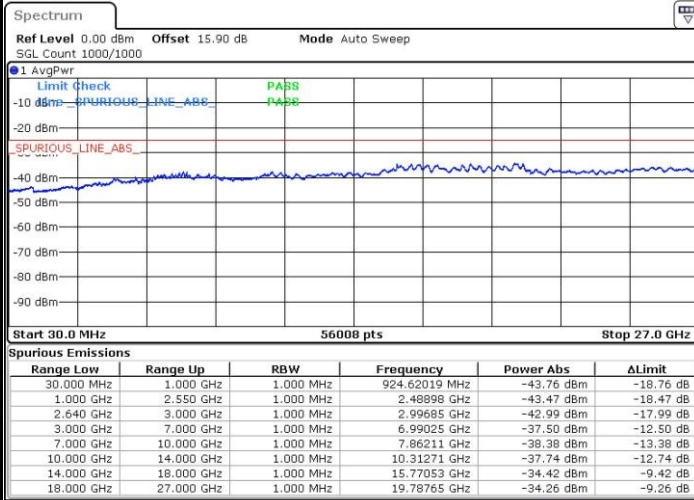




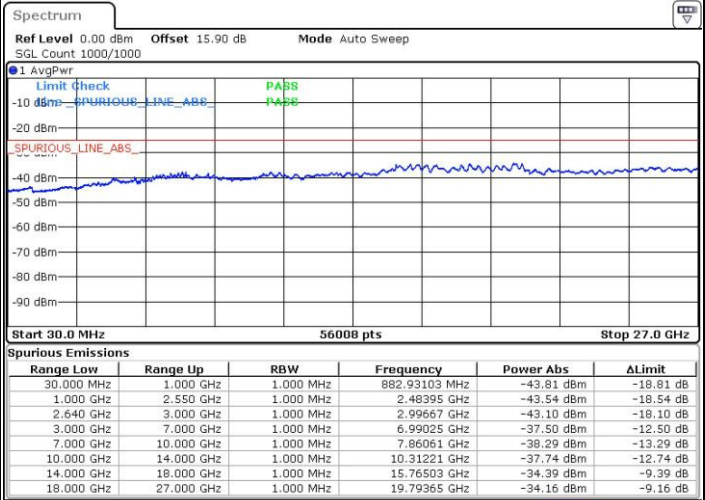
## LTE Band 38 / 5MHz

## Highest Channel / QPSK



Date: 1.MAR.2017 13:52:55

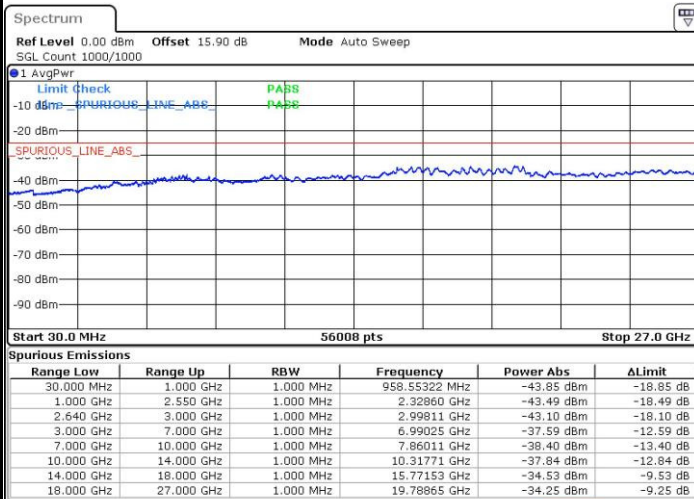
## Highest Channel / 16QAM



Date: 1.MAR.2017 13:45:47

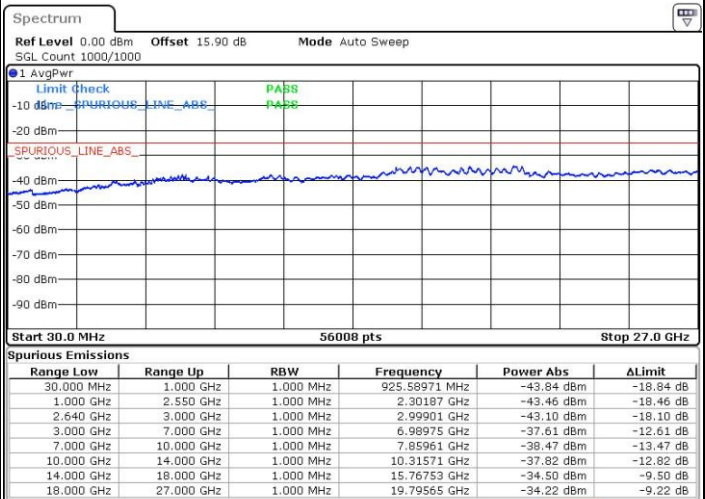
## LTE Band 38 / 10MHz

## Lowest Channel / QPSK



Date: 1.MAR.2017 13:59:47

## Lowest Channel / 16QAM

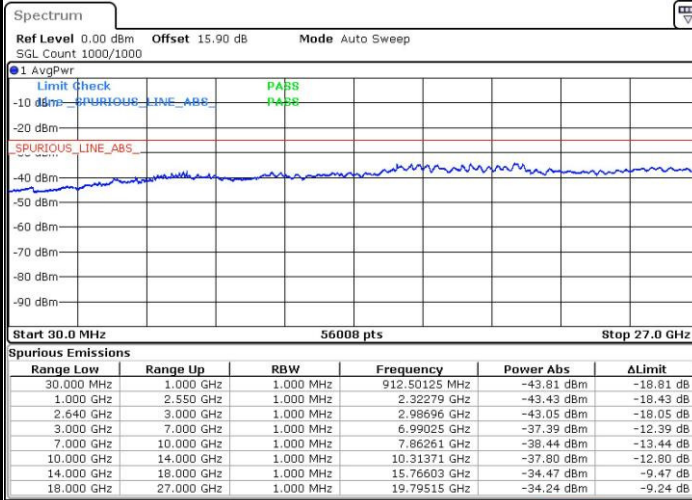


Date: 1.MAR.2017 14:07:16



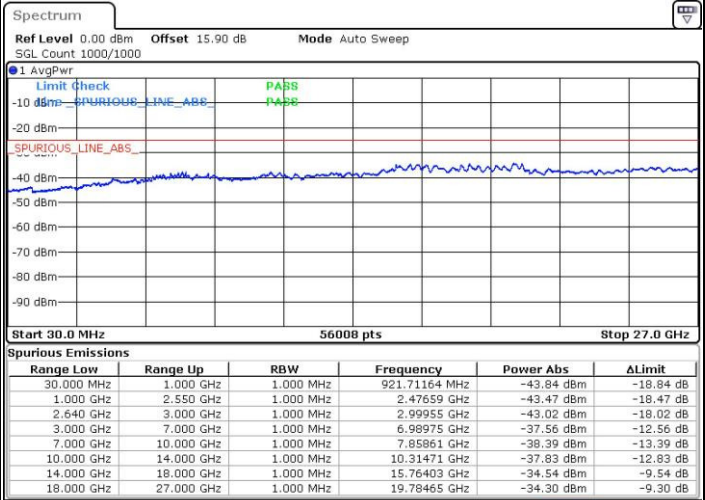
## LTE Band 38 / 10MHz

## Middle Channel / QPSK



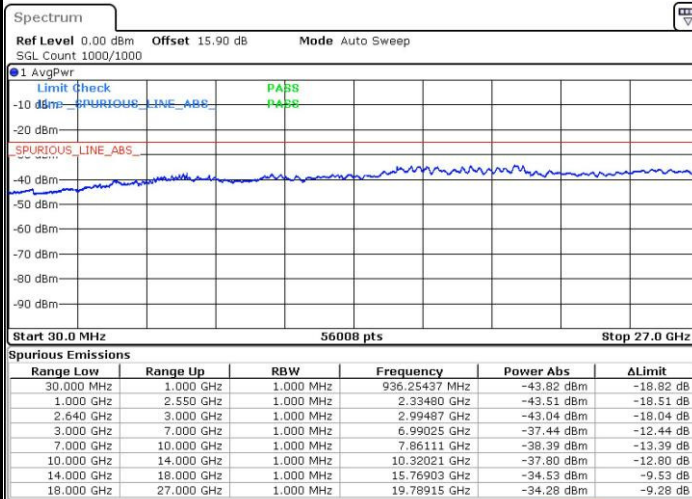
Date: 1.MAR.2017 14:34:38

## Middle Channel / 16QAM



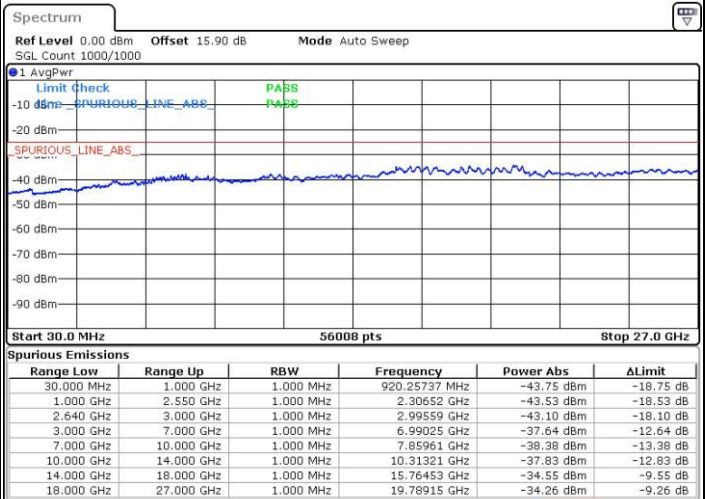
Date: 1.MAR.2017 14:14:48

## Highest Channel / QPSK



Date: 1.MAR.2017 14:42:01

## Highest Channel / 16QAM

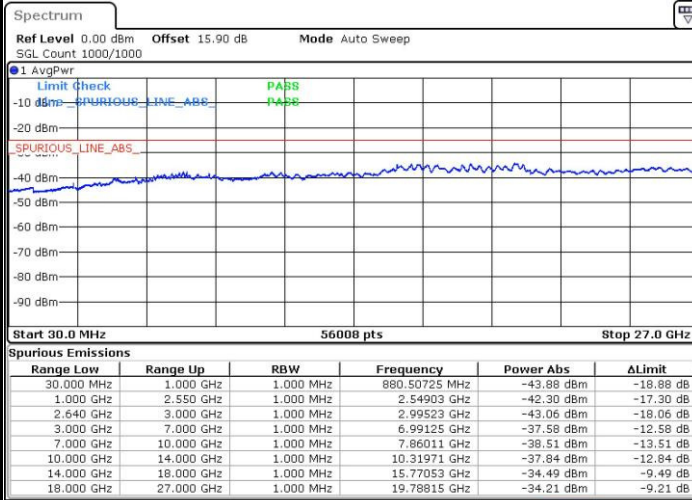


Date: 1.MAR.2017 14:53:50



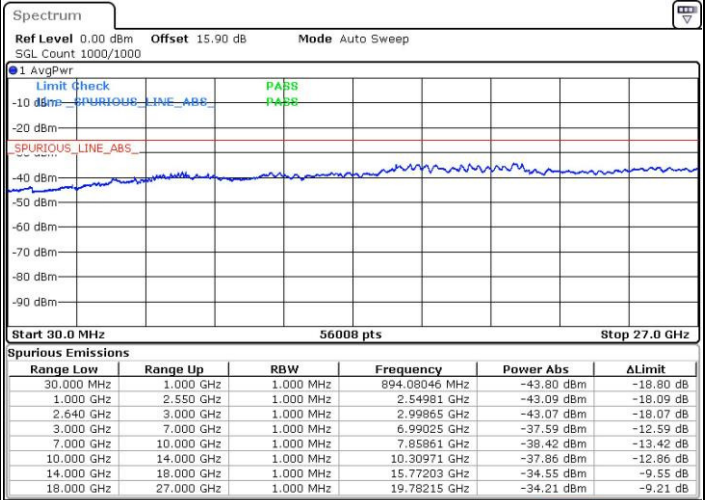
## LTE Band 38 / 15MHz

## Lowest Channel / QPSK



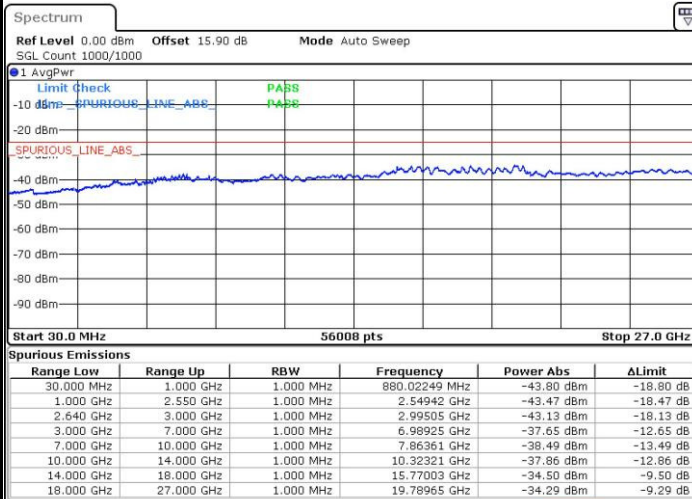
Date: 1.MAR.2017 15:08:25

## Lowest Channel / 16QAM



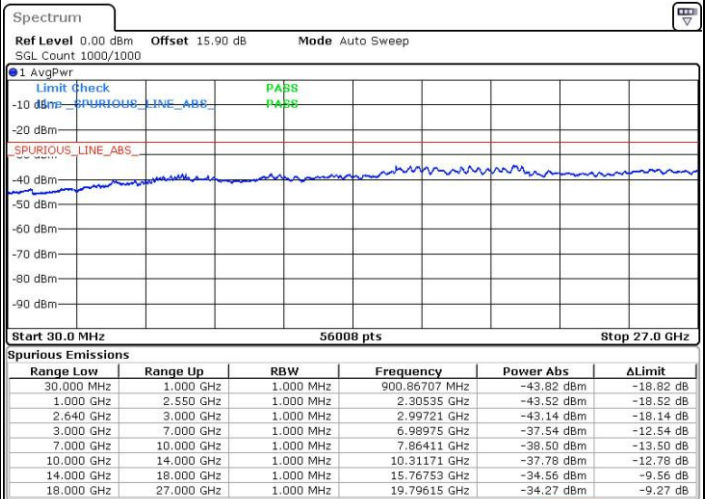
Date: 1.MAR.2017 15:02:08

## Middle Channel / QPSK



Date: 1.MAR.2017 15:15:29

## Middle Channel / 16QAM

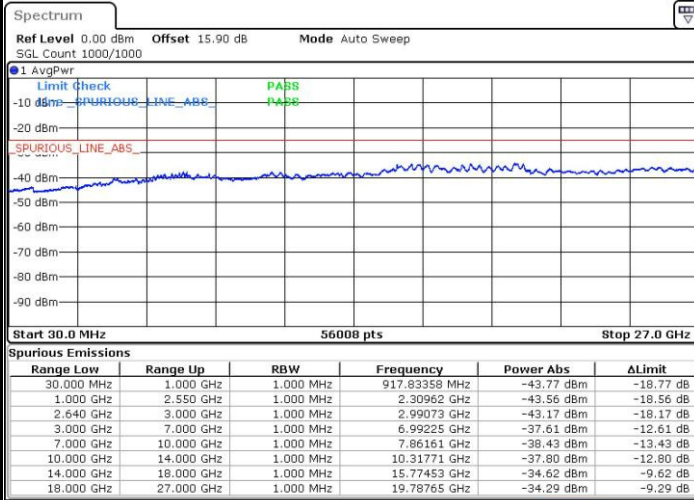


Date: 1.MAR.2017 15:22:18



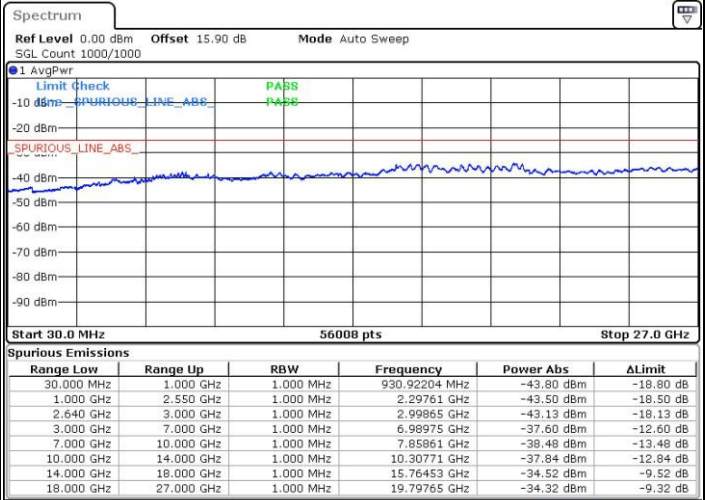
## LTE Band 38 / 15MHz

## Highest Channel / QPSK



Date: 1.MAR.2017 15:36:00

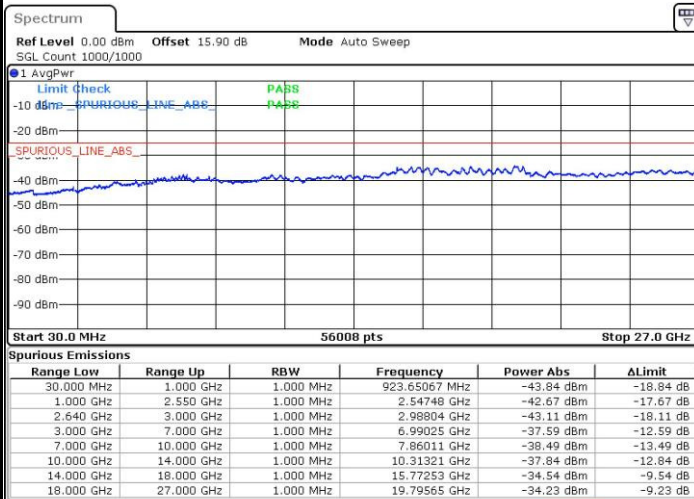
## Highest Channel / 16QAM



Date: 1.MAR.2017 15:29:43

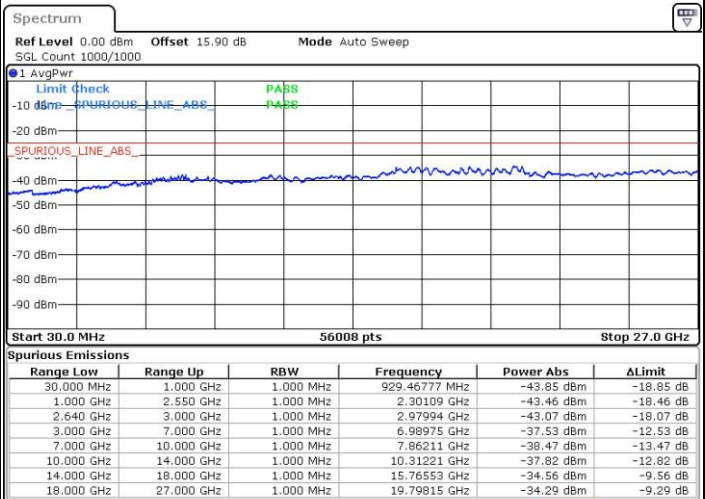
## LTE Band 38 / 20MHz

## Lowest Channel / QPSK



Date: 1.MAR.2017 15:42:21

## Lowest Channel / 16QAM

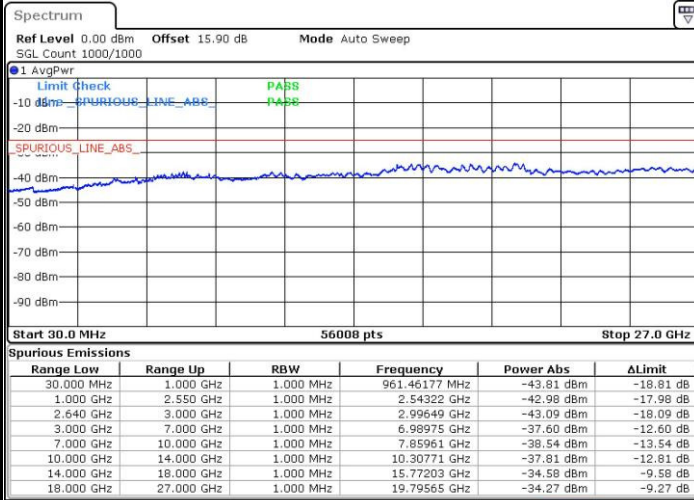


Date: 1.MAR.2017 15:48:40



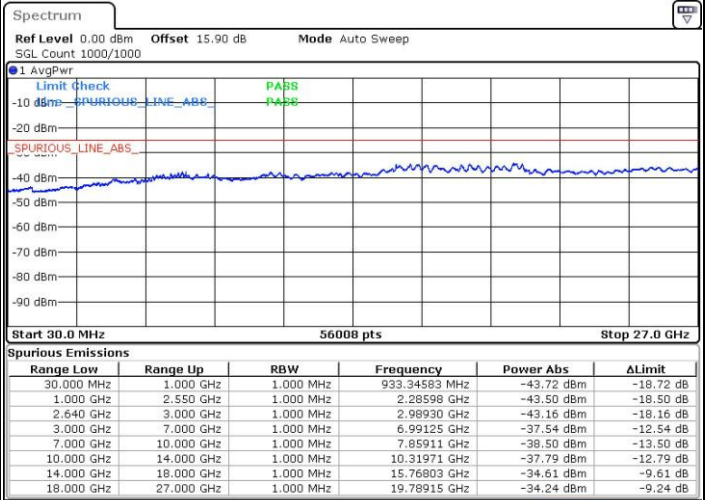
## LTE Band 38 / 20MHz

## Middle Channel / QPSK



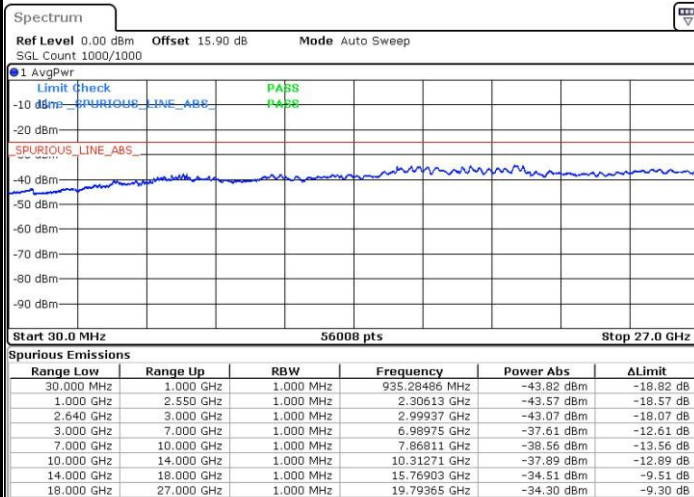
Date: 1.MAR.2017 16:02:41

## Middle Channel / 16QAM



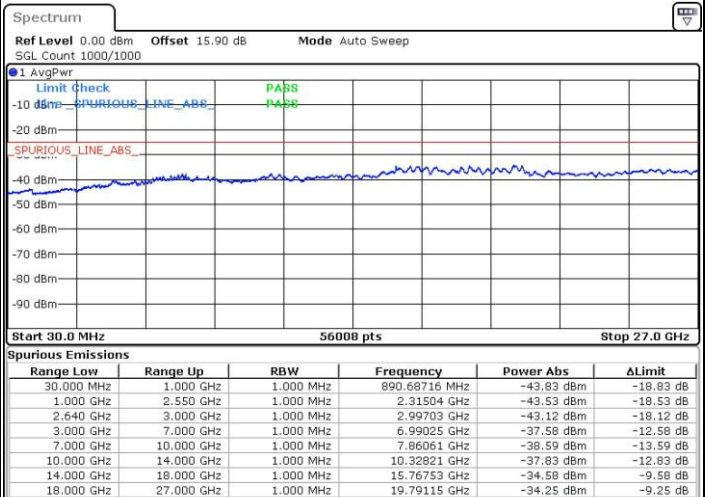
Date: 1.MAR.2017 15:55:00

## Highest Channel / QPSK



Date: 1.MAR.2017 16:09:36

## Highest Channel / 16QAM



Date: 1.MAR.2017 16:15:55

## 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    | 0.0020                              | PASS    |
| 40               | Normal Voltage    | 0.0001                              |         |
| 30               | Normal Voltage    | 0.0024                              |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                              |         |
| 10               | Normal Voltage    | 0.0007                              |         |
| 0                | Normal Voltage    | 0.0018                              |         |
| -10              | Normal Voltage    | 0.0011                              |         |
| -20              | Normal Voltage    | 0.0012                              |         |
| -30              | Normal Voltage    | 0.0005                              |         |
| 20               | Maximum Voltage   | 0.0017                              |         |
| 20               | Normal Voltage    | 0.0000                              |         |
| 20               | Battery End Point | 0.0015                              |         |

**Note:**

1. Normal Voltage =3.9 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 41

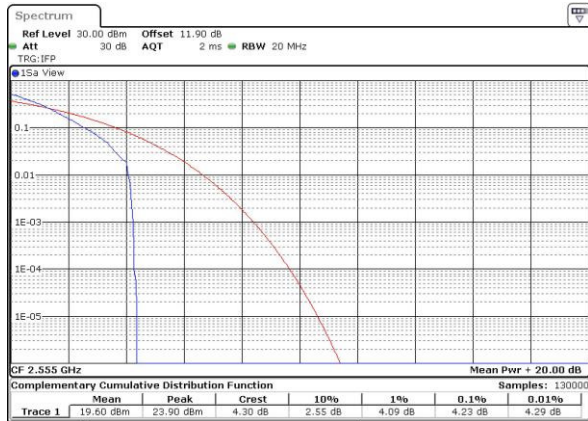
### Peak-to-Average Ratio

| Mode       | LTE Band 41 / 20MHz |         |       |         |             |
|------------|---------------------|---------|-------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 4.23                | 4.75    | 5.19  | 5.77    | PASS        |
| Middle CH  | 4.93                | 5.07    | 5.54  | 6.09    |             |
| Highest CH | 4.84                | 5.1     | 5.45  | 6.09    |             |

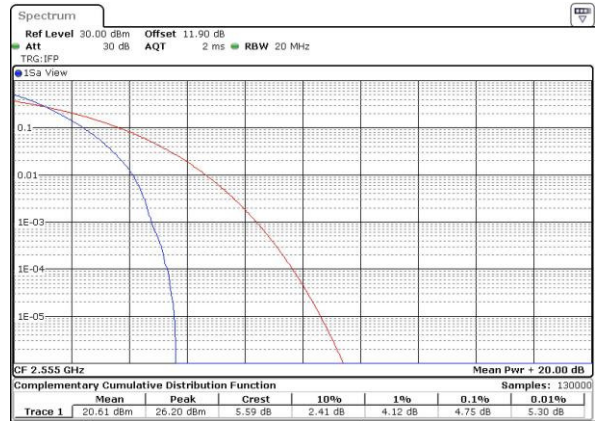


## LTE Band 41 / 20MHz / QPSK

## Lowest Channel / 1RB



## Lowest Channel / Full RB



## Middle Channel / 1RB



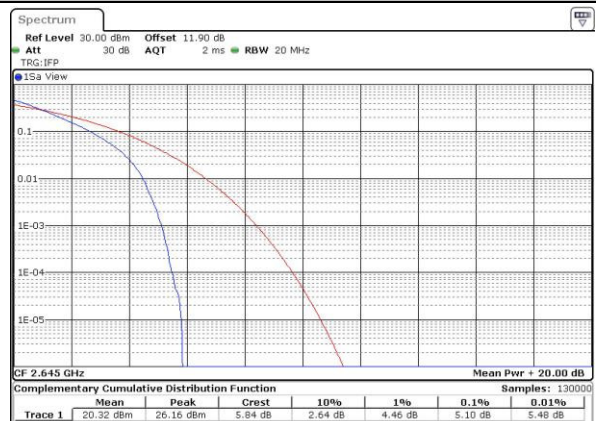
## Middle Channel / Full RB



## Highest Channel / 1RB



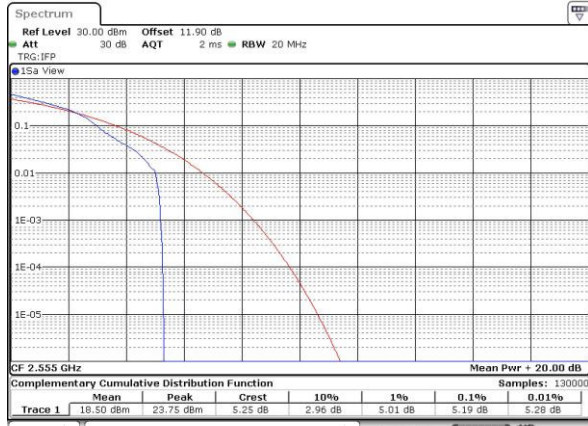
## Highest Channel / Full RB



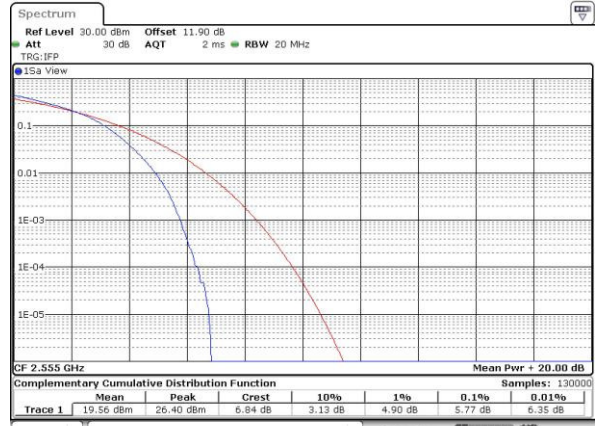


## LTE Band 41 / 20MHz / 16QAM

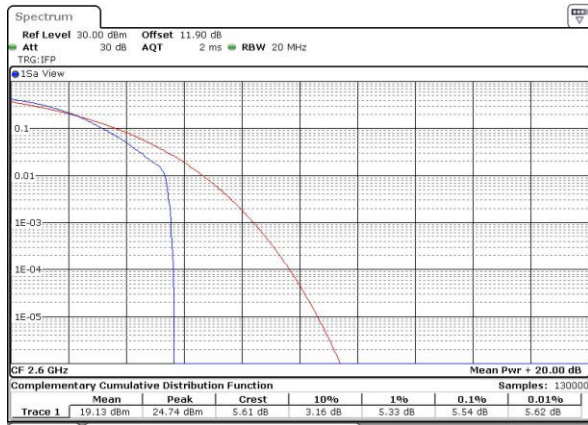
## Lowest Channel / 1RB



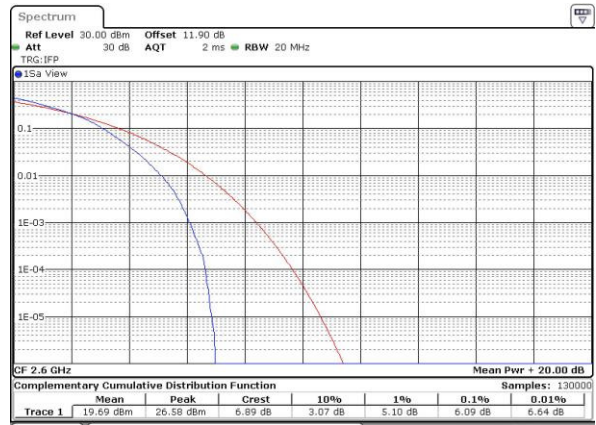
## Lowest Channel / Full RB



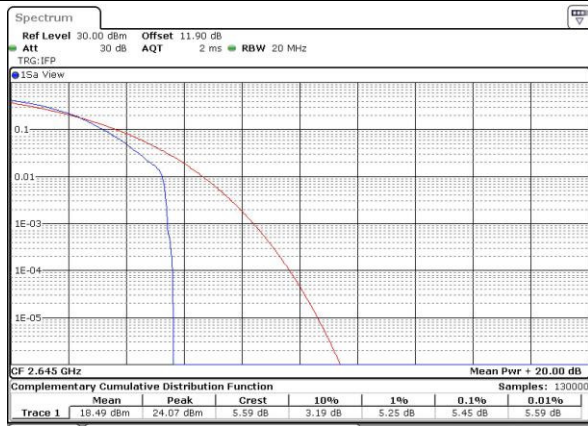
## Middle Channel / 1RB



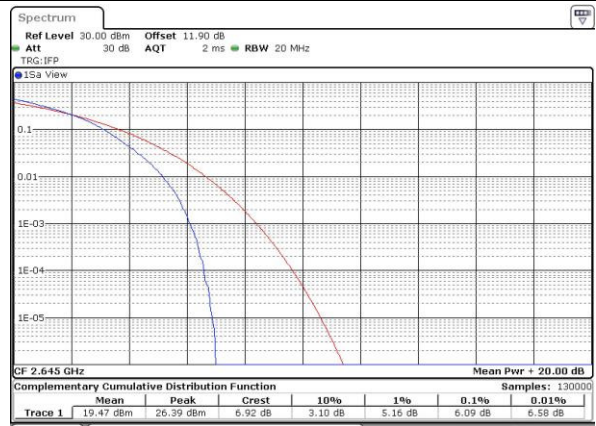
## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB



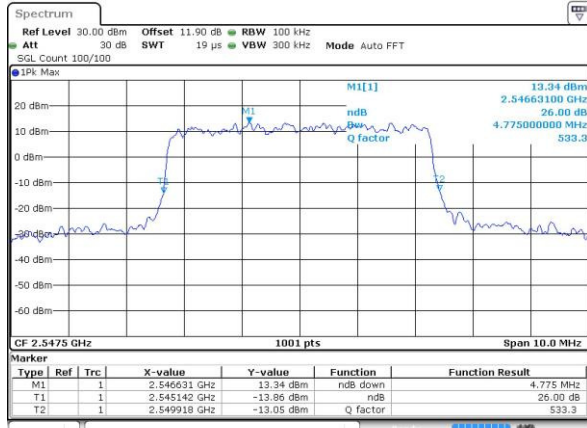
**26dB Bandwidth**

| 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  | -                          | -     | -    | -     | 4.775 | 4.865 | 9.61  | 9.59  | 14.356 | 14.176 | 20.14 | 20.14 |
| Middle CH  | -                          | -     | -    | -     | 4.865 | 4.855 | 9.71  | 9.65  | 14.176 | 14.356 | 20.14 | 20.14 |
| Highest CH | -                          | -     | -    | -     | 4.785 | 4.755 | 9.75  | 9.63  | 14.176 | 14.356 | 20.14 | 20.1  |



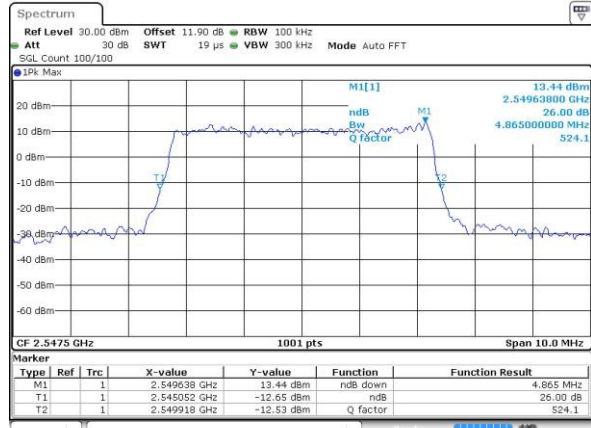
## LTE Band 41

## Lowest Channel / 5MHz / QPSK



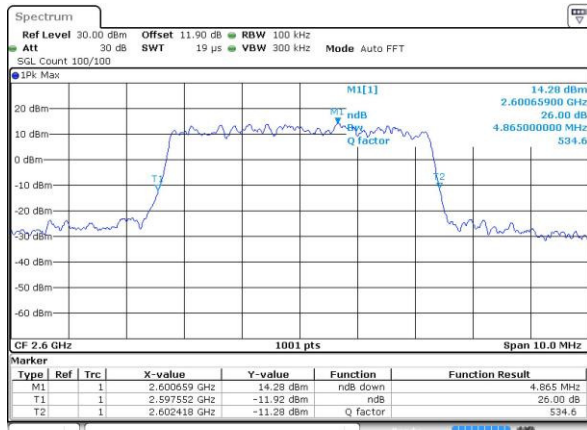
Date: 1 MAR 2017 19:34:52

## Lowest Channel / 5MHz / 16QAM



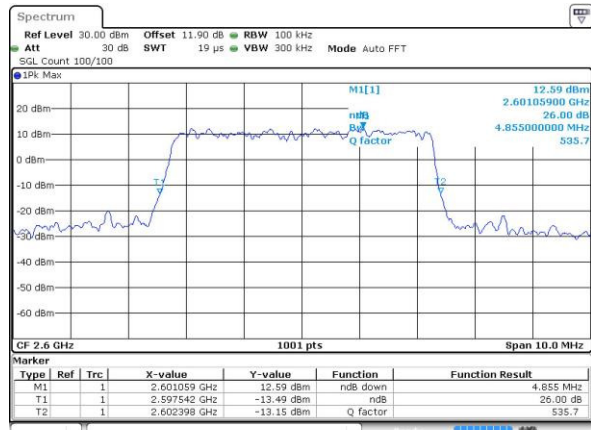
Date: 1 MAR 2017 19:35:02

## Middle Channel / 5MHz / QPSK



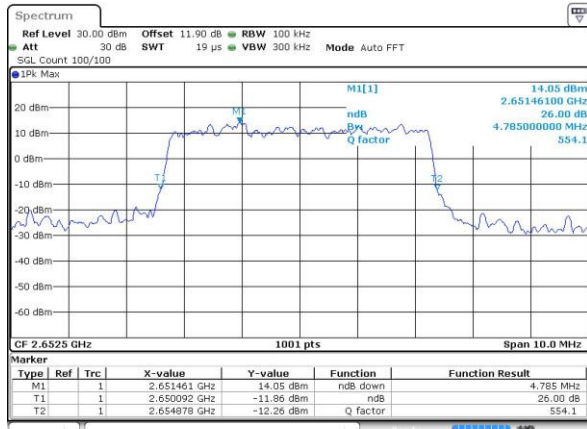
Date: 1 MAR 2017 19:35:33

## Middle Channel / 5MHz / 16QAM



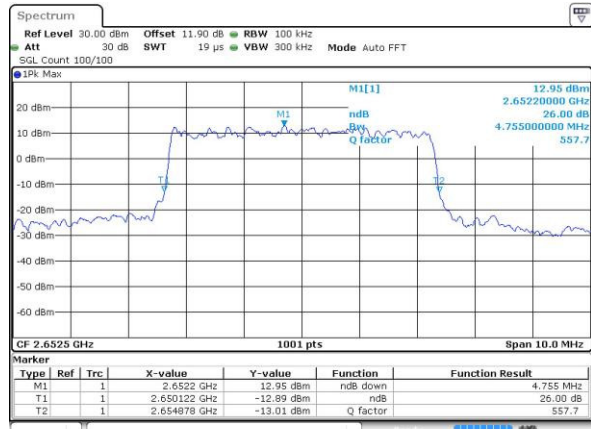
Date: 1 MAR 2017 19:35:44

## Highest Channel / 5MHz / QPSK



Date: 1 MAR 2017 19:36:15

## Highest Channel / 5MHz / 16QAM

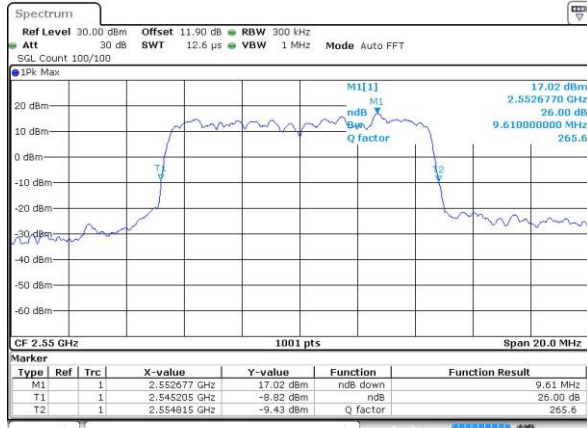


Date: 1 MAR 2017 19:36:25

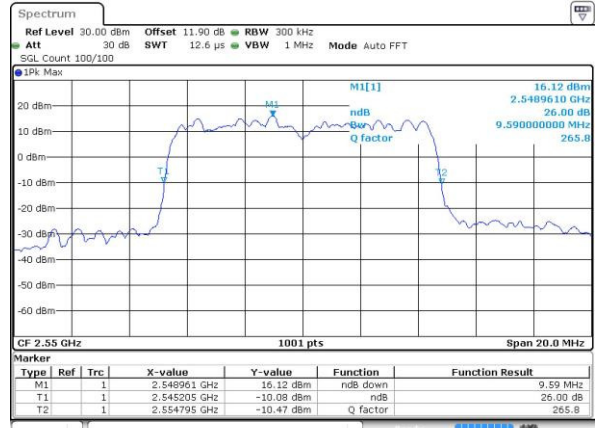


## LTE Band 41

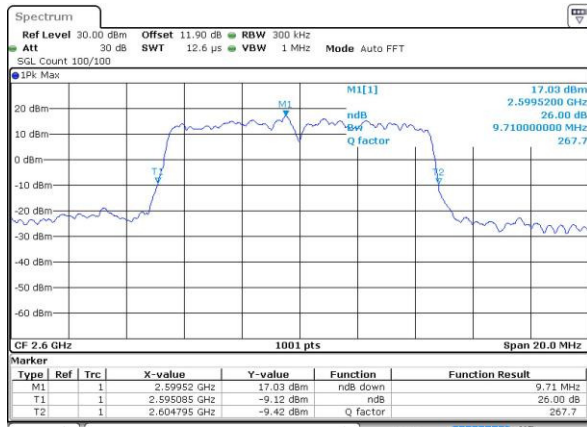
## Lowest Channel / 10MHz / QPSK



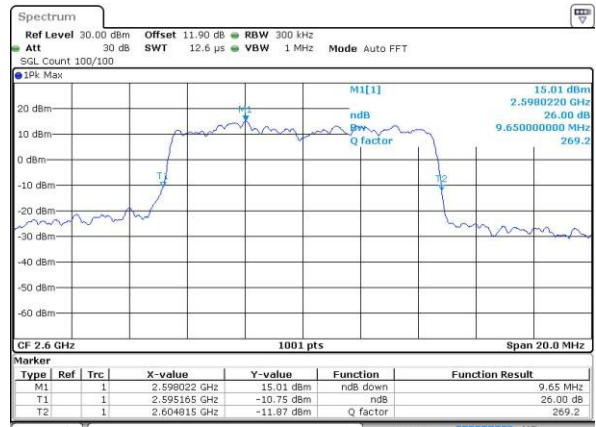
## Lowest Channel / 10MHz / 16QAM



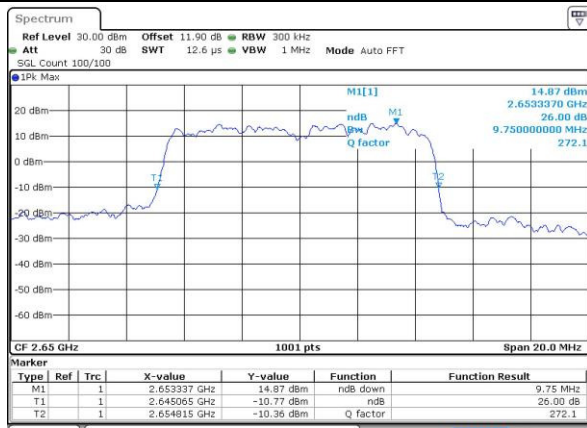
## Middle Channel / 10MHz / QPSK



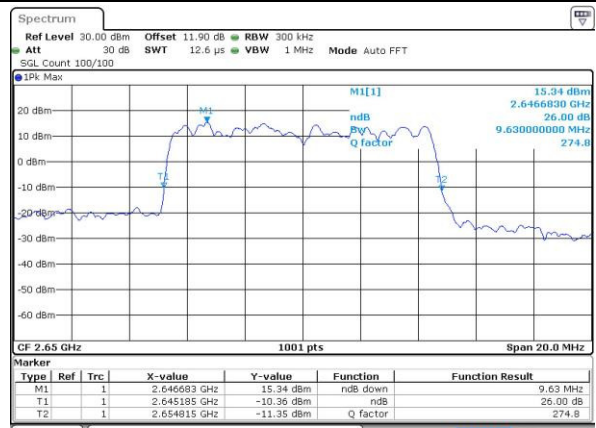
## Middle Channel / 10MHz / 16QAM



## Highest Channel / 10MHz / QPSK



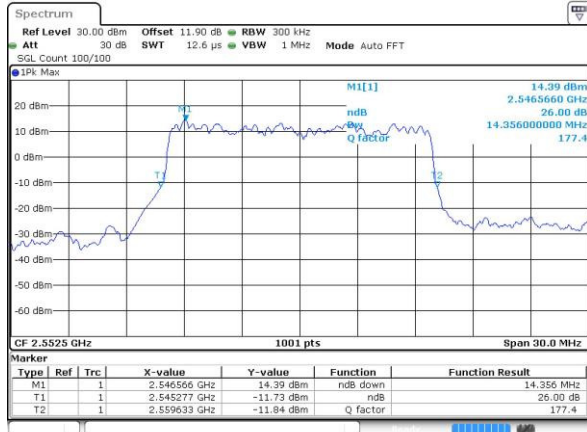
## Highest Channel / 10MHz / 16QAM



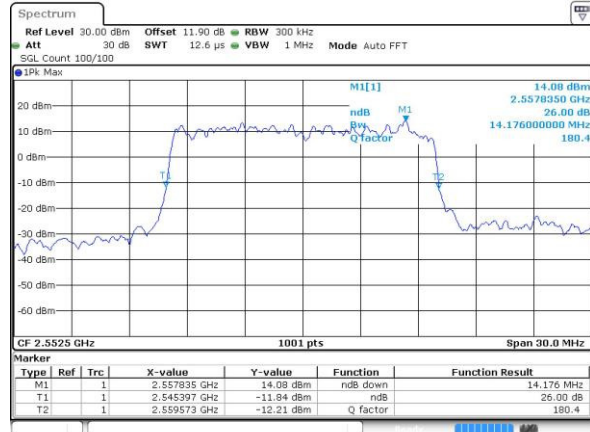


## LTE Band 41

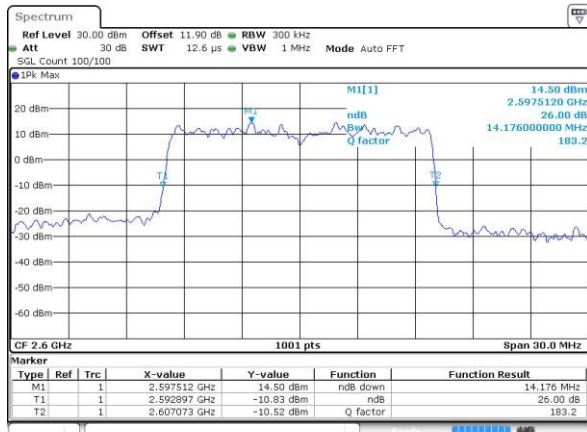
## Lowest Channel / 15MHz / QPSK



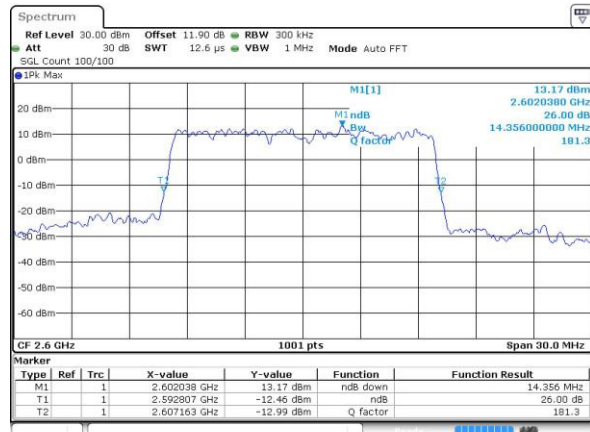
## Lowest Channel / 15MHz / 16QAM



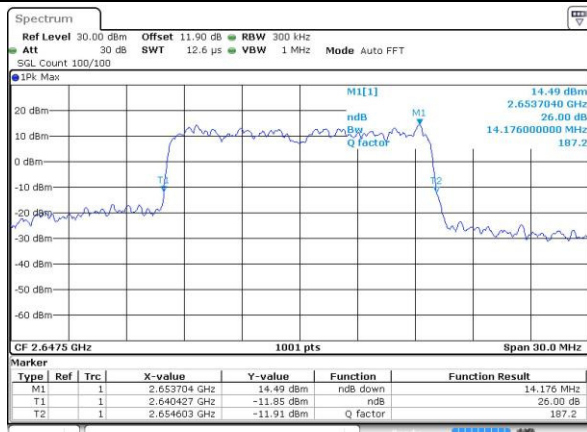
## Middle Channel / 15MHz / QPSK



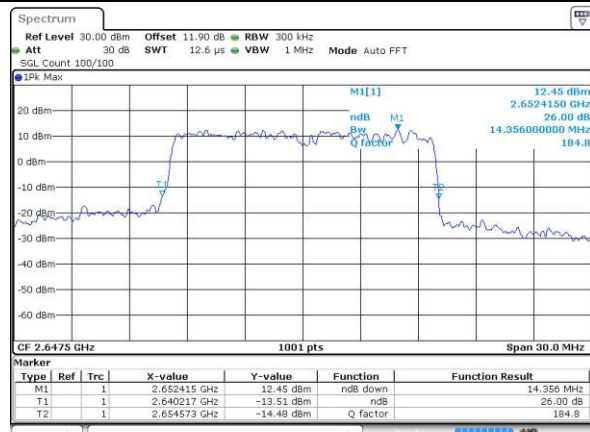
## Middle Channel / 15MHz / 16QAM



## Highest Channel / 15MHz / QPSK



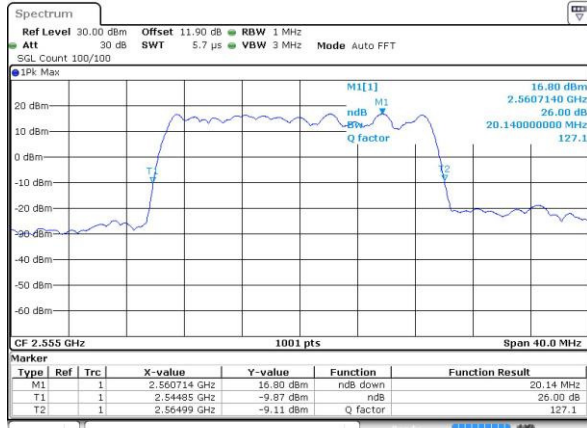
## Highest Channel / 15MHz / 16QAM



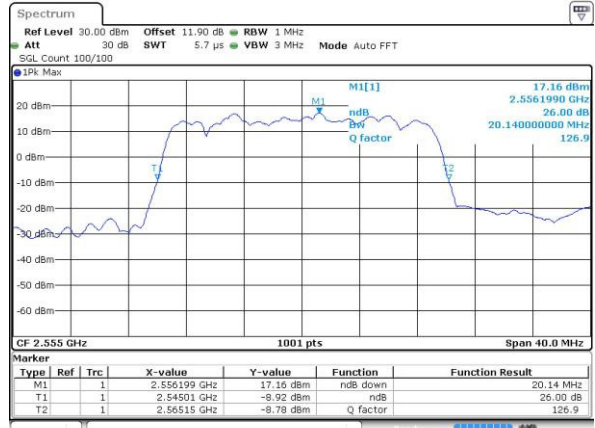


## LTE Band 41

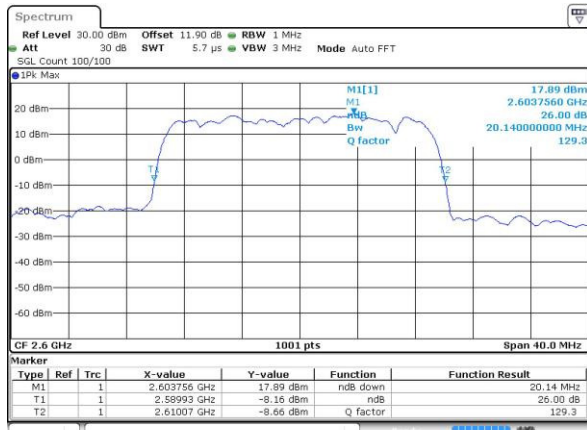
## Lowest Channel / 20MHz / QPSK



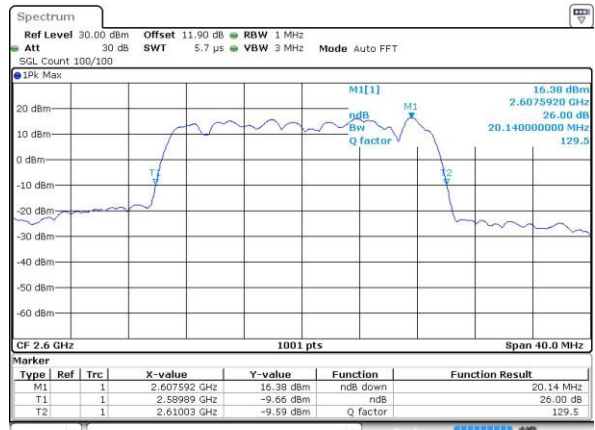
## Lowest Channel / 20MHz / 16QAM



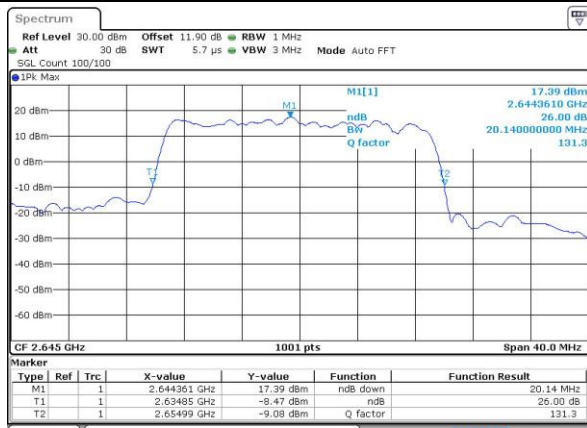
## Middle Channel / 20MHz / QPSK



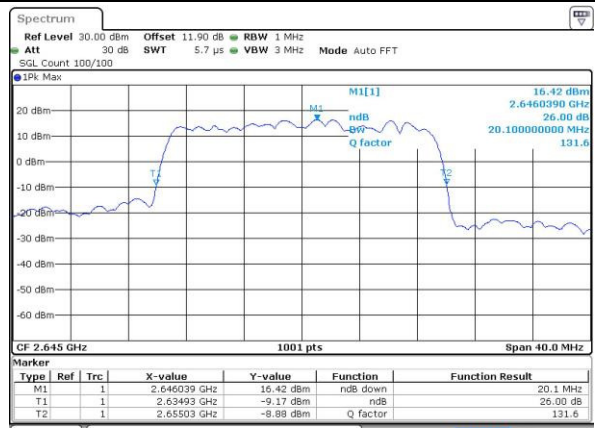
## Middle Channel / 20MHz / 16QAM



## Highest Channel / 20MHz / QPSK



## Highest Channel / 20MHz / 16QAM



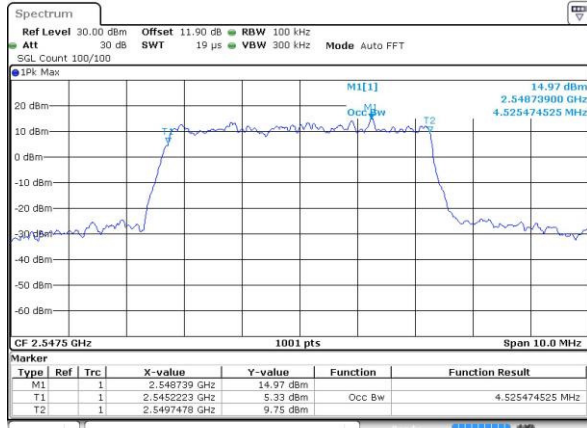
**Occupied Bandwidth**

| 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  | -                         | -     | -    | -     | 4.53 | 4.49  | 9.09  | 9.03  | 13.46 | 13.43 | 18.26 | 18.38 |
| Middle CH  | -                         | -     | -    | -     | 4.52 | 4.5   | 9.03  | 9.05  | 13.49 | 13.46 | 18.42 | 18.46 |
| Highest CH | -                         | -     | -    | -     | 4.49 | 4.52  | 9.05  | 9.05  | 13.46 | 13.52 | 18.18 | 18.38 |



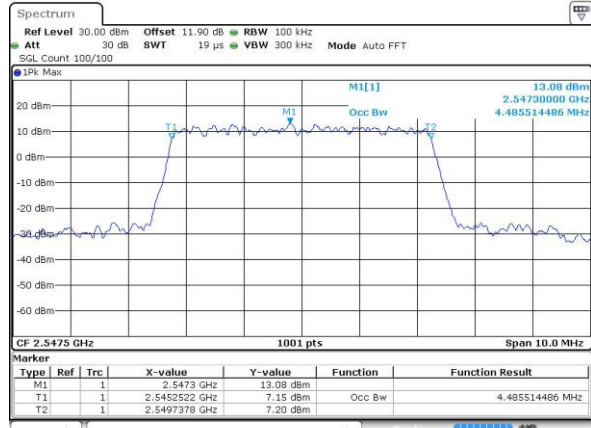
## LTE Band 41

## Lowest Channel / 5MHz / QPSK



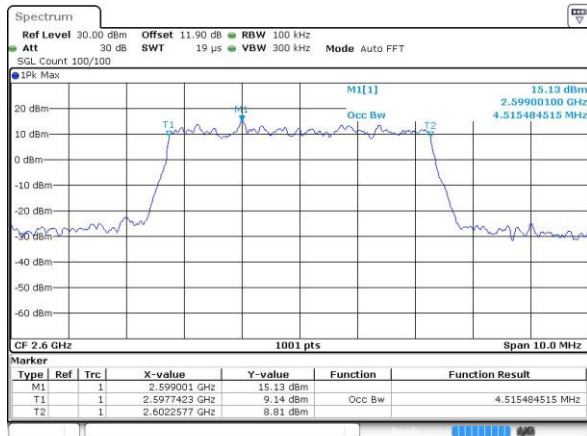
Date: 1 MAR 2017 19:34:31

## Lowest Channel / 5MHz / 16QAM



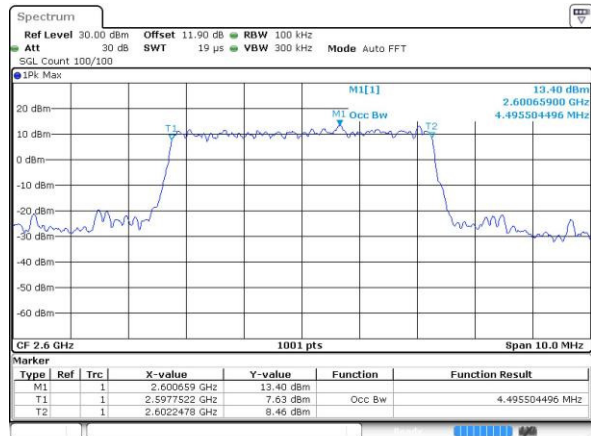
Date: 1 MAR 2017 19:34:42

## Middle Channel / 5MHz / QPSK



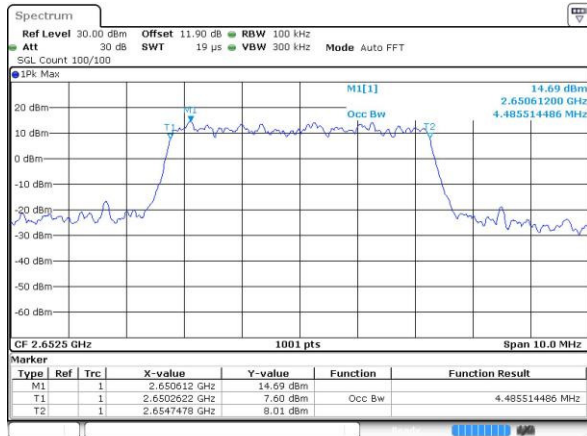
Date: 1 MAR 2017 19:35:13

## Middle Channel / 5MHz / 16QAM



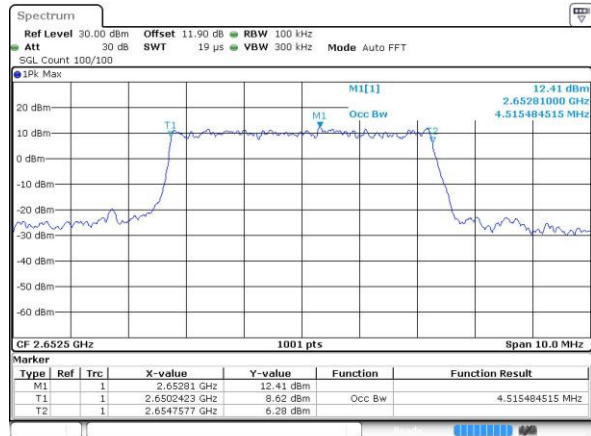
Date: 1 MAR 2017 19:35:23

## Highest Channel / 5MHz / QPSK



Date: 1 MAR 2017 19:35:54

## Highest Channel / 5MHz / 16QAM

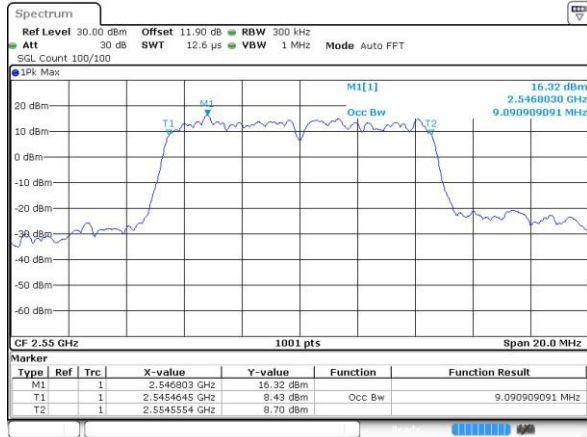


Date: 1 MAR 2017 19:36:05



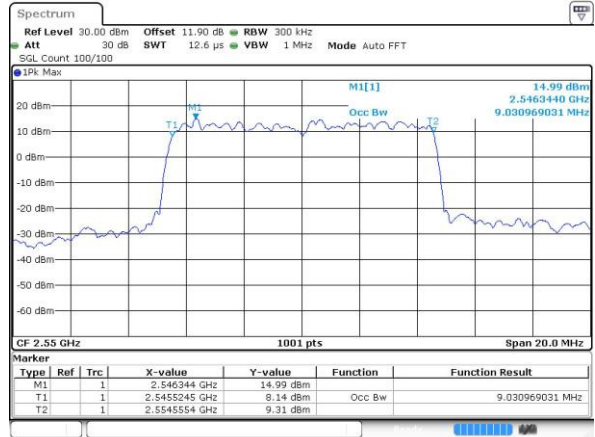
## LTE Band 41

## Lowest Channel / 10MHz / QPSK



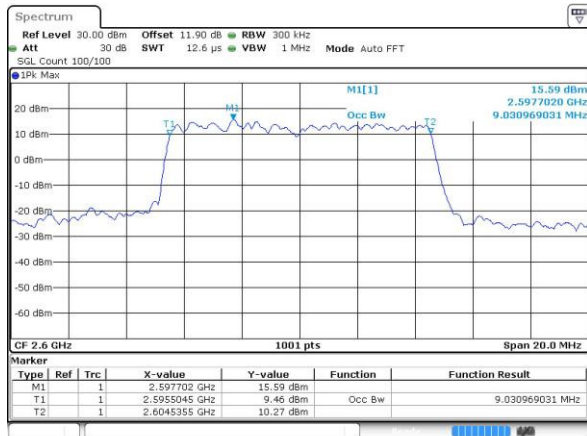
Date: 1 MAR 2017 19:36:36

## Lowest Channel / 10MHz / 16QAM



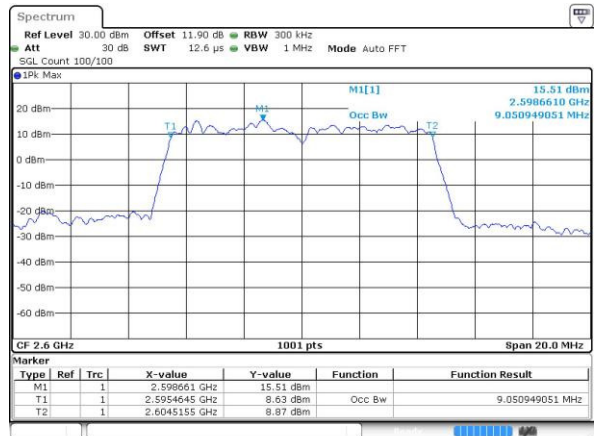
Date: 1 MAR 2017 19:36:46

## Middle Channel / 10MHz / QPSK



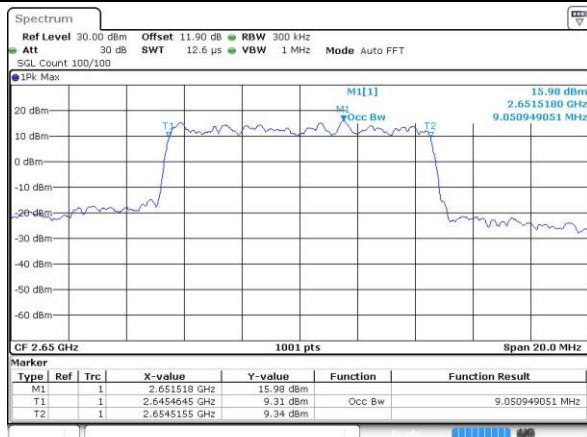
Date: 1 MAR 2017 19:37:17

## Middle Channel / 10MHz / 16QAM



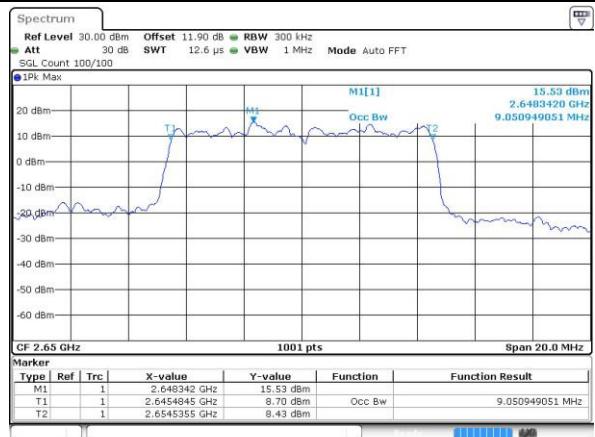
Date: 1 MAR 2017 19:37:26

## Highest Channel / 10MHz / QPSK



Date: 1 MAR 2017 19:37:59

## Highest Channel / 10MHz / 16QAM

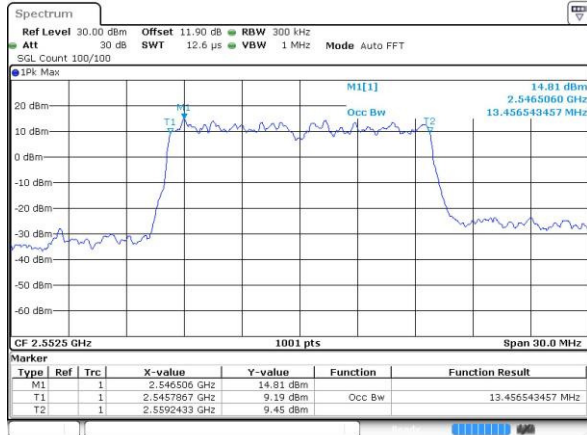


Date: 1 MAR 2017 19:38:09

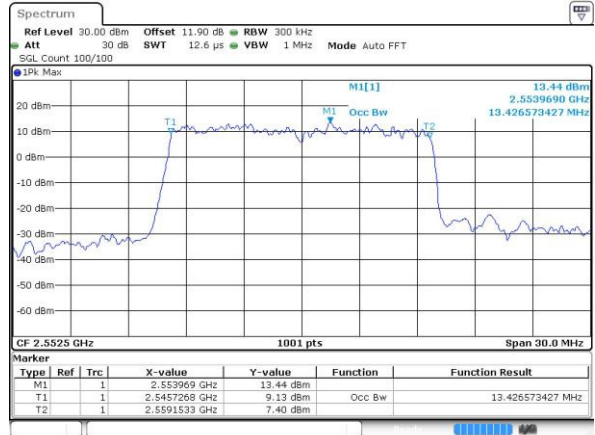


## LTE Band 41

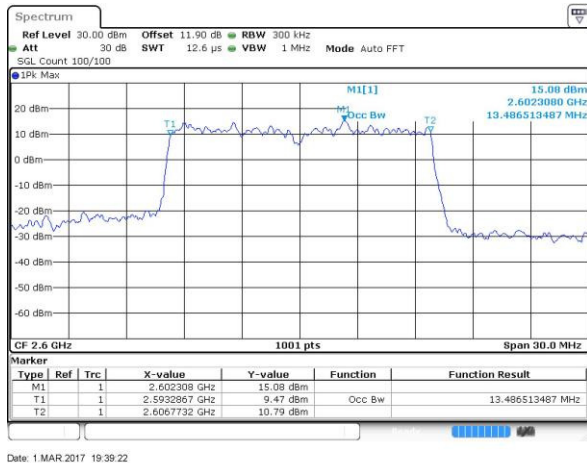
## Lowest Channel / 15MHz / QPSK



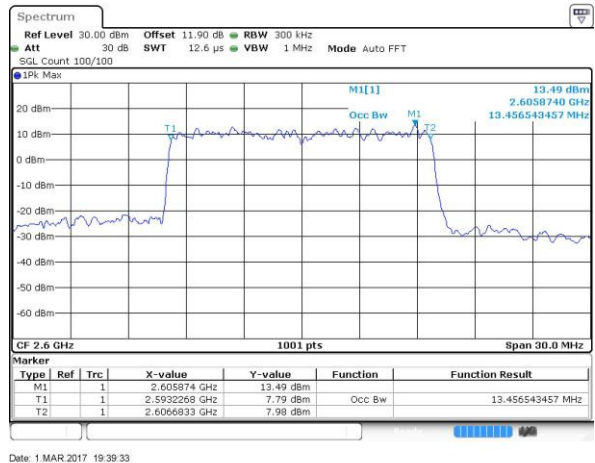
## Lowest Channel / 15MHz / 16QAM



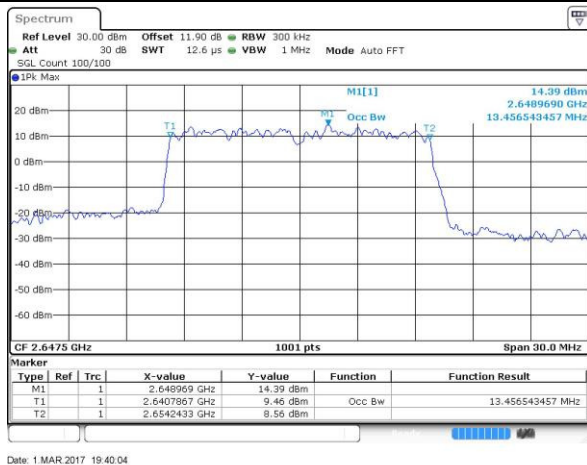
## Middle Channel / 15MHz / QPSK



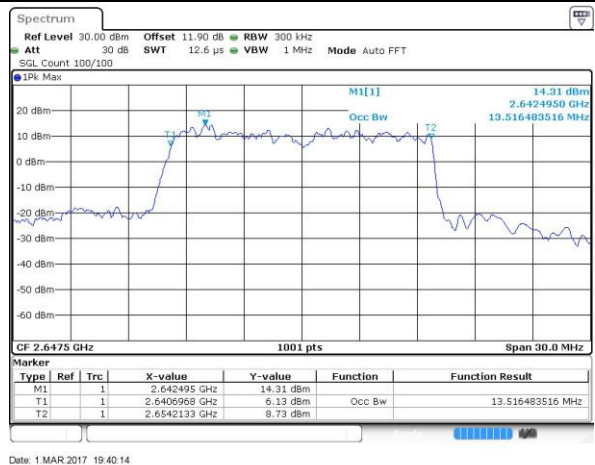
## Middle Channel / 15MHz / 16QAM



## Highest Channel / 15MHz / QPSK



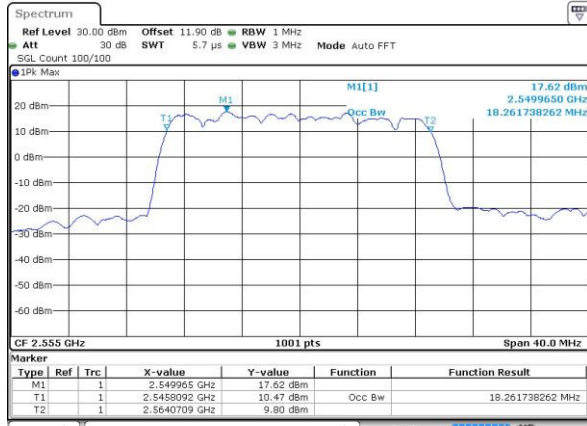
## Highest Channel / 15MHz / 16QAM





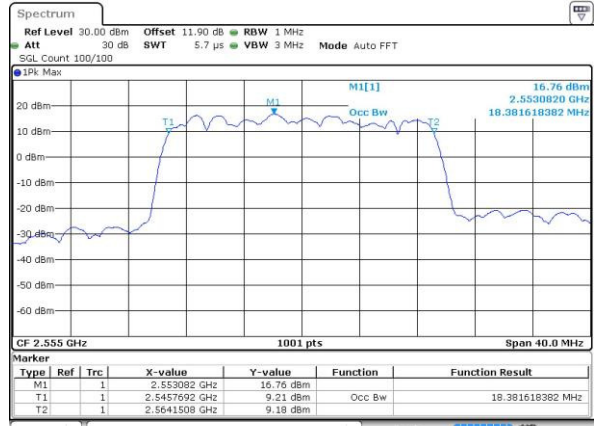
## LTE Band 41

## Lowest Channel / 20MHz / QPSK



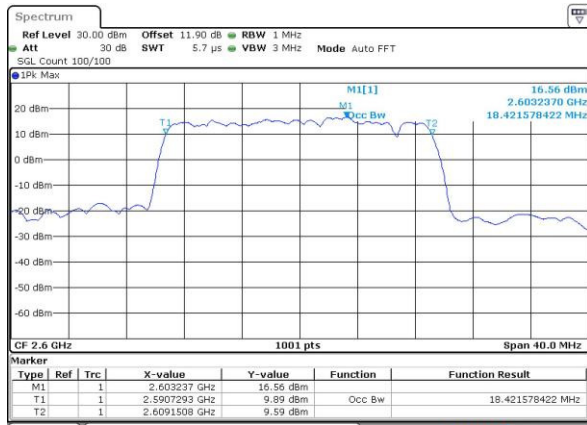
Date: 1 MAR 2017 19:40:45

## Lowest Channel / 20MHz / 16QAM



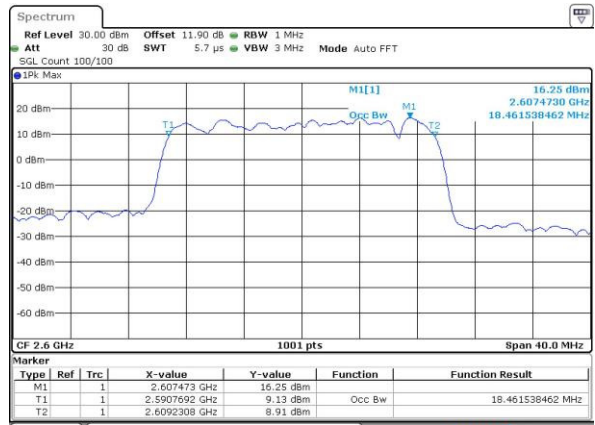
Date: 1 MAR 2017 19:40:56

## Middle Channel / 20MHz / QPSK



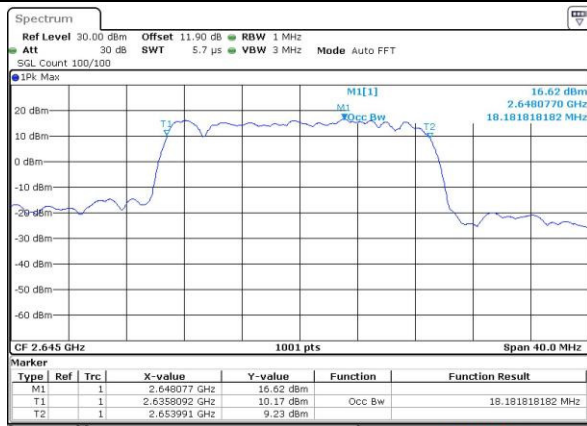
Date: 1 MAR 2017 19:41:27

## Middle Channel / 20MHz / 16QAM



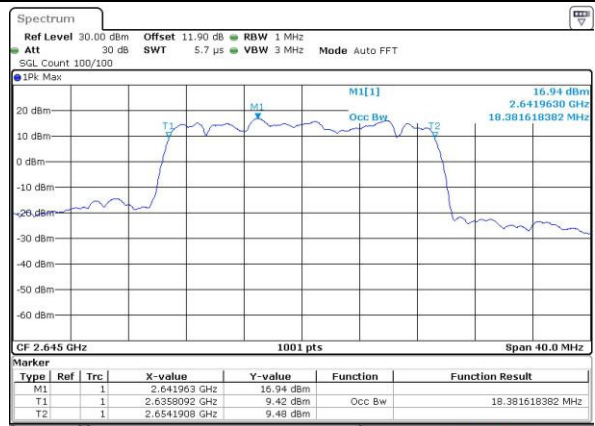
Date: 1 MAR 2017 19:41:37

## Highest Channel / 20MHz / QPSK



Date: 1 MAR 2017 19:42:08

## Highest Channel / 20MHz / 16QAM



Date: 1 MAR 2017 19:42:19

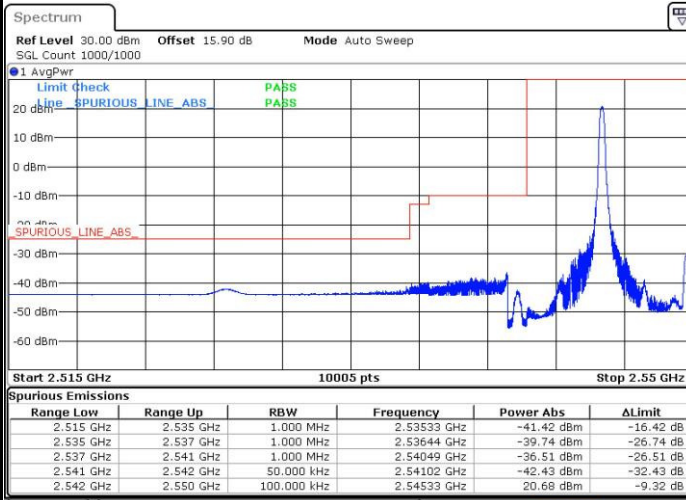


## **Conducted Band Edge**

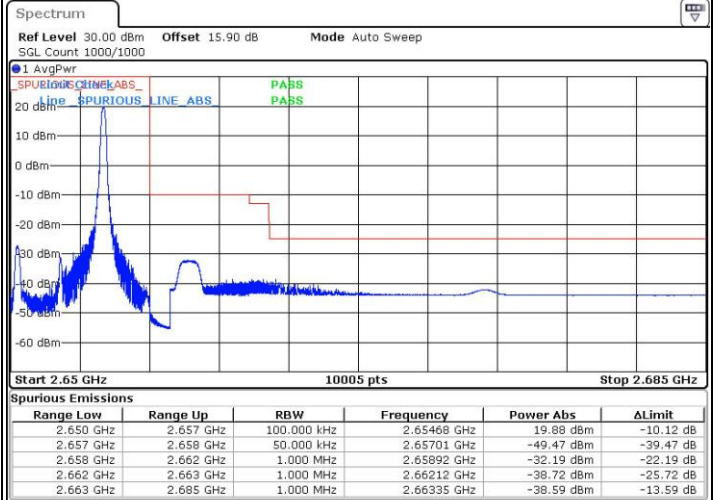


## LTE Band 41 / 5MHz / QPSK

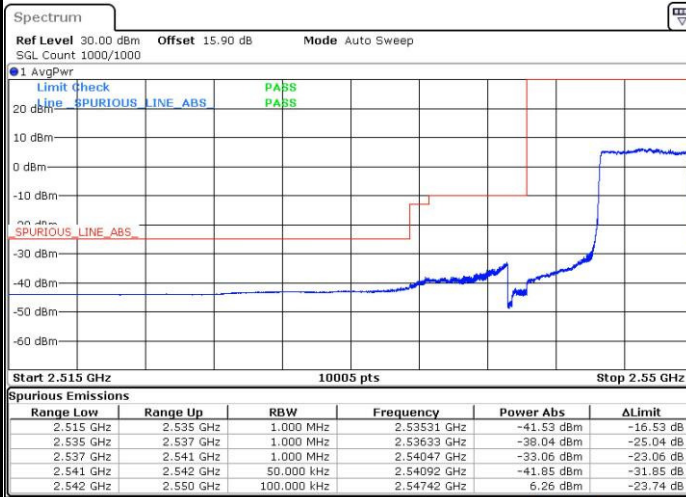
## Lowest Band Edge / 1 RB



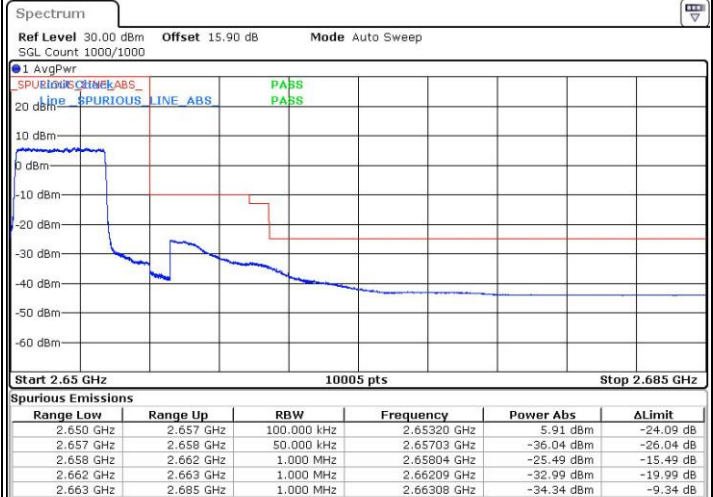
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



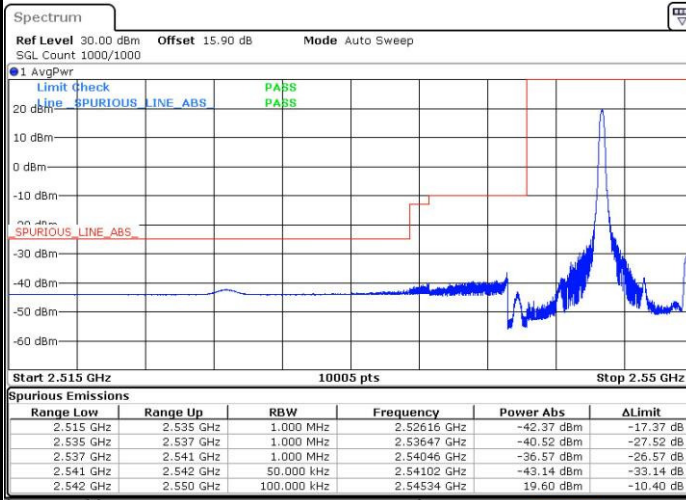
## Highest Band Edge / Full RB



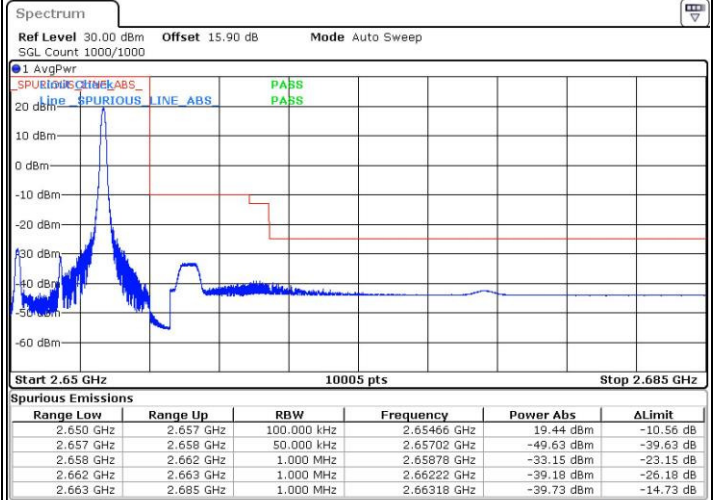


## LTE Band 41 / 5MHz / 16QAM

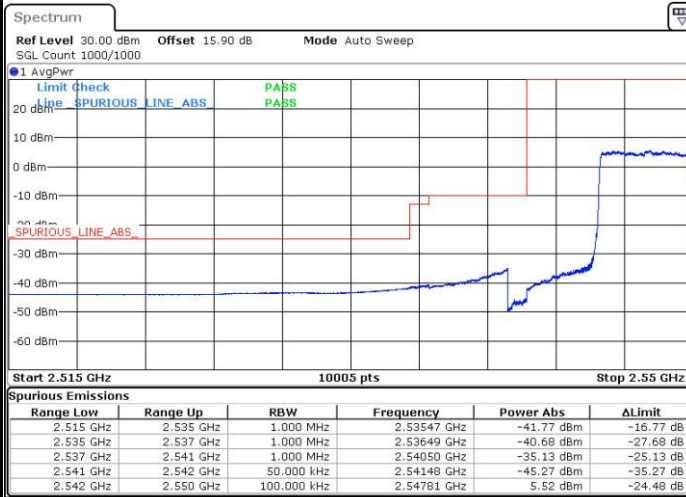
## Lowest Band Edge / 1RB



## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

