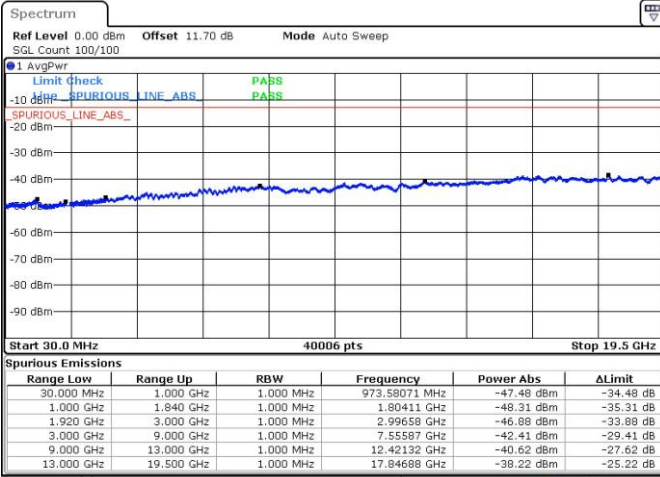




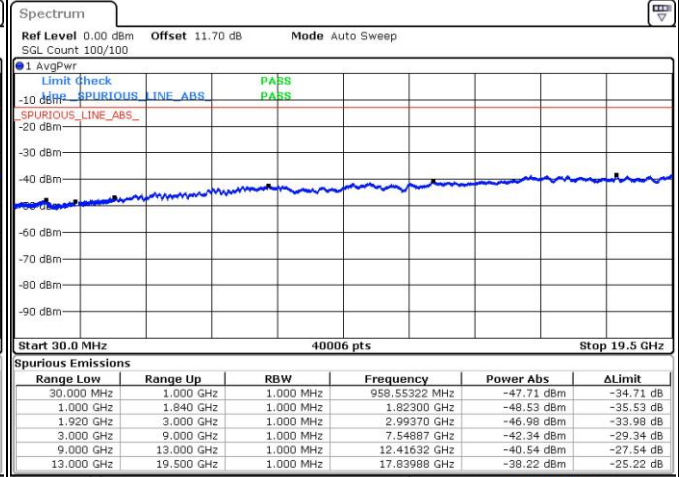
LTE Band 2 / 10MHz

Lowest Channel / QPSK

Highest Channel / QPSK

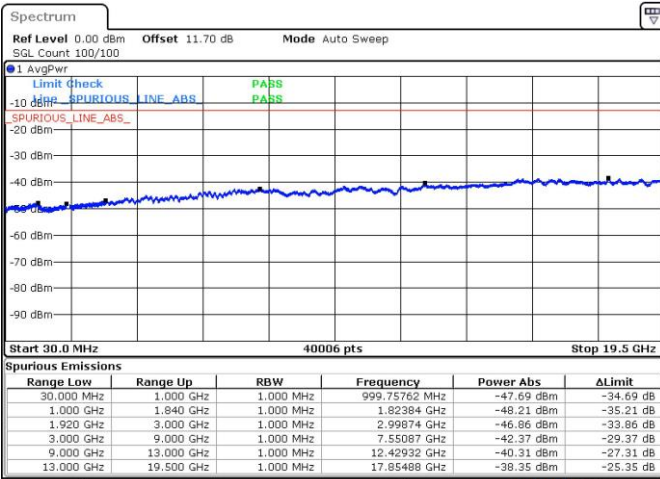


Date: 18.MAY.2019 11:49:21



Date: 18.MAY.2019 11:57:47

Middle Channel / QPSK



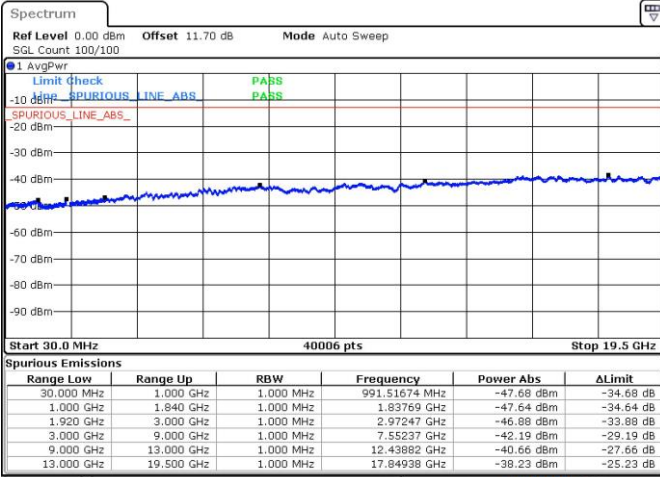
Date: 18.MAY.2019 11:51:31



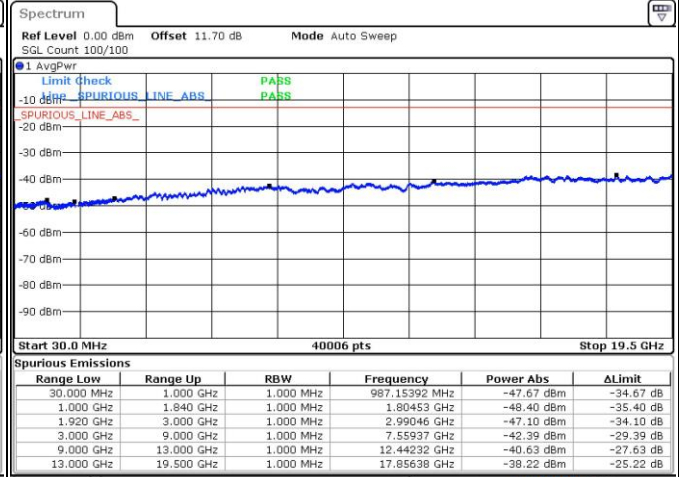
LTE Band 2 / 15MHz

Lowest Channel / QPSK

Highest Channel / QPSK

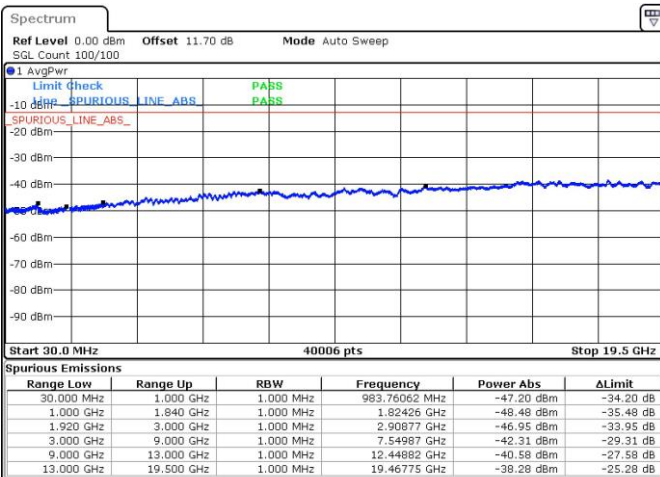


Date: 18.MAY.2019 12:04:06



Date: 18.MAY.2019 12:12:31

Middle Channel / QPSK



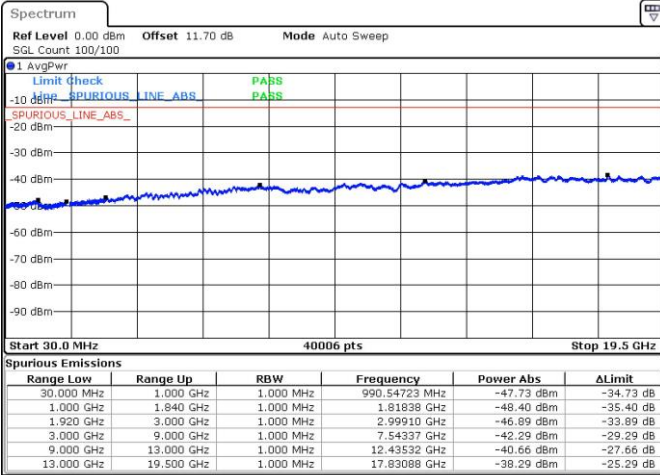
Date: 18.MAY.2019 12:06:16



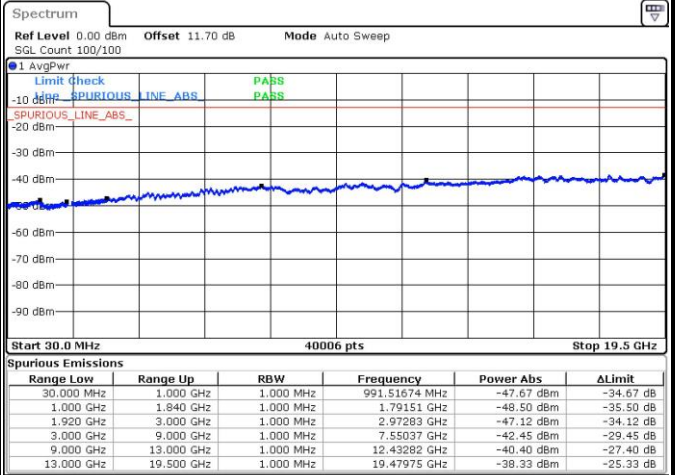
LTE Band 2 / 20MHz

Lowest Channel / QPSK

Highest Channel / QPSK

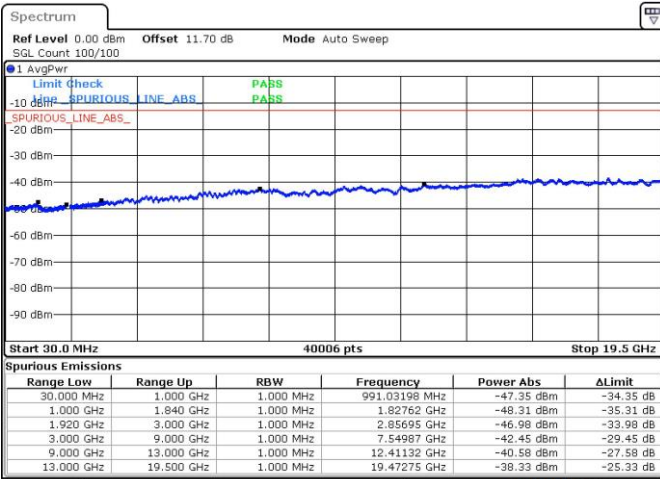


Date: 18.MAY.2019 12:18:50



Date: 18.MAY.2019 13:11:36

Middle Channel / QPSK



Date: 18.MAY.2019 13:05:19



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    | 0.0013                             |         |
| 30               | Normal Voltage    | 0.0004                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0019                             |         |
| 0                | Normal Voltage    | 0.0007                             |         |
| -10              | Normal Voltage    | 0.0021                             |         |
| -20              | Normal Voltage    | 0.0006                             |         |
| -30              | Normal Voltage    | 0.0018                             |         |
| 20               | Maximum Voltage   | 0.0009                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0012                             |         |

Note:

1. Normal Voltage =14.0 V. ; Battery End Point (BEP) =14.0 V. ; Maximum Voltage =16.0 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 4

### Peak-to-Average Ratio

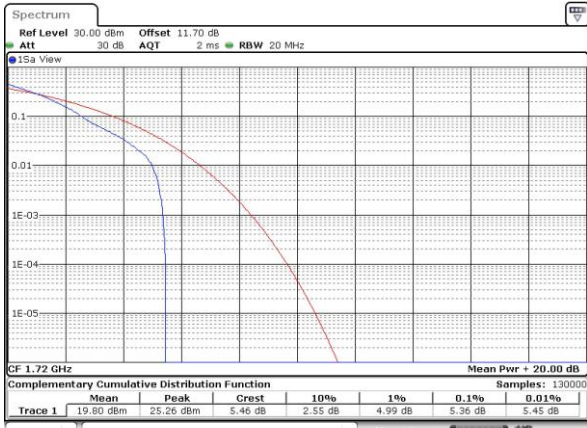
| Mode       | LTE Band 4 / 20MHz |         |       |         |             |
|------------|--------------------|---------|-------|---------|-------------|
| Mod.       | QPSK               |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 5.36               | 5.42    | -     | -       | PASS        |
| Middle CH  | 5.45               | 5.42    | -     | -       |             |
| Highest CH | 5.54               | 5.25    | -     | -       |             |





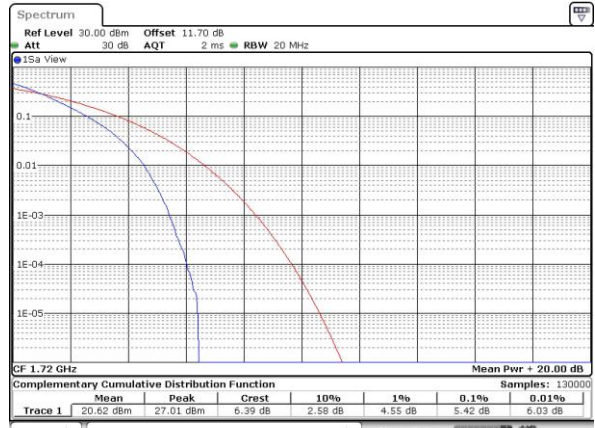
LTE Band 4 / 20MHz / QPSK

Lowest Channel / 1RB



Date: 18 MAY 2019 14:47:53

Lowest Channel / Full RB



Date: 18 MAY 2019 14:48:07

Middle Channel / 1RB



Date: 18 MAY 2019 14:48:19

Middle Channel / Full RB



Date: 18 MAY 2019 14:48:30

Highest Channel / 1RB



Date: 18 MAY 2019 14:48:42

Highest Channel / Full RB



Date: 18 MAY 2019 14:48:54



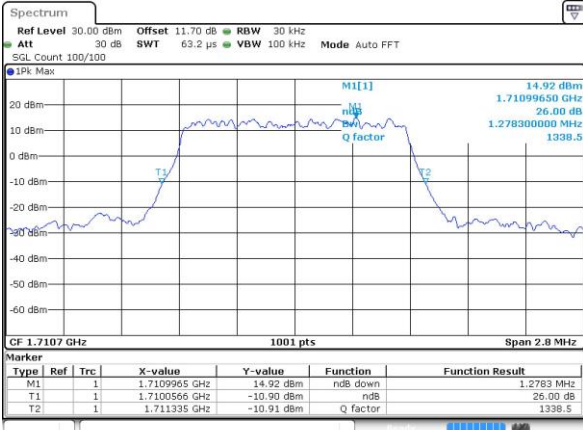
**26dB Bandwidth**

| Mode       | LTE Band 4 : 26dB BW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
|------------|---------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
|            | 1.4MHz                    |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| BW         | QPSK                      | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Mod.       | QPSK                      | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | 1.28                      | -     | 2.98 | -     | 4.93 | -     | 9.65  | -     | 14.30 | -     | 18.82 | -     |
| Middle CH  | 1.28                      | -     | 2.94 | -     | 5.03 | -     | 9.69  | -     | 14.30 | -     | 18.78 | -     |
| Highest CH | 1.28                      | -     | 3.01 | -     | 4.84 | -     | 9.71  | -     | 14.42 | -     | 18.86 | -     |



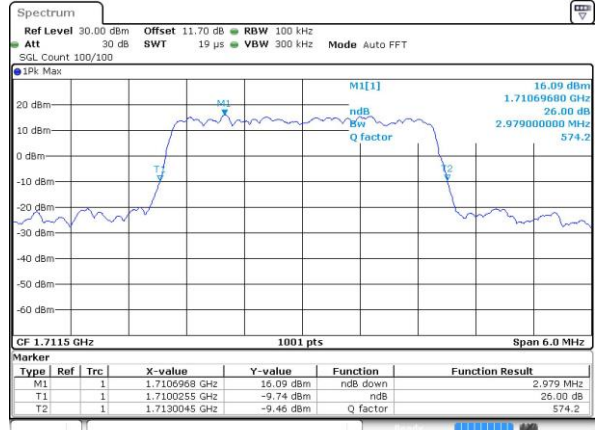
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



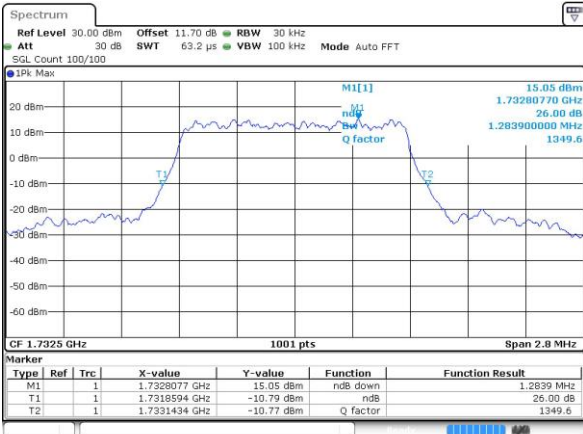
Date: 18 MAY 2019 14:31:51

Lowest Channel / 3MHz / QPSK



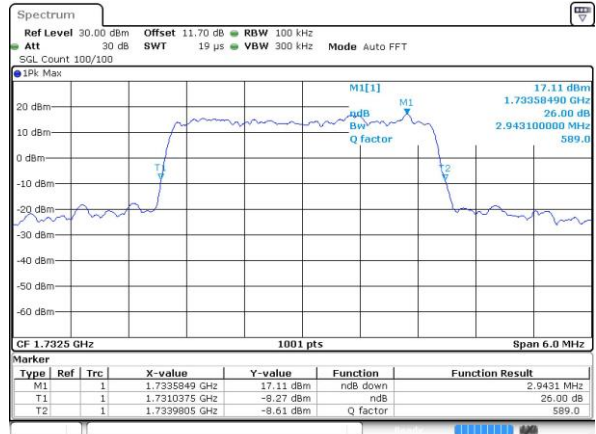
Date: 18 MAY 2019 13:18:06

Middle Channel / 1.4MHz / QPSK



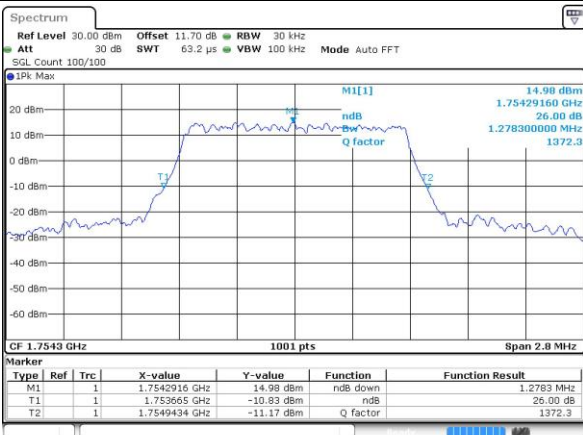
Date: 18 MAY 2019 14:38:19

Middle Channel / 3MHz / QPSK



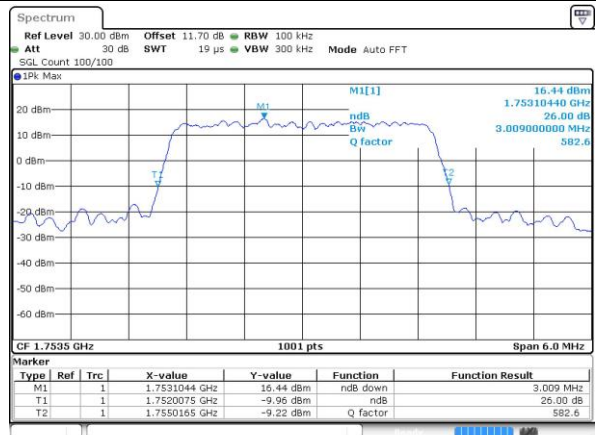
Date: 18 MAY 2019 13:24:21

Highest Channel / 1.4MHz / QPSK



Date: 18 MAY 2019 14:40:30

Highest Channel / 3MHz / QPSK



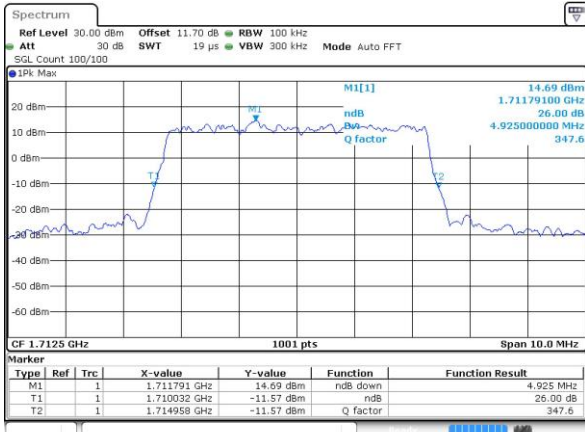
Date: 18 MAY 2019 13:26:31





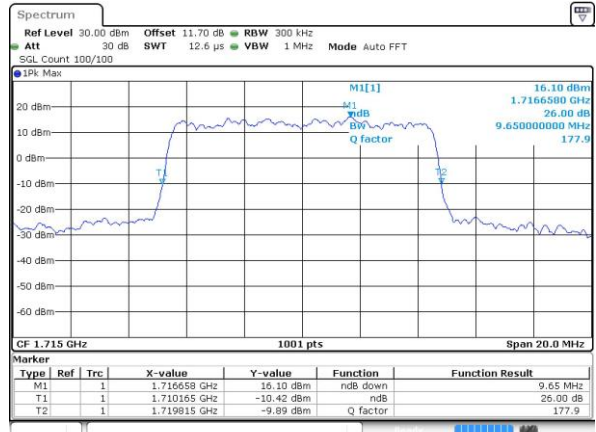
LTE Band 4

Lowest Channel / 5MHz / QPSK



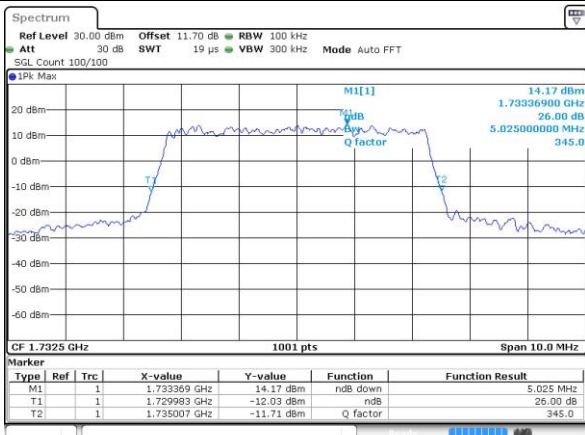
Date: 18 MAY 2019 13:32:50

Lowest Channel / 10MHz / QPSK



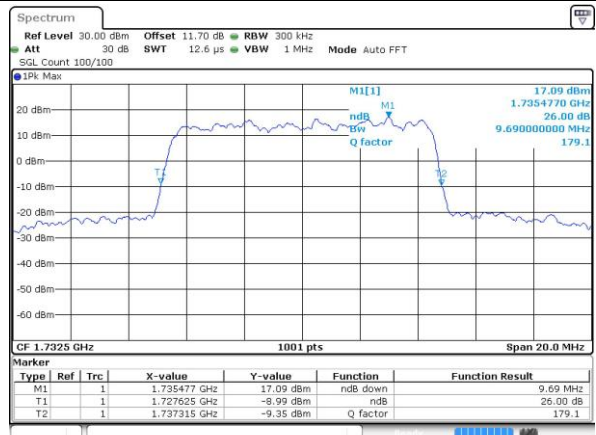
Date: 18 MAY 2019 13:47:36

Middle Channel / 5MHz / QPSK



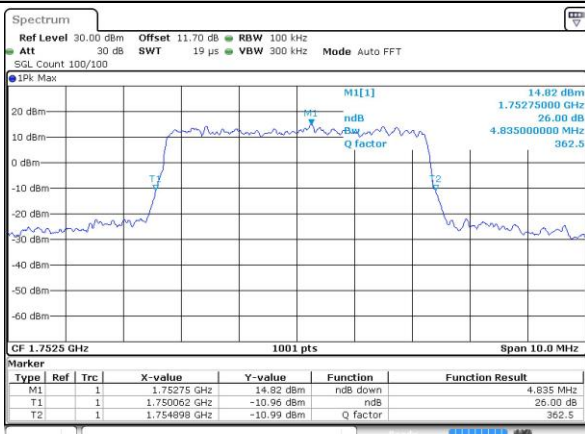
Date: 18 MAY 2019 13:39:06

Middle Channel / 10MHz / QPSK



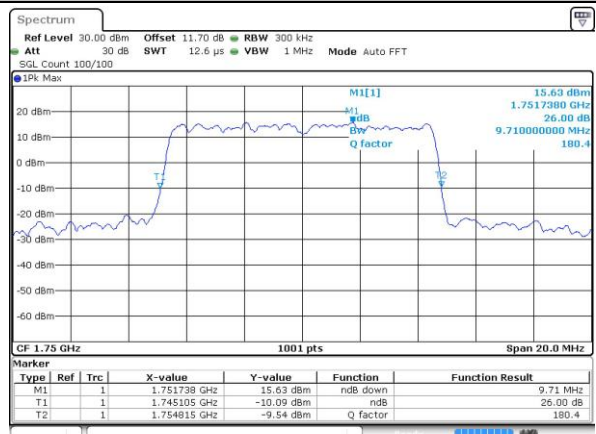
Date: 18 MAY 2019 13:53:52

Highest Channel / 5MHz / QPSK



Date: 18 MAY 2019 13:41:17

Highest Channel / 10MHz / QPSK

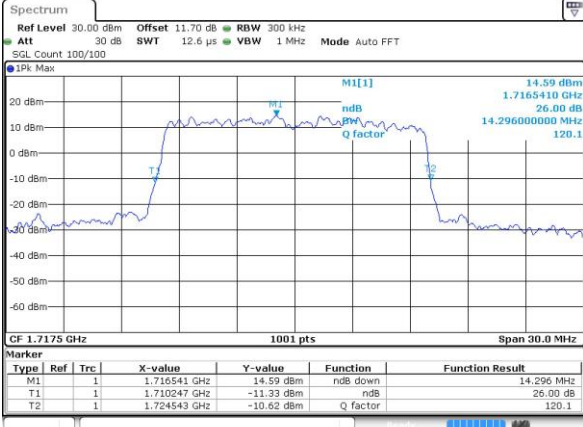


Date: 18 MAY 2019 13:56:02



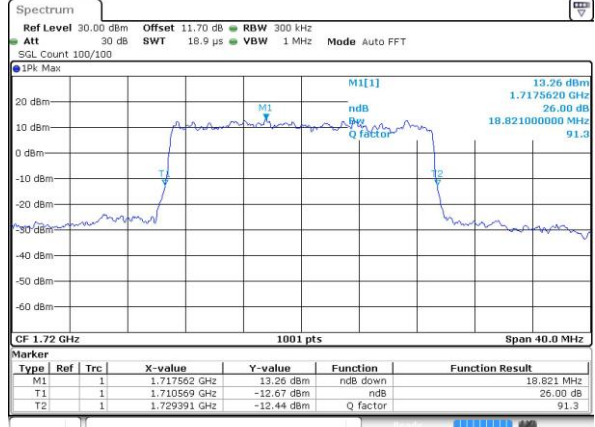
LTE Band 4

Lowest Channel / 15MHz / QPSK



Date: 18 MAY 2019 14:02:21

Lowest Channel / 20MHz / QPSK



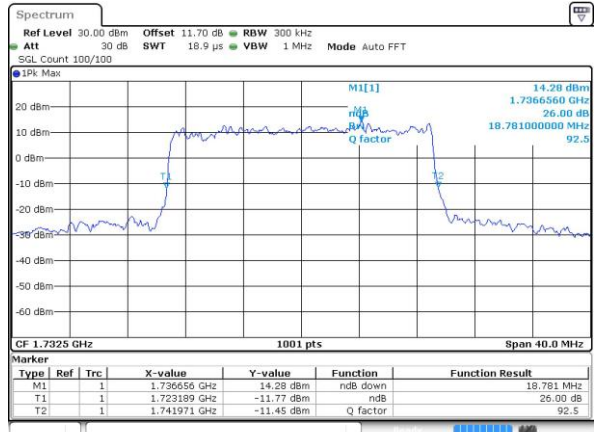
Date: 18 MAY 2019 14:17:06

Middle Channel / 15MHz / QPSK



Date: 18 MAY 2019 14:08:37

Middle Channel / 20MHz / QPSK



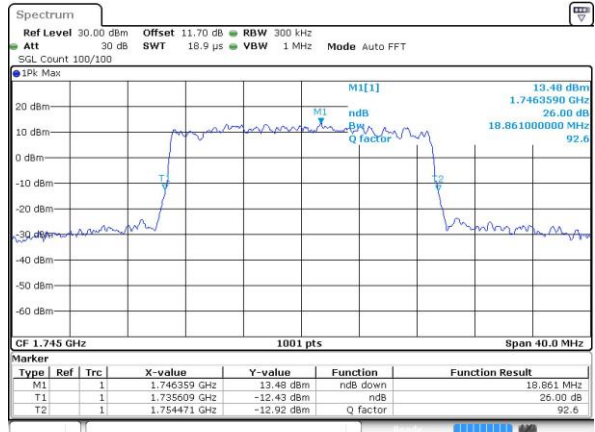
Date: 18 MAY 2019 14:23:21

Highest Channel / 15MHz / QPSK



Date: 18 MAY 2019 14:10:47

Highest Channel / 20MHz / QPSK



Date: 18 MAY 2019 14:25:32



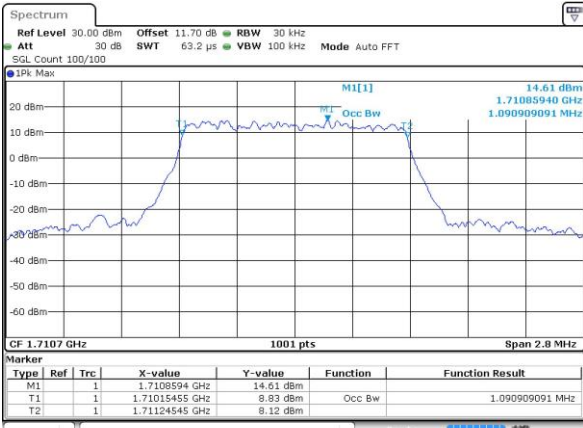
**Occupied Bandwidth**

| Mode       | LTE Band 4 : 99%OBW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
|------------|--------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
|            | 1.4MHz                   |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| BW         | QPSK                     | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | 1.09                     | -     | 2.73 | -     | 4.48 | -     | 9.07  | -     | 13.4  | -     | 17.86 | -     |
| Middle CH  | 1.09                     | -     | 2.73 | -     | 4.5  | -     | 9.05  | -     | 13.46 | -     | 17.86 | -     |
| Highest CH | 1.11                     | -     | 2.72 | -     | 4.49 | -     | 8.97  | -     | 13.43 | -     | 17.86 | -     |



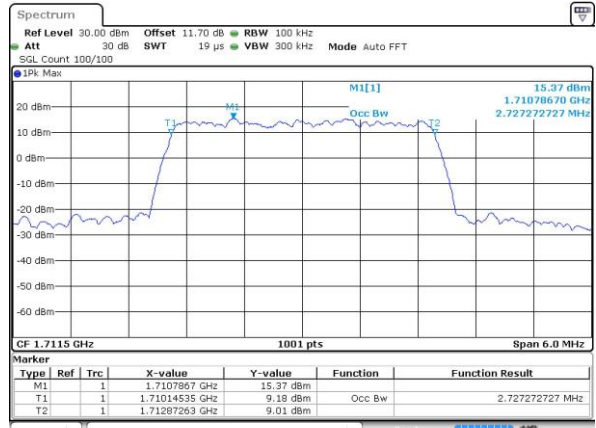
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



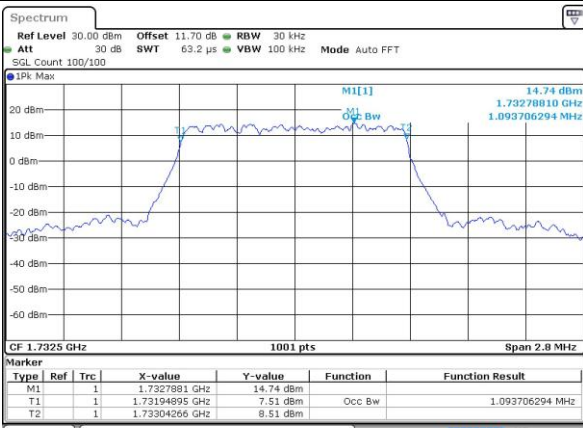
Date: 18 MAY 2019 14:31:26

Lowest Channel / 3MHz / QPSK



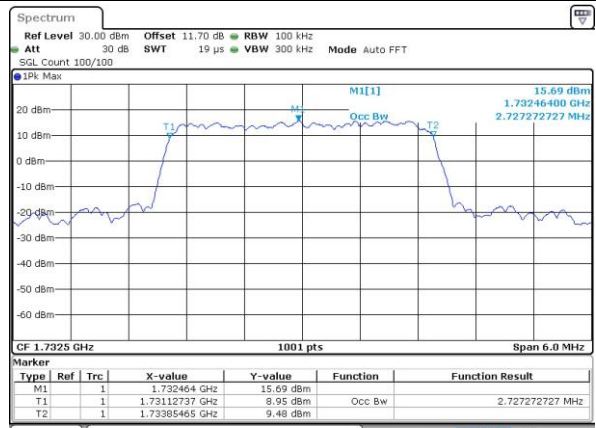
Date: 18 MAY 2019 13:17:41

Middle Channel / 1.4MHz / QPSK



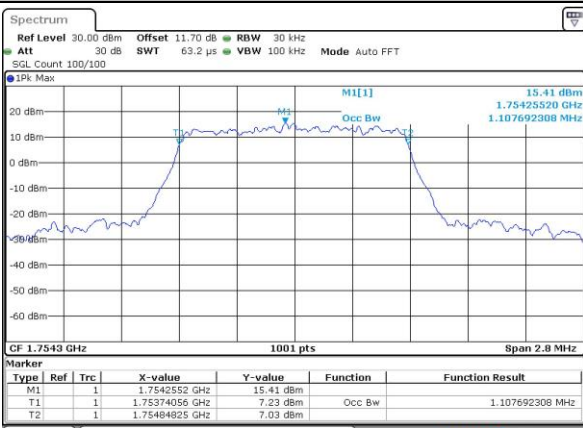
Date: 18 MAY 2019 14:37:55

Middle Channel / 3MHz / QPSK



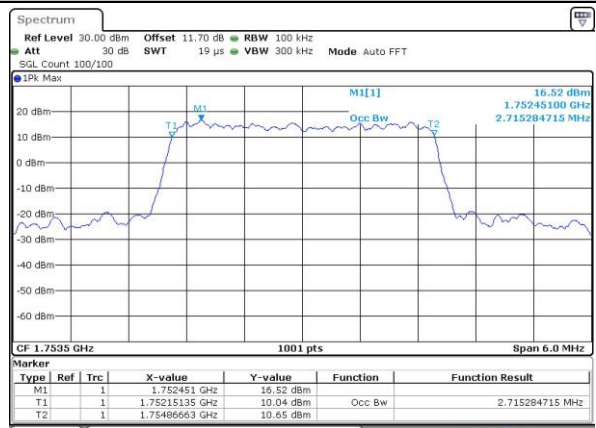
Date: 18 MAY 2019 13:25:58

Highest Channel / 1.4MHz / QPSK



Date: 18 MAY 2019 14:40:05

Highest Channel / 3MHz / QPSK

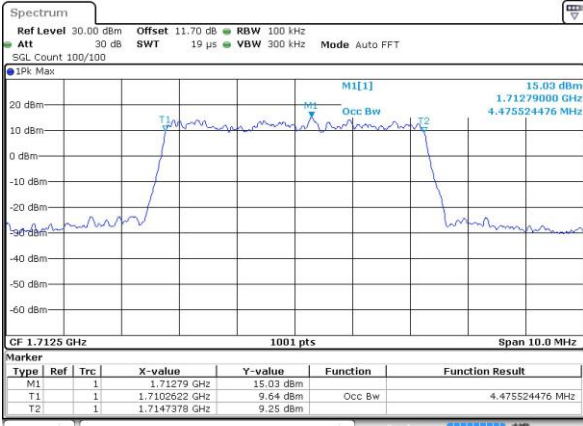


Date: 18 MAY 2019 13:26:07



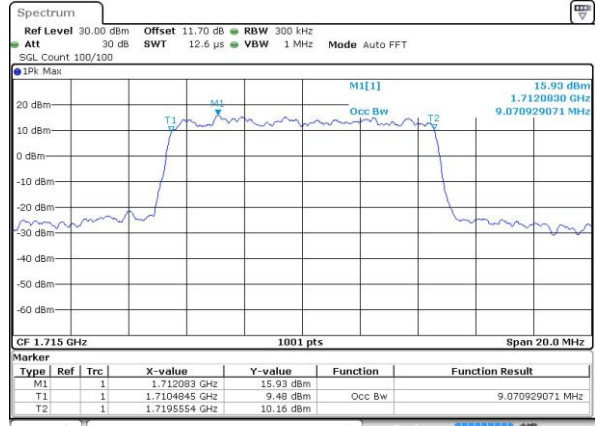
LTE Band 4

Lowest Channel / 5MHz / QPSK



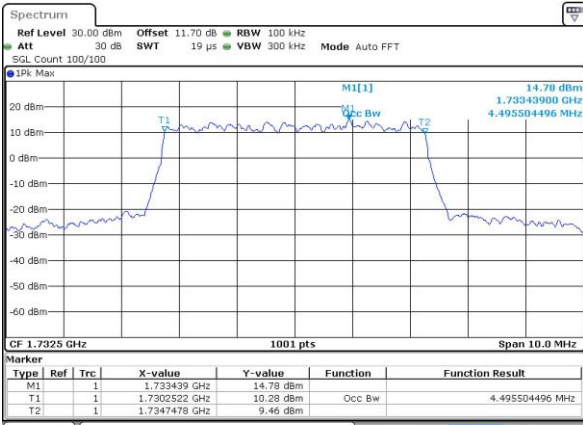
Date: 18 MAY 2019 13:32:25

Lowest Channel / 10MHz / QPSK



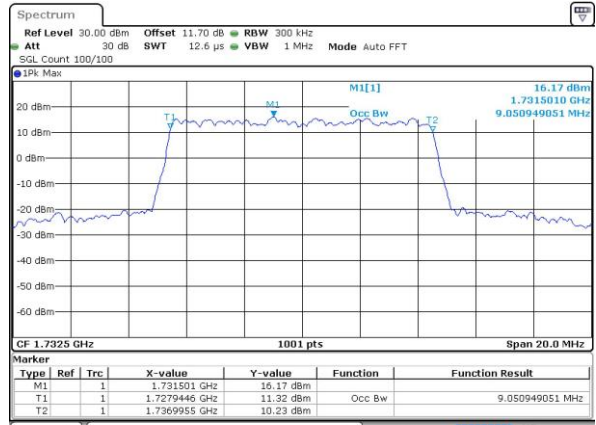
Date: 18 MAY 2019 13:47:11

Middle Channel / 5MHz / QPSK



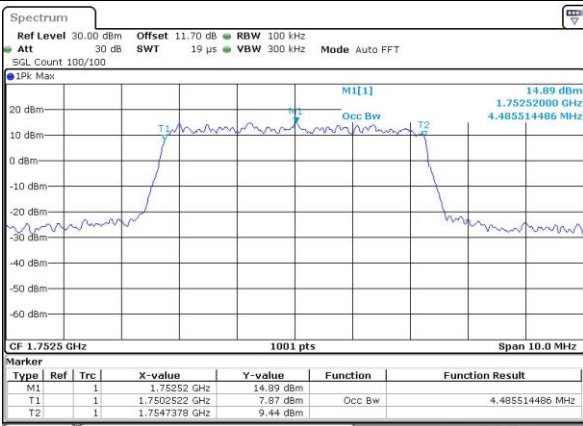
Date: 18 MAY 2019 13:38:43

Middle Channel / 10MHz / QPSK



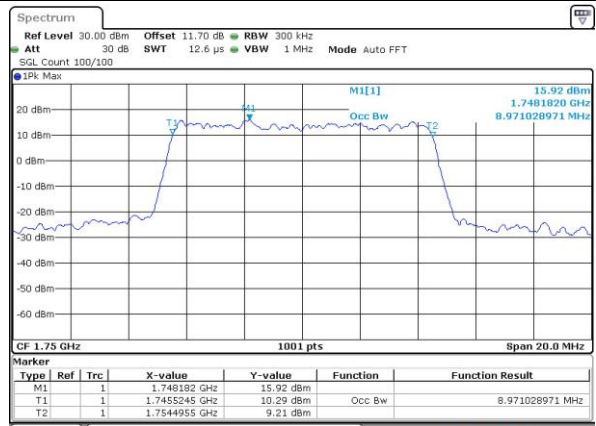
Date: 18 MAY 2019 13:53:29

Highest Channel / 5MHz / QPSK



Date: 18 MAY 2019 13:40:52

Highest Channel / 10MHz / QPSK



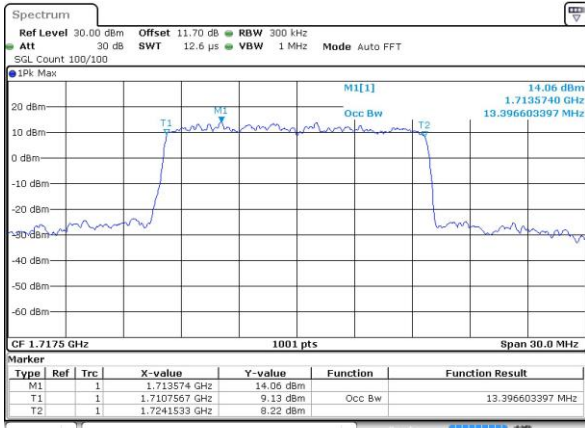
Date: 18 MAY 2019 13:55:37





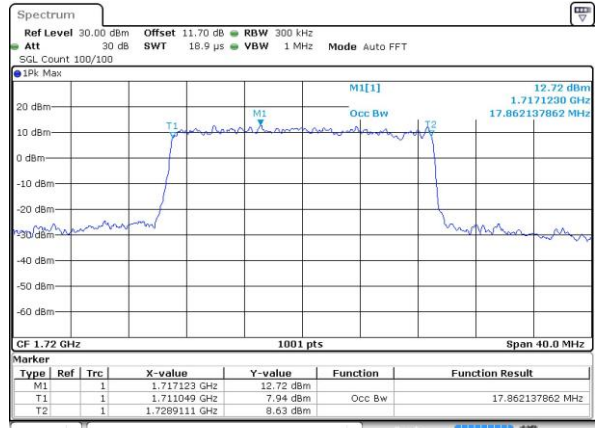
LTE Band 4

Lowest Channel / 15MHz / QPSK



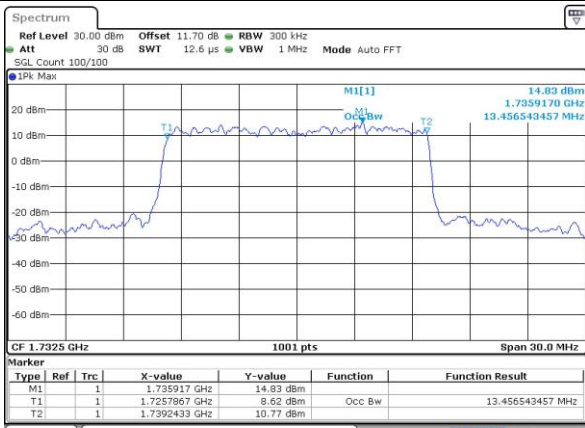
Date: 18 MAY 2019 14:01:56

Lowest Channel / 20MHz / QPSK



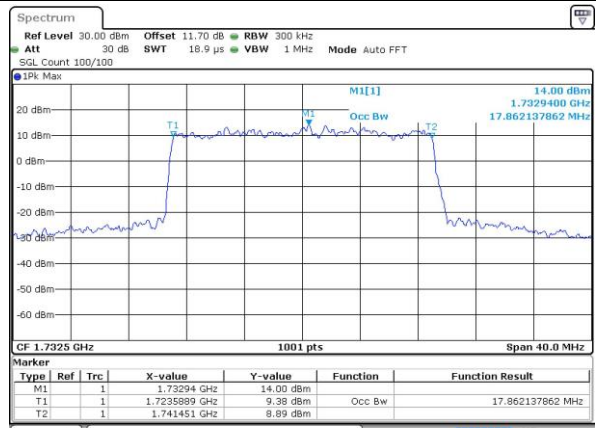
Date: 18 MAY 2019 14:16:41

Middle Channel / 15MHz / QPSK



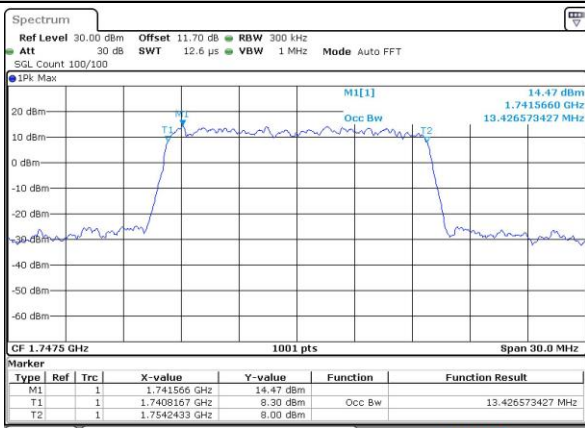
Date: 18 MAY 2019 14:08:13

Middle Channel / 20MHz / QPSK



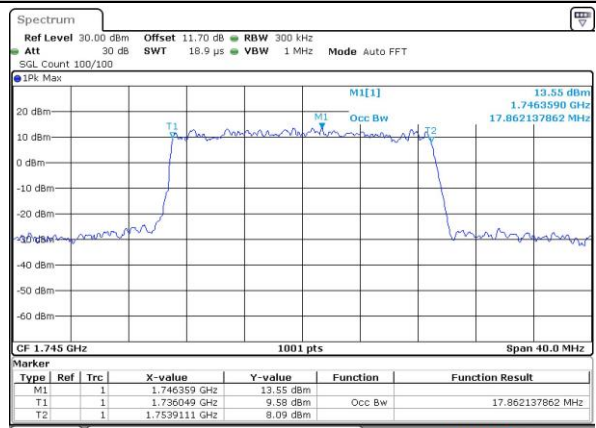
Date: 18 MAY 2019 14:22:58

Highest Channel / 15MHz / QPSK



Date: 18 MAY 2019 14:10:22

Highest Channel / 20MHz / QPSK

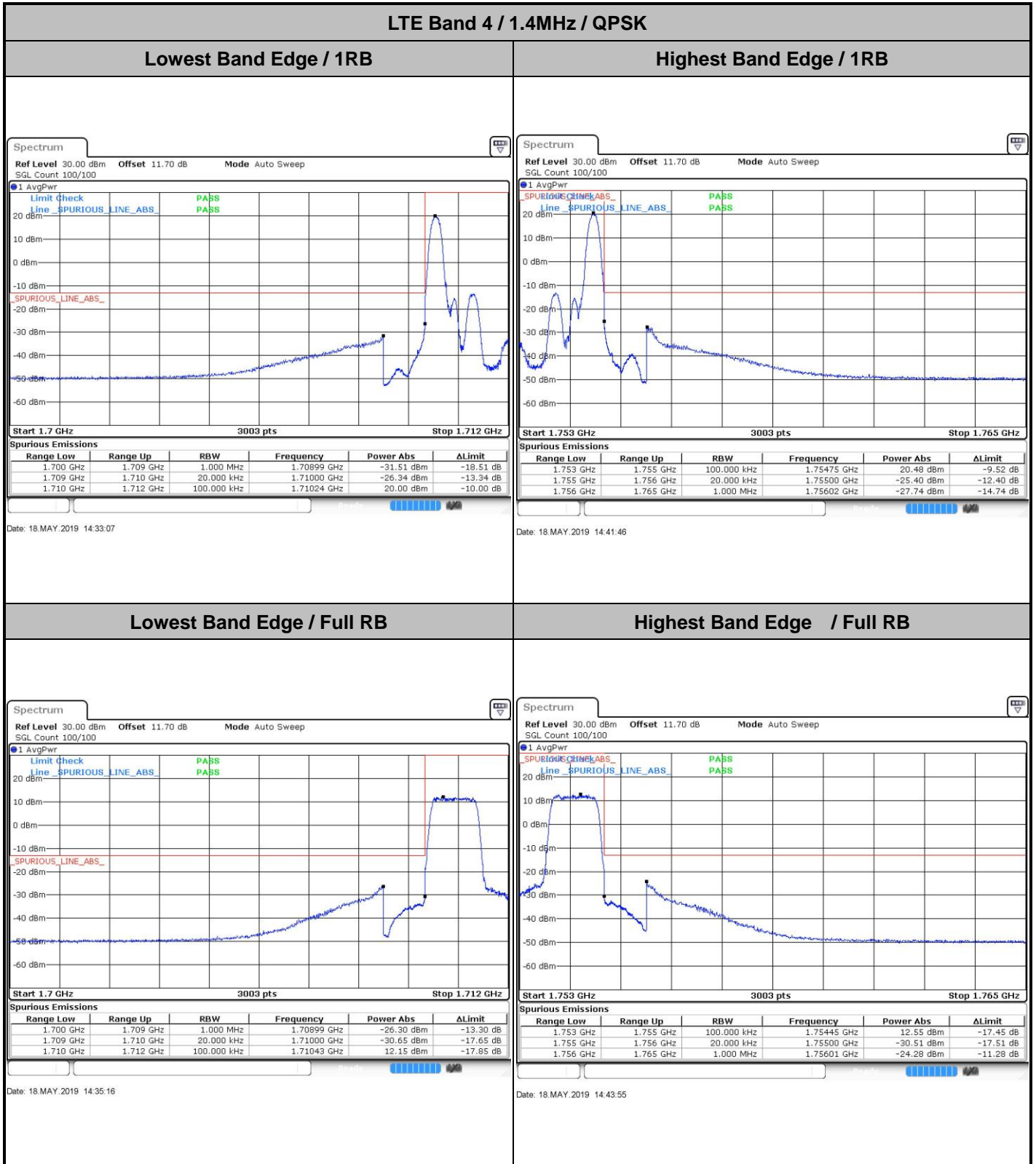


Date: 18 MAY 2019 14:25:07





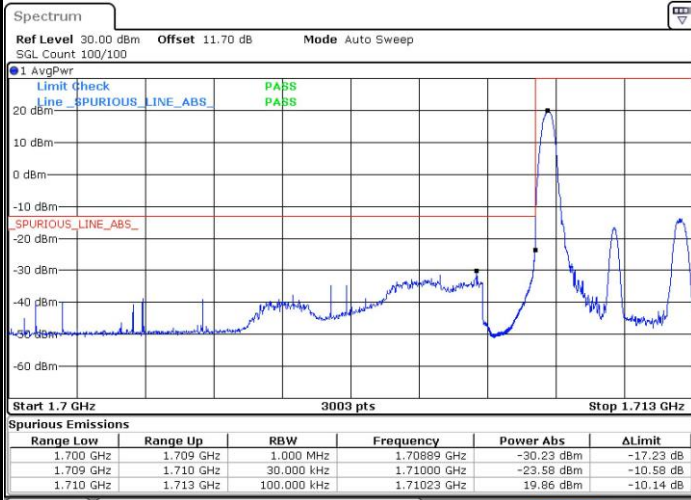
# Conducted Band Edge





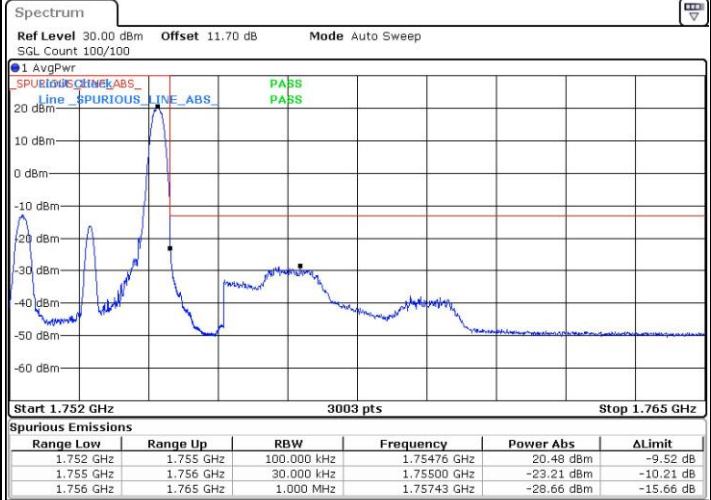
LTE Band 4 / 3MHz / QPSK

Lowest Band Edge / 1RB



Date: 18.MAY.2019 13:19:19

Highest Band Edge / 1 RB



Date: 18.MAY.2019 13:27:45

Lowest Band Edge / Full RB



Date: 18.MAY.2019 13:21:21

Highest Band Edge / Full RB

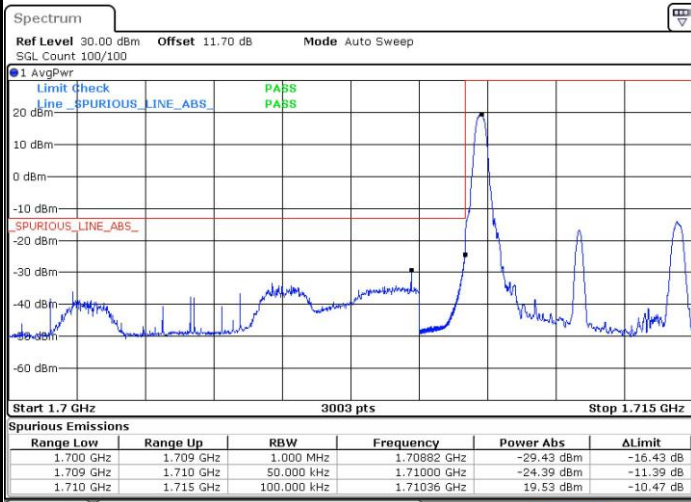


Date: 18.MAY.2019 13:29:47



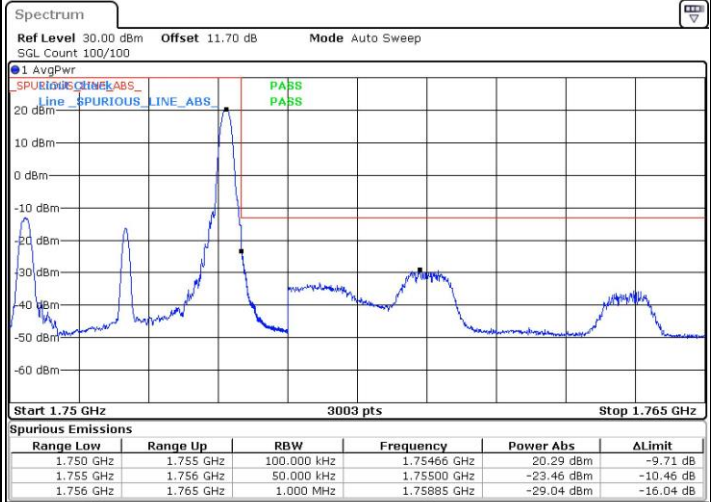
LTE Band 4 / 5MHz / QPSK

Lowest Band Edge / 1 RB



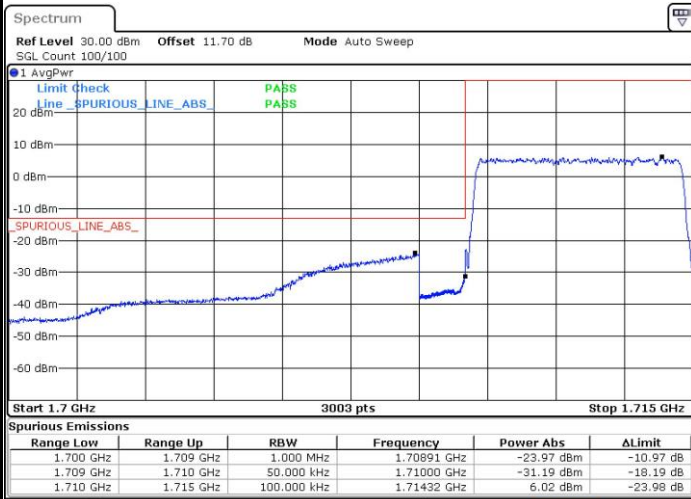
Date: 18.MAY.2019 13:34:03

Highest Band Edge / 1 RB



Date: 18.MAY.2019 13:42:30

Lowest Band Edge / Full RB



Date: 18.MAY.2019 13:36:06

Highest Band Edge / Full RB

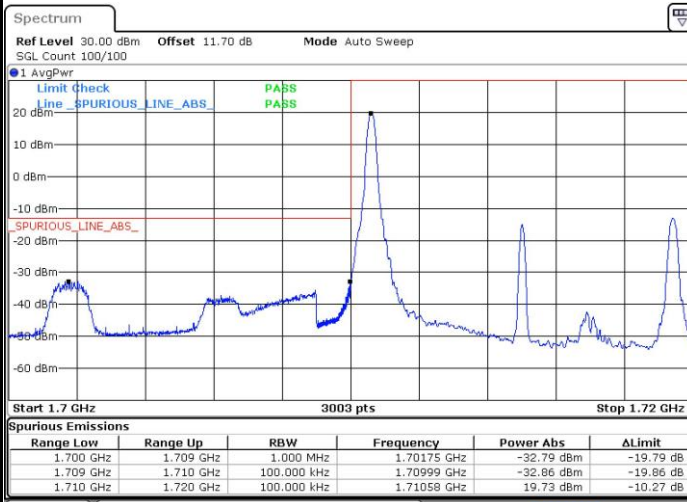


Date: 18.MAY.2019 13:44:33



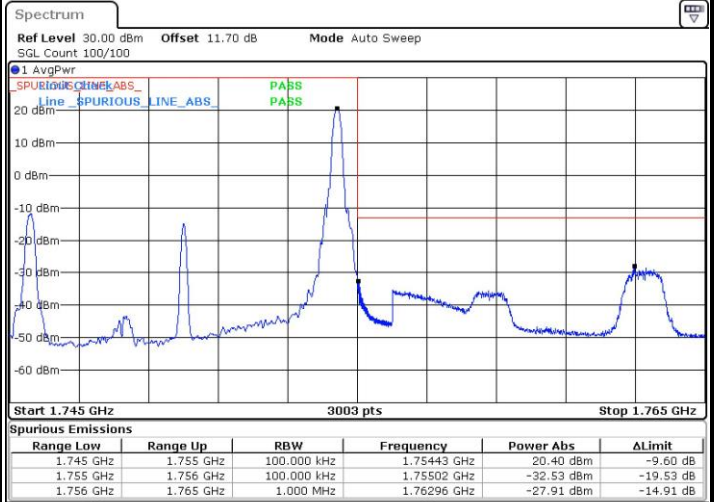
LTE Band 4 / 10MHz / QPSK

Lowest Band Edge / 1 RB



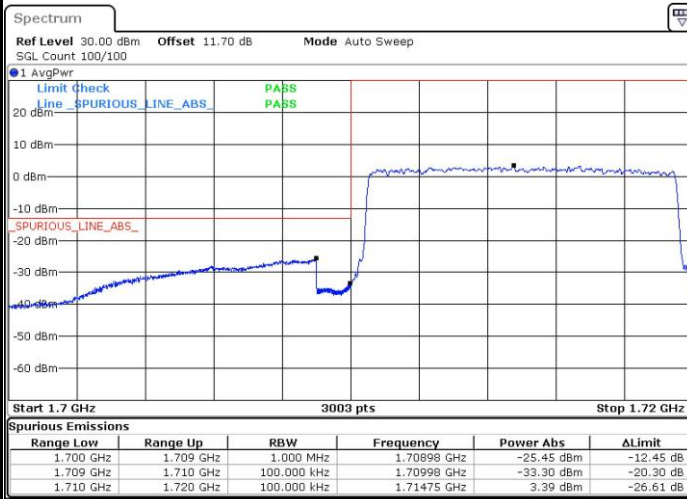
Date: 18.MAY.2019 13:48:49

Highest Band Edge / 1 RB



Date: 18.MAY.2019 13:57:15

Lowest Band Edge / Full RB



Date: 18.MAY.2019 13:50:52

Highest Band Edge / Full RB



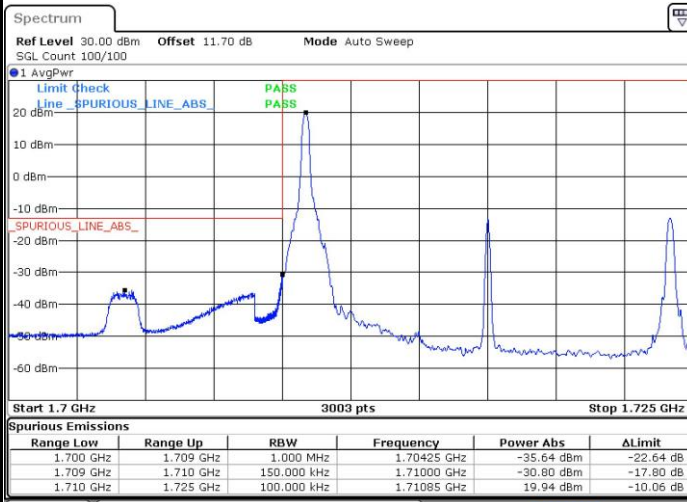
Date: 18.MAY.2019 13:59:18





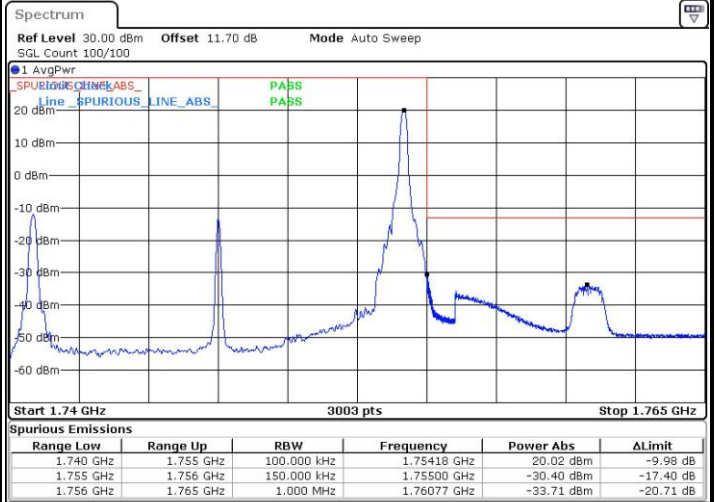
LTE Band 4 / 15MHz / QPSK

Lowest Band Edge / 1 RB



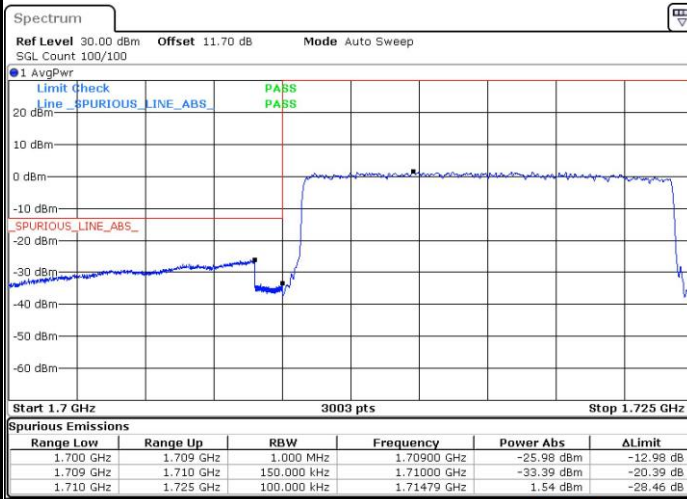
Date: 18.MAY.2019 14:03:34

Highest Band Edge / 1 RB



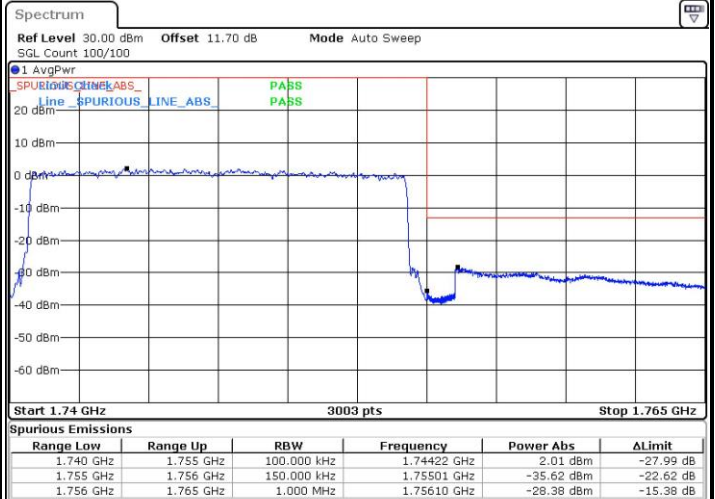
Date: 18.MAY.2019 14:12:00

Lowest Band Edge / Full RB



Date: 18.MAY.2019 14:05:37

Highest Band Edge / Full RB

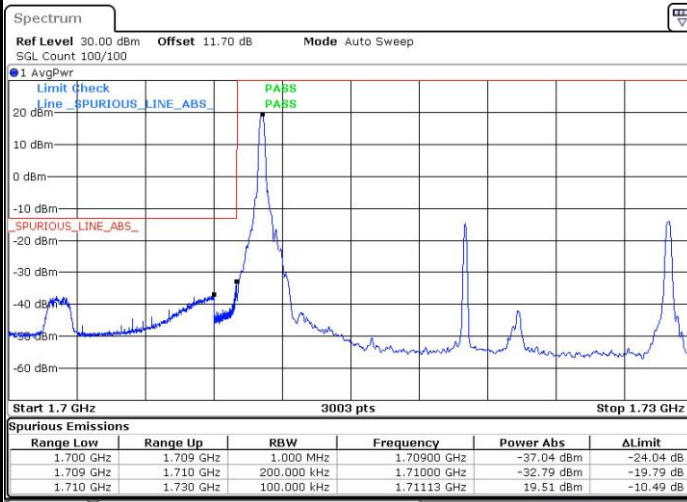


Date: 18.MAY.2019 14:14:03



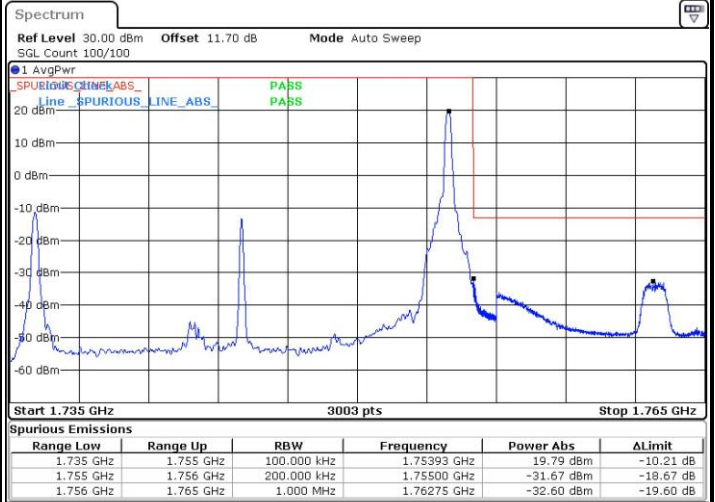
LTE Band 4 / 20MHz / QPSK

Lowest Band Edge / 1 RB



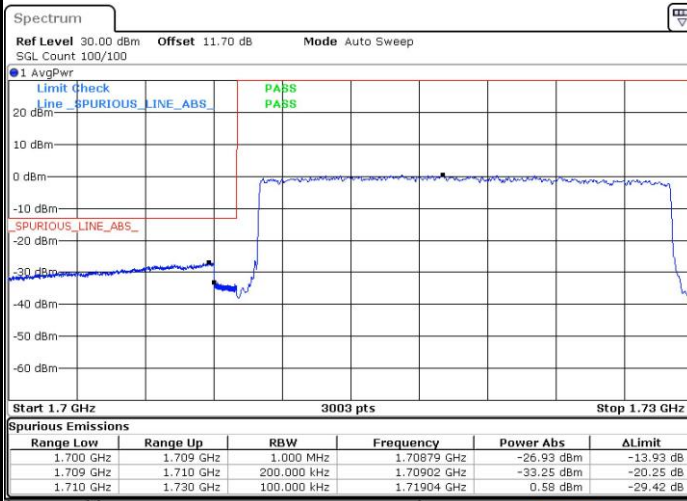
Date: 18.MAY.2019 14:18:19

Highest Band Edge / 1 RB



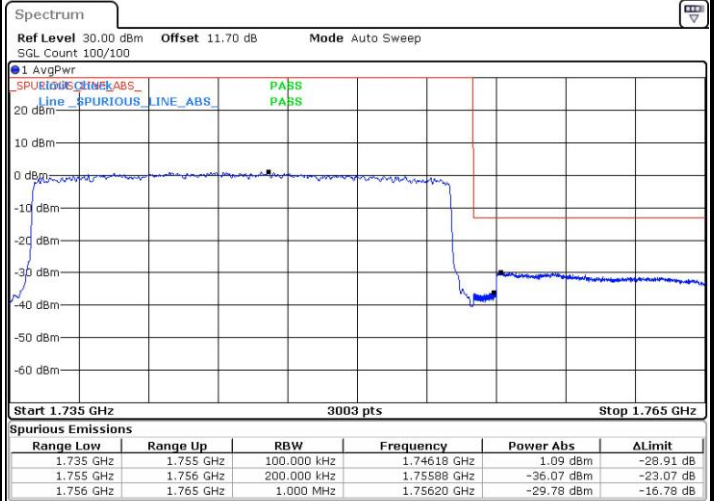
Date: 18.MAY.2019 14:26:45

Lowest Band Edge / Full RB



Date: 18.MAY.2019 14:20:21

Highest Band Edge / Full RB



Date: 18.MAY.2019 14:28:48



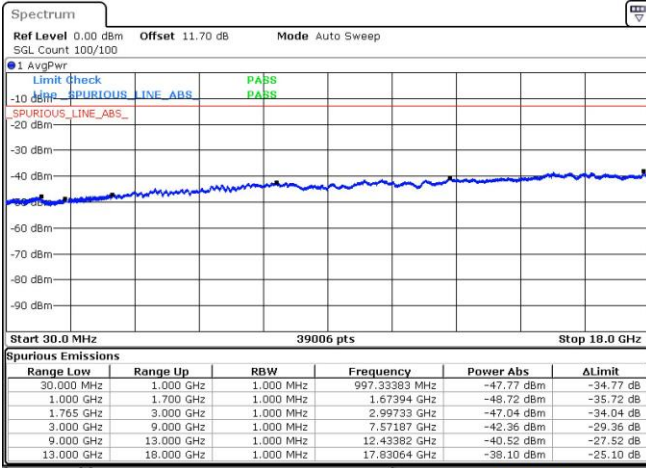


# Conducted Spurious Emission

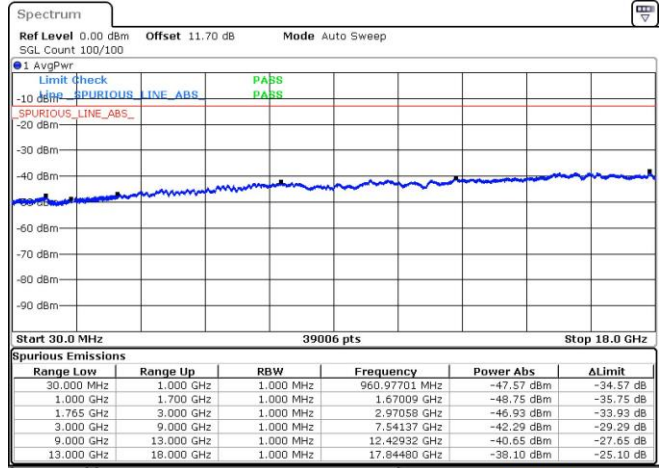
## LTE Band 4 / 1.4MHz

### Lowest Channel / QPSK

### Highest Channel / QPSK

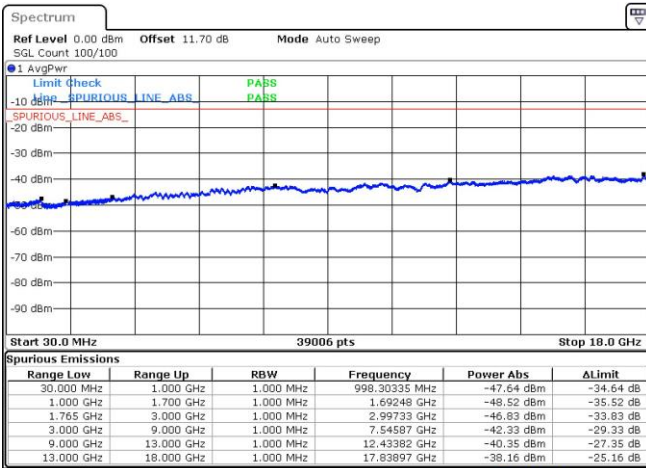


Date: 18 MAY.2019 14:37:02



Date: 18 MAY.2019 14:45:41

### Middle Channel / QPSK



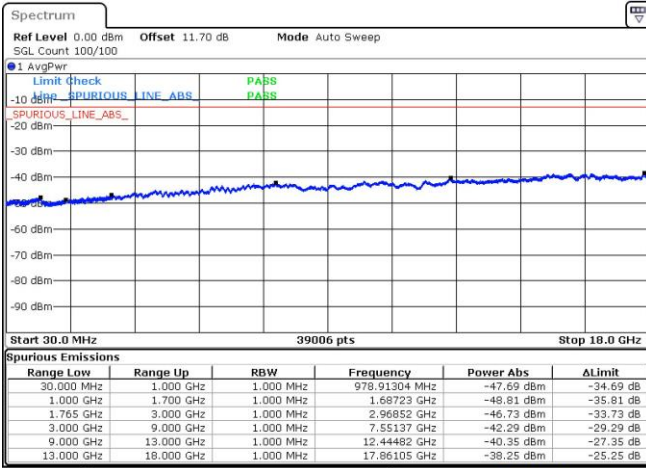
Date: 18 MAY.2019 14:39:12



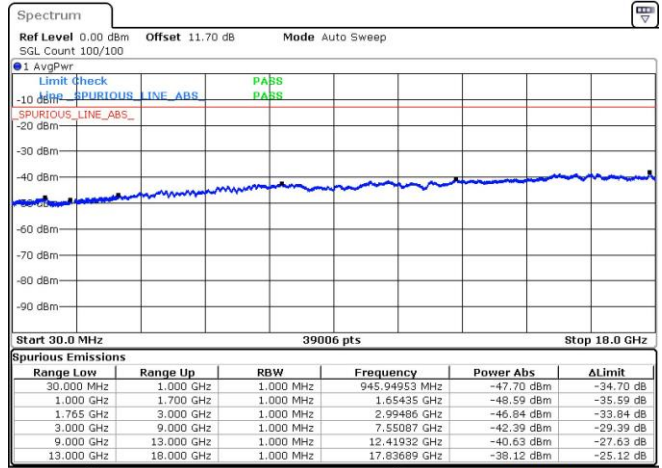
LTE Band 4 / 3MHz

Lowest Channel / QPSK

Highest Channel / QPSK

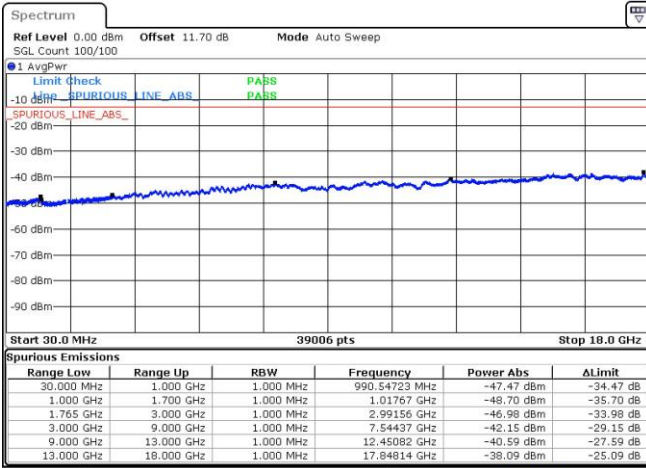


Date: 18 MAY 2019 13:23:04



Date: 18 MAY 2019 13:31:30

Middle Channel / QPSK



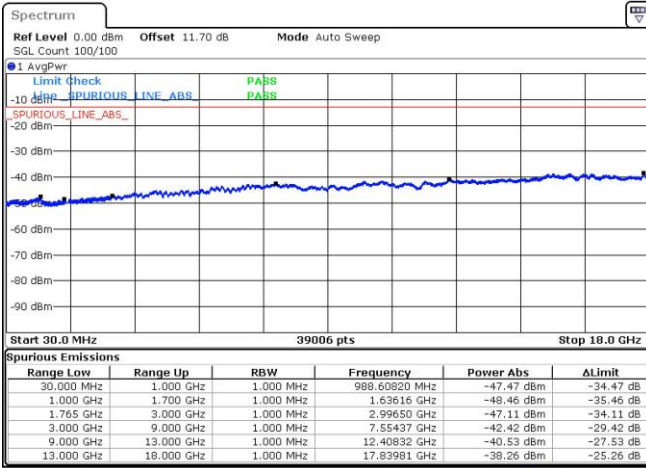
Date: 18 MAY 2019 13:25:14



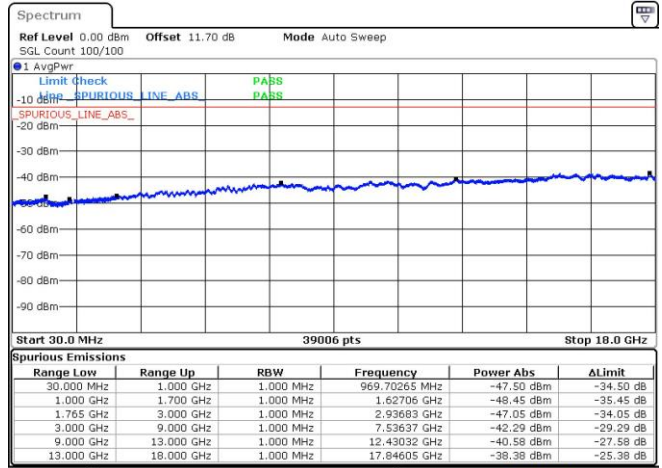
LTE Band 4 / 5MHz

Lowest Channel / QPSK

Highest Channel / QPSK

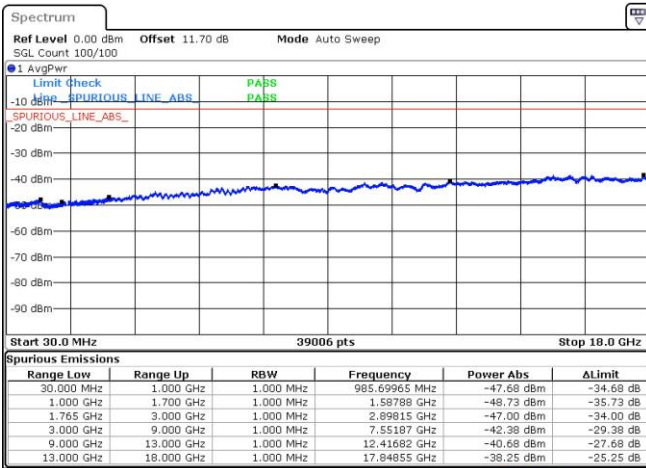


Date: 18 MAY 2019 13:37:49



Date: 18 MAY 2019 13:46:16

Middle Channel / QPSK



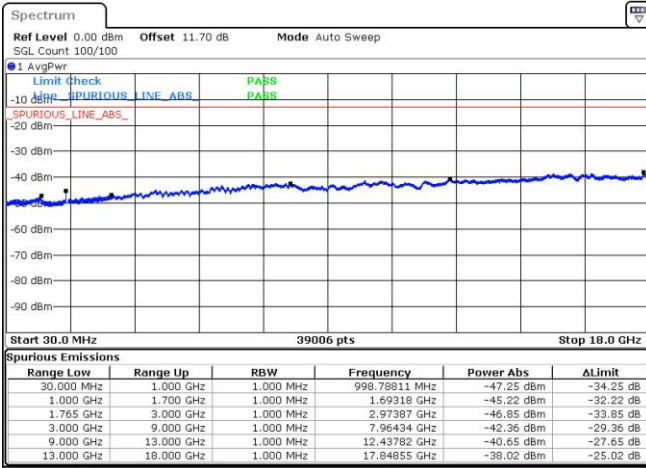
Date: 18 MAY 2019 13:39:59



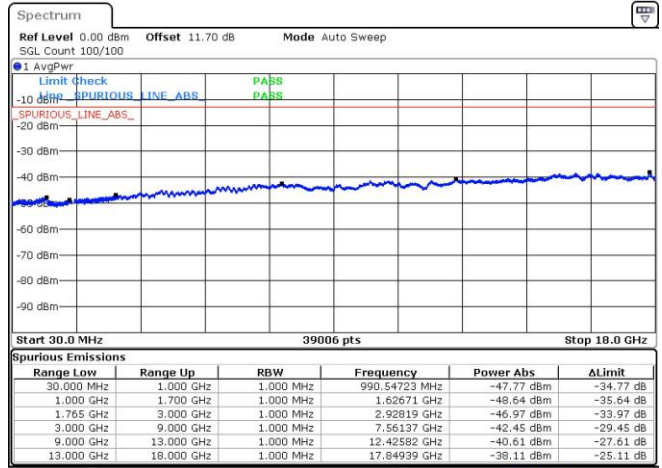
LTE Band 4 / 10MHz

Lowest Channel / QPSK

Highest Channel / QPSK

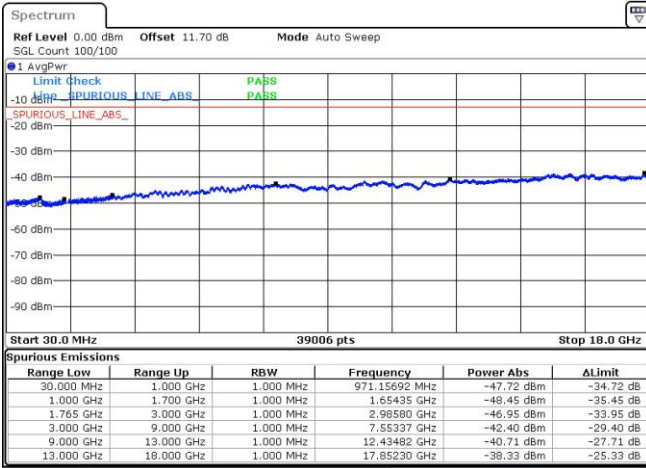


Date: 18 MAY.2019 13:52:35



Date: 18 MAY.2019 14:01:01

Middle Channel / QPSK



Date: 18 MAY.2019 13:54:45