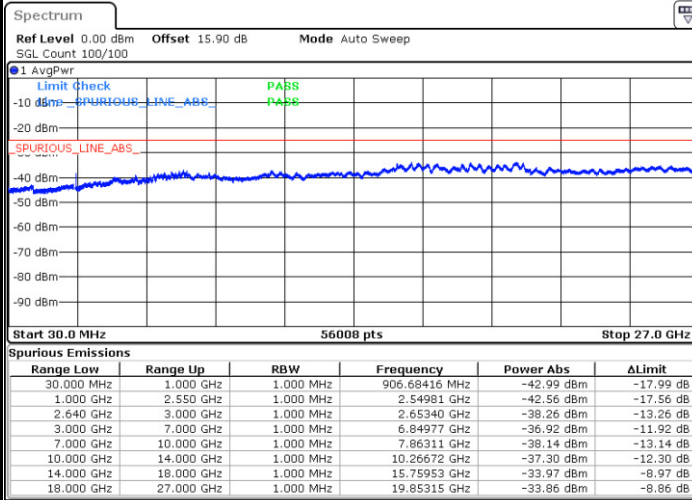




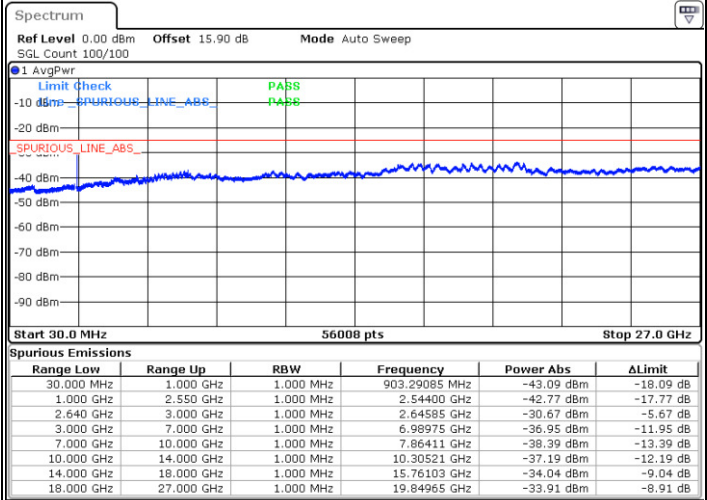
## LTE Band 38 / 15MHz

## Highest Channel / QPSK



Date: 7.JAN.2018 11:26:02

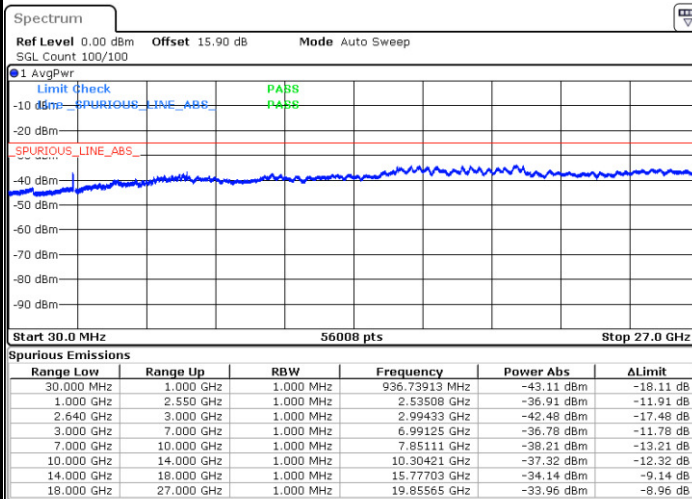
## Highest Channel / 16QAM



Date: 7.JAN.2018 11:26:57

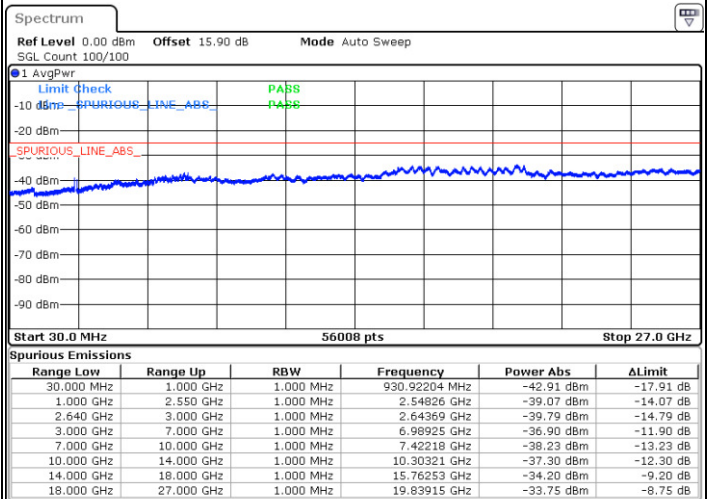
## LTE Band 38 / 20MHz

## Lowest Channel / QPSK



Date: 7.JAN.2018 11:27:51

## Lowest Channel / 16QAM

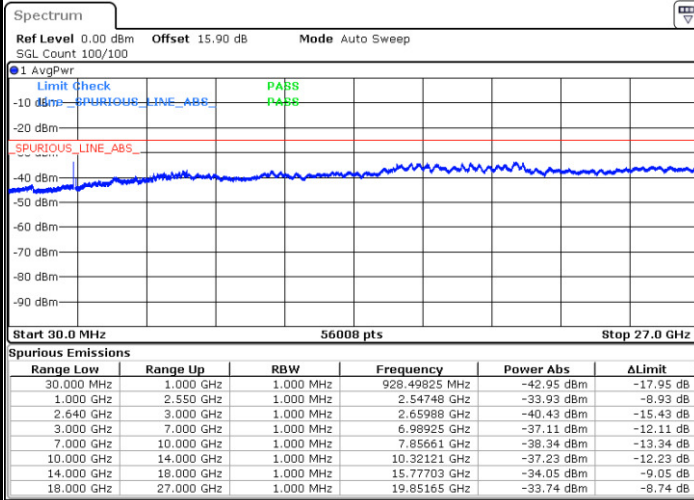


Date: 7.JAN.2018 11:28:45



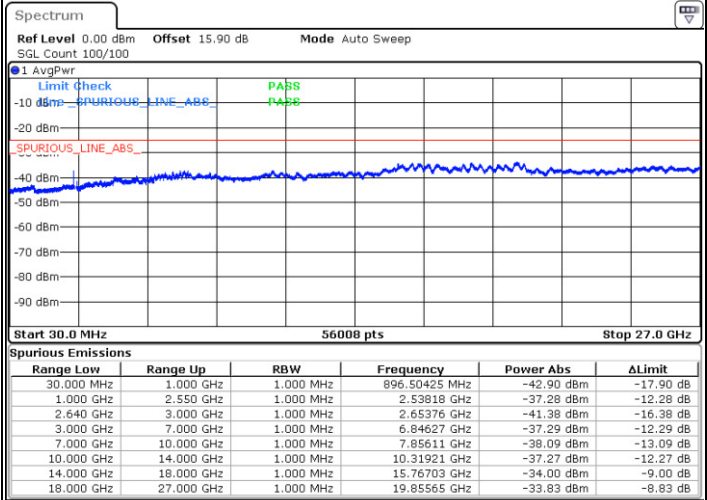
## LTE Band 38 / 20MHz

## Middle Channel / QPSK



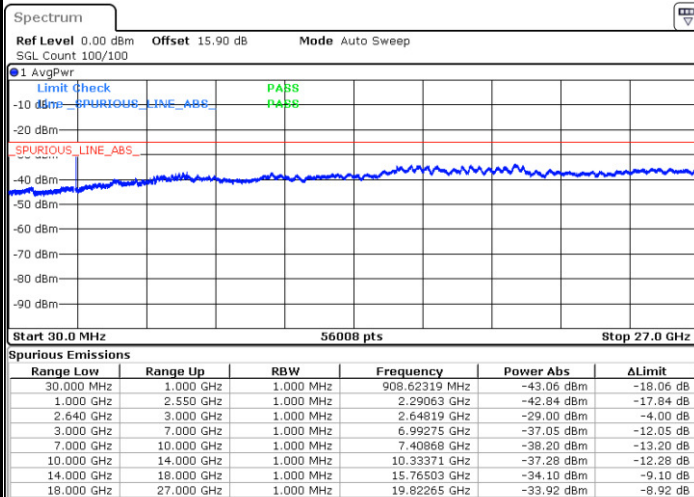
Date: 7.JAN.2018 11:29:39

## Middle Channel / 16QAM



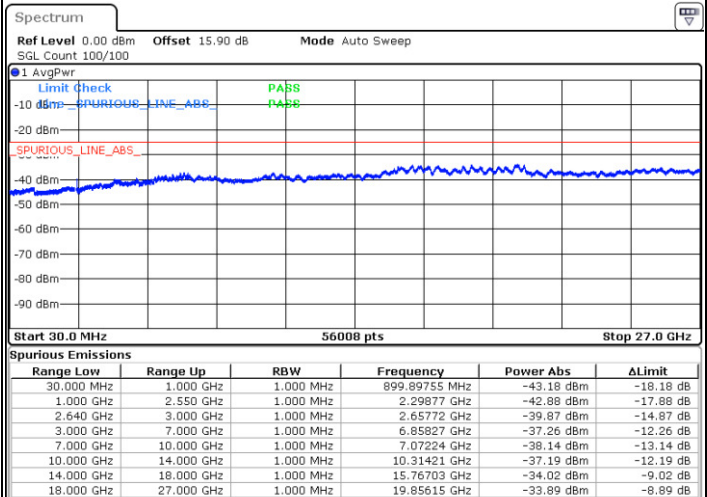
Date: 7.JAN.2018 11:30:33

## Highest Channel / QPSK



Date: 7.JAN.2018 11:31:27

## Highest Channel / 16QAM



Date: 7.JAN.2018 11:32:21

## Frequency Stability

| Test Conditions  |                   | LTE Band 38 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                            | Note 2. |
|                  |                   | Deviation (ppm)                     | Result  |
| 50               | Normal Voltage    | 0.0004                              | PASS    |
| 40               | Normal Voltage    | 0.0021                              |         |
| 30               | Normal Voltage    | 0.0008                              |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                              |         |
| 10               | Normal Voltage    | 0.0001                              |         |
| 0                | Normal Voltage    | 0.0012                              |         |
| -10              | Normal Voltage    | 0.0009                              |         |
| -20              | Normal Voltage    | 0.0008                              |         |
| -30              | Normal Voltage    | 0.0000                              |         |
| 20               | Maximum Voltage   | 0.0005                              |         |
| 20               | Normal Voltage    | 0.0007                              |         |
| 20               | Battery End Point | 0.0002                              |         |

**Note:**

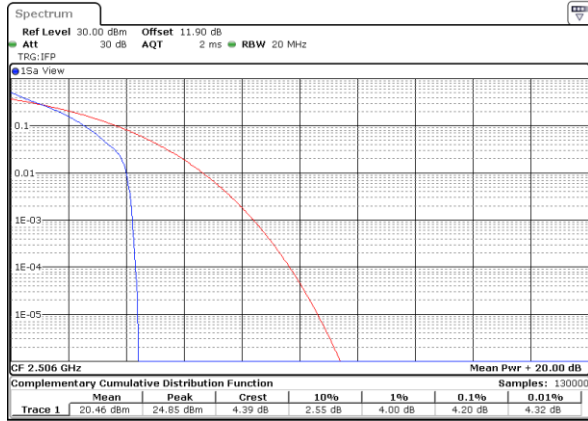
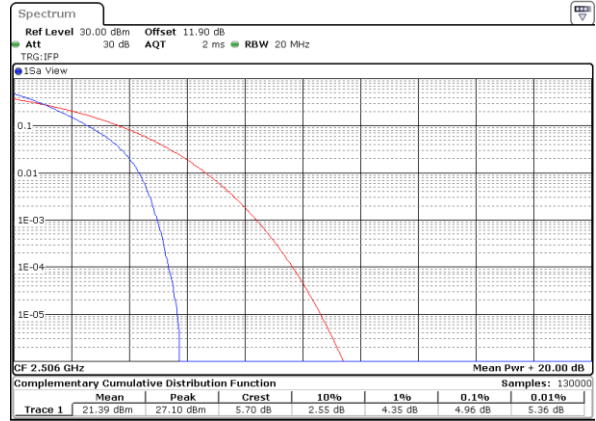
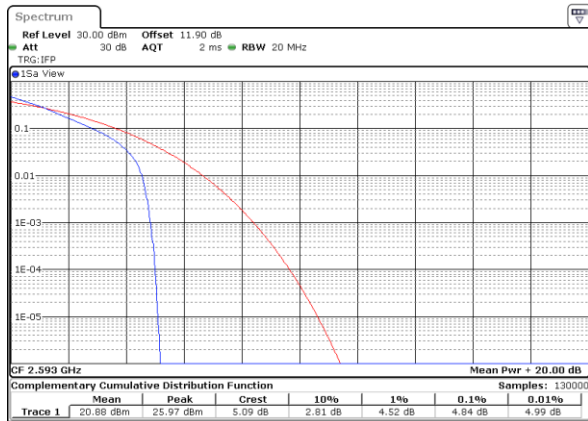
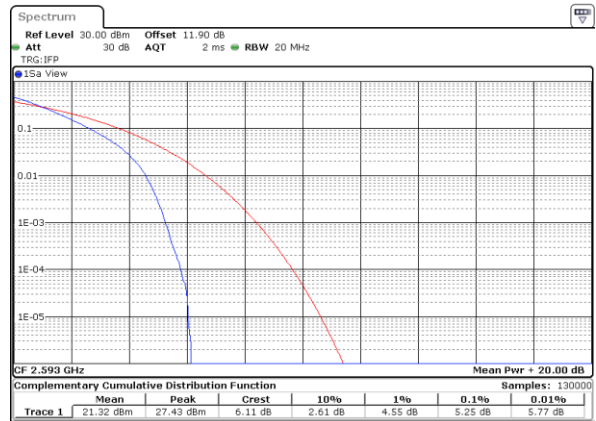
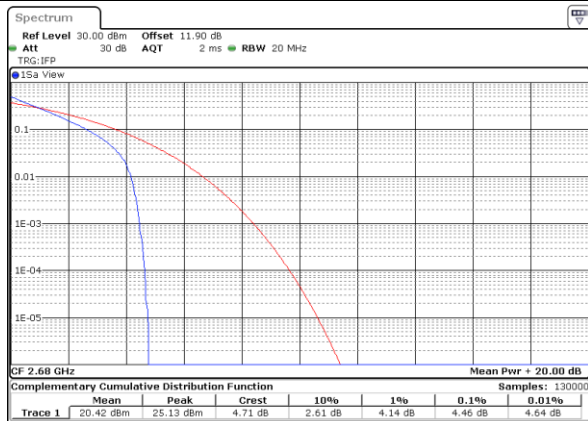
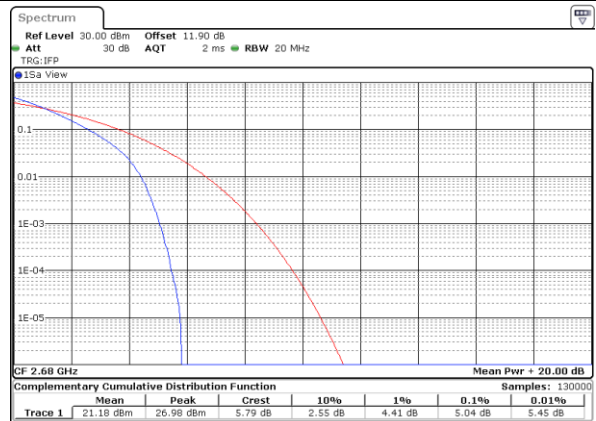
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

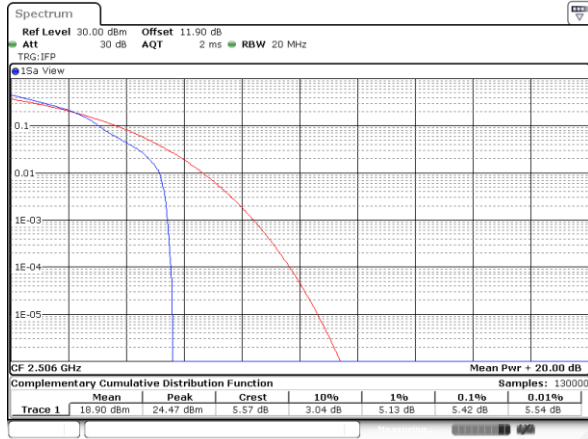
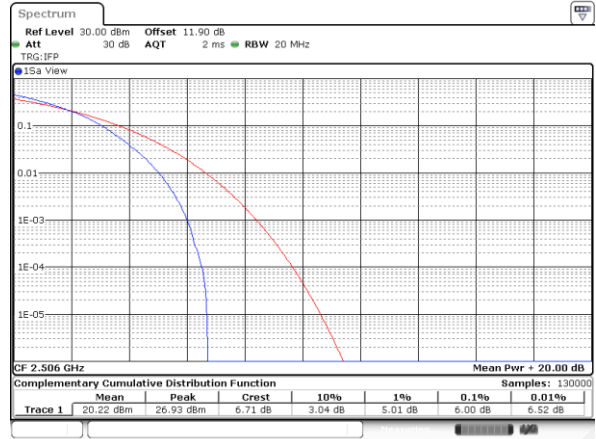
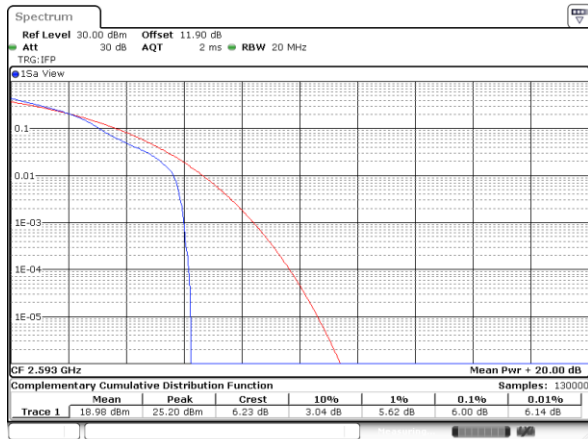
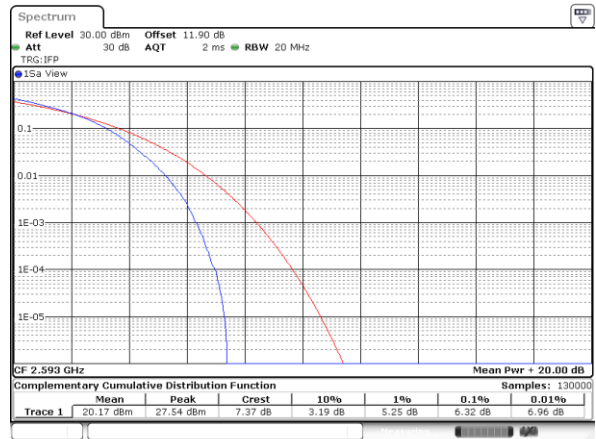
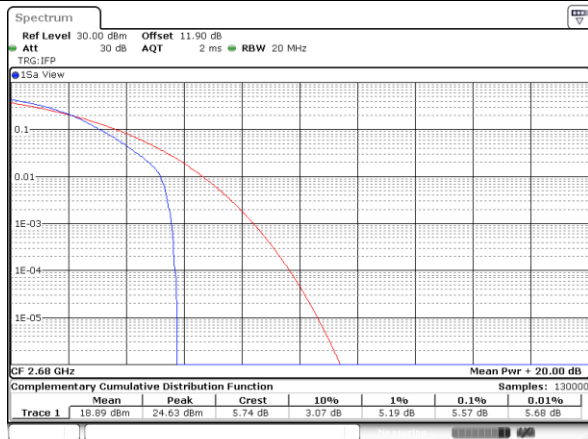
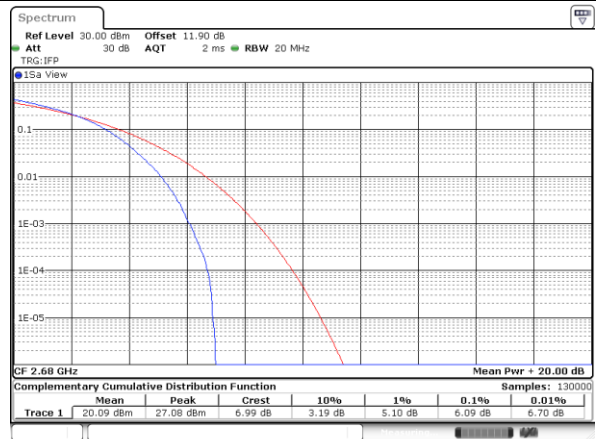


## LTE Band 41

### Peak-to-Average Ratio

| Mode       | LTE Band 41 / 20MHz |         |       |         |             |
|------------|---------------------|---------|-------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 4.2                 | 4.96    | 5.42  | 6       | PASS        |
| Middle CH  | 4.84                | 5.25    | 6     | 6.32    |             |
| Highest CH | 4.46                | 5.04    | 5.57  | 6.09    |             |

**LTE Band 41 / 20MHz / QPSK**
**Lowest Channel / 1RB**

**Lowest Channel / Full RB**

**Middle Channel / 1RB**

**Middle Channel / Full RB**

**Highest Channel / 1RB**

**Highest Channel / Full RB**


**LTE Band 41 / 20MHz / 16QAM**
**Lowest Channel / 1RB**

**Lowest Channel / Full RB**

**Middle Channel / 1RB**

**Middle Channel / Full RB**

**Highest Channel / 1RB**

**Highest Channel / Full RB**


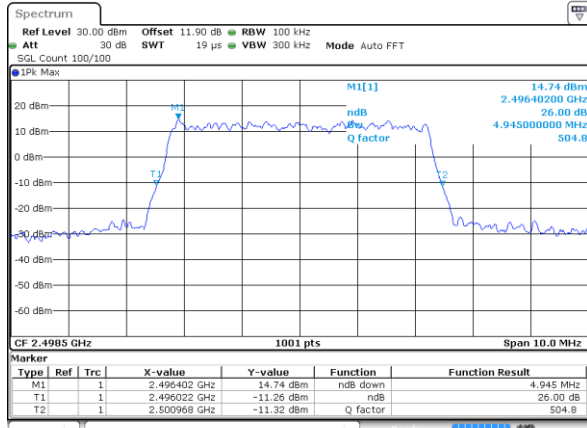
**26dB Bandwidth**

| Mode       | LTE Band 41 : 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  | -                          | -     | -    | -     | 4.95 | 4.76  | 9.73  | 9.67  | 14.24 | 14.12 | 20.02 | 20.10 |
| Middle CH  | -                          | -     | -    | -     | 4.92 | 4.99  | 9.63  | 9.73  | 14.21 | 14.12 | 20.18 | 20.70 |
| Highest CH | -                          | -     | -    | -     | 5.00 | 4.95  | 9.71  | 9.61  | 14.30 | 14.21 | 22.14 | 20.10 |



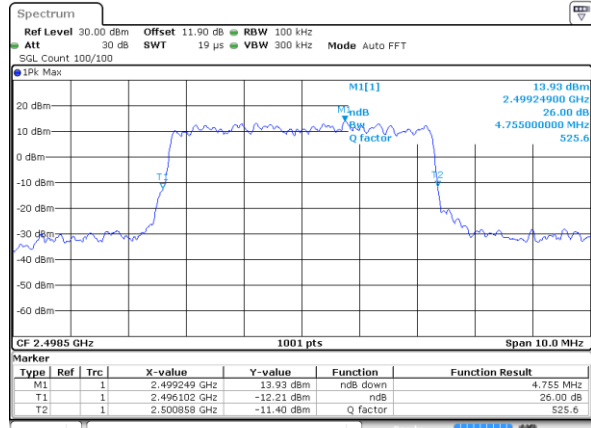
## LTE Band 41

## Lowest Channel / 5MHz / QPSK



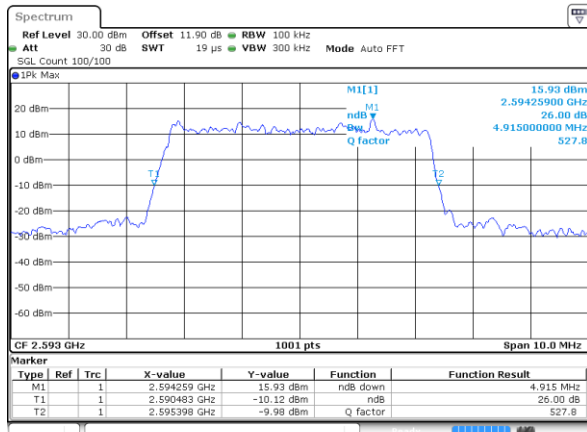
Date: 7 JAN 2018 15:24:04

## Lowest Channel / 5MHz / 16QAM



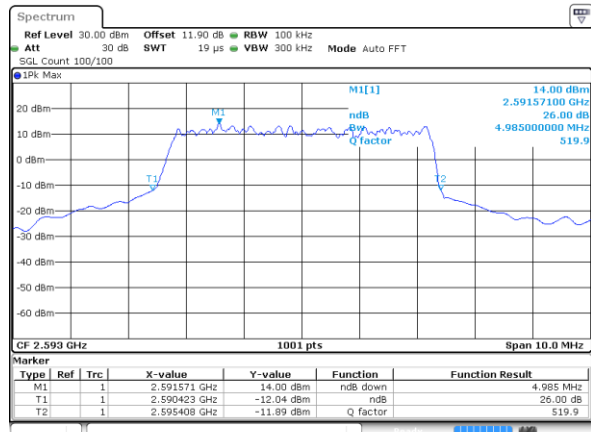
Date: 7 JAN 2018 15:24:14

## Middle Channel / 5MHz / QPSK



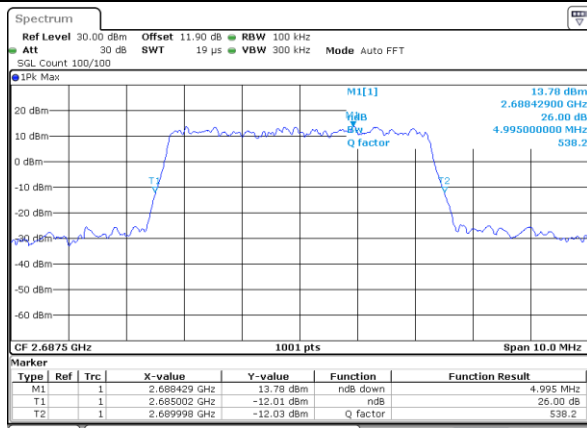
Date: 7 JAN 2018 15:24:44

## Middle Channel / 5MHz / 16QAM



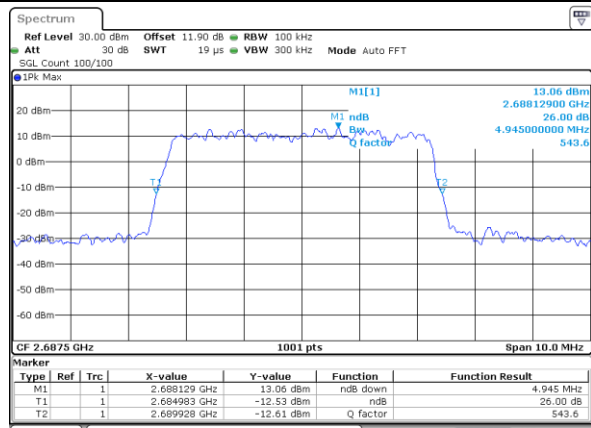
Date: 7 JAN 2018 15:24:54

## Highest Channel / 5MHz / QPSK

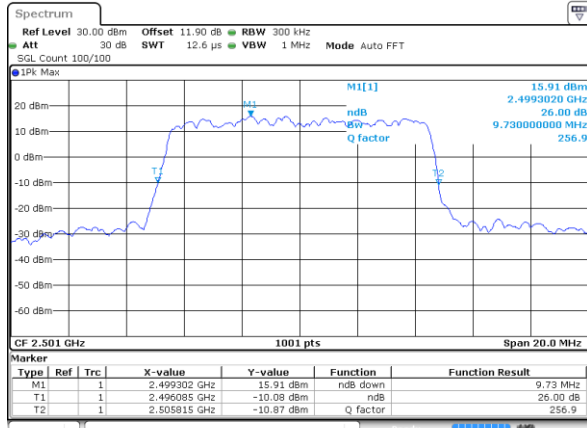
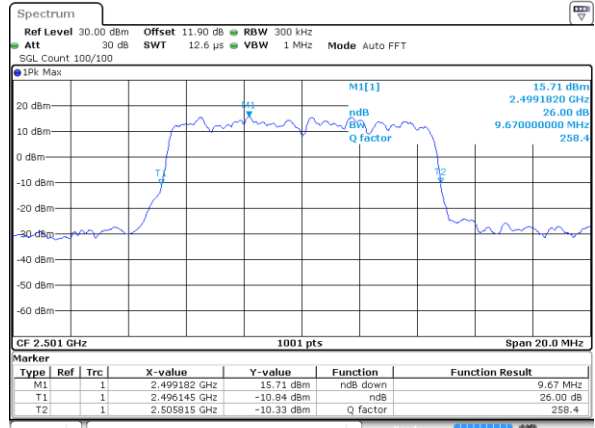
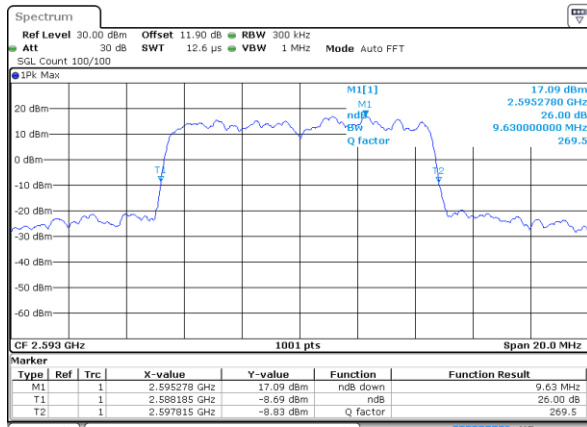
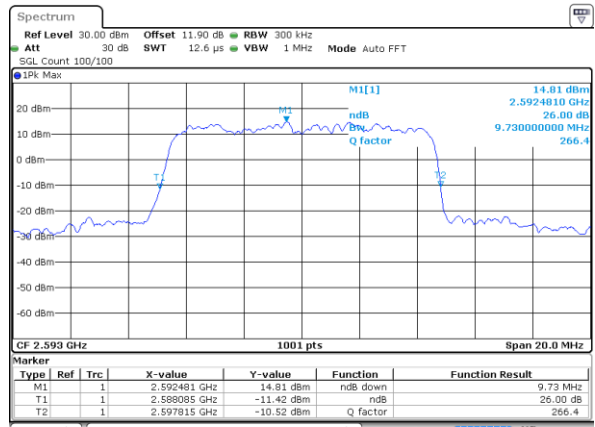
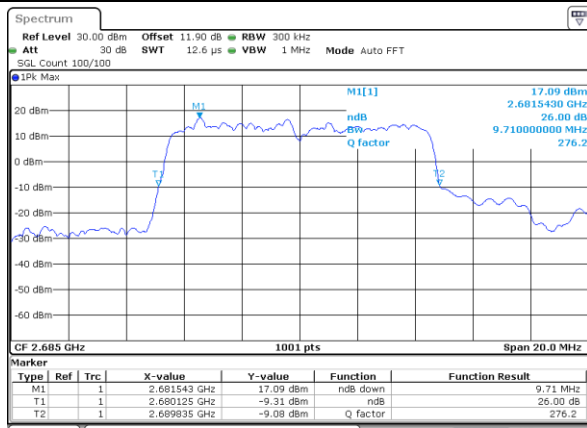
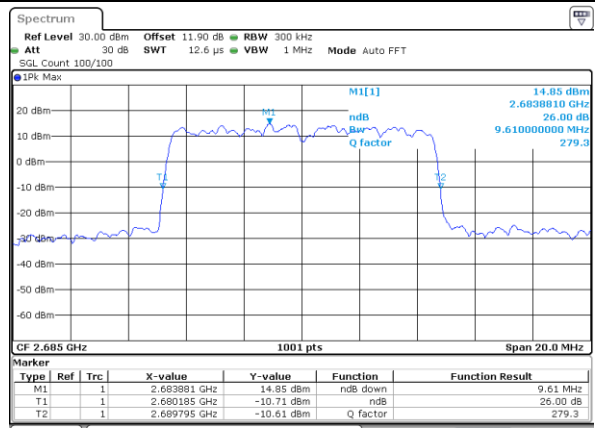


Date: 7 JAN 2018 15:25:24

## Highest Channel / 5MHz / 16QAM



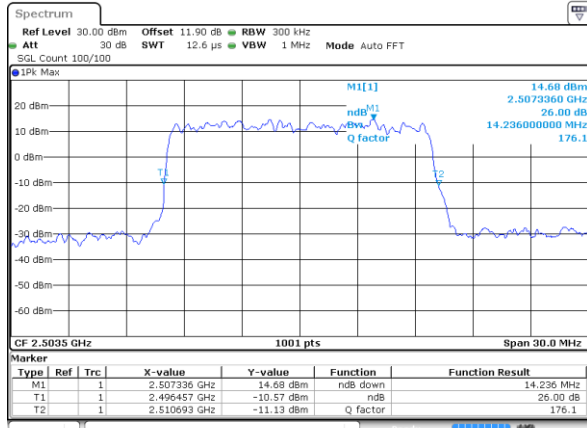
Date: 7 JAN 2018 15:25:34

**LTE Band 41**
**Lowest Channel / 10MHz / QPSK**

**Lowest Channel / 10MHz / 16QAM**

**Middle Channel / 10MHz / QPSK**

**Middle Channel / 10MHz / 16QAM**

**Highest Channel / 10MHz / QPSK**

**Highest Channel / 10MHz / 16QAM**




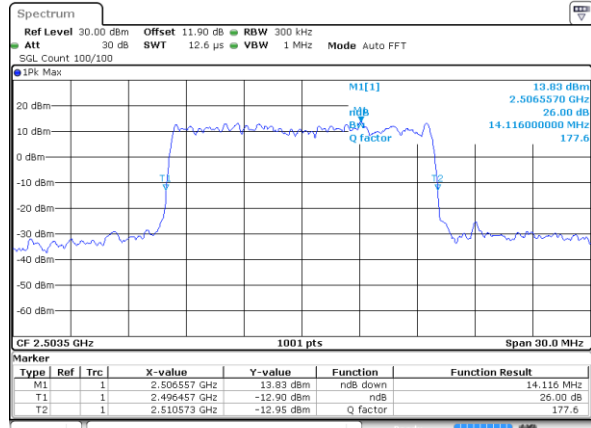
## LTE Band 41

## Lowest Channel / 15MHz / QPSK



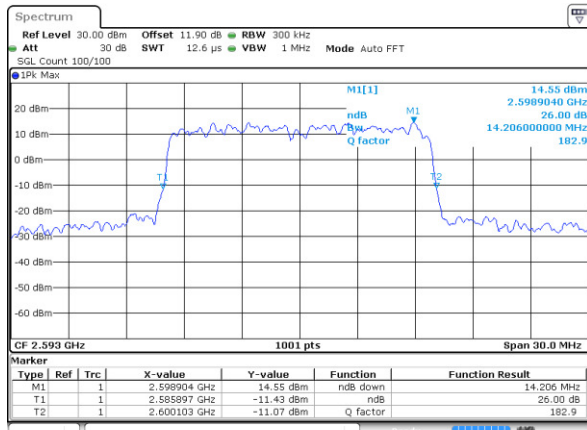
Date: 7 JAN 2018 15:28:04

## Lowest Channel / 15MHz / 16QAM



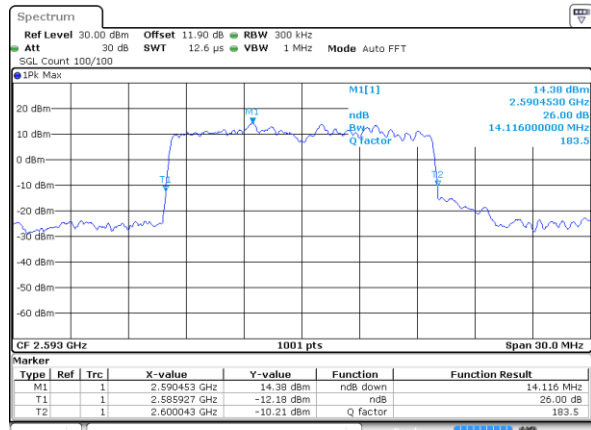
Date: 7 JAN 2018 15:28:14

## Middle Channel / 15MHz / QPSK



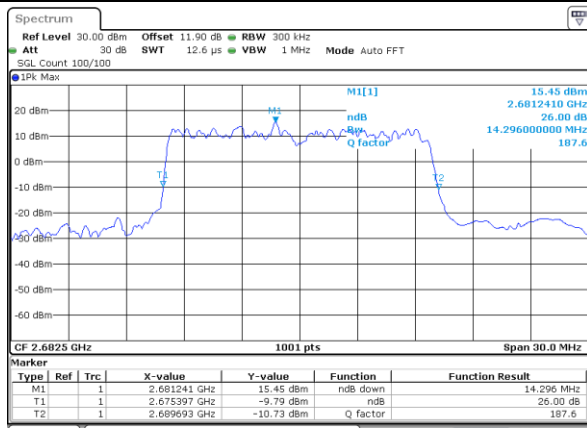
Date: 7 JAN 2018 15:28:44

## Middle Channel / 15MHz / 16QAM



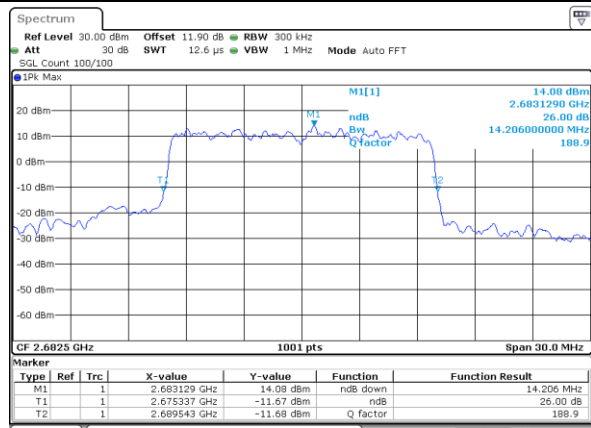
Date: 7 JAN 2018 15:28:54

## Highest Channel / 15MHz / QPSK



Date: 7 JAN 2018 15:29:24

## Highest Channel / 15MHz / 16QAM

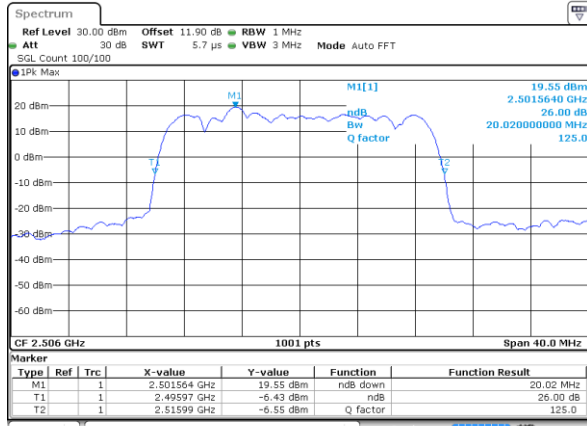


Date: 7 JAN 2018 15:29:34



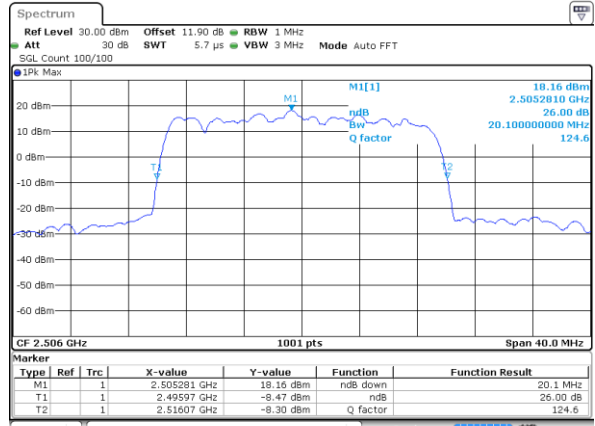
## LTE Band 41

## Lowest Channel / 20MHz / QPSK



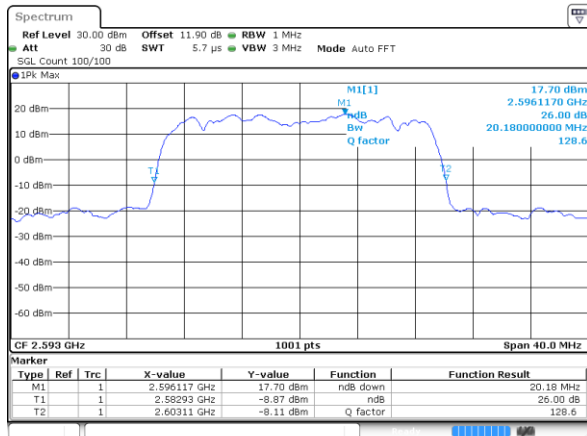
Date: 7 JAN 2018 15:30:04

## Lowest Channel / 20MHz / 16QAM



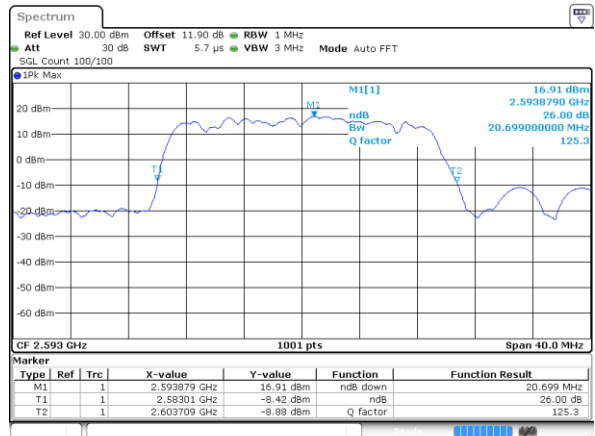
Date: 7 JAN 2018 15:30:14

## Middle Channel / 20MHz / QPSK



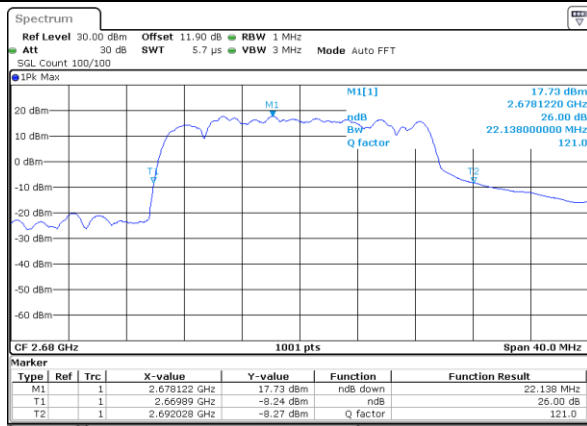
Date: 7 JAN 2018 15:30:44

## Middle Channel / 20MHz / 16QAM



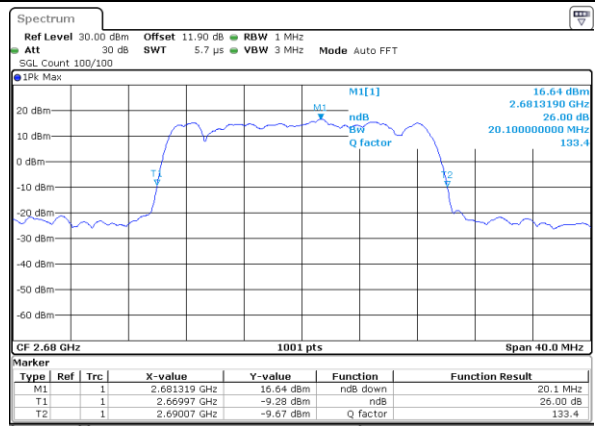
Date: 7 JAN 2018 15:30:54

## Highest Channel / 20MHz / QPSK



Date: 7 JAN 2018 15:31:24

## Highest Channel / 20MHz / 16QAM



Date: 7 JAN 2018 15:31:34

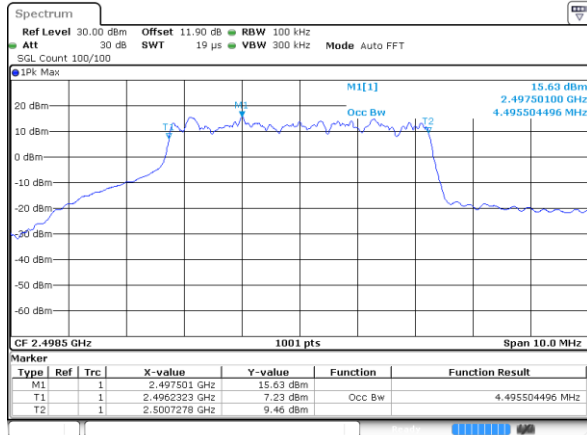
**Occupied Bandwidth**

| Mode       | LTE Band 41 : 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  | -                         | -     | -    | -     | 4.5  | 4.46  | 8.99  | 8.97  | 13.46 | 13.4  | 18.18 | 18.18 |
| Middle CH  | -                         | -     | -    | -     | 4.48 | 4.5   | 8.95  | 8.95  | 13.46 | 13.46 | 18.46 | 18.3  |
| Highest CH | -                         | -     | -    | -     | 4.47 | 4.48  | 9.05  | 9.01  | 13.43 | 13.46 | 18.26 | 18.22 |



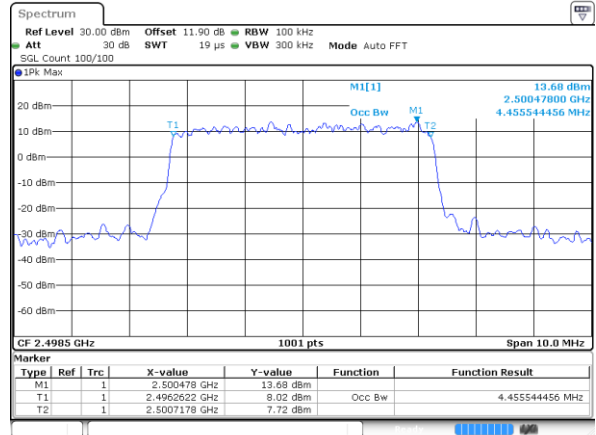
## LTE Band 41

## Lowest Channel / 5MHz / QPSK



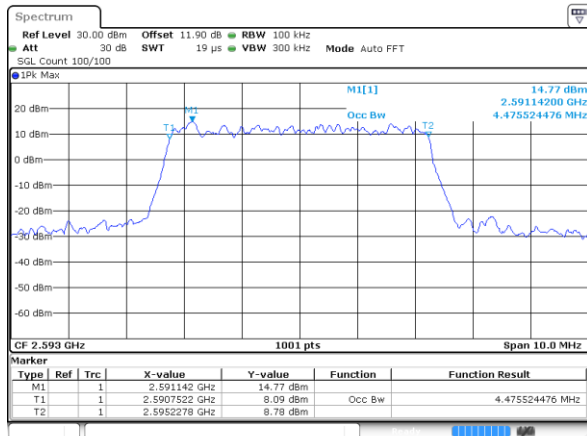
Date: 7 JAN 2018 15:23:44

## Lowest Channel / 5MHz / 16QAM



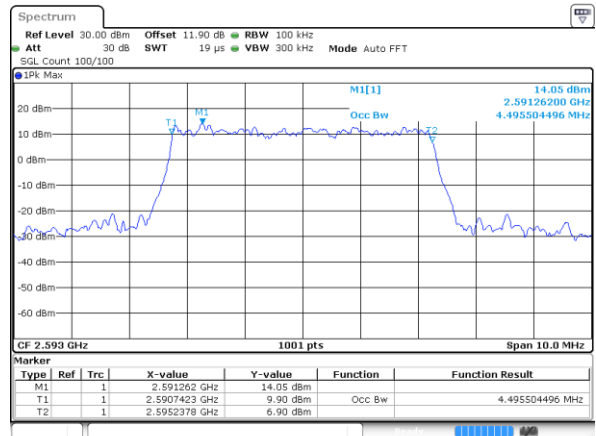
Date: 7 JAN 2018 15:23:54

## Middle Channel / 5MHz / QPSK



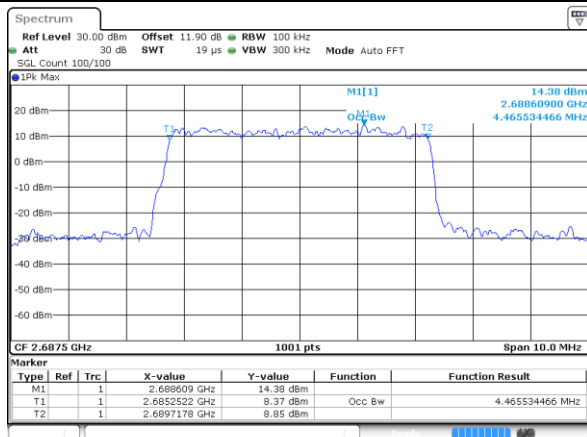
Date: 7 JAN 2018 15:24:24

## Middle Channel / 5MHz / 16QAM



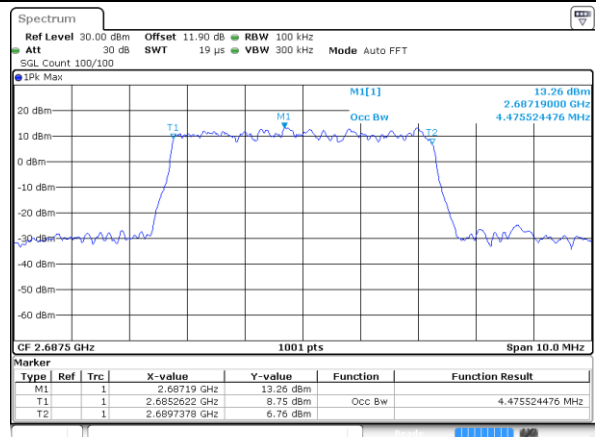
Date: 7 JAN 2018 15:24:34

## Highest Channel / 5MHz / QPSK



Date: 7 JAN 2018 15:25:04

## Highest Channel / 5MHz / 16QAM

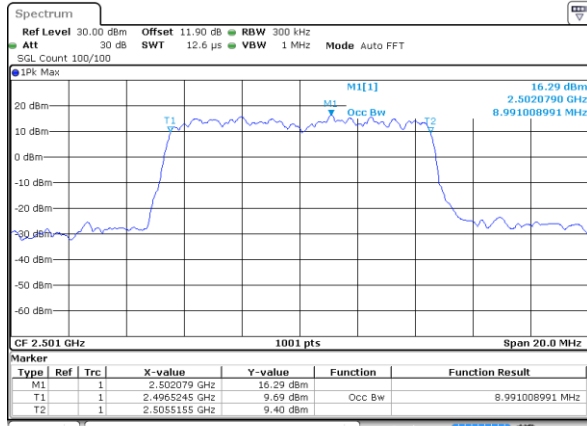


Date: 7 JAN 2018 15:25:14



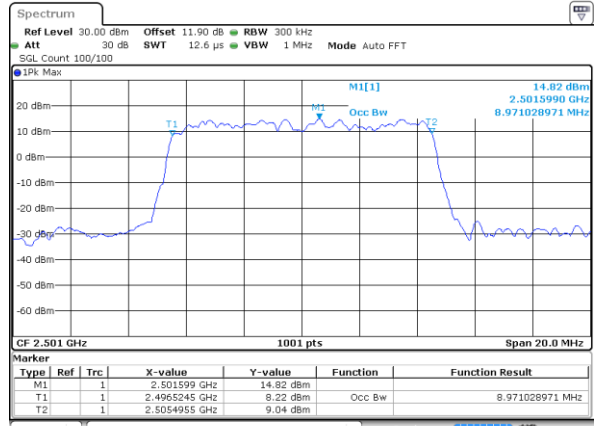
## LTE Band 41

## Lowest Channel / 10MHz / QPSK



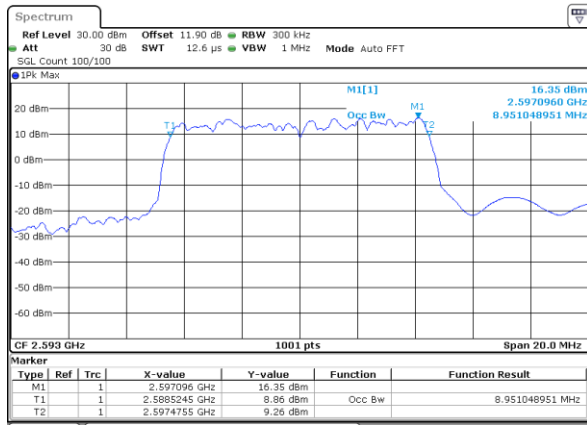
Date: 7 JAN 2018 15:25:44

## Lowest Channel / 10MHz / 16QAM



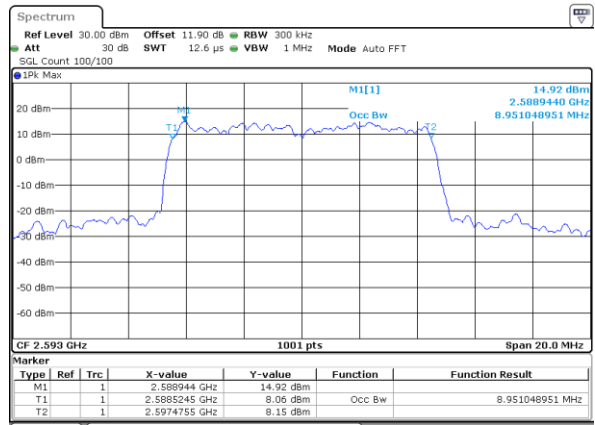
Date: 7 JAN 2018 15:25:54

## Middle Channel / 10MHz / QPSK



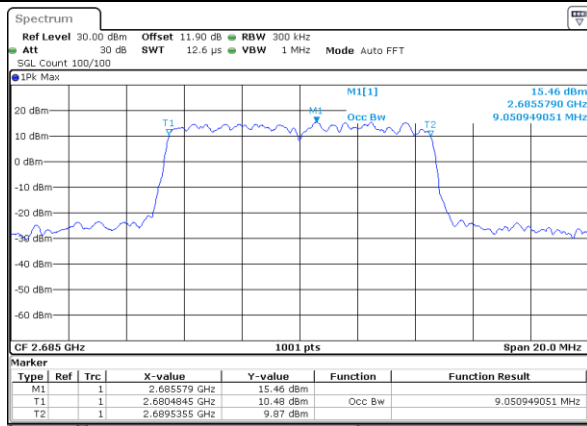
Date: 7 JAN 2018 15:26:24

## Middle Channel / 10MHz / 16QAM



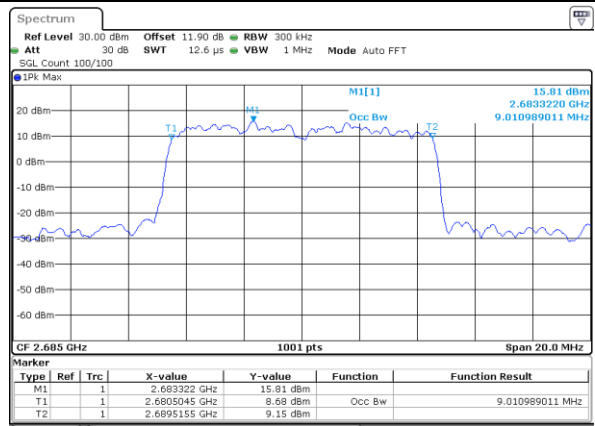
Date: 7 JAN 2018 15:26:34

## Highest Channel / 10MHz / QPSK



Date: 7 JAN 2018 15:27:04

## Highest Channel / 10MHz / 16QAM

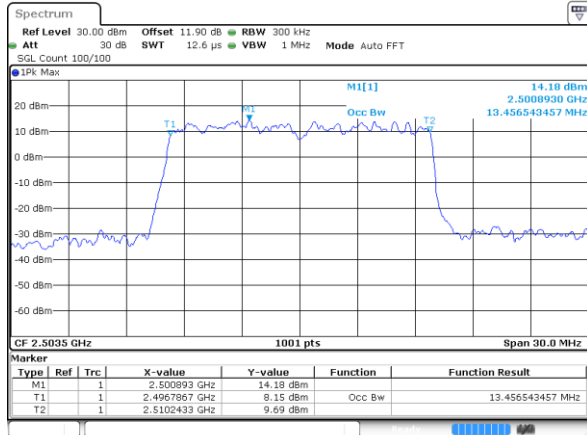


Date: 7 JAN 2018 15:27:14



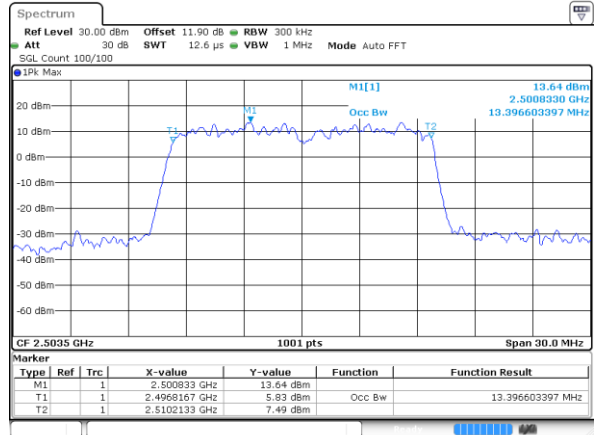
## LTE Band 41

## Lowest Channel / 15MHz / QPSK



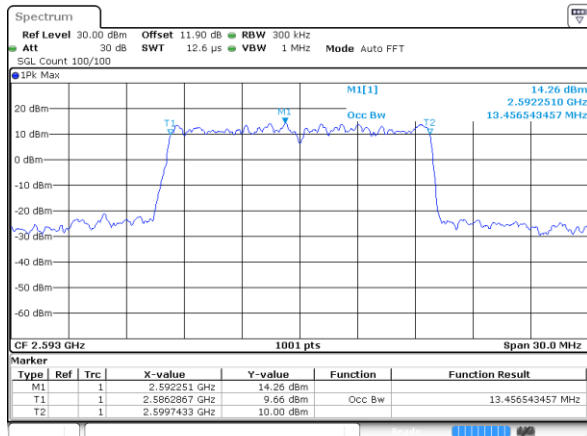
Date: 7 JAN 2018 15:27:44

## Lowest Channel / 15MHz / 16QAM



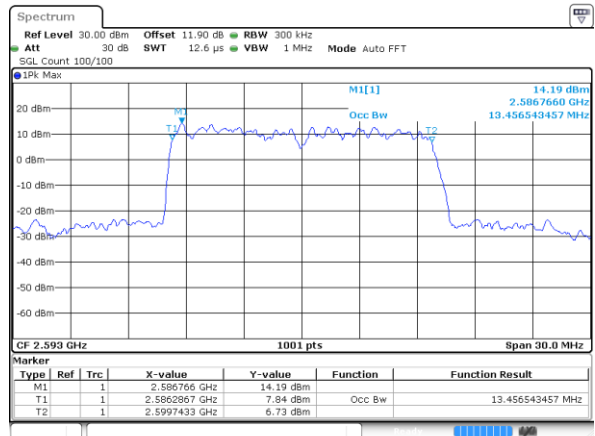
Date: 7 JAN 2018 15:27:54

## Middle Channel / 15MHz / QPSK



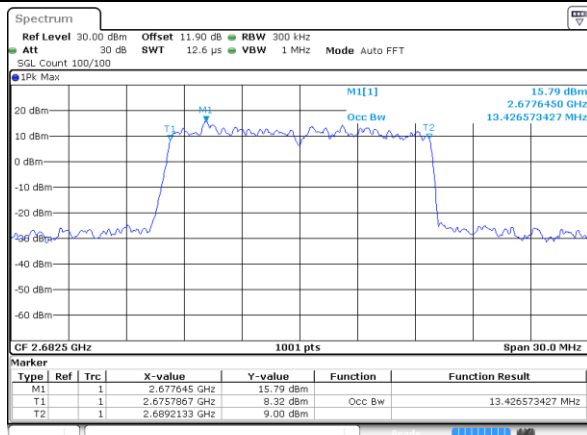
Date: 7 JAN 2018 15:28:24

## Middle Channel / 15MHz / 16QAM



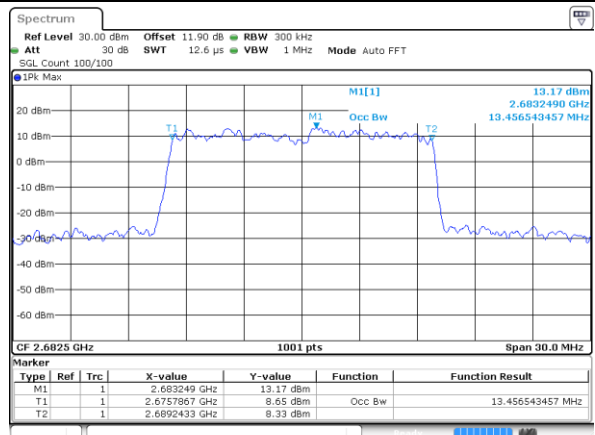
Date: 7 JAN 2018 15:28:34

## Highest Channel / 15MHz / QPSK



Date: 7 JAN 2018 15:29:04

## Highest Channel / 15MHz / 16QAM

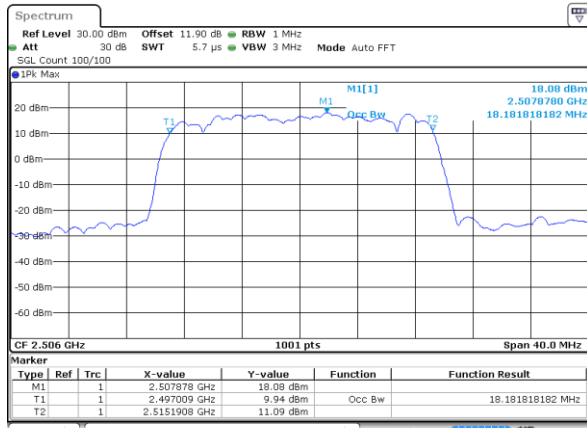


Date: 7 JAN 2018 15:29:14



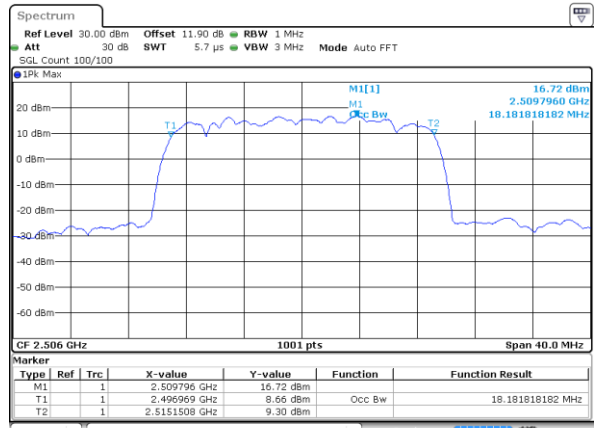
## LTE Band 41

## Lowest Channel / 20MHz / QPSK



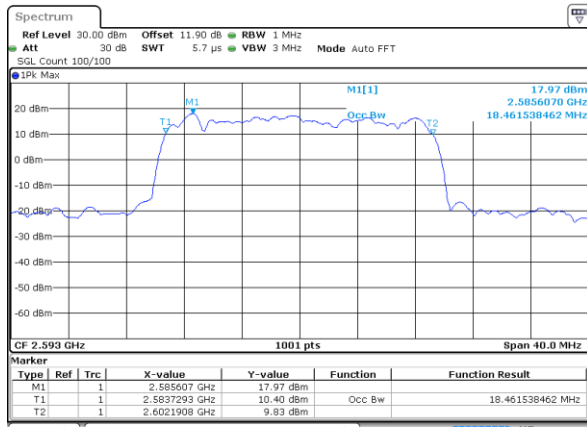
Date: 7 JAN 2018 15:29:44

## Lowest Channel / 20MHz / 16QAM



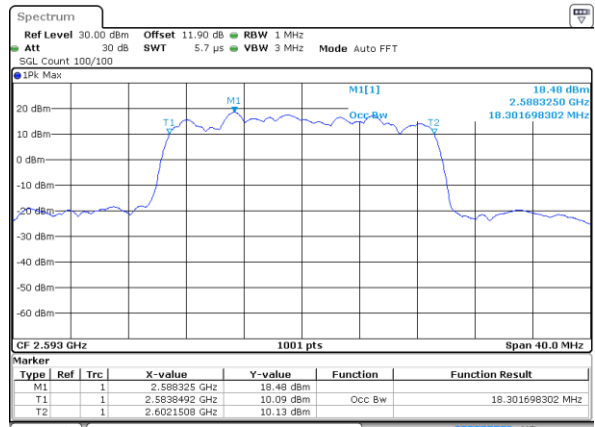
Date: 7 JAN 2018 15:29:54

## Middle Channel / 20MHz / QPSK



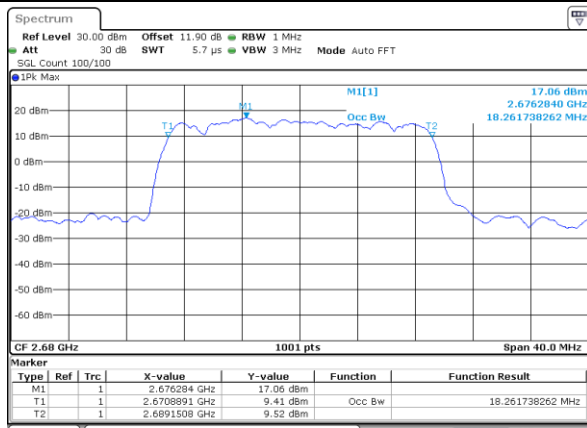
Date: 7 JAN 2018 15:30:24

## Middle Channel / 20MHz / 16QAM



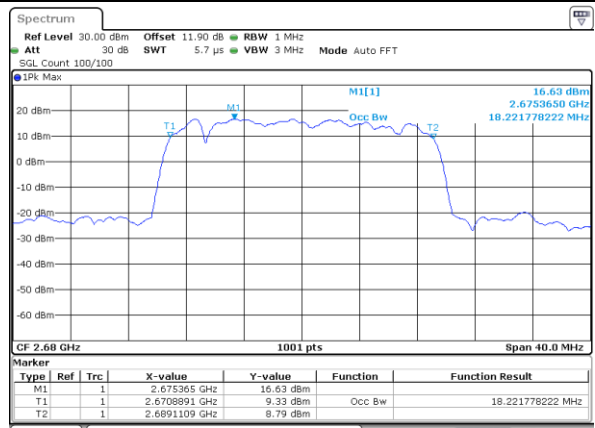
Date: 7 JAN 2018 15:30:34

## Highest Channel / 20MHz / QPSK



Date: 7 JAN 2018 15:31:04

## Highest Channel / 20MHz / 16QAM



Date: 7 JAN 2018 15:31:14

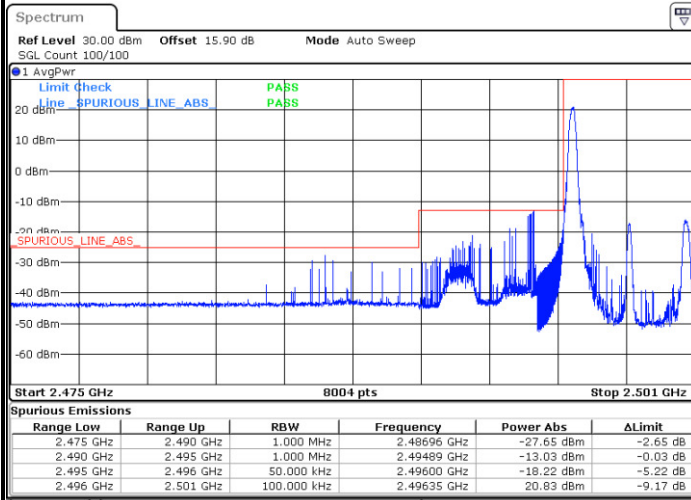


## **Conducted Band Edge**

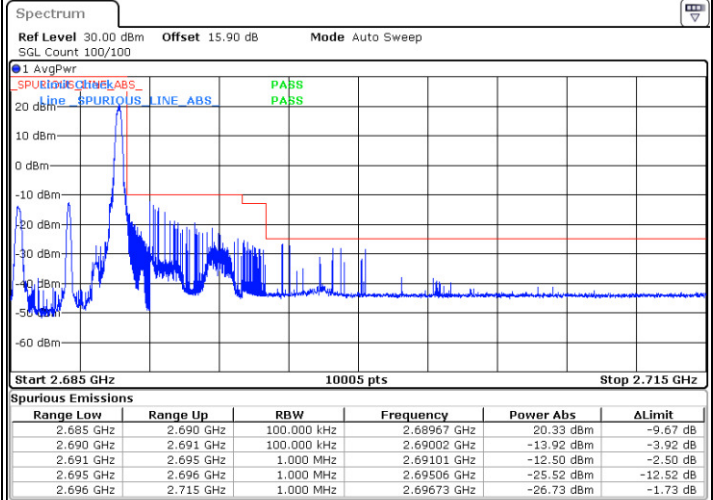


## LTE Band 41 / 5MHz / QPSK

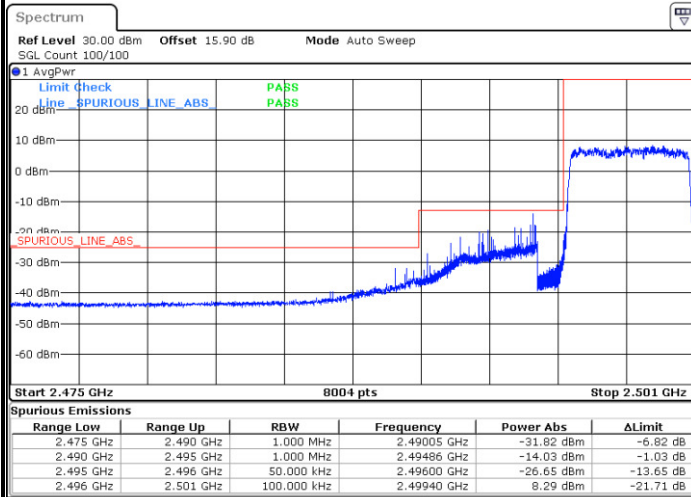
## Lowest Band Edge / 1 RB



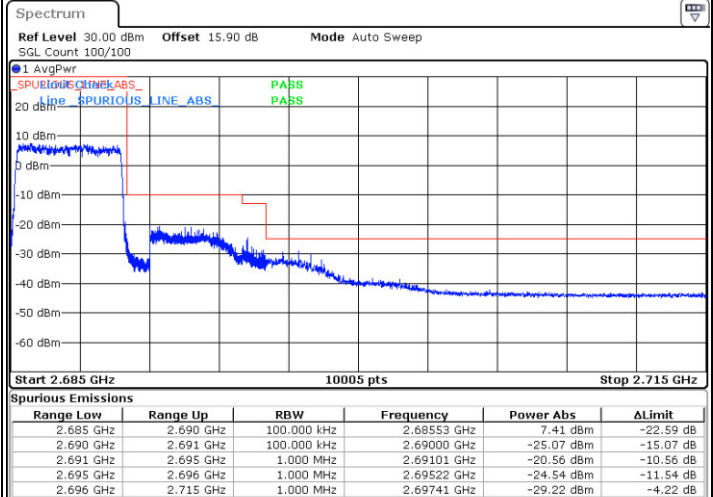
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



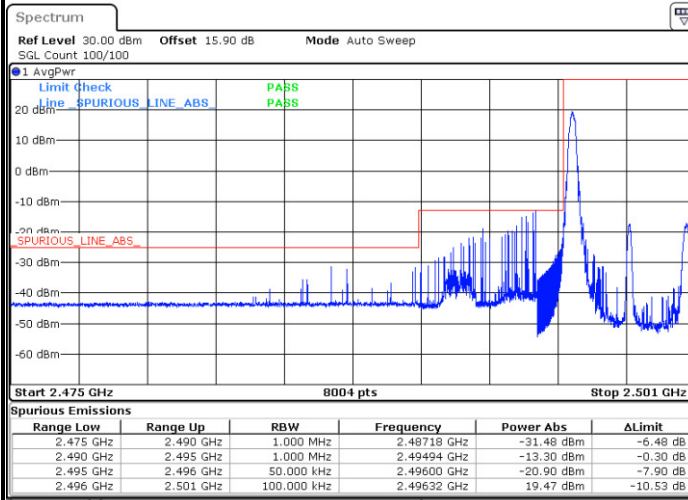
## Highest Band Edge / Full RB



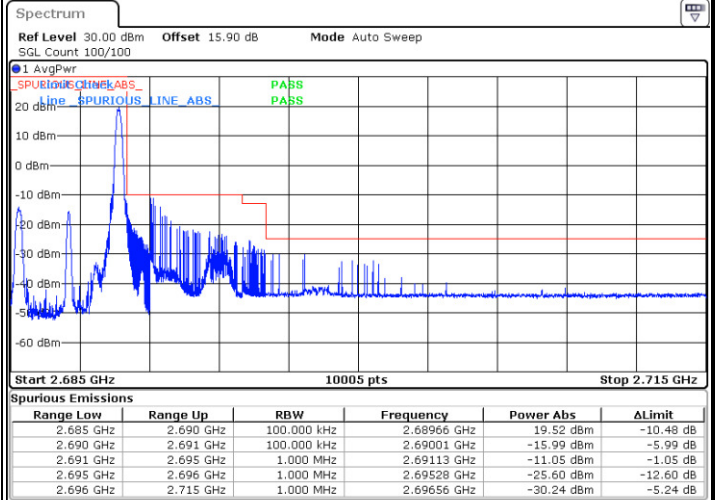


## LTE Band 41 / 5MHz / 16QAM

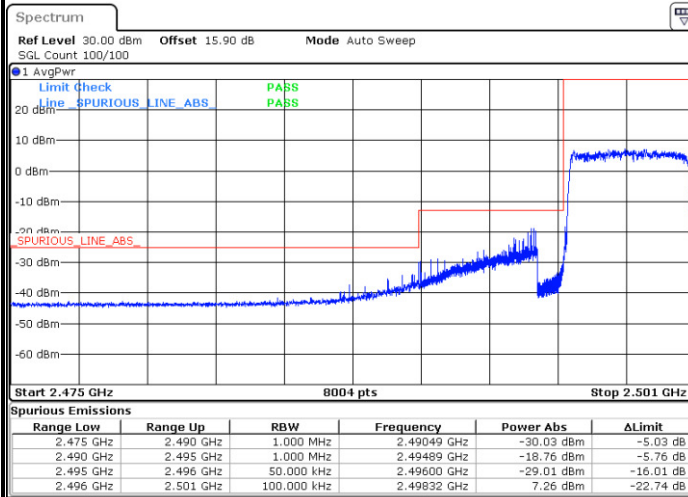
## Lowest Band Edge / 1RB



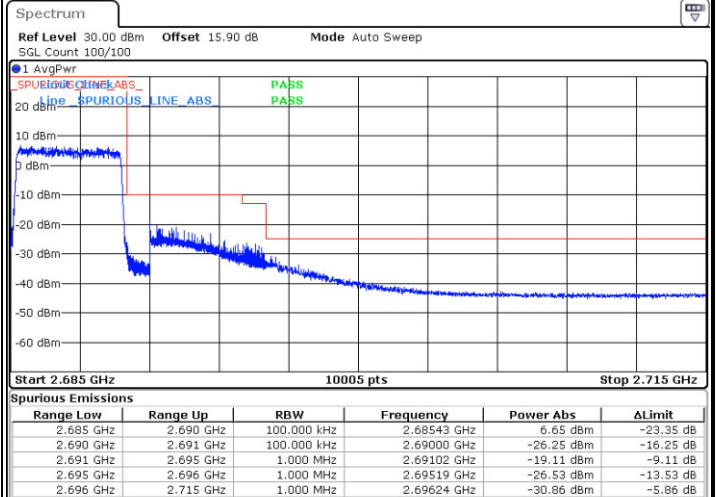
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



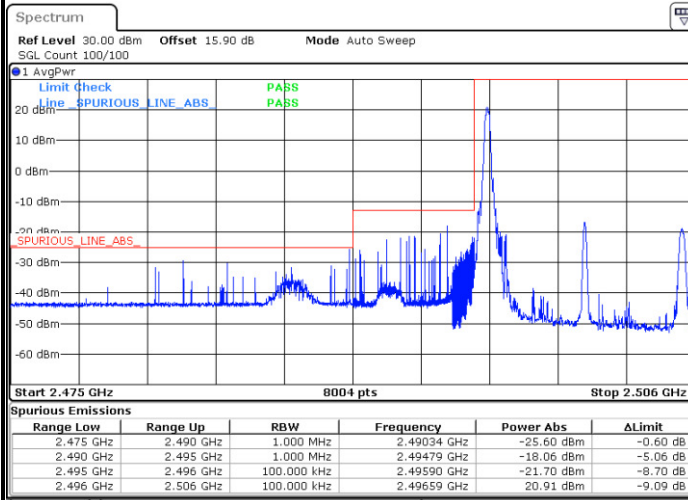
## Highest Band Edge / Full RB



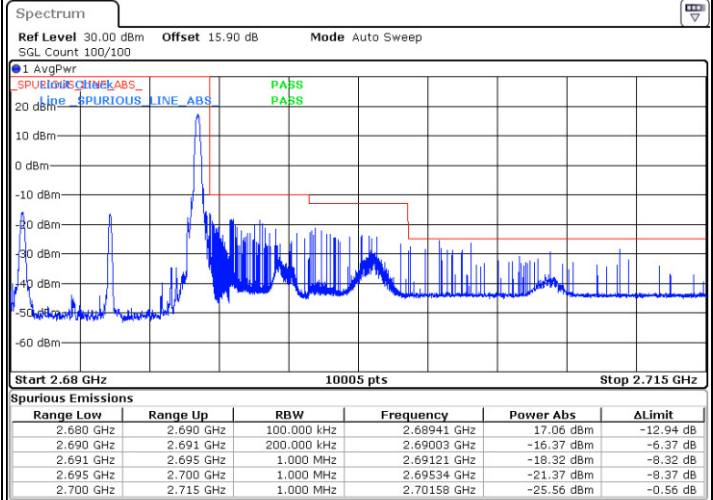


## LTE Band 41 / 10MHz / QPSK

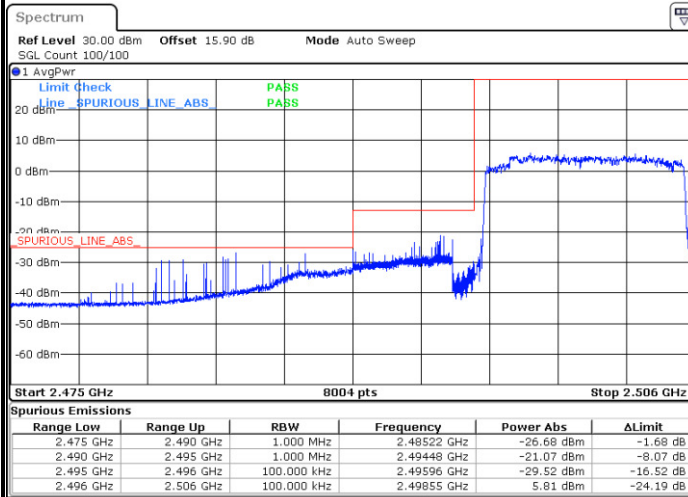
## Lowest Band Edge / 1 RB



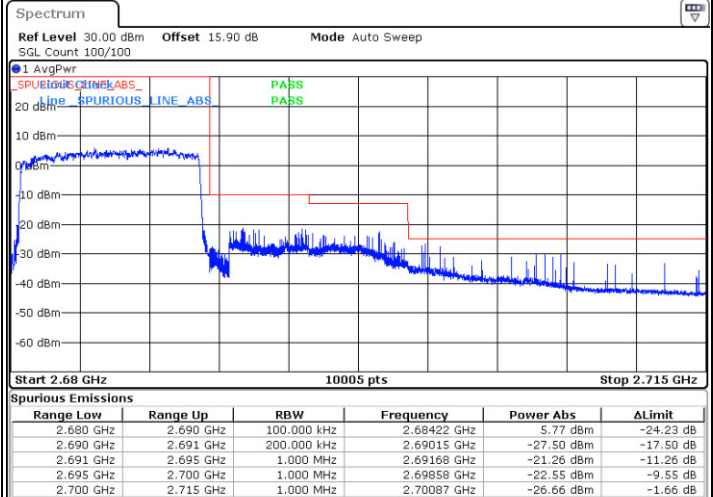
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



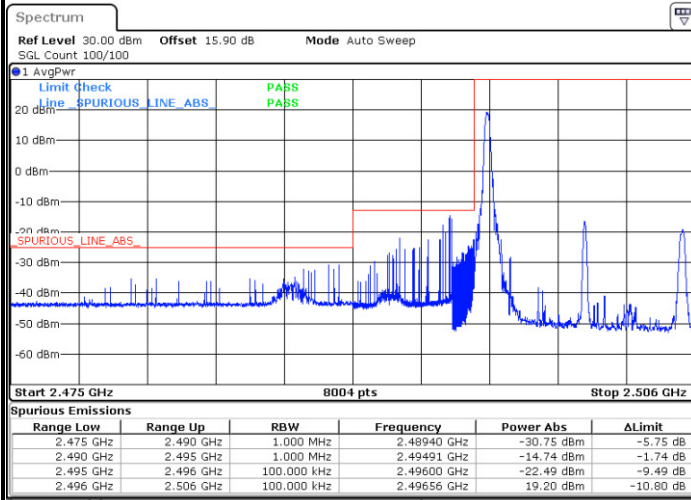
## Highest Band Edge / Full RB



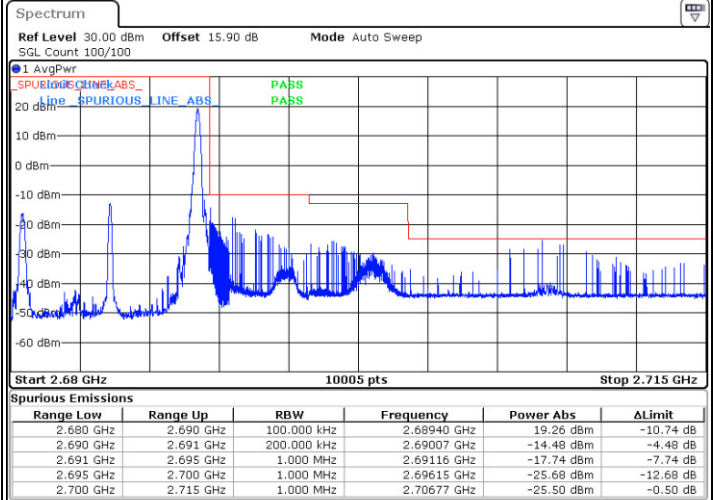


## LTE Band 41 / 10MHz / 16QAM

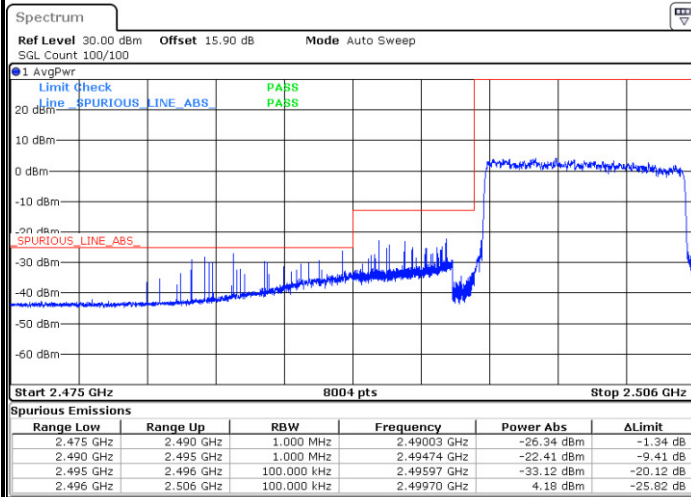
## Lowest Band Edge / 1 RB



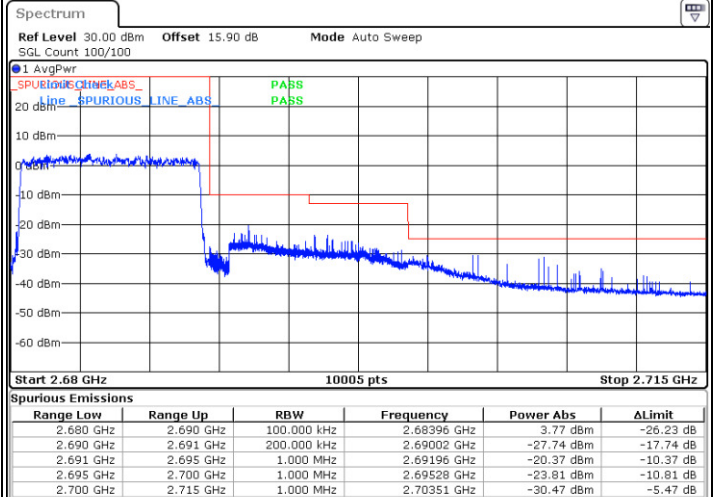
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



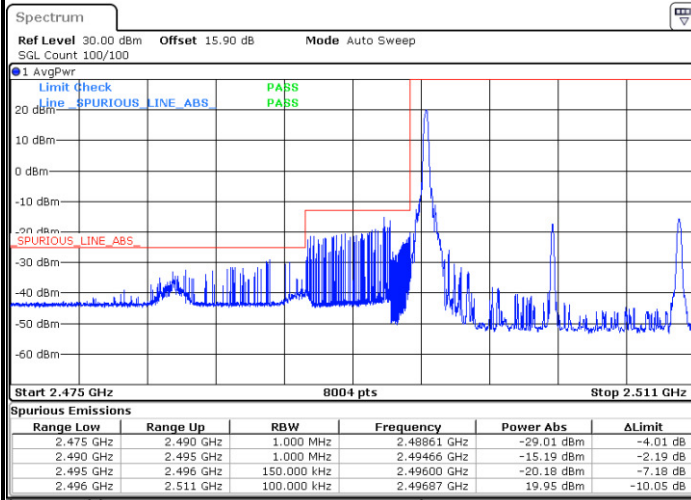
## Highest Band Edge / Full RB



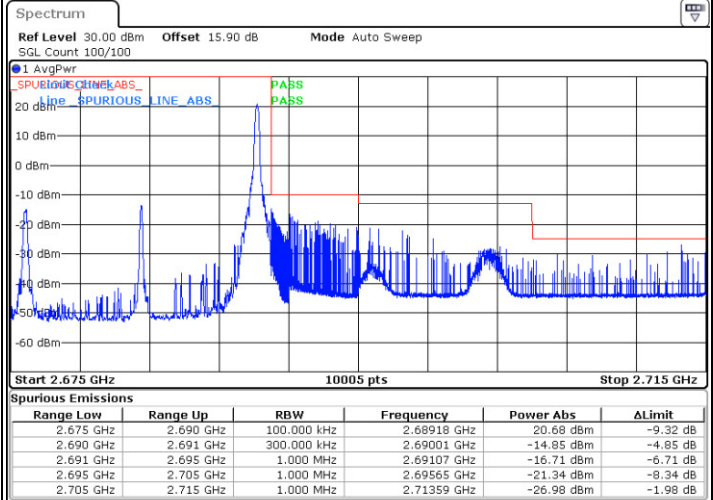


## LTE Band 41 / 15MHz / QPSK

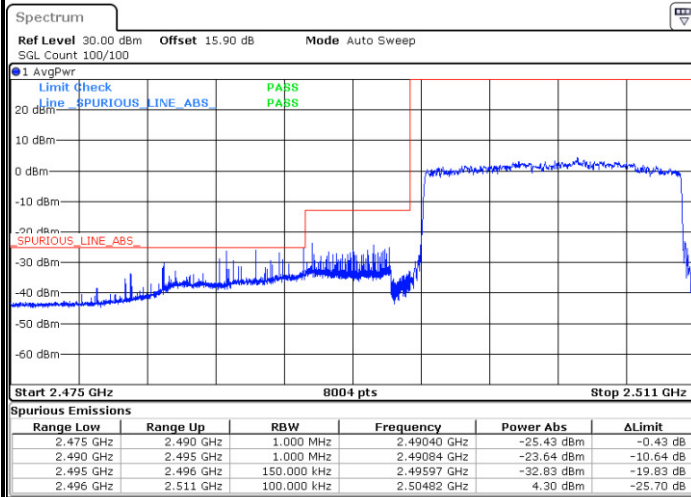
## Lowest Band Edge / 1 RB



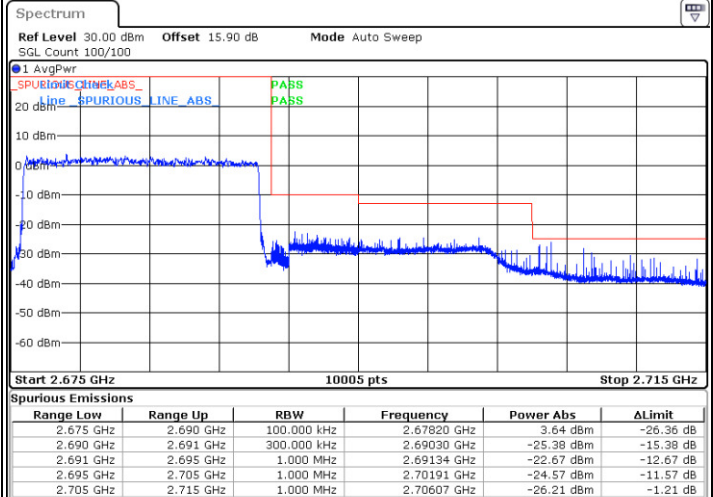
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



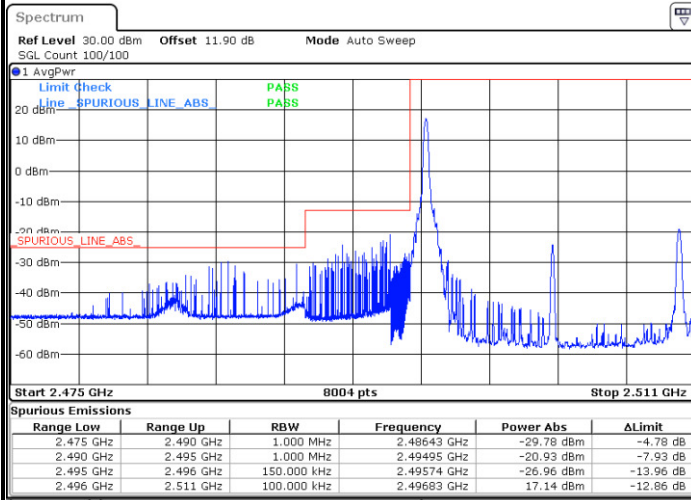
## Highest Band Edge / Full RB



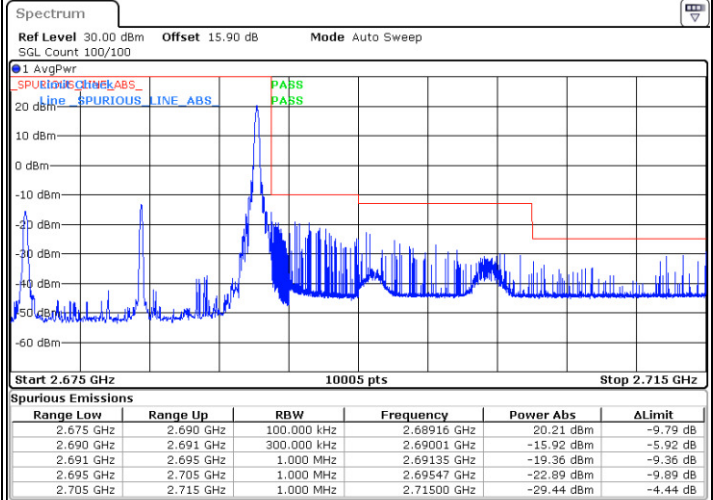


## LTE Band 41 / 15MHz / 16QAM

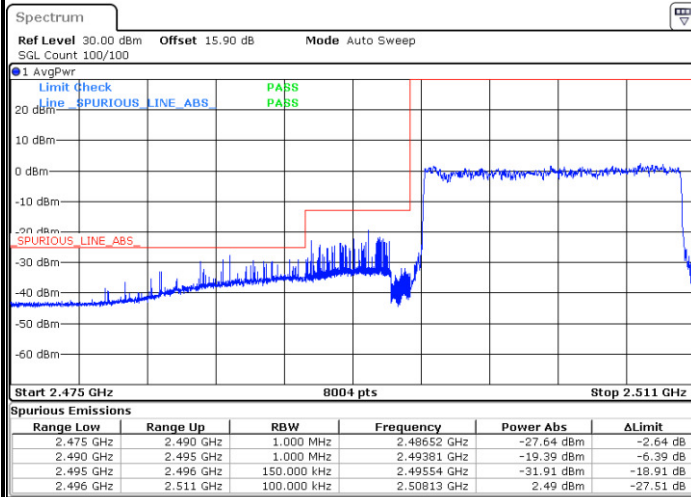
## Lowest Band Edge / 1 RB



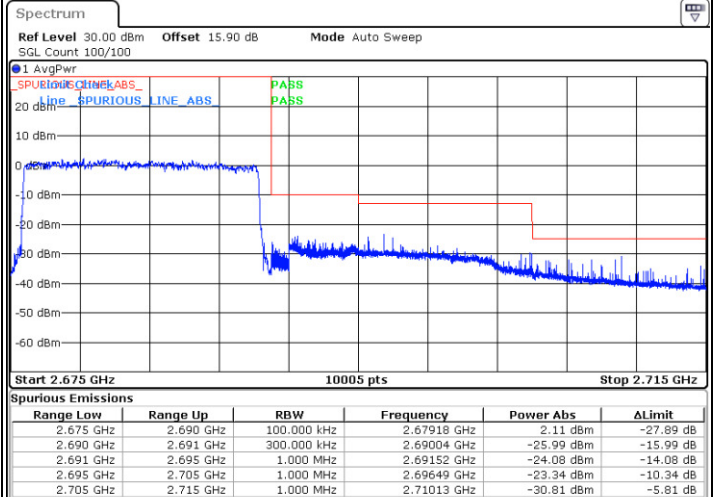
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



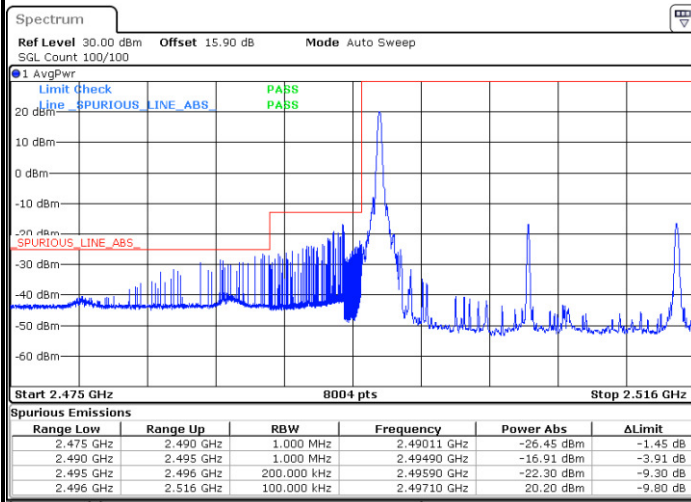
## Highest Band Edge / Full RB



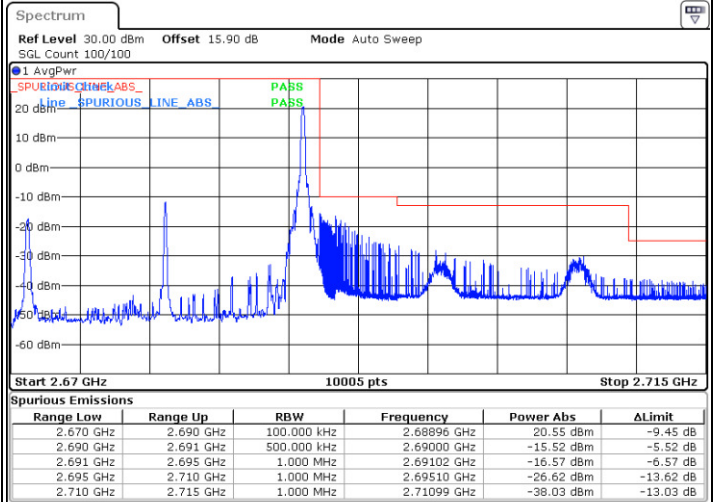


## LTE Band 41 / 20MHz / QPSK

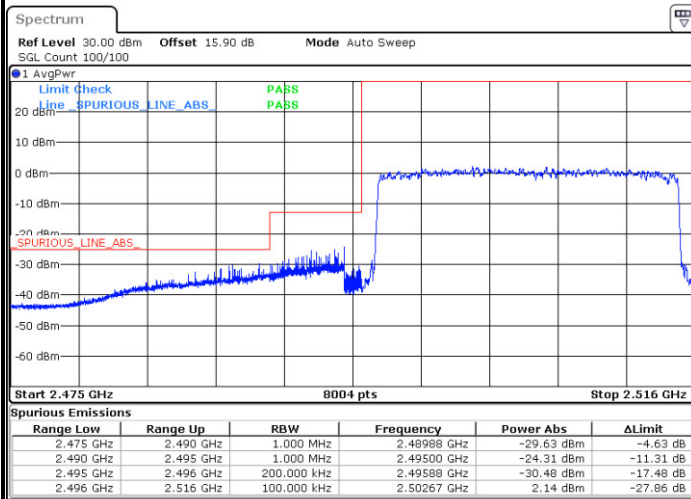
## Lowest Band Edge / 1 RB



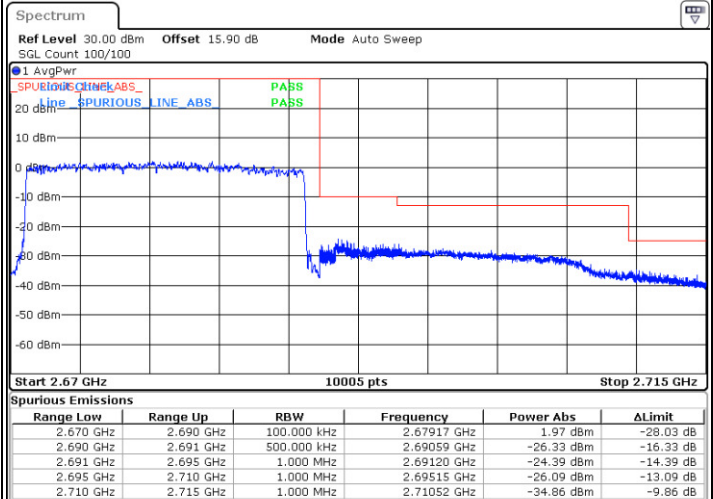
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



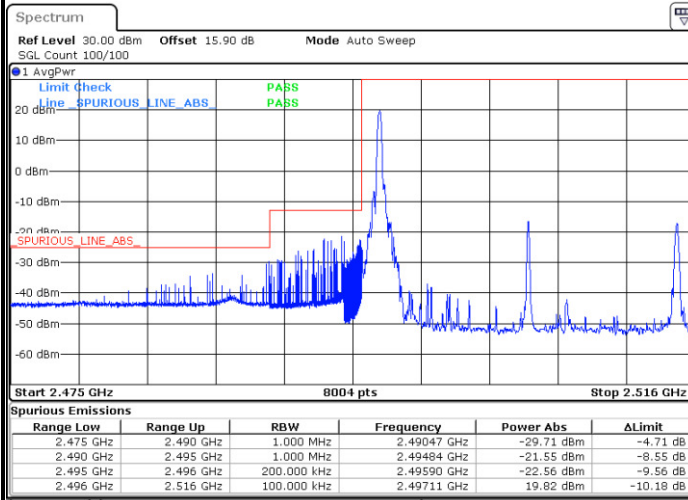
## Highest Band Edge / Full RB



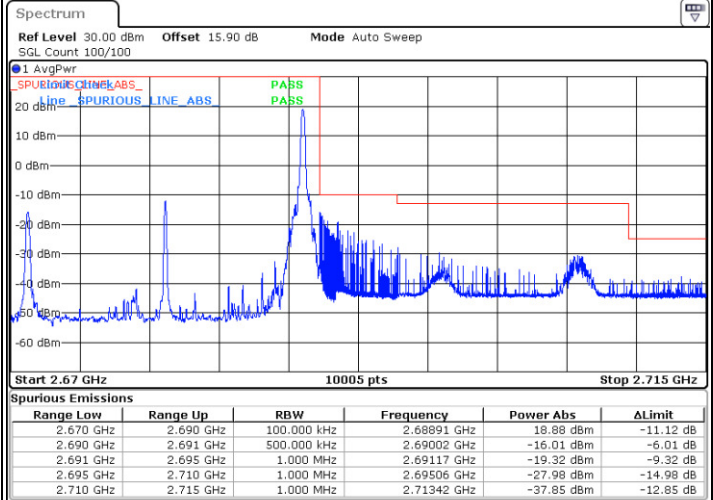


## LTE Band 41 / 20MHz / 16QAM

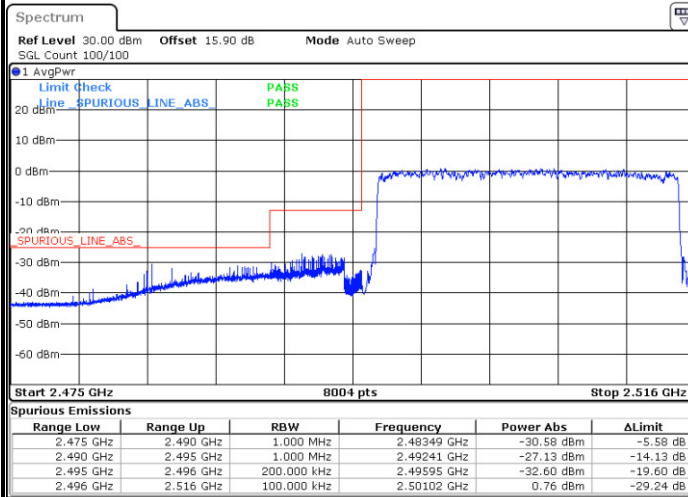
## Lowest Band Edge / 1 RB



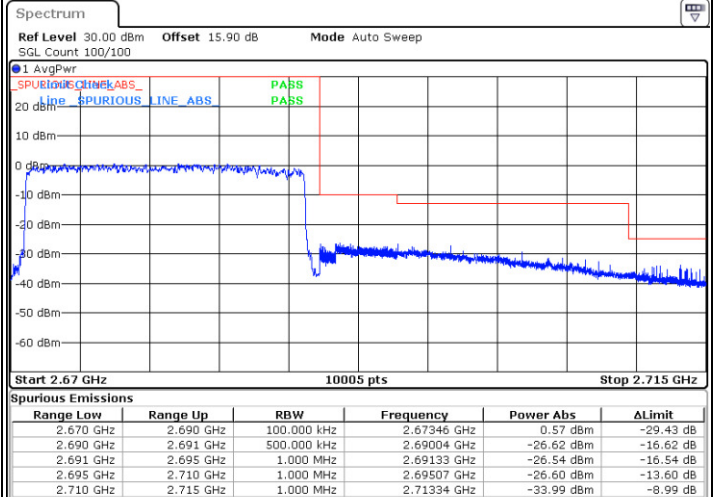
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB



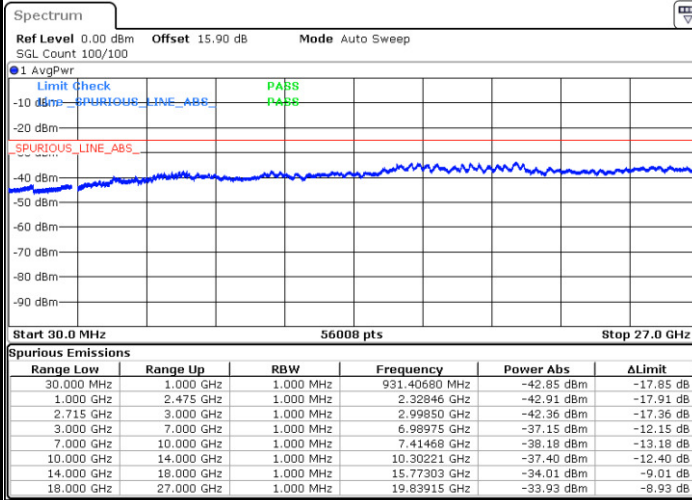


## **Conducted Spurious Emission**



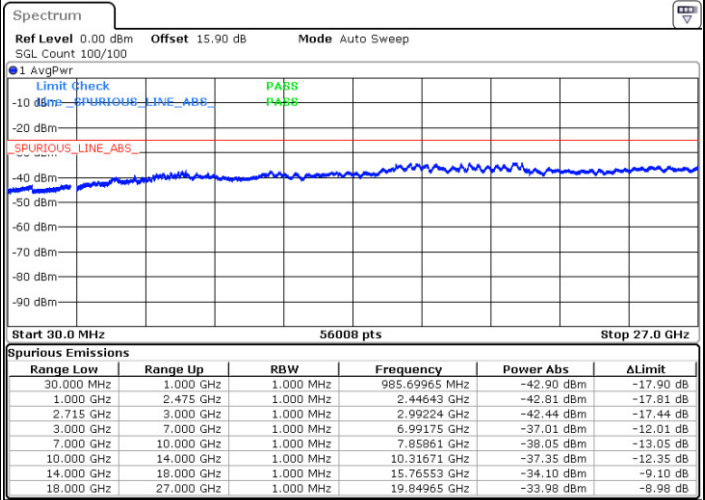
## LTE Band 41 / 5MHz

## Lowest Channel / QPSK



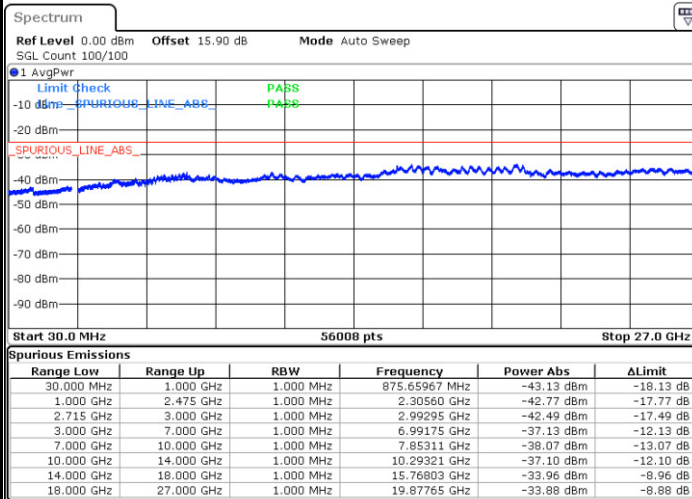
Date: 7.JAN.2018 14:50:46

## Lowest Channel / 16QAM



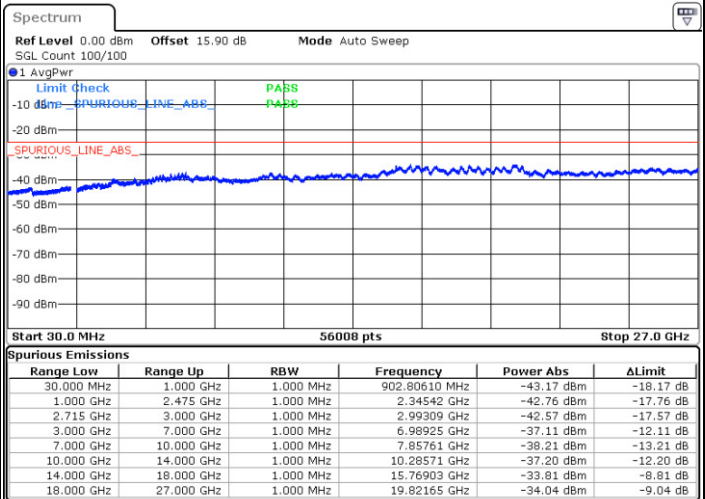
Date: 7.JAN.2018 14:51:40

## Middle Channel / QPSK



Date: 7.JAN.2018 14:52:34

## Middle Channel / 16QAM

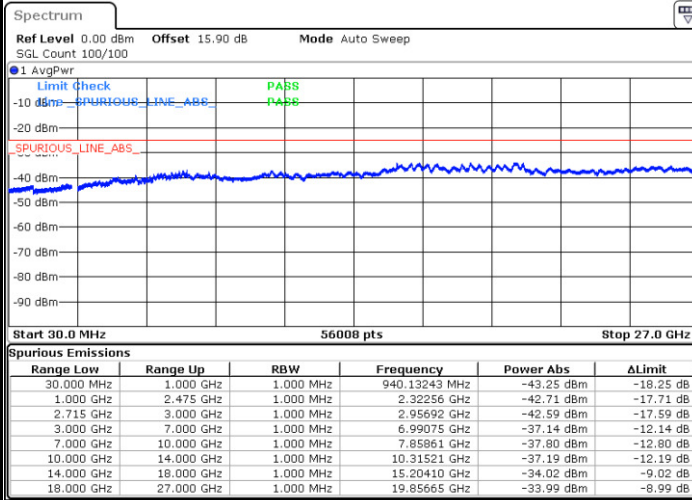


Date: 7.JAN.2018 14:53:28



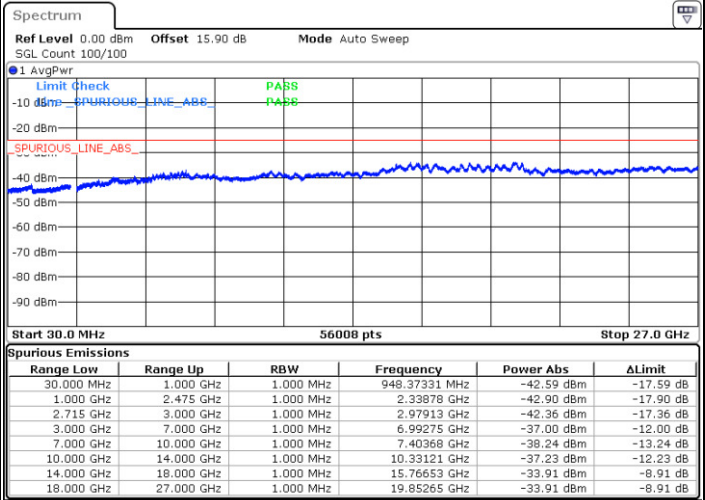
## LTE Band 41 / 5MHz

## Highest Channel / QPSK



Date: 7.JAN.2018 14:54:22

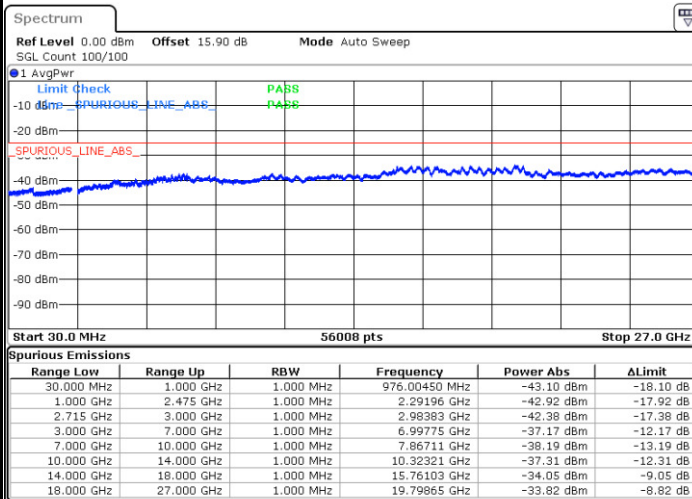
## Highest Channel / 16QAM



Date: 7.JAN.2018 14:55:16

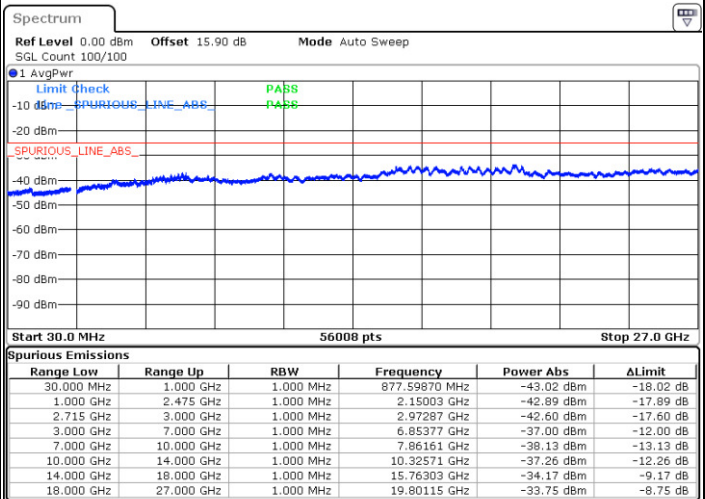
## LTE Band 41 / 10MHz

## Lowest Channel / QPSK



Date: 7.JAN.2018 14:56:11

## Lowest Channel / 16QAM



Date: 7.JAN.2018 14:57:04