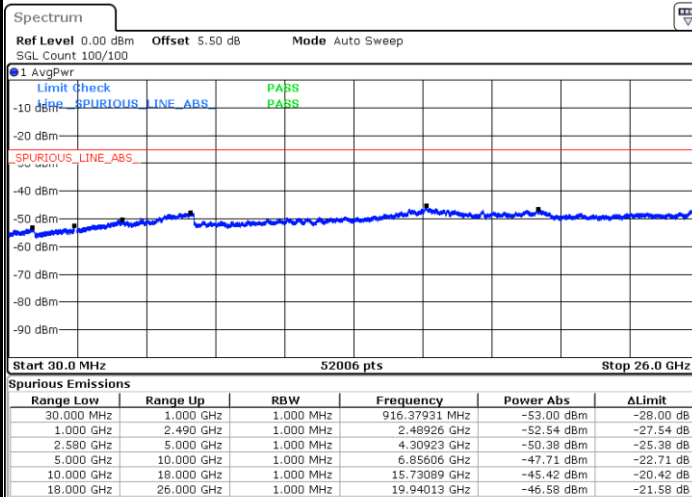




# Conducted Spurious Emission

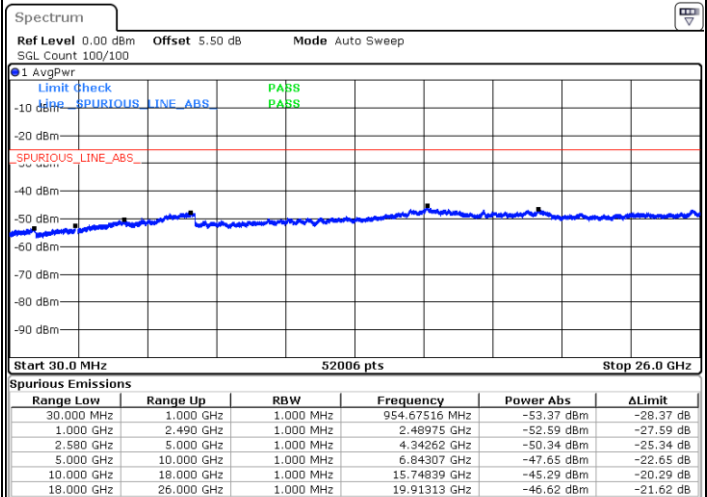
## LTE Band 7 / 5MHz

### Lowest Channel / QPSK



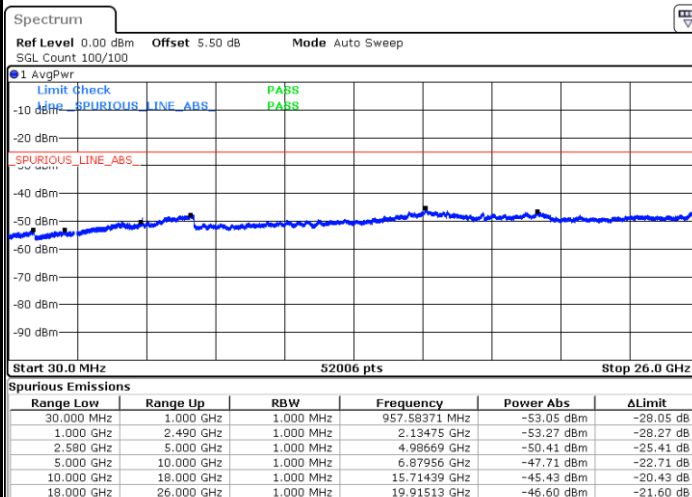
Date: 15.FEB.2020 07:19:46

### Lowest Channel / 16QAM



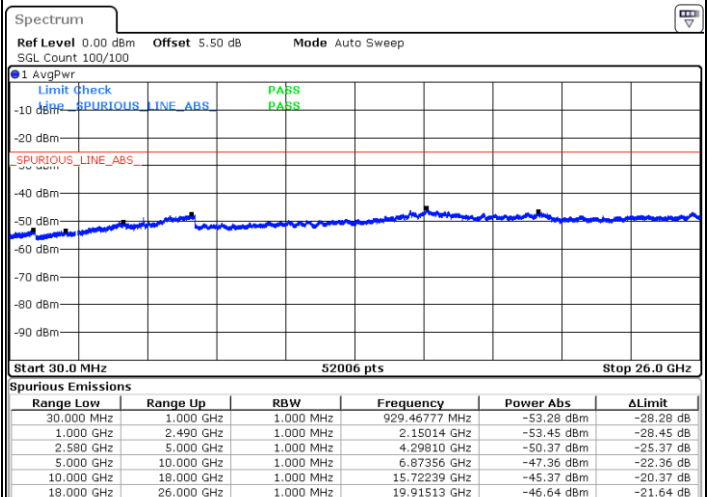
Date: 15.FEB.2020 07:20:40

### Middle Channel / QPSK



Date: 15.FEB.2020 07:22:27

### Middle Channel / 16QAM

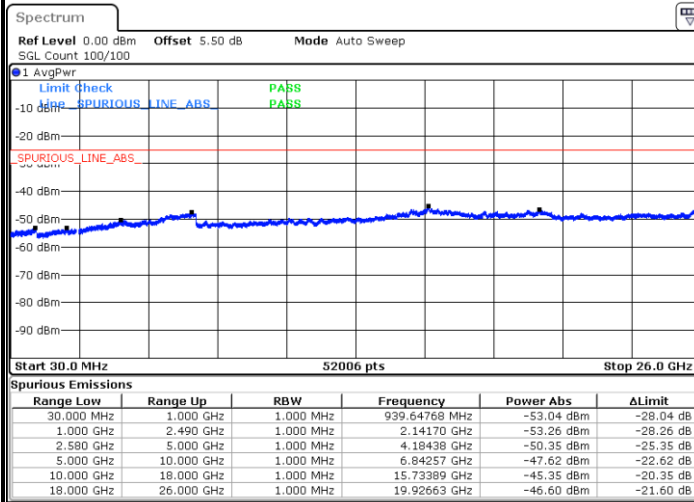


Date: 15.FEB.2020 07:21:34



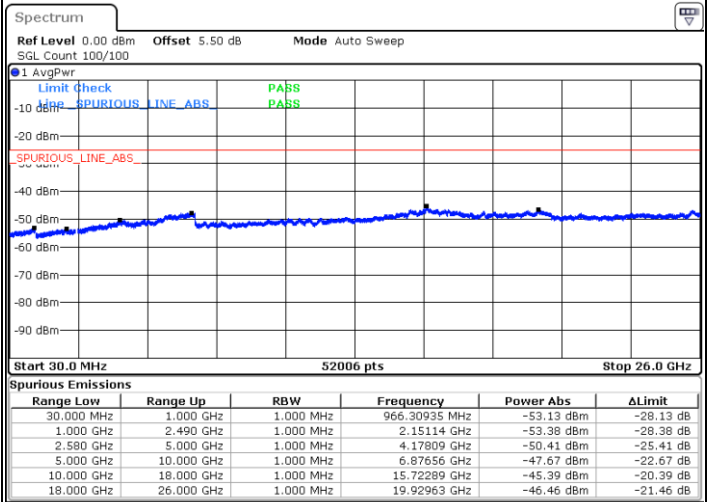
## LTE Band 7 / 5MHz

## Highest Channel / QPSK



Date: 15 FEB 2020 07:23:21

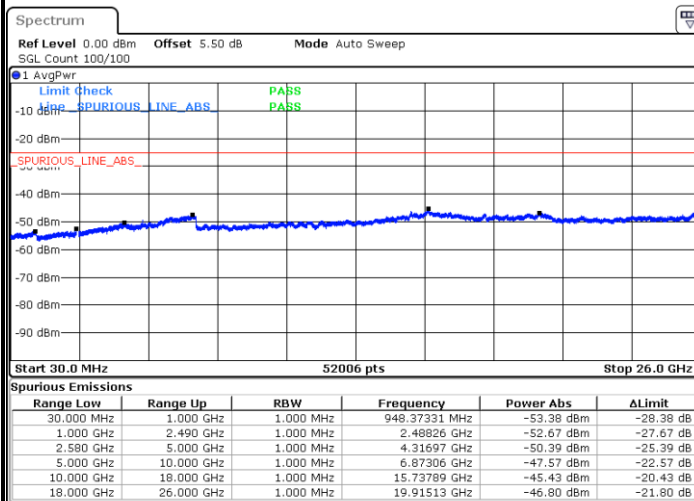
## Highest Channel / 16QAM



Date: 15 FEB 2020 07:24:15

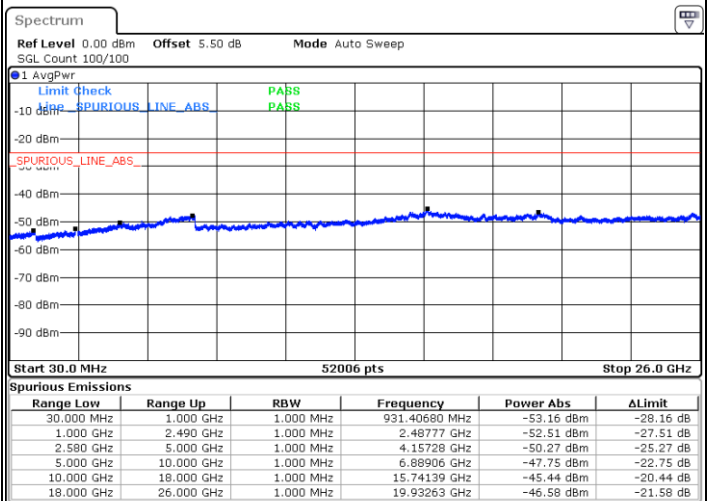
## LTE Band 7 / 10MHz

## Lowest Channel / QPSK



Date: 15 FEB 2020 07:36:12

## Lowest Channel / 16QAM

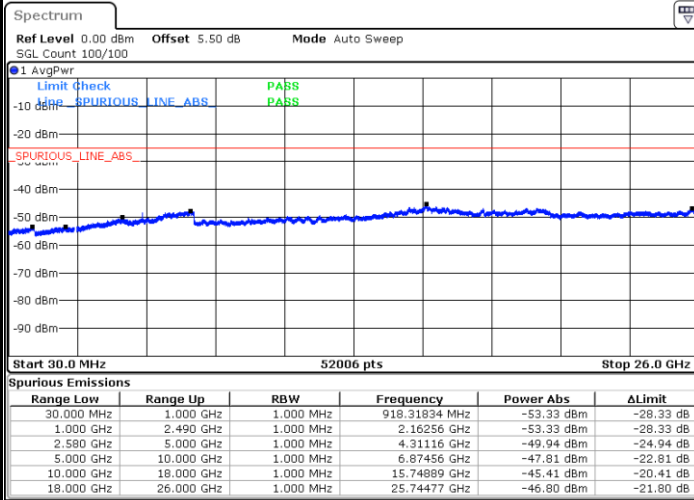


Date: 15 FEB 2020 07:37:06



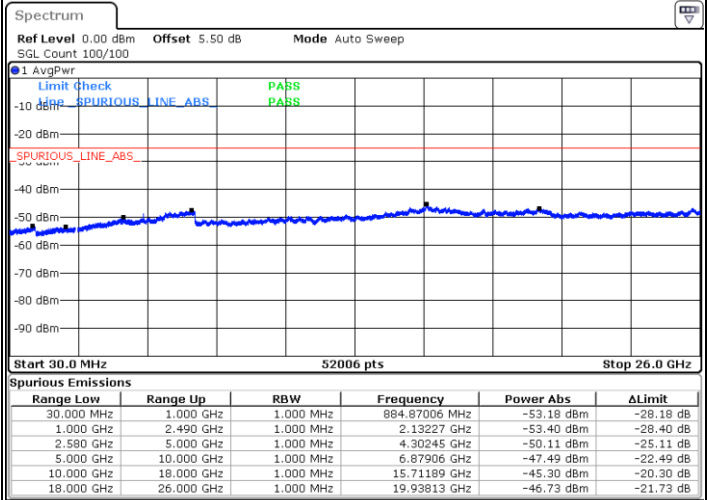
## LTE Band 7 / 10MHz

## Middle Channel / QPSK



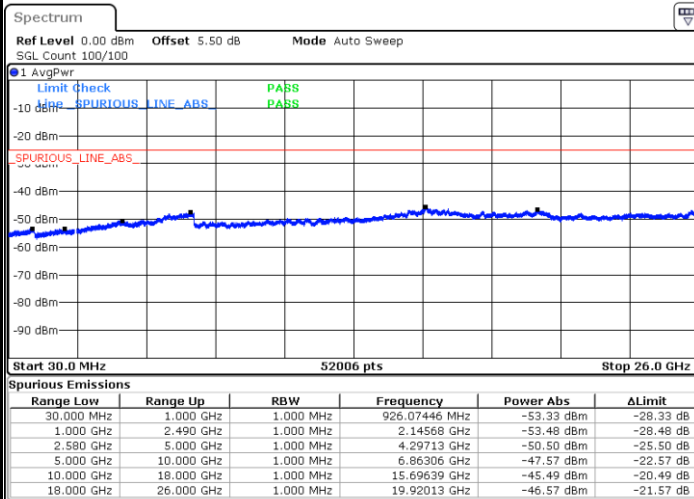
Date: 15 FEB 2020 07:38:53

## Middle Channel / 16QAM



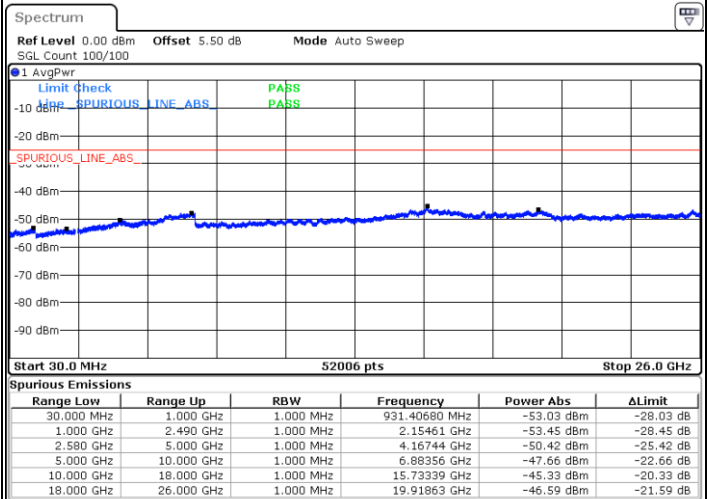
Date: 15 FEB 2020 07:38:00

## Highest Channel / QPSK



Date: 15 FEB 2020 07:39:47

## Highest Channel / 16QAM

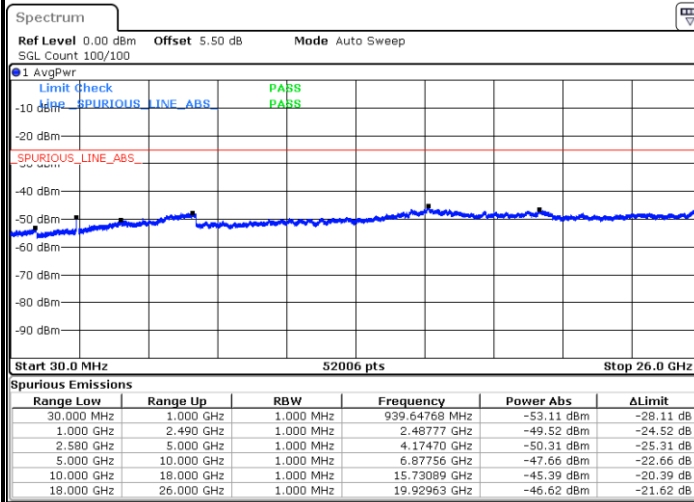


Date: 15 FEB 2020 07:40:41



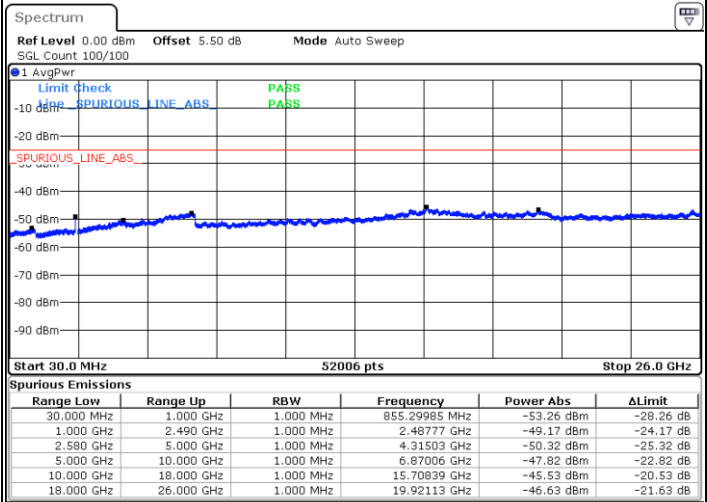
## LTE Band 7 / 15MHz

## Lowest Channel / QPSK



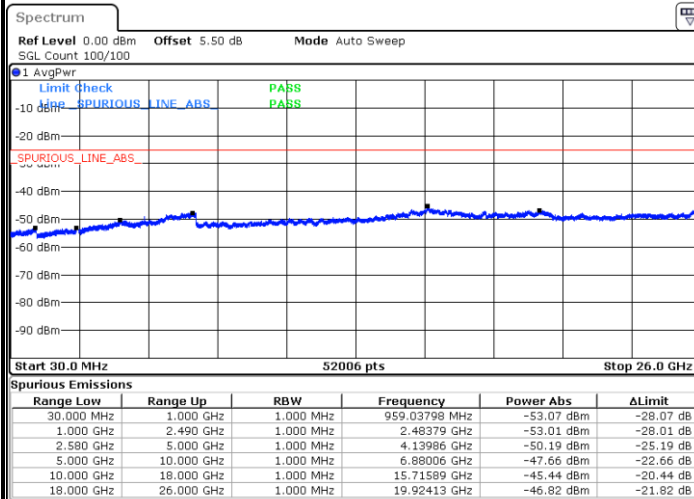
Date: 15 FEB 2020 07:52:39

## Lowest Channel / 16QAM



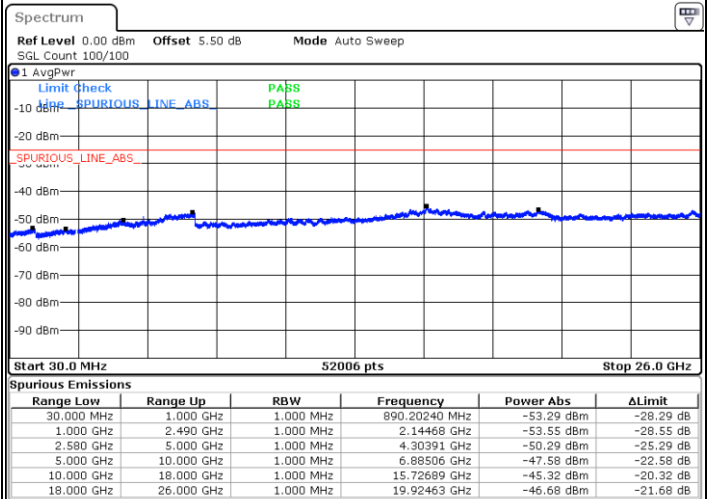
Date: 15 FEB 2020 07:53:33

## Middle Channel / QPSK



Date: 15 FEB 2020 07:55:21

## Middle Channel / 16QAM

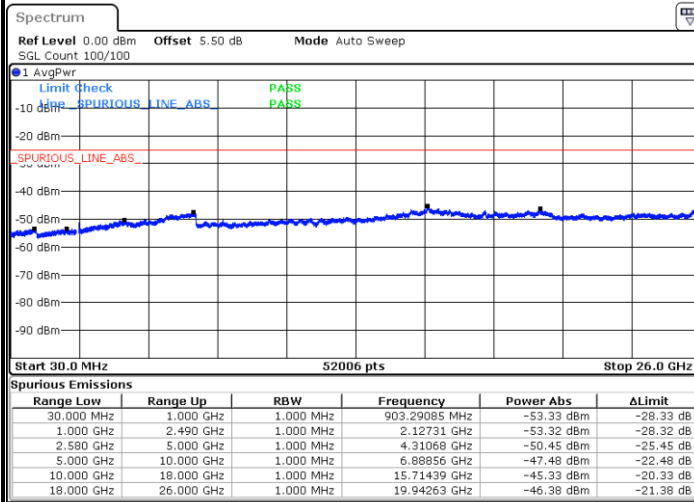


Date: 15 FEB 2020 07:54:27



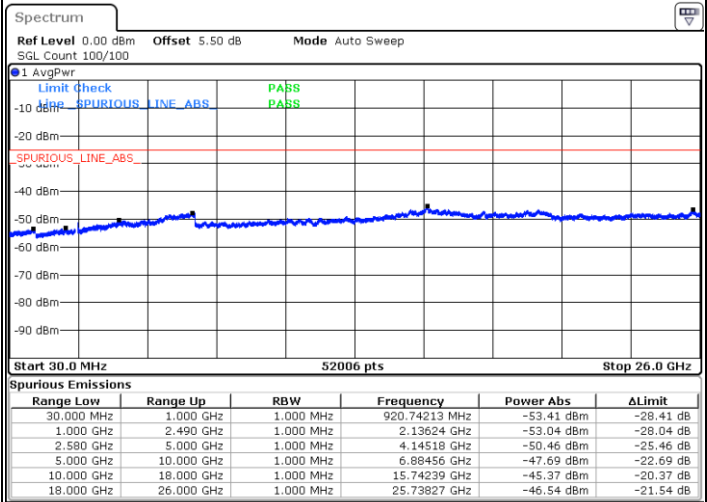
## LTE Band7 / 15MHz

## Highest Channel / QPSK



Date: 15 FEB 2020 07:56:15

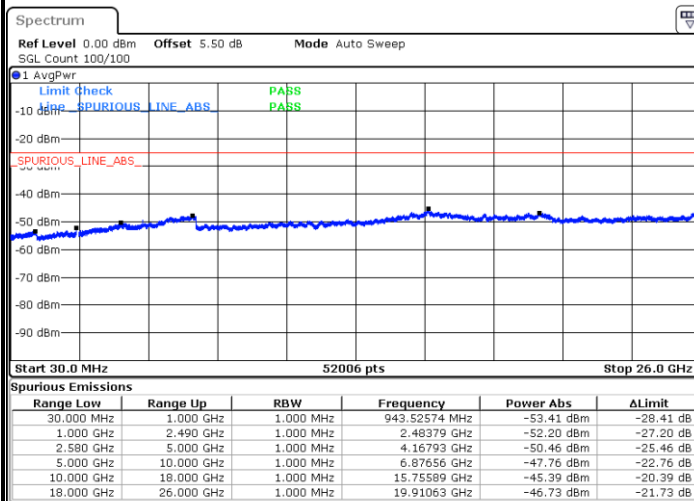
## Highest Channel / 16QAM



Date: 15 FEB 2020 07:57:09

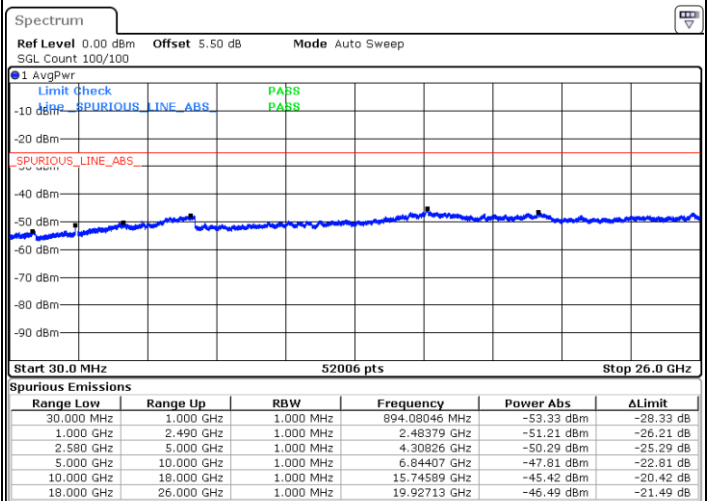
## LTE Band 7 / 20MHz

## Lowest Channel / QPSK



Date: 15 FEB 2020 08:09:06

## Lowest Channel / 16QAM

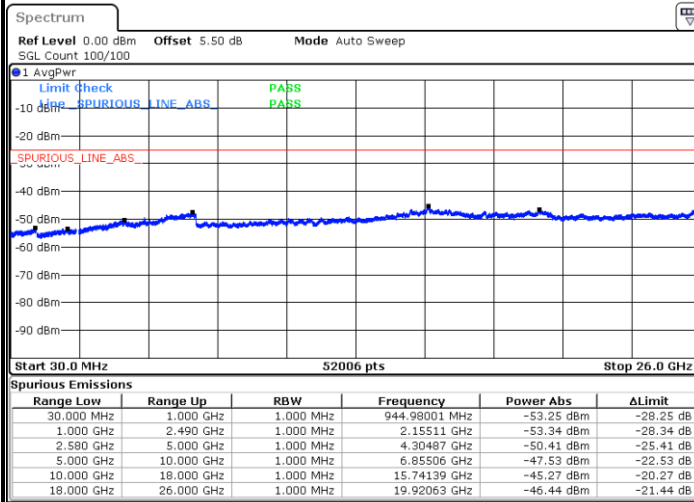


Date: 15 FEB 2020 08:10:00



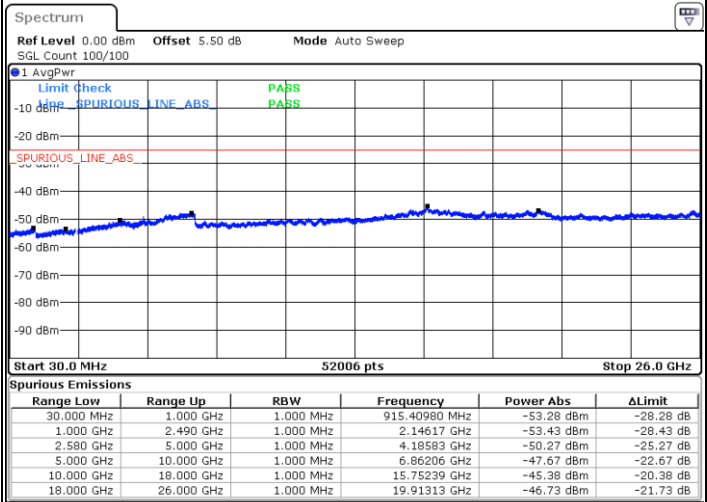
## LTE Band 7 / 20MHz

## Middle Channel / QPSK



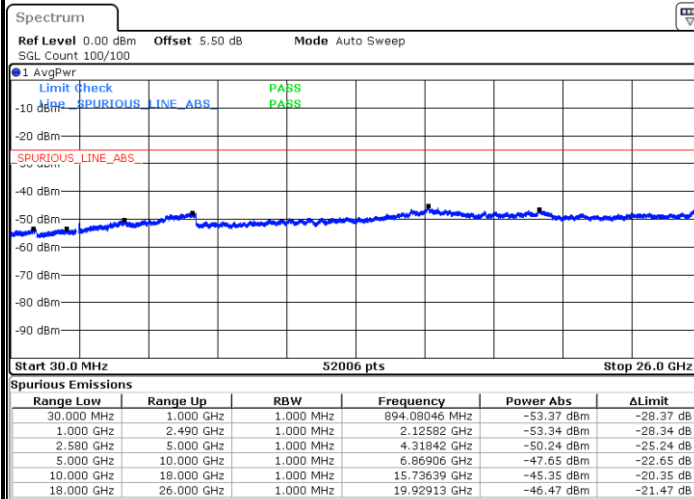
Date: 15.FEB.2020 08:11:48

## Middle Channel / 16QAM



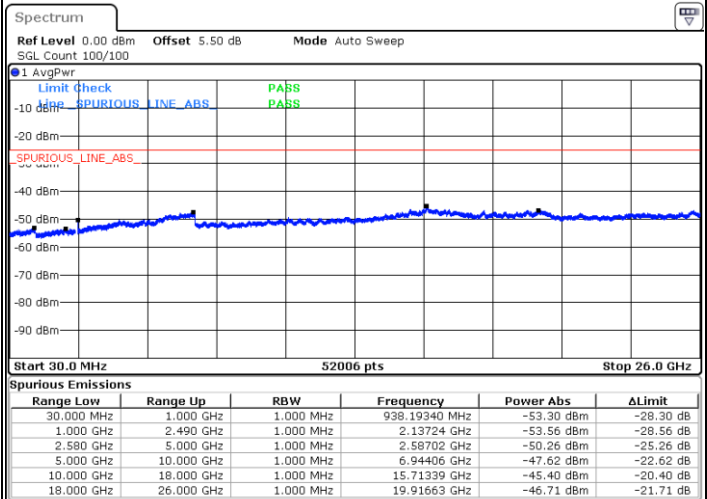
Date: 15.FEB.2020 08:10:54

## Highest Channel / QPSK



Date: 15.FEB.2020 08:12:42

## Highest Channel / 16QAM

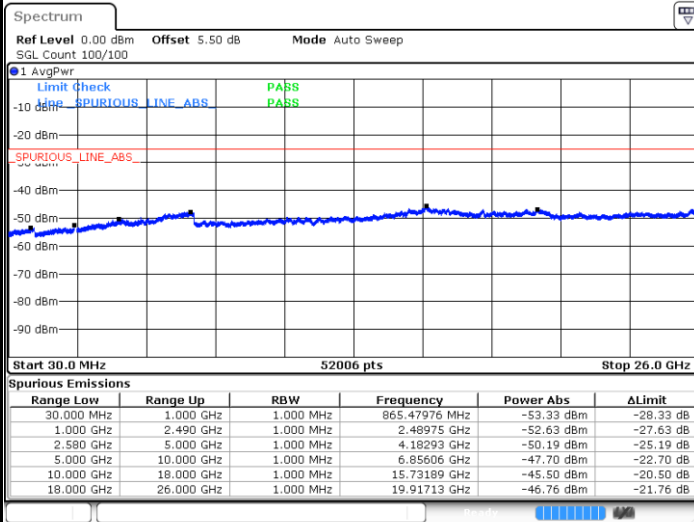


Date: 15.FEB.2020 08:13:36



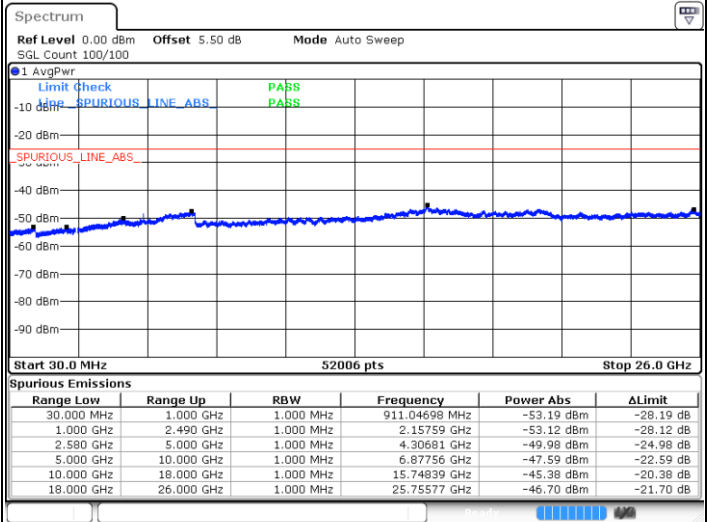
## LTE Band 7 / 5MHz

## Lowest Channel / 64QAM



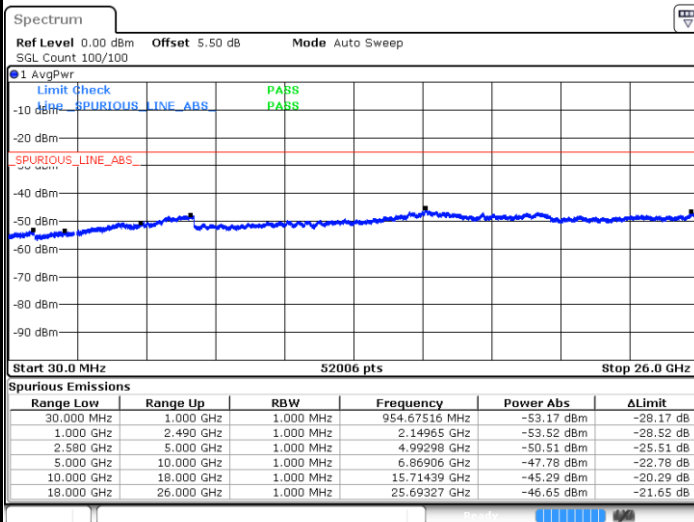
Date: 15 FEB 2020 08:19:41

## Middle Channel / 64QAM



Date: 15 FEB 2020 08:20:35

## Highest Channel / 64QAM

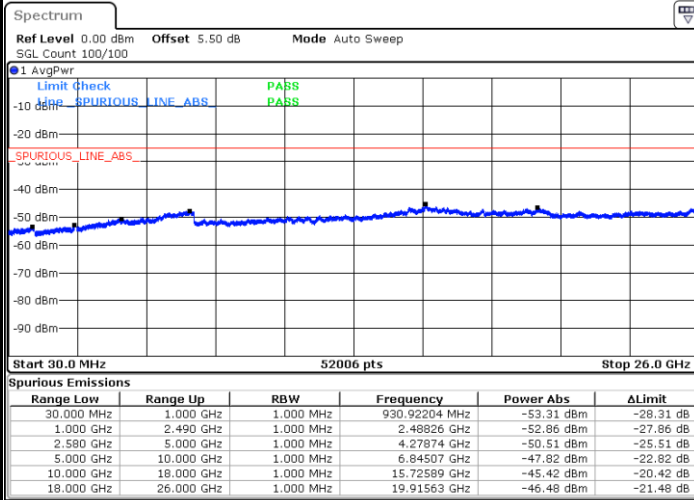


Date: 15 FEB 2020 08:21:28



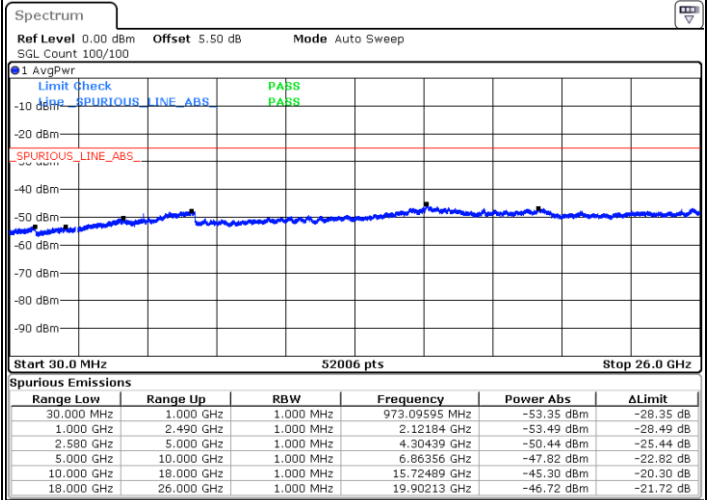
## LTE Band 7 / 10MHz

## Lowest Channel / 64QAM



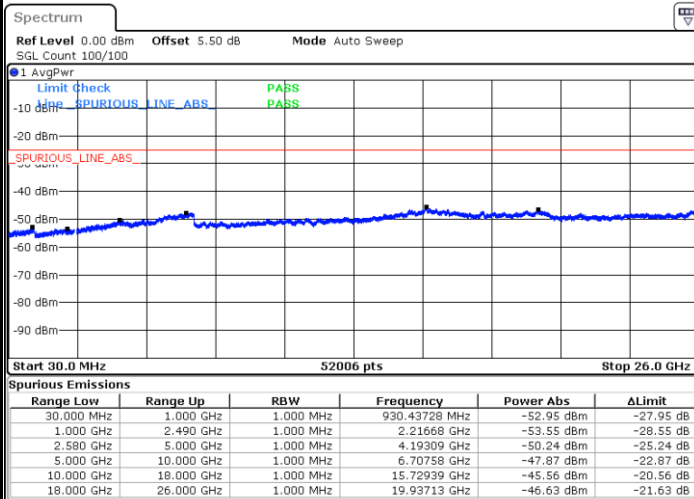
Date: 15 FEB 2020 08:25:38

## Middle Channel / 64QAM



Date: 15 FEB 2020 08:26:32

## Highest Channel / 64QAM

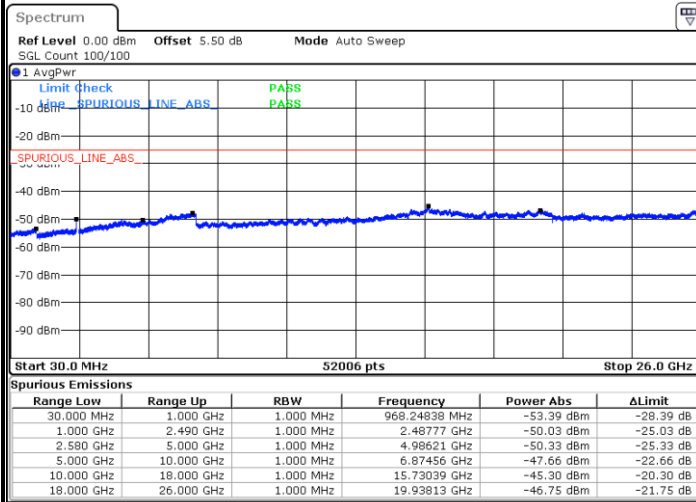


Date: 15 FEB 2020 08:27:25



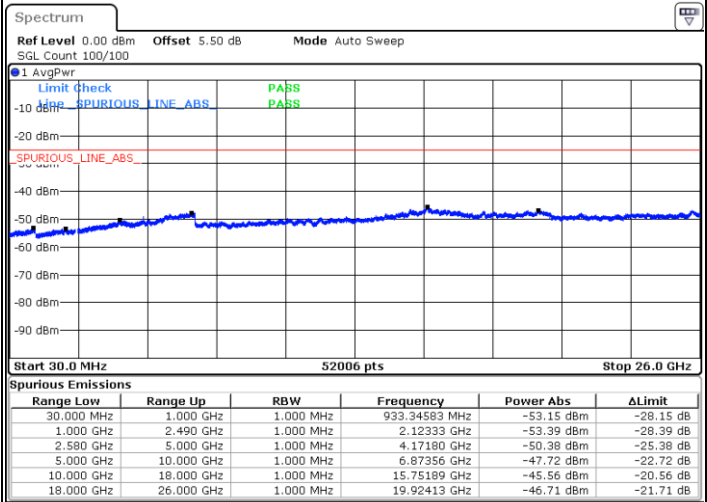
## LTE Band 7 / 15MHz

## Lowest Channel / 64QAM



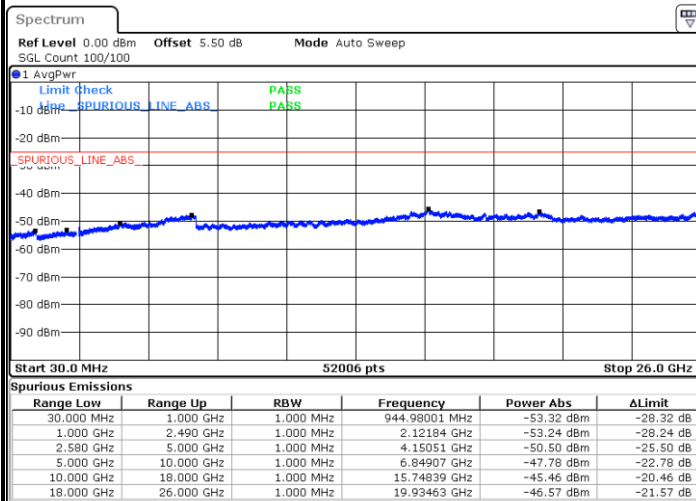
Date: 15 FEB 2020 08:33:51

## Middle Channel / 64QAM



Date: 15 FEB 2020 08:34:45

## Highest Channel / 64QAM

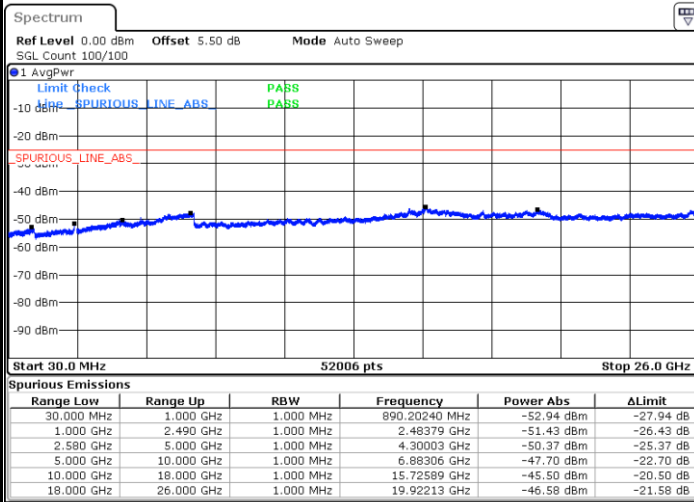


Date: 15 FEB 2020 08:35:39



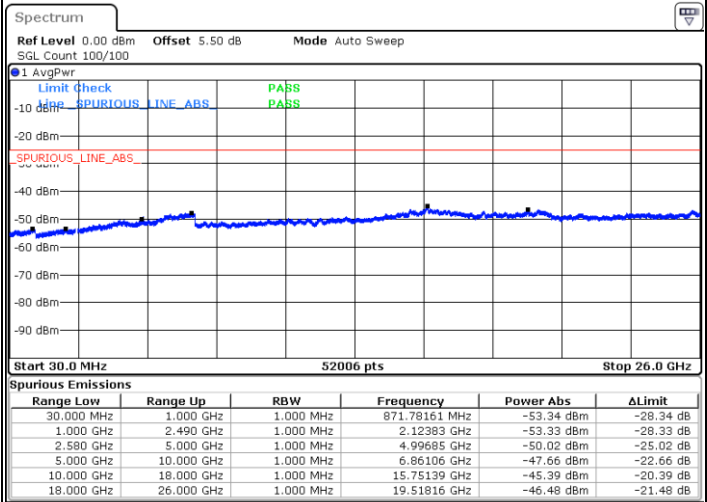
## LTE Band 7 / 20MHz

## Lowest Channel / 64QAM



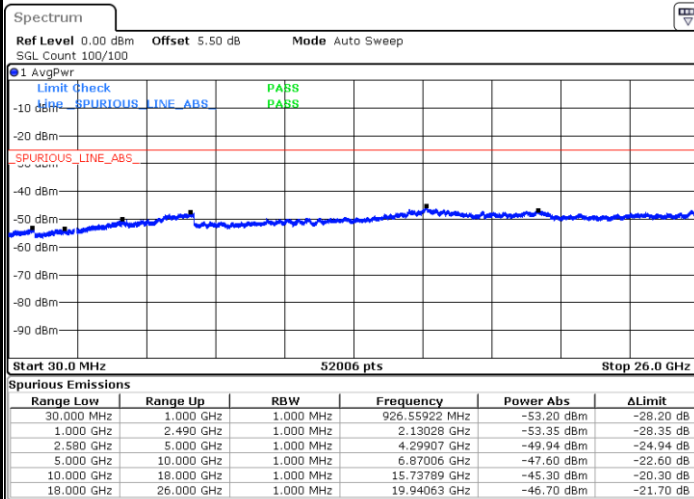
Date: 15 FEB 2020 08:39:49

## Middle Channel / 64QAM



Date: 15 FEB 2020 08:40:43

## Highest Channel / 64QAM



Date: 15 FEB 2020 08:41:36

**Frequency Stability**

| Test Conditions  |                   | LTE Band 7 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                           | Note 2. |
|                  |                   | Deviation (ppm)                    | Result  |
| 50               | Normal Voltage    | 0.0082                             | PASS    |
| 40               | Normal Voltage    | 0.0108                             |         |
| 30               | Normal Voltage    | 0.0121                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0015                             |         |
| 0                | Normal Voltage    | 0.0076                             |         |
| -10              | Normal Voltage    | 0.0087                             |         |
| -20              | Normal Voltage    | 0.0014                             |         |
| -30              | Normal Voltage    | 0.0017                             |         |
| 20               | Maximum Voltage   | 0.0031                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0018                             |         |

**Note:**

1. Normal Voltage =3.8 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 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  | 3.65                | 4.41    | 6.49  | 5.83    | PASS        |
| Middle CH  | 3.39                | 4.58    | 4.46  | 7.07    |             |
| Highest CH | 5.25                | 4.52    | 5.94  | 6.09    |             |
| Mod.       | 64QAM               |         |       |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB |       |         | Result      |
| Lowest CH  | 6.61                | 5.91    |       |         | PASS        |
| Middle CH  | 3.48                | 5.83    |       |         |             |
| Highest CH | 5.48                | 5.94    |       |         |             |



## LTE Band 41 / 20MHz / QPSK

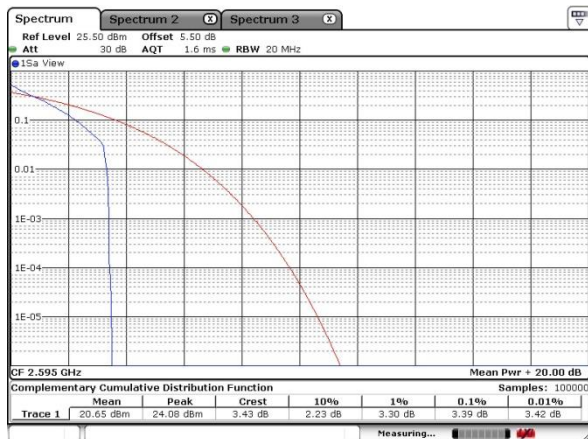
## Lowest Channel / 1RB



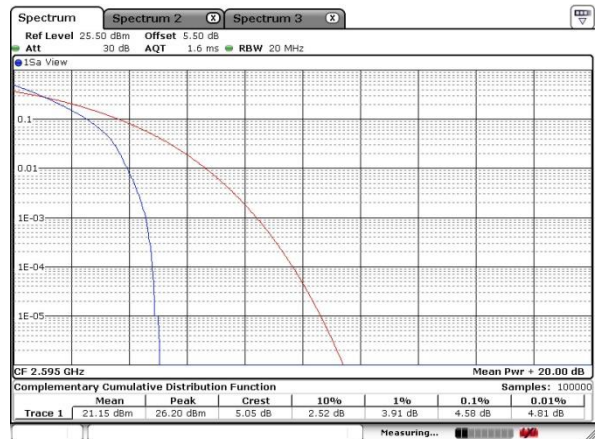
## Lowest Channel / Full RB



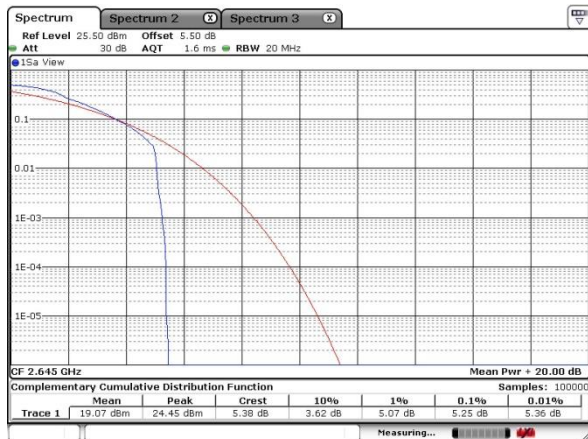
## Middle Channel / 1RB



## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB



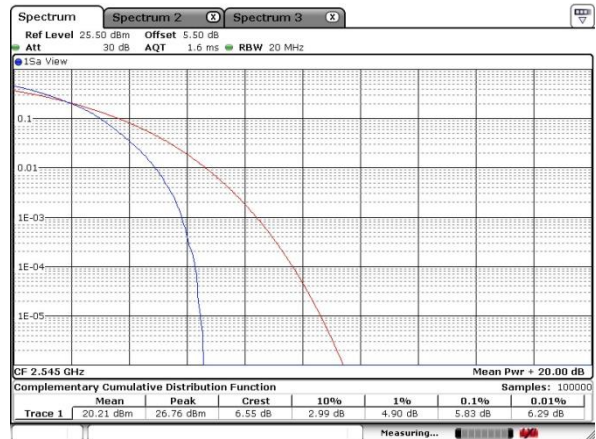


## LTE Band 41 / 20MHz / 16QAM

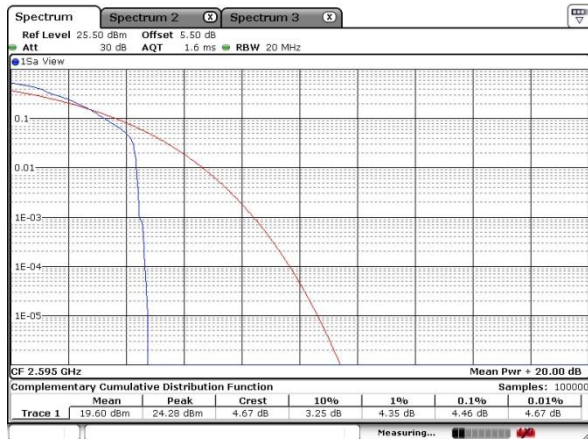
## Lowest Channel / 1RB



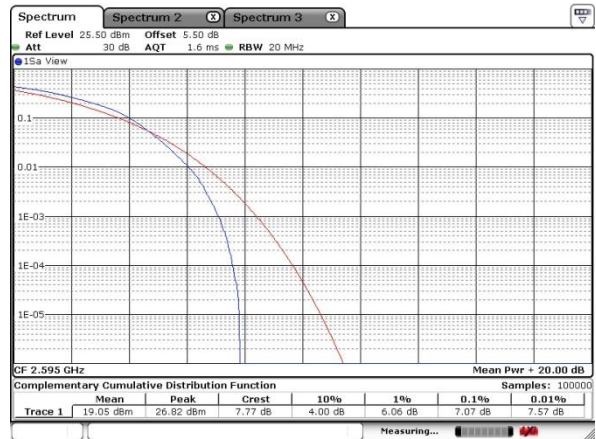
## Lowest Channel / Full RB



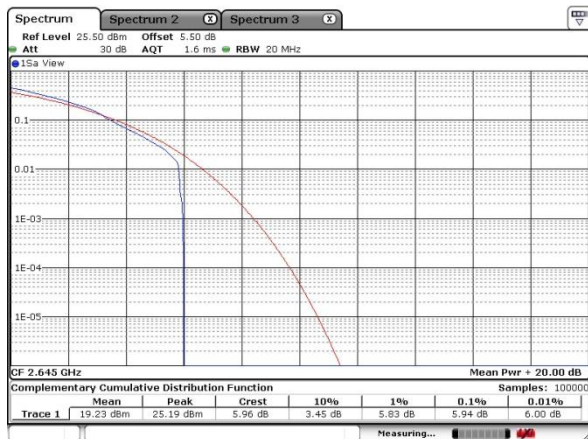
## Middle Channel / 1RB



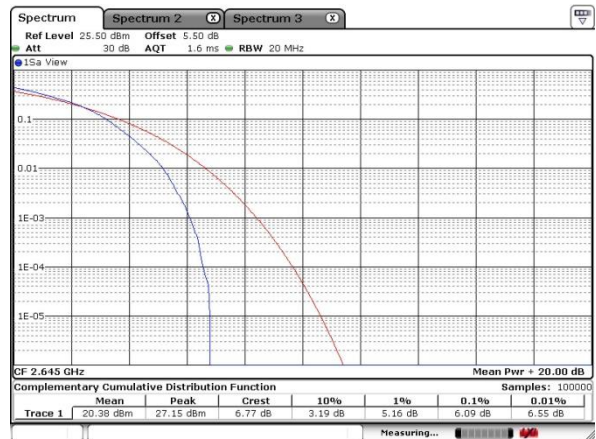
## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB





## LTE Band 41 / 20MHz / 64QAM

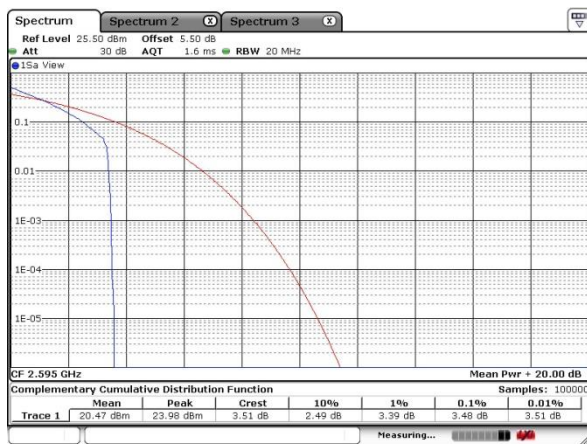
## Lowest Channel / 1RB



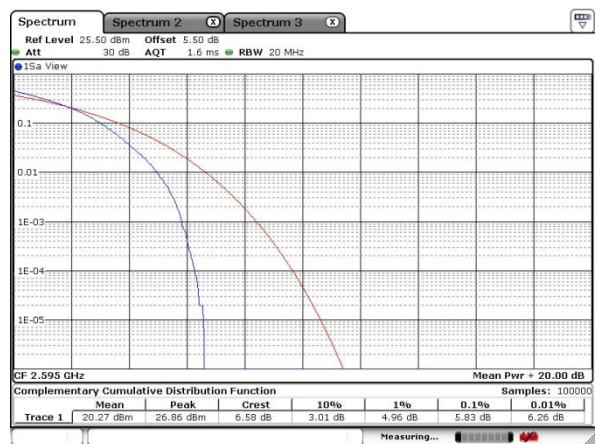
## Lowest Channel / Full RB



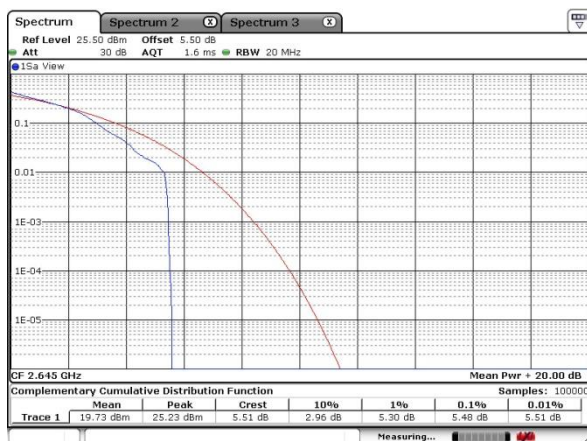
## Middle Channel / 1RB



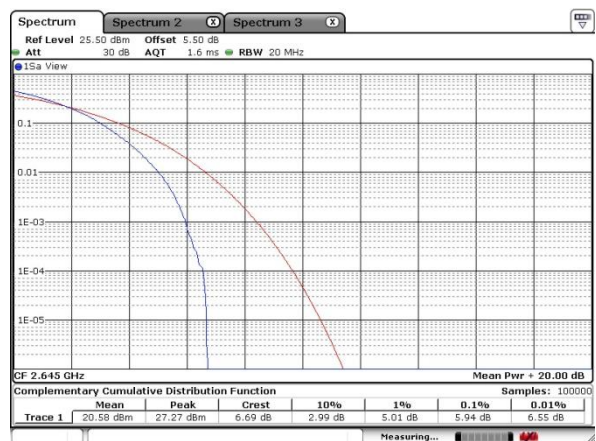
## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB



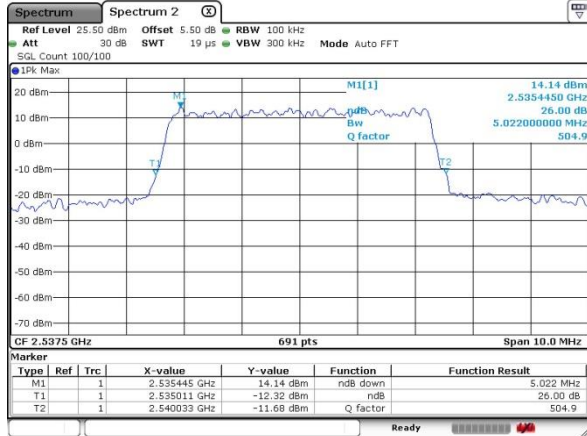
**26dB Bandwidth**

| Mode       | LTE Band 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  |                            |       |       |       | 5.02  | 4.92  | 9.73  | 9.67  | 14.15 | 14.41 | 20.15 | 20.26 |
| Middle CH  |                            |       |       |       | 4.81  | 4.88  | 9.70  | 9.81  | 14.46 | 14.24 | 20.20 | 20.26 |
| Highest CH |                            |       |       |       | 4.88  | 4.94  | 9.75  | 9.67  | 14.72 | 14.33 | 20.15 | 20.26 |
| Mod.       | 64QAM                      |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  |                            |       |       |       | 4.94  |       | 9.73  |       | 14.41 |       | 20.09 |       |
| Middle CH  |                            |       |       |       | 4.94  |       | 9.70  |       | 14.20 |       | 20.15 |       |
| Highest CH |                            |       |       |       | 4.88  |       | 9.96  |       | 14.15 |       | 20.09 |       |

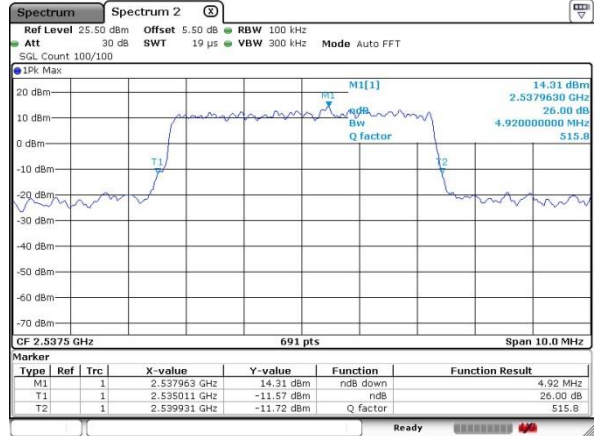


## LTE Band 41

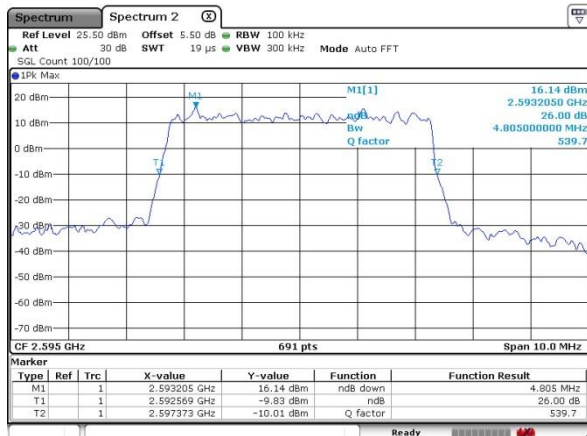
## Lowest Channel / 5MHz / QPSK



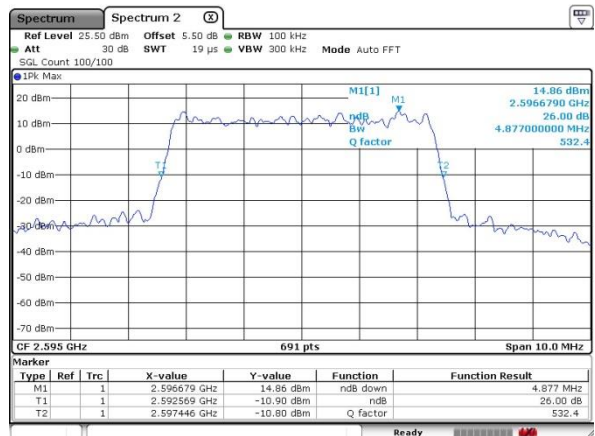
## Lowest Channel / 5MHz / 16QAM



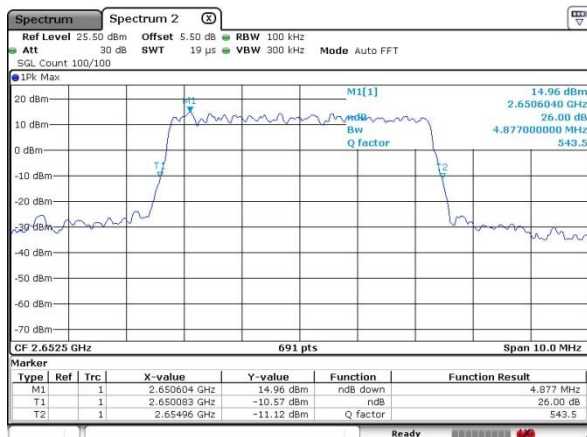
## Middle Channel / 5MHz / QPSK



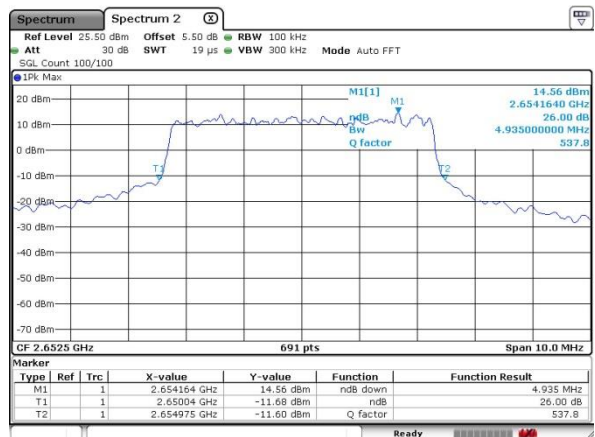
## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



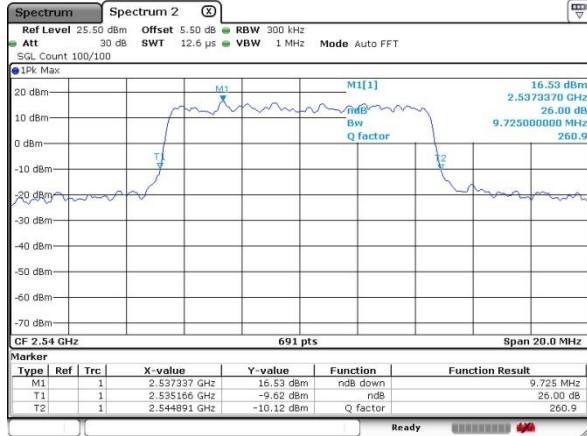
## Highest Channel / 5MHz / 16QAM



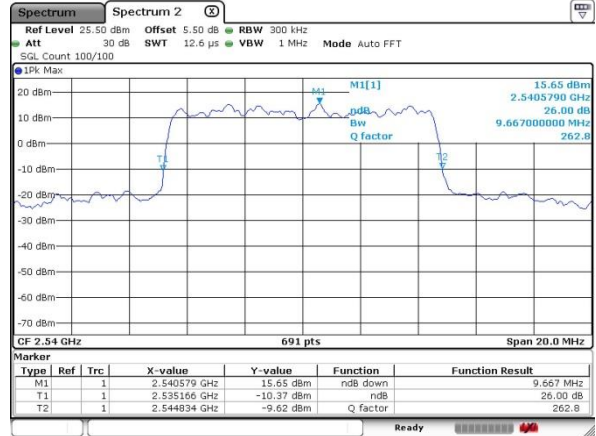


## LTE Band 41

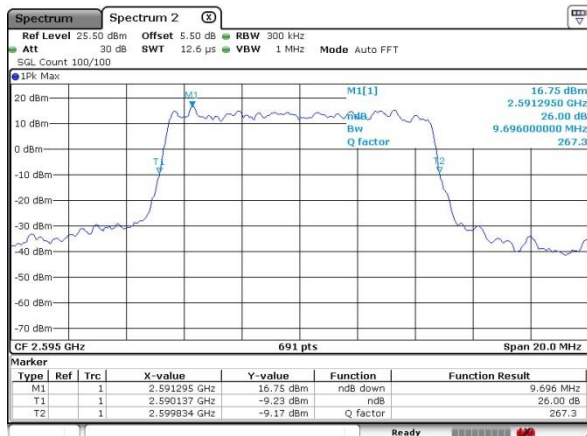
## Lowest Channel / 10MHz / QPSK



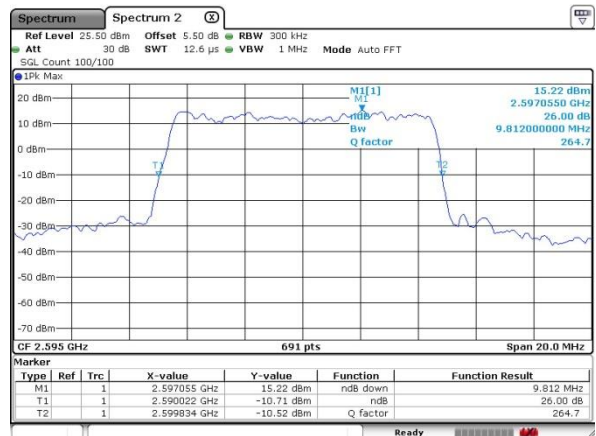
## Lowest Channel / 10MHz / 16QAM



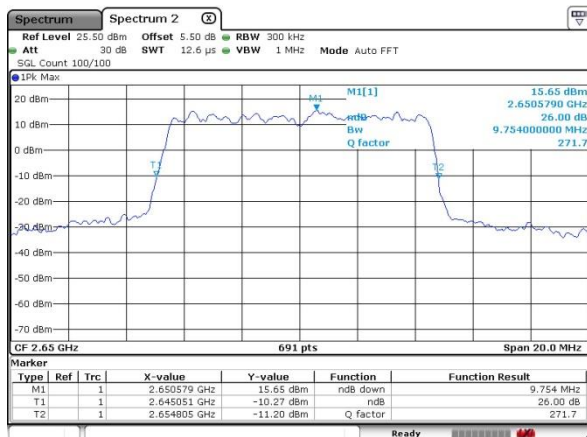
## Middle Channel / 10MHz / QPSK



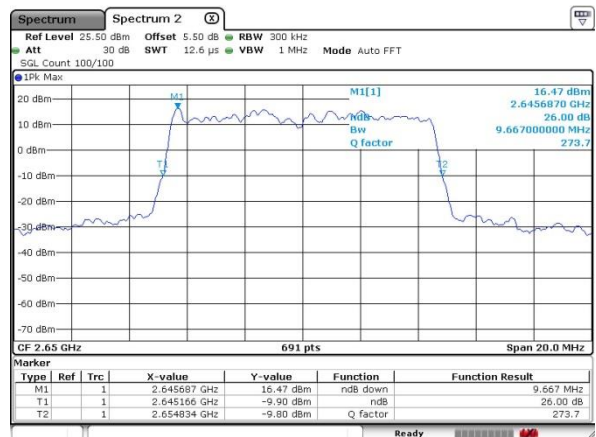
## Middle Channel / 10MHz / 16QAM



## Highest Channel / 10MHz / QPSK



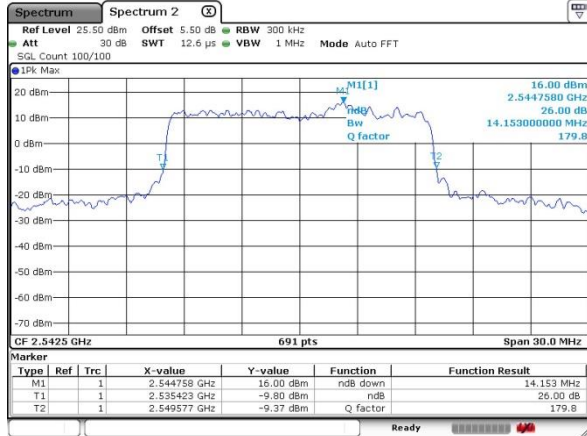
## Highest Channel / 10MHz / 16QAM



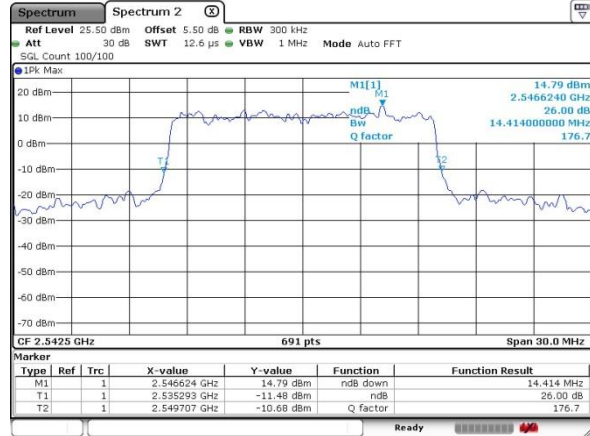


## LTE Band 41

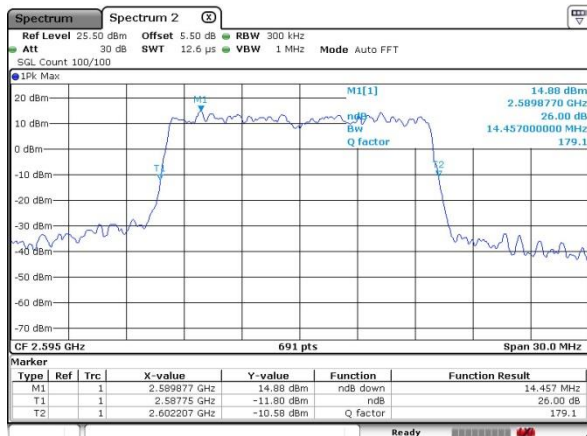
## Lowest Channel / 15MHz / QPSK



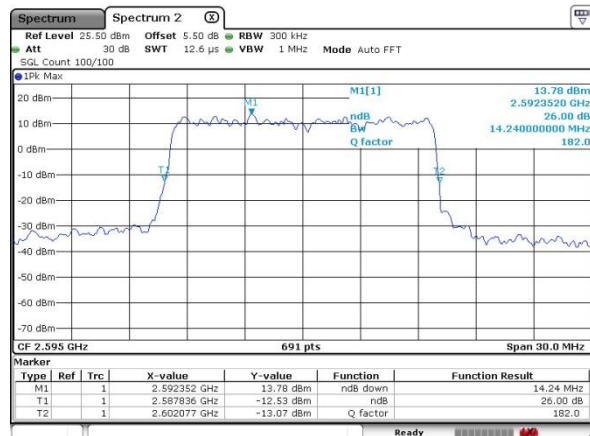
## Lowest Channel / 15MHz / 16QAM



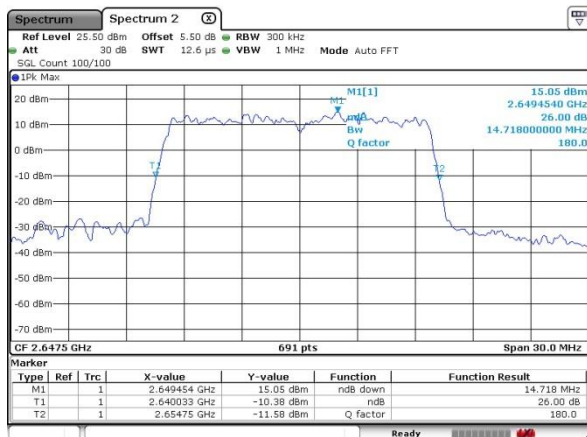
## Middle Channel / 15MHz / QPSK



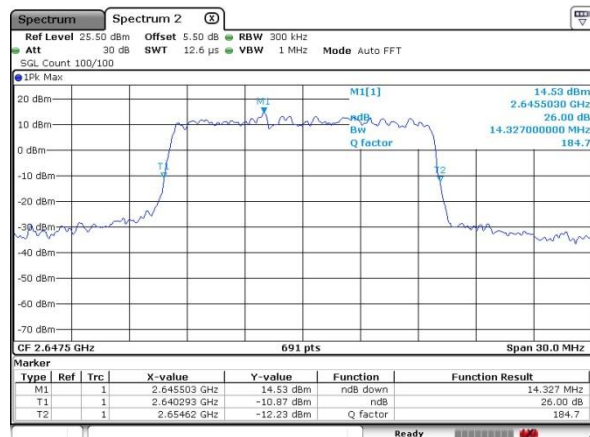
## Middle Channel / 15MHz / 16QAM



## Highest Channel / 15MHz / QPSK



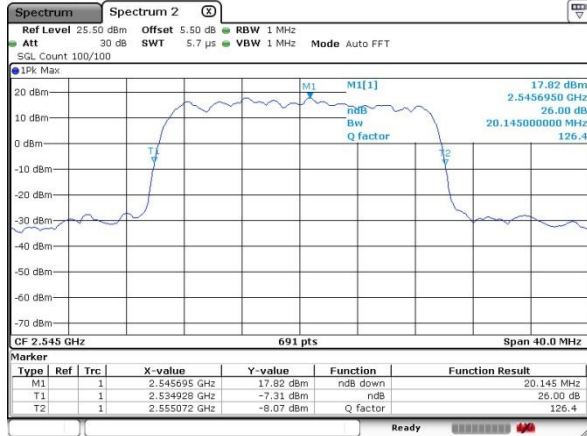
## Highest Channel / 15MHz / 16QAM



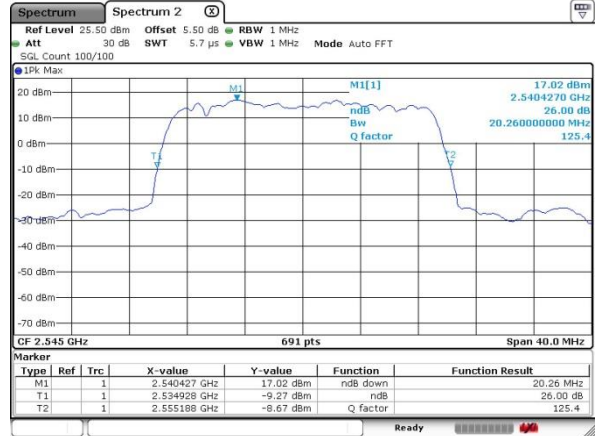


## LTE Band 41

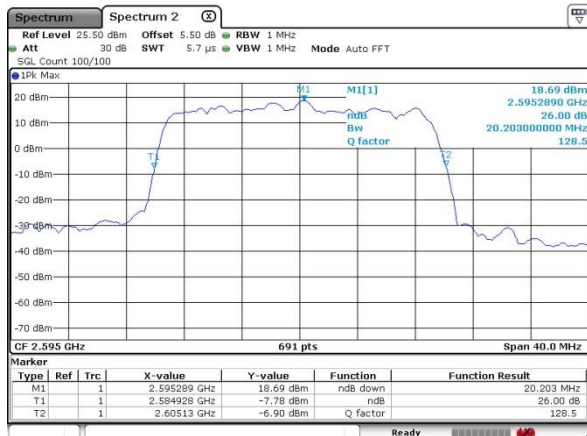
## Lowest Channel / 20MHz / QPSK



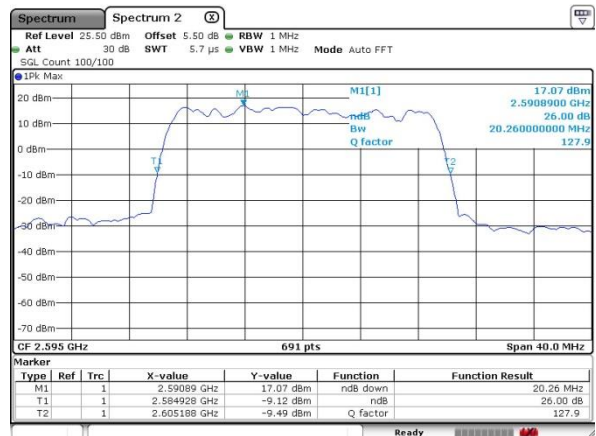
## Lowest Channel / 20MHz / 16QAM



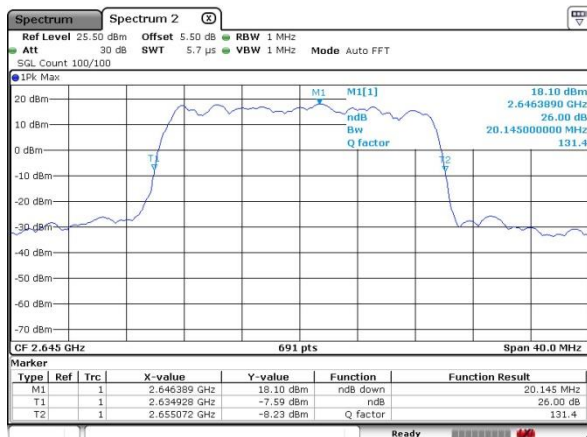
## Middle Channel / 20MHz / QPSK



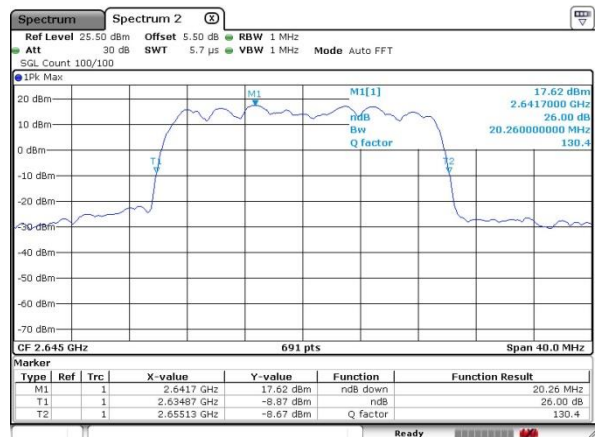
## Middle Channel / 20MHz / 16QAM



## Highest Channel / 20MHz / QPSK



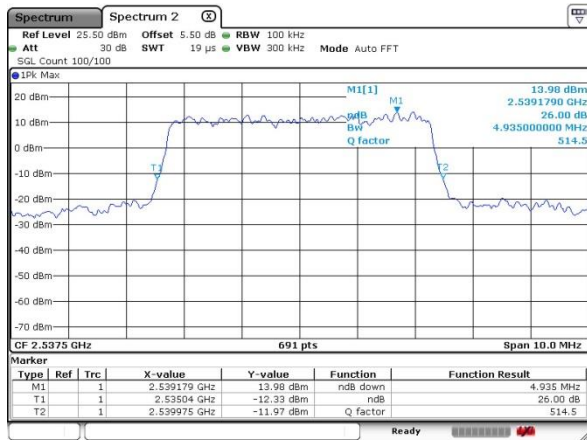
## Highest Channel / 20MHz / 16QAM



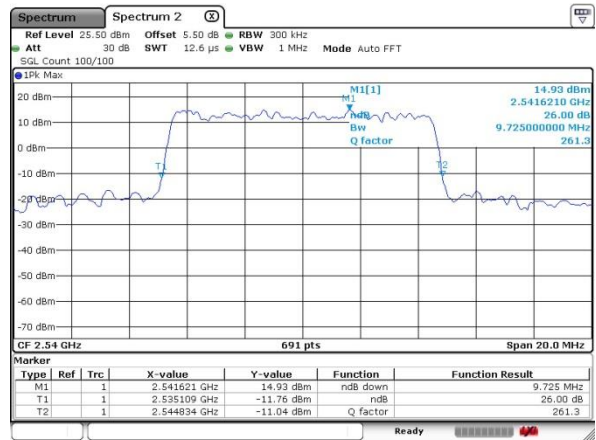


## LTE Band 41

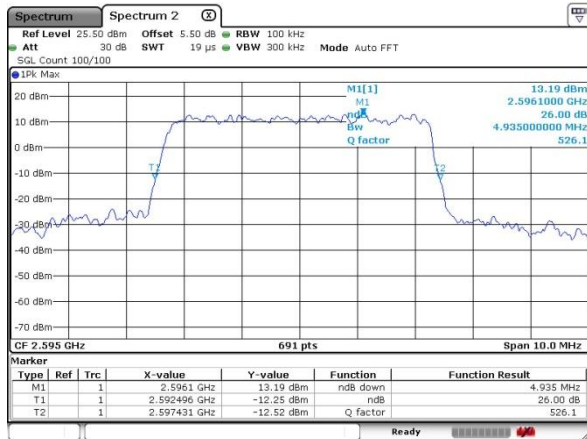
## Lowest Channel / 5MHz / 64QAM



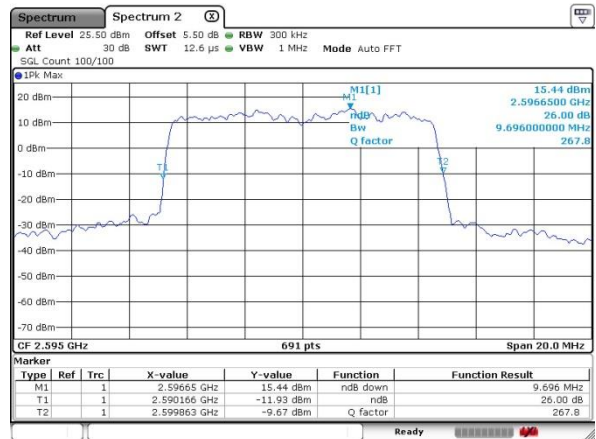
## Lowest Channel / 10MHz / 64QAM



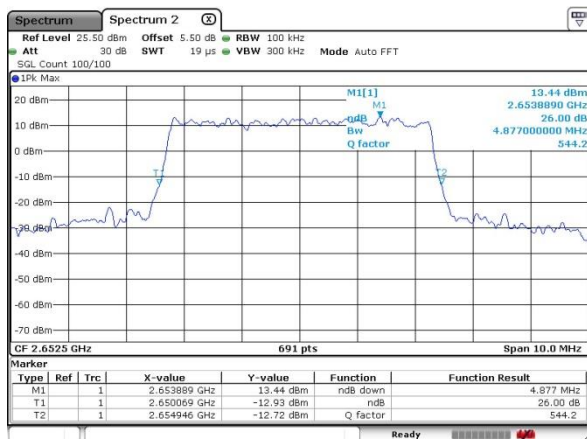
## Middle Channel / 5MHz / 64QAM



## Middle Channel / 10MHz / 64QAM



## Highest Channel / 5MHz / 64QAM



## Highest Channel / 10MHz / 64QAM

