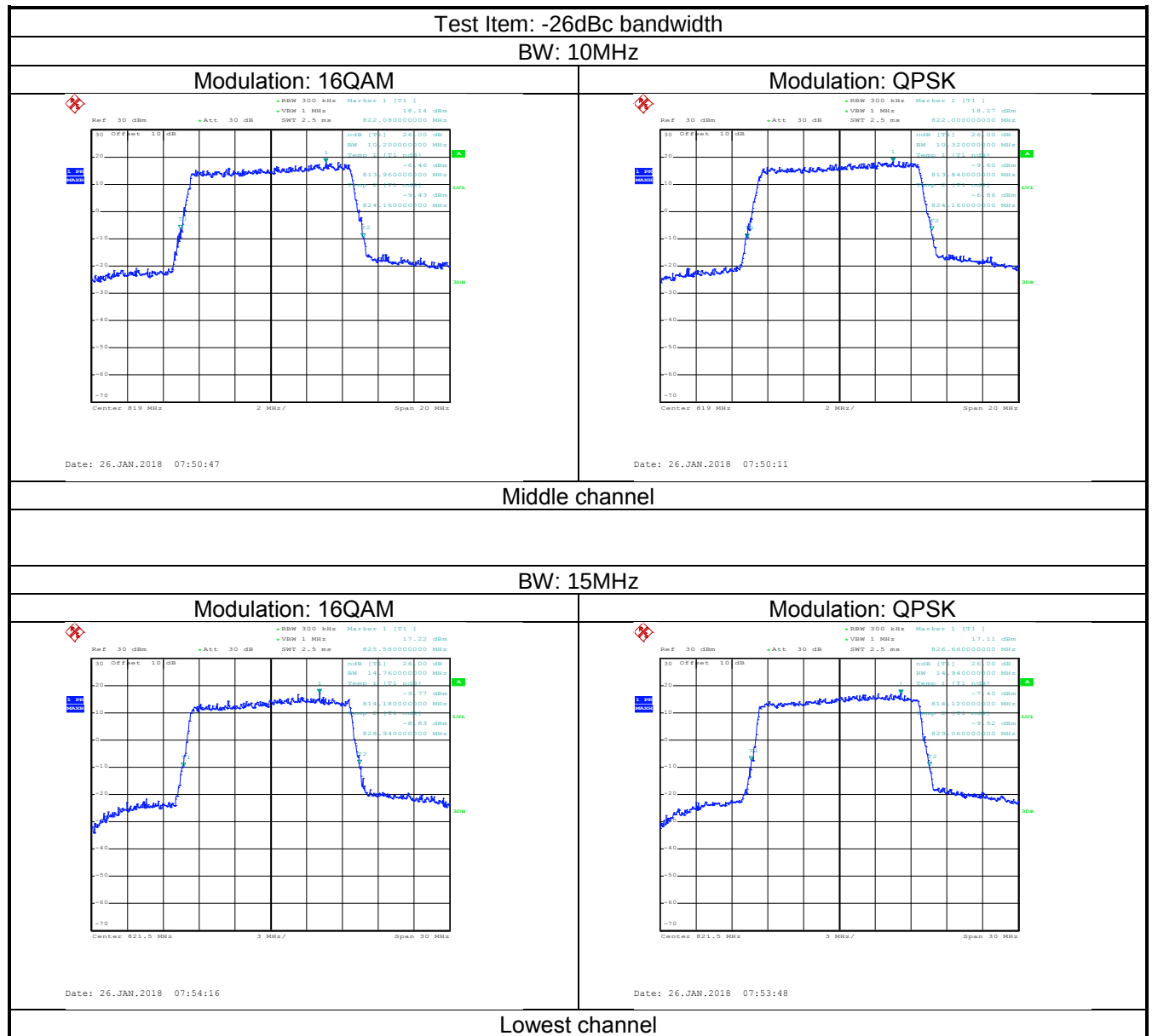
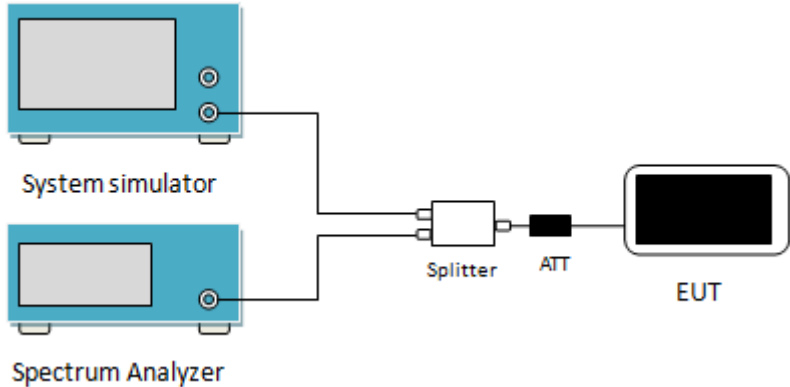




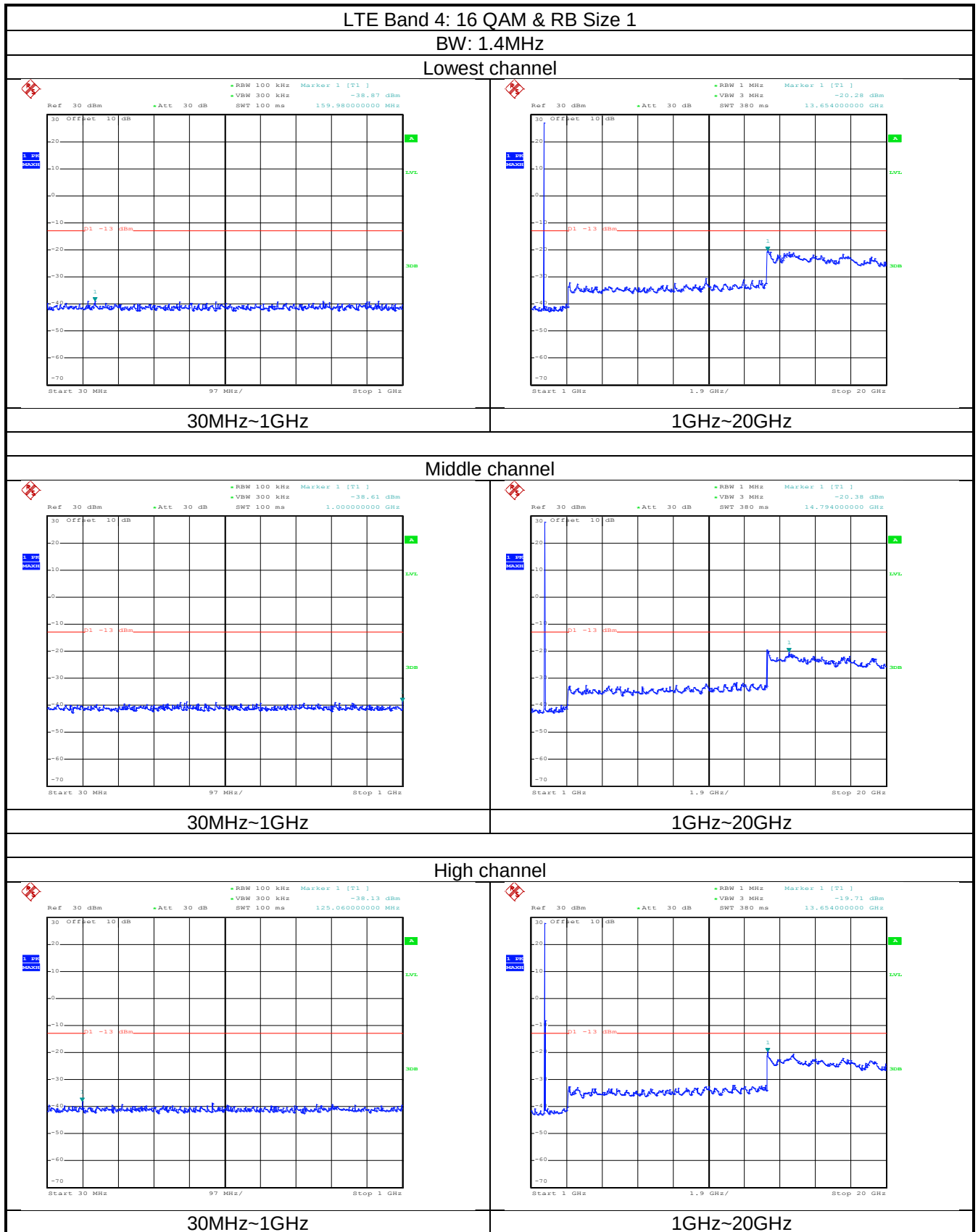


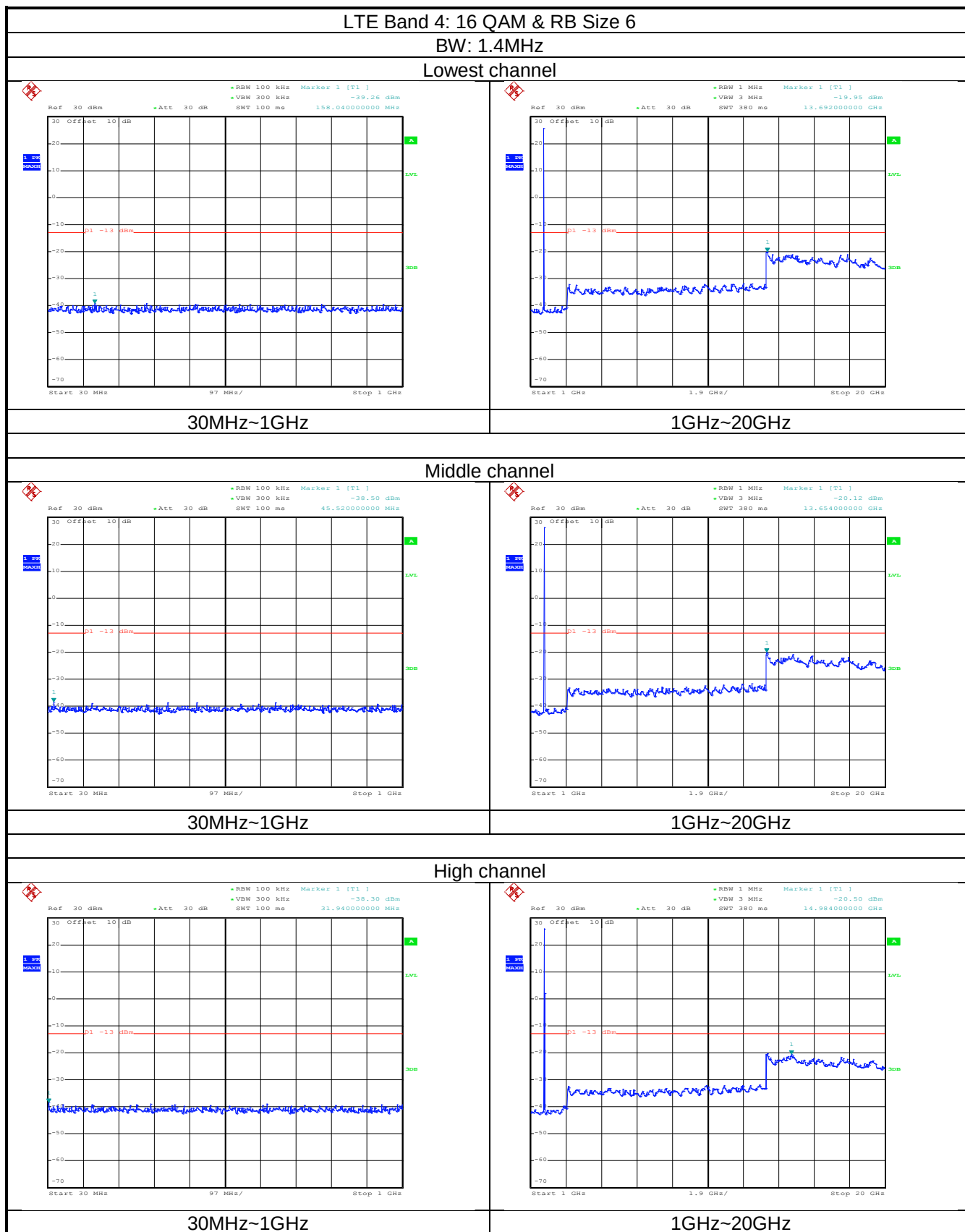


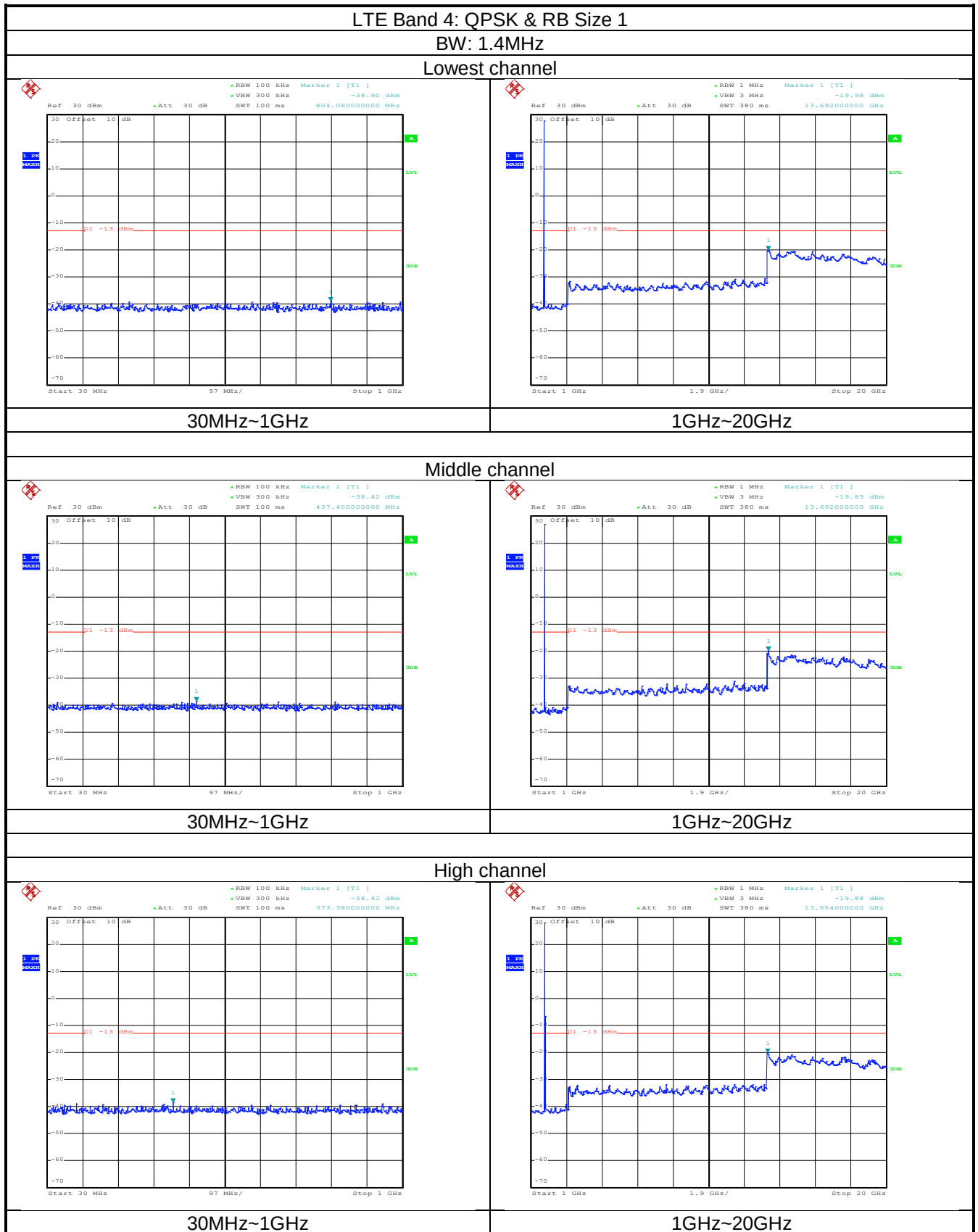
6.4 Out of band emission at antenna terminals

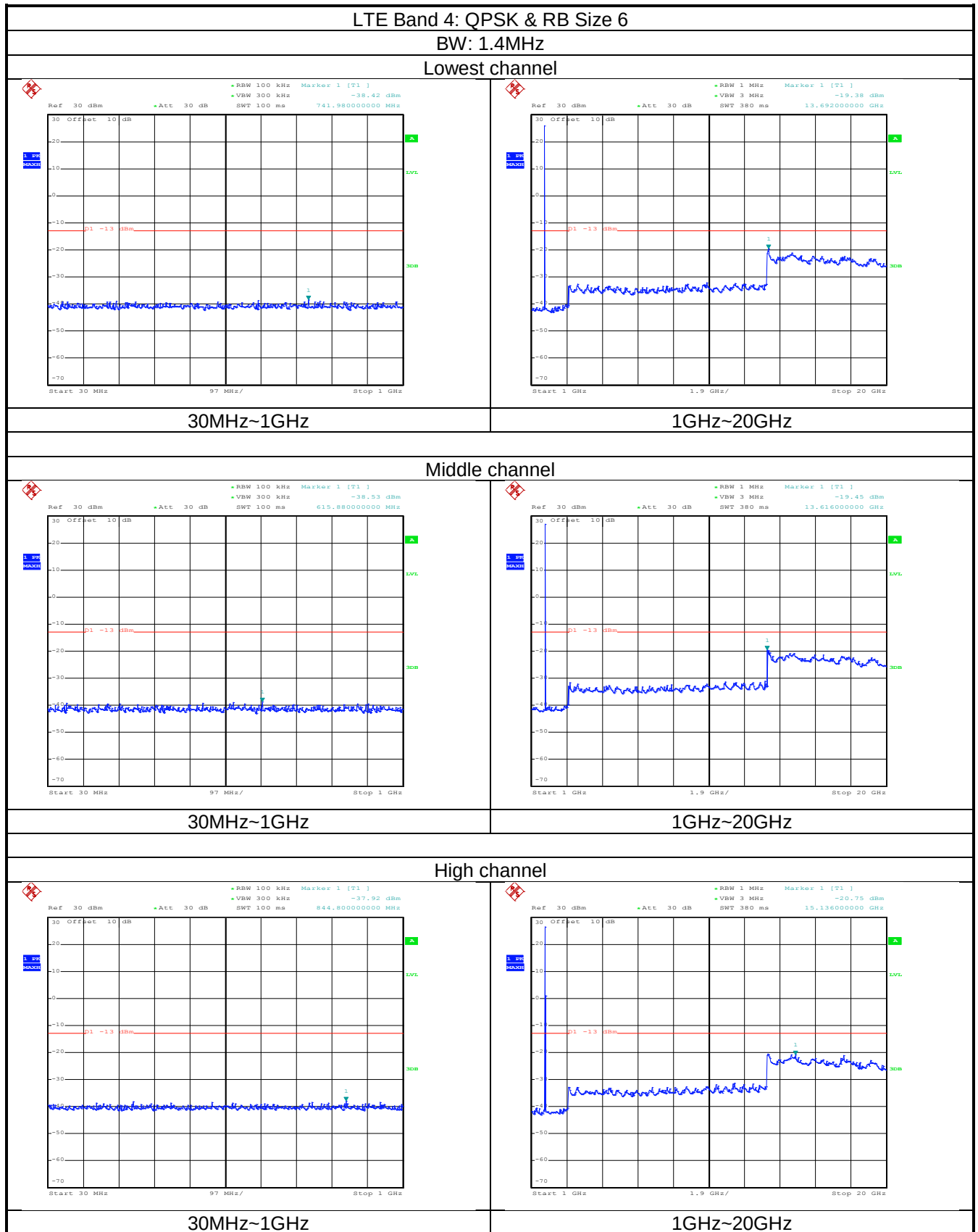
Test Requirement:	Part 22.917(a), Part 24.238 (a), Part 27.53(g), Part 27.53(h), Part 90.691(a)
Test Method:	ANSI/TIA-603-D 2010
Limit:	LTE Band 4 & 5 & 12 & 25 & 26: The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB (-13 dBm).
Test Setup:	 The diagram illustrates the test setup. On the left, there are two blue rectangular units: the top one is labeled 'System simulator' and the bottom one is labeled 'Spectrum Analyzer'. Both have a single output port. These two ports are connected to a single input port of a white rectangular unit labeled 'Splitter'. The 'Splitter' has two output ports. One output port is connected to a black rectangular unit labeled 'ATT' (Attenuator). The other output port of the 'Splitter' is connected to the input port of a black rectangular unit labeled 'EUT' (Equipment Under Test).
Test Procedure:	1 The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. 2 The resolution bandwidth of the spectrum analyzer was set at 100 kHz when below 1GHz, 1MHz when above 1 GHz; sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic. 3 For the out of band: Set the RBW=100 kHz, VBW=300 kHz when below 1 GHz, RBW =1 MHz, VBW=3 MHz when above 1 GHz, Start=30MHz, Stop= 10th harmonic. 4 Band Edge Requirements: In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions.
Test Instruments:	Refer to section 5.9 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Remark:	Pre-scan all RB Size and offset, and found the RB Size and offset of worst case, so the report shows only the worst case test data.

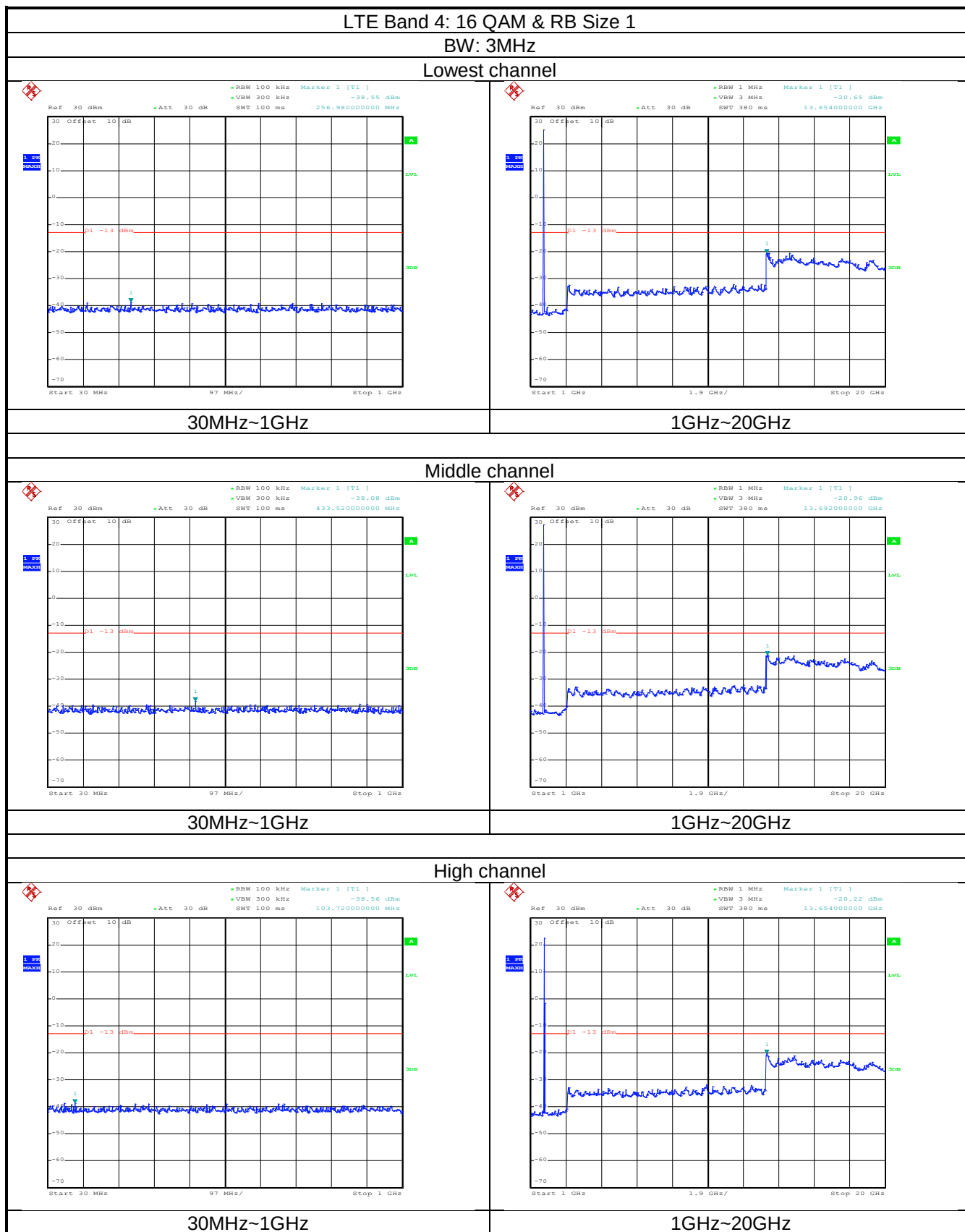
Test plots as follows (Conducted spurious emission) (worst case):
LTE Band 4 part:







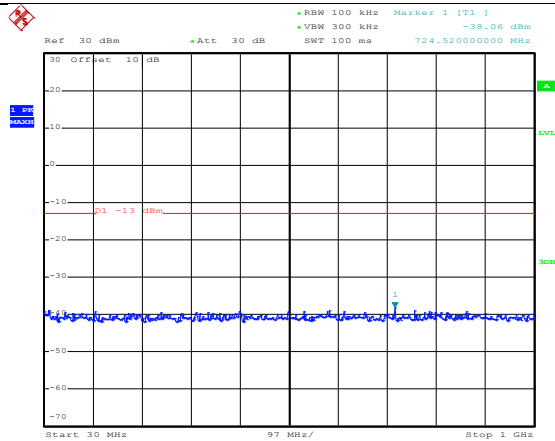




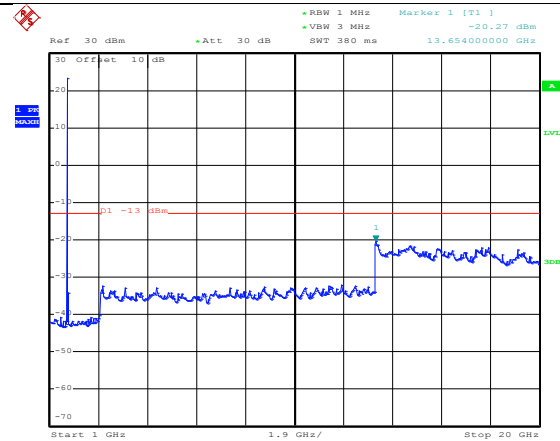
LTE Band 4: 16 QAM & RB Size 15

BW: 3MHz

Lowest channel

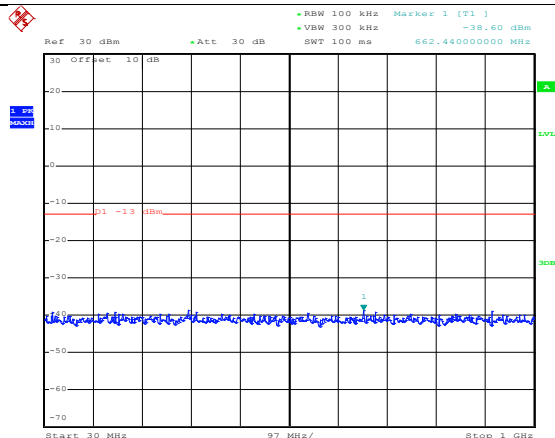


30MHz~1GHz

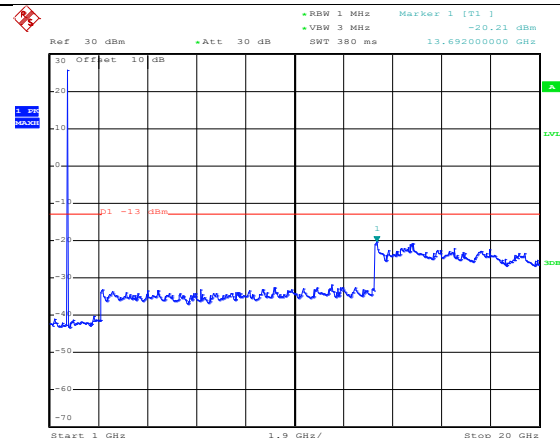


1GHz~20GHz

Middle channel

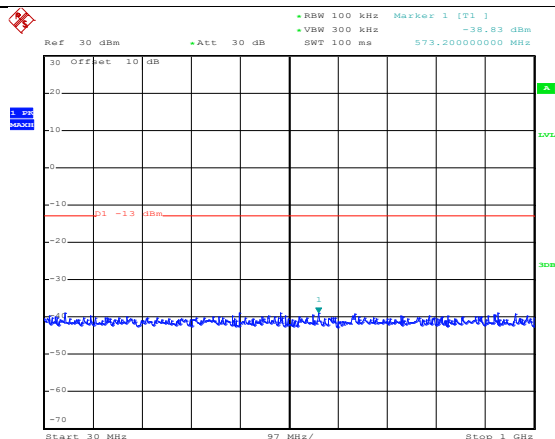


30MHz~1GHz

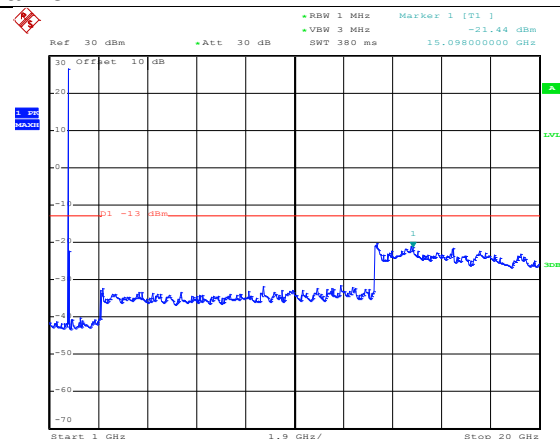


1GHz~20GHz

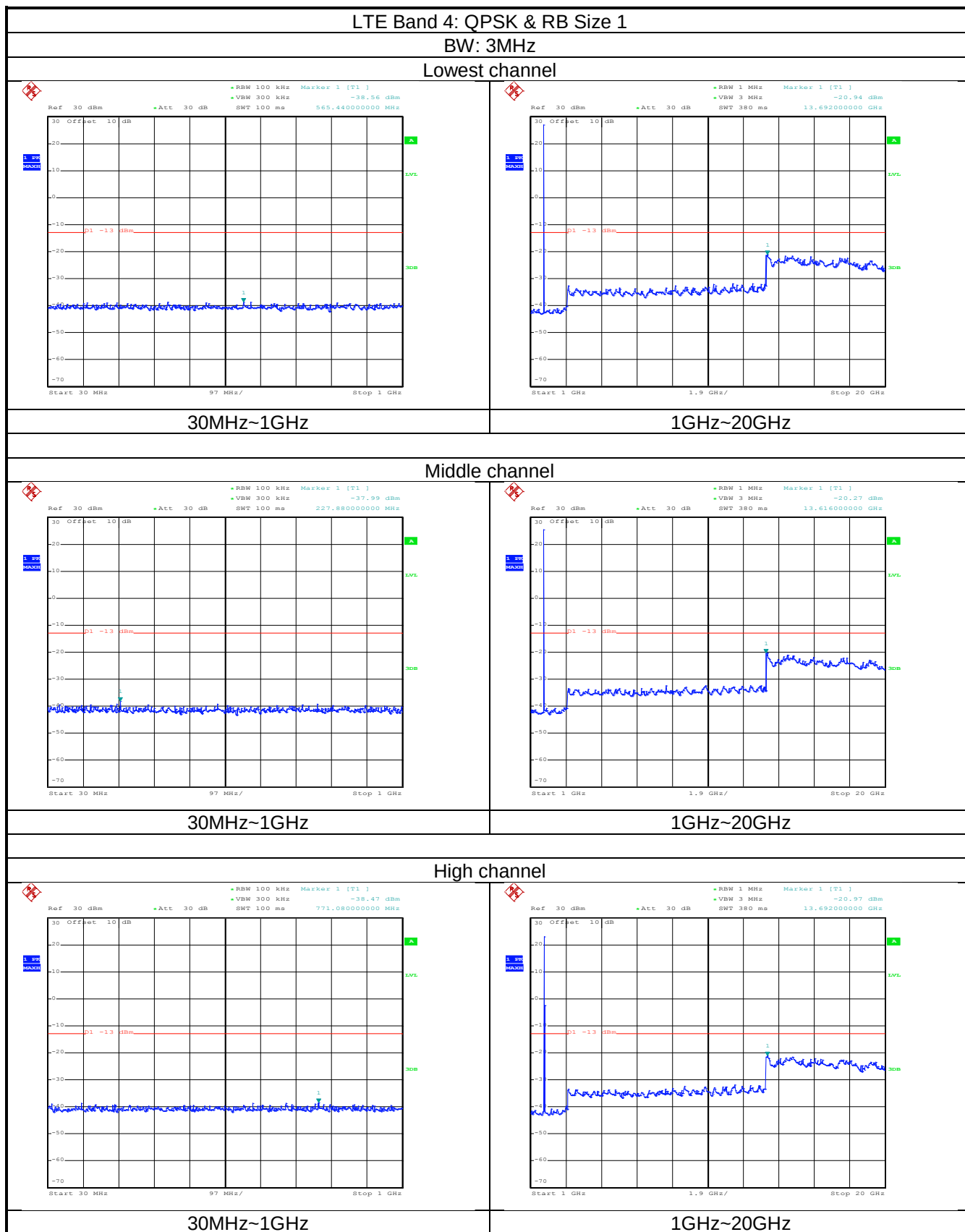
High channel

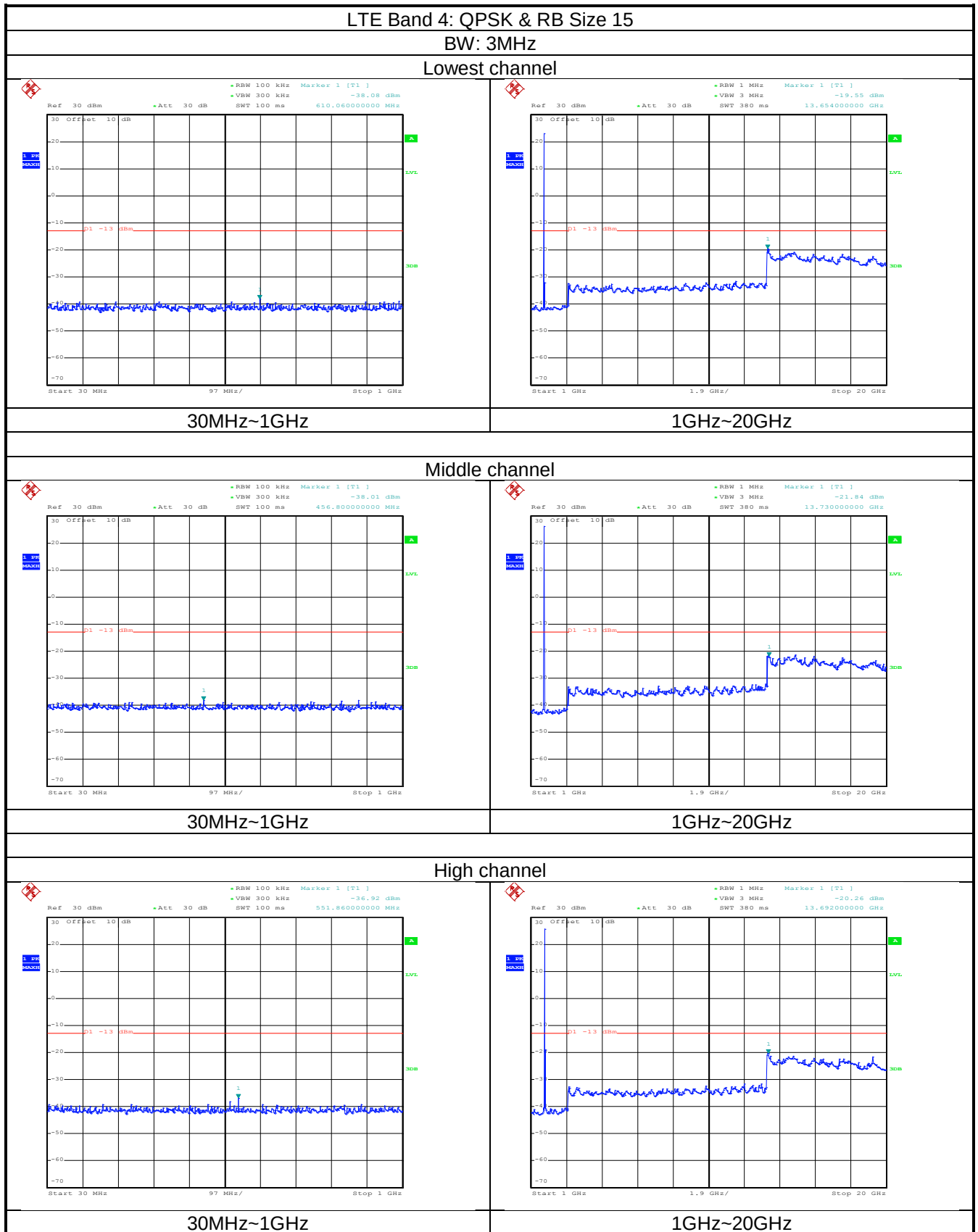


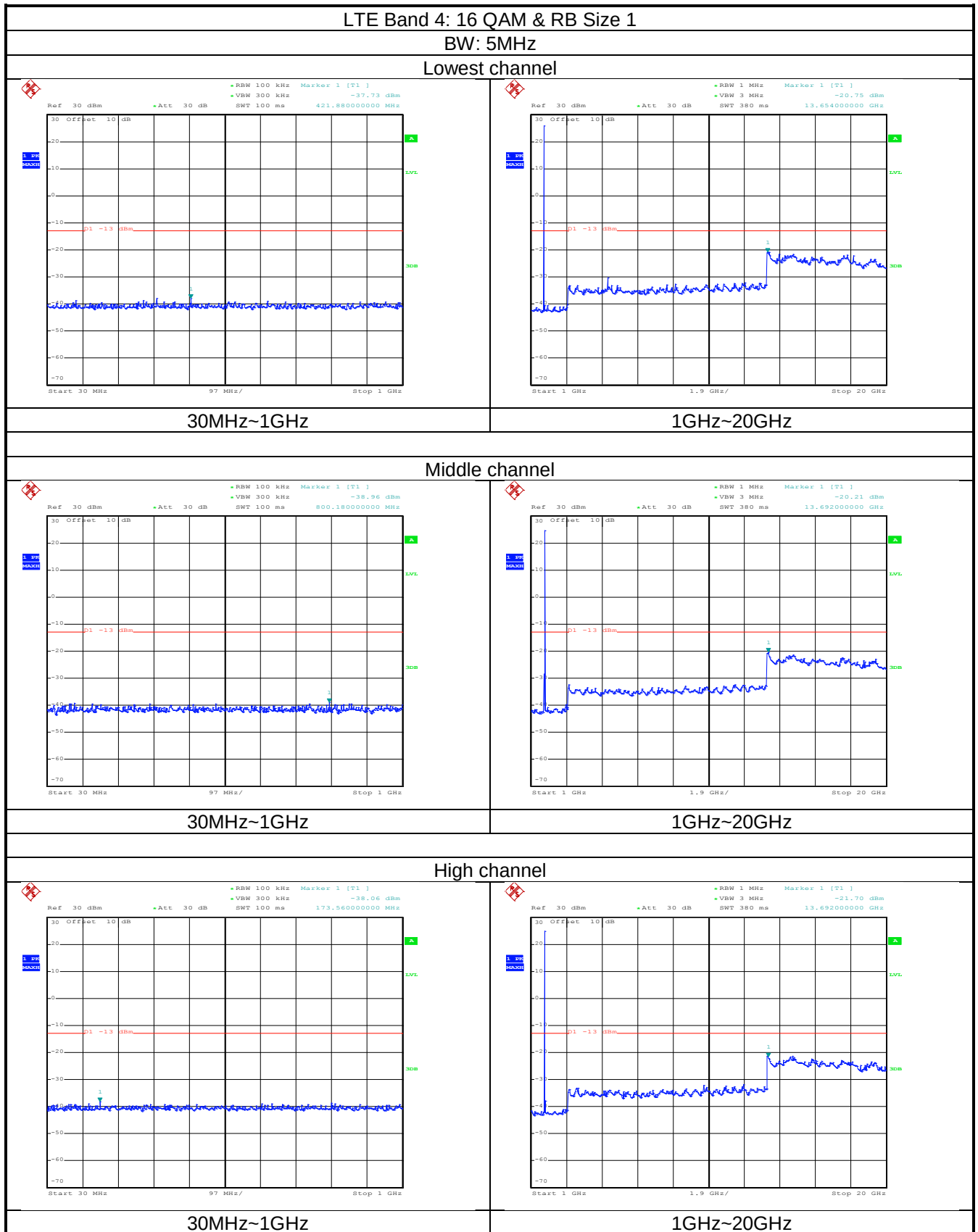
30MHz~1GHz

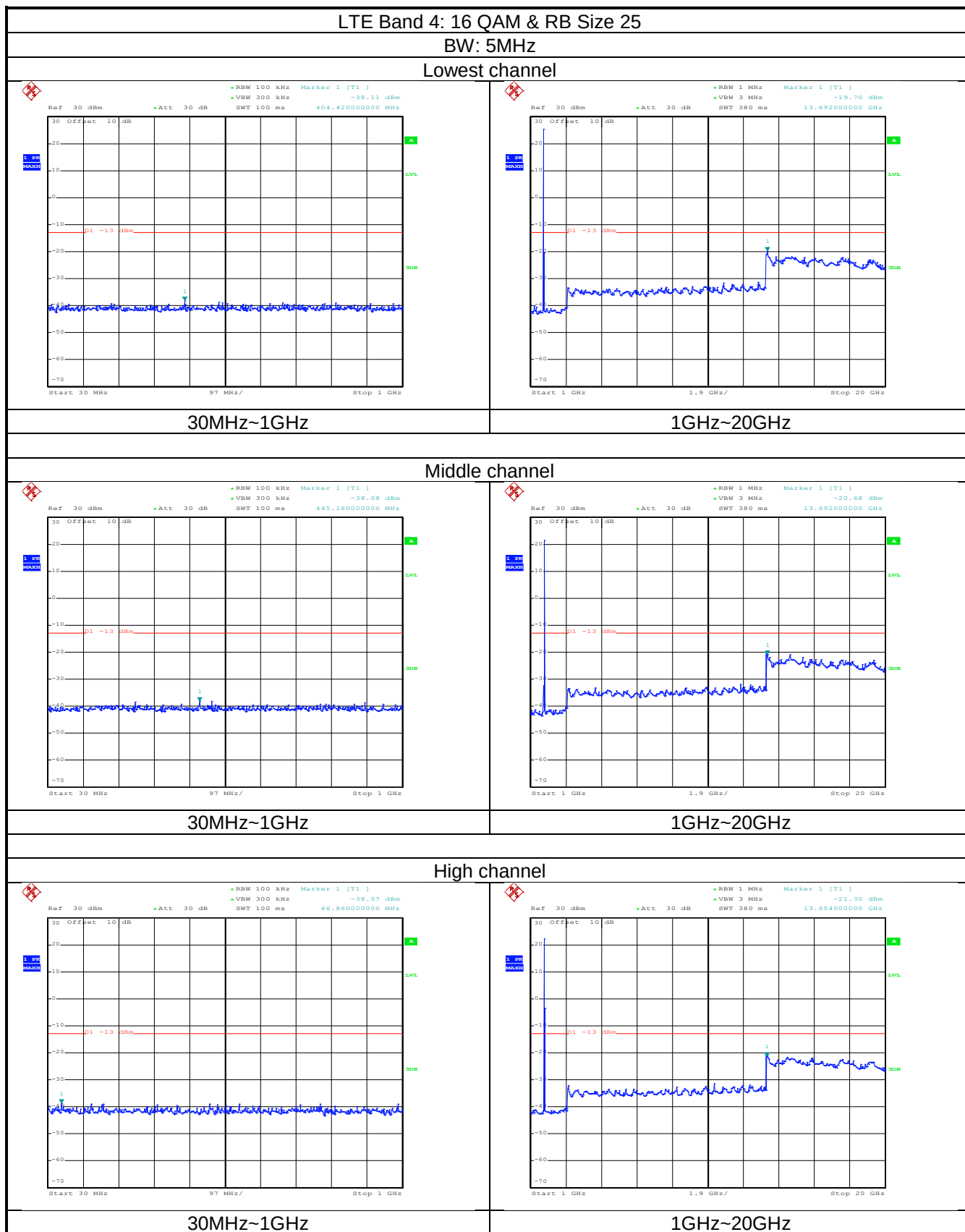


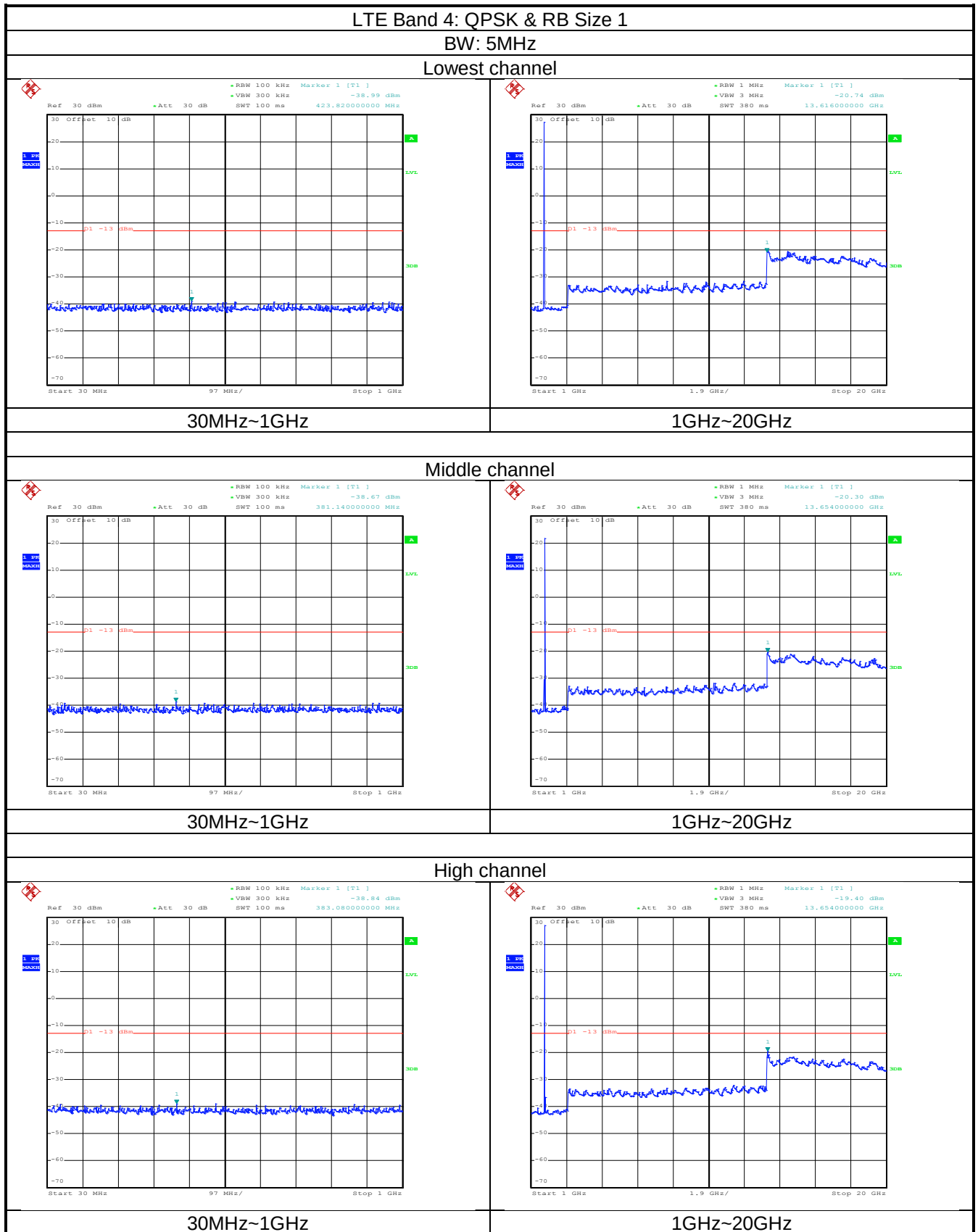
1GHz~20GHz

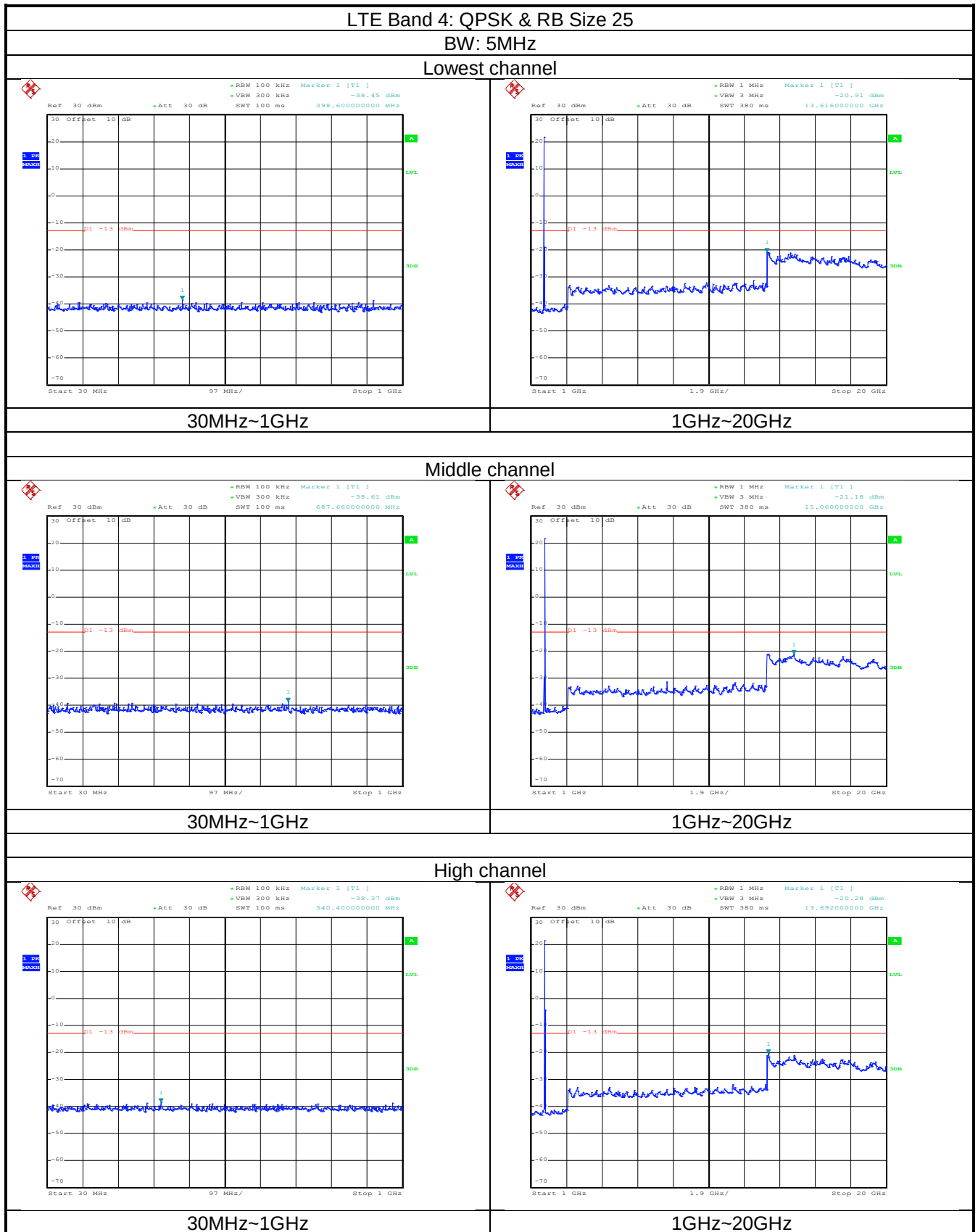


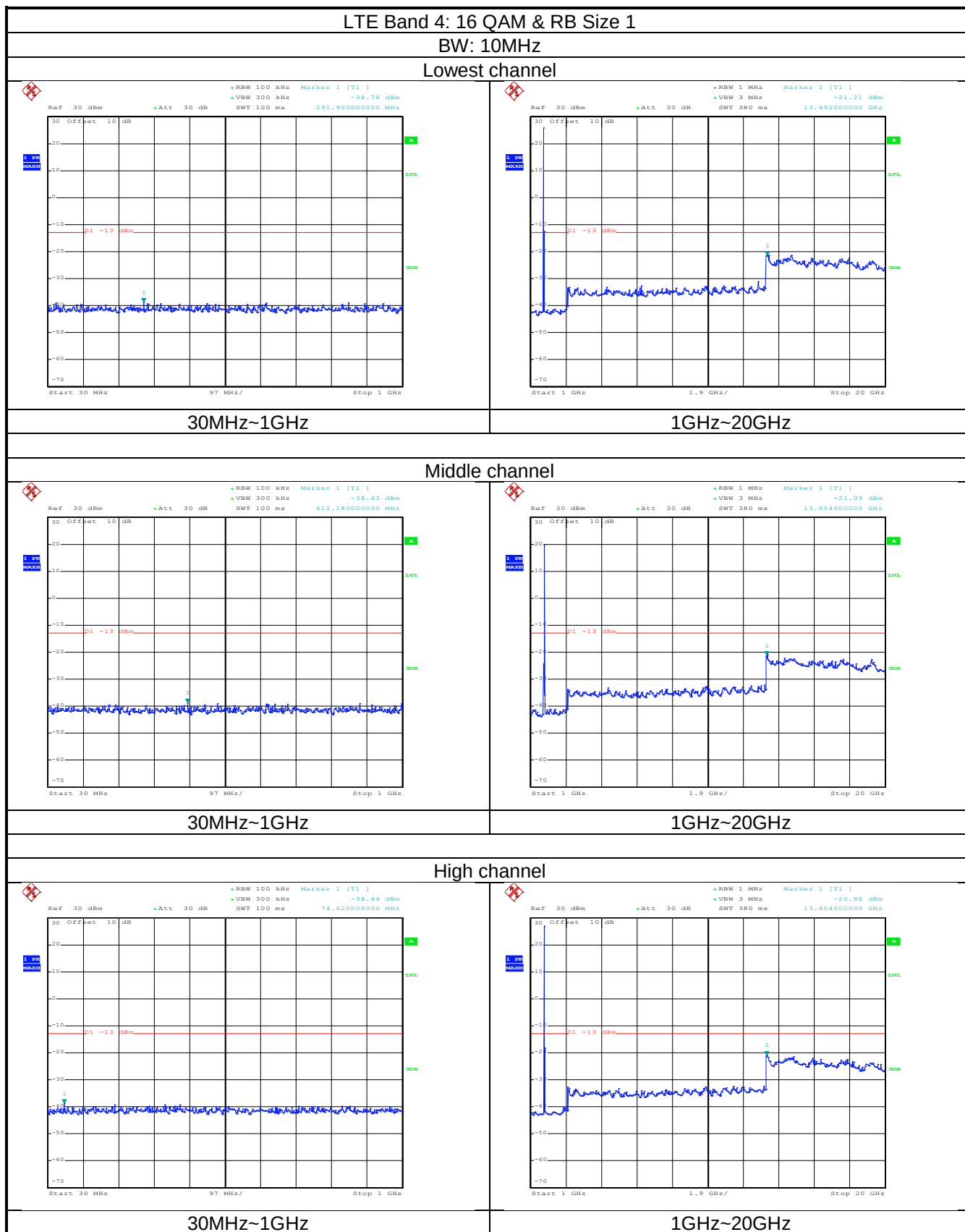


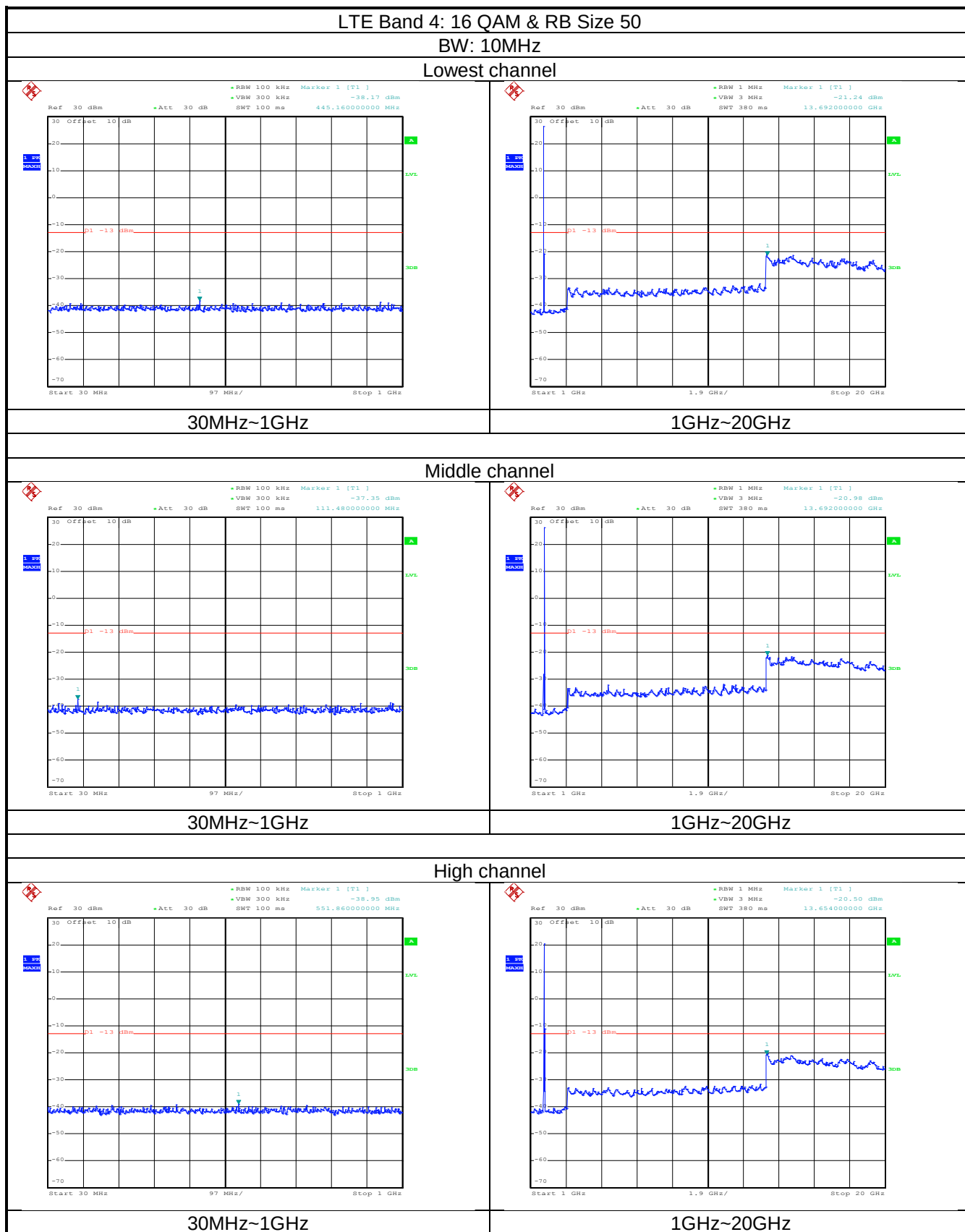


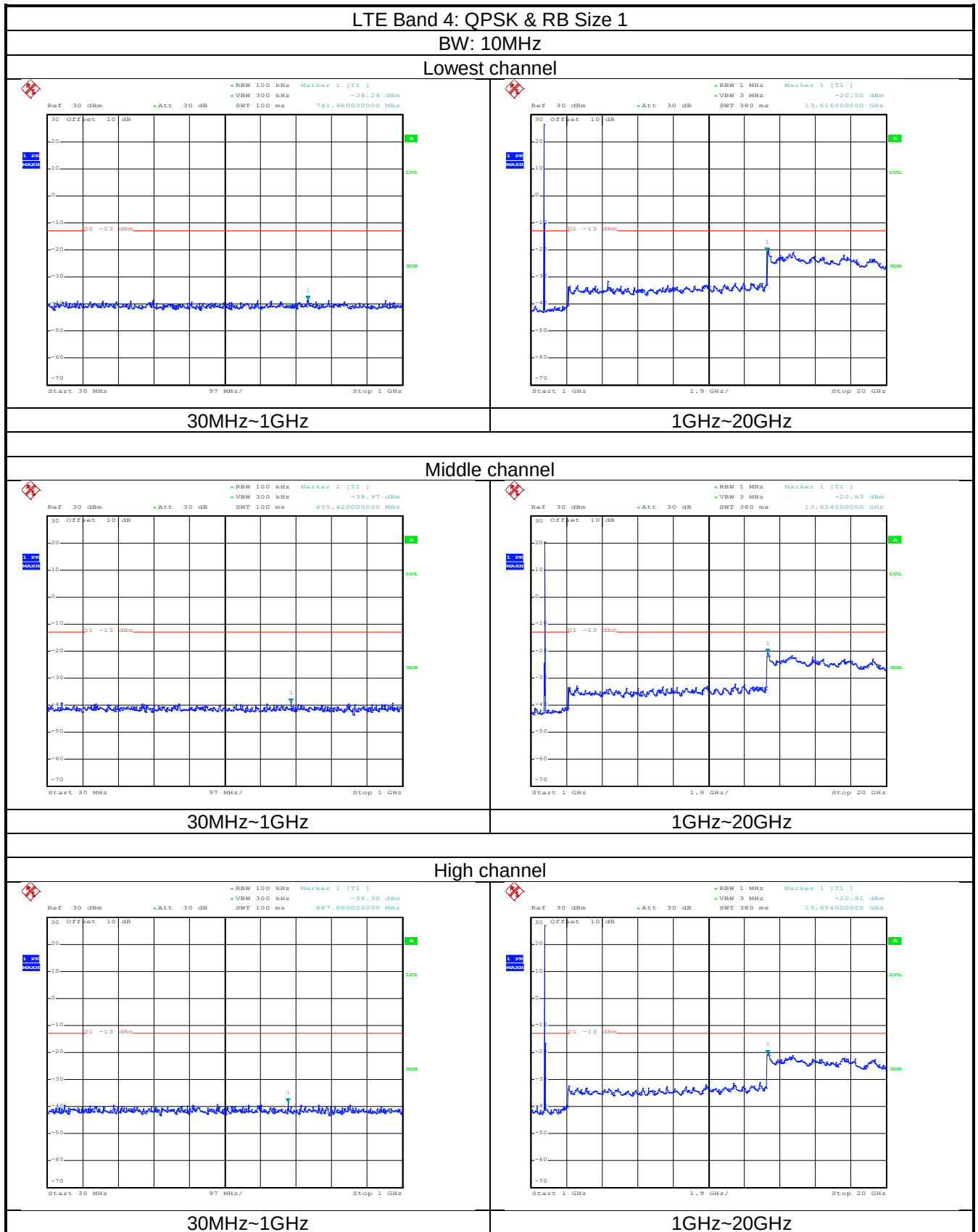


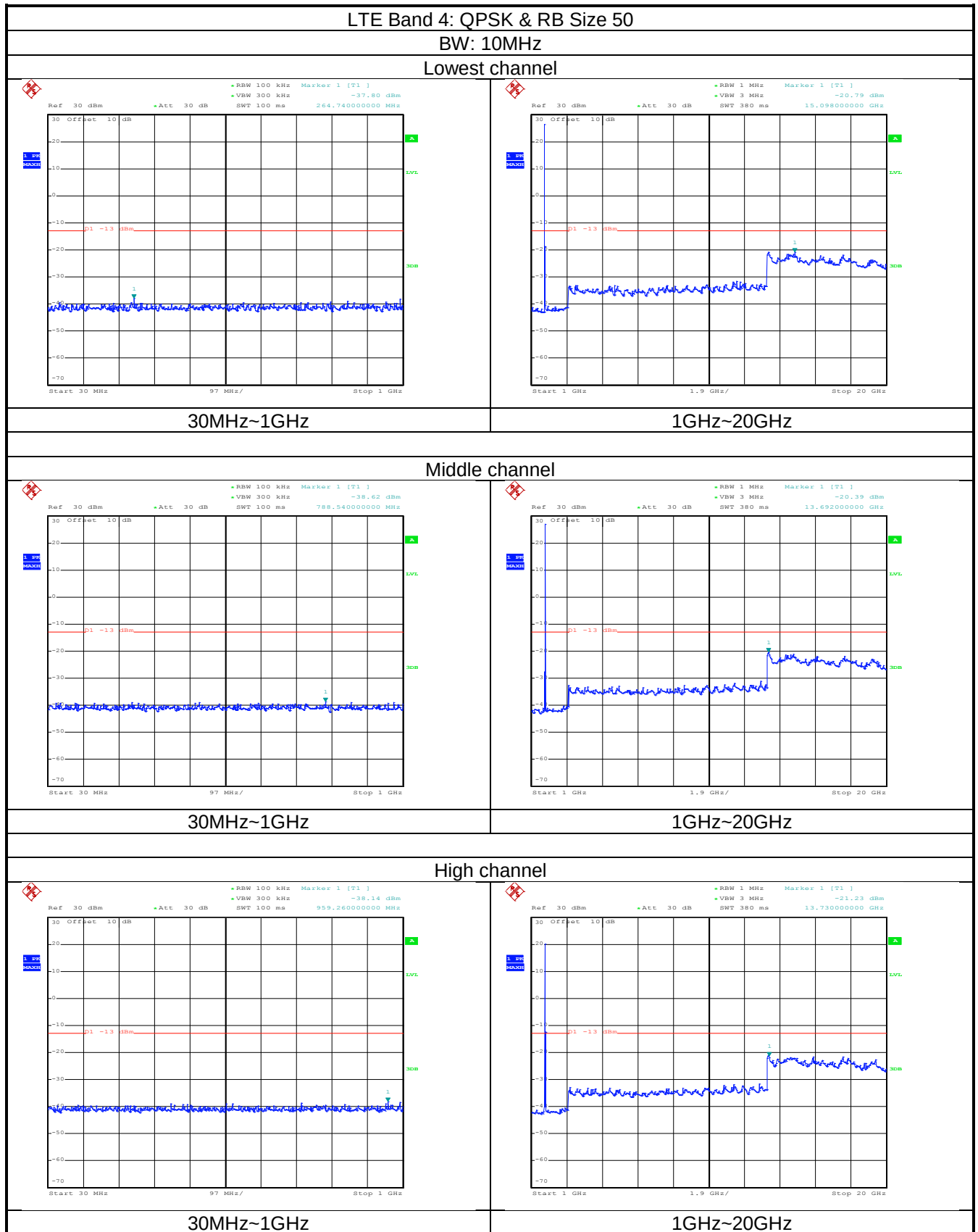








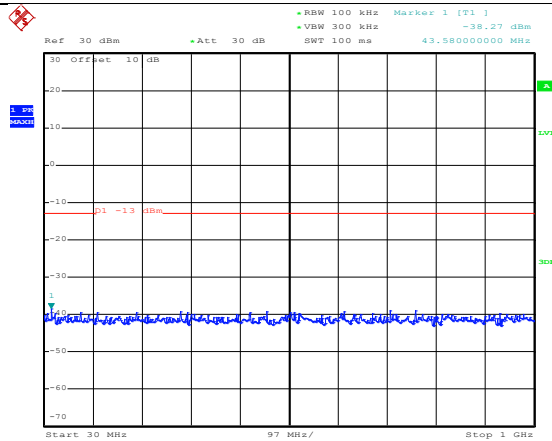




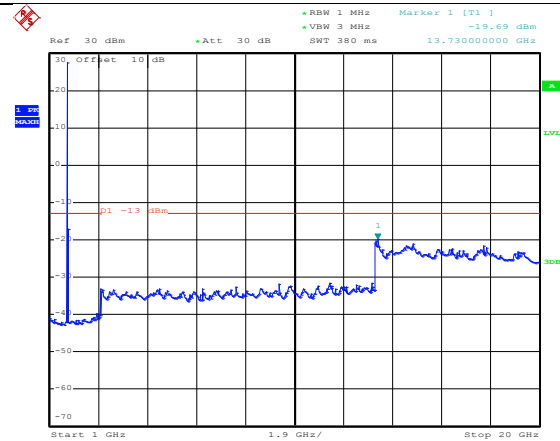
LTE Band 4: 16 QAM & RB Size 1

BW: 15MHz

Lowest channel

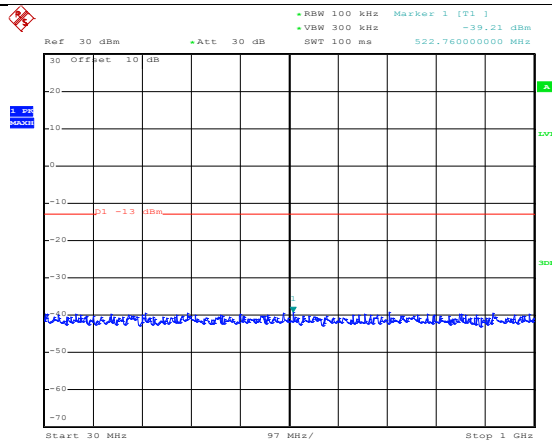


30MHz~1GHz

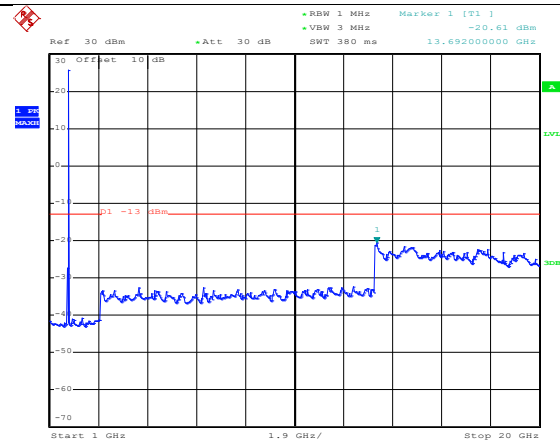


1GHz~20GHz

Middle channel

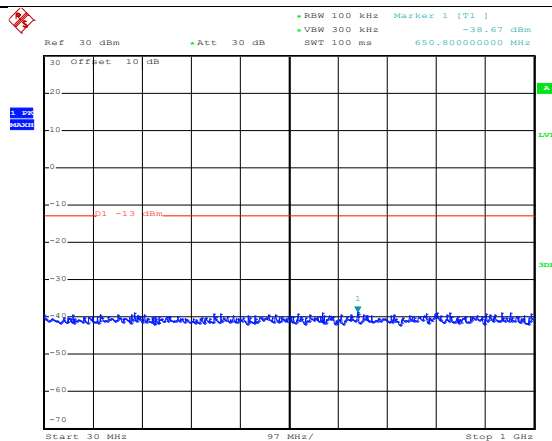


30MHz~1GHz

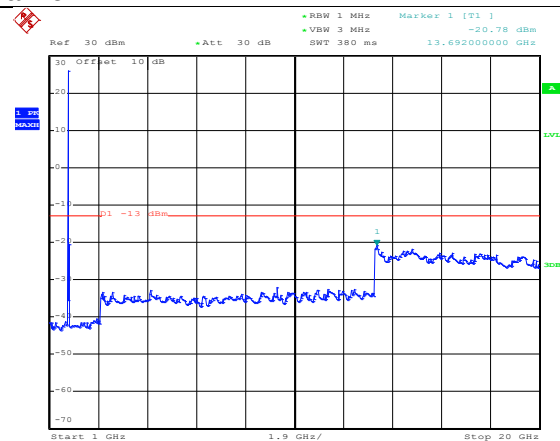


1GHz~20GHz

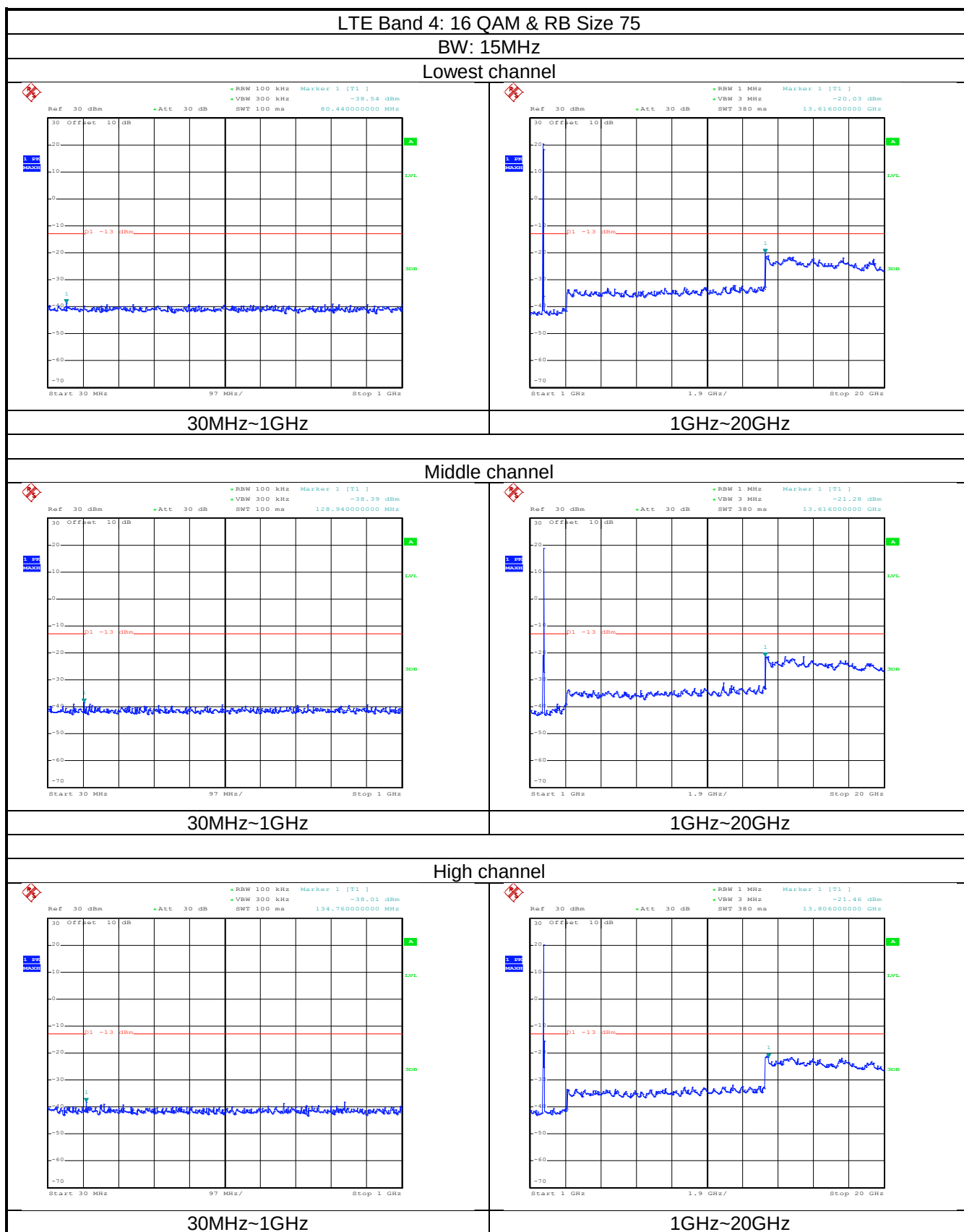
High channel

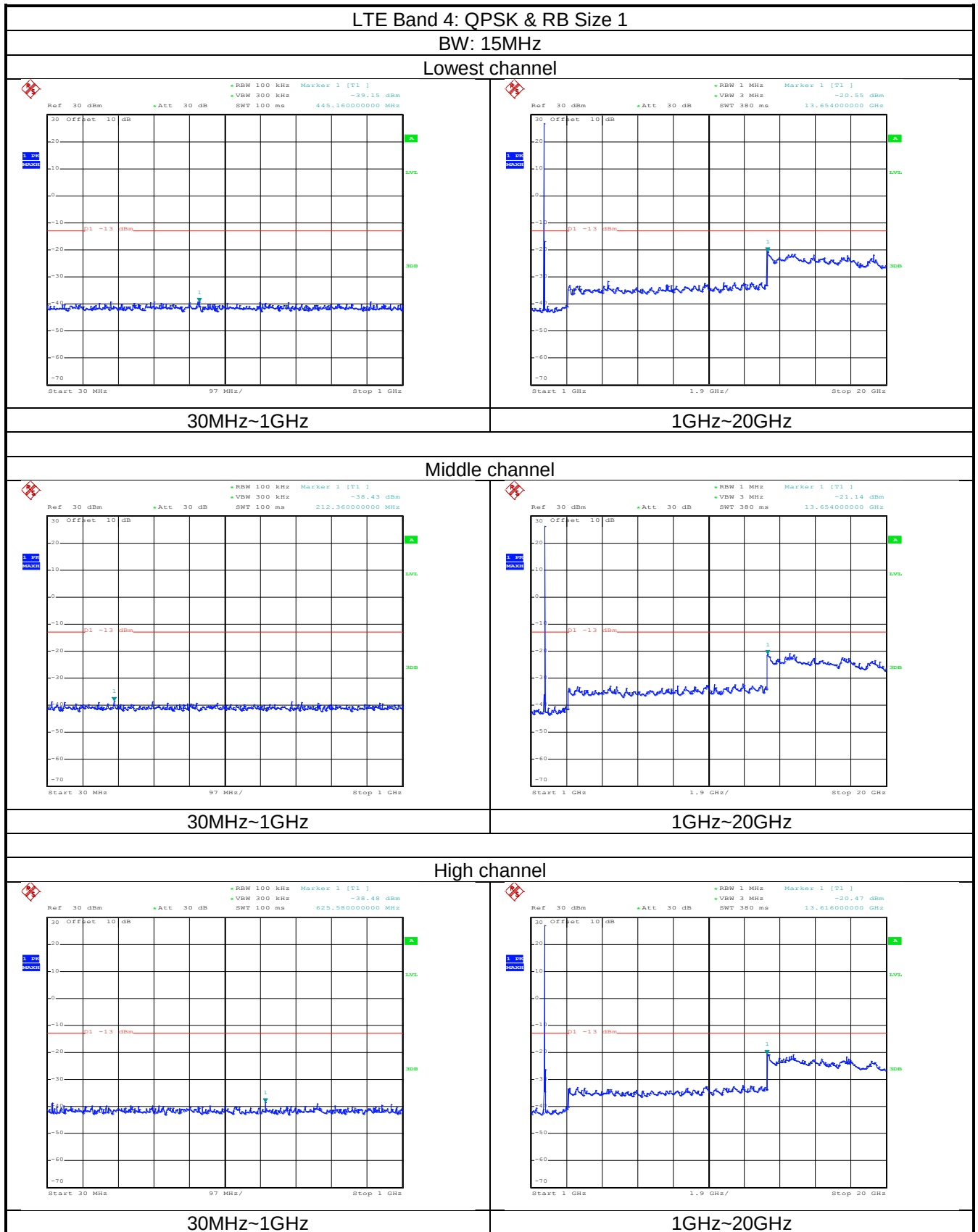


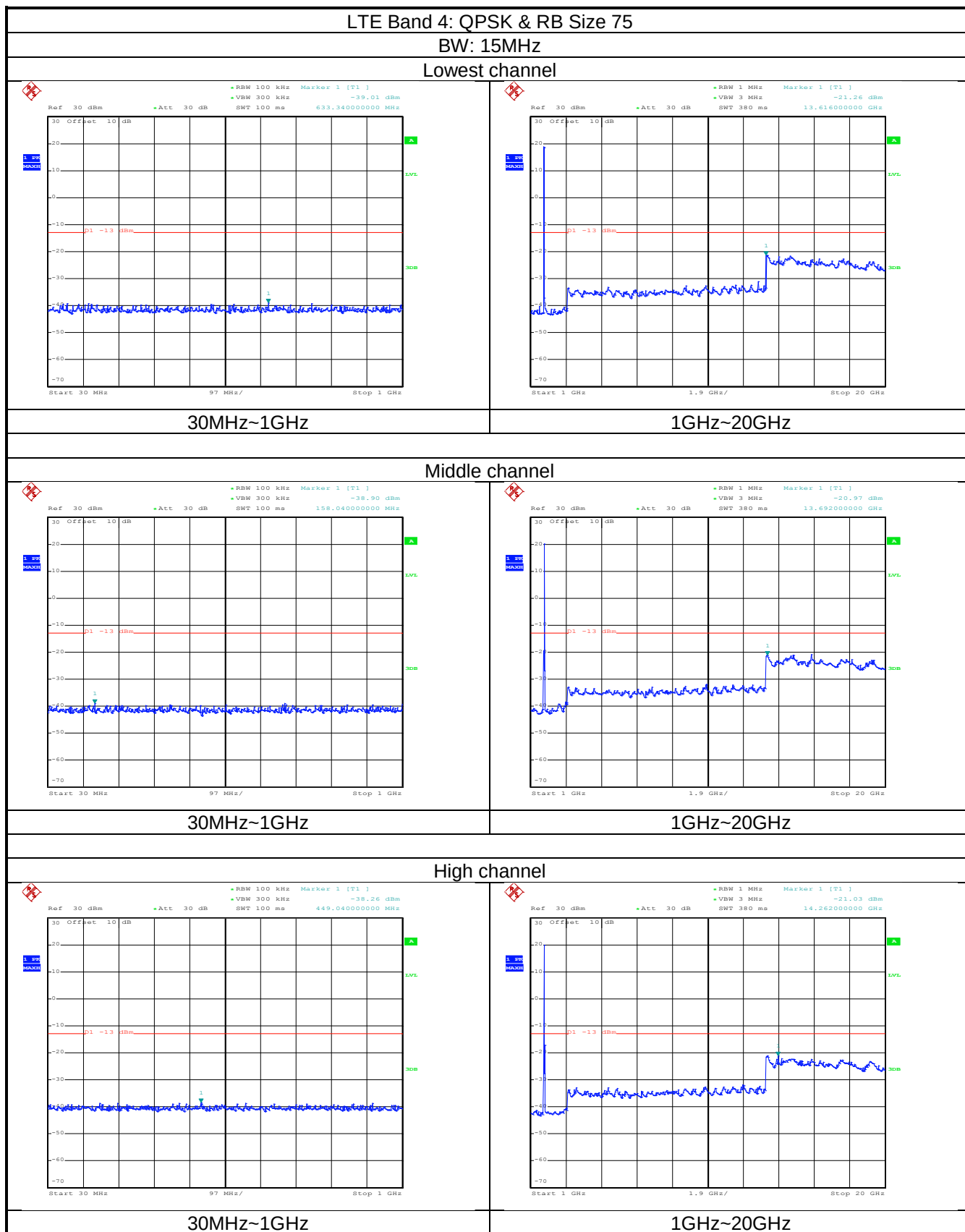
30MHz~1GHz

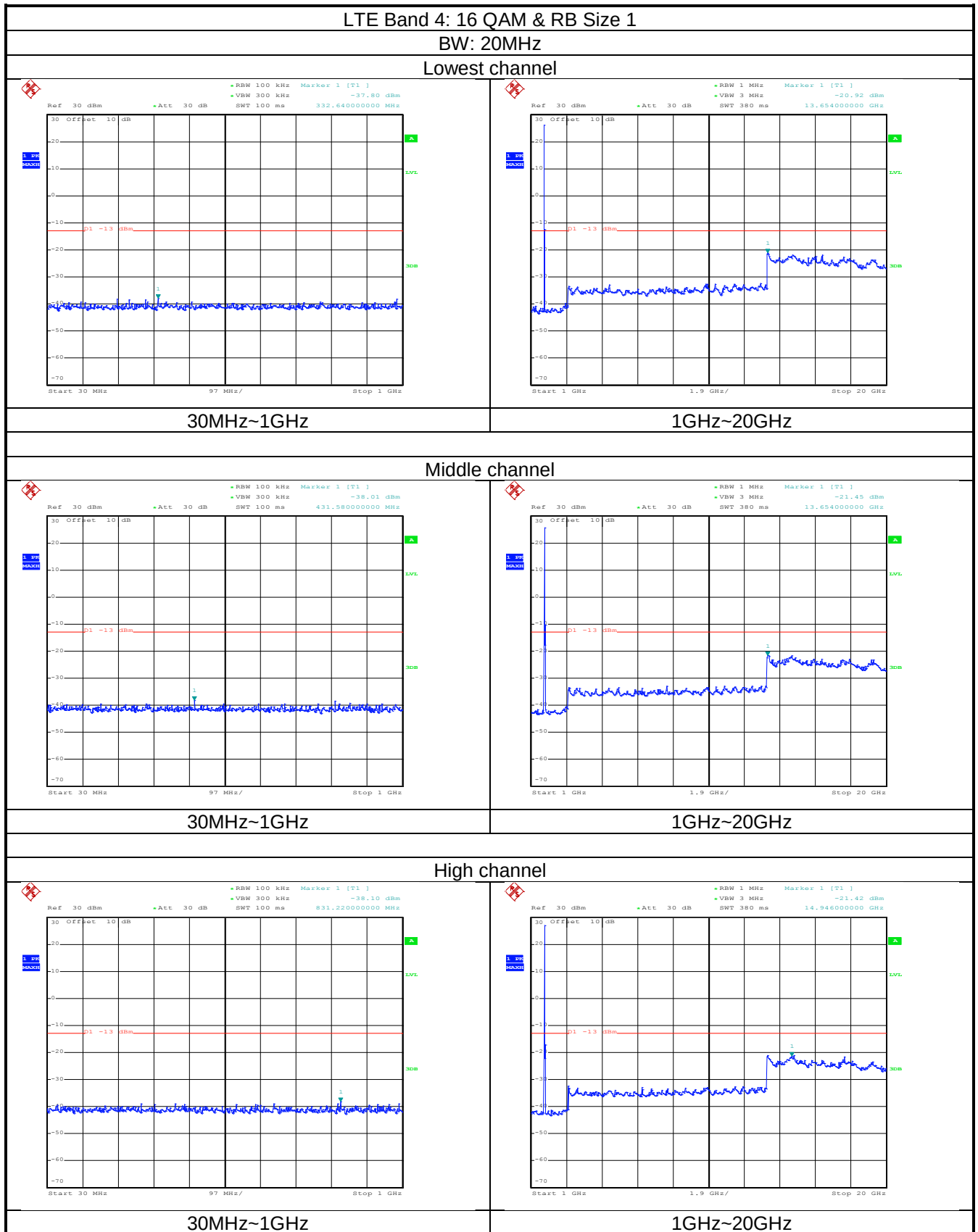


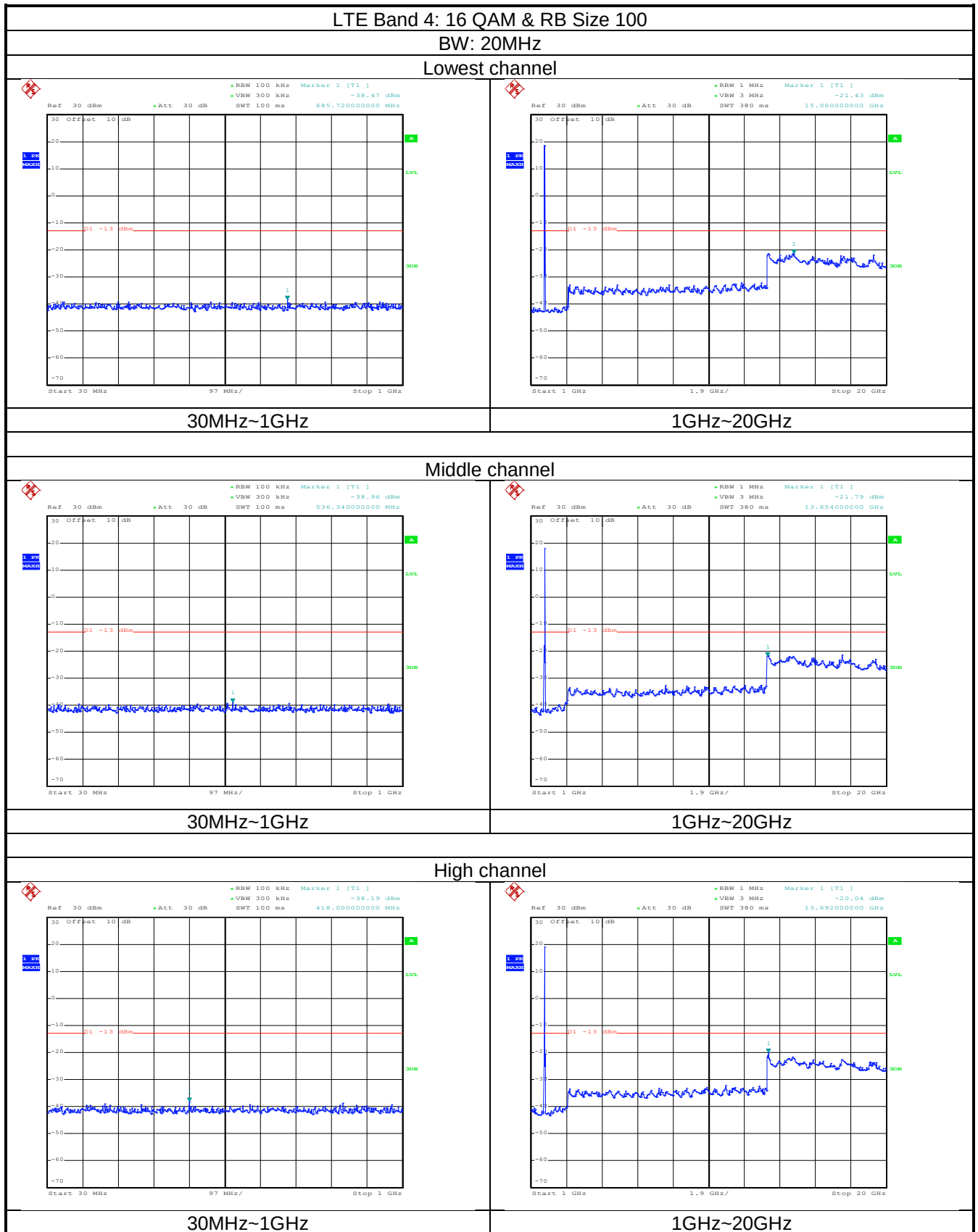
1GHz~20GHz

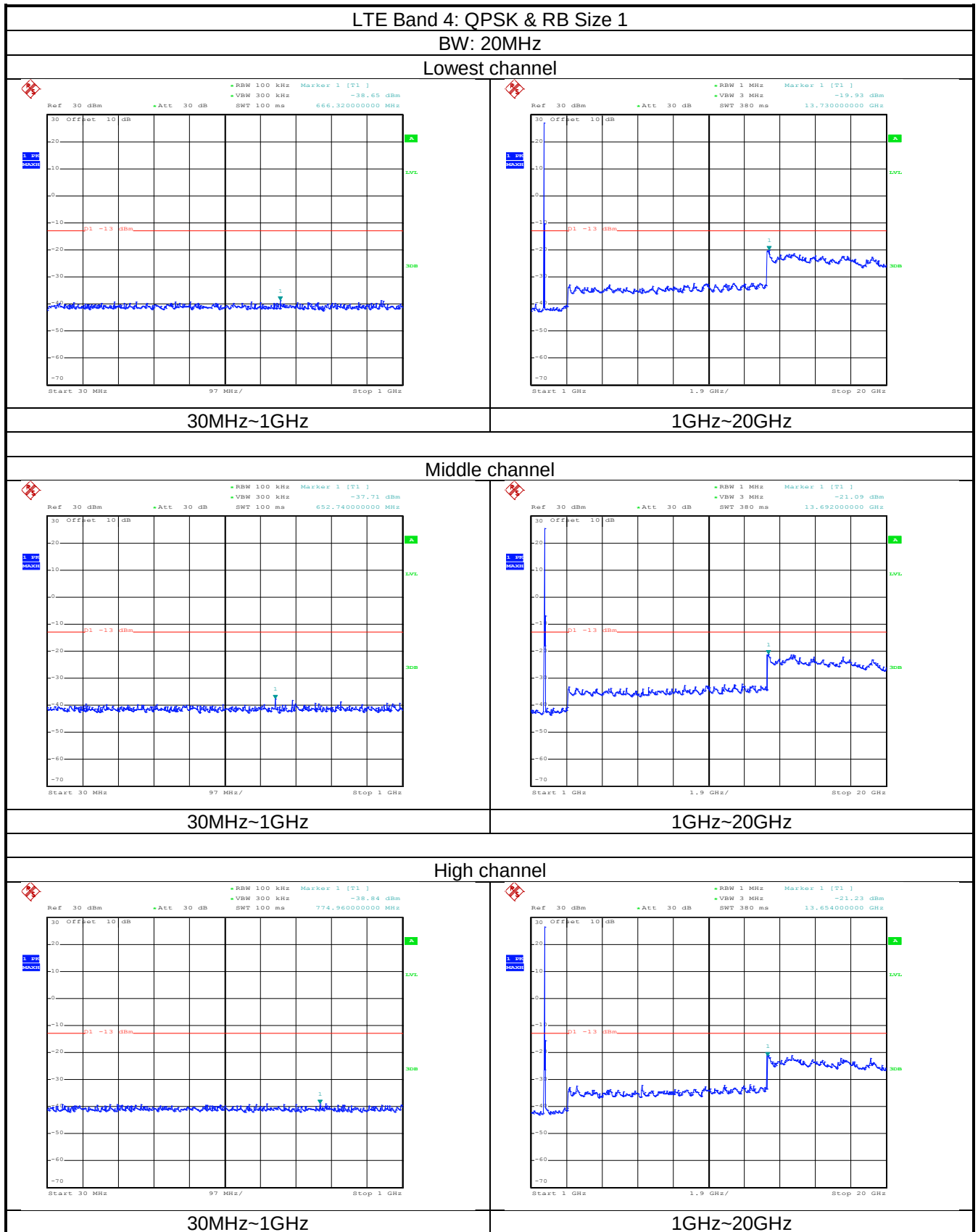


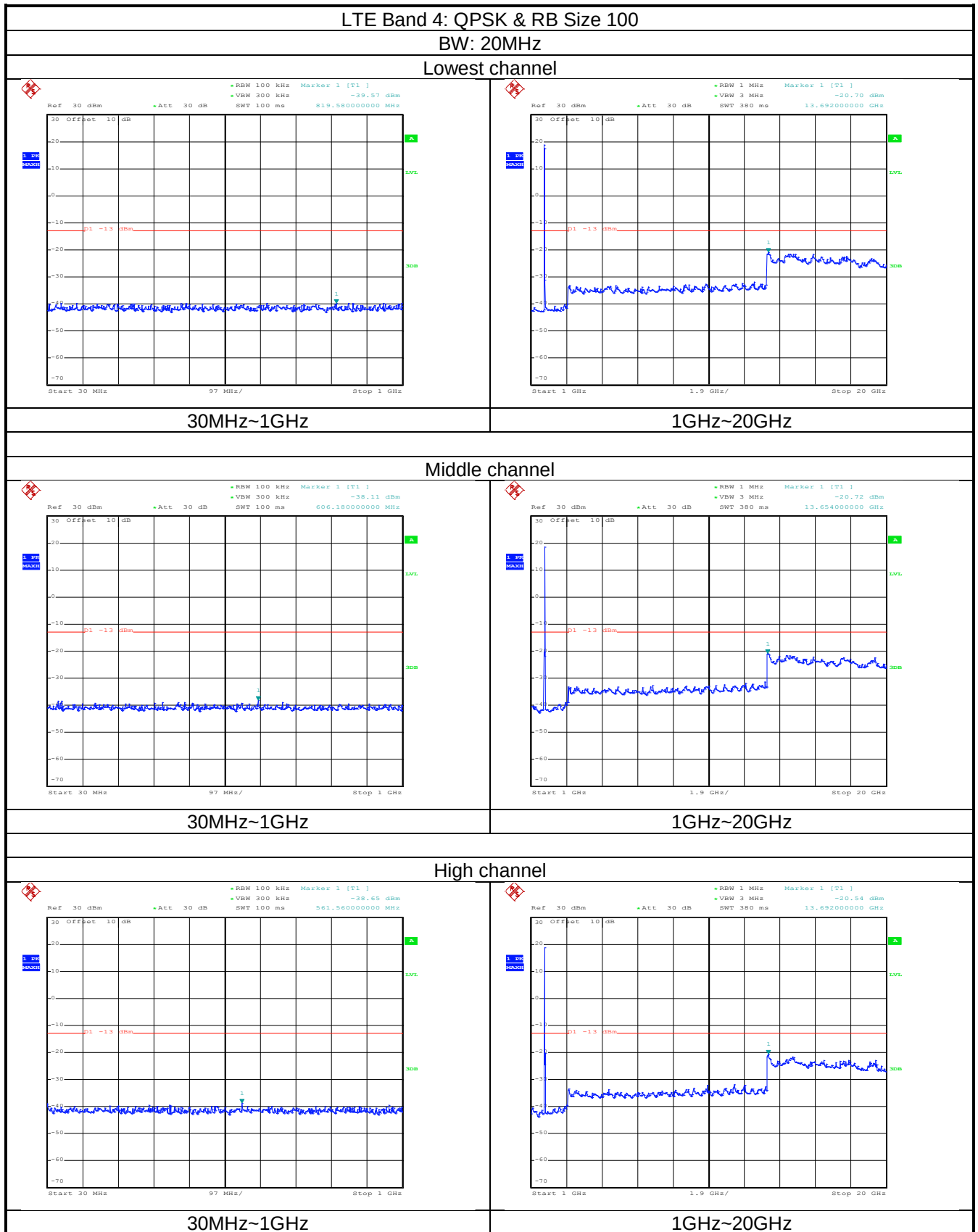




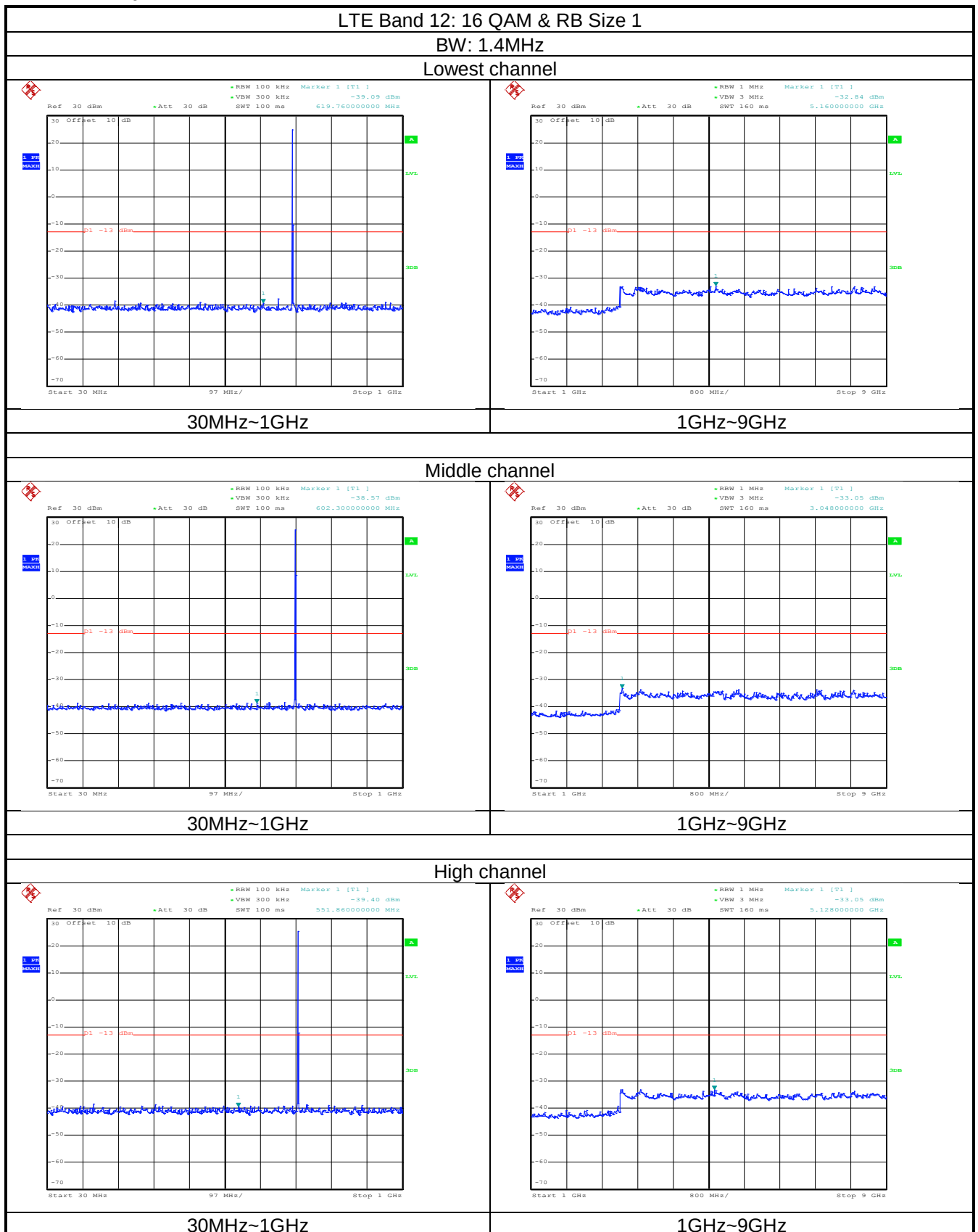








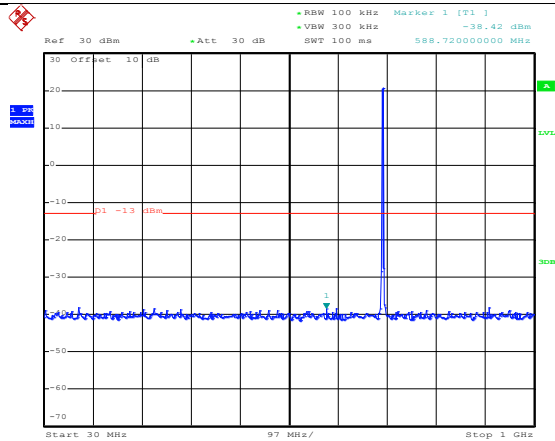
LTE Band 12 part:



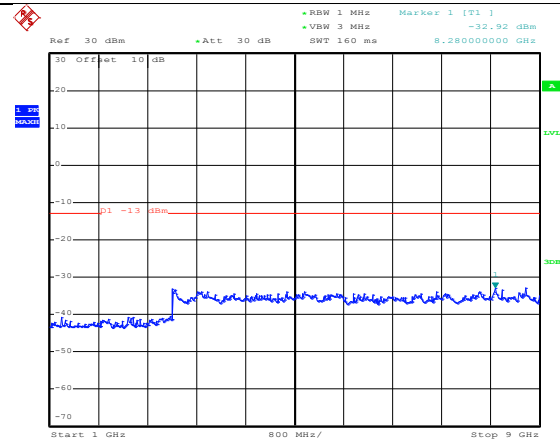
LTE Band 12: 16 QAM & RB Size 6

BW: 1.4MHz

Lowest channel

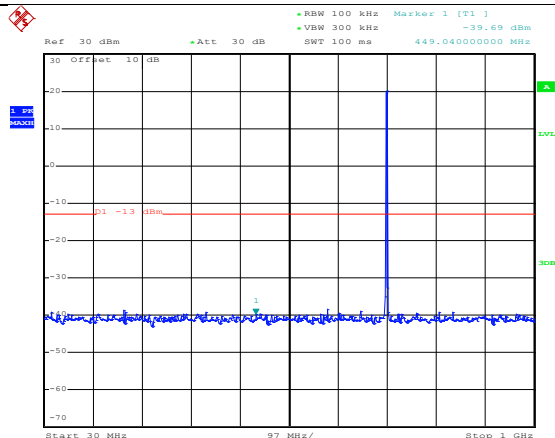


30MHz~1GHz

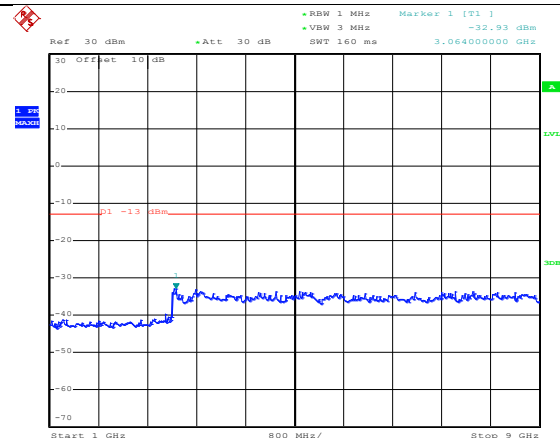


1GHz~9GHz

Middle channel

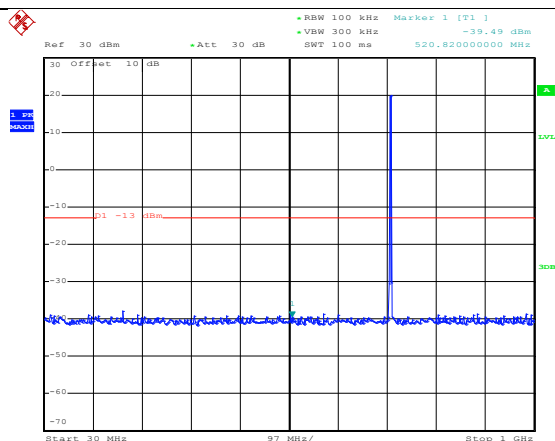


30MHz~1GHz

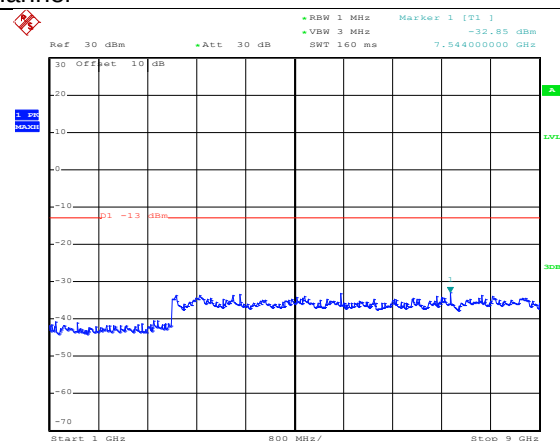


1GHz~9GHz

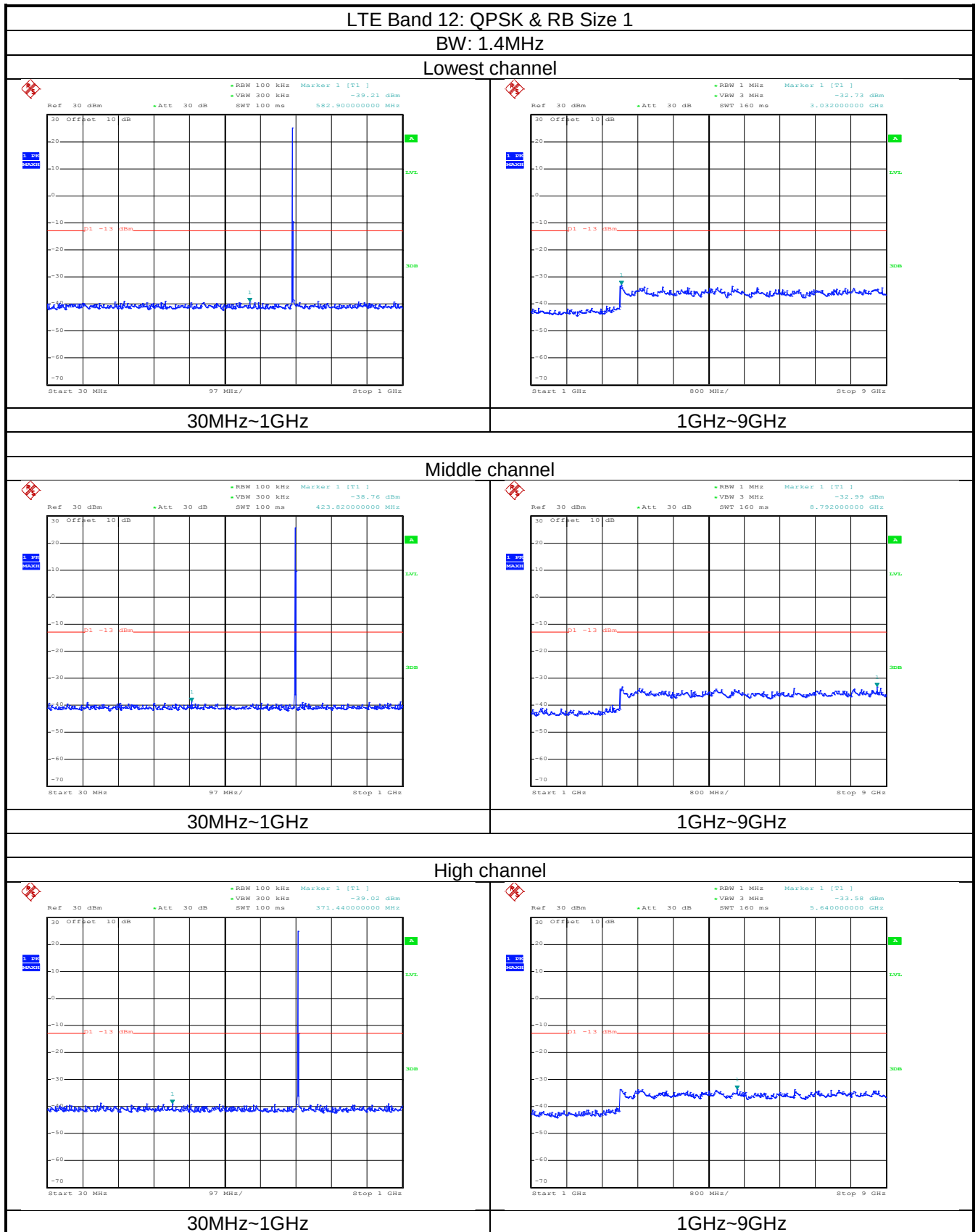
High channel

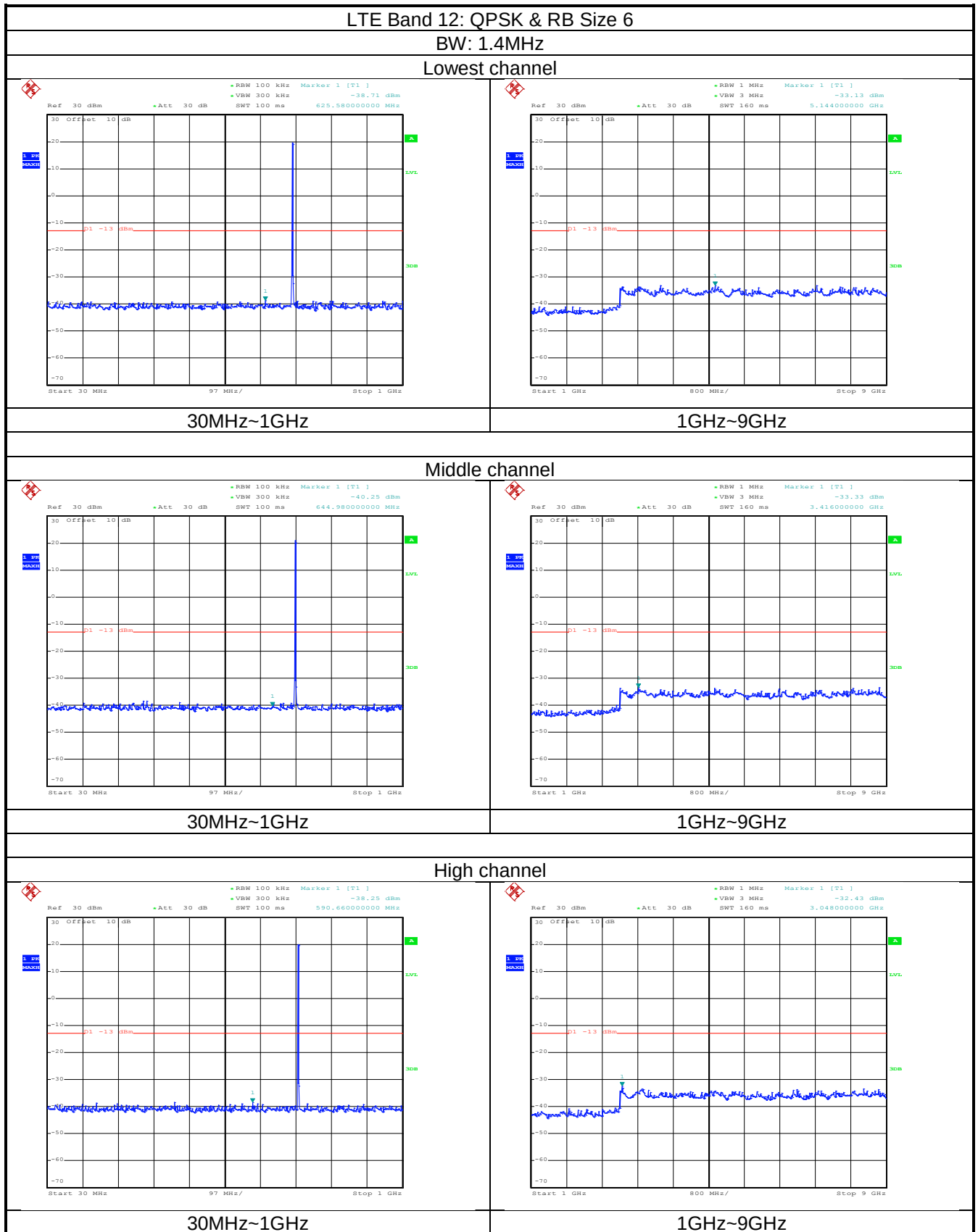


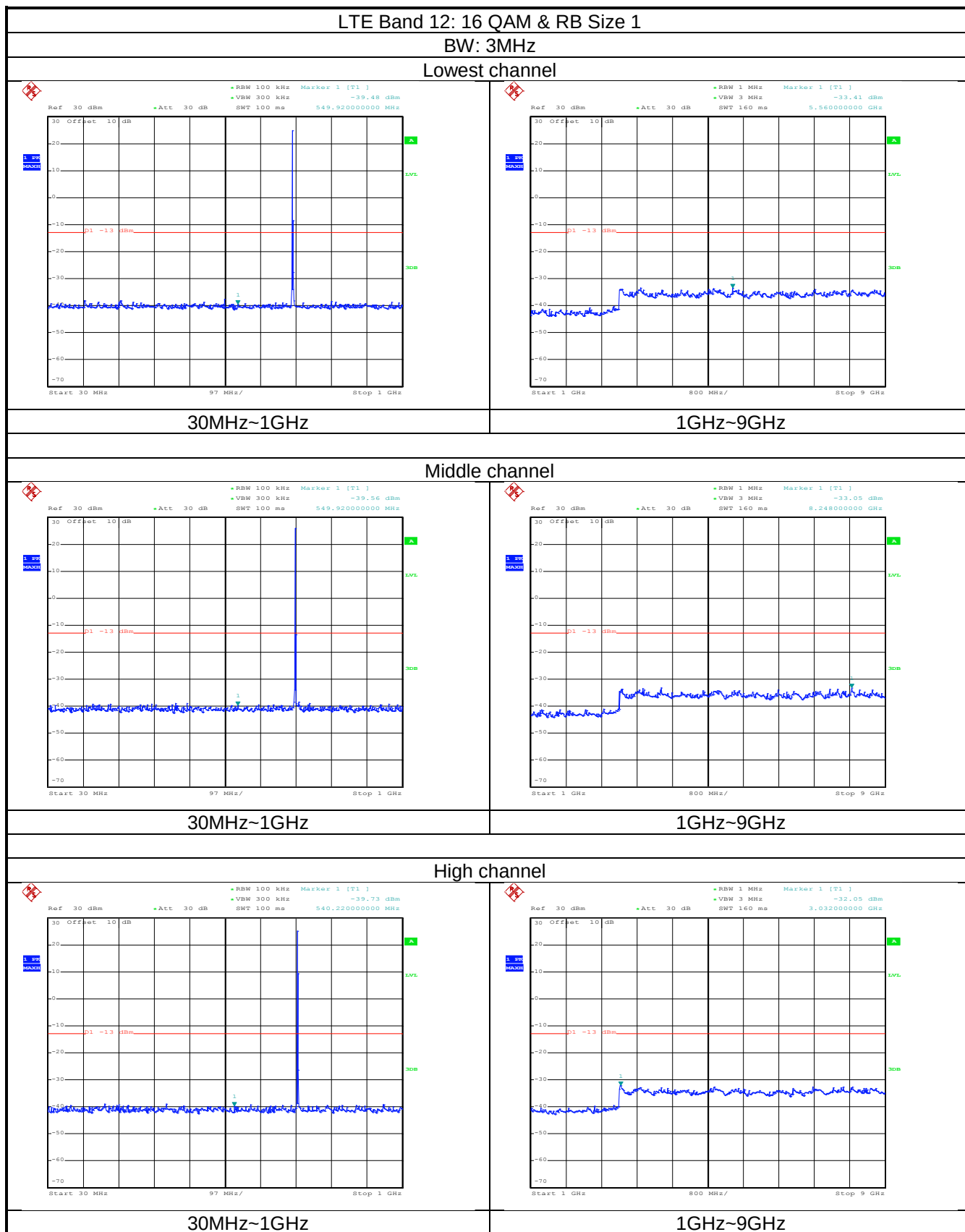
30MHz~1GHz



1GHz~9GHz



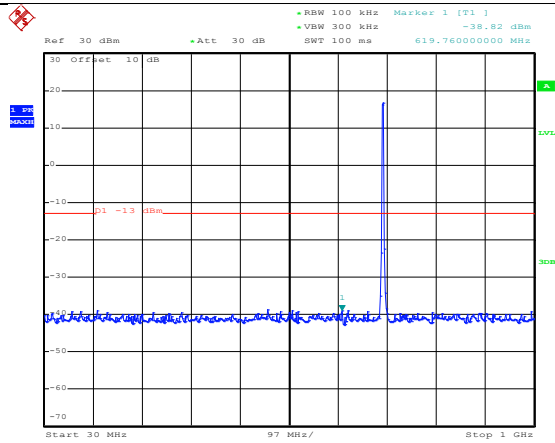




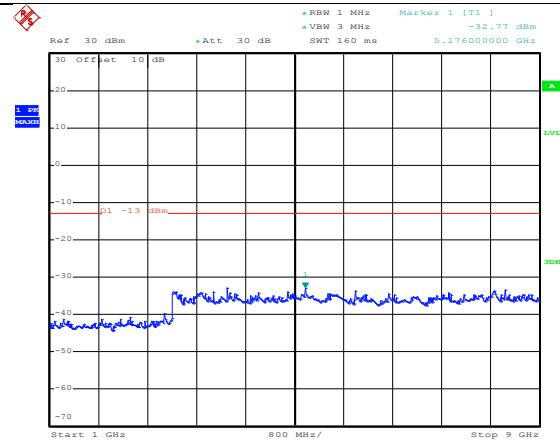
LTE Band 12: 16 QAM & RB Size 15

BW: 3MHz

Lowest channel

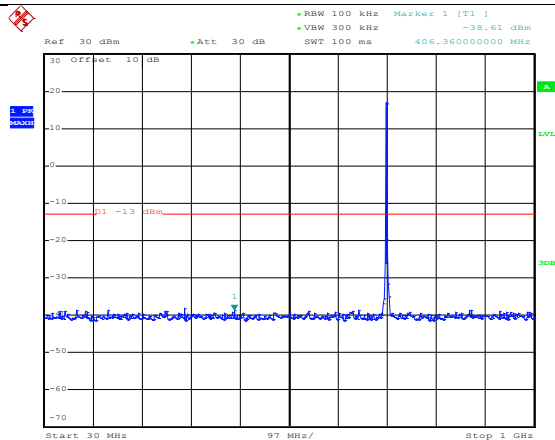


30MHz~1GHz

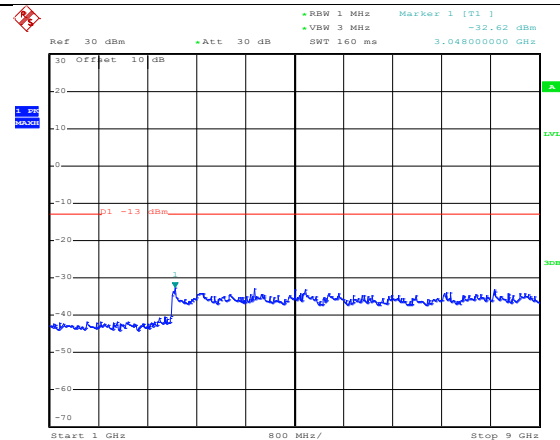


1GHz~9GHz

Middle channel

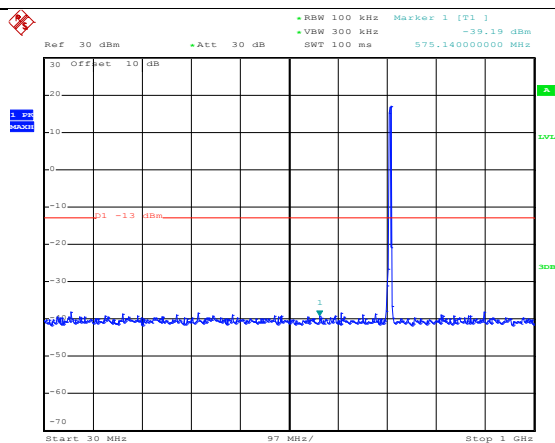


30MHz~1GHz

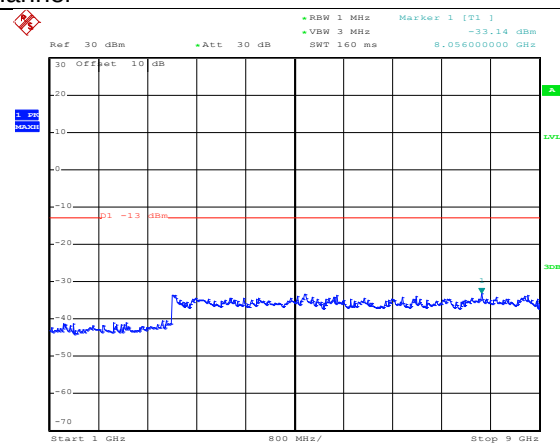


1GHz~9GHz

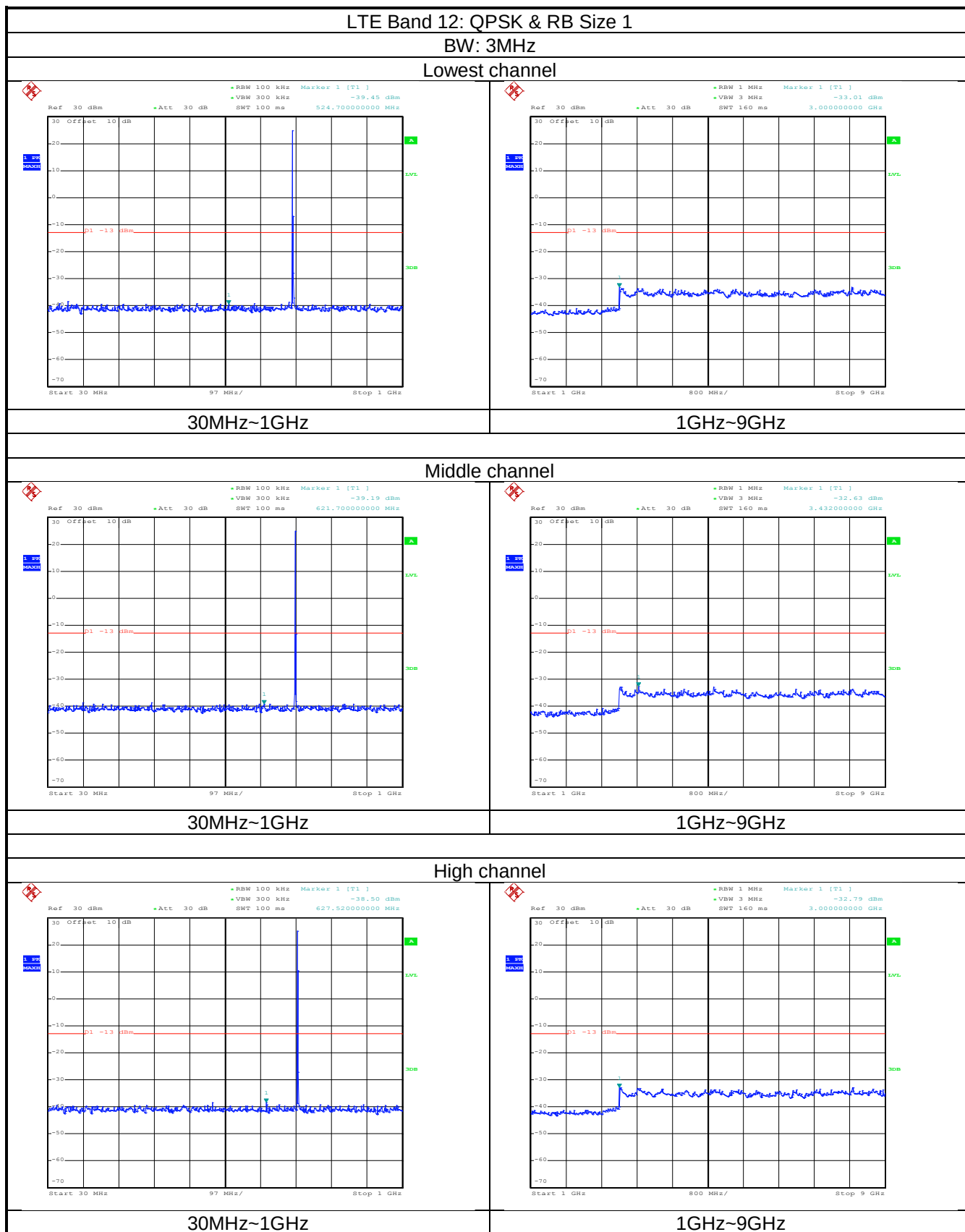
High channel



30MHz~1GHz



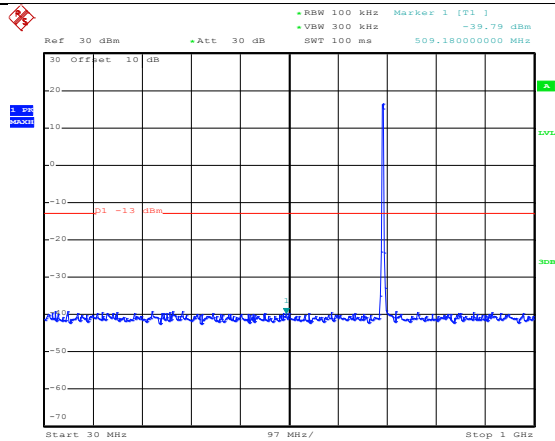
1GHz~9GHz



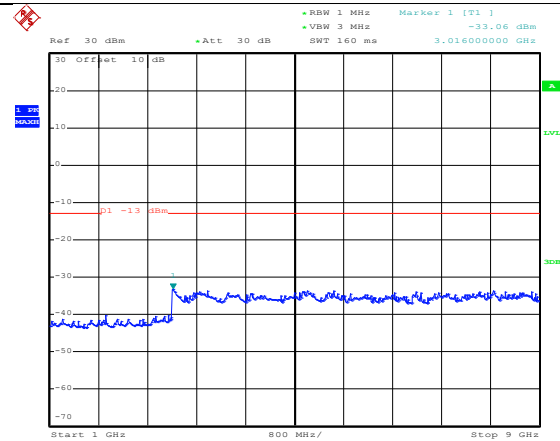
LTE Band 12: QPSK & RB Size 15

BW: 3MHz

Lowest channel

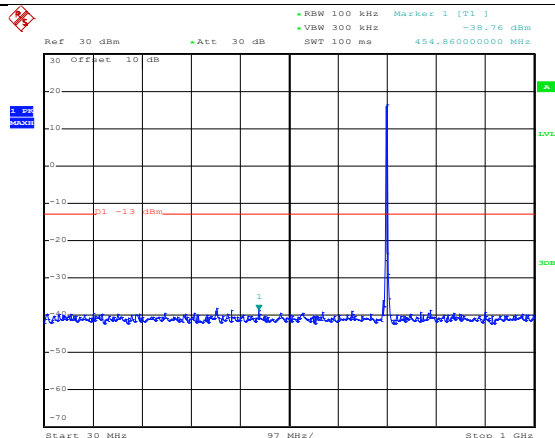


30MHz~1GHz

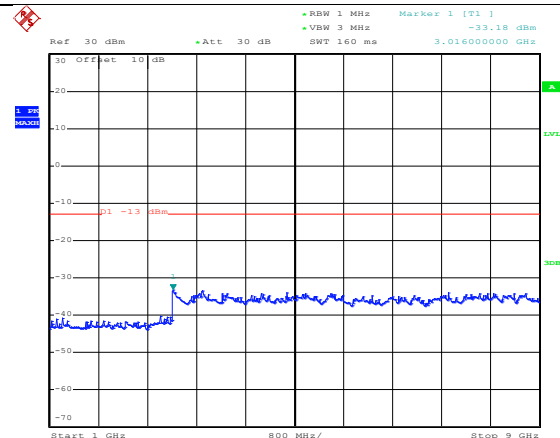


1GHz~9GHz

Middle channel

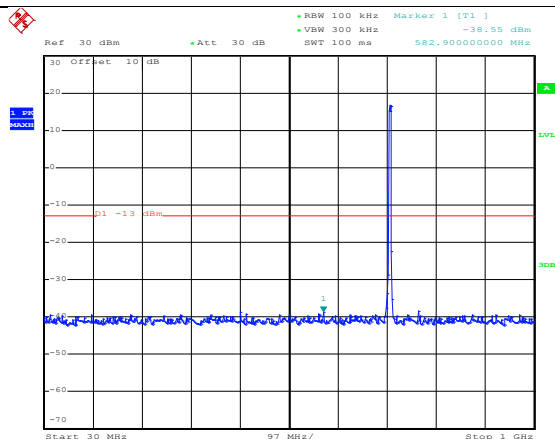


30MHz~1GHz

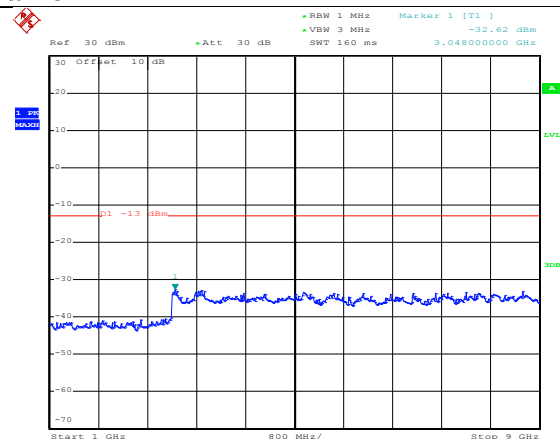


1GHz~9GHz

High channel



30MHz~1GHz

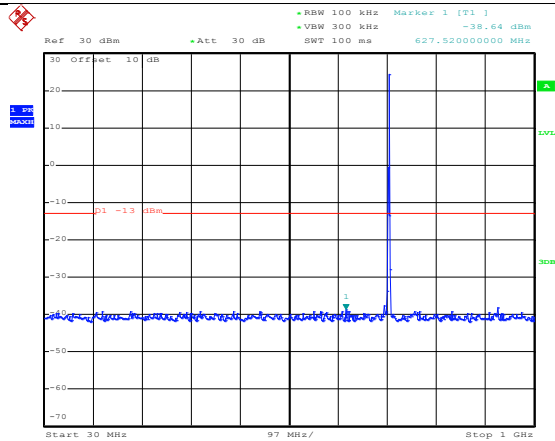


1GHz~9GHz

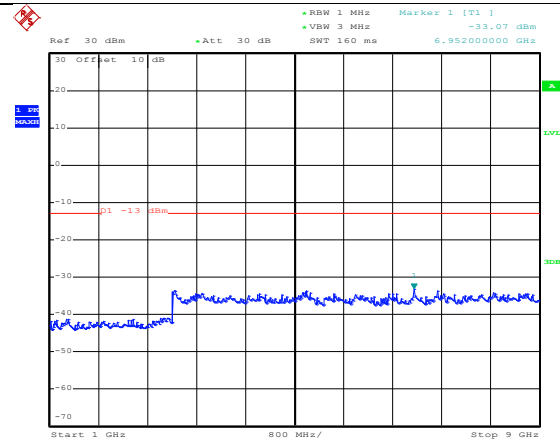
LTE Band 12: 16 QAM & RB Size 1

BW: 5MHz

Lowest channel

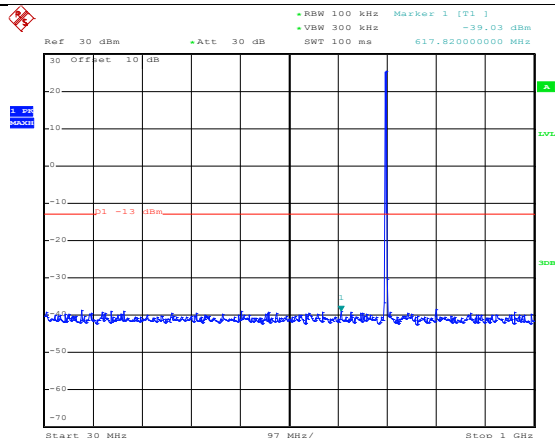


30MHz~1GHz

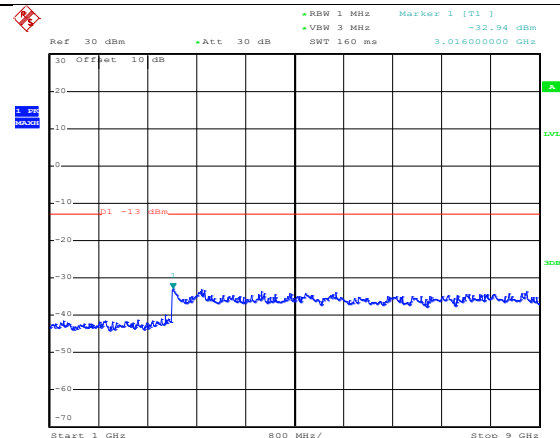


1GHz~9GHz

Middle channel

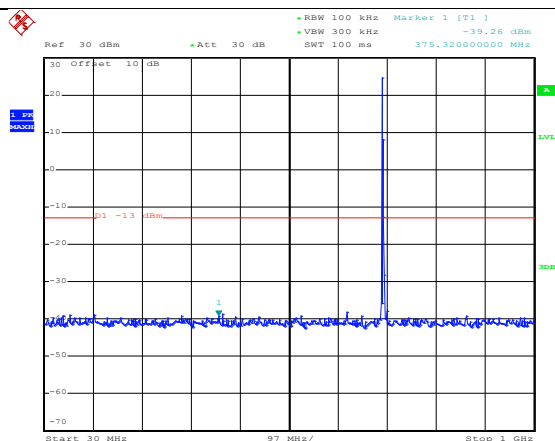


30MHz~1GHz

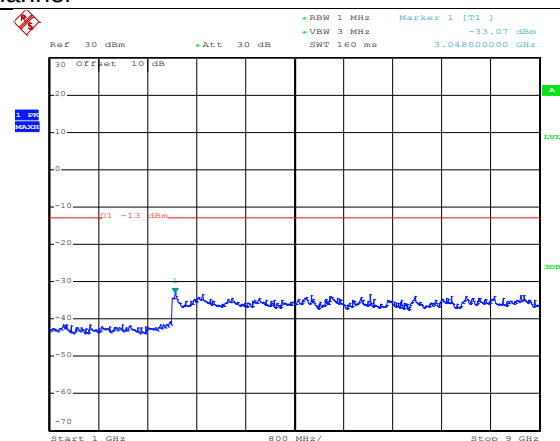


1GHz~9GHz

High channel



30MHz~1GHz

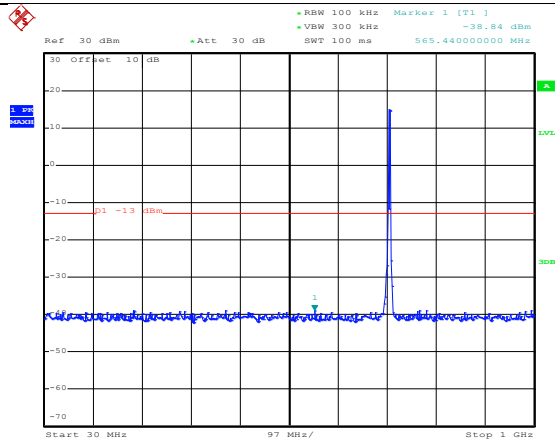


1GHz~9GHz

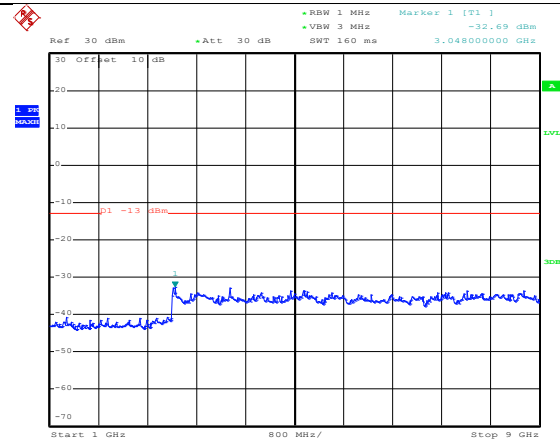
LTE Band 12: 16 QAM & RB Size 25

BW: 5MHz

Lowest channel

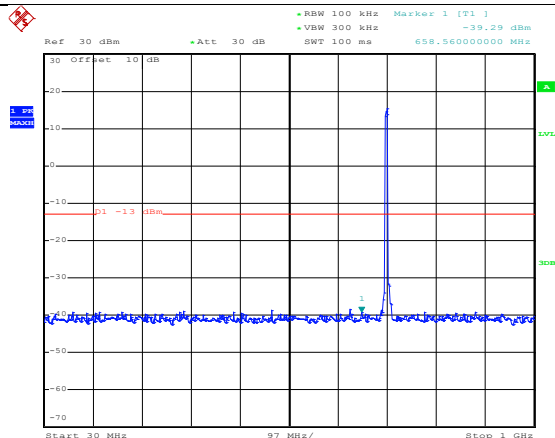


30MHz~1GHz

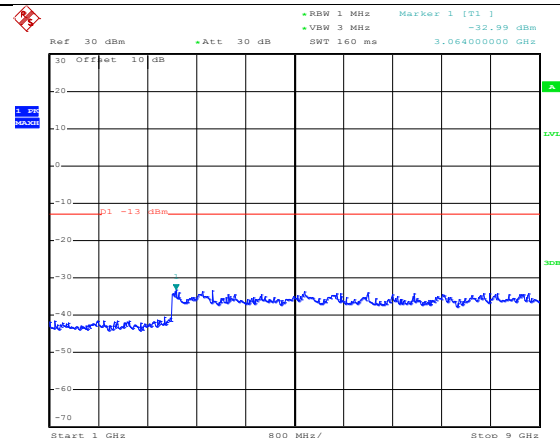


1GHz~9GHz

Middle channel

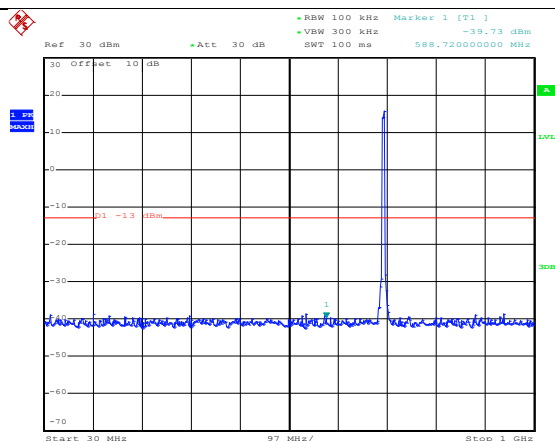


30MHz~1GHz

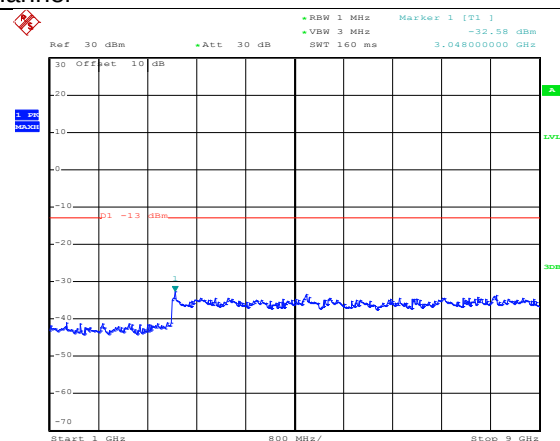


1GHz~9GHz

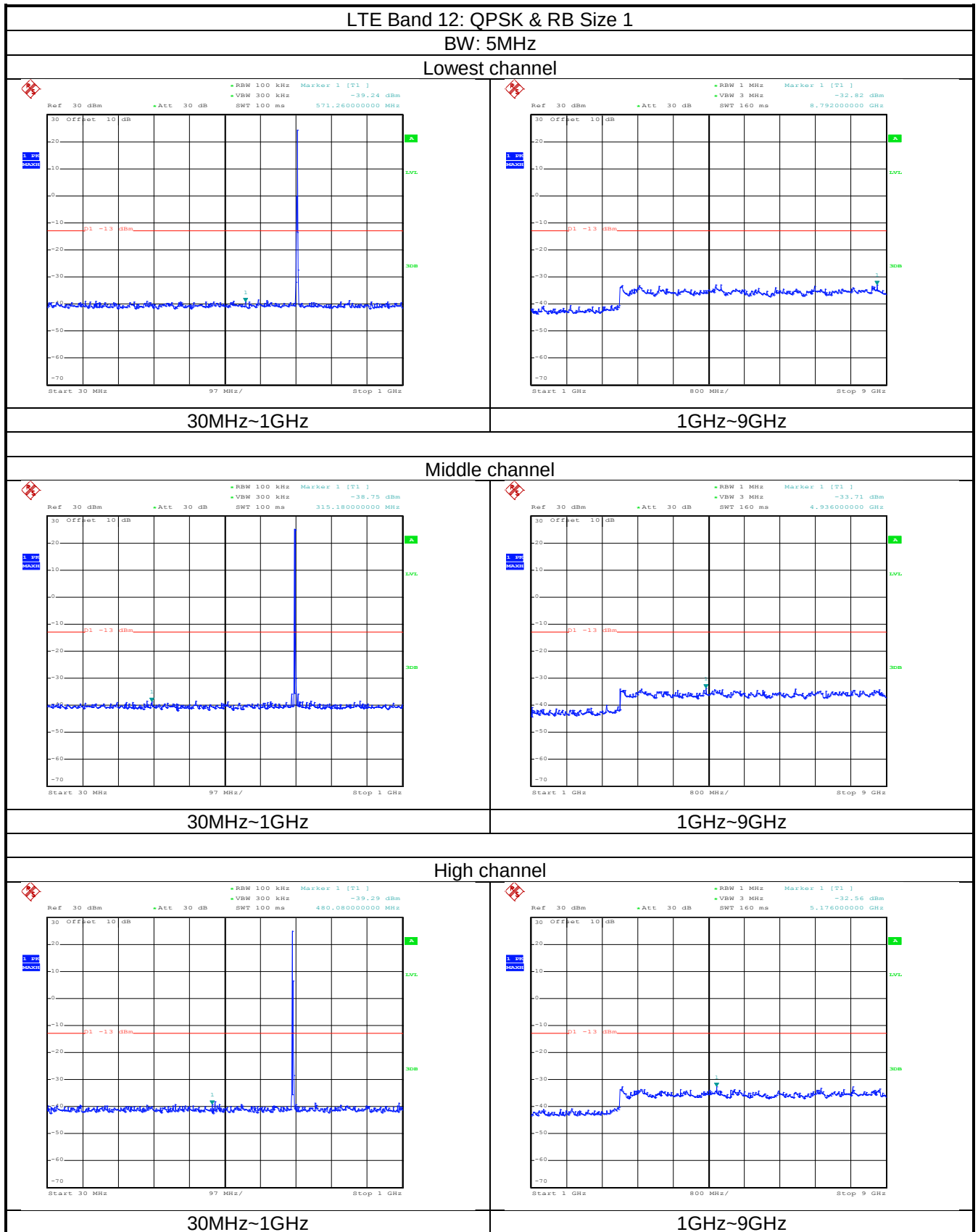
High channel



30MHz~1GHz



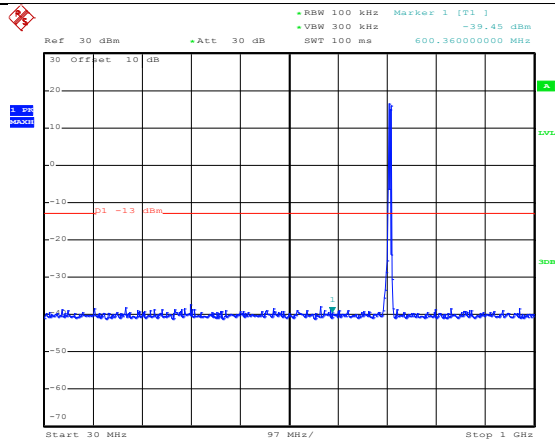
1GHz~9GHz



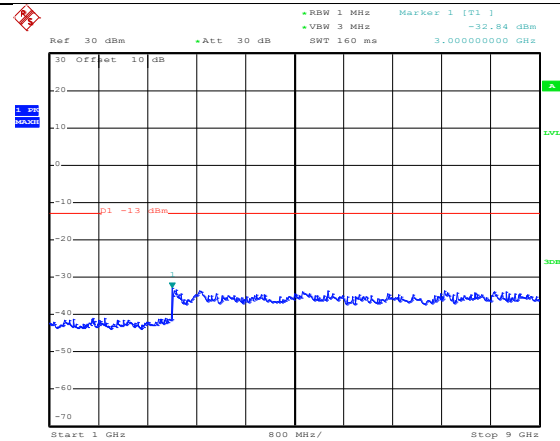
LTE Band 12: QPSK & RB Size 25

BW: 5MHz

Lowest channel

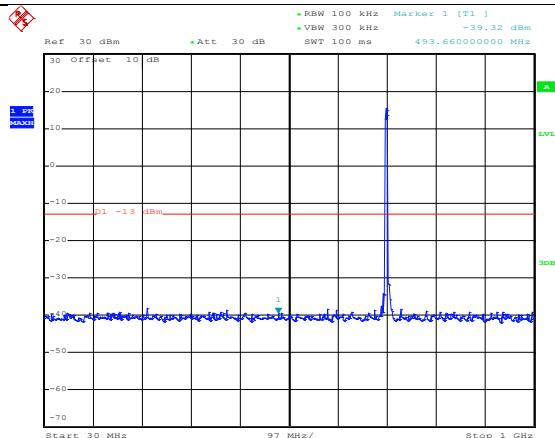


30MHz~1GHz

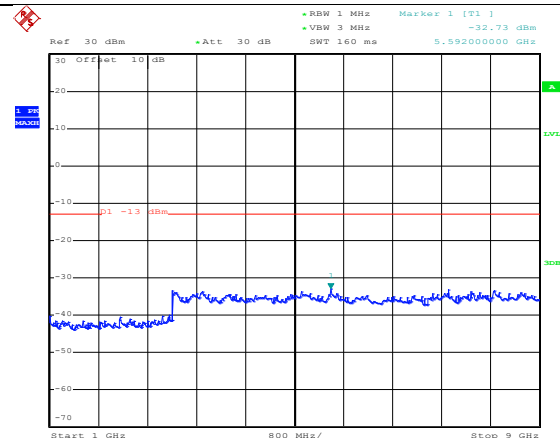


1GHz~9GHz

Middle channel

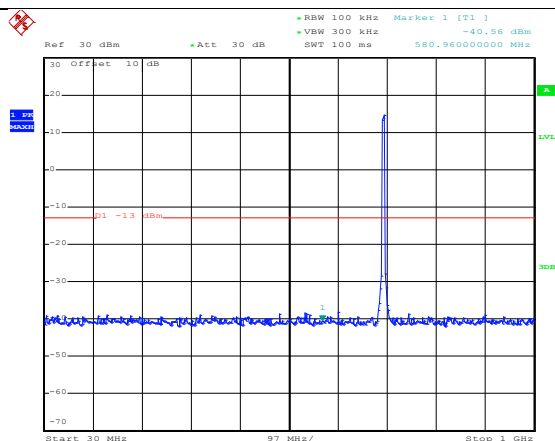


30MHz~1GHz

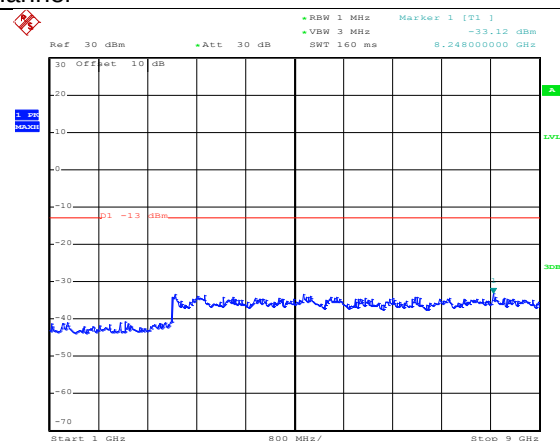


1GHz~9GHz

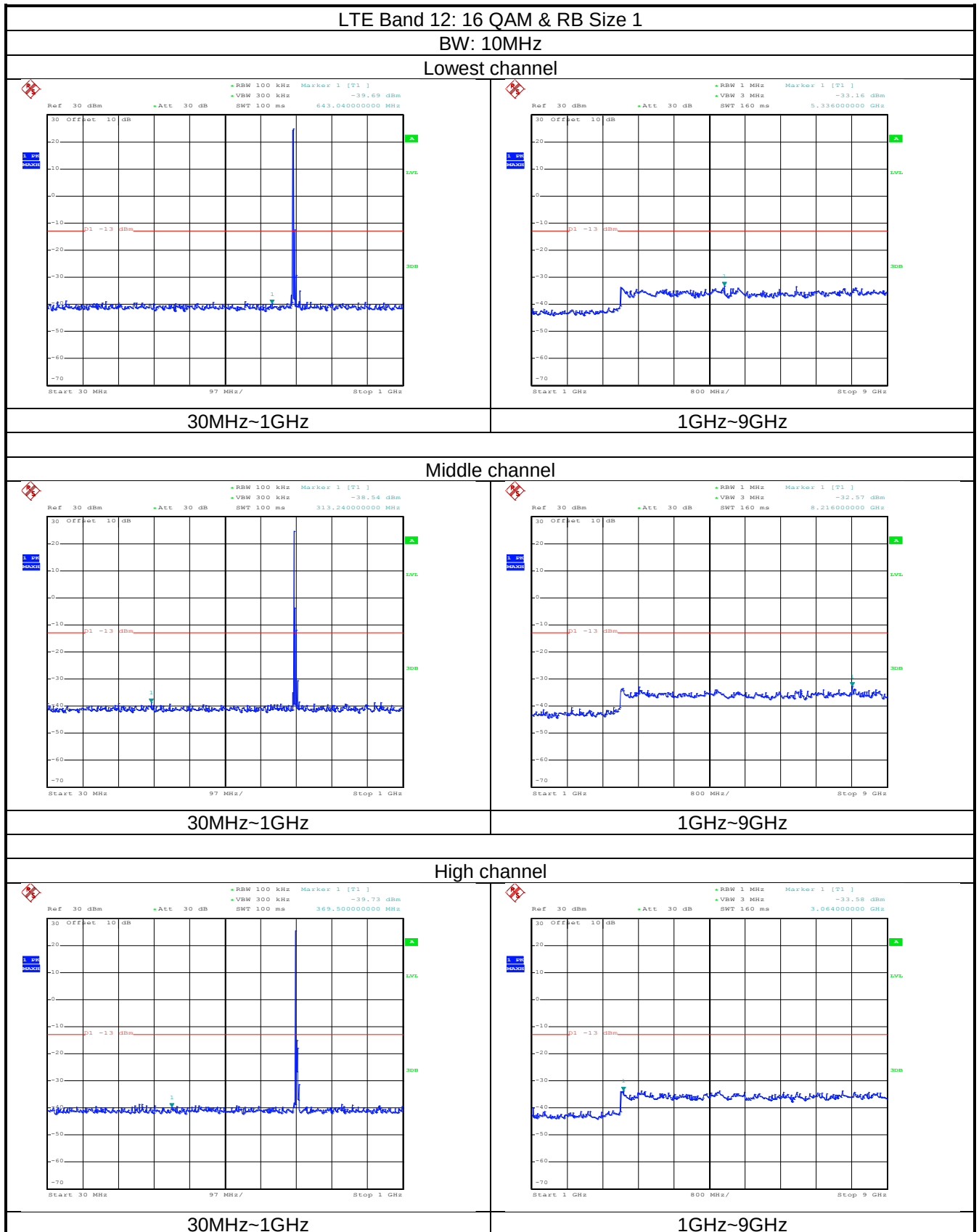
High channel

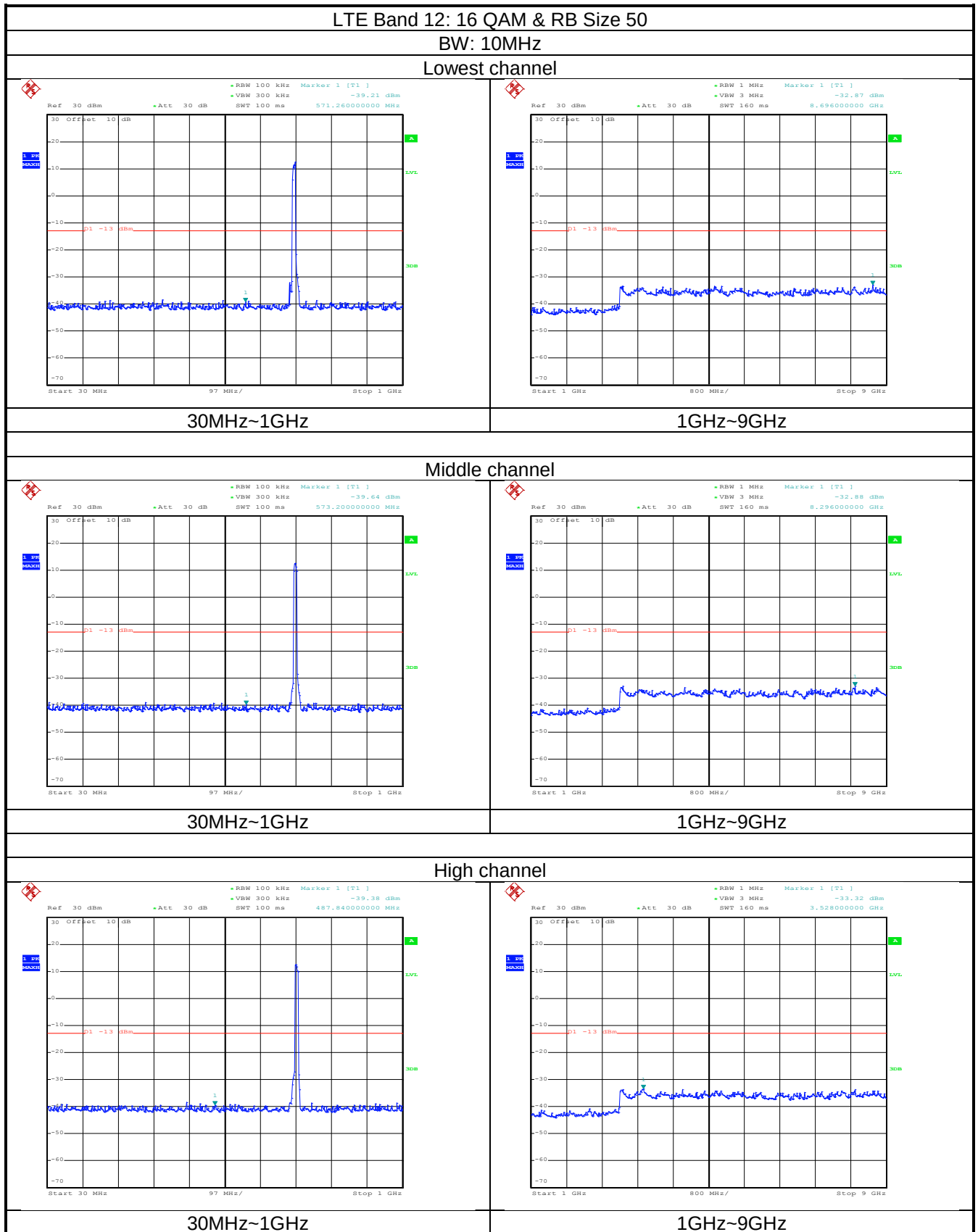


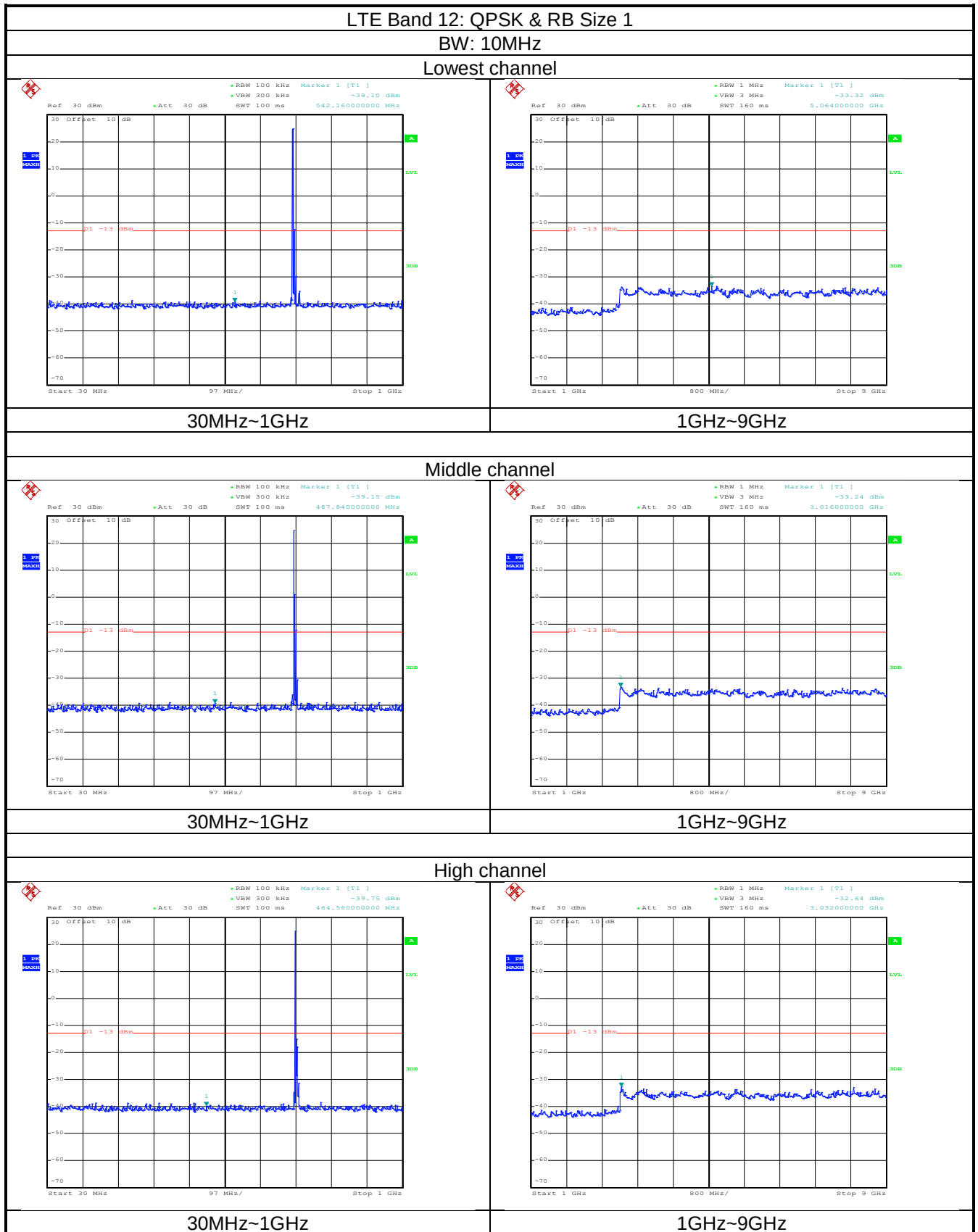
30MHz~1GHz

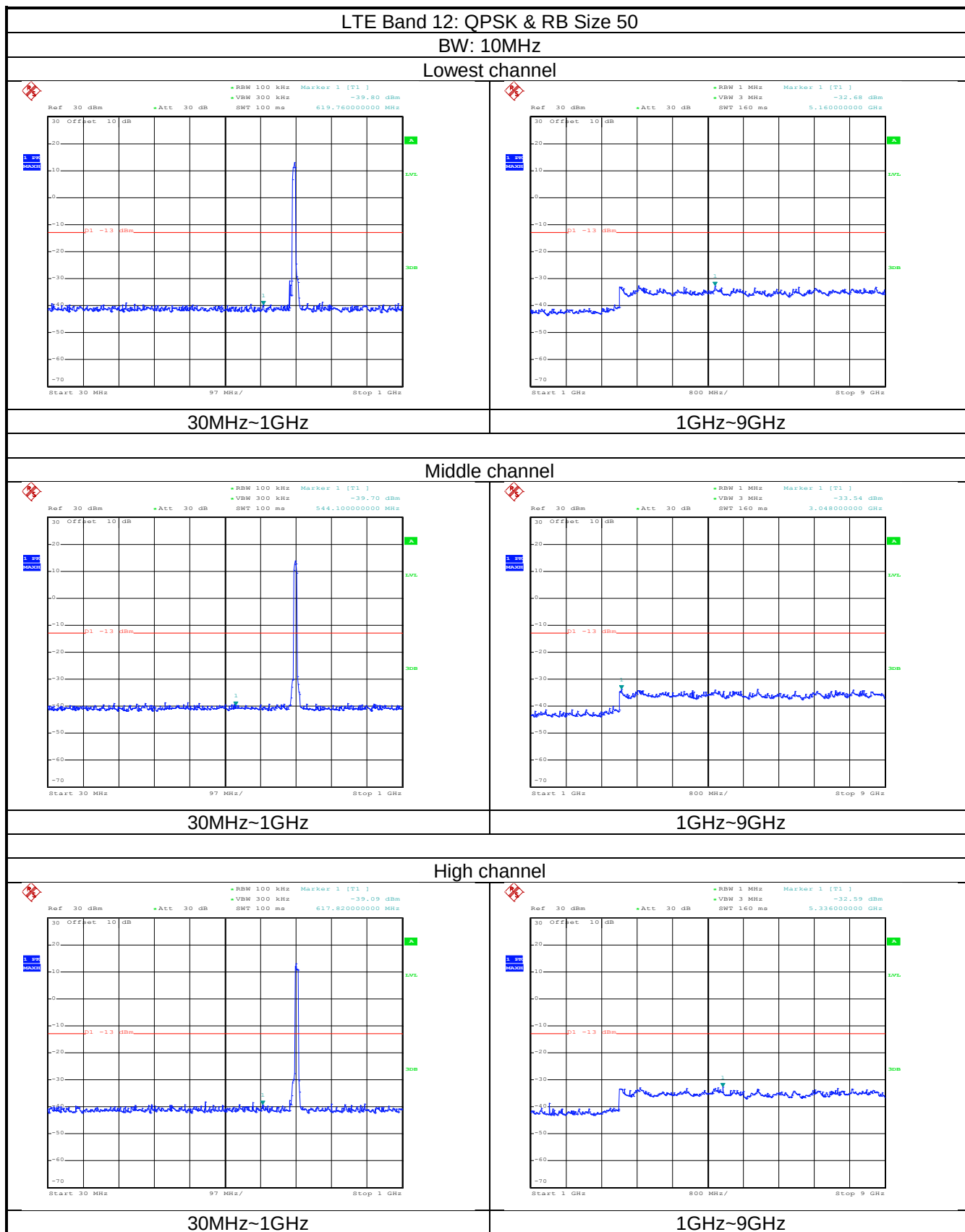


1GHz~9GHz

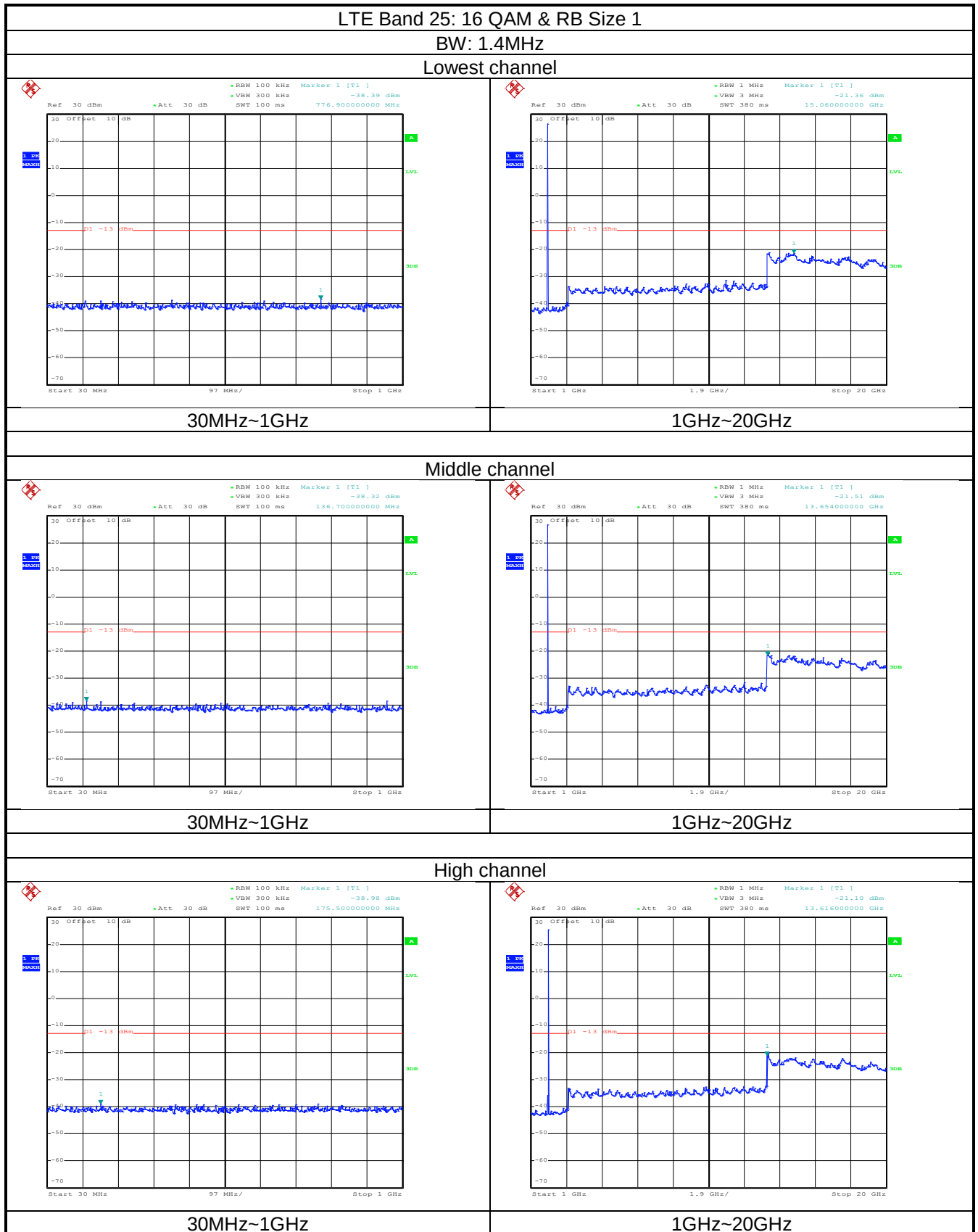








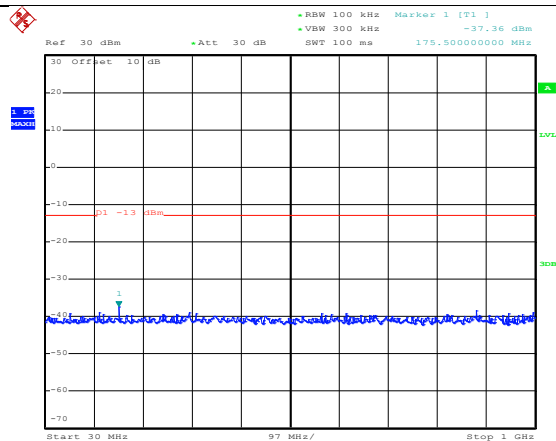
LTE Band 25 part:



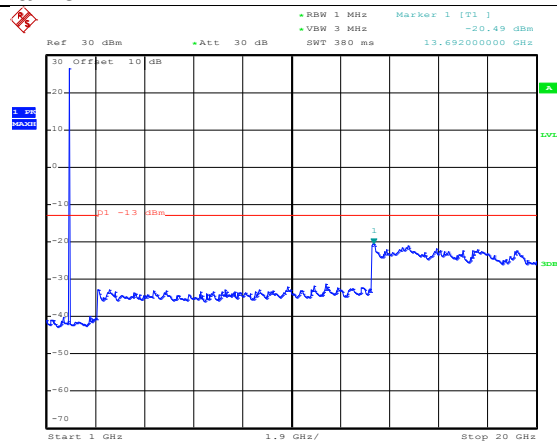
LTE Band 25: 16 QAM & RB Size 6

BW: 1.4MHz

Lowest channel

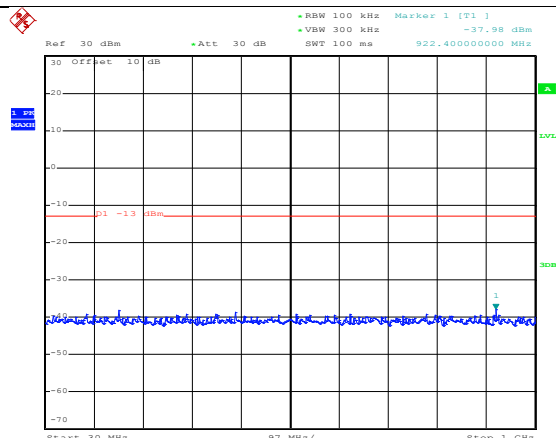


30MHz~1GHz

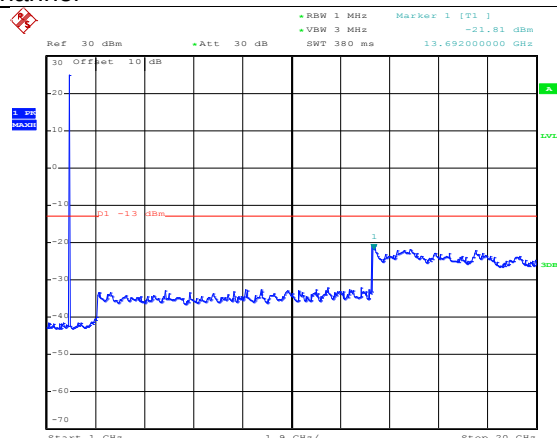


1GHz~20GHz

Middle channel

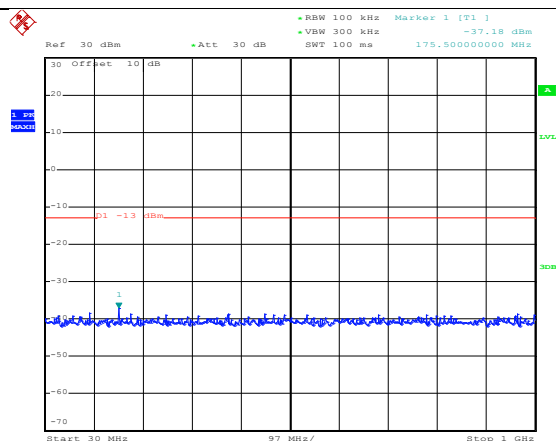


30MHz~1GHz

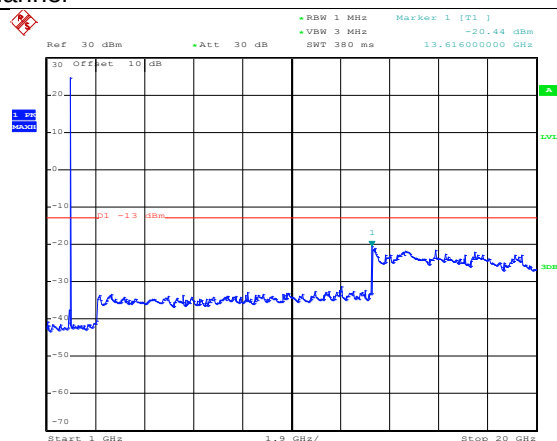


1GHz~20GHz

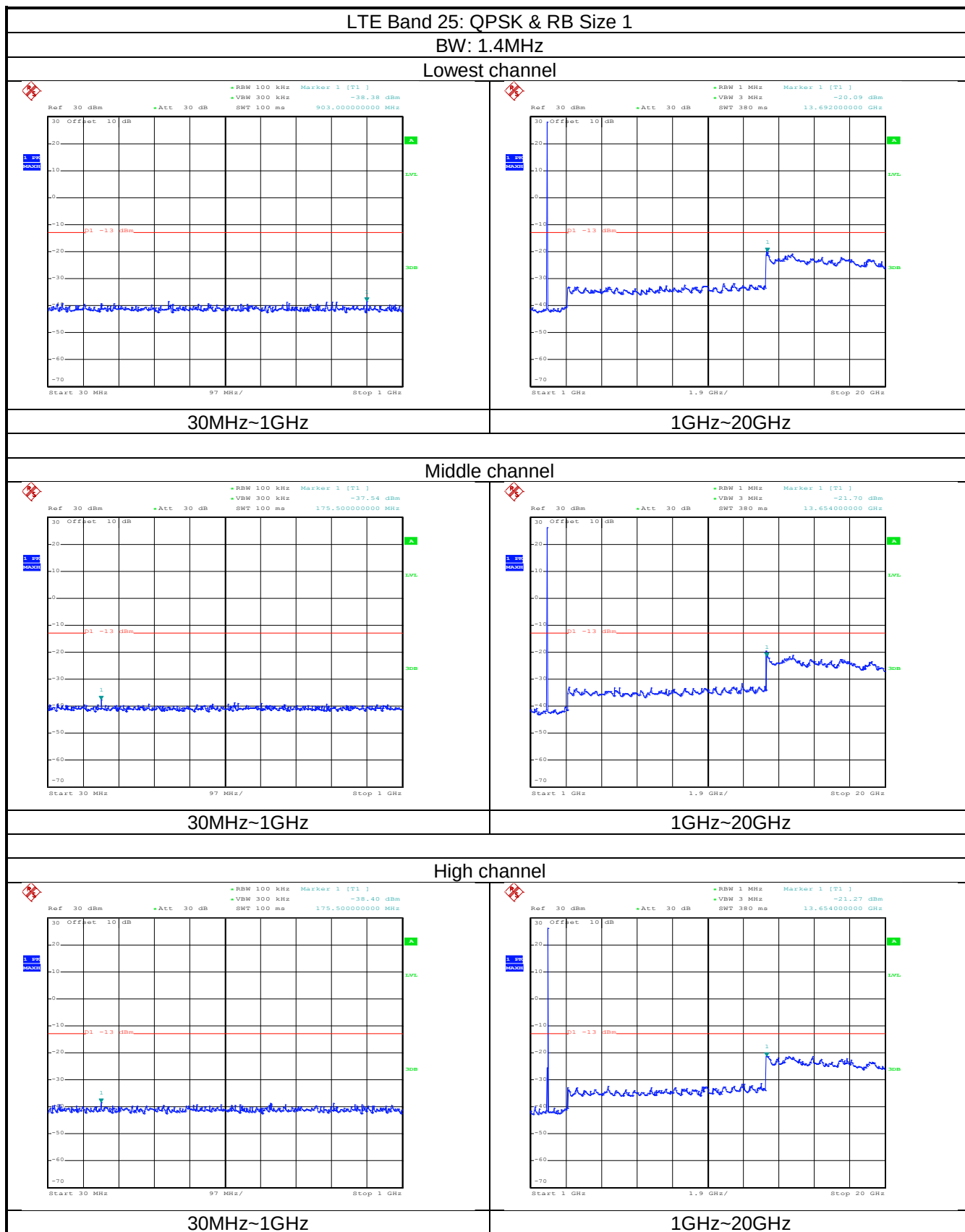
High channel

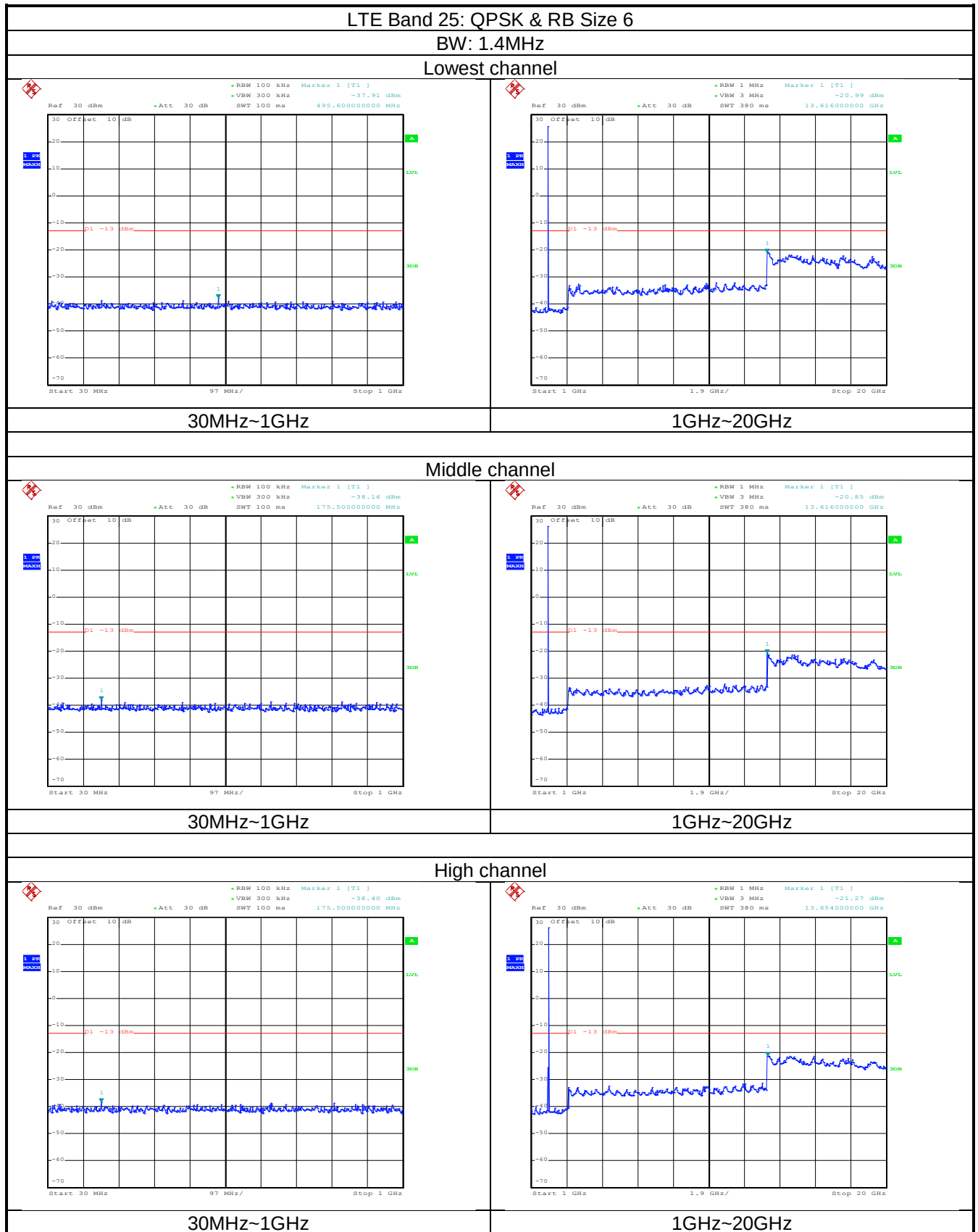


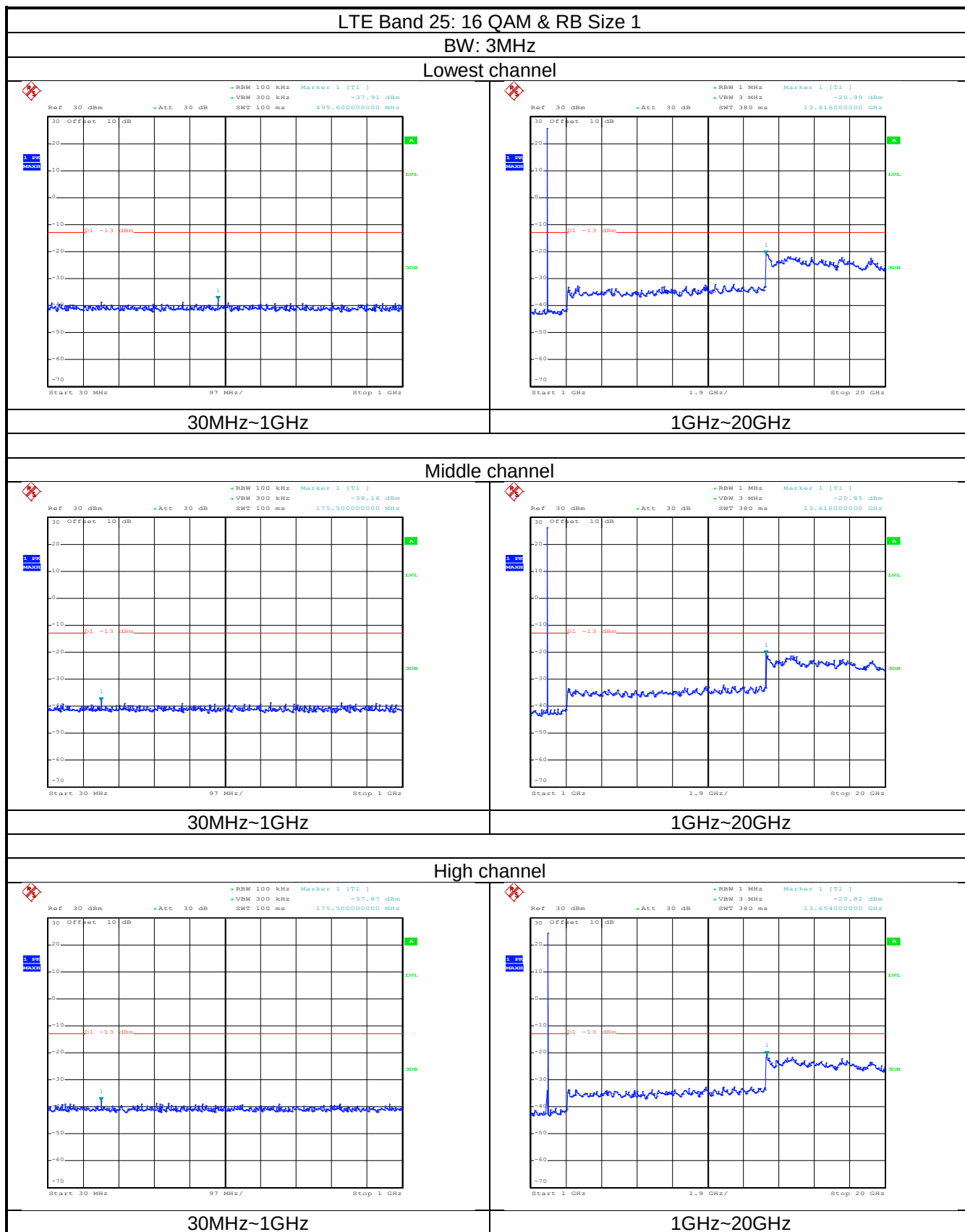
30MHz~1GHz



1GHz~20GHz



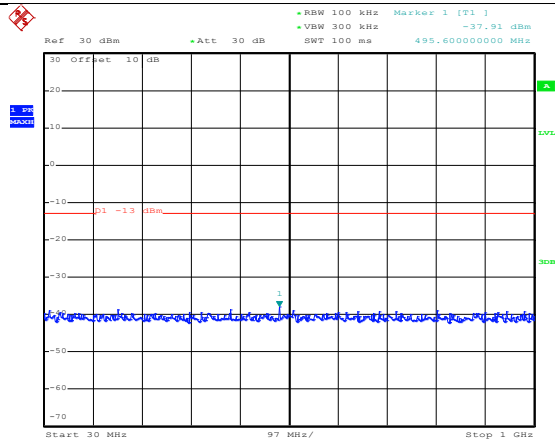




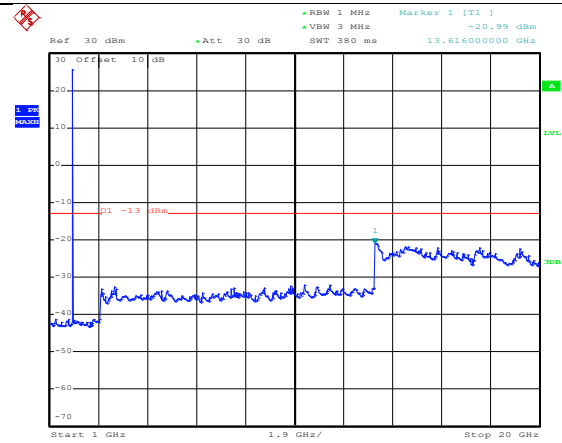
LTE Band 25: 16 QAM & RB Size 15

BW: 3MHz

Lowest channel

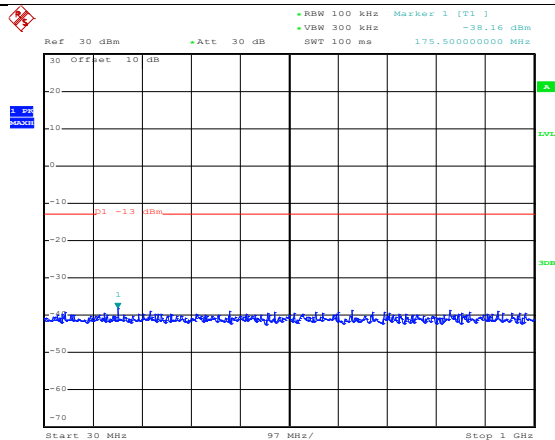


30MHz~1GHz

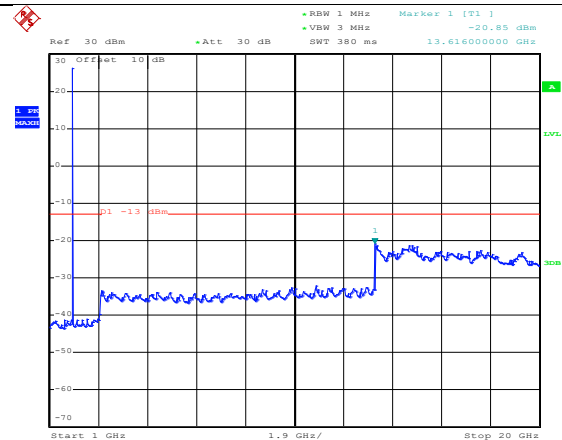


1GHz~20GHz

Middle channel

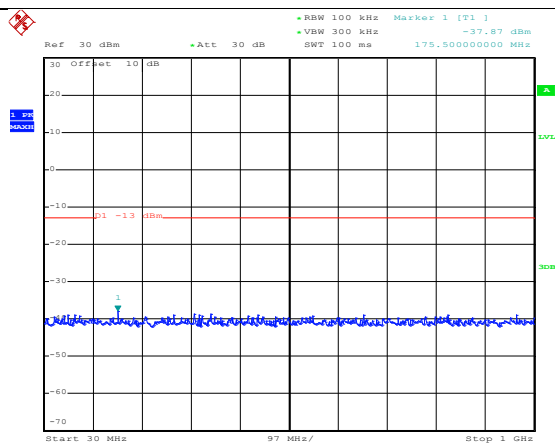


30MHz~1GHz

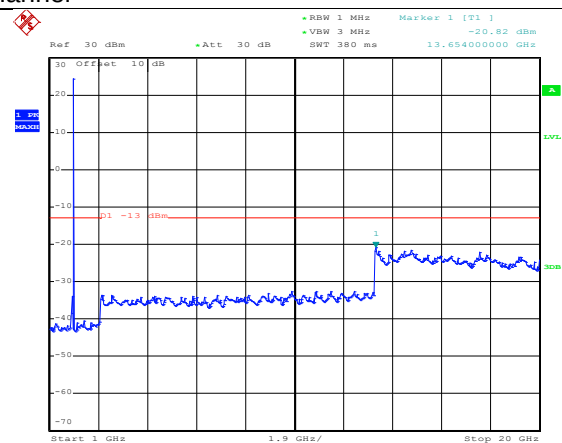


1GHz~20GHz

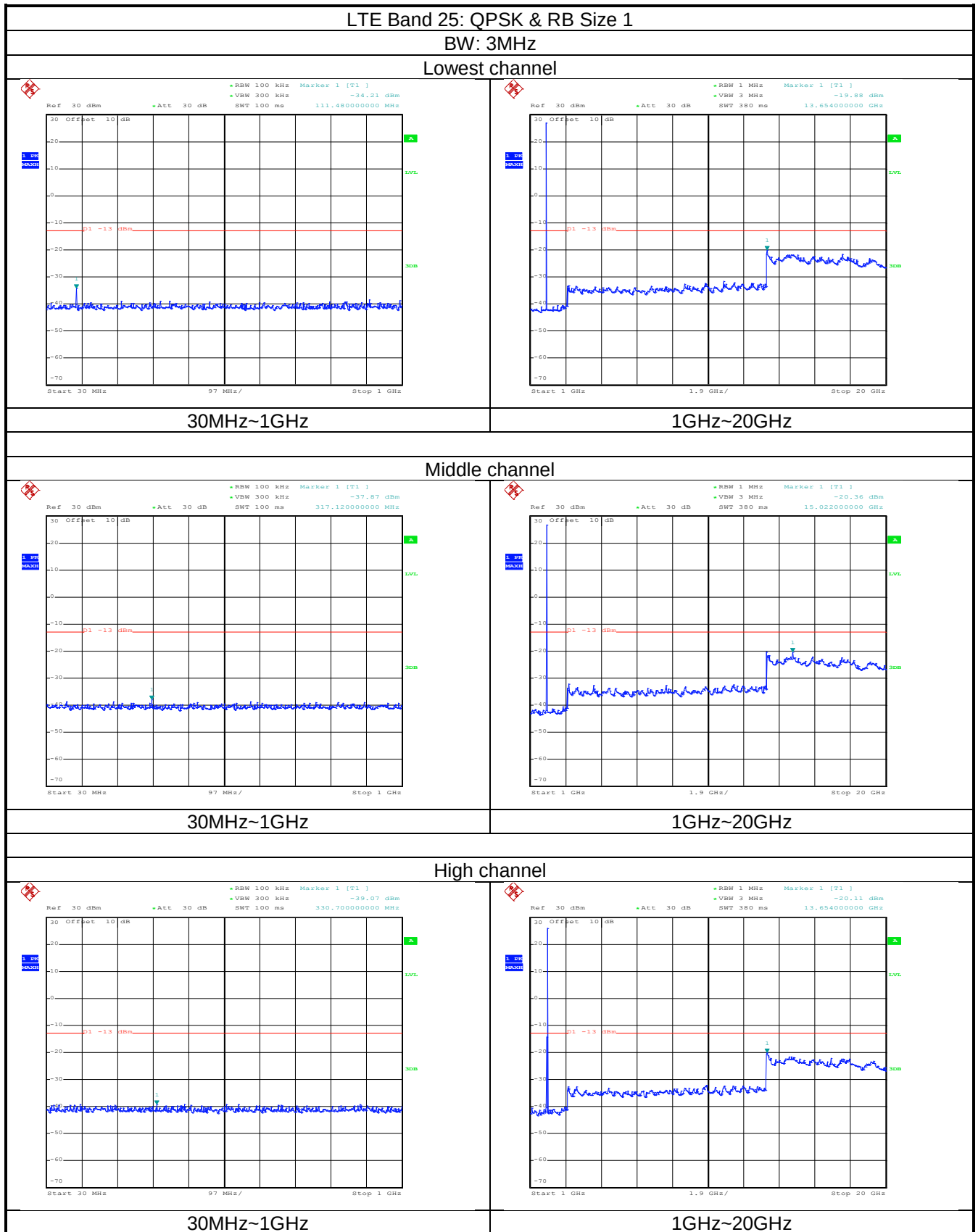
High channel

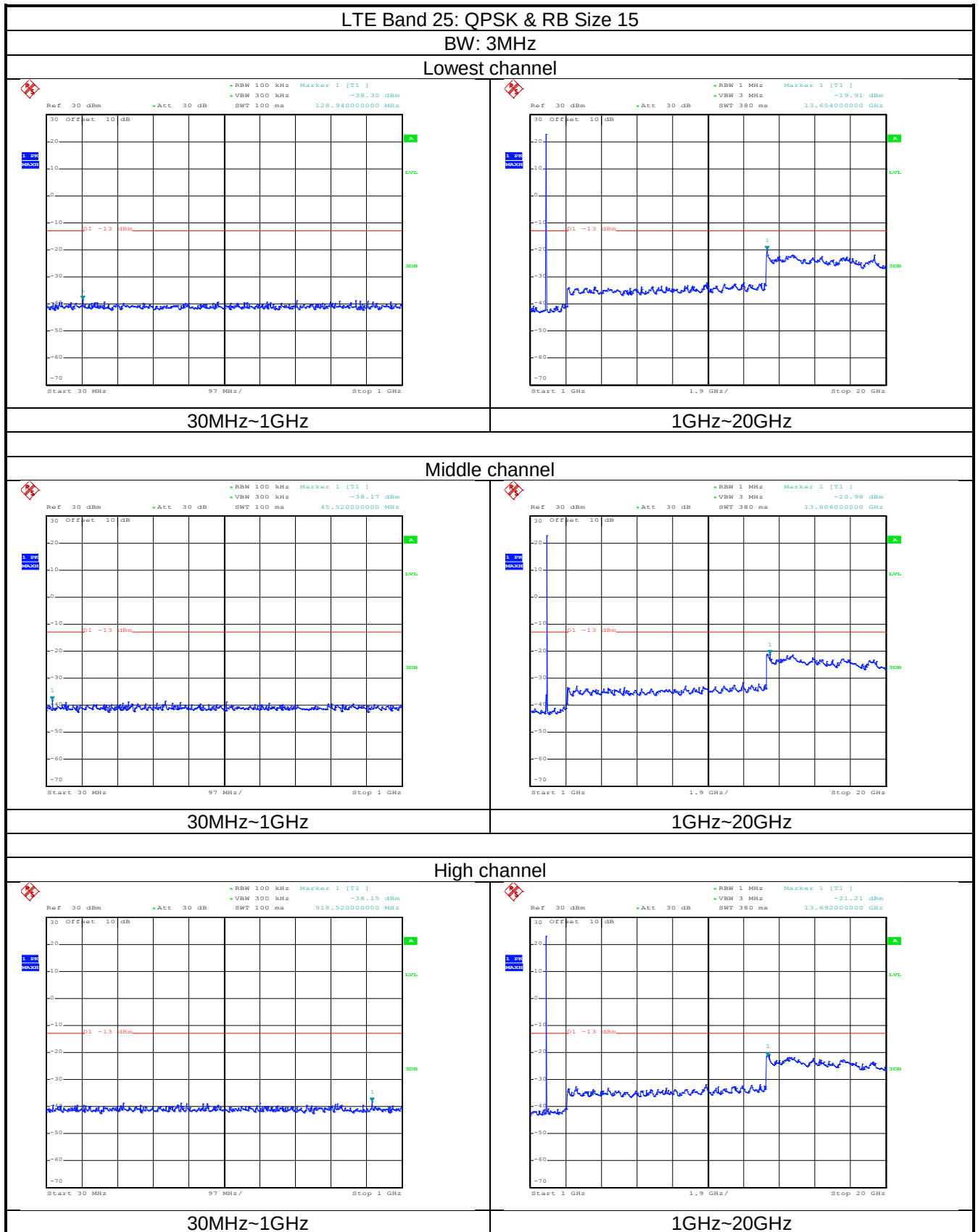


30MHz~1GHz



1GHz~20GHz

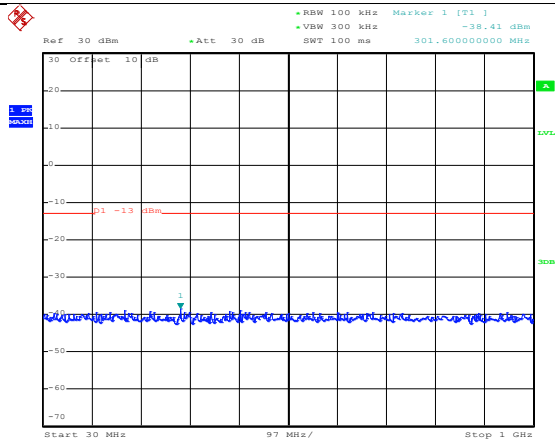




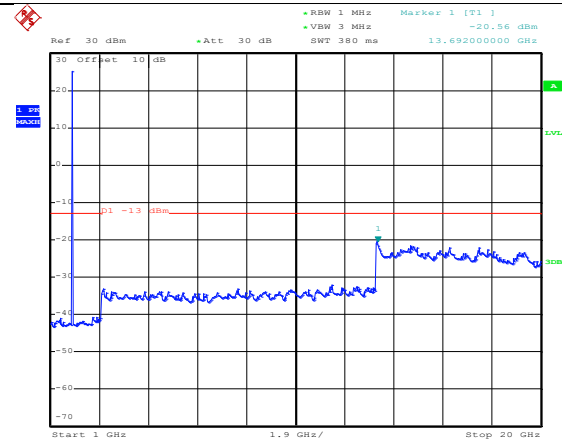
LTE Band 25: 16 QAM & RB Size 1

BW: 5MHz

Lowest channel

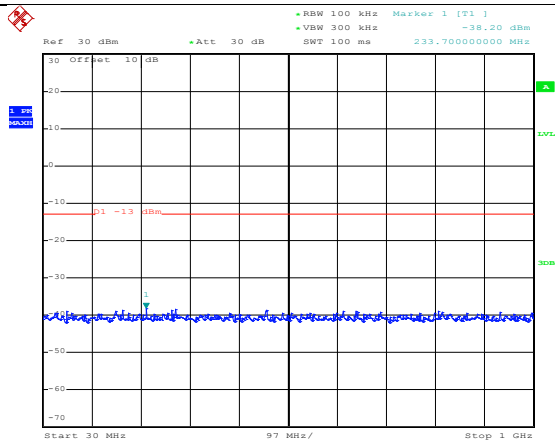


30MHz~1GHz

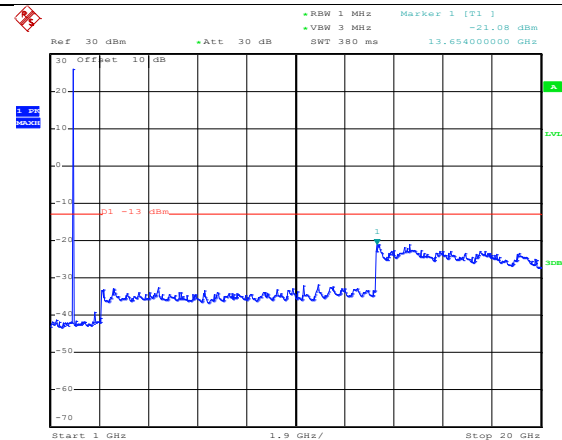


1GHz~20GHz

Middle channel

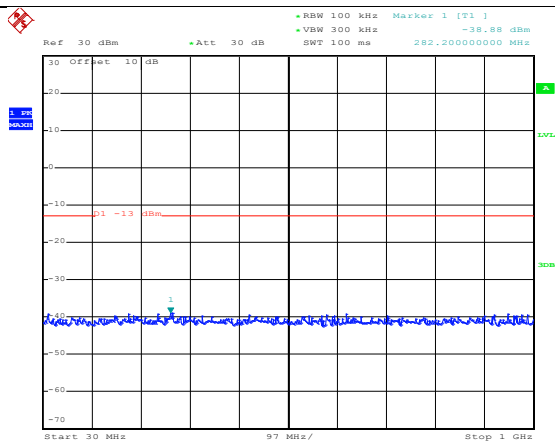


30MHz~1GHz

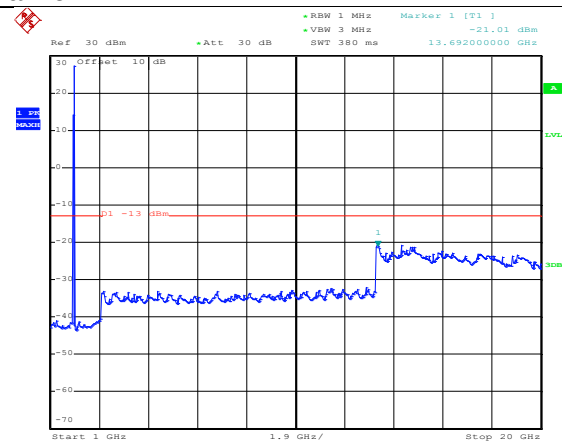


1GHz~20GHz

High channel



30MHz~1GHz

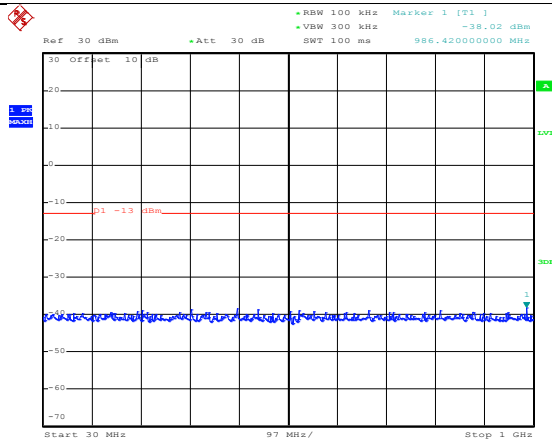


1GHz~20GHz

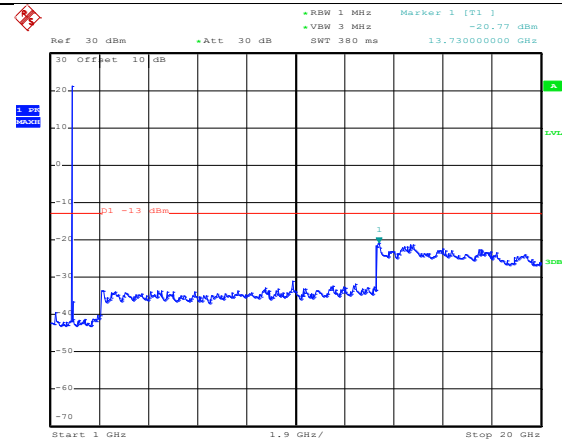
LTE Band 25: 16 QAM & RB Size 25

BW: 5MHz

Lowest channel

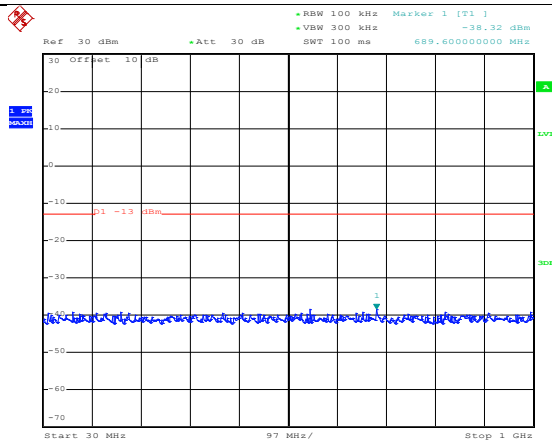


30MHz~1GHz

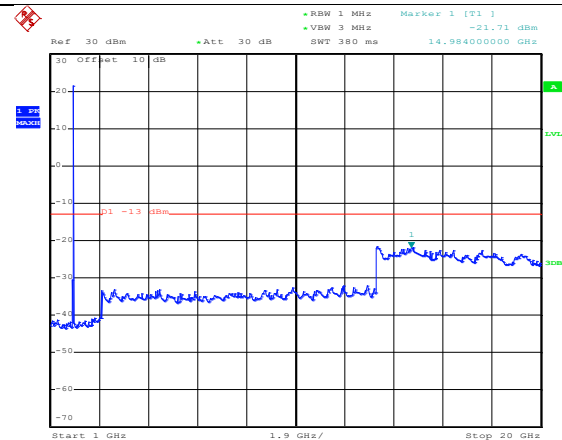


1GHz~20GHz

Middle channel

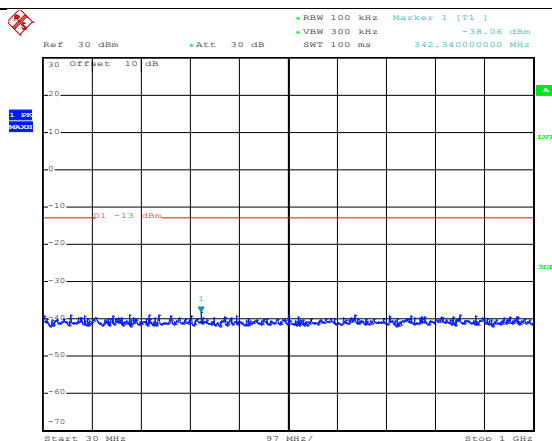


30MHz~1GHz

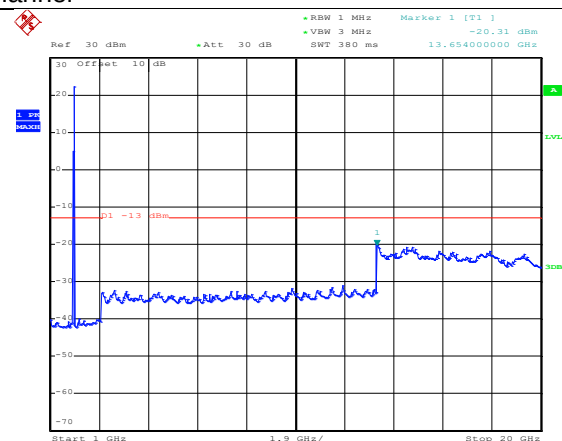


1GHz~20GHz

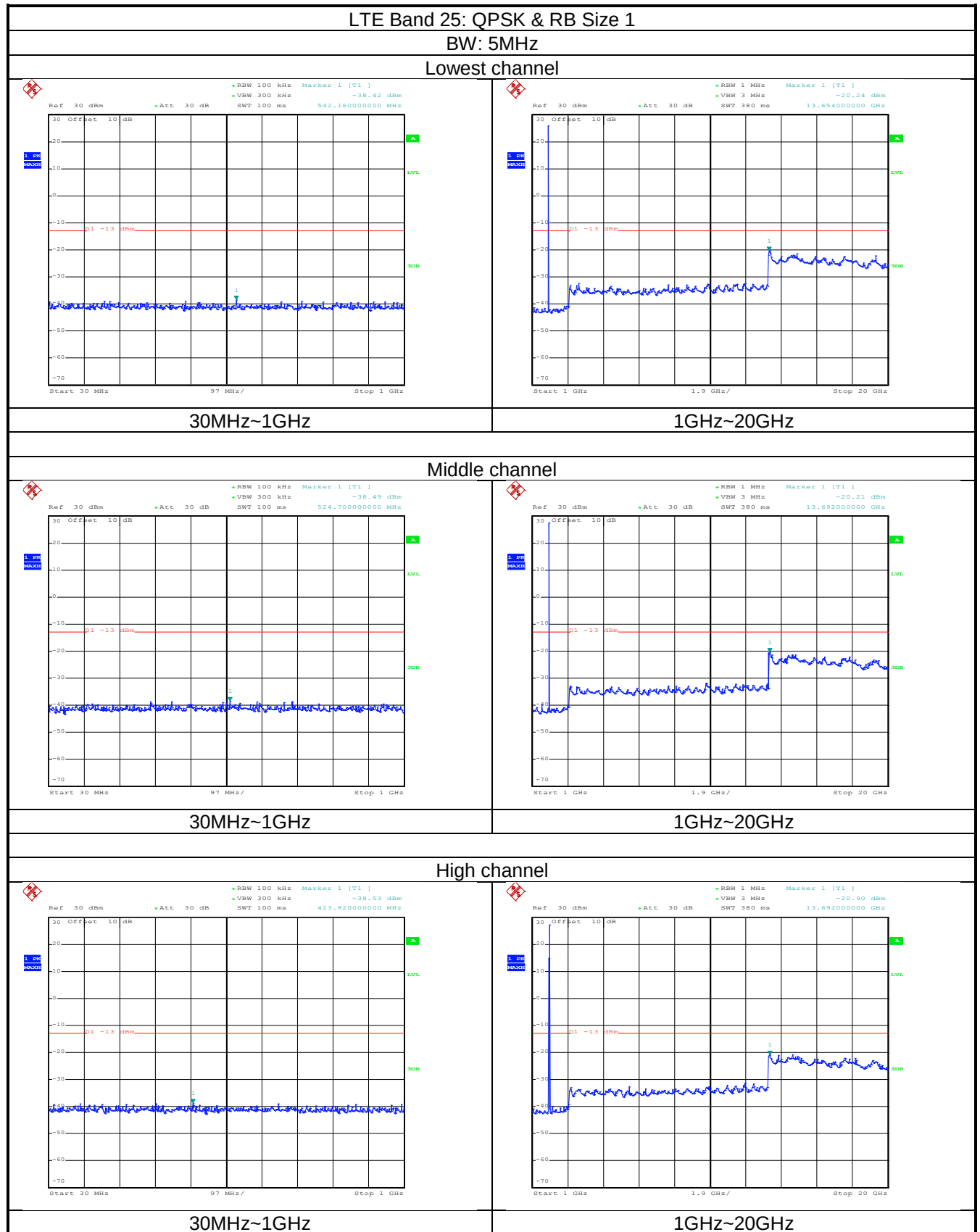
High channel



30MHz~1GHz



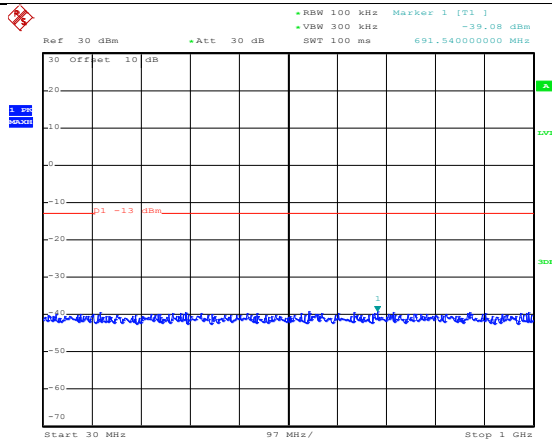
1GHz~20GHz



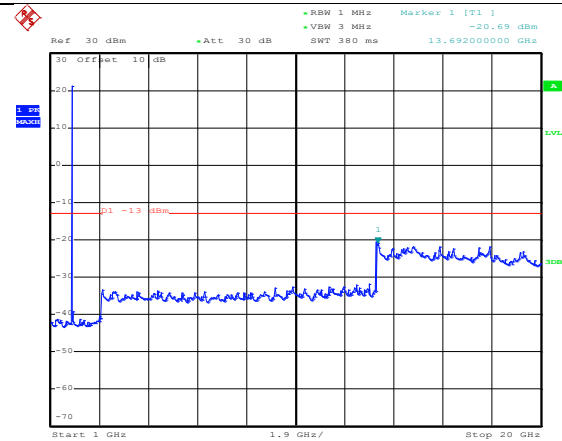
LTE Band 25: QPSK & RB Size 25

BW: 5MHz

Lowest channel

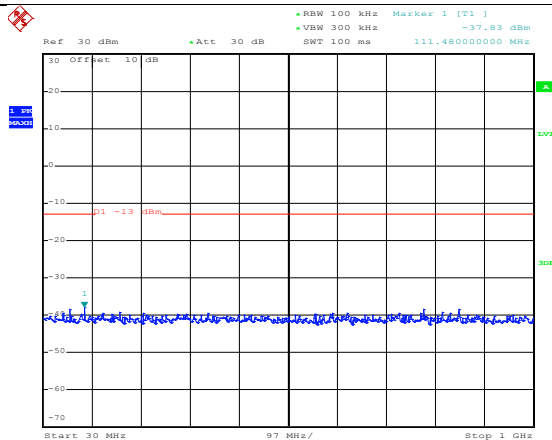


30MHz~1GHz

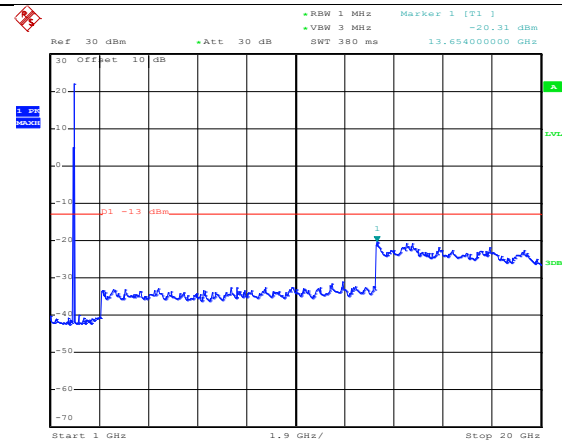


1GHz~20GHz

Middle channel

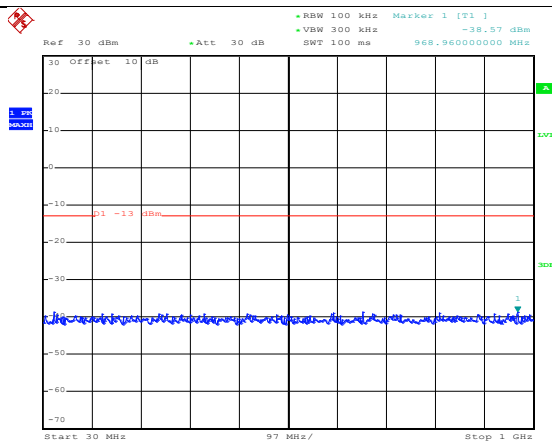


30MHz~1GHz

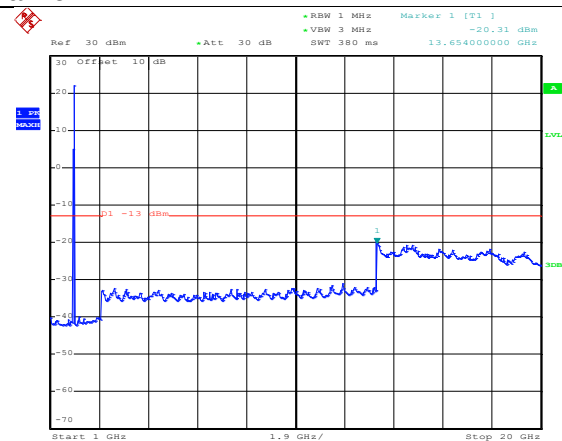


1GHz~20GHz

High channel



30MHz~1GHz

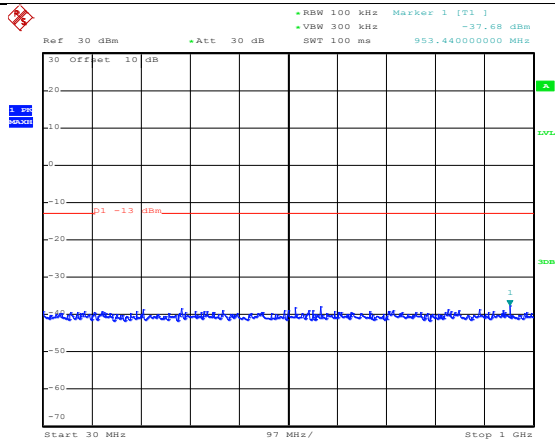


1GHz~20GHz

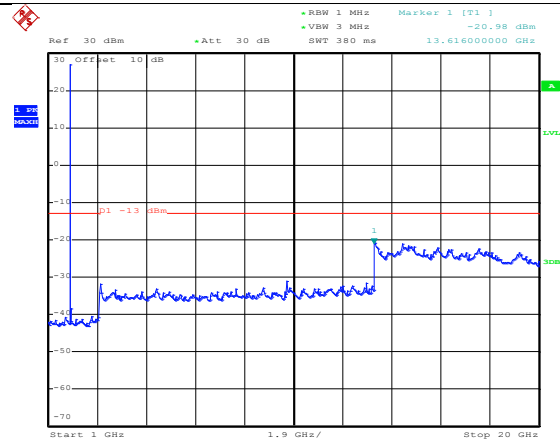
LTE Band 25: 16 QAM & RB Size 1

BW: 10MHz

Lowest channel

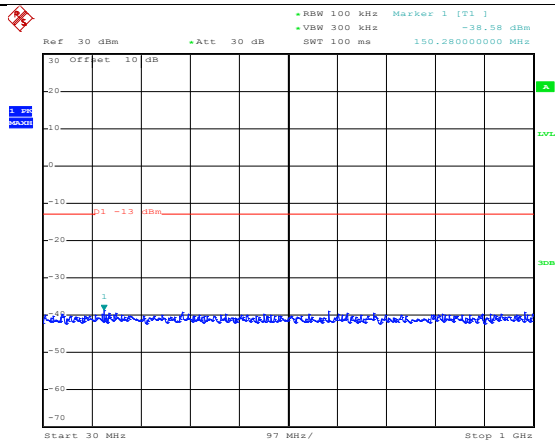


30MHz~1GHz

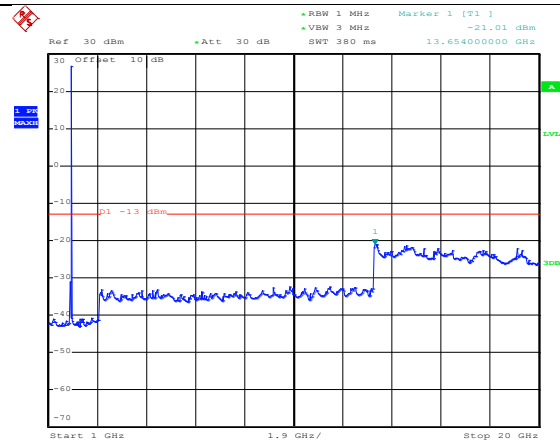


1GHz~20GHz

Middle channel

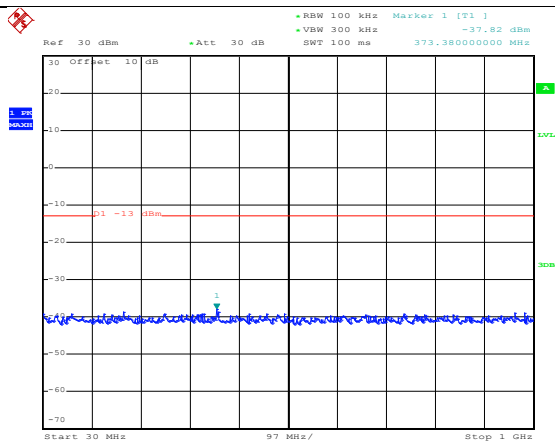


30MHz~1GHz

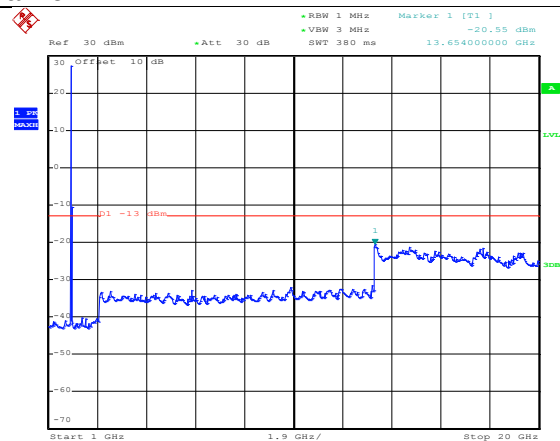


1GHz~20GHz

High channel



30MHz~1GHz

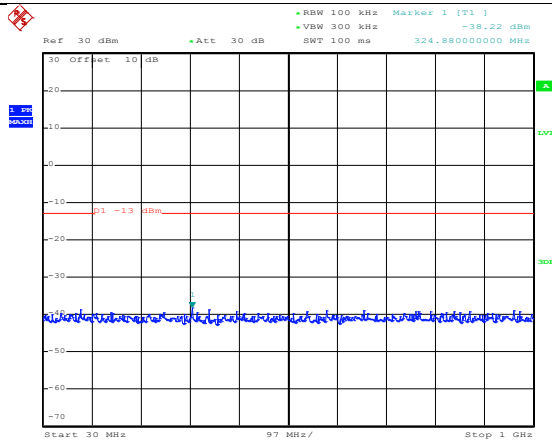


1GHz~20GHz

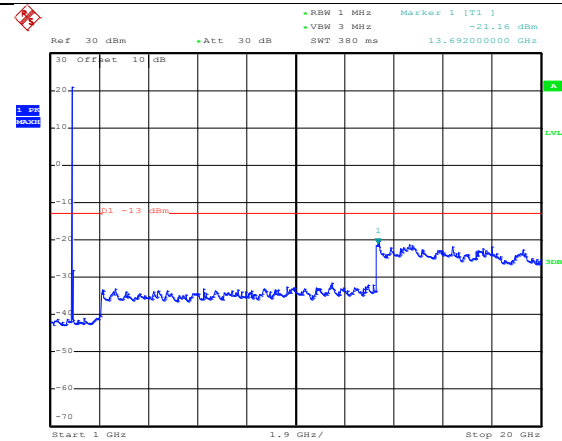
LTE Band 25: 16 QAM & RB Size 50

BW: 10MHz

Lowest channel

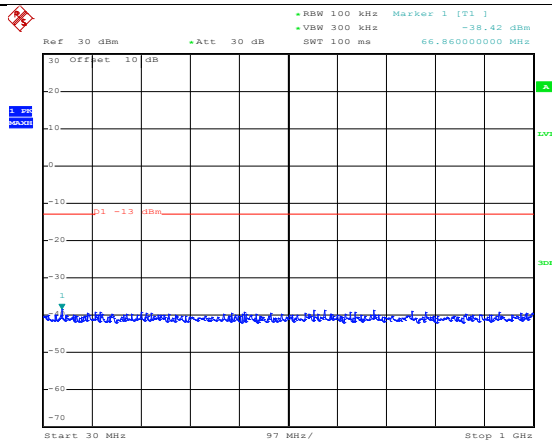


30MHz~1GHz

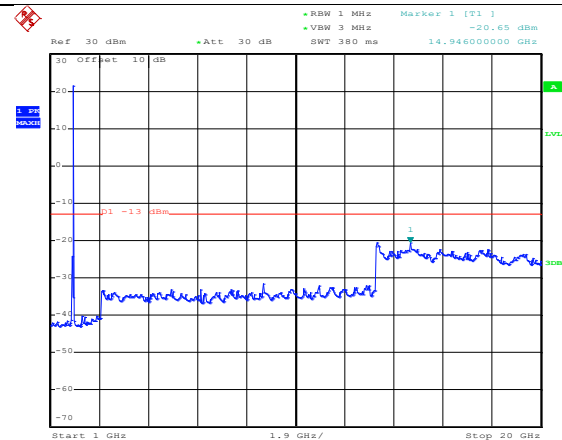


1GHz~20GHz

Middle channel

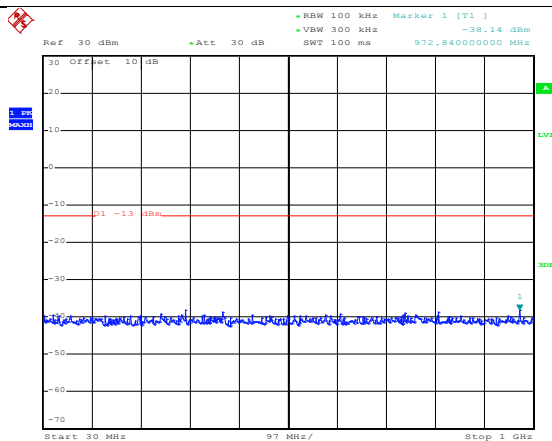


30MHz~1GHz

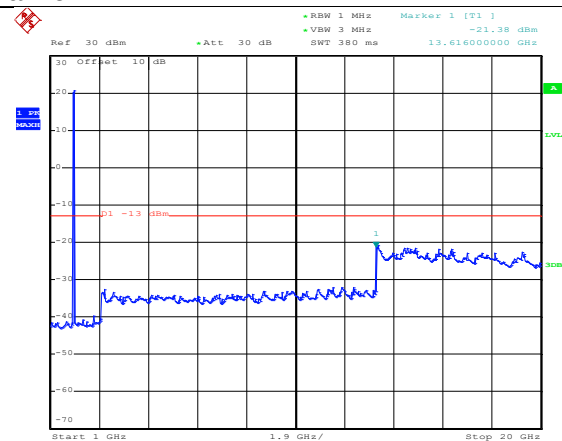


1GHz~20GHz

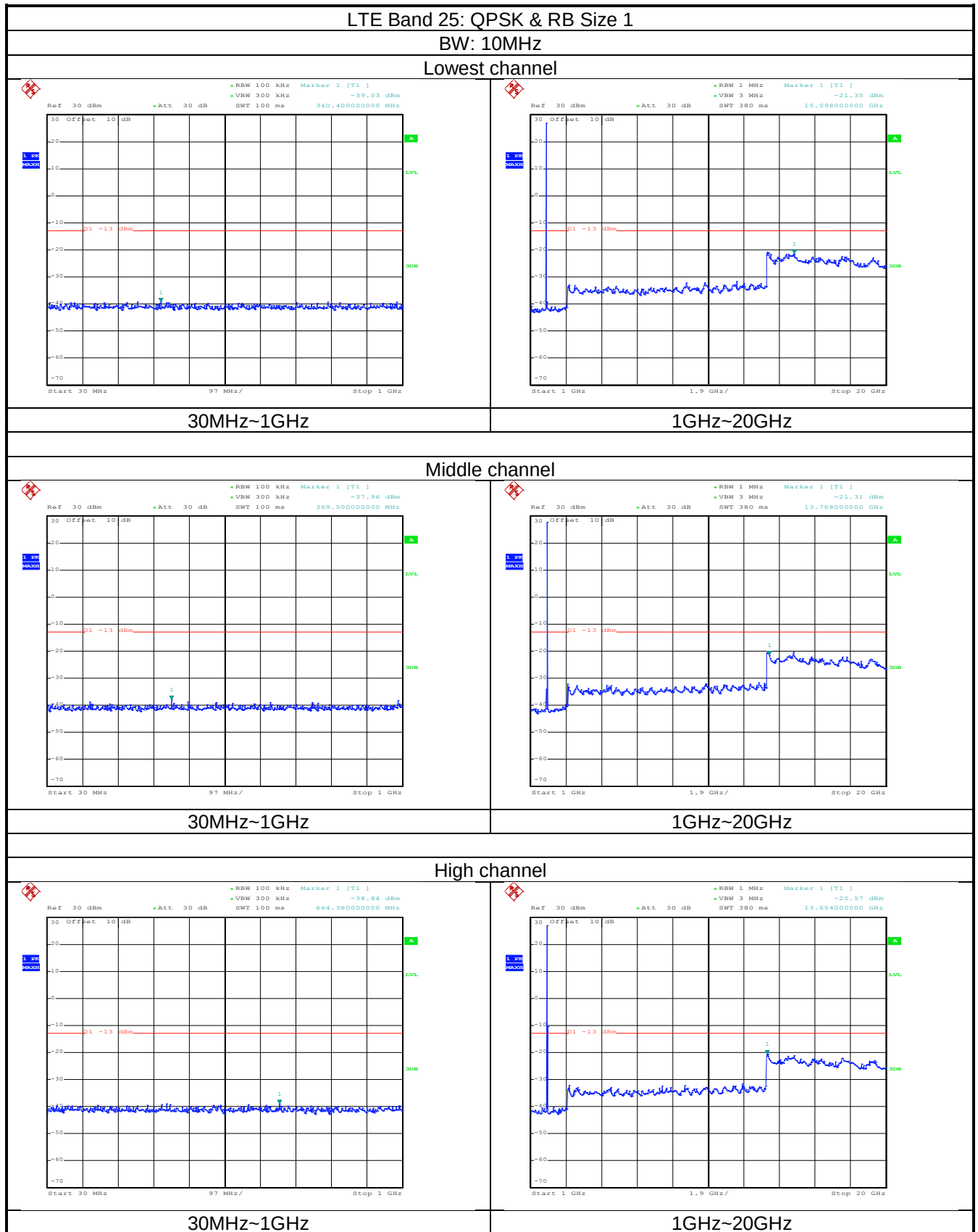
High channel



30MHz~1GHz



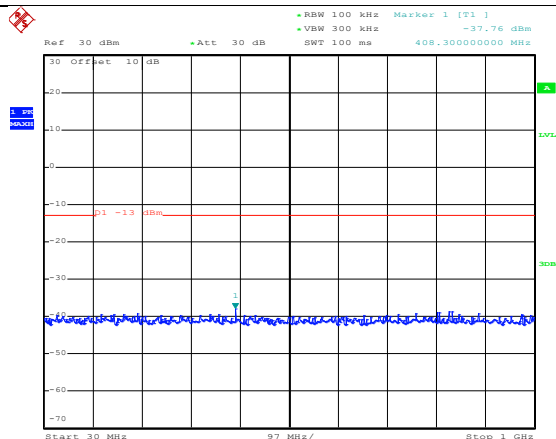
1GHz~20GHz



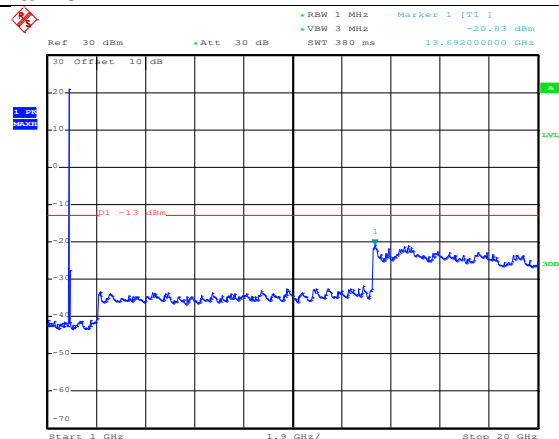
LTE Band 25: QPSK & RB Size 50

BW: 10MHz

Lowest channel

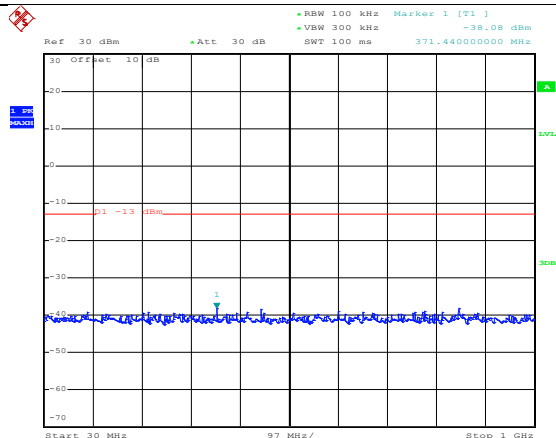


30MHz~1GHz

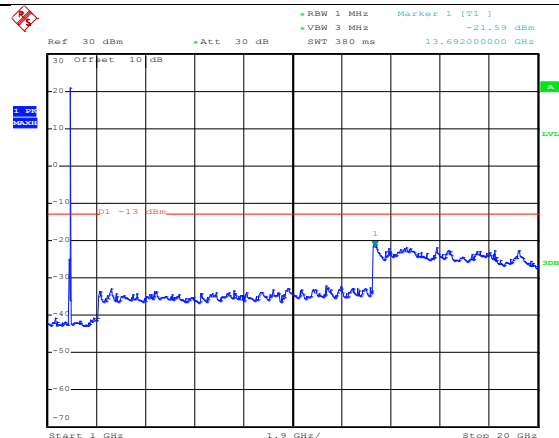


1GHz~20GHz

Middle channel

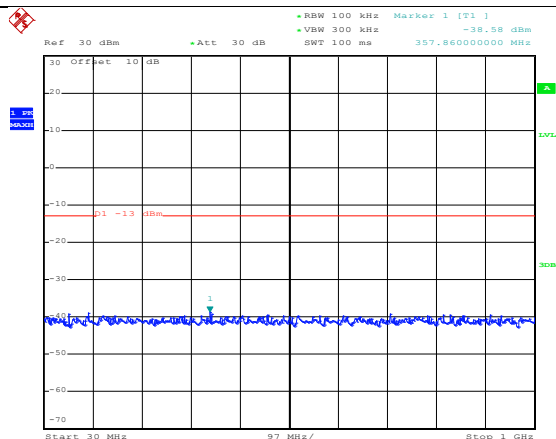


30MHz~1GHz

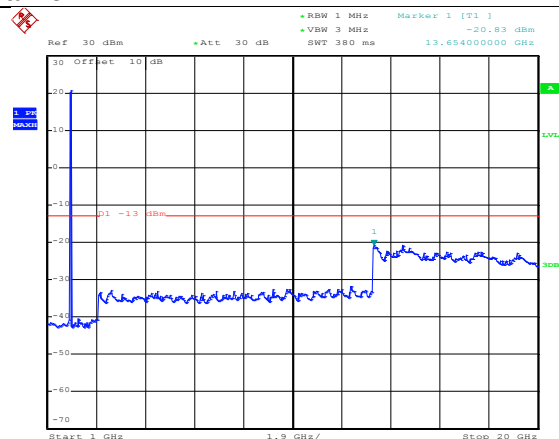


1GHz~20GHz

High channel



30MHz~1GHz

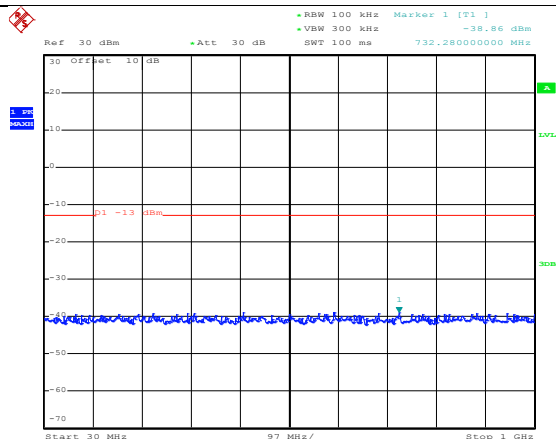


1GHz~20GHz

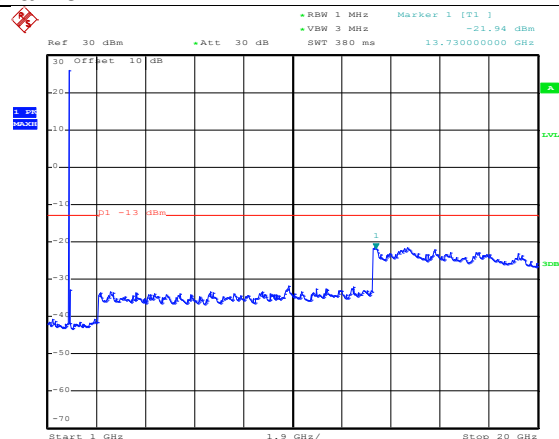
LTE Band 25: 16 QAM & RB Size 1

BW: 15MHz

Lowest channel

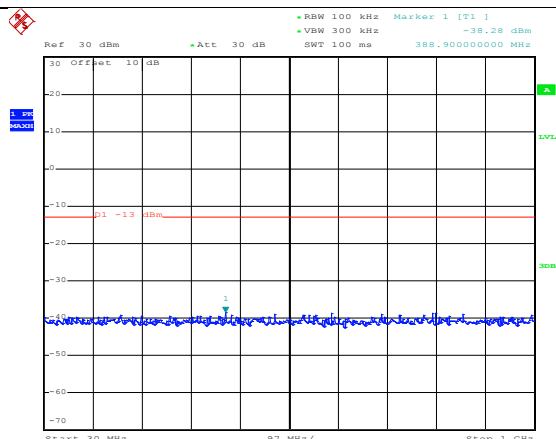


30MHz~1GHz

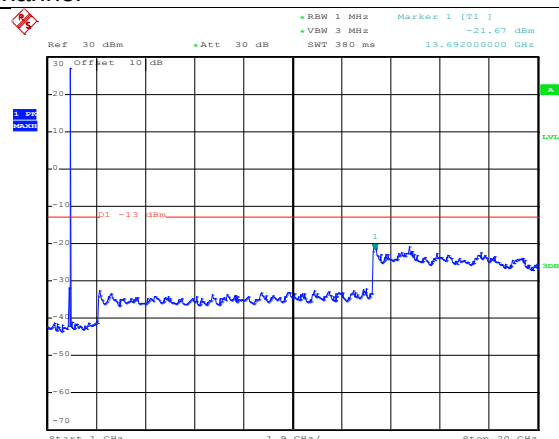


1GHz~20GHz

Middle channel

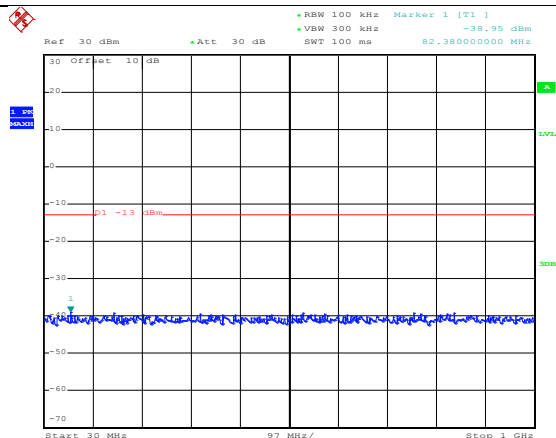


30MHz~1GHz

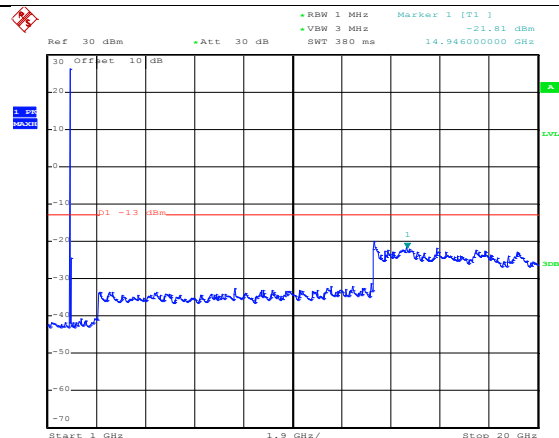


1GHz~20GHz

High channel



30MHz~1GHz

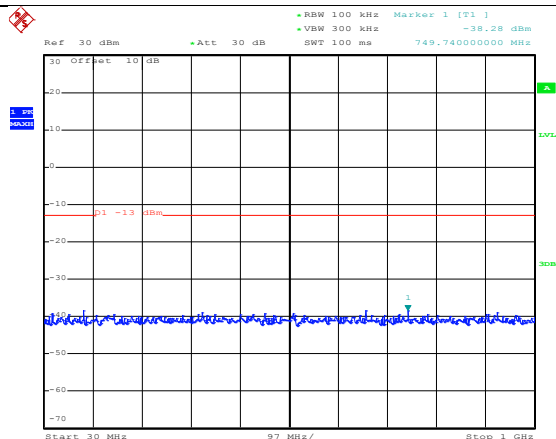


1GHz~20GHz

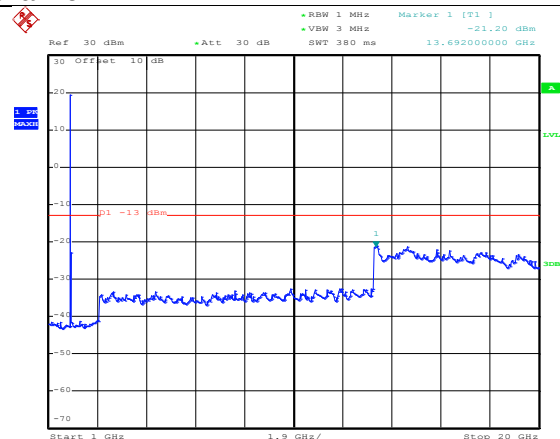
LTE Band 25: 16 QAM & RB Size 75

BW: 15MHz

Lowest channel

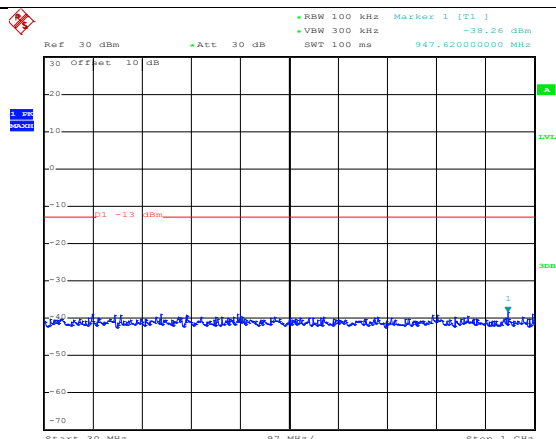


30MHz~1GHz

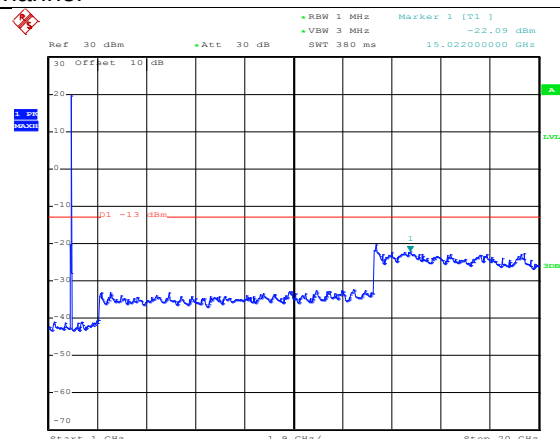


1GHz~20GHz

Middle channel

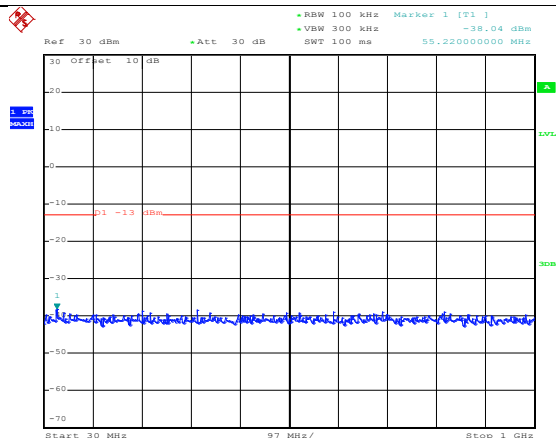


30MHz~1GHz

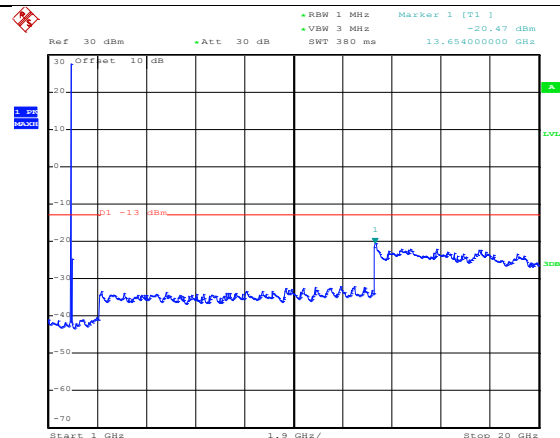


1GHz~20GHz

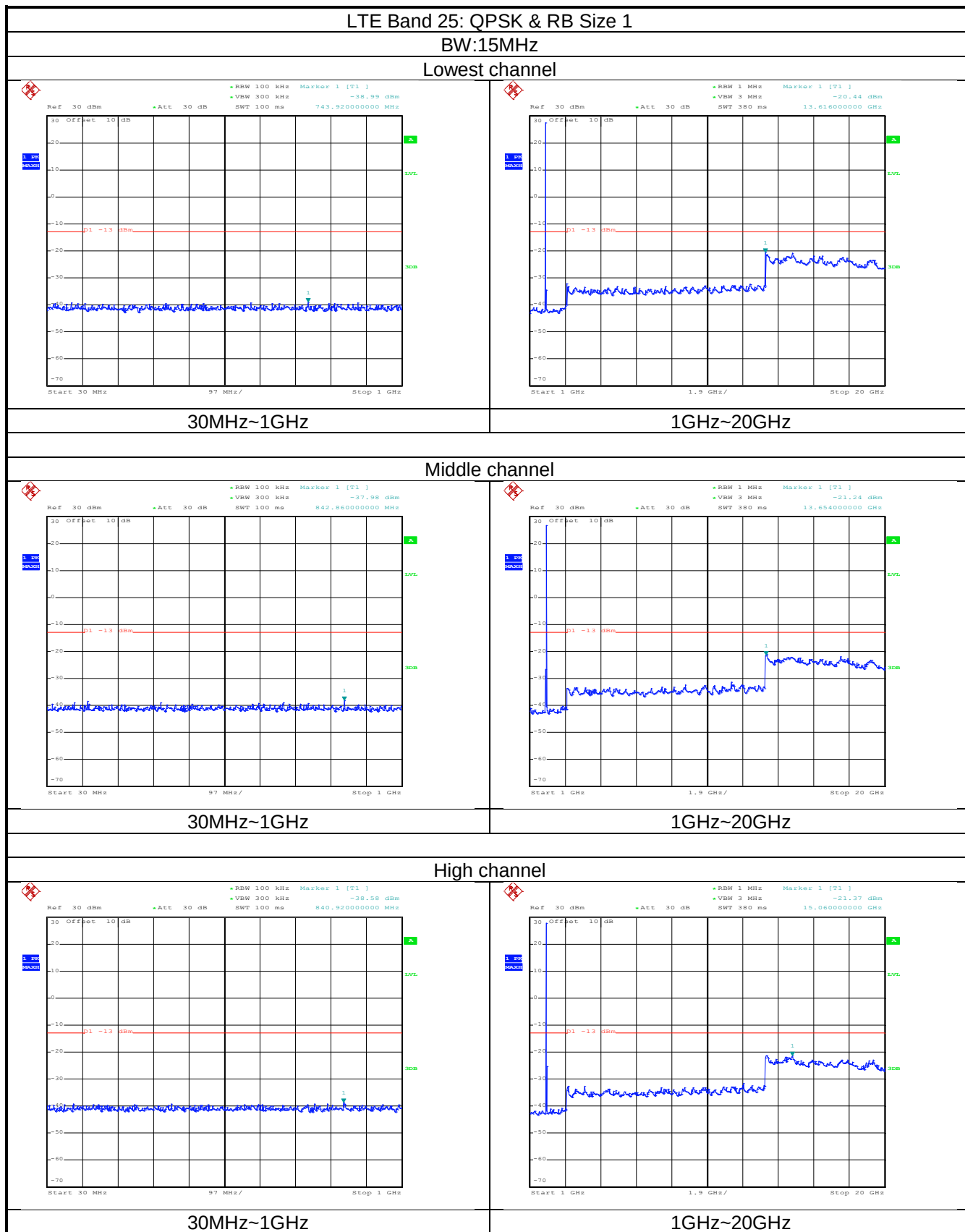
High channel



30MHz~1GHz



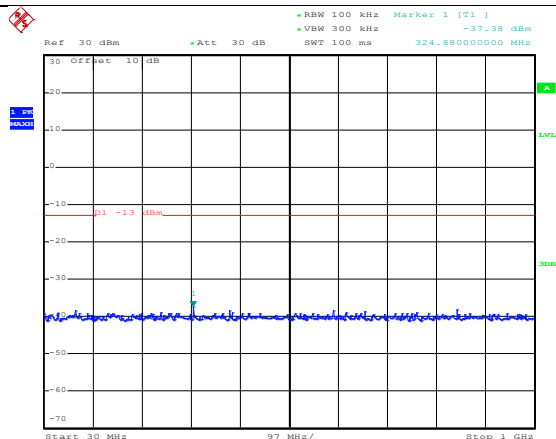
1GHz~20GHz



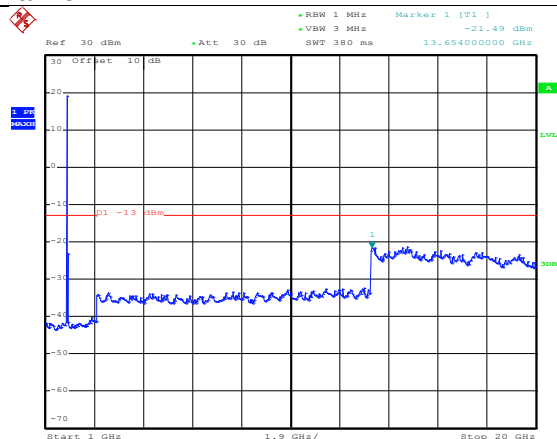
LTE Band 25: QPSK & RB Size 75

BW:15MHz

Lowest channel

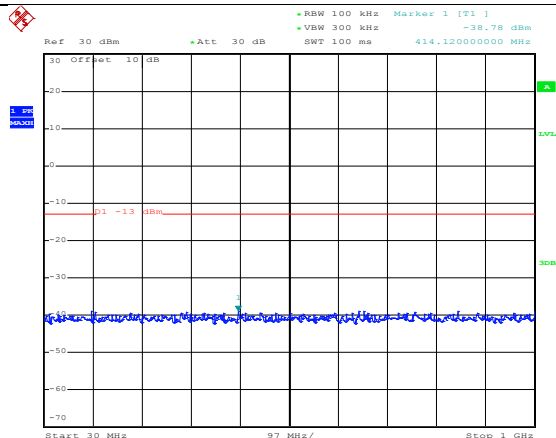


30MHz~1GHz

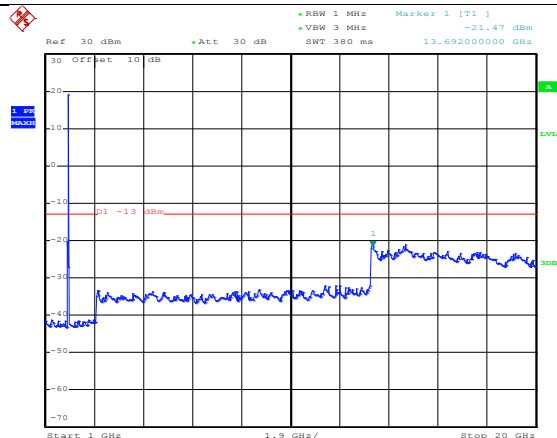


1GHz~20GHz

Middle channel

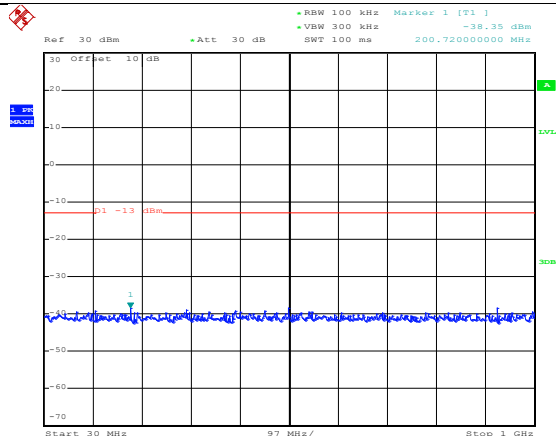


30MHz~1GHz

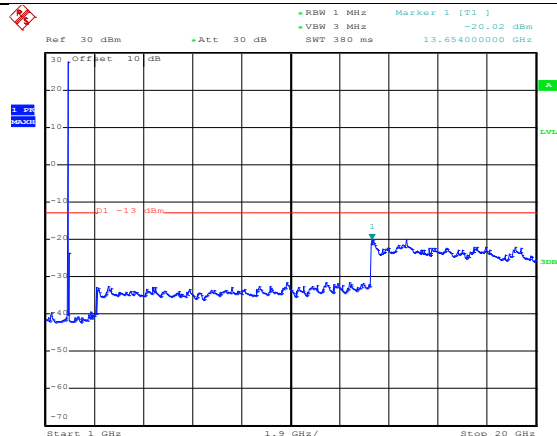


1GHz~20GHz

High channel



30MHz~1GHz

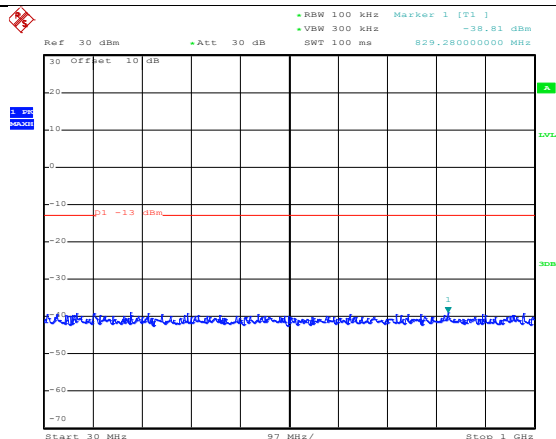


1GHz~20GHz

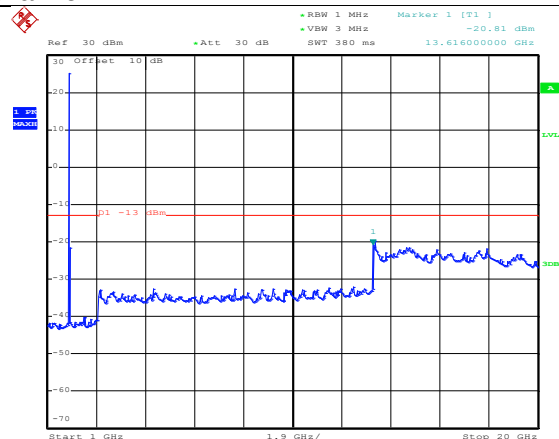
LTE Band 25: 16 QAM & RB Size 1

BW: 20MHz

Lowest channel

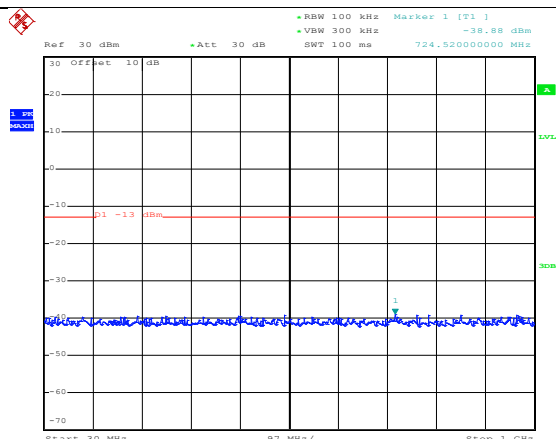


30MHz~1GHz

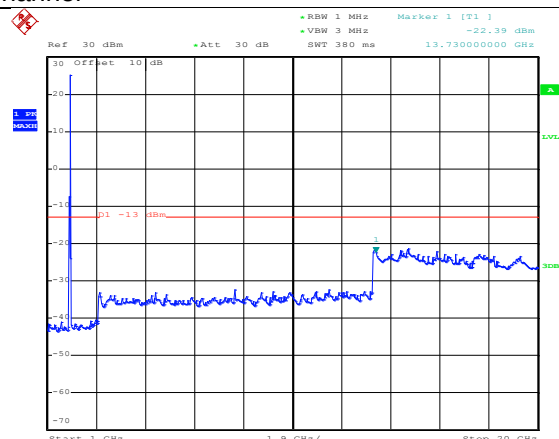


1GHz~20GHz

Middle channel

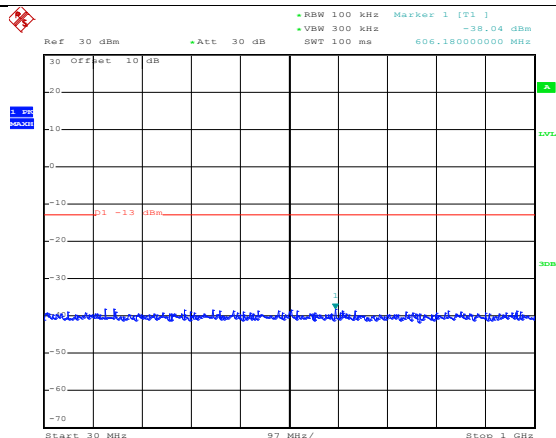


30MHz~1GHz

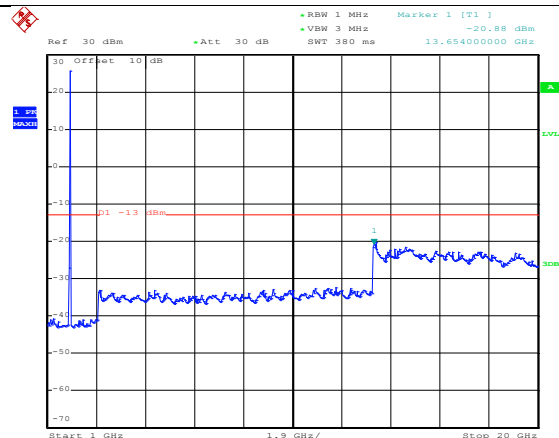


1GHz~20GHz

High channel



30MHz~1GHz



1GHz~20GHz