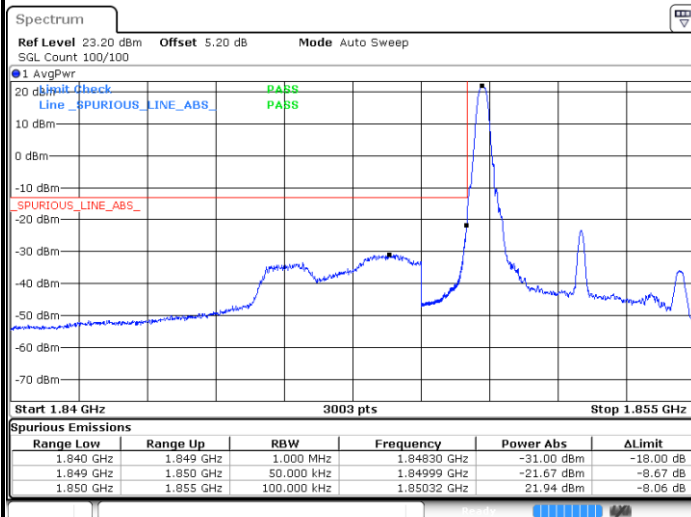


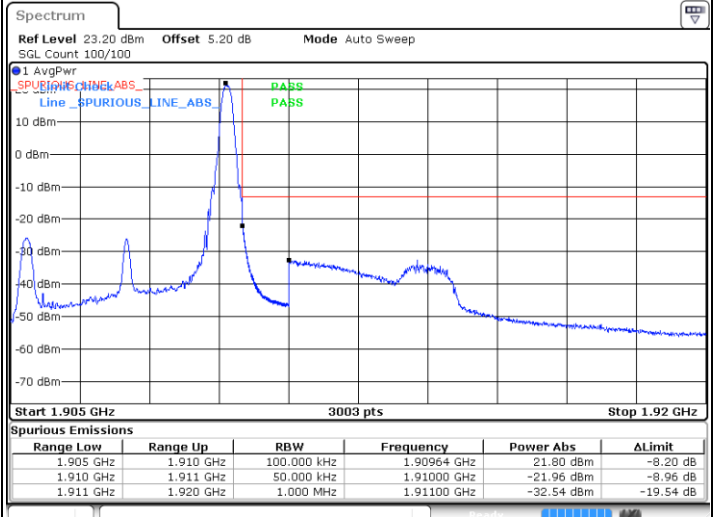


## LTE Band 2 / 5MHz / QPSK

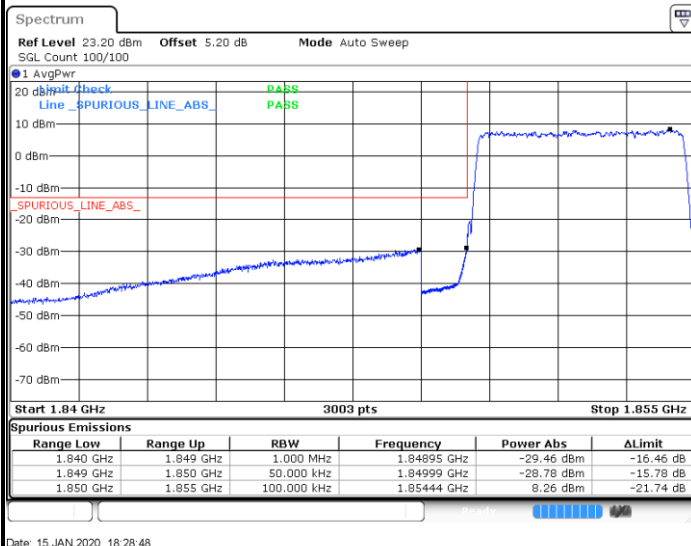
## Lowest Band Edge / 1 RB



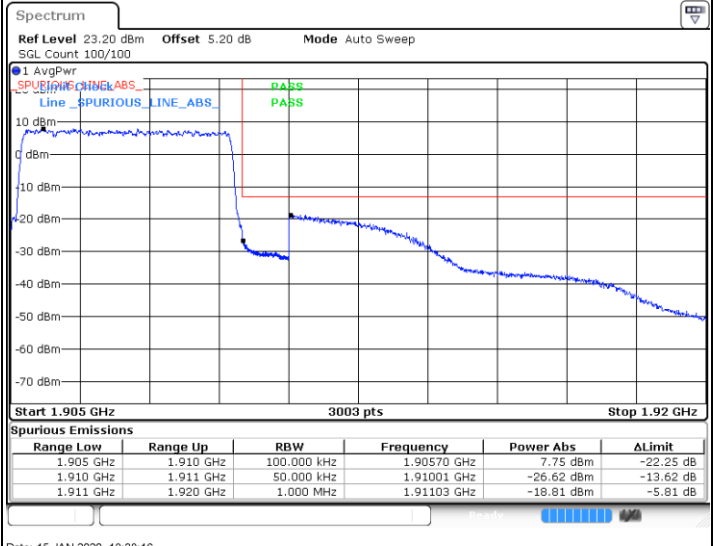
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



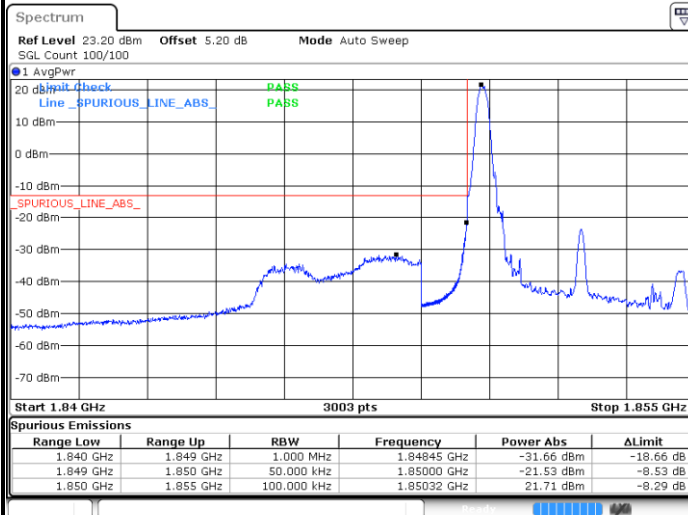
## Highest Band Edge / Full RB



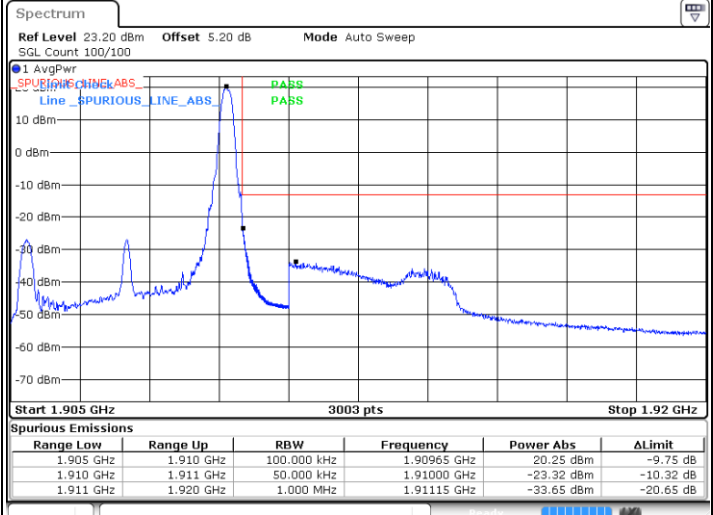


## LTE Band 2 / 5MHz / 16QAM

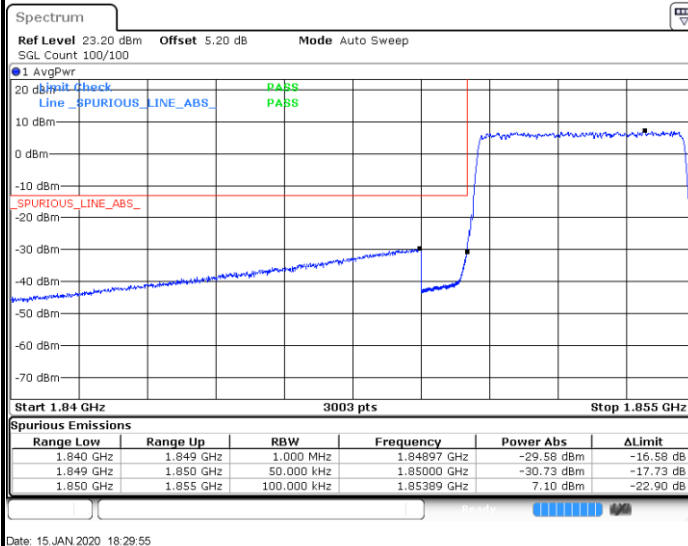
## Lowest Band Edge / 1RB



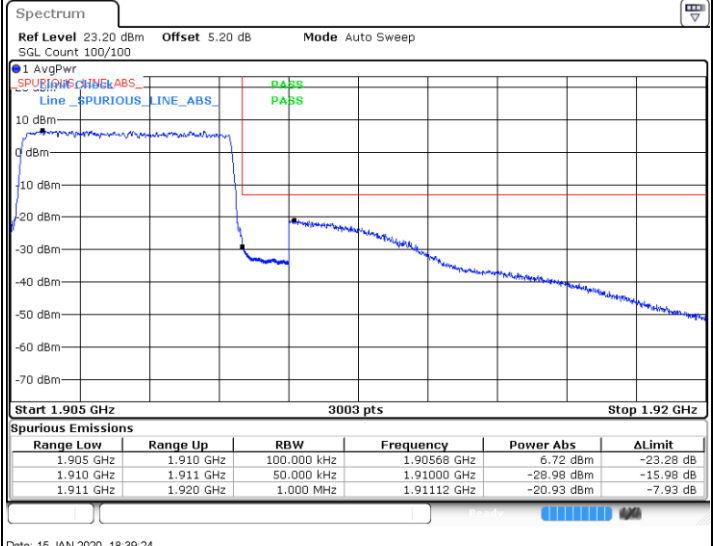
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



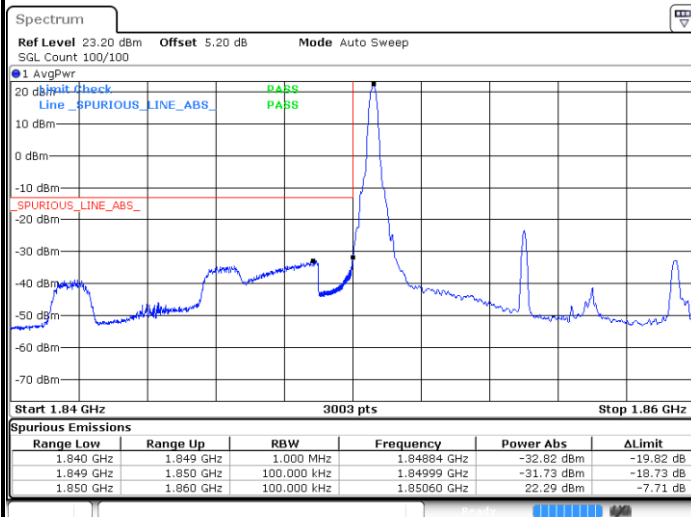
## Highest Band Edge / Full RB



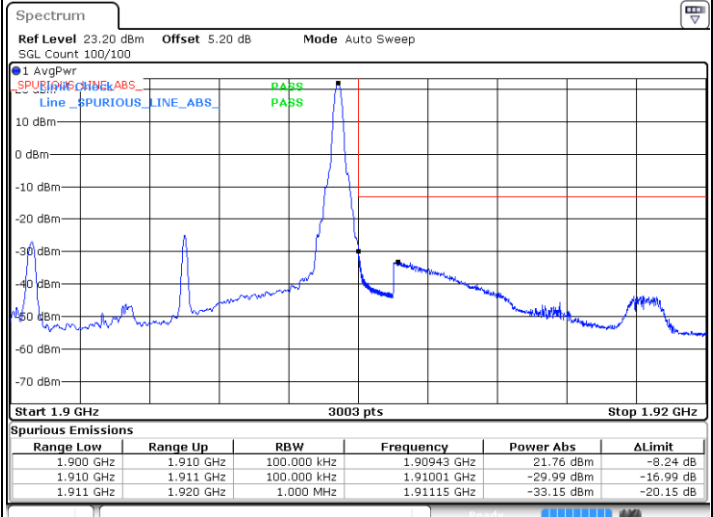


## LTE Band 2 / 10MHz / QPSK

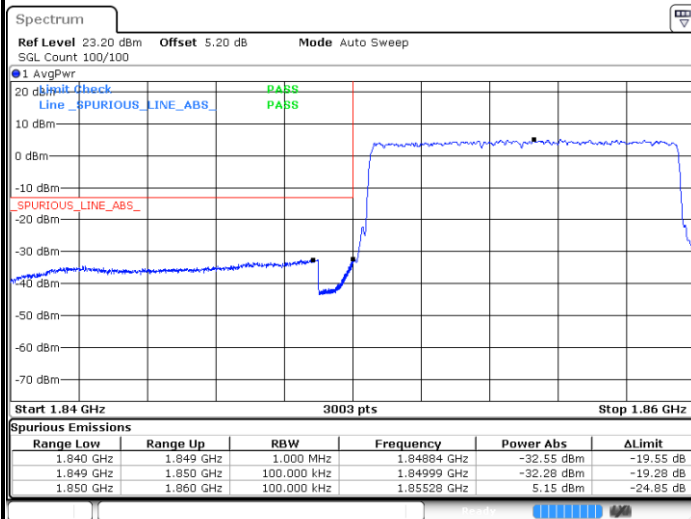
## Lowest Band Edge / 1 RB



## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



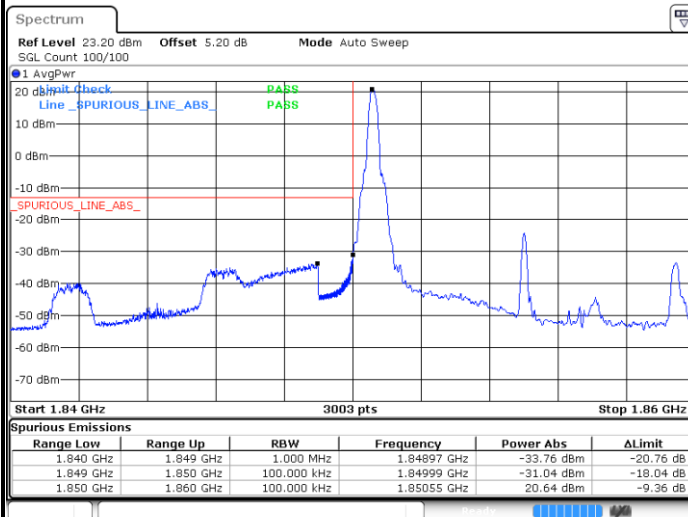
## Highest Band Edge / Full RB



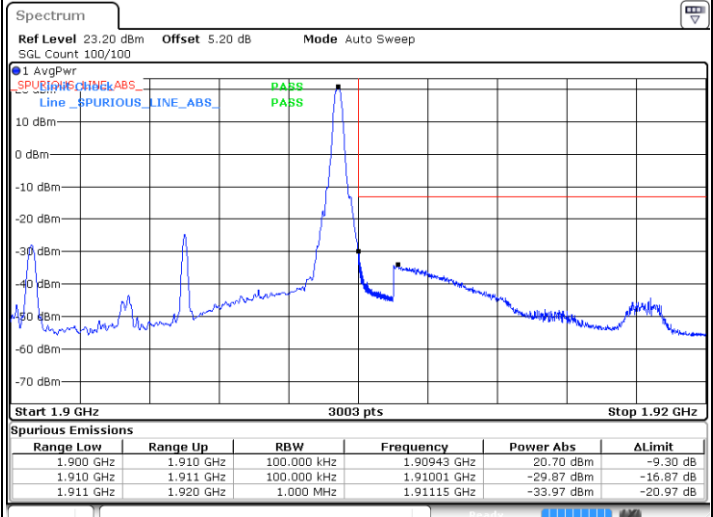


## LTE Band 2 / 10MHz / 16QAM

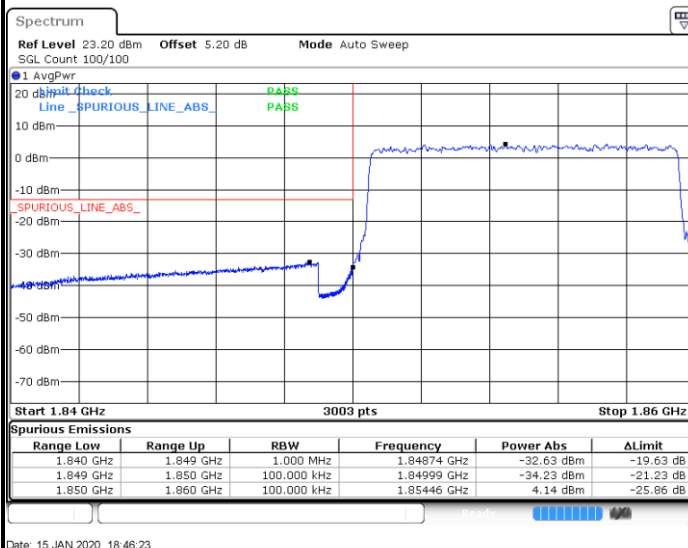
## Lowest Band Edge / 1 RB



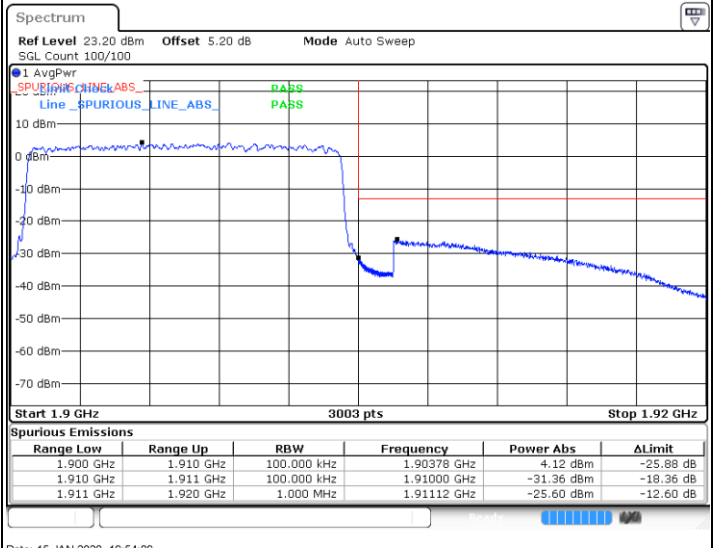
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB

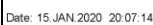


## Highest Band Edge / Full RB





### Highest Band Edge / 1 RB



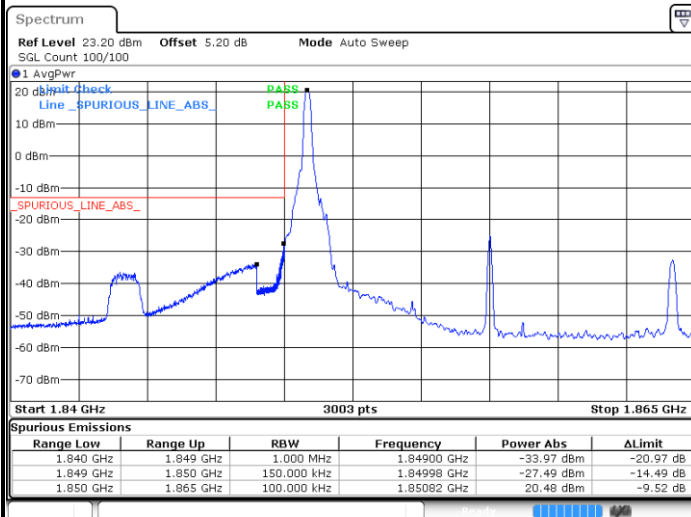
### Highest Band Edge / Full RB



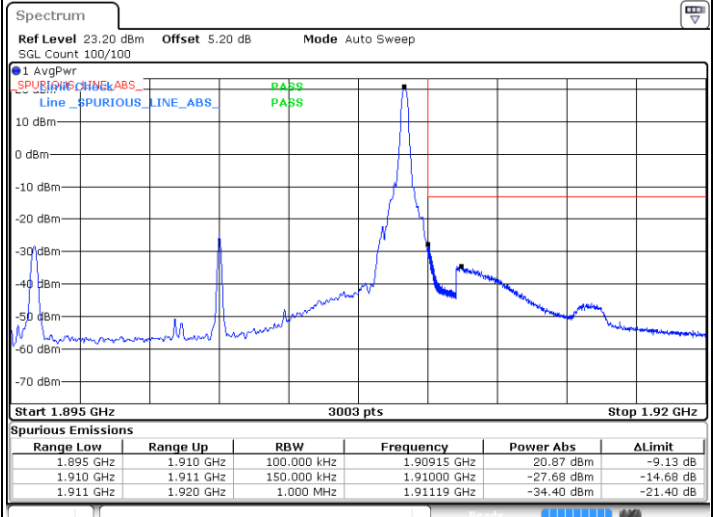


## LTE Band 2 / 15MHz / 16QAM

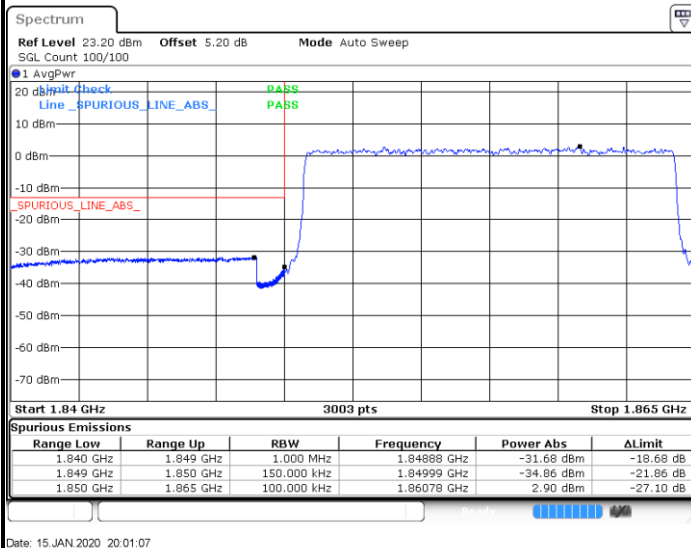
## Lowest Band Edge / 1 RB



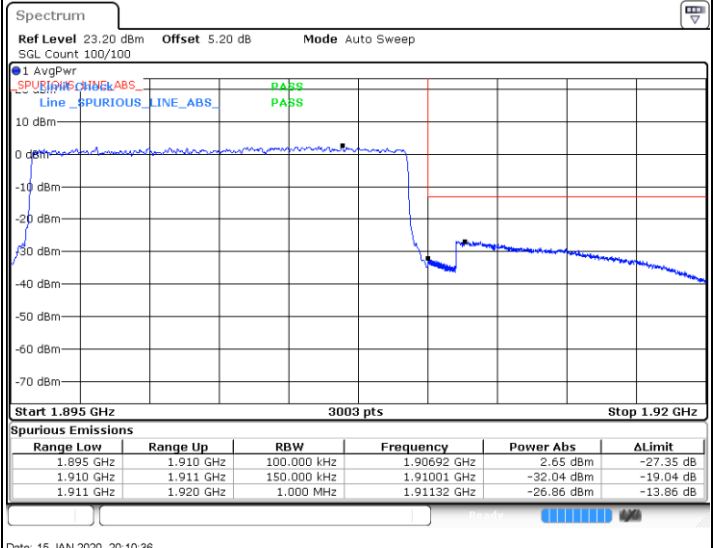
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



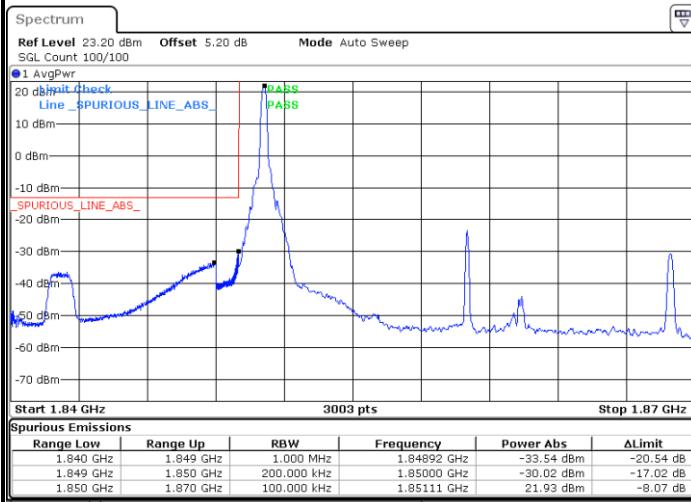
## Highest Band Edge / Full RB



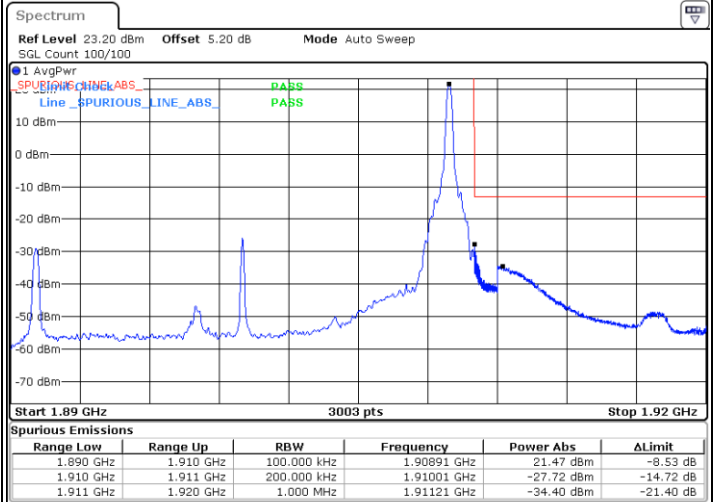


## LTE Band 2 / 20MHz / QPSK

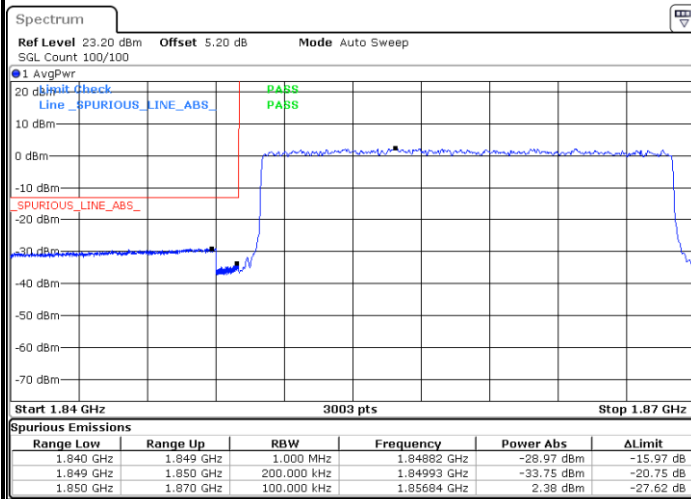
## Lowest Band Edge / 1 RB



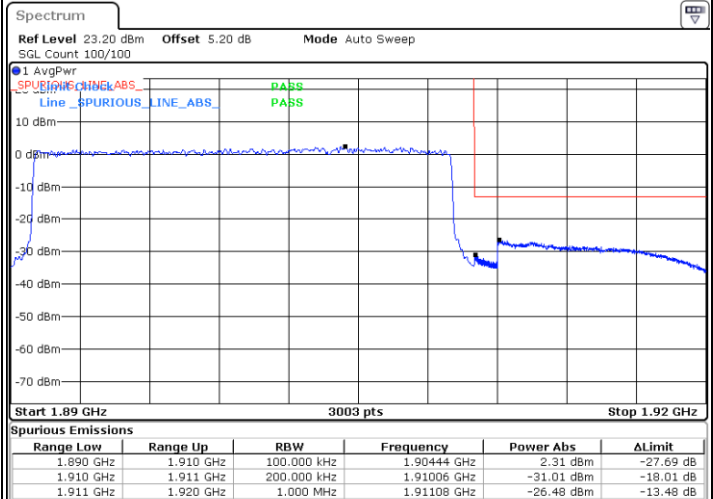
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB

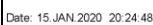


## Highest Band Edge / Full RB





### Highest Band Edge / 1 RB



### Highest Band Edge / Full RB

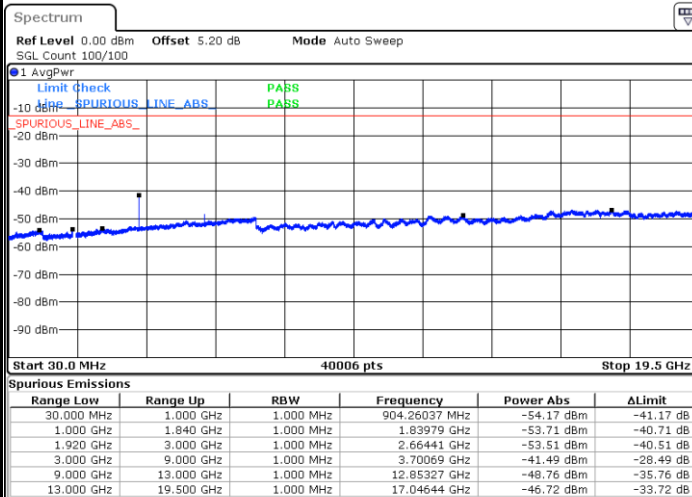




# Conducted Spurious Emission

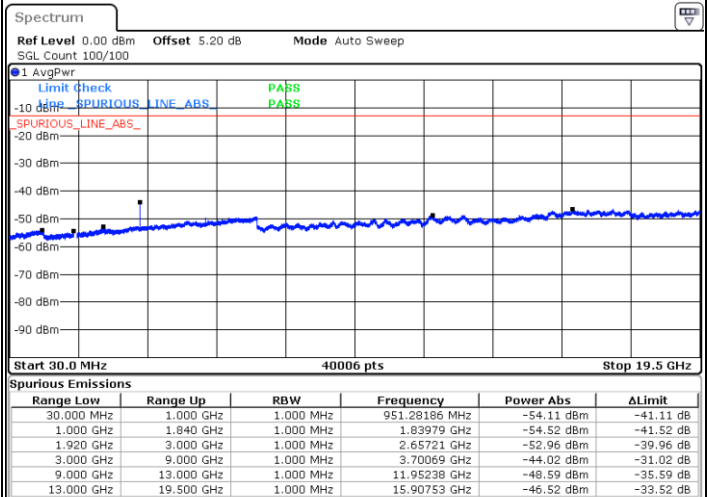
## LTE Band 2 / 1.4MHz

### Lowest Channel / QPSK



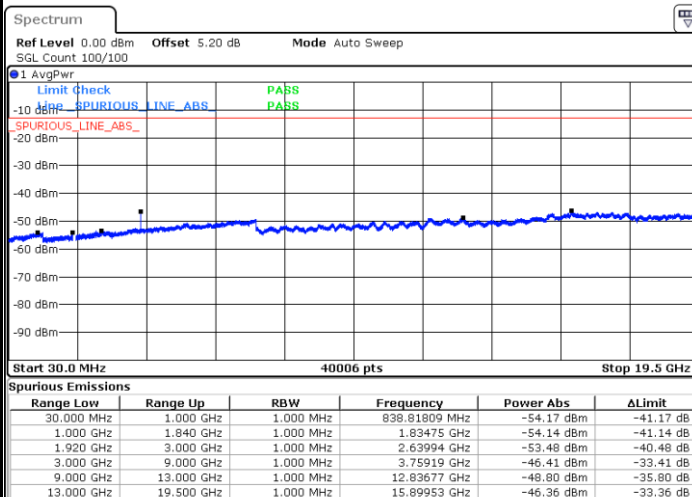
Date: 15 JAN 2020 17:57:50

### Lowest Channel / 16QAM



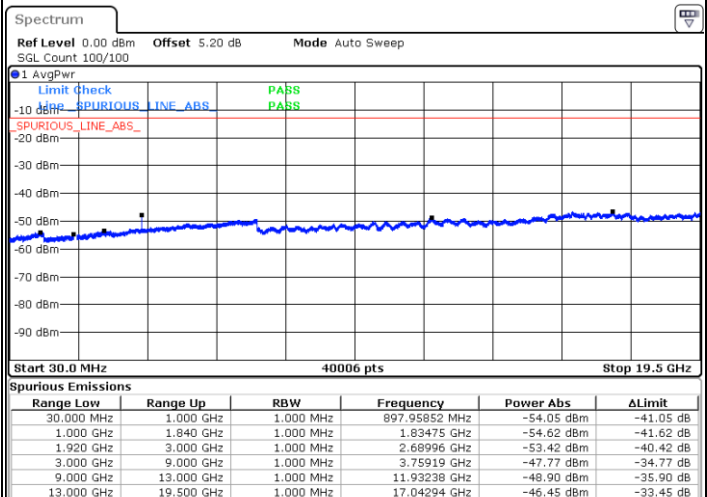
Date: 15 JAN 2020 17:58:45

### Middle Channel / QPSK



Date: 15 JAN 2020 18:00:19

### Middle Channel / 16QAM

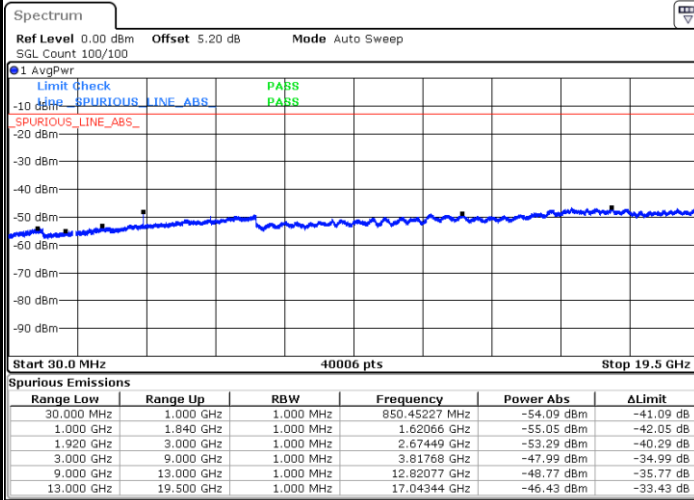


Date: 15 JAN 2020 18:01:14



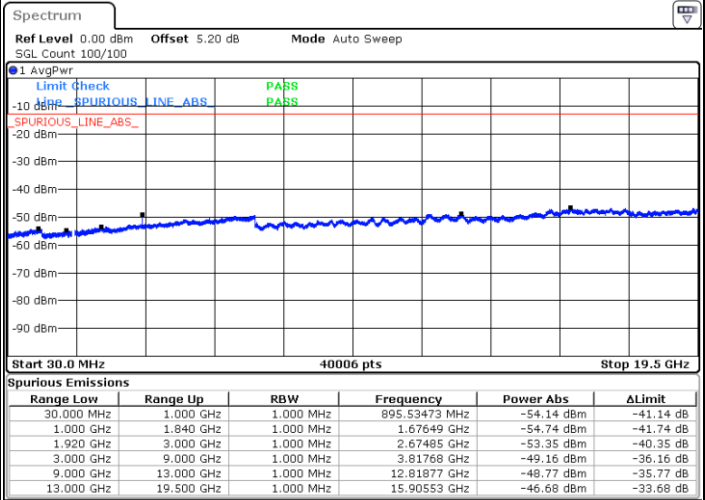
## LTE Band 2 / 1.4MHz

## Highest Channel / QPSK



Date: 15 JAN 2020 18:07:18

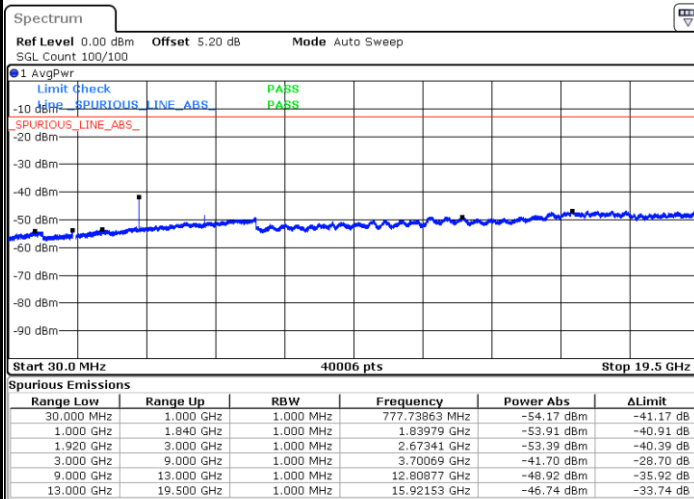
## Highest Channel / 16QAM



Date: 15 JAN 2020 18:08:13

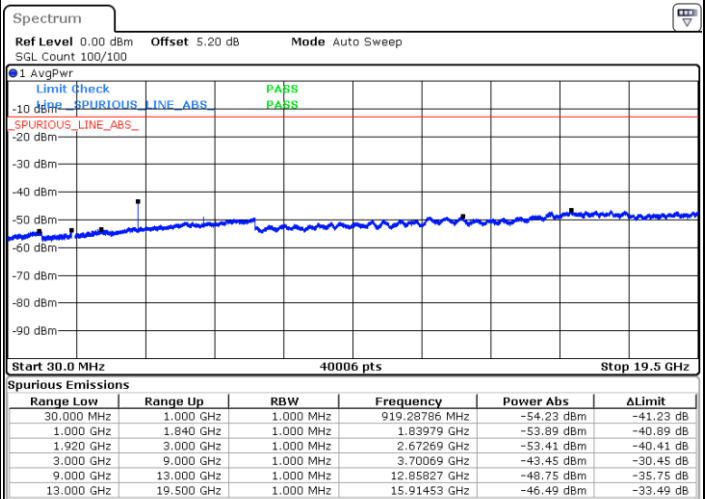
## LTE Band 2 / 3MHz

## Lowest Channel / QPSK



Date: 15 JAN 2020 18:14:17

## Lowest Channel / 16QAM

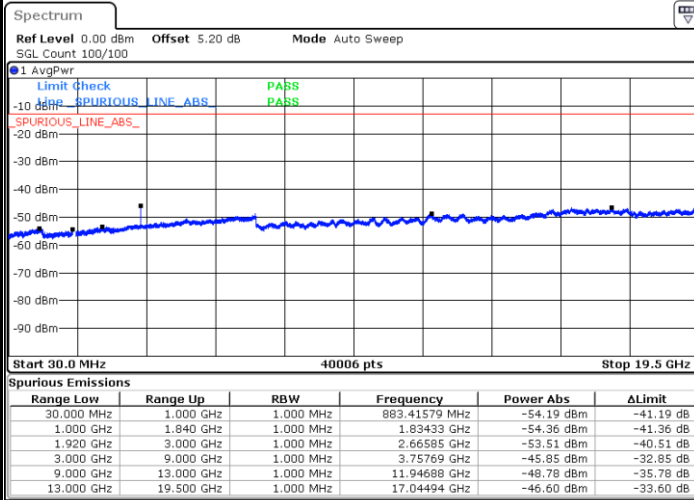


Date: 15 JAN 2020 18:15:12



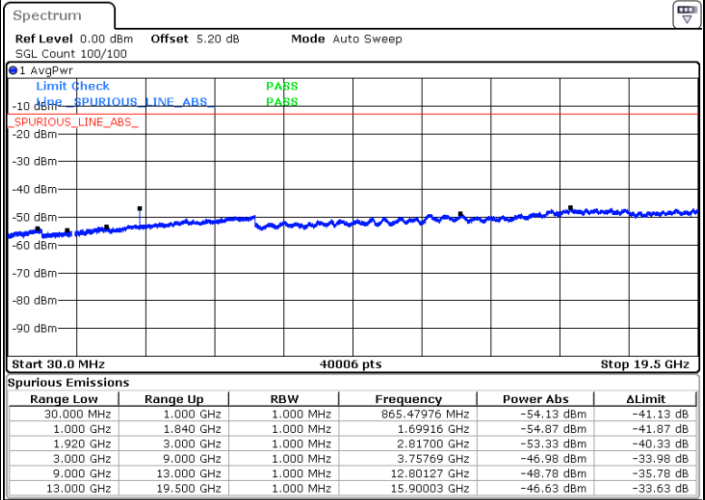
## LTE Band 2 / 3MHz

## Middle Channel / QPSK



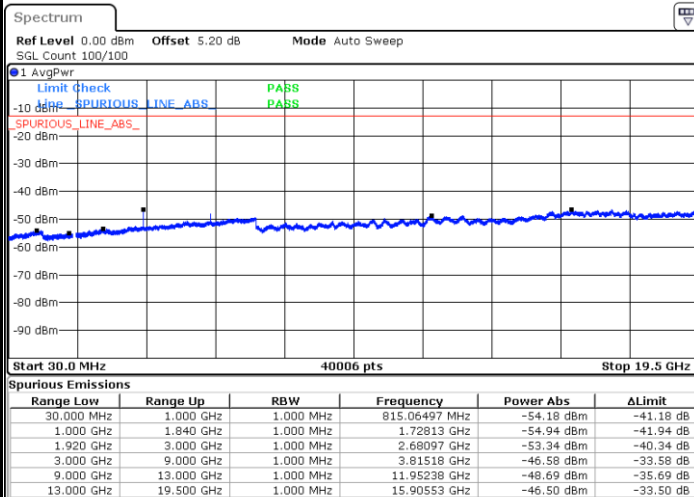
Date: 15 JAN 2020 18:16:51

## Middle Channel / 16QAM



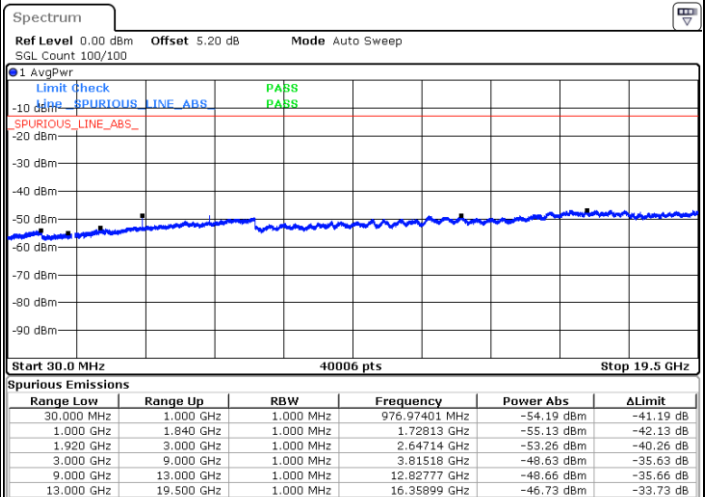
Date: 15 JAN 2020 18:17:46

## Highest Channel / QPSK



Date: 15 JAN 2020 18:23:50

## Highest Channel / 16QAM

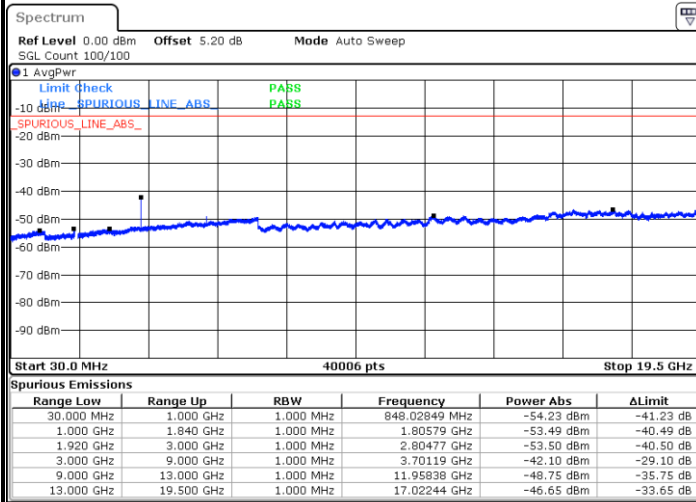


Date: 15 JAN 2020 18:24:44



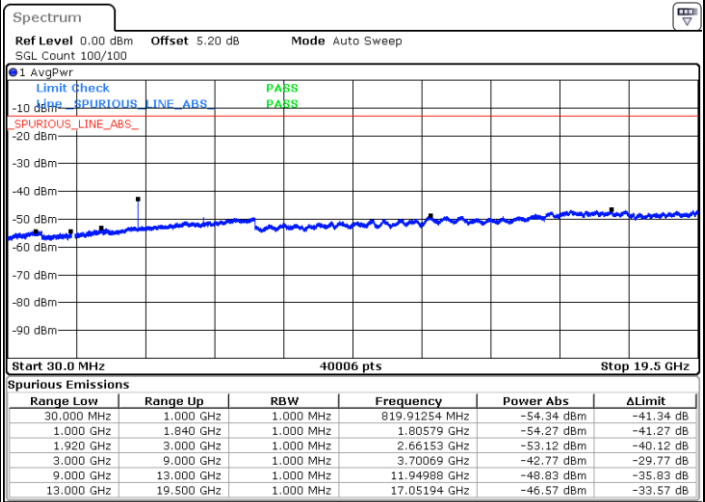
## LTE Band 2 / 5MHz

## Lowest Channel / QPSK



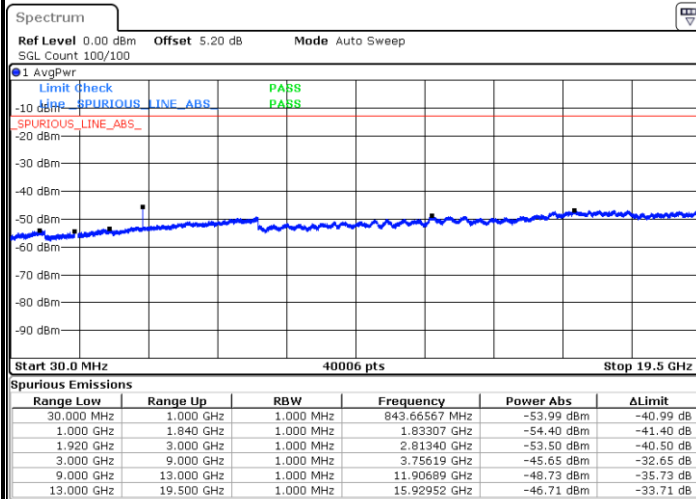
Date: 15 JAN 2020 18:30:49

## Lowest Channel / 16QAM



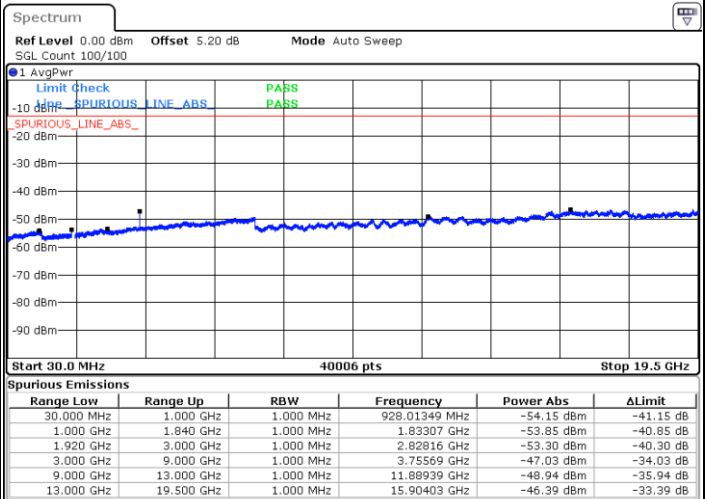
Date: 15 JAN 2020 18:31:43

## Middle Channel / QPSK



Date: 15 JAN 2020 18:33:18

## Middle Channel / 16QAM

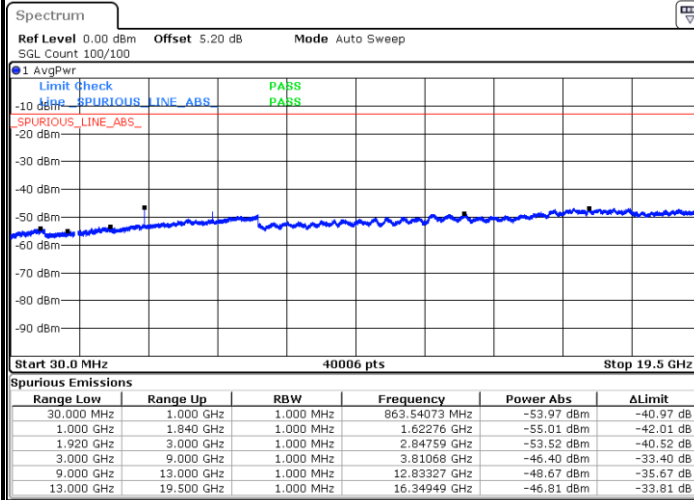


Date: 15 JAN 2020 18:34:13



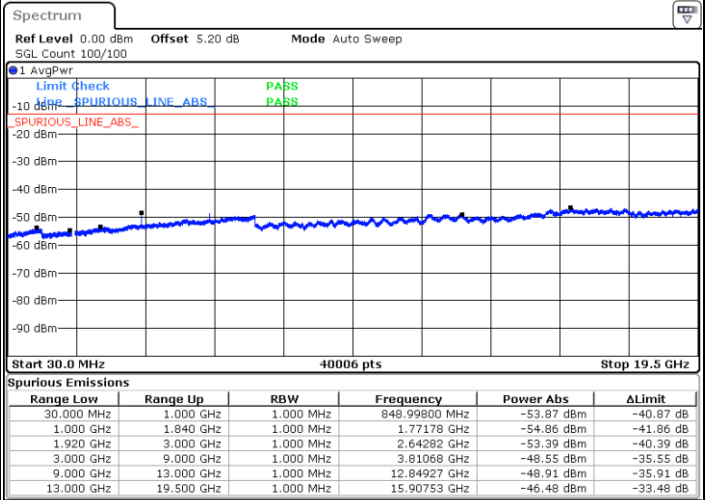
## LTE Band 2 / 5MHz

## Highest Channel / QPSK



Date: 15 JAN 2020 18:40:17

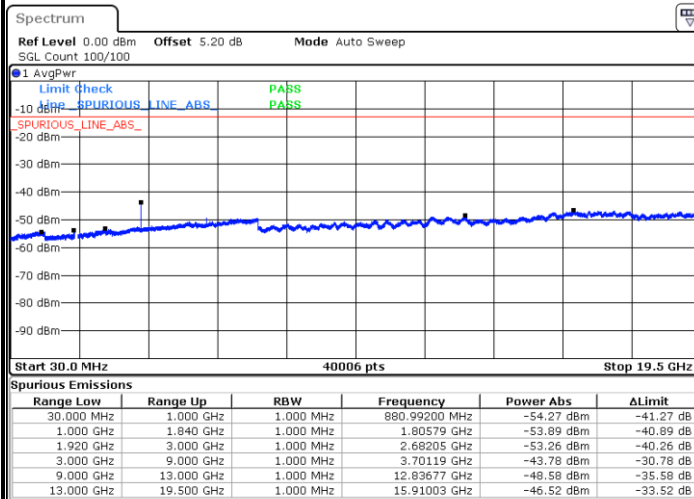
## Highest Channel / 16QAM



Date: 15 JAN 2020 18:41:11

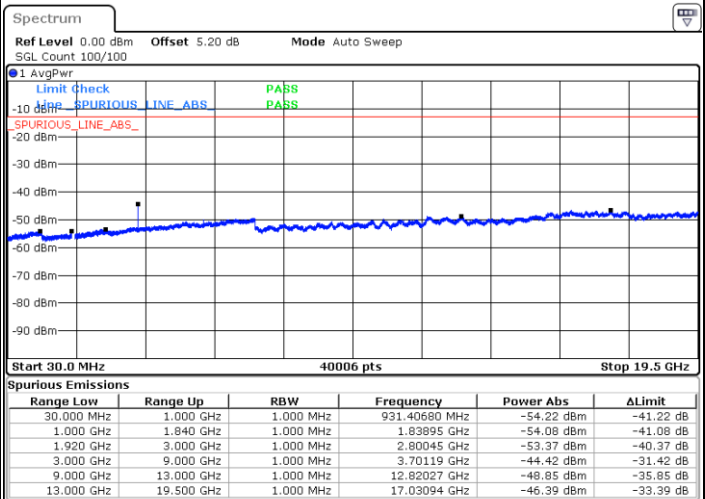
## LTE Band 2 / 10MHz

## Lowest Channel / QPSK



Date: 15 JAN 2020 19:45:34

## Lowest Channel / 16QAM

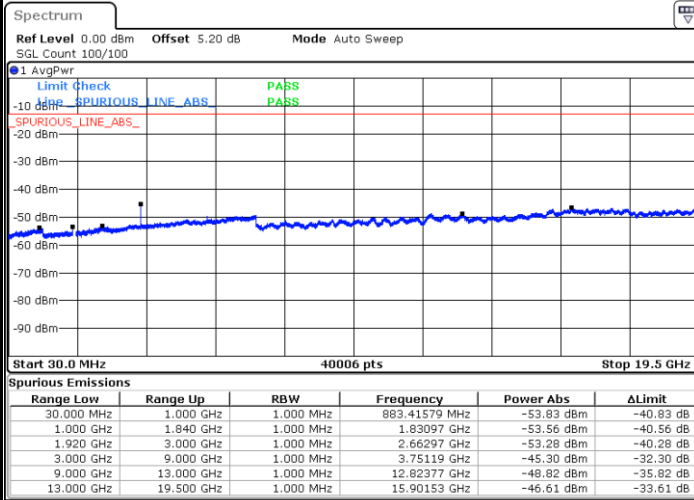


Date: 15 JAN 2020 19:46:28



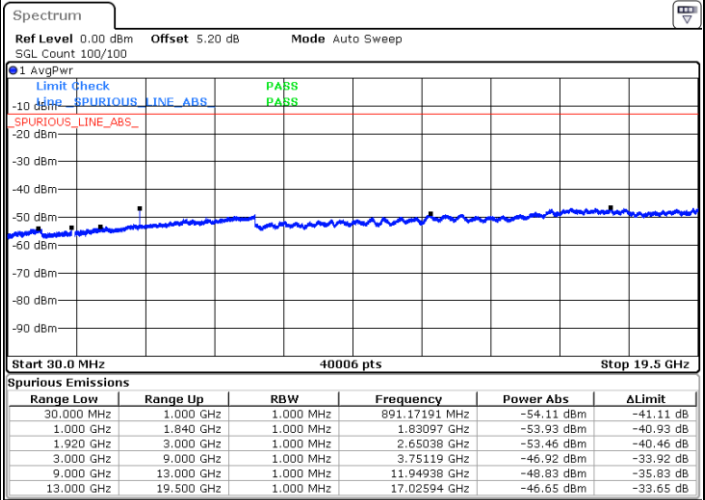
## LTE Band 2 / 10MHz

## Middle Channel / QPSK



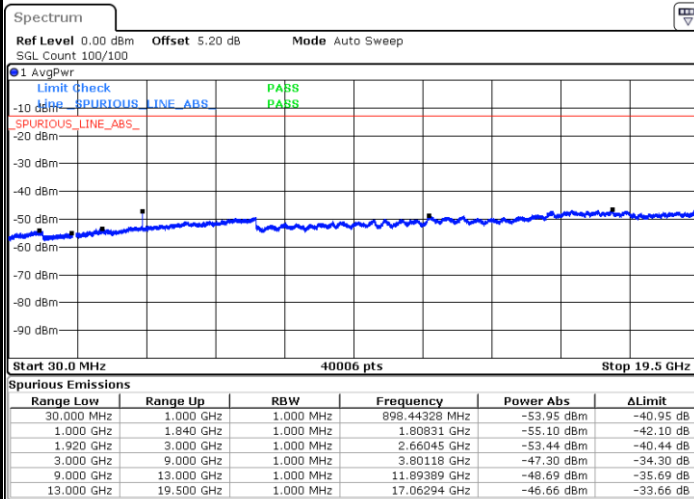
Date: 15 JAN 2020 19:48:03

## Middle Channel / 16QAM



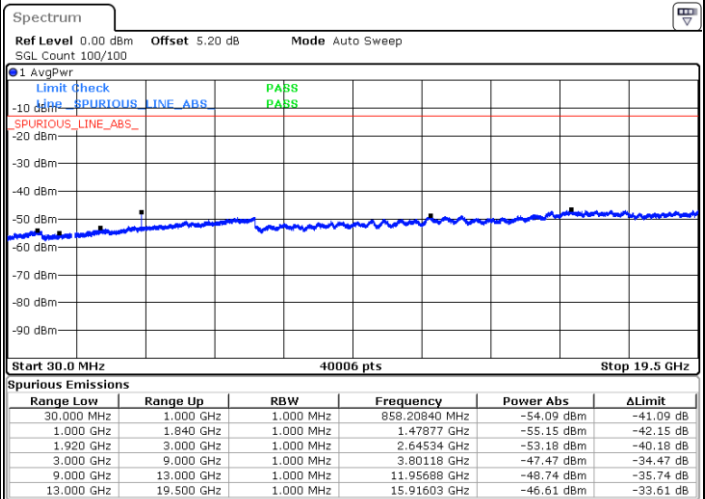
Date: 15 JAN 2020 19:48:57

## Highest Channel / QPSK



Date: 15 JAN 2020 19:55:02

## Highest Channel / 16QAM

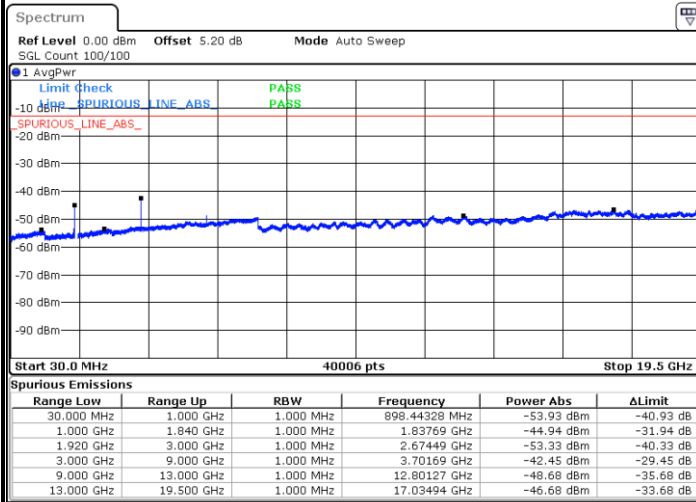


Date: 15 JAN 2020 19:55:56



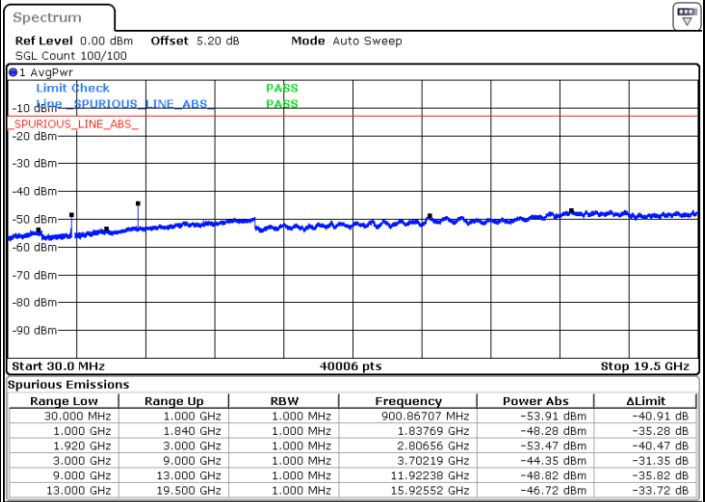
## LTE Band 2 / 15MHz

## Lowest Channel / QPSK



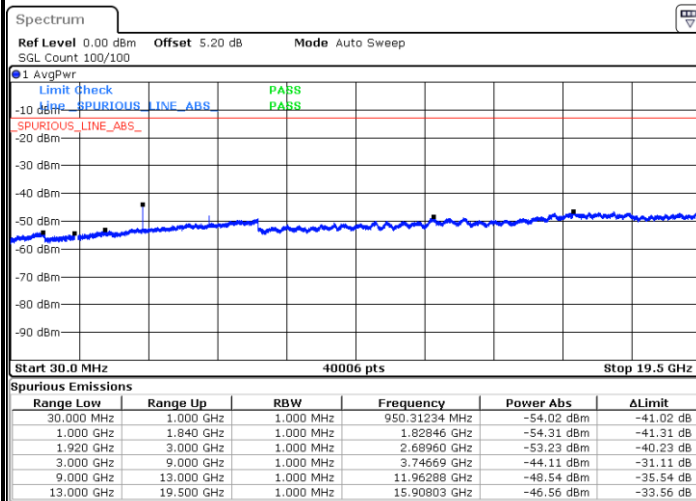
Date: 15 JAN 2020 20:02:01

## Lowest Channel / 16QAM



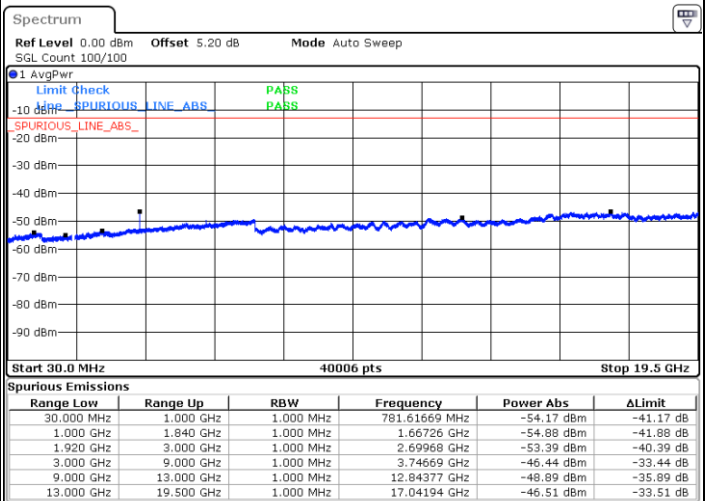
Date: 15 JAN 2020 20:02:55

## Middle Channel / QPSK



Date: 15 JAN 2020 20:04:30

## Middle Channel / 16QAM

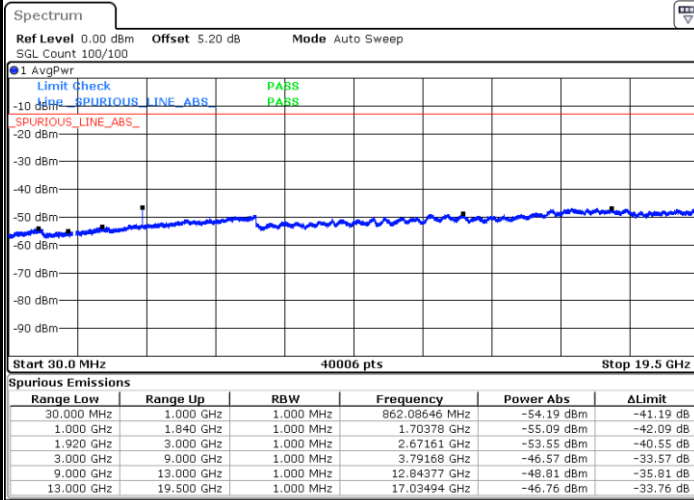


Date: 15 JAN 2020 20:05:25



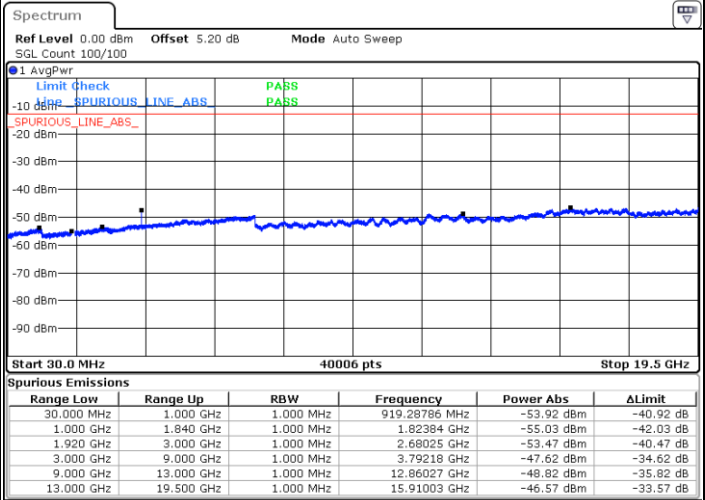
## LTE Band 2 / 15MHz

## Highest Channel / QPSK



Date: 15 JAN 2020 20:11:29

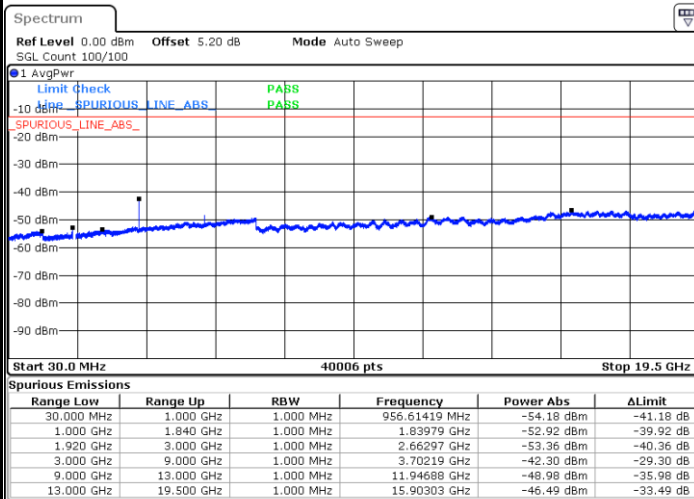
## Highest Channel / 16QAM



Date: 15 JAN 2020 20:12:24

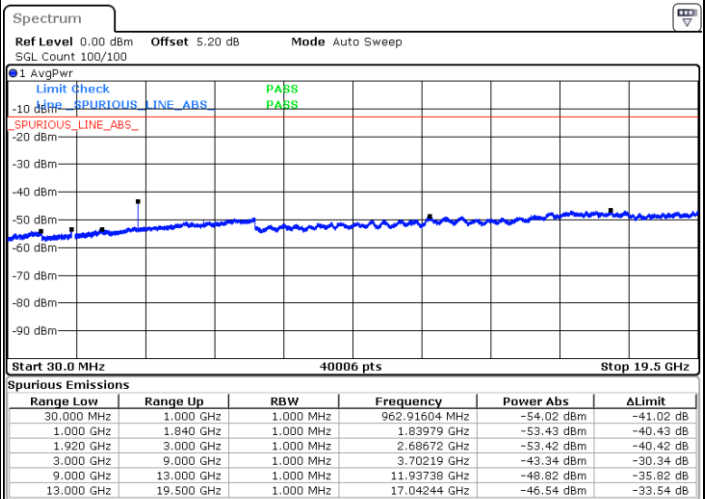
## LTE Band 2 / 20MHz

## Lowest Channel / QPSK



Date: 15 JAN 2020 20:18:28

## Lowest Channel / 16QAM

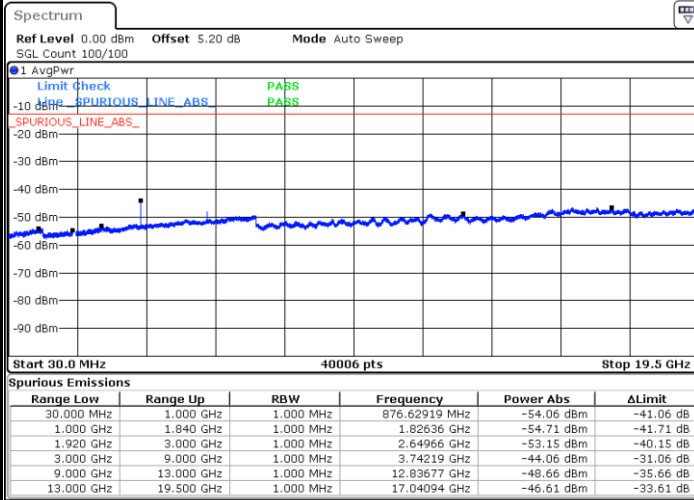


Date: 15 JAN 2020 20:19:23



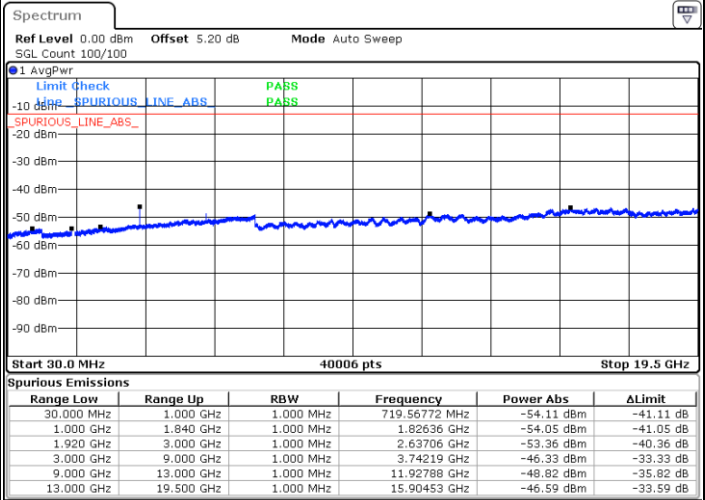
## LTE Band 2 / 20MHz

## Middle Channel / QPSK



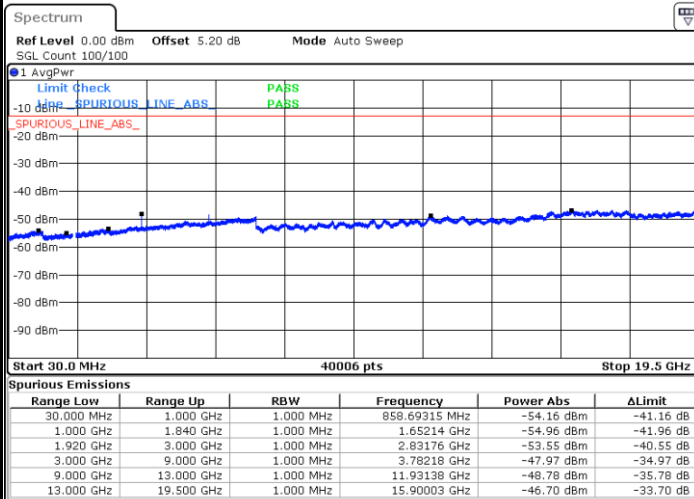
Date: 15 JAN 2020 20:20:57

## Middle Channel / 16QAM



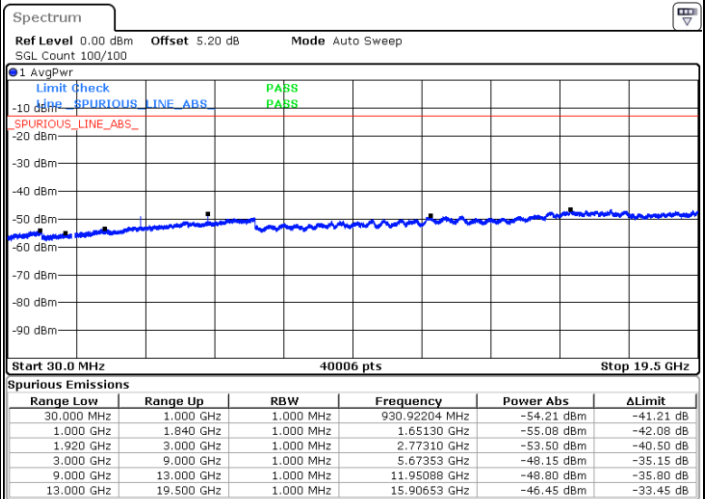
Date: 15 JAN 2020 20:21:52

## Highest Channel / QPSK



Date: 15 JAN 2020 20:27:56

## Highest Channel / 16QAM



Date: 15 JAN 2020 20:28:51

## 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    | 0.0002                             | PASS    |
| 40               | Normal Voltage    | 0.0025                             |         |
| 30               | Normal Voltage    | 0.0007                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0022                             |         |
| 0                | Normal Voltage    | 0.0009                             |         |
| -10              | Normal Voltage    | 0.0016                             |         |
| -20              | Normal Voltage    | 0.0012                             |         |
| -30              | Normal Voltage    | 0.0028                             |         |
| 20               | Maximum Voltage   | 0.0004                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0006                             |         |

**Note:**

1. Normal Voltage =7.2 V. ; Battery End Point (BEP) =7 V. ; Maximum Voltage =8.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 4

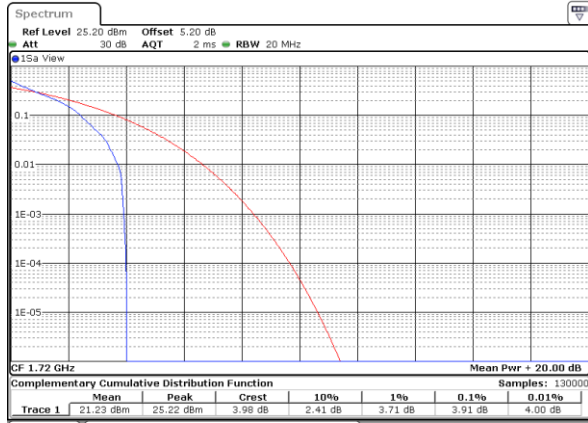
**Peak-to-Average Ratio**

| Mode       | LTE Band 4 / 20MHz |         |       |         |             |
|------------|--------------------|---------|-------|---------|-------------|
| Mod.       | QPSK               |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 3.91               | 4.96    | 4.81  | 5.86    | PASS        |
| Middle CH  | 4.32               | 4.78    | 5.10  | 5.77    |             |
| Highest CH | 4.20               | 4.72    | 5.04  | 5.62    |             |

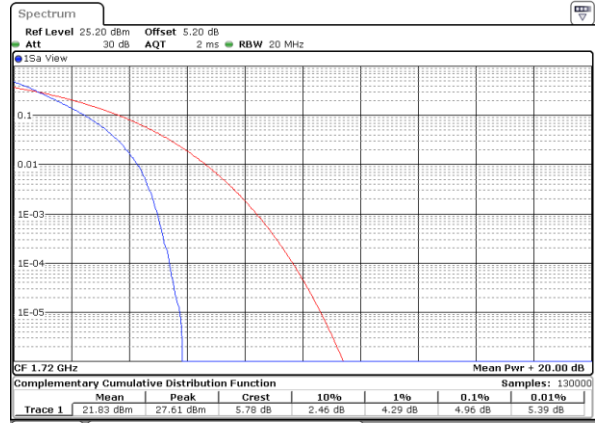


## LTE Band 4 / 20MHz / QPSK

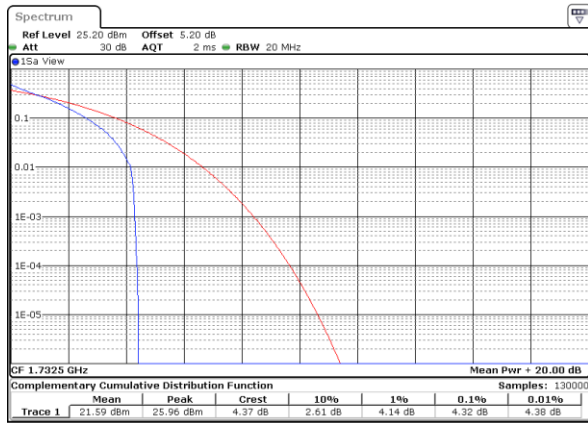
## Lowest Channel / 1RB



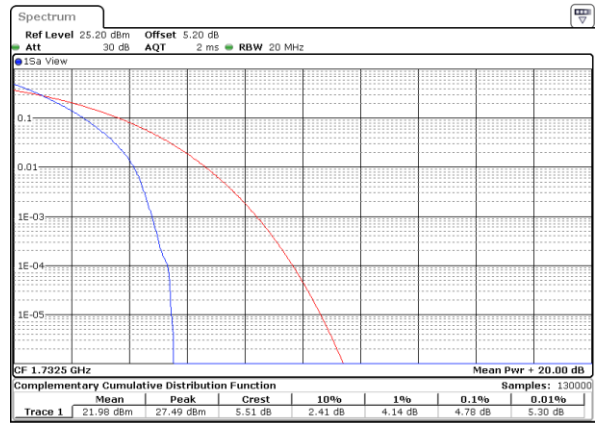
## Lowest Channel / Full RB



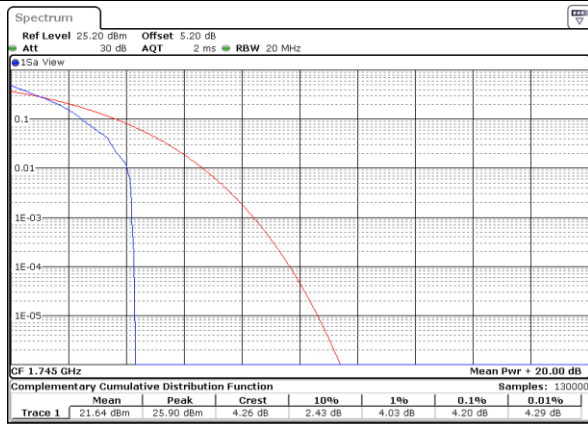
## Middle Channel / 1RB



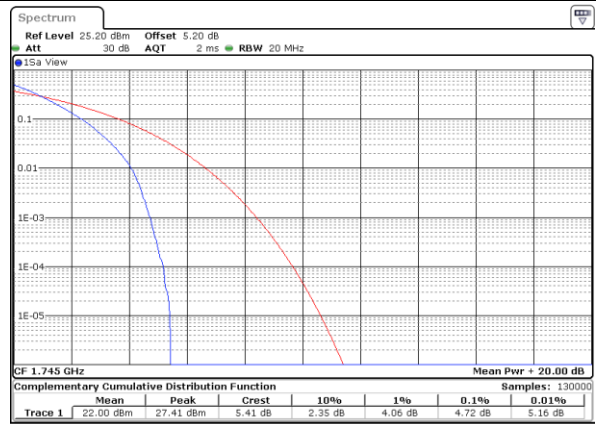
## Middle Channel / Full RB



## Highest Channel / 1RB



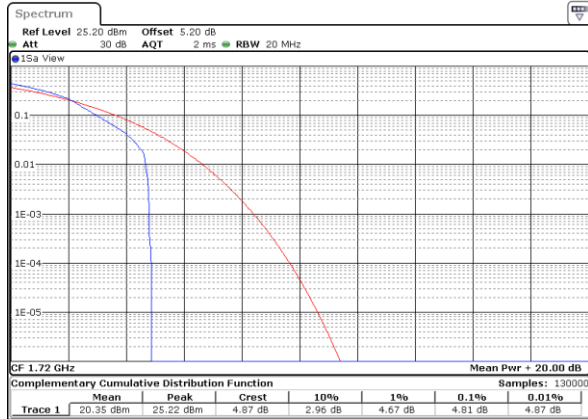
## Highest Channel / Full RB



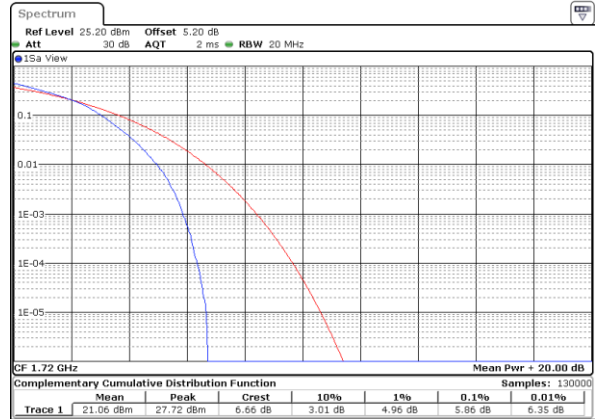


## LTE Band 4 / 20MHz / 16QAM

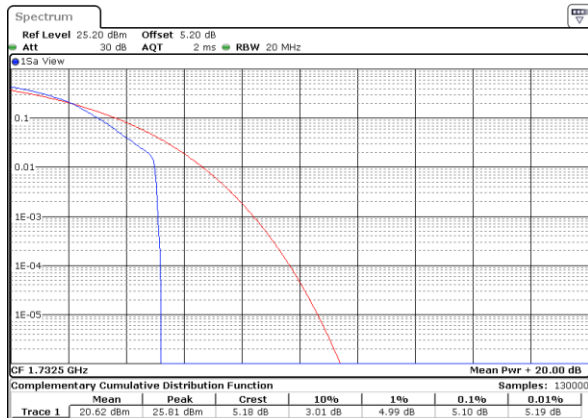
## Lowest Channel / 1RB



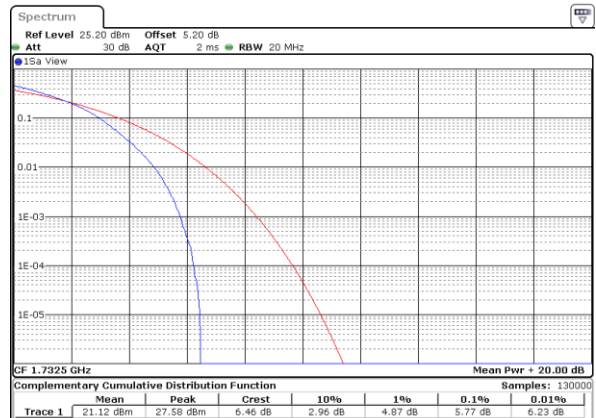
## Lowest Channel / Full RB



## Middle Channel / 1RB



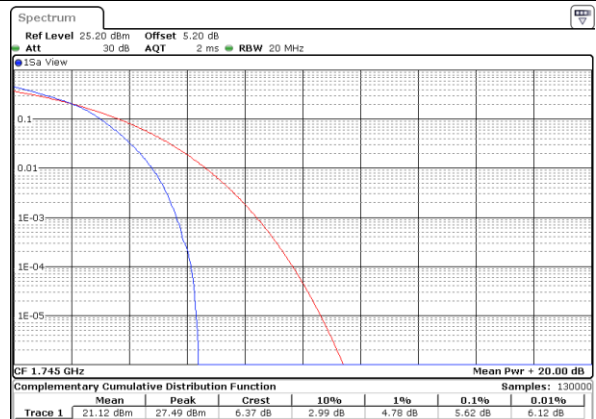
## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB





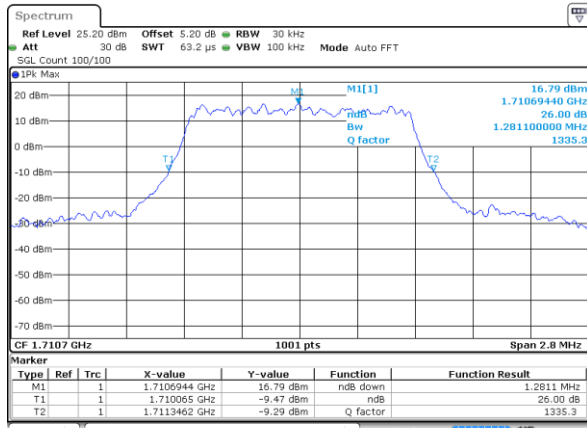
26dB Bandwidth

| 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  | 1.281                     | 1.284 | 3.033 | 3.021 | 4.845 | 4.955 | 9.870 | 9.690 | 14.505 | 14.446 | 20.100 | 20.100 |
| Middle CH  | 1.267                     | 1.273 | 3.009 | 3.003 | 4.935 | 4.905 | 9.890 | 9.950 | 14.386 | 14.535 | 20.180 | 20.140 |
| Highest CH | 1.287                     | 1.256 | 2.985 | 2.979 | 4.965 | 4.875 | 9.950 | 9.770 | 14.236 | 14.535 | 20.220 | 20.100 |



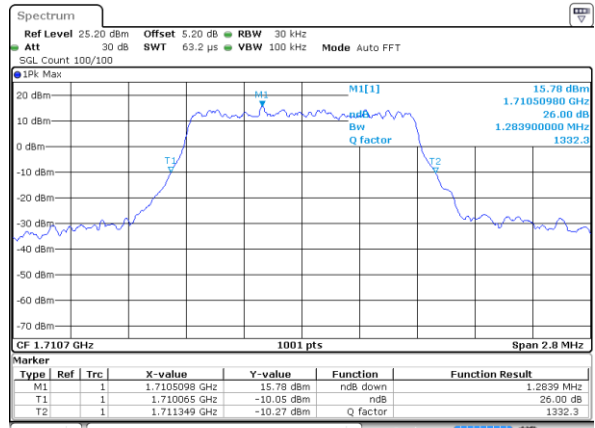
## LTE Band 4

## Lowest Channel / 1.4MHz / QPSK



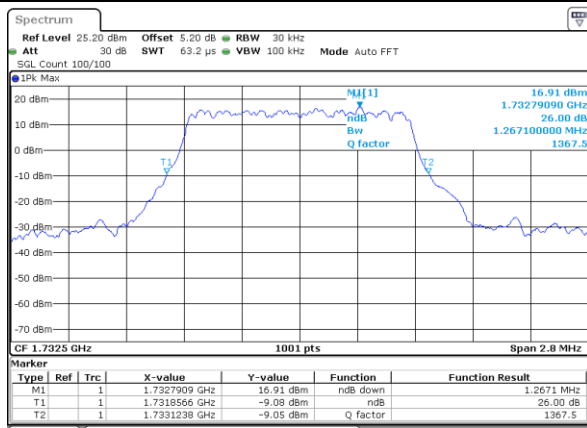
Date: 16 JAN 2020 00:25:07

## Lowest Channel / 1.4MHz / 16QAM



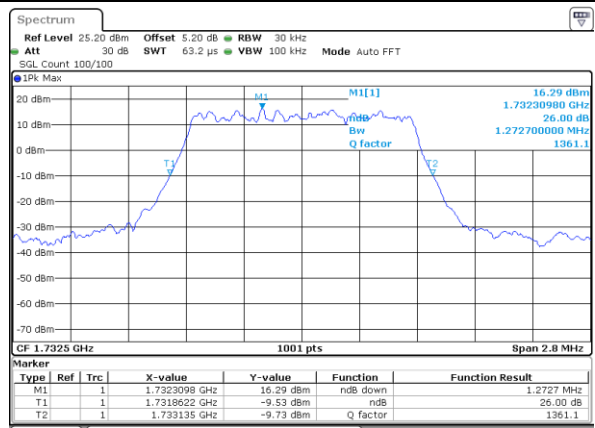
Date: 16 JAN 2020 00:25:16

## Middle Channel / 1.4MHz / QPSK



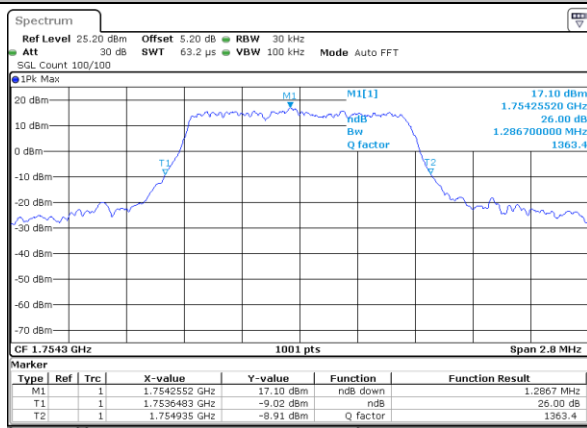
Date: 16 JAN 2020 00:32:05

## Middle Channel / 1.4MHz / 16QAM



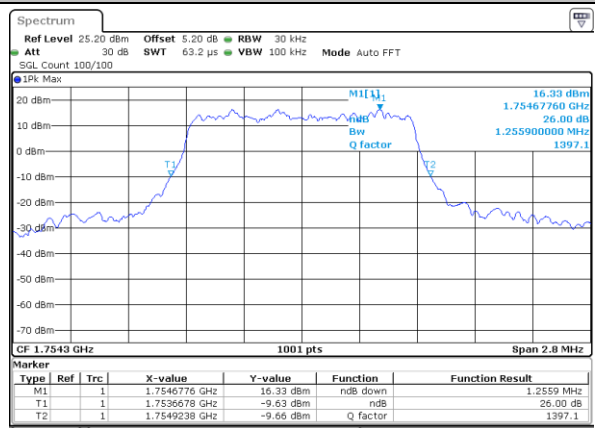
Date: 16 JAN 2020 00:32:15

## Highest Channel / 1.4MHz / QPSK



Date: 16 JAN 2020 00:34:34

## Highest Channel / 1.4MHz / 16QAM

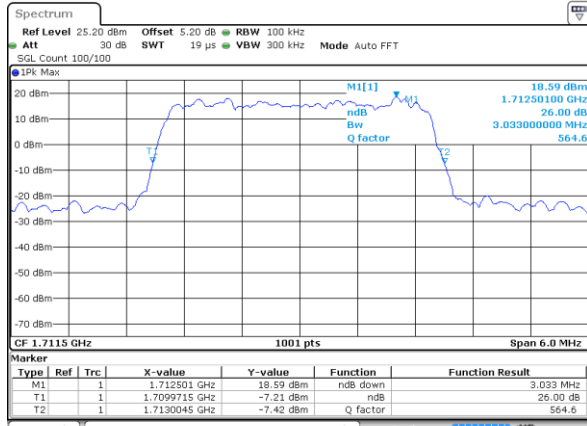


Date: 16 JAN 2020 00:34:43

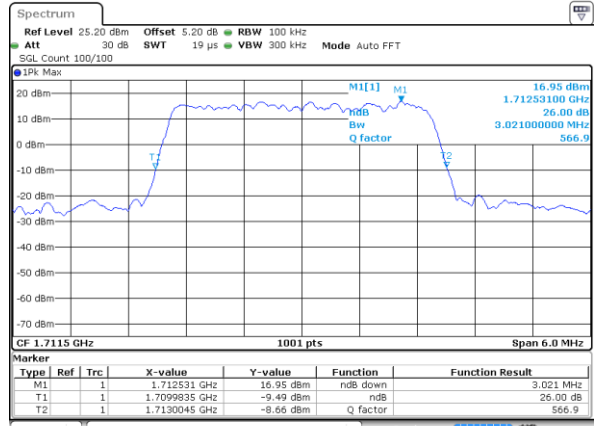


## LTE Band 4

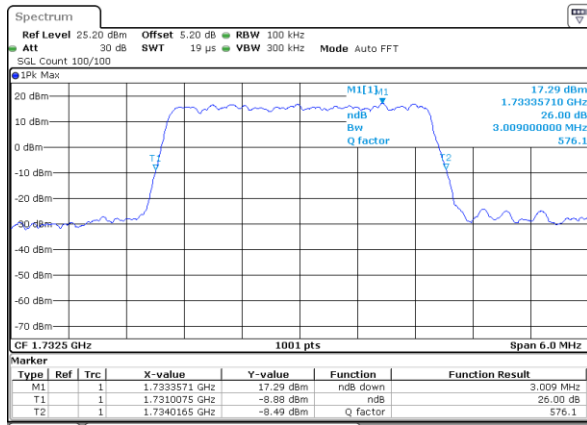
## Lowest Channel / 3MHz / QPSK



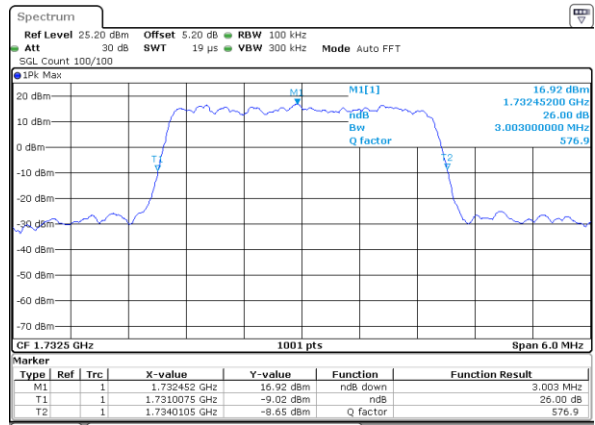
## Lowest Channel / 3MHz / 16QAM



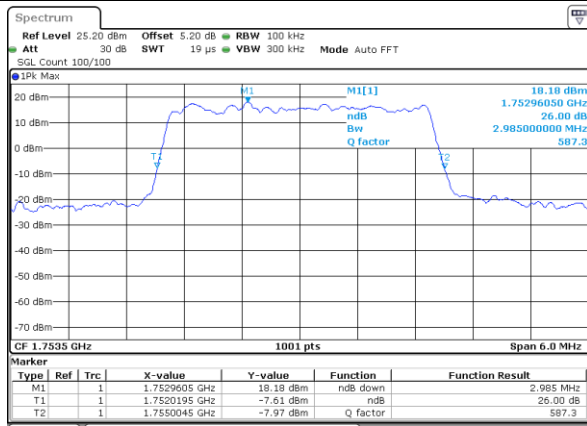
## Middle Channel / 3MHz / QPSK



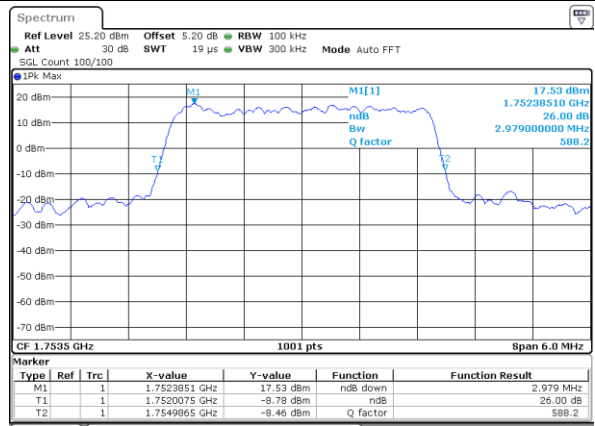
## Middle Channel / 3MHz / 16QAM



## Highest Channel / 3MHz / QPSK



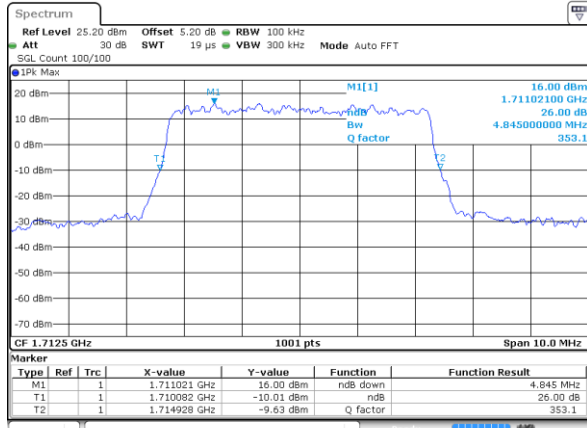
## Highest Channel / 3MHz / 16QAM





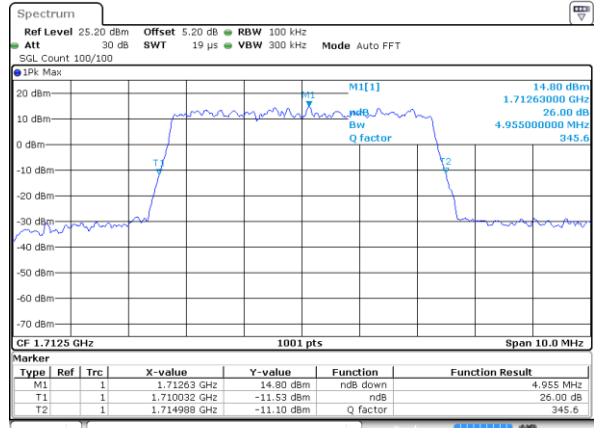
## LTE Band 4

## Lowest Channel / 5MHz / QPSK



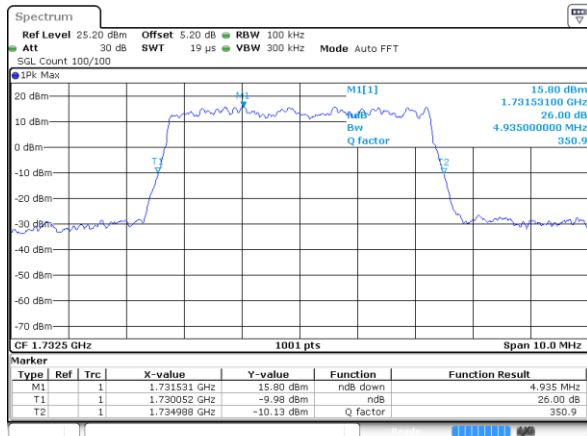
Date: 16 JAN 2020 00:57:57

## Lowest Channel / 5MHz / 16QAM



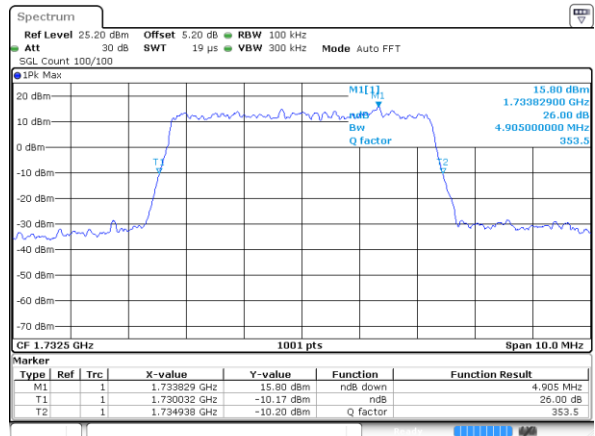
Date: 16 JAN 2020 00:58:07

## Middle Channel / 5MHz / QPSK



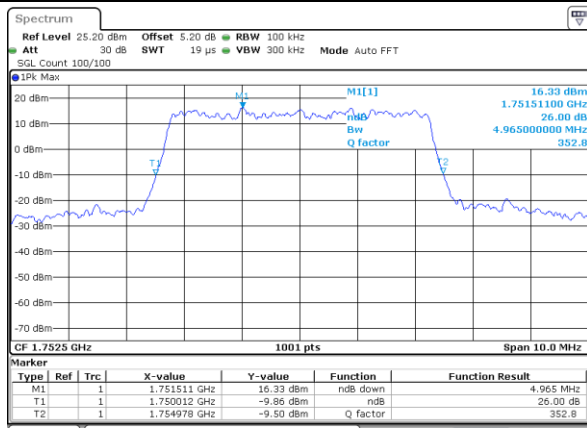
Date: 16 JAN 2020 01:04:56

## Middle Channel / 5MHz / 16QAM



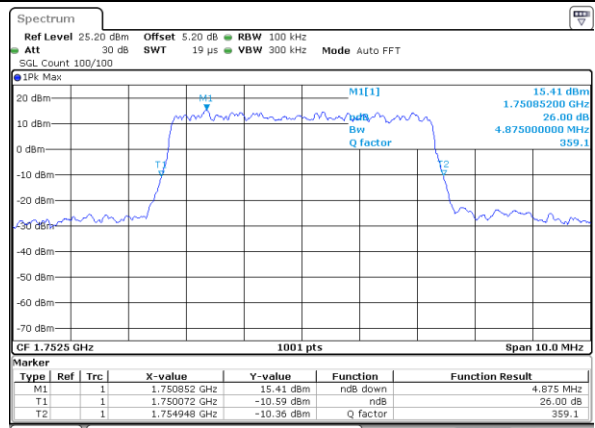
Date: 16 JAN 2020 01:05:05

## Highest Channel / 5MHz / QPSK



Date: 16 JAN 2020 01:07:24

## Highest Channel / 5MHz / 16QAM

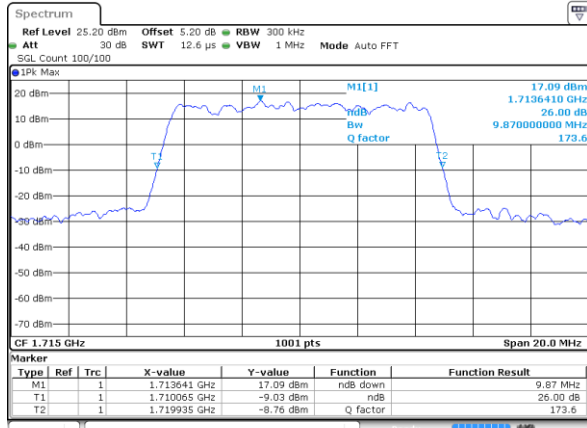


Date: 16 JAN 2020 01:07:34



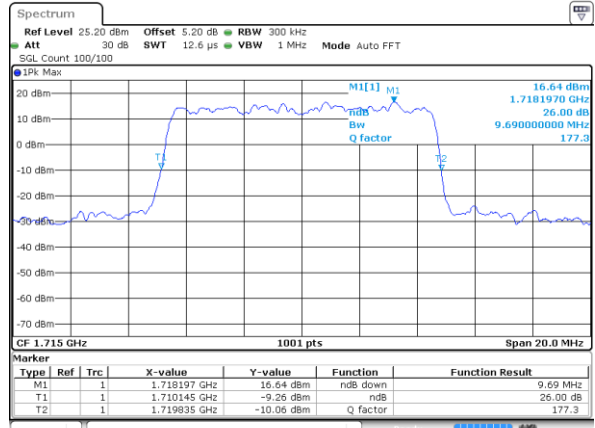
## LTE Band 4

## Lowest Channel / 10MHz / QPSK



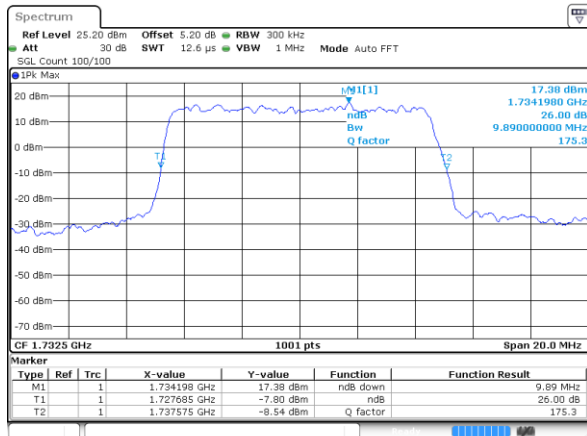
Date: 16 JAN 2020 01:14:22

## Lowest Channel / 10MHz / 16QAM



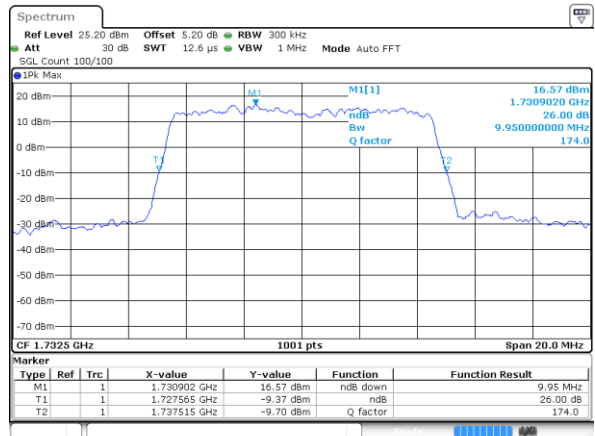
Date: 16 JAN 2020 01:14:32

## Middle Channel / 10MHz / QPSK



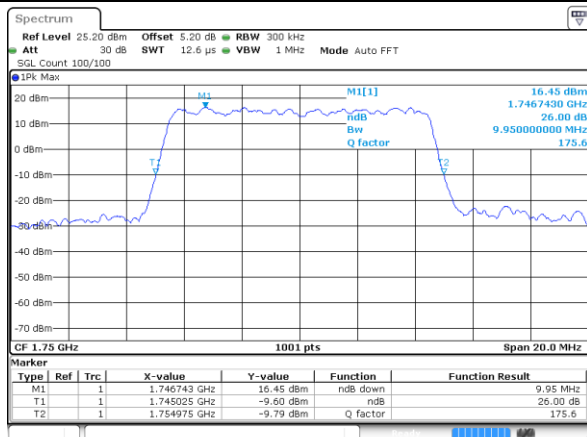
Date: 16 JAN 2020 01:21:20

## Middle Channel / 10MHz / 16QAM



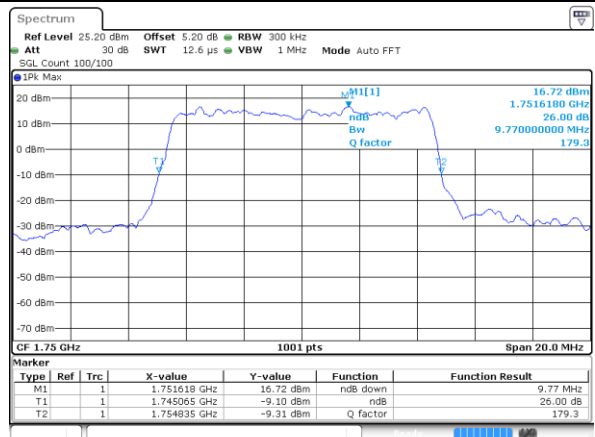
Date: 16 JAN 2020 01:21:30

## Highest Channel / 10MHz / QPSK



Date: 16 JAN 2020 01:47:35

## Highest Channel / 10MHz / 16QAM



Date: 16 JAN 2020 01:47:45