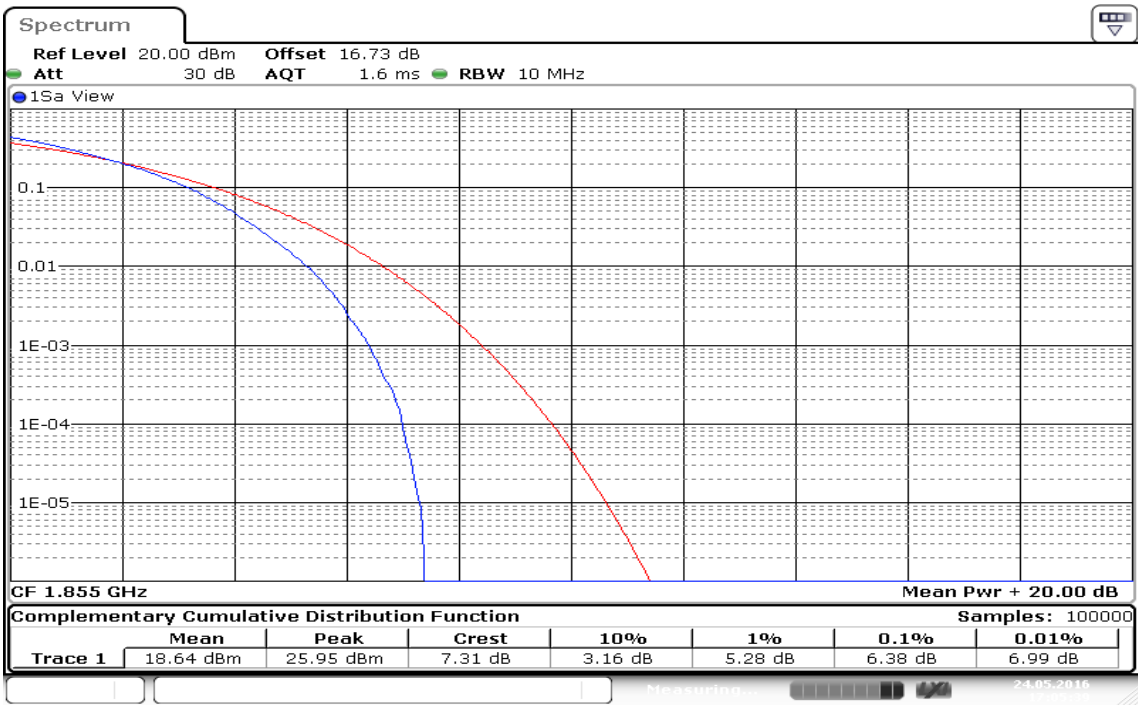
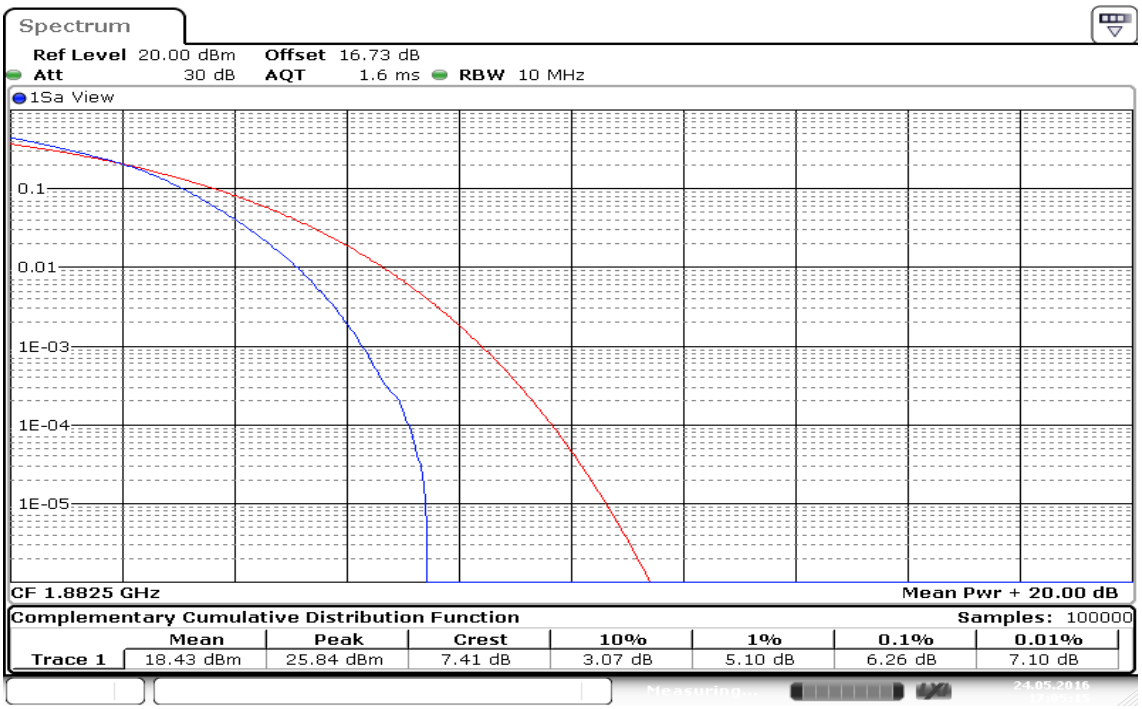
CHANNEL BANDWIDTH: 10MHz / 16QAM

CH Low



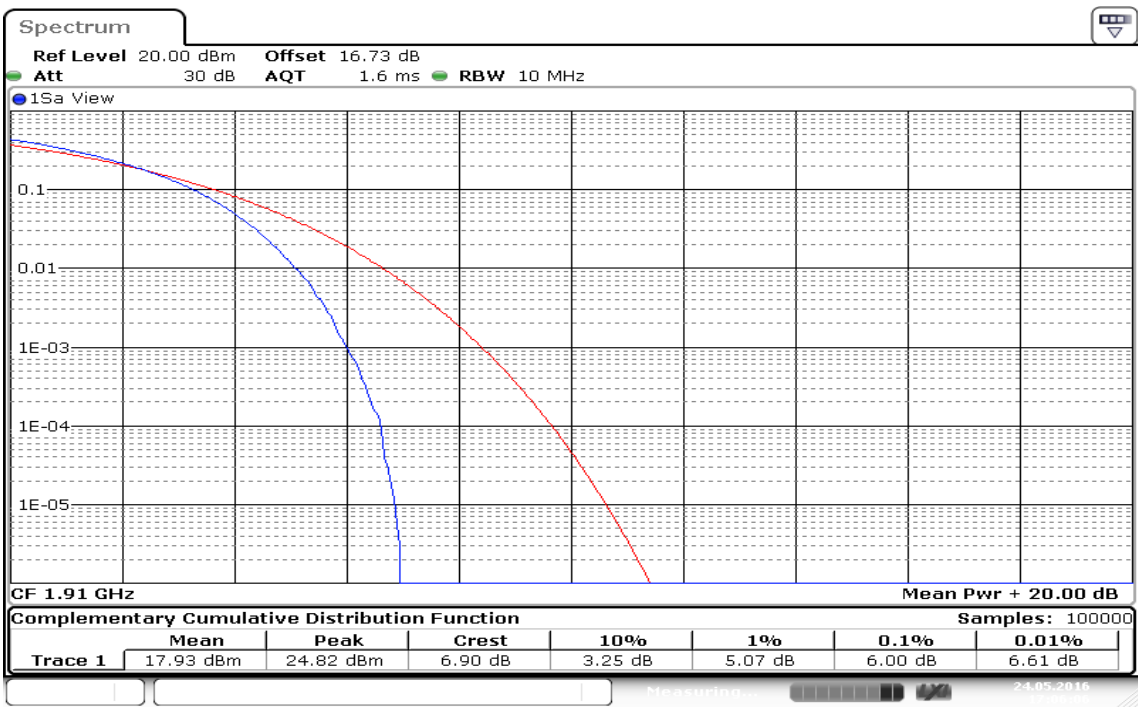
Date: 24.MAY.2016 17:05:39

CH Mid



Date: 24.MAY.2016 17:05:15

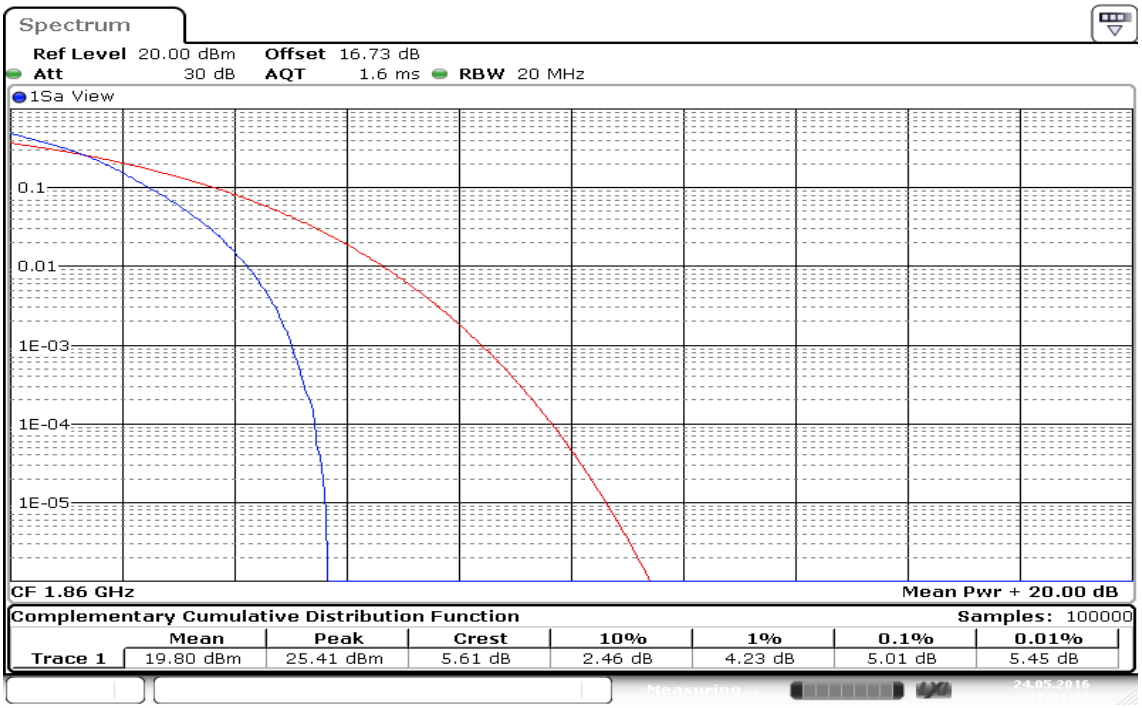
CH High



Date: 24.MAY.2016 17:06:05

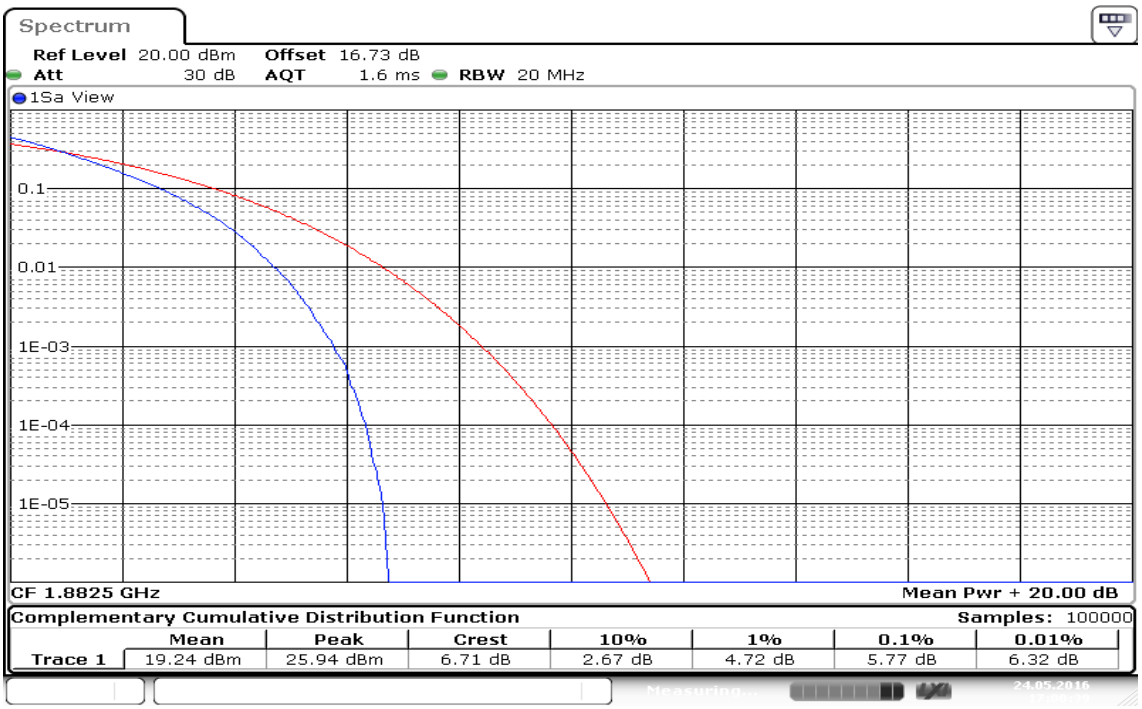
CHANNEL BANDWIDTH: 20MHz / QPSK

CH Low



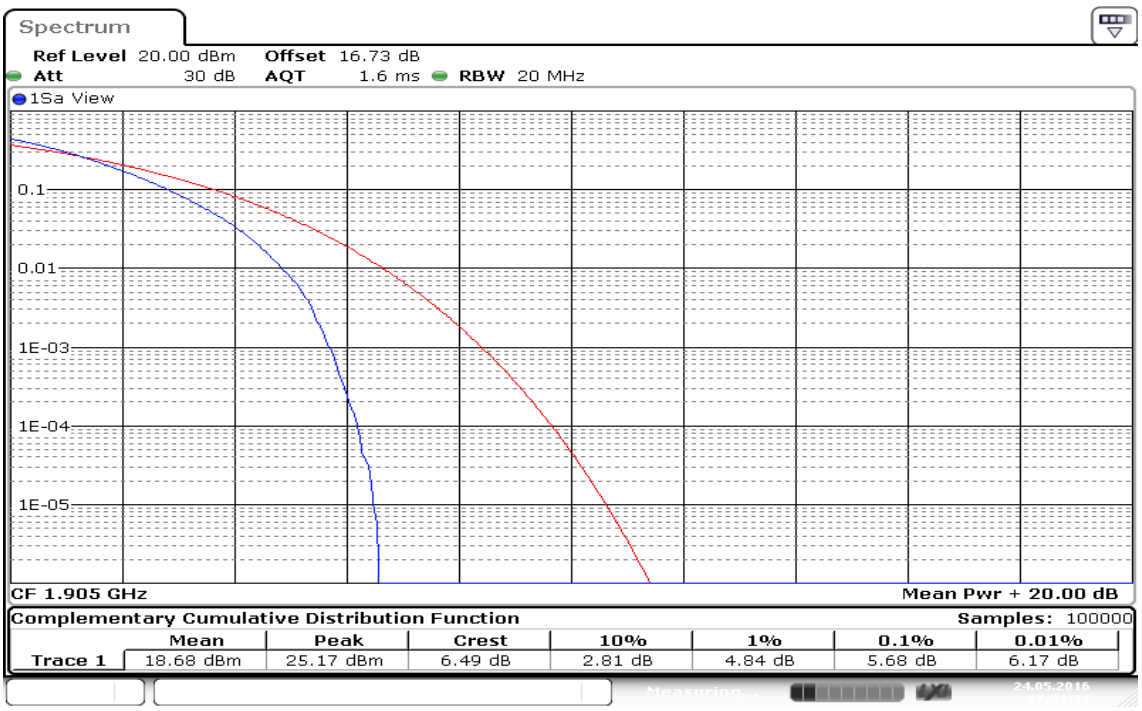
Date: 24.MAY.2016 17:01:00

CH Mid



Date: 24.MAY.2016 17:00:38

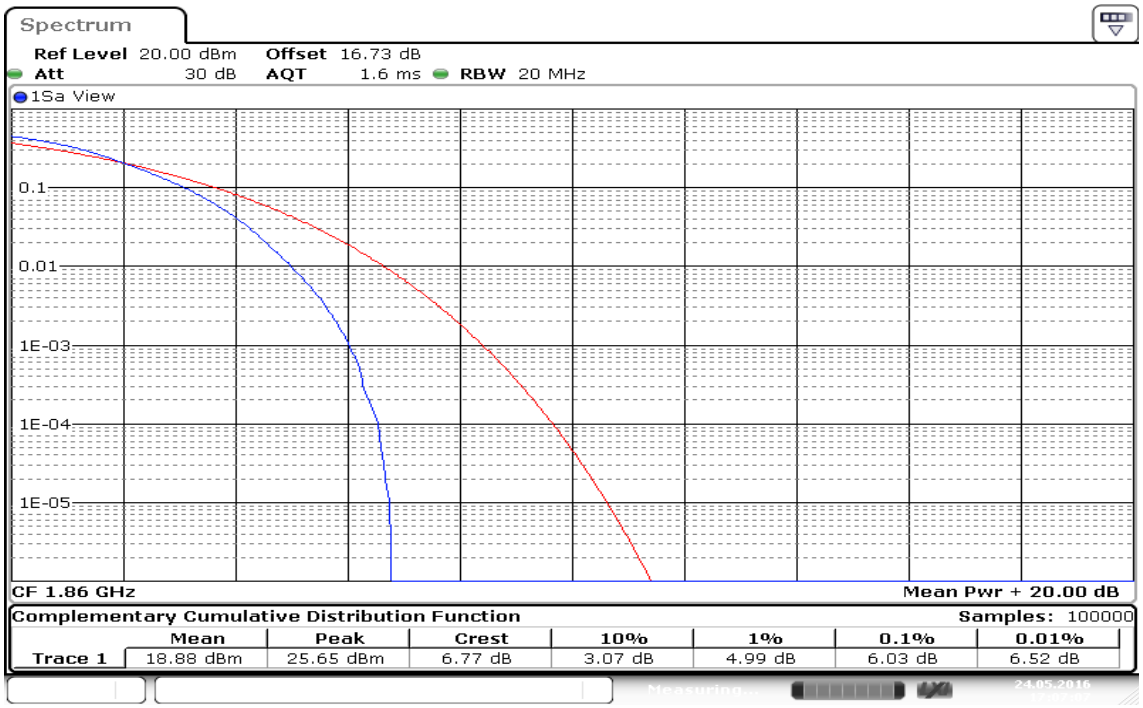
CH High



Date: 24.MAY.2016 17:01:21

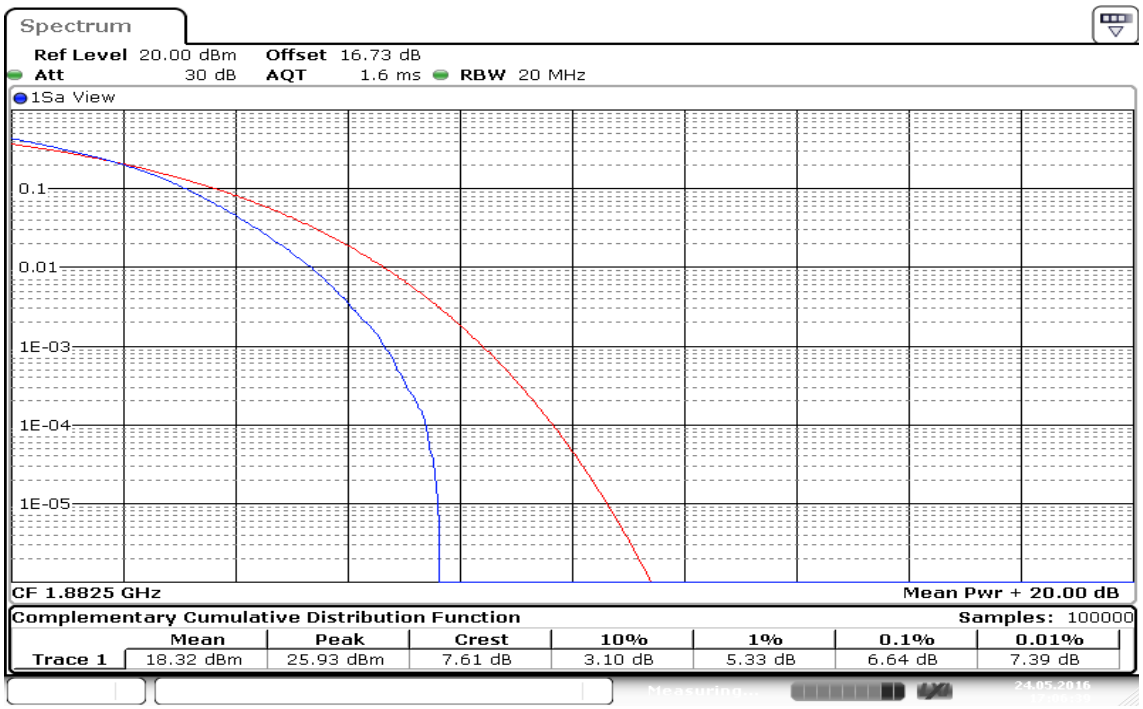
CHANNEL BANDWIDTH: 20MHz / 16QAM

CH Low



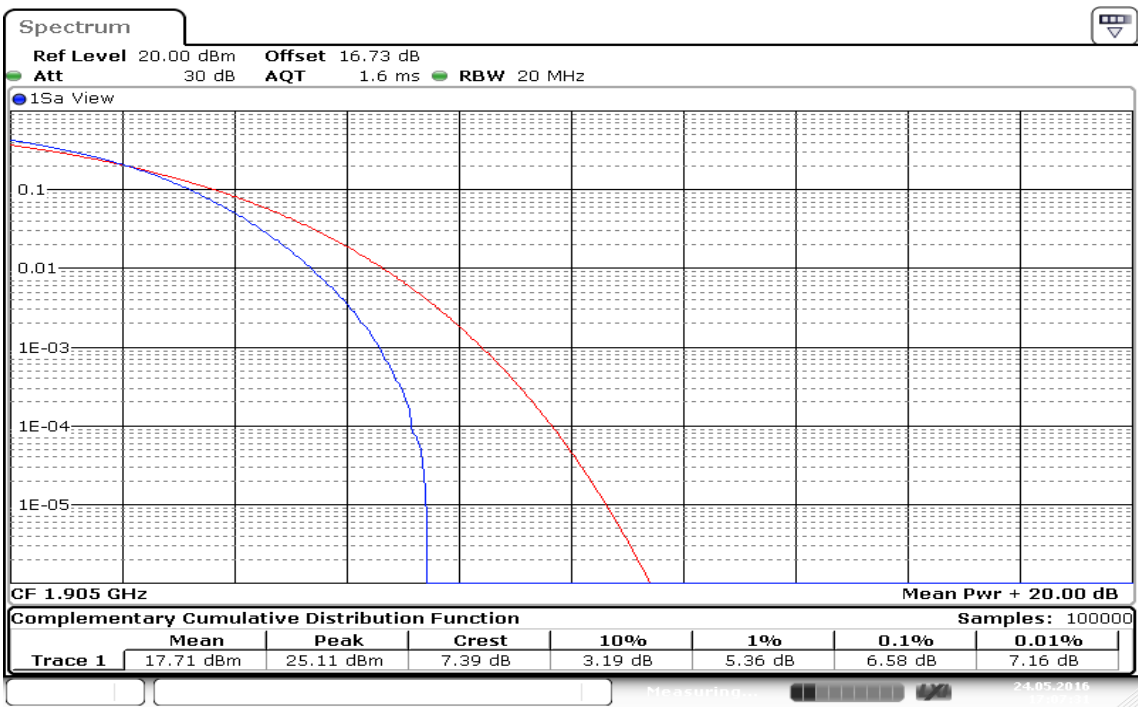
Date: 24.MAY.2016 17:07:06

CH Mid



Date: 24.MAY.2016 17:06:38

CH High

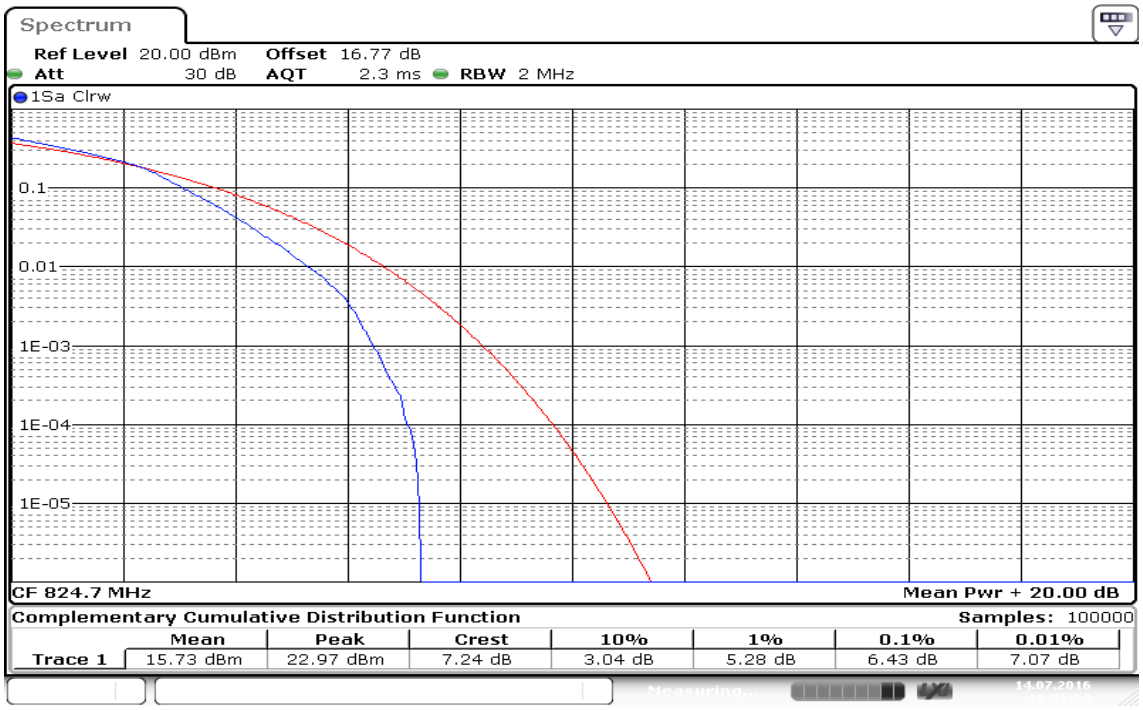


Date: 24.MAY.2016 17:07:31

LTE Band 5

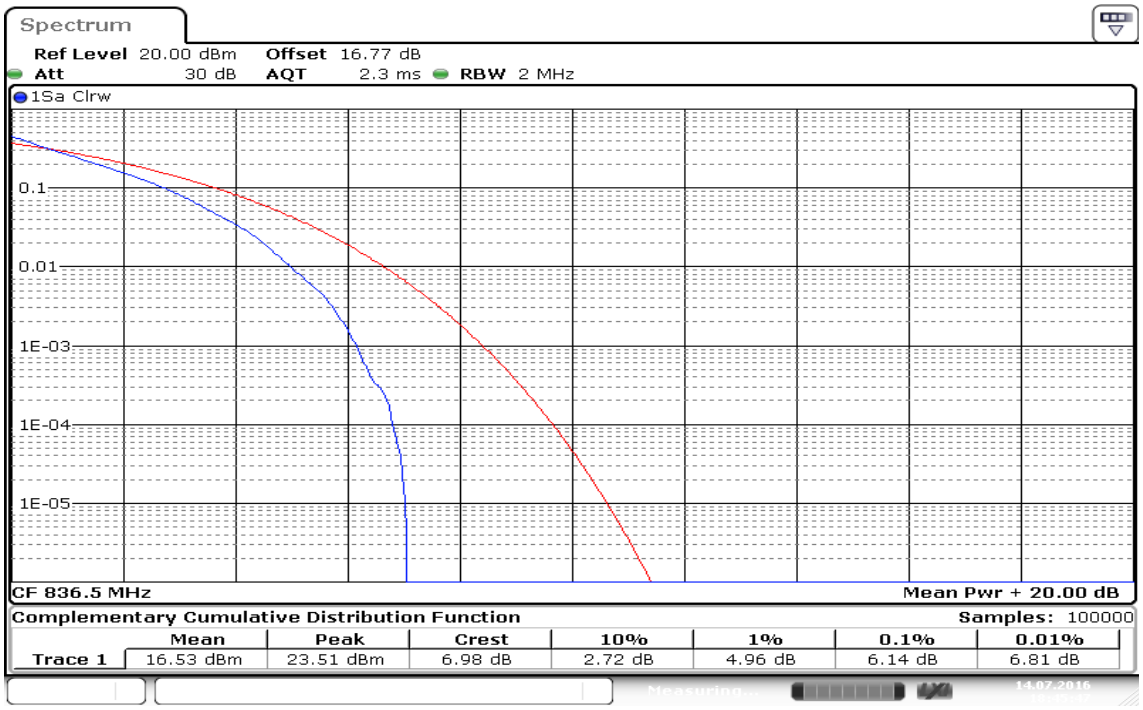
CHANNEL BANDWIDTH: 1.4MHz / QPSK

CH Low



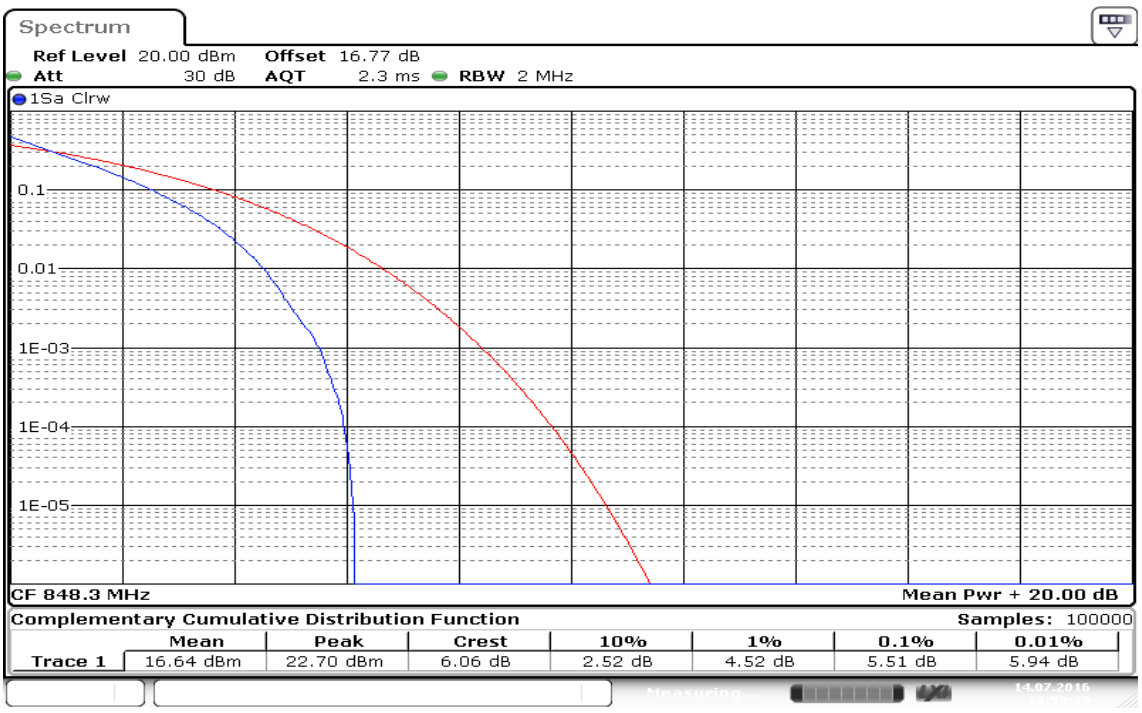
Date: 14.JUL.2016 18:56:52

CH Mid



Date: 14.JUL.2016 18:45:47

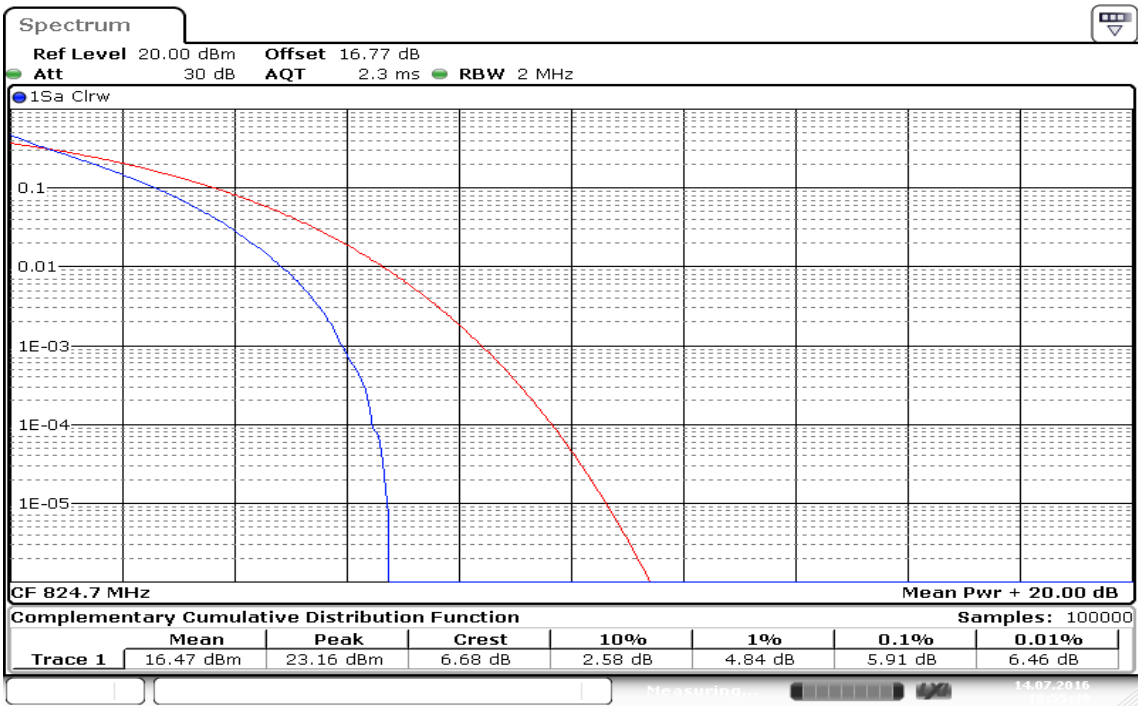
CH High



Date: 14.JUL.2016 18:59:29

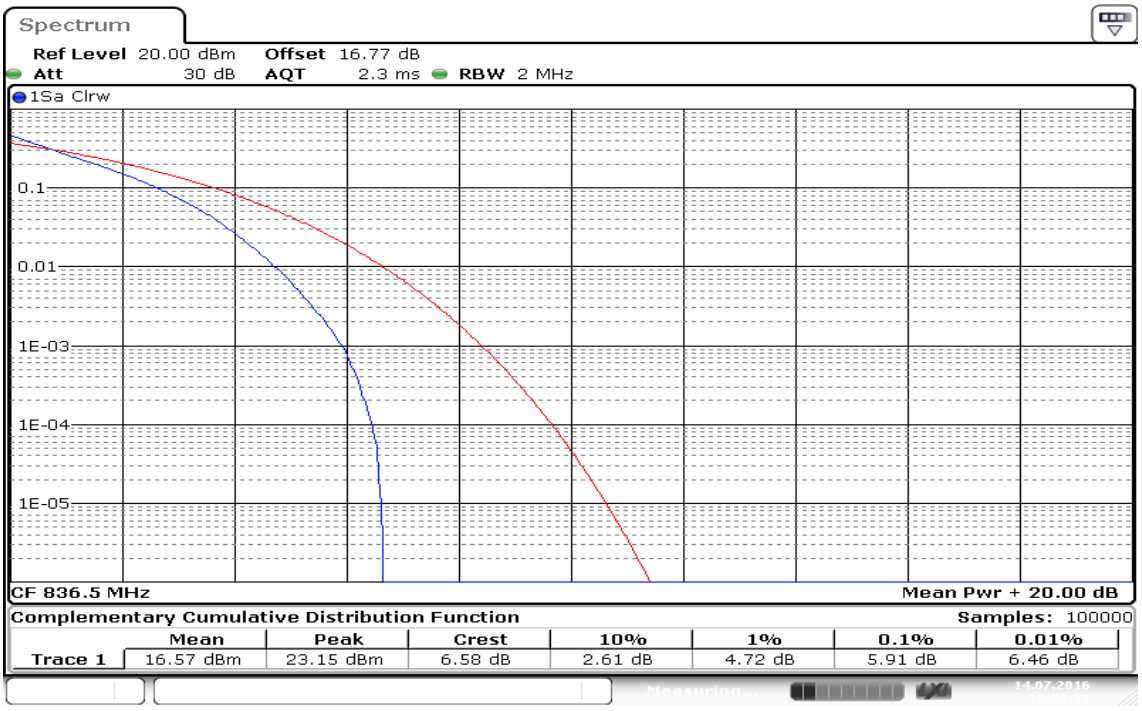
CHANNEL BANDWIDTH: 1.4MHz / 16QAM

CH Low



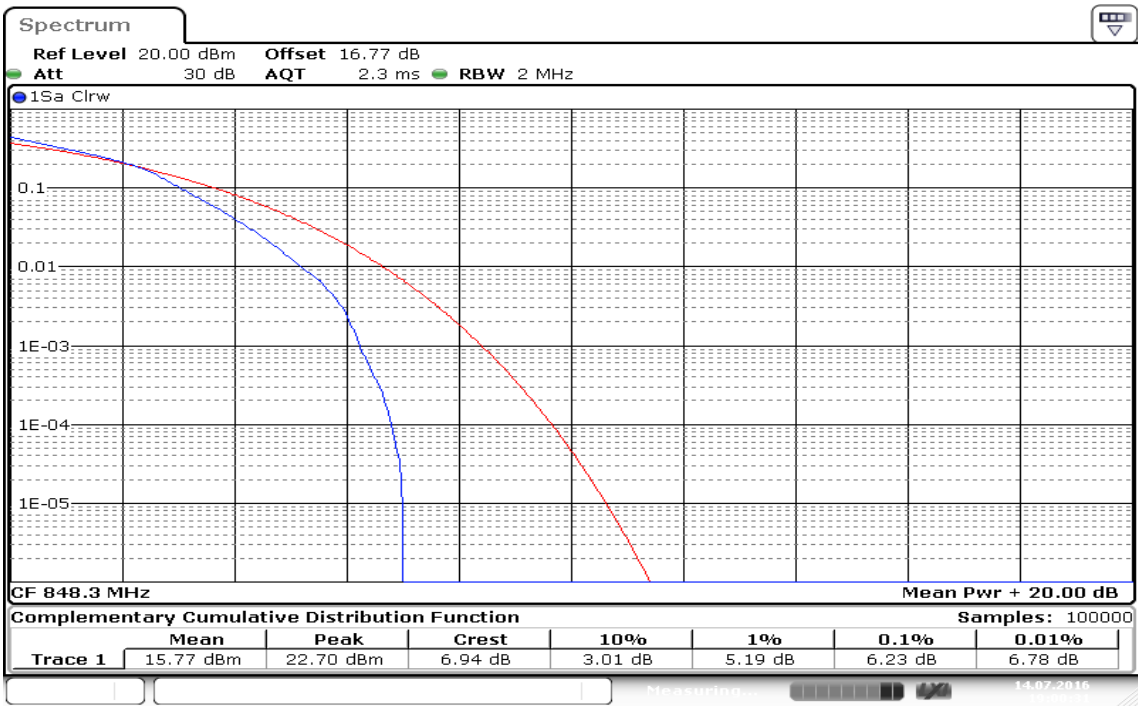
Date: 14.JUL.2016 18:55:50

CH Mid



Date: 14.JUL.2016 18:52:51

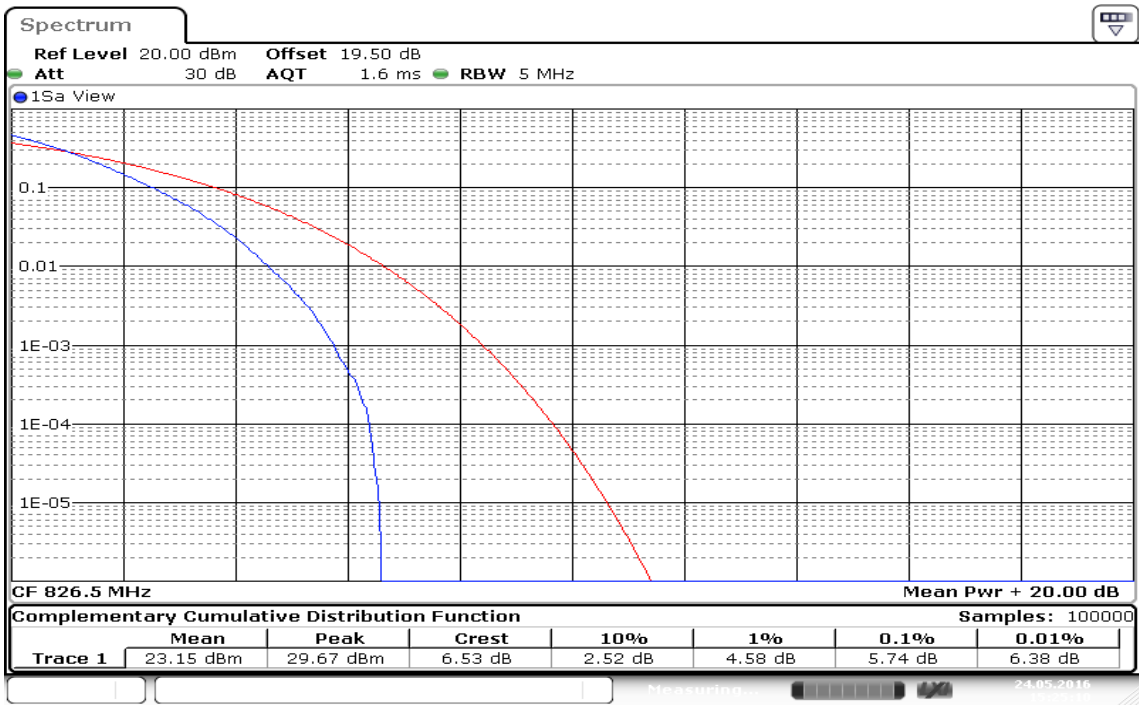
CH High



Date: 14.JUL.2016 19:00:32

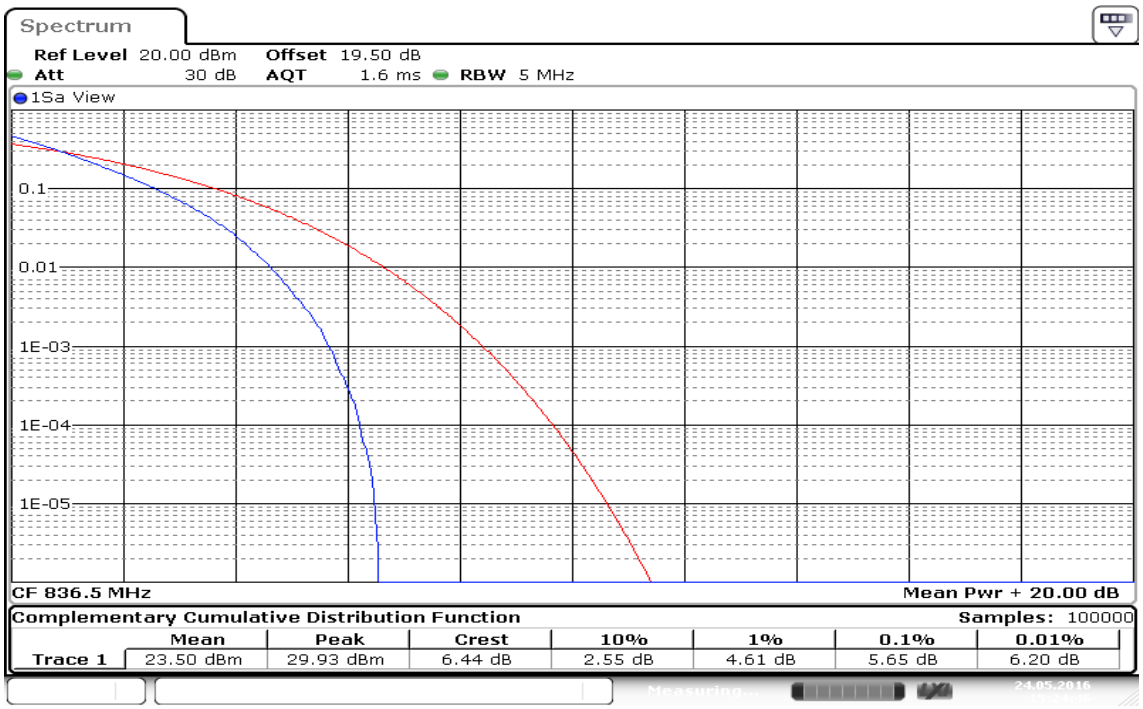
CHANNEL BANDWIDTH: 5MHz / QPSK

CH Low



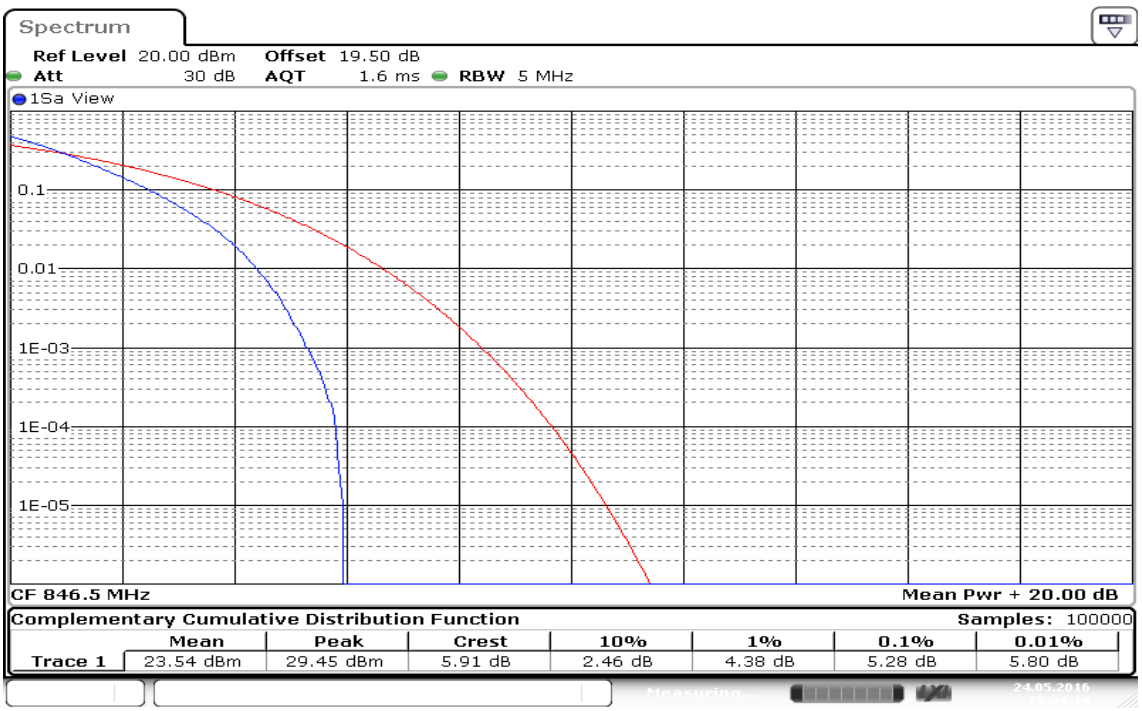
Date: 24.MAY.2016 15:25:09

CH Mid



Date: 24.MAY.2016 15:24:46

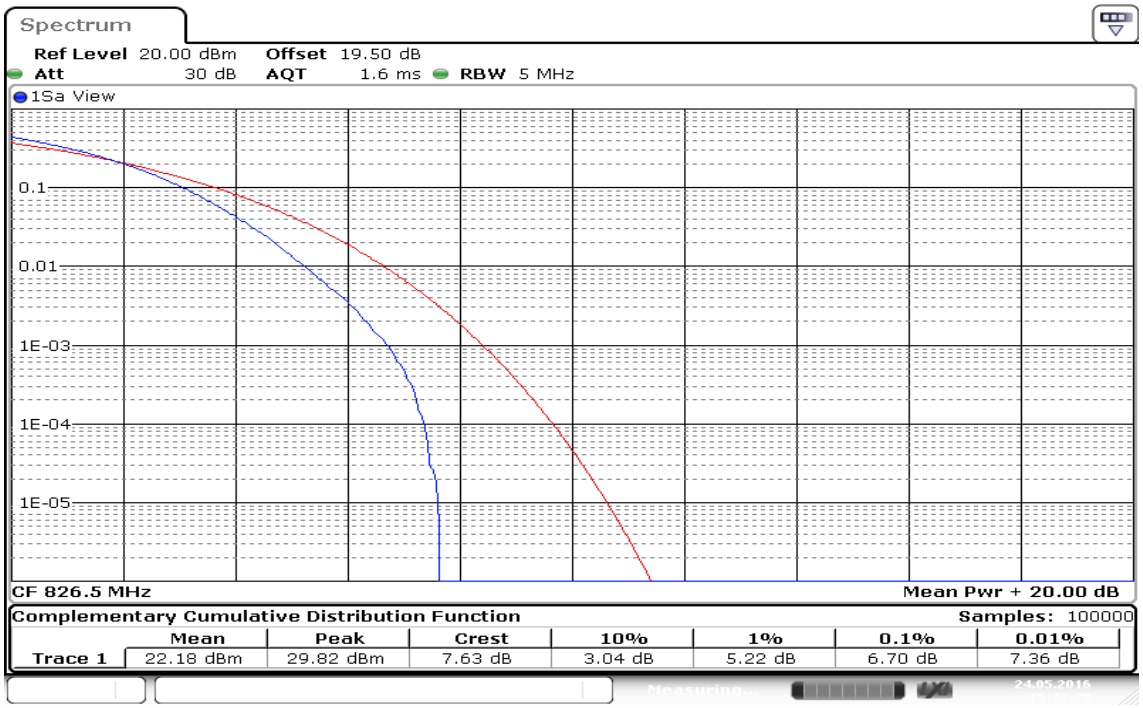
CH High



Date: 24.MAY.2016 15:24:14

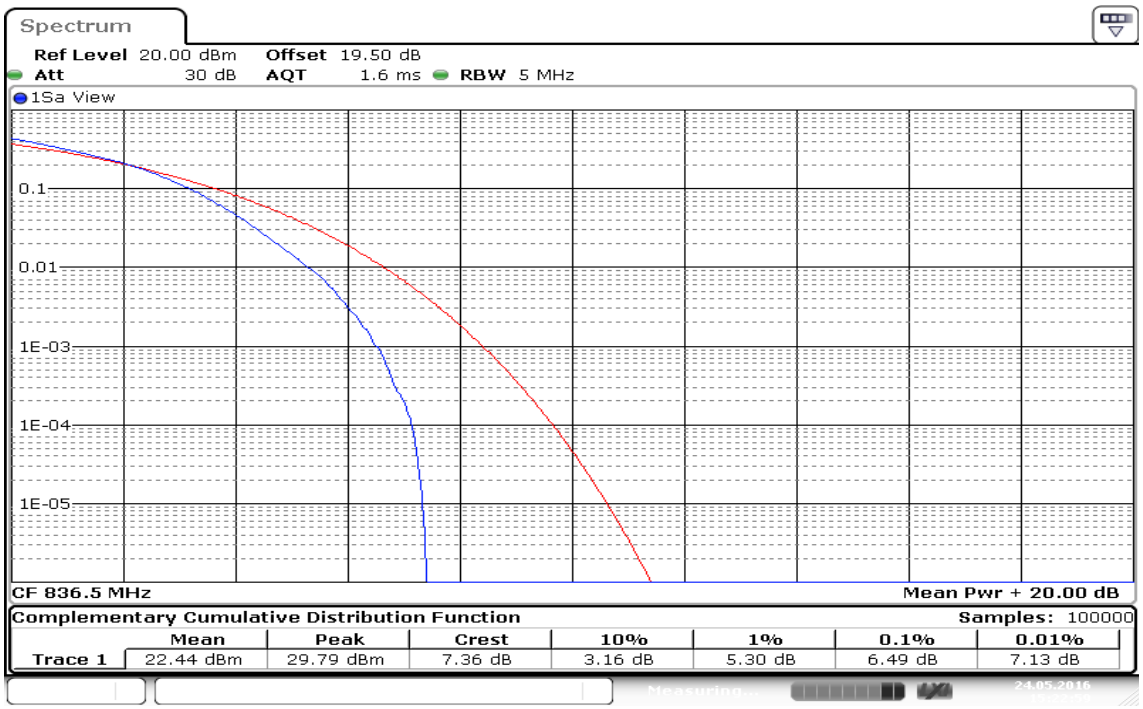
CHANNEL BANDWIDTH: 5MHz / 16QAM

CH Low



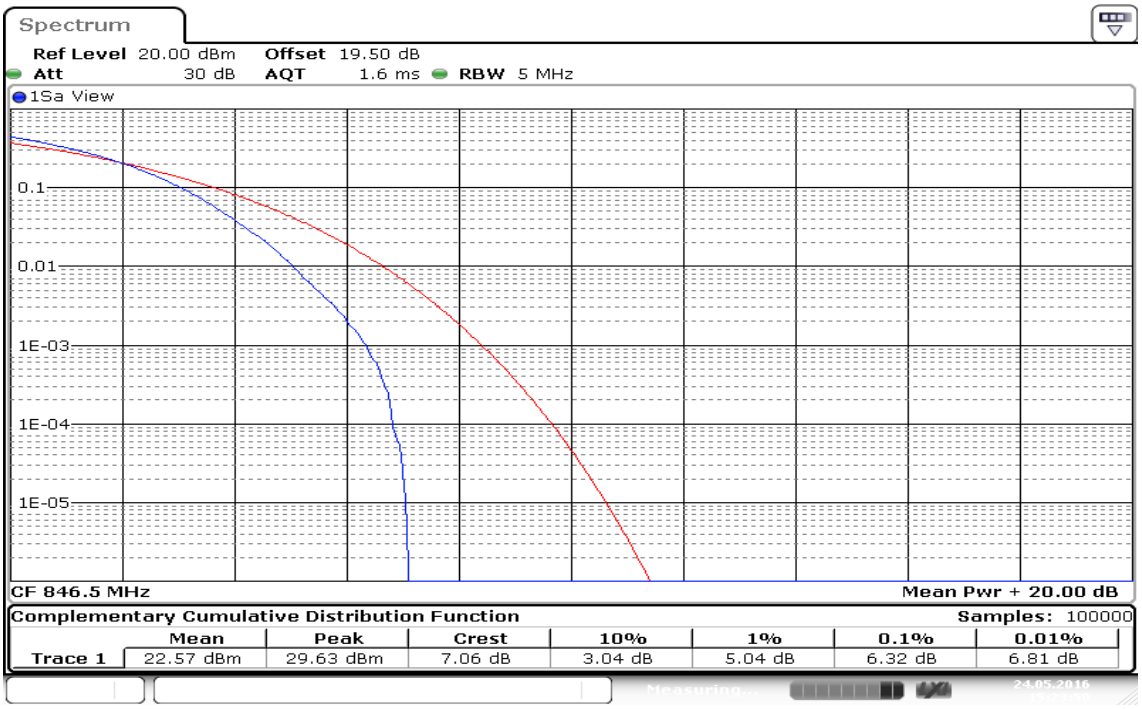
Date: 24.MAY.2016 15:23:28

CH Mid



Date: 24.MAY.2016 15:22:59

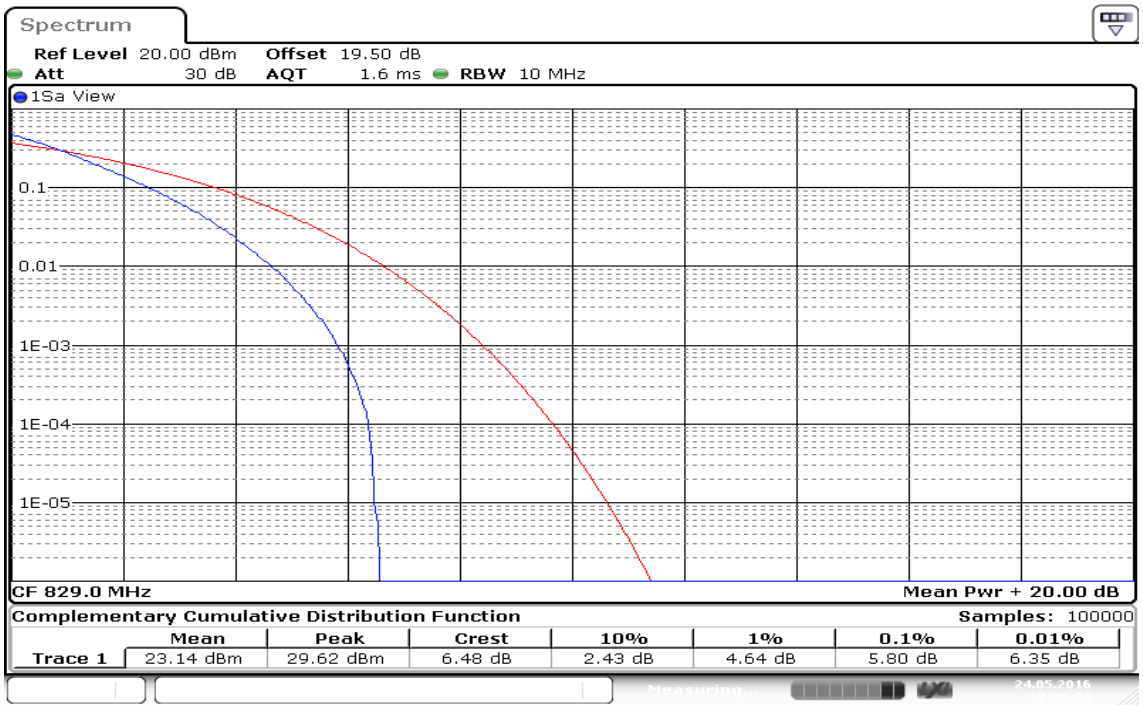
CH High



Date: 24.MAY.2016 15:23:50

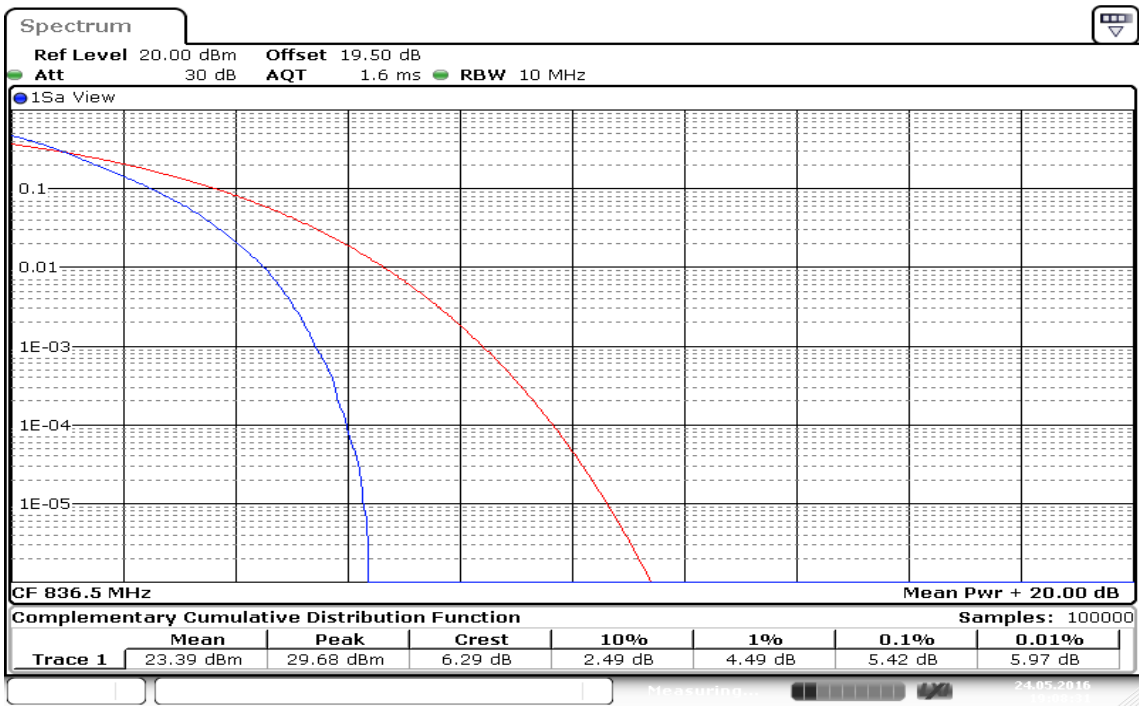
CHANNEL BANDWIDTH: 10MHz / QPSK

CH Low



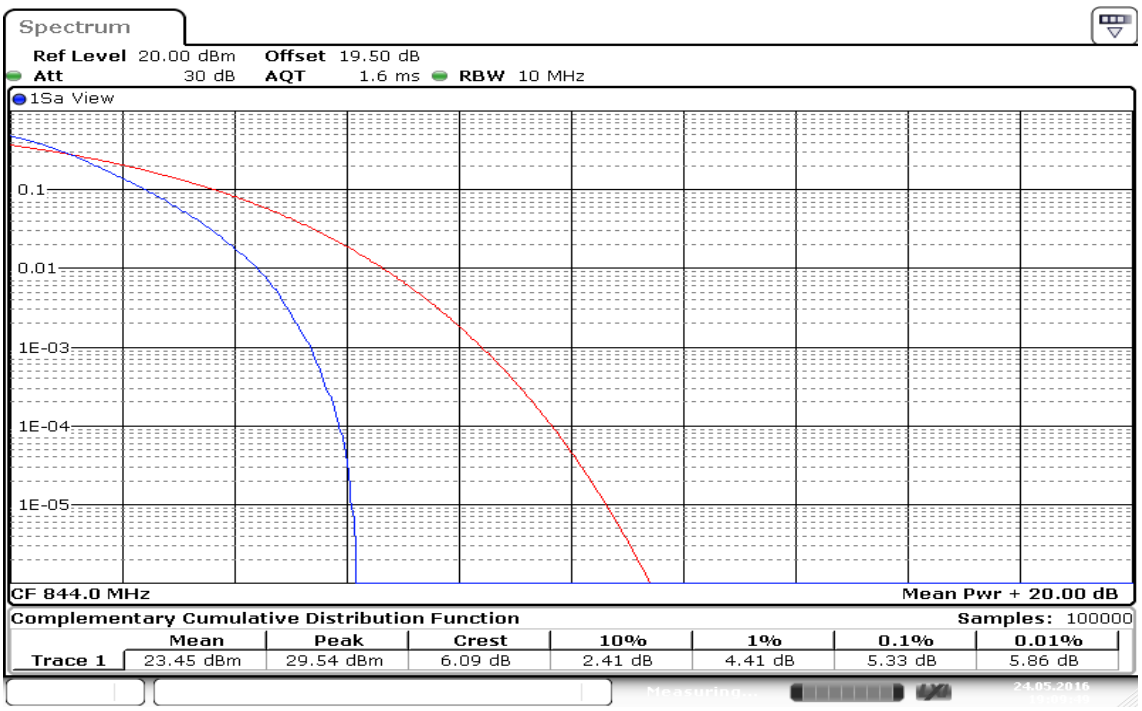
Date: 24.MAY.2016 19:09:25

CH Mid



Date: 24.MAY.2016 19:08:30

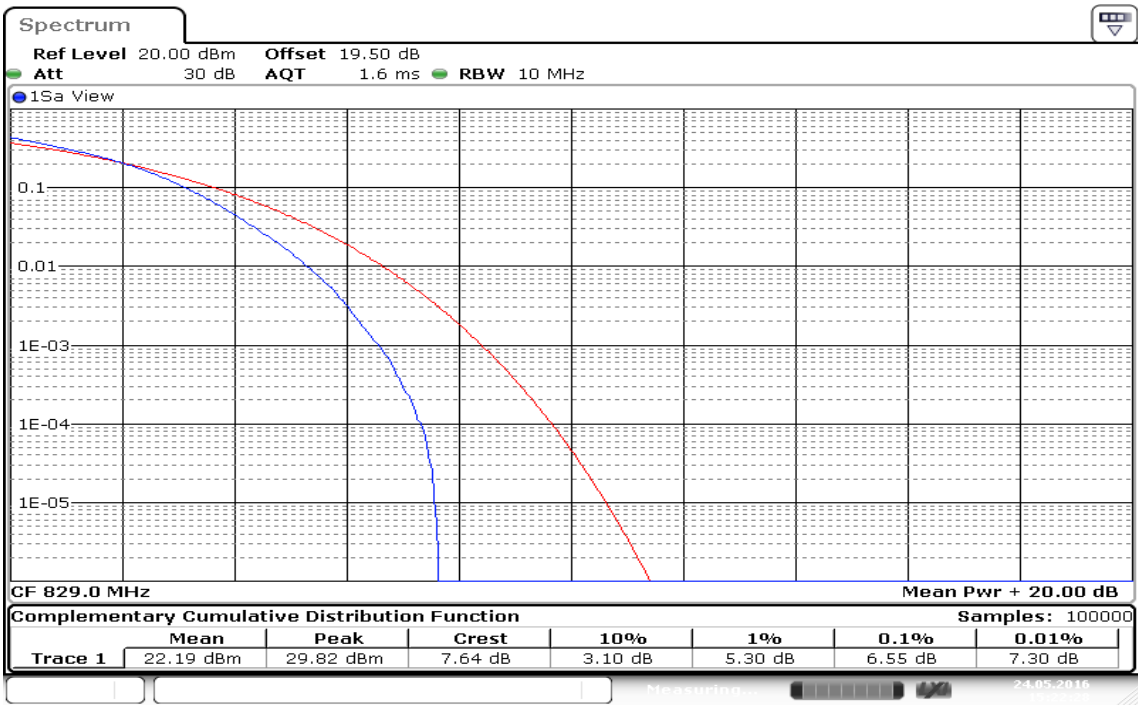
CH High



Date: 24.MAY.2016 19:09:49

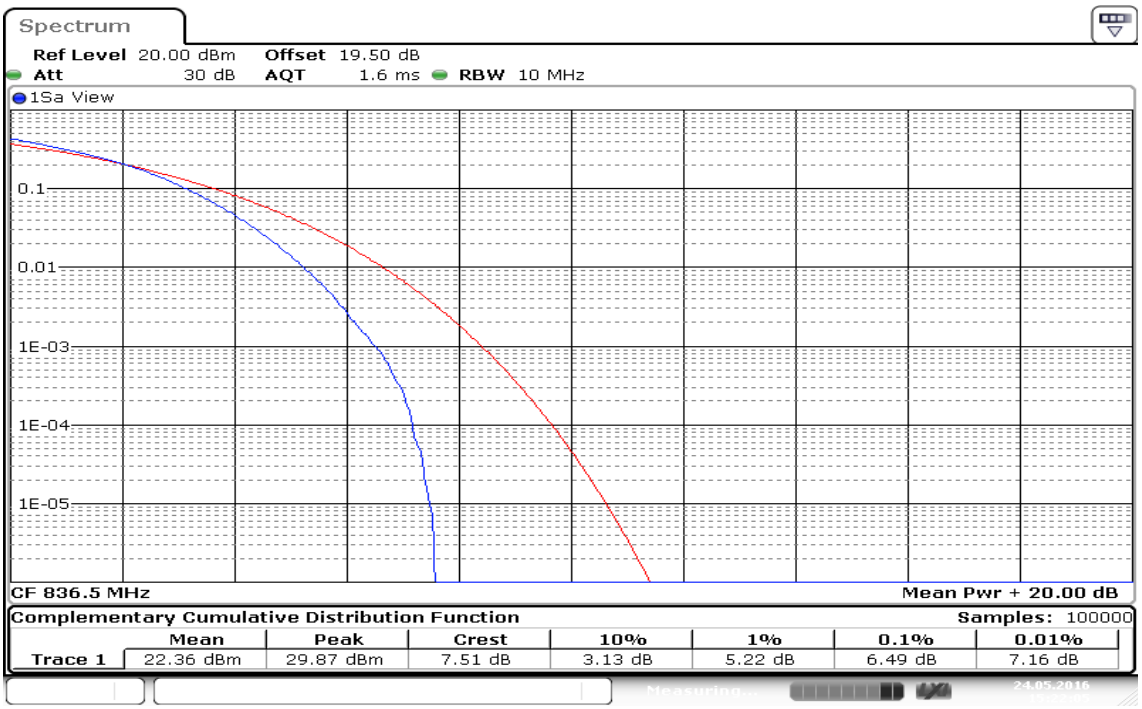
CHANNEL BANDWIDTH: 10MHz / 16QAM

CH Low



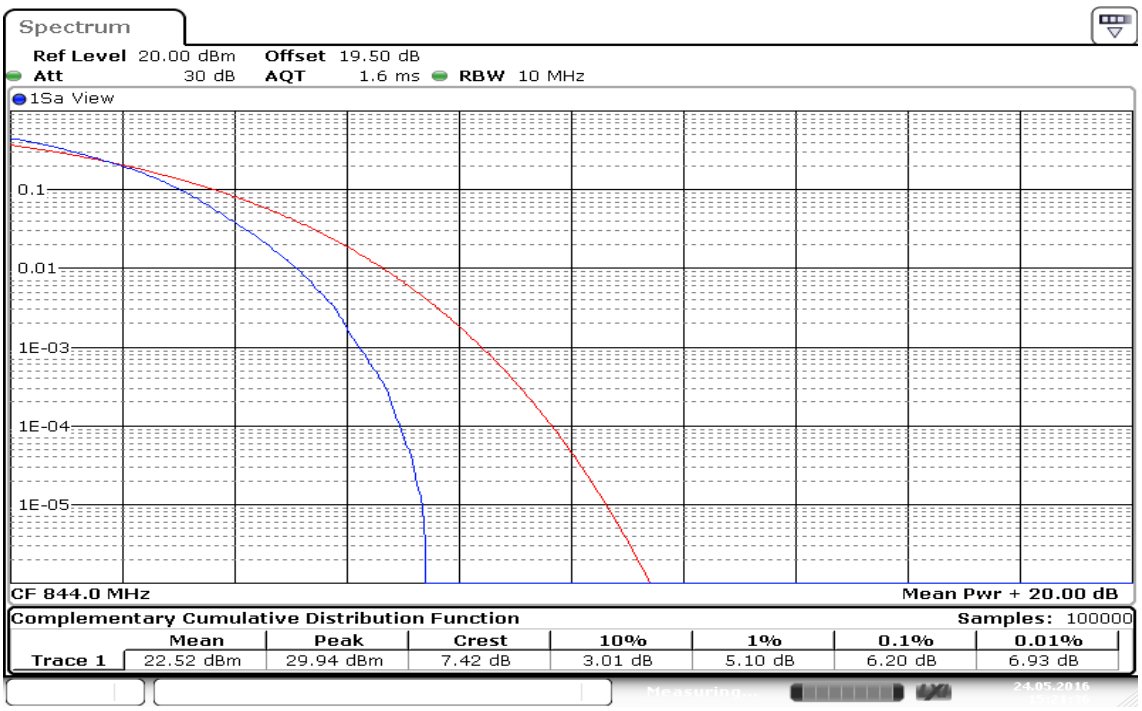
Date: 24.MAY.2016 15:22:28

CH Mid



Date: 24.MAY.2016 15:22:05

CH High

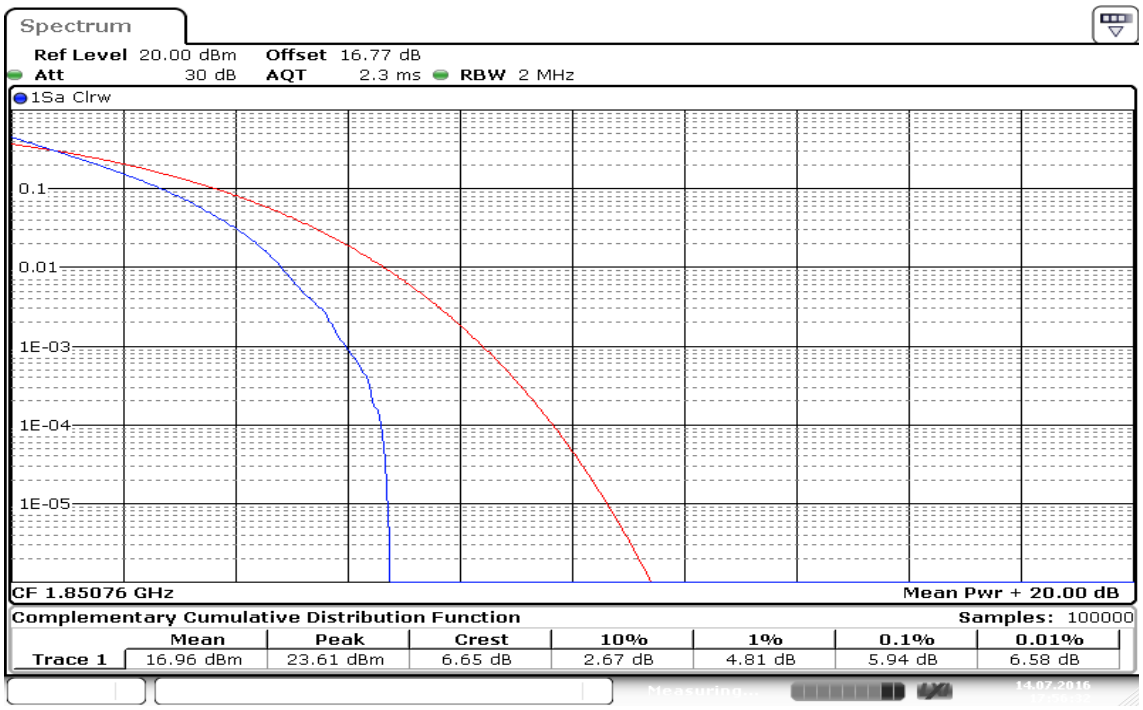


Date: 24.MAY.2016 15:21:35

LTE Band 2

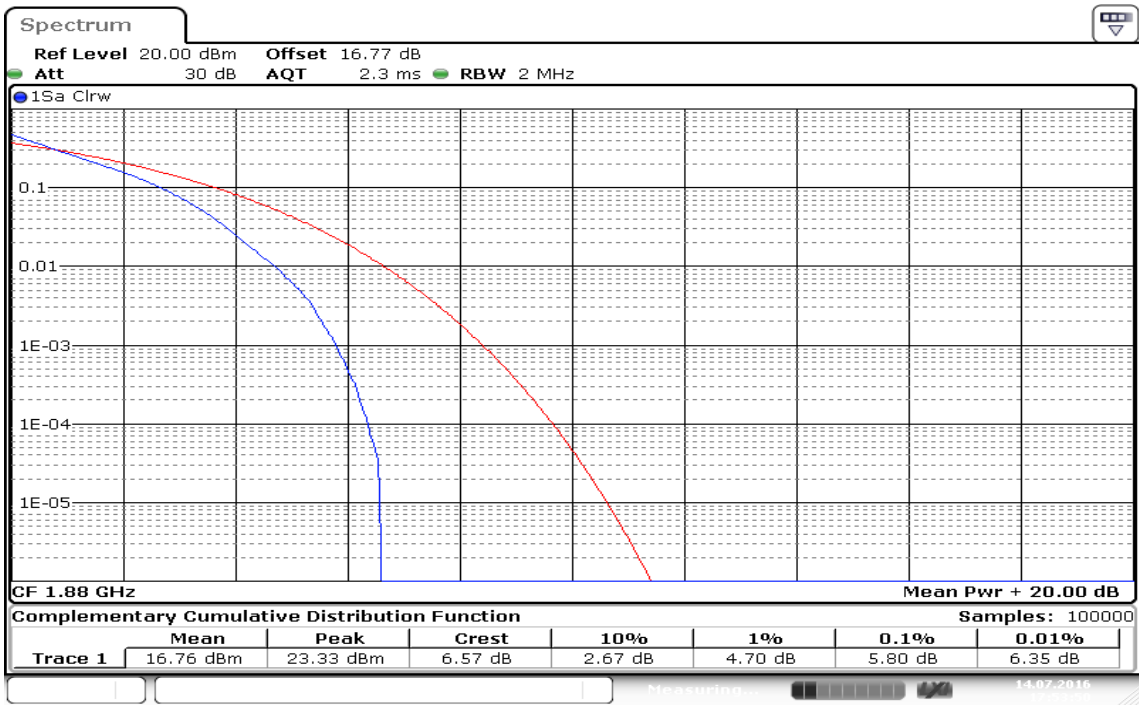
CHANNEL BANDWIDTH: 1.4MHz / QPSK

CH Low



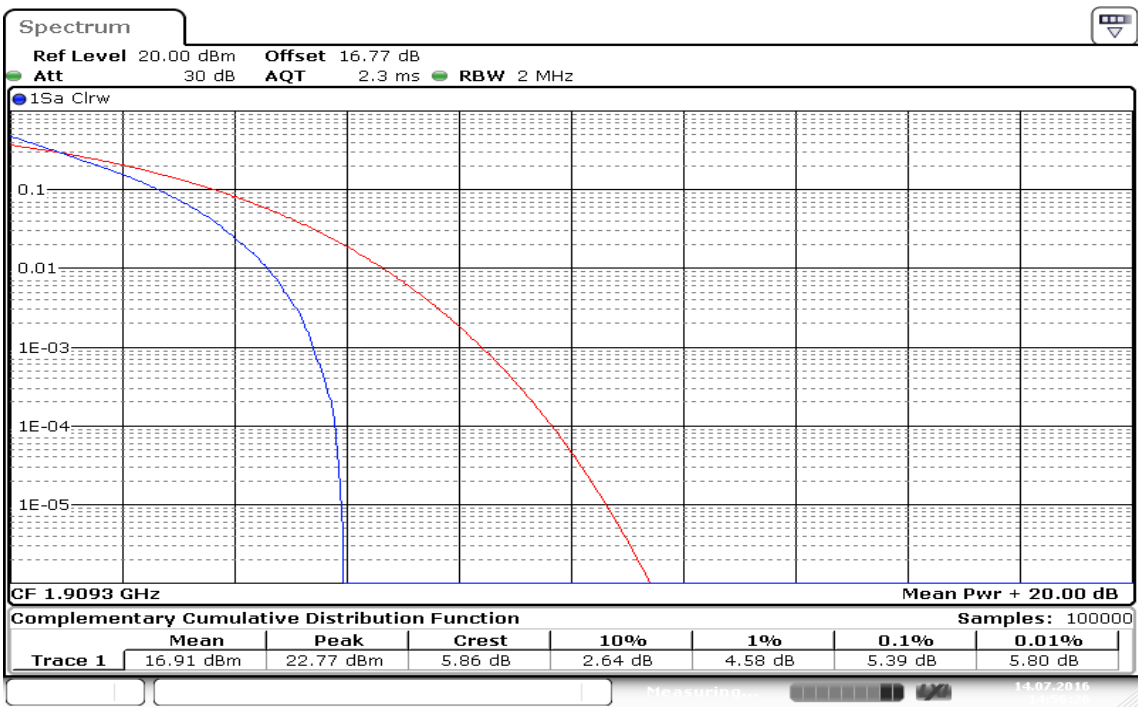
Date: 14.JUL.2016 17:56:32

CH Mid



Date: 14.JUL.2016 17:53:51

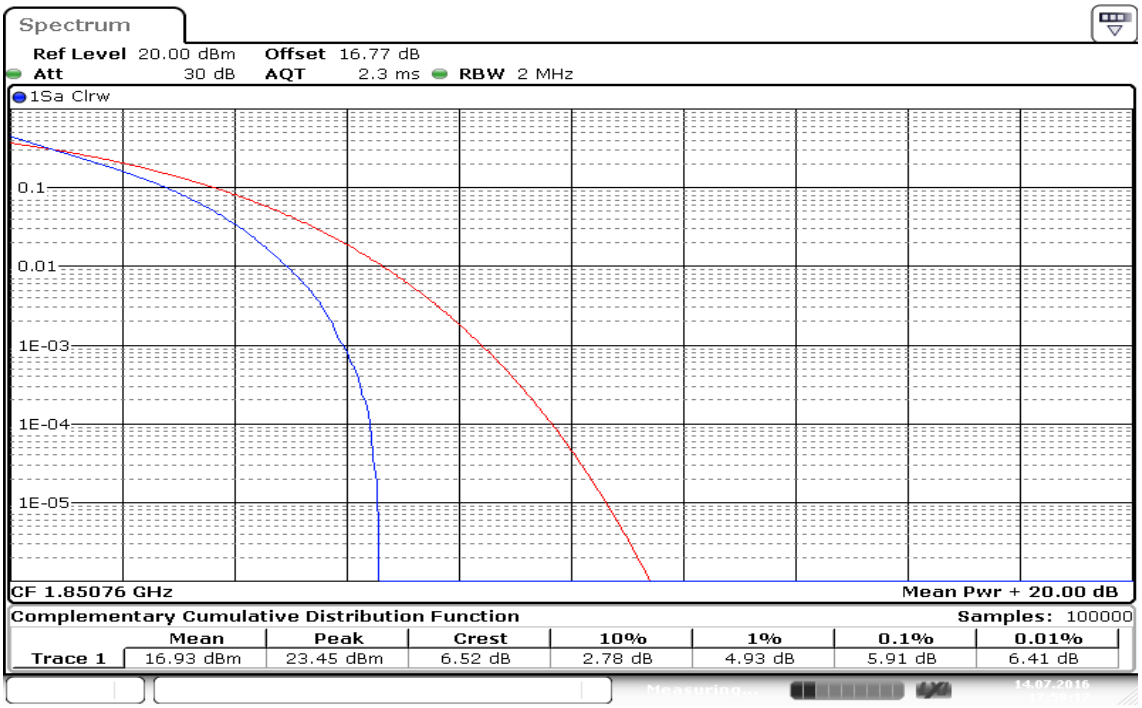
CH High



Date: 14.JUL.2016 14:56:26

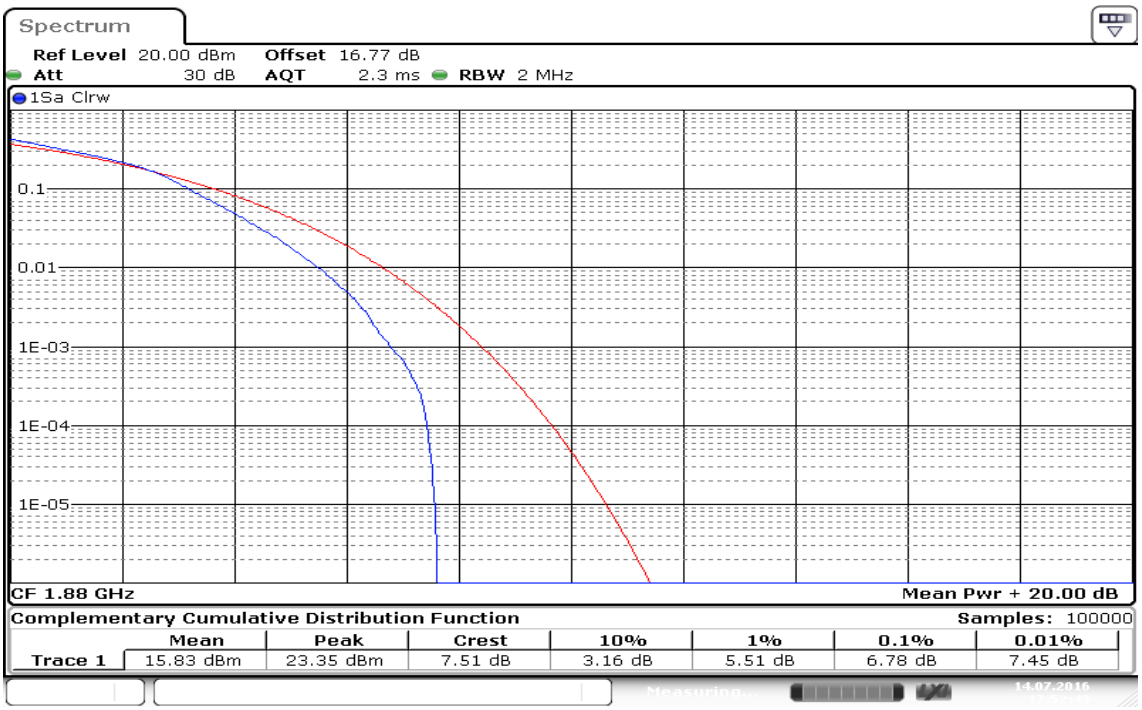
CHANNEL BANDWIDTH: 1.4MHz / 16QAM

CH Low



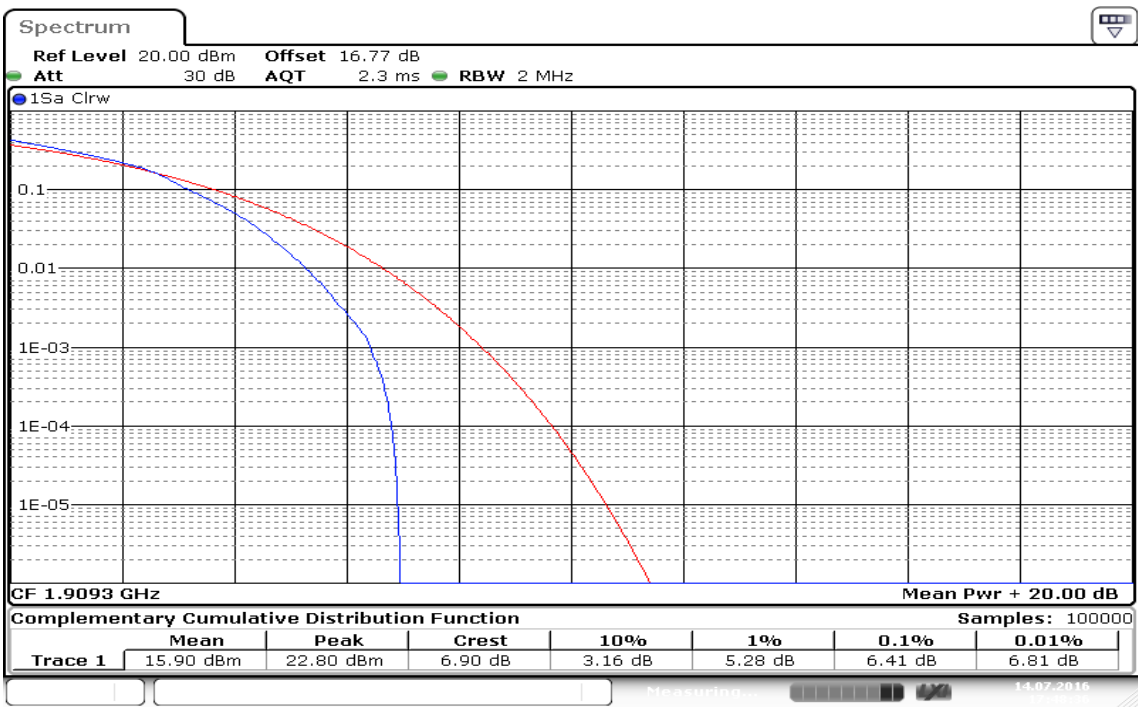
Date: 14.JUL.2016 17:58:18

CH Mid



Date: 14.JUL.2016 17:52:44

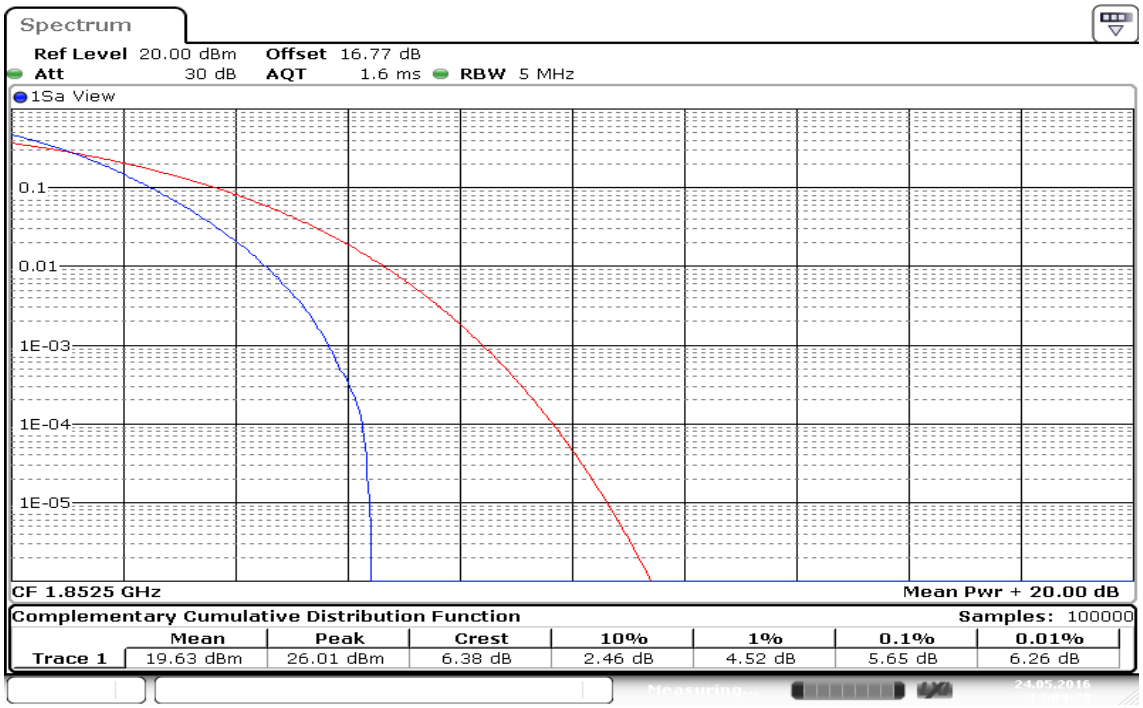
CH High



Date: 14.JUL.2016 17:48:37

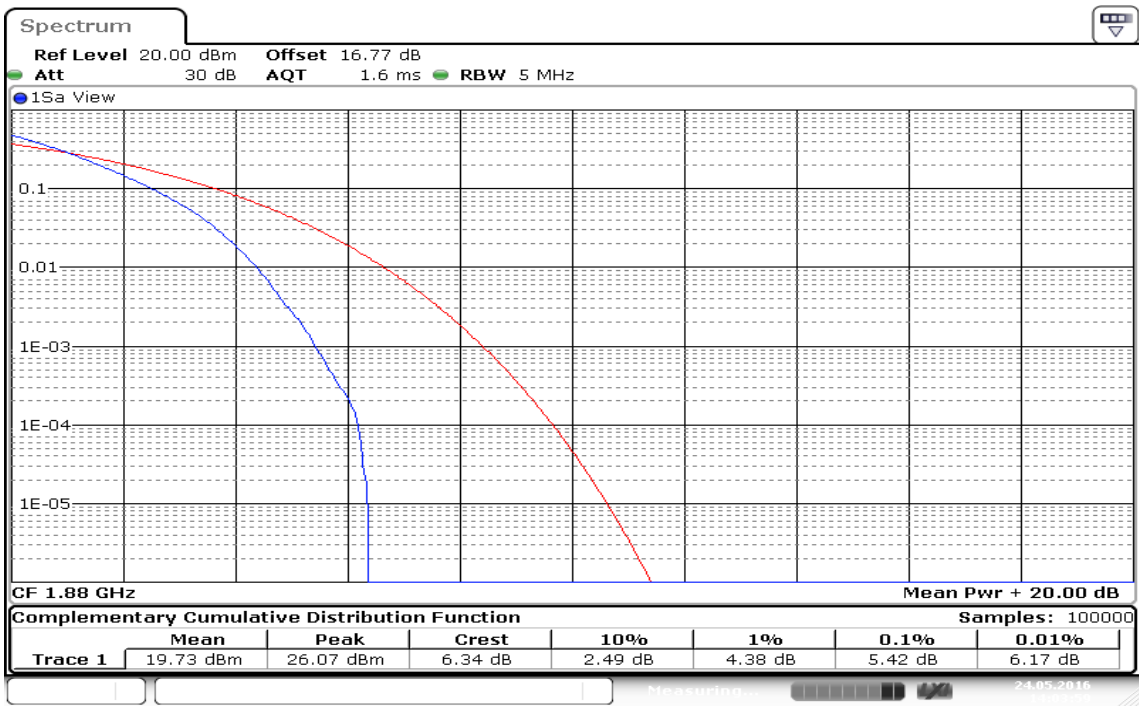
CHANNEL BANDWIDTH: 5MHz / QPSK

CH Low



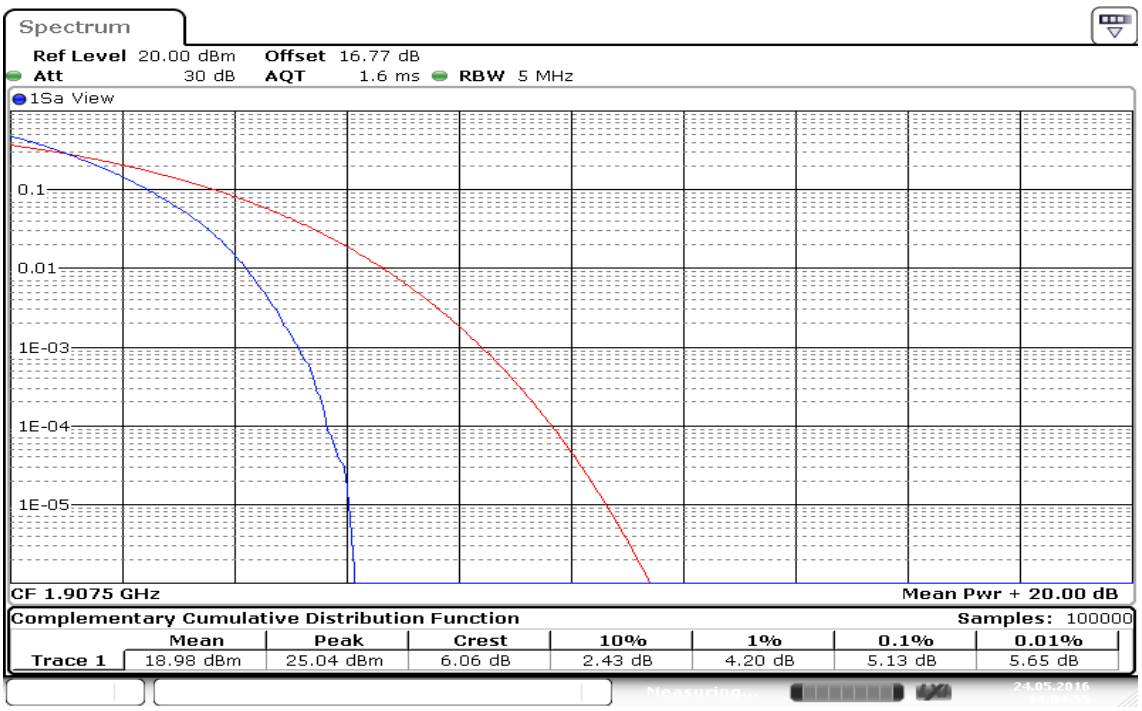
Date: 24.MAY.2016 14:04:28

CH Mid



Date: 24.MAY.2016 14:03:59

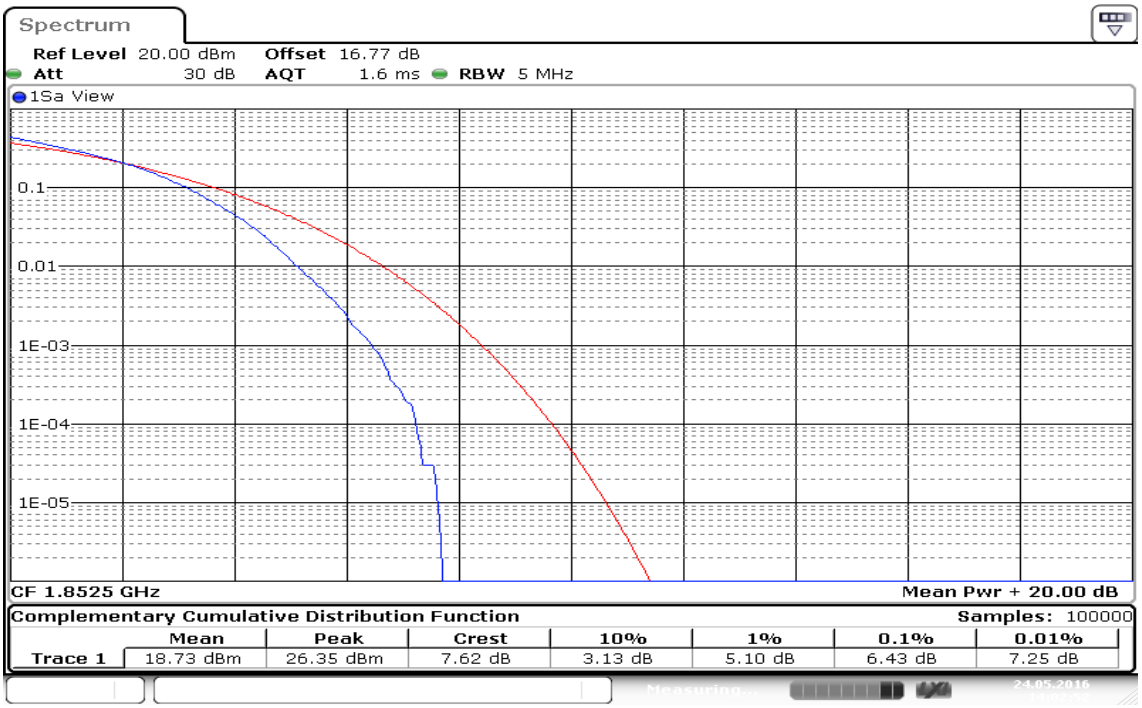
CH High



Date: 24.MAY.2016 14:04:55

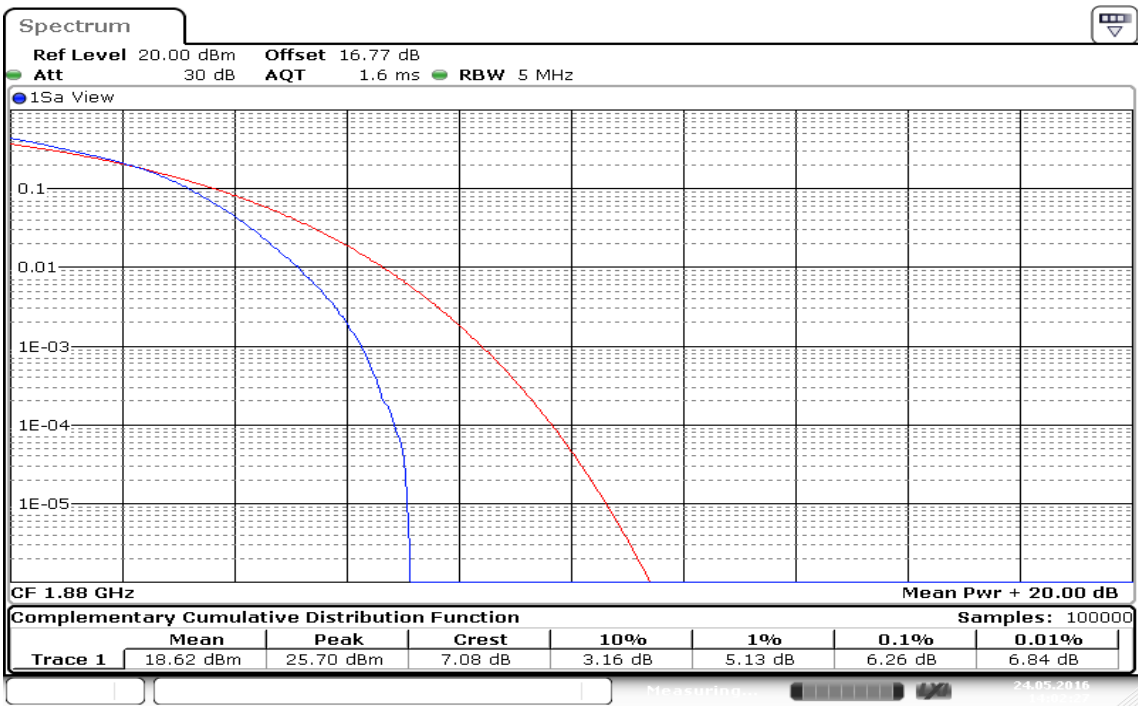
CHANNEL BANDWIDTH: 5MHz / 16QAM

CH Low



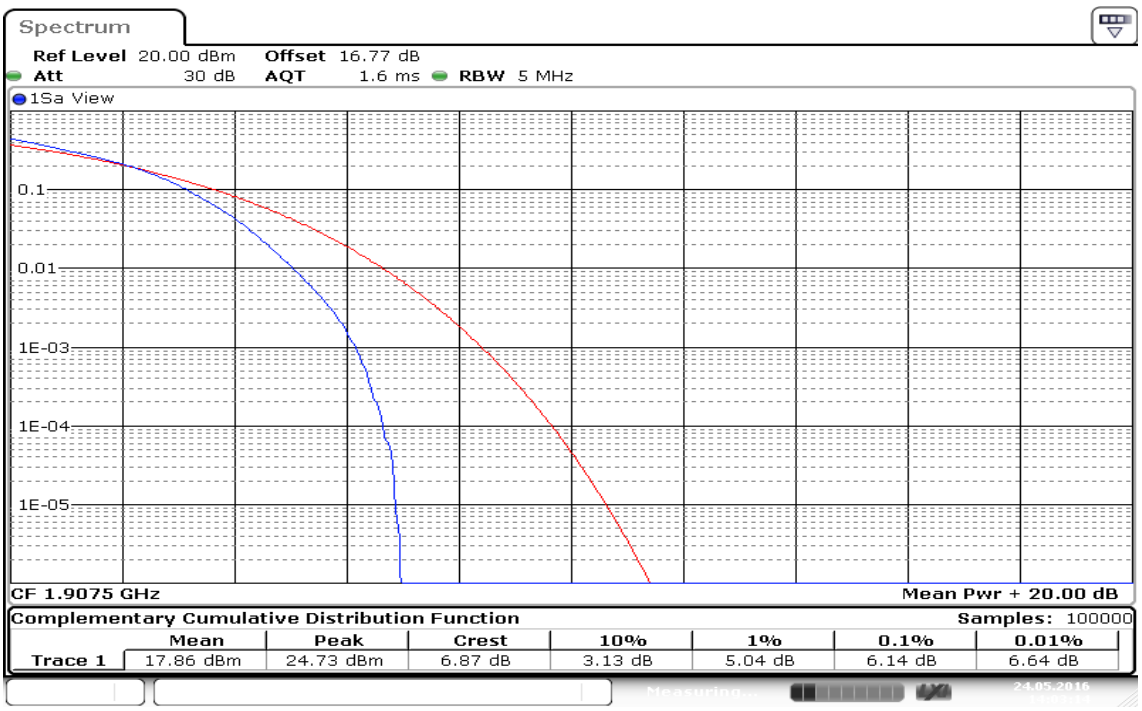
Date: 24.MAY.2016 14:02:52

CH Mid



Date: 24.MAY.2016 14:02:26

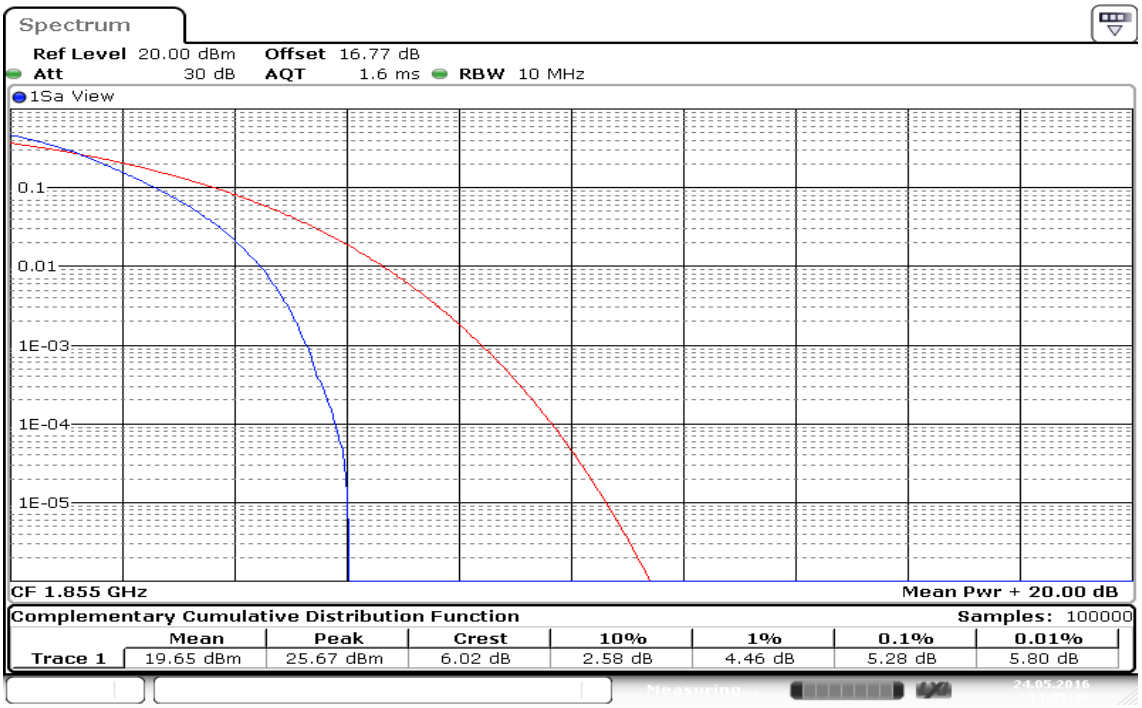
CH High



Date: 24.MAY.2016 14:03:14

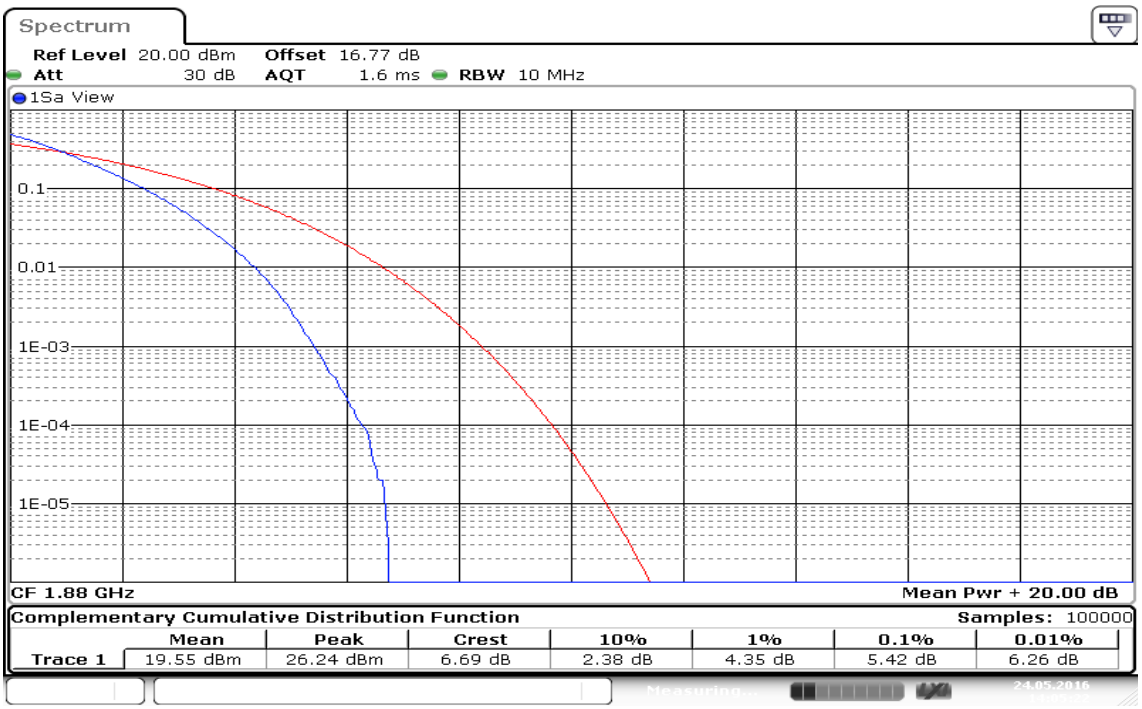
CHANNEL BANDWIDTH: 10MHz / QPSK

CH Low



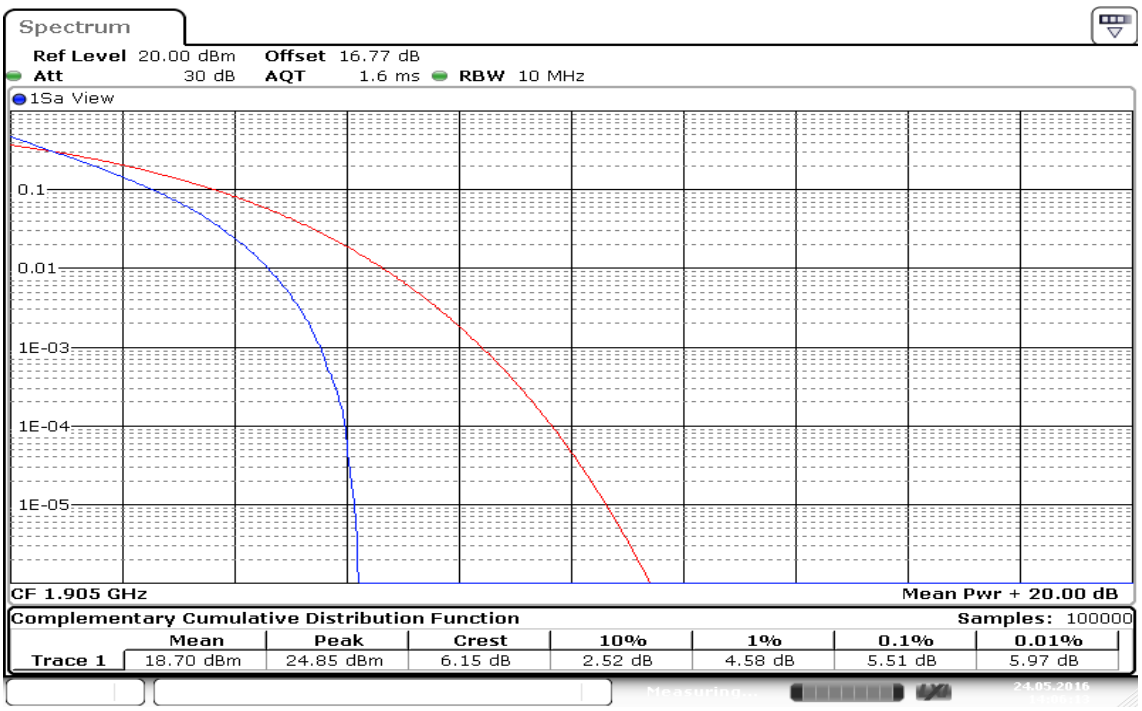
Date: 24.MAY.2016 14:05:46

CH Mid



Date: 24.MAY.2016 14:05:21

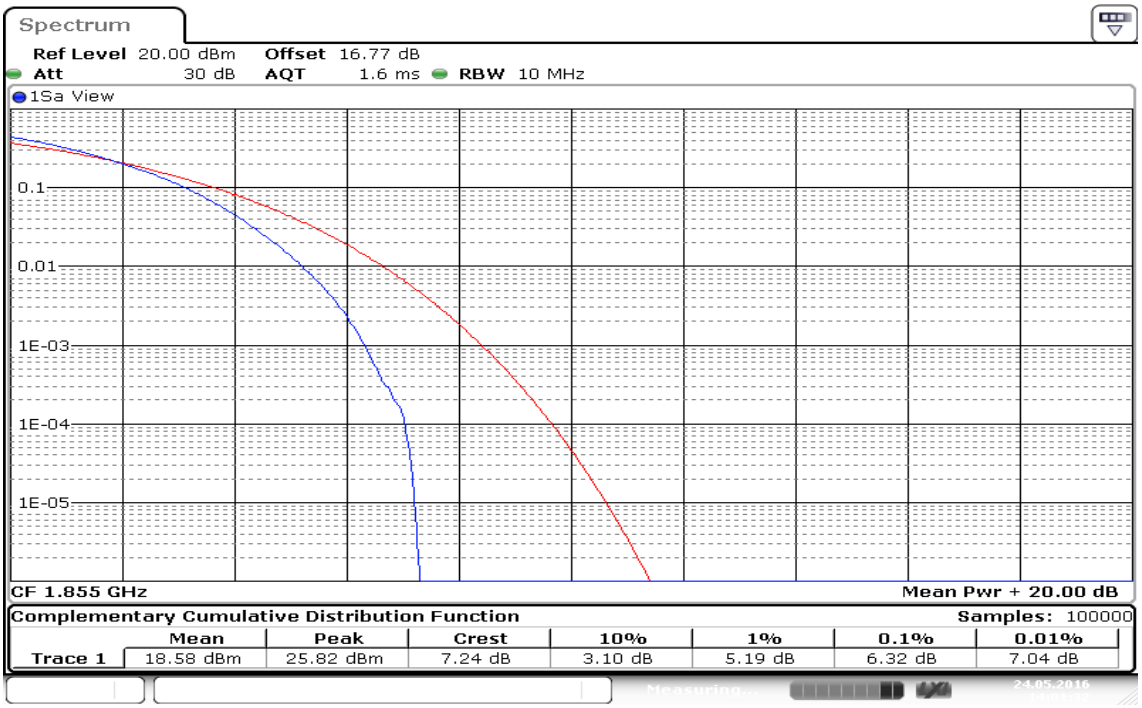
CH High



Date: 24.MAY.2016 14:06:13

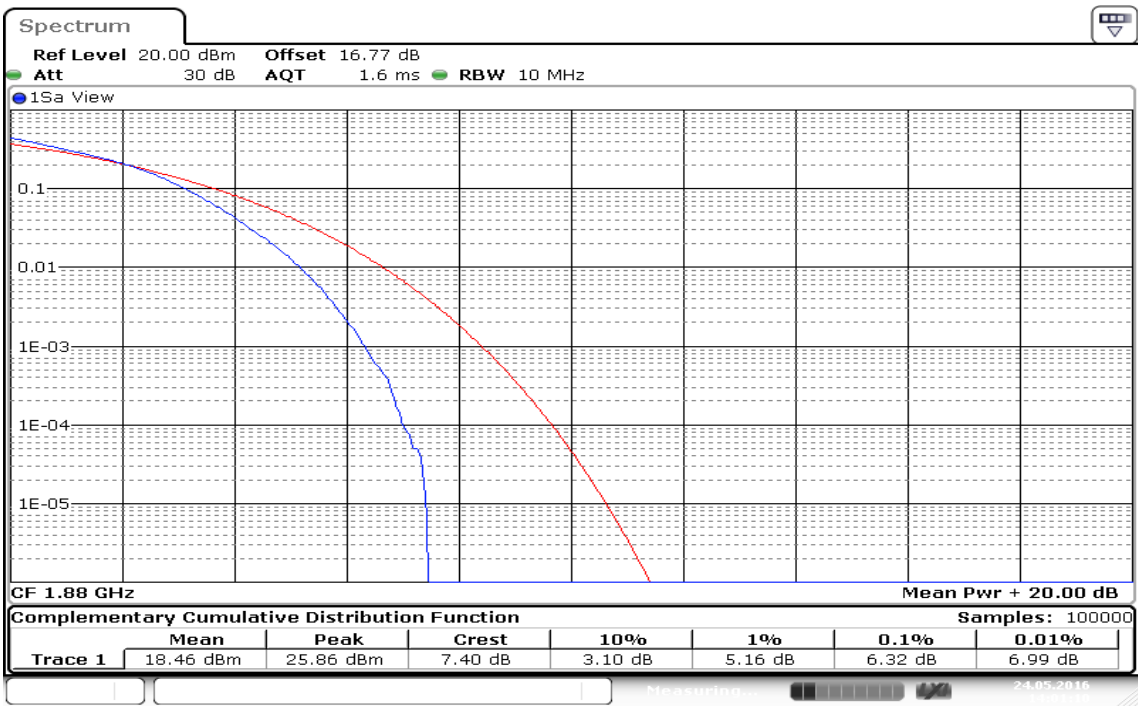
CHANNEL BANDWIDTH: 10MHz / 16QAM

CH Low



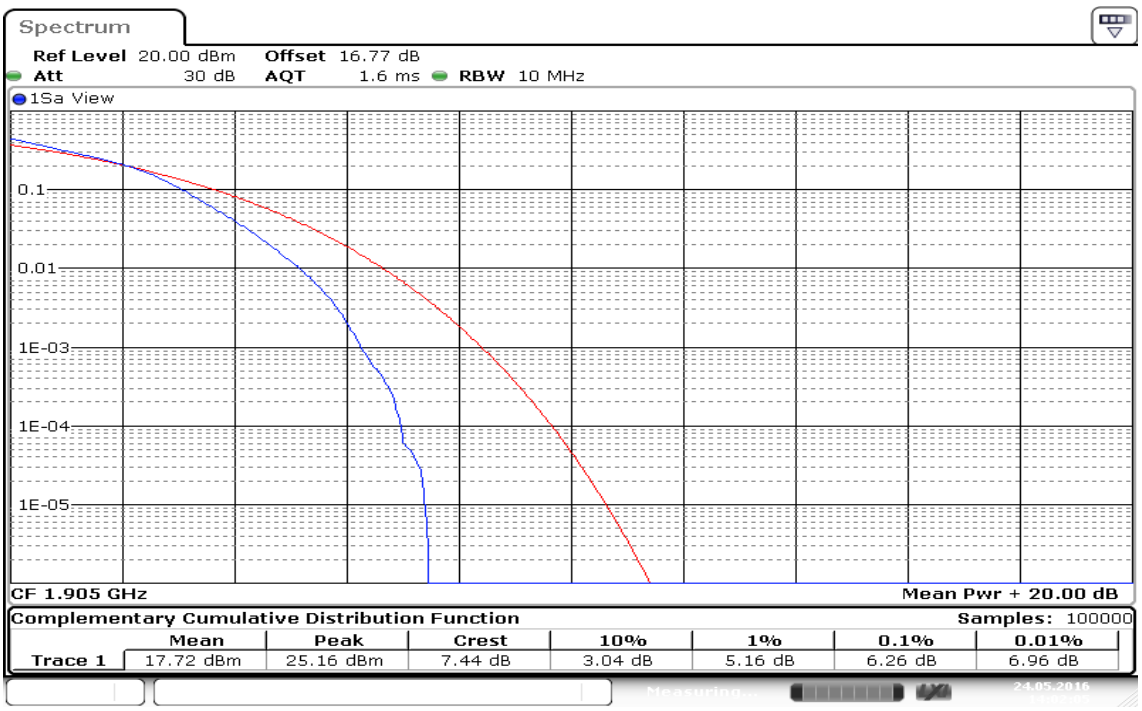
Date: 24.MAY.2016 14:01:32

CH Mid



Date: 24.MAY.2016 14:01:10

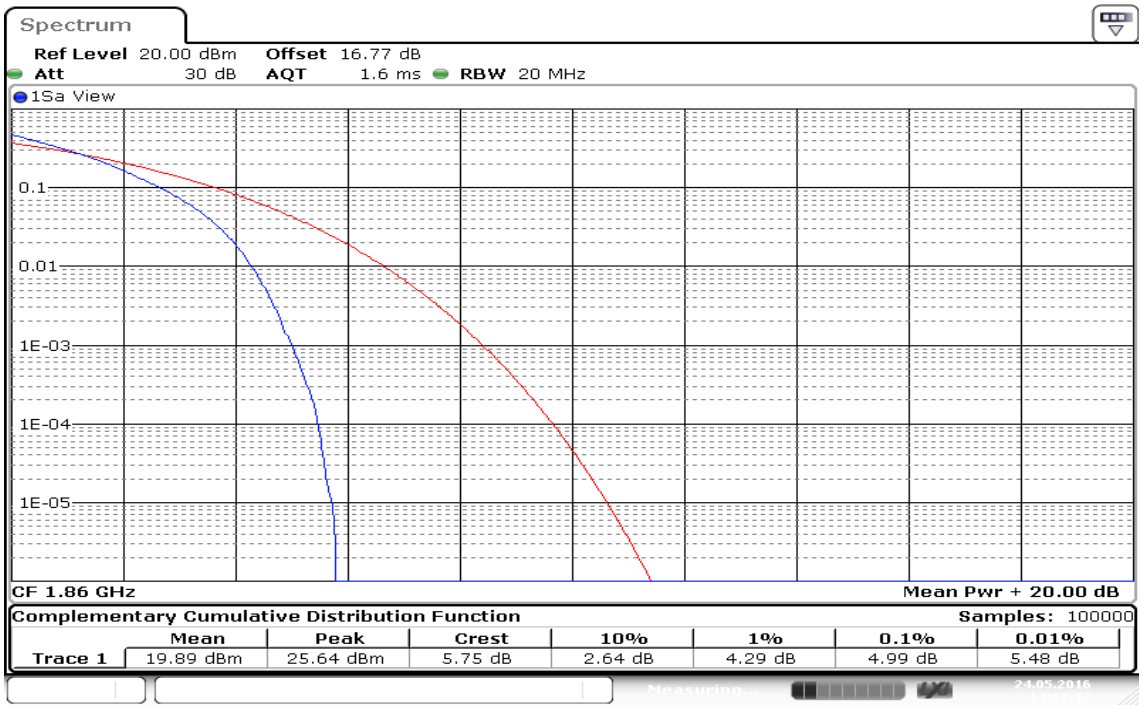
CH High



Date: 24.MAY.2016 14:02:05

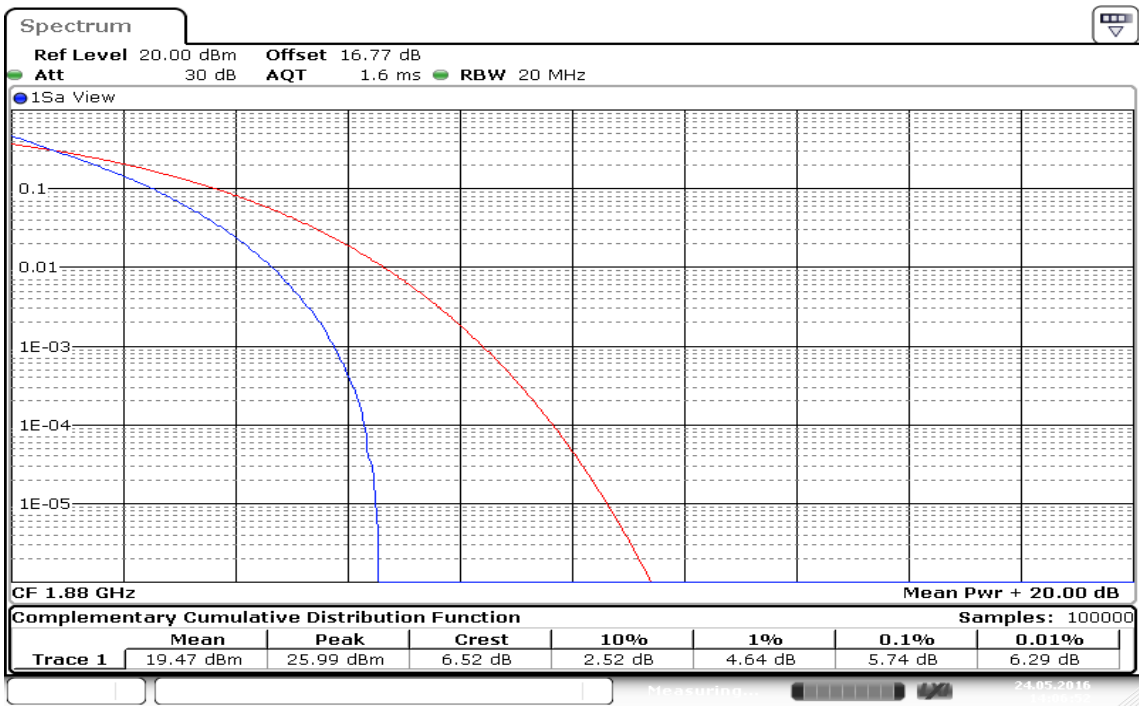
CHANNEL BANDWIDTH: 20MHz / QPSK

CH Low



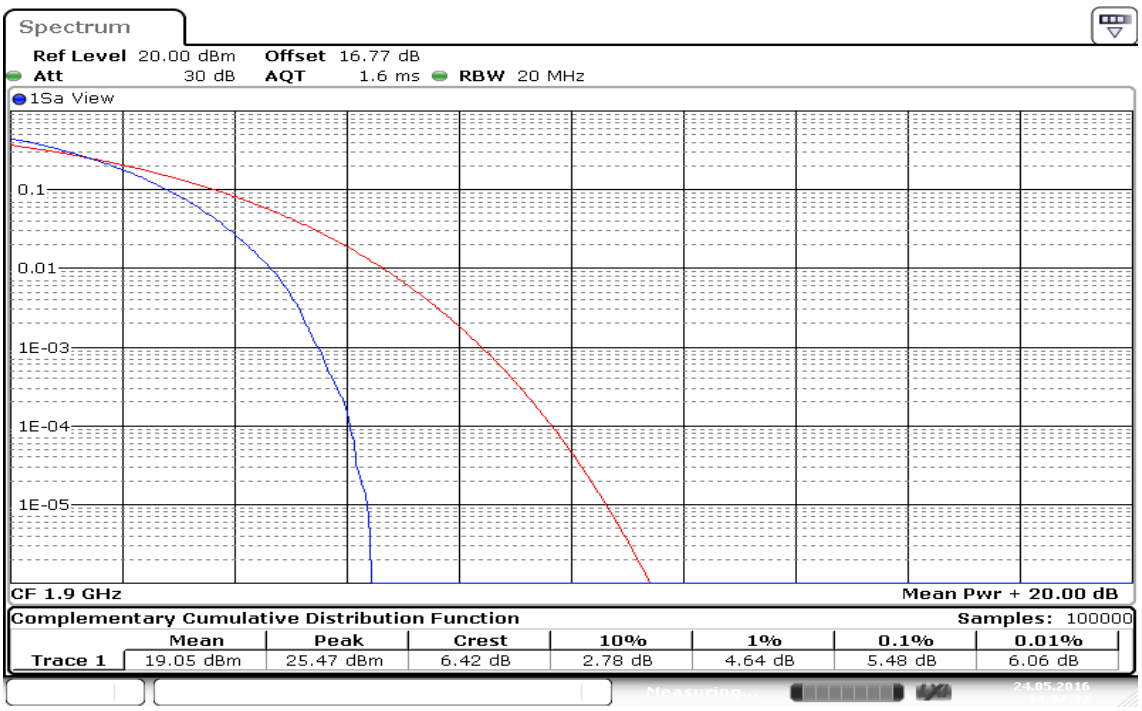
Date: 24.MAY.2016 14:07:12

CH Mid



Date: 24.MAY.2016 14:06:51

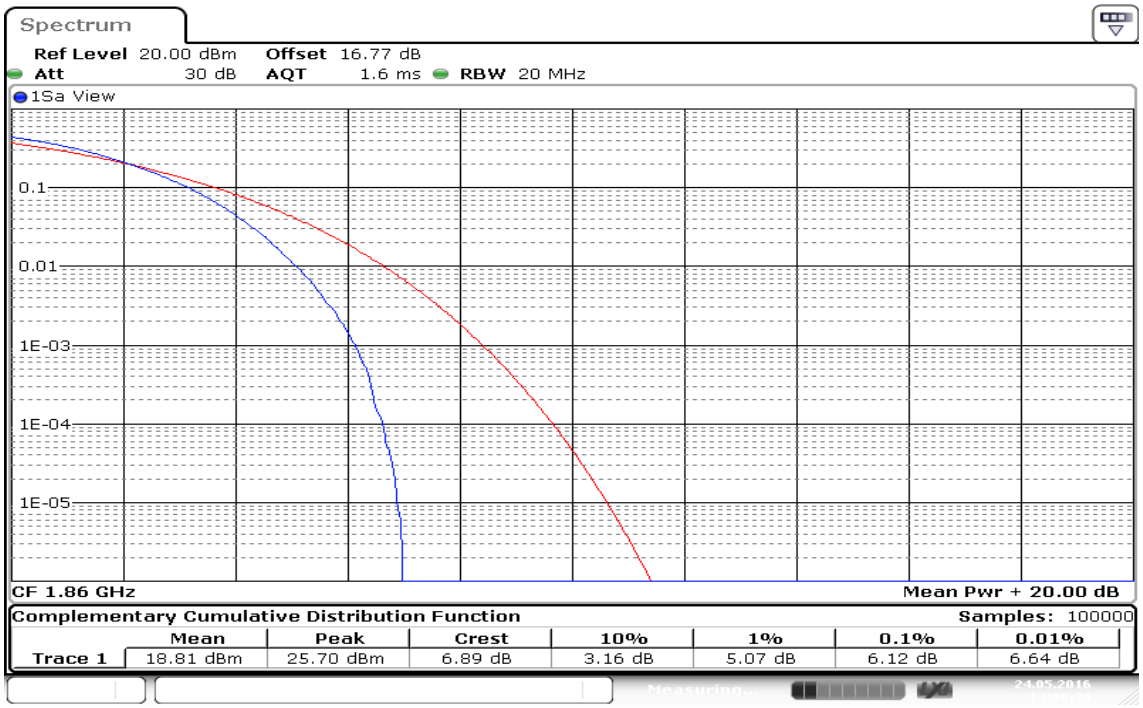
CH High



Date: 24.MAY.2016 14:07:32

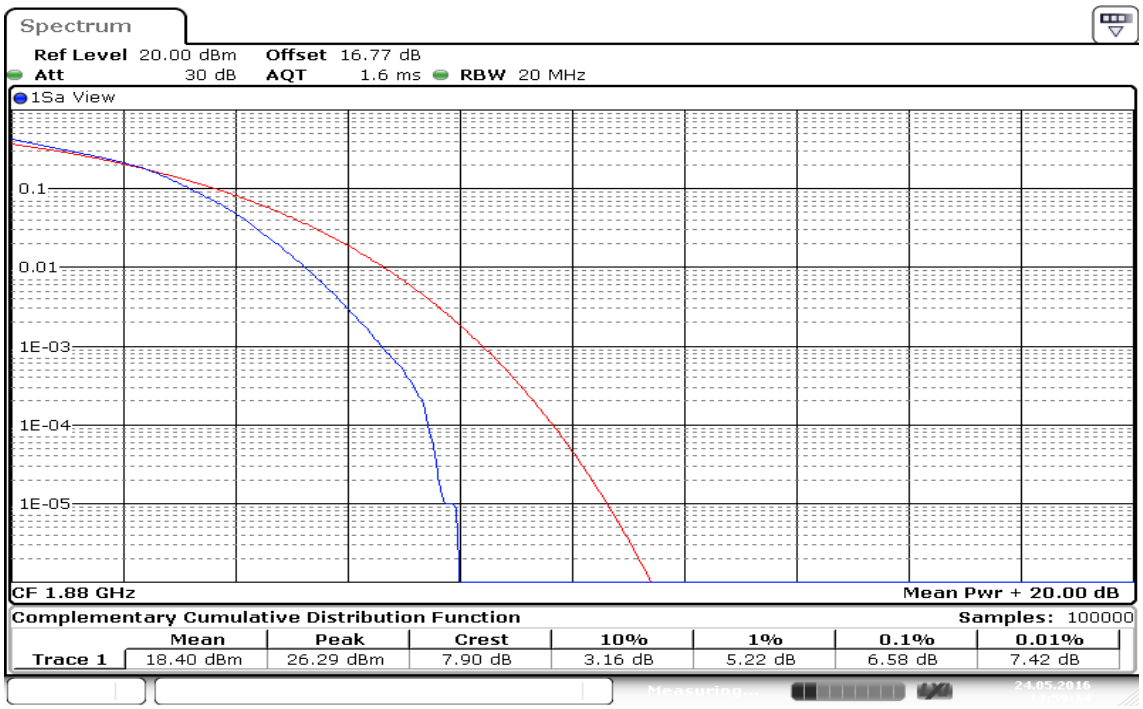
CHANNEL BANDWIDTH: 20MHz / 16QAM

CH Low



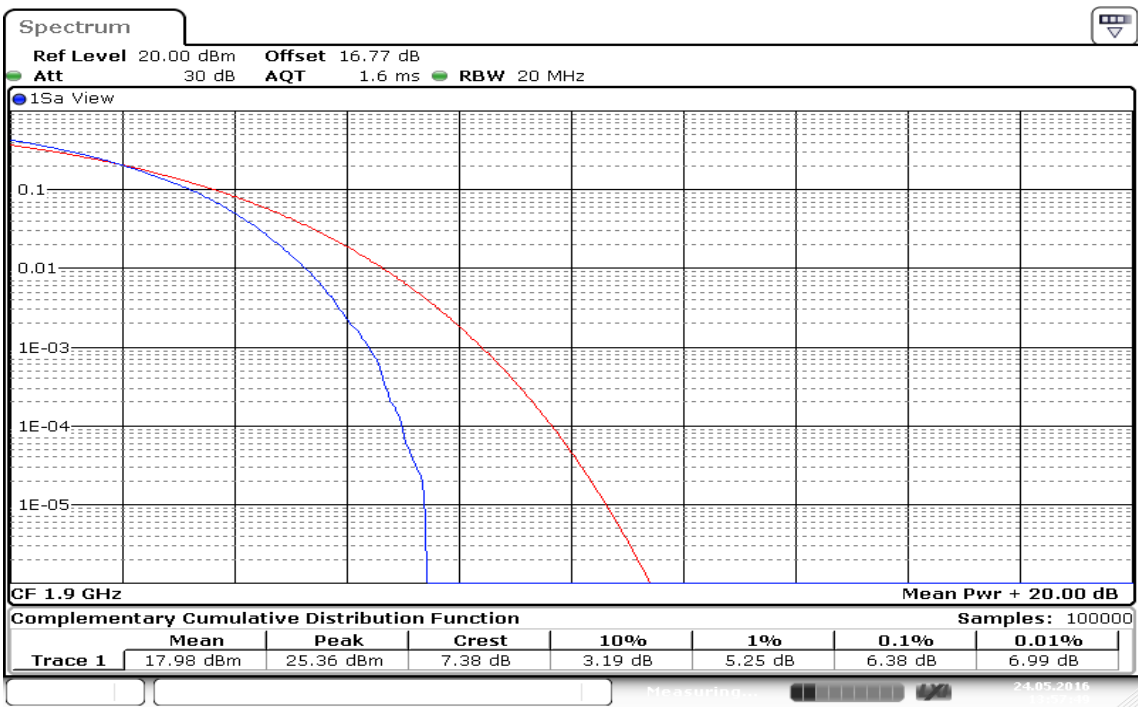
Date: 24.MAY.2016 14:00:30

CH Mid



Date: 24.MAY.2016 13:59:14

CH High



Date: 24.MAY.2016 13:57:49

7.6 BAND EDGE MEASUREMENT

Limit

For operations in the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed. For operations in the 1710–1755 MHz and 2110–2155 MHz bands, the power of any

emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission equal to –13dBm.In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

Test Procedures

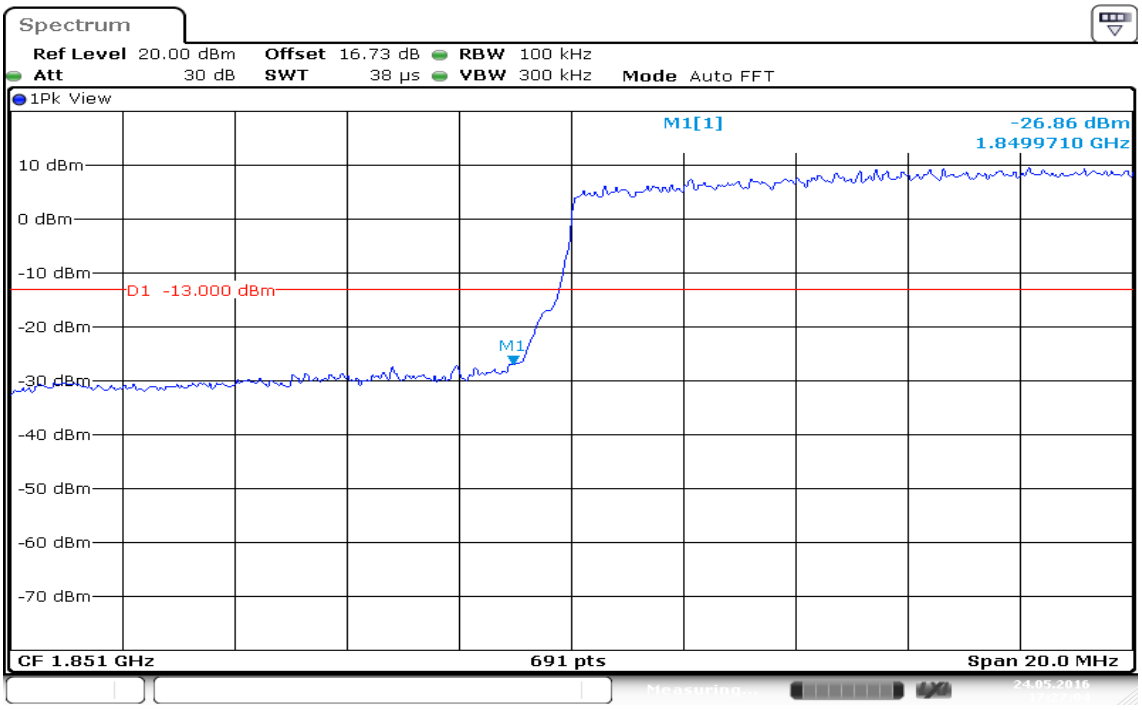
1. The EUT was set up for the maximum peak power with LTE link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 2 channels (low and high operational frequency range.).
2. The band edge measurement used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer. This splitter loss and cable loss are the worst loss 7.2 dB in the transmitted path track.
3. The center frequency of spectrum is the band edge frequency and span is 1 MHz. RB of the spectrum is 50kHz and VB of the spectrum is 200kHz.
4. Record the max trace plot into the test report.

Test Results:

LTE Band 25

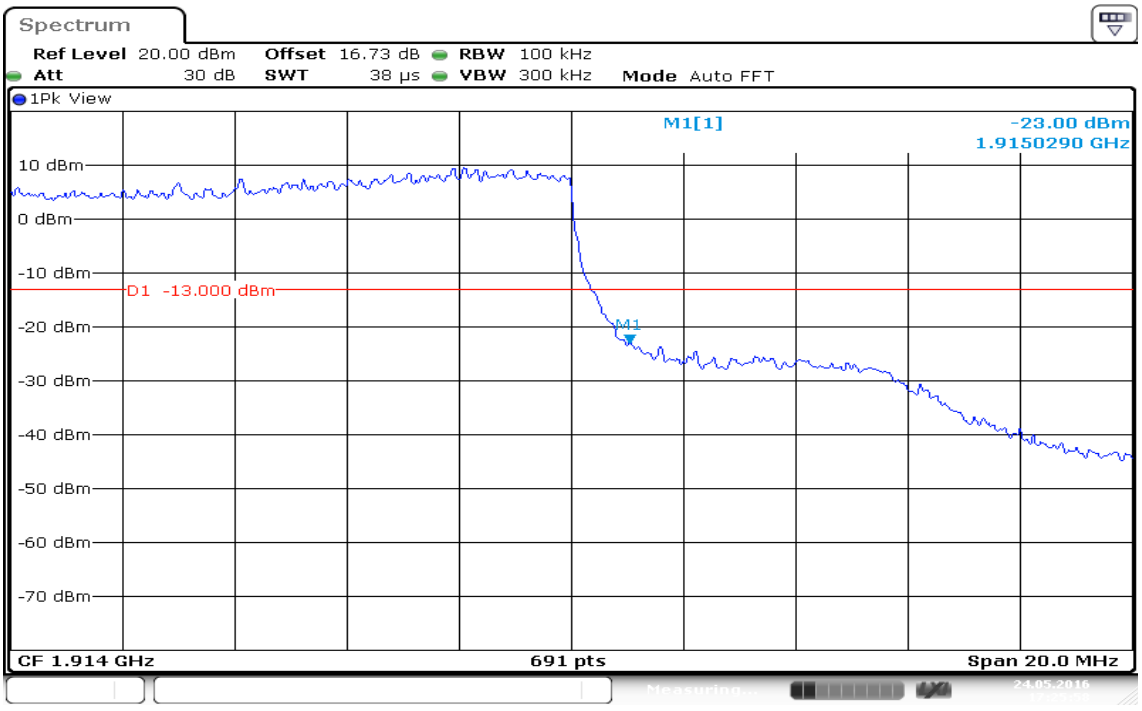
CHANNEL BANDWIDTH: 20MHz / QPSK / FULL RB ALLOCATED

LOWER BAND EDGE



Date: 24.MAY.2016 17:27:03

HIGHER BAND EDGE

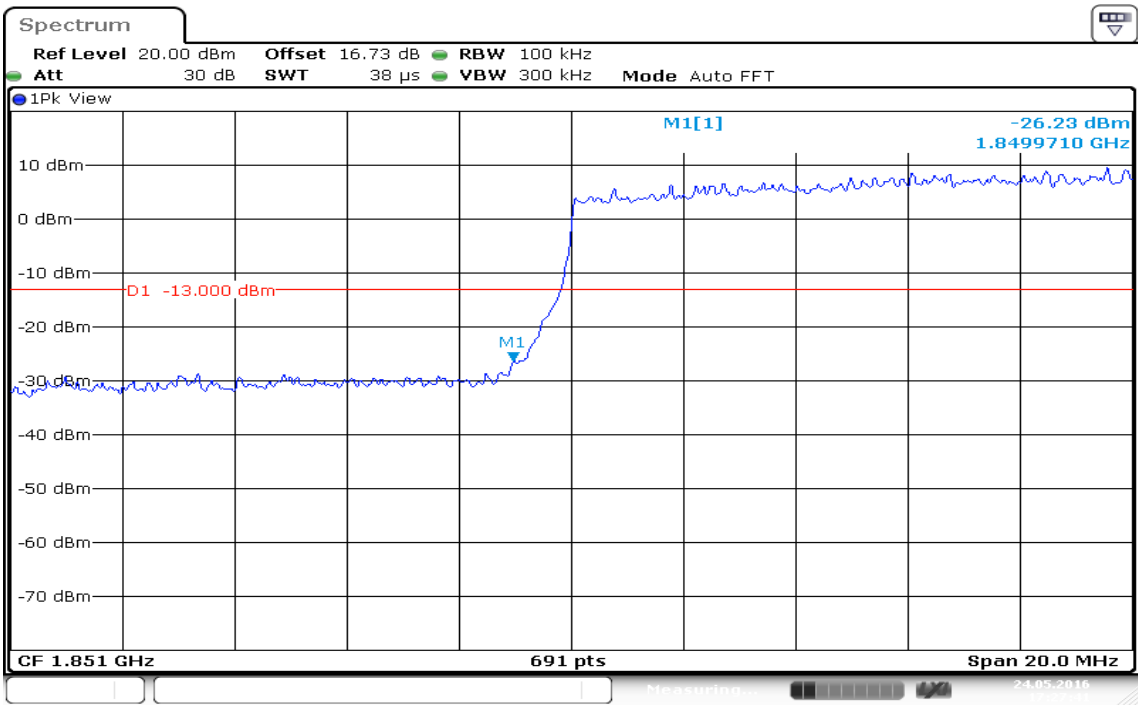


Date: 24.MAY.2016 17:25:58

LTE Band 25

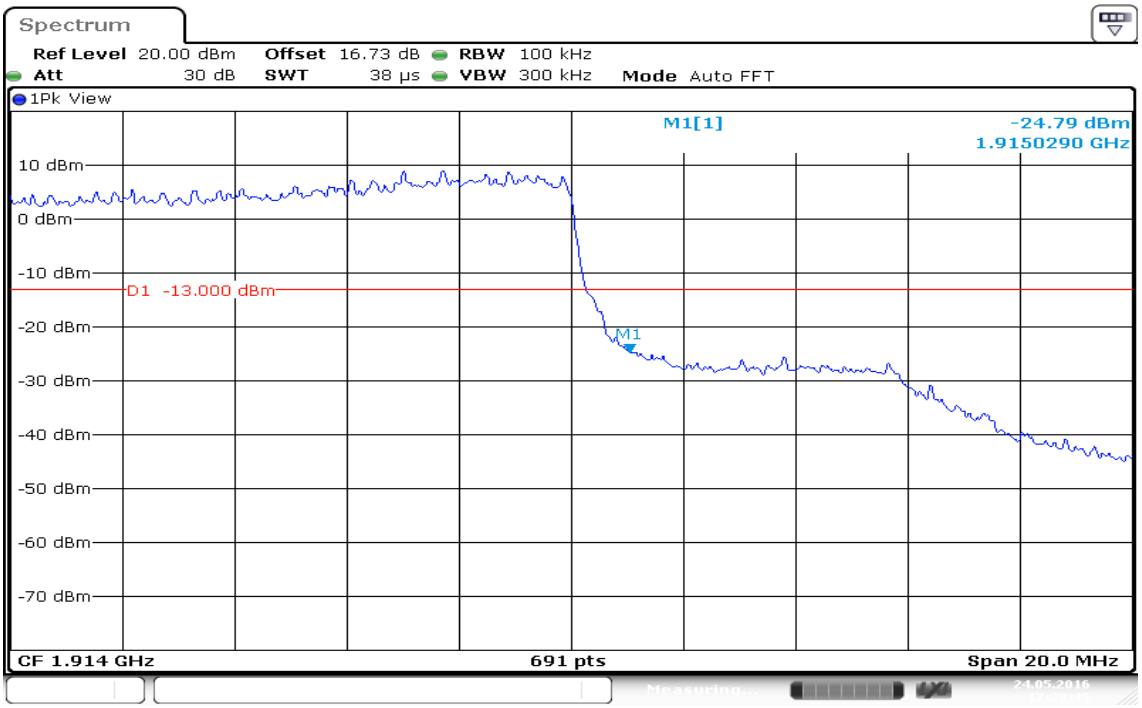
CHANNEL BANDWIDTH: 20MHz / 16QAM / FULL RB ALLOCATED

LOWER BAND EDGE



Date: 24.MAY.2016 17:27:41

HIGHER BAND EDGE

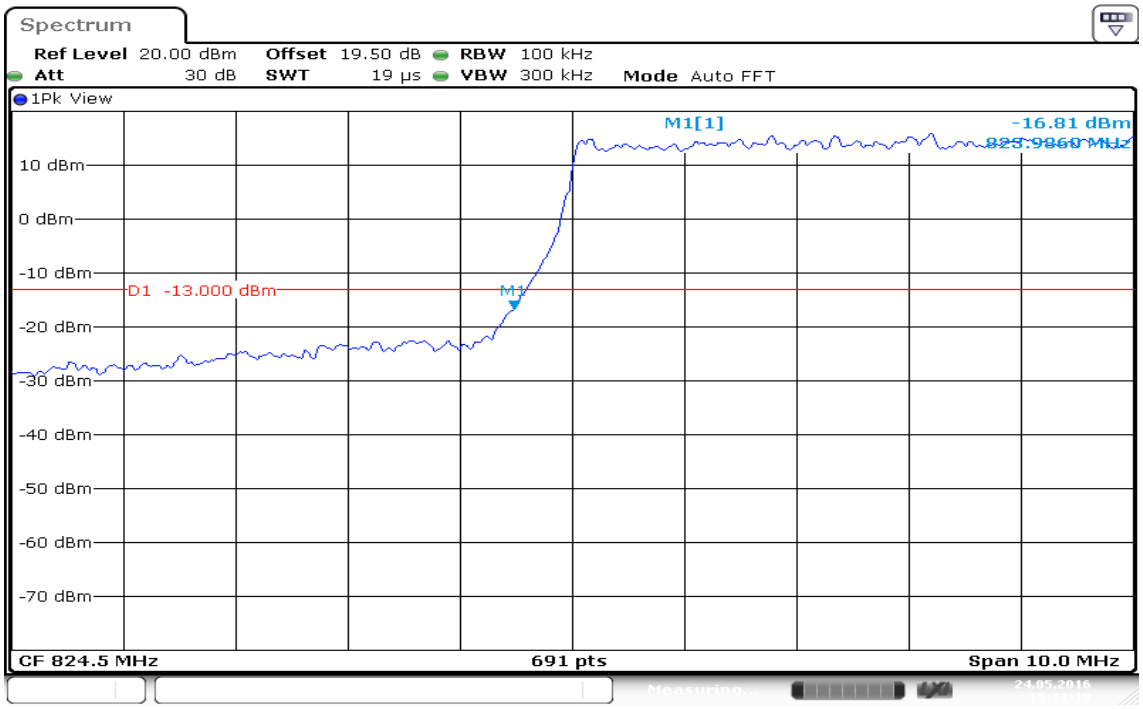


Date: 24.MAY.2016 17:28:45

LTE Band 5

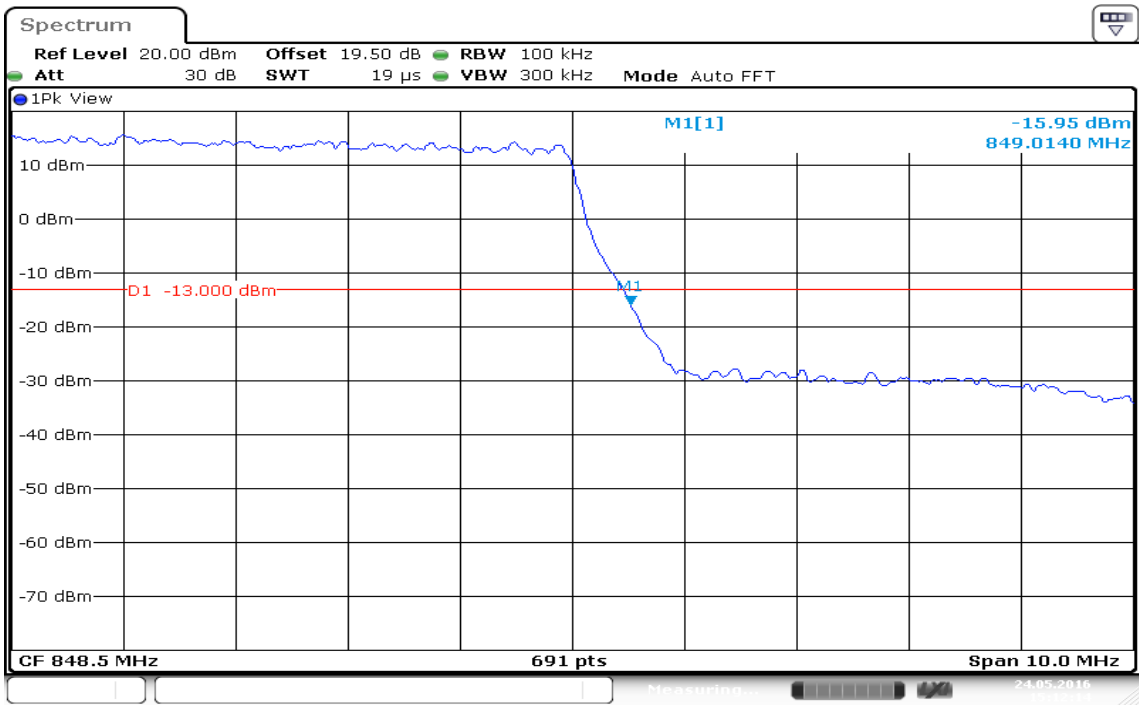
CHANNEL BANDWIDTH: 10MHz / QPSK / FULL RB ALLOCATED

LOWER BAND EDGE



Date: 24.MAY.2016 15:11:19

HIGHER BAND EDGE

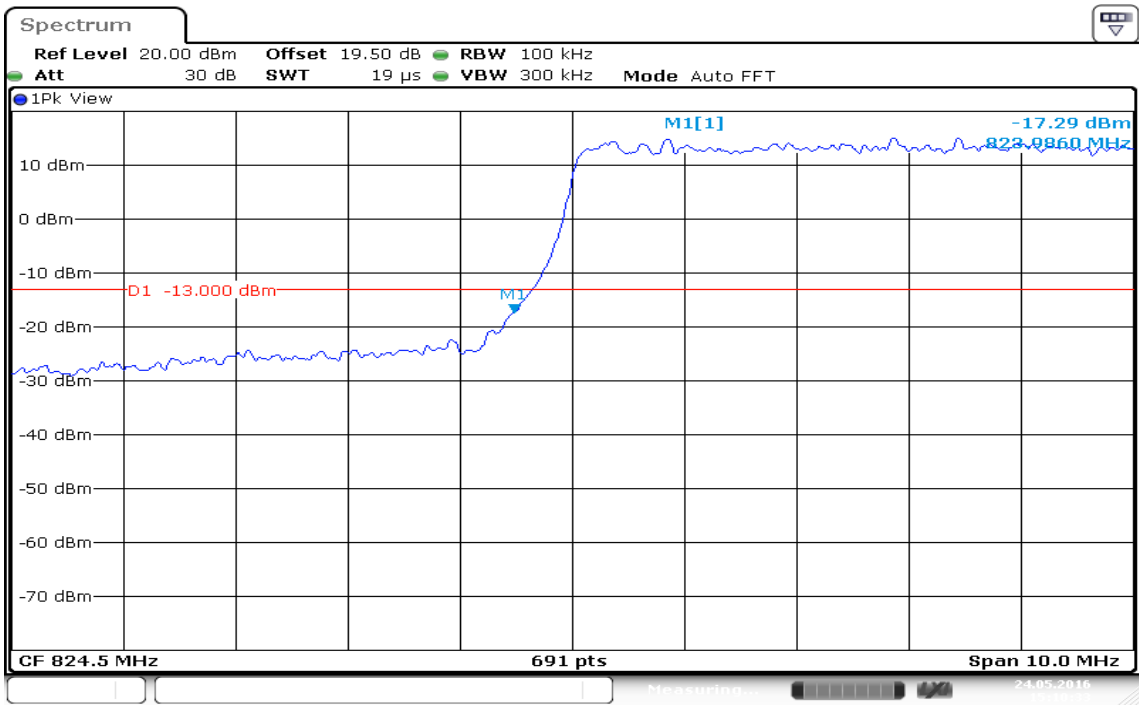


Date: 24.MAY.2016 15:12:14

LTE Band 5

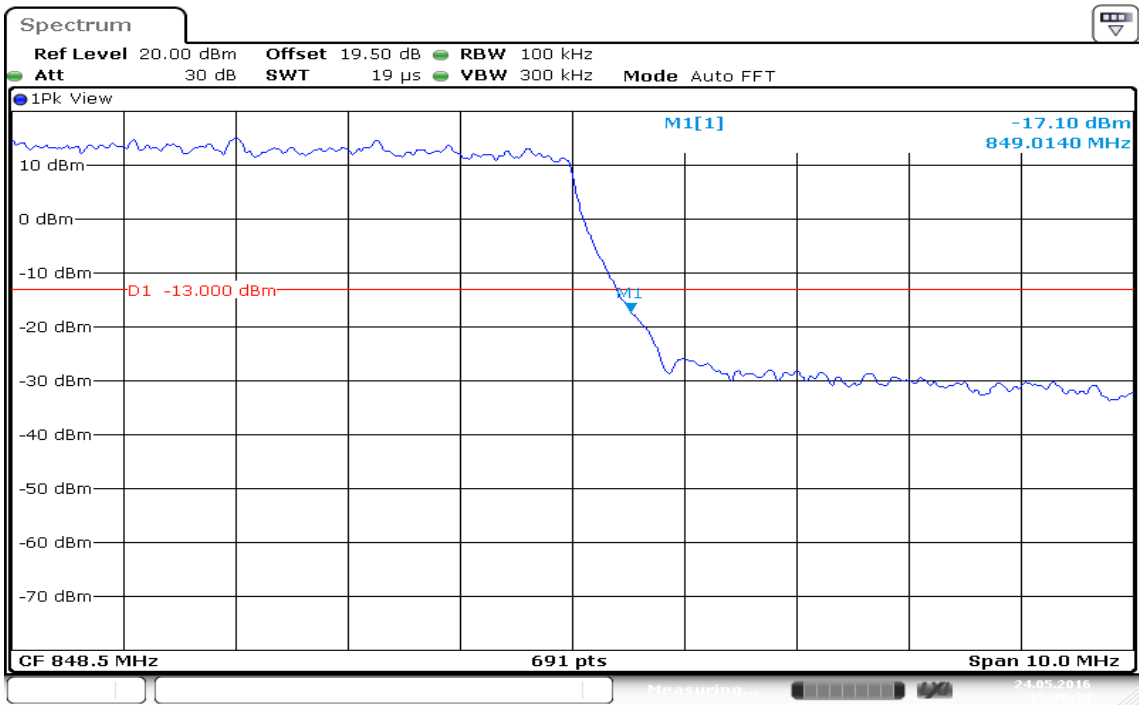
CHANNEL BANDWIDTH: 10MHz / 16QAM / FULL RB ALLOCATED

LOWER BAND EDGE



Date: 24.MAY.2016 15:10:33

HIGHER BAND EDGE

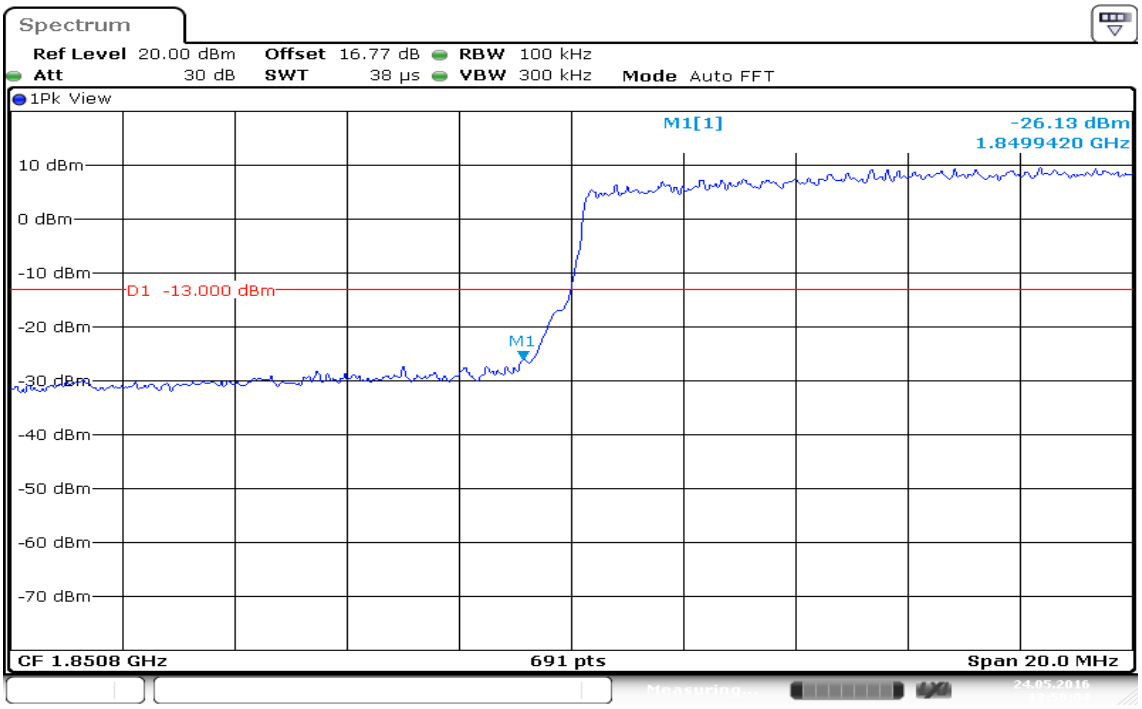


Date: 24.MAY.2016 15:09:39

LTE Band 2

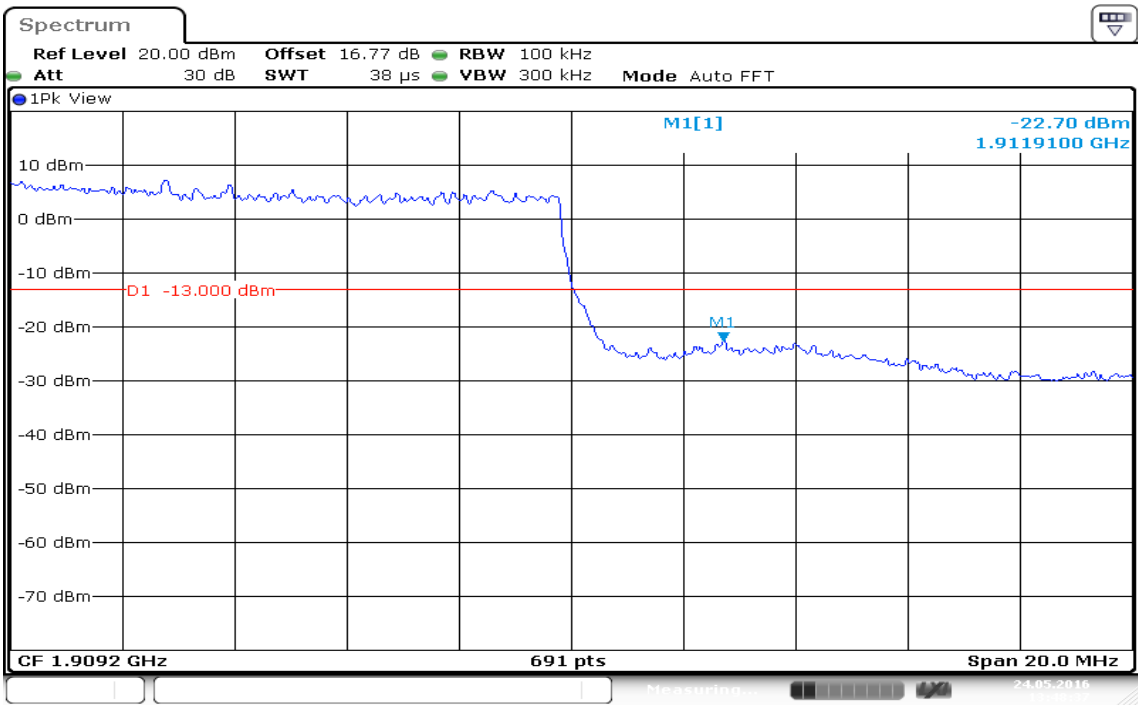
CHANNEL BANDWIDTH: 20MHz / QPSK / FULL RB ALLOCATION

LOWER BAND EDGE



Date: 24.MAY.2016 13:50:04

HIGHER BAND EDGE

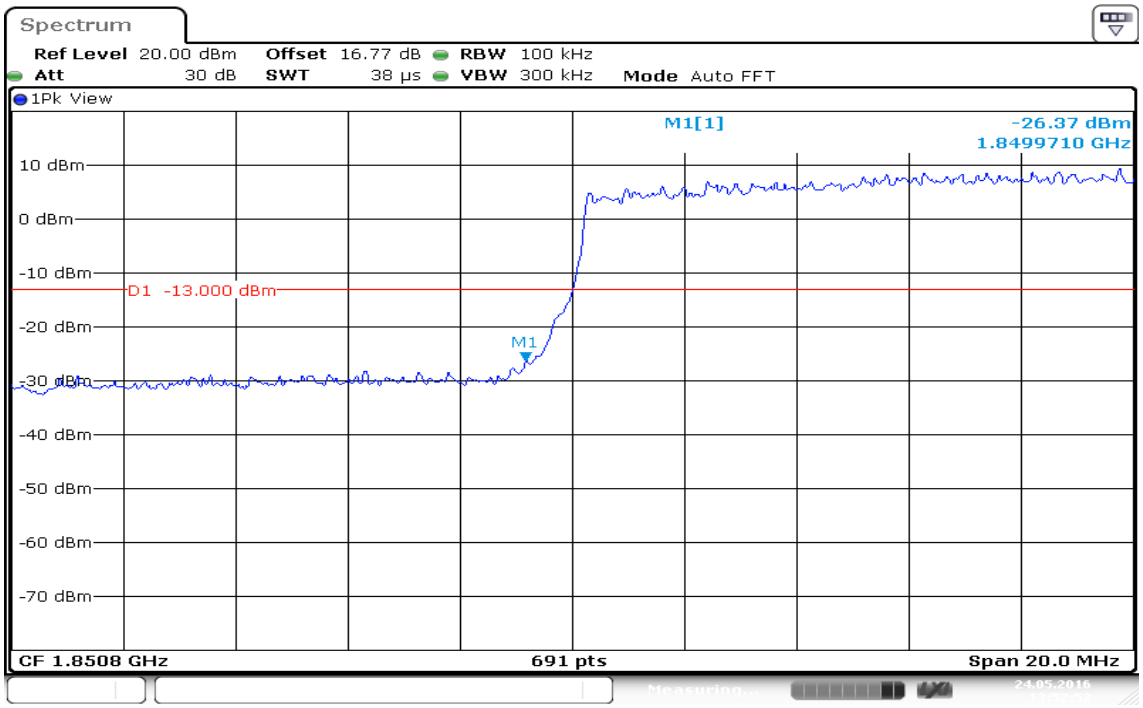


Date: 24.MAY.2016 13:48:37

LTE Band 2

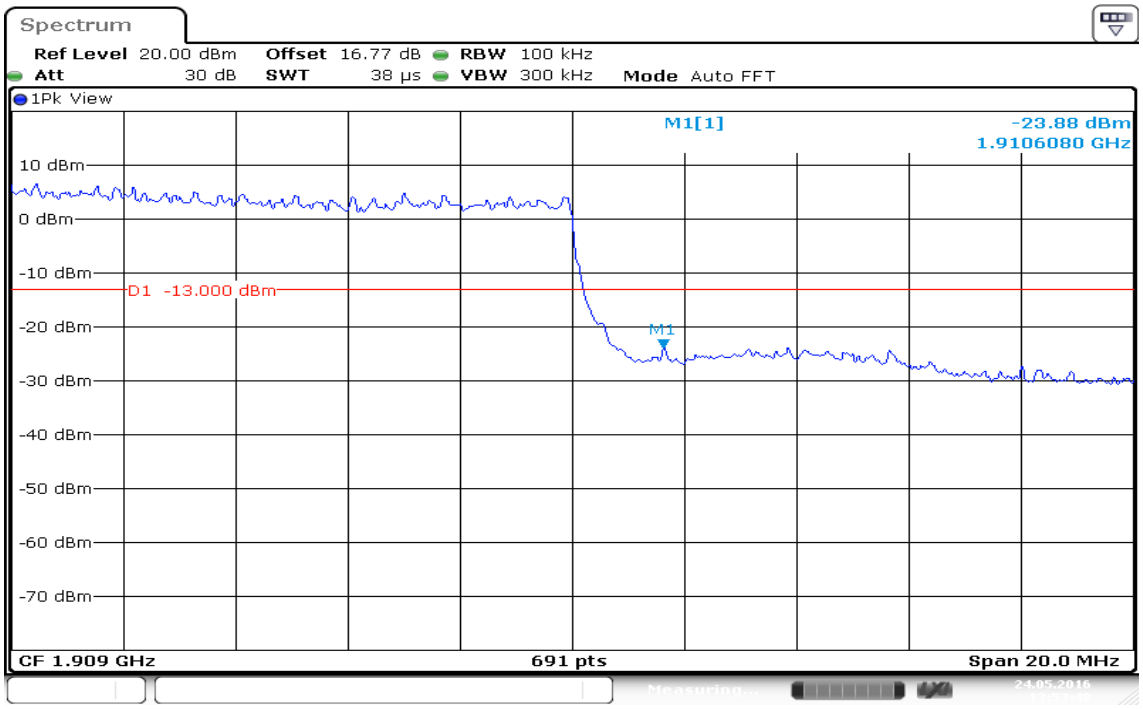
CHANNEL BANDWIDTH: 20MHz / 16QAM / FULL RB ALLOCATION

LOWER BAND EDGE



Date: 24.MAY.2016 13:52:51

HIGHER BAND EDGE



Date: 24.MAY.2016 13:53:48

7.7 CONDUCTED SPURIOUS EMISSIONS

Limits

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission equal to –13dBm

Test Procedures

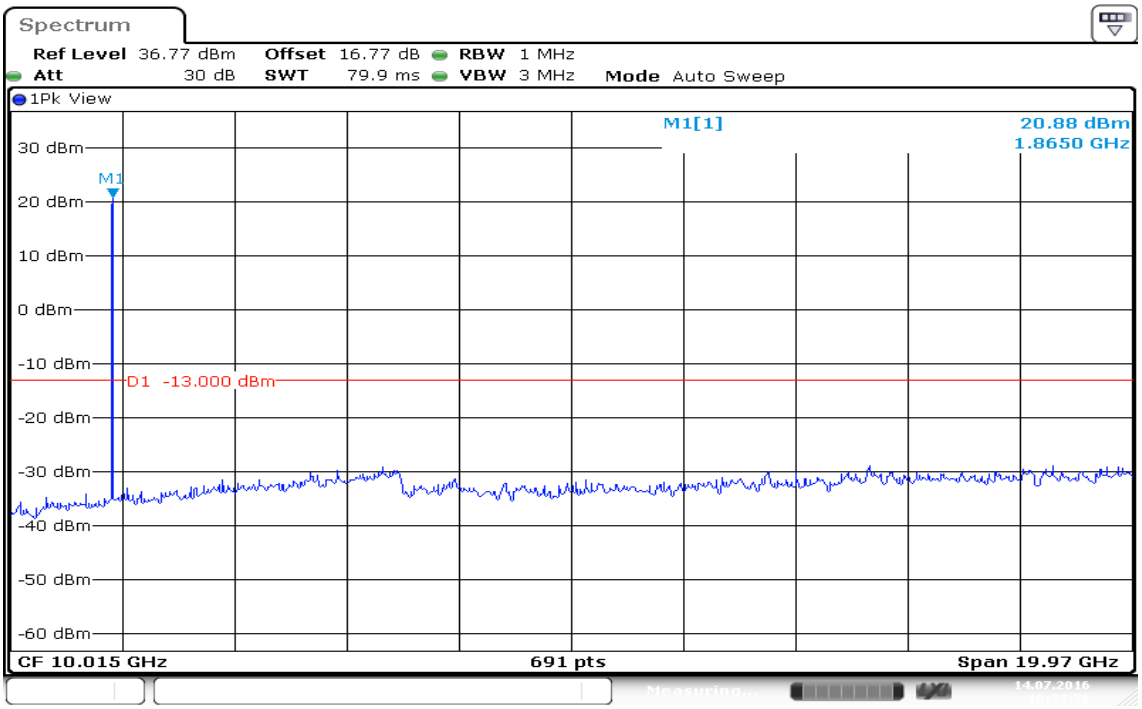
1. The EUT was set up for the maximum peak power with LTE link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range.).
2. The conducted spurious emission used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
3. When the spectrum scanned from 30MHz to 3GHz, it shall be connected to the band reject filter attenuated the carried frequency. The spectrum set RB=1MHz, VB=3MHz.
4. When the spectrum scanned from 3GHz to 20GHz, it shall be connected to the high pass filter attenuated the carried frequency. The spectrum set RB=1MHz, VB=3MHz.

Test Results

LTE Band 25

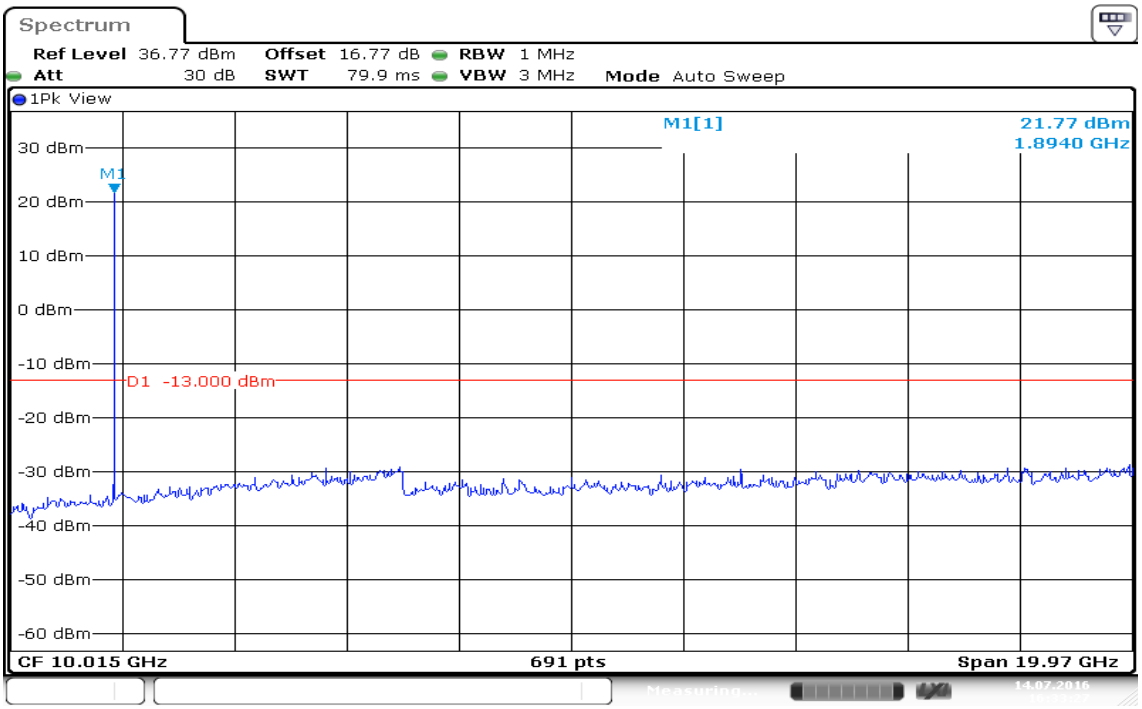
CHANNEL BANDWIDTH: 1.4MHz / QPSK

CH Low



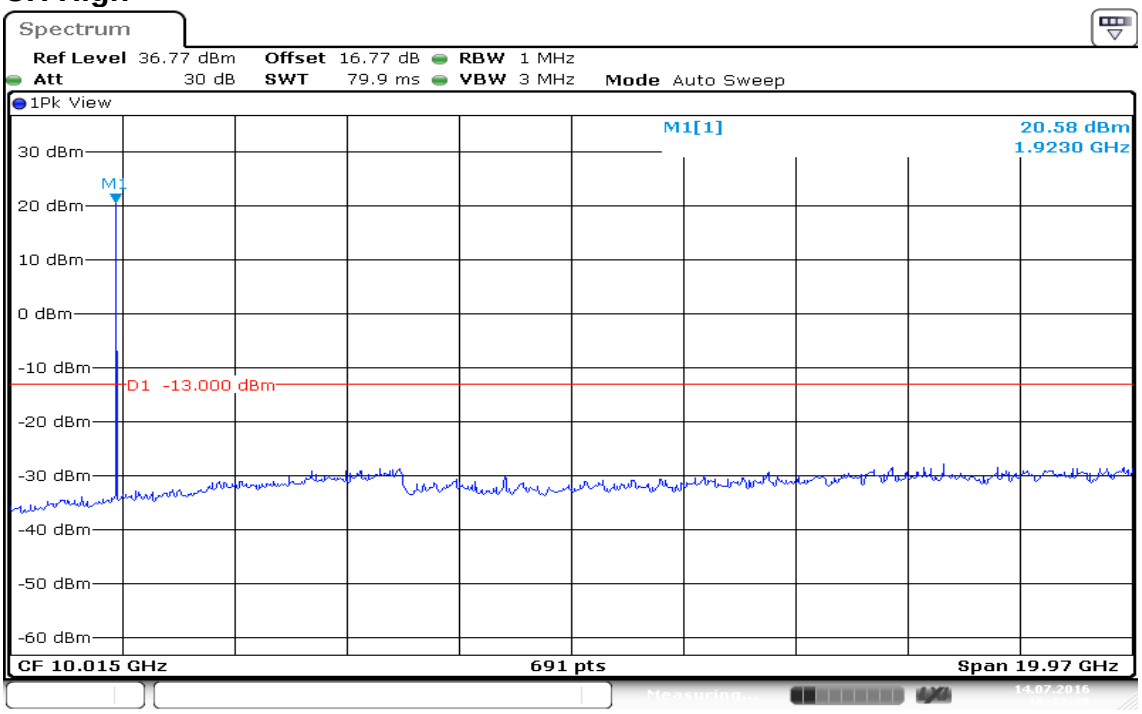
Date: 14.JUL.2016 16:33:56

CH Mid



Date: 14.JUL.2016 16:33:28

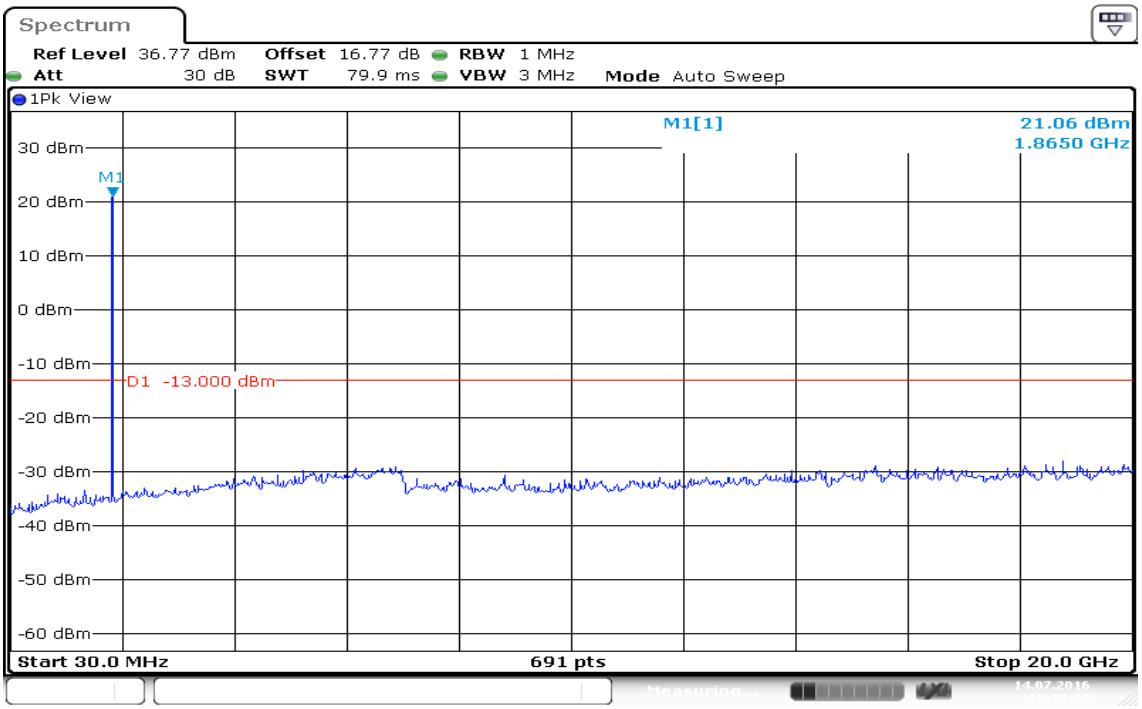
CH High



Date: 14.JUL.2016 16:32:38

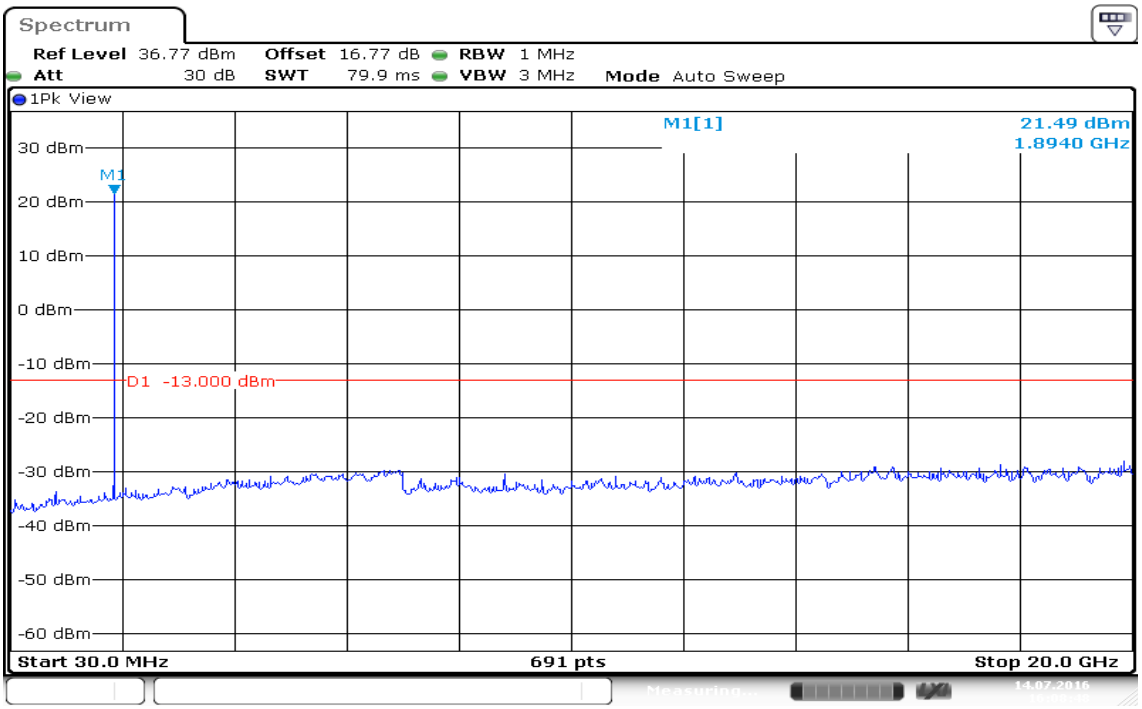
CHANNEL BANDWIDTH: 1.4MHz / 16QAM

CH Low



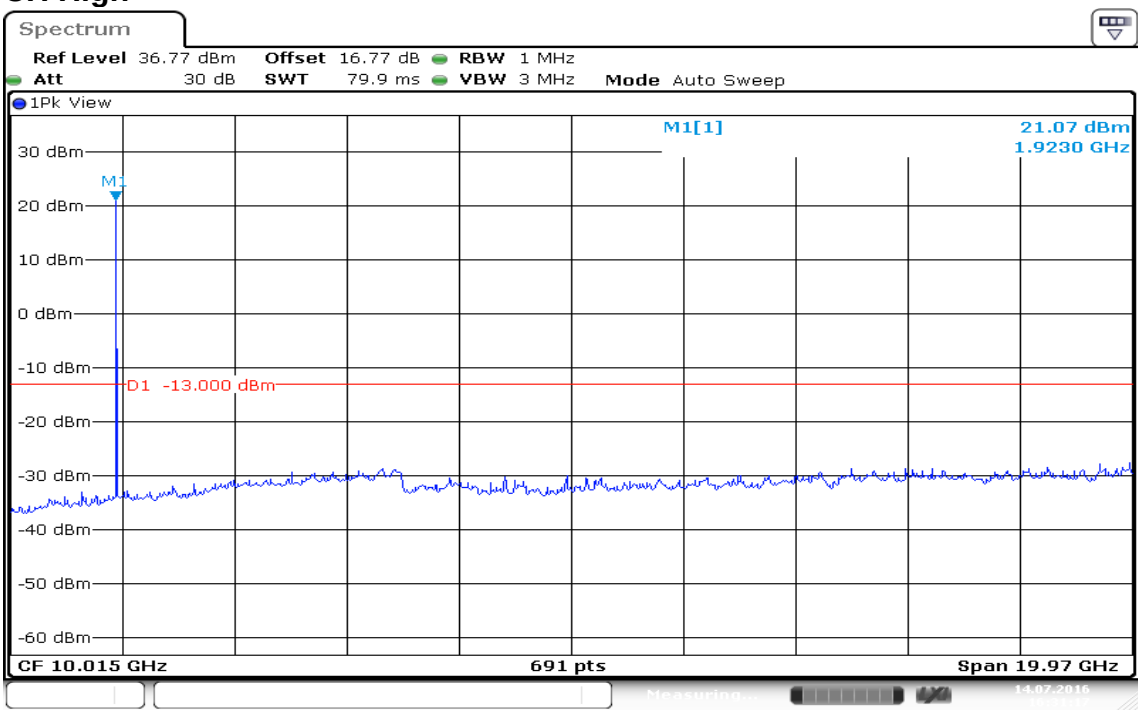
Date: 14.JUL.2016 16:11:00

CH Mid



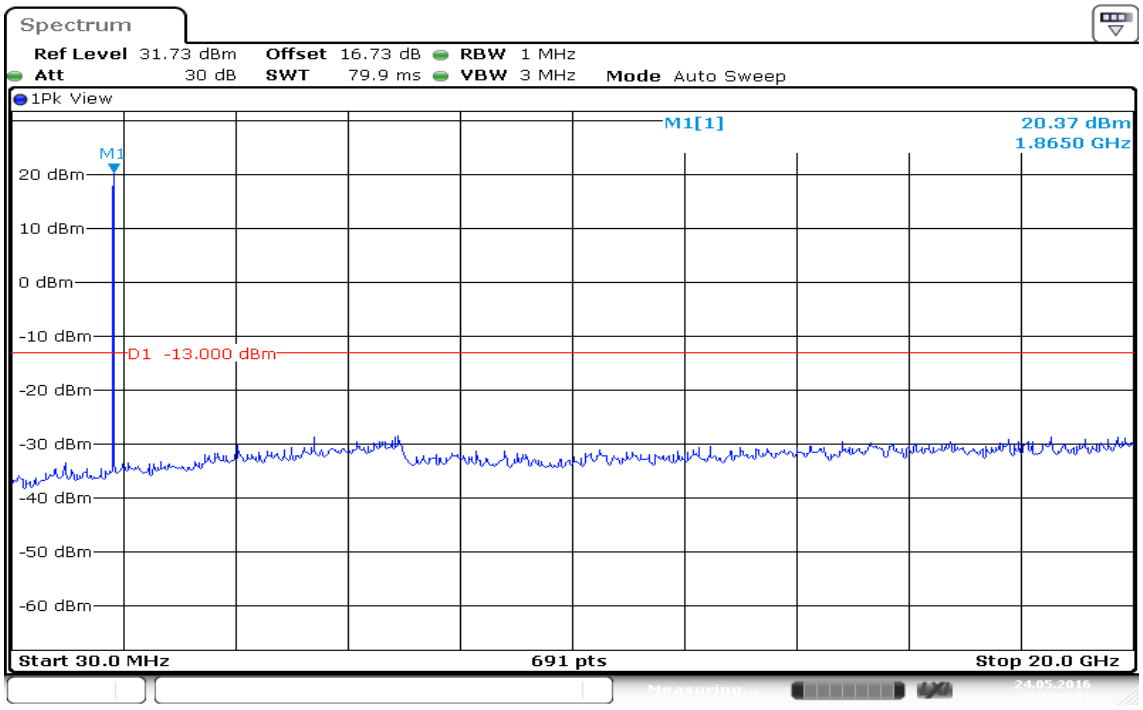
Date: 14.JUL.2016 16:08:48

CH High



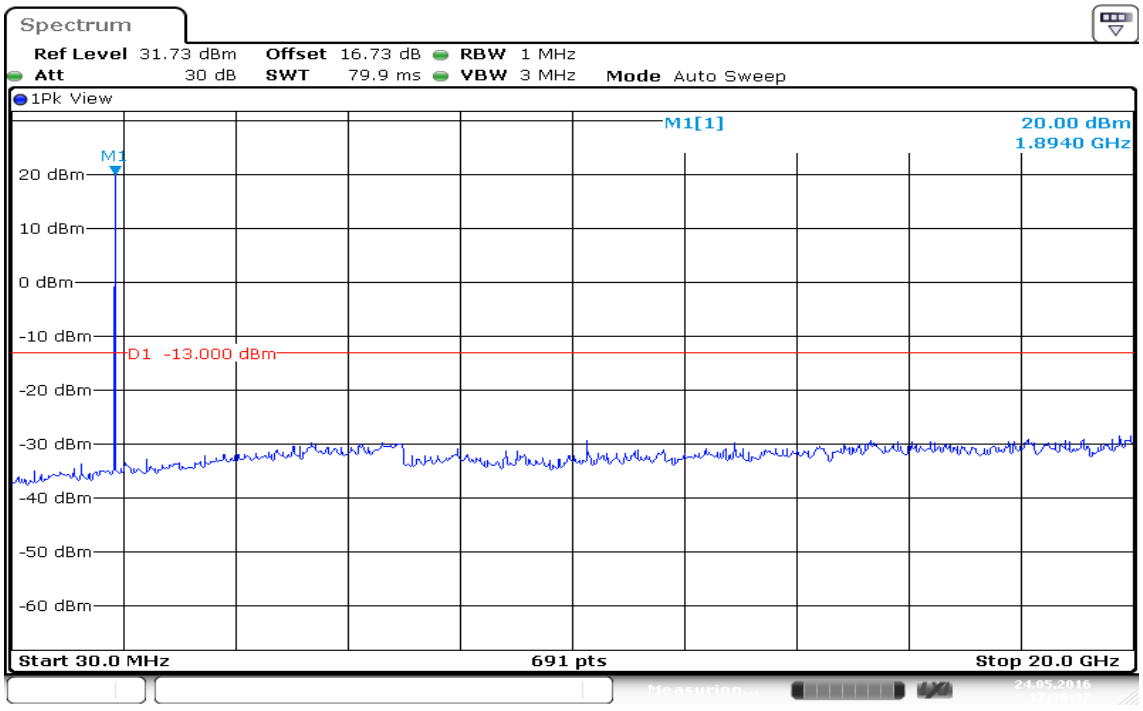
Date: 14.JUL.2016 16:31:17

CHANNEL BANDWIDTH: 5MHz / QPSK
CH Low



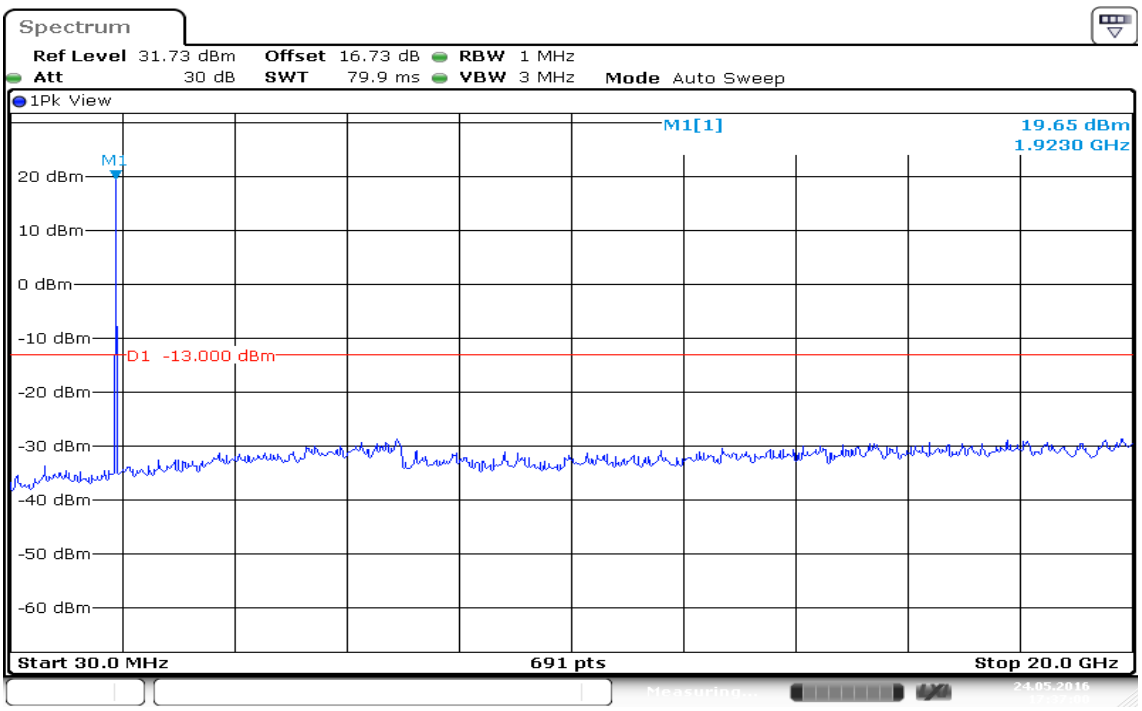
Date: 24.MAY.2016 17:36:00

CH Mid



Date: 24.MAY.2016 17:36:37

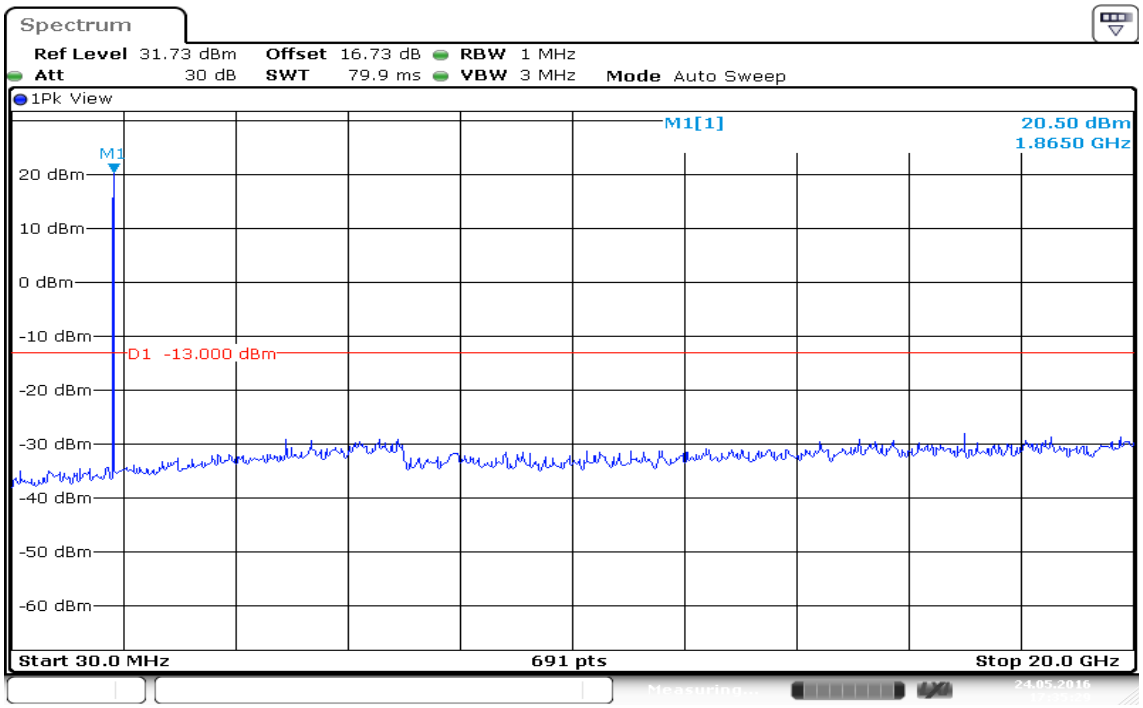
CH High



Date: 24.MAY.2016 17:36:59

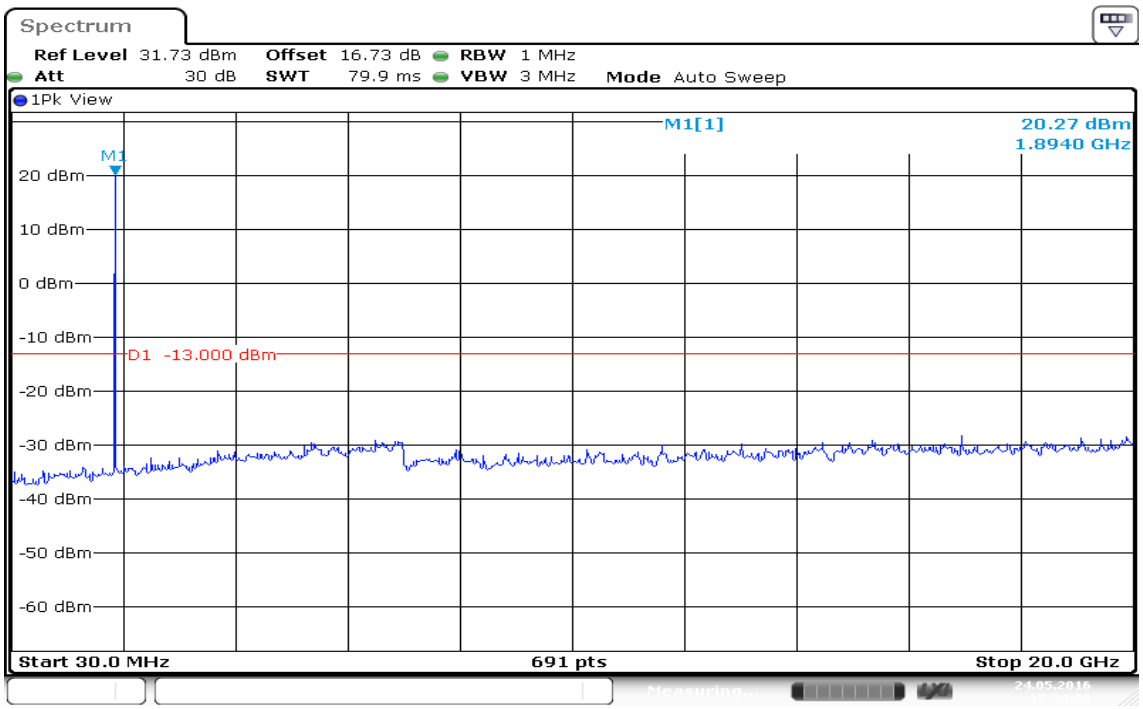
CHANNEL BANDWIDTH: 5MHz / 16QAM

CH Low



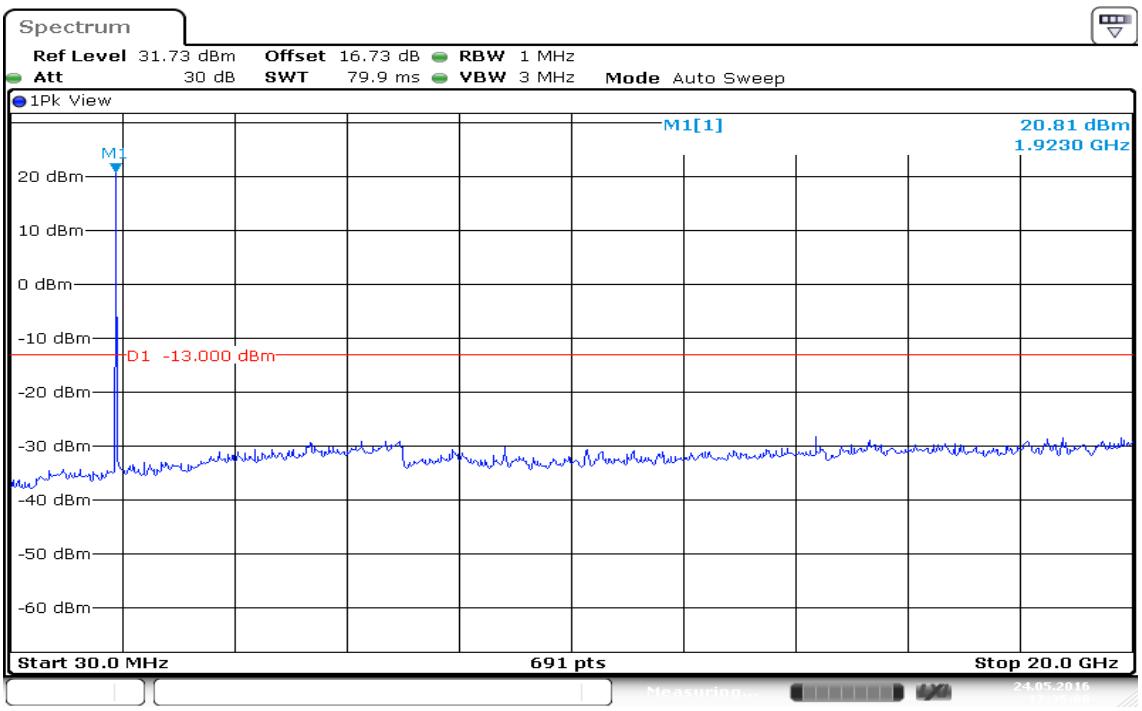
Date: 24.MAY.2016 17:35:29

CH Mid



Date: 24.MAY.2016 17:34:06

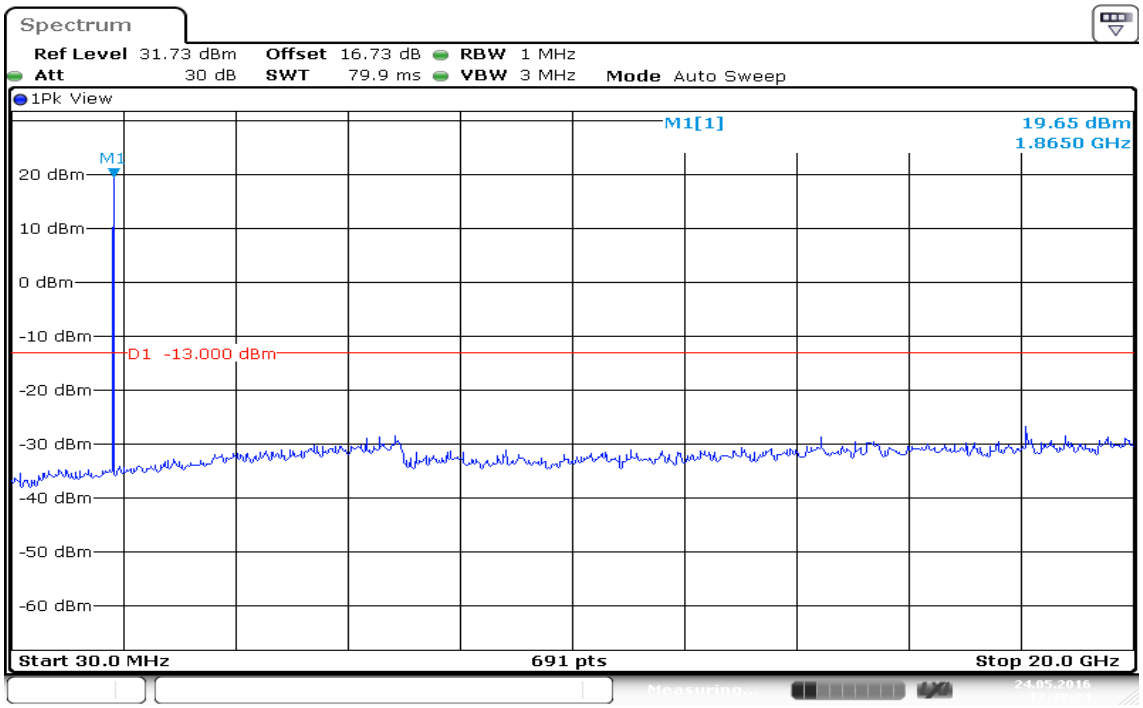
CH High



Date: 24.MAY.2016 17:35:00

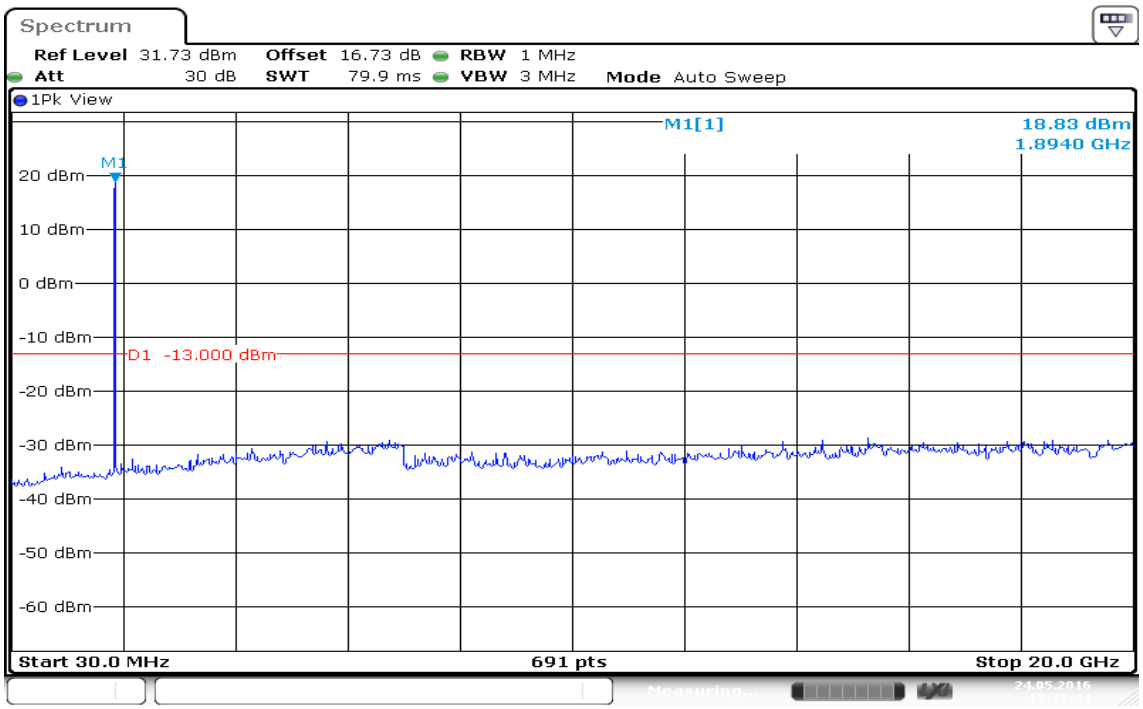
CHANNEL BANDWIDTH: 10MHz / QPSK

CH Low



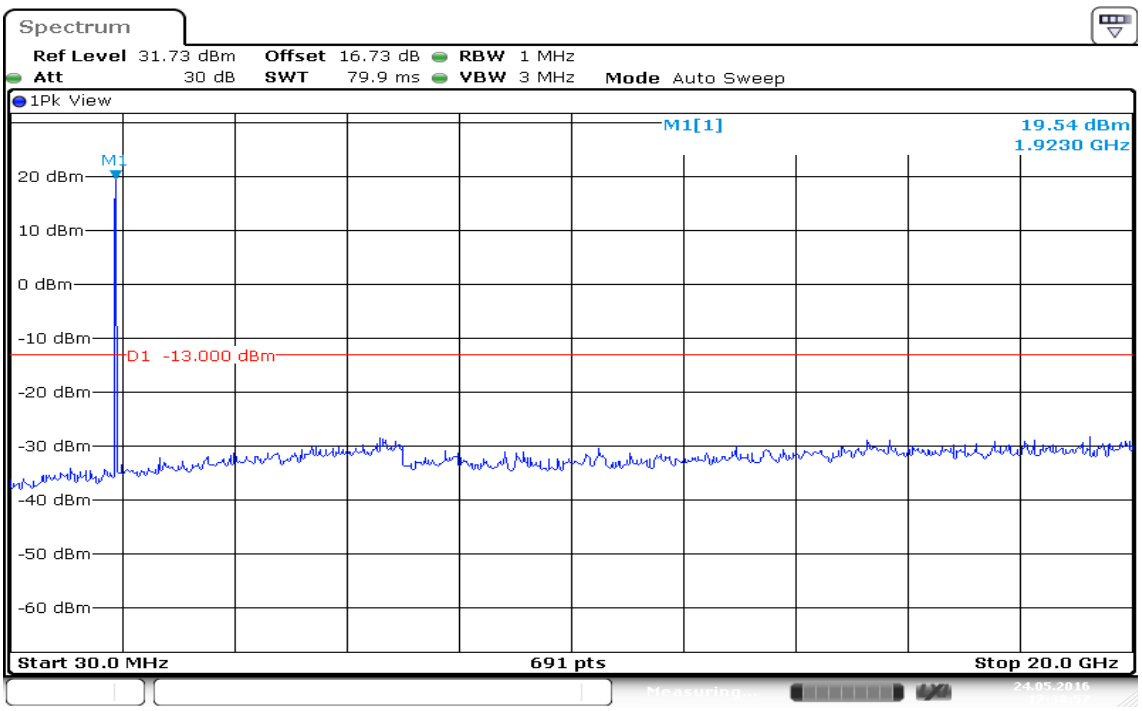
Date: 24.MAY.2016 17:38:23

CH Mid



Date: 24.MAY.2016 17:37:44

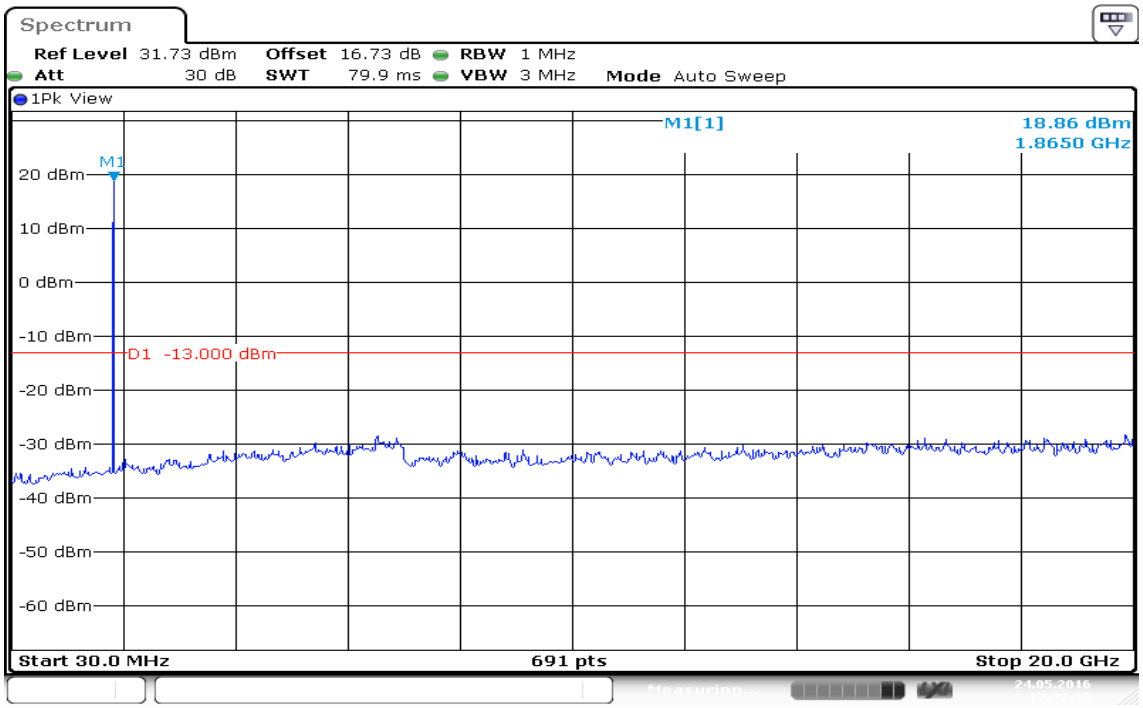
CH High



Date: 24.MAY.2016 17:38:56

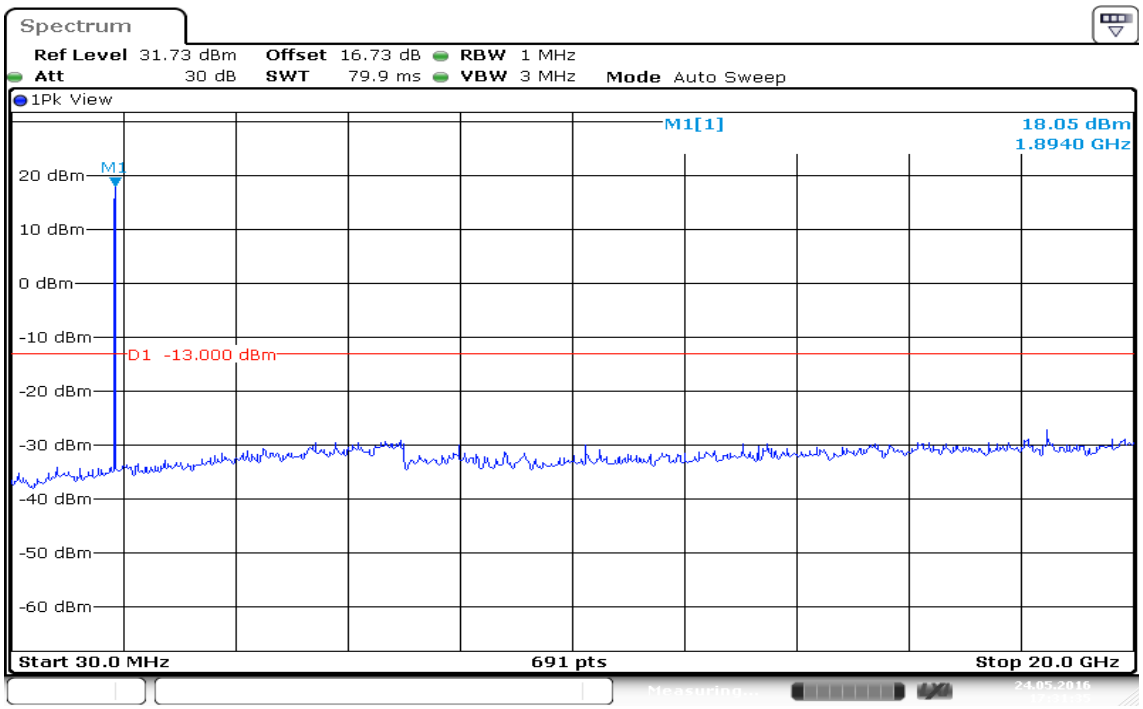
CHANNEL BANDWIDTH: 10MHz / 16QAM

CH Low



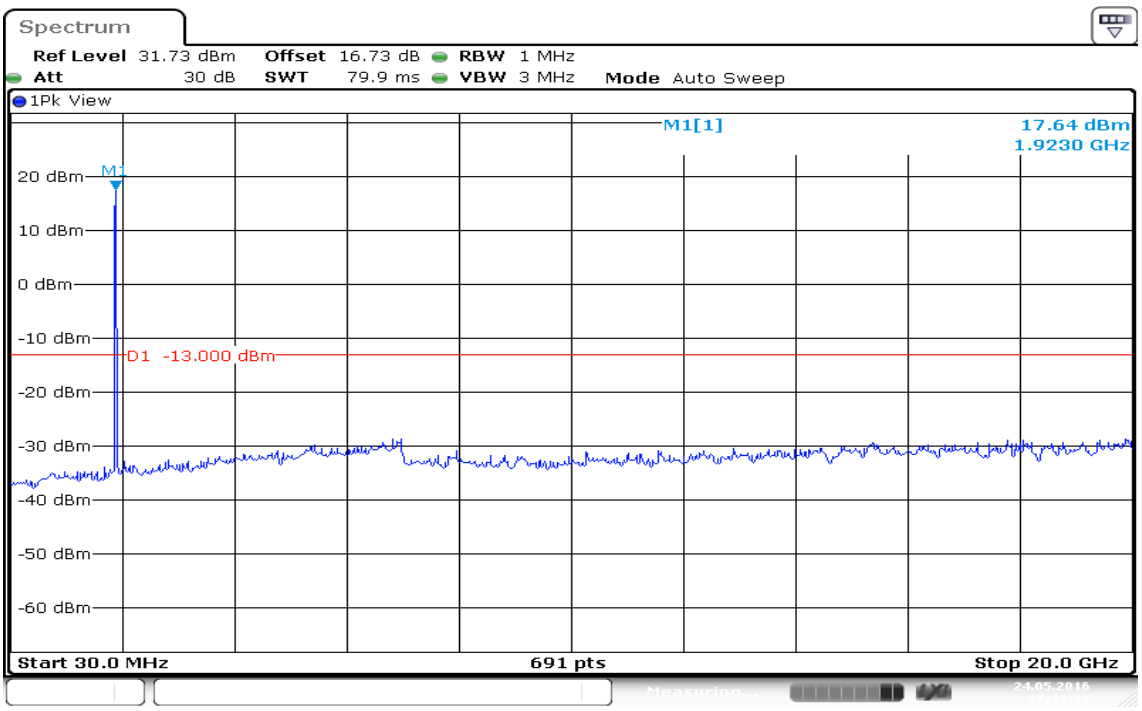
Date: 24.MAY.2016 17:32:19

CH Mid



Date: 24.MAY.2016 17:31:35

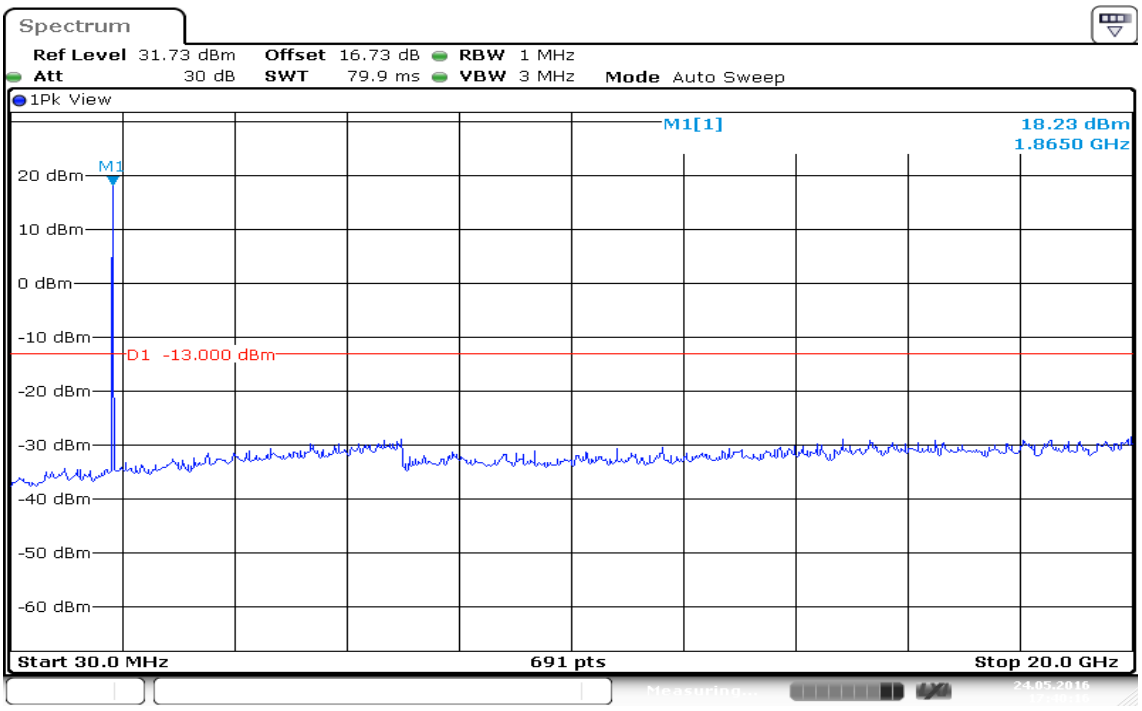
CH High



Date: 24.MAY.2016 17:33:13

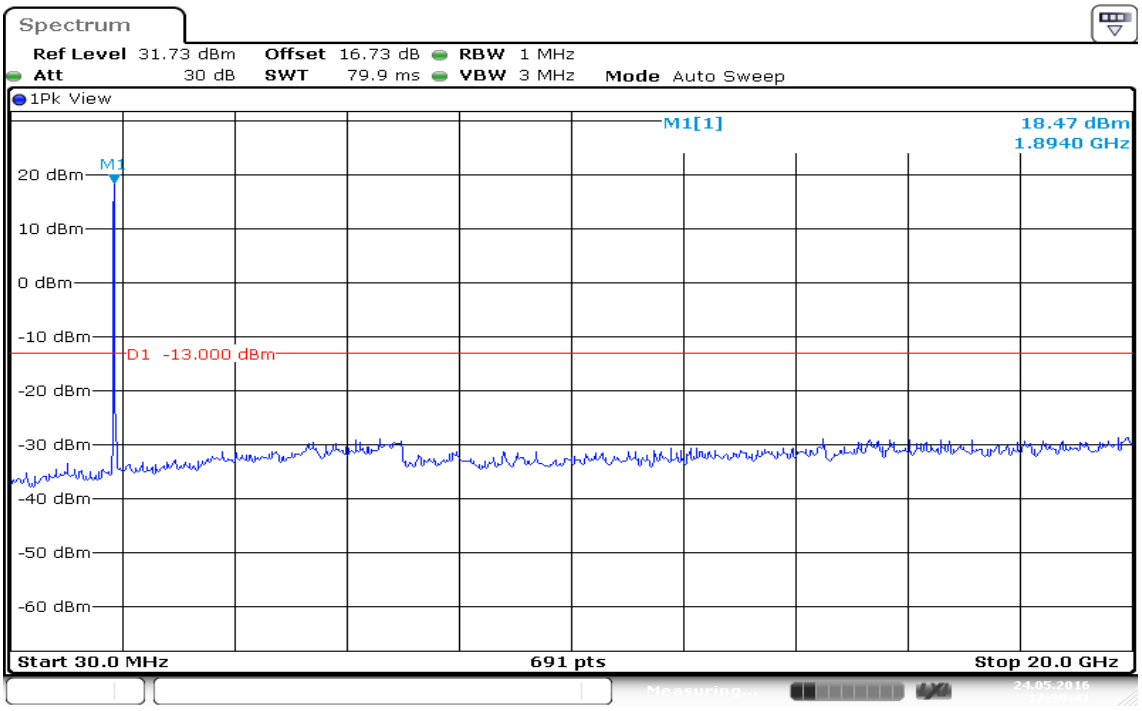
CHANNEL BANDWIDTH: 20MHz / QPSK

CH Low



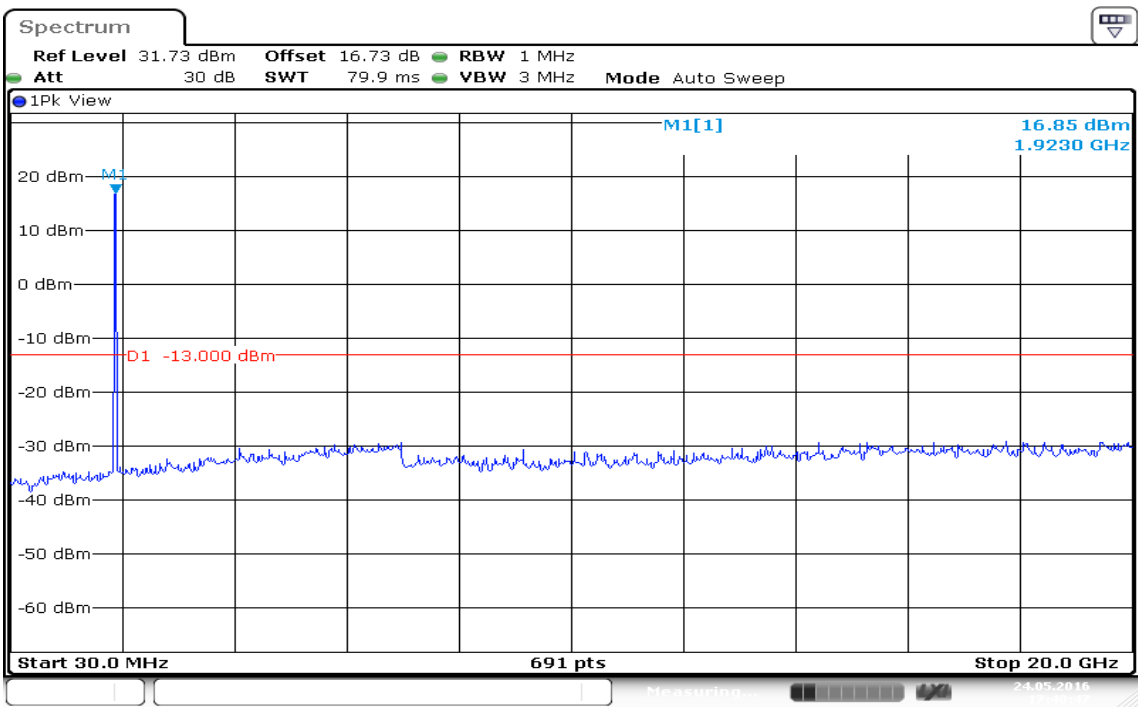
Date: 24.MAY.2016 17:40:15

CH Mid



Date: 24.MAY.2016 17:39:40

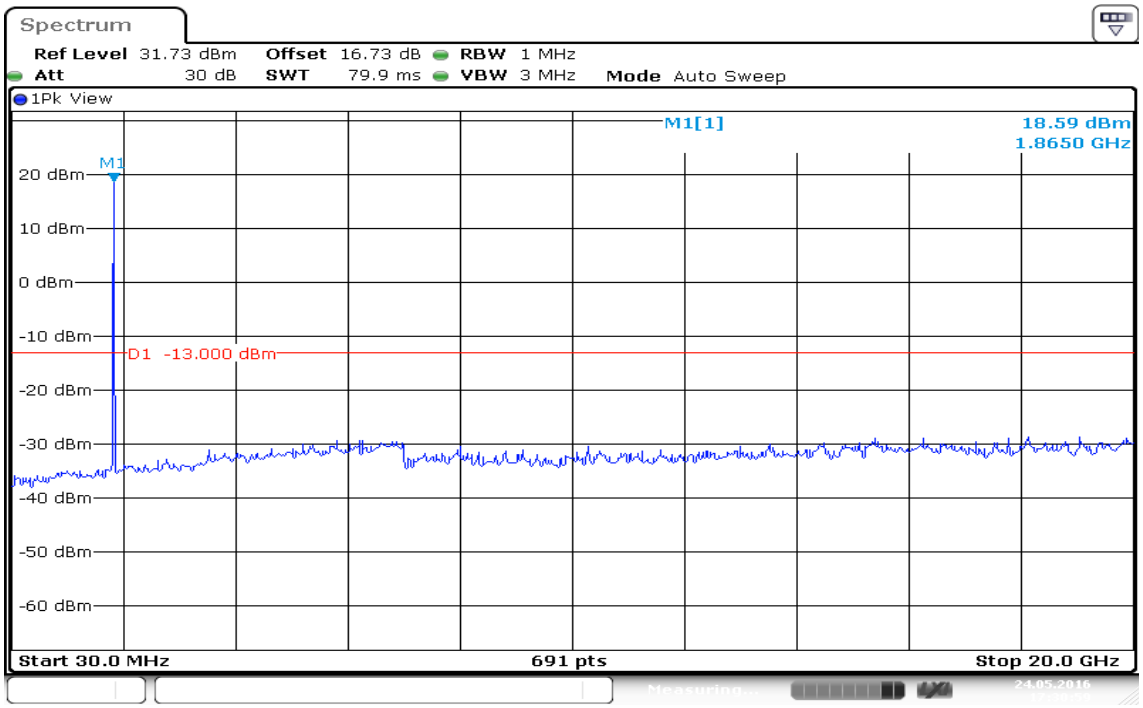
CH High



Date: 24.MAY.2016 17:40:47

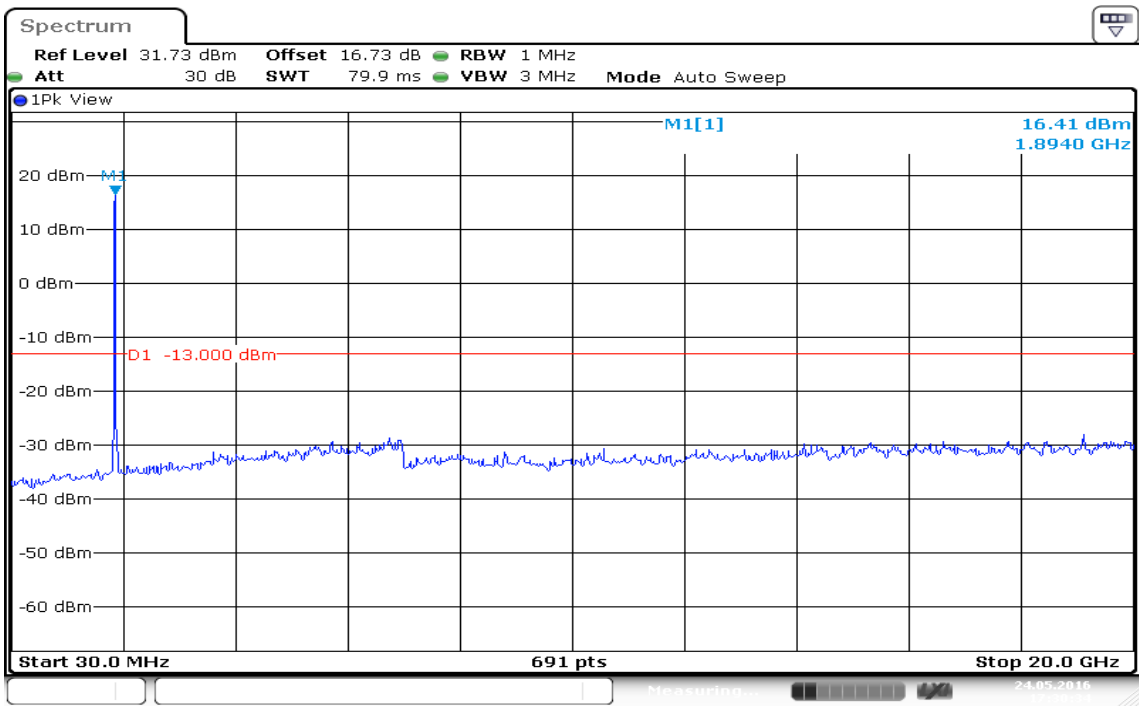
CHANNEL BANDWIDTH: 20MHz / 16QAM

CH Low



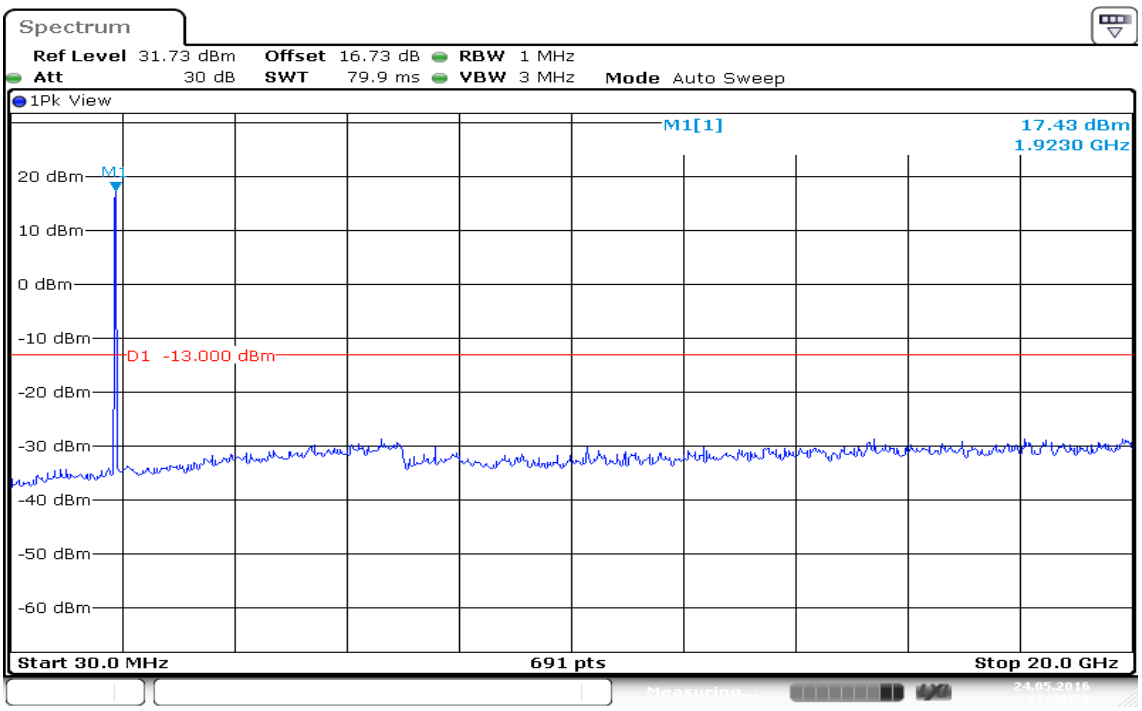
Date: 24.MAY.2016 17:30:59

CH Mid



Date: 24.MAY.2016 17:30:34

CH High

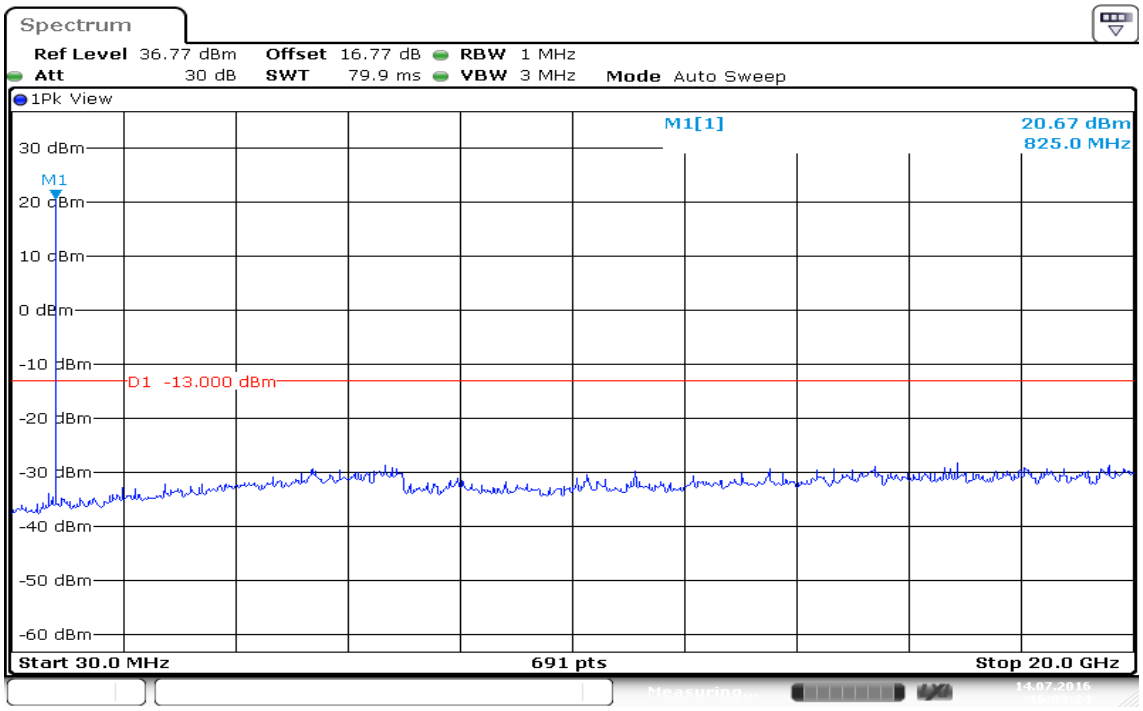


Date: 24.MAY.2016 17:29:59

LTE Band 5

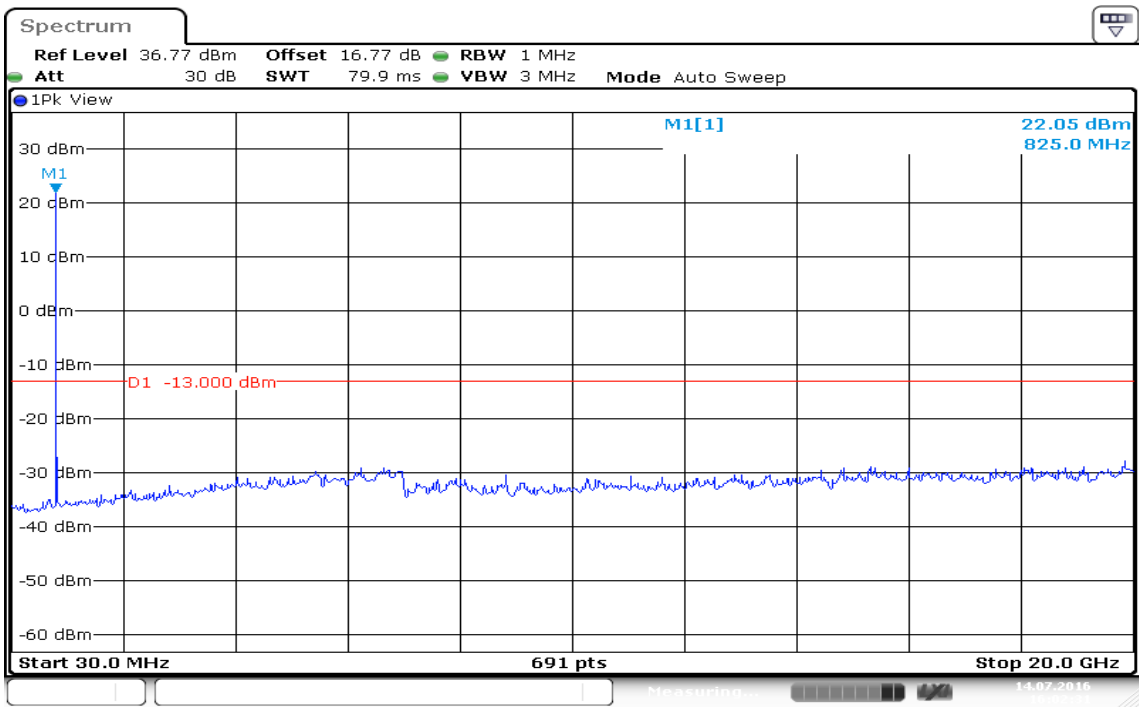
CHANNEL BANDWIDTH: 1.4MHz / QPSK

CH Low



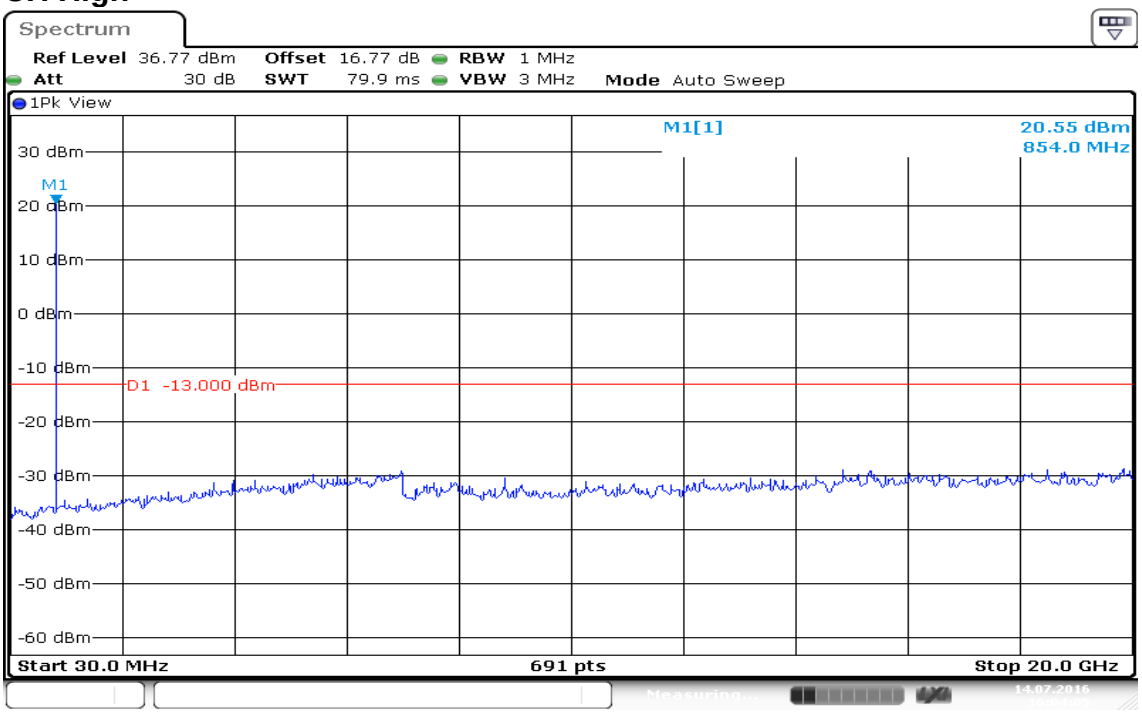
Date: 14.JUL.2016 16:03:25

CH Mid



Date: 14.JUL.2016 16:02:31

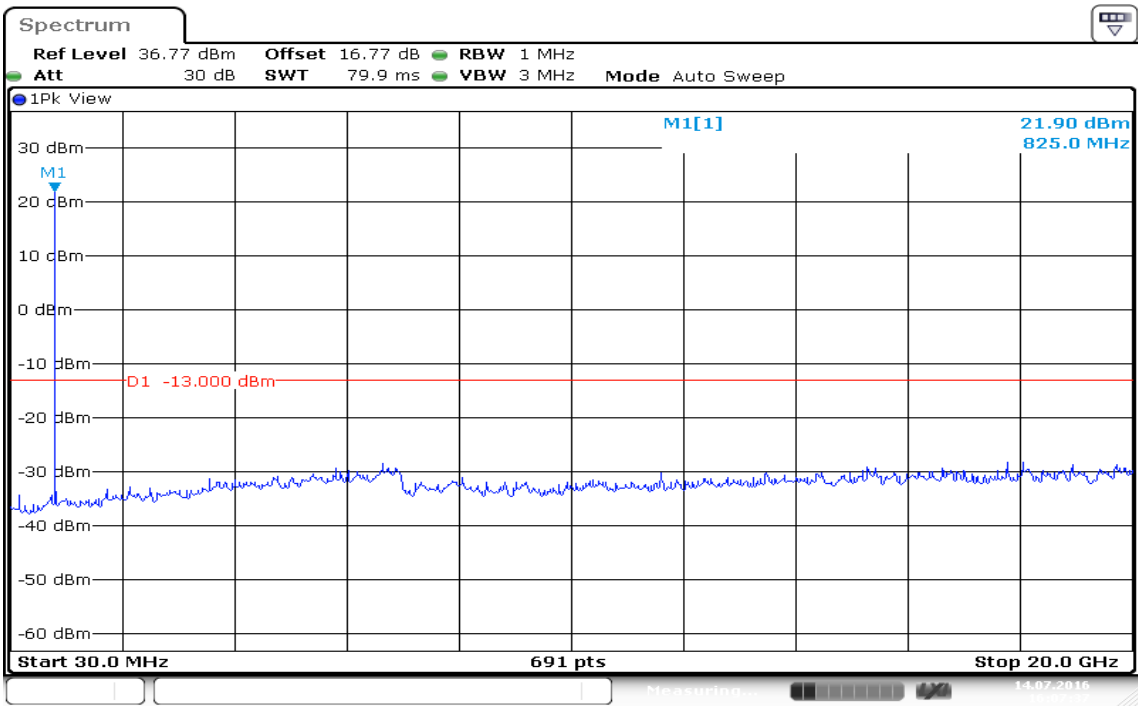
CH High



Date: 14.JUL.2016 16:04:06

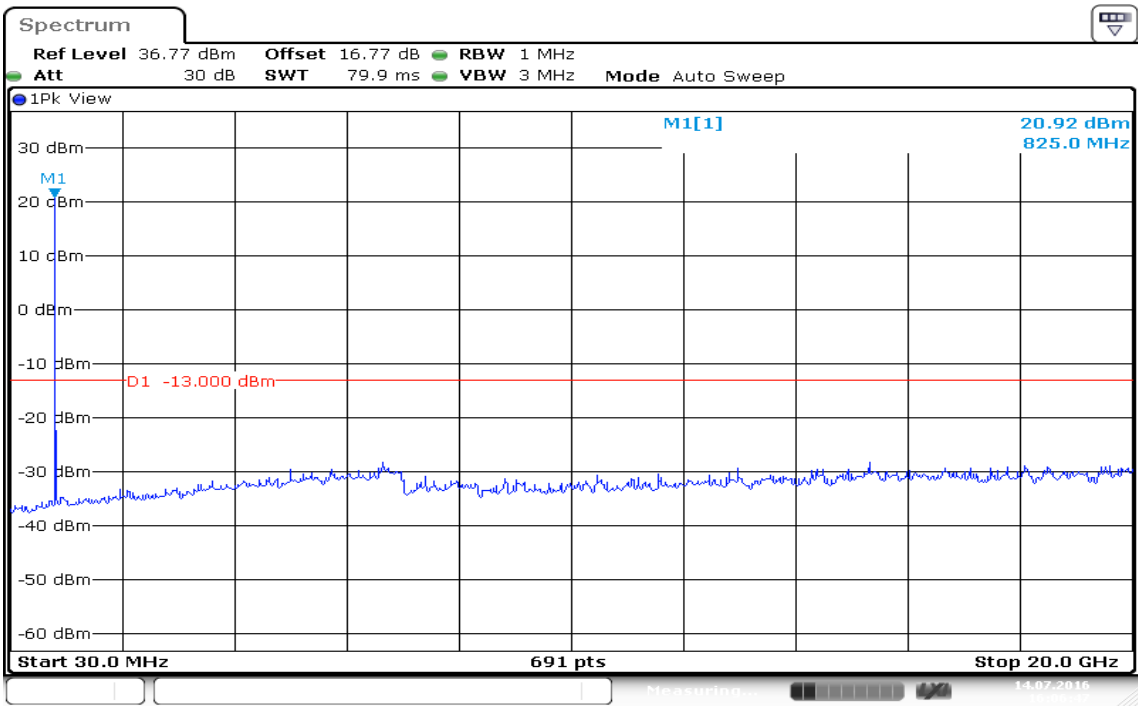
CHANNEL BANDWIDTH: 1.4MHz / 16QAM

CH Low



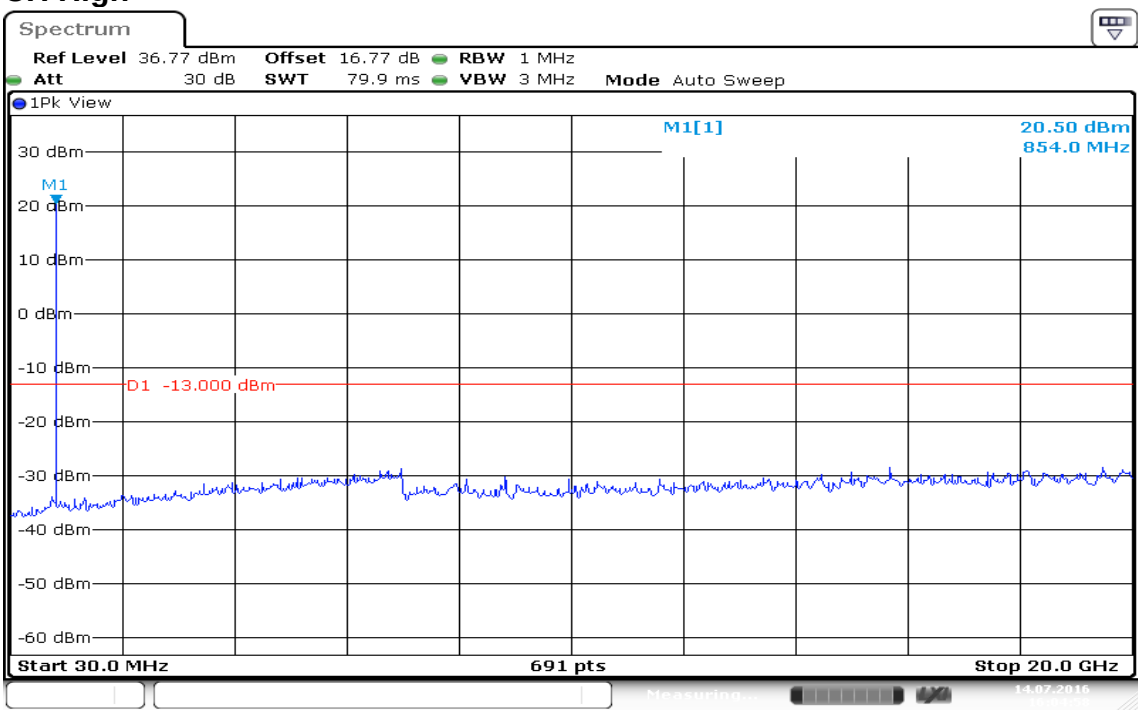
Date: 14.JUL.2016 16:07:37

CH Mid



Date: 14.JUL.2016 16:06:47

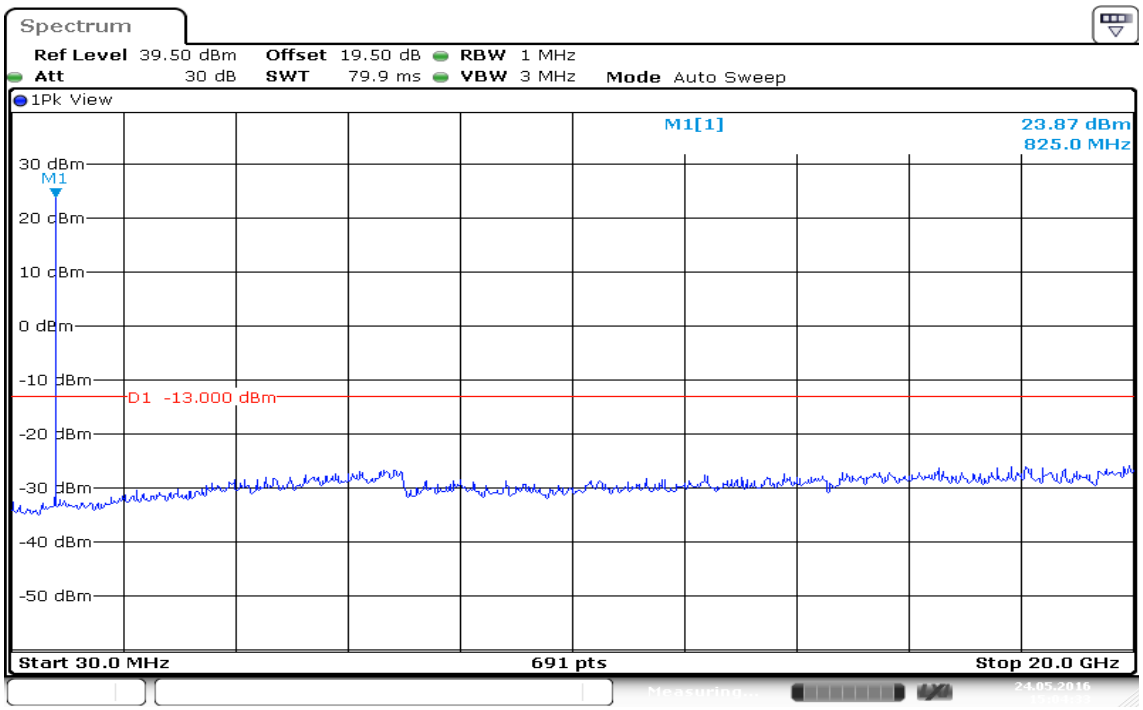
CH High



Date: 14.JUL.2016 16:04:58

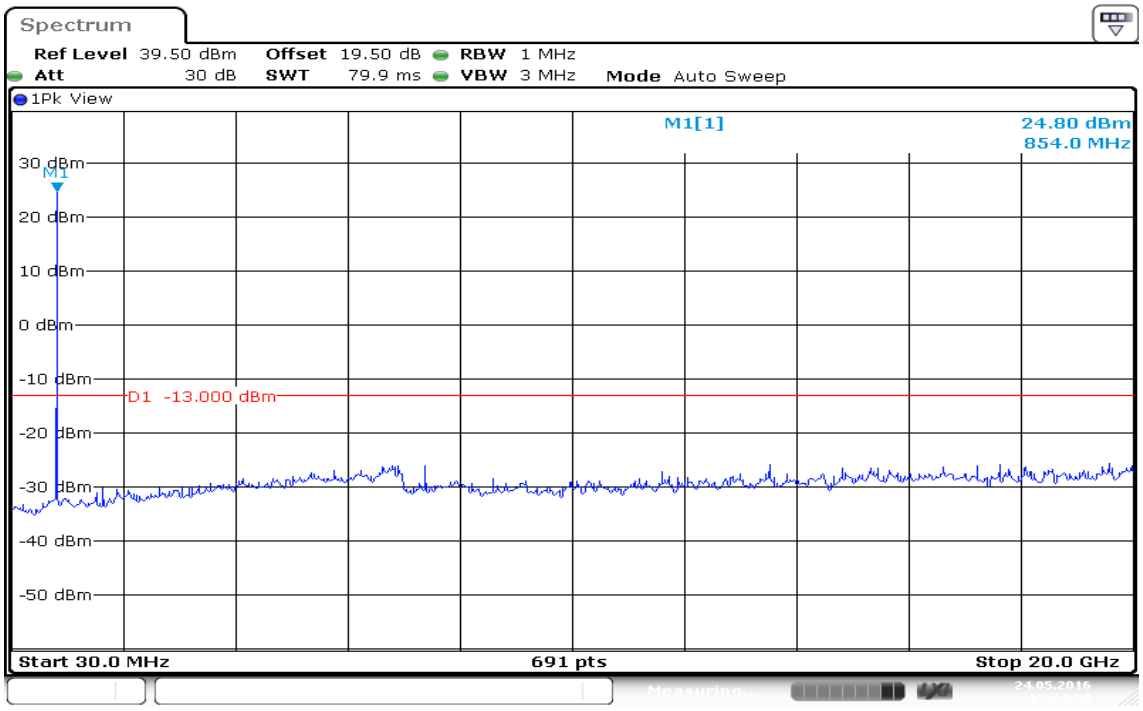
CHANNEL BANDWIDTH: 5MHz / QPSK

CH Low



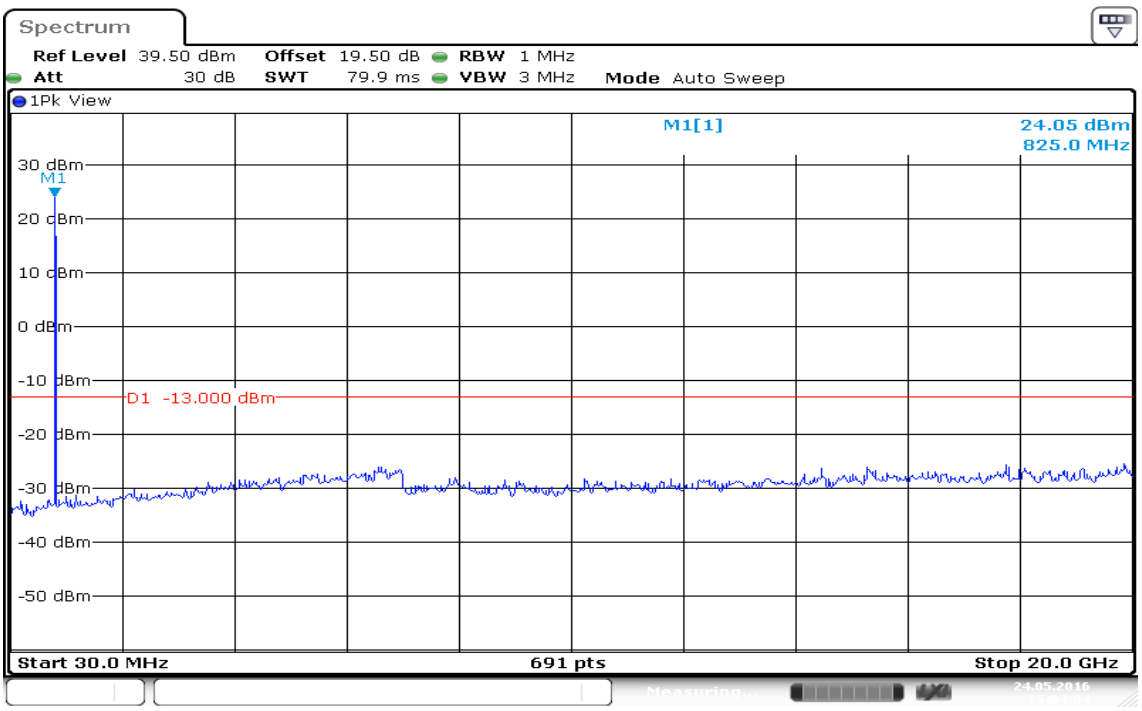
Date: 24.MAY.2016 15:04:33

CH Mid



Date: 24.MAY.2016 15:04:59

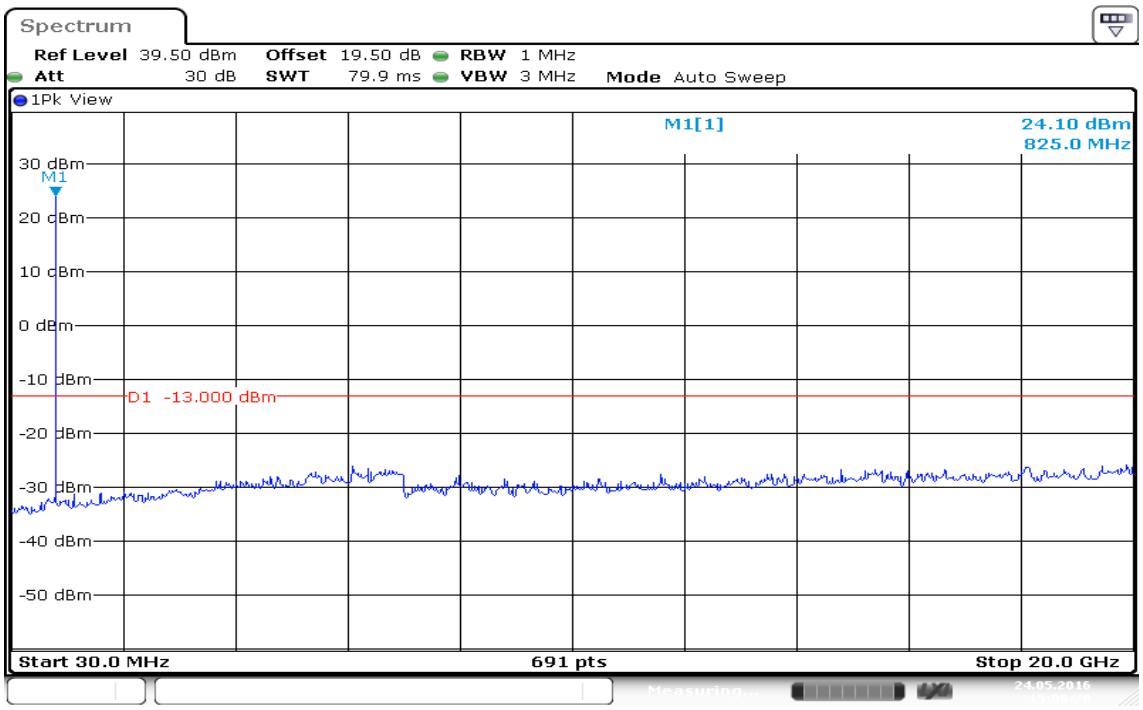
CH High



Date: 24.MAY.2016 15:04:04

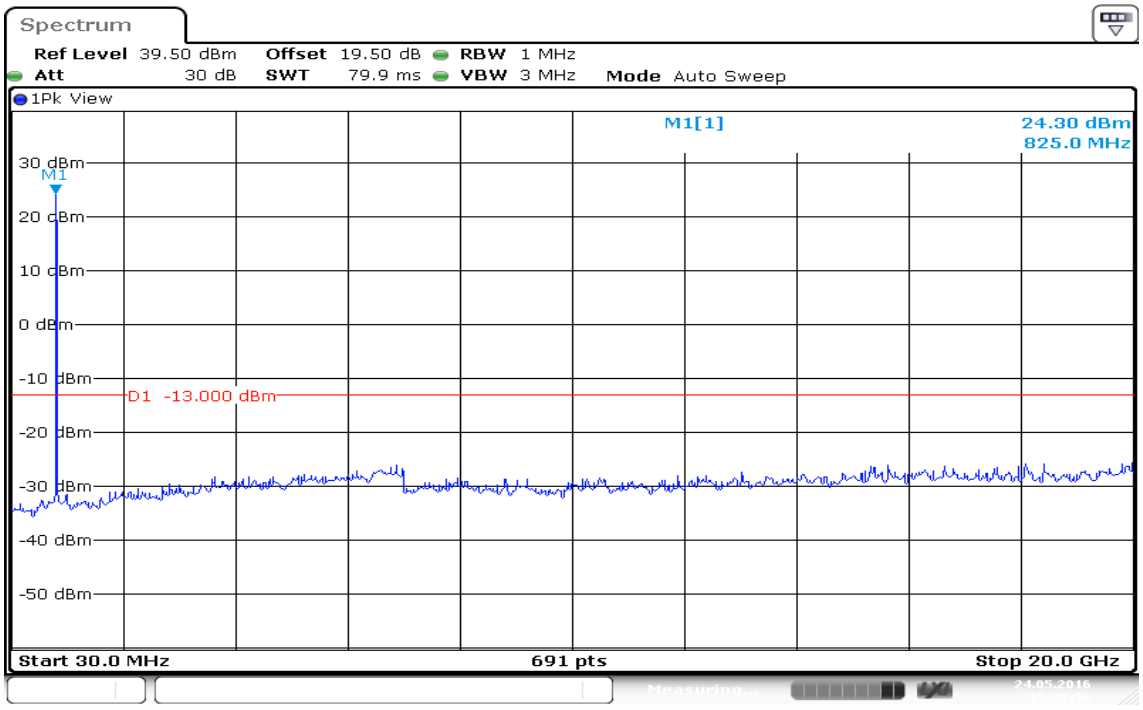
CHANNEL BANDWIDTH: 5MHz / 16QAM

CH Low



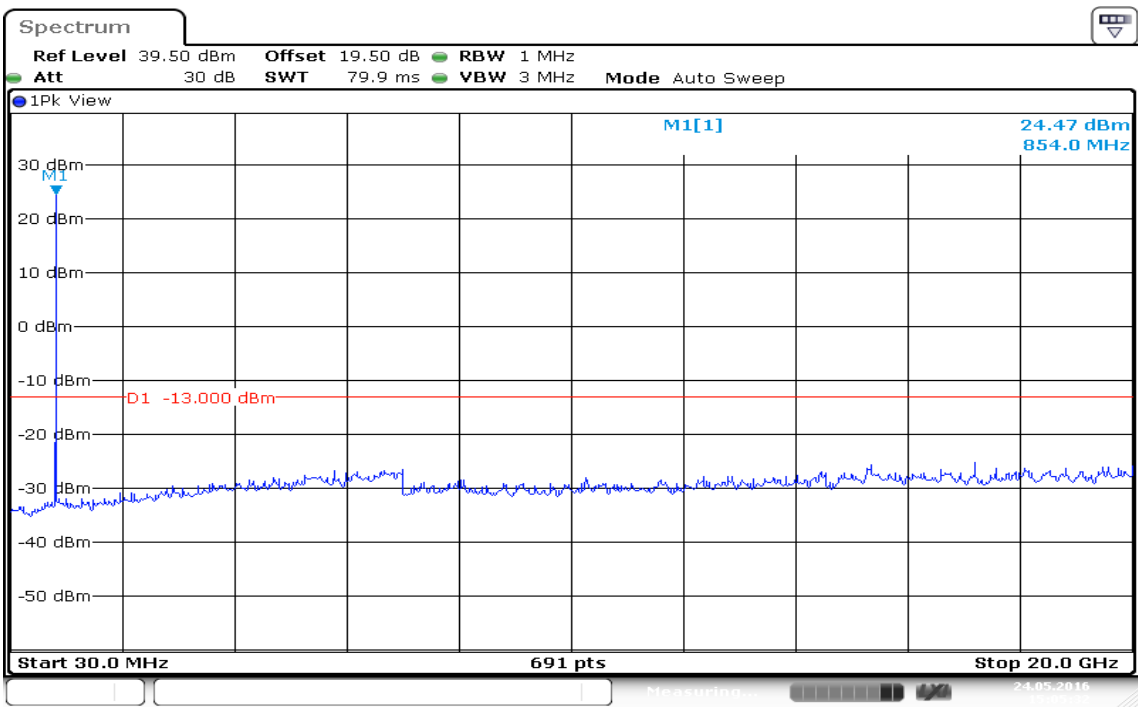
Date: 24.MAY.2016 15:06:20

CH Mid



Date: 24.MAY.2016 15:05:56

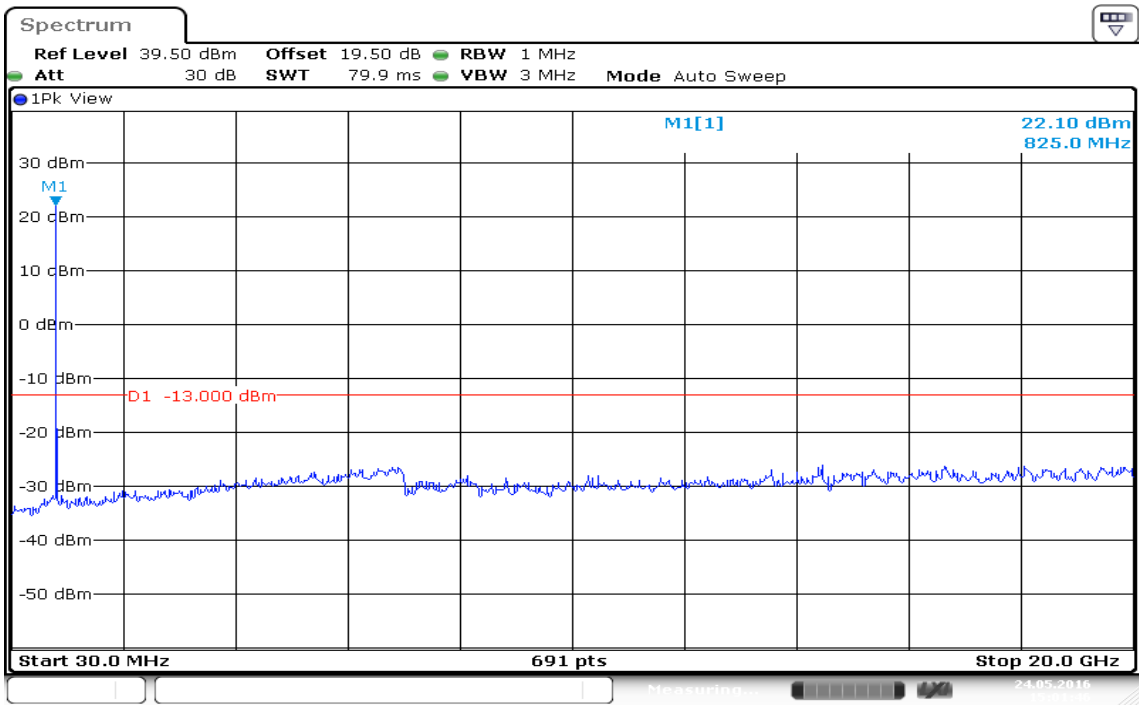
CH High



Date: 24.MAY.2016 15:05:32

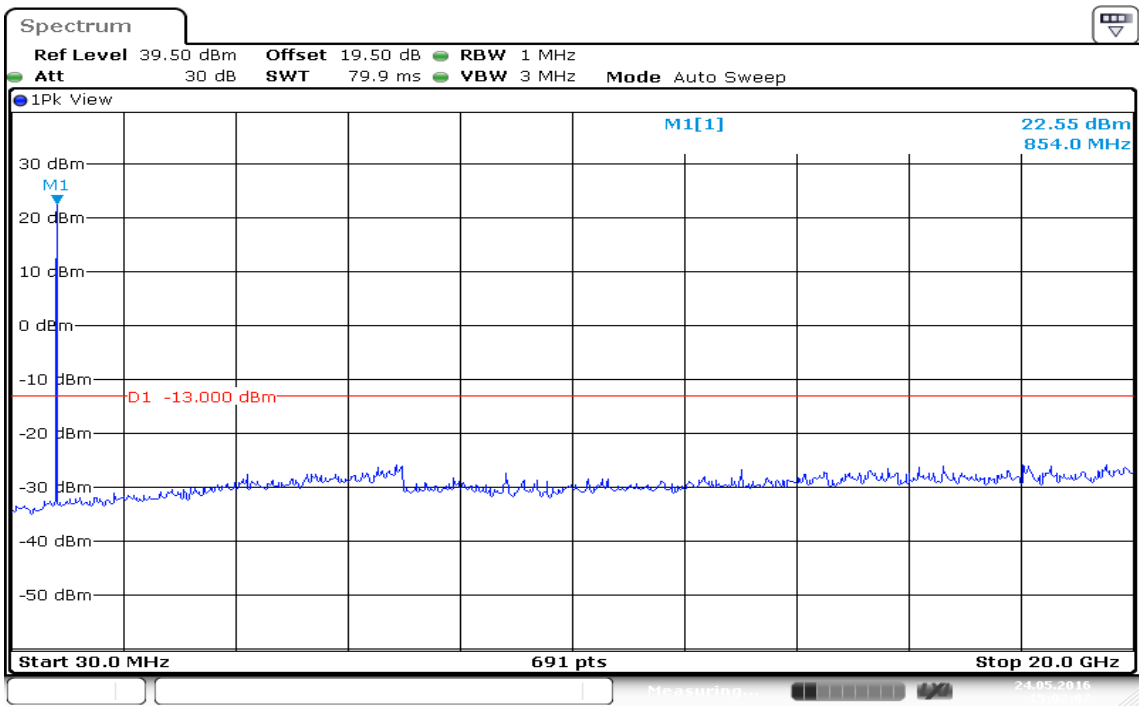
CHANNEL BANDWIDTH: 10MHz / QPSK

CH Low



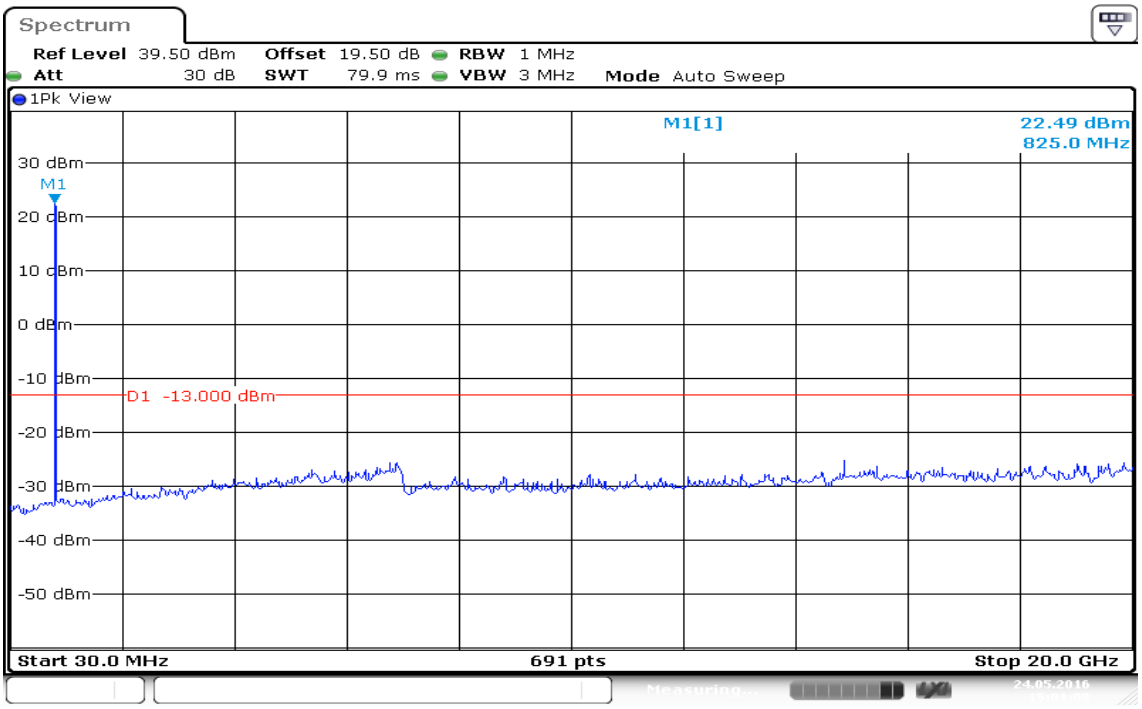
Date: 24.MAY.2016 15:01:46

CH Mid



Date: 24.MAY.2016 15:02:07

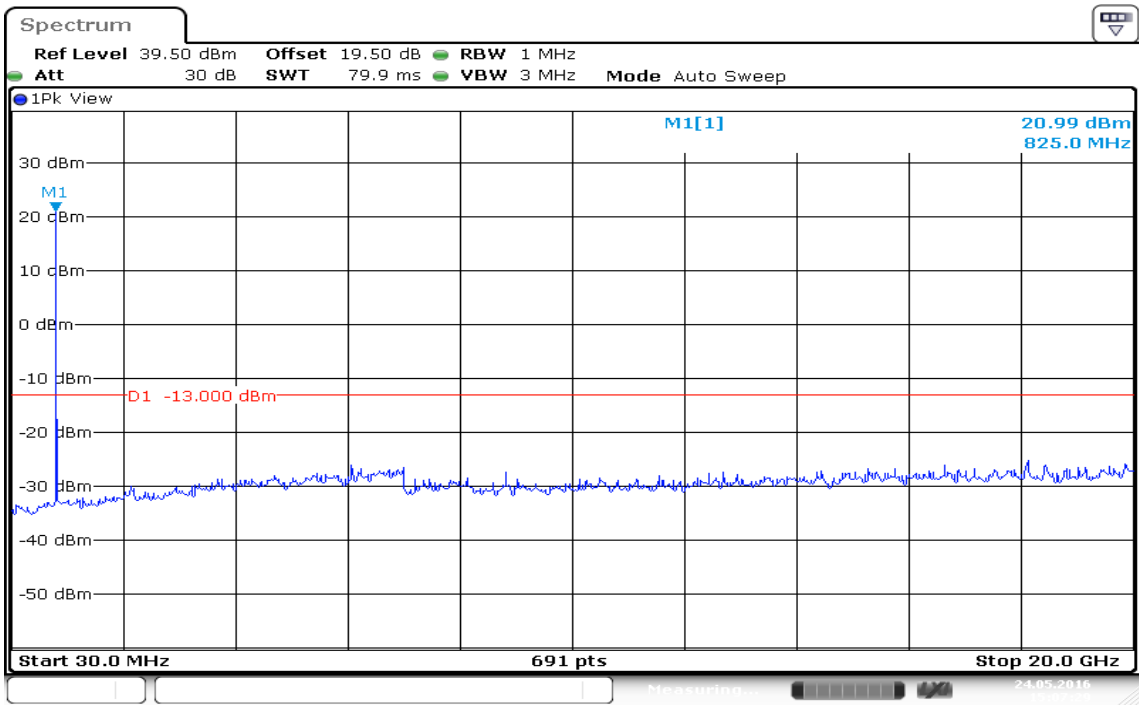
CH High



Date: 24.MAY.2016 15:01:08

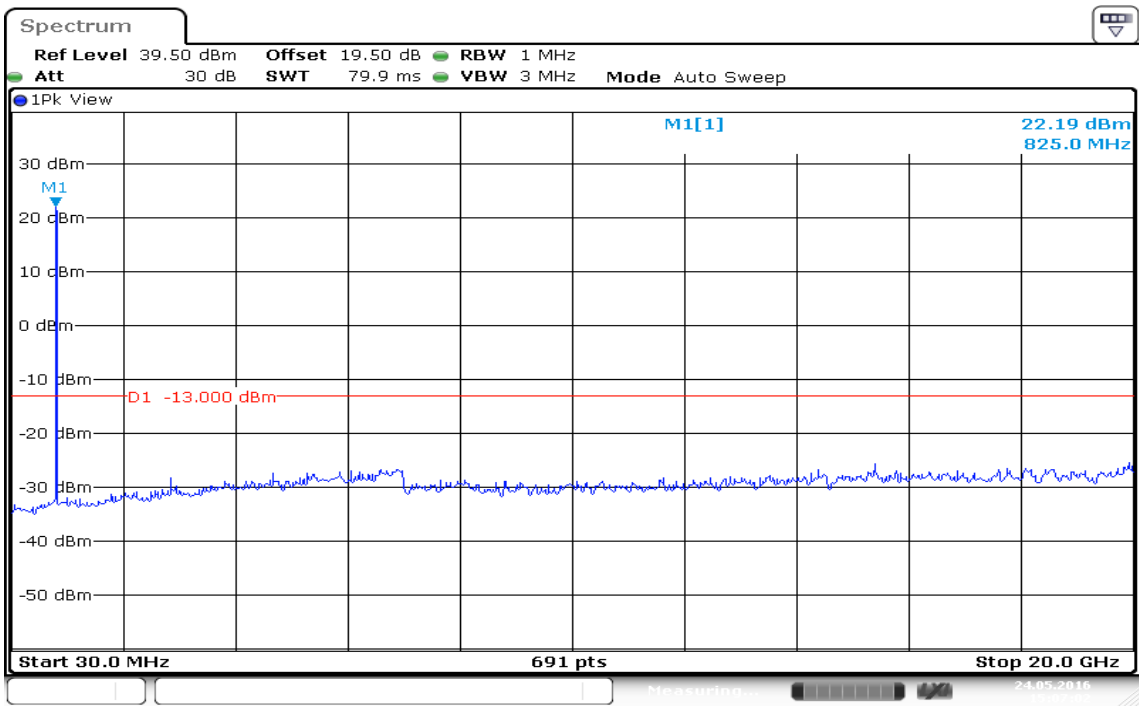
CHANNEL BANDWIDTH: 10MHz / 16QAM

CH Low



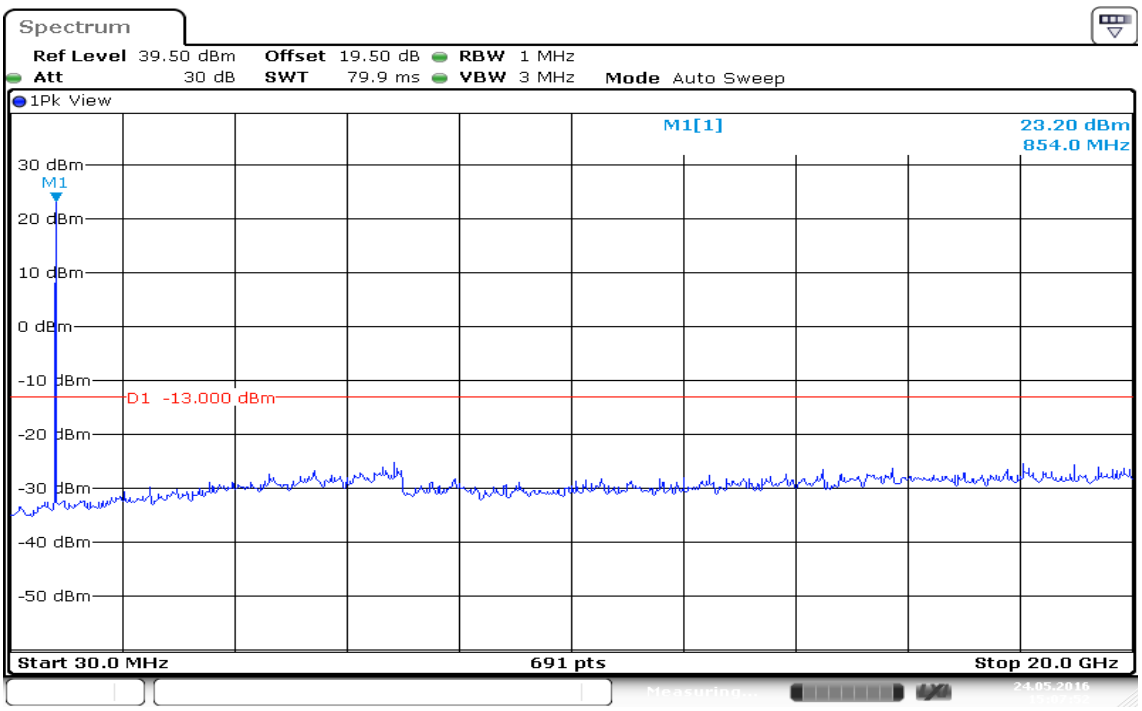
Date: 24.MAY.2016 15:07:29

CH Mid



Date: 24.MAY.2016 15:07:02

CH High



Date: 24.MAY.2016 15:07:52