Chongqing Academy of Information and Communications Technology
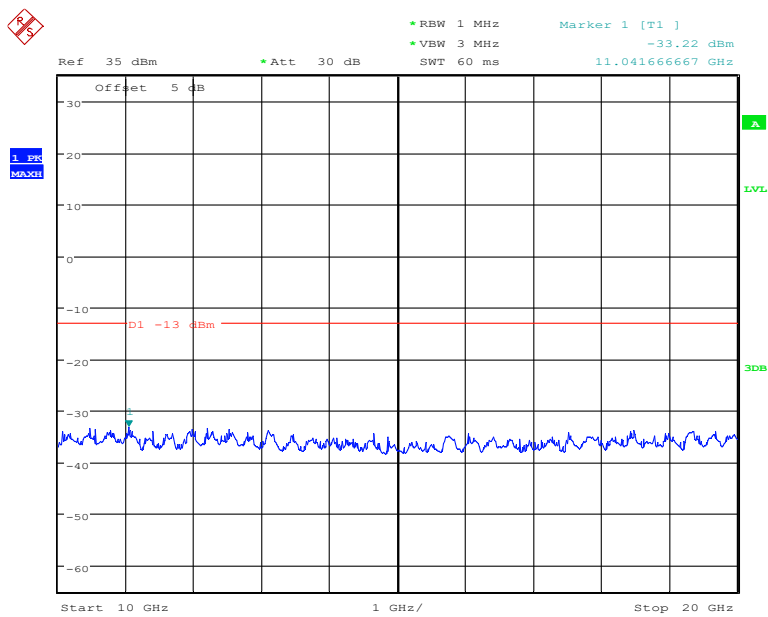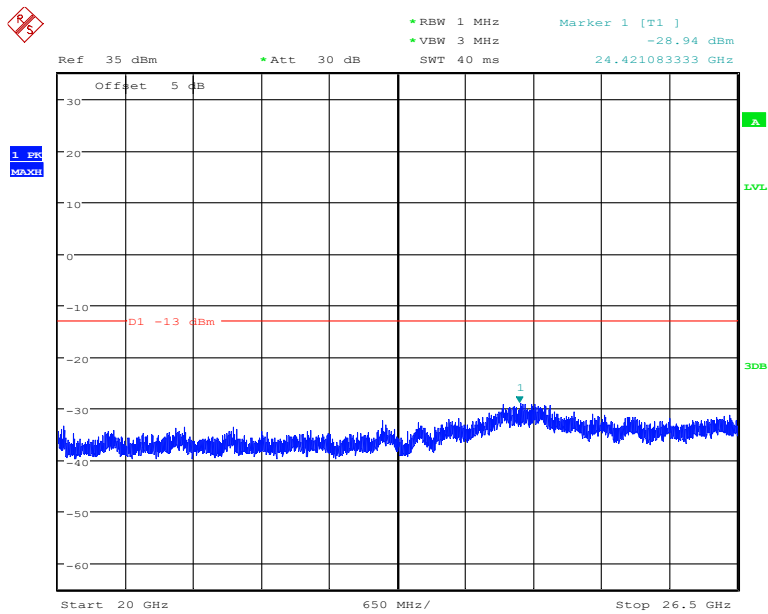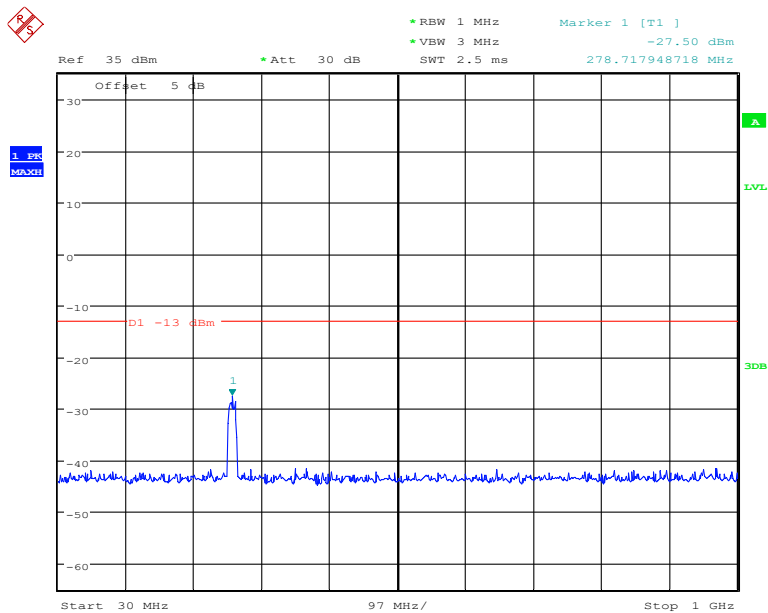
Date: 13.NOV.2019 02:23:13

10 MHz bandwidth 16QAM Mode Middle Channel, 2593 MHz,10MHz to 20GHz

Date: 13.NOV.2019 02:41:29

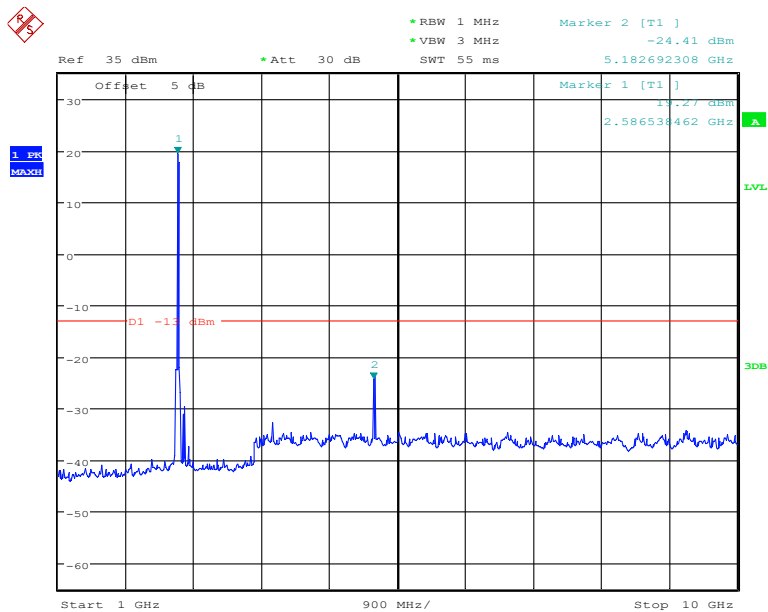10 MHz bandwidth 16QAM Mode Middle Channel, 2593 MHz,20MHz to 26.5GHz

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```
*RBW 1 MHz                    Marker 1 [T1 ]
*VBW 3 MHz                         -27.50 dBm
Ref  35 dBm        *Att  30 dB   SWT 2.5 ms    278.717948718 MHz
   Offset  5 dB
```

Date: 13.NOV.2019 02:25:30

15 MHz bandwidth QPSK Mode Middle Channel, 2593 MHz,30MHz to 1GHz


```
*RBW 1 MHz                    Marker 2 [T1 ]
*VBW 3 MHz                         -24.41 dBm
Ref  35 dBm        *Att  30 dB   SWT 55 ms     5.182692308 GHz
   Offset  5 dB                 Marker 1 [T1 ]
                                     19.27 dBm
                                 2.586538462 GHz
```
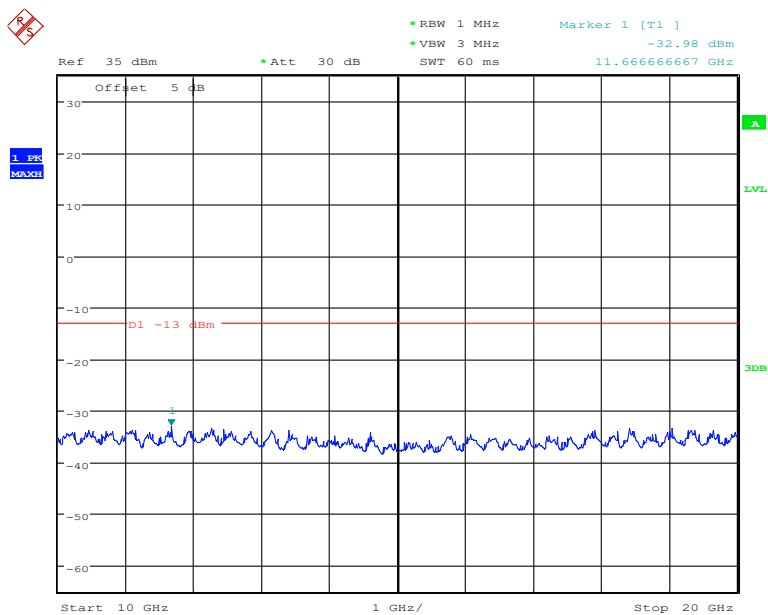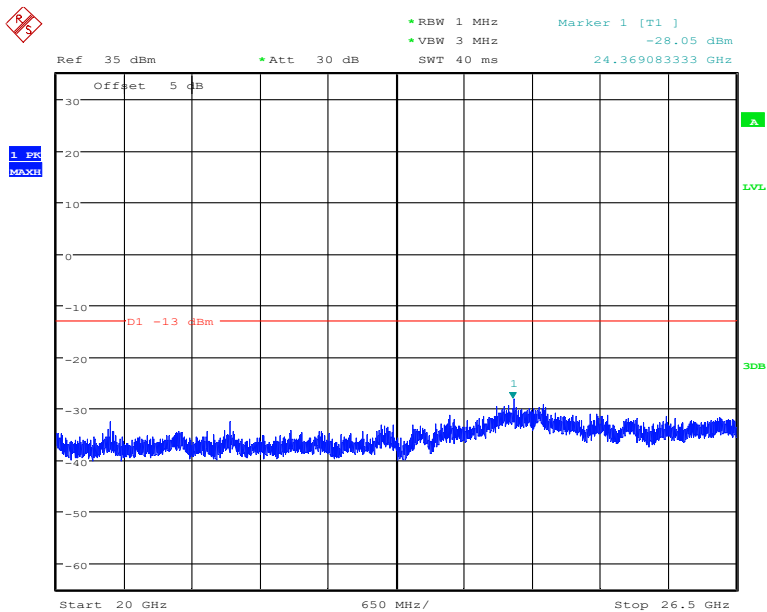
Date: 13.NOV.2019 02:26:44

15 MHz bandwidth QPSK Mode Middle Channel, 2593 MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.

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```
                                        *RBW  1 MHz       Marker 1 [T1 ]
                                        *VBW  3 MHz             -32.98 dBm
        Ref   35 dBm      *Att   30 dB  SWT  60 ms       11.666666667 GHz
          Offset   5 dB
```

Date: 13.NOV.2019 02:27:07

15 MHz bandwidth QPSK Mode Middle Channel, 2593 MHz,10MHz to 20GHz


```
                                        *RBW  1 MHz       Marker 1 [T1 ]
                                        *VBW  3 MHz             -28.05 dBm
        Ref   35 dBm      *Att   30 dB  SWT  40 ms        24.369083333 GHz
          Offset   5 dB
```

Date: 13.NOV.2019 02:41:50

15 MHz bandwidth QPSK Mode Middle Channel, 2593 MHz,20MHz to 26.5GHz

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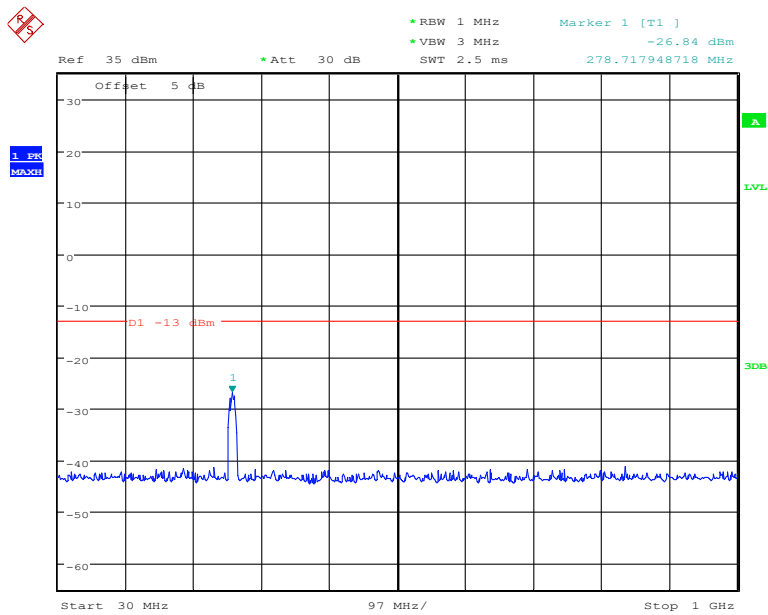
Date: 13.NOV.2019 02:25:46

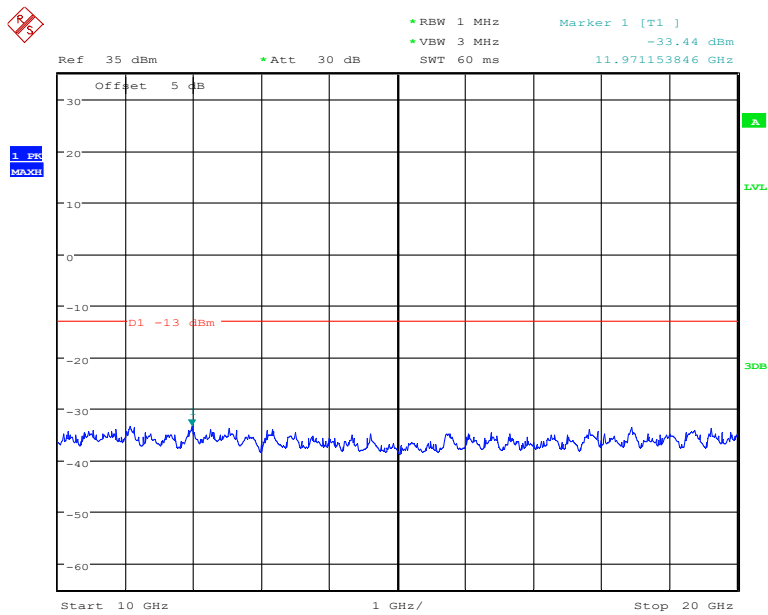15 MHz bandwidth 16QAM Mode Middle Channel, 2593 MHz,30MHz to 1GHz
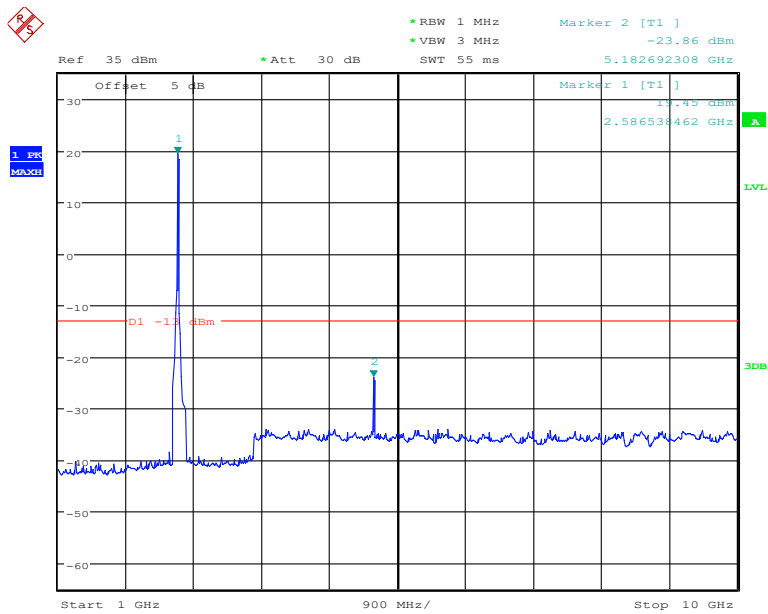
Date: 13.NOV.2019 02:26:35

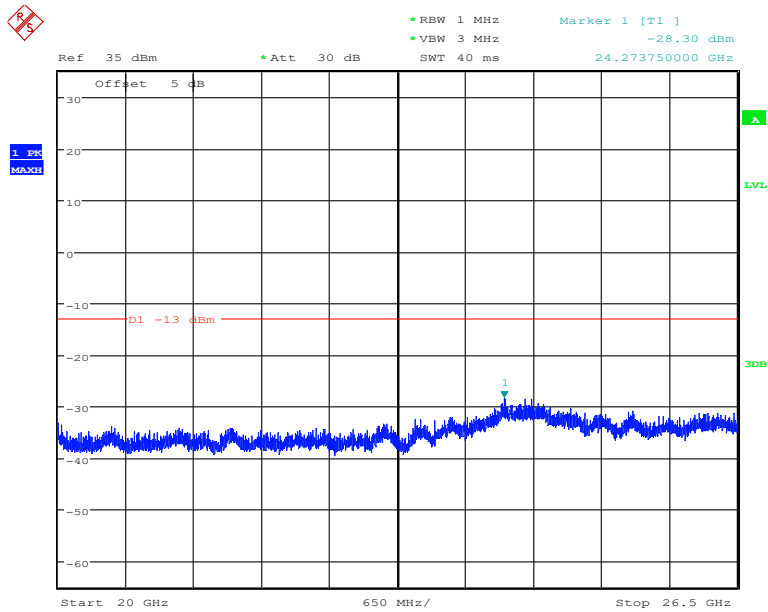15 MHz bandwidth 16QAM Mode Middle Channel, 2593 MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.

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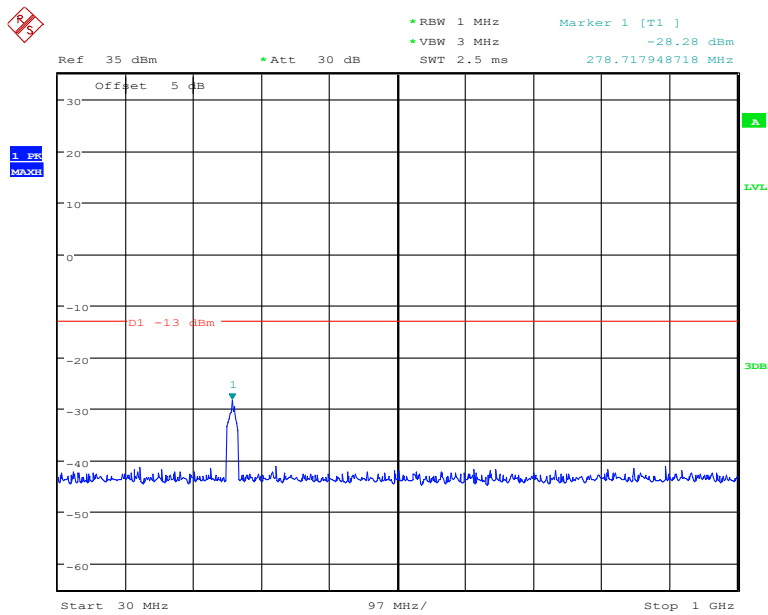
Date: 13.NOV.2019 02:27:17

15 MHz bandwidth 16QAM Mode Middle Channel, 2593 MHz,10MHz to 20GHz

Date: 13.NOV.2019 02:42:00

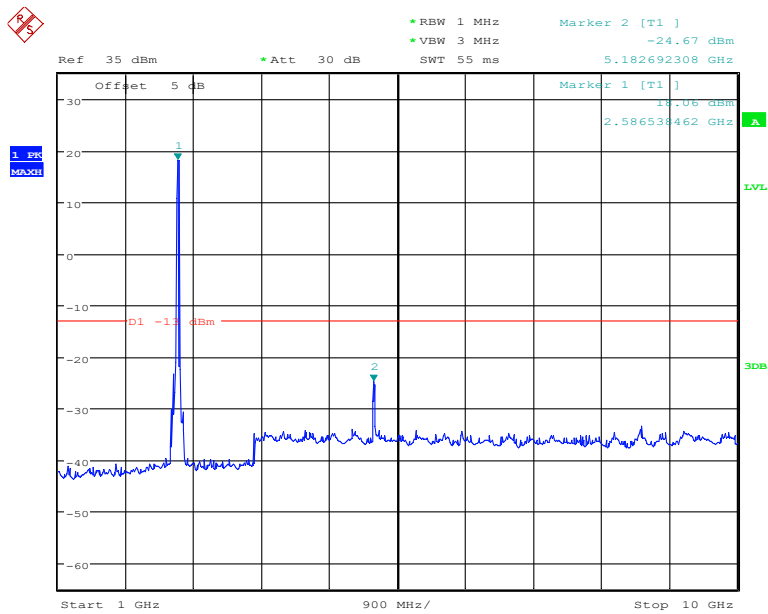15 MHz bandwidth 16QAM Mode Middle Channel, 2593 MHz,20MHz to 26.5GHz

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Date: 13.NOV.2019 02:28:39

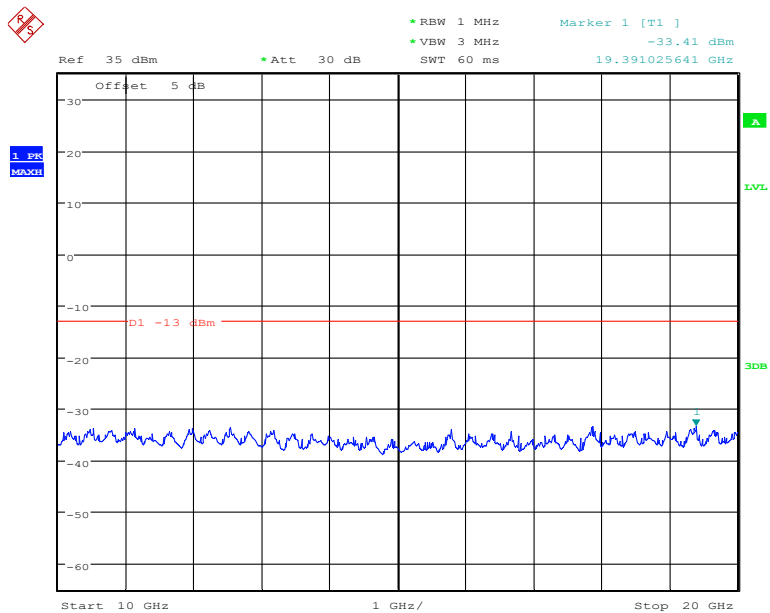20 MHz bandwidth QPSK Mode Middle Channel, 2593 MHz,30MHz to 1GHz

Date: 13.NOV.2019 02:28:00

20 MHz bandwidth QPSK Mode Middle Channel, 2593 MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.

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Date: 13.NOV.2019 02:27:42

20 MHz bandwidth QPSK Mode Middle Channel, 2593 MHz,10MHz to 20GHz

Date: 13.NOV.2019 02:42:20

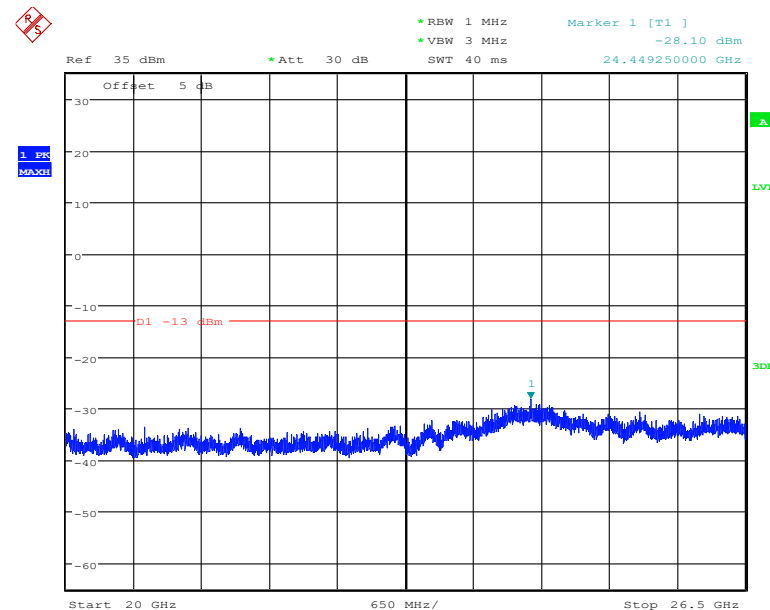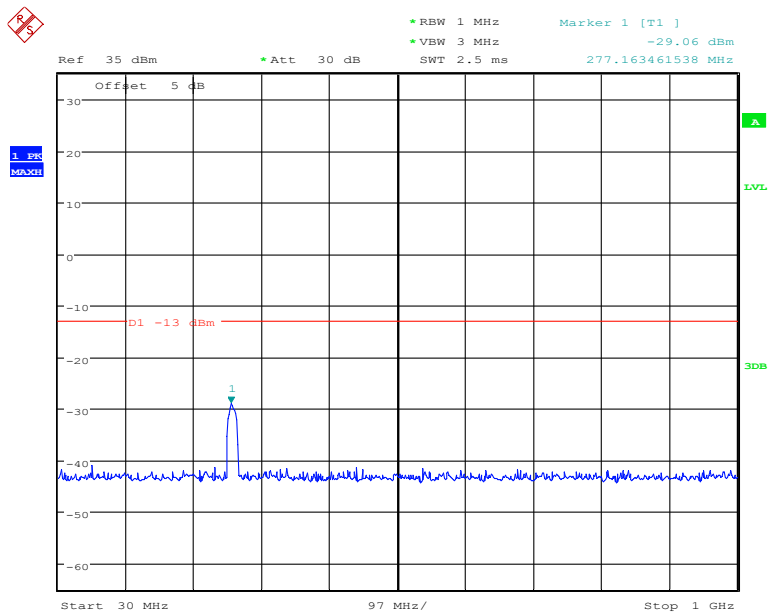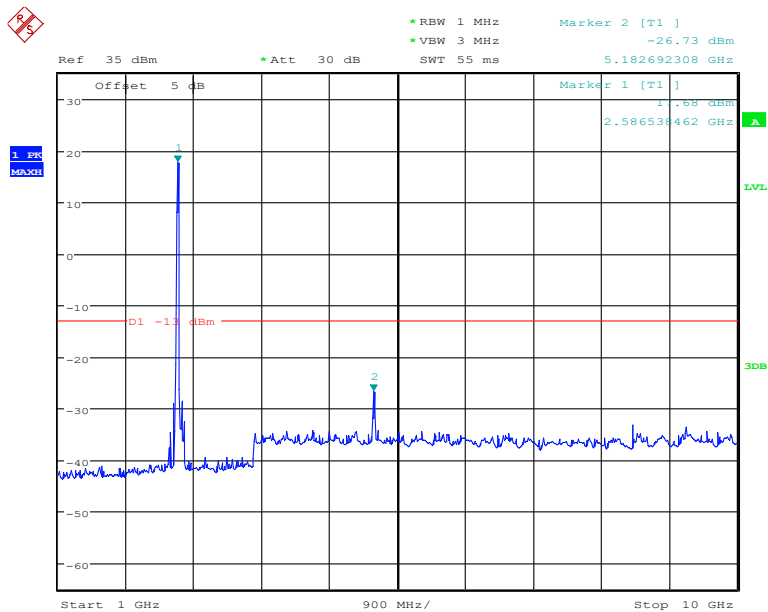20 MHz bandwidth QPSK Mode Middle Channel, 2593 MHz,20MHz to 26.5GHz

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Date: 13.NOV.2019 02:28:30

20 MHz bandwidth 16QAM Mode Middle Channel, 2593 MHz,30MHz to 1GHz
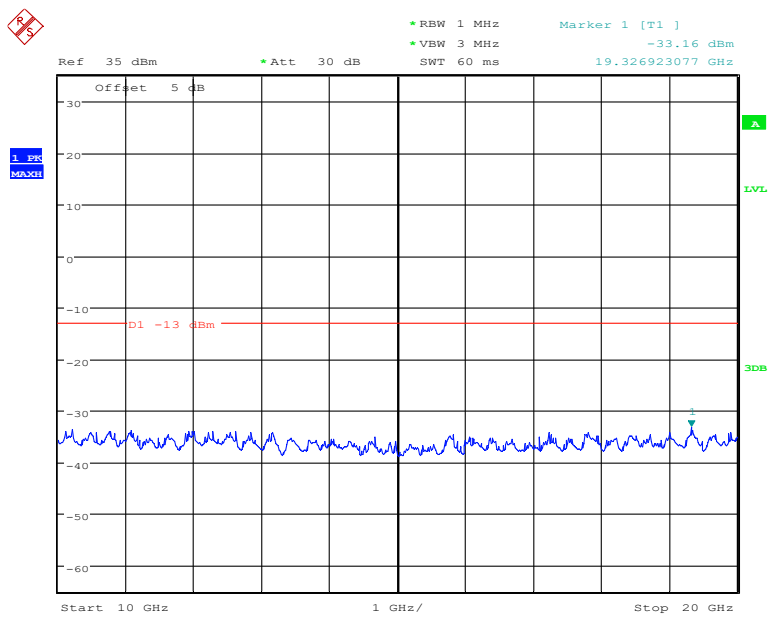

Date: 13.NOV.2019 02:28:10

20 MHz bandwidth 16QAM Mode Middle Channel, 2593 MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.

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Date: 13.NOV.2019 02:27:32

20 MHz bandwidth 16QAM Mode Middle Channel, 2593 MHz,10MHz to 20GHz

Date: 13.NOV.2019 02:42:12

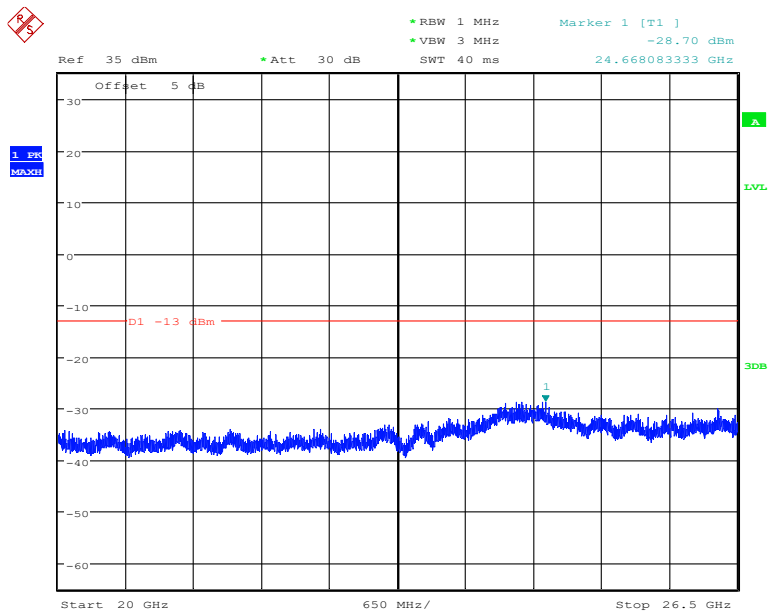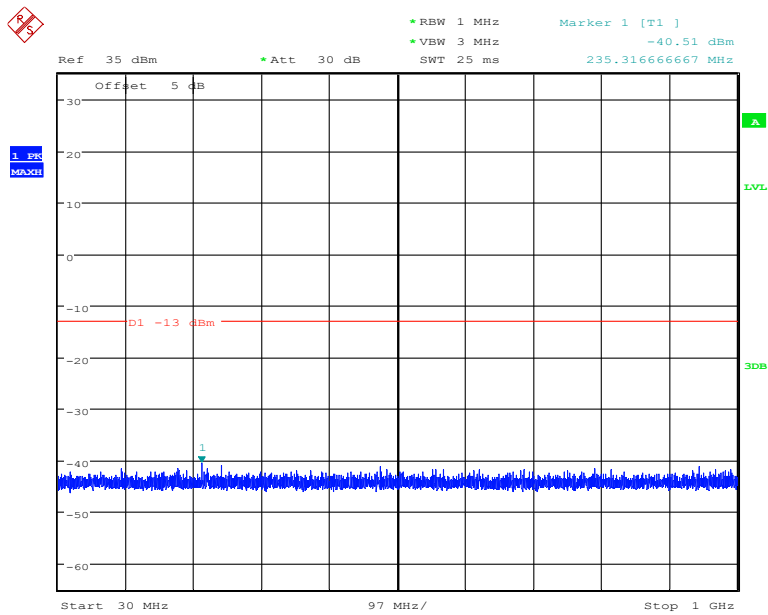20 MHz bandwidth 16QAM Mode Middle Channel, 2593 MHz,20MHz to 26.5GHz

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5.3.12 LTE B66 Conducted Spurious Emission Results

Date: 13.NOV.2019 03:08:21

1.4 MHz bandwidth QPSK Mode Middle Channel, 1745 MHz,30MHz to 1GHz
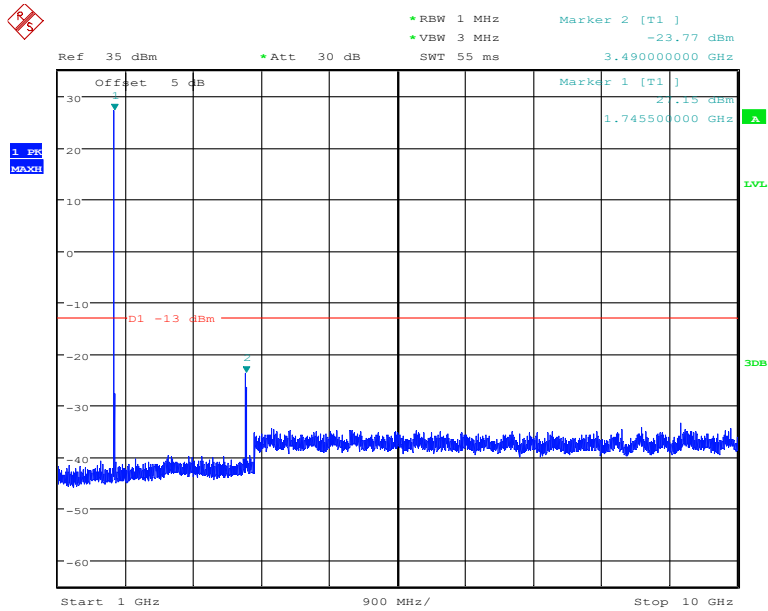
Date: 13.NOV.2019 03:08:35

1.4 MHz bandwidth QPSK Mode Middle Channel, 1745 MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.

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```
                                    *RBW  1 MHz        Marker 1 [T1 ]
                                    *VBW  3 MHz            -33.37 dBm
          Ref  35 dBm    *Att  30 dB   SWT  60 ms      19.340000000 GHz
              Offset  5 dB
          -30                                                        A
1 PK      -20
MAXH                                                                 LVL
          -10
           0
          -10    D1 -13 dBm
          -20                                                        3DB
          -30
          -40
          -50
          -60
          Start 10 GHz            1 GHz/              Stop 20 GHz
```
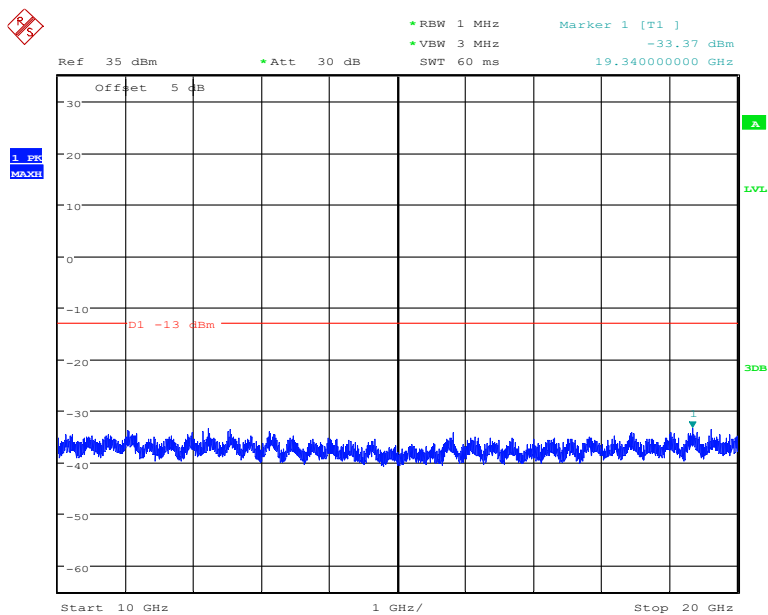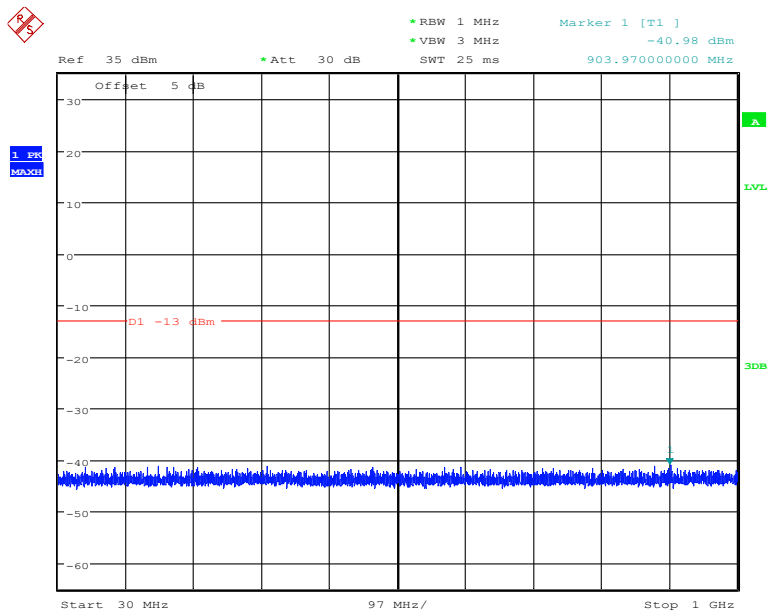
Date: 13.NOV.2019 03:09:12

1.4 MHz bandwidth QPSK Mode Middle Channel, 1745MHz,10MHz to 20GHz


```
                                    *RBW  1 MHz        Marker 1 [T1 ]
                                    *VBW  3 MHz            -40.98 dBm
          Ref  35 dBm    *Att  30 dB   SWT  25 ms      903.970000000 MHz
              Offset  5 dB
          -30                                                        A
1 PK      -20
MAXH                                                                 LVL
          -10
           0
          -10    D1 -13 dBm
          -20                                                        3DB
          -30
          -40
          -50
          -60
          Start 30 MHz            97 MHz/              Stop 1 GHz
```

Date: 13.NOV.2019 03:08:11

1.4 MHz bandwidth 16QAMMode Middle Channel, 1745 MHz,30MHz to 1GHz

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```
* RBW  1 MHz          Marker 2 [T1 ]
* VBW  3 MHz                    -22.97 dBm
Ref  35 dBm        * Att  30 dB    SWT  55 ms        3.490000000 GHz
     Offset   5 dB                 Marker 1 [T1 ]
                                        28.83 dBm
                                   1.744000000 GHz
```
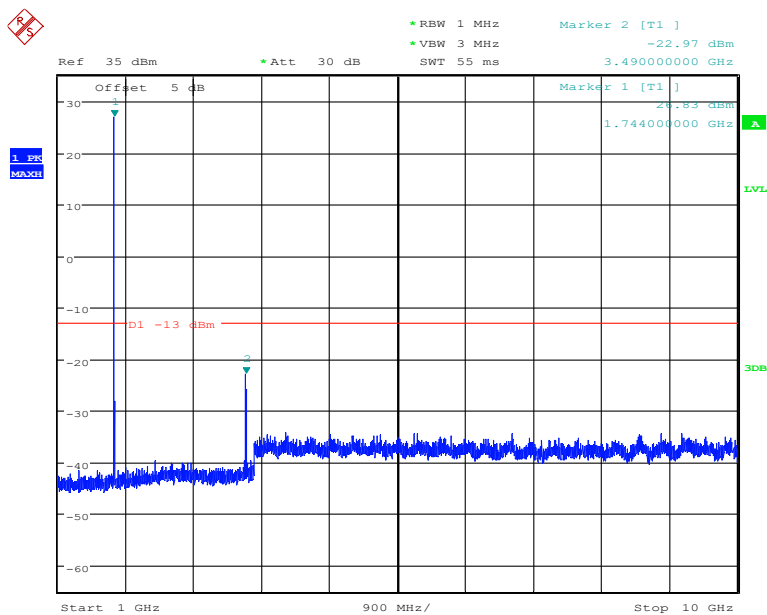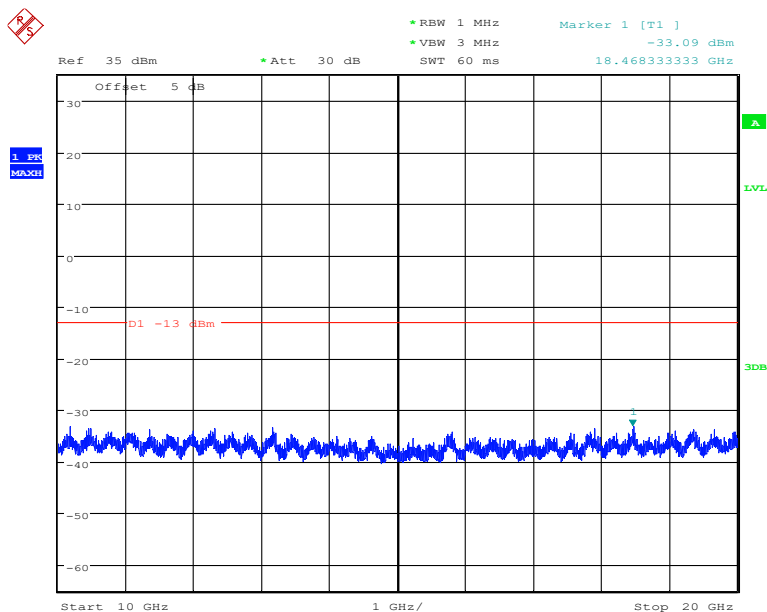
Date: 13.NOV.2019 03:08:45

1.4 MHz bandwidth 16QAMMode Middle Channel, 1745 MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.


```
* RBW  1 MHz          Marker 1 [T1 ]
* VBW  3 MHz                    -33.09 dBm
Ref  35 dBm        * Att  30 dB    SWT  60 ms        18.468333333 GHz
     Offset   5 dB
```
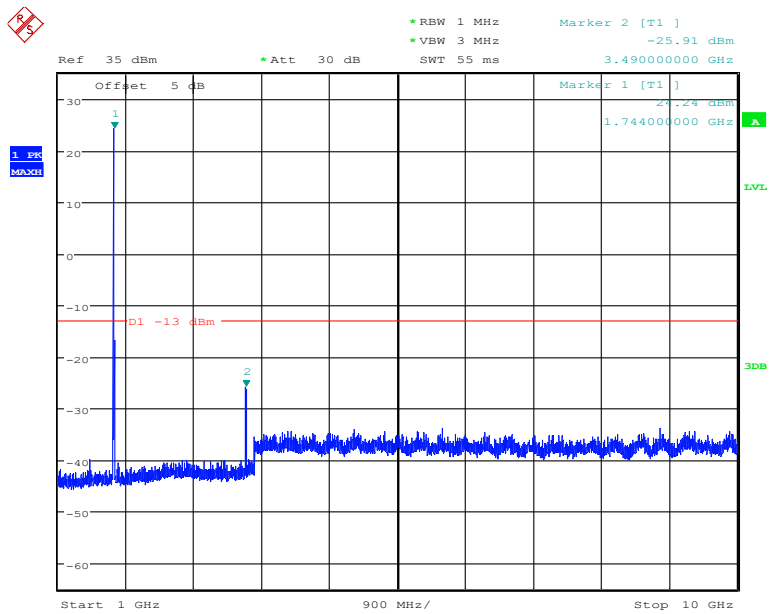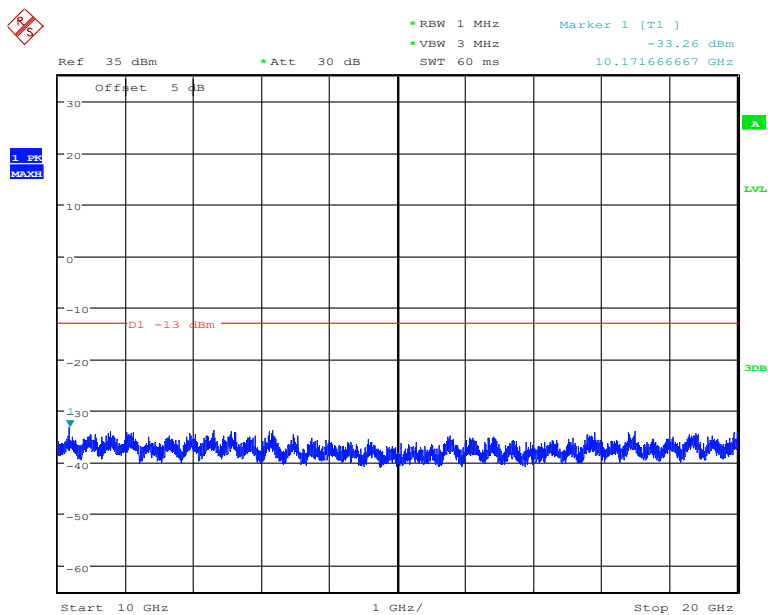
Date: 13.NOV.2019 03:09:03

1.4 MHz bandwidth 16QAMMode Middle Channel, 1745MHz,10MHz to 20GHz

```
                                    *RBW  1 MHz        Marker 1 [T1 ]
                                    *VBW  3 MHz            -40.68 dBm
    Ref   35 dBm        *Att  30 dB  SWT  25 ms      141.550000000 MHz
        Offset   5 dB
```
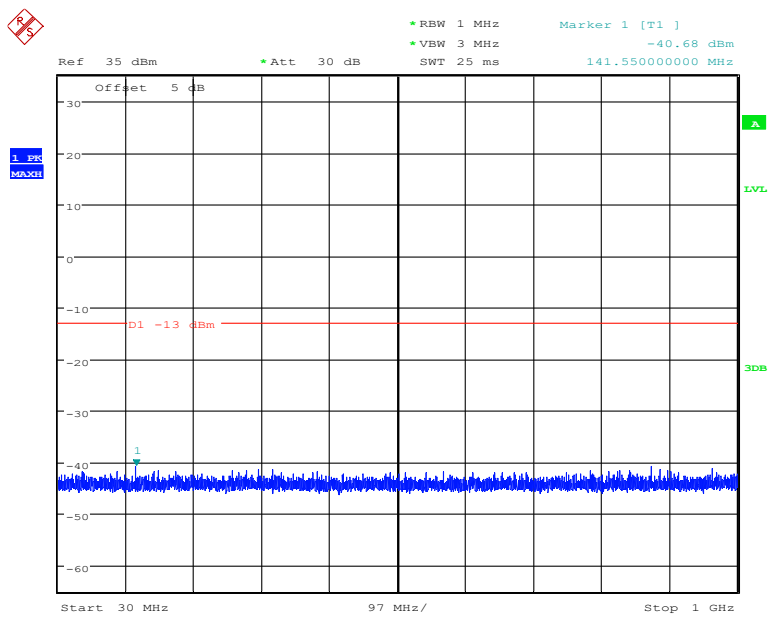
Date: 13.NOV.2019 03:10:11

3 MHz bandwidth QPSK Mode Middle Channel, 1745 MHz,30MHz to 1GHz

```
                                    *RBW  1 MHz        Marker 2 [T1 ]
                                    *VBW  3 MHz            -25.91 dBm
    Ref   35 dBm        *Att  30 dB  SWT  55 ms      3.490000000 GHz
        Offset   5 dB                               Marker 1 [T1 ]
                                                        2*.24 dBm
                                                   1.744000000 GHz
```

Date: 13.NOV.2019 03:09:59

3 MHz bandwidth QPSK Mode Middle Channel, 1745 MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.

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Date: 13.NOV.2019 03:09:23

3 MHz bandwidth QPSK Mode Middle Channel, 1745MHz,10MHz to 20GHz

Date: 13.NOV.2019 03:10:20

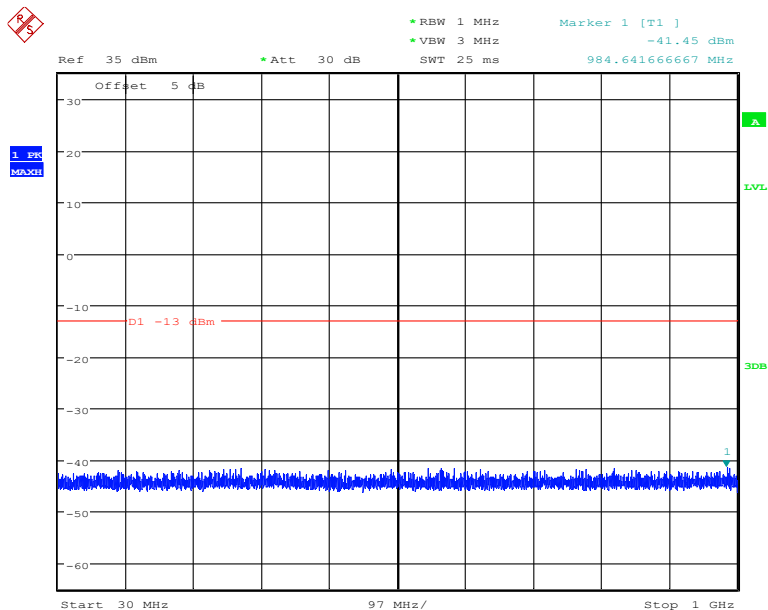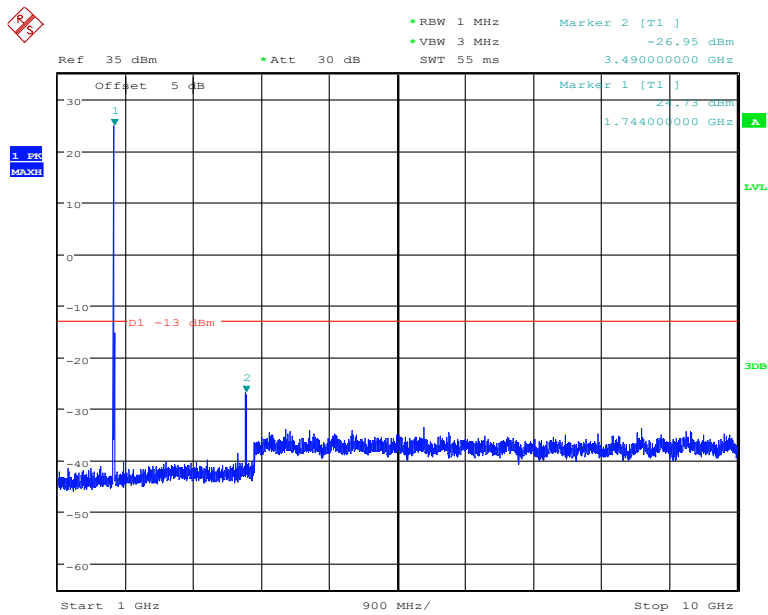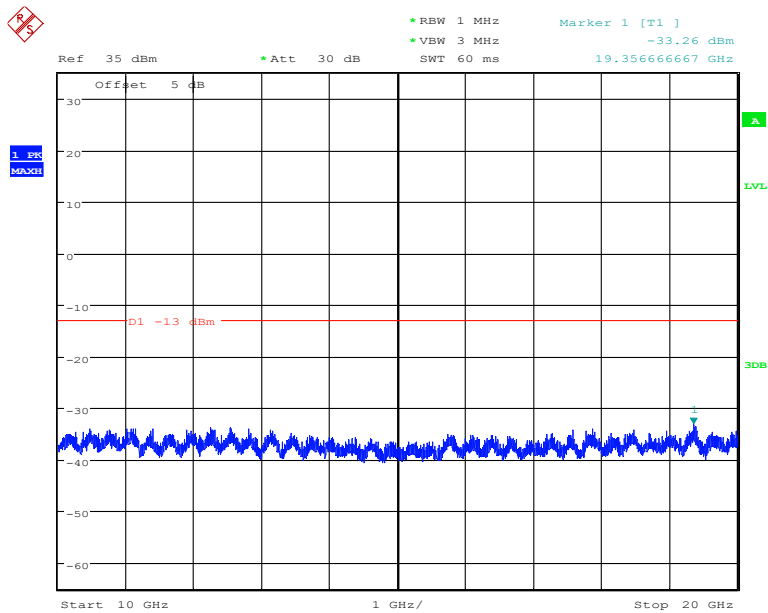3 MHz bandwidth 16QAMMode Middle Channel, 1745 MHz,30MHz to 1GHz

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Date: 13.NOV.2019 03:09:46

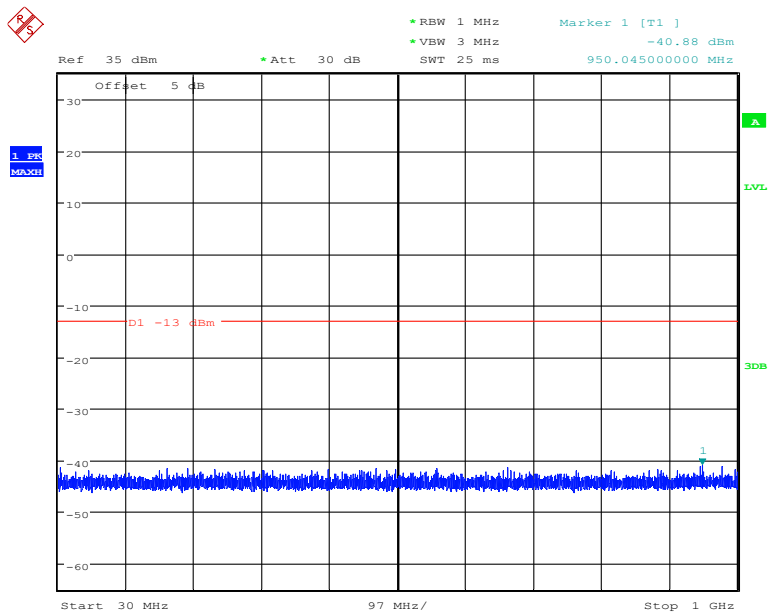3 MHz bandwidth 16QAMMode Middle Channel, 1745 MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.
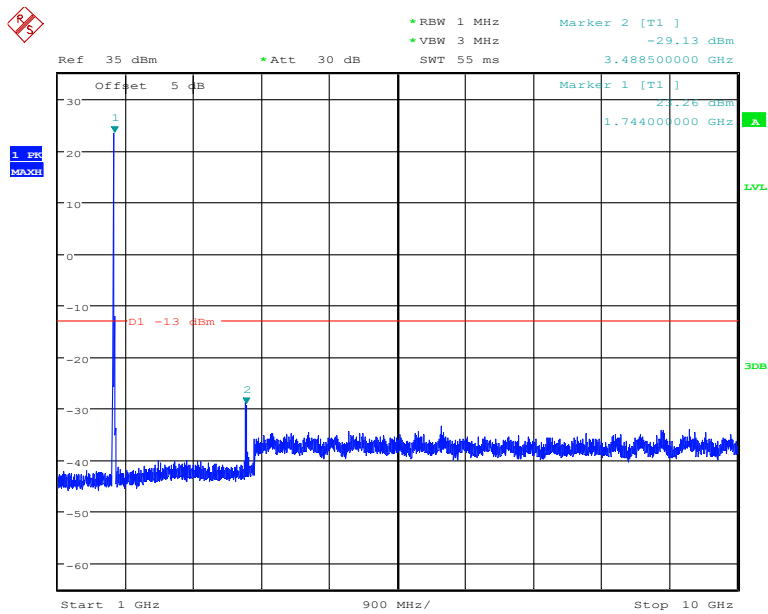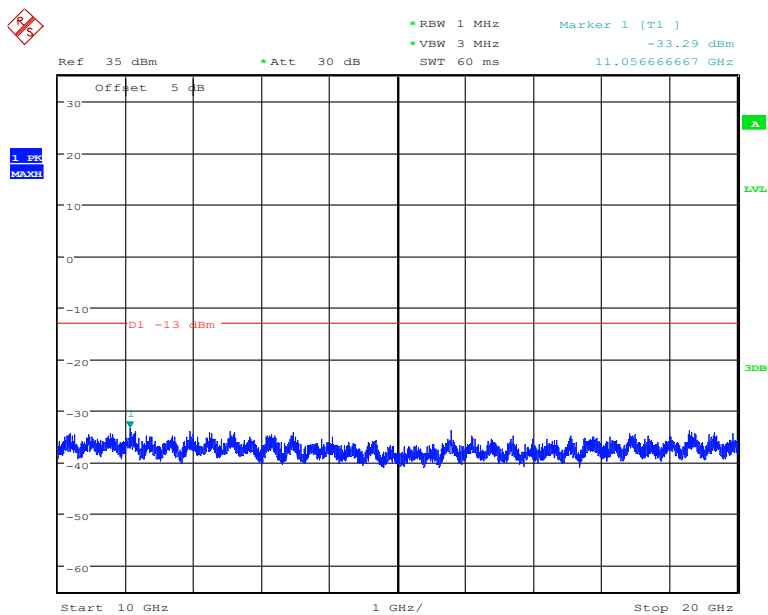

Date: 13.NOV.2019 03:09:34

3 MHz bandwidth 16QAMMode Middle Channel, 1745MHz,10MHz to 20GHz

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Report No.:B19W50601-WWAN_Rev1


```
                                      *RBW 1 MHz      Marker 1 [T1 ]
                                      *VBW 3 MHz            -40.88 dBm
      Ref   35 dBm      *Att  30 dB   SWT 25 ms       950.045000000 MHz
         Offset   5 dB
  30
  20                                                              A
  10                                                              LVL
   0
 -10      D1 -13 dBm
 -20                                                              3DB
 -30
 -40                                                      1
 -50
 -60
  Start 30 MHz            97 MHz/              Stop 1 GHz
```

Date: 13.NOV.2019 03:10:39

5 MHz bandwidth QPSK Mode Middle Channel, 1745 MHz,30MHz to 1GHz


```
                                      *RBW 1 MHz      Marker 2 [T1 ]
                                      *VBW 3 MHz            -29.13 dBm
      Ref   35 dBm      *Att  30 dB   SWT 55 ms       3.488500000 GHz
         Offset   5 dB                Marker 1 [T1 ]
  30                                        23.26 dBm
  20   1                              1.744000000 GHz   A
  10                                                              LVL
   0
 -10      D1 -13 dBm
 -20                                                              3DB
 -30              2
 -40
 -50
 -60
  Start 1 GHz             900 MHz/             Stop 10 GHz
```

Date: 13.NOV.2019 03:10:52

5 MHz bandwidth QPSK Mode Middle Channel, 1745 MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.

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Date: 13.NOV.2019 03:11:22

5MHz bandwidth QPSK Mode Middle Channel, 1745MHz,10MHz to 20GHz

Date: 13.NOV.2019 03:10:30

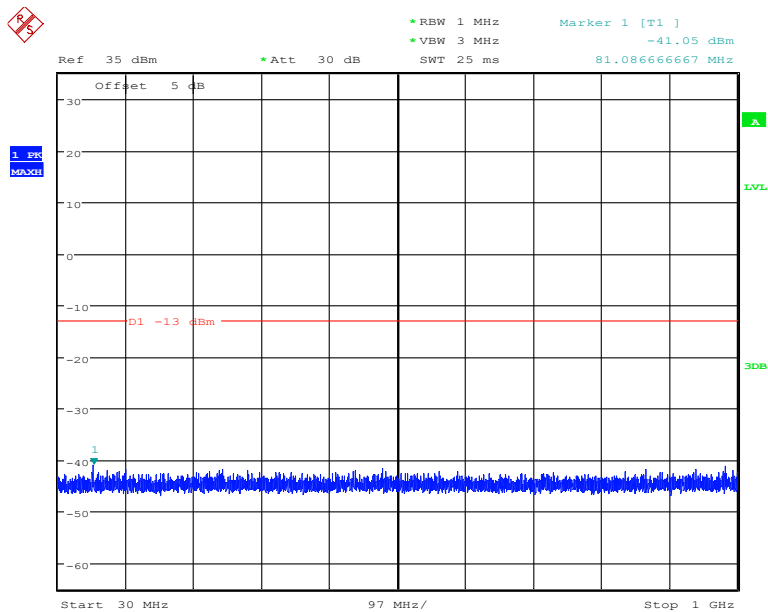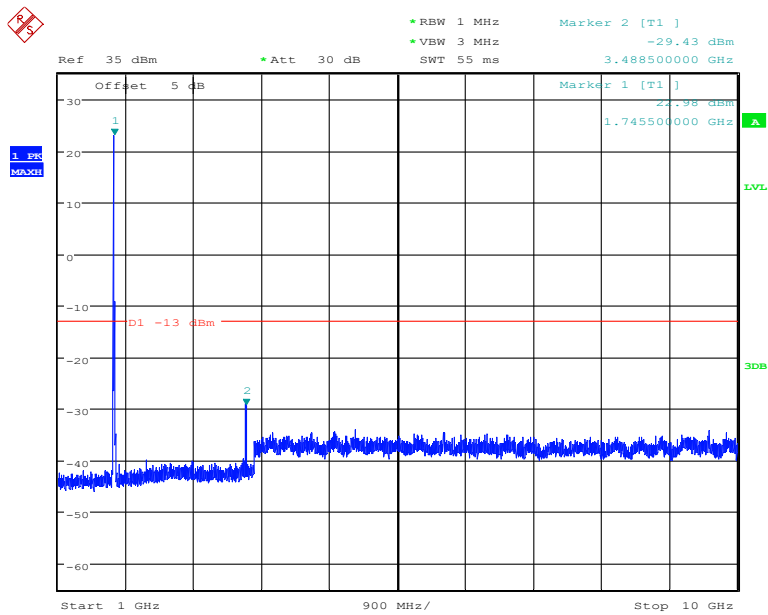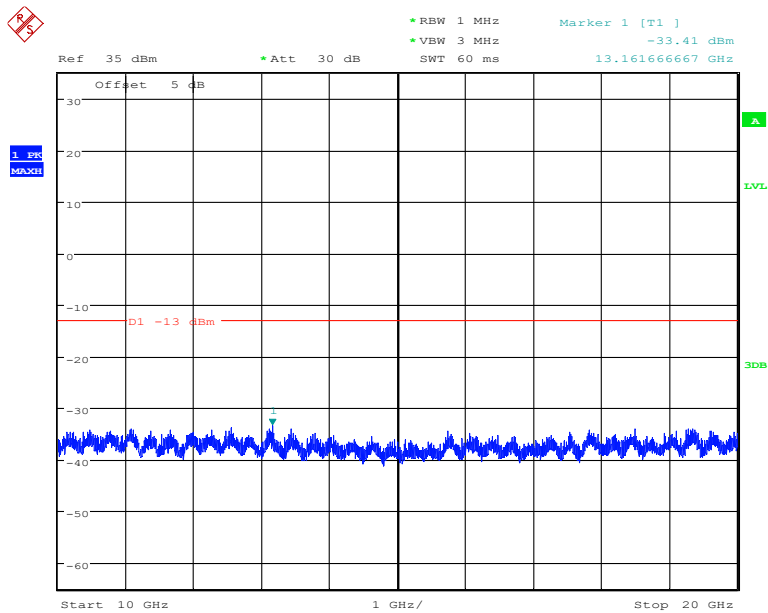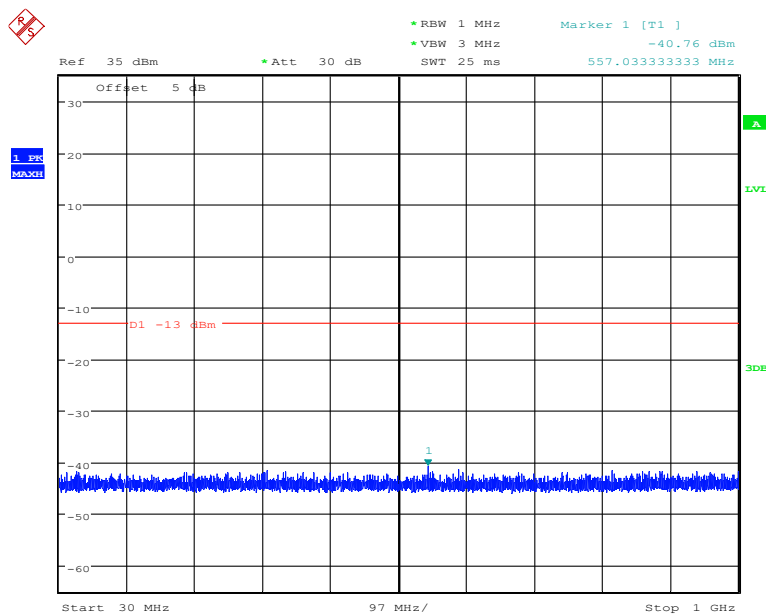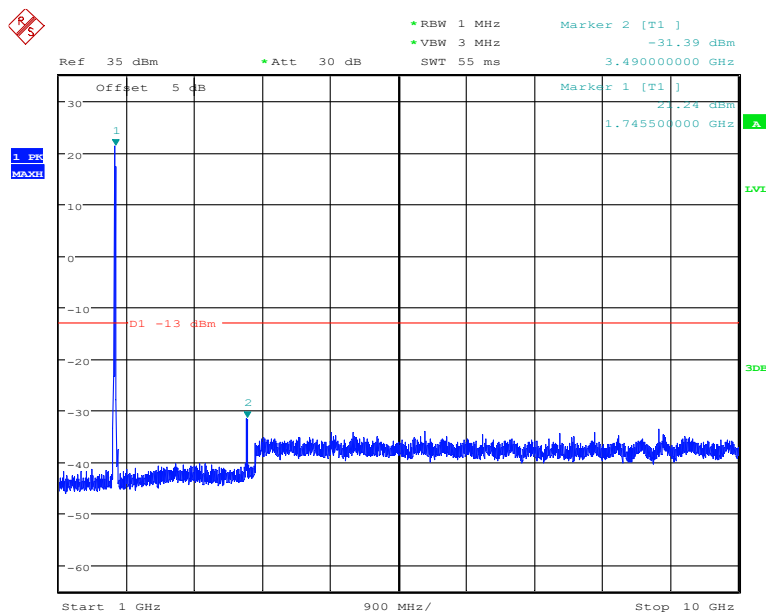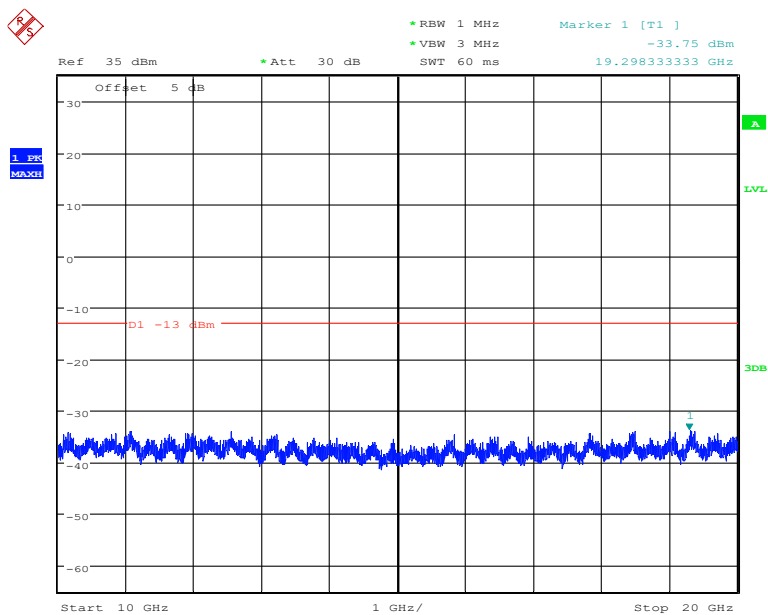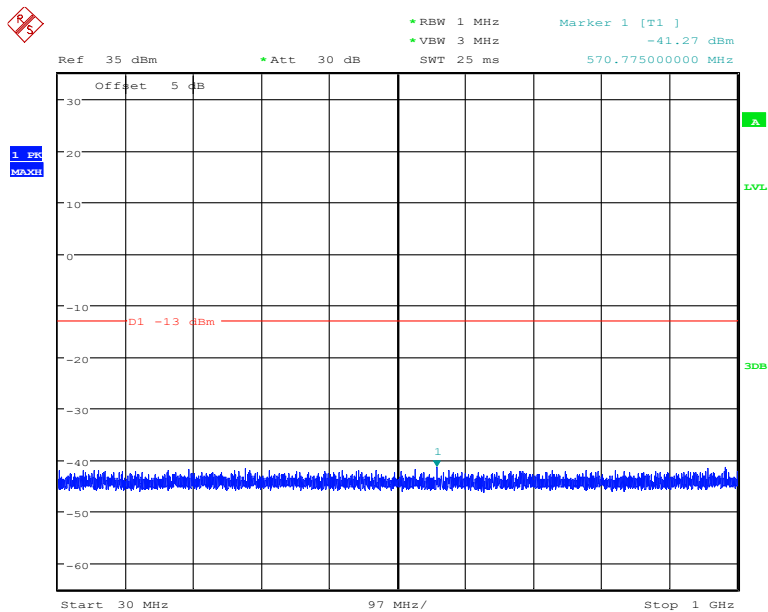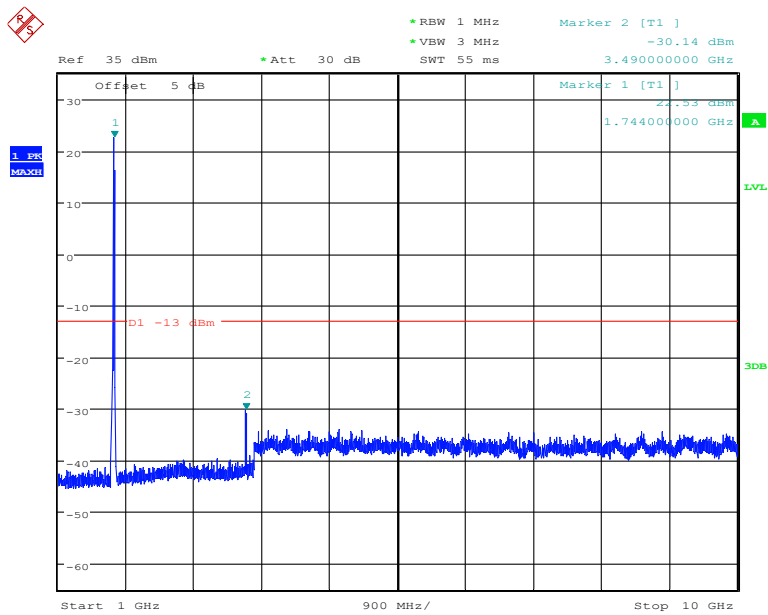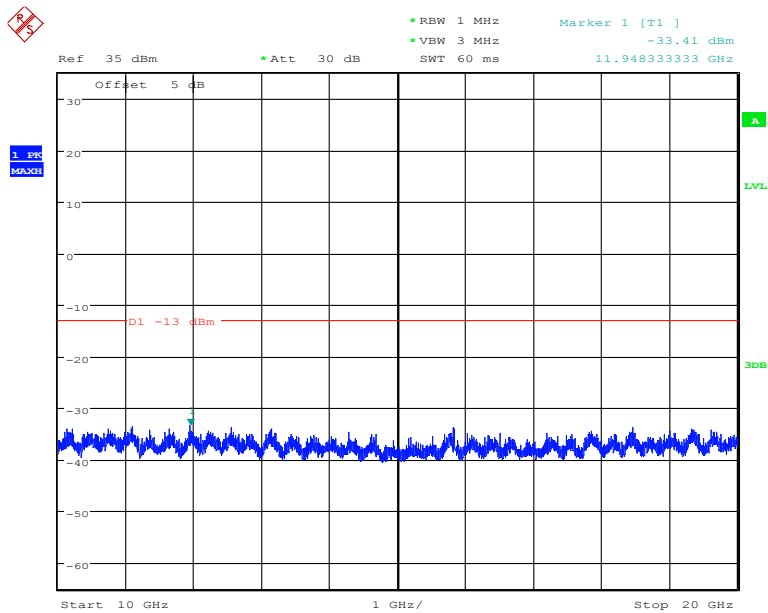5 MHz bandwidth 16QAMMode Middle Channel, 1745 MHz,30MHz to 1GHz

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```
                                    *RBW  1 MHz        Marker 2 [T1 ]
                                    *VBW  3 MHz              -29.43 dBm
        Ref  35 dBm      *Att  30 dB    SWT 55 ms      3.488500000 GHz
        Offset  5 dB                        Marker 1 [T1 ]
   -30                                           22.98 dBm
1                                          1.745500000 GHz   A
   -20

   -10                                                       LVL

   -0

   -10
       D1 -13 dBm                                            3DB
   -20

   -30
             2
   -40

   -50

   -60

Start  1 GHz              900 MHz/              Stop  10 GHz
```

Date: 13.NOV.2019 03:11:01

5 MHz bandwidth 16QAMMode Middle Channel, 1745 MHz,1GHz to 10GHz

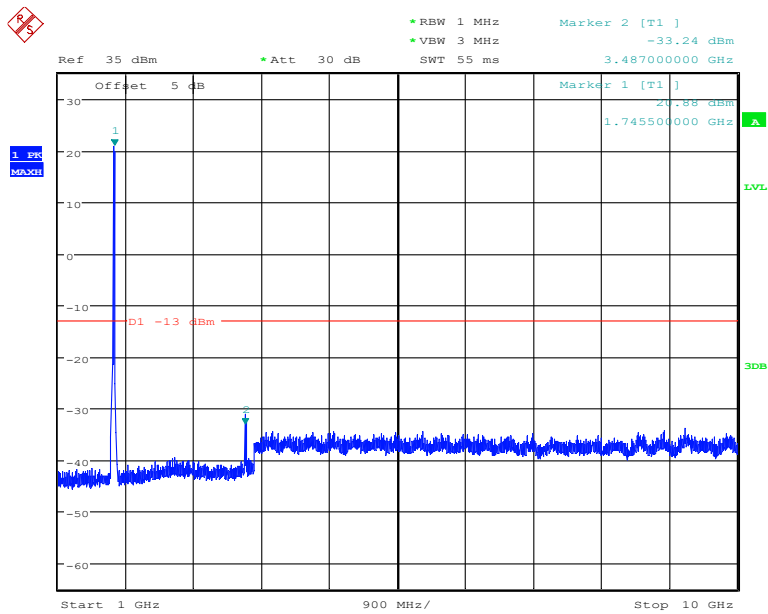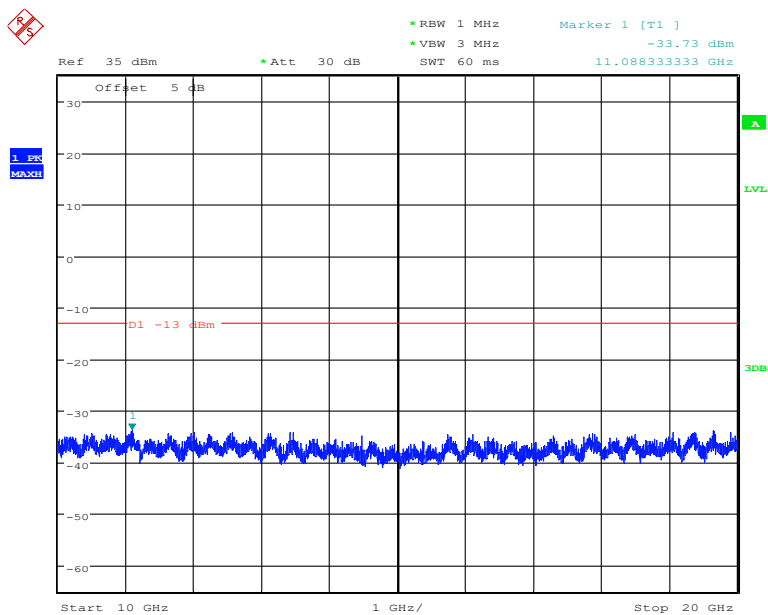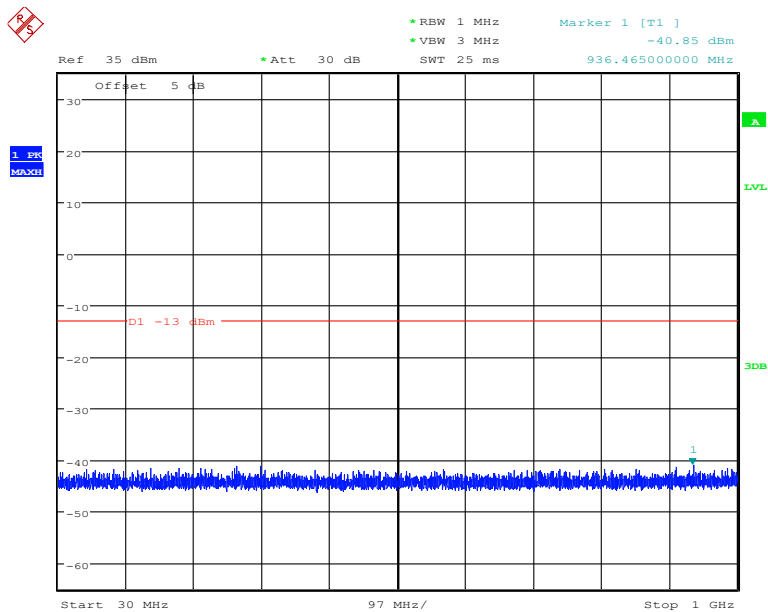Note: The strong emission shown in each case is the carrier signal.


```
                                    *RBW  1 MHz        Marker 1 [T1 ]
                                    *VBW  3 MHz              -33.41 dBm
        Ref  35 dBm      *Att  30 dB    SWT 60 ms      13.161666667 GHz
        Offset  5 dB
   -30                                                       A
   -20

   -10                                                       LVL

   -0

   -10
       D1 -13 dBm                                            3DB
   -20

   -30
   -40

   -50

   -60

Start  10 GHz              1 GHz/              Stop  20 GHz
```

Date: 13.NOV.2019 03:11:13

5 MHz bandwidth 16QAMMode Middle Channel, 1745MHz,10MHz to 20GHz

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```
*RBW  1 MHz          Marker 1 [T1 ]
*VBW  3 MHz                -40.76 dBm
Ref  35 dBm        *Att  30 dB    SWT  25 ms      557.033333333 MHz
    Offset   5 dB
```

Date: 13.NOV.2019 03:12:32

10 MHz bandwidth QPSK Mode Middle Channel, 1745 MHz,30MHz to 1GHz

```
*RBW  1 MHz          Marker 2 [T1 ]
*VBW  3 MHz                -31.39 dBm
Ref  35 dBm        *Att  30 dB    SWT  55 ms      3.490000000 GHz
    Offset   5 dB                  Marker 1 [T1 ]
                                        21.24 dBm
                                   1.745500000 GHz
```

Date: 13.NOV.2019 03:12:07

10 MHz bandwidth QPSK Mode Middle Channel, 1745 MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.

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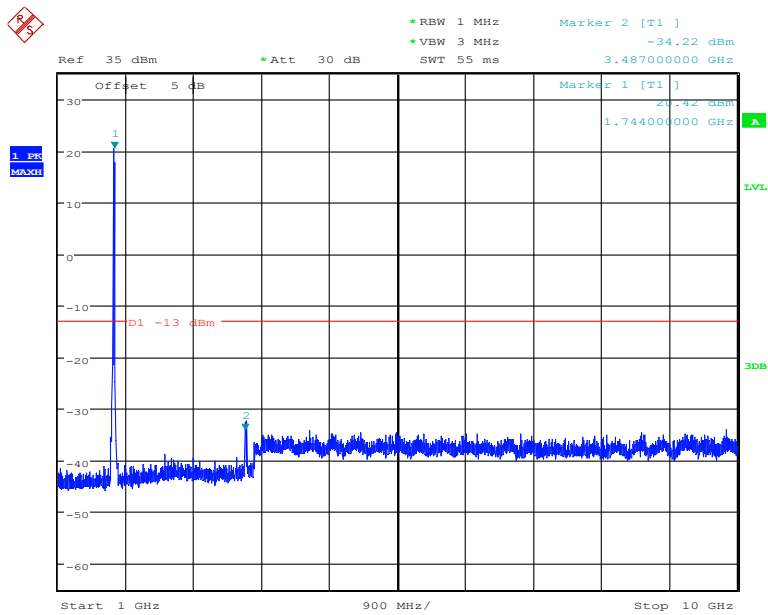
Date: 13.NOV.2019 03:11:31

10 MHz bandwidth QPSK Mode Middle Channel, 1745MHz,10MHz to 20GHz

Date: 13.NOV.2019 03:12:41

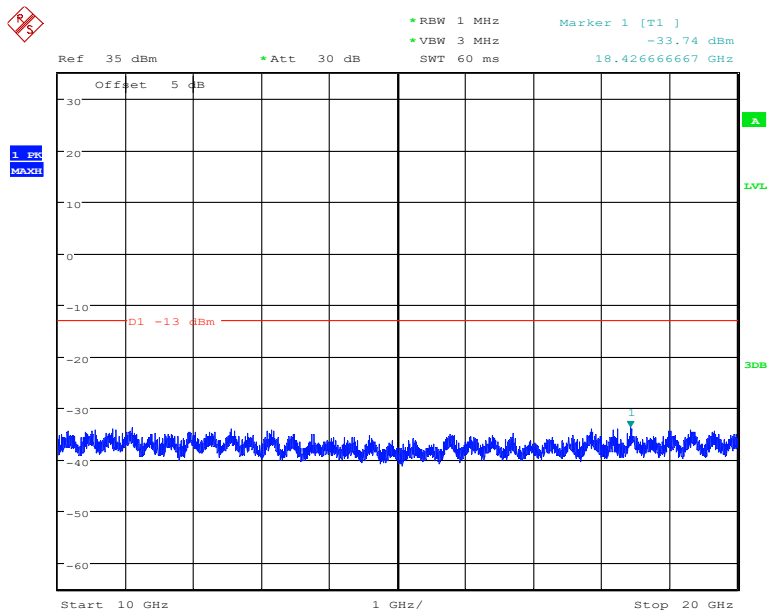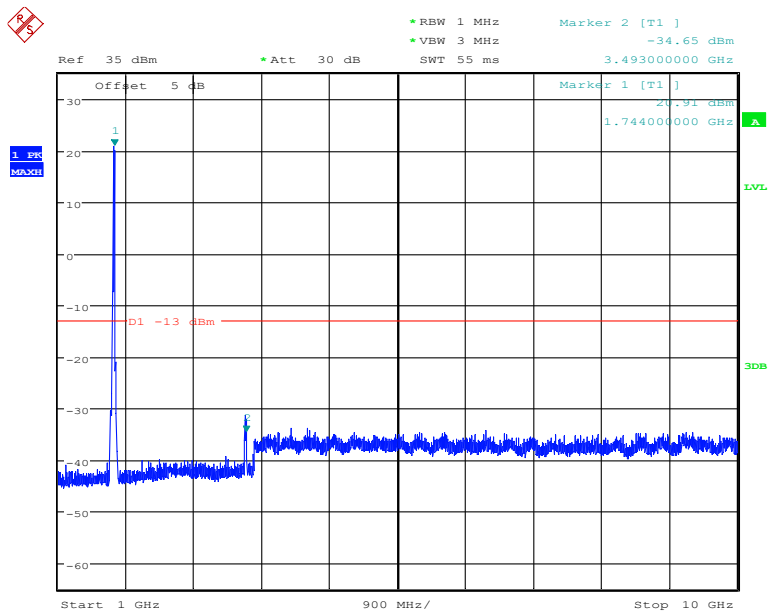10 MHz bandwidth 16QAMMode Middle Channel, 1745 MHz,30MHz to 1GHz

```
                                    * RBW  1 MHz        Marker 2 [T1 ]
                                    * VBW  3 MHz             -30.14 dBm
    Ref   35 dBm        * Att  30 dB   SWT  55 ms      3.490000000 GHz
        Offset   5 dB                    Marker 1 [T1 ]
  -30                                       22.53 dBm
      1                                  1.744000000 GHz    A
  -20
  -10                                                       LVL
    0
  -10
      D1 -13 dBm                                            3DB
  -20
  -30         2
  -40
  -50
  -60
  Start 1 GHz            900 MHz/              Stop 10 GHz
```
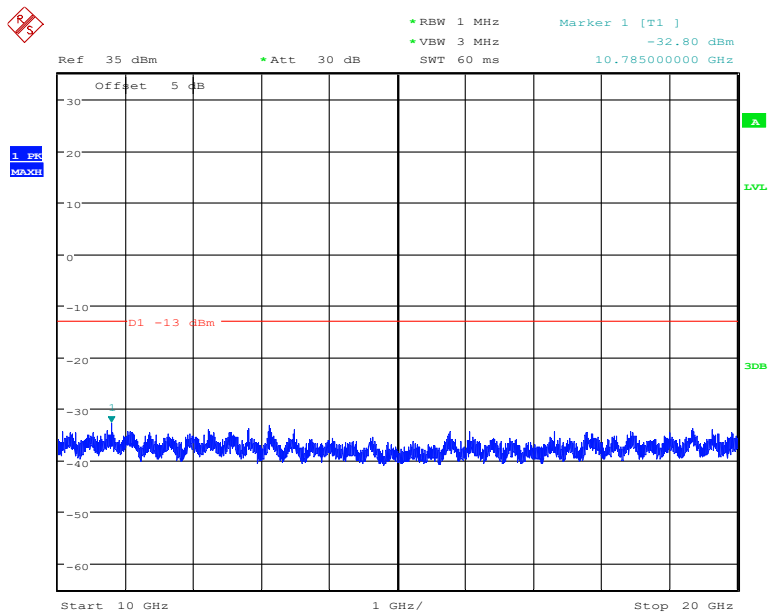
Date: 13.NOV.2019 03:11:57

10 MHz bandwidth 16QAMMode Middle Channel, 1745 MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.


```
                                    * RBW  1 MHz        Marker 1 [T1 ]
                                    * VBW  3 MHz             -33.41 dBm
    Ref   35 dBm        * Att  30 dB   SWT  60 ms     11.948333333 GHz
        Offset   5 dB
  -30                                                        A
  -20
  -10                                                        LVL
    0
  -10
      D1 -13 dBm
  -20                                                        3DB
  -30
  -40
  -50
  -60
  Start 10 GHz           1 GHz/              Stop 20 GHz
```

Date: 13.NOV.2019 03:11:41

10 MHz bandwidth 16QAMMode Middle Channel, 1745MHz,10MHz to 20GHz

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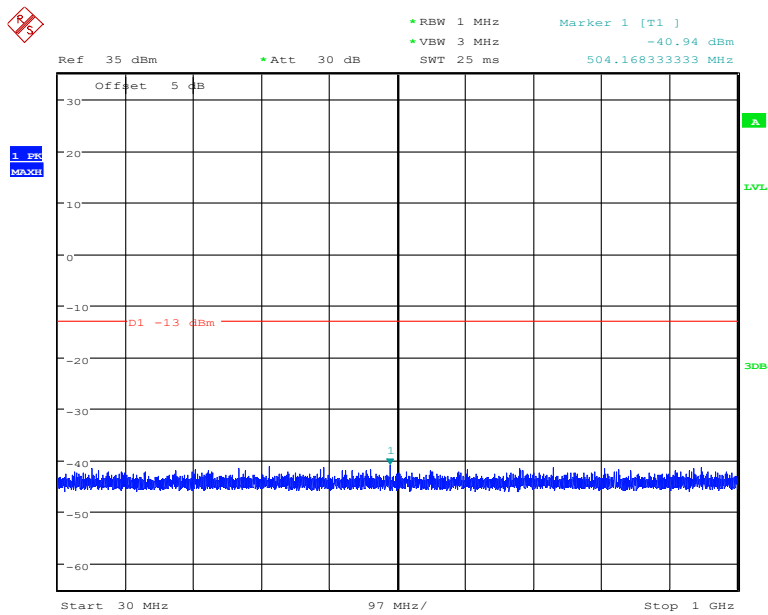
Date: 13.NOV.2019 03:13:02

15 MHz bandwidth QPSK Mode Middle Channel, 1745 MHz,30MHz to 1GHz

Date: 13.NOV.2019 03:13:17

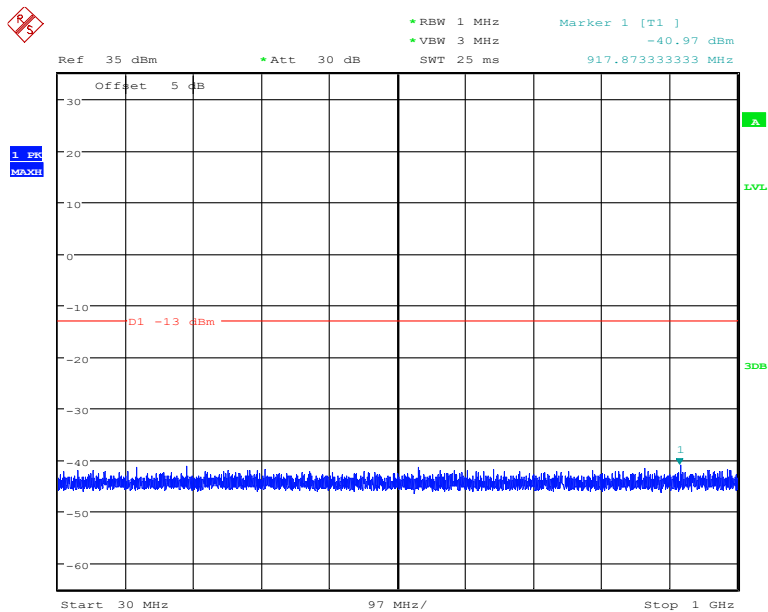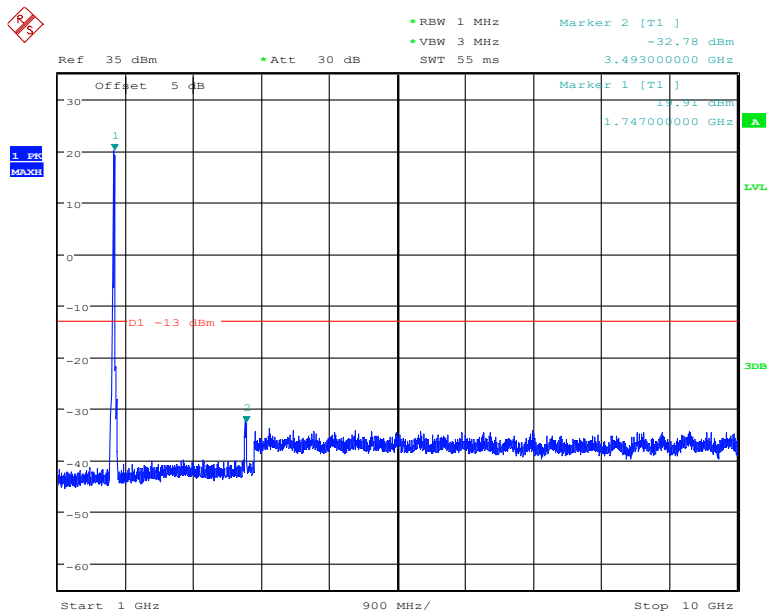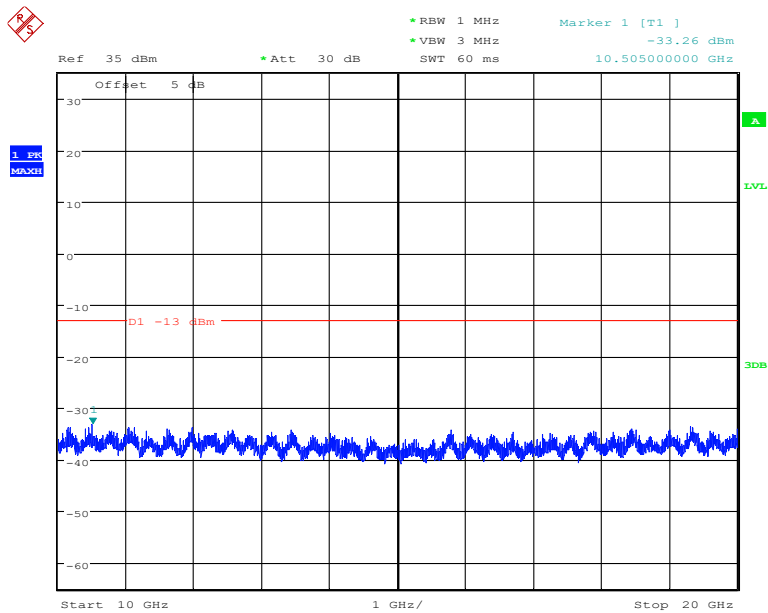15 MHz bandwidth QPSK Mode Middle Channel, 1745 MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.

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Date: 13.NOV.2019 03:13:49

15 MHz bandwidth QPSK Mode Middle Channel, 1745MHz,10MHz to 20GHz

Date: 13.NOV.2019 03:12:53

15 MHz bandwidth 16QAMMode Middle Channel, 1745 MHz,30MHz to 1GHz

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```
* RBW  1 MHz          Marker 2 [T1 ]
* VBW  3 MHz                 -34.22 dBm
Ref  35 dBm      * Att  30 dB    SWT  55 ms      3.487000000 GHz
        Offset   5 dB                   Marker 1 [T1 ]
   30                                          20.42 dBm
                                          1.744000000 GHz    A
   20
   10                                                    LVL
    0
  -10
      D1 -13 dBm                                         3DB
  -20
  -30
  -40
  -50
  -60
Start 1 GHz          900 MHz/          Stop 10 GHz
```

Date: 13.NOV.2019 03:13:26

15 MHz bandwidth 16QAMMode Middle Channel, 1745 MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.


```
* RBW  1 MHz          Marker 1 [T1 ]
* VBW  3 MHz                 -33.74 dBm
Ref  35 dBm      * Att  30 dB    SWT  60 ms      18.426666667 GHz
        Offset   5 dB
   30                                                    A
   20
   10                                                    LVL
    0
  -10
      D1 -13 dBm                                         3DB
  -20
  -30
  -40
  -50
  -60
Start 10 GHz          1 GHz/          Stop 20 GHz
```

Date: 13.NOV.2019 03:13:38

15 MHz bandwidth 16QAMMode Middle Channel, 1745MHz,10MHz to 20GHz

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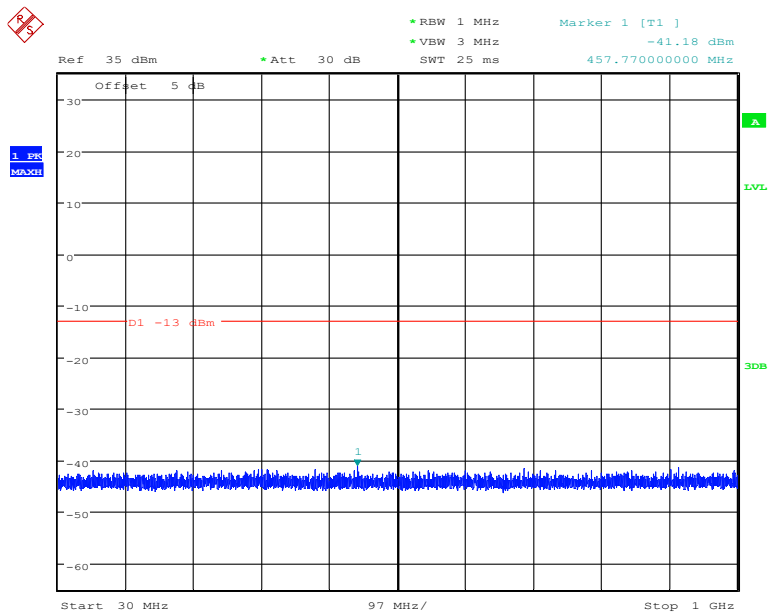
Date: 13.NOV.2019 03:14:52

20 MHz bandwidth QPSK Mode Middle Channel, 1745 MHz,30MHz to 1GHz

Date: 13.NOV.2019 03:14:40

20 MHz bandwidth QPSK Mode Middle Channel, 1745 MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.

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20 MHz bandwidth QPSK Mode Middle Channel, 1745MHz,10MHz to 20GHz

20 MHz bandwidth 16QAMMode Middle Channel, 1745 MHz,30MHz to 1GHz

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Date: 13.NOV.2019 03:14:26

20 MHz bandwidth 16QAMMode Middle Channel, 1745 MHz,1GHz to 10GHz

Note: The strong emission shown in each case is the carrier signal.

Date: 13.NOV.2019 03:14:08

20 MHz bandwidth 16QAMMode Middle Channel, 1745MHz,10MHz to 20GHz

5.4 Radiated Spurious Emission

Specifications:	FCC Part 2.1051,24.238,2.1053,22.917, 27.53, 90.691
	RSS-130 4.6, RSS-132 4.5, RSS-133 6.5, RSS-199 4.6
DUT Serial Number:	868822040004135
Test conditions:	Ambient Temperature:15℃-35℃
	Relative Humidity:30%-60%
	Air pressure: 86-106kPa
Test Results:	--

Limit Level Construction:

According to Part 22.917 (a), i.e., Out of Band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

According to Part 24.238 (a), i.e., Out of Band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB, so the limit level is: P(dBm)– (43 + 10 log(P)) dB= -13dBm.

According to Part 27.53(h):

Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 Bands, 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 log10(P) dB.

According to Part 27.53(g):

For operations in the 600 MHz Band and 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.

Limits for Radiated spurious emissions(UE)	
Frequency range	**Limit Level /Resolution Bandwidth**
30 MHz to 20000 MHz	-13dBm/1MHz

Test Setup:

The EUT was placed in an anechoic chamber. The Wireless Communications Test Set was used to set the TX channel and power level and modulate the TX signal with different bit patterns.

Test Method:

The measurement method is substitution method accordance with section 2.2.12 of

ANSI/TIA-603-D: Land Mobile FM or PM Communications Equipment Measurement and

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Performance Standards.

(a) Connect the equipment as illustrated and measure the spurious emissions as the method as above. The distance from the device to the antenna is 3 m .
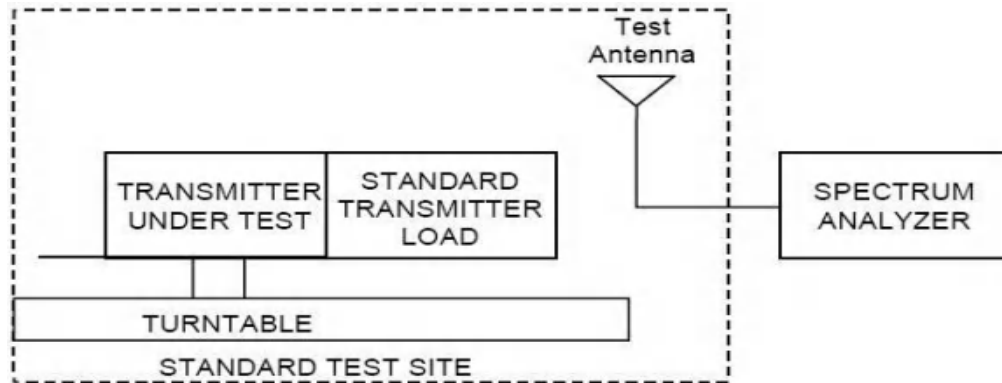
(b) Reconnect the equipment as illustrated.
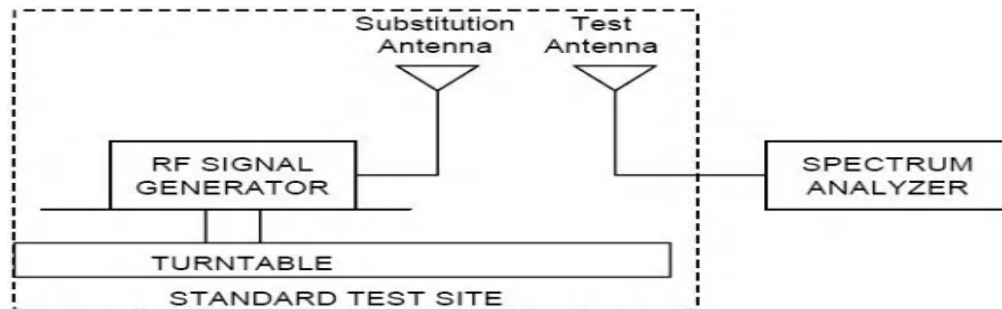
(c) Remove the transmitter and replace it with a substitution antenna. The center of the substitution antenna should be approximately at the same location as the center of the transmitter.

(d) Feed the substitution antenna at the transmitter end with a signal generator connected to the antenna by means of a non-radiating cable. With the antennas at both ends horizontally polarized, and with the signal generator tuned to a particular spurious frequency, raise and lower the test antenna to obtain a maximum reading at the spectrum analyzer. Adjust the level of the signal generator output until the previously recorded maximum reading for this set of conditions is obtained. This should be done carefully repeating the adjustment of the test antenna and generator output.

(e) Repeat step d) with both antennas vertically polarized for each spurious frequency.

(f) Calculate power in dBm into a reference ideal half-wave dipole antenna by reducing the readings obtained in steps d) and e) by the power loss in the cable between the generator and the antenna, and further corrected for the gain of the substitution antenna used relative to an ideal half-wave dipole antenna by the following formula:

P_d(dBm) = P_g(dBm) – cable loss (dB) + antenna gain (dB)

where:

Pd is the dipole equivalent power and Pg is the generator output power into the substitution antenna.

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5.4.1 GSM850 GMSK Radiated Spurious Emission Results

Test Data （GMSK Mode channel 128）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1648.80	-49.88	4.7	7.3	-47.28	H
2472.00	-45.50	5.9	5.0	-46.40	H
3296.40	-54.61	6.7	10.5	-50.81	V
4120.80	-45.44	7.6	9.8	-43.24	V
4945.20	-48.35	7.7	11.3	-44.75	V
5769.60	-54.53	1.4	12.0	-43.93	V

Test Data （GMSK Mode channel 190）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1672.80	-45.58	4.7	7.3	-42.98	H
2510.40	-51.36	5.9	5.0	-52.26	H
3346.80	-45.60	6.7	10.5	-41.80	V
4182.00	-53.44	7.6	9.8	-51.24	V
5019.60	-47.96	7.7	11.3	-44.36	V
5856.00	-53.28	1.4	12.0	-42.68	V

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Test Data （GMSK Mode channel 251）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1696.80	-45.83	4.7	7.3	-43.23	H
2544.00	-51.95	5.9	5.0	-52.85	H
3392.40	-48.52	6.7	10.5	-44.72	V
4240.80	-53.07	7.6	9.8	-50.87	V
5089.20	-49.75	7.7	11.3	-46.15	V
5941.6	-45.07	1.4	12.0	-34.47	V

5.4.2 PCS1900 GMSK Radiated Spurious Emission Results

Test Data （GMSK Mode channel 512）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3700.65	-57.07	7.2	10.3	-53.97	H
5550.00	-64.78	2.0	12.0	-54.78	H
7401.41	-57.02	0.9	11.9	-46.02	V
9250.80	-59.84	1.0	13.0	-47.84	V
11100.30	-56.53	0.4	12.4	-44.53	V
12951.65	-59.50	0.4	14.2	-45.70	V

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Test Data （**GMSK Mode channel 661**）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3760.80	-55.30	7.2	10.3	-52.20	V
5641.20	-61.78	2.0	12.0	-51.78	V
7517.40	-64.03	0.9	11.9	-53.03	V
9399.30	-55.11	1.0	13.0	-43.11	V
11278.50	-57.78	0.4	12.4	-45.78	V
13160.33	-58.16	0.4	14.2	-44.36	V

Test Data （**GMSK Mode channel 810**）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3818.40	-60.43	7.2	10.3	-57.33	V
5727.60	-64.32	2.0	12.0	-54.32	V
7636.20	-59.08	0.9	11.9	-48.08	V
9547.80	-57.00	1.0	13.0	-45.00	V
11454.00	-60.24	0.4	12.4	-48.24	V
13362.79	-61.05	0.4	14.2	-47.25	V

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5.4.3 WCDMA B2 Radiated Spurious Emission Results

Test Data （QPSK Mode channel 9262）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3705.90	-63.01	4.4	10.3	-57.11	V
5558.40	-56.77	5.4	12.0	-50.17	V
7410.90	-62.67	6.3	11.9	-57.07	V
9263.40	-59.83	7.0	13.0	-53.83	V
11115.90	-60.36	7.8	12.4	-55.76	V
12966.80	-63.18	7.7	14.2	-56.68	V

Test Data （QPSK Mode channel 9400）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3760.50	-56.39	4.4	10.3	-50.49	V
5640.30	-62.11	5.4	12.0	-55.51	V
7520.10	-57.86	6.4	11.9	-52.36	V
9440.85	-56.18	7.0	13.0	-50.18	V
11281.65	-59.32	7.8	12.4	-54.72	V
13160.00	-63.12	7.5	14.2	-56.42	V

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Test Data （QPSK Mode channel 9538）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3815.10	-60.73	4.4	10.3	-54.83	V
5722.20	-61.55	5.4	12.0	-54.95	V
7631.25	-57.6	6.4	11.9	-52.10	V
9538.35	-57.13	7.2	13.0	-51.33	V
11445.45	-55.51	7.8	12.4	-50.91	V
13353.20	-61.0	7.5	14.2	-54.30	V

5.4.4 WCDMA B4 Radiated Spurious Emission Results

Test Data（QPSK Mode channel 1312）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3425.10	-60.52	4.4	10.3	-54.62	V
5137.20	-63.00	5.4	12.0	-56.40	V
6849.30	-56.00	6.4	11.9	-50.50	V
8563.35	-61.22	7.2	13.0	-55.42	V
10275.45	-58.80	7.8	12.4	-54.20	V
11987.55	-62.42	7.5	14.2	-55.72	V

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Test Data（QPSK Mode channel 1412）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3464.10	-60.02	4.4	10.3	-54.12	V
5197.65	-57.64	5.4	11.3	-51.74	V
6929.25	-62.83	6.4	12.0	-57.23	V
8662.80	-62.64	7.0	12.3	-57.34	V
10394.40	-57.16	7.8	12.3	-52.66	V
12126.00	-57.85	7.5	13.1	-52.25	V

Test Data（QPSK Mode channel 1513）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3505.05	-59.60	4.4	10.3	-53.70	V
5258.10	-55.97	5.4	11.3	-50.07	V
7011.15	-63.42	6.4	12.0	-57.82	V
8764.20	-55.27	7.2	12.3	-50.17	V
10515.30	-57.71	7.8	12.3	-53.21	V
12268.35	-63.04	7.5	13.1	-57.44	V

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5.4.5 WCDMA B5 Radiated Spurious Emission Results

Test Data （QPSK Mode channel 4132）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1653.00	-52.24	4.8	7.3	-49.74	H
2479.20	-50.99	5.9	5.0	-51.89	H
3306.15	-63.87	6.8	10.3	-60.37	V
4132.95	-61.74	7.6	9.8	-59.54	V
4959.75	-59.42	7.7	11.3	-55.82	V
5784.60	-57.10	1.4	12.0	-46.50	V

Test Data （QPSK Mode channel 4182）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1672.80	-50.88	4.8	7.3	-48.38	H
2509.20	-45.81	5.9	5.0	-46.71	H
3345.15	-63.49	6.8	10.3	-59.99	V
4183.65	-55.99	7.6	9.8	-53.79	V
5018.25	-63.81	7.7	11.3	-60.21	V
5854.80	-55.71	1.4	12.0	-45.11	V

Test Data （QPSK Mode channel 4233）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1693.20	-47.32	4.8	7.3	-44.82	H
2539.80	-54.08	5.9	5.0	-54.98	H
3386.10	-63.05	6.8	10.3	-59.55	V
4234.35	-56.18	7.6	9.8	-53.98	V
5080.65	-58.92	7.7	11.3	-55.32	V
5926.95	-56.83	1.4	12.0	-46.23	V

5.4.6 LTE B7 Radiated Spurious Emission Results

Test Data （5MHz bandwidth QPSK Mode channel 20785）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
5002.09	-63.18	7.5	9.9	-60.78	V
7505.77	-63.89	0.9	11.9	-52.89	V
10007.43	-64.39	0.6	12.0	-52.99	V
125010.70	-62.60	0.5	12.3	-50.80	V
150011.43	-60.17	0.4	12.8	-47.77	V
175016.72	-62.79	0.4	11.9	-51.29	V

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Test Data （5MHz bandwidth QPSK Mode channel 21000）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
5070.34	-55.27	6.8	10.3	-51.77	V
7605.62	-55.61	1.1	12.0	-44.71	V
10140.32	-64.59	0.4	11.9	-53.09	V
12675.62	-55.02	0.5	13.0	-42.52	V
15209.31	-55.05	0.4	12.4	-43.05	V
17745.91	-56.96	0.4	14.2	-43.16	V

Test Data （5MHz bandwidth QPSK Mode channel 21425）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
5135.21	-57.98	6.3	10.3	-53.98	V
7702.47	-59.61	0.9	12.0	-48.51	V
10270.87	-58.91	0.5	11.9	-47.51	V
12837.16	-61.29	0.4	13.0	-48.69	V
15405.29	-57.54	0.4	12.4	-45.54	V
17972.78	-58.06	0.4	14.2	-44.26	V

5.4.7 LTE B12 Radiated Spurious Emission Results

Test Data （1.4 MHz bandwidth QPSK Mode channel 23017）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1399.40	-45.85	4.4	7.8	-42.45	H
2099.10	-53.61	5.4	8.3	-50.71	H
2798.80	-51.35	6.2	8.0	-49.55	H
3498.50	-61.92	7.0	8.9	-60.02	V
4198.20	-57.26	7.8	9.2	-55.86	V
4897.90	-63.68	7.8	9.9	-61.58	V

Test Data （1.4 MHz bandwidth QPSK Mode channel 23017）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1415.40	-52.80	4.4	7.8	-49.40	H
2122.60	-51.37	5.4	8.3	-48.47	H
2830.40	-51.23	6.2	8.0	-49.43	H
3538.20	-55.23	7.0	8.9	-53.33	V
4246.05	-61.24	7.8	9.2	-59.84	V
4953.90	-63.59	7.8	9.9	-61.49	V

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est Data （1.4 MHz bandwidth QPSK Mode channel 23173）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1430.60	-45.01	4.4	7.8	-41.61	H
2145.90	-47.05	5.4	8.3	-44.15	H
2861.20	-51.67	6.2	8.0	-49.87	H
3576.50	-57.54	7.0	8.9	-55.64	V
4291.80	-64.65	7.8	9.2	-63.25	V
5007.10	-55.14	7.8	9.9	-53.04	V

5.4.8 LTE B13 Radiated Spurious Emission Results

Test Data （5MHz bandwidth QPSK Mode channel 23205）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1559.00	-48.77	4.6	7.3	-46.07	H
2338.50	-53.72	5.6	5.0	-54.32	H
3118.00	-52.56	6.5	10.5	-48.56	H
3897.50	-58.24	7.4	9.8	-55.84	V
4677.00	-59.81	8.1	10.7	-57.21	V
5456.50	-58.36	2.9	12.0	-49.26	V

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Test Data （5MHz bandwidth QPSK Mode channel 23230）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1564.00	-47.90	4.6	7.3	-45.20	H
2346.00	-53.50	5.6	5.0	-54.10	H
3128.00	-49.14	6.5	10.5	-45.14	H
3910.00	-57.18	7.4	9.8	-54.78	V
4692.00	-60.39	8.1	10.7	-57.79	V
5474.00	-63.17	2.9	12.0	-54.07	V

Test Data （5MHz bandwidth QPSK Mode 23265）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1571.00	-53.99	4.6	7.3	-51.29	H
2356.50	-47.97	5.6	5.0	-48.57	H
3142.00	-50.18	6.5	10.5	-46.18	H
3927.50	-64.35	7.4	9.8	-61.95	V
4713.00	-62.82	8.1	10.7	-60.22	V
5498.50	-55.87	2.9	12.0	-46.77	V

5.4.9 LTE B25 Radiated Spurious Emission Results

Test Data （1.4MHz bandwidth QPSK Mode channel 26047）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3701.40	-64.14	7.2	8.9	-62.44	V
5552.10	-63.91	2.0	10.5	-55.41	V
7402.80	-62.48	0.9	11.9	-51.48	V
9253.50	-60.37	1.0	11.5	-49.87	V
11104.20	-57.71	0.3	12.1	-45.91	V
12954.90	-63.43	0.4	12.4	-51.43	V

Test Data （1.4MHz bandwidth QPSK Mode channel 26365）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3765.00	-61.28	7.2	8.9	-59.58	V
5647.50	-60.15	2.0	10.5	-51.65	V
7530.00	-59.86	0.9	11.9	-48.86	V
9412.50	-60.43	1.0	11.5	-49.93	V
11295.00	-63.94	0.3	12.1	-52.14	V
13177.50	-59.68	0.4	12.4	-47.68	V

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Test Data （1.4MHz bandwidth QPSK Mode channel 26683）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3828.60	-60.69	7.2	8.9	-58.99	V
5742.90	-58.86	2.0	10.5	-50.36	V
7657.20	-57.44	0.9	11.9	-46.44	V
9571.50	-56.76	1.0	11.5	-46.26	V
11485.80	-59.81	0.3	12.1	-48.01	V
13400.10	-62.40	0.4	12.4	-50.40	V

5.4.10 LTE B26 Radiated Spurious Emission Results

Test Data （10MHz bandwidth QPSK Mode channel 26840）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1638.00	-54.98	4.7	7.3	-52.38	H
2457.00	-53.57	5.9	6.8	-52.67	H
3276.00	-58.02	6.7	8.9	-55.82	V
4095.00	-64.90	7.6	9.2	-63.30	V
4914.00	-56.53	7.8	9.9	-54.43	V
5733.00	-58.73	1.5	11.9	-48.33	V

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Test Data （10MHz bandwidth QPSK Mode channel 26865）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1663.00	-46.99	4.7	7.3	-44.39	H
2494.50	-45.44	5.9	6.8	-44.54	H
3326.00	-61.48	6.7	8.9	-59.28	V
4157.50	-61.38	7.6	9.2	-59.78	V
4989.00	-61.93	7.8	9.9	-59.83	V
5820.50	-61.04	1.5	11.9	-50.64	V

Test Data （10MHz bandwidth QPSK Mode channel 26990）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
1688.00	-53.09	4.7	7.3	-50.49	H
2532.00	-53.59	5.9	6.8	-52.69	H
3376.00	-62.60	6.7	8.9	-60.40	V
4220.00	-59.81	7.6	9.2	-58.21	V
5064.00	-59.10	7.8	9.9	-57.00	V
5908.00	-62.65	1.5	11.9	-52.25	V

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5.4.11 LTE B41 Radiated Spurious Emission Results

Test Data （5MHz bandwidth QPSK Mode channel 39675）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
4993.00	-63.83	6.3	10.3	-59.83	V
7489.50	-59.31	0.9	12.0	-48.21	V
9986.00	-56.13	0.5	11.9	-44.73	V
12482.50	-64.06	0.4	13.0	-51.46	V
14979.00	-60.38	0.4	12.4	-48.38	V
17475.50	-58.63	0.4	14.2	-44.83	V

Test Data （5MHz bandwidth QPSK Mode channel 40620）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
5186.00	-64.68	6.3	10.3	-60.68	V
7779.00	-58.96	0.9	12.0	-47.86	V
10372.00	-61.47	0.5	11.9	-50.07	V
12965.00	-62.66	0.4	13.0	-50.06	V
15558.00	-64.78	0.4	12.4	-52.78	V
18151.00	-58.37	0.4	14.2	-44.57	V

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Test Data （5MHz bandwidth QPSK Mode channel 41565）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
5380.00	-56.39	6.3	10.3	-52.39	V
8070.00	-61.36	0.9	12.0	-50.26	V
10760.00	-59.44	0.5	11.9	-48.04	V
13450.00	-61.54	0.4	13.0	-48.94	V
16140.00	-55.14	0.4	12.4	-43.14	V
18830.00	-63.88	0.4	14.2	-50.08	V

5.4.12 LTE B66 Radiated Spurious Emission Results

Test Data （1.4MHz bandwidth QPSK Mode channel 131979）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3421.40	-58.86	6.9	8.9	-56.86	V
5132.10	-58.06	6.3	9.9	-54.46	V
6842.80	-56.49	0.8	11.9	-45.39	V
8553.50	-60.48	0.9	11.2	-50.18	V
10264.20	-56.15	0.5	12.0	-44.65	V
11974.90	-59.10	0.4	12.2	-47.30	V

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Test Data （1.4MHz bandwidth QPSK Mode channel 132322）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3490.00	-62.12	6.9	8.9	-60.12	V
5235.00	-56.87	6.3	9.9	-53.27	V
6980.00	-58.85	0.8	11.9	-47.75	V
8725.00	-55.06	0.9	11.2	-44.76	V
10470.00	-55.72	0.5	12.0	-44.22	V
12215.00	-60.60	0.4	12.2	-48.80	V

Test Data （1.4MHz bandwidth QPSK Mode channel 132665）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
3558.60	-63.13	6.9	8.9	-61.13	V
5337.90	-62.70	6.3	9.9	-59.10	V
7117.20	-58.32	0.8	11.9	-47.22	V
8896.50	-59.79	0.9	11.2	-49.49	V
10675.80	-62.74	0.5	12.0	-51.24	V
12455.10	-62.51	0.4	12.2	-50.71	V

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5.5 Band Edge

Specifications:	FCC Part 2.1051,24.238,2.1053,22.917, 27.53, 90.691
	RSS-130 4.6, RSS-132 4.5, RSS-133 6.5, RSS-199 4.6
DUT Serial Number:	868822040009761
Test conditions:	Ambient Temperature:15℃-35℃
	Relative Humidity:30%-60%
	Air pressure: 86-106kPa
Test Results:	--

Limit Level Construction:

For Cellular and PCS systems band, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB, so the limit level is: P(dBm) – (43 + 10 log(P)) dB= -13dBm

For mobile and portable stations operating in the 2305-2315 MHz bands:

By a factor of not less than: 43 + 10 log (P) dB on all frequencies between 2305 and 2320 MHz that are outside the licensed band(s) of operation, not less than 55 + 10 log (P) dB on all frequencies between 2320 and 2324 MHz, not less than 61 + 10 log (P) dB on all frequencies between 2324 and 2328 MHz, and not less than 67 + 10 log (P) dB on all frequencies between 2328 and 2337 MHz; By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 55 + 10 log (P) dB on all frequencies between 2296 and 2300 MHz, 61 + 10 log (P) dB on all frequencies between 2292 and 2296 MHz, 67 + 10 log (P) dB on all frequencies between 2288 and 2292 MHz, and 70 + 10 log (P) dB below 2288 MHz.

For operations in the 776-788 MHz band, the power of any emission outside the 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, in accordance with the following:

On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.

For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

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Out-of-band emission requirement shall apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50 + 10 Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + 10Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

Test Setup:

During the test, the EUT was controlled via the Wireless Communications Test Set to ensure max power transmission and proper modulation and measured by spectrum analyzer.
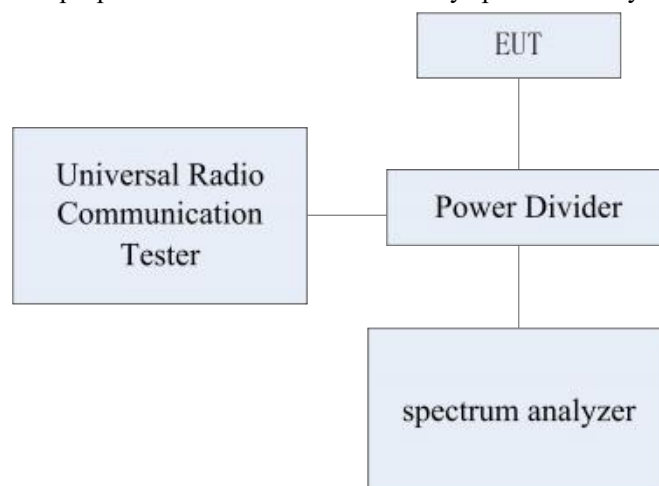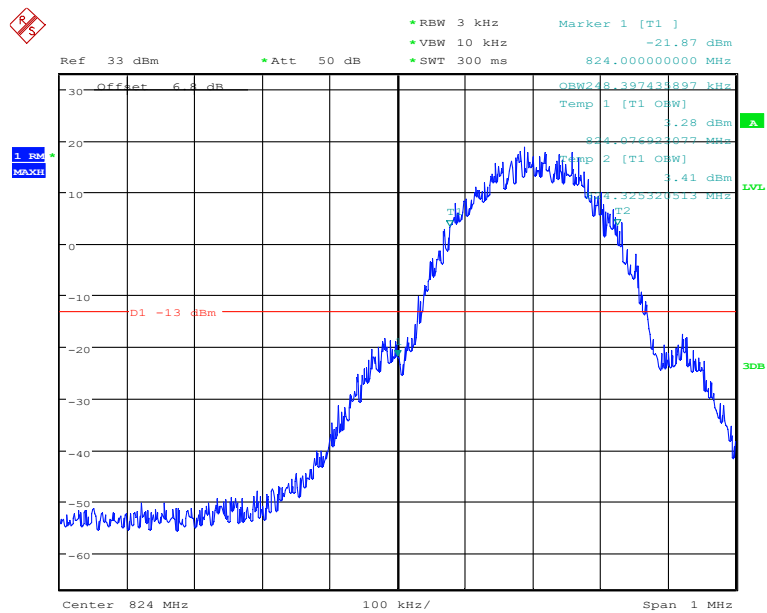

Test Method:

1) The EUT was coupled to the EMI test receiver analyzer mode and the base station simulator through a power divider. The lost of the cables the test system is calibrated to correct the readings.

2) The spectrum analyzer was set to Average Detector function and Maximum hold mode.

3) The of the s resolution Bandwidth pectrum analyzer was a little greater than 1% of the 26dB emission Bandwidth.

Note: In the graphical result description (X, Y), X represents the number of RB, Y represents the RB offset.

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5.5.1 GSM850 Band Edge Results

Date: 14.DEC.2019 10:28:20

GSMK; Cellular low channel, below 824 MHz

Date: 14.DEC.2019 10:36:21

GMSK; Cellular high channel, above 849 MHz

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Report No.:B19W50601-WWAN_Rev1

Date: 14.DEC.2019 10:39:28

8PSK; Cellular low channel, below 824 MHz
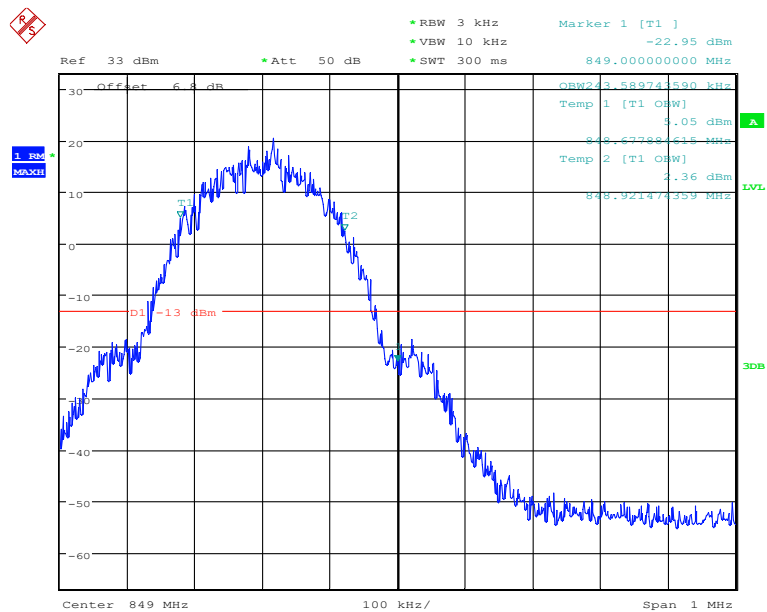
Date: 14.DEC.2019 10:39:51

8PSK; Cellular high channel, above 849 MHz

5.5.2 PCS1900 Band Edge Results

Date: 14.DEC.2019 10:43:34

GMSK; PCS low channel, below 1850 MHz

Date: 14.DEC.2019 10:43:50

GMSK; PCS high channel, above 1910 MHz

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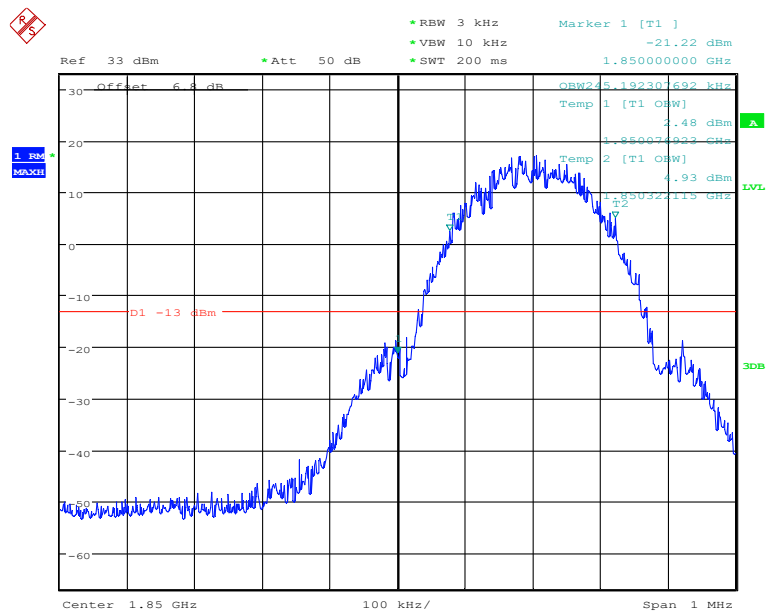
Date: 14.DEC.2019 10:46:35

8PSK; PCS low channel, below 1850 MHz
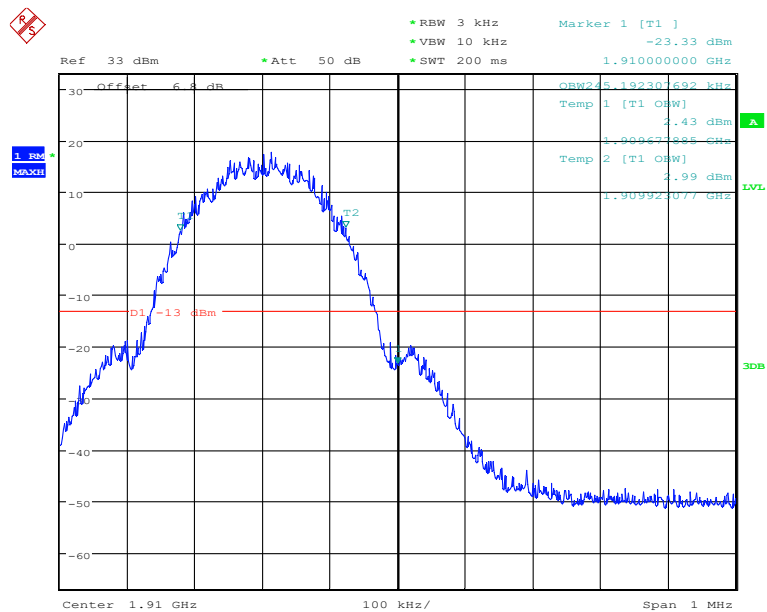
Date: 14.DEC.2019 10:46:07

8PSK; PCS high channel, above 1910 MHz

5.5.3 WCDMA B2 Band Edge Results

WCDMA Band 2 QPSK, Low Channel , Below 1850MHz

WCDMA Band 2 QPSK, High Channel , Above 1910MHz

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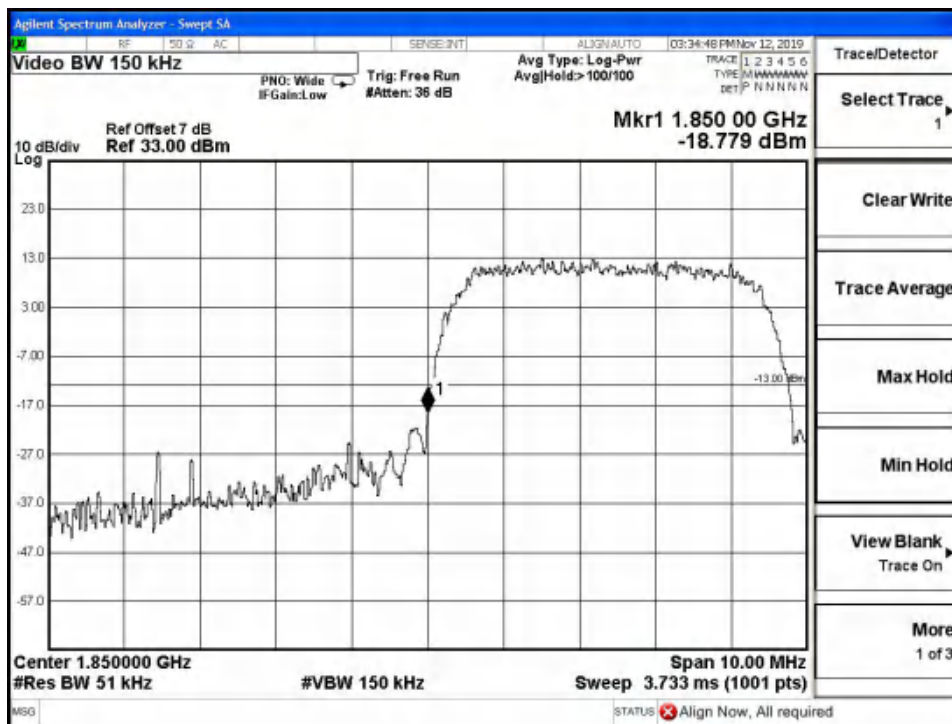
WCDMA Band 2 16QAM, Low Channel , Below 1850MHz
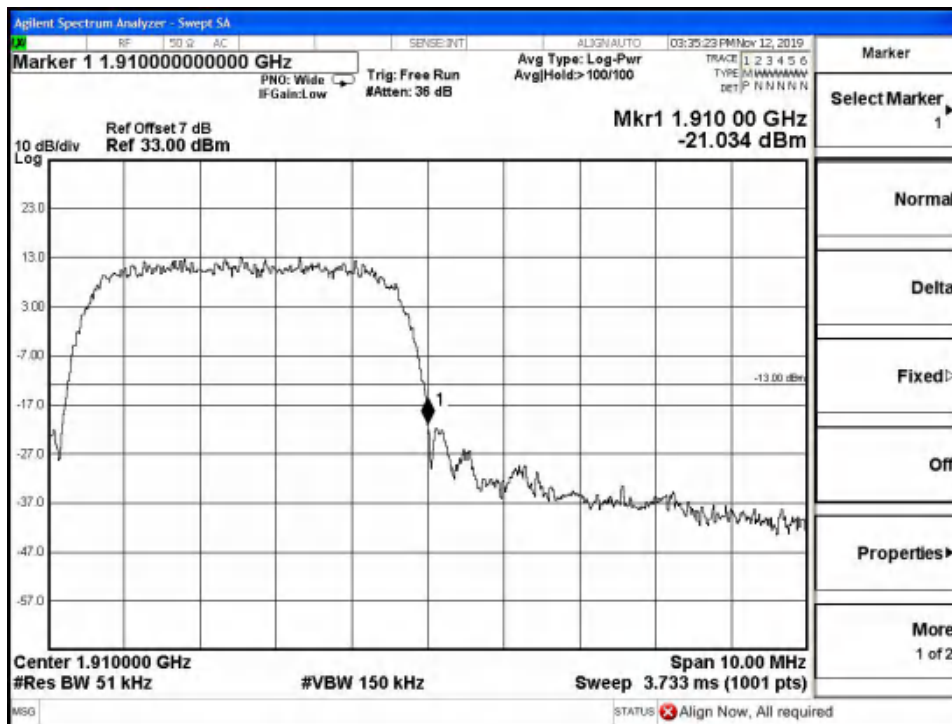
WCDMA Band 2 16QAM, High Channel , Above 1910MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
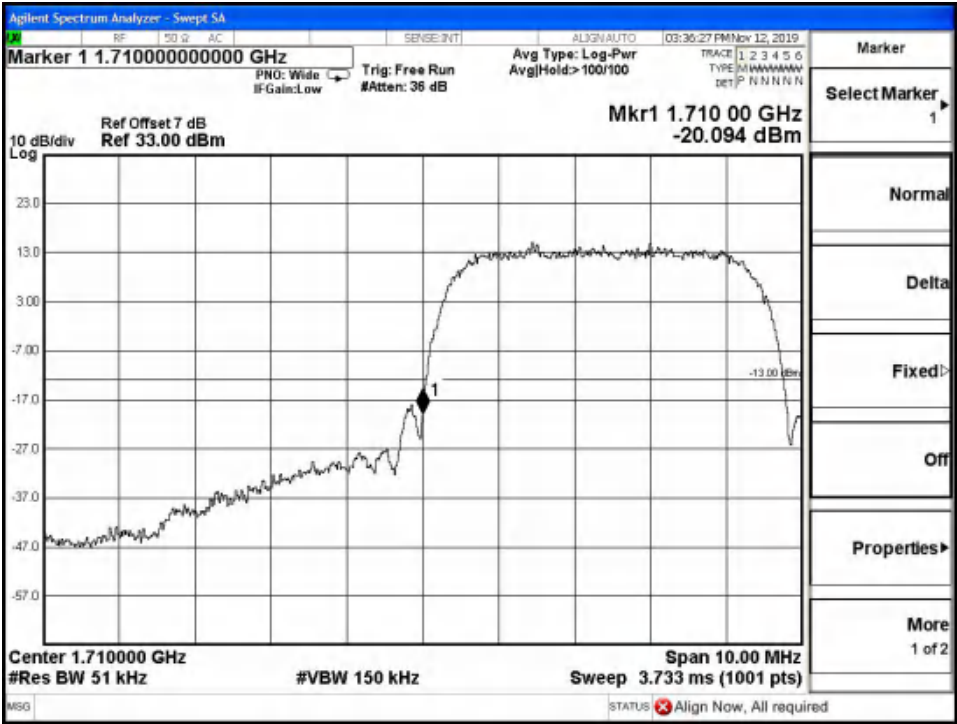Tel: 0086-23-88069965   FAX: 0086-23-88608777

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5.5.4 WCDMA B4 Band Edge Results

WCDMA Band 4 QPSK, Low Channel , Below 1710MHz
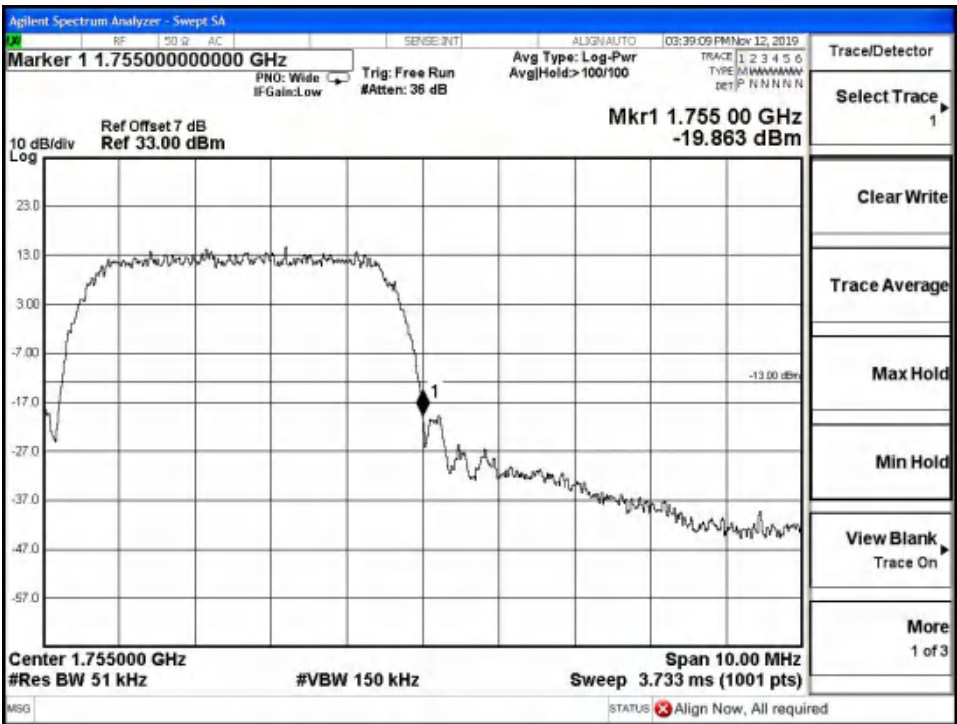
WCDMA Band 4 QPSK, High Channel , Above 1755MHz

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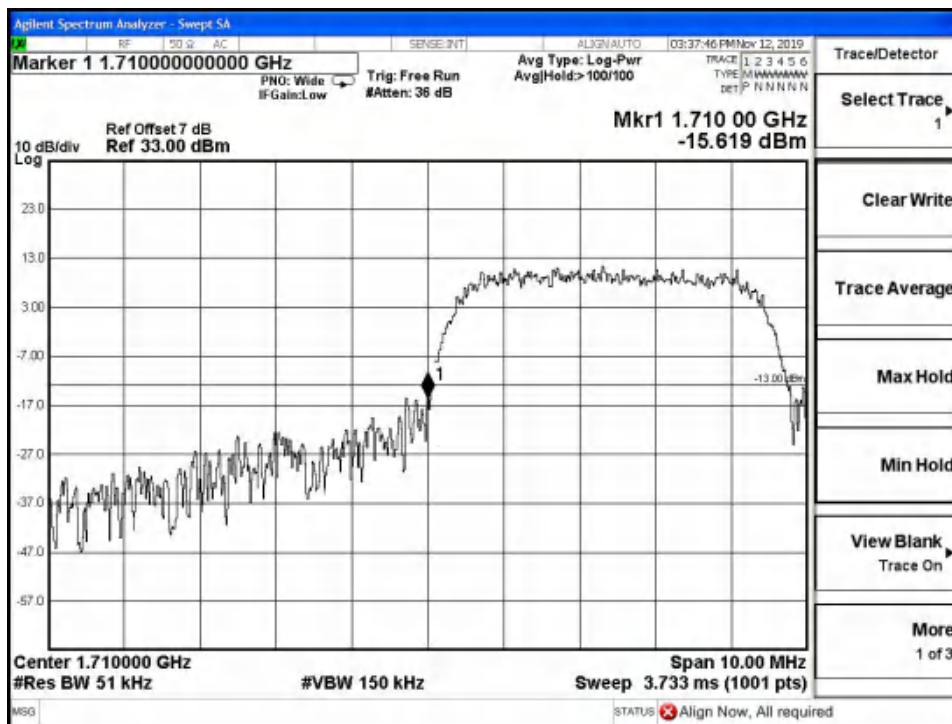
WCDMA Band 4 16QAM, Low Channel , Below 1710MHz
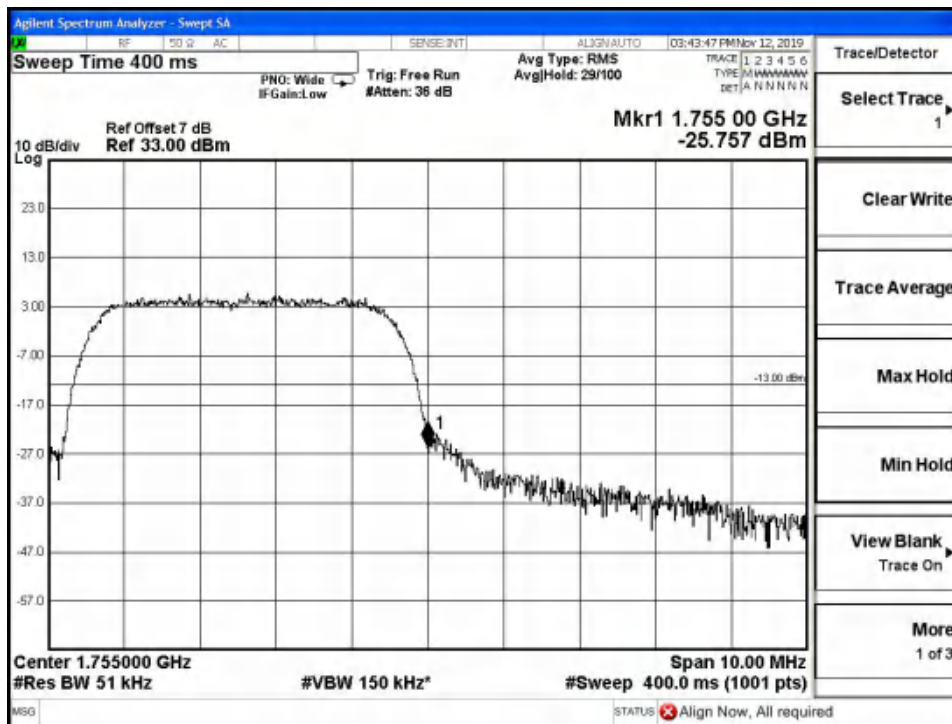
WCDMA Band 4 16QAM, High Channel , Above 1755MHz

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5.5.5 WCDMA B5 Band Edge Results
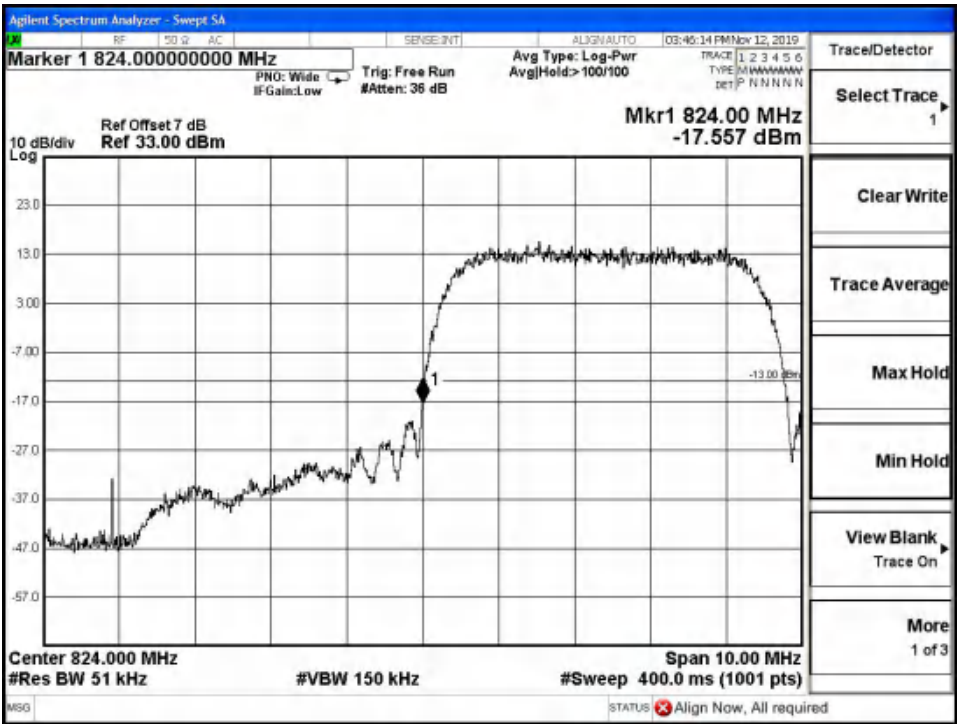
WCDMA Band 5 QPSK, Low Channel , Below 824MHz
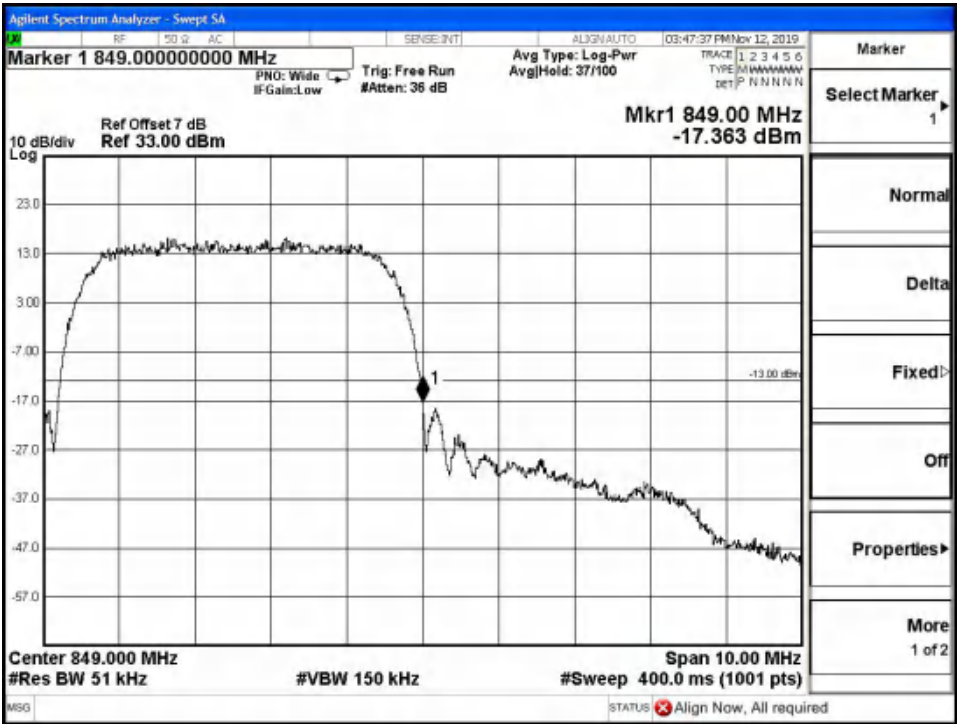
WCDMA Band 5 QPSK, High Channel , Above 849MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
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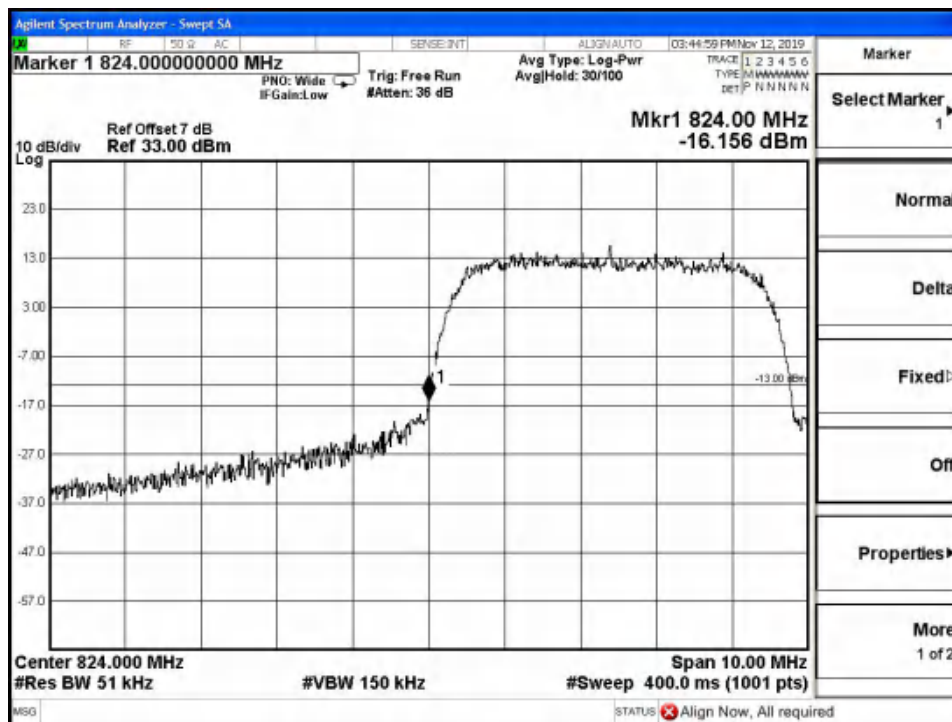
WCDMA Band 5 16QAM, Low Channel , Below 824MHz
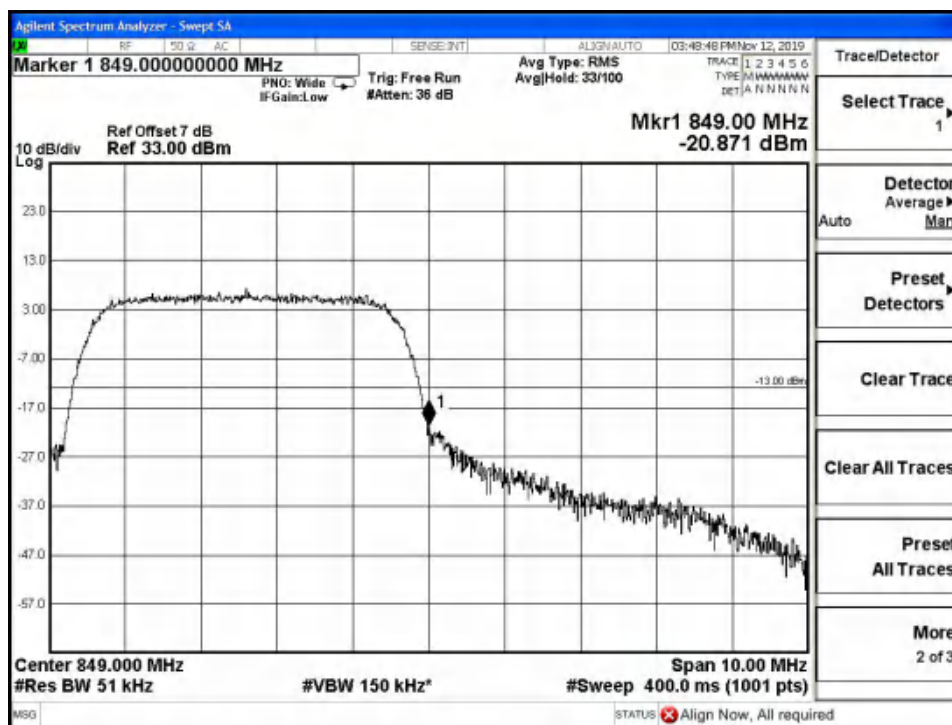
WCDMA Band 5 16QAM, High Channel , Above 849MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
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5.5.6 LTE B7 Band Edge Results
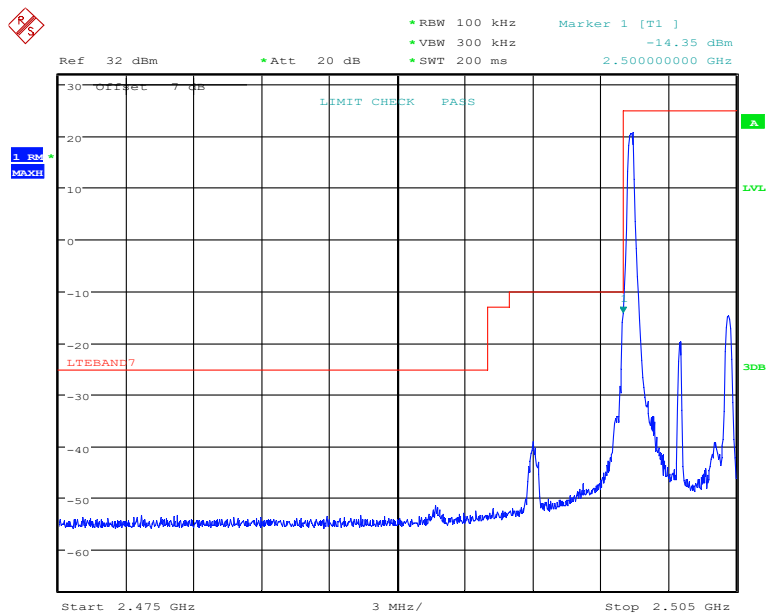
Date: 15.NOV.2019 17:26:25

LTE Band7, 5MHz bandwidth, QPSK,(1,0) Mode , Below 2500MHz
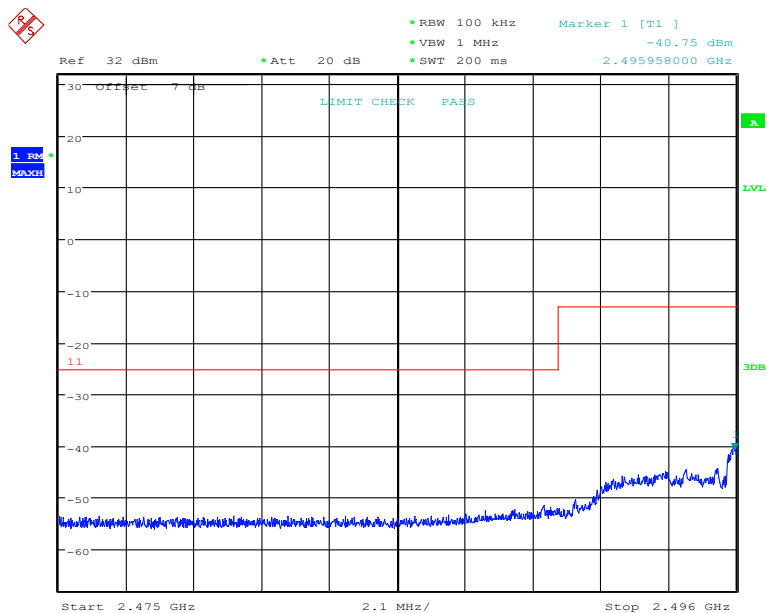
Date: 15.NOV.2019 17:38:46

LTE Band7, 5MHz bandwidth, QPSK,(1,0) Mode , Below 2500MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
Tel: 0086-23-88069965   FAX: 0086-23-88608777

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Date: 15.NOV.2019 17:28:29

LTE Band7, 5MHz bandwidth, QPSK,(25,0) Mode , Below 2500MHz
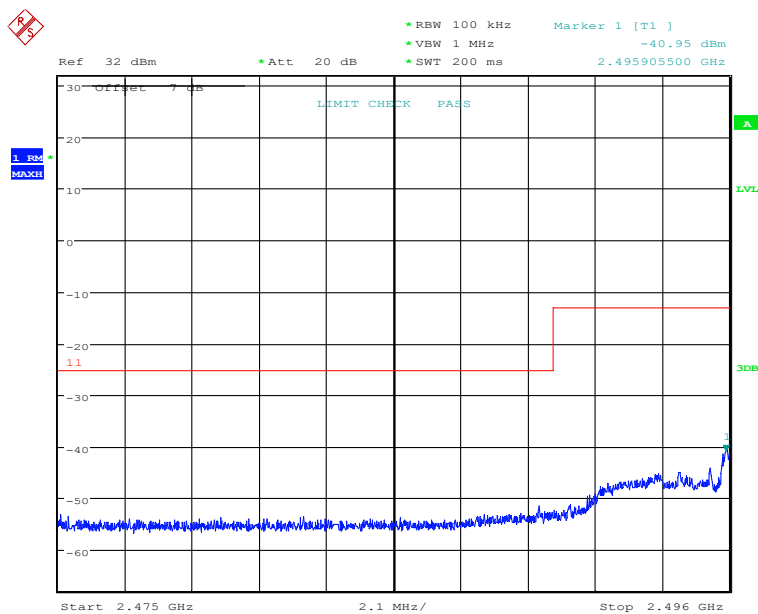
Date: 15.NOV.2019 17:39:43

LTE Band7, 5MHz bandwidth, QPSK,(25,0) Mode , Below 2500MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
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Date: 15.NOV.2019 16:49:22

LTE Band7, 5MHz bandwidth, QPSK,(1,25) Mode, Above 2570MHz
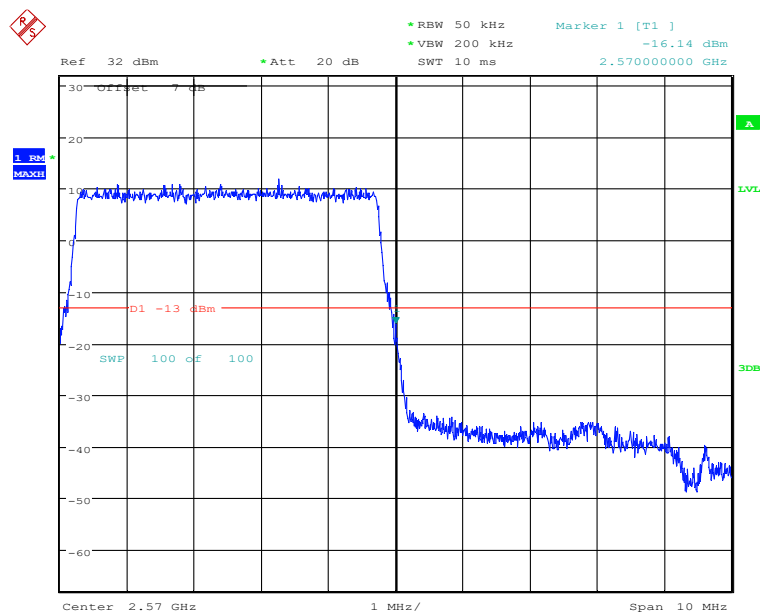
Date: 15.NOV.2019 16:52:19

LTE Band7, 5MHz bandwidth, QPSK,(25,0) Mode, Above 2570MHz

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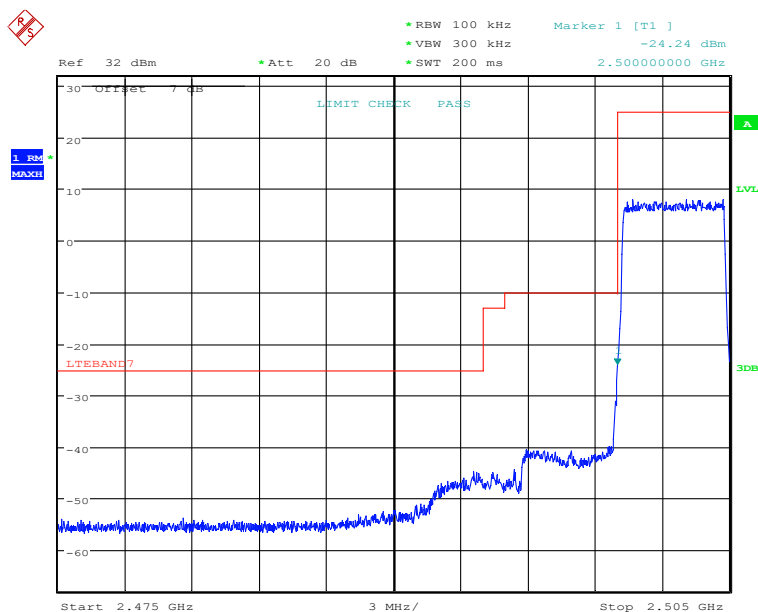
Date: 15.NOV.2019 17:26:48

LTE Band7, 5MHz bandwidth, 16QAM,(1,0) Mode , Below 2500MHz
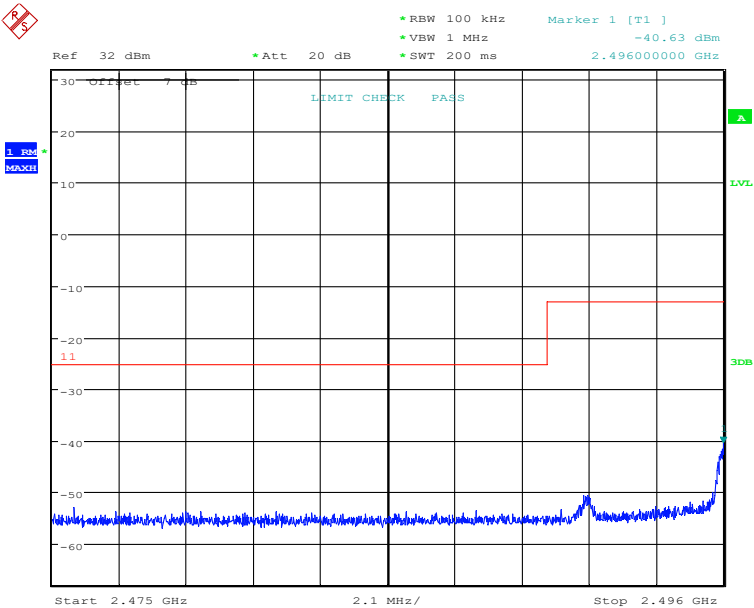
Date: 15.NOV.2019 17:39:08

LTE Band7, 5MHz bandwidth, 16QAM,(1,0) Mode , Below 2500MHz

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Date: 15.NOV.2019 17:28:14
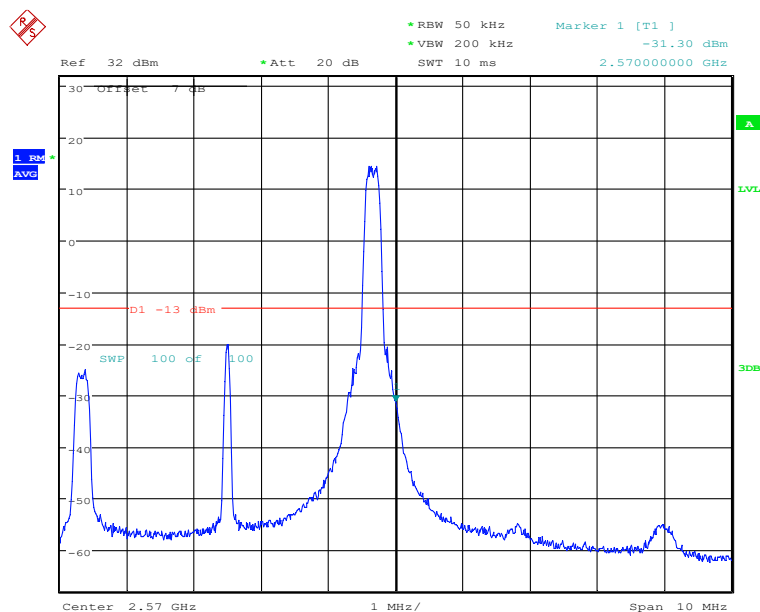
LTE Band7, 5MHz bandwidth, 16QAM,(25,0) Mode , Below 2500MHz

Date: 15.NOV.2019 17:39:24

LTE Band7, 5MHz bandwidth, 16QAM,(25,0) Mode , Below 2500MHz

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Date: 15.NOV.2019 16:51:34

LTE Band7, 5MHz bandwidth, 16QAM,(1,25) Mode, Above 2570MHz
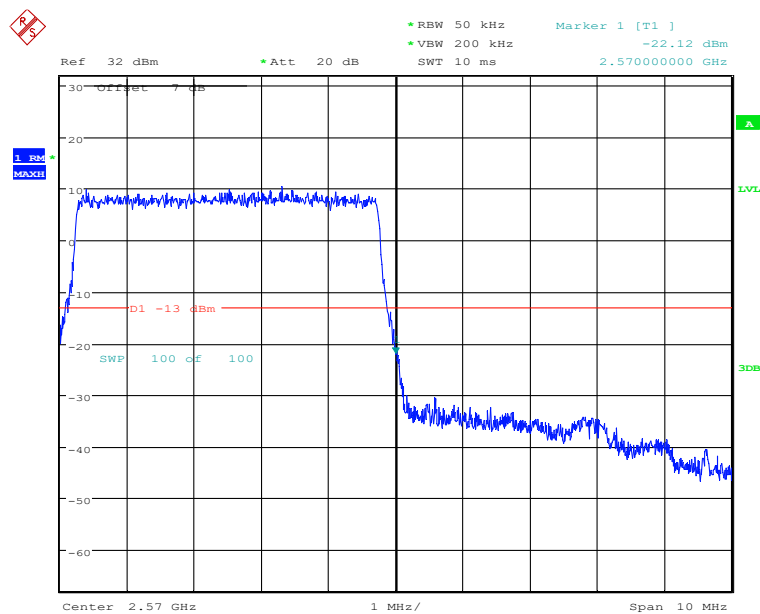
Date: 15.NOV.2019 16:51:56

LTE Band7, 5MHz bandwidth, 16QAM,(25,0) Mode, Above 2570MHz

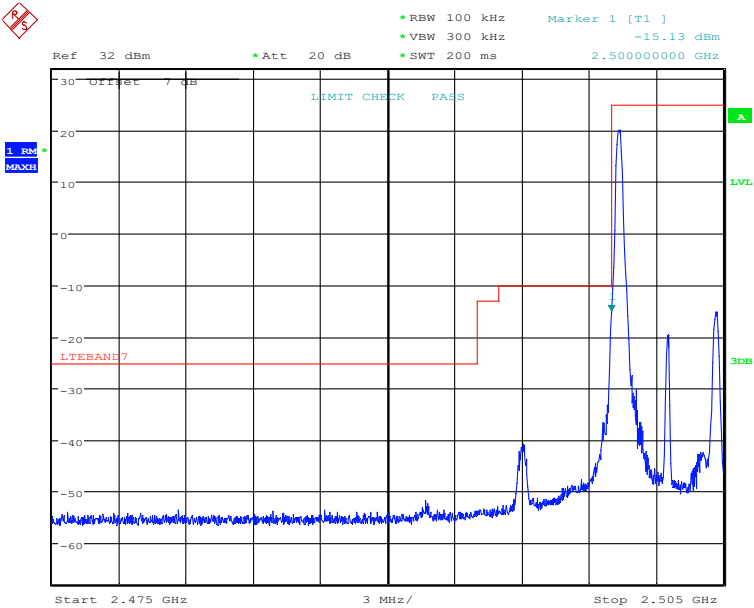# Chongqing Academy of Information and Communications Technology

Date: 15.NOV.2019 17:31:04

LTE Band7, 10MHz bandwidth, QPSK,(1,0) Mode , Below 2500MHz
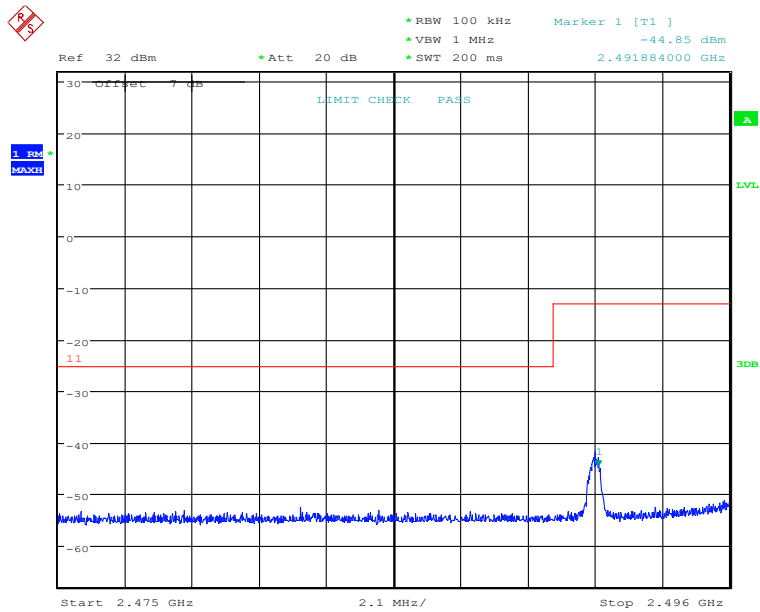
Date: 15.NOV.2019 17:41:50

LTE Band7, 10MHz bandwidth, QPSK,(1,0) Mode , Below 2500MHz

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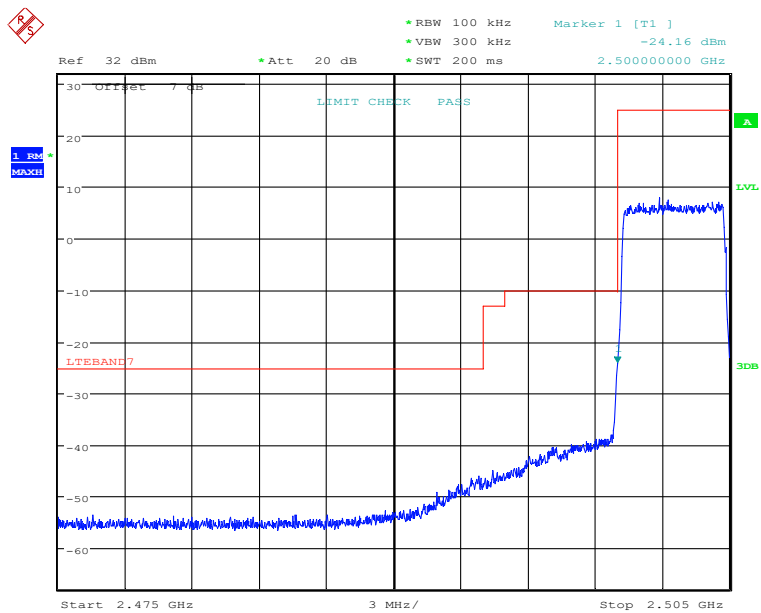
Date: 15.NOV.2019 17:30:09

LTE Band7, 10MHz bandwidth, QPSK,(50,0) Mode , Below 2500MHz
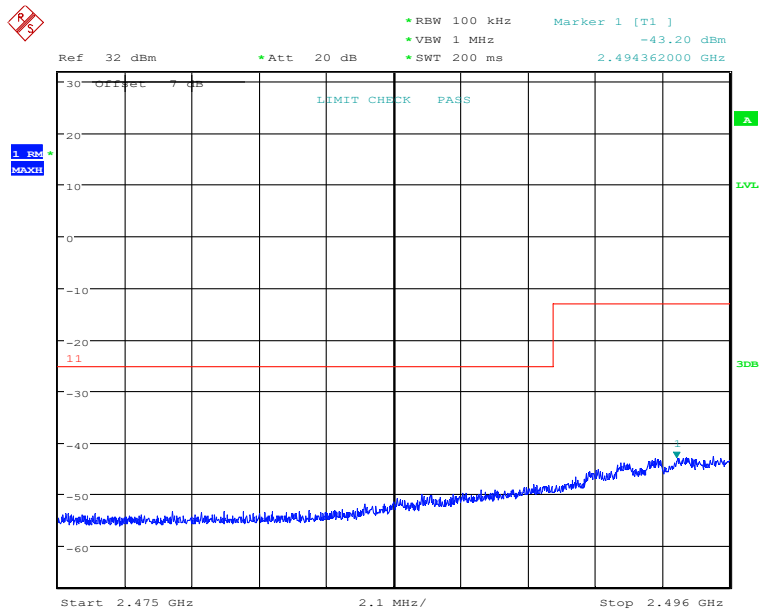
Date: 15.NOV.2019 17:43:05

LTE Band7, 10MHz bandwidth, QPSK,(50,0) Mode , Below 2500MHz

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Report No.:B19W50601-WWAN_Rev1

Date: 15.NOV.2019 17:00:06

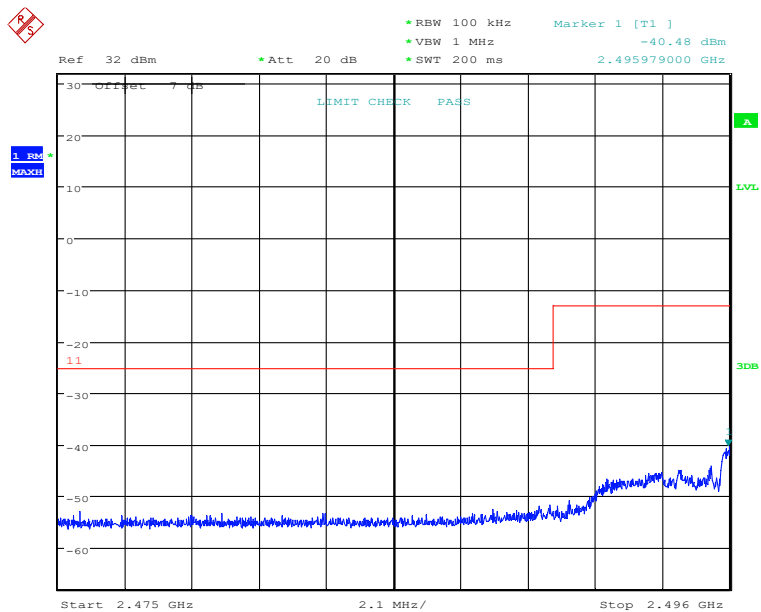LTE Band7, 10MHz bandwidth, QPSK,(1,50) Mode, Above 2570MHz

Date: 15.NOV.2019 17:01:17

LTE Band7, 10MHz bandwidth, QPSK,(25,0) Mode, Above 2570MHz

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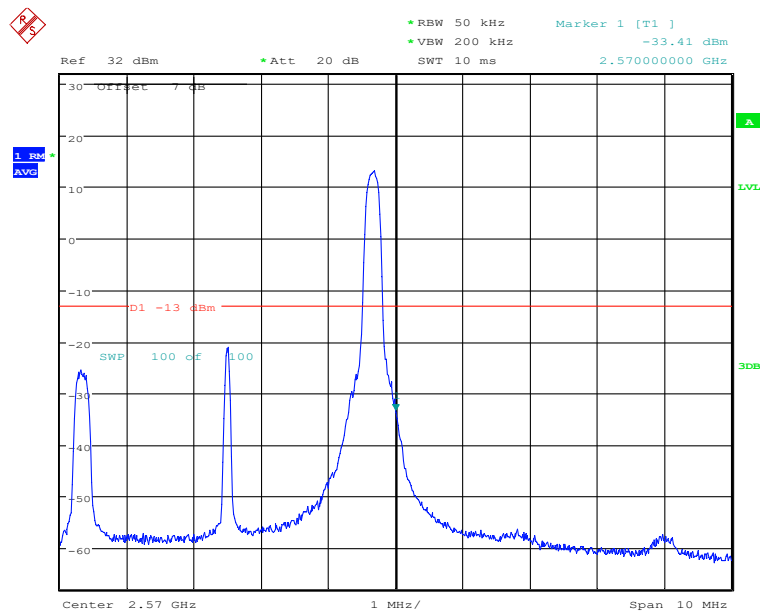
Date: 15.NOV.2019 17:30:49

LTE Band7, 10MHz bandwidth, 16QAM,(1,0) Mode , Below 2500MHz

Date: 15.NOV.2019 17:42:06

LTE Band7, 10MHz bandwidth, 16QAM,(1,0) Mode , Below 2500MHz

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Date: 15.NOV.2019 17:30:27

LTE Band7, 10MHz bandwidth, 16QAM,(50,0) Mode , Below 2500MHz

Date: 15.NOV.2019 17:42:31

LTE Band7,10MHz bandwidth, 16QAM,(50,0) Mode , Below 2500MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
Tel: 0086-23-88069965   FAX: 0086-23-88608777
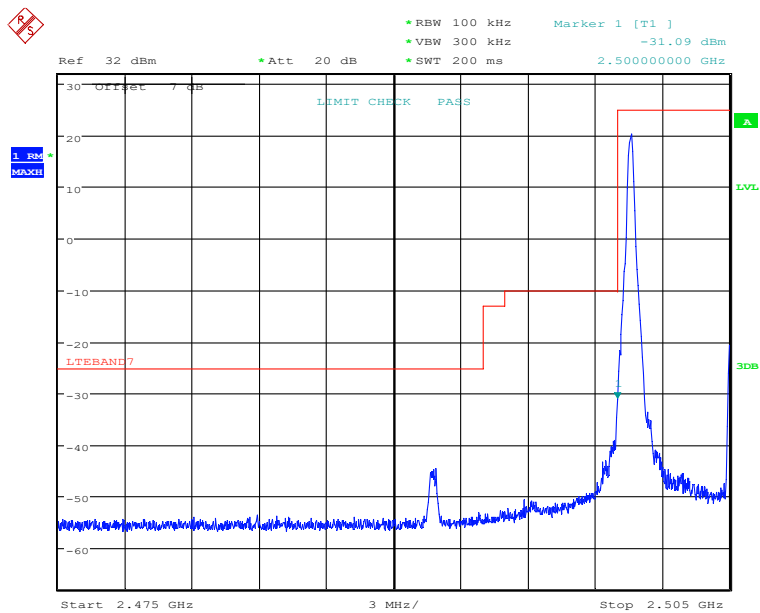
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Date: 15.NOV.2019 17:00:30

LTE Band7, 10MHz bandwidth, 16QAM,(1,50) Mode, Above 2570MHz

Date: 15.NOV.2019 17:00:55

LTE Band7,10MHz bandwidth, 16QAM,(50,0) Mode, Above 2570MHz

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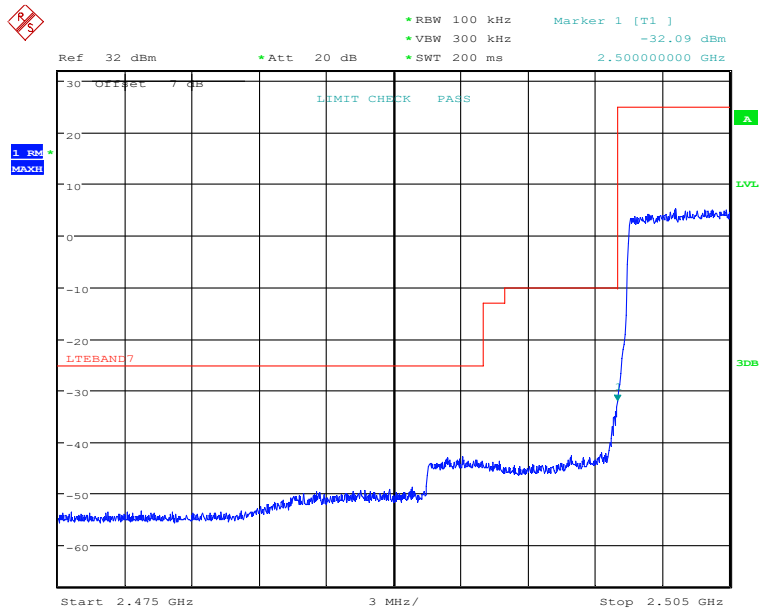
Date: 15.NOV.2019 17:32:27

LTE Band7, 15MHz bandwidth, QPSK,(1,0) Mode , Below 2500MHz

Date: 15.NOV.2019 17:46:00

LTE Band7, 15MHz bandwidth, QPSK,(1,0) Mode , Below 2500MHz

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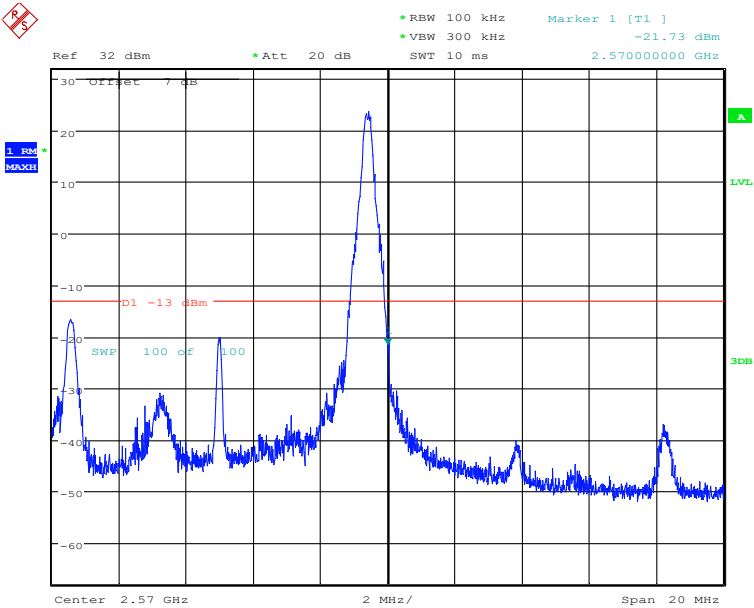
Date: 15.NOV.2019 17:33:11

LTE Band7, 15MHz bandwidth, QPSK,(75,0) Mode , Below 2500MHz
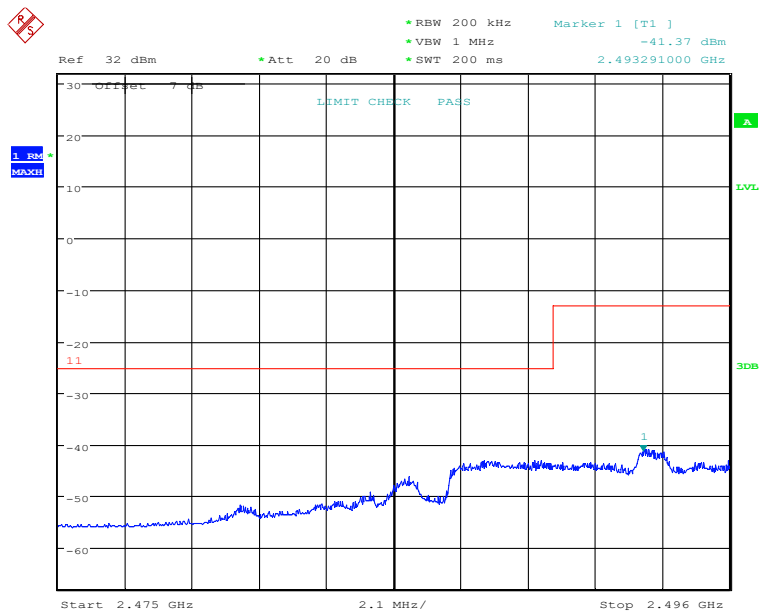
Date: 15.NOV.2019 17:46:43

LTE Band7, 15MHz bandwidth, QPSK,(75,0) Mode , Below 2500MHz

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Date: 15.NOV.2019 16:23:11

LTE Band7, 15MHz bandwidth, QPSK,(1,75) Mode, Above 2570MHz
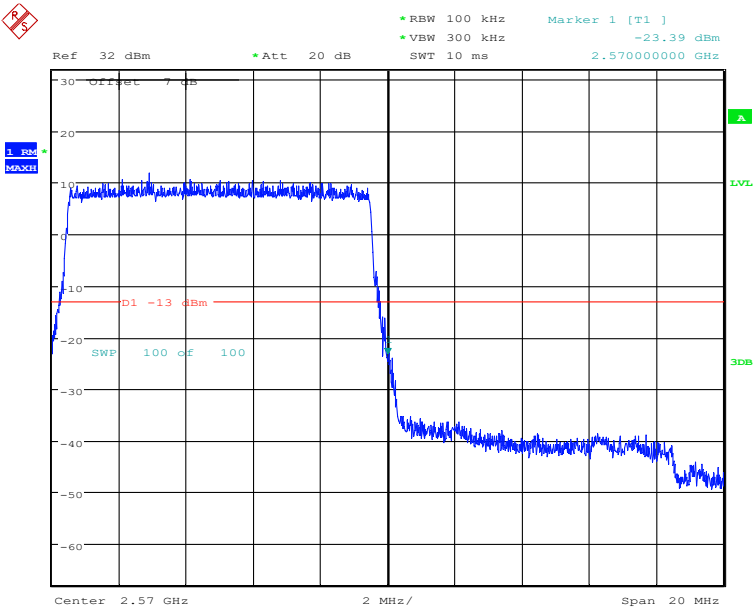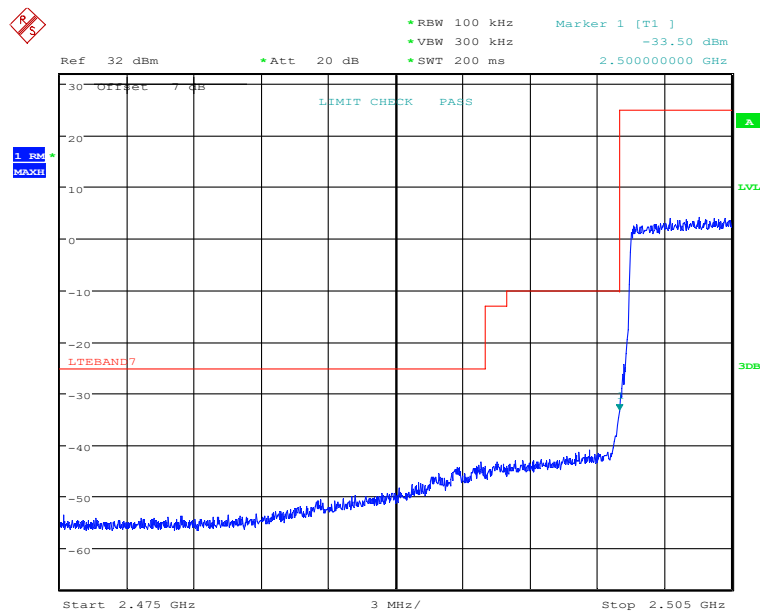

Date: 15.NOV.2019 16:22:02

LTE Band7, 15MHz bandwidth, QPSK,(75,0) Mode, Above 2570MHz

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```
*RBW 200 kHz          Marker 1 [T1 ]
*VBW 1 MHz                    -20.85 dBm
Ref  32 dBm        *Att  20 dB    *SWT 200 ms         2.500000000 GHz
-30  Offset   7 dB
                          LIMIT CHECK   PASS
 20                                                          A

 10                                                          LVL

  0

-10
                                                             3DB
-20
LTEBAND7
-30

-40

-50

-60
Start 2.475 GHz          3 MHz/              Stop 2.505 GHz
```
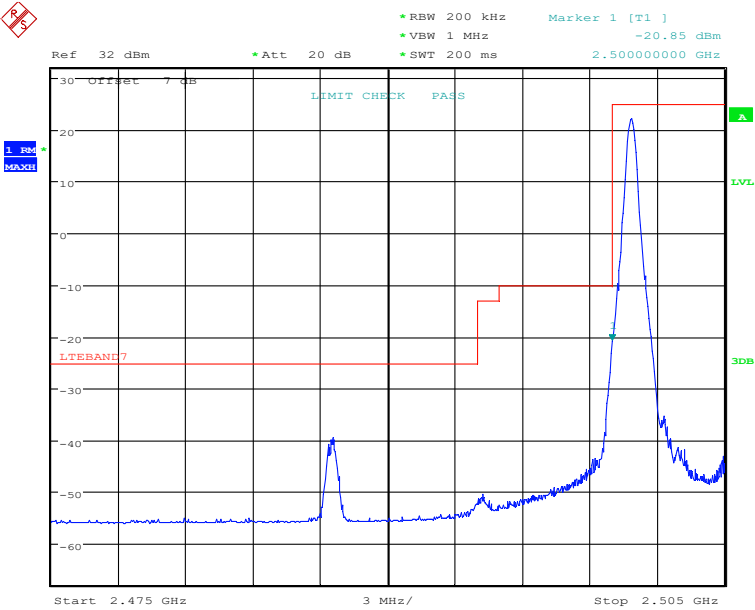
Date: 15.NOV.2019 17:32:39

LTE Band7, 15MHz bandwidth, 16QAM,(1,0) Mode , Below 2500MHz


```
*RBW 200 kHz          Marker 1 [T1 ]
*VBW 1 MHz                    -42.59 dBm
Ref  32 dBm        *Att  20 dB    *SWT 200 ms         2.487621000 GHz
-30  Offset   7 dB
                          LIMIT CHECK   PASS
 20                                                          A

 10                                                          LVL

  0

-10
                                                             3DB
-20
11
-30

-40

-50

-60
Start 2.475 GHz          2.1 MHz/             Stop 2.496 GHz
```
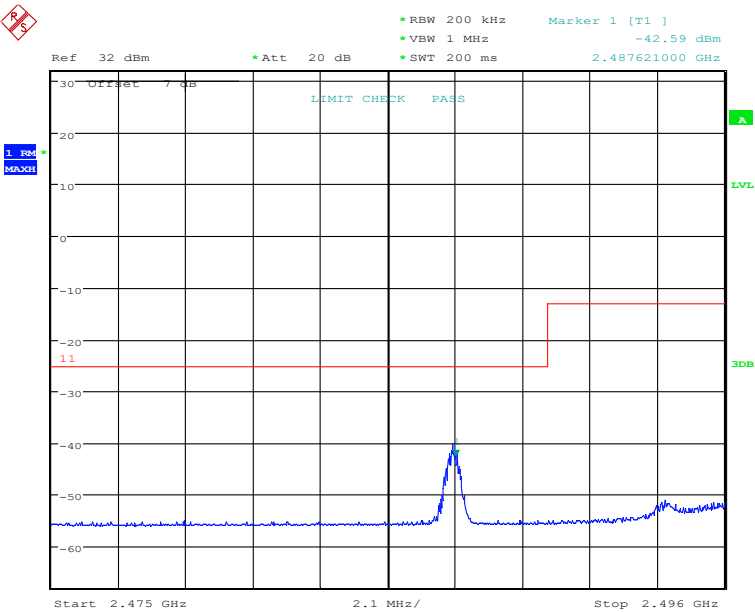
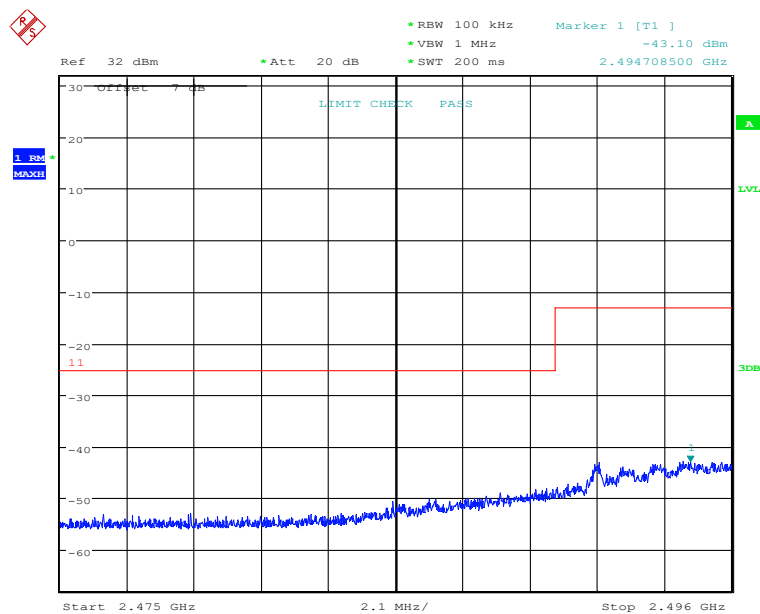Date: 15.NOV.2019 17:46:14

LTE Band7, 15MHz bandwidth, 16QAM,(1,0) Mode , Below 2500MHz

Report No.:B19W50601-WWAN_Rev1
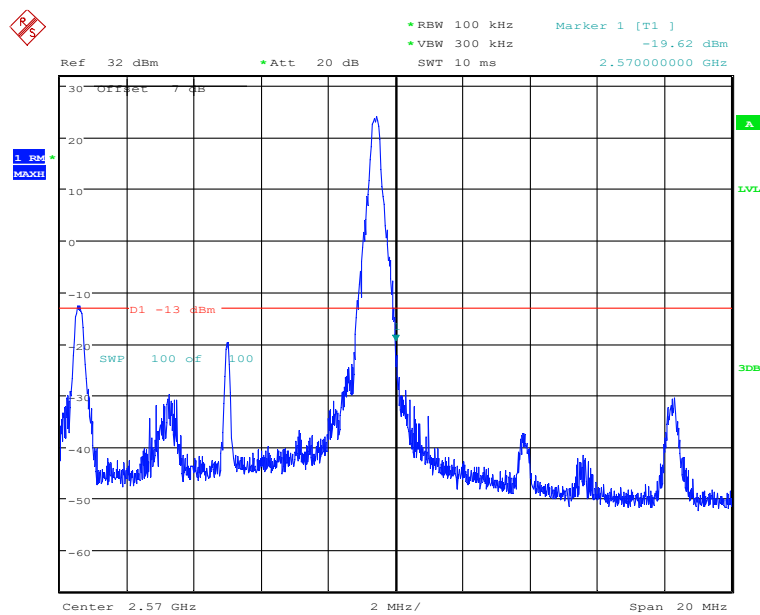

Date: 15.NOV.2019 17:32:58

LTE Band7, 15MHz bandwidth, 16QAM,(75,0) Mode , Below 2500MHz
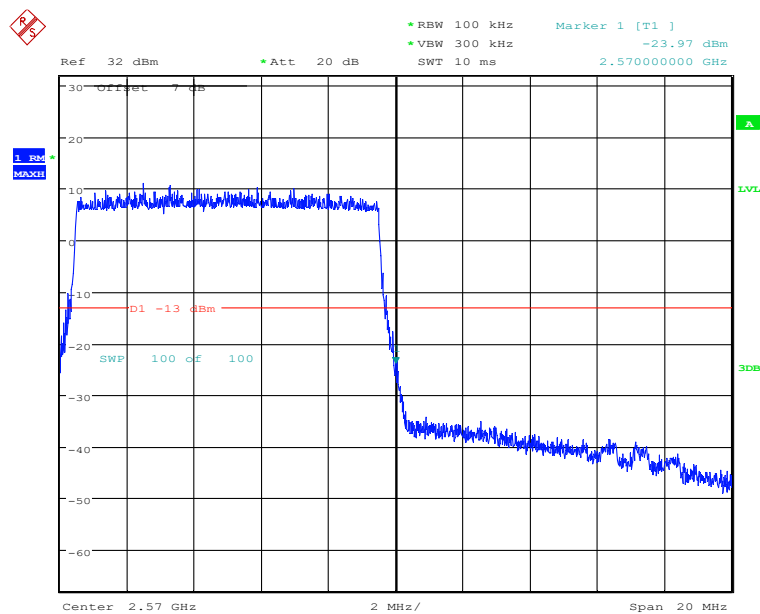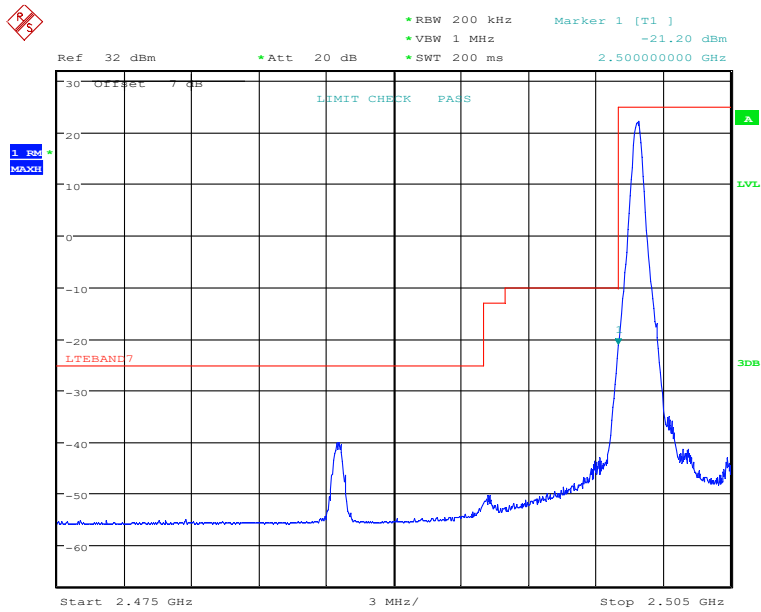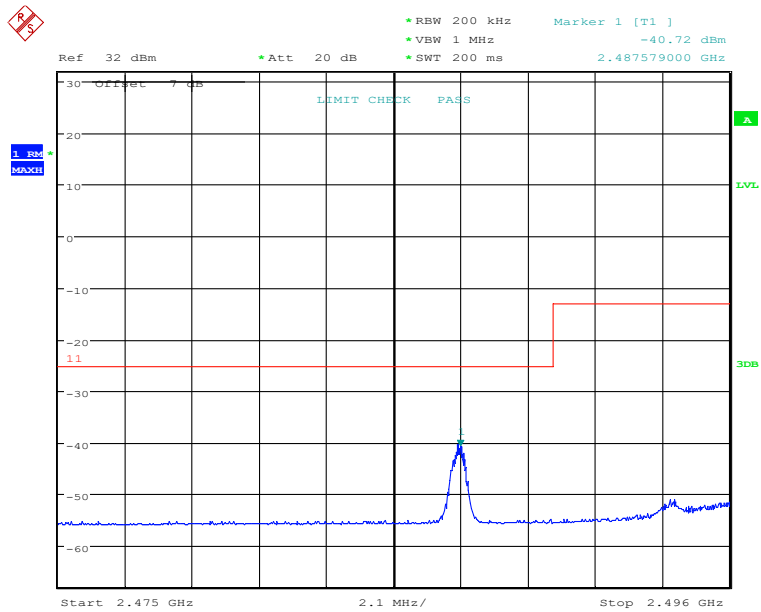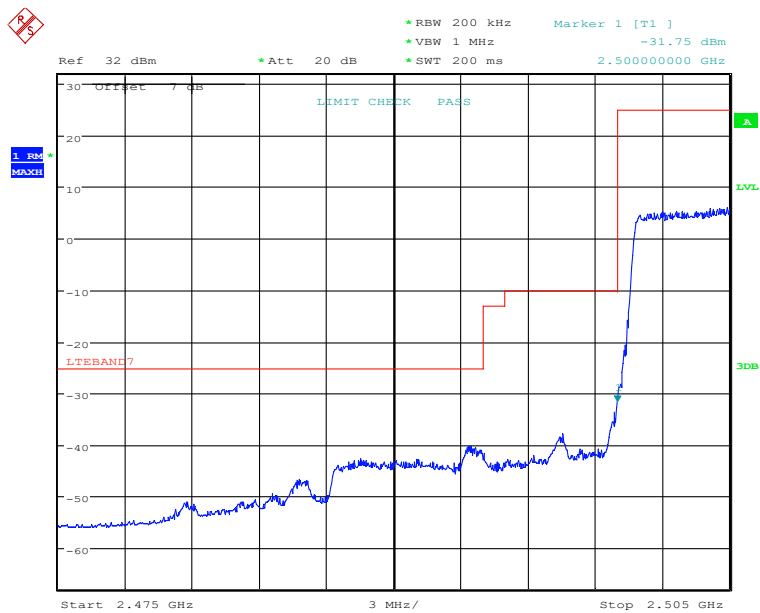

Date: 15.NOV.2019 17:46:29

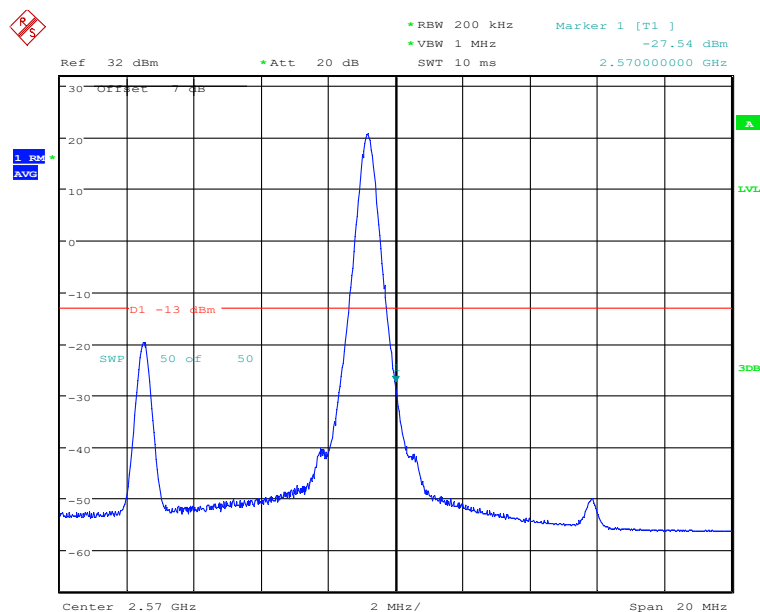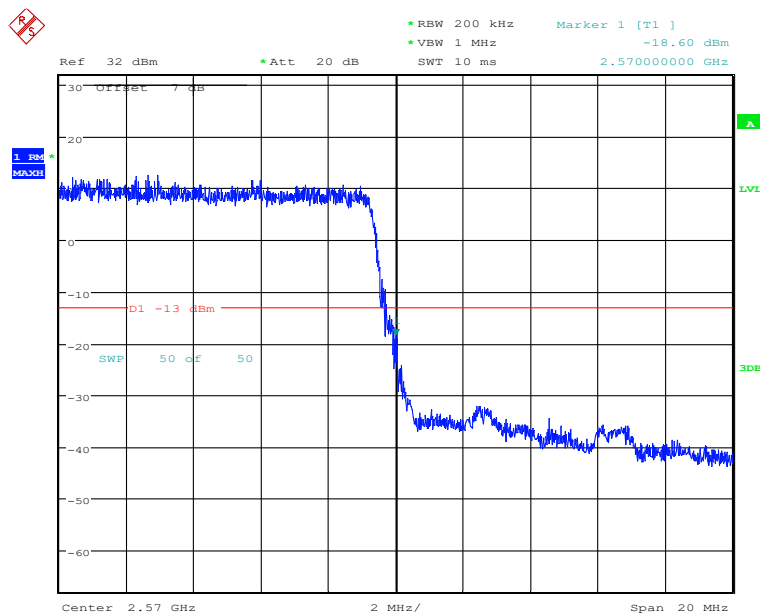LTE Band7, 15MHz bandwidth, 16QAM,(75,0) Mode , Below 2500MHz

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```
                                        *RBW  200 kHz      Marker 1 [T1 ]
                                        *VBW  1 MHz                -28.91 dBm
         Ref   32 dBm      *Att  20 dB   SWT  10 ms        2.570000000 GHz
    -30  Offset   7 dB
                                                                              A

     20
1 RM*
AVG
     10                                                                      LVL

      0

    -10
         D1 -13 dBm
    -20                                                                      3DB
         SWP    50 of    50

    -30

    -40

    -50

    -60

    Center  2.57 GHz          2 MHz/                       Span  20 MHz
```

Date: 15.NOV.2019 16:22:50

LTE Band7, 15MHz bandwidth, 16QAM,(1,75) Mode, Above 2570MHz

```
                                        *RBW  200 kHz      Marker 1 [T1 ]
                                        *VBW  1 MHz                -23.83 dBm
         Ref   32 dBm      *Att  20 dB   SWT  10 ms        2.570000000 GHz
    -30  Offset   7 dB
                                                                              A

     20
1 RM*
MAXH
                                                                            LVL

      0

    -10
         D1 -13 dBm
    -20                                                                      3DB
         SWP    50 of    50

    -30

    -40

    -50

    -60

    Center  2.57 GHz          2 MHz/                       Span  20 MHz
```
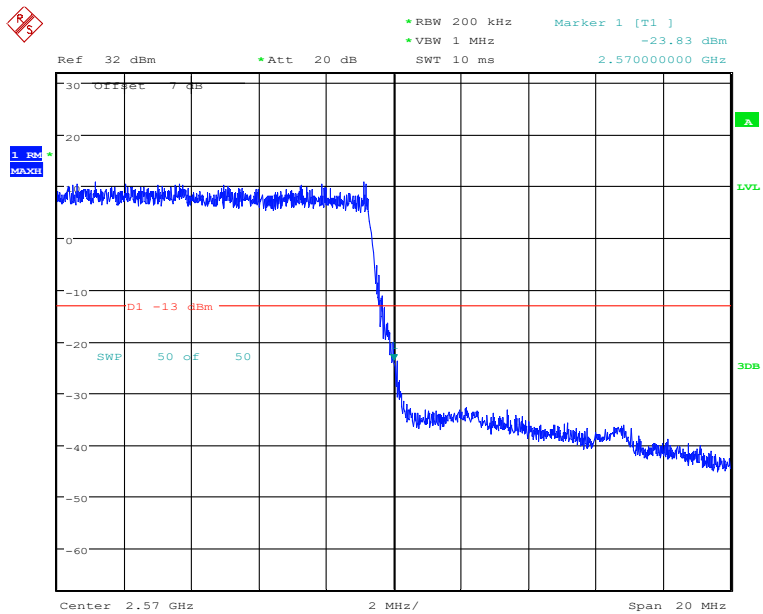
Date: 15.NOV.2019 16:22:20

LTE Band7, 15MHz bandwidth, 16QAM,(75,0) Mode, Above 2570MHz

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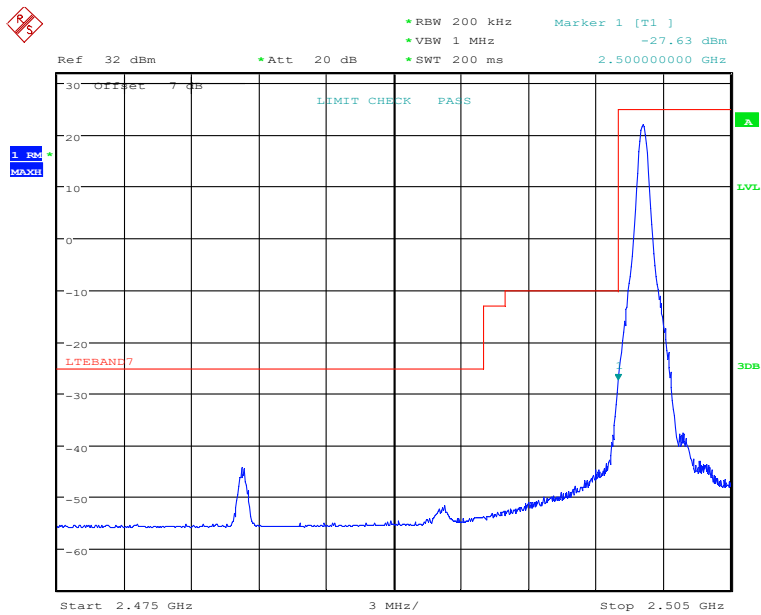
Date: 15.NOV.2019 17:33:42
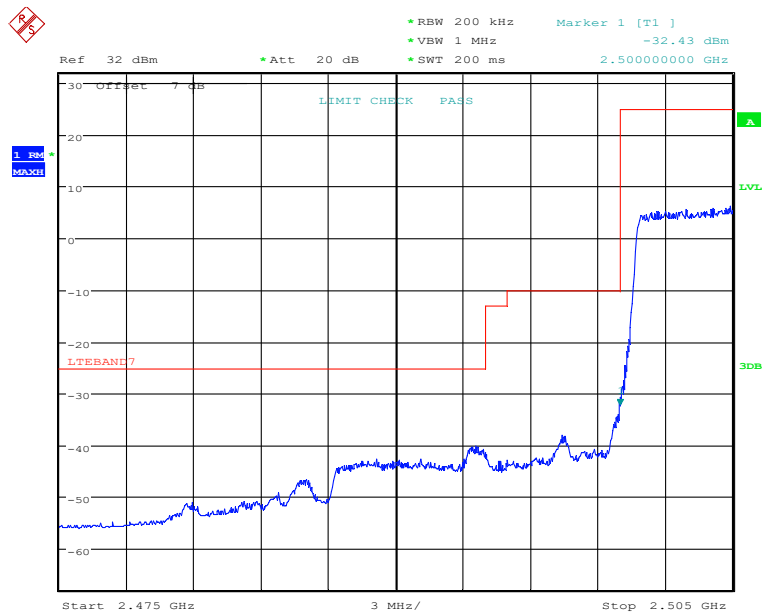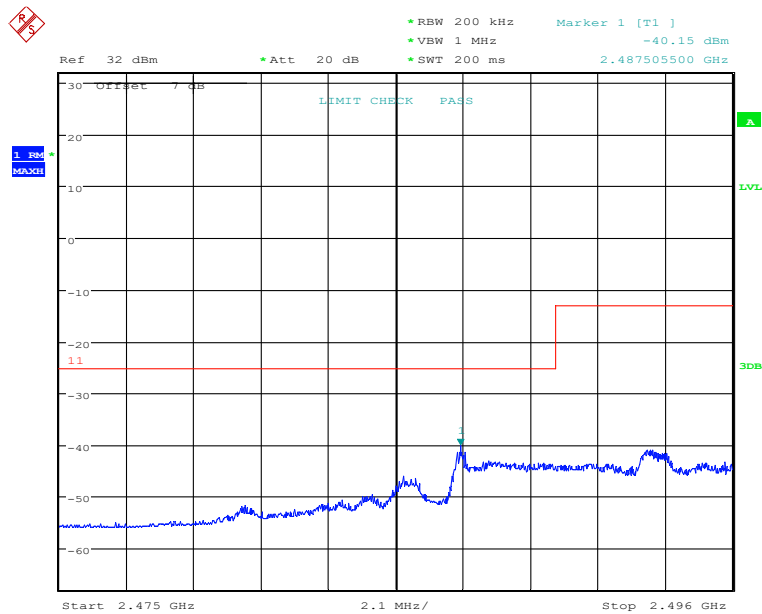
LTE Band7, 20MHz bandwidth, QPSK,(1,0) Mode , Below 2500MHz
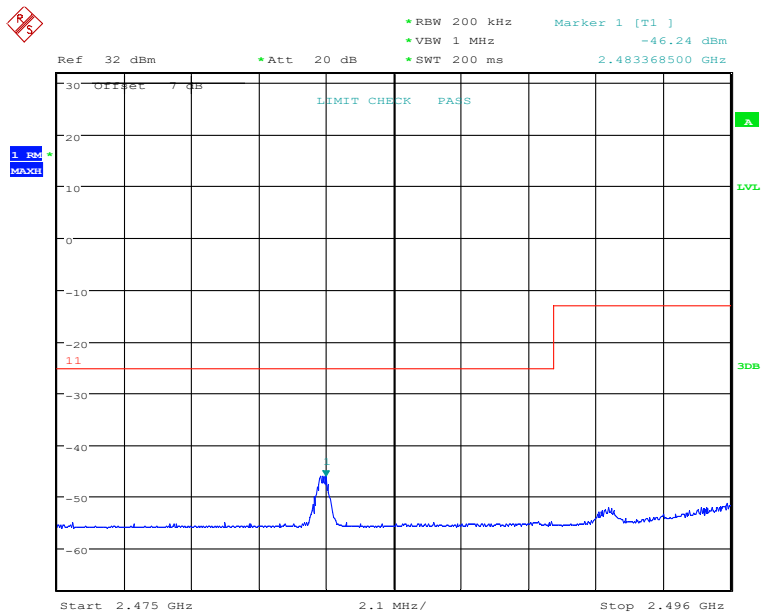
Date: 15.NOV.2019 17:47:17

LTE Band7, 20MHz bandwidth, QPSK,(1,0) Mode , Below 2500MHz

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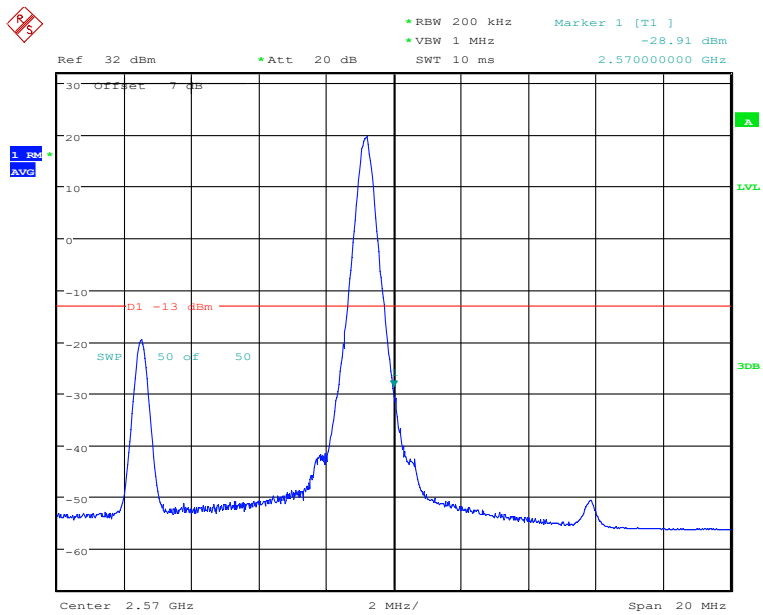
Date: 15.NOV.2019 17:34:20

LTE Band7, 20MHz bandwidth, QPSK,(100,0) Mode , Below 2500MHz
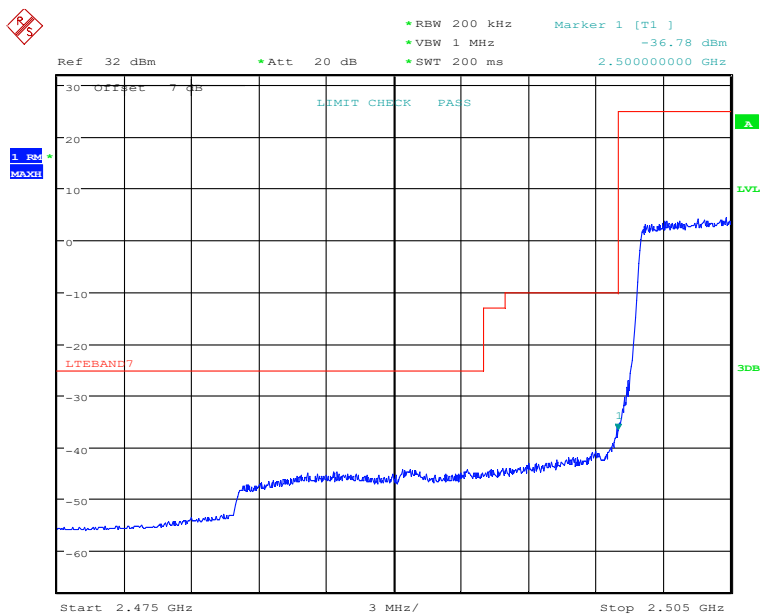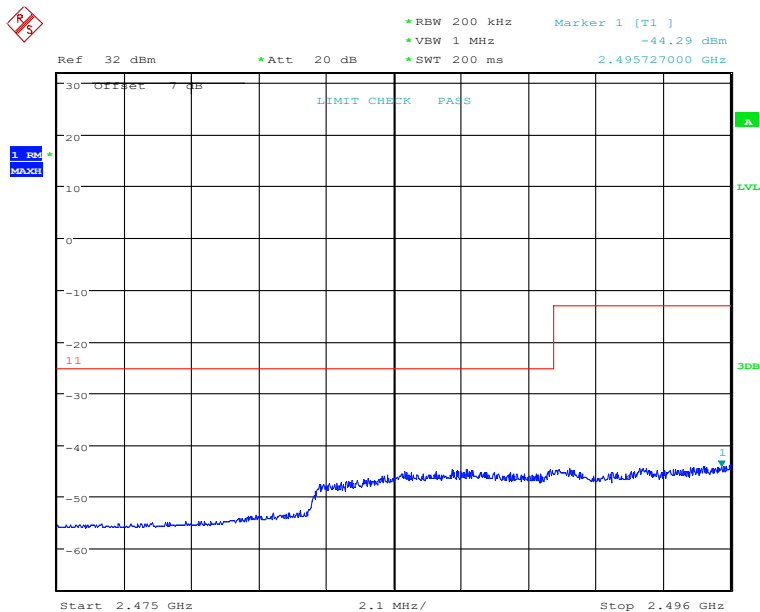

Date: 15.NOV.2019 17:48:00

LTE Band7, 20MHz bandwidth, QPSK,(100,0) Mode , Below 2500MHz

```
                                    *RBW  200 kHz      Marker 1 [T1 ]
                                    *VBW  1 MHz                -16.48 dBm
      Ref   32 dBm      *Att  20 dB  SWT  10 ms         2.570000000 GHz
   -30 Offset   7 dB                                                      A
     20
1 RM *
MAXH                                                                     LVL
     10

      0

    -10
      D1 -13 dBm
    -20                                                                  3DB
      SWP   50 of   50
    -30

    -40

    -50

    -60

   Center 2.57 GHz           2 MHz/              Span  20 MHz
```

LTE Band7, 20MHz bandwidth, QPSK,(1,100) Mode, Above 2570MHz

```
                                    *RBW  200 kHz      Marker 1 [T1 ]
                                    *VBW  1 MHz                -29.39 dBm
      Ref   32 dBm      *Att  20 dB  SWT  10 ms         2.570000000 GHz
   -30 Offset   7 dB                                                      A
     20
1 RM *
MAXH                                                                     LVL
     10

      0

    -10
      D1 -13 dBm
    -20                                                                  3DB
      SWP   50 of   50
    -30

    -40

    -50

    -60

   Center 2.57 GHz           2 MHz/              Span  20 MHz
```
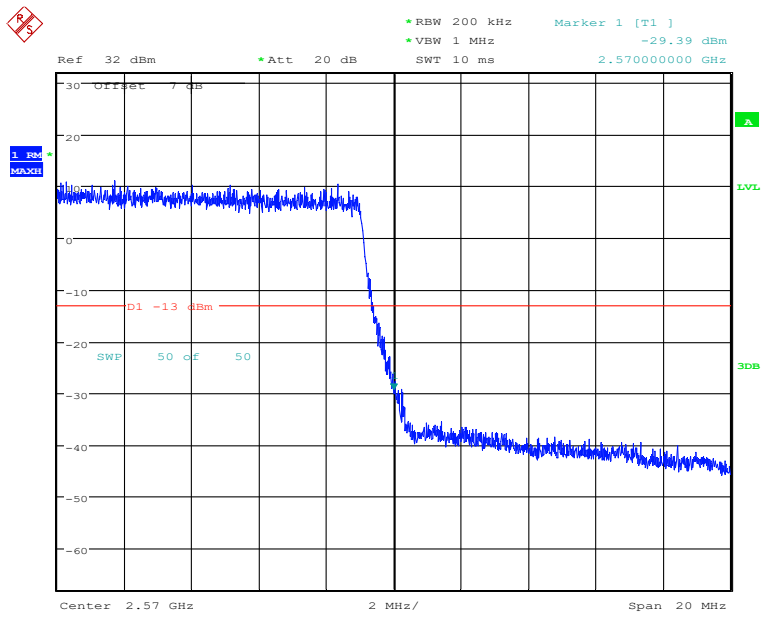
LTE Band7, 20MHz bandwidth, QPSK,(100,0) Mode, Above 2570MHz

*RBW 200 kHz
*VBW 1 MHz
*SWT 200 ms
Marker 1 [T1]
-27.76 dBm
2.500000000 GHz

Ref 32 dBm   *Att 20 dB

-30 Offset 7 dB

LIMIT CHECK   PASS

LTEBAND7

Start 2.475 GHz   3 MHz/   Stop 2.505 GHz

Date: 15.NOV.2019 17:33:56

LTE Band7, 20MHz bandwidth, 16QAM,(1,0) Mode , Below 2500MHz

*RBW 200 kHz
*VBW 1 MHz
*SWT 200 ms
Marker 1 [T1]
-46.13 dBm
2.483263500 GHz

Ref 32 dBm   *Att 20 dB

-30 Offset 7 dB

LIMIT CHECK   PASS

11

Start 2.475 GHz   2.1 MHz/   Stop 2.496 GHz
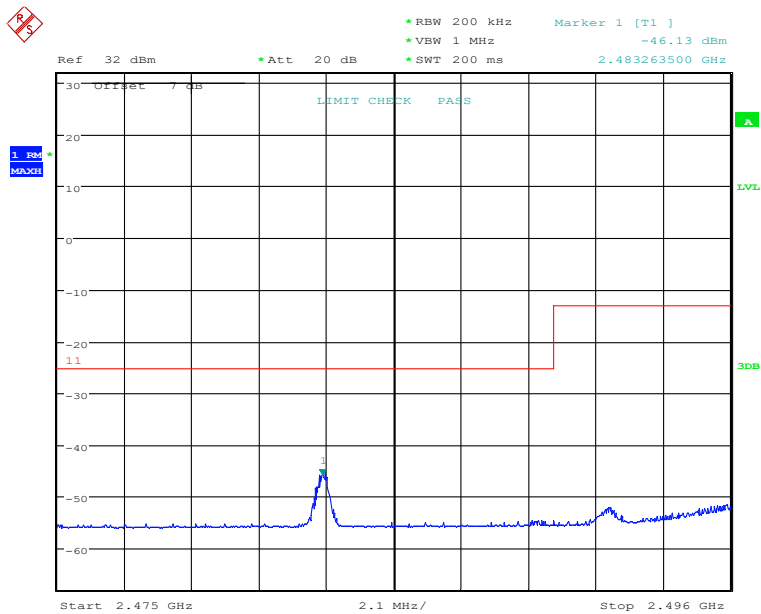
Date: 15.NOV.2019 17:47:31

LTE Band7, 20MHz bandwidth, 16QAM,(1,0) Mode , Below 2500MHz

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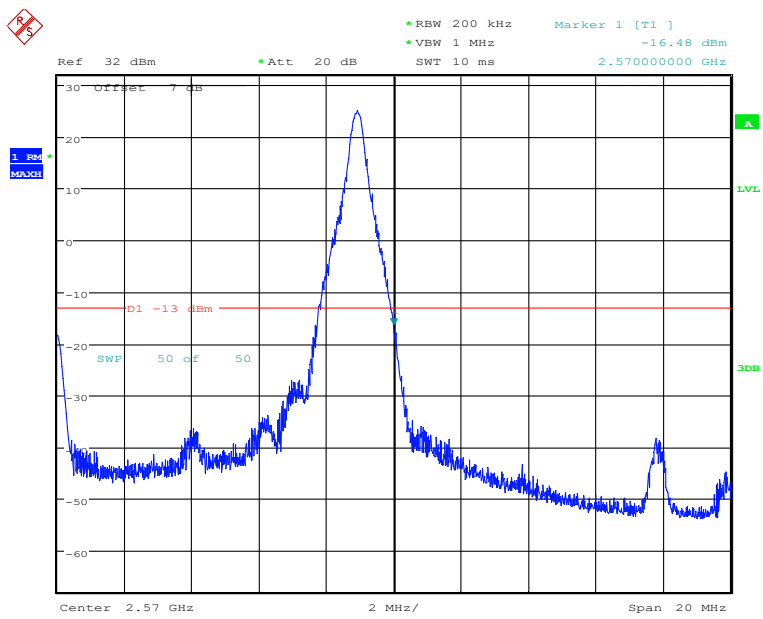
Date: 15.NOV.2019 17:34:10

LTE Band7, 20MHz bandwidth, 16QAM,(100,0) Mode , Below 2500MHz
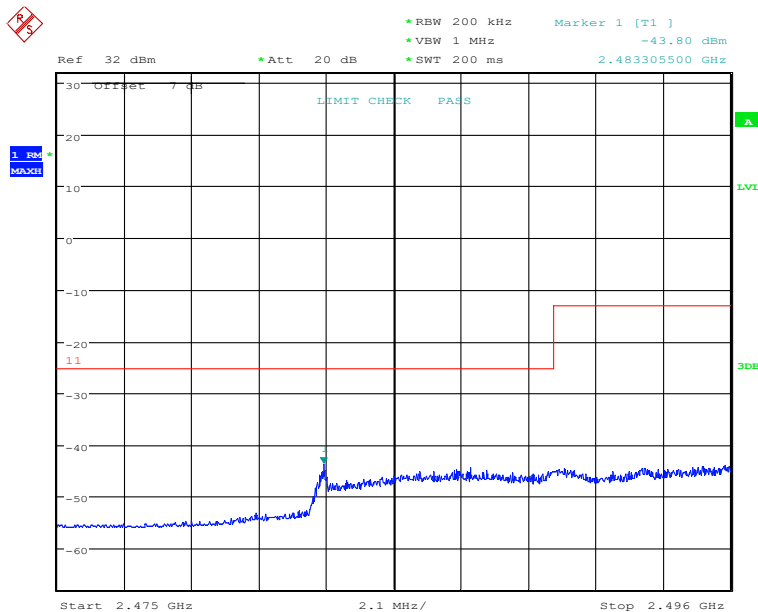
Date: 15.NOV.2019 17:47:44

LTE Band7, 20MHz bandwidth, 16QAM,(100,0) Mode , Below 2500MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
Tel: 0086-23-88069965   FAX: 0086-23-88608777
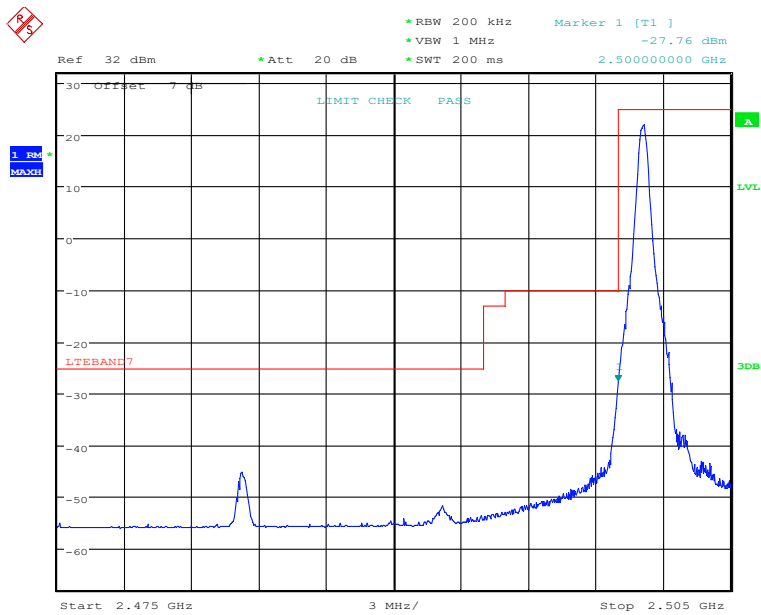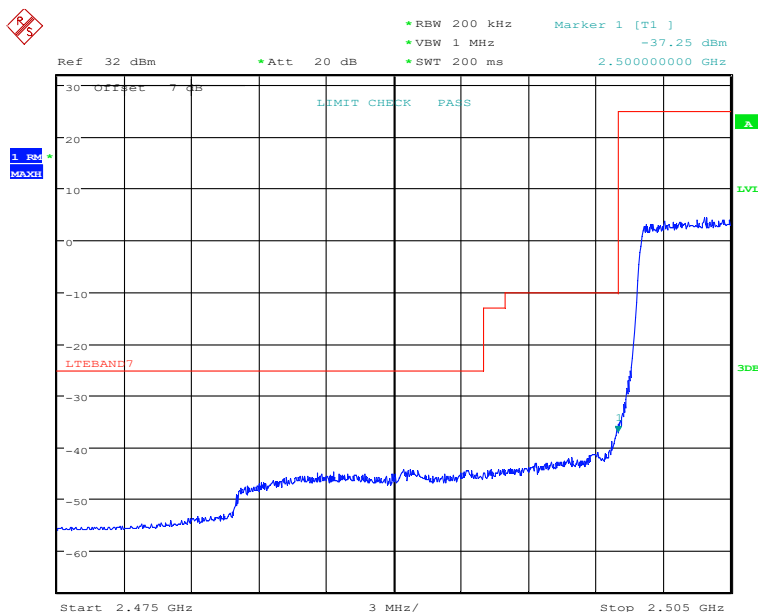
Date: 15.NOV.2019 16:25:53

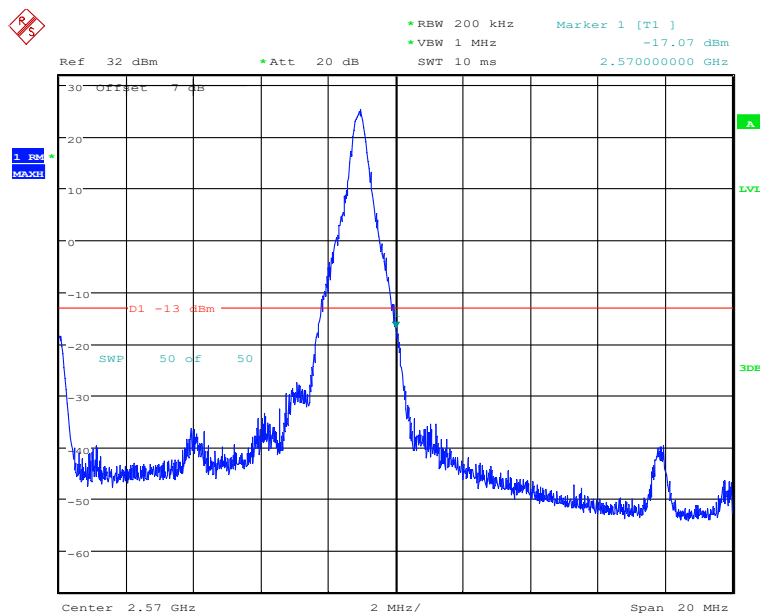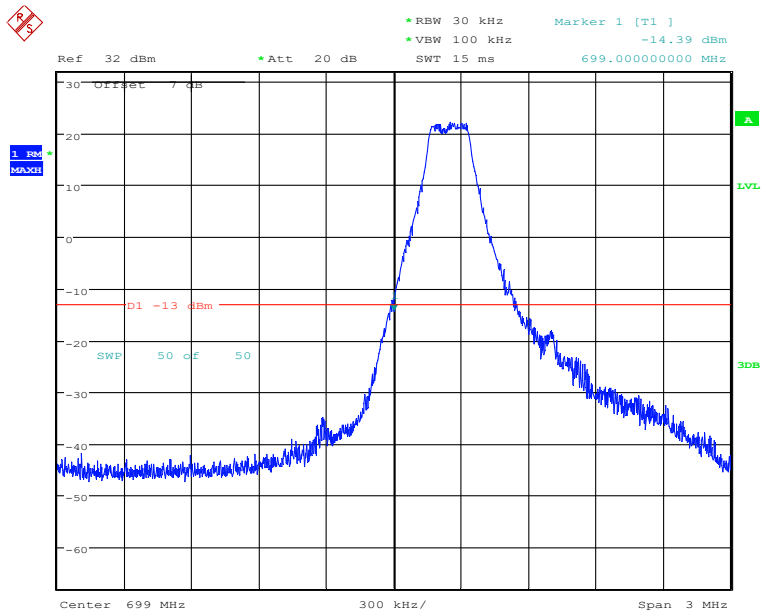LTE Band7, 20MHz bandwidth, 16QAM,(1,100) Mode, Above 2570MHz
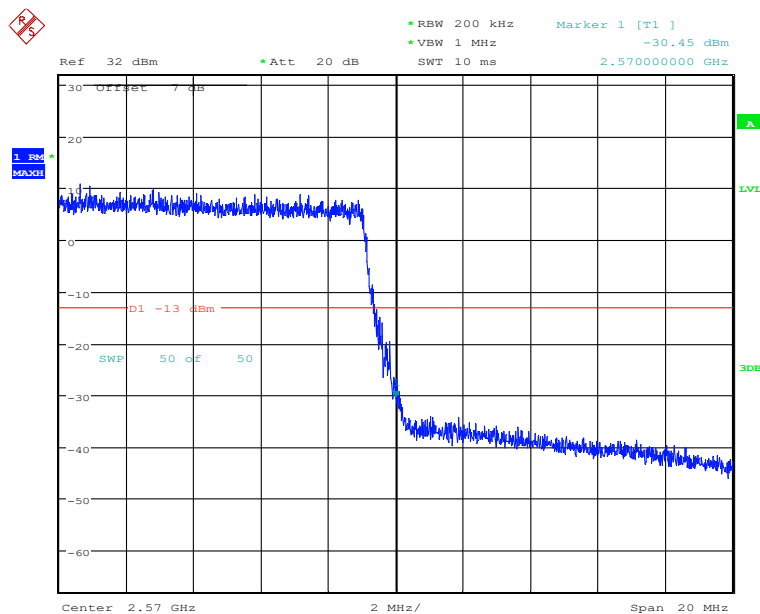
Date: 15.NOV.2019 16:26:46

LTE Band7, 20MHz bandwidth, 16QAM,(100,0) Mode, Above 2570MHz

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5.5.7 LTE B12 Band Edge Results


```
                                    *RBW  30 kHz      Marker 1 [T1 ]
                                    *VBW  100 kHz                -14.39 dBm
    Ref   32 dBm      *Att  20 dB   SWT  15 ms        699.000000000 MHz
-30  Offset   7 dB
 20
 10
  0
-10   D1 -13 dBm
-20   SWP    50 of    50
-30
-40
-50
-60
   Center  699 MHz       300 kHz/              Span  3 MHz
```

Date: 15.NOV.2019 16:32:37

LTE Band12, 1.4MHz bandwidth, QPSK,(1,0) Mode , Below 698MHz


```
                                    *RBW  30 kHz      Marker 1 [T1 ]
                                    *VBW  100 kHz                -20.44 dBm
    Ref   32 dBm      *Att  20 dB   SWT  15 ms        699.000000000 MHz
-30  Offset   7 dB
 20
 10
  0
-10   D1 -13 dBm
-20   SWP    50 of    50
-30
-40
-50
-60
   Center  699 MHz       300 kHz/              Span  3 MHz
```
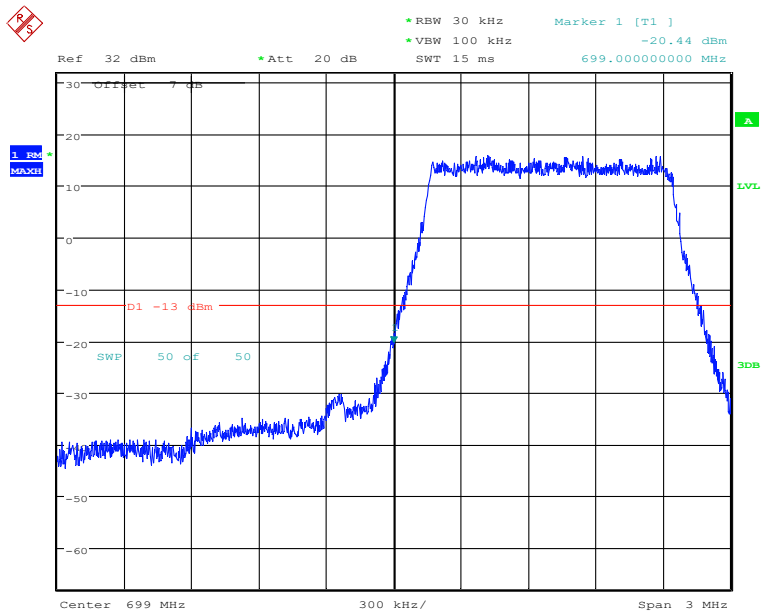
Date: 15.NOV.2019 16:33:36

LTE Band12, 1.4MHz bandwidth, QPSK,(6,0) Mode , Below 698MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
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Date: 15.NOV.2019 16:35:27

LTE Band12, 1.4MHz bandwidth, QPSK,(1,6) Mode, Above 716MHz
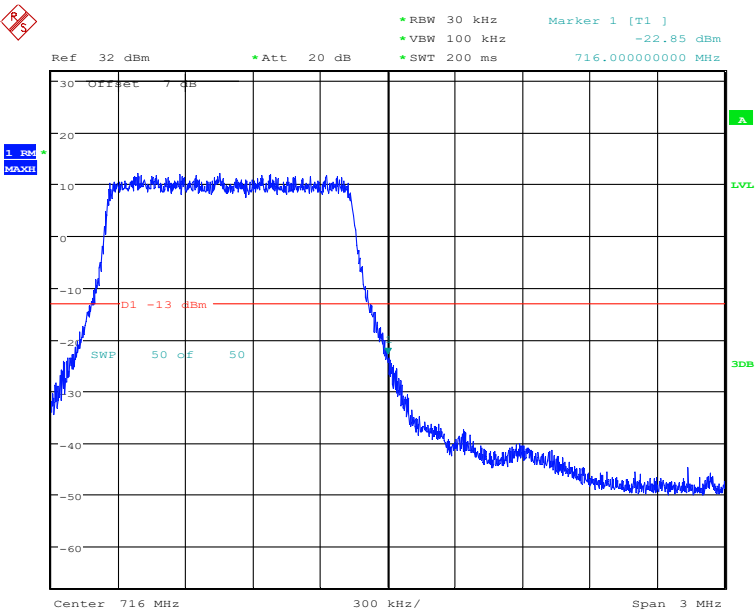
Date: 15.NOV.2019 16:36:57

LTE Band12, 1.4MHz bandwidth, QPSK,(6,0) Mode, Above 716MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
Tel: 0086-23-88069965   FAX: 0086-23-88608777

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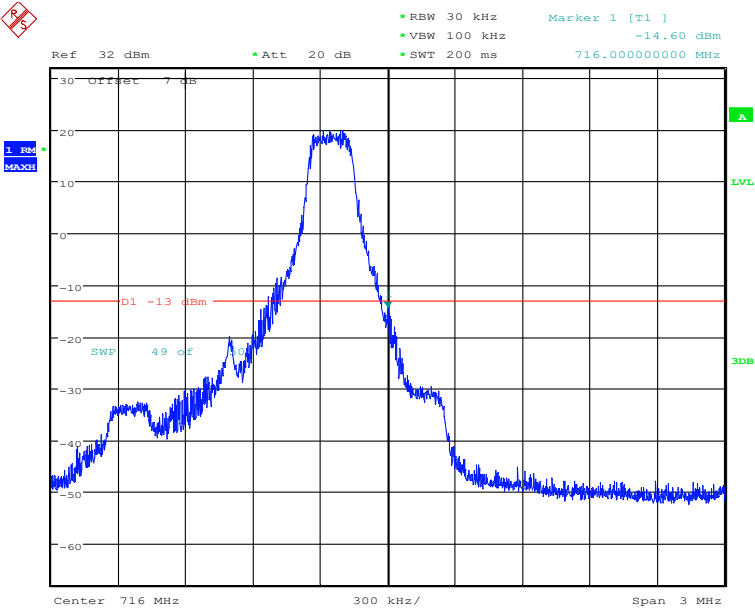
Date: 15.NOV.2019 16:32:53

LTE Band12, 1.4MHz bandwidth, 16QAM,(1,0) Mode , Below 698MHz
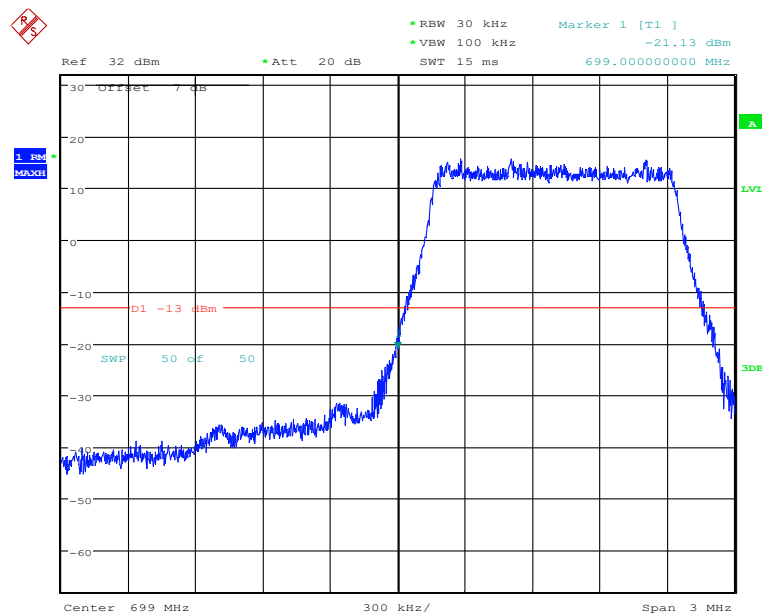
Date: 15.NOV.2019 16:33:15

LTE Band12, 1.4MHz bandwidth, 16QAM,(6,0) Mode , Below 698MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
Tel: 0086-23-88069965   FAX: 0086-23-88608777

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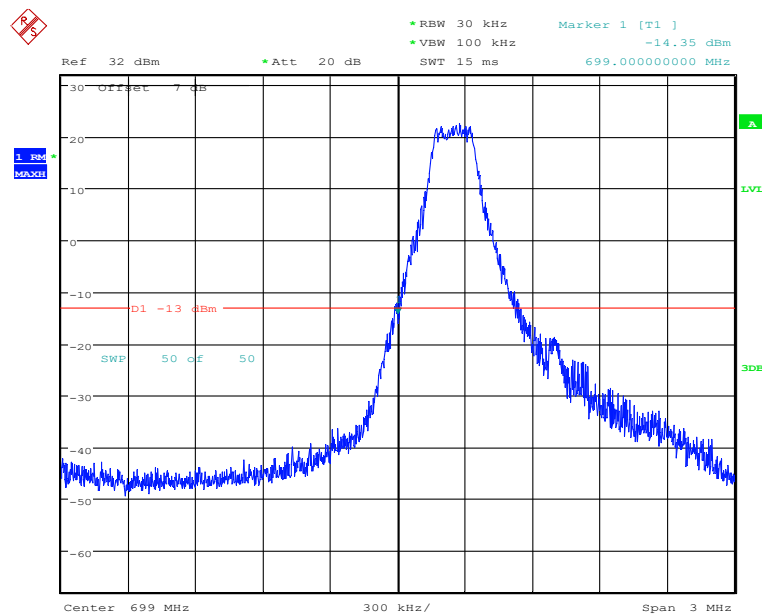
Date: 15.NOV.2019 16:35:10
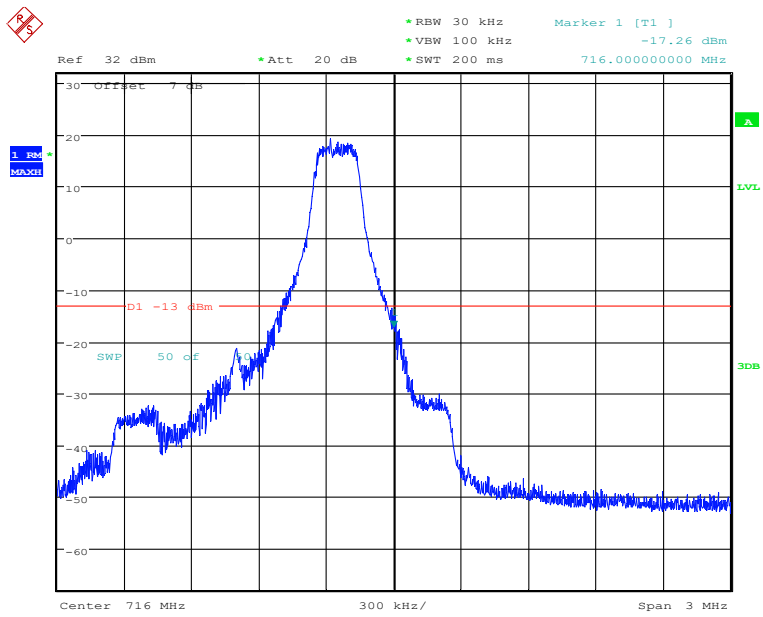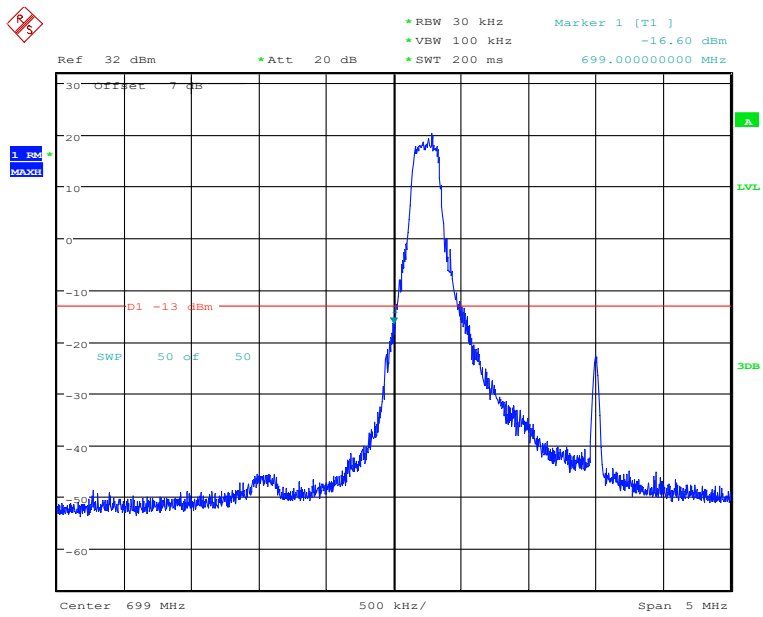
LTE Band12, 1.4MHz bandwidth, 16QAM,(1,6) Mode, Above 716MHz
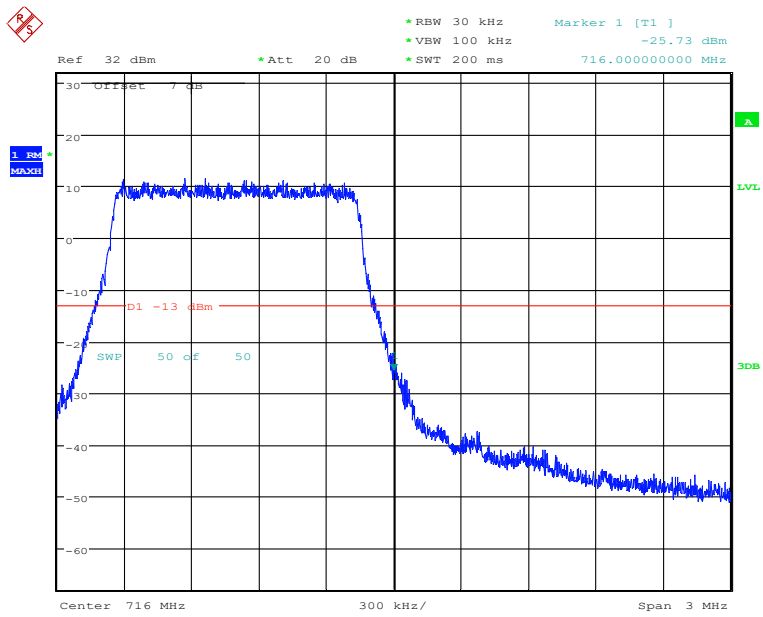
Date: 15.NOV.2019 16:37:18

LTE Band12, 1.4MHz bandwidth, 16QAM,(6,0) Mode, Above 716MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
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```
*RBW  30 kHz        Marker 1 [T1 ]
*VBW  100 kHz              -16.60 dBm
Ref  32 dBm    *Att  20 dB   *SWT  200 ms       699.000000000 MHz
-30  Offset  7 dB
                                                        A

1 RM                                                   LVL
MAXH

     D1 -13 dBm

     SWP    50 of    50                                3DB

Center  699 MHz        500 kHz/              Span  5 MHz
```

Date: 15.NOV.2019 16:40:41

LTE Band12, 3MHz bandwidth, QPSK,(1,0) Mode , Below 698MHz


```
*RBW  30 kHz        Marker 1 [T1 ]
*VBW  100 kHz              -24.73 dBm
Ref  32 dBm    *Att  20 dB   *SWT  200 ms       699.000000000 MHz
-30  Offset  7 dB
                                                        A

1 RM                                                   LVL
MAXH

     D1 -13 dBm

     SWP    50 of    50                                3DB

Center  699 MHz        500 kHz/              Span  5 MHz
```
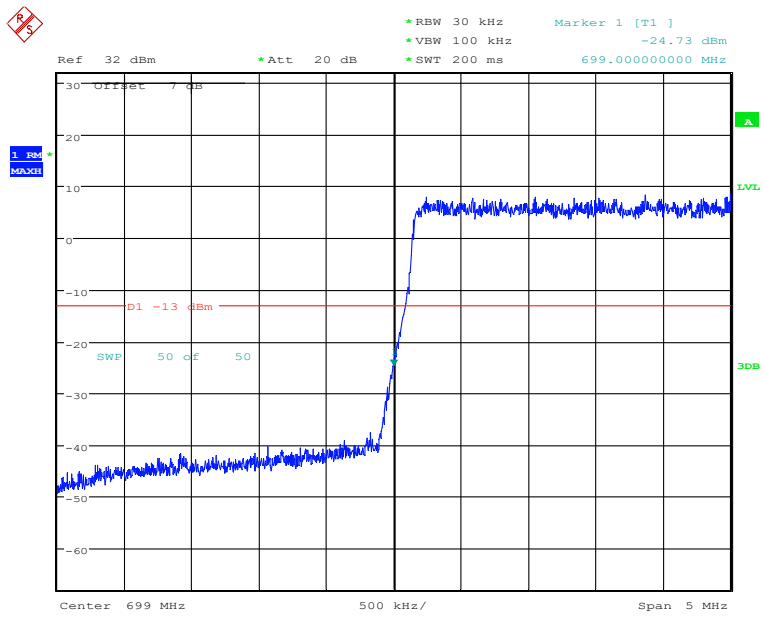
Date: 15.NOV.2019 16:39:47

LTE Band12, 3MHz bandwidth, QPSK,(15,0) Mode , Below 698MHz

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Date: 15.NOV.2019 16:38:37

LTE Band12, 3MHz bandwidth, QPSK,(1,15) Mode, Above 716MHz
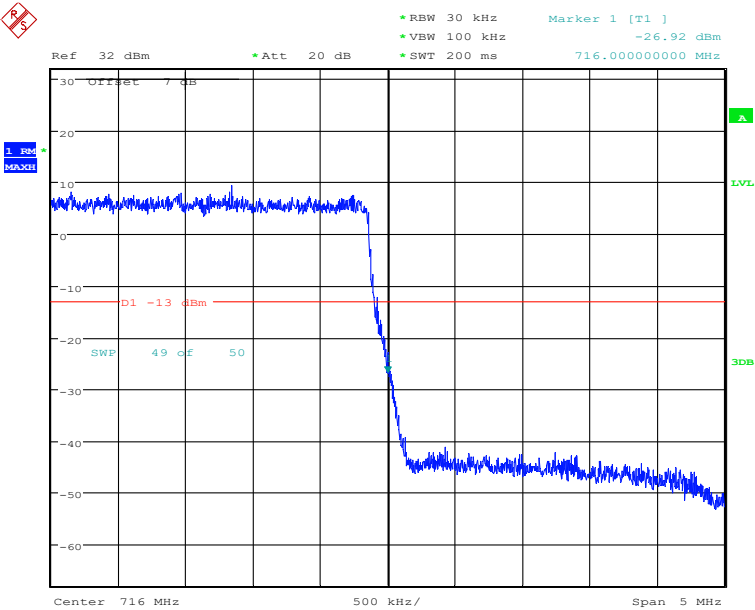
Date: 15.NOV.2019 16:39:16

LTE Band12, 3MHz bandwidth, QPSK,(15,0) Mode, Above 716MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
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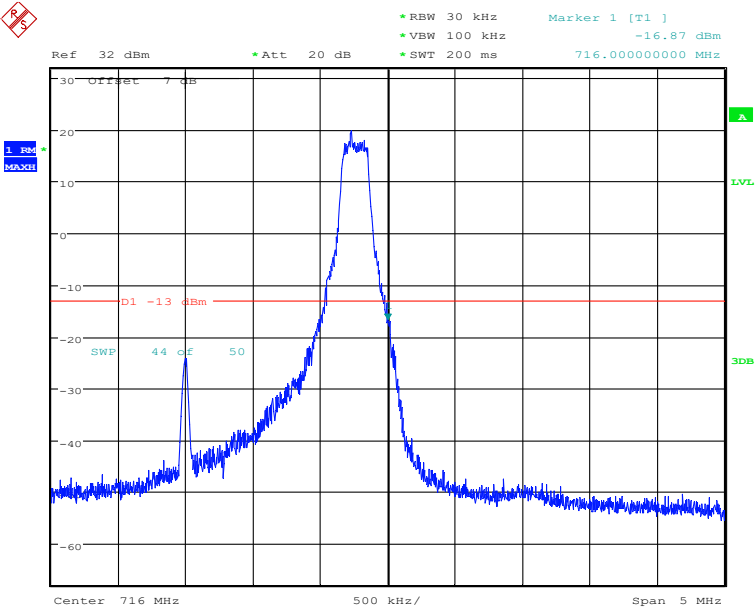
Date: 15.NOV.2019 16:40:23

LTE Band12, 3MHz bandwidth, 16QAM,(1,0) Mode , Below 698MHz
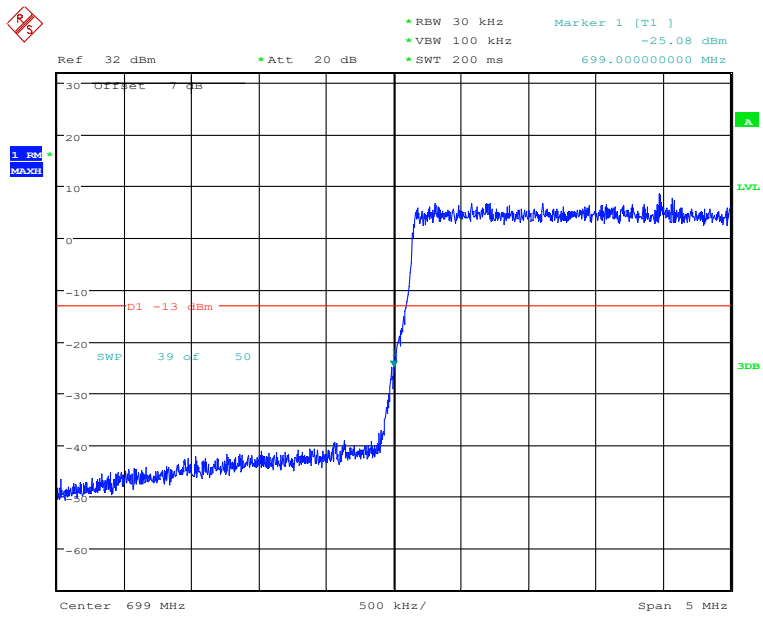
Date: 15.NOV.2019 16:40:01

LTE Band12, 3MHz bandwidth, 16QAM,(15,0) Mode , Below 698MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
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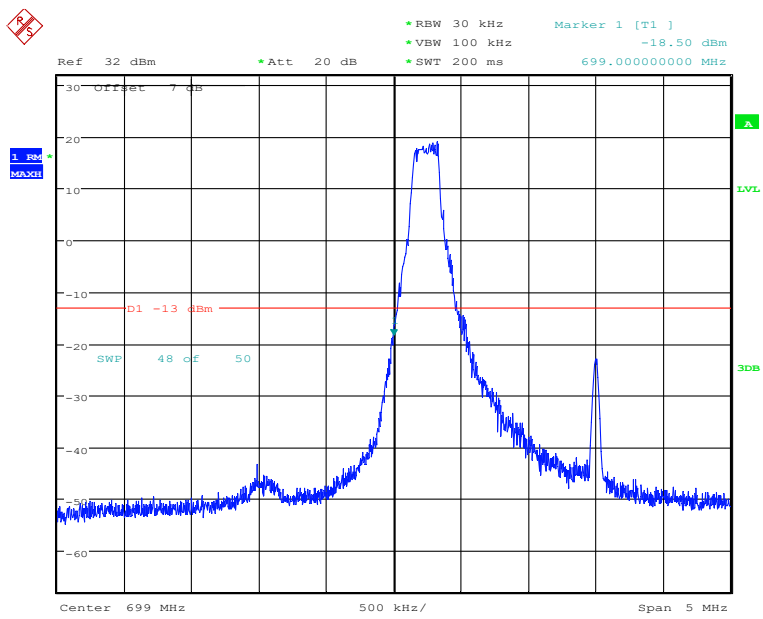
Date: 15.NOV.2019 16:38:21

LTE Band12, 3MHz bandwidth, 16QAM,(1,15) Mode, Above 716MHz
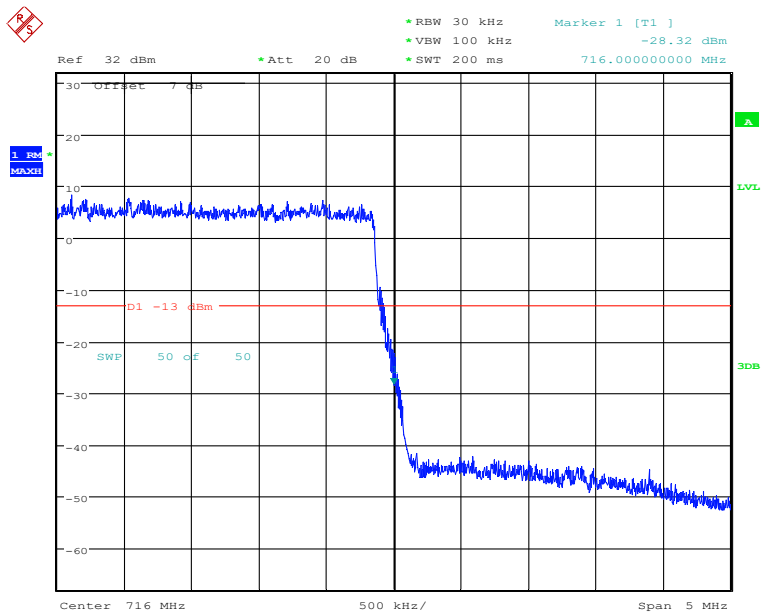
Date: 15.NOV.2019 16:38:59

LTE Band12, 3MHz bandwidth, 16QAM,(15,0) Mode, Above 716MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
Tel: 0086-23-88069965   FAX: 0086-23-88608777
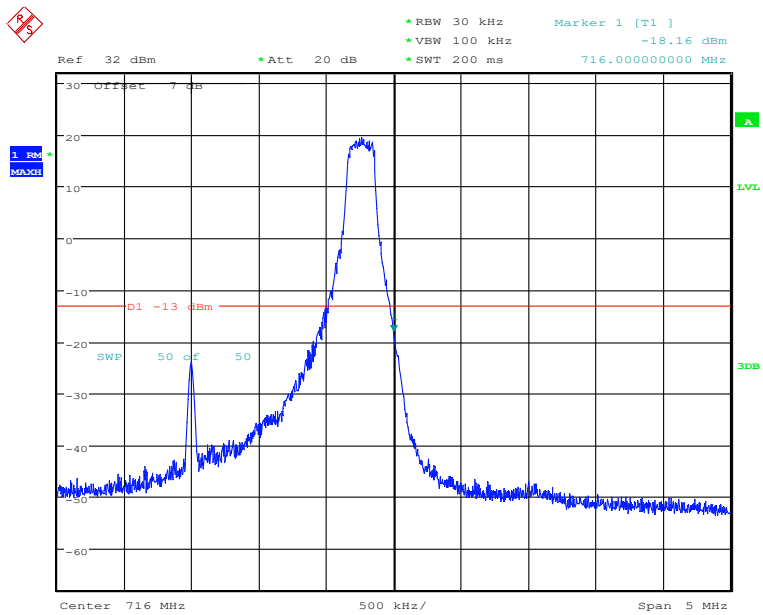
Page 312 of 441
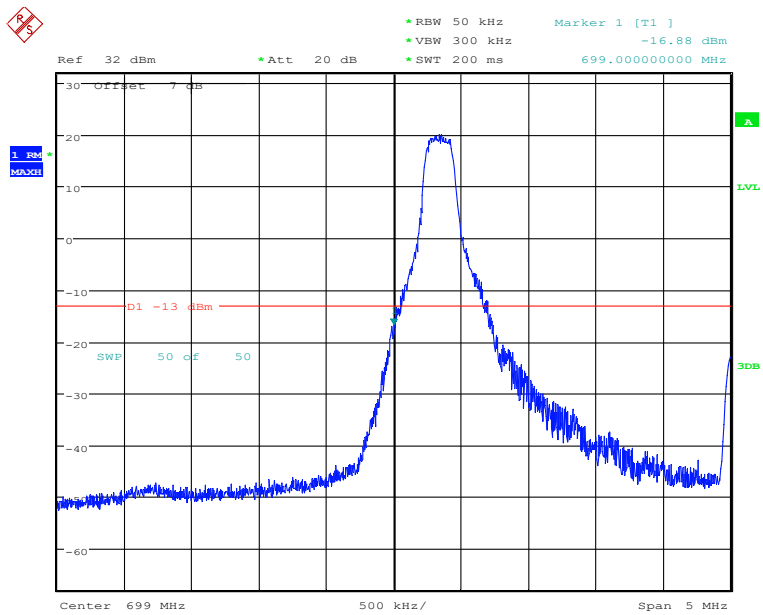
Date: 15.NOV.2019 16:43:17

LTE Band12, 5MHz bandwidth, QPSK,(1,0) Mode , Below 698MHz
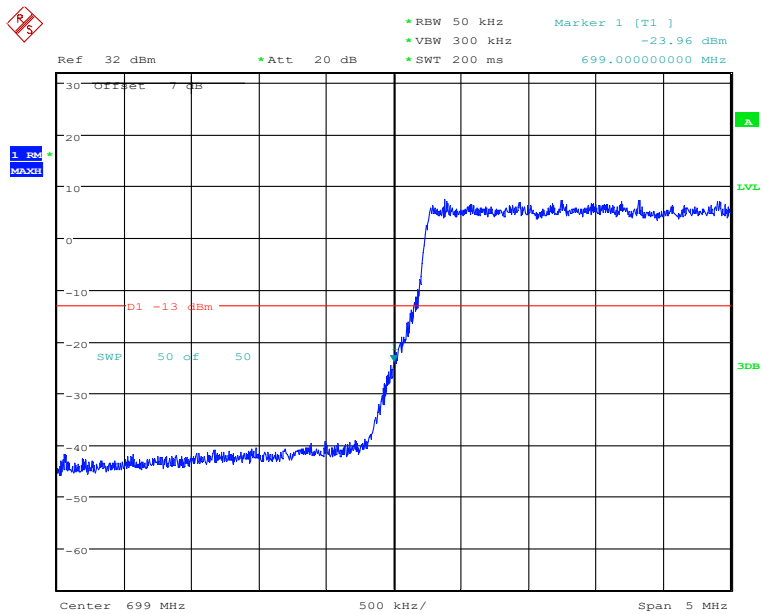
Date: 15.NOV.2019 16:42:03

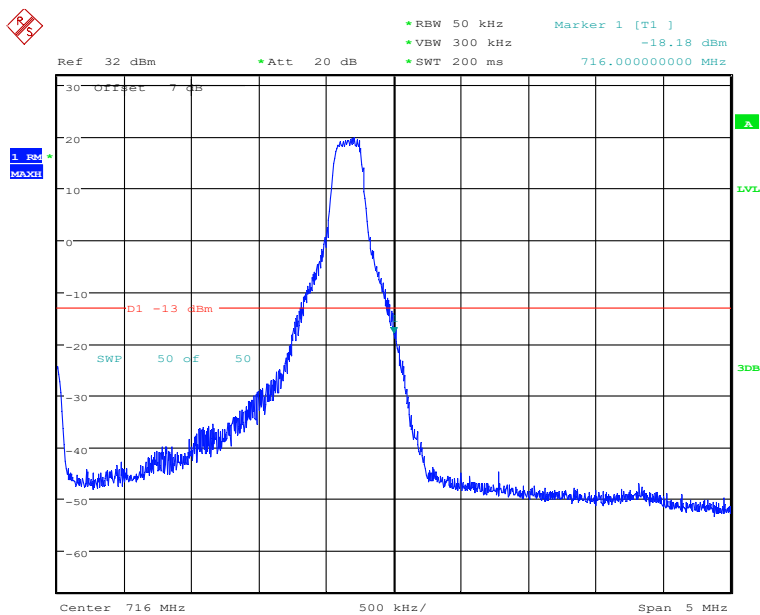LTE Band12, 5MHz bandwidth, QPSK,(25,0) Mode , Below 698MHz

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Report No.:B19W50601-WWAN_Rev1


```
*RBW  50 kHz          Marker 1 [T1 ]
*VBW  300 kHz              -18.18 dBm
Ref  32 dBm        *Att  20 dB    *SWT 200 ms        716.000000000 MHz
-30 Offset   7 dB                                                      A

1 RM *                                                                LVL
MAXH

D1 -13 dBm

SWP    50 of  50                                                      3DB

Center 716 MHz           500 kHz/              Span  5 MHz
```

Date: 15.NOV.2019 16:43:59

LTE Band12, 5MHz bandwidth, QPSK,(1,25) Mode, Above 716MHz


```
*RBW  50 kHz          Marker 1 [T1 ]
*VBW  300 kHz              -26.88 dBm
Ref  32 dBm        *Att  20 dB    *SWT 200 ms        716.000000000 MHz
-30 Offset   7 dB                                                      A

1 RM *                                                                LVL
MAXH

D1 -13 dBm

                                                                     3DB

Center 716 MHz           500 kHz/              Span  5 MHz
```
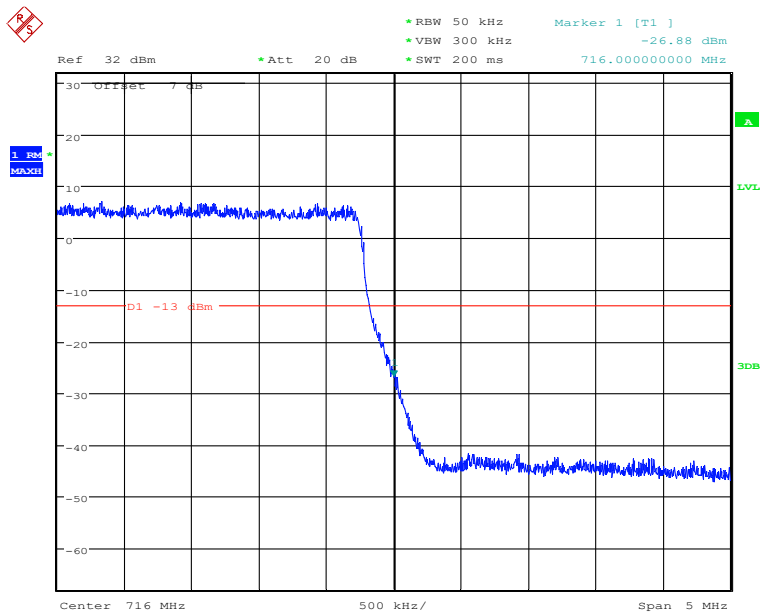
Date: 15.NOV.2019 16:45:15

LTE Band12, 5MHz bandwidth, QPSK,(25,0) Mode, Above 716MHz

```
*RBW 50 kHz          Marker 1 [T1 ]
*VBW 300 kHz               -17.75 dBm
Ref  32 dBm      *Att  20 dB   *SWT 200 ms    699.000000000 MHz
-30  Offset  7 dB
                                              A
 20
1 RM
MAXH                                          LVL
 10

  0

-10  D1 -13 dBm
-20  SWP   50 of  50                          3DB

-30

-40

-50

-60

Center  699 MHz      500 kHz/          Span  5 MHz
```
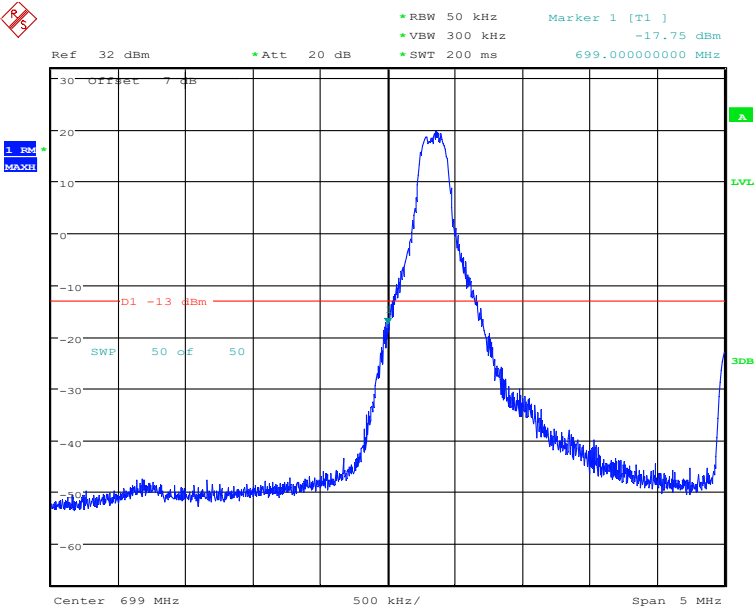
Date: 15.NOV.2019 16:42:56

LTE Band12, 5MHz bandwidth, 16QAM,(1,0) Mode , Below 698MHz


```
*RBW 50 kHz          Marker 1 [T1 ]
*VBW 300 kHz               -24.14 dBm
Ref  32 dBm      *Att  20 dB   *SWT 200 ms    699.000000000 MHz
-30  Offset  7 dB
                                              A
 20
1 RM
MAXH
 10                                           LVL

  0

-10  D1 -13 dBm
-20  SWP   44 of  50                          3DB

-30

-40

-50

-60

Center  699 MHz      500 kHz/          Span  5 MHz
```
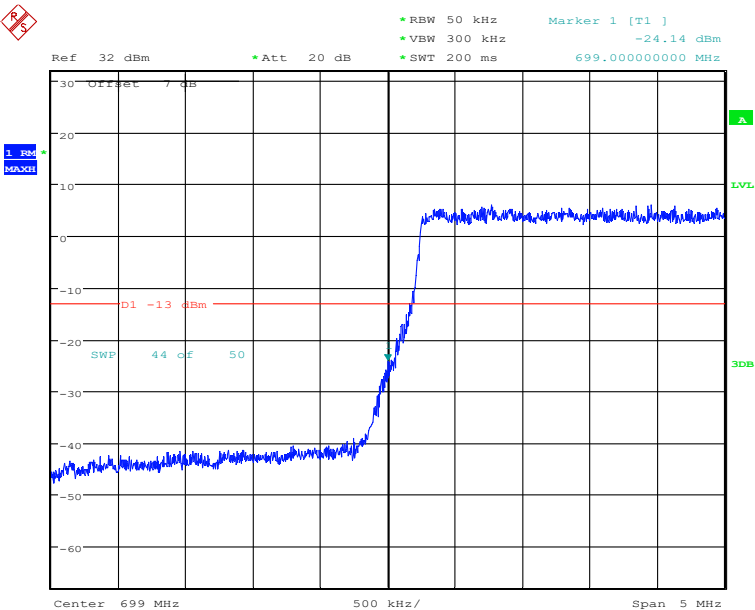
Date: 15.NOV.2019 16:42:21

LTE Band12, 5MHz bandwidth, 16QAM,(25,0) Mode , Below 698MHz

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Report No.:B19W50601-WWAN_Rev1


```
                                    *RBW  50 kHz      Marker 1 [T1 ]
                                    *VBW  300 kHz              -17.25 dBm
Ref  32 dBm          *Att  20 dB    *SWT  200 ms      716.000000000 MHz
-30  Offset  7 dB
                                                                        A
 20
1 RM *
MAXH 10                                                                 LVL

  0

-10
   D1 -13 dBm
-20
     SWP    50 of   50                                                  3DB
-30

-40

-50

-60

Center  716 MHz          500 kHz/              Span  5 MHz
```
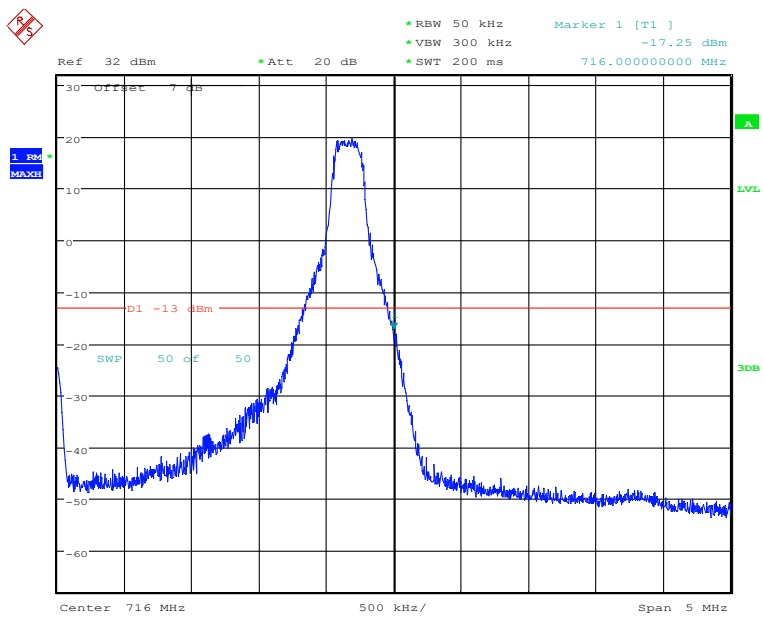
Date: 15.NOV.2019 16:44:18

LTE Band12, 5MHz bandwidth, 16QAM,(1,25) Mode, Above 716MHz


```
                                    *RBW  50 kHz      Marker 1 [T1 ]
                                    *VBW  300 kHz              -26.58 dBm
Ref  32 dBm          *Att  20 dB    *SWT  200 ms      716.000000000 MHz
-30  Offset  7 dB
                                                                        A
 20
1 RM *
MAXH 10                                                                 LVL

  0

-10
   D1 -13 dBm
-20
                                                                        3DB
-30

-40

-50

-60

Center  716 MHz          500 kHz/              Span  5 MHz
```
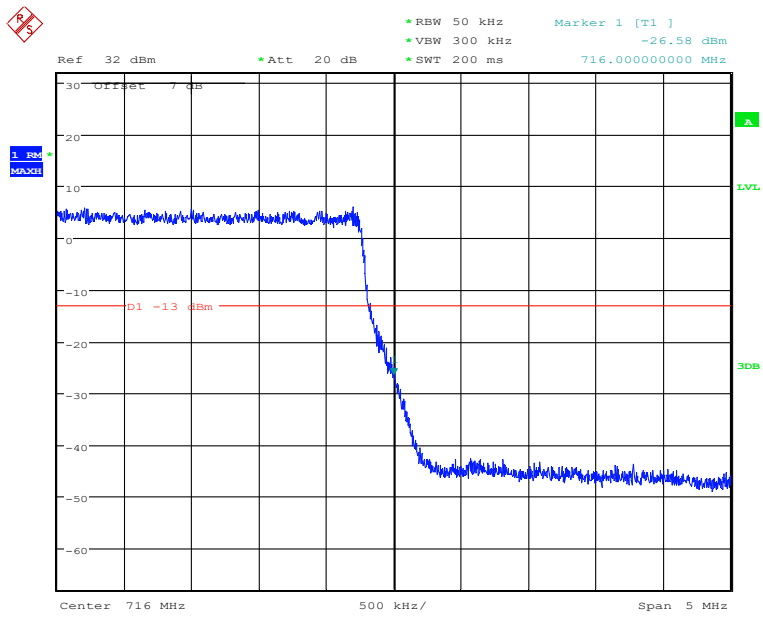
Date: 15.NOV.2019 16:44:57

LTE Band12, 5MHz bandwidth, 16QAM,(25,0) Mode, Above 716MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
Tel: 0086-23-88069965   FAX: 0086-23-88608777
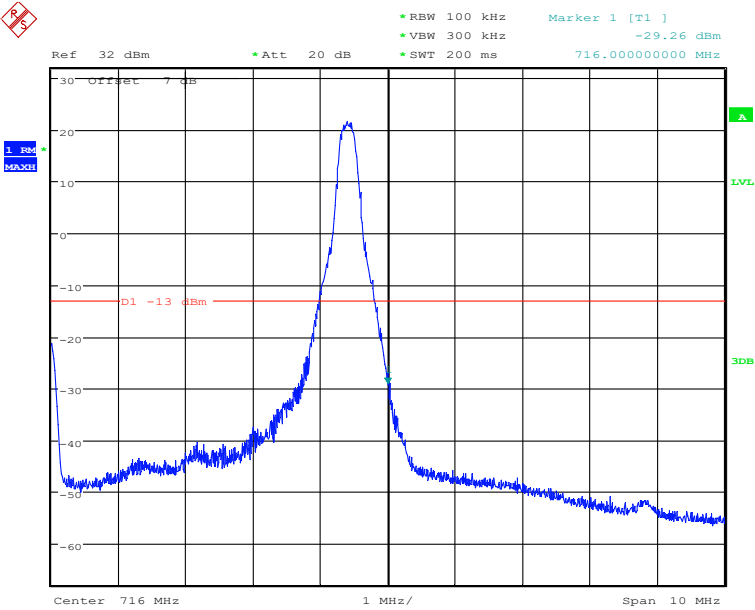
Page 316 of 441
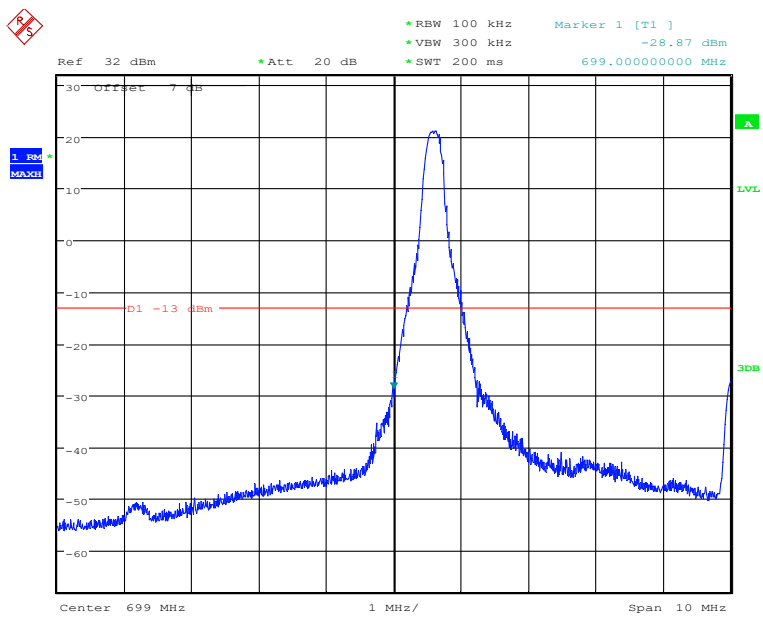
Date: 15.NOV.2019 16:49:12

LTE Band12, 10MHz bandwidth, QPSK,(1,0) Mode , Below 698MHz
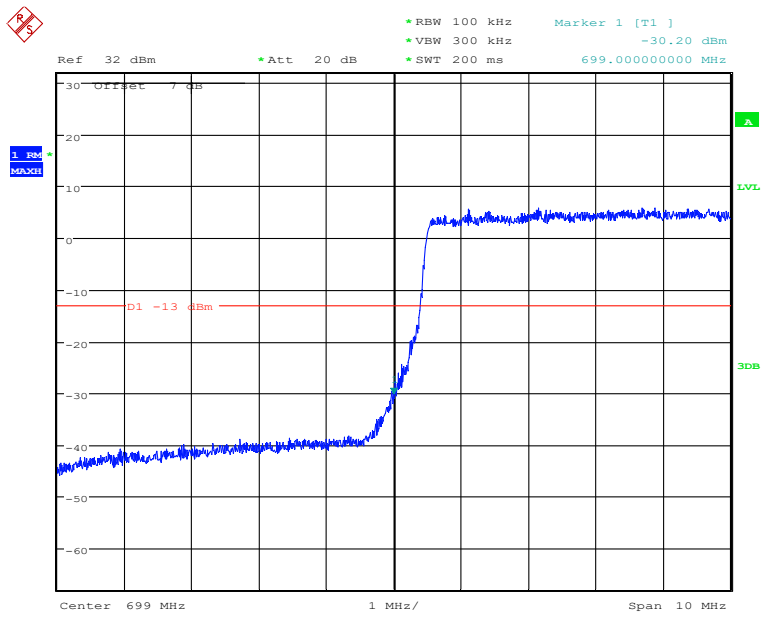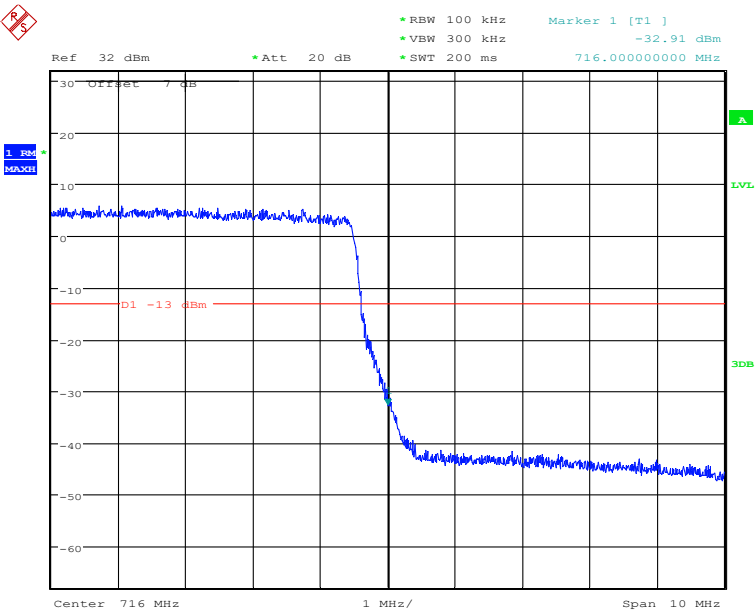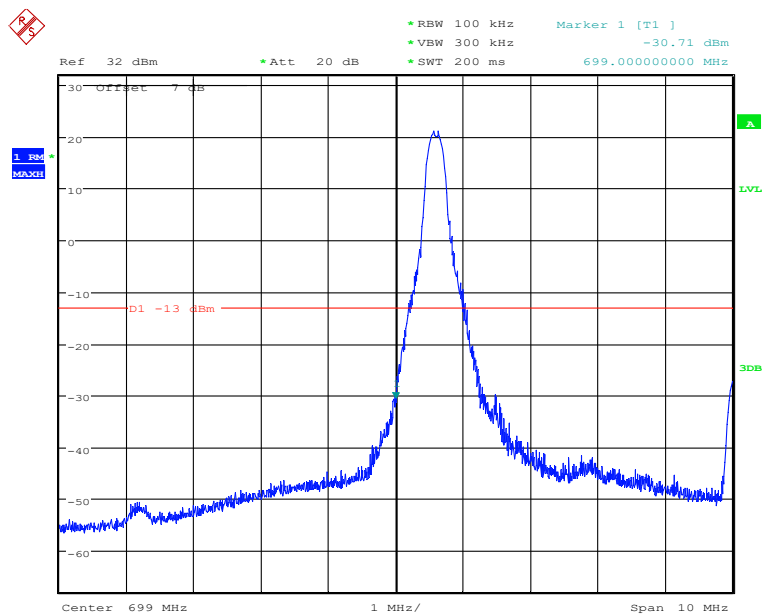

Date: 15.NOV.2019 16:49:58

LTE Band12, 10MHz bandwidth, QPSK,(50,0) Mode , Below 698MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
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Report No.:B19W50601-WWAN_Rev1

Date: 15.NOV.2019 16:48:33

LTE Band12, 10MHz bandwidth, QPSK,(1,50) Mode, Above 716MHz
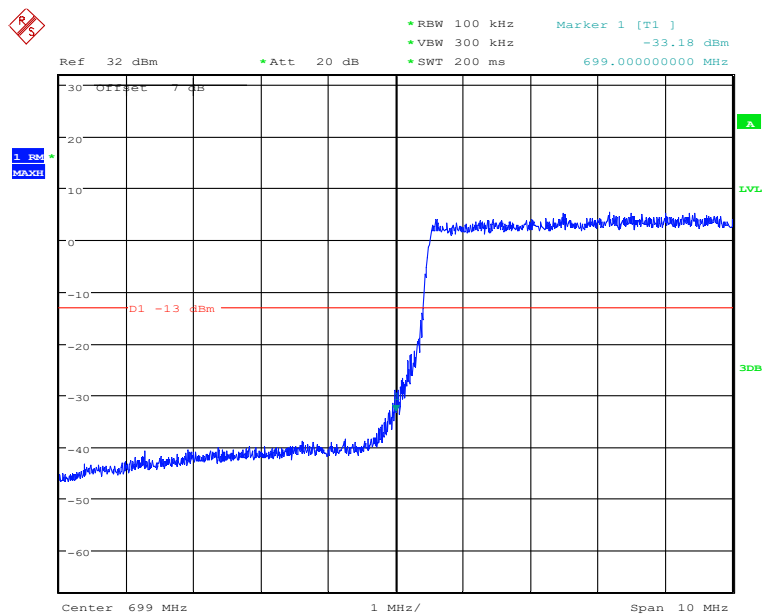

Date: 15.NOV.2019 16:47:34

LTE Band12, 10MHz bandwidth, QPSK,(50,0) Mode, Above 716MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
Tel: 0086-23-88069965   FAX: 0086-23-88608777
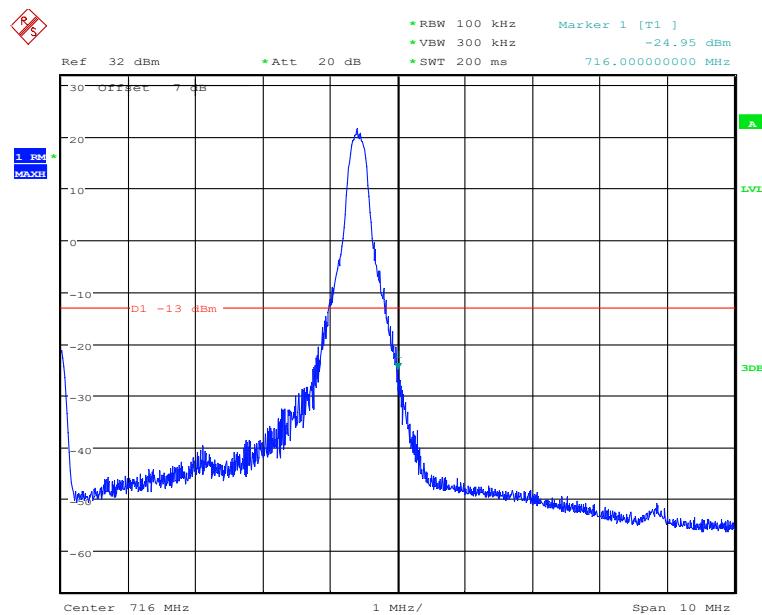
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Date: 15.NOV.2019 16:49:28

LTE Band12, 10MHz bandwidth, 16QAM,(1,0) Mode , Below 698MHz
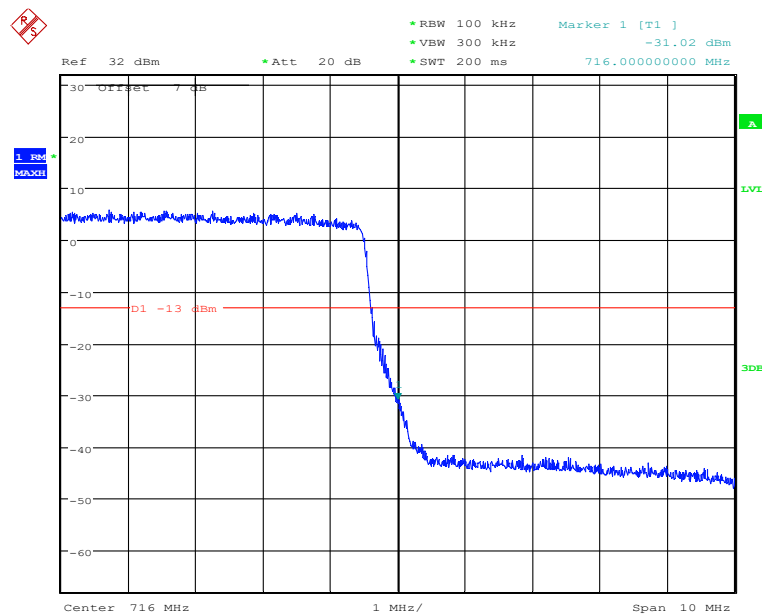

Date: 15.NOV.2019 16:49:42

LTE Band12, 10MHz bandwidth, 16QAM,(50,0) Mode , Below 698MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
Tel: 0086-23-88069965   FAX: 0086-23-88608777
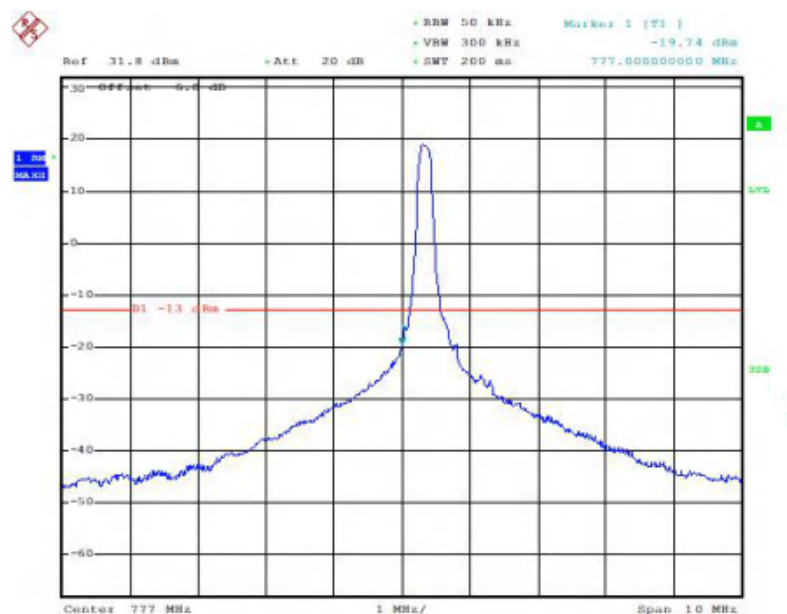
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Date: 15.NOV.2019 16:48:19

LTE Band12, 10MHz bandwidth, 16QAM,(1,50) Mode, Above 716MHz

Date: 15.NOV.2019 16:47:56

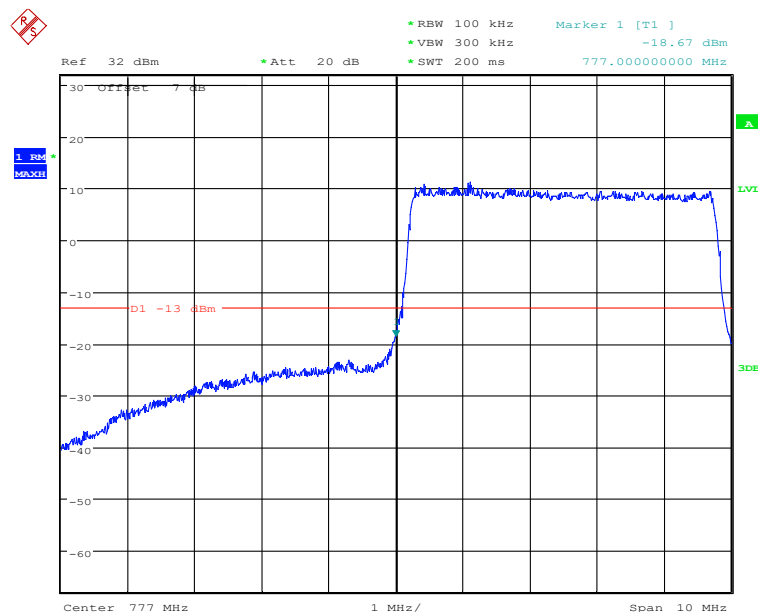LTE Band12, 10MHz bandwidth, 16QAM,(50,0) Mode, Above 716MHz

Address：No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
Tel: 0086-23-88069965   FAX: 0086-23-88608777
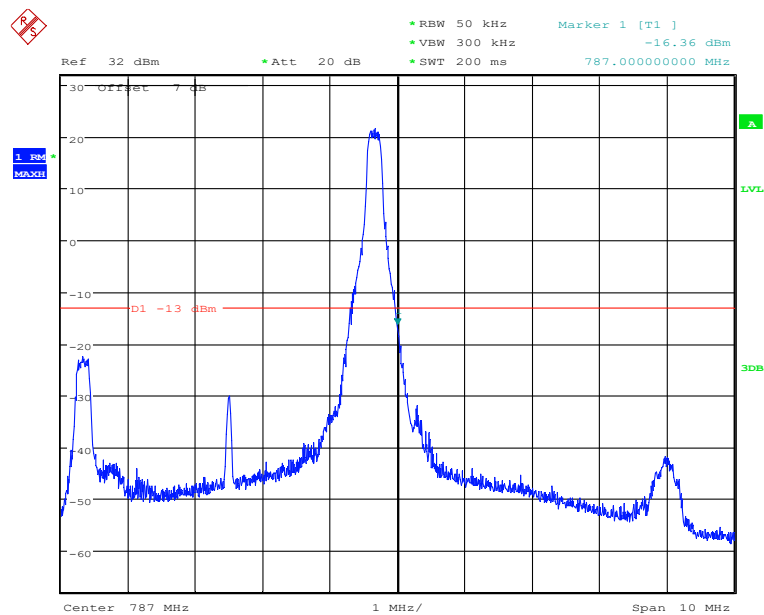
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5.5.8 LTE B13 Band Edge Results

LTE Band13, 5MHz bandwidth, QPSK,(1,0) Mode , Below 776MHz

LTE Band13, 5MHz bandwidth, QPSK,(25,0) Mode , Below 776MHz

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Date: 15.NOV.2019 17:03:55
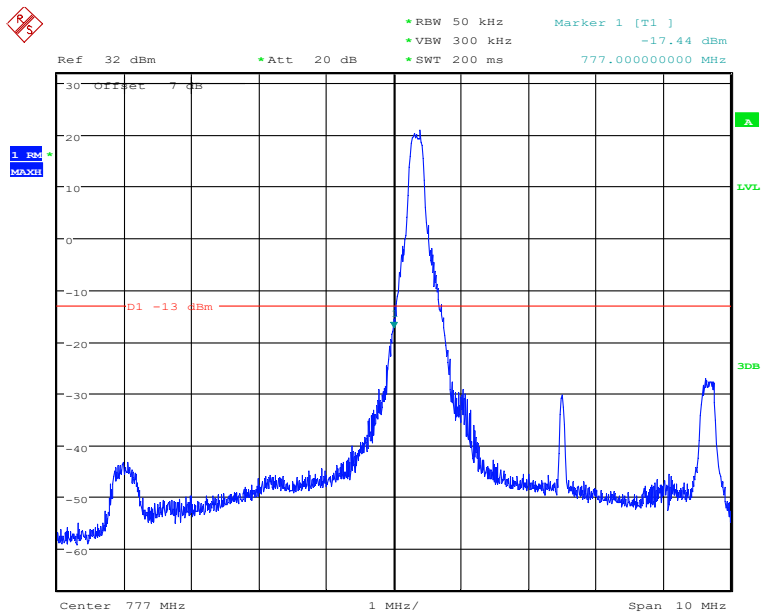
LTE Band13, 5MHz bandwidth, QPSK,(1,25) Mode, Above 788MHz
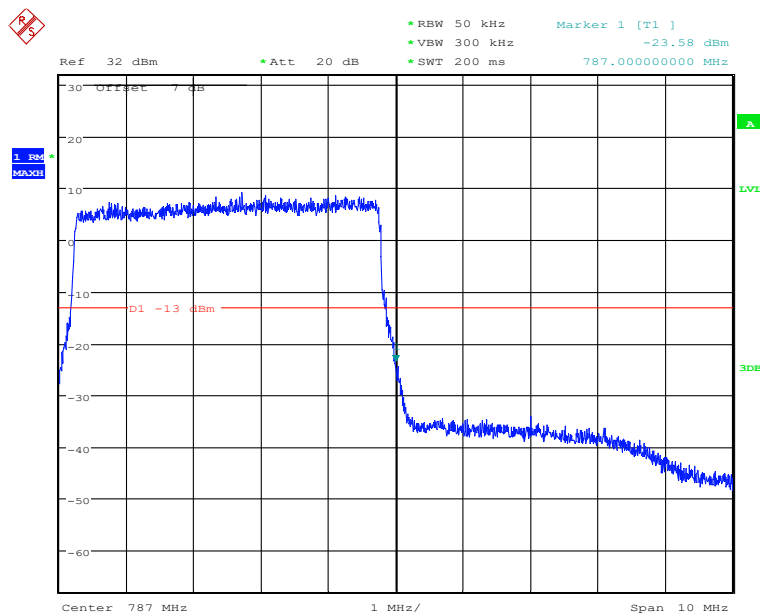
Date: 15.NOV.2019 17:04:37

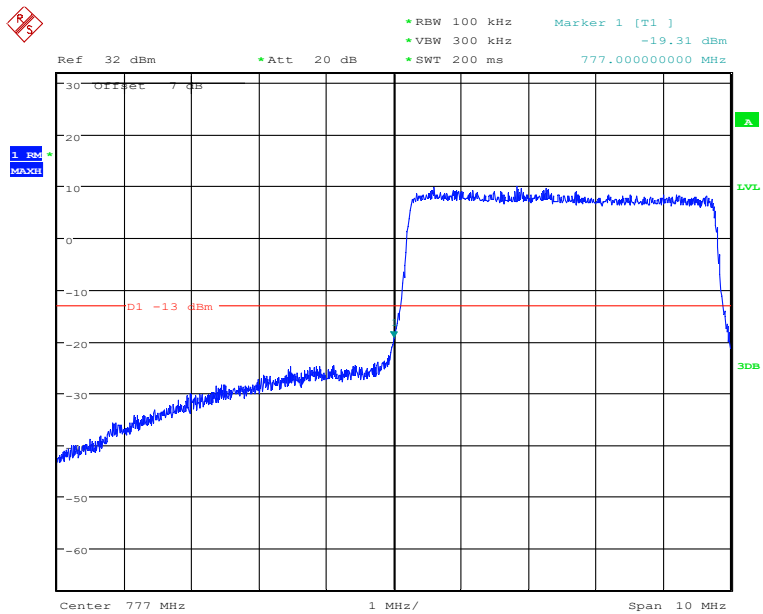LTE Band13, 5MHz bandwidth, QPSK,(25,0) Mode, Above 788MHz

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Tel: 0086-23-88069965   FAX: 0086-23-88608777

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Date: 15.NOV.2019 17:02:55
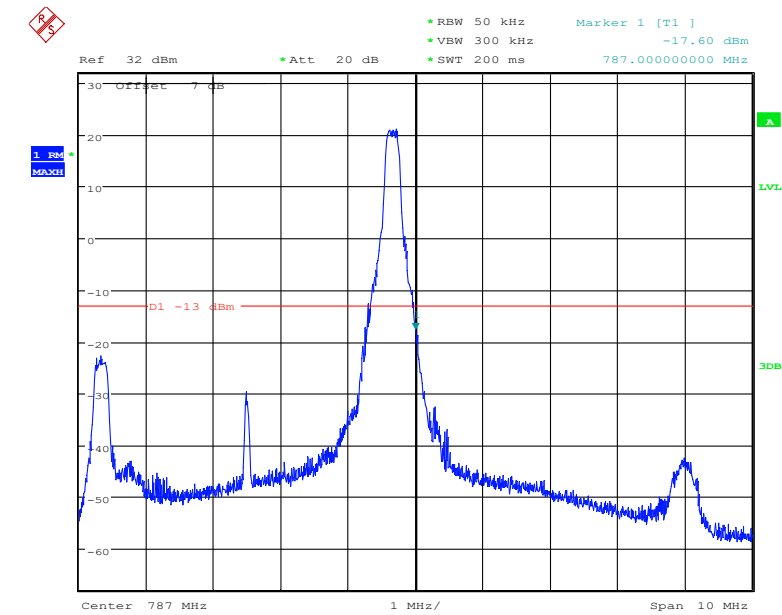
LTE Band13, 5MHz bandwidth, 16QAM,(1,0) Mode , Below 776MHz

Date: 15.NOV.2019 17:02:31

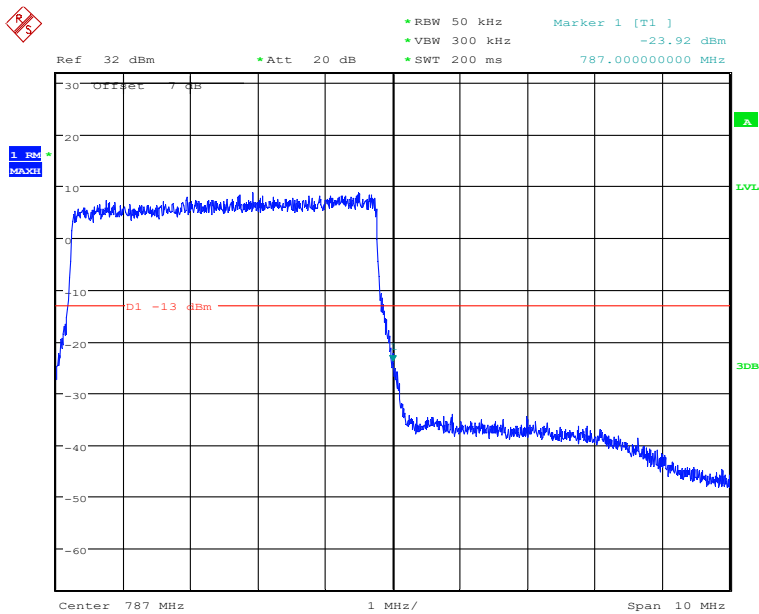LTE Band13, 5MHz bandwidth, 16QAM,(25,0) Mode , Below 776MHz

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Tel: 0086-23-88069965   FAX: 0086-23-88608777

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Date: 15.NOV.2019 17:04:08

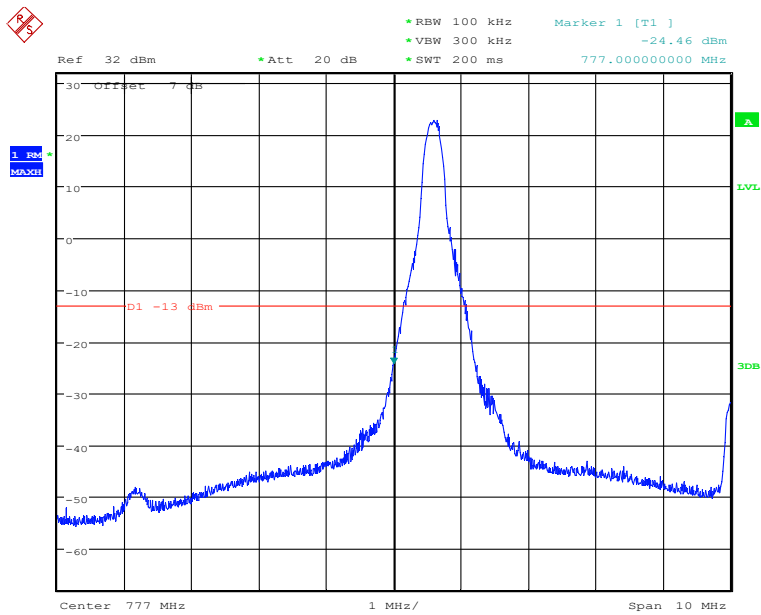LTE Band13, 5MHz bandwidth, 16QAM,(1,25) Mode, Above 788MHz

Date: 15.NOV.2019 17:04:23

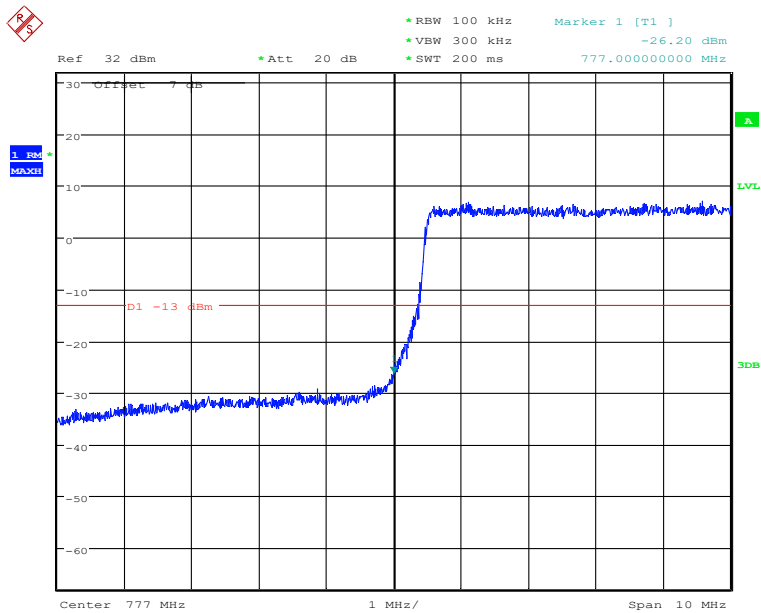LTE Band13, 5MHz bandwidth, 16QAM,(25,0) Mode, Above 788MHz

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*RBW 100 kHz	Marker 1 [T1]	
*VBW 300 kHz		-24.46 dBm
Ref 32 dBm	*Att 20 dB	*SWT 200 ms	777.000000000 MHz

Date: 15.NOV.2019 17:07:37

LTE Band13, 10MHz bandwidth, QPSK,(1,0) Mode , Below 776MHz

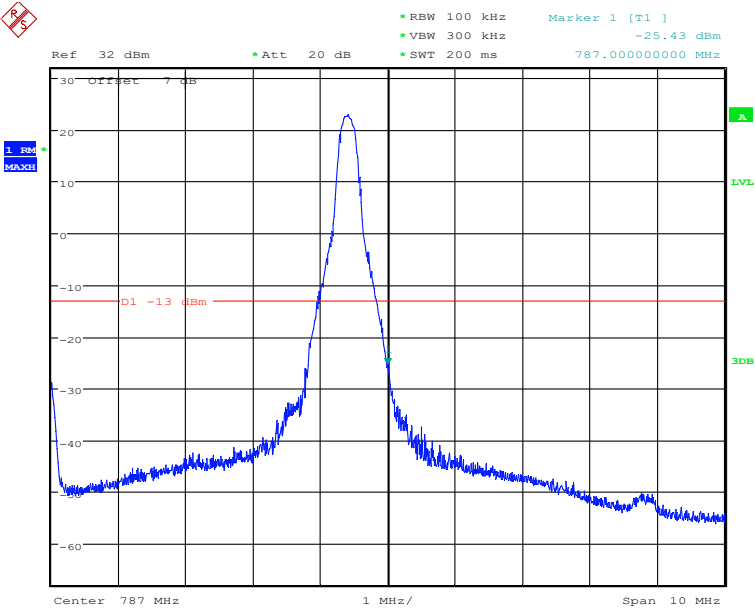|		
*RBW 100 kHz	Marker 1 [T1]	
*VBW 300 kHz		-26.20 dBm
Ref 32 dBm	*Att 20 dB	*SWT 200 ms	777.000000000 MHz

Date: 15.NOV.2019 17:08:29

LTE Band13, 10MHz bandwidth, QPSK,(50,0) Mode , Below 776MHz

Date: 15.NOV.2019 17:06:17

LTE Band13, 10MHz bandwidth, QPSK,(1,50) Mode, Above 788MHz

Date: 15.NOV.2019 17:05:25

LTE Band13, 10MHz bandwidth, QPSK,(50,0) Mode, Above 788MHz

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Date: 15.NOV.2019 17:07:50

LTE Band13, 10MHz bandwidth, 16QAM,(1,0) Mode , Below 776MHz
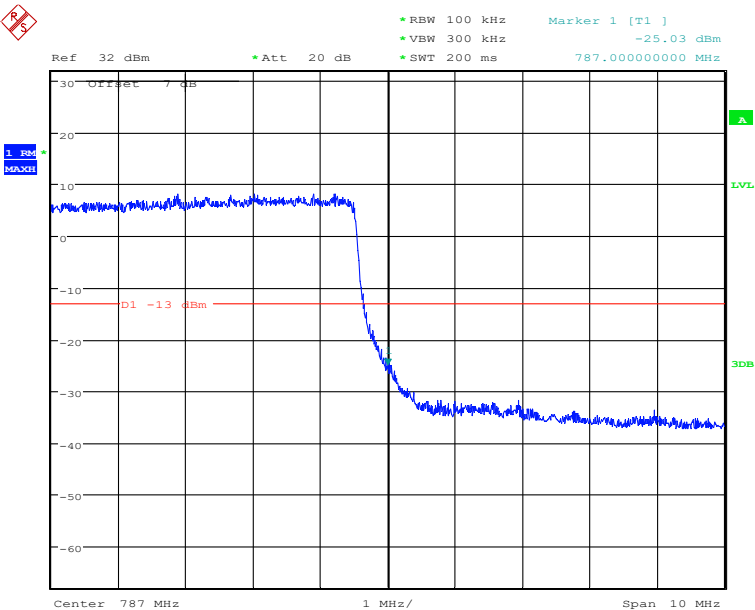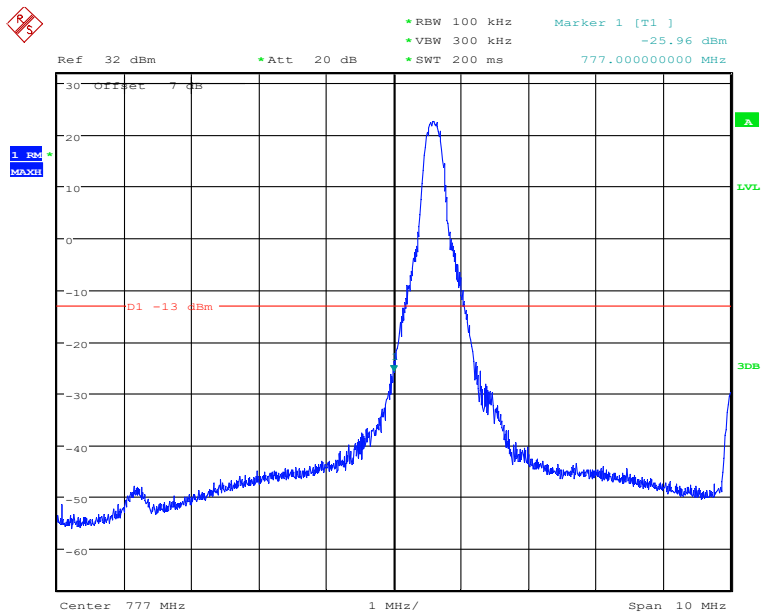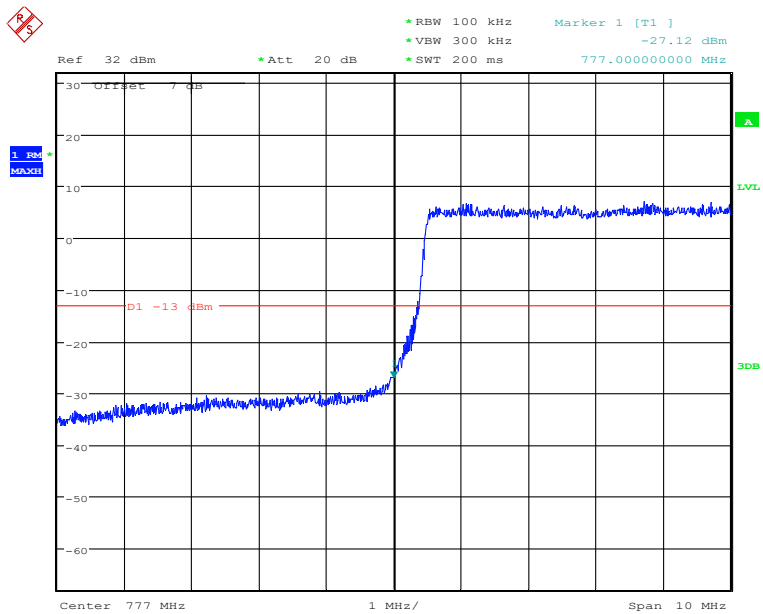

Date: 15.NOV.2019 17:08:12

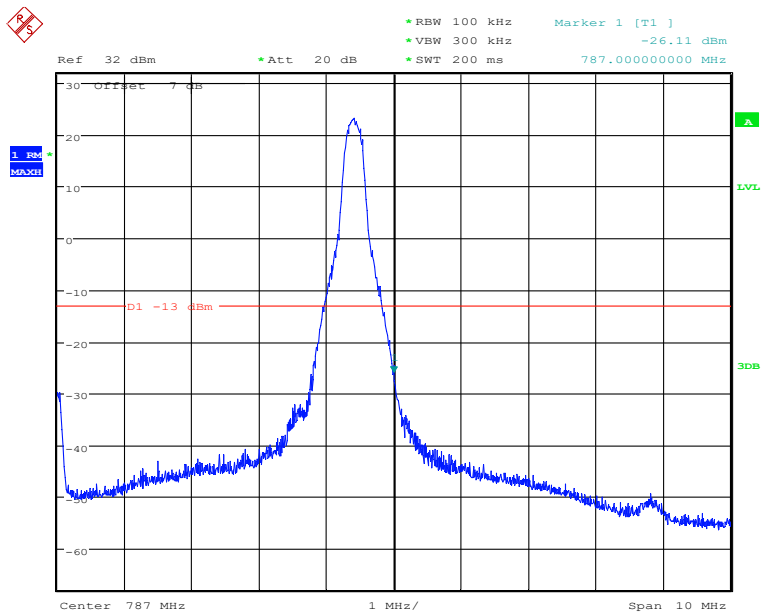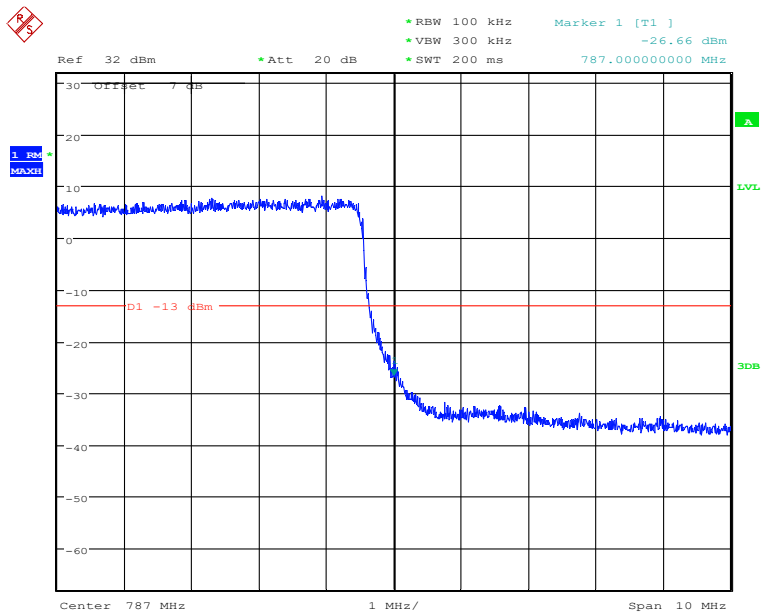LTE Band13, 10MHz bandwidth, 16QAM,(50,0) Mode , Below 776MHz

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```
*RBW  100 kHz        Marker 1 [T1 ]
*VBW  300 kHz              -26.11 dBm
Ref  32 dBm      *Att  20 dB   *SWT  200 ms      787.000000000 MHz
-30  Offset   7 dB
D1 -13 dBm
Center  787 MHz          1 MHz/            Span  10 MHz
```

Date: 15.NOV.2019 17:06:04

LTE Band13, 10MHz bandwidth, 16QAM,(1,50) Mode, Above 788MHz


```
*RBW  100 kHz        Marker 1 [T1 ]
*VBW  300 kHz              -26.66 dBm
Ref  32 dBm      *Att  20 dB   *SWT  200 ms      787.000000000 MHz
-30  Offset   7 dB
D1 -13 dBm
Center  787 MHz          1 MHz/            Span  10 MHz
```

Date: 15.NOV.2019 17:05:40

LTE Band13, 10MHz bandwidth, 16QAM,(50,0) Mode, Above 788MHz

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5.5.9 LTE B25 Band Edge Results
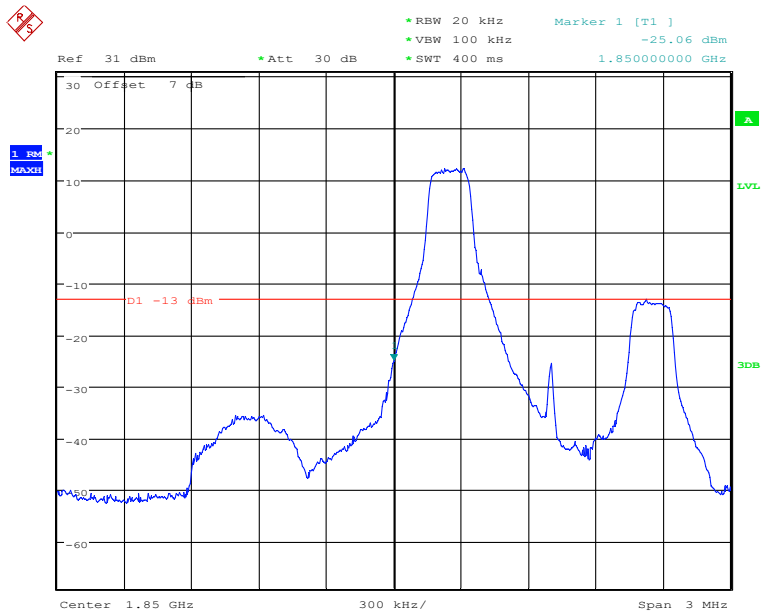
Date: 15.NOV.2019 19:29:47
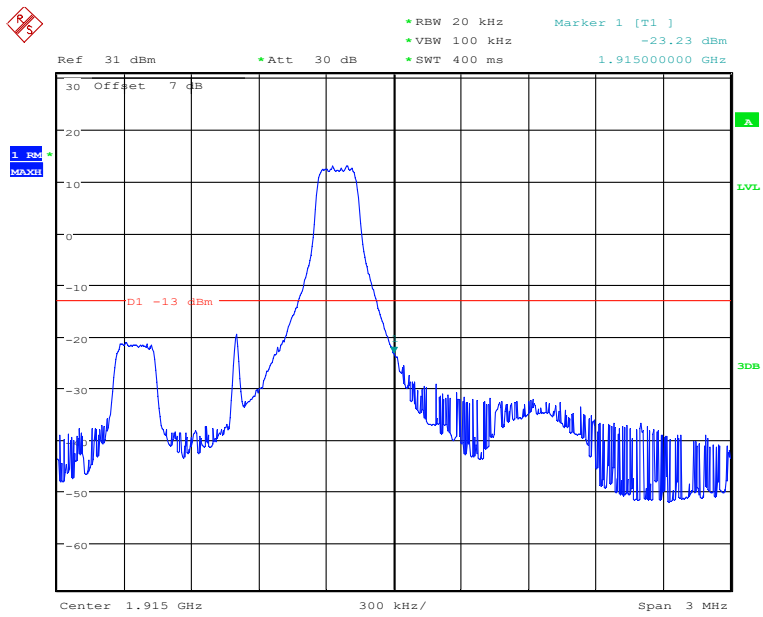
LTE Band25, 1.4MHz bandwidth, QPSK,(1,0) Mode , Below 1850MHz
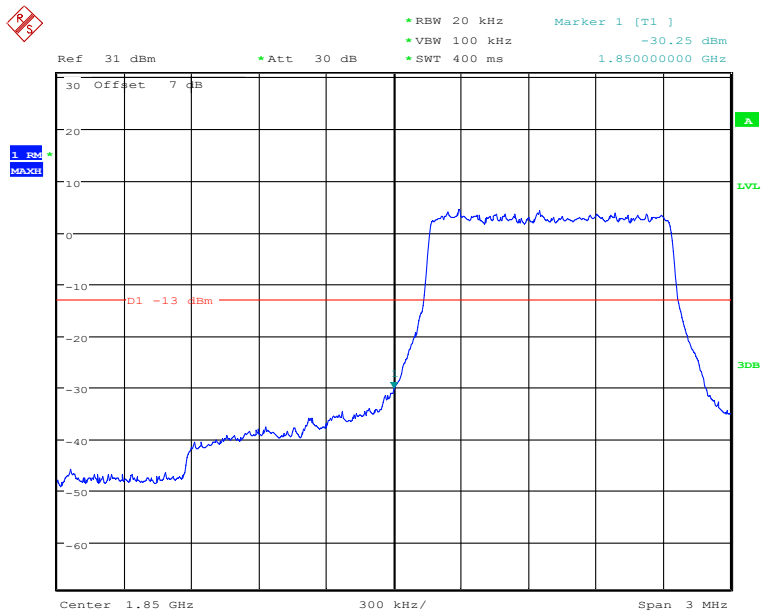
Date: 15.NOV.2019 19:30:33

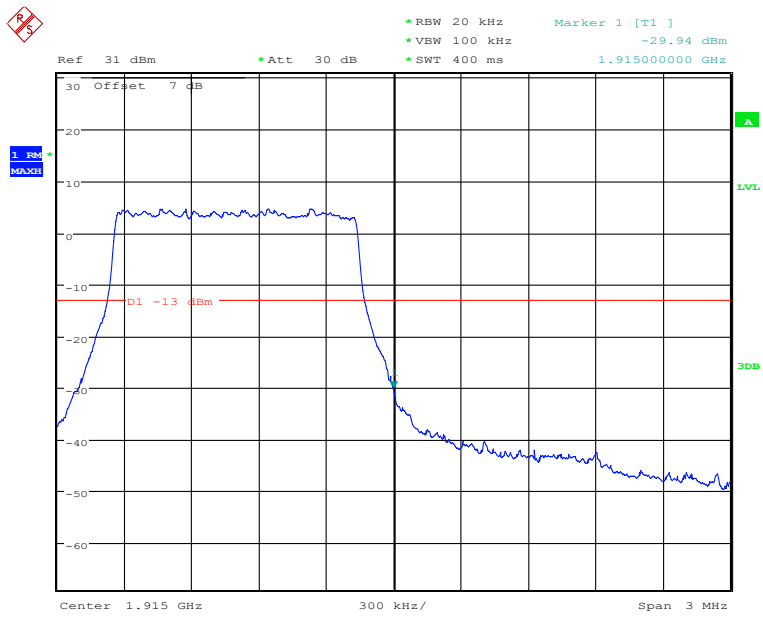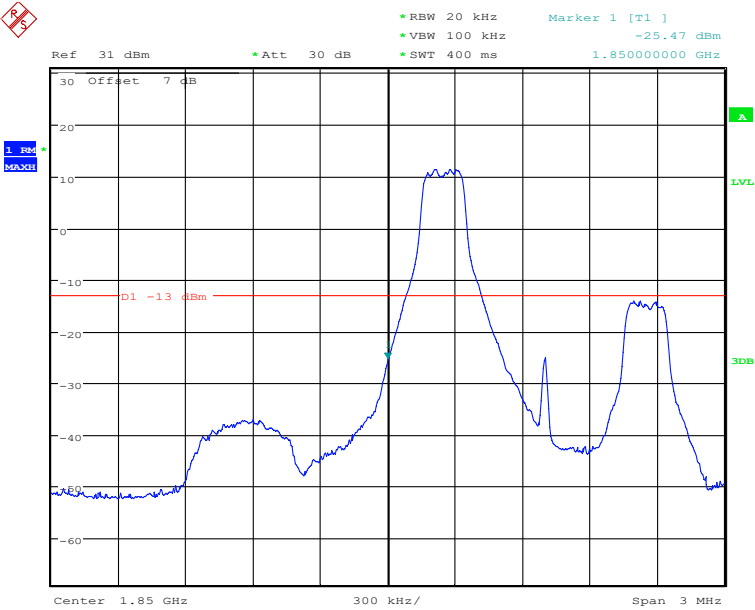LTE Band25, 1.4MHz bandwidth, QPSK,(6,0) Mode , Below 1850MHz

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```
*RBW 20 kHz          Marker 1 [T1 ]
*VBW 100 kHz                  -23.23 dBm
Ref   31 dBm          *Att  30 dB    *SWT  400 ms        1.915000000 GHz
30 Offset  7 dB
                                                                    A
20
1 RM *
MAXH                                                                LVL
10
0
-10          D1 -13 dBm
-20                                                                 3DB
-30
-40
-50
-60
Center  1.915 GHz          300 kHz/              Span  3 MHz
```

Date: 15.NOV.2019 19:41:46

LTE Band25, 1.4MHz bandwidth, QPSK,(1,6) Mode, Above 1915MHz


```
*RBW 20 kHz          Marker 1 [T1 ]
*VBW 100 kHz                  -29.94 dBm
Ref   31 dBm          *Att  30 dB    *SWT  400 ms        1.915000000 GHz
30 Offset  7 dB
                                                                    A
20
1 RM *
MAXH                                                                LVL
10
0
-10          D1 -13 dBm
-20                                                                 3DB
-30
-40
-50
-60
Center  1.915 GHz          300 kHz/              Span  3 MHz
```

Date: 15.NOV.2019 19:42:55

LTE Band25, 1.4MHz bandwidth, QPSK,(6,0) Mode, Above 1915MHz

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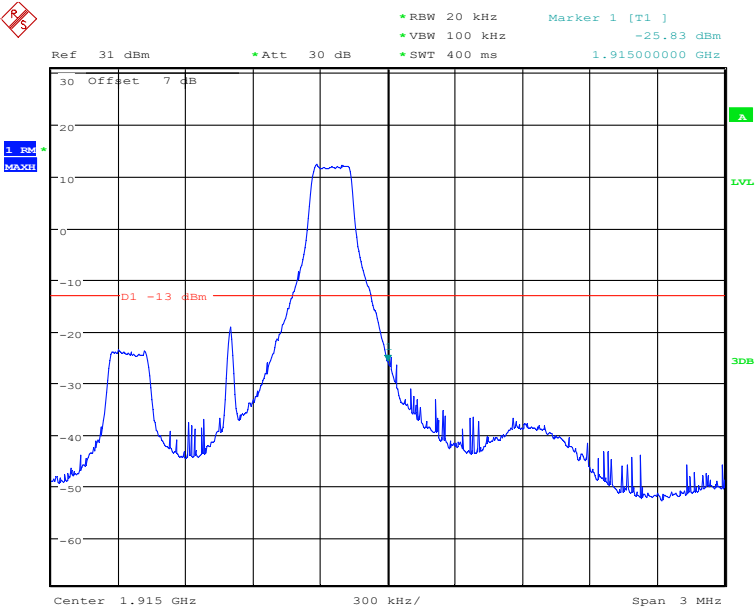
Date: 15.NOV.2019 19:29:06

LTE Band25, 1.4MHz bandwidth, 16QAM,(1,0) Mode , Below 1850MHz
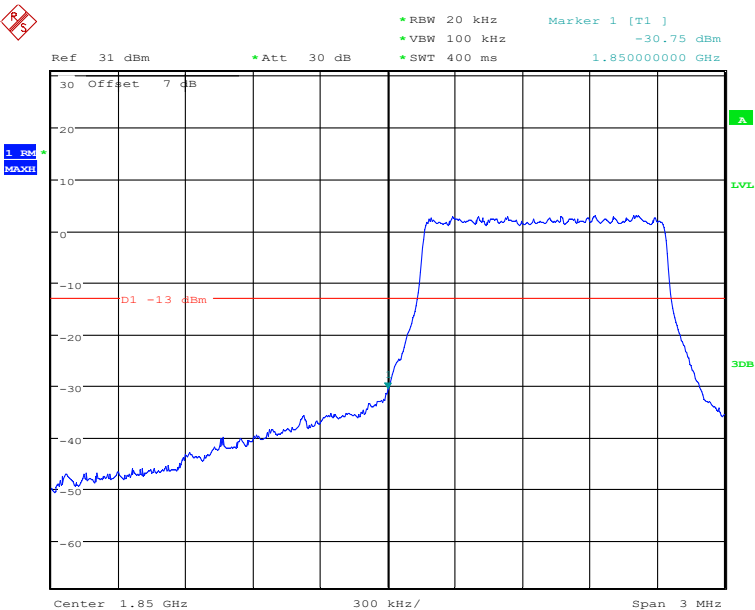
Date: 15.NOV.2019 19:31:39

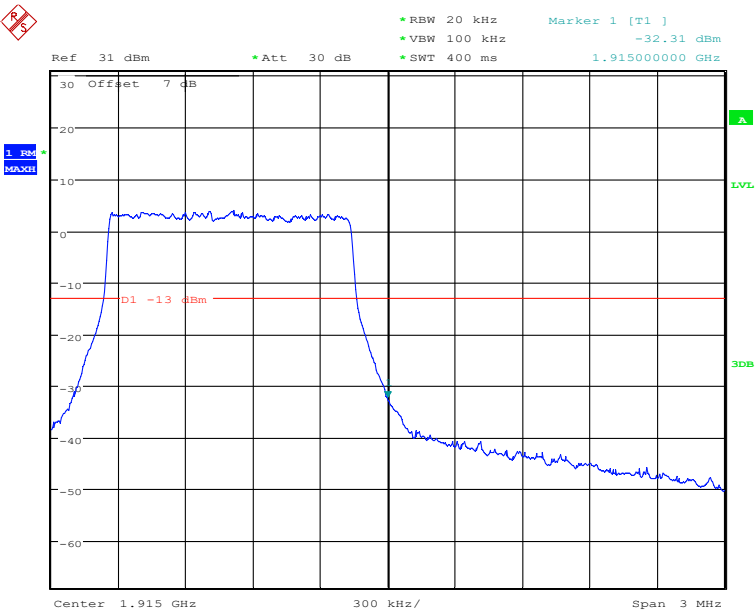LTE Band25, 1.4MHz bandwidth, 16QAM,(6,0) Mode , Below 1850MHz

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Date: 15.NOV.2019 19:39:43

LTE Band25, 1.4MHz bandwidth, 16QAM,(1,6) Mode, Above 1915MHz

Date: 15.NOV.2019 19:44:33

LTE Band25, 1.4MHz bandwidth, 16QAM,(6,0) Mode, Above 1915MHz

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