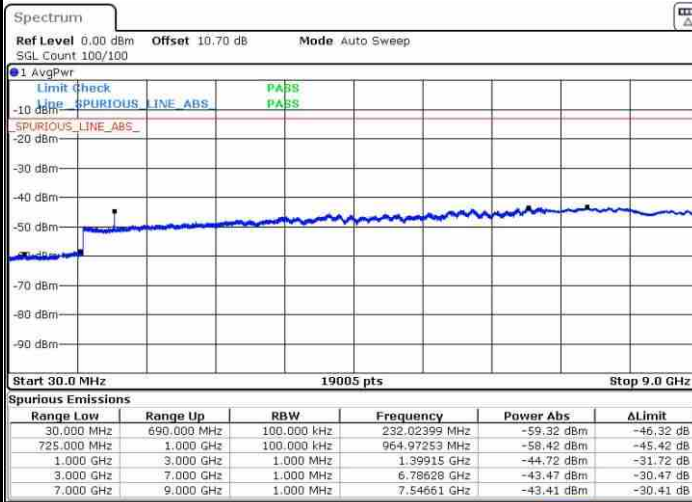




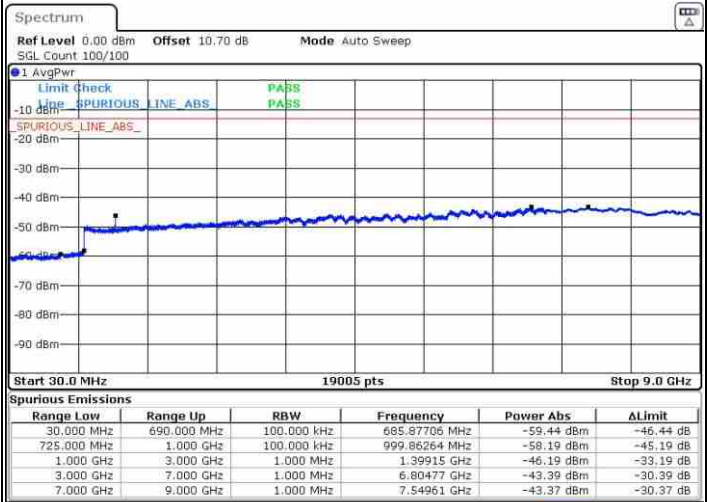
## LTE Band 12 / 5MHz

## Lowest Channel / QPSK



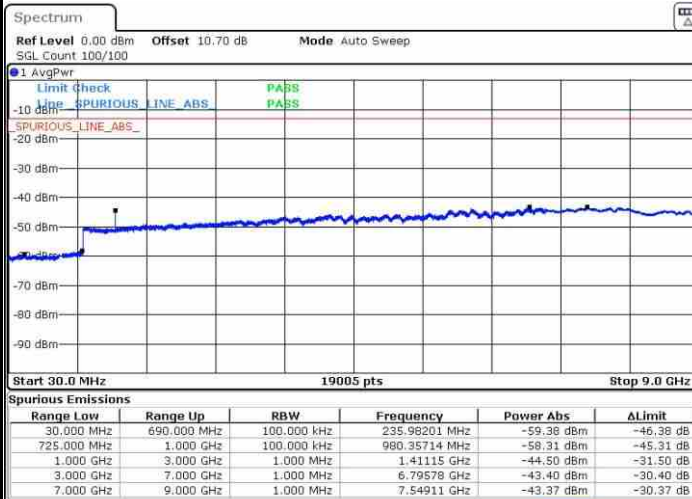
Date: 22 MAY 2019 02:28:02

## Lowest Channel / 16QAM



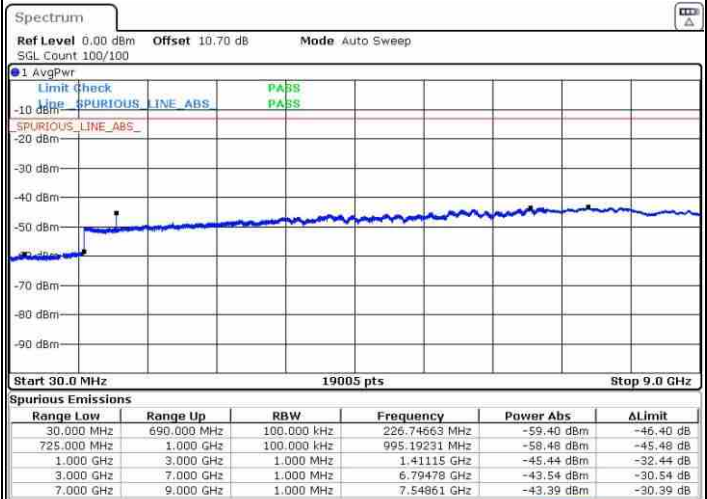
Date: 22 MAY 2019 02:28:49

## Middle Channel / QPSK



Date: 22 MAY 2019 02:31:08

## Middle Channel / 16QAM

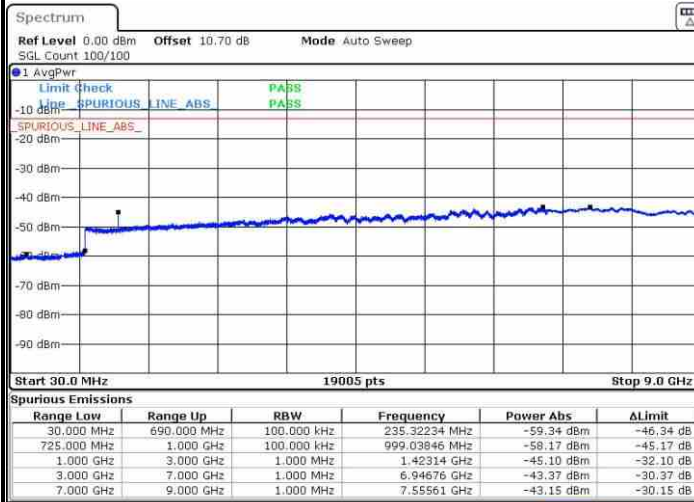


Date: 22 MAY 2019 02:30:22



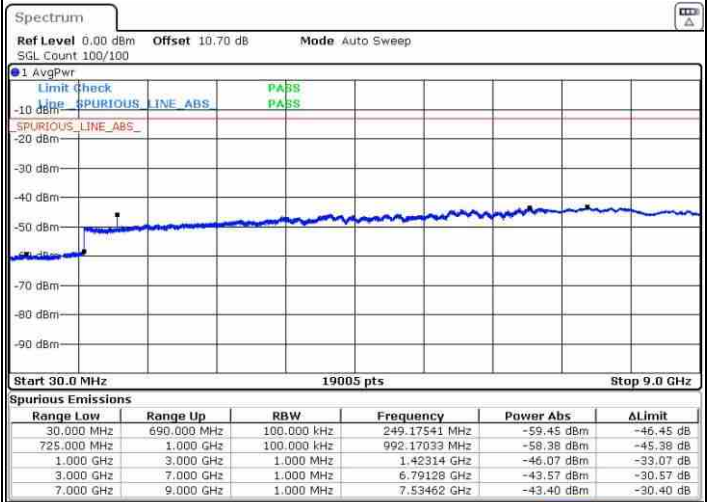
## LTE Band 12 / 5MHz

## Highest Channel / QPSK



Date: 22 MAY 2019 02:37:33

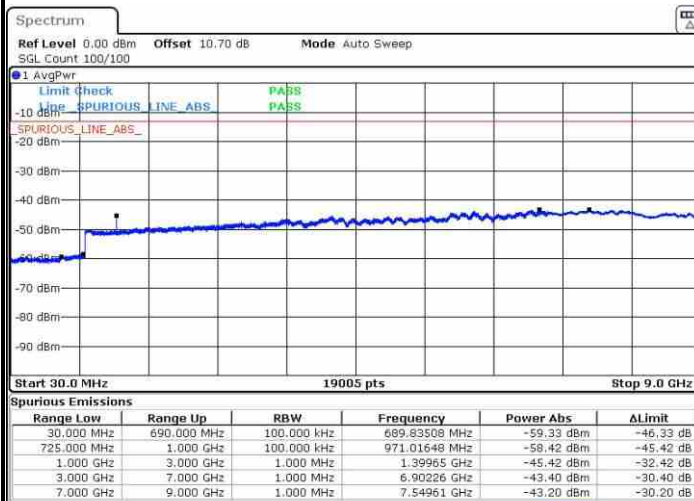
## Highest Channel / 16QAM



Date: 22 MAY 2019 02:36:47

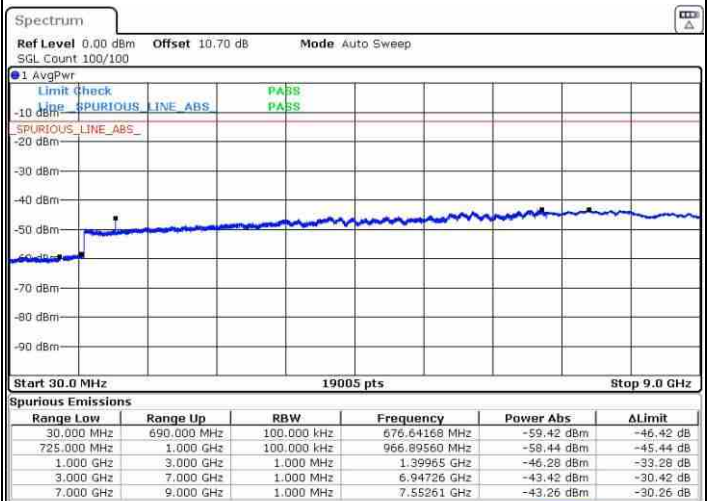
## LTE Band 12 / 10MHz

## Lowest Channel / QPSK



Date: 22 MAY 2019 02:43:13

## Lowest Channel / 16QAM

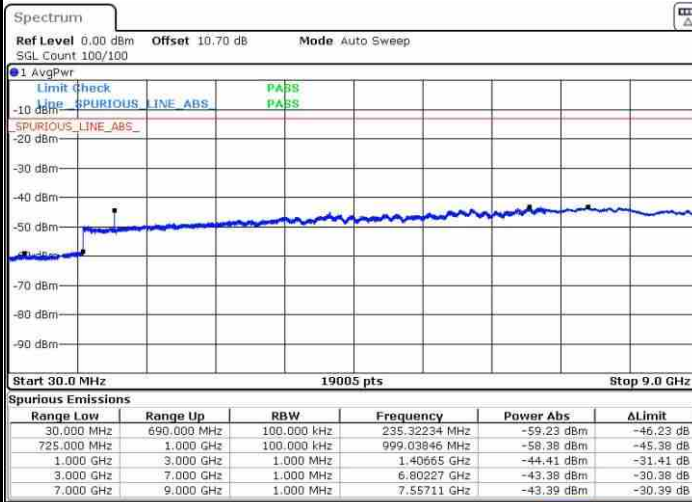


Date: 22 MAY 2019 02:44:00



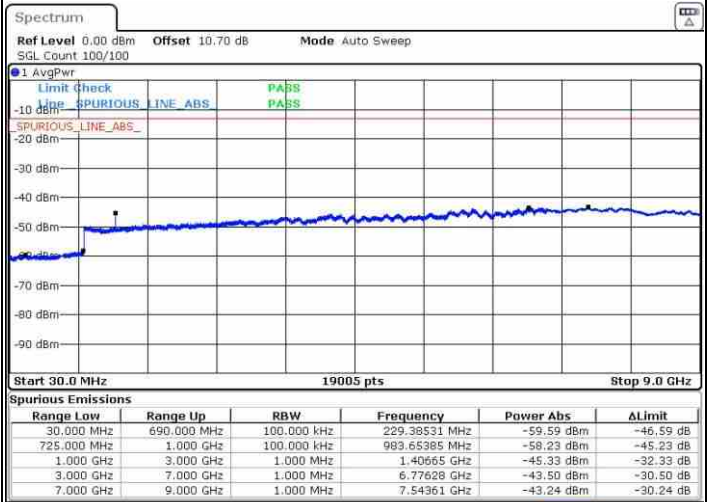
## LTE Band 12 / 10MHz

## Middle Channel / QPSK



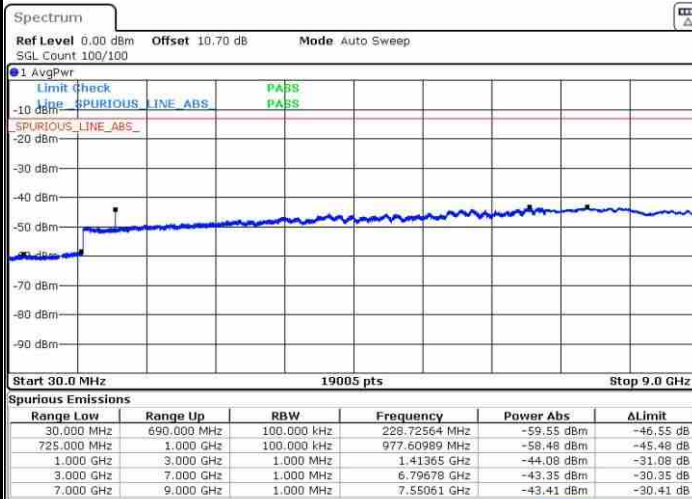
Date: 22 MAY 2019 02:46:18

## Middle Channel / 16QAM



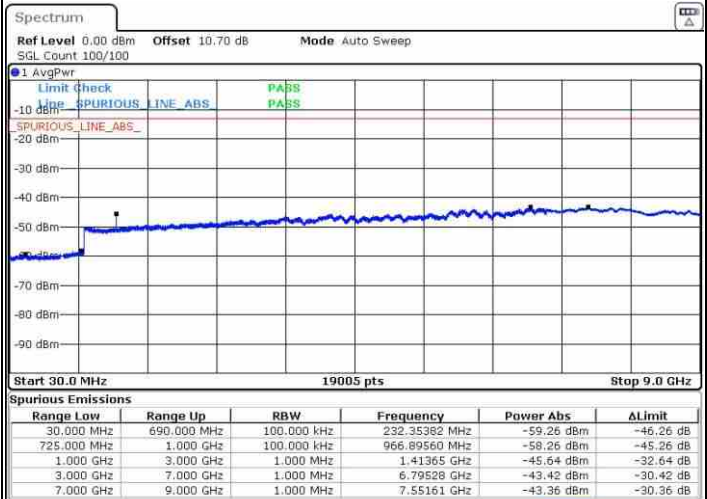
Date: 22 MAY 2019 02:45:33

## Highest Channel / QPSK



Date: 22 MAY 2019 02:51:57

## Highest Channel / 16QAM

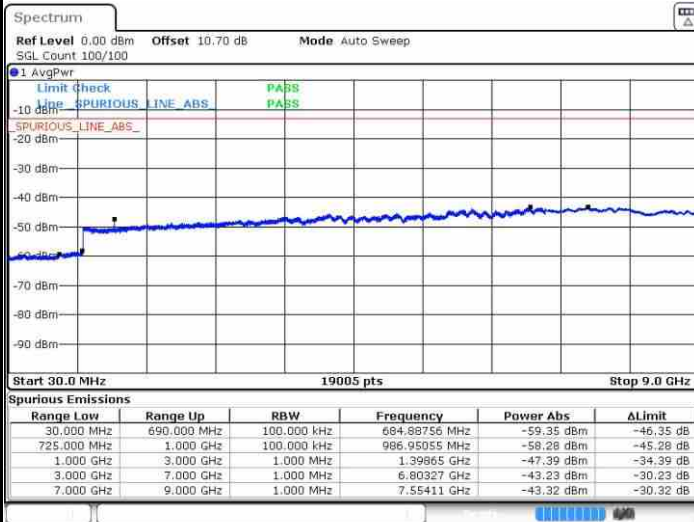


Date: 22 MAY 2019 02:52:43



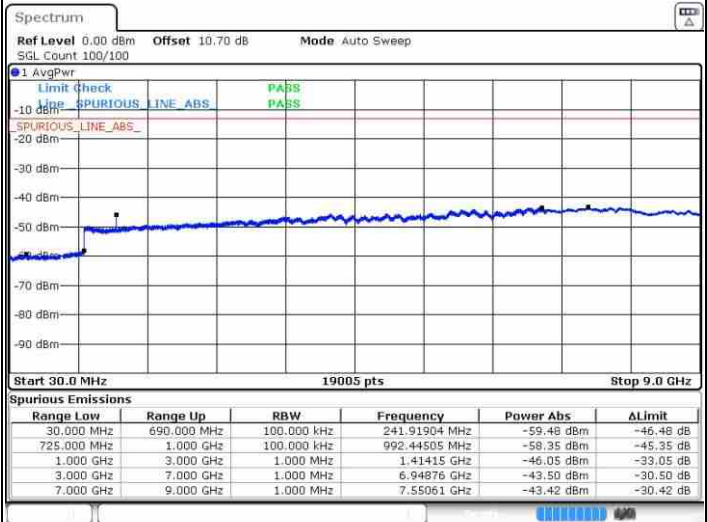
## LTE Band 12 / 1.4MHz

## Lowest Channel / 64QAM



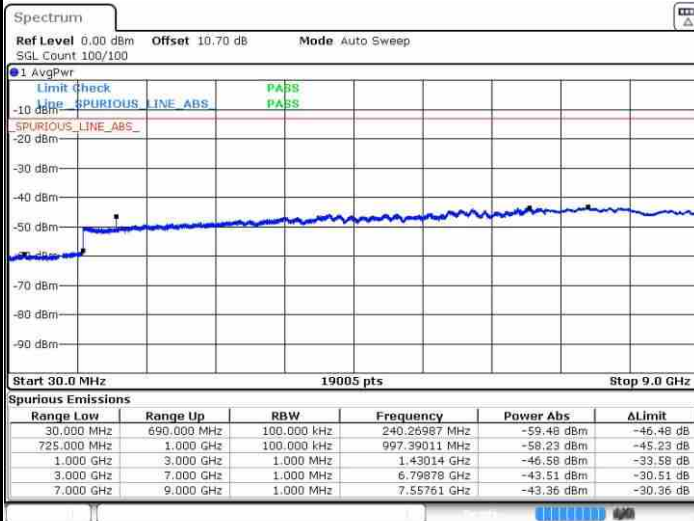
Date: 21 MAY 2019 22:38:17

## Middle Channel / 64QAM



Date: 21 MAY 2019 22:39:27

## Highest Channel / 64QAM

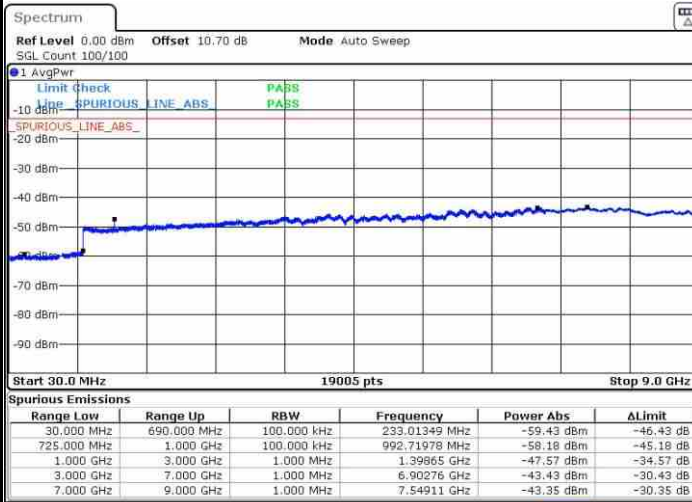


Date: 21 MAY 2019 22:42:39



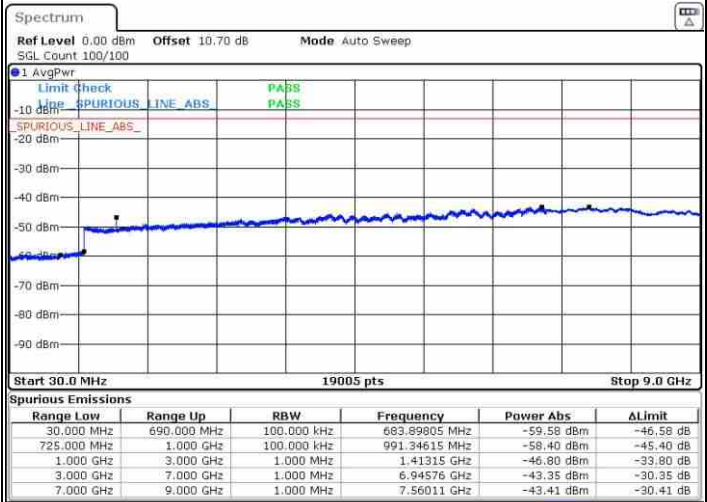
## LTE Band 12 / 3MHz

## Lowest Channel / 64QAM



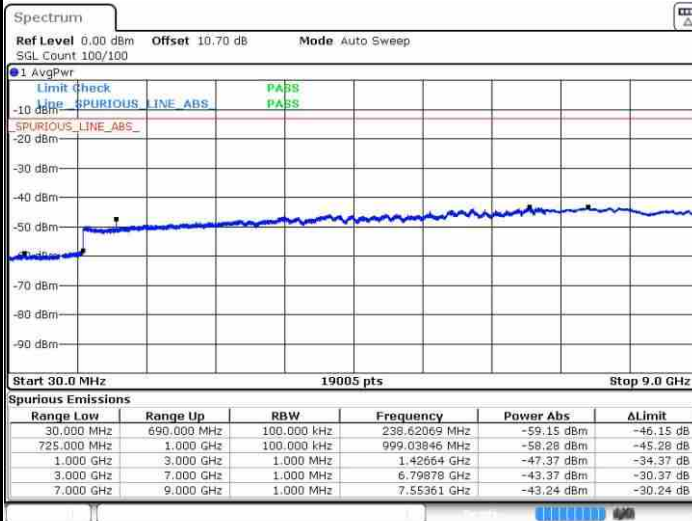
Date: 21 MAY 2019 23:01:04

## Middle Channel / 64QAM



Date: 21 MAY 2019 23:02:13

## Highest Channel / 64QAM

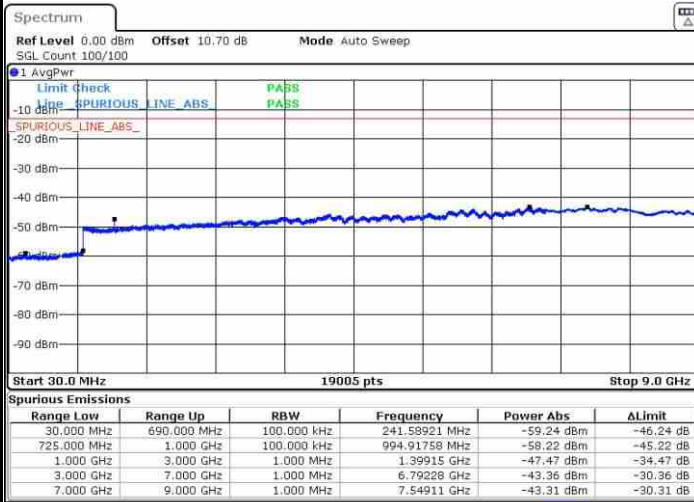


Date: 22 MAY 2019 02:14:46



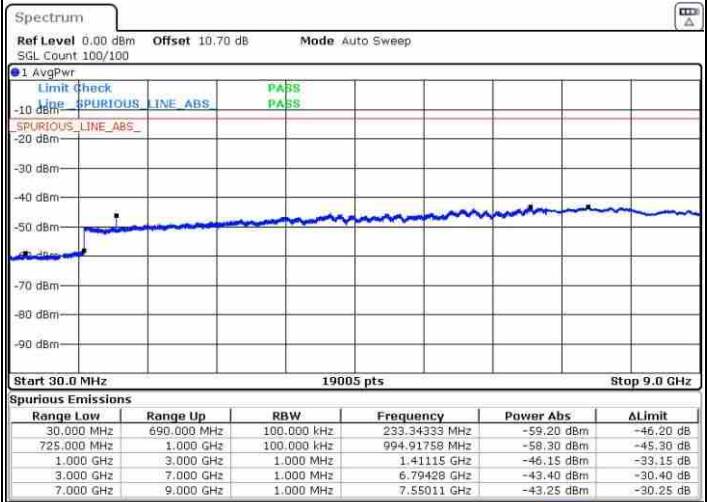
## LTE Band 12 / 5MHz

## Lowest Channel / 64QAM



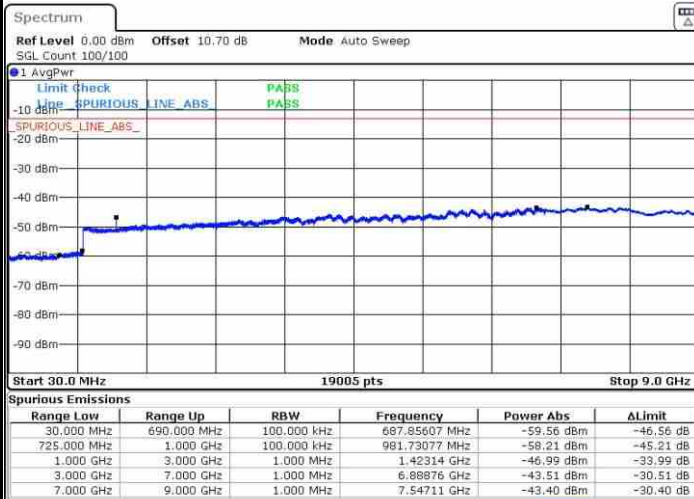
Date: 22 MAY 2019 02:17:59

## Middle Channel / 64QAM



Date: 22 MAY 2019 02:19:08

## Highest Channel / 64QAM



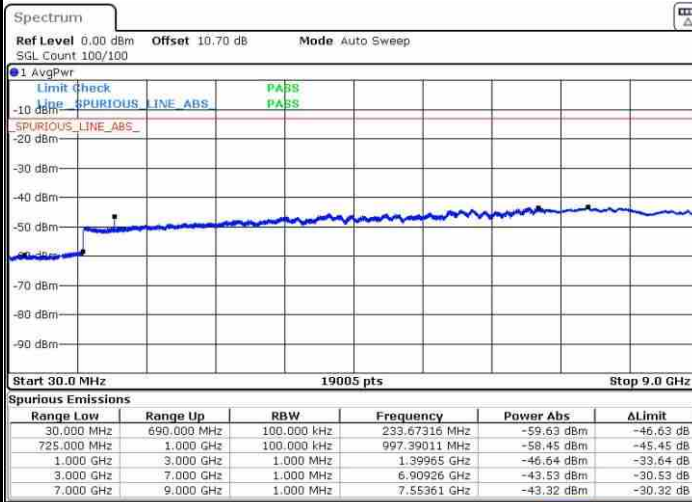
Date: 22 MAY 2019 02:22:23





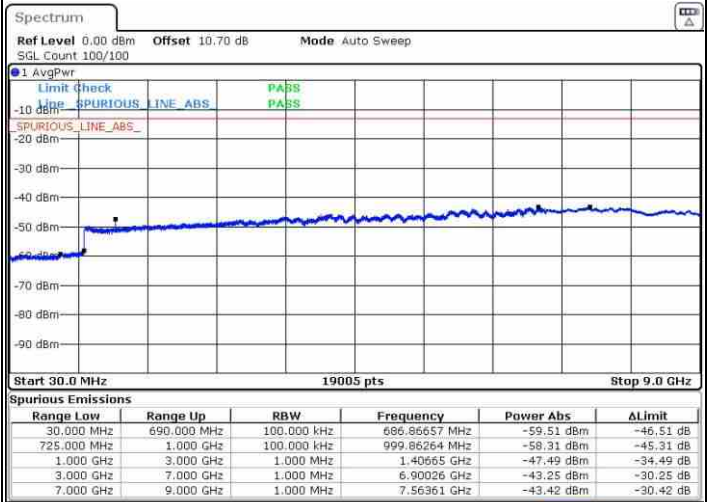
## LTE Band 12 / 10MHz

## Lowest Channel / 64QAM



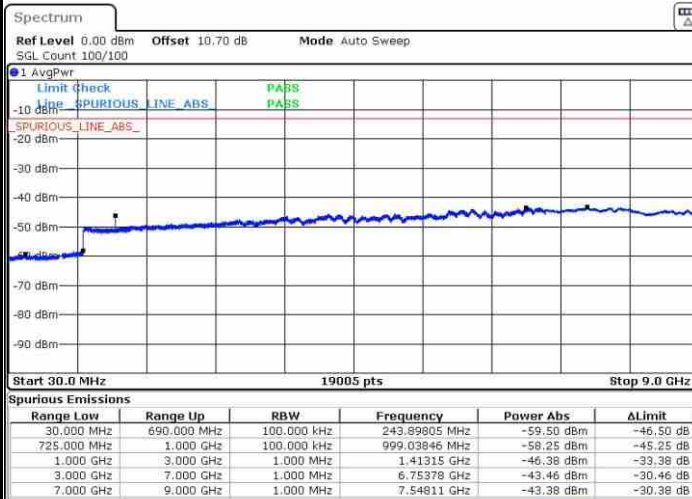
Date: 22 MAY 2019 02:55:56

## Middle Channel / 64QAM



Date: 22 MAY 2019 02:57:06

## Highest Channel / 64QAM



Date: 22 MAY 2019 03:00:19

## Frequency Stability

| Test Conditions  |                   | LTE Band 12 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                            | Note 2. |
|                  |                   | Deviation (ppm)                     | Result  |
| 50               | Normal Voltage    | 0.0078                              | PASS    |
| 40               | Normal Voltage    | 0.0052                              |         |
| 30               | Normal Voltage    | 0.0004                              |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                              |         |
| 10               | Normal Voltage    | 0.0010                              |         |
| 0                | Normal Voltage    | 0.0069                              |         |
| -10              | Normal Voltage    | 0.0024                              |         |
| -20              | Normal Voltage    | 0.0016                              |         |
| -30              | Normal Voltage    | 0.0004                              |         |
| 20               | Maximum Voltage   | 0.0079                              |         |
| 20               | Normal Voltage    | 0.0000                              |         |
| 20               | Battery End Point | 0.0013                              |         |

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



| Test Conditions  |                   | LTE Band 12 (QPSK) / Middle Channel  | Limit       |
|------------------|-------------------|--------------------------------------|-------------|
| Temperature (°C) | Voltage (Volt)    | BW 5MHz                              | Within Band |
|                  |                   | Frequency Offset ( $\Delta f$ ) (Hz) | Result      |
| 50               | Normal Voltage    | -5.5                                 | PASS        |
| 40               | Normal Voltage    | 3.7                                  |             |
| 30               | Normal Voltage    | 0.3                                  |             |
| 20(Ref.)         | Normal Voltage    | 0                                    |             |
| 10               | Normal Voltage    | 0.7                                  |             |
| 0                | Normal Voltage    | -4.9                                 |             |
| -10              | Normal Voltage    | 1.7                                  |             |
| -20              | Normal Voltage    | 1.1                                  |             |
| -30              | Normal Voltage    | -0.3                                 |             |
| 20               | Maximum Voltage   | -5.6                                 |             |
| 20               | Normal Voltage    | 0                                    |             |
| 20               | Battery End Point | 0.9                                  |             |

$|\text{MAX}(\Delta f)| = 5.6\text{Hz}$

| Frequency Stability            | Frequency (MHz) | Limit Line             | Result |
|--------------------------------|-----------------|------------------------|--------|
| $f_L -  \text{MAX}(\Delta f) $ | 699.022694      | $\geq 699 \text{ MHz}$ | PASS   |
| $f_H +  \text{MAX}(\Delta f) $ | 715.964406      | $\leq 716 \text{ MHz}$ |        |

## LTE Band 13

### Peak-to-Average Ratio

| Mode       | LTE Band 13 / 10MHz |         |       |         |             |
|------------|---------------------|---------|-------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | -                   | -       | -     | -       | PASS        |
| Middle CH  | 3.25                | 4.52    | 3.94  | 5.59    |             |
| Highest CH | -                   | -       | -     | -       |             |
| Mode       | LTE Band 13 / 10MHz |         |       |         |             |
| Mod.       | 64QAM               |         |       |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB |       |         | Result      |
| Lowest CH  | -                   | -       | -     | -       | PASS        |
| Middle CH  | 4.81                | 6.23    | -     | -       |             |
| Highest CH | -                   | -       | -     | -       |             |



## LTE Band 13 / 10MHz / QPSK

## Middle Channel / 1RB



## Middle Channel / Full RB



## LTE Band 13 / 10MHz / 16QAM

## Middle Channel / 1RB



## Middle Channel / Full RB



## LTE Band 13 / 10MHz / 64QAM

## Middle Channel / 1RB



## Middle Channel / Full RB



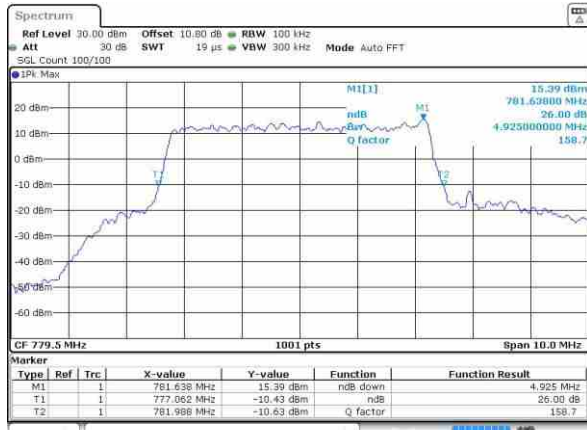
**26dB Bandwidth**

| Mode       | LTE Band 13 : 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  | -                          | -     | -     | -     | 4.93  | 4.88  | -     | -     | -     | -     | -     | -     |
| Middle CH  | -                          | -     | -     | -     | 4.85  | 4.91  | 9.77  | 9.83  | -     | -     | -     | -     |
| Highest CH | -                          | -     | -     | -     | 4.86  | 4.86  | -     | -     | -     | -     | -     | -     |
| Mode       | LTE Band 13 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                     |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                      |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | -                          | -     | -     | -     | 4.88  | -     | -     | -     | -     | -     | -     | -     |
| Middle CH  | -                          | -     | -     | -     | 4.86  | -     | 9.79  | -     | -     | -     | -     | -     |
| Highest CH | -                          | -     | -     | -     | 4.88  | -     | -     | -     | -     | -     | -     | -     |

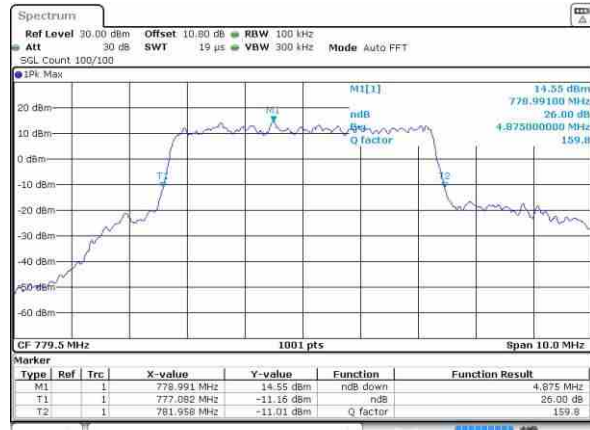


## LTE Band 13

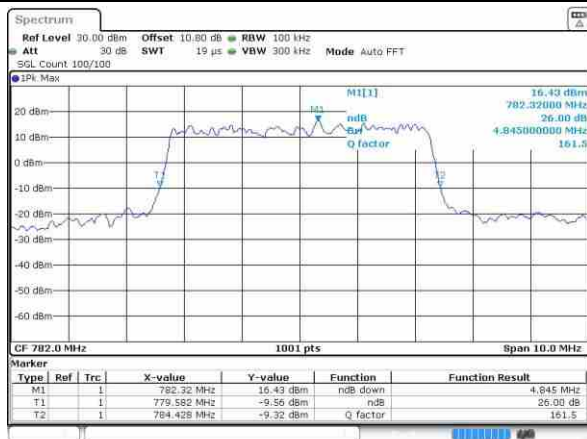
## Lowest Channel / 5MHz / QPSK



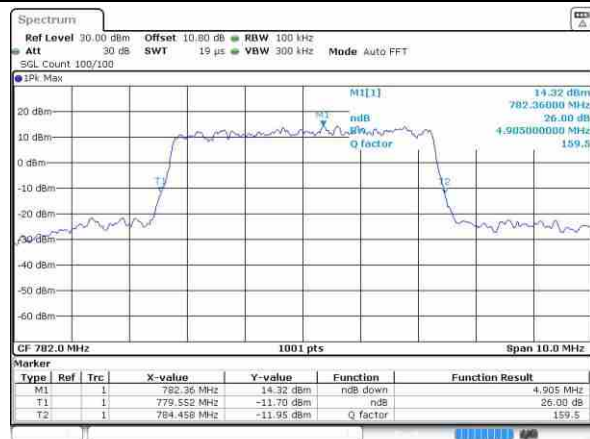
## Lowest Channel / 5MHz / 16QAM



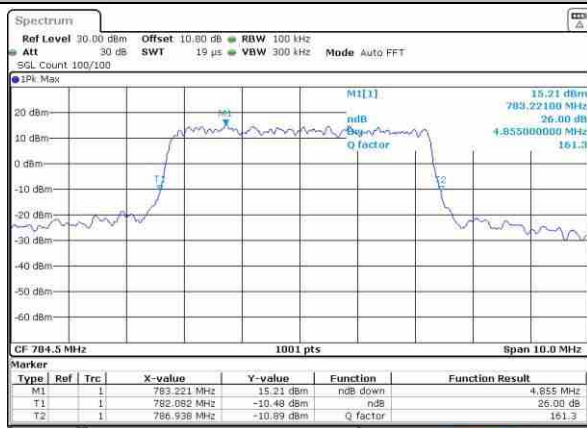
## Middle Channel / 5MHz / QPSK



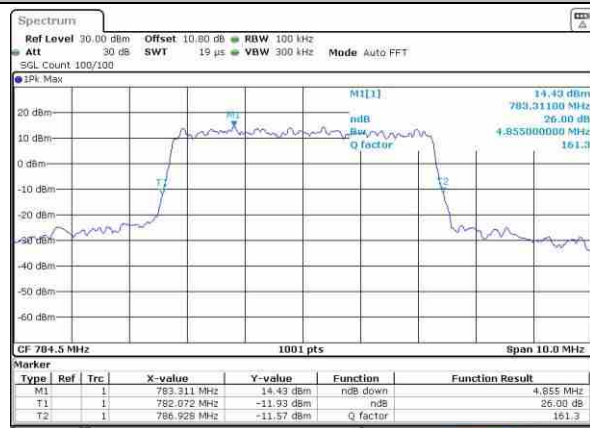
## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



## Highest Channel / 5MHz / 16QAM





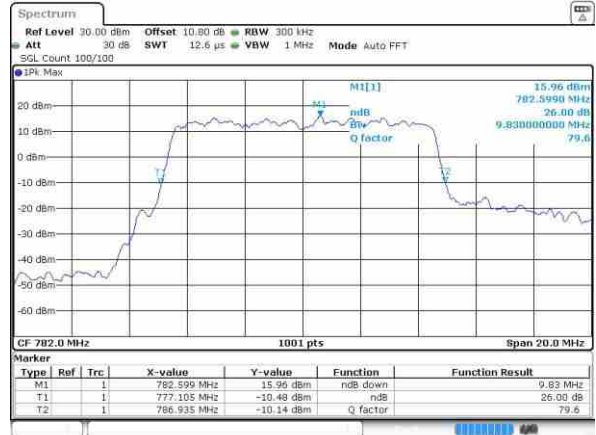
## LTE Band 13

## Middle Channel / 10MHz / QPSK



Date: 22 MAY 2019 15:49:49

## Middle Channel / 10MHz / 16QAM

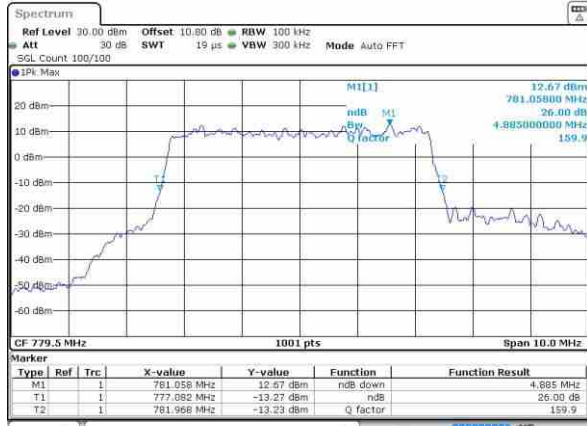


Date: 22 MAY 2019 15:49:37



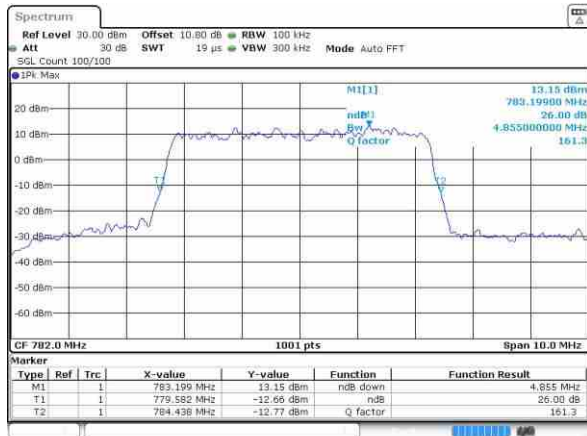
## LTE Band 13

## Lowest Channel / 5MHz / 64QAM



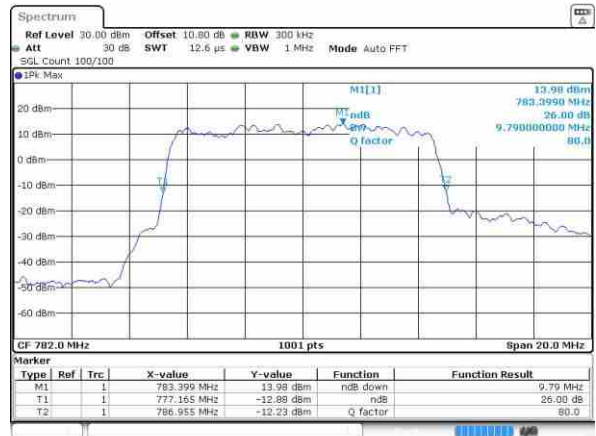
Date: 22 MAY 2019 15:39:26

## Middle Channel / 5MHz / 64QAM



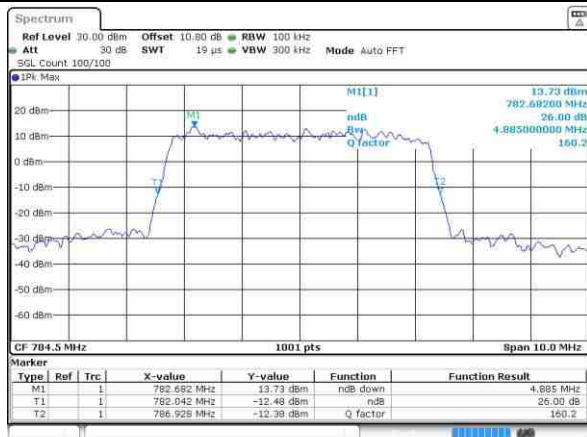
Date: 22 MAY 2019 15:44:22

## Middle Channel / 10MHz / 64QAM



Date: 22 MAY 2019 16:01:37

## Highest Channel / 5MHz / 64QAM



Date: 22 MAY 2019 15:44:58



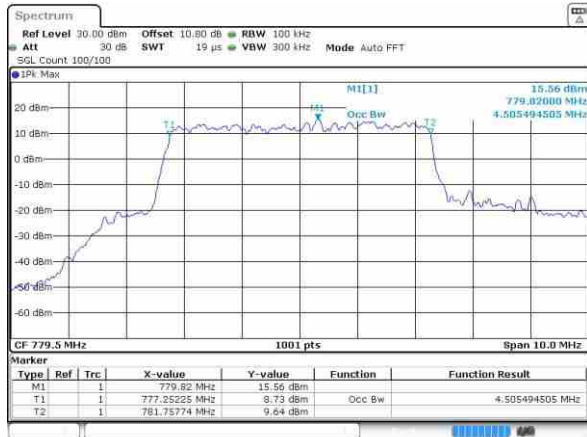
**Occupied Bandwidth**

| Mode       | LTE Band 13 : 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  | -                         | -     | -     | -     | 4.51  | 4.51  | -     | -     | -     | -     | -     | -     |
| Middle CH  | -                         | -     | -     | -     | 4.48  | 4.49  | 9.01  | 9.01  | -     | -     | -     | -     |
| Highest CH | -                         | -     | -     | -     | 4.50  | 4.50  | -     | -     | -     | -     | -     | -     |
| Mode       | LTE Band 13 : 99%OBW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                     |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | -                         | -     | -     | -     | 4.49  | -     | -     | -     | -     | -     | -     | -     |
| Middle CH  | -                         | -     | -     | -     | 4.48  | -     | 9.05  | -     | -     | -     | -     | -     |
| Highest CH | -                         | -     | -     | -     | 4.49  | -     | -     | -     | -     | -     | -     | -     |



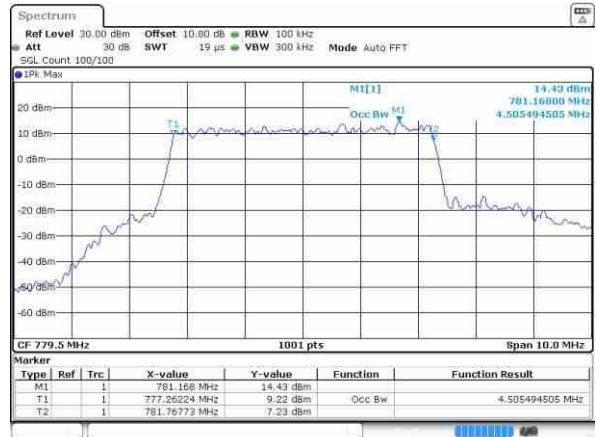
## LTE Band 13

## Lowest Channel / 5MHz / QPSK



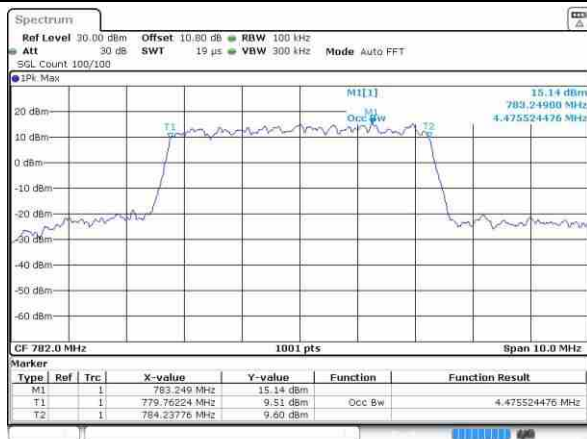
Date: 22 MAY 2019 15:17:01

## Lowest Channel / 5MHz / 16QAM



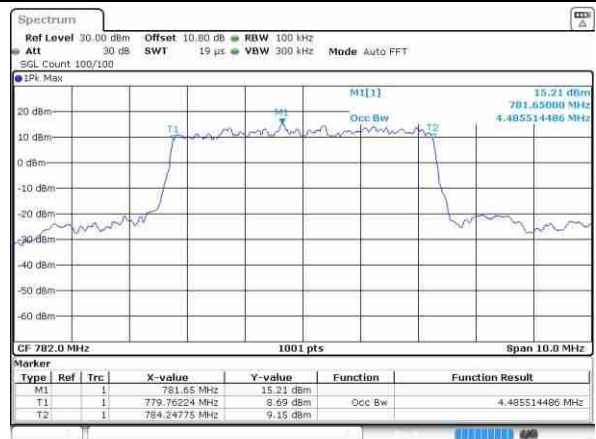
Date: 22 MAY 2019 15:17:13

## Middle Channel / 5MHz / QPSK



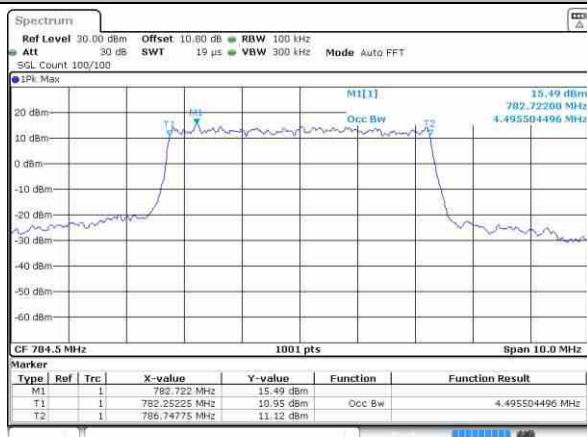
Date: 22 MAY 2019 15:30:05

## Middle Channel / 5MHz / 16QAM



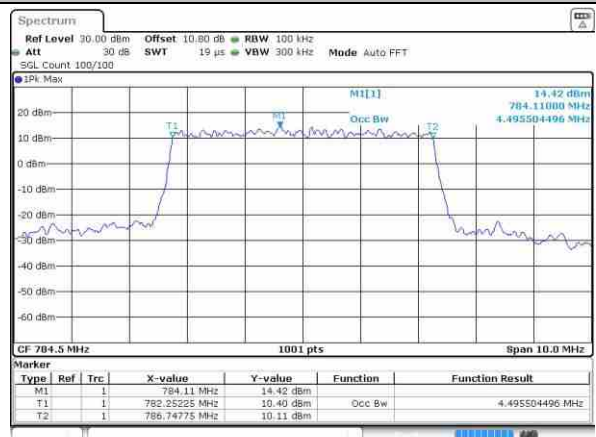
Date: 22 MAY 2019 15:29:53

## Highest Channel / 5MHz / QPSK



Date: 22 MAY 2019 15:30:17

## Highest Channel / 5MHz / 16QAM



Date: 22 MAY 2019 15:30:30

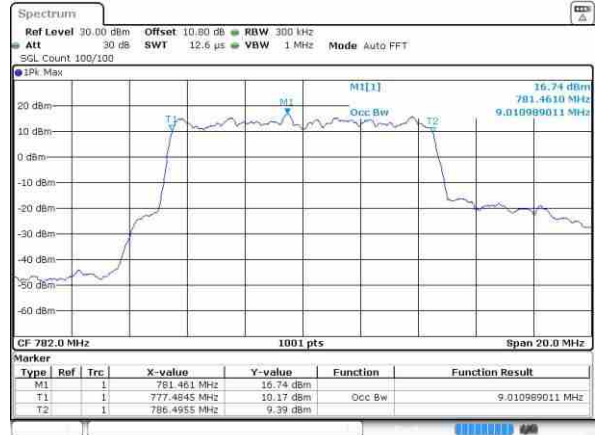


## LTE Band 13

## Middle Channel / 10MHz / QPSK



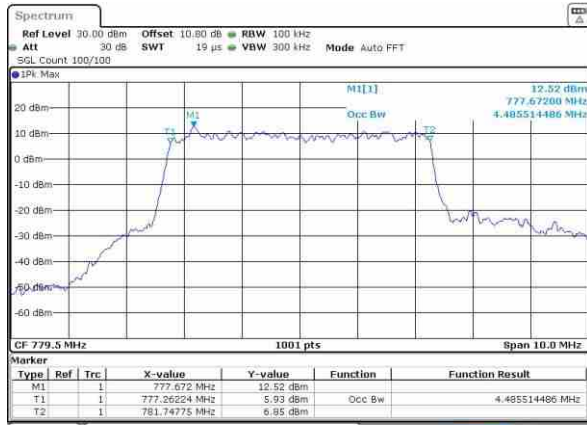
## Middle Channel / 10MHz / 16QAM



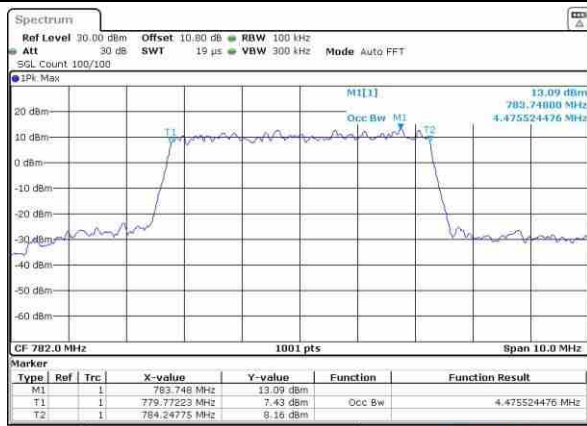


## LTE Band 13

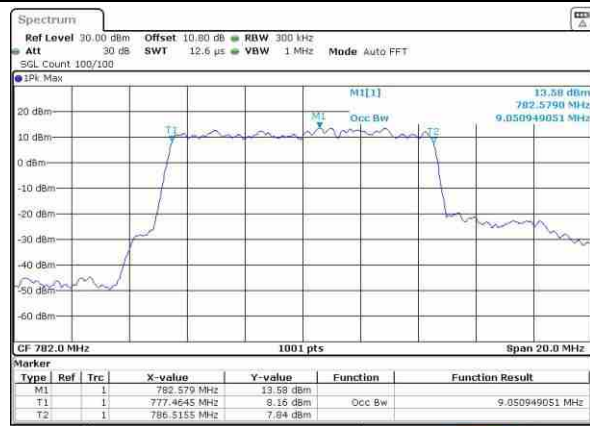
## Lowest Channel / 5MHz / 64QAM



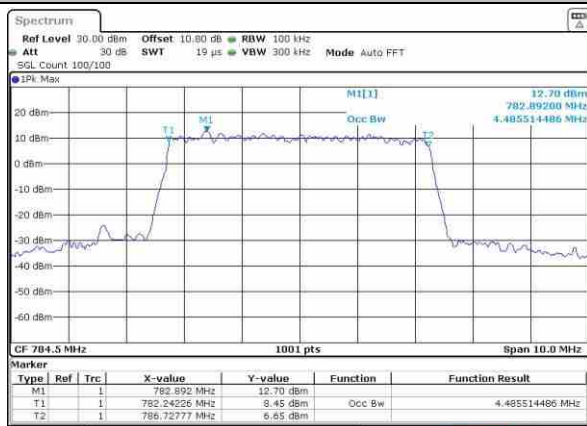
## Middle Channel / 5MHz / 64QAM



## Middle Channel / 10MHz / 64QAM



## Highest Channel / 5MHz / 64QAM



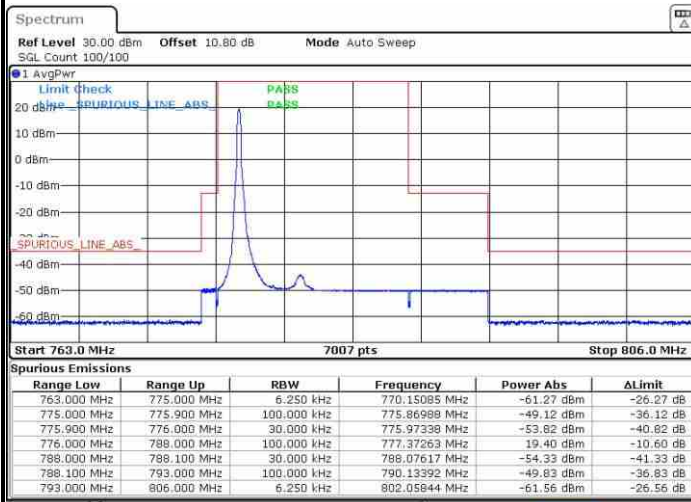


## **Conducted Band Edge**



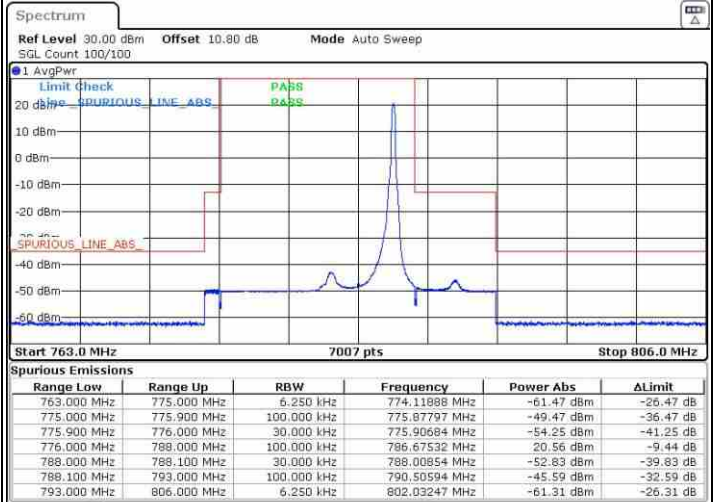
## LTE Band 13 / 5MHz / QPSK

## Lowest Band Edge / 1 RB



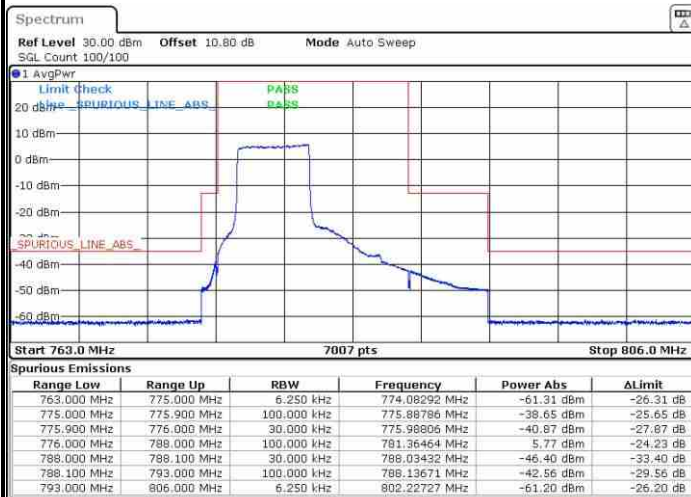
Date: 22 MAY 2019 16:24:27

## Highest Band Edge / 1 RB



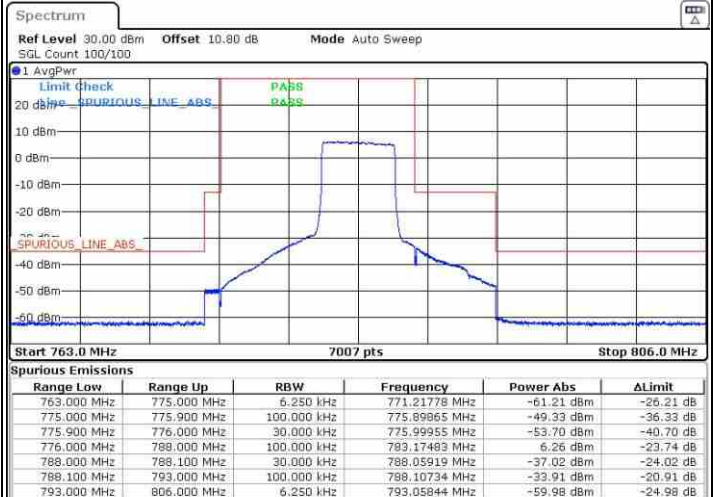
Date: 22 MAY 2019 16:31:12

## Lowest Band Edge / Full RB



Date: 22 MAY 2019 16:19:23

## Highest Band Edge / Full RB

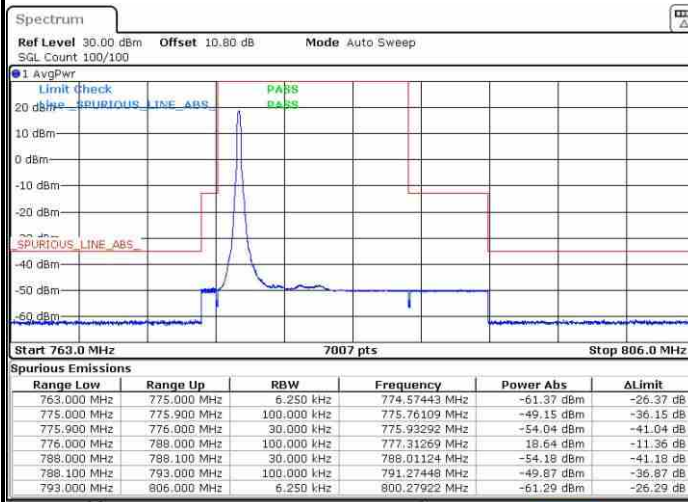


Date: 22 MAY 2019 16:26:09



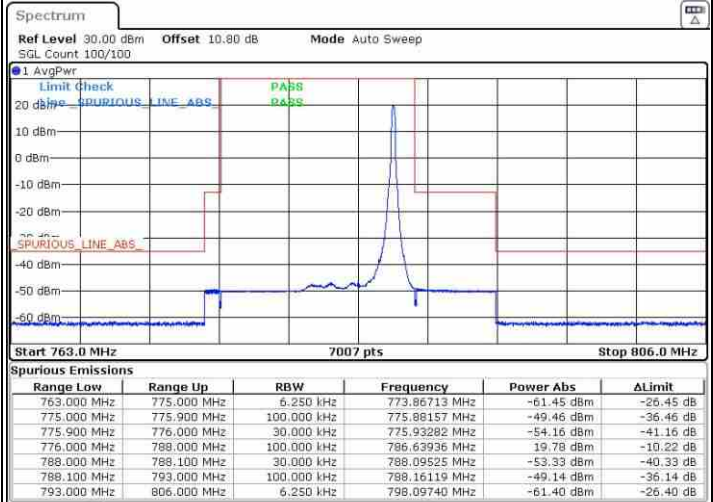
## LTE Band 13 / 5MHz / 16QAM

## Lowest Band Edge / 1 RB



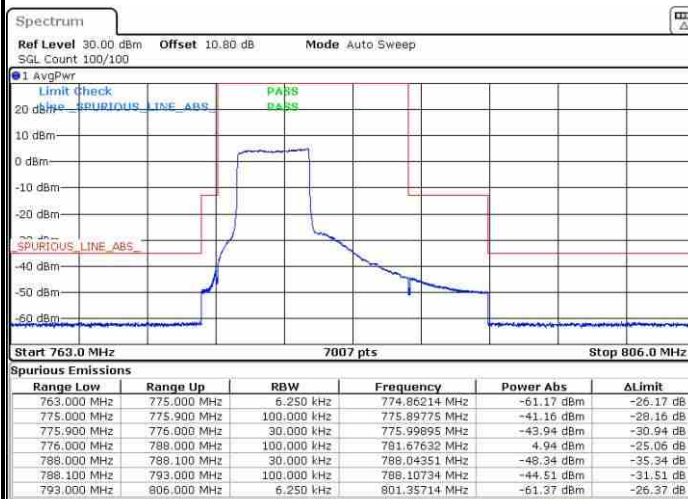
Date: 22 MAY 2019 16:22:46

## Highest Band Edge / 1 RB



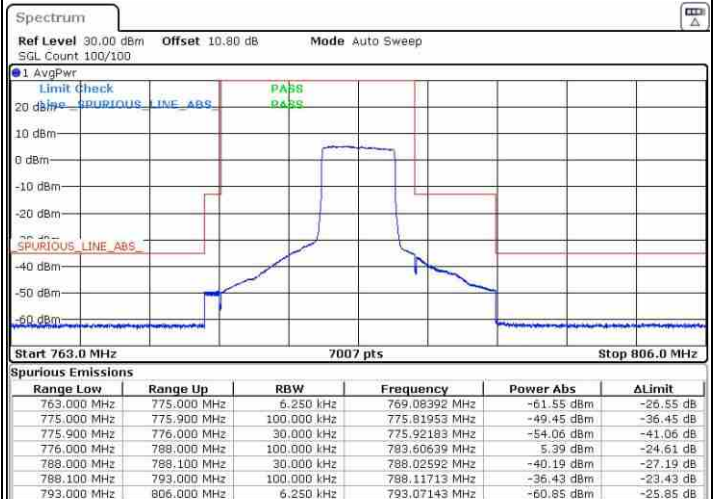
Date: 22 MAY 2019 16:29:31

## Lowest Band Edge / Full RB



Date: 22 MAY 2019 16:21:05

## Highest Band Edge / Full RB



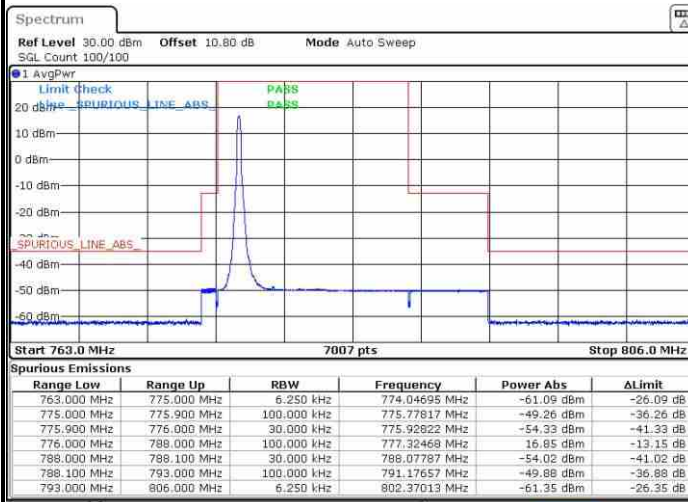
Date: 22 MAY 2019 16:27:50





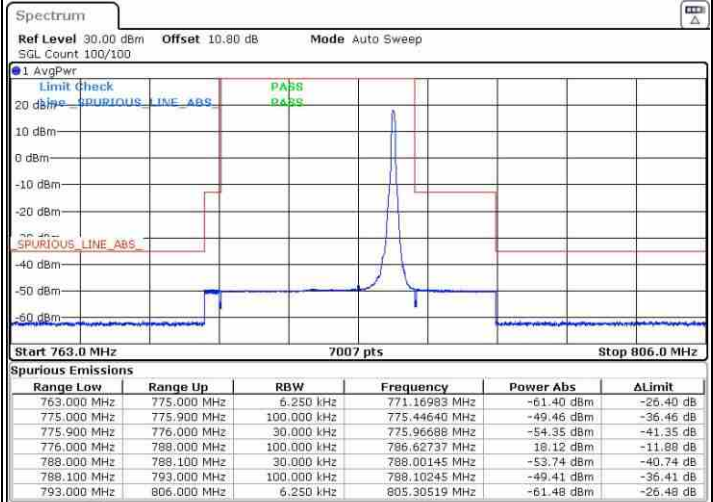
## LTE Band 13 / 5MHz / 64QAM

## Lowest Band Edge / 1 RB



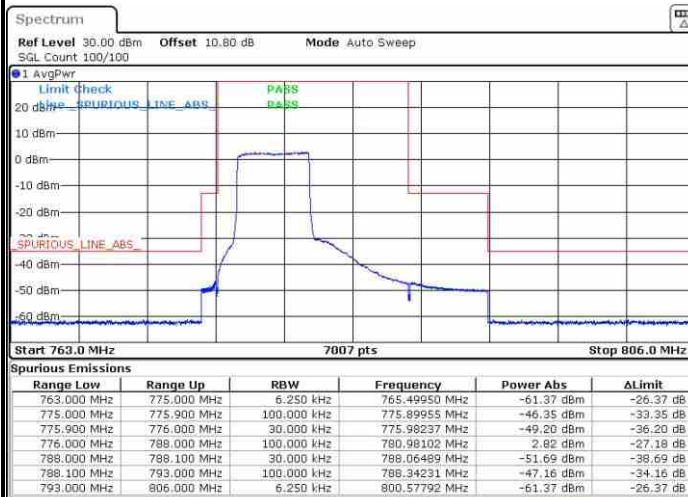
Date: 22 MAY 2019 16:34:35

## Highest Band Edge / 1 RB



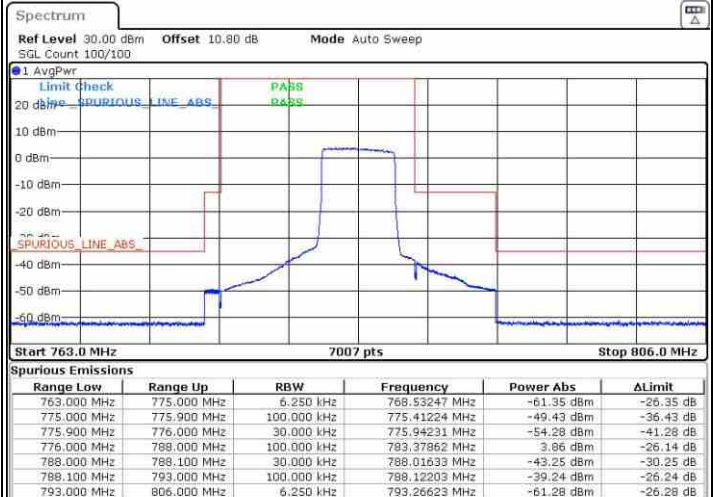
Date: 22 MAY 2019 16:37:58

## Lowest Band Edge / Full RB



Date: 22 MAY 2019 16:32:54

## Highest Band Edge / Full RB



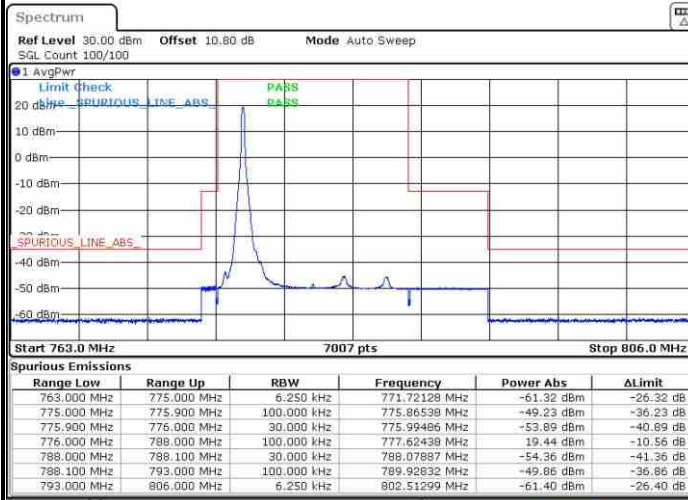
Date: 22 MAY 2019 16:36:17





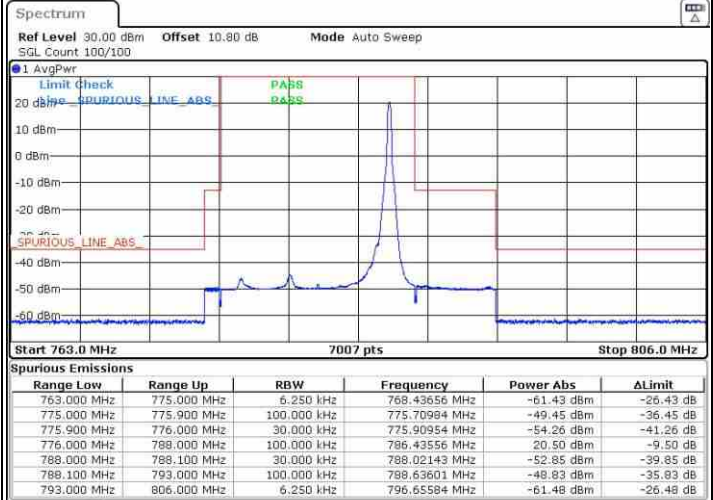
## LTE Band 13 / 10MHz / QPSK

## Lowest Band Edge / 1 RB



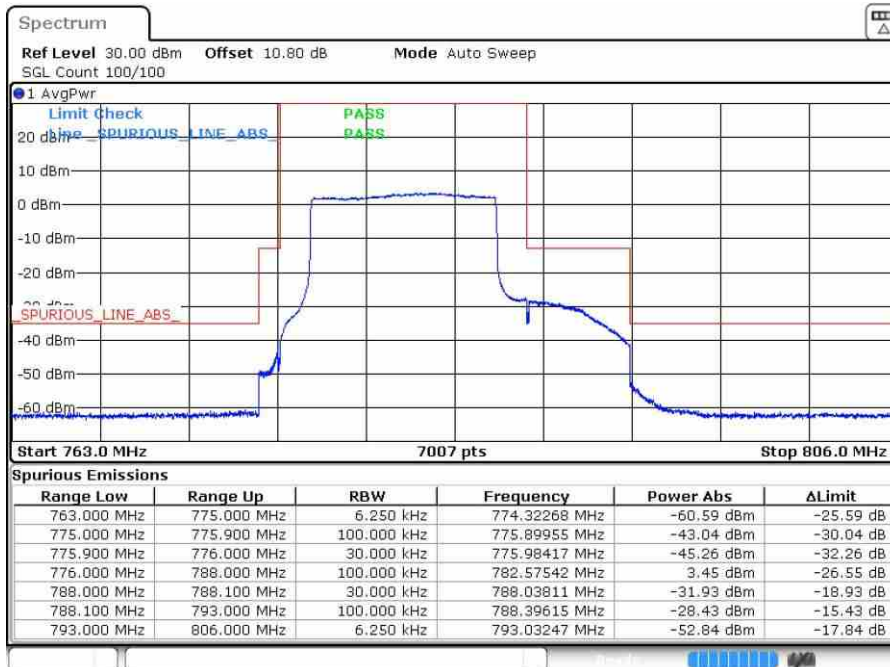
Date: 22 MAY 2019 16:49:43

## Highest Band Edge / 1 RB



Date: 22 MAY 2019 16:51:24

## Band Edge / Full RB

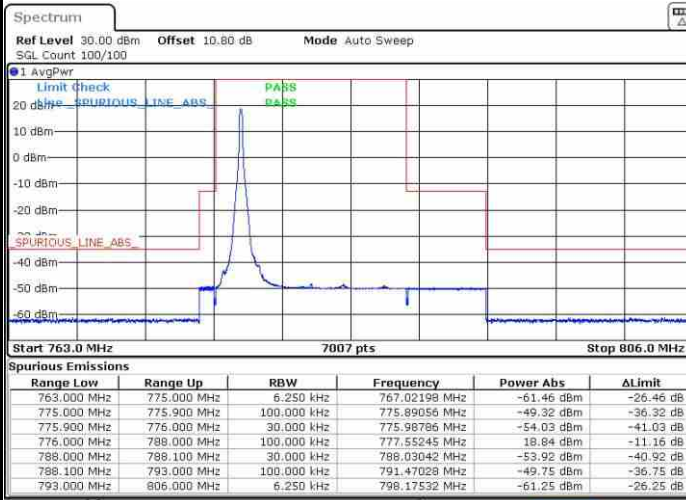


Date: 22 MAY 2019 16:44:41



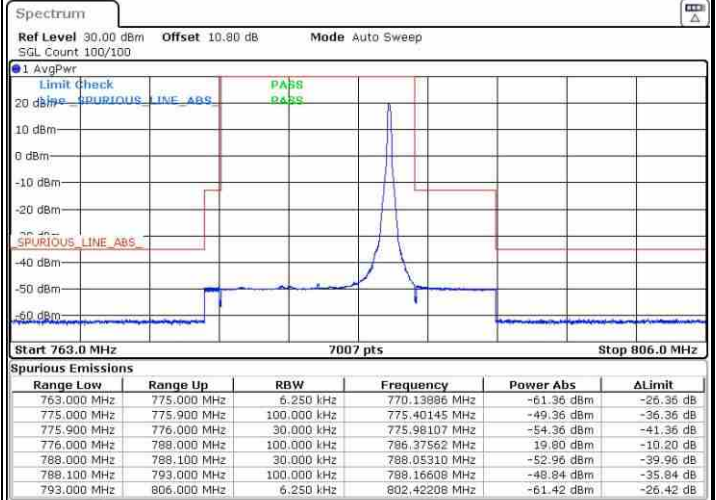
## LTE Band 13 / 10MHz / 16QAM

## Lowest Band Edge / 1 RB



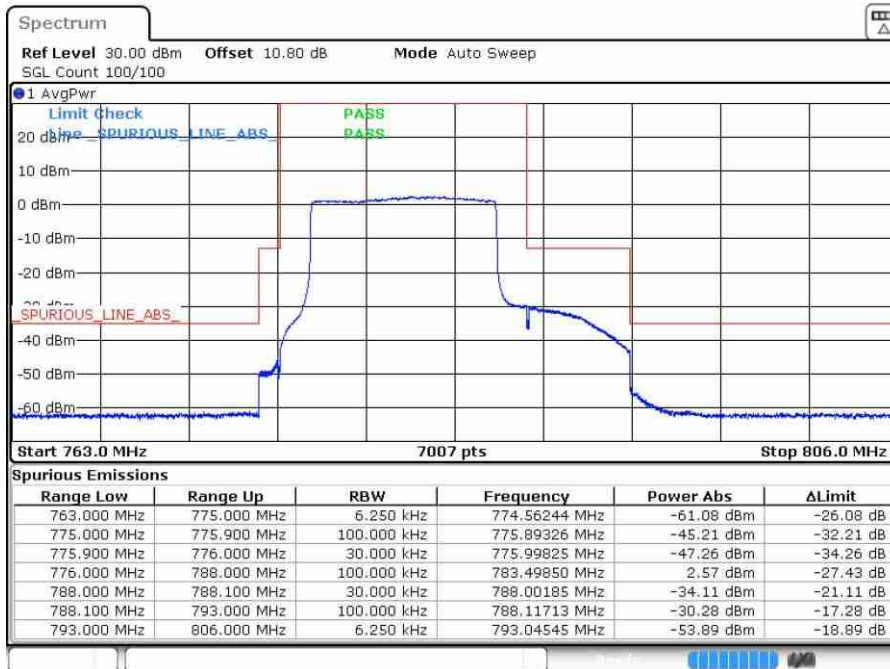
Date: 22 MAY 2019 16:48:03

## Highest Band Edge / 1 RB



Date: 22 MAY 2019 16:53:05

## Band Edge / Full RB

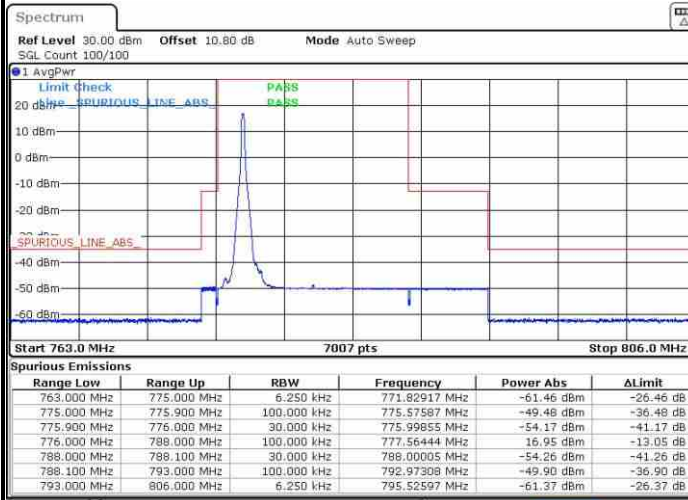


Date: 22 MAY 2019 16:46:22



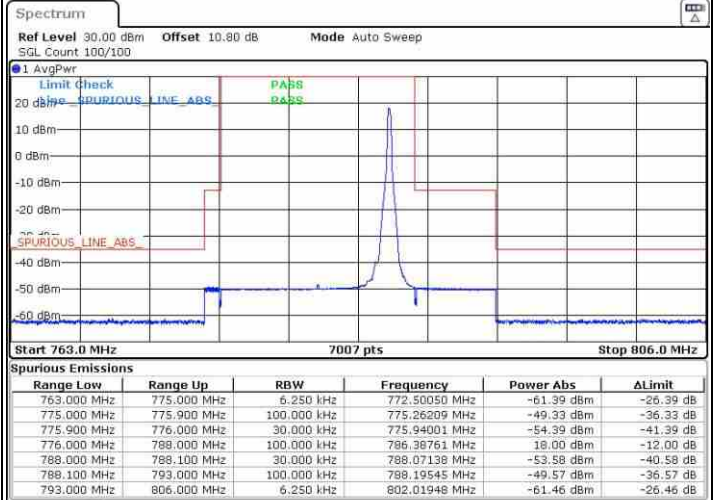
## LTE Band 13 / 10MHz / 64QAM

## Lowest Band Edge / 1 RB



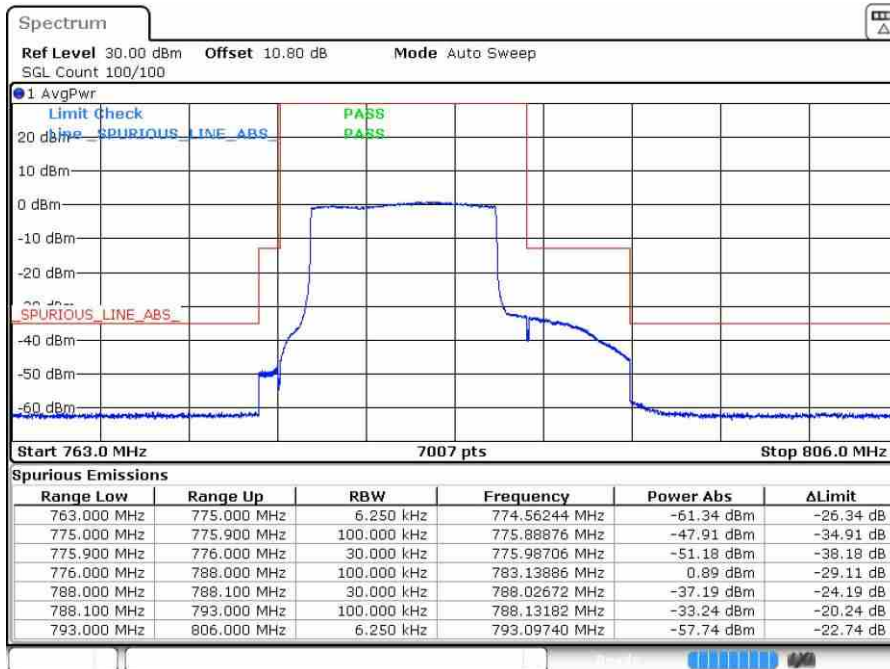
Date: 22 MAY 2019 16:41:20

## Highest Band Edge / 1 RB



Date: 22 MAY 2019 16:43:01

## Band Edge / Full RB

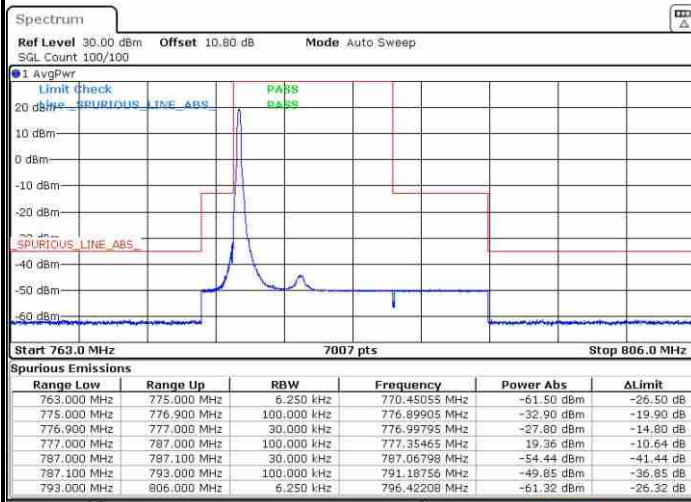


Date: 22 MAY 2019 16:39:39



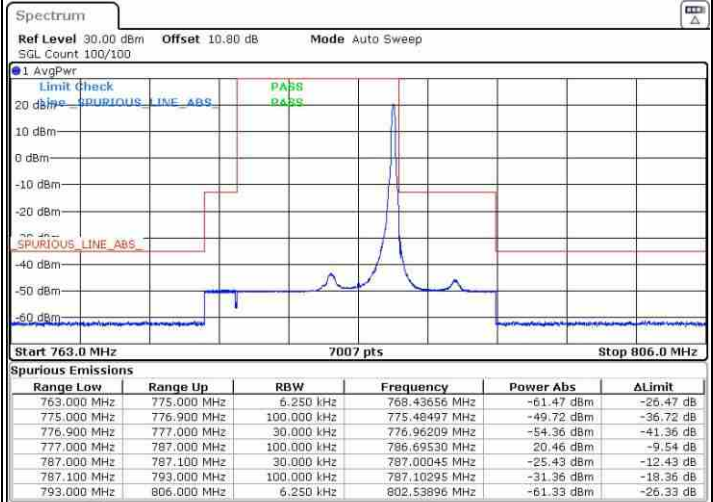
## IC LTE Band 13 / 5MHz / QPSK

## Lowest Band Edge / 1 RB



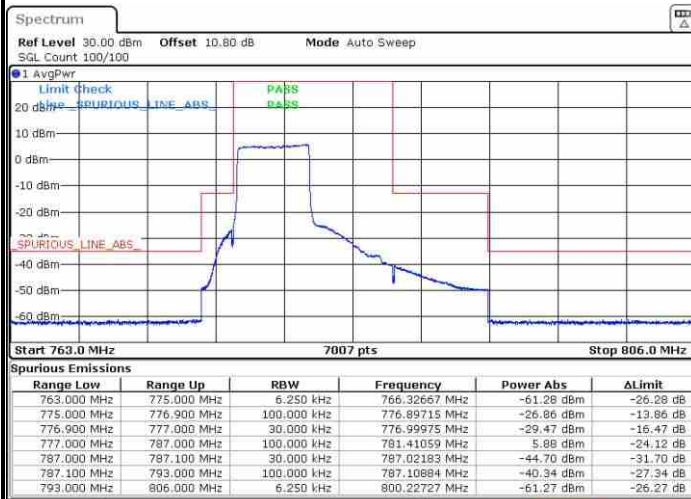
Date: 22 MAY 2019 15:26:35

## Highest Band Edge / 1 RB



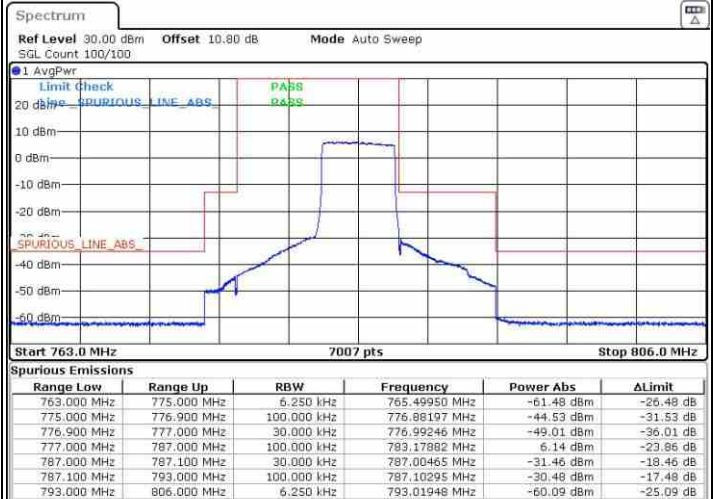
Date: 22 MAY 2019 15:37:39

## Lowest Band Edge / Full RB



Date: 22 MAY 2019 15:19:19

## Highest Band Edge / Full RB



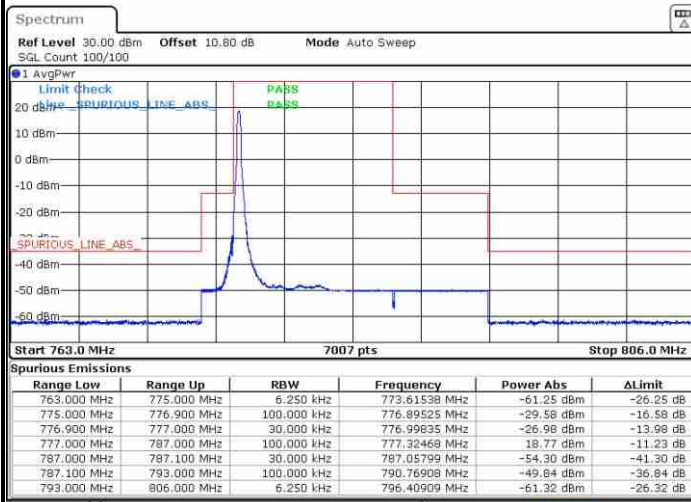
Date: 22 MAY 2019 15:32:35





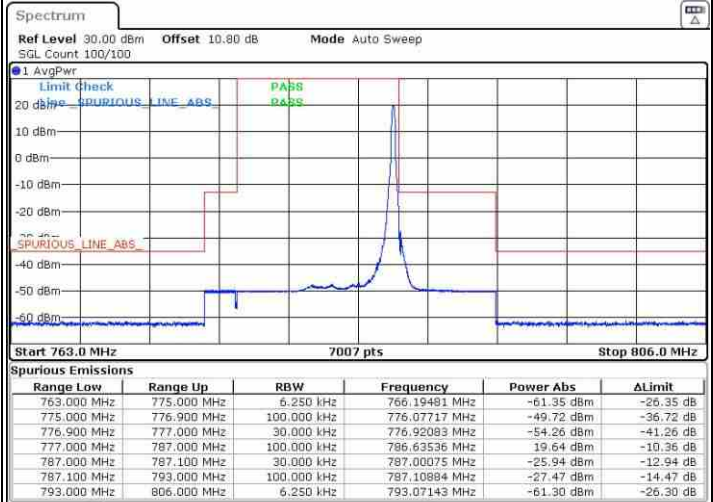
## IC LTE Band 13 / 5MHz / 16QAM

## Lowest Band Edge / 1 RB



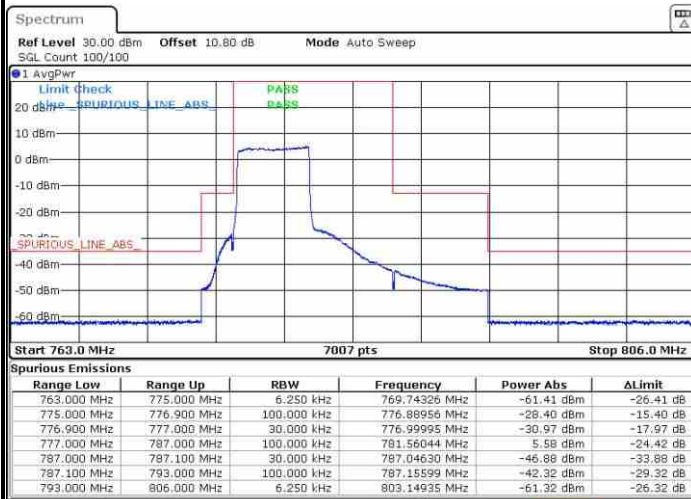
Date: 22 MAY 2019 15:24:54

## Highest Band Edge / 1 RB



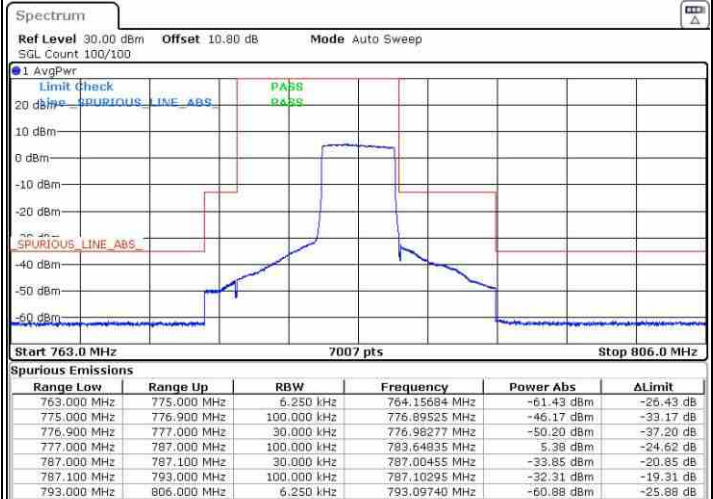
Date: 22 MAY 2019 15:35:57

## Lowest Band Edge / Full RB



Date: 22 MAY 2019 15:21:00

## Highest Band Edge / Full RB

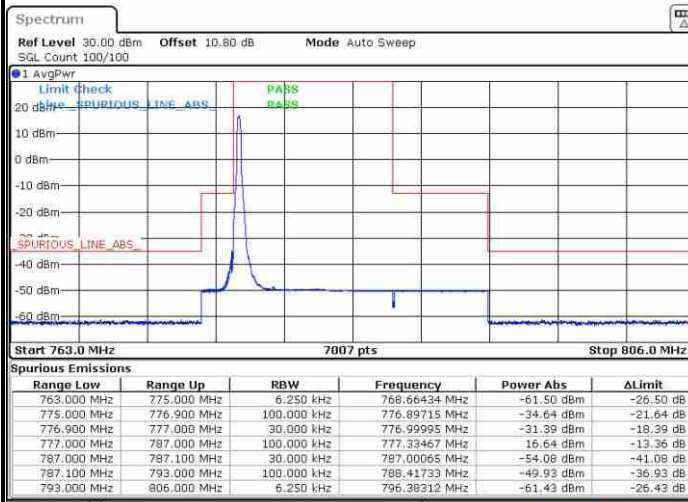


Date: 22 MAY 2019 15:34:16



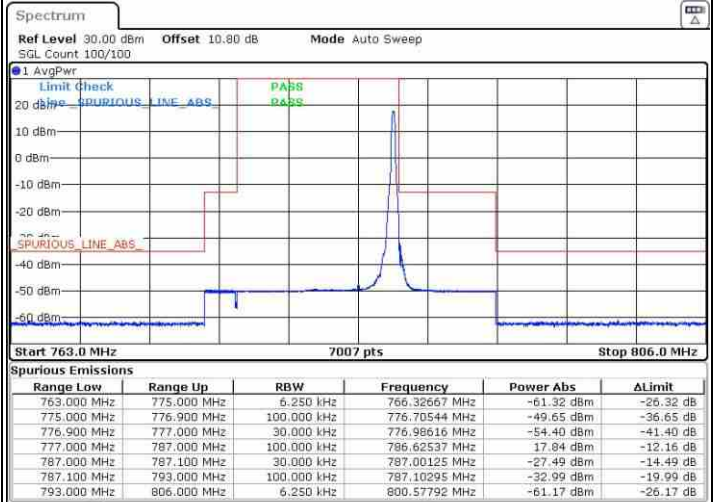
## IC LTE Band 13 / 5MHz / 64QAM

## Lowest Band Edge / 1 RB



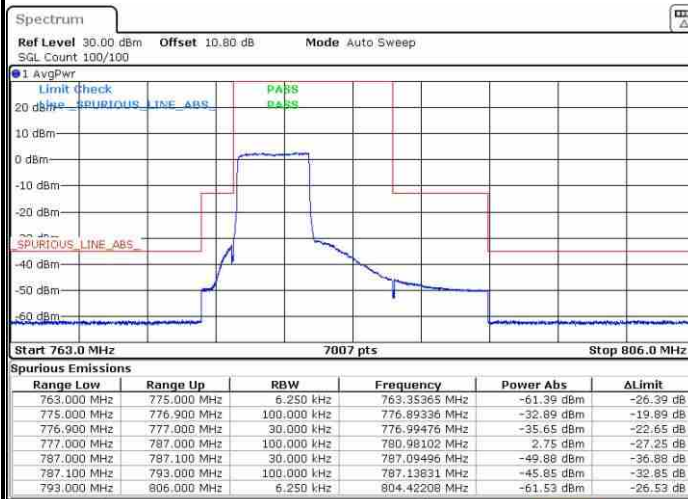
Date: 22 MAY 2019 15:42:48

## Highest Band Edge / 1 RB



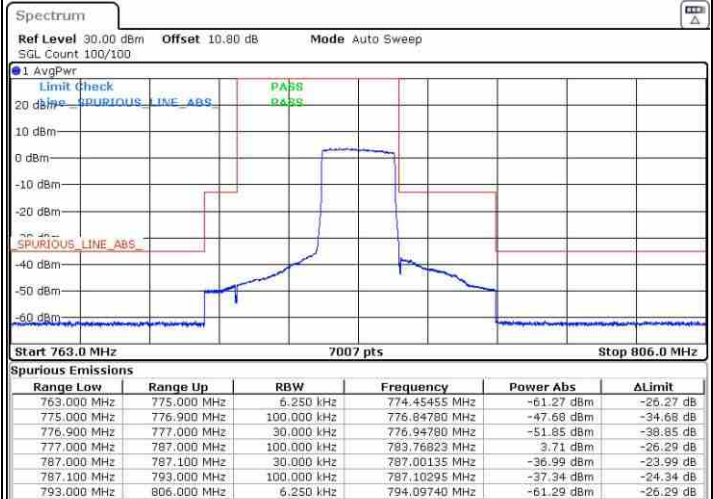
Date: 22 MAY 2019 15:48:20

## Lowest Band Edge / Full RB



Date: 22 MAY 2019 15:41:07

## Highest Band Edge / Full RB

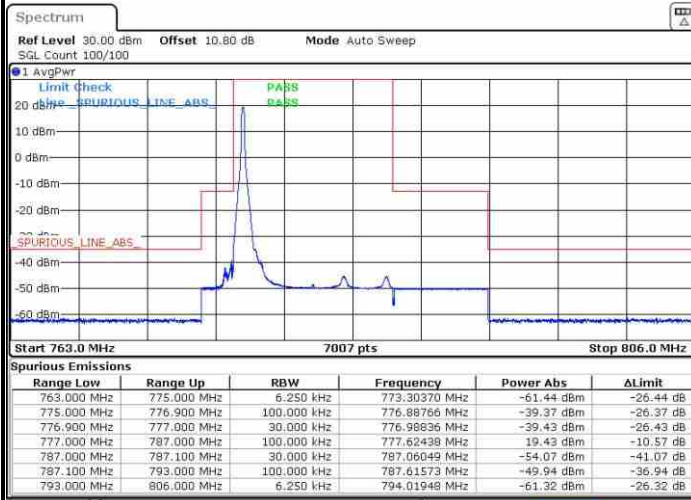


Date: 22 MAY 2019 15:46:38



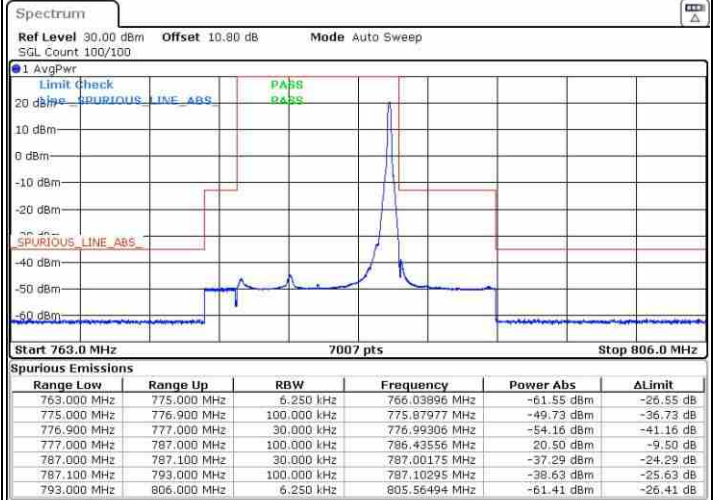
## IC LTE Band 13 / 10MHz / QPSK

## Lowest Band Edge / 1 RB



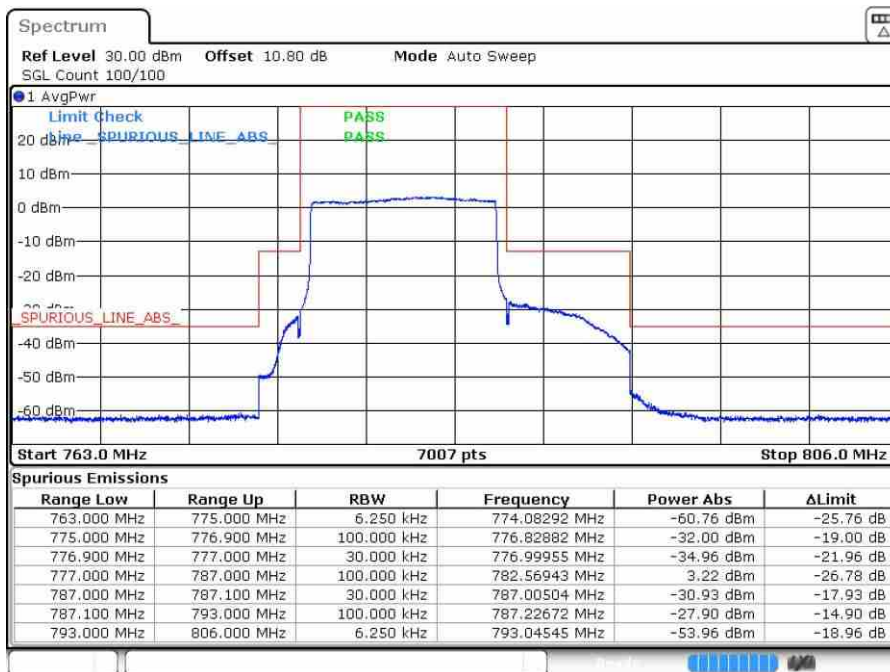
Date: 22 MAY 2019 15:56:31

## Highest Band Edge / 1 RB



Date: 22 MAY 2019 15:58:12

## Band Edge / Full RB



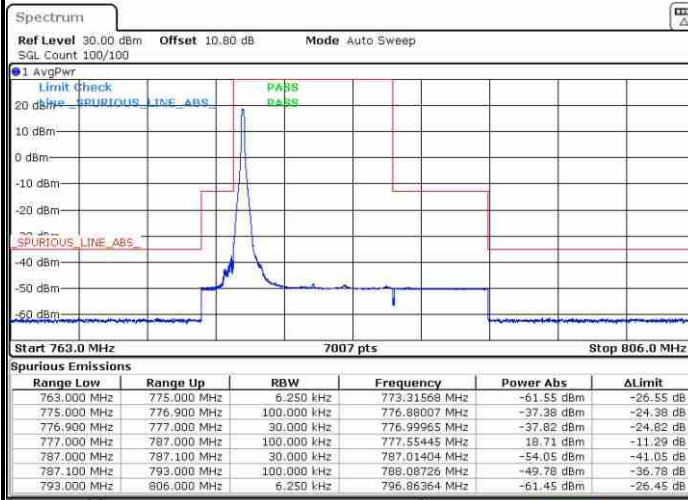
Date: 22 MAY 2019 15:51:28





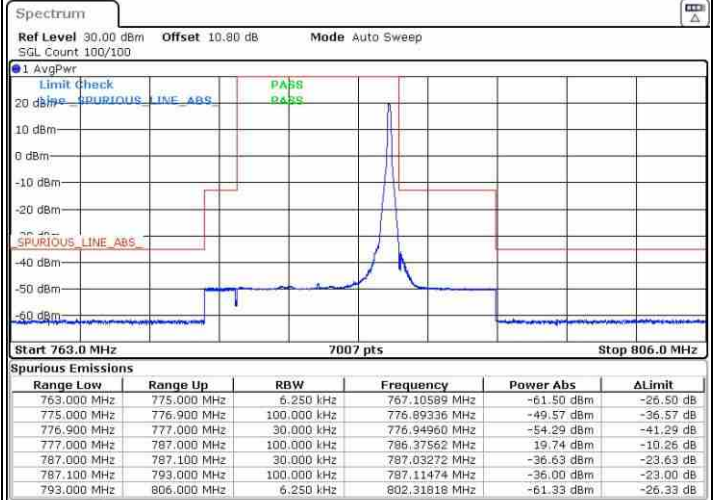
## IC LTE Band 13 / 10MHz / 16QAM

## Lowest Band Edge / 1 RB



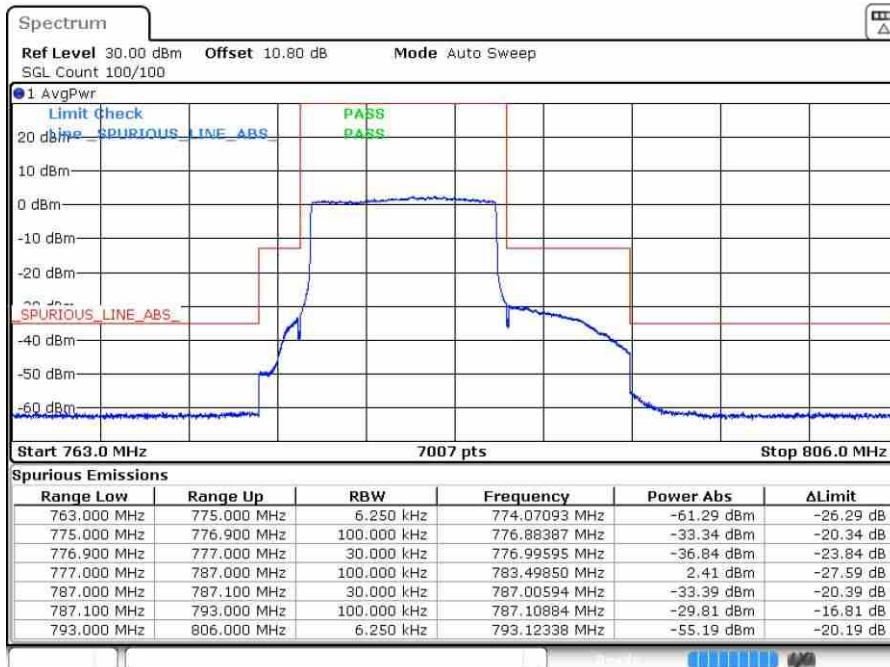
Date: 22 MAY 2019 15:54:50

## Highest Band Edge / 1 RB



Date: 22 MAY 2019 15:59:52

## Band Edge / Full RB

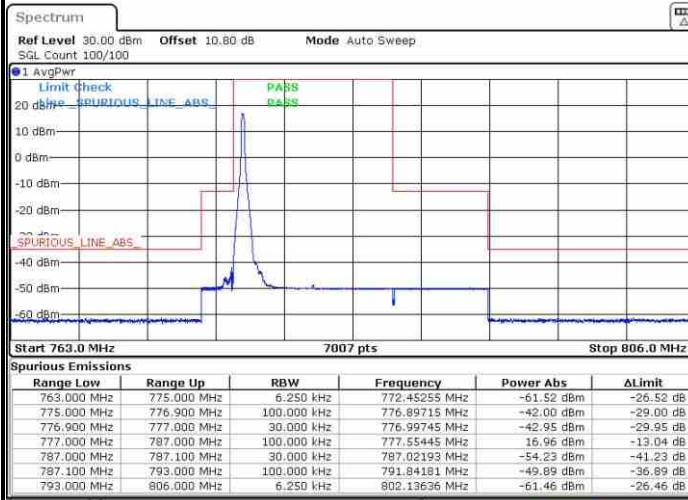


Date: 22 MAY 2019 15:53:10



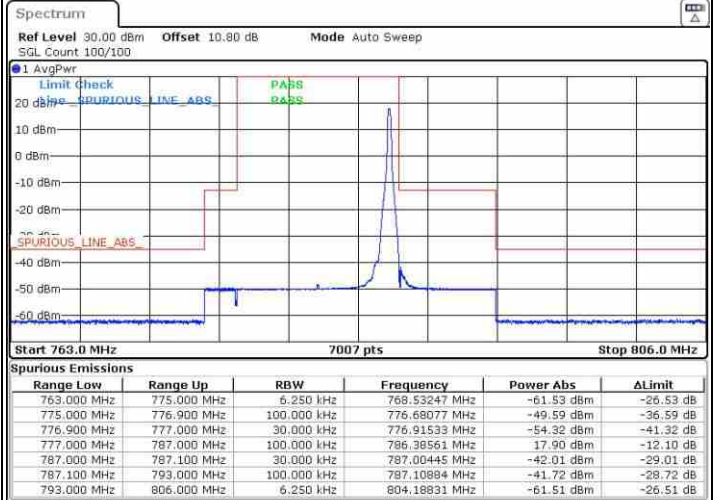
## IC LTE Band 13 / 10MHz / 64QAM

## Lowest Band Edge / 1 RB



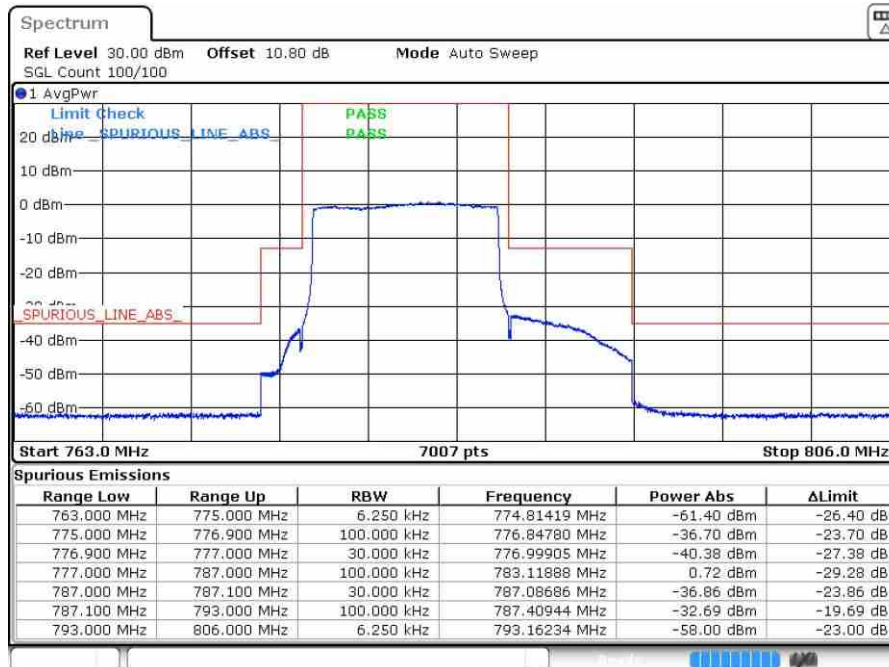
Date: 22 MAY 2019 16:04:58

## Highest Band Edge / 1 RB



Date: 22 MAY 2019 16:06:38

## Band Edge / Full RB



Date: 22 MAY 2019 16:03:17

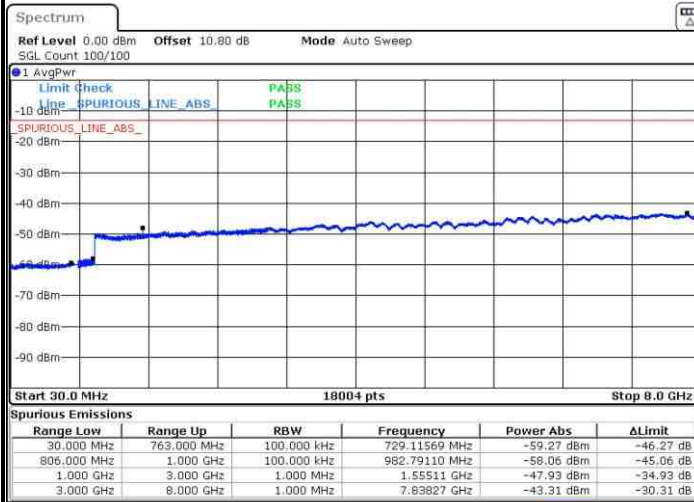


## **Conducted Spurious Emission**



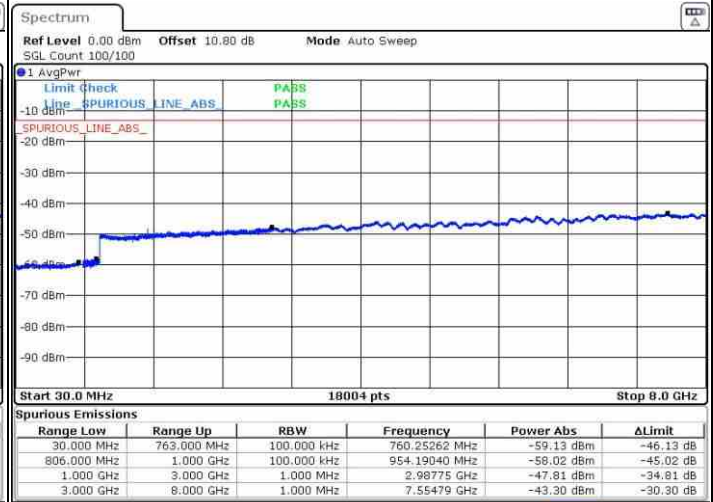
## LTE Band 13 / 5MHz

## Lowest Channel / QPSK



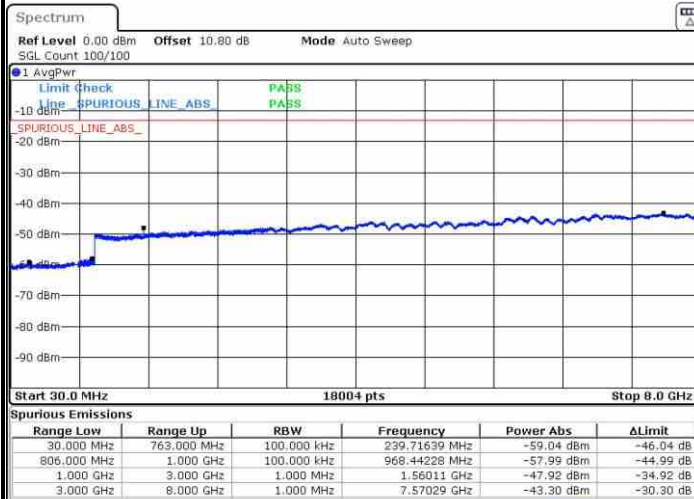
Date: 22 MAY 2019 15:27:17

## Lowest Channel / 16QAM



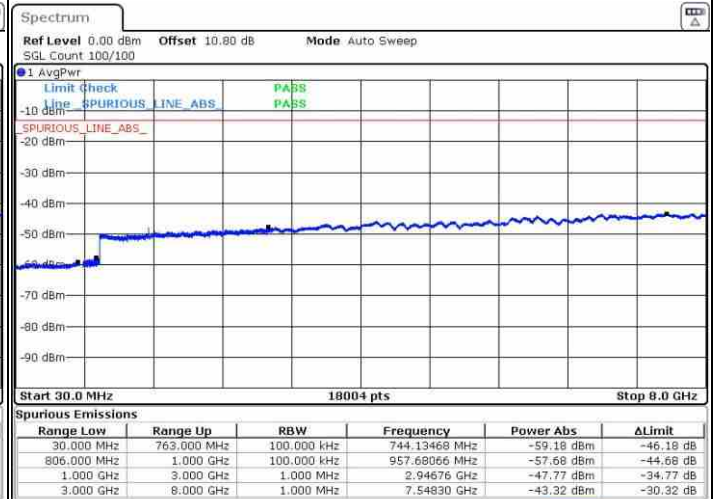
Date: 22 MAY 2019 15:27:58

## Middle Channel / QPSK



Date: 22 MAY 2019 15:28:19

## Middle Channel / 16QAM

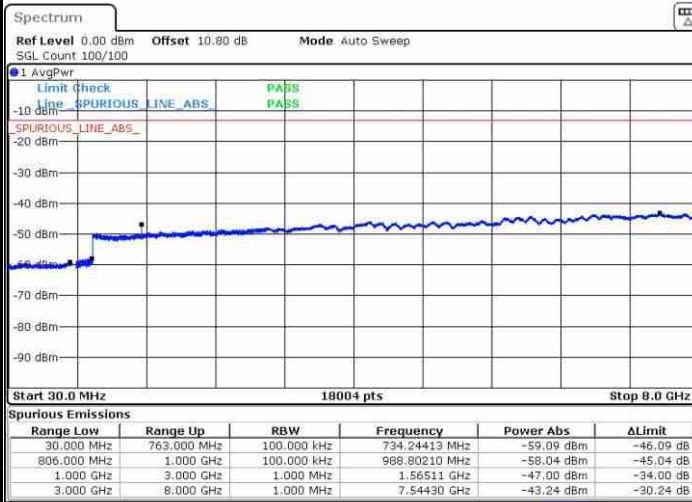


Date: 22 MAY 2019 15:28:38



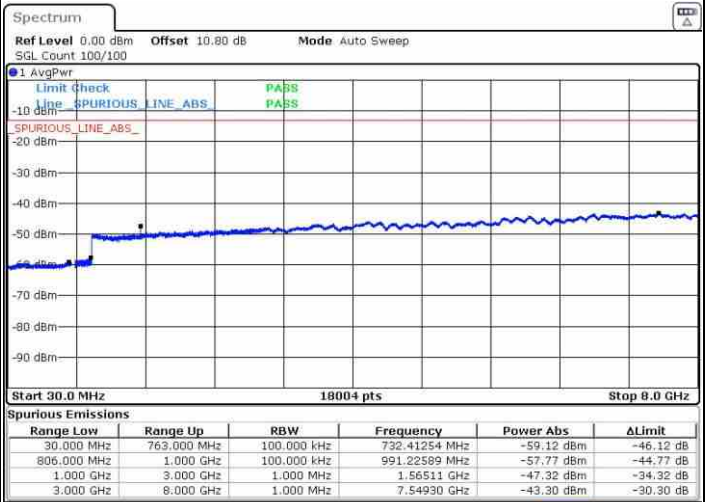
## LTE Band 13 / 5MHz

## Highest Channel / QPSK



Date: 22 MAY 2019 15:38:21

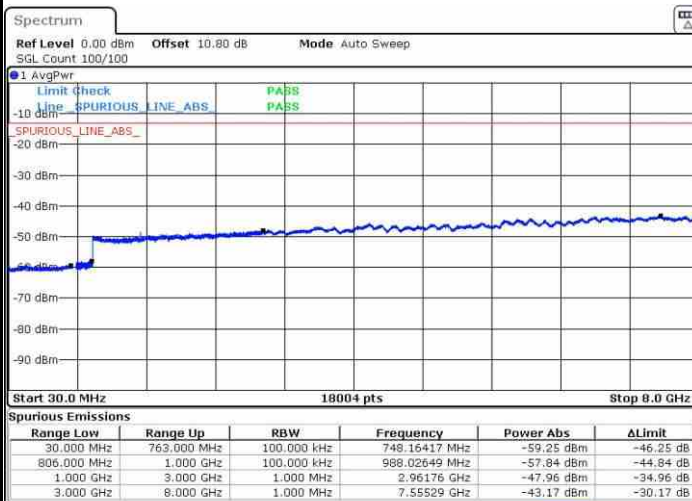
## Highest Channel / 16QAM



Date: 22 MAY 2019 15:39:01

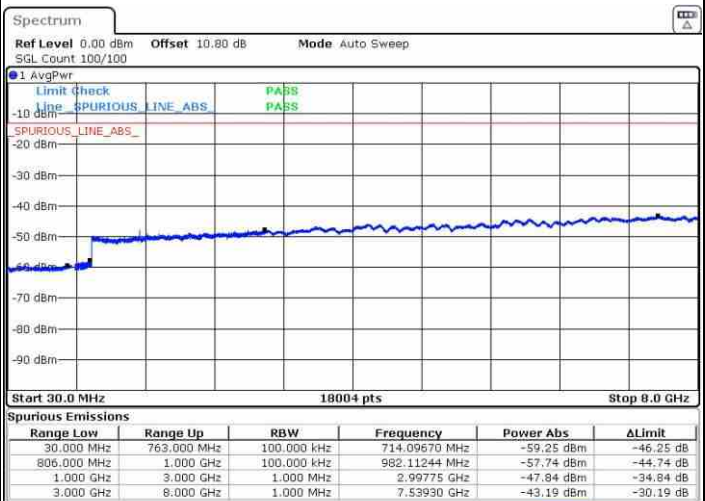
## LTE Band 13 / 10MHz

## Middle Channel / QPSK



Date: 22 MAY 2019 16:01:14

## Middle Channel / 16QAM

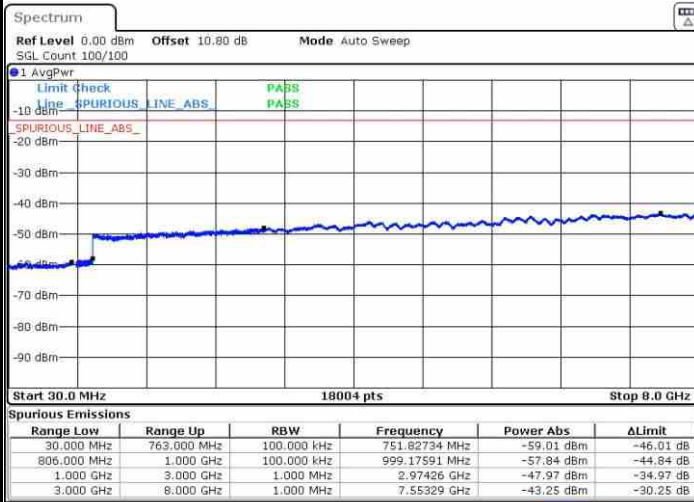


Date: 22 MAY 2019 16:00:33



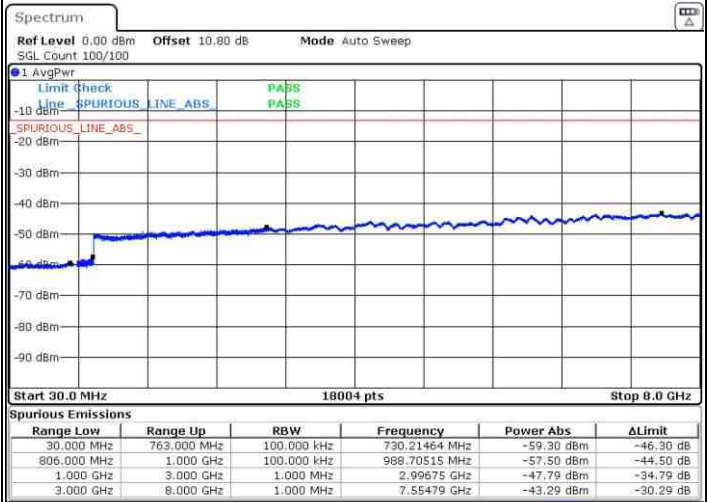
## LTE Band 13 / 5MHz

## Lowest Channel / 64QAM



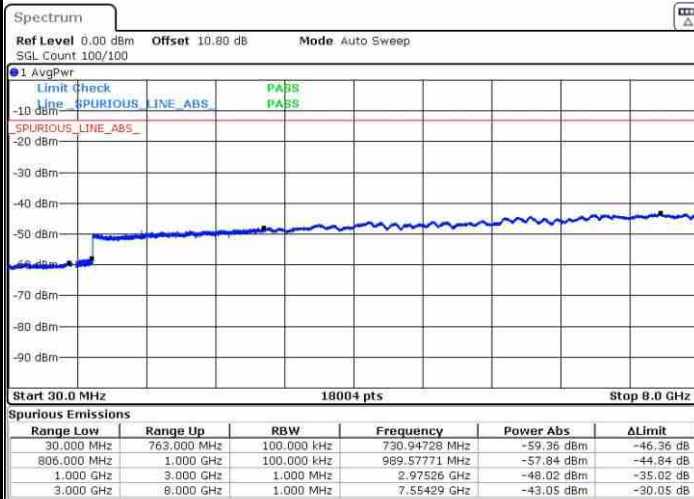
Date: 22 MAY 2019 15:43:30

## Middle Channel / 64QAM



Date: 22 MAY 2019 15:44:10

## Highest Channel / 64QAM



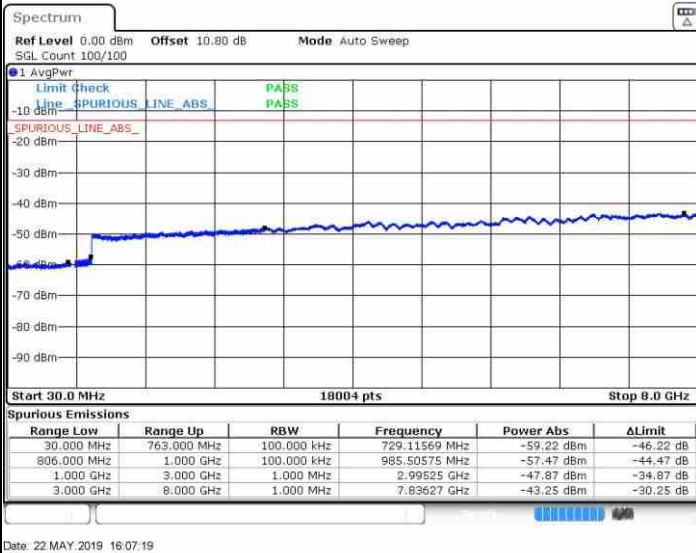
Date: 22 MAY 2019 15:48:01





## LTE Band 13 / 10MHz

## Middle Channel / 64QAM



## Frequency Stability

| Test Conditions  |                   | LTE Band 13 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                            | Note 2. |
|                  |                   | Deviation (ppm)                     | Result  |
| 50               | Normal Voltage    | 0.0035                              | PASS    |
| 40               | Normal Voltage    | 0.0064                              |         |
| 30               | Normal Voltage    | 0.0077                              |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                              |         |
| 10               | Normal Voltage    | 0.0098                              |         |
| 0                | Normal Voltage    | 0.0075                              |         |
| -10              | Normal Voltage    | 0.0068                              |         |
| -20              | Normal Voltage    | 0.0072                              |         |
| -30              | Normal Voltage    | 0.0017                              |         |
| 20               | Maximum Voltage   | 0.0077                              |         |
| 20               | Normal Voltage    | 0.0000                              |         |
| 20               | Battery End Point | 0.0077                              |         |

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

| Test Conditions  |                   | LTE Band 13 (QPSK) / Middle Channel  | Limit       |
|------------------|-------------------|--------------------------------------|-------------|
| Temperature (°C) | Voltage (Volt)    | BW 5MHz                              | Within Band |
|                  |                   | Frequency Offset ( $\Delta f$ ) (Hz) | Result      |
| 50               | Normal Voltage    | -2.7                                 | PASS        |
| 40               | Normal Voltage    | 5                                    |             |
| 30               | Normal Voltage    | 6                                    |             |
| 20(Ref.)         | Normal Voltage    | 0                                    |             |
| 10               | Normal Voltage    | 7.7                                  |             |
| 0                | Normal Voltage    | 0                                    |             |
| -10              | Normal Voltage    | 5.3                                  |             |
| -20              | Normal Voltage    | 5.6                                  |             |
| -30              | Normal Voltage    | 1.3                                  |             |
| 20               | Maximum Voltage   | 6                                    |             |
| 20               | Normal Voltage    | 0                                    |             |
| 20               | Battery End Point | 6                                    |             |

$|\text{MAX}(\Delta f)| = 7.7\text{Hz}$

| Frequency Stability            | Frequency (MHz) | Limit Line             | Result |
|--------------------------------|-----------------|------------------------|--------|
| $f_L -  \text{MAX}(\Delta f) $ | 777.145992      | $\geq 777 \text{ MHz}$ | PASS   |
| $f_H +  \text{MAX}(\Delta f) $ | 786.859008      | $\leq 787 \text{ MHz}$ |        |



## LTE Band 17

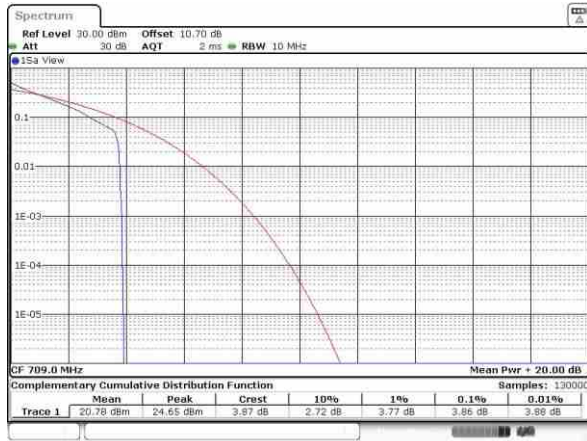
**Peak-to-Average Ratio**

| Mode       | LTE Band 17 / 10MHz |         |       |         |             |
|------------|---------------------|---------|-------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 3.86                | 5.19    | 4.35  | 6.14    | PASS        |
| Middle CH  | 3.83                | 5.19    | 4.49  | 6.03    |             |
| Highest CH | 3.88                | 5.04    | 4.23  | 6.03    |             |
| Mode       | LTE Band 17 / 10MHz |         |       |         |             |
| Mod.       | 64QAM               |         |       |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB |       |         | Result      |
| Lowest CH  | 5.54                | 6.72    | -     | -       | PASS        |
| Middle CH  | 5.36                | 6.61    | -     | -       |             |
| Highest CH | 5.59                | 6.58    | -     | -       |             |

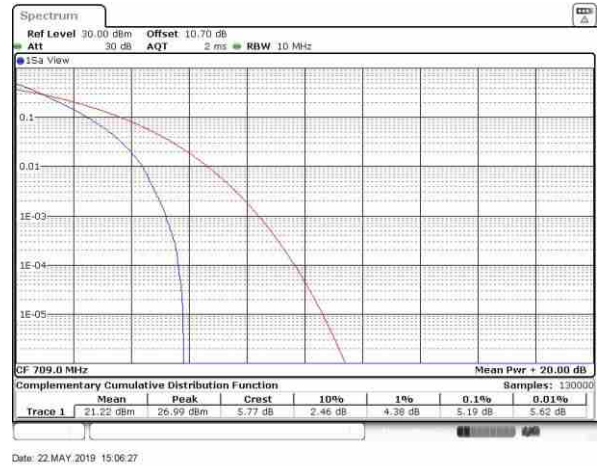


## LTE Band 17 / 10MHz / QPSK

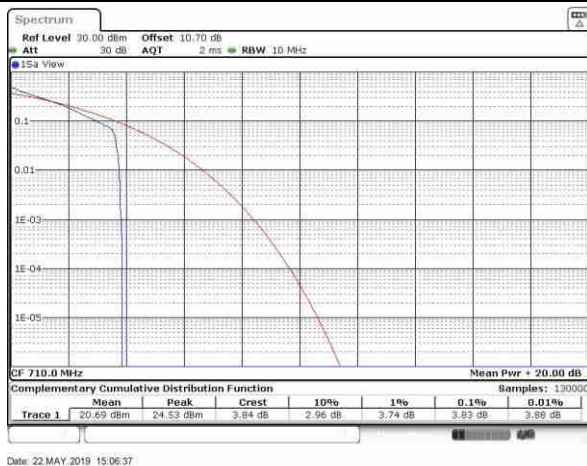
## Lowest Channel / 1RB



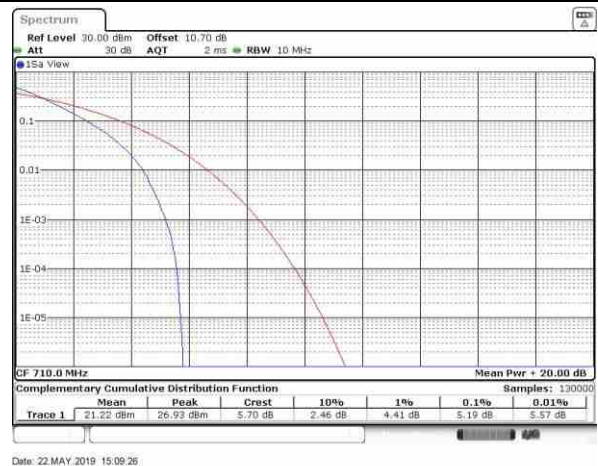
## Lowest Channel / Full RB



## Middle Channel / 1RB



## Middle Channel / Full RB



## Highest Channel / 1RB

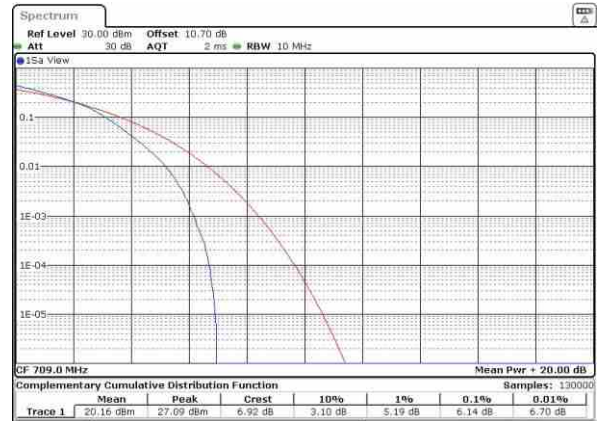


## Highest Channel / Full RB



**LTE Band 17 / 10MHz / 16QAM**
**Lowest Channel / 1RB**

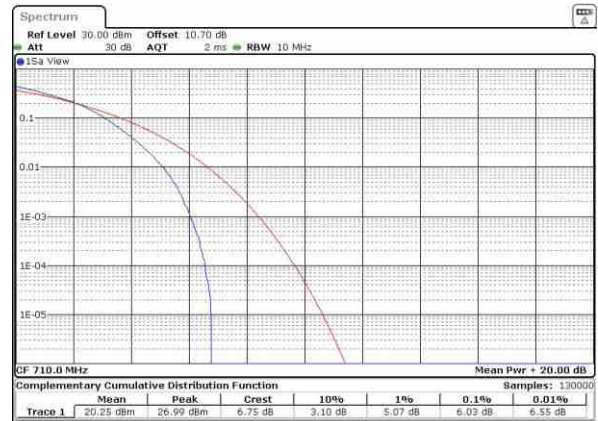

Date: 22 MAY 2019 15:05:07

**Lowest Channel / Full RB**


Date: 22 MAY 2019 15:05:18

**Middle Channel / 1RB**


Date: 22 MAY 2019 15:05:32

**Middle Channel / Full RB**


Date: 22 MAY 2019 15:05:42

**Highest Channel / 1RB**


Date: 22 MAY 2019 15:05:53

**Highest Channel / Full RB**

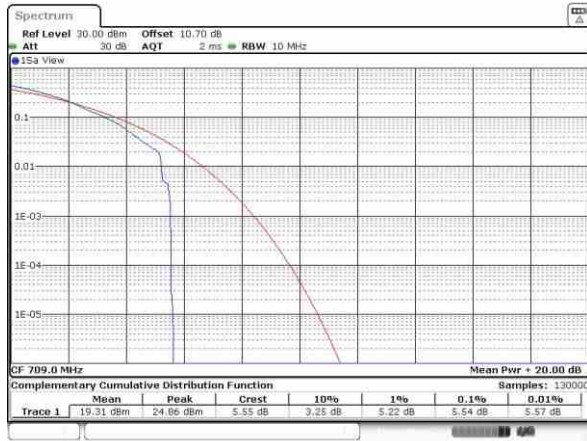

Date: 22 MAY 2019 15:06:04



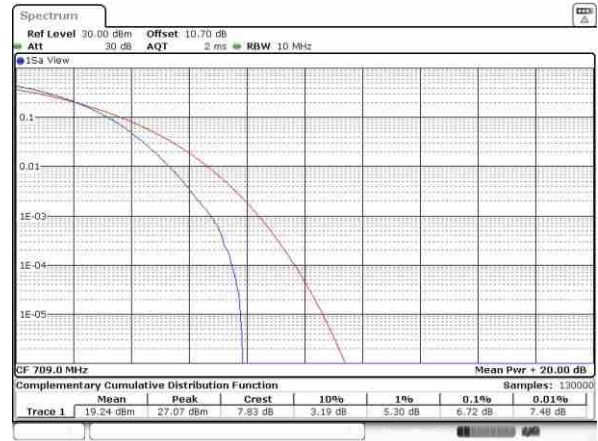


## LTE Band 17 / 10MHz / 64QAM

## Lowest Channel / 1RB



## Lowest Channel / Full RB



## Middle Channel / 1RB



## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB



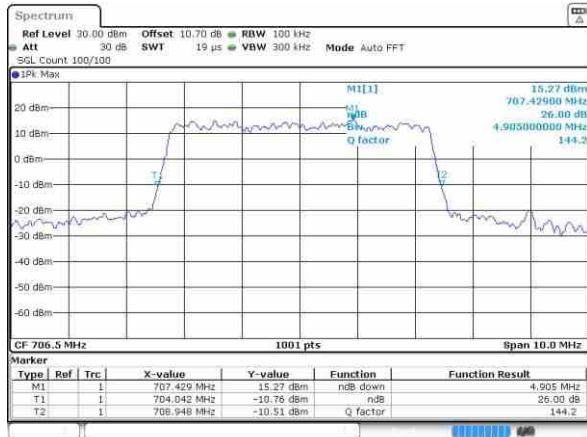
**26dB Bandwidth**

| Mode       | LTE Band 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  | -                          | -     | -     | -     | 4.91  | 5.00  | 9.75  | 9.71  | -     | -     | -     | -     |
| Middle CH  | -                          | -     | -     | -     | 4.92  | 4.91  | 9.83  | 9.81  | -     | -     | -     | -     |
| Highest CH | -                          | -     | -     | -     | 4.97  | 4.84  | 9.89  | 9.73  | -     | -     | -     | -     |
| Mode       | LTE Band 17 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                     |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                      |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | -                          | -     | -     | -     | 4.92  | -     | 9.95  | -     | -     | -     | -     | -     |
| Middle CH  | -                          | -     | -     | -     | 4.84  | -     | 9.83  | -     | -     | -     | -     | -     |
| Highest CH | -                          | -     | -     | -     | 4.87  | -     | 9.81  | -     | -     | -     | -     | -     |

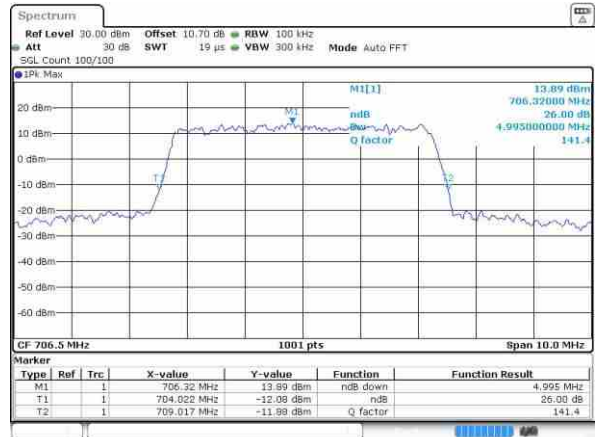


## LTE Band 17

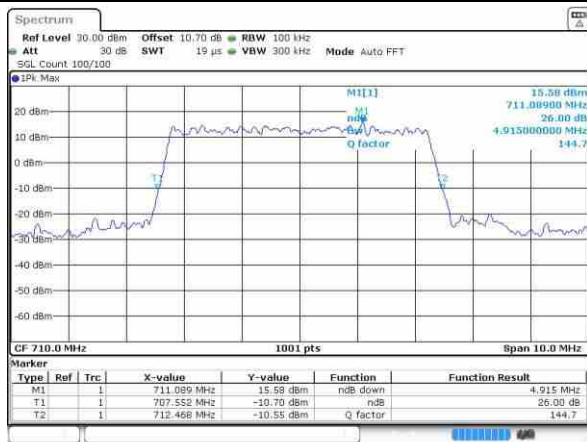
## Lowest Channel / 5MHz / QPSK



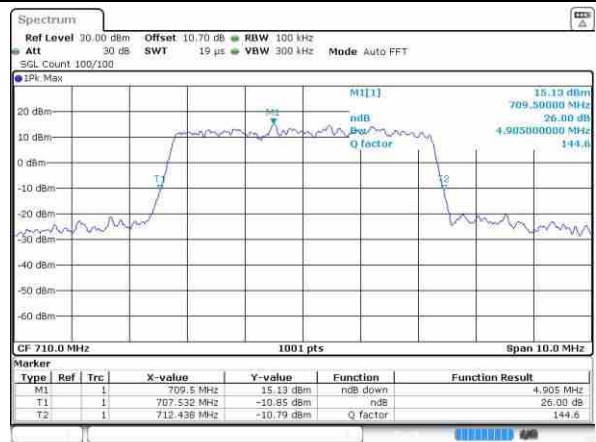
## Lowest Channel / 5MHz / 16QAM



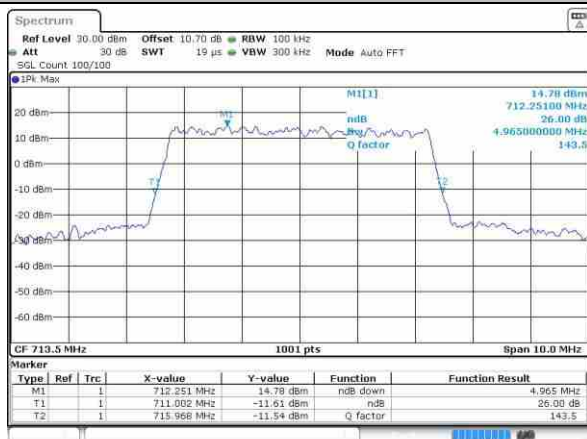
## Middle Channel / 5MHz / QPSK



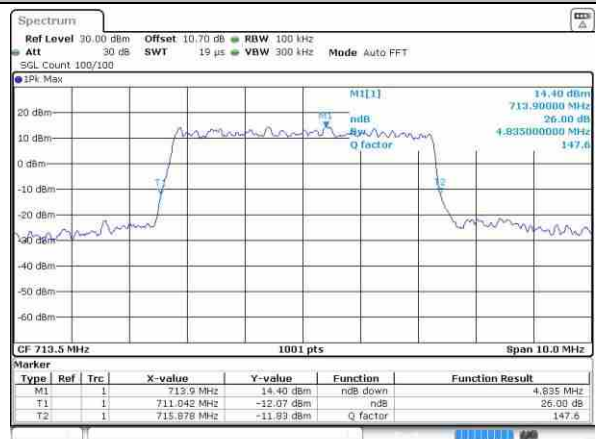
## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



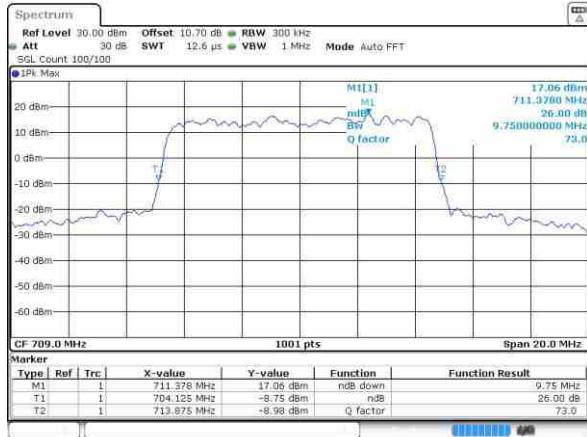
## Highest Channel / 5MHz / 16QAM





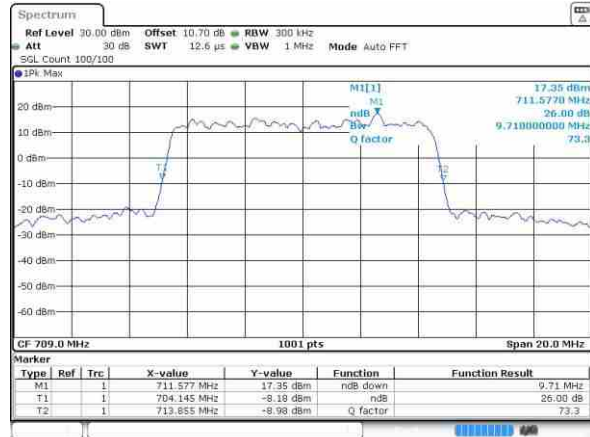
## LTE Band 17

## Lowest Channel / 10MHz / QPSK



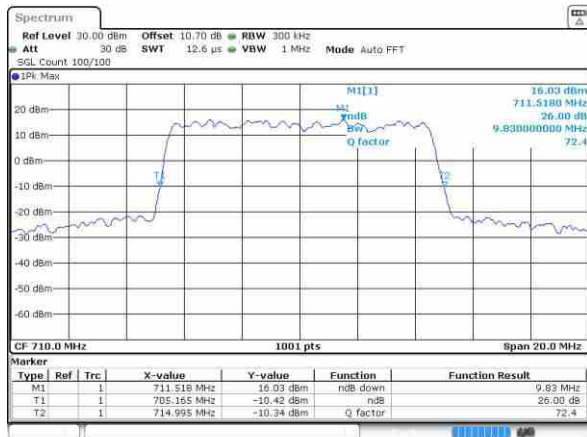
Date: 22 MAY 2019 14:33:34

## Lowest Channel / 10MHz / 16QAM



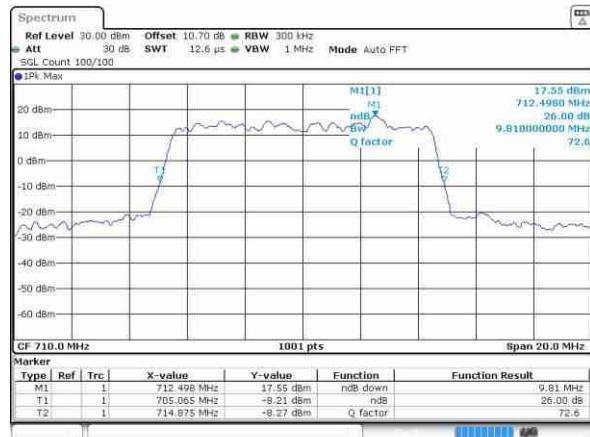
Date: 22 MAY 2019 14:33:46

## Middle Channel / 10MHz / QPSK



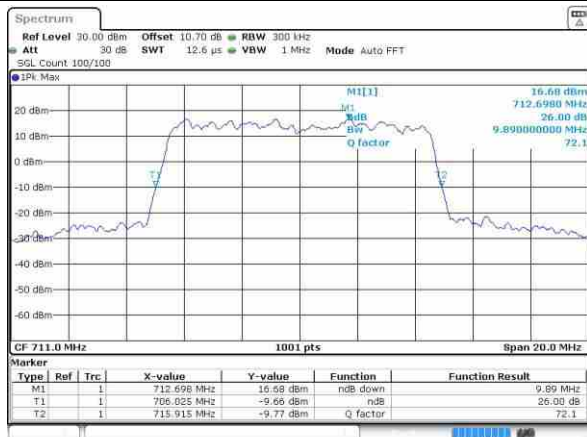
Date: 22 MAY 2019 14:39:49

## Middle Channel / 10MHz / 16QAM



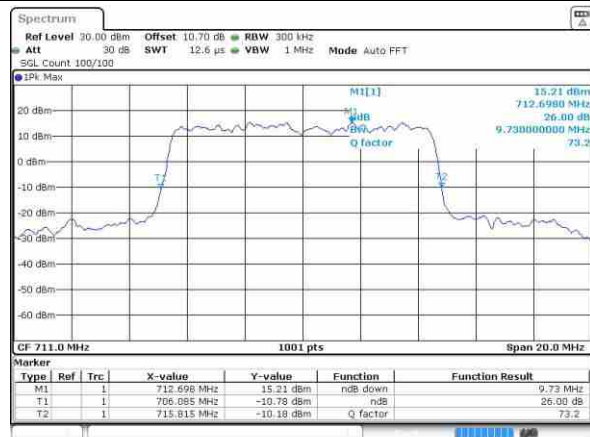
Date: 22 MAY 2019 14:40:00

## Highest Channel / 10MHz / QPSK



Date: 22 MAY 2019 14:41:58

## Highest Channel / 10MHz / 16QAM

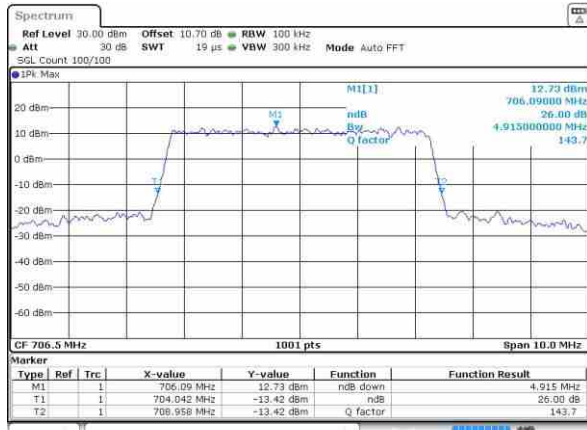


Date: 22 MAY 2019 14:42:10

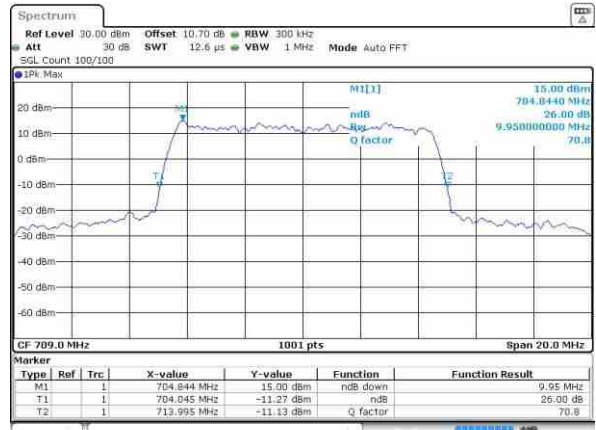


## LTE Band 17

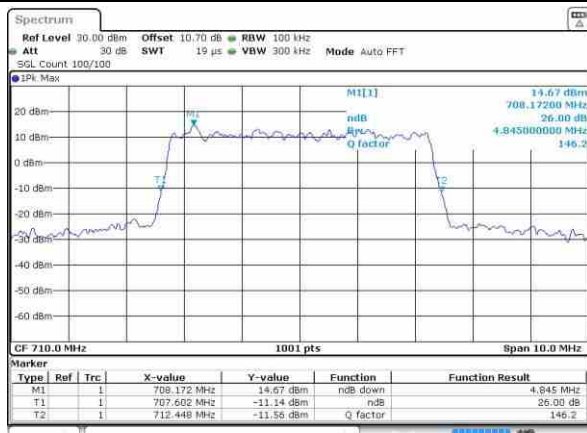
## Lowest Channel / 5MHz / 64QAM



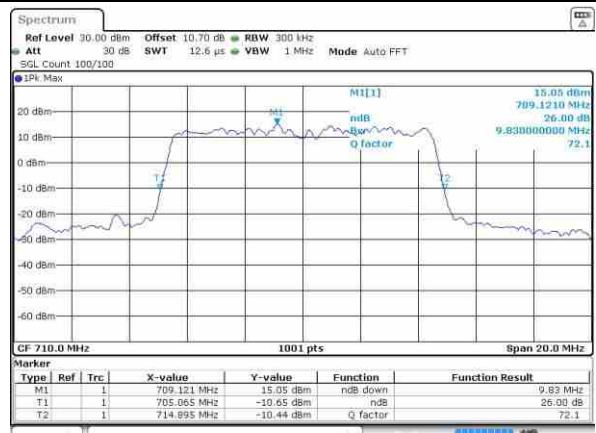
## Lowest Channel / 10MHz / 64QAM



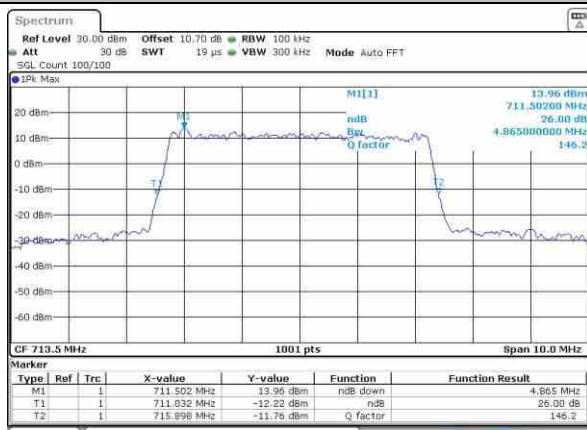
## Middle Channel / 5MHz / 64QAM



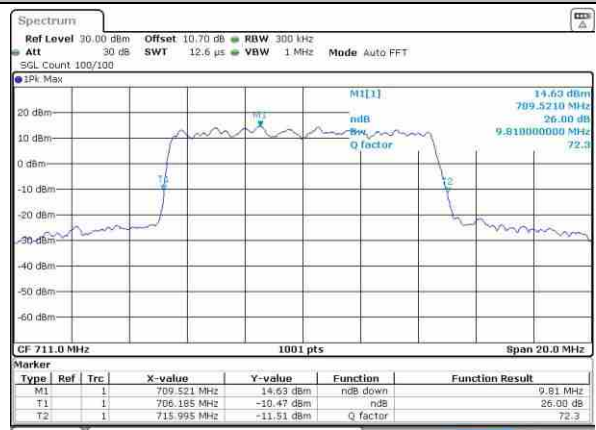
## Middle Channel / 10MHz / 64QAM



## Highest Channel / 5MHz / 64QAM



## Highest Channel / 10MHz / 64QAM



**Occupied Bandwidth**

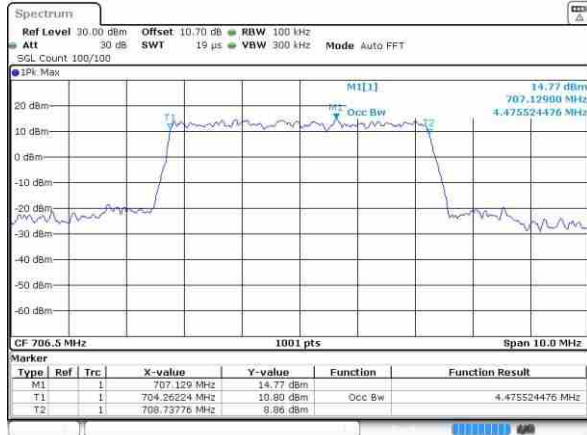
| Mode       | LTE Band 17 : 99%OBW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
|------------|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | QPSK                      | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | -                         | -     | -     | -     | 4.48  | 4.50  | 9.05  | 8.99  | -     | -     | -     | -     |
| Middle CH  | -                         | -     | -     | -     | 4.47  | 4.50  | 9.01  | 8.97  | -     | -     | -     | -     |
| Highest CH | -                         | -     | -     | -     | 4.48  | 4.50  | 8.97  | 8.99  | -     | -     | -     | -     |
| Mode       | LTE Band 17 : 99%OBW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                     |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | -                         | -     | -     | -     | 4.50  | -     | 9.01  | -     | -     | -     | -     | -     |
| Middle CH  | -                         | -     | -     | -     | 4.48  | -     | 9.03  | -     | -     | -     | -     | -     |
| Highest CH | -                         | -     | -     | -     | 4.53  | -     | 9.01  | -     | -     | -     | -     | -     |



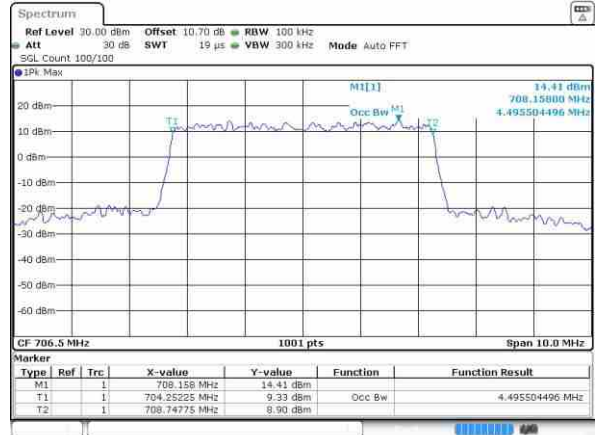


## LTE Band 17

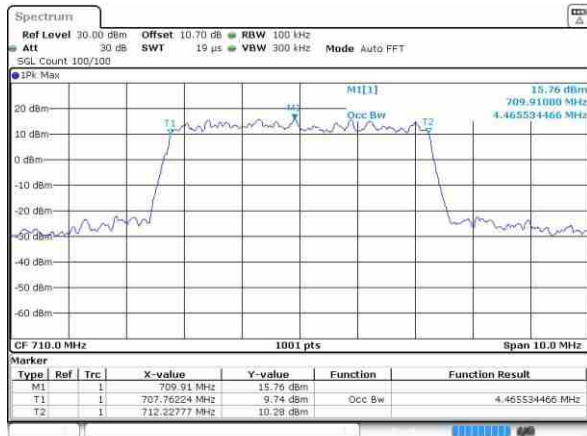
## Lowest Channel / 5MHz / QPSK



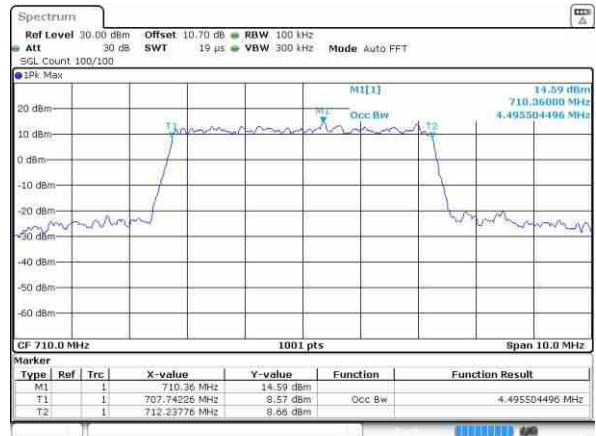
## Lowest Channel / 5MHz / 16QAM



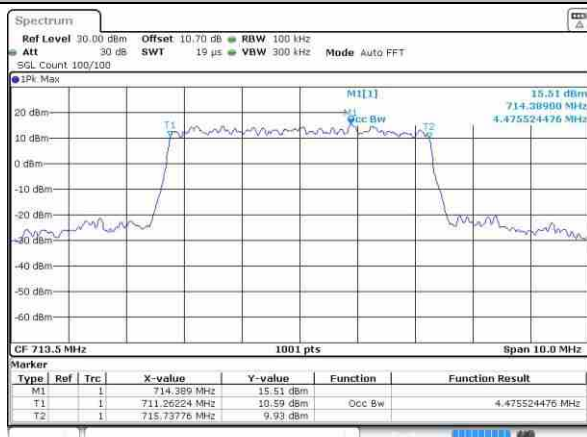
## Middle Channel / 5MHz / QPSK



## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



## Highest Channel / 5MHz / 16QAM

