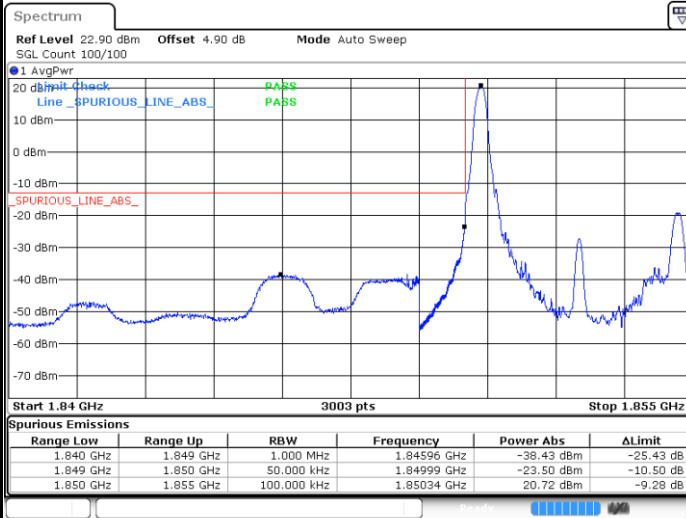


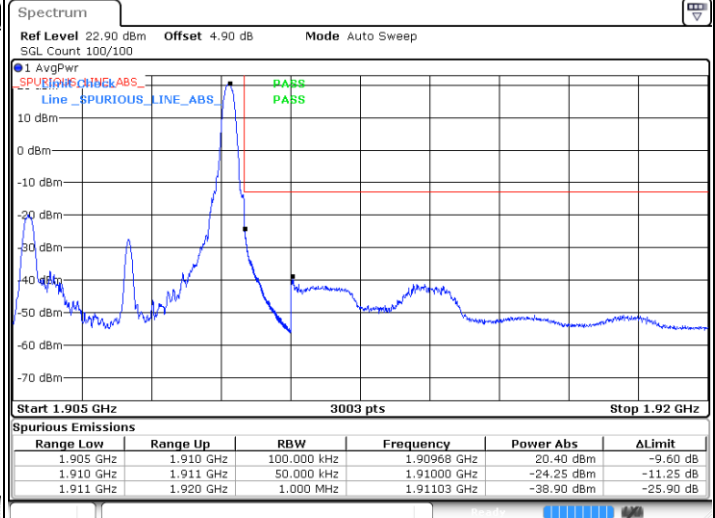


## LTE Band 2 / 5MHz / QPSK

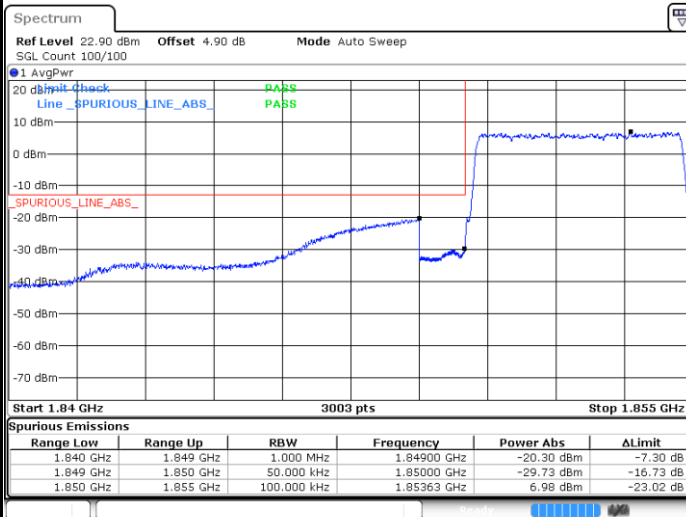
## Lowest Band Edge / 1 RB



## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



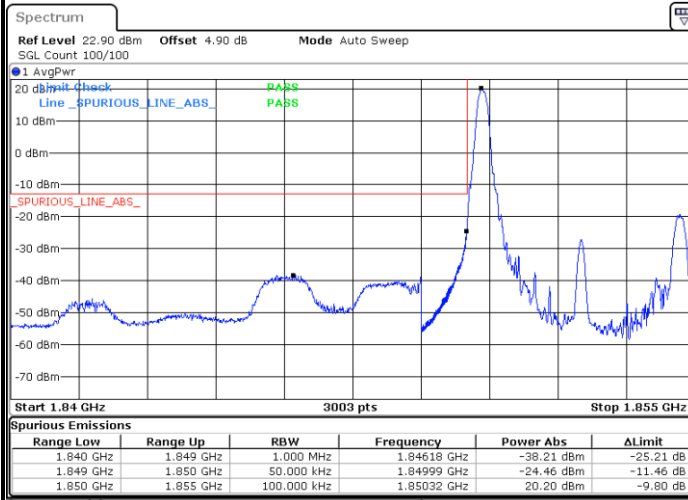
## Highest Band Edge / Full RB



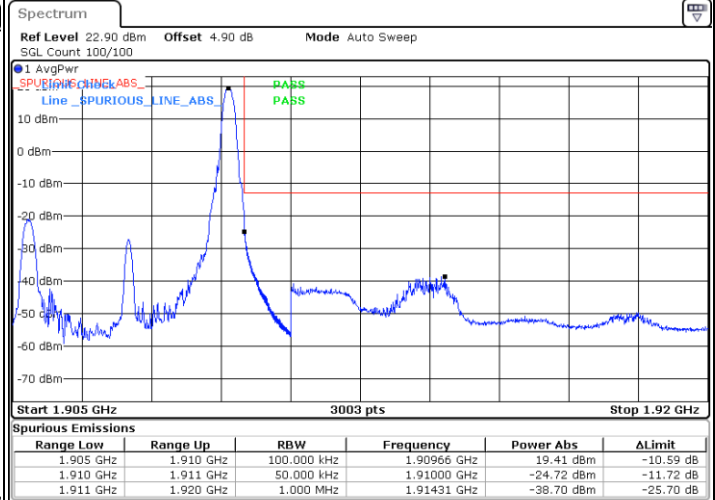


## LTE Band 2 / 5MHz / 16QAM

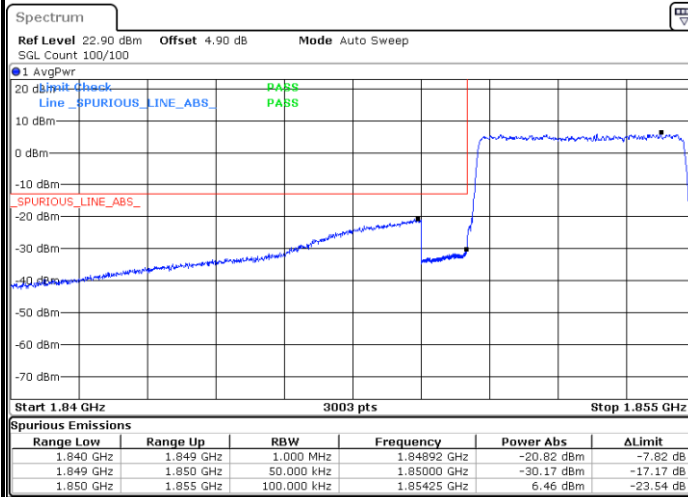
## Lowest Band Edge / 1RB



## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



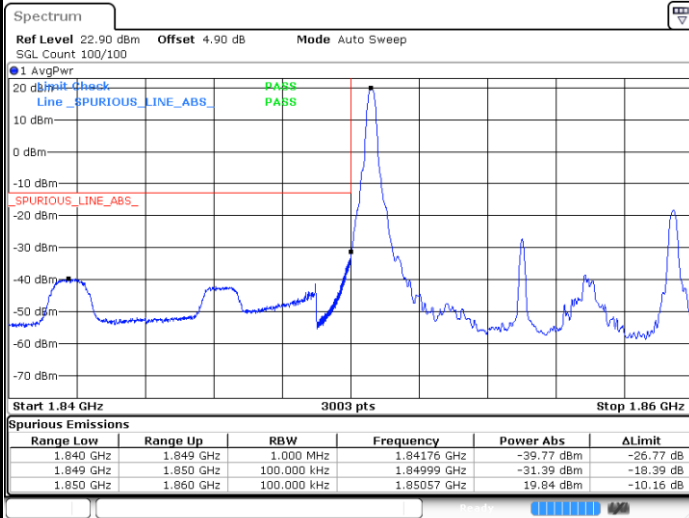
## Highest Band Edge / Full RB



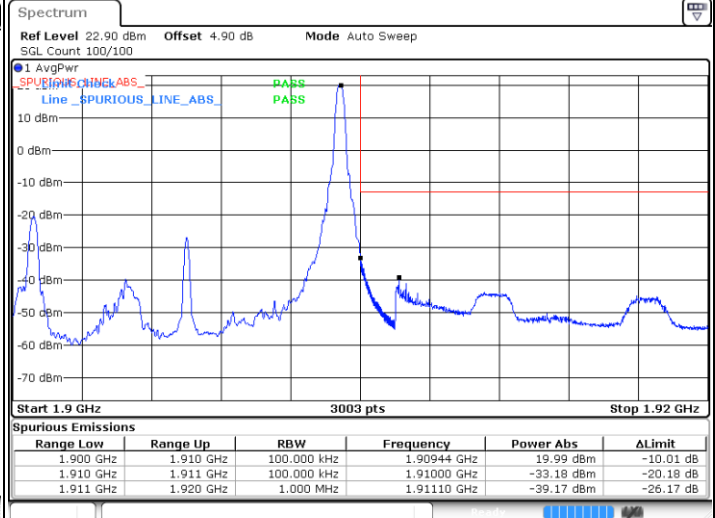


## LTE Band 2 / 10MHz / QPSK

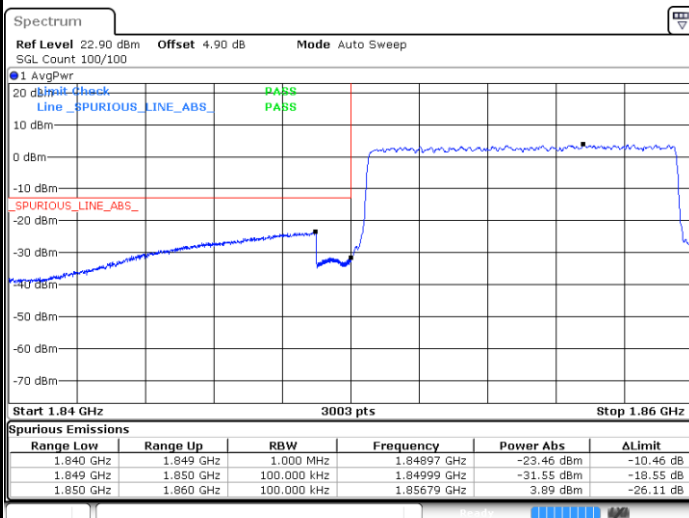
## Lowest Band Edge / 1 RB



## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



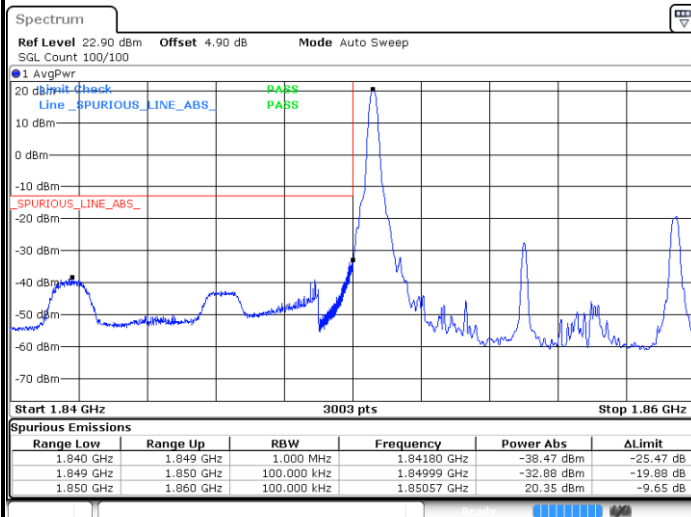
## Highest Band Edge / Full RB



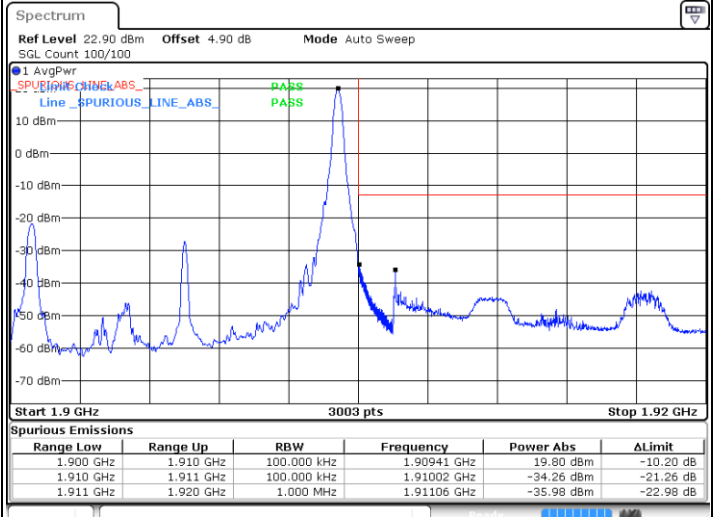


## LTE Band 2 / 10MHz / 16QAM

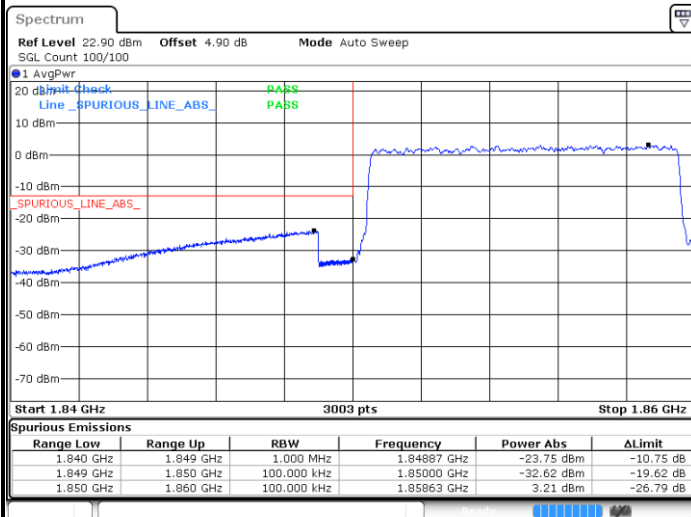
## Lowest Band Edge / 1 RB



## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



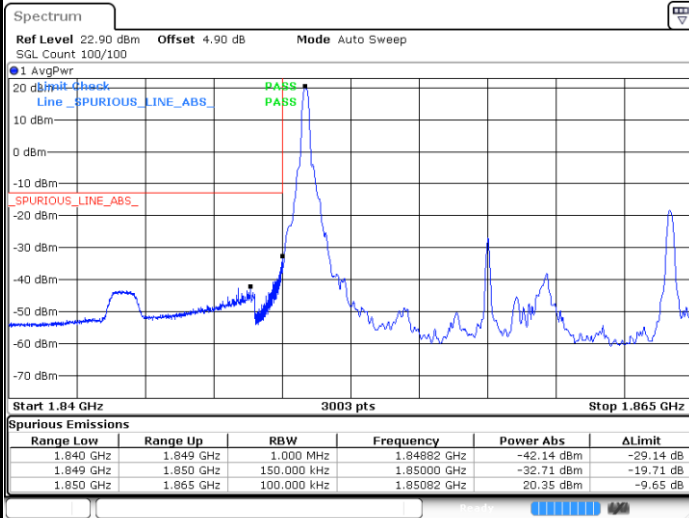
## Highest Band Edge / Full RB



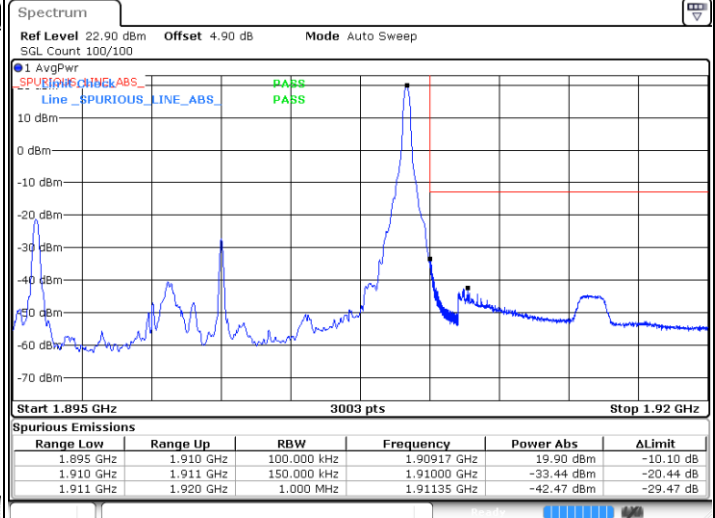


## LTE Band 2 / 15MHz / QPSK

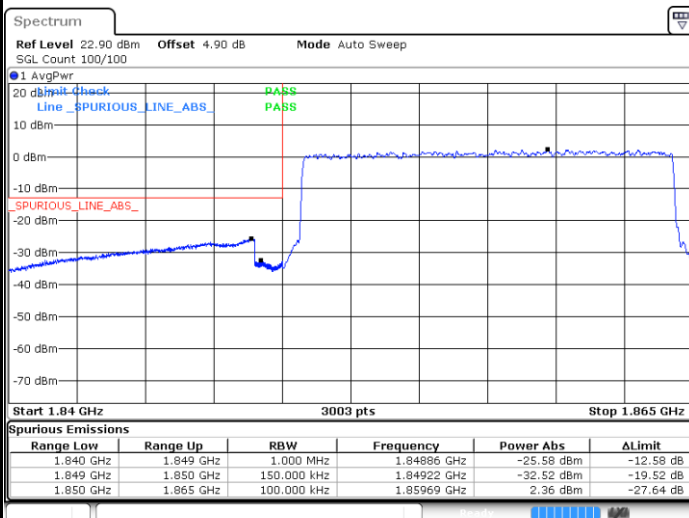
## Lowest Band Edge / 1 RB



## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



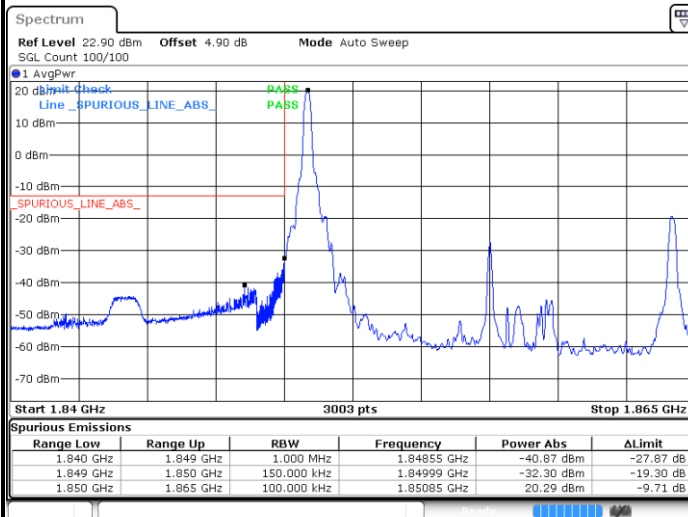
## Highest Band Edge / Full RB



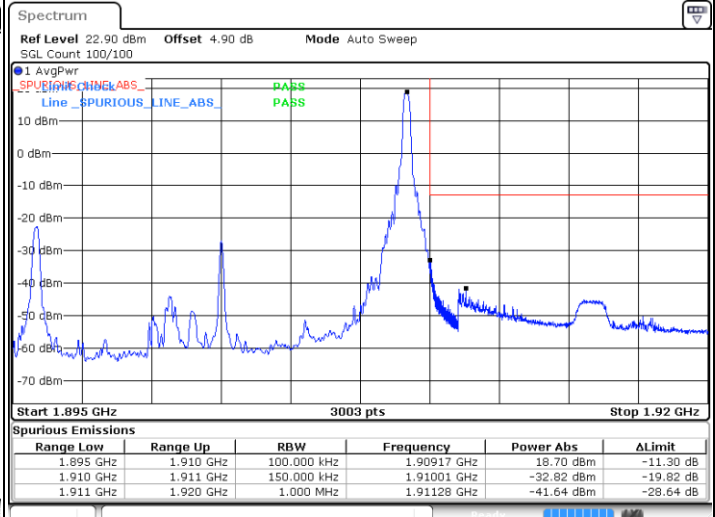


## LTE Band 2 / 15MHz / 16QAM

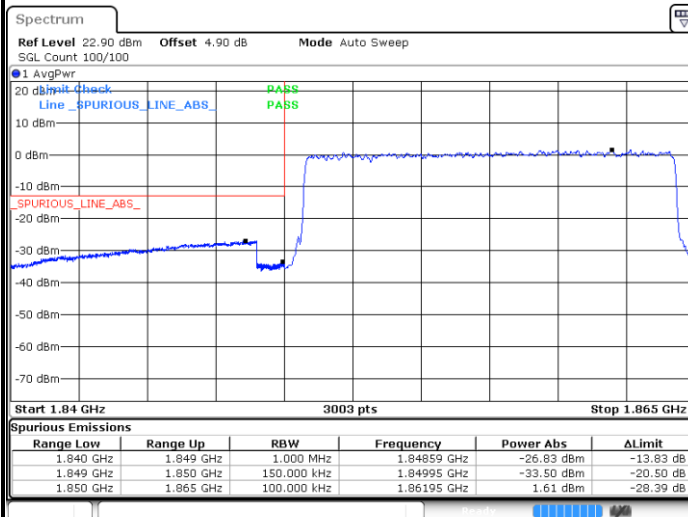
## Lowest Band Edge / 1 RB



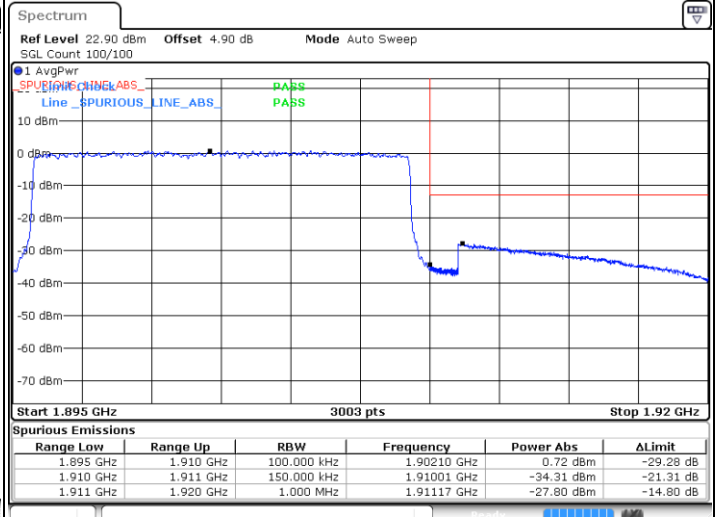
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



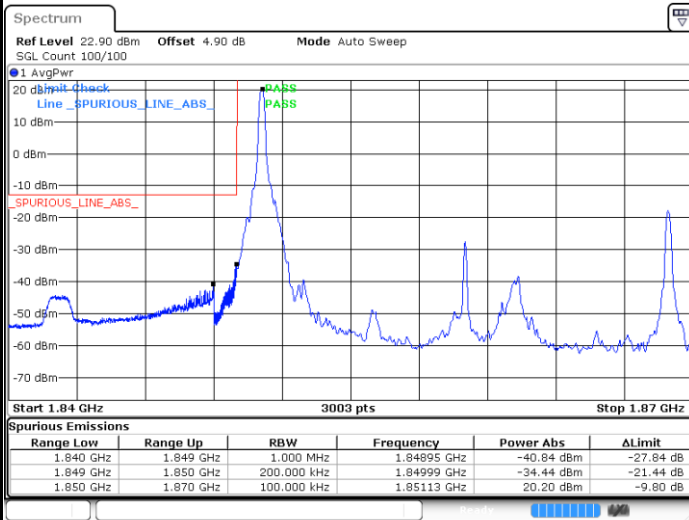
## Highest Band Edge / Full RB



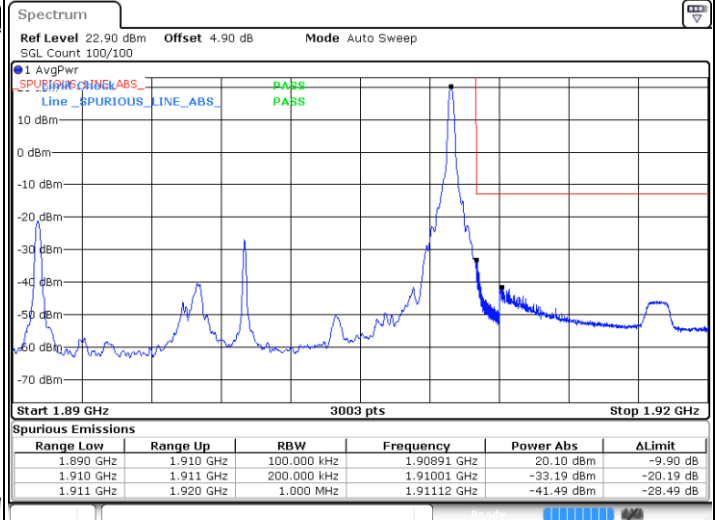


## LTE Band 2 / 20MHz / QPSK

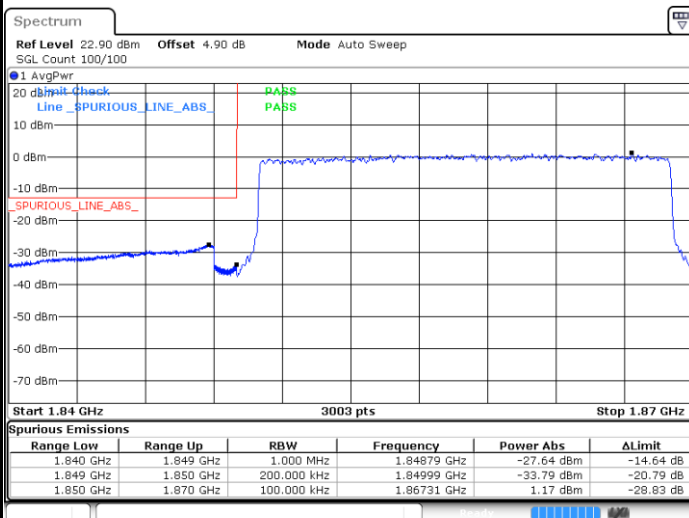
## Lowest Band Edge / 1 RB



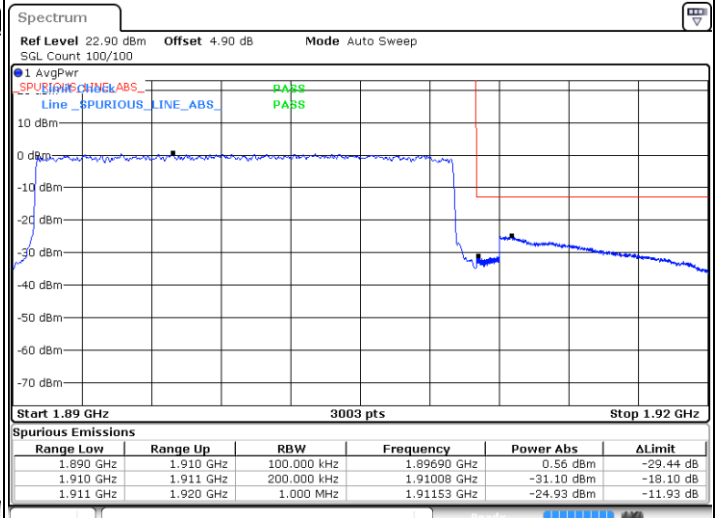
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



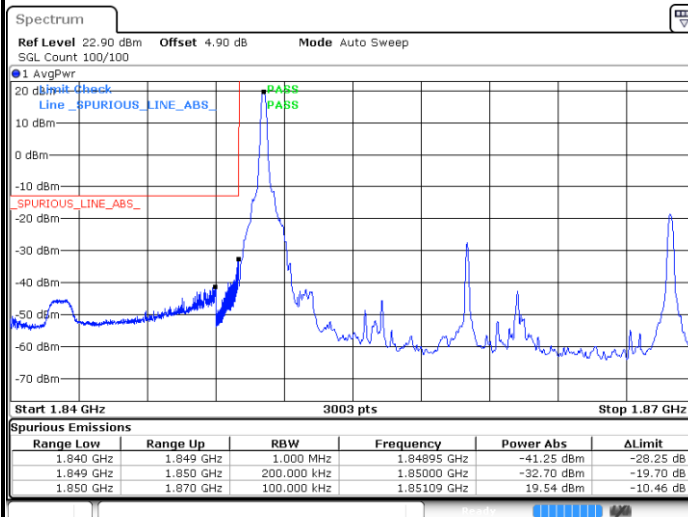
## Highest Band Edge / Full RB



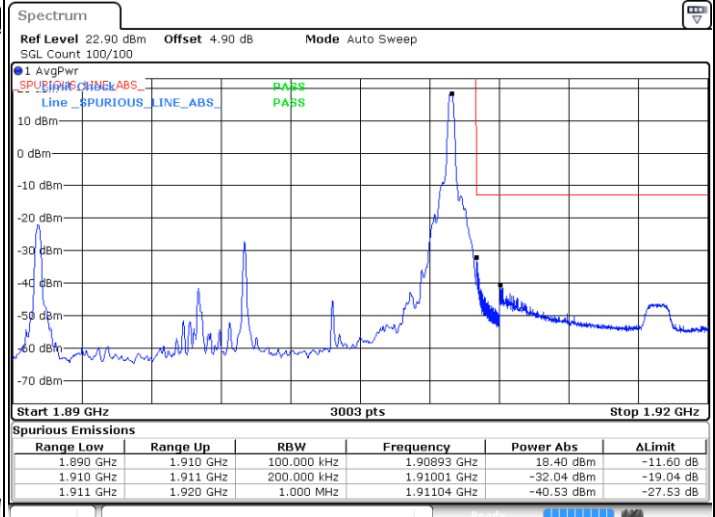


## LTE Band 2 / 20MHz / 16QAM

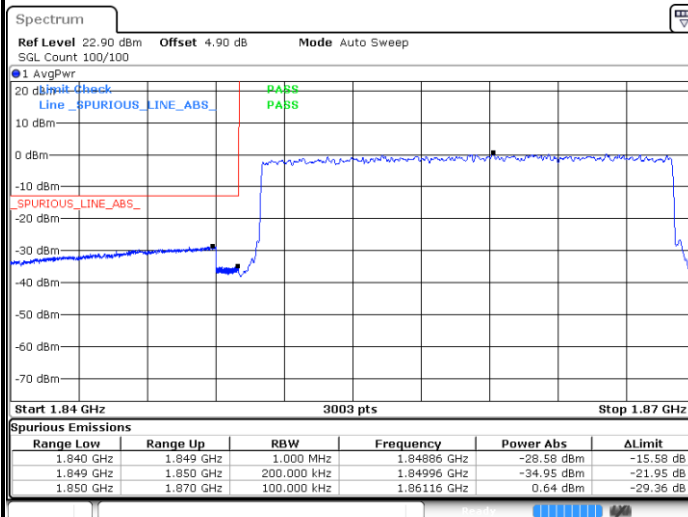
## Lowest Band Edge / 1 RB



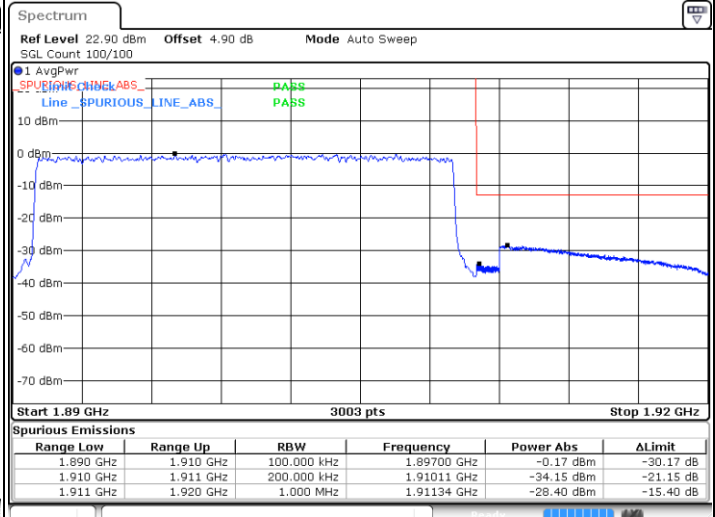
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



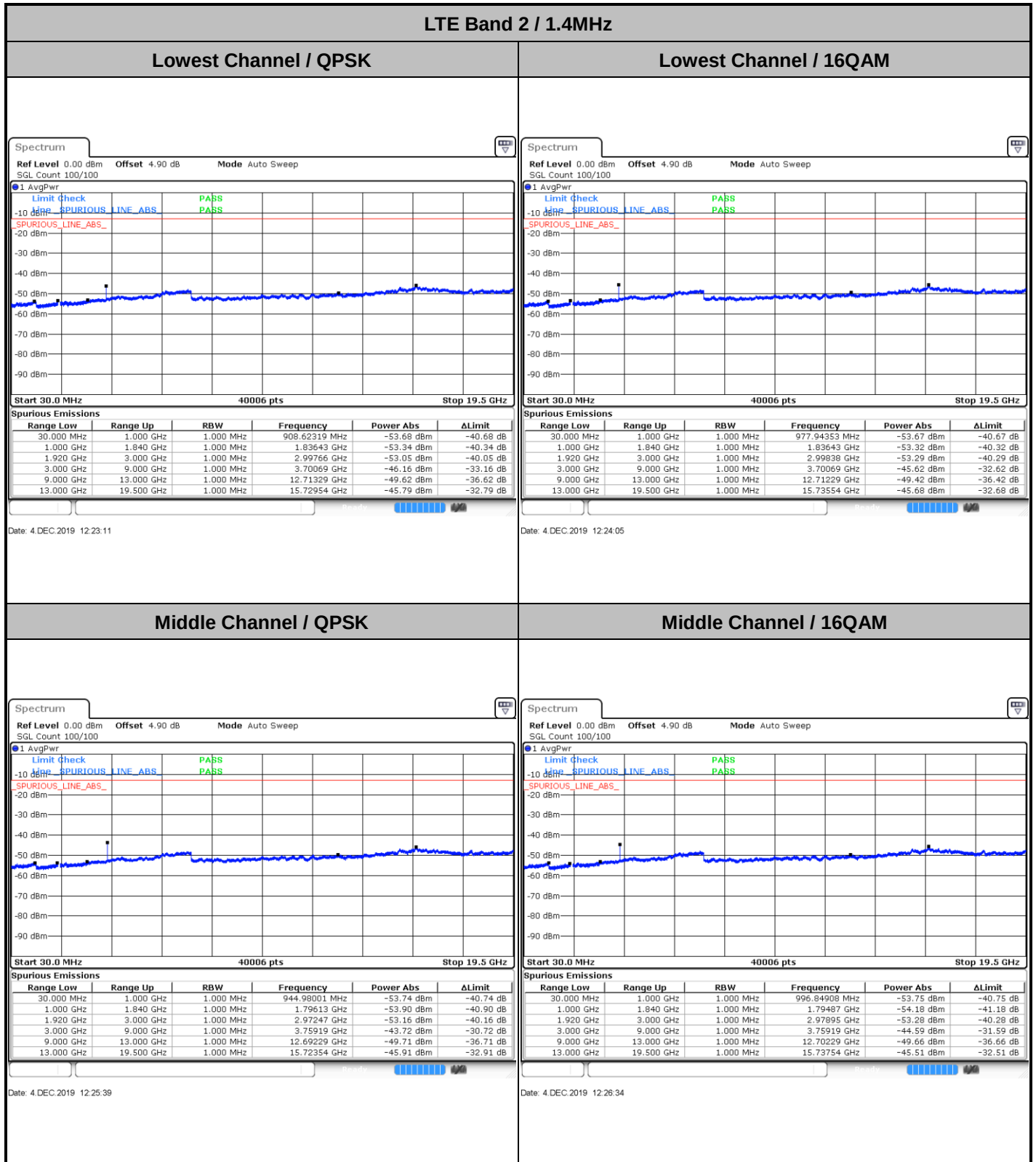
## Highest Band Edge / Full RB







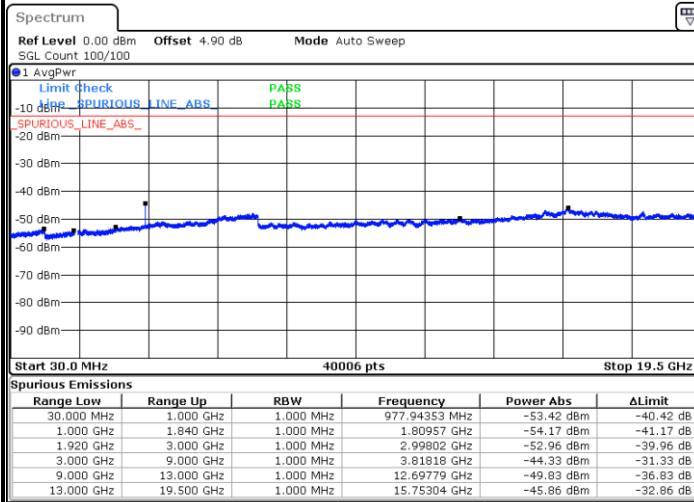
## Conducted Spurious Emission





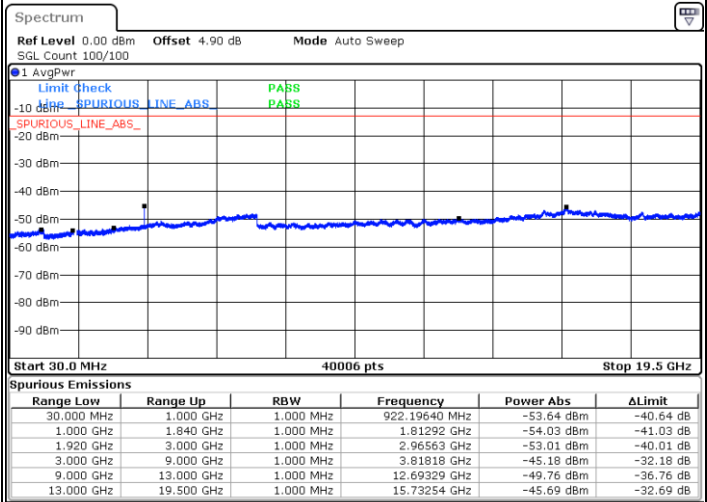
## LTE Band 2 / 1.4MHz

## Highest Channel / QPSK



Date: 4 DEC. 2019 12:32:37

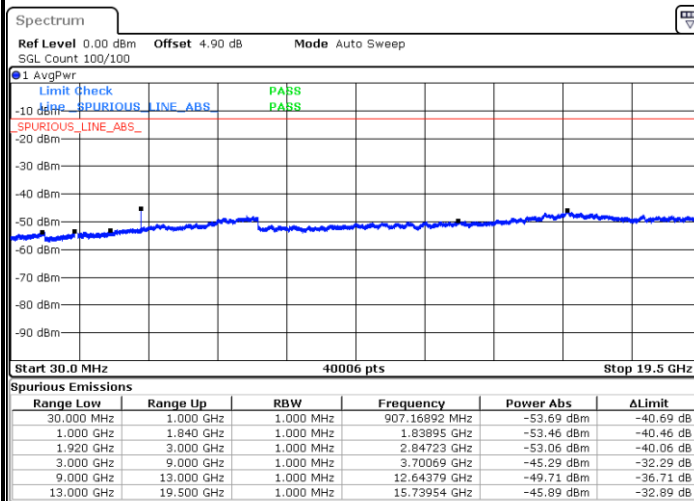
## Highest Channel / 16QAM



Date: 4 DEC. 2019 12:33:32

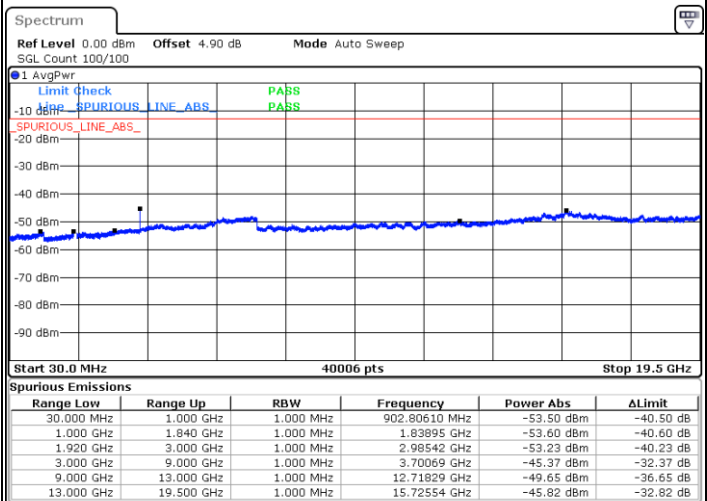
## LTE Band 2 / 3MHz

## Lowest Channel / QPSK



Date: 4 DEC. 2019 12:39:35

## Lowest Channel / 16QAM

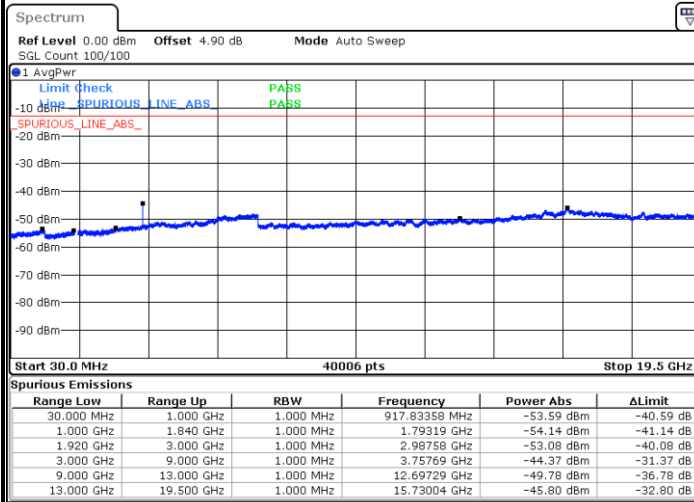


Date: 4 DEC. 2019 12:40:29



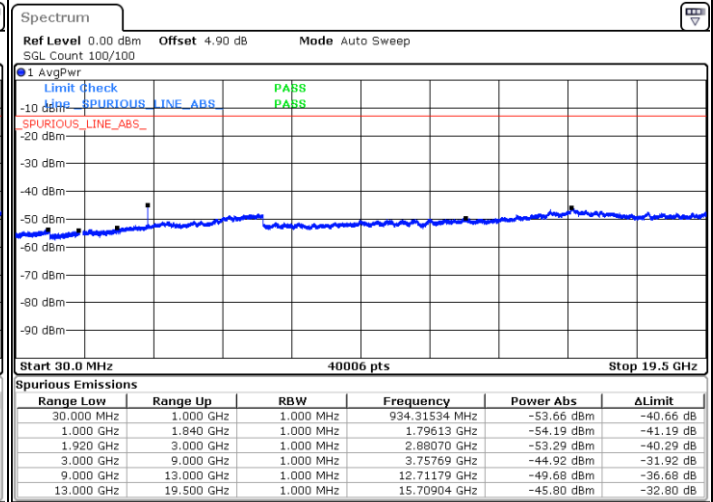
## LTE Band 2 / 3MHz

## Middle Channel / QPSK



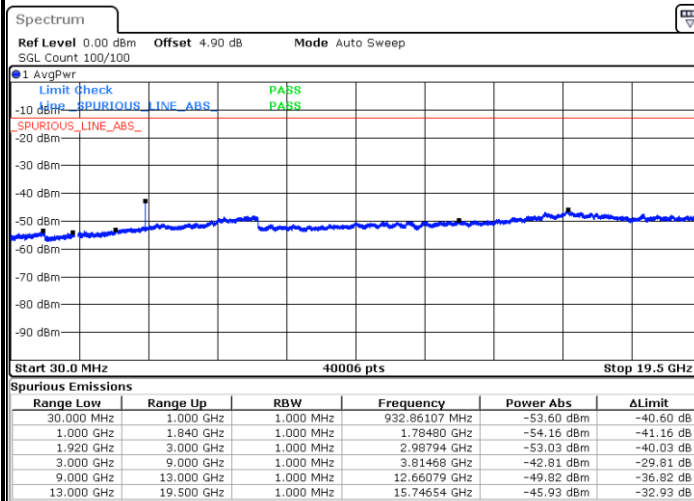
Date: 4 DEC. 2019 12:42:03

## Middle Channel / 16QAM



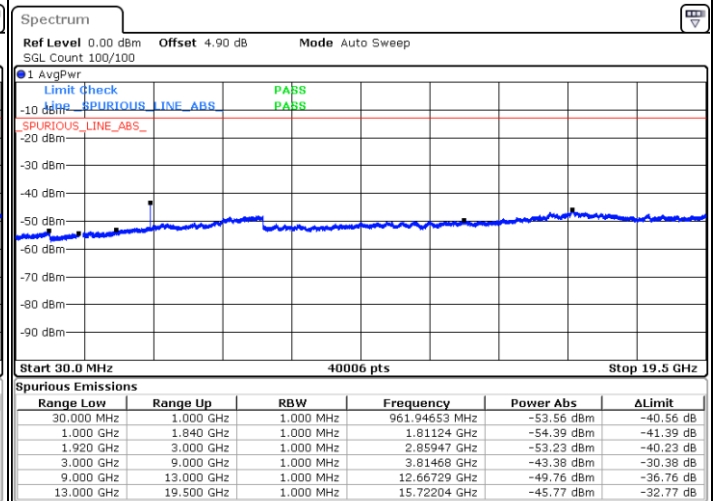
Date: 4 DEC. 2019 12:42:58

## Highest Channel / QPSK



Date: 4 DEC. 2019 12:49:01

## Highest Channel / 16QAM

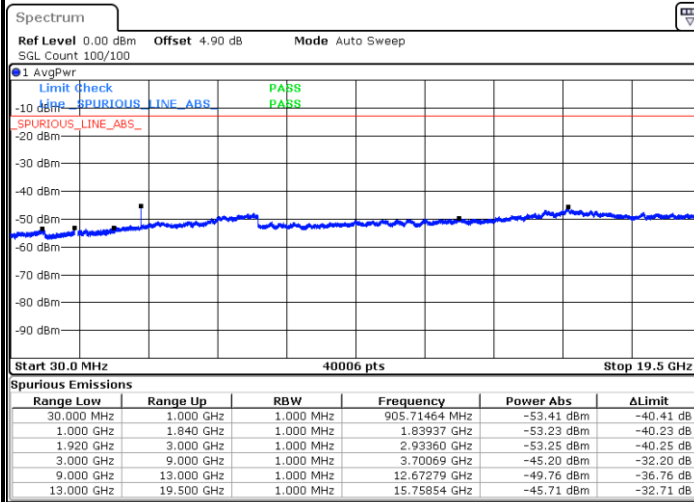


Date: 4 DEC. 2019 12:49:56



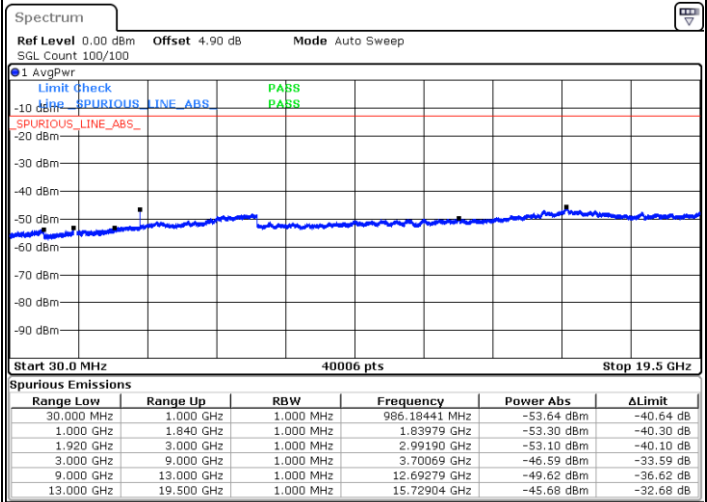
## LTE Band 2 / 5MHz

## Lowest Channel / QPSK



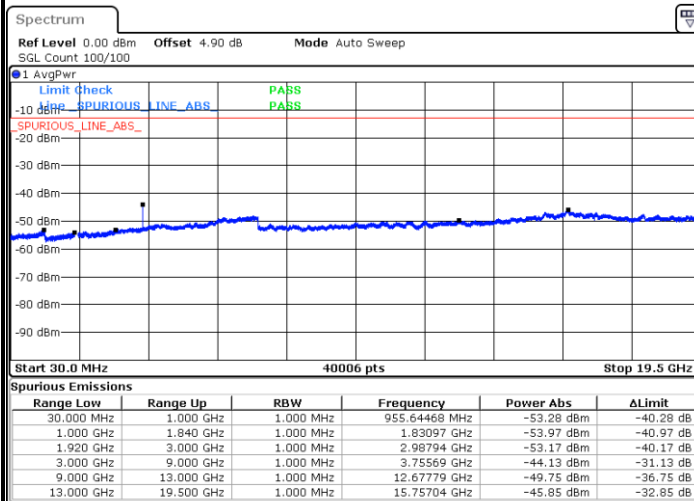
Date: 4 DEC. 2019 12:55:59

## Lowest Channel / 16QAM



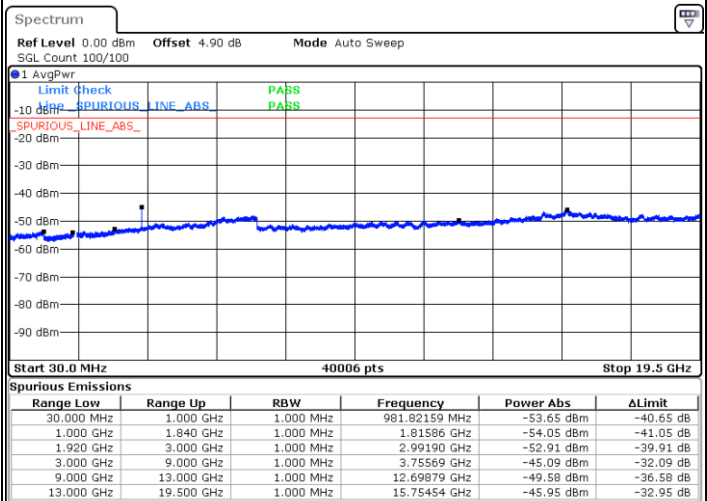
Date: 4 DEC. 2019 12:56:53

## Middle Channel / QPSK



Date: 4 DEC. 2019 12:58:27

## Middle Channel / 16QAM

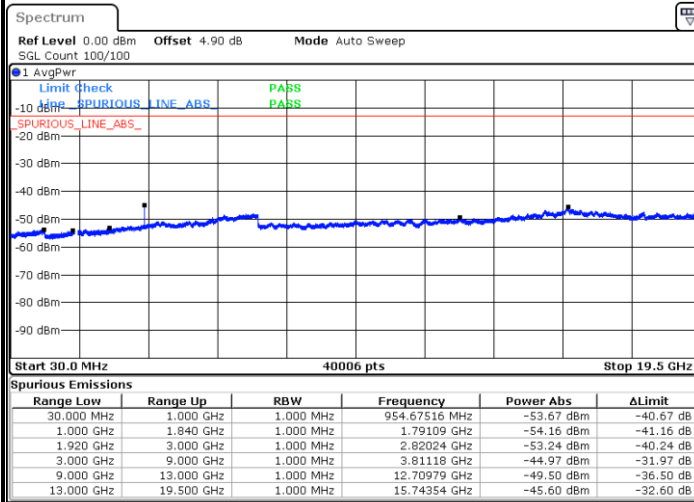


Date: 4 DEC. 2019 12:59:22



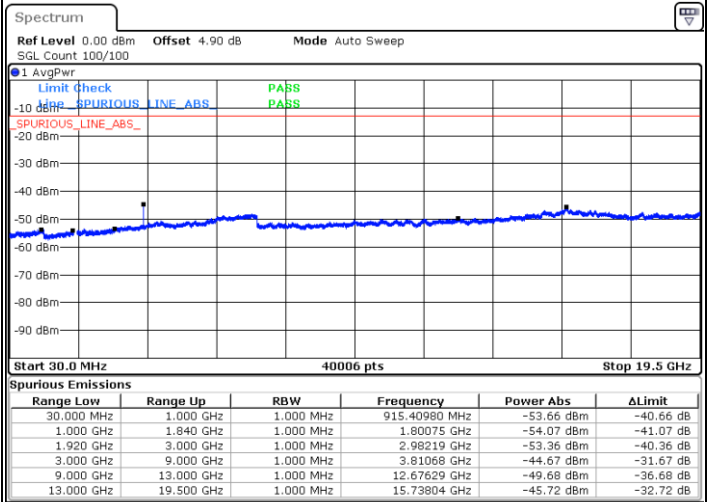
## LTE Band 2 / 5MHz

## Highest Channel / QPSK



Date: 4 DEC. 2019 13:05:25

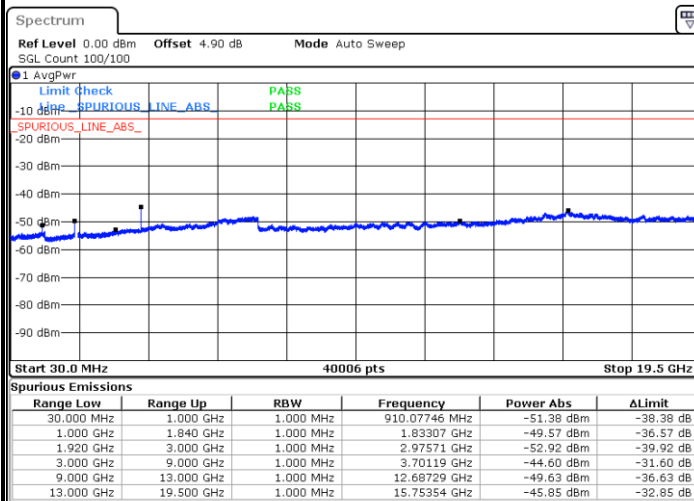
## Highest Channel / 16QAM



Date: 4 DEC. 2019 13:06:19

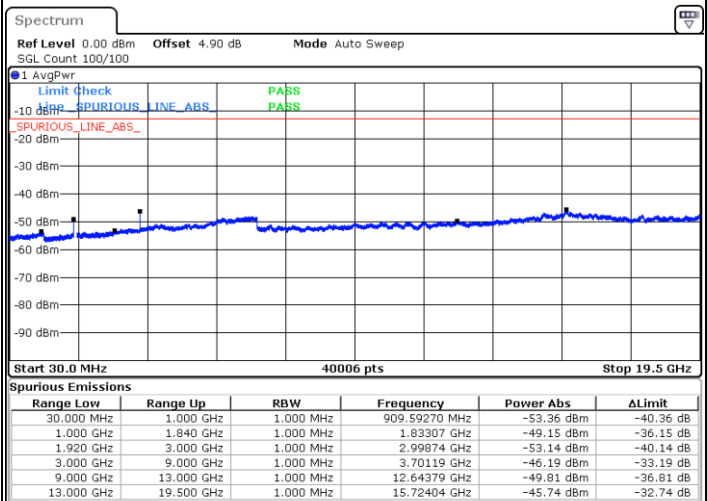
## LTE Band 2 / 10MHz

## Lowest Channel / QPSK



Date: 4 DEC. 2019 13:12:23

## Lowest Channel / 16QAM

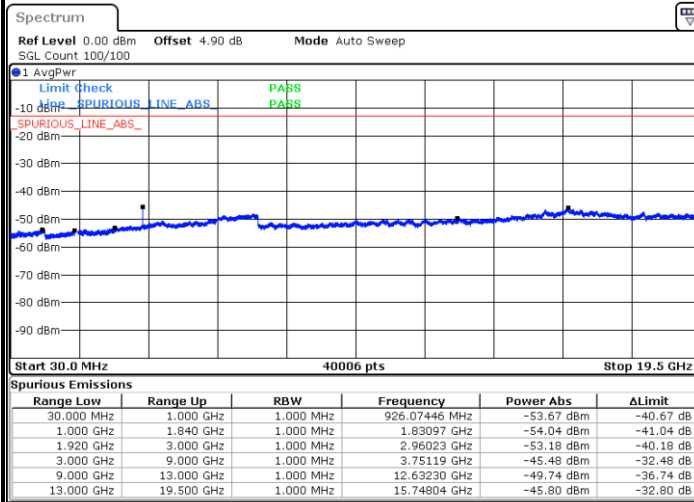


Date: 4 DEC. 2019 13:13:17



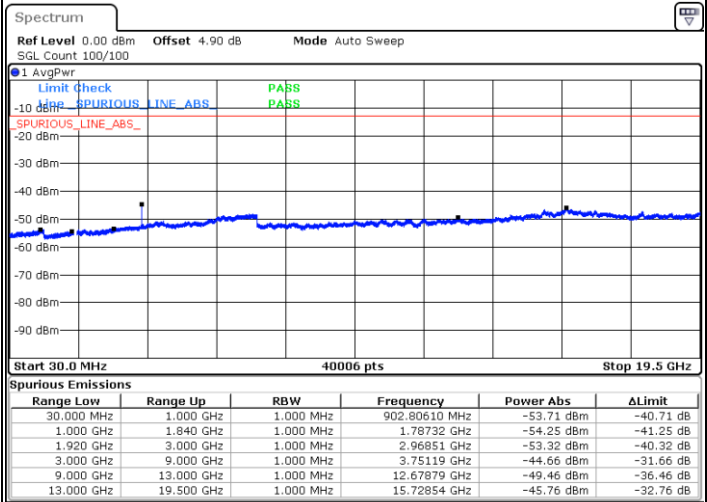
## LTE Band 2 / 10MHz

## Middle Channel / QPSK



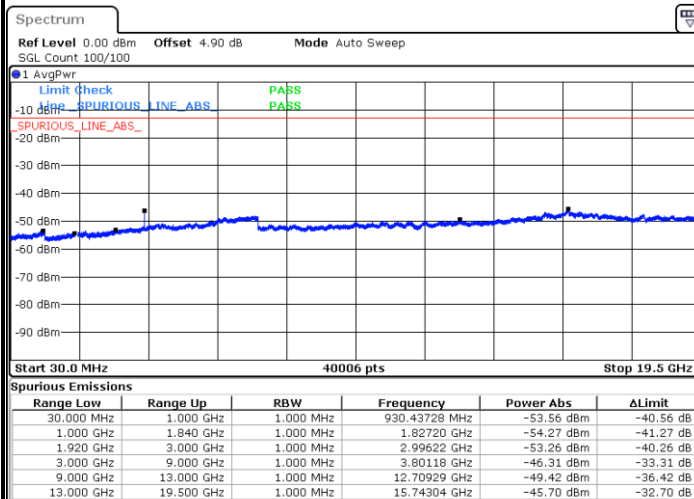
Date: 4 DEC. 2019 13:14:51

## Middle Channel / 16QAM



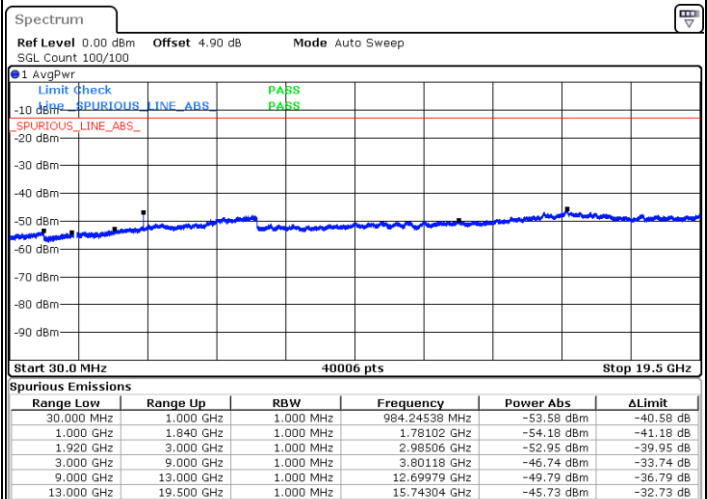
Date: 4 DEC. 2019 13:15:46

## Highest Channel / QPSK



Date: 4 DEC. 2019 13:21:49

## Highest Channel / 16QAM

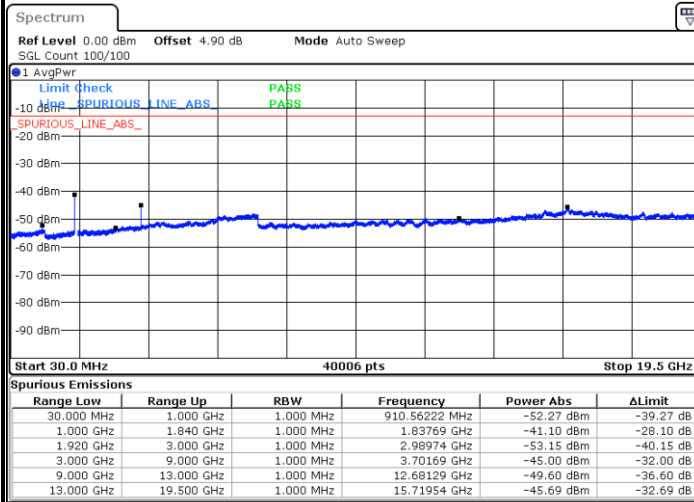


Date: 4 DEC. 2019 13:22:44



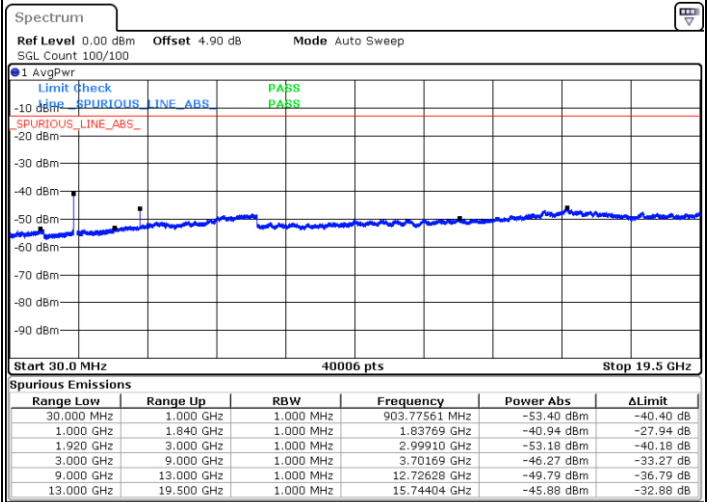
## LTE Band 2 / 15MHz

## Lowest Channel / QPSK



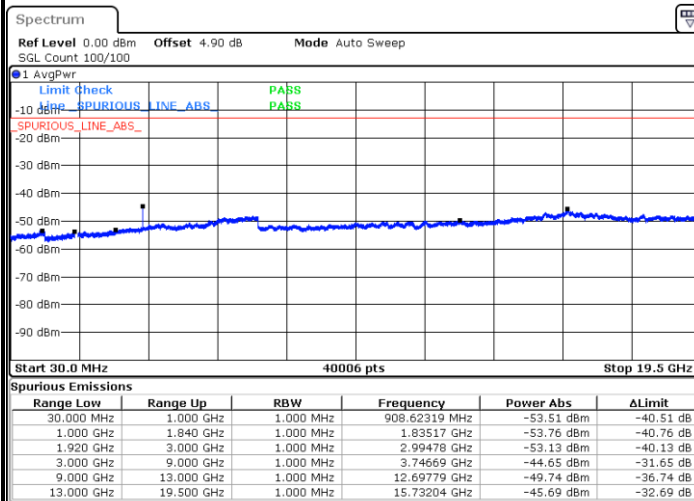
Date: 4 DEC. 2019 13:28:47

## Lowest Channel / 16QAM



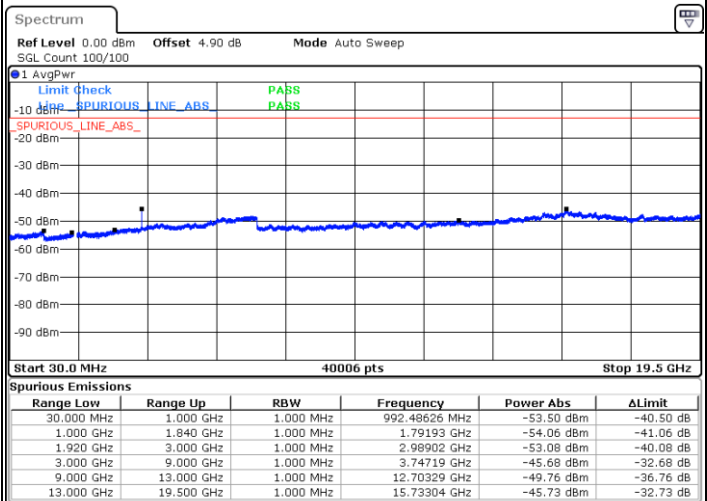
Date: 4 DEC. 2019 13:29:41

## Middle Channel / QPSK



Date: 4 DEC. 2019 13:31:15

## Middle Channel / 16QAM

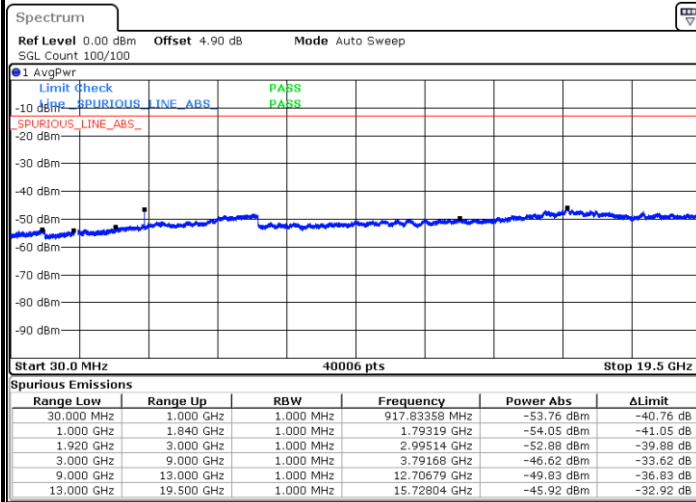


Date: 4 DEC. 2019 13:32:10



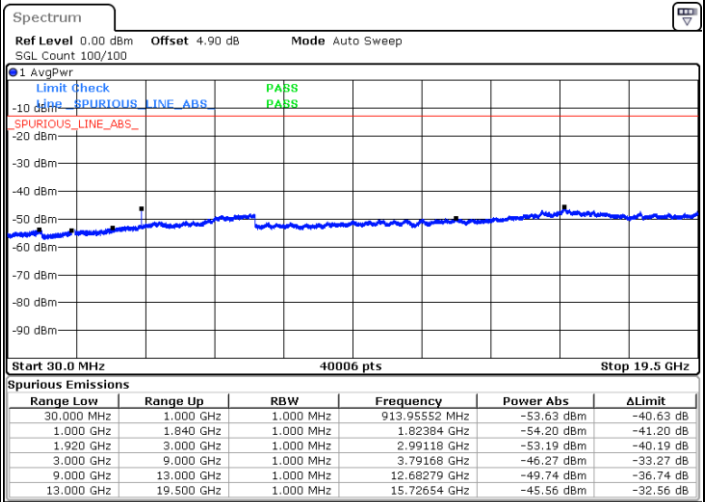
## LTE Band 2 / 15MHz

## Highest Channel / QPSK



Date: 4 DEC. 2019 13:38:13

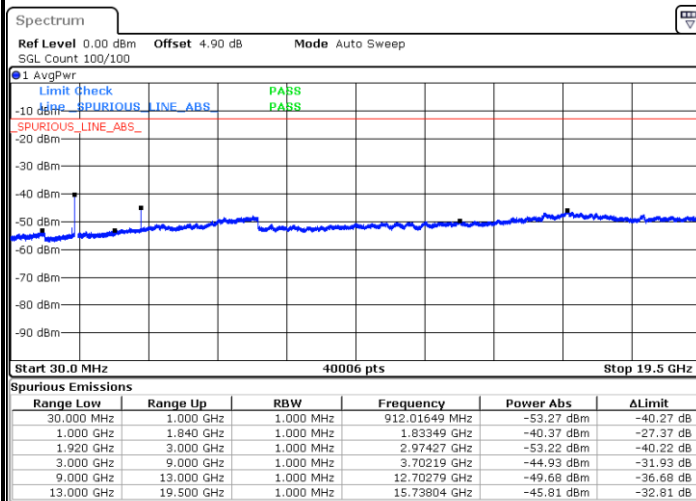
## Highest Channel / 16QAM



Date: 4 DEC. 2019 13:39:07

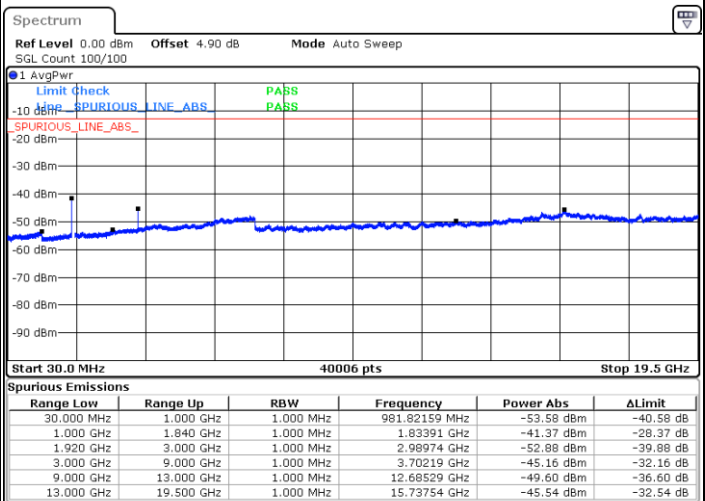
## LTE Band 2 / 20MHz

## Lowest Channel / QPSK



Date: 4 DEC. 2019 13:45:10

## Lowest Channel / 16QAM



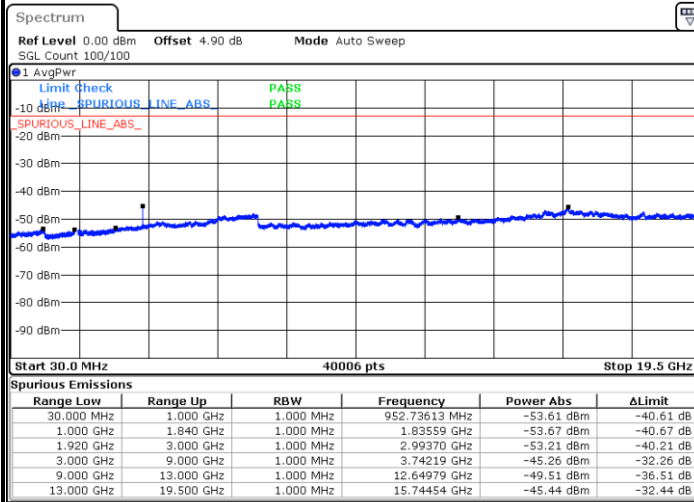
Date: 4 DEC. 2019 13:46:05





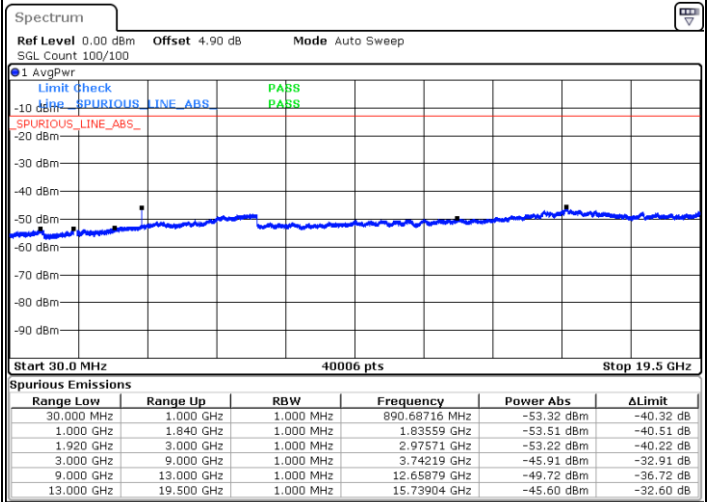
## LTE Band 2 / 20MHz

## Middle Channel / QPSK



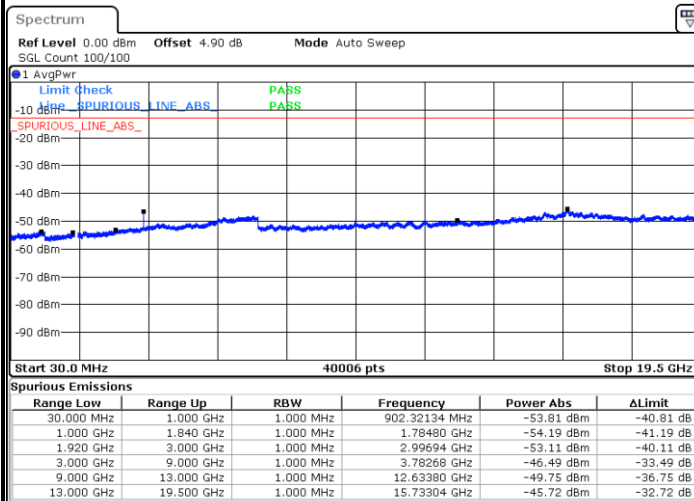
Date: 4 DEC. 2019 13:47:39

## Middle Channel / 16QAM



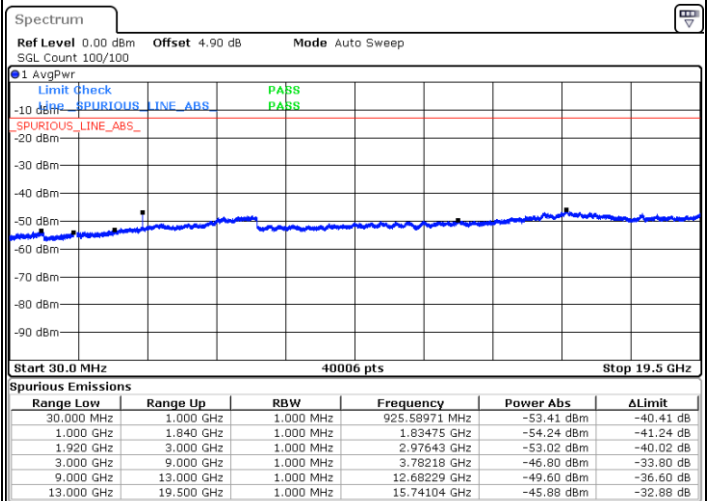
Date: 4 DEC. 2019 13:48:33

## Highest Channel / QPSK



Date: 4 DEC. 2019 13:54:37

## Highest Channel / 16QAM



Date: 4 DEC. 2019 13:55:31

## 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    | 0.0025                             | PASS    |
| 40               | Normal Voltage    | 0.0021                             |         |
| 30               | Normal Voltage    | 0.0012                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0023                             |         |
| 0                | Normal Voltage    | 0.0019                             |         |
| -10              | Normal Voltage    | 0.0007                             |         |
| -20              | Normal Voltage    | 0.0024                             |         |
| -30              | Normal Voltage    | 0.0021                             |         |
| 20               | Maximum Voltage   | 0.0011                             |         |
| 20               | Normal Voltage    | 0.0026                             |         |
| 20               | Battery End Point | 0.0004                             |         |

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 4

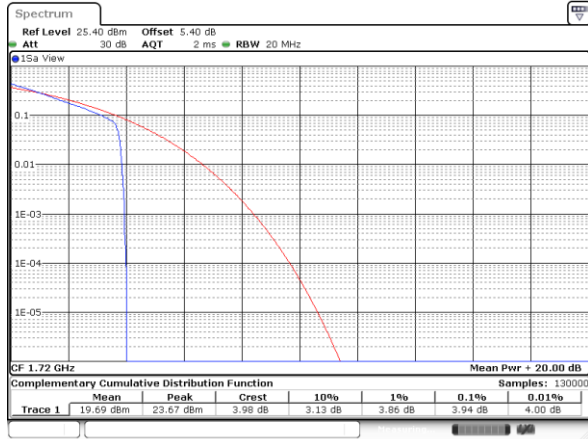
## Peak-to-Average Ratio

| Mode       | LTE Band 4 / 20MHz |         |       |         |             |
|------------|--------------------|---------|-------|---------|-------------|
| Mod.       | QPSK               |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 3.94               | 5.10    | 5.25  | 6.46    | PASS        |
| Middle CH  | 4.14               | 4.43    | 5.88  | 5.77    |             |
| Highest CH | 3.36               | 4.70    | 4.70  | 5.97    |             |

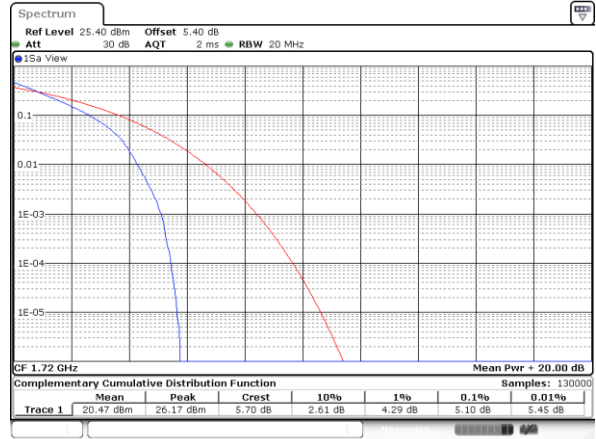


## LTE Band 4 / 20MHz / QPSK

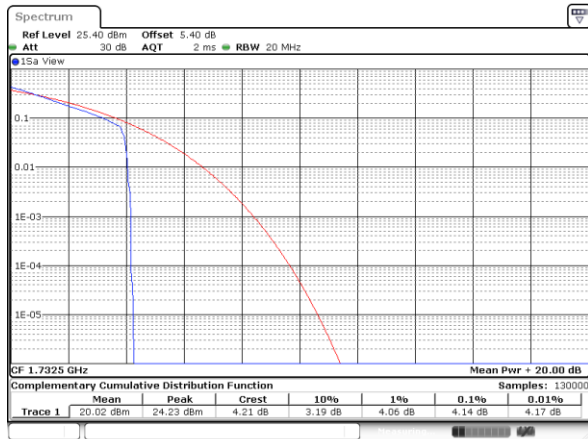
## Lowest Channel / 1RB



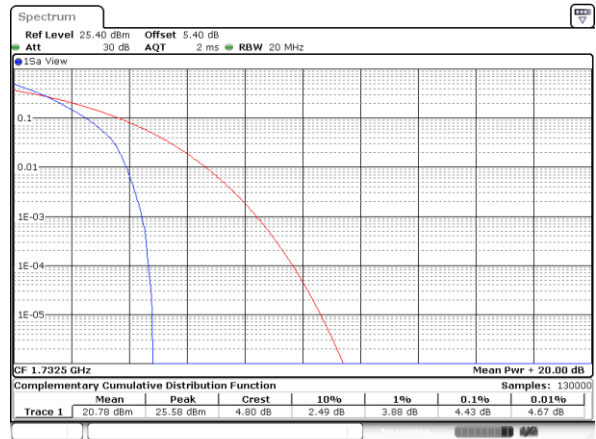
## Lowest Channel / Full RB



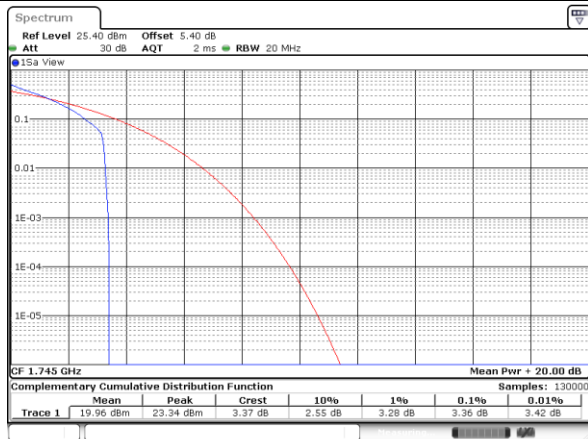
## Middle Channel / 1RB



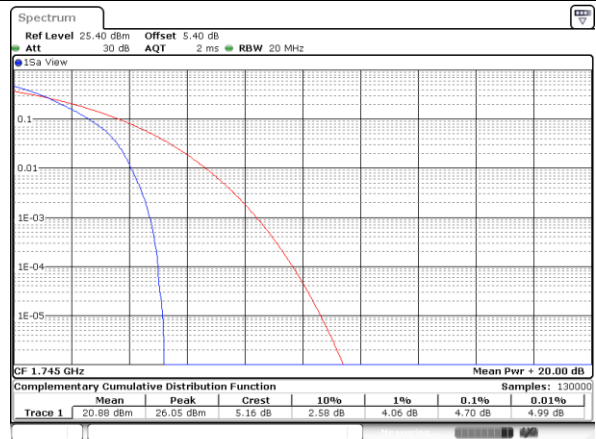
## Middle Channel / Full RB



## Highest Channel / 1RB



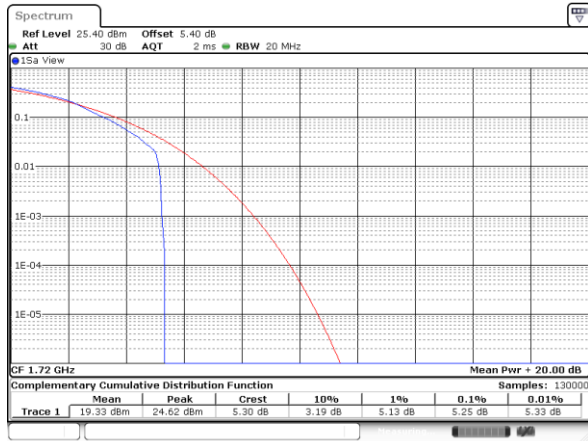
## Highest Channel / Full RB



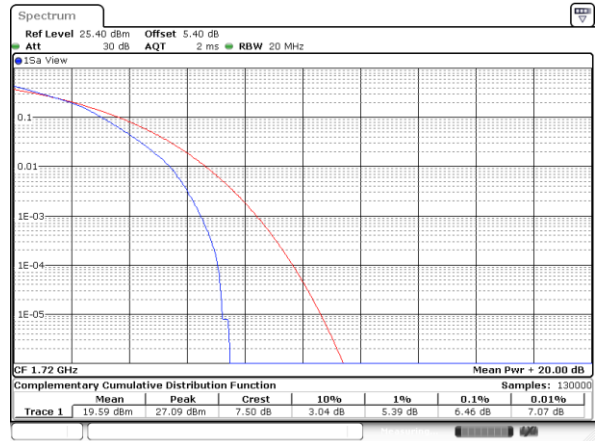


## LTE Band 4 / 20MHz / 16QAM

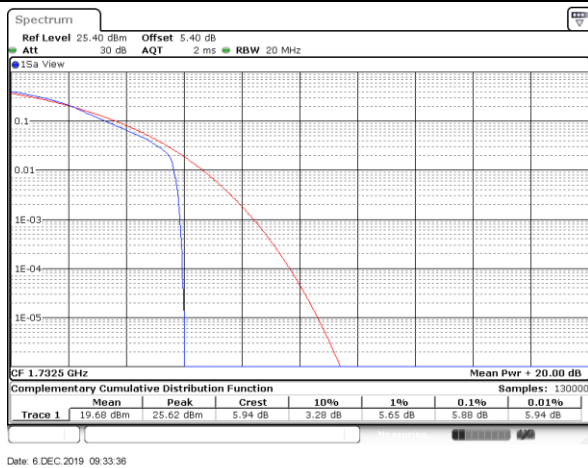
## Lowest Channel / 1RB



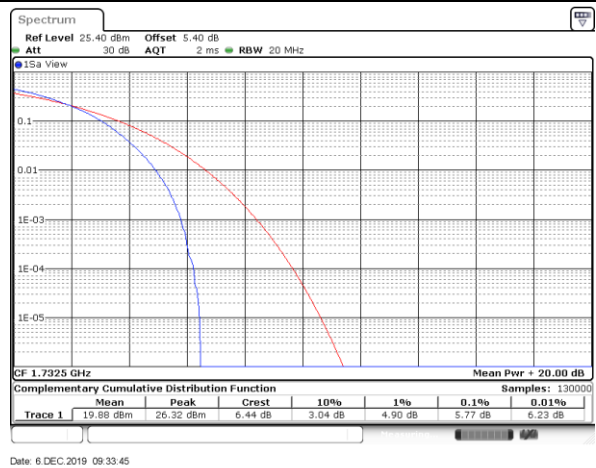
## Lowest Channel / Full RB



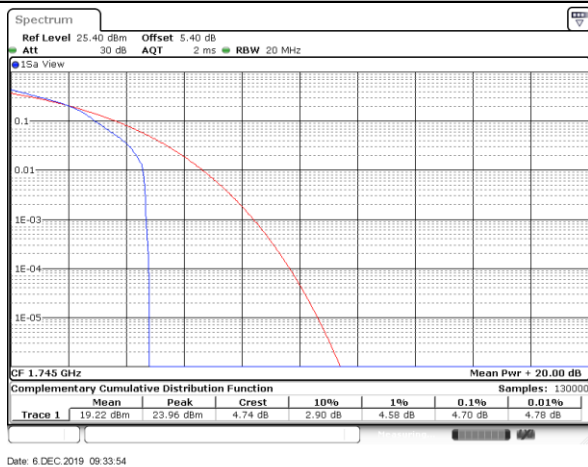
## Middle Channel / 1RB



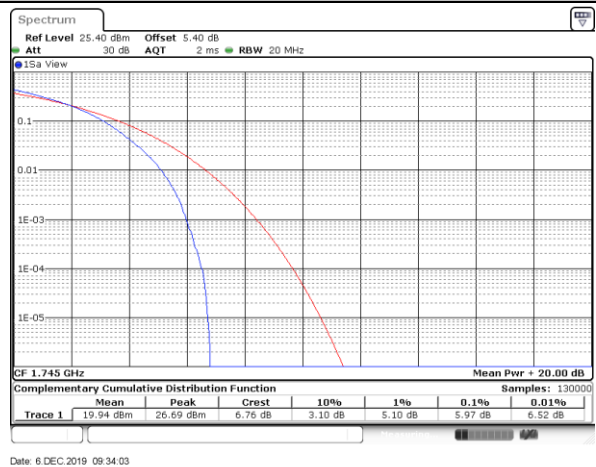
## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB





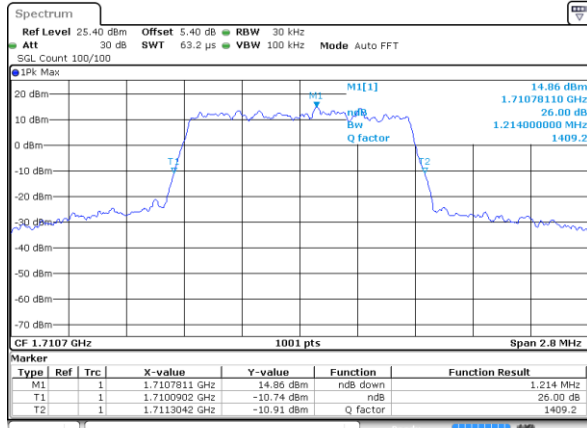
26dB Bandwidth

| Mode       | LTE Band 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  | 1.21                      | 1.21  | 3.00 | 3.05  | 4.97 | 4.86  | 9.73  | 9.73  | 14.51 | 14.18 | 20.34 | 20.14 |
| Middle CH  | 1.23                      | 1.24  | 3.00 | 3.03  | 4.86 | 4.94  | 9.83  | 9.79  | 14.30 | 14.12 | 20.22 | 20.14 |
| Highest CH | 1.23                      | 1.23  | 3.02 | 3.03  | 4.90 | 4.92  | 9.81  | 9.75  | 14.45 | 14.33 | 20.18 | 20.22 |



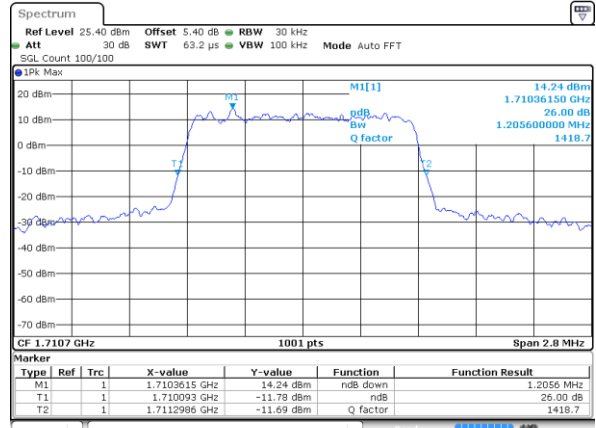
## LTE Band 4

## Lowest Channel / 1.4MHz / QPSK



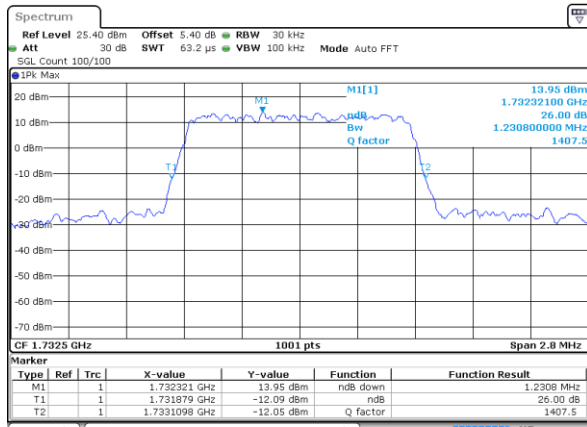
Date: 6 DEC 2019 06:37:29

## Lowest Channel / 1.4MHz / 16QAM



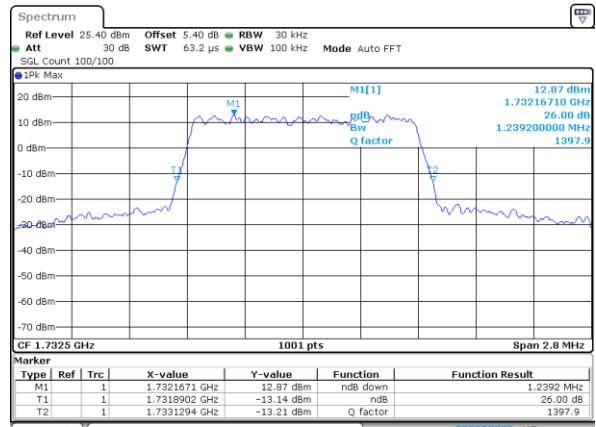
Date: 6 DEC 2019 06:37:39

## Middle Channel / 1.4MHz / QPSK



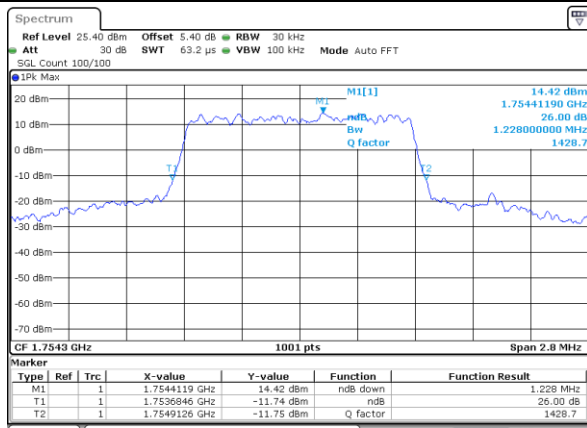
Date: 6 DEC 2019 06:49:09

## Middle Channel / 1.4MHz / 16QAM



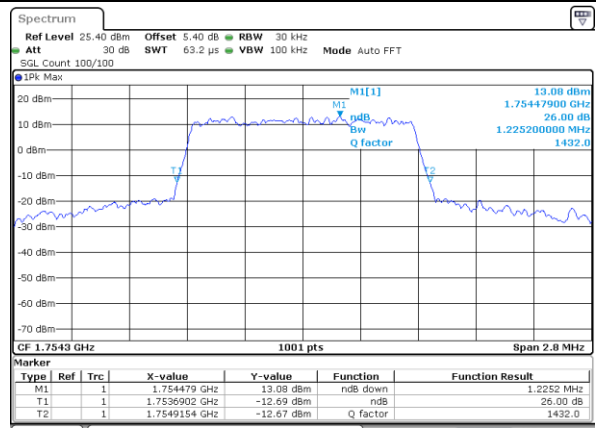
Date: 6 DEC 2019 06:49:19

## Highest Channel / 1.4MHz / QPSK



Date: 6 DEC 2019 06:51:38

## Highest Channel / 1.4MHz / 16QAM

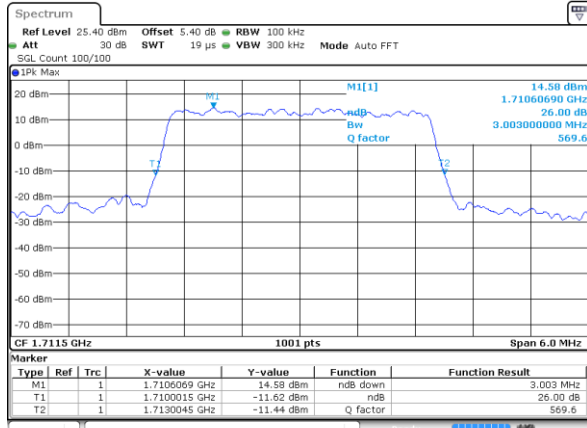


Date: 6 DEC 2019 06:51:48



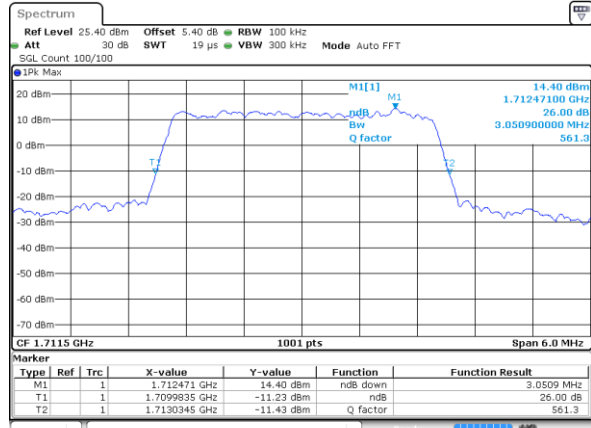
## LTE Band 4

## Lowest Channel / 3MHz / QPSK



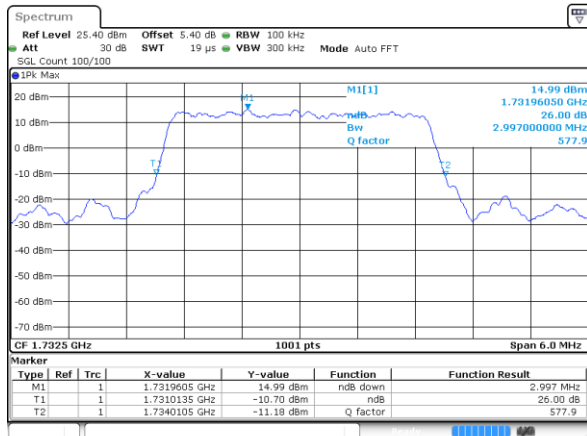
Date: 6 DEC 2019 06:58:37

## Lowest Channel / 3MHz / 16QAM



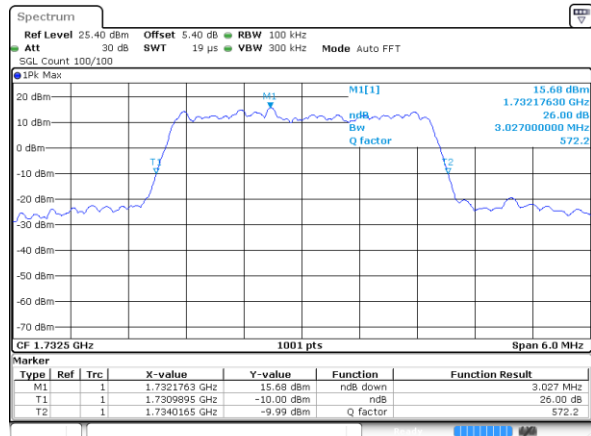
Date: 6 DEC 2019 06:58:47

## Middle Channel / 3MHz / QPSK



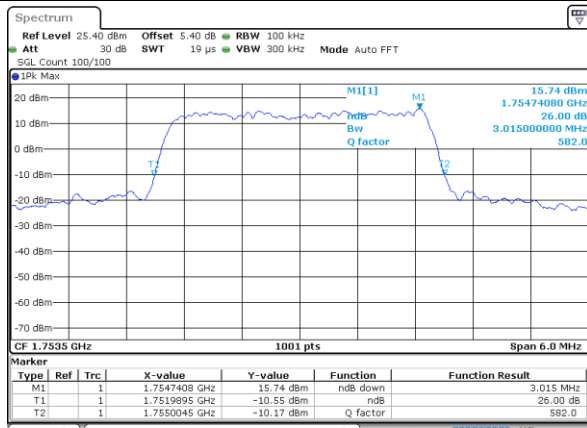
Date: 6 DEC 2019 07:05:36

## Middle Channel / 3MHz / 16QAM



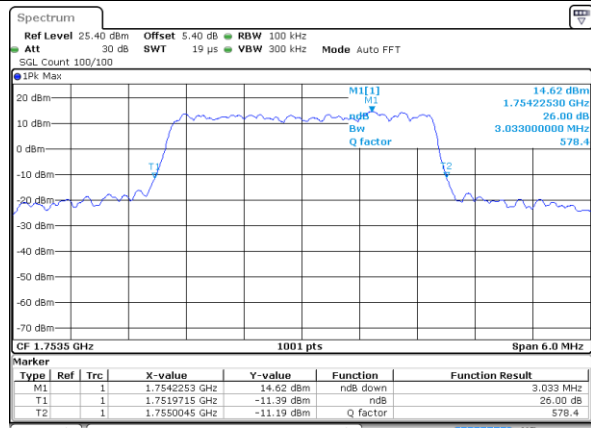
Date: 6 DEC 2019 07:05:46

## Highest Channel / 3MHz / QPSK



Date: 6 DEC 2019 07:08:05

## Highest Channel / 3MHz / 16QAM



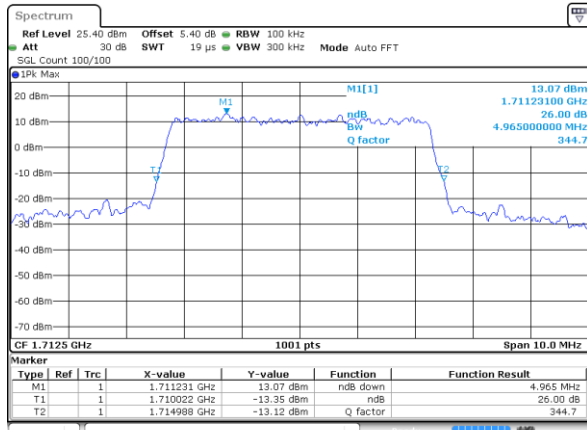
Date: 6 DEC 2019 07:08:15





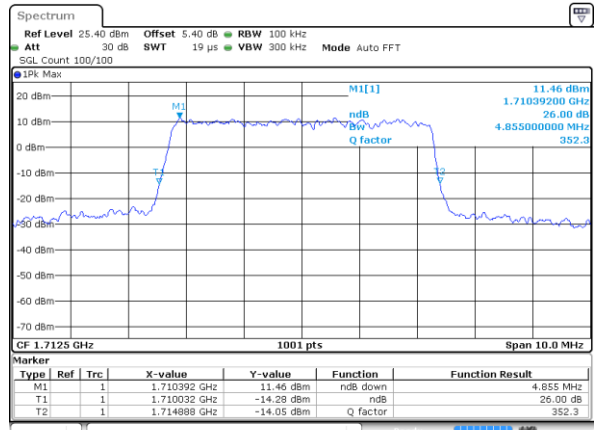
## LTE Band 4

## Lowest Channel / 5MHz / QPSK



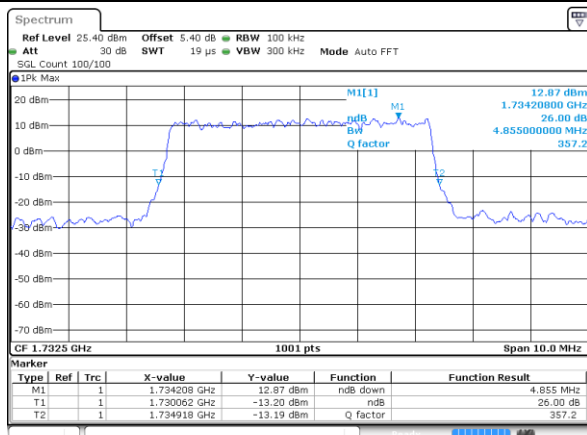
Date: 6 DEC 2019 07:15:04

## Lowest Channel / 5MHz / 16QAM



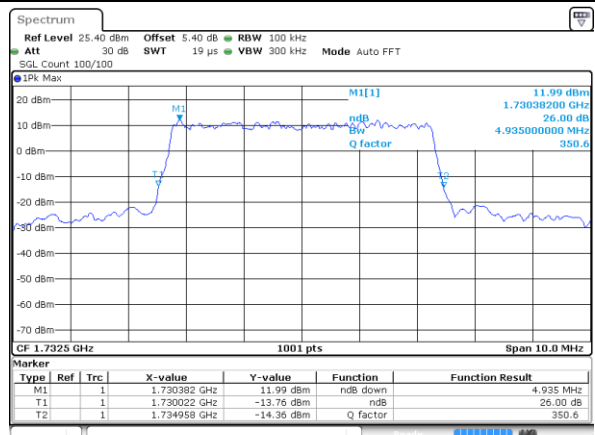
Date: 6 DEC 2019 07:15:14

## Middle Channel / 5MHz / QPSK



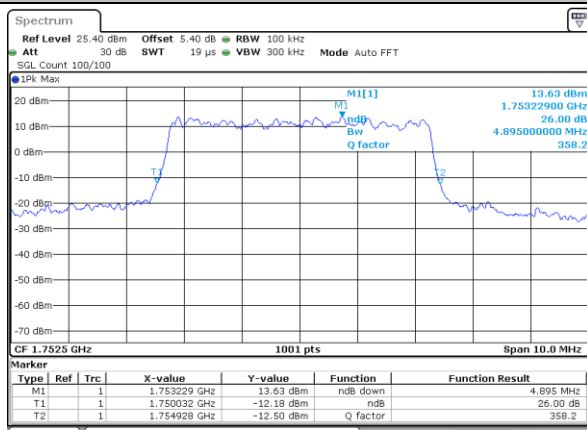
Date: 6 DEC 2019 07:22:02

## Middle Channel / 5MHz / 16QAM



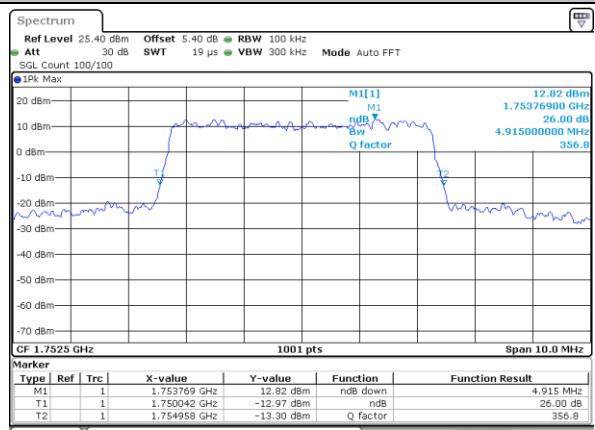
Date: 6 DEC 2019 07:22:13

## Highest Channel / 5MHz / QPSK

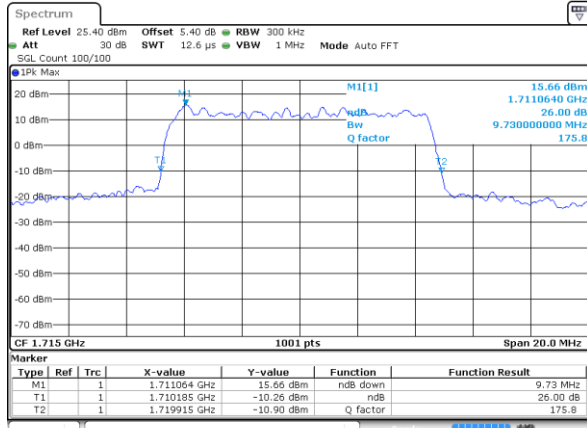


Date: 6 DEC 2019 07:24:33

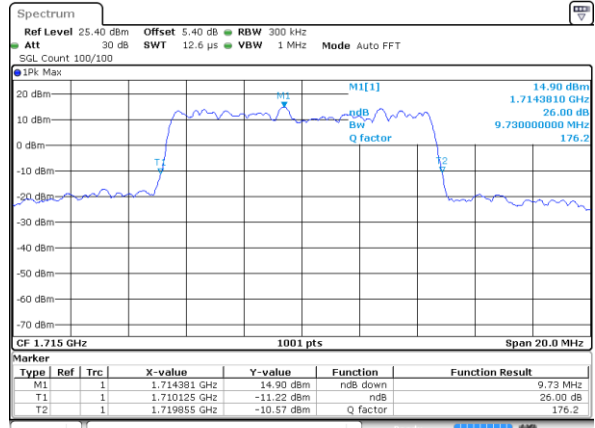
## Highest Channel / 5MHz / 16QAM



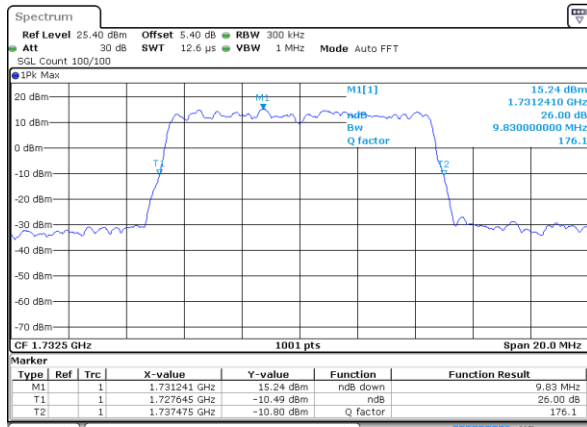
Date: 6 DEC 2019 07:24:43

**LTE Band 4**
**Lowest Channel / 10MHz / QPSK**


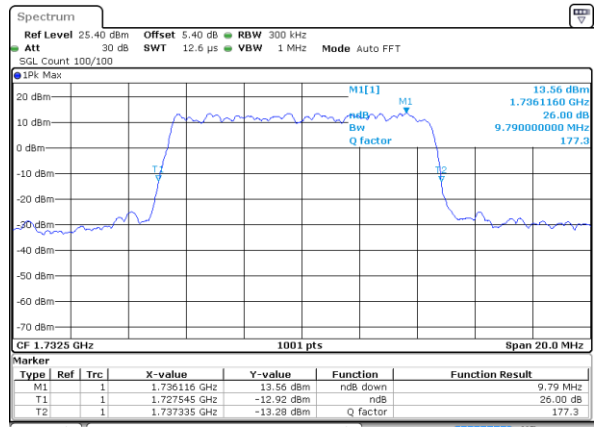
Date: 6 DEC 2019 07:31:31

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


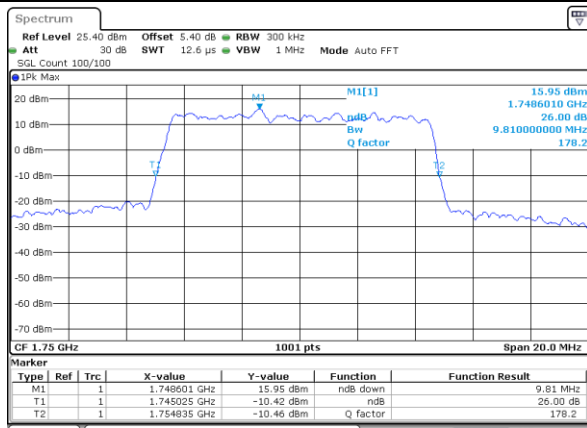
Date: 6 DEC 2019 07:31:41

**Middle Channel / 10MHz / QPSK**


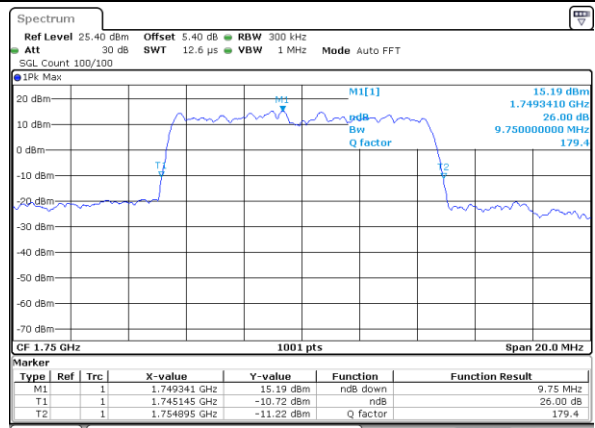
Date: 6 DEC 2019 07:38:30

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


Date: 6 DEC 2019 07:38:40

**Highest Channel / 10MHz / QPSK**


Date: 6 DEC 2019 07:40:59

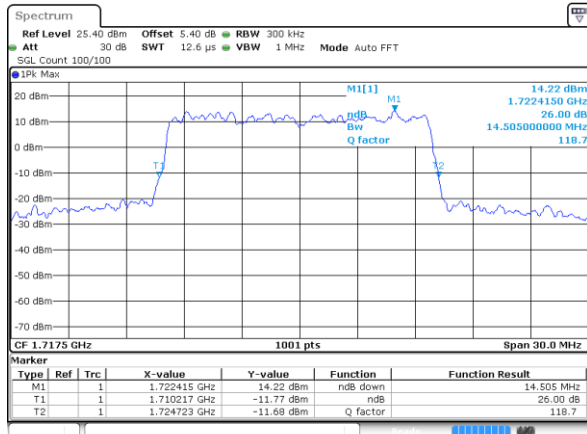
**Highest Channel / 10MHz / 16QAM**


Date: 6 DEC 2019 07:41:09



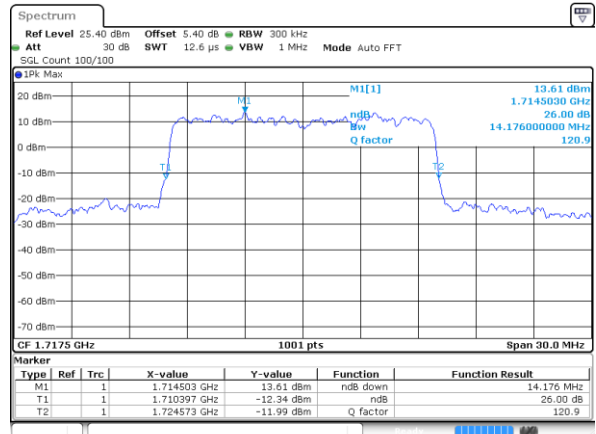
## LTE Band 4

## Lowest Channel / 15MHz / QPSK



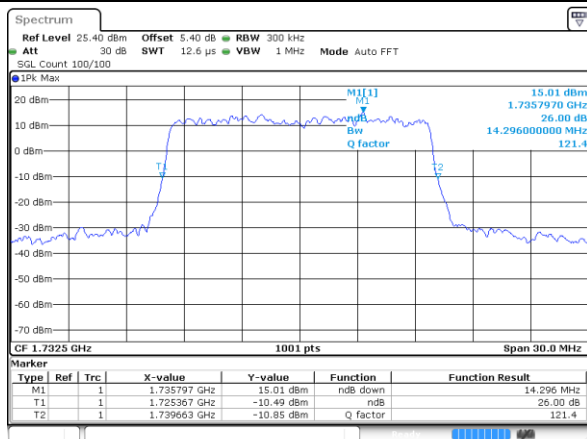
Date: 6 DEC 2019 07:47:58

## Lowest Channel / 15MHz / 16QAM



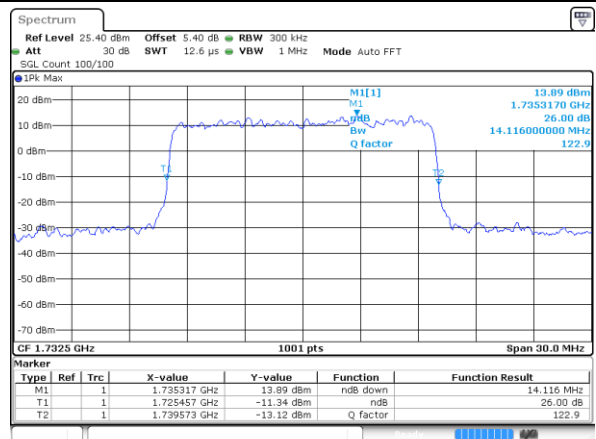
Date: 6 DEC 2019 07:48:08

## Middle Channel / 15MHz / QPSK



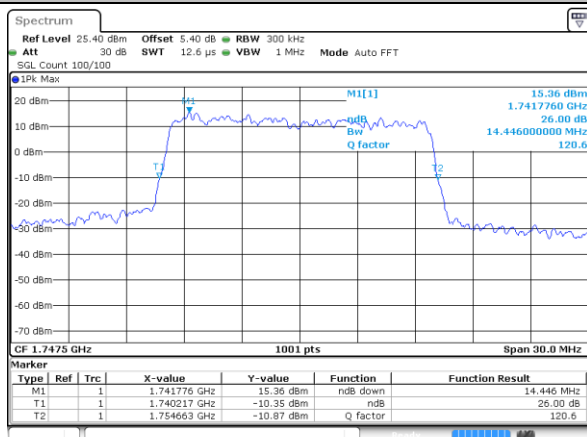
Date: 6 DEC 2019 07:54:57

## Middle Channel / 15MHz / 16QAM



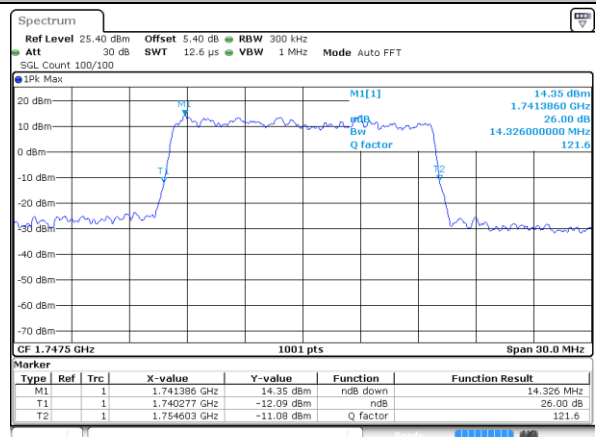
Date: 6 DEC 2019 07:55:07

## Highest Channel / 15MHz / QPSK



Date: 6 DEC 2019 07:57:26

## Highest Channel / 15MHz / 16QAM



Date: 6 DEC 2019 07:57:36