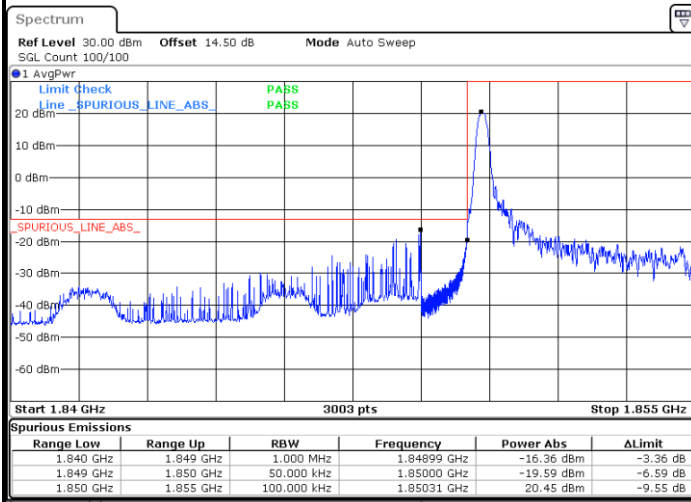


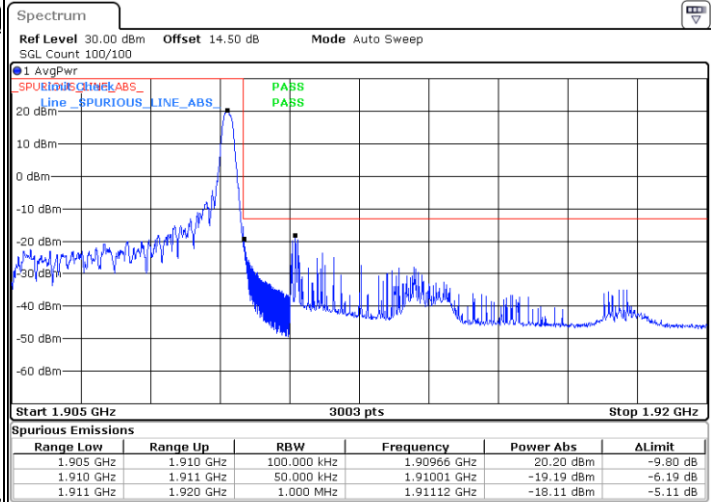


## LTE Band 2 / 5MHz / 16QAM

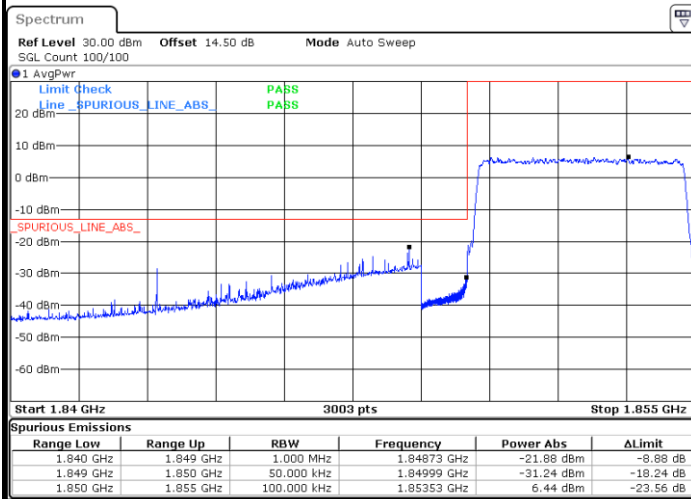
## Lowest Band Edge / 1RB



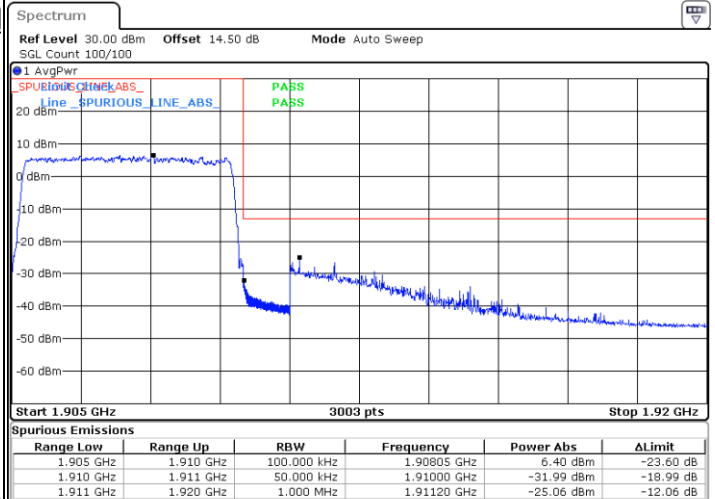
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



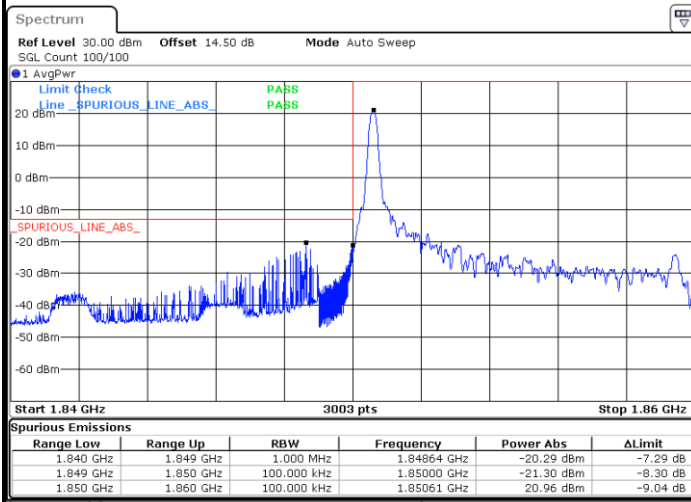
## Highest Band Edge / Full RB



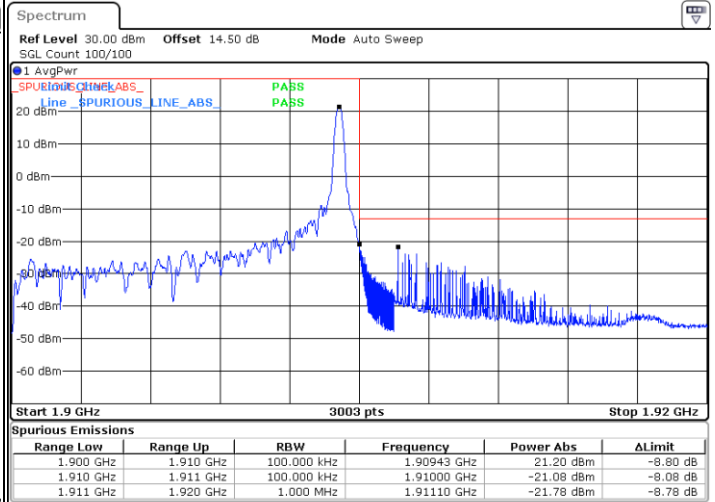


## LTE Band 2 / 10MHz / QPSK

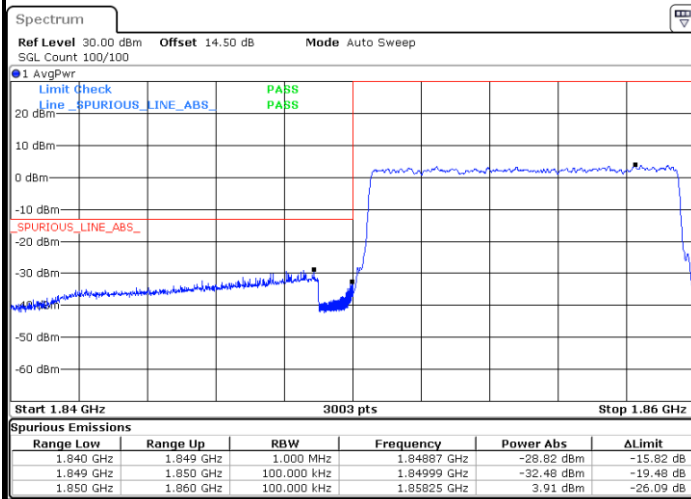
## Lowest Band Edge / 1 RB



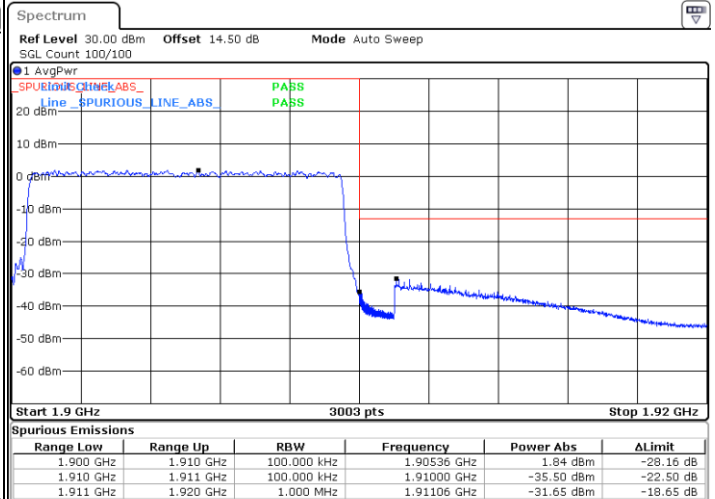
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



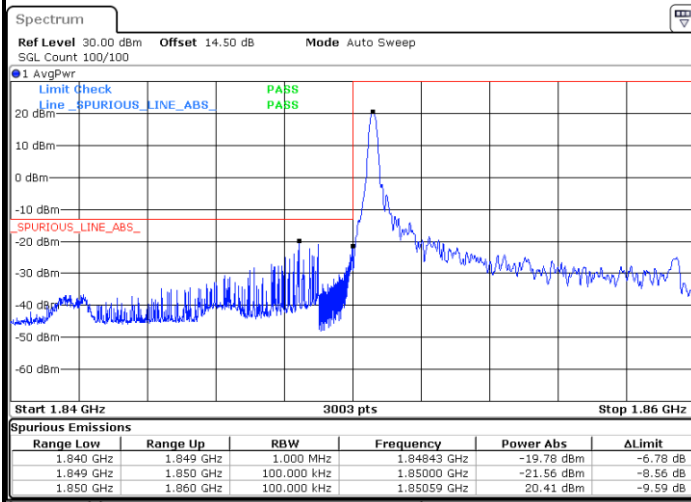
## Highest Band Edge / Full RB



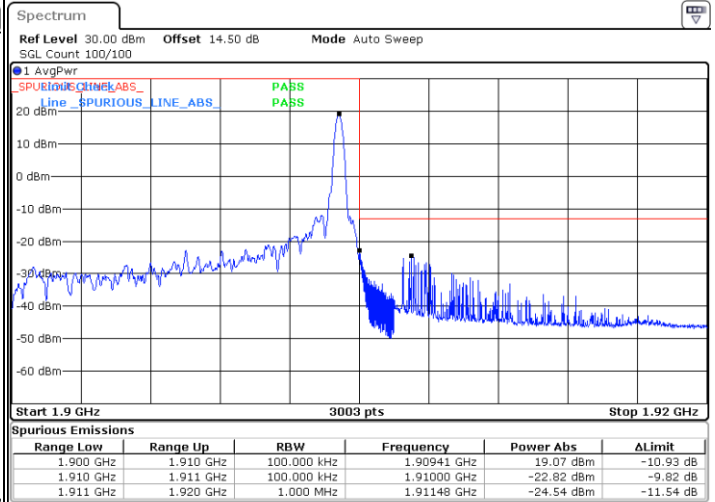


## LTE Band 2 / 10MHz / 16QAM

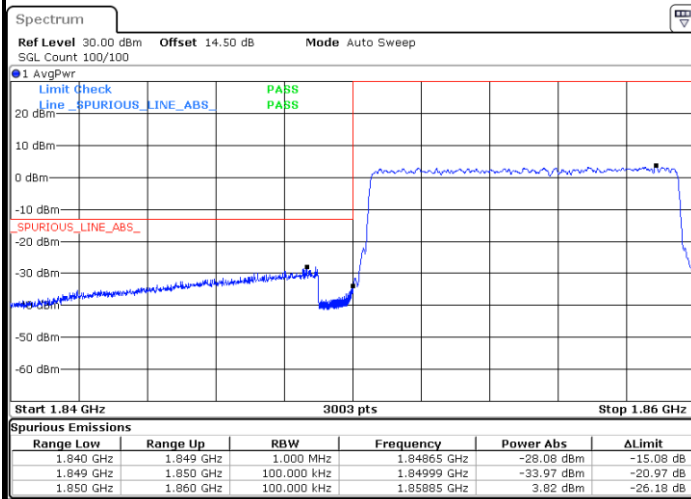
## Lowest Band Edge / 1 RB



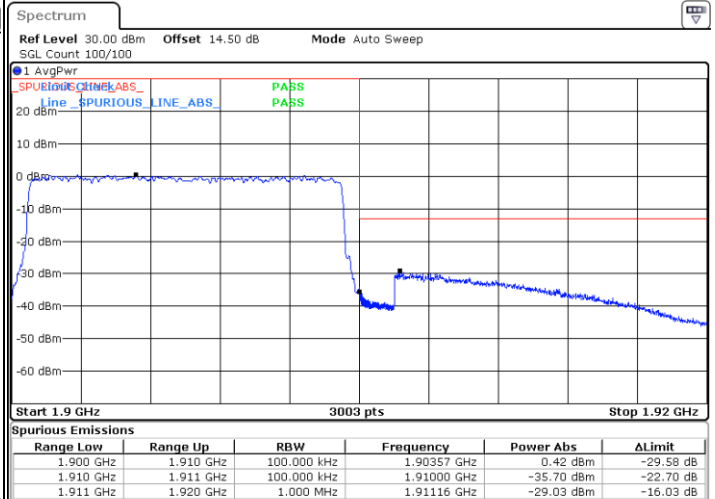
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



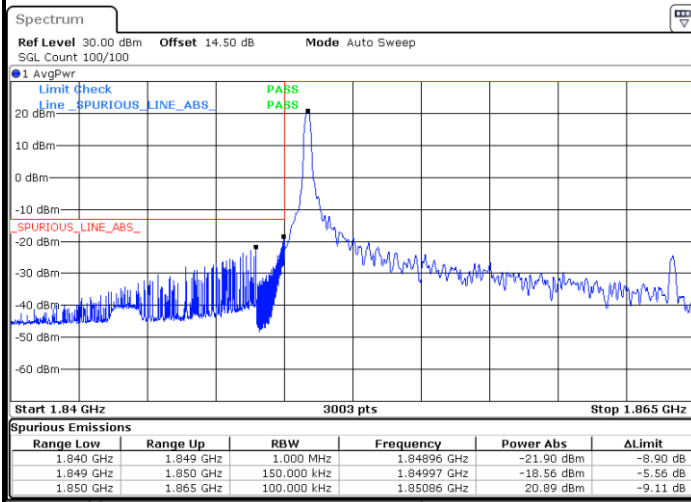
## Highest Band Edge / Full RB



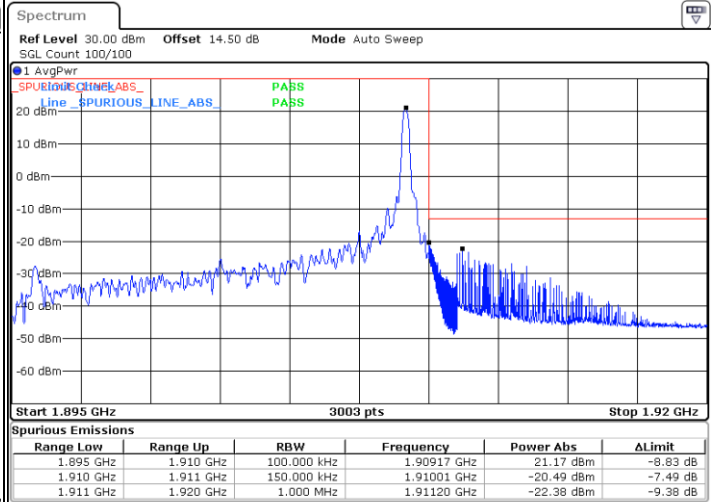


## LTE Band 2 / 15MHz / QPSK

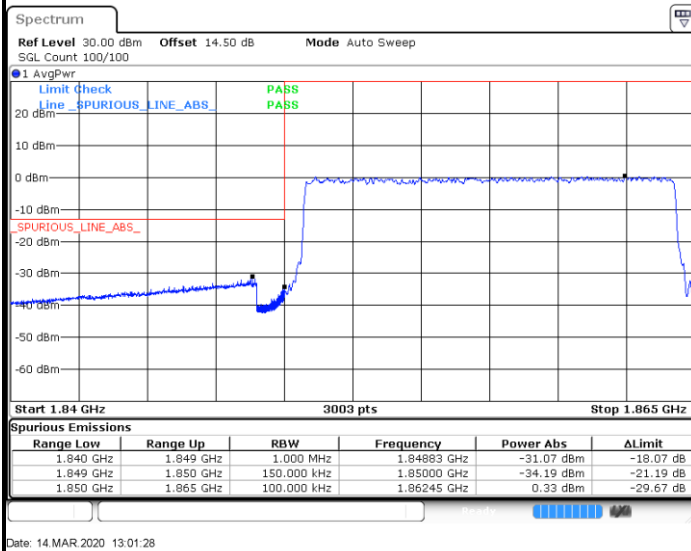
## Lowest Band Edge / 1 RB



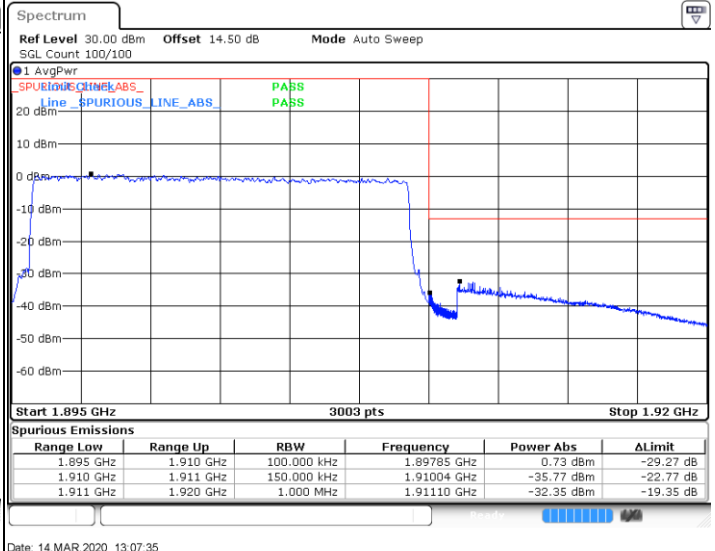
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



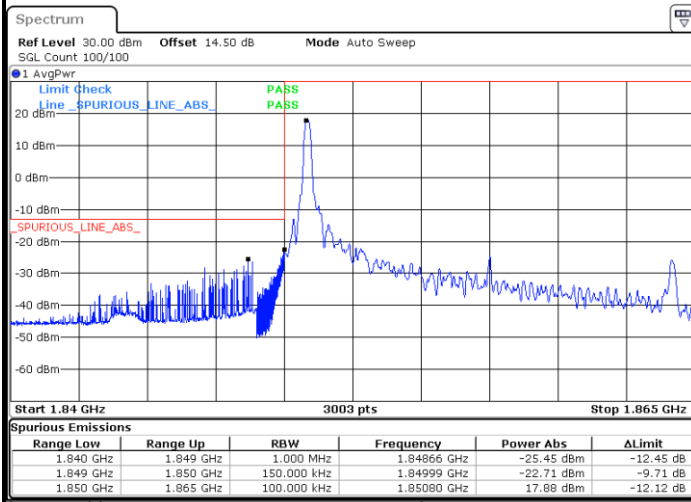
## Highest Band Edge / Full RB



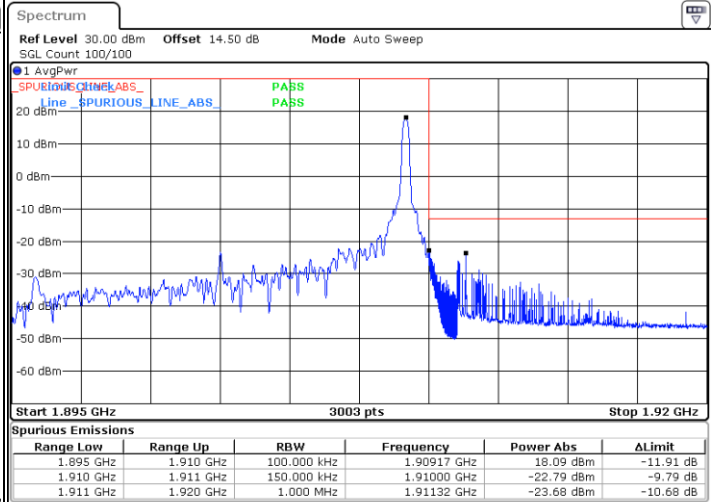


## LTE Band 2 / 15MHz / 16QAM

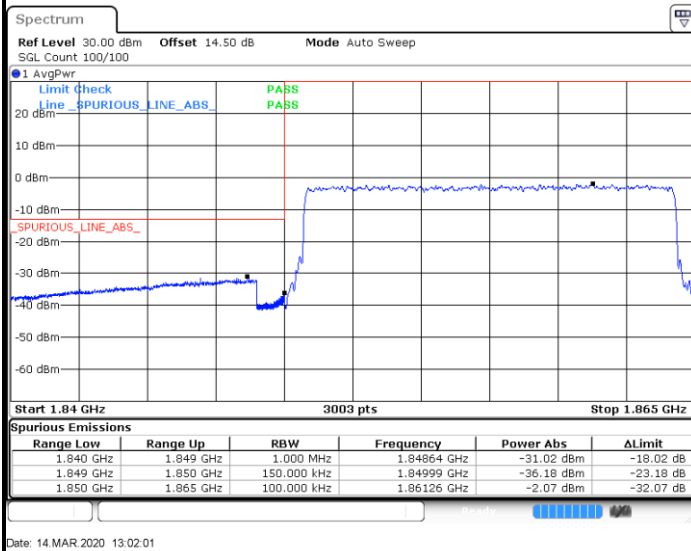
## Lowest Band Edge / 1 RB



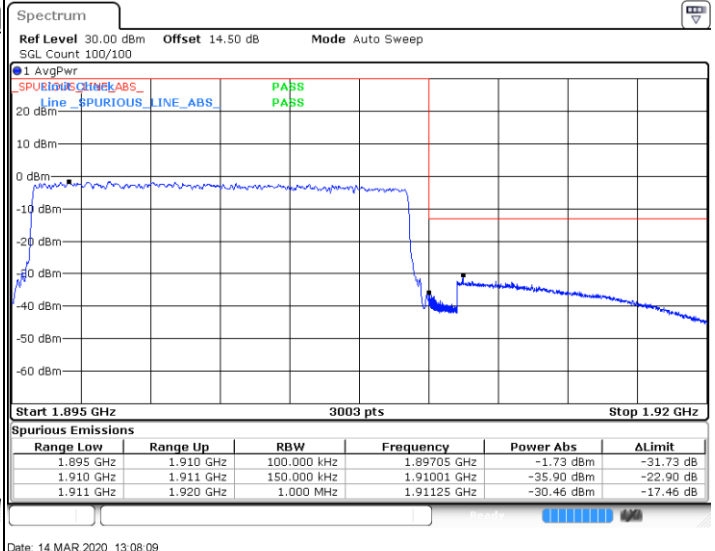
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



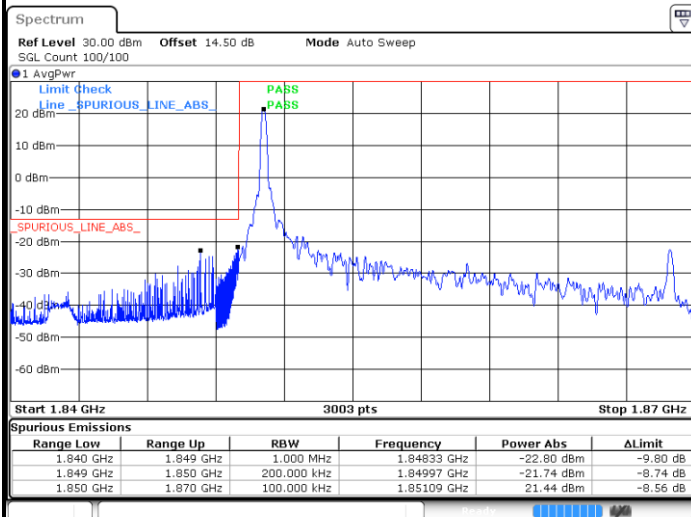
## Highest Band Edge / Full RB



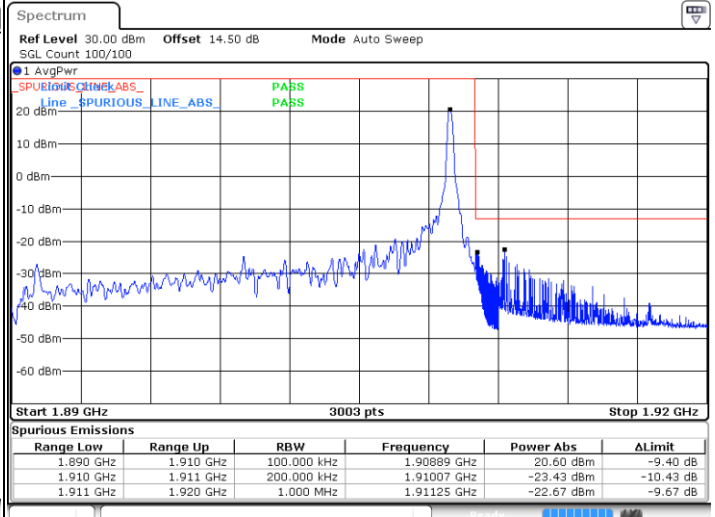


## LTE Band 2 / 20MHz / QPSK

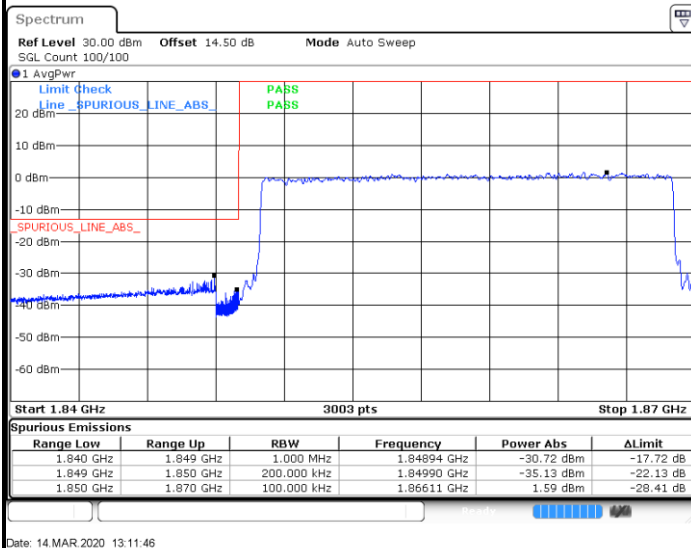
## Lowest Band Edge / 1 RB



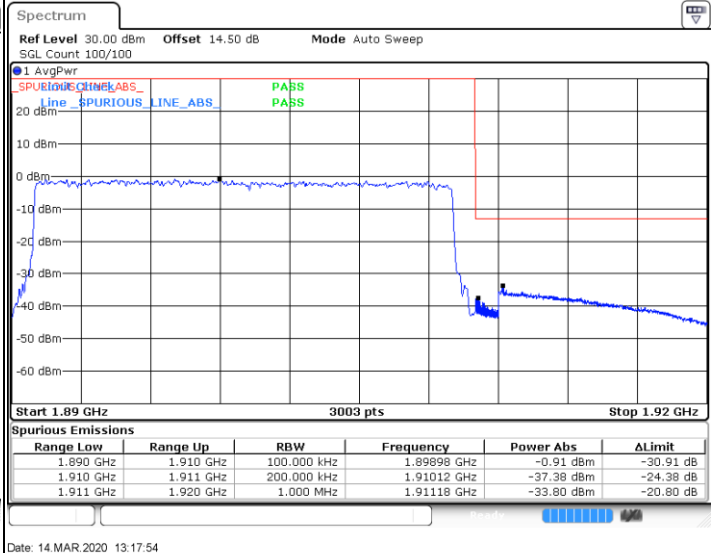
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



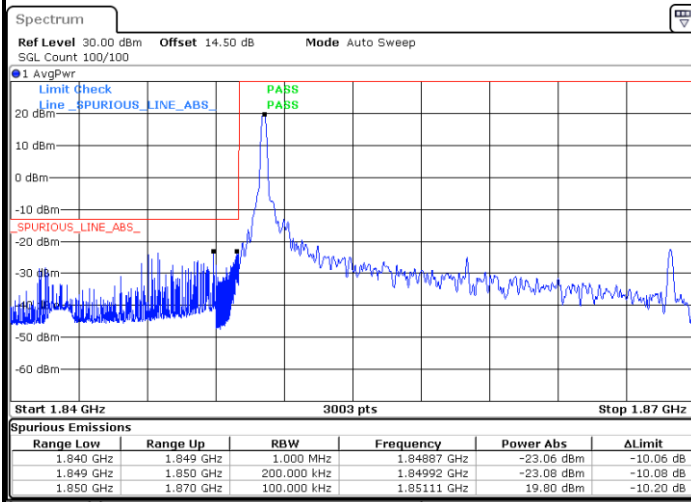
## Highest Band Edge / Full RB



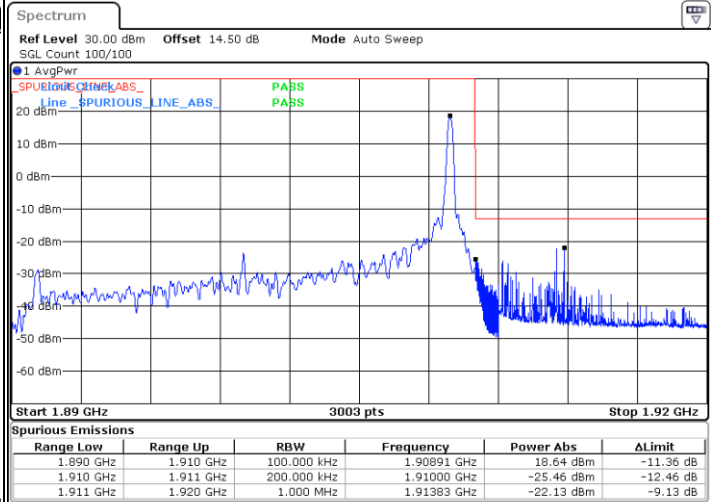


## LTE Band 2 / 20MHz / 16QAM

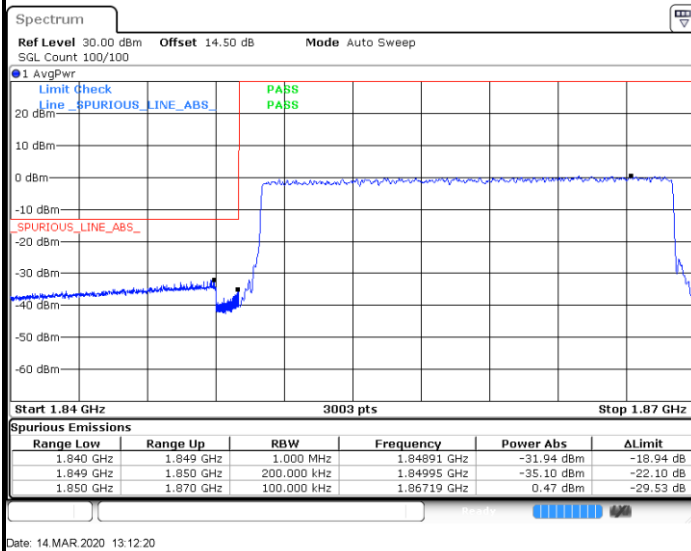
## Lowest Band Edge / 1 RB



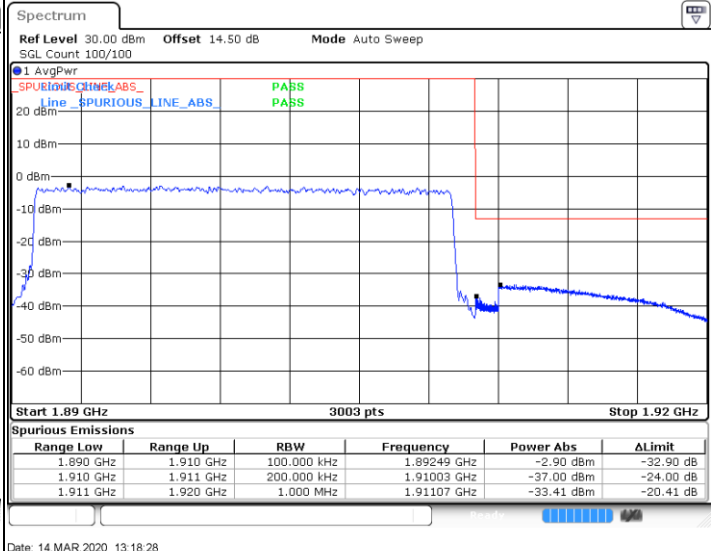
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

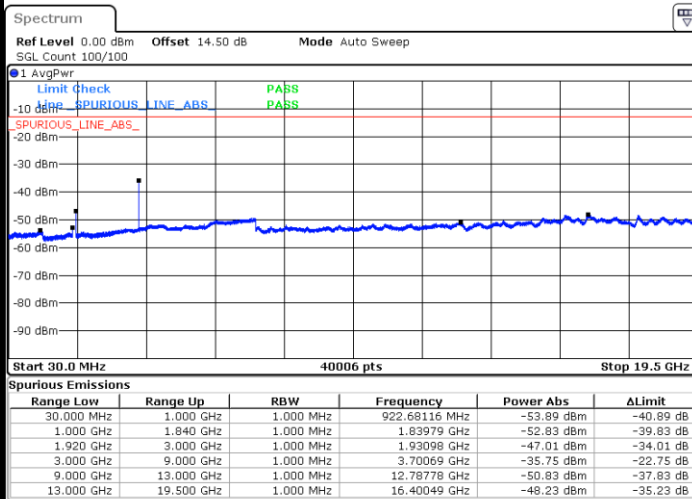




# Conducted Spurious Emission

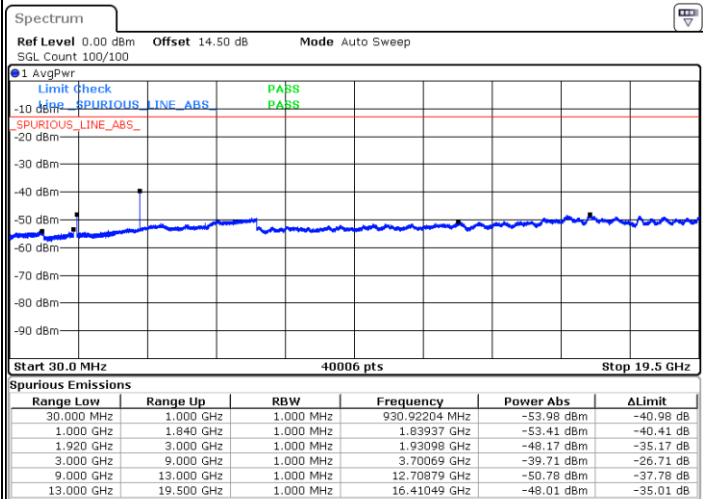
## LTE Band 2 / 1.4MHz

### Lowest Channel / QPSK



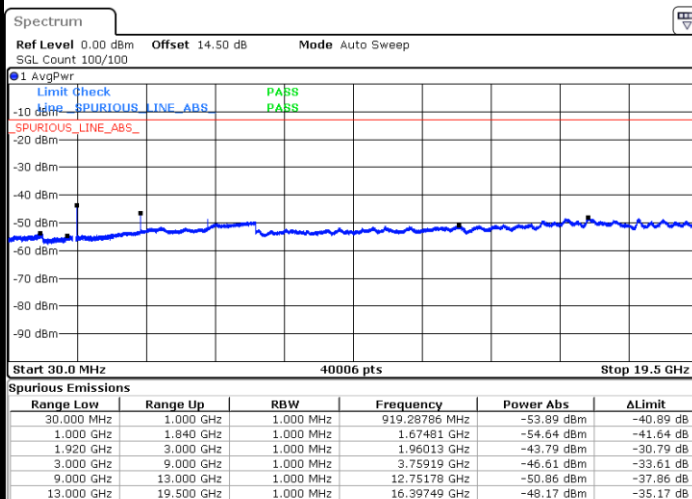
Date: 14 MAR 2020 13:41:54

### Lowest Channel / 16QAM



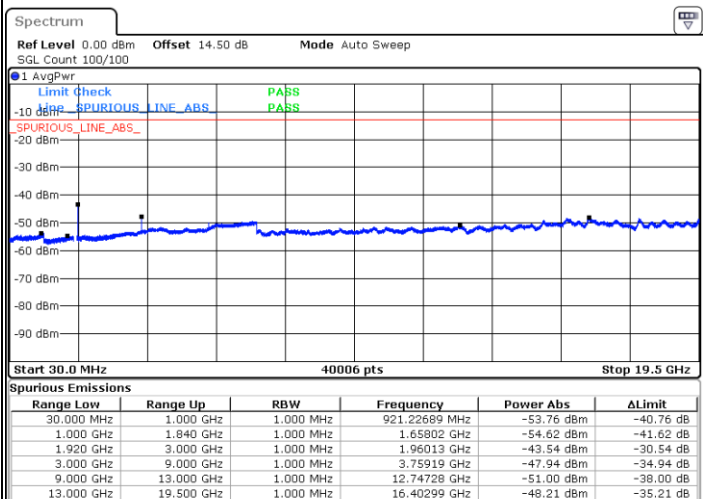
Date: 14 MAR 2020 13:42:30

### Middle Channel / QPSK



Date: 14 MAR 2020 13:43:50

### Middle Channel / 16QAM



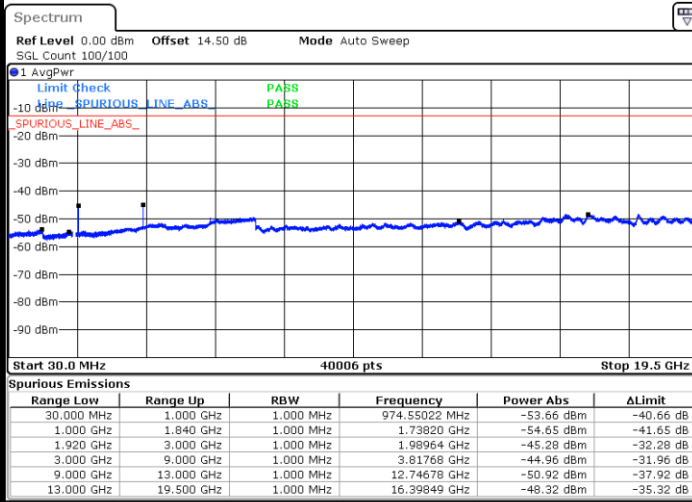
Date: 14 MAR 2020 13:44:26





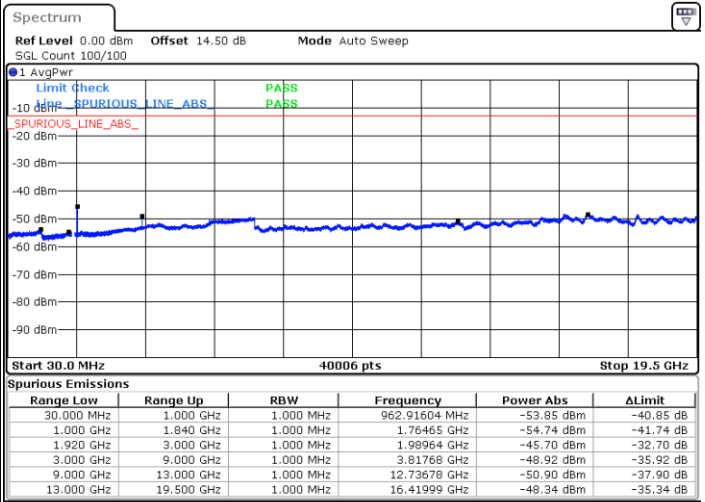
## LTE Band 2 / 1.4MHz

## Highest Channel / QPSK



Date: 14.MAR.2020 13:51:44

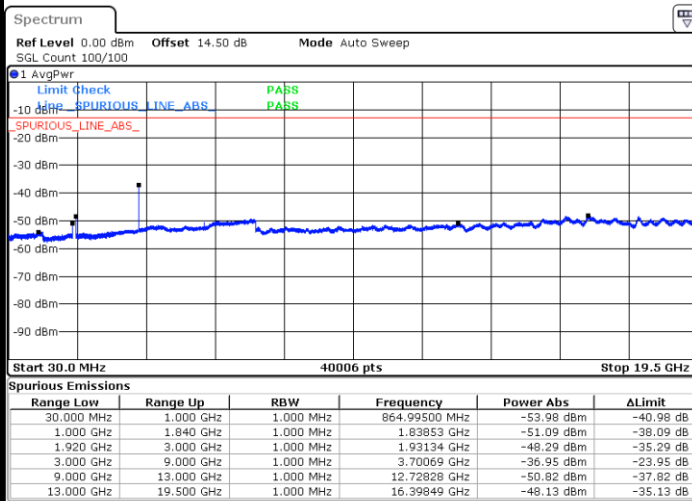
## Highest Channel / 16QAM



Date: 14.MAR.2020 13:52:20

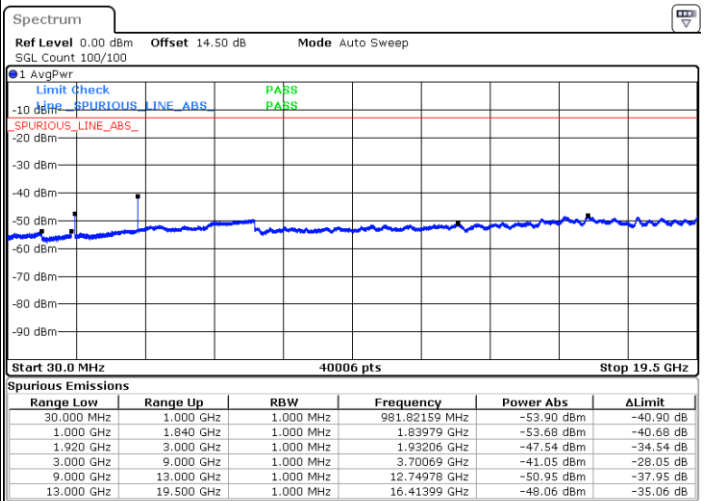
## LTE Band 2 / 3MHz

## Lowest Channel / QPSK



Date: 14.MAR.2020 11:32:40

## Lowest Channel / 16QAM

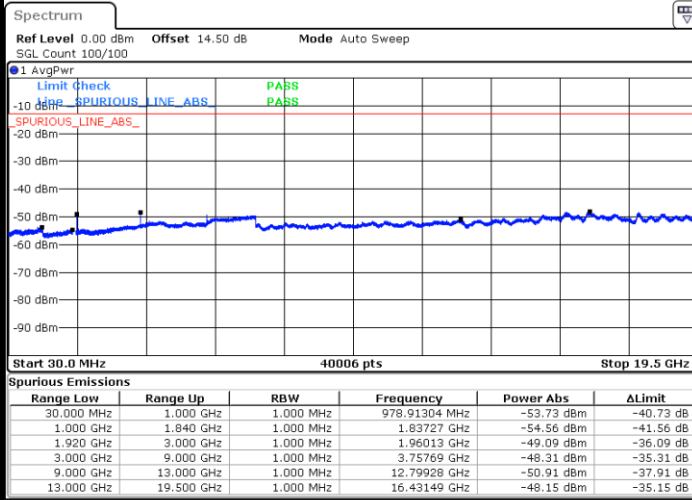


Date: 14.MAR.2020 11:33:16



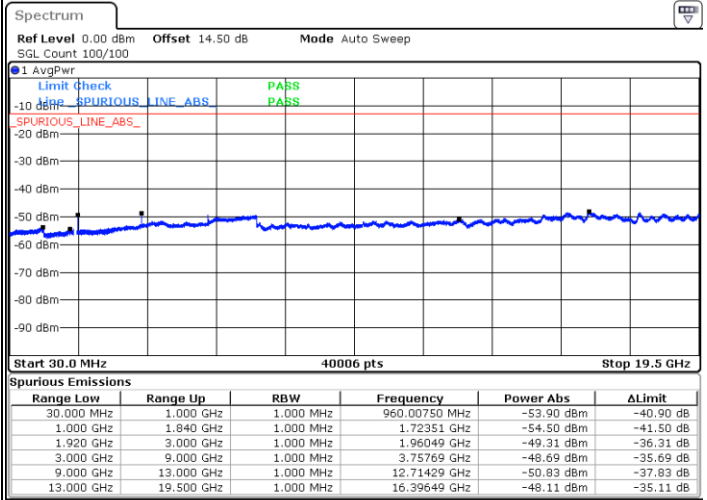
## LTE Band 2 / 3MHz

## Middle Channel / QPSK



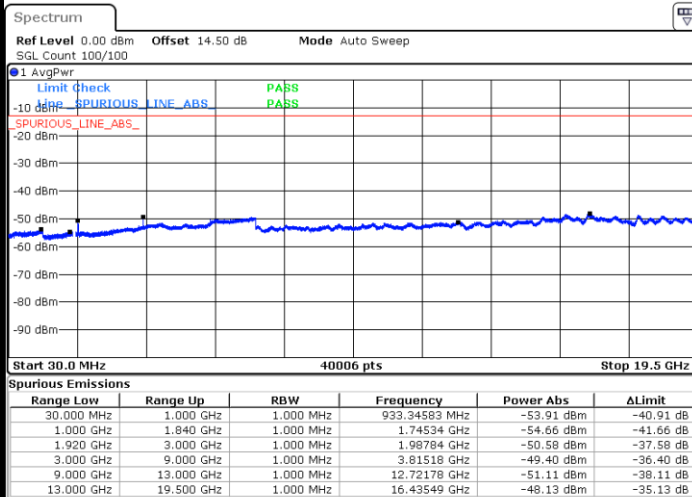
Date: 14.MAR.2020 11:34:36

## Middle Channel / 16QAM



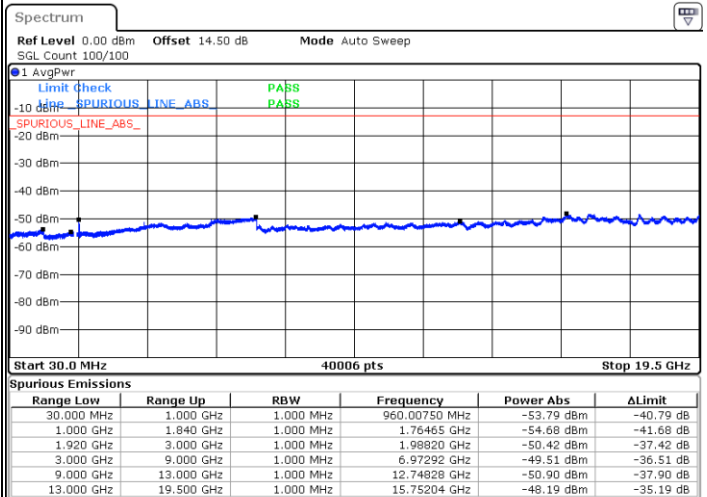
Date: 14.MAR.2020 11:35:12

## Highest Channel / QPSK



Date: 14.MAR.2020 11:42:46

## Highest Channel / 16QAM

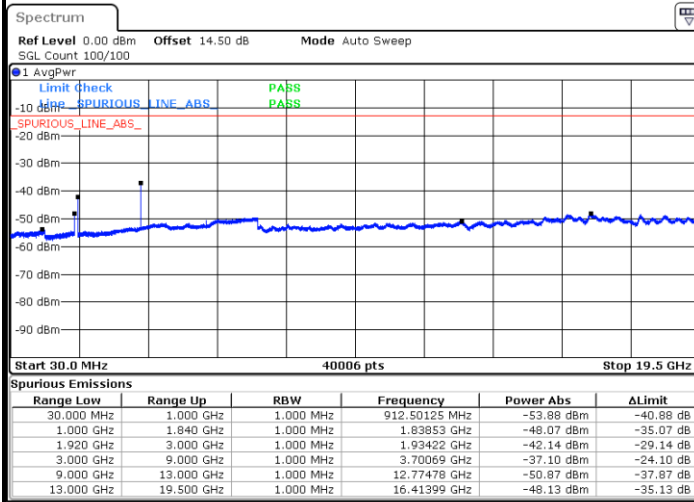


Date: 14.MAR.2020 11:43:22



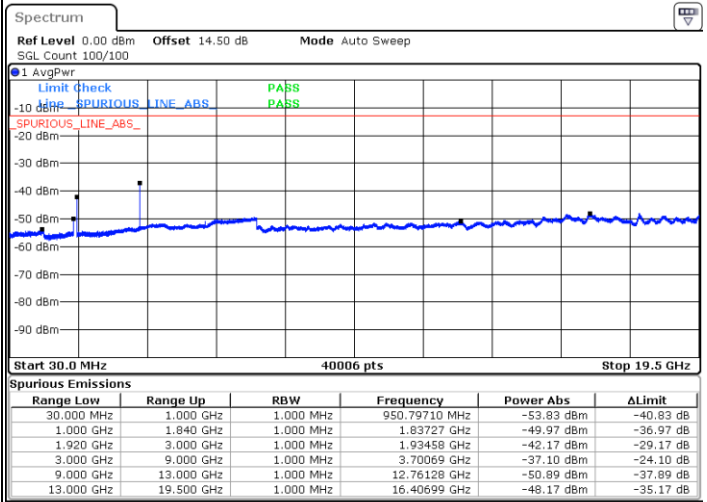
## LTE Band 2 / 5MHz

## Lowest Channel / QPSK



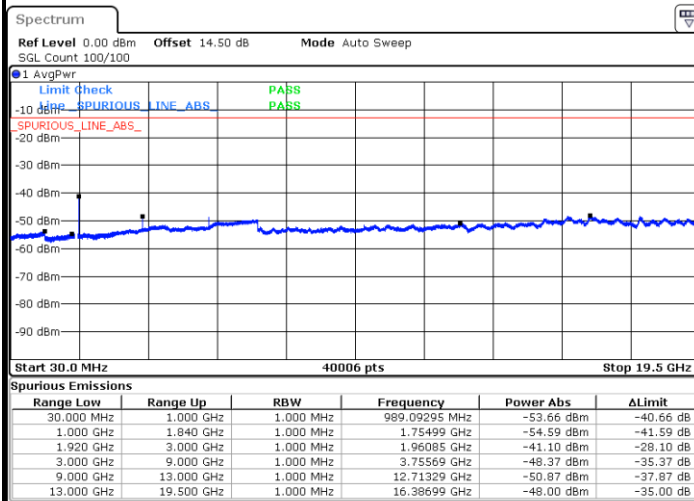
Date: 14.MAR.2020 11:47:42

## Lowest Channel / 16QAM



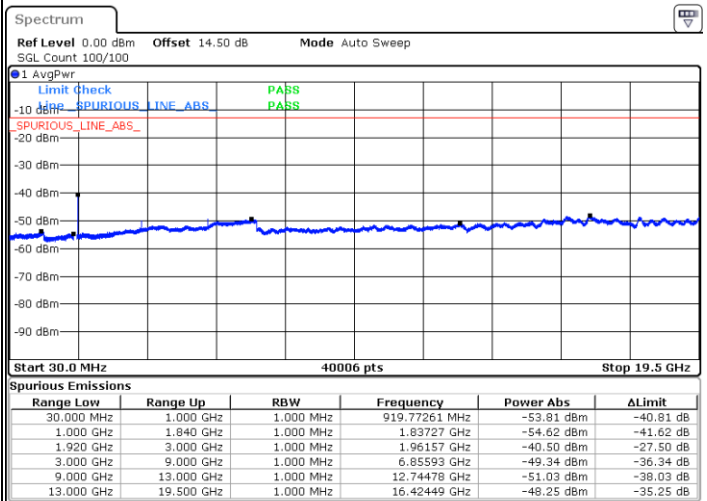
Date: 14.MAR.2020 11:48:18

## Middle Channel / QPSK



Date: 14.MAR.2020 11:49:38

## Middle Channel / 16QAM

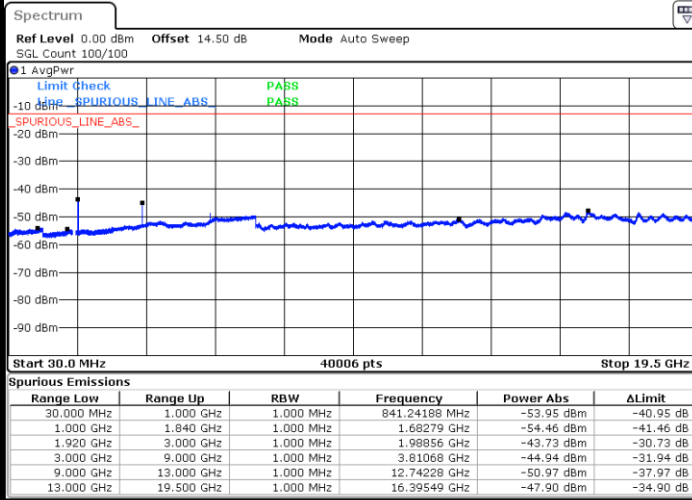


Date: 14.MAR.2020 11:50:14



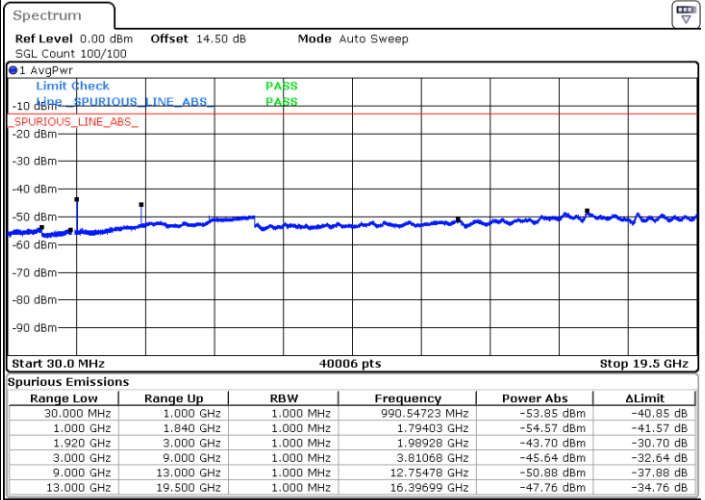
## LTE Band 2 / 5MHz

## Highest Channel / QPSK



Date: 14.MAR.2020 11:56:13

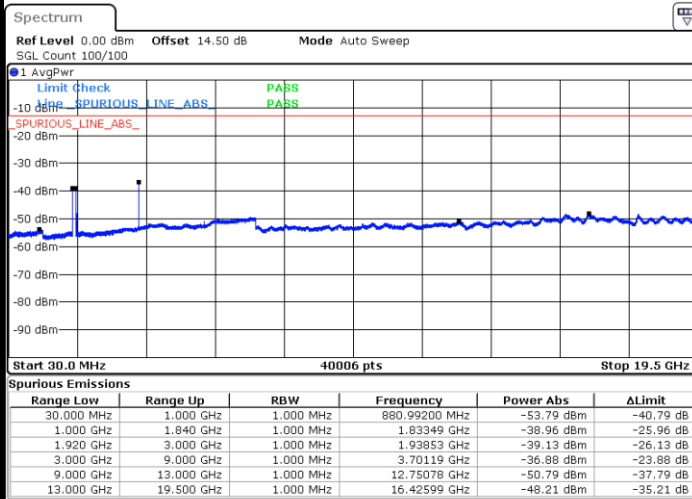
## Highest Channel / 16QAM



Date: 14.MAR.2020 11:56:49

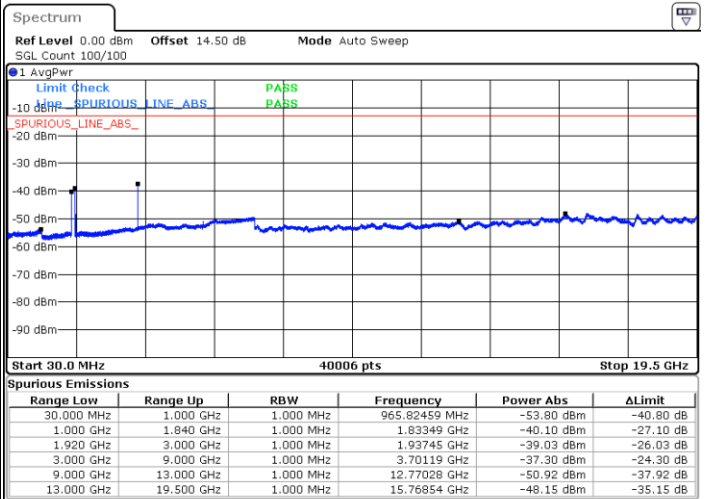
## LTE Band 2 / 10MHz

## Lowest Channel / QPSK



Date: 14.MAR.2020 12:42:35

## Lowest Channel / 16QAM

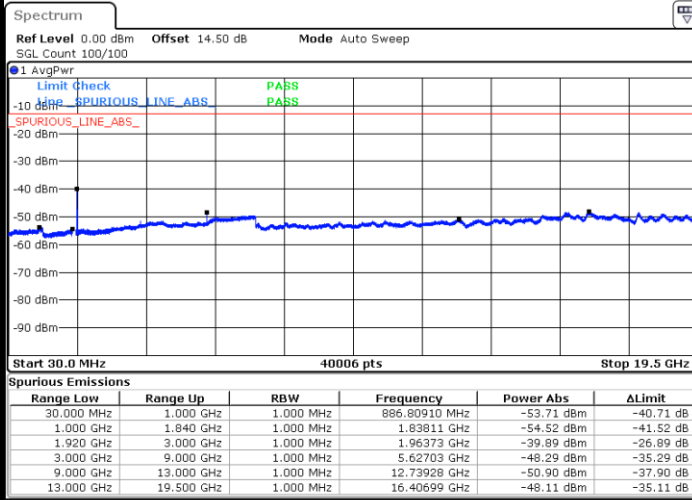


Date: 14.MAR.2020 12:43:12



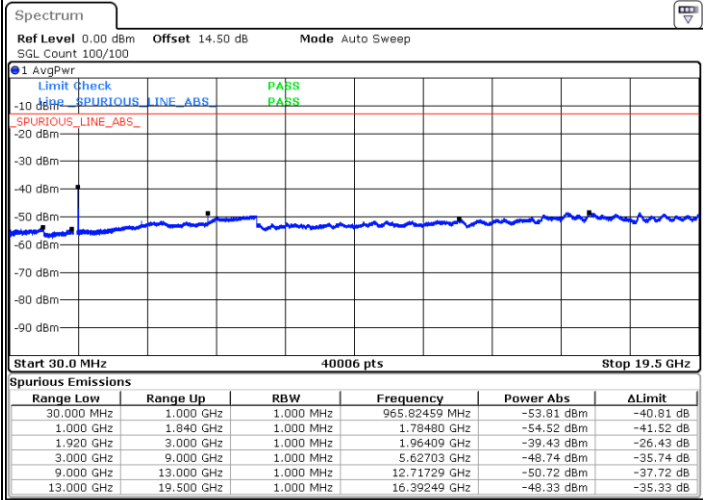
## LTE Band 2 / 10MHz

## Middle Channel / QPSK



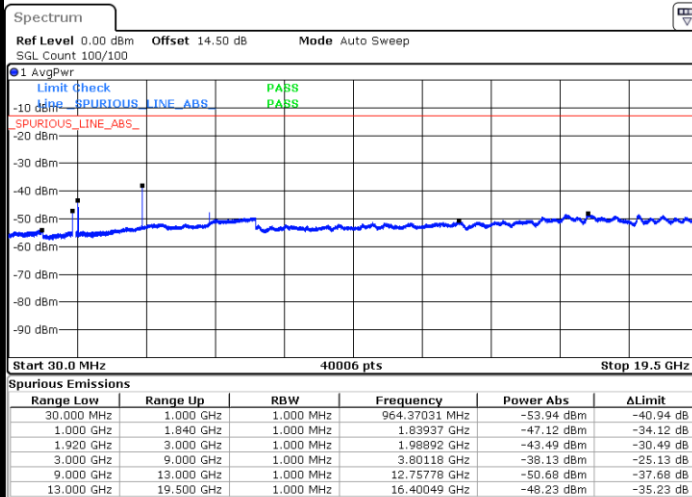
Date: 14.MAR.2020 12:44:31

## Middle Channel / 16QAM



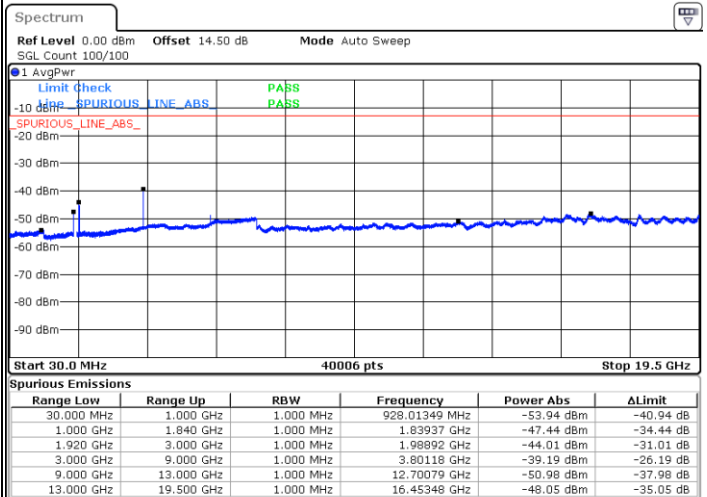
Date: 14.MAR.2020 12:45:07

## Highest Channel / QPSK



Date: 14.MAR.2020 12:48:43

## Highest Channel / 16QAM

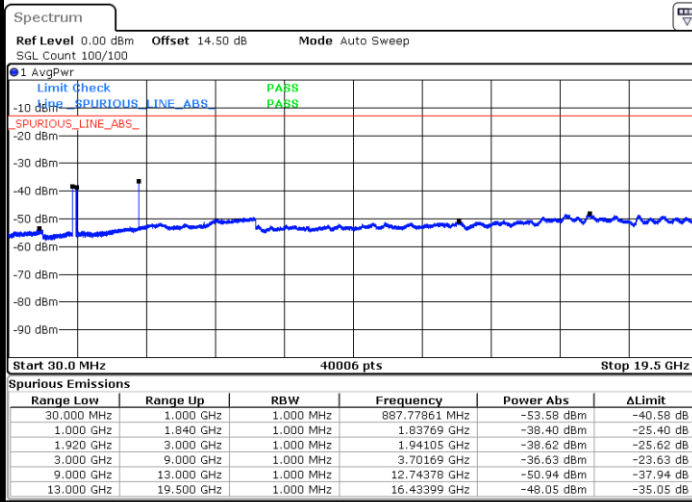


Date: 14.MAR.2020 12:49:19



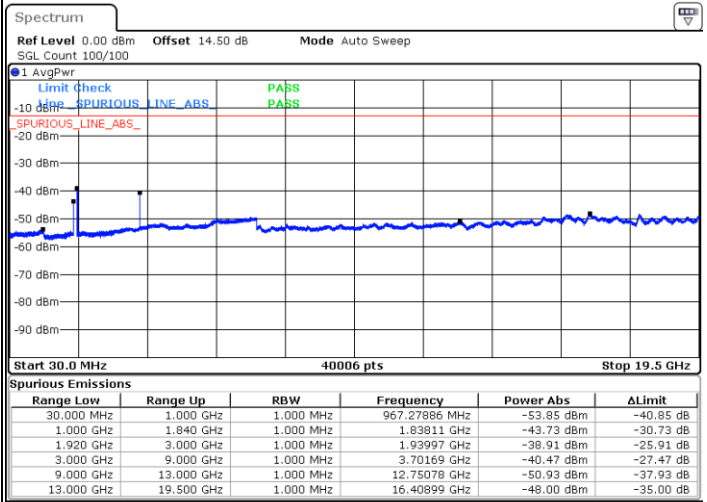
## LTE Band 2 / 15MHz

## Lowest Channel / QPSK



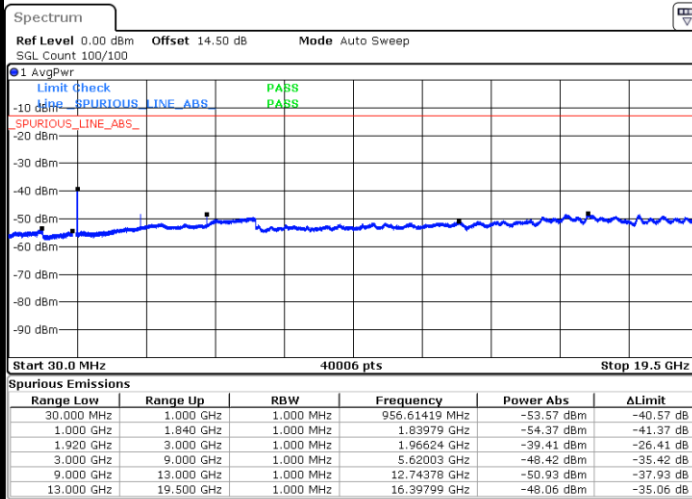
Date: 14.MAR.2020 13:02:38

## Lowest Channel / 16QAM



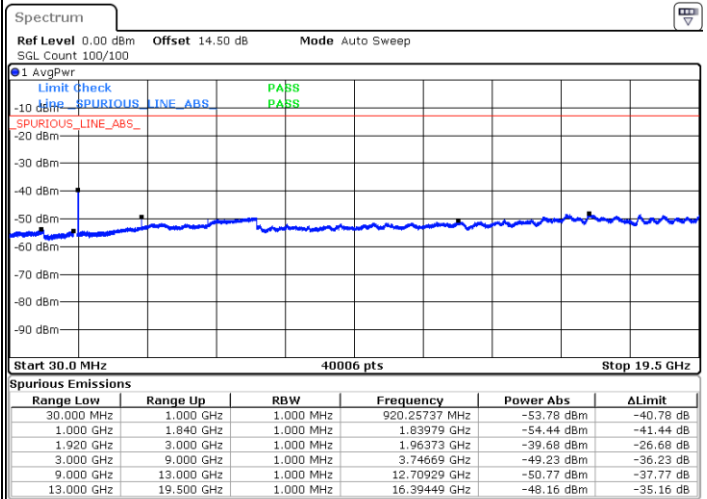
Date: 14.MAR.2020 13:03:14

## Middle Channel / QPSK



Date: 14.MAR.2020 13:04:34

## Middle Channel / 16QAM

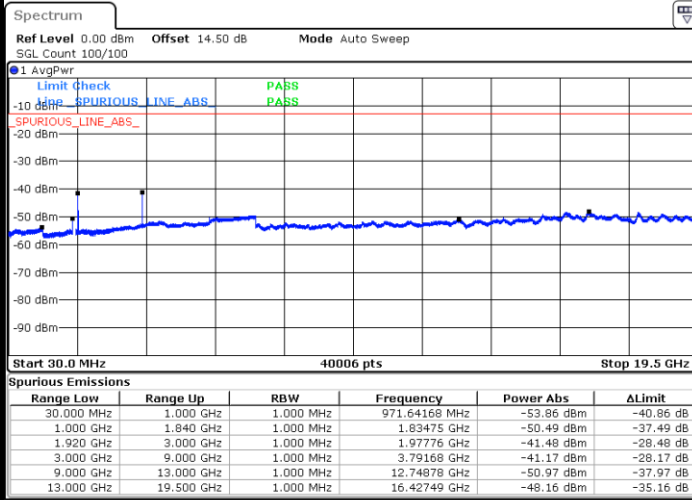


Date: 14.MAR.2020 13:05:10



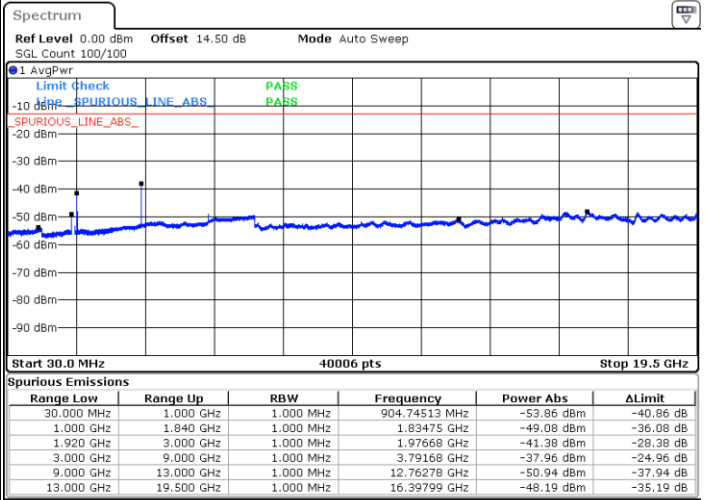
## LTE Band 2 / 15MHz

## Highest Channel / QPSK



Date: 14 MAR 2020 13:08:45

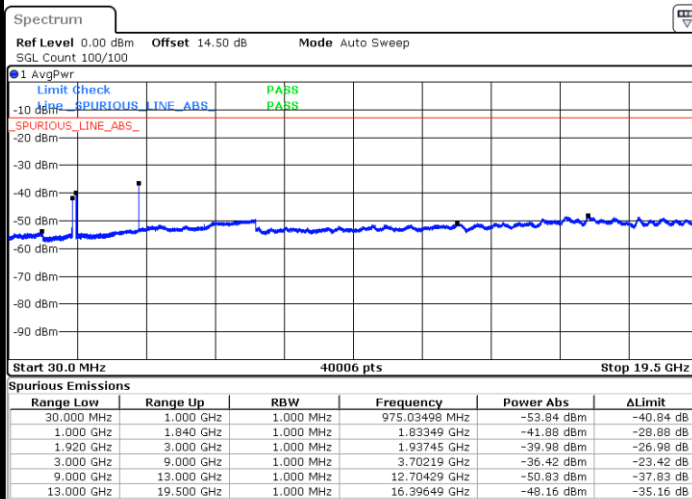
## Highest Channel / 16QAM



Date: 14 MAR 2020 13:09:21

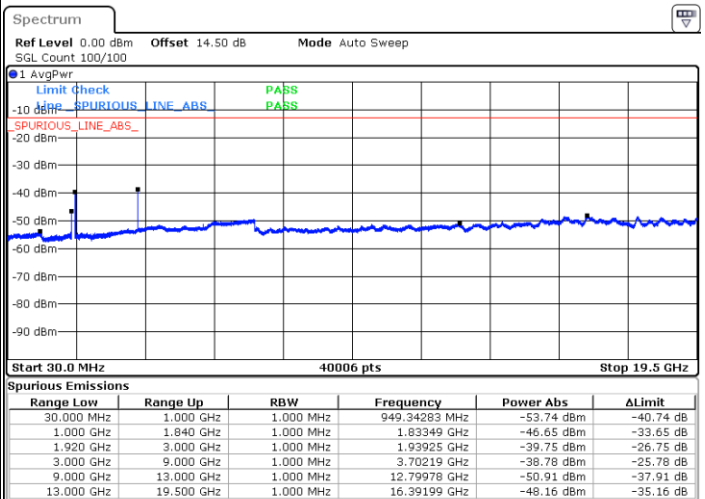
## LTE Band 2 / 20MHz

## Lowest Channel / QPSK



Date: 14 MAR 2020 13:12:57

## Lowest Channel / 16QAM

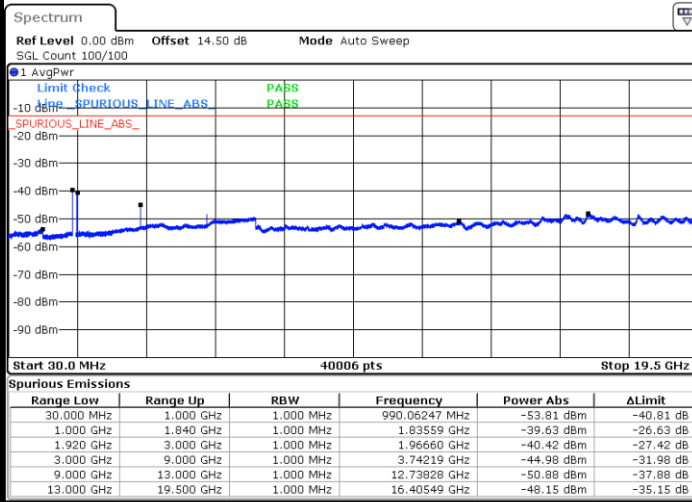


Date: 14 MAR 2020 13:13:33



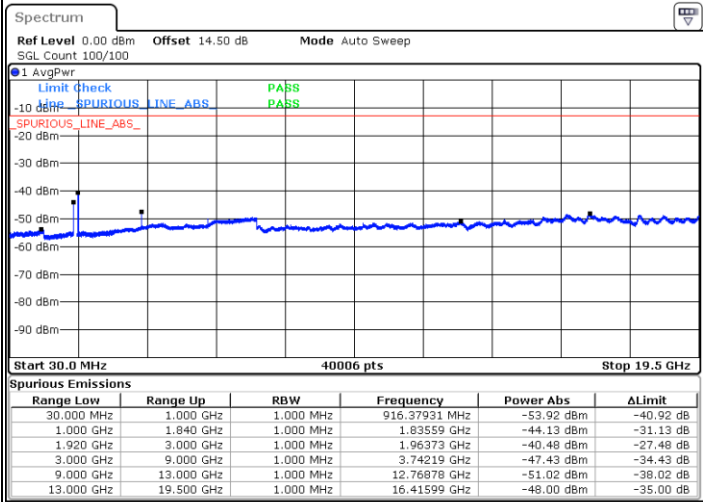
## LTE Band 2 / 20MHz

## Middle Channel / QPSK



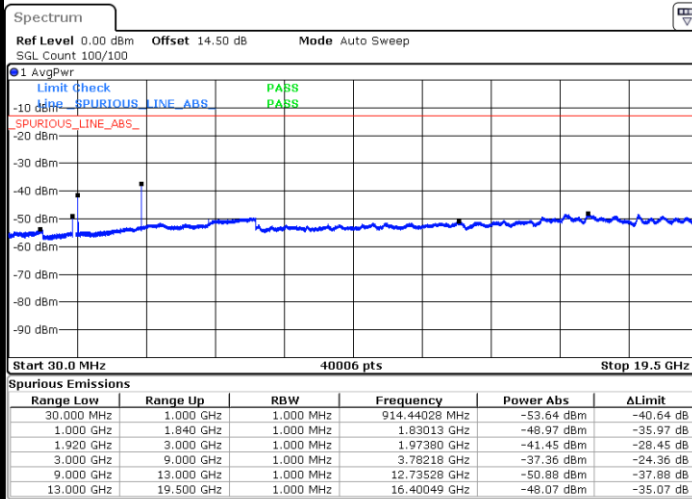
Date: 14.MAR.2020 13:14:53

## Middle Channel / 16QAM



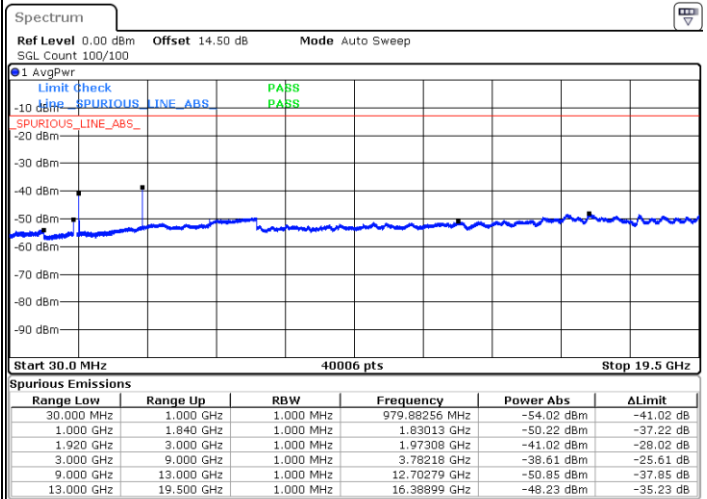
Date: 14.MAR.2020 13:15:29

## Highest Channel / QPSK



Date: 14.MAR.2020 13:19:04

## Highest Channel / 16QAM



Date: 14.MAR.2020 13:19:40



**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    | 0.0093                             | PASS    |
| 40               | Normal Voltage    | 0.0062                             |         |
| 30               | Normal Voltage    | 0.0011                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0151                             |         |
| 0                | Normal Voltage    | 0.0137                             |         |
| -10              | Normal Voltage    | 0.0184                             |         |
| -20              | Normal Voltage    | 0.0133                             |         |
| -30              | Normal Voltage    | 0.0160                             |         |
| 20               | Maximum Voltage   | 0.0126                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0148                             |         |

**Note:**

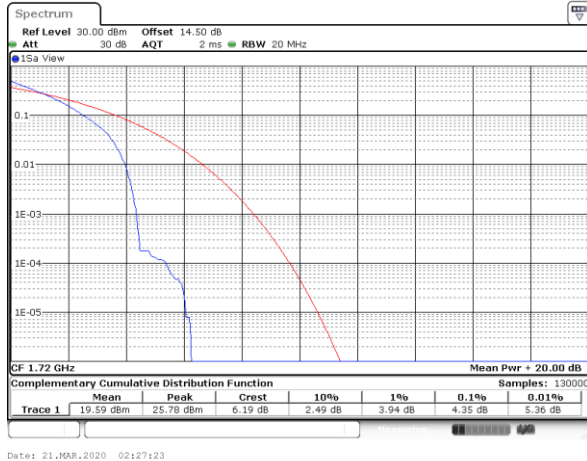
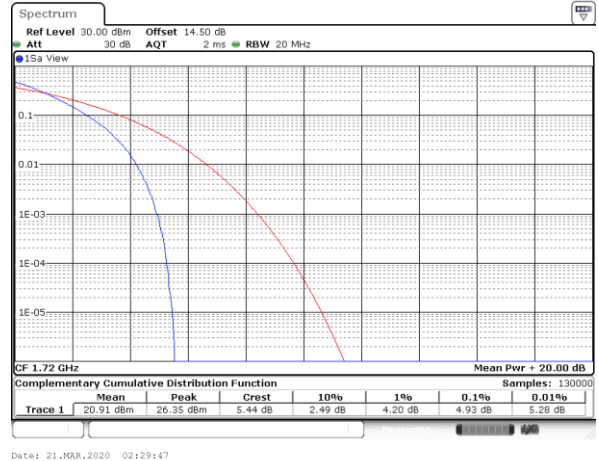
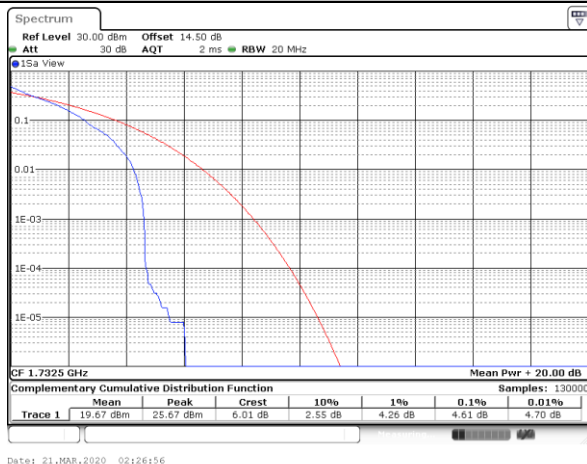
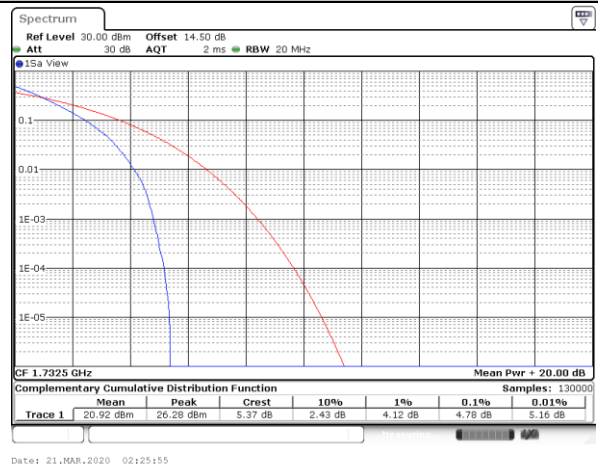
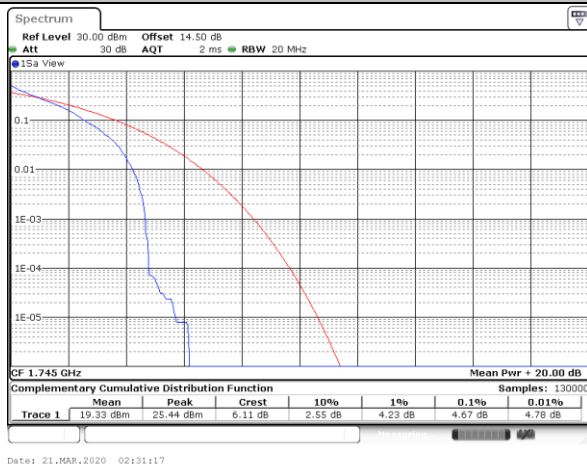
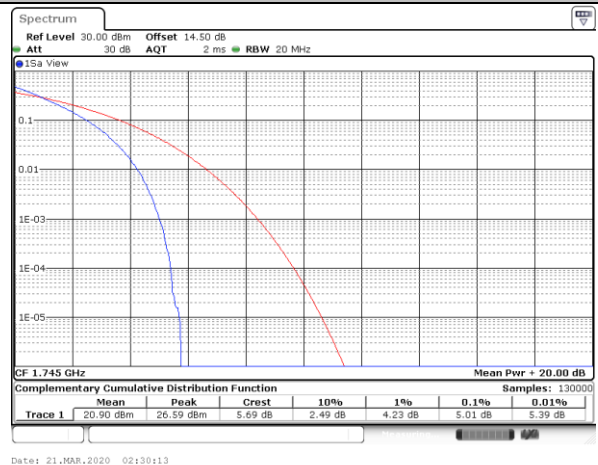
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 4

### Peak-to-Average Ratio

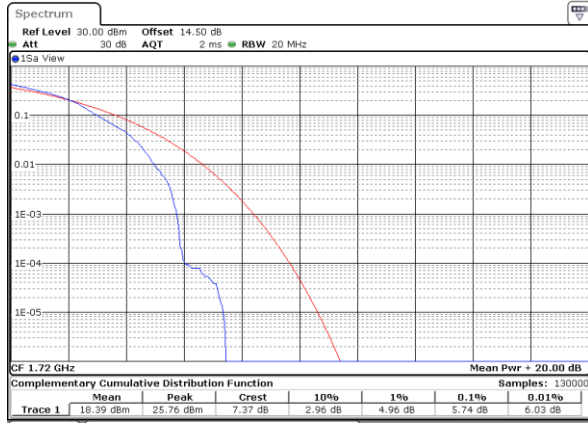
| Mode       | LTE Band 4 / 20MHz |         |       |         |             |
|------------|--------------------|---------|-------|---------|-------------|
| Mod.       | QPSK               |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 4.35               | 4.93    | 5.74  | 6.06    | PASS        |
| Middle CH  | 4.61               | 4.78    | 6.00  | 5.94    |             |
| Highest CH | 4.67               | 5.01    | 5.65  | 6.14    |             |

**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**


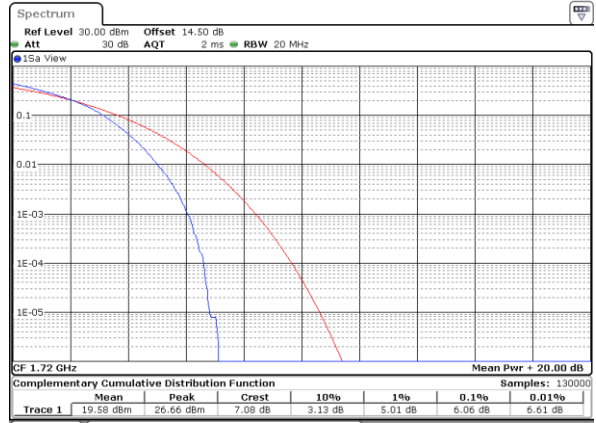


## LTE Band 4 / 20MHz / 16QAM

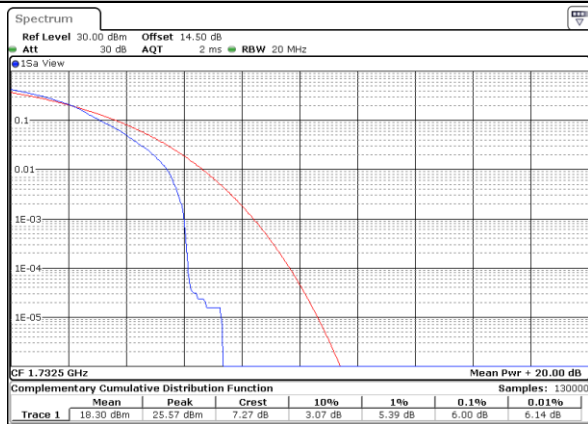
## Lowest Channel / 1RB



## Lowest Channel / Full RB



## Middle Channel / 1RB



## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB



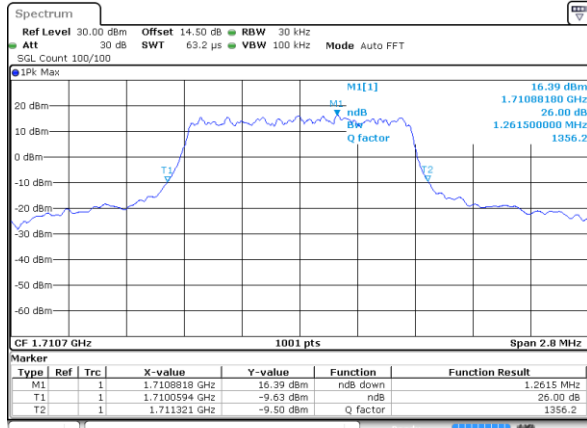
**26dB Bandwidth**

| 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  | 1.26                      | 1.27  | 3.14 | 3.05  | 4.95 | 4.91  | 9.75  | 10.33 | 14.54 | 14.45 | 19.22 | 19.02 |
| Middle CH  | 1.27                      | 1.24  | 3.12 | 3.03  | 5.14 | 5.33  | 9.71  | 10.05 | 14.6  | 14.45 | 19.42 | 19.06 |
| Highest CH | 1.24                      | 1.31  | 3.06 | 3.15  | 5.16 | 4.84  | 9.81  | 9.93  | 14.51 | 14.21 | 19.02 | 19.18 |



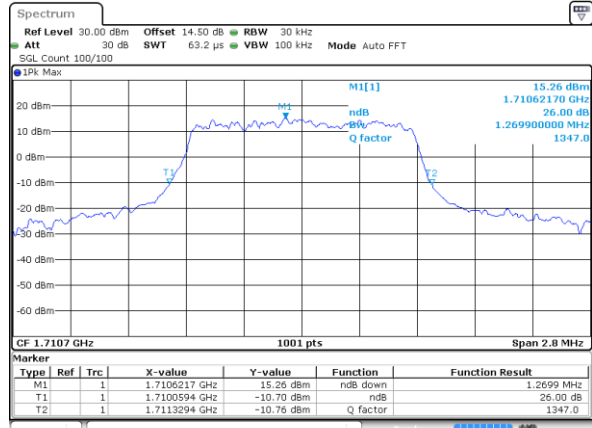
## LTE Band 4

## Lowest Channel / 1.4MHz / QPSK



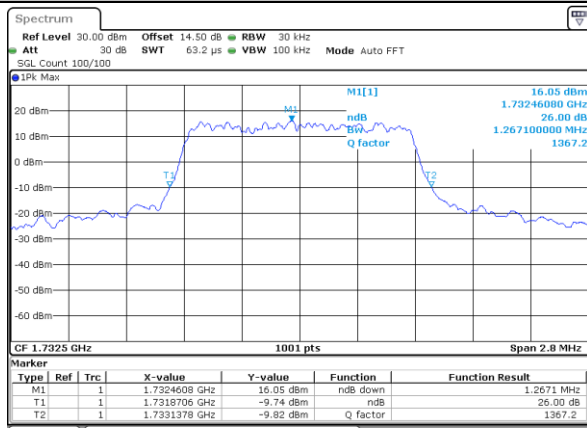
Date: 14 MAR 2020 18:34:17

## Lowest Channel / 1.4MHz / 16QAM



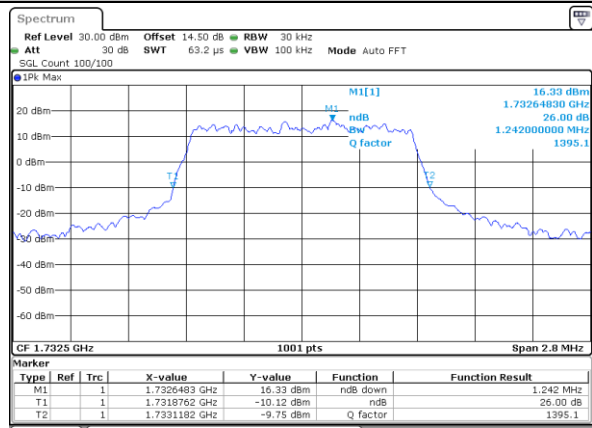
Date: 14 MAR 2020 18:34:28

## Middle Channel / 1.4MHz / QPSK



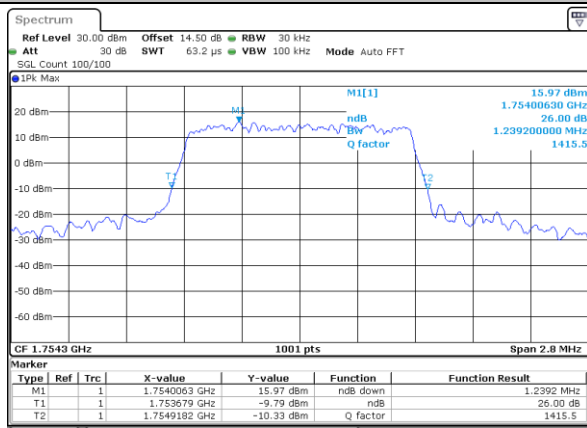
Date: 14 MAR 2020 18:40:18

## Middle Channel / 1.4MHz / 16QAM



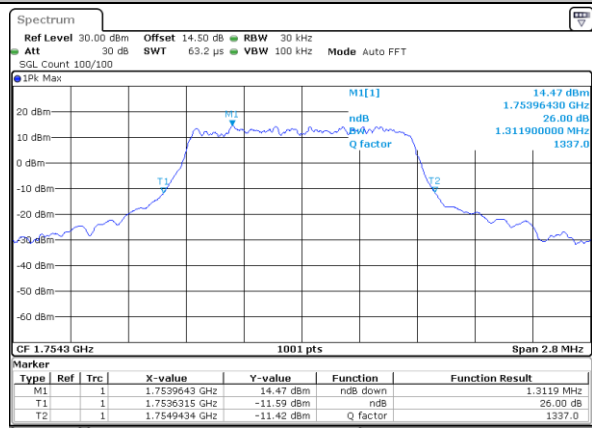
Date: 14 MAR 2020 18:40:29

## Highest Channel / 1.4MHz / QPSK



Date: 14 MAR 2020 18:42:10

## Highest Channel / 1.4MHz / 16QAM

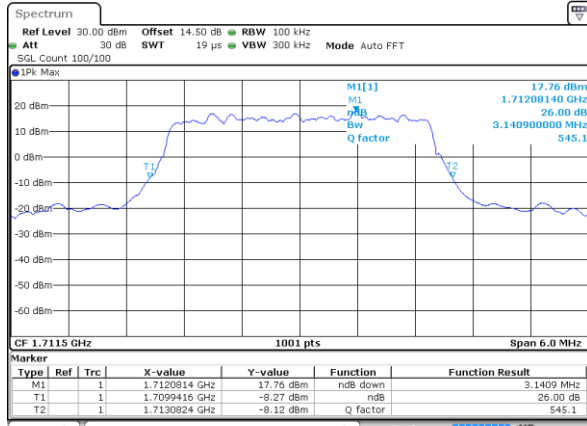


Date: 14 MAR 2020 18:42:21



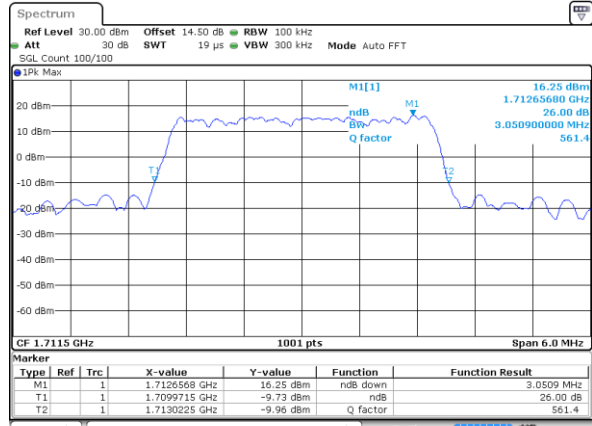
## LTE Band 4

## Lowest Channel / 3MHz / QPSK



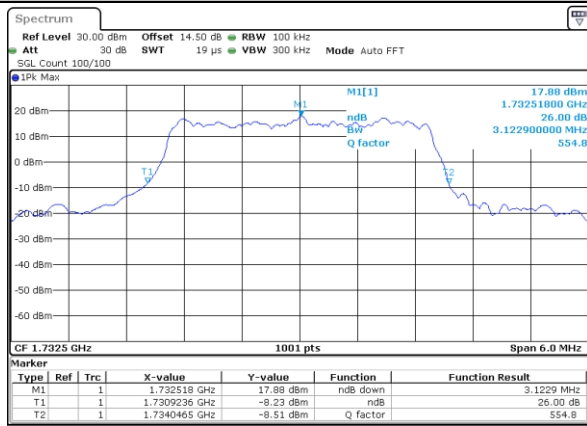
Date: 14 MAR 2020 17:04:52

## Lowest Channel / 3MHz / 16QAM



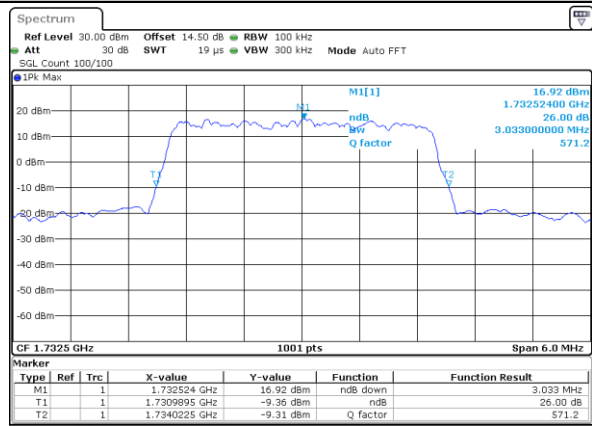
Date: 14 MAR 2020 17:05:04

## Middle Channel / 3MHz / QPSK



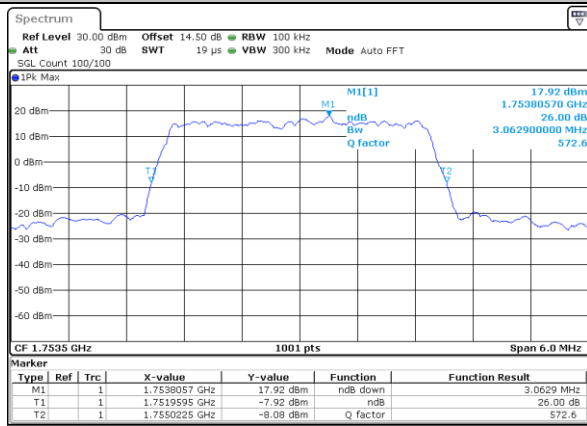
Date: 14 MAR 2020 17:10:41

## Middle Channel / 3MHz / 16QAM



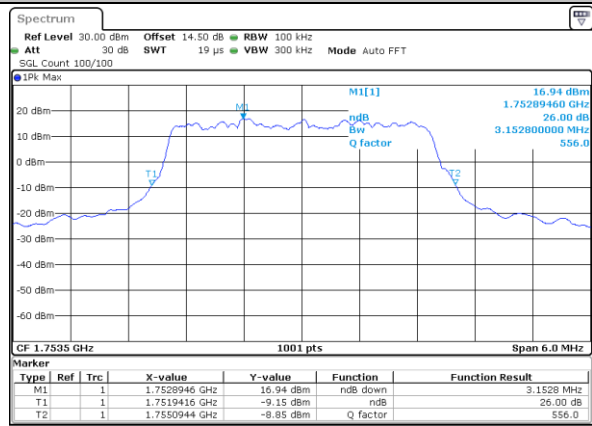
Date: 14 MAR 2020 17:10:52

## Highest Channel / 3MHz / QPSK



Date: 14 MAR 2020 17:12:34

## Highest Channel / 3MHz / 16QAM

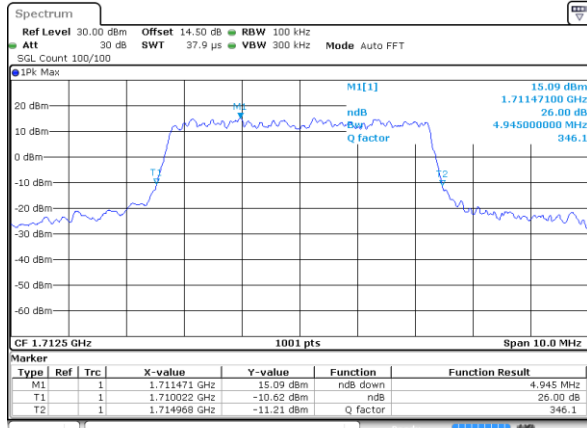


Date: 14 MAR 2020 17:12:45



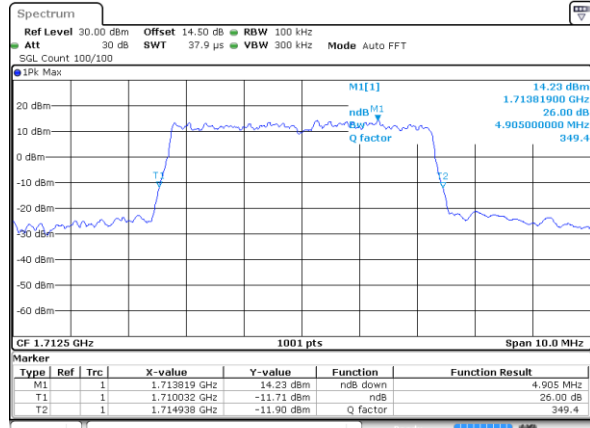
## LTE Band 4

## Lowest Channel / 5MHz / QPSK



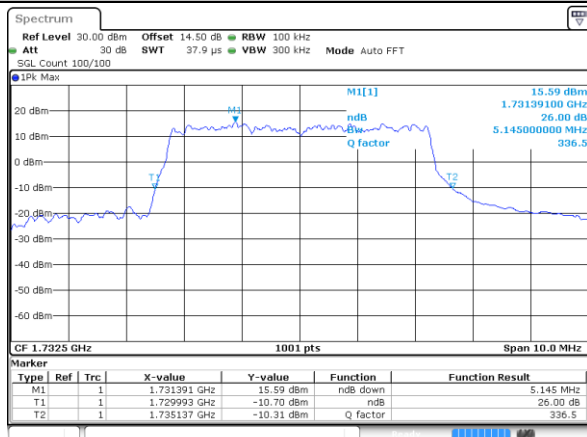
Date: 14 MAR 2020 17:18:22

## Lowest Channel / 5MHz / 16QAM



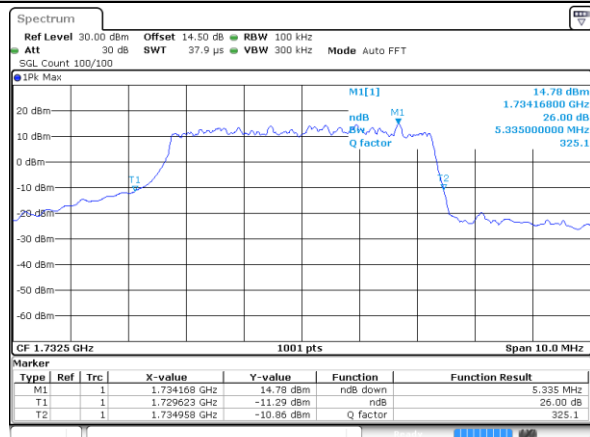
Date: 14 MAR 2020 17:18:33

## Middle Channel / 5MHz / QPSK



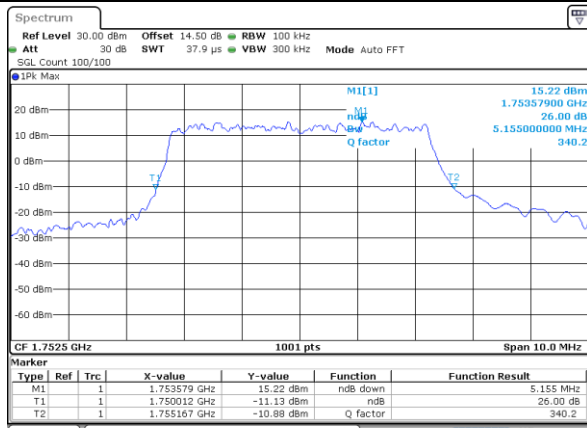
Date: 14 MAR 2020 17:24:10

## Middle Channel / 5MHz / 16QAM



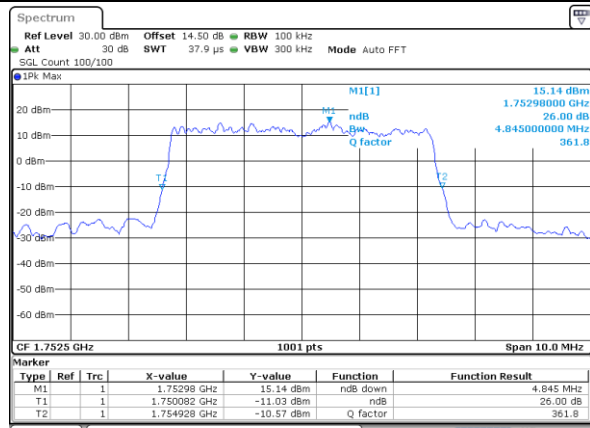
Date: 14 MAR 2020 17:24:21

## Highest Channel / 5MHz / QPSK



Date: 14 MAR 2020 17:26:03

## Highest Channel / 5MHz / 16QAM



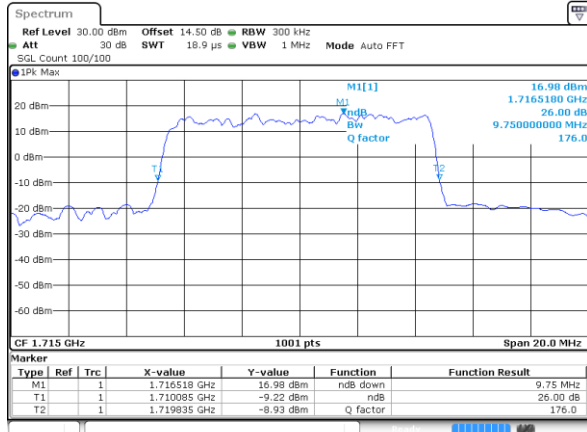
Date: 14 MAR 2020 17:26:14





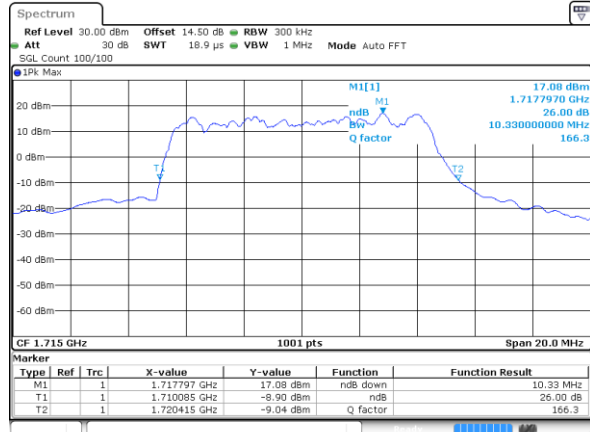
## LTE Band 4

## Lowest Channel / 10MHz / QPSK



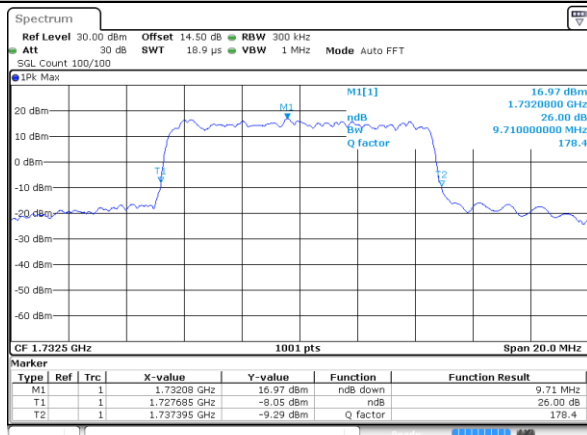
Date: 14 MAR 2020 17:31:51

## Lowest Channel / 10MHz / 16QAM



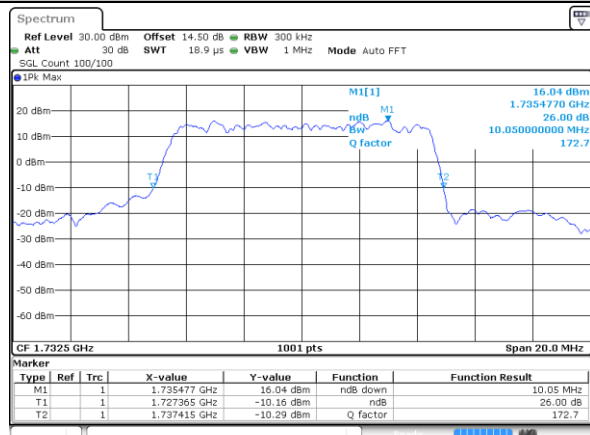
Date: 14 MAR 2020 17:32:02

## Middle Channel / 10MHz / QPSK



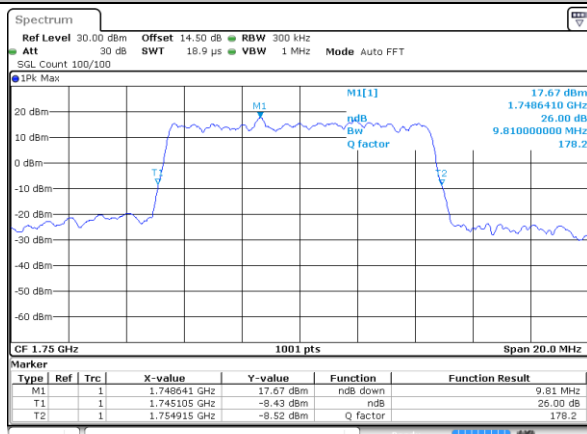
Date: 14 MAR 2020 17:37:39

## Middle Channel / 10MHz / 16QAM



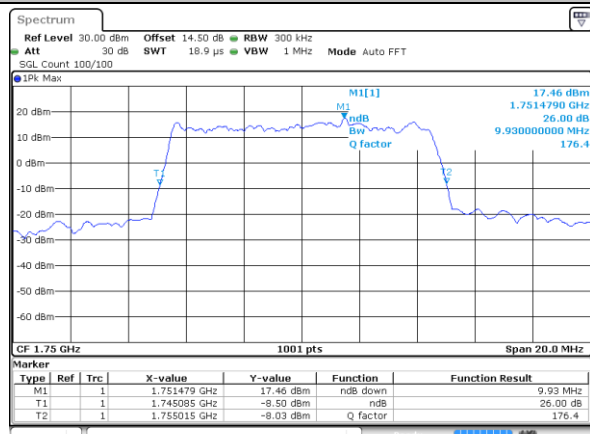
Date: 14 MAR 2020 17:37:50

## Highest Channel / 10MHz / QPSK



Date: 14 MAR 2020 17:39:32

## Highest Channel / 10MHz / 16QAM

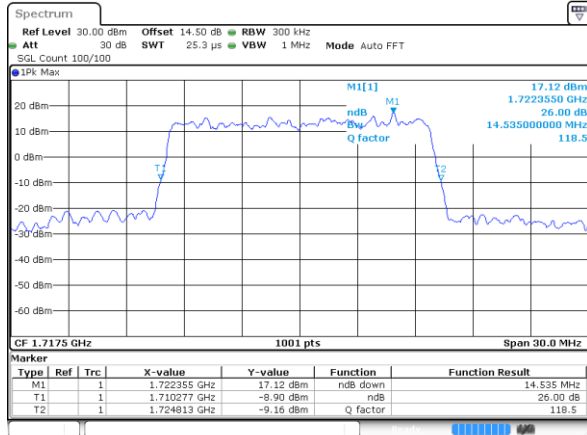


Date: 14 MAR 2020 17:39:43

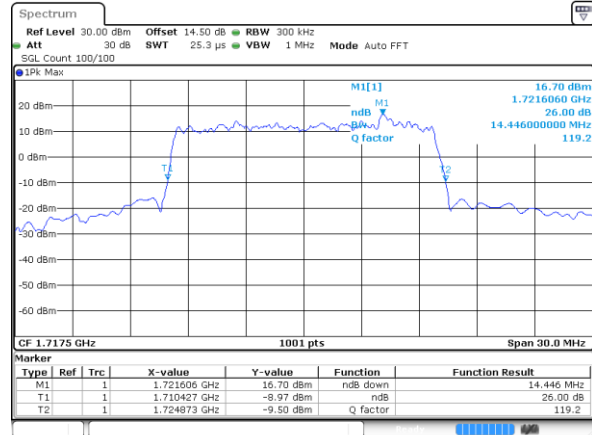


## LTE Band 4

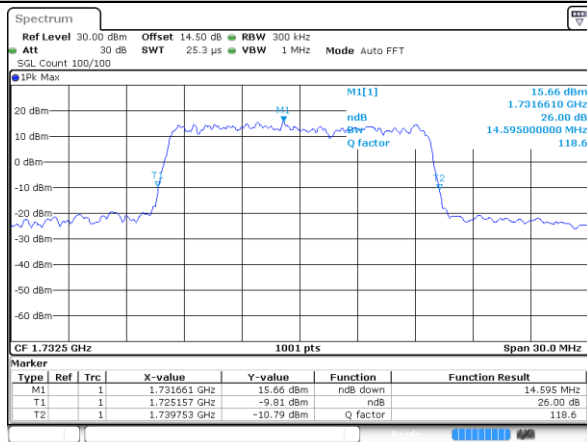
## Lowest Channel / 15MHz / QPSK



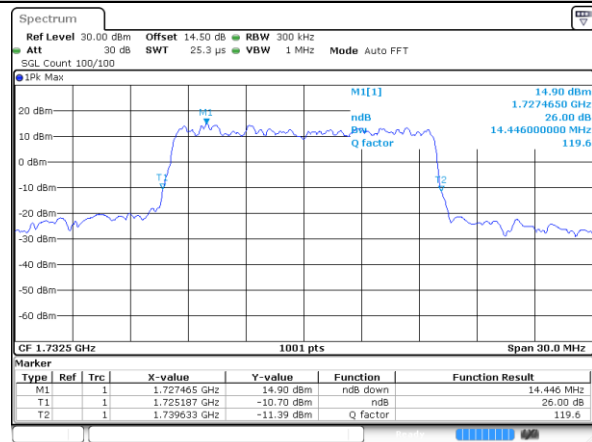
## Lowest Channel / 15MHz / 16QAM



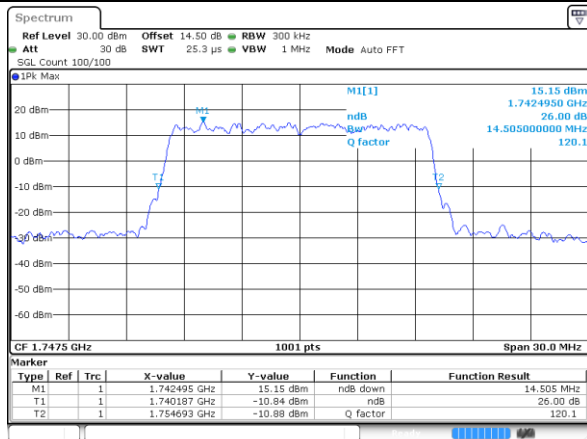
## Middle Channel / 15MHz / QPSK



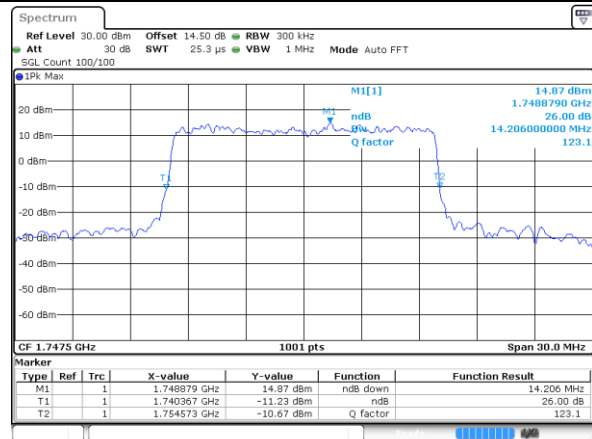
## Middle Channel / 15MHz / 16QAM



## Highest Channel / 15MHz / QPSK



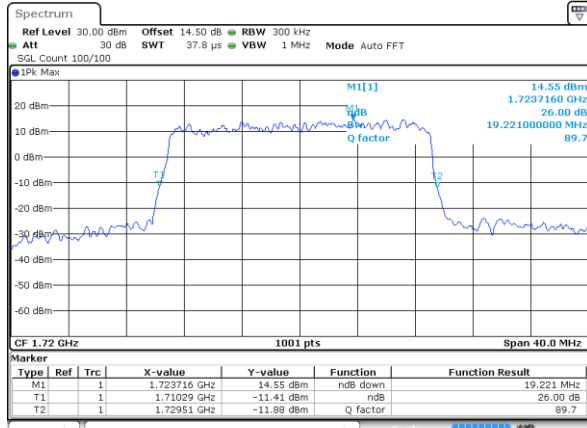
## Highest Channel / 15MHz / 16QAM





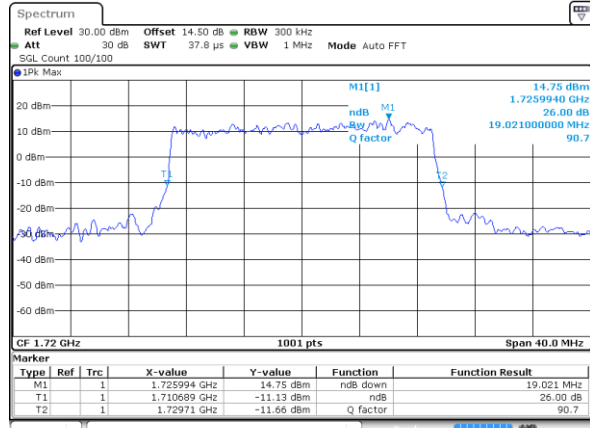
## LTE Band 4

## Lowest Channel / 20MHz / QPSK



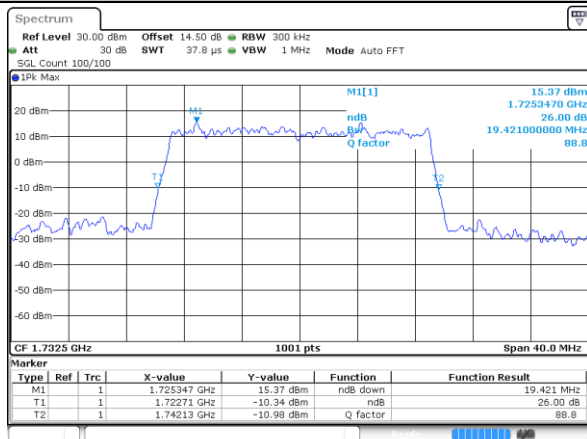
Date: 14 MAR 2020 17:58:49

## Lowest Channel / 20MHz / 16QAM



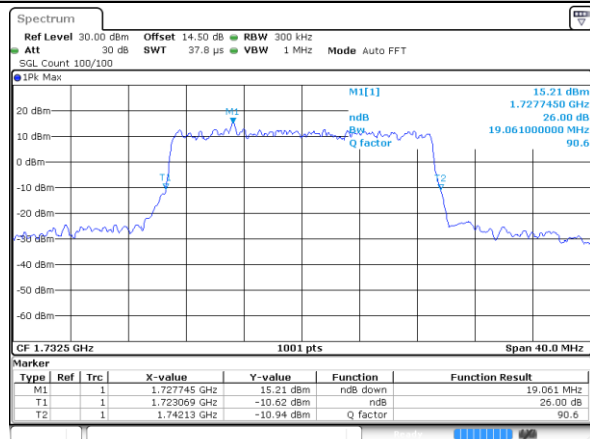
Date: 14 MAR 2020 17:59:00

## Middle Channel / 20MHz / QPSK



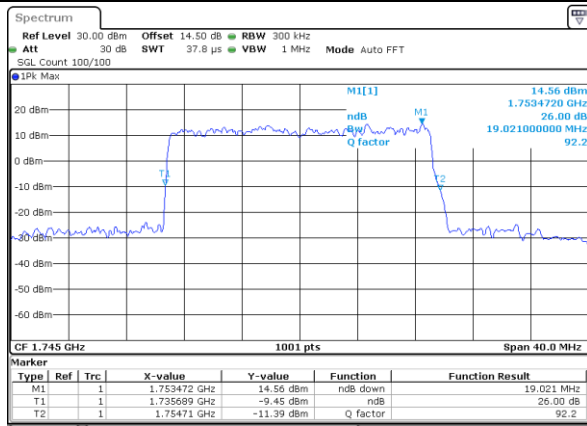
Date: 14 MAR 2020 18:04:37

## Middle Channel / 20MHz / 16QAM



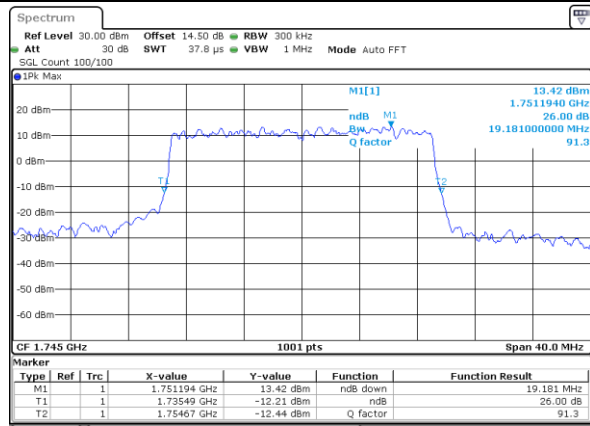
Date: 14 MAR 2020 18:04:48

## Highest Channel / 20MHz / QPSK



Date: 14 MAR 2020 18:06:30

## Highest Channel / 20MHz / 16QAM



Date: 14 MAR 2020 18:06:41