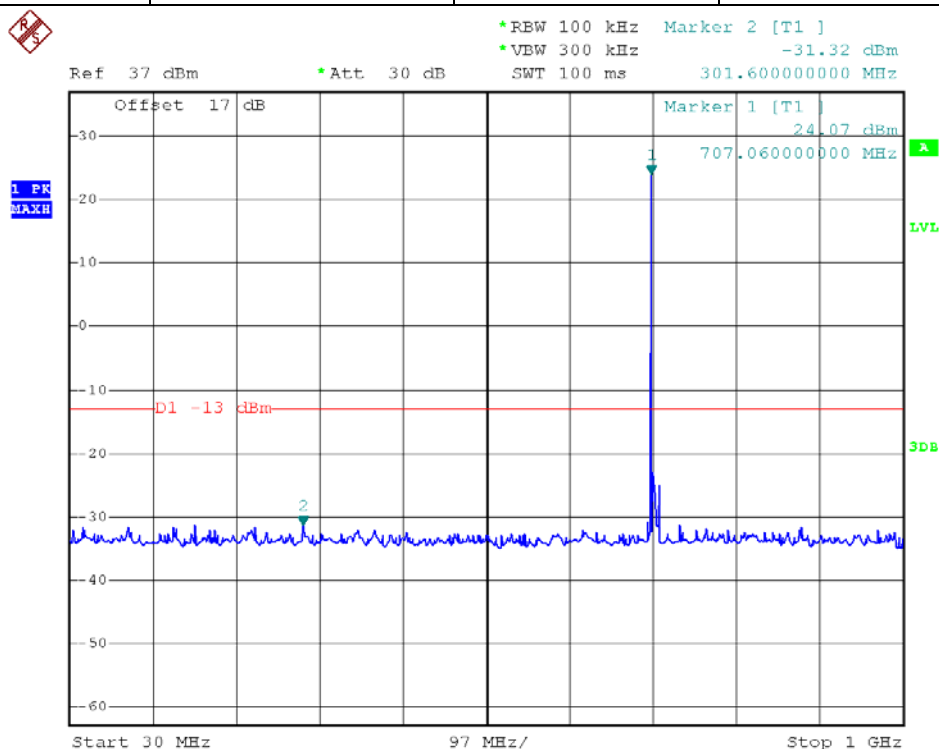
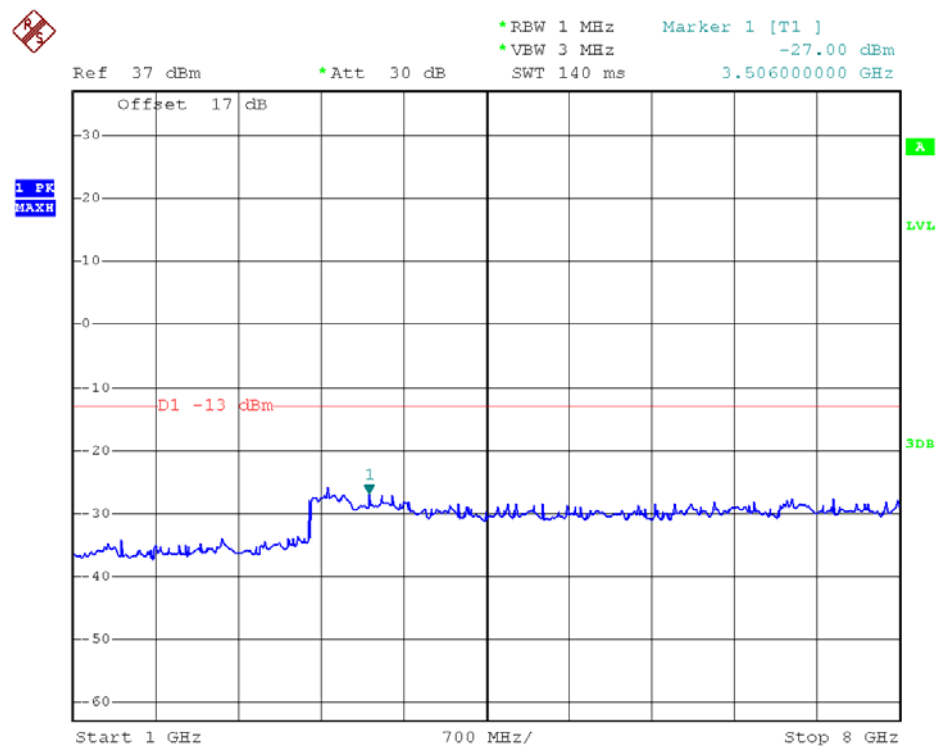


|           |             |            |      |
|-----------|-------------|------------|------|
| Band      | LTE Band 12 | Channel    | High |
| Bandwidth | 10MHz       | Modulation | QPSK |



RB Size 1, RB Offset 0 30MHz to 1GHz



RB Size 1, RB Offset 0 1GHz to 8GHz

## **2.6 Conducted Band Edge**

### **2.6.1 Description of Conducted Band Edge Measurement**

24.238(a) for Band 2

For operations in the 1850 -1910 MHz band, the FCC limit is  $43 + 10\log_{10}(P [\text{Watts}])$  dB below the transmitter power  $P(\text{Watts})$  in a 1MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53(h) for Band 4

For operations in the 1710 – 1755 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power  $P(\text{Watts})$  in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

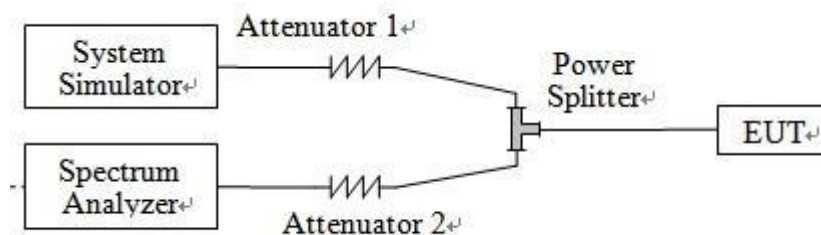
27.53 (m)(4) for Band 7

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 than  $43 + 10 \log (P)$  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.

### **2.6.2 Measuring Instruments**

The measuring equipment is listed in the section 3 of this test report.

### 2.6.3 Test Setup



### 2.6.4 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The band edges of low and high channels for the highest RF powers were measured. Set  $RBW \geq 1\%$  EBW in the 1MHz band immediately outside and adjacent to the band edge.
3. Set spectrum analyzer with RMS detector.
4. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
5. The limit line is derived from  $43 + 10\log(P)$  dB below the transmitter power P(Watts)
 
$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$

$$= -13\text{dBm.}$$

<For Band 7>

The limit line is derived from  $55 + 10\log(P)$  dB below the transmitter power P(Watts)

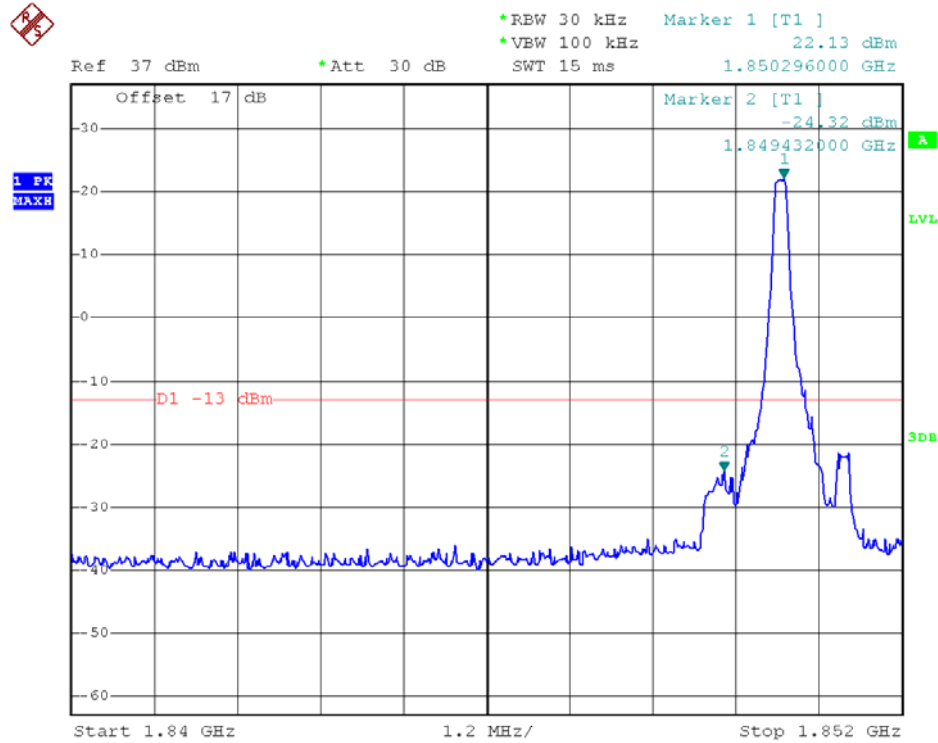
$$= P(W) - [55 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [55 + 10\log(P)] \text{ (dB)}$$

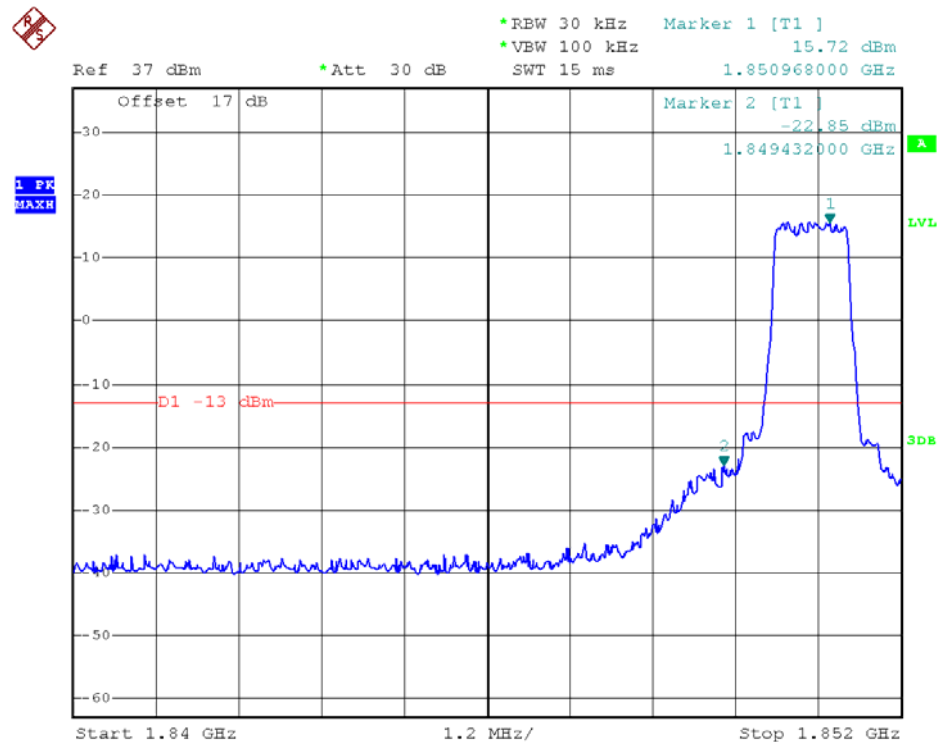
$$= -25\text{dBm.}$$

## 2.6.5 Test Result of Conducted Band Edge

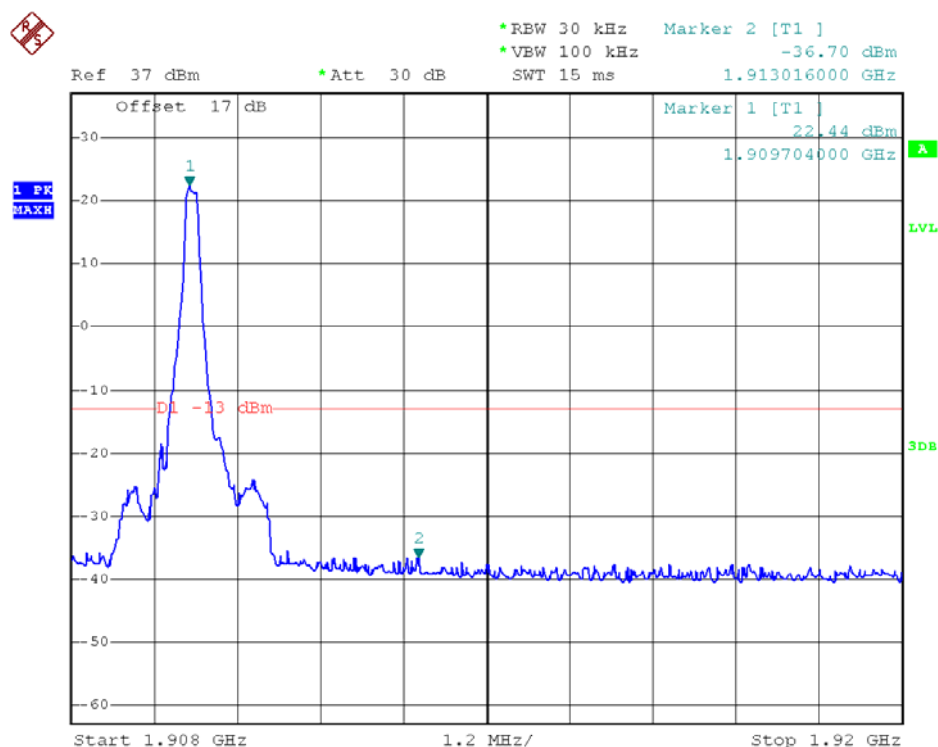
|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 2 | Modulation | QPSK |
| Bandwidth | 1.4MHz     |            |      |



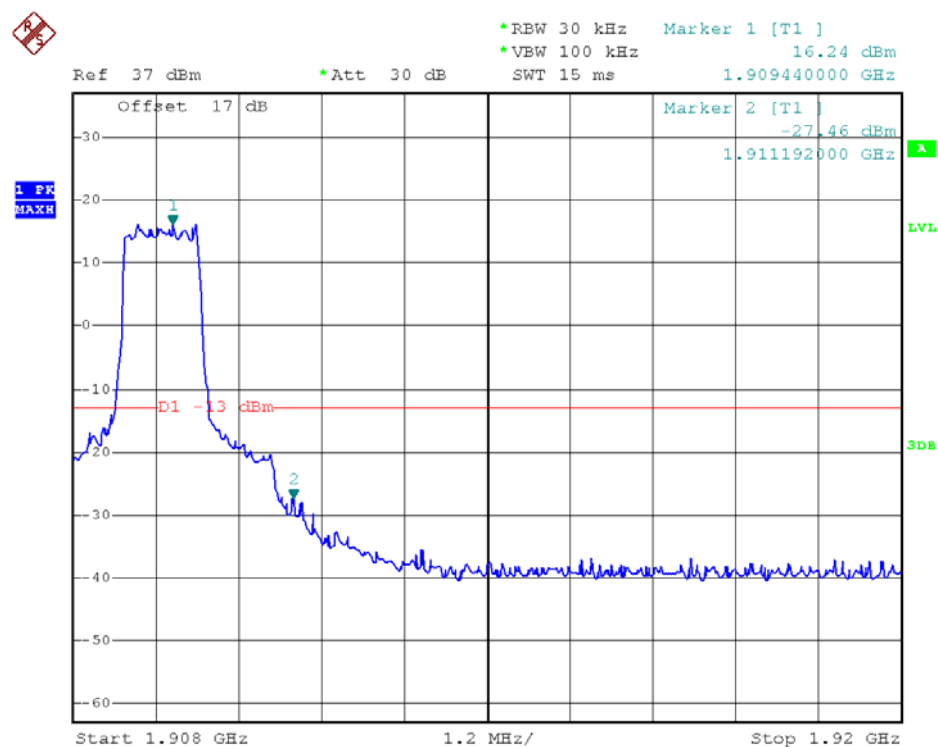
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 6, RB Offset 0

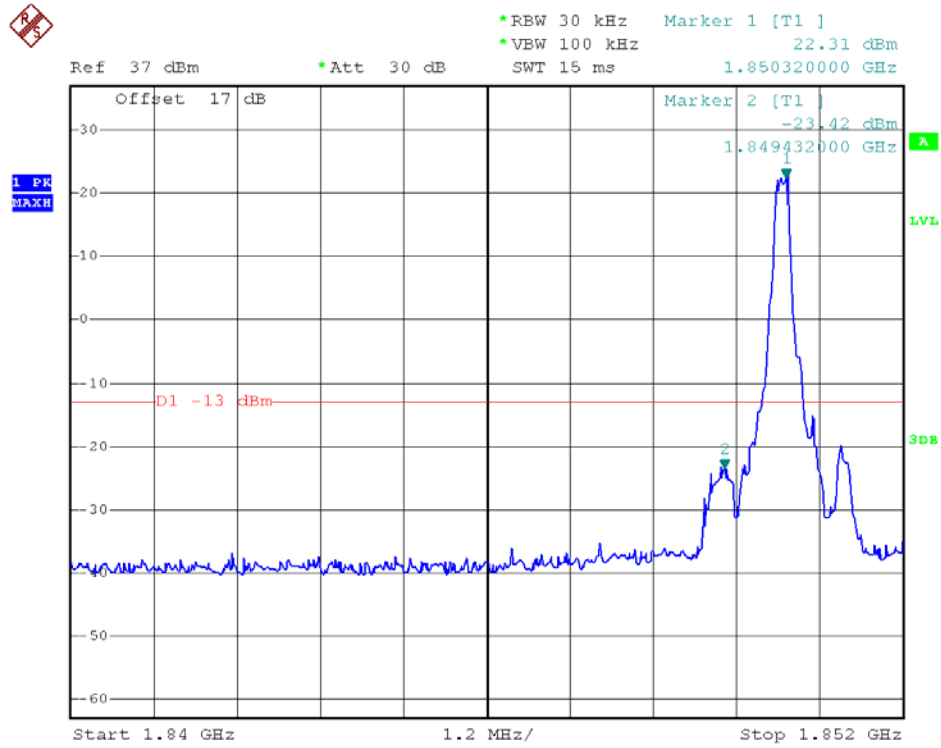


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5

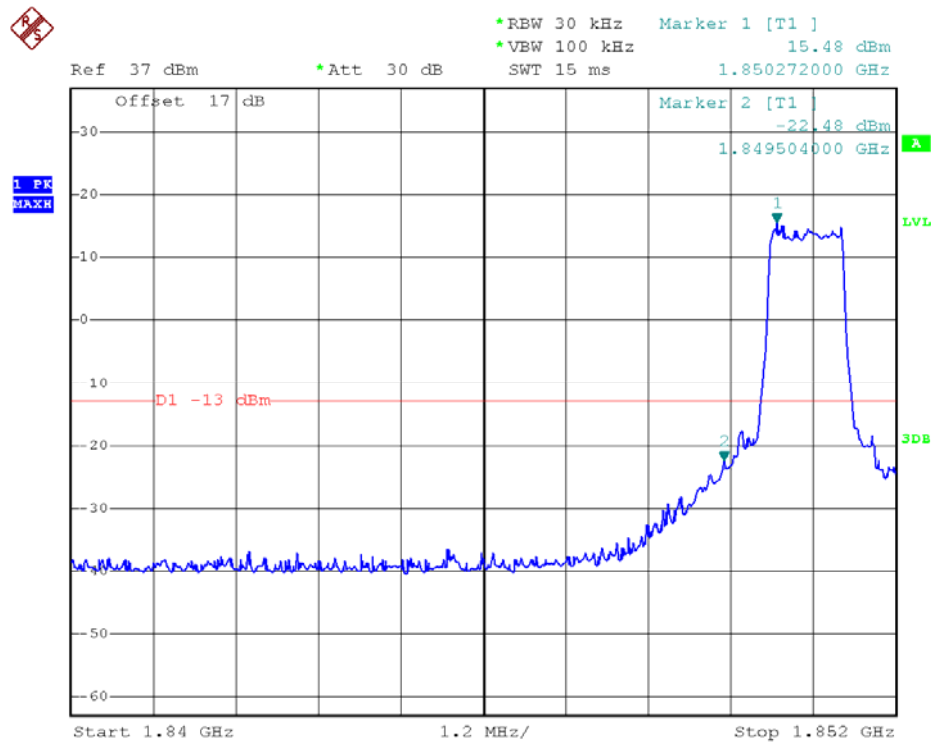


Higher Band Edge Plot for QPSK-RB Size 6, RB Offset 0

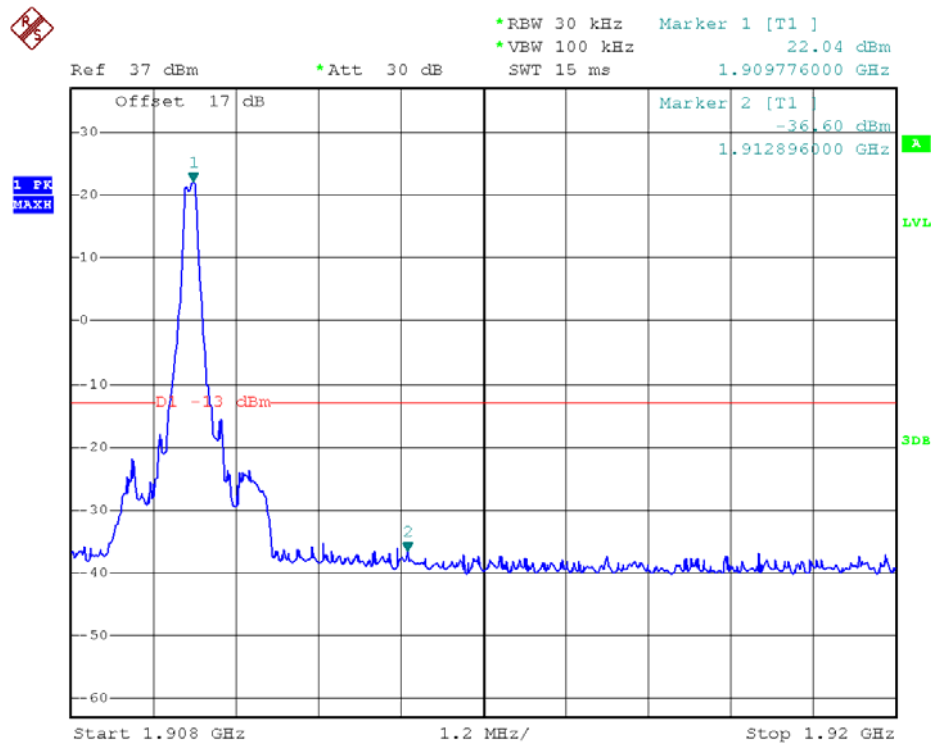
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 2 | Modulation | 16QAM |
| Bandwidth | 1.4MHz     |            |       |



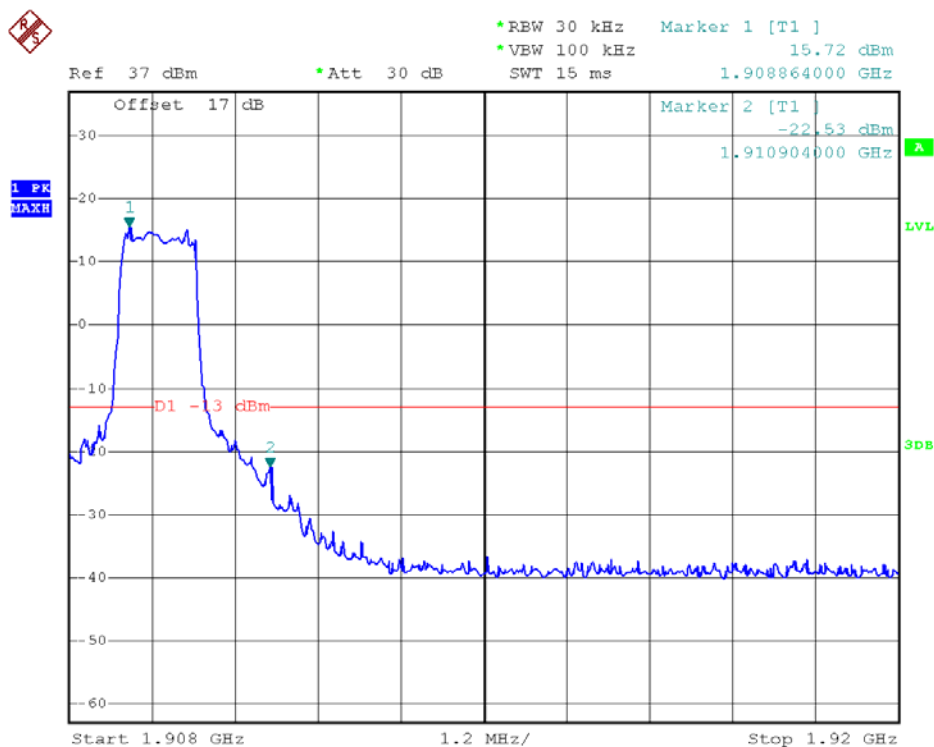
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 6, RB Offset 0

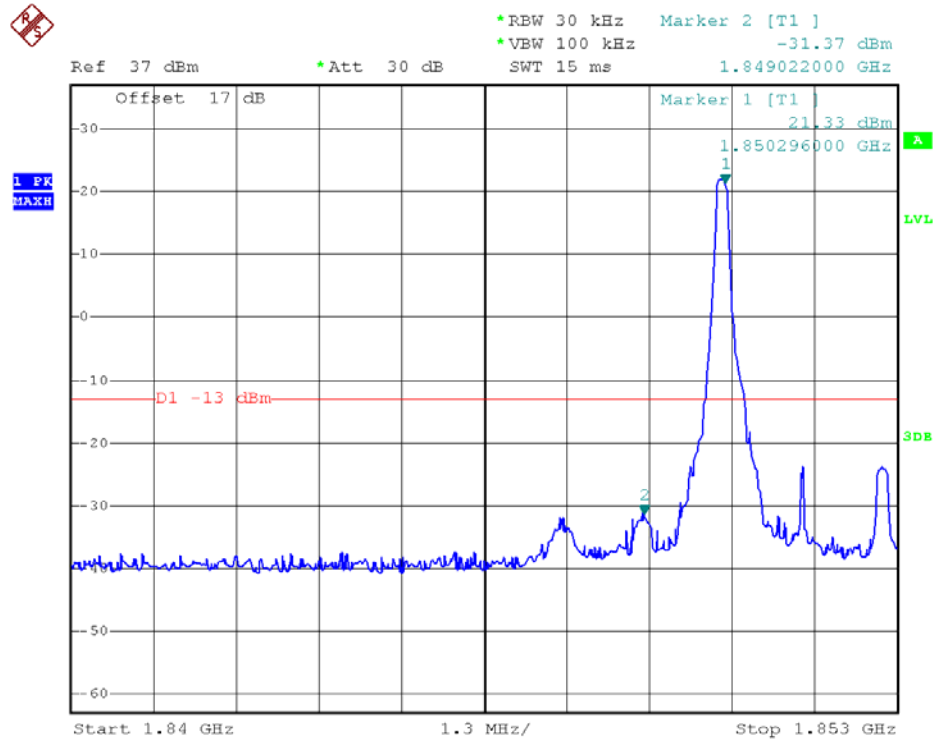


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 5

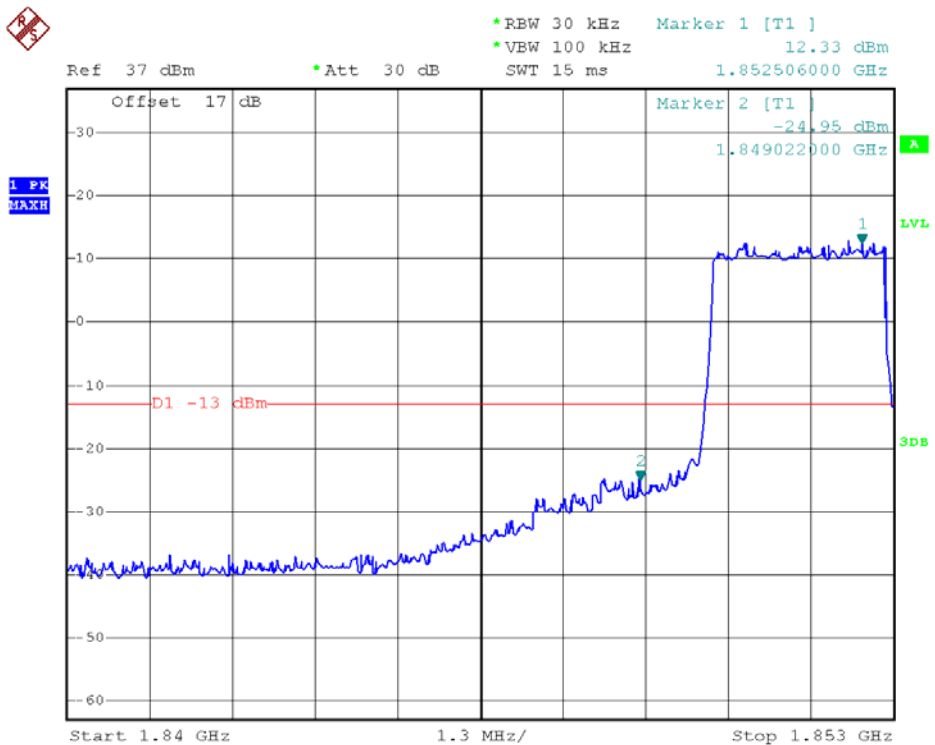


Higher Band Edge Plot for 16QAM-RB Size 6, RB Offset 0

|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 2 | Modulation | QPSK |
| Bandwidth | 3MHz       |            |      |

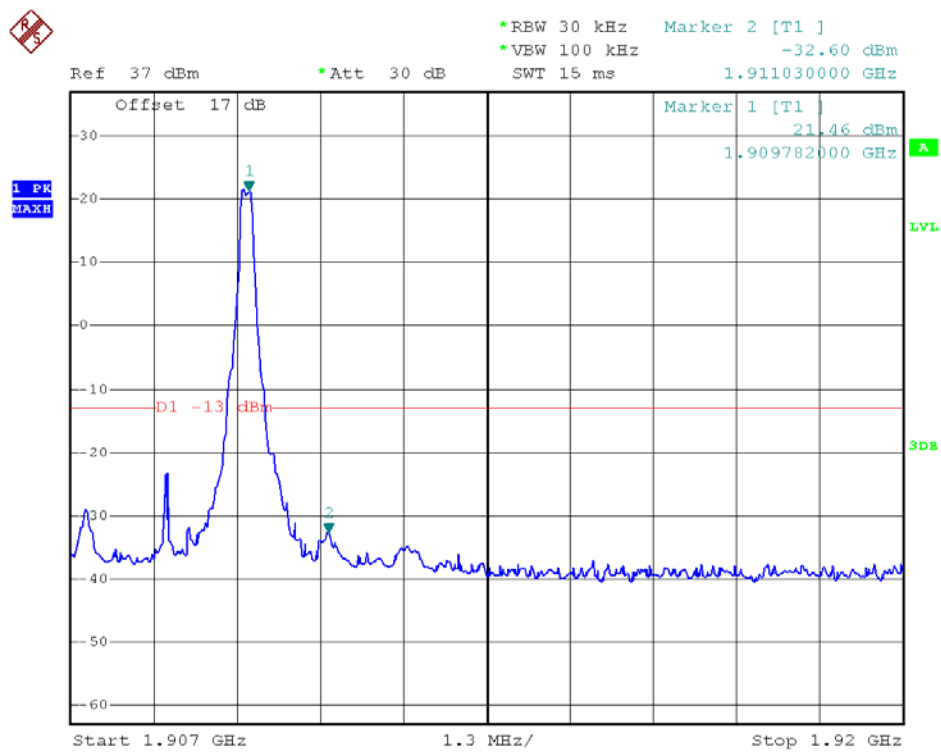


Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0

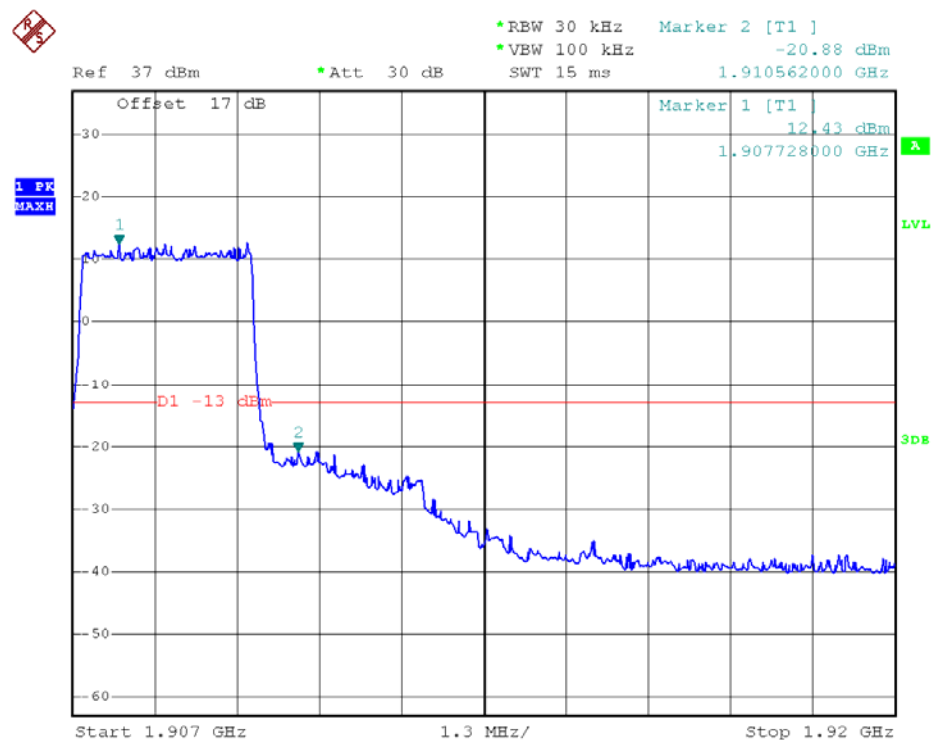


Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0



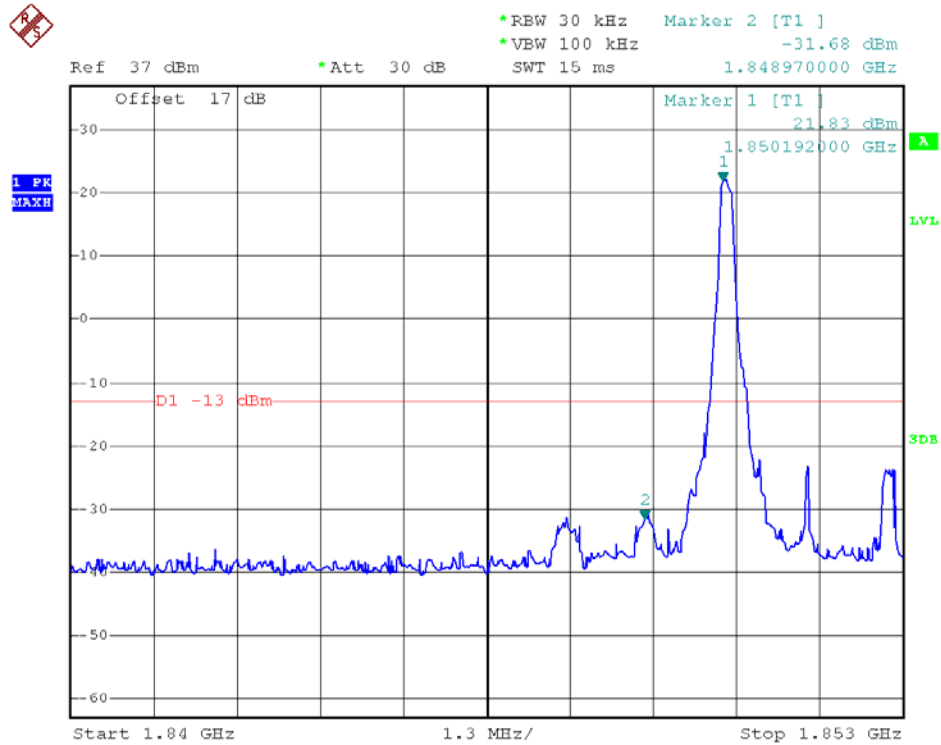


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14

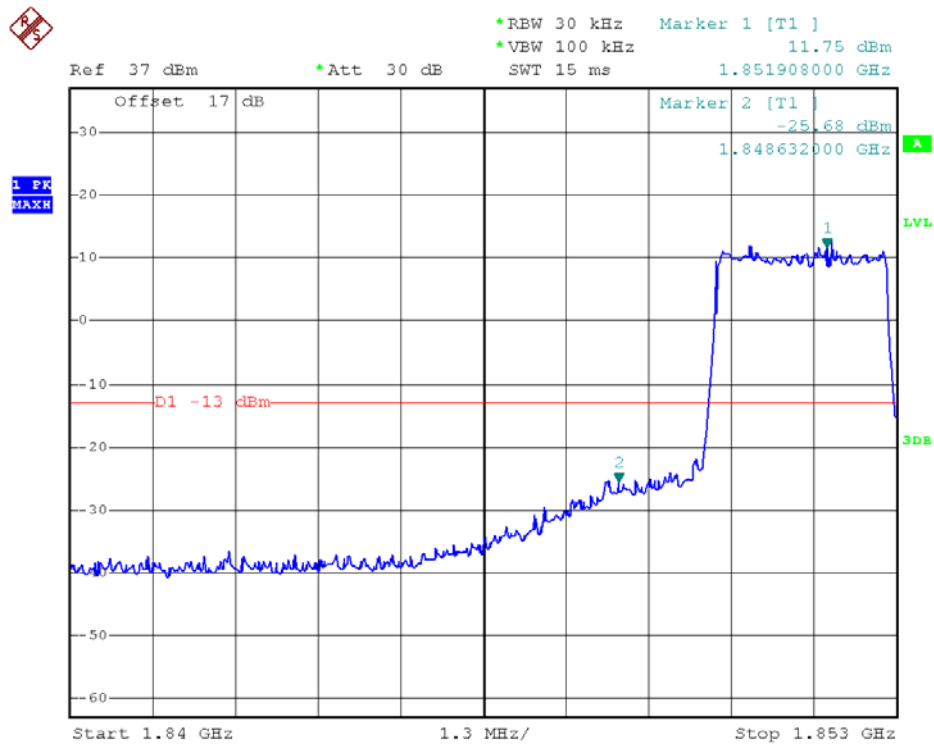


Higher Band Edge Plot for QPSK-RB Size 15, RB Offset 0

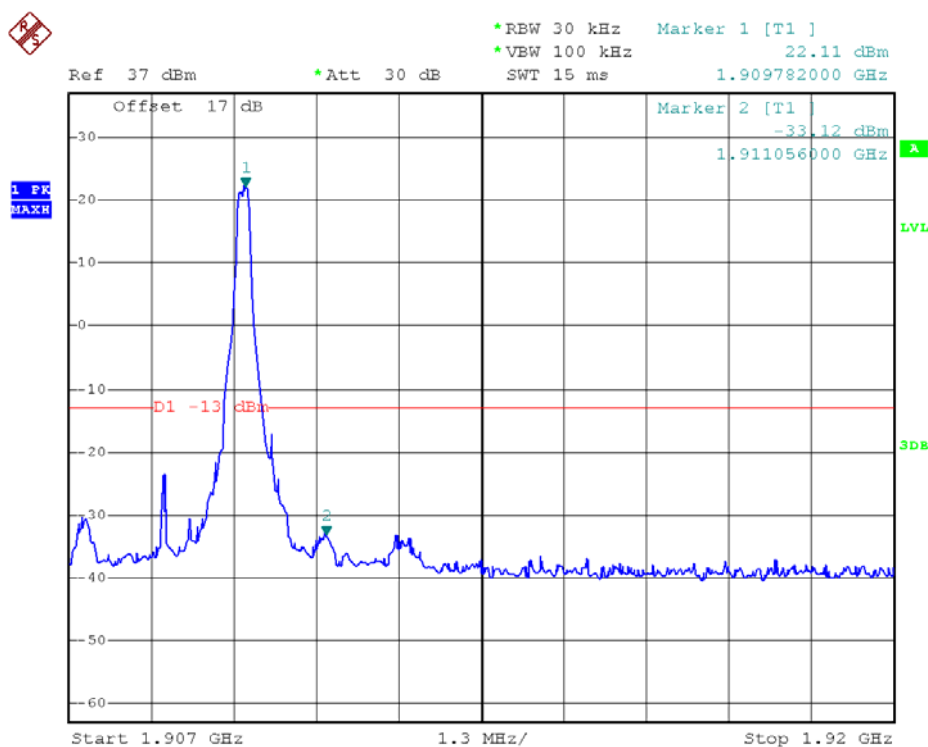
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 2 | Modulation | 16QAM |
| Bandwidth | 3MHz       |            |       |



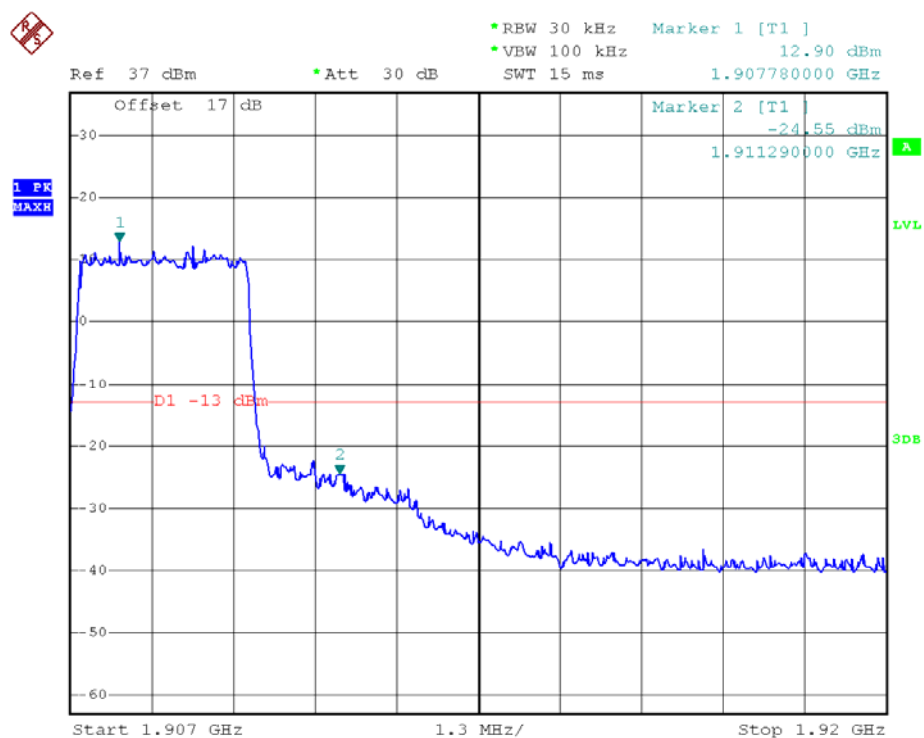
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 15, RB Offset 0

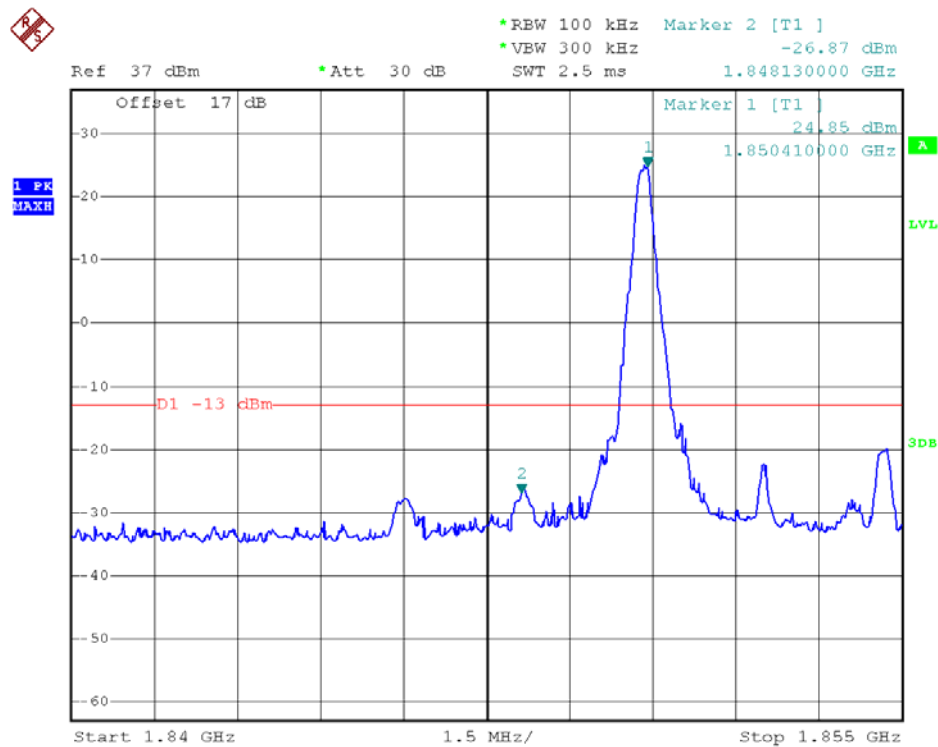


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 14

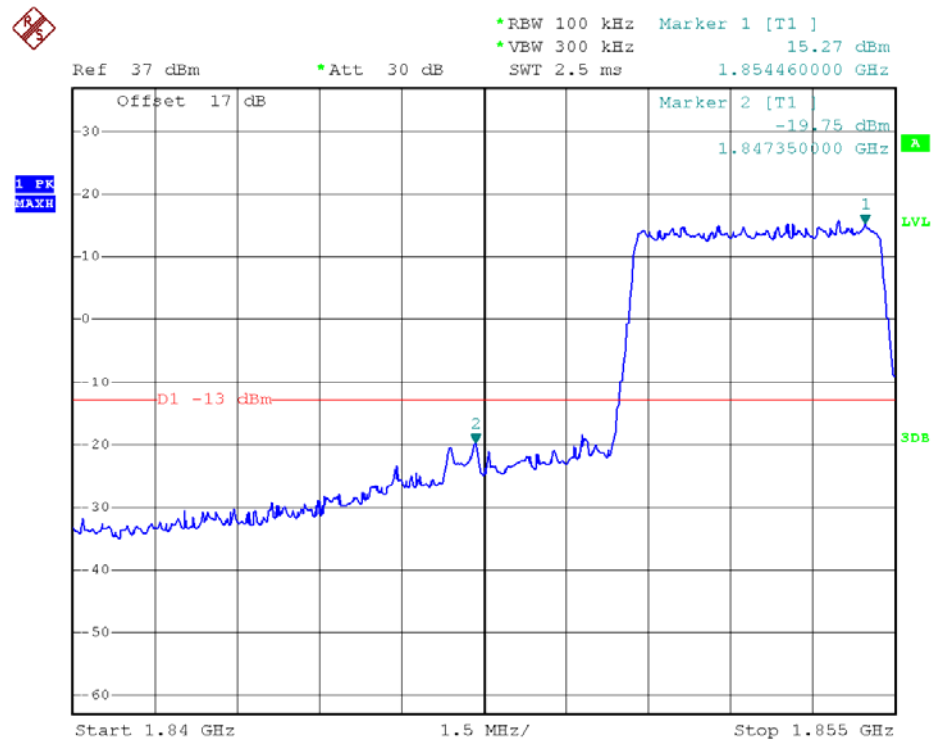


Higher Band Edge Plot for 16QAM-RB Size 15, RB Offset 0

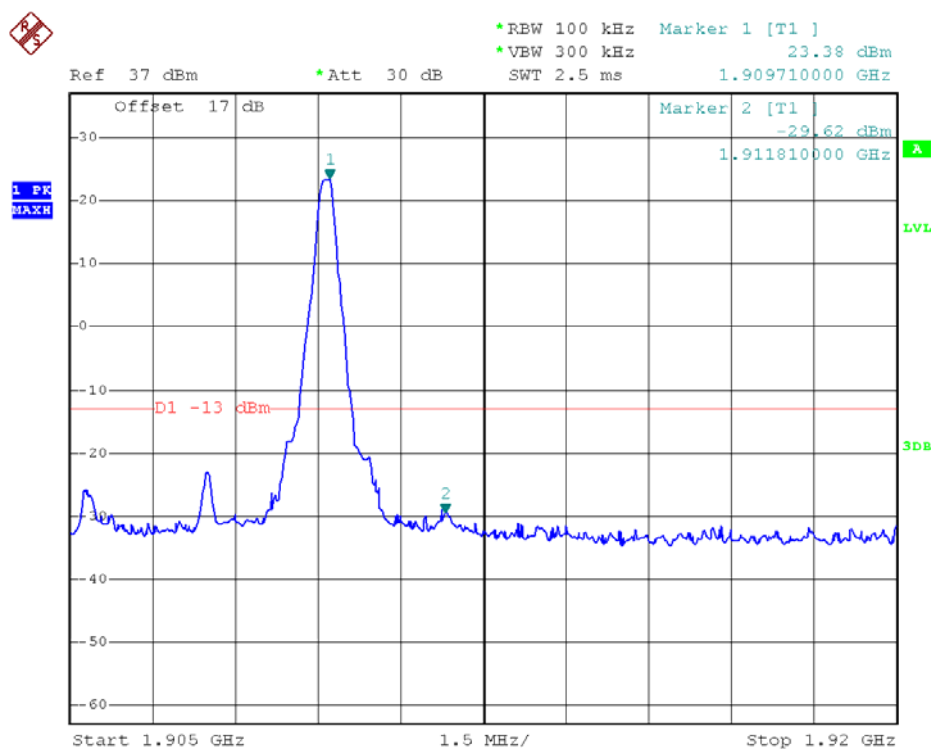
|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 2 | Modulation | QPSK |
| Bandwidth | 5MHz       |            |      |



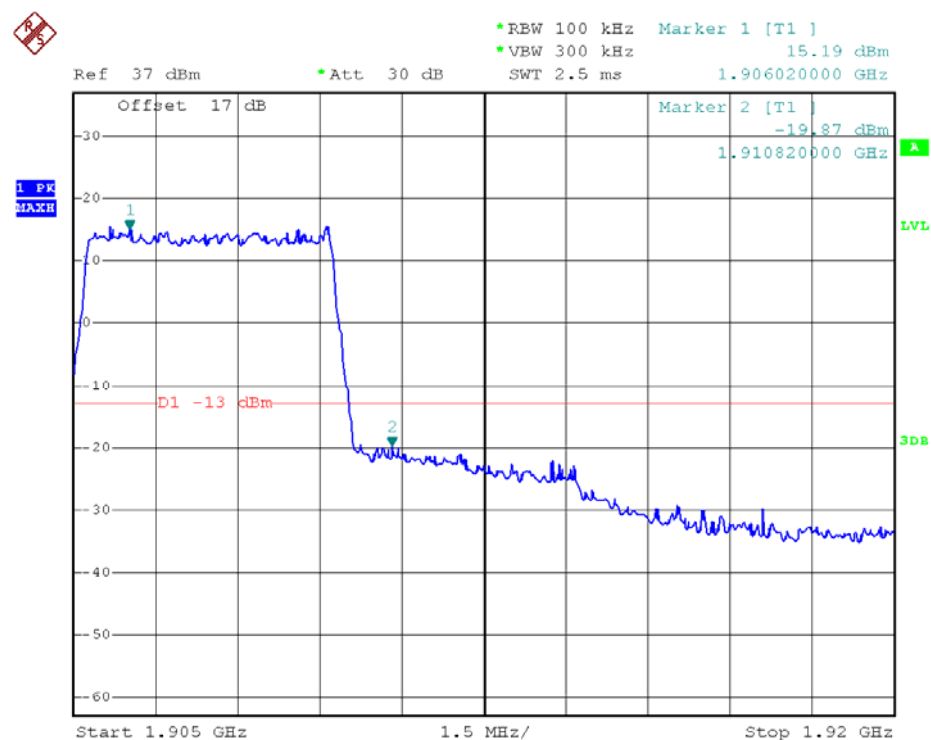
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0

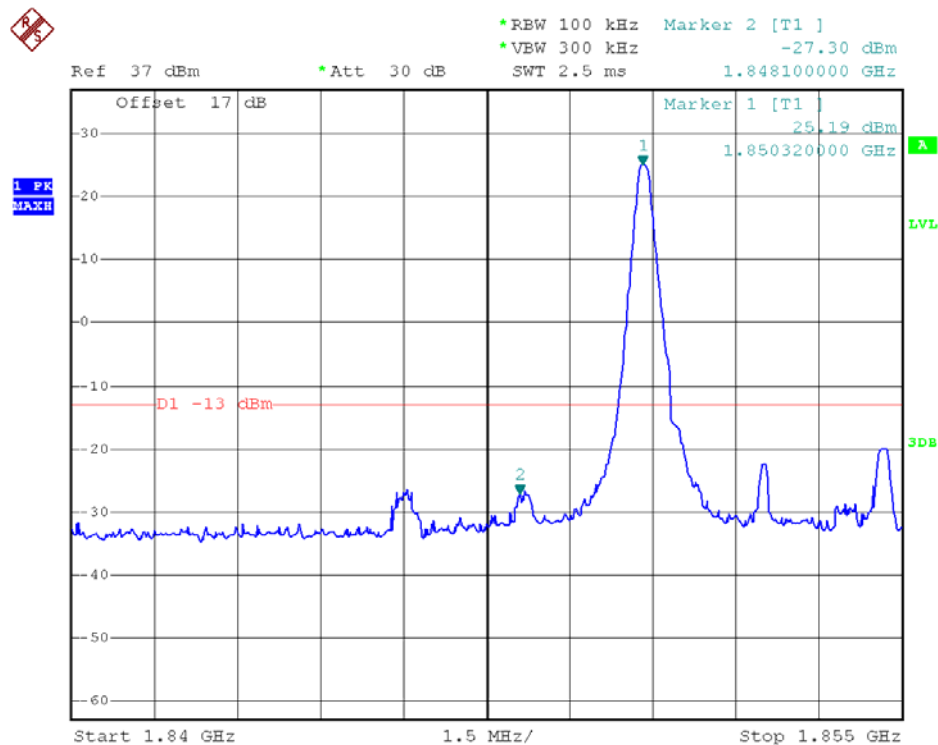


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24

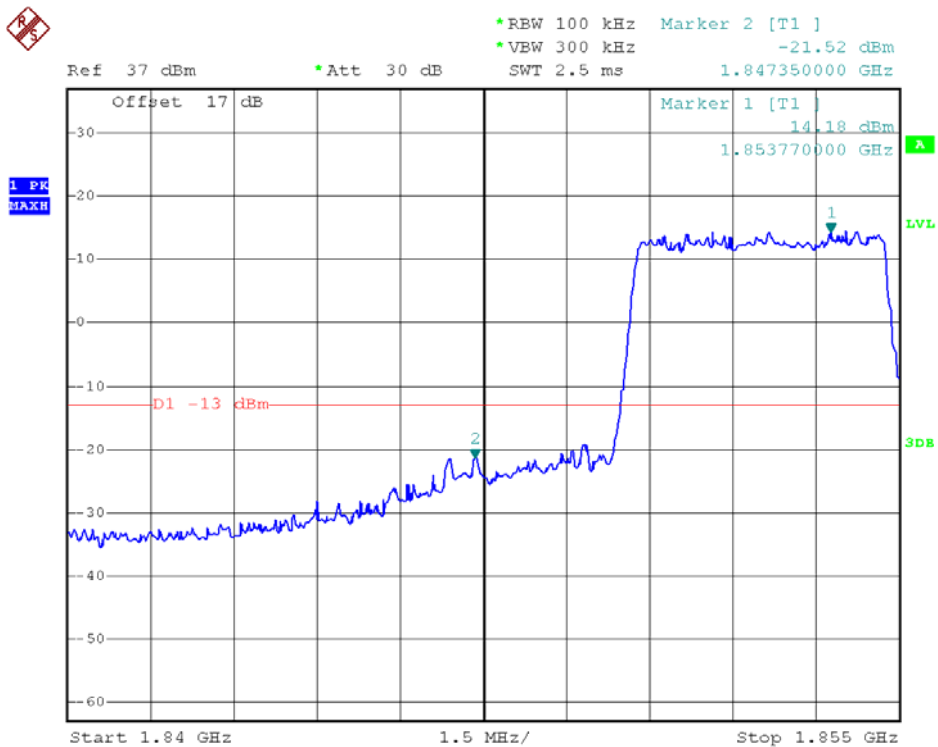


Higher Band Edge Plot for QPSK-RB Size 25, RB Offset 0

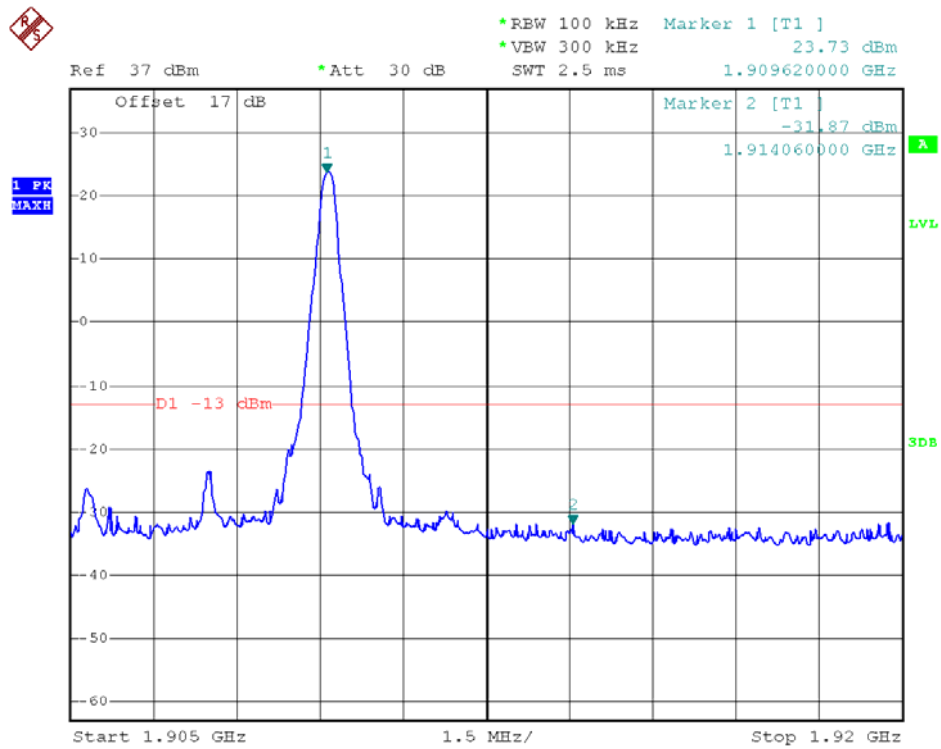
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 2 | Modulation | 16QAM |
| Bandwidth | 5MHz       |            |       |



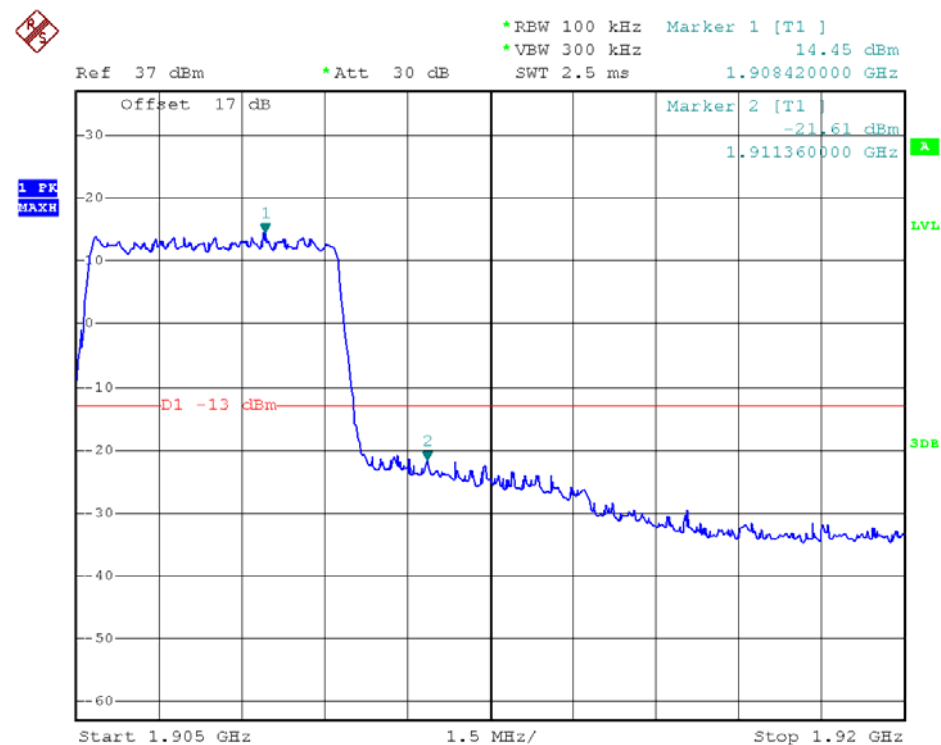
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 25, RB Offset 0

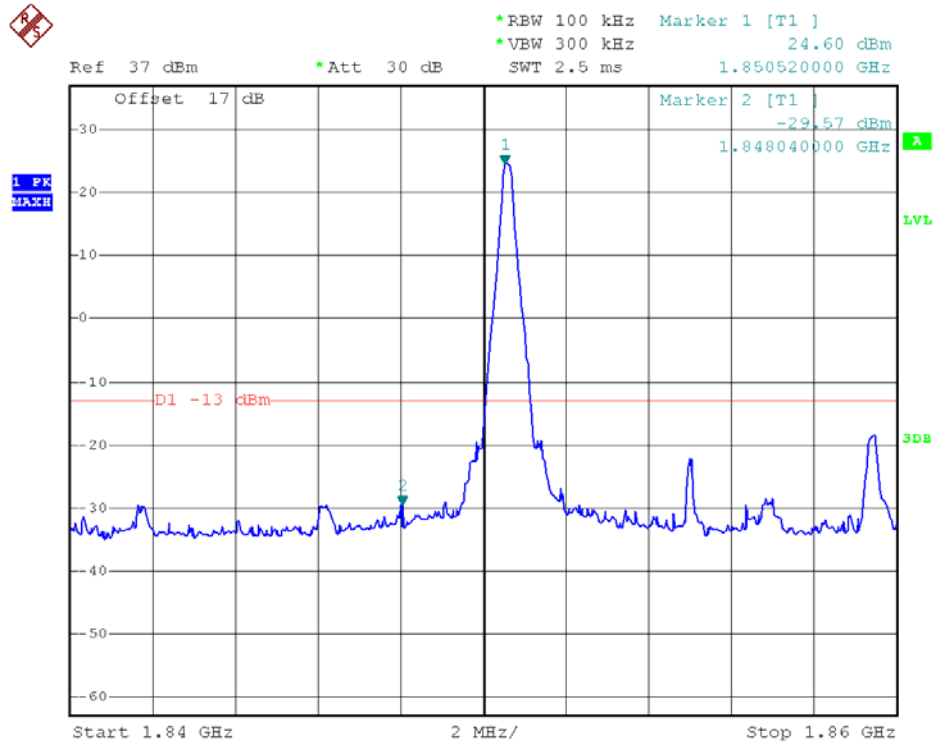


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 24

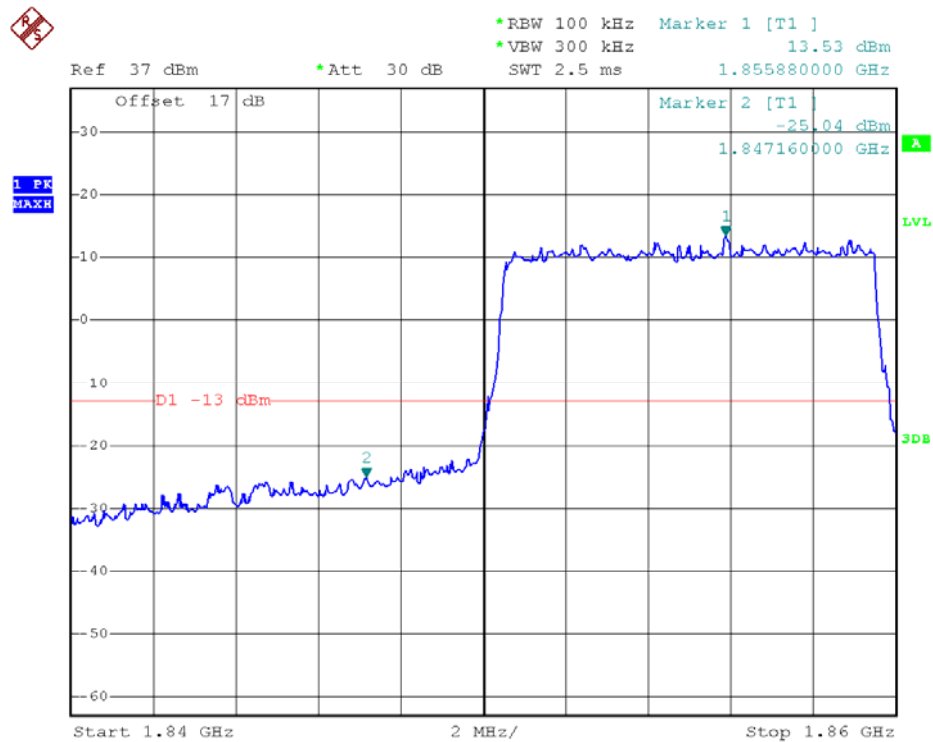


Higher Band Edge Plot for 16QAM-RB Size 25, RB Offset 0

|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 2 | Modulation | QPSK |
| Bandwidth | 10MHz      |            |      |

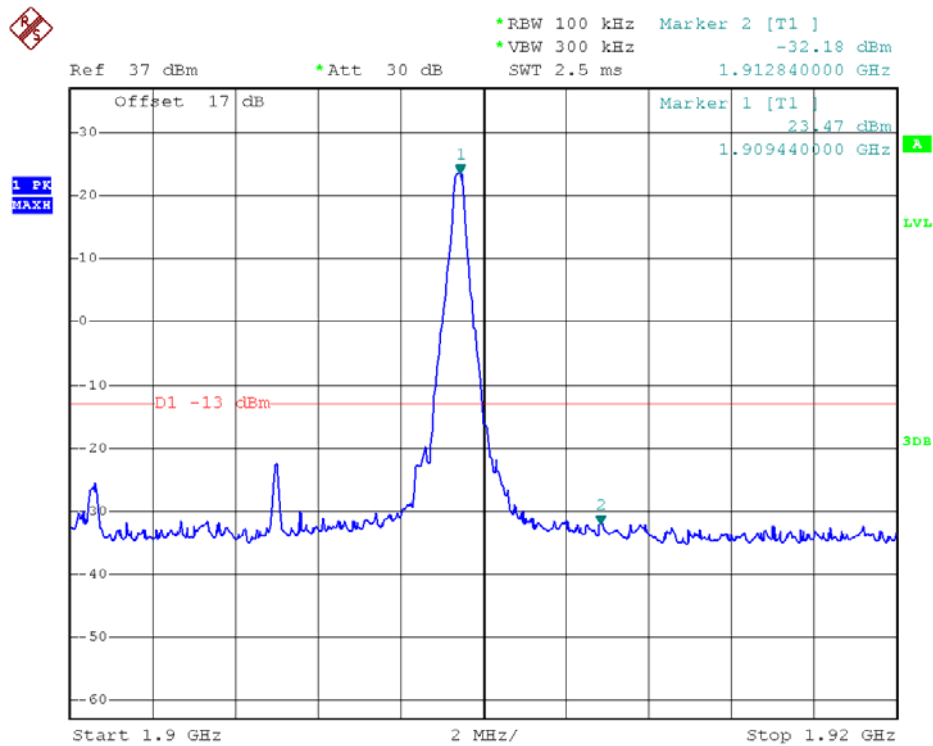


Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0

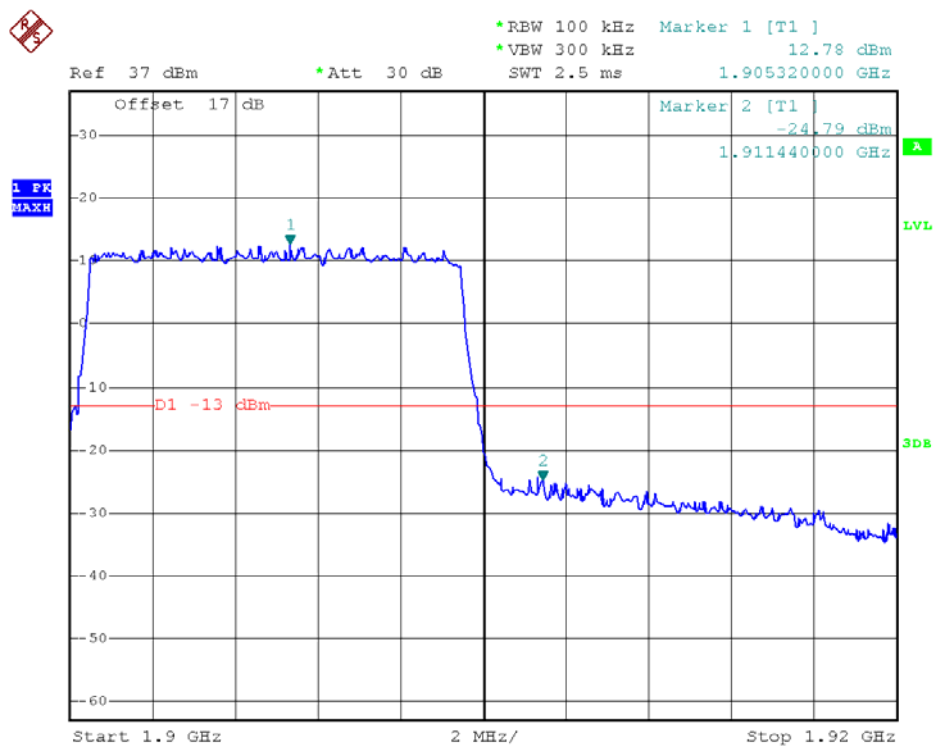


Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0



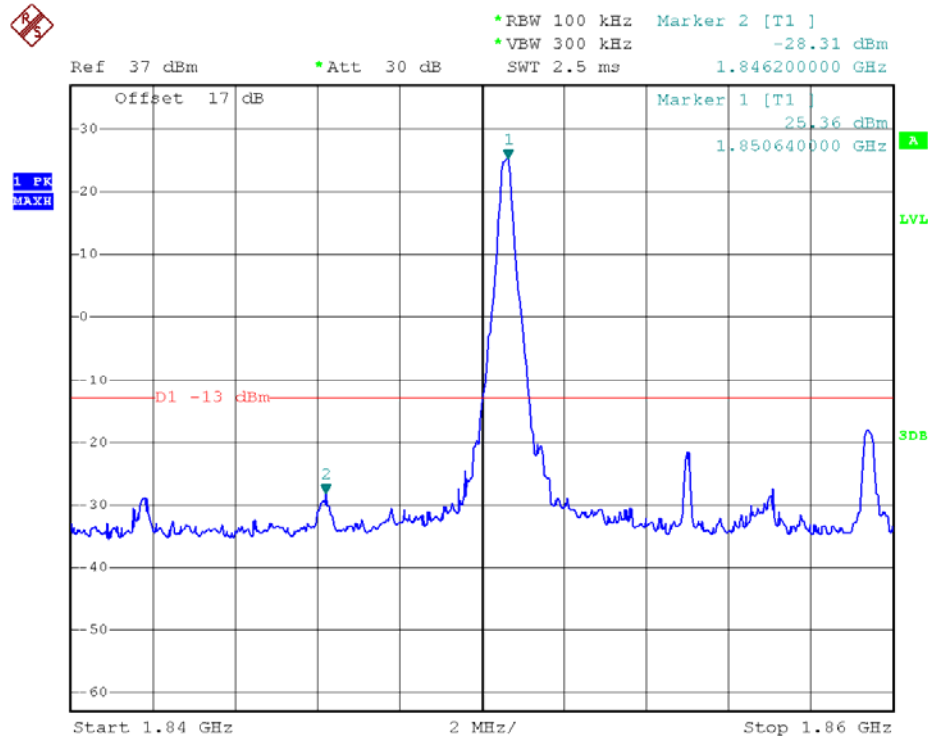


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49

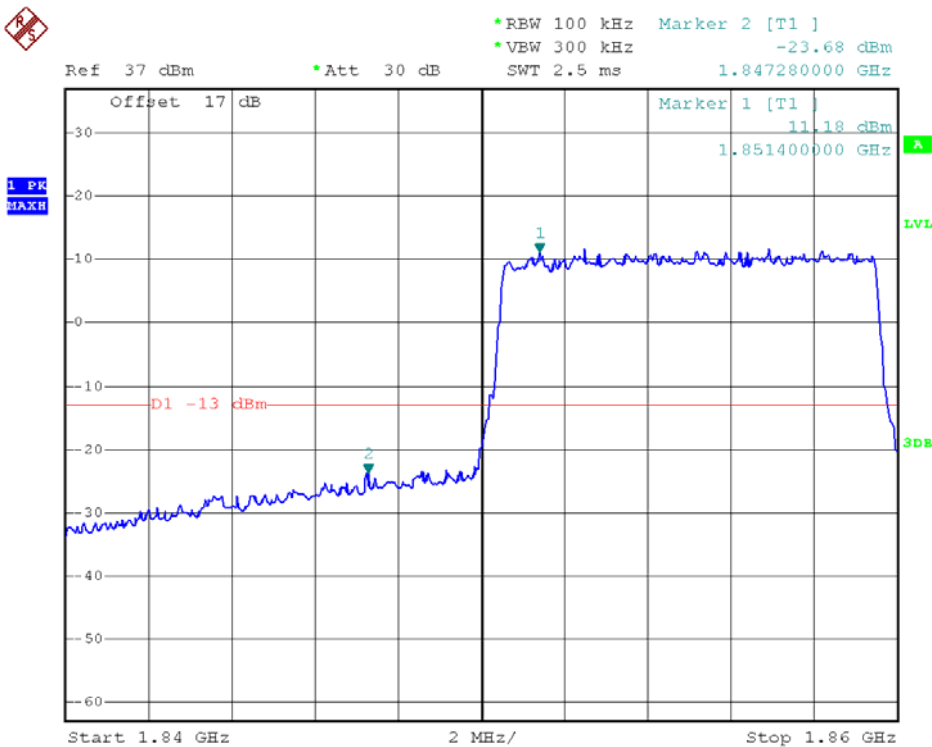


Higher Band Edge Plot for QPSK-RB Size 50, RB Offset 0

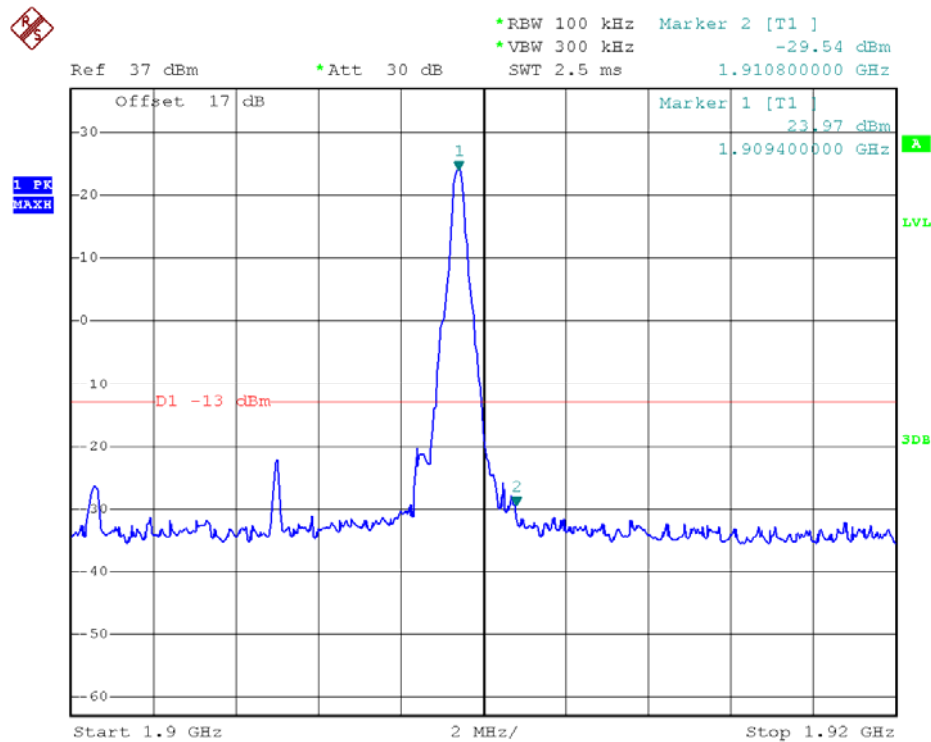
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 2 | Modulation | 16QAM |
| Bandwidth | 10MHz      |            |       |



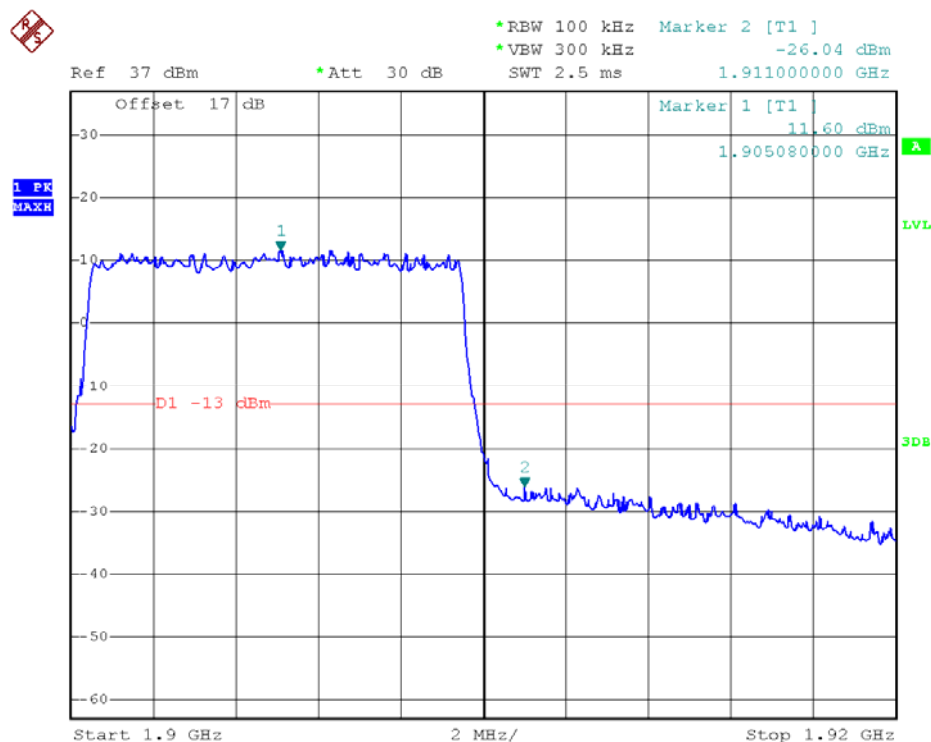
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 50, RB Offset 0

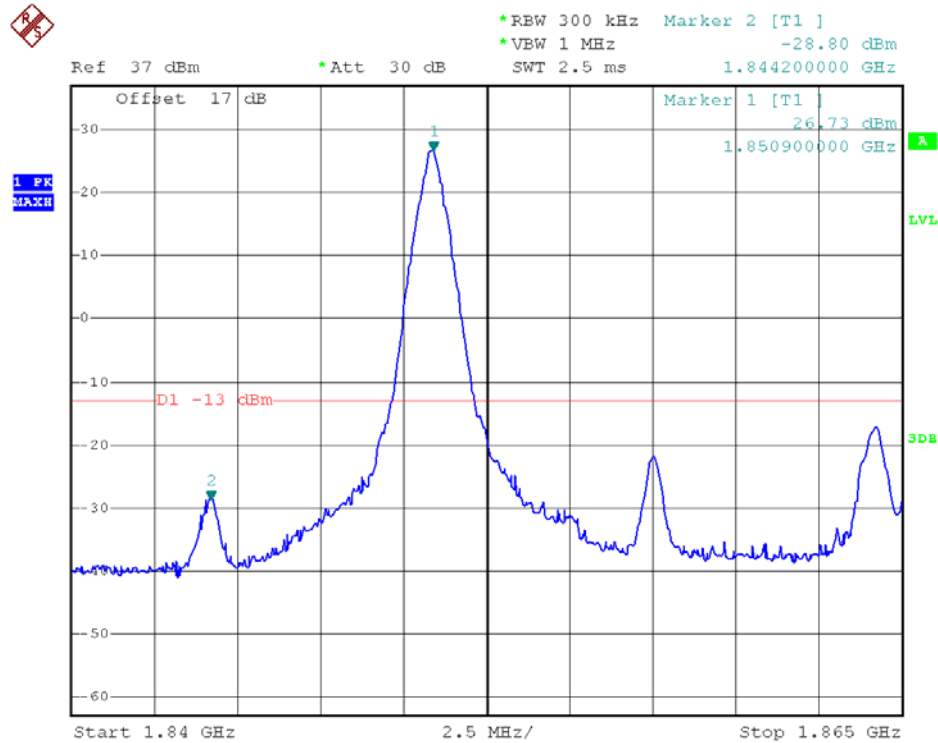


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 49

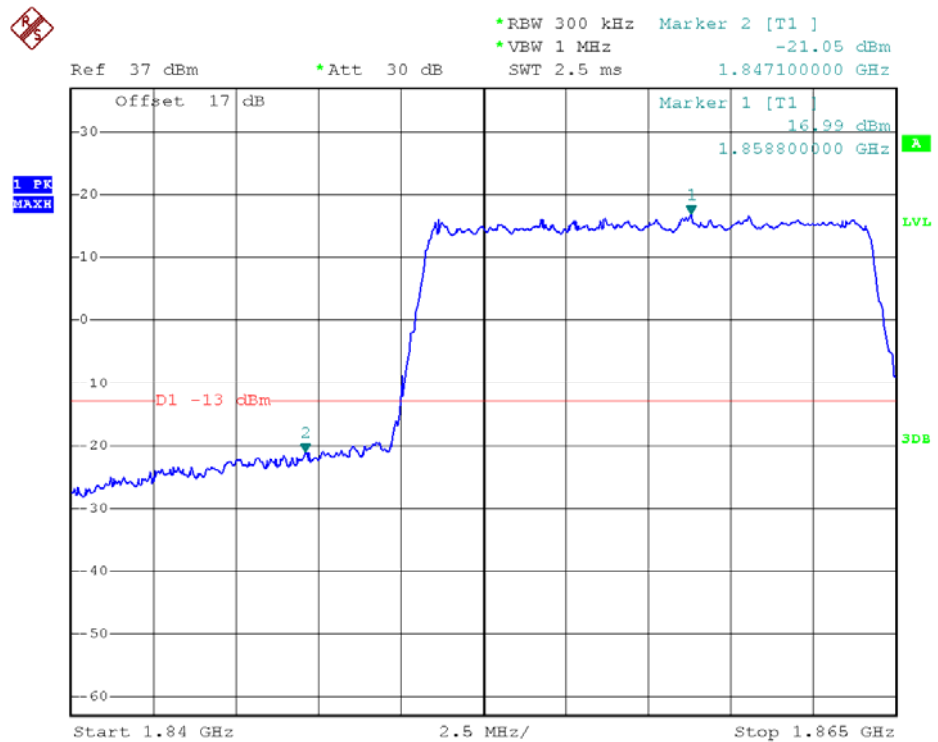


Higher Band Edge Plot for 16QAM-RB Size 50, RB Offset 0

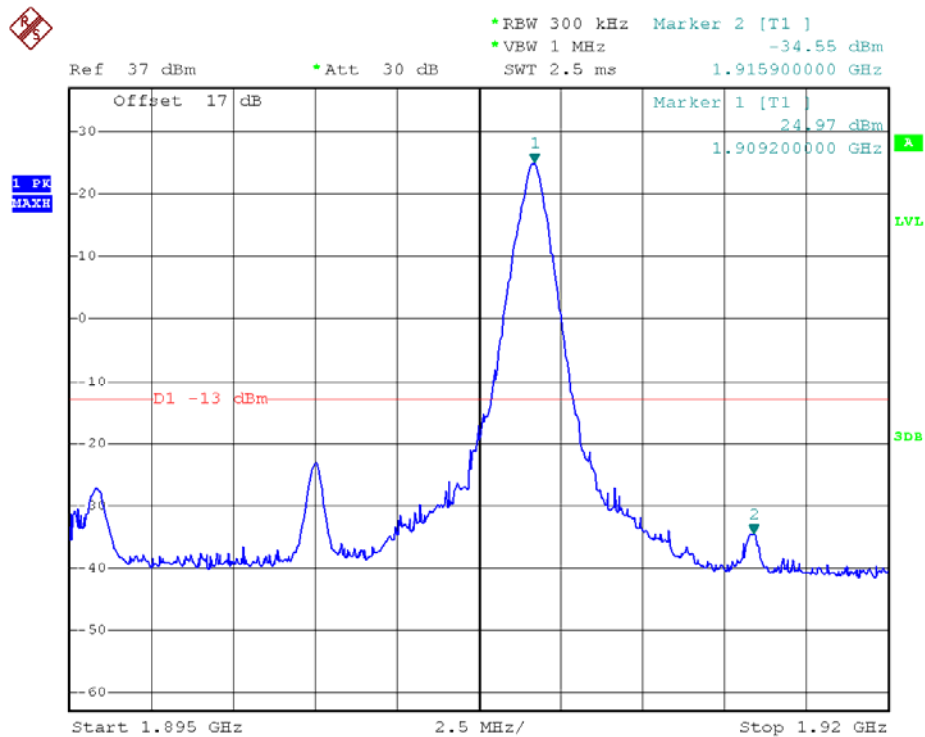
|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 2 | Modulation | QPSK |
| Bandwidth | 15MHz      |            |      |



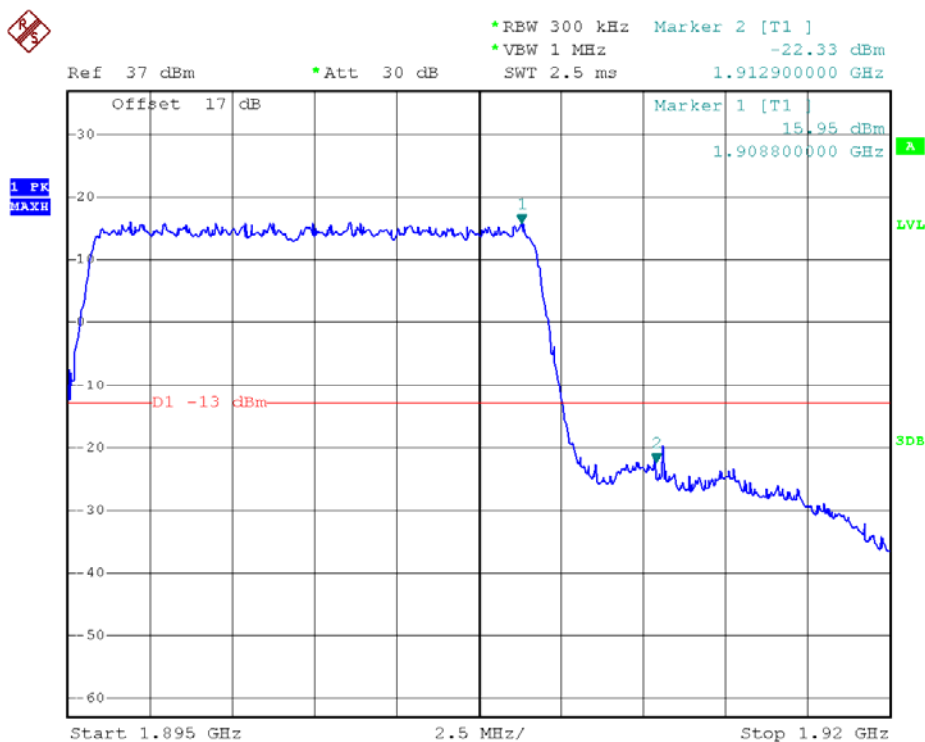
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 75, RB Offset 0

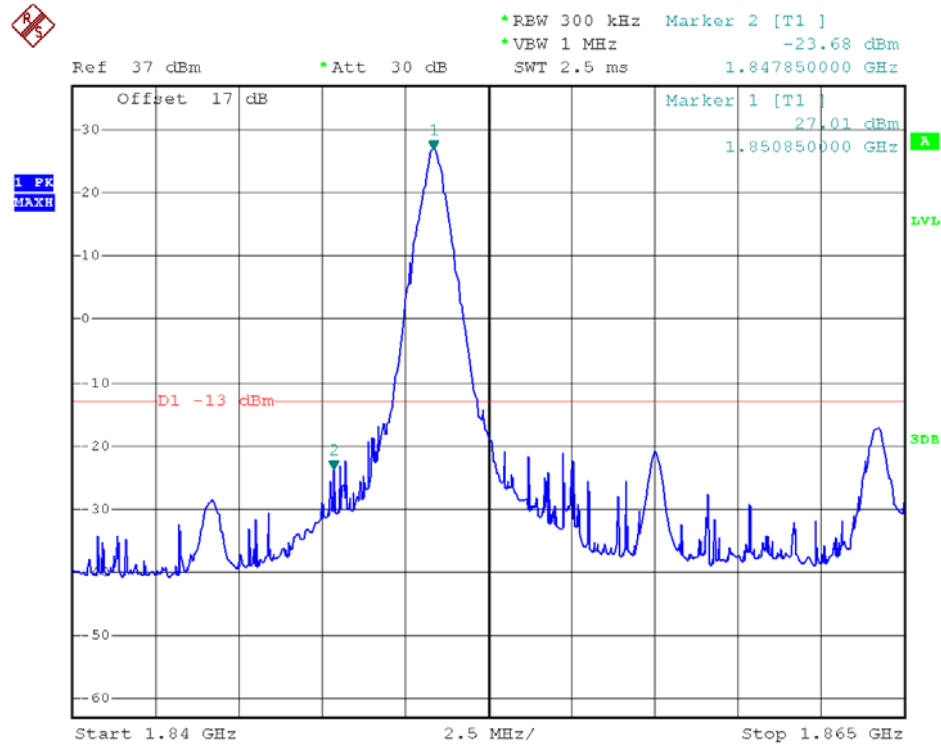


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 74

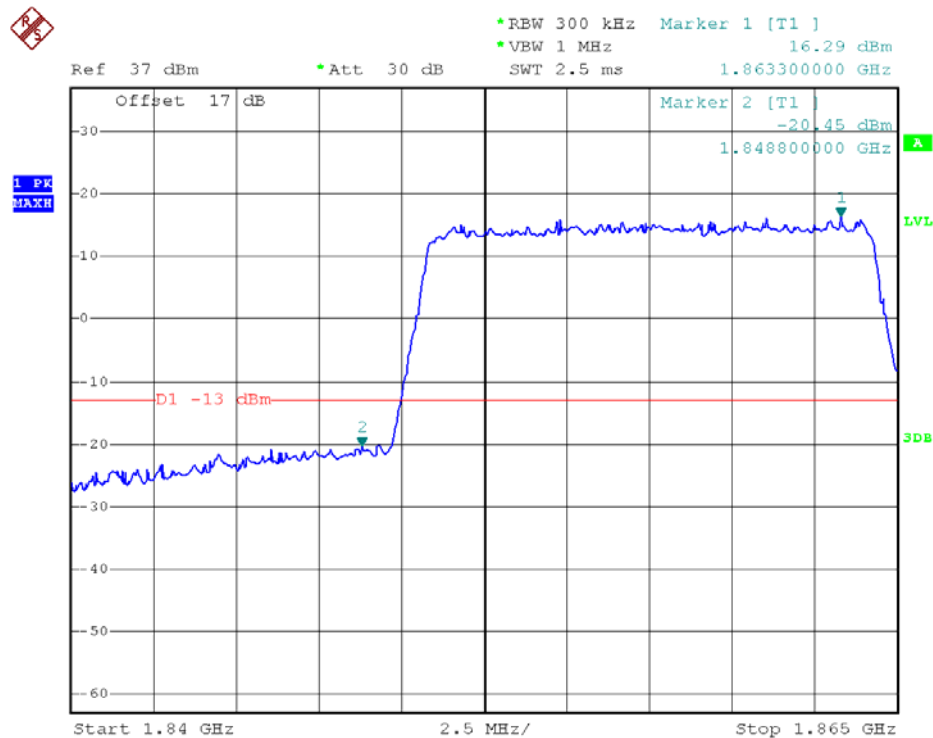


Higher Band Edge Plot for QPSK-RB Size 75, RB Offset 0

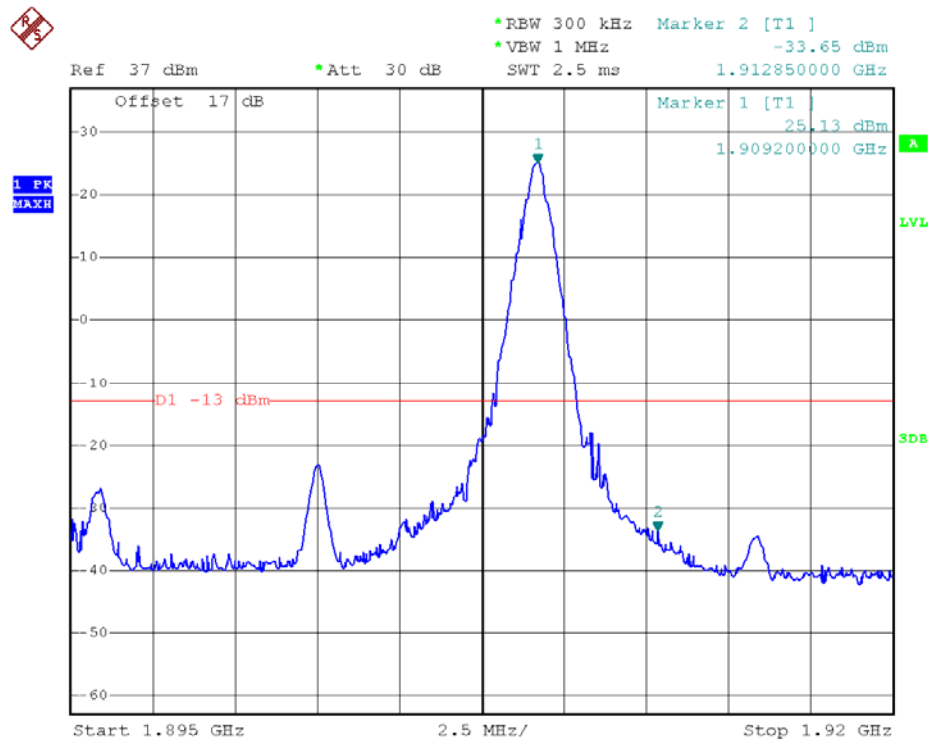
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 2 | Modulation | 16QAM |
| Bandwidth | 15MHz      |            |       |



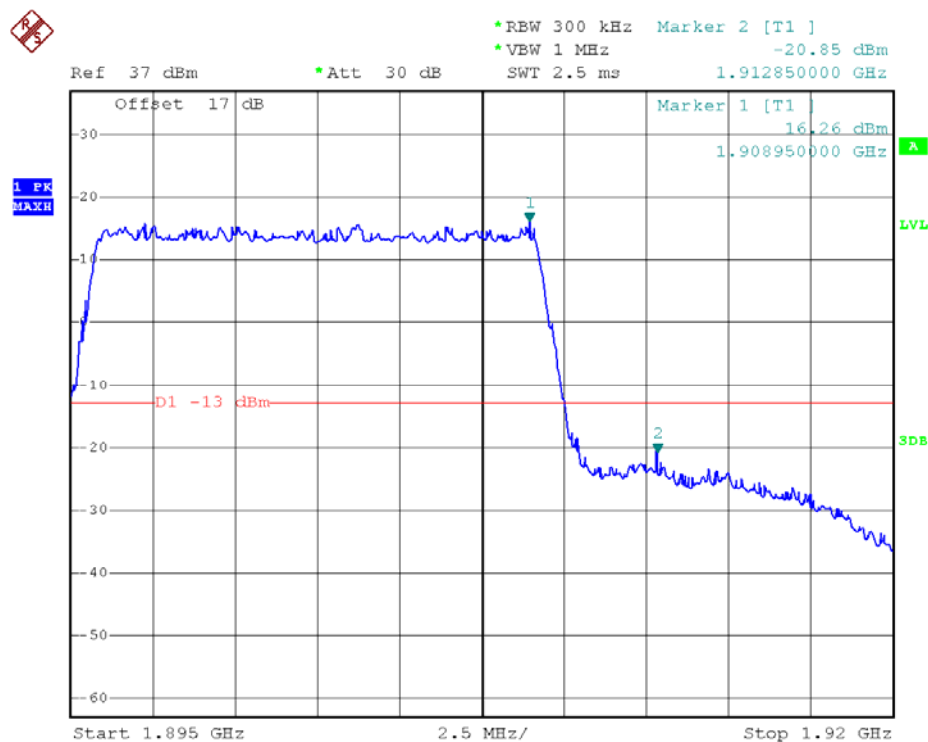
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 75, RB Offset 0

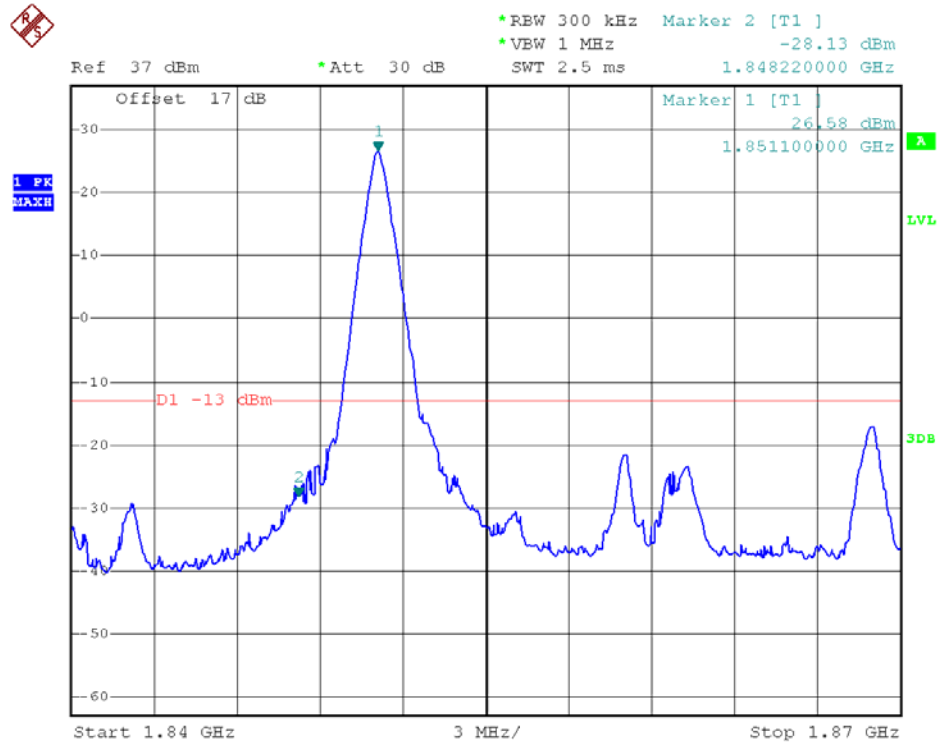


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 74

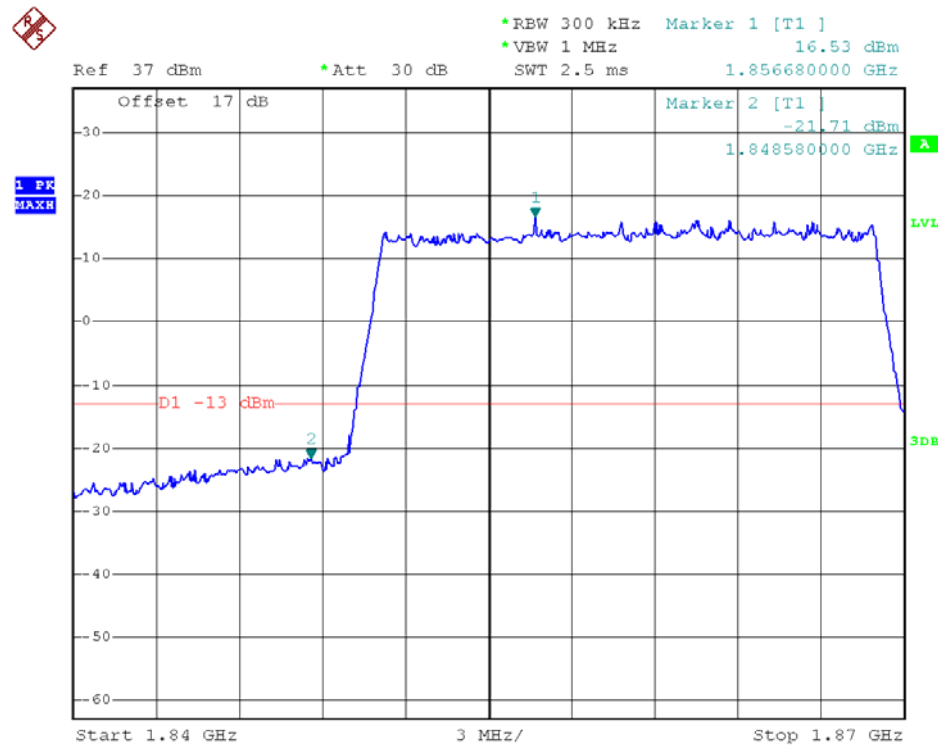


Higher Band Edge Plot for 16QAM-RB Size 75, RB Offset 0

|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 2 | Modulation | QPSK |
| Bandwidth | 20MHz      |            |      |

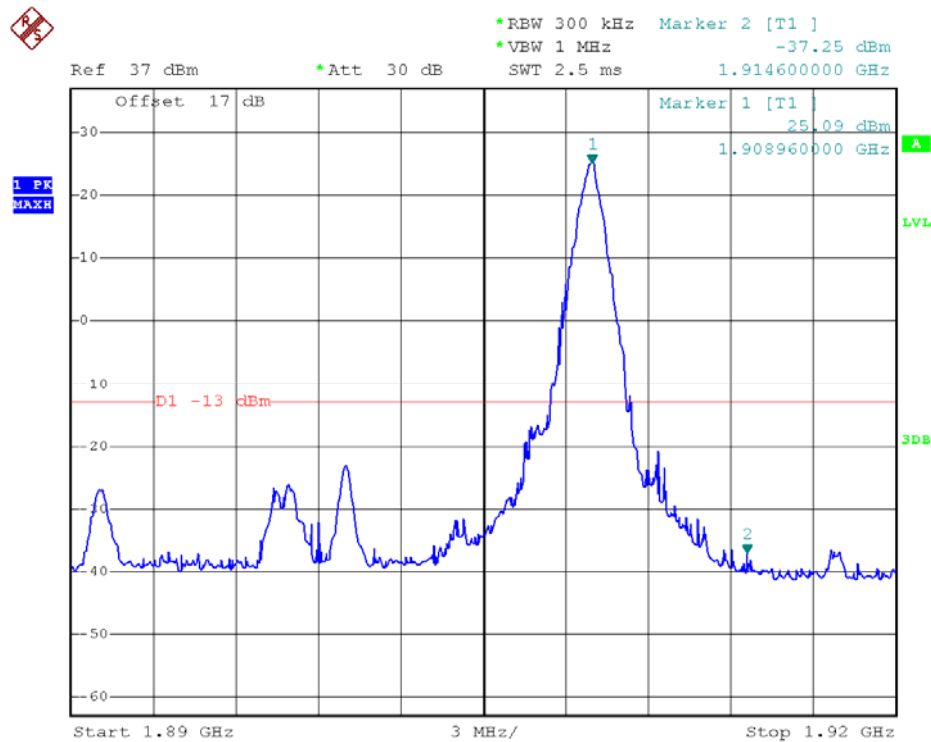


Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0

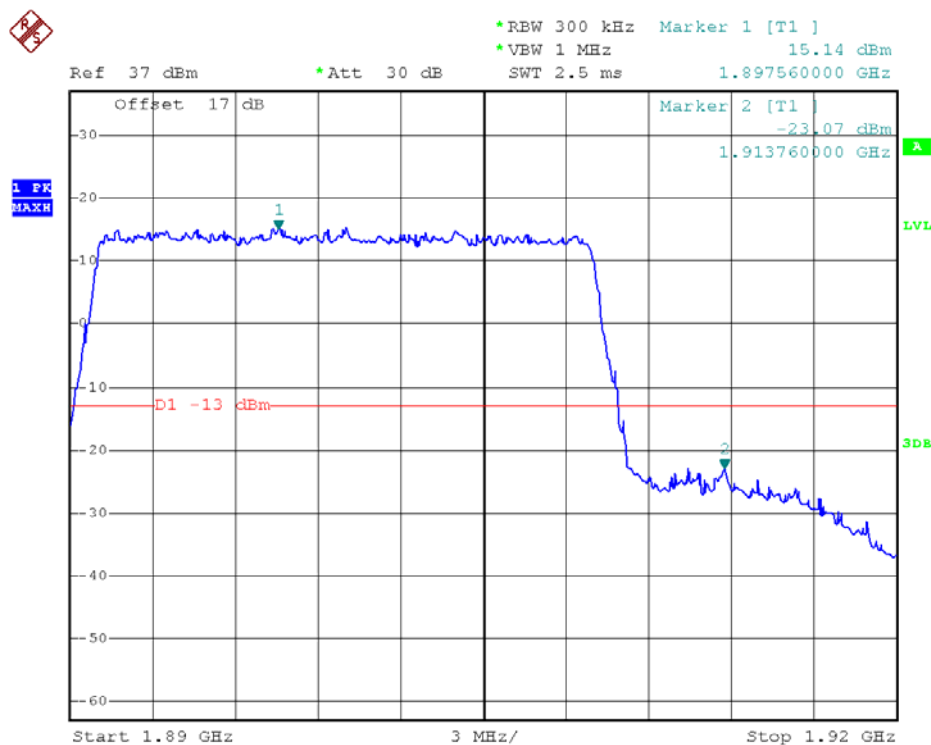


Lower Band Edge Plot for QPSK-RB Size 100, RB Offset 0



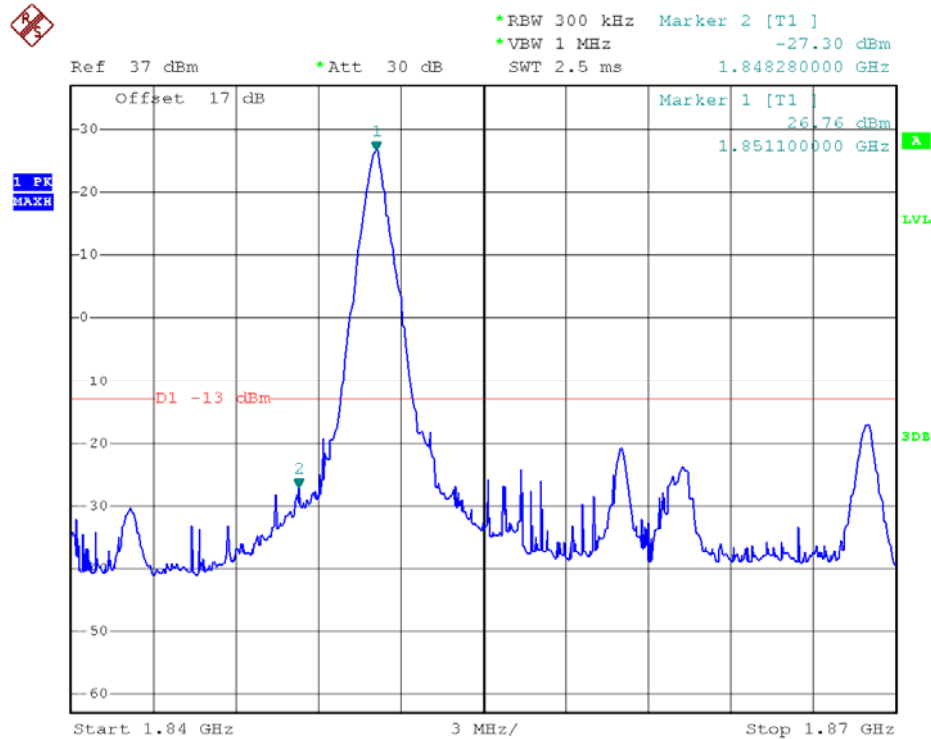


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 99

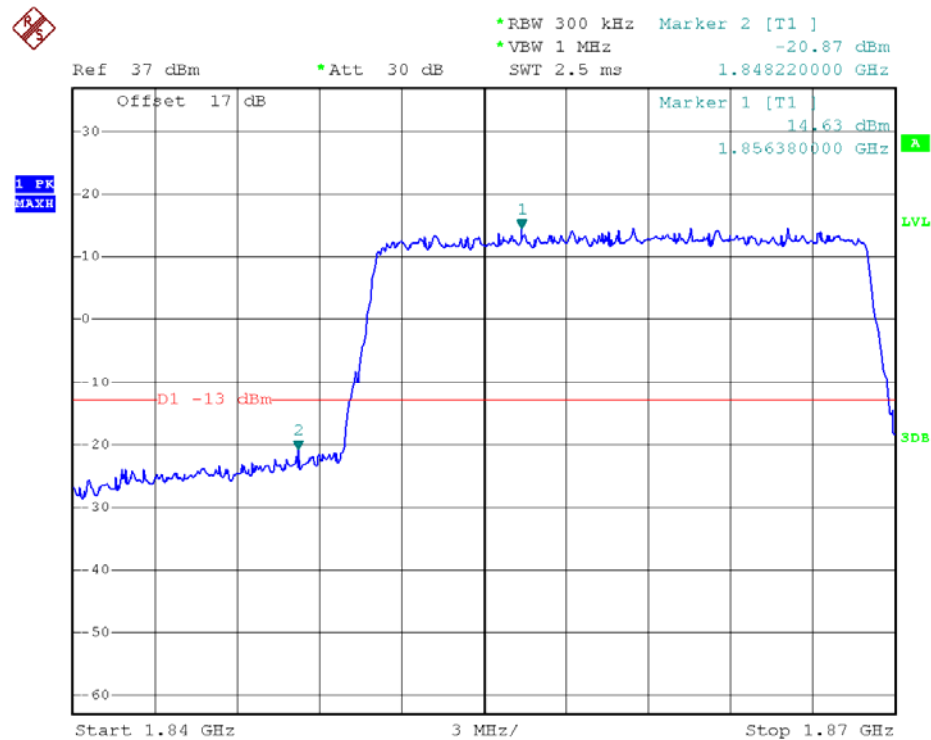


Higher Band Edge Plot for QPSK-RB Size 100, RB Offset 0

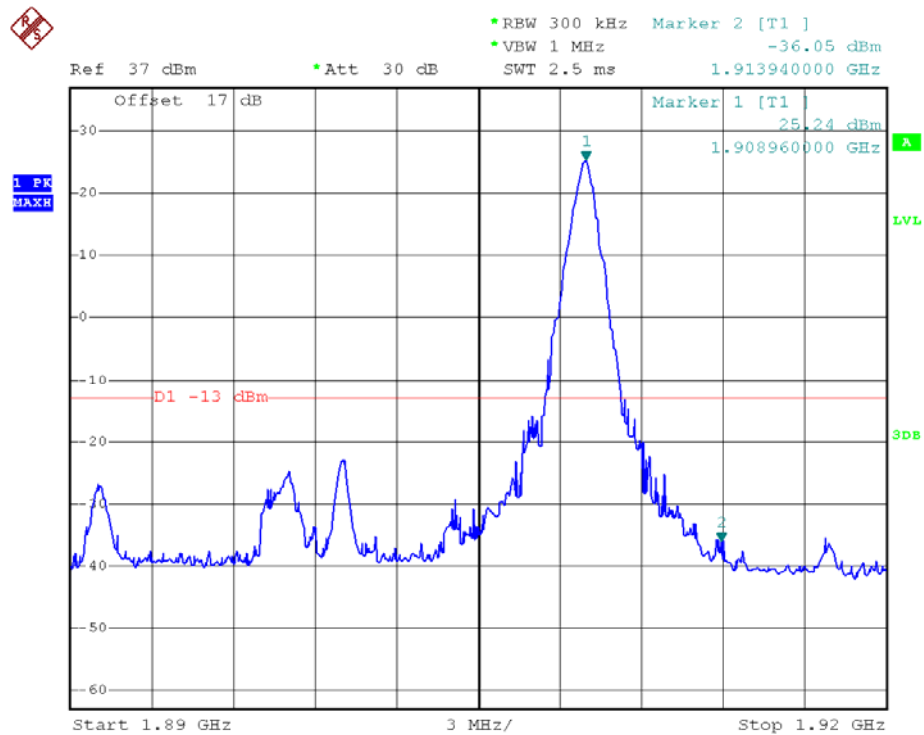
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 2 | Modulation | 16QAM |
| Bandwidth | 20MHz      |            |       |



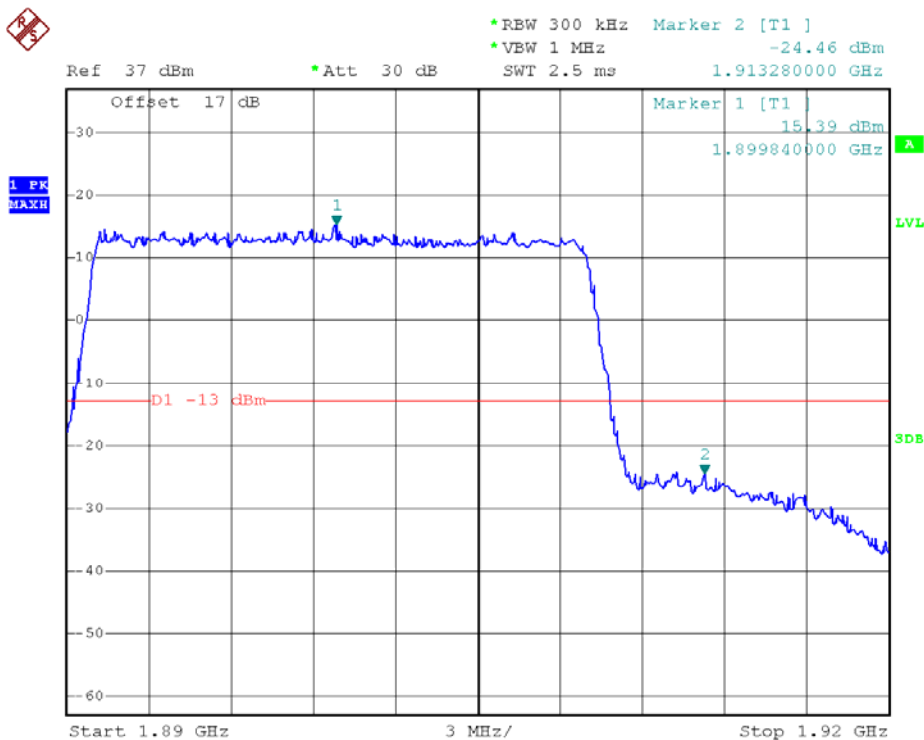
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 100, RB Offset 0

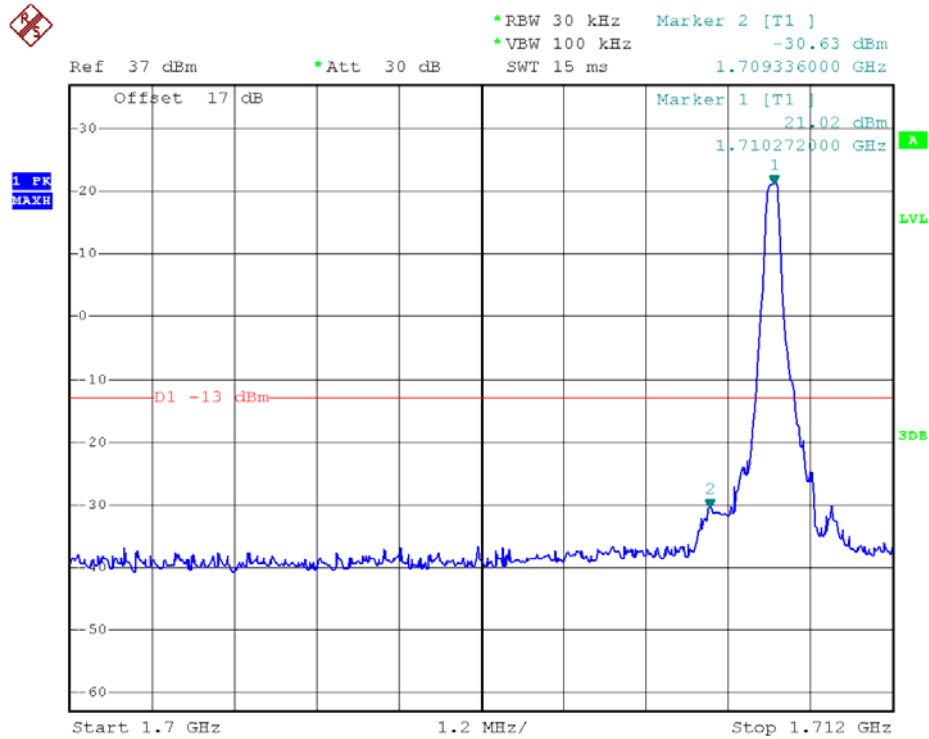


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 99

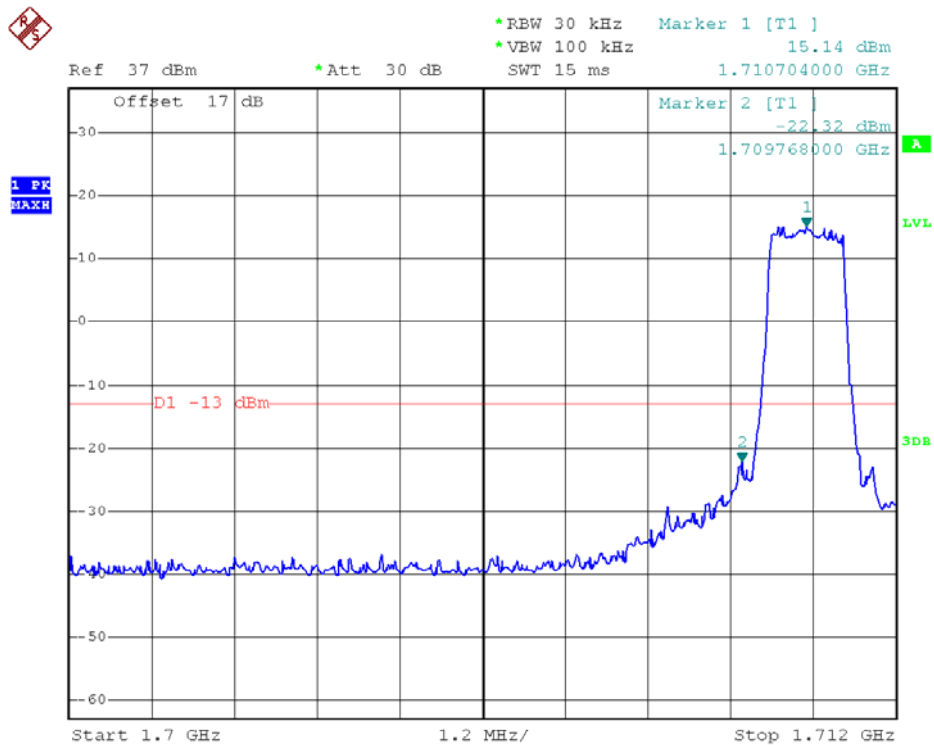


Higher Band Edge Plot for 16QAM-RB Size 100, RB Offset 0

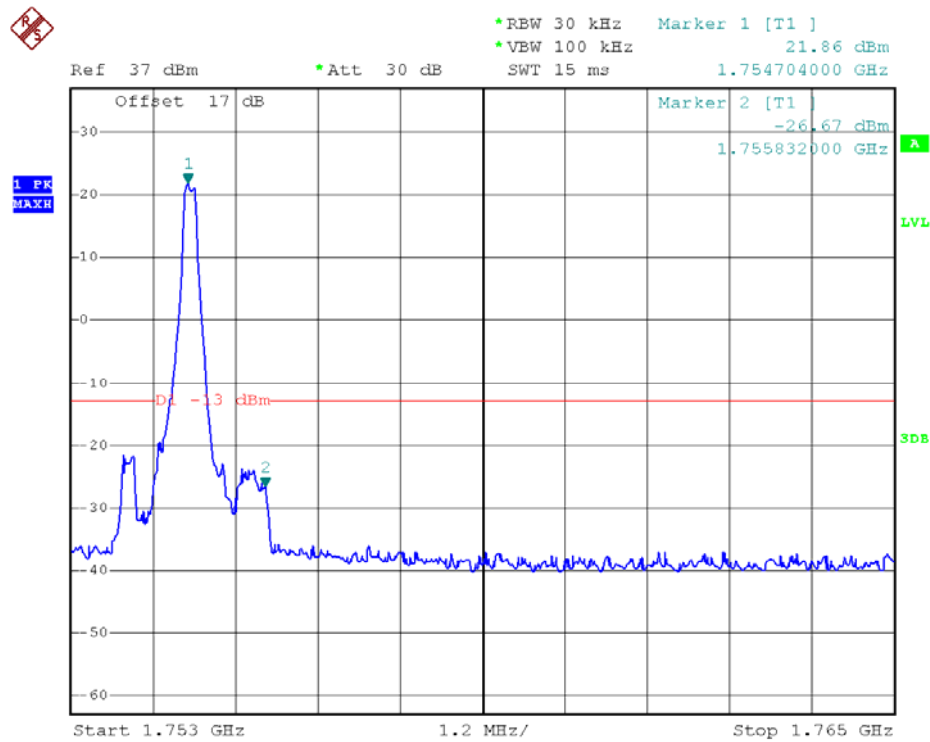
|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 4 | Modulation | QPSK |
| Bandwidth | 1.4MHz     |            |      |



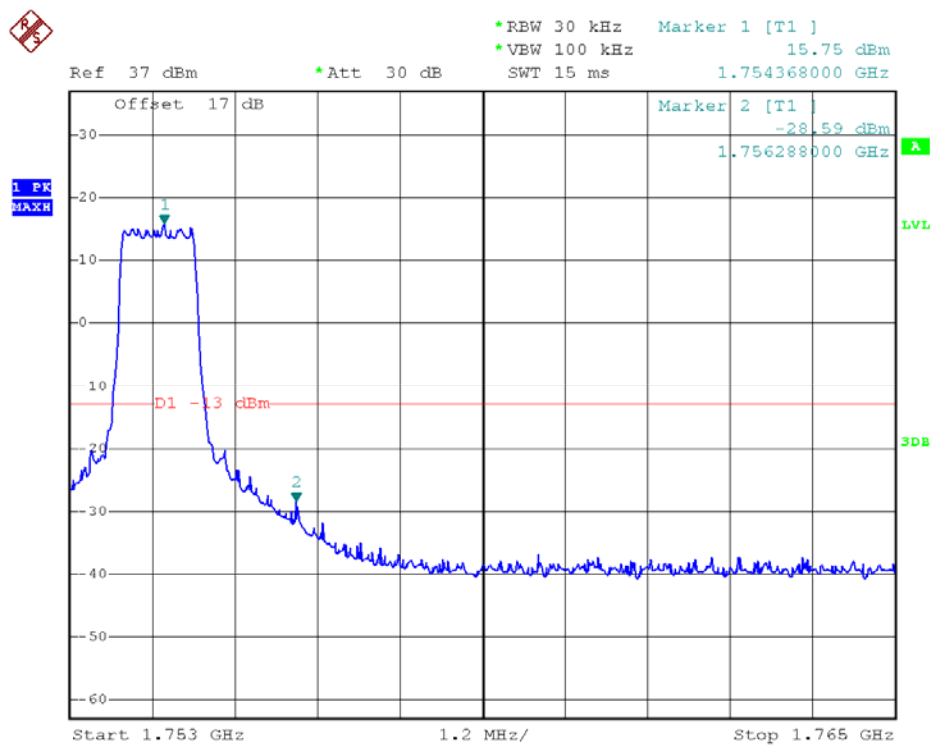
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 6, RB Offset 0

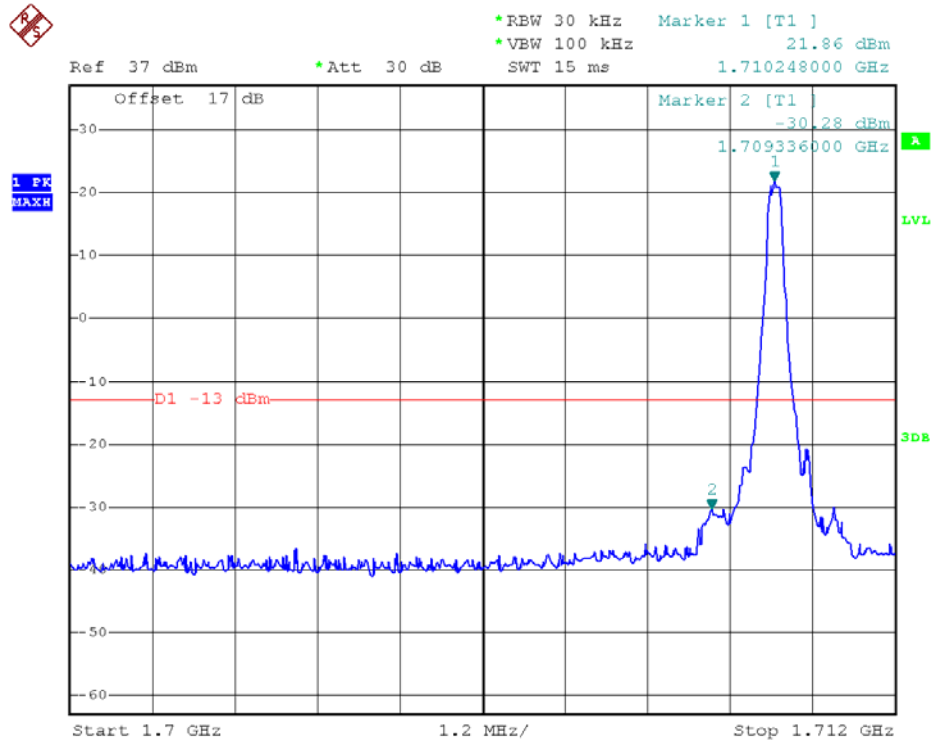


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5

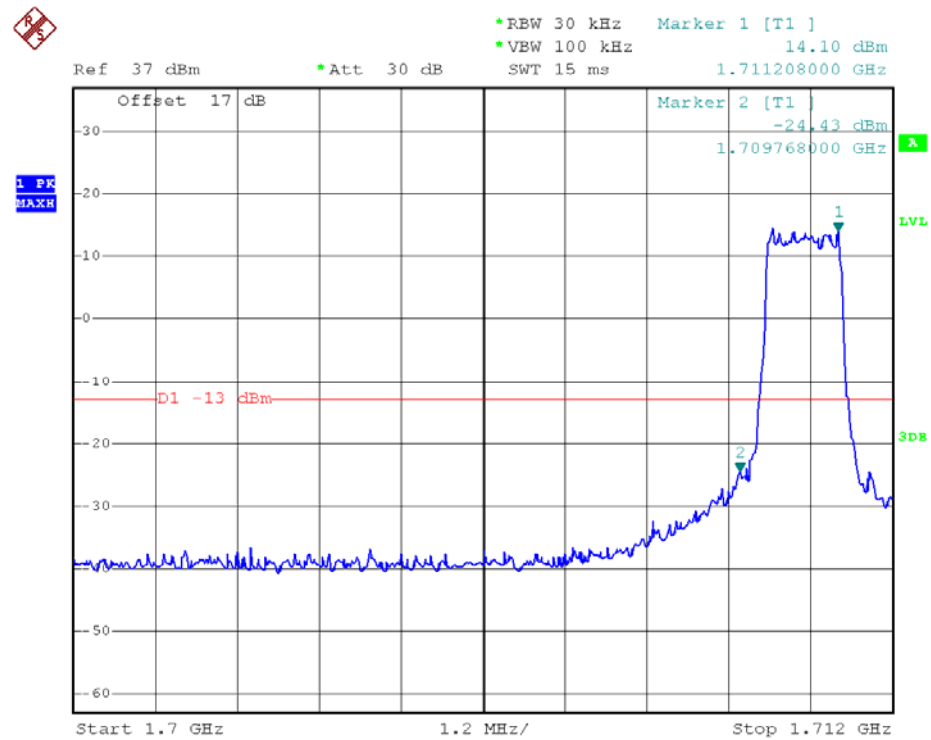


Higher Band Edge Plot for QPSK-RB Size 6, RB Offset 0

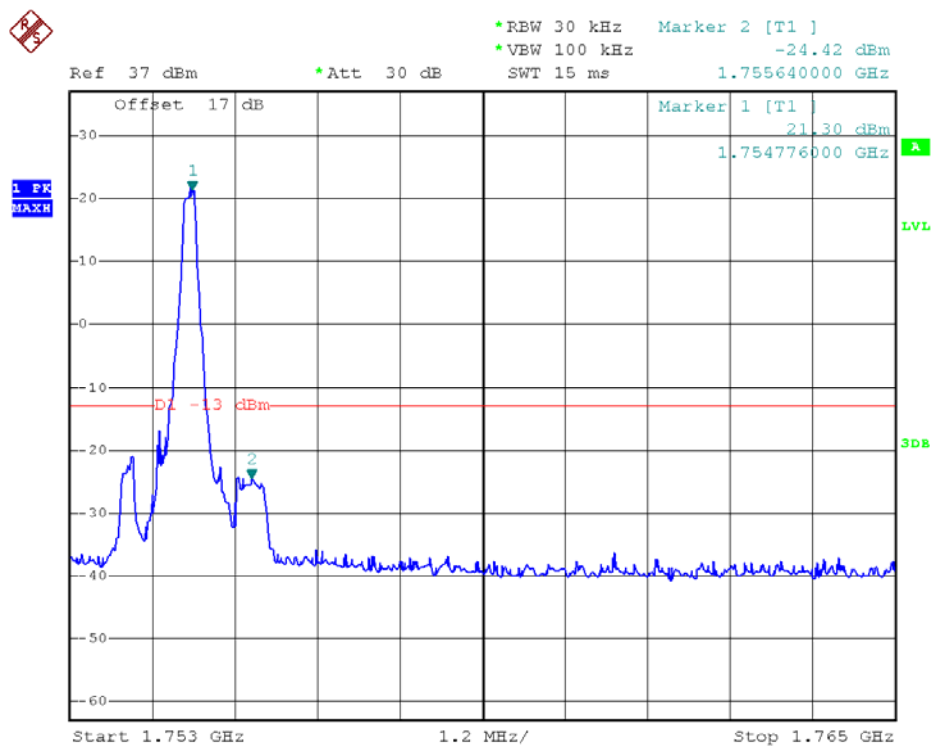
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 4 | Modulation | 16QAM |
| Bandwidth | 1.4MHz     |            |       |



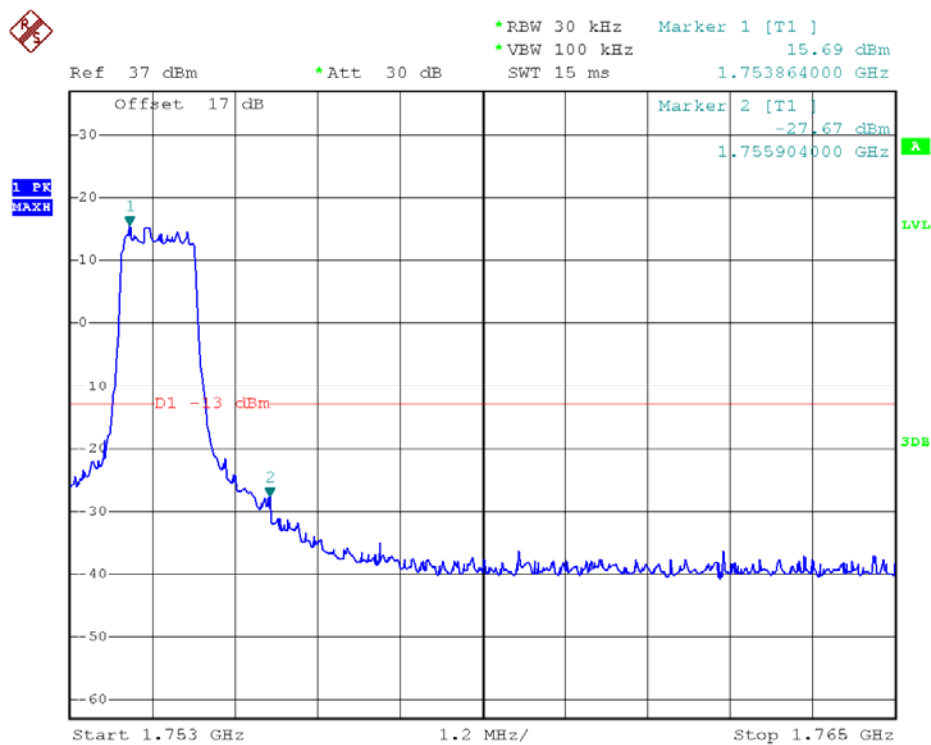
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 6, RB Offset 0

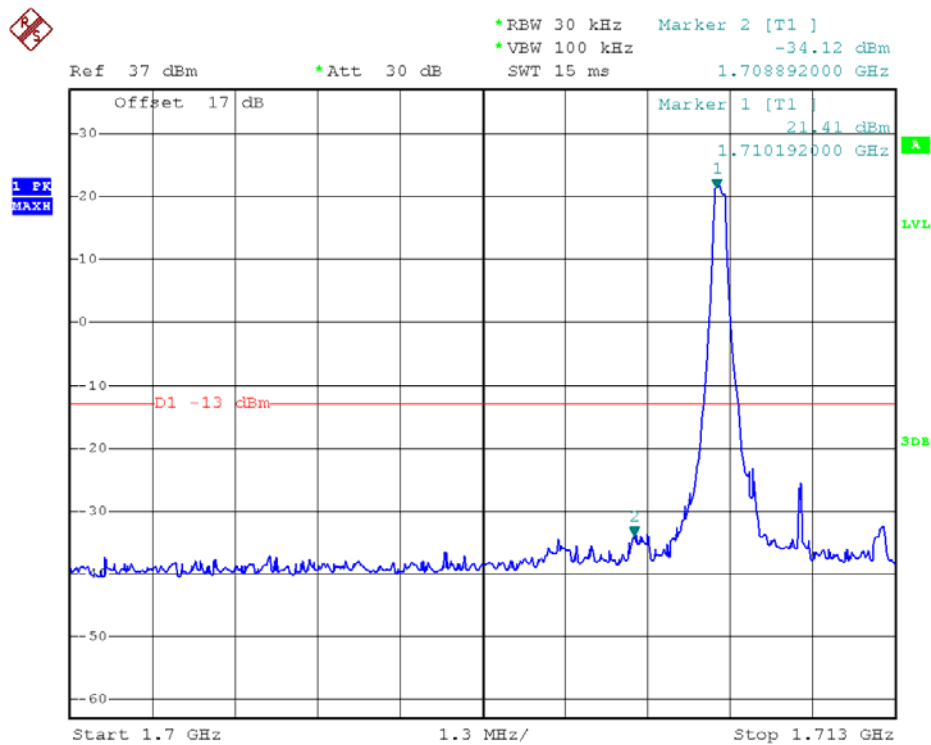


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 5

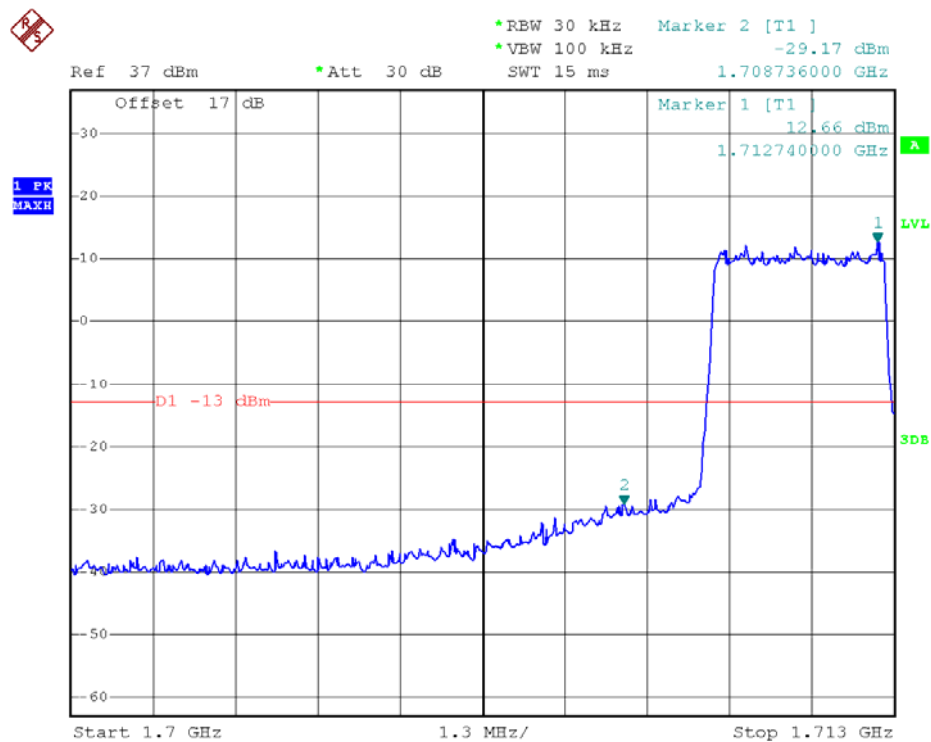


Higher Band Edge Plot for 16QAM -RB Size 6, RB Offset 0

|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 4 | Modulation | QPSK |
| Bandwidth | 3MHz       |            |      |

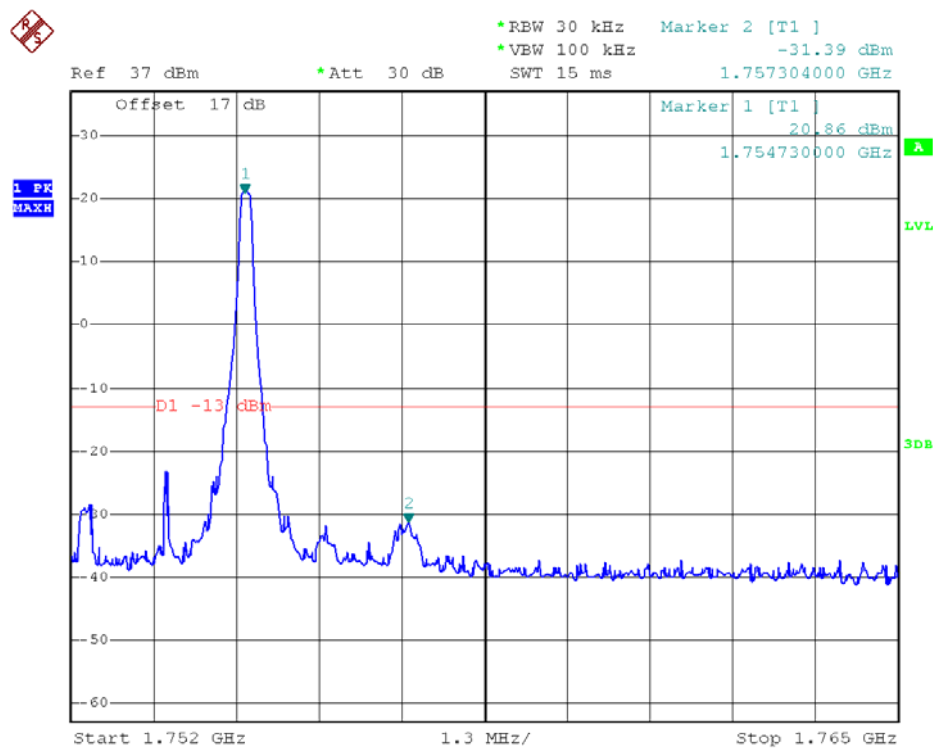


Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0

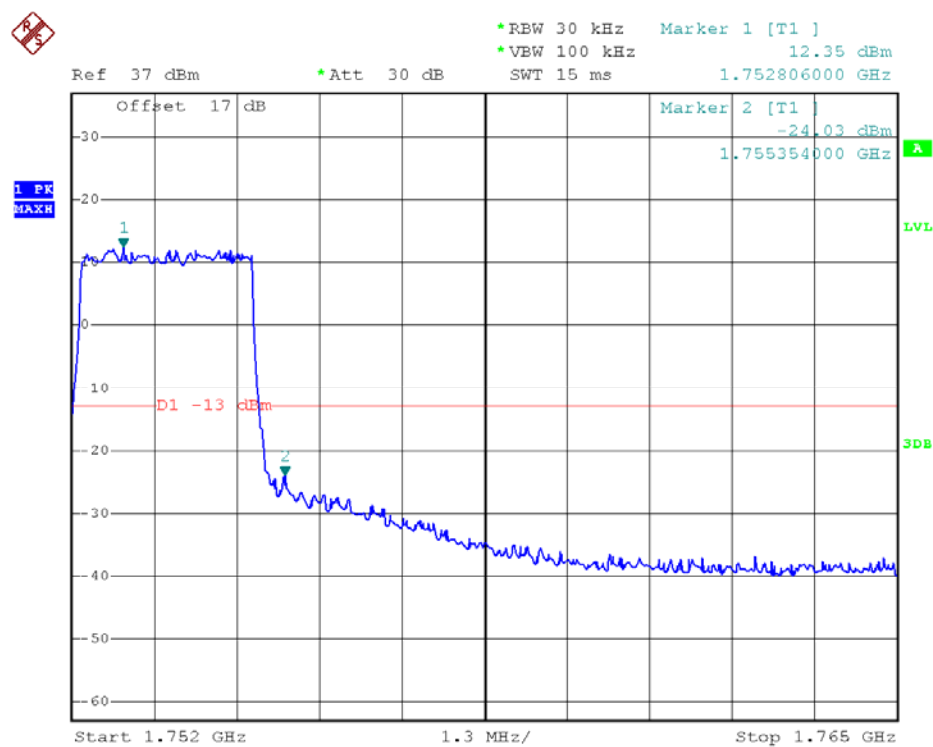


Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0



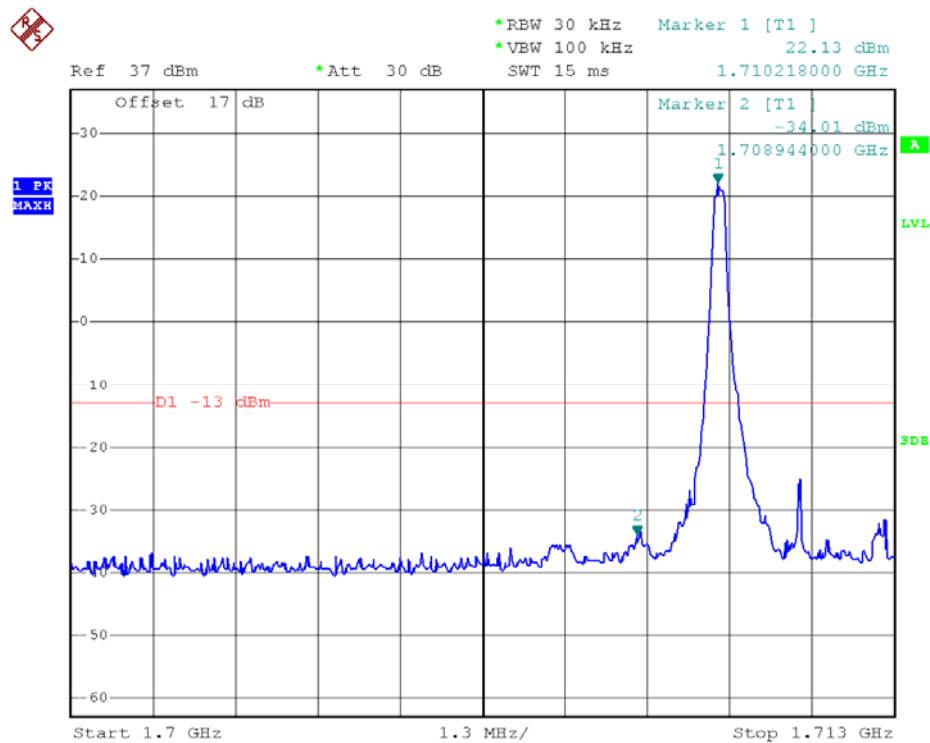


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14

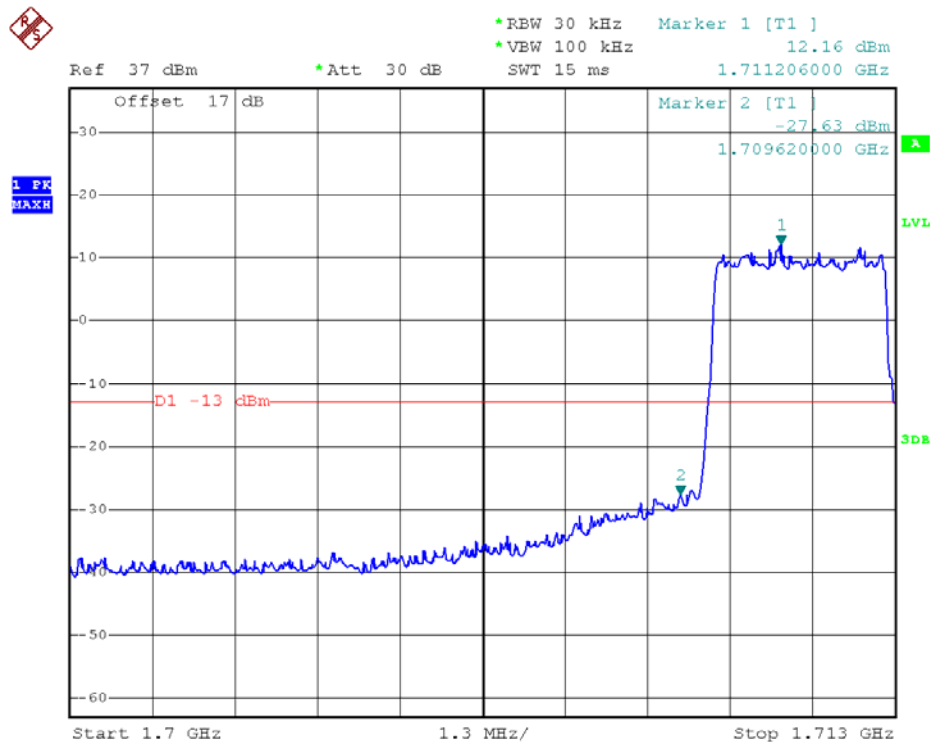


Higher Band Edge Plot for QPSK-RB Size 15, RB Offset 0

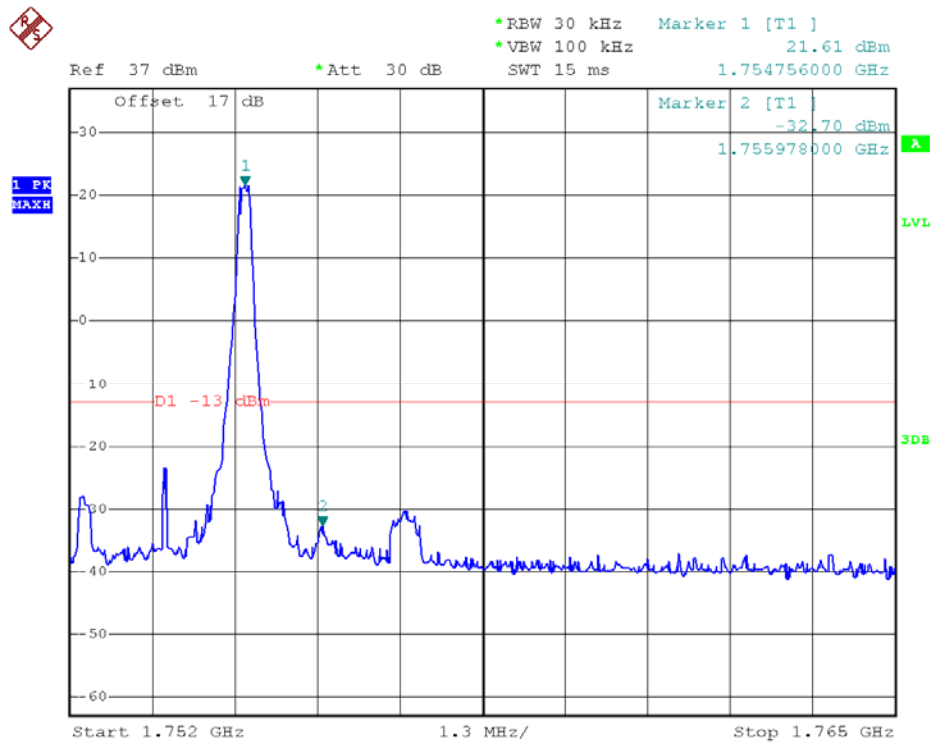
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 4 | Modulation | 16QAM |
| Bandwidth | 3MHz       |            |       |



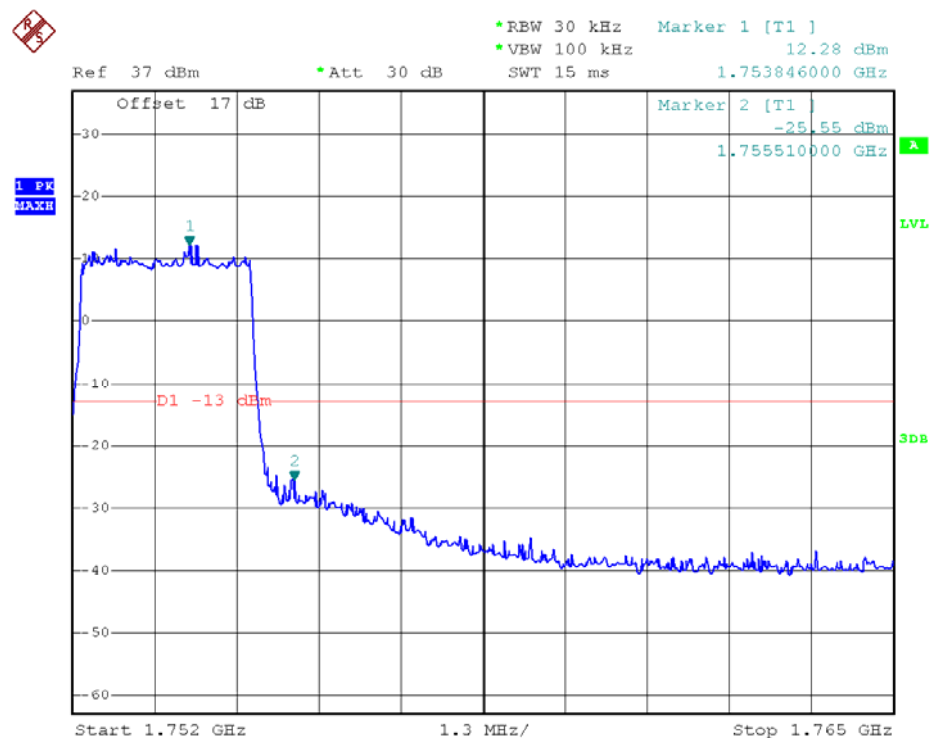
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 15, RB Offset 0

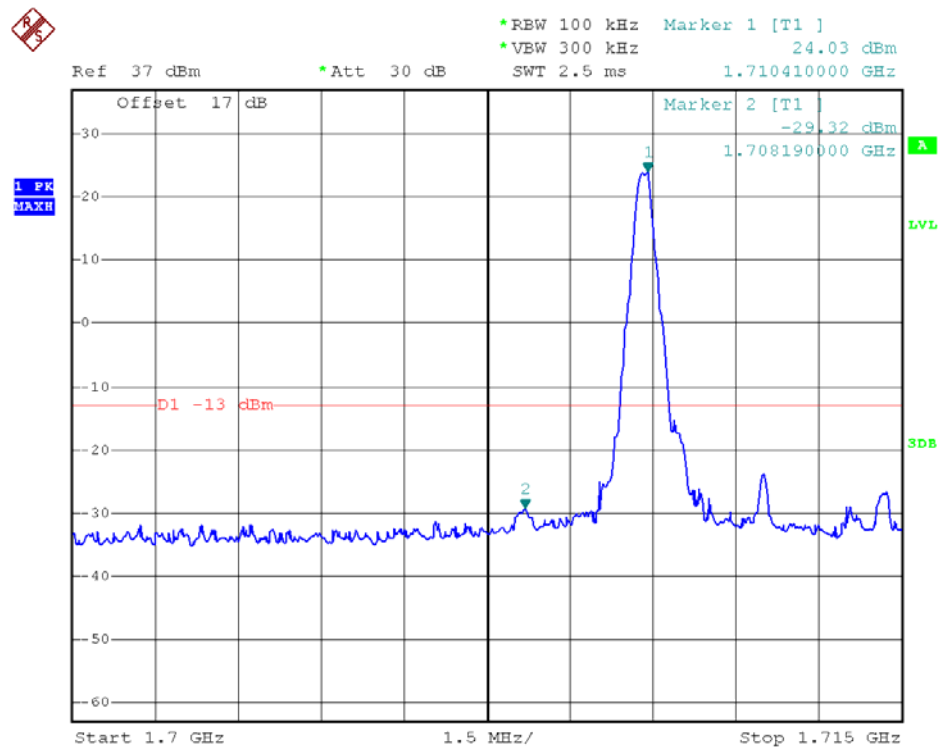


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 14

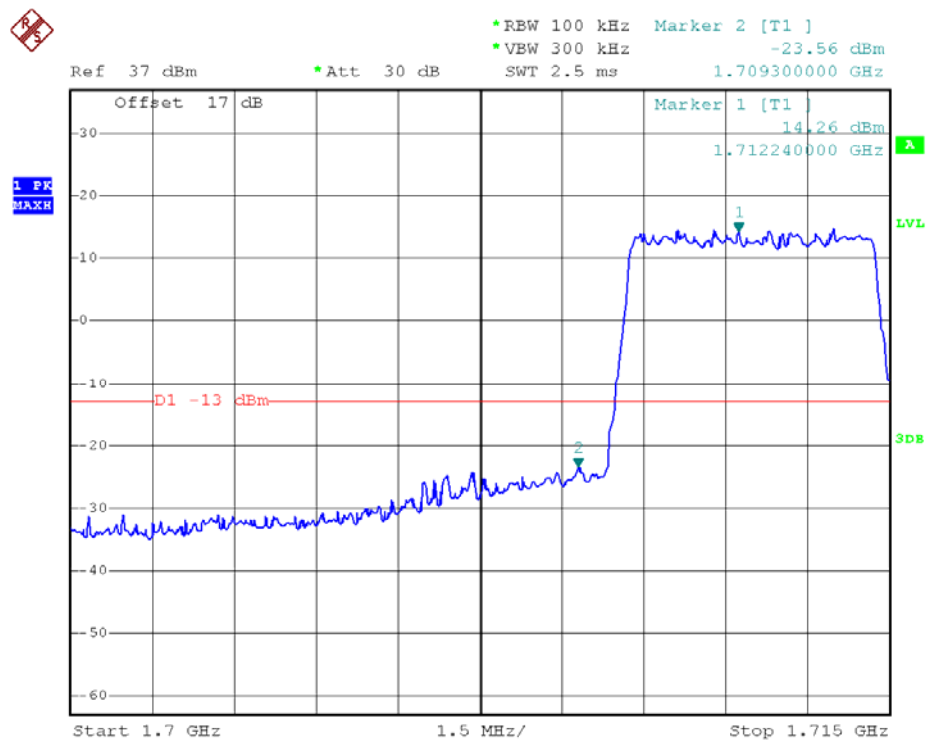


Higher Band Edge Plot for 16QAM -RB Size 15, RB Offset 0

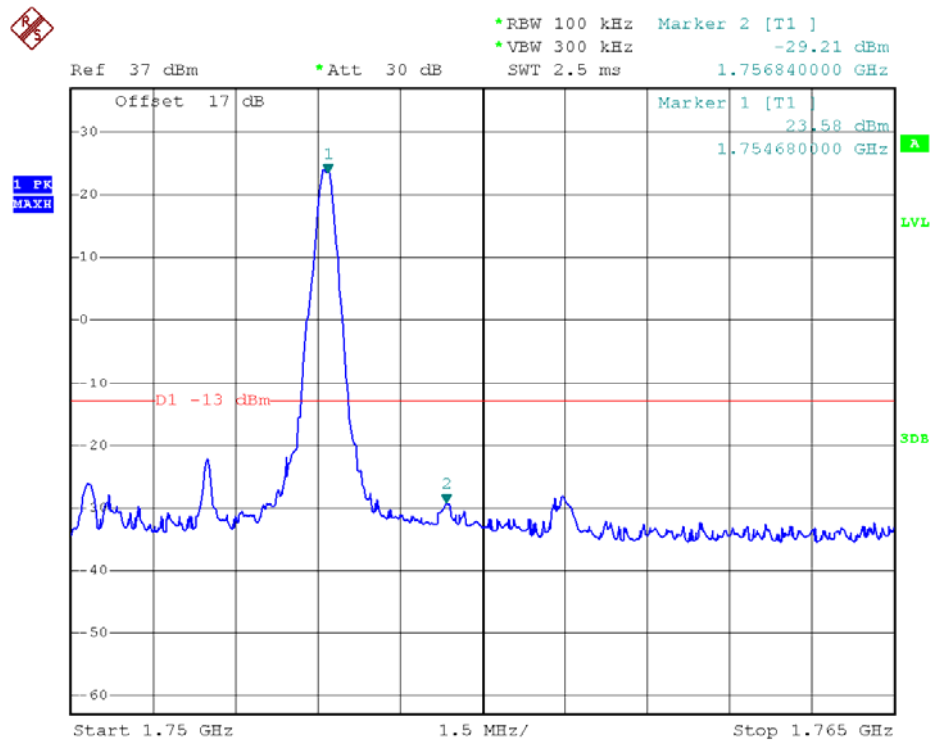
|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 4 | Modulation | QPSK |
| Bandwidth | 5MHz       |            |      |



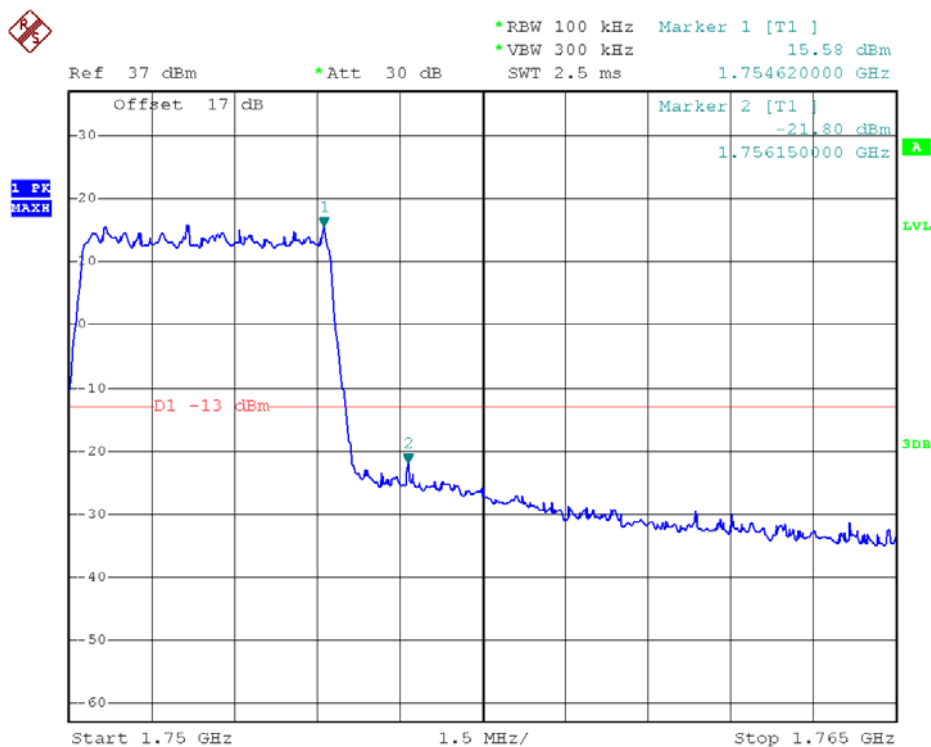
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0

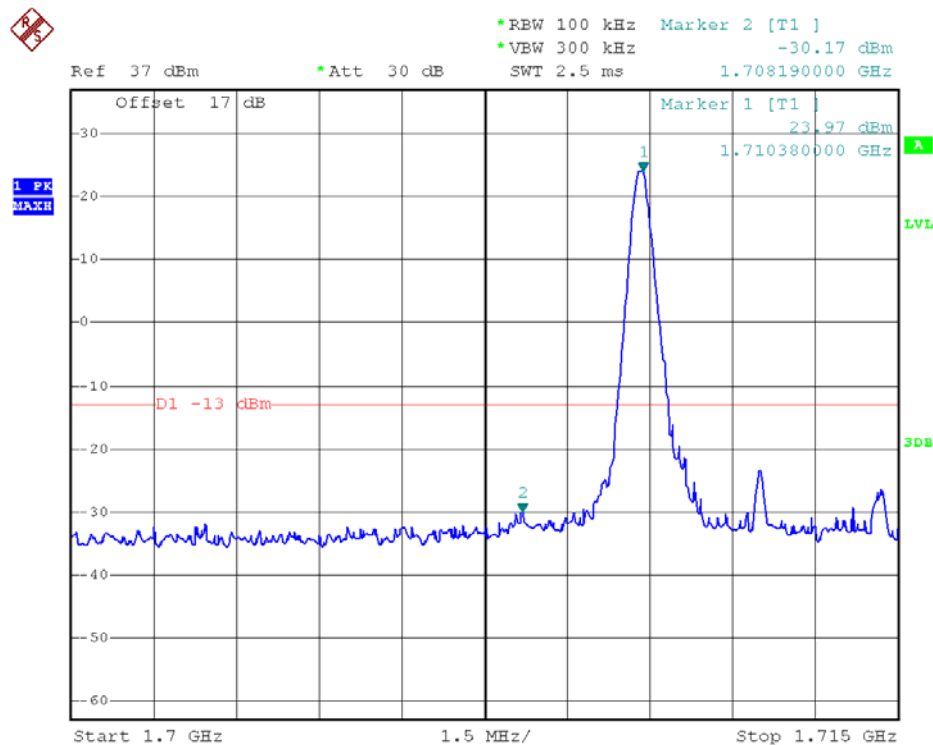


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24

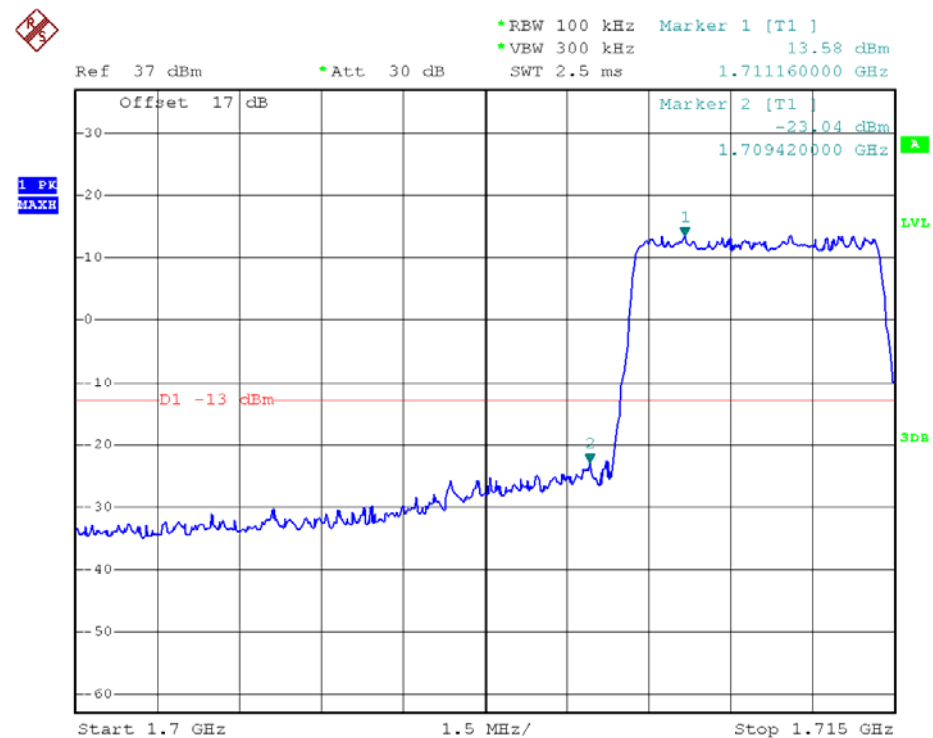


Higher Band Edge Plot for QPSK-RB Size 25, RB Offset 0

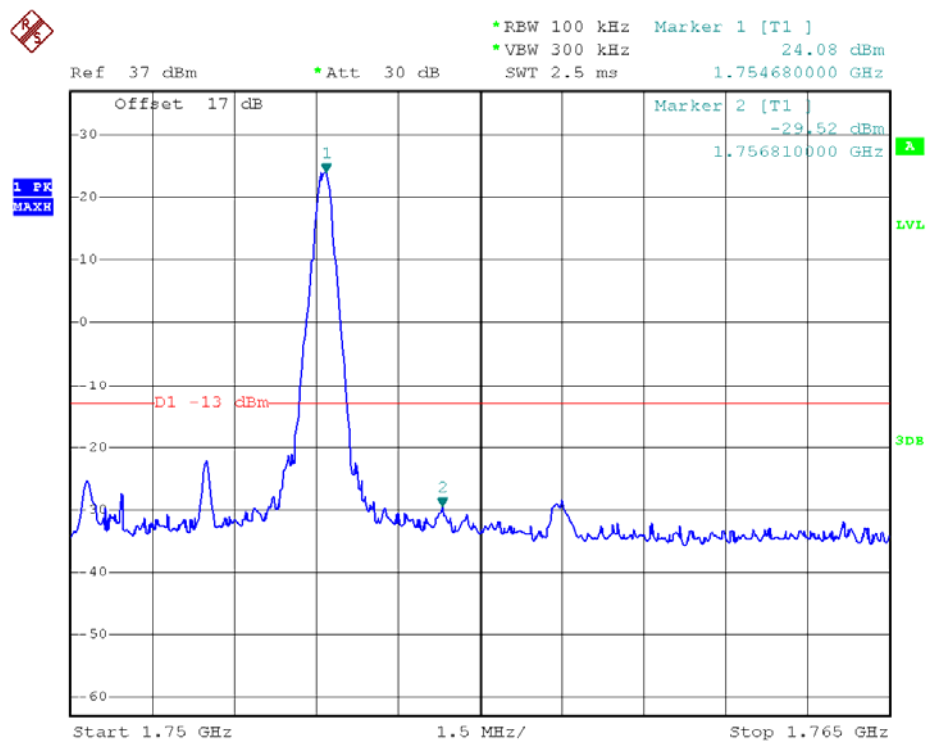
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 4 | Modulation | 16QAM |
| Bandwidth | 5MHz       |            |       |



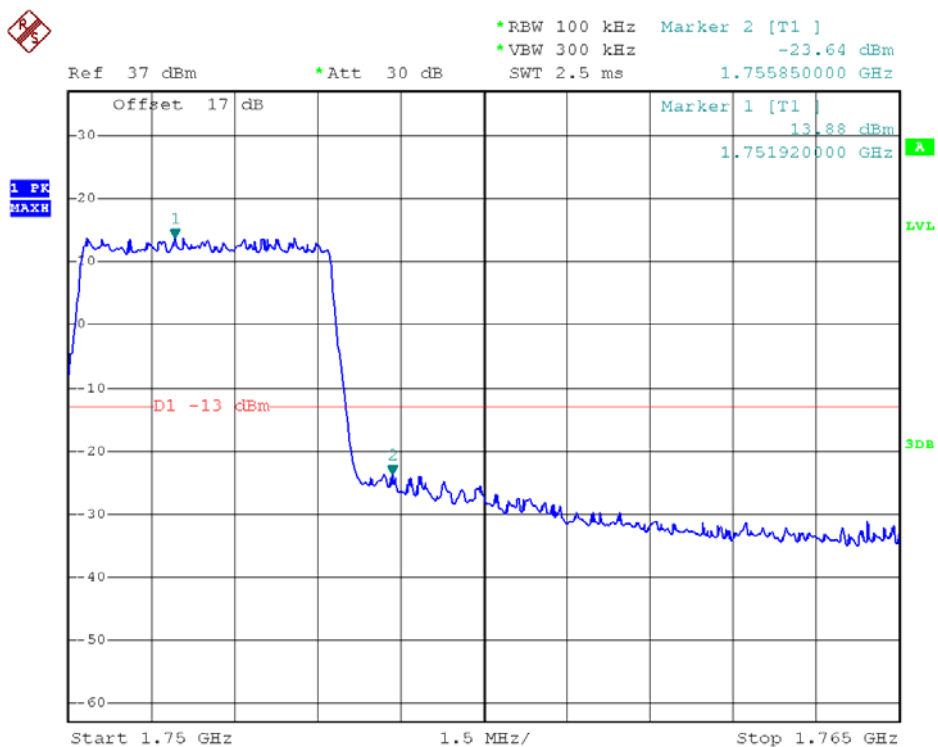
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 25, RB Offset 0

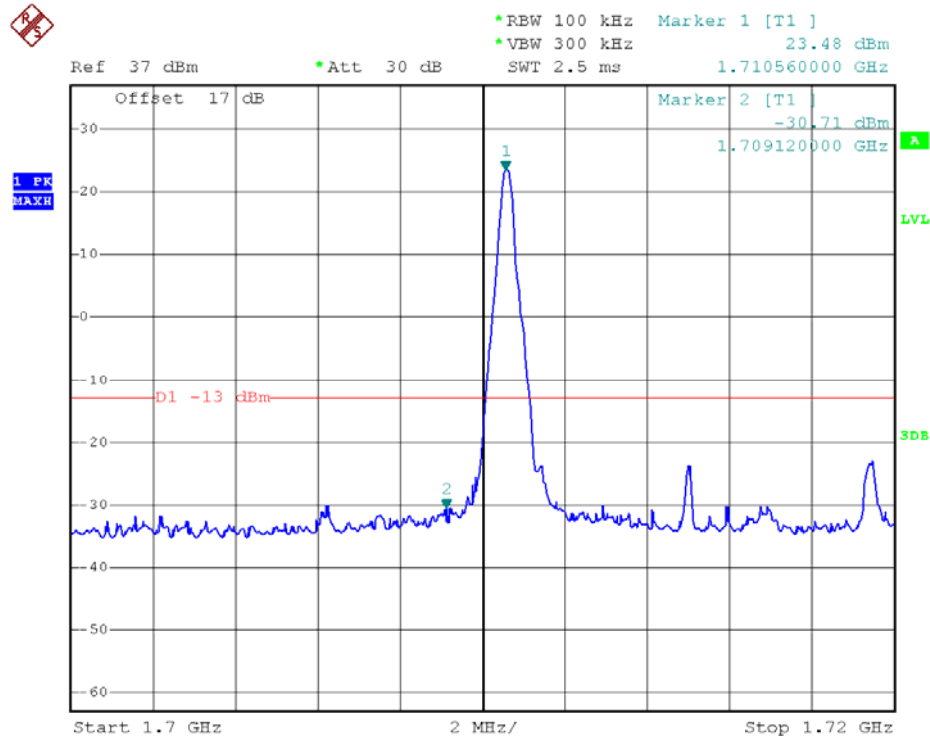


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 24

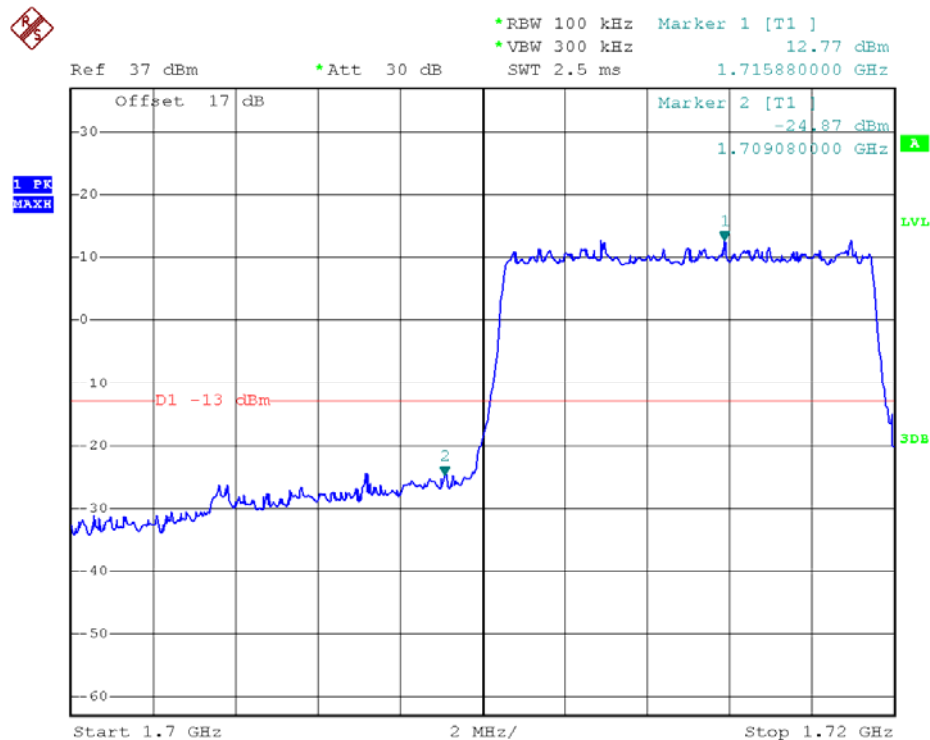


Higher Band Edge Plot for 16QAM -RB Size 25, RB Offset 0

|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 4 | Modulation | QPSK |
| Bandwidth | 10MHz      |            |      |

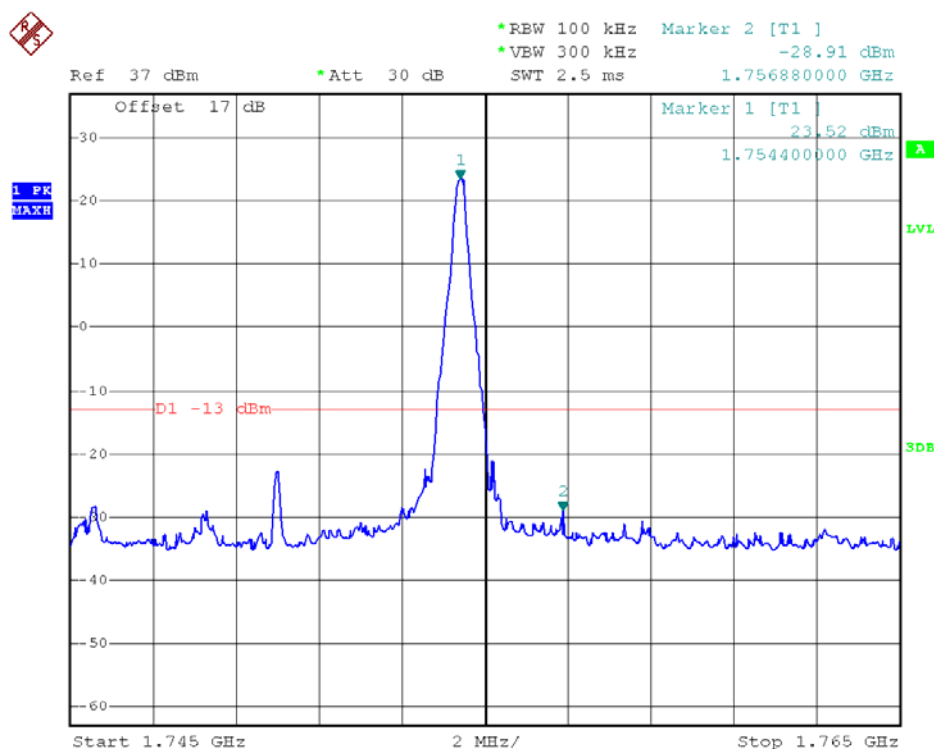


Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0

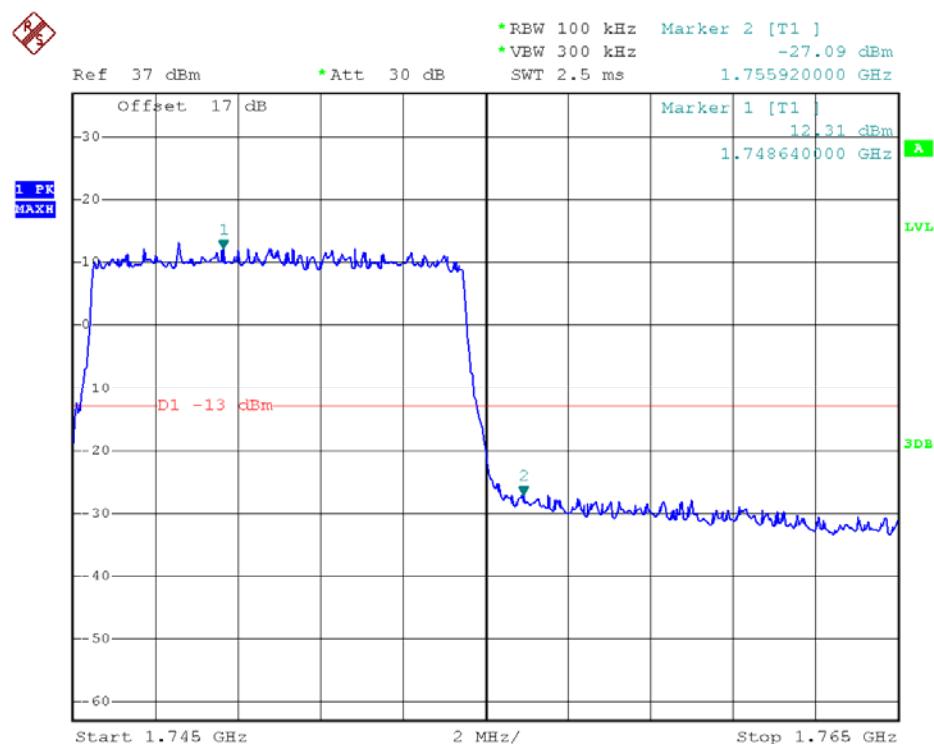


Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0



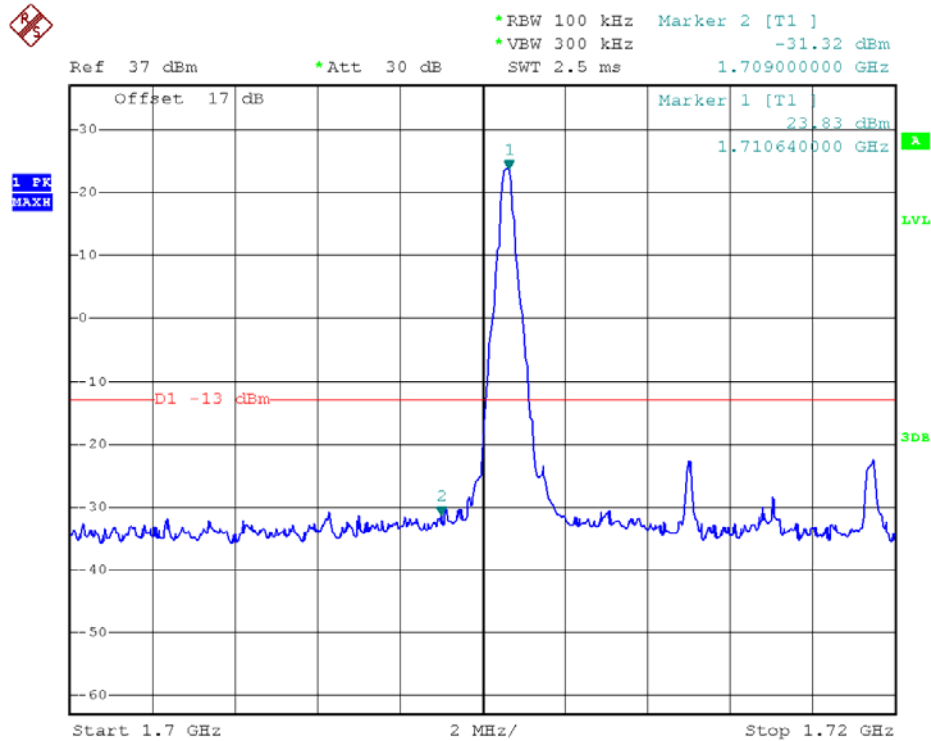


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49

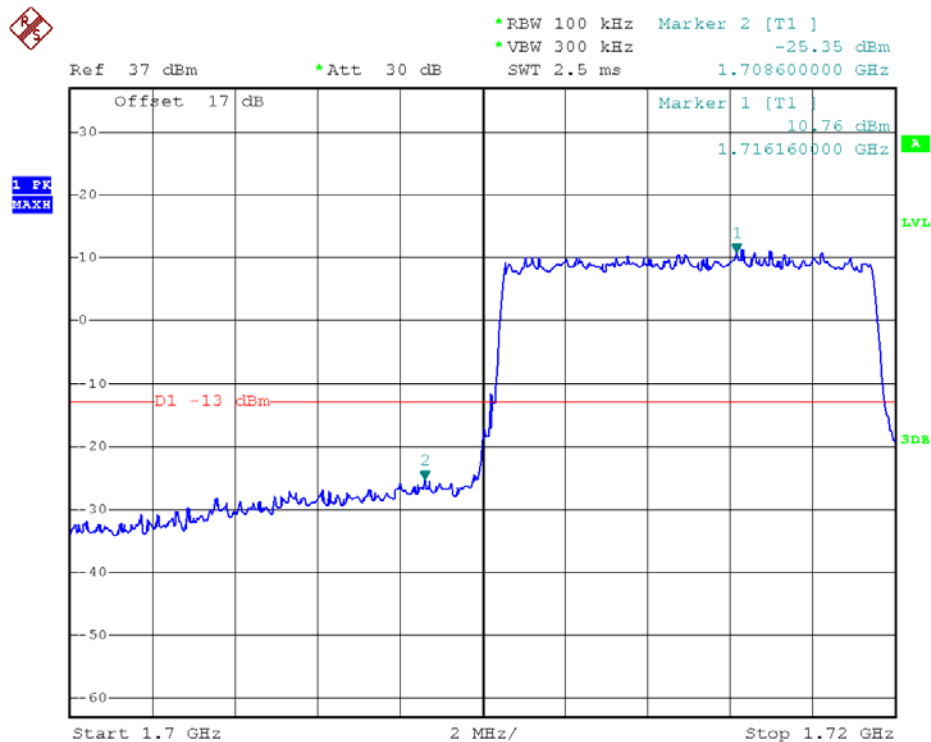


Higher Band Edge Plot for QPSK-RB Size 50, RB Offset 0

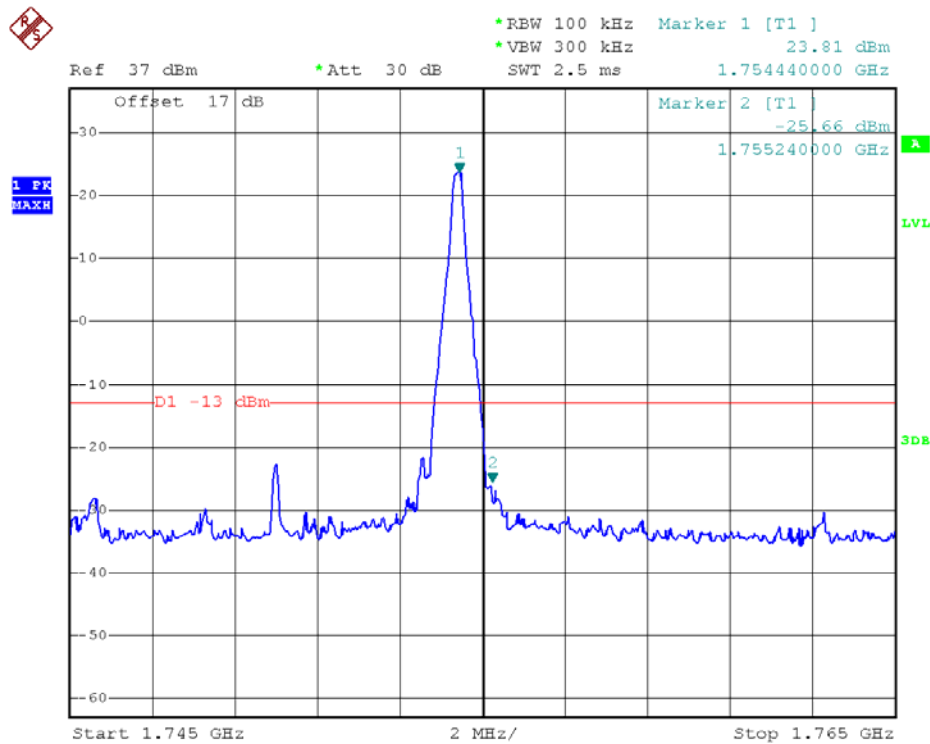
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 4 | Modulation | 16QAM |
| Bandwidth | 10MHz      |            |       |



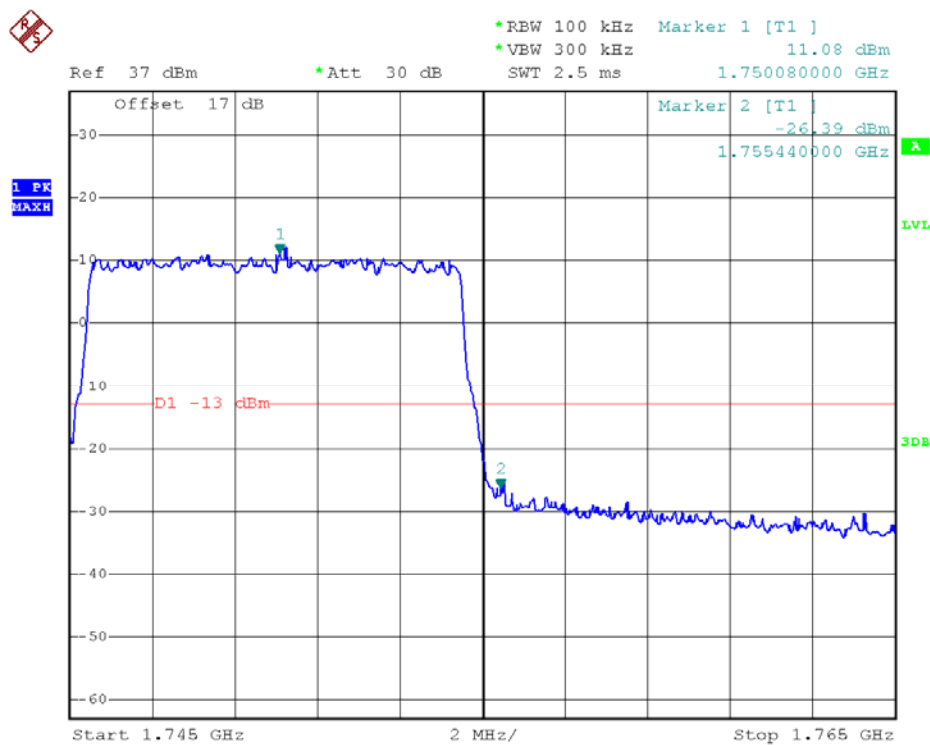
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 50, RB Offset 0

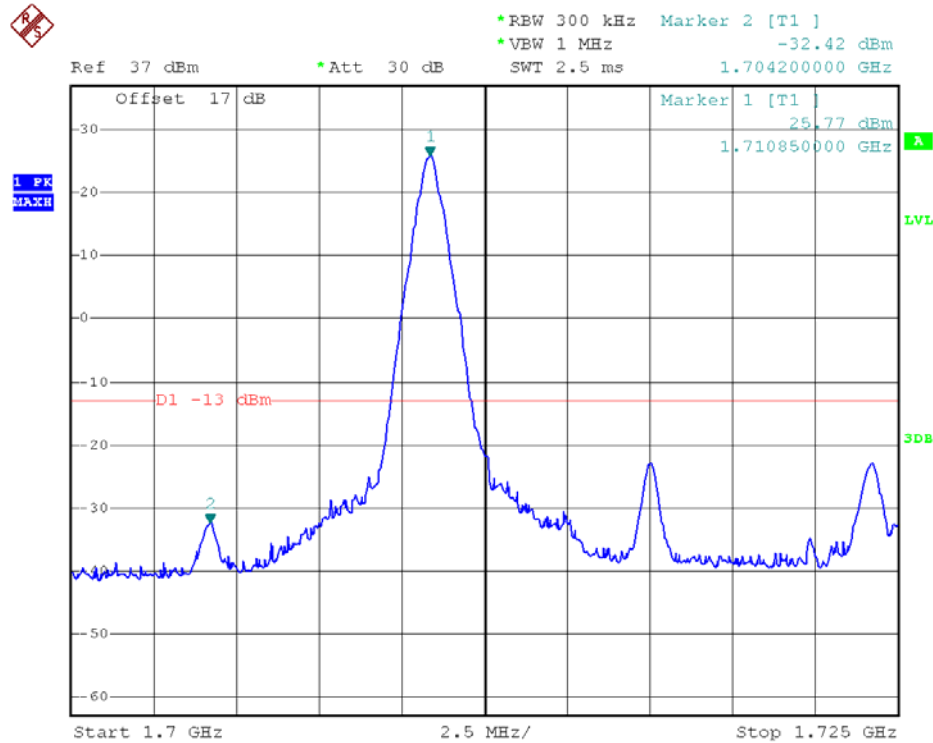


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 49

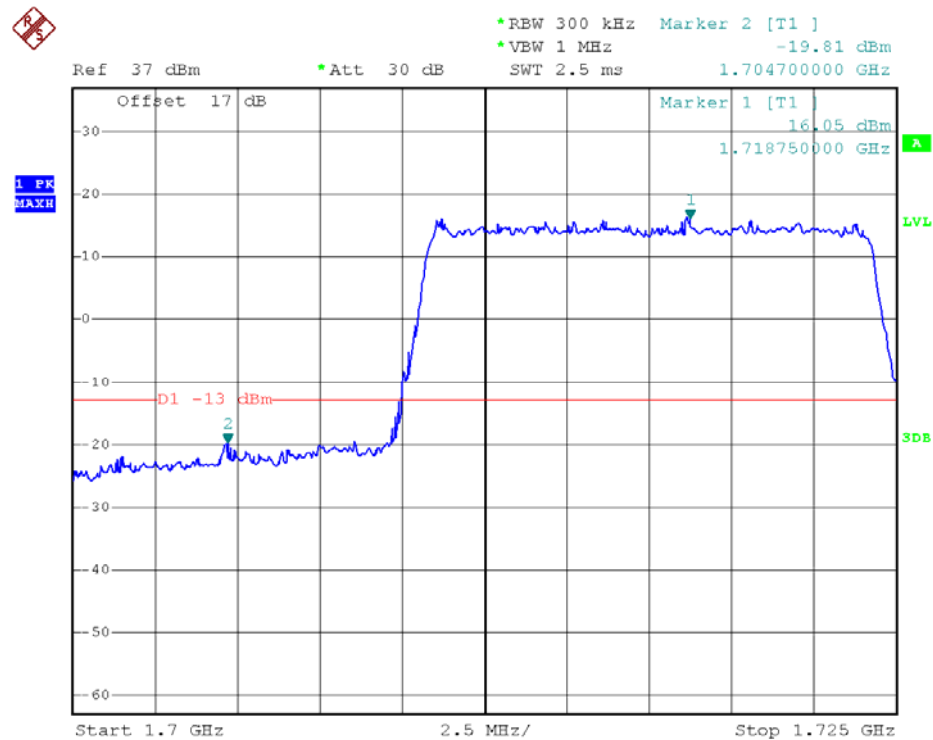


Higher Band Edge Plot for 16QAM -RB Size 50, RB Offset 0

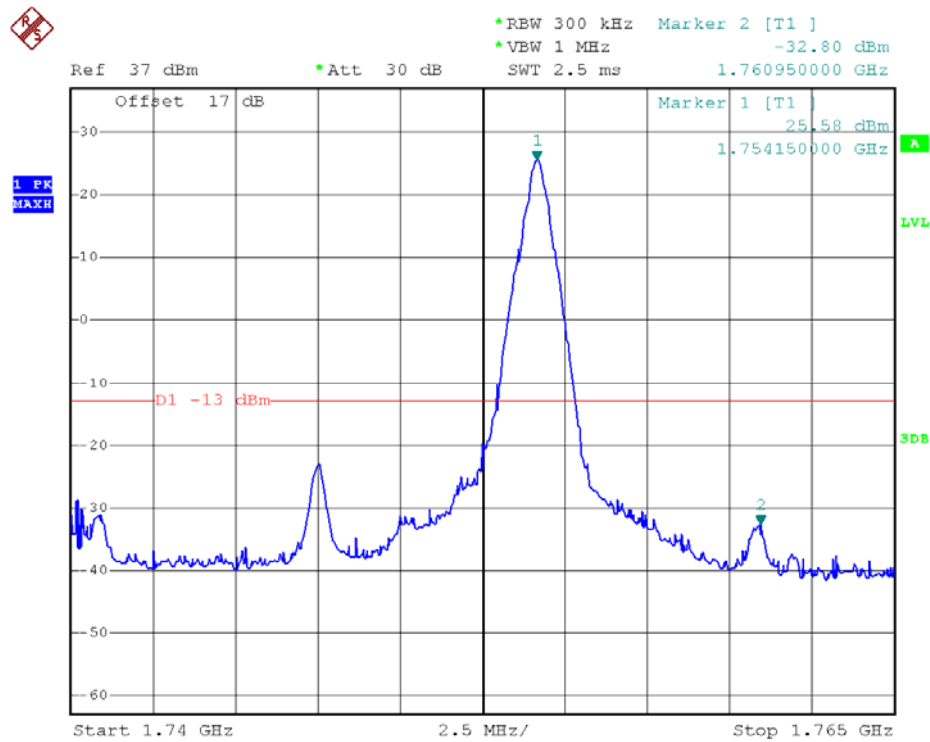
|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 4 | Modulation | QPSK |
| Bandwidth | 15MHz      |            |      |



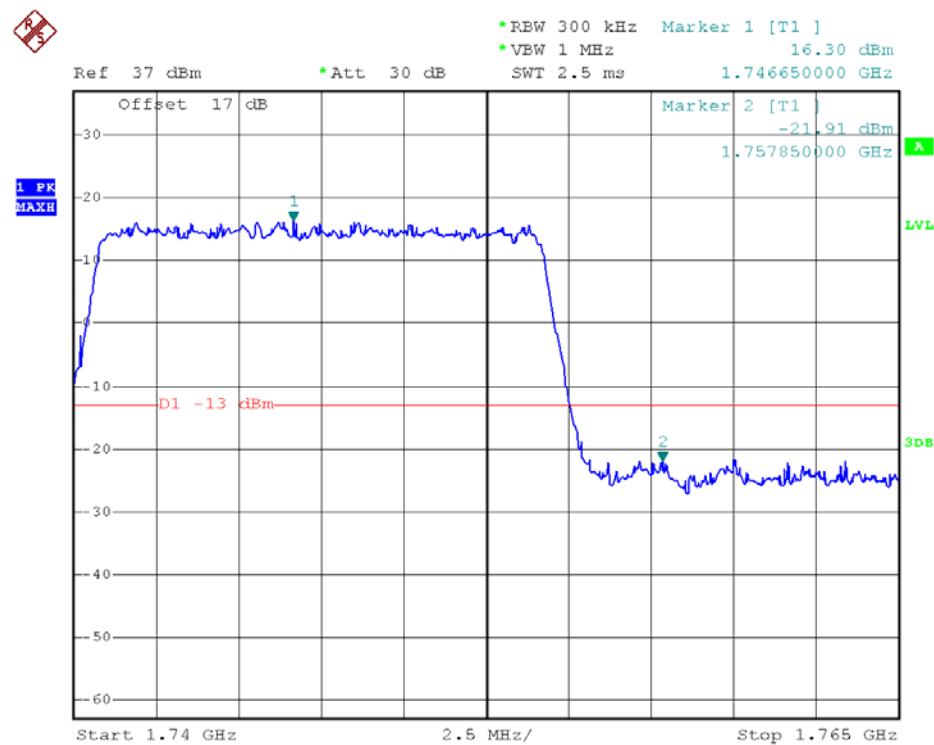
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 75, RB Offset 0

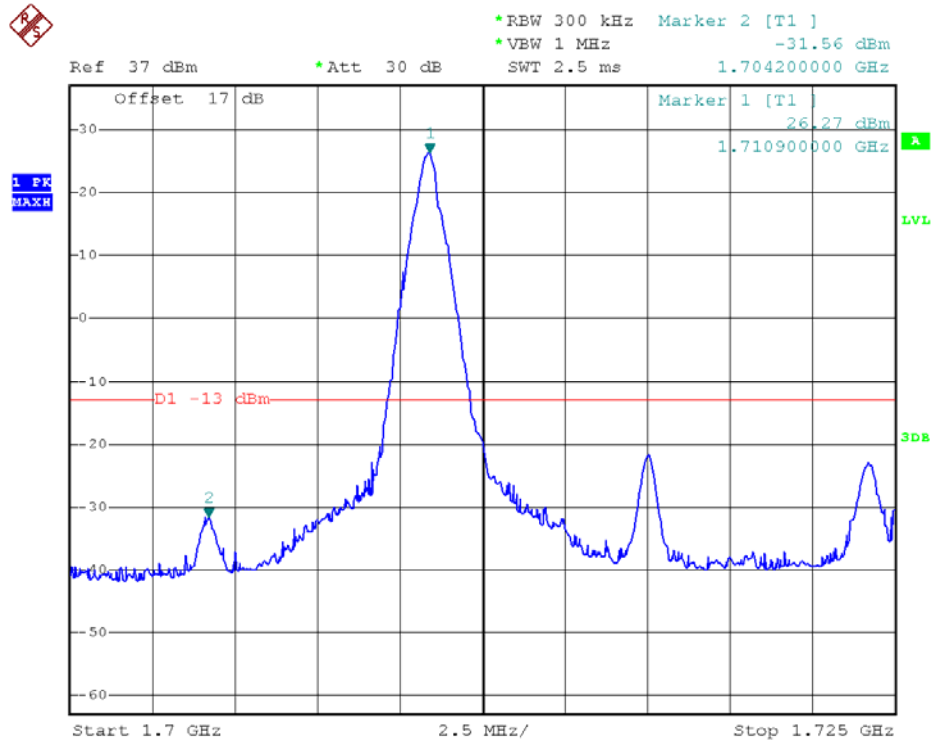


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 74

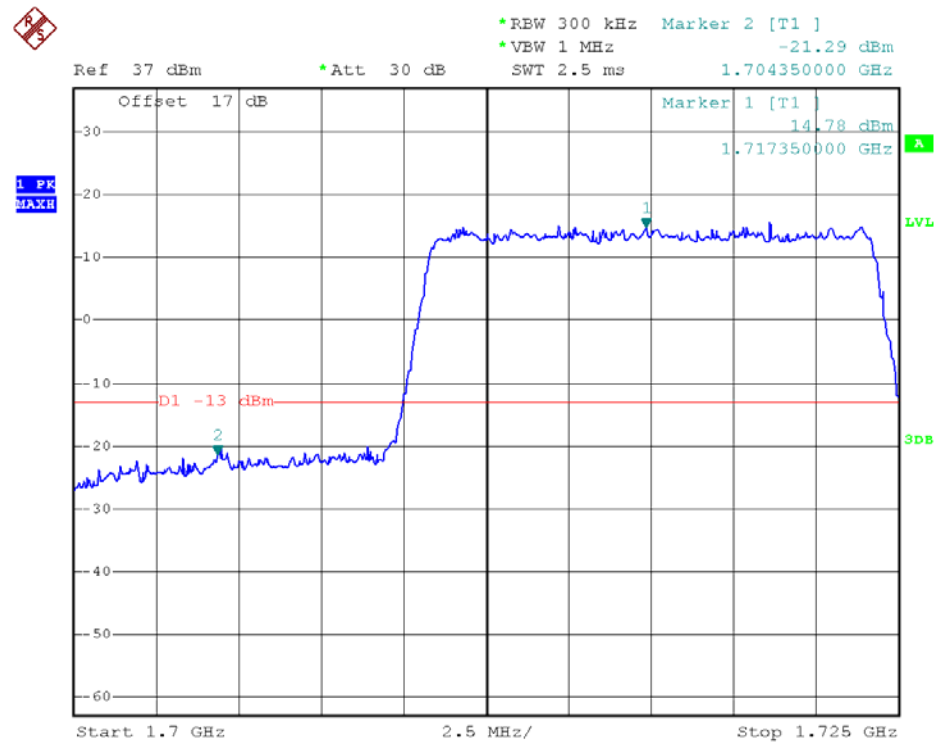


Higher Band Edge Plot for QPSK-RB Size 75, RB Offset 0

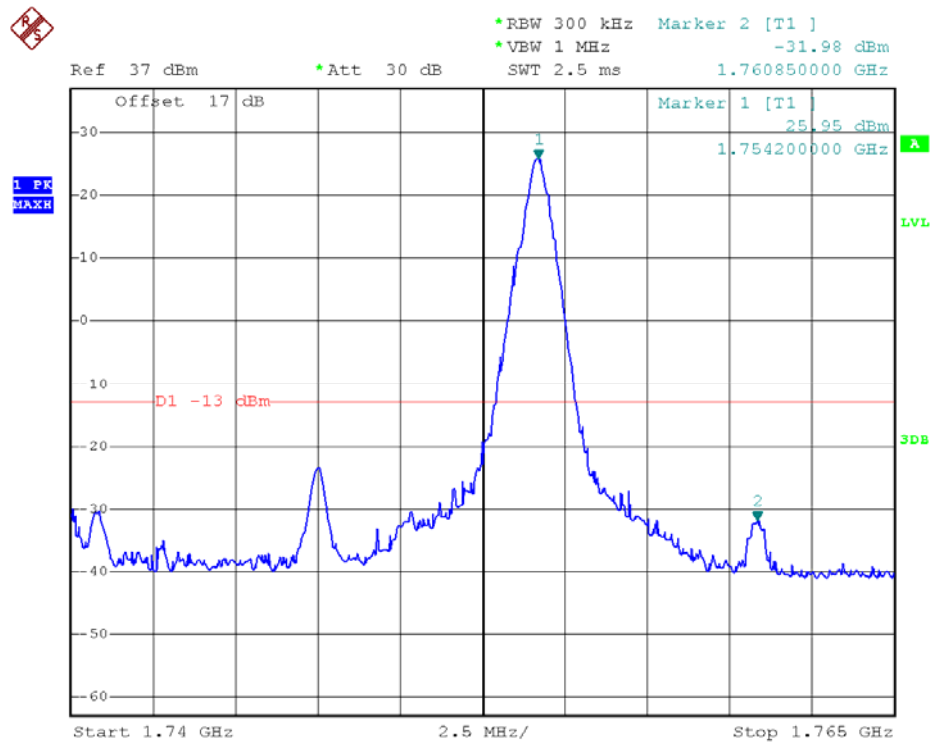
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 4 | Modulation | 16QAM |
| Bandwidth | 15MHz      |            |       |



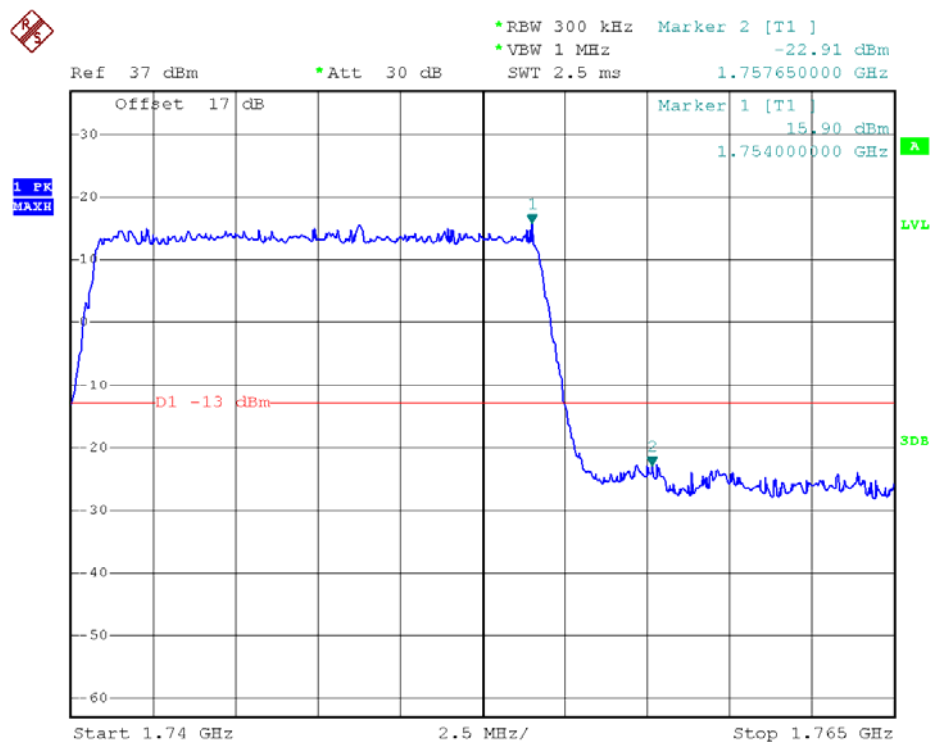
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 75, RB Offset 0

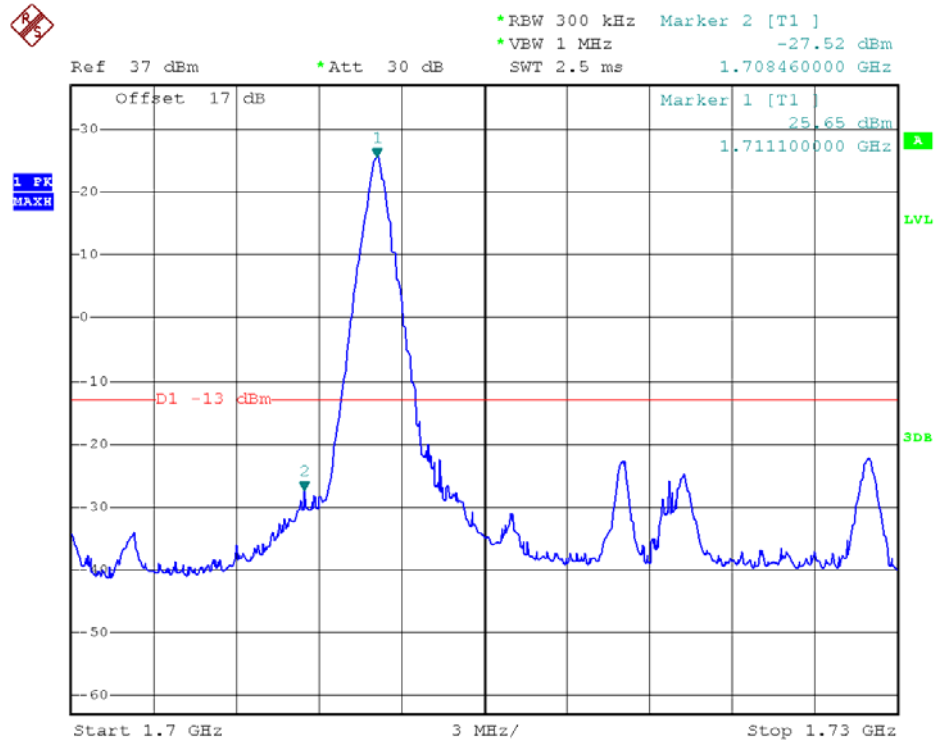


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 74

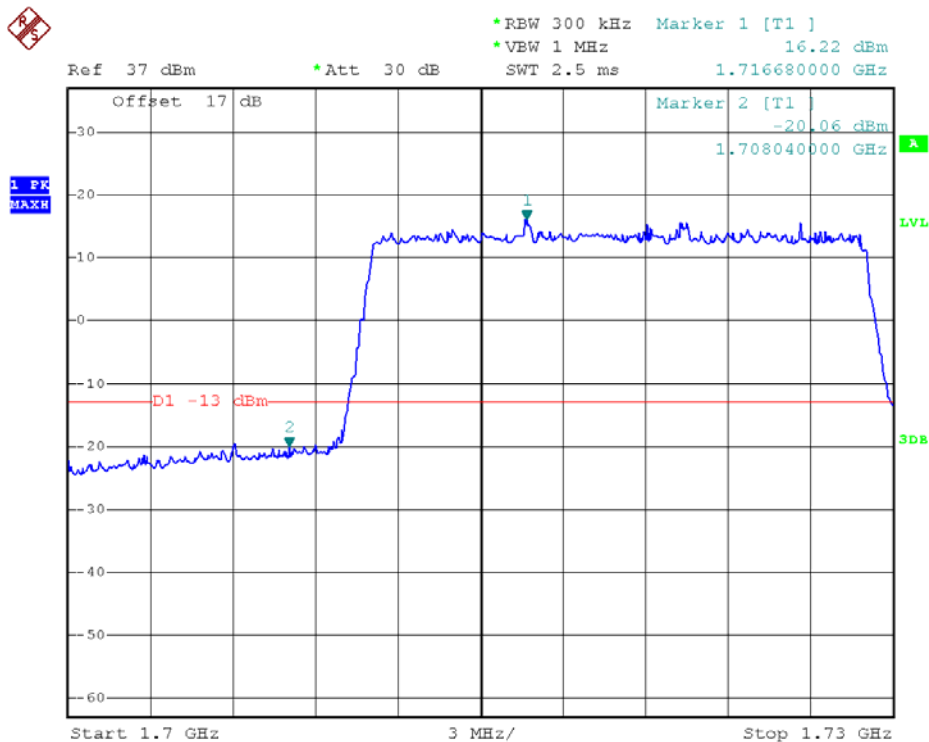


Higher Band Edge Plot for 16QAM -RB Size 75, RB Offset 0

|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 4 | Modulation | QPSK |
| Bandwidth | 20MHz      |            |      |

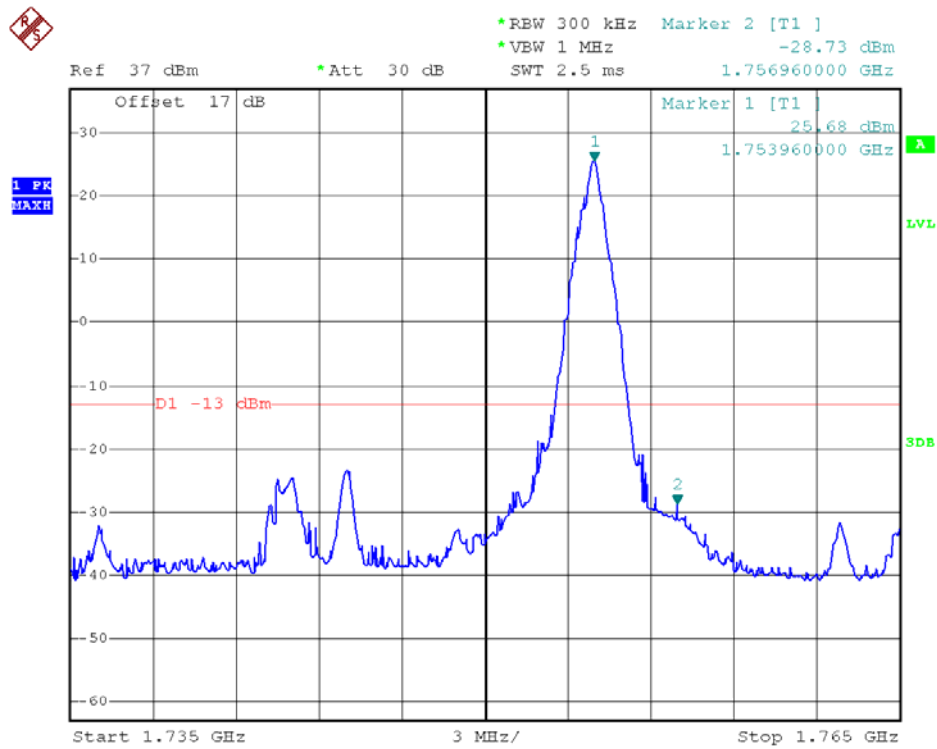


Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0

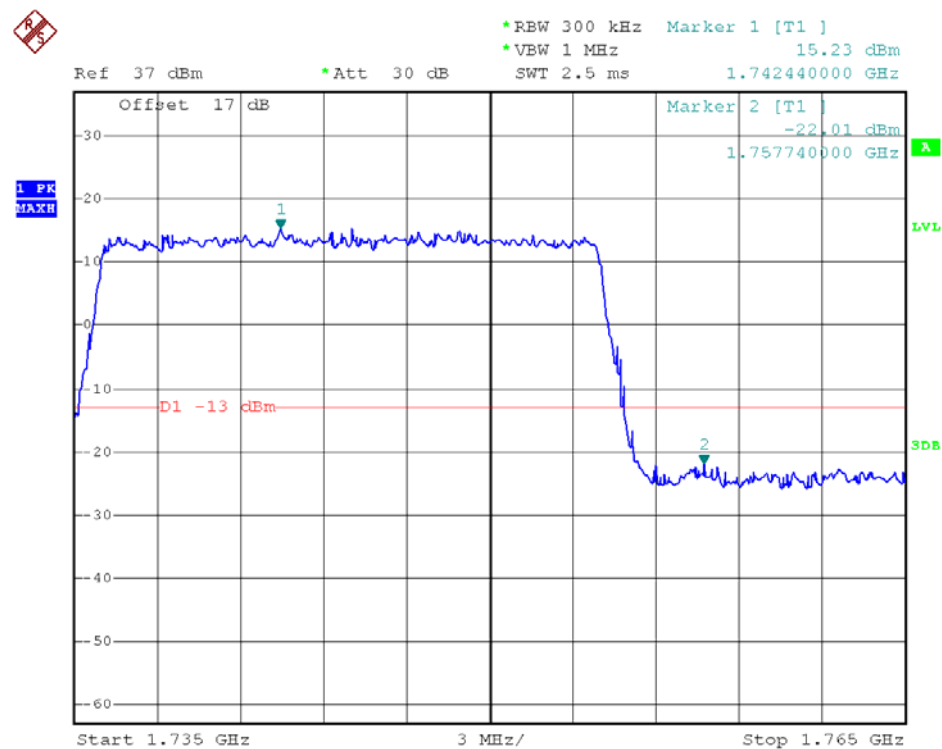


Lower Band Edge Plot for QPSK-RB Size 100, RB Offset 0



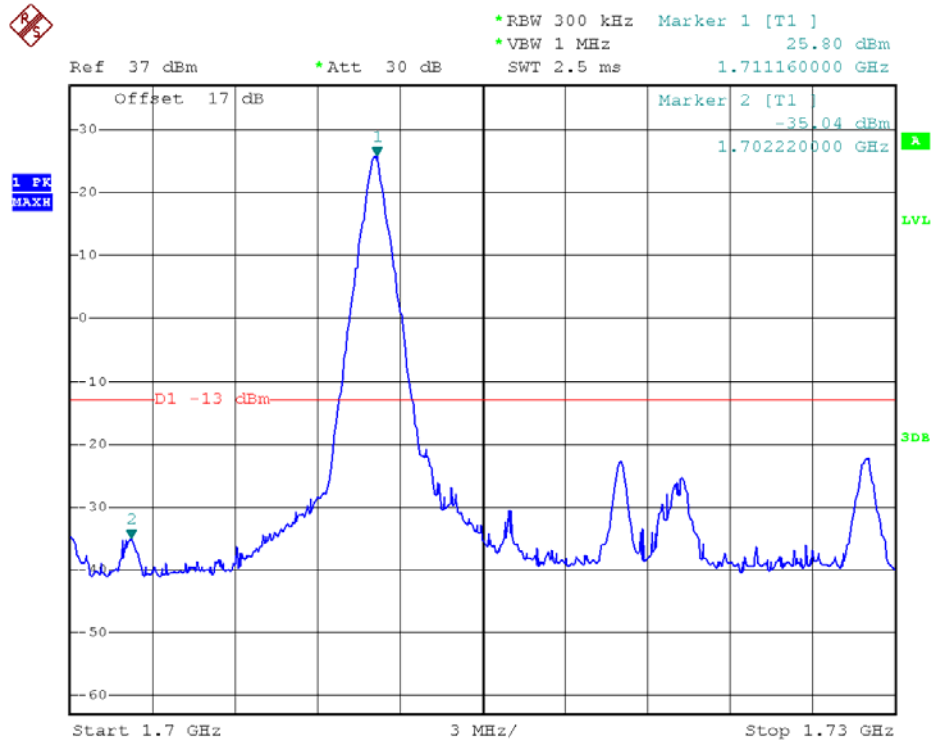


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 99

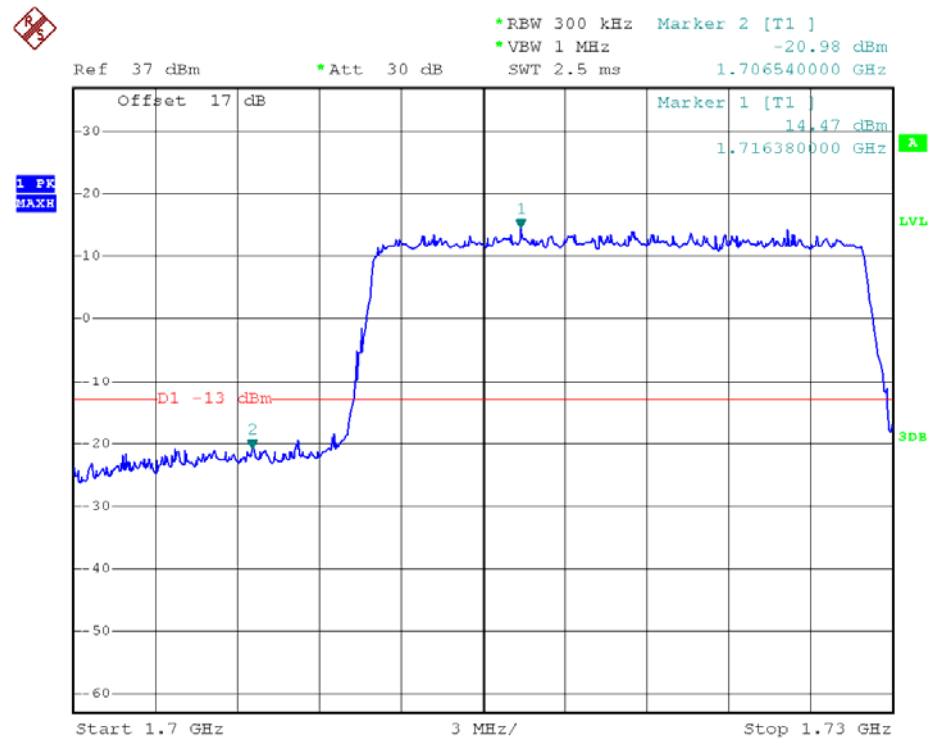


Higher Band Edge Plot for QPSK-RB Size 100, RB Offset 0

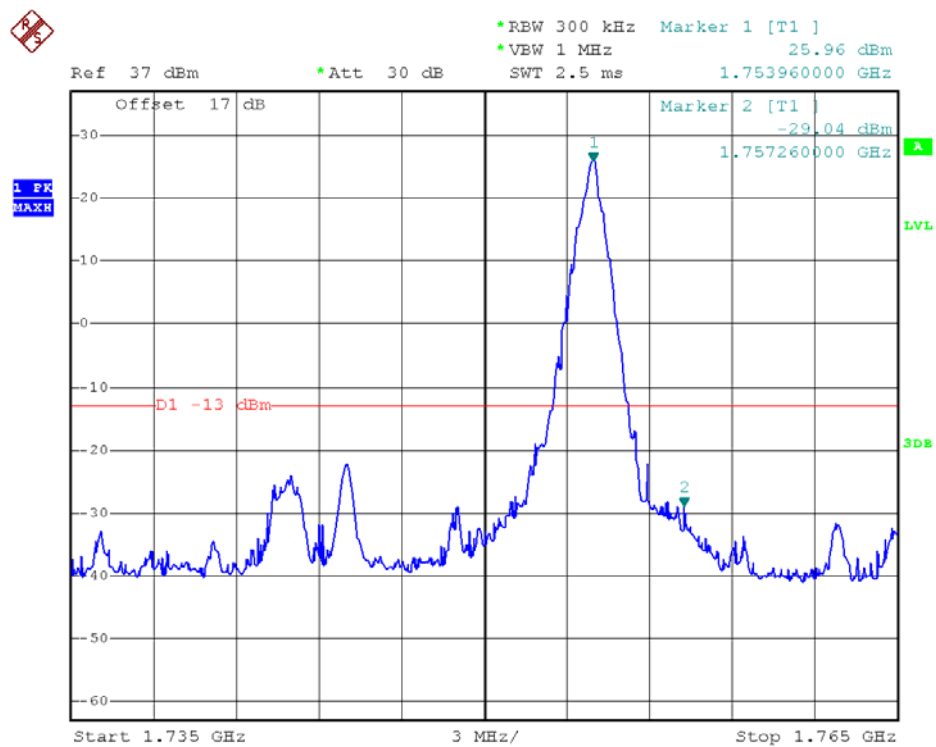
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 4 | Modulation | 16QAM |
| Bandwidth | 20MHz      |            |       |



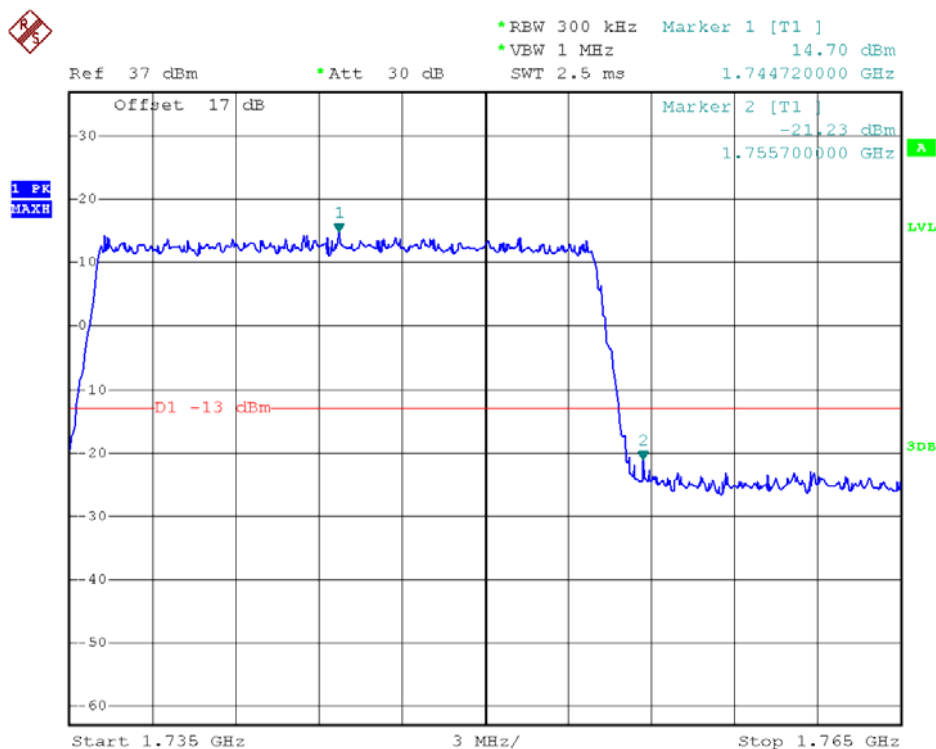
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 100, RB Offset 0

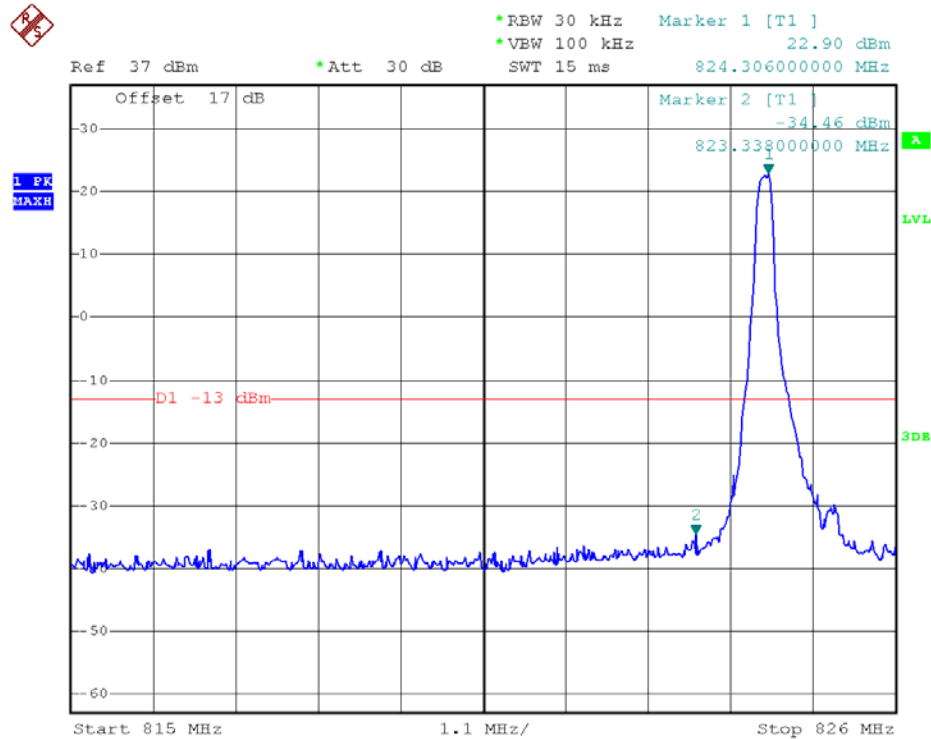


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 99

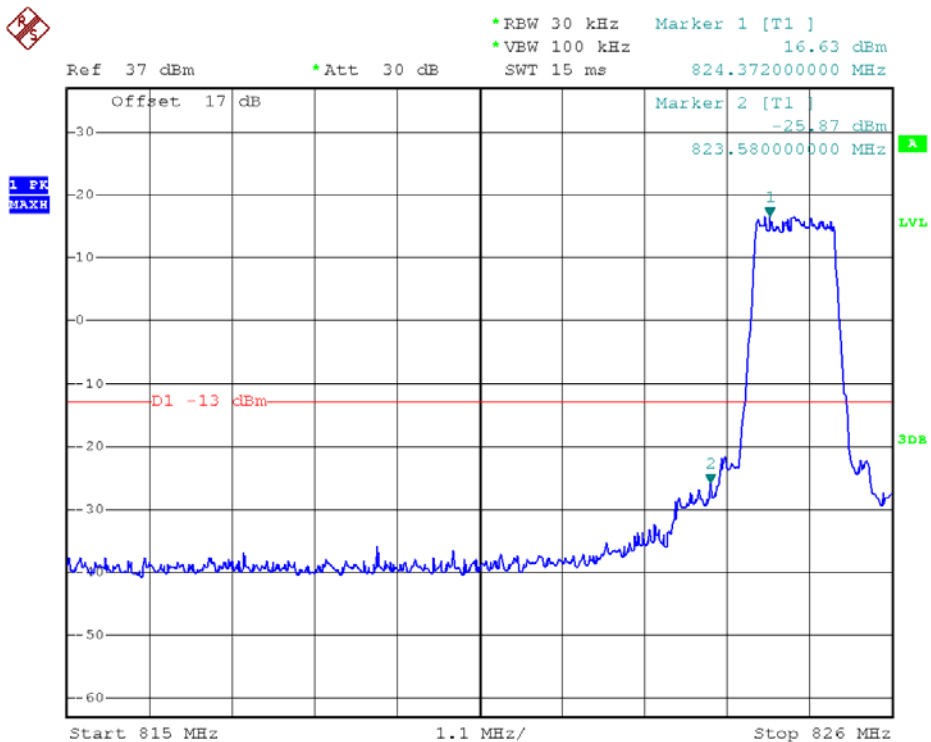


Higher Band Edge Plot for 16QAM -RB Size 100, RB Offset 0

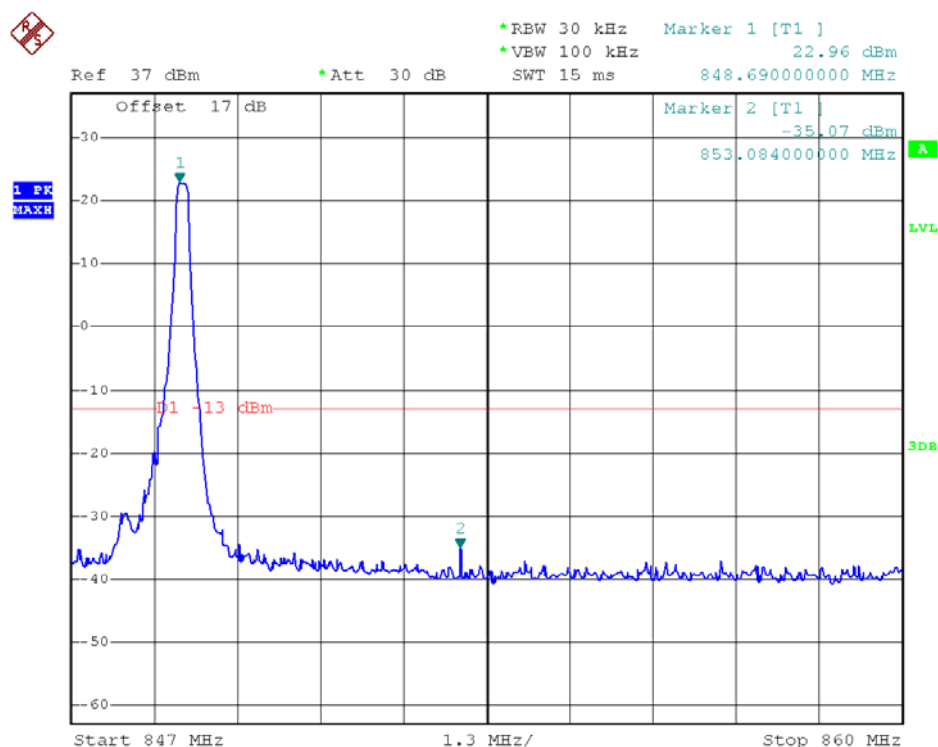
|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 5 | Modulation | QPSK |
| Bandwidth | 1.4MHz     |            |      |



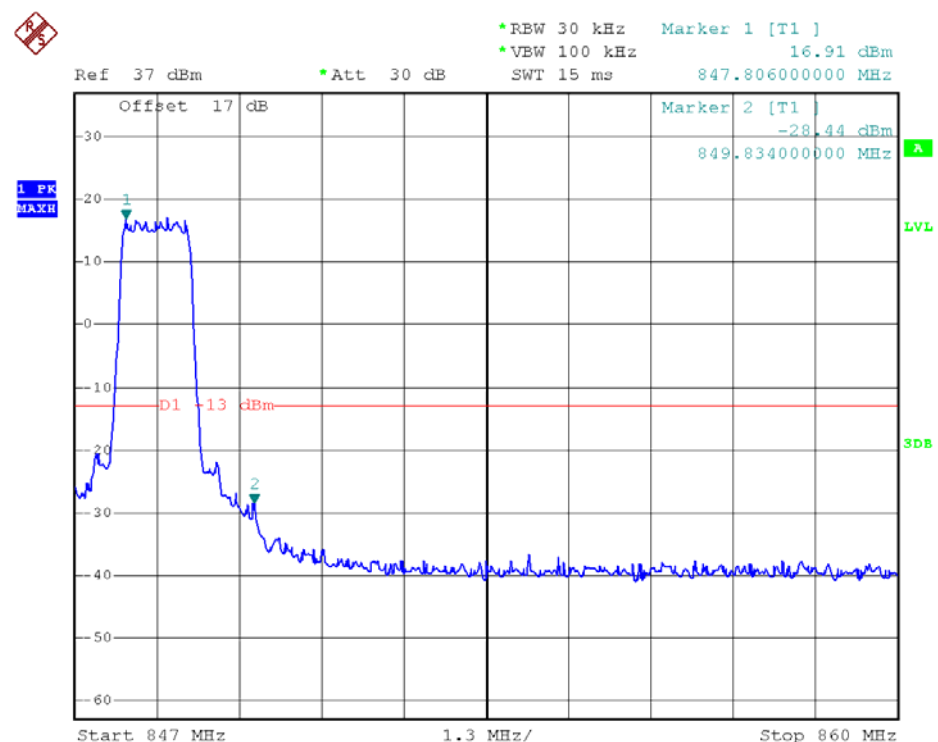
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 6, RB Offset 0

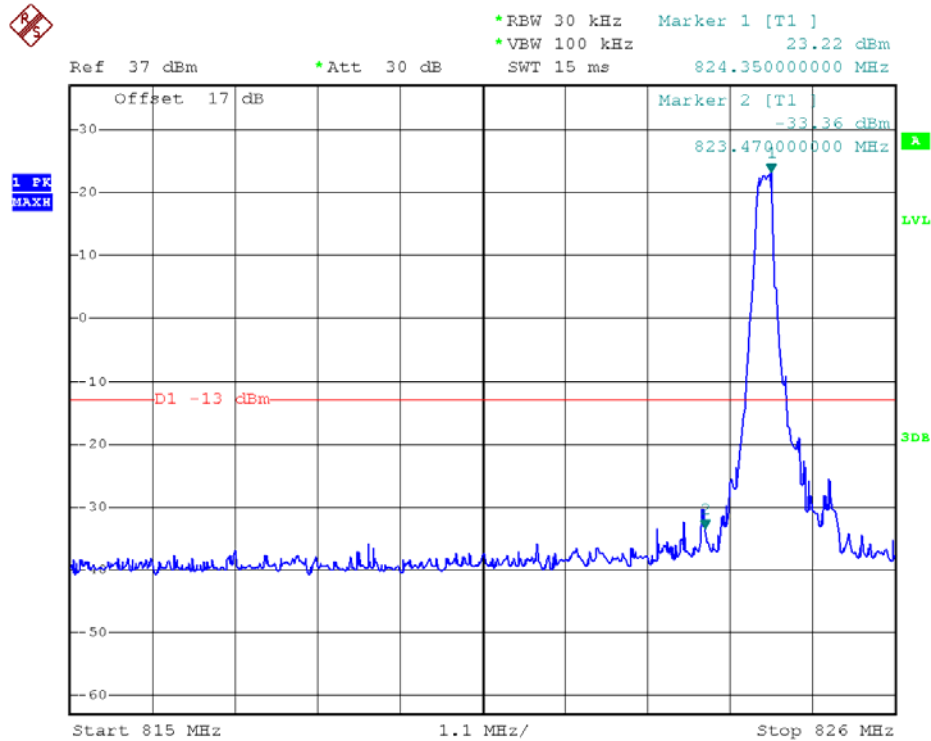


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5

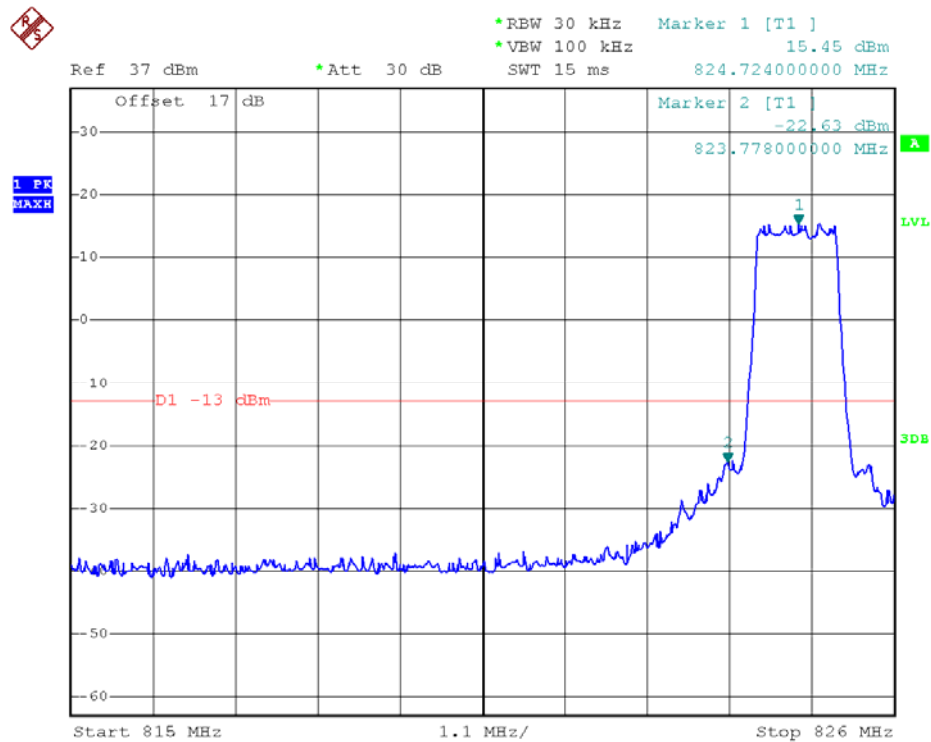


Higher Band Edge Plot for QPSK-RB Size 6, RB Offset 0

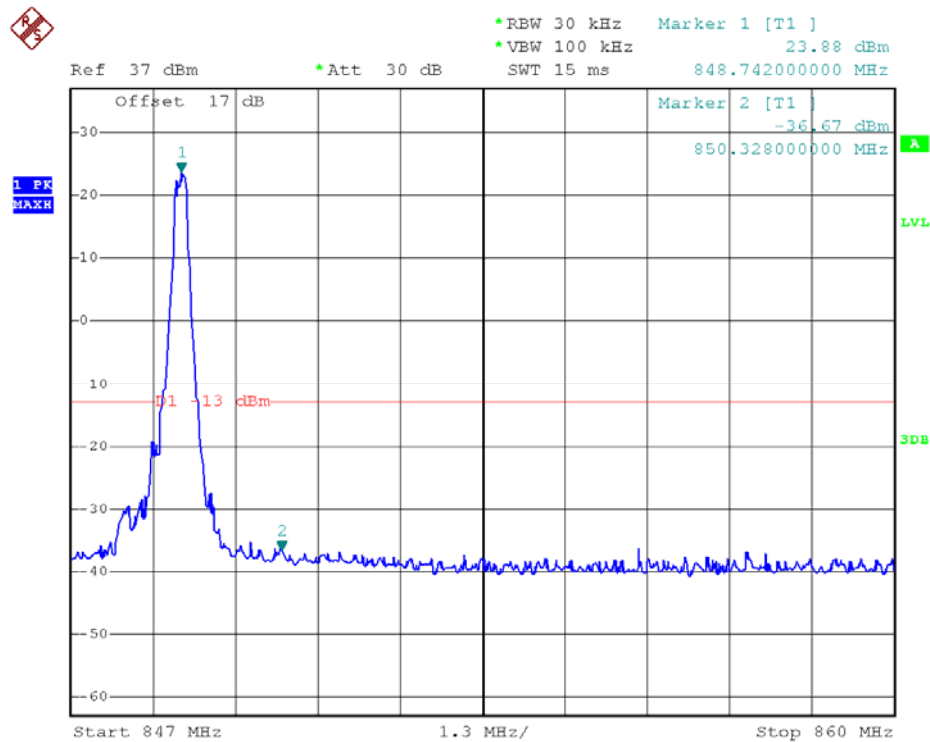
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 5 | Modulation | 16QAM |
| Bandwidth | 1.4MHz     |            |       |



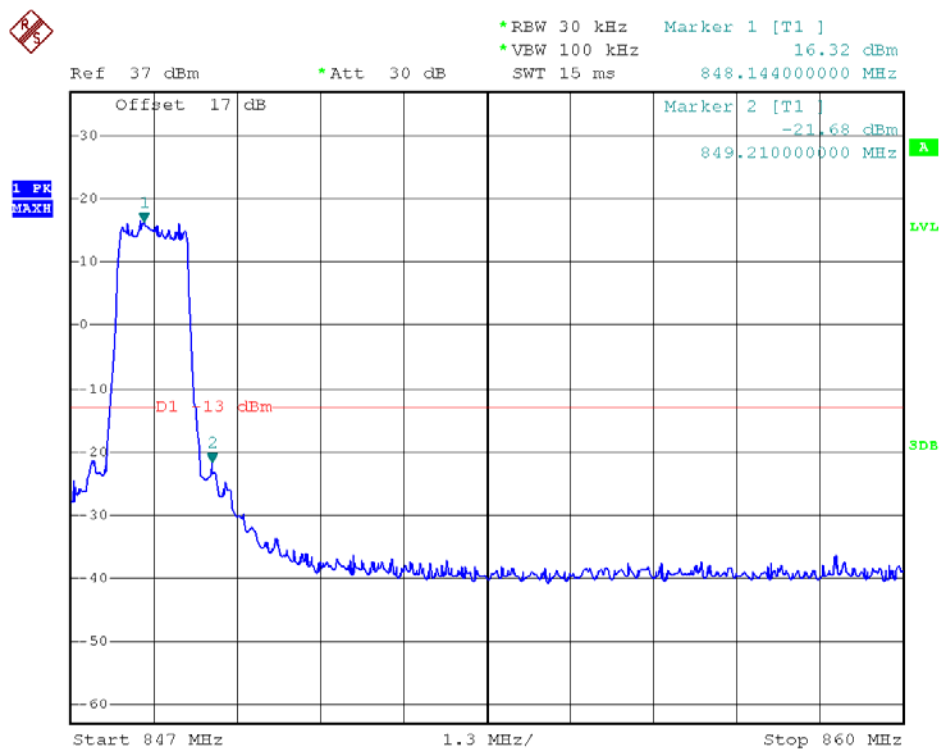
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 6, RB Offset 0

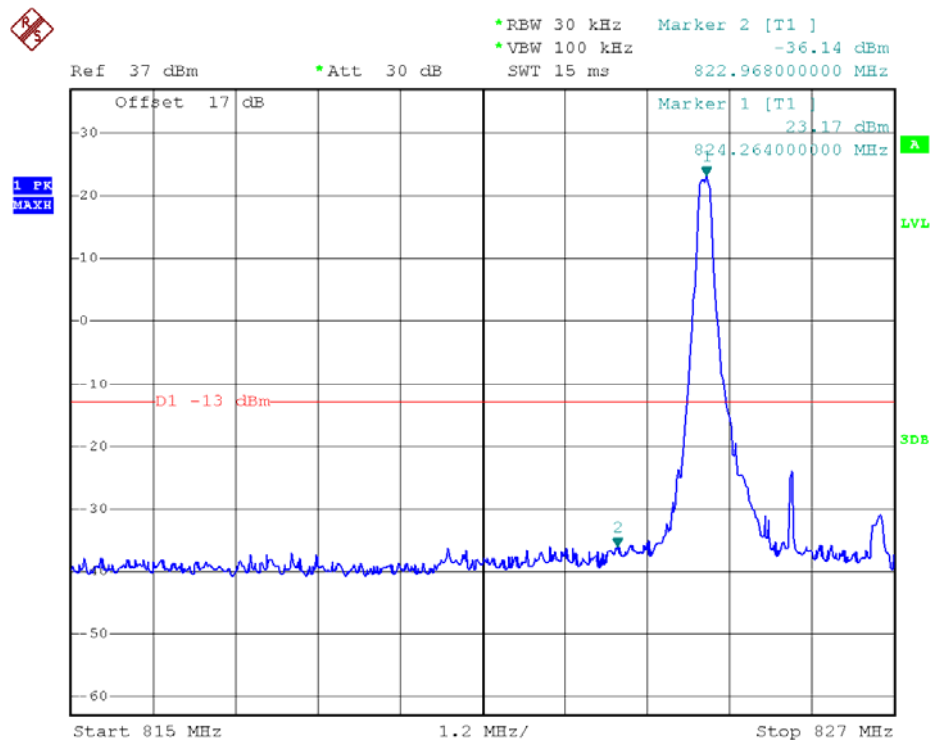


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 5

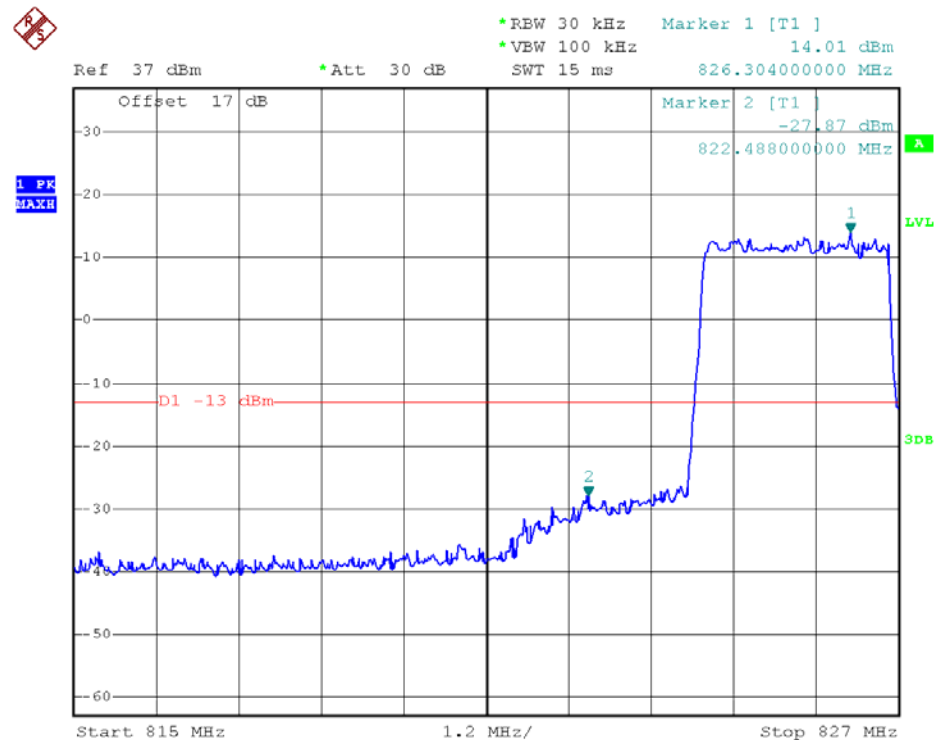


Higher Band Edge Plot for 16QAM -RB Size 6, RB Offset 0

|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 5 | Modulation | QPSK |
| Bandwidth | 3MHz       |            |      |

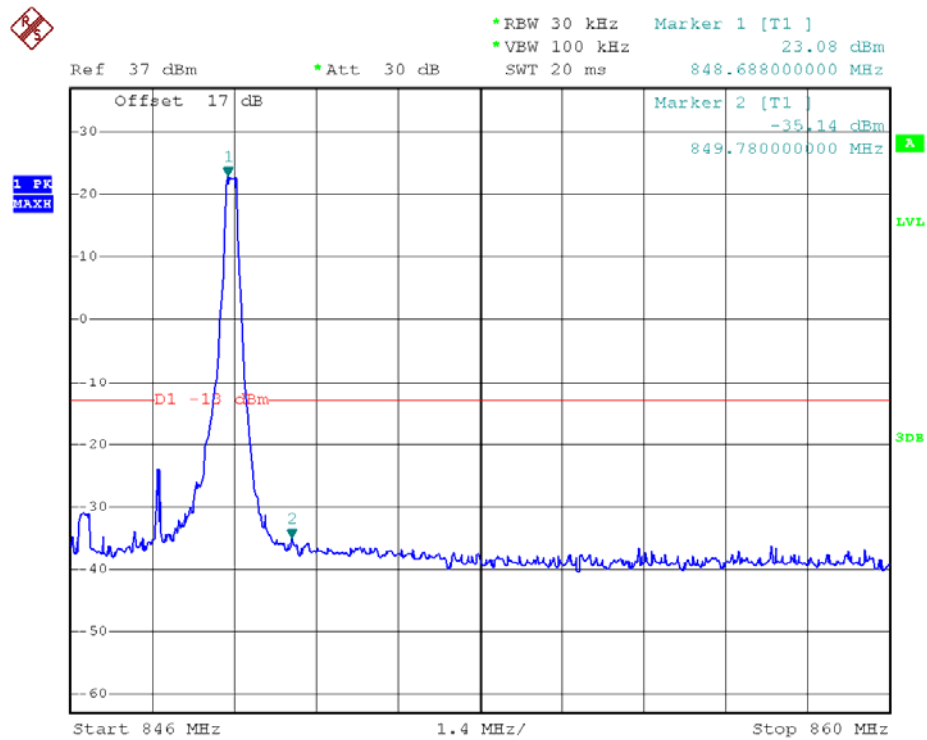


Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0

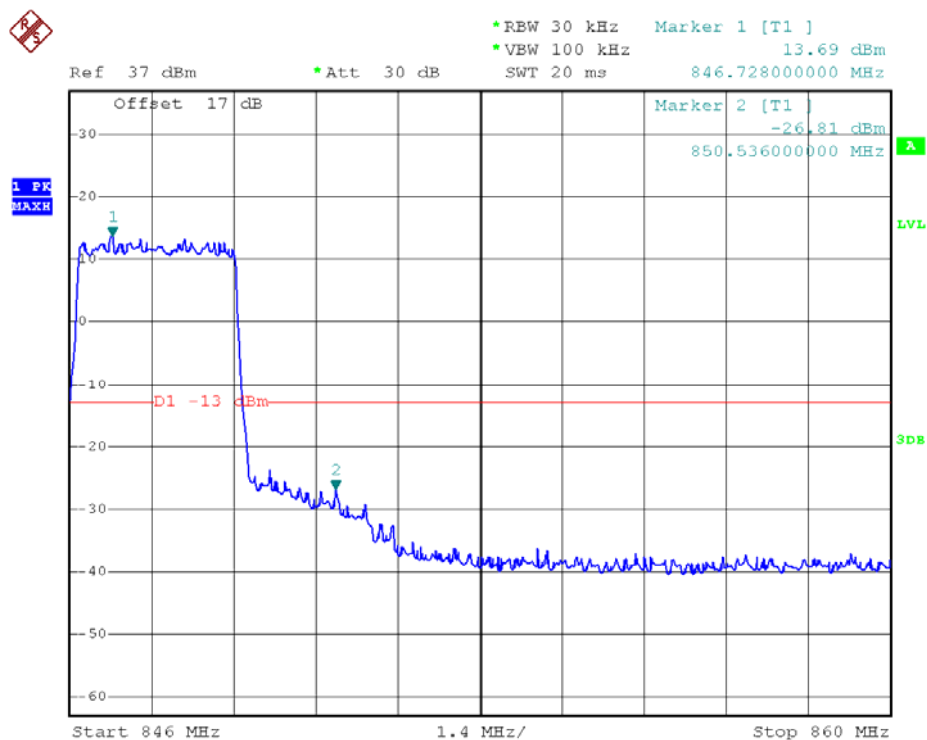


Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0



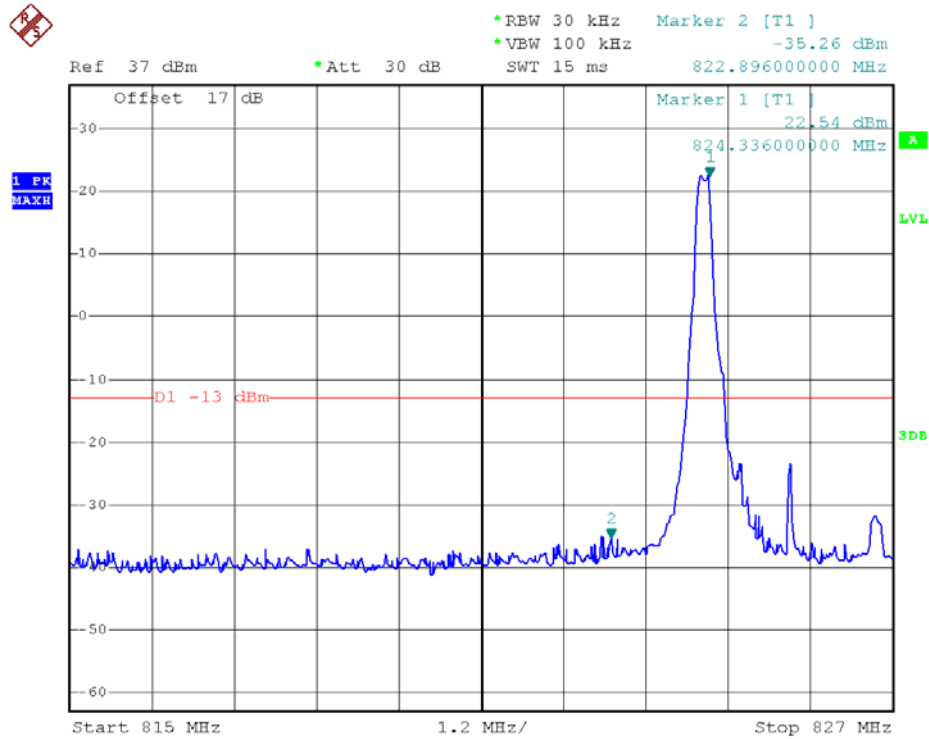


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14

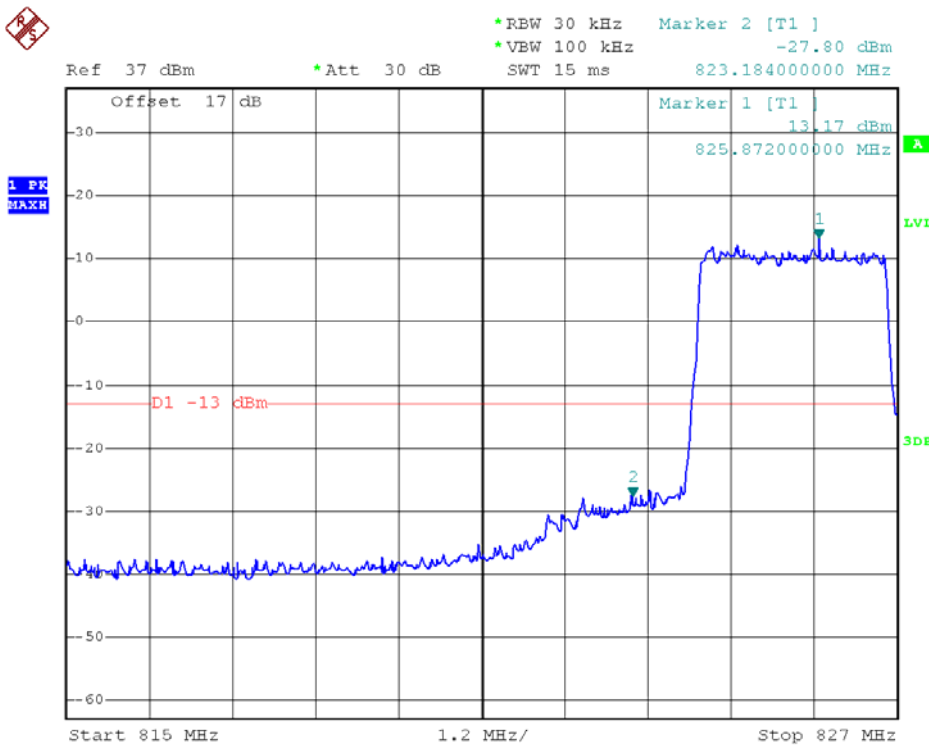


Higher Band Edge Plot for QPSK-RB Size 15, RB Offset 0

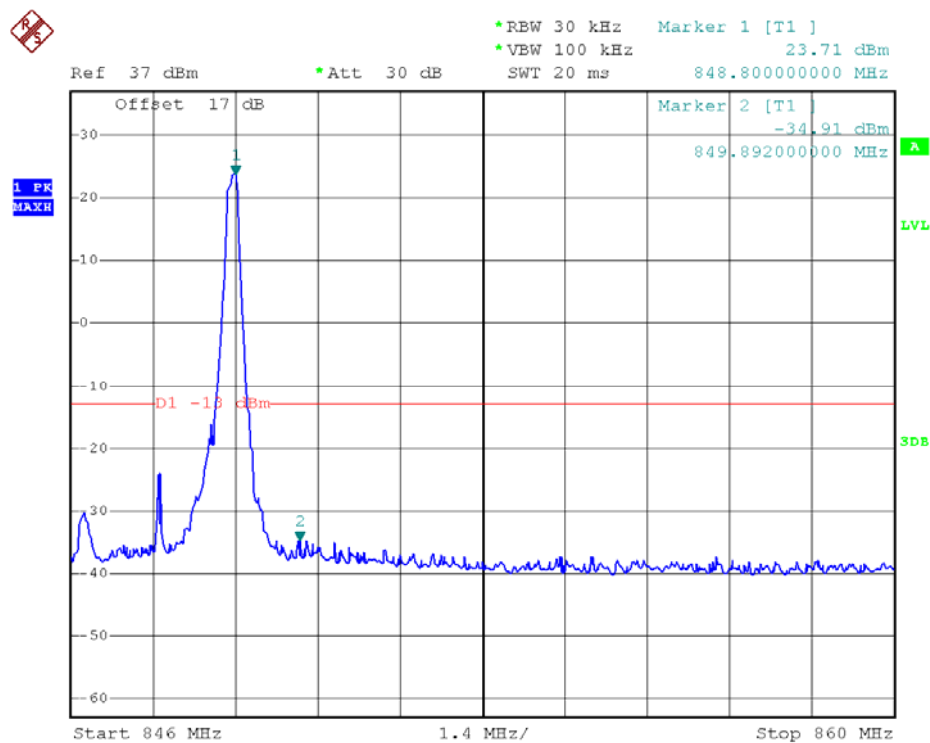
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 5 | Modulation | 16QAM |
| Bandwidth | 3MHz       |            |       |



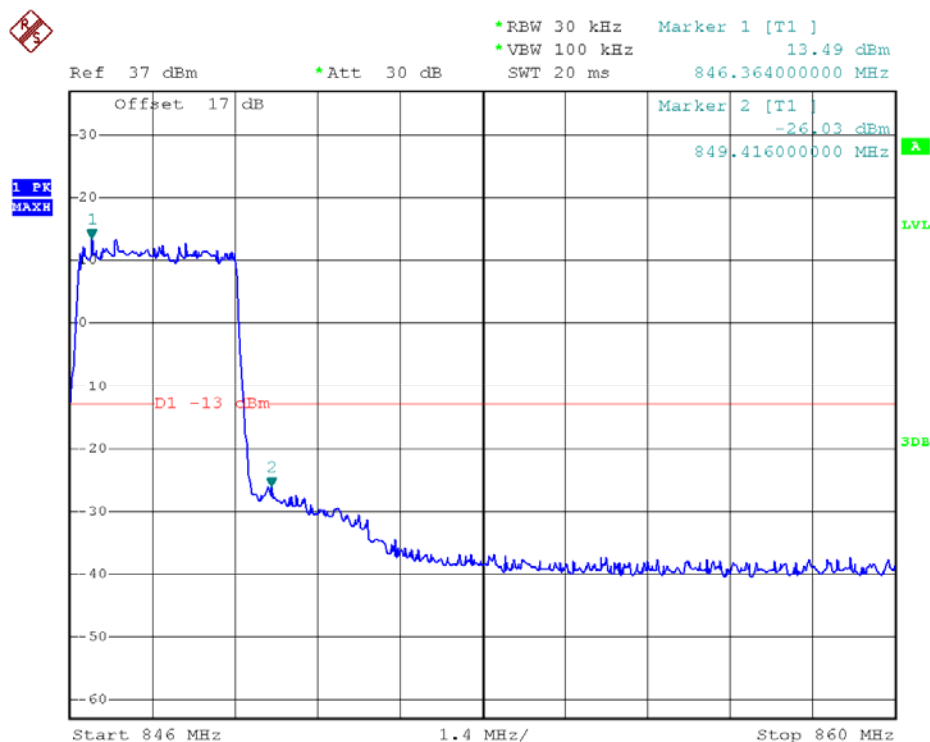
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 15, RB Offset 0

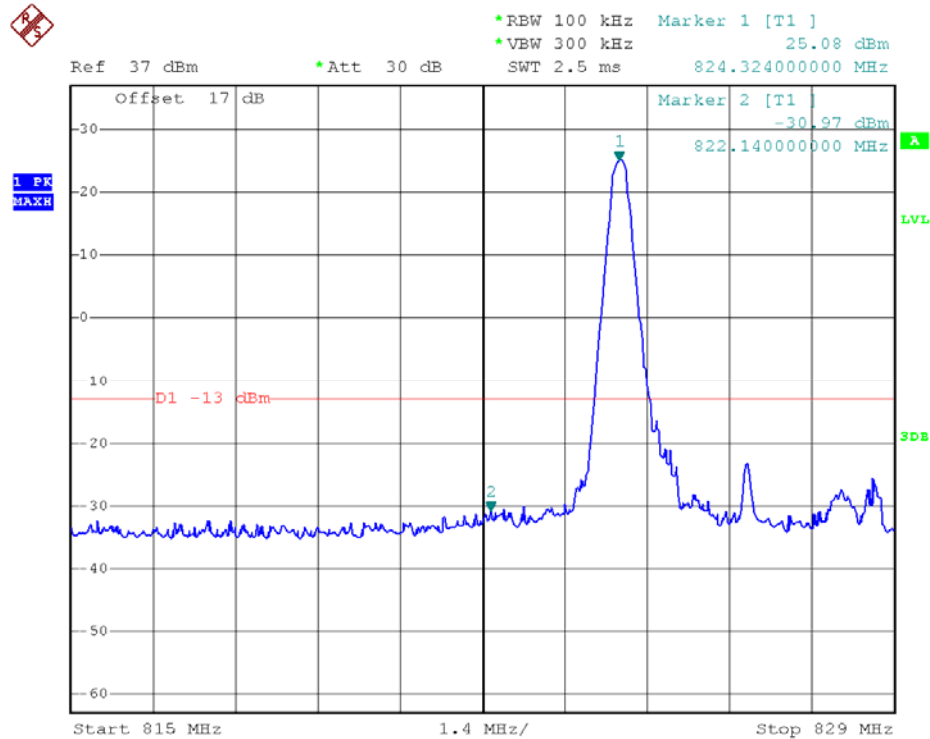


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 14

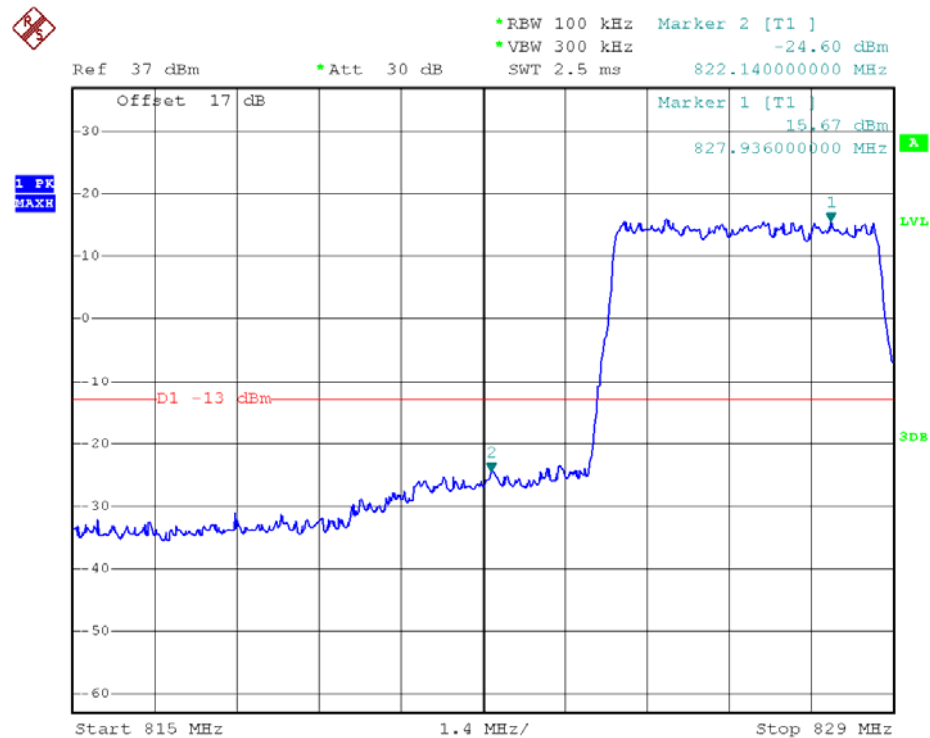


Higher Band Edge Plot for 16QAM -RB Size 15, RB Offset 0

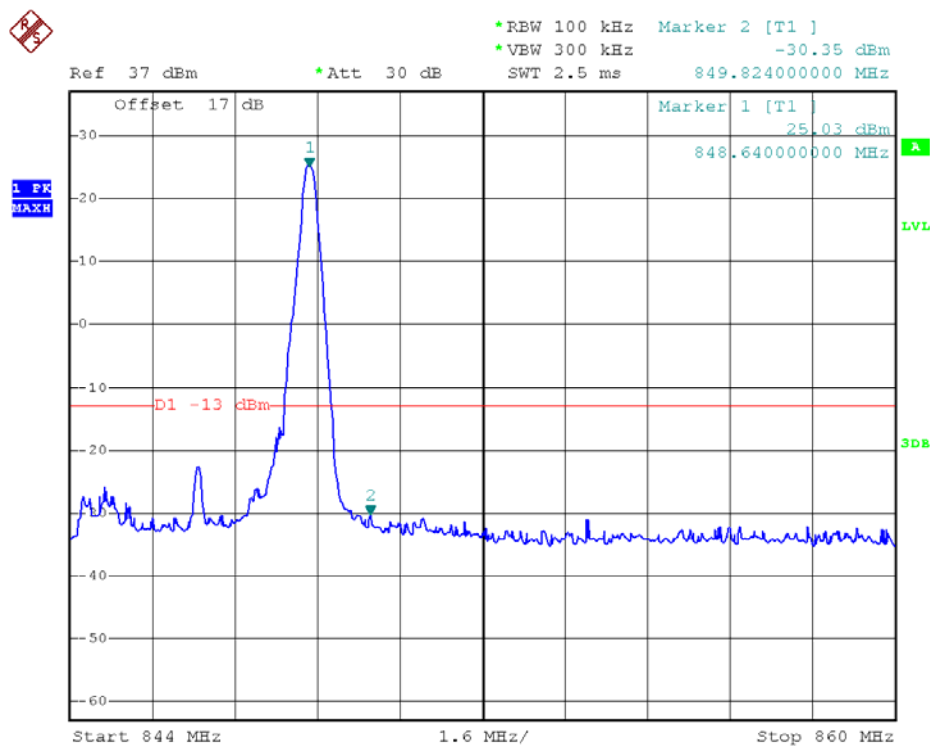
|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 5 | Modulation | QPSK |
| Bandwidth | 5MHz       |            |      |



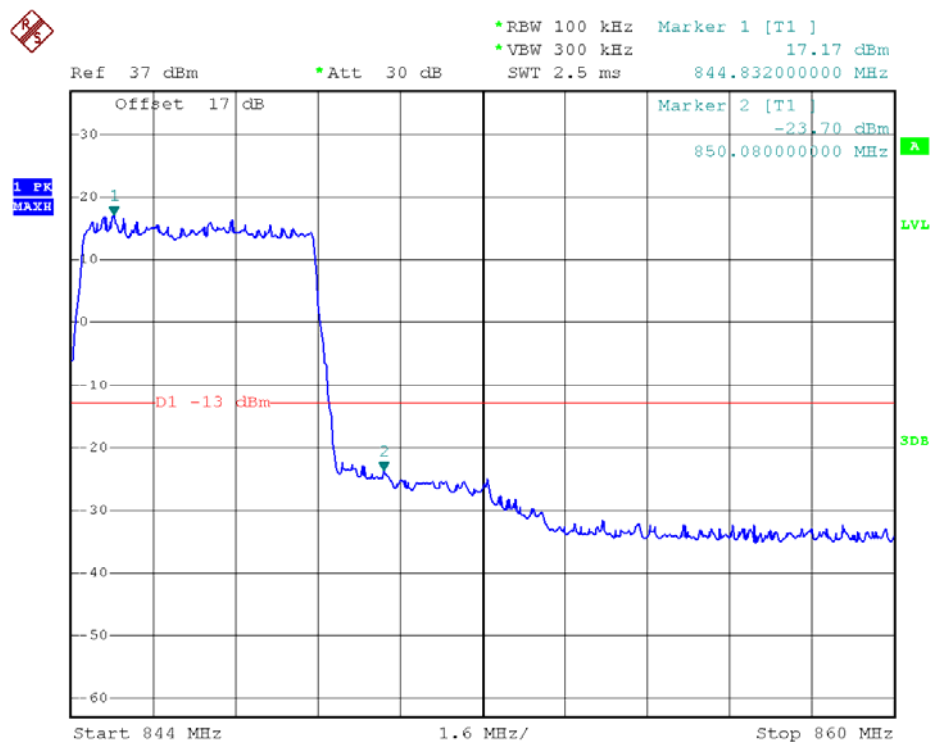
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0

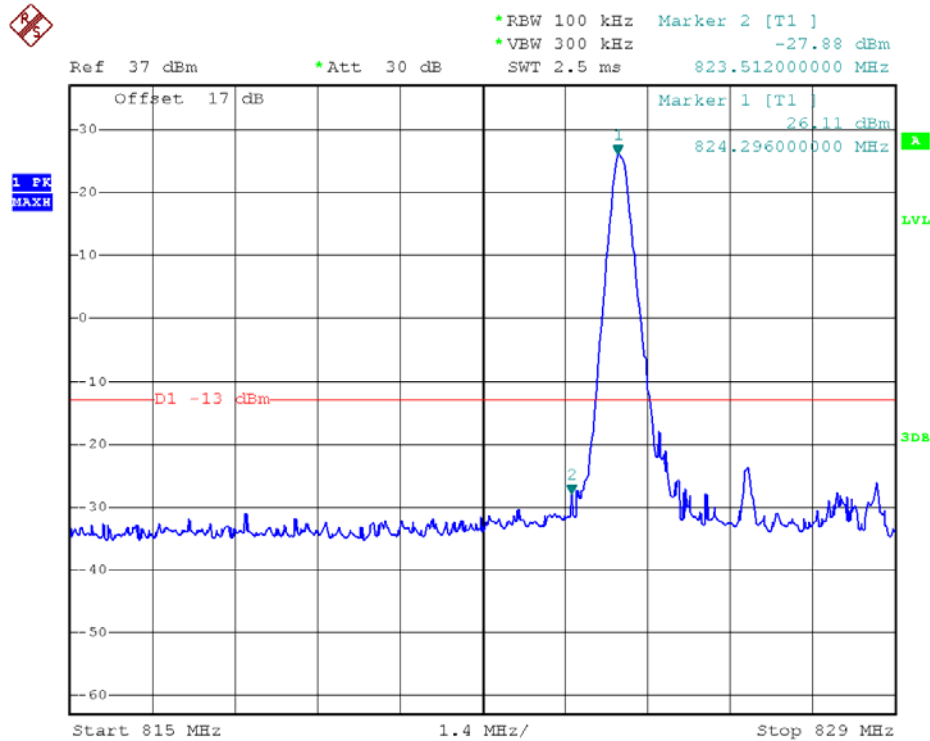


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24

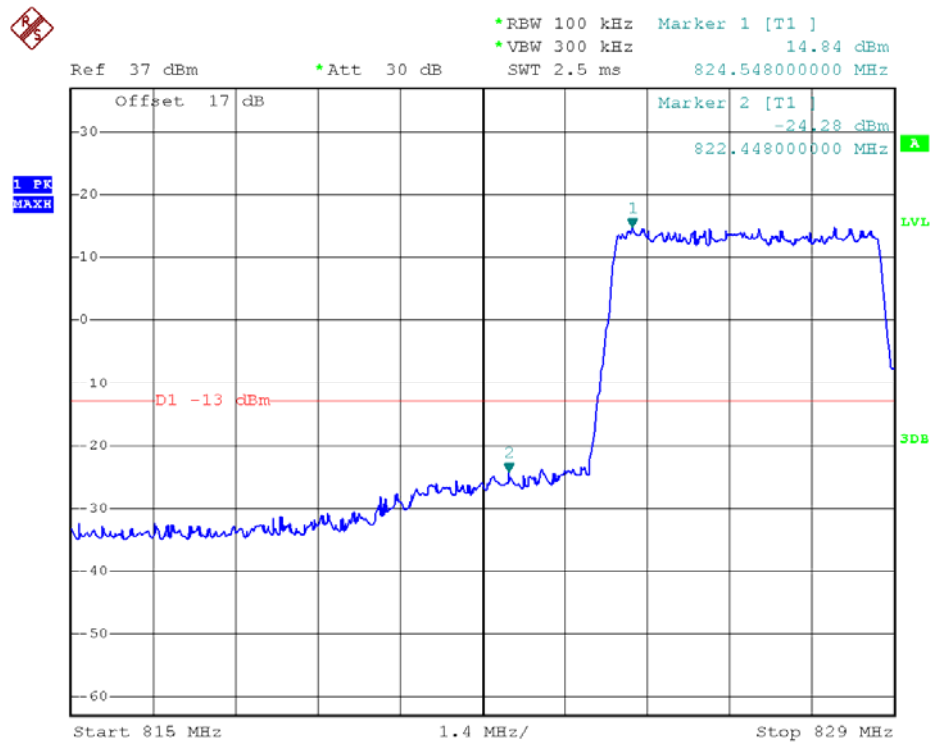


Higher Band Edge Plot for QPSK-RB Size 25, RB Offset 0

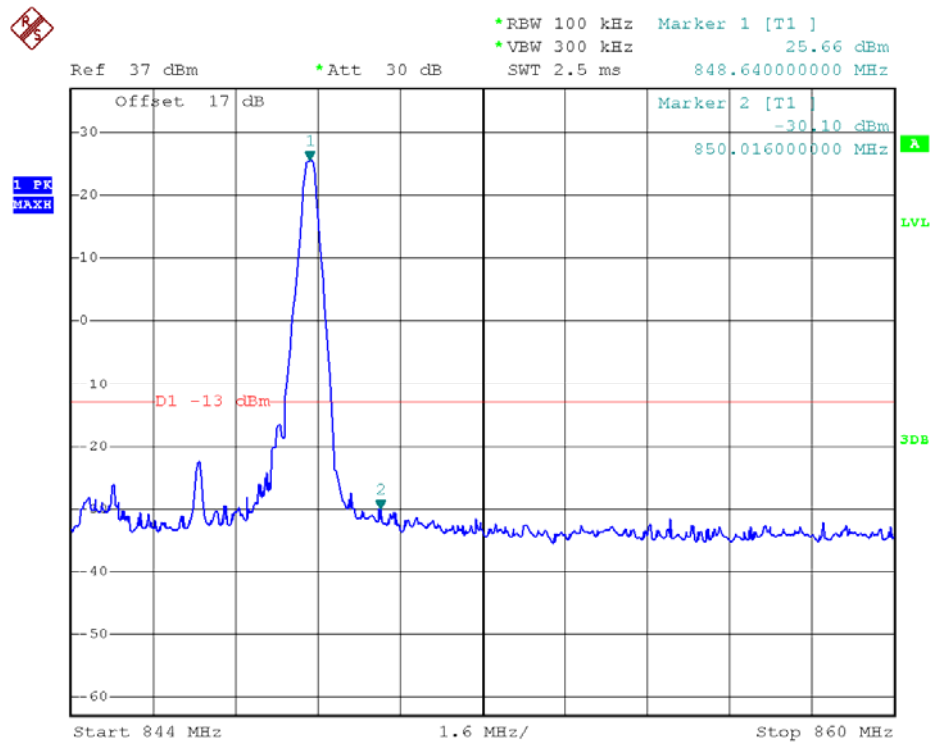
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 5 | Modulation | 16QAM |
| Bandwidth | 5MHz       |            |       |



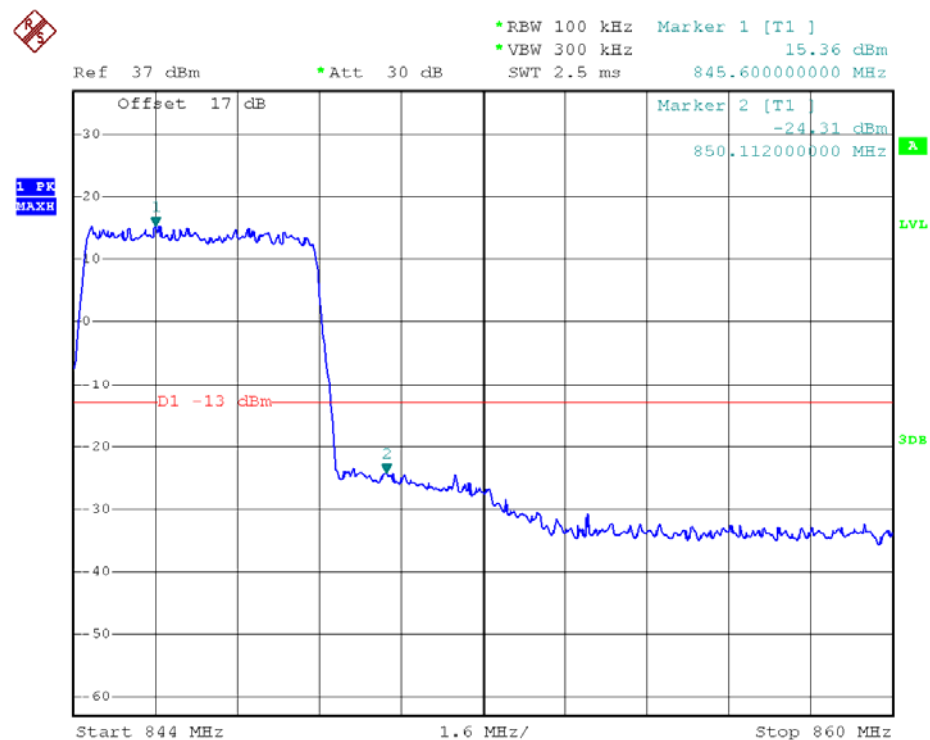
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 25, RB Offset 0

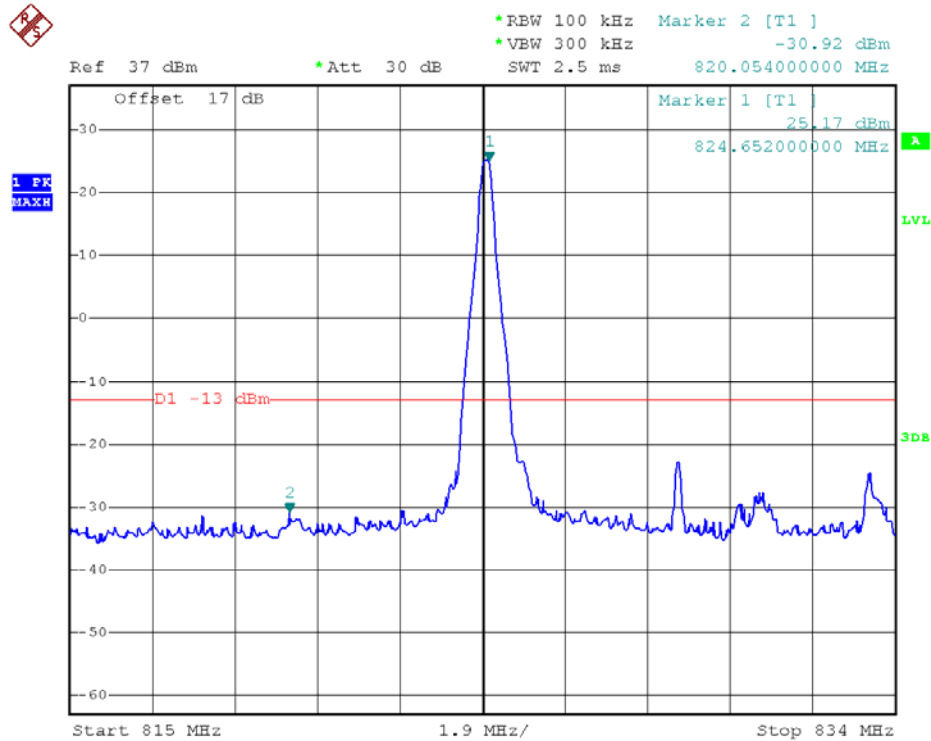


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 24

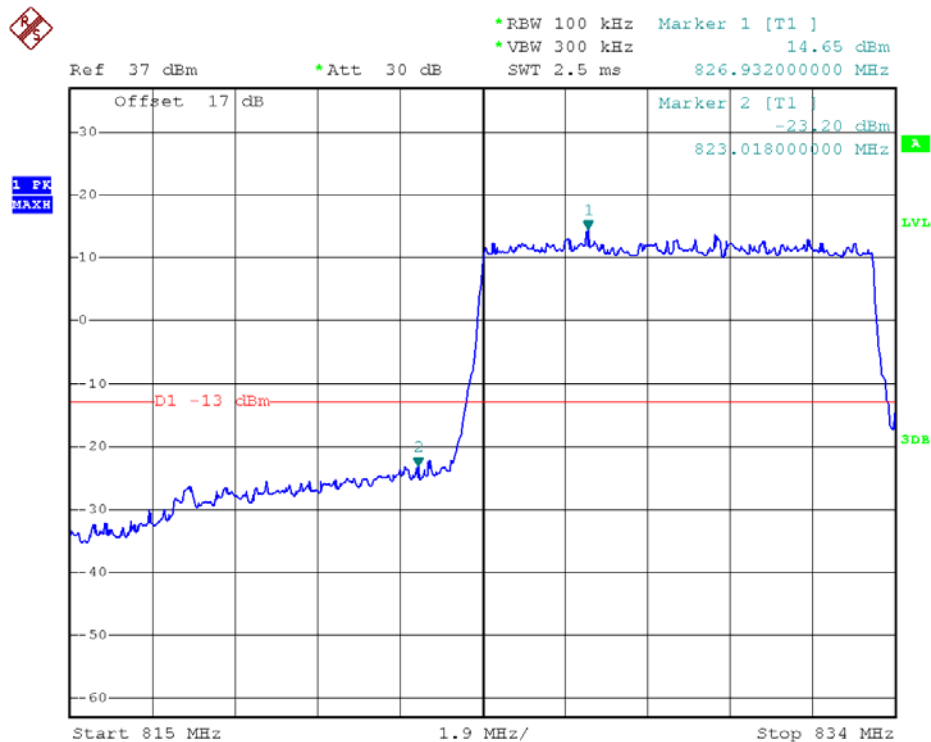


Higher Band Edge Plot for 16QAM -RB Size 25, RB Offset 0

|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 5 | Modulation | QPSK |
| Bandwidth | 10MHz      |            |      |

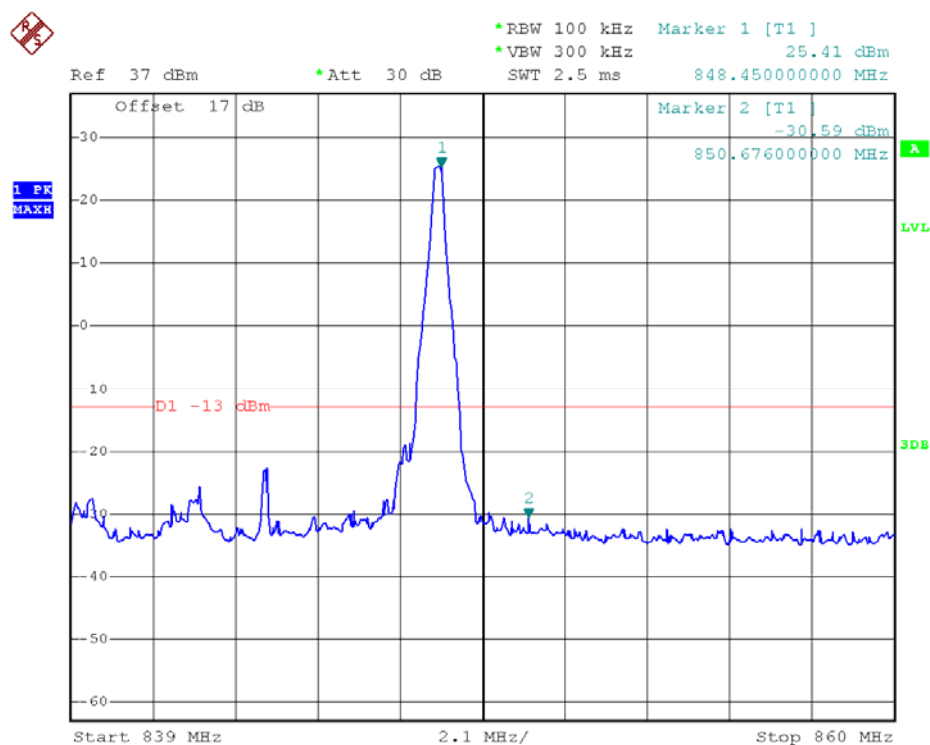


Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0

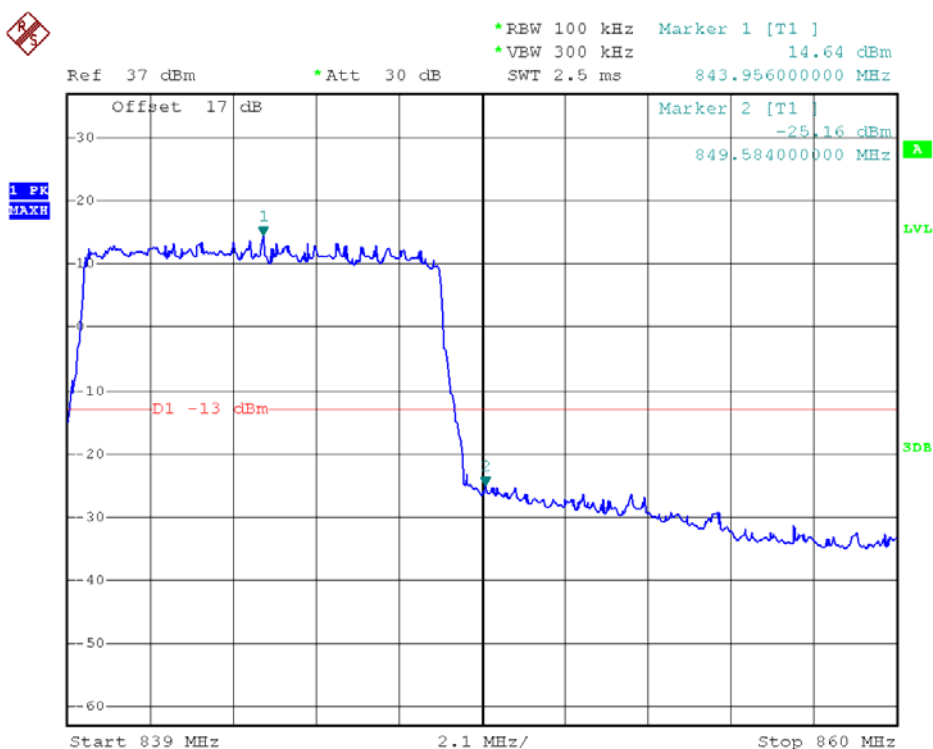


Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0



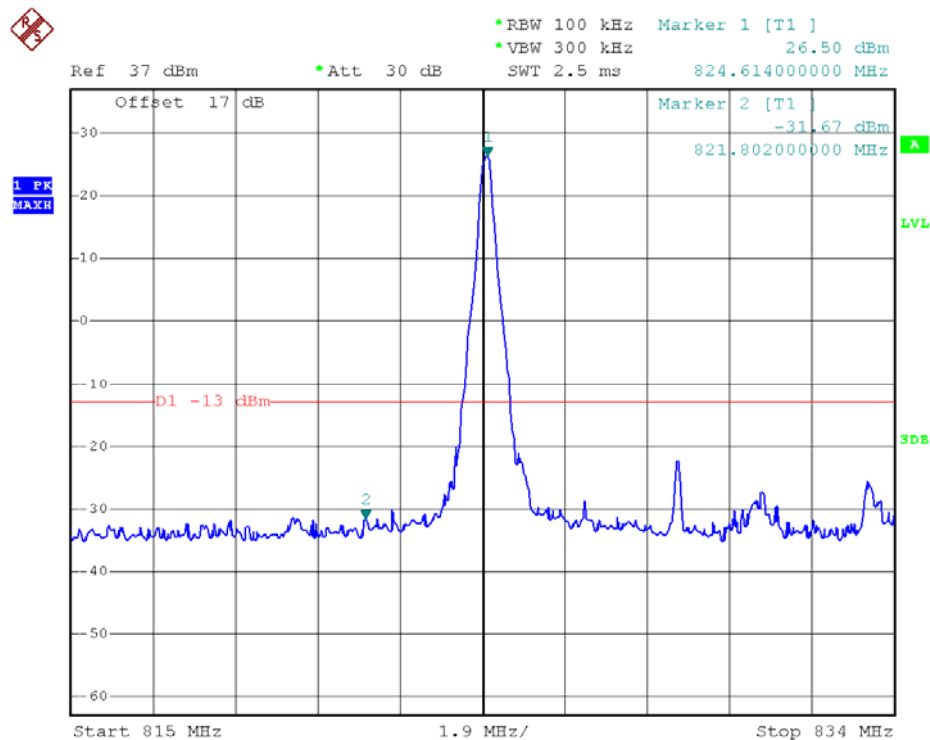


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49

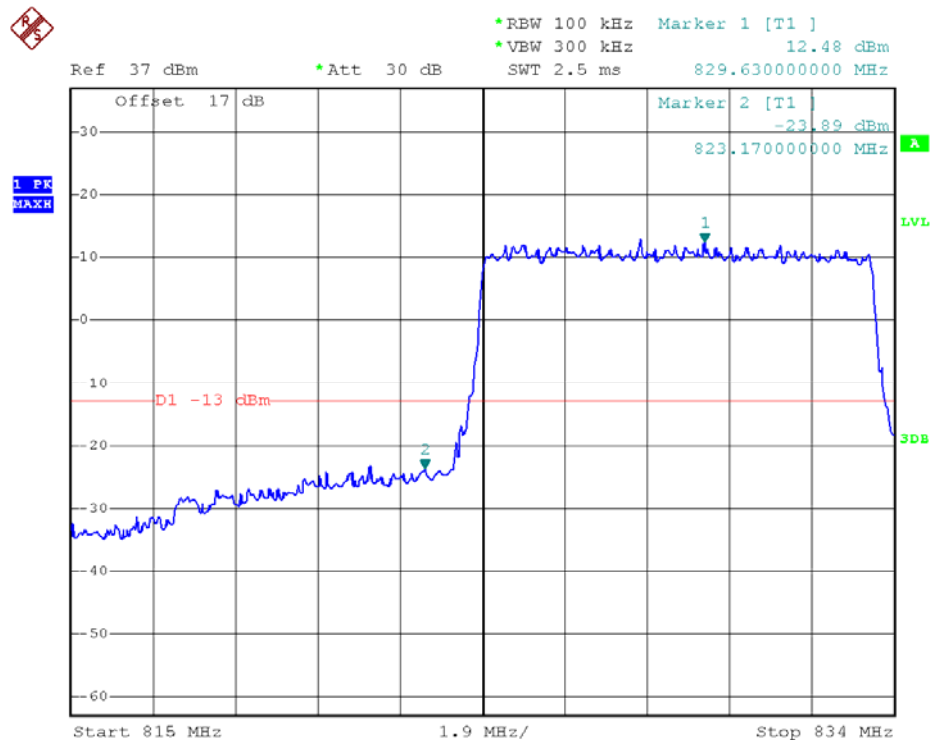


Higher Band Edge Plot for QPSK-RB Size 50, RB Offset 0

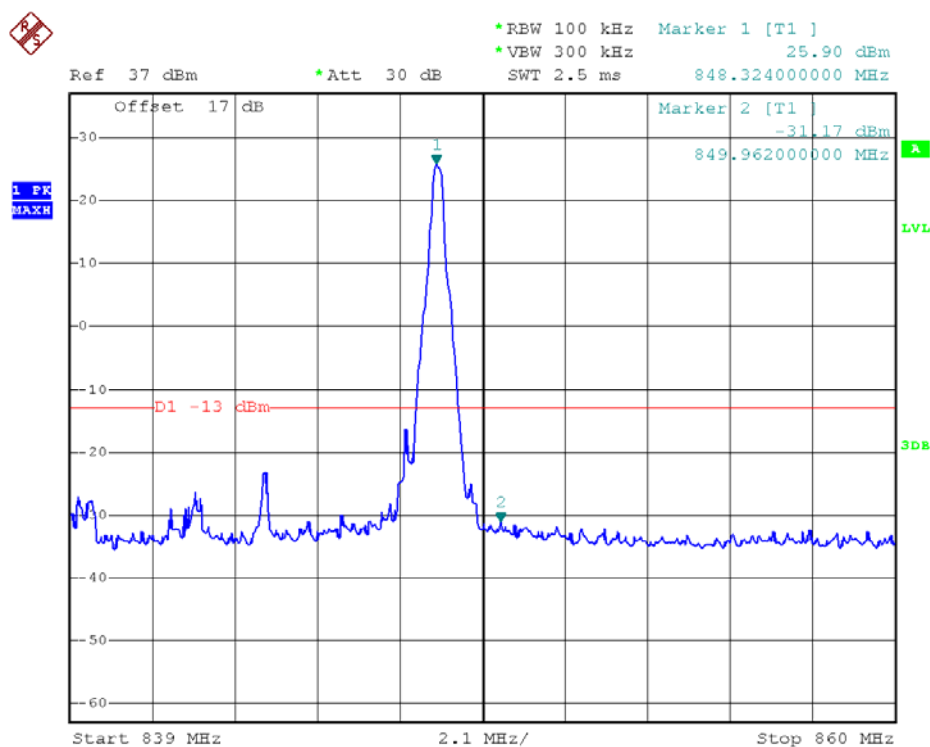
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 5 | Modulation | 16QAM |
| Bandwidth | 10MHz      |            |       |



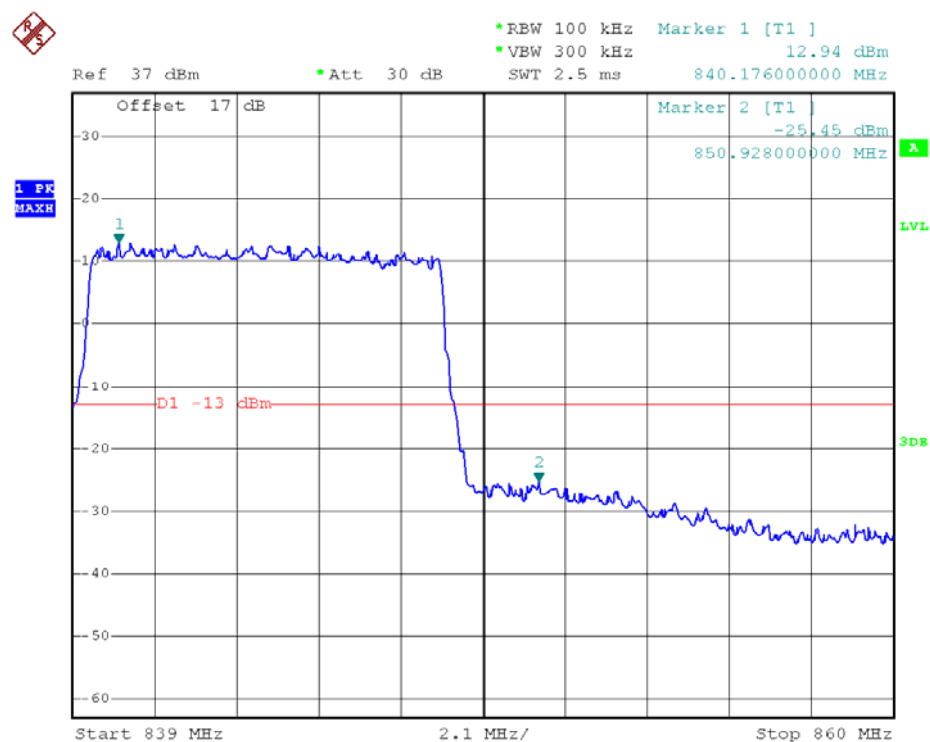
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 50, RB Offset 0

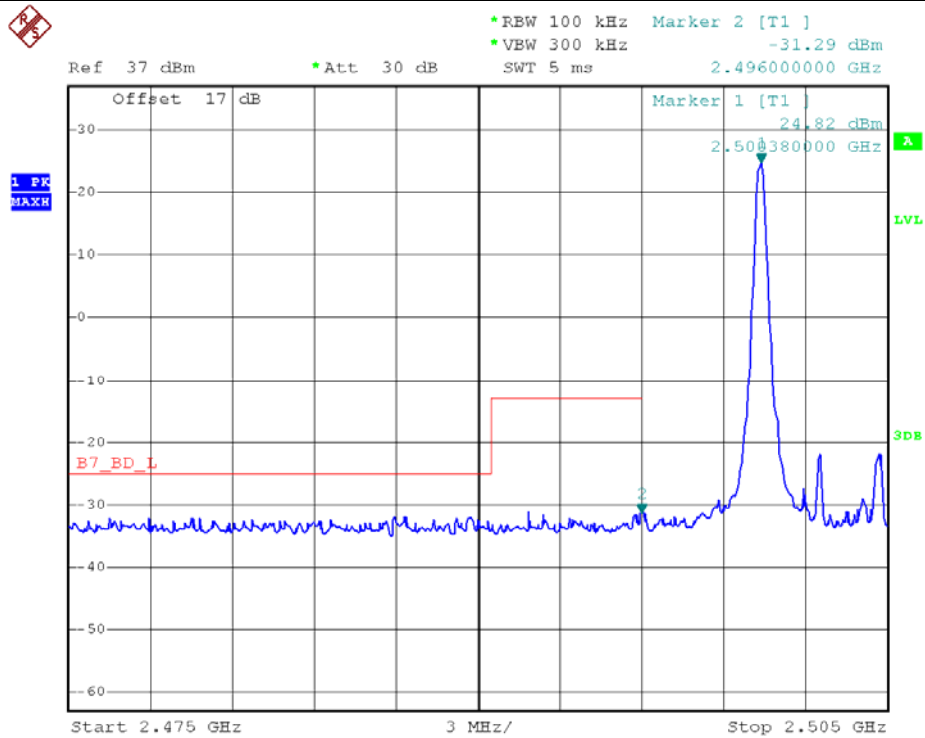


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 49

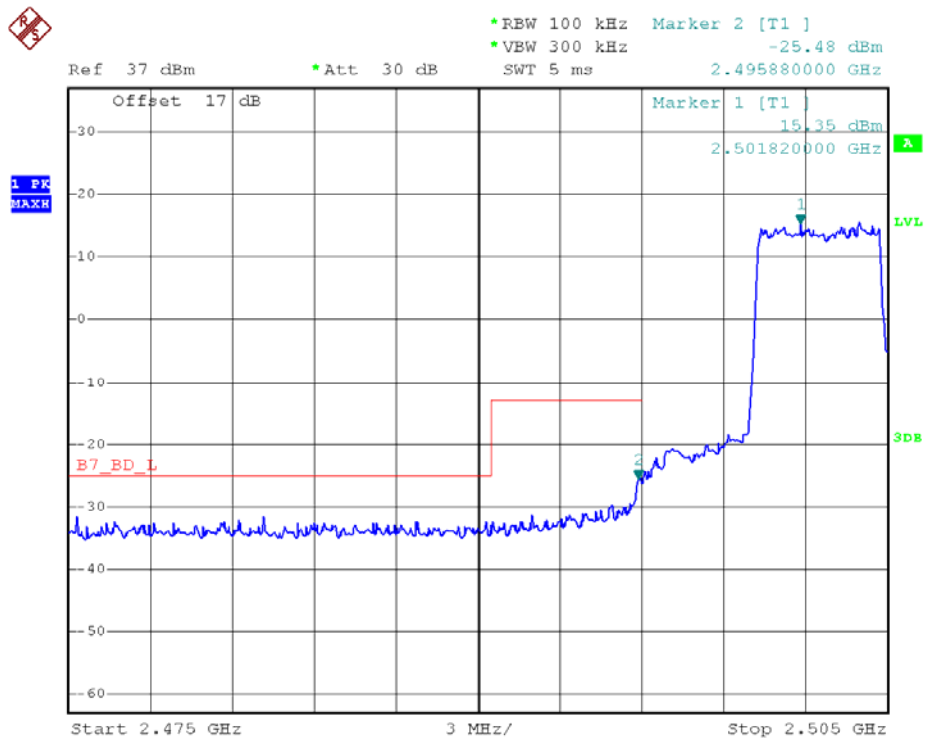


Higher Band Edge Plot for 16QAM -RB Size 50, RB Offset 0

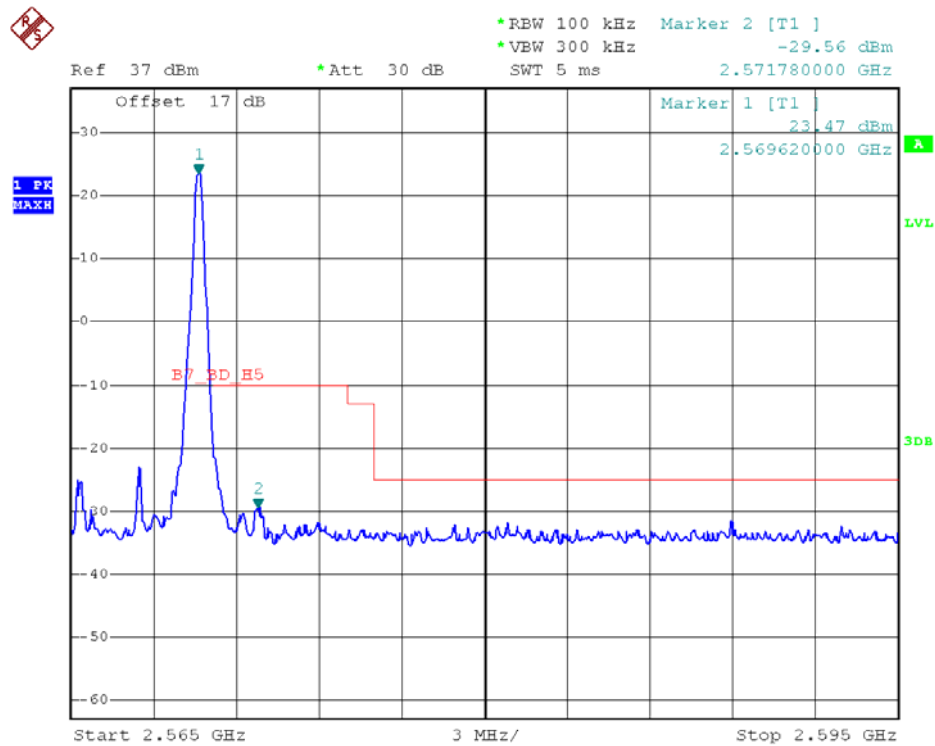
|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 7 | Modulation | QPSK |
| Bandwidth | 5MHz       |            |      |



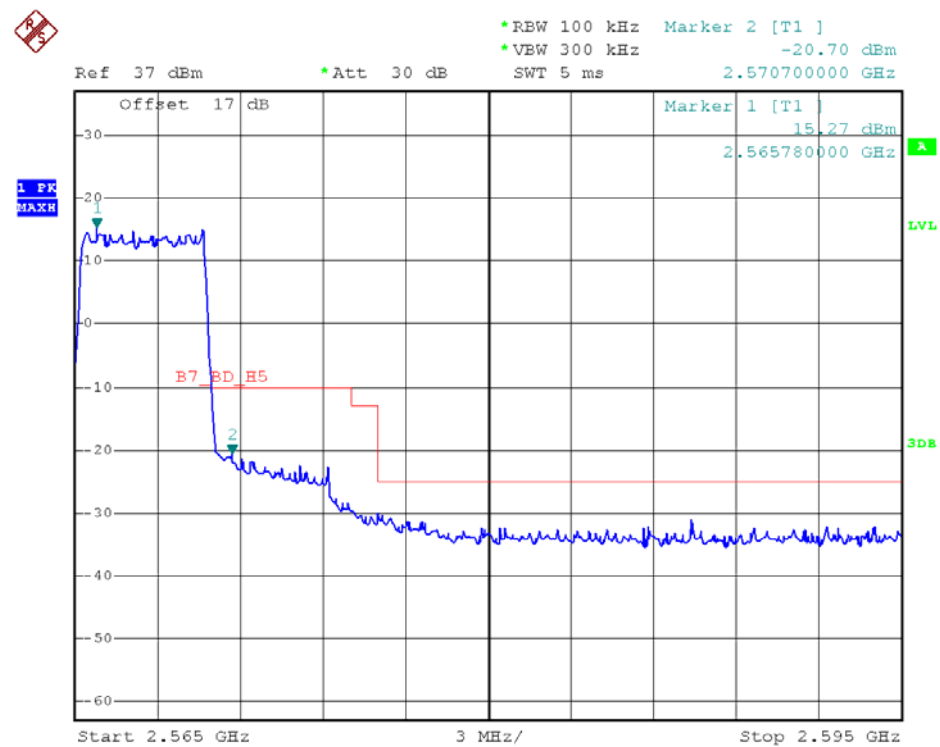
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0

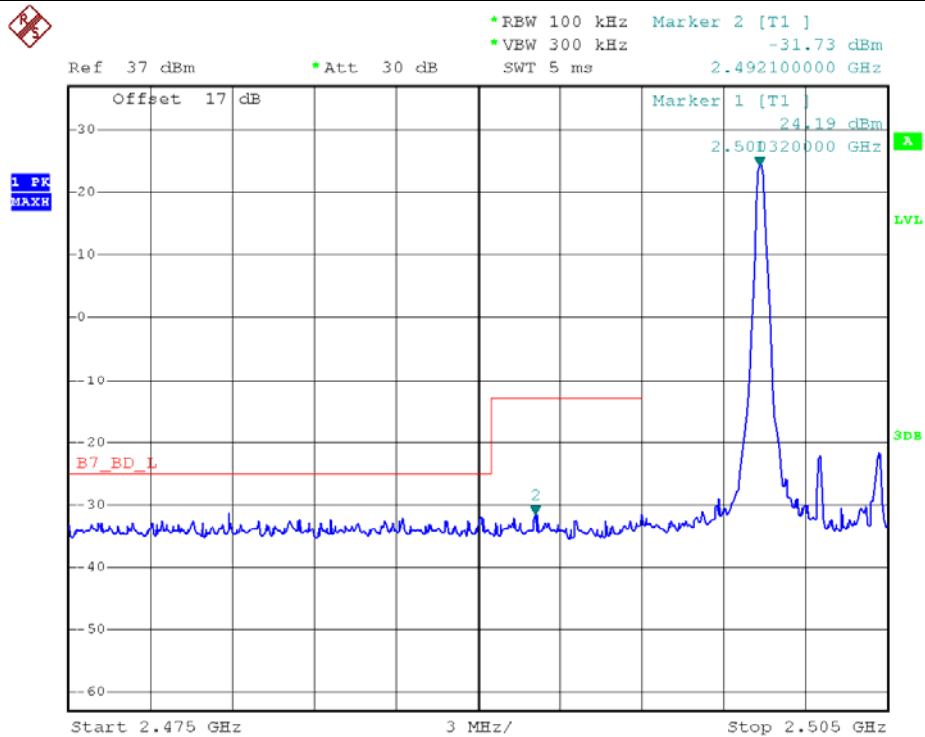


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24

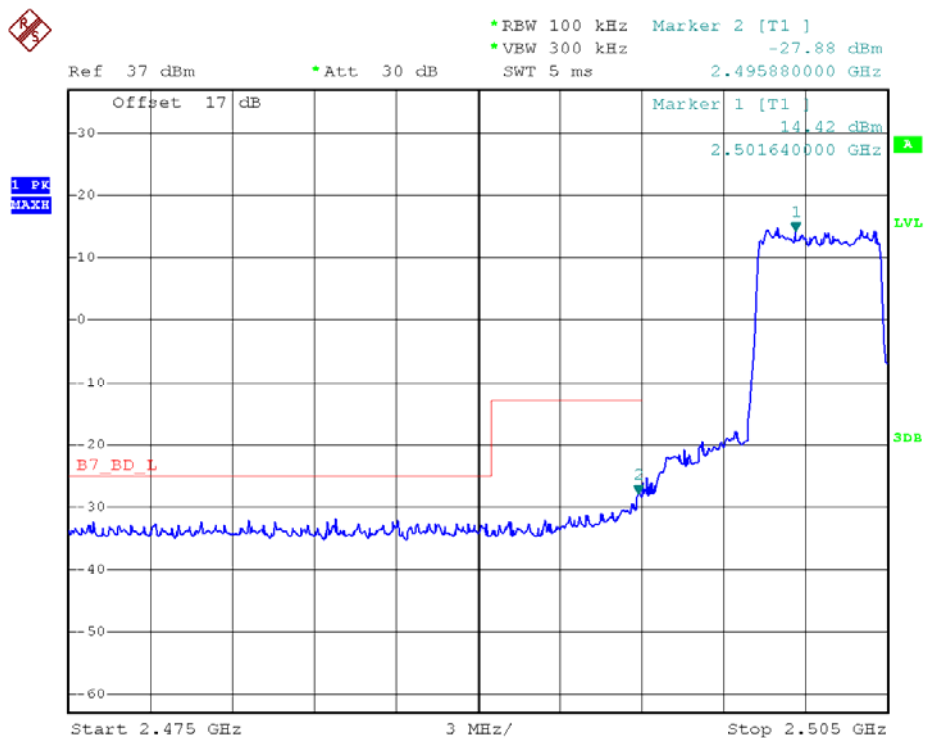


Higher Band Edge Plot for QPSK-RB Size 25, RB Offset 0

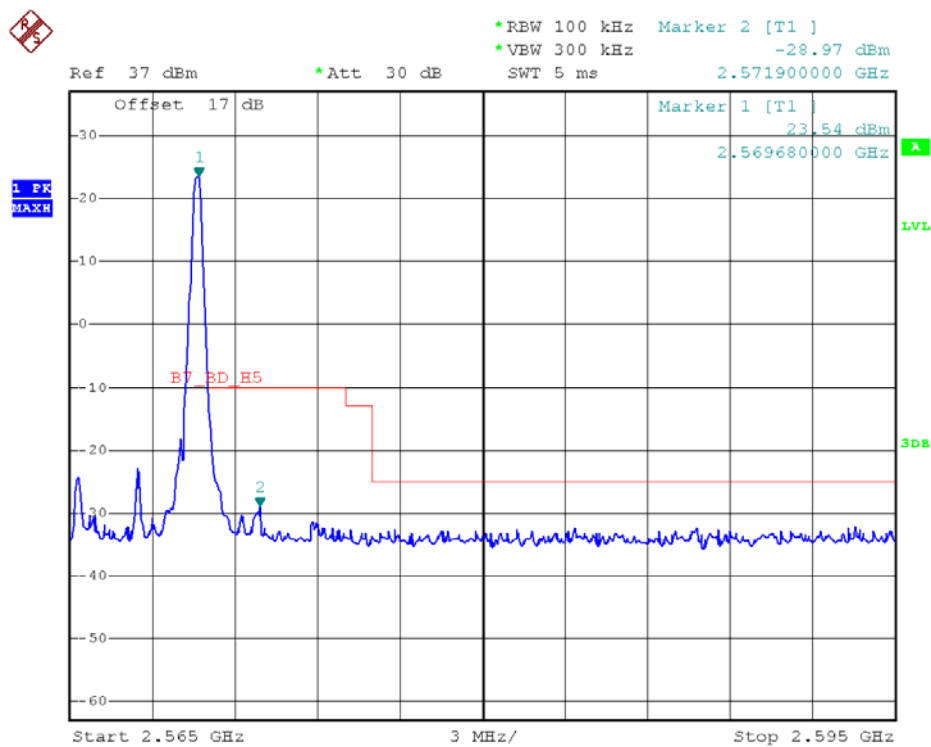
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 7 | Modulation | 16QAM |
| Bandwidth | 5MHz       |            |       |



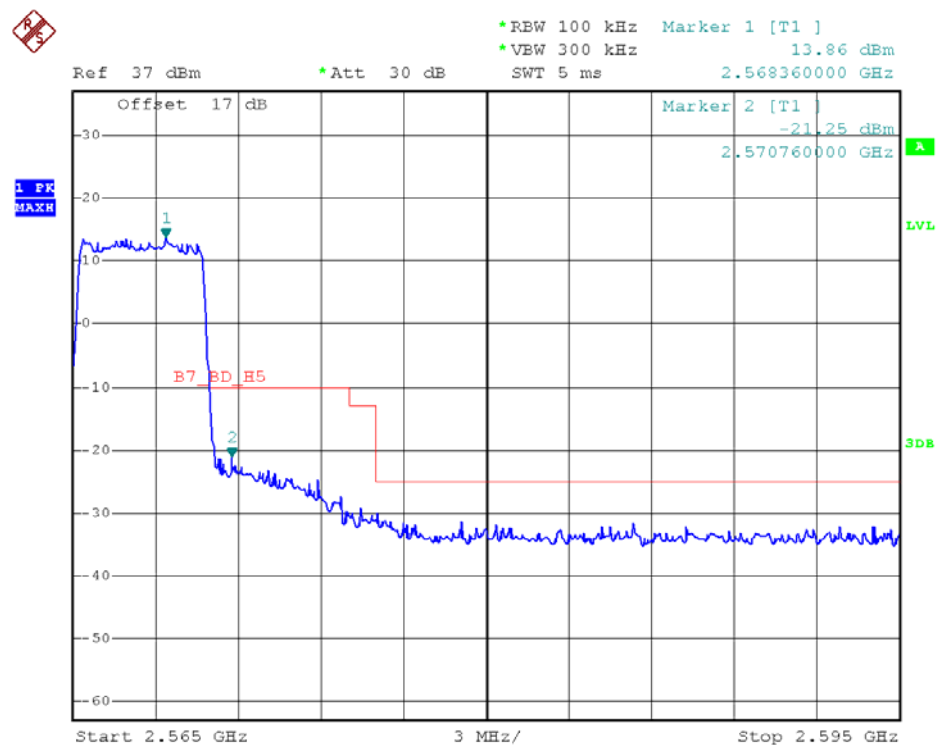
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 25, RB Offset 0

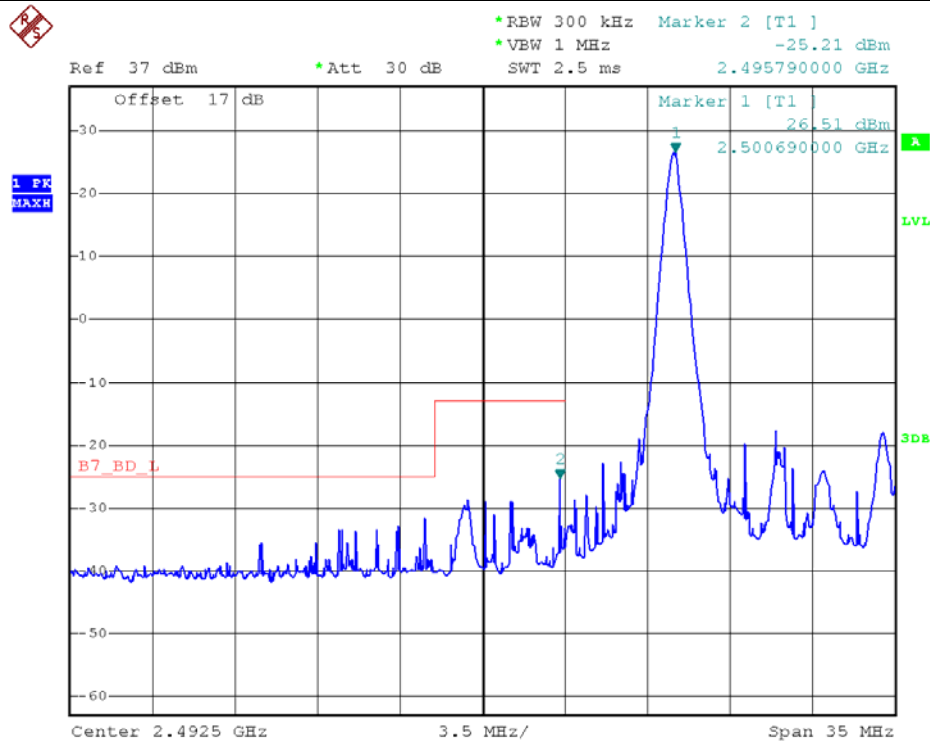


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 24

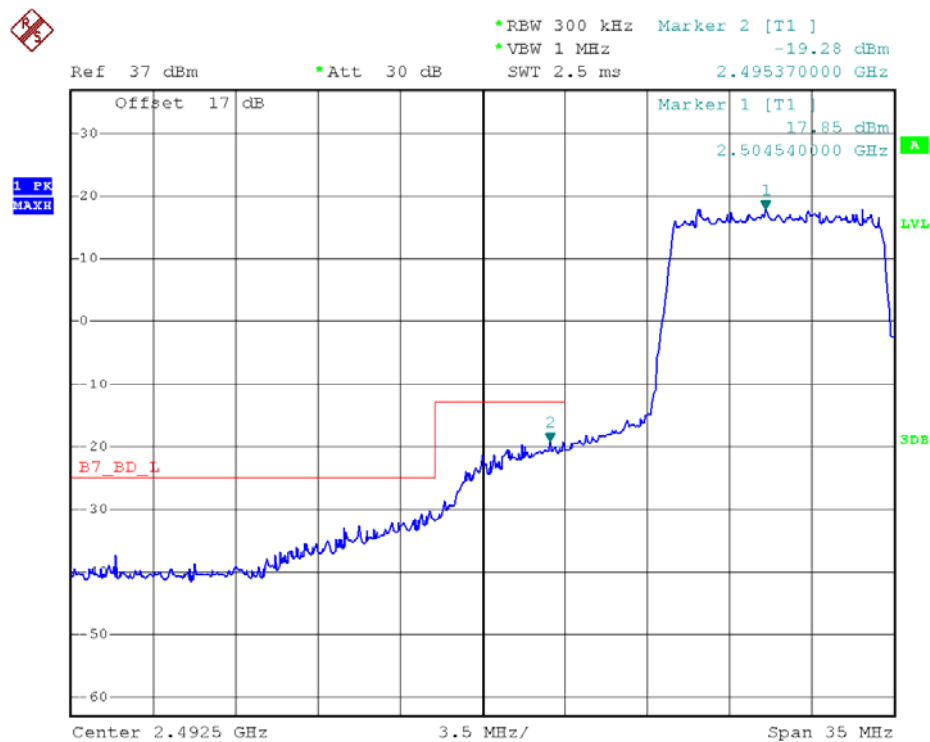


Higher Band Edge Plot for 16QAM -RB Size 25, RB Offset 0

|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 7 | Modulation | QPSK |
| Bandwidth | 10MHz      |            |      |

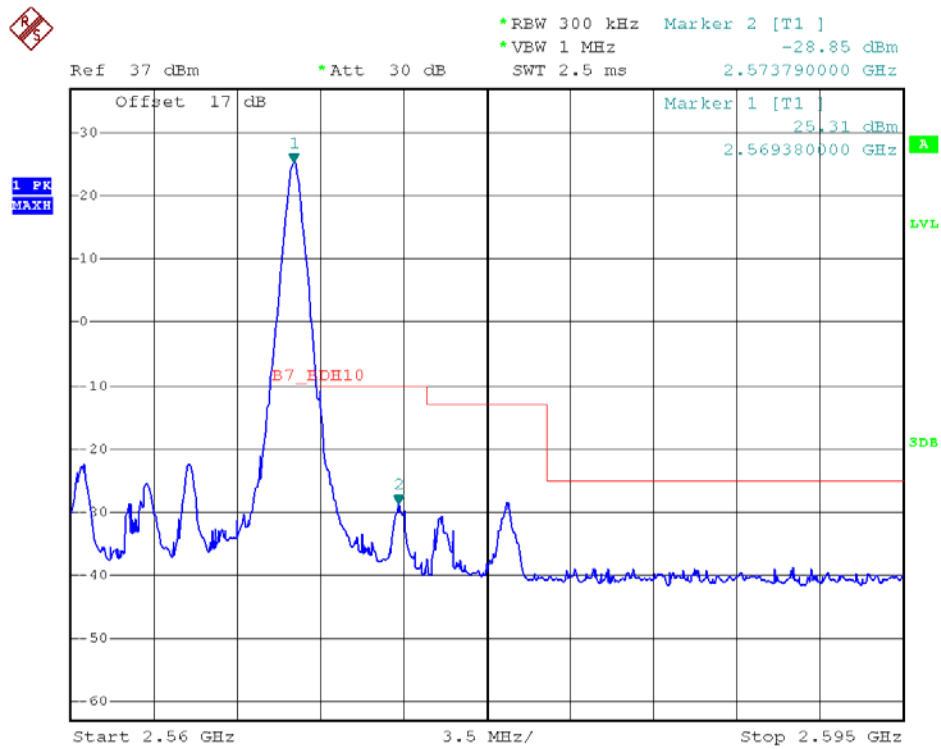


Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0

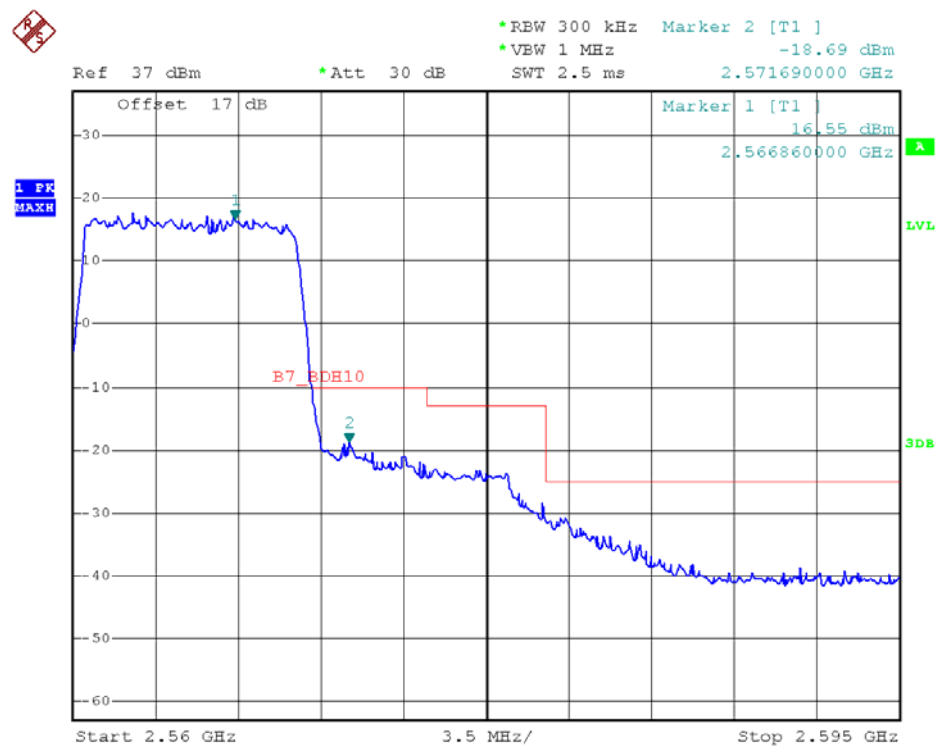


Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0



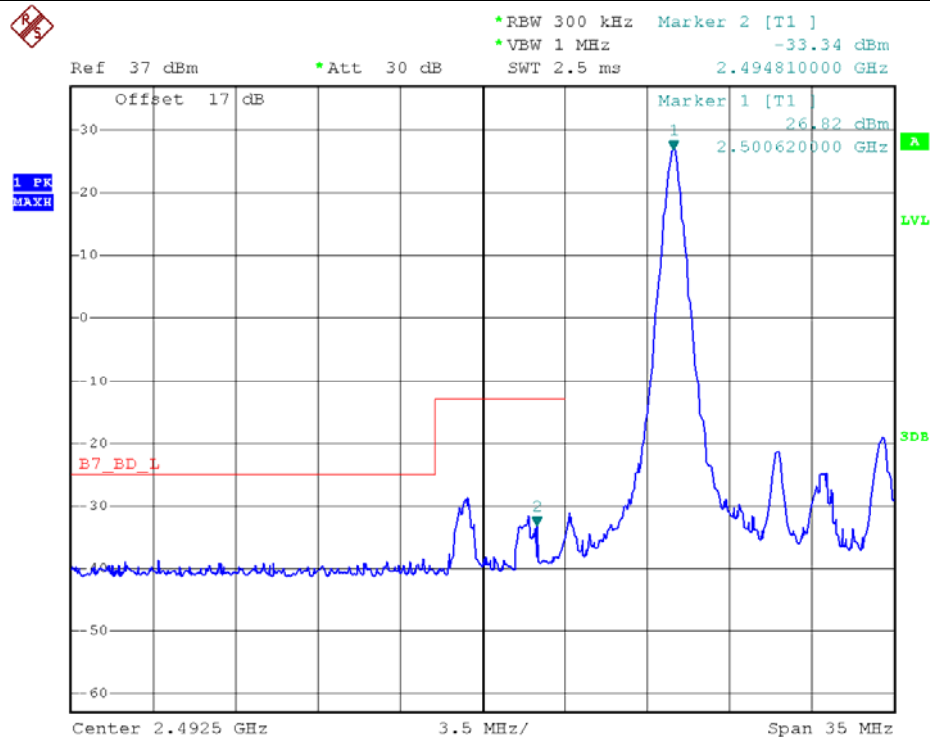


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49

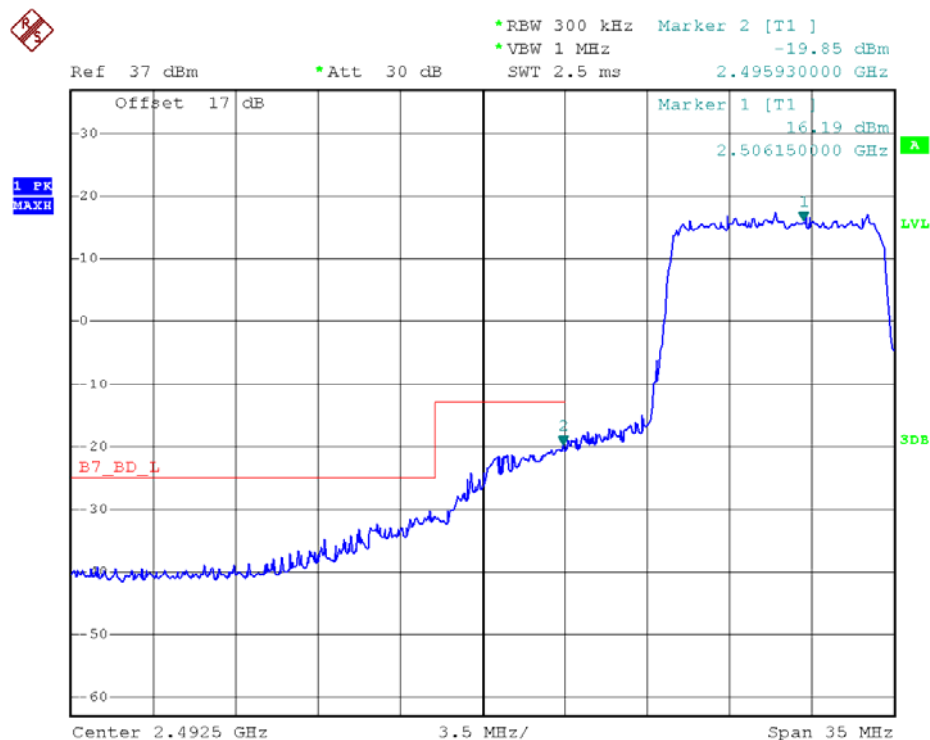


Higher Band Edge Plot for QPSK-RB Size 50, RB Offset 0

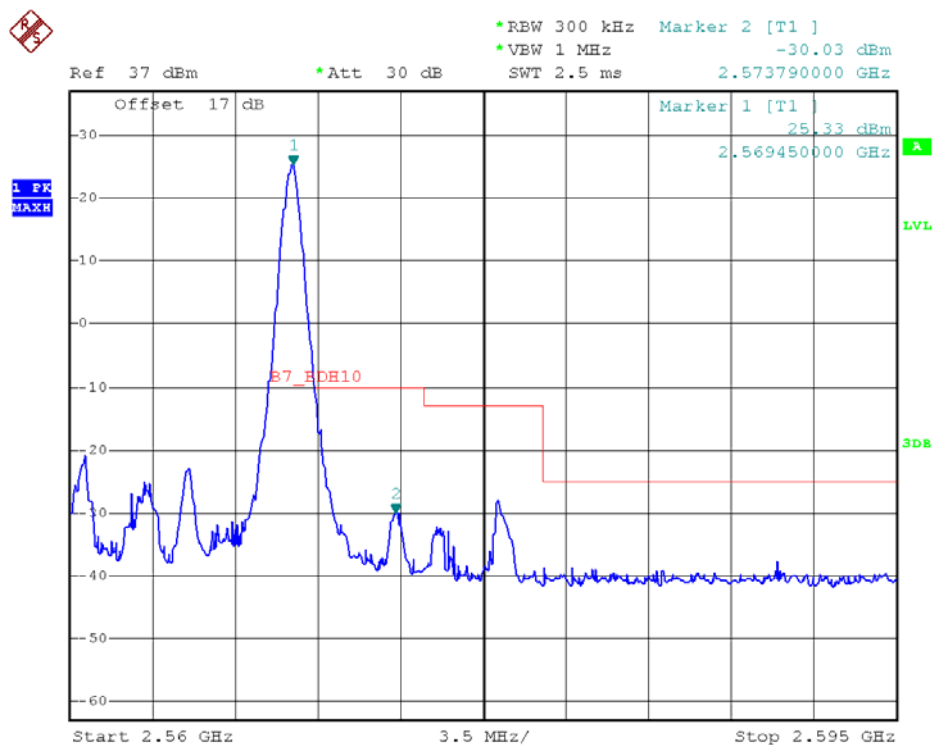
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 7 | Modulation | 16QAM |
| Bandwidth | 10MHz      |            |       |



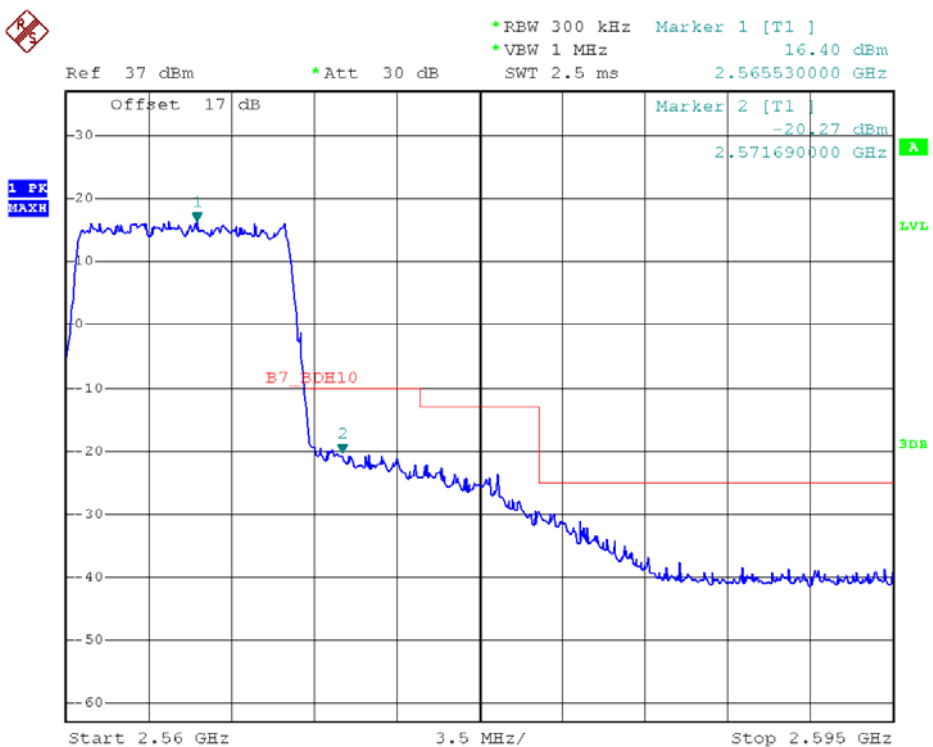
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 50, RB Offset 0

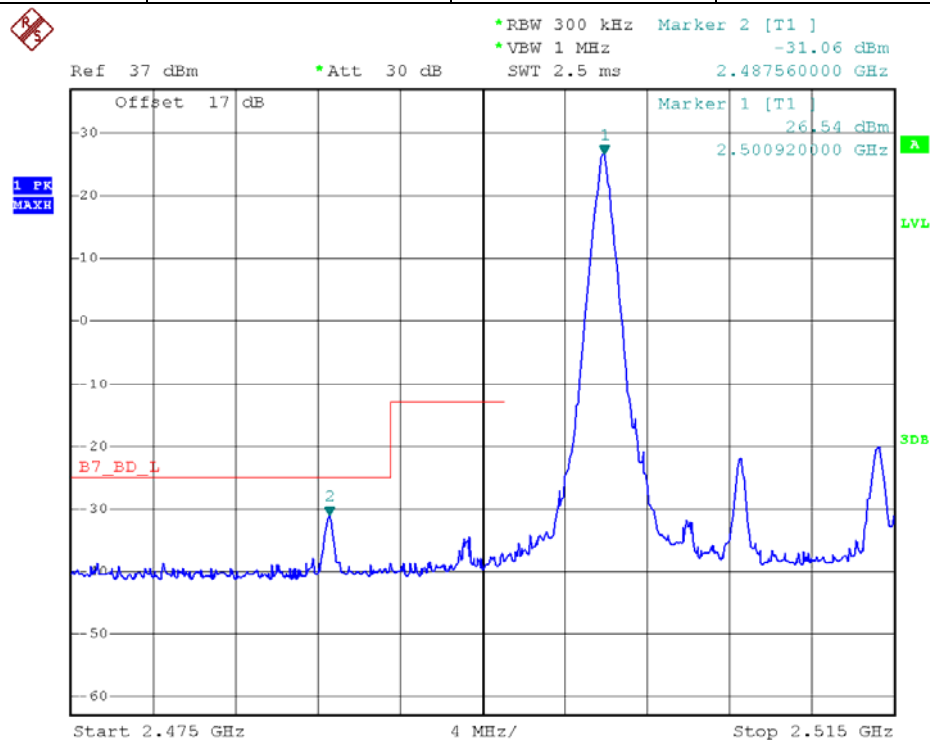


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 49

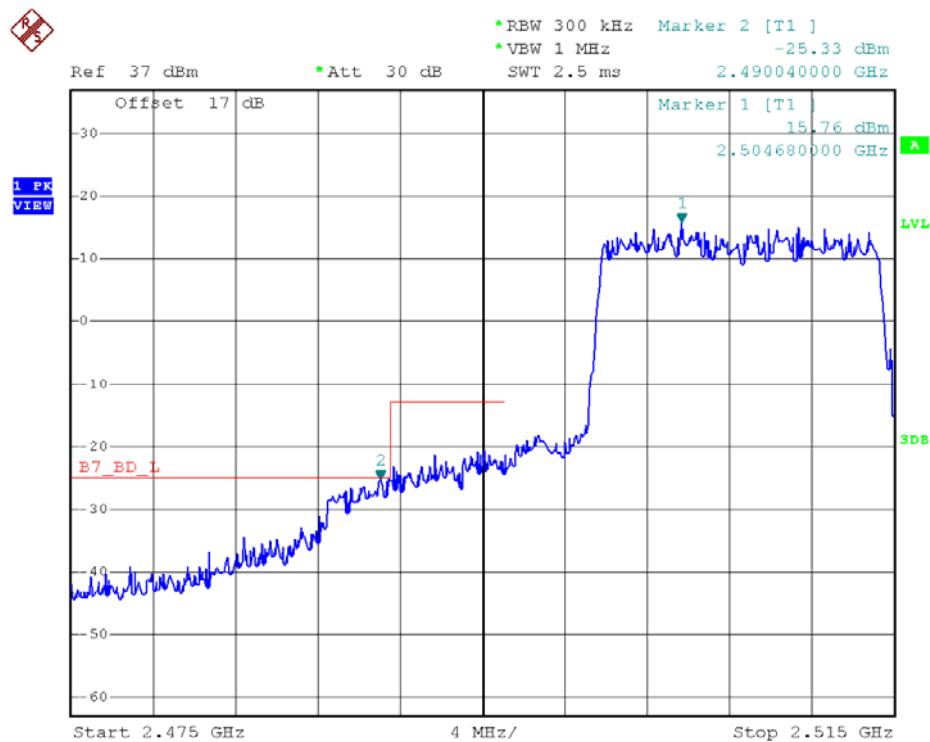


Higher Band Edge Plot for 16QAM -RB Size 50, RB Offset 0

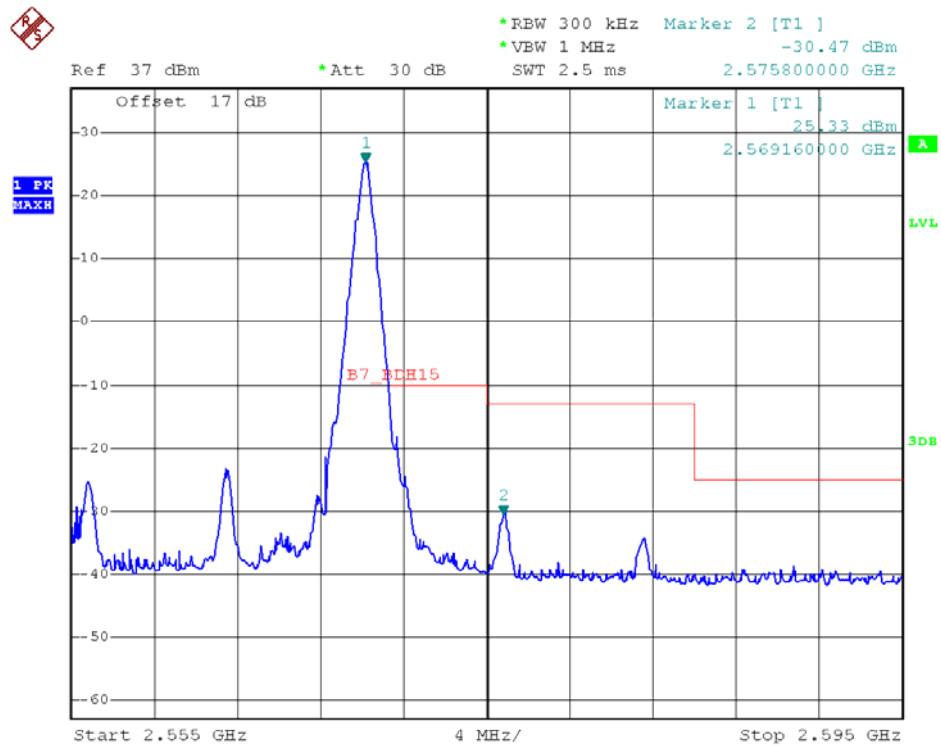
|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 7 | Modulation | QPSK |
| Bandwidth | 15MHz      |            |      |



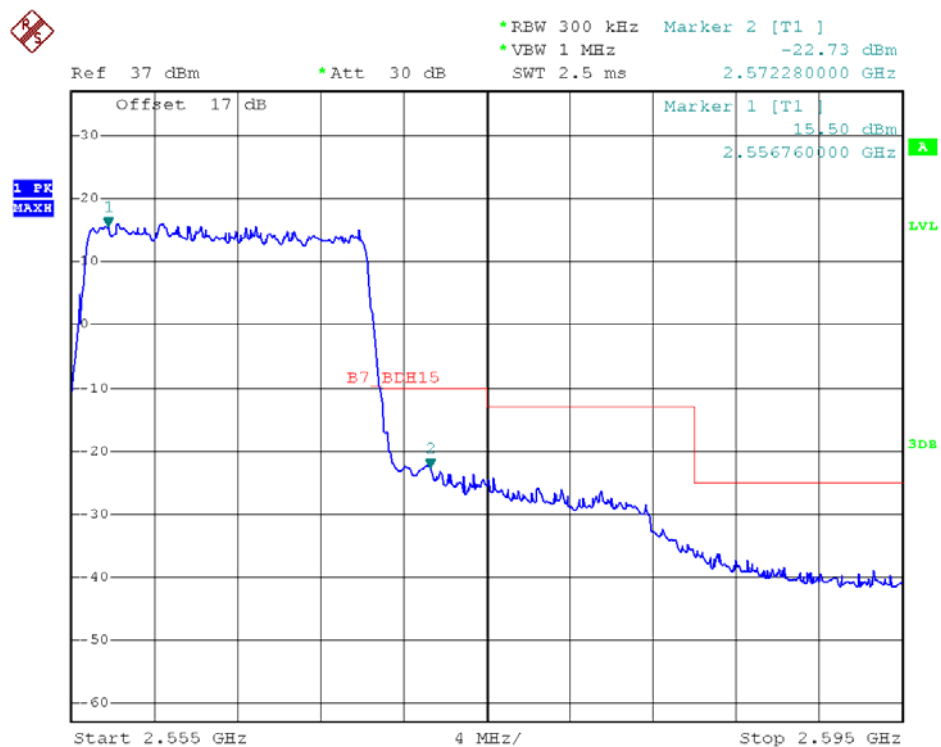
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK -RB Size 75, RB Offset 0

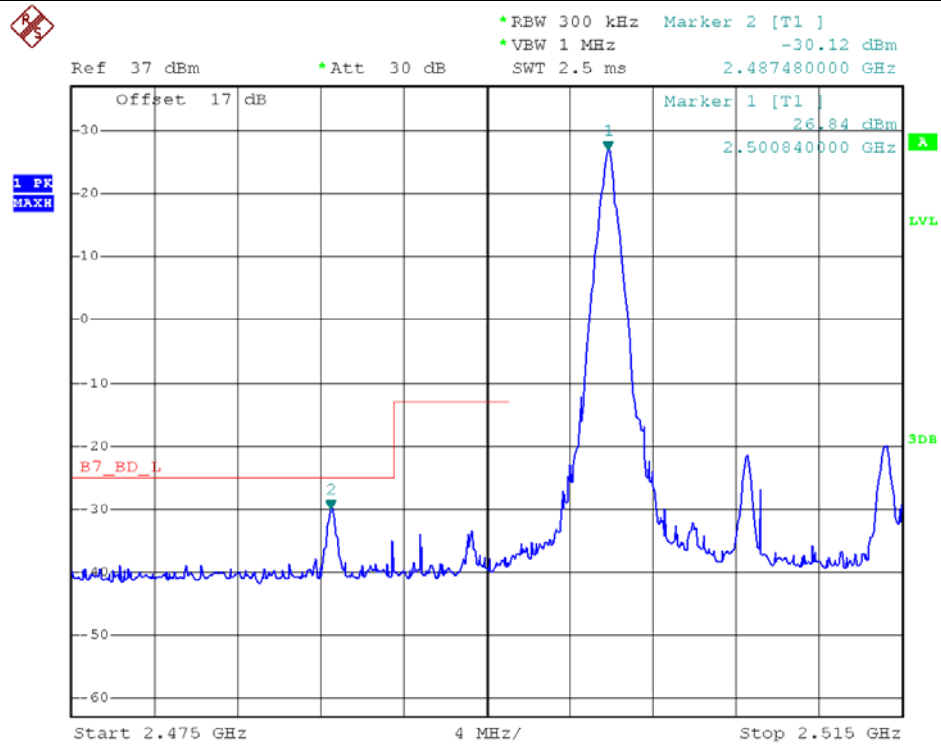


Higher Band Edge Plot for QPSK -RB Size 1, RB Offset 74

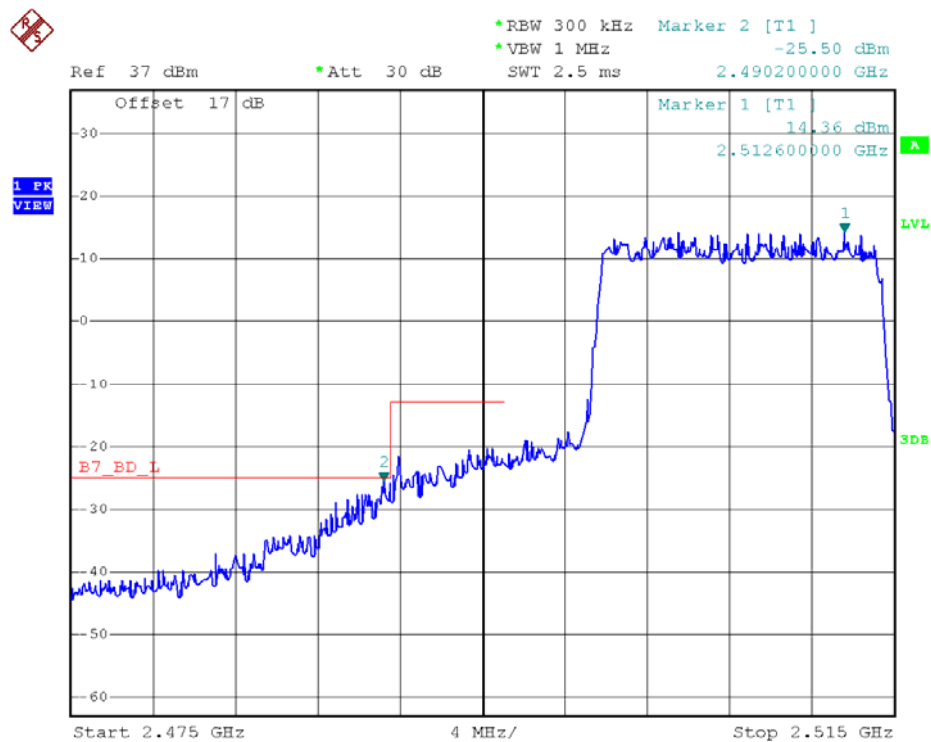


Higher Band Edge Plot for QPSK -RB Size 75, RB Offset 0

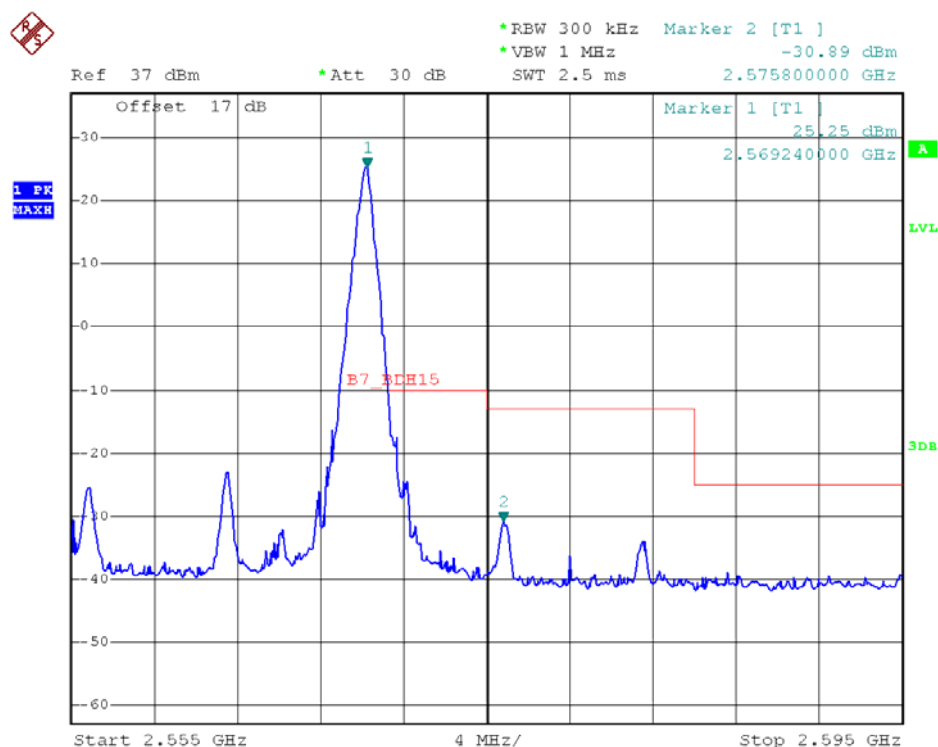
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 7 | Modulation | 16QAM |
| Bandwidth | 15MHz      |            |       |



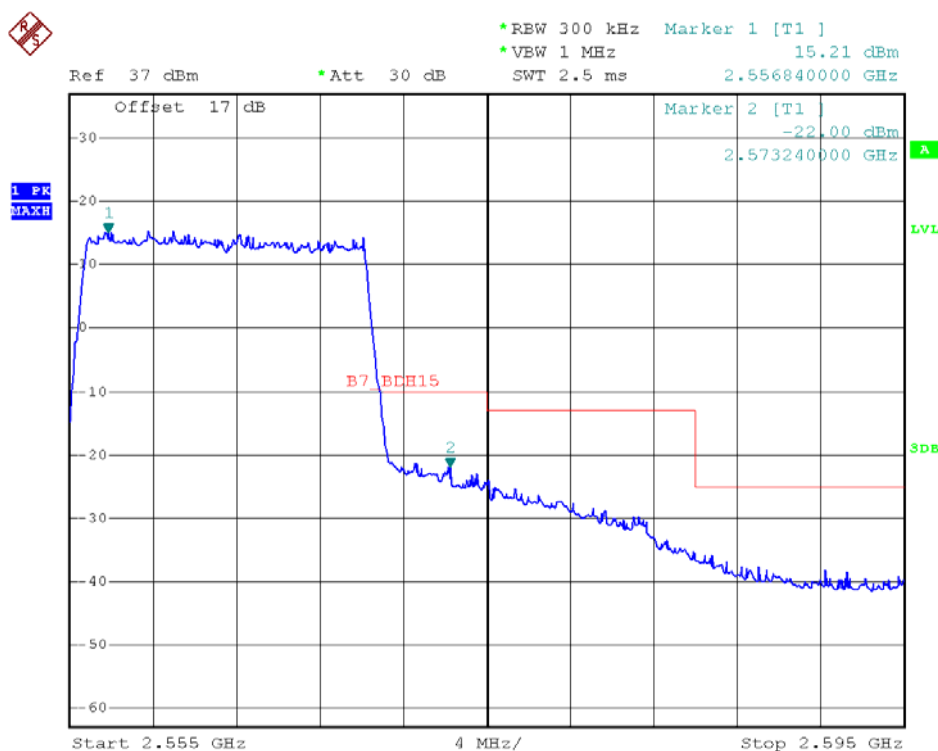
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 75, RB Offset 0

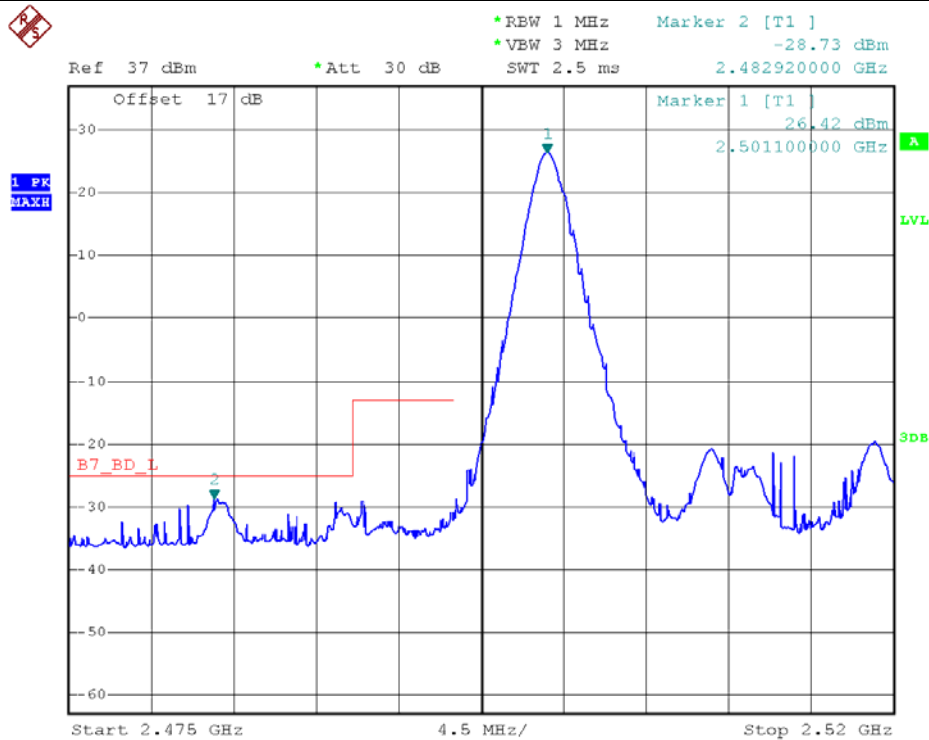


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 74

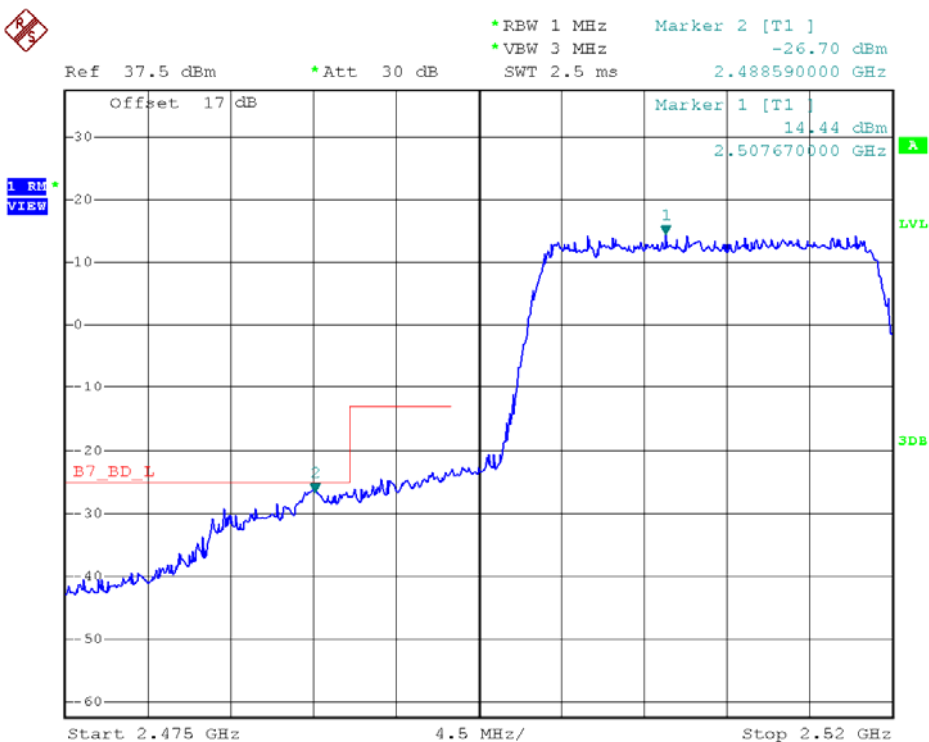


Higher Band Edge Plot for 16QAM -RB Size 75, RB Offset 0

|           |            |            |      |
|-----------|------------|------------|------|
| Band      | LTE Band 7 | Modulation | QPSK |
| Bandwidth | 20MHz      |            |      |

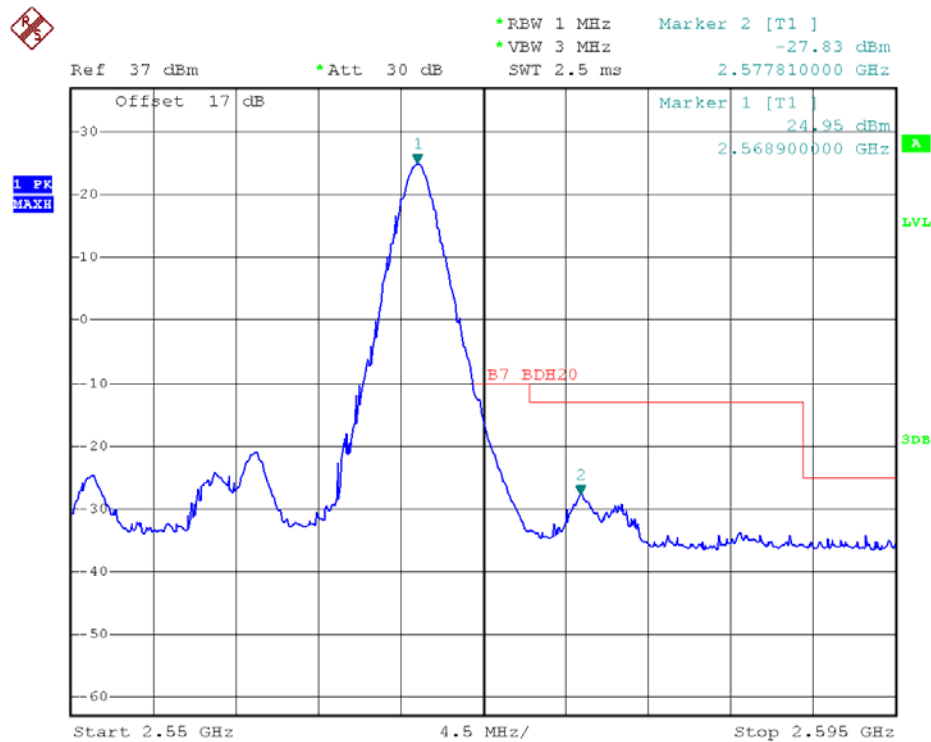


Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0

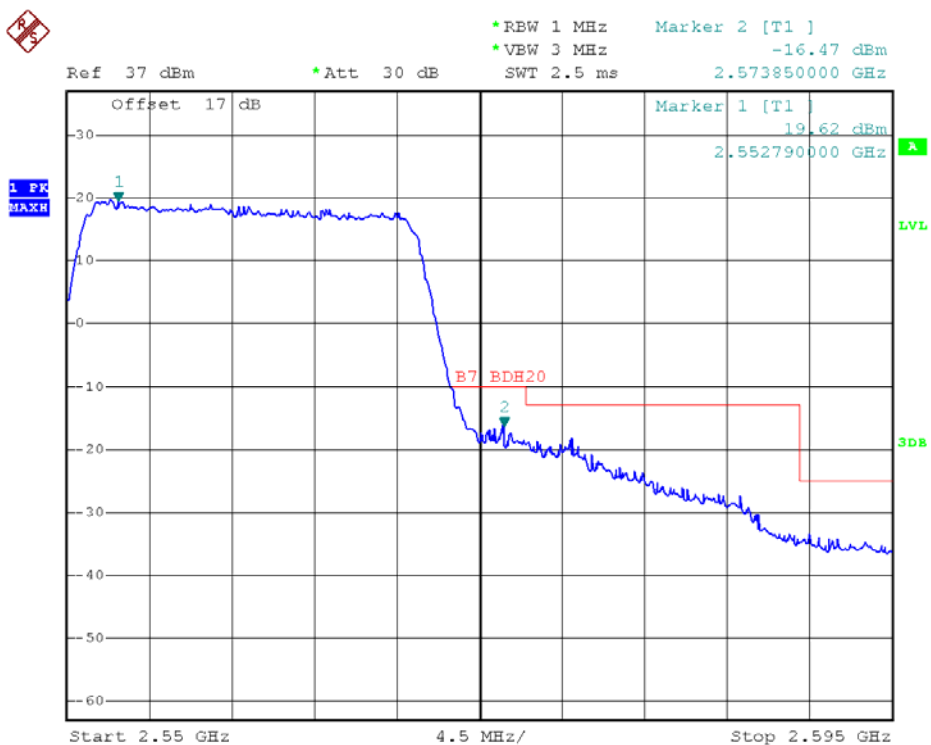


Lower Band Edge Plot for QPSK -RB Size 100, RB Offset 0



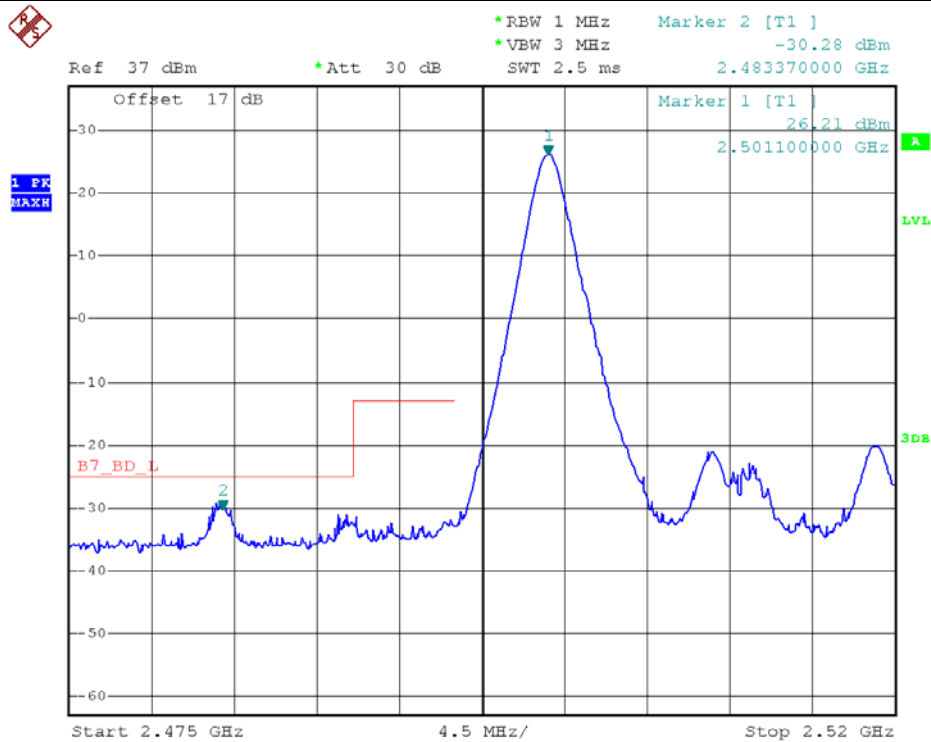


Higher Band Edge Plot for QPSK -RB Size 1, RB Offset 99

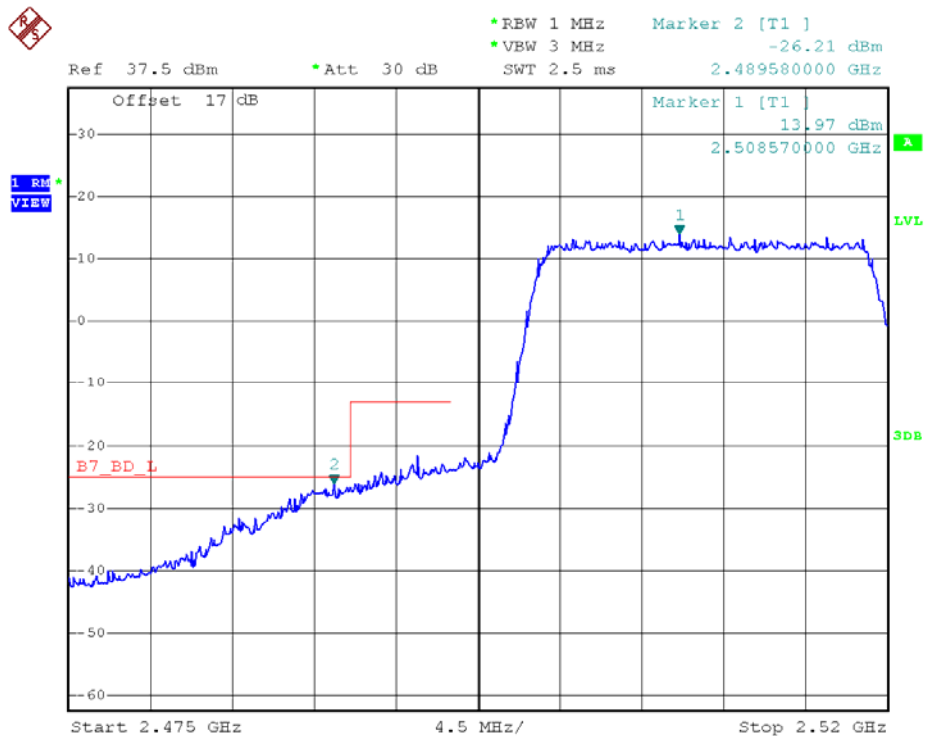


Higher Band Edge Plot for QPSK -RB Size 100, RB Offset 0

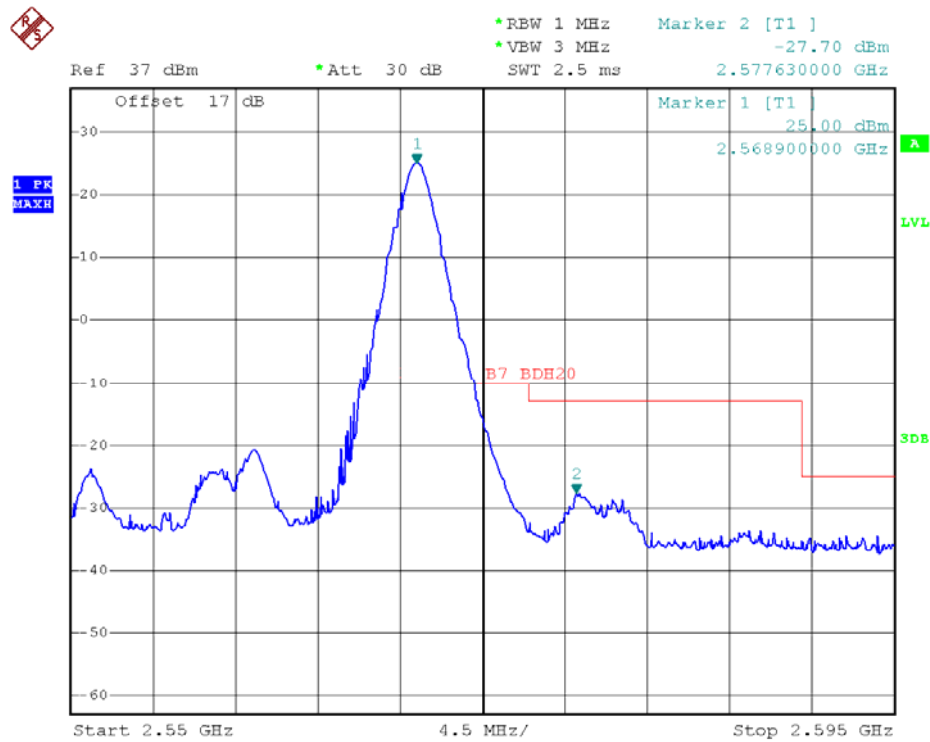
|           |            |            |       |
|-----------|------------|------------|-------|
| Band      | LTE Band 7 | Modulation | 16QAM |
| Bandwidth | 20MHz      |            |       |



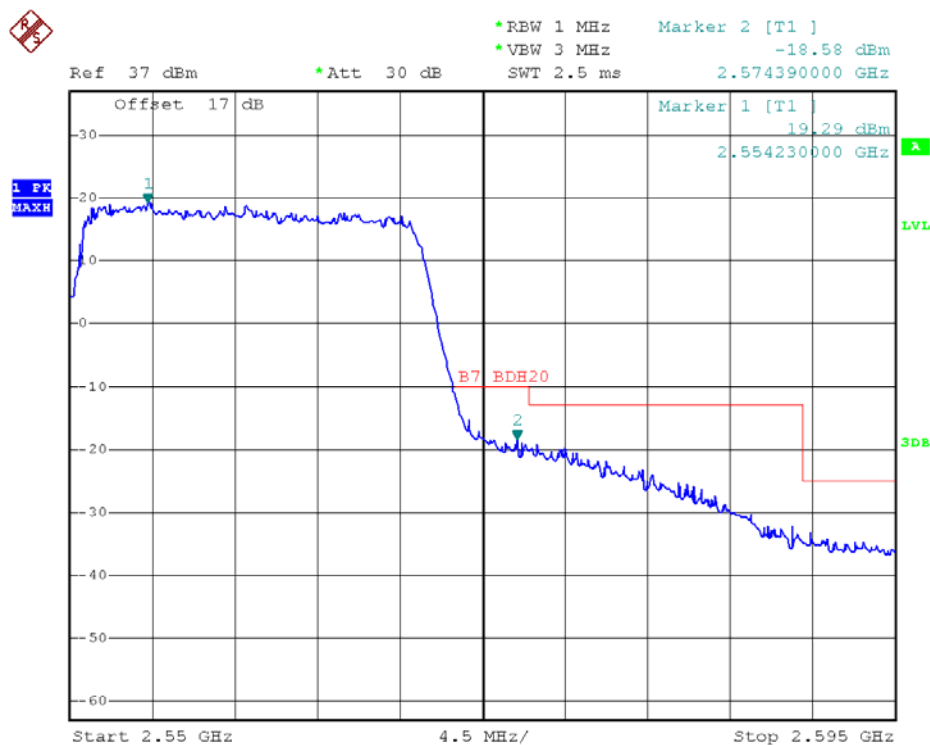
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 100, RB Offset 0

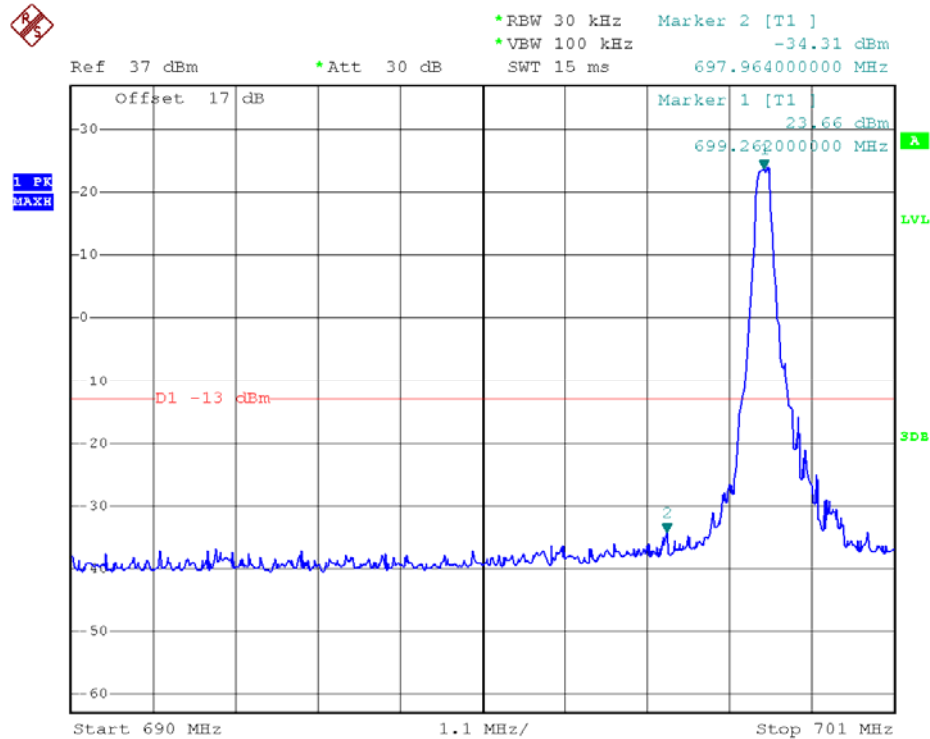


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 99

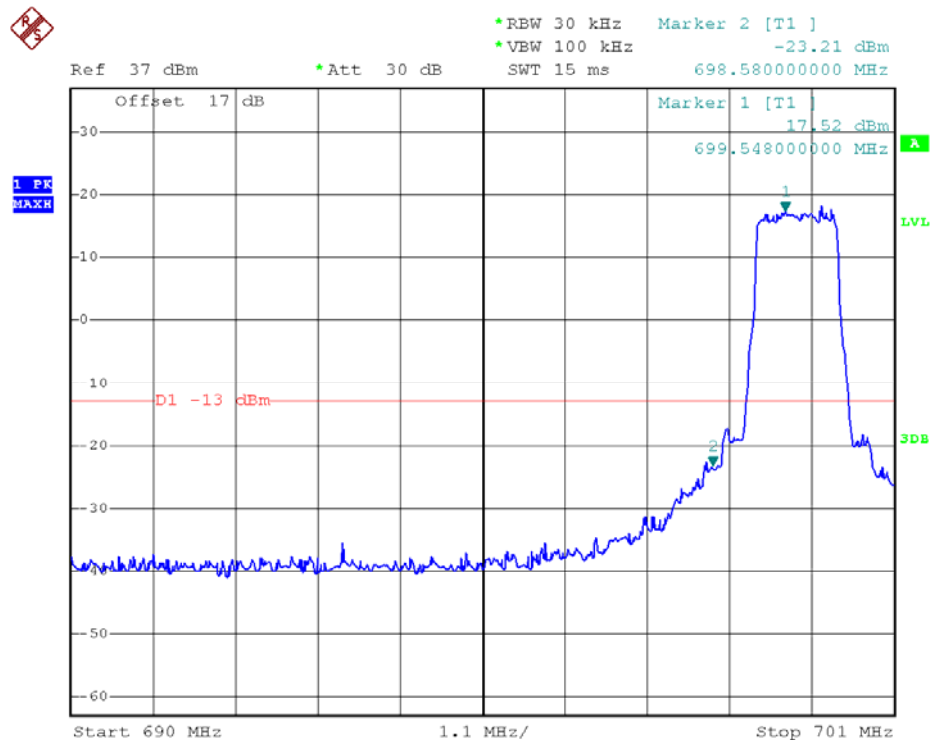


Higher Band Edge Plot for 16QAM -RB Size 100, RB Offset 0

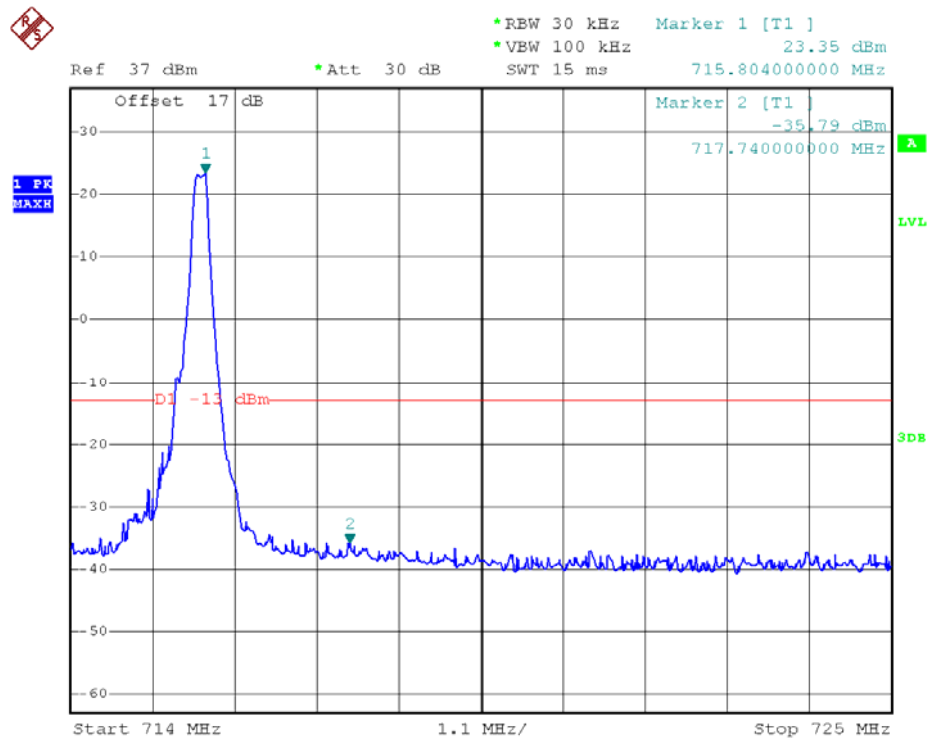
|           |             |            |      |
|-----------|-------------|------------|------|
| Band      | LTE Band 12 | Modulation | QPSK |
| Bandwidth | 1.4MHz      |            |      |



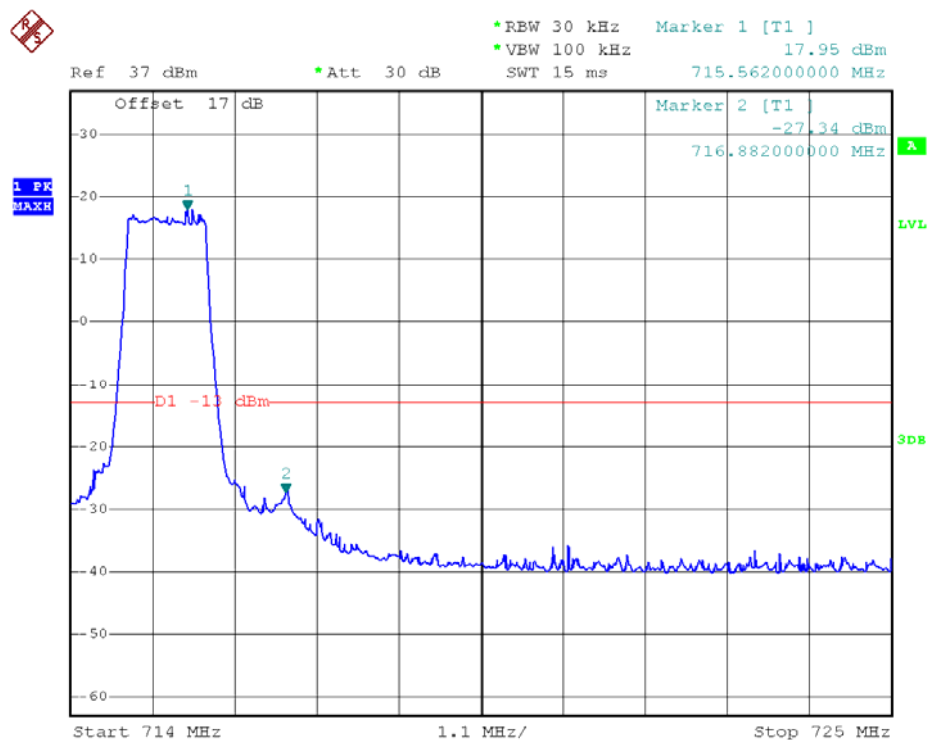
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 6, RB Offset 0

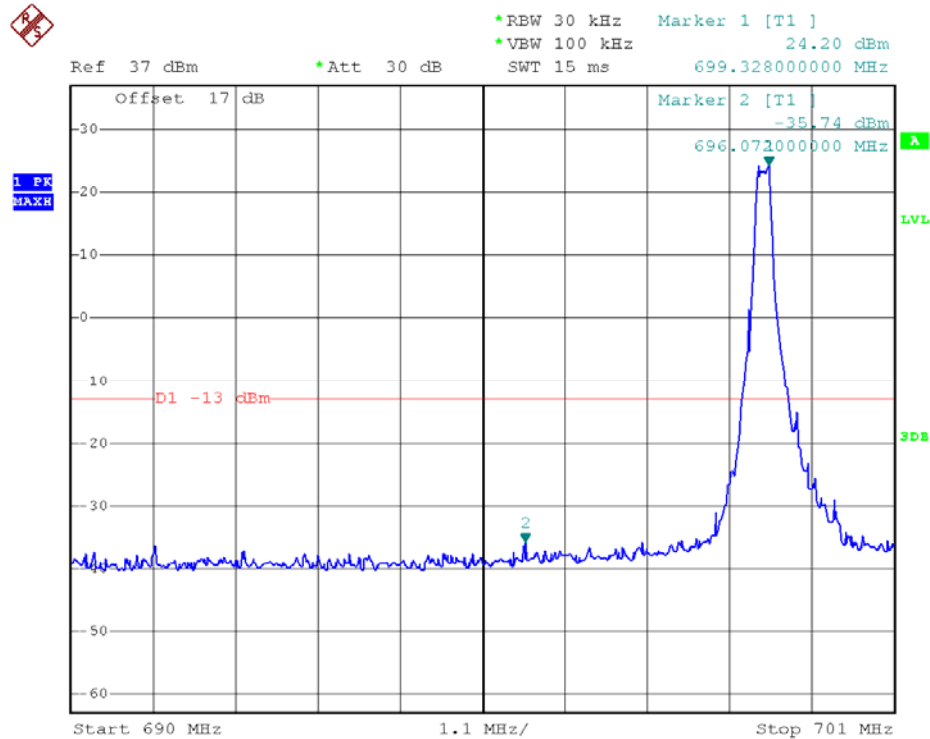


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5

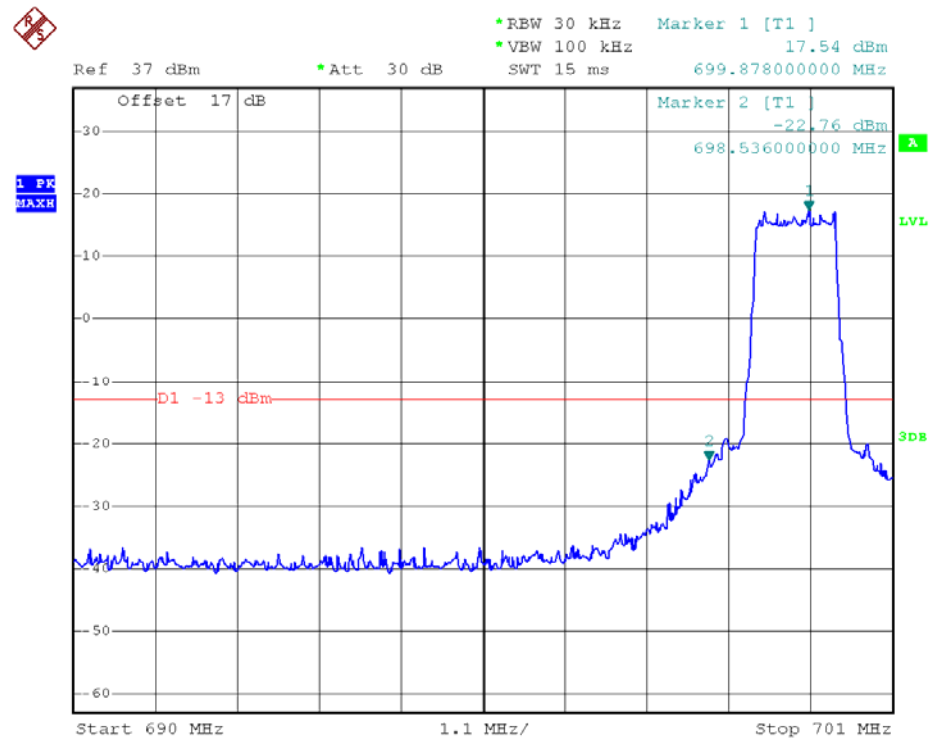


Higher Band Edge Plot for QPSK-RB Size 6, RB Offset 0

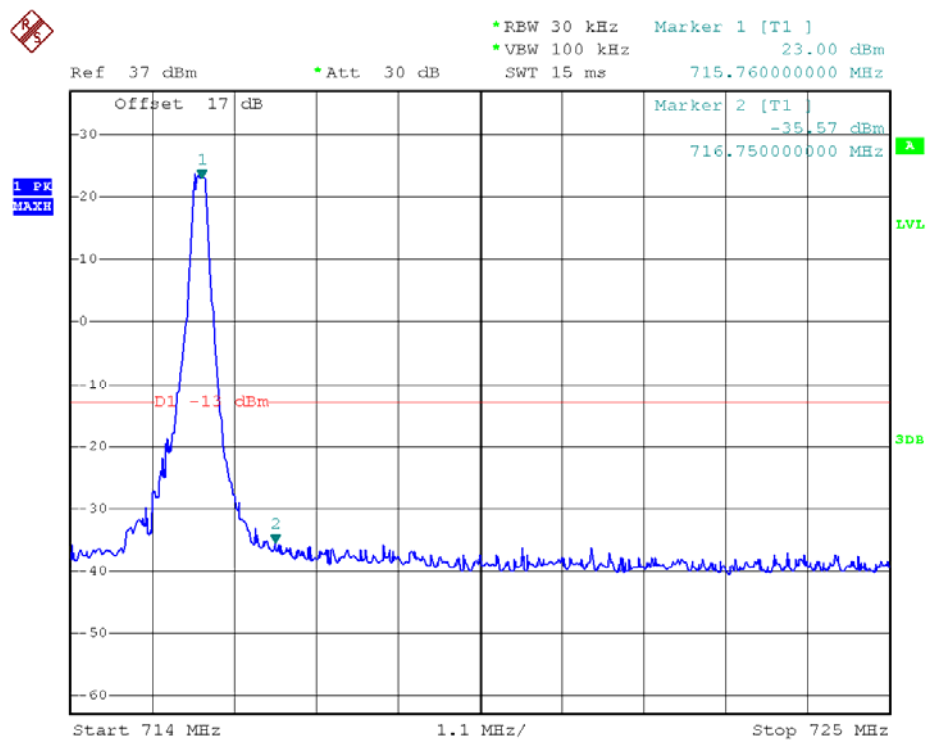
|           |             |            |       |
|-----------|-------------|------------|-------|
| Band      | LTE Band 12 | Modulation | 16QAM |
| Bandwidth | 1.4MHz      |            |       |



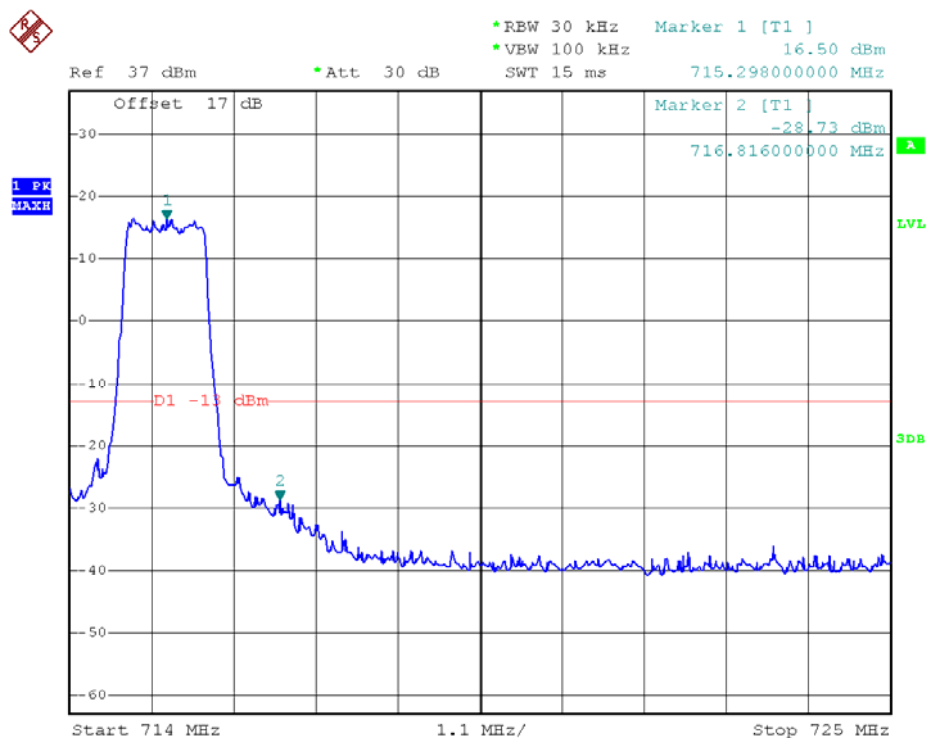
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 6, RB Offset 0

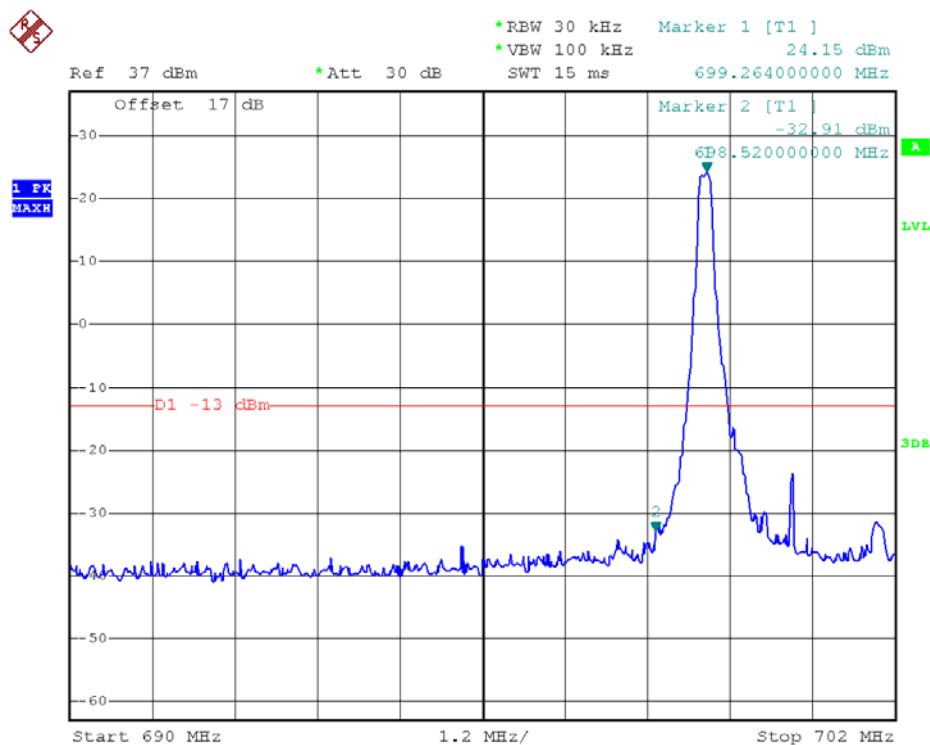


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 5

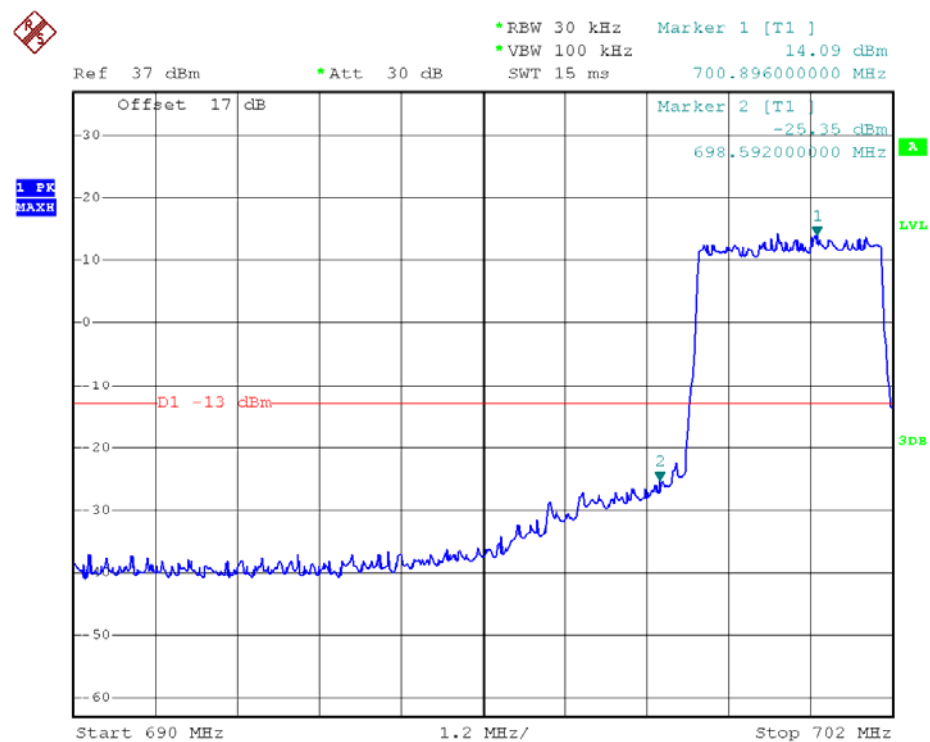


Higher Band Edge Plot for 16QAM -RB Size 6, RB Offset 0

|           |             |            |      |
|-----------|-------------|------------|------|
| Band      | LTE Band 12 | Modulation | QPSK |
| Bandwidth | 3MHz        |            |      |

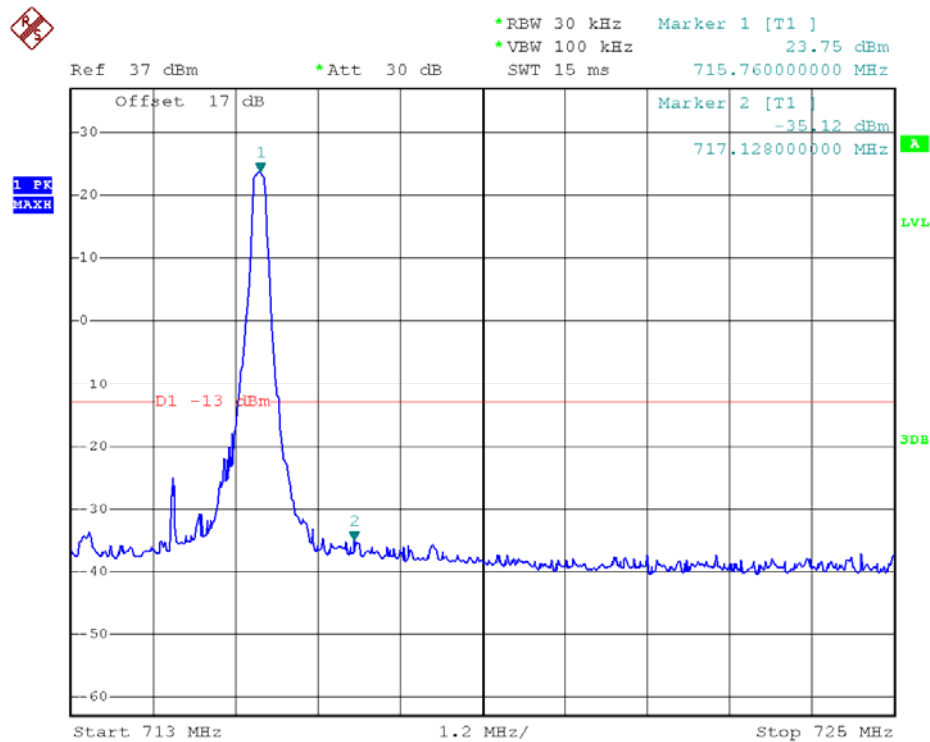


Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0

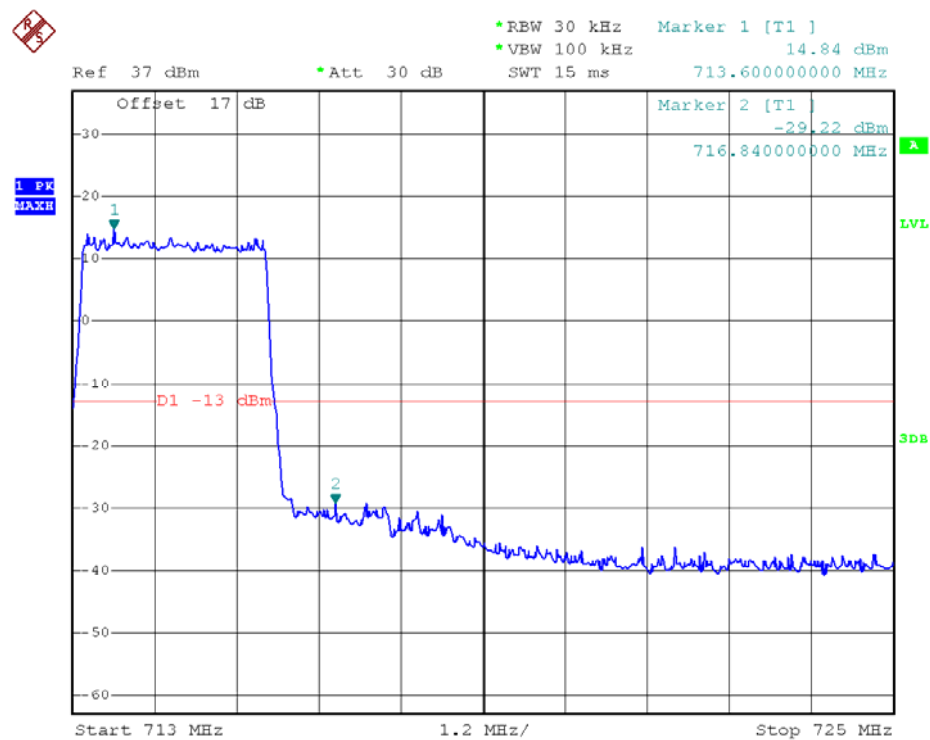


Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0



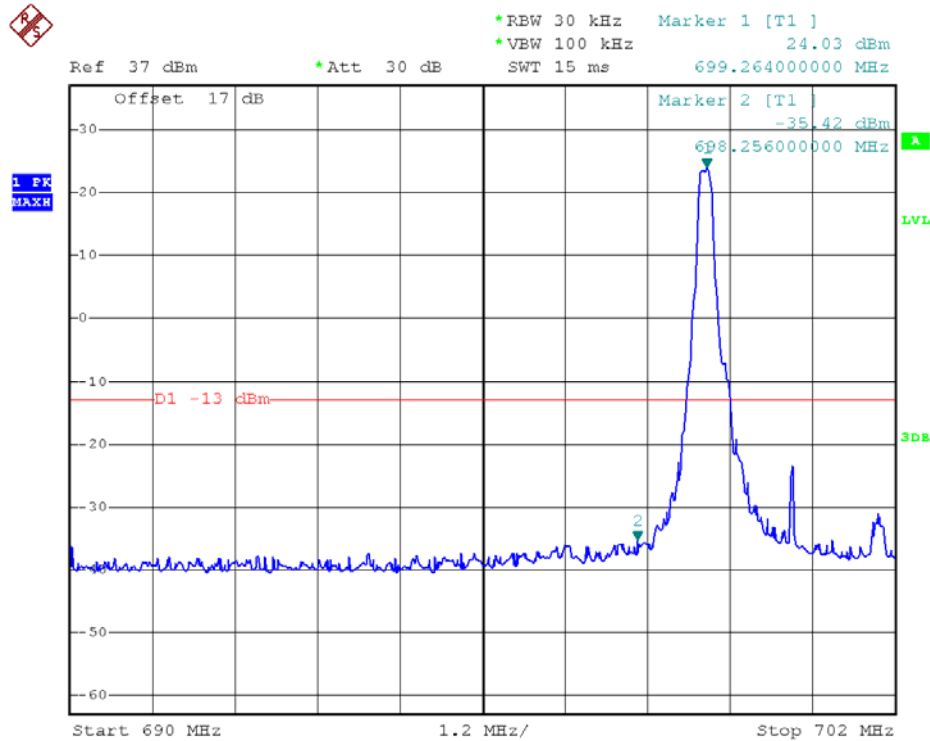


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14

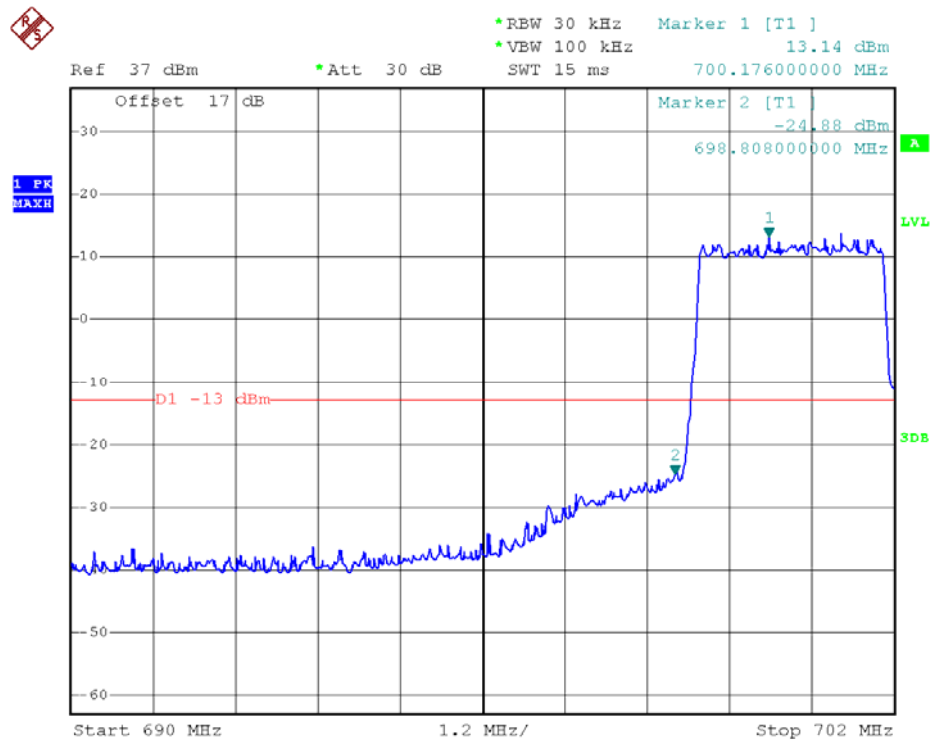


Higher Band Edge Plot for QPSK-RB Size 15, RB Offset 0

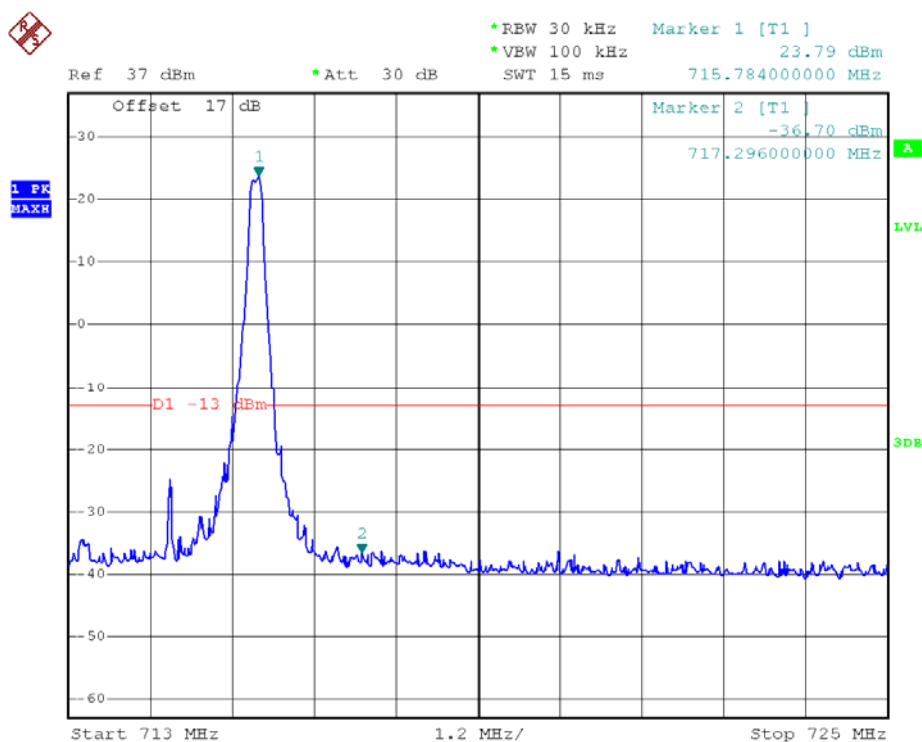
|           |             |            |       |
|-----------|-------------|------------|-------|
| Band      | LTE Band 12 | Modulation | 16QAM |
| Bandwidth | 3MHz        |            |       |



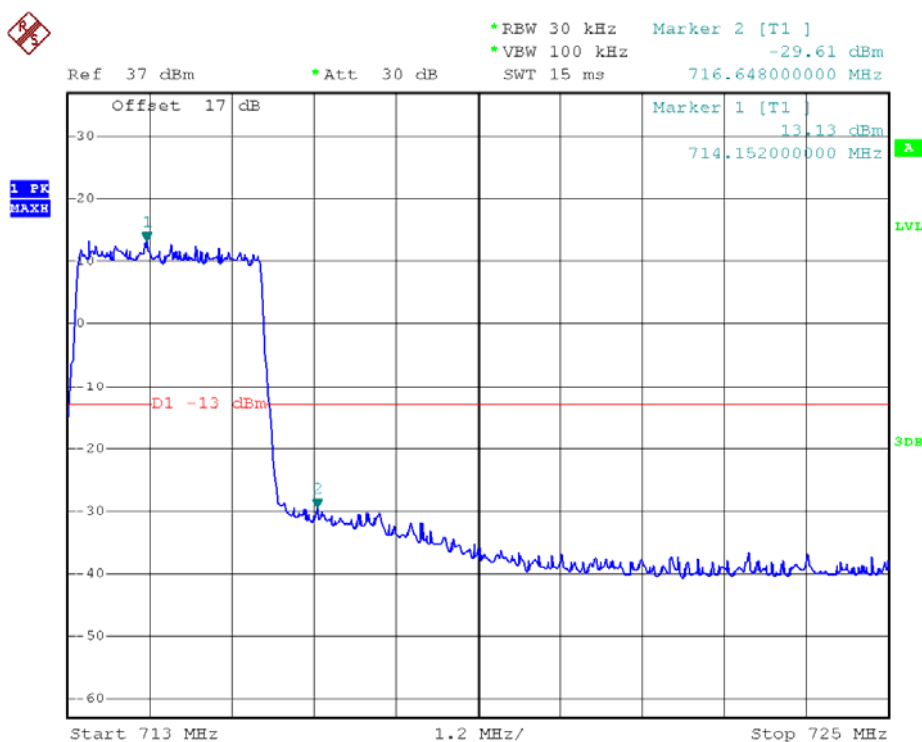
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 15, RB Offset 0

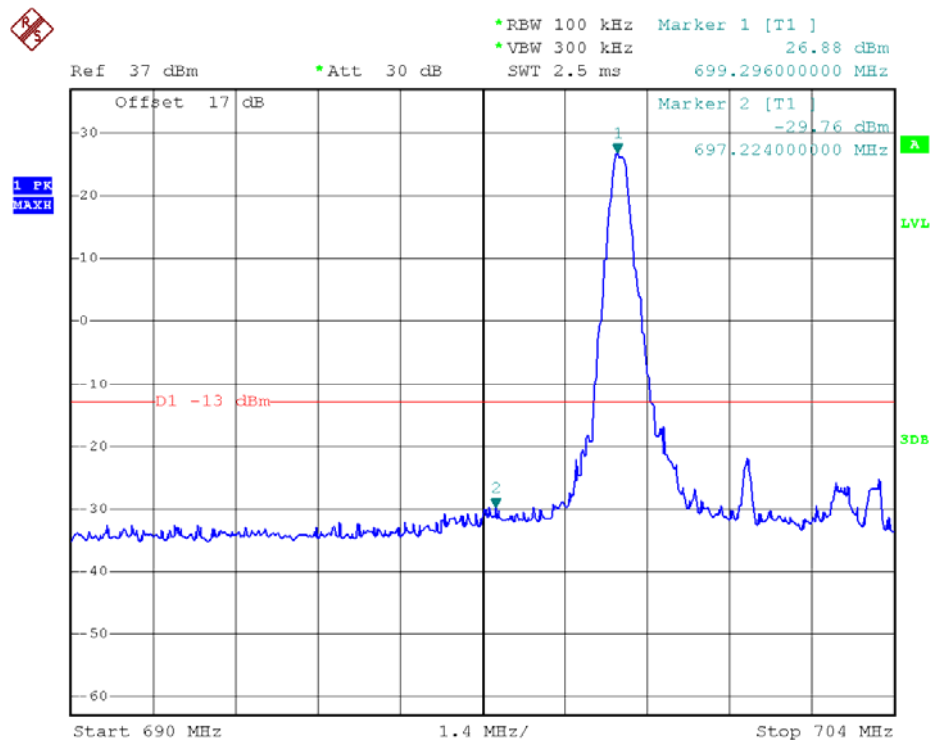


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 14



Higher Band Edge Plot for 16QAM -RB Size 15, RB Offset 0

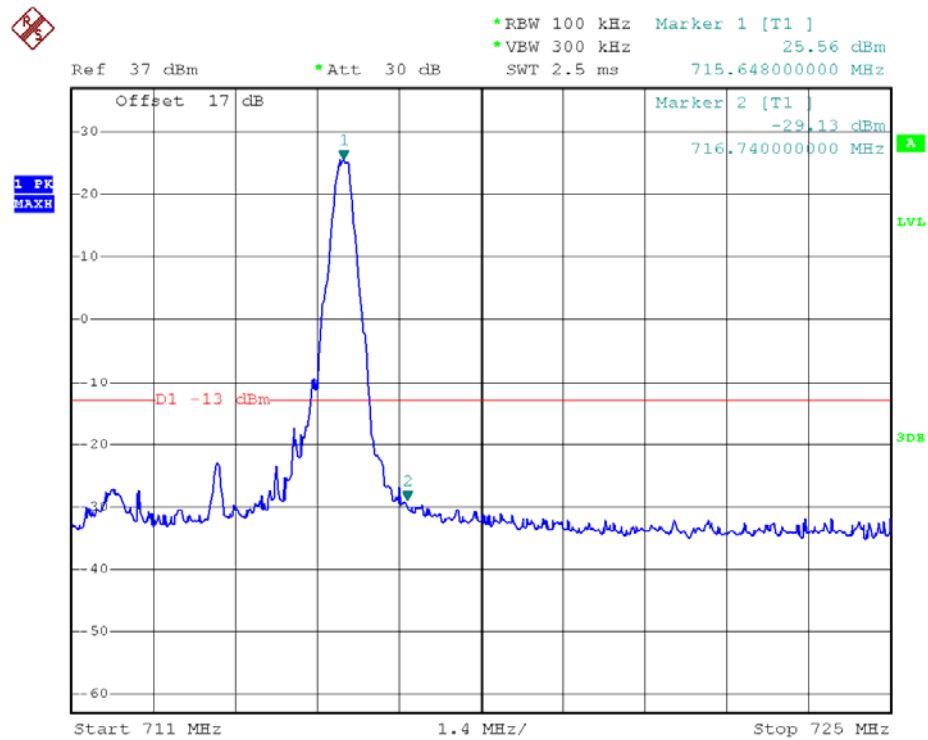
|           |             |            |      |
|-----------|-------------|------------|------|
| Band      | LTE Band 12 | Modulation | QPSK |
| Bandwidth | 5MHz        |            |      |



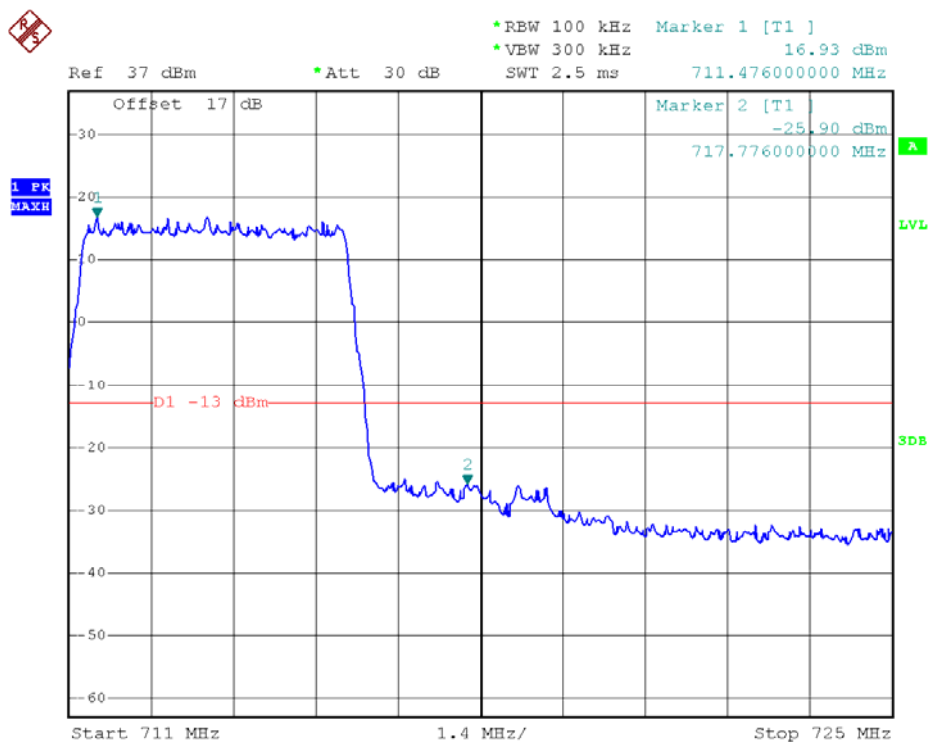
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0

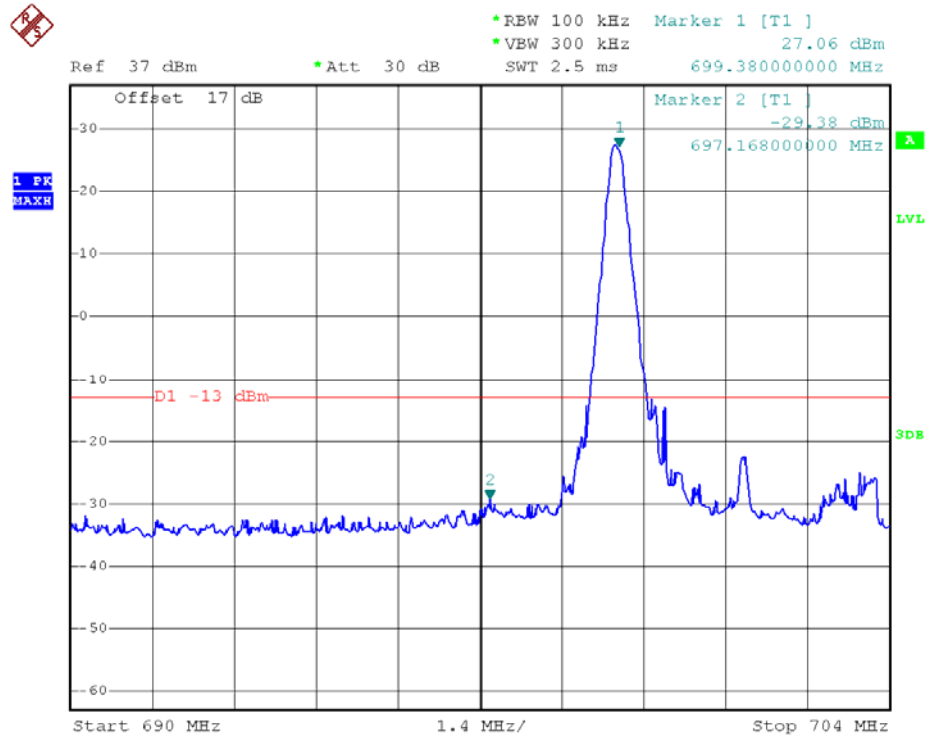


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24

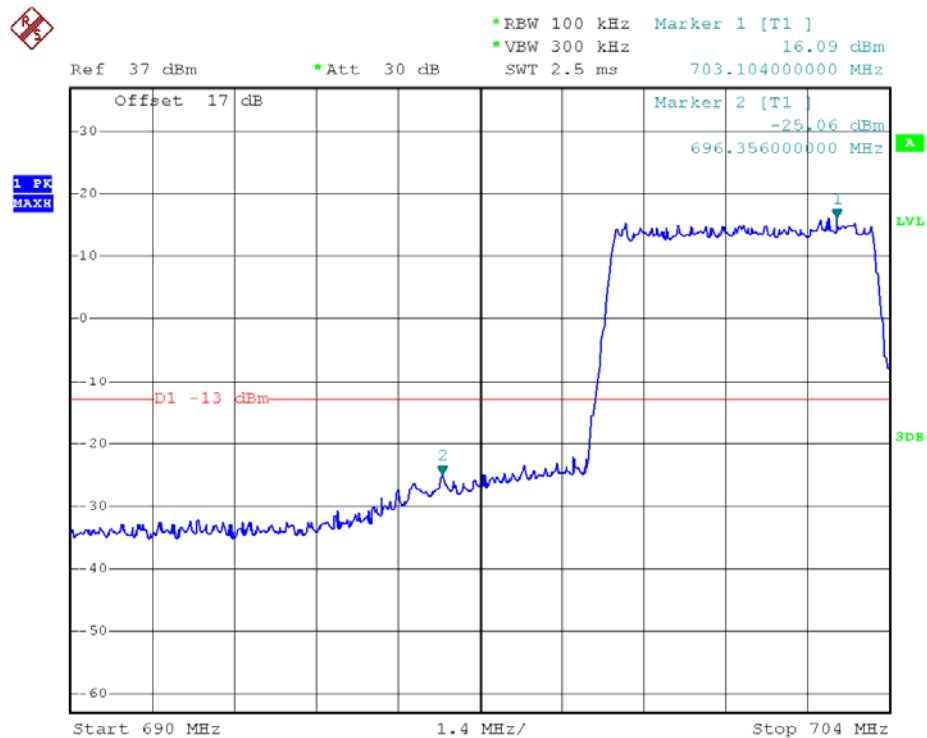


Higher Band Edge Plot for QPSK-RB Size 25, RB Offset 0

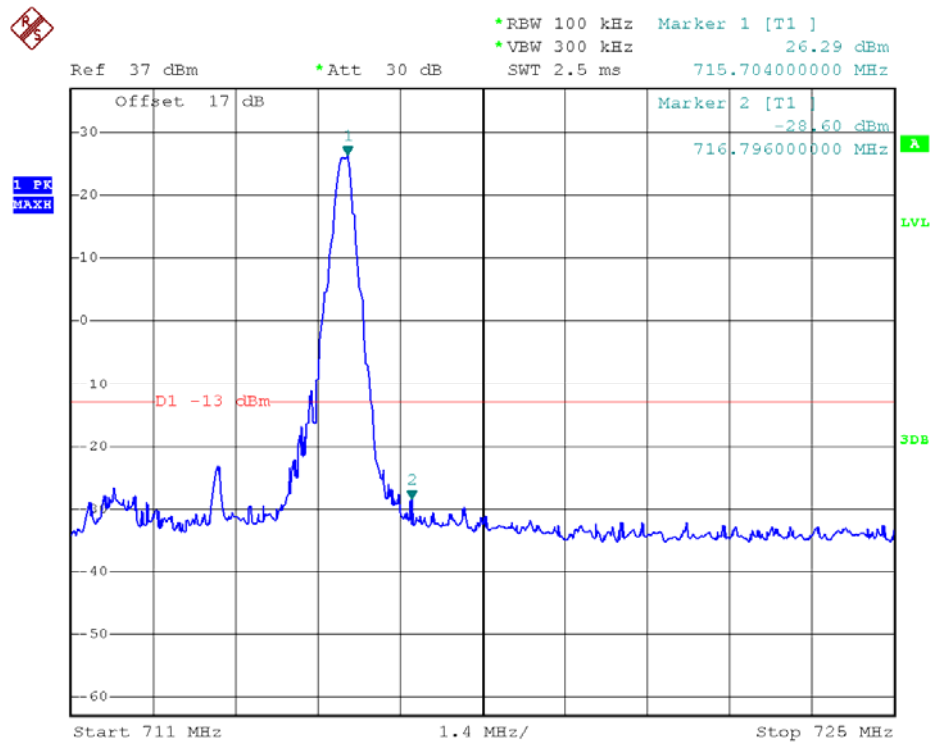
|           |             |            |       |
|-----------|-------------|------------|-------|
| Band      | LTE Band 12 | Modulation | 16QAM |
| Bandwidth | 5MHz        |            |       |



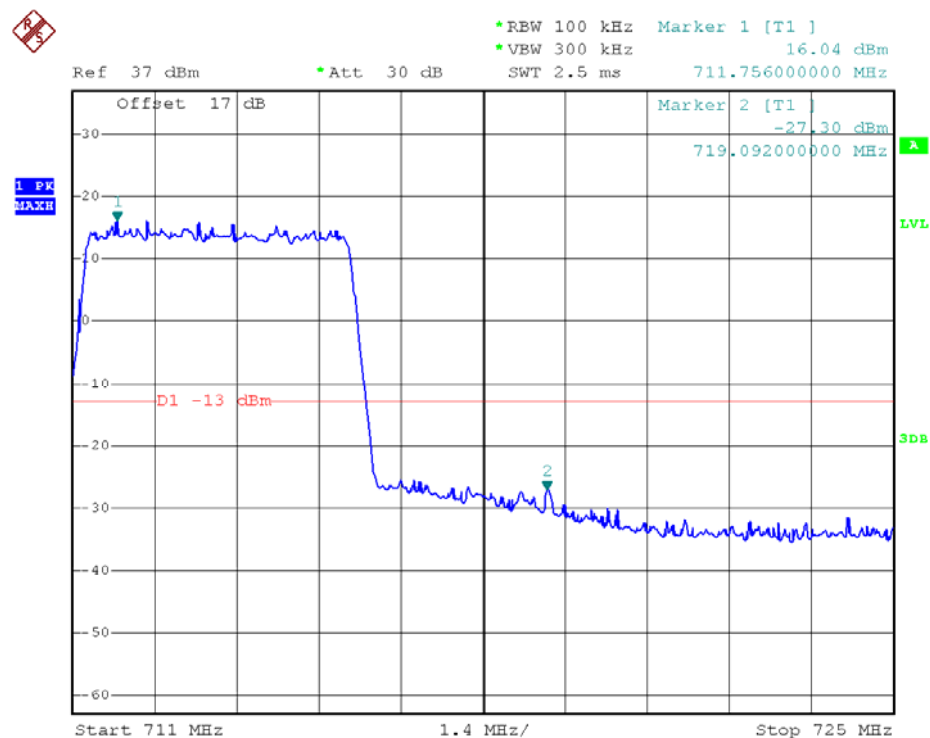
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 25, RB Offset 0

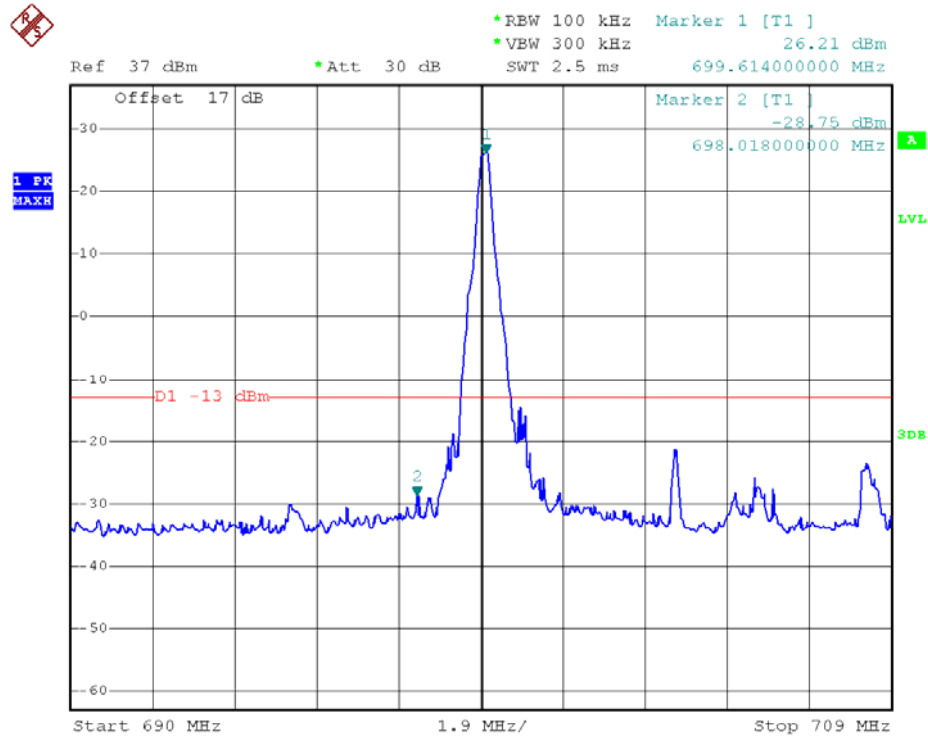


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 24

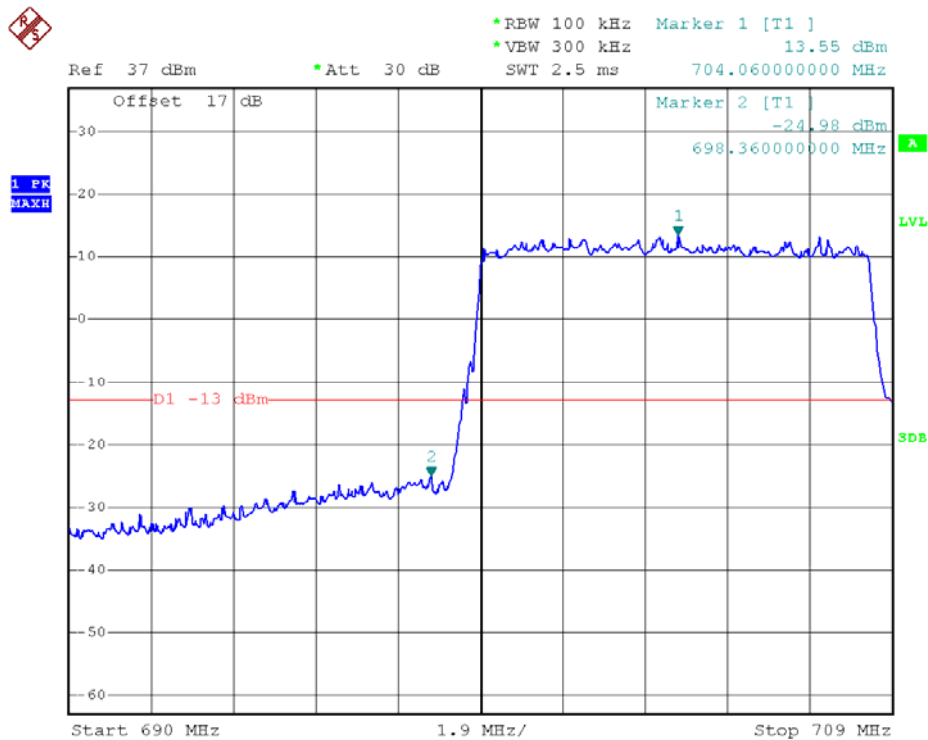


Higher Band Edge Plot for 16QAM -RB Size 25, RB Offset 0

|           |             |            |      |
|-----------|-------------|------------|------|
| Band      | LTE Band 12 | Modulation | QPSK |
| Bandwidth | 10MHz       |            |      |

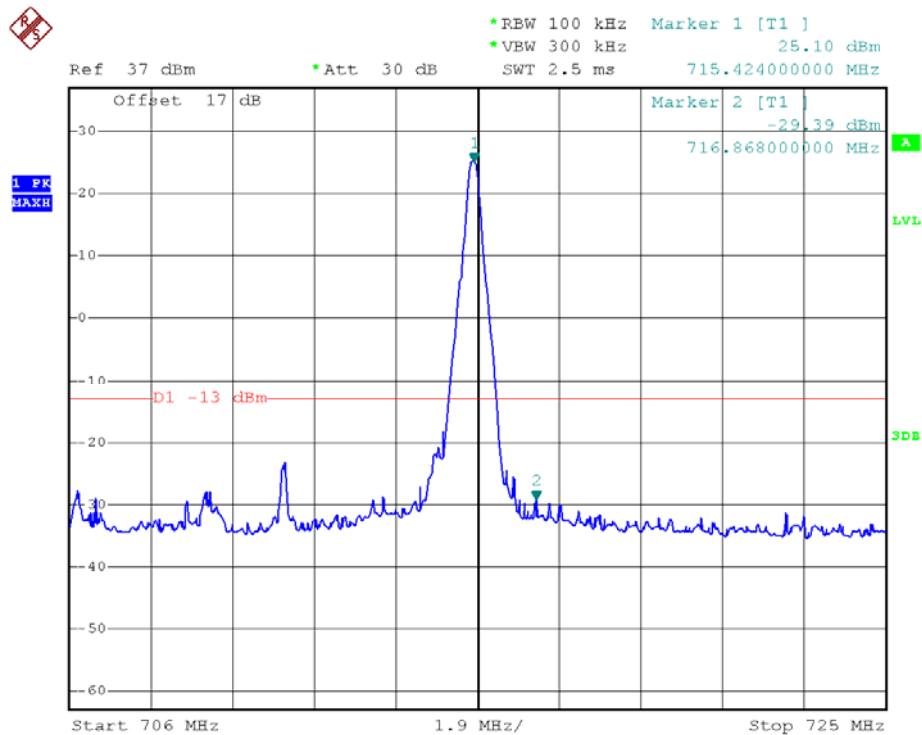


Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0

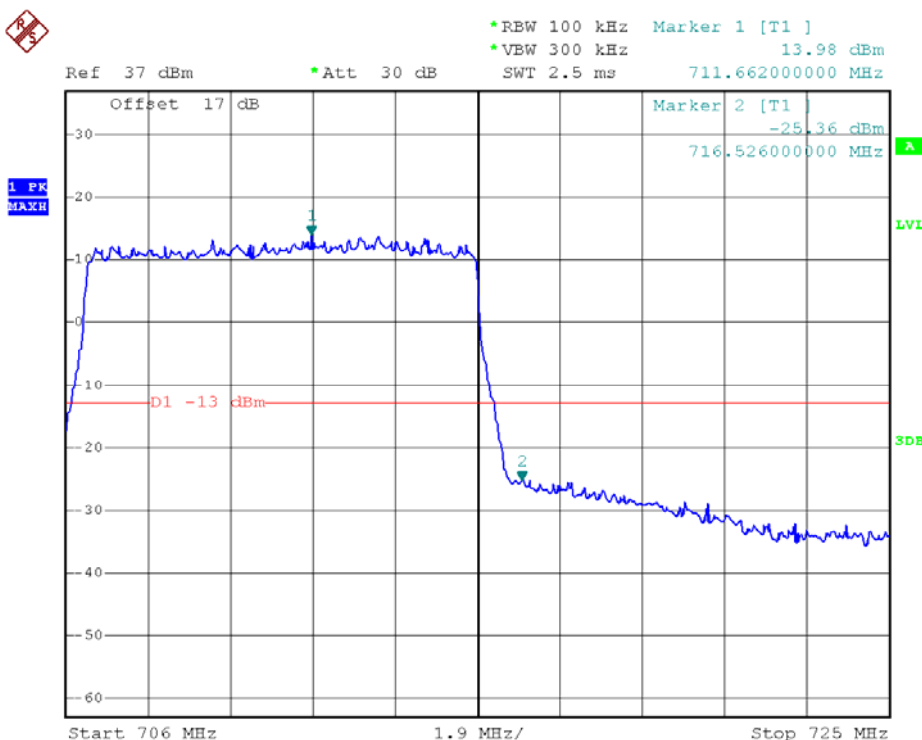


Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0



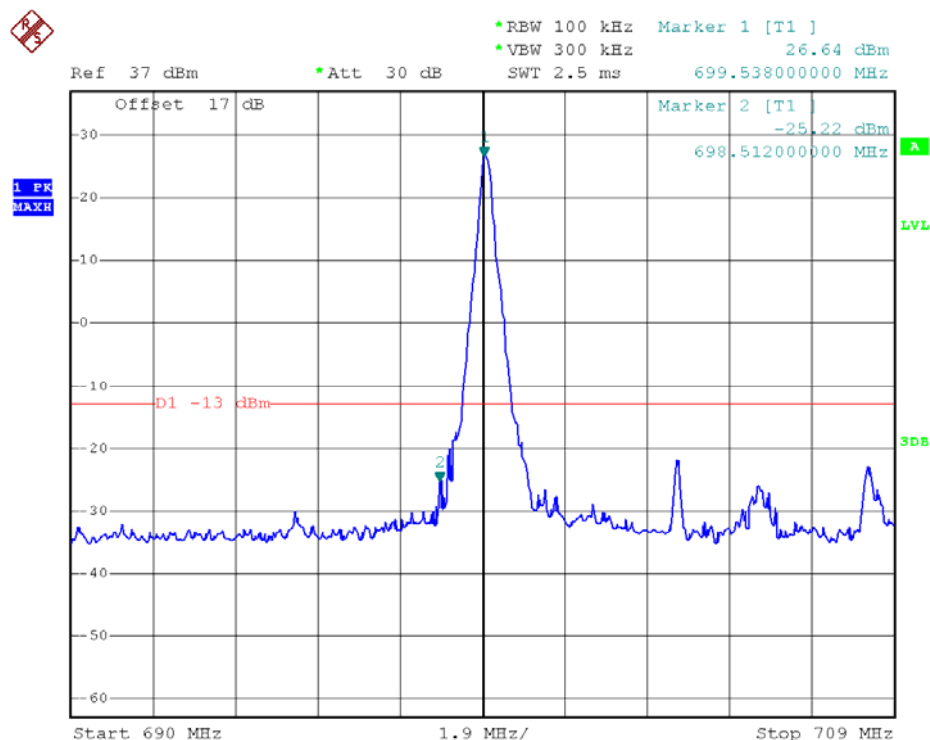


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49

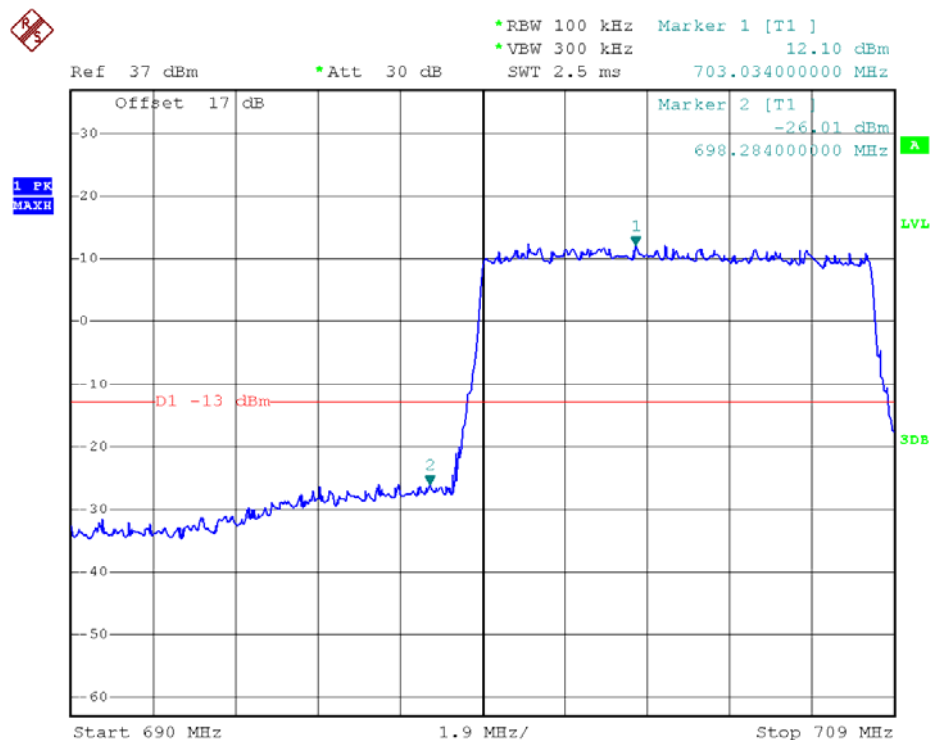


Higher Band Edge Plot for QPSK-RB Size 50, RB Offset 0

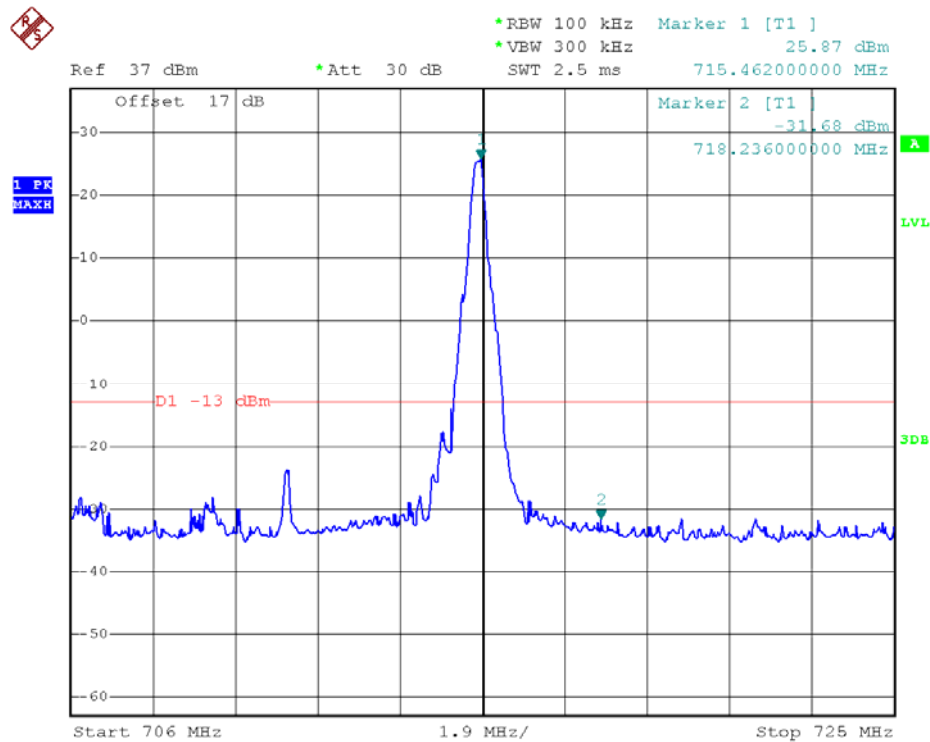
|           |             |            |       |
|-----------|-------------|------------|-------|
| Band      | LTE Band 12 | Modulation | 16QAM |
| Bandwidth | 10MHz       |            |       |



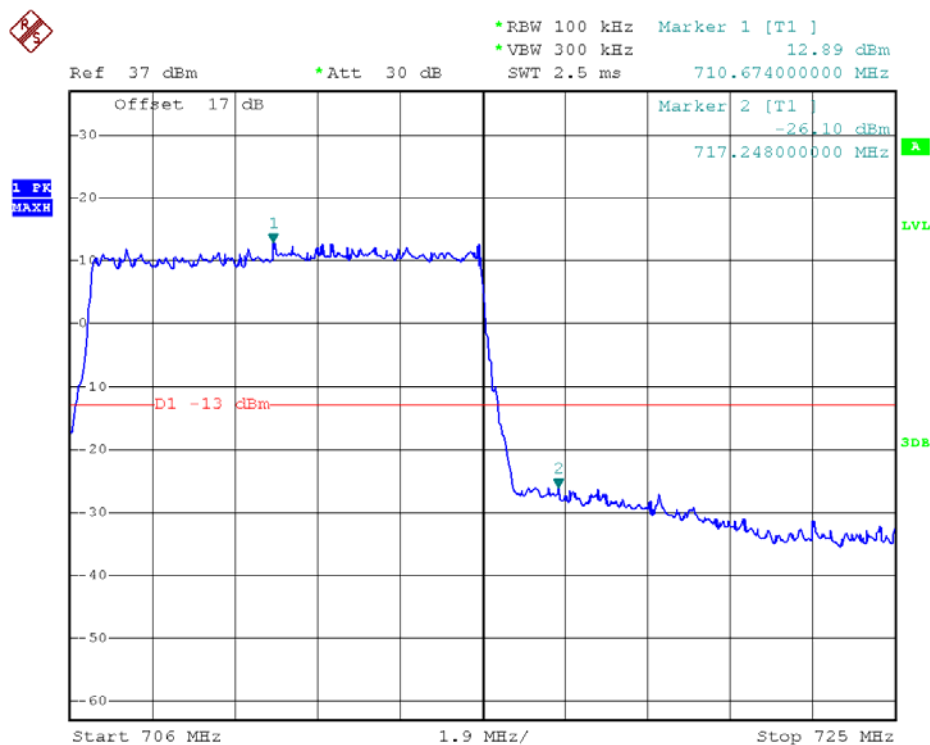
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 50, RB Offset 0



Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 49



Higher Band Edge Plot for 16QAM -RB Size 50, RB Offset 0

## 2.7 Transmitter Radiated Power (EIRP/ERP)

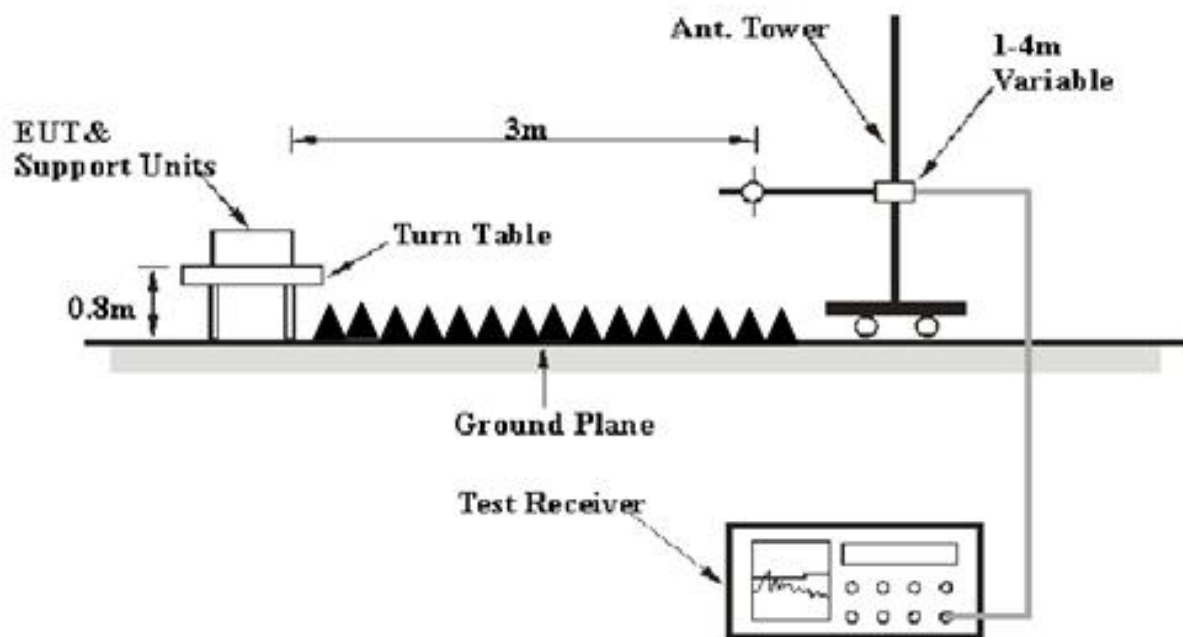
### 2.7.1 Requirement

Equivalent isotropic radiated power output measurements by substitution method according to ANSI /TIA / EIA-603-C-2004, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r02. Mobile and portable (hand-held) stations operating are limited to average EIRP of 2 watts with LTE band 2 / 7 and 1 watt with LTE band 4.

### 2.7.2 Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

### 2.7.3 Test Setup



### 2.7.4 Test Procedures

1. The EUT was placed on a turntable with 1.5 meter height in a fully anechoic chamber.
2. The EUT was set at 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer which used a channel power option across EUT's signal

bandwidth per section 4.0 of KDB 971168 D01v02r02.

4. The table was rotated 360 degrees to determine the position of the highest radiated power.
5. The height of the receiving antenna is adjusted to look for the maximum ERP/EIRP.
6. Taking the record of maximum ERP/EIRP.
7. A dipole antenna was substituted in place of the EUT and was driven by a signal generator.
8. The conducted power at the terminal of the dipole antenna is measured.
9. Repeat step 3 to step 5 to get the maximum ERP/EIRP of the substitution antenna.
10.  $ERP/EIRP = P_s + E_t - E_s + G_s = P_s + R_t - R_s + G_s$

$P_s$  (dBm): Input power to substitution antenna.

$G_s$  (dBi or dBd): Substitution antenna Gain.

$E_t = R_t + AF$

$E_s = R_s + AF$

$AF$  (dB/m): Receive antenna factor

$R_t$ : The highest received signal in spectrum analyzer for EUT.

$R_s$ : The highest received signal in spectrum analyzer for substitution antenna.

**2.7.5 Test Result of ERP/EIRP****1. LTE Band 2 Test Verdict:**

| LTE Band | BW (MHz) | Modulation | RB Configuration |           | Freq. (MHz) | EIRP (dBm)   | H/V | Verdict |
|----------|----------|------------|------------------|-----------|-------------|--------------|-----|---------|
|          |          |            | RB Size          | RB Offset |             |              |     |         |
| 2        | 1.4      | QPSK       | 1                | 2         | 1710.7      | <b>22.33</b> | H   | PASS    |
| 2        | 1.4      | QPSK       | 1                | 5         | 1732.5      | 22.30        | H   | PASS    |
| 2        | 1.4      | QPSK       | 3                | 2         | 1754.3      | 22.32        | H   | PASS    |
| 2        | 1.4      | QPSK       | 1                | 2         | 1710.7      | 21.88        | V   | PASS    |
| 2        | 1.4      | QPSK       | 1                | 5         | 1732.5      | 21.85        | V   | PASS    |
| 2        | 1.4      | QPSK       | 3                | 2         | 1754.3      | 21.87        | V   | PASS    |
| 2        | 1.4      | 16QAM      | 1                | 0         | 1710.7      | 21.48        | H   | PASS    |
| 2        | 1.4      | 16QAM      | 1                | 2         | 1732.5      | 21.42        | H   | PASS    |
| 2        | 1.4      | 16QAM      | 3                | 2         | 1754.3      | <b>21.53</b> | H   | PASS    |
| 2        | 1.4      | 16QAM      | 1                | 0         | 1710.7      | 20.82        | V   | PASS    |
| 2        | 1.4      | 16QAM      | 1                | 2         | 1732.5      | 20.87        | V   | PASS    |
| 2        | 1.4      | 16QAM      | 3                | 2         | 1754.3      | 20.88        | V   | PASS    |
| 2        | 3        | QPSK       | 1                | 7         | 1711.5      | 22.29        | H   | PASS    |
| 2        | 3        | QPSK       | 1                | 14        | 1732.5      | <b>22.35</b> | H   | PASS    |
| 2        | 3        | QPSK       | 1                | 0         | 1753.5      | 22.28        | H   | PASS    |
| 2        | 3        | QPSK       | 1                | 7         | 1711.5      | 21.82        | V   | PASS    |
| 2        | 3        | QPSK       | 1                | 14        | 1732.5      | 21.84        | V   | PASS    |
| 2        | 3        | QPSK       | 1                | 0         | 1753.5      | 21.85        | V   | PASS    |
| 2        | 3        | 16QAM      | 1                | 14        | 1711.5      | <b>21.51</b> | H   | PASS    |
| 2        | 3        | 16QAM      | 1                | 0         | 1732.5      | 21.48        | H   | PASS    |
| 2        | 3        | 16QAM      | 1                | 0         | 1753.5      | 21.47        | H   | PASS    |
| 2        | 3        | 16QAM      | 1                | 14        | 1711.5      | 20.91        | V   | PASS    |
| 2        | 3        | 16QAM      | 1                | 0         | 1732.5      | 20.85        | V   | PASS    |
| 2        | 3        | 16QAM      | 1                | 0         | 1753.5      | 20.83        | V   | PASS    |
| 2        | 5        | QPSK       | 1                | 0         | 1712.5      | 22.30        | H   | PASS    |
| 2        | 5        | QPSK       | 1                | 0         | 1732.5      | 22.31        | H   | PASS    |
| 2        | 5        | QPSK       | 1                | 24        | 1752.5      | <b>22.37</b> | H   | PASS    |
| 2        | 5        | QPSK       | 1                | 0         | 1712.5      | 21.82        | V   | PASS    |
| 2        | 5        | QPSK       | 1                | 0         | 1732.5      | 21.89        | V   | PASS    |
| 2        | 5        | QPSK       | 1                | 24        | 1752.5      | 21.85        | V   | PASS    |
| 2        | 5        | 16QAM      | 1                | 12        | 1712.5      | 21.52        | H   | PASS    |
| 2        | 5        | 16QAM      | 1                | 0         | 1732.5      | 21.50        | H   | PASS    |
| 2        | 5        | 16QAM      | 1                | 12        | 1752.5      | <b>21.55</b> | H   | PASS    |
| 2        | 5        | 16QAM      | 1                | 12        | 1712.5      | 20.85        | V   | PASS    |
| 2        | 5        | 16QAM      | 1                | 0         | 1732.5      | 20.84        | V   | PASS    |
| 2        | 5        | 16QAM      | 1                | 12        | 1752.5      | 20.89        | V   | PASS    |



| LTE Band | BW (MHz) | Modulation | RB Configuration |           | Freq. (MHz) | EIRP (dBm)   | H/V | Verdict |
|----------|----------|------------|------------------|-----------|-------------|--------------|-----|---------|
|          |          |            | RB Size          | RB Offset |             |              |     |         |
| 2        | 10       | QPSK       | 1                | 0         | 1715        | 22.31        | H   | PASS    |
| 2        | 10       | QPSK       | 1                | 0         | 1732.5      | 22.27        | H   | PASS    |
| 2        | 10       | QPSK       | 1                | 49        | 1750        | <b>22.32</b> | H   | PASS    |
| 2        | 10       | QPSK       | 1                | 0         | 1715        | 21.85        | V   | PASS    |
| 2        | 10       | QPSK       | 1                | 0         | 1732.5      | 21.84        | V   | PASS    |
| 2        | 10       | QPSK       | 1                | 49        | 1750        | 21.88        | V   | PASS    |
| 2        | 10       | 16QAM      | 1                | 0         | 1715        | 21.48        | H   | PASS    |
| 2        | 10       | 16QAM      | 1                | 0         | 1732.5      | 21.50        | H   | PASS    |
| 2        | 10       | 16QAM      | 1                | 24        | 1750        | <b>21.52</b> | H   | PASS    |
| 2        | 10       | 16QAM      | 1                | 0         | 1715        | 20.84        | V   | PASS    |
| 2        | 10       | 16QAM      | 1                | 0         | 1732.5      | 20.90        | V   | PASS    |
| 2        | 10       | 16QAM      | 1                | 24        | 1750        | 20.85        | V   | PASS    |
| 2        | 15       | QPSK       | 1                | 0         | 1717.5      | 22.38        | H   | PASS    |
| 2        | 15       | QPSK       | 1                | 0         | 1732.5      | <b>22.39</b> | H   | PASS    |
| 2        | 15       | QPSK       | 1                | 74        | 1747.5      | 22.33        | H   | PASS    |
| 2        | 15       | QPSK       | 1                | 0         | 1717.5      | 21.82        | V   | PASS    |
| 2        | 15       | QPSK       | 1                | 0         | 1732.5      | 21.91        | V   | PASS    |
| 2        | 15       | QPSK       | 1                | 74        | 1747.5      | 21.87        | V   | PASS    |
| 2        | 15       | 16QAM      | 1                | 0         | 1717.5      | 21.49        | H   | PASS    |
| 2        | 15       | 16QAM      | 1                | 0         | 1732.5      | <b>21.57</b> | H   | PASS    |
| 2        | 15       | 16QAM      | 1                | 74        | 1747.5      | 21.53        | H   | PASS    |
| 2        | 15       | 16QAM      | 1                | 0         | 1717.5      | 20.89        | V   | PASS    |
| 2        | 15       | 16QAM      | 1                | 0         | 1732.5      | 20.92        | V   | PASS    |
| 2        | 15       | 16QAM      | 1                | 74        | 1747.5      | 20.87        | V   | PASS    |
| 2        | 20       | QPSK       | 1                | 0         | 1720        | <b>22.41</b> | H   | PASS    |
| 2        | 20       | QPSK       | 1                | 0         | 1732.5      | 22.35        | H   | PASS    |
| 2        | 20       | QPSK       | 1                | 0         | 1745        | 22.39        | H   | PASS    |
| 2        | 20       | QPSK       | 1                | 0         | 1720        | 21.85        | V   | PASS    |
| 2        | 20       | QPSK       | 1                | 0         | 1732.5      | 21.89        | V   | PASS    |
| 2        | 20       | QPSK       | 1                | 0         | 1745        | 21.92        | V   | PASS    |
| 2        | 20       | 16QAM      | 1                | 0         | 1720        | 21.59        | H   | PASS    |
| 2        | 20       | 16QAM      | 1                | 0         | 1732.5      | 21.62        | H   | PASS    |
| 2        | 20       | 16QAM      | 1                | 49        | 1745        | <b>21.65</b> | H   | PASS    |
| 2        | 20       | 16QAM      | 1                | 0         | 1720        | 20.91        | V   | PASS    |
| 2        | 20       | 16QAM      | 1                | 0         | 1732.5      | 20.96        | V   | PASS    |
| 2        | 20       | 16QAM      | 1                | 49        | 1745        | 20.94        | V   | PASS    |



## 2. LTE Band 4 Test Verdict:

| LTE Band | BW (MHz) | Modulation | RB Configuration |           | Freq. (MHz) | EIRP (dBm)   | H/V | Verdict |
|----------|----------|------------|------------------|-----------|-------------|--------------|-----|---------|
|          |          |            | RB Size          | RB Offset |             |              |     |         |
| 4        | 1.4      | QPSK       | 3                | 0         | 1710.7      | 22.11        | H   | PASS    |
| 4        | 1.4      | QPSK       | 3                | 2         | 1732.5      | 22.24        | H   | PASS    |
| 4        | 1.4      | QPSK       | 1                | 2         | 1754.3      | <b>22.25</b> | H   | PASS    |
| 4        | 1.4      | QPSK       | 3                | 0         | 1710.7      | 21.76        | V   | PASS    |
| 4        | 1.4      | QPSK       | 3                | 2         | 1732.5      | 21.74        | V   | PASS    |
| 4        | 1.4      | QPSK       | 1                | 2         | 1754.3      | 21.77        | V   | PASS    |
| 4        | 1.4      | 16QAM      | 3                | 2         | 1710.7      | 21.19        | H   | PASS    |
| 4        | 1.4      | 16QAM      | 3                | 2         | 1732.5      | <b>21.20</b> | H   | PASS    |
| 4        | 1.4      | 16QAM      | 3                | 2         | 1754.3      | 21.17        | H   | PASS    |
| 4        | 1.4      | 16QAM      | 3                | 2         | 1710.7      | 20.57        | V   | PASS    |
| 4        | 1.4      | 16QAM      | 3                | 2         | 1732.5      | 20.61        | V   | PASS    |
| 4        | 1.4      | 16QAM      | 3                | 2         | 1754.3      | 20.62        | V   | PASS    |
| 4        | 3        | QPSK       | 1                | 0         | 1711.5      | 22.11        | H   | PASS    |
| 4        | 3        | QPSK       | 1                | 0         | 1732.5      | <b>22.17</b> | H   | PASS    |
| 4        | 3        | QPSK       | 1                | 7         | 1753.5      | 22.15        | H   | PASS    |
| 4        | 3        | QPSK       | 1                | 0         | 1711.5      | 21.60        | V   | PASS    |
| 4        | 3        | QPSK       | 1                | 0         | 1732.5      | 21.64        | V   | PASS    |
| 4        | 3        | QPSK       | 1                | 7         | 1753.5      | 21.71        | V   | PASS    |
| 4        | 3        | 16QAM      | 1                | 14        | 1711.5      | 21.22        | H   | PASS    |
| 4        | 3        | 16QAM      | 1                | 14        | 1732.5      | 21.14        | H   | PASS    |
| 4        | 3        | 16QAM      | 1                | 14        | 1753.5      | <b>21.24</b> | H   | PASS    |
| 4        | 3        | 16QAM      | 1                | 14        | 1711.5      | 20.57        | V   | PASS    |
| 4        | 3        | 16QAM      | 1                | 14        | 1732.5      | 20.52        | V   | PASS    |
| 4        | 3        | 16QAM      | 1                | 14        | 1753.5      | 20.60        | V   | PASS    |
| 4        | 5        | QPSK       | 1                | 12        | 1712.5      | 22.20        | H   | PASS    |
| 4        | 5        | QPSK       | 1                | 24        | 1732.5      | <b>22.22</b> | H   | PASS    |
| 4        | 5        | QPSK       | 1                | 24        | 1752.5      | 22.19        | H   | PASS    |
| 4        | 5        | QPSK       | 1                | 12        | 1712.5      | 21.76        | V   | PASS    |
| 4        | 5        | QPSK       | 1                | 24        | 1732.5      | 21.70        | V   | PASS    |
| 4        | 5        | QPSK       | 1                | 24        | 1752.5      | 21.68        | V   | PASS    |
| 4        | 5        | 16QAM      | 1                | 24        | 1712.5      | 21.15        | H   | PASS    |
| 4        | 5        | 16QAM      | 1                | 0         | 1732.5      | 21.11        | H   | PASS    |
| 4        | 5        | 16QAM      | 1                | 0         | 1752.5      | <b>21.19</b> | H   | PASS    |
| 4        | 5        | 16QAM      | 1                | 24        | 1712.5      | 20.72        | V   | PASS    |
| 4        | 5        | 16QAM      | 1                | 0         | 1732.5      | 20.65        | V   | PASS    |
| 4        | 5        | 16QAM      | 1                | 0         | 1752.5      | 20.70        | V   | PASS    |





| LTE Band | BW (MHz) | Modulation | RB Configuration |           | Freq. (MHz) | EIRP (dBm)   | H/V | Verdict |
|----------|----------|------------|------------------|-----------|-------------|--------------|-----|---------|
|          |          |            | RB Size          | RB Offset |             |              |     |         |
| 4        | 10       | QPSK       | 1                | 24        | 1715        | <b>22.19</b> | H   | PASS    |
| 4        | 10       | QPSK       | 1                | 0         | 1732.5      | 22.15        | H   | PASS    |
| 4        | 10       | QPSK       | 1                | 24        | 1750        | 22.11        | H   | PASS    |
| 4        | 10       | QPSK       | 1                | 24        | 1715        | 21.67        | V   | PASS    |
| 4        | 10       | QPSK       | 1                | 0         | 1732.5      | 21.62        | V   | PASS    |
| 4        | 10       | QPSK       | 1                | 24        | 1750        | 21.63        | V   | PASS    |
| 4        | 10       | 16QAM      | 1                | 24        | 1715        | 21.21        | H   | PASS    |
| 4        | 10       | 16QAM      | 1                | 0         | 1732.5      | <b>21.28</b> | H   | PASS    |
| 4        | 10       | 16QAM      | 1                | 24        | 1750        | 21.13        | H   | PASS    |
| 4        | 10       | 16QAM      | 1                | 24        | 1715        | 20.62        | V   | PASS    |
| 4        | 10       | 16QAM      | 1                | 0         | 1732.5      | 20.71        | V   | PASS    |
| 4        | 10       | 16QAM      | 1                | 24        | 1750        | 20.63        | V   | PASS    |
| 4        | 15       | QPSK       | 1                | 74        | 1717.5      | 22.24        | H   | PASS    |
| 4        | 15       | QPSK       | 1                | 74        | 1732.5      | <b>22.28</b> | H   | PASS    |
| 4        | 15       | QPSK       | 1                | 0         | 1747.5      | 22.23        | H   | PASS    |
| 4        | 15       | QPSK       | 1                | 74        | 1717.5      | 21.63        | V   | PASS    |
| 4        | 15       | QPSK       | 1                | 74        | 1732.5      | 21.65        | V   | PASS    |
| 4        | 15       | QPSK       | 1                | 0         | 1747.5      | 21.69        | V   | PASS    |
| 4        | 15       | 16QAM      | 1                | 74        | 1717.5      | 21.24        | H   | PASS    |
| 4        | 15       | 16QAM      | 1                | 0         | 1732.5      | 21.20        | H   | PASS    |
| 4        | 15       | 16QAM      | 1                | 0         | 1747.5      | <b>21.25</b> | H   | PASS    |
| 4        | 15       | 16QAM      | 1                | 74        | 1717.5      | 20.66        | V   | PASS    |
| 4        | 15       | 16QAM      | 1                | 0         | 1732.5      | 20.71        | V   | PASS    |
| 4        | 15       | 16QAM      | 1                | 0         | 1747.5      | 20.69        | V   | PASS    |
| 4        | 20       | QPSK       | 1                | 0         | 1720        | 22.28        | H   | PASS    |
| 4        | 20       | QPSK       | 1                | 0         | 1732.5      | <b>22.32</b> | H   | PASS    |
| 4        | 20       | QPSK       | 1                | 0         | 1745        | 22.29        | H   | PASS    |
| 4        | 20       | QPSK       | 1                | 0         | 1720        | 21.69        | V   | PASS    |
| 4        | 20       | QPSK       | 1                | 0         | 1732.5      | 21.74        | V   | PASS    |
| 4        | 20       | QPSK       | 1                | 0         | 1745        | 21.66        | V   | PASS    |
| 4        | 20       | 16QAM      | 1                | 0         | 1720        | 21.23        | H   | PASS    |
| 4        | 20       | 16QAM      | 1                | 0         | 1732.5      | 21.26        | H   | PASS    |
| 4        | 20       | 16QAM      | 1                | 0         | 1745        | <b>21.29</b> | H   | PASS    |
| 4        | 20       | 16QAM      | 1                | 0         | 1720        | 20.73        | V   | PASS    |
| 4        | 20       | 16QAM      | 1                | 0         | 1732.5      | 20.76        | V   | PASS    |
| 4        | 20       | 16QAM      | 1                | 0         | 1745        | 20.74        | V   | PASS    |



## 3. LTE Band 5 Test Verdict:

| LTE Band | BW (MHz) | Modulation | RB Configuration |           | Freq. (MHz) | EIRP (dBm)   | H/V | Verdict |
|----------|----------|------------|------------------|-----------|-------------|--------------|-----|---------|
|          |          |            | RB Size          | RB Offset |             |              |     |         |
| 5        | 1.4      | QPSK       | 3                | 0         | 824.7       | 21.88        | H   | PASS    |
| 5        | 1.4      | QPSK       | 3                | 2         | 836.5       | 21.90        | H   | PASS    |
| 5        | 1.4      | QPSK       | 1                | 2         | 848.3       | <b>21.91</b> | H   | PASS    |
| 5        | 1.4      | QPSK       | 3                | 0         | 824.7       | 21.45        | V   | PASS    |
| 5        | 1.4      | QPSK       | 3                | 2         | 836.5       | 21.34        | V   | PASS    |
| 5        | 1.4      | QPSK       | 1                | 2         | 848.3       | 21.37        | V   | PASS    |
| 5        | 1.4      | 16QAM      | 3                | 2         | 824.7       | 20.89        | H   | PASS    |
| 5        | 1.4      | 16QAM      | 3                | 2         | 836.5       | <b>20.91</b> | H   | PASS    |
| 5        | 1.4      | 16QAM      | 3                | 2         | 848.3       | 20.87        | H   | PASS    |
| 5        | 1.4      | 16QAM      | 3                | 2         | 824.7       | 20.17        | V   | PASS    |
| 5        | 1.4      | 16QAM      | 3                | 2         | 836.5       | 20.21        | V   | PASS    |
| 5        | 1.4      | 16QAM      | 3                | 2         | 848.3       | 20.22        | V   | PASS    |
| 5        | 3        | QPSK       | 1                | 0         | 825.5       | 21.87        | H   | PASS    |
| 5        | 3        | QPSK       | 1                | 0         | 836.5       | <b>21.88</b> | H   | PASS    |
| 5        | 3        | QPSK       | 1                | 7         | 847.5       | 21.85        | H   | PASS    |
| 5        | 3        | QPSK       | 1                | 0         | 825.5       | 21.40        | V   | PASS    |
| 5        | 3        | QPSK       | 1                | 0         | 836.5       | 21.44        | V   | PASS    |
| 5        | 3        | QPSK       | 1                | 7         | 847.5       | 21.51        | V   | PASS    |
| 5        | 3        | 16QAM      | 1                | 14        | 825.5       | 20.82        | H   | PASS    |
| 5        | 3        | 16QAM      | 1                | 14        | 836.5       | 20.84        | H   | PASS    |
| 5        | 3        | 16QAM      | 1                | 14        | 847.5       | <b>20.87</b> | H   | PASS    |
| 5        | 3        | 16QAM      | 1                | 14        | 825.5       | 20.27        | V   | PASS    |
| 5        | 3        | 16QAM      | 1                | 14        | 836.5       | 20.22        | V   | PASS    |
| 5        | 3        | 16QAM      | 1                | 14        | 847.5       | 20.20        | V   | PASS    |
| 5        | 5        | QPSK       | 1                | 12        | 826.5       | 21.90        | H   | PASS    |
| 5        | 5        | QPSK       | 1                | 24        | 836.5       | <b>21.92</b> | H   | PASS    |
| 5        | 5        | QPSK       | 1                | 24        | 846.5       | 21.89        | H   | PASS    |
| 5        | 5        | QPSK       | 1                | 12        | 826.5       | 21.46        | V   | PASS    |
| 5        | 5        | QPSK       | 1                | 24        | 836.5       | 21.50        | V   | PASS    |
| 5        | 5        | QPSK       | 1                | 24        | 846.5       | 21.48        | V   | PASS    |
| 5        | 5        | 16QAM      | 1                | 24        | 826.5       | 20.85        | H   | PASS    |
| 5        | 5        | 16QAM      | 1                | 0         | 836.5       | 20.81        | H   | PASS    |
| 5        | 5        | 16QAM      | 1                | 0         | 846.5       | <b>20.90</b> | H   | PASS    |
| 5        | 5        | 16QAM      | 1                | 24        | 826.5       | 20.22        | V   | PASS    |
| 5        | 5        | 16QAM      | 1                | 0         | 836.5       | 20.25        | V   | PASS    |
| 5        | 5        | 16QAM      | 1                | 0         | 846.5       | 20.18        | V   | PASS    |



| LTE Band | BW (MHz) | Modulation | RB Configuration |           | Freq. (MHz) | EIRP (dBm)   | H/V | Verdict |
|----------|----------|------------|------------------|-----------|-------------|--------------|-----|---------|
|          |          |            | RB Size          | RB Offset |             |              |     |         |
| 5        | 10       | QPSK       | 1                | 24        | 829         | 21.87        | H   | PASS    |
| 5        | 10       | QPSK       | 1                | 0         | 836.5       | <b>21.96</b> | H   | PASS    |
| 5        | 10       | QPSK       | 1                | 24        | 844         | 21.92        | H   | PASS    |
| 5        | 10       | QPSK       | 1                | 24        | 829         | 21.47        | V   | PASS    |
| 5        | 10       | QPSK       | 1                | 0         | 836.5       | 21.52        | V   | PASS    |
| 5        | 10       | QPSK       | 1                | 24        | 844         | 21.48        | V   | PASS    |
| 5        | 10       | 16QAM      | 1                | 24        | 829         | 20.88        | H   | PASS    |
| 5        | 10       | 16QAM      | 1                | 0         | 836.5       | <b>20.92</b> | H   | PASS    |
| 5        | 10       | 16QAM      | 1                | 24        | 844         | 20.83        | H   | PASS    |
| 5        | 10       | 16QAM      | 1                | 24        | 829         | 20.25        | V   | PASS    |
| 5        | 10       | 16QAM      | 1                | 0         | 836.5       | 20.27        | V   | PASS    |
| 5        | 10       | 16QAM      | 1                | 24        | 844         | 20.23        | V   | PASS    |



## 4. LTE Band 7 Test Verdict:

| LTE Band | BW (MHz) | Modulation | RB Configuration |           | Freq. (MHz) | ERP (dBm)    | H/V | Verdict |
|----------|----------|------------|------------------|-----------|-------------|--------------|-----|---------|
|          |          |            | RB Size          | RB Offset |             |              |     |         |
| 7        | 5        | QPSK       | 1                | 12        | 2502.5      | <b>21.76</b> | H   | PASS    |
| 7        | 5        | QPSK       | 1                | 0         | 2535        | 21.70        | H   | PASS    |
| 7        | 5        | QPSK       | 1                | 24        | 2567.5      | 21.78        | H   | PASS    |
| 7        | 5        | QPSK       | 1                | 12        | 2502.5      | 21.16        | V   | PASS    |
| 7        | 5        | QPSK       | 1                | 0         | 2535        | 21.20        | V   | PASS    |
| 7        | 5        | QPSK       | 1                | 24        | 2567.5      | 21.18        | V   | PASS    |
| 7        | 5        | 16QAM      | 1                | 24        | 2502.5      | 20.45        | H   | PASS    |
| 7        | 5        | 16QAM      | 1                | 24        | 2535        | 20.48        | H   | PASS    |
| 7        | 5        | 16QAM      | 1                | 0         | 2567.5      | <b>20.49</b> | H   | PASS    |
| 7        | 5        | 16QAM      | 1                | 24        | 2502.5      | 19.72        | V   | PASS    |
| 7        | 5        | 16QAM      | 1                | 24        | 2535        | 19.65        | V   | PASS    |
| 7        | 5        | 16QAM      | 1                | 0         | 2567.5      | 19.75        | V   | PASS    |
| 7        | 10       | QPSK       | 1                | 24        | 2505        | <b>21.78</b> | H   | PASS    |
| 7        | 10       | QPSK       | 1                | 49        | 2535        | 21.69        | H   | PASS    |
| 7        | 10       | QPSK       | 1                | 24        | 2565        | 21.71        | H   | PASS    |
| 7        | 10       | QPSK       | 1                | 24        | 2505        | 21.23        | V   | PASS    |
| 7        | 10       | QPSK       | 1                | 49        | 2535        | 21.18        | V   | PASS    |
| 7        | 10       | QPSK       | 1                | 24        | 2565        | 21.15        | V   | PASS    |
| 7        | 10       | 16QAM      | 1                | 24        | 2505        | 20.50        | H   | PASS    |
| 7        | 10       | 16QAM      | 1                | 49        | 2535        | 20.45        | H   | PASS    |
| 7        | 10       | 16QAM      | 1                | 24        | 2565        | <b>20.53</b> | H   | PASS    |
| 7        | 10       | 16QAM      | 1                | 24        | 2505        | 19.82        | V   | PASS    |
| 7        | 10       | 16QAM      | 1                | 49        | 2535        | 19.75        | V   | PASS    |
| 7        | 10       | 16QAM      | 1                | 24        | 2565        | 19.83        | V   | PASS    |
| 7        | 15       | QPSK       | 1                | 37        | 2507.5      | <b>21.74</b> | H   | PASS    |
| 7        | 15       | QPSK       | 1                | 74        | 2535        | 21.73        | H   | PASS    |
| 7        | 15       | QPSK       | 1                | 0         | 2562.5      | 21.70        | H   | PASS    |
| 7        | 15       | QPSK       | 1                | 37        | 2507.5      | 21.25        | V   | PASS    |
| 7        | 15       | QPSK       | 1                | 74        | 2535        | 21.20        | V   | PASS    |
| 7        | 15       | QPSK       | 1                | 0         | 2562.5      | 21.19        | V   | PASS    |
| 7        | 15       | 16QAM      | 1                | 37        | 2507.5      | 20.44        | H   | PASS    |
| 7        | 15       | 16QAM      | 1                | 18        | 2535        | 20.50        | H   | PASS    |
| 7        | 15       | 16QAM      | 1                | 0         | 2562.5      | <b>20.51</b> | H   | PASS    |
| 7        | 15       | 16QAM      | 1                | 37        | 2507.5      | 19.86        | V   | PASS    |
| 7        | 15       | 16QAM      | 1                | 18        | 2535        | 19.81        | V   | PASS    |
| 7        | 15       | 16QAM      | 1                | 0         | 2562.5      | 19.79        | V   | PASS    |



| LTE Band | BW (MHz) | Modulation | RB Configuration |   | Freq. (MHz) | ERP (dBm)    | H/V | Verdict |
|----------|----------|------------|------------------|---|-------------|--------------|-----|---------|
| 7        | 20       | QPSK       | 1                | 0 | 2510        | 21.78        | H   | PASS    |
| 7        | 20       | QPSK       | 1                | 0 | 2535        | 21.75        | H   | PASS    |
| 7        | 20       | QPSK       | 1                | 0 | 2560        | <b>21.81</b> | H   | PASS    |
| 7        | 20       | QPSK       | 1                | 0 | 2510        | 21.29        | V   | PASS    |
| 7        | 20       | QPSK       | 1                | 0 | 2535        | 21.24        | V   | PASS    |
| 7        | 20       | QPSK       | 1                | 0 | 2560        | 21.25        | V   | PASS    |
| 7        | 20       | 16QAM      | 1                | 0 | 2510        | 20.53        | H   | PASS    |
| 7        | 20       | 16QAM      | 1                | 0 | 2535        | <b>20.56</b> | H   | PASS    |
| 7        | 20       | 16QAM      | 1                | 0 | 2560        | 20.49        | H   | PASS    |
| 7        | 20       | 16QAM      | 1                | 0 | 2510        | 19.83        | V   | PASS    |
| 7        | 20       | 16QAM      | 1                | 0 | 2535        | 19.86        | V   | PASS    |
| 7        | 20       | 16QAM      | 1                | 0 | 2560        | 19.91        | V   | PASS    |



## 5. LTE Band 12 Test Verdict:

| LTE Band | BW (MHz) | Modulation | RB Configuration |           | Freq. (MHz) | EIRP (dBm)   | H/V | Verdict |
|----------|----------|------------|------------------|-----------|-------------|--------------|-----|---------|
|          |          |            | RB Size          | RB Offset |             |              |     |         |
| 12       | 1.4      | QPSK       | 3                | 0         | 699.7       | 20.88        | H   | PASS    |
| 12       | 1.4      | QPSK       | 3                | 2         | 707.5       | 20.84        | H   | PASS    |
| 12       | 1.4      | QPSK       | 1                | 2         | 715.3       | <b>20.89</b> | H   | PASS    |
| 12       | 1.4      | QPSK       | 3                | 0         | 699.7       | 20.26        | V   | PASS    |
| 12       | 1.4      | QPSK       | 3                | 2         | 707.5       | 20.34        | V   | PASS    |
| 12       | 1.4      | QPSK       | 1                | 2         | 715.3       | 20.27        | V   | PASS    |
| 12       | 1.4      | 16QAM      | 3                | 2         | 699.7       | 19.69        | H   | PASS    |
| 12       | 1.4      | 16QAM      | 3                | 2         | 707.5       | <b>19.71</b> | H   | PASS    |
| 12       | 1.4      | 16QAM      | 3                | 2         | 715.3       | 19.67        | H   | PASS    |
| 12       | 1.4      | 16QAM      | 3                | 2         | 699.7       | 19.17        | V   | PASS    |
| 12       | 1.4      | 16QAM      | 3                | 2         | 707.5       | 19.21        | V   | PASS    |
| 12       | 1.4      | 16QAM      | 3                | 2         | 715.3       | 19.22        | V   | PASS    |
| 12       | 3        | QPSK       | 1                | 0         | 700.5       | 20.84        | H   | PASS    |
| 12       | 3        | QPSK       | 1                | 0         | 707.5       | <b>20.87</b> | H   | PASS    |
| 12       | 3        | QPSK       | 1                | 7         | 714.5       | 20.85        | H   | PASS    |
| 12       | 3        | QPSK       | 1                | 0         | 700.5       | 20.20        | V   | PASS    |
| 12       | 3        | QPSK       | 1                | 0         | 707.5       | 20.24        | V   | PASS    |
| 12       | 3        | QPSK       | 1                | 7         | 714.5       | 20.21        | V   | PASS    |
| 12       | 3        | 16QAM      | 1                | 14        | 700.5       | 19.72        | H   | PASS    |
| 12       | 3        | 16QAM      | 1                | 14        | 707.5       | 19.64        | H   | PASS    |
| 12       | 3        | 16QAM      | 1                | 14        | 714.5       | <b>19.75</b> | H   | PASS    |
| 12       | 3        | 16QAM      | 1                | 14        | 700.5       | 19.17        | V   | PASS    |
| 12       | 3        | 16QAM      | 1                | 14        | 707.5       | 19.12        | V   | PASS    |
| 12       | 3        | 16QAM      | 1                | 14        | 714.5       | 19.20        | V   | PASS    |
| 12       | 5        | QPSK       | 1                | 12        | 701.5       | 20.85        | H   | PASS    |
| 12       | 5        | QPSK       | 1                | 24        | 707.5       | <b>20.92</b> | H   | PASS    |
| 12       | 5        | QPSK       | 1                | 24        | 713.5       | 20.89        | H   | PASS    |
| 12       | 5        | QPSK       | 1                | 12        | 701.5       | 20.26        | V   | PASS    |
| 12       | 5        | QPSK       | 1                | 24        | 707.5       | 20.20        | V   | PASS    |
| 12       | 5        | QPSK       | 1                | 24        | 713.5       | 20.28        | V   | PASS    |
| 12       | 5        | 16QAM      | 1                | 24        | 701.5       | 19.65        | H   | PASS    |
| 12       | 5        | 16QAM      | 1                | 0         | 707.5       | 19.71        | H   | PASS    |
| 12       | 5        | 16QAM      | 1                | 0         | 713.5       | <b>19.78</b> | H   | PASS    |
| 12       | 5        | 16QAM      | 1                | 24        | 701.5       | 19.12        | V   | PASS    |
| 12       | 5        | 16QAM      | 1                | 0         | 707.5       | 19.25        | V   | PASS    |
| 12       | 5        | 16QAM      | 1                | 0         | 713.5       | 19.18        | V   | PASS    |



| LTE Band | BW (MHz) | Modulation | RB Configuration |           | Freq. (MHz) | EIRP (dBm)   | H/V | Verdict |
|----------|----------|------------|------------------|-----------|-------------|--------------|-----|---------|
|          |          |            | RB Size          | RB Offset |             |              |     |         |
| 12       | 10       | QPSK       | 1                | 24        | 704         | 20.87        | H   | PASS    |
| 12       | 10       | QPSK       | 1                | 0         | 707.5       | <b>20.95</b> | H   | PASS    |
| 12       | 10       | QPSK       | 1                | 24        | 711         | 20.84        | H   | PASS    |
| 12       | 10       | QPSK       | 1                | 24        | 704         | 20.27        | V   | PASS    |
| 12       | 10       | QPSK       | 1                | 0         | 707.5       | 20.25        | V   | PASS    |
| 12       | 10       | QPSK       | 1                | 24        | 711         | 20.33        | V   | PASS    |
| 12       | 10       | 16QAM      | 1                | 24        | 704         | 19.78        | H   | PASS    |
| 12       | 10       | 16QAM      | 1                | 0         | 707.5       | <b>19.81</b> | H   | PASS    |
| 12       | 10       | 16QAM      | 1                | 24        | 711         | 19.77        | H   | PASS    |
| 12       | 10       | 16QAM      | 1                | 24        | 704         | 19.18        | V   | PASS    |
| 12       | 10       | 16QAM      | 1                | 0         | 707.5       | 19.25        | V   | PASS    |
| 12       | 10       | 16QAM      | 1                | 24        | 711         | 19.23        | V   | PASS    |

## 2.8 Radiated Out of Band Emissions

### 2.8.1 Requirement

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least  $43 + 10 \log (P)$  dB.

For Band 7

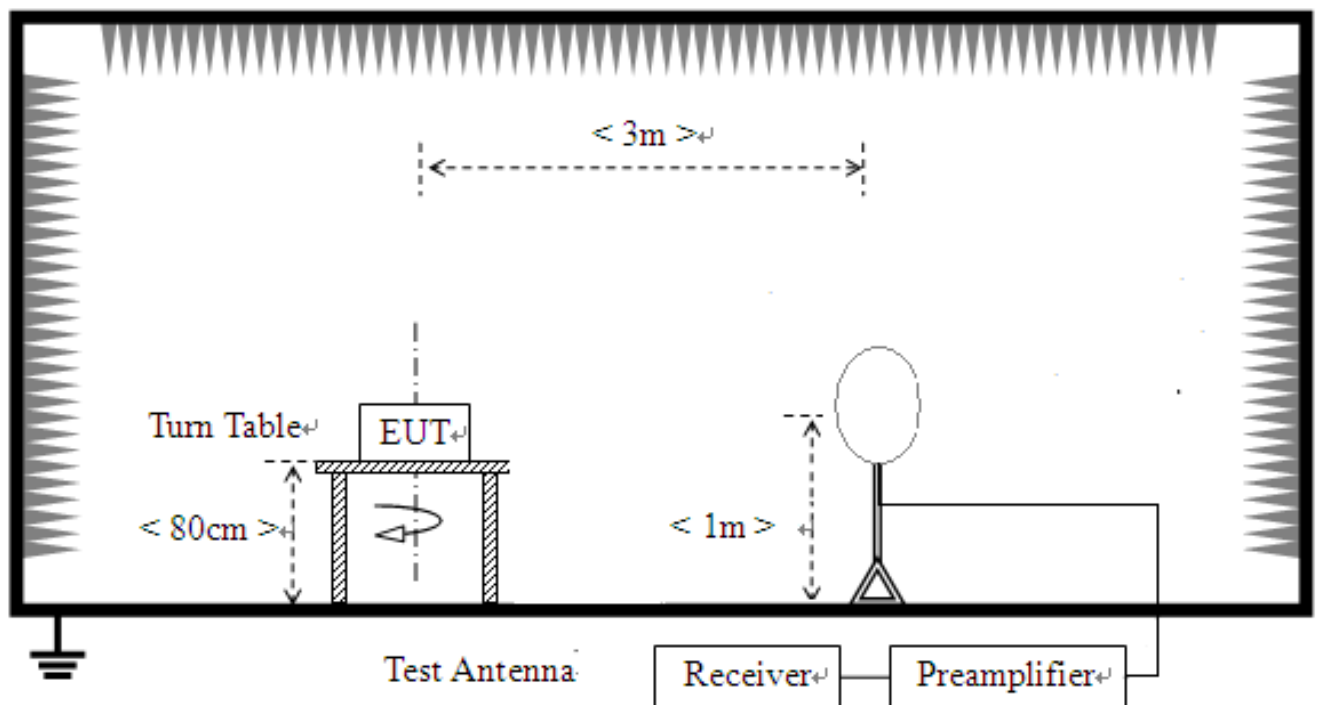
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least  $55 + 10 \log (P)$  dB.

### 2.8.2 Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

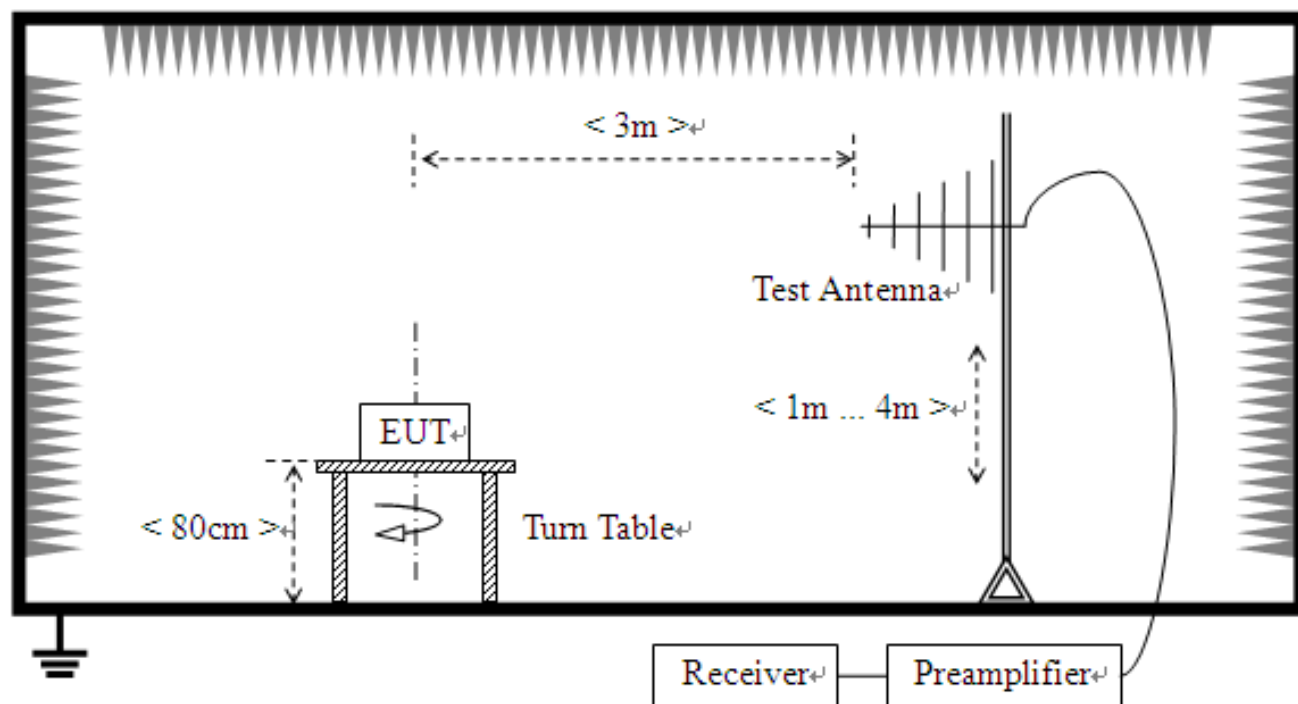
### 2.8.3 Test Setup

For radiated emissions from 9kHz to 30MHz

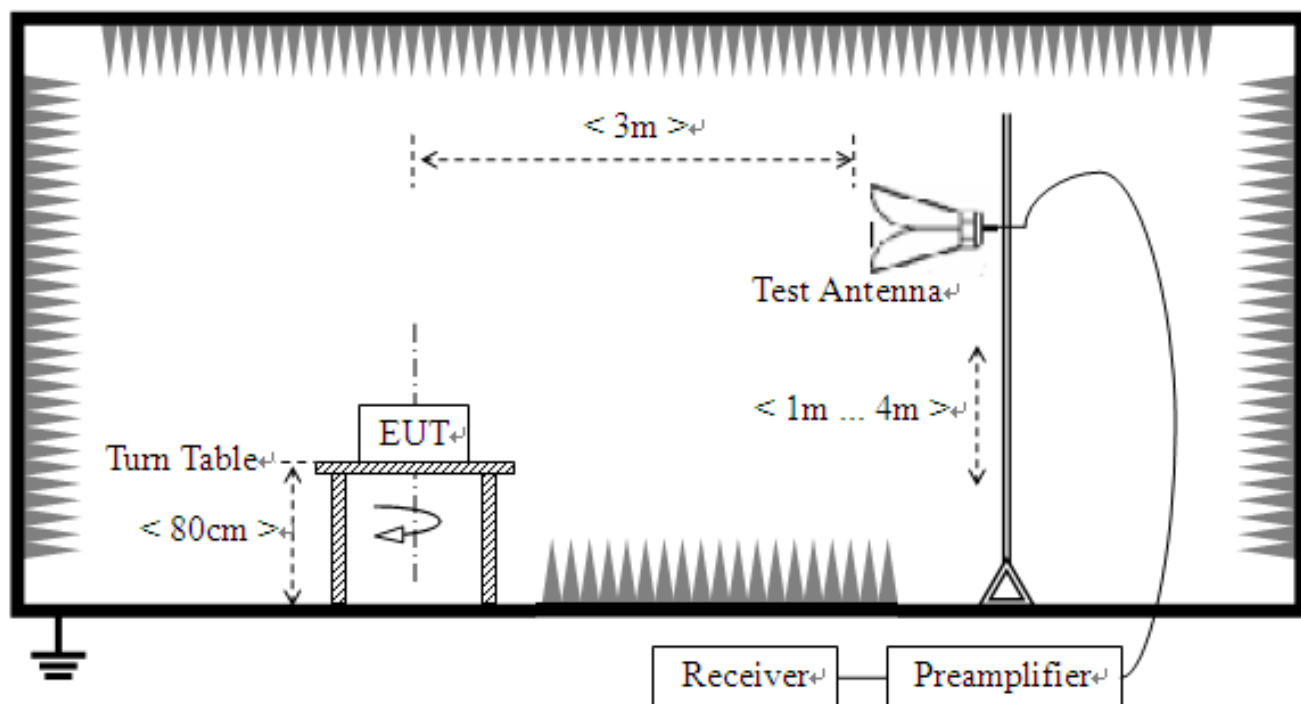




For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



#### 2.8.4 Test Procedures

1. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from  $43 + 10\log(P)$ dB below the transmitter power P(Watts)  
 $= P(W) - [43 + 10\log(P)]$  (dB)  
 $= [30 + 10\log(P)]$  (dBm) -  $[43 + 10\log(P)]$  (dB)  
 $= -13$ dBm.

<For Band 7>

The limit line is derived from  $55 + 10\log(P)$ dB below the transmitter power P(Watts)  
 $= P(W) - [55 + 10\log(P)]$  (dB)  
 $= [30 + 10\log(P)]$  (dBm) -  $[55 + 10\log(P)]$  (dB)  
 $= -25$ dBm.

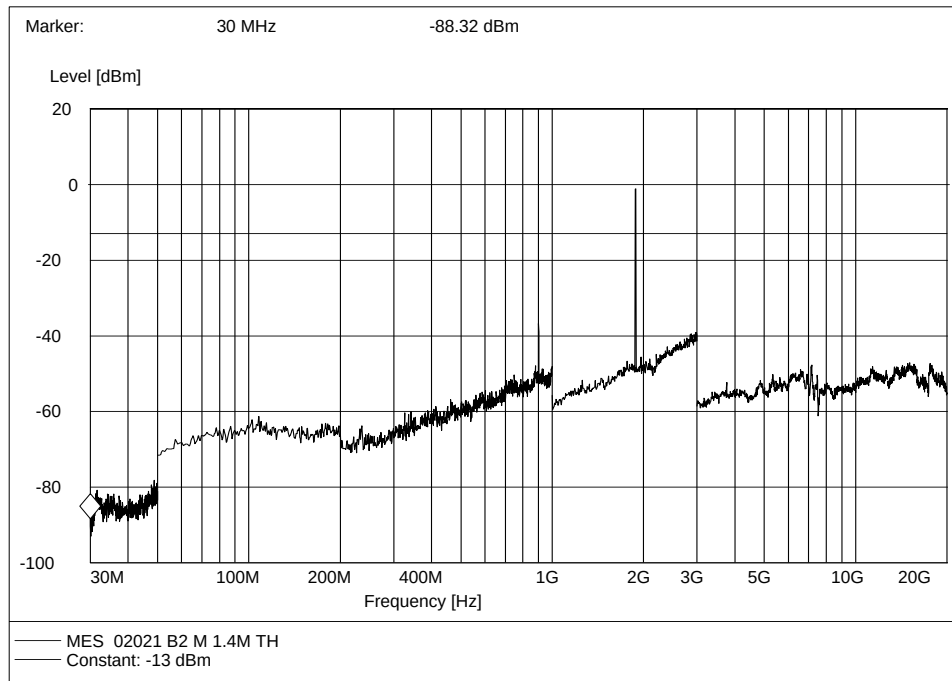
11. All Spurious Emission tests were performed in X, Y, Z axis direction and low, middle, high channel. And only the worst axis test condition was recorded in this test report.
12. The spectrum is measured from 9 KHz to the 10<sup>th</sup> harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. The worst case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.



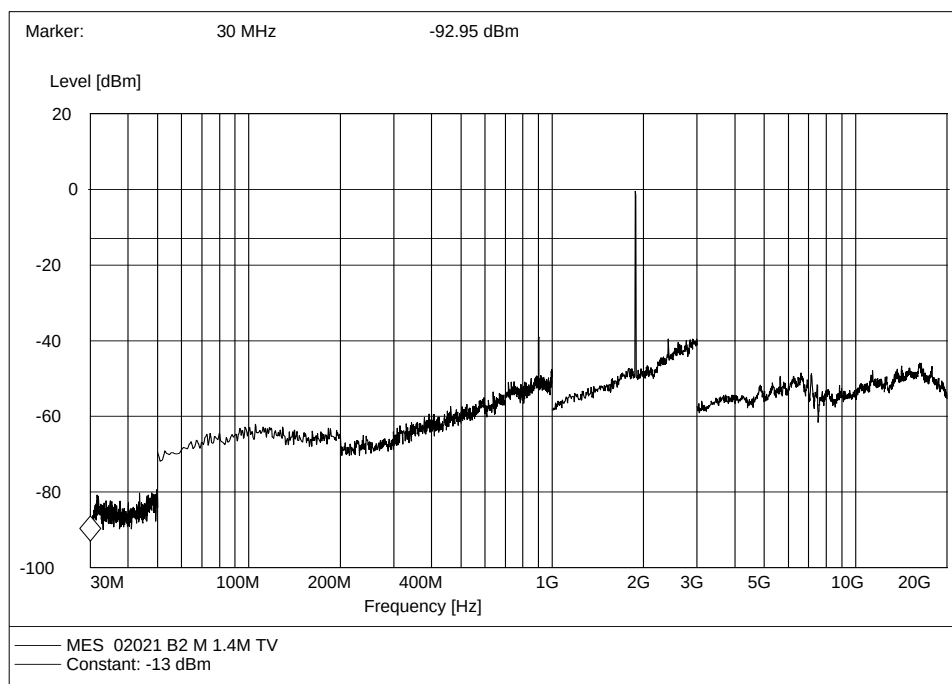
13. The maximum RB configurations of the Radiated Spurious Emissions as RB Size 1,  
RB Offset 0

## 2.8.5 Test Result (Plots) of Radiated Spurious Emission

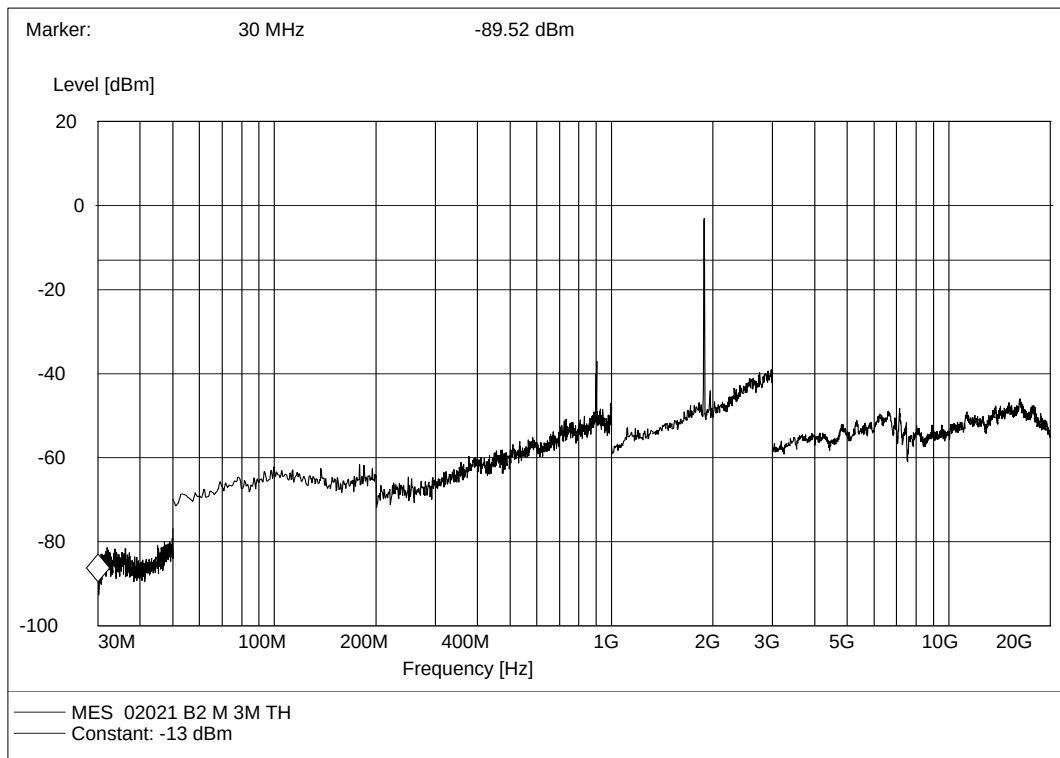
Note: For 9 KHz to 30MHz: the amplitude of spurious emissions is attenuated by more than 20dB below the permissible value, so we not provide the test result here.



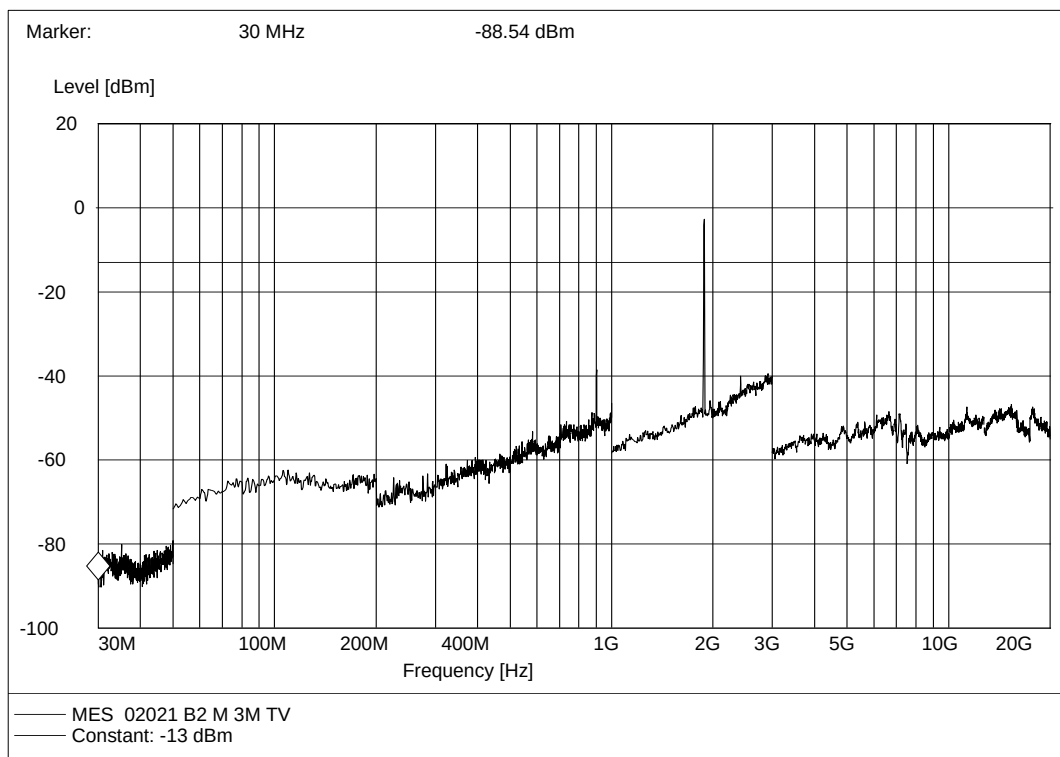
LTE Band 2 QPSK 1.4MHz BW Test Antenna Horizontal



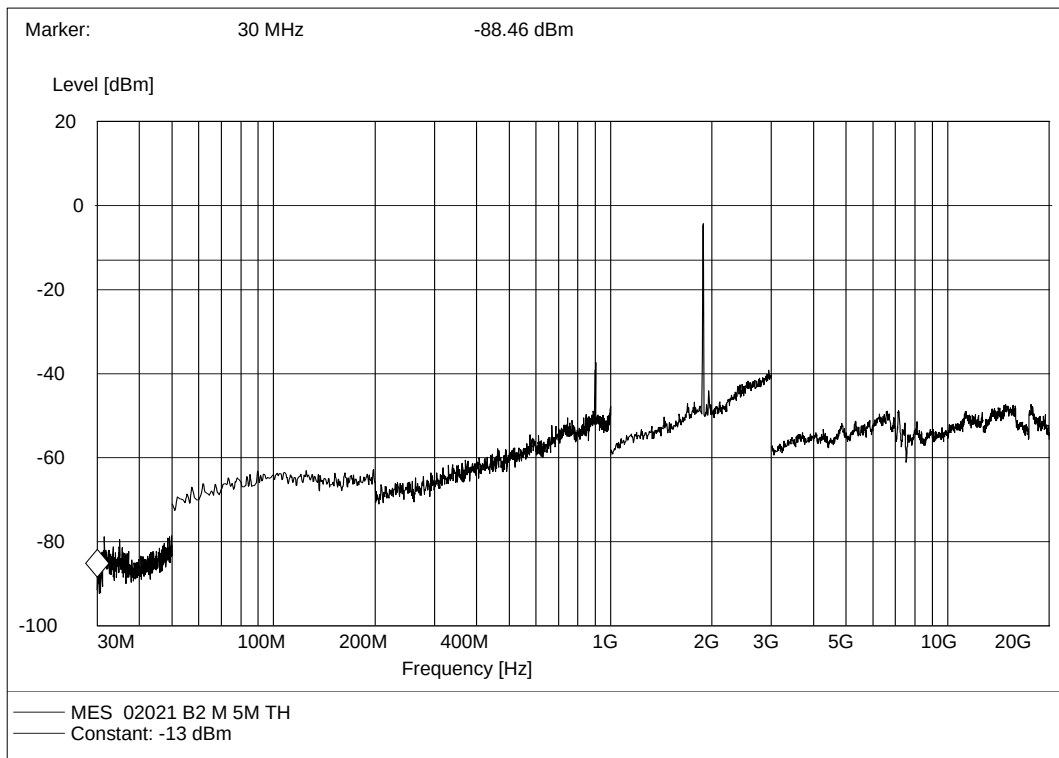
LTE Band 2 QPSK 1.4MHz BW Test Antenna Vertical



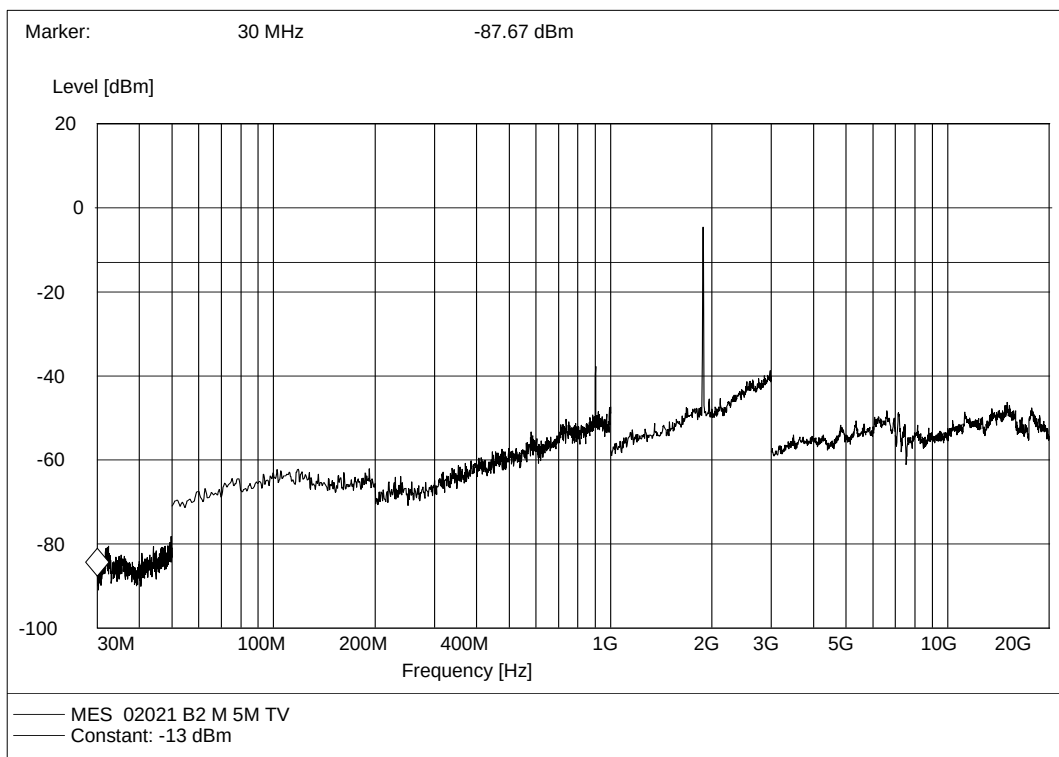
LTE Band 2 QPSK 3MHz BW Test Antenna Horizontal



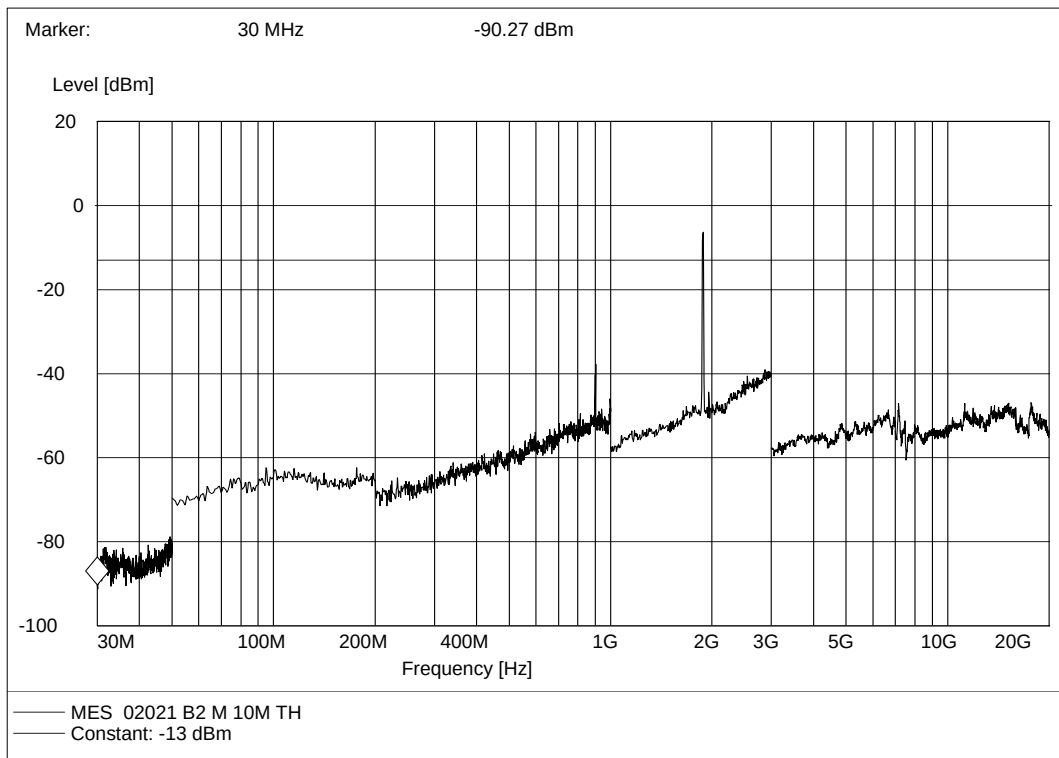
LTE Band 2 QPSK 3MHz BW Test Antenna Vertical



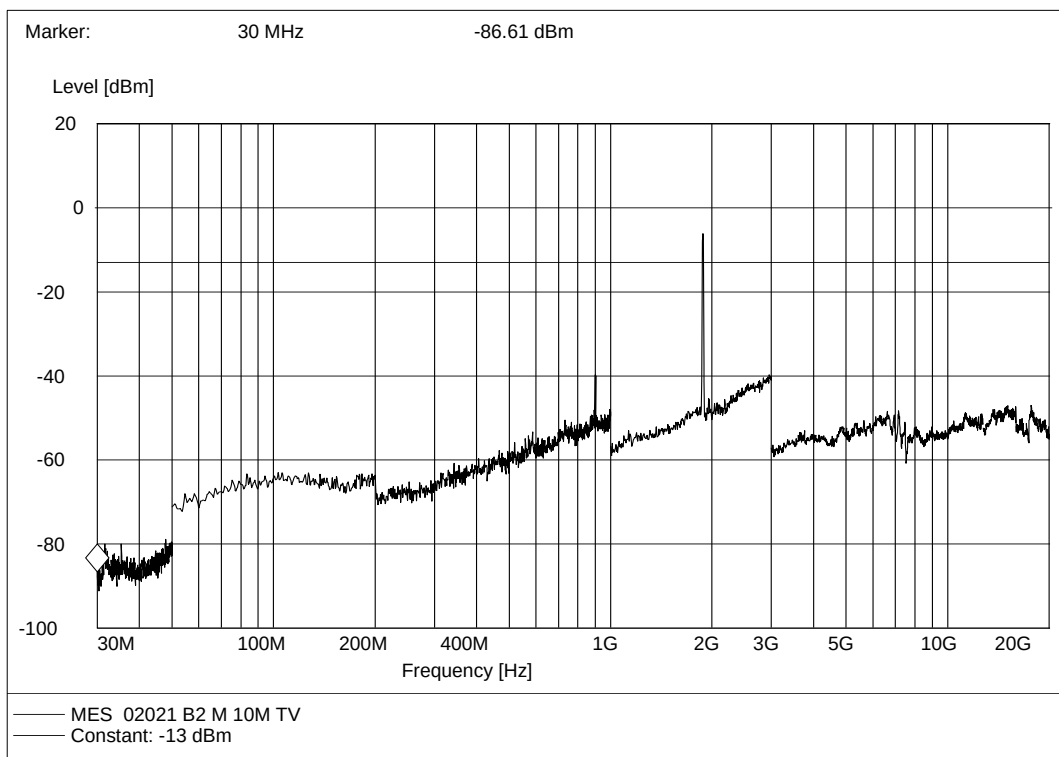
LTE Band 2 QPSK 5MHz BW Test Antenna Horizontal



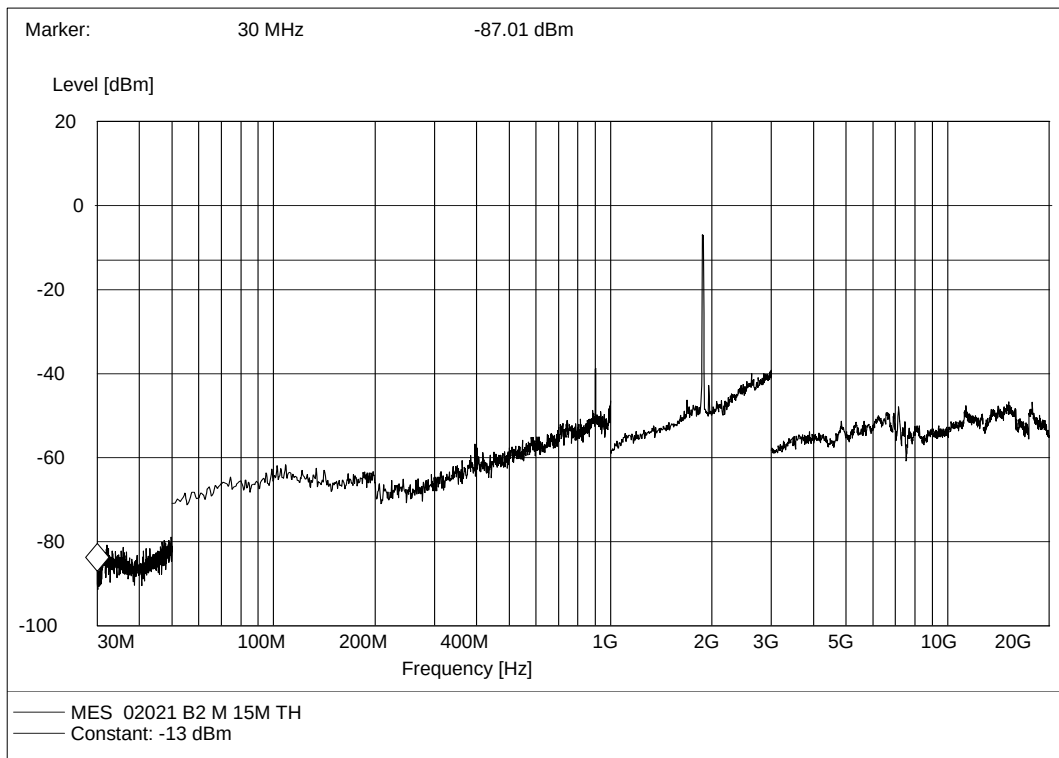
LTE Band 2 QPSK 5MHz BW Test Antenna Vertical



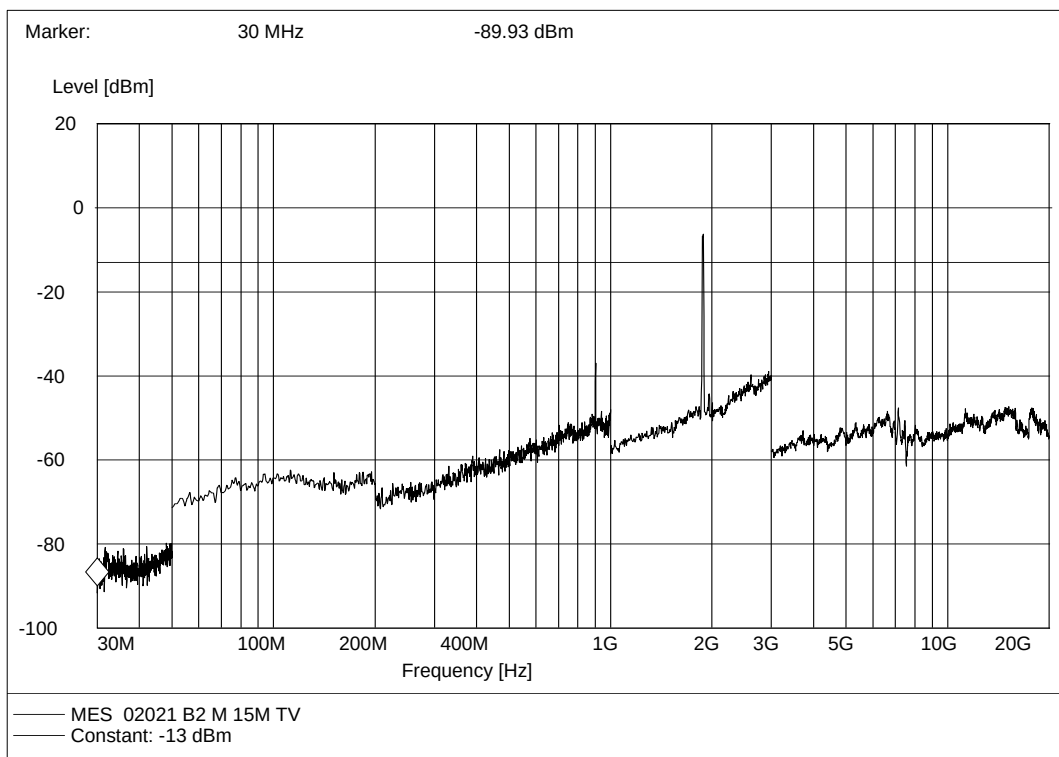
LTE Band 2 QPSK 10MHz BW Test Antenna Horizontal



LTE Band 2 QPSK 10MHz BW Test Antenna Vertical

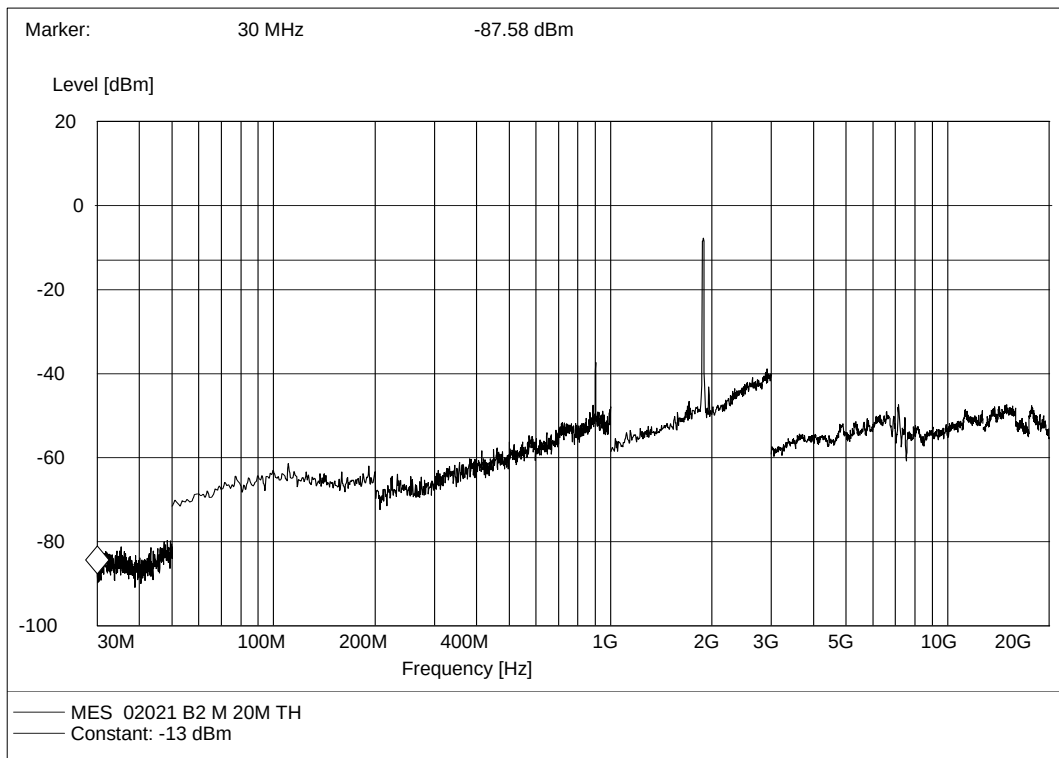


LTE Band 2 QPSK 15MHz BW Test Antenna Horizontal

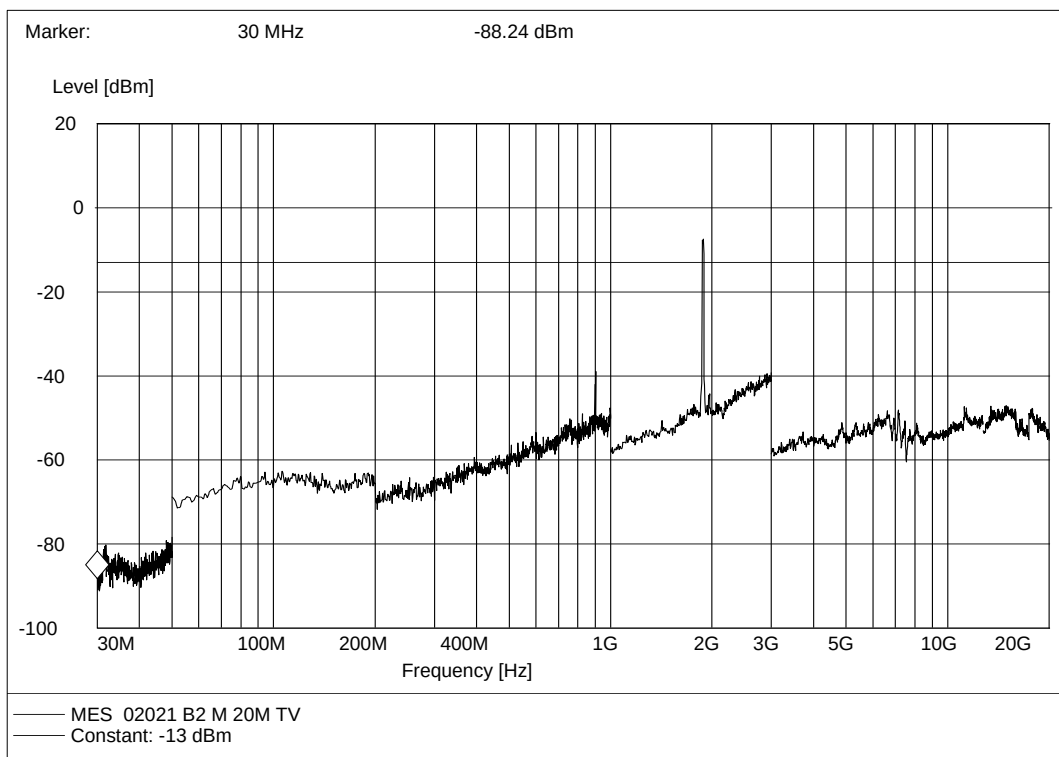


LTE Band 2 QPSK 15MHz BW Test Antenna Vertical

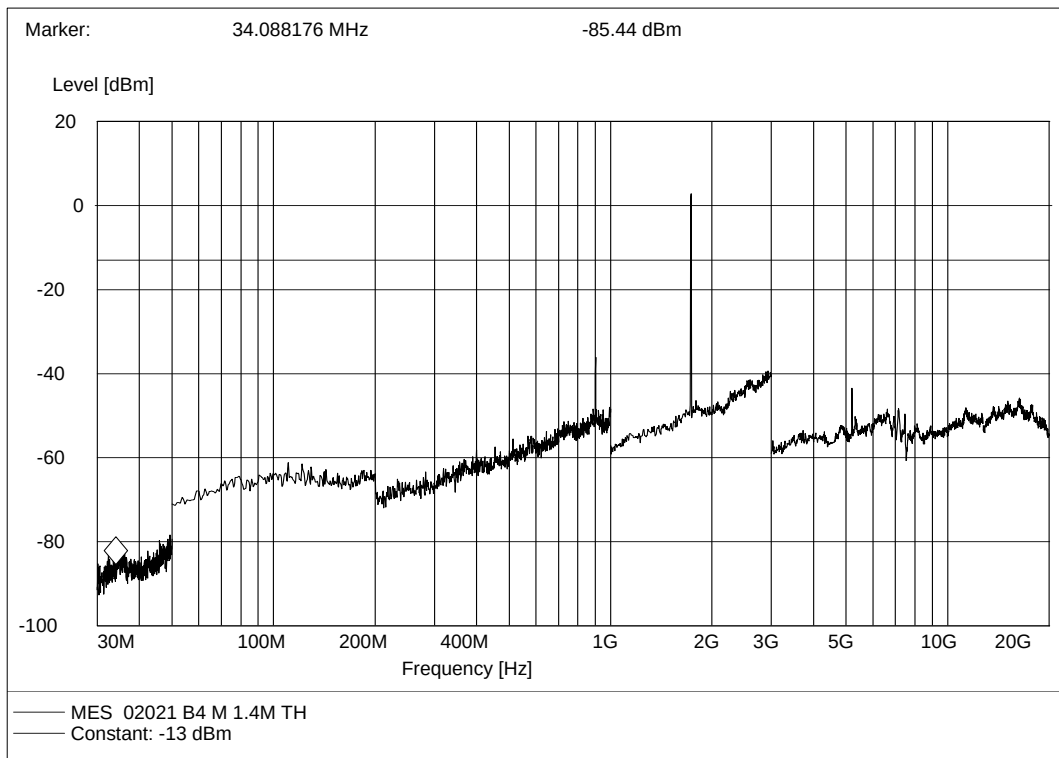




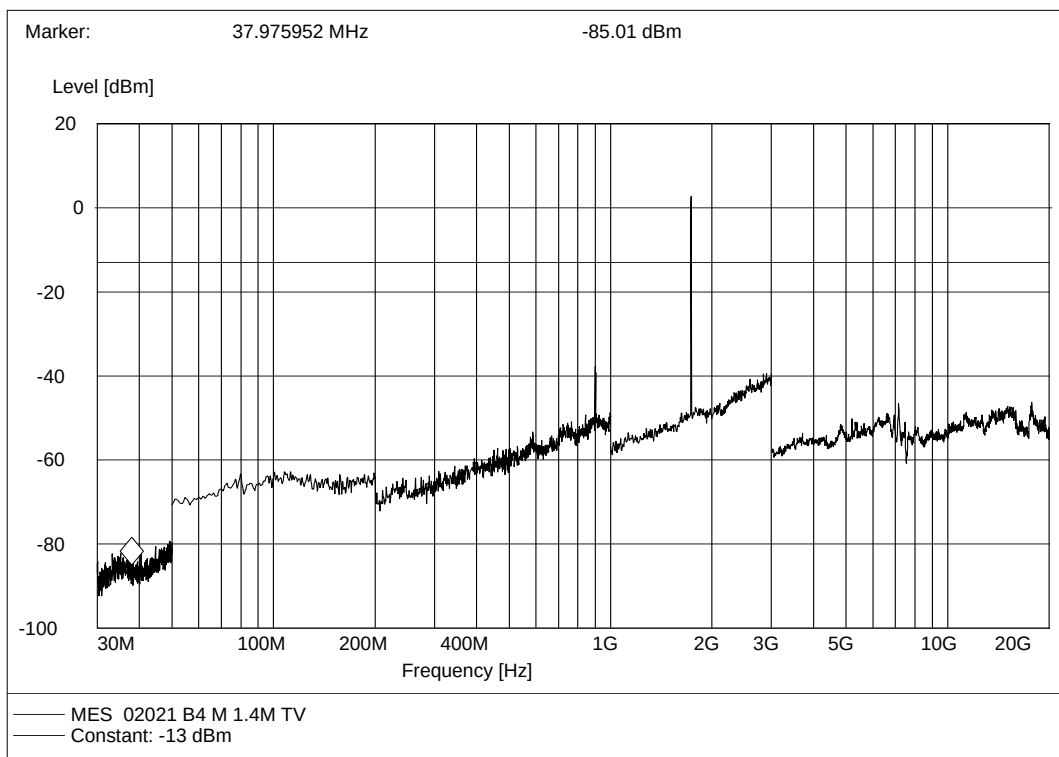
LTE Band 2 QPSK 20MHz BW Test Antenna Horizontal



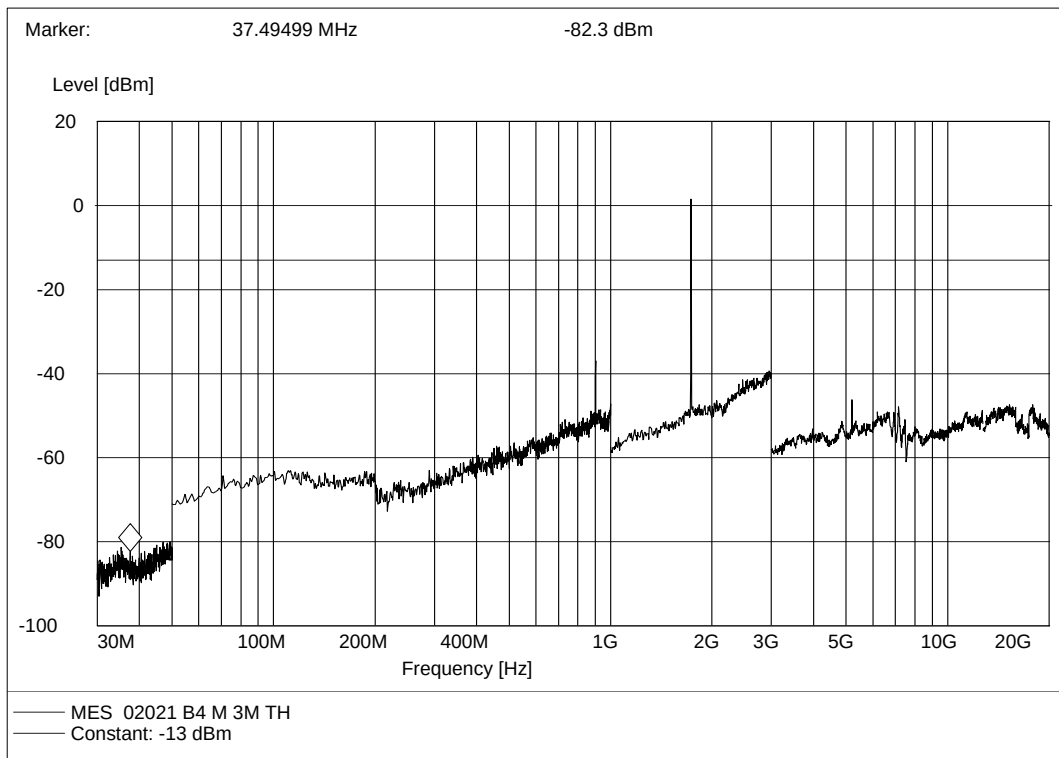
LTE Band 2 QPSK 20MHz BW Test Antenna Vertical



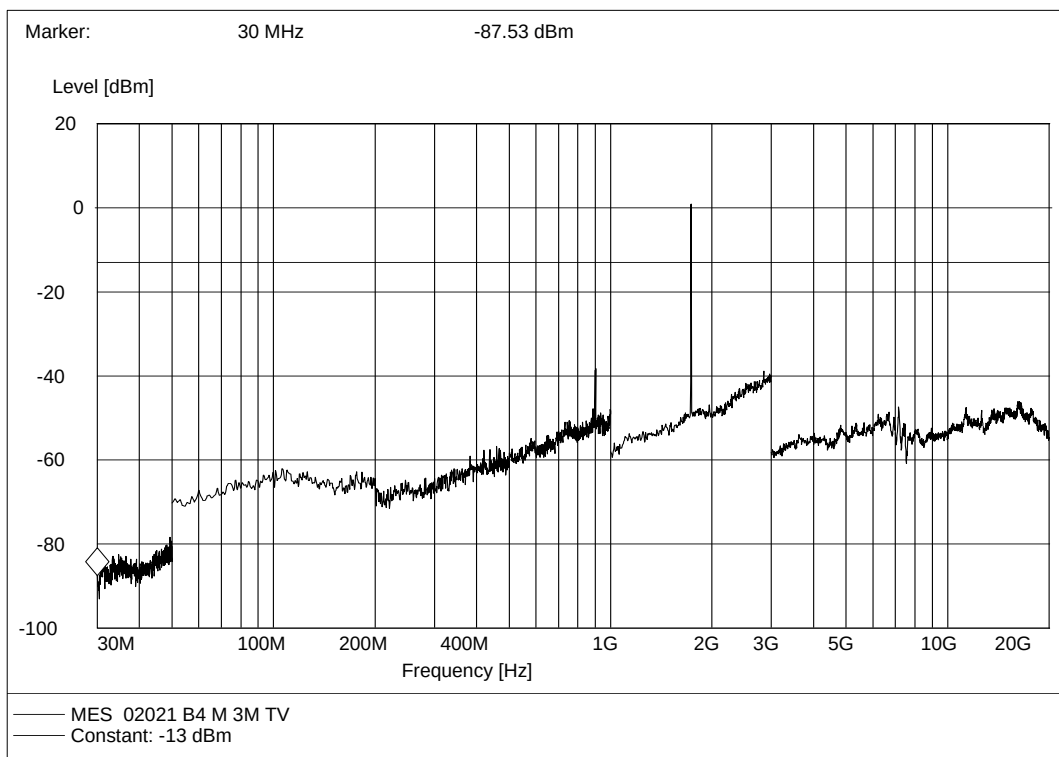
LTE Band 4 QPSK 1.4MHz BW Test Antenna Horizontal



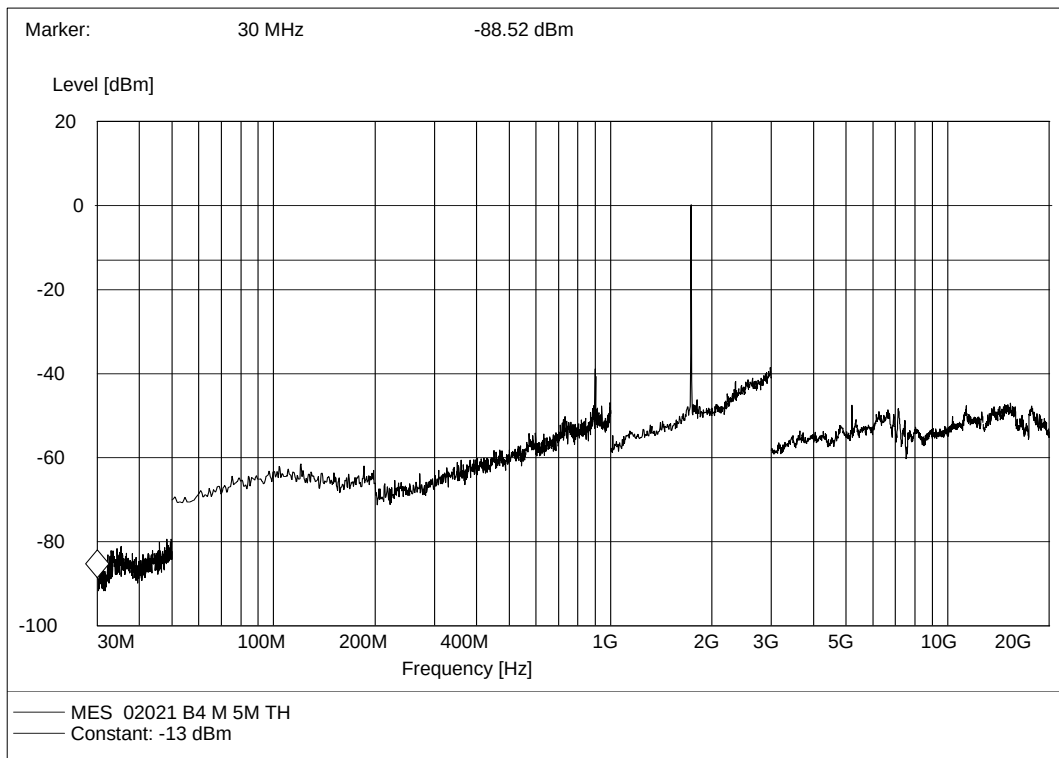
LTE Band 4 QPSK 1.4MHz BW Test Antenna Vertical



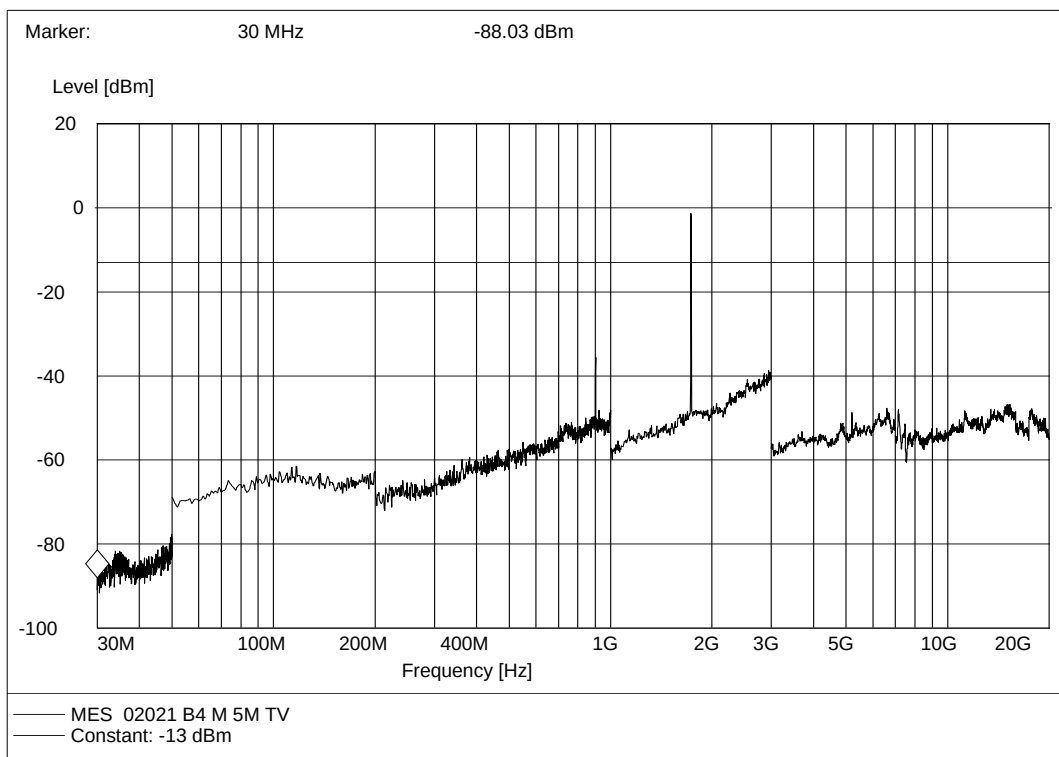
· LTE Band 4 QPSK 3MHz BW Test Antenna Horizontal



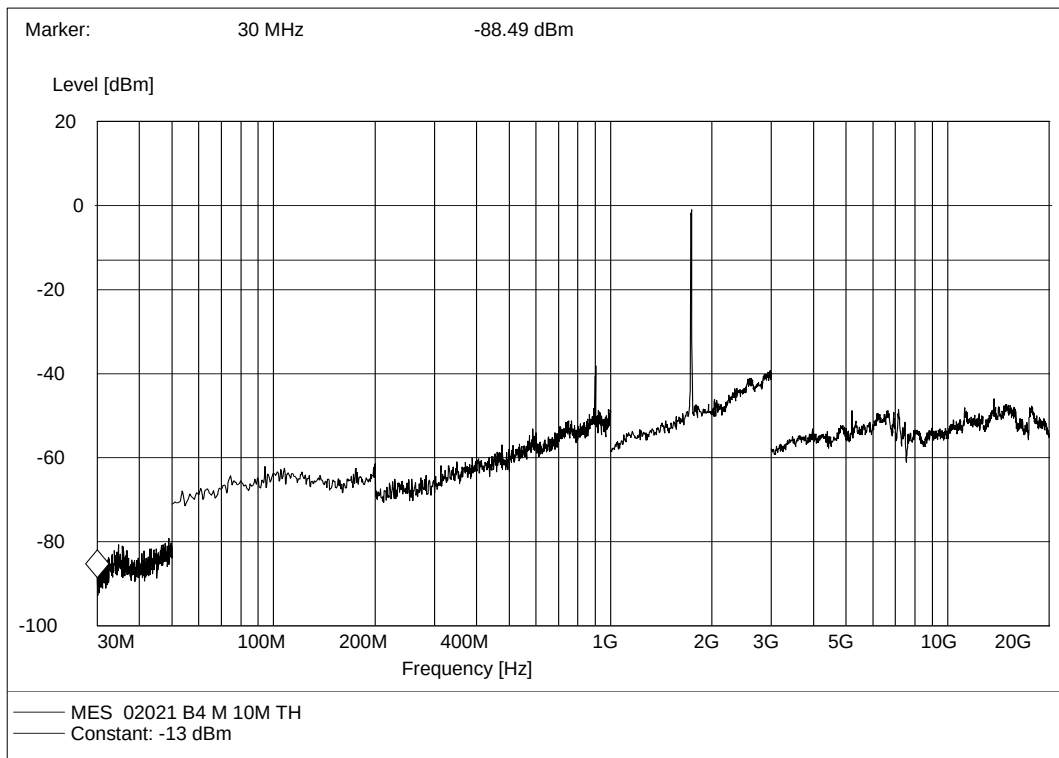
LTE Band 4 QPSK 3MHz BW Test Antenna Vertical



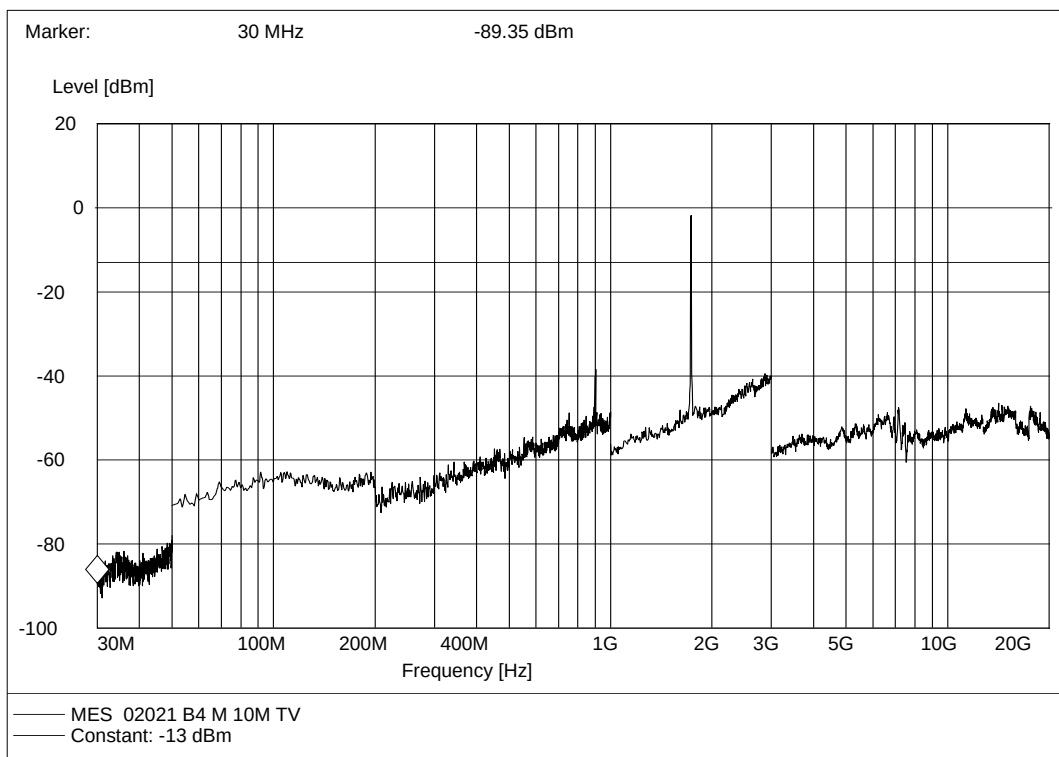
· LTE Band 4 QPSK 5MHz BW Test Antenna Horizontal



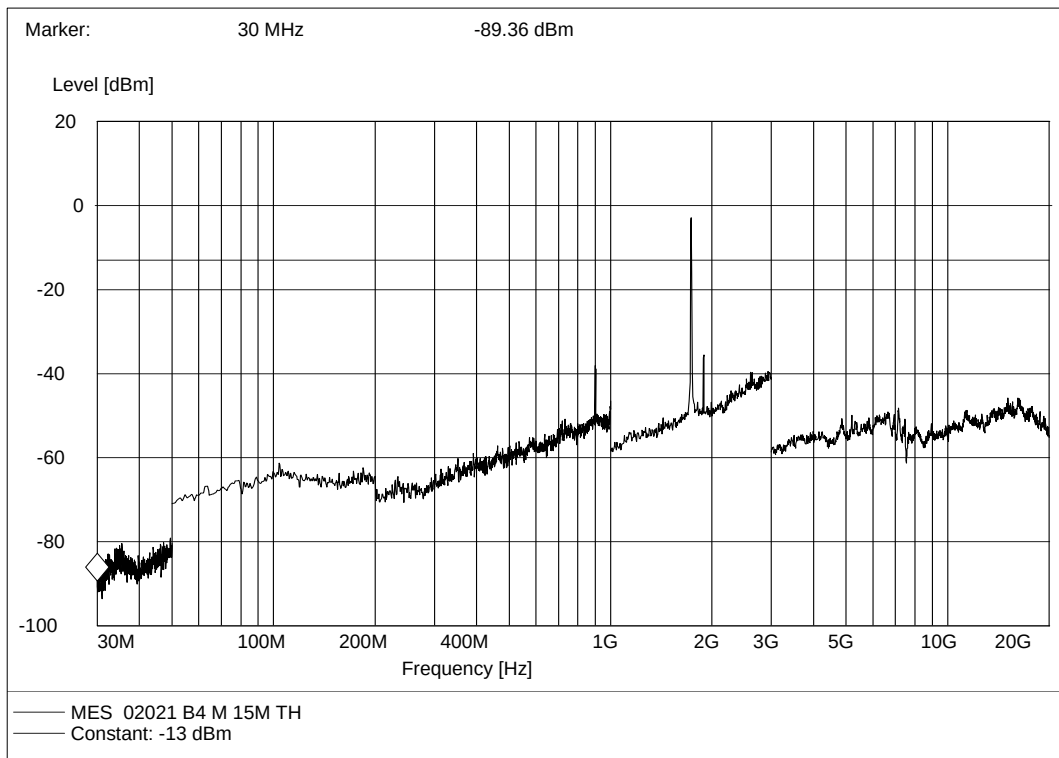
LTE Band 4 QPSK 5MHz BW Test Antenna Vertical



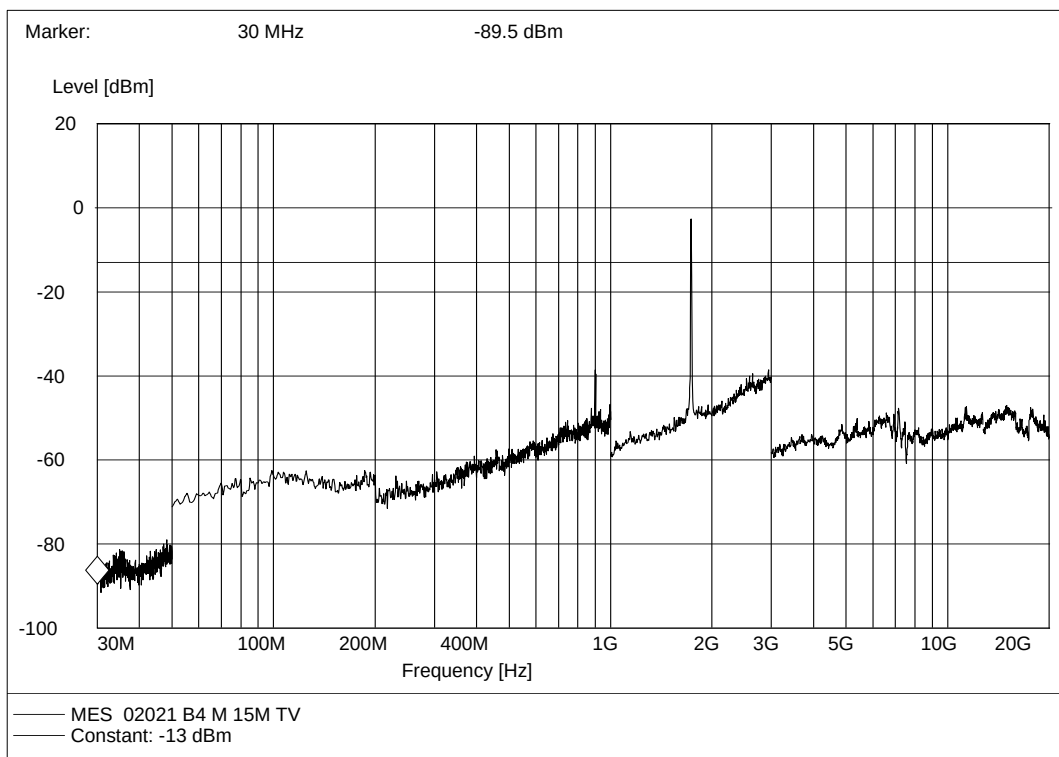
LTE Band 4 QPSK 10MHz BW Test Antenna Horizontal



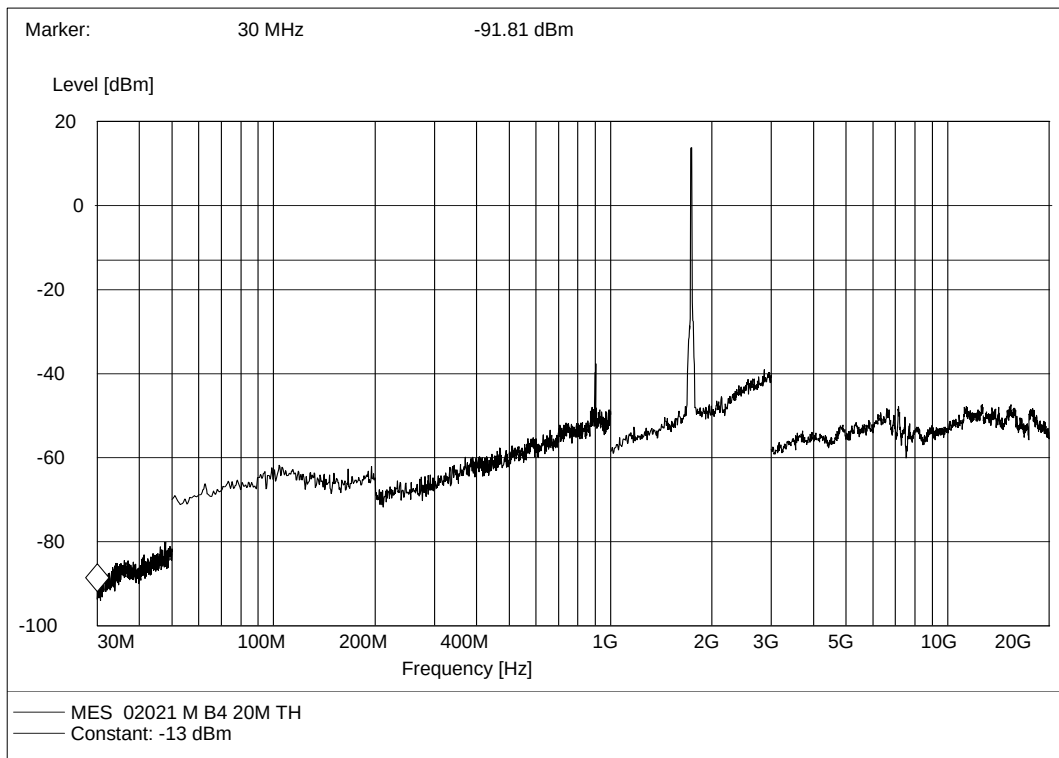
LTE Band 4 QPSK 10MHz BW Test Antenna Vertical



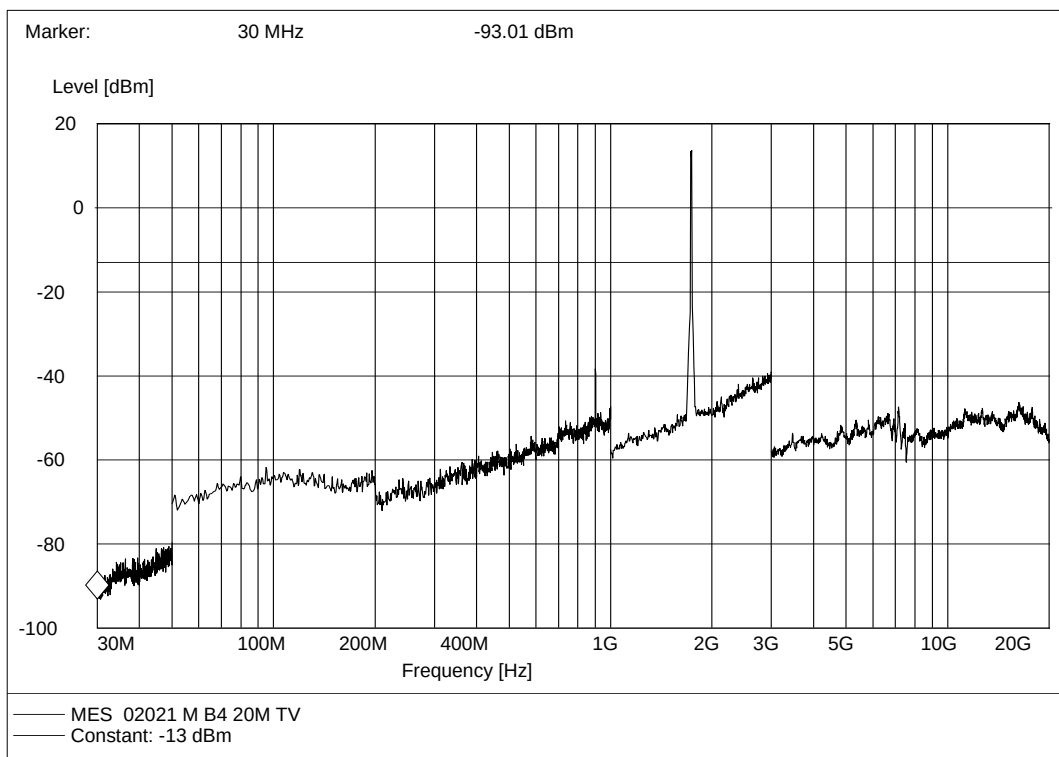
LTE Band 4 QPSK 15MHz BW Test Antenna Horizontal



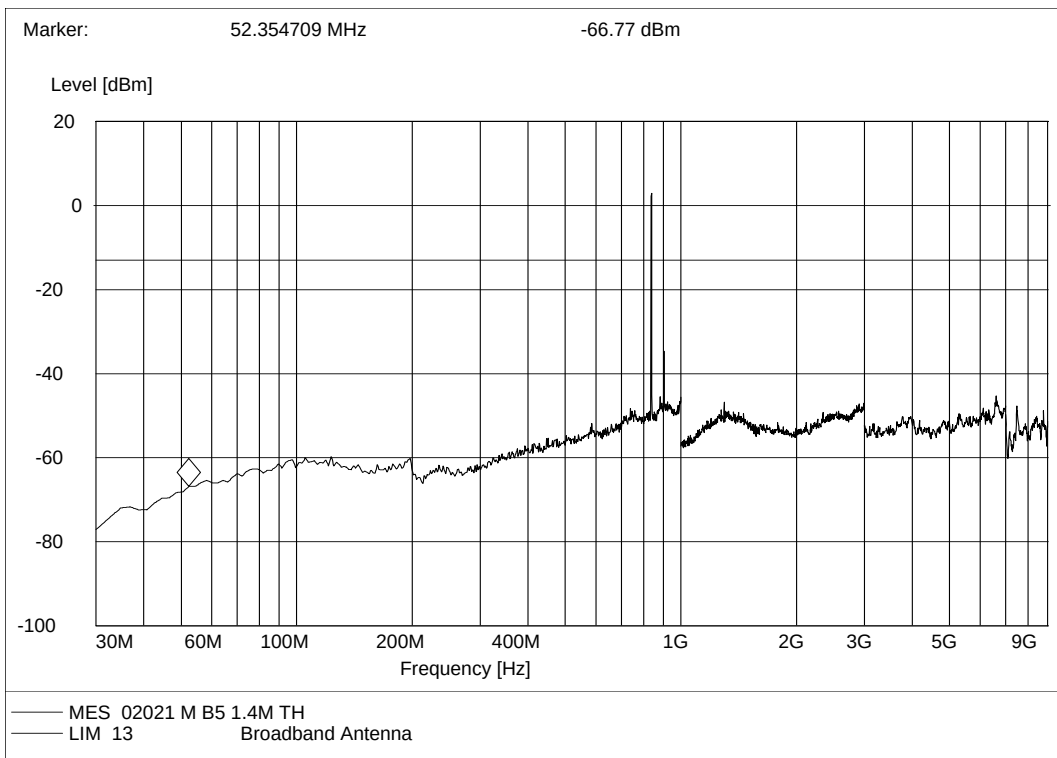
LTE Band 4 QPSK 15MHz BW Test Antenna Vertical



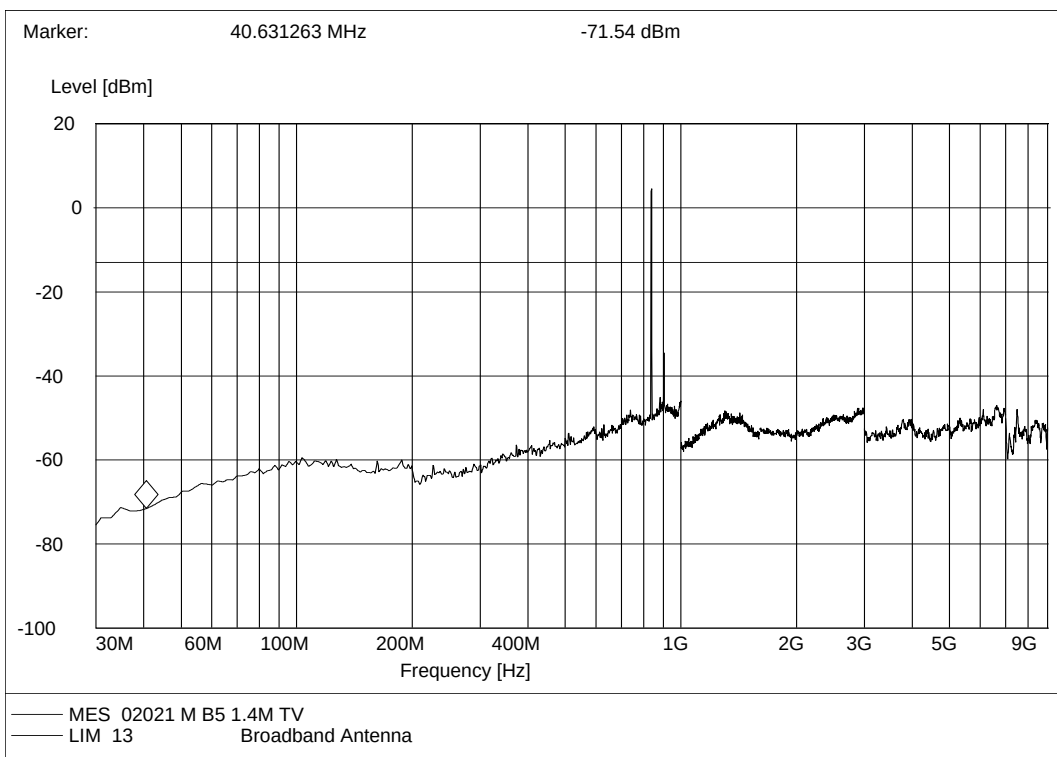
LTE Band 4 QPSK 20MHz BW Test Antenna Horizontal



LTE Band 4 QPSK 20MHz BW Test Antenna Vertical

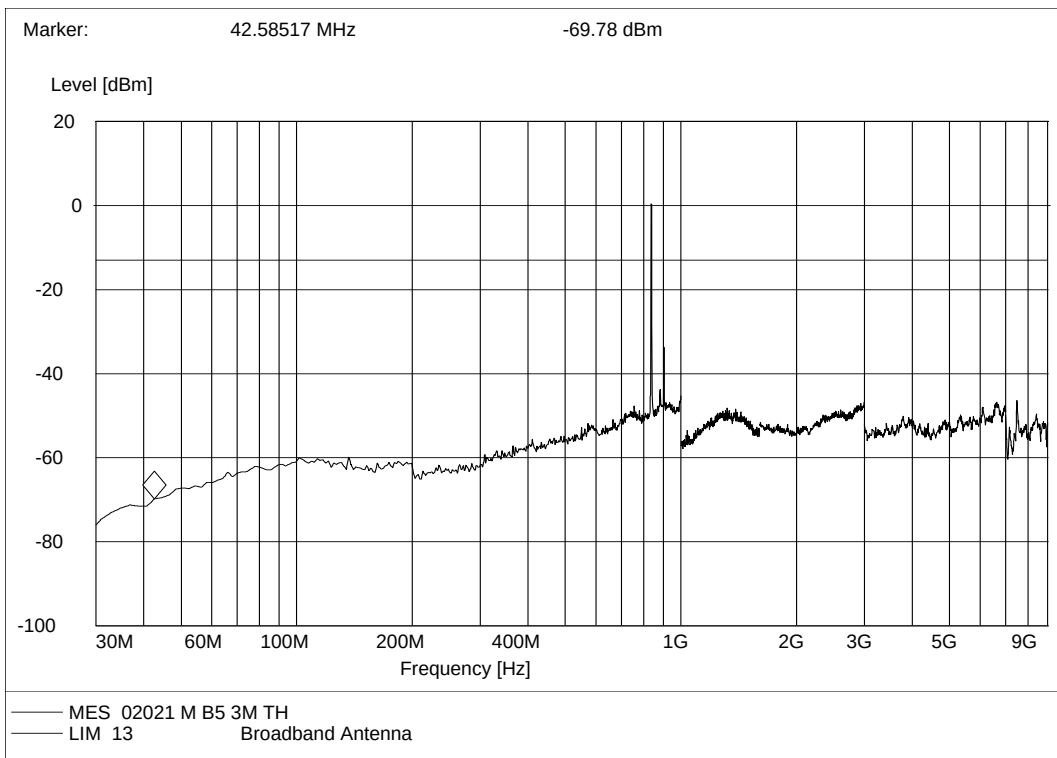


### LTE Band 5 QPSK 1.4MHz BW Test Antenna Horizontal

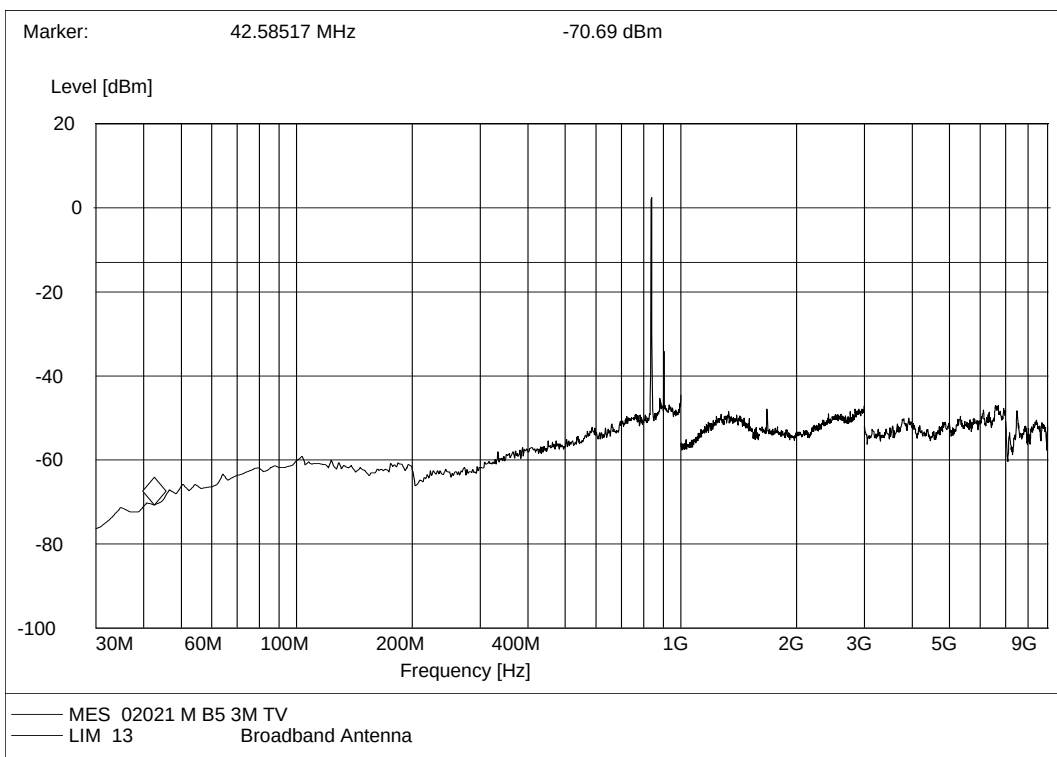


### LTE Band 5 QPSK 1.4MHz BW Test Antenna Vertical

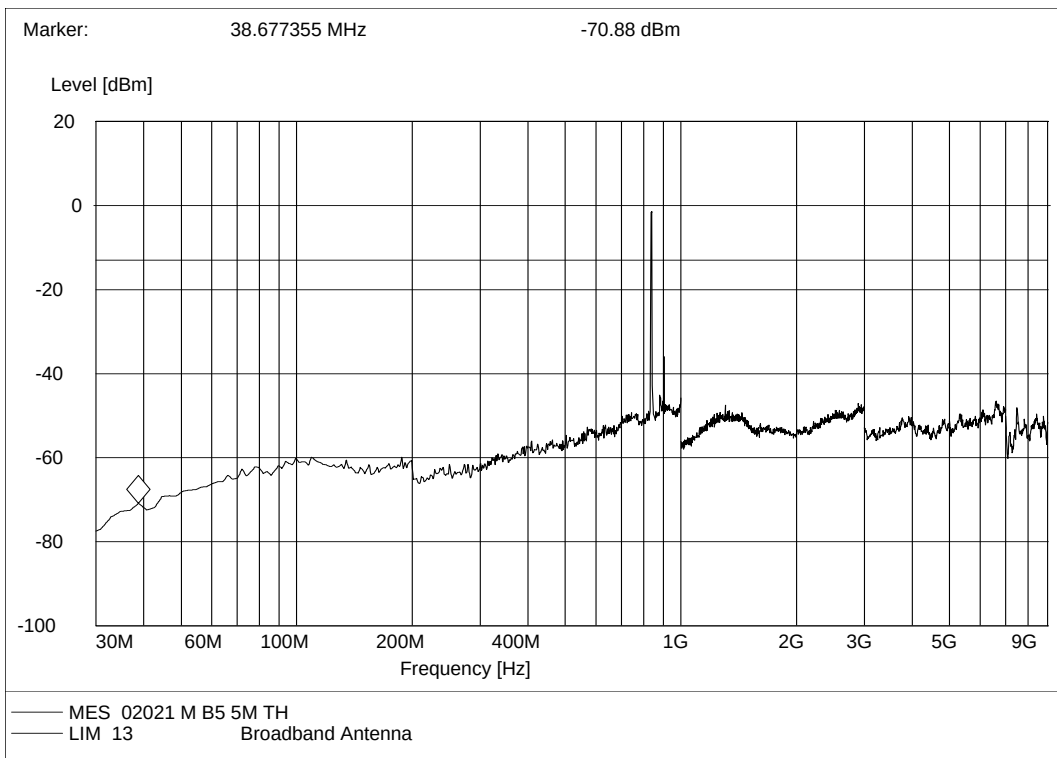




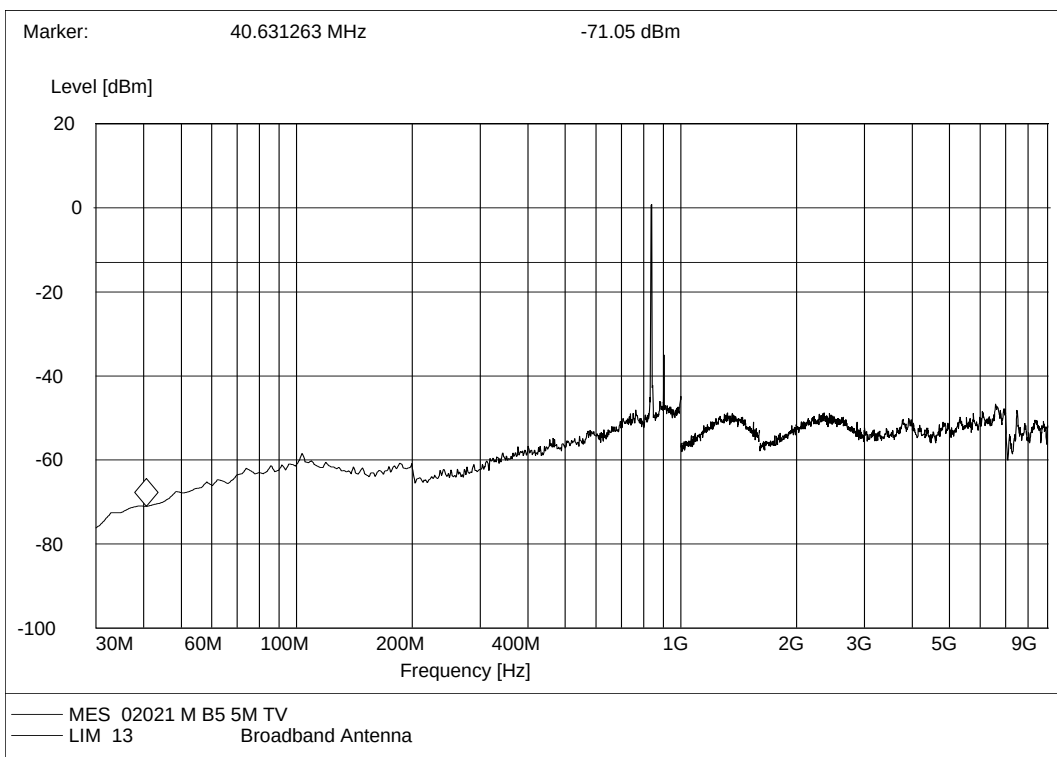
LTE Band 5 QPSK 3MHz BW Test Antenna Horizontal



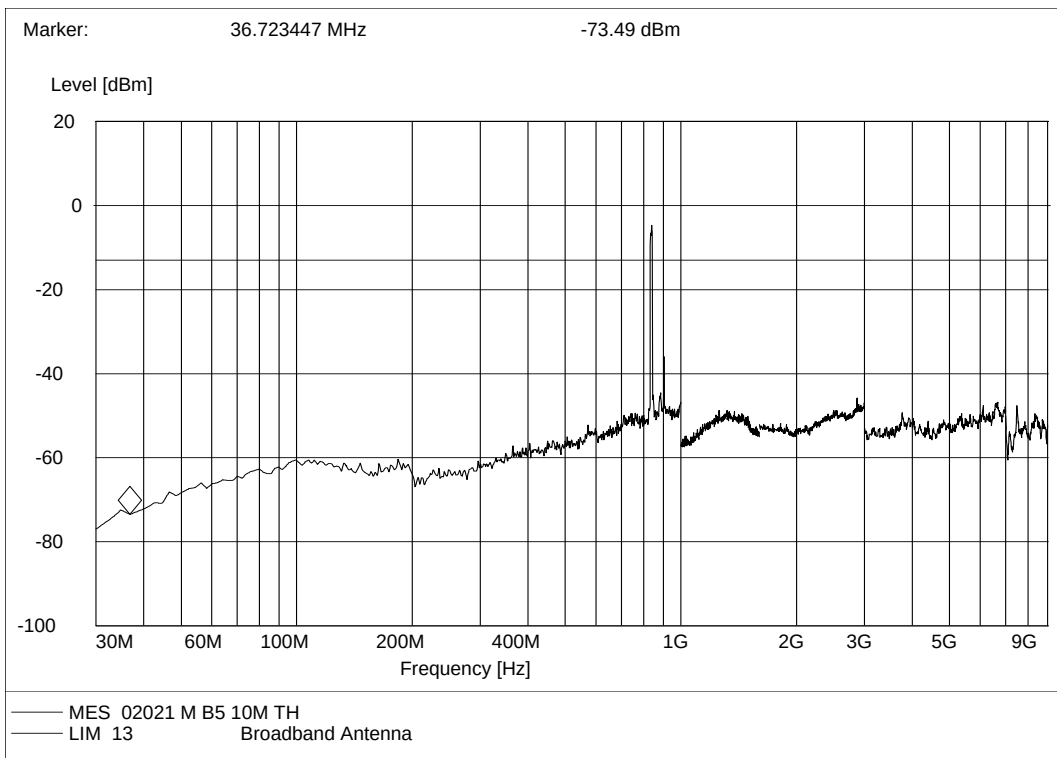
LTE Band 5 QPSK 3MHz BW Test Antenna Vertical



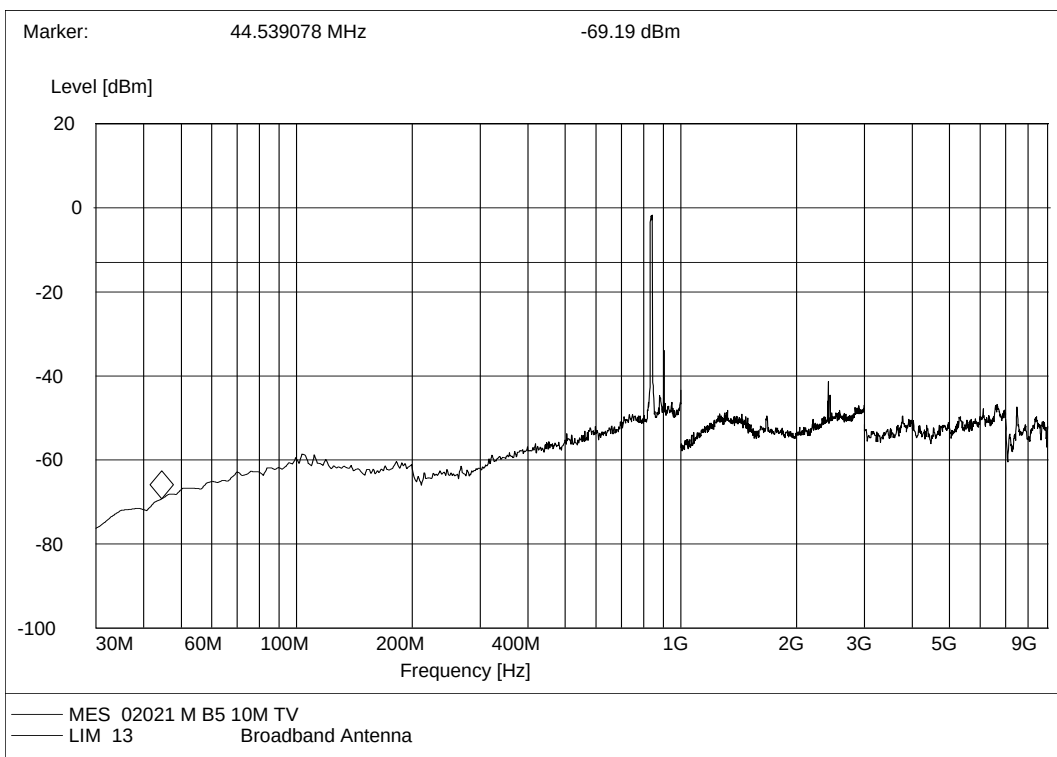
### LTE Band 5 QPSK 5MHz BW Test Antenna Horizontal



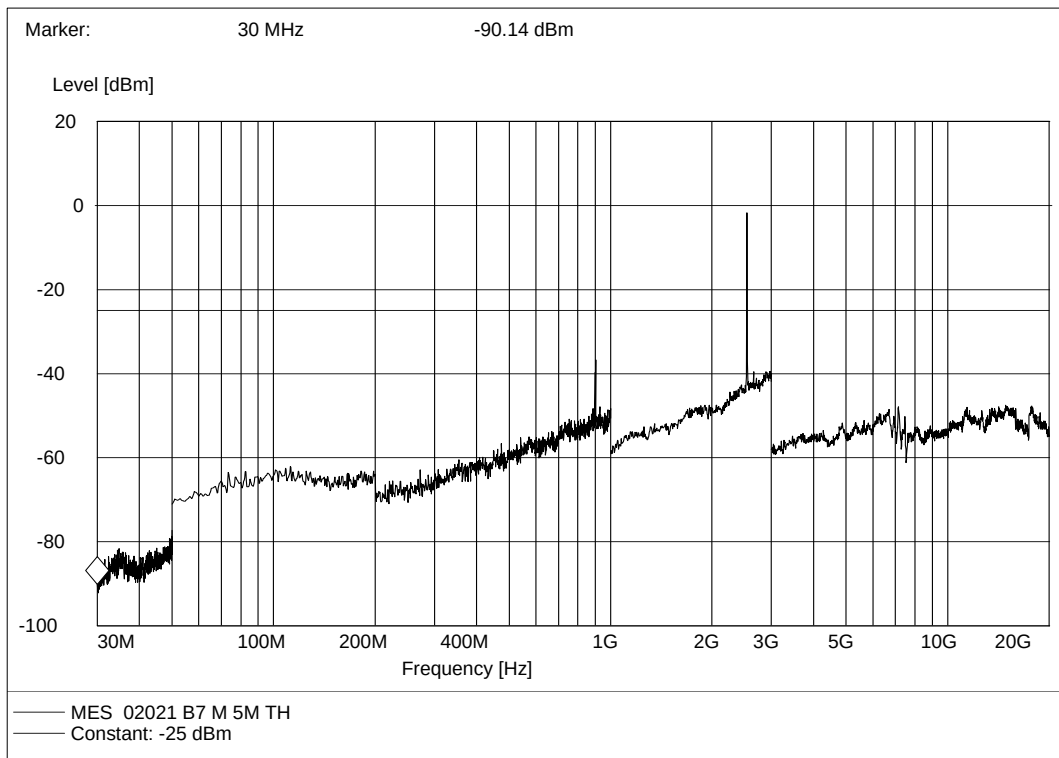
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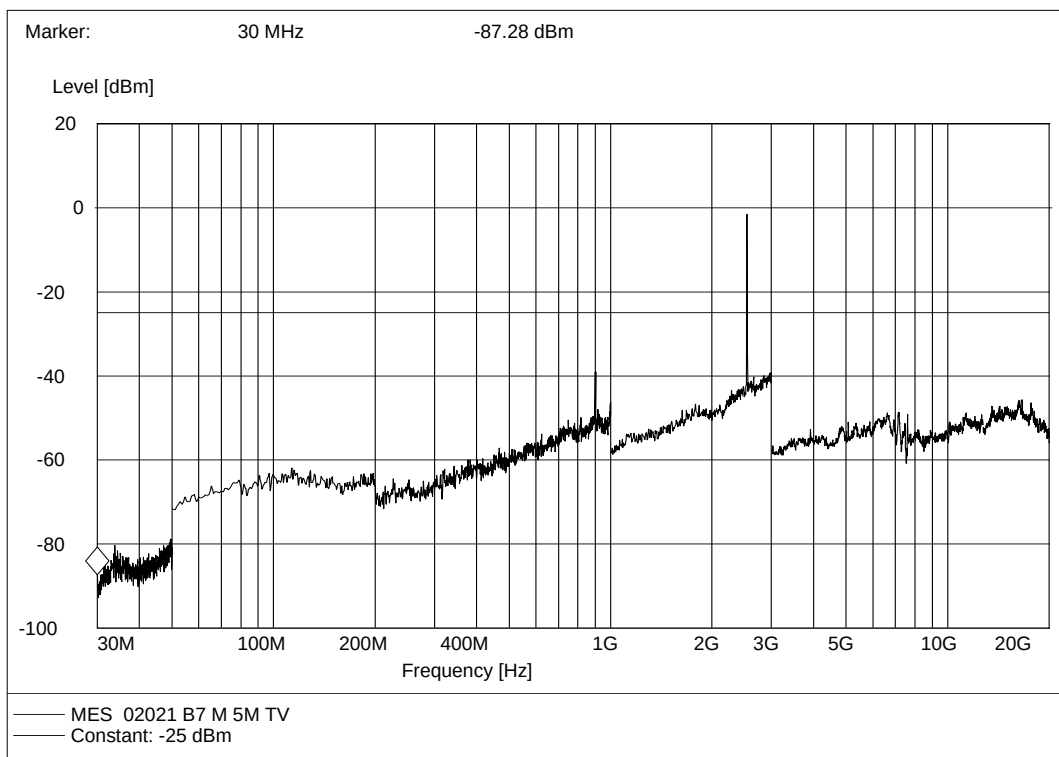
### LTE Band 5 QPSK 10MHz BW Test Antenna Horizontal



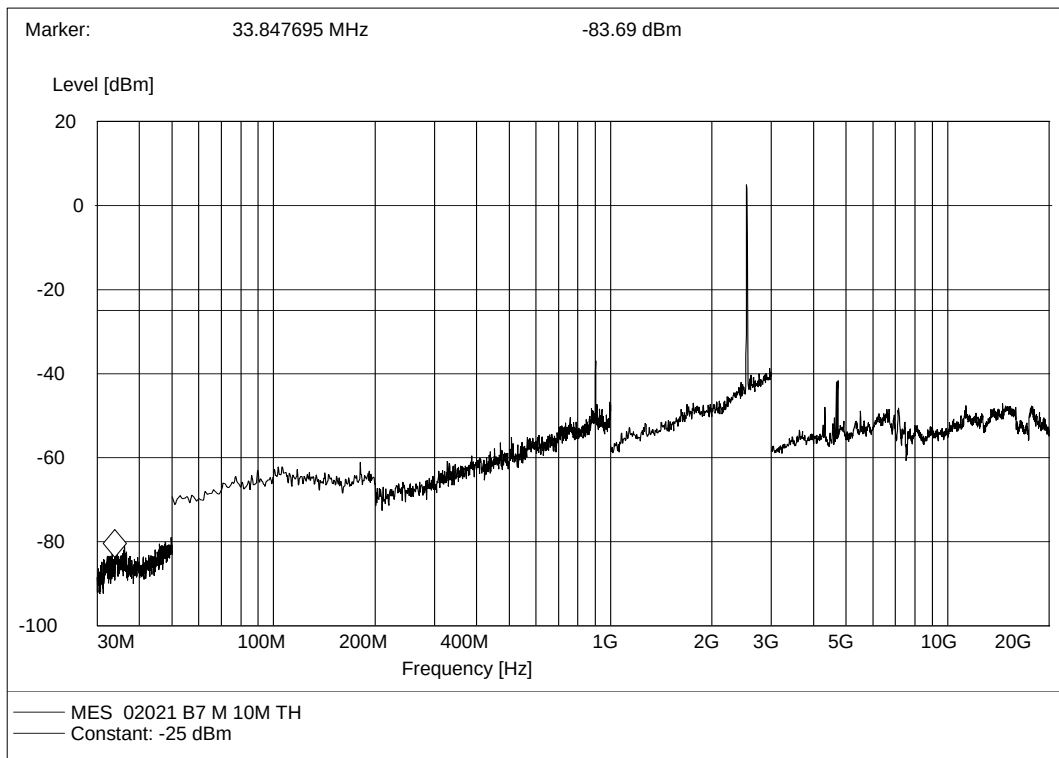
### LTE Band 5 QPSK 10MHz BW Test Antenna Vertical



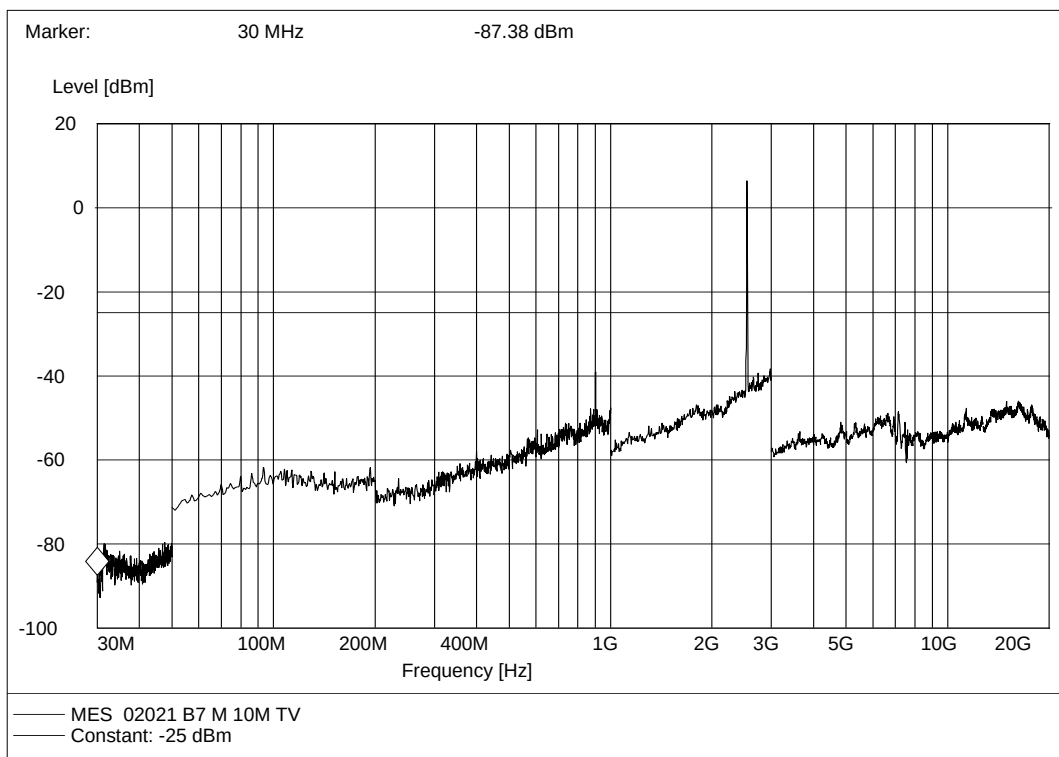
· LTE Band 7 QPSK 5MHz BW Test Antenna Horizontal



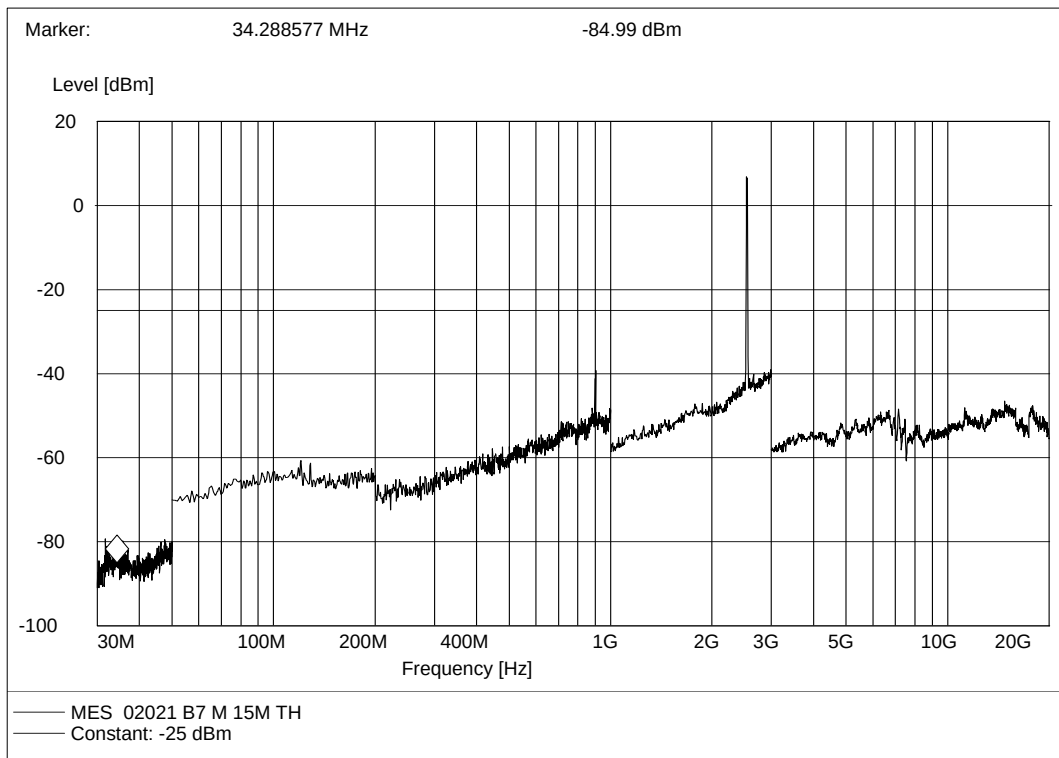
LTE Band 7 QPSK 5MHz BW Test Antenna Vertical



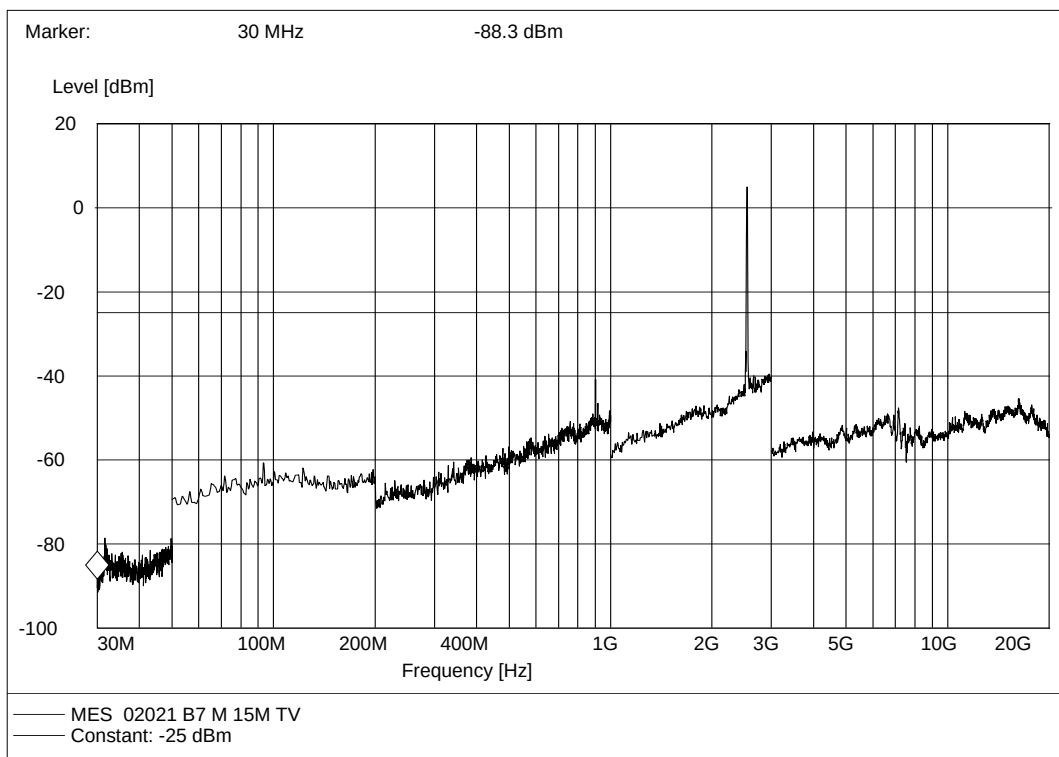
LTE Band 7 QPSK 10MHz BW Test Antenna Horizontal



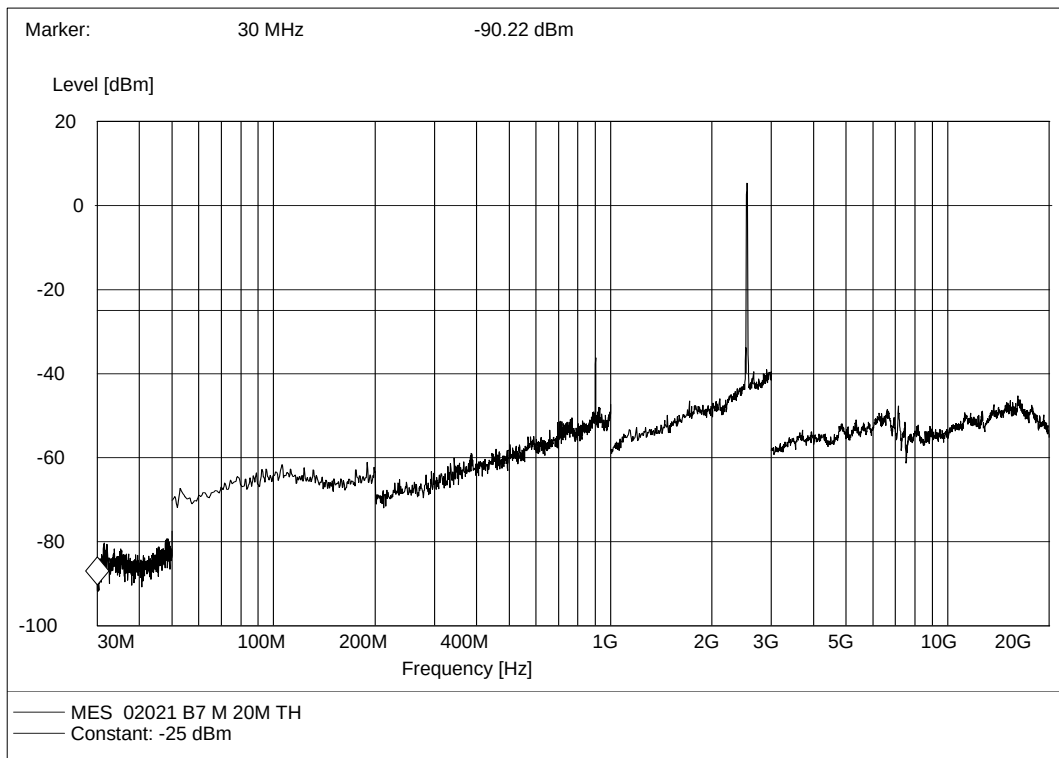
LTE Band 7 QPSK 10MHz BW Test Antenna Vertical



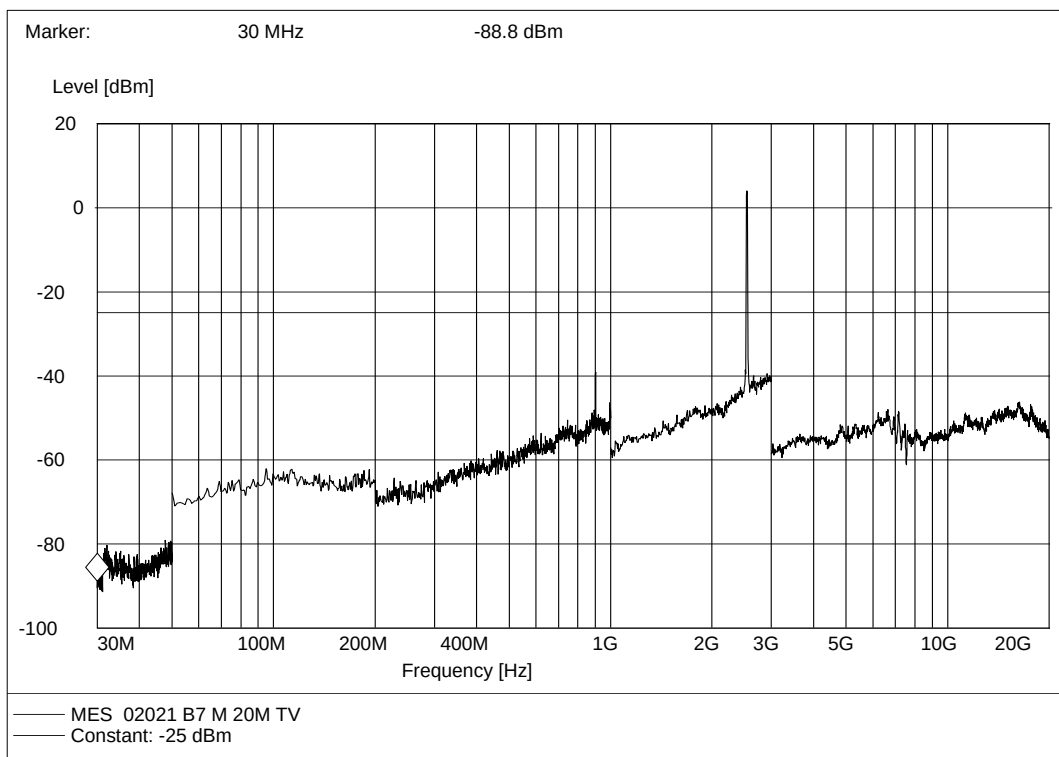
LTE Band 7 QPSK 15MHz BW Test Antenna Horizontal



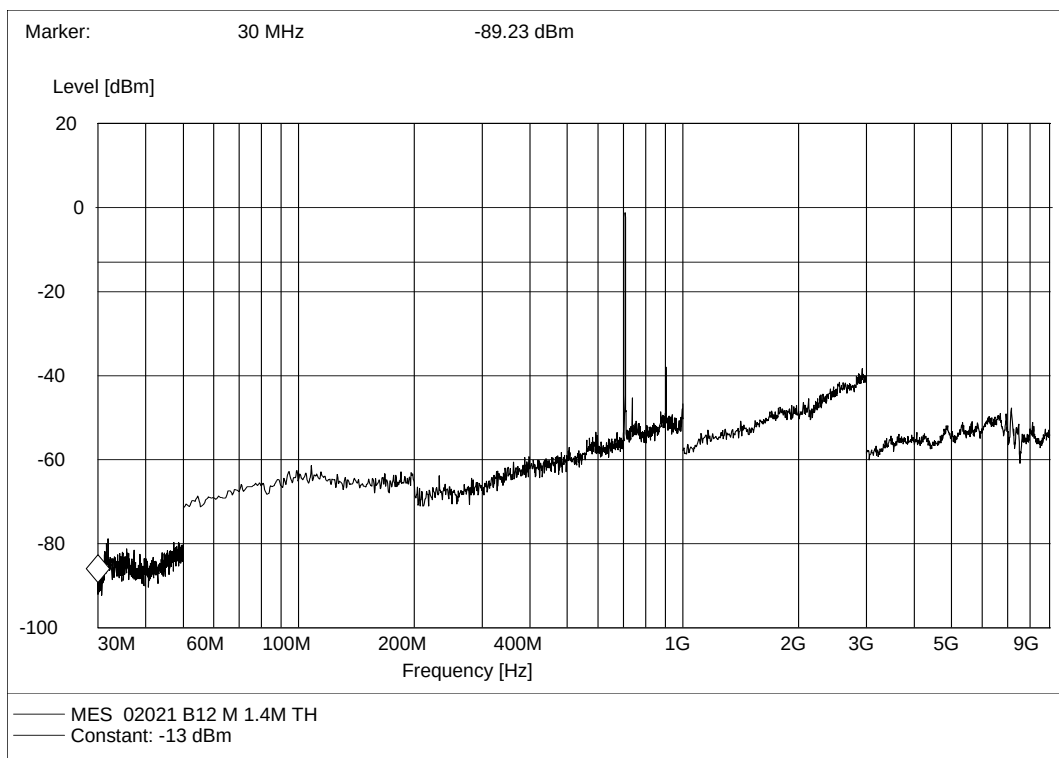
LTE Band 7 QPSK 15MHz BW Test Antenna Vertical



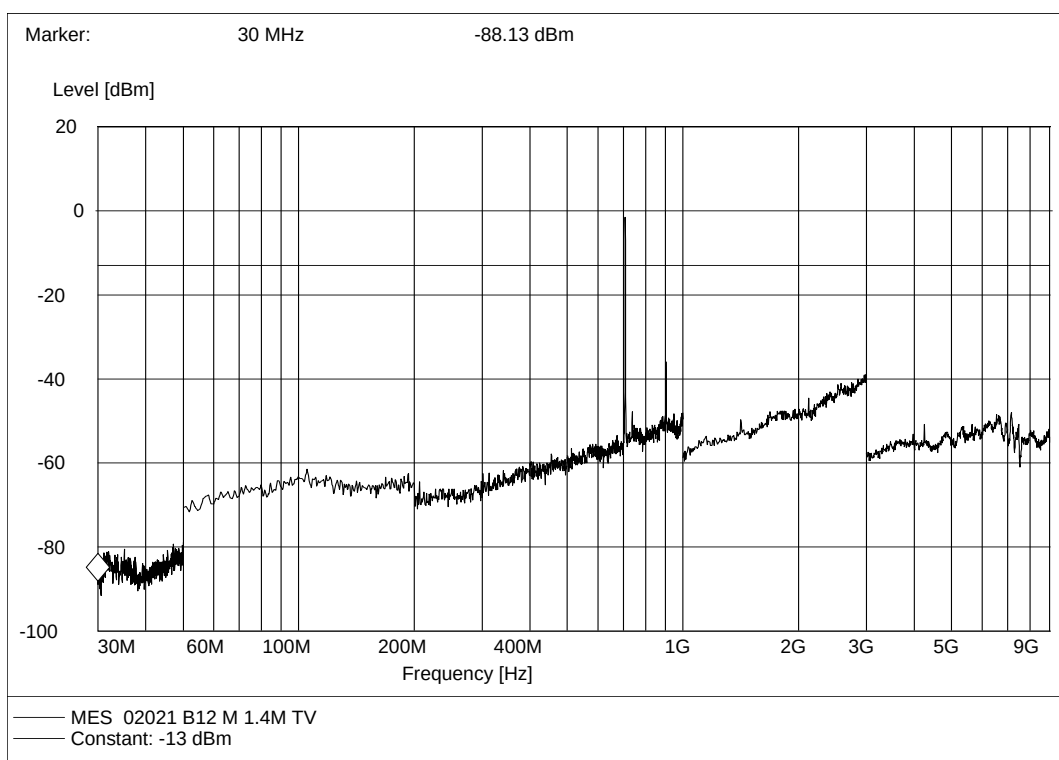
LTE Band 7 QPSK 20MHz BW Test Antenna Horizontal



LTE Band 7 QPSK 20MHz BW Test Antenna Vertical

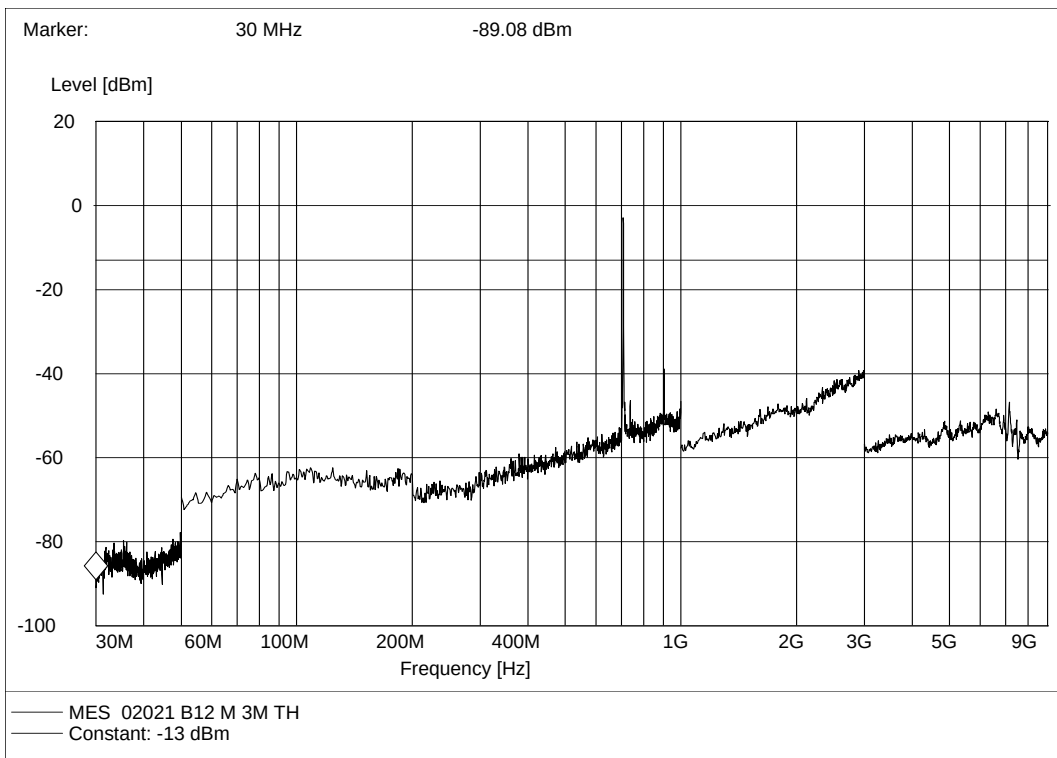


LTE Band 12 QPSK 1.4MHz BW Test Antenna Horizontal

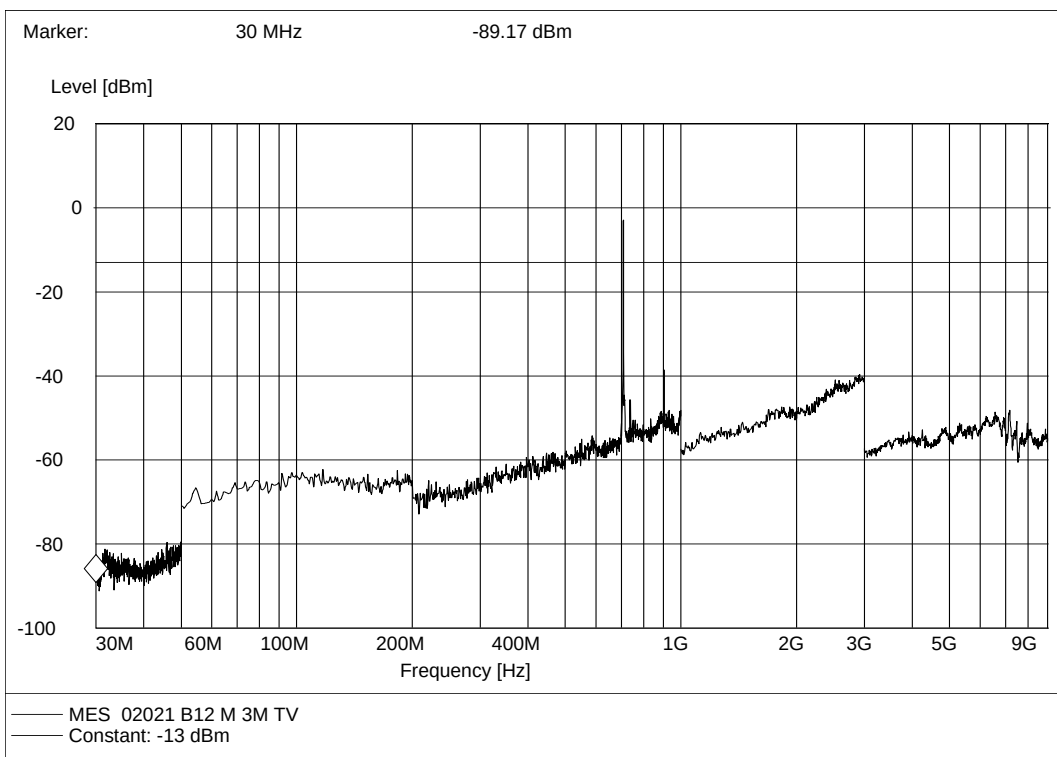


LTE Band 12 QPSK 1.4MHz BW Test Antenna Vertical

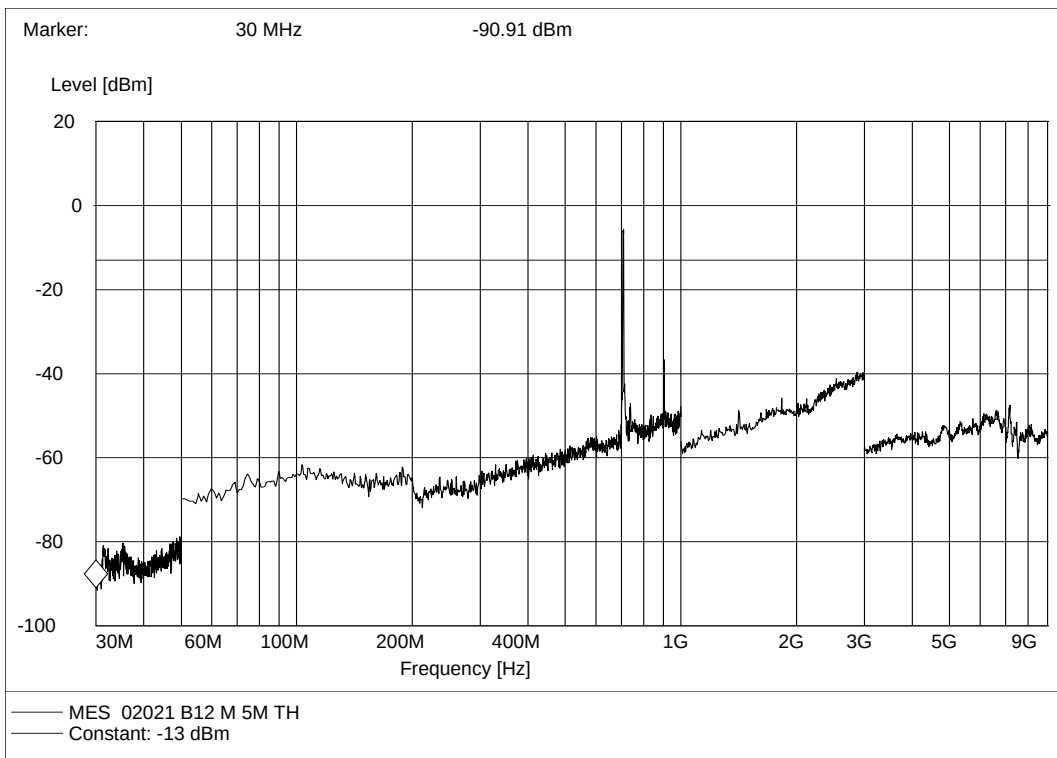




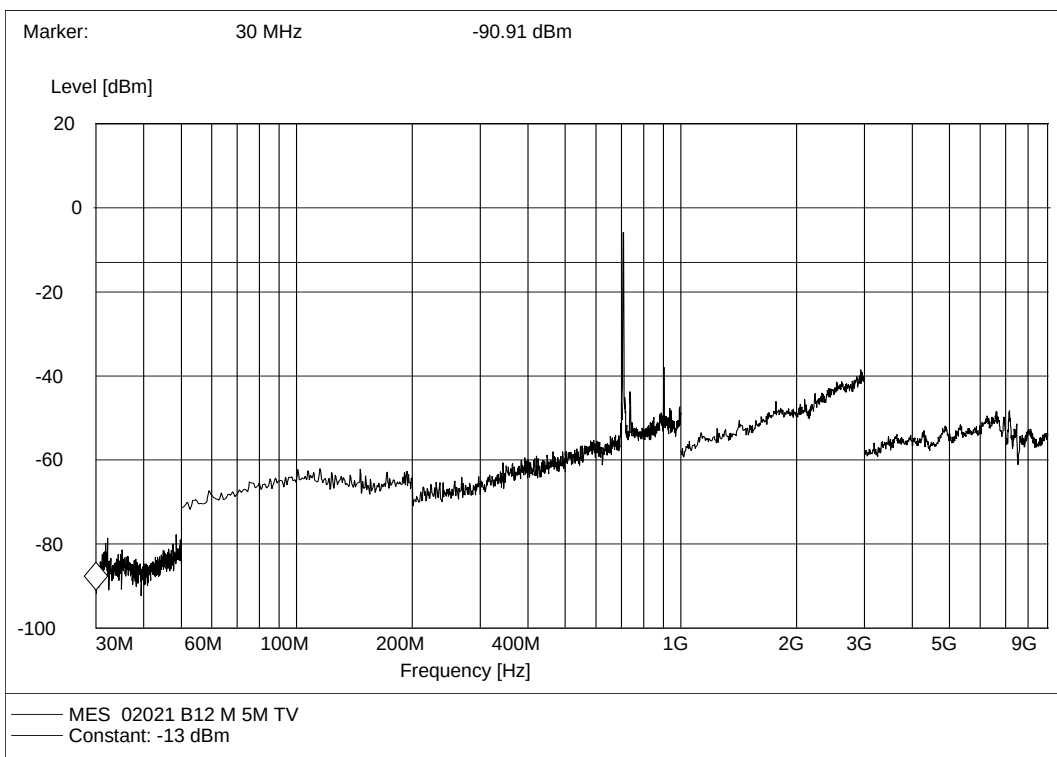
LTE Band 12 QPSK 3MHz BW Test Antenna Horizontal



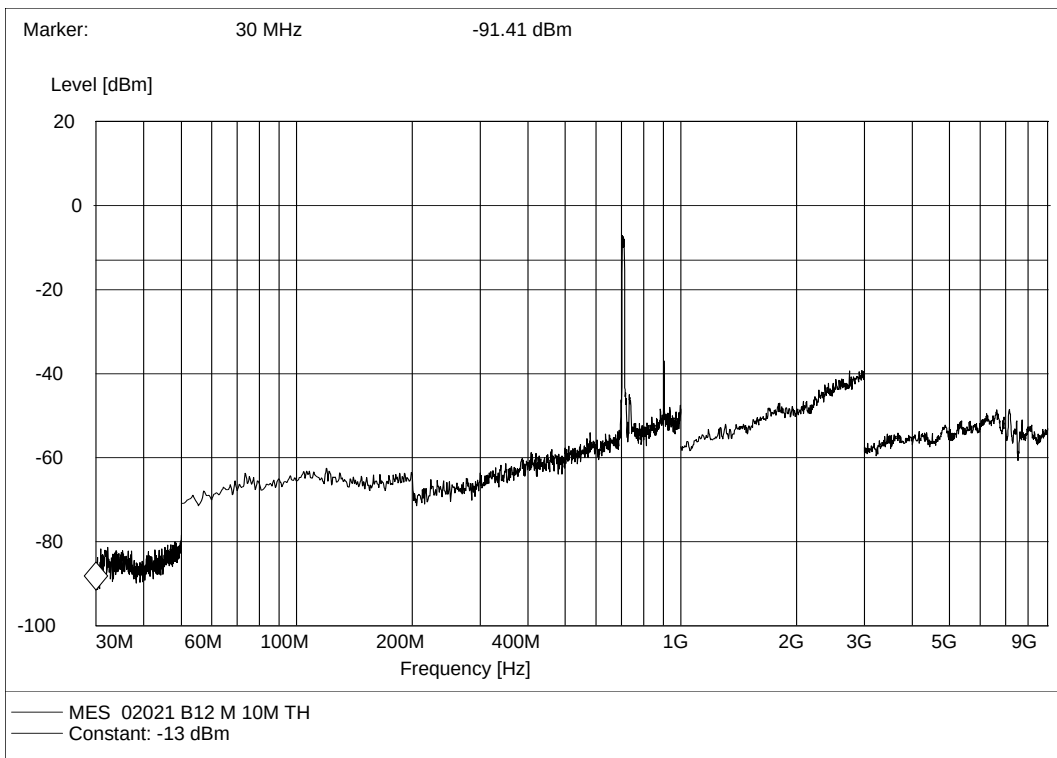
LTE Band 12 QPSK 3MHz BW Test Antenna Vertical



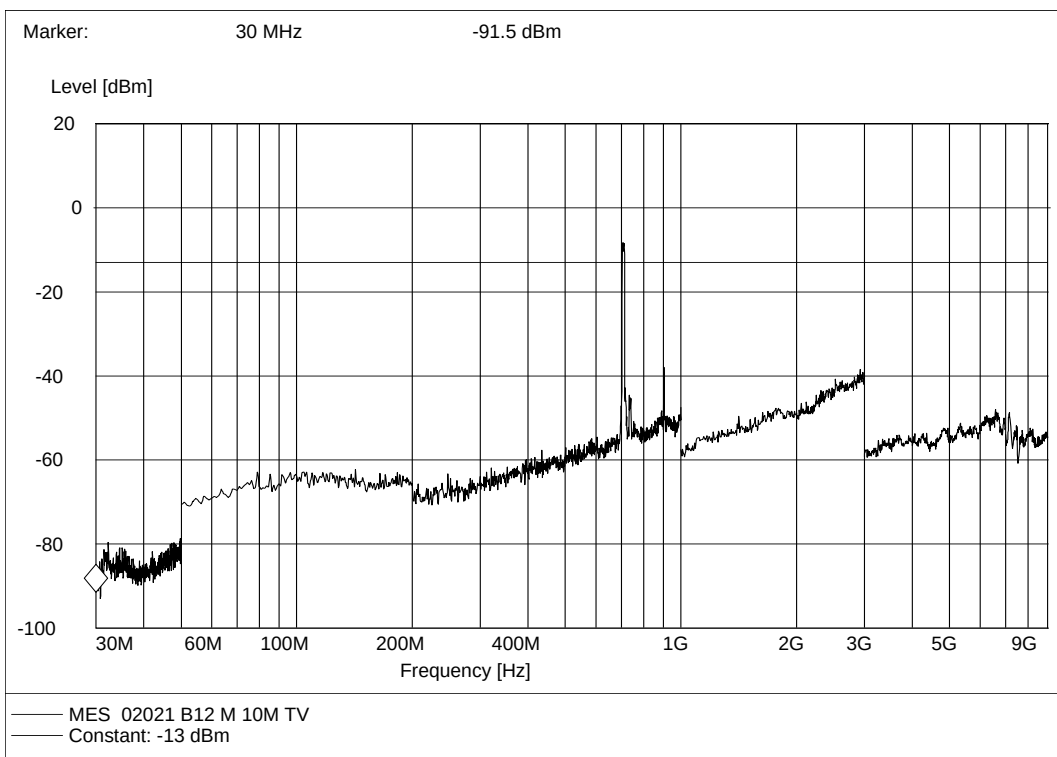
### LTE Band 12 QPSK 5MHz BW Test Antenna Horizontal



### LTE Band 12 QPSK 5MHz BW Test Antenna Vertical



LTE Band 12 QPSK 10MHz BW Test Antenna Horizontal



LTE Band 12 QPSK 10MHz BW Test Antenna Vertical

**3. LIST OF MEASURING EQUIPMENT**

| Description                    | Manufacturer  | Model                 | Serial No.    | Test Date  | Due Date   | Remark    |
|--------------------------------|---------------|-----------------------|---------------|------------|------------|-----------|
| EMI Test Receiver              | R&S           | ESIB26                | A0304218      | 2016.06.02 | 2017.06.01 | Radiation |
| Full-Anechoic Chamber          | Albatross     | 12.8m*6.8m*6.4m       | A0412372      | 2016.06.02 | 2017.06.01 | Radiation |
| Loop Antenna                   | Schwarz beck  | HFH2-Z2               | 100047        | 2016.06.02 | 2017.06.01 | Radiation |
| Bilog Antenna                  | Schwarzbeck   | VULB 9163             | 9163-274      | 2016.06.02 | 2017.06.01 | Radiation |
| Double ridge horn antenna      | R&S           | HF906                 | 100150        | 2016.06.02 | 2017.06.01 | Radiation |
| Ultra-wideband antenna         | R&S           | HL562                 | 100089        | 2016.06.02 | 2017.06.01 | Radiation |
| Test Antenna – Horn (18-25GHz) | ETS           | 3160-09               | A0902607      | 2016.06.02 | 2017.06.01 | Radiation |
| Amplifier 20M~3GHz             | R&S           | PAP-0203H             | 22018         | 2016.06.02 | 2017.06.01 | Radiation |
| Ampilier 1G~18GHz              | R&S           | MITEQ AFS42-00101 800 | 25-S-42       | 2016.06.02 | 2017.06.01 | Radiation |
| Ampilier 18G~40GHz             | R&S           | JS42-180026 00-28-5A  | 12111.0980.00 | 2016.06.02 | 2017.06.01 | Radiation |
| Spectrum Analyzer              | R&S           | FSP40                 | 100341        | 2016.05.05 | 2017.05.04 | Conducted |
| Power Meter                    | R&S           | NRP2                  | 1020.1809.02  | 2016.06.02 | 2017.06.01 | Conducted |
| Power Sensor                   | R&S           | NRP-Z81               | 823.3618.03   | 2016.06.02 | 2017.06.01 | Conducted |
| System Simulator               | R&S           | CMW500                | 148888        | 2016.06.02 | 2017.06.01 | Conducted |
| LISN                           | ROHDE&SCHWARZ | ESH2-Z5               | A0304221      | 2016.06.02 | 2017.06.01 | Conducted |
| Test Receiver                  | R&S           | ESCS30                | A0304260      | 2016.06.02 | 2017.06.01 | Conducted |
| Cable                          | SUNHNER       | SUCOFLEX 100          | /             | 2016.06.02 | 2017.06.01 | Radiation |
| Cable                          | SUNHNER       | SUCOFLEX 104          | /             | 2016.06.02 | 2017.06.01 | Radiation |

#### 4. UNCERTAINTY OF EVALUATION

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2

| Measurement         | Frequency    | Uncertainty |
|---------------------|--------------|-------------|
| Conducted emissions | 9kHz~30MHz   | 2.35dB      |
| Radiated emissions  | 9KHz~1000MHz | 2.45dB      |
|                     | 1G~18GHz     | 2.21dB      |
|                     | 18G~40GHz    | 1.96dB      |
| RF Conducted        | 9kHz~40MHz   | 1.60dB      |

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$ .

**\*\* END OF REPORT \*\***