

## Appendix A \_ Conducted Test Data

### A1 Conducted output power and EIRP

| Band  | Bandwidth<br>(MHz) | UL<br>Channel | RB<br>Size | RB<br>Position | Modulation | Power<br>(dBm) | Gain<br>(dBi) | EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) | Verdict |
|-------|--------------------|---------------|------------|----------------|------------|----------------|---------------|---------------|------------------------|---------|
| Band7 | 5                  | 20775         | 1          | #0             | QAM16      | 21.74          | -5.5          | 16.24         | 33                     | PASS    |
| Band7 | 5                  | 20775         | 1          | #Mid           | QAM16      | <b>22.14</b>   | -5.5          | 16.64         | 33                     | PASS    |
| Band7 | 5                  | 20775         | 1          | #Max           | QAM16      | 21.78          | -5.5          | 16.28         | 33                     | PASS    |
| Band7 | 5                  | 20775         | 12         | #0             | QAM16      | 20.63          | -5.5          | 15.13         | 33                     | PASS    |
| Band7 | 5                  | 20775         | 12         | #Mid           | QAM16      | 20.50          | -5.5          | 15.00         | 33                     | PASS    |
| Band7 | 5                  | 20775         | 12         | #Max           | QAM16      | 20.59          | -5.5          | 15.09         | 33                     | PASS    |
| Band7 | 5                  | 20775         | 25         | #0             | QAM16      | 20.70          | -5.5          | 15.2          | 33                     | PASS    |
| Band7 | 5                  | 21100         | 1          | #0             | QAM16      | 21.92          | -5.5          | 16.42         | 33                     | PASS    |
| Band7 | 5                  | 21100         | 1          | #Mid           | QAM16      | 21.90          | -5.5          | 16.4          | 33                     | PASS    |
| Band7 | 5                  | 21100         | 1          | #Max           | QAM16      | 21.80          | -5.5          | 16.3          | 33                     | PASS    |
| Band7 | 5                  | 21100         | 12         | #0             | QAM16      | 20.69          | -5.5          | 15.19         | 33                     | PASS    |
| Band7 | 5                  | 21100         | 12         | #Mid           | QAM16      | 20.89          | -5.5          | 15.39         | 33                     | PASS    |
| Band7 | 5                  | 21100         | 12         | #Max           | QAM16      | 20.91          | -5.5          | 15.41         | 33                     | PASS    |
| Band7 | 5                  | 21100         | 25         | #0             | QAM16      | 21.16          | -5.5          | 15.66         | 33                     | PASS    |
| Band7 | 5                  | 21425         | 1          | #0             | QAM16      | 22.10          | -5.5          | 16.60         | 33                     | PASS    |
| Band7 | 5                  | 21425         | 1          | #Mid           | QAM16      | 21.92          | -5.5          | 16.42         | 33                     | PASS    |
| Band7 | 5                  | 21425         | 1          | #Max           | QAM16      | 22.08          | -5.5          | 16.58         | 33                     | PASS    |
| Band7 | 5                  | 21425         | 12         | #0             | QAM16      | 20.94          | -5.5          | 15.44         | 33                     | PASS    |
| Band7 | 5                  | 21425         | 12         | #Mid           | QAM16      | 20.86          | -5.5          | 15.36         | 33                     | PASS    |
| Band7 | 5                  | 21425         | 12         | #Max           | QAM16      | 20.88          | -5.5          | 15.38         | 33                     | PASS    |
| Band7 | 5                  | 21425         | 25         | #0             | QAM16      | 20.99          | -5.5          | 15.49         | 33                     | PASS    |
| Band7 | 5                  | 20775         | 1          | #0             | QPSK       | 22.26          | -5.5          | 16.76         | 33                     | PASS    |
| Band7 | 5                  | 20775         | 1          | #Mid           | QPSK       | 22.54          | -5.5          | 17.04         | 33                     | PASS    |
| Band7 | 5                  | 20775         | 1          | #Max           | QPSK       | 22.50          | -5.5          | 17.00         | 33                     | PASS    |
| Band7 | 5                  | 20775         | 12         | #0             | QPSK       | 21.61          | -5.5          | 16.11         | 33                     | PASS    |
| Band7 | 5                  | 20775         | 12         | #Mid           | QPSK       | 21.54          | -5.5          | 16.04         | 33                     | PASS    |
| Band7 | 5                  | 20775         | 12         | #Max           | QPSK       | 21.52          | -5.5          | 16.02         | 33                     | PASS    |
| Band7 | 5                  | 20775         | 25         | #0             | QPSK       | 21.65          | -5.5          | 16.15         | 33                     | PASS    |
| Band7 | 5                  | 21100         | 1          | #0             | QPSK       | 22.97          | -5.5          | 17.47         | 33                     | PASS    |
| Band7 | 5                  | 21100         | 1          | #Mid           | QPSK       | 22.91          | -5.5          | 17.41         | 33                     | PASS    |
| Band7 | 5                  | 21100         | 1          | #Max           | QPSK       | 22.73          | -5.5          | 17.23         | 33                     | PASS    |
| Band7 | 5                  | 21100         | 12         | #0             | QPSK       | 22.02          | -5.5          | 16.52         | 33                     | PASS    |
| Band7 | 5                  | 21100         | 12         | #Mid           | QPSK       | 21.93          | -5.5          | 16.43         | 33                     | PASS    |
| Band7 | 5                  | 21100         | 12         | #Max           | QPSK       | 21.95          | -5.5          | 16.45         | 33                     | PASS    |
| Band7 | 5                  | 21100         | 25         | #0             | QPSK       | 21.99          | -5.5          | 16.49         | 33                     | PASS    |
| Band7 | 5                  | 21425         | 1          | #0             | QPSK       | 22.76          | -5.5          | 17.26         | 33                     | PASS    |
| Band7 | 5                  | 21425         | 1          | #Mid           | QPSK       | 22.94          | -5.5          | 17.44         | 33                     | PASS    |
| Band7 | 5                  | 21425         | 1          | #Max           | QPSK       | <b>22.99</b>   | -5.5          | 17.49         | 33                     | PASS    |



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|       |   |       |    |      |      |       |      |       |    |      |
|-------|---|-------|----|------|------|-------|------|-------|----|------|
| Band7 | 5 | 21425 | 12 | #0   | QPSK | 21.97 | -5.5 | 16.47 | 33 | PASS |
| Band7 | 5 | 21425 | 12 | #Mid | QPSK | 21.90 | -5.5 | 16.40 | 33 | PASS |
| Band7 | 5 | 21425 | 12 | #Max | QPSK | 21.98 | -5.5 | 16.48 | 33 | PASS |
| Band7 | 5 | 21425 | 25 | #0   | QPSK | 22.00 | -5.5 | 16.50 | 33 | PASS |

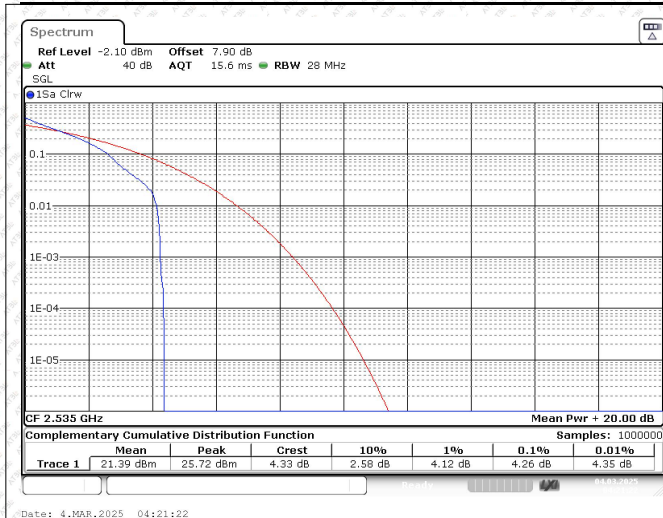
## A2 Frequency stability

| Band  | Bandwidth (MHz) | UL Channel | RB Size | RB Position | Modulation | Voltage (Vdc) | Temperature (°C) | Result (Hz) | Result (ppm) | Verdict |
|-------|-----------------|------------|---------|-------------|------------|---------------|------------------|-------------|--------------|---------|
| Band7 | 5               | 20525      | 25      | #0          | QPSK       | VL            | NT               | -0.97       | -0.001       | PASS    |
| Band7 | 5               | 20525      | 25      | #0          | QPSK       | VN            | NT               | -0.04       | 0.000        | PASS    |
| Band7 | 5               | 20525      | 25      | #0          | QPSK       | VH            | NT               | -1.26       | -0.002       | PASS    |

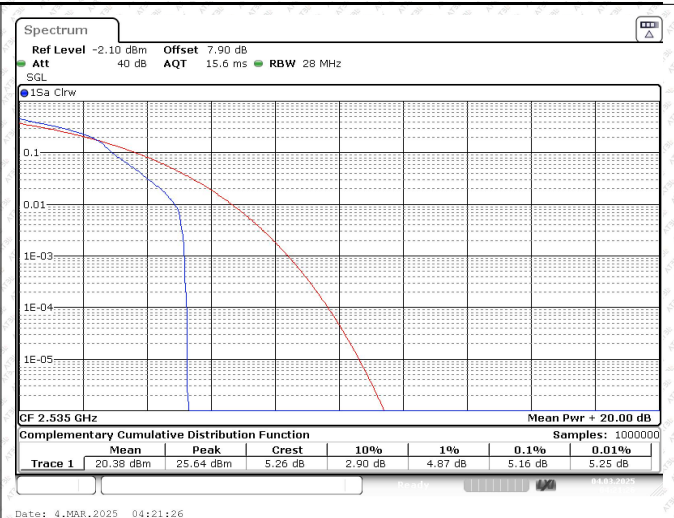
| Band  | Bandwidth (MHz) | UL Channel | RB Size | RB Position | Modulation | Voltage (Vdc) | Temperature (°C) | Result (Hz) | Result (ppm) | Verdict |
|-------|-----------------|------------|---------|-------------|------------|---------------|------------------|-------------|--------------|---------|
| Band7 | 5               | 20525      | 25      | #0          | QPSK       | NV            | -30              | -0.82       | -0.001       | PASS    |
| Band7 | 5               | 20525      | 25      | #0          | QPSK       | NV            | -20              | 1.27        | 0.002        | PASS    |
| Band7 | 5               | 20525      | 25      | #0          | QPSK       | NV            | -10              | -0.79       | -0.001       | PASS    |
| Band7 | 5               | 20525      | 25      | #0          | QPSK       | NV            | 0                | -1.59       | -0.002       | PASS    |
| Band7 | 5               | 20525      | 25      | #0          | QPSK       | NV            | 10               | -1.1        | -0.001       | PASS    |
| Band7 | 5               | 20525      | 25      | #0          | QPSK       | NV            | 20               | -0.56       | -0.001       | PASS    |
| Band7 | 5               | 20525      | 25      | #0          | QPSK       | NV            | 30               | -1.89       | -0.002       | PASS    |
| Band7 | 5               | 20525      | 25      | #0          | QPSK       | NV            | 40               | 0.41        | 0.000        | PASS    |
| Band7 | 5               | 20525      | 25      | #0          | QPSK       | NV            | 50               | 1.09        | 0.001        | PASS    |

## A3 Peak-to-Average Ratio

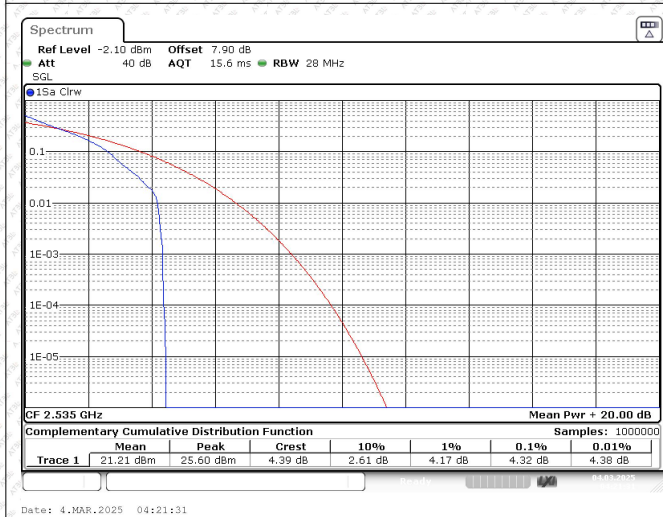
| Band  | Bandwidth (MHz) | UL Channel | RB Size | RB Position | Modulation | Result (dB) | high Limit (dB) | Verdict |
|-------|-----------------|------------|---------|-------------|------------|-------------|-----------------|---------|
| Band7 | 5               | 21100      | 1       | #0          | QAM16      | 5.16        | 13              | PASS    |
| Band7 | 10              | 21100      | 1       | #0          | QAM16      | 5.22        | 13              | PASS    |
| Band7 | 15              | 21100      | 1       | #0          | QAM16      | 5.13        | 13              | PASS    |
| Band7 | 20              | 21100      | 1       | #0          | QAM16      | 5.22        | 13              | PASS    |
| Band7 | 5               | 21100      | 1       | #0          | QPSK       | 4.26        | 13              | PASS    |
| Band7 | 10              | 21100      | 1       | #0          | QPSK       | 4.32        | 13              | PASS    |
| Band7 | 15              | 21100      | 1       | #0          | QPSK       | 4.35        | 13              | PASS    |
| Band7 | 20              | 21100      | 1       | #0          | QPSK       | 4.38        | 13              | PASS    |



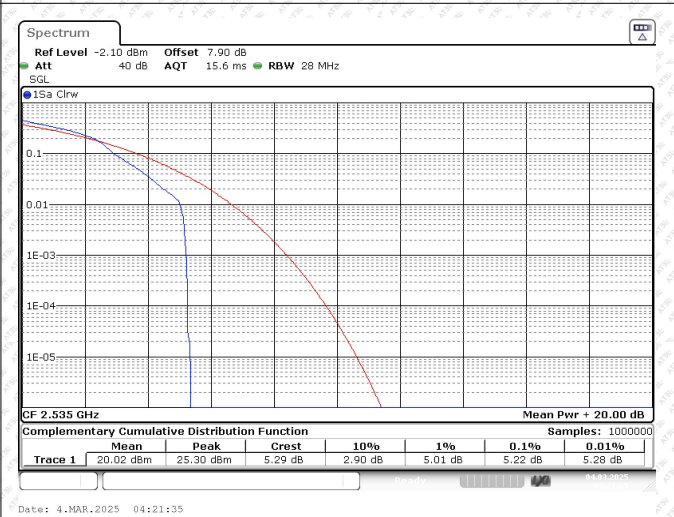
Band7 QPSK BW=5MHz Channel=21100 RB Size=1 Position=#0



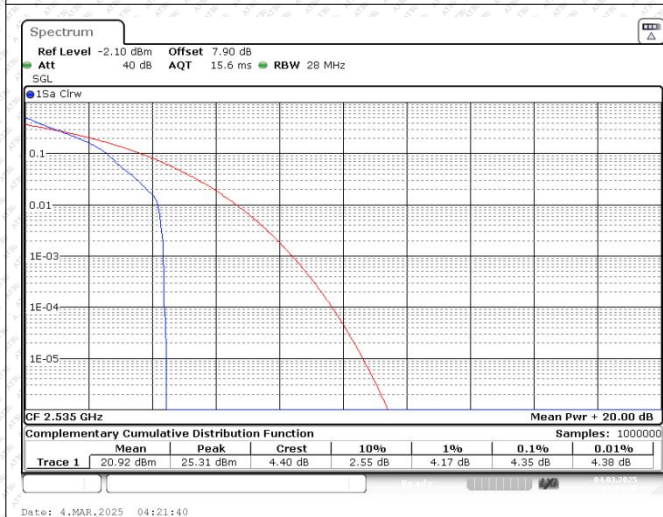
Band7 QAM16 BW=5MHz Channel=21100 RB Size=1 Position=#0



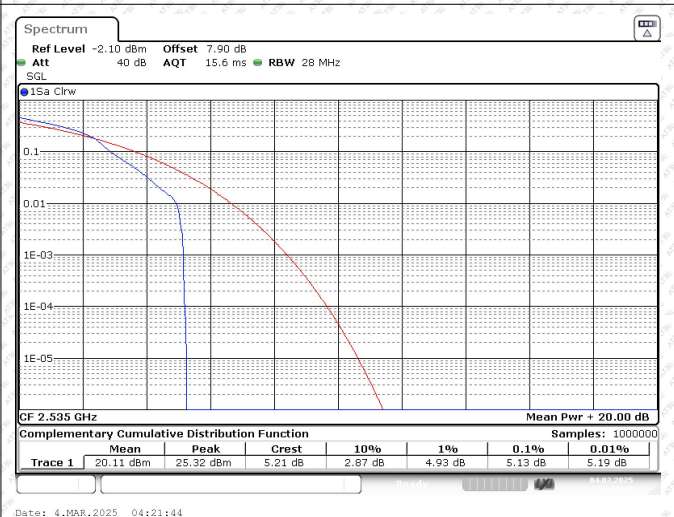
Band7 QPSK BW=10MHz Channel=21100 RB Size=1 Position=#0



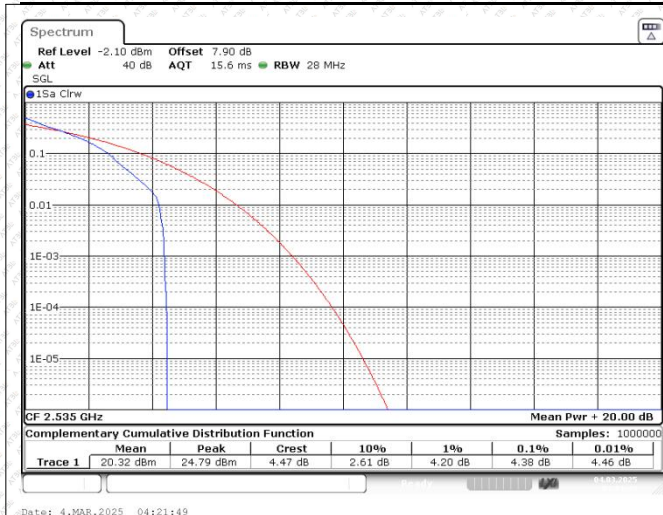
Band7 QAM16 BW=10MHz Channel=21100 RB Size=1 Position=#0



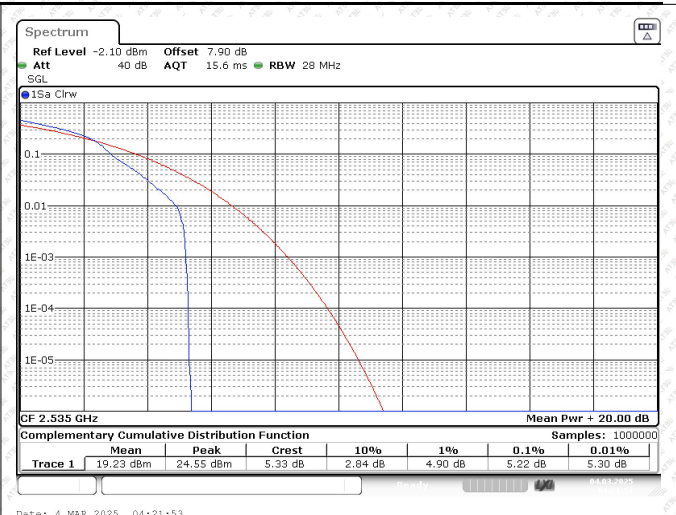
Band7 QPSK BW=15MHz Channel=21100 RB Size=1 Position=#0



Band7 QAM16 BW=15MHz Channel=21100 RB Size=1 Position=#0



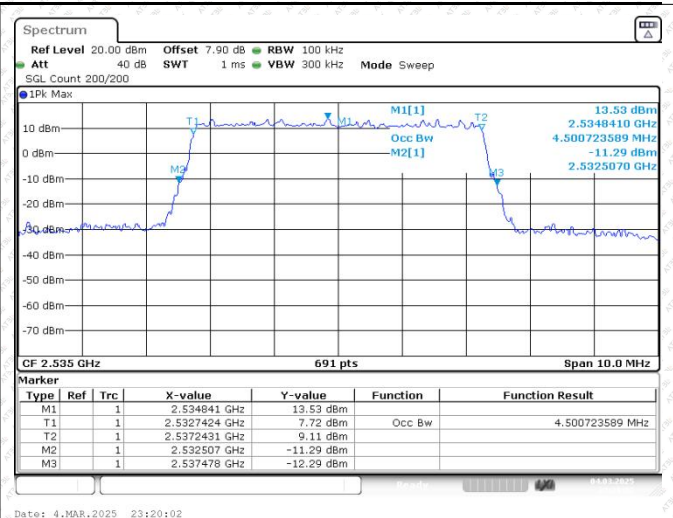
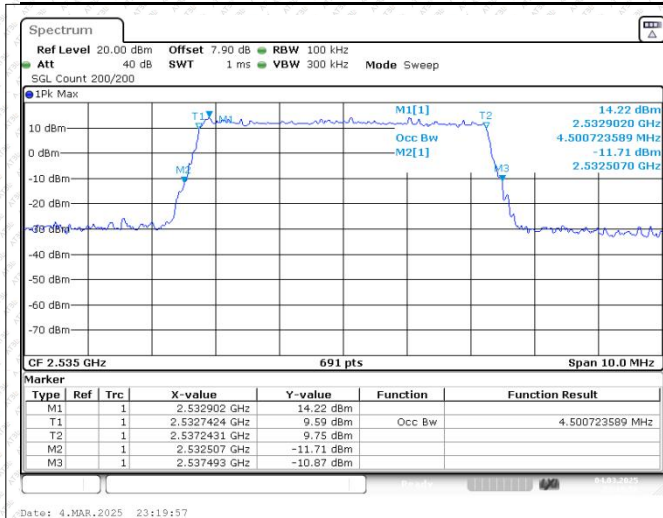
Band7 QPSK BW=20MHz Channel=21100 RB Size=1 Position=#0



Band7 QAM16 BW=20MHz Channel=21100 RB Size=1 Position=#0

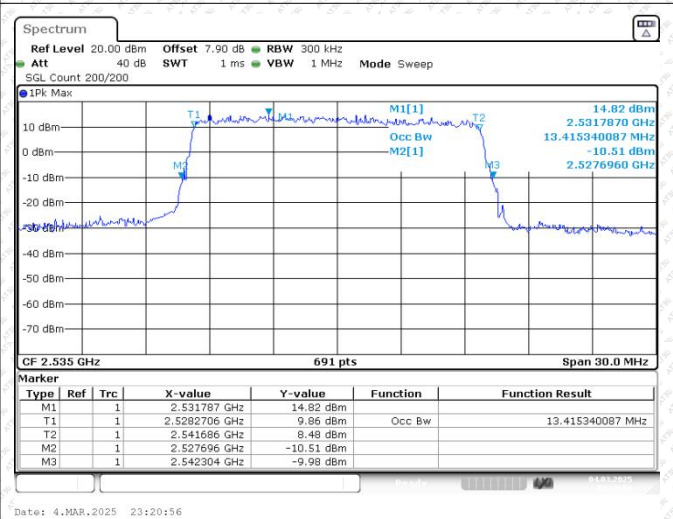
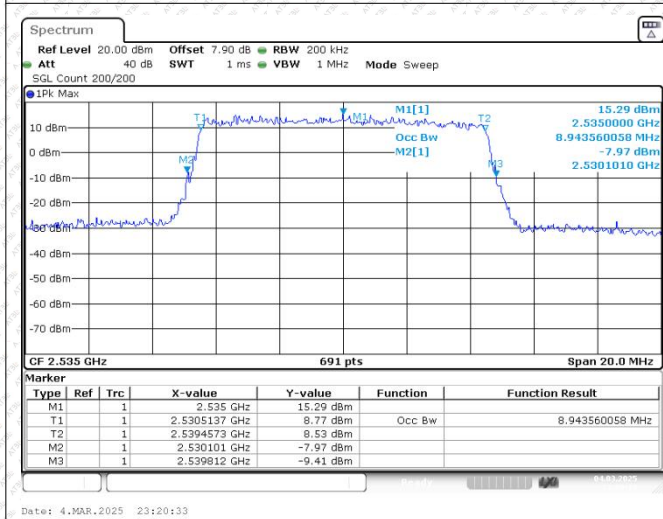
## A4 Occupied bandwidth

| Band  | Bandwidth (MHz) | UL Channel | RB Size | RB Position | Modulation | 99% OBW (MHz) | -26dB EBW (MHz) | Verdict |
|-------|-----------------|------------|---------|-------------|------------|---------------|-----------------|---------|
| Band7 | 5               | 20775      | 25      | #0          | QAM16      | 4.501         | 5.014           | PASS    |
| Band7 | 5               | 21100      | 25      | #0          | QAM16      | 4.501         | 4.971           | PASS    |
| Band7 | 5               | 21425      | 25      | #0          | QAM16      | 4.515         | 5.000           | PASS    |
| Band7 | 5               | 20775      | 25      | #0          | QPSK       | 4.501         | 4.899           | PASS    |
| Band7 | 5               | 21100      | 25      | #0          | QPSK       | 4.501         | 4.986           | PASS    |
| Band7 | 5               | 21425      | 25      | #0          | QPSK       | 4.501         | 4.971           | PASS    |
| Band7 | 10              | 20800      | 50      | #0          | QPSK       | 8.973         | 9.826           | PASS    |
| Band7 | 10              | 21100      | 50      | #0          | QPSK       | 8.944         | 9.710           | PASS    |
| Band7 | 10              | 21400      | 50      | #0          | QPSK       | 8.973         | 9.826           | PASS    |
| Band7 | 15              | 20825      | 75      | #0          | QPSK       | 13.546        | 14.696          | PASS    |
| Band7 | 15              | 21100      | 75      | #0          | QPSK       | 13.415        | 14.609          | PASS    |
| Band7 | 15              | 21375      | 75      | #0          | QPSK       | 13.459        | 14.652          | PASS    |
| Band7 | 20              | 20850      | 100     | #0          | QPSK       | 18.003        | 19.536          | PASS    |
| Band7 | 20              | 21100      | 100     | #0          | QPSK       | 17.887        | 19.246          | PASS    |
| Band7 | 20              | 21350      | 100     | #0          | QPSK       | 17.945        | 19.420          | PASS    |



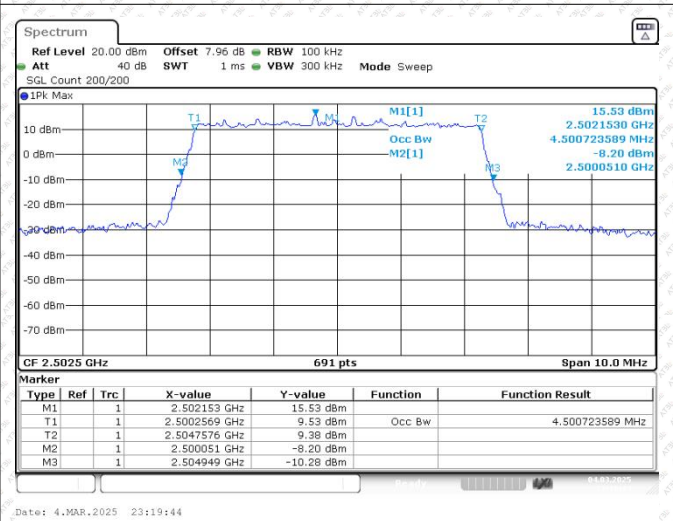
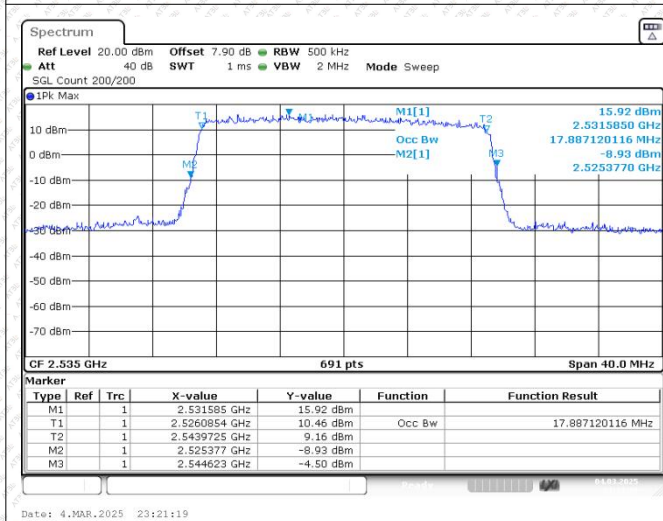
Band7 QPSK BW=5MHz Channel=21100 RB Size=25 Position=#0

Band7 QAM16 BW=5MHz Channel=21100 RB Size=25 Position=#0



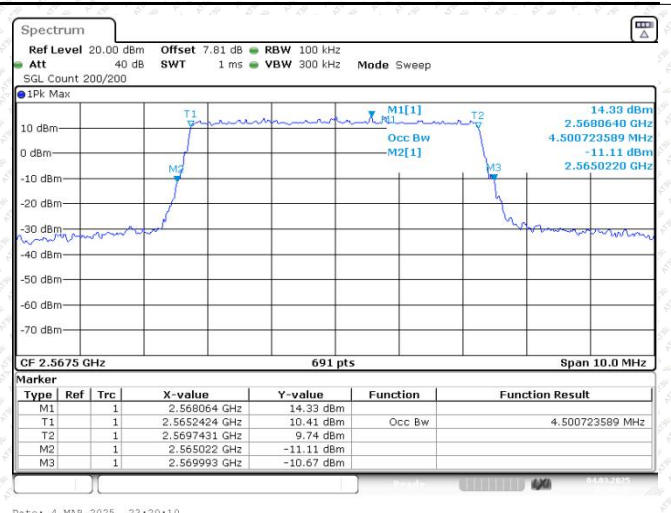
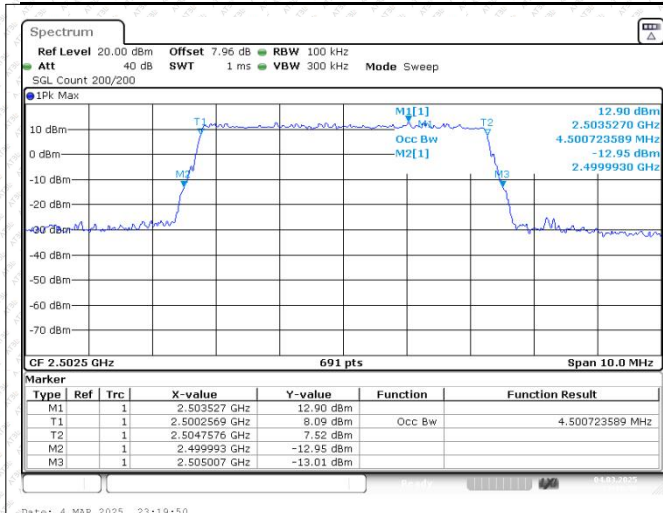
Band7 QPSK BW=10MHz Channel=21100 RB Size=50 Position=#0

Band7 QPSK BW=15MHz Channel=21100 RB Size=75 Position=#0



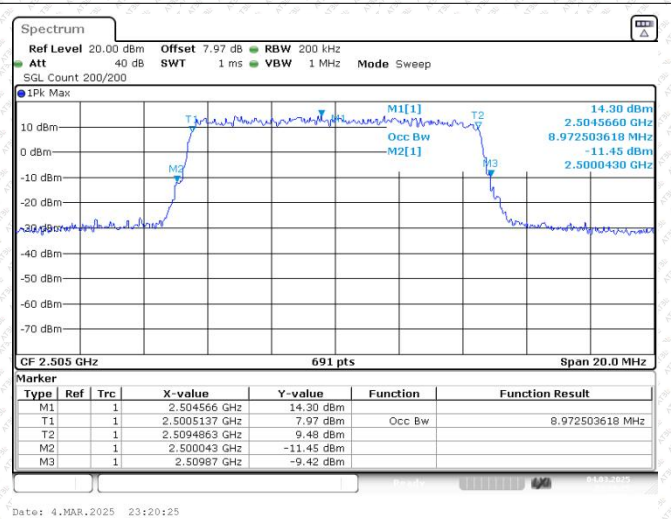
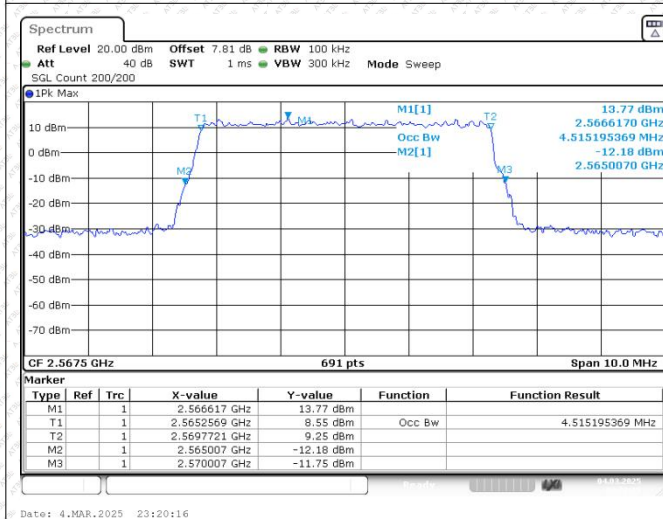
Band7 QPSK BW=20MHz Channel=21100 RB Size=100 Position=#0

Band7 QPSK BW=5MHz Channel=20775 RB Size=25 Position=#0



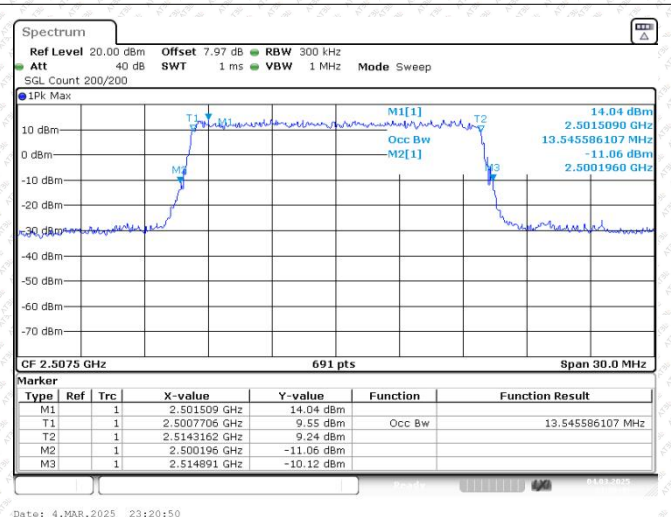
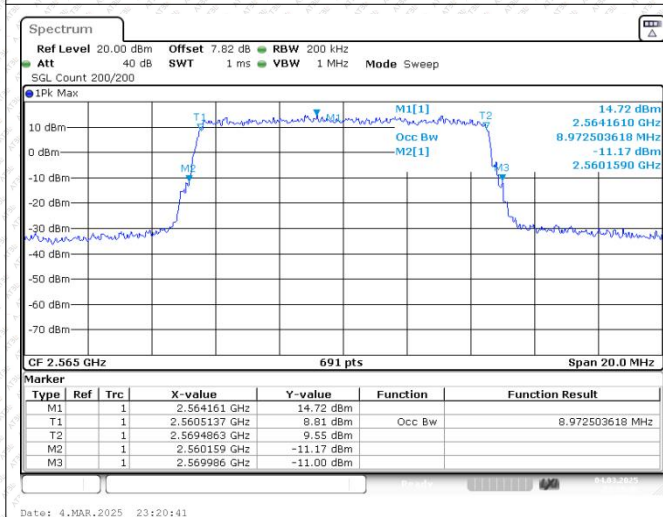
Band7 QAM16 BW=5MHz Channel=20775 RB Size=25 Position=#0

Band7 QPSK BW=5MHz Channel=21425 RB Size=25 Position=#0



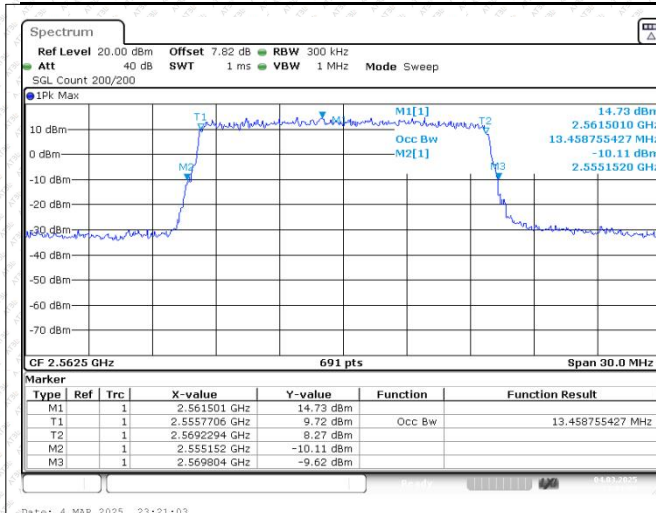
Band7 QAM16 BW=5MHz Channel=21425 RB Size=25 Position=#0

Band7 QPSK BW=10MHz Channel=20800 RB Size=50 Position=#0

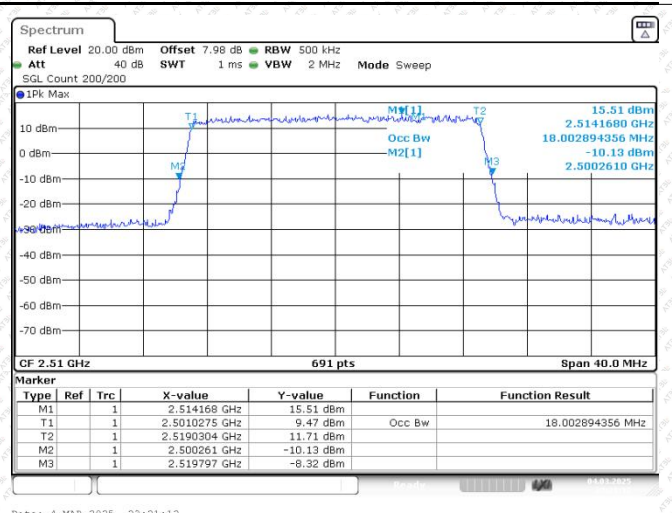


Band7 QPSK BW=10MHz Channel=21400 RB Size=50 Position=#0

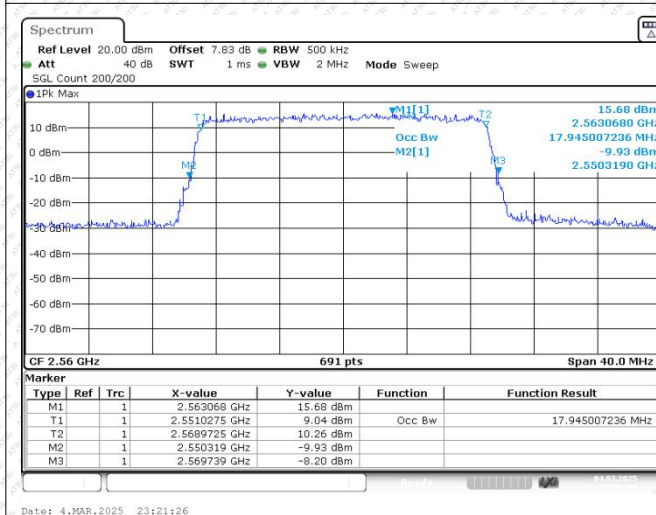
Band7 QPSK BW=15MHz Channel=20825 RB Size=75 Position=#0



Band7 QPSK BW=15MHz Channel=21375 RB Size=75 Position=#0



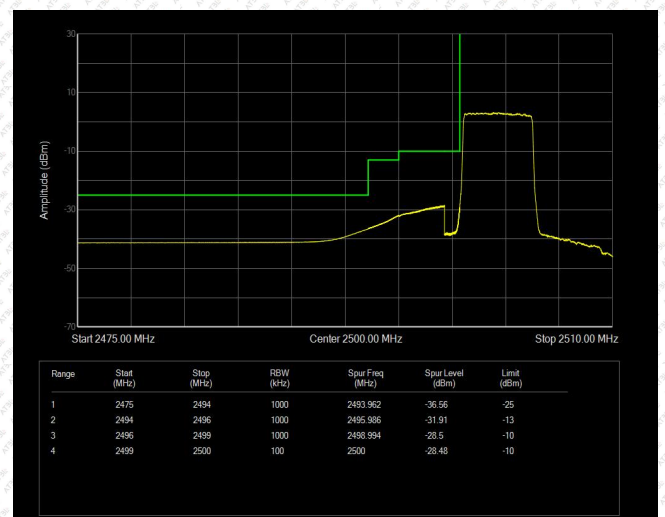
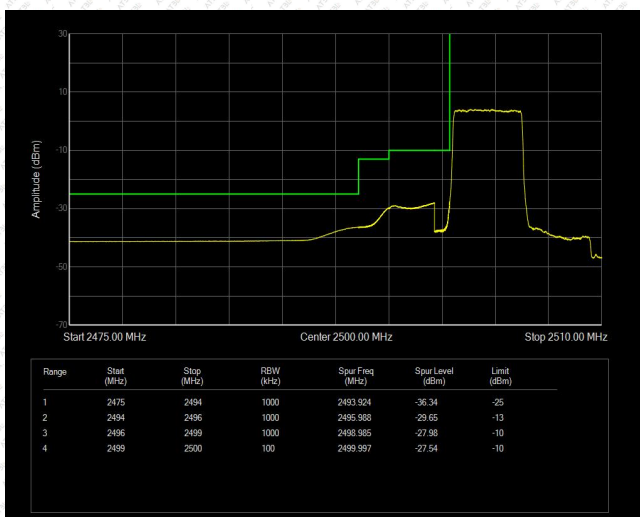
Band7 QPSK BW=20MHz Channel=20850 RB Size=100 Position=#0



Band7 QPSK BW=20MHz Channel=21350 RB Size=100 Position=#0

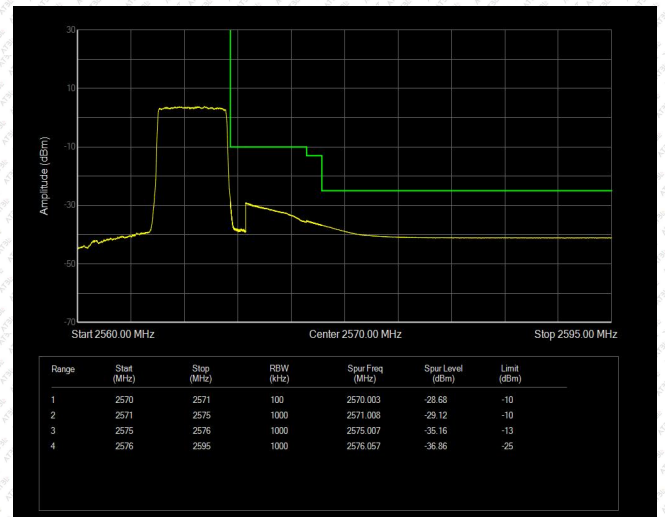
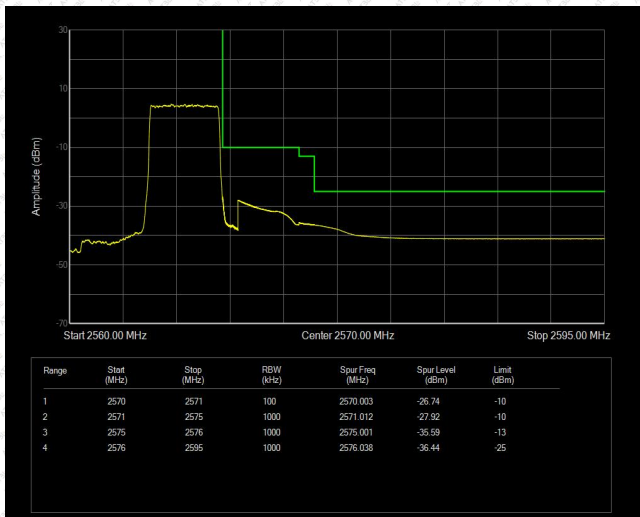
## A5 Band edge

| Band  | Bandwidth<br>(MHz) | UL<br>Channel | RB<br>Size | RB<br>Position | Modulation | Spur Freq<br>(MHz) | Spur Level<br>(dBm) | Limit<br>(dBm) | Verdict |
|-------|--------------------|---------------|------------|----------------|------------|--------------------|---------------------|----------------|---------|
| Band7 | 5                  | 20775         | 25         | #0             | QAM16      | 2493.96            | -36.56              | -25            | PASS    |
| Band7 | 5                  | 21425         | 25         | #0             | QAM16      | 2576.06            | -36.86              | -25            | PASS    |
| Band7 | 5                  | 20775         | 25         | #0             | QPSK       | 2493.92            | -36.34              | -25            | PASS    |
| Band7 | 5                  | 21425         | 25         | #0             | QPSK       | 2576.04            | -36.44              | -25            | PASS    |
| Band7 | 10                 | 20800         | 50         | #0             | QPSK       | 2489.63            | -38.67              | -25            | PASS    |
| Band7 | 10                 | 21400         | 50         | #0             | QPSK       | 2580.02            | -39.00              | -25            | PASS    |
| Band7 | 15                 | 20825         | 75         | #0             | QPSK       | 2484.75            | -39.40              | -25            | PASS    |
| Band7 | 15                 | 21375         | 75         | #0             | QPSK       | 2585.02            | -39.96              | -25            | PASS    |
| Band7 | 20                 | 20850         | 100        | #0             | QPSK       | 2479.94            | -40.67              | -25            | PASS    |
| Band7 | 20                 | 21350         | 100        | #0             | QPSK       | 2590.09            | -40.76              | -25            | PASS    |



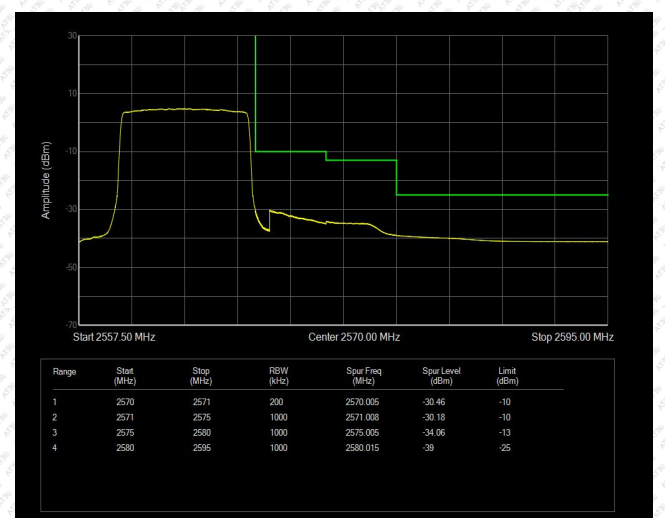
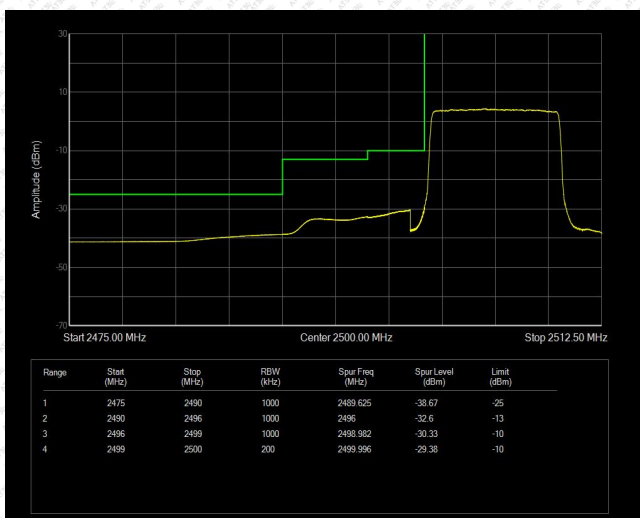
Band7 QPSK BW=5MHz Channel=20775 RB Size=25 Position=#0

Band7 QAM16 BW=5MHz Channel=20775 RB Size=25 Position=#0



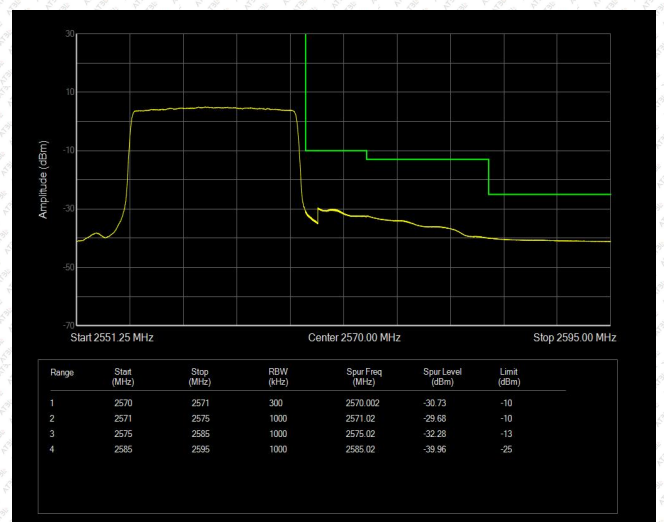
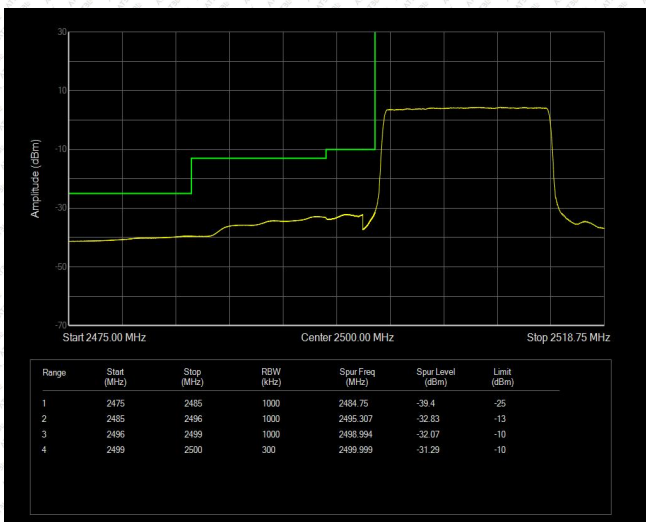
Band7 QPSK BW=5MHz Channel=21425 RB Size=25 Position=#0

Band7 QAM16 BW=5MHz Channel=21425 RB Size=25 Position=#0



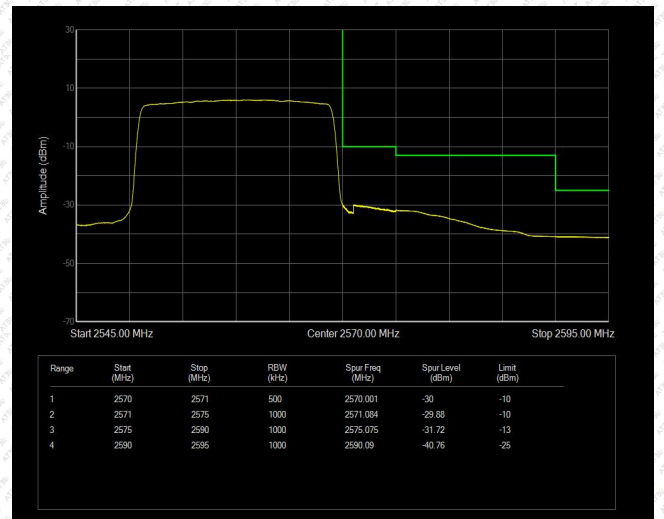
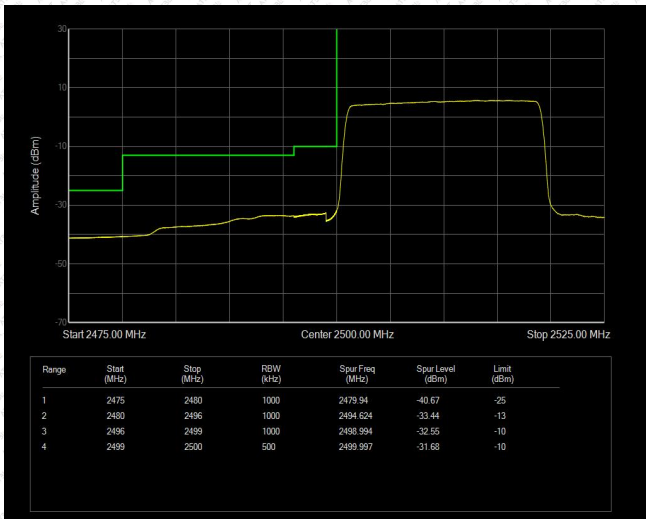
Band7 QPSK BW=10MHz Channel=20800 RB Size=50 Position=#0

Band7 QPSK BW=10MHz Channel=21400 RB Size=50 Position=#0



Band7 QPSK BW=15MHz Channel=20825 RB Size=75 Position=#0

Band7 QPSK BW=15MHz Channel=21375 RB Size=75 Position=#0

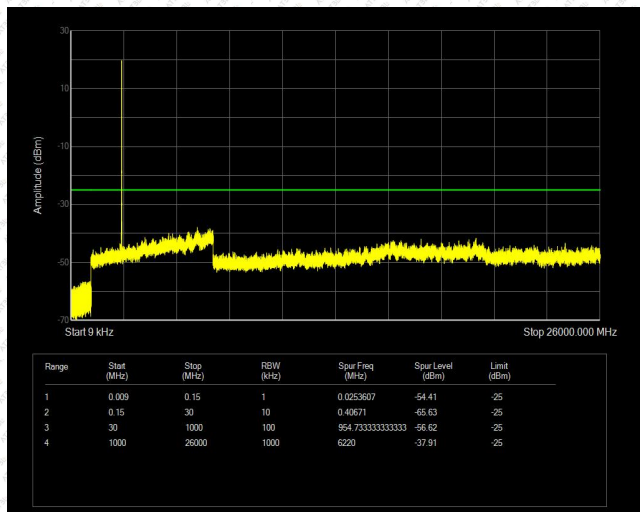


Band7 QPSK BW=20MHz Channel=20850 RB Size=100 Position=#0

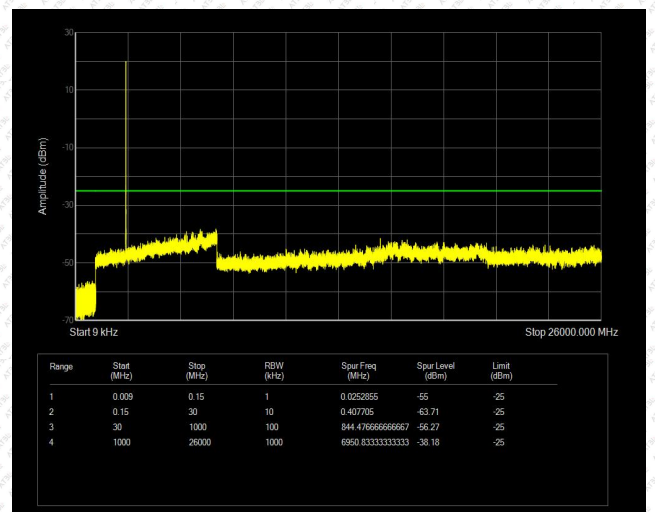
Band7 QPSK BW=20MHz Channel=21350 RB Size=100 Position=#0

## A6 Out-of-band emissions

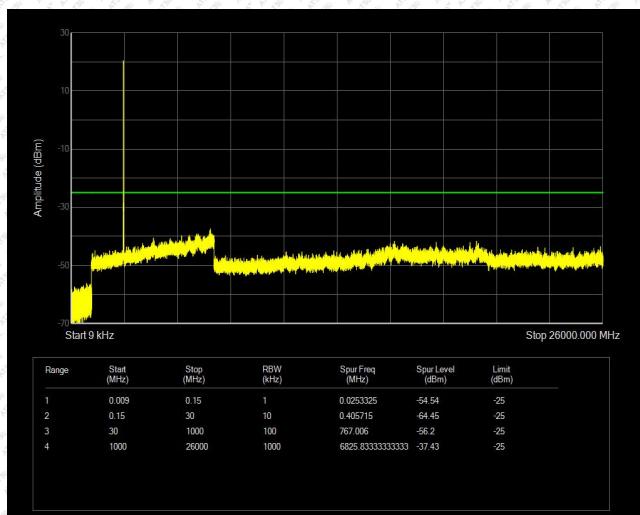
| Band  | Bandwidth<br>(MHz) | UL<br>Channel | RB<br>Size | RB<br>Position | Modulation | Spur Freq<br>(MHz) | Spur Level<br>(dBm) | Limit<br>(dBm) | Verdict |
|-------|--------------------|---------------|------------|----------------|------------|--------------------|---------------------|----------------|---------|
| Band7 | 5                  | 20775         | 25         | #0             | QAM16      | 6950.83            | -38.18              | -25            | PASS    |
| Band7 | 5                  | 21425         | 25         | #0             | QAM16      | 6953.33            | -38.78              | -25            | PASS    |
| Band7 | 5                  | 20775         | 25         | #0             | QPSK       | 6220.00            | -37.91              | -25            | PASS    |
| Band7 | 5                  | 21425         | 25         | #0             | QPSK       | 6825.83            | -37.43              | -25            | PASS    |
| Band7 | 10                 | 20800         | 50         | #0             | QPSK       | 6825.00            | -37.92              | -25            | PASS    |
| Band7 | 10                 | 21400         | 50         | #0             | QPSK       | 6824.17            | -36.75              | -25            | PASS    |
| Band7 | 15                 | 20825         | 75         | #0             | QPSK       | 6233.33            | -38.52              | -25            | PASS    |
| Band7 | 15                 | 21375         | 75         | #0             | QPSK       | 6174.17            | -37.96              | -25            | PASS    |
| Band7 | 20                 | 20850         | 100        | #0             | QPSK       | 6862.50            | -37.42              | -25            | PASS    |
| Band7 | 20                 | 21350         | 100        | #0             | QPSK       | 6720.00            | -37.97              | -25            | PASS    |



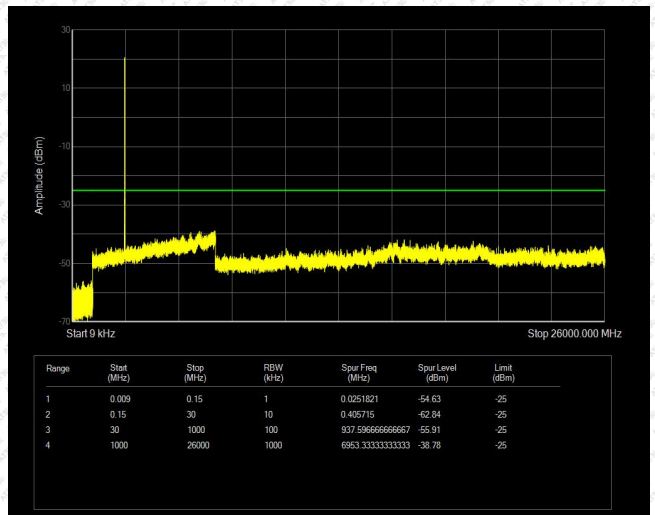
Band7 QPSK BW=5MHz Channel=20775 RB Size=25 Position=#0



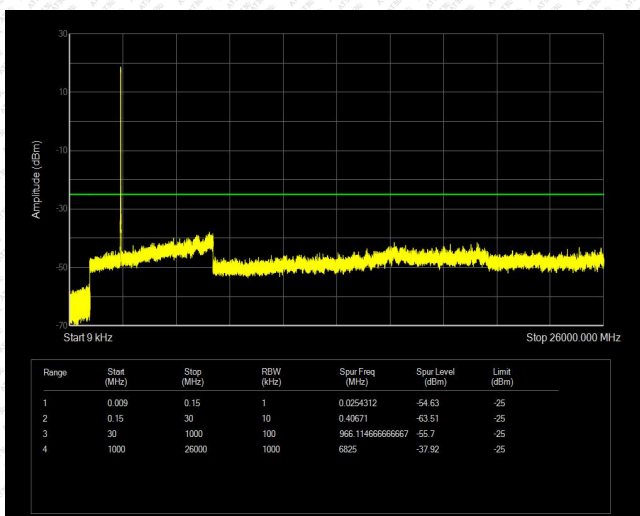
Band7 QAM16 BW=5MHz Channel=20775 RB Size=25 Position=#0



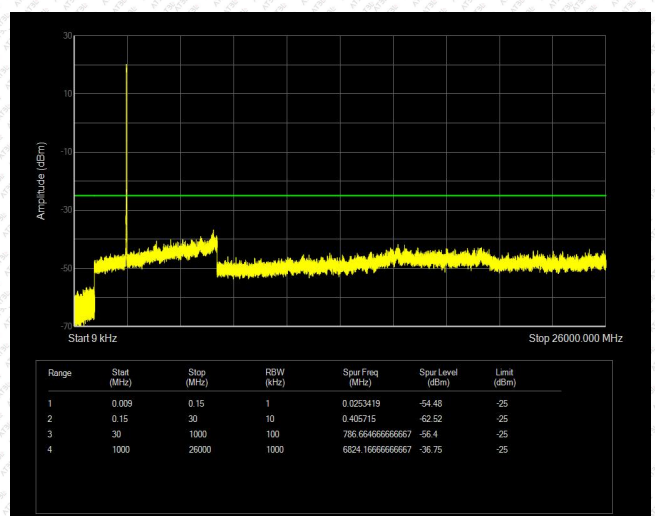
Band7 QPSK BW=5MHz Channel=21425 RB Size=25 Position=#0



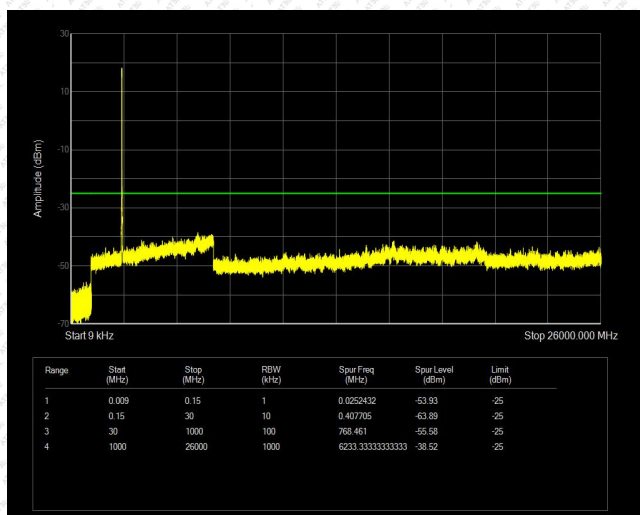
Band7 QAM16 BW=5MHz Channel=21425 RB Size=25 Position=#0



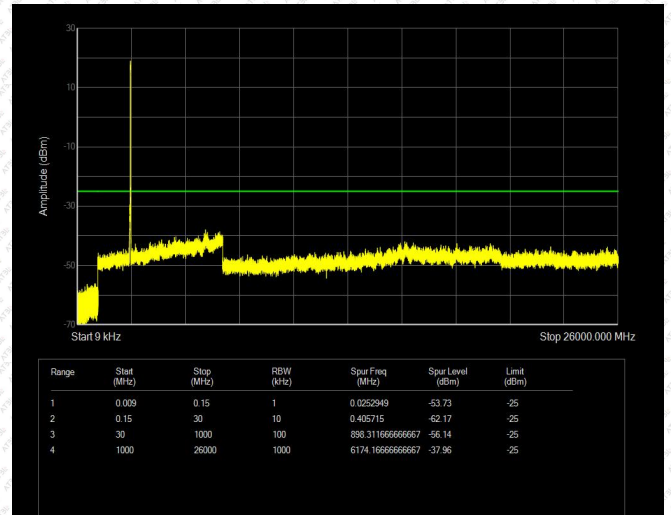
Band7 QPSK BW=10MHz Channel=20800 RB Size=50 Position=#0



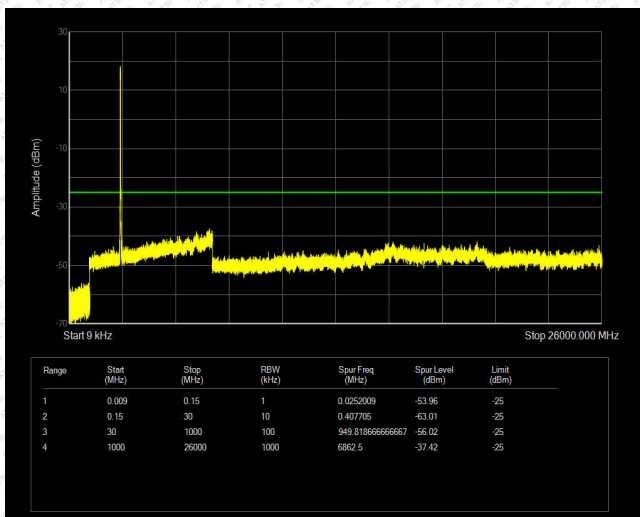
Band7 QPSK BW=10MHz Channel=21400 RB Size=50 Position=#0



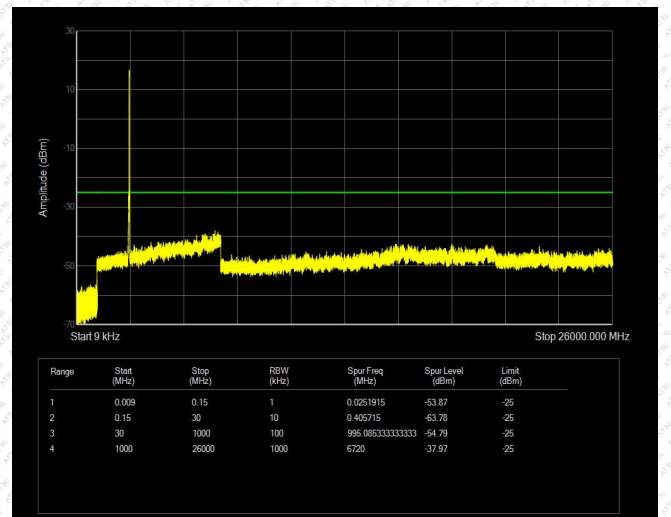
Band7 QPSK BW=15MHz Channel=20825 RB Size=75 Position=#0



Band7 QPSK BW=15MHz Channel=21375 RB Size=75 Position=#0



Band7 QPSK BW=20MHz Channel=20850 RB Size=100 Position=#0



Band7 QPSK BW=20MHz Channel=21350 RB Size=100 Position=#0

\*\*\*\*\*END OF THE APPENDIX A LTE Band 7\*\*\*\*\*