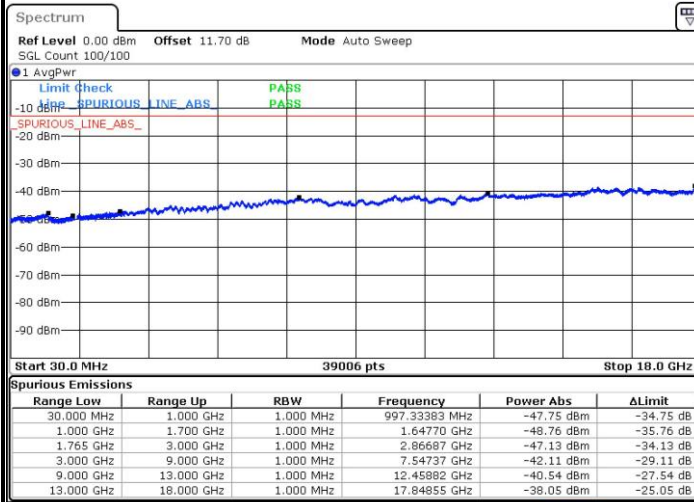




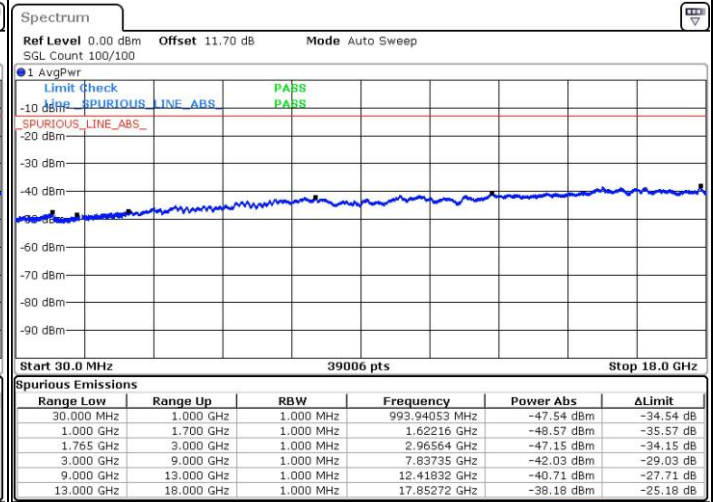
## LTE Band 4 / 5MHz

## Lowest Channel / QPSK



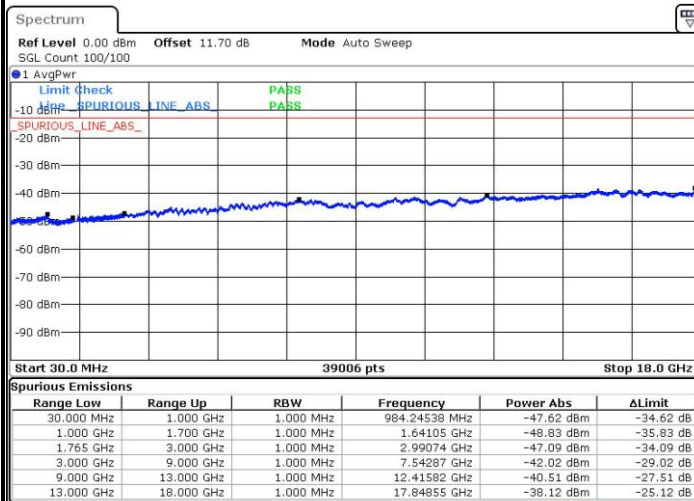
Date: 6 JUL 2018 05:27:01

## Lowest Channel / 16QAM



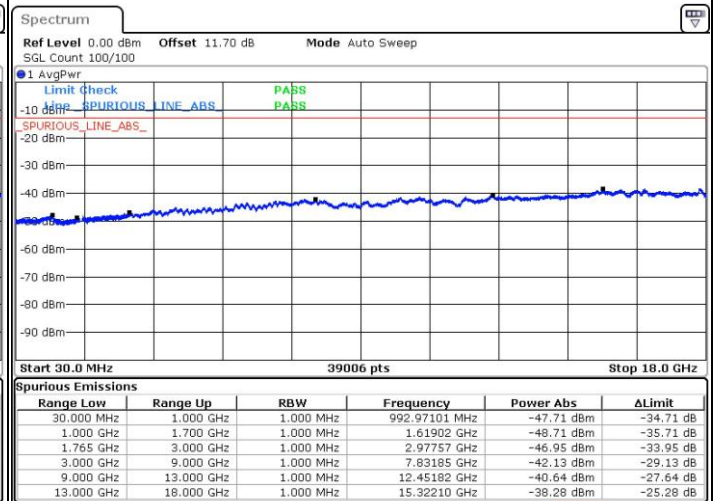
Date: 6 JUL 2018 05:27:56

## Middle Channel / QPSK



Date: 6 JUL 2018 05:29:37

## Middle Channel / 16QAM

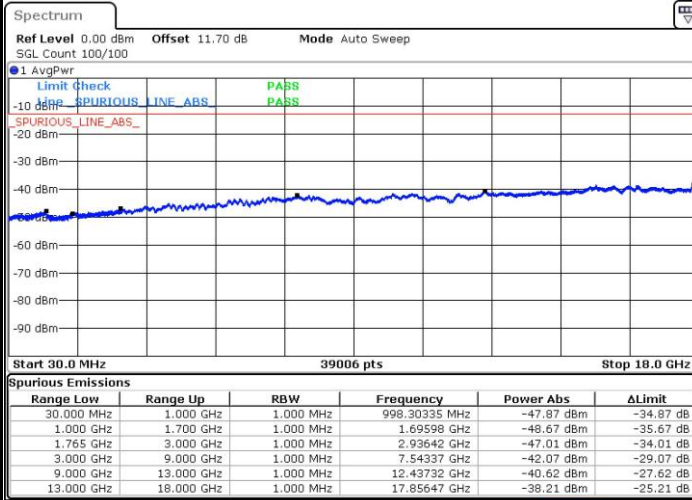


Date: 6 JUL 2018 05:30:33



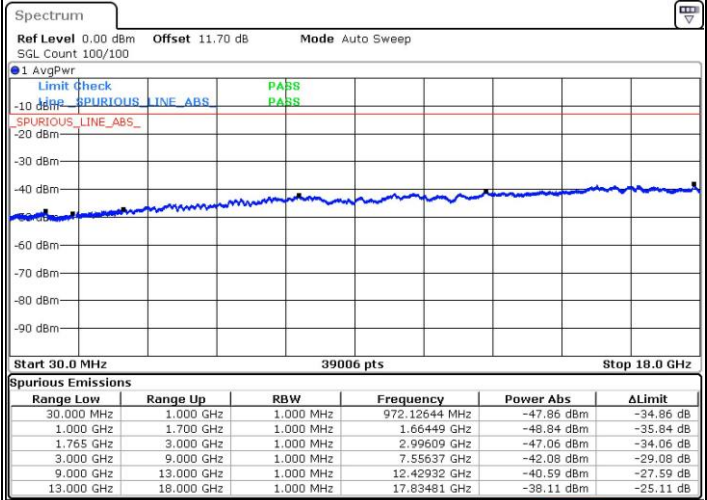
## LTE Band 4 / 5MHz

## Highest Channel / QPSK



Date: 6 JUL 2018 05:36:53

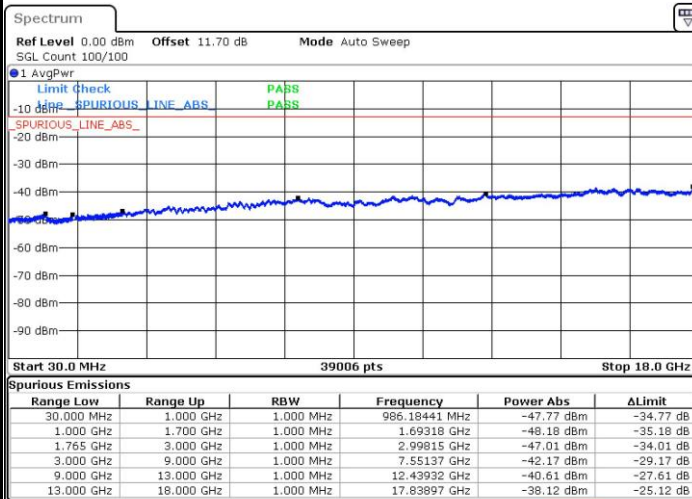
## Highest Channel / 16QAM



Date: 6 JUL 2018 05:37:49

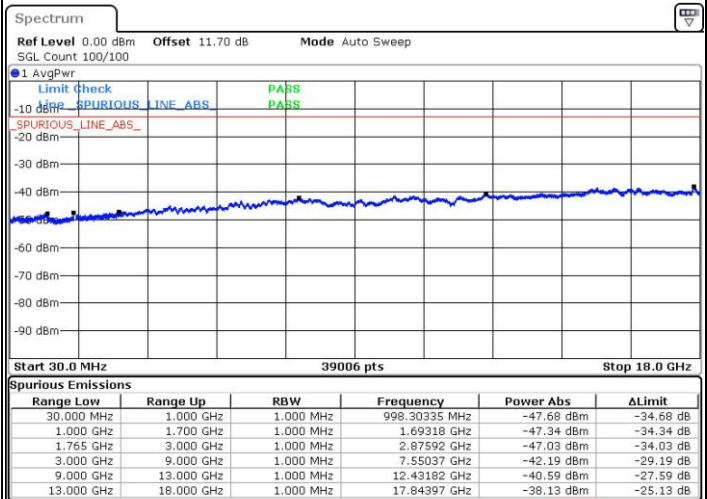
## LTE Band 4 / 10MHz

## Lowest Channel / QPSK



Date: 6 JUL 2018 05:44:10

## Lowest Channel / 16QAM

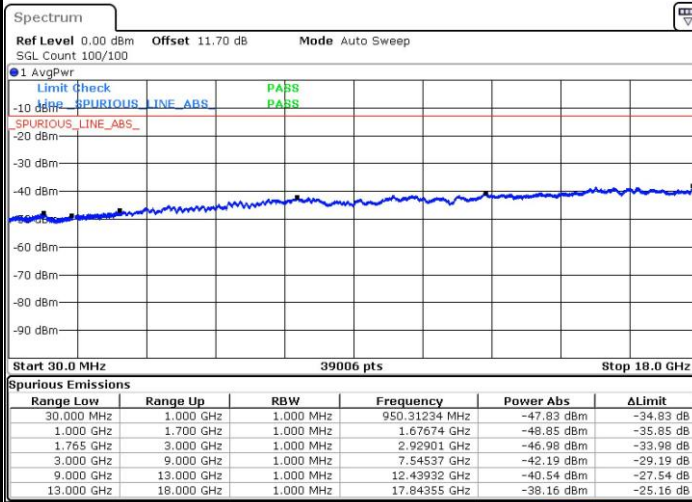


Date: 6 JUL 2018 05:45:05



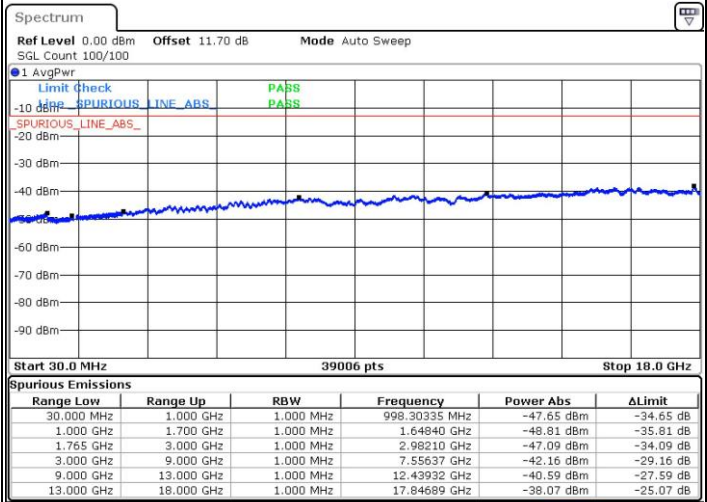
## LTE Band 4 / 10MHz

## Middle Channel / QPSK



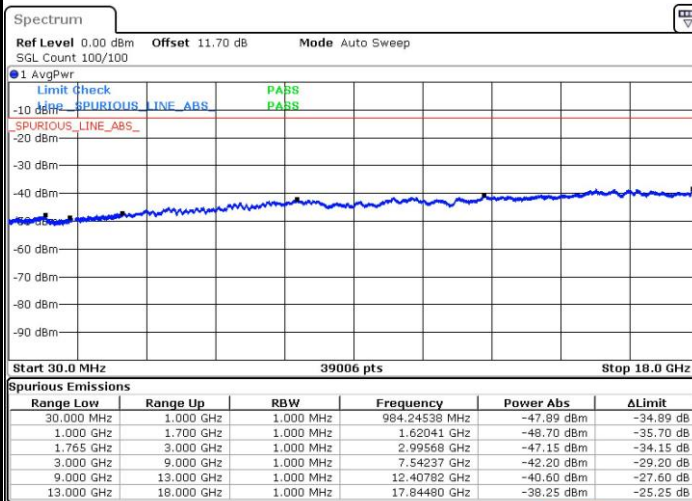
Date: 6 JUL 2018 05:46:46

## Middle Channel / 16QAM



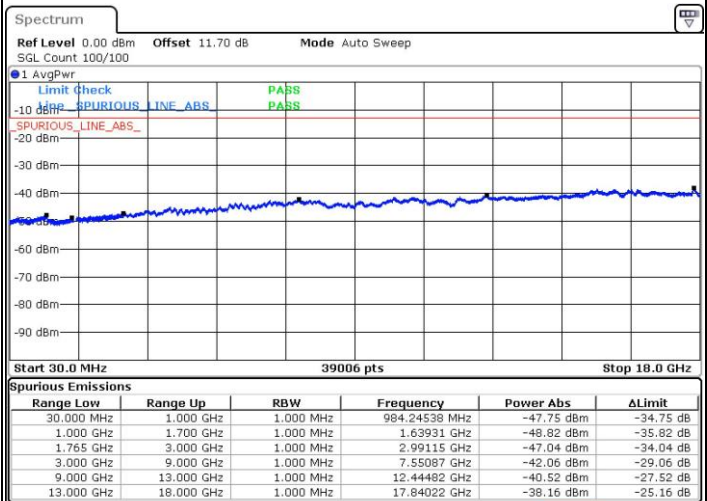
Date: 6 JUL 2018 05:47:42

## Highest Channel / QPSK



Date: 6 JUL 2018 05:54:03

## Highest Channel / 16QAM

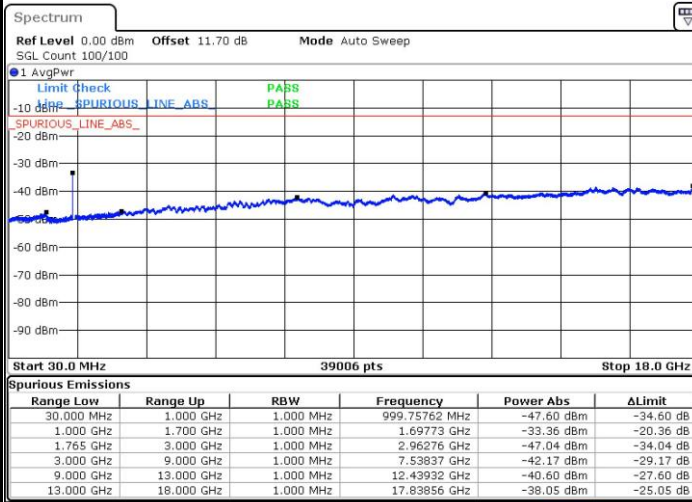


Date: 6 JUL 2018 05:54:58



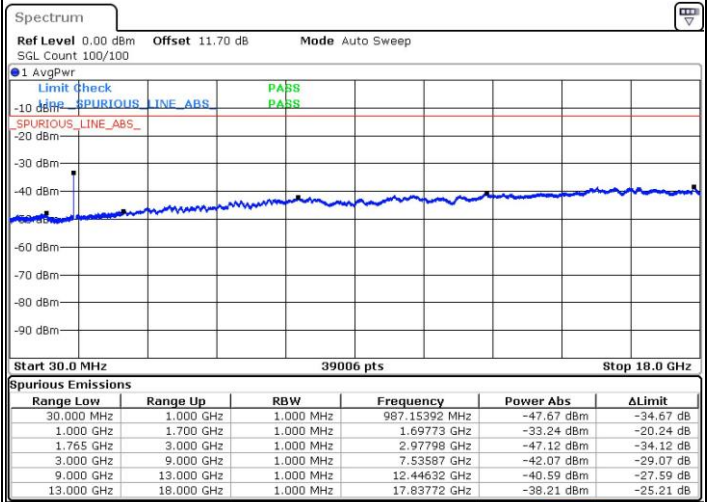
## LTE Band 4 / 15MHz

## Lowest Channel / QPSK



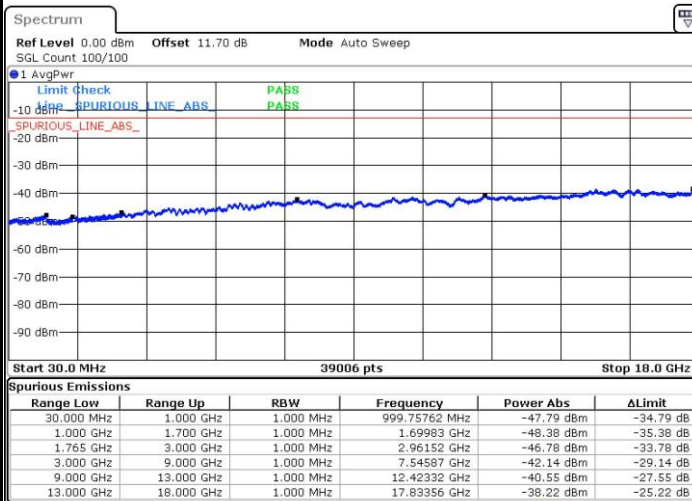
Date: 6 JUL 2018 06:01:19

## Lowest Channel / 16QAM



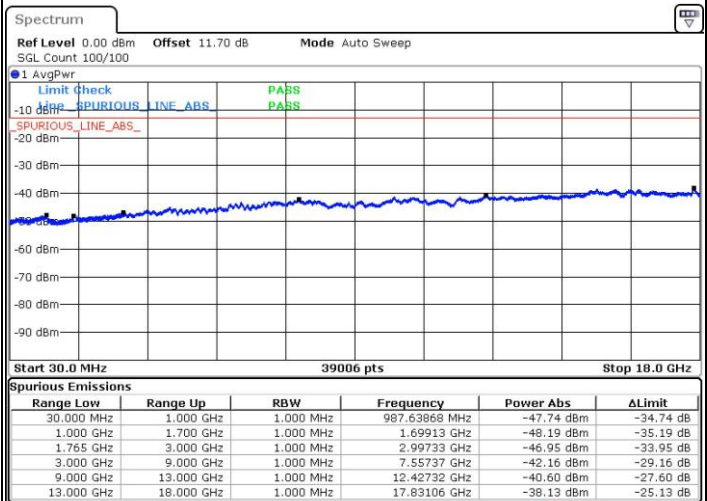
Date: 6 JUL 2018 06:02:15

## Middle Channel / QPSK



Date: 6 JUL 2018 06:03:56

## Middle Channel / 16QAM

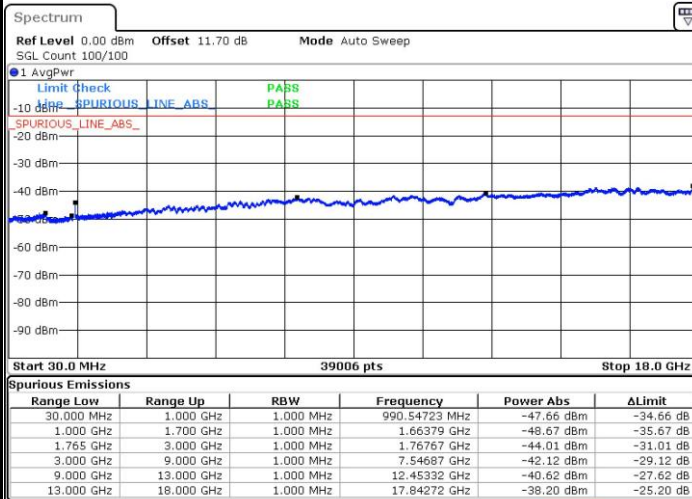


Date: 6 JUL 2018 06:04:51



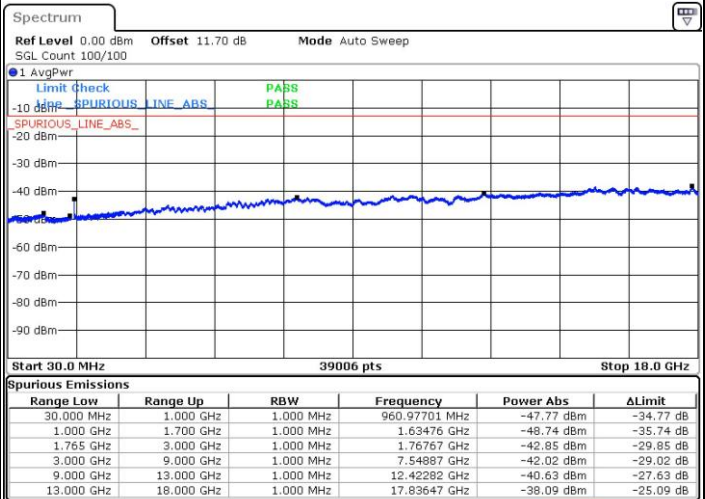
## LTE Band 4 / 15MHz

## Highest Channel / QPSK



Date: 6 JUL 2018 06:11:12

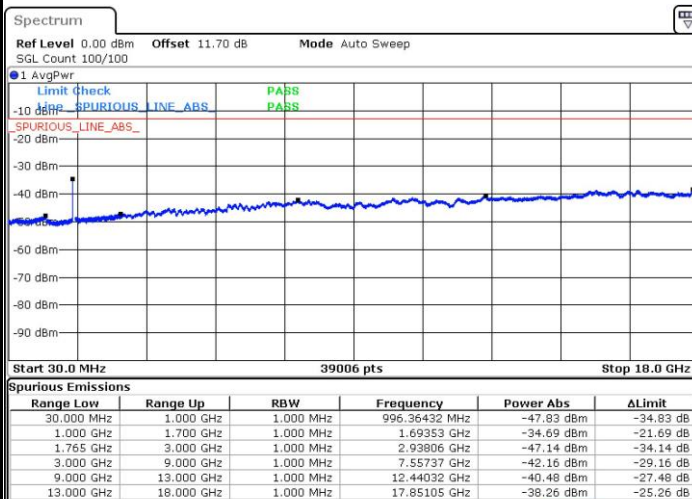
## Highest Channel / 16QAM



Date: 6 JUL 2018 06:12:07

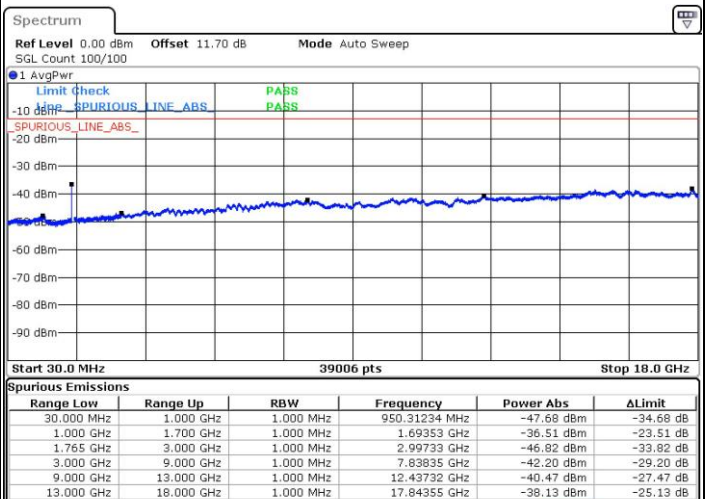
## LTE Band 4 / 20MHz

## Lowest Channel / QPSK



Date: 6 JUL 2018 06:18:28

## Lowest Channel / 16QAM

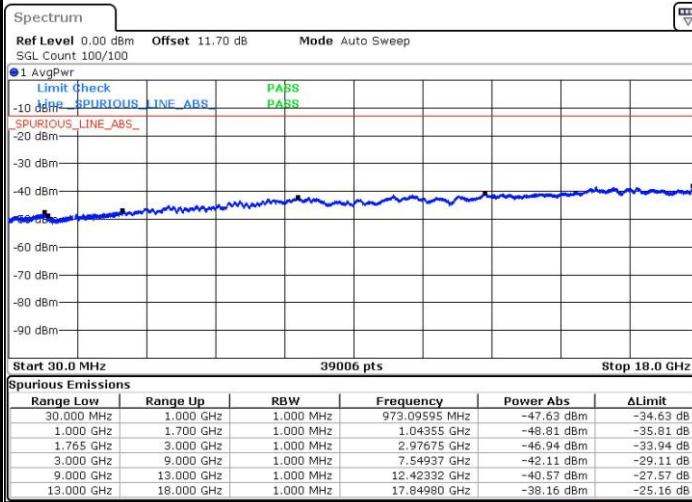


Date: 6 JUL 2018 06:19:24



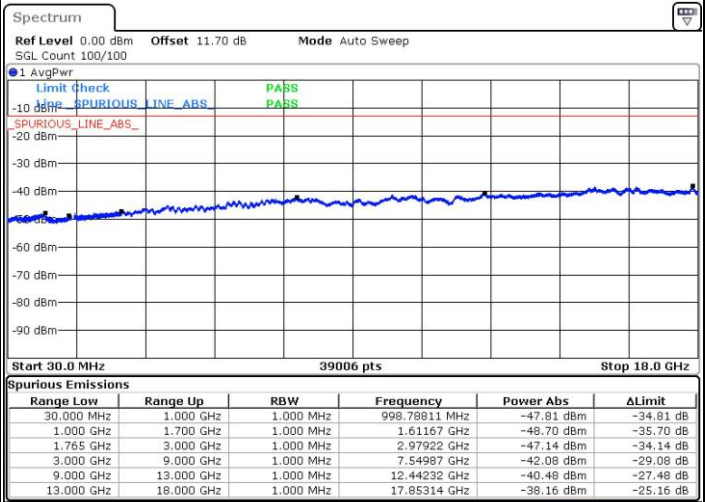
## LTE Band 4 / 20MHz

## Middle Channel / QPSK



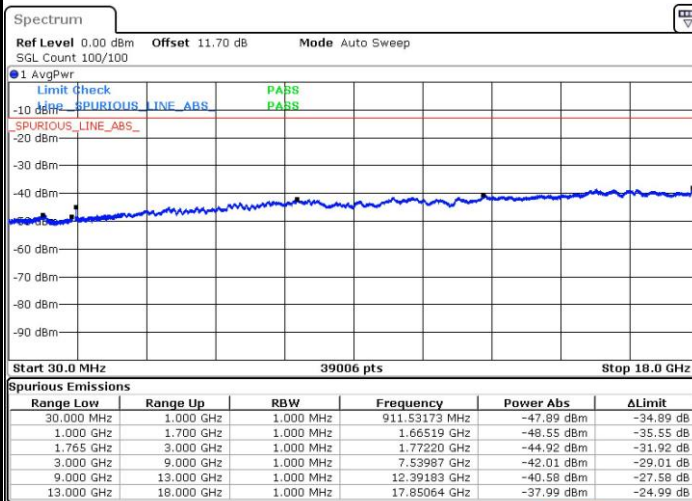
Date: 6 JUL 2018 06:21:05

## Middle Channel / 16QAM



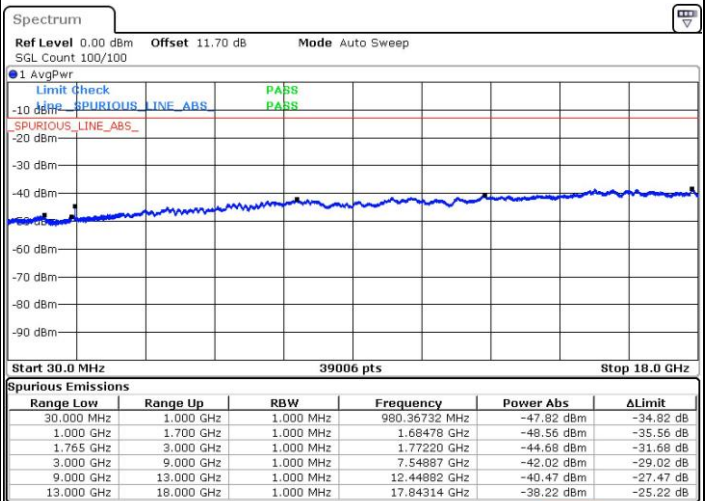
Date: 6 JUL 2018 06:22:00

## Highest Channel / QPSK



Date: 6 JUL 2018 06:28:21

## Highest Channel / 16QAM

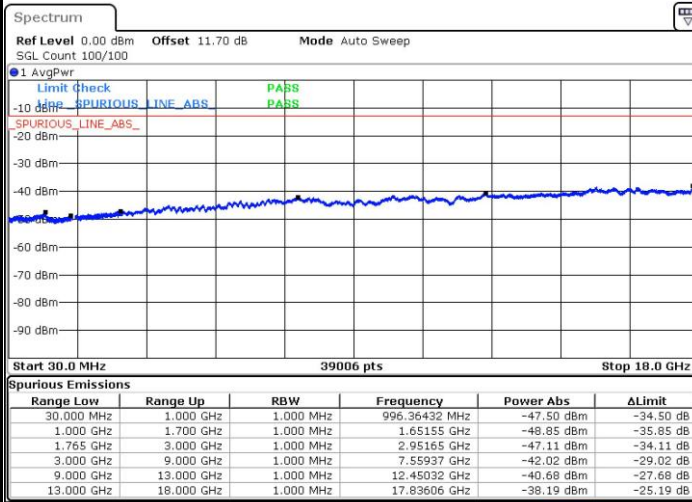


Date: 6 JUL 2018 06:29:16



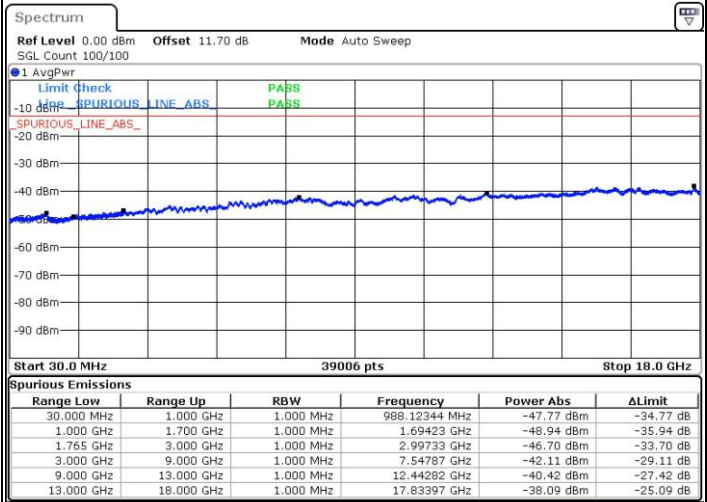
## LTE Band 4 / 1.4MHz

## Lowest Channel / 64QAM



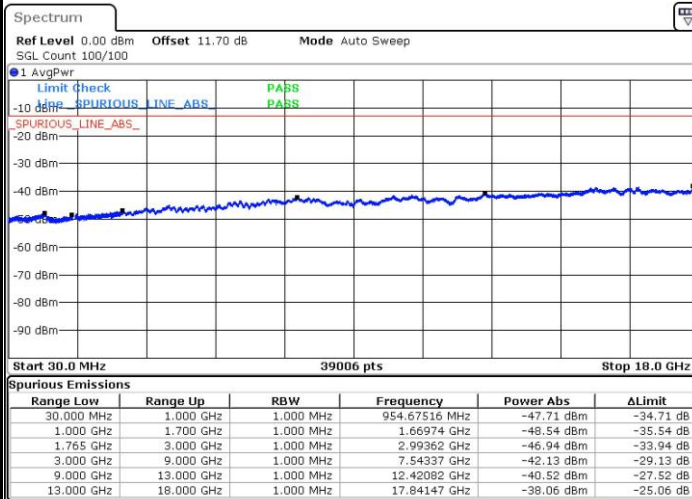
Date: 6 JUL 2018 07:15:47

## Middle Channel / 64QAM



Date: 6 JUL 2018 07:17:05

## Highest Channel / 64QAM

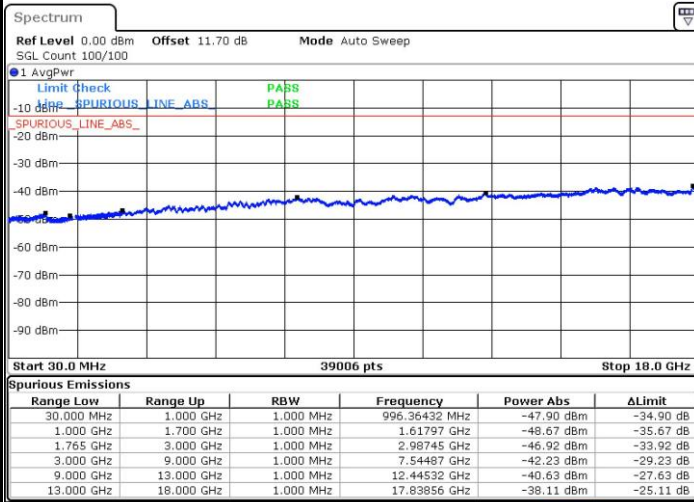


Date: 6 JUL 2018 07:20:43



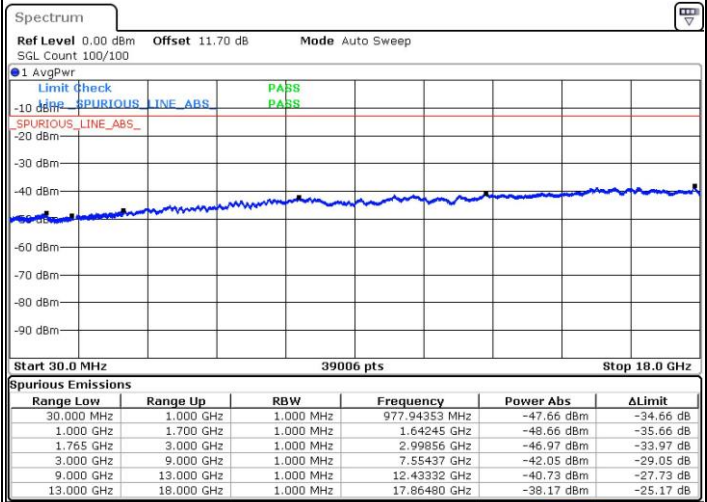
## LTE Band 4 / 3MHz

## Lowest Channel / 64QAM



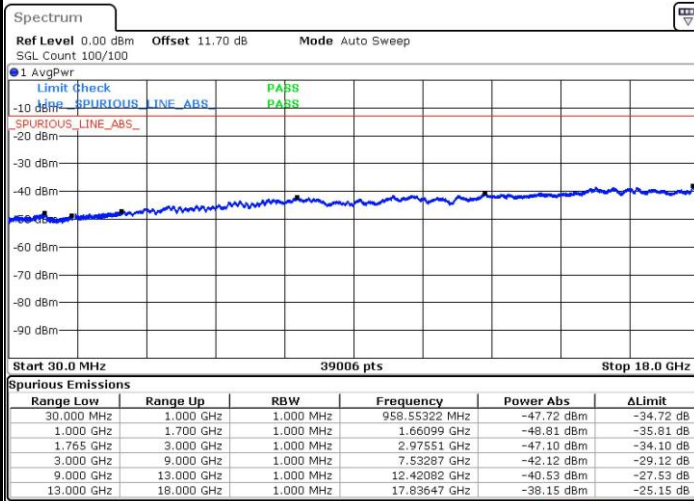
Date: 6 JUL 2018 06:32:55

## Middle Channel / 64QAM



Date: 6 JUL 2018 06:34:13

## Highest Channel / 64QAM

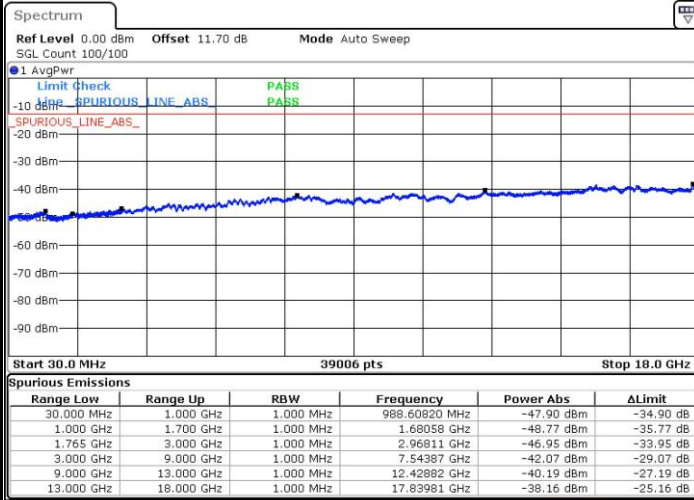


Date: 6 JUL 2018 06:37:51



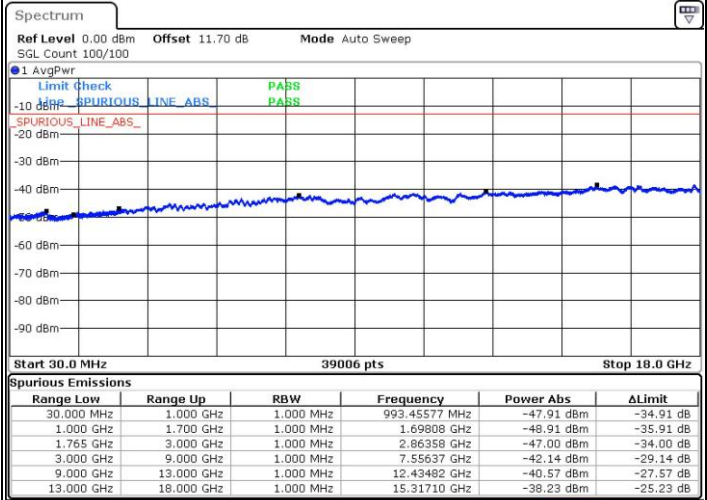
## LTE Band 4 / 5MHz

## Lowest Channel / 64QAM



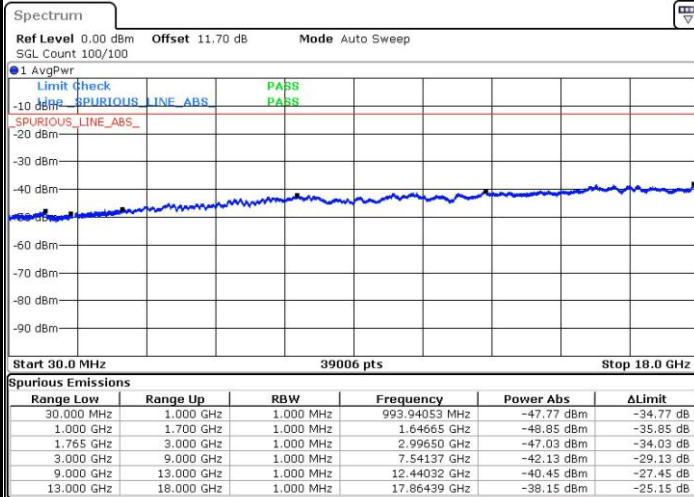
Date: 6 JUL 2018 06:41:29

## Middle Channel / 64QAM



Date: 6 JUL 2018 06:42:47

## Highest Channel / 64QAM

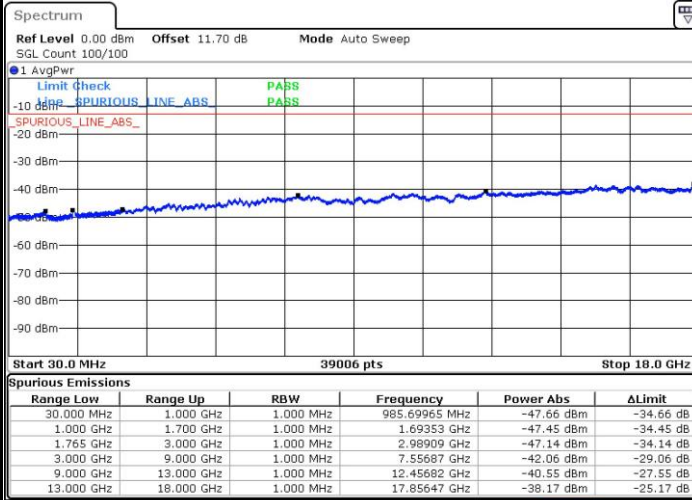


Date: 6 JUL 2018 06:46:26



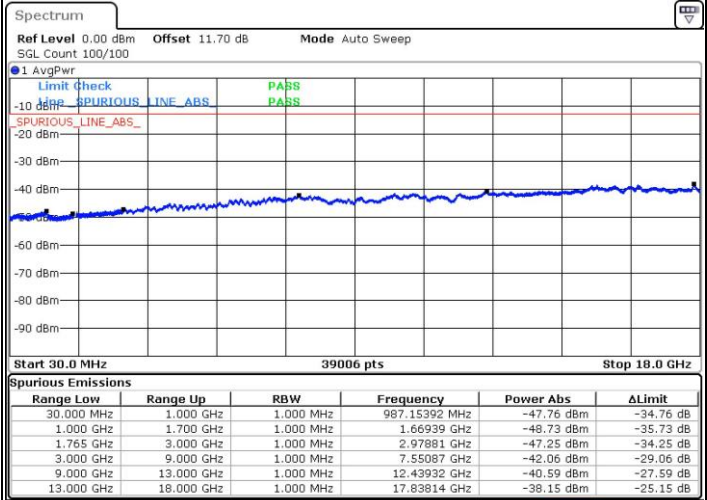
## LTE Band 4 / 10MHz

## Lowest Channel / 64QAM



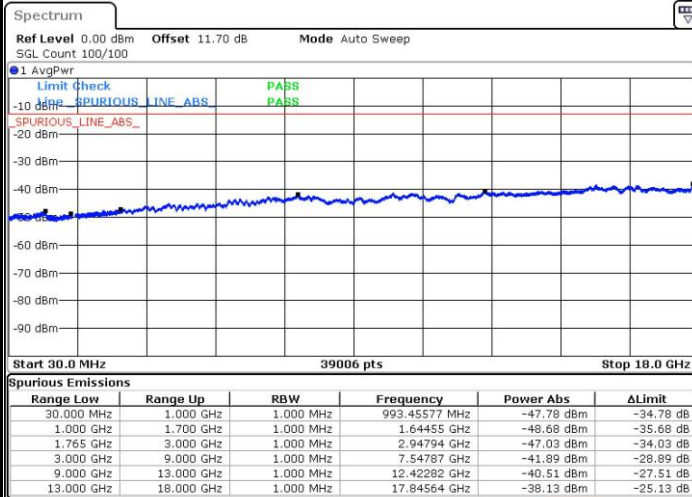
Date: 6 JUL 2018 06:50:04

## Middle Channel / 64QAM



Date: 6 JUL 2018 06:51:22

## Highest Channel / 64QAM

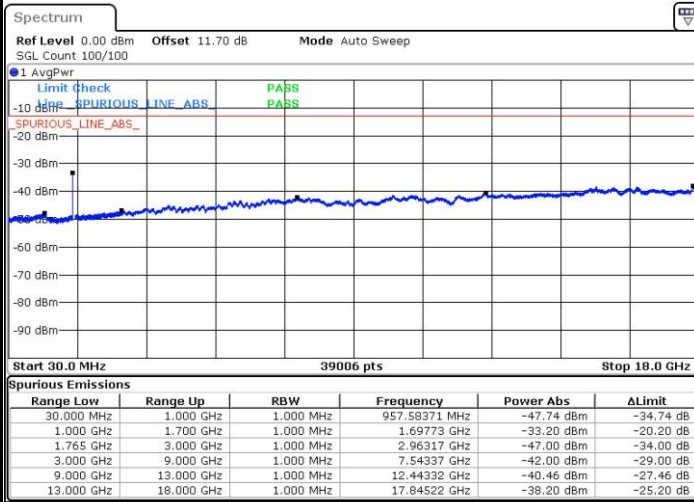


Date: 6 JUL 2018 06:55:00



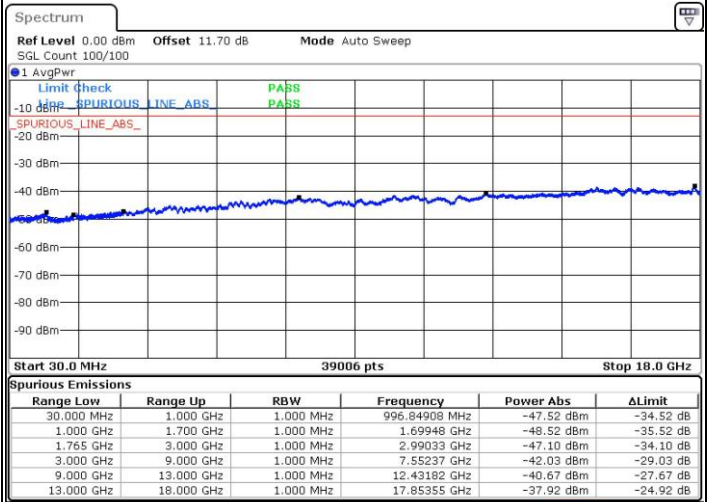
## LTE Band 4 / 15MHz

## Lowest Channel / 64QAM



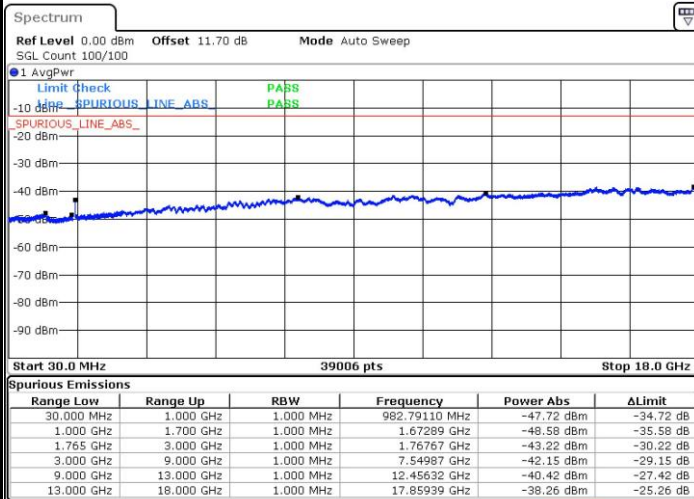
Date: 6 JUL 2018 06:58:38

## Middle Channel / 64QAM



Date: 6 JUL 2018 06:59:56

## Highest Channel / 64QAM

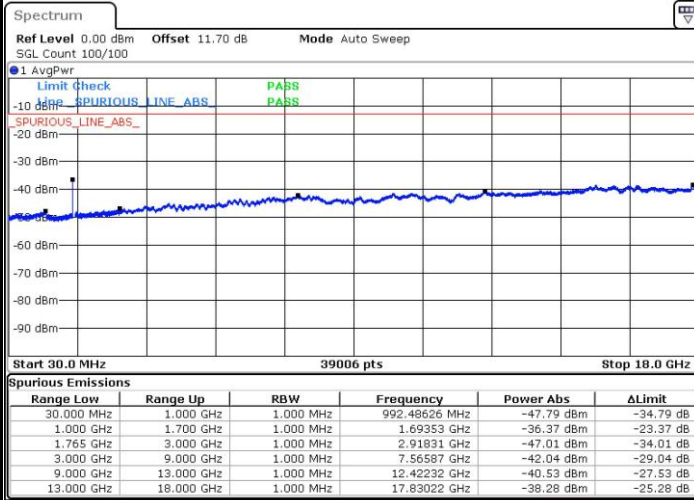


Date: 6 JUL 2018 07:03:34



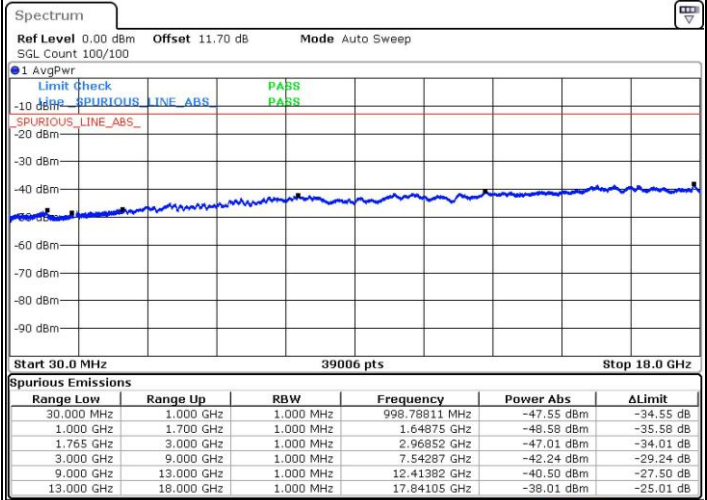
## LTE Band 4 / 20MHz

## Lowest Channel / 64QAM



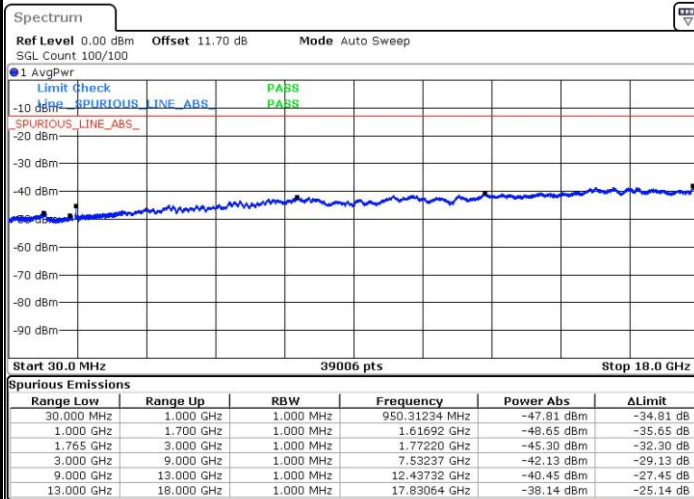
Date: 6 JUL 2018 07:07:12

## Middle Channel / 64QAM



Date: 6 JUL 2018 07:08:31

## Highest Channel / 64QAM



Date: 6 JUL 2018 07:12:09

## 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    | 0.0034                             | PASS    |
| 40               | Normal Voltage    | 0.0001                             |         |
| 30               | Normal Voltage    | 0.0017                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0040                             |         |
| 0                | Normal Voltage    | 0.0020                             |         |
| -10              | Normal Voltage    | 0.0018                             |         |
| -20              | Normal Voltage    | 0.0034                             |         |
| -30              | Normal Voltage    | 0.0032                             |         |
| 20               | Maximum Voltage   | 0.0044                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0043                             |         |

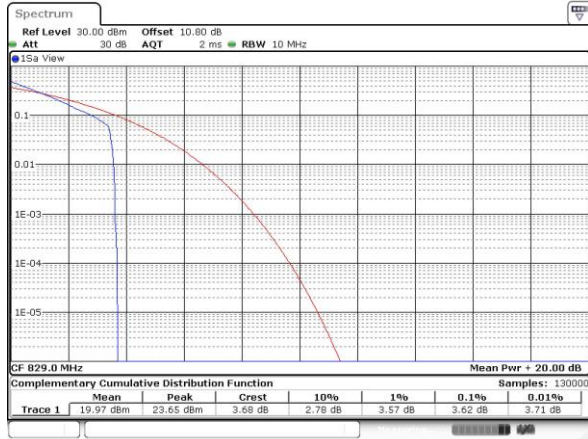
**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

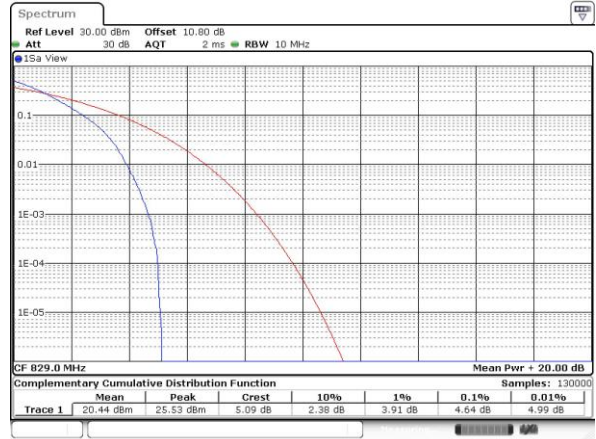
## LTE Band 5

### Peak-to-Average Ratio

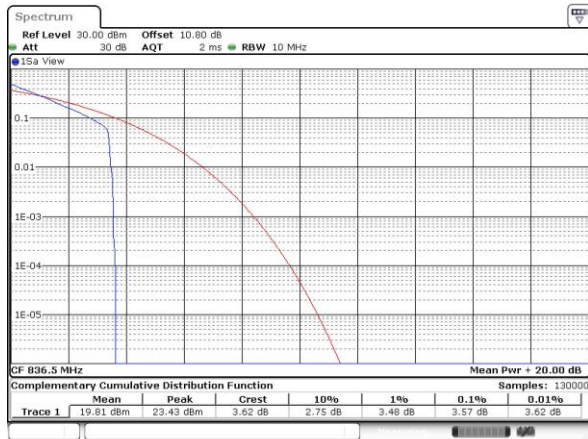
| Mode       | LTE Band 5 / 10MHz |         |       |         |             |
|------------|--------------------|---------|-------|---------|-------------|
| Mod.       | QPSK               |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 3.62               | 4.64    | 5.57  | 6.03    | PASS        |
| Middle CH  | 3.57               | 4.64    | 5.42  | 6.00    |             |
| Highest CH | 3.65               | 4.72    | 5.28  | 5.94    |             |
| Mode       | LTE Band 5 / 10MHz |         |       |         |             |
| Mod.       | 64QAM              |         |       |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB |       |         | Result      |
| Lowest CH  | 5.28               | 5.86    | -     | -       | PASS        |
| Middle CH  | 5.54               | 5.91    | -     | -       |             |
| Highest CH | 5.59               | 5.97    | -     | -       |             |

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


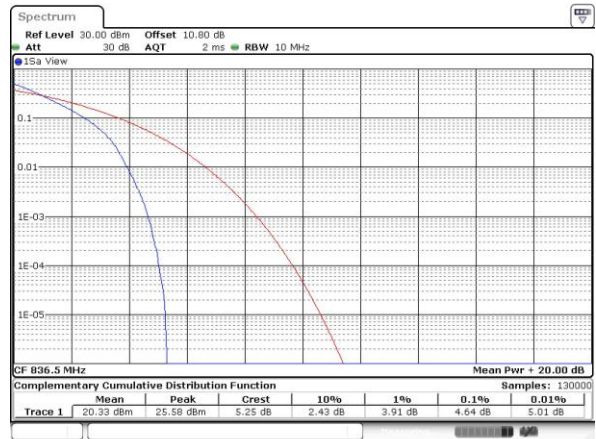
Date: 6 JUL 2018 18:13:31

**Lowest Channel / Full RB**


Date: 6 JUL 2018 18:13:43

**Middle Channel / 1RB**


Date: 6 JUL 2018 18:14:12

**Middle Channel / Full RB**


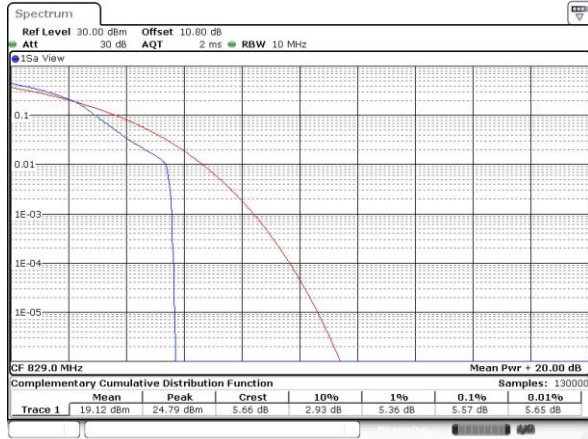
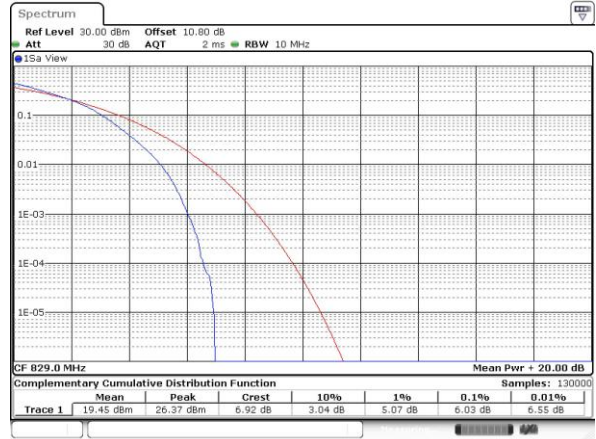
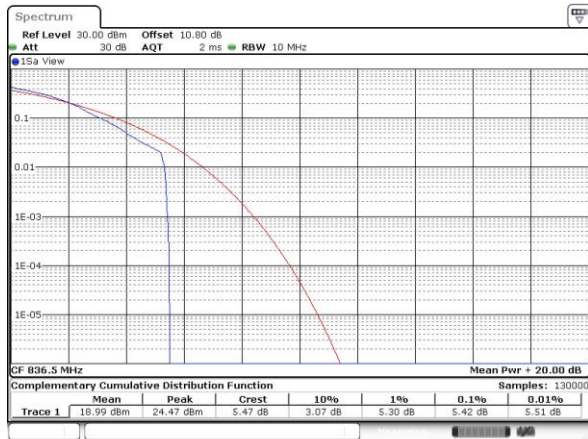
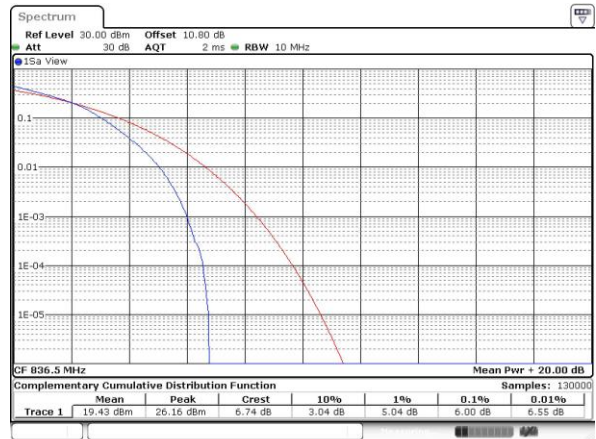
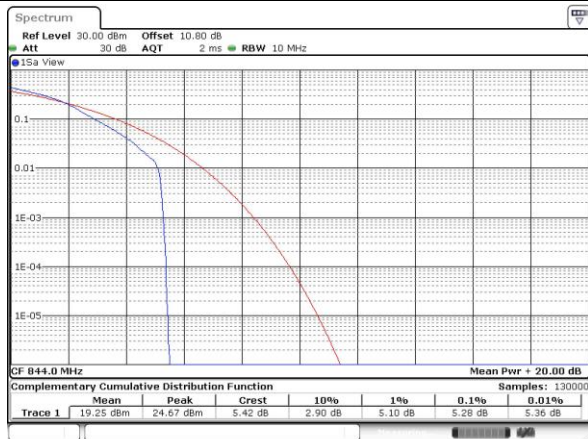
Date: 6 JUL 2018 18:15:57

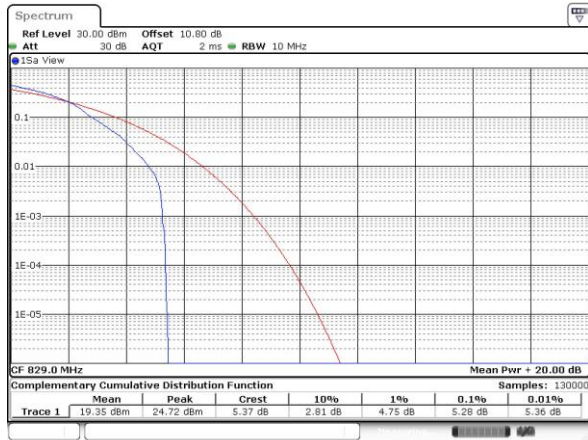
**Highest Channel / 1RB**


Date: 6 JUL 2018 18:16:49

**Highest Channel / Full RB**


Date: 6 JUL 2018 18:17:14

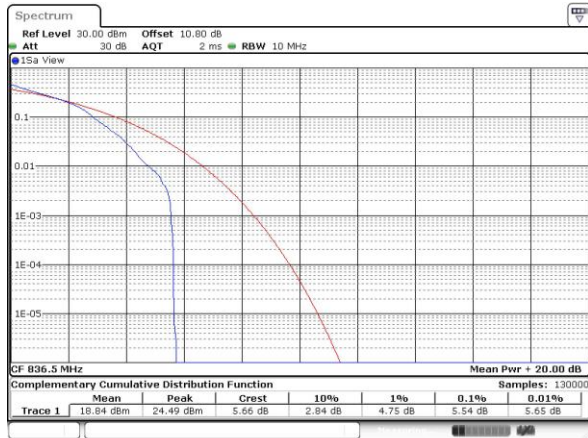
**LTE Band 5 / 10MHz / 16QAM**
**Lowest Channel / 1RB**

**Lowest Channel / Full RB**

**Middle Channel / 1RB**

**Middle Channel / Full RB**

**Highest Channel / 1RB**

**Highest Channel / Full RB**


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


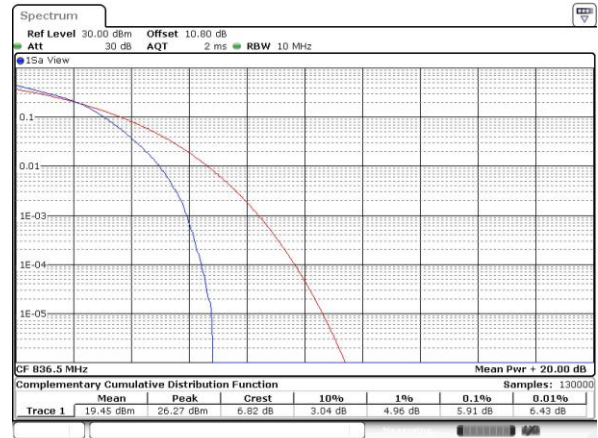
Date: 6 JUL 2018 18:17:26

**Lowest Channel / Full RB**


Date: 6 JUL 2018 18:17:47

**Middle Channel / 1RB**


Date: 6 JUL 2018 18:18:01

**Middle Channel / Full RB**


Date: 6 JUL 2018 18:18:16

**Highest Channel / 1RB**


Date: 6 JUL 2018 18:18:35

**Highest Channel / Full RB**


Date: 6 JUL 2018 18:19:21

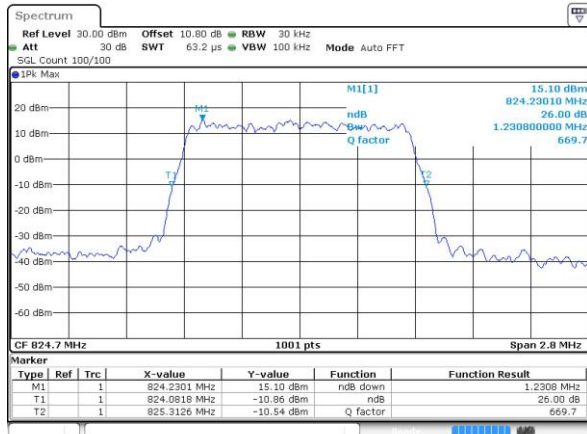
**26dB Bandwidth**

| 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  | 1.23                      | 1.23  | 3.06  | 3.04  | 4.94  | 4.87  | 9.73  | 9.79  | -     | -     | -     | -     |
| Middle CH  | 1.22                      | 1.23  | 3.02  | 3.05  | 4.96  | 4.91  | 9.83  | 9.85  | -     | -     | -     | -     |
| Highest CH | 1.24                      | 1.22  | 2.99  | 3.01  | 4.89  | 4.84  | 9.75  | 9.89  | -     | -     | -     | -     |
| Mode       | LTE Band 5 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                     |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.23                      | -     | 3.03  | -     | 4.90  | -     | 9.77  | -     | -     | -     | -     | -     |
| Middle CH  | 1.22                      | -     | 2.98  | -     | 4.84  | -     | 9.93  | -     | -     | -     | -     | -     |
| Highest CH | 1.23                      | -     | 2.98  | -     | 4.91  | -     | 9.85  | -     | -     | -     | -     | -     |



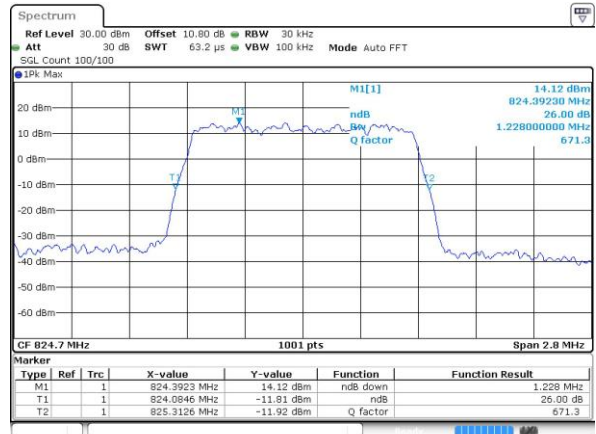
## LTE Band 5

## Lowest Channel / 1.4MHz / QPSK



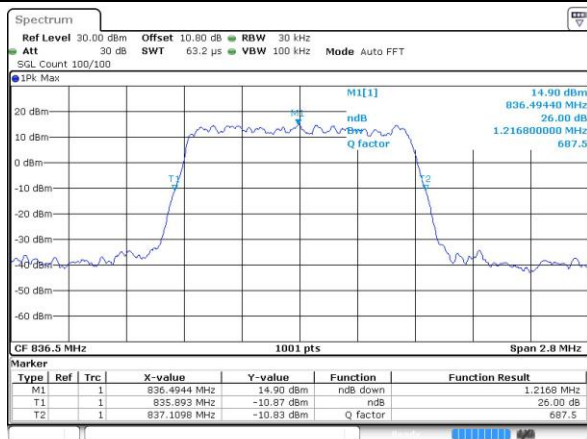
Date: 6 JUL 2018 17:40:07

## Lowest Channel / 1.4MHz / 16QAM



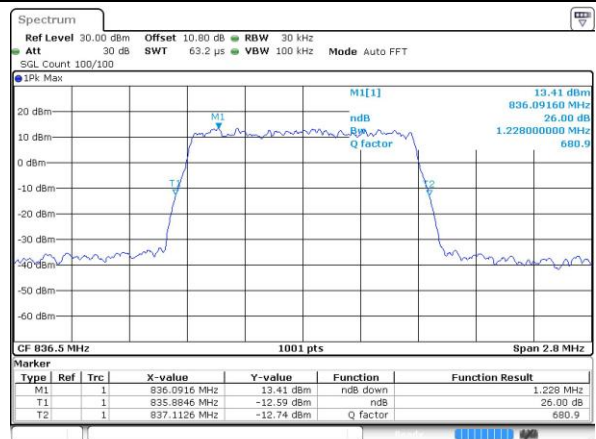
Date: 6 JUL 2018 17:39:56

## Middle Channel / 1.4MHz / QPSK



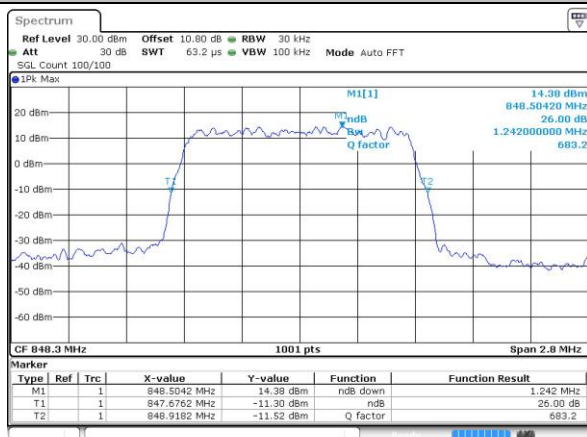
Date: 6 JUL 2018 17:49:12

## Middle Channel / 1.4MHz / 16QAM



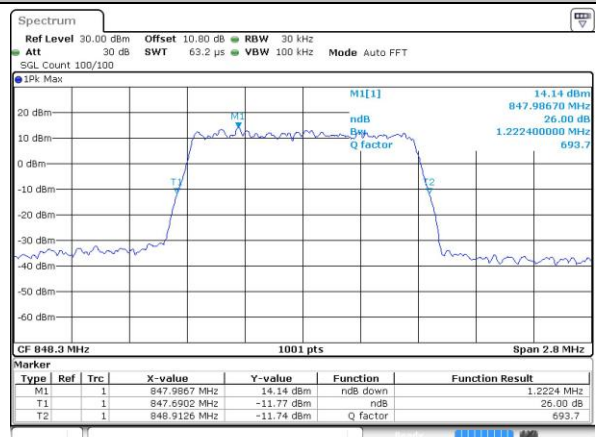
Date: 6 JUL 2018 17:49:23

## Highest Channel / 1.4MHz / QPSK



Date: 6 JUL 2018 17:51:47

## Highest Channel / 1.4MHz / 16QAM



Date: 6 JUL 2018 17:51:59