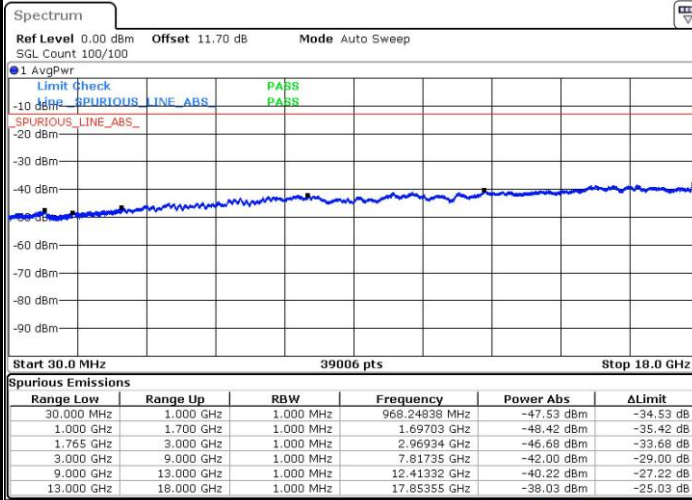




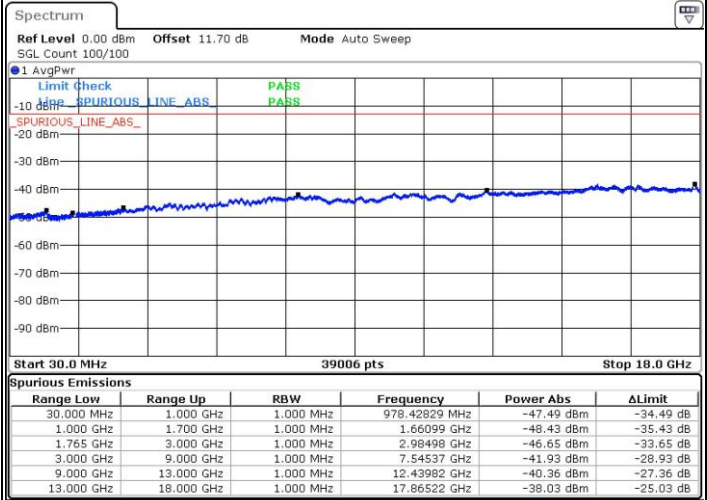
## LTE Band 4 / 5MHz

## Highest Channel / QPSK



Date: 24.OCT.2018 14:53:13

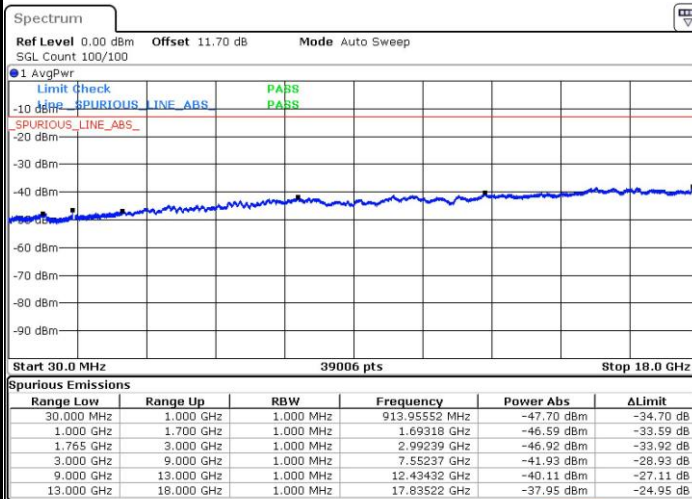
## Highest Channel / 16QAM



Date: 24.OCT.2018 14:53:53

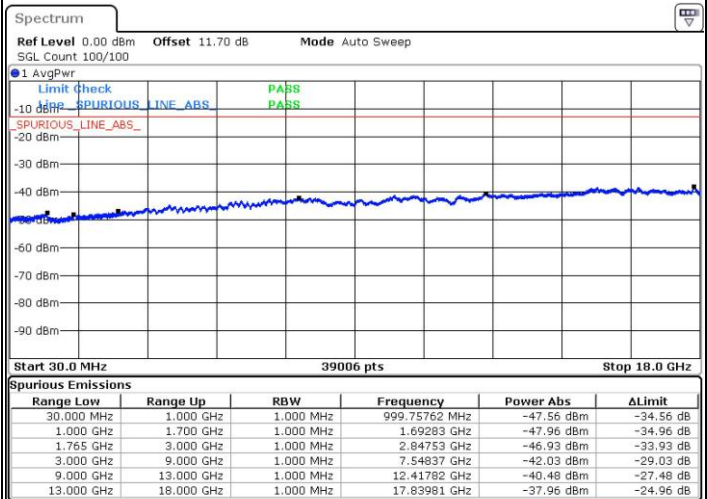
## LTE Band 4 / 10MHz

## Lowest Channel / QPSK



Date: 24.OCT.2018 14:59:20

## Lowest Channel / 16QAM

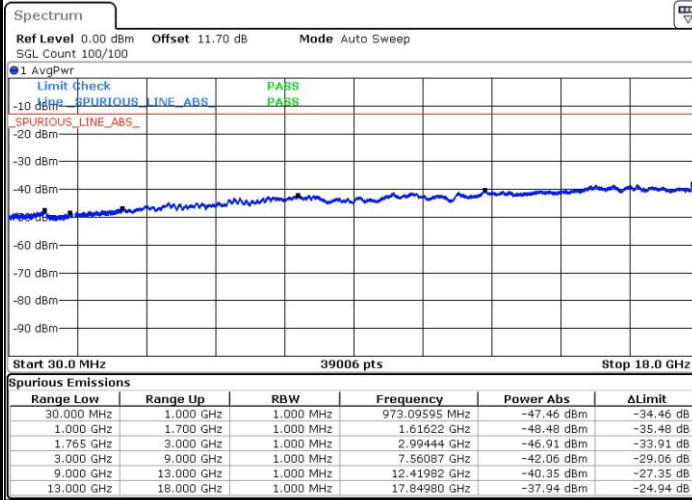


Date: 24.OCT.2018 15:00:01



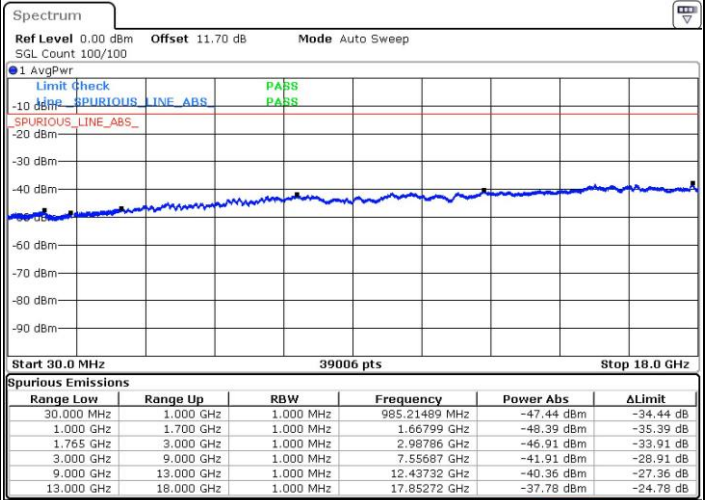
## LTE Band 4 / 10MHz

## Middle Channel / QPSK



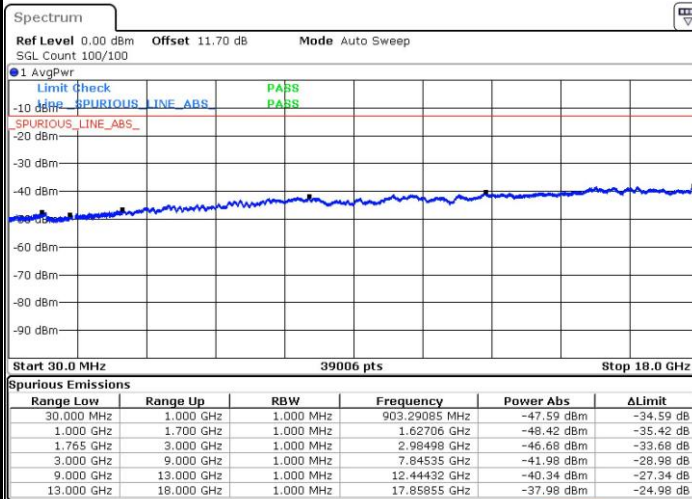
Date: 24.OCT.2018 15:01:27

## Middle Channel / 16QAM



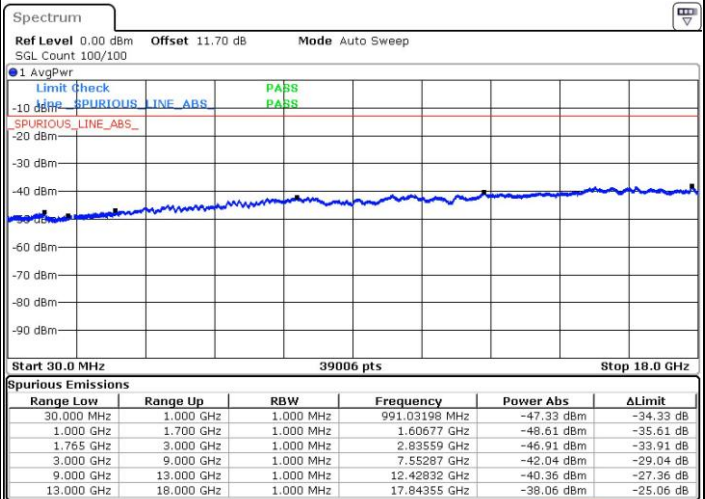
Date: 24.OCT.2018 15:02:08

## Highest Channel / QPSK



Date: 24.OCT.2018 15:07:35

## Highest Channel / 16QAM

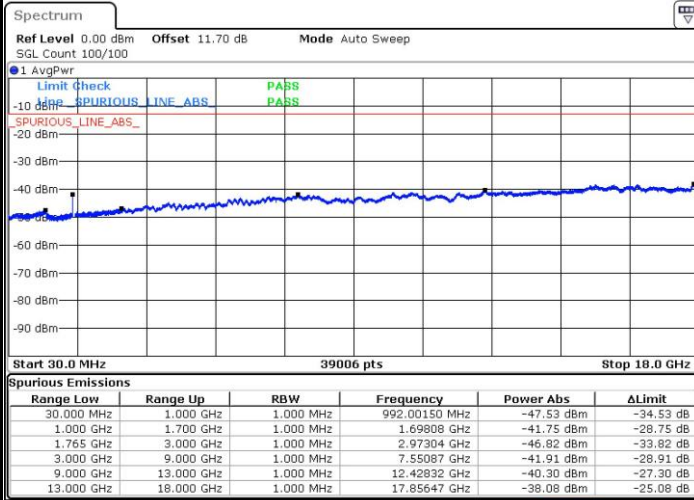


Date: 24.OCT.2018 15:08:15



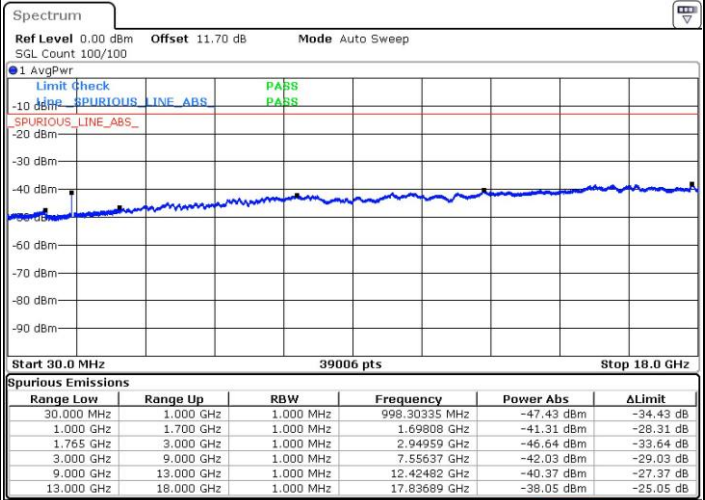
## LTE Band 4 / 15MHz

## Lowest Channel / QPSK



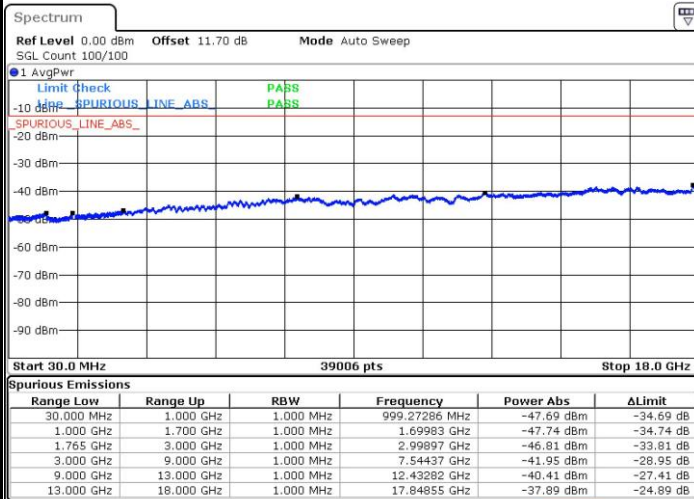
Date: 24.OCT.2018 15:13:42

## Lowest Channel / 16QAM



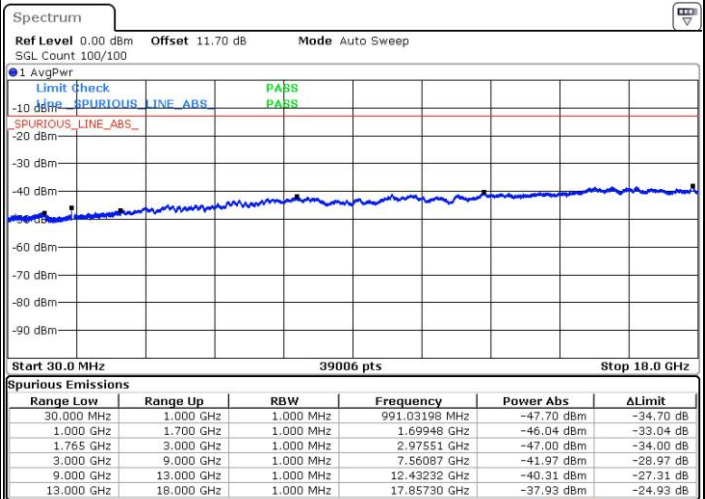
Date: 24.OCT.2018 15:14:23

## Middle Channel / QPSK



Date: 24.OCT.2018 15:15:49

## Middle Channel / 16QAM

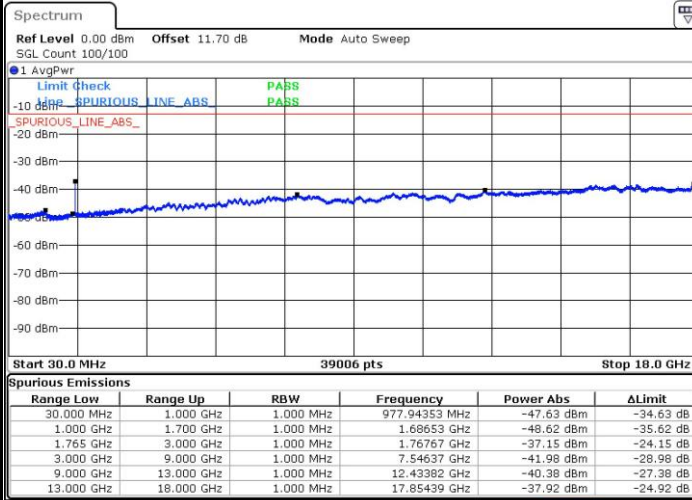


Date: 24.OCT.2018 15:16:29



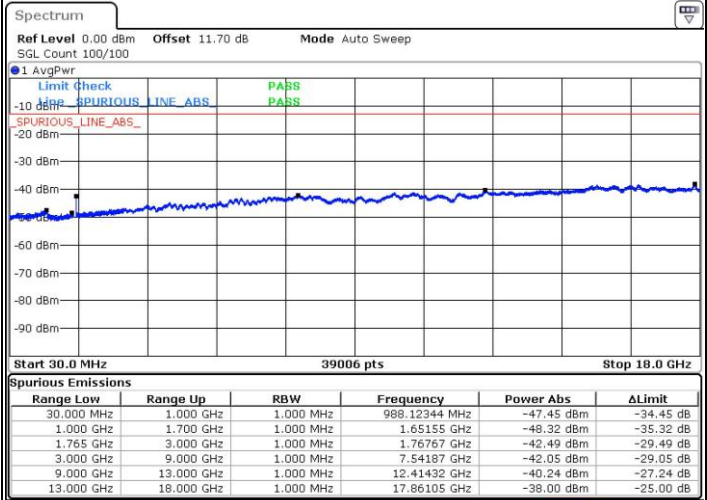
## LTE Band 4 / 15MHz

## Highest Channel / QPSK



Date: 24.OCT.2018 15:21:56

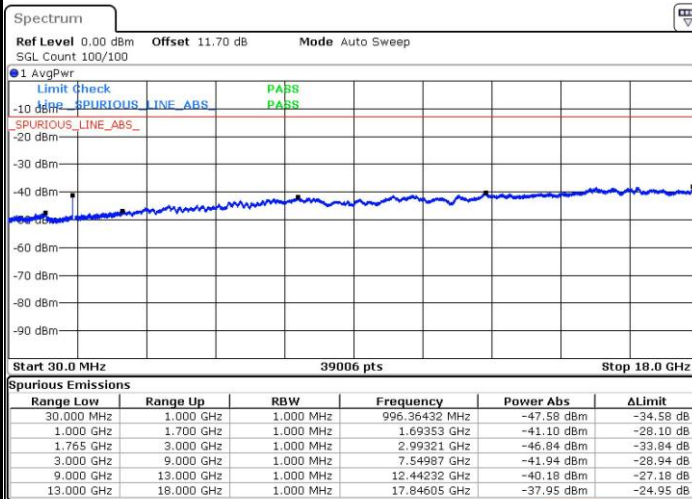
## Highest Channel / 16QAM



Date: 24.OCT.2018 15:22:36

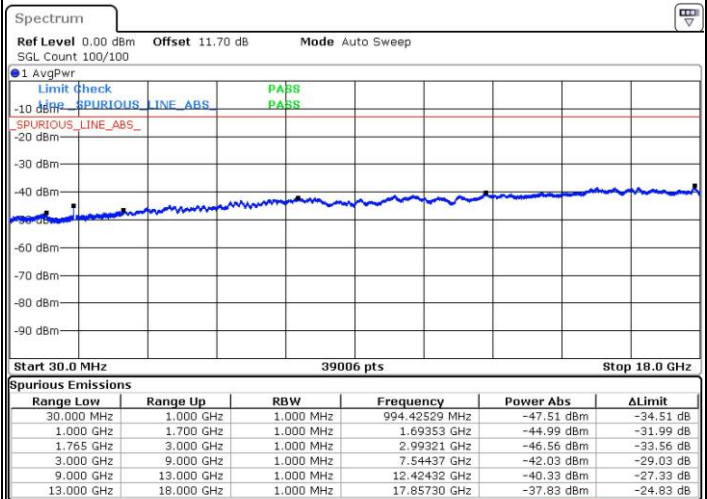
## LTE Band 4 / 20MHz

## Lowest Channel / QPSK



Date: 24.OCT.2018 15:28:03

## Lowest Channel / 16QAM

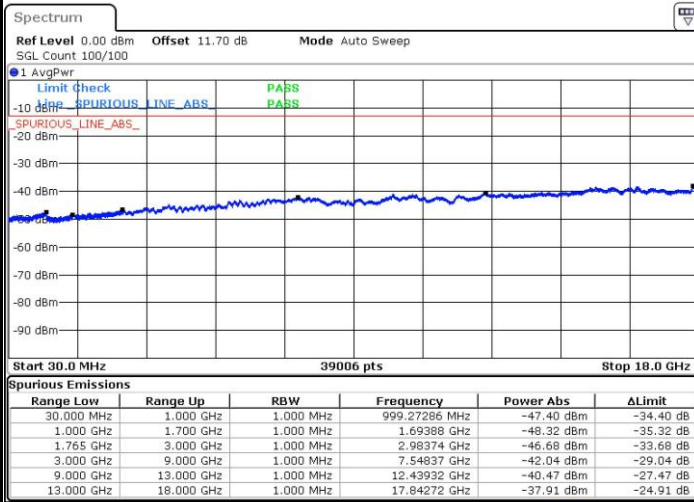


Date: 24.OCT.2018 15:28:44



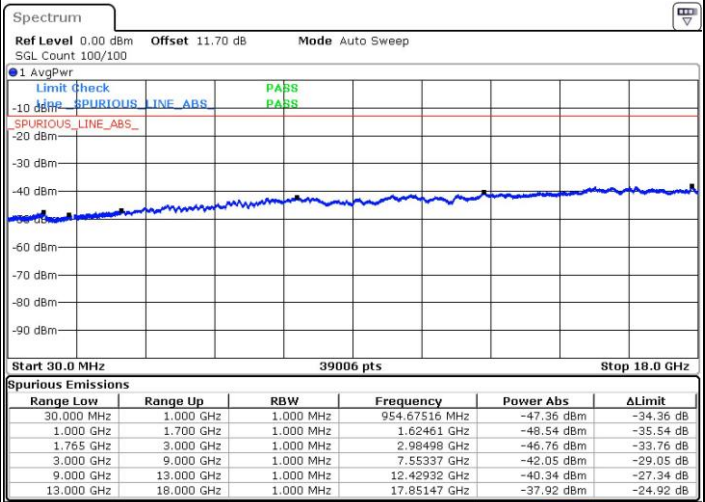
## LTE Band 4 / 20MHz

## Middle Channel / QPSK



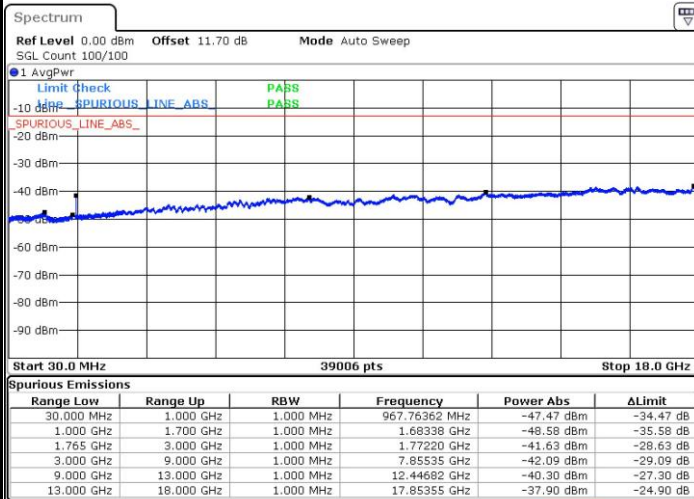
Date: 24.OCT.2018 15:30:10

## Middle Channel / 16QAM



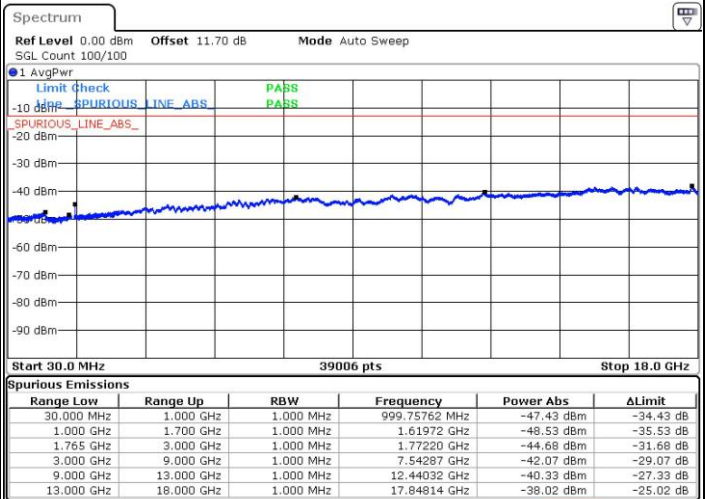
Date: 24.OCT.2018 15:30:50

## Highest Channel / QPSK



Date: 24.OCT.2018 15:36:17

## Highest Channel / 16QAM

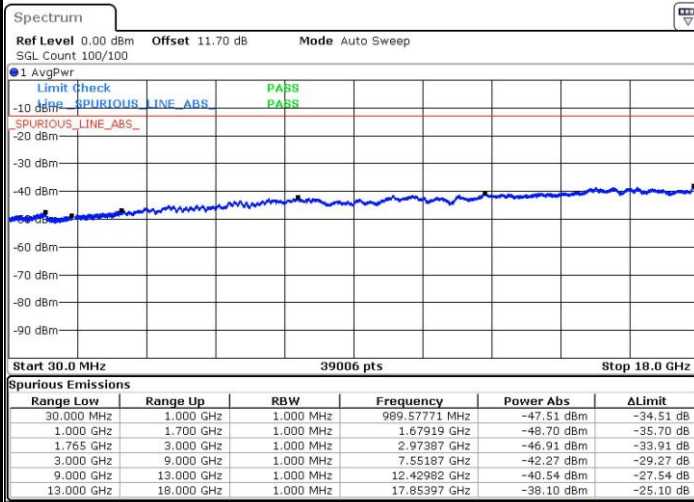


Date: 24.OCT.2018 15:36:57



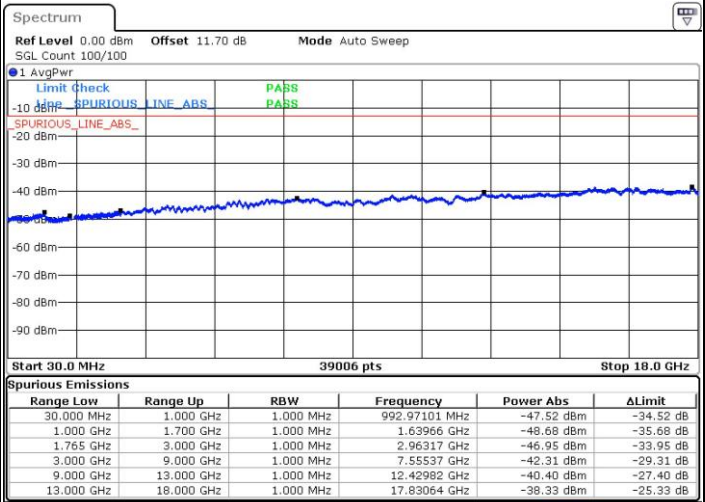
## LTE Band 4 / 1.4MHz

## Lowest Channel / 64QAM



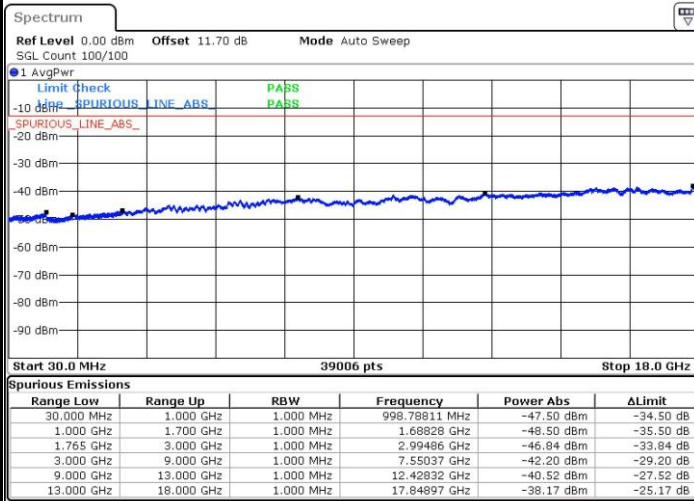
Date: 24.OCT.2018 16:16:00

## Middle Channel / 64QAM



Date: 24.OCT.2018 16:17:03

## Highest Channel / 64QAM

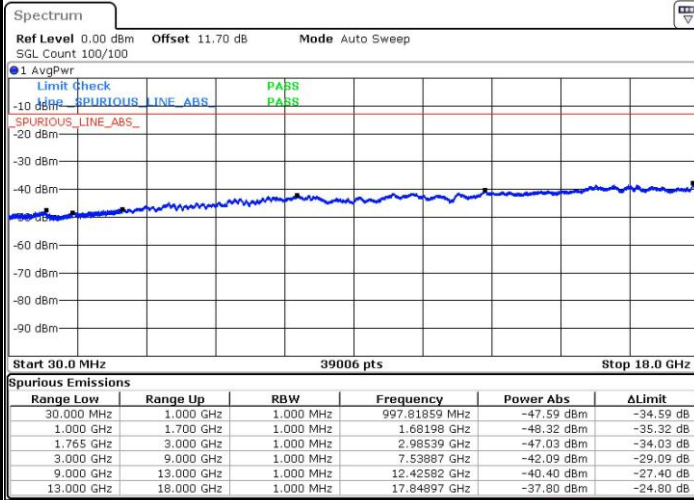


Date: 24.OCT.2018 16:20:14



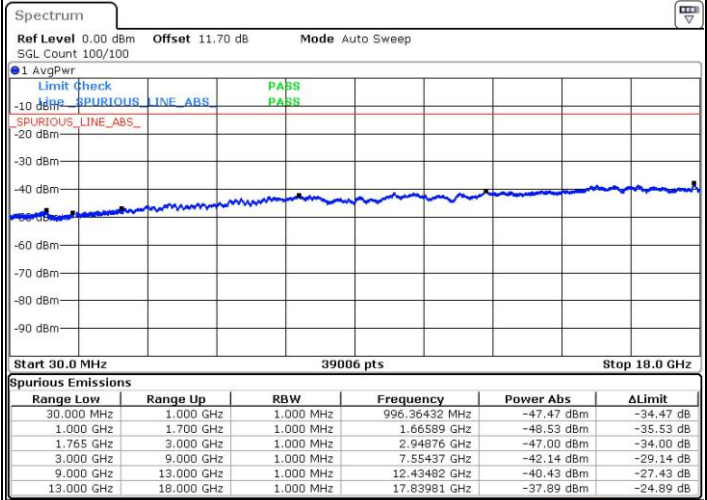
## LTE Band 4 / 3MHz

## Lowest Channel / 64QAM



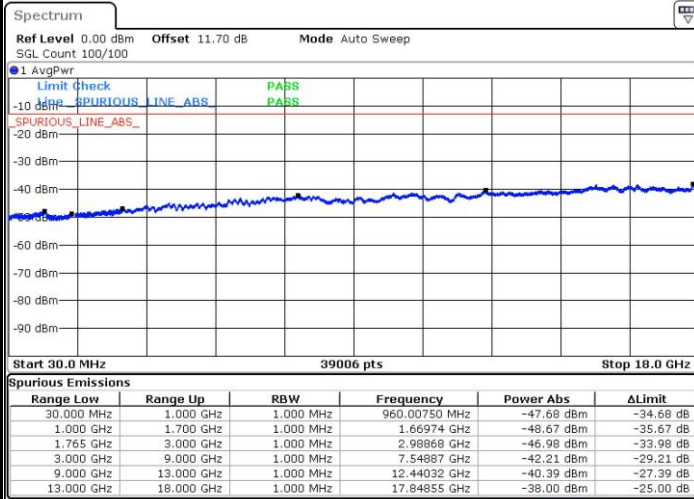
Date: 24.OCT.2018 15:40:01

## Middle Channel / 64QAM



Date: 24.OCT.2018 15:41:04

## Highest Channel / 64QAM

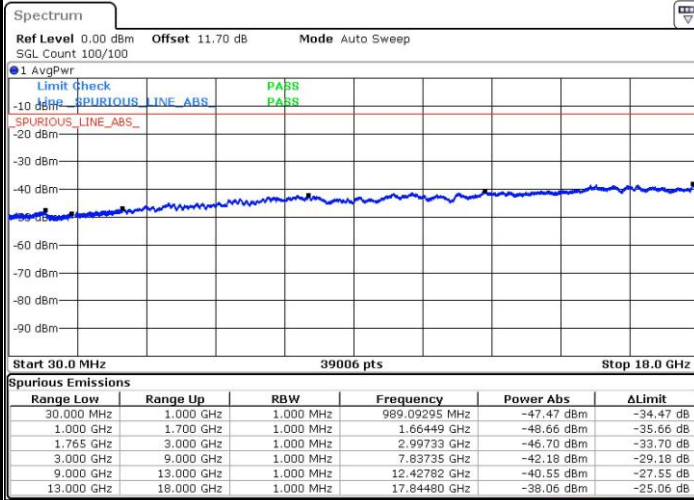


Date: 24.OCT.2018 15:44:08



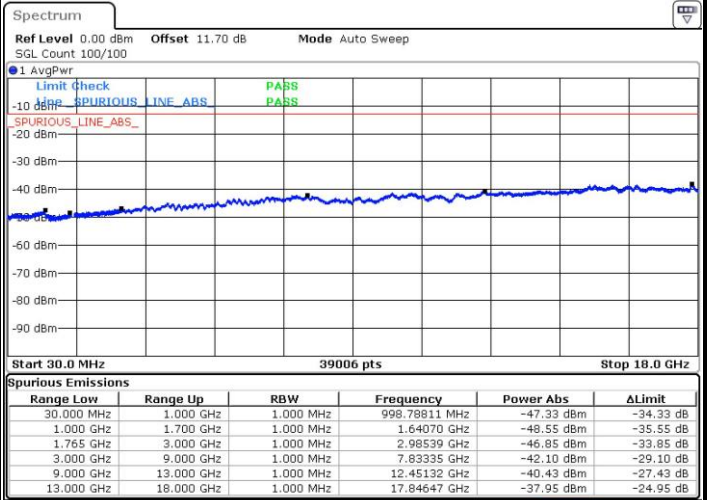
## LTE Band 4 / 5MHz

## Lowest Channel / 64QAM



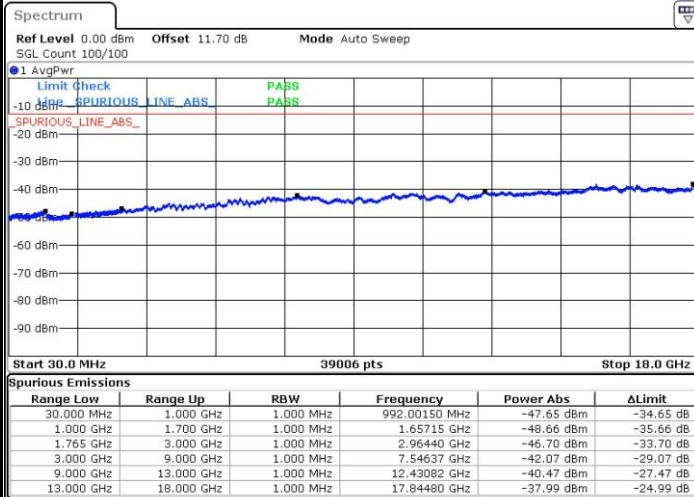
Date: 24.OCT.2018 15:47:12

## Middle Channel / 64QAM



Date: 24.OCT.2018 15:48:15

## Highest Channel / 64QAM

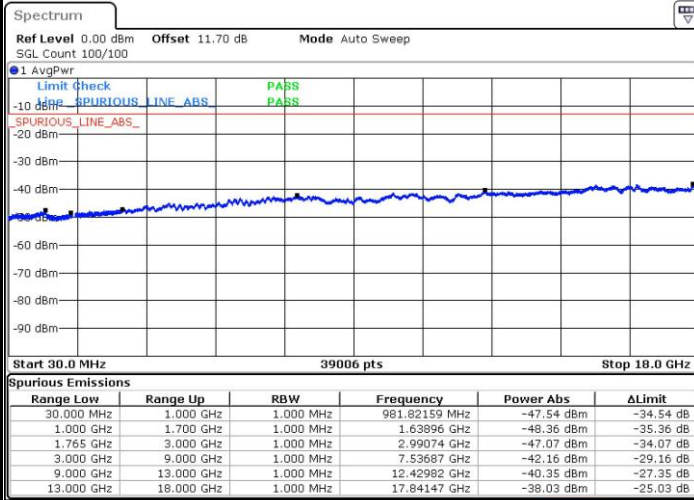


Date: 24.OCT.2018 15:51:19



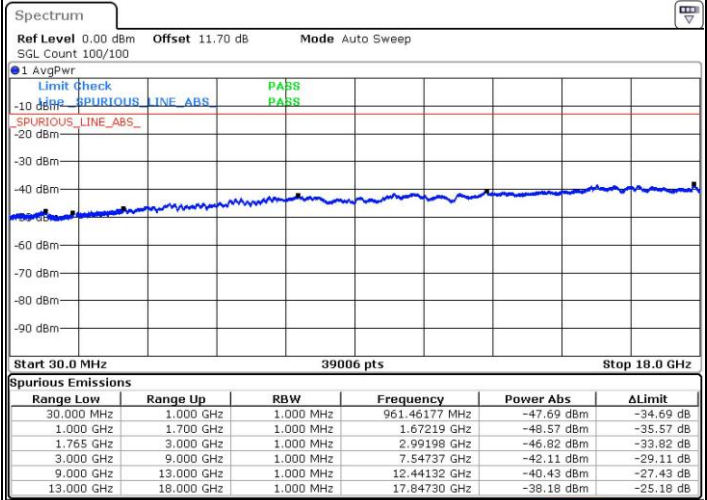
## LTE Band 4 / 10MHz

## Lowest Channel / 64QAM



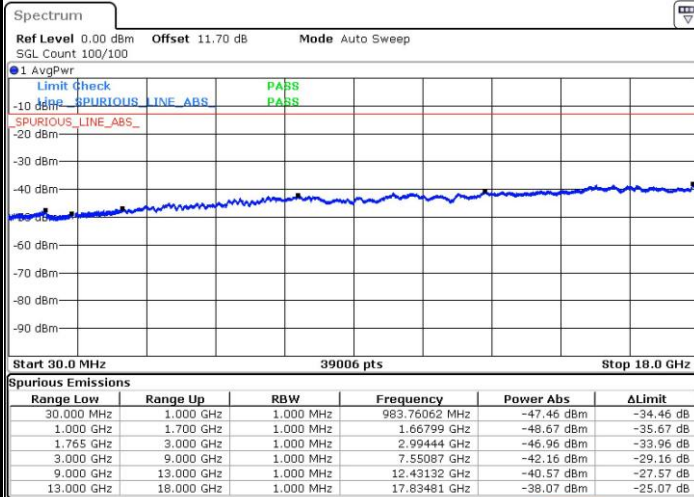
Date: 24.OCT.2018 15:54:22

## Middle Channel / 64QAM



Date: 24.OCT.2018 15:55:26

## Highest Channel / 64QAM

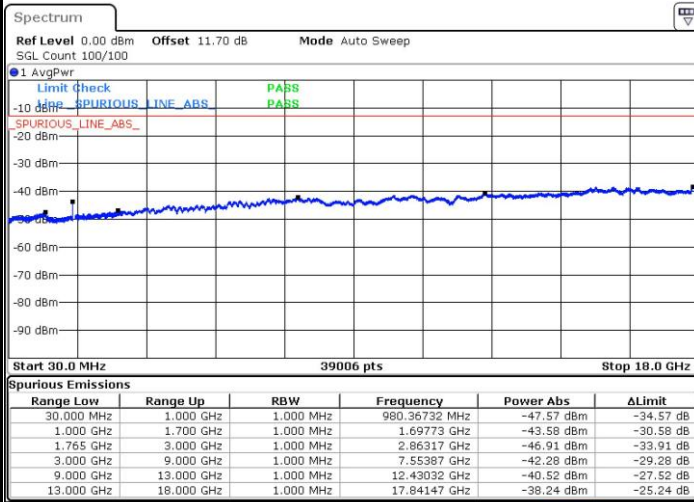


Date: 24.OCT.2018 15:58:29



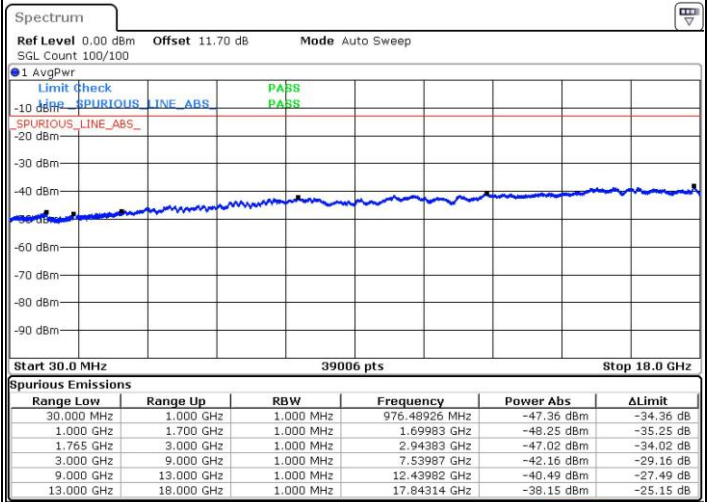
## LTE Band 4 / 15MHz

## Lowest Channel / 64QAM



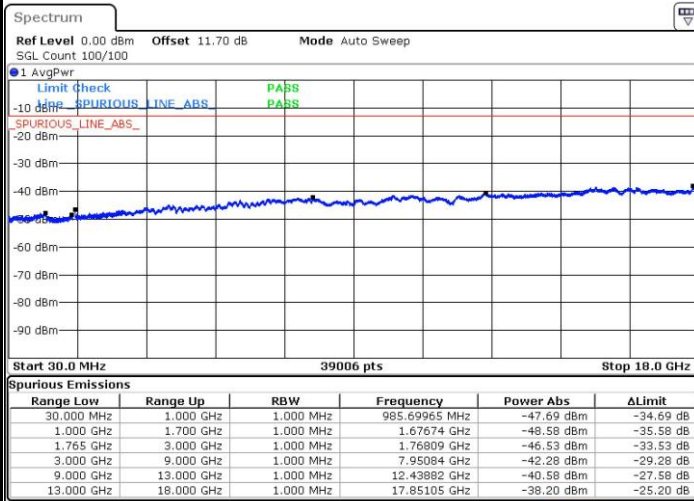
Date: 24.OCT.2018 16:01:33

## Middle Channel / 64QAM



Date: 24.OCT.2018 16:02:36

## Highest Channel / 64QAM

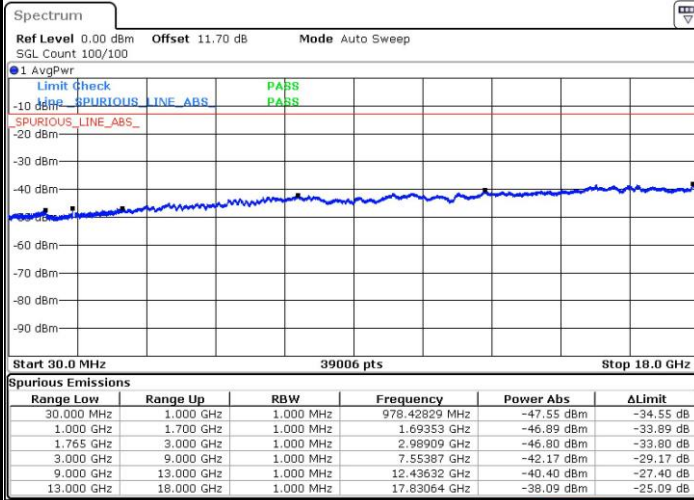


Date: 24.OCT.2018 16:05:40



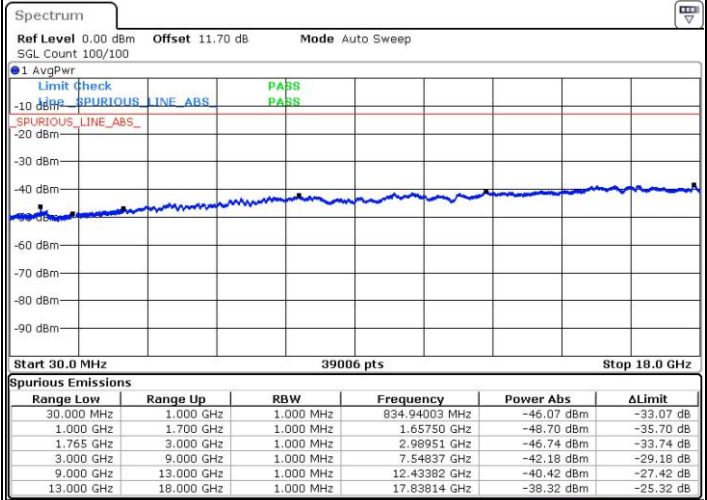
## LTE Band 4 / 20MHz

## Lowest Channel / 64QAM



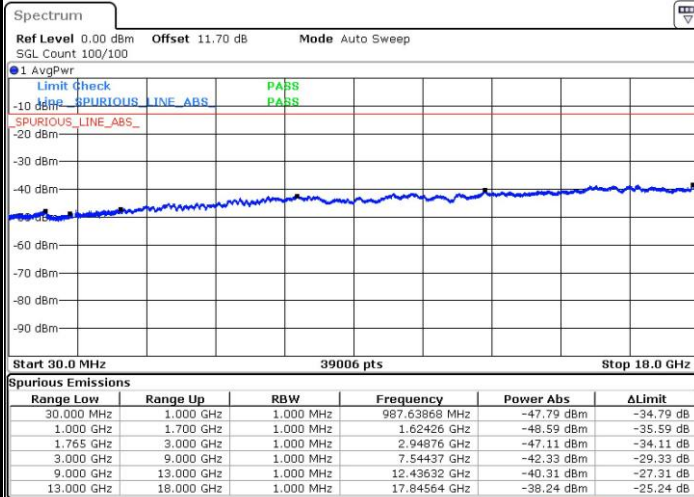
Date: 24.OCT.2018 16:08:43

## Middle Channel / 64QAM



Date: 24.OCT.2018 16:09:47

## Highest Channel / 64QAM



Date: 24.OCT.2018 16:12:50

## Frequency Stability

| Test Conditions  |                   | LTE Band 4 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                           | Note 2. |
|                  |                   | Deviation (ppm)                    | Result  |
| 50               | Normal Voltage    | 0.0053                             | PASS    |
| 40               | Normal Voltage    | 0.0002                             |         |
| 30               | Normal Voltage    | 0.0007                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0059                             |         |
| 0                | Normal Voltage    | 0.0058                             |         |
| -10              | Normal Voltage    | 0.0047                             |         |
| -20              | Normal Voltage    | 0.0050                             |         |
| -30              | Normal Voltage    | 0.0002                             |         |
| 20               | Maximum Voltage   | 0.0005                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0003                             |         |

**Note:**

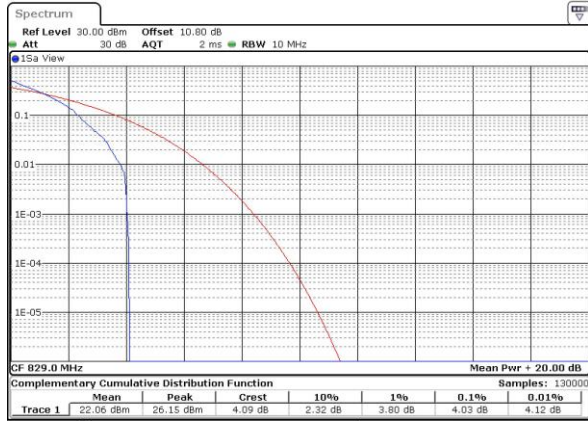
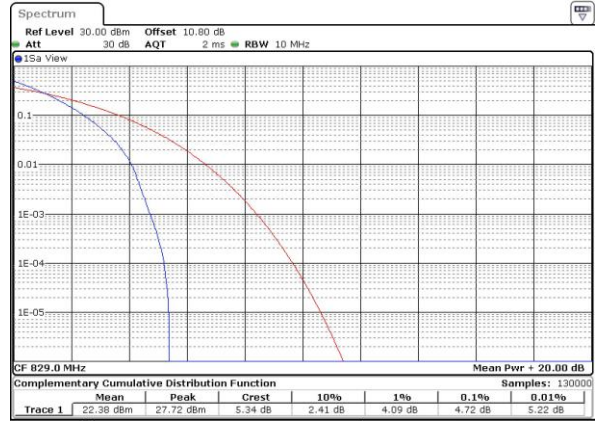
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

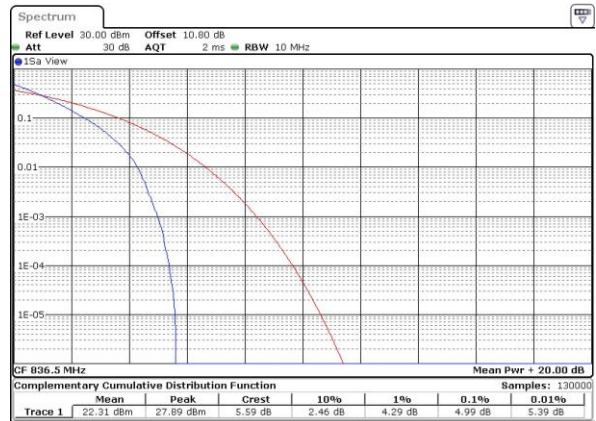


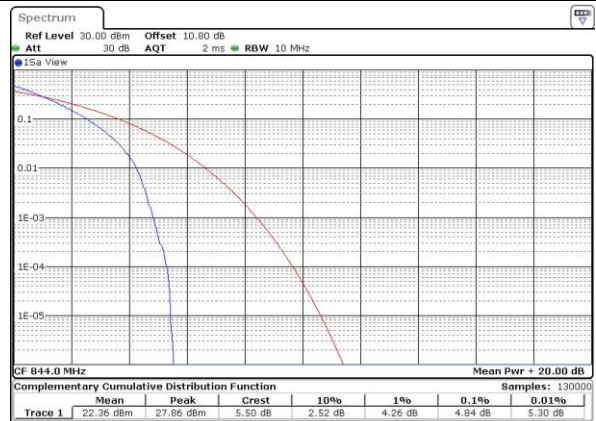
## LTE Band 5

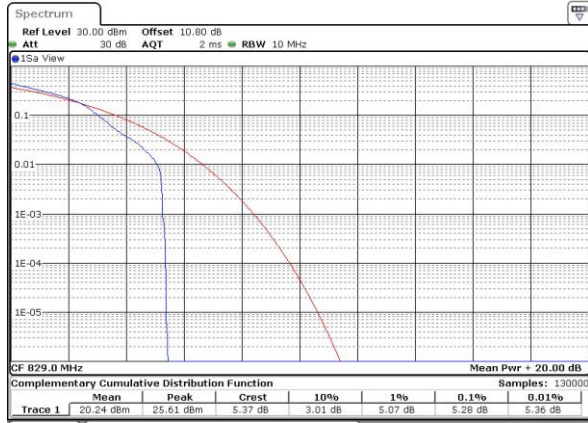
### Peak-to-Average Ratio

| Mode       | LTE Band 5 / 10MHz |         |       |         |             |
|------------|--------------------|---------|-------|---------|-------------|
| Mod.       | QPSK               |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 4.03               | 4.72    | 5.28  | 5.65    | PASS        |
| Middle CH  | 4.2                | 4.99    | 5.04  | 5.88    |             |
| Highest CH | 4.46               | 4.84    | 5.22  | 5.91    |             |
| Mode       | LTE Band 5 / 10MHz |         |       |         |             |
| Mod.       | 64QAM              |         |       |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB |       |         | Result      |
| Lowest CH  | 6.75               | 6.09    | -     | -       | PASS        |
| Middle CH  | 6.70               | 6.43    | -     | -       |             |
| Highest CH | 6.23               | 6.41    | -     | -       |             |

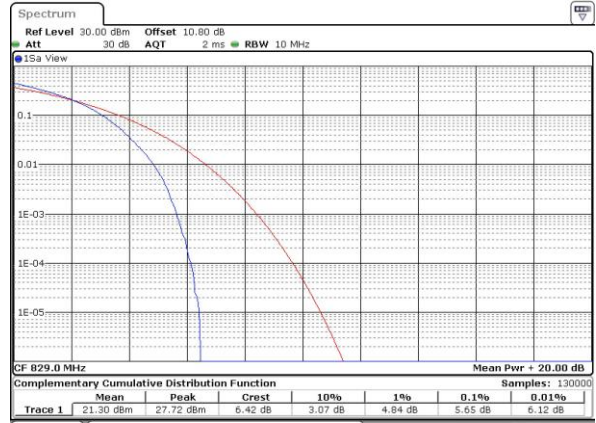
**LTE Band 5 / 10MHz / QPSK**
**Lowest Channel / 1RB**

**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**


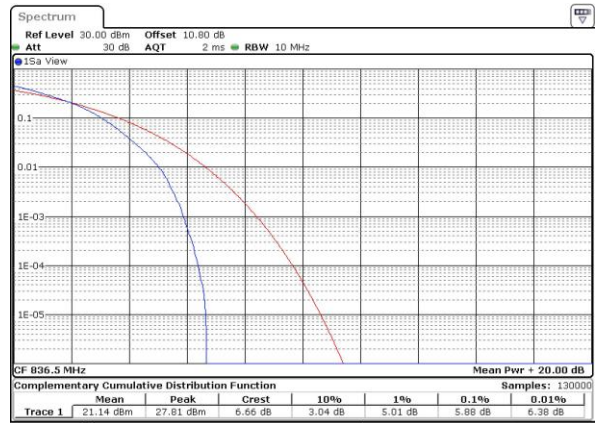
Date: 24.OCT.2018 23:25:32

**Lowest Channel / Full RB**


Date: 24.OCT.2018 23:25:42

**Middle Channel / 1RB**


Date: 24.OCT.2018 23:25:52

**Middle Channel / Full RB**


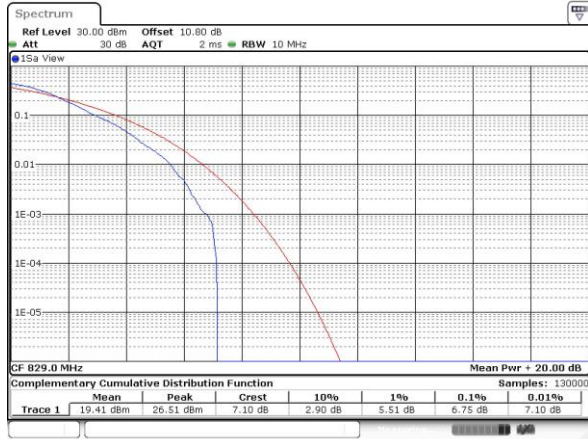
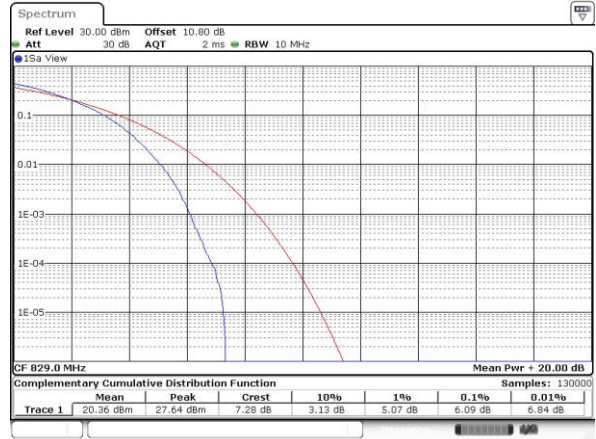
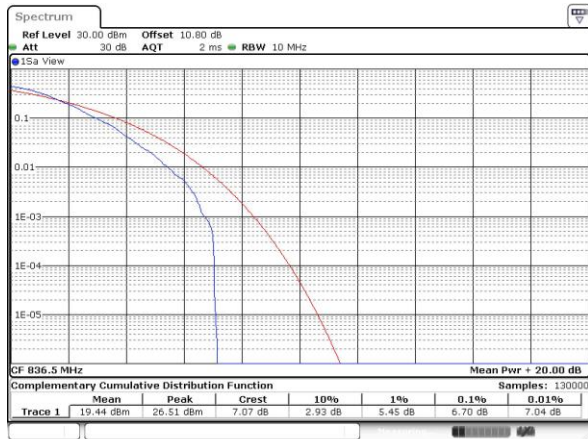
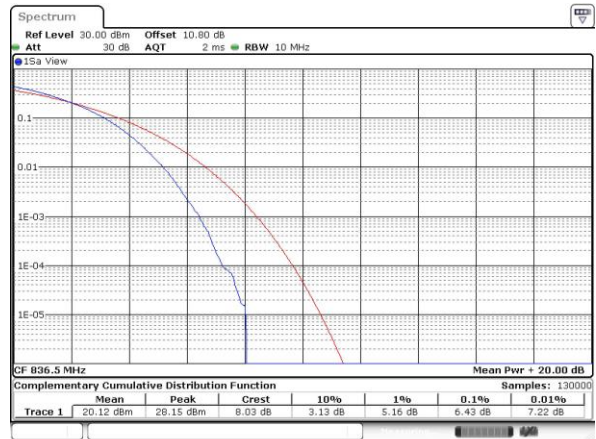
Date: 24.OCT.2018 23:26:02

**Highest Channel / 1RB**


Date: 24.OCT.2018 23:26:12

**Highest Channel / Full RB**


Date: 24.OCT.2018 23:26:21

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

**Lowest Channel / Full RB**

**Middle Channel / 1RB**

**Middle Channel / Full RB**

**Highest Channel / 1RB**

**Highest Channel / Full RB**

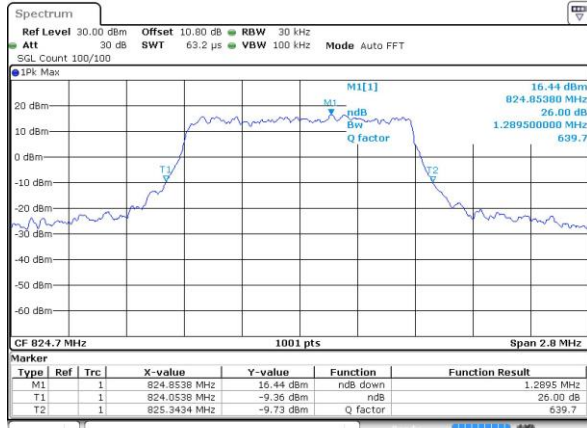

**26dB Bandwidth**

| Mode       | LTE Band 5 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
|------------|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | QPSK                      | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | 1.29                      | 1.28  | 2.99  | 3.03  | 4.93  | 4.87  | 9.75  | 9.93  | -     | -     | -     | -     |
| Middle CH  | 1.28                      | 1.27  | 2.97  | 3.03  | 4.94  | 4.97  | 9.87  | 9.81  | -     | -     | -     | -     |
| Highest CH | 1.27                      | 1.26  | 3.05  | 2.99  | 4.89  | 4.93  | 9.65  | 9.67  | -     | -     | -     | -     |
| Mode       | LTE Band 5 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                     |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.24                      | -     | 3.02  | -     | 4.87  | -     | 9.63  | -     | -     | -     | -     | -     |
| Middle CH  | 1.26                      | -     | 2.97  | -     | 4.98  | -     | 9.93  | -     | -     | -     | -     | -     |
| Highest CH | 1.30                      | -     | 3.00  | -     | 5.03  | -     | 9.83  | -     | -     | -     | -     | -     |



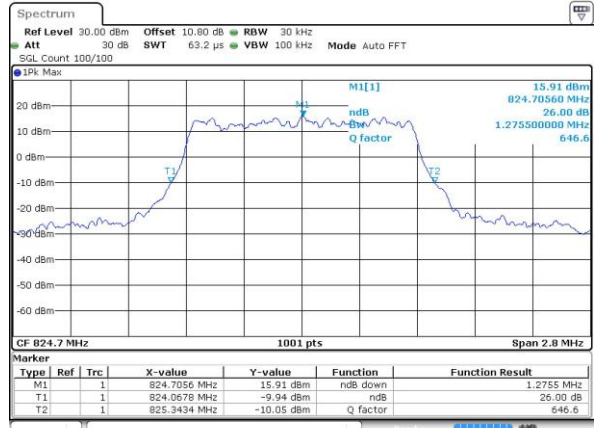
## LTE Band 5

## Lowest Channel / 1.4MHz / QPSK



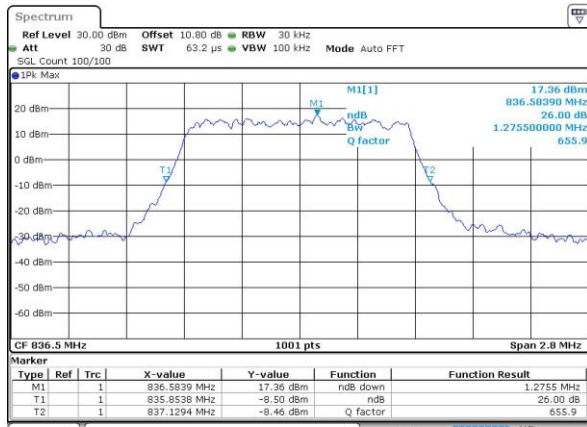
Date: 24.OCT.2018 22:58:18

## Lowest Channel / 1.4MHz / 16QAM



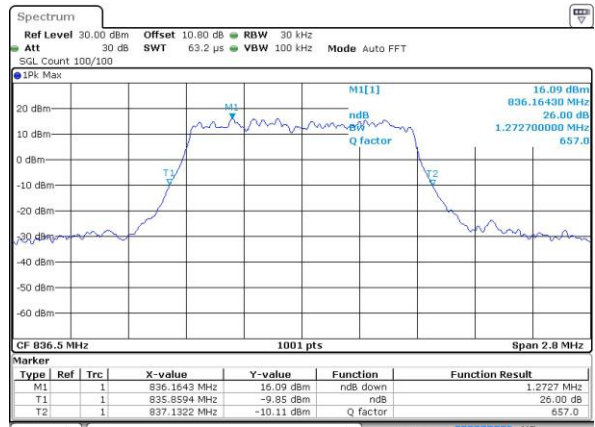
Date: 24.OCT.2018 22:58:06

## Middle Channel / 1.4MHz / QPSK



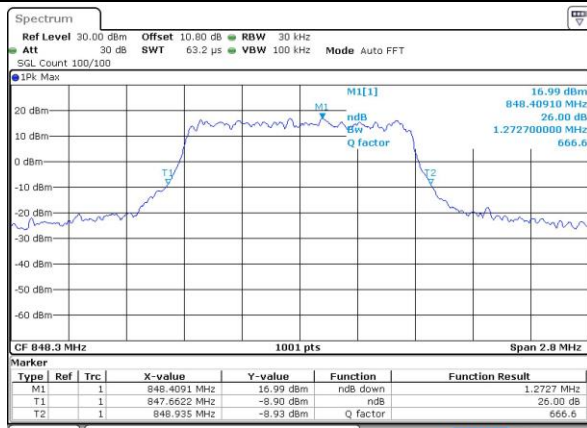
Date: 24.OCT.2018 23:06:54

## Middle Channel / 1.4MHz / 16QAM



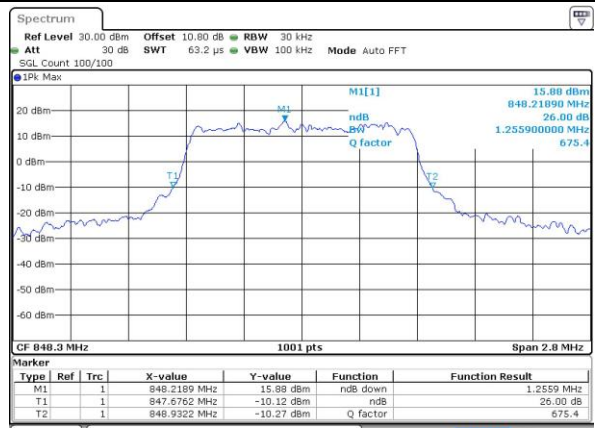
Date: 24.OCT.2018 23:07:05

## Highest Channel / 1.4MHz / QPSK



Date: 24.OCT.2018 23:09:00

## Highest Channel / 1.4MHz / 16QAM

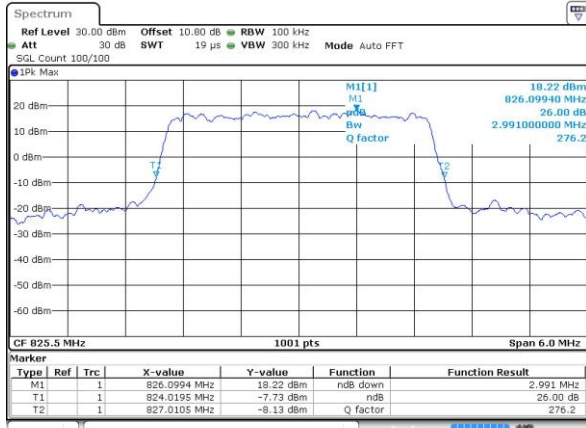


Date: 24.OCT.2018 23:09:12



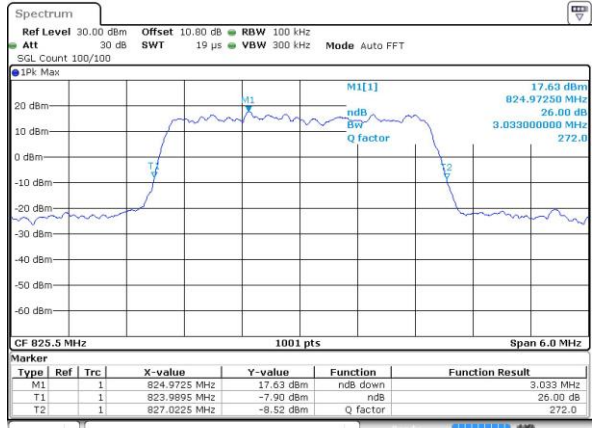
## LTE Band 5

## Lowest Channel / 3MHz / QPSK



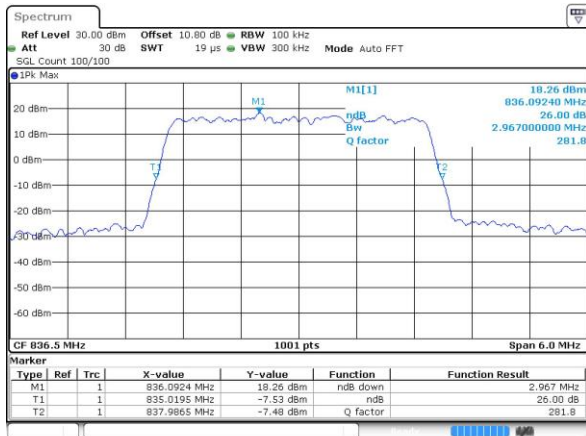
Date: 24.OCT.2018 21:14:20

## Lowest Channel / 3MHz / 16QAM



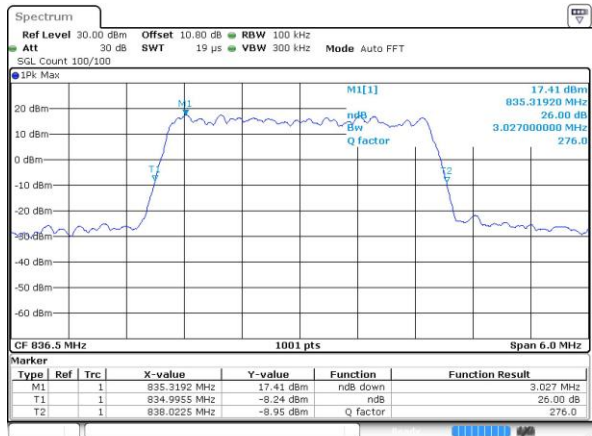
Date: 24.OCT.2018 21:14:32

## Middle Channel / 3MHz / QPSK



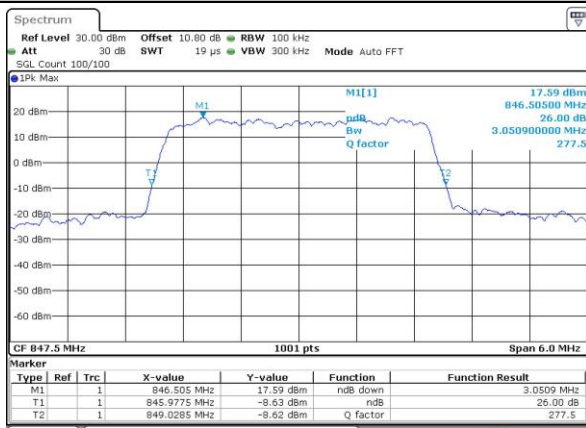
Date: 24.OCT.2018 21:23:07

## Middle Channel / 3MHz / 16QAM



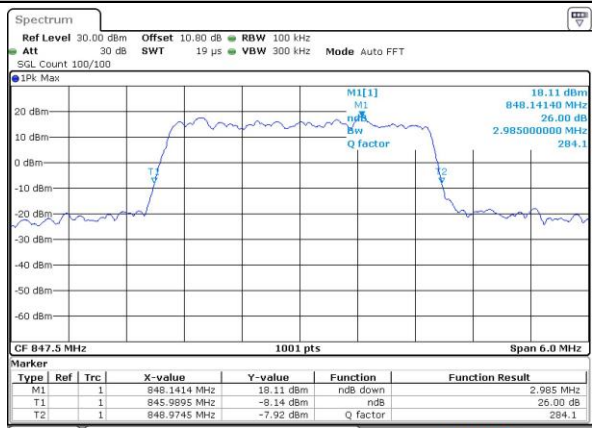
Date: 24.OCT.2018 21:23:19

## Highest Channel / 3MHz / QPSK



Date: 24.OCT.2018 21:25:13

## Highest Channel / 3MHz / 16QAM



Date: 24.OCT.2018 21:25:25