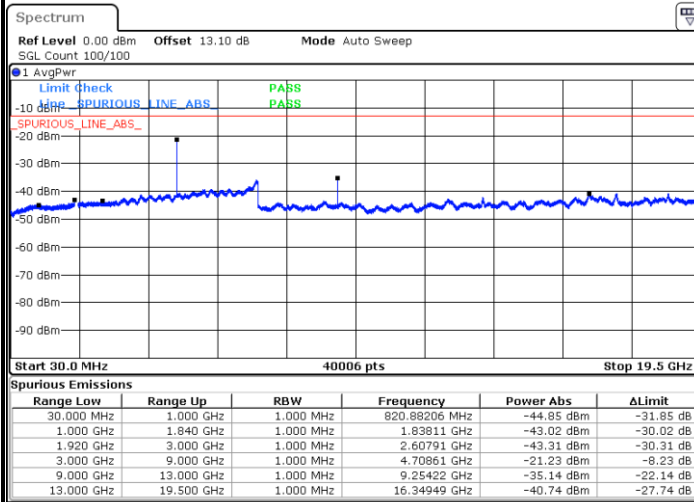




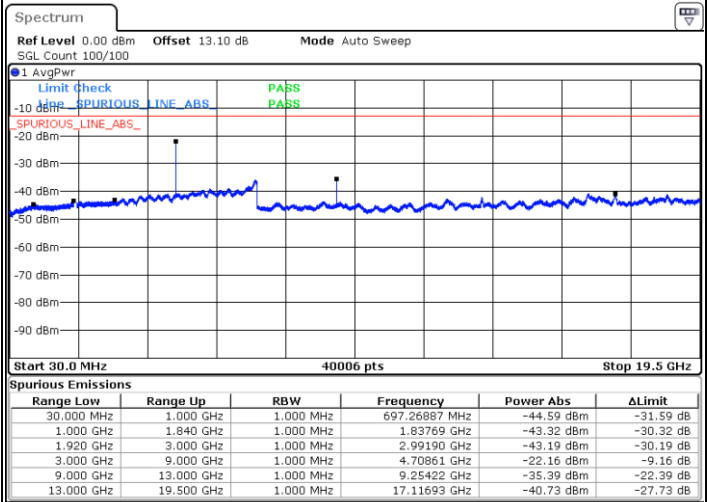
## LTE Band 2 / 15MHz

## Lowest Channel / QPSK



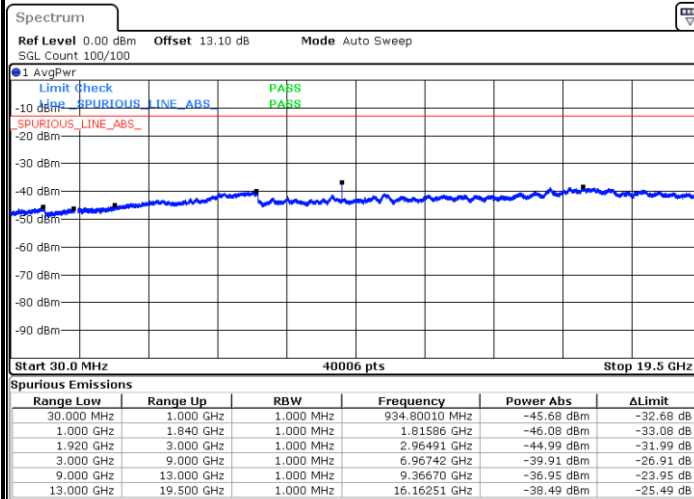
Date: 18.FEB.2018 01:54:37

## Lowest Channel / 16QAM



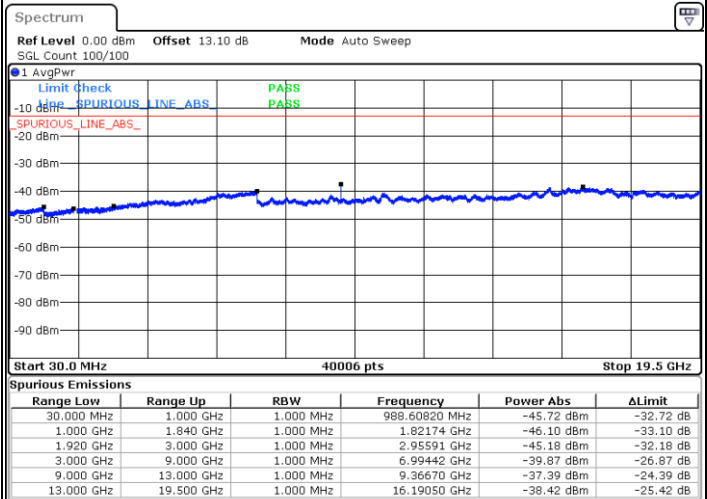
Date: 18.FEB.2018 01:55:35

## Middle Channel / QPSK



Date: 27.FEB.2018 09:18:56

## Middle Channel / 16QAM

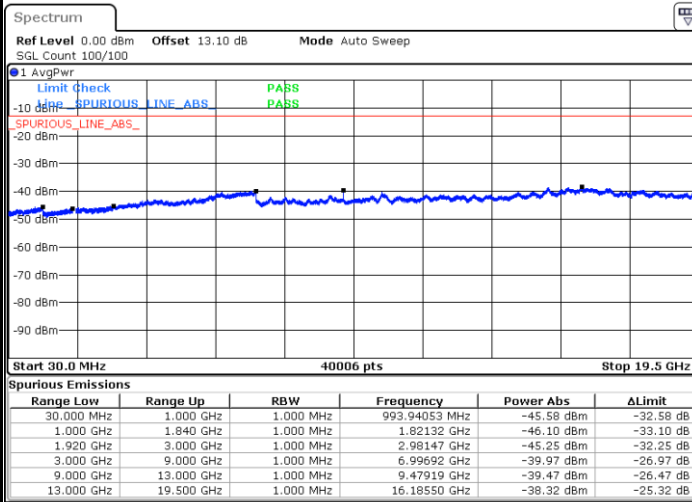


Date: 27.FEB.2018 09:19:50



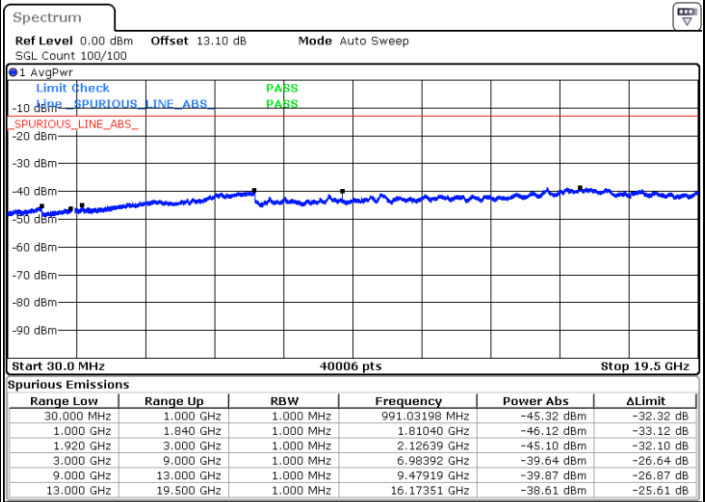
## LTE Band 2 / 15MHz

## Highest Channel / QPSK



Date: 27.FEB.2018 09:25:52

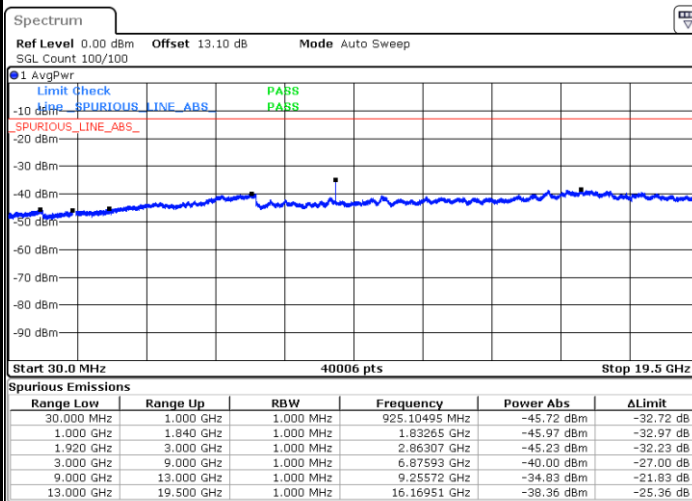
## Highest Channel / 16QAM



Date: 27.FEB.2018 09:26:46

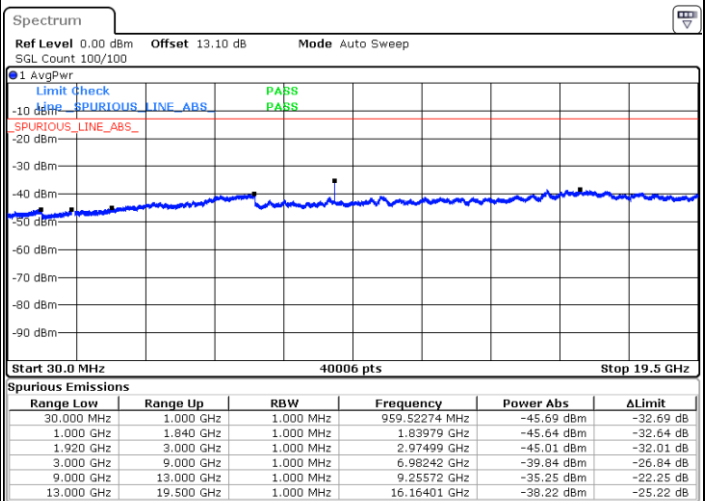
## LTE Band 2 / 20MHz

## Lowest Channel / QPSK



Date: 27.FEB.2018 09:32:48

## Lowest Channel / 16QAM

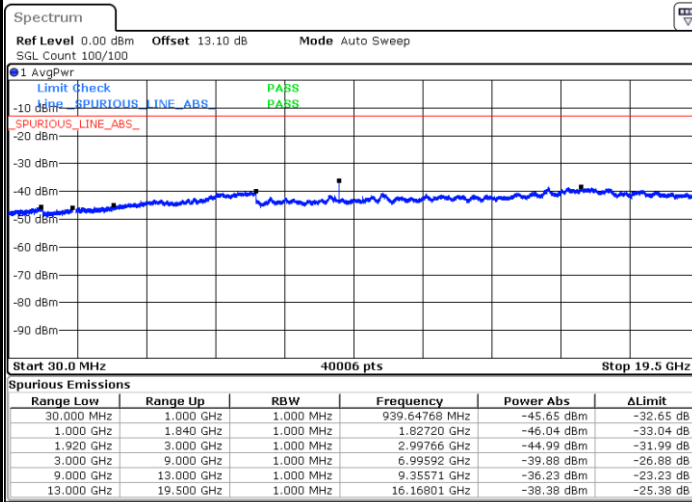


Date: 27.FEB.2018 09:33:41



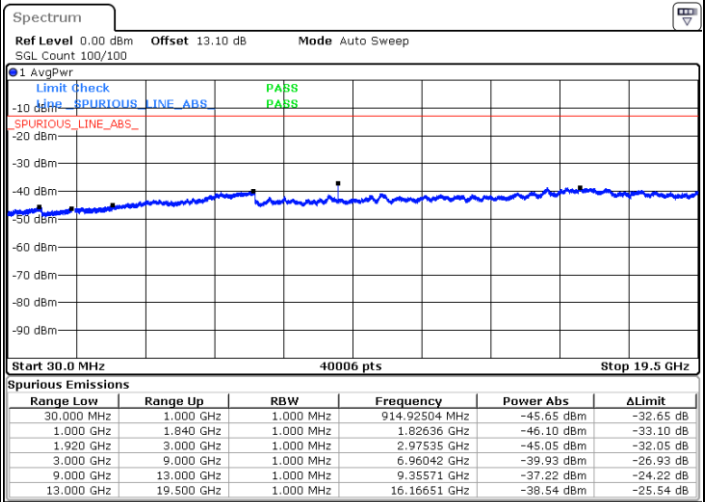
## LTE Band 2 / 20MHz

## Middle Channel / QPSK



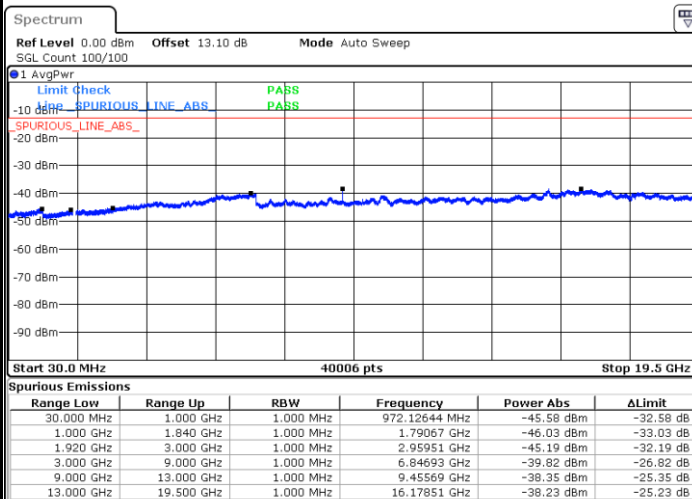
Date: 27.FEB.2018 09:35:15

## Middle Channel / 16QAM



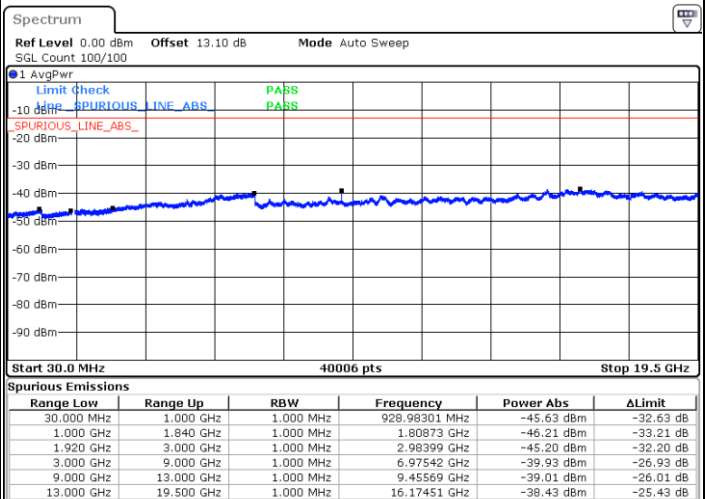
Date: 27.FEB.2018 09:36:08

## Highest Channel / QPSK



Date: 27.FEB.2018 09:42:10

## Highest Channel / 16QAM

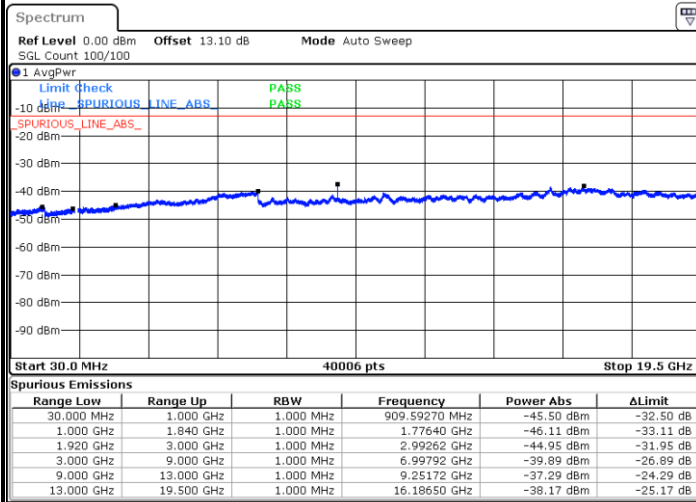


Date: 27.FEB.2018 09:43:04



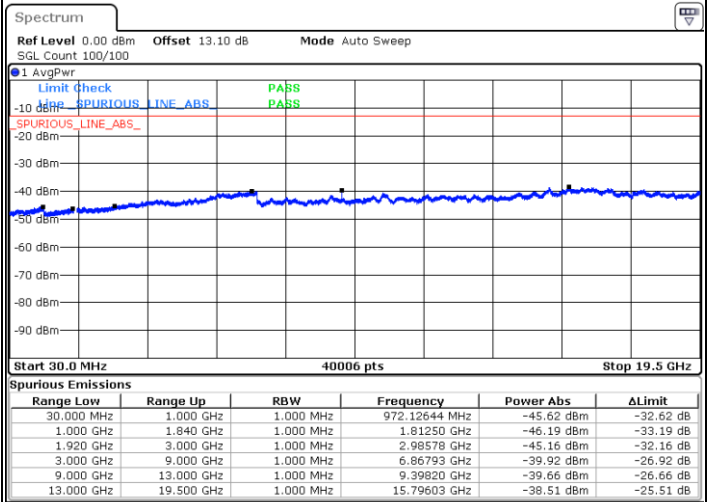
## LTE Band 2 / 1.4MHz

## Lowest Channel / 64QAM



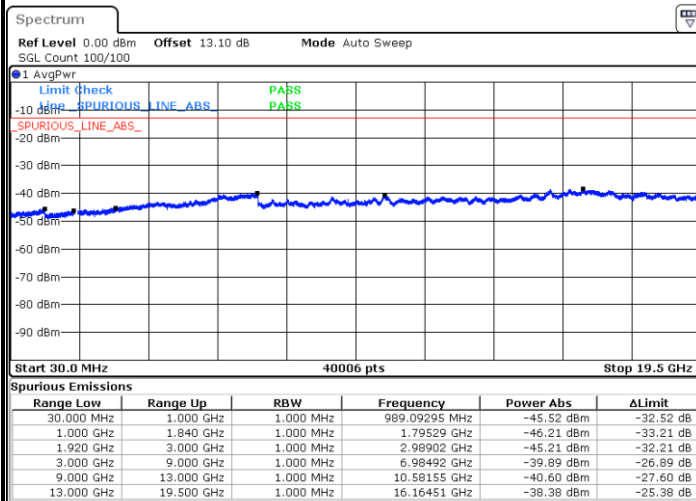
Date: 27.FEB.2018 10:31:33

## Middle Channel / 64QAM



Date: 27.FEB.2018 10:32:47

## Highest Channel / 64QAM

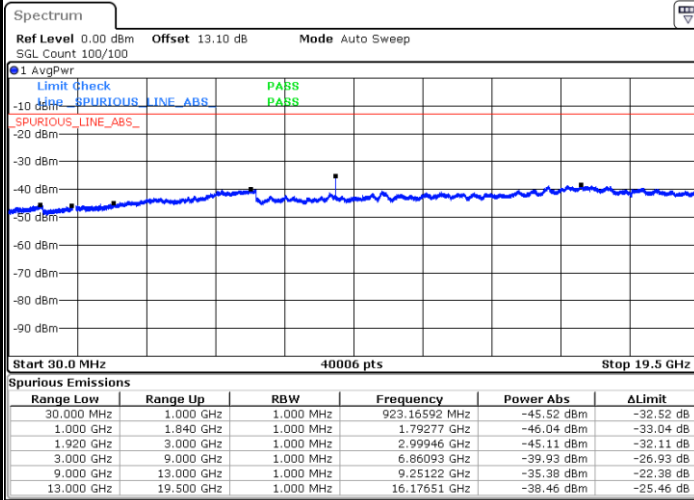


Date: 27.FEB.2018 10:36:15



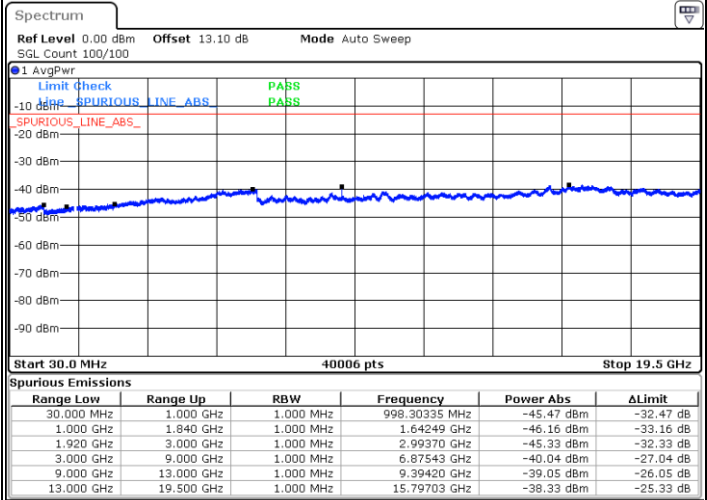
## LTE Band 2 / 3MHz

## Lowest Channel / 64QAM



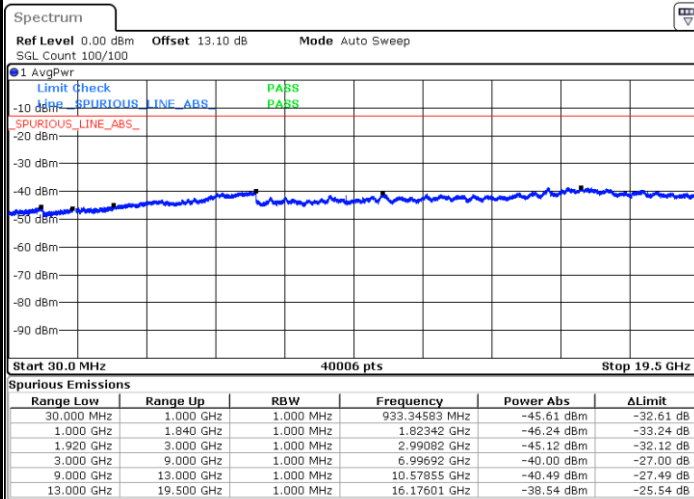
Date: 27.FEB.2018 09:49:03

## Middle Channel / 64QAM



Date: 27.FEB.2018 09:50:16

## Highest Channel / 64QAM

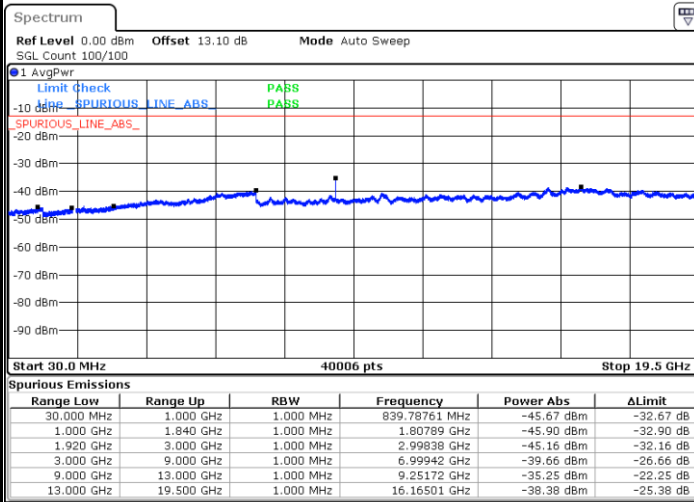


Date: 27.FEB.2018 09:53:44



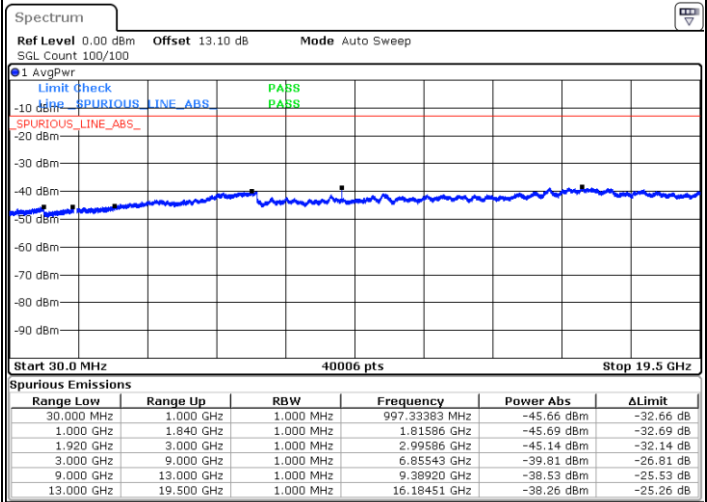
## LTE Band 2 / 5MHz

## Lowest Channel / 64QAM



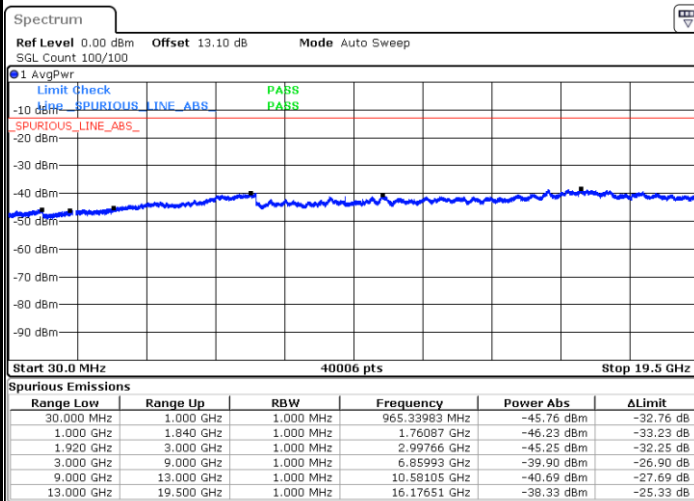
Date: 27.FEB.2018 09:57:12

## Middle Channel / 64QAM



Date: 27.FEB.2018 09:58:25

## Highest Channel / 64QAM

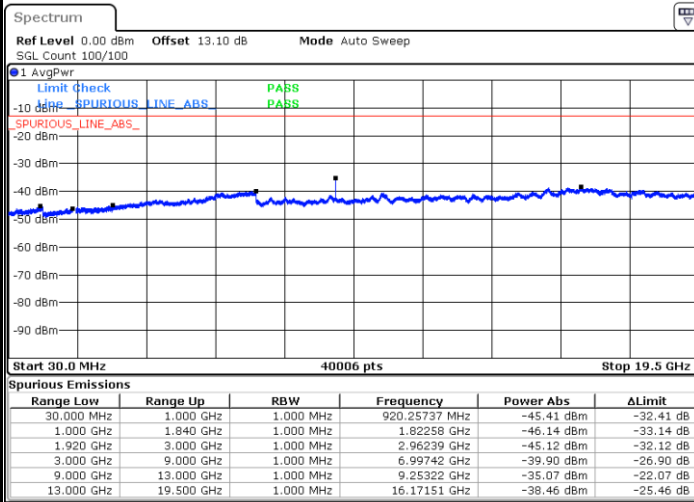


Date: 27.FEB.2018 10:01:53



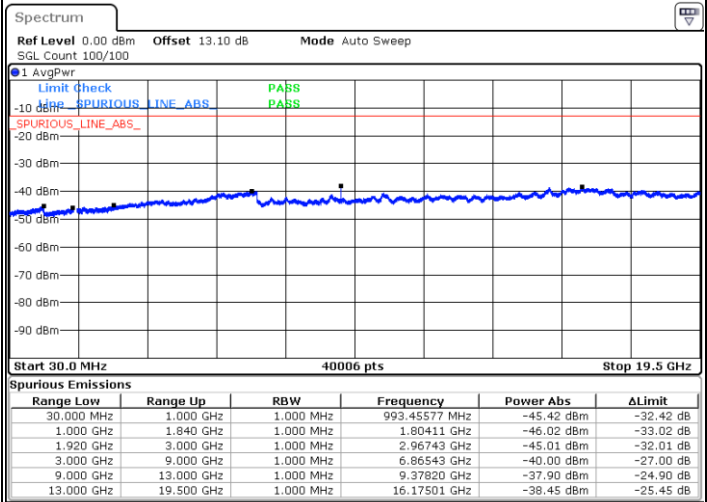
## LTE Band 2 / 10MHz

## Lowest Channel / 64QAM



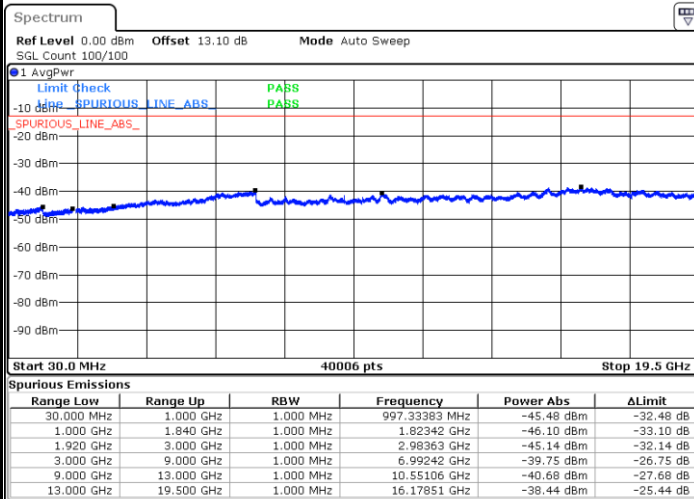
Date: 27.FEB.2018 10:05:21

## Middle Channel / 64QAM



Date: 27.FEB.2018 10:06:34

## Highest Channel / 64QAM

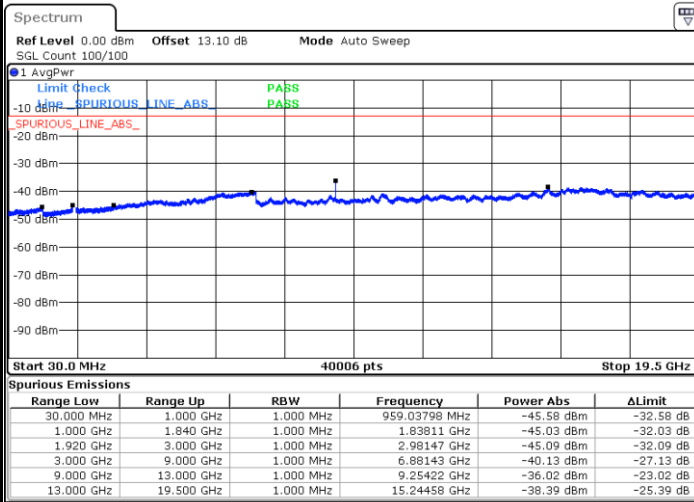


Date: 27.FEB.2018 10:10:02



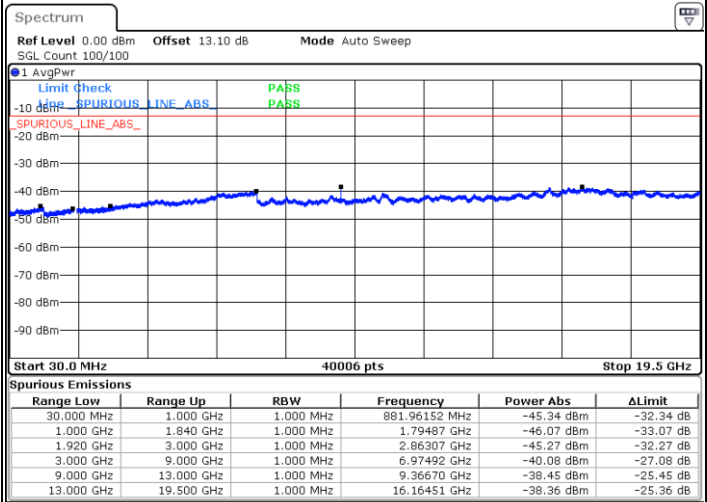
## LTE Band 2 / 15MHz

## Lowest Channel / 64QAM



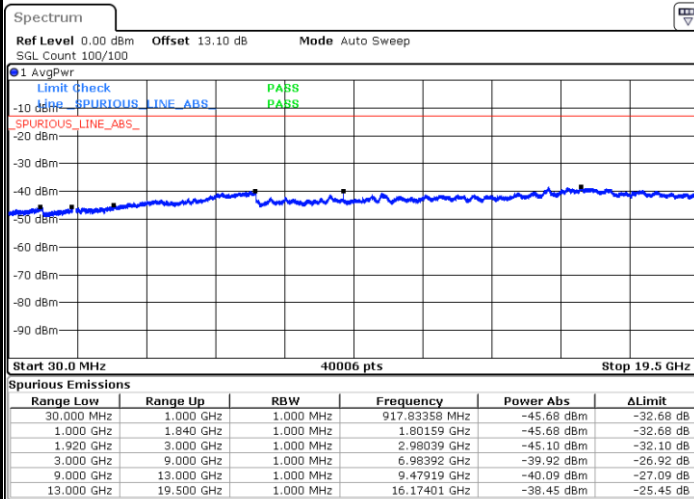
Date: 27.FEB.2018 10:13:30

## Middle Channel / 64QAM



Date: 27.FEB.2018 10:14:43

## Highest Channel / 64QAM

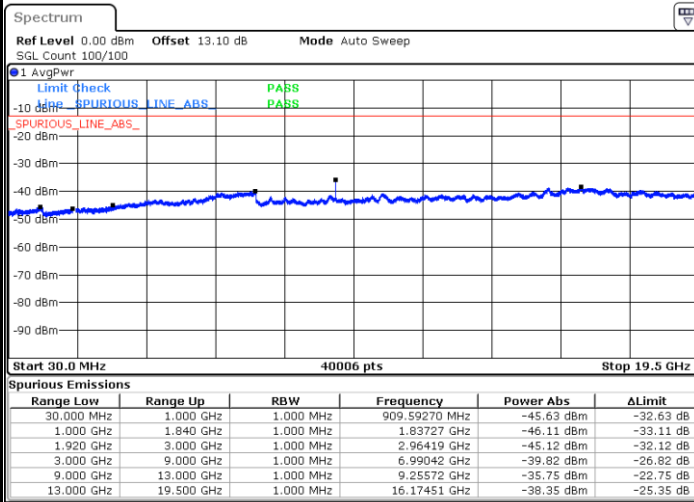


Date: 27.FEB.2018 10:18:11



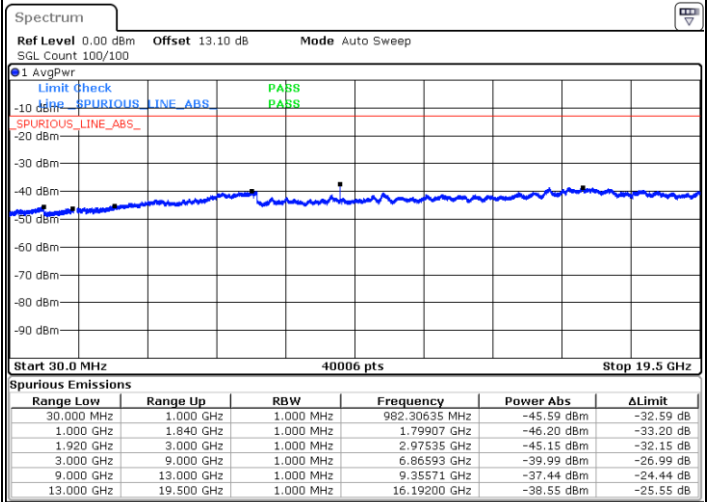
## LTE Band 2 / 20MHz

## Lowest Channel / 64QAM



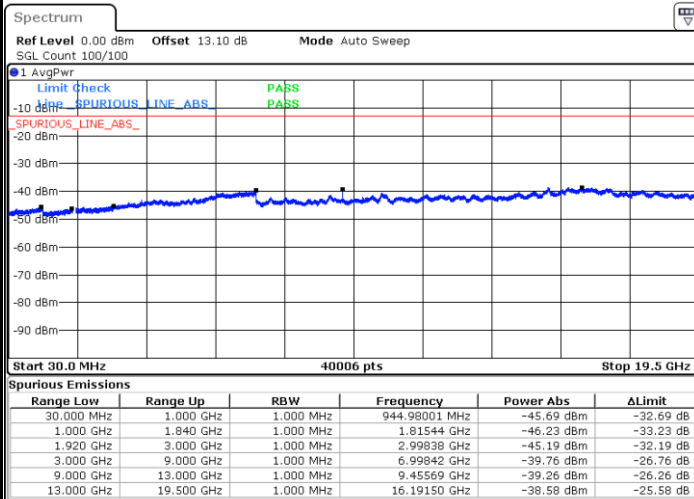
Date: 27.FEB.2018 10:21:39

## Middle Channel / 64QAM



Date: 27.FEB.2018 10:22:53

## Highest Channel / 64QAM



Date: 27.FEB.2018 10:26:20

## Frequency Stability

| Test Conditions  |                   | LTE Band 2 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                           | Note 2. |
|                  |                   | Deviation (ppm)                    | Result  |
| 50               | Normal Voltage    | 0.0082                             | PASS    |
| 40               | Normal Voltage    | 0.0002                             |         |
| 30               | Normal Voltage    | 0.0052                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0010                             |         |
| 0                | Normal Voltage    | 0.0033                             |         |
| -10              | Normal Voltage    | 0.0003                             |         |
| -20              | Normal Voltage    | 0.0021                             |         |
| -30              | Normal Voltage    | 0.0010                             |         |
| 20               | Maximum Voltage   | 0.0050                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0009                             |         |

**Note:**

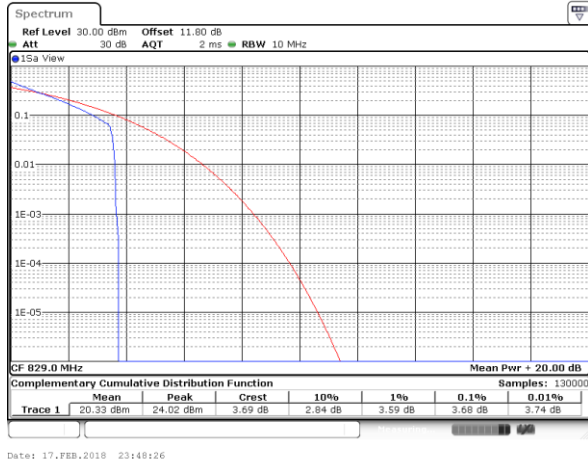
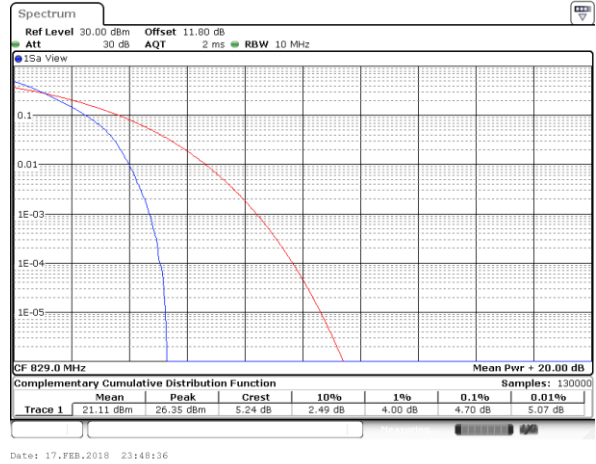
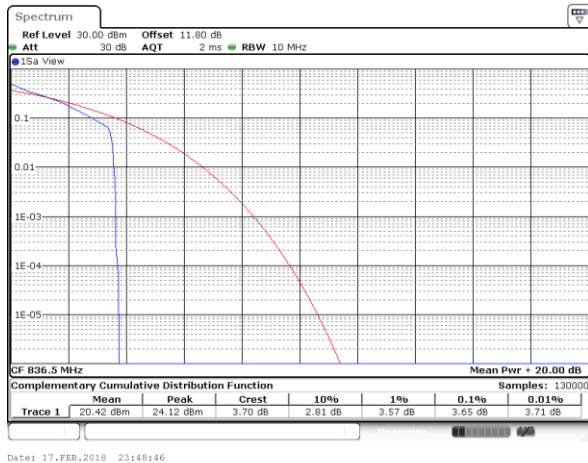
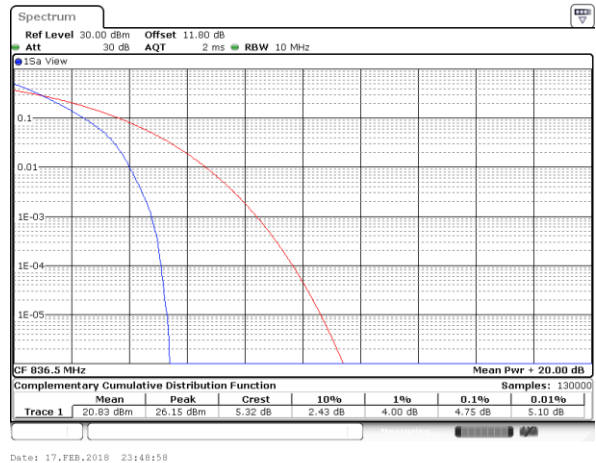
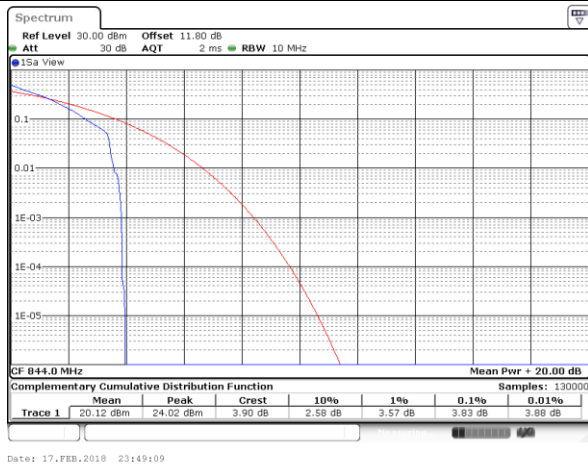
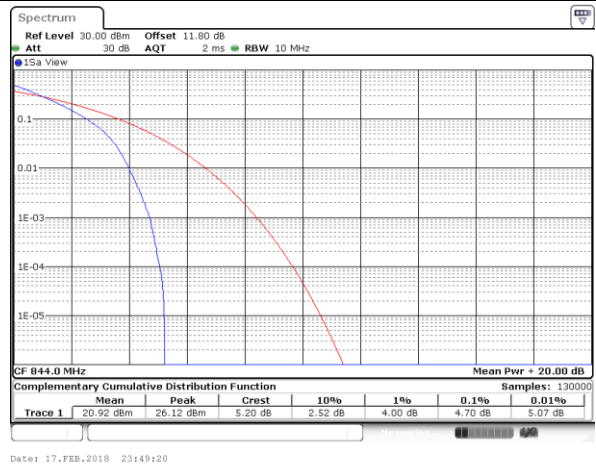
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

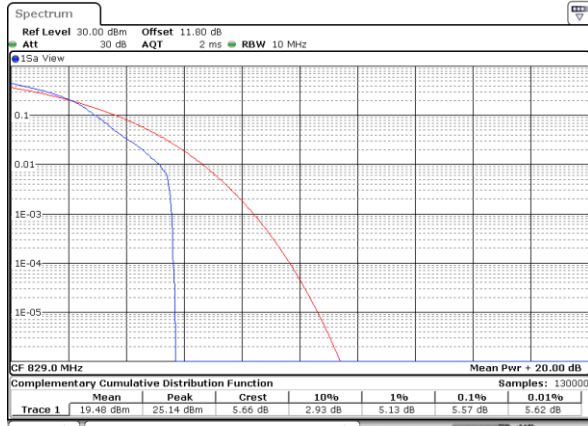


## LTE Band 5

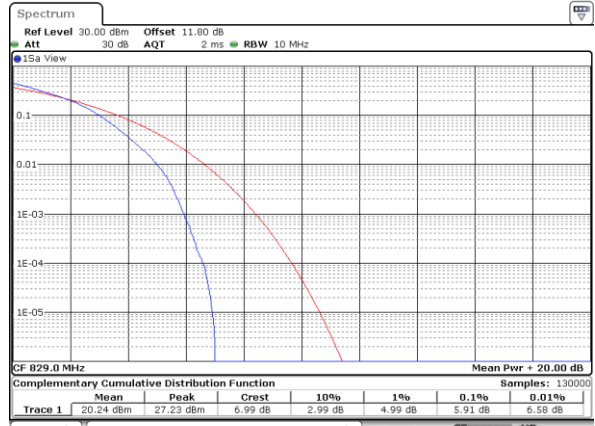
**Peak-to-Average Ratio**

| Mode       | LTE Band 5 / 10MHz |         |       |         |             |
|------------|--------------------|---------|-------|---------|-------------|
| Mod.       | QPSK               |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 3.68               | 4.7     | 5.57  | 5.91    | PASS        |
| Middle CH  | 3.65               | 4.75    | 5.59  | 5.88    |             |
| Highest CH | 3.83               | 4.7     | 5.33  | 5.91    |             |
| Mode       | LTE Band 5 / 10MHz |         |       |         |             |
| Mod.       | 64QAM              |         |       |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB |       |         | Result      |
| Lowest CH  | 5.28               | 6.00    |       |         | PASS        |
| Middle CH  | 5.54               | 6.00    |       |         |             |
| Highest CH | 5.48               | 5.88    |       |         |             |

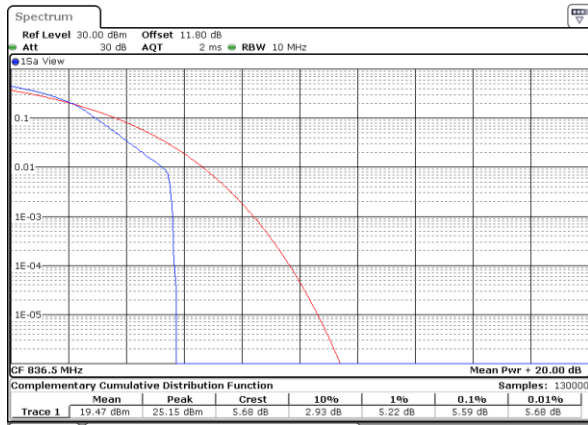
**LTE Band 5 / 10MHz / QPSK**
**Lowest Channel / 1RB**

**Lowest Channel / Full RB**

**Middle Channel / 1RB**

**Middle Channel / Full RB**

**Highest Channel / 1RB**

**Highest Channel / Full RB**


**LTE Band 5 / 10MHz / 16QAM**
**Lowest Channel / 1RB**


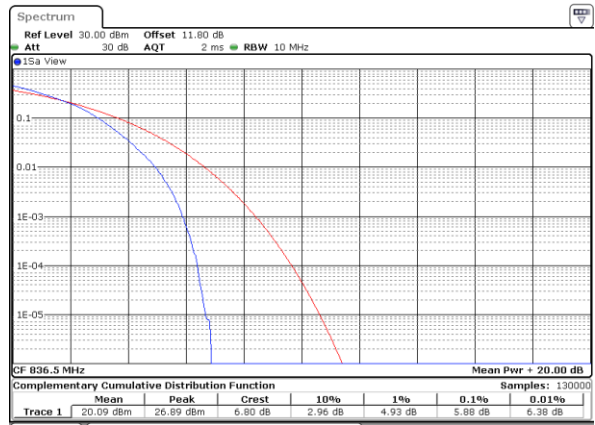
Date: 17.FEB.2018 23:47:25

**Lowest Channel / Full RB**


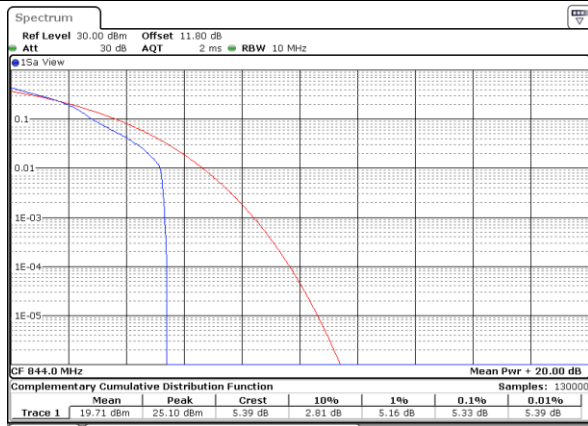
Date: 17.FEB.2018 23:47:35

**Middle Channel / 1RB**


Date: 17.FEB.2018 23:47:45

**Middle Channel / Full RB**


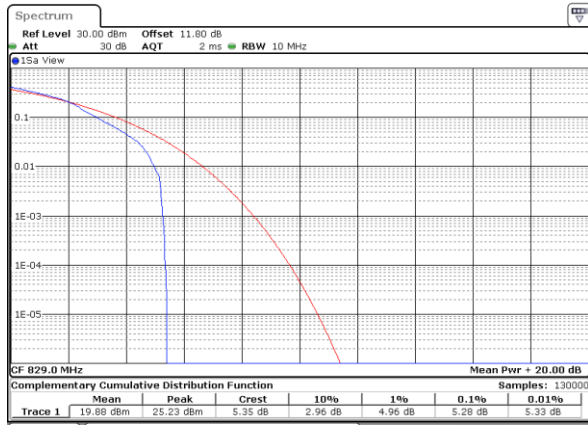
Date: 17.FEB.2018 23:47:55

**Highest Channel / 1RB**


Date: 17.FEB.2018 23:48:06

**Highest Channel / Full RB**

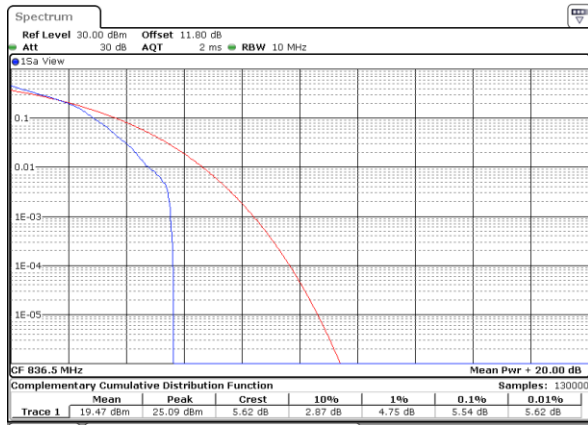

Date: 17.FEB.2018 23:48:16

**LTE Band 5 / 10MHz / 64QAM**
**Lowest Channel / 1RB**


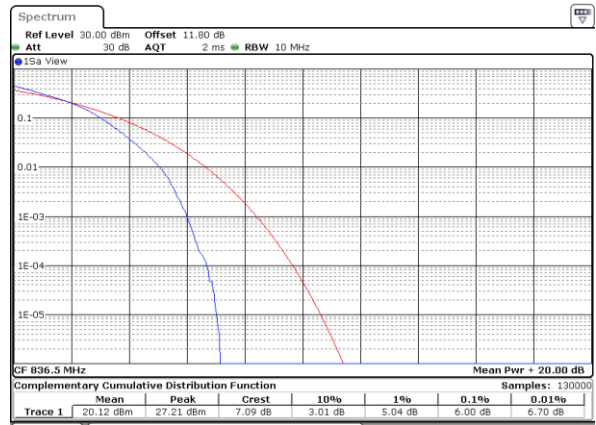
Date: 18.FEB.2018 00:34:20

**Lowest Channel / Full RB**

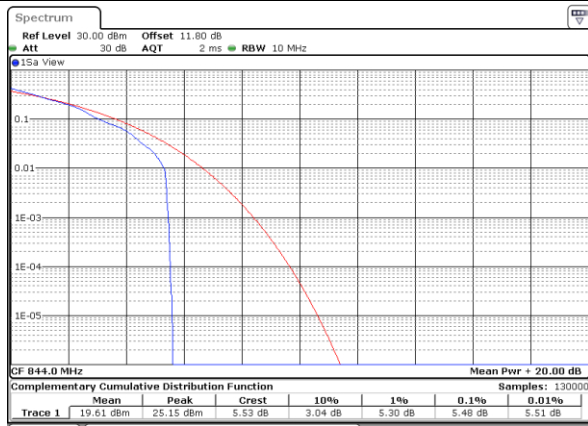

Date: 18.FEB.2018 00:34:40

**Middle Channel / 1RB**


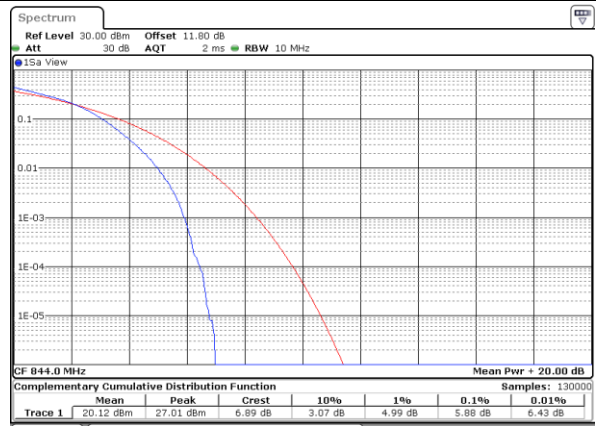
Date: 18.FEB.2018 00:34:52

**Middle Channel / Full RB**


Date: 18.FEB.2018 00:35:02

**Highest Channel / 1RB**


Date: 18.FEB.2018 00:35:11

**Highest Channel / Full RB**


Date: 18.FEB.2018 00:35:21

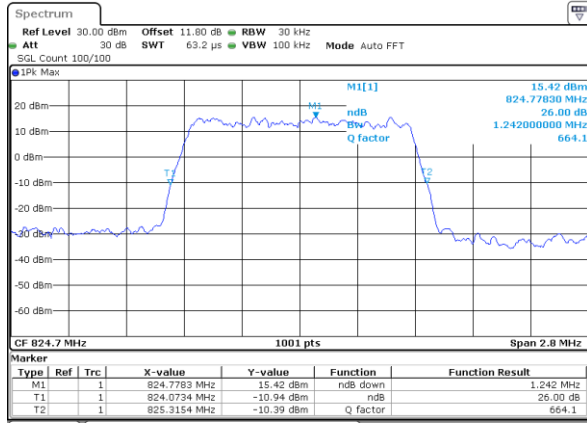
**26dB Bandwidth**

| Mode       | LTE Band 5 : 26dB BW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
|------------|---------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| BW         | 1.4MHz                    |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | QPSK                      | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | 1.24                      | 1.22  | 3.08 | 3.01  | 4.93 | 4.90  | 9.77  | 9.83  | -     | -     | -     | -     |
| Middle CH  | 1.22                      | 1.24  | 3.05 | 3.04  | 4.92 | 4.98  | 9.89  | 9.71  | -     | -     | -     | -     |
| Highest CH | 1.23                      | 1.23  | 3.04 | 3.04  | 4.93 | 4.82  | 9.83  | 9.85  | -     | -     | -     | -     |
| Mode       | LTE Band 5 : 26dB BW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | -                         | 64QAM | -    | 64QAM | -    | 64QAM | -     | 64QAM | -     | 64QAM | -     | 64QAM |
| Lowest CH  | -                         | 1.21  | -    | 3.05  | -    | 4.89  | -     | 9.63  | -     | -     | -     | -     |
| Middle CH  | -                         | 1.22  | -    | 3.03  | -    | 4.89  | -     | 9.81  | -     | -     | -     | -     |
| Highest CH | -                         | 1.23  | -    | 3.04  | -    | 4.89  | -     | 9.69  | -     | -     | -     | -     |



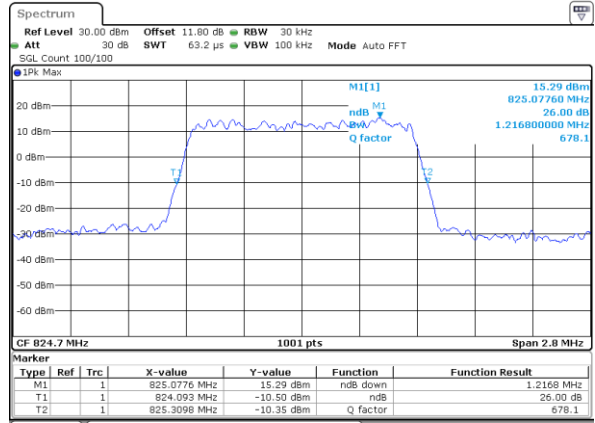
## LTE Band 5

## Lowest Channel / 1.4MHz / QPSK



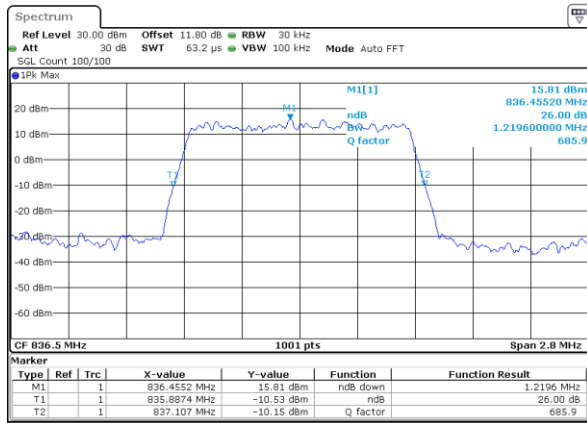
Date: 17.FEB.2018 23:25:11

## Lowest Channel / 1.4MHz / 16QAM



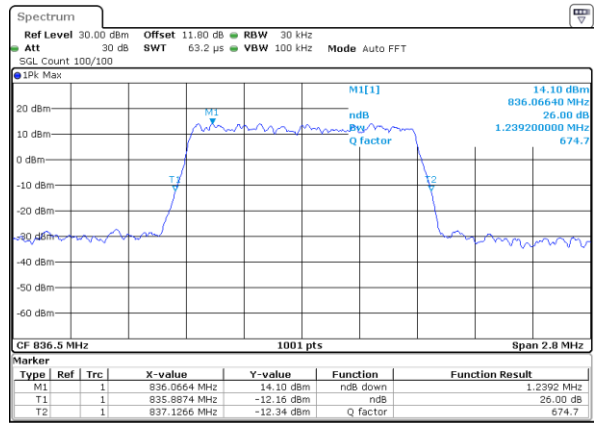
Date: 17.FEB.2018 23:25:00

## Middle Channel / 1.4MHz / QPSK



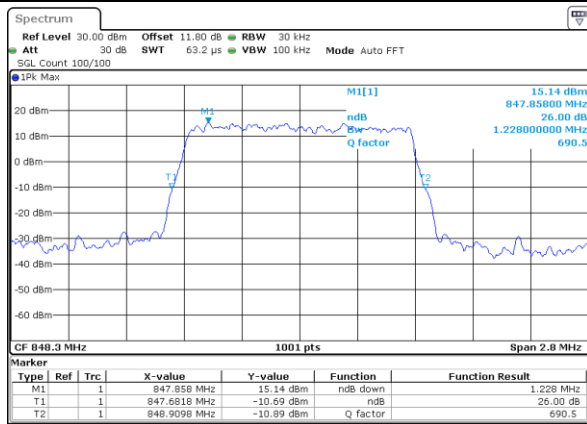
Date: 17.FEB.2018 23:34:16

## Middle Channel / 1.4MHz / 16QAM



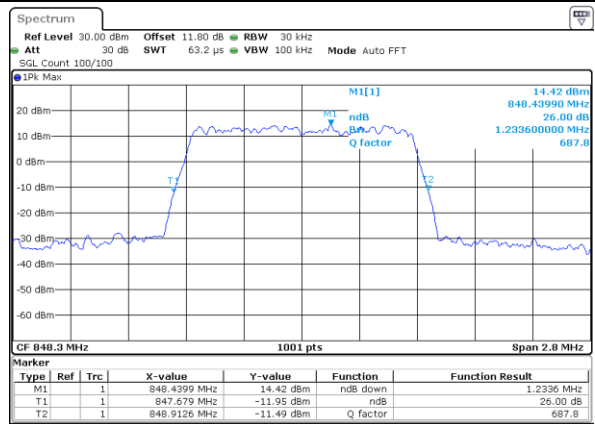
Date: 17.FEB.2018 23:34:28

## Highest Channel / 1.4MHz / QPSK



Date: 17.FEB.2018 23:36:57

## Highest Channel / 1.4MHz / 16QAM

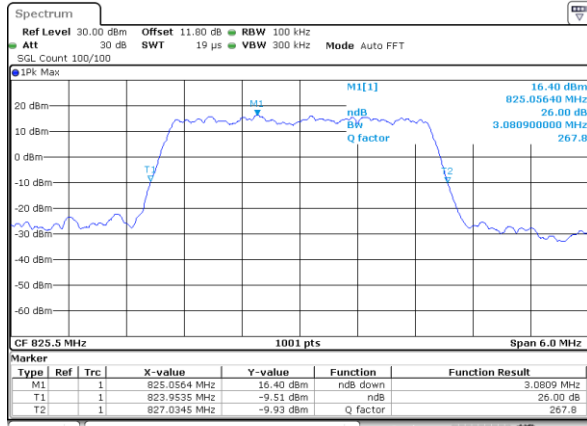


Date: 17.FEB.2018 23:37:09



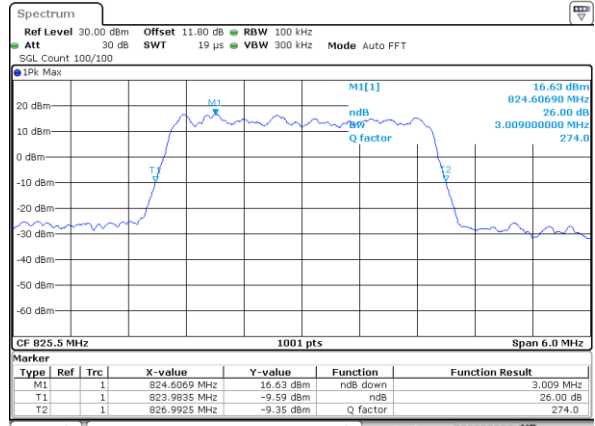
## LTE Band 5

## Lowest Channel / 3MHz / QPSK



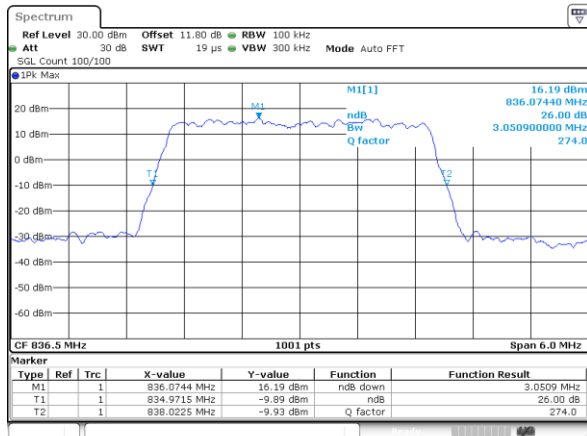
Date: 17.FEB.2018 22:17:50

## Lowest Channel / 3MHz / 16QAM



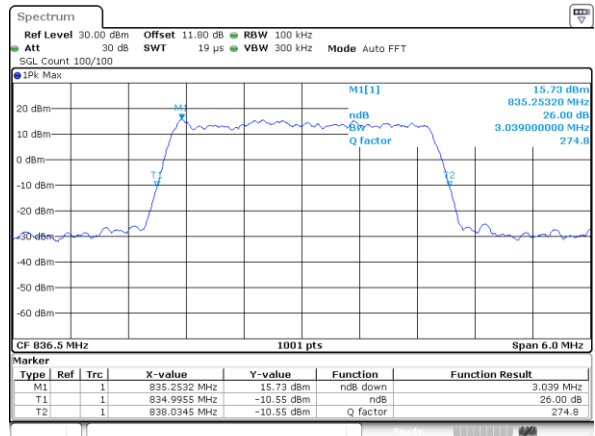
Date: 17.FEB.2018 22:18:09

## Middle Channel / 3MHz / QPSK



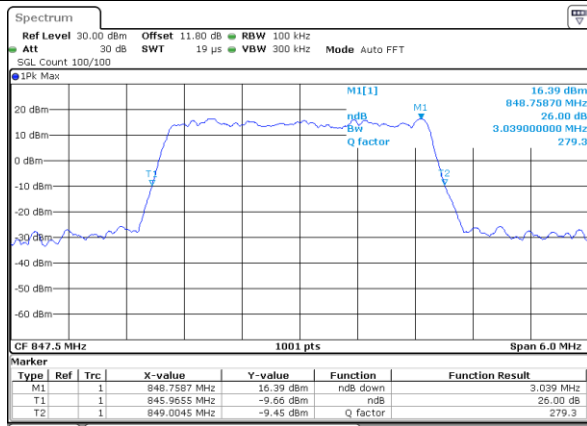
Date: 17.FEB.2018 22:17:15

## Middle Channel / 3MHz / 16QAM



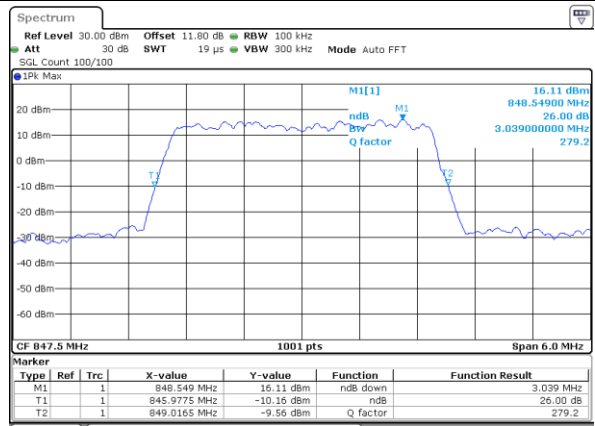
Date: 17.FEB.2018 22:17:26

## Highest Channel / 3MHz / QPSK



Date: 17.FEB.2018 22:29:55

## Highest Channel / 3MHz / 16QAM

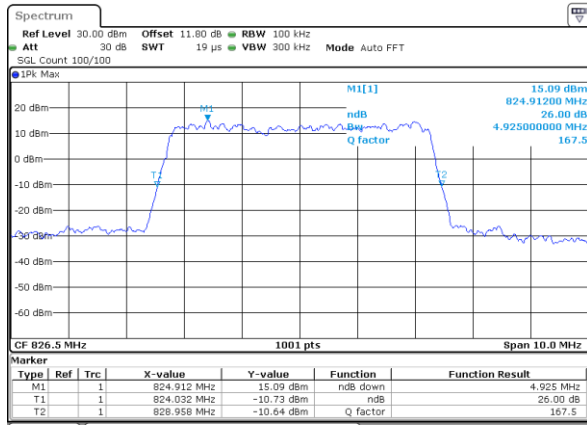


Date: 17.FEB.2018 22:30:07



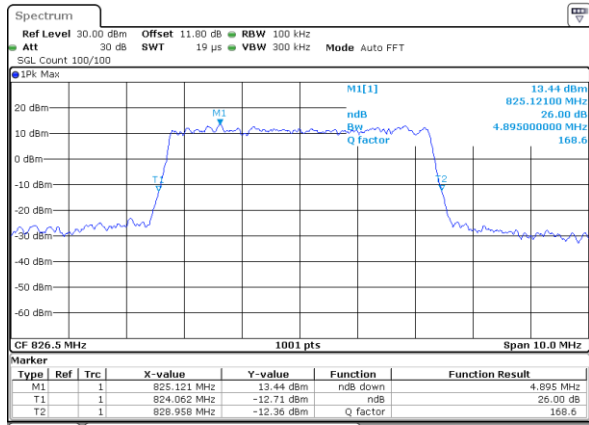
## LTE Band 5

## Lowest Channel / 5MHz / QPSK



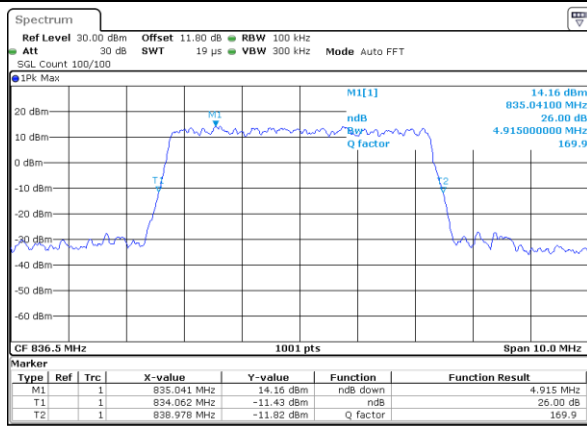
Date: 17.FEB.2018 22:39:12

## Lowest Channel / 5MHz / 16QAM



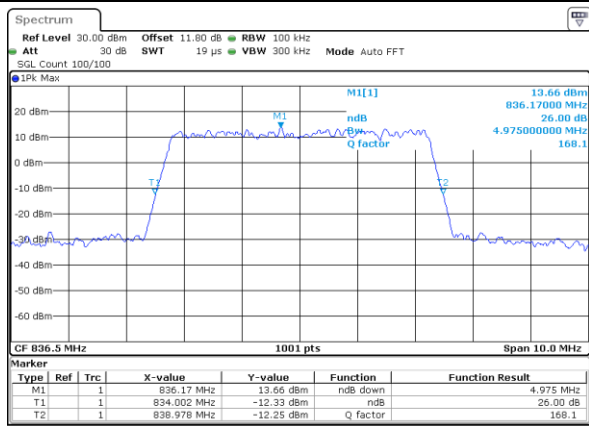
Date: 17.FEB.2018 22:39:23

## Middle Channel / 5MHz / QPSK



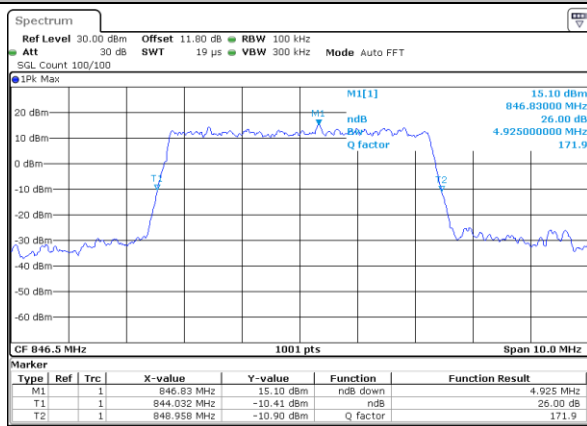
Date: 17.FEB.2018 22:48:28

## Middle Channel / 5MHz / 16QAM



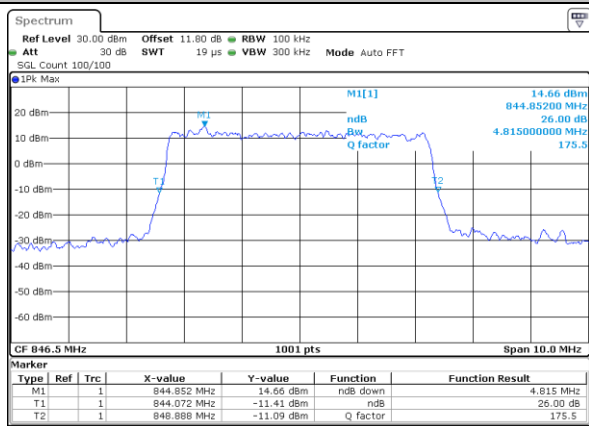
Date: 17.FEB.2018 22:48:39

## Highest Channel / 5MHz / QPSK



Date: 17.FEB.2018 22:51:09

## Highest Channel / 5MHz / 16QAM

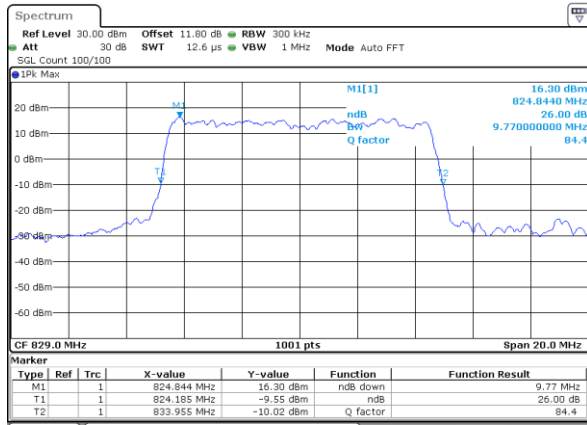


Date: 17.FEB.2018 22:51:20



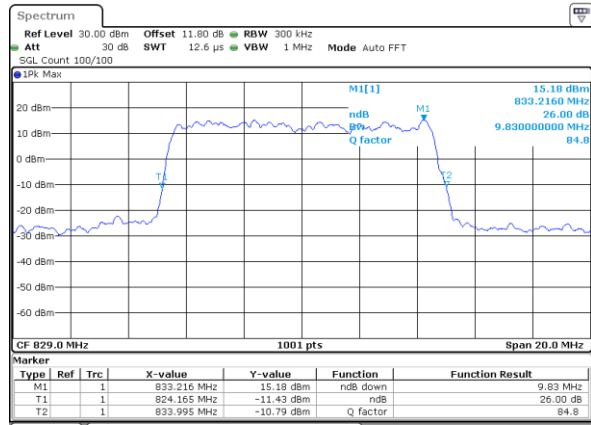
## LTE Band 5

## Lowest Channel / 10MHz / QPSK



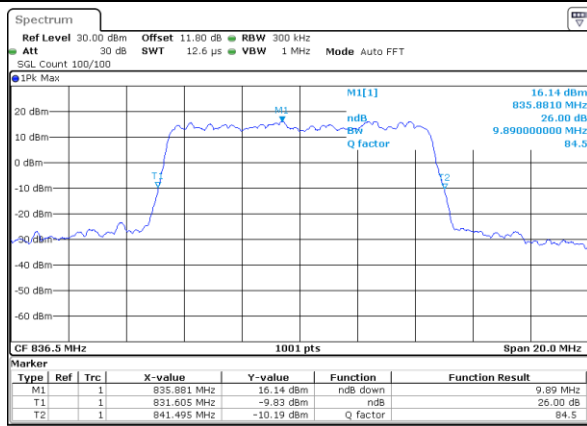
Date: 17.FEB.2018 23:00:25

## Lowest Channel / 10MHz / 16QAM



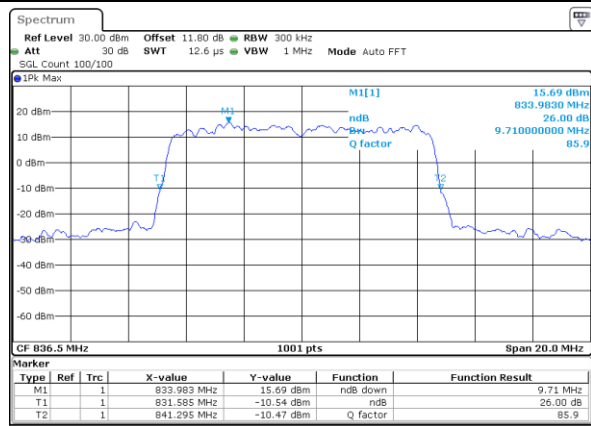
Date: 17.FEB.2018 23:00:36

## Middle Channel / 10MHz / QPSK



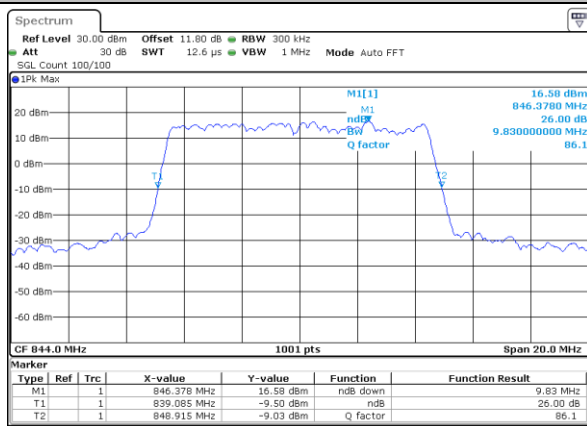
Date: 17.FEB.2018 23:09:40

## Middle Channel / 10MHz / 16QAM



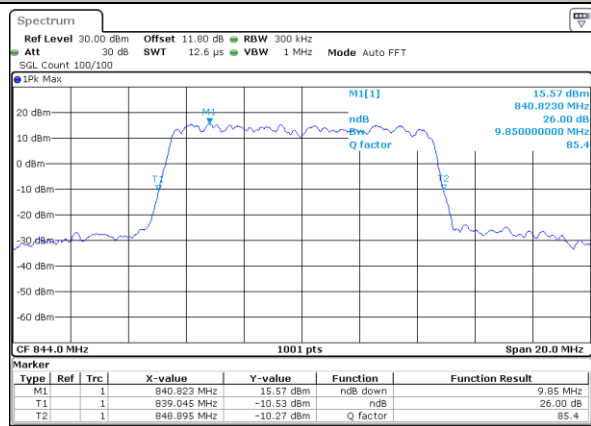
Date: 17.FEB.2018 23:09:52

## Highest Channel / 10MHz / QPSK



Date: 17.FEB.2018 23:12:21

## Highest Channel / 10MHz / 16QAM

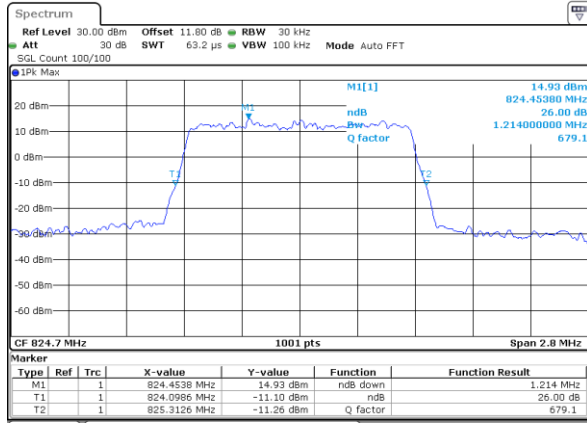


Date: 17.FEB.2018 23:12:33



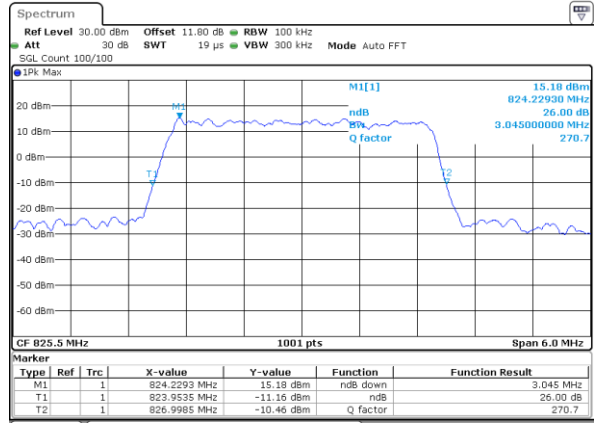
## LTE Band 5

## Lowest Channel / 1.4MHz / 64QAM



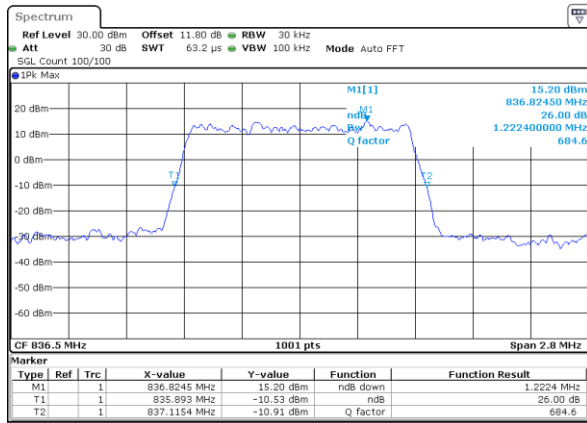
Date: 18.FEB.2018 00:23:42

## Lowest Channel / 3MHz / 64QAM



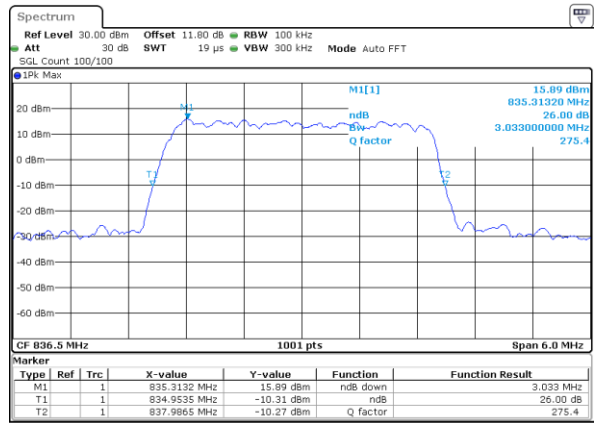
Date: 17.FEB.2018 23:51:52

## Middle Channel / 1.4MHz / 64QAM



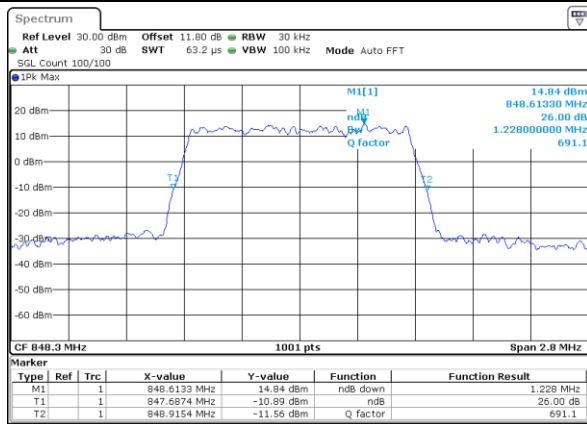
Date: 18.FEB.2018 00:28:20

## Middle Channel / 3MHz / 64QAM



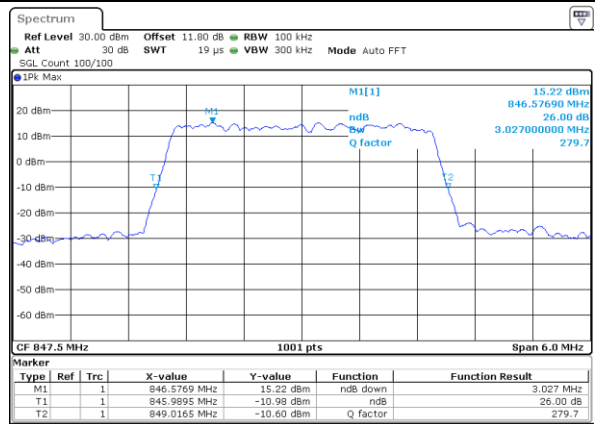
Date: 17.FEB.2018 23:56:30

## Highest Channel / 1.4MHz / 64QAM



Date: 18.FEB.2018 00:29:40

## Highest Channel / 3MHz / 64QAM

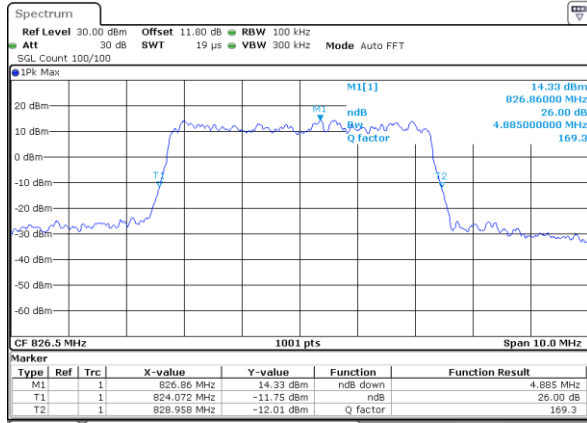


Date: 17.FEB.2018 23:57:51



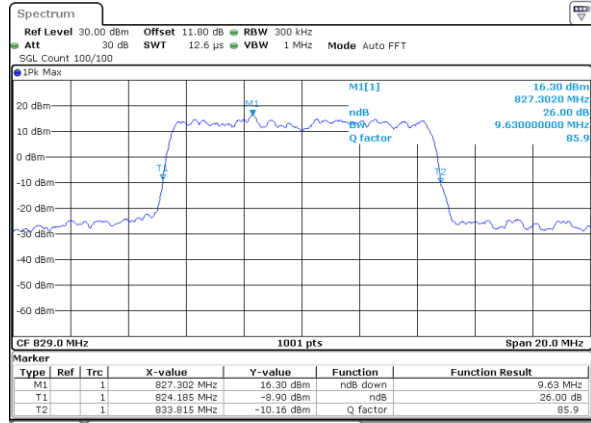
## LTE Band 5

## Lowest Channel / 5MHz / 64QAM



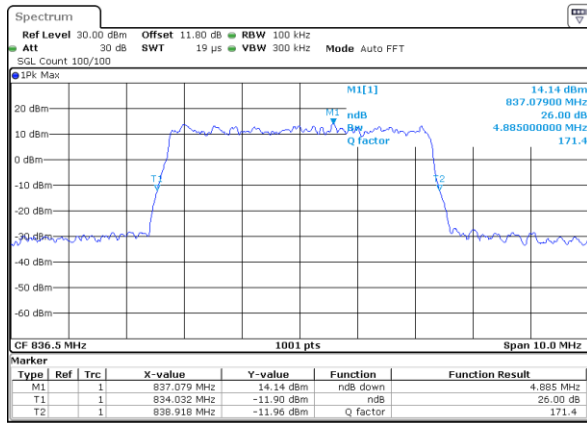
Date: 18.FEB.2018 00:02:29

## Lowest Channel / 10MHz / 64QAM



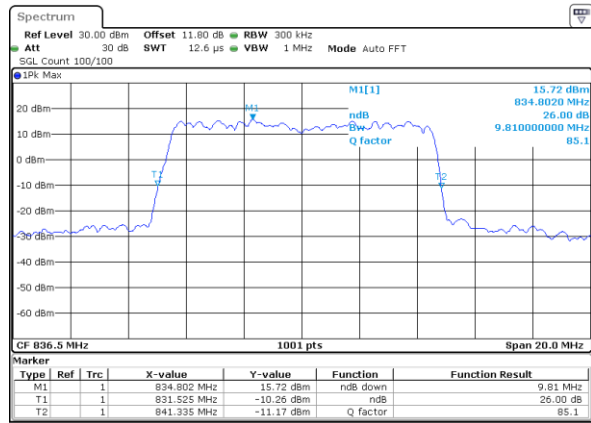
Date: 18.FEB.2018 00:13:06

## Middle Channel / 5MHz / 64QAM



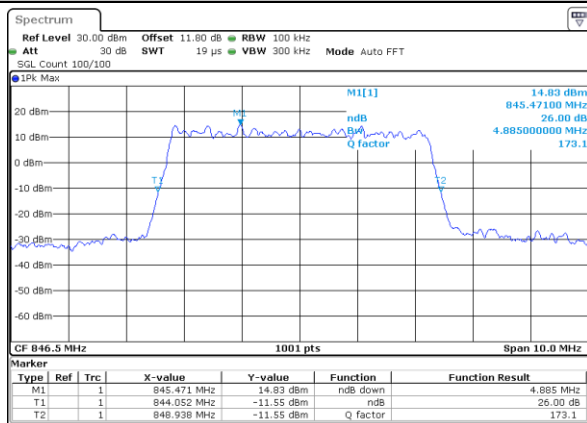
Date: 18.FEB.2018 00:07:08

## Middle Channel / 10MHz / 64QAM



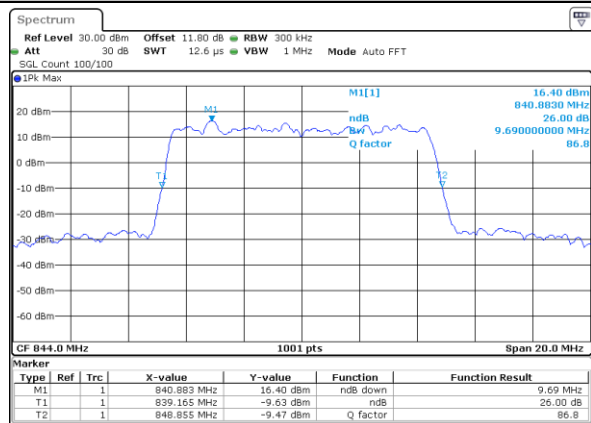
Date: 18.FEB.2018 00:17:44

## Highest Channel / 5MHz / 64QAM



Date: 18.FEB.2018 00:08:28

## Highest Channel / 10MHz / 64QAM



Date: 18.FEB.2018 00:19:04

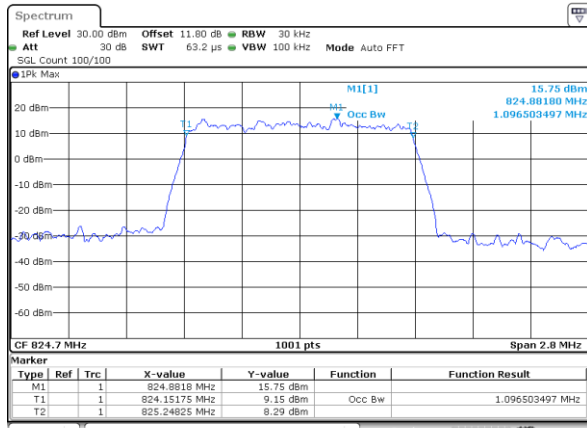
**Occupied Bandwidth**

| Mode       | LTE Band 5 : 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 | 2.73  | 4.49 | 4.46  | 9.05  | 9.01  | -     | -     | -     | -     |
| Middle CH  | 1.09                     | 1.08  | 2.71 | 2.73  | 4.51 | 4.48  | 8.99  | 8.97  | -     | -     | -     | -     |
| Highest CH | 1.09                     | 1.09  | 2.73 | 2.73  | 4.52 | 4.5   | 9.03  | 9.01  | -     | -     | -     | -     |
| Mode       | LTE Band 5 : 99%OBW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
| BW         | 1.4MHz                   |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | -                        | 64QAM | -    | 64QAM | -    | 64QAM | -     | 64QAM | -     | 64QAM | -     | 64QAM |
| Lowest CH  | -                        | 1.08  | -    | 2.72  | -    | 4.49  | -     | 9.05  | -     | -     | -     | -     |
| Middle CH  | -                        | 1.09  | -    | 2.75  | -    | 4.49  | -     | 9.05  | -     | -     | -     | -     |
| Highest CH | -                        | 1.09  | -    | 2.73  | -    | 4.50  | -     | 8.99  | -     | -     | -     | -     |

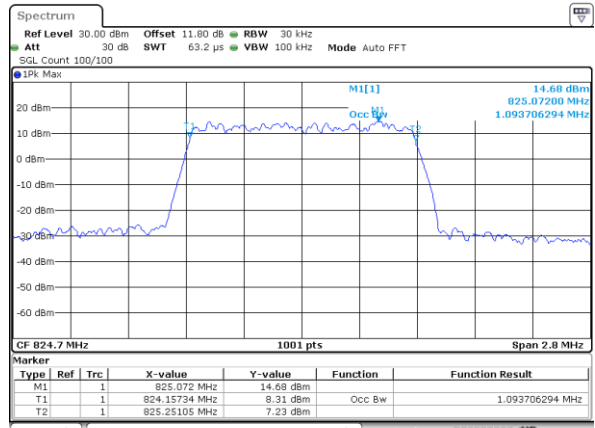


## LTE Band 5

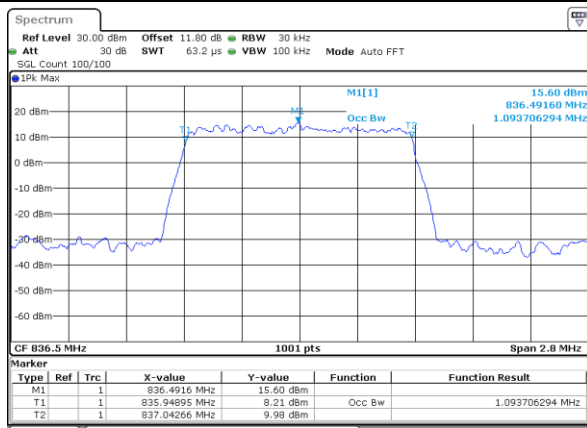
## Lowest Channel / 1.4MHz / QPSK



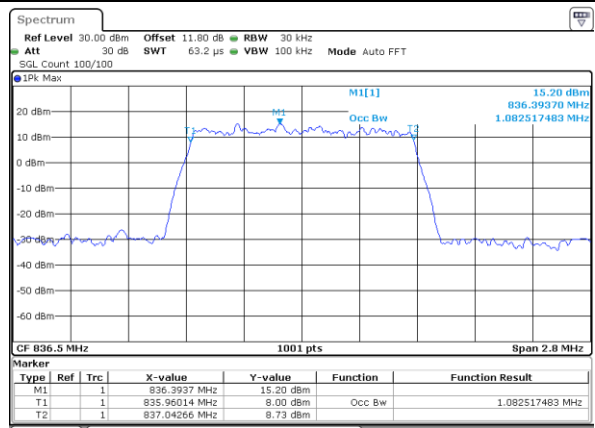
## Lowest Channel / 1.4MHz / 16QAM



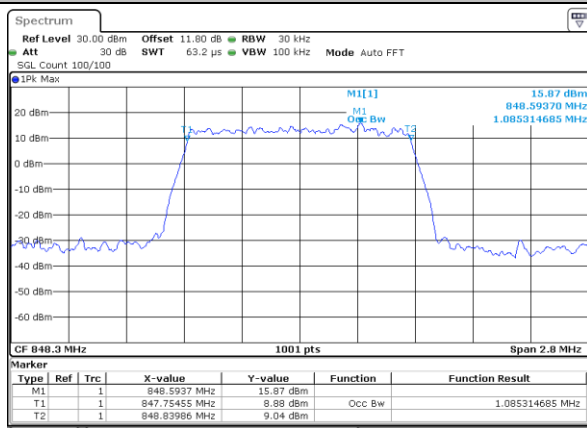
## Middle Channel / 1.4MHz / QPSK



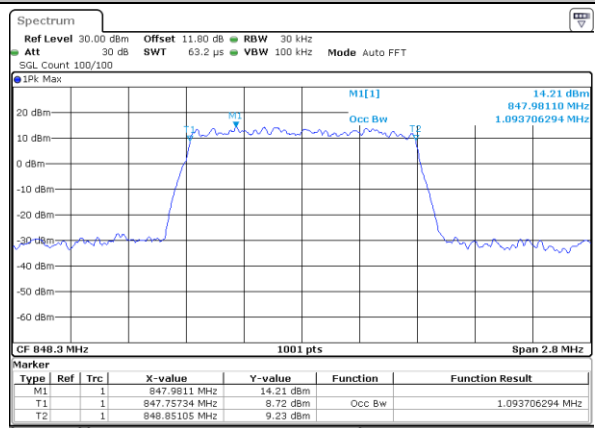
## Middle Channel / 1.4MHz / 16QAM



## Highest Channel / 1.4MHz / QPSK



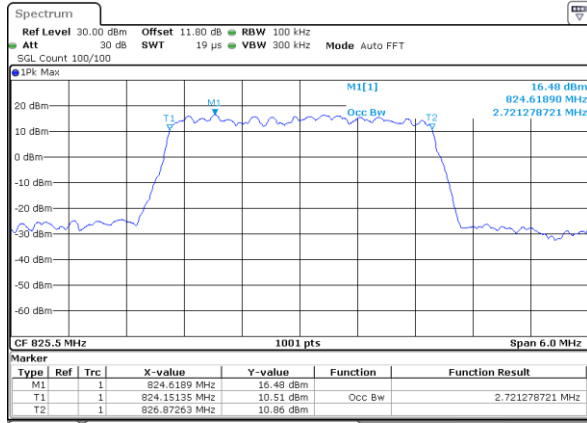
## Highest Channel / 1.4MHz / 16QAM





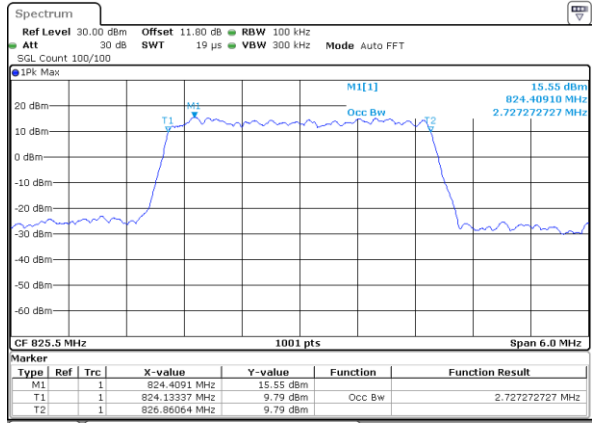
## LTE Band 5

## Lowest Channel / 3MHz / QPSK



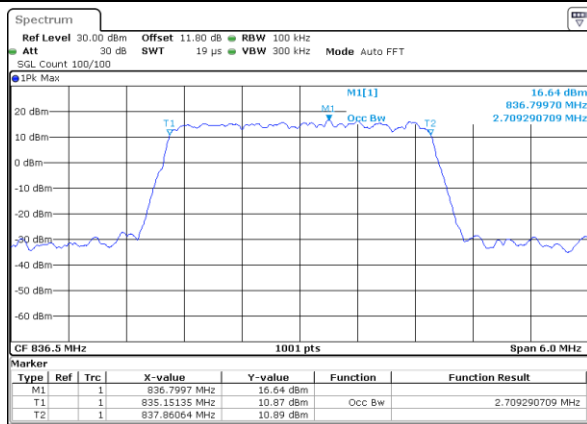
Date: 17.FEB.2018 22:17:35

## Lowest Channel / 3MHz / 16QAM



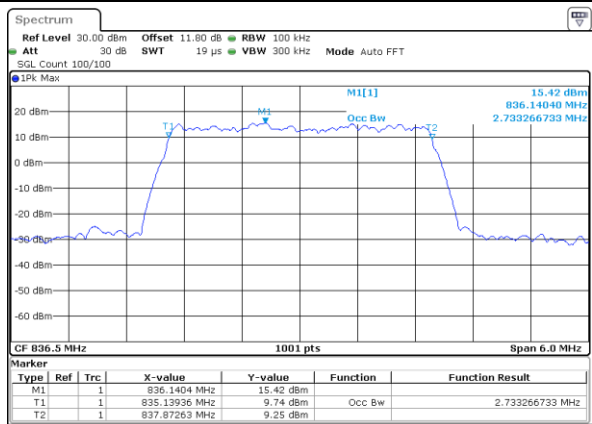
Date: 17.FEB.2018 22:17:46

## Middle Channel / 3MHz / QPSK



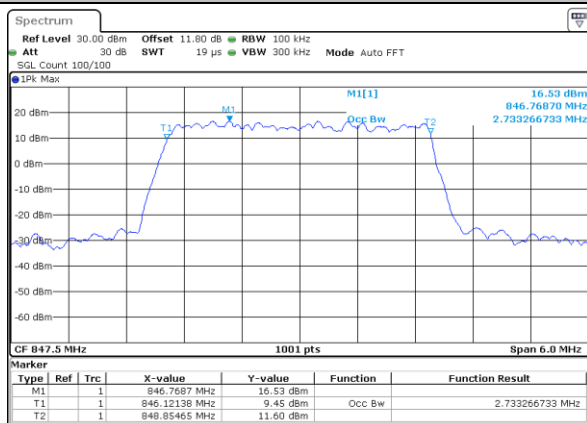
Date: 17.FEB.2018 22:26:52

## Middle Channel / 3MHz / 16QAM



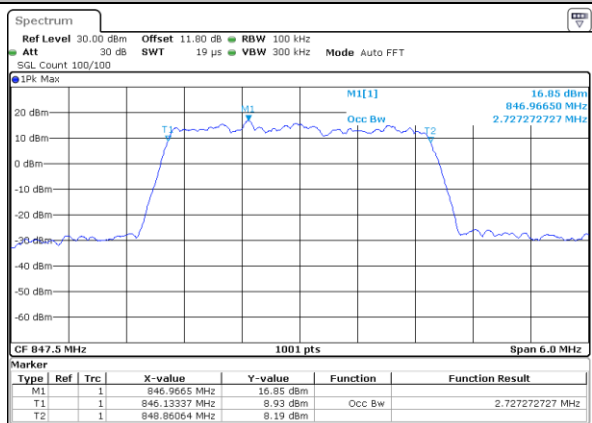
Date: 17.FEB.2018 22:27:03

## Highest Channel / 3MHz / QPSK



Date: 17.FEB.2018 22:29:32

## Highest Channel / 3MHz / 16QAM

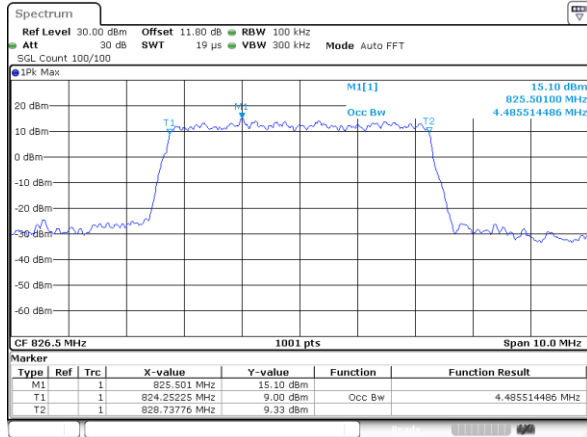


Date: 17.FEB.2018 22:29:44

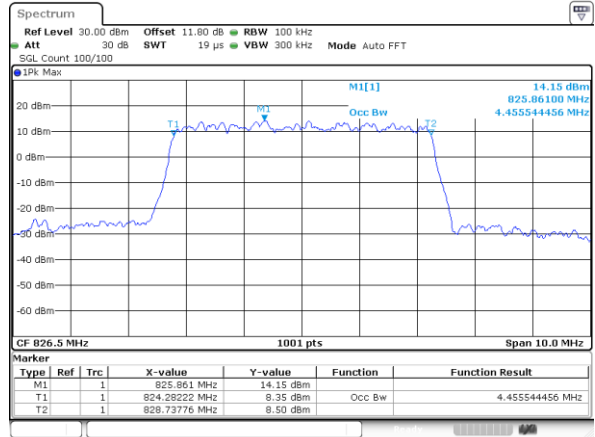


## LTE Band 5

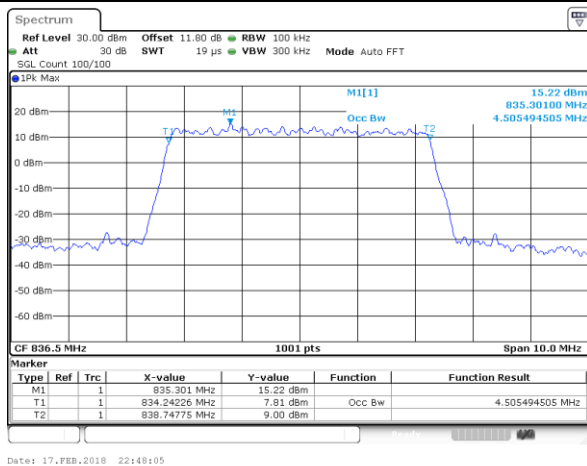
## Lowest Channel / 5MHz / QPSK



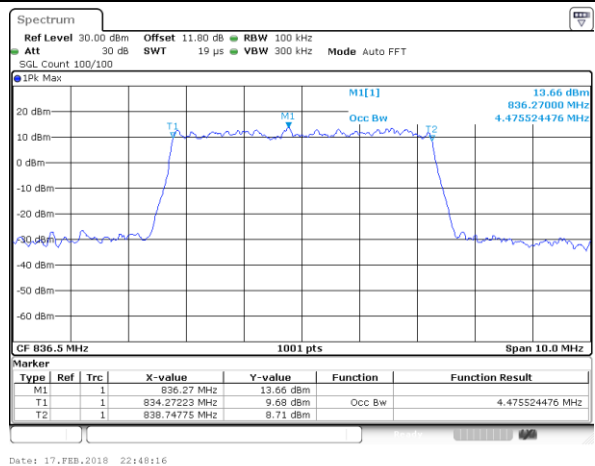
## Lowest Channel / 5MHz / 16QAM



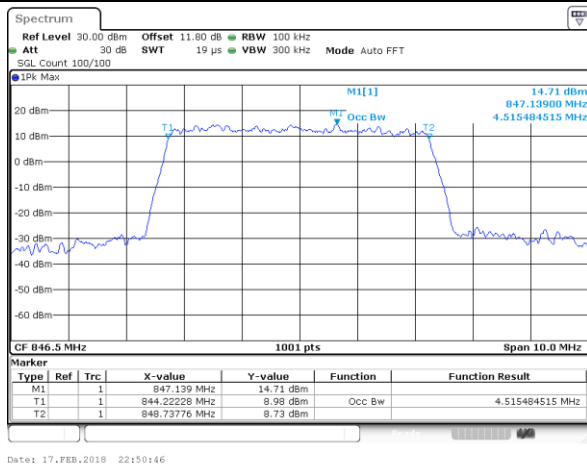
## Middle Channel / 5MHz / QPSK



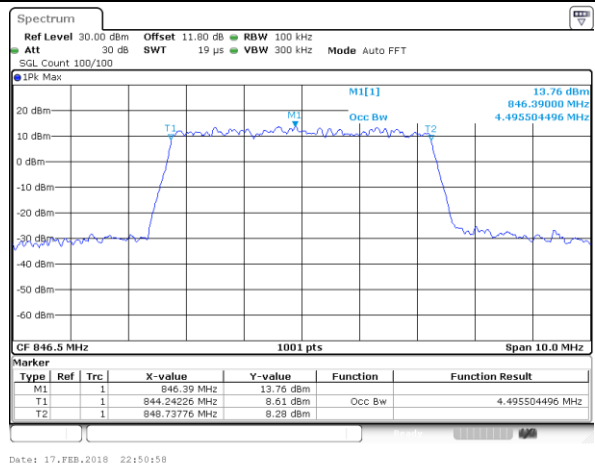
## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



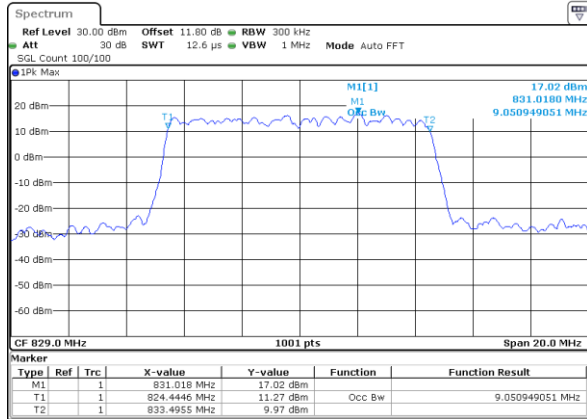
## Highest Channel / 5MHz / 16QAM





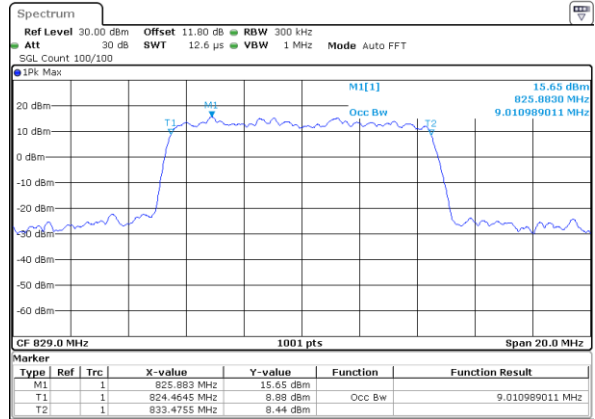
## LTE Band 5

## Lowest Channel / 10MHz / QPSK



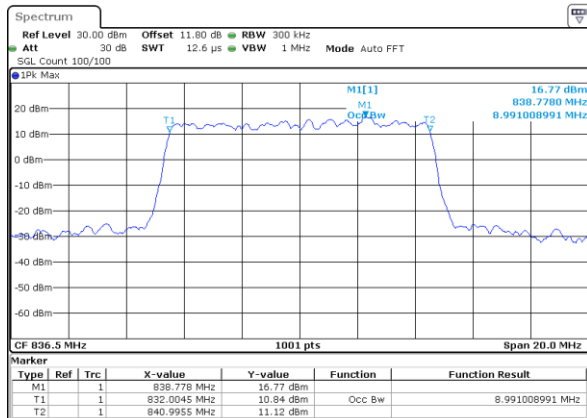
Date: 17.FEB.2018 23:00:02

## Lowest Channel / 10MHz / 16QAM



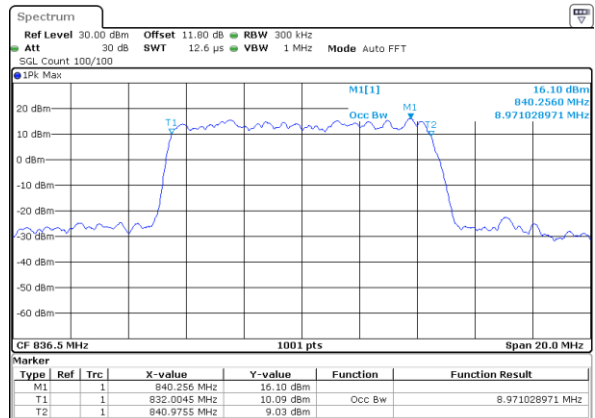
Date: 17.FEB.2018 23:00:13

## Middle Channel / 10MHz / QPSK



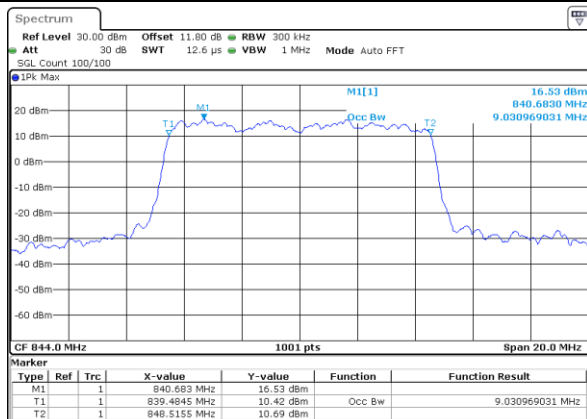
Date: 17.FEB.2018 23:09:18

## Middle Channel / 10MHz / 16QAM



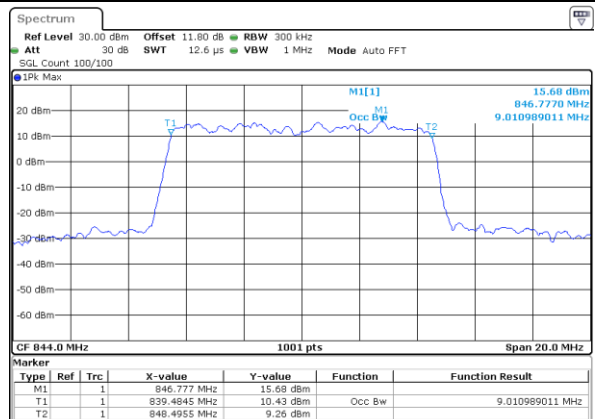
Date: 17.FEB.2018 23:09:29

## Highest Channel / 10MHz / QPSK



Date: 17.FEB.2018 23:11:58

## Highest Channel / 10MHz / 16QAM

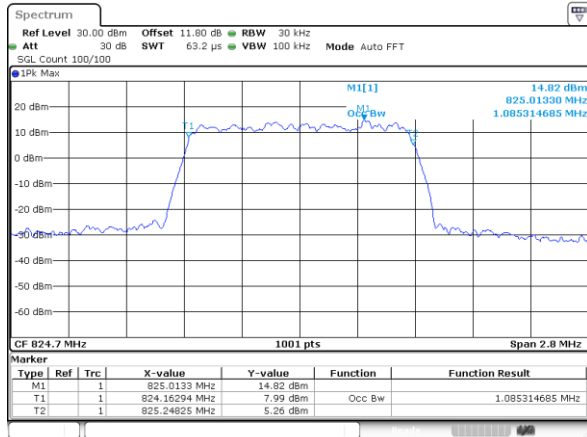


Date: 17.FEB.2018 23:12:10

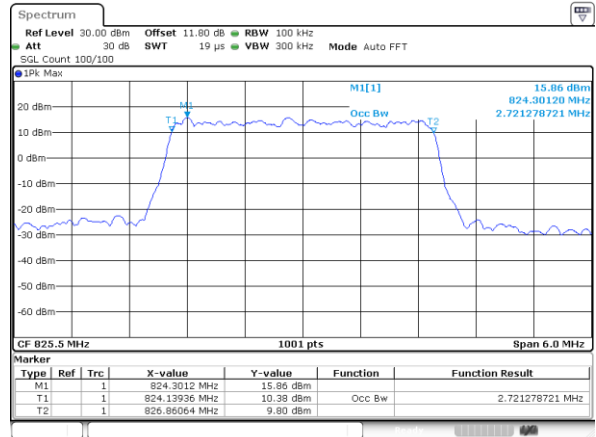


## LTE Band 5

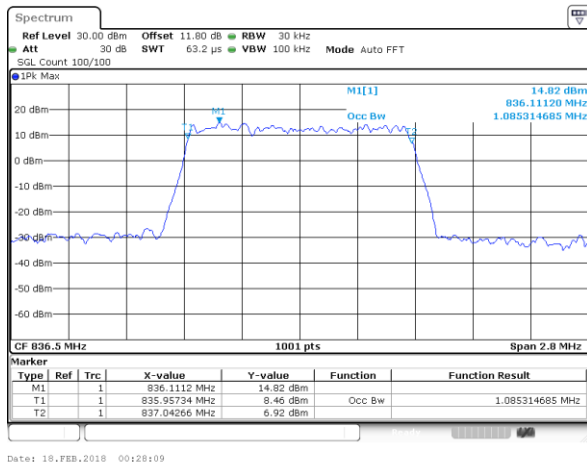
## Lowest Channel / 1.4MHz / 64QAM



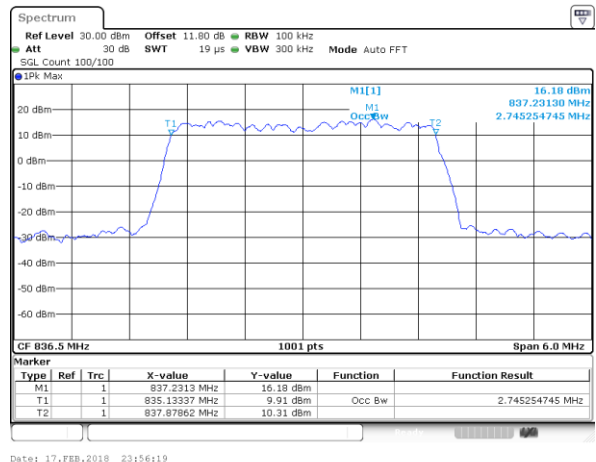
## Lowest Channel / 3MHz / 64QAM



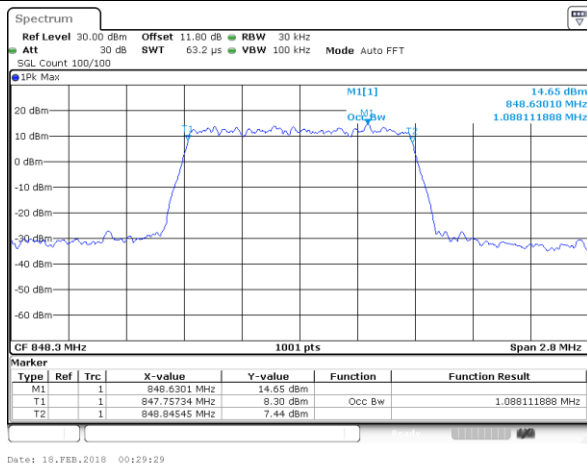
## Middle Channel / 1.4MHz / 64QAM



## Middle Channel / 3MHz / 64QAM



## Highest Channel / 1.4MHz / 64QAM



## Highest Channel / 3MHz / 64QAM

