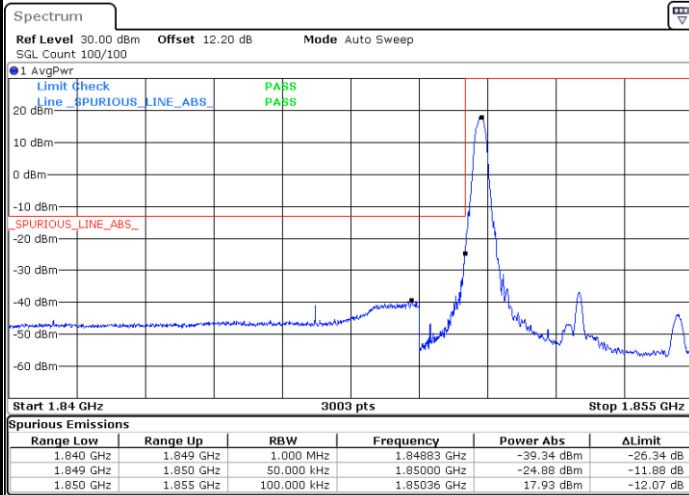


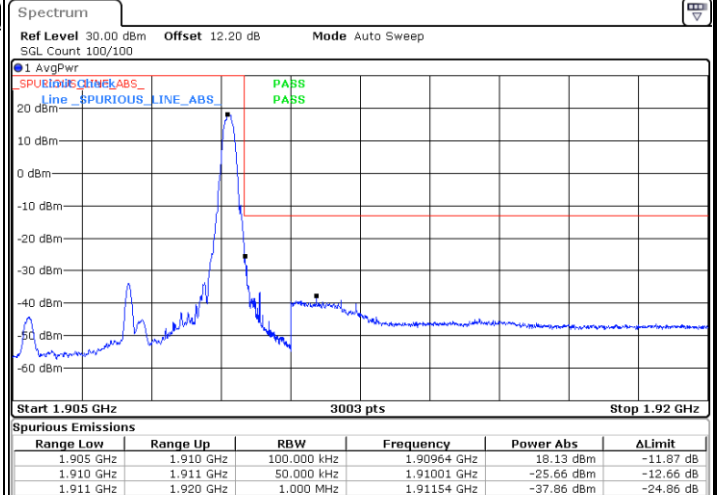


## LTE Band 2 / 5MHz / 64QAM

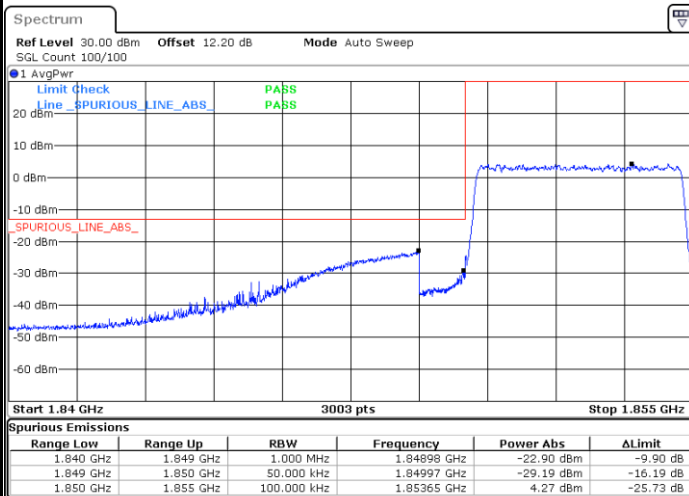
## Lowest Band Edge / 1RB



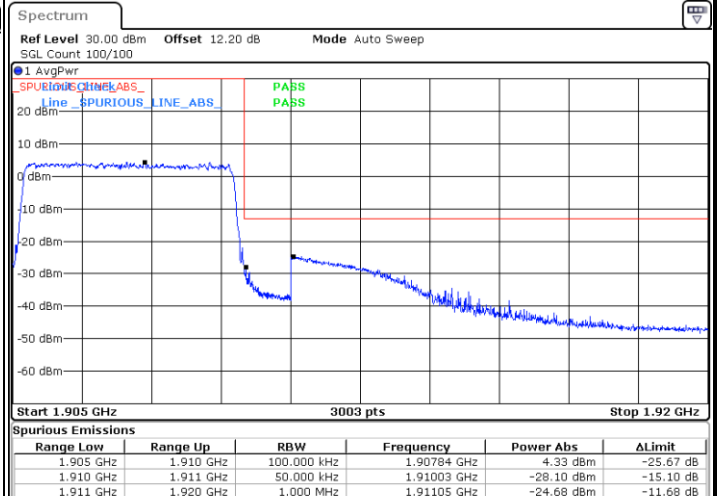
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



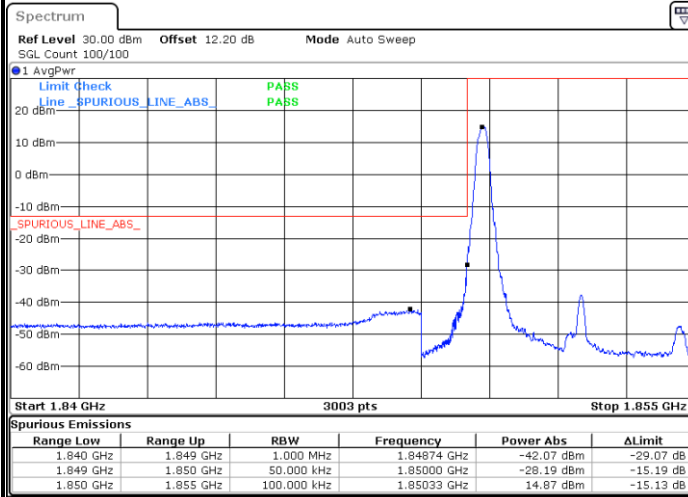
## Highest Band Edge / Full RB



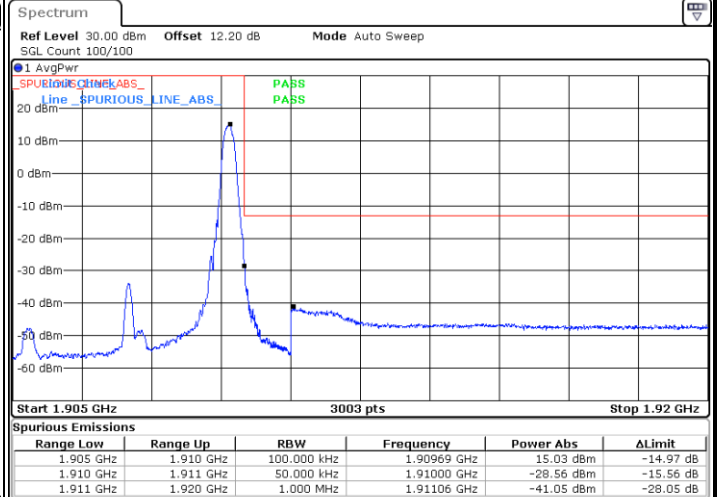


## LTE Band 2 / 5MHz / 256QAM

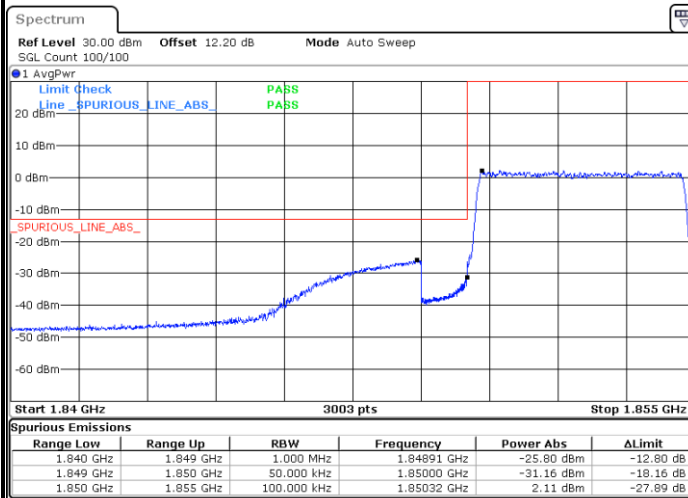
## Lowest Band Edge / 1RB



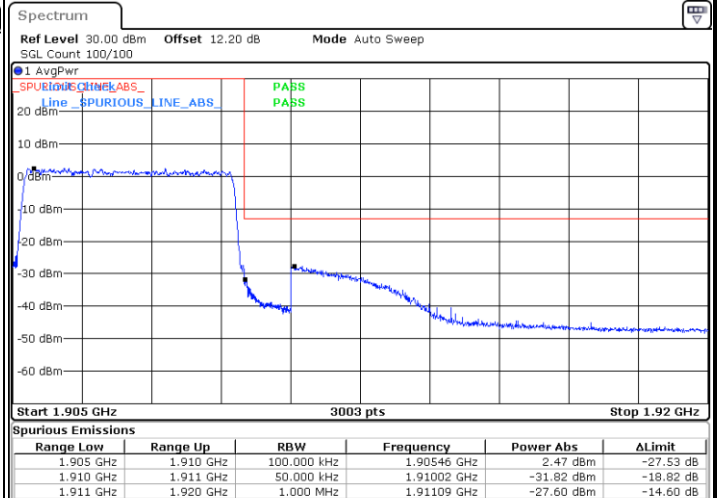
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



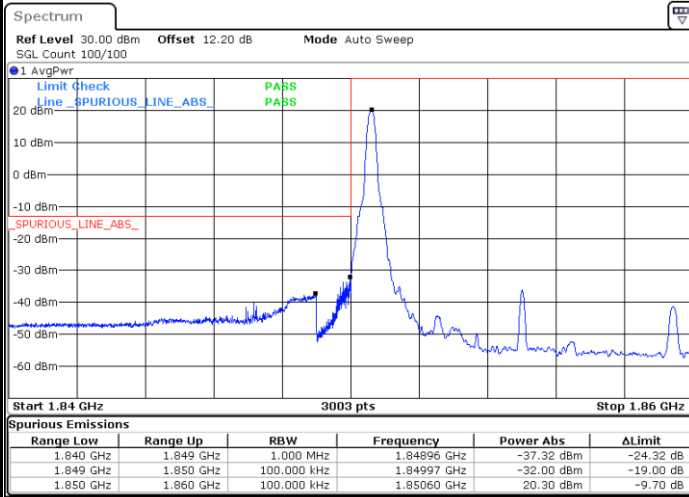
## Highest Band Edge / Full RB



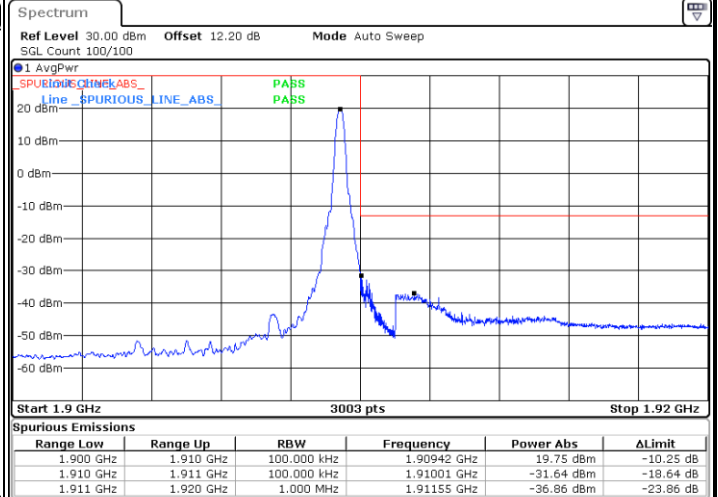


## LTE Band 2 / 10MHz / QPSK

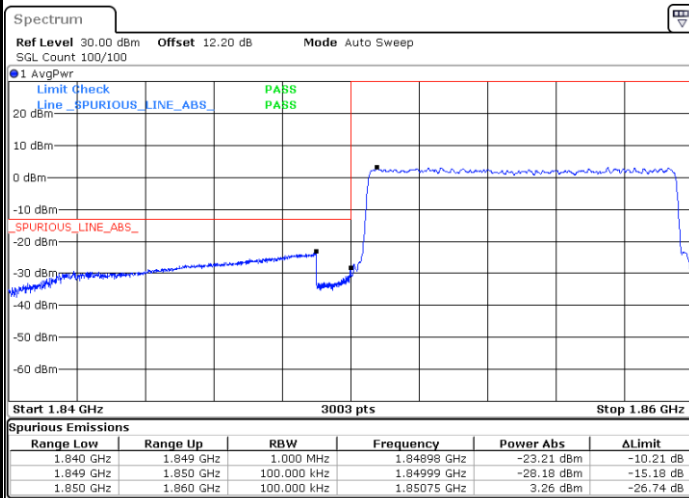
## Lowest Band Edge / 1 RB



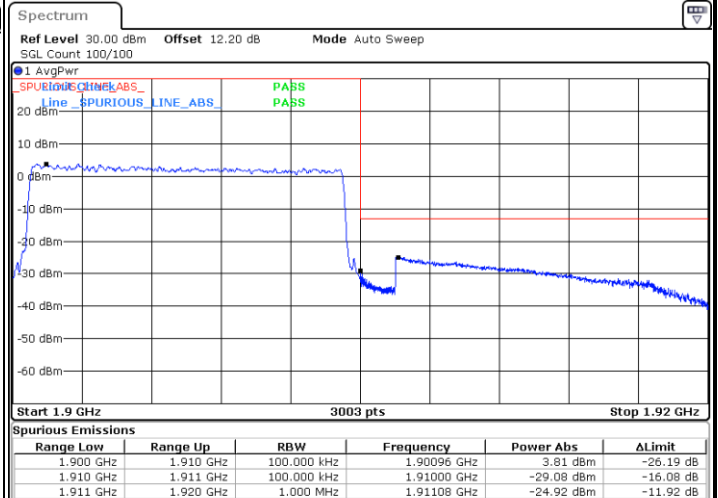
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



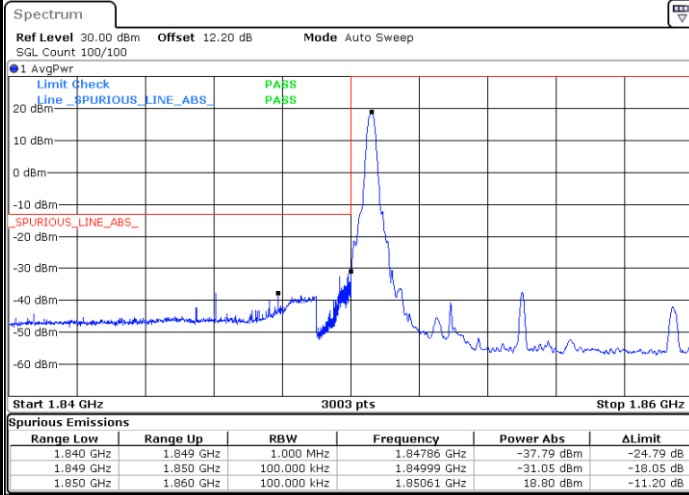
## Highest Band Edge / Full RB



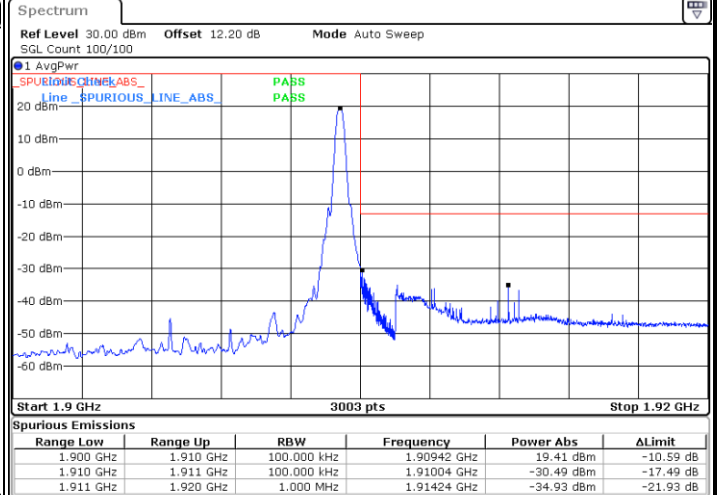


## LTE Band 2 / 10MHz / 16QAM

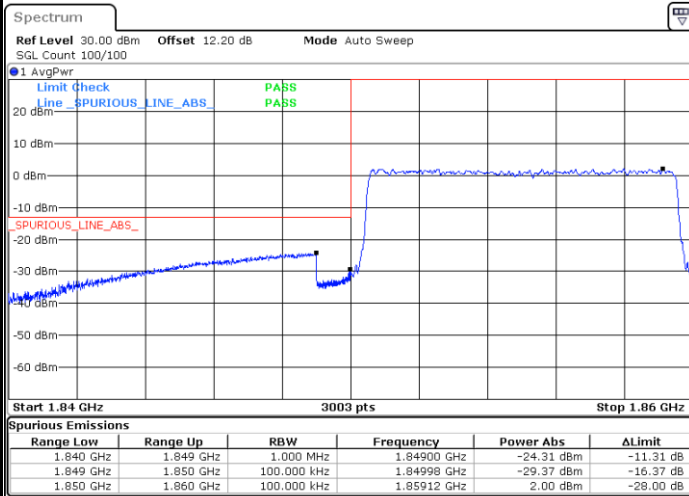
## Lowest Band Edge / 1 RB



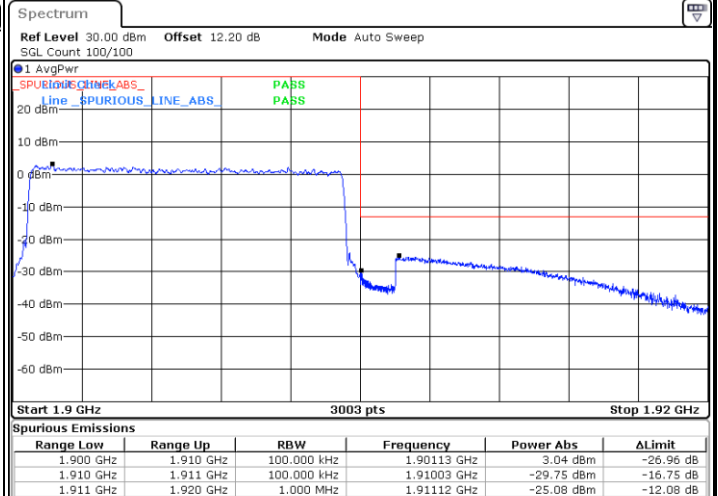
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



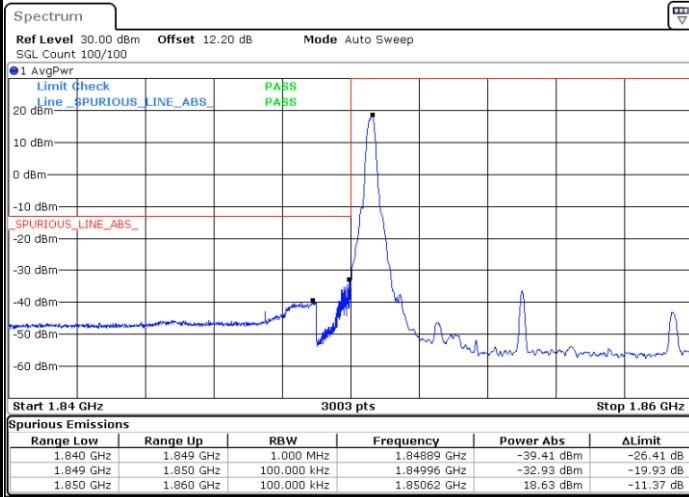
## Highest Band Edge / Full RB



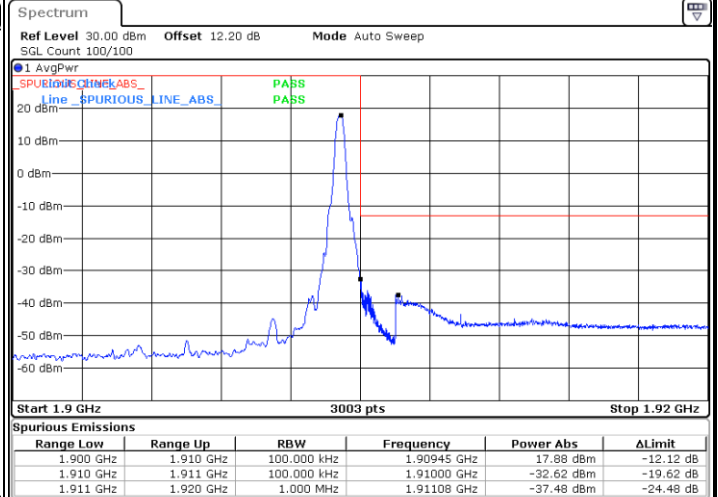


## LTE Band 2 / 10MHz / 64QAM

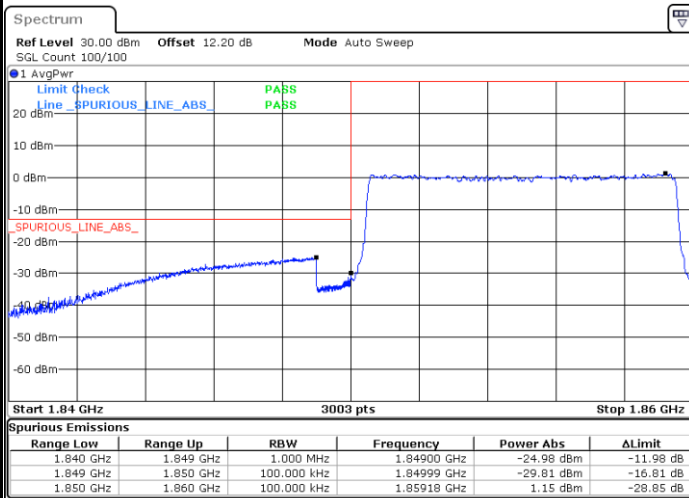
## Lowest Band Edge / 1 RB



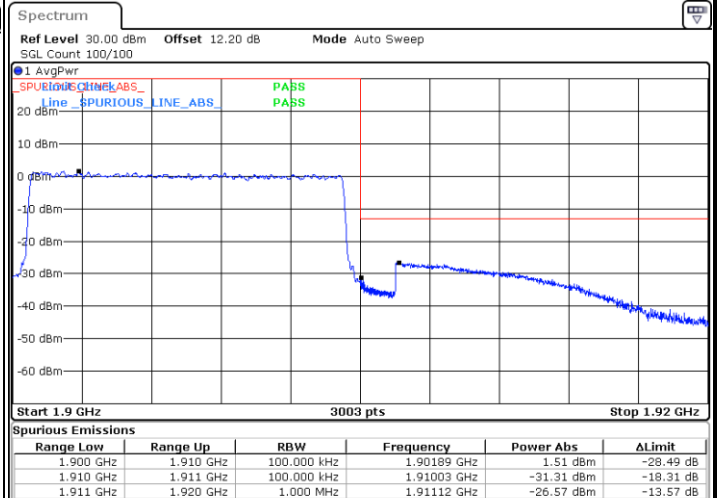
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



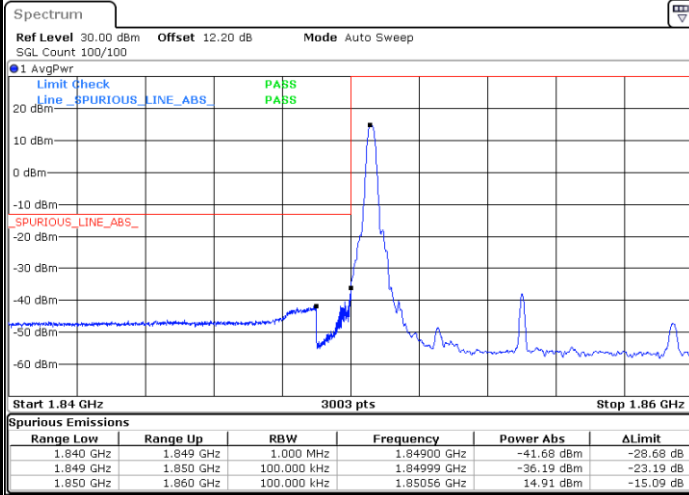
## Highest Band Edge / Full RB



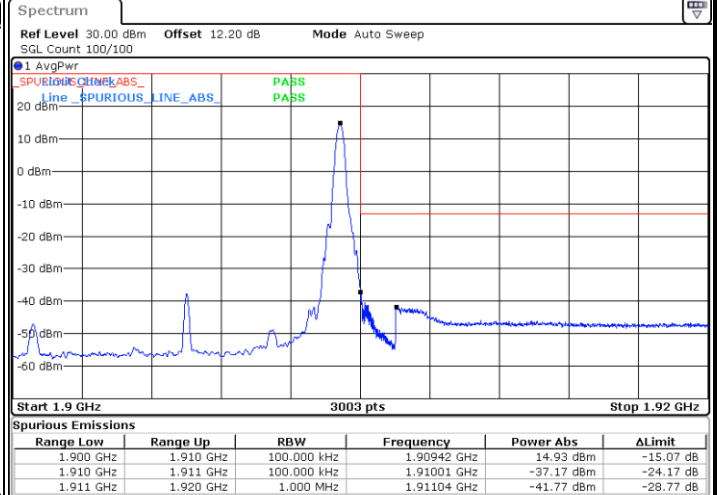


## LTE Band 2 / 10MHz / 256QAM

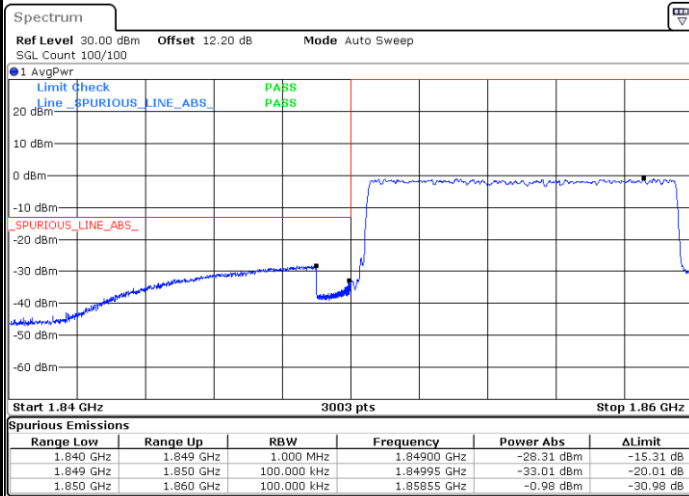
## Lowest Band Edge / 1 RB



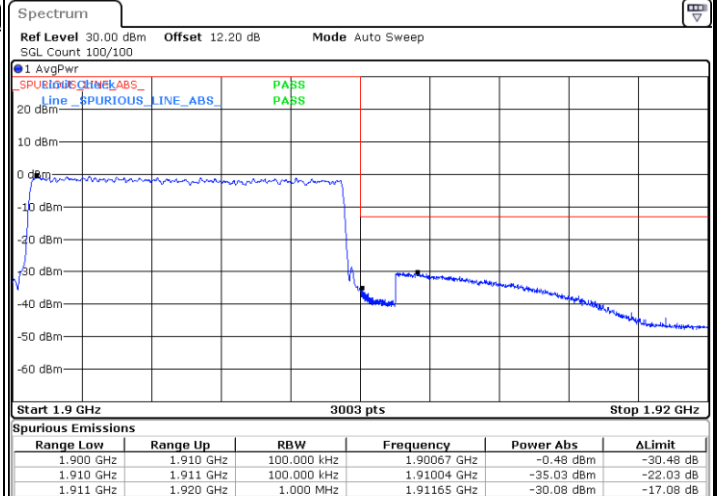
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



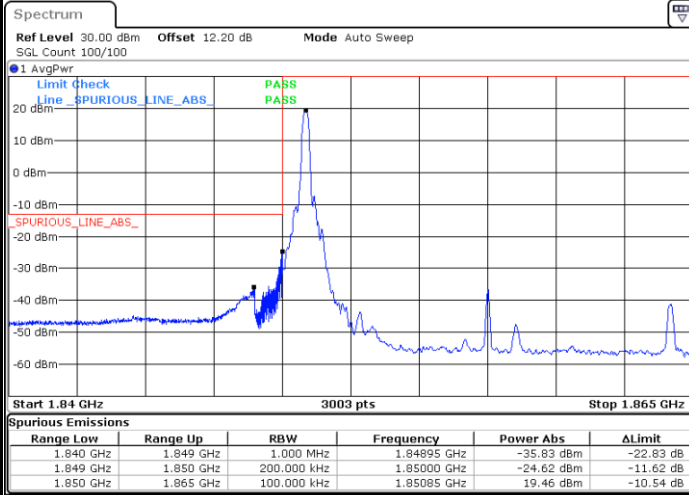
## Highest Band Edge / Full RB



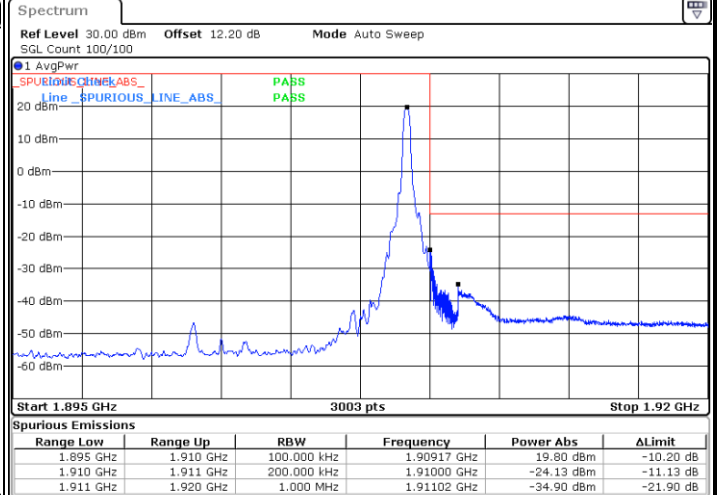


## LTE Band 2 / 15MHz / QPSK

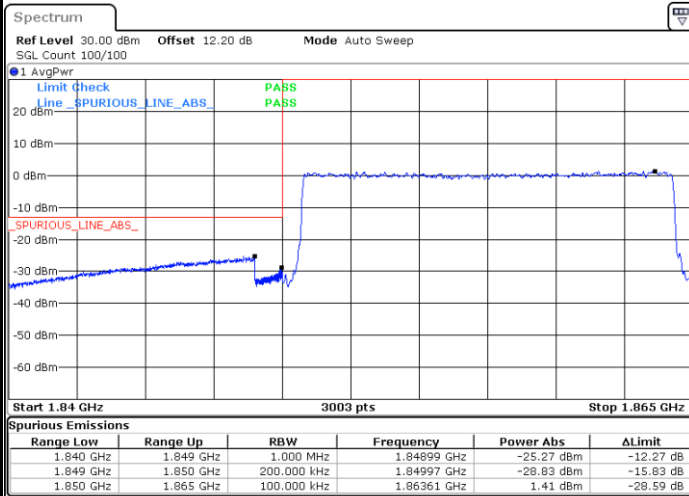
## Lowest Band Edge / 1 RB



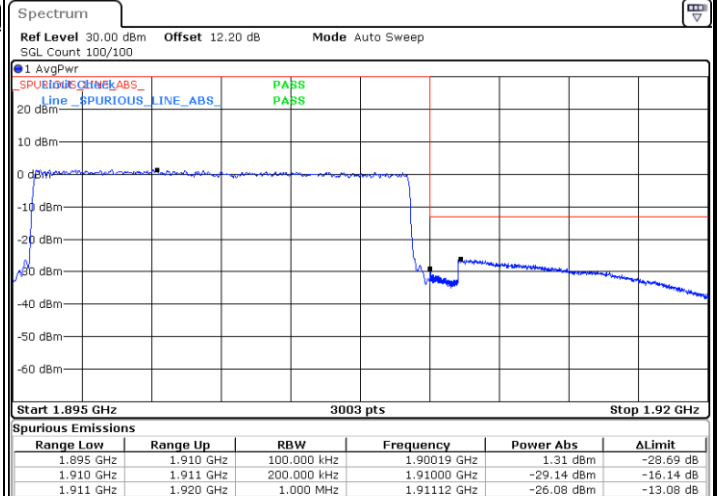
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



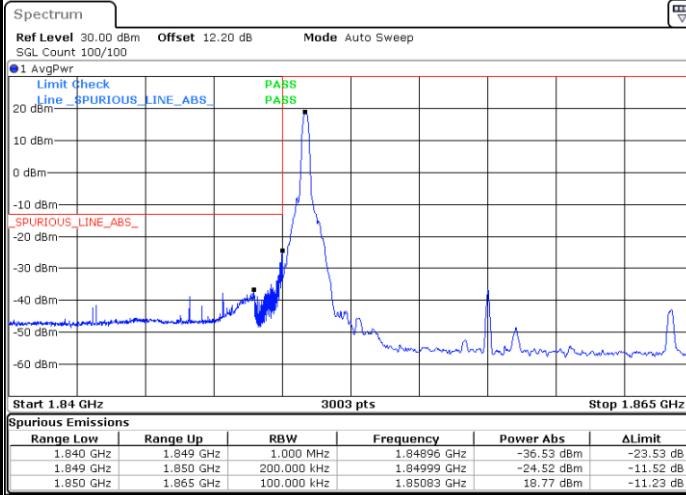
## Highest Band Edge / Full RB





## LTE Band 2 / 15MHz / 16QAM

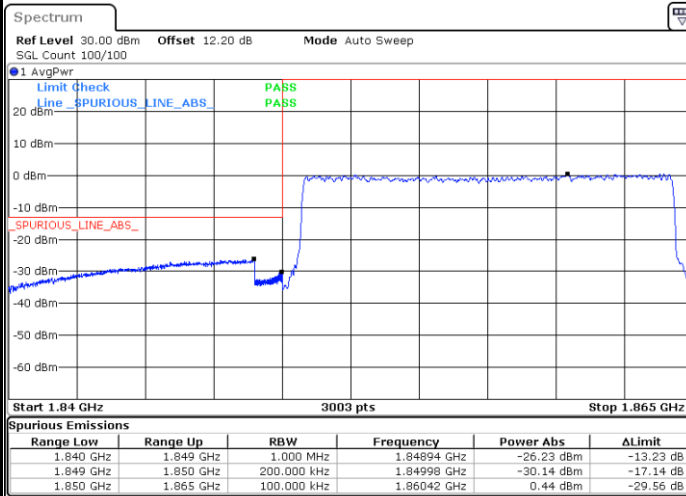
## Lowest Band Edge / 1 RB



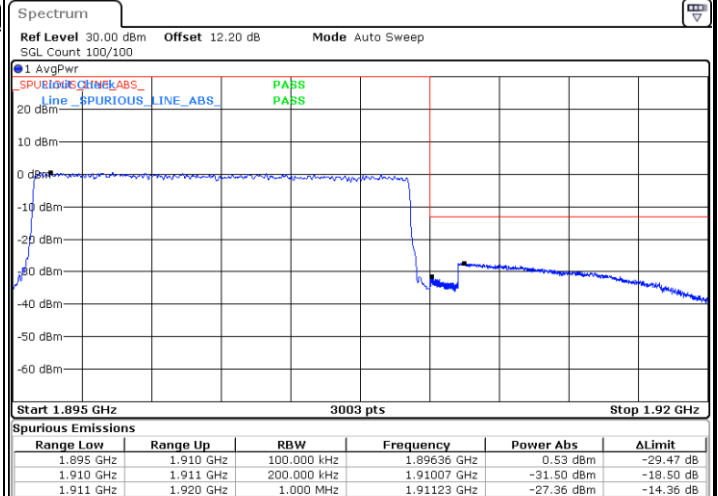
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



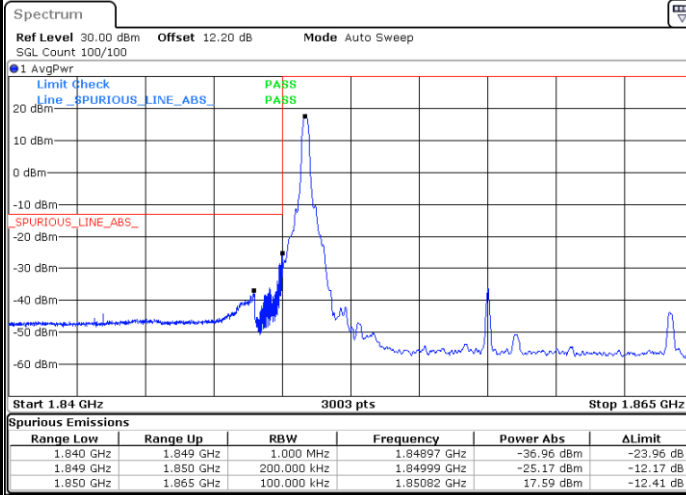
## Highest Band Edge / Full RB



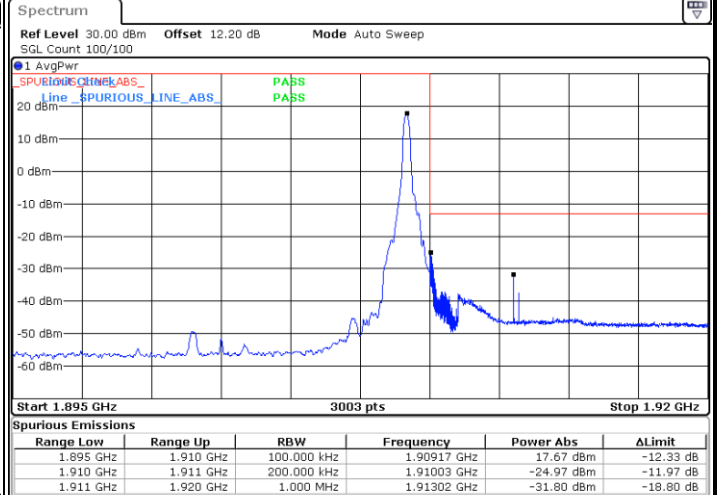


## LTE Band 2 / 15MHz / 64QAM

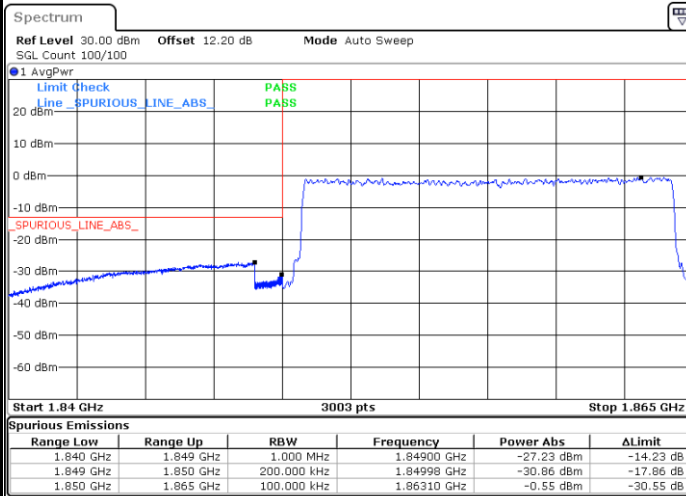
## Lowest Band Edge / 1 RB



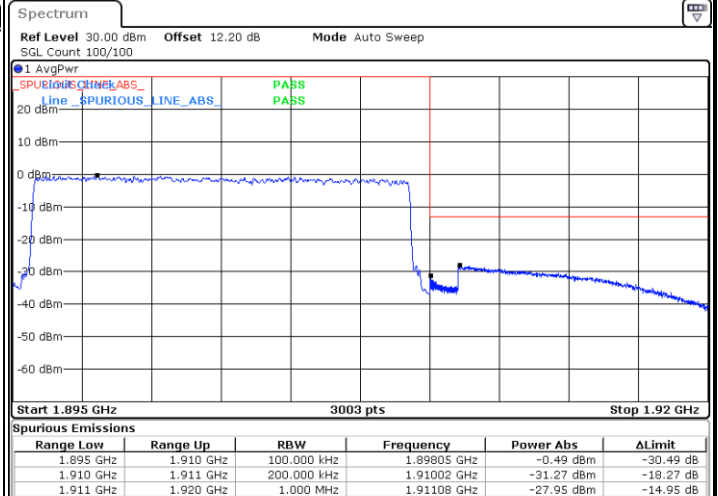
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



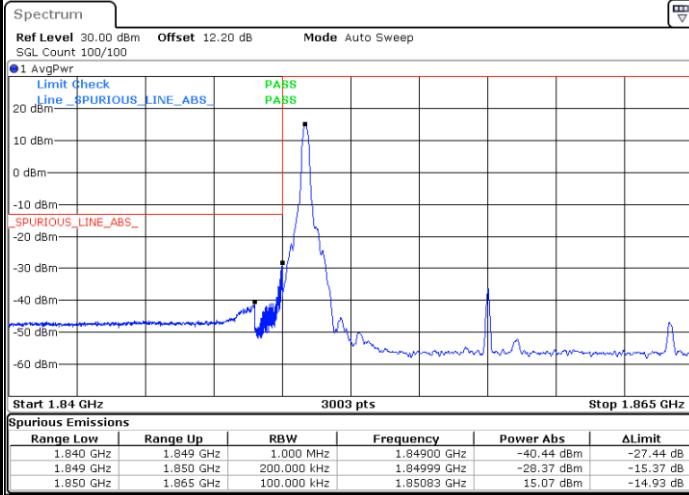
## Highest Band Edge / Full RB



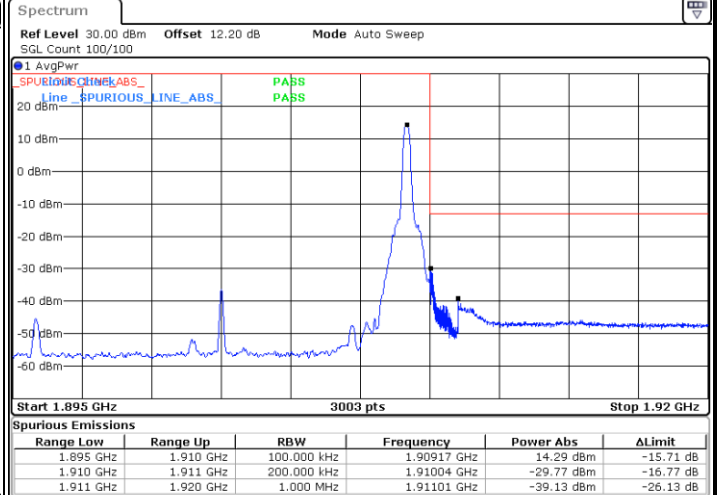


## LTE Band 2 / 15MHz / 256QAM

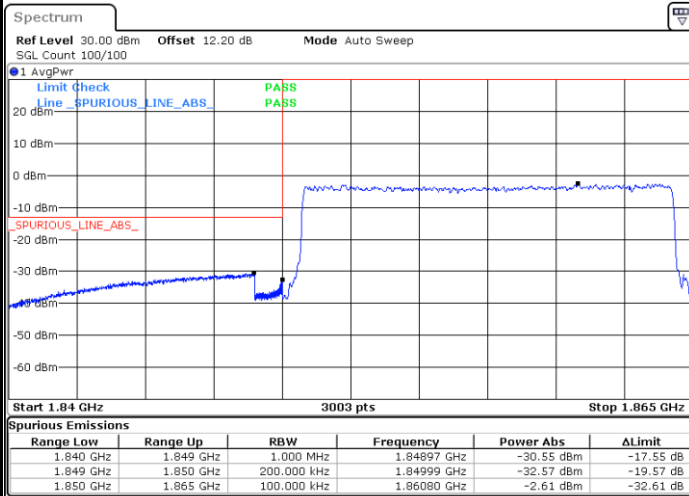
## Lowest Band Edge / 1 RB



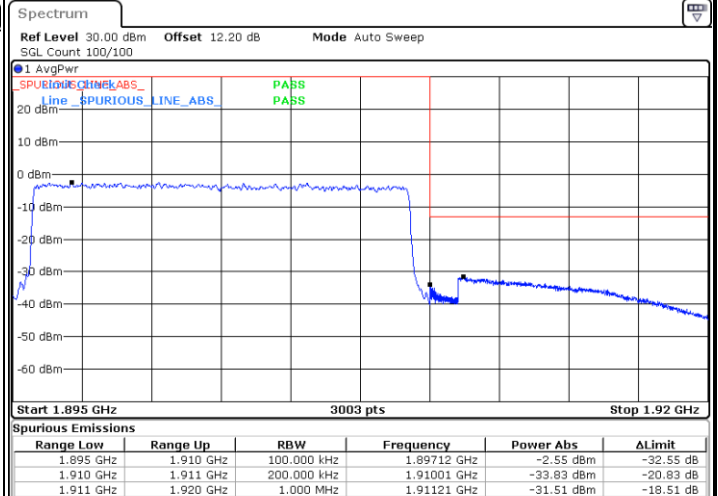
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



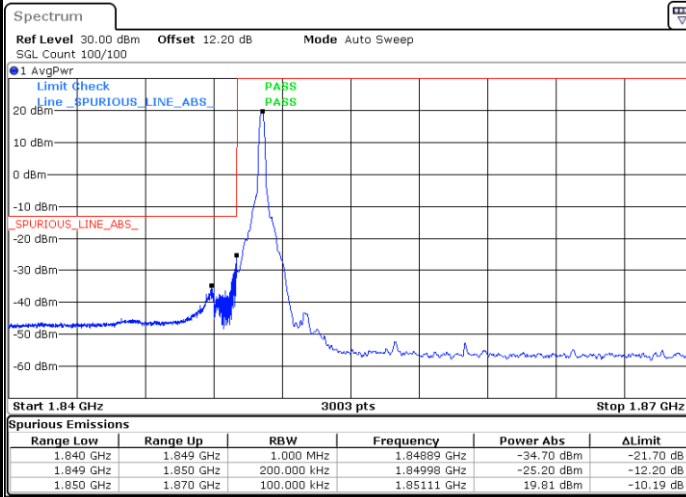
## Highest Band Edge / Full RB





## LTE Band 2 / 20MHz / QPSK

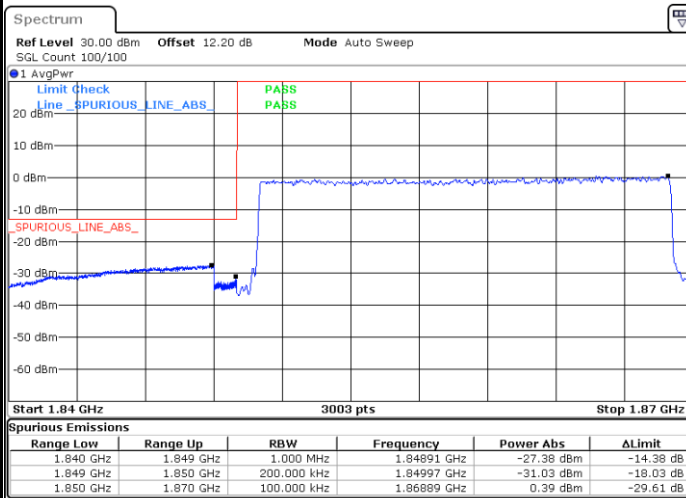
## Lowest Band Edge / 1 RB



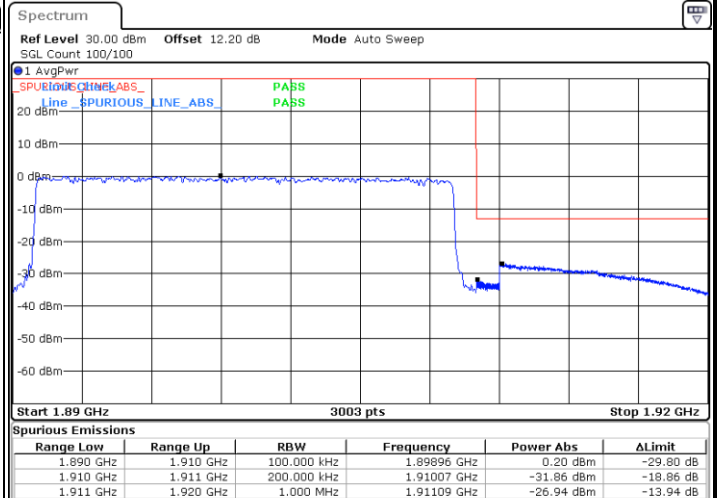
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



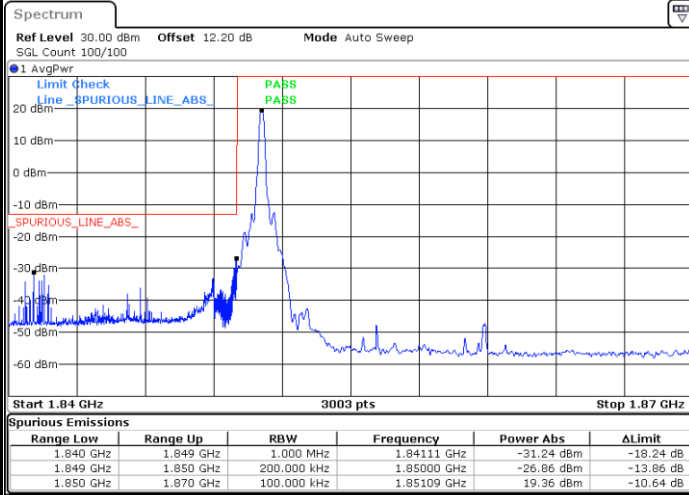
## Highest Band Edge / Full RB



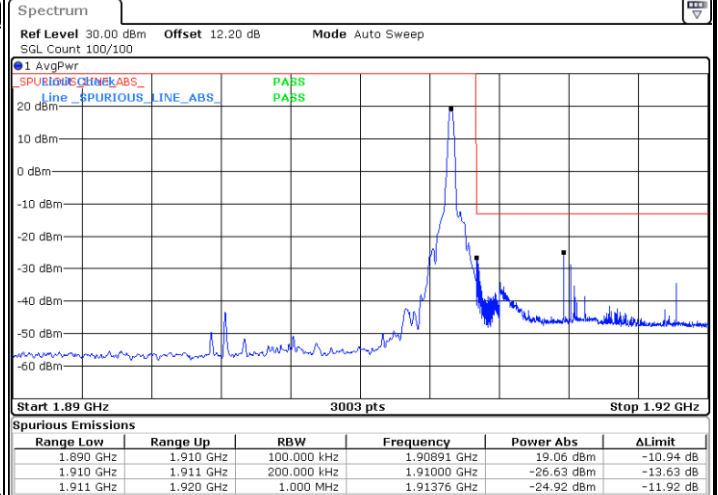


## LTE Band 2 / 20MHz / 16QAM

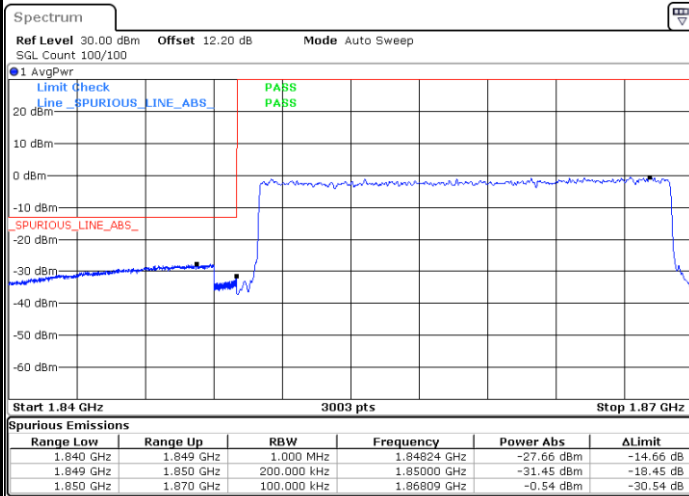
## Lowest Band Edge / 1 RB



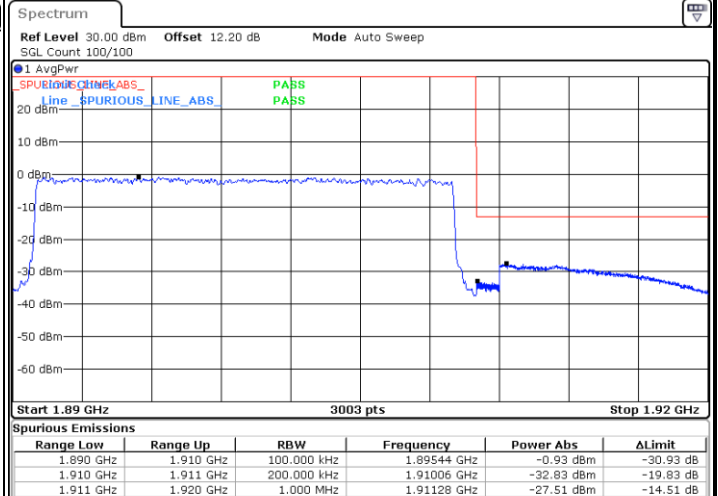
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



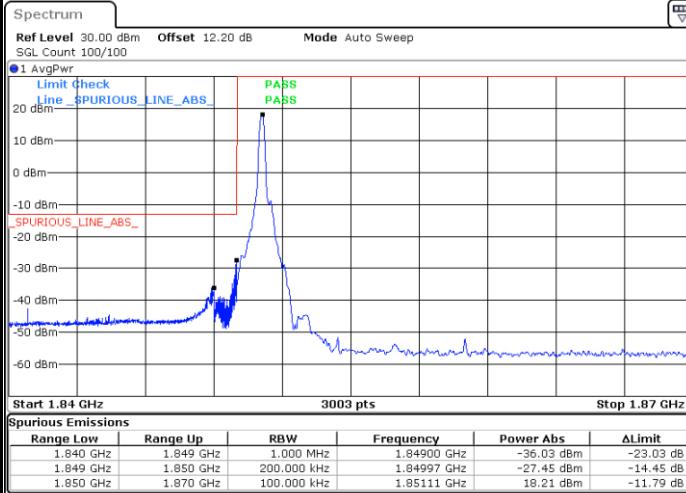
## Highest Band Edge / Full RB



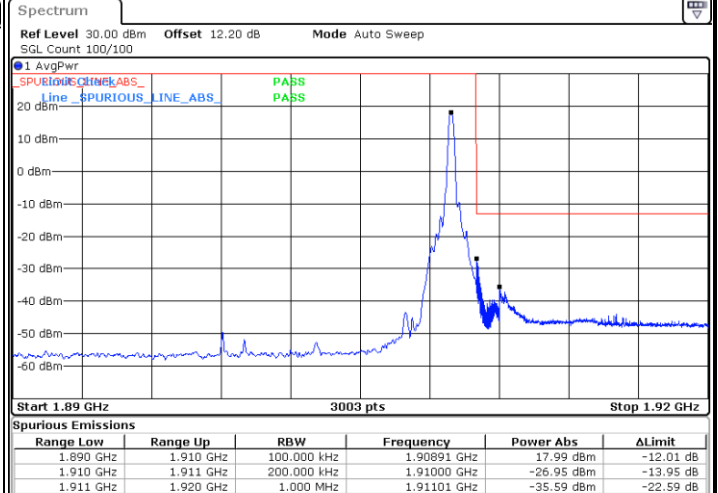


## LTE Band 2 / 20MHz / 64QAM

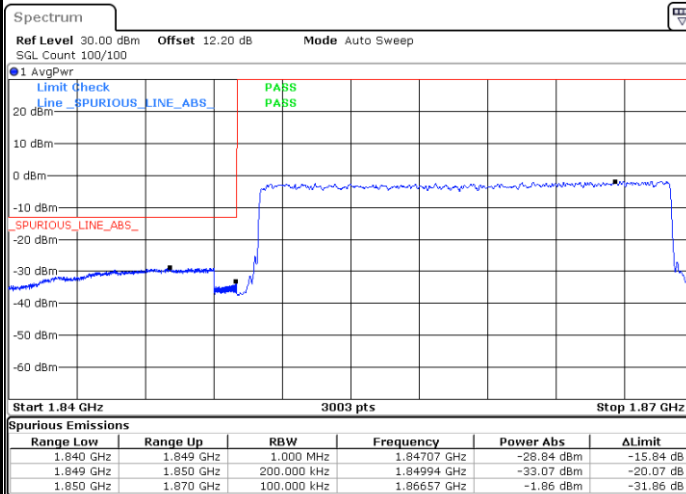
## Lowest Band Edge / 1 RB



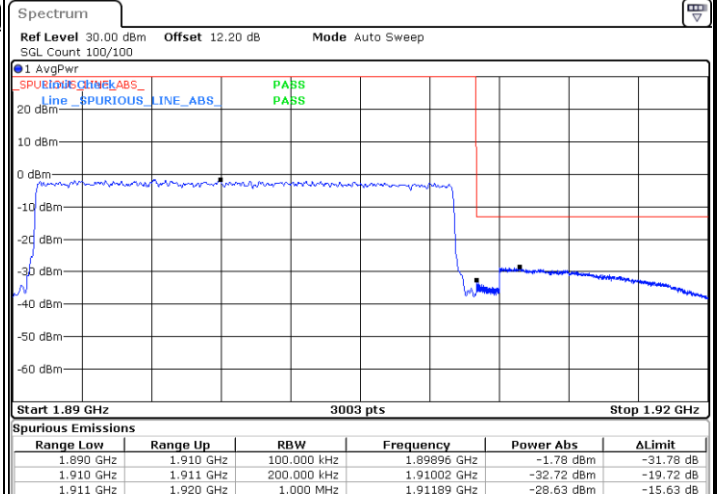
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



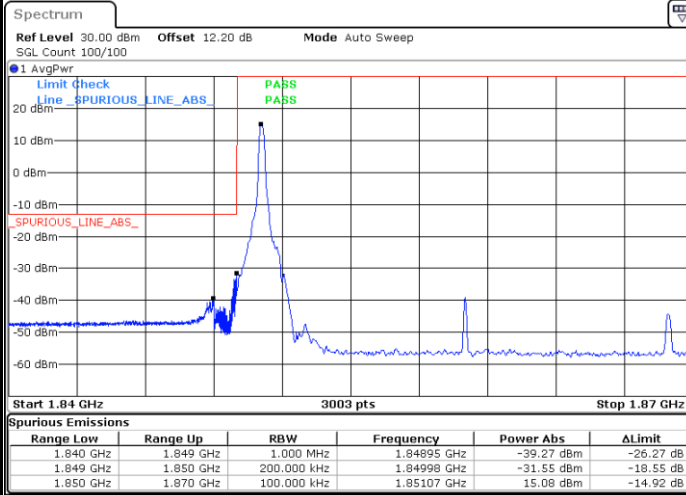
## Highest Band Edge / Full RB



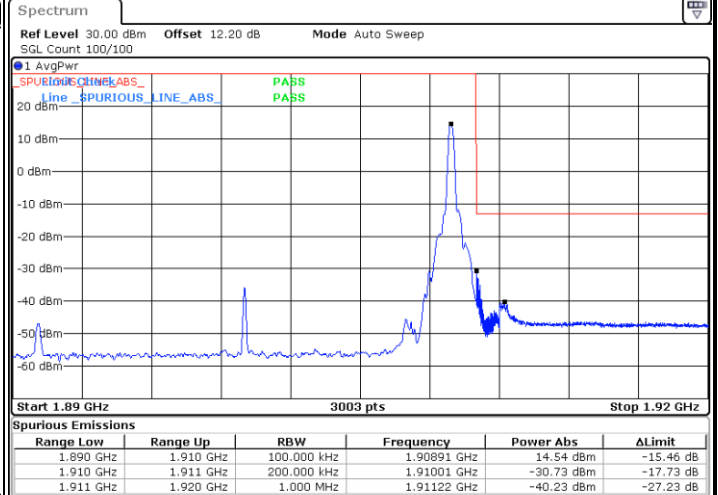


## LTE Band 2 / 20MHz / 256QAM

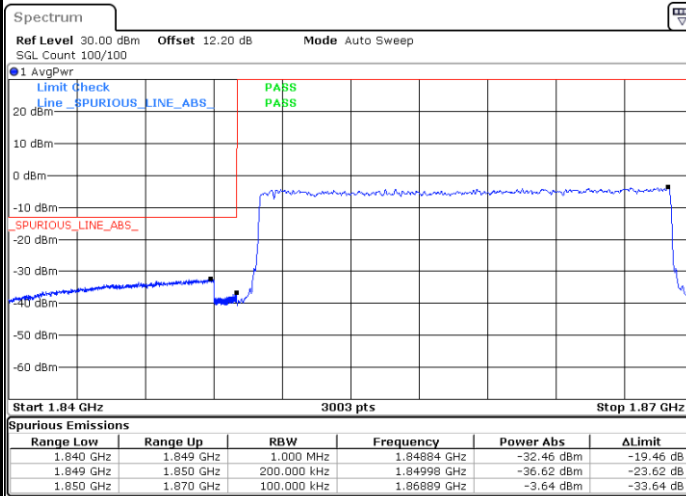
## Lowest Band Edge / 1 RB



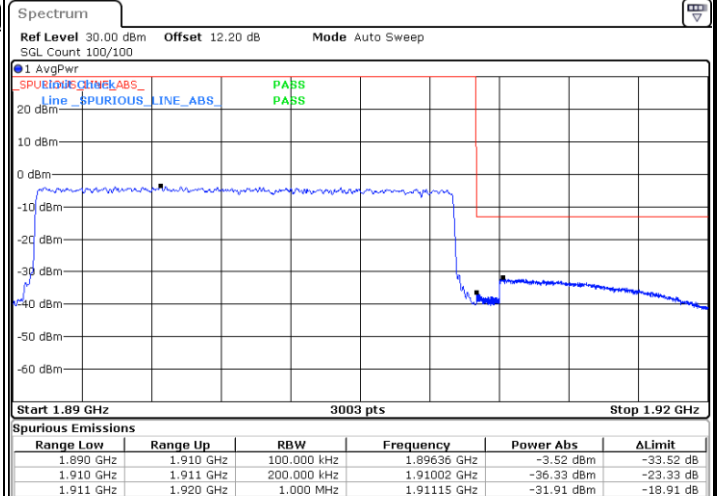
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

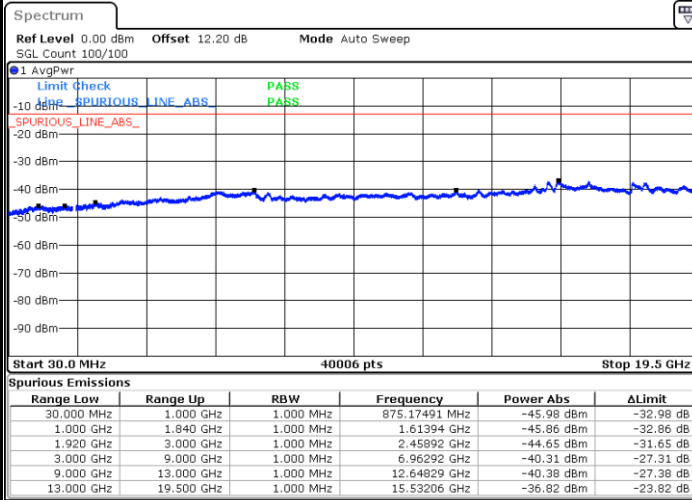




# Conducted Spurious Emission

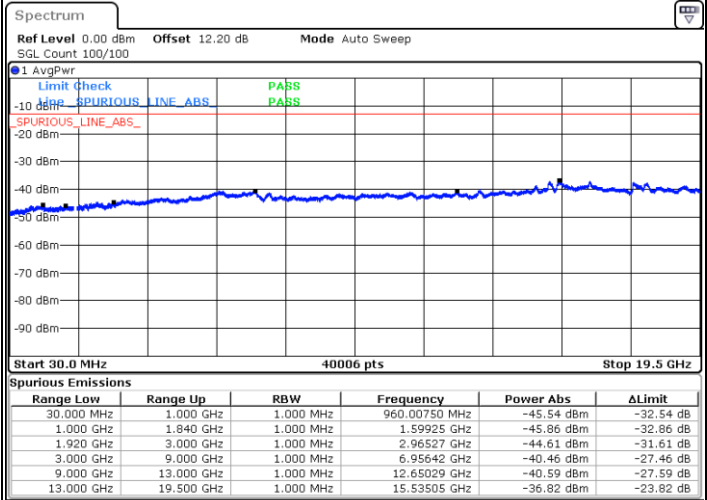
## LTE Band 2 / 1.4MHz

### Lowest Channel / QPSK



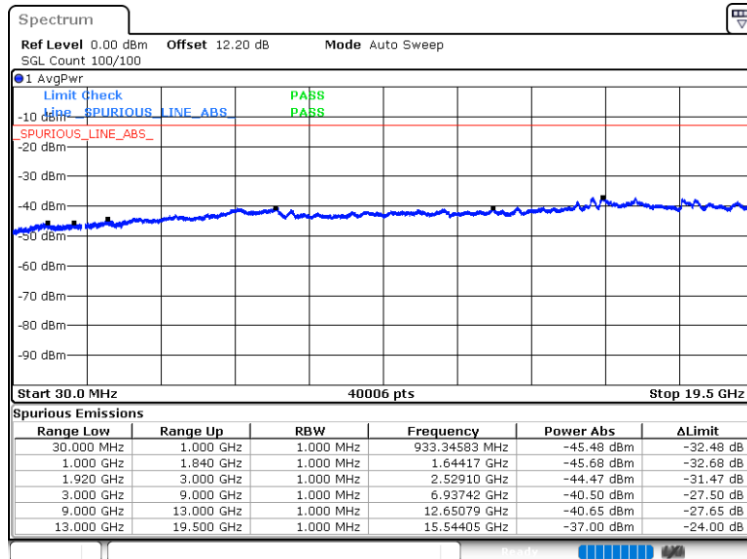
Date: 26.NOV.2021 17:47:21

### Middle Channel / QPSK



Date: 26.NOV.2021 15:02:51

### Highest Channel / QPSK

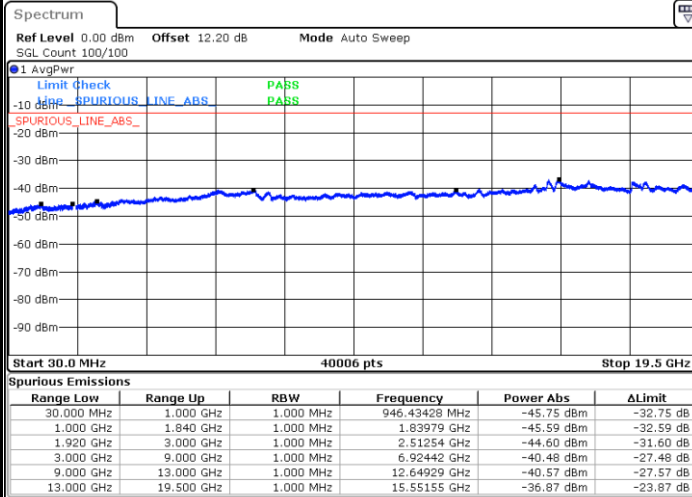


Date: 26.NOV.2021 15:04:00



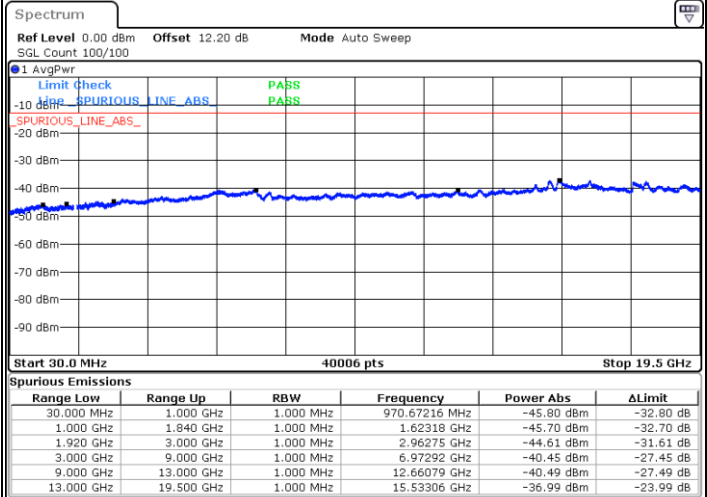
## LTE Band 2 / 3MHz

## Lowest Channel / QPSK



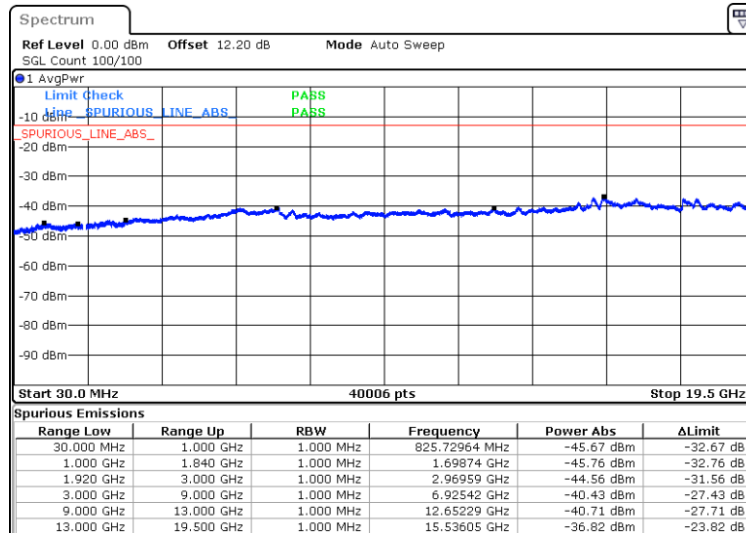
Date: 26.NOV.2021 15:12:08

## Middle Channel / QPSK



Date: 26.NOV.2021 15:21:11

## Highest Channel / QPSK

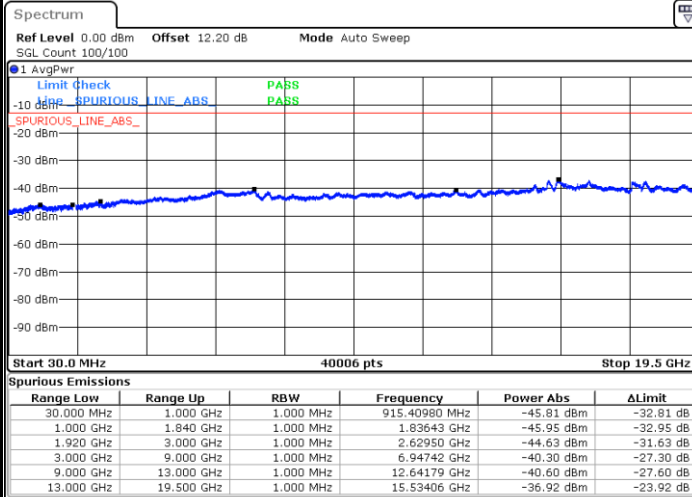


Date: 26.NOV.2021 15:22:22



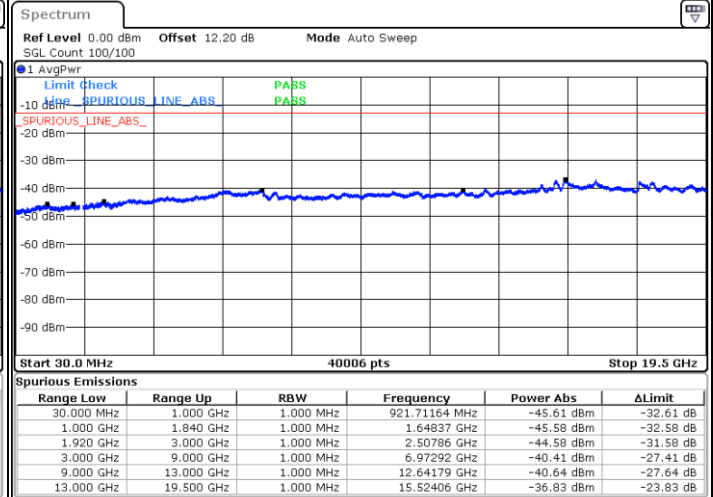
## LTE Band 2 / 5MHz

## Lowest Channel / QPSK



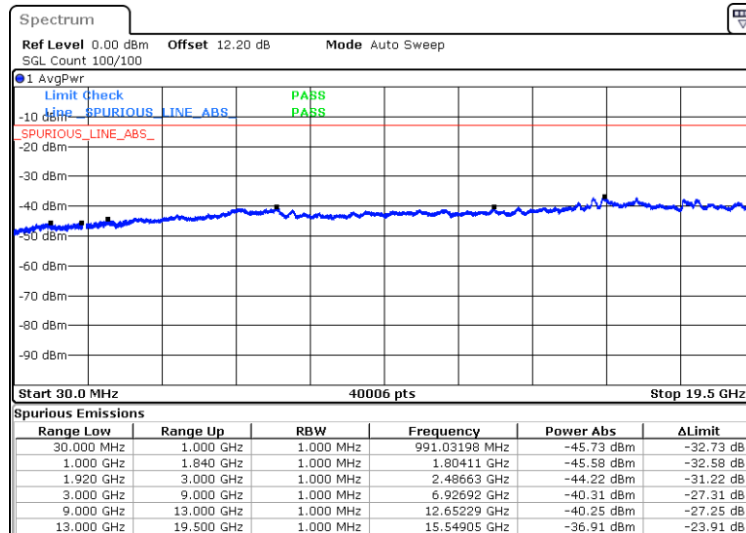
Date: 26.NOV.2021 15:32:21

## Middle Channel / QPSK



Date: 26.NOV.2021 15:41:23

## Highest Channel / QPSK

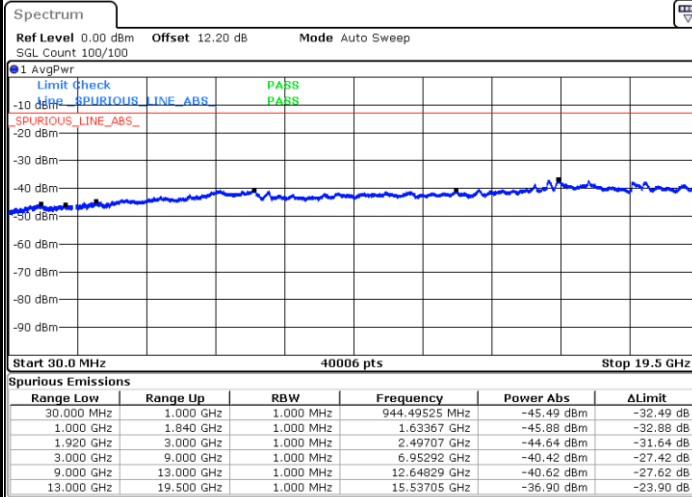


Date: 26.NOV.2021 15:42:33



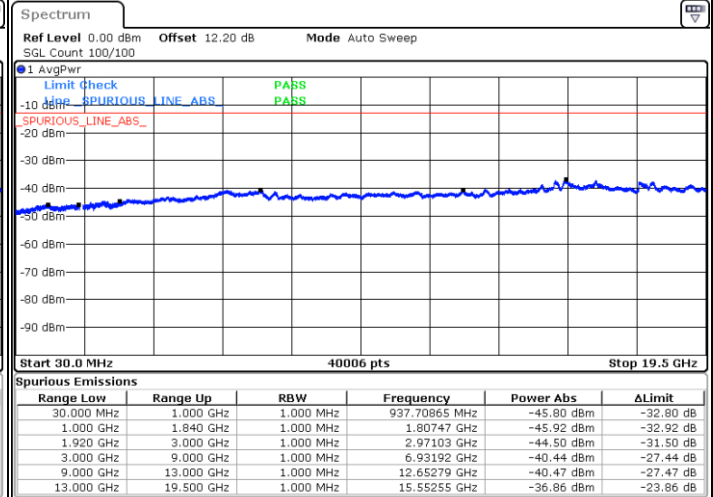
## LTE Band 2 / 10MHz

## Lowest Channel / QPSK



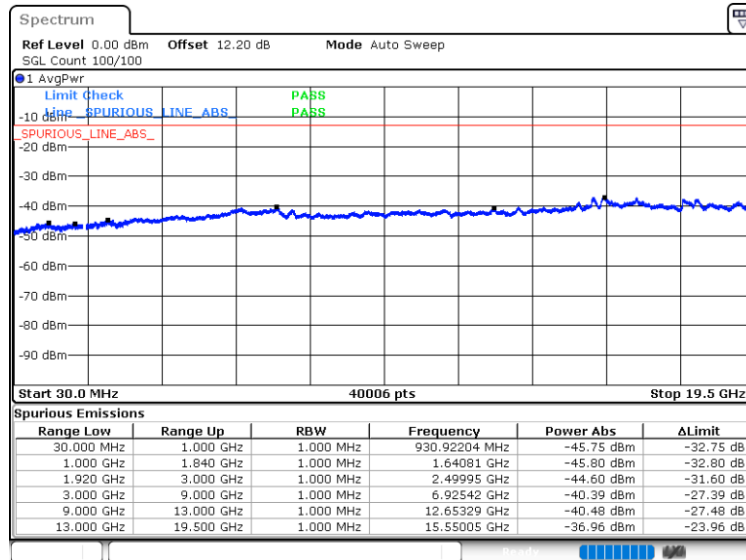
Date: 26.NOV.2021 16:01:37

## Middle Channel / QPSK



Date: 26.NOV.2021 16:11:13

## Highest Channel / QPSK

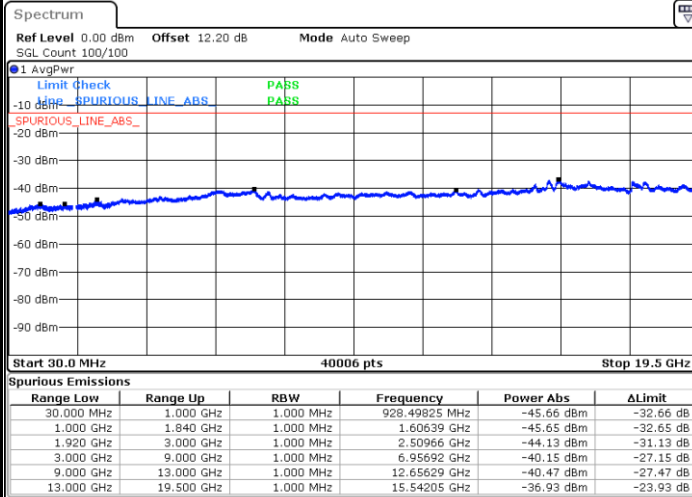


Date: 26.NOV.2021 16:12:23



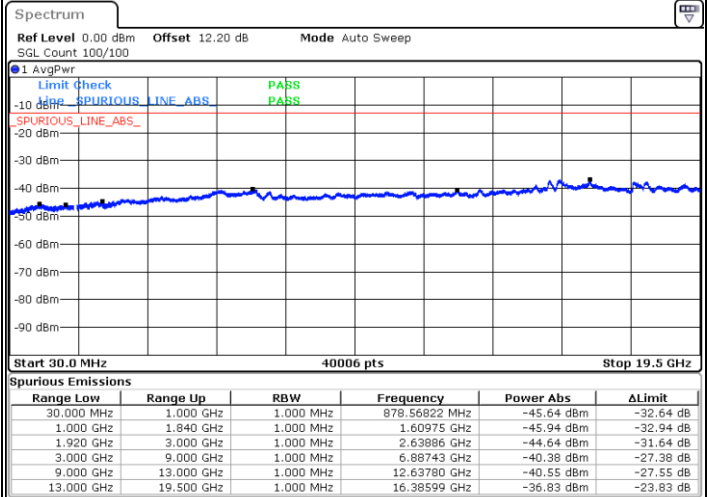
## LTE Band 2 / 15MHz

## Lowest Channel / QPSK



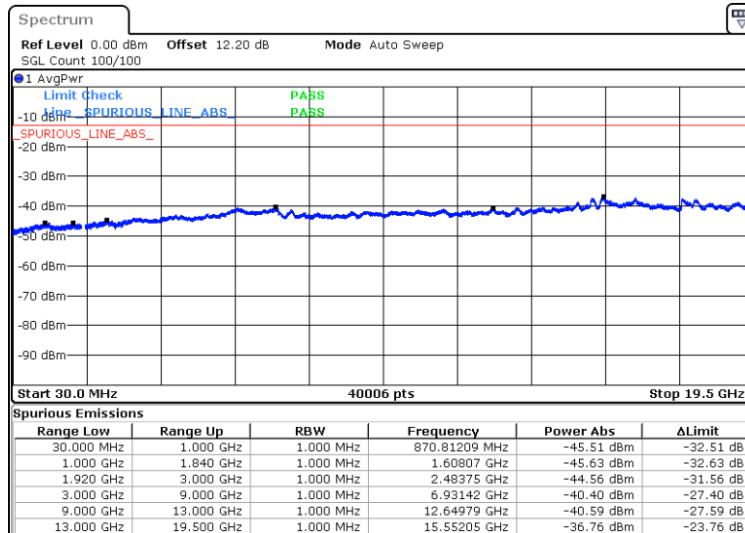
Date: 26.NOV.2021 16:20:16

## Middle Channel / QPSK



Date: 26.NOV.2021 16:29:18

## Highest Channel / QPSK

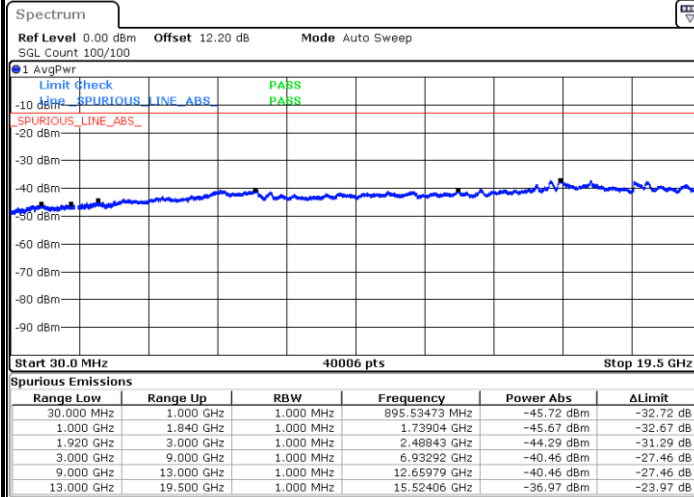


Date: 26.NOV.2021 16:30:28



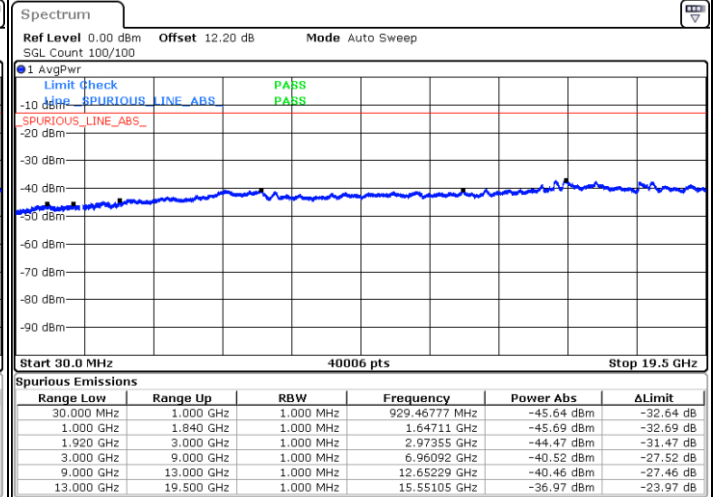
## LTE Band 2 / 20MHz

## Lowest Channel / QPSK



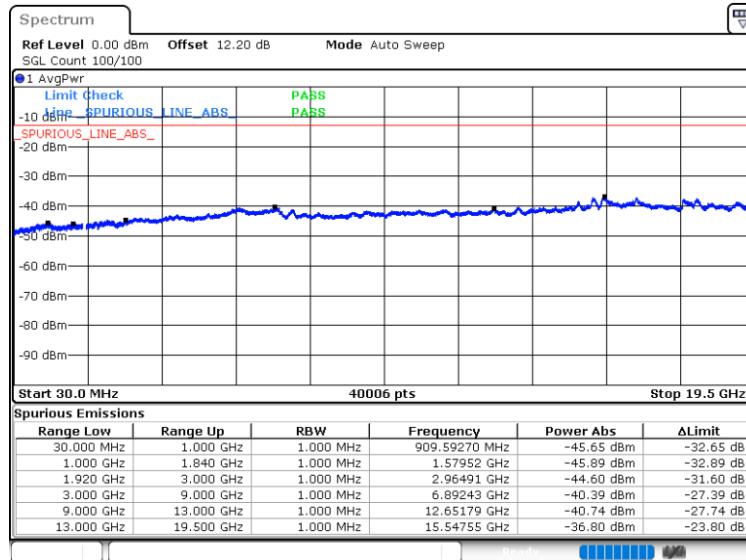
Date: 26.NOV.2021 16:38:54

## Middle Channel / QPSK



Date: 26.NOV.2021 16:47:55

## Highest Channel / QPSK



Date: 26.NOV.2021 16:49:06

## Frequency Stability

| Test Conditions     |                   | LTE Band 2 (QPSK) / Middle Channel | Limit   |
|---------------------|-------------------|------------------------------------|---------|
| Temperature<br>(°C) | Voltage<br>(Volt) | BW 10MHz                           | Note 2. |
|                     |                   | Deviation (ppm)                    | Result  |
| 50                  | Normal Voltage    | 0.0001                             | PASS    |
| 40                  | Normal Voltage    | 0.0027                             |         |
| 30                  | Normal Voltage    | 0.0004                             |         |
| 20(Ref.)            | Normal Voltage    | 0.0000                             |         |
| 10                  | Normal Voltage    | 0.0000                             |         |
| 0                   | Normal Voltage    | 0.0040                             |         |
| -10                 | Normal Voltage    | 0.0077                             |         |
| -20                 | Normal Voltage    | 0.0039                             |         |
| -30                 | Normal Voltage    | 0.0064                             |         |
| 20                  | Maximum Voltage   | 0.0006                             |         |
| 20                  | Normal Voltage    | 0.0000                             |         |
| 20                  | Battery End Point | 0.0009                             |         |

**Note:**

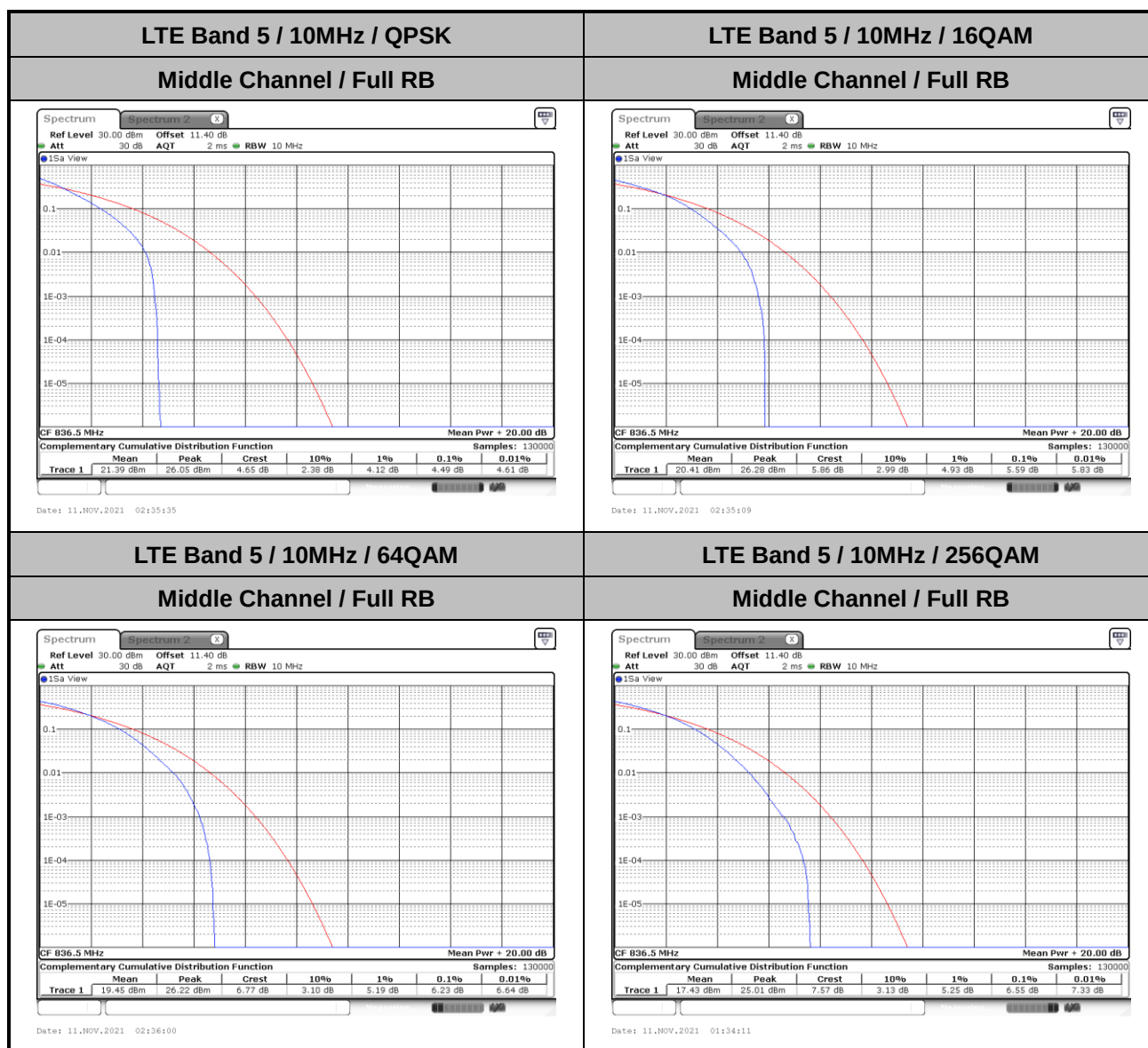
1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 5

## Peak-to-Average Ratio

| Mode      | LTE Band 5 / 10MHz |         |         |         |             |
|-----------|--------------------|---------|---------|---------|-------------|
| Mod.      | QPSK               | 16QAM   | 64QAM   | 256QAM  | Limit: 13dB |
| RB Size   | Full RB            | Full RB | Full RB | Full RB | Result      |
| Middle CH | 4.49               | 5.59    | 6.23    | 6.55    | PASS        |



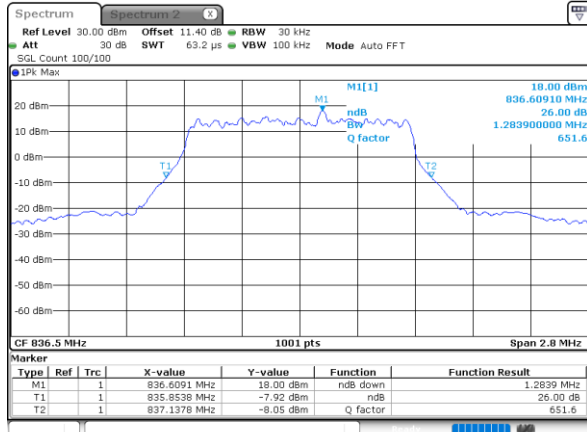
**26dB Bandwidth**

| Mode      | LTE Band 5 : 26dB BW(MHz) |         |       |         |       |         |       |         |       |         |       |         |
|-----------|---------------------------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
| BW        | 1.4MHz                    |         | 3MHz  |         | 5MHz  |         | 10MHz |         | 15MHz |         | 20MHz |         |
| Mod.      | QPSK                      | 16QAM   | QPSK  | 16QAM   | QPSK  | 16QAM   | QPSK  | 16QAM   | QPSK  | 16QAM   | QPSK  | 16QAM   |
| Middle CH | 1.28                      | 1.32    | 3.06  | 3.05    | 5.13  | 5.05    | 10.11 | 10.11   | -     | -       | -     | -       |
| Mode      | LTE Band 5 : 26dB BW(MHz) |         |       |         |       |         |       |         |       |         |       |         |
| BW        | 1.4MHz                    |         | 3MHz  |         | 5MHz  |         | 10MHz |         | 15MHz |         | 20MHz |         |
| Mod.      | 64QAM                     | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM |
| Middle CH | 1.33                      | 1.35    | 3.09  | 3.05    | 5.11  | 4.98    | 9.97  | 9.95    | -     | -       | -     | -       |

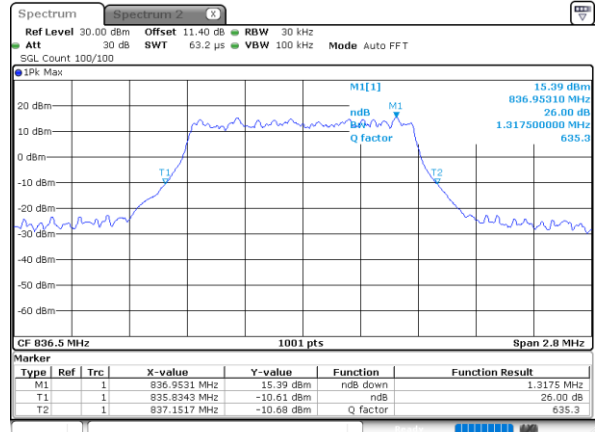


## LTE Band 5

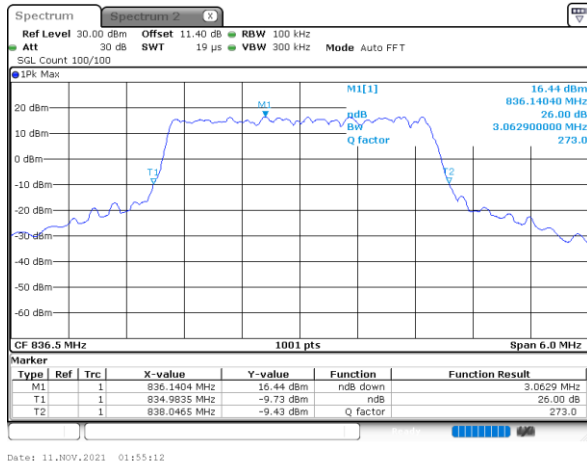
## Middle Channel / 1.4MHz / QPSK



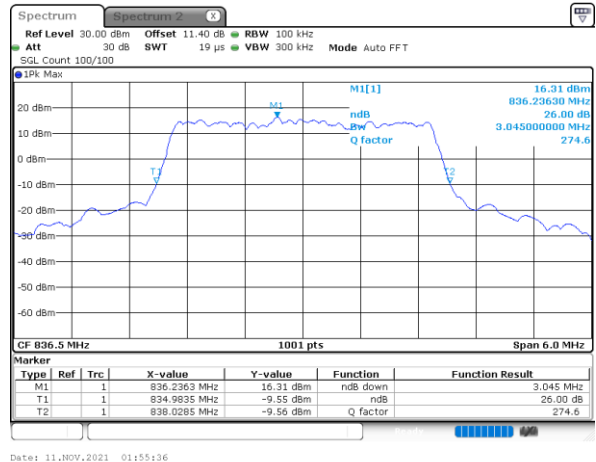
## Middle Channel / 1.4MHz / 16QAM



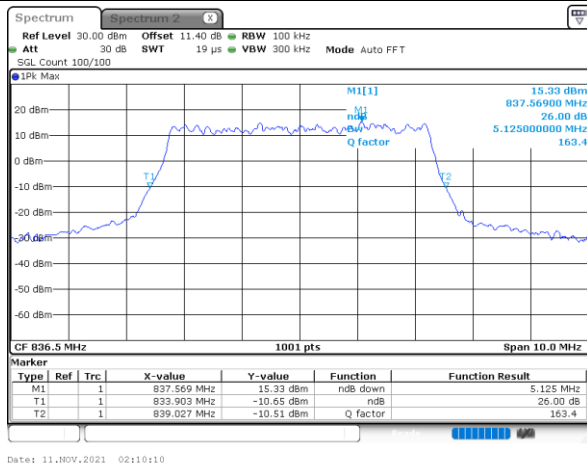
## Middle Channel / 3MHz / QPSK



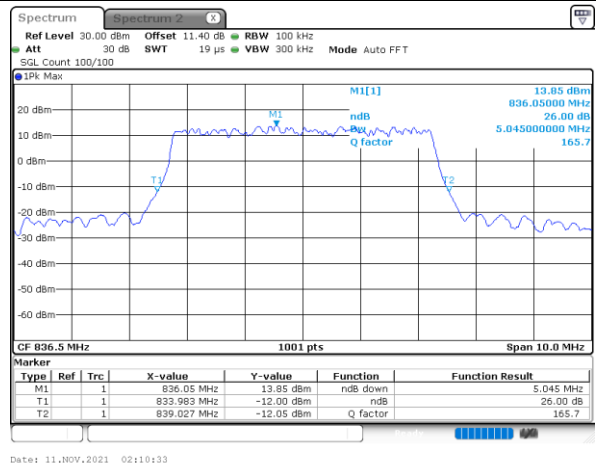
## Middle Channel / 3MHz / 16QAM



## Middle Channel / 5MHz / QPSK



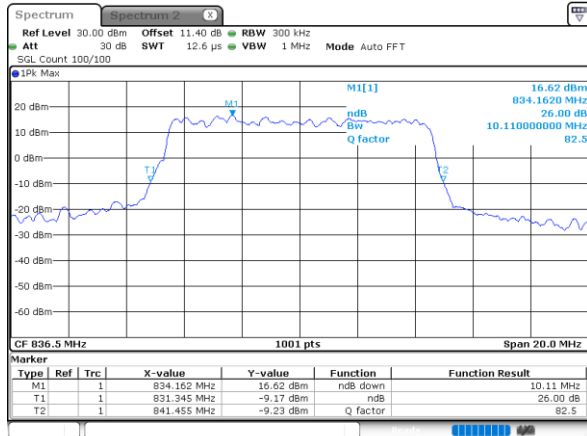
## Middle Channel / 5MHz / 16QAM



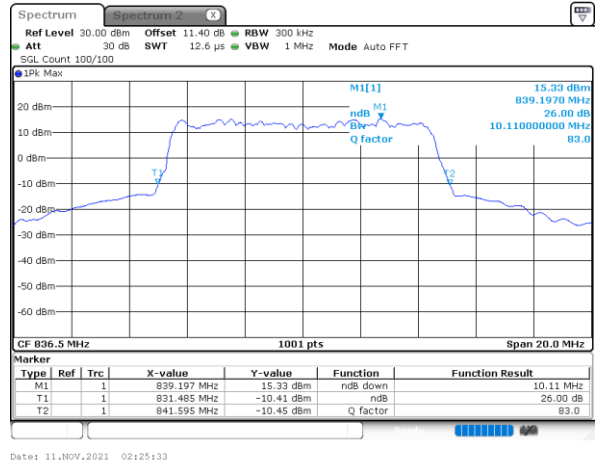


## LTE Band 5

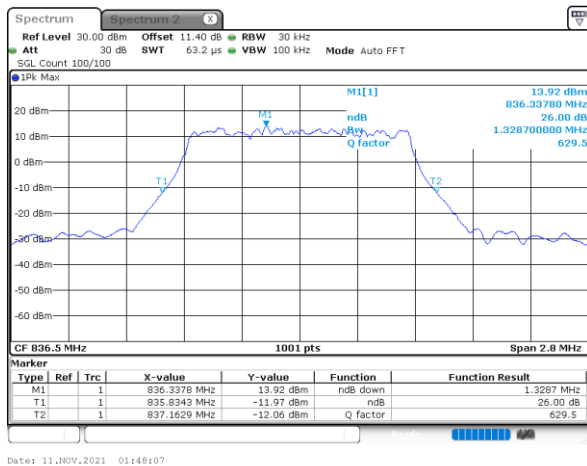
## Middle Channel / 10MHz / QPSK



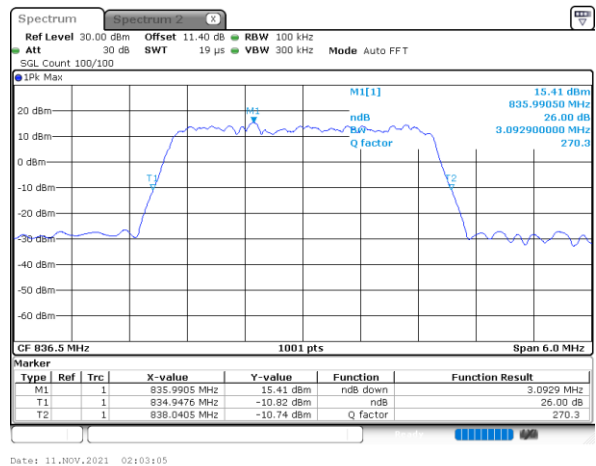
## Middle Channel / 10MHz / 16QAM



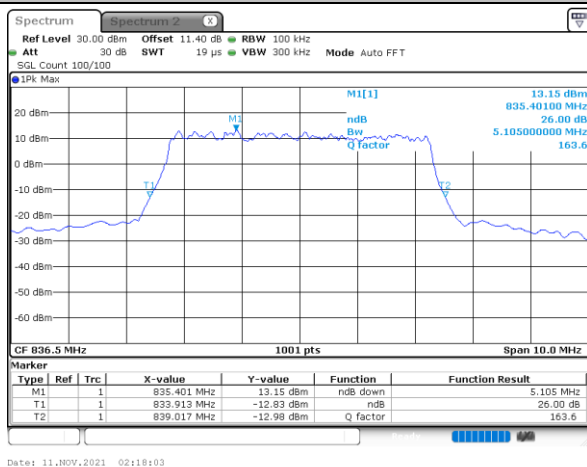
## Middle Channel / 1.4MHz / 64QAM



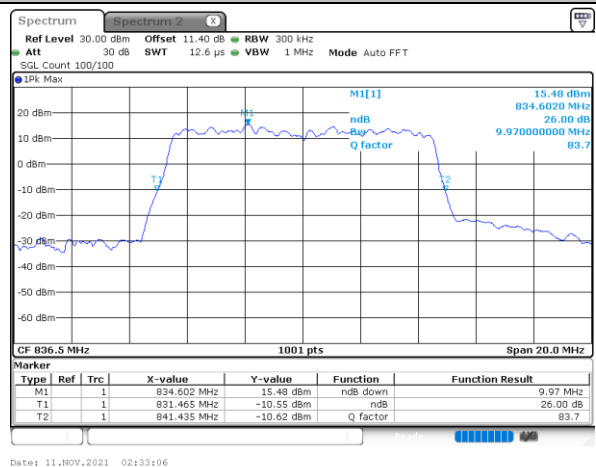
## Middle Channel / 3MHz / 64QAM



## Middle Channel / 5MHz / 64QAM



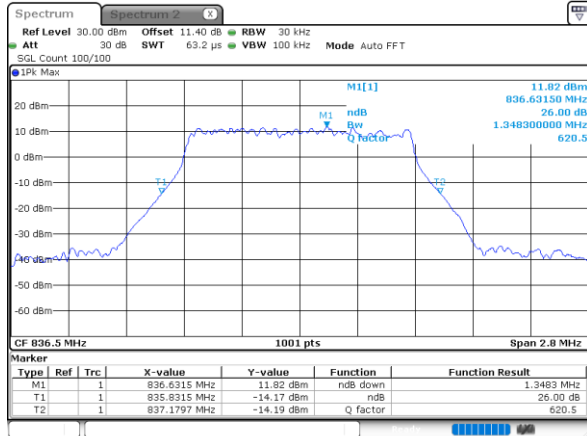
## Middle Channel / 10MHz / 64QAM



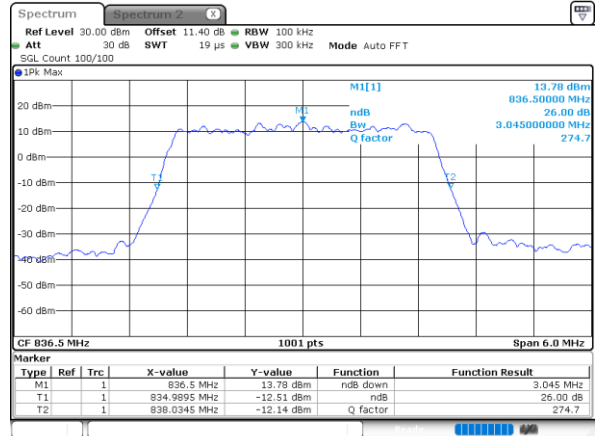


## LTE Band 5

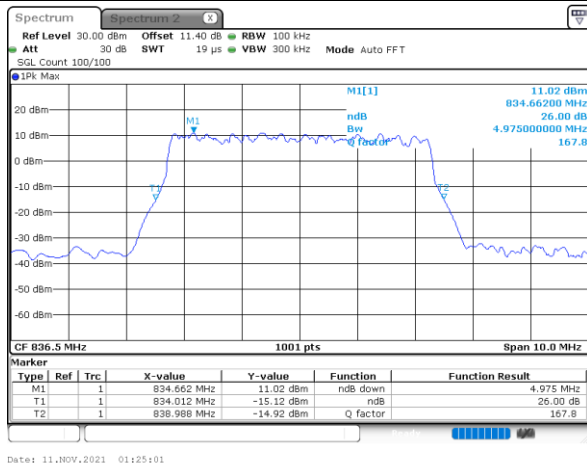
## Middle Channel / 1.4MHz / 256QAM



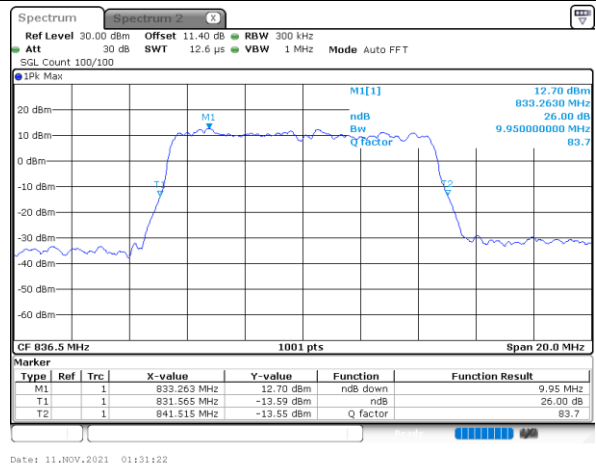
## Middle Channel / 3MHz / 256QAM



## Middle Channel / 5MHz / 256QAM



## Middle Channel / 10MHz / 256QAM



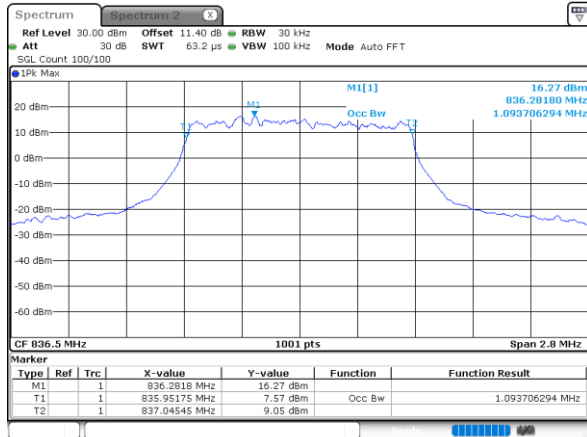
**Occupied Bandwidth**

| Mode      | LTE Band 5 : 99%OBW(MHz) |         |       |         |       |         |       |         |       |         |       |         |
|-----------|--------------------------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
| BW        | 1.4MHz                   |         | 3MHz  |         | 5MHz  |         | 10MHz |         | 15MHz |         | 20MHz |         |
| Mod.      | QPSK                     | 16QAM   | QPSK  | 16QAM   | QPSK  | 16QAM   | QPSK  | 16QAM   | QPSK  | 16QAM   | QPSK  | 16QAM   |
| Middle CH | 1.09                     | 1.10    | 2.73  | 2.74    | 4.54  | 4.49    | 8.99  | 9.03    | -     | -       | -     | -       |
| Mode      | LTE Band 5 : 99%OBW(MHz) |         |       |         |       |         |       |         |       |         |       |         |
| BW        | 1.4MHz                   |         | 3MHz  |         | 5MHz  |         | 10MHz |         | 15MHz |         | 20MHz |         |
| Mod.      | 64QAM                    | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM |
| Middle CH | 1.09                     | 1.09    | 2.73  | 2.71    | 4.49  | 4.51    | 8.97  | 9.01    | -     | -       | -     | -       |

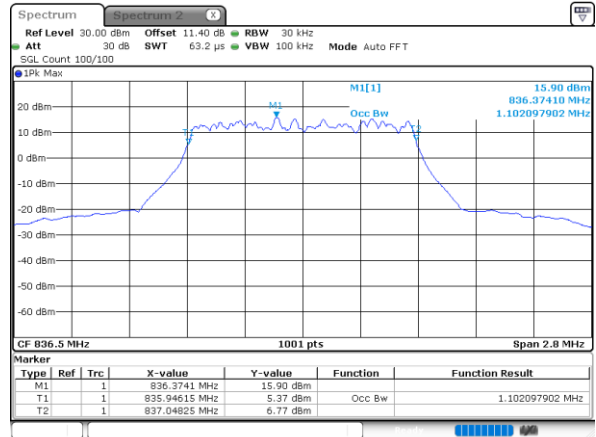


## LTE Band 5

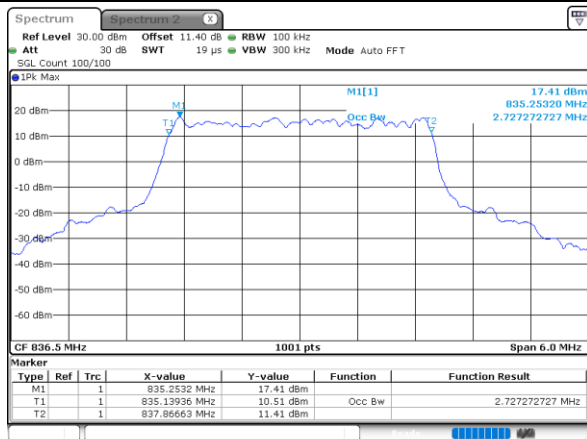
## Middle Channel / 1.4MHz / QPSK



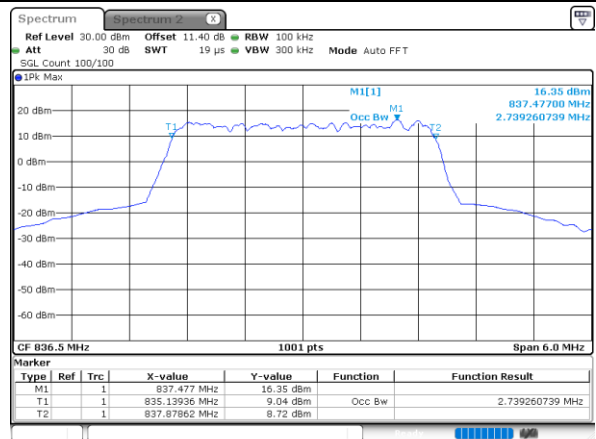
## Middle Channel / 1.4MHz / 16QAM



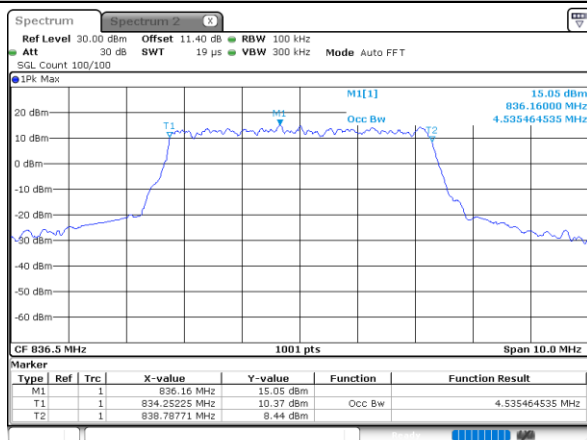
## Middle Channel / 3MHz / QPSK



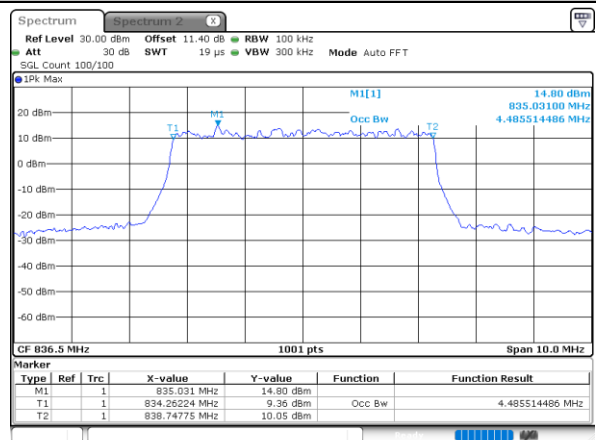
## Middle Channel / 3MHz / 16QAM



## Middle Channel / 5MHz / QPSK



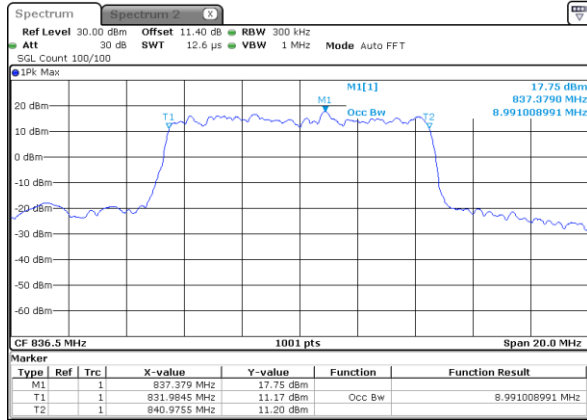
## Middle Channel / 5MHz / 16QAM



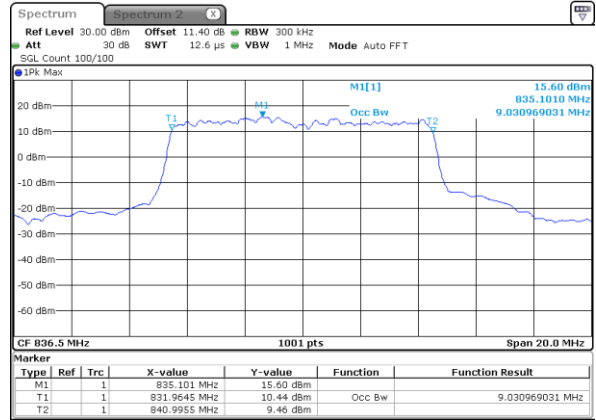


## LTE Band 5

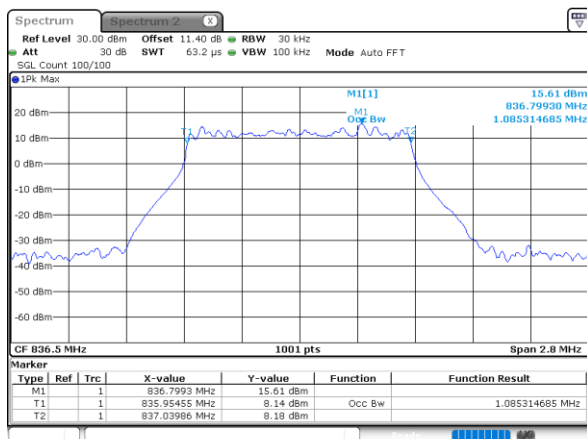
## Middle Channel / 10MHz / QPSK



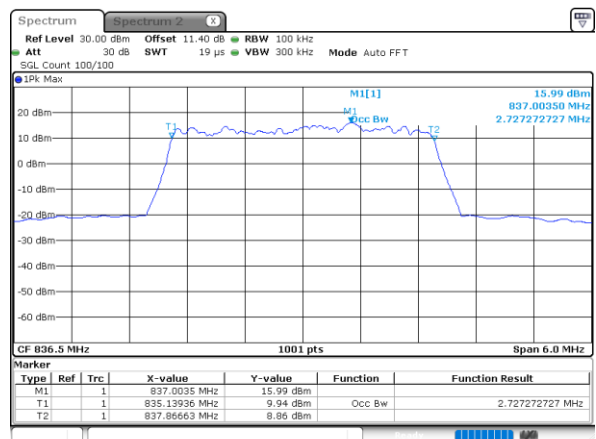
## Middle Channel / 10MHz / 16QAM



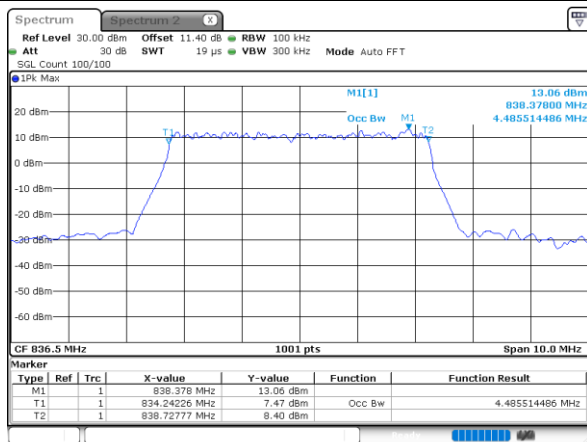
## Middle Channel / 1.4MHz / 64QAM



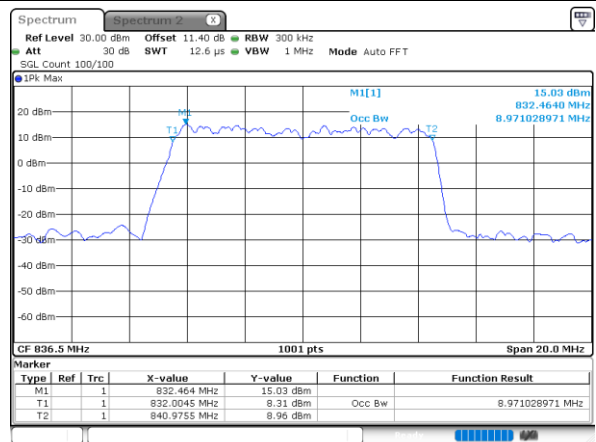
## Middle Channel / 3MHz / 64QAM



## Middle Channel / 5MHz / 64QAM



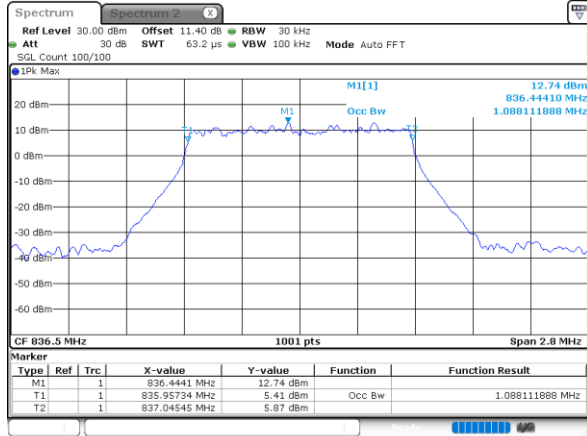
## Middle Channel / 10MHz / 64QAM



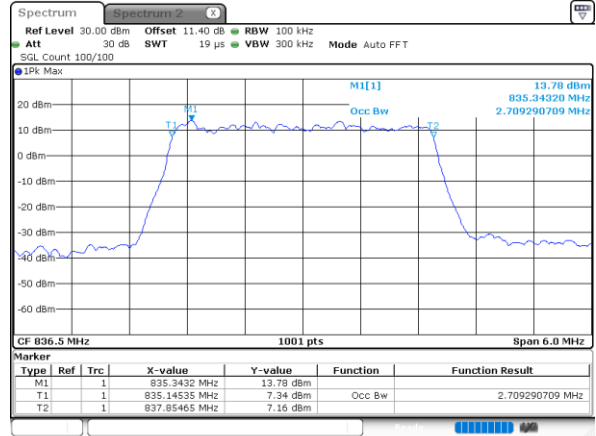


## LTE Band 5

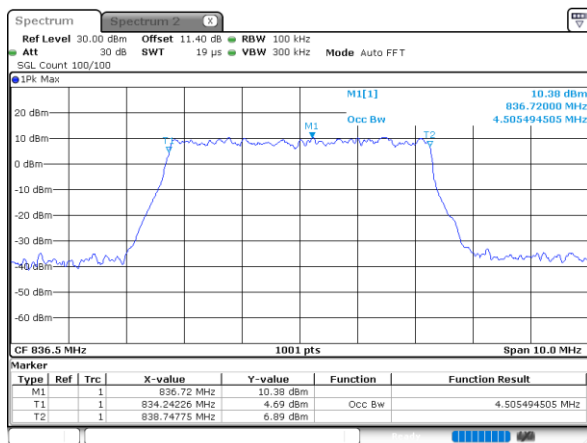
## Middle Channel / 1.4MHz / 256QAM



## Middle Channel / 3MHz / 256QAM



## Middle Channel / 5MHz / 256QAM



## Middle Channel / 10MHz / 256QAM

