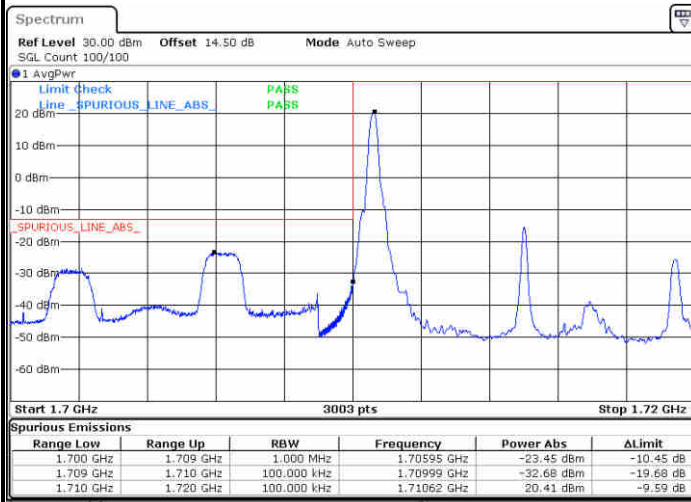


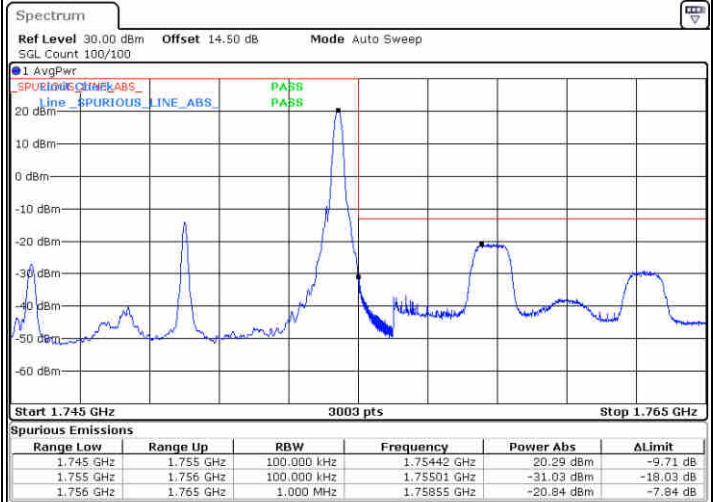


## LTE Band 4 / 10MHz / QPSK

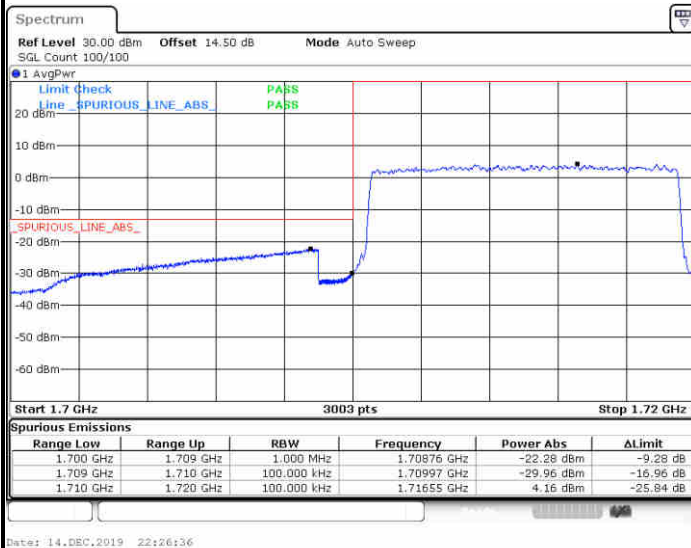
## Lowest Band Edge / 1 RB



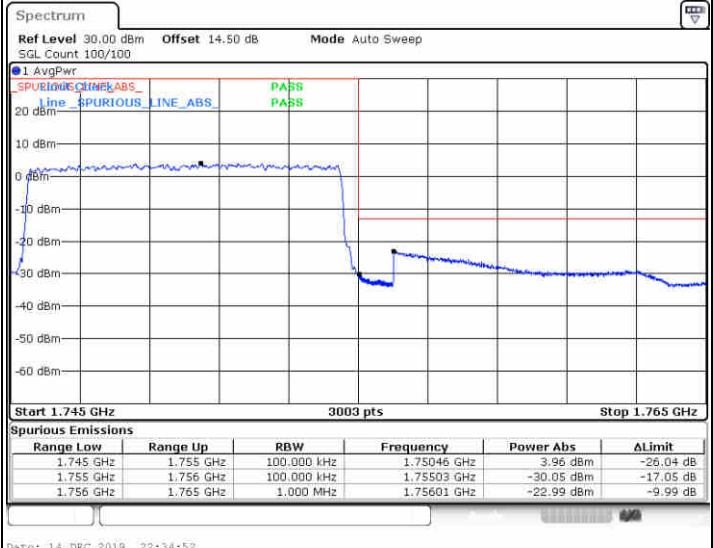
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



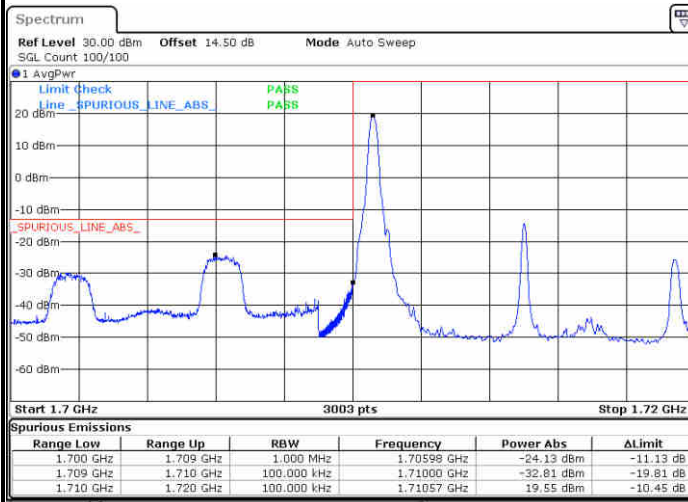
## Highest Band Edge / Full RB



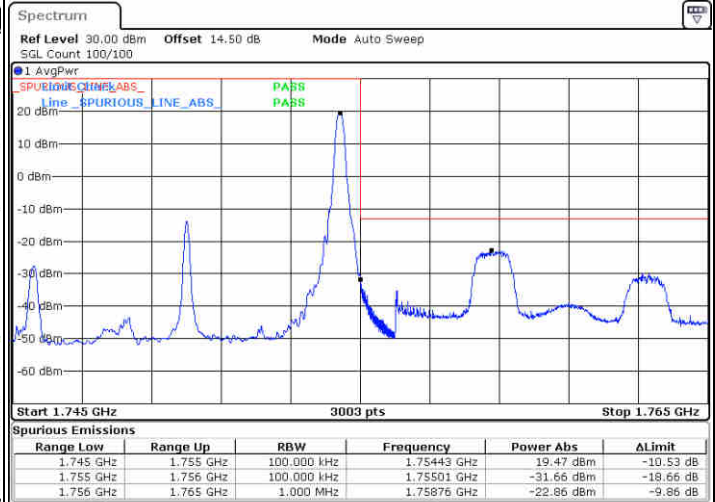


## LTE Band 4 / 10MHz / 16QAM

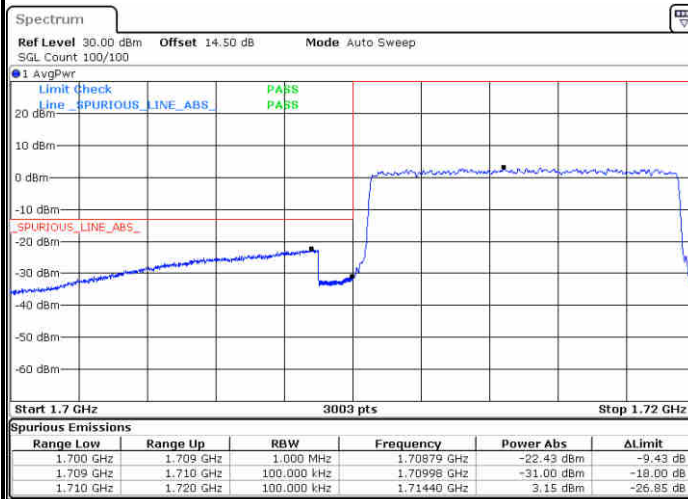
## Lowest Band Edge / 1 RB



## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



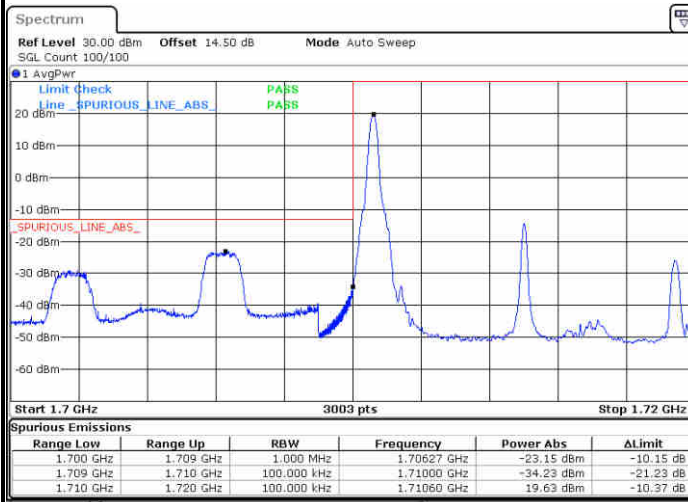
## Highest Band Edge / Full RB



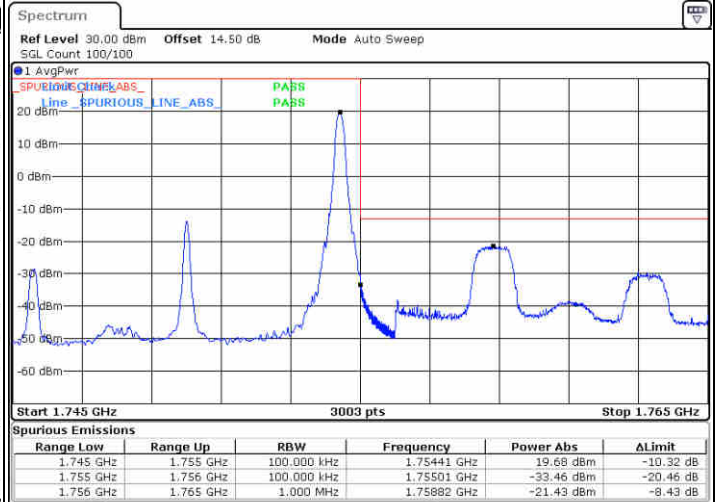


## LTE Band 4 / 10MHz / 64QAM

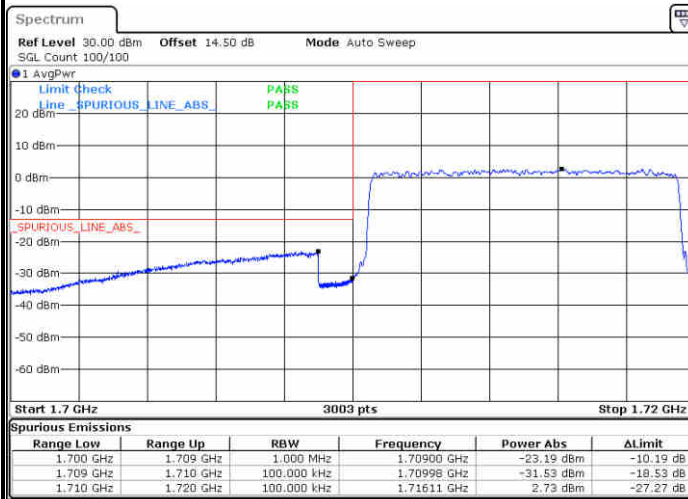
## Lowest Band Edge / 1 RB



## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



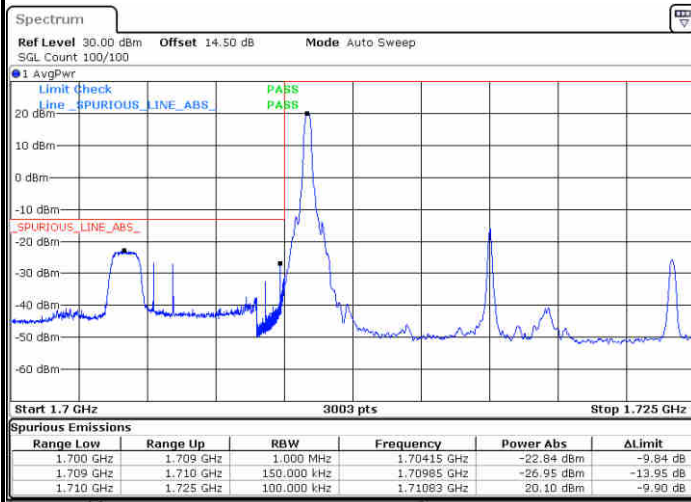
## Highest Band Edge / Full RB



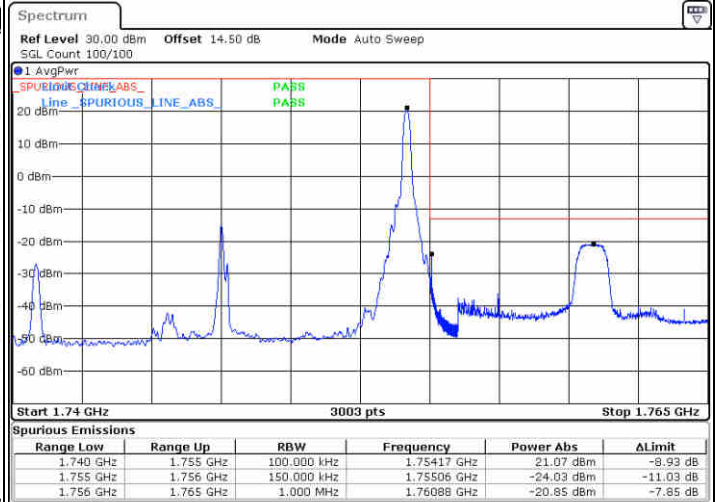


## LTE Band 4 / 15MHz / QPSK

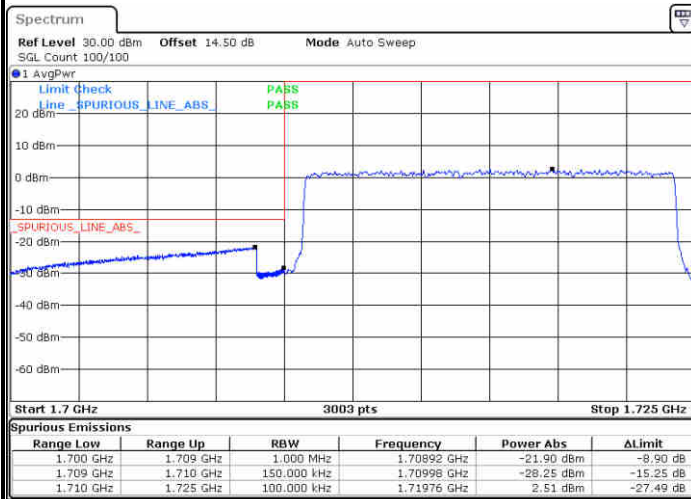
## Lowest Band Edge / 1 RB



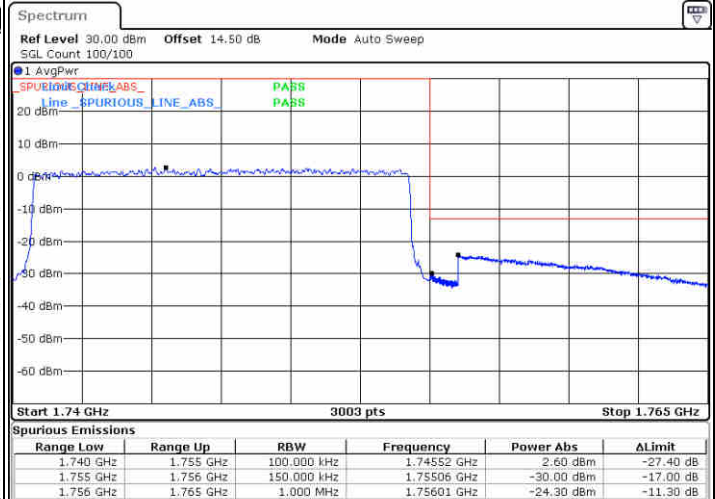
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



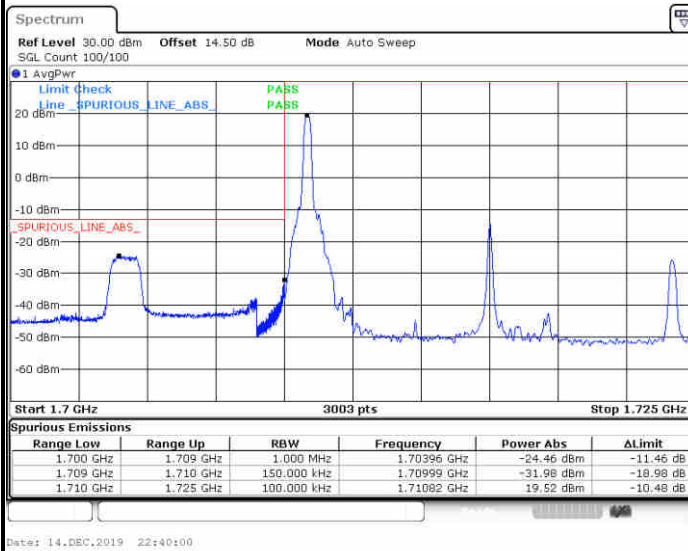
## Highest Band Edge / Full RB



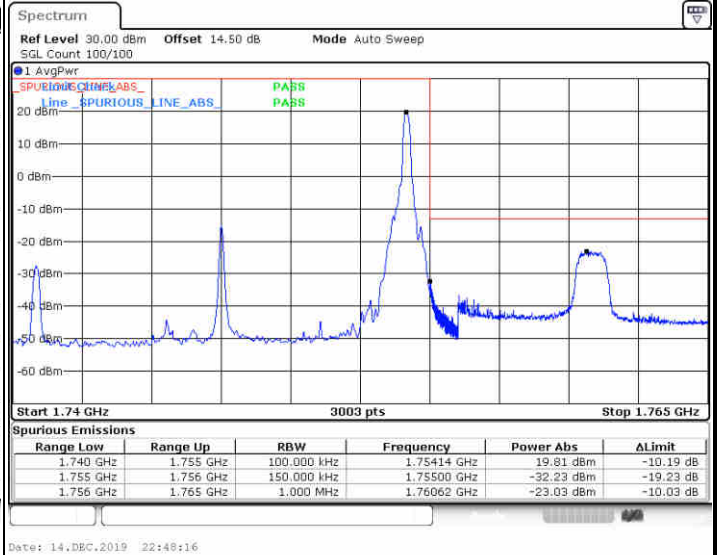


## LTE Band 4 / 15MHz / 16QAM

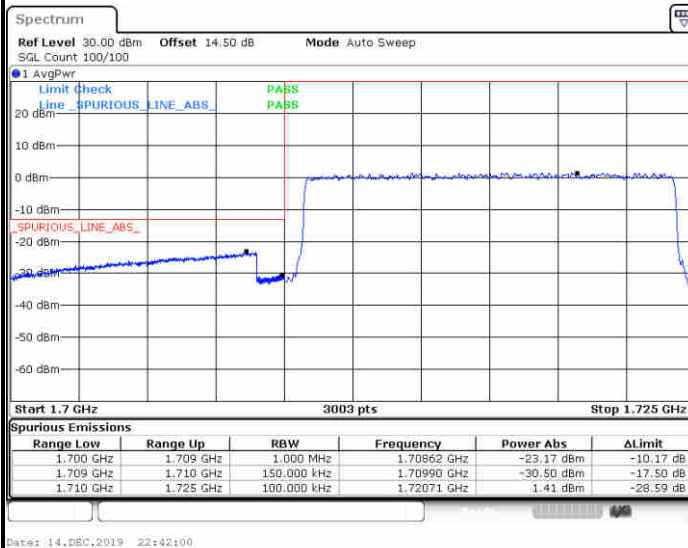
## Lowest Band Edge / 1 RB



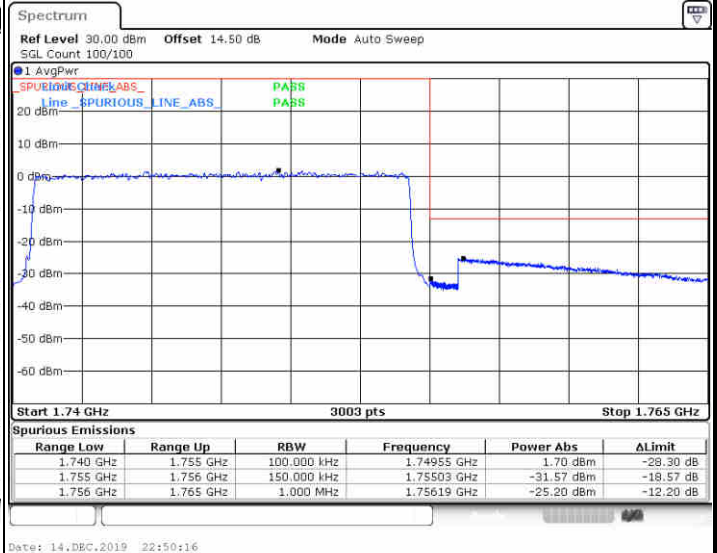
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



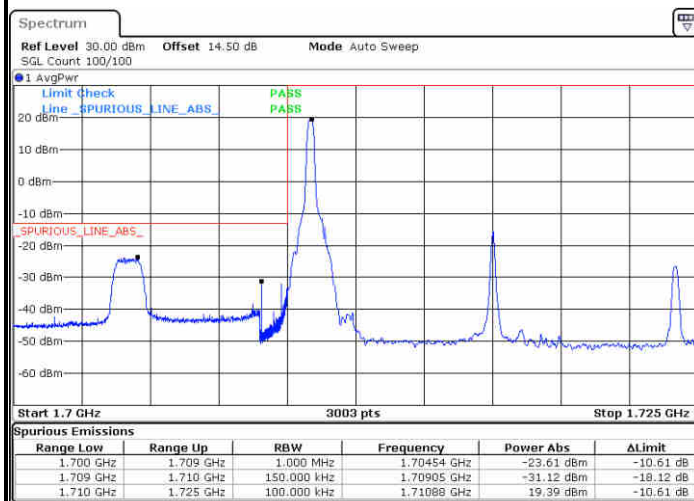
## Highest Band Edge / Full RB



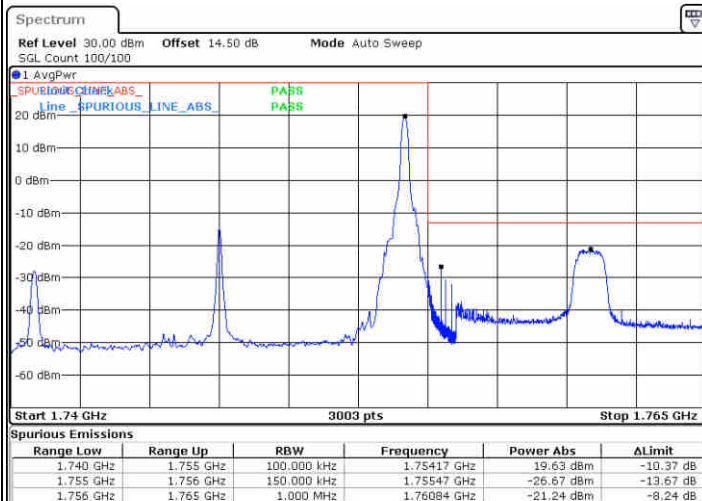


## LTE Band 4 / 15MHz / 64QAM

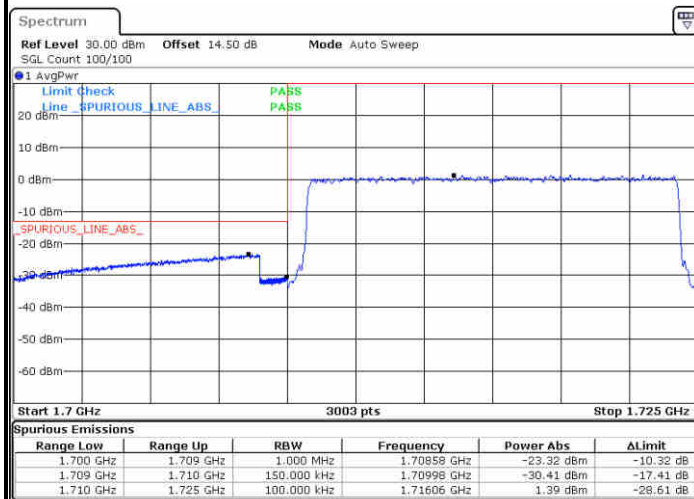
## Lowest Band Edge / 1 RB



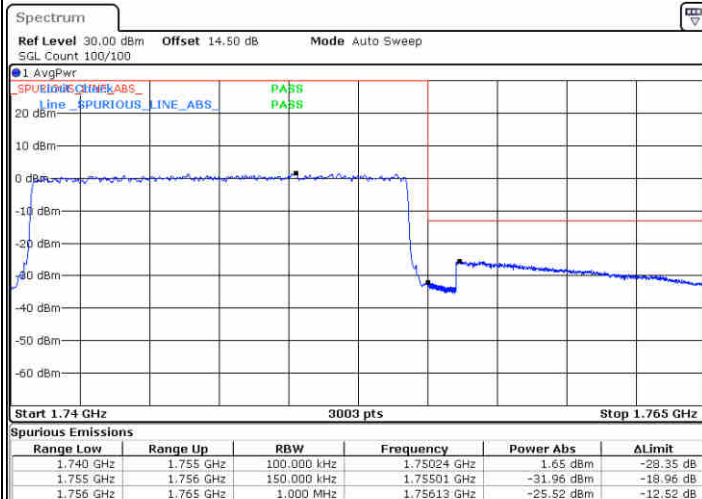
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



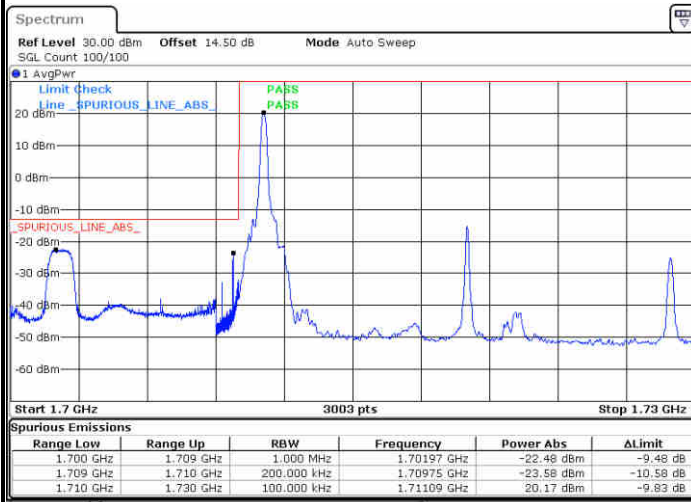
## Highest Band Edge / Full RB



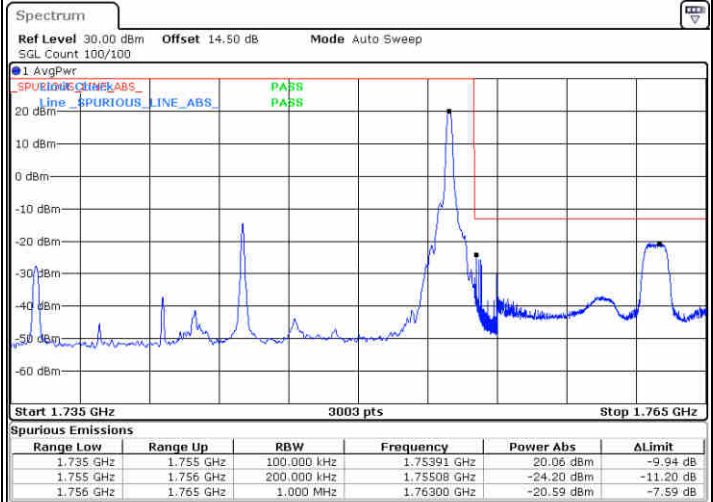


## LTE Band 4 / 20MHz / QPSK

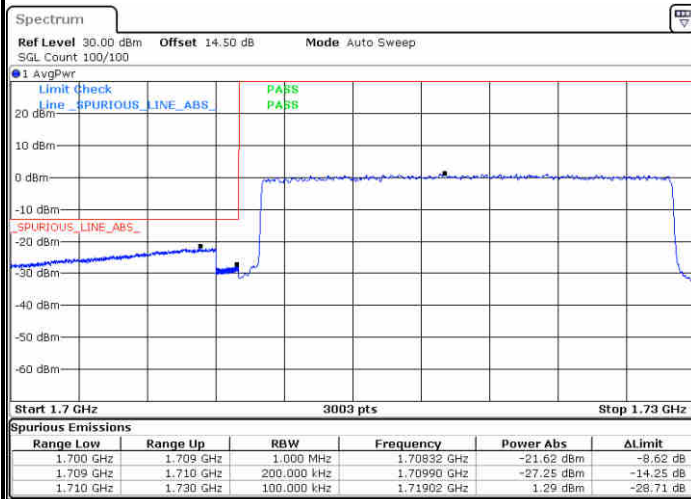
## Lowest Band Edge / 1 RB



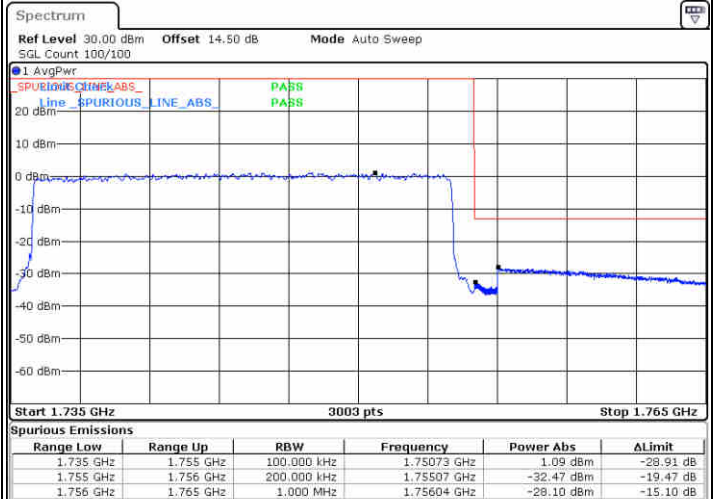
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



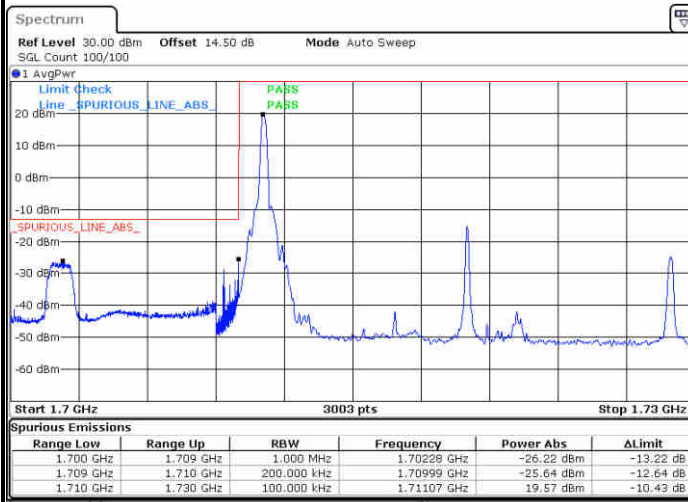
## Highest Band Edge / Full RB



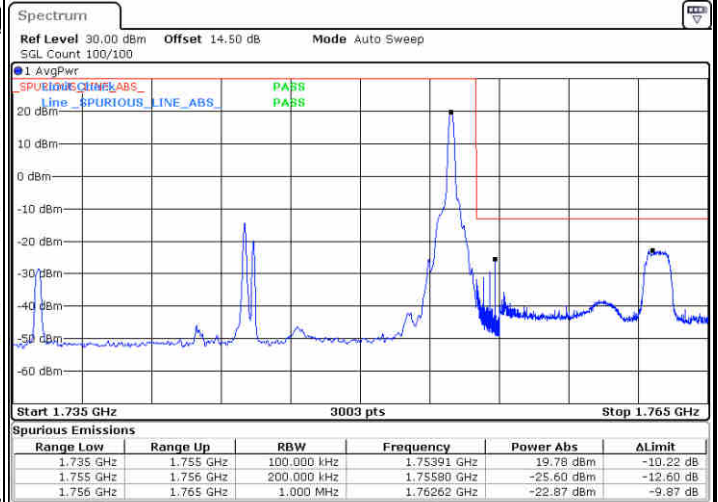


## LTE Band 4 / 20MHz / 16QAM

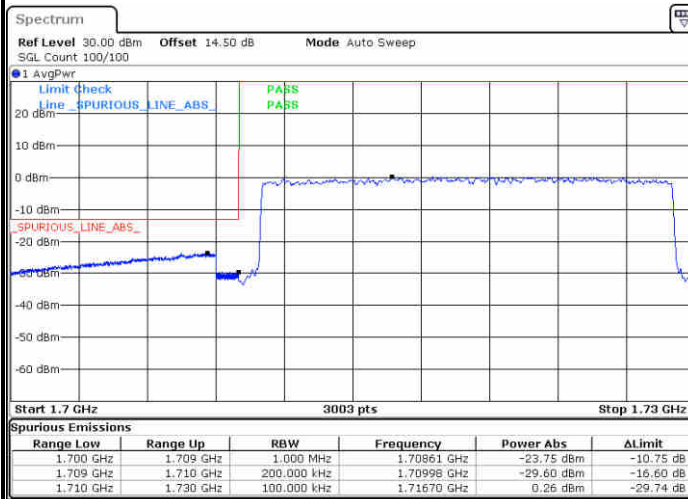
## Lowest Band Edge / 1 RB



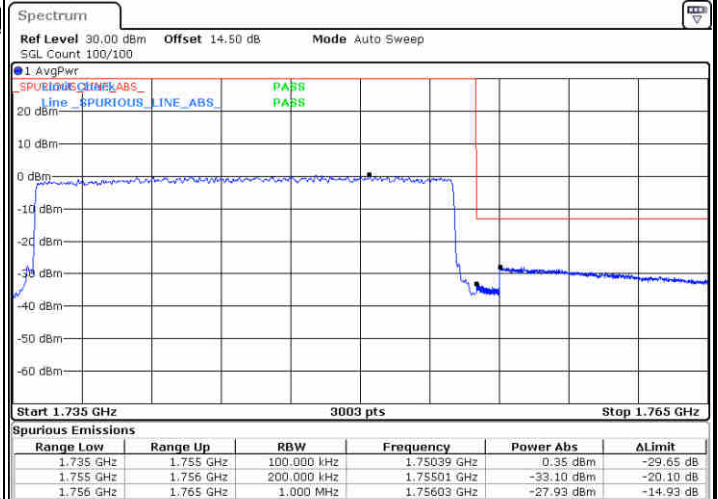
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



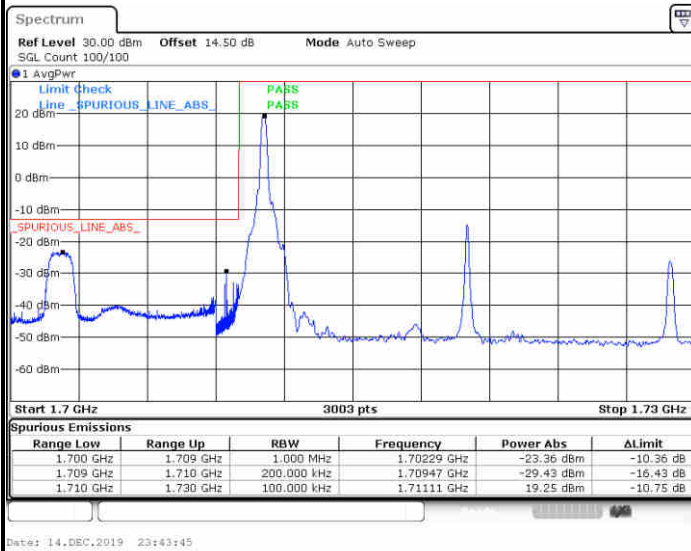
## Highest Band Edge / Full RB



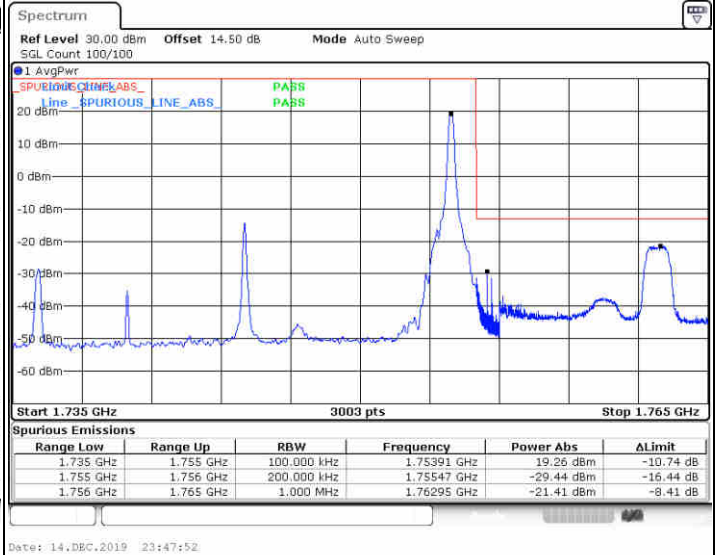


## LTE Band 4 / 20MHz / 64QAM

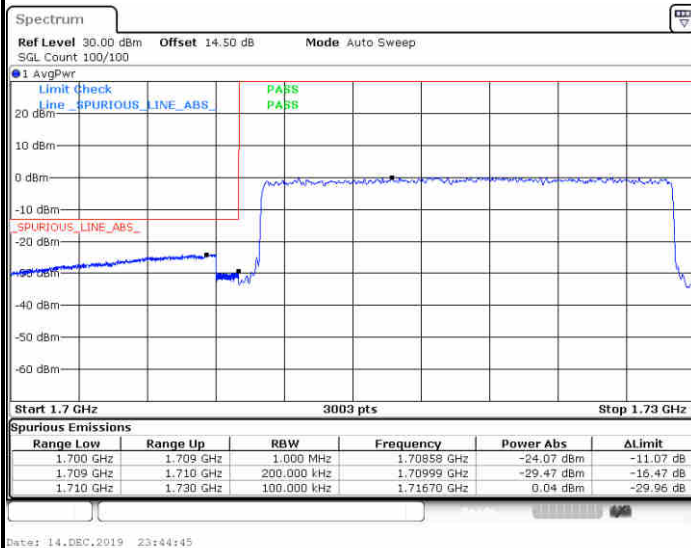
## Lowest Band Edge / 1 RB



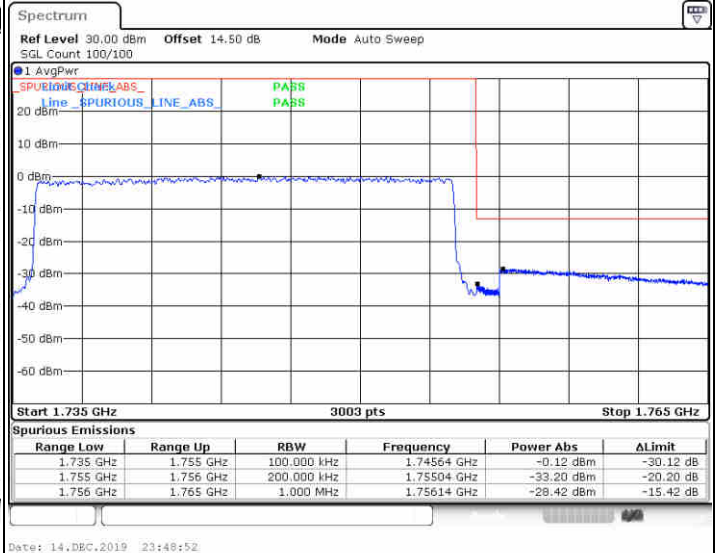
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

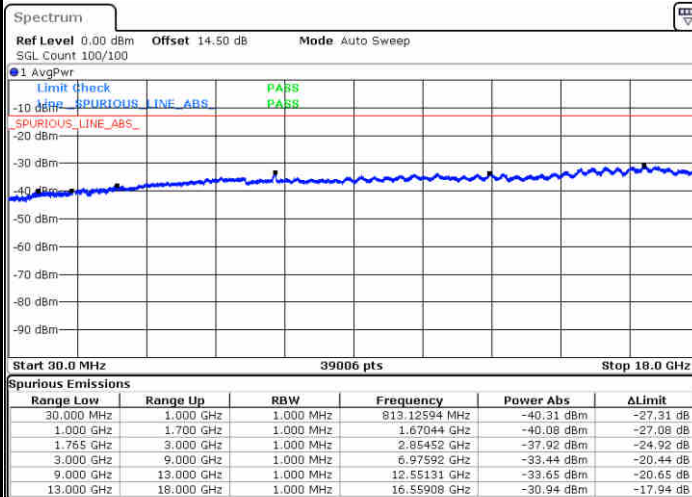




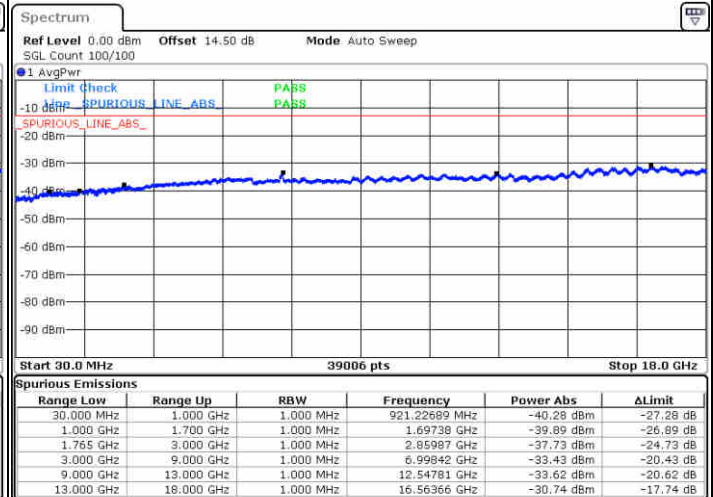
## Conducted Spurious Emission

### LTE Band 4 / 1.4MHz

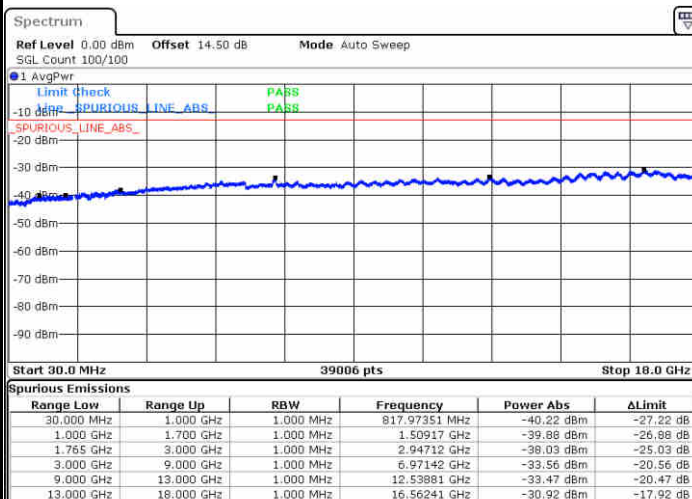
#### Lowest Channel / QPSK



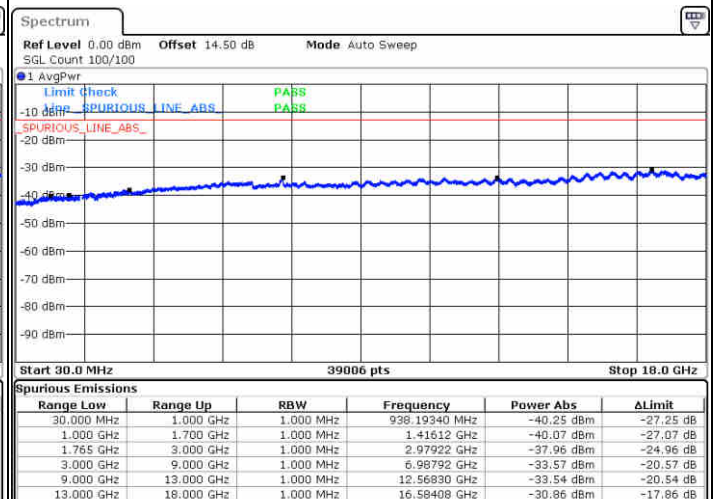
#### Lowest Channel / 16QAM



#### Middle Channel / QPSK



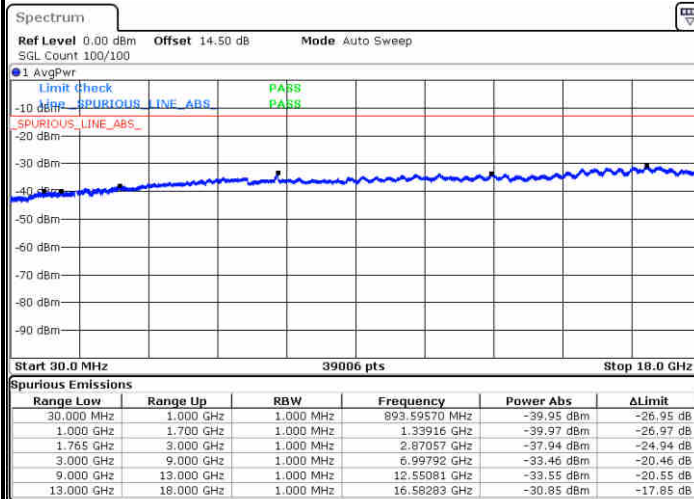
#### Middle Channel / 16QAM





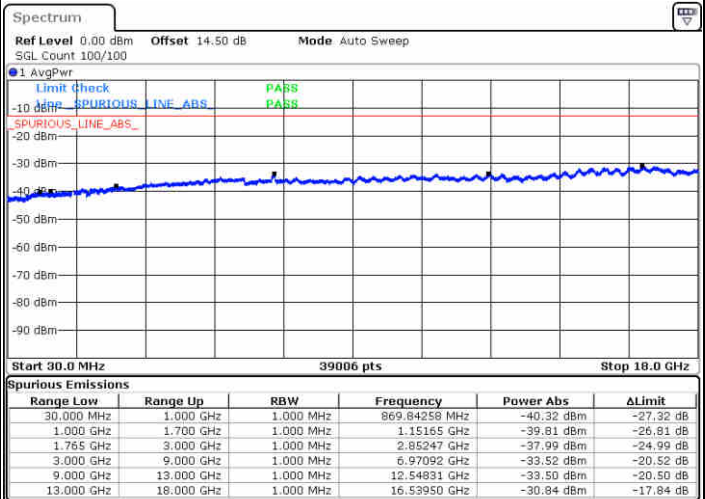
## LTE Band 4 / 1.4MHz

## Highest Channel / QPSK



Date: 15.DEC.2019 00:24:17

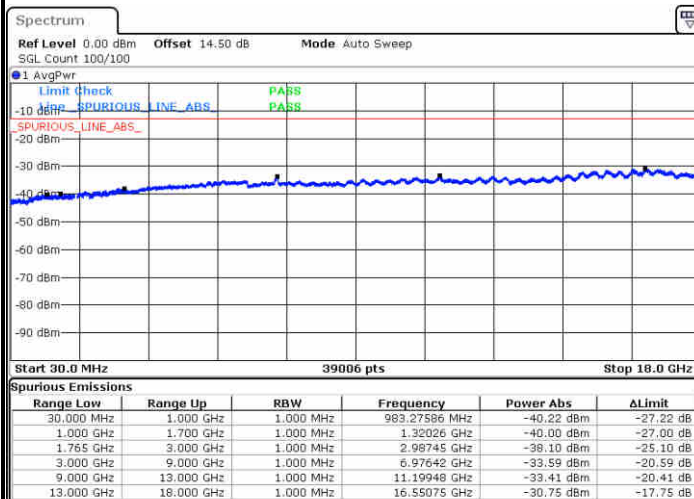
## Highest Channel / 16QAM



Date: 15.DEC.2019 00:24:58

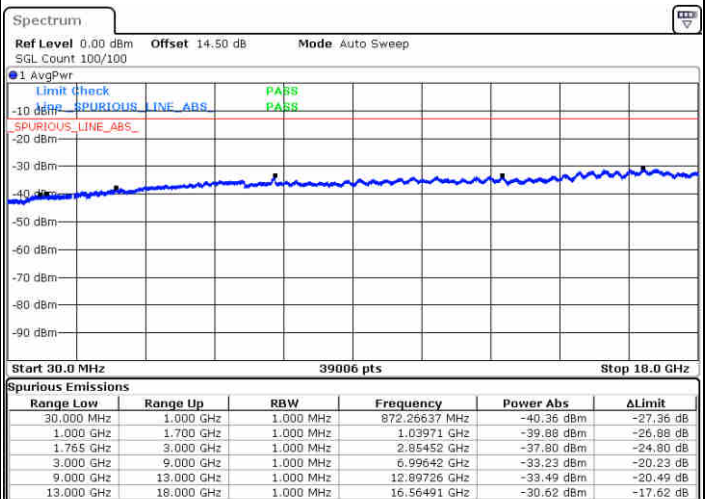
## LTE Band 4 / 3MHz

## Lowest Channel / QPSK



Date: 14.DEC.2019 21:59:30

## Lowest Channel / 16QAM

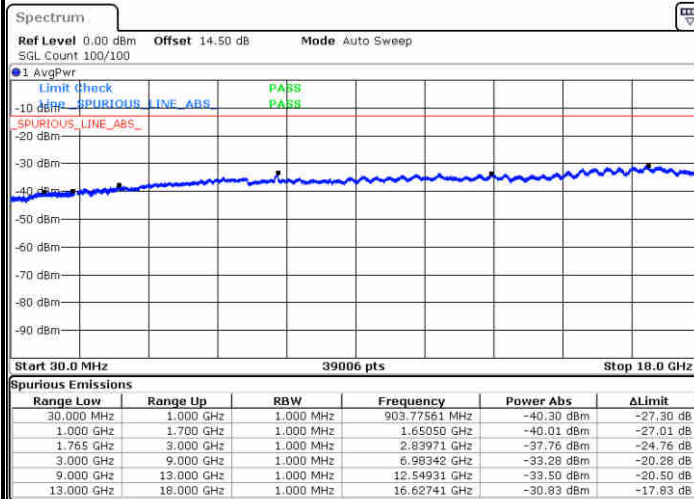


Date: 14.DEC.2019 22:00:11



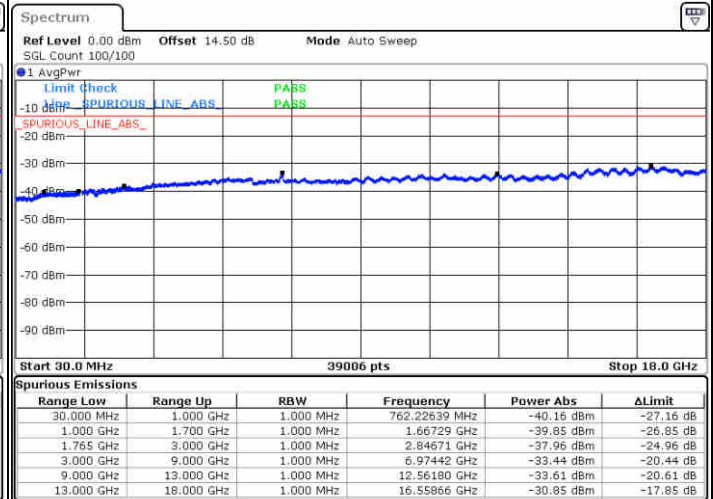
## LTE Band 4 / 3MHz

## Middle Channel / QPSK



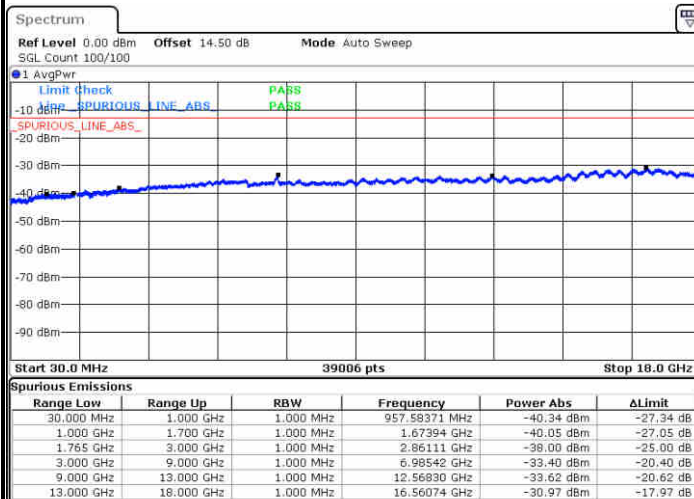
Date: 14.DEC.2019 22:01:38

## Middle Channel / 16QAM



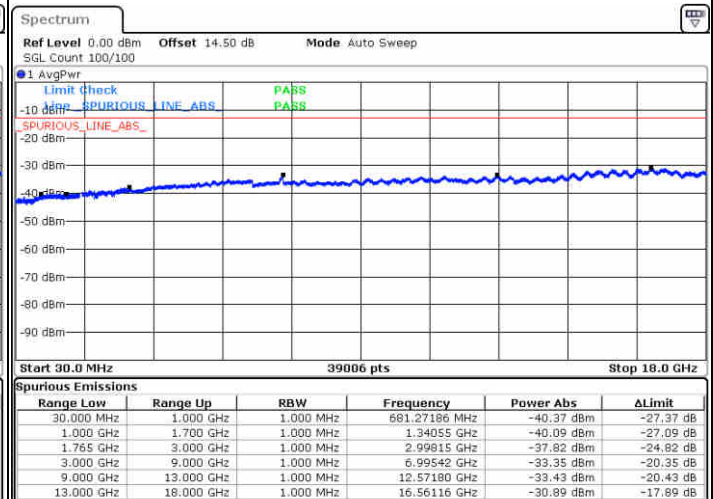
Date: 14.DEC.2019 22:02:20

## Highest Channel / QPSK



Date: 14.DEC.2019 22:07:46

## Highest Channel / 16QAM

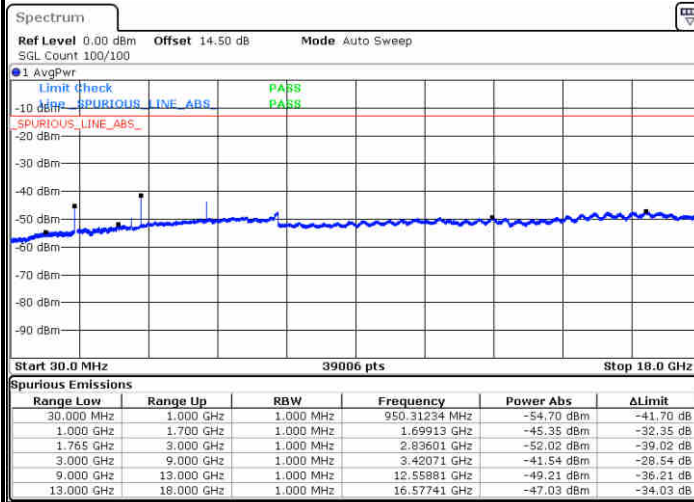


Date: 14.DEC.2019 22:08:28



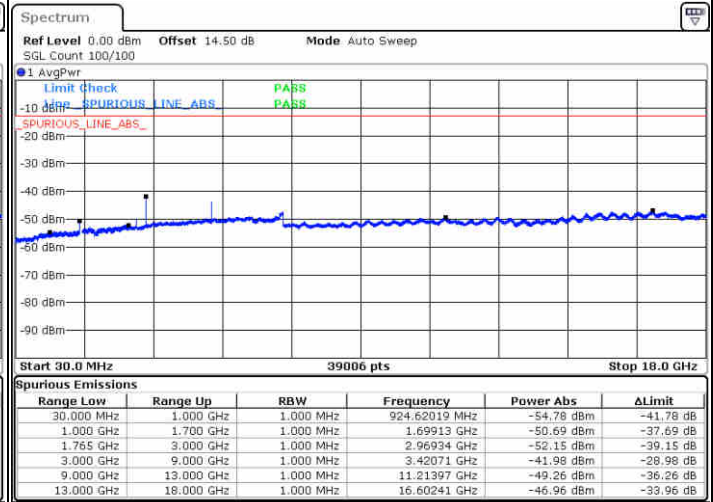
## LTE Band 4 / 5MHz

## Lowest Channel / QPSK



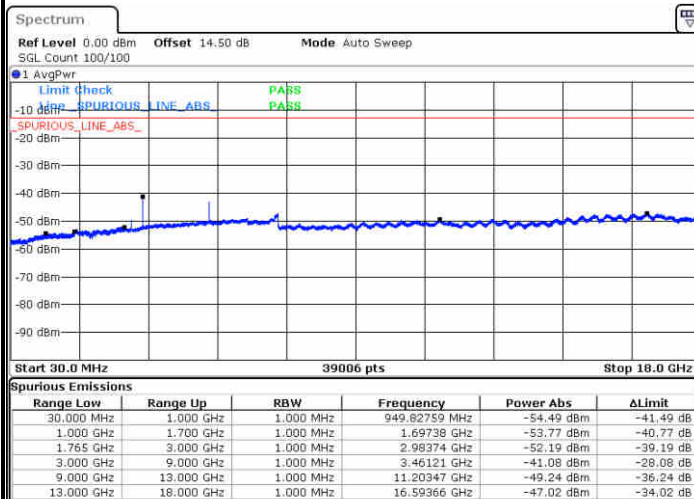
Date: 14.DEC.2019 22:13:54

## Lowest Channel / 16QAM



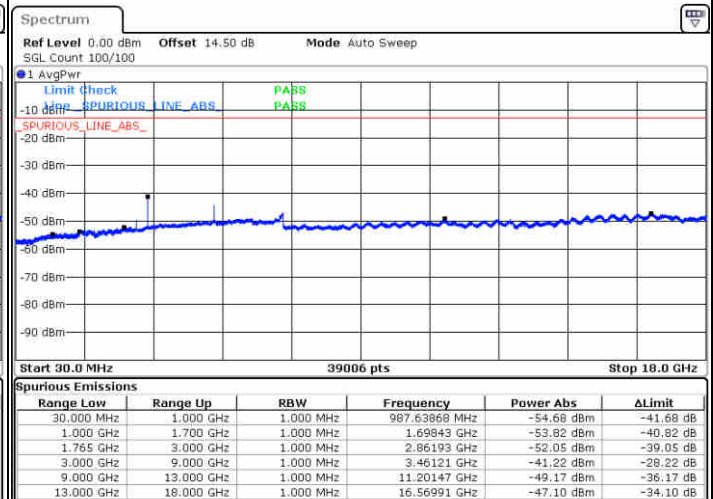
Date: 14.DEC.2019 22:14:36

## Middle Channel / QPSK



Date: 14.DEC.2019 22:16:02

## Middle Channel / 16QAM

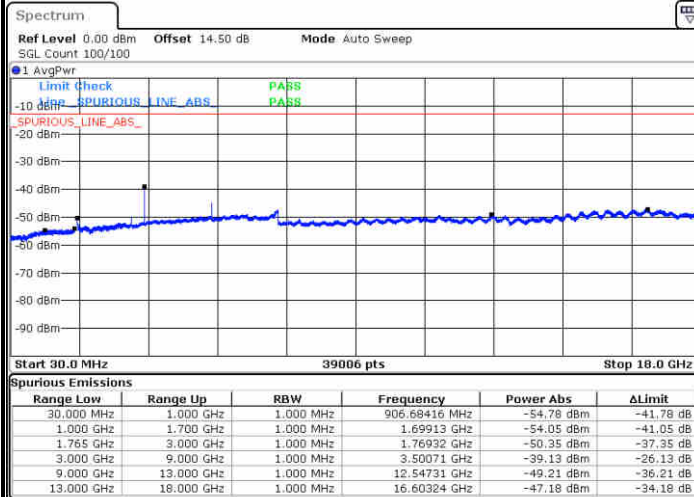


Date: 14.DEC.2019 22:16:44



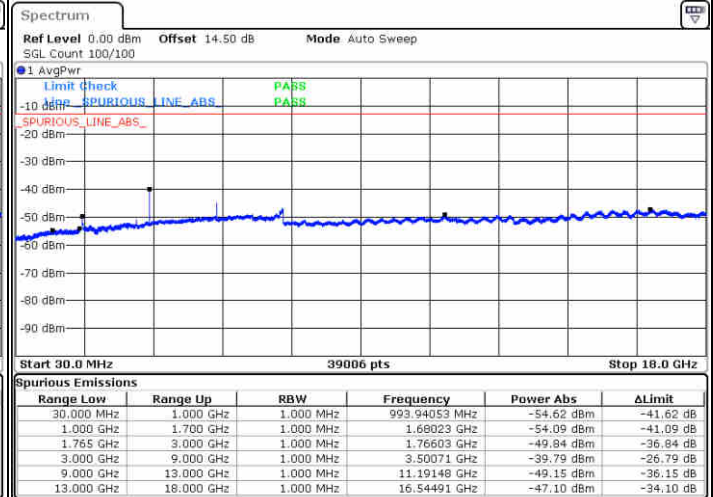
## LTE Band 4 / 5MHz

## Highest Channel / QPSK



Date: 14.DEC.2019 22:22:10

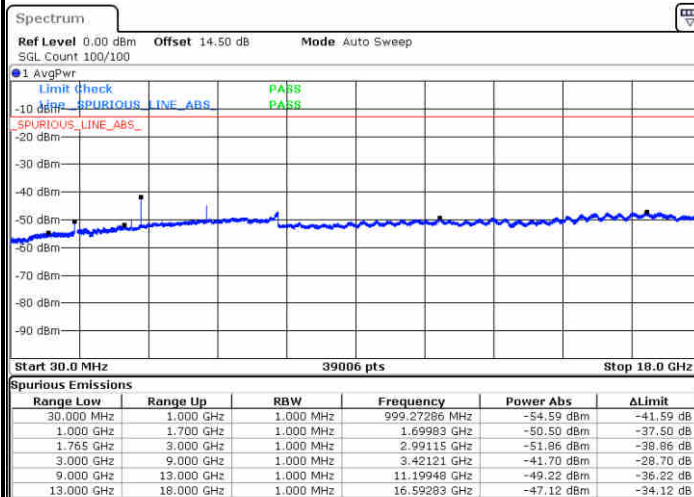
## Highest Channel / 16QAM



Date: 14.DEC.2019 22:22:52

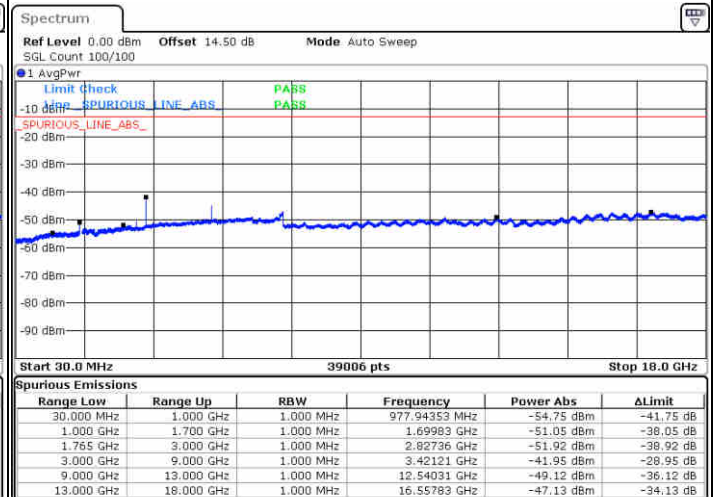
## LTE Band 4 / 10MHz

## Lowest Channel / QPSK



Date: 14.DEC.2019 22:28:18

## Lowest Channel / 16QAM

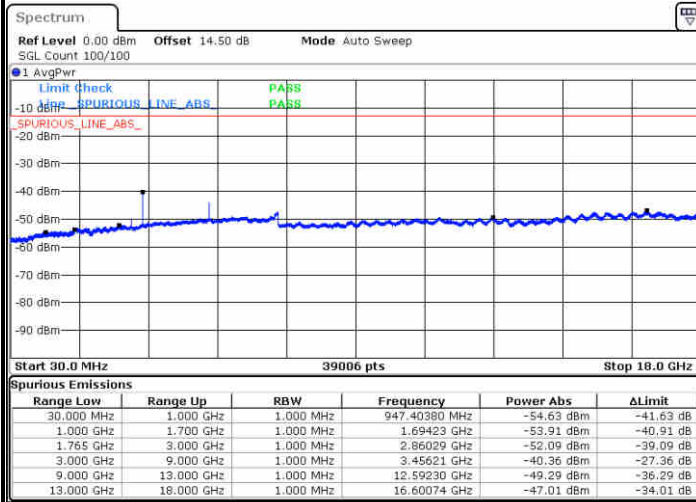


Date: 14.DEC.2019 22:29:00



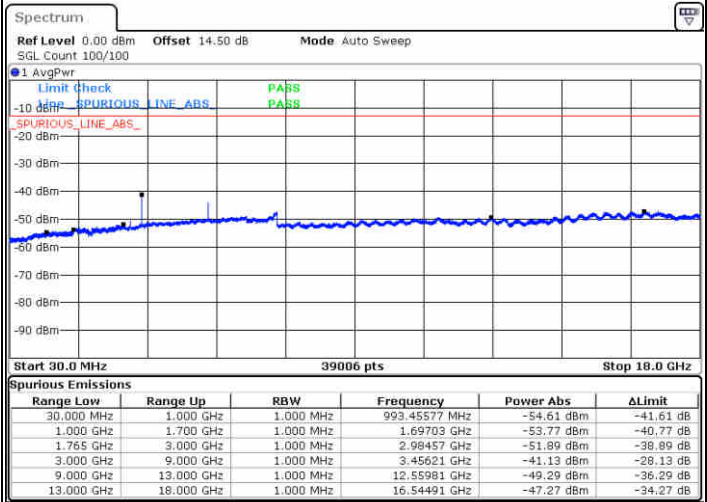
## LTE Band 4 / 10MHz

## Middle Channel / QPSK



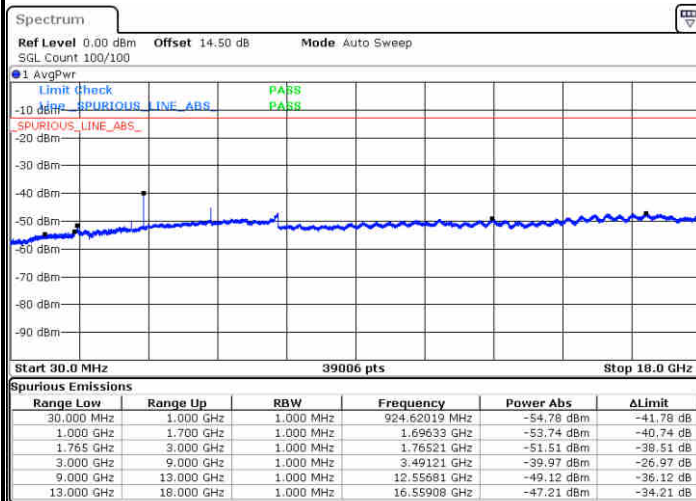
Date: 14.DEC.2019 22:30:26

## Middle Channel / 16QAM



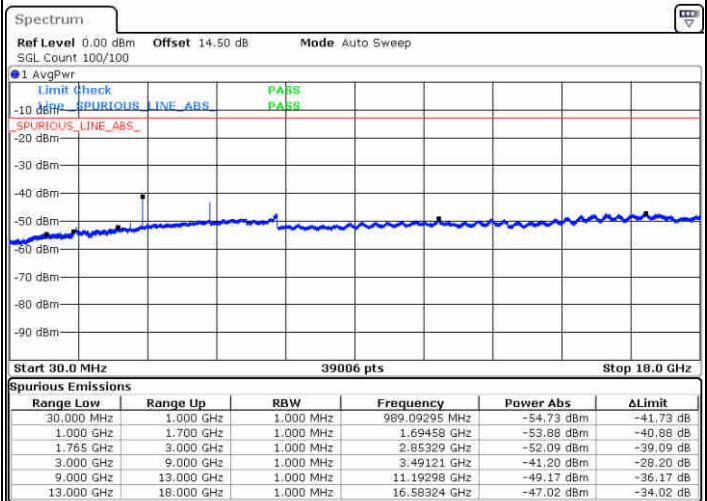
Date: 14.DEC.2019 22:31:08

## Highest Channel / QPSK



Date: 14.DEC.2019 22:36:34

## Highest Channel / 16QAM

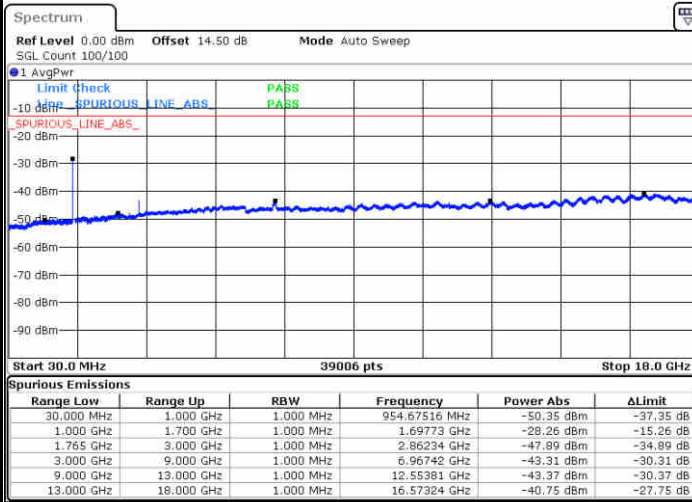


Date: 14.DEC.2019 22:37:15



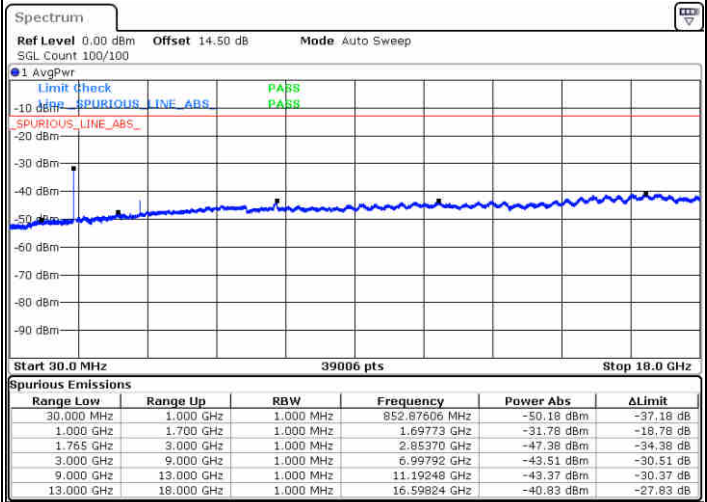
## LTE Band 4 / 15MHz

## Lowest Channel / QPSK



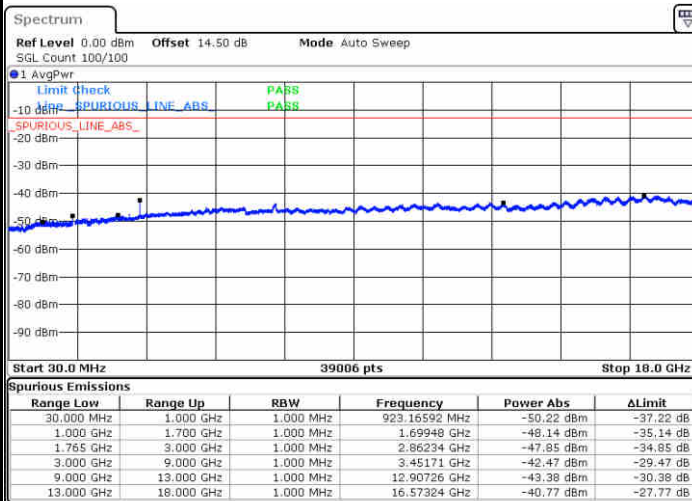
Date: 14.DEC.2019 22:42:42

## Lowest Channel / 16QAM



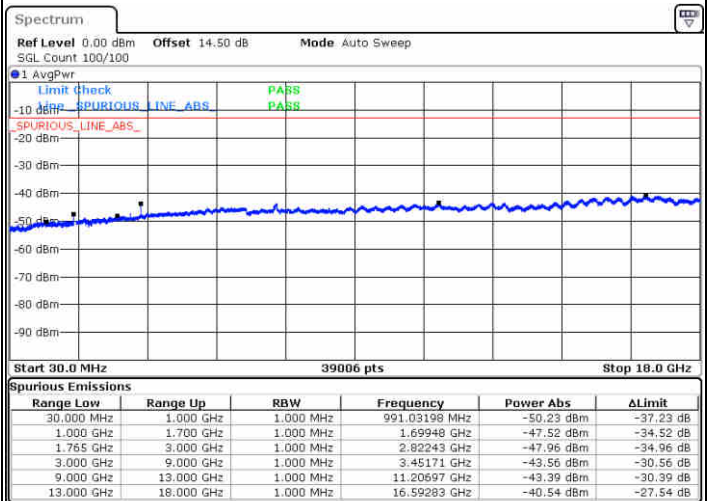
Date: 14.DEC.2019 22:43:23

## Middle Channel / QPSK



Date: 14.DEC.2019 22:44:50

## Middle Channel / 16QAM

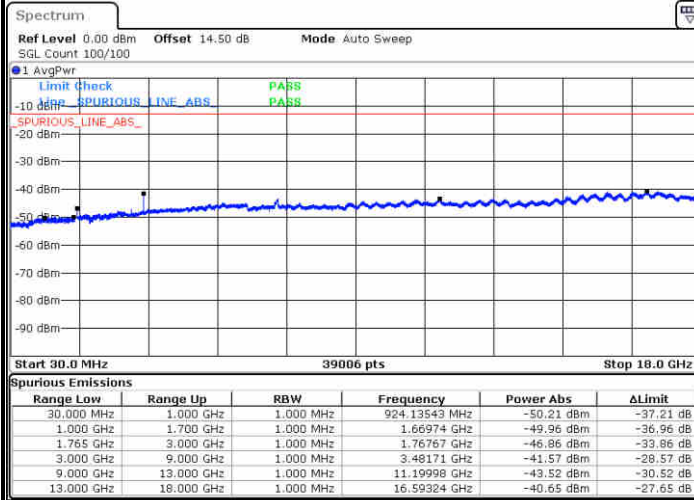


Date: 14.DEC.2019 22:45:32



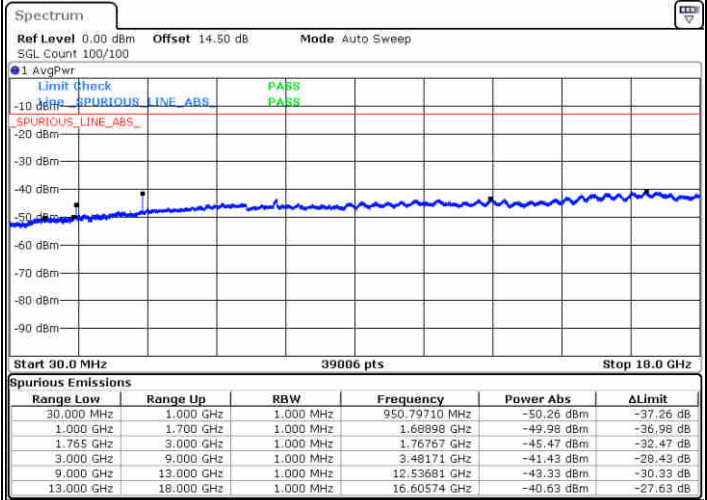
## LTE Band 4 / 15MHz

## Highest Channel / QPSK



Date: 14.DEC.2019 22:50:58

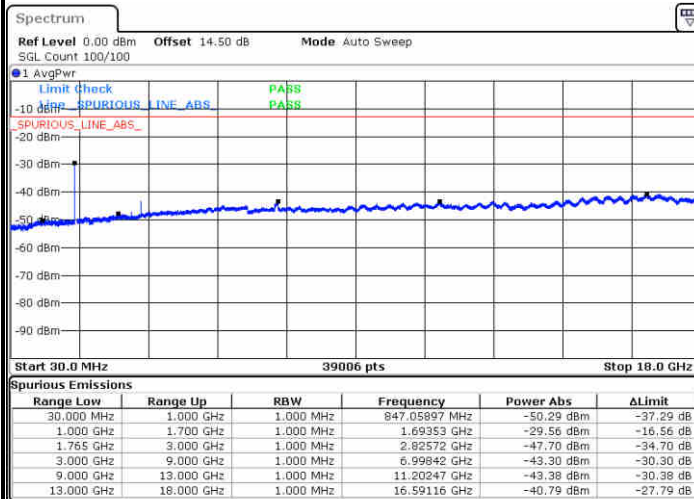
## Highest Channel / 16QAM



Date: 14.DEC.2019 22:51:39

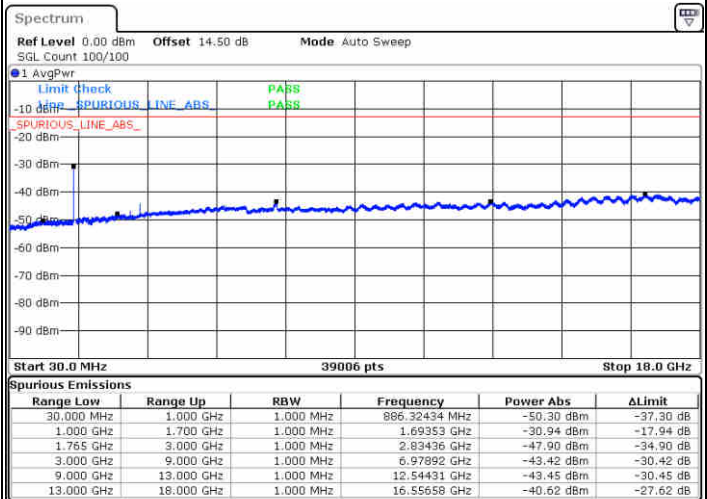
## LTE Band 4 / 20MHz

## Lowest Channel / QPSK



Date: 14.DEC.2019 22:57:05

## Lowest Channel / 16QAM

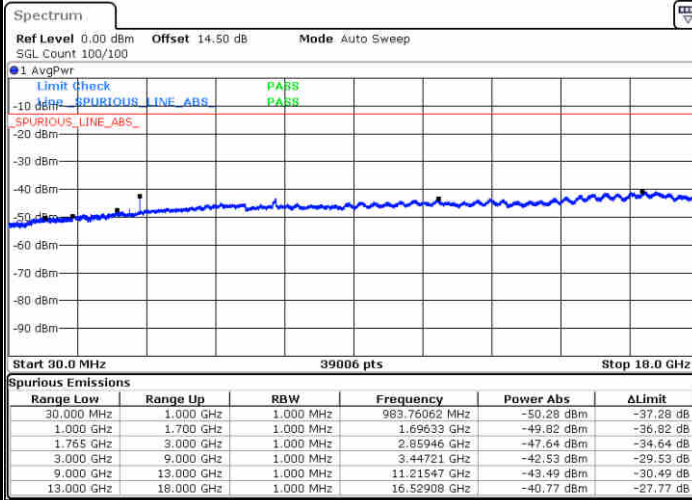


Date: 14.DEC.2019 22:57:46



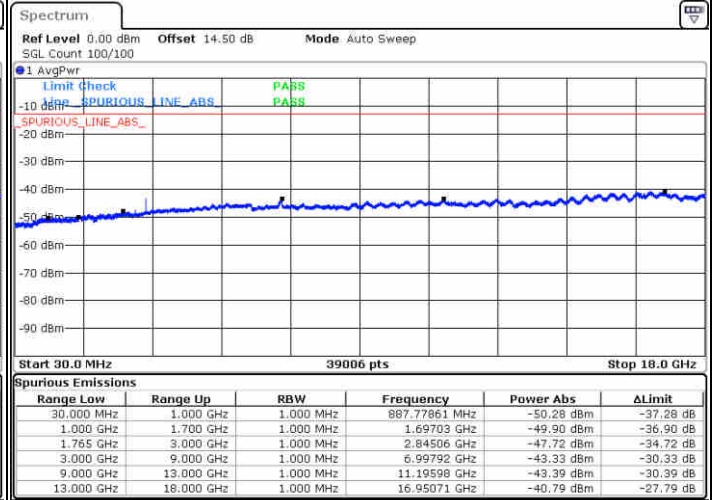
## LTE Band 4 / 20MHz

## Middle Channel / QPSK



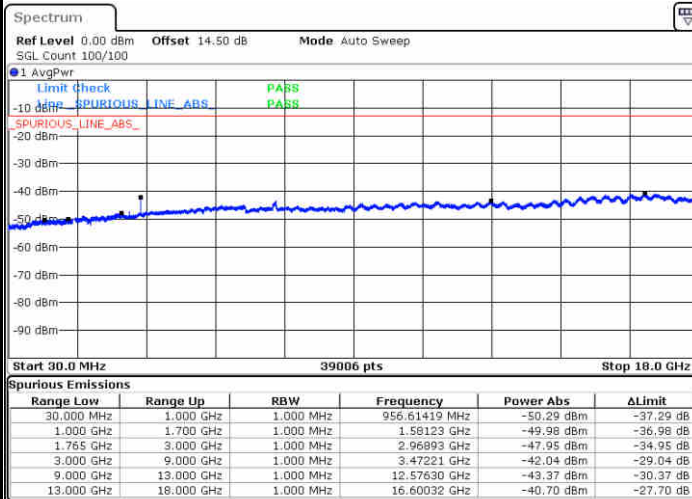
Date: 14.DEC.2019 22:59:13

## Middle Channel / 16QAM



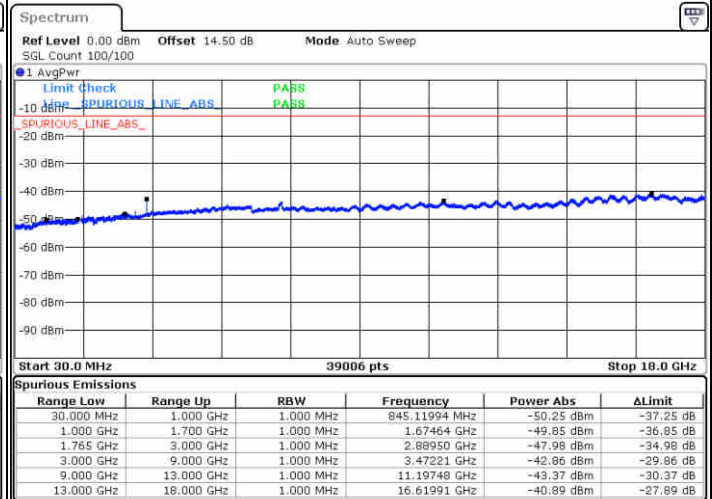
Date: 14.DEC.2019 22:59:55

## Highest Channel / QPSK



Date: 14.DEC.2019 23:05:20

## Highest Channel / 16QAM

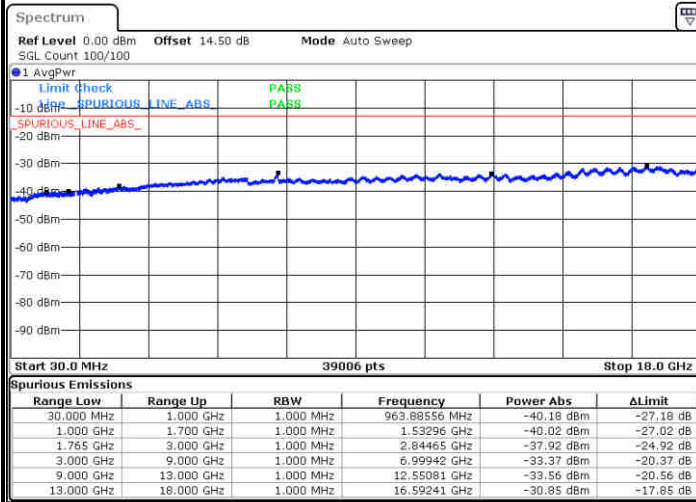


Date: 14.DEC.2019 23:06:02



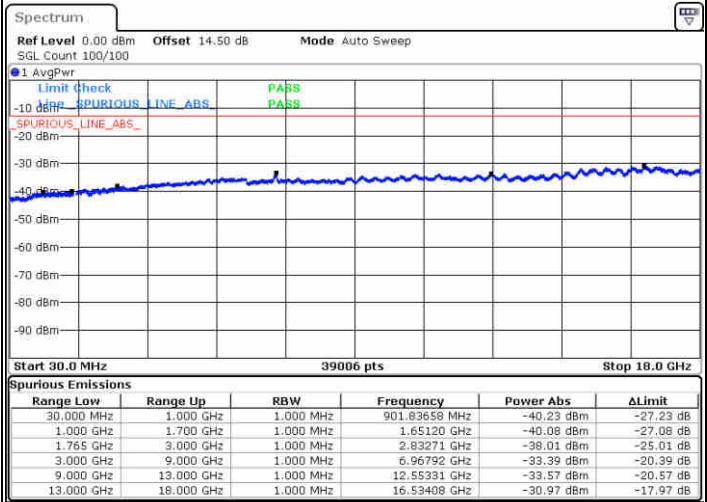
## LTE Band 4 / 1.4MHz

## Lowest Channel / 64QAM



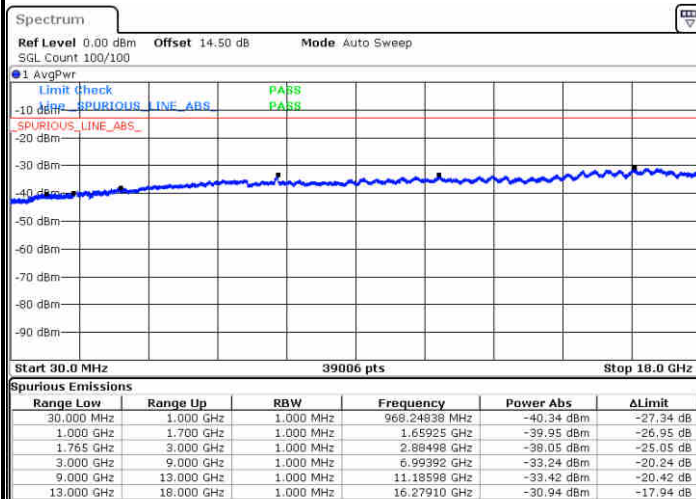
Date: 14.DEC.2019 23:52:44

## Middle Channel / 64QAM



Date: 14.DEC.2019 23:53:48

## Highest Channel / 64QAM

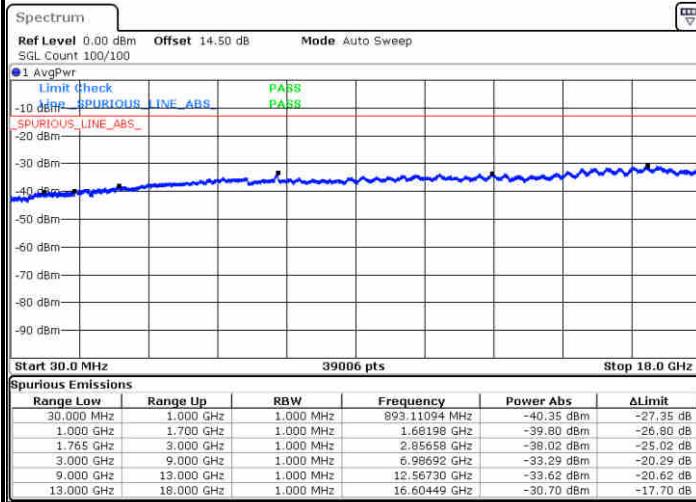


Date: 15.DEC.2019 00:10:04



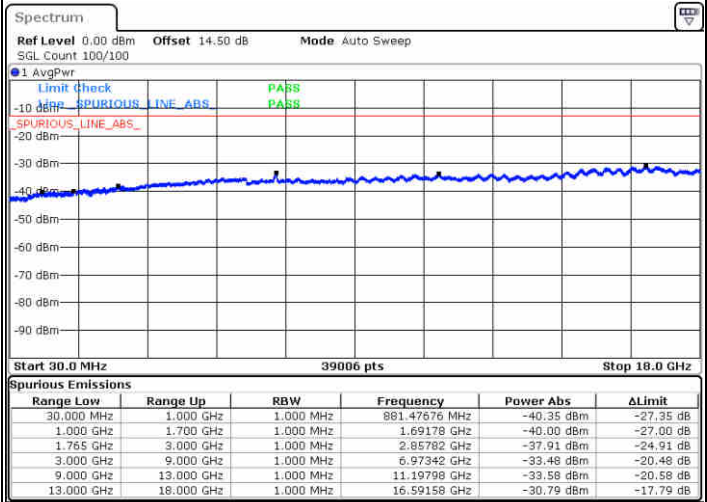
## LTE Band 4 / 3MHz

## Lowest Channel / 64QAM



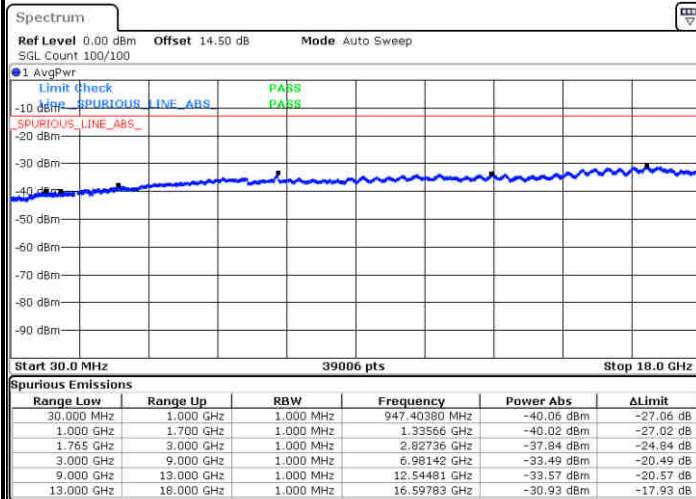
Date: 14.DEC.2019 23:09:06

## Middle Channel / 64QAM



Date: 14.DEC.2019 23:10:10

## Highest Channel / 64QAM

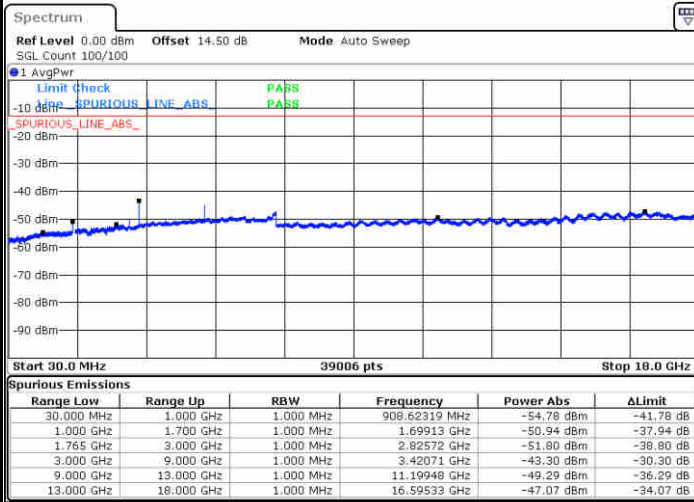


Date: 14.DEC.2019 23:13:14



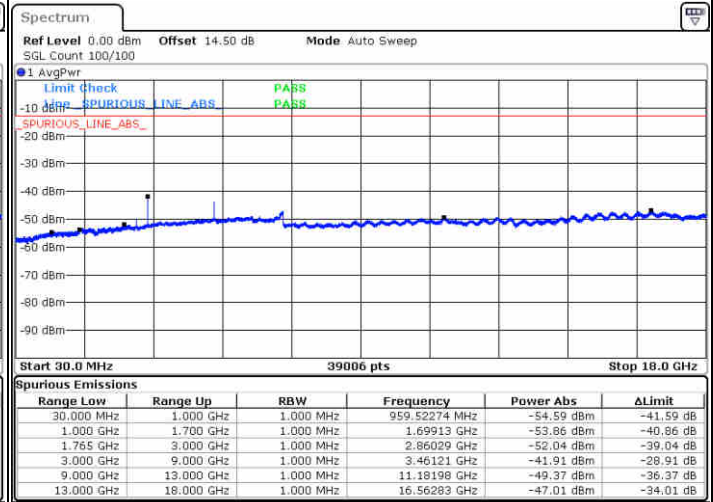
## LTE Band 4 / 5MHz

## Lowest Channel / 64QAM



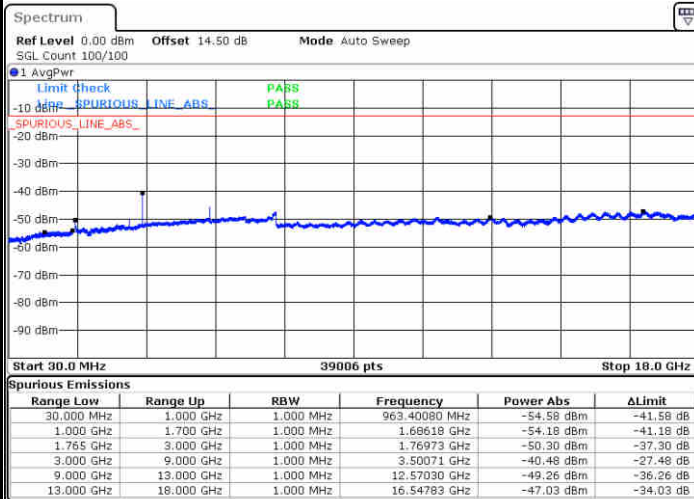
Date: 14.DEC.2019 23:16:18

## Middle Channel / 64QAM



Date: 14.DEC.2019 23:17:22

## Highest Channel / 64QAM

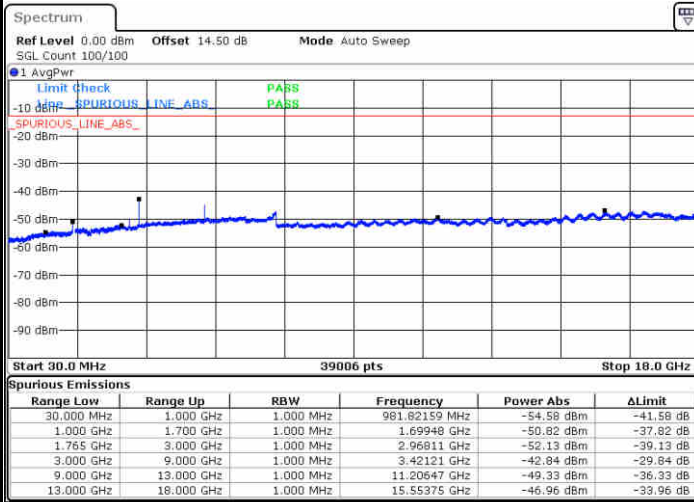


Date: 14.DEC.2019 23:20:26



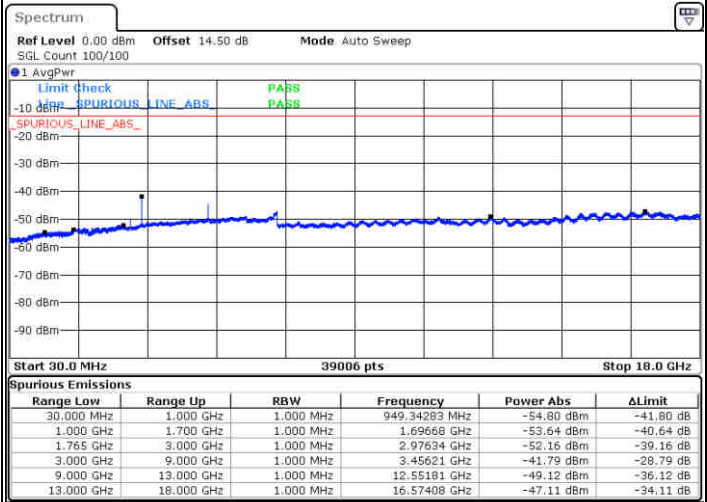
## LTE Band 4 / 10MHz

## Lowest Channel / 64QAM



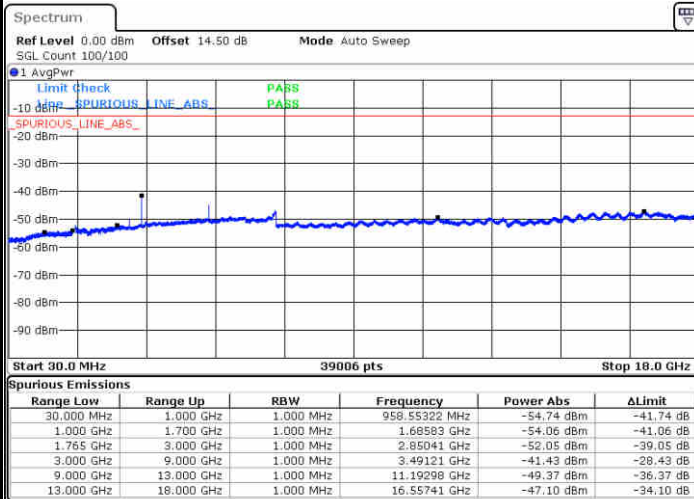
Date: 14.DEC.2019 23:31:04

## Middle Channel / 64QAM



Date: 14.DEC.2019 23:32:08

## Highest Channel / 64QAM

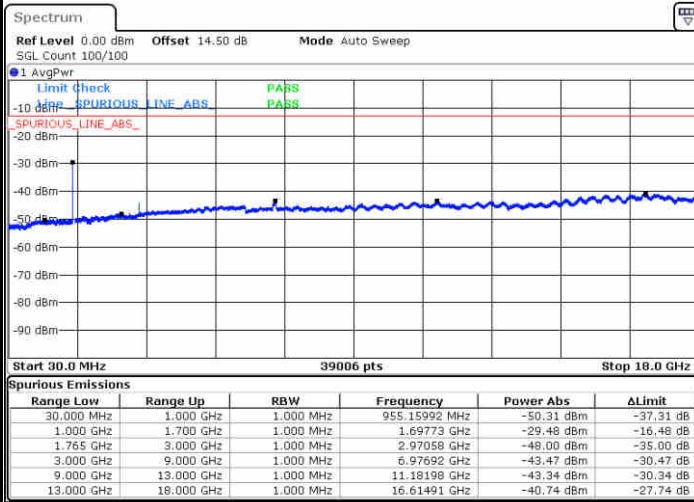


Date: 14.DEC.2019 23:35:12



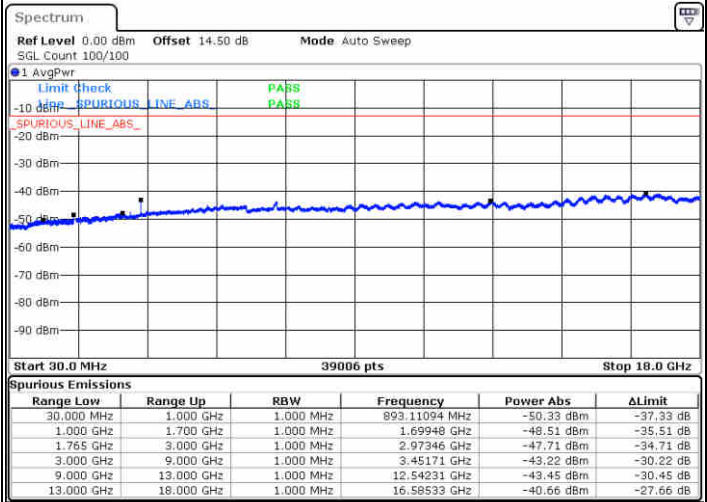
## LTE Band 4 / 15MHz

## Lowest Channel / 64QAM



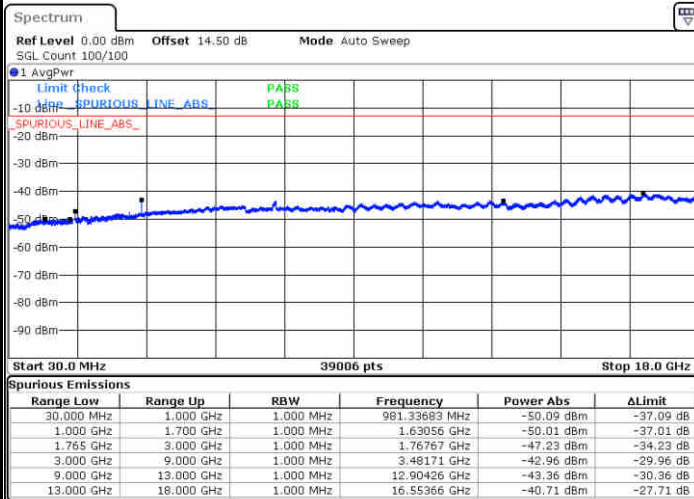
Date: 14.DEC.2019 23:38:16

## Middle Channel / 64QAM



Date: 14.DEC.2019 23:39:20

## Highest Channel / 64QAM

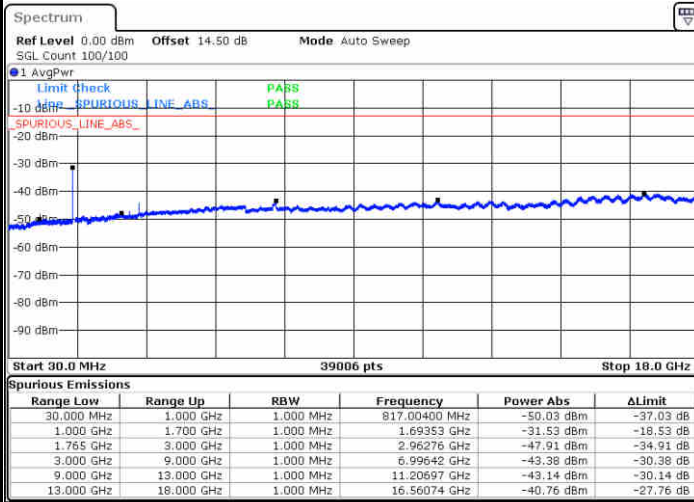


Date: 14.DEC.2019 23:42:23



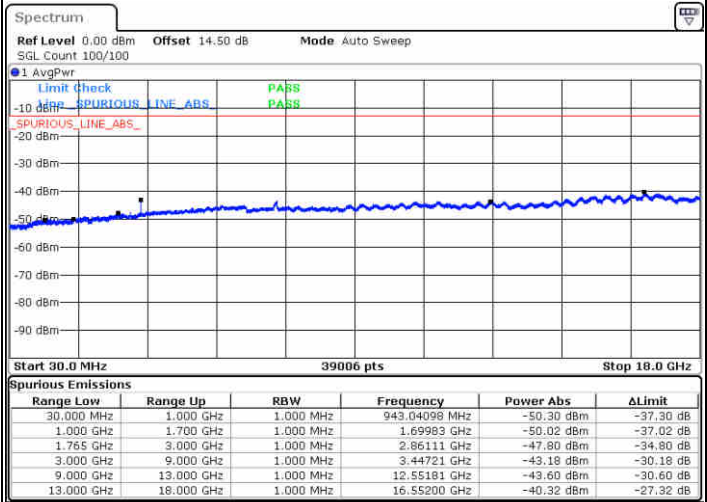
## LTE Band 4 / 20MHz

## Lowest Channel / 64QAM



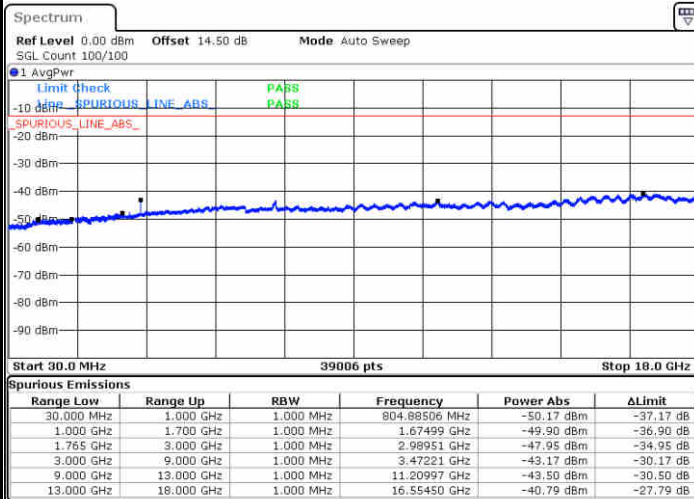
Date: 14.DEC.2019 23:45:27

## Middle Channel / 64QAM



Date: 14.DEC.2019 23:46:31

## Highest Channel / 64QAM



Date: 14.DEC.2019 23:49:34

**Frequency Stability**

| Test Conditions  |                   | LTE Band 4 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                           | Note 2. |
|                  |                   | Deviation (ppm)                    | Result  |
| 50               | Normal Voltage    | 0.0059                             | PASS    |
| 40               | Normal Voltage    | 0.0313                             |         |
| 30               | Normal Voltage    | 0.0102                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0073                             |         |
| 0                | Normal Voltage    | 0.0103                             |         |
| -10              | Normal Voltage    | 0.0196                             |         |
| -20              | Normal Voltage    | 0.0012                             |         |
| -30              | Normal Voltage    | 0.0120                             |         |
| 20               | Maximum Voltage   | 0.0301                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0048                             |         |

**Note:**

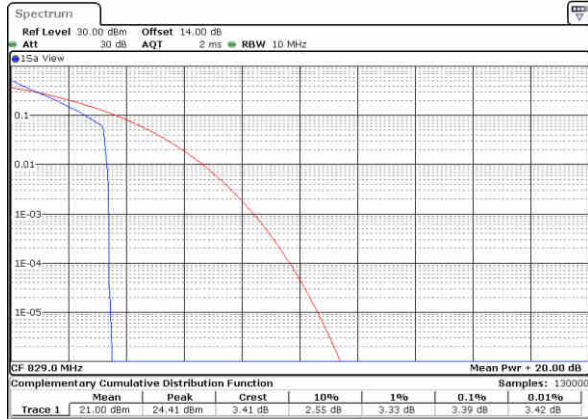
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 5

## Peak-to-Average Ratio

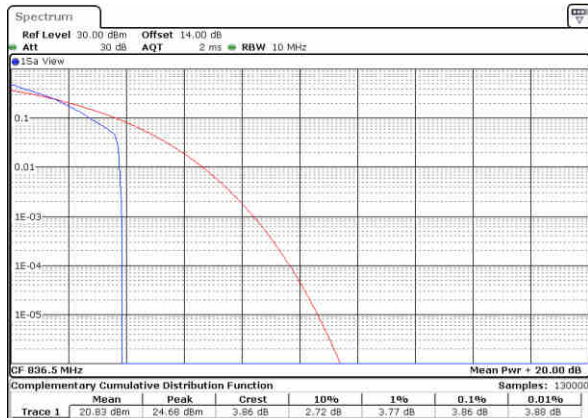
| Mode       | LTE Band 5 / 10MHz |         |       |         |             |
|------------|--------------------|---------|-------|---------|-------------|
| Mod.       | QPSK               |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 3.39               | 4.93    | 5.19  | 5.88    | PASS        |
| Middle CH  | 3.86               | 5.01    | 5.45  | 5.88    |             |
| Highest CH | 3.39               | 5.13    | 4.90  | 5.94    |             |
| Mode       | LTE Band 5 / 10MHz |         |       |         |             |
| Mod.       | 64QAM              |         |       |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB |       |         | Result      |
| Lowest CH  | 5.25               | 5.80    | -     | -       | PASS        |
| Middle CH  | 5.86               | 5.88    | -     | -       |             |
| Highest CH | 4.99               | 6.00    | -     | -       |             |

**LTE Band 5 / 10MHz / QPSK**
**Lowest Channel / 1RB**


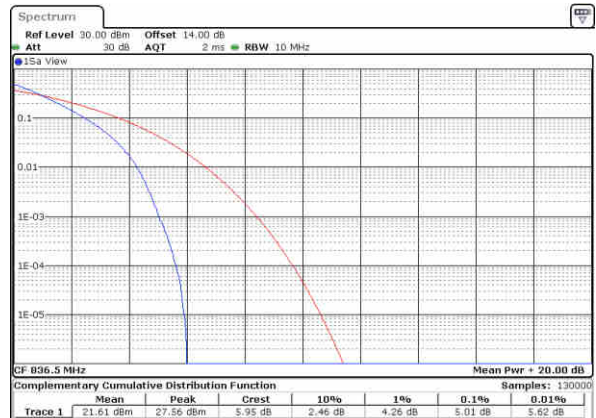
Date: 15, DEC, 2019 21:47:33

**Lowest Channel / Full RB**


Date: 15, DEC, 2019 21:47:45

**Middle Channel / 1RB**


Date: 15, DEC, 2019 21:47:58

**Middle Channel / Full RB**


Date: 15, DEC, 2019 21:55:09

**Highest Channel / 1RB**


Date: 15, DEC, 2019 21:55:21

**Highest Channel / Full RB**

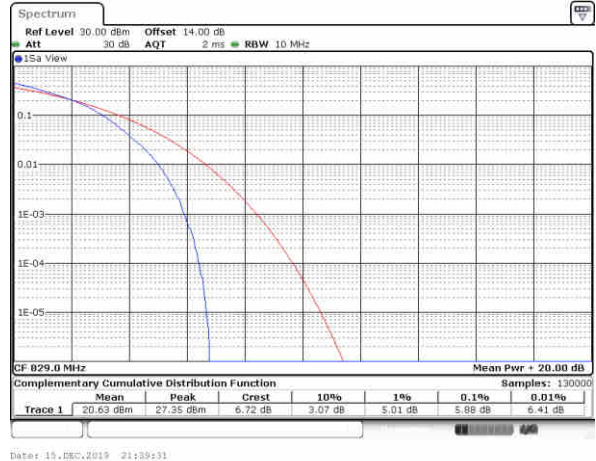

Date: 15, DEC, 2019 21:55:31

LTE Band 5 / 10MHz / 16QAM

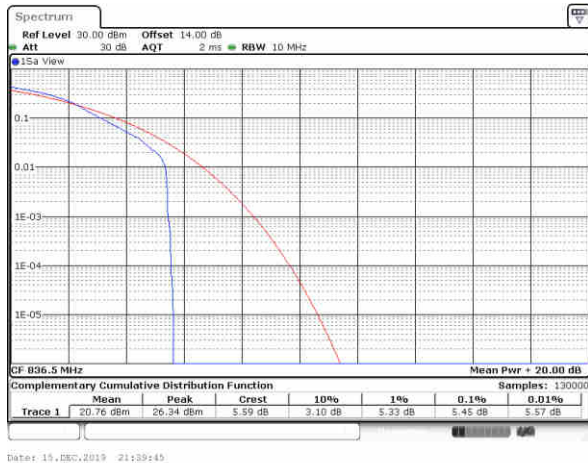
Lowest Channel / 1RB



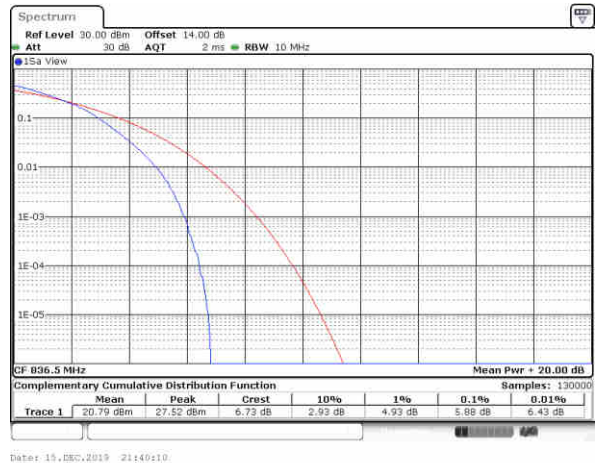
Lowest Channel / Full RB



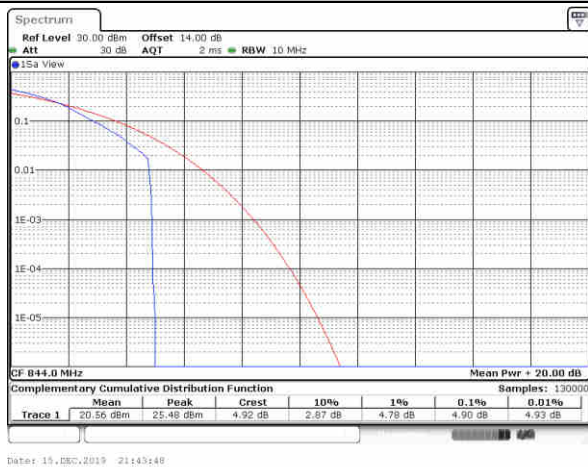
Middle Channel / 1RB



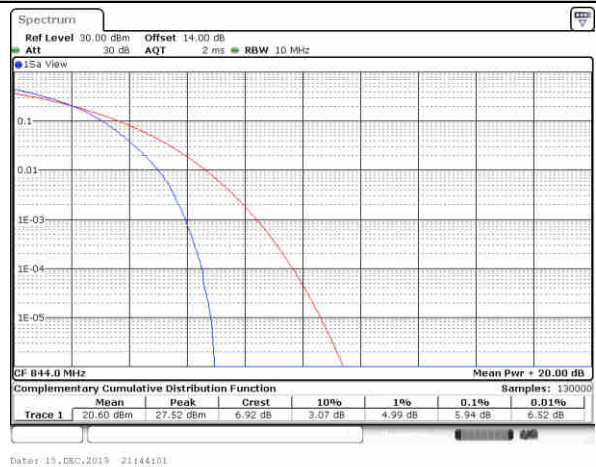
Middle Channel / Full RB



Highest Channel / 1RB



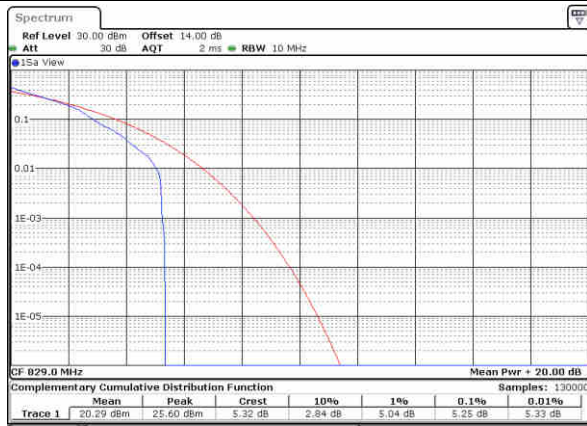
Highest Channel / Full RB



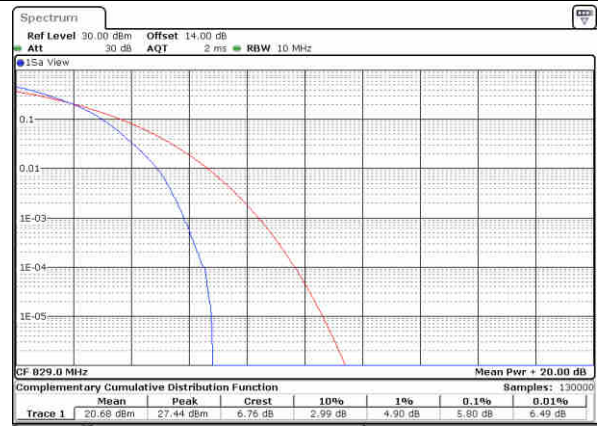


## LTE Band 5 / 10MHz / 64QAM

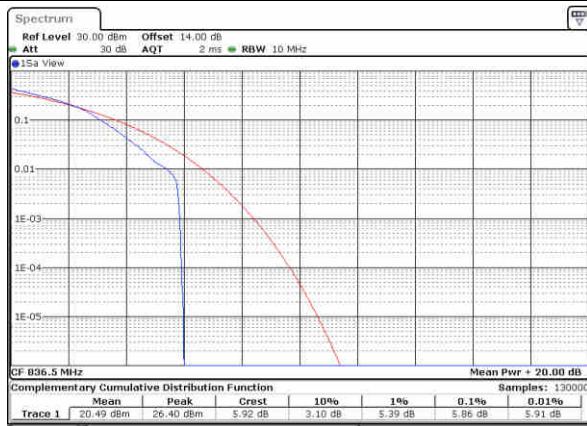
## Lowest Channel / 1RB



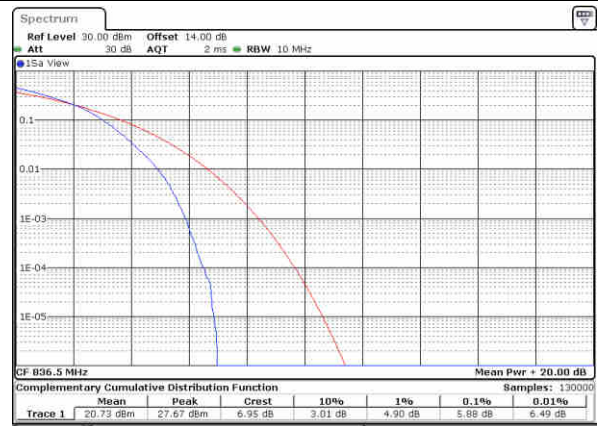
## Lowest Channel / Full RB



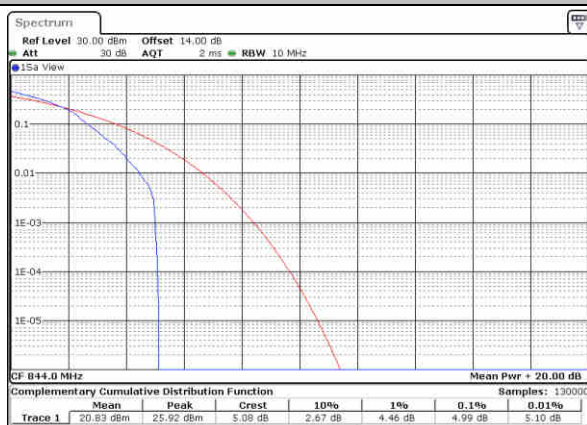
## Middle Channel / 1RB



## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB



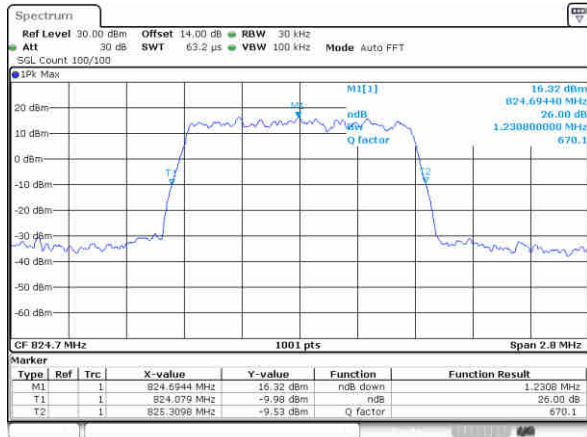
**26dB Bandwidth**

| Mode       | LTE Band 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 |
| Lowest CH  | 1.23                      | 1.21  | 3.01  | 2.97  | 4.91  | 4.86  | 9.81  | 9.83  | -     | -     | -     | -     |
| Middle CH  | 1.21                      | 1.22  | 3.03  | 3.01  | 4.91  | 4.85  | 9.81  | 9.77  | -     | -     | -     | -     |
| Highest CH | 1.21                      | 1.22  | 3.03  | 3.05  | 4.92  | 4.91  | 9.79  | 9.85  | -     | -     | -     | -     |
| Mode       | LTE Band 5 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                     |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.22                      | -     | 3.03  | -     | 4.86  | -     | 9.69  | -     | -     | -     | -     | -     |
| Middle CH  | 1.22                      | -     | 3.05  | -     | 4.90  | -     | 9.81  | -     | -     | -     | -     | -     |
| Highest CH | 1.23                      | -     | 2.99  | -     | 4.87  | -     | 9.75  | -     | -     | -     | -     | -     |

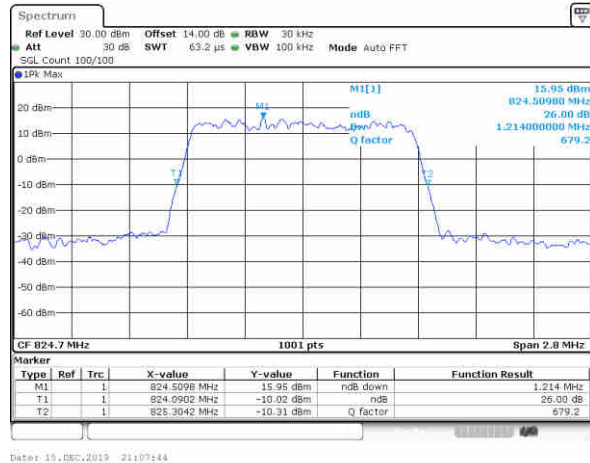


## LTE Band 5

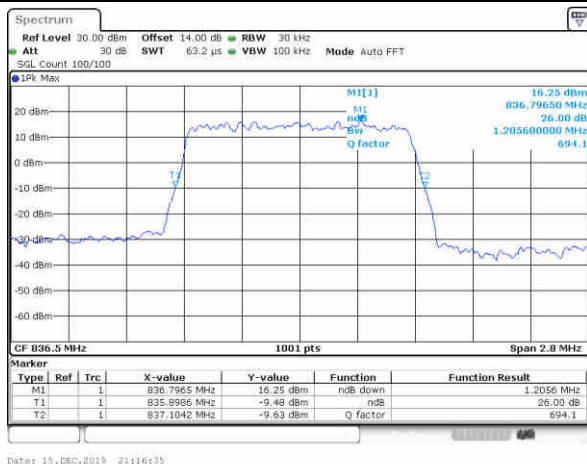
## Lowest Channel / 1.4MHz / QPSK



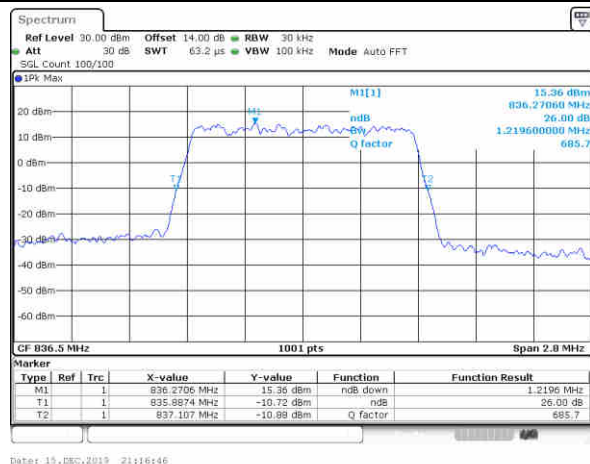
## Lowest Channel / 1.4MHz / 16QAM



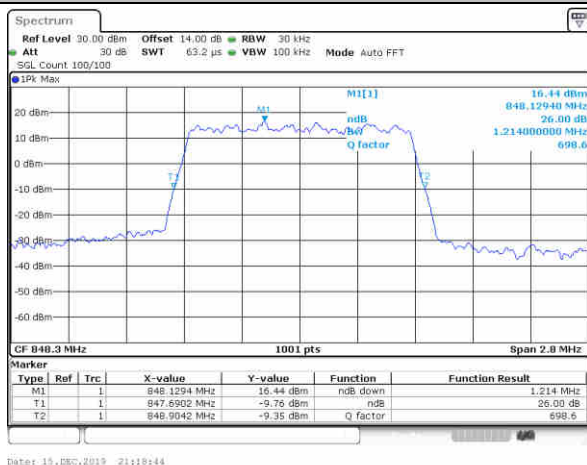
## Middle Channel / 1.4MHz / QPSK



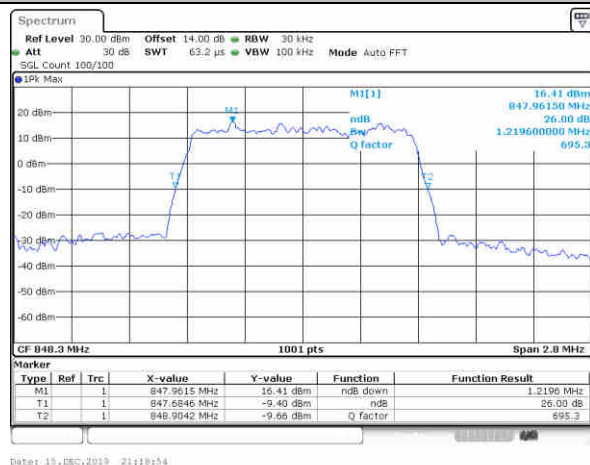
## Middle Channel / 1.4MHz / 16QAM



## Highest Channel / 1.4MHz / QPSK



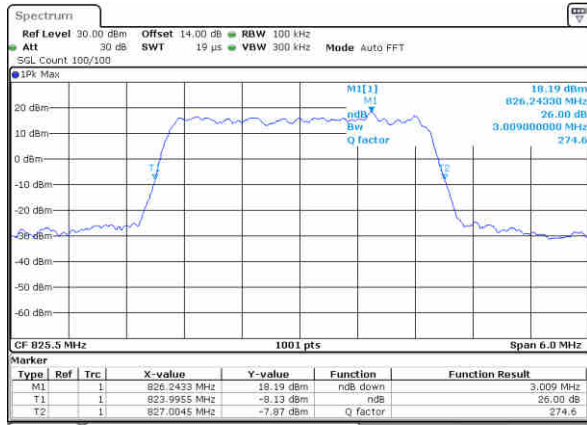
## Highest Channel / 1.4MHz / 16QAM



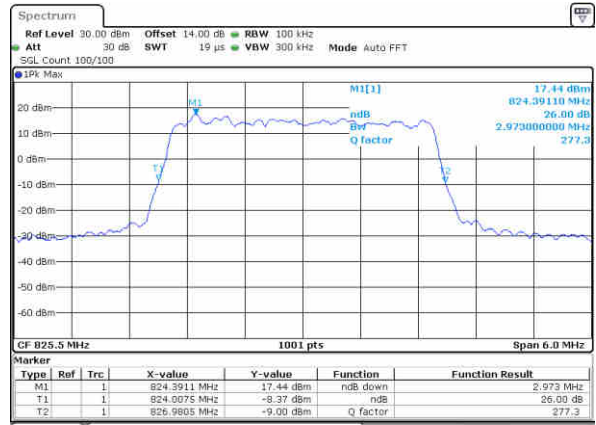


## LTE Band 5

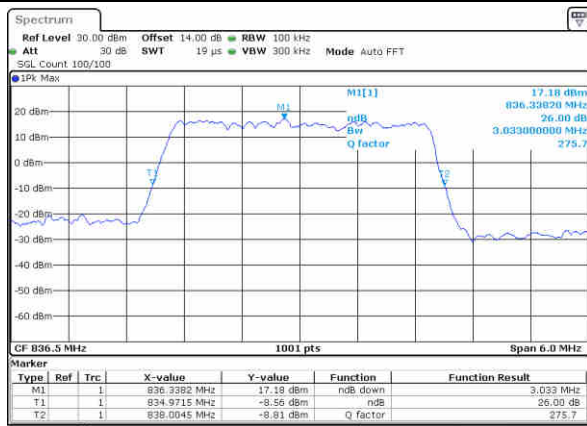
## Lowest Channel / 3MHz / QPSK



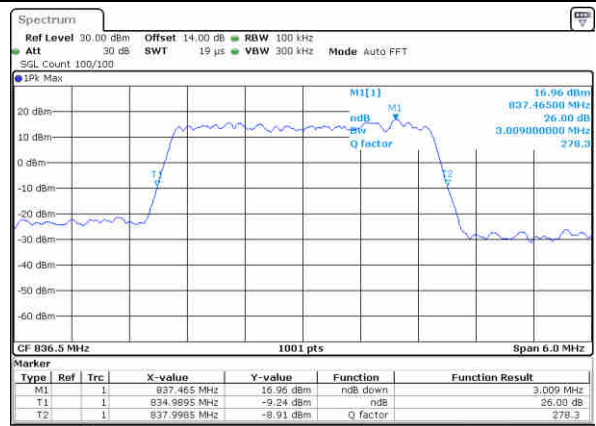
## Lowest Channel / 3MHz / 16QAM



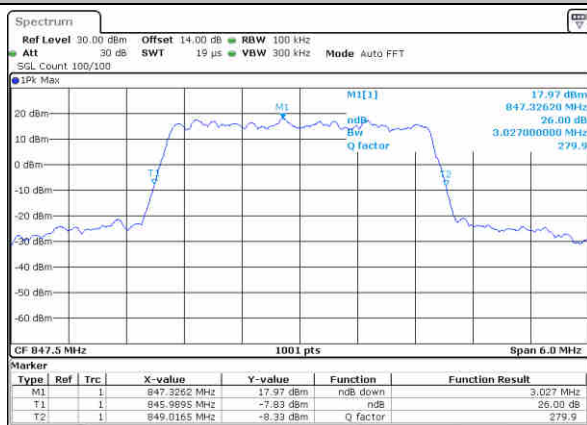
## Middle Channel / 3MHz / QPSK



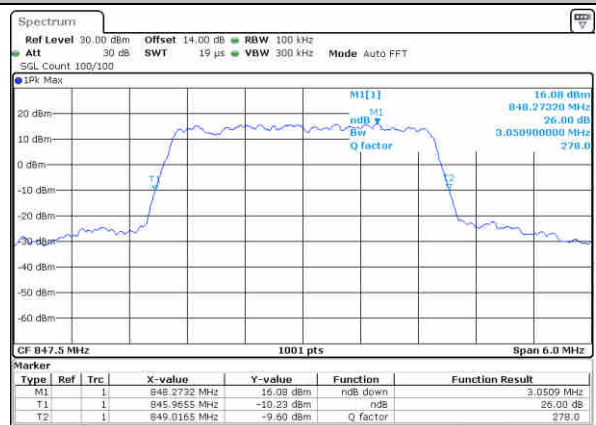
## Middle Channel / 3MHz / 16QAM



## Highest Channel / 3MHz / QPSK



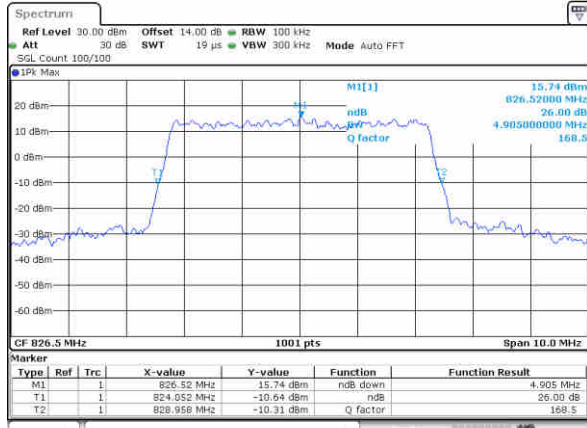
## Highest Channel / 3MHz / 16QAM





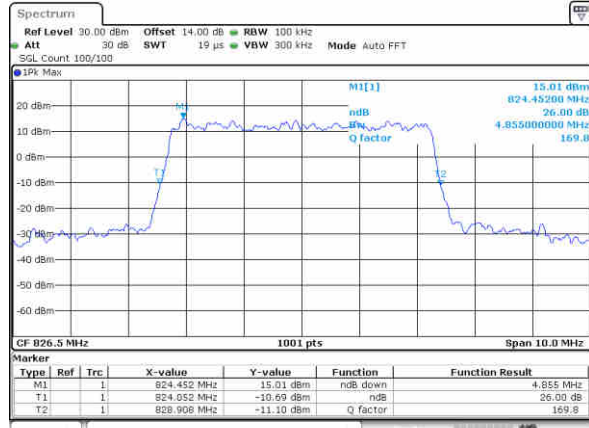
## LTE Band 5

## Lowest Channel / 5MHz / QPSK



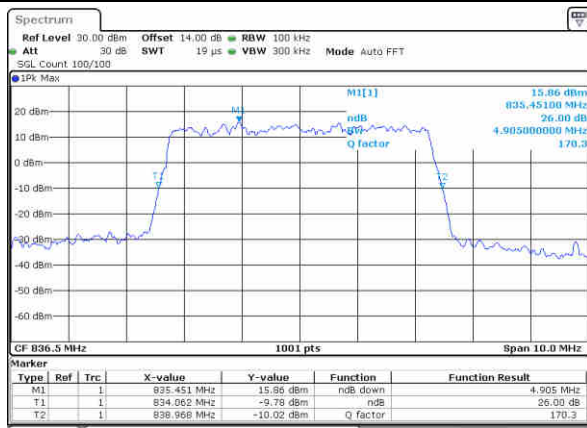
Date: 15, DEC, 2019 20:05:04

## Lowest Channel / 5MHz / 16QAM



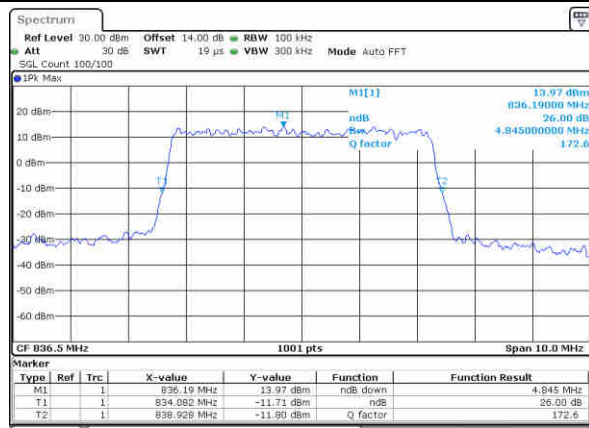
Date: 15, DEC, 2019 20:05:15

## Middle Channel / 5MHz / QPSK



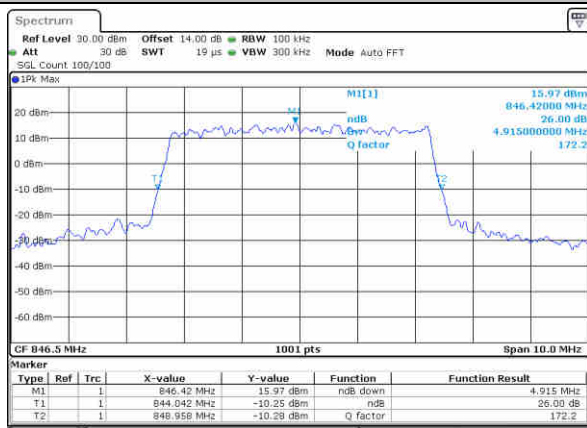
Date: 15, DEC, 2019 20:13:55

## Middle Channel / 5MHz / 16QAM



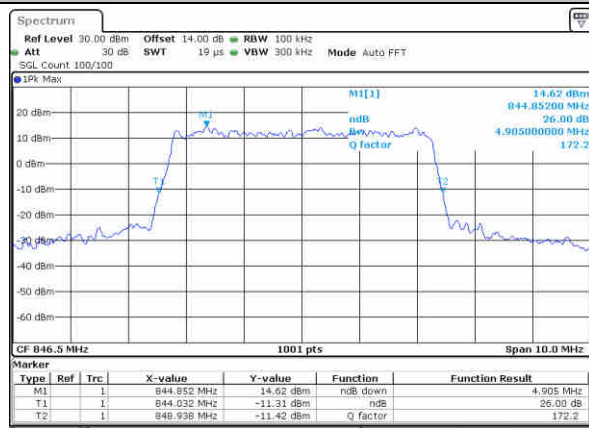
Date: 15, DEC, 2019 20:14:06

## Highest Channel / 5MHz / QPSK



Date: 15, DEC, 2019 20:16:04

## Highest Channel / 5MHz / 16QAM

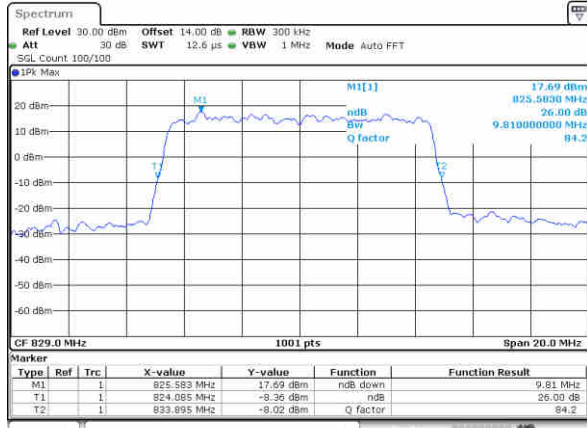


Date: 15, DEC, 2019 20:16:15



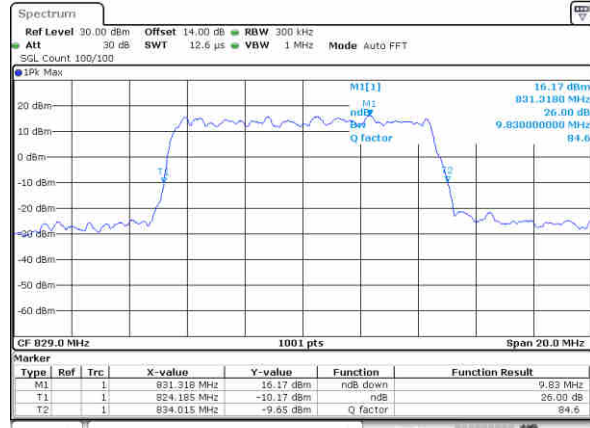
## LTE Band 5

## Lowest Channel / 10MHz / QPSK



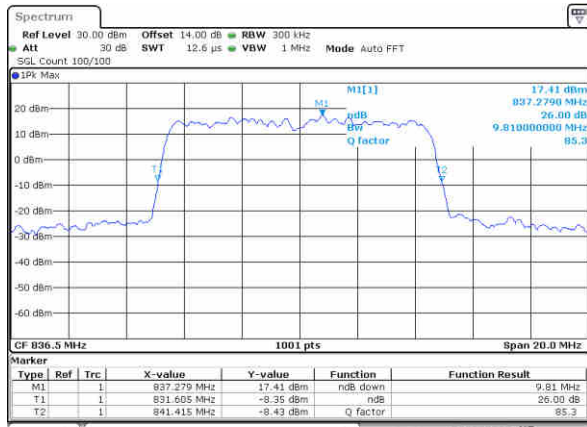
Date: 15, DEC, 2019 20:34:08

## Lowest Channel / 10MHz / 16QAM



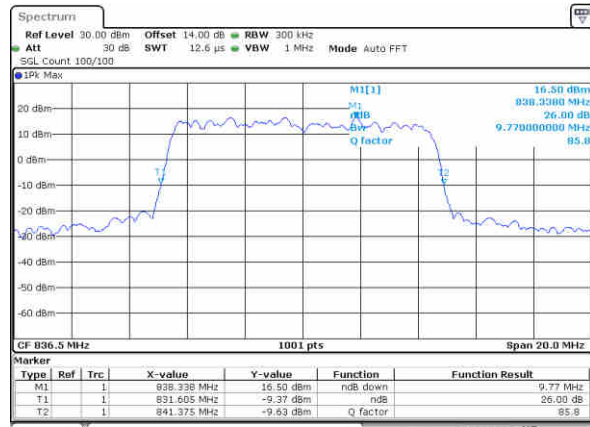
Date: 15, DEC, 2019 20:34:19

## Middle Channel / 10MHz / QPSK



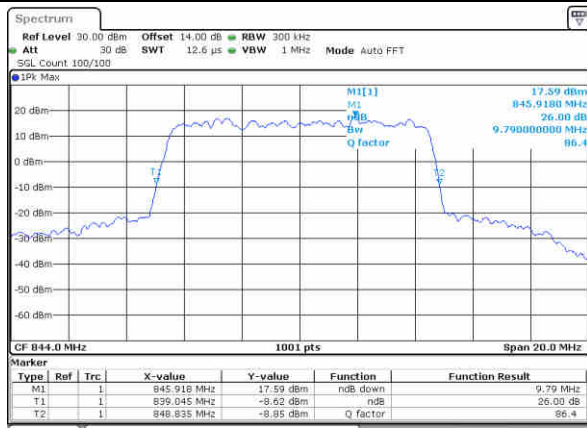
Date: 15, DEC, 2019 20:42:59

## Middle Channel / 10MHz / 16QAM



Date: 15, DEC, 2019 20:43:10

## Highest Channel / 10MHz / QPSK



Date: 15, DEC, 2019 20:45:08

## Highest Channel / 10MHz / 16QAM



Date: 15, DEC, 2019 20:45:19