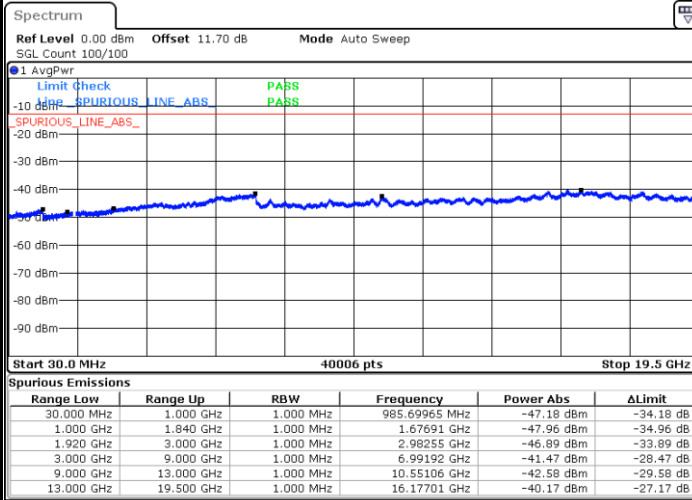




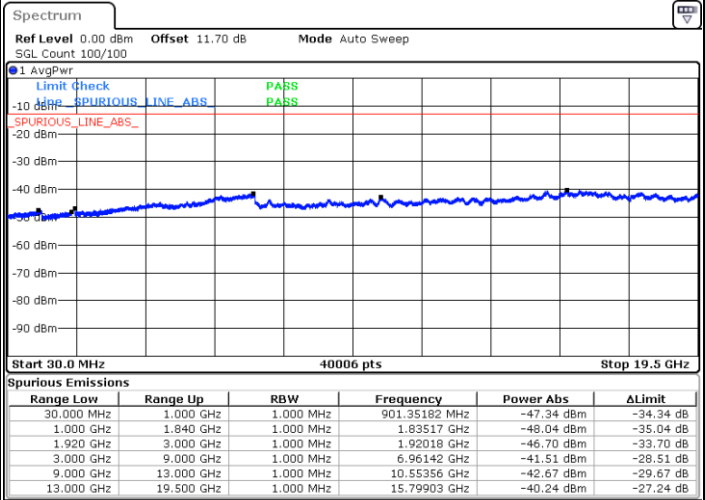
## LTE Band 2 / 5MHz

## Highest Channel / QPSK



Date: 5.NOV.2019 00:53:06

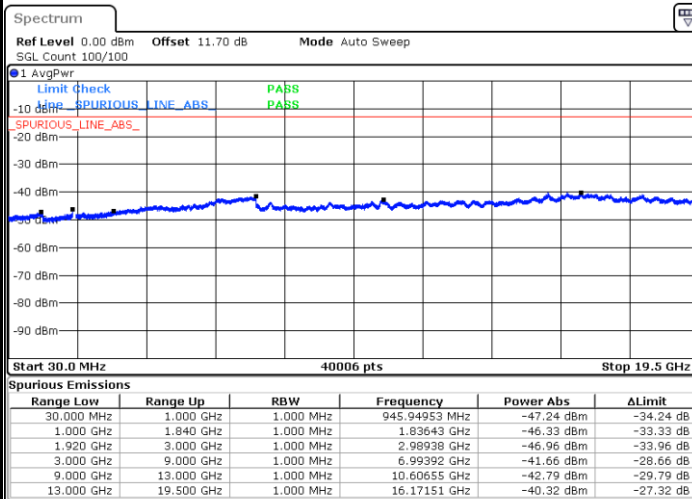
## Highest Channel / 16QAM



Date: 5.NOV.2019 00:54:26

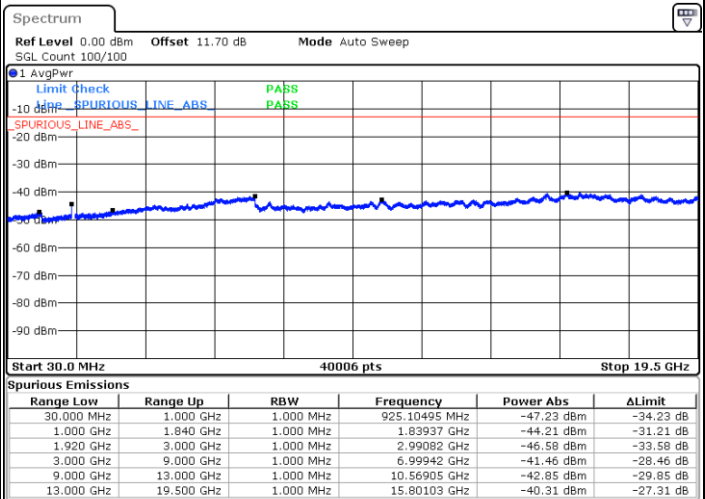
## LTE Band 2 / 10MHz

## Lowest Channel / QPSK



Date: 5.NOV.2019 00:59:02

## Lowest Channel / 16QAM

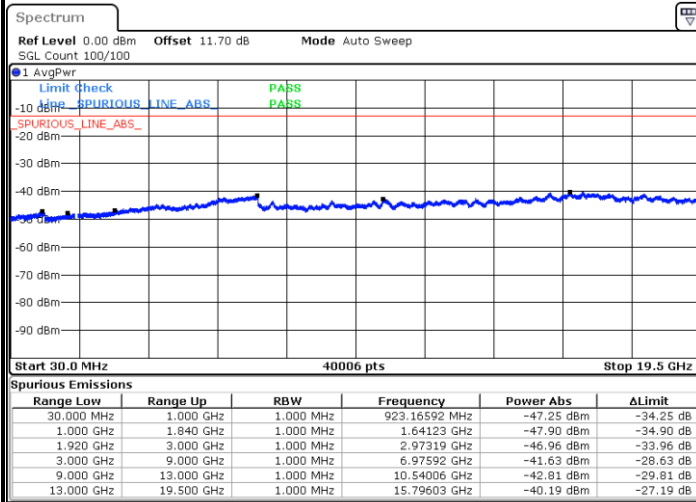


Date: 5.NOV.2019 01:00:21



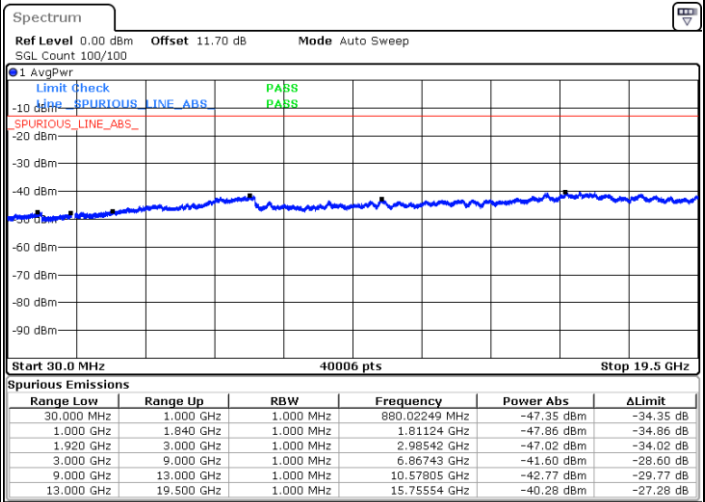
## LTE Band 2 / 10MHz

## Middle Channel / QPSK



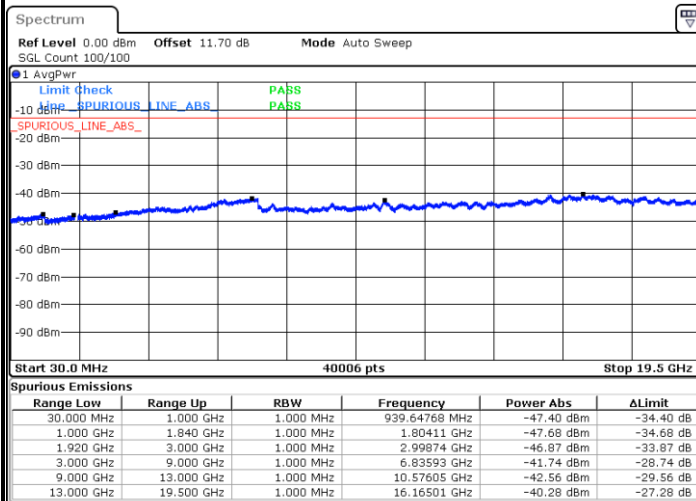
Date: 5 NOV 2019 01:02:25

## Middle Channel / 16QAM



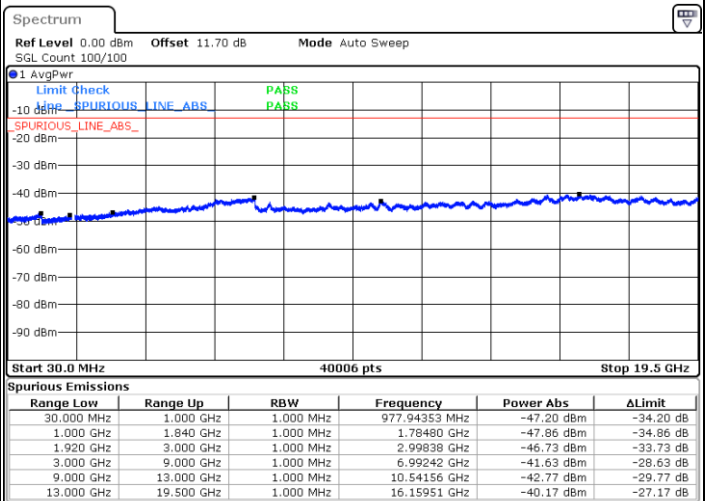
Date: 5 NOV 2019 01:03:44

## Highest Channel / QPSK



Date: 5 NOV 2019 01:08:20

## Highest Channel / 16QAM

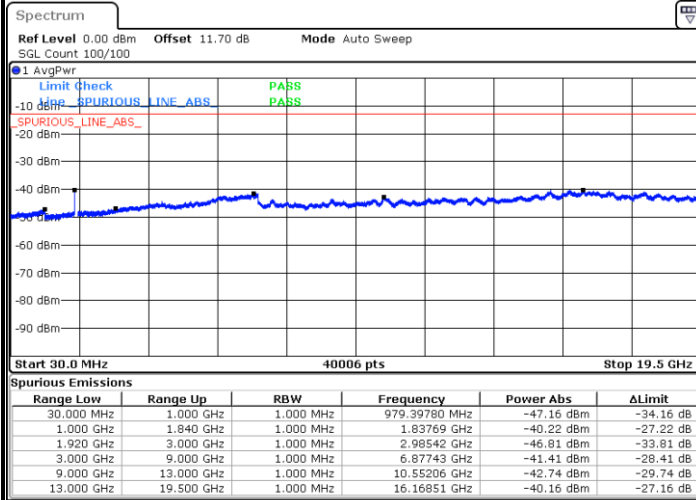


Date: 5 NOV 2019 01:09:40



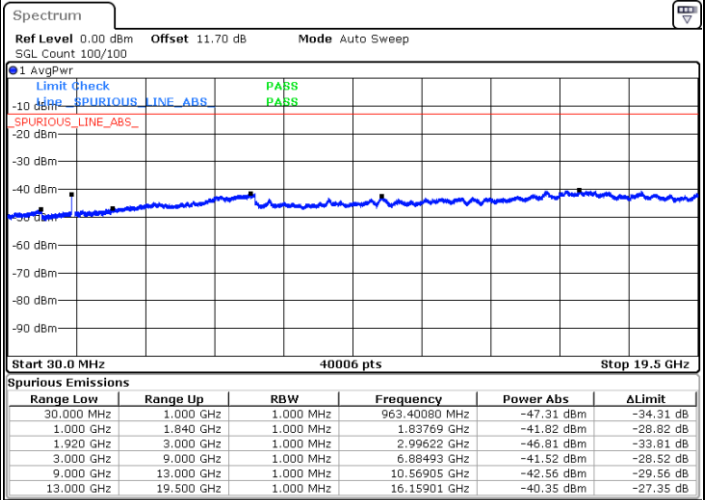
## LTE Band 2 / 15MHz

## Lowest Channel / QPSK



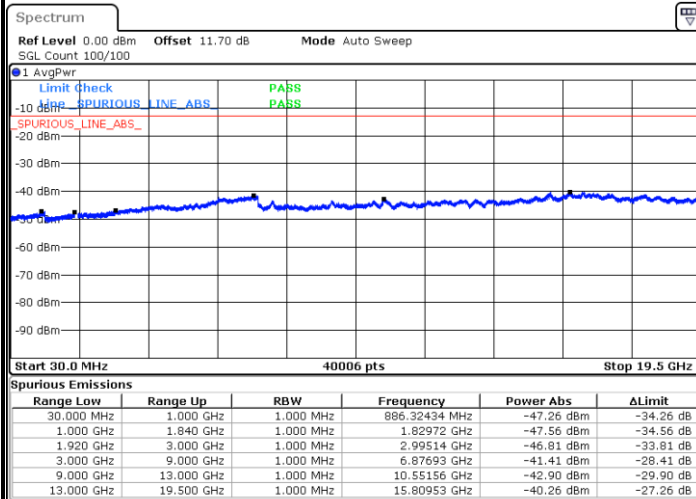
Date: 5.NOV.2019 01:14:15

## Lowest Channel / 16QAM



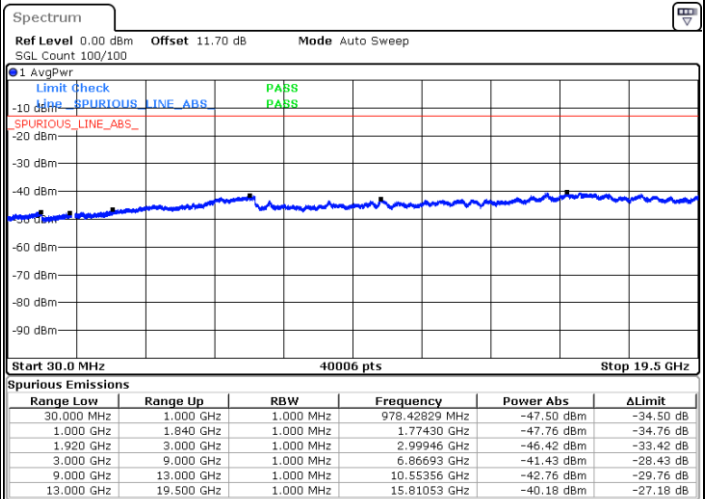
Date: 5.NOV.2019 01:15:35

## Middle Channel / QPSK



Date: 5.NOV.2019 01:17:38

## Middle Channel / 16QAM

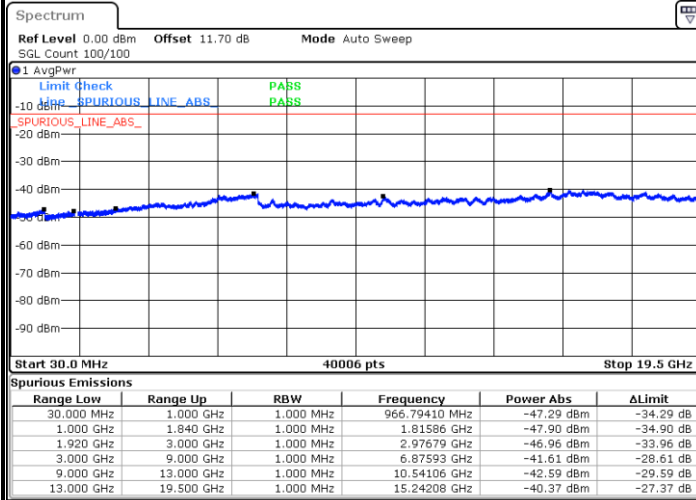


Date: 5.NOV.2019 01:18:58



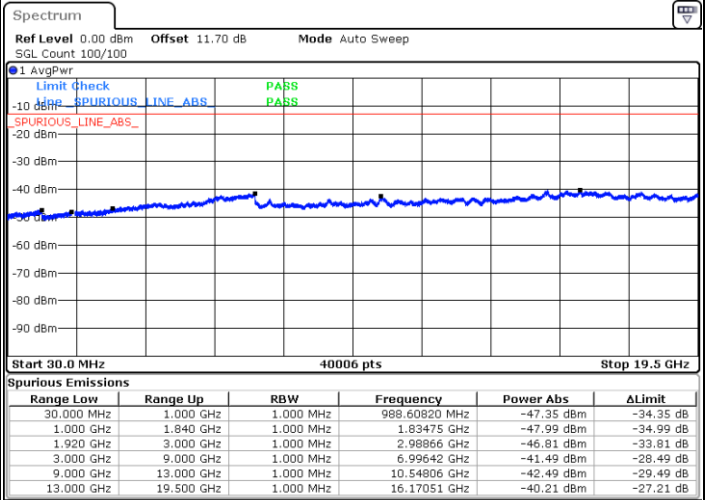
## LTE Band 2 / 15MHz

## Highest Channel / QPSK



Date: 5.NOV.2019 01:23:34

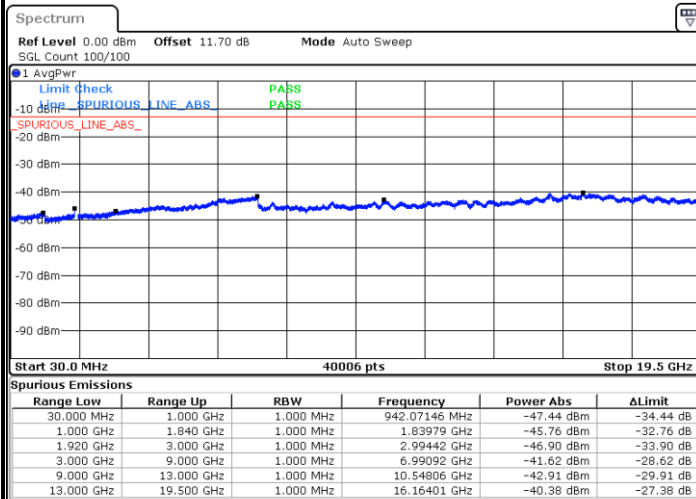
## Highest Channel / 16QAM



Date: 5.NOV.2019 01:24:54

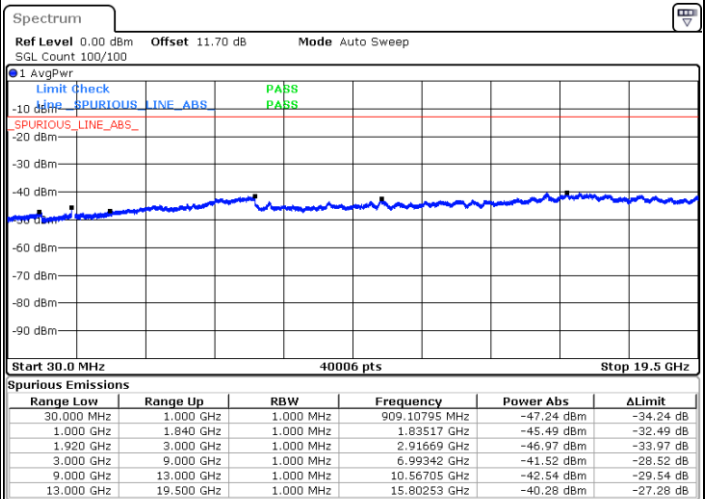
## LTE Band 2 / 20MHz

## Lowest Channel / QPSK



Date: 5.NOV.2019 09:23:43

## Lowest Channel / 16QAM

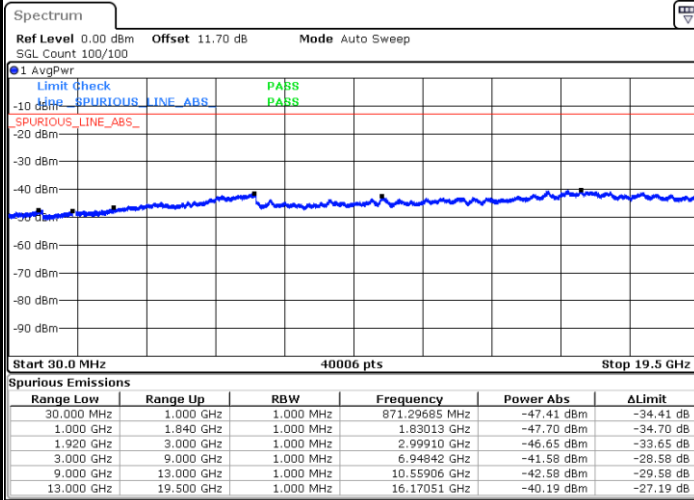


Date: 5.NOV.2019 09:25:04



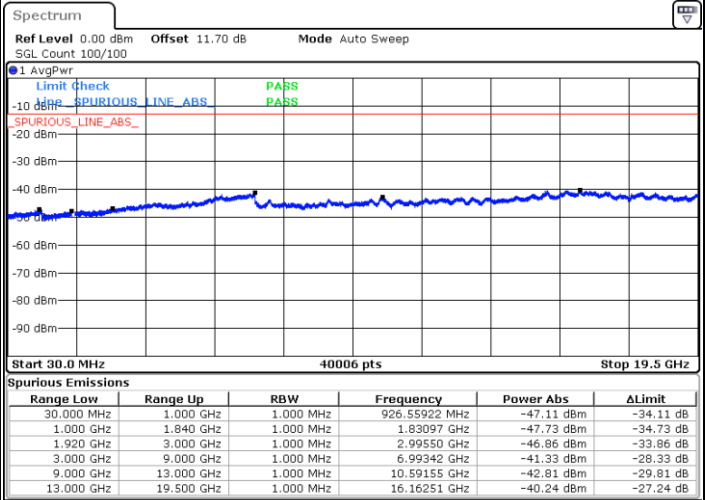
## LTE Band 2 / 20MHz

## Middle Channel / QPSK



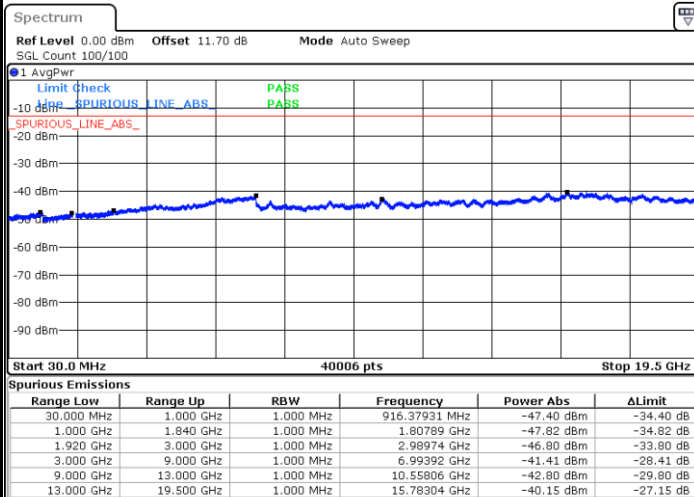
Date: 5 NOV 2019 09:26:24

## Middle Channel / 16QAM



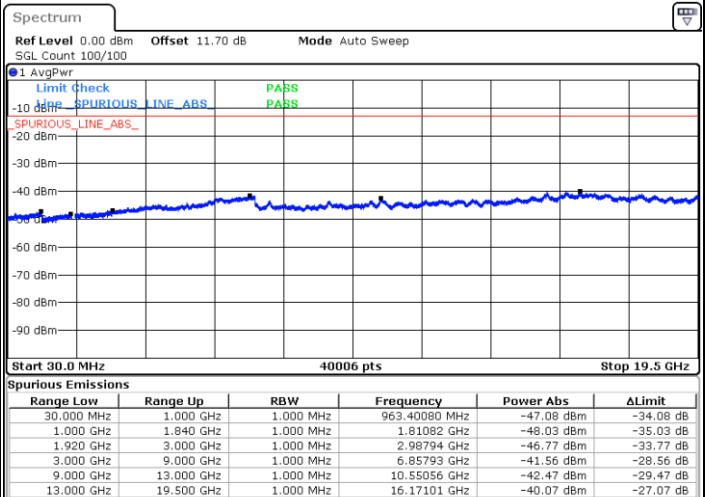
Date: 5 NOV 2019 09:27:44

## Highest Channel / QPSK



Date: 5 NOV 2019 09:29:05

## Highest Channel / 16QAM

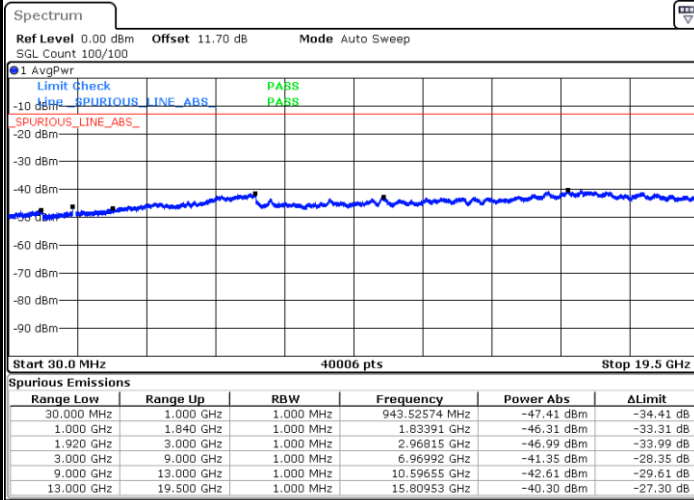


Date: 5 NOV 2019 09:30:25



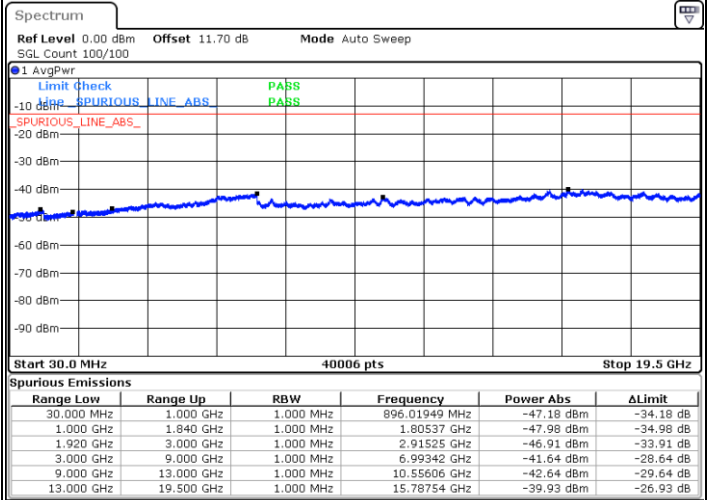
## LTE Band 2 / 1.4MHz

## Lowest Channel / 64QAM



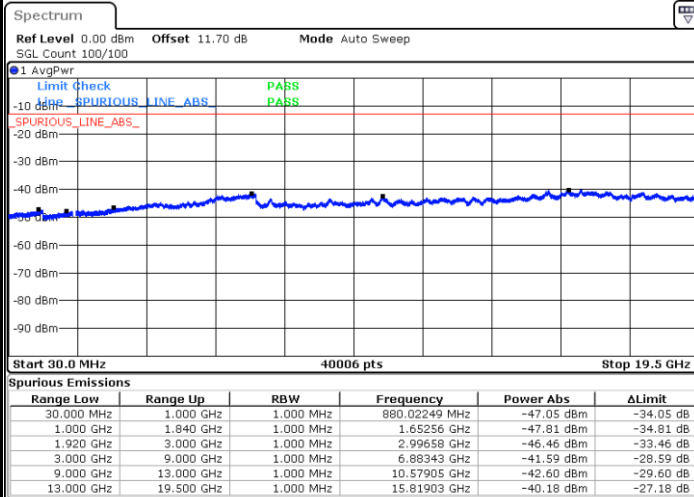
Date: 4 NOV. 2019 23:04:33

## Middle Channel / 64QAM



Date: 4 NOV. 2019 23:06:15

## Highest Channel / 64QAM

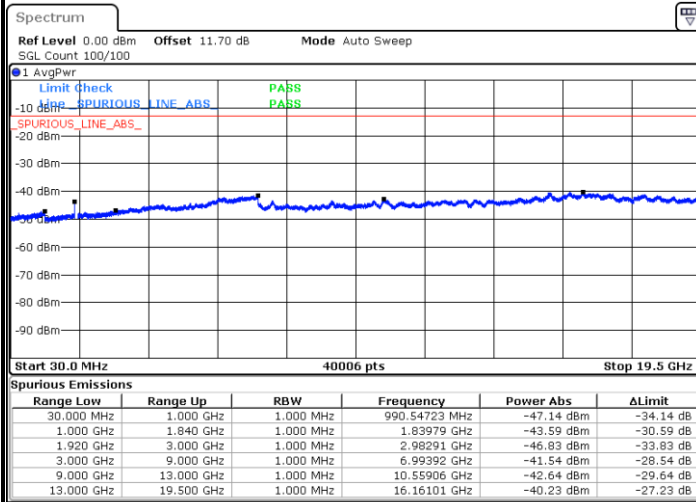


Date: 4 NOV. 2019 23:09:59



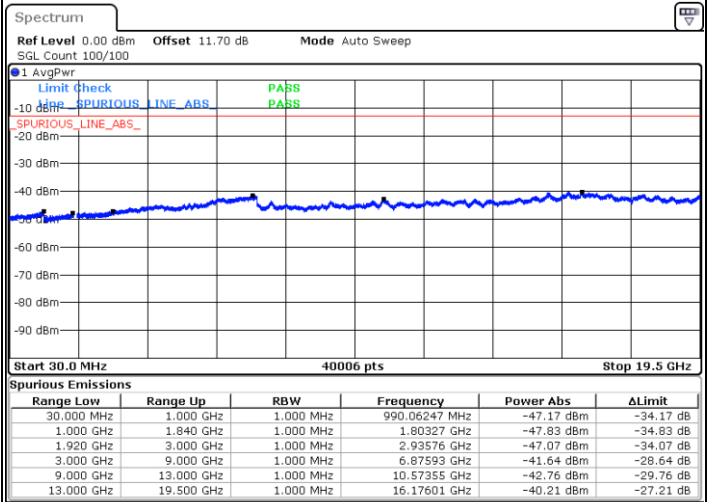
## LTE Band 2 / 3MHz

## Lowest Channel / 64QAM



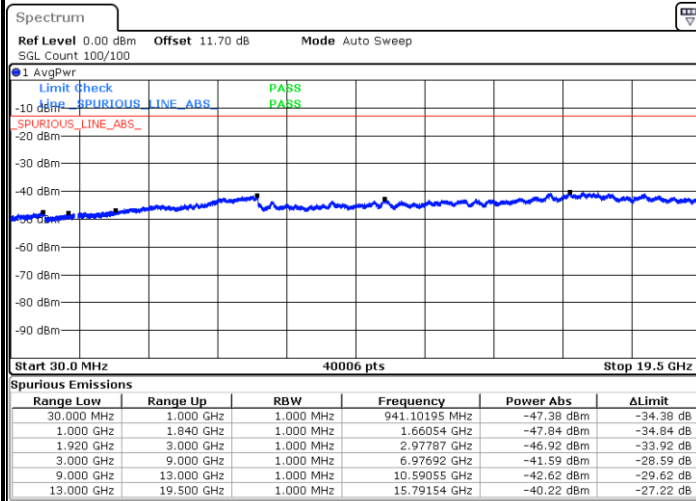
Date: 5 NOV. 2019 09:31:47

## Middle Channel / 64QAM



Date: 5 NOV. 2019 09:33:07

## Highest Channel / 64QAM

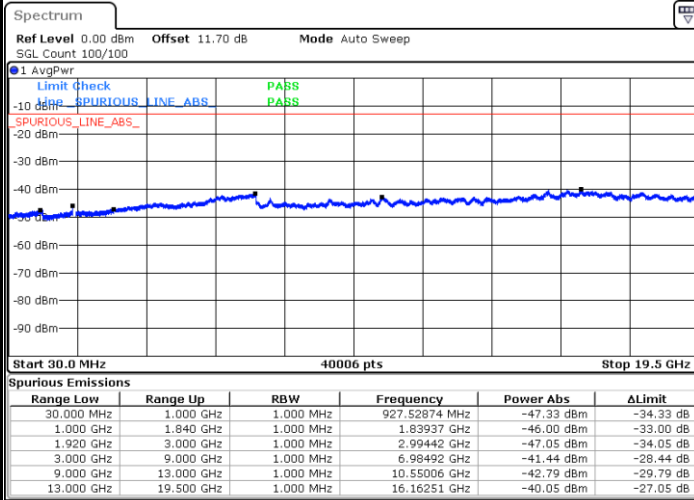


Date: 5 NOV. 2019 09:34:27



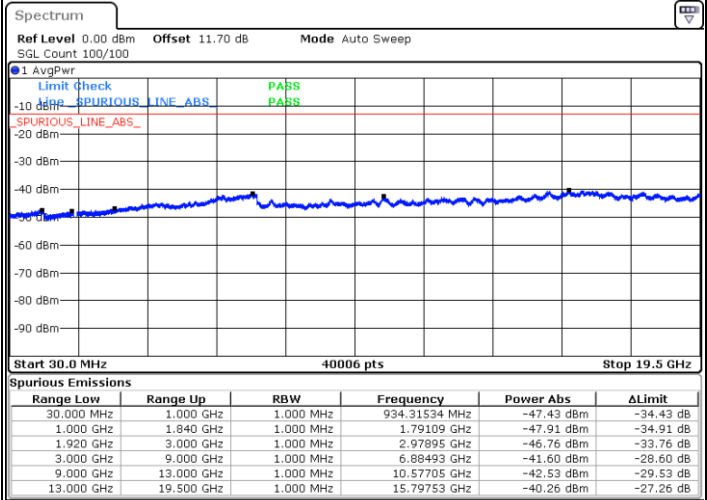
## LTE Band 2 / 5MHz

## Lowest Channel / 64QAM



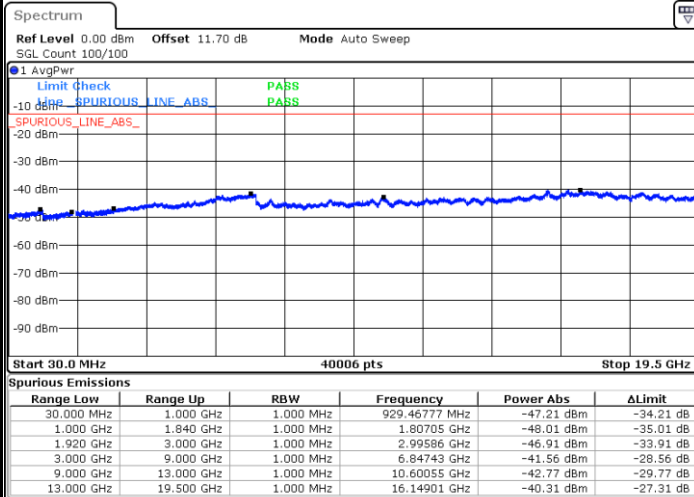
Date: 5 NOV. 2019 09:35:49

## Middle Channel / 64QAM



Date: 5 NOV. 2019 01:52:27

## Highest Channel / 64QAM

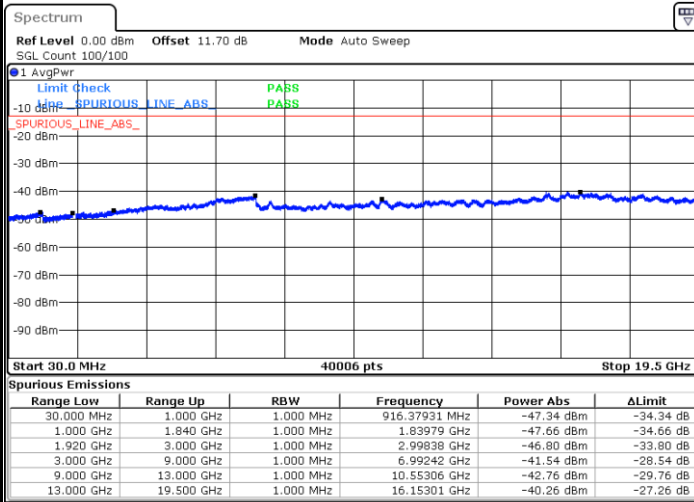


Date: 5 NOV. 2019 09:37:09



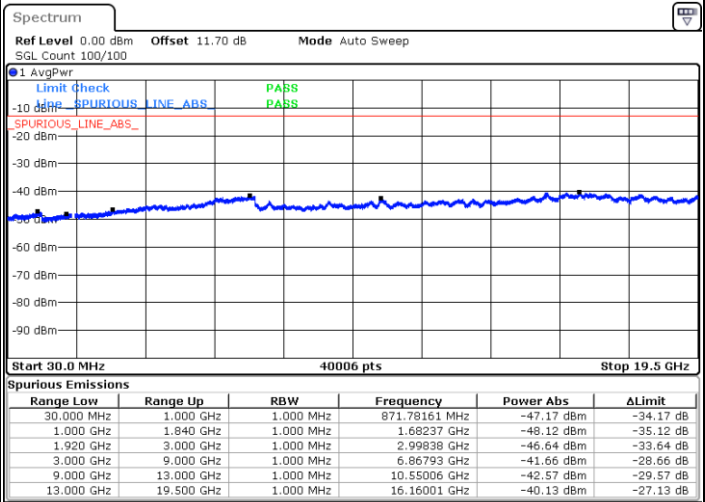
## LTE Band 2 / 10MHz

## Lowest Channel / 64QAM



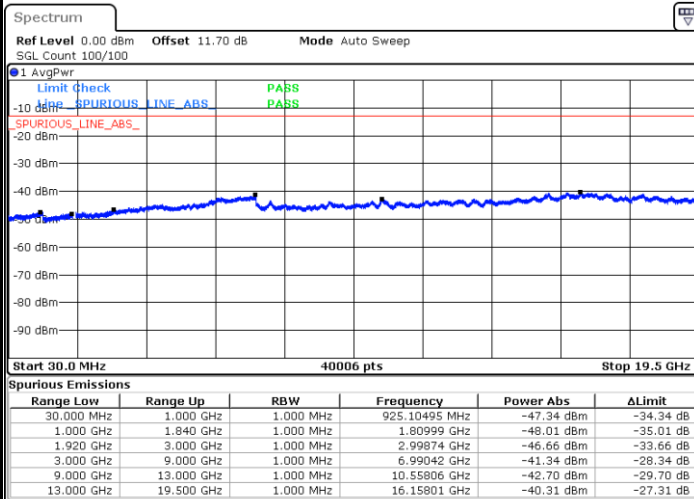
Date: 5 NOV. 2019 09:38:30

## Middle Channel / 64QAM



Date: 5 NOV. 2019 02:00:05

## Highest Channel / 64QAM

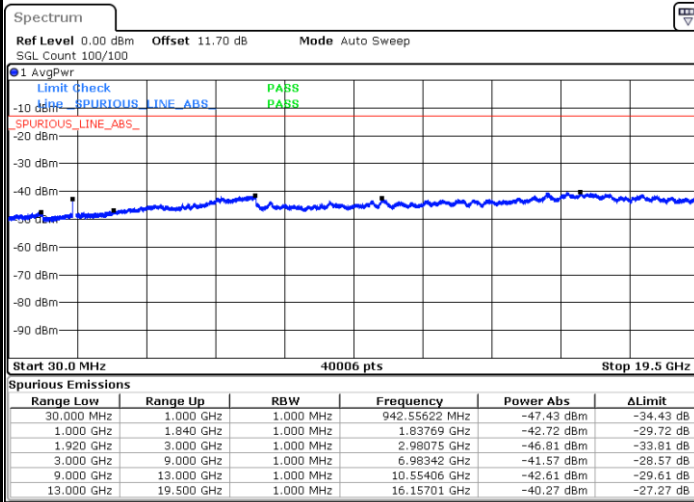


Date: 5 NOV. 2019 09:39:51



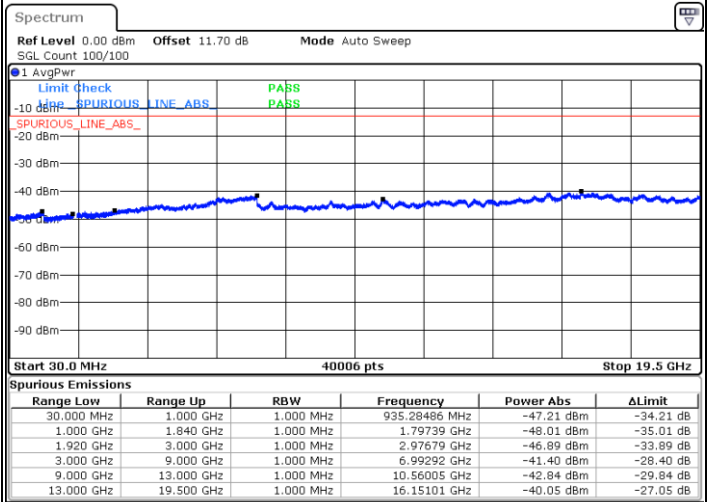
## LTE Band 2 / 15MHz

## Lowest Channel / 64QAM



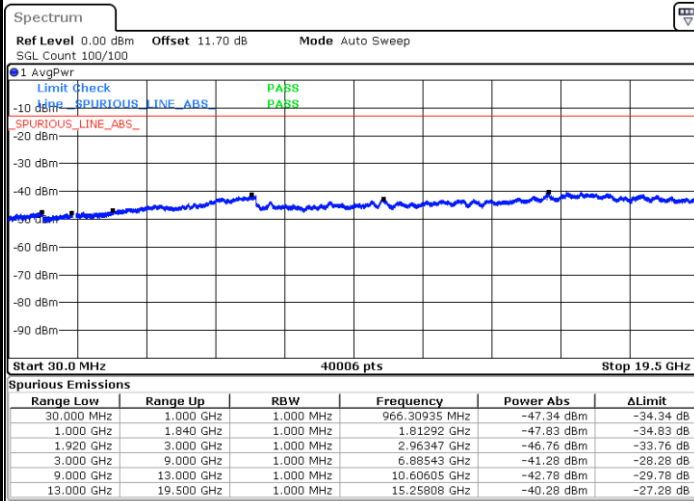
Date: 5.NOV.2019 09:41:12

## Middle Channel / 64QAM



Date: 5.NOV.2019 09:42:33

## Highest Channel / 64QAM

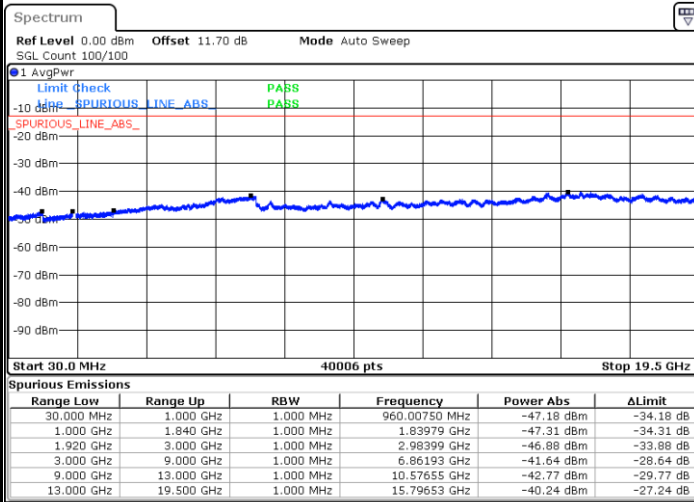


Date: 5.NOV.2019 09:43:53



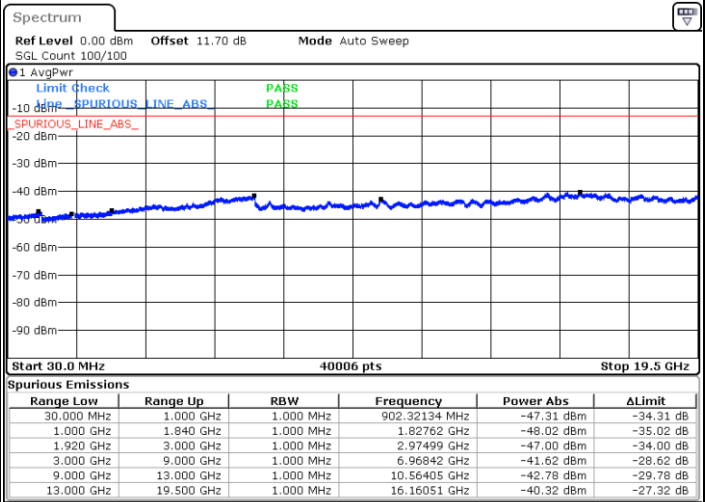
## LTE Band 2 / 20MHz

## Lowest Channel / 64QAM



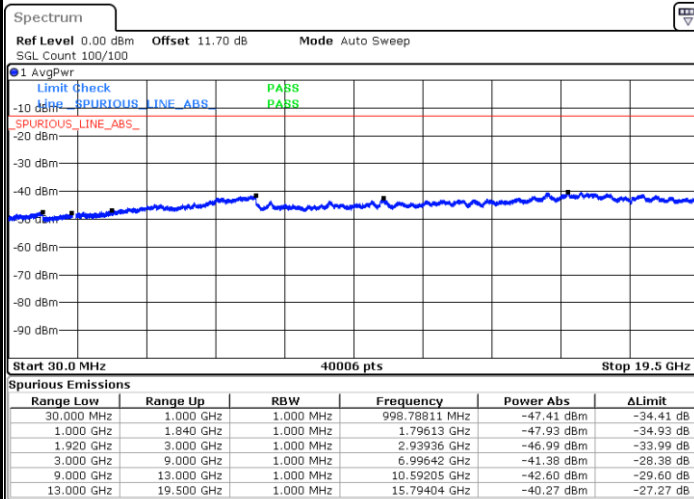
Date: 5 NOV. 2019 09:45:14

## Middle Channel / 64QAM



Date: 5 NOV. 2019 09:46:34

## Highest Channel / 64QAM



Date: 5 NOV. 2019 09:47:55

## Frequency Stability

| Test Conditions  |                   | LTE Band 2 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                           | Note 2. |
|                  |                   | Deviation (ppm)                    | Result  |
| 50               | Normal Voltage    | 0.0009                             | PASS    |
| 40               | Normal Voltage    | 0.0005                             |         |
| 30               | Normal Voltage    | 0.0023                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0047                             |         |
| 0                | Normal Voltage    | 0.0049                             |         |
| -10              | Normal Voltage    | 0.0038                             |         |
| -20              | Normal Voltage    | 0.0045                             |         |
| -30              | Normal Voltage    | 0.0056                             |         |
| 20               | Maximum Voltage   | 0.0041                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0045                             |         |

**Note:**

1. Normal Voltage =4.0 V. ; Battery End Point (BEP) =3.8 V. ; Maximum Voltage =4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

## LTE Band 4

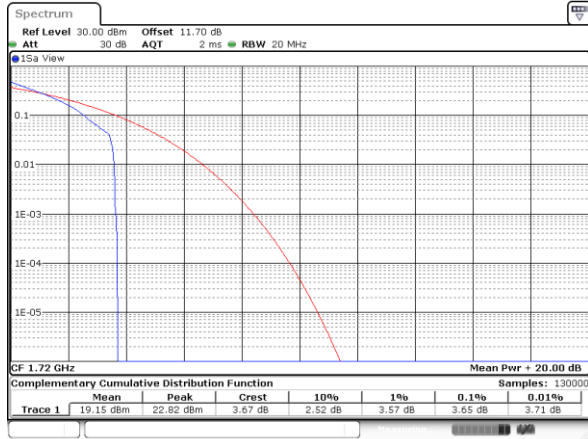
### Peak-to-Average Ratio

| Mode       | LTE Band 4 / 20MHz |         |       |         |             |
|------------|--------------------|---------|-------|---------|-------------|
| Mod.       | QPSK               |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 3.65               | 4.93    | 4.52  | 5.86    | PASS        |
| Middle CH  | 3.68               | 5.04    | 4.23  | 5.94    |             |
| Highest CH | 3.59               | 4.99    | 4.29  | 5.94    |             |
| Mode       | LTE Band 4 / 20MHz |         |       |         |             |
| Mod.       | 64QAM              |         |       |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB |       |         | Result      |
| Lowest CH  | 5.48               | 6.29    | -     | -       | PASS        |
| Middle CH  | 5.51               | 6.06    | -     | -       |             |
| Highest CH | 5.28               | 6.38    | -     | -       |             |



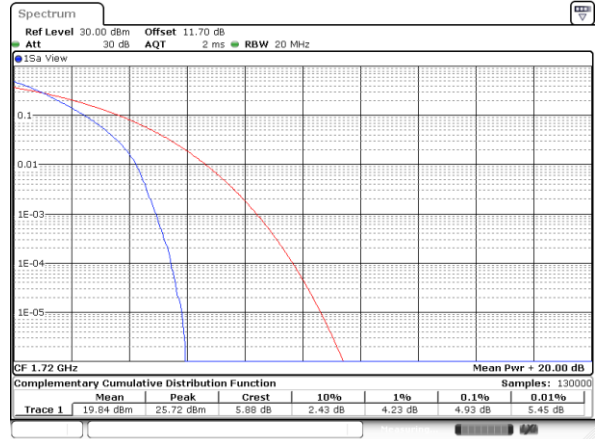
## LTE Band 4 / 20MHz / QPSK

## Lowest Channel / 1RB



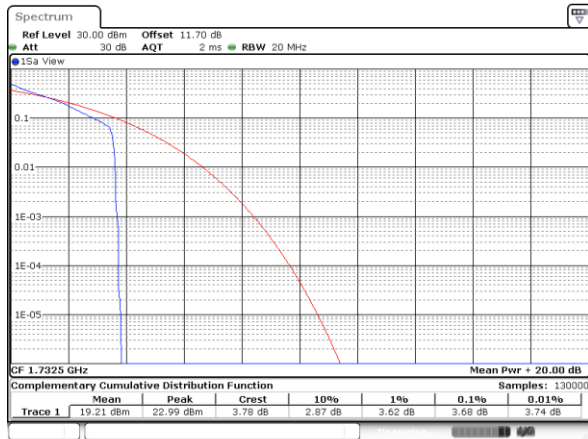
Date: 5 NOV 2019 10:58:15

## Lowest Channel / Full RB



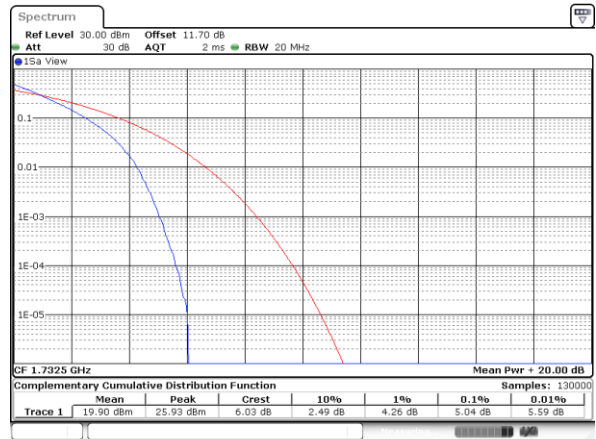
Date: 5 NOV 2019 10:58:26

## Middle Channel / 1RB



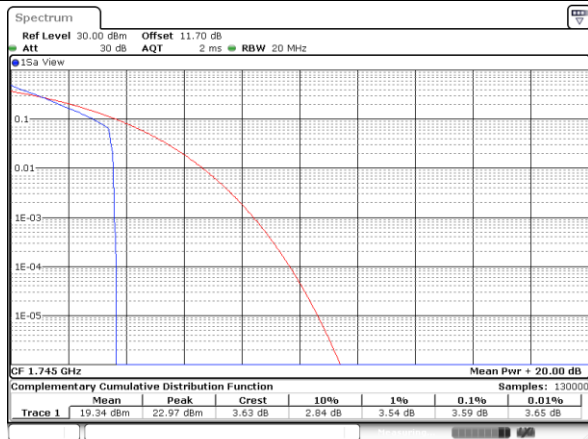
Date: 5 NOV 2019 10:58:49

## Middle Channel / Full RB



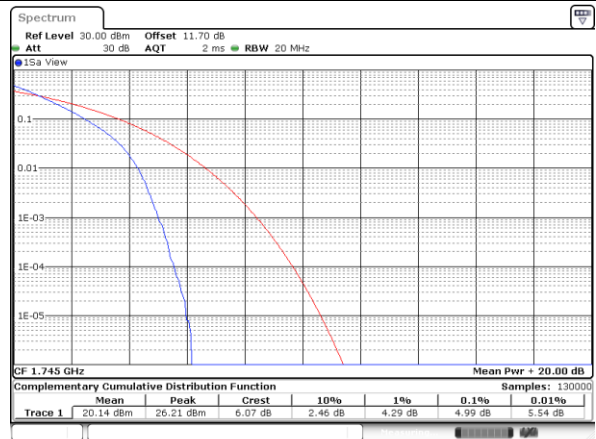
Date: 5 NOV 2019 10:59:00

## Highest Channel / 1RB

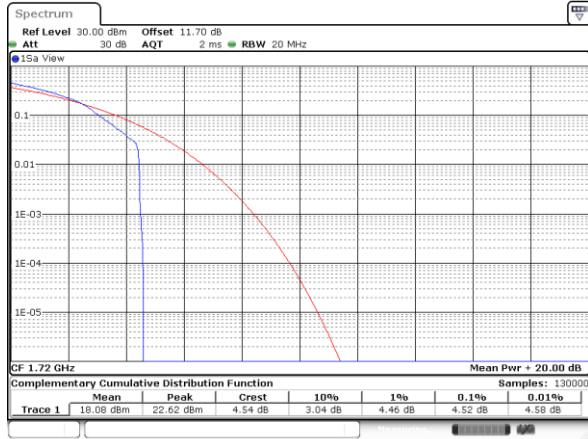
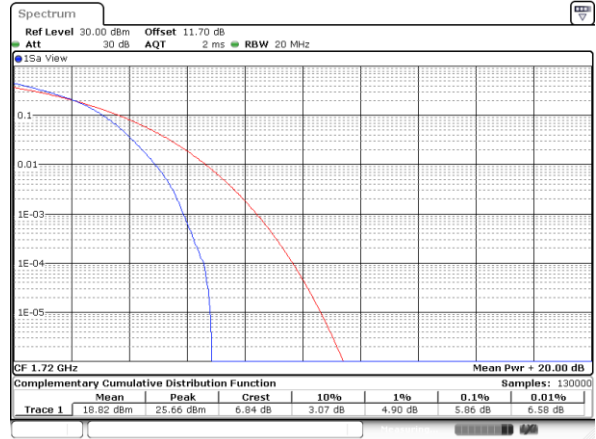
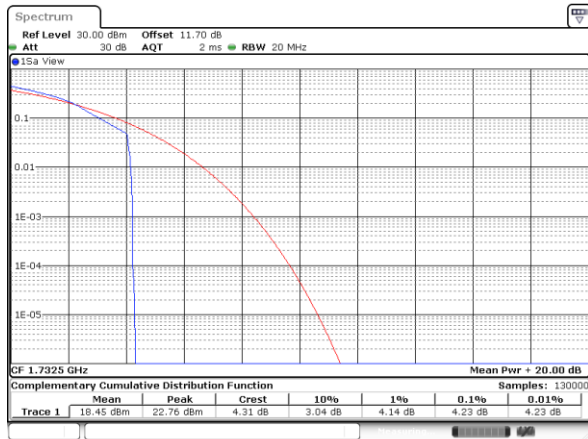
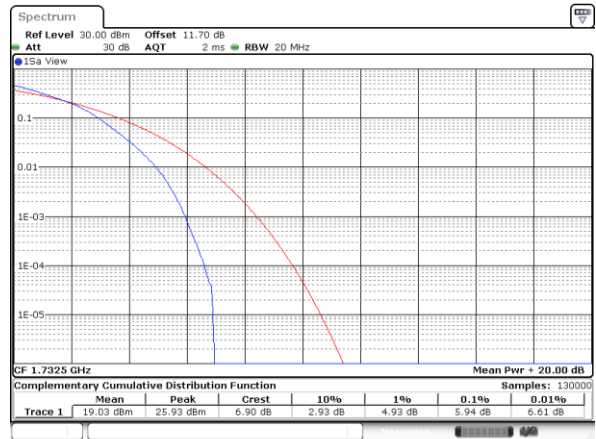
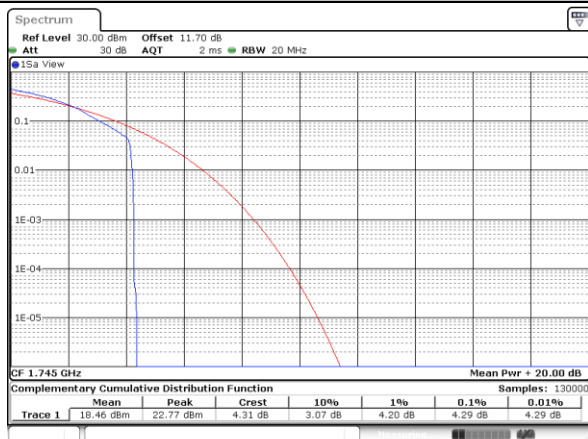
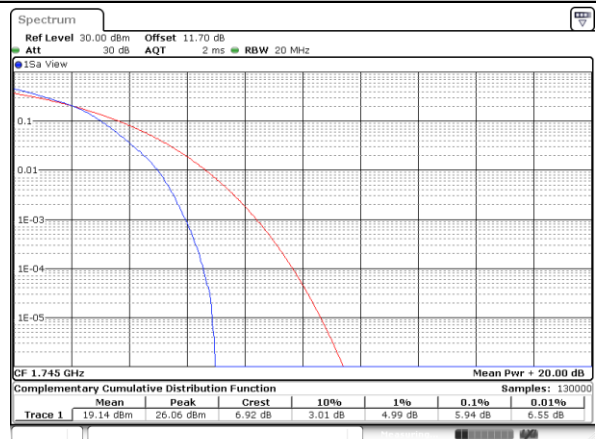


Date: 5 NOV 2019 10:59:10

## Highest Channel / Full RB

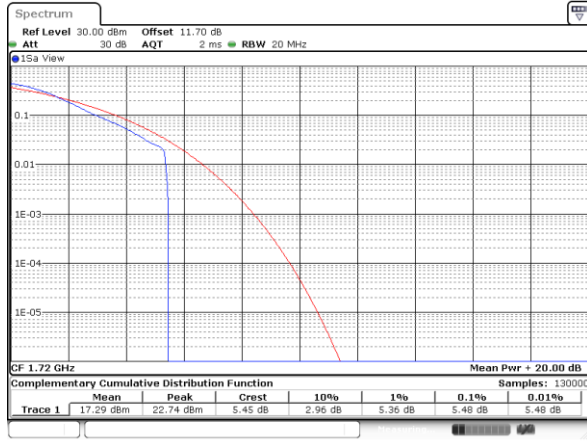


Date: 5 NOV 2019 10:59:20

**LTE Band 4 / 20MHz / 16QAM**
**Lowest Channel / 1RB**

**Lowest Channel / Full RB**

**Middle Channel / 1RB**

**Middle Channel / Full RB**

**Highest Channel / 1RB**

**Highest Channel / Full RB**


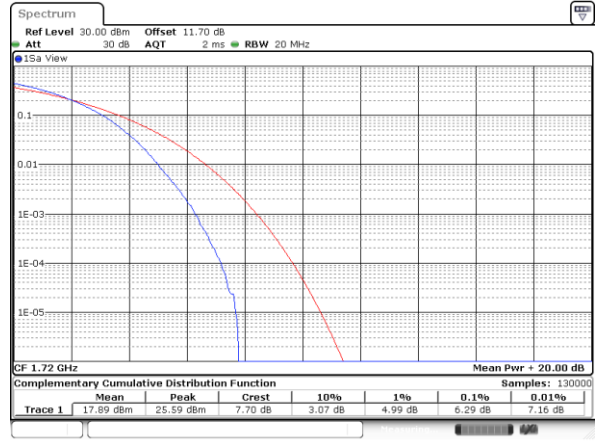
## LTE Band 4 / 20MHz / 64QAM

### Lowest Channel / 1RB



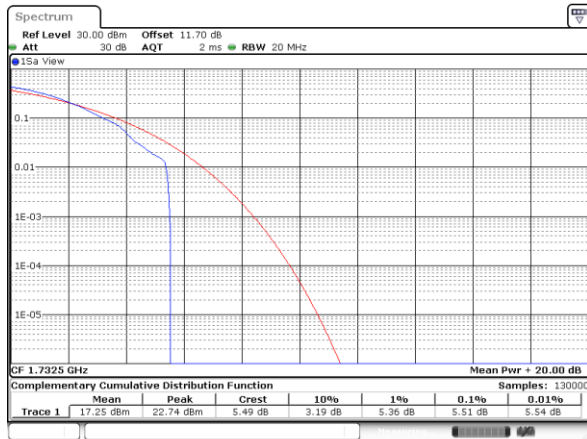
Date: 5 NOV 2019 10:59:30

### Lowest Channel / Full RB



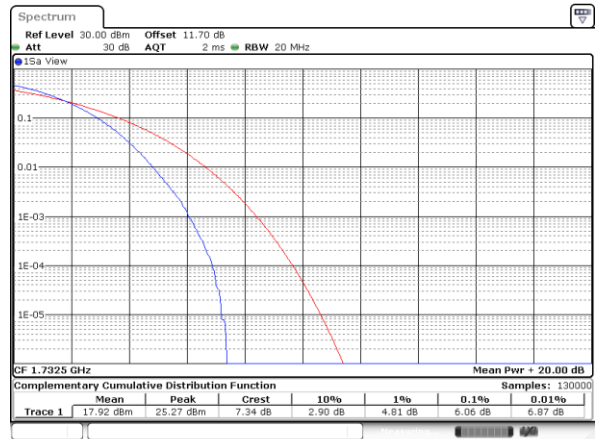
Date: 5 NOV 2019 10:59:40

### Middle Channel / 1RB



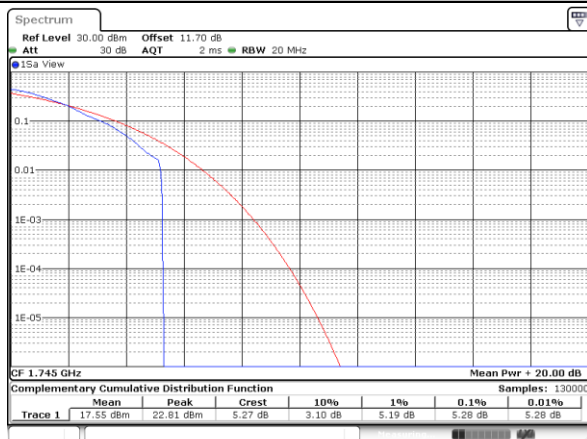
Date: 5 NOV 2019 10:59:50

### Middle Channel / Full RB



Date: 5 NOV 2019 11:00:03

### Highest Channel / 1RB



Date: 5 NOV 2019 11:00:13

### Highest Channel / Full RB



Date: 5 NOV 2019 11:00:23

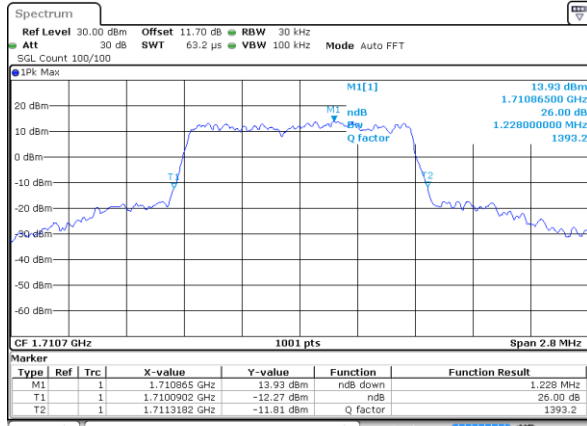
**26dB Bandwidth**

| Mode       | LTE Band 4 : 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  | 3.00  | 2.99  | 4.90  | 4.94  | 9.69  | 9.85  | 14.45 | 14.81 | 18.98 | 18.82 |
| Middle CH  | 1.24                      | 1.25  | 3.04  | 3.02  | 4.92  | 4.86  | 9.83  | 9.83  | 14.36 | 14.54 | 18.90 | 19.22 |
| Highest CH | 1.23                      | 1.24  | 3.04  | 3.00  | 4.86  | 4.87  | 9.83  | 9.77  | 14.39 | 14.27 | 18.74 | 19.34 |
| Mode       | LTE Band 4 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                     |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.22                      | -     | 3.02  | -     | 4.90  | -     | 9.75  | -     | 14.15 | -     | 19.14 | -     |
| Middle CH  | 1.23                      | -     | 2.98  | -     | 4.94  | -     | 9.93  | -     | 14.27 | -     | 19.18 | -     |
| Highest CH | 1.24                      | -     | 2.99  | -     | 4.83  | -     | 9.89  | -     | 14.72 | -     | 18.94 | -     |



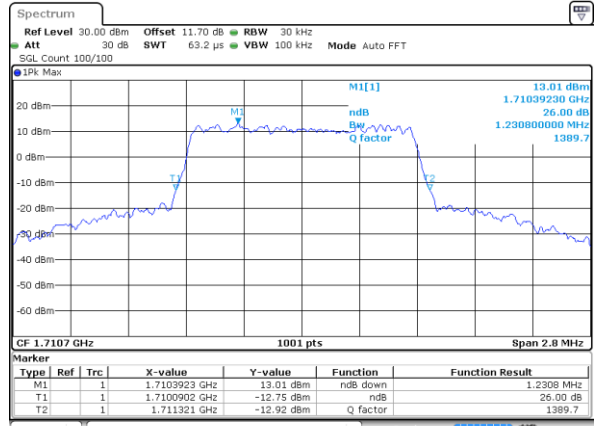
## LTE Band 4

## Lowest Channel / 1.4MHz / QPSK



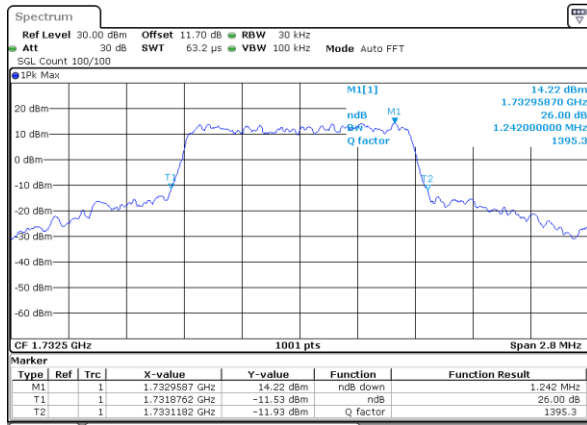
Date: 5 NOV 2019 10:36:30

## Lowest Channel / 1.4MHz / 16QAM



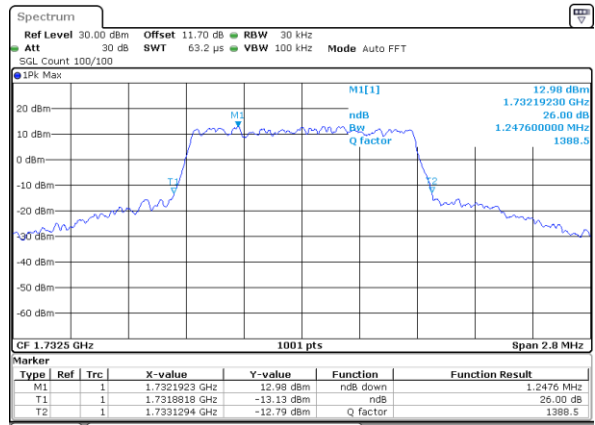
Date: 5 NOV 2019 10:36:41

## Middle Channel / 1.4MHz / QPSK



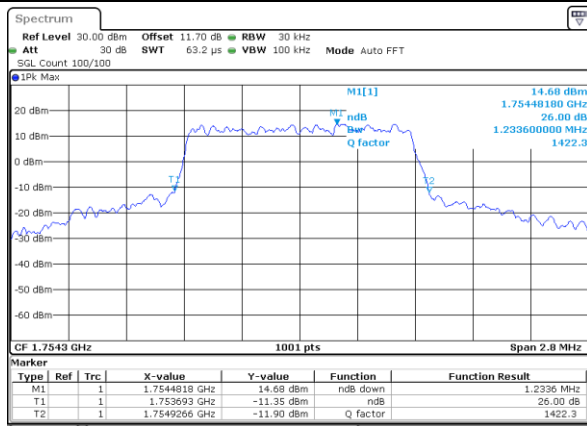
Date: 5 NOV 2019 10:37:14

## Middle Channel / 1.4MHz / 16QAM



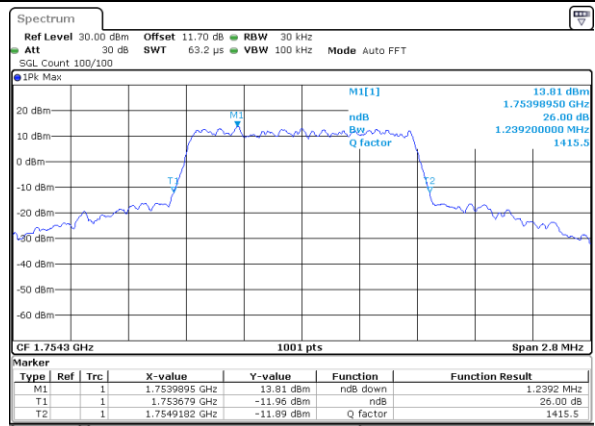
Date: 5 NOV 2019 10:37:25

## Highest Channel / 1.4MHz / QPSK



Date: 5 NOV 2019 10:37:58

## Highest Channel / 1.4MHz / 16QAM

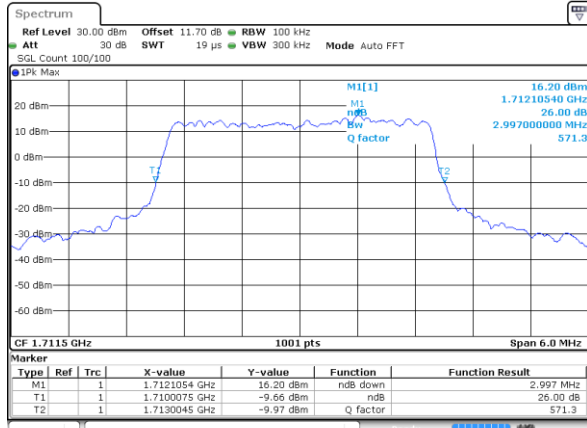


Date: 5 NOV 2019 10:38:09



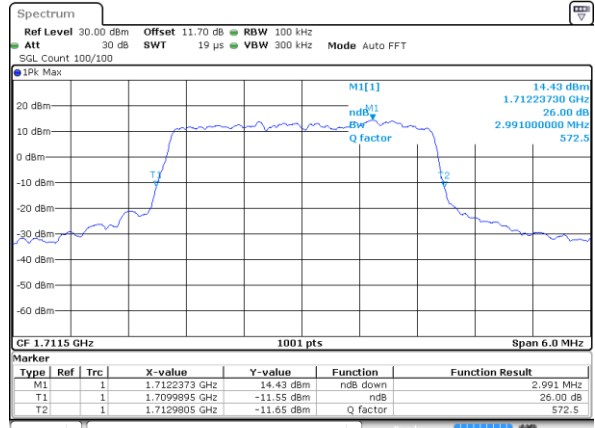
## LTE Band 4

## Lowest Channel / 3MHz / QPSK



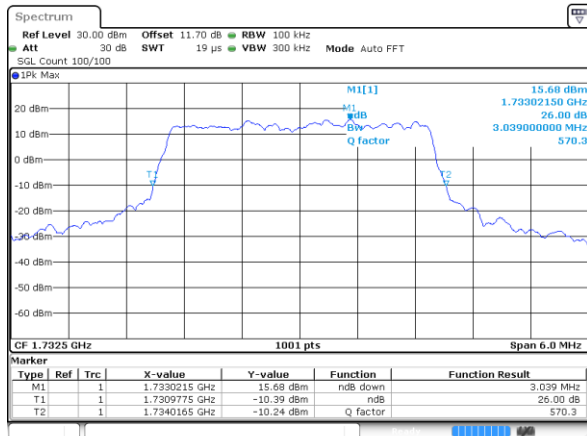
Date: 5 NOV 2019 10:39:47

## Lowest Channel / 3MHz / 16QAM



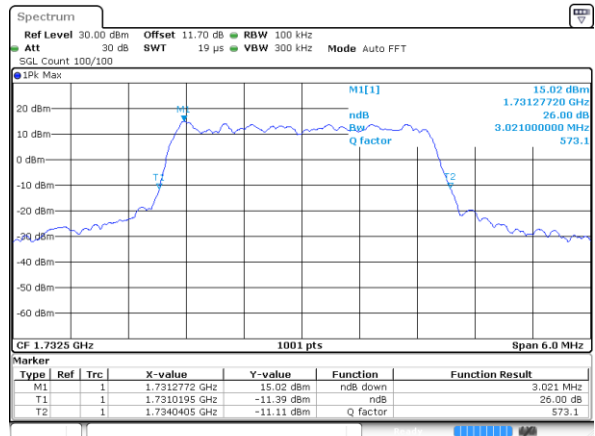
Date: 5 NOV 2019 10:39:58

## Middle Channel / 3MHz / QPSK



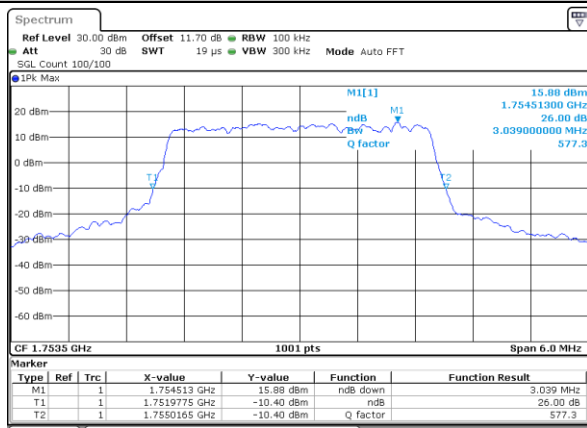
Date: 5 NOV 2019 10:40:31

## Middle Channel / 3MHz / 16QAM



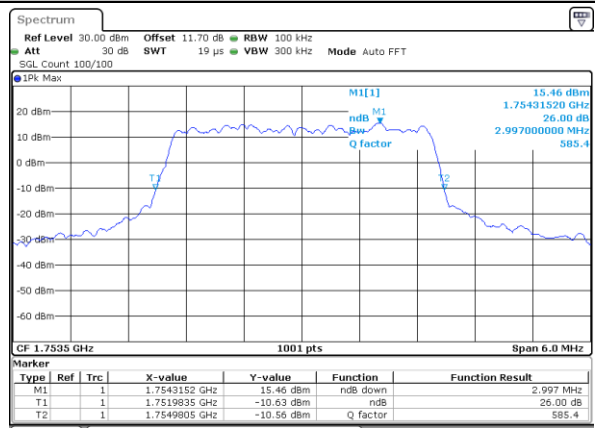
Date: 5 NOV 2019 10:40:42

## Highest Channel / 3MHz / QPSK



Date: 5 NOV 2019 10:41:15

## Highest Channel / 3MHz / 16QAM

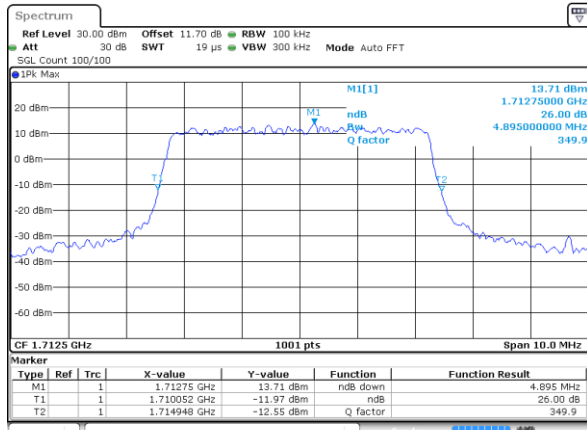


Date: 5 NOV 2019 10:41:26



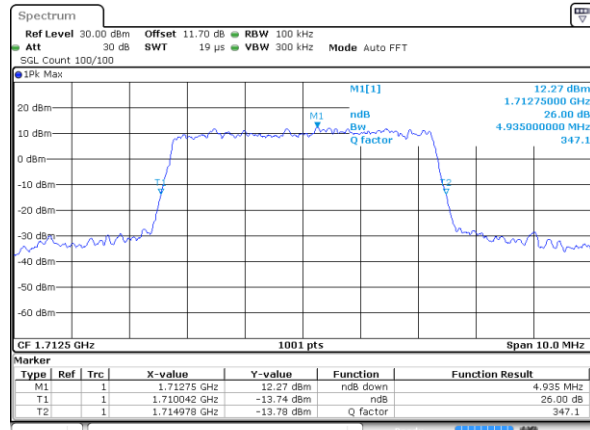
## LTE Band 4

## Lowest Channel / 5MHz / QPSK



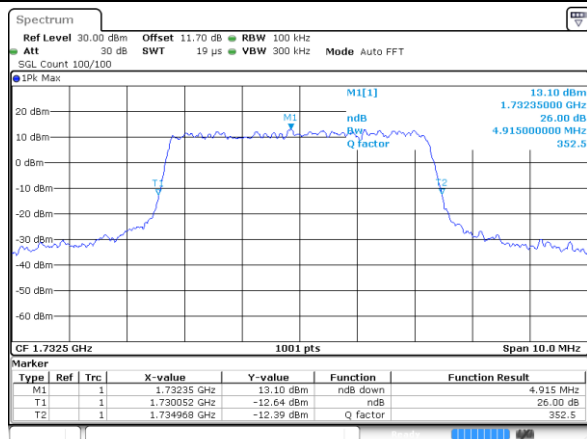
Date: 5 NOV 2019 10:44:09

## Lowest Channel / 5MHz / 16QAM



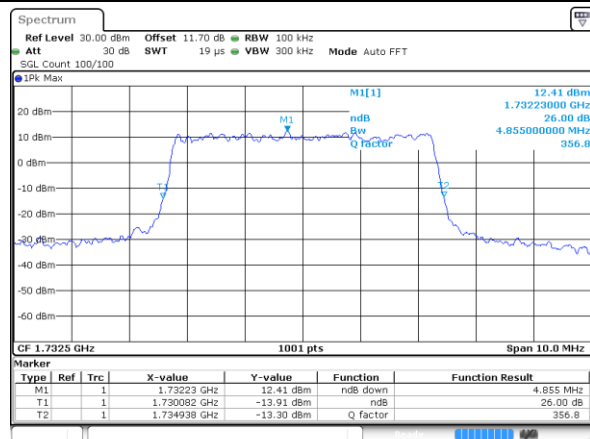
Date: 5 NOV 2019 10:44:20

## Middle Channel / 5MHz / QPSK



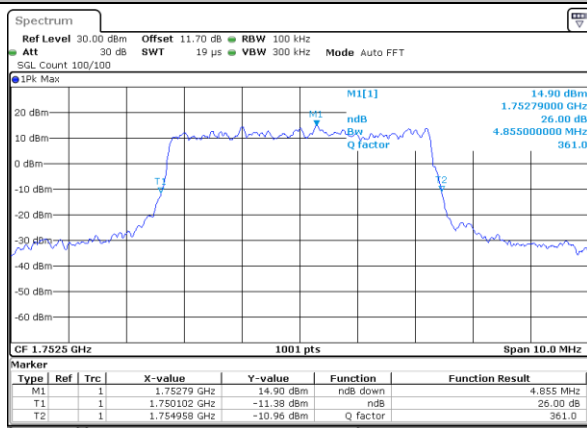
Date: 5 NOV 2019 10:44:53

## Middle Channel / 5MHz / 16QAM



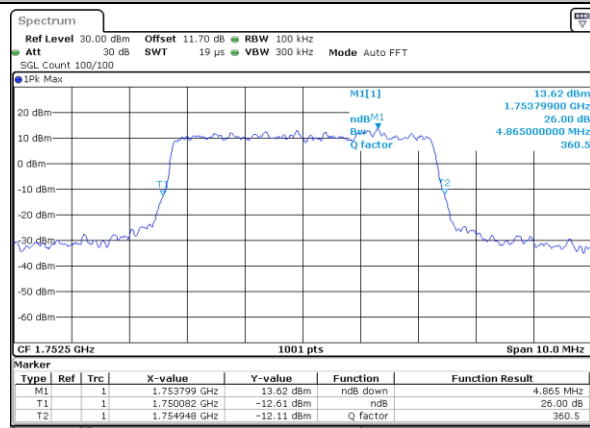
Date: 5 NOV 2019 10:45:04

## Highest Channel / 5MHz / QPSK



Date: 5 NOV 2019 10:45:37

## Highest Channel / 5MHz / 16QAM

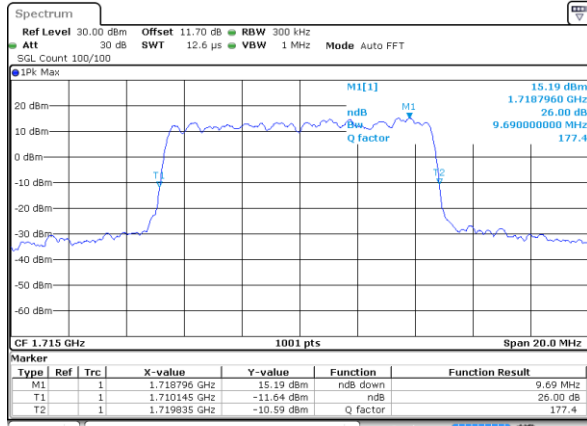


Date: 5 NOV 2019 10:45:48



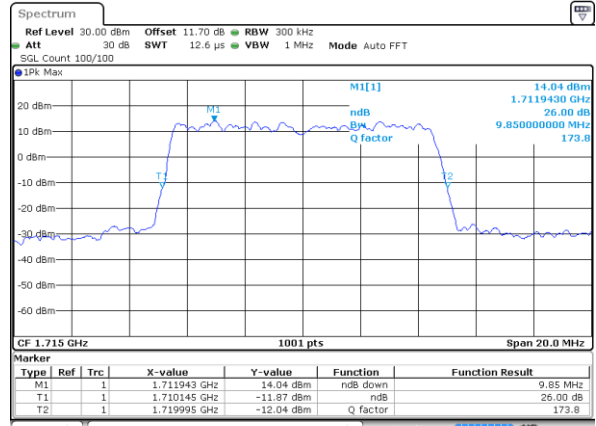
## LTE Band 4

## Lowest Channel / 10MHz / QPSK



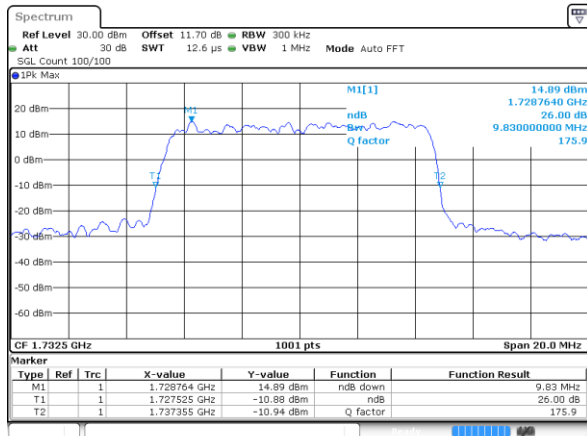
Date: 5 NOV 2019 10:46:21

## Lowest Channel / 10MHz / 16QAM



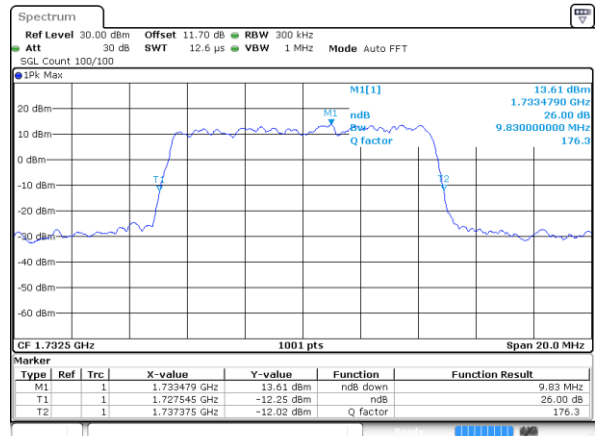
Date: 5 NOV 2019 10:46:32

## Middle Channel / 10MHz / QPSK



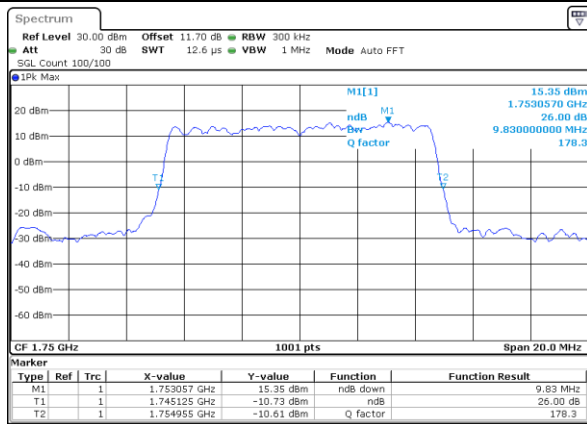
Date: 5 NOV 2019 10:47:05

## Middle Channel / 10MHz / 16QAM



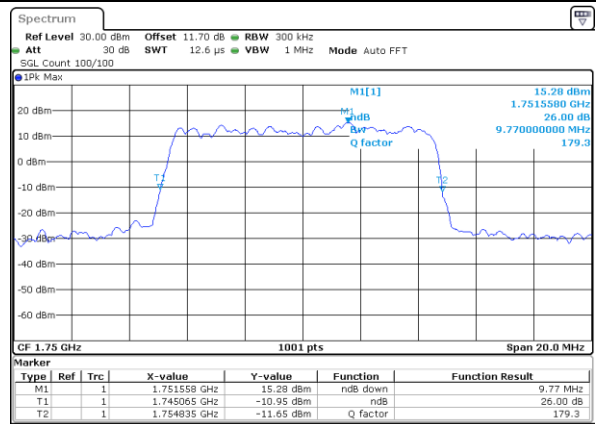
Date: 5 NOV 2019 10:47:15

## Highest Channel / 10MHz / QPSK



Date: 5 NOV 2019 10:47:48

## Highest Channel / 10MHz / 16QAM

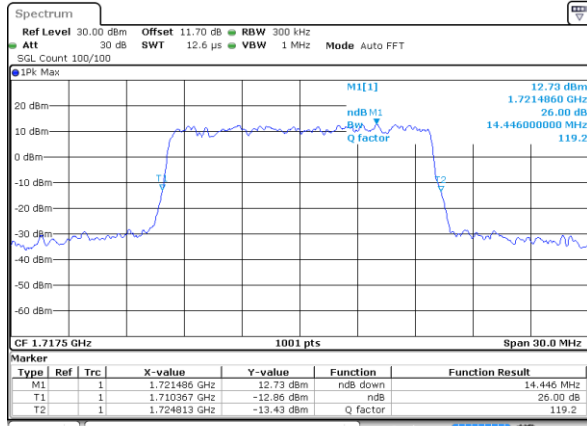


Date: 5 NOV 2019 10:47:59

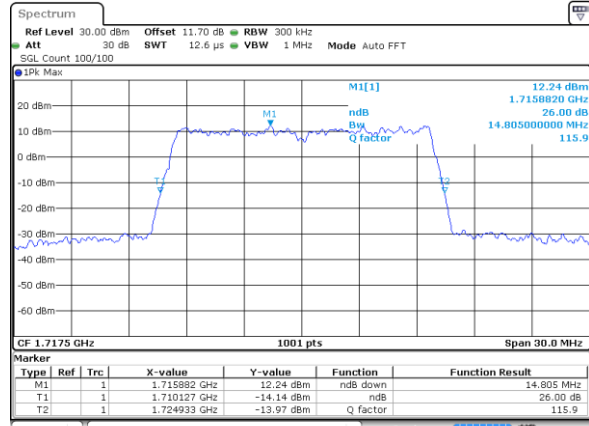


## LTE Band 4

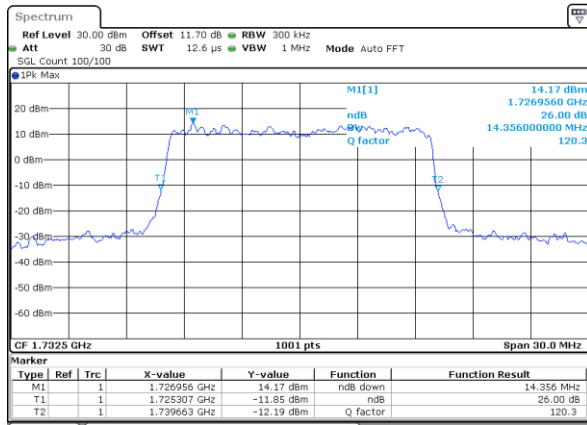
## Lowest Channel / 15MHz / QPSK



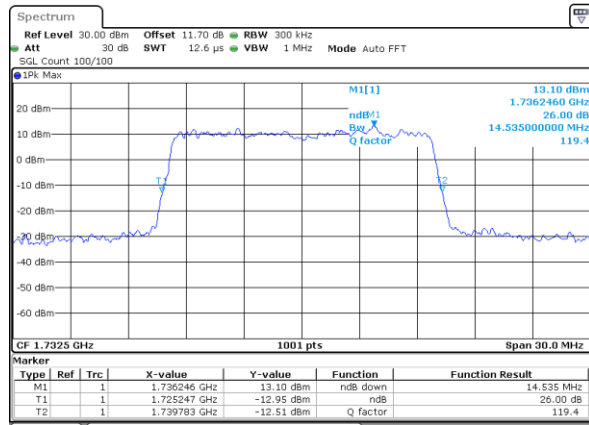
## Lowest Channel / 15MHz / 16QAM



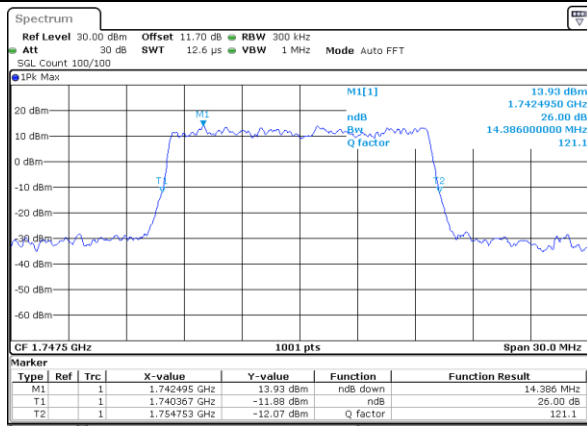
## Middle Channel / 15MHz / QPSK



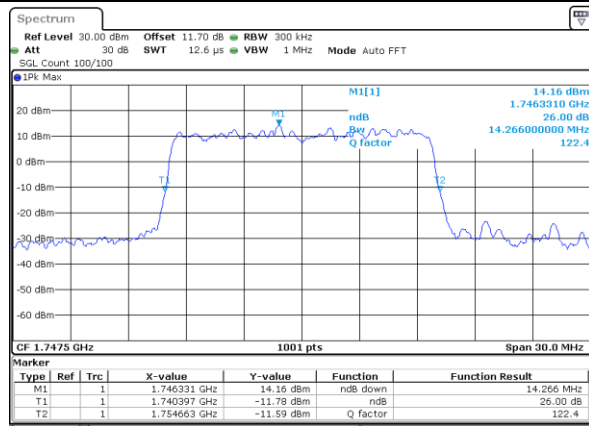
## Middle Channel / 15MHz / 16QAM



## Highest Channel / 15MHz / QPSK



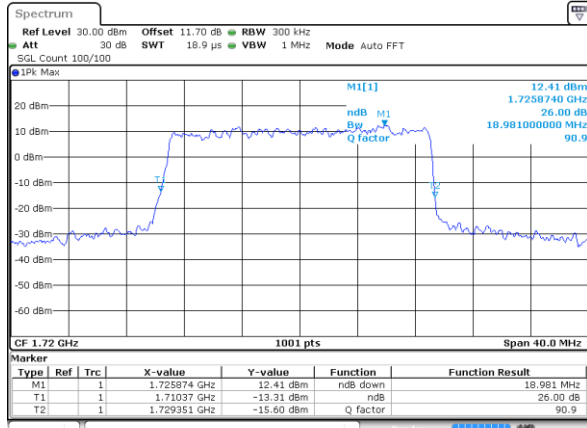
## Highest Channel / 15MHz / 16QAM



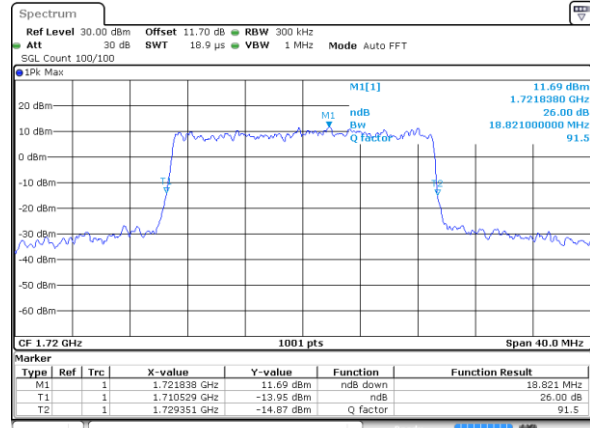


## LTE Band 4

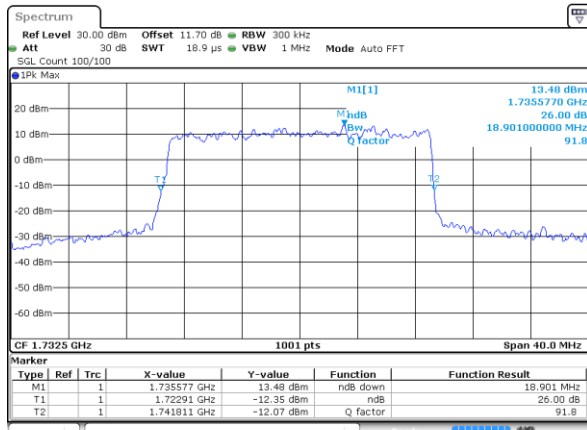
## Lowest Channel / 20MHz / QPSK



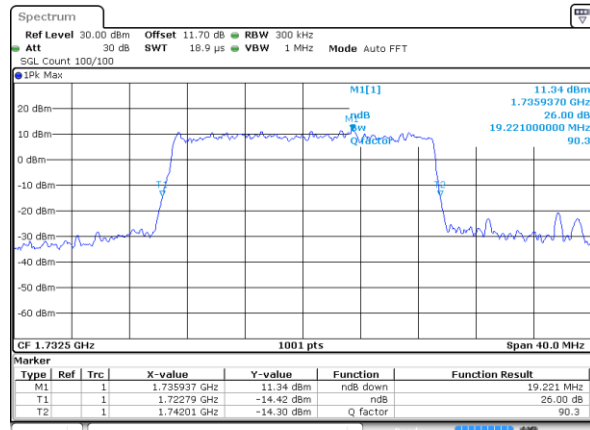
## Lowest Channel / 20MHz / 16QAM



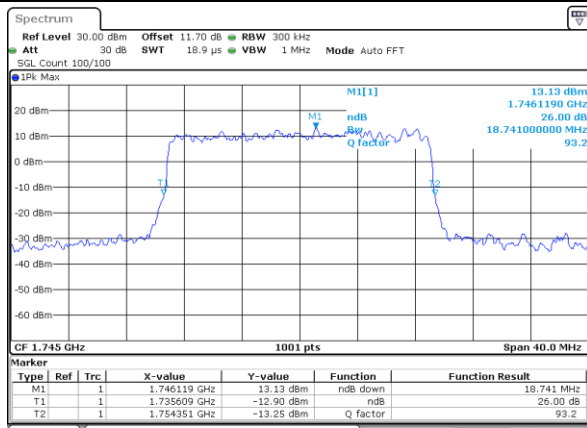
## Middle Channel / 20MHz / QPSK



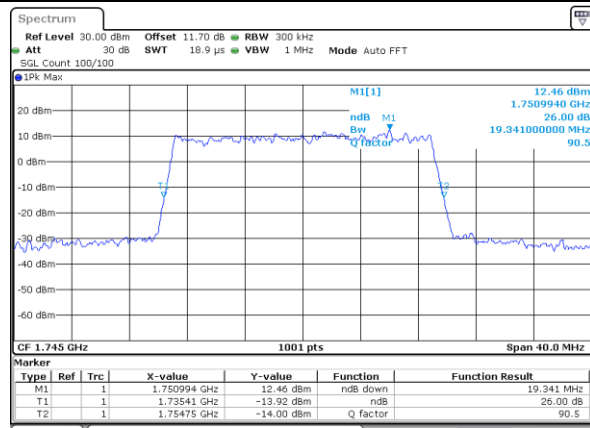
## Middle Channel / 20MHz / 16QAM



## Highest Channel / 20MHz / QPSK



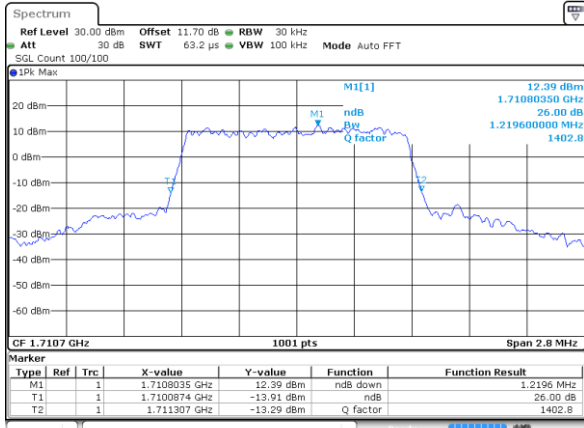
## Highest Channel / 20MHz / 16QAM





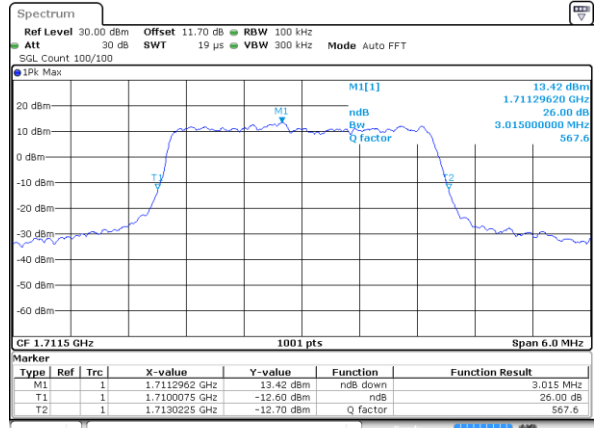
## LTE Band 4

## Lowest Channel / 1.4MHz / 64QAM



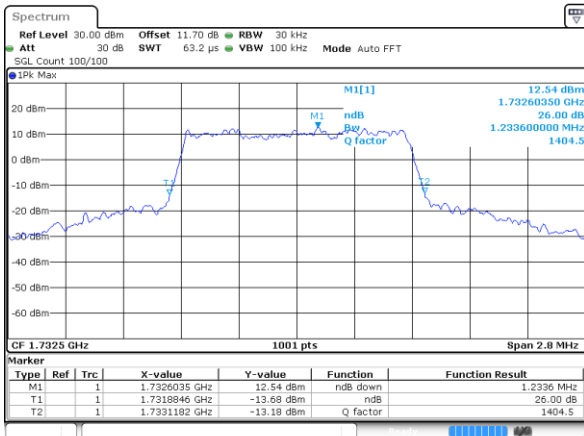
Date: 5 NOV 2019 10:38:31

## Lowest Channel / 3MHz / 64QAM



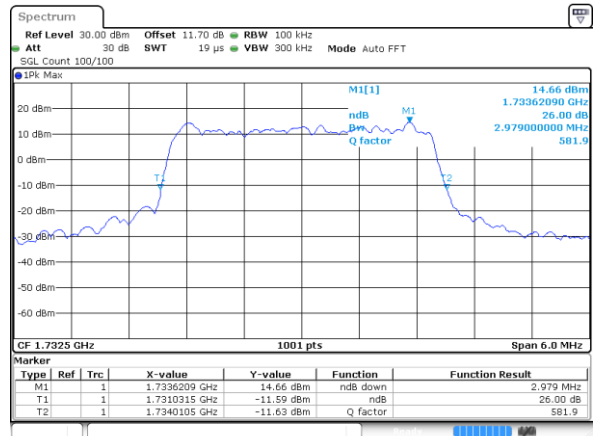
Date: 5 NOV 2019 10:41:47

## Middle Channel / 1.4MHz / 64QAM



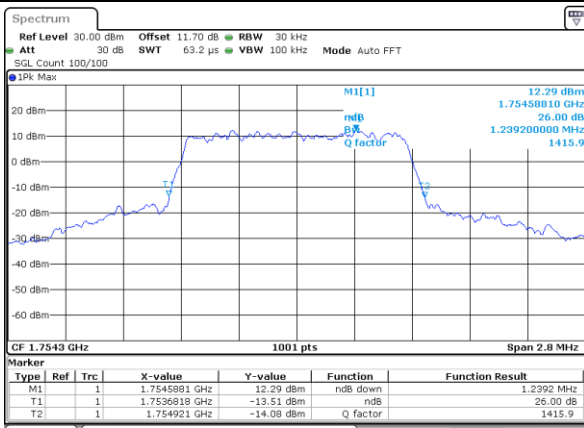
Date: 5 NOV 2019 10:38:53

## Middle Channel / 3MHz / 64QAM



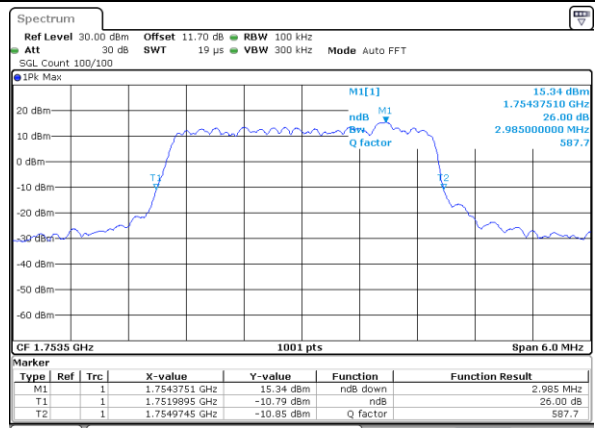
Date: 5 NOV 2019 10:42:09

## Highest Channel / 1.4MHz / 64QAM



Date: 5 NOV 2019 13:38:22

## Highest Channel / 3MHz / 64QAM

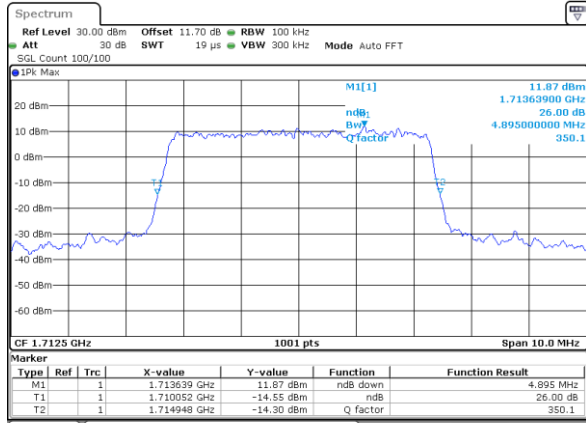


Date: 5 NOV 2019 10:42:31

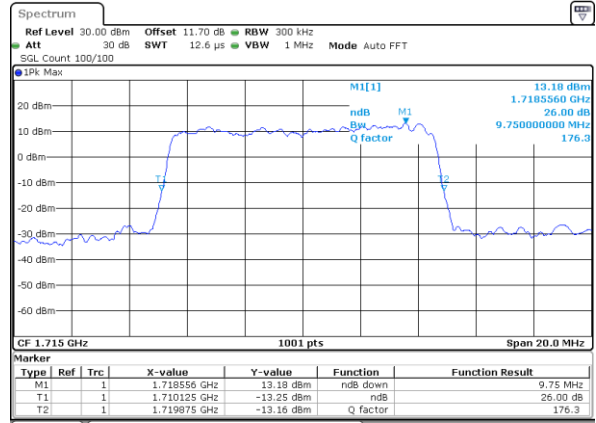


## LTE Band 4

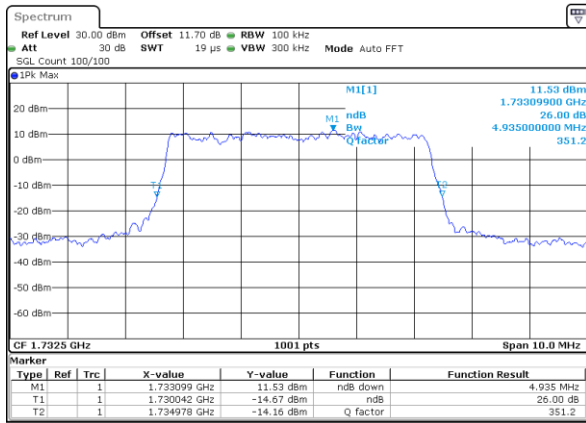
## Lowest Channel / 5MHz / 64QAM



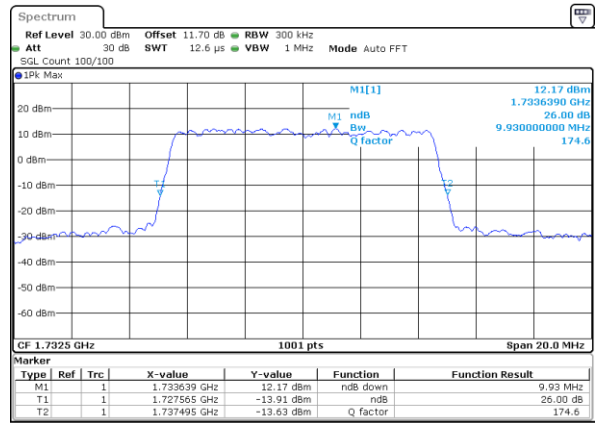
## Lowest Channel / 10MHz / 64QAM



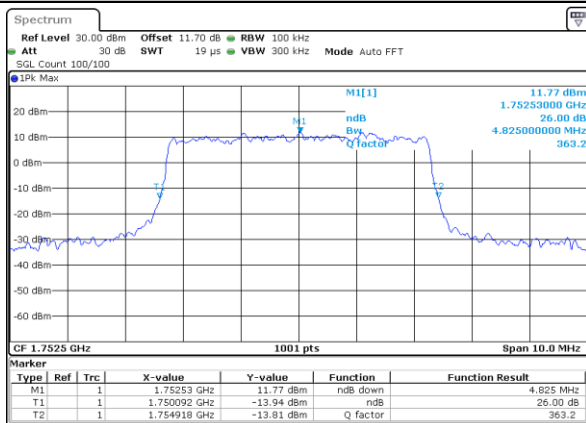
## Middle Channel / 5MHz / 64QAM



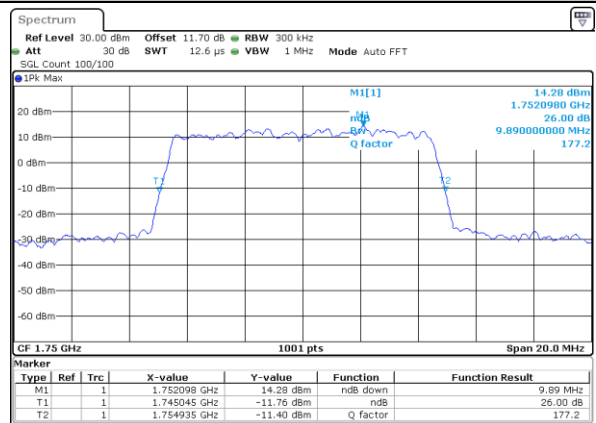
## Middle Channel / 10MHz / 64QAM



## Highest Channel / 5MHz / 64QAM



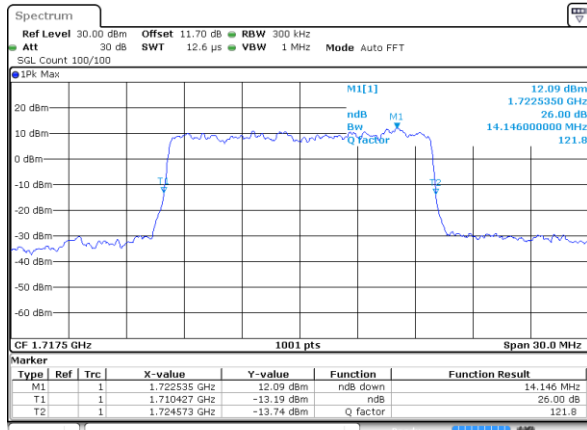
## Highest Channel / 10MHz / 64QAM





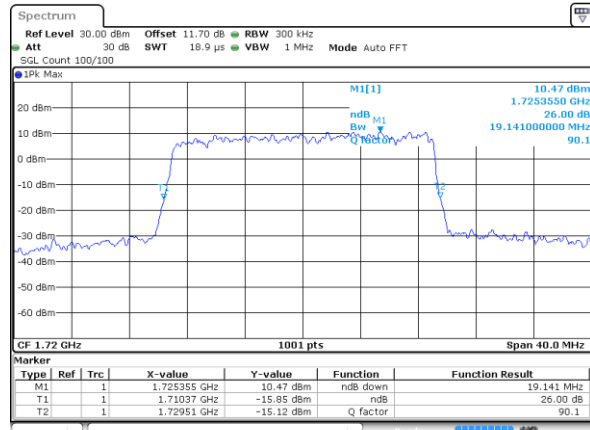
## LTE Band 4

## Lowest Channel / 15MHz / 64QAM



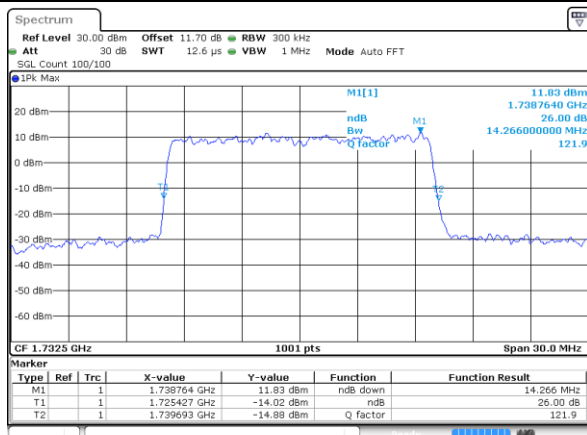
Date: 5 NOV 2019 10:51:39

## Lowest Channel / 20MHz / 64QAM



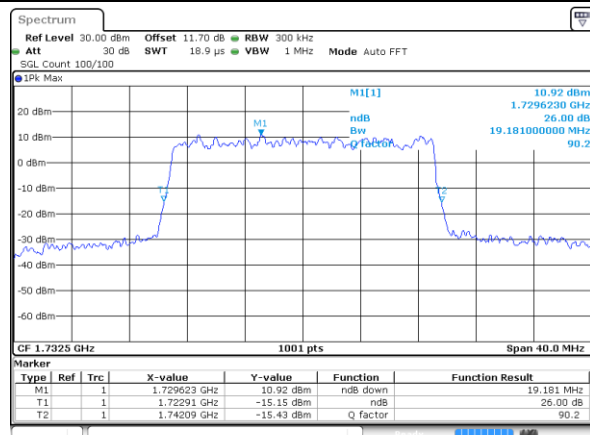
Date: 5 NOV 2019 10:54:56

## Middle Channel / 15MHz / 64QAM



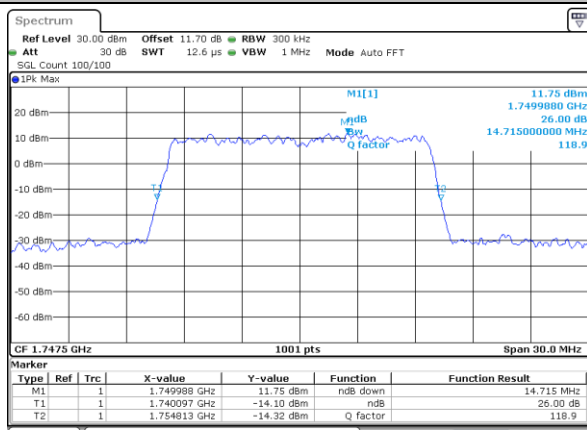
Date: 5 NOV 2019 10:52:00

## Middle Channel / 20MHz / 64QAM



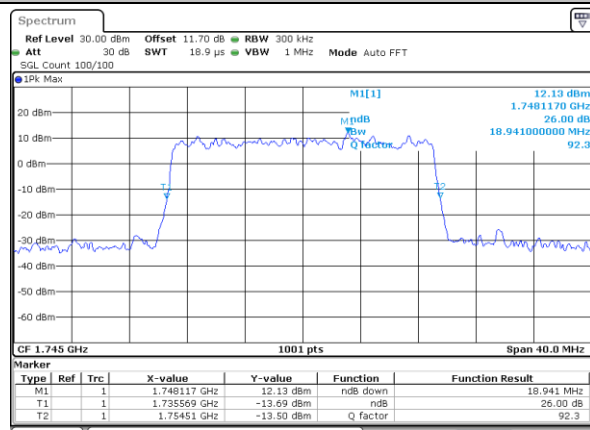
Date: 5 NOV 2019 10:55:18

## Highest Channel / 15MHz / 64QAM



Date: 5 NOV 2019 10:52:22

## Highest Channel / 20MHz / 64QAM



Date: 5 NOV 2019 10:55:39