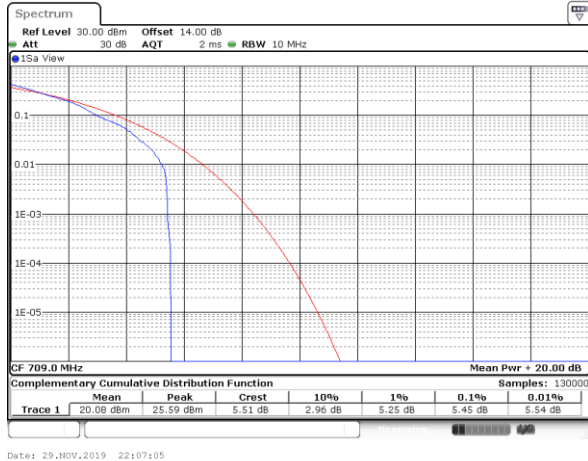
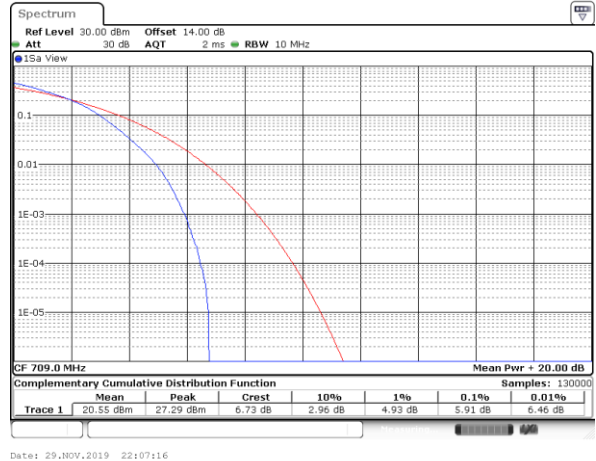
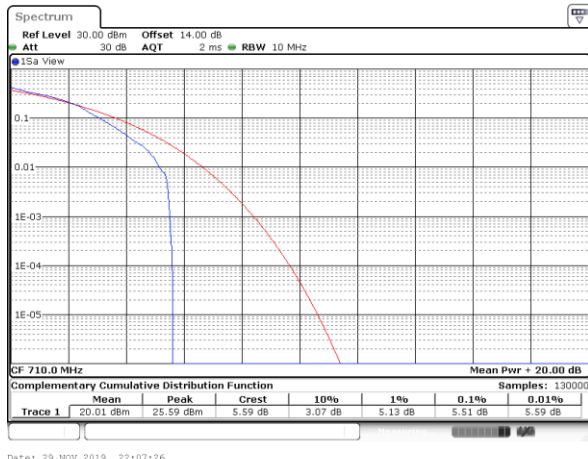


**LTE Band 17 / 10MHz / 64QAM**
**Lowest Channel / 1RB**


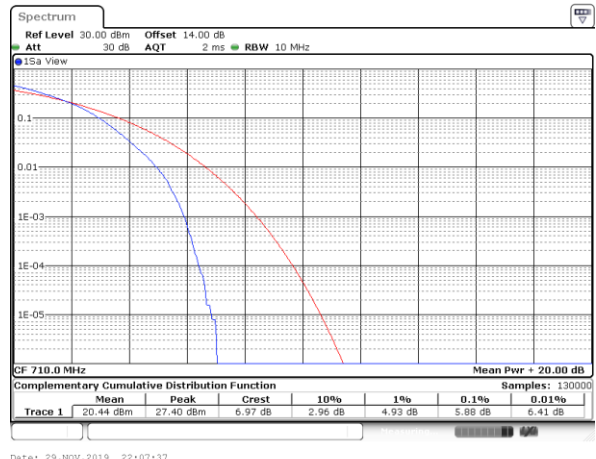
Date: 29.NOV.2019 22:07:05

**Lowest Channel / Full RB**


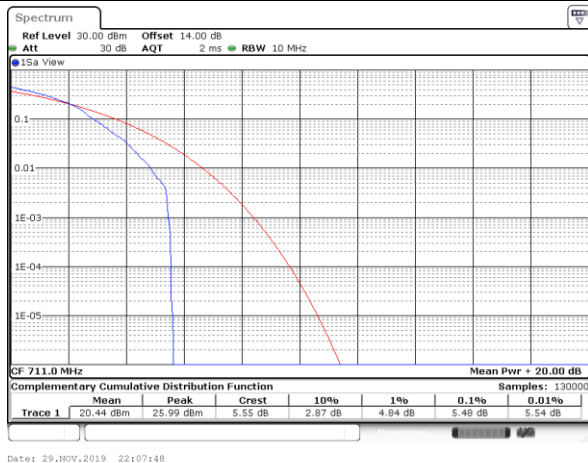
Date: 29.NOV.2019 22:07:16

**Middle Channel / 1RB**


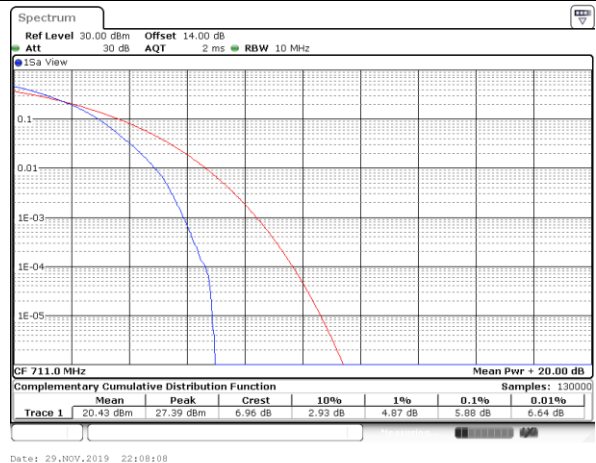
Date: 29.NOV.2019 22:07:26

**Middle Channel / Full RB**


Date: 29.NOV.2019 22:07:37

**Highest Channel / 1RB**


Date: 29.NOV.2019 22:07:48

**Highest Channel / Full RB**


Date: 29.NOV.2019 22:08:08

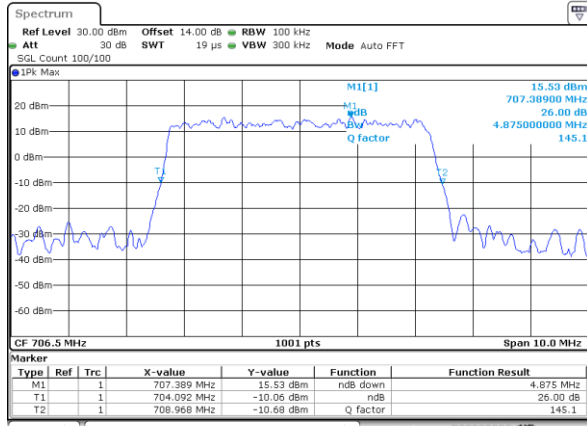
**26dB Bandwidth**

| Mode       | LTE Band 17 : 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  | -                          | -     | -     | -     | 4.875 | 4.825 | 9.73  | 9.89  | -     | -     | -     | -     |
| Middle CH  | -                          | -     | -     | -     | 4.845 | 4.865 | 9.79  | 9.85  | -     | -     | -     | -     |
| Highest CH | -                          | -     | -     | -     | 4.905 | 4.885 | 9.81  | 9.77  | -     | -     | -     | -     |
| Mode       | LTE Band 17 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                     |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                      |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | -                          |       | -     |       | 4.875 |       | 9.73  |       | -     |       | -     |       |
| Middle CH  | -                          |       | -     |       | 4.885 |       | 9.79  |       | -     |       | -     |       |
| Highest CH | -                          |       | -     |       | 4.855 |       | 9.79  |       | -     |       | -     |       |

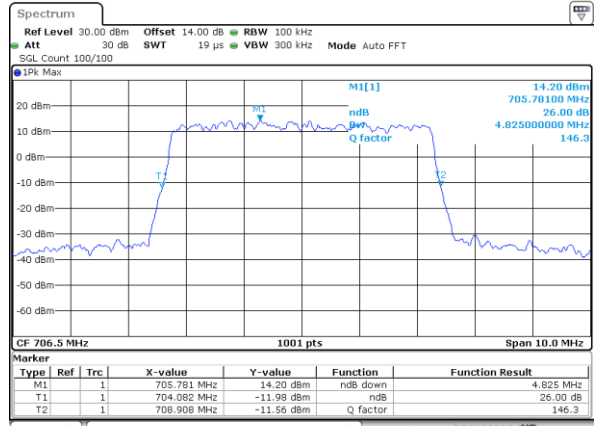


## LTE Band 17

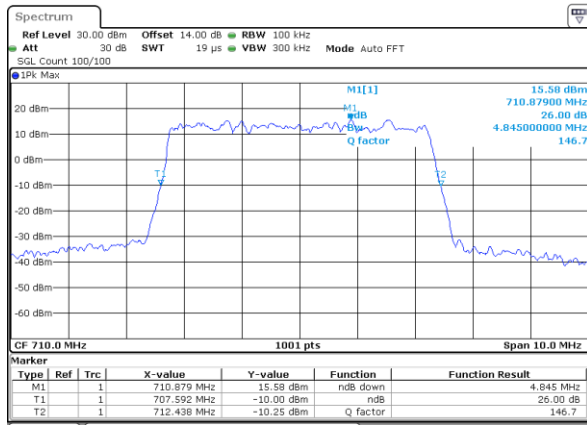
## Lowest Channel / 5MHz / QPSK



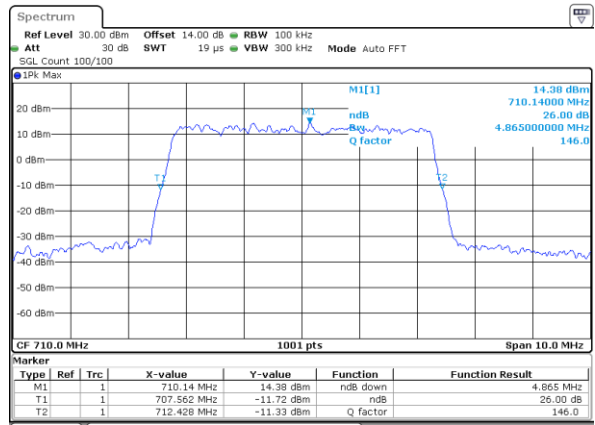
## Lowest Channel / 5MHz / 16QAM



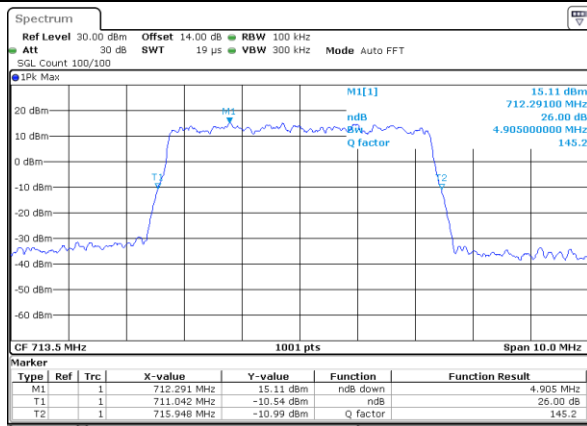
## Middle Channel / 5MHz / QPSK



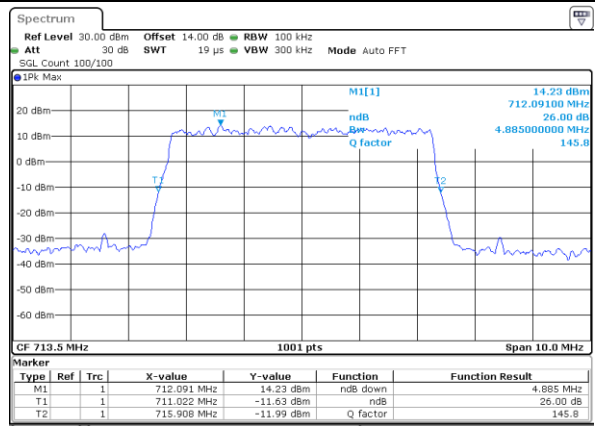
## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



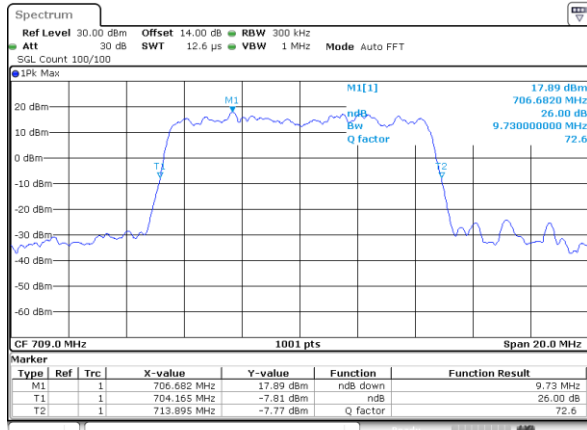
## Highest Channel / 5MHz / 16QAM



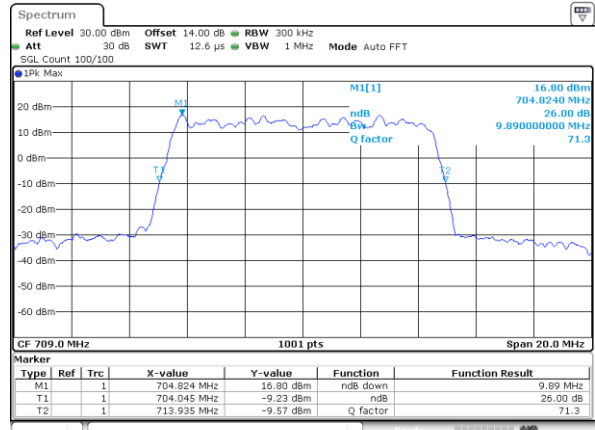


## LTE Band 17

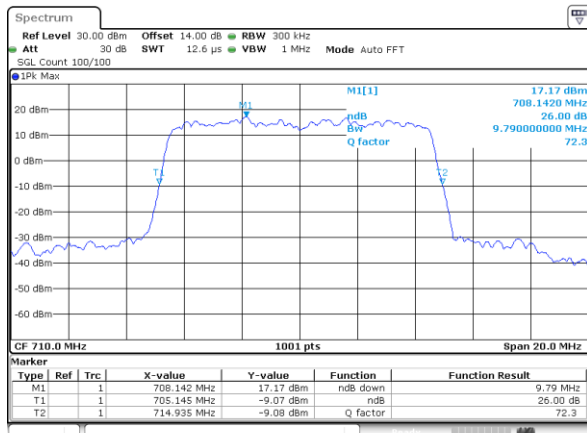
## Lowest Channel / 10MHz / QPSK



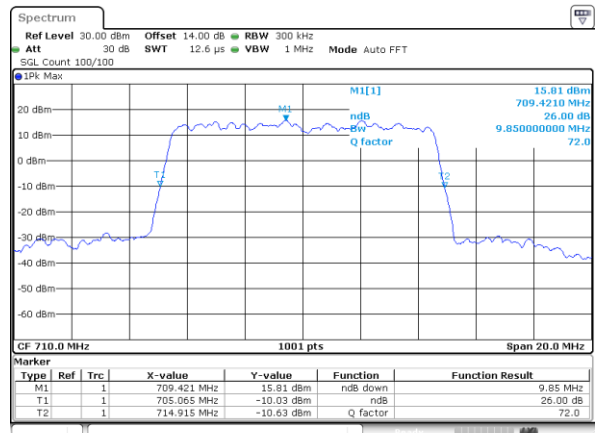
## Lowest Channel / 10MHz / 16QAM



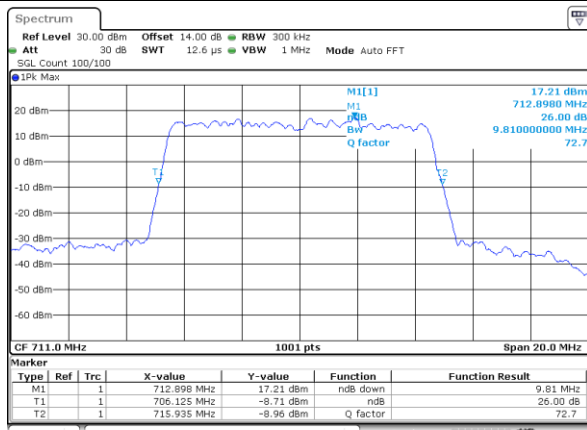
## Middle Channel / 10MHz / QPSK



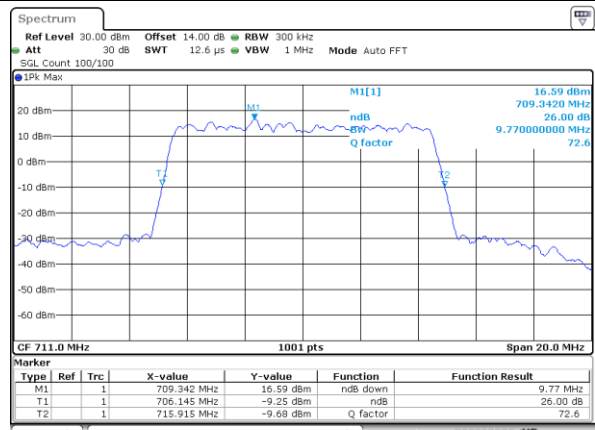
## Middle Channel / 10MHz / 16QAM



## Highest Channel / 10MHz / QPSK



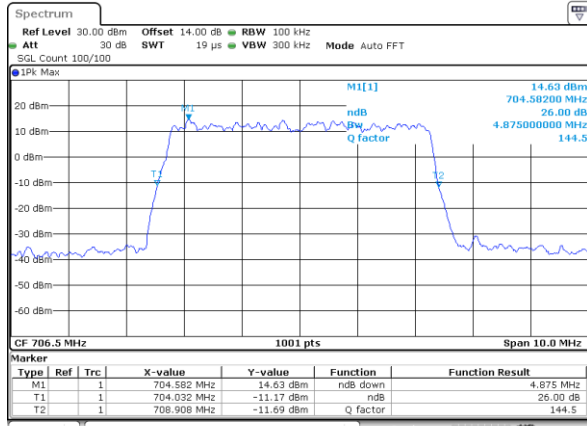
## Highest Channel / 10MHz / 16QAM





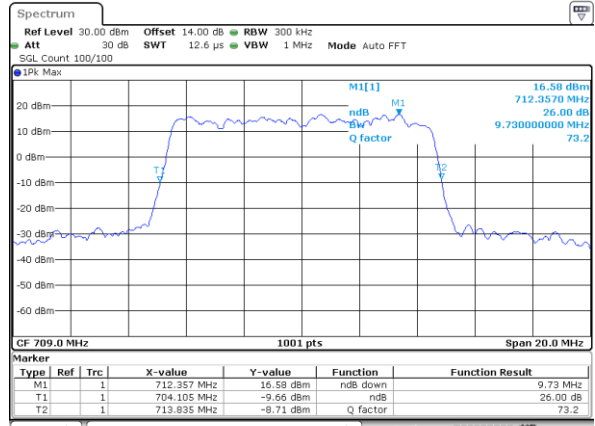
## LTE Band 17

## Lowest Channel / 5MHz / 64QAM



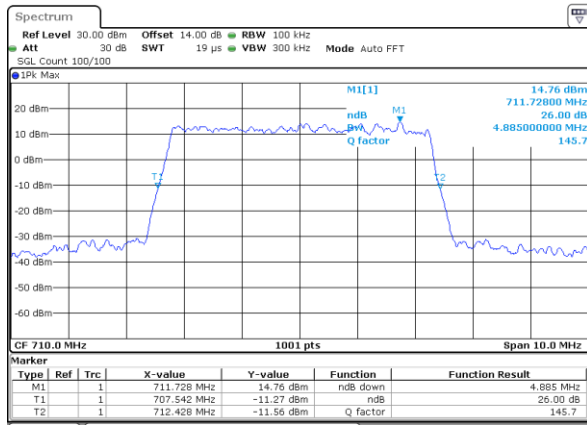
Date: 29.NOV.2019 21:50:35

## Lowest Channel / 10MHz / 64QAM



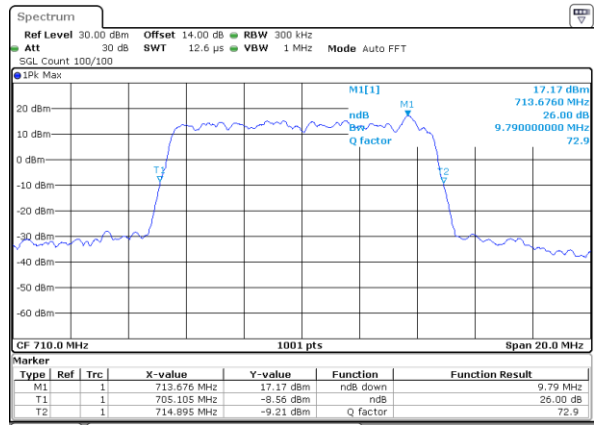
Date: 29.NOV.2019 21:57:46

## Middle Channel / 5MHz / 64QAM



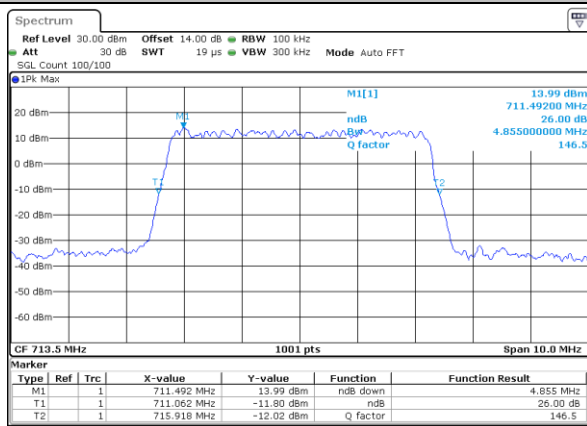
Date: 29.NOV.2019 21:53:39

## Middle Channel / 10MHz / 64QAM



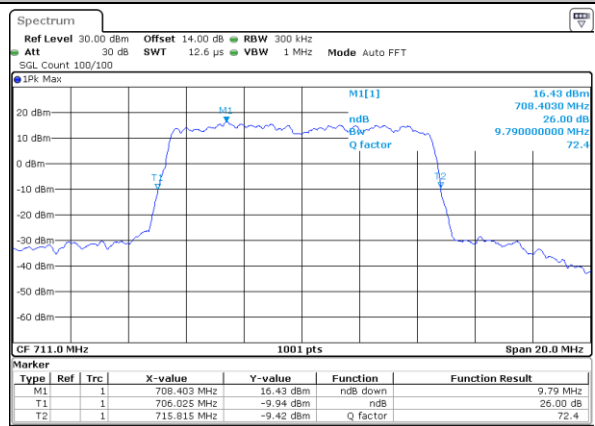
Date: 29.NOV.2019 22:00:50

## Highest Channel / 5MHz / 64QAM



Date: 29.NOV.2019 21:54:43

## Highest Channel / 10MHz / 64QAM



Date: 29.NOV.2019 22:01:53

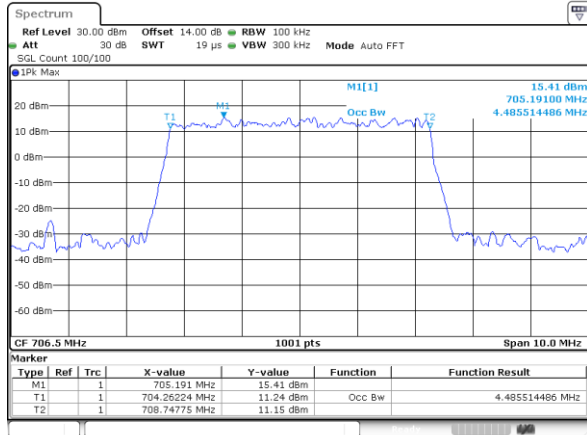
**Occupied Bandwidth**

| Mode       | LTE Band 17 : 99%OBW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
|------------|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | QPSK                      | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | -                         | -     | -     | -     | 4.49  | 4.51  | 9.01  | 9.03  | -     | -     | -     | -     |
| Middle CH  | -                         | -     | -     | -     | 4.49  | 4.67  | 9.09  | 8.99  | -     | -     | -     | -     |
| Highest CH | -                         | -     | -     | -     | 4.50  | 4.76  | 8.95  | 9.03  | -     | -     | -     | -     |
| Mode       | LTE Band 17 : 99%OBW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                     |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | -                         |       | -     |       | 4.48  |       | 9.03  |       | -     |       | -     |       |
| Middle CH  | -                         |       | -     |       | 4.52  |       | 9.01  |       | -     |       | -     |       |
| Highest CH | -                         |       | -     |       | 4.51  |       | 8.99  |       | -     |       | -     |       |



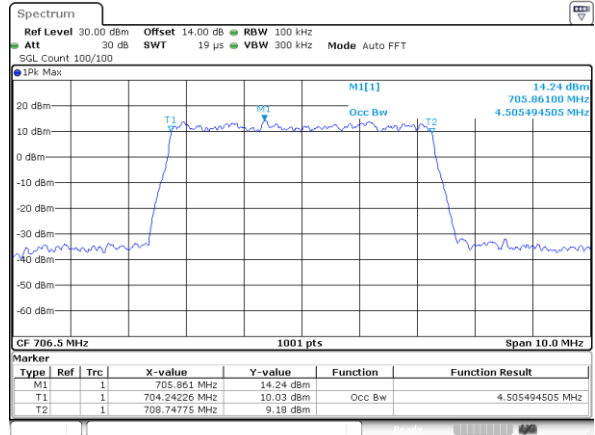
## LTE Band 17

## Lowest Channel / 5MHz / QPSK



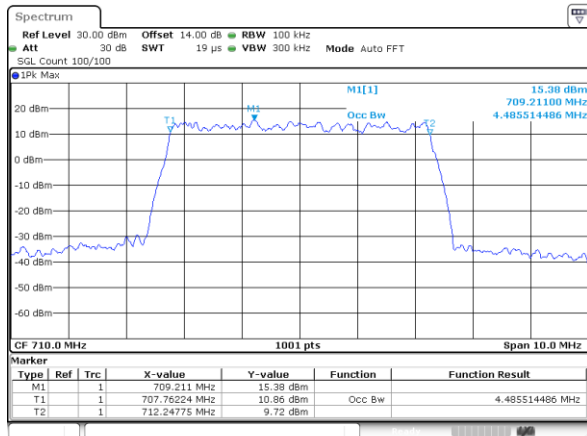
Date: 29.NOV.2019 21:21:41

## Lowest Channel / 5MHz / 16QAM



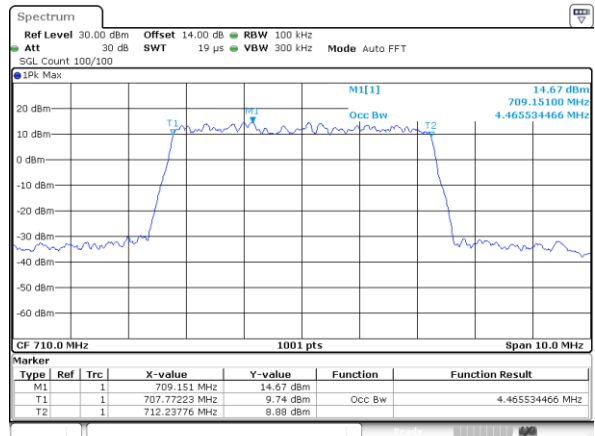
Date: 29.NOV.2019 21:21:52

## Middle Channel / 5MHz / QPSK



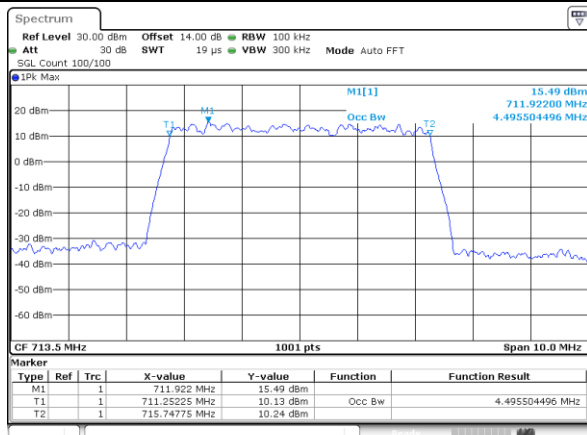
Date: 29.NOV.2019 21:27:48

## Middle Channel / 5MHz / 16QAM



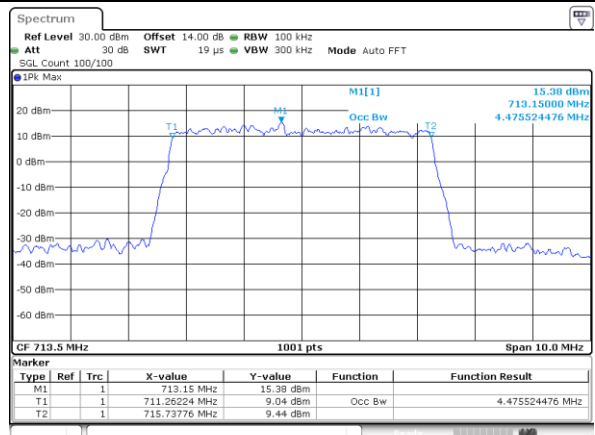
Date: 29.NOV.2019 21:28:00

## Highest Channel / 5MHz / QPSK



Date: 29.NOV.2019 21:29:56

## Highest Channel / 5MHz / 16QAM

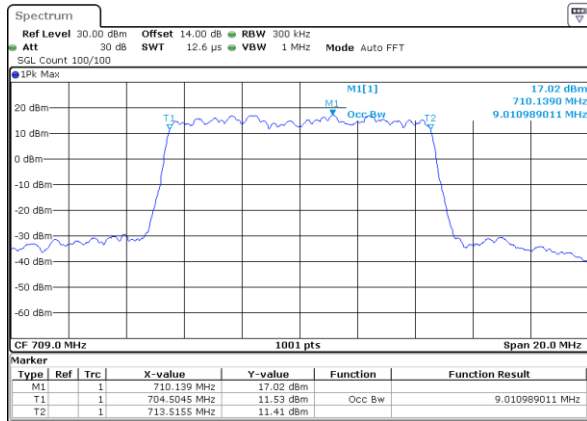


Date: 29.NOV.2019 21:30:07



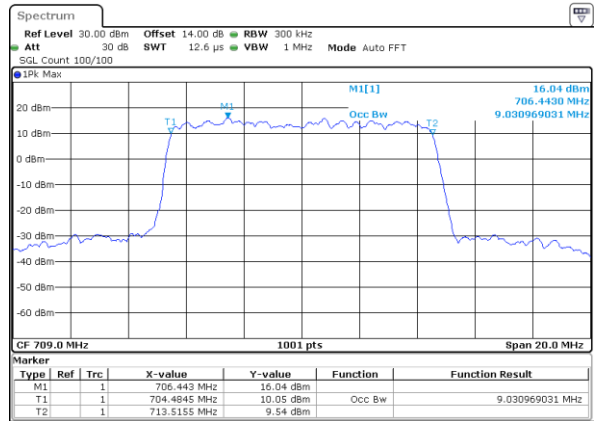
## LTE Band 17

## Lowest Channel / 10MHz / QPSK



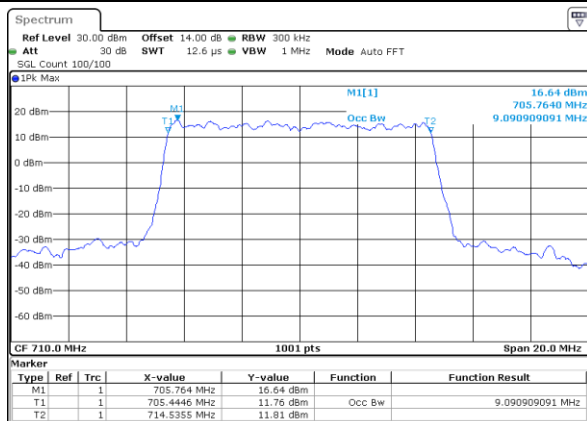
Date: 29.NOV.2019 21:36:04

## Lowest Channel / 10MHz / 16QAM



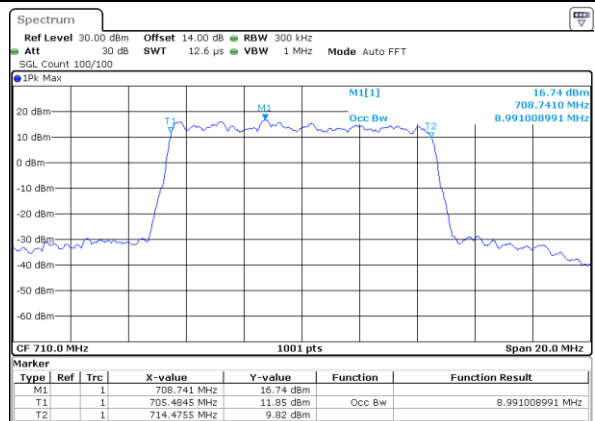
Date: 29.NOV.2019 21:36:15

## Middle Channel / 10MHz / QPSK



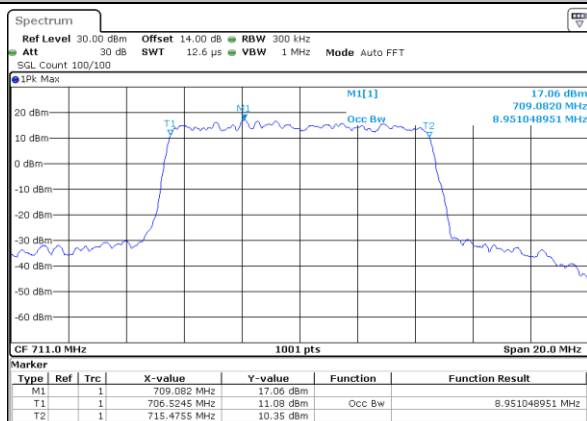
Date: 29.NOV.2019 21:42:10

## Middle Channel / 10MHz / 16QAM



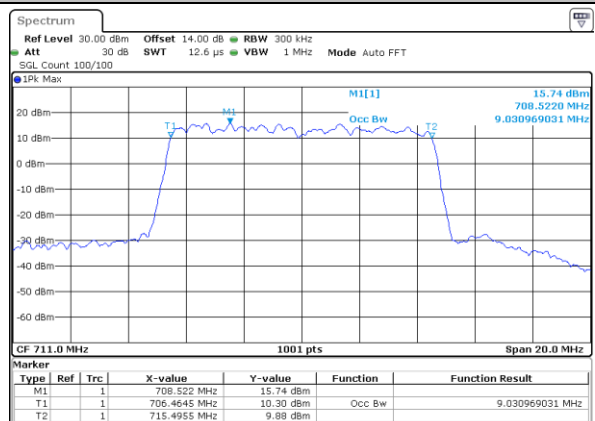
Date: 29.NOV.2019 21:42:21

## Highest Channel / 10MHz / QPSK



Date: 29.NOV.2019 21:44:17

## Highest Channel / 10MHz / 16QAM



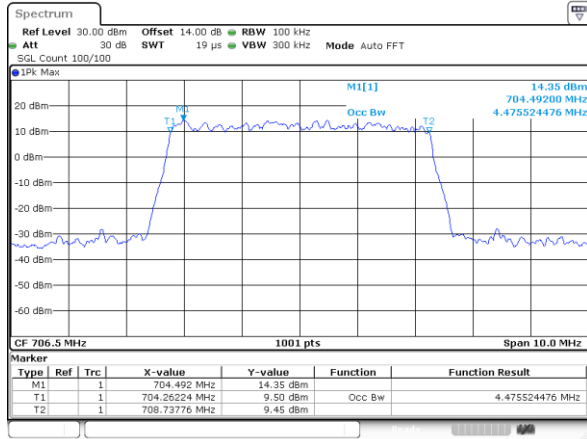
Date: 29.NOV.2019 21:44:29



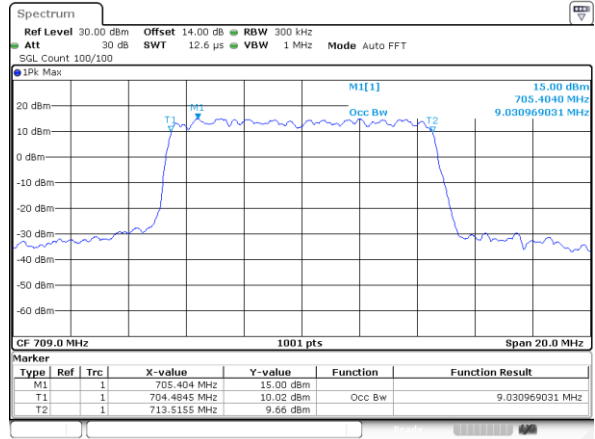


## LTE Band 17

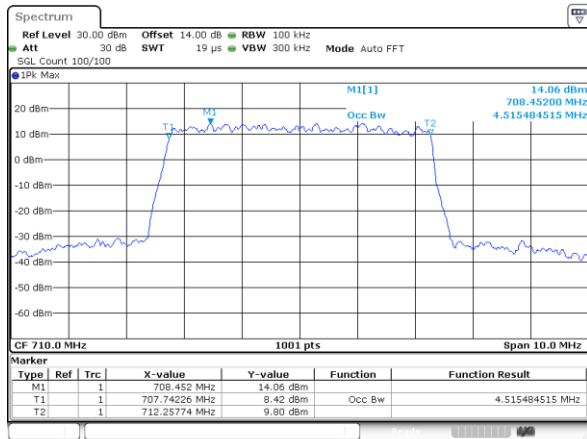
## Lowest Channel / 5MHz / 64QAM



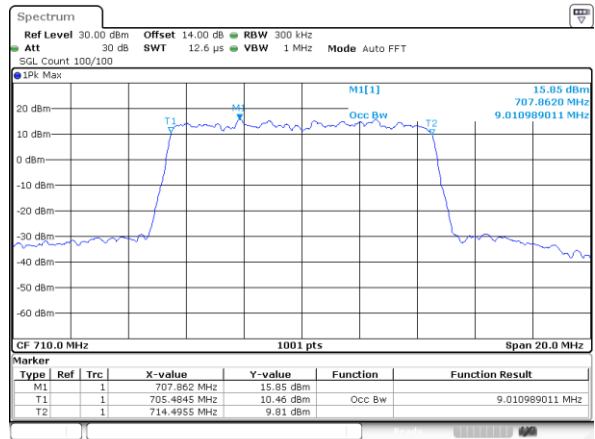
## Lowest Channel / 10MHz / 64QAM



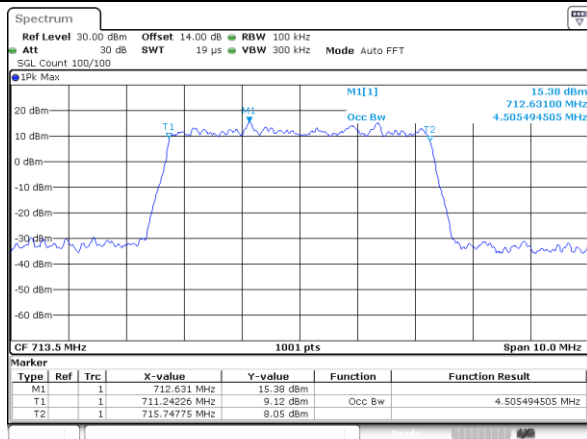
## Middle Channel / 5MHz / 64QAM



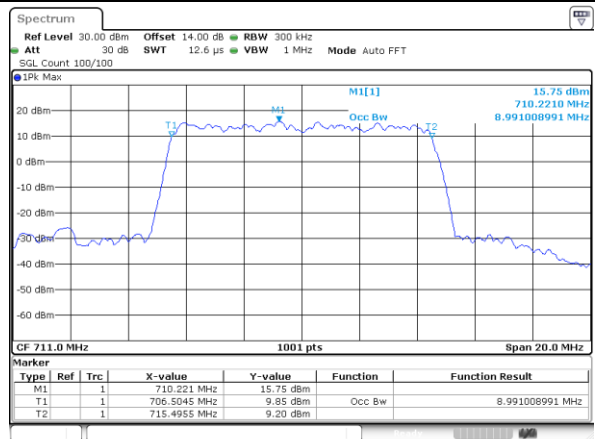
## Middle Channel / 10MHz / 64QAM



## Highest Channel / 5MHz / 64QAM



## Highest Channel / 10MHz / 64QAM

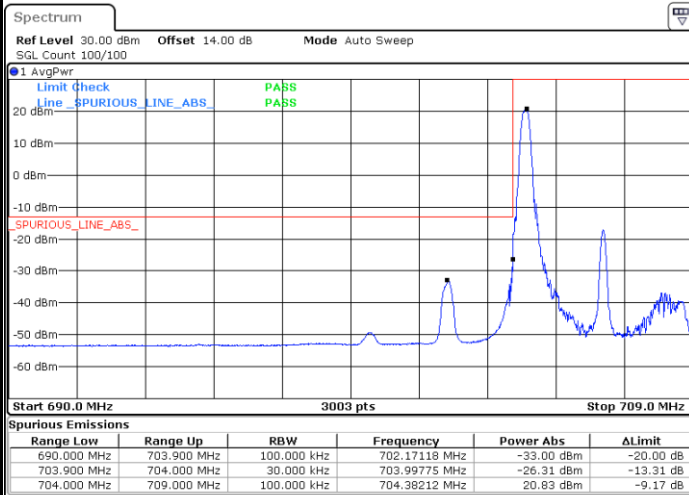




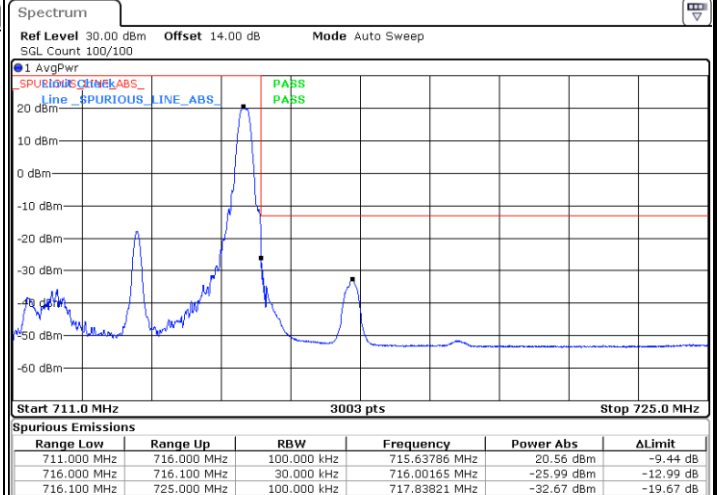
## Conducted Band Edge

### LTE Band 17 / 5MHz / QPSK

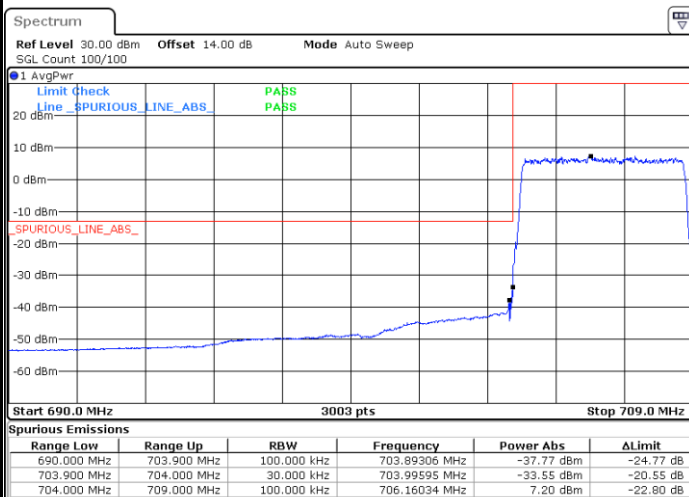
#### Lowest Band Edge / 1 RB



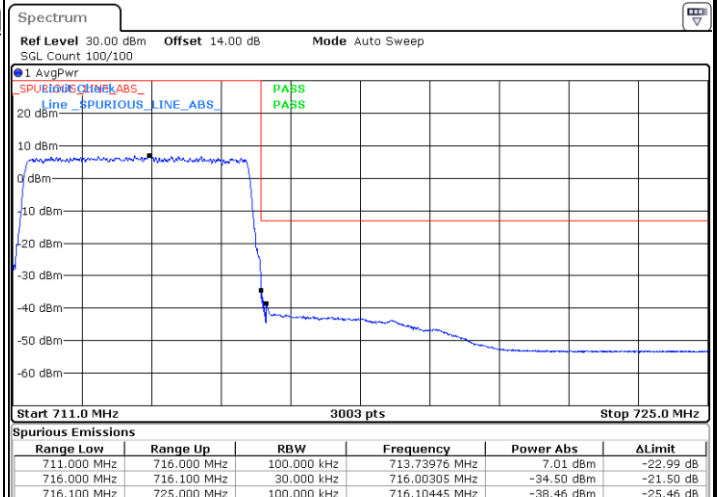
#### Highest Band Edge / 1 RB



#### Lowest Band Edge / Full RB



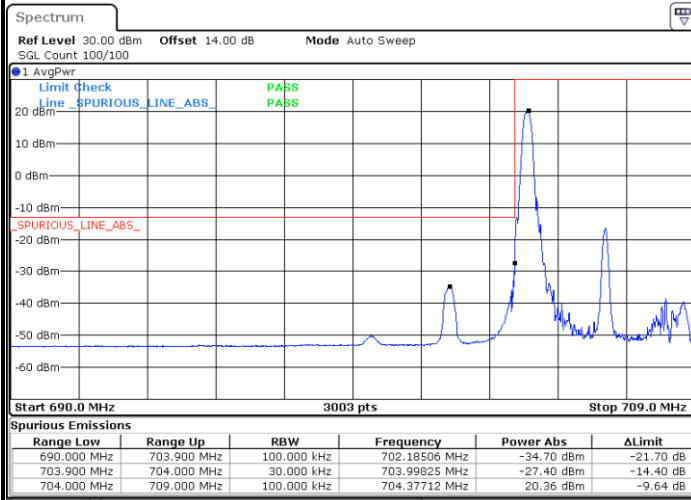
#### Highest Band Edge / Full RB



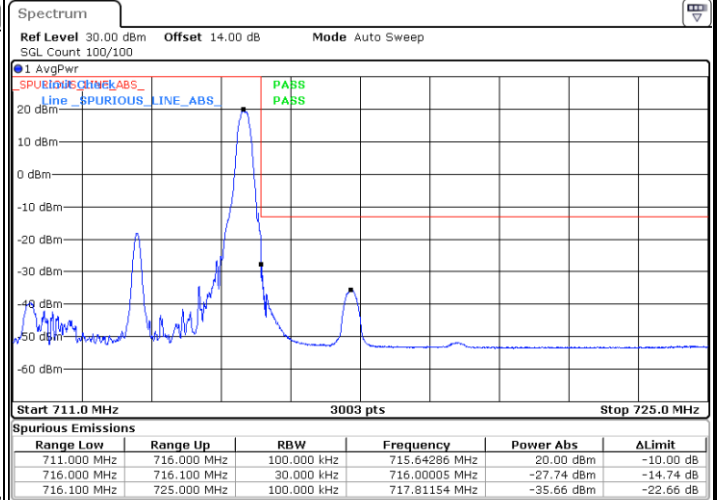


## LTE Band 17 / 5MHz / 16QAM

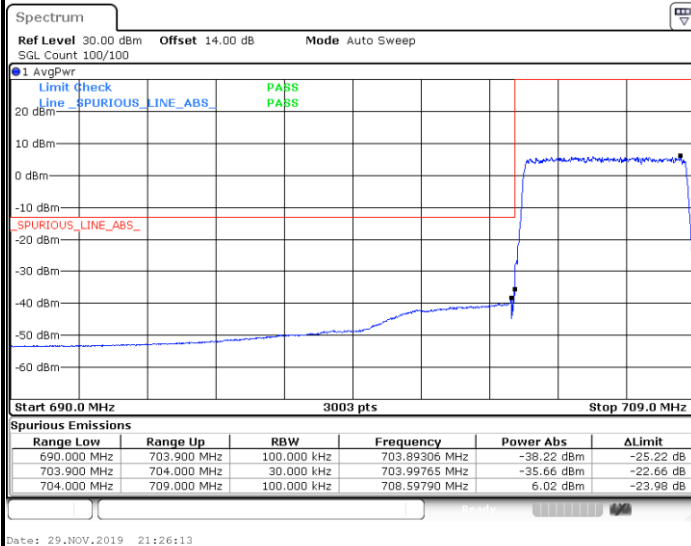
## Lowest Band Edge / 1 RB



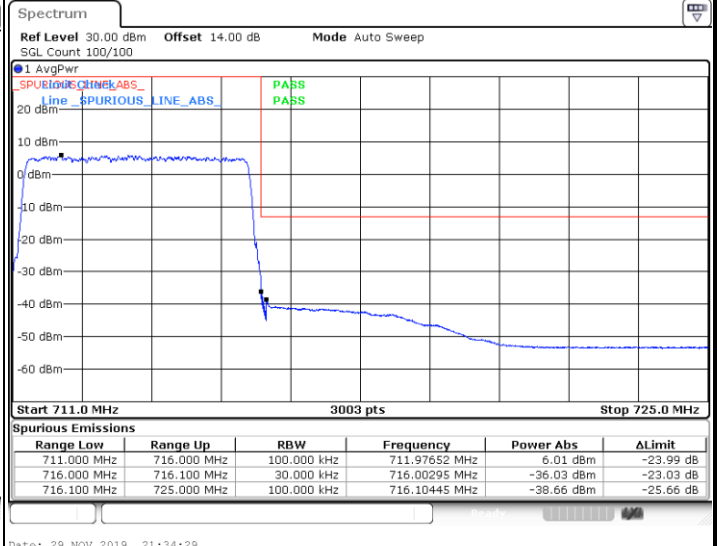
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



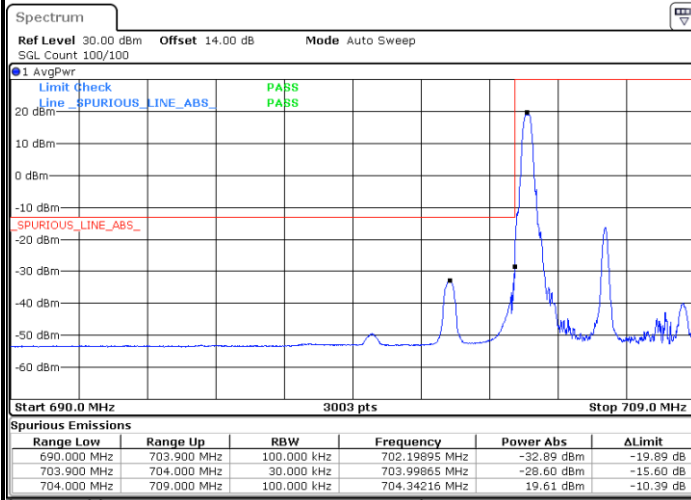
## Highest Band Edge / Full RB



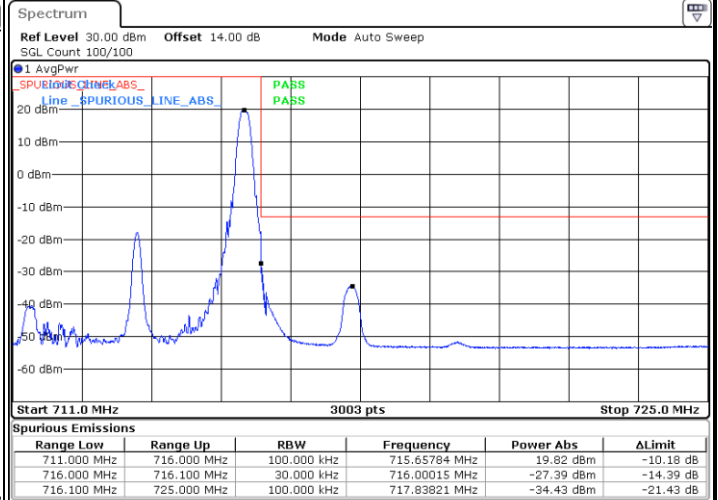


## LTE Band 17 / 5MHz / 64QAM

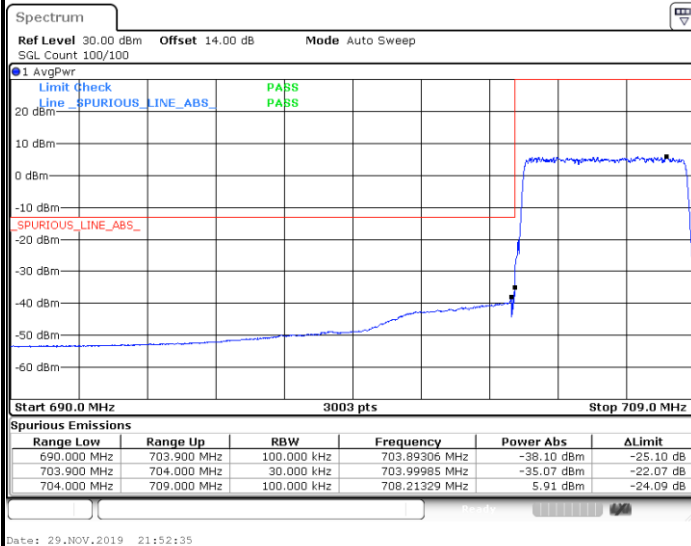
## Lowest Band Edge / 1 RB



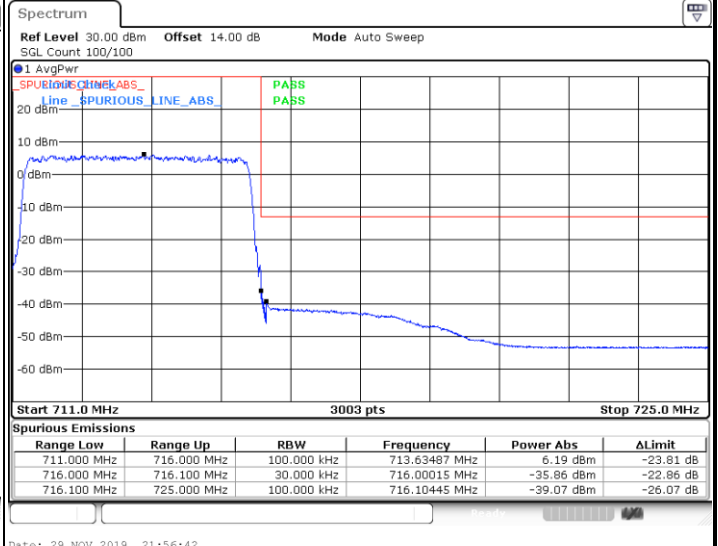
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



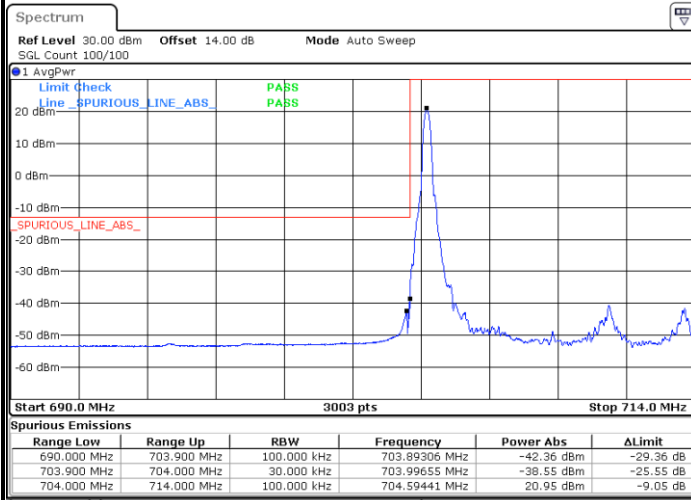
## Highest Band Edge / Full RB



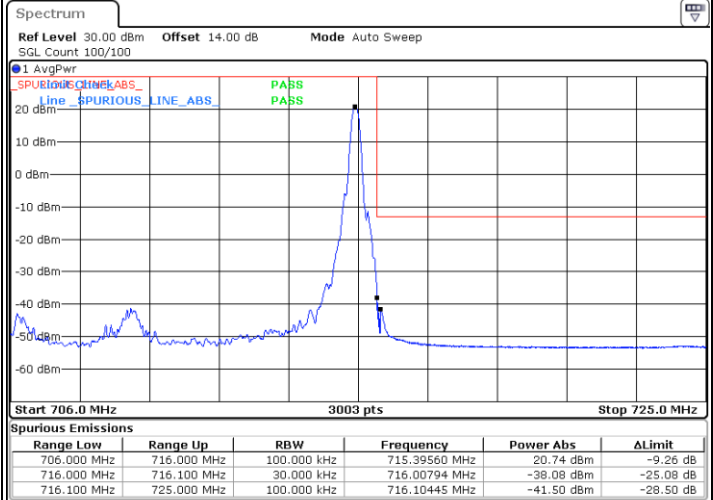


## LTE Band 17 / 10MHz / QPSK

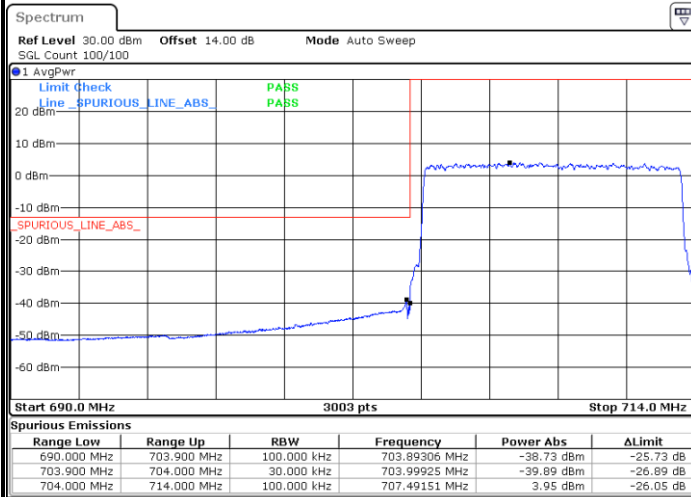
## Lowest Band Edge / 1 RB



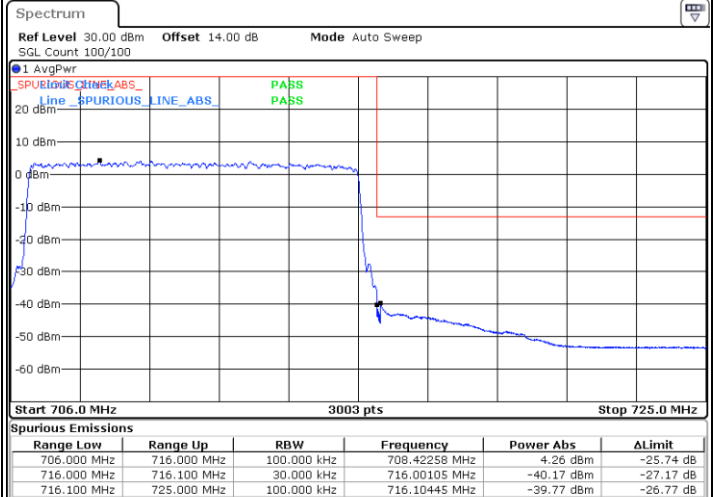
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



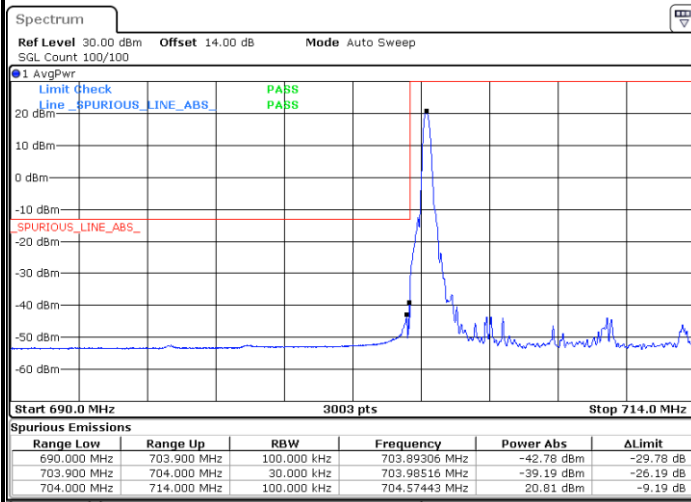
## Highest Band Edge / Full RB



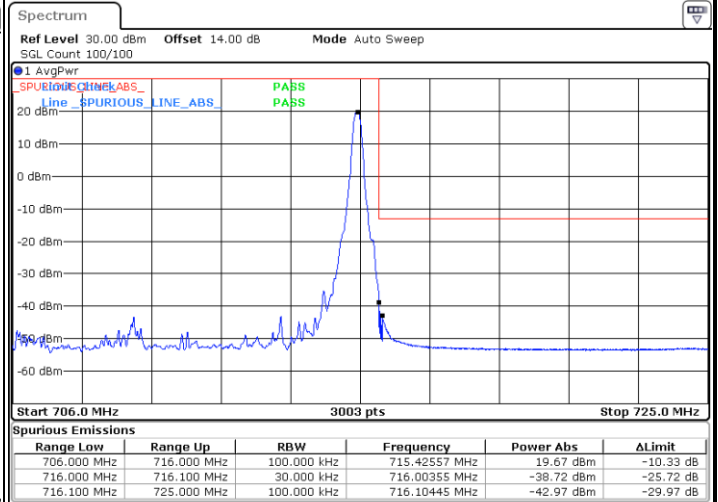


## LTE Band 17 / 10MHz / 16QAM

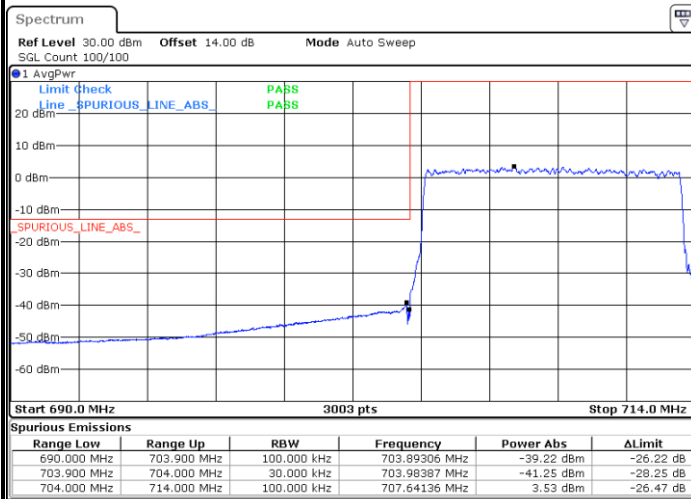
## Lowest Band Edge / 1 RB



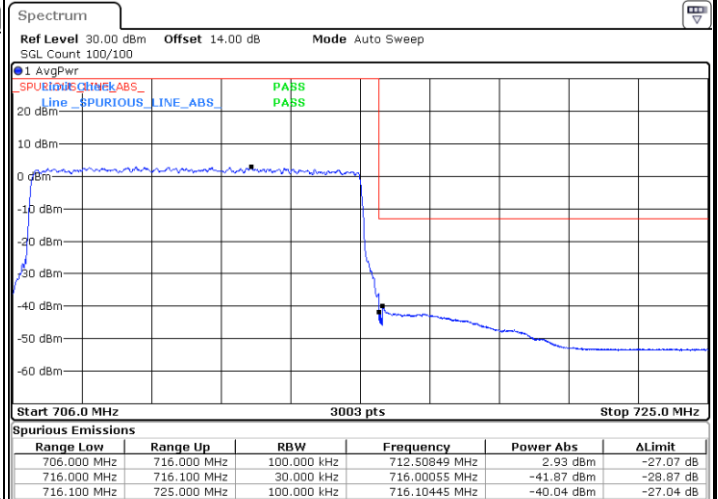
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



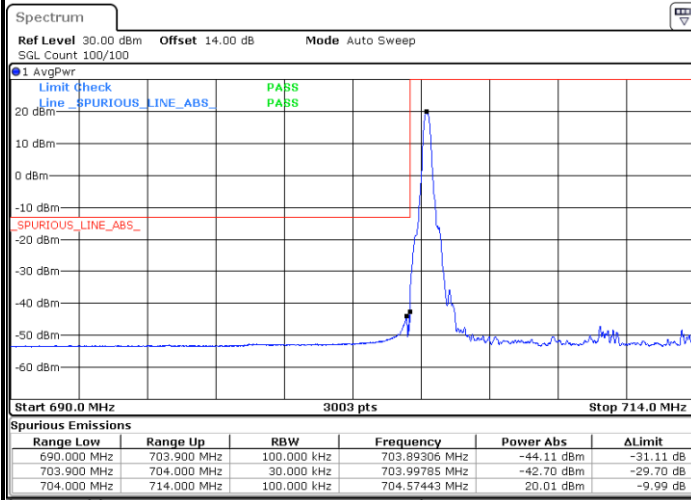
## Highest Band Edge / Full RB



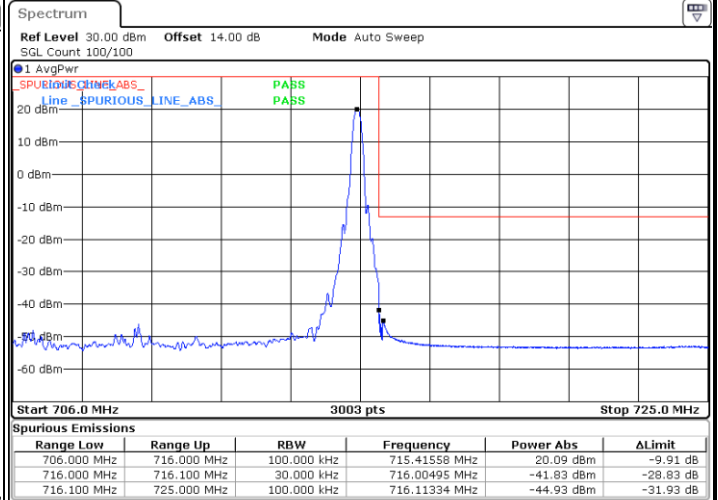


## LTE Band 17 / 10MHz / 64QAM

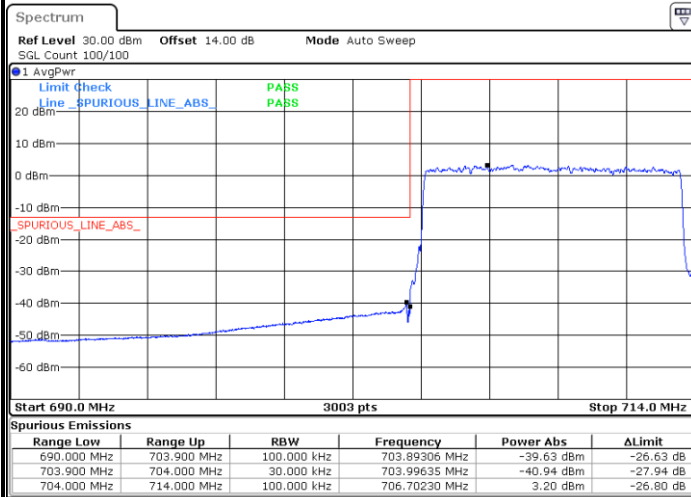
## Lowest Band Edge / 1 RB



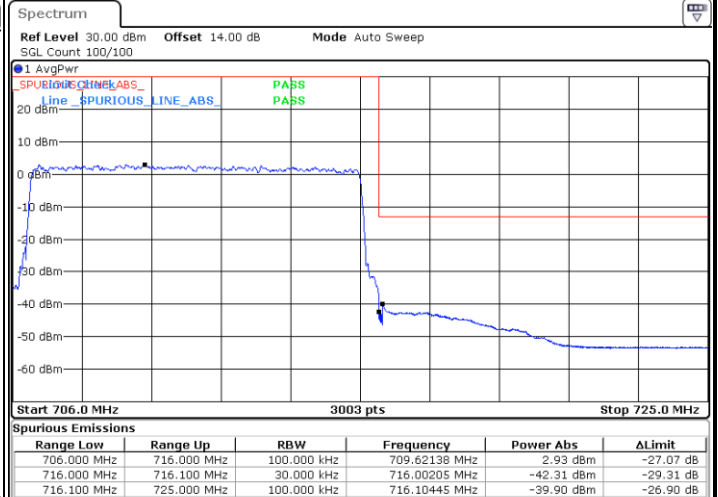
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB

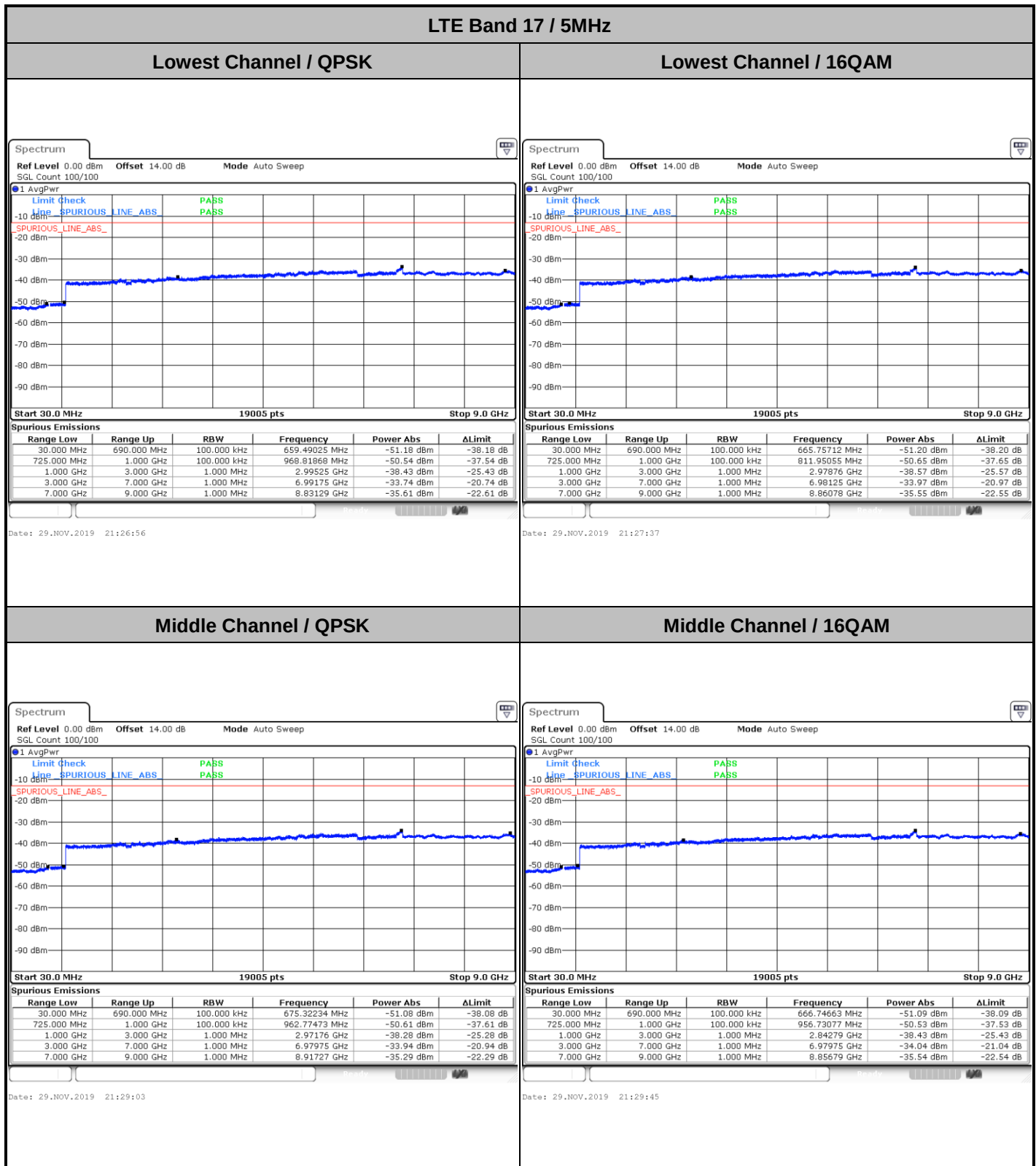


## Highest Band Edge / Full RB





## Conducted Spurious Emission

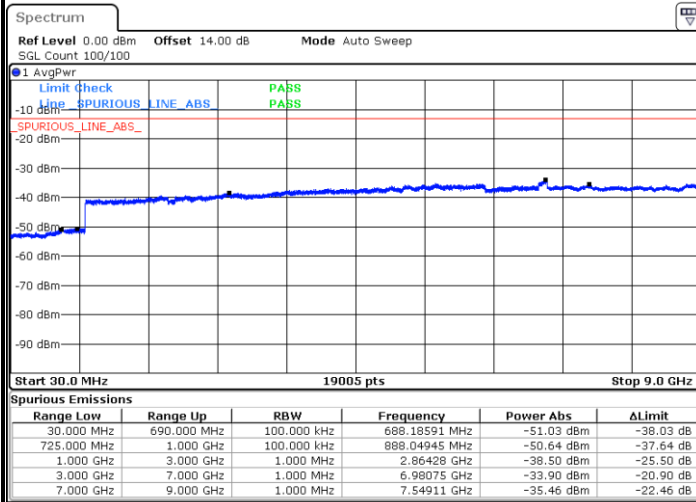






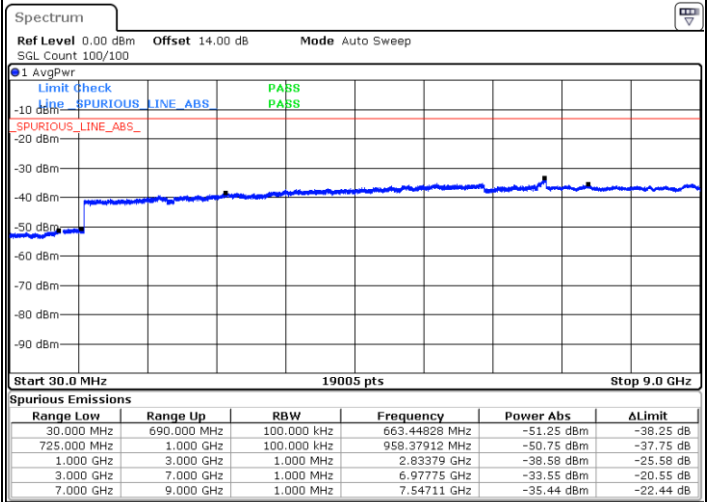
## LTE Band 17 / 5MHz

## Highest Channel / QPSK



Date: 29.NOV.2019 21:35:11

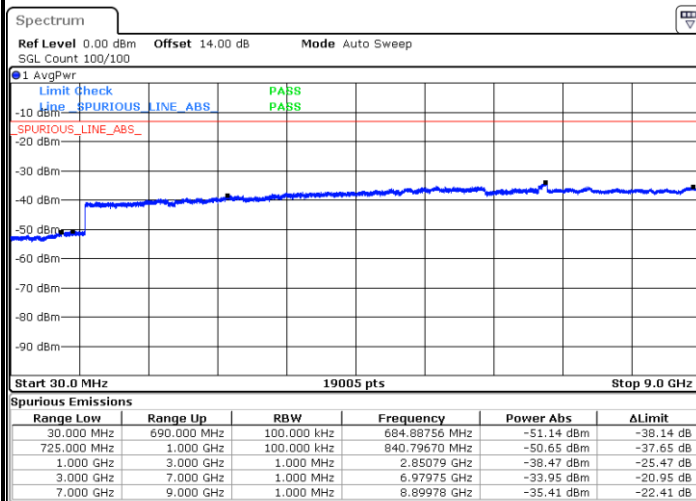
## Highest Channel / 16QAM



Date: 29.NOV.2019 21:35:52

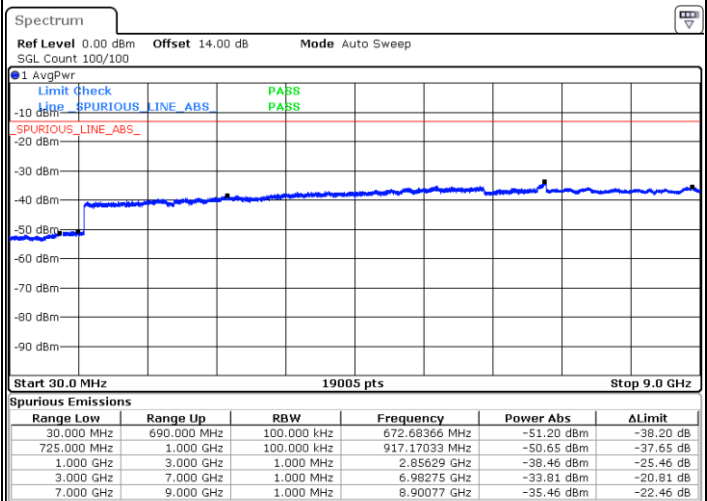
## LTE Band 17 / 10MHz

## Lowest Channel / QPSK



Date: 29.NOV.2019 21:41:18

## Lowest Channel / 16QAM

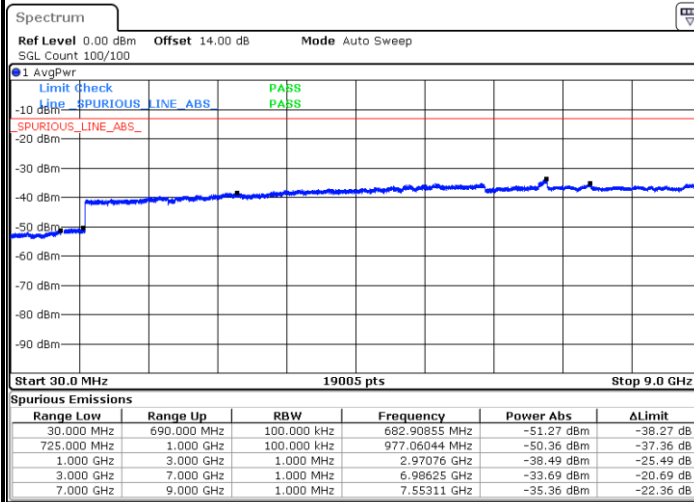


Date: 29.NOV.2019 21:41:59



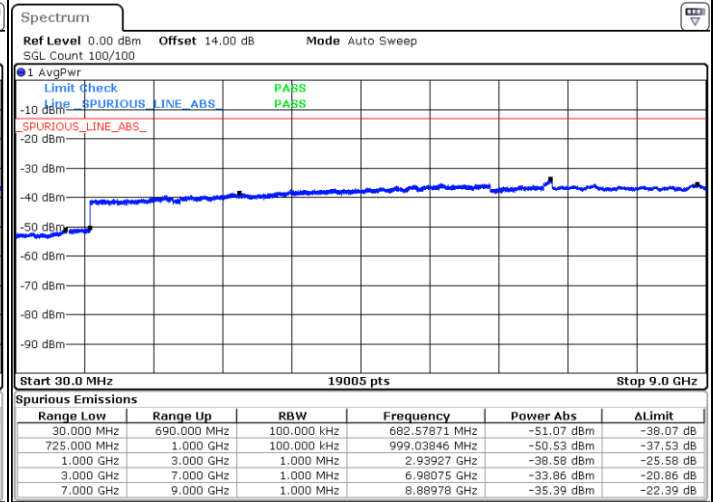
## LTE Band 17 / 10MHz

## Middle Channel / QPSK



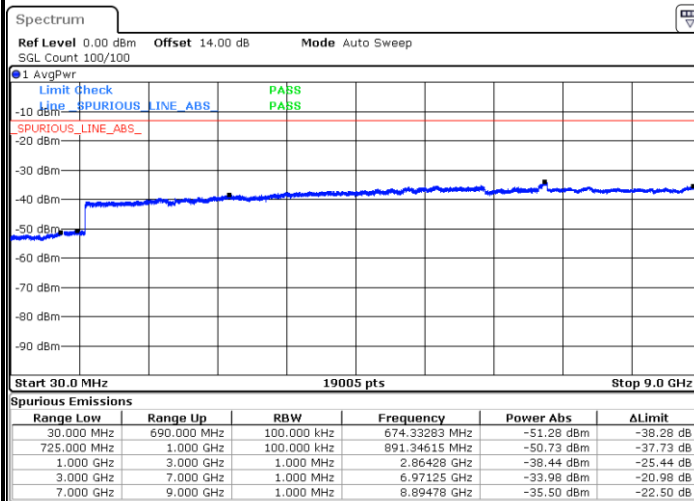
Date: 29.NOV.2019 21:43:25

## Middle Channel / 16QAM



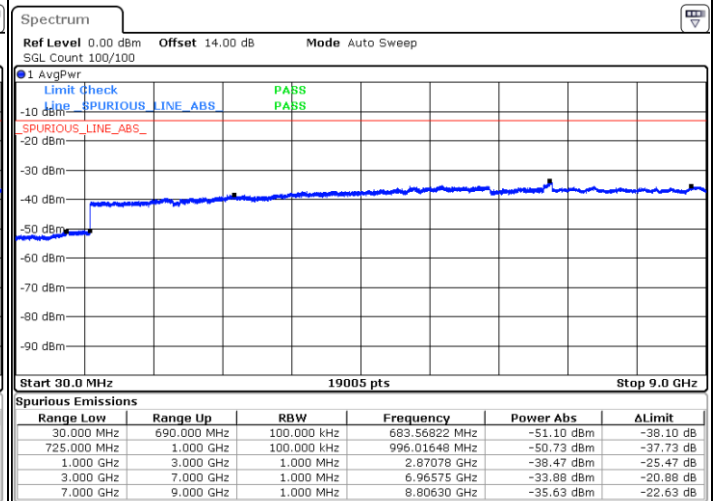
Date: 29.NOV.2019 21:44:06

## Highest Channel / QPSK



Date: 29.NOV.2019 21:49:32

## Highest Channel / 16QAM

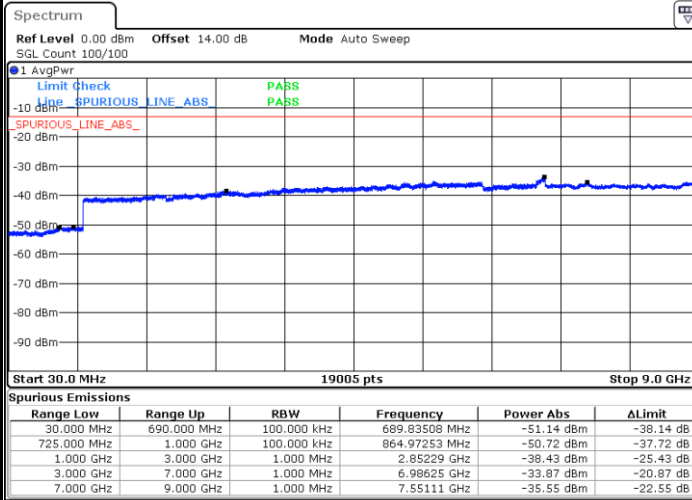


Date: 29.NOV.2019 21:50:13



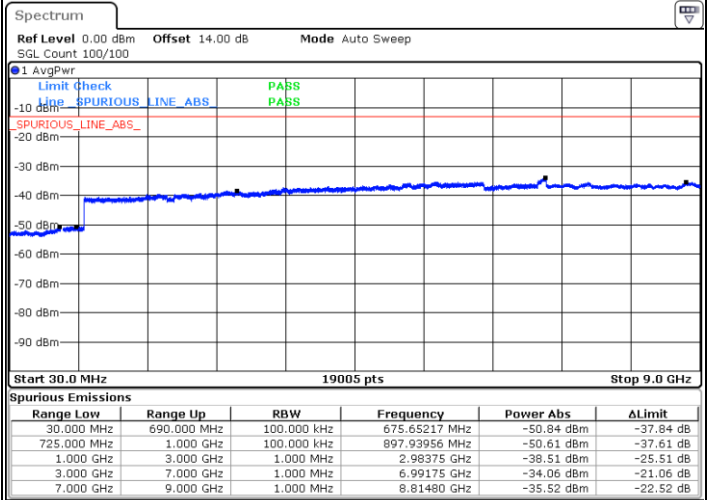
## LTE Band 17 / 5MHz

## Lowest Channel / 64QAM



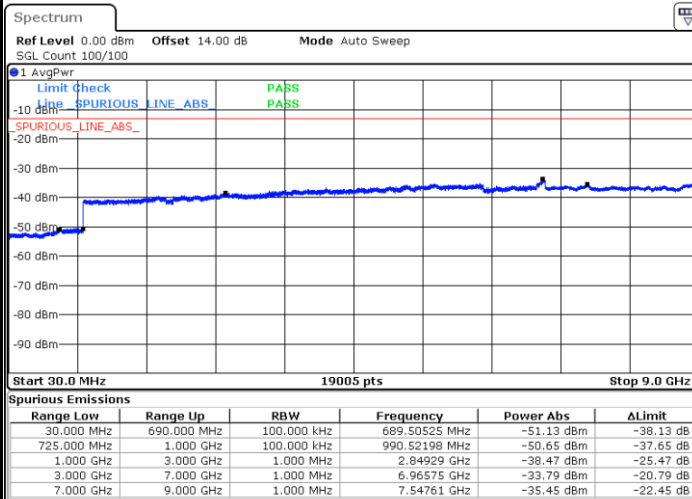
Date: 29.NOV.2019 21:53:17

## Middle Channel / 64QAM



Date: 29.NOV.2019 21:54:20

## Highest Channel / 64QAM

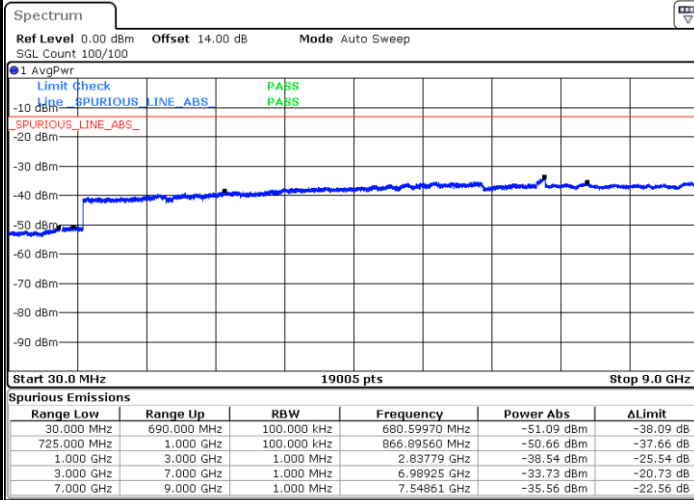


Date: 29.NOV.2019 21:57:24



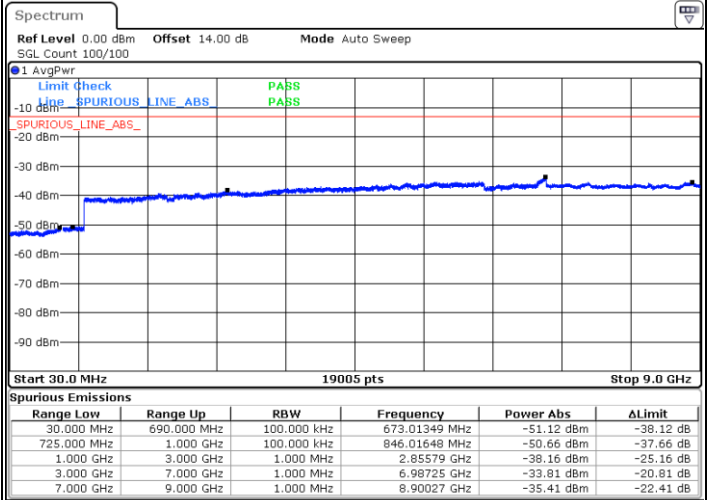
## LTE Band 17 / 10MHz

## Lowest Channel / 64QAM



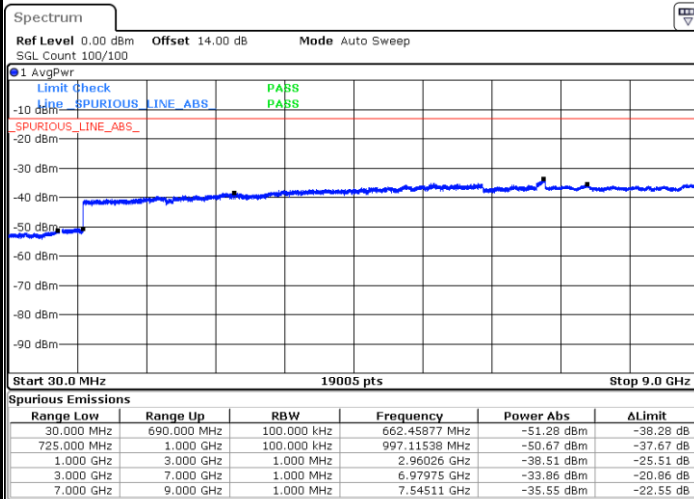
Date: 29.NOV.2019 22:00:27

## Middle Channel / 64QAM



Date: 29.NOV.2019 22:01:31

## Highest Channel / 64QAM



Date: 29.NOV.2019 22:04:35

**Frequency Stability**

| Test Conditions  |                   | LTE Band 17 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                            | Note 2. |
|                  |                   | Deviation (ppm)                     | Result  |
| 50               | Normal Voltage    | 0.0024                              | PASS    |
| 40               | Normal Voltage    | 0.0032                              |         |
| 30               | Normal Voltage    | 0.0001                              |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                              |         |
| 10               | Normal Voltage    | 0.0017                              |         |
| 0                | Normal Voltage    | 0.0039                              |         |
| -10              | Normal Voltage    | 0.0001                              |         |
| -20              | Normal Voltage    | 0.0001                              |         |
| -30              | Normal Voltage    | 0.0011                              |         |
| 20               | Maximum Voltage   | 0.0032                              |         |
| 20               | Normal Voltage    | 0.0000                              |         |
| 20               | Battery End Point | 0.0028                              |         |

**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 38

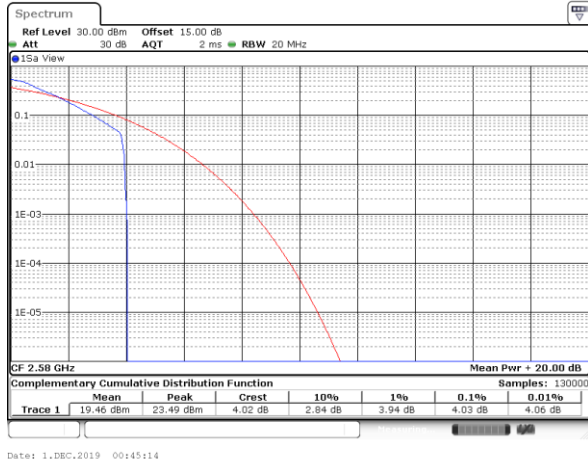
## Peak-to-Average Ratio

| Mode       | LTE Band 38 / 20MHz |         |       |         |             |
|------------|---------------------|---------|-------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 4.03                | 5.59    | 5.36  | 6.14    | PASS        |
| Middle CH  | 5.42                | 6.29    | 6.00  | 6.09    |             |
| Highest CH | 4.14                | 6.52    | 5.48  | 6.58    |             |
| Mode       | LTE Band 38 / 20MHz |         |       |         |             |
| Mod.       | 64QAM               |         | -     |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | -     | -       | Result      |
| Lowest CH  | 6.09                | 7.13    | -     | -       | PASS        |
| Middle CH  | 5.54                | 6.58    | -     | -       |             |
| Highest CH | 6.02                | 7.30    | -     | -       |             |

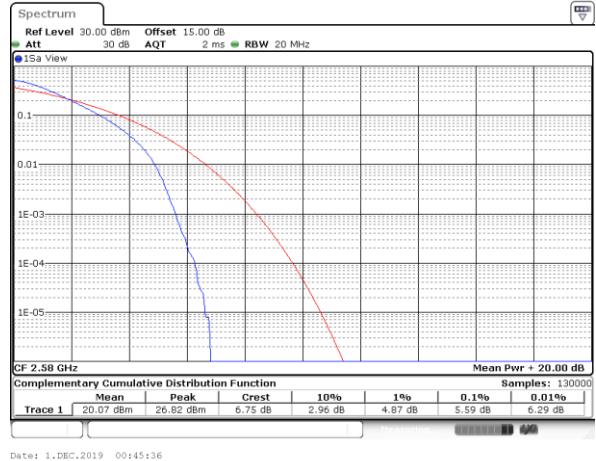


## LTE Band 38 / 20MHz / QPSK

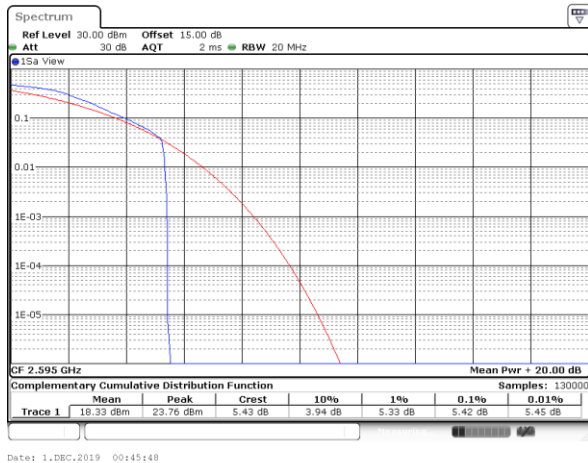
## Lowest Channel / 1RB



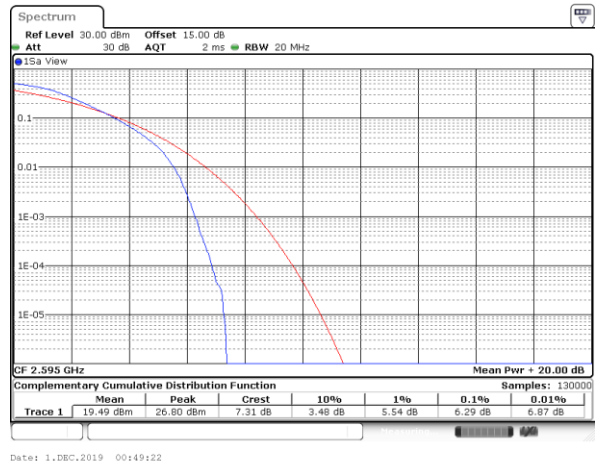
## Lowest Channel / Full RB



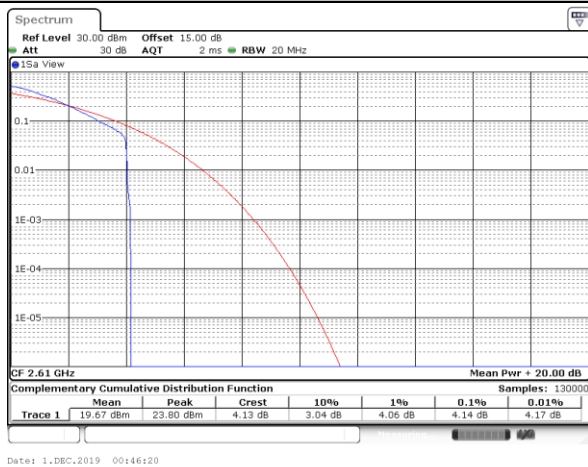
## Middle Channel / 1RB



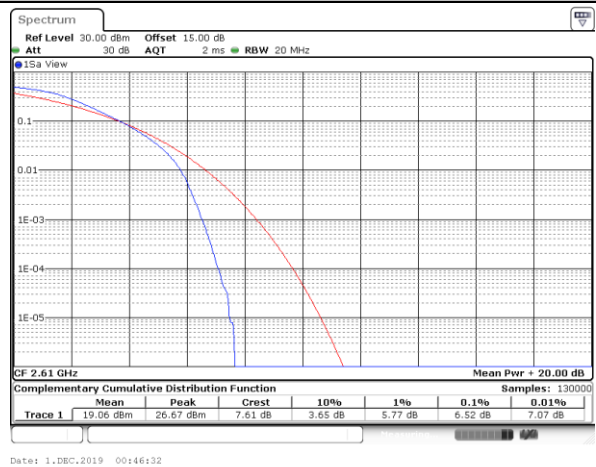
## Middle Channel / Full RB



## Highest Channel / 1RB



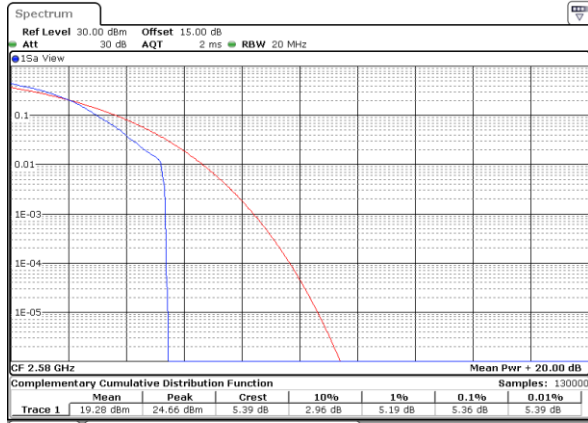
## Highest Channel / Full RB



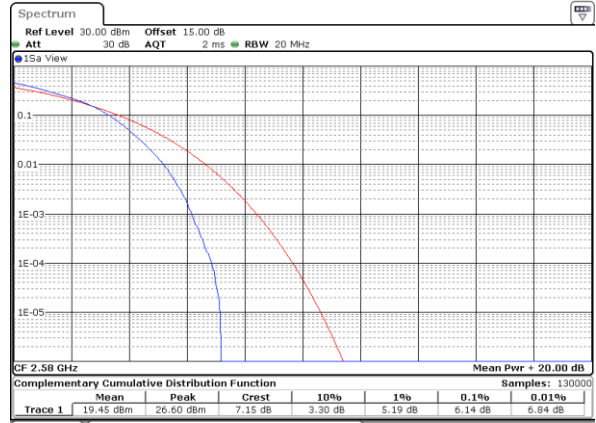


## LTE Band 38 / 20MHz / 16QAM

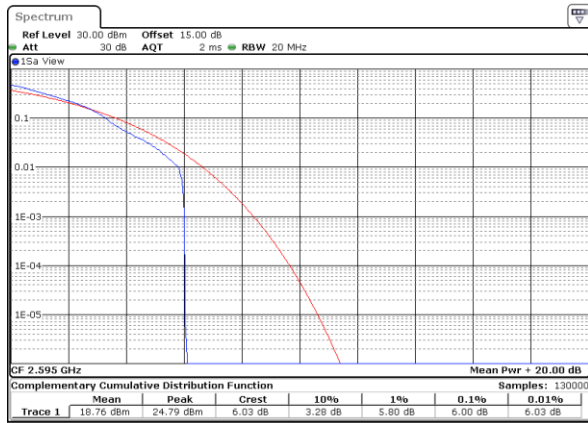
## Lowest Channel / 1RB



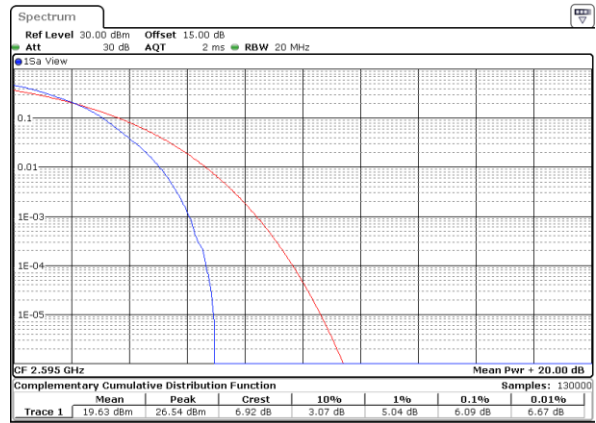
## Lowest Channel / Full RB



## Middle Channel / 1RB



## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB

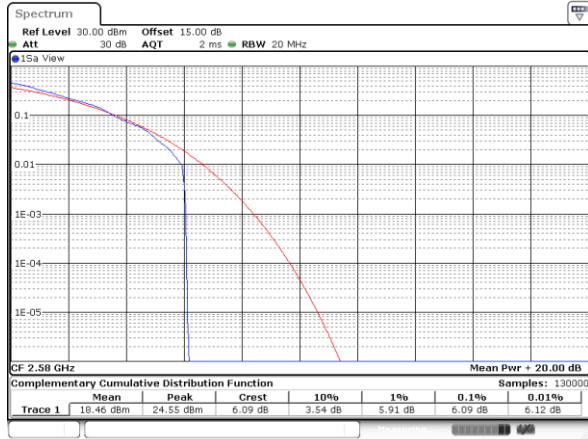




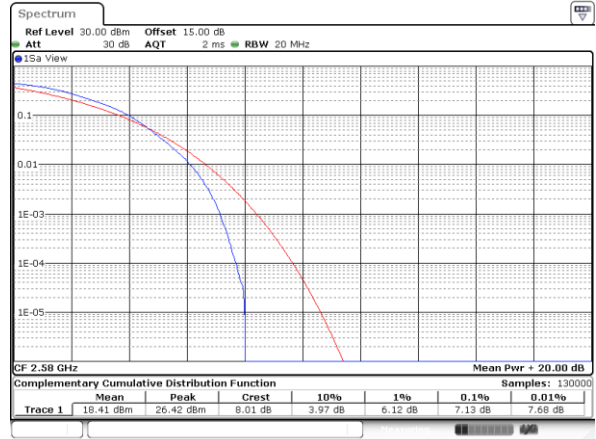


## LTE Band 38 / 20MHz / 64QAM

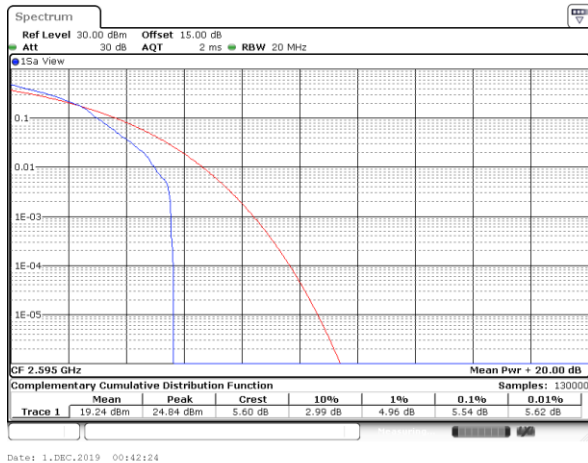
## Lowest Channel / 1RB



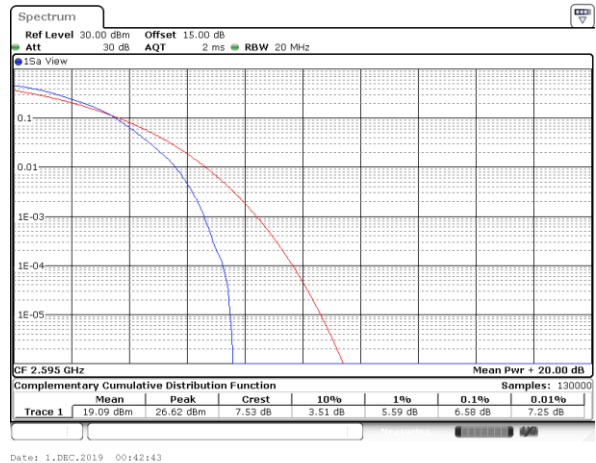
## Lowest Channel / Full RB



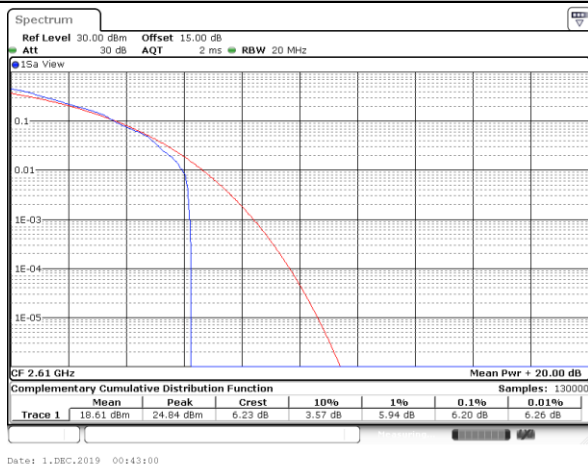
## Middle Channel / 1RB



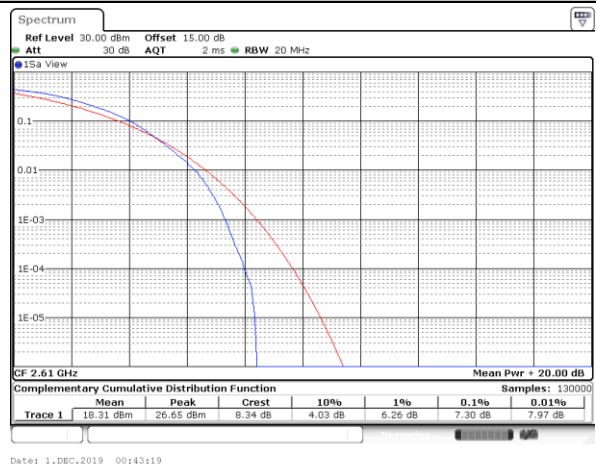
## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB



**26dB Bandwidth**

| Mode       | LTE Band 38 : 26dB BW(MHz) |       |       |       |        |        |        |        |
|------------|----------------------------|-------|-------|-------|--------|--------|--------|--------|
| BW         | 5MHz                       |       | 10MHz |       | 15MHz  |        | 20MHz  |        |
| Mod.       | QPSK                       | 16QAM | QPSK  | 16QAM | QPSK   | 16QAM  | QPSK   | 16QAM  |
| Lowest CH  | 4.795                      | 4.875 | 9.77  | 9.69  | 14.356 | 14.116 | 18.821 | 18.981 |
| Middle CH  | 4.945                      | 4.865 | 9.71  | 9.61  | 14.296 | 14.266 | 18.901 | 18.621 |
| Highest CH | 4.945                      | 4.845 | 9.69  | 9.63  | 14.236 | 14.236 | 18.661 | 18.701 |
| Mode       | LTE Band 38 : 26dB BW(MHz) |       |       |       |        |        |        |        |
| BW         | 5MHz                       |       | 10MHz |       | 15MHz  |        | 20MHz  |        |
| Mod.       | 64QAM                      |       | 64QAM |       | 64QAM  |        | 64QAM  |        |
| Lowest CH  | 4.785                      |       | 9.85  |       | 14.266 |        | 18.701 |        |
| Middle CH  | 4.705                      |       | 9.77  |       | 14.056 |        | 18.781 |        |
| Highest CH | 4.805                      |       | 9.65  |       | 14.356 |        | 18.621 |        |