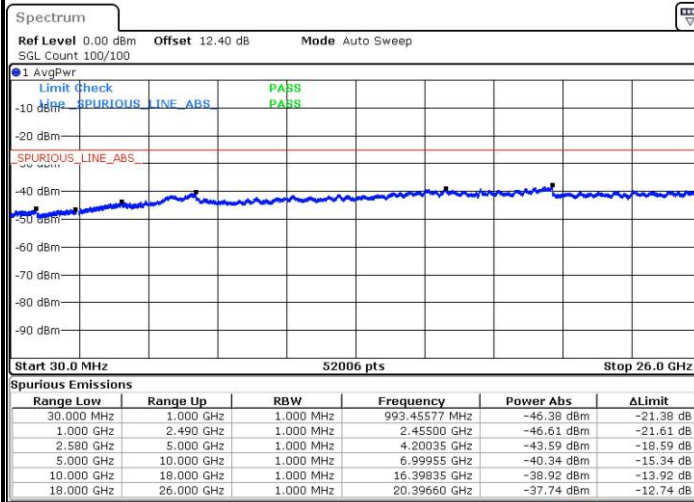




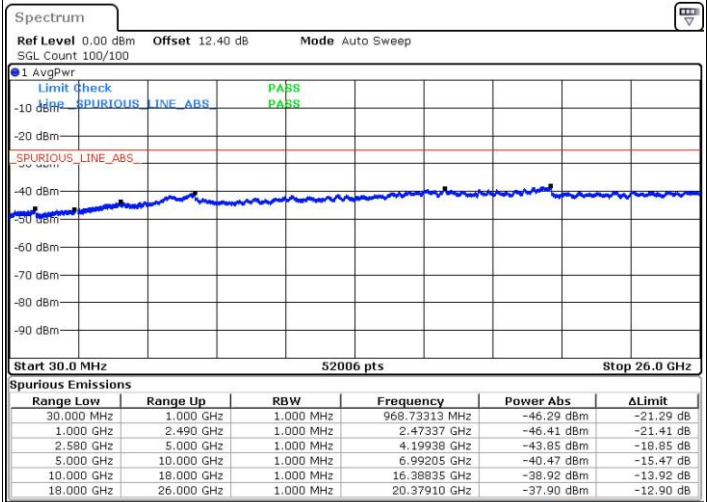
## LTE Band 7 / 20MHz

## Middle Channel / QPSK



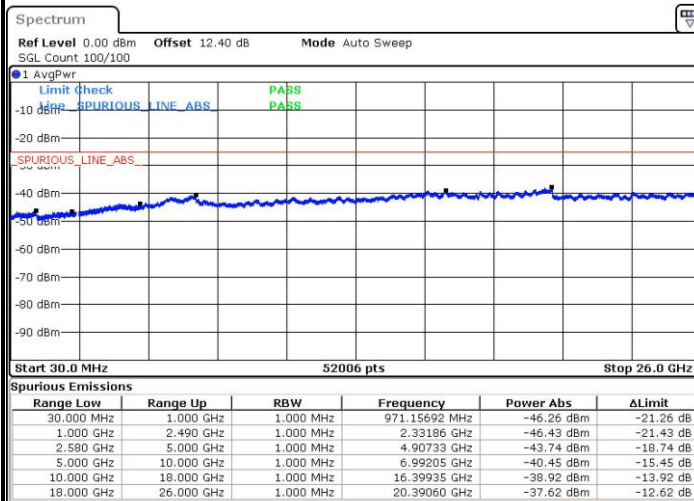
Date: 25.SEP.2018 04:06:24

## Middle Channel / 16QAM



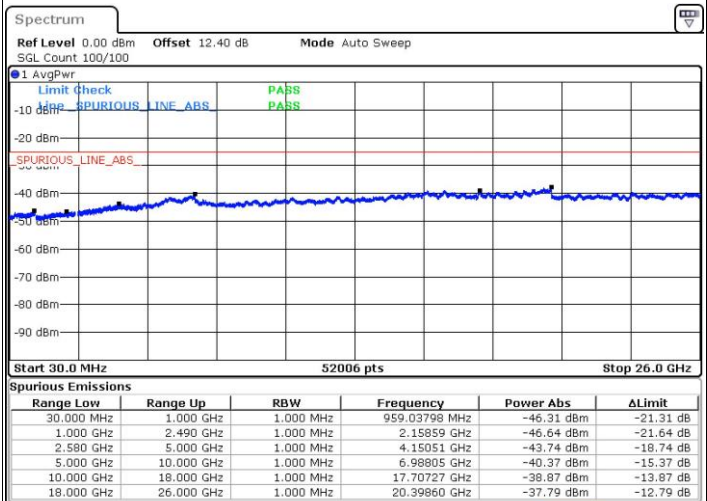
Date: 25.SEP.2018 04:07:23

## Highest Channel / QPSK



Date: 25.SEP.2018 04:13:07

## Highest Channel / 16QAM



Date: 25.SEP.2018 04:14:06

## 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    | 0.0041                             | PASS    |
| 40               | Normal Voltage    | 0.0015                             |         |
| 30               | Normal Voltage    | 0.0014                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0038                             |         |
| 0                | Normal Voltage    | 0.0011                             |         |
| -10              | Normal Voltage    | 0.0032                             |         |
| -20              | Normal Voltage    | 0.0029                             |         |
| -30              | Normal Voltage    | 0.0026                             |         |
| 20               | Maximum Voltage   | 0.0009                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0030                             |         |

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 12

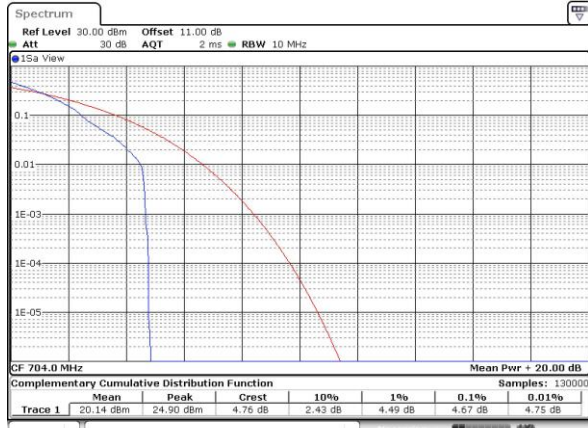
### Peak-to-Average Ratio

| Mode       | LTE Band 12 / 10MHz |         |       |         |             |
|------------|---------------------|---------|-------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 4.67                | 4.75    | 5.65  | 5.77    | PASS        |
| Middle CH  | 4.52                | 4.93    | 5.51  | 5.8     |             |
| Highest CH | 4.38                | 4.75    | 5.19  | 5.77    |             |

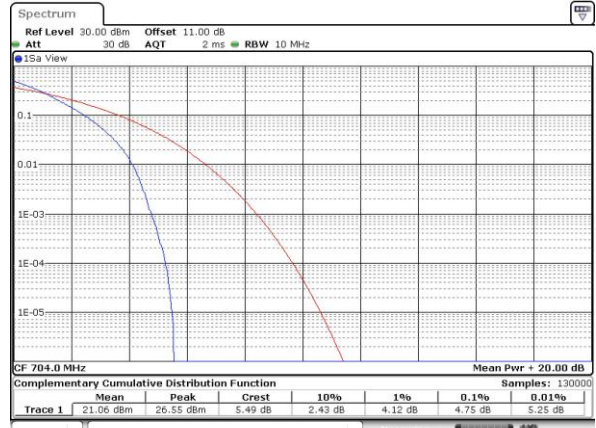


## LTE Band 12 / 10MHz / QPSK

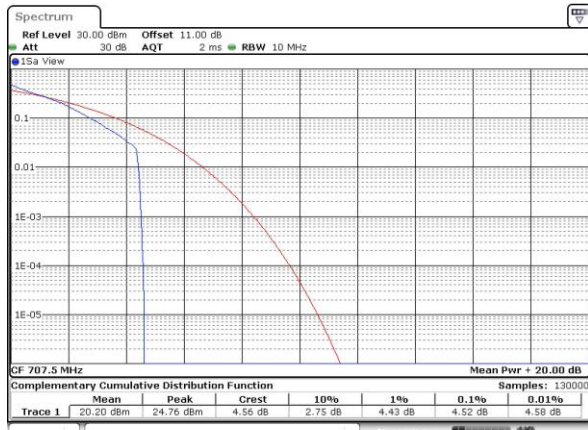
## Lowest Channel / 1RB



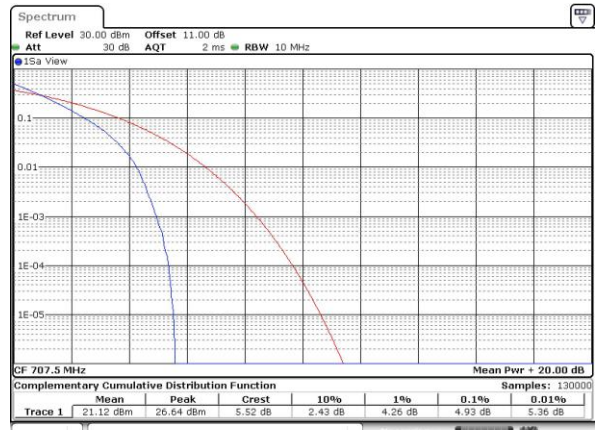
## Lowest Channel / Full RB



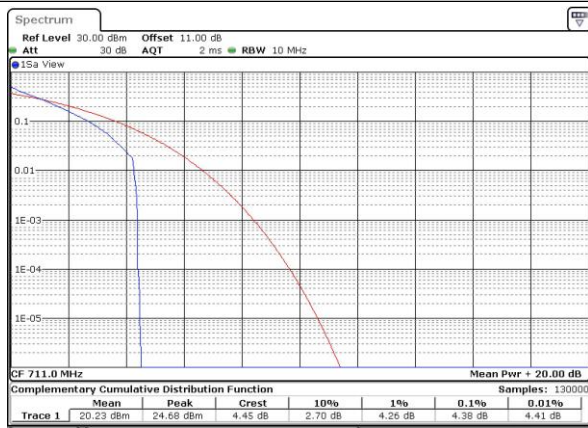
## Middle Channel / 1RB



## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB



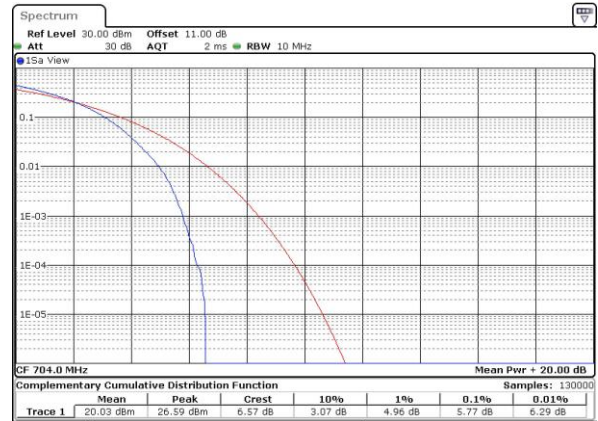


## LTE Band 12 / 10MHz / 16QAM

## Lowest Channel / 1RB



## Lowest Channel / Full RB



## Middle Channel / 1RB



## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB





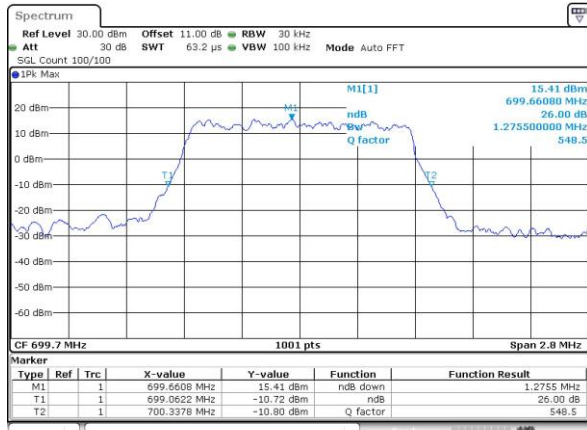
26dB Bandwidth

| 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  | 1.28                       | 1.29  | 3.01 | 3.05  | 4.85 | 4.94  | 9.89  | 9.77  | -     | -     | -     | -     |
| Middle CH  | 1.27                       | 1.27  | 3.02 | 3.05  | 4.89 | 4.96  | 9.93  | 9.79  | -     | -     | -     | -     |
| Highest CH | 1.26                       | 1.29  | 2.99 | 3.00  | 5.03 | 4.84  | 9.79  | 9.95  | -     | -     | -     | -     |



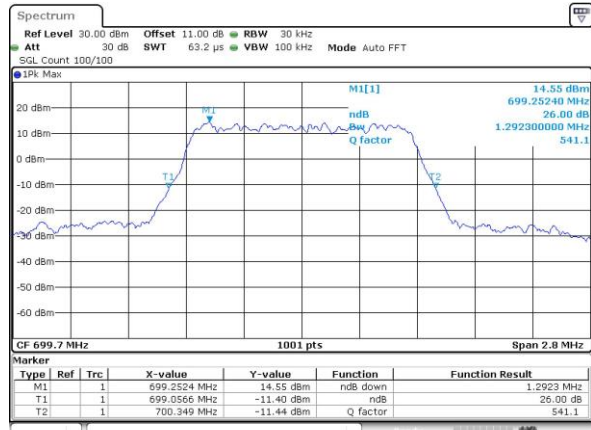
## LTE Band 12

## Lowest Channel / 1.4MHz / QPSK



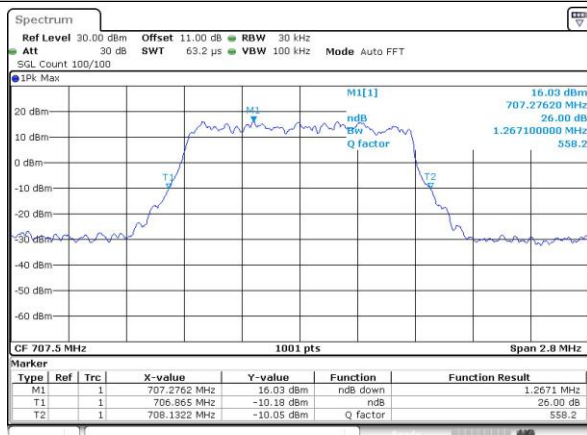
Date: 21.SEP.2018 03:32:32

## Lowest Channel / 1.4MHz / 16QAM



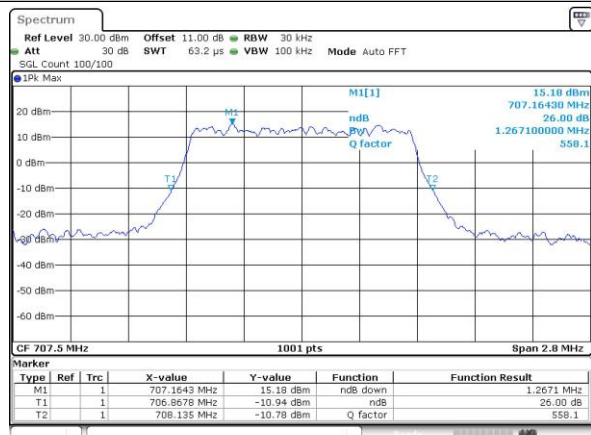
Date: 21.SEP.2018 03:32:19

## Middle Channel / 1.4MHz / QPSK



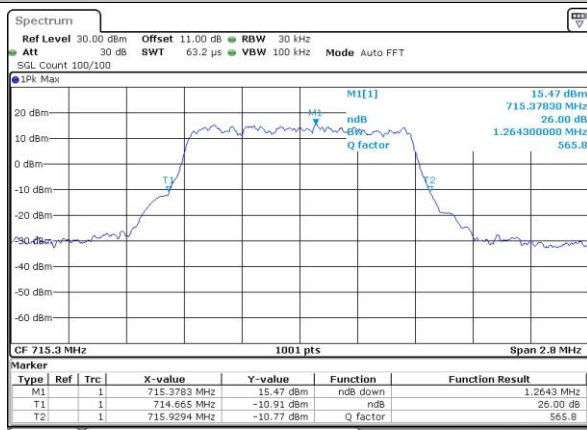
Date: 21.SEP.2018 03:39:41

## Middle Channel / 1.4MHz / 16QAM



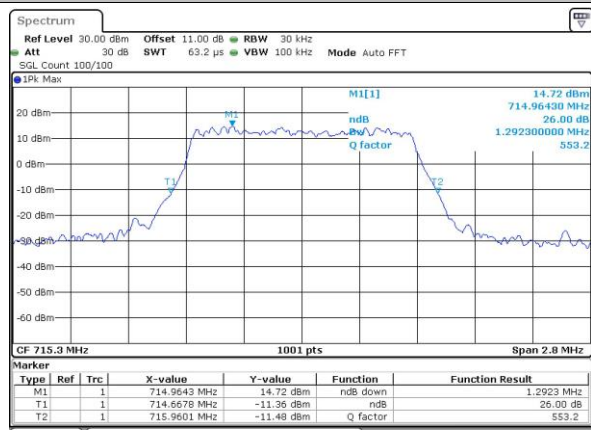
Date: 21.SEP.2018 03:39:54

## Highest Channel / 1.4MHz / QPSK



Date: 21.SEP.2018 03:42:34

## Highest Channel / 1.4MHz / 16QAM

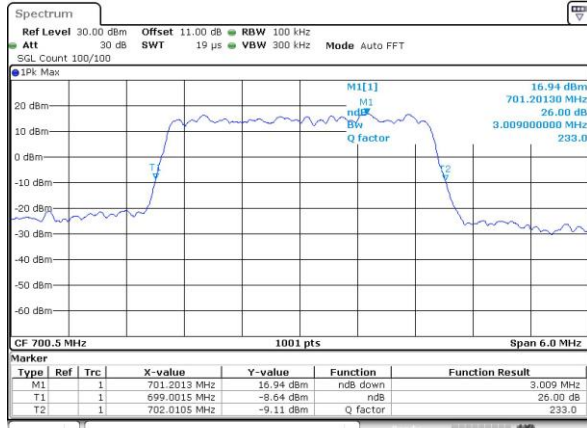


Date: 21.SEP.2018 03:42:22

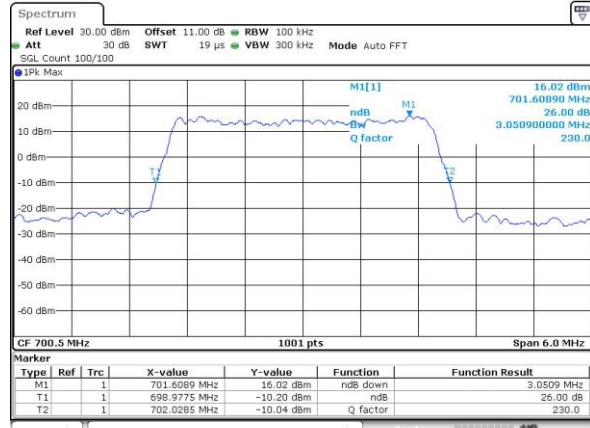


## LTE Band 12

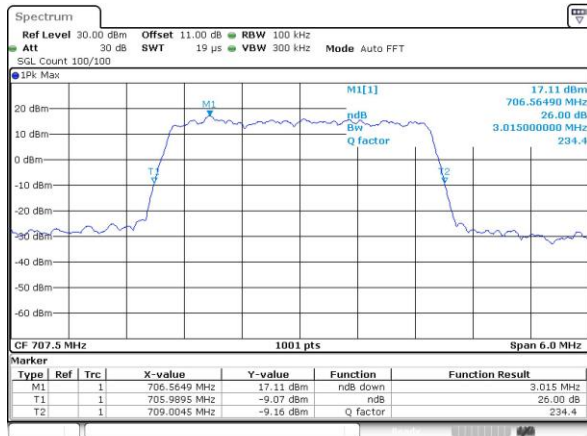
## Lowest Channel / 3MHz / QPSK



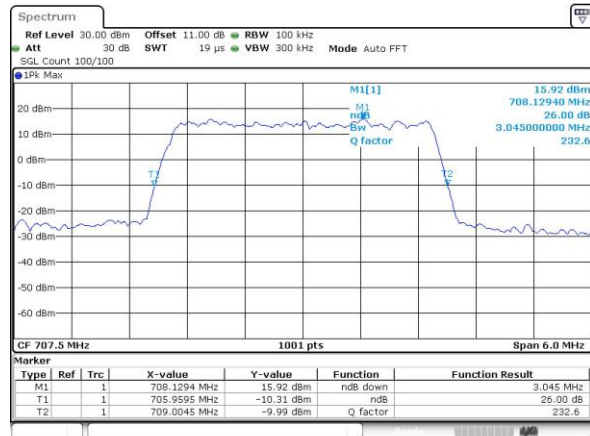
## Lowest Channel / 3MHz / 16QAM



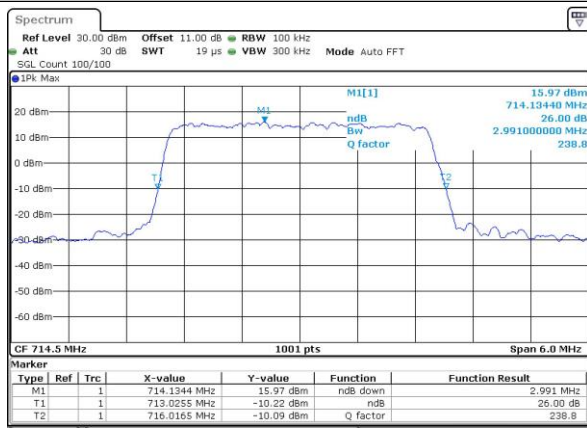
## Middle Channel / 3MHz / QPSK



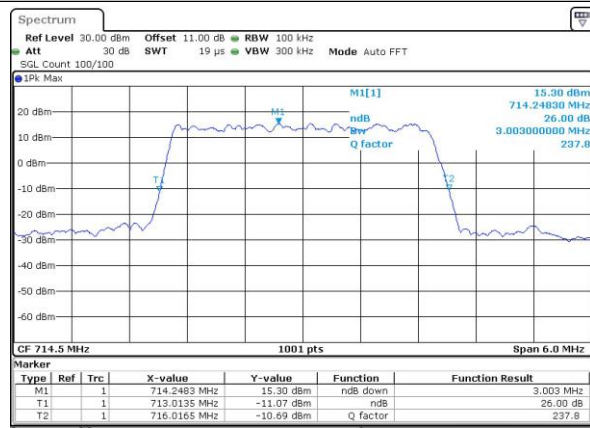
## Middle Channel / 3MHz / 16QAM



## Highest Channel / 3MHz / QPSK



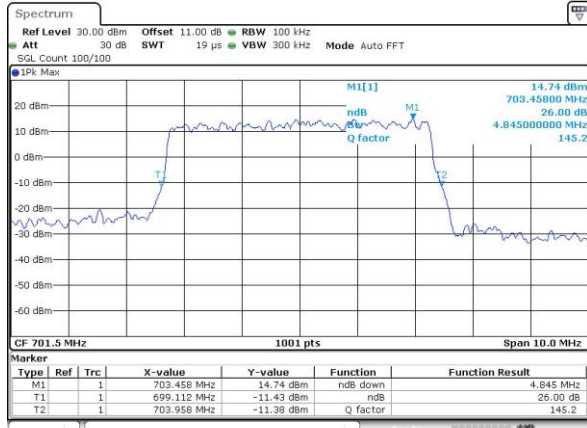
## Highest Channel / 3MHz / 16QAM





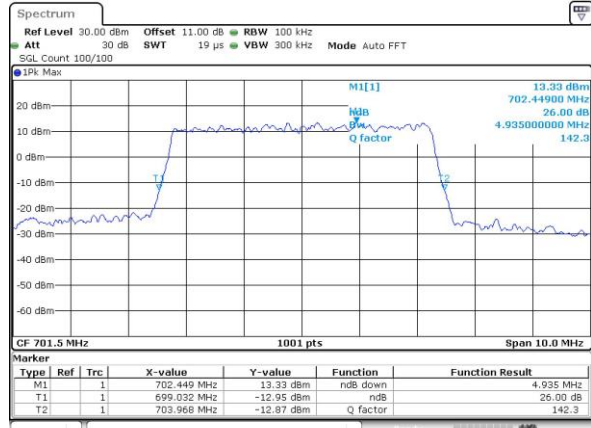
## LTE Band 12

## Lowest Channel / 5MHz / QPSK



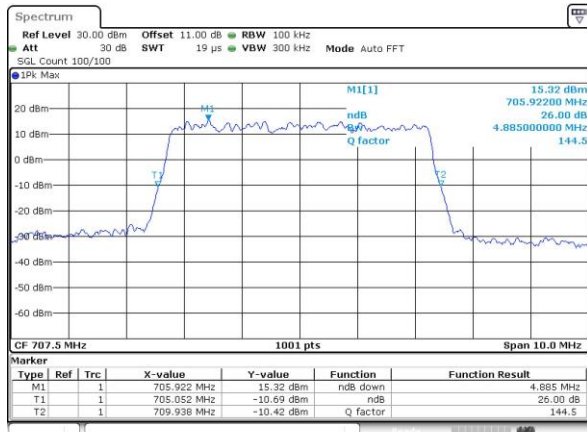
Date: 21.SEP.2018 02:22:59

## Lowest Channel / 5MHz / 16QAM



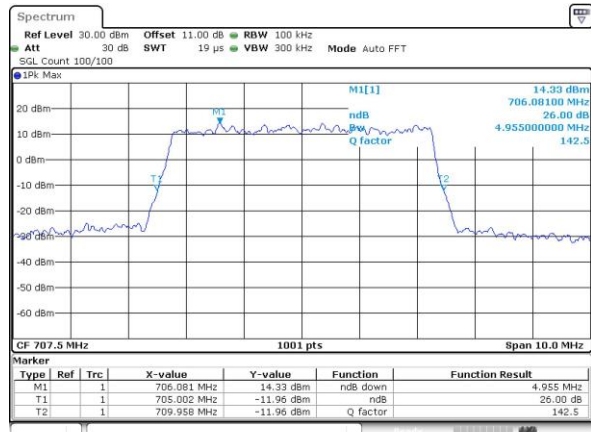
Date: 21.SEP.2018 02:22:46

## Middle Channel / 5MHz / QPSK



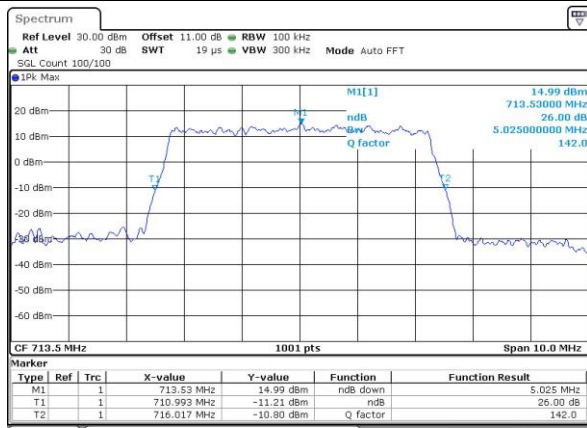
Date: 21.SEP.2018 02:30:07

## Middle Channel / 5MHz / 16QAM



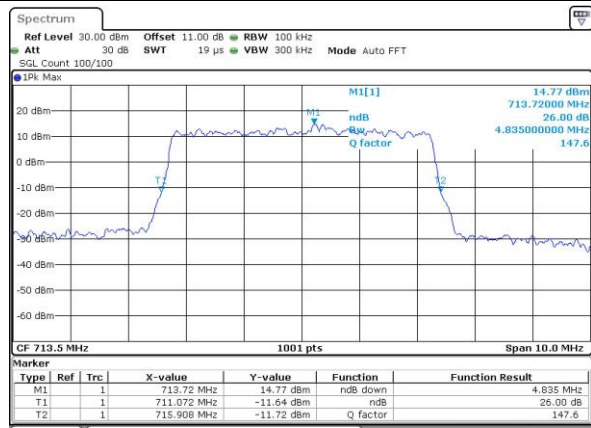
Date: 21.SEP.2018 02:30:20

## Highest Channel / 5MHz / QPSK



Date: 21.SEP.2018 02:33:00

## Highest Channel / 5MHz / 16QAM

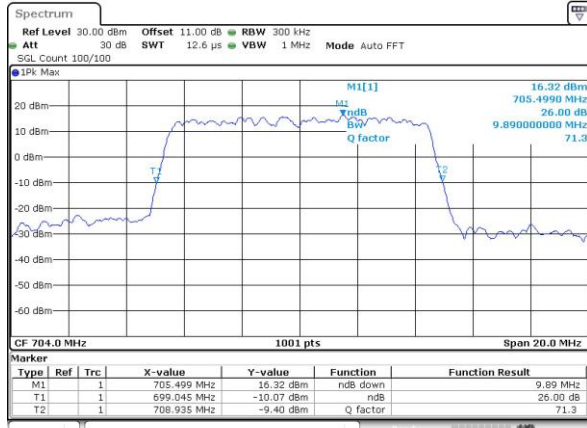


Date: 21.SEP.2018 02:32:47

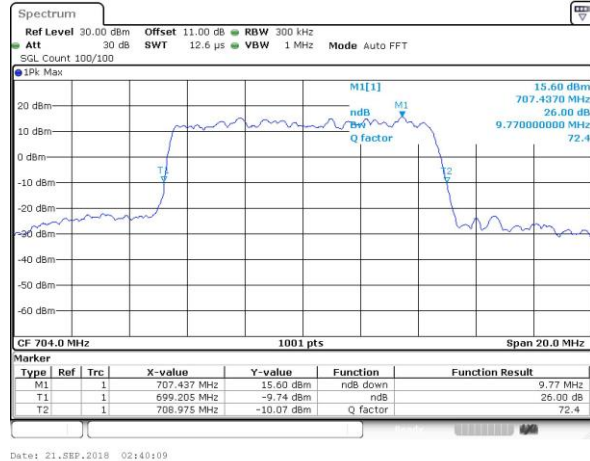


## LTE Band 12

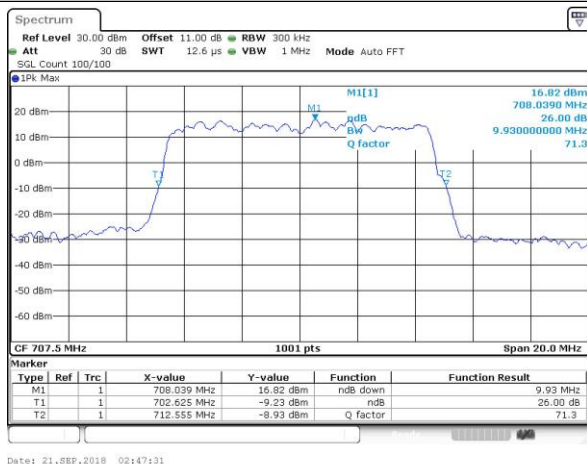
## Lowest Channel / 10MHz / QPSK



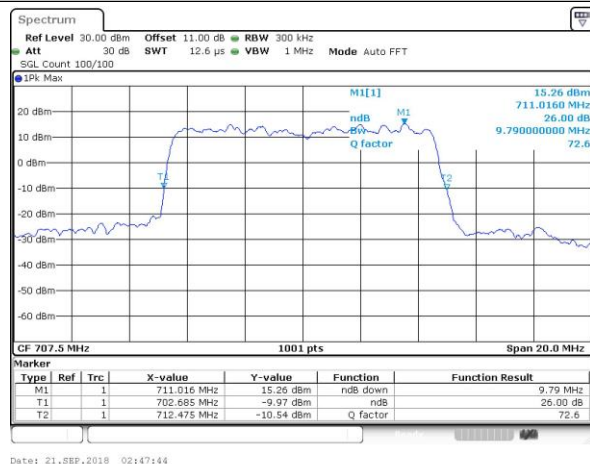
## Lowest Channel / 10MHz / 16QAM



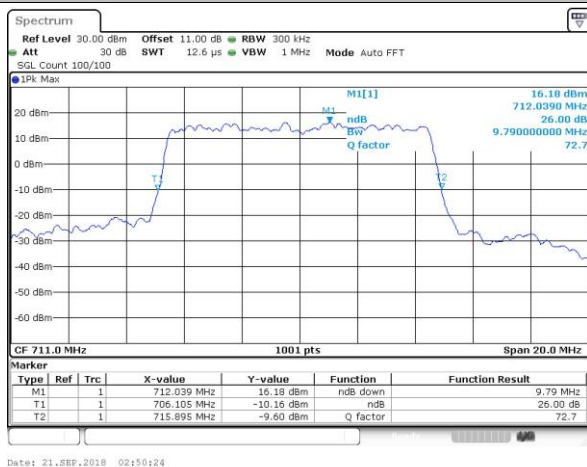
## Middle Channel / 10MHz / QPSK



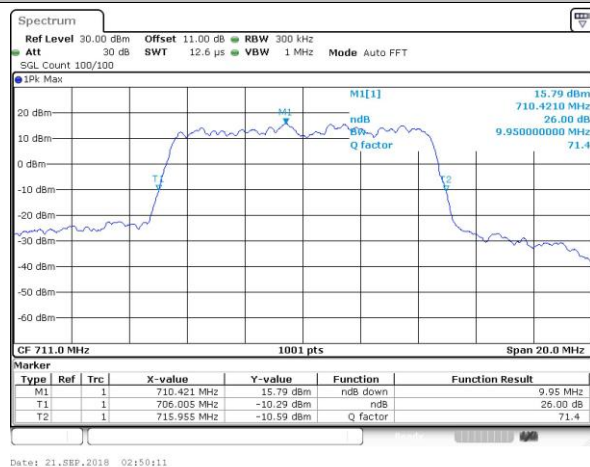
## Middle Channel / 10MHz / 16QAM



## Highest Channel / 10MHz / QPSK



## Highest Channel / 10MHz / 16QAM



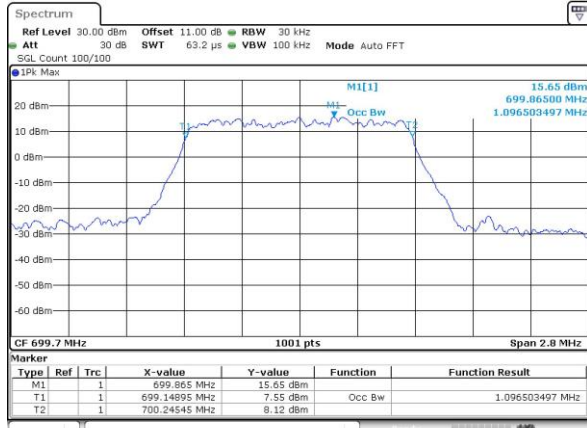
**Occupied Bandwidth**

| Mode       | LTE Band 12 : 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  | 1.1                       | 1.09  | 2.72 | 2.72  | 4.49 | 4.5   | 8.99  | 8.97  | -     | -     | -     | -     |
| Middle CH  | 1.09                      | 1.09  | 2.72 | 2.73  | 4.5  | 4.48  | 9.07  | 8.99  | -     | -     | -     | -     |
| Highest CH | 1.09                      | 1.09  | 2.7  | 2.72  | 4.5  | 4.49  | 9.01  | 9.03  | -     | -     | -     | -     |

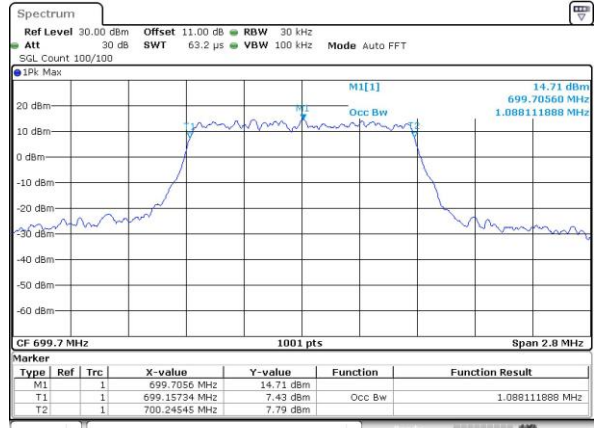


## LTE Band 12

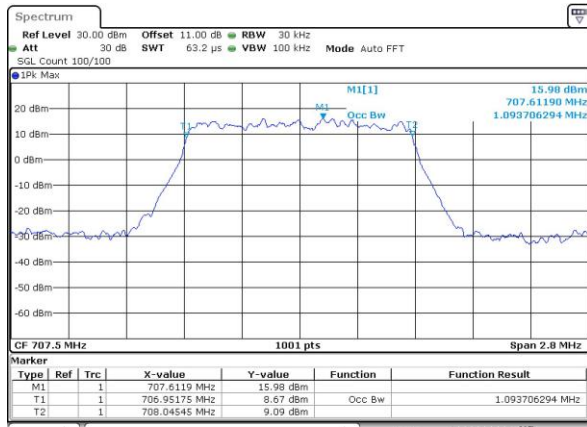
### Lowest Channel / 1.4MHz / QPSK



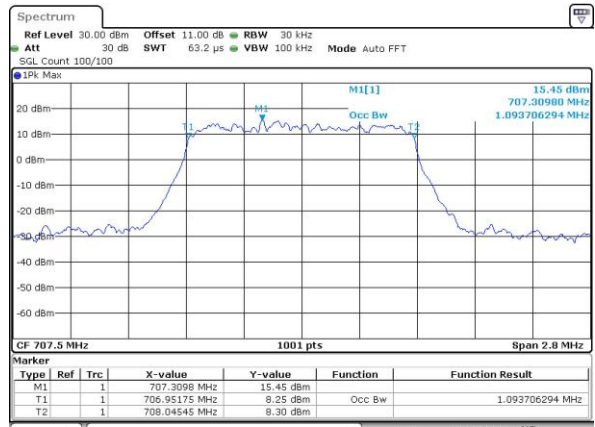
### Lowest Channel / 1.4MHz / 16QAM



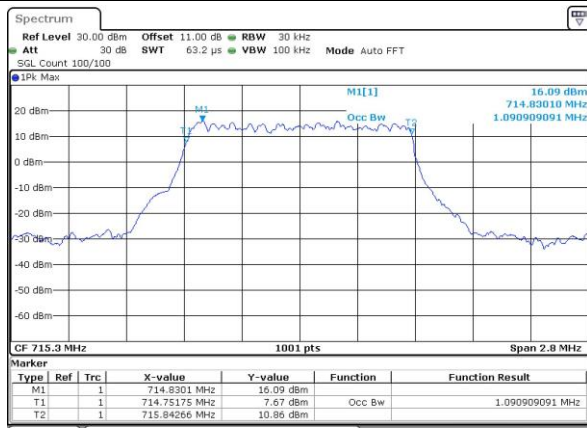
### Middle Channel / 1.4MHz / QPSK



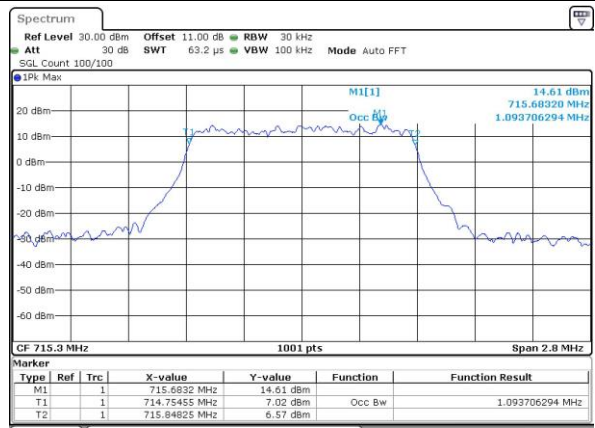
### Middle Channel / 1.4MHz / 16QAM



### Highest Channel / 1.4MHz / QPSK



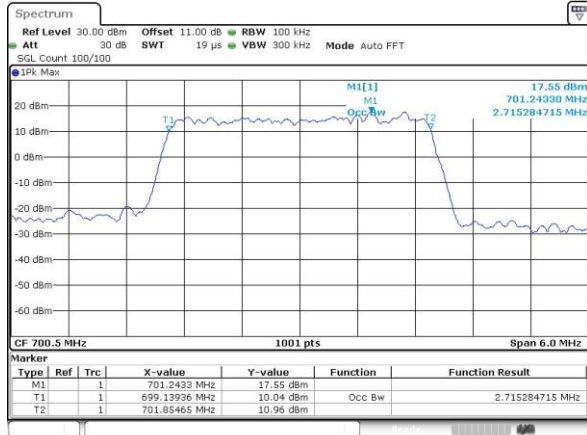
### Highest Channel / 1.4MHz / 16QAM



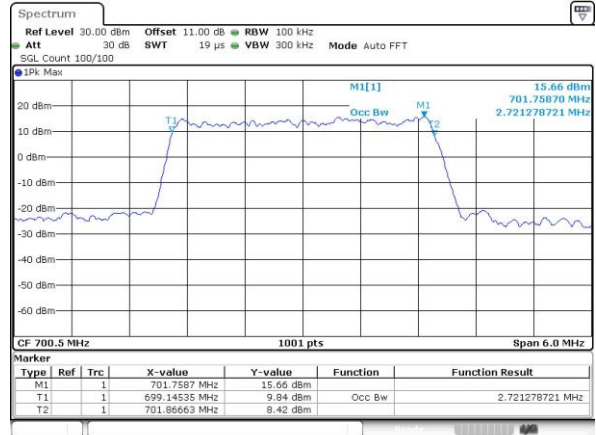


## LTE Band 12

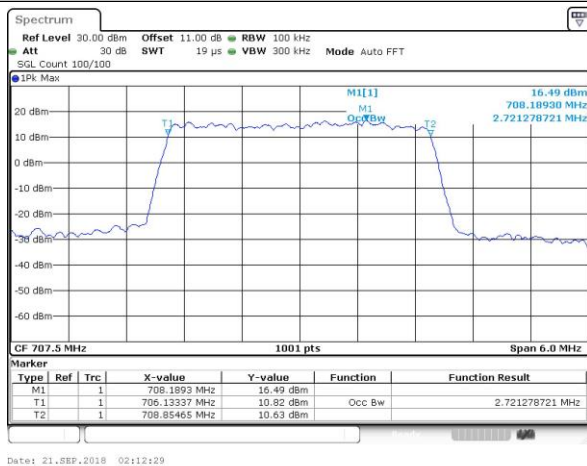
## Lowest Channel / 3MHz / QPSK



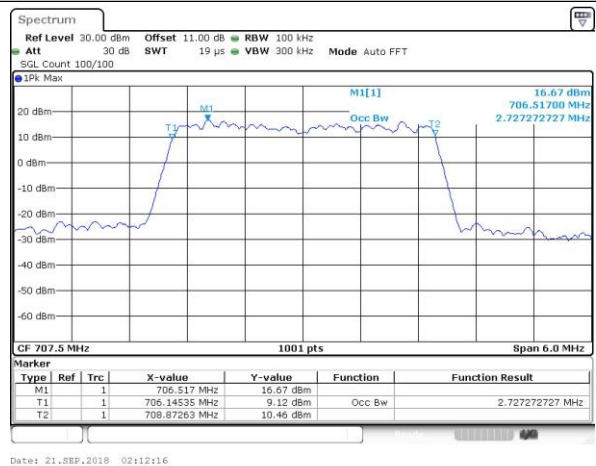
## Lowest Channel / 3MHz / 16QAM



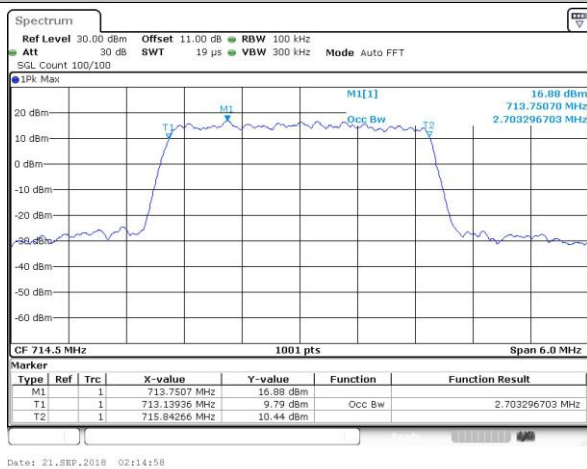
## Middle Channel / 3MHz / QPSK



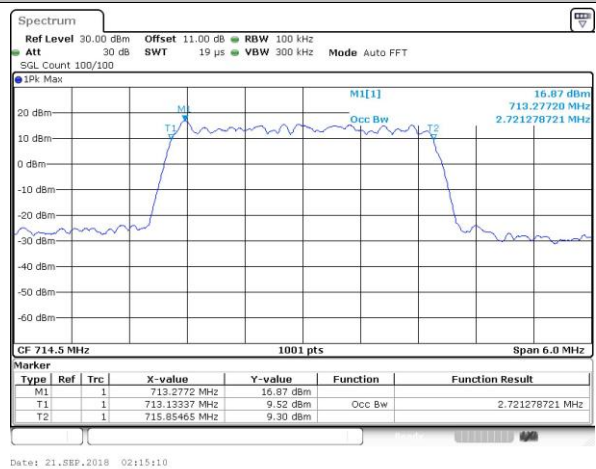
## Middle Channel / 3MHz / 16QAM



## Highest Channel / 3MHz / QPSK



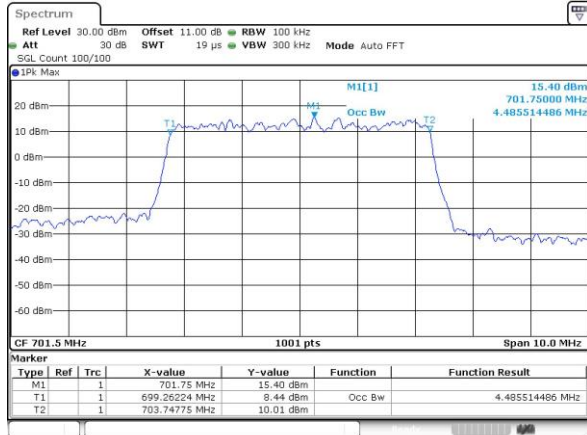
## Highest Channel / 3MHz / 16QAM



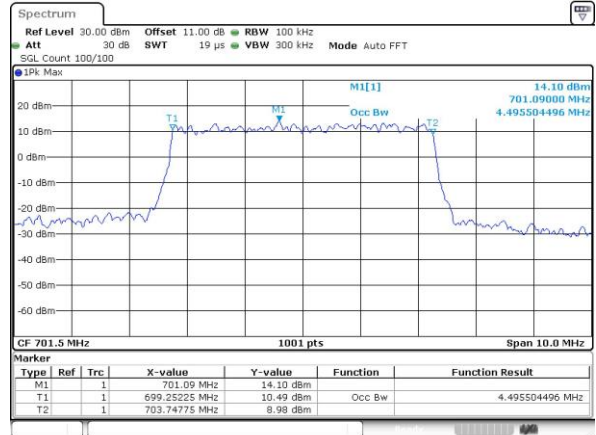


## LTE Band 12

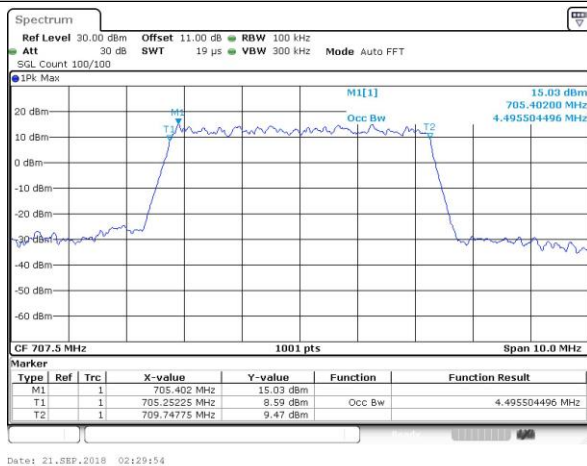
## Lowest Channel / 5MHz / QPSK



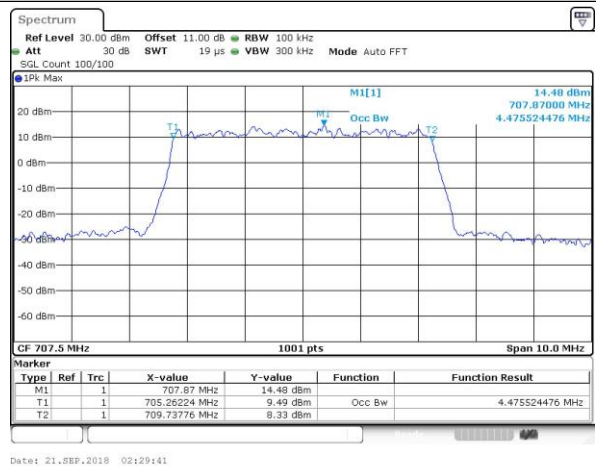
## Lowest Channel / 5MHz / 16QAM



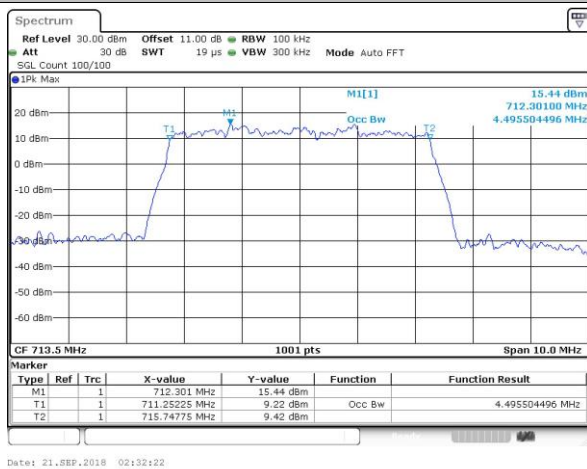
## Middle Channel / 5MHz / QPSK



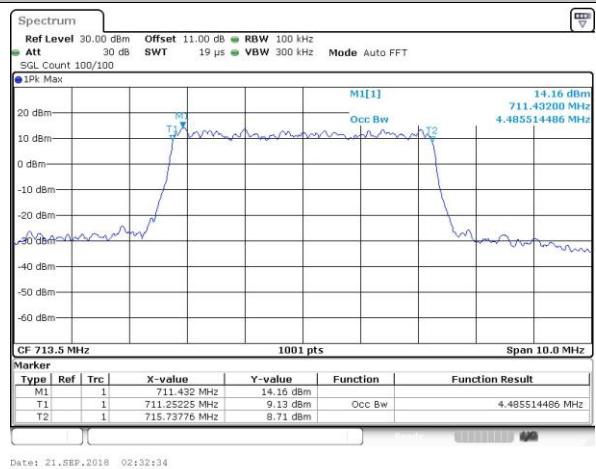
## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



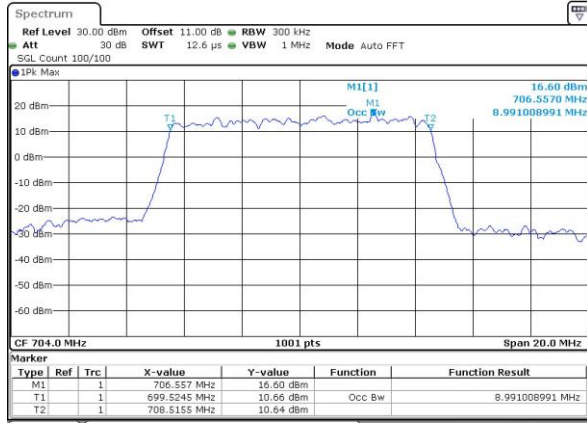
## Highest Channel / 5MHz / 16QAM





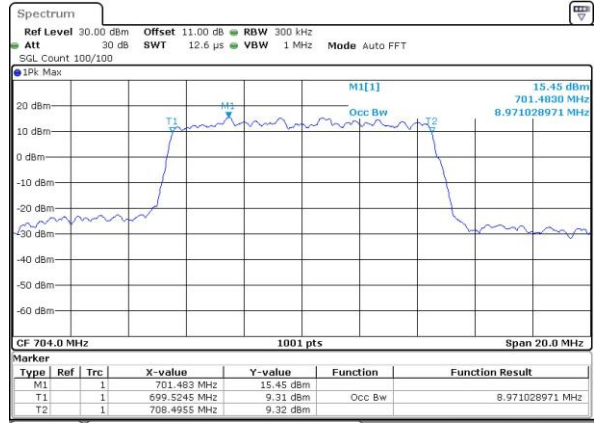
## LTE Band 12

## Lowest Channel / 10MHz / QPSK



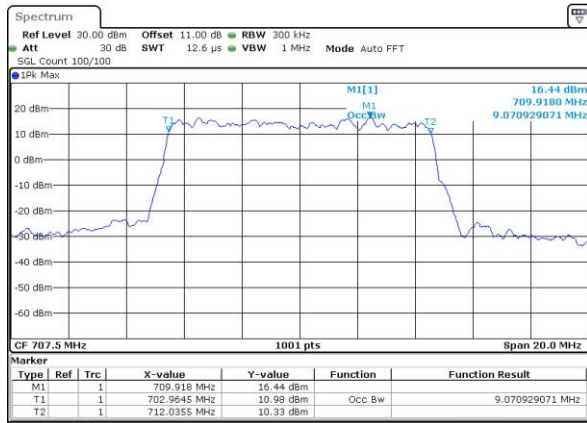
Date: 21.SEP.2018 02:39:42

## Lowest Channel / 10MHz / 16QAM



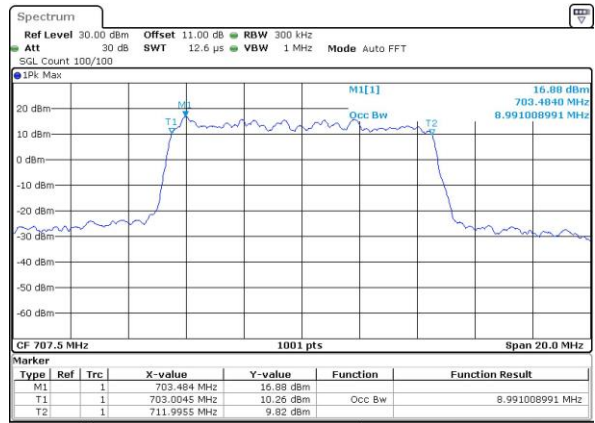
Date: 21.SEP.2018 02:39:56

## Middle Channel / 10MHz / QPSK



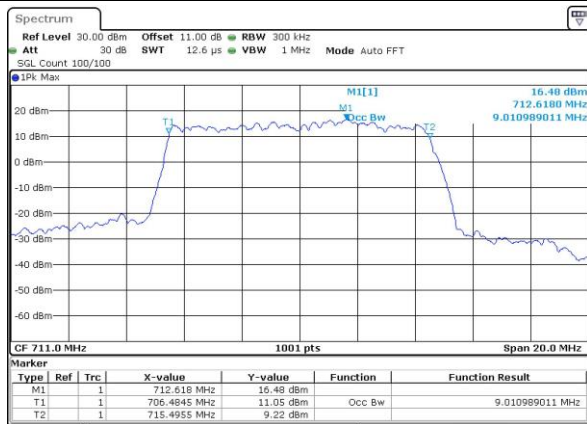
Date: 21.SEP.2018 02:47:18

## Middle Channel / 10MHz / 16QAM



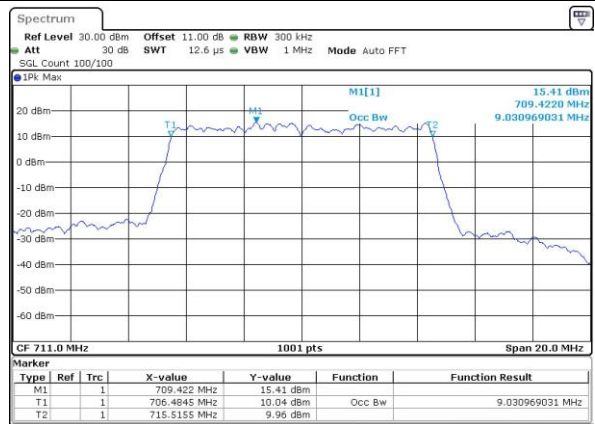
Date: 21.SEP.2018 02:47:05

## Highest Channel / 10MHz / QPSK

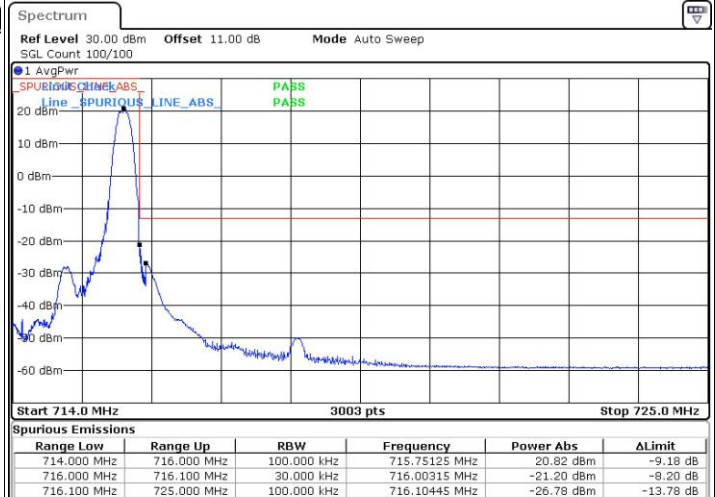


Date: 21.SEP.2018 02:49:46

## Highest Channel / 10MHz / 16QAM



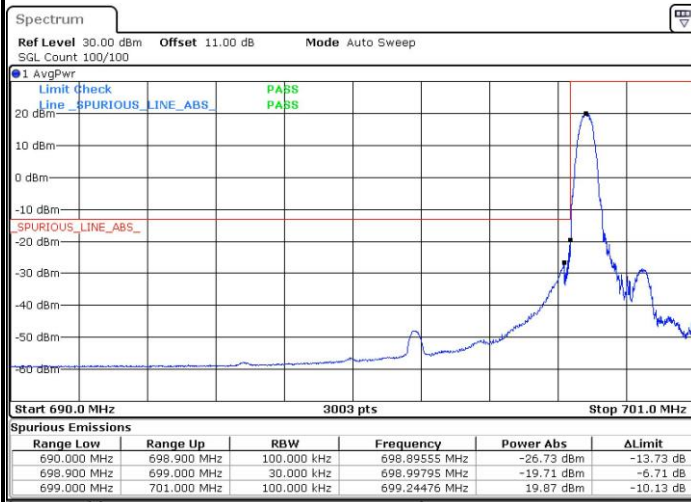
Date: 21.SEP.2018 02:49:59

**Conducted Band Edge****LTE Band 12 / 1.4MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**



## LTE Band 12 / 1.4MHz / 16QAM

## Lowest Band Edge / 1 RB



## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



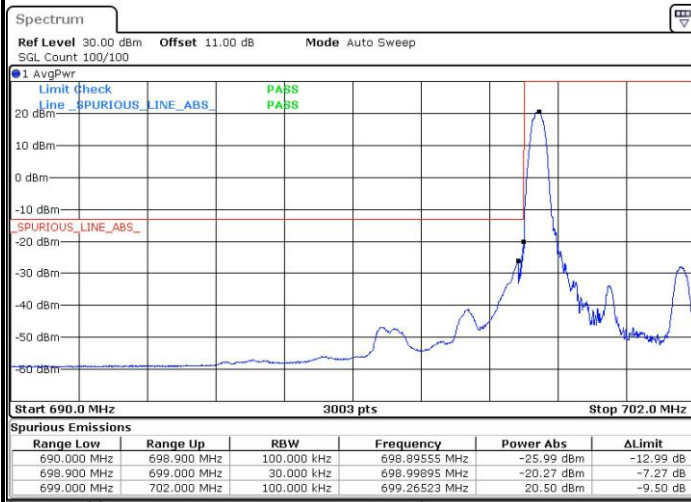
## Highest Band Edge / Full RB



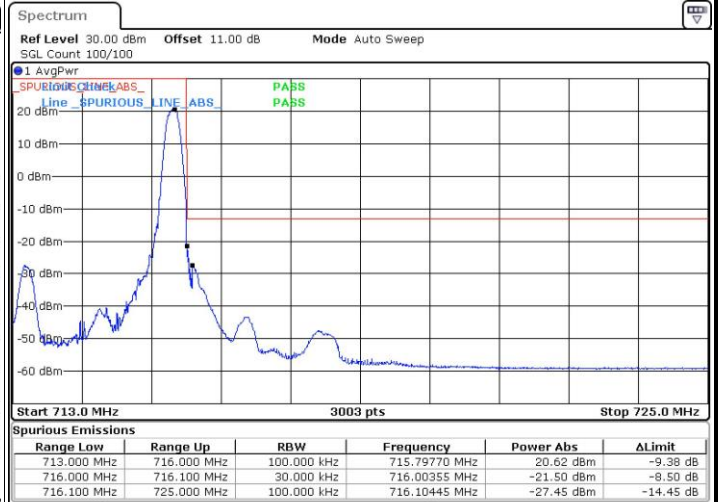


## LTE Band 12 / 3MHz / QPSK

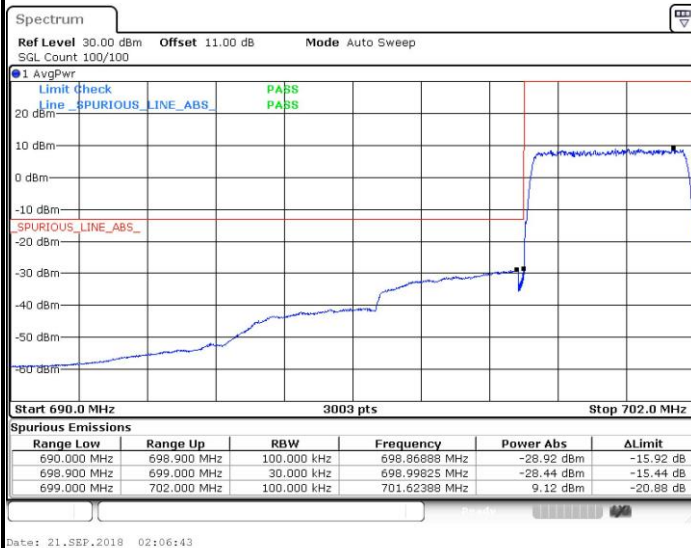
## Lowest Band Edge / 1RB



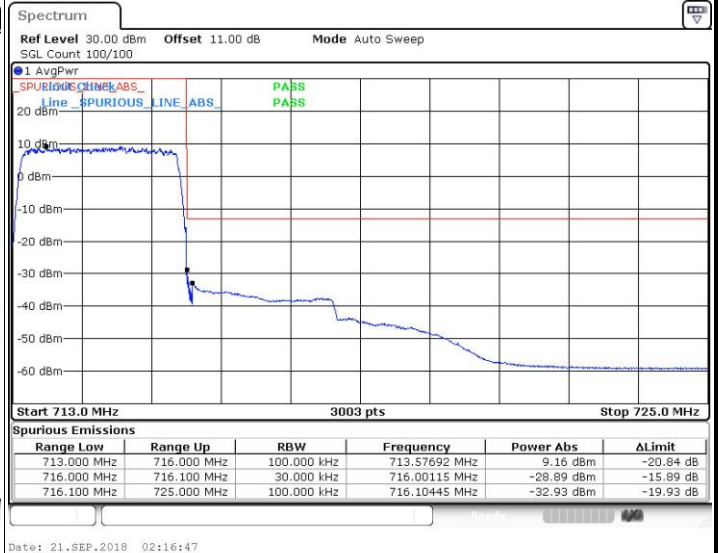
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



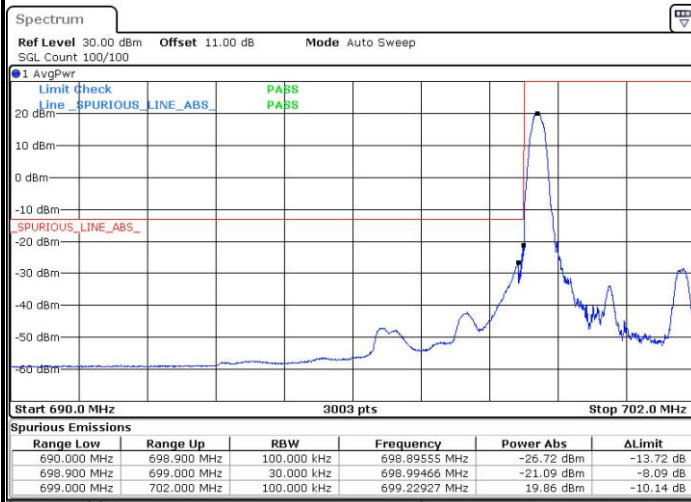
## Highest Band Edge / Full RB



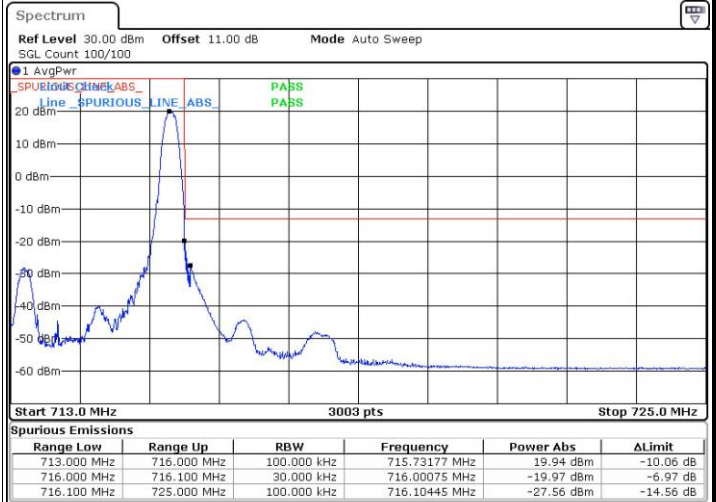


## LTE Band 12 / 3MHz / 16QAM

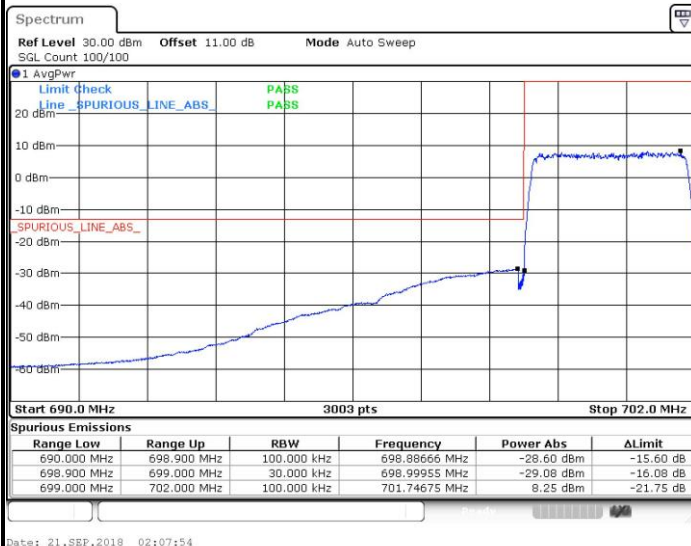
## Lowest Band Edge / 1 RB



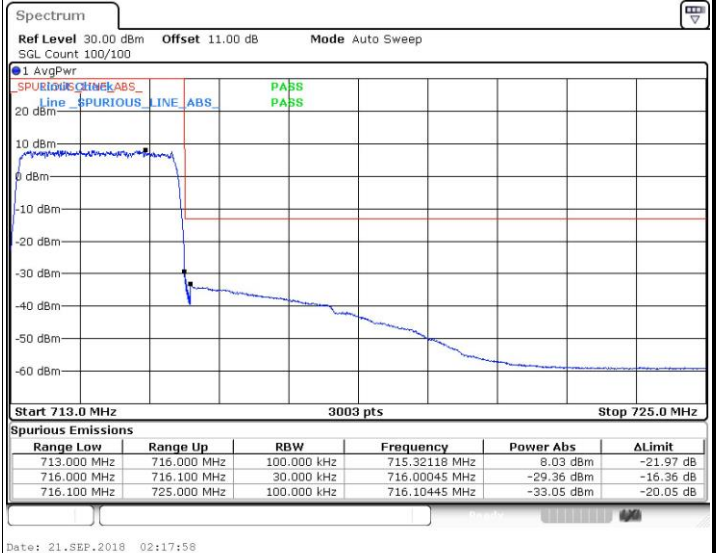
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



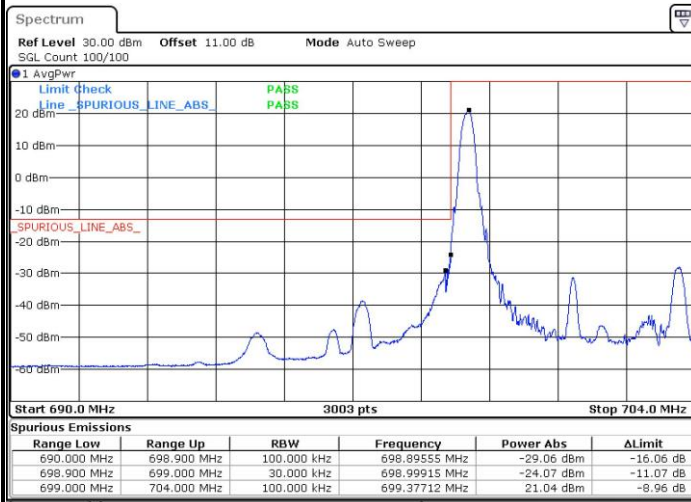
## Highest Band Edge / Full RB



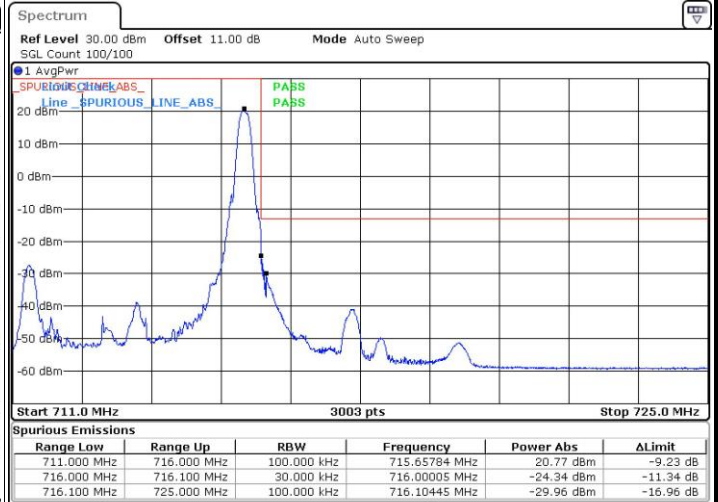


## LTE Band 12 / 5MHz / QPSK

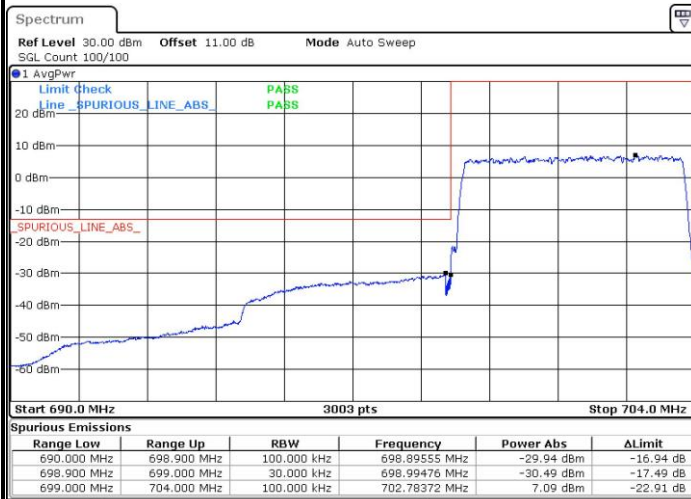
## Lowest Band Edge / 1 RB



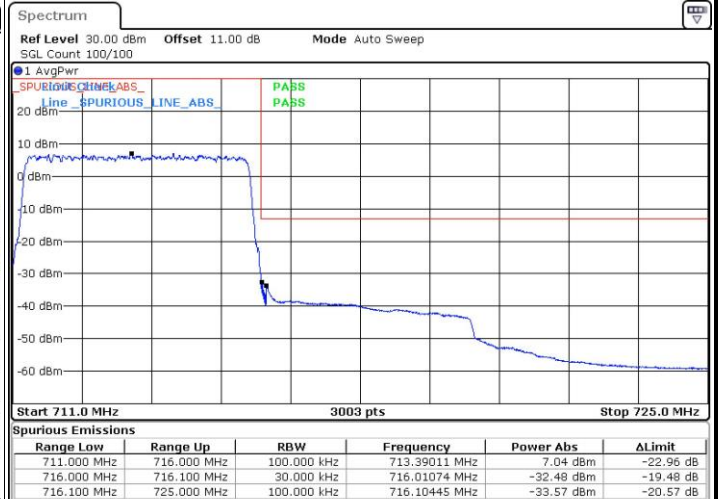
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



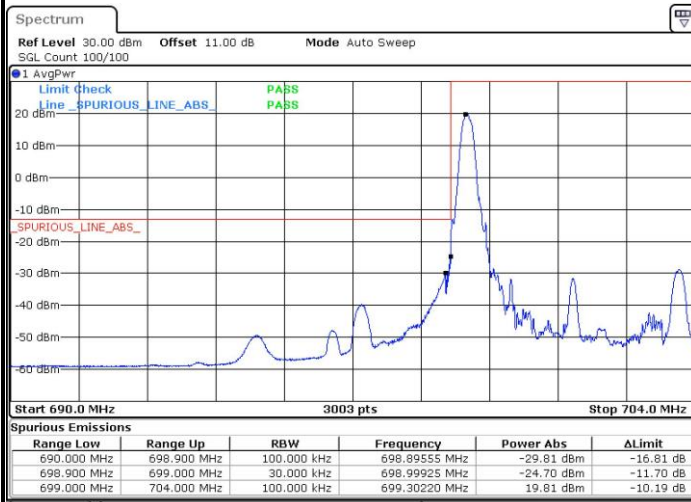
## Highest Band Edge / Full RB



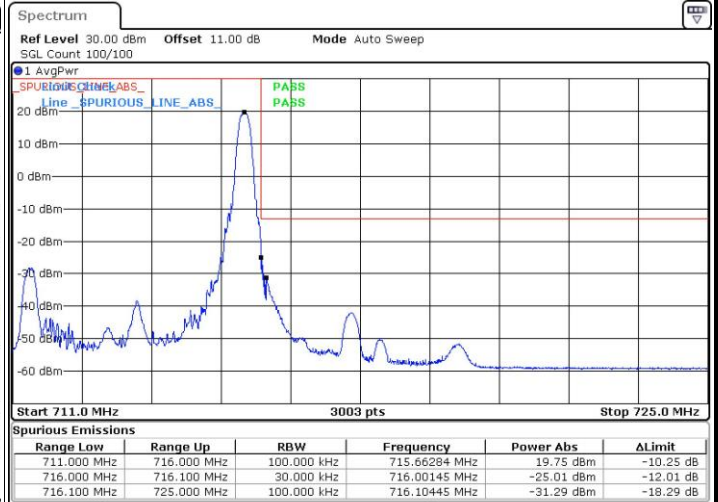


## LTE Band 12 / 5MHz / 16QAM

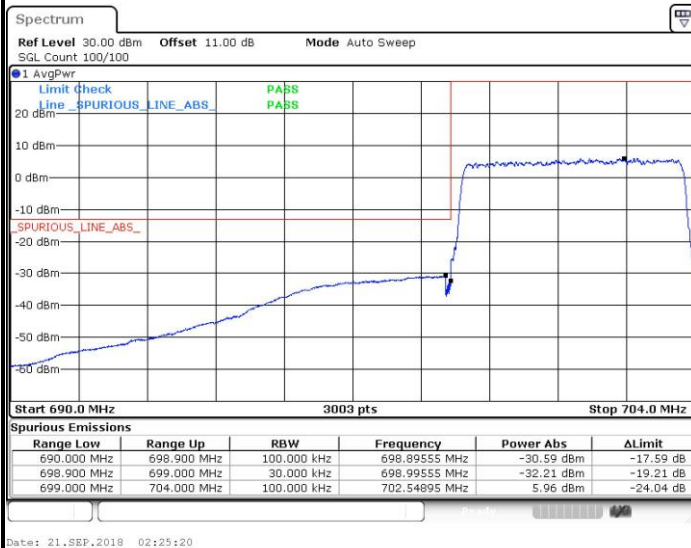
## Lowest Band Edge / 1RB



## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

