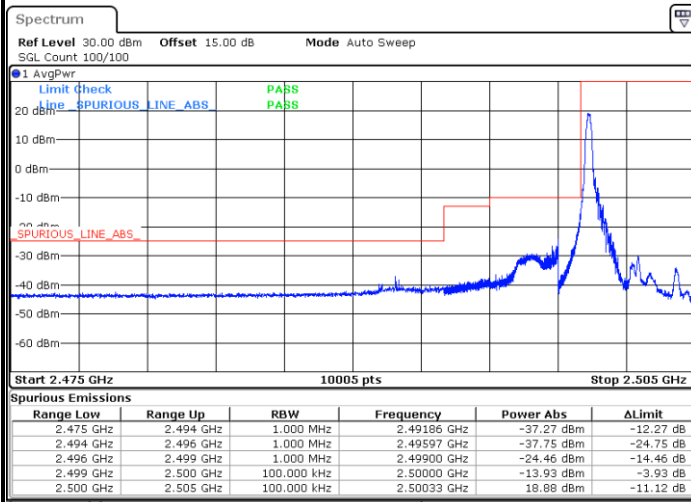


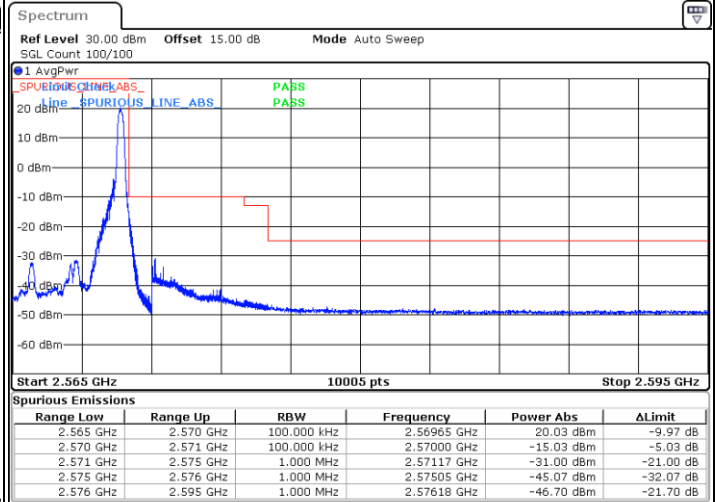


## LTE Band 7 / 5MHz / 16QAM

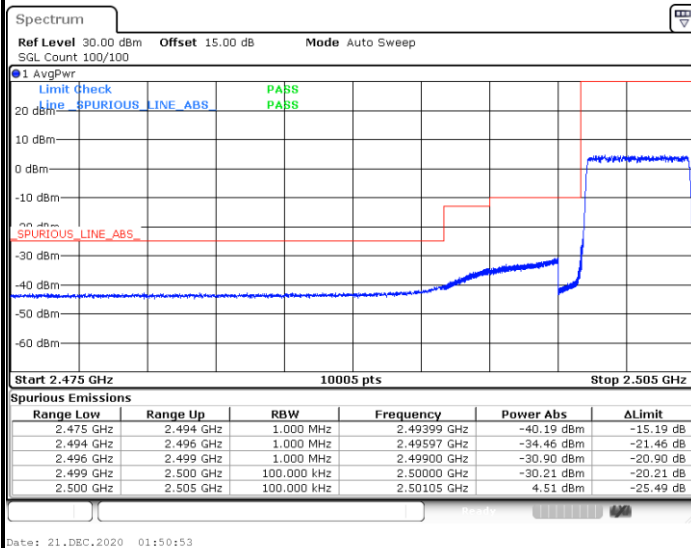
## Lowest Band Edge / 1 RB



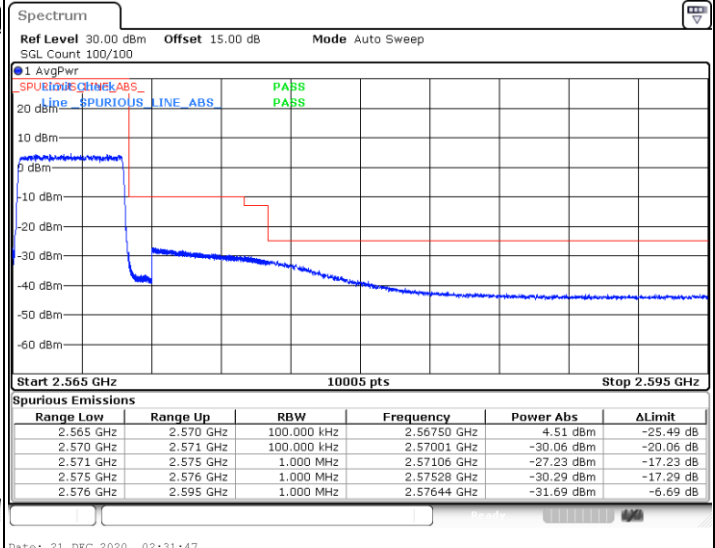
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



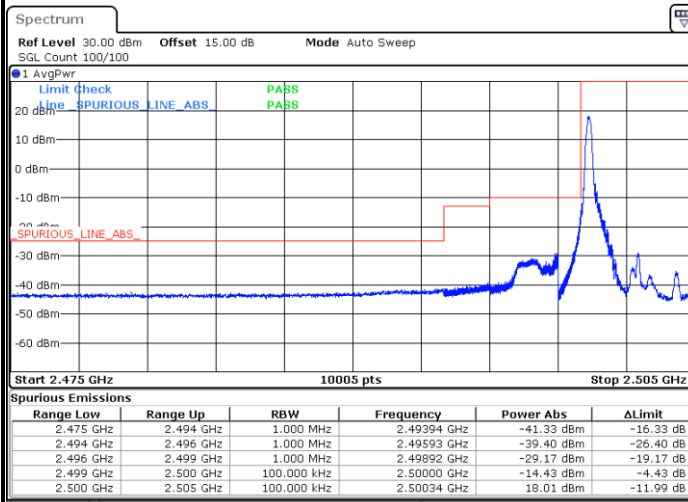
## Highest Band Edge / Full RB



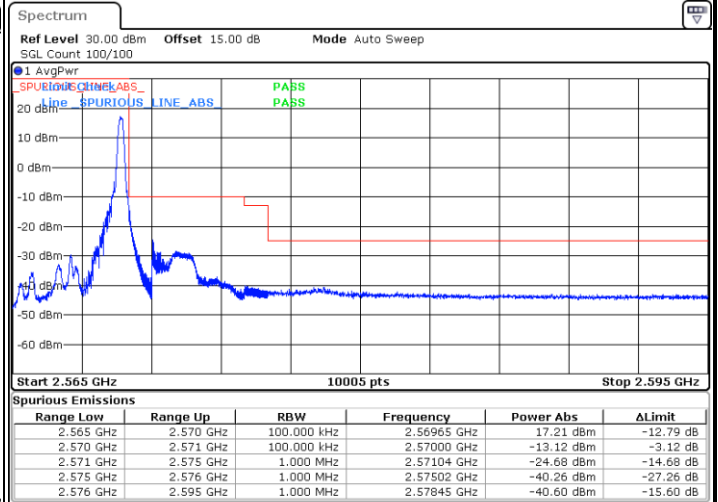


## LTE Band 7 / 5MHz / 64QAM

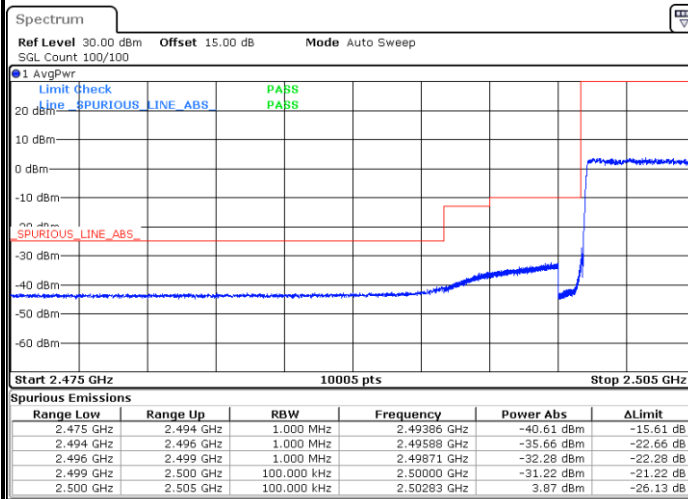
## Lowest Band Edge / 1RB



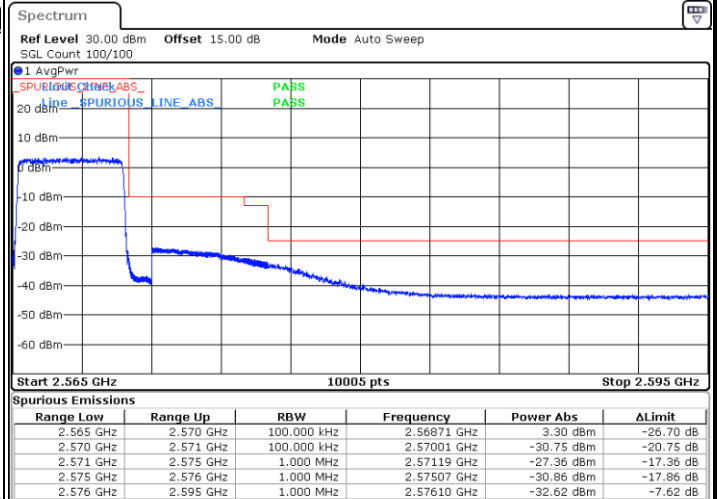
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



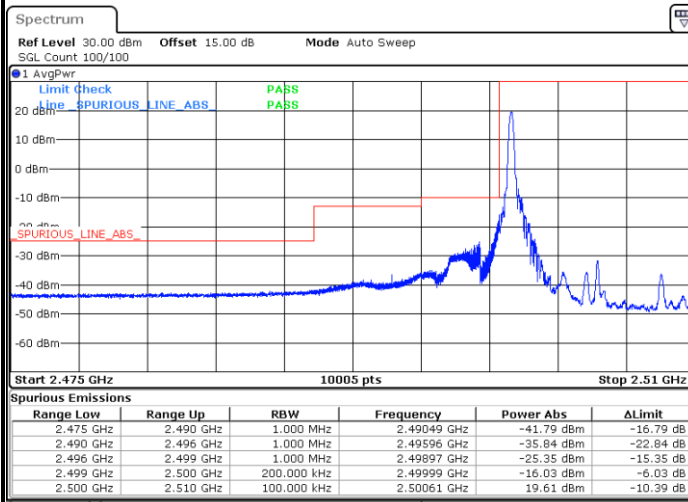
## Highest Band Edge / Full RB



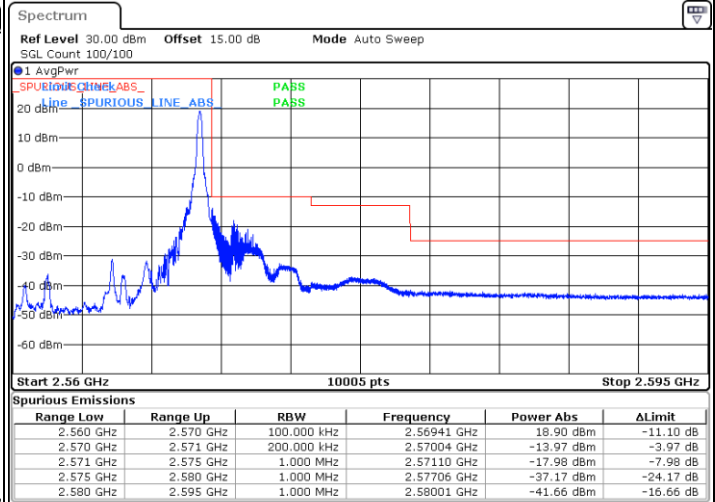


## LTE Band 7 / 10MHz / QPSK

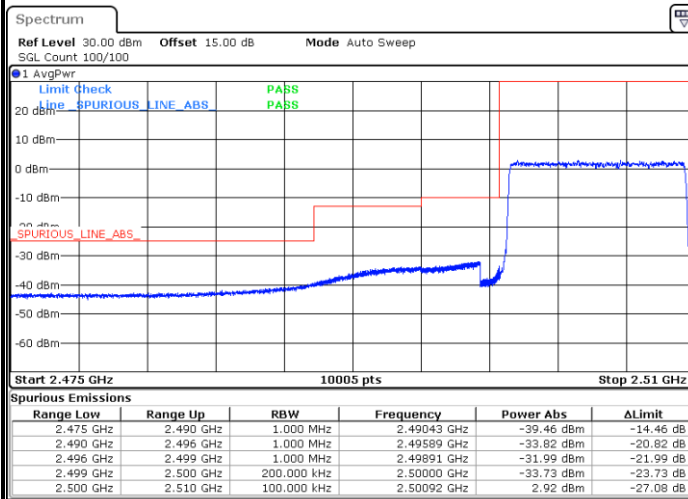
## Lowest Band Edge / 1 RB



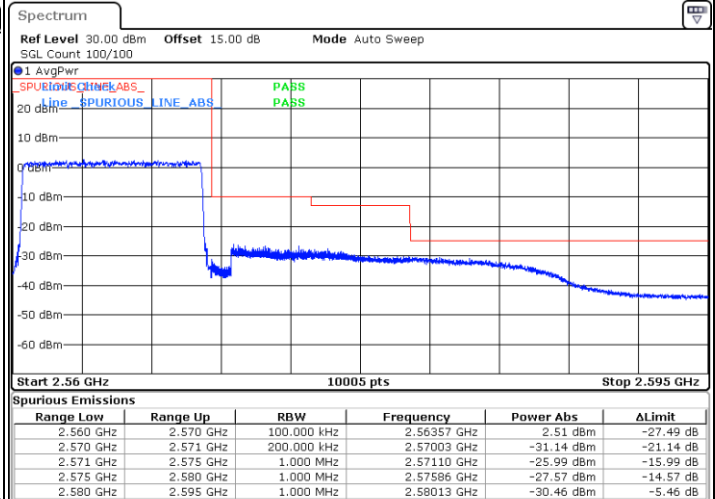
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



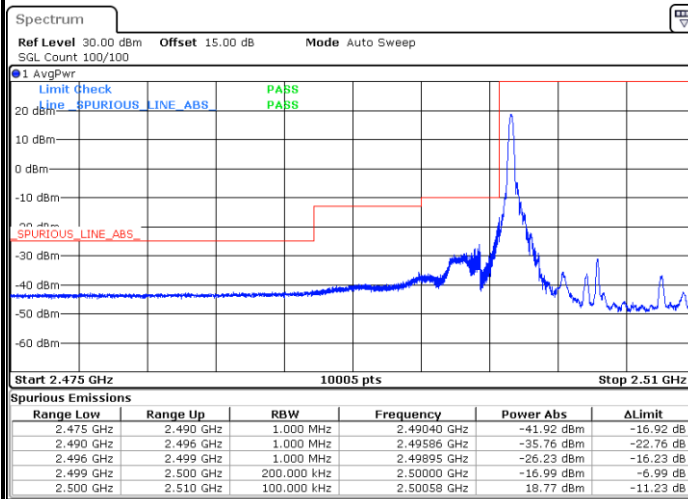
## Highest Band Edge / Full RB



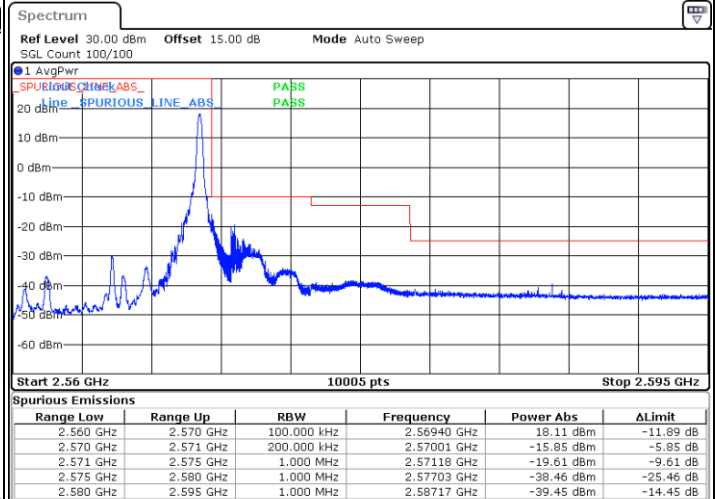


## LTE Band 7 / 10MHz / 16QAM

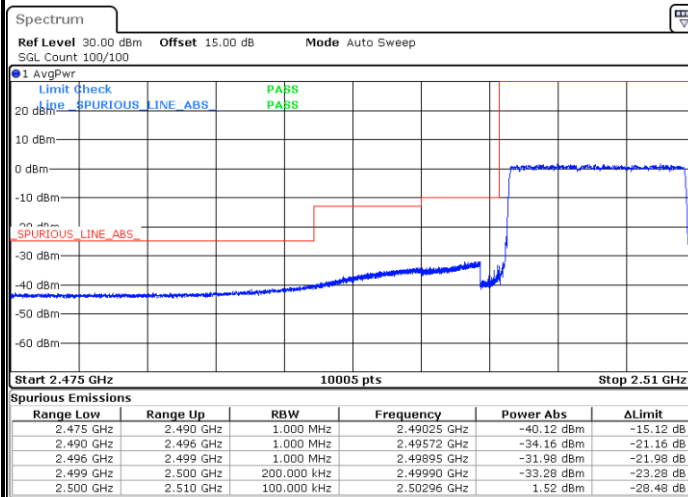
## Lowest Band Edge / 1 RB



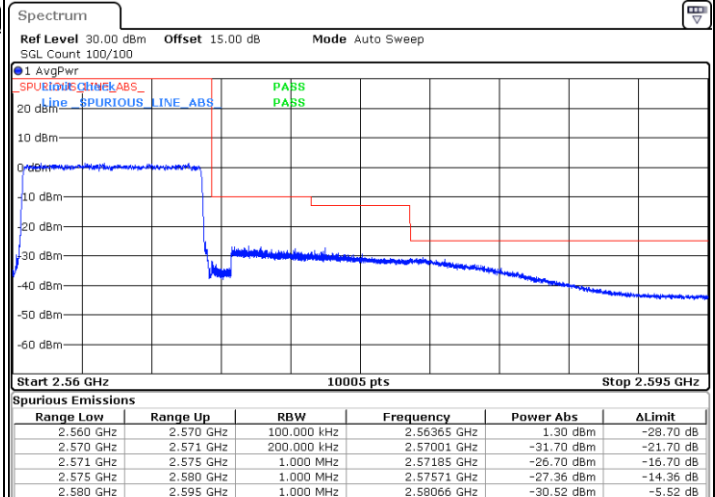
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



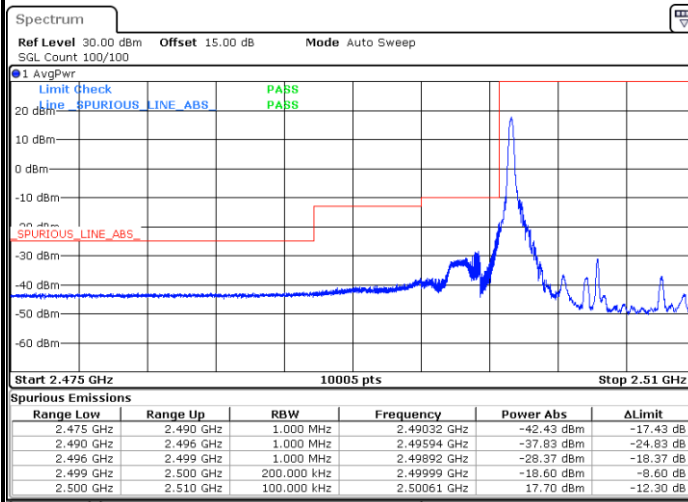
## Highest Band Edge / Full RB



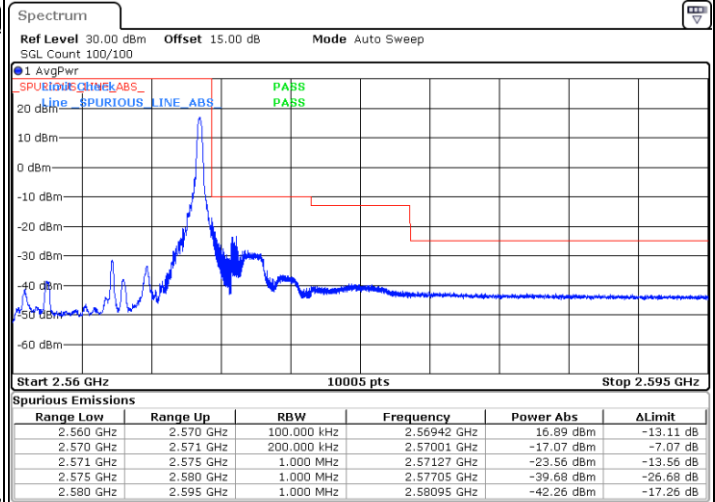


## LTE Band 7 / 10MHz / 64QAM

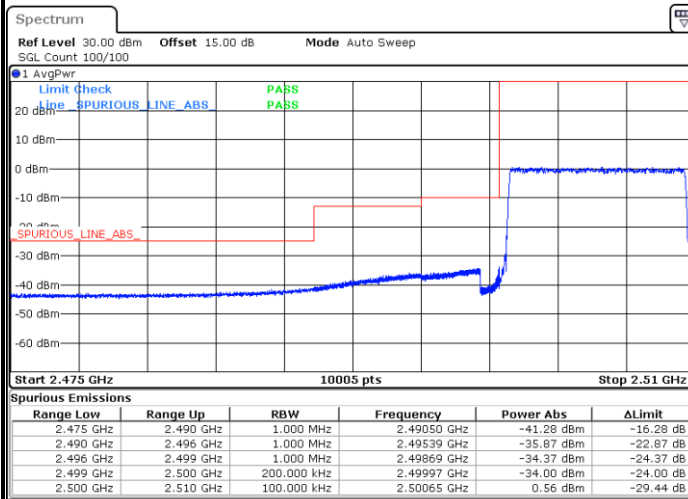
## Lowest Band Edge / 1 RB



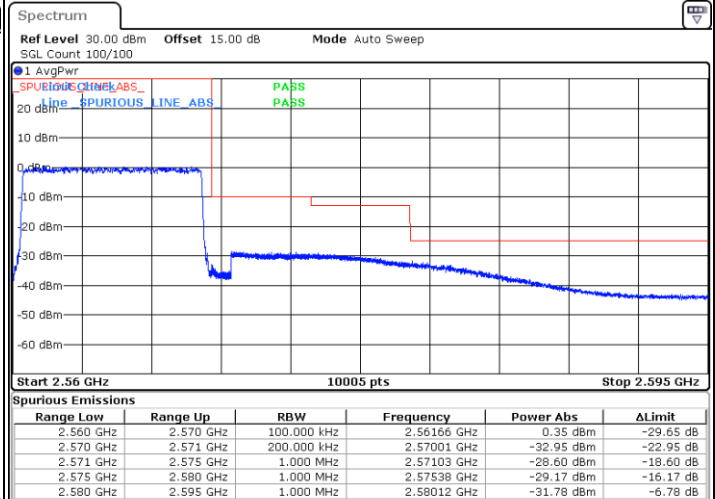
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



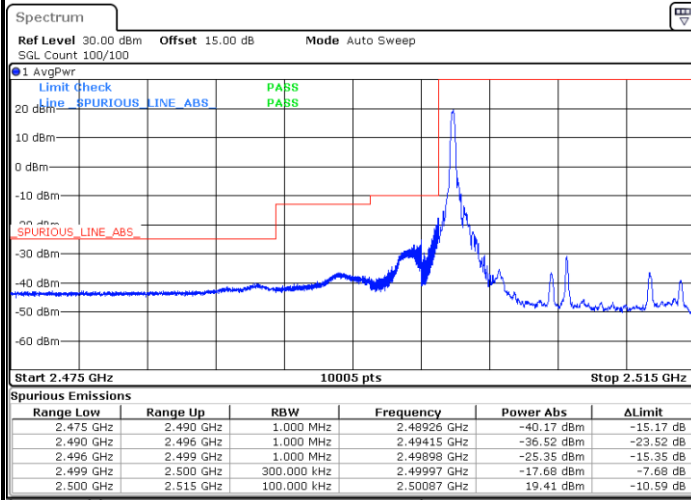
## Highest Band Edge / Full RB



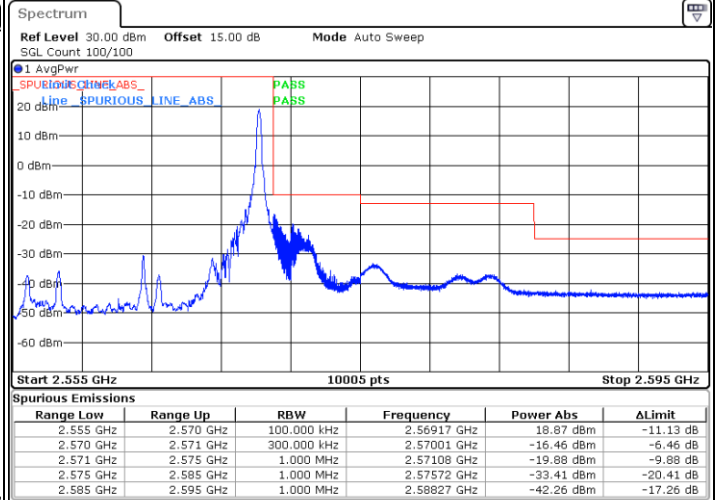


## LTE Band 7 / 15MHz / QPSK

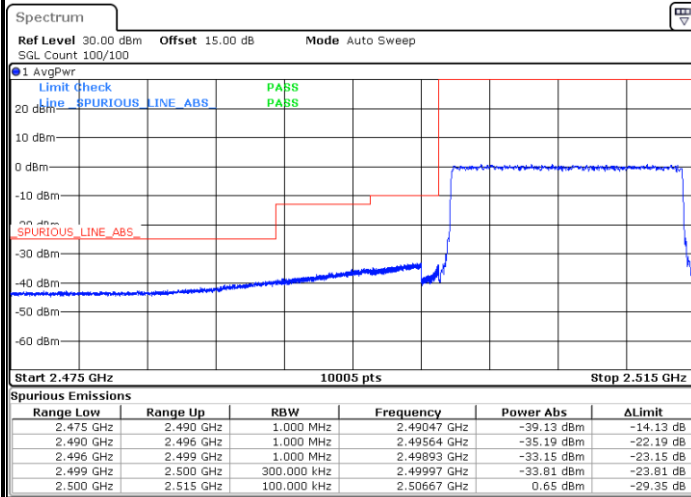
## Lowest Band Edge / 1 RB



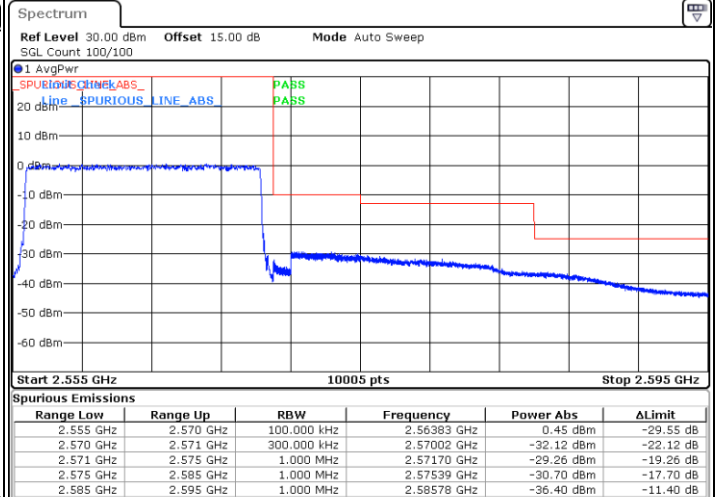
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



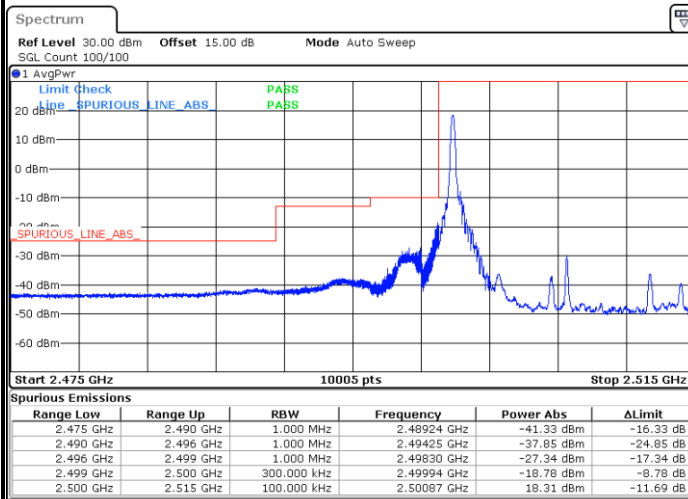
## Highest Band Edge / Full RB



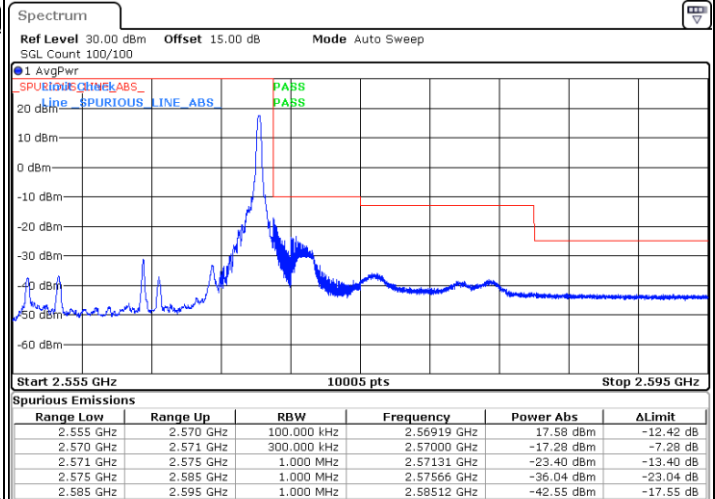


## LTE Band 7 / 15MHz / 16QAM

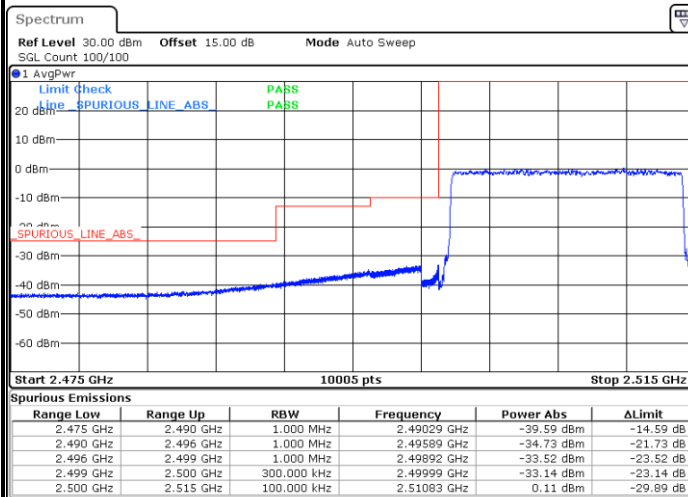
## Lowest Band Edge / 1 RB



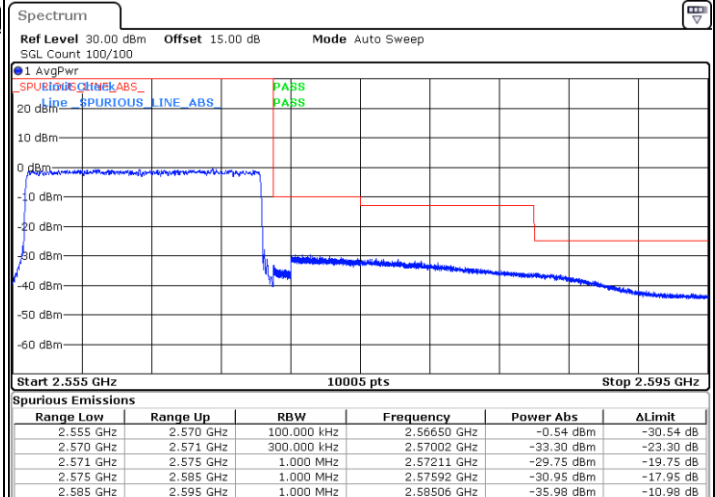
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

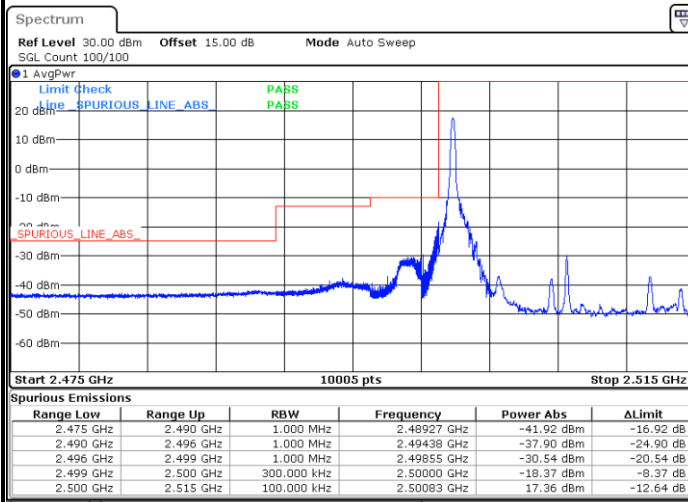




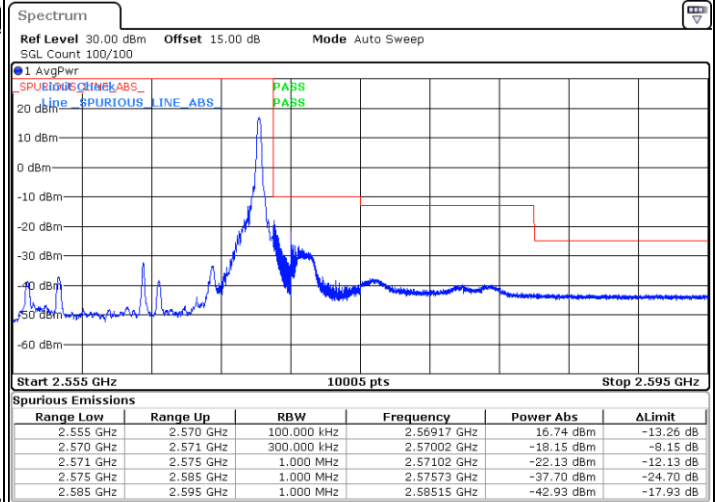


## LTE Band 7 / 15MHz / 64QAM

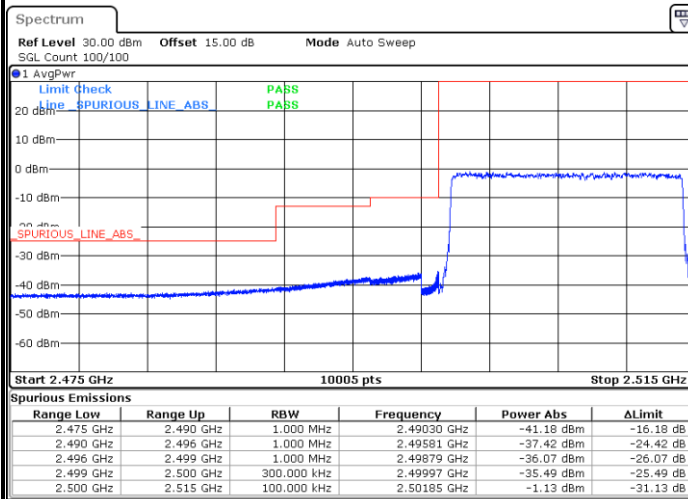
## Lowest Band Edge / 1 RB



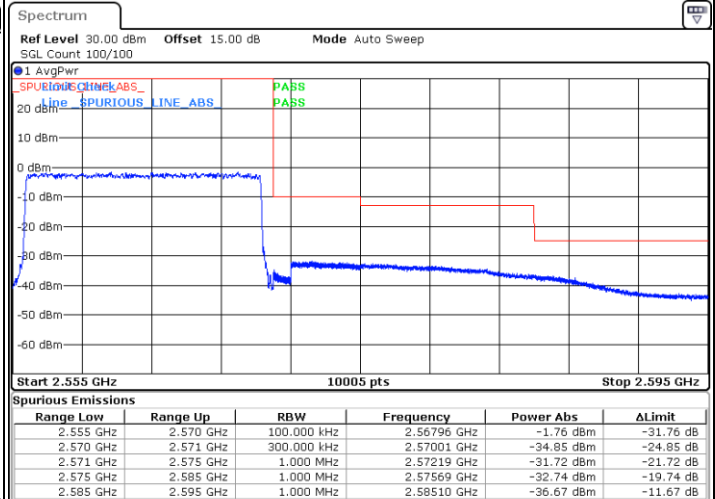
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

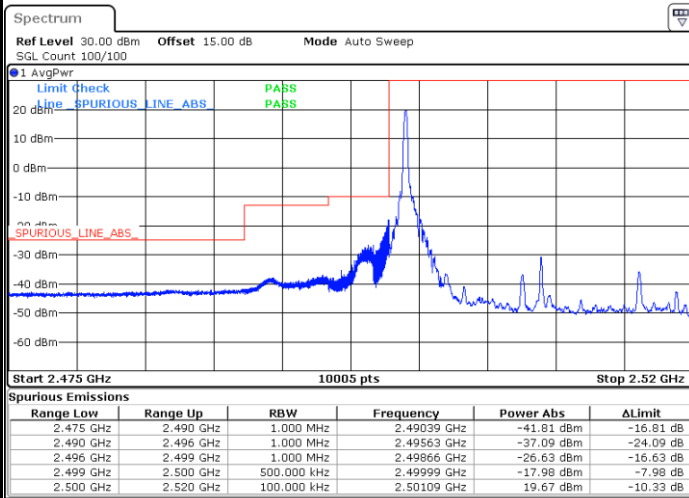




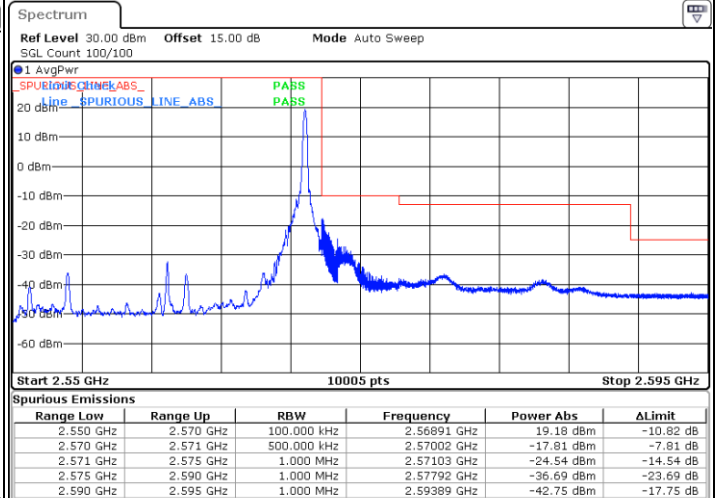


## LTE Band 7 / 20MHz / QPSK

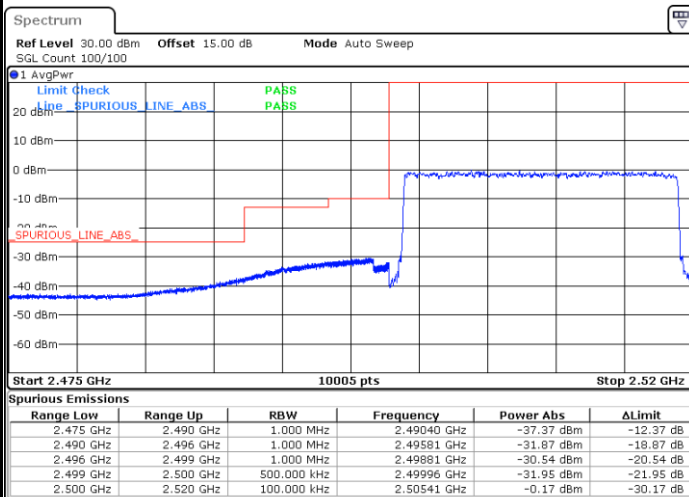
## Lowest Band Edge / 1 RB



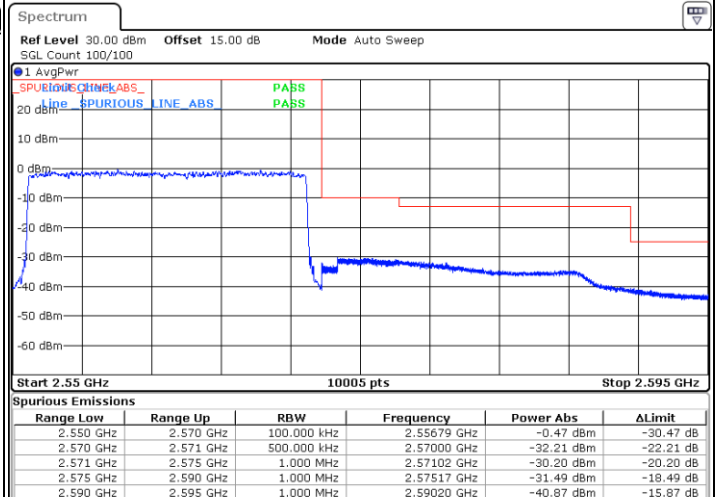
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



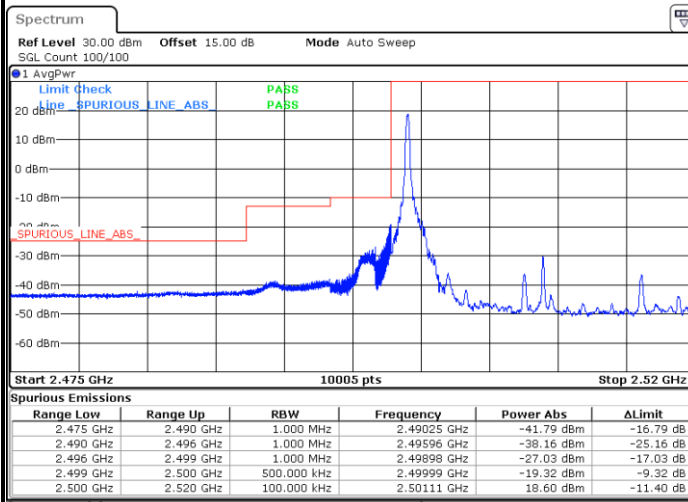
## Highest Band Edge / Full RB



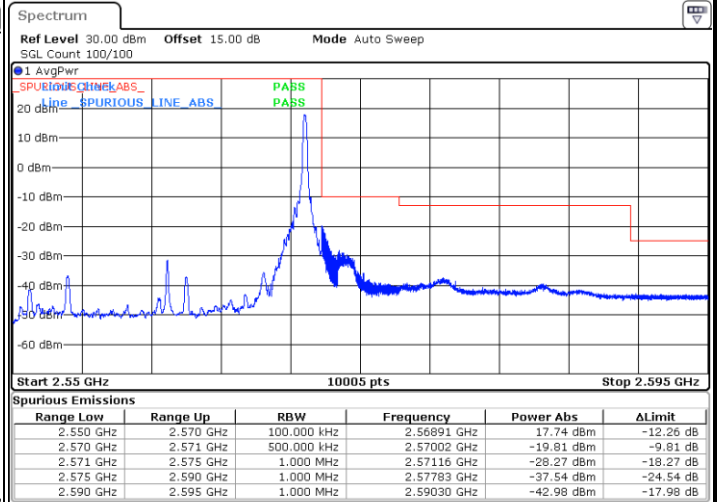


## LTE Band 7 / 20MHz / 16QAM

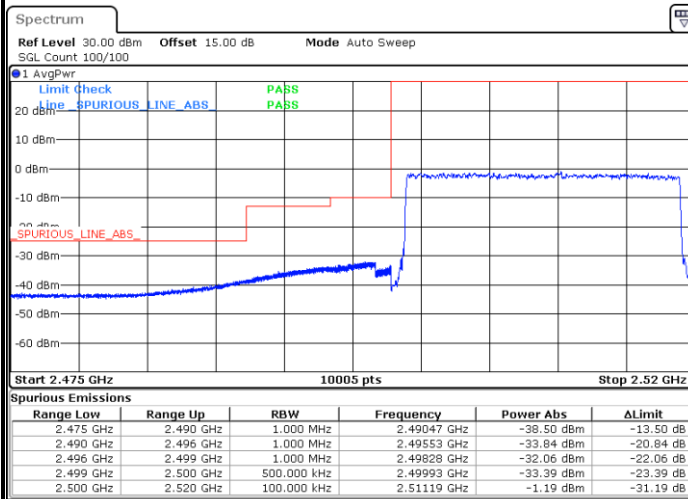
## Lowest Band Edge / 1 RB



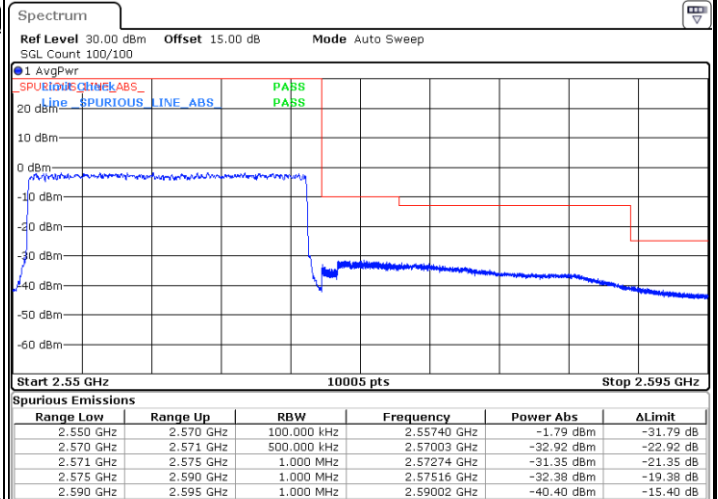
## Highest Band Edge / 1RB



## Lowest Band Edge / Full RB



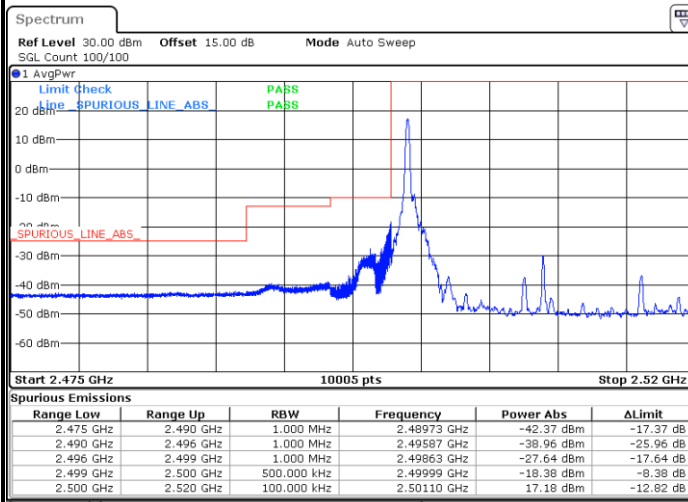
## Highest Band Edge / Full RB



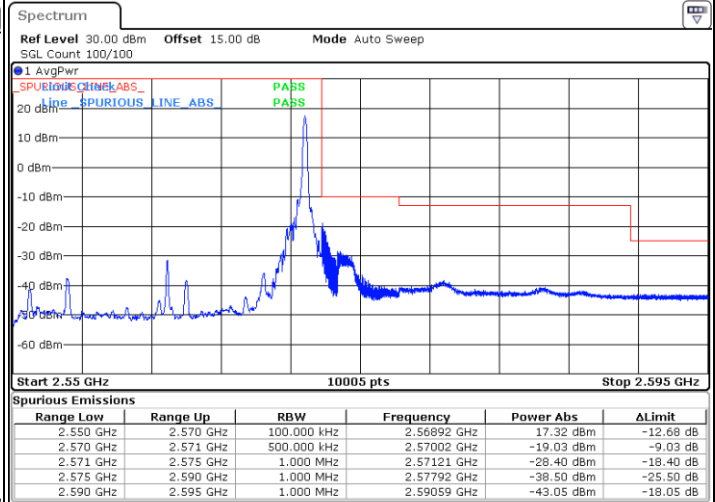


## LTE Band 7 / 20MHz / 64QAM

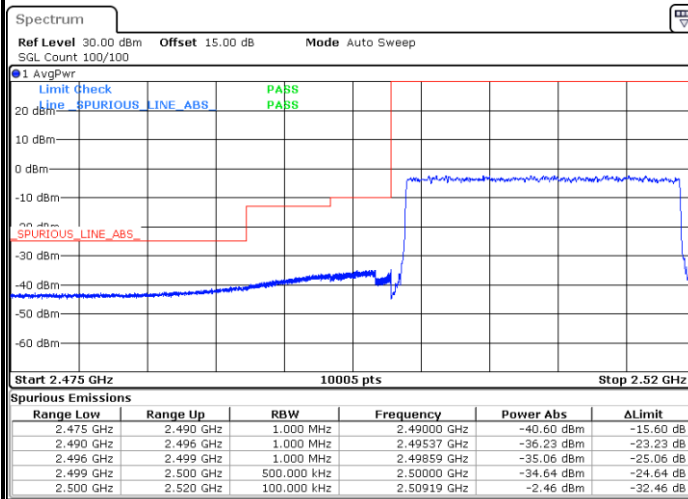
## Lowest Band Edge / 1 RB



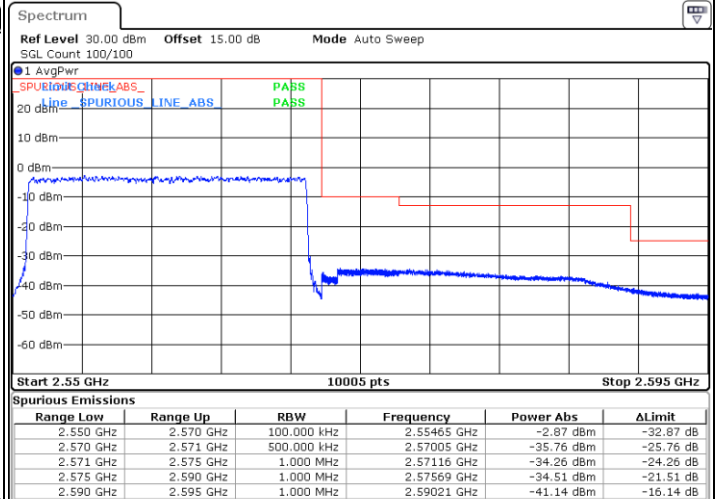
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB



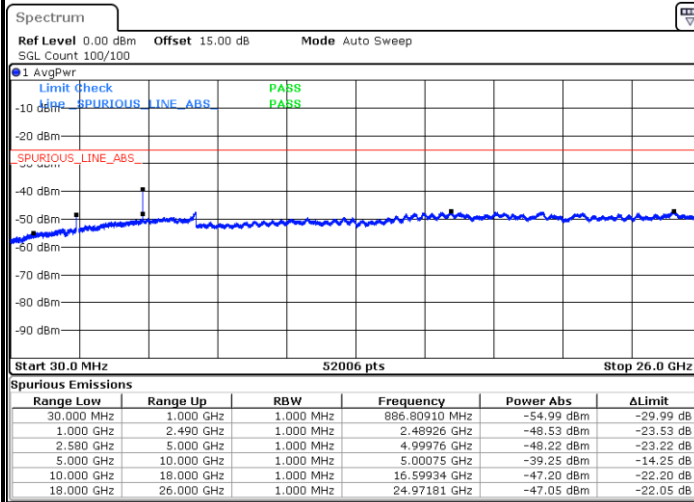


## **Conducted Spurious Emission**



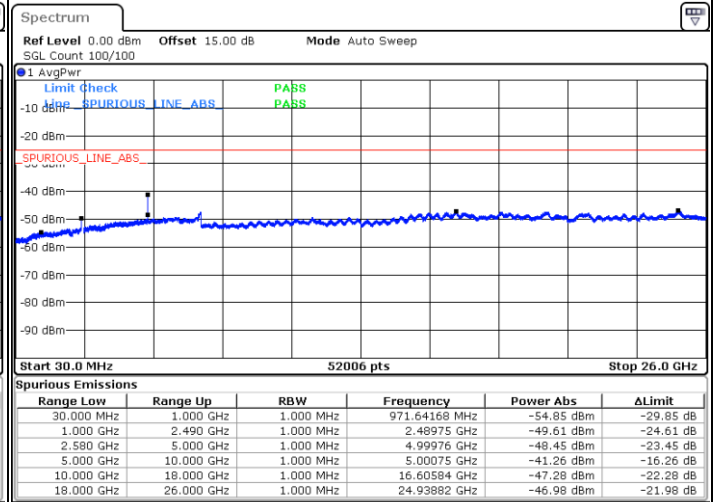
## LTE Band 7 / 5MHz

## Lowest Channel / QPSK



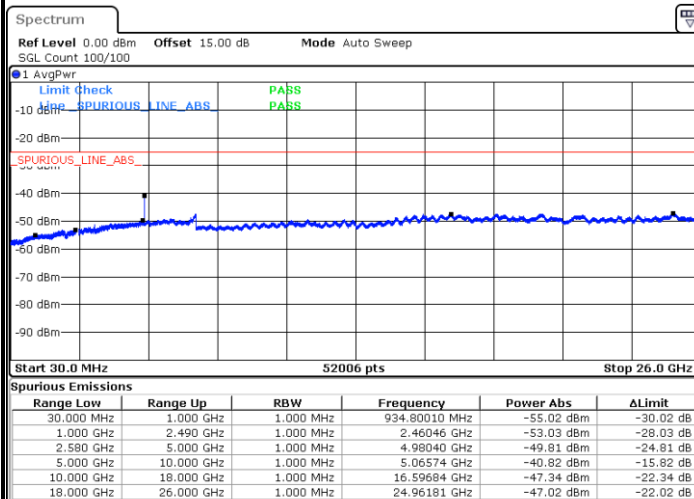
Date: 21.DEC.2020 02:00:29

## Lowest Channel / 16QAM



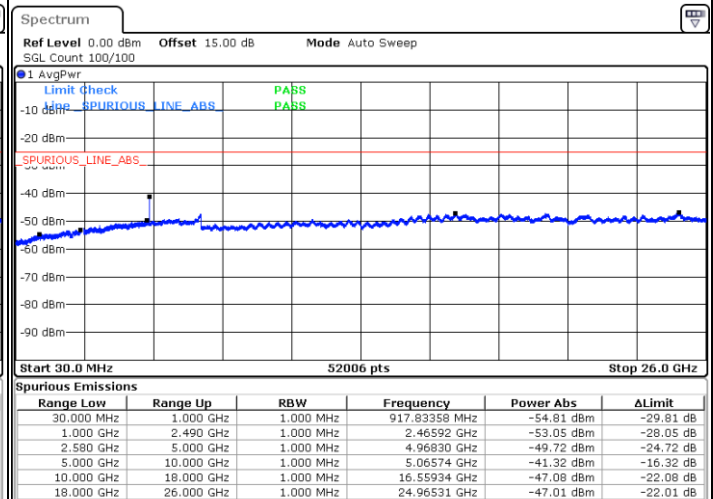
Date: 21.DEC.2020 01:58:00

## Middle Channel / QPSK



Date: 21.DEC.2020 02:03:26

## Middle Channel / 16QAM

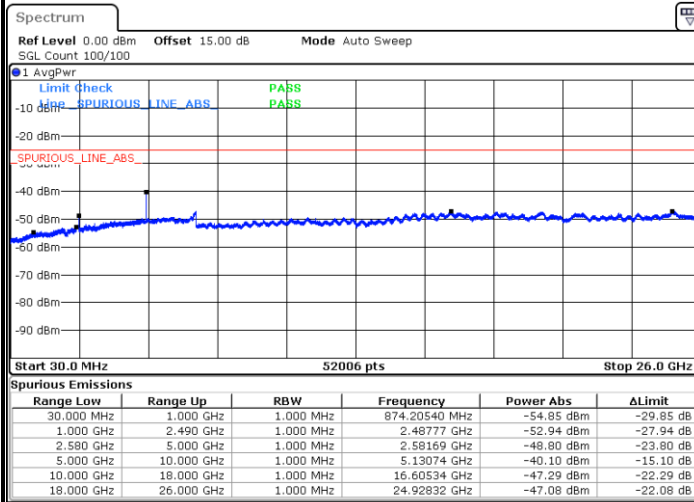


Date: 21.DEC.2020 02:04:53



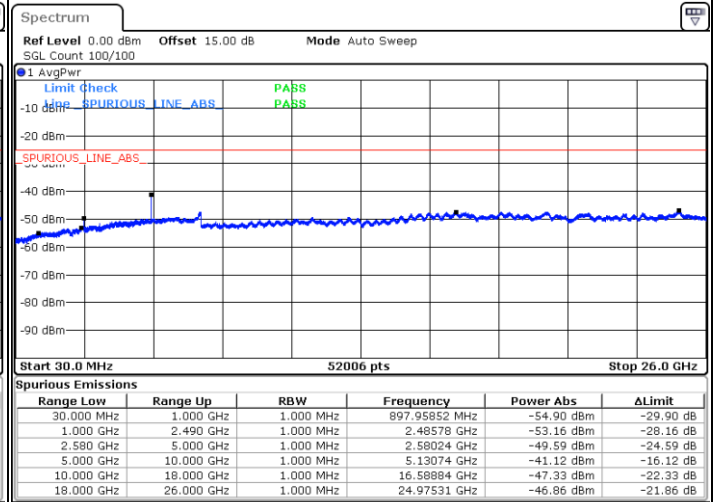
## LTE Band 7 / 5MHz

## Highest Channel / QPSK



Date: 21.DEC.2020 02:15:22

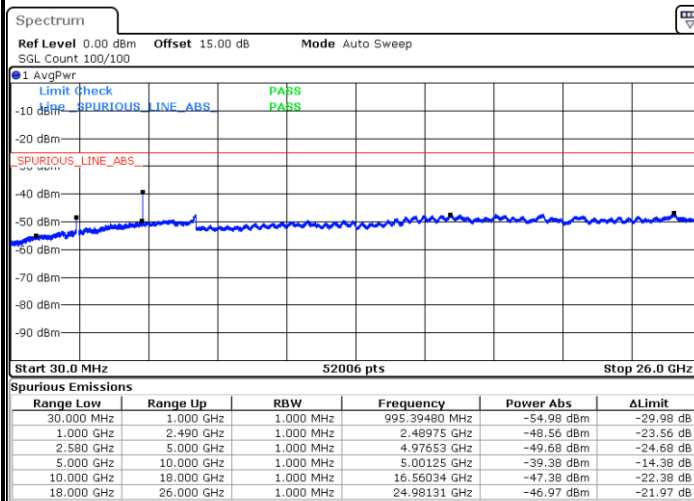
## Highest Channel / 16QAM



Date: 21.DEC.2020 02:14:01

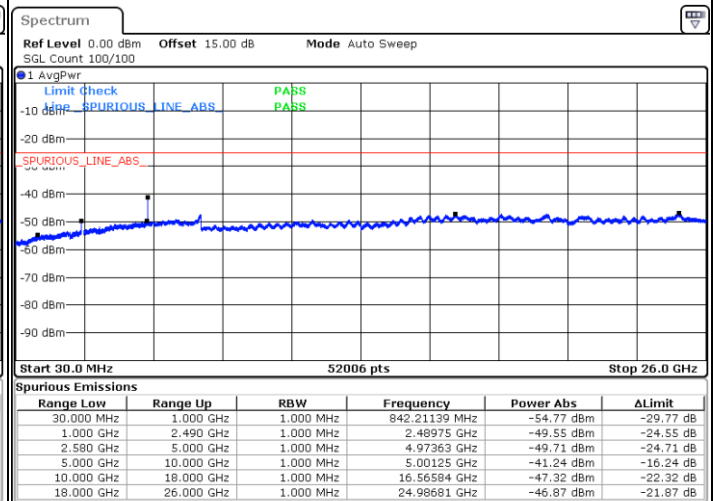
## LTE Band 7 / 10MHz

## Lowest Channel / QPSK



Date: 21.DEC.2020 02:45:58

## Lowest Channel / 16QAM

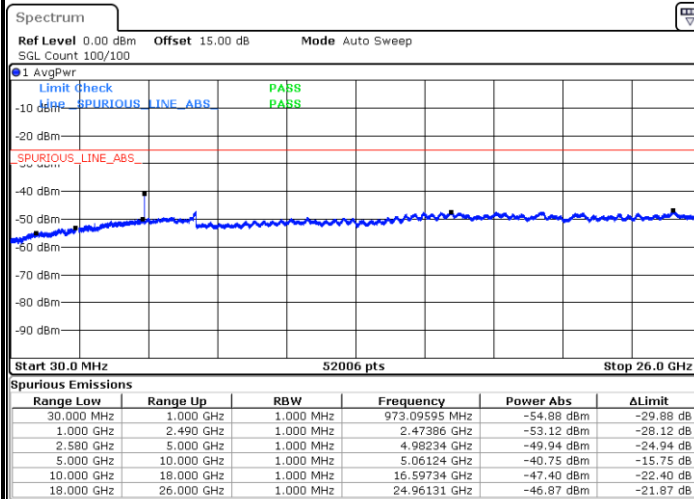


Date: 21.DEC.2020 02:43:55



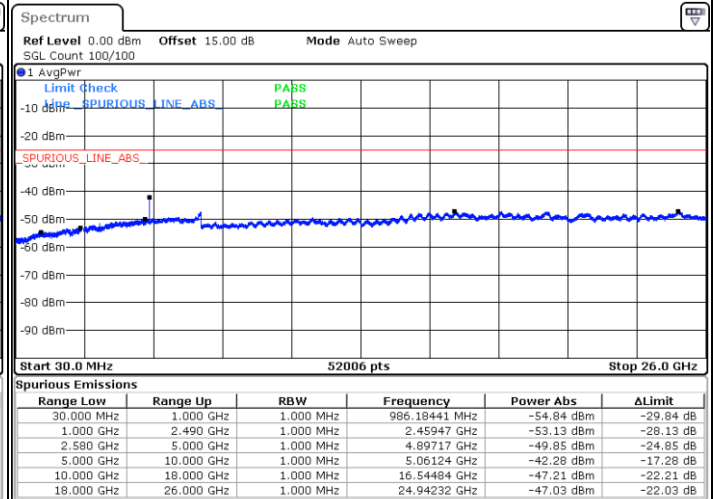
## LTE Band 7 / 10MHz

## Middle Channel / QPSK



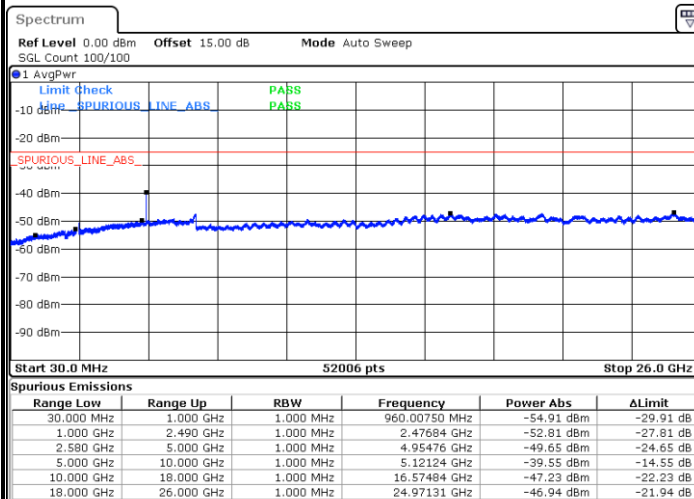
Date: 21.DEC.2020 02:55:26

## Middle Channel / 16QAM



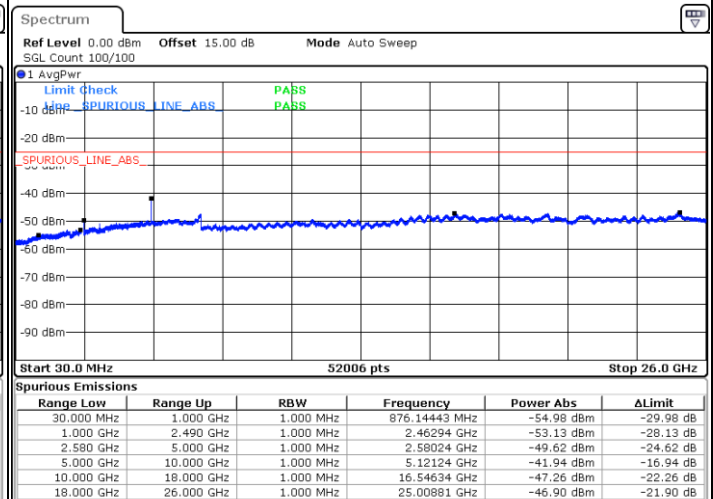
Date: 21.DEC.2020 02:57:19

## Highest Channel / QPSK



Date: 21.DEC.2020 03:07:30

## Highest Channel / 16QAM



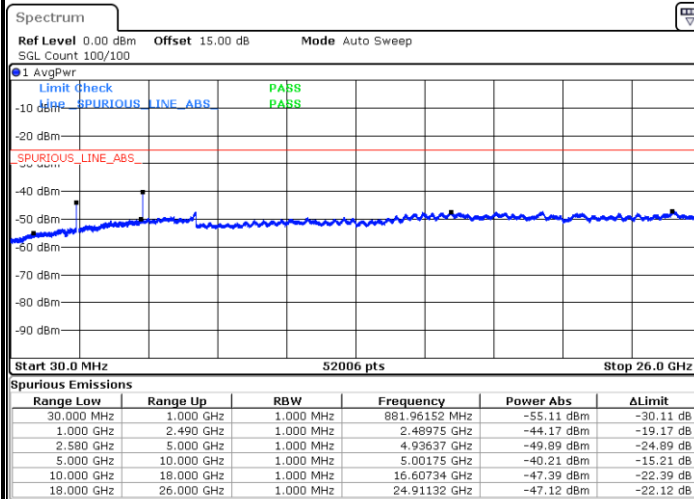
Date: 21.DEC.2020 03:06:08





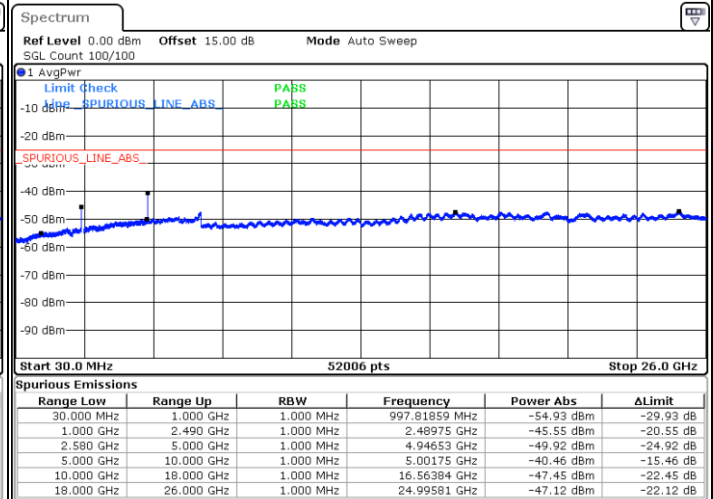
## LTE Band 7 / 15MHz

## Lowest Channel / QPSK



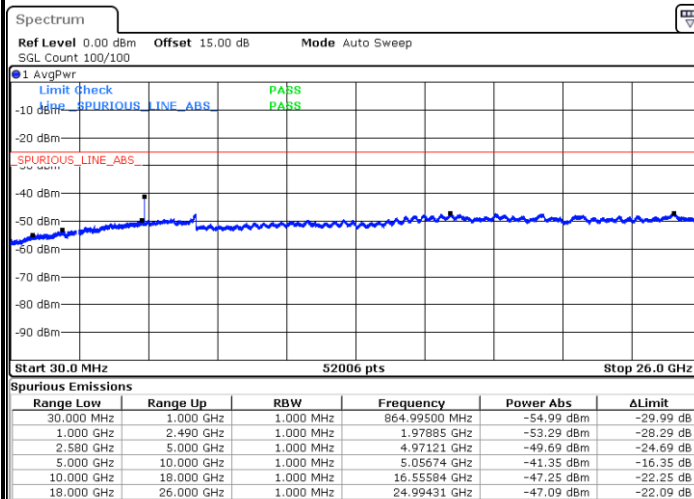
Date: 21.DEC.2020 03:26:30

## Lowest Channel / 16QAM



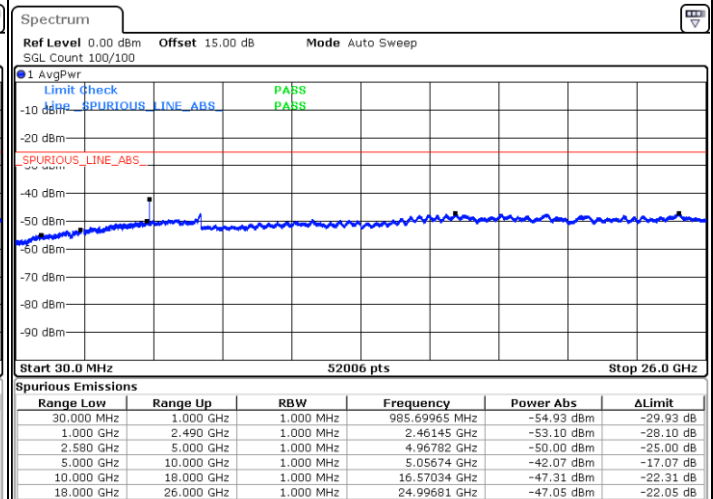
Date: 21.DEC.2020 03:24:50

## Middle Channel / QPSK



Date: 21.DEC.2020 03:29:00

## Middle Channel / 16QAM

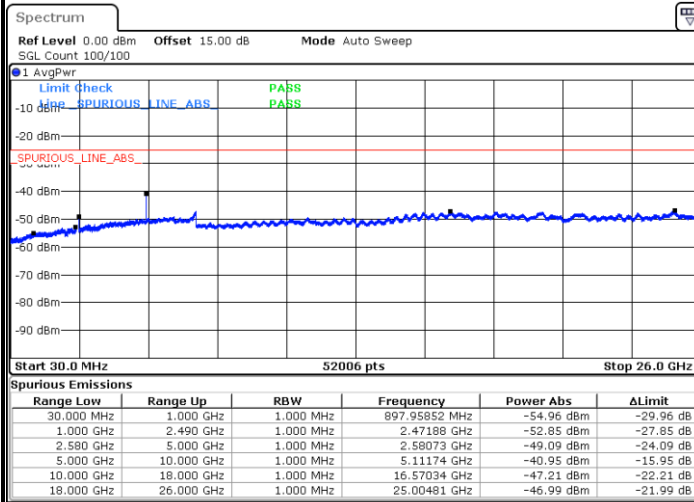


Date: 21.DEC.2020 03:30:21



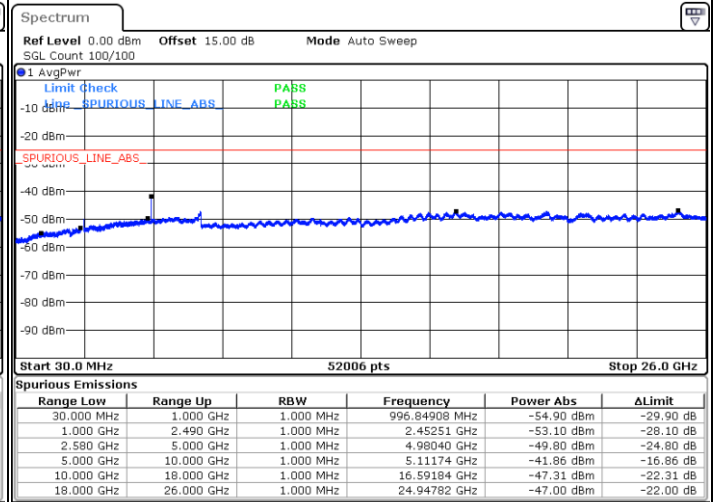
## LTE Band7 / 15MHz

## Highest Channel / QPSK



Date: 21.DEC.2020 03:45:11

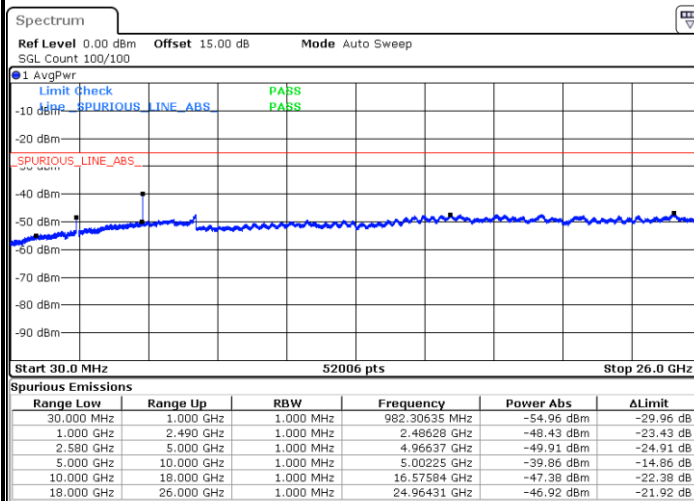
## Highest Channel / 16QAM



Date: 21.DEC.2020 03:43:37

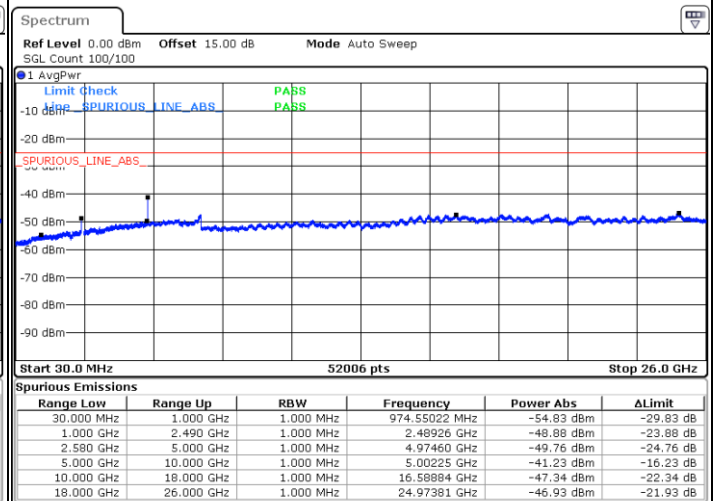
## LTE Band 7 / 20MHz

## Lowest Channel / QPSK



Date: 21.DEC.2020 04:00:15

## Lowest Channel / 16QAM

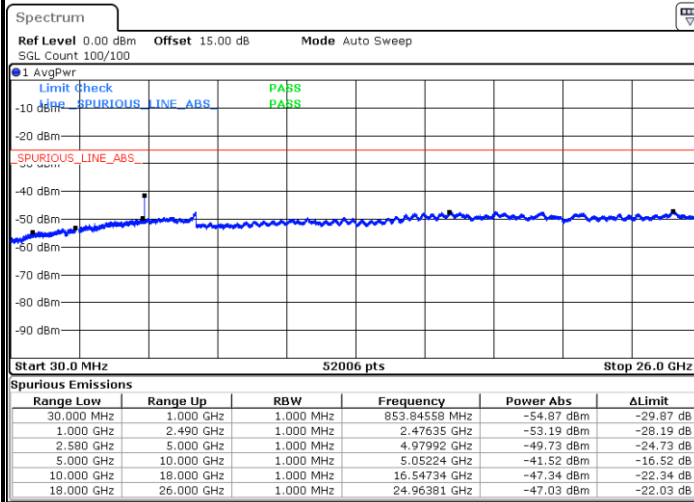


Date: 21.DEC.2020 04:02:28



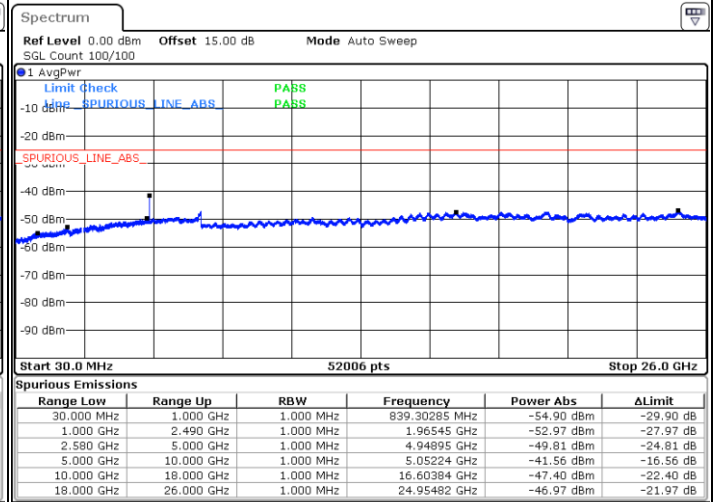
## LTE Band 7 / 20MHz

## Middle Channel / QPSK



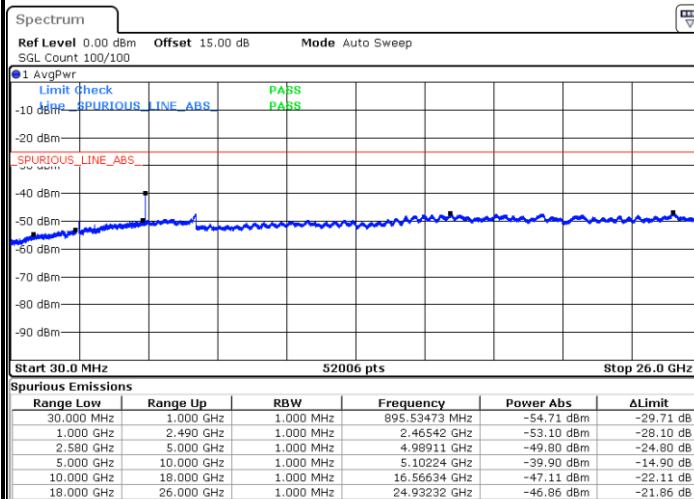
Date: 21.DEC.2020 04:13:17

## Middle Channel / 16QAM



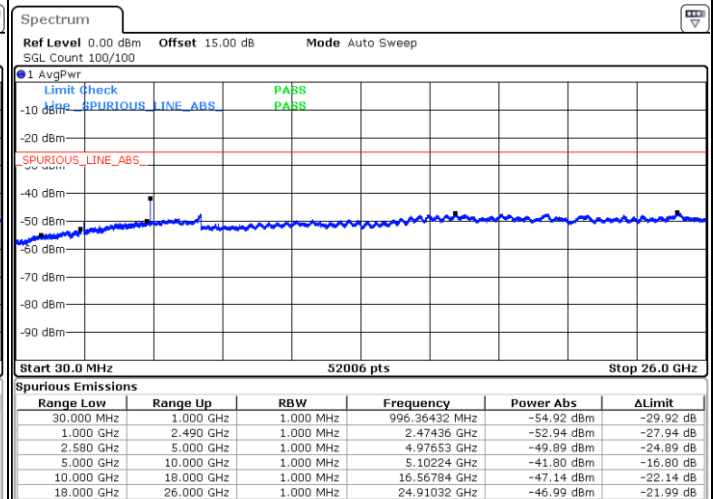
Date: 21.DEC.2020 04:11:46

## Highest Channel / QPSK



Date: 21.DEC.2020 04:21:35

## Highest Channel / 16QAM

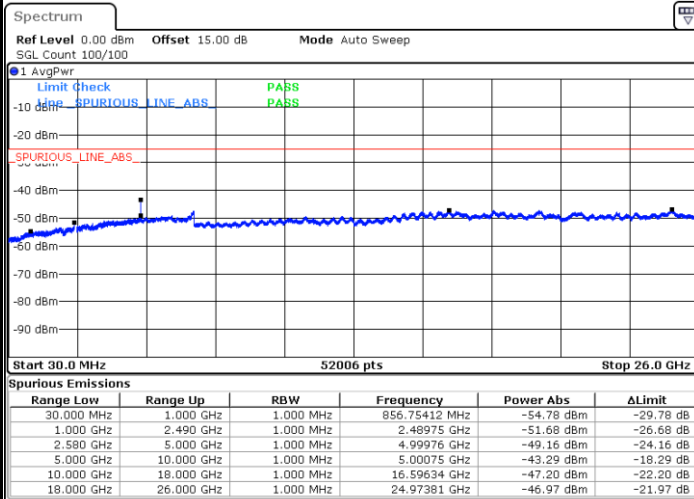


Date: 21.DEC.2020 04:28:23



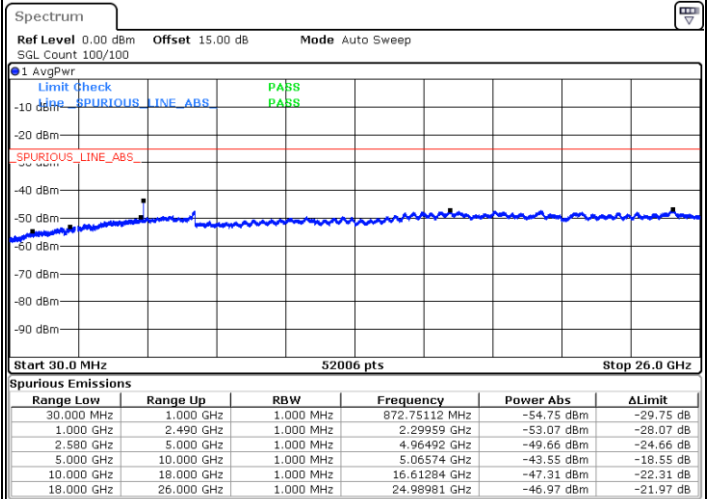
## LTE Band 7 / 5MHz

## Lowest Channel / 64QAM



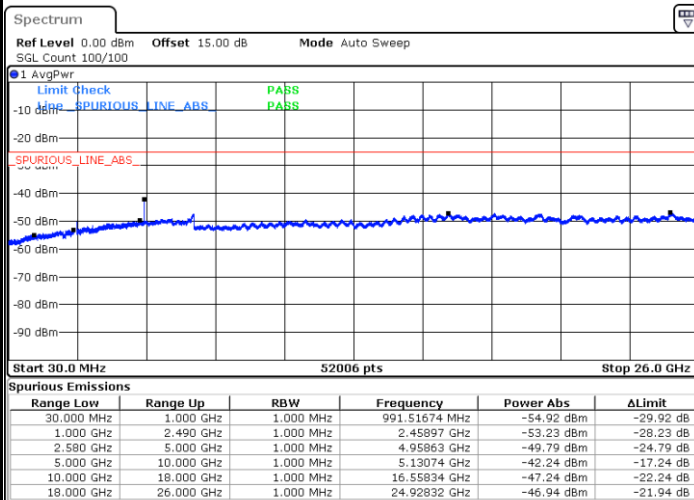
Date: 21.DEC.2020 01:55:26

## Middle Channel / 64QAM



Date: 21.DEC.2020 02:07:30

## Highest Channel / 64QAM

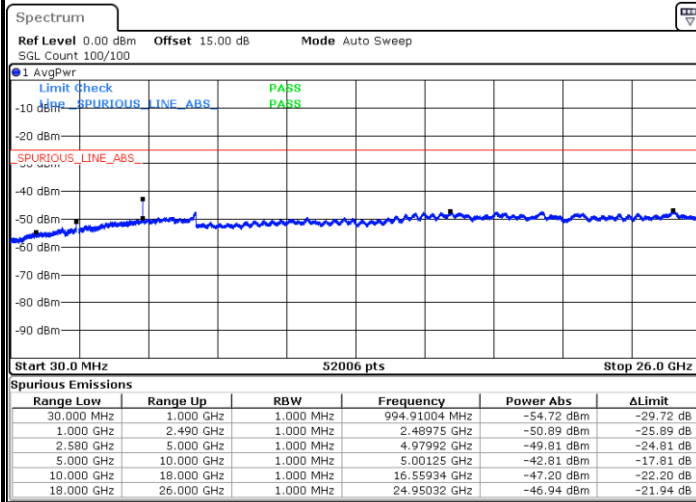


Date: 21.DEC.2020 02:12:41



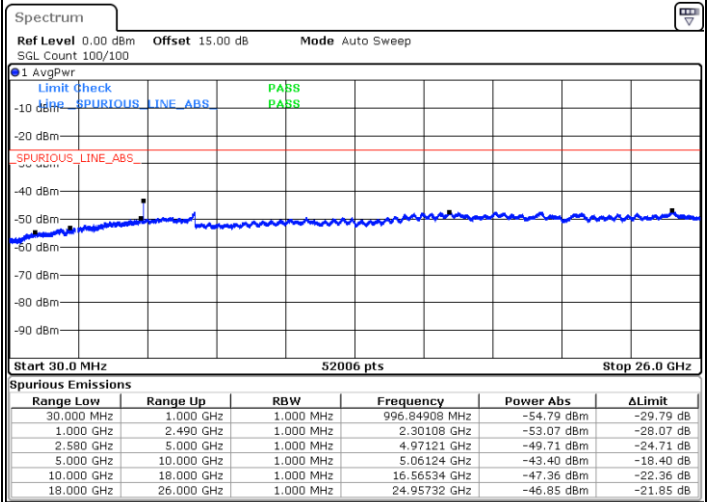
## LTE Band 7 / 10MHz

## Lowest Channel / 64QAM



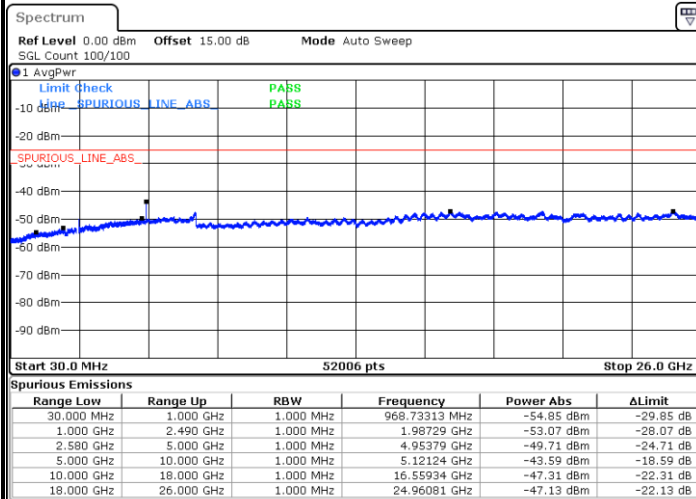
Date: 21.DEC.2020 02:41:20

## Middle Channel / 64QAM



Date: 21.DEC.2020 02:58:44

## Highest Channel / 64QAM

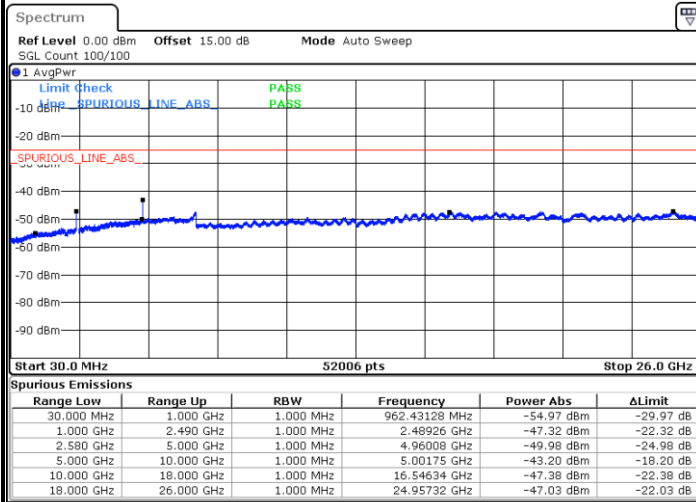


Date: 21.DEC.2020 03:04:48



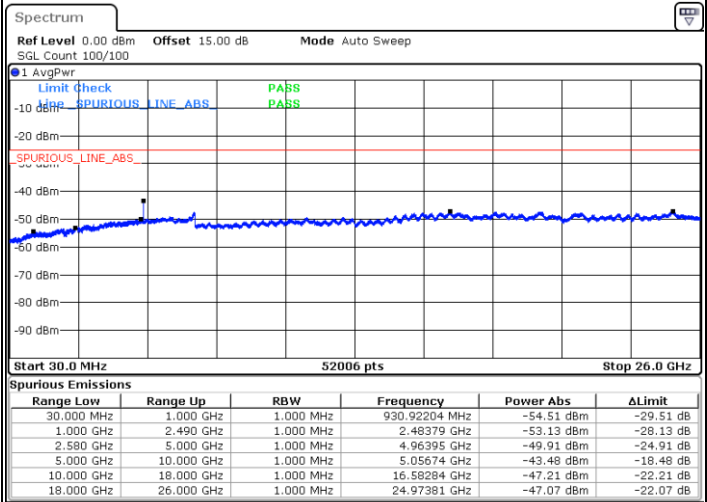
## LTE Band 7 / 15MHz

## Lowest Channel / 64QAM



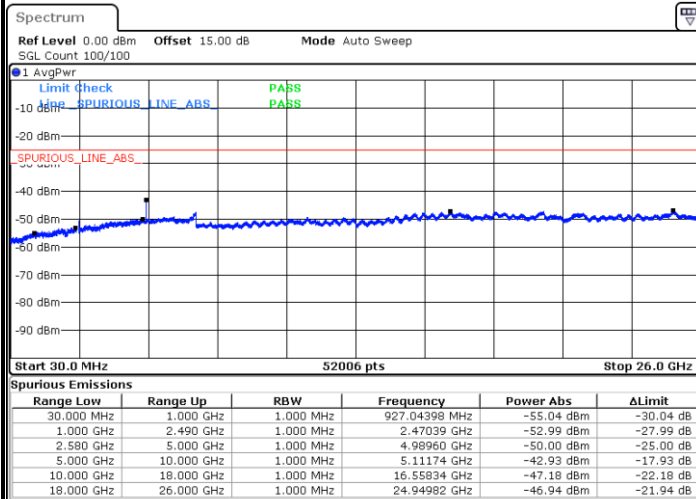
Date: 21.DEC.2020 03:23:07

## Middle Channel / 64QAM



Date: 21.DEC.2020 03:31:49

## Highest Channel / 64QAM

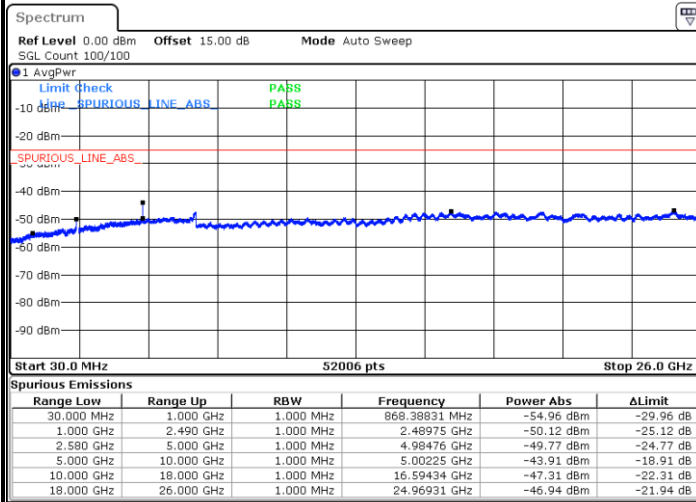


Date: 21.DEC.2020 03:40:51



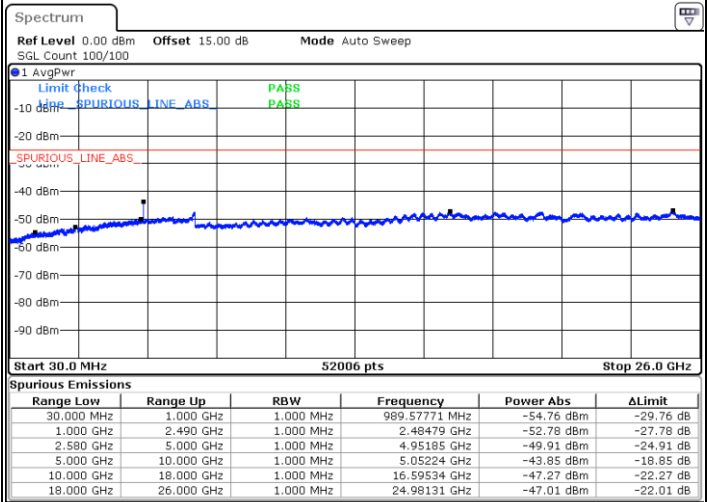
## LTE Band 7 / 20MHz

## Lowest Channel / 64QAM



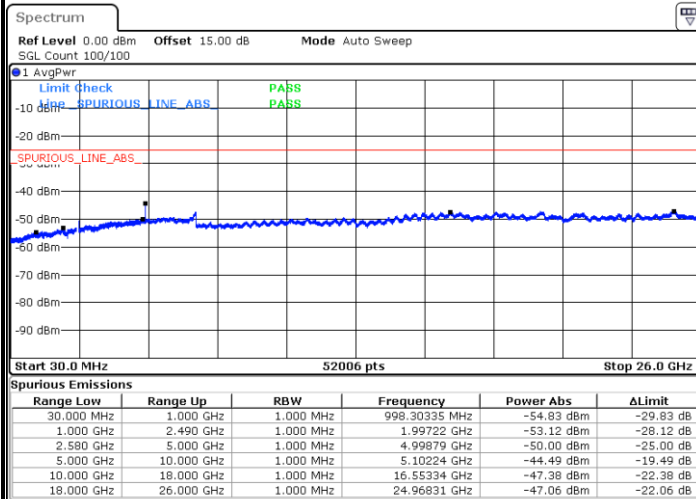
Date: 21.DEC.2020 04:05:42

## Middle Channel / 64QAM



Date: 21.DEC.2020 04:10:05

## Highest Channel / 64QAM



Date: 21.DEC.2020 04:30:00

## Frequency Stability

| Test Conditions  |                   | LTE Band 7 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                           | Note 2. |
|                  |                   | Deviation (ppm)                    | Result  |
| 50               | Normal Voltage    | 0.0010                             | PASS    |
| 40               | Normal Voltage    | 0.0007                             |         |
| 30               | Normal Voltage    | 0.0013                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0004                             |         |
| 0                | Normal Voltage    | 0.0014                             |         |
| -10              | Normal Voltage    | 0.0012                             |         |
| -20              | Normal Voltage    | 0.0004                             |         |
| -30              | Normal Voltage    | 0.0000                             |         |
| 20               | Maximum Voltage   | 0.0015                             |         |
| 20               | Normal Voltage    | 0.0002                             |         |
| 20               | Battery End Point | 0.0015                             |         |

**Note:**

1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.14 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

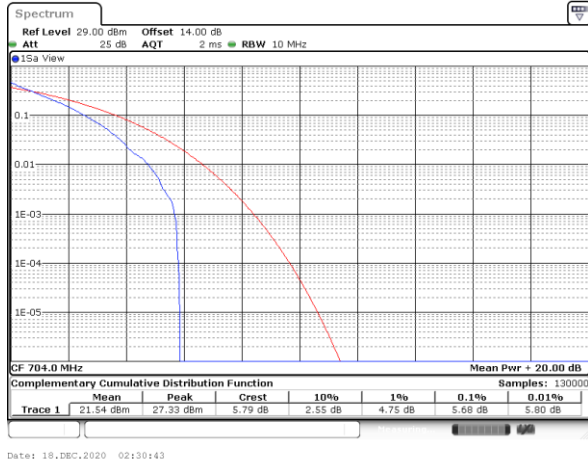
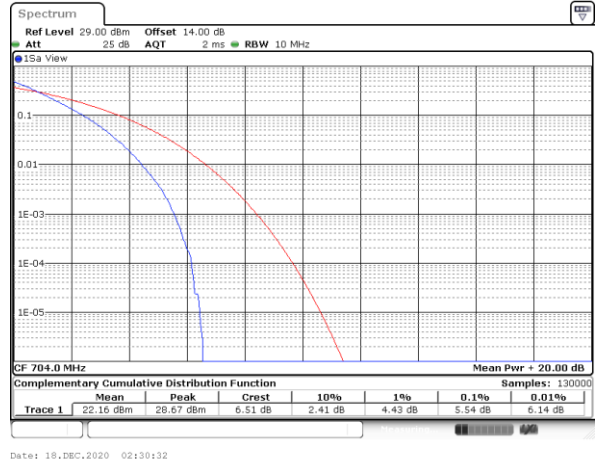
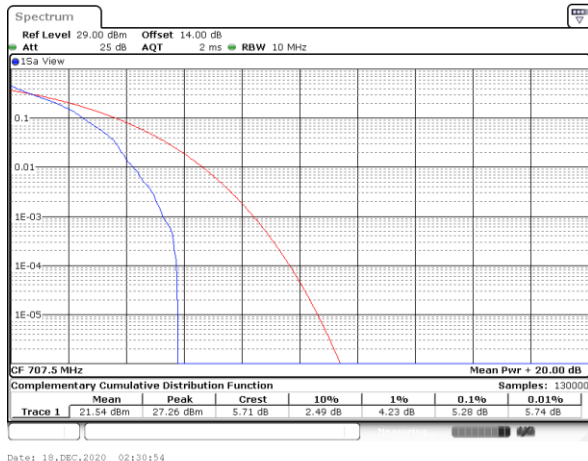
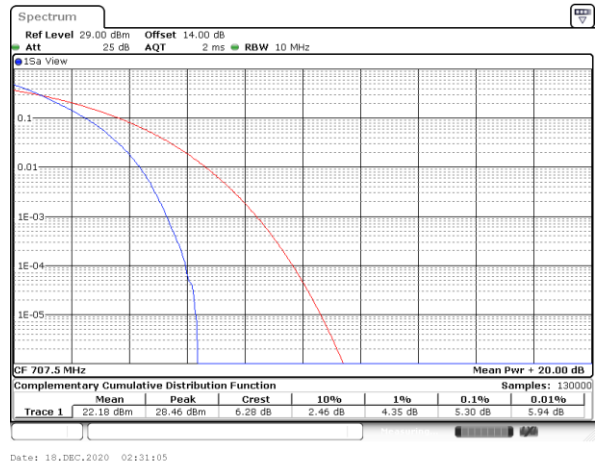
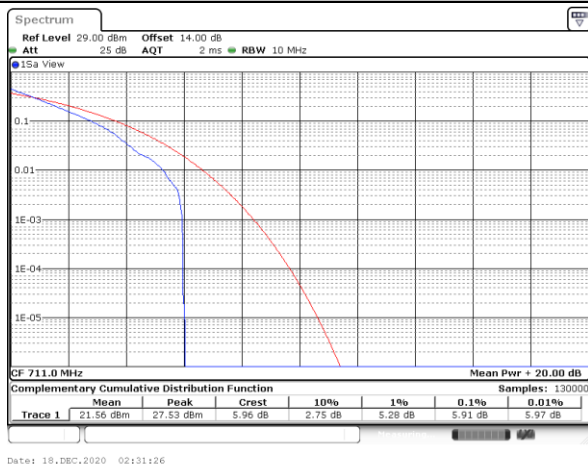
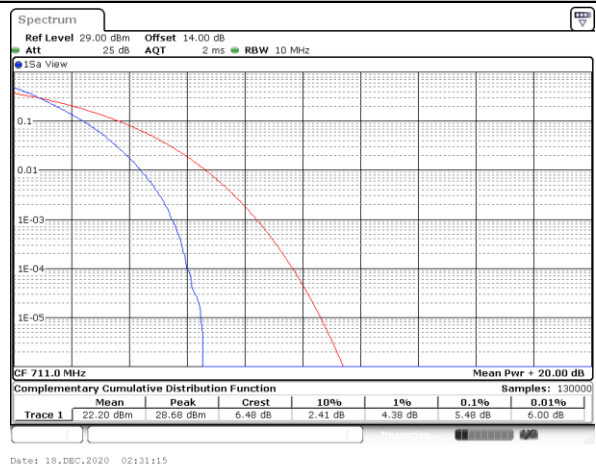




## LTE Band 12

## Peak-to-Average Ratio

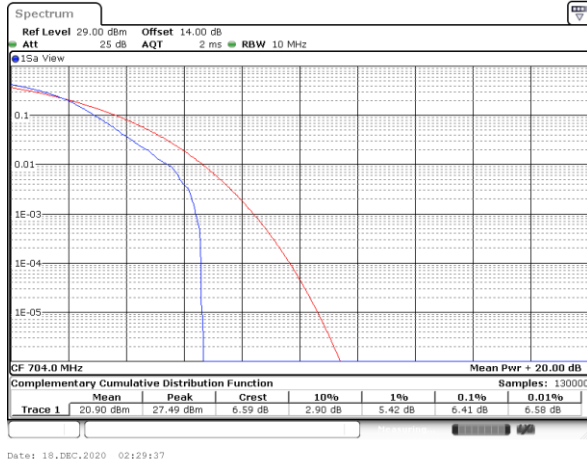
| Mode       | LTE Band 12 / 10MHz |         |       |         |             |
|------------|---------------------|---------|-------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 5.68                | 5.54    | 6.41  | 6.29    | PASS        |
| Middle CH  | 5.28                | 5.30    | 6.81  | 6.26    |             |
| Highest CH | 5.91                | 5.48    | 7.10  | 6.20    |             |
| Mode       | LTE Band 12 / 10MHz |         |       |         |             |
| Mod.       | 64QAM               |         |       |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB |       |         | Result      |
| Lowest CH  | 7.07                | 6.41    | -     | -       | PASS        |
| Middle CH  | 7.04                | 6.52    | -     | -       |             |
| Highest CH | 7.48                | 6.55    | -     | -       |             |

**LTE Band 12 / 10MHz / QPSK**
**Lowest Channel / 1RB**

**Lowest Channel / Full RB**

**Middle Channel / 1RB**

**Middle Channel / Full RB**

**Highest Channel / 1RB**

**Highest Channel / Full RB**


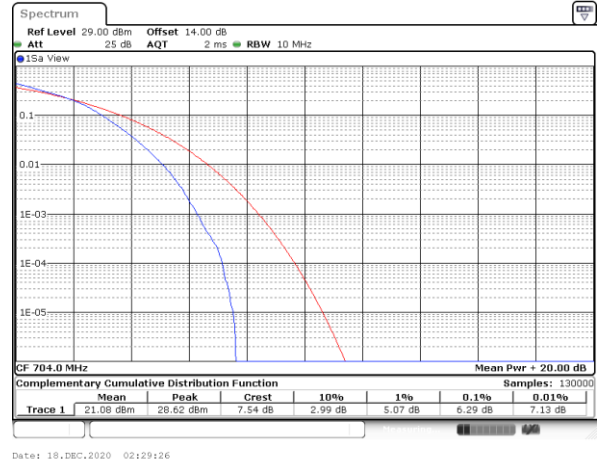


## LTE Band 12 / 10MHz / 16QAM

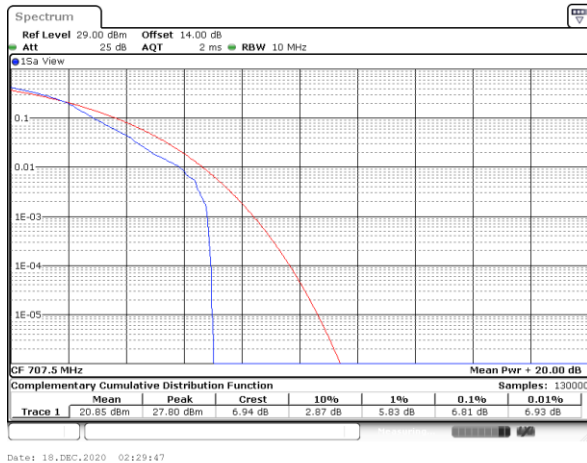
## Lowest Channel / 1RB



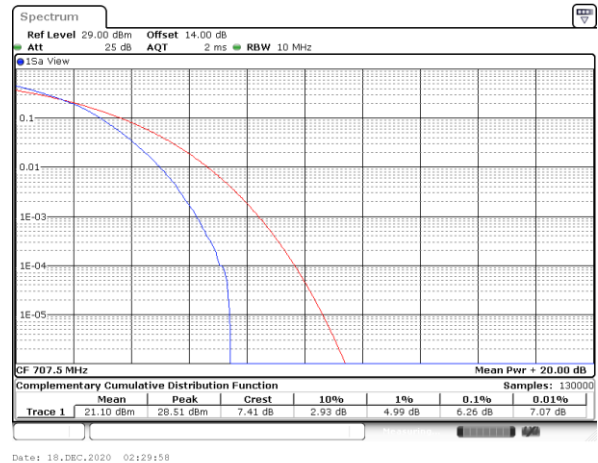
## Lowest Channel / Full RB



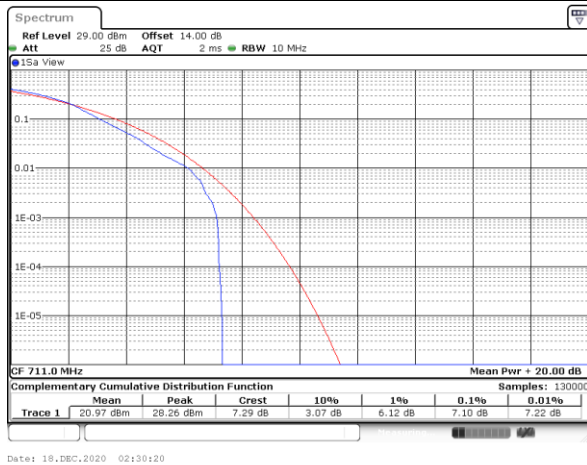
## Middle Channel / 1RB



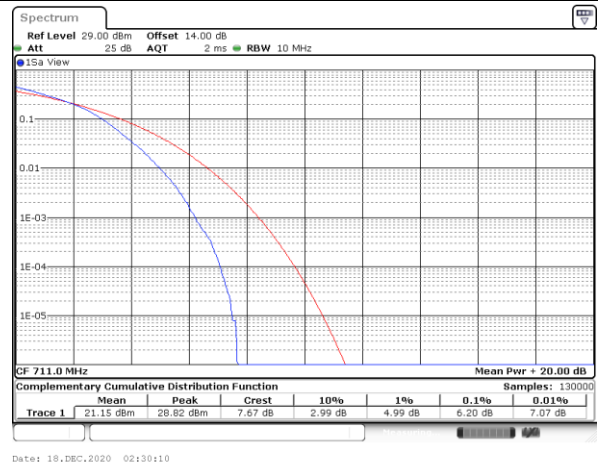
## Middle Channel / Full RB

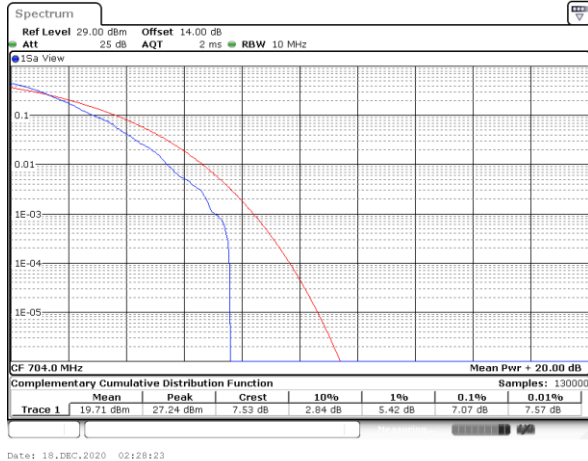
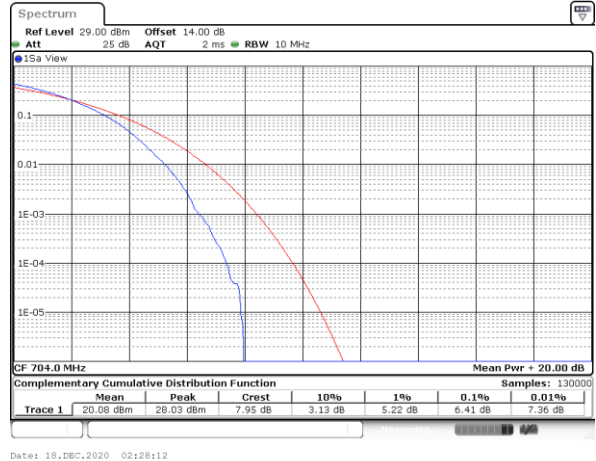
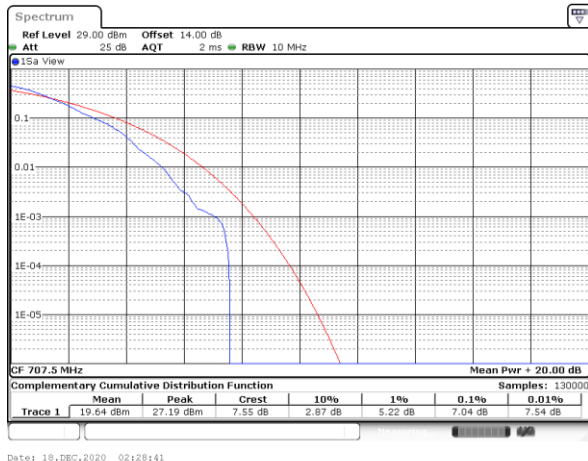
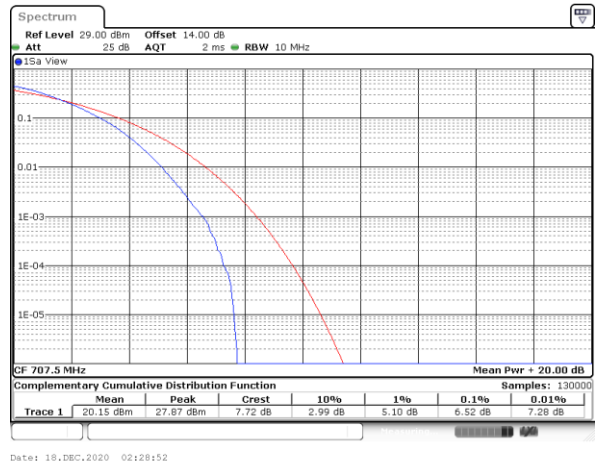
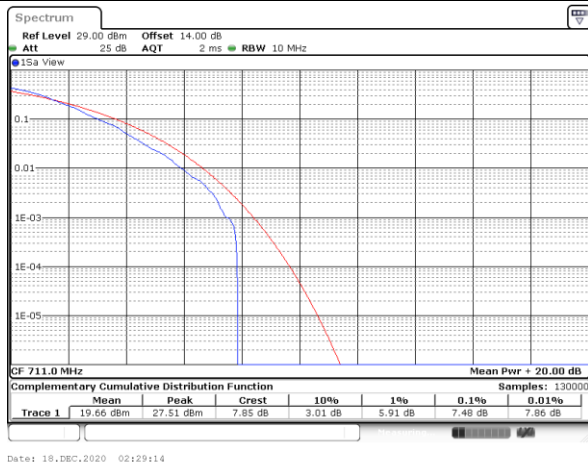
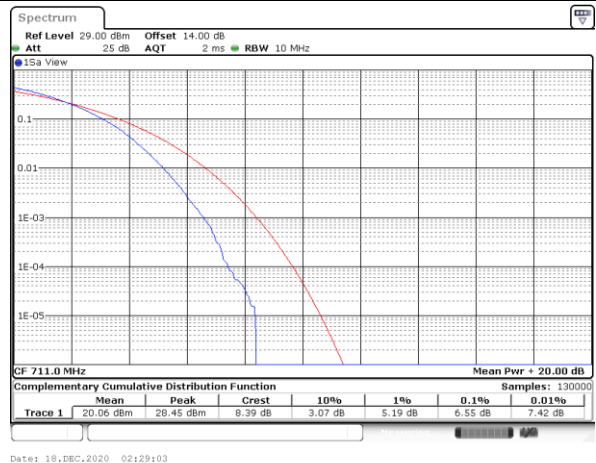


## Highest Channel / 1RB



## Highest Channel / Full RB



**LTE Band 12 / 10MHz / 64QAM**
**Lowest Channel / 1RB**

**Lowest Channel / Full RB**

**Middle Channel / 1RB**

**Middle Channel / Full RB**

**Highest Channel / 1RB**

**Highest Channel / Full RB**


**26dB Bandwidth**

| Mode       | LTE Band 12 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
|------------|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BW         | 1.4MHz                     |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | QPSK                       | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | 1.29                       | 1.30  | 2.98  | 2.99  | 4.83  | 4.86  | 9.81  | 9.73  | -     | -     | -     | -     |
| Middle CH  | 1.27                       | 1.26  | 2.95  | 2.94  | 4.89  | 4.91  | 9.73  | 9.81  | -     | -     | -     | -     |
| Highest CH | 1.28                       | 1.31  | 2.96  | 2.97  | 4.83  | 4.91  | 9.71  | 9.79  | -     | -     | -     | -     |
| Mode       | LTE Band 12 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                     |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                      |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.27                       | -     | 2.97  | -     | 4.91  | -     | 9.79  | -     | -     | -     | -     | -     |
| Middle CH  | 1.28                       | -     | 2.95  | -     | 4.85  | -     | 9.89  | -     | -     | -     | -     | -     |
| Highest CH | 1.28                       | -     | 2.97  | -     | 4.81  | -     | 9.67  | -     | -     | -     | -     | -     |