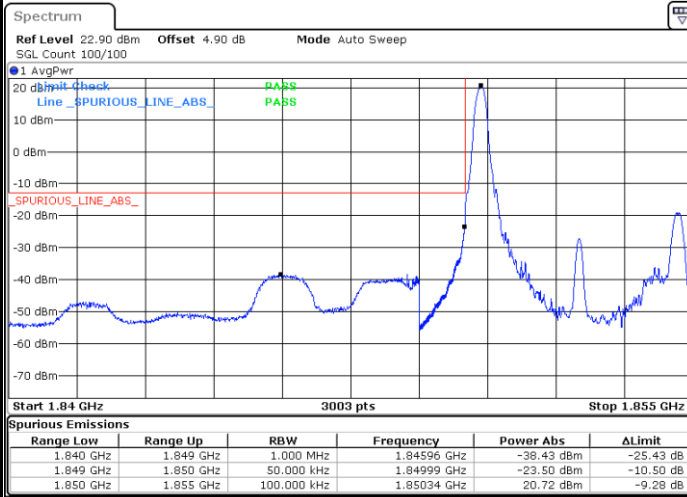




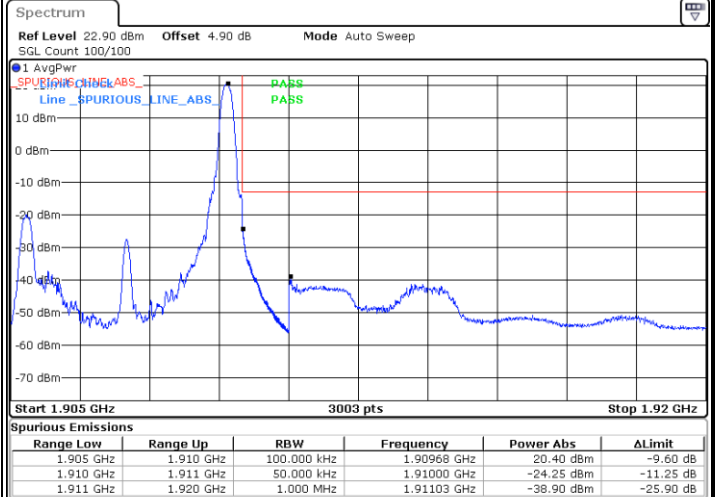
LTE Band 2 / 5MHz / QPSK

Lowest Band Edge / 1 RB



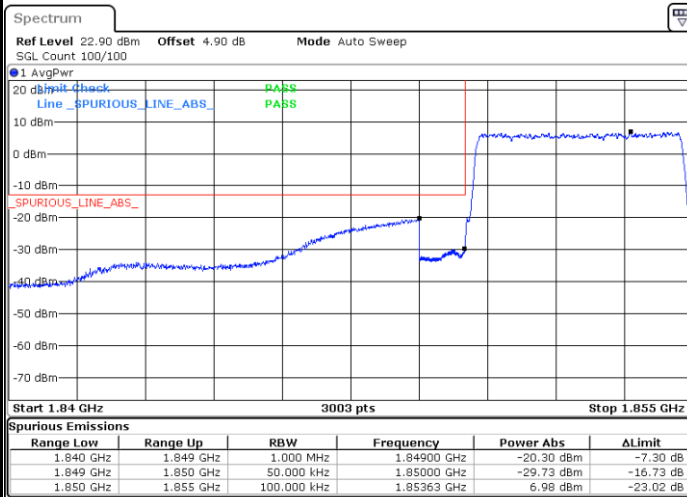
Date: 4 DEC.2019 12:51:44

Highest Band Edge / 1 RB



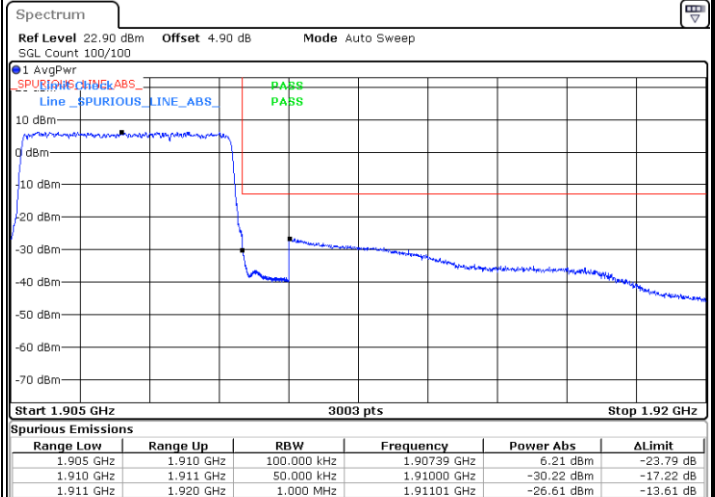
Date: 4 DEC.2019 13:01:10

Lowest Band Edge / Full RB



Date: 4 DEC.2019 12:53:59

Highest Band Edge / Full RB

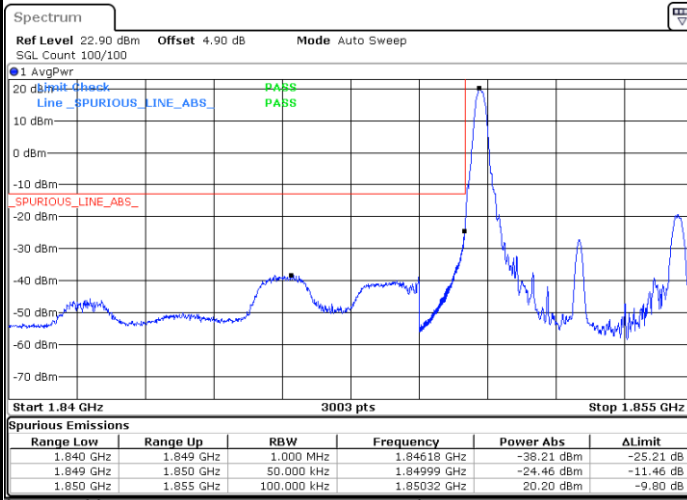


Date: 4 DEC.2019 13:03:25



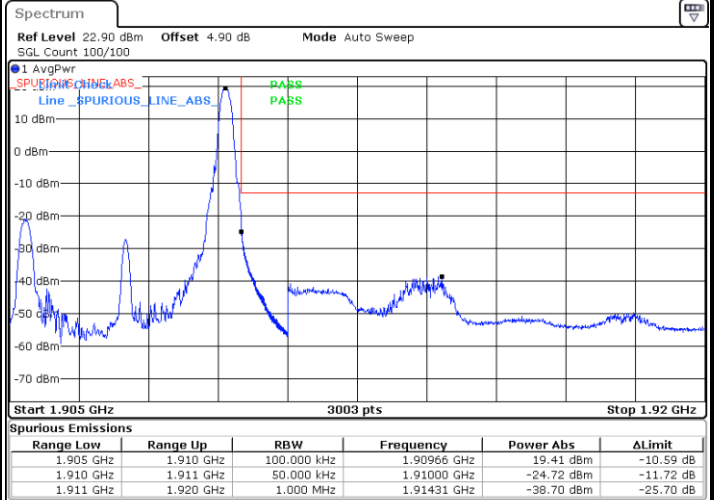
LTE Band 2 / 5MHz / 16QAM

Lowest Band Edge / 1RB



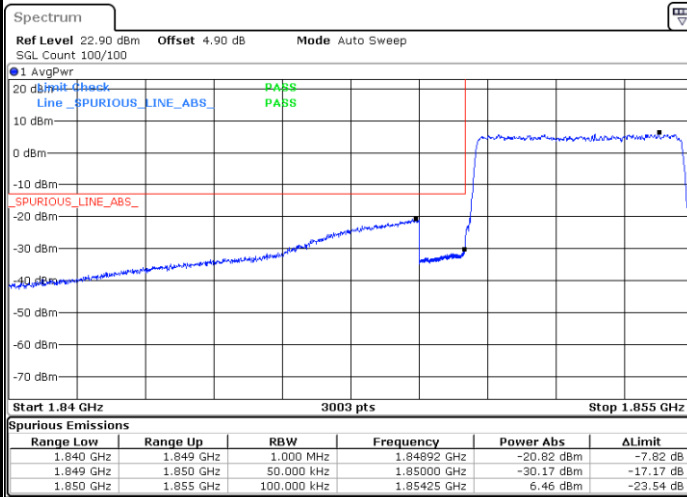
Date: 4 DEC.2019 12:52:51

Highest Band Edge / 1 RB



Date: 4 DEC.2019 13:02:17

Lowest Band Edge / Full RB



Date: 4 DEC.2019 12:55:06

Highest Band Edge / Full RB

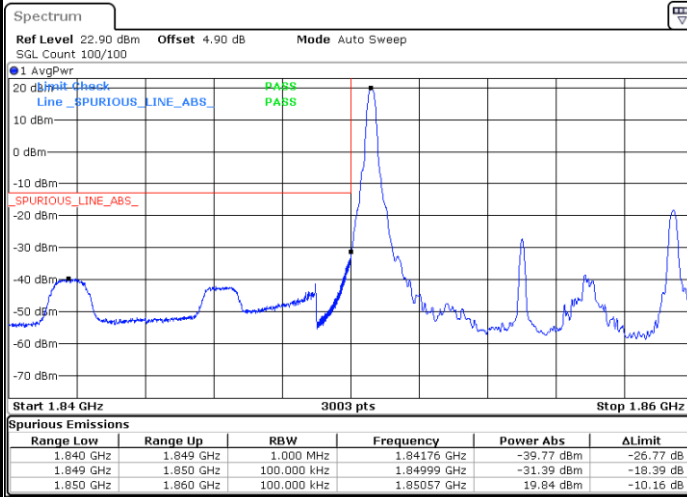


Date: 4 DEC.2019 13:04:32



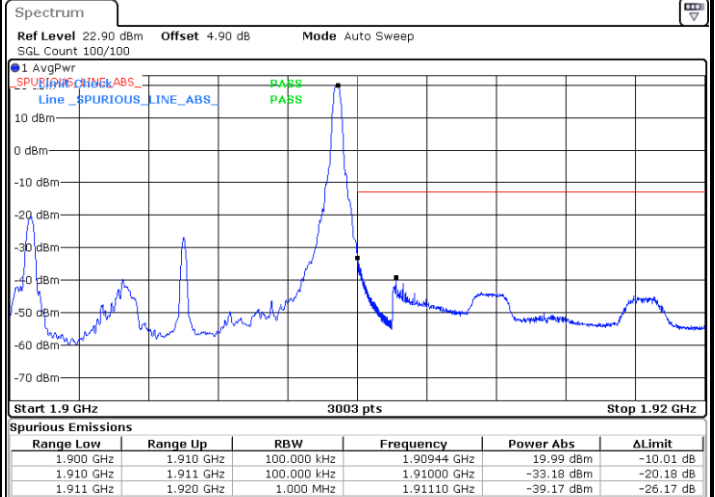
LTE Band 2 / 10MHz / QPSK

Lowest Band Edge / 1 RB



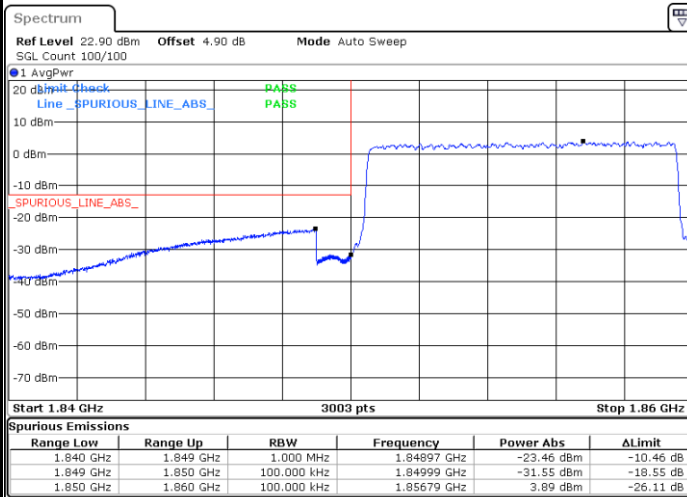
Date: 4 DEC.2019 13:08:07

Highest Band Edge / 1 RB



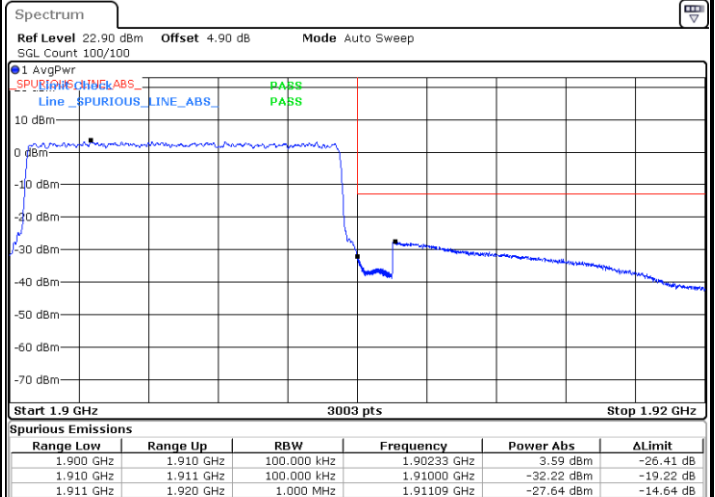
Date: 4 DEC.2019 13:17:34

Lowest Band Edge / Full RB



Date: 4 DEC.2019 13:10:22

Highest Band Edge / Full RB

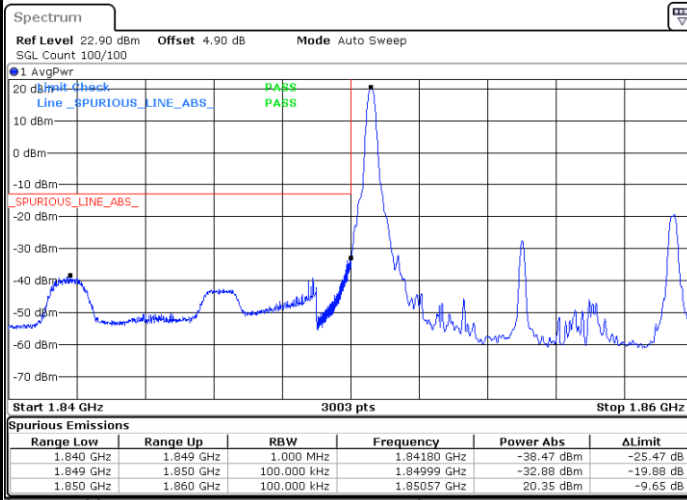


Date: 4 DEC.2019 13:19:49



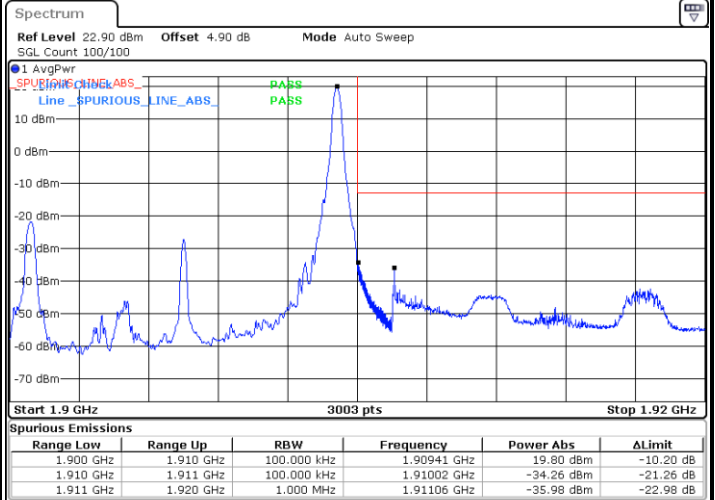
LTE Band 2 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



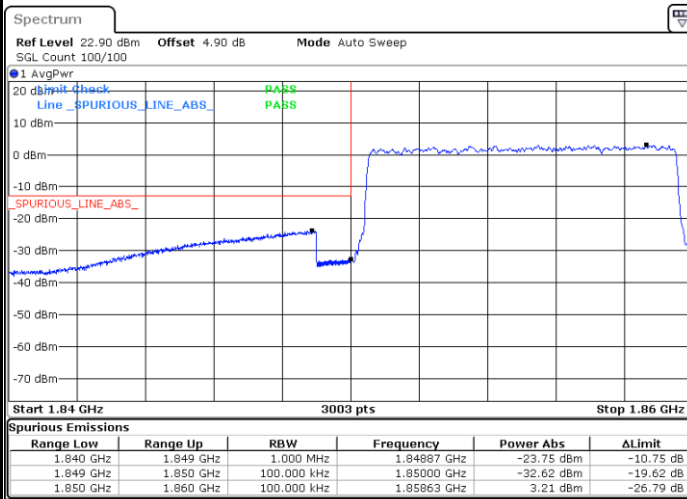
Date: 4 DEC.2019 13:09:15

Highest Band Edge / 1 RB



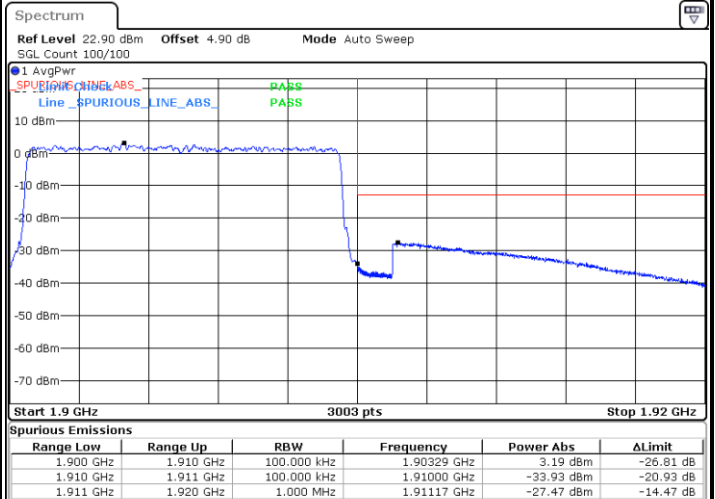
Date: 4 DEC.2019 13:18:41

Lowest Band Edge / Full RB



Date: 4 DEC.2019 13:11:29

Highest Band Edge / Full RB



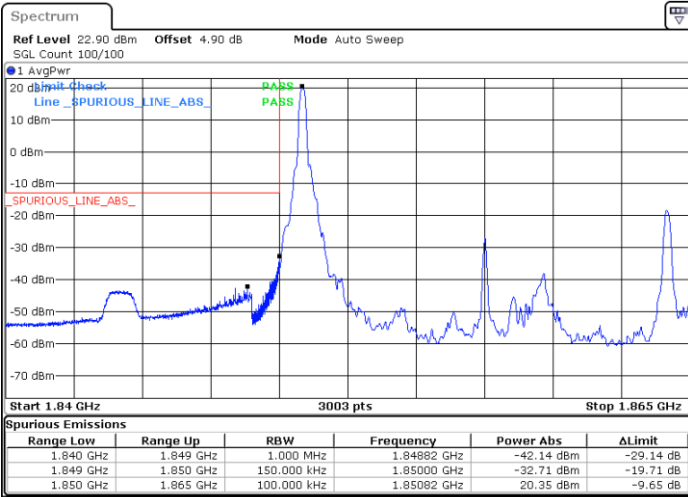
Date: 4 DEC.2019 13:20:56



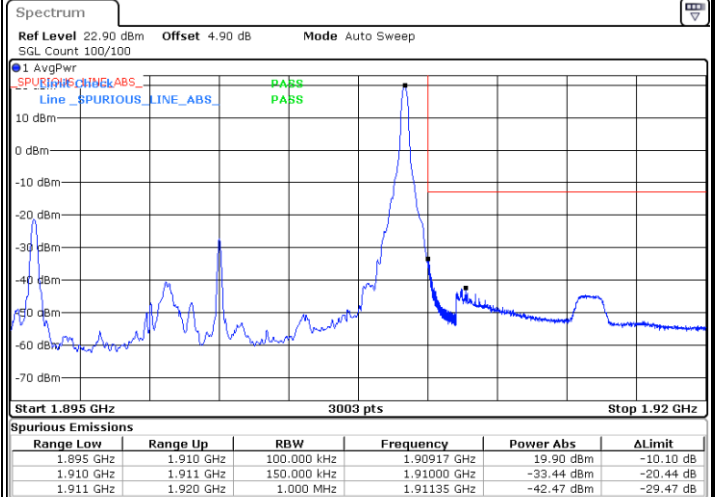
LTE Band 2 / 15MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



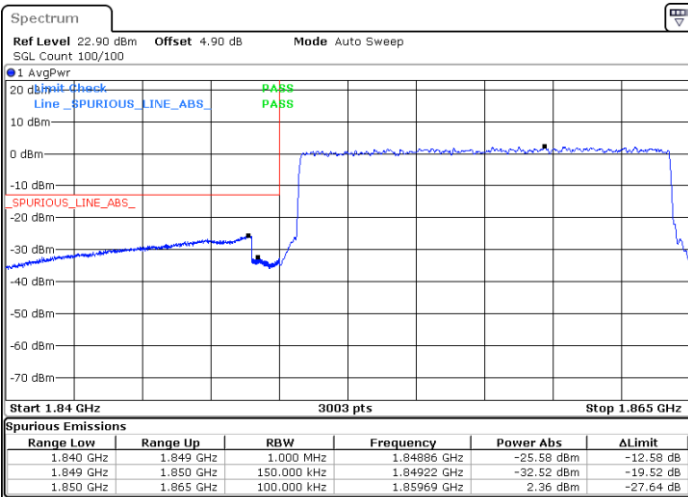
Date: 4 DEC.2019 13:24:32



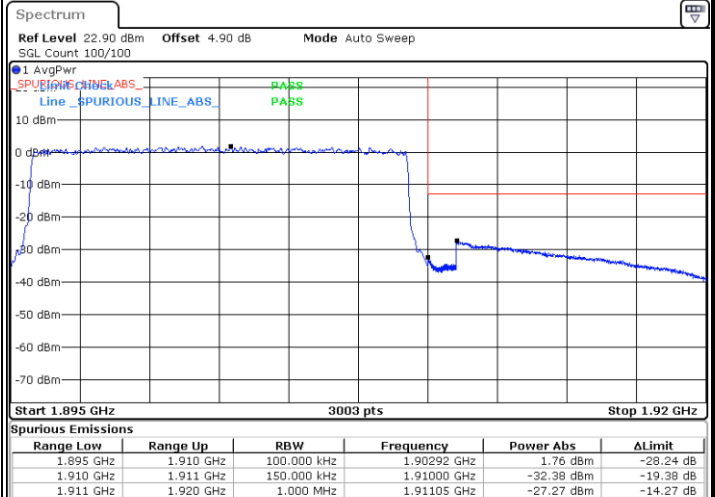
Date: 4 DEC.2019 13:33:58

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4 DEC.2019 13:26:46

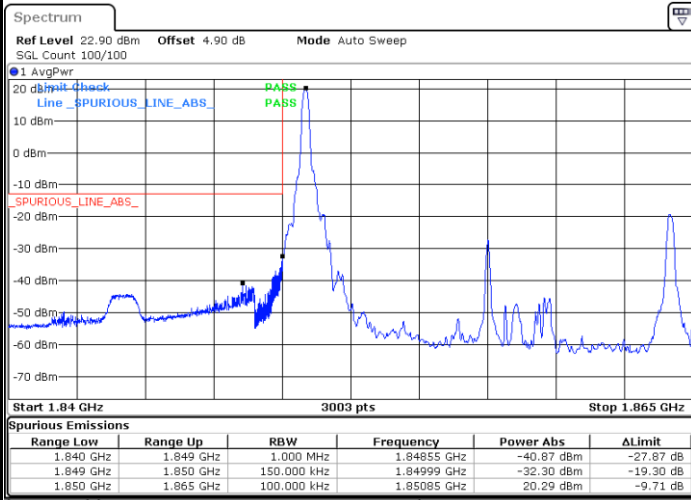


Date: 4 DEC.2019 13:36:12



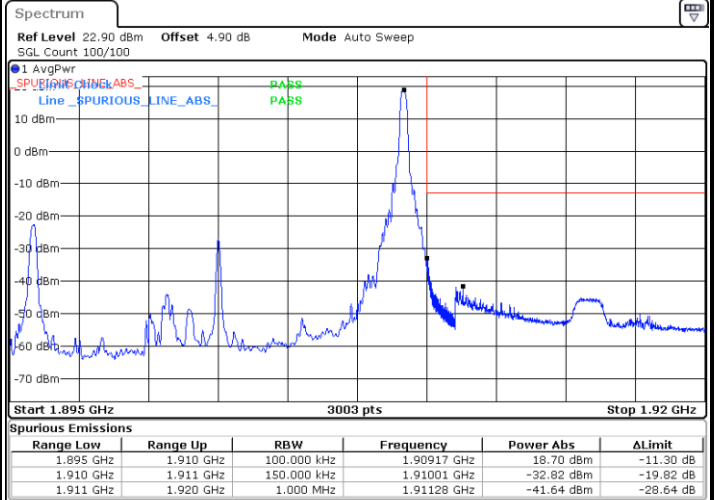
LTE Band 2 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



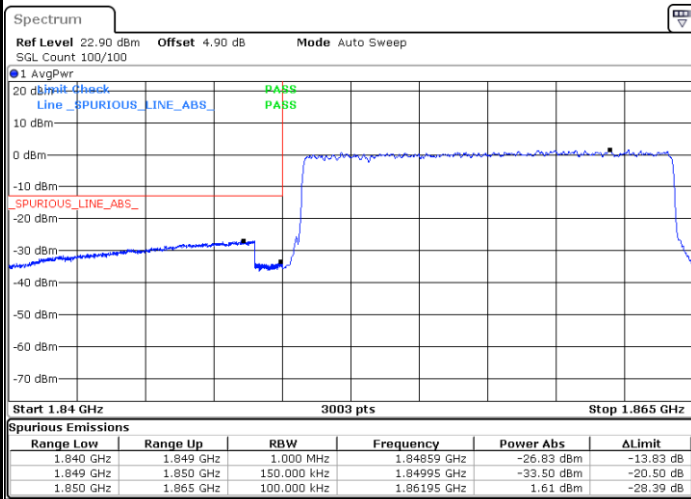
Date: 4 DEC.2019 13:25:39

Highest Band Edge / 1 RB



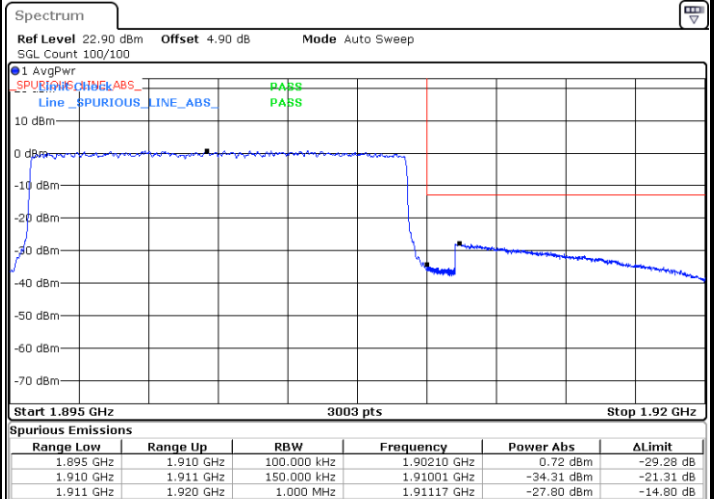
Date: 4 DEC.2019 13:35:05

Lowest Band Edge / Full RB



Date: 4 DEC.2019 13:27:54

Highest Band Edge / Full RB

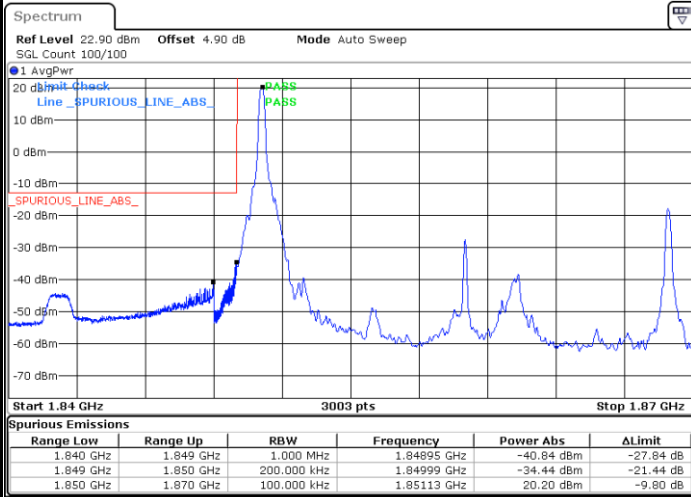


Date: 4 DEC.2019 13:37:19



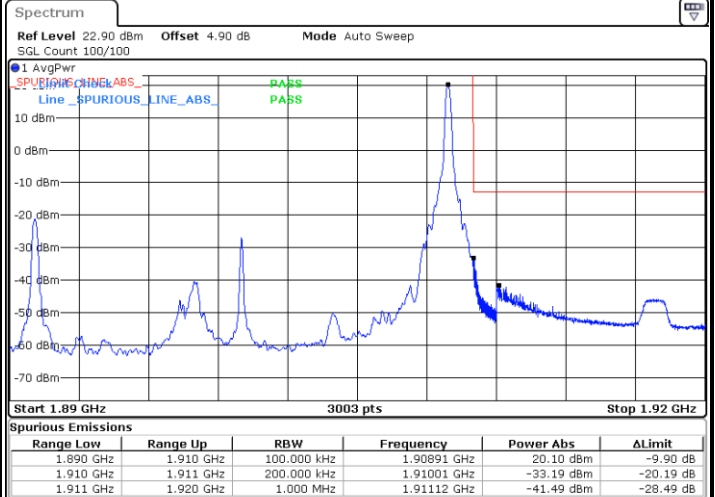
LTE Band 2 / 20MHz / QPSK

Lowest Band Edge / 1 RB



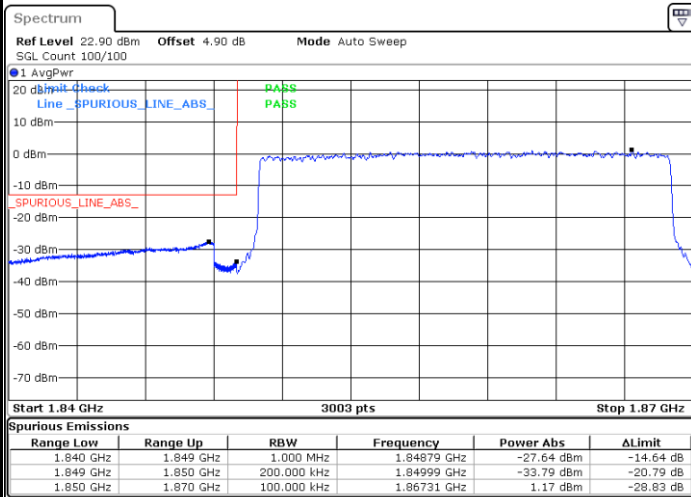
Date: 4 DEC.2019 13:40:55

Highest Band Edge / 1 RB



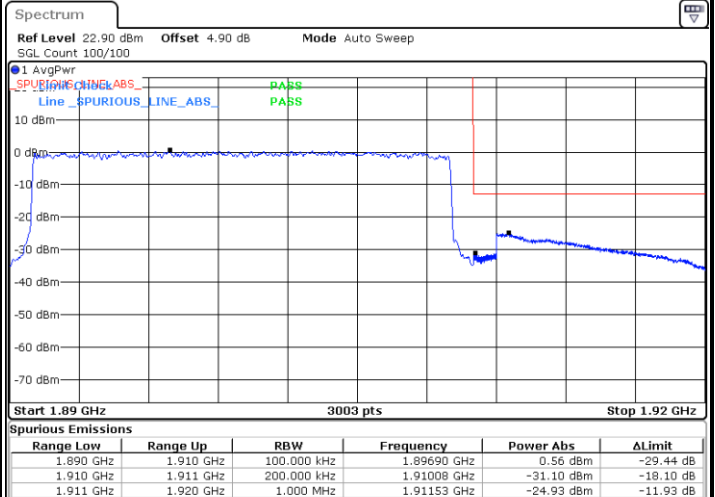
Date: 4 DEC.2019 13:50:22

Lowest Band Edge / Full RB



Date: 4 DEC.2019 13:43:10

Highest Band Edge / Full RB

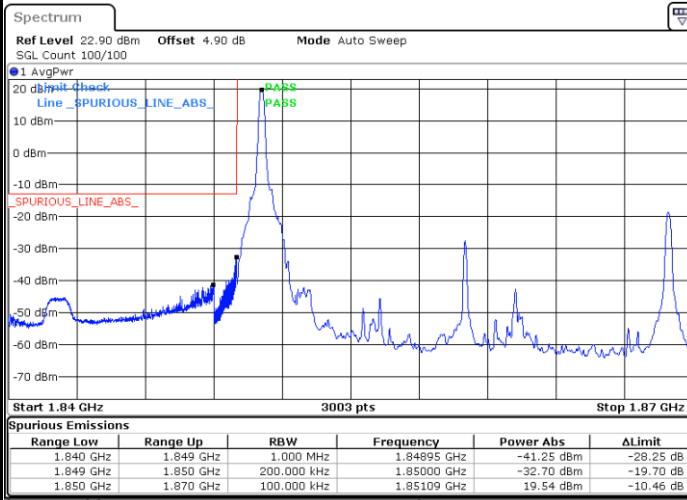


Date: 4 DEC.2019 13:52:36



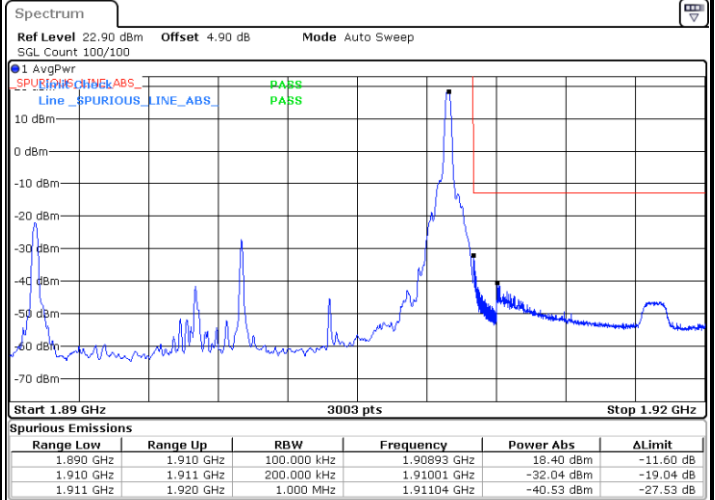
LTE Band 2 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



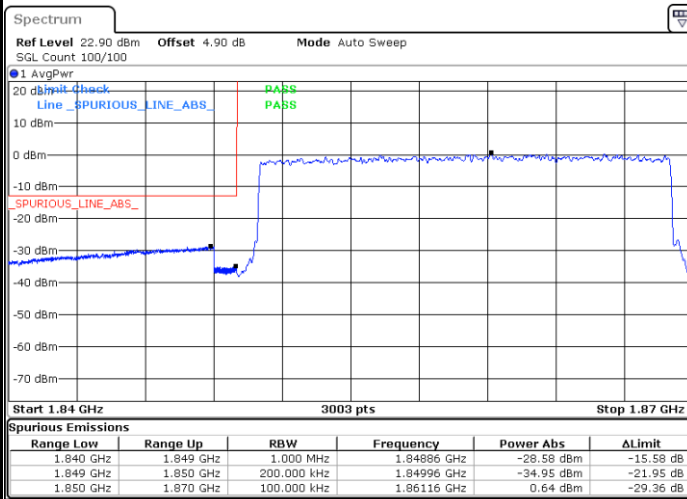
Date: 4 DEC.2019 13:42:02

Highest Band Edge / 1 RB



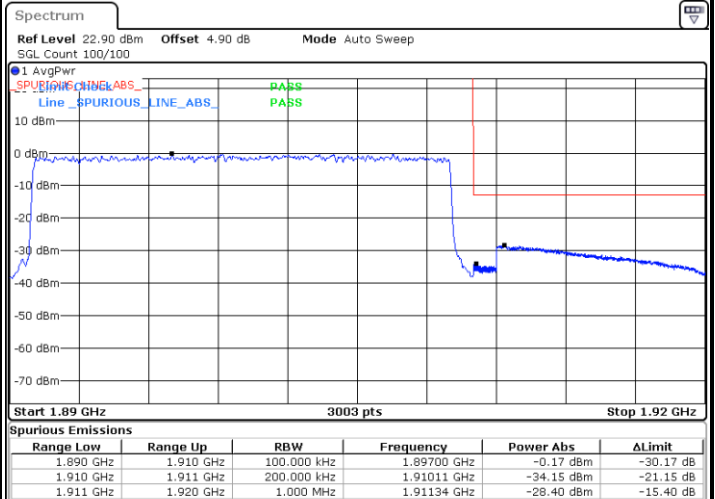
Date: 4 DEC.2019 13:51:29

Lowest Band Edge / Full RB



Date: 4 DEC.2019 13:44:17

Highest Band Edge / Full RB

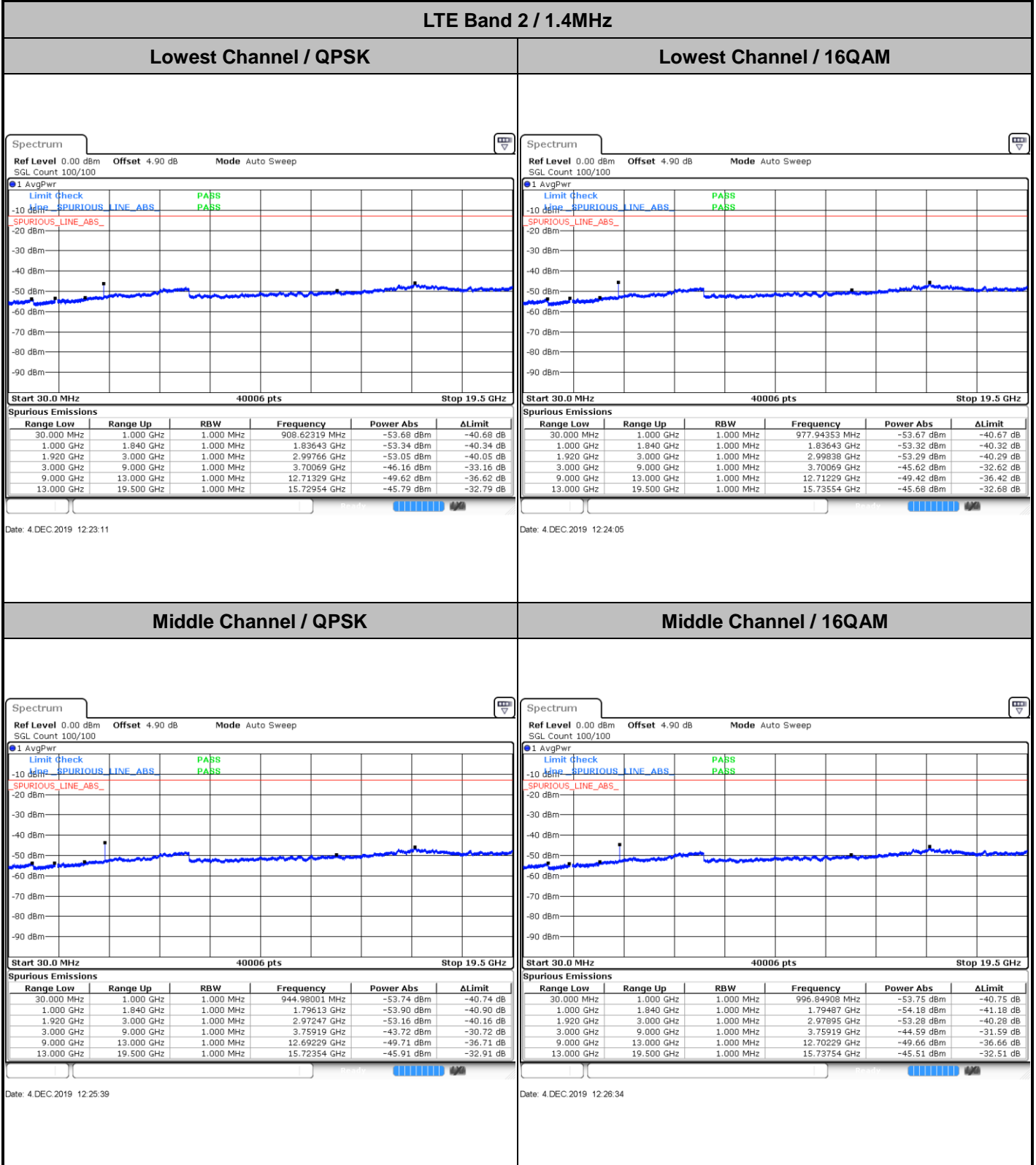


Date: 4 DEC.2019 13:53:43





# Conducted Spurious Emission

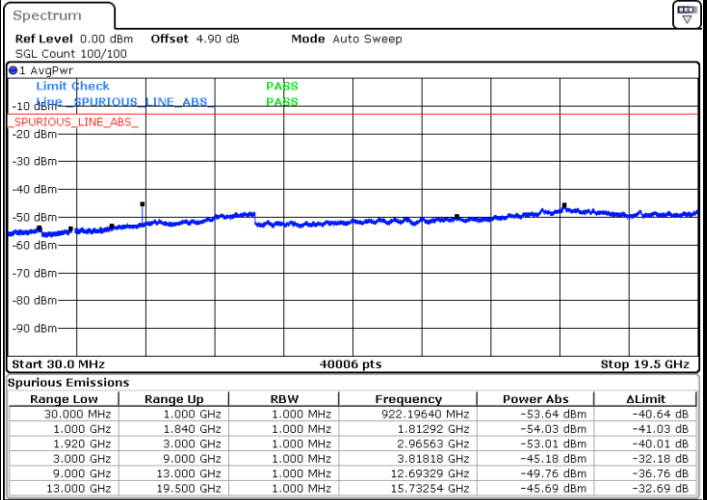
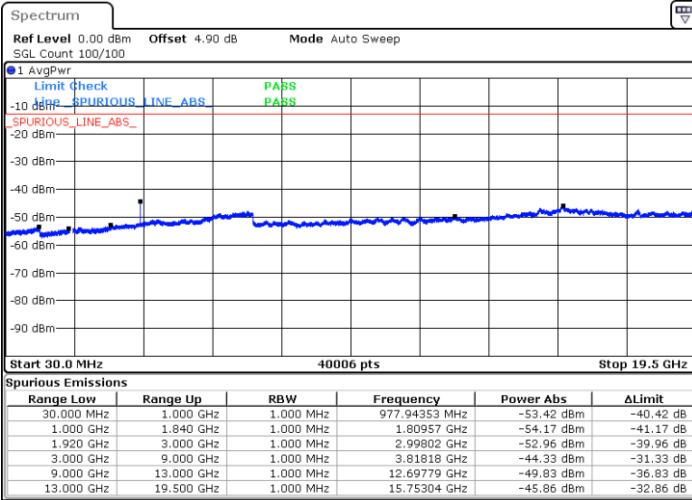




LTE Band 2 / 1.4MHz

Highest Channel / QPSK

Highest Channel / 16QAM



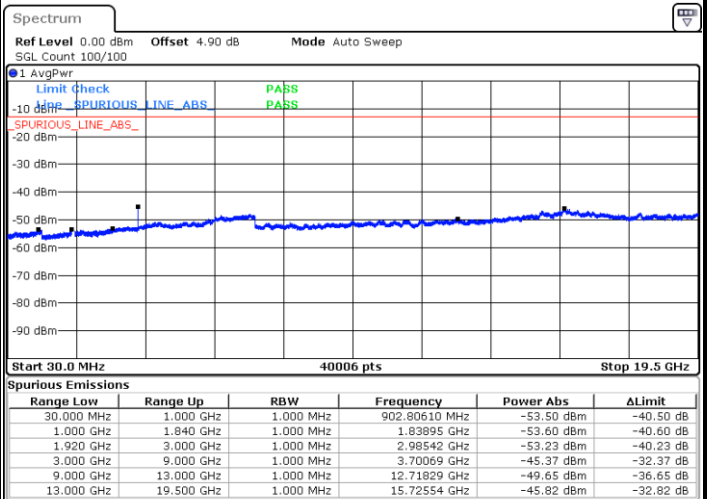
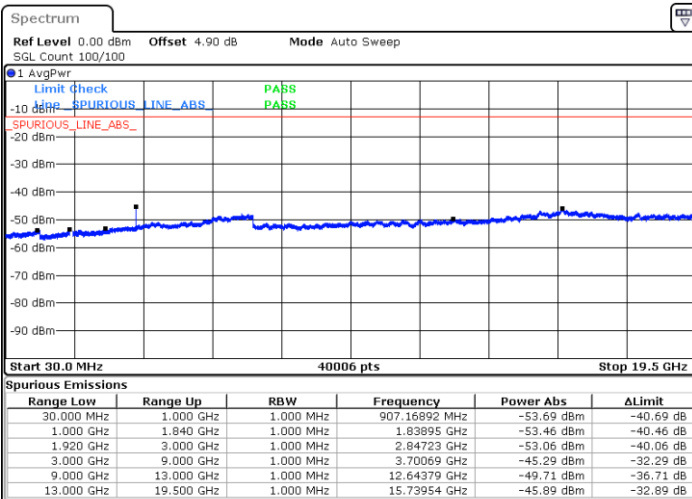
Date: 4 DEC.2019 12:32:37

Date: 4 DEC.2019 12:33:32

LTE Band 2 / 3MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 4 DEC.2019 12:39:35

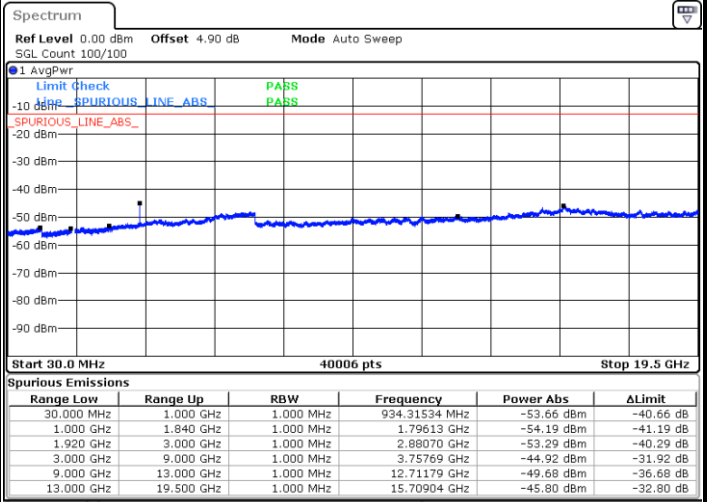
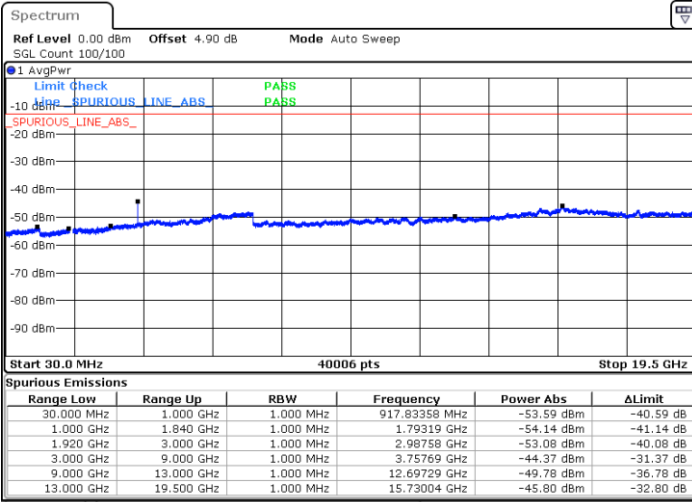
Date: 4 DEC.2019 12:40:29



LTE Band 2 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

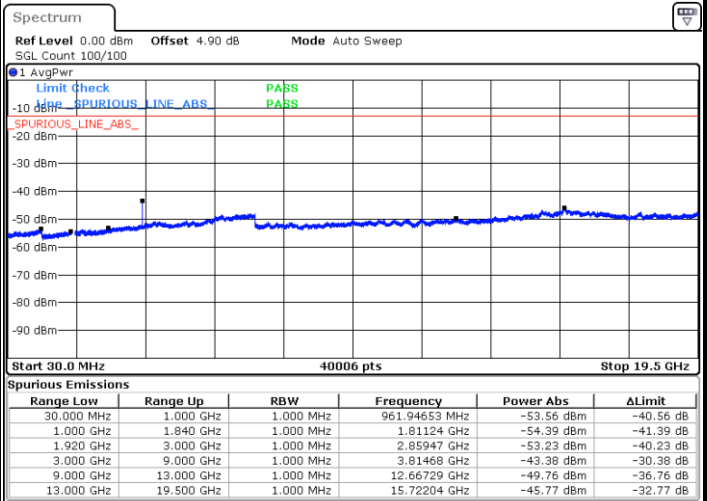
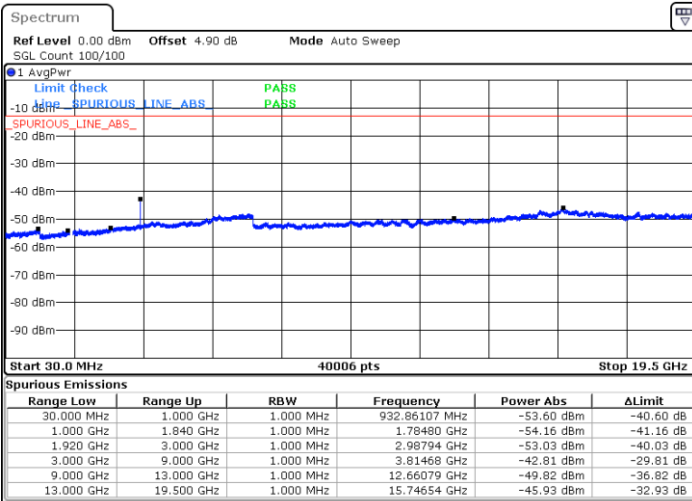


Date: 4 DEC.2019 12:42:03

Date: 4 DEC.2019 12:42:58

Highest Channel / QPSK

Highest Channel / 16QAM



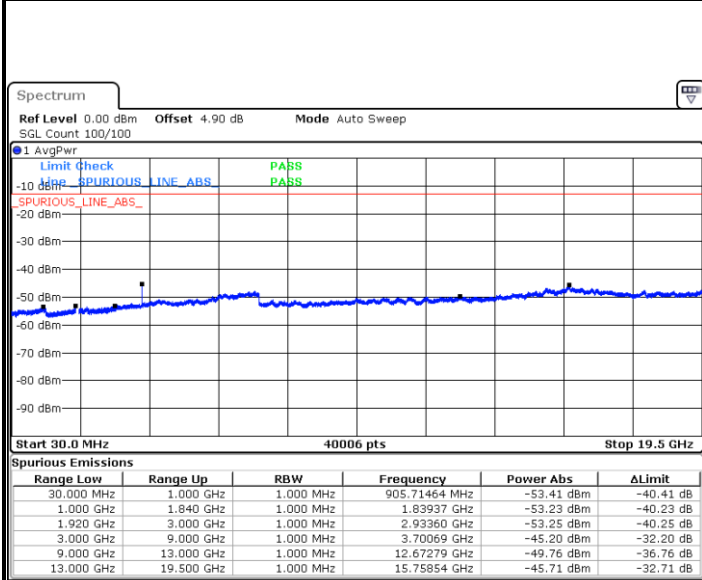
Date: 4 DEC.2019 12:49:01

Date: 4 DEC.2019 12:49:56



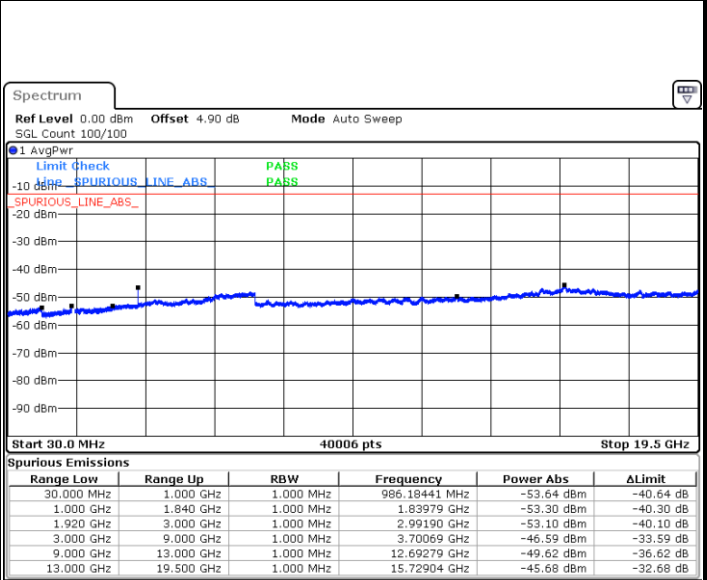
LTE Band 2 / 5MHz

Lowest Channel / QPSK



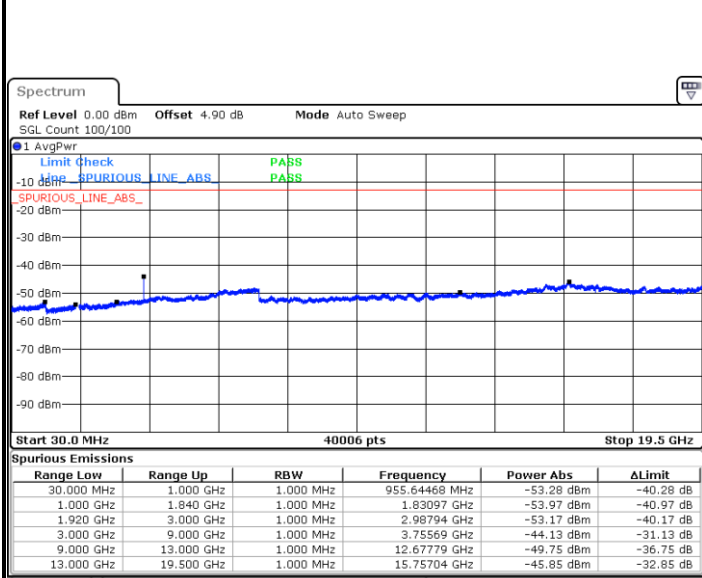
Date: 4 DEC.2019 12:55:59

Lowest Channel / 16QAM



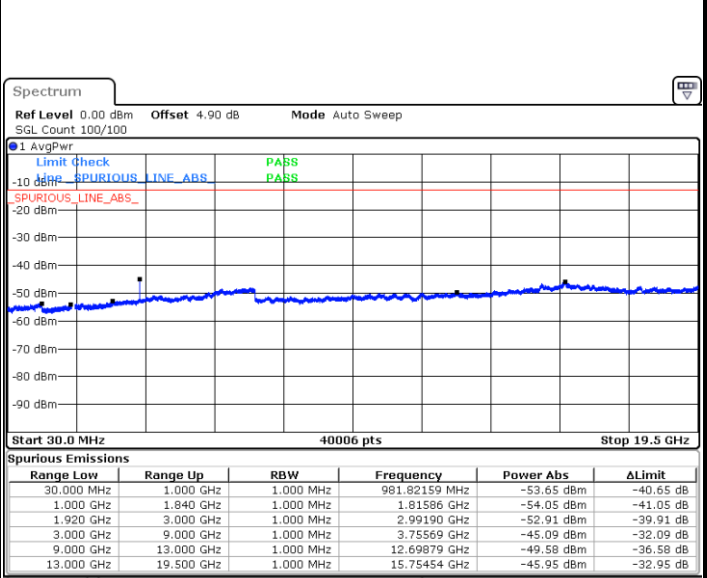
Date: 4 DEC.2019 12:56:53

Middle Channel / QPSK



Date: 4 DEC.2019 12:58:27

Middle Channel / 16QAM

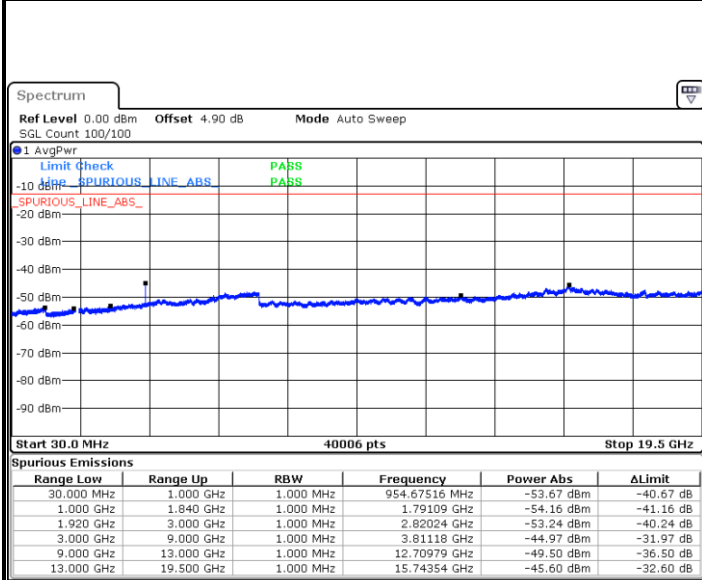


Date: 4 DEC.2019 12:59:22



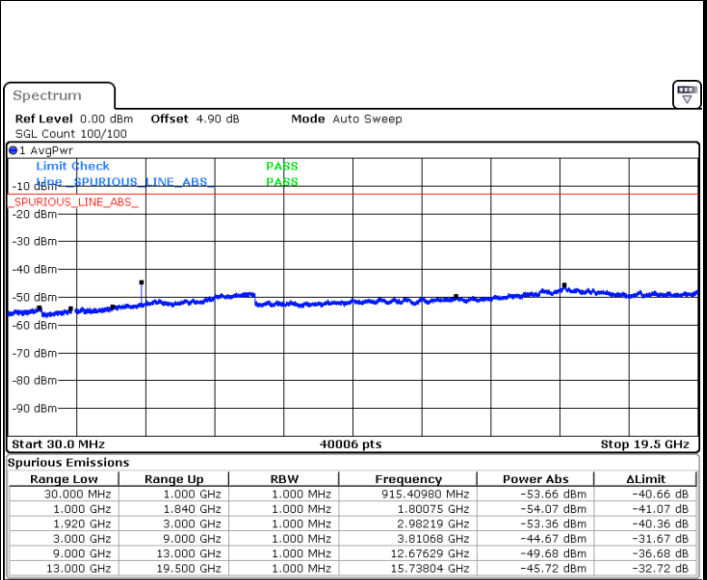
LTE Band 2 / 5MHz

Highest Channel / QPSK



Date: 4 DEC.2019 13:05:25

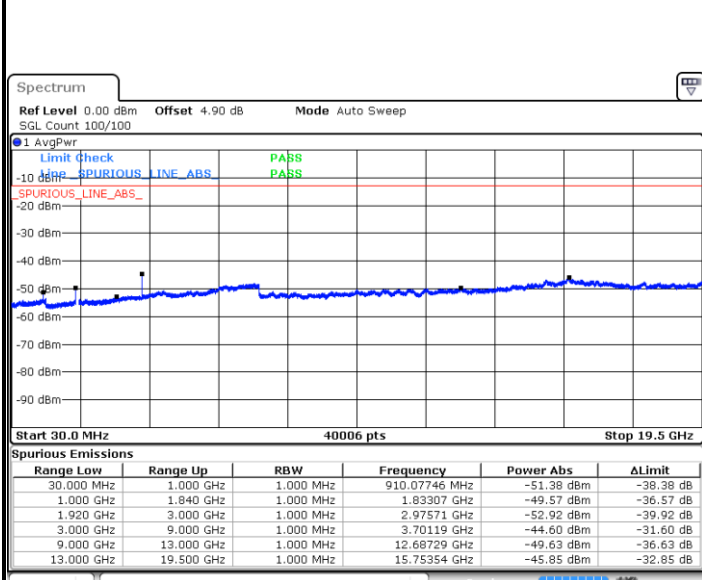
Highest Channel / 16QAM



Date: 4 DEC.2019 13:06:19

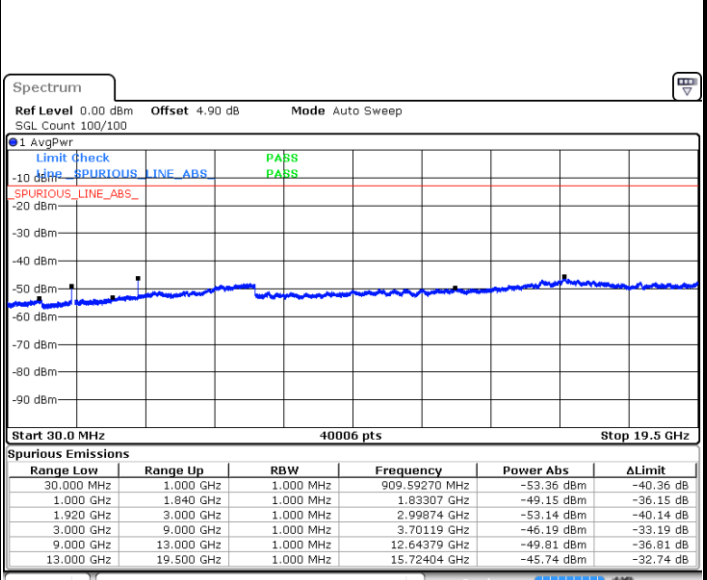
LTE Band 2 / 10MHz

Lowest Channel / QPSK



Date: 4 DEC.2019 13:12:23

Lowest Channel / 16QAM



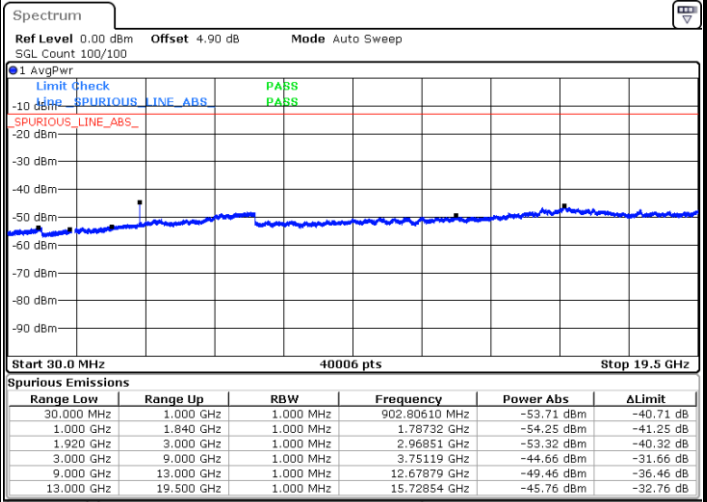
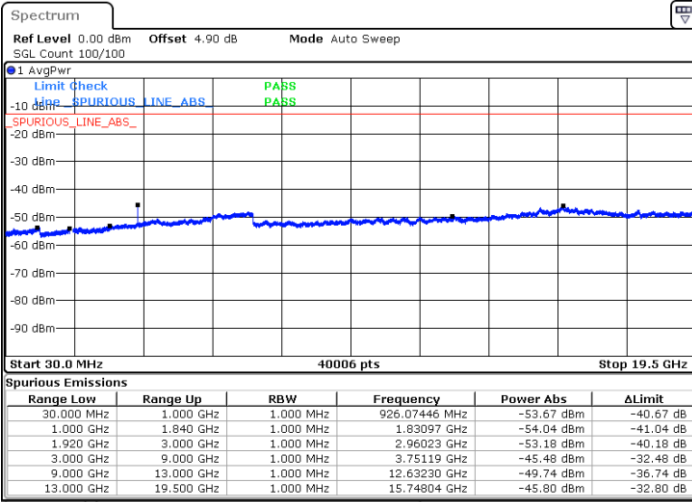
Date: 4 DEC.2019 13:13:17



LTE Band 2 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

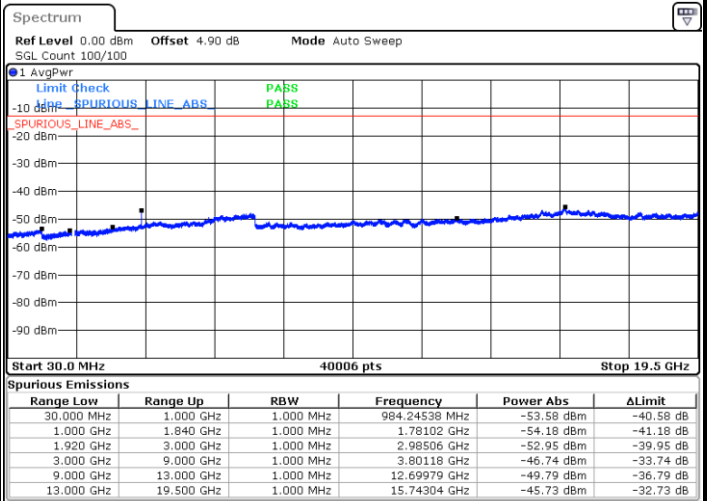
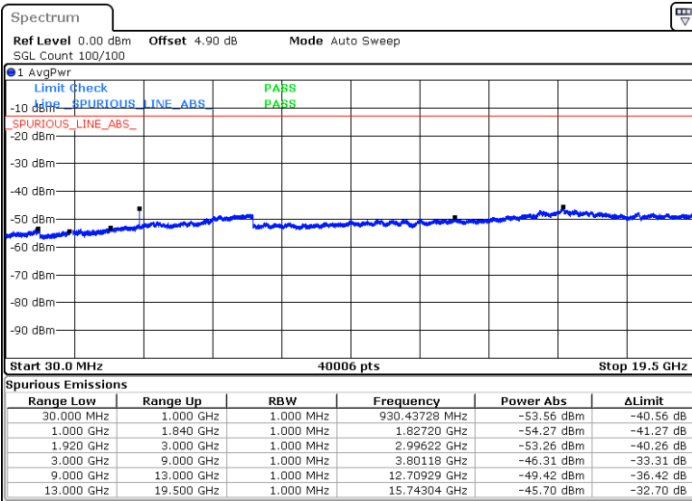


Date: 4 DEC.2019 13:14:51

Date: 4 DEC.2019 13:15:46

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 4 DEC.2019 13:21:49

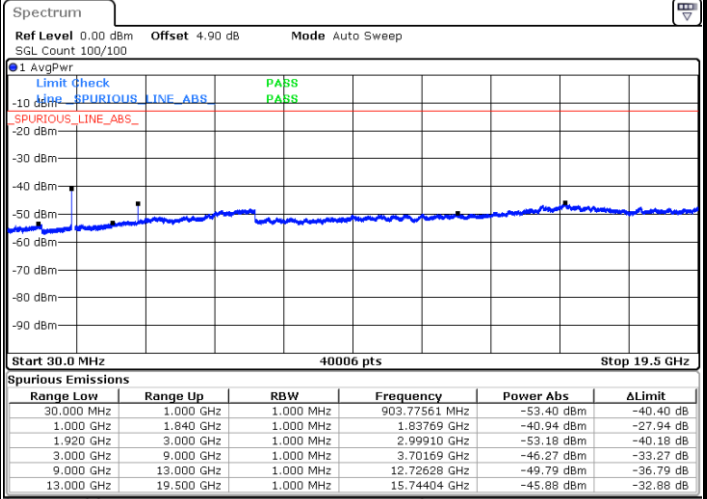
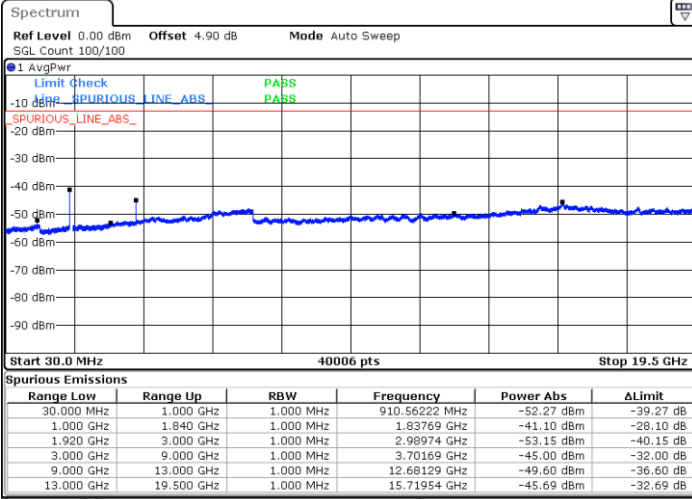
Date: 4 DEC.2019 13:22:44



LTE Band 2 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

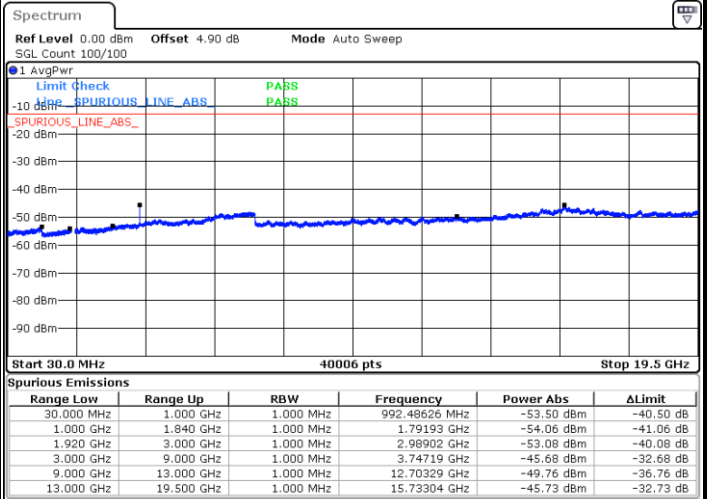
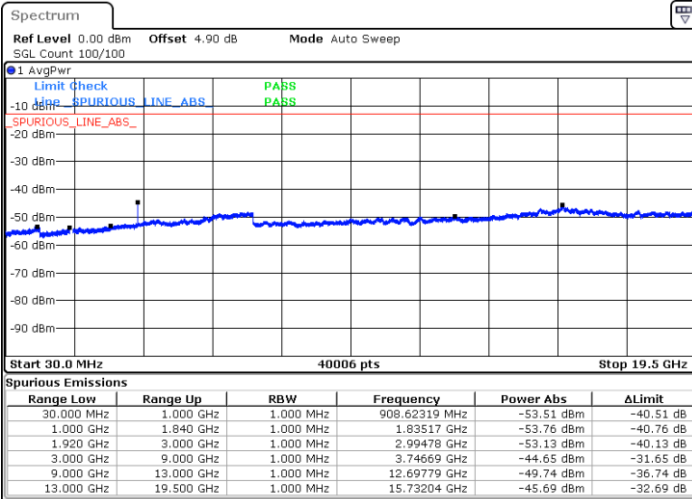


Date: 4 DEC.2019 13:28:47

Date: 4 DEC.2019 13:29:41

Middle Channel / QPSK

Middle Channel / 16QAM



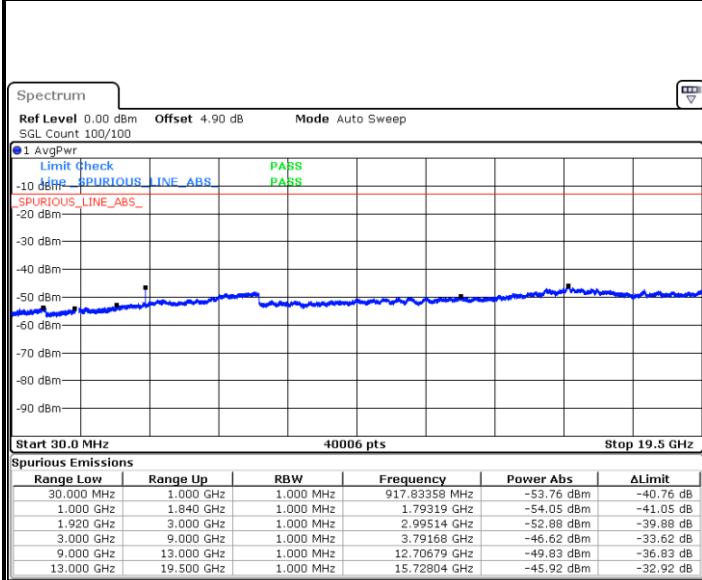
Date: 4 DEC.2019 13:31:15

Date: 4 DEC.2019 13:32:10



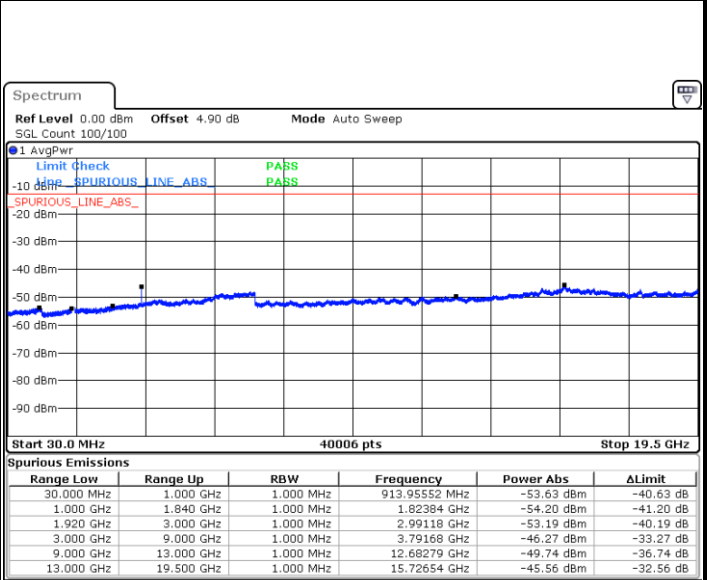
LTE Band 2 / 15MHz

Highest Channel / QPSK



Date: 4 DEC.2019 13:38:13

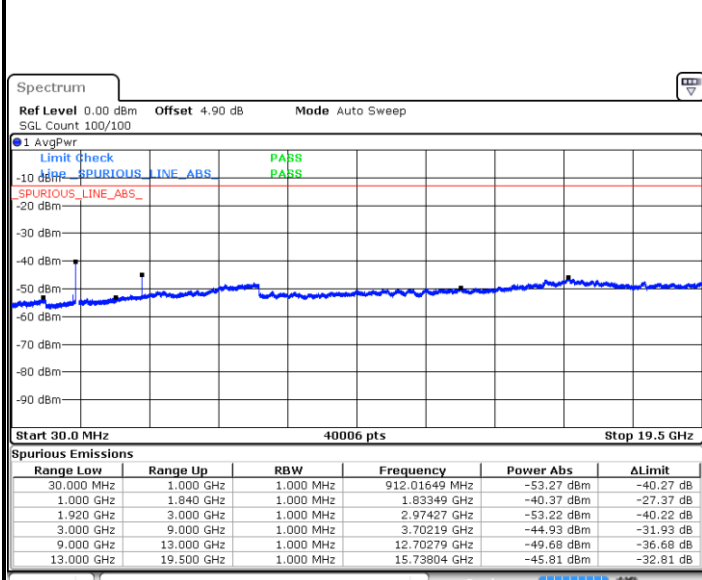
Highest Channel / 16QAM



Date: 4 DEC.2019 13:39:07

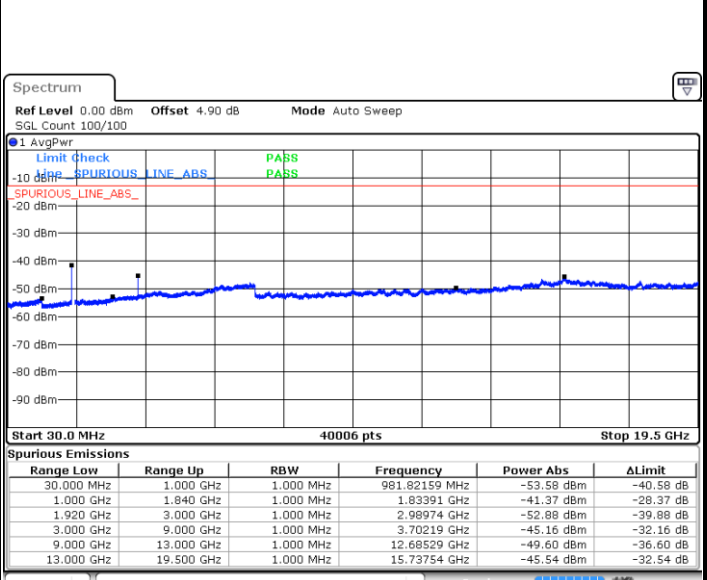
LTE Band 2 / 20MHz

Lowest Channel / QPSK



Date: 4 DEC.2019 13:45:10

Lowest Channel / 16QAM



Date: 4 DEC.2019 13:46:05

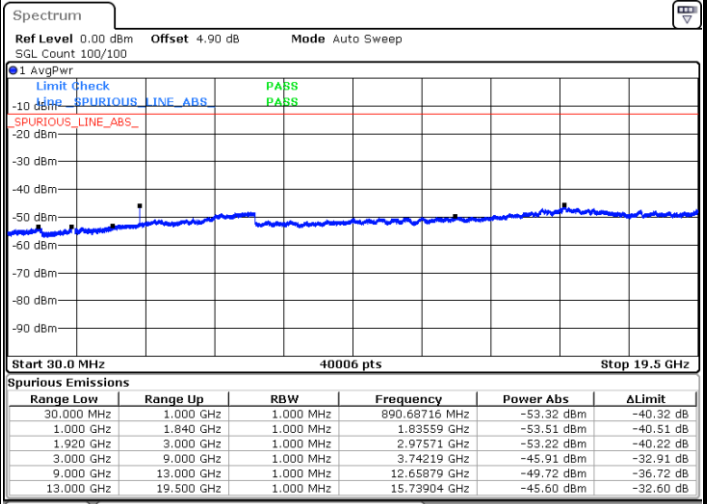
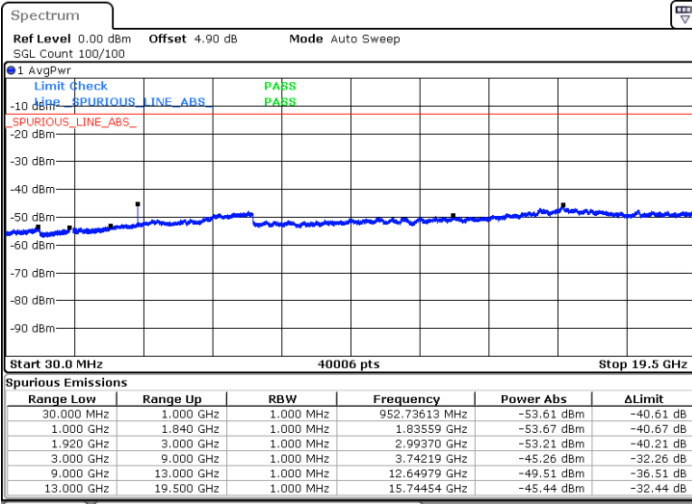




LTE Band 2 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

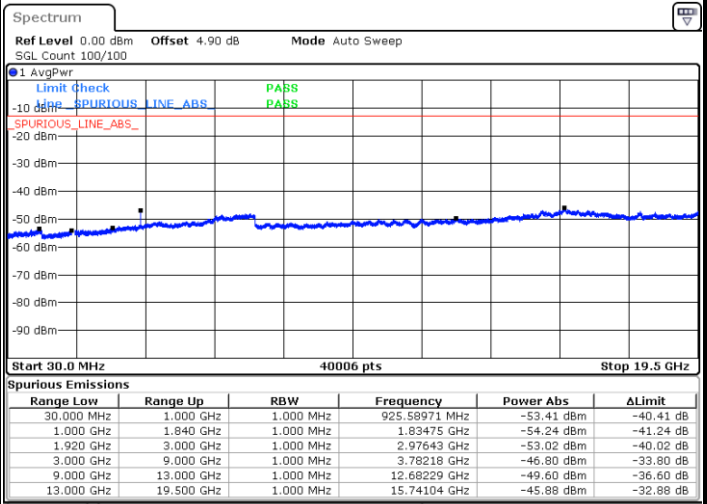
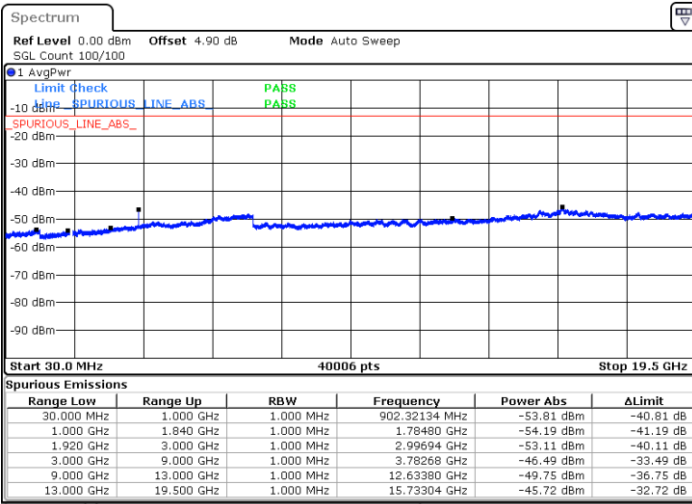


Date: 4 DEC.2019 13:47:39

Date: 4 DEC.2019 13:48:33

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 4 DEC.2019 13:54:37

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

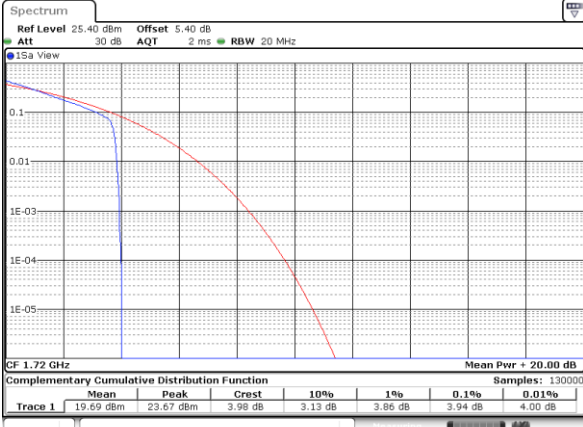
### Peak-to-Average Ratio

| 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    |             |



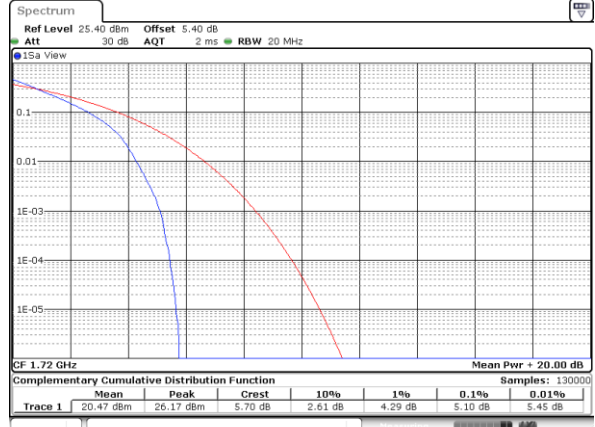
LTE Band 4 / 20MHz / QPSK

Lowest Channel / 1RB



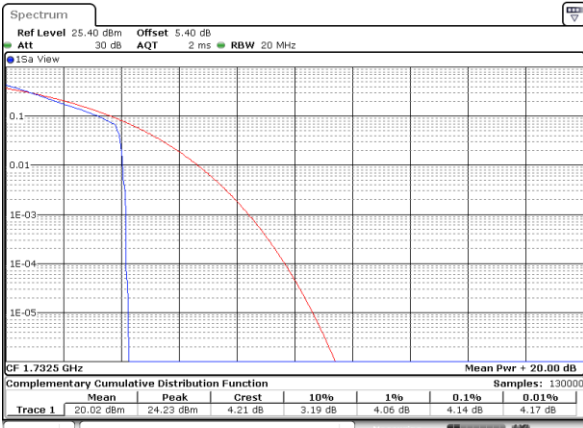
Date: 6 DEC 2019 09:34:12

Lowest Channel / Full RB



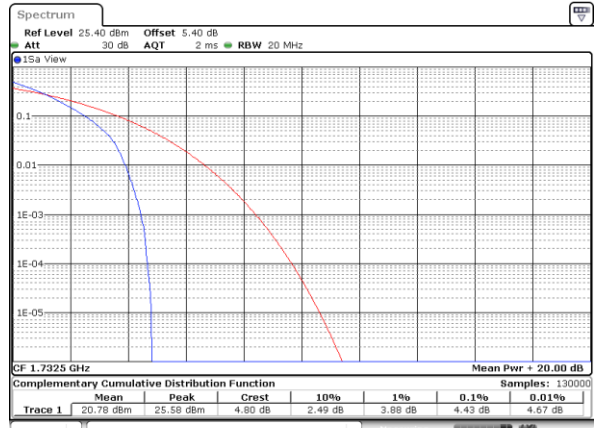
Date: 6 DEC 2019 09:34:21

Middle Channel / 1RB



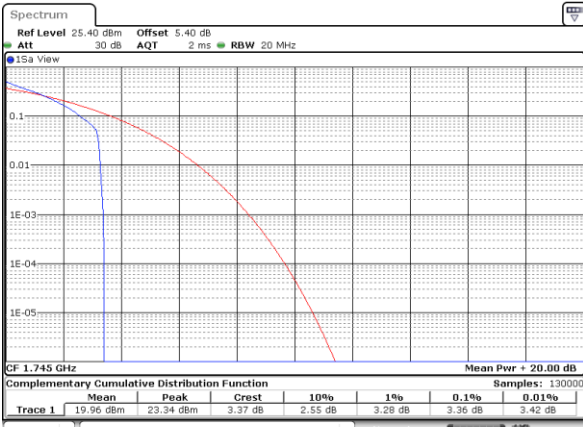
Date: 6 DEC 2019 09:34:39

Middle Channel / Full RB



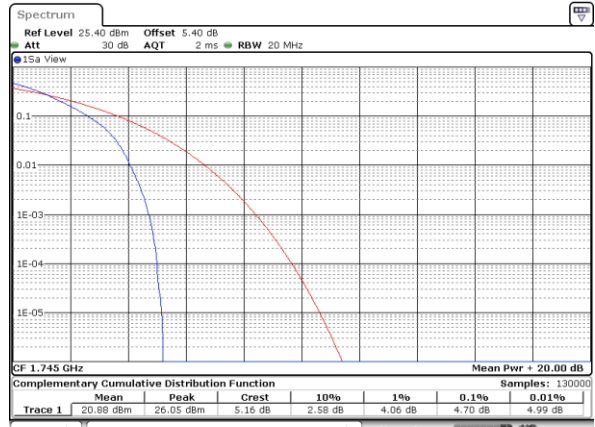
Date: 6 DEC 2019 09:34:29

Highest Channel / 1RB



Date: 6 DEC 2019 09:34:48

Highest Channel / Full RB

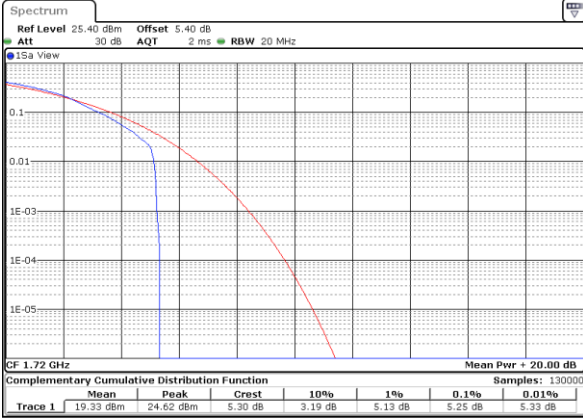


Date: 6 DEC 2019 09:34:57



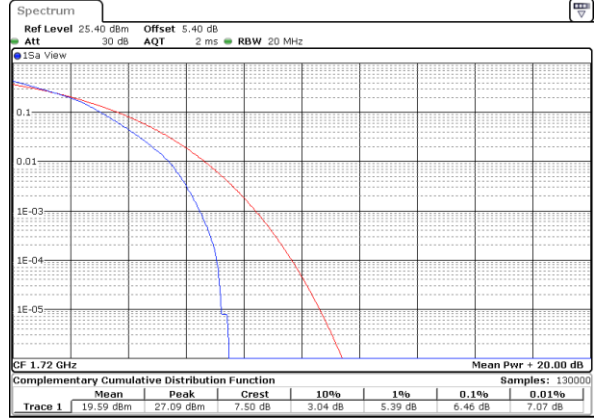
LTE Band 4 / 20MHz / 16QAM

Lowest Channel / 1RB



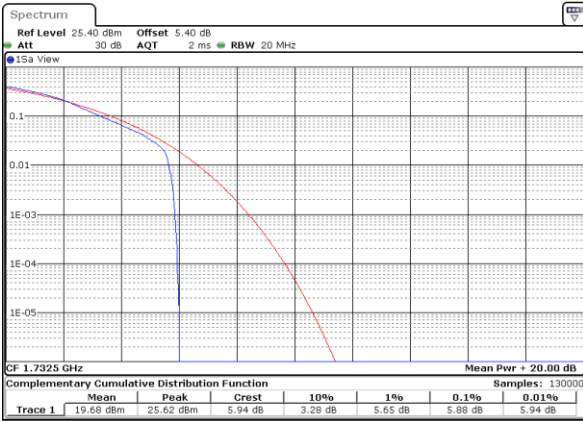
Date: 6 DEC 2019 09:33:14

Lowest Channel / Full RB



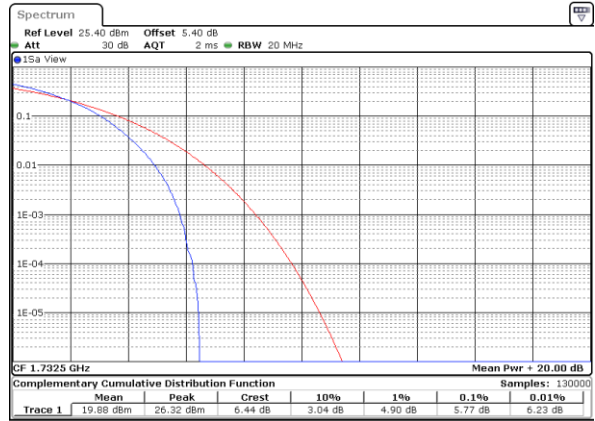
Date: 6 DEC 2019 09:33:23

Middle Channel / 1RB



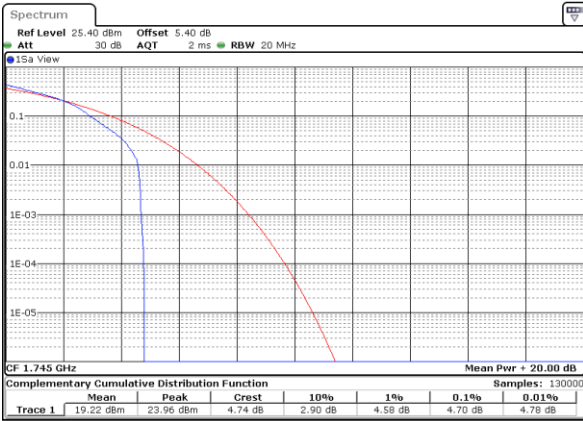
Date: 6 DEC 2019 09:33:36

Middle Channel / Full RB



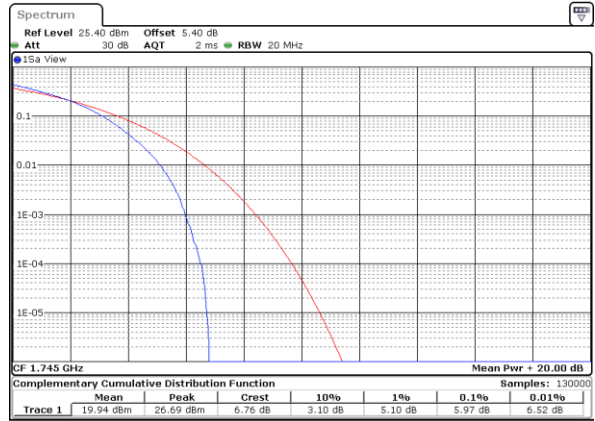
Date: 6 DEC 2019 09:33:45

Highest Channel / 1RB



Date: 6 DEC 2019 09:33:54

Highest Channel / Full RB



Date: 6 DEC 2019 09:34:03



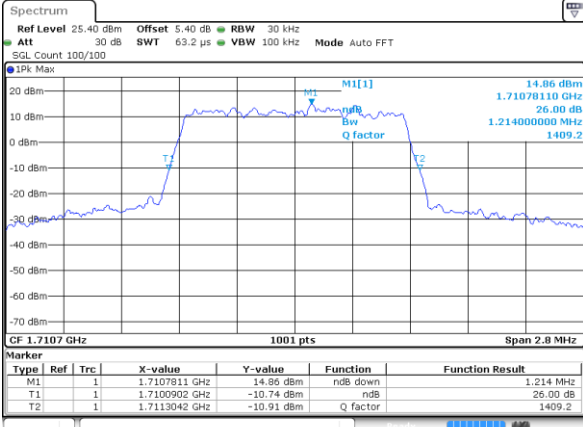
**26dB Bandwidth**

| Mode       | LTE Band 4 : 26dB BW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
|------------|---------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
|            | 1.4MHz                    |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| BW         |                           |       |      |       |      |       |       |       |       |       |       |       |
| 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 |



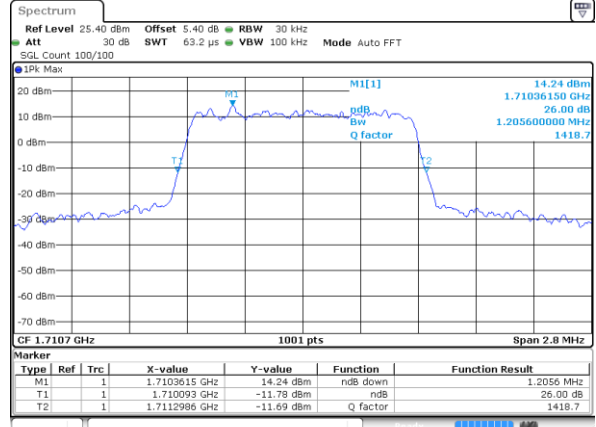
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



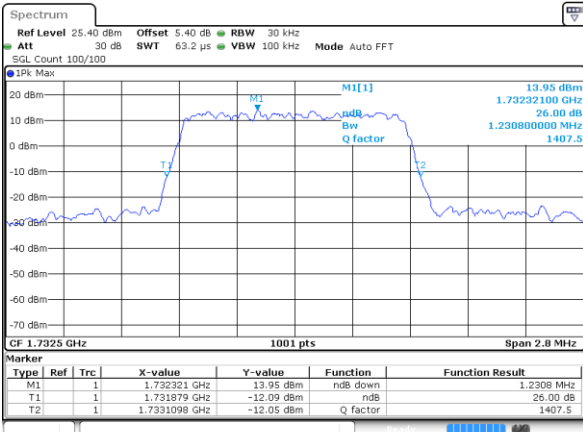
Date: 6 DEC 2019 06:37:29

Lowest Channel / 1.4MHz / 16QAM



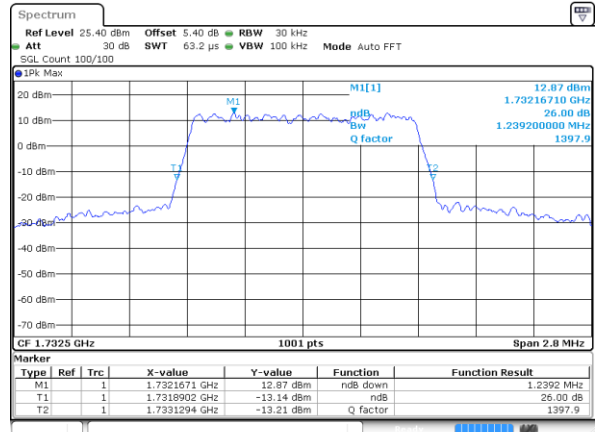
Date: 6 DEC 2019 06:37:39

Middle Channel / 1.4MHz / QPSK



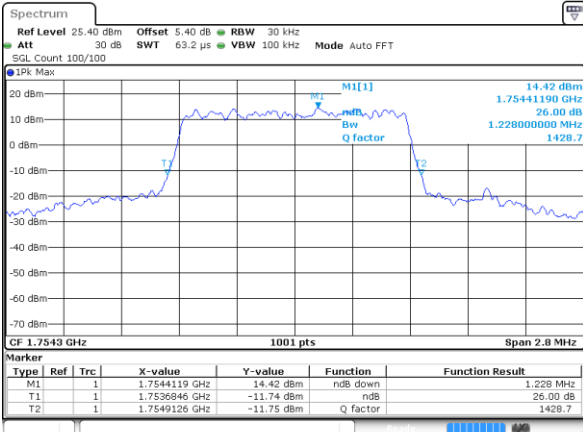
Date: 6 DEC 2019 06:49:09

Middle Channel / 1.4MHz / 16QAM



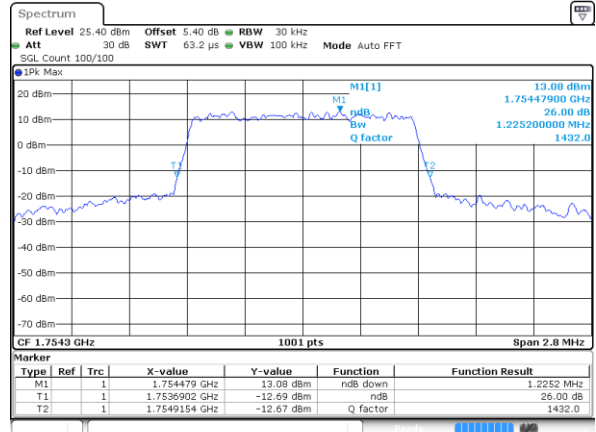
Date: 6 DEC 2019 06:49:19

Highest Channel / 1.4MHz / QPSK



Date: 6 DEC 2019 06:51:38

Highest Channel / 1.4MHz / 16QAM

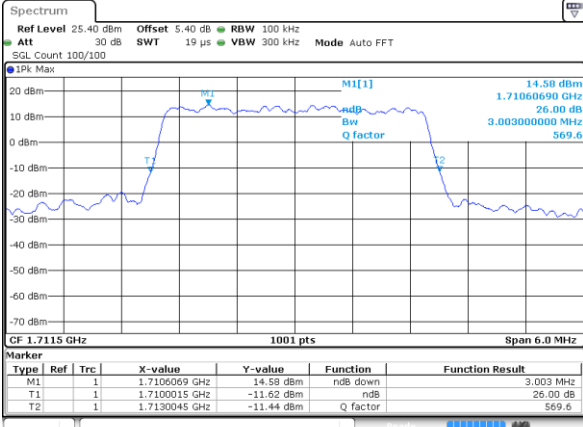


Date: 6 DEC 2019 06:51:48



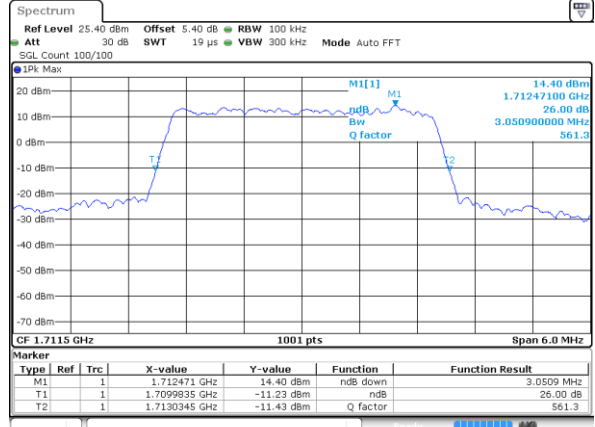
LTE Band 4

Lowest Channel / 3MHz / QPSK



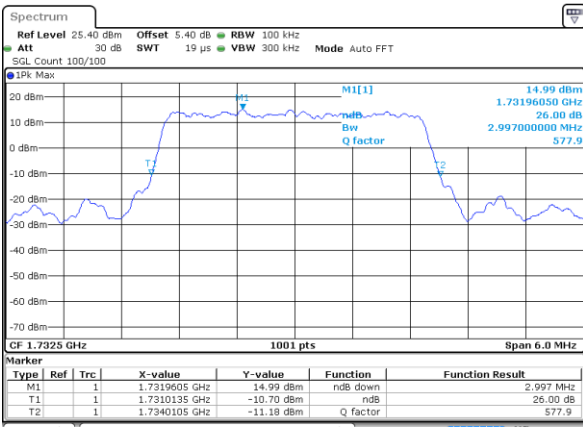
Date: 6 DEC 2019 06:58:37

Lowest Channel / 3MHz / 16QAM



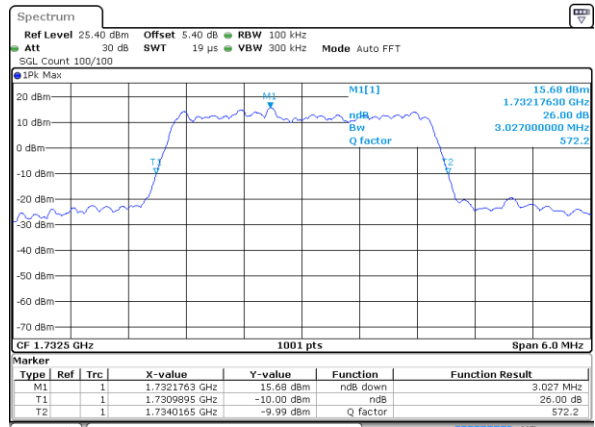
Date: 6 DEC 2019 06:58:47

Middle Channel / 3MHz / QPSK



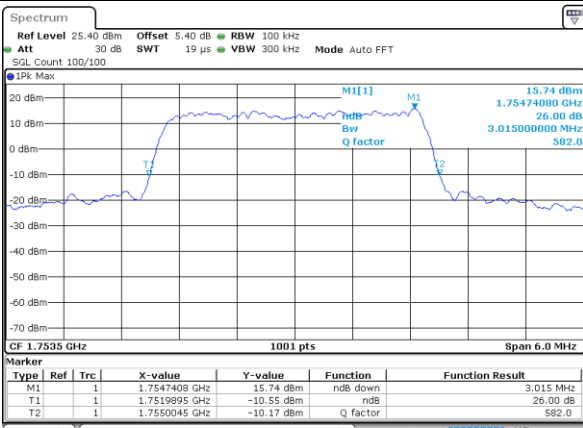
Date: 6 DEC 2019 07:05:36

Middle Channel / 3MHz / 16QAM



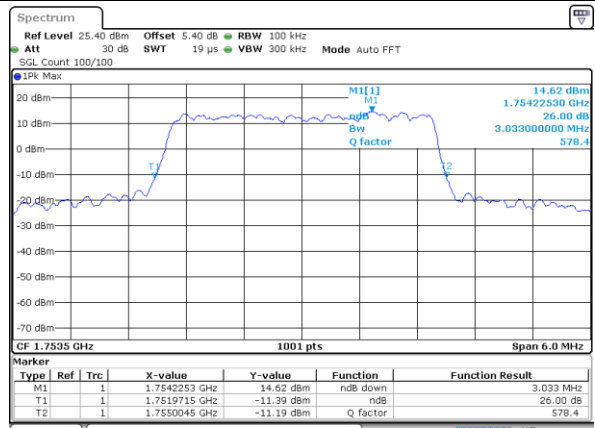
Date: 6 DEC 2019 07:05:46

Highest Channel / 3MHz / QPSK



Date: 6 DEC 2019 07:08:05

Highest Channel / 3MHz / 16QAM



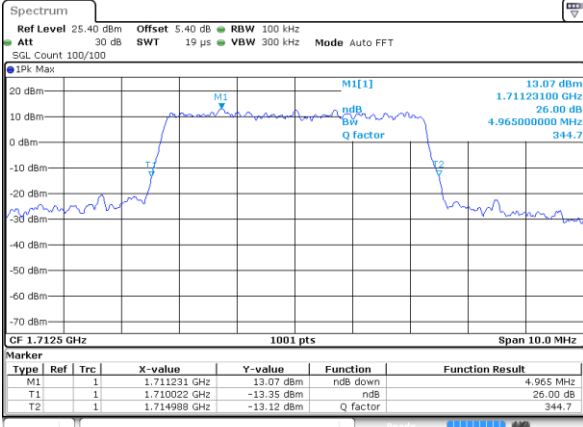
Date: 6 DEC 2019 07:08:15





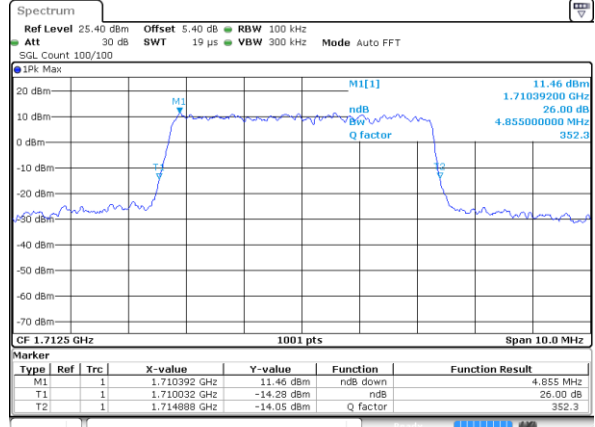
LTE Band 4

Lowest Channel / 5MHz / QPSK



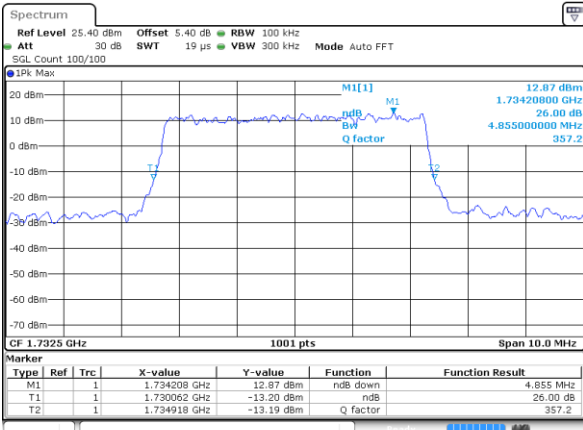
Date: 6 DEC 2019 07:15:04

Lowest Channel / 5MHz / 16QAM



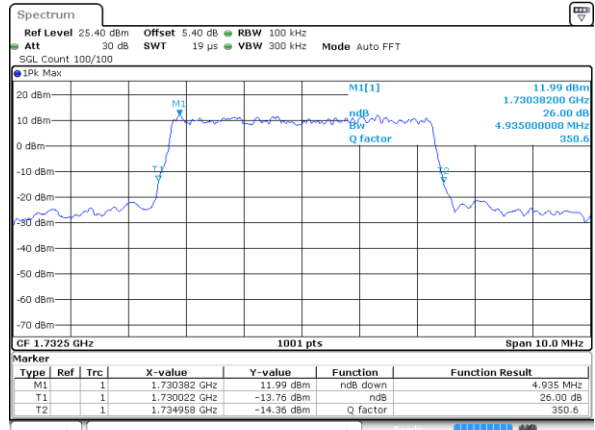
Date: 6 DEC 2019 07:15:14

Middle Channel / 5MHz / QPSK



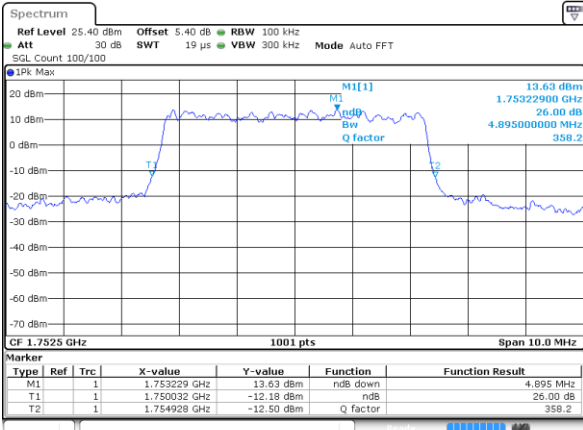
Date: 6 DEC 2019 07:22:02

Middle Channel / 5MHz / 16QAM



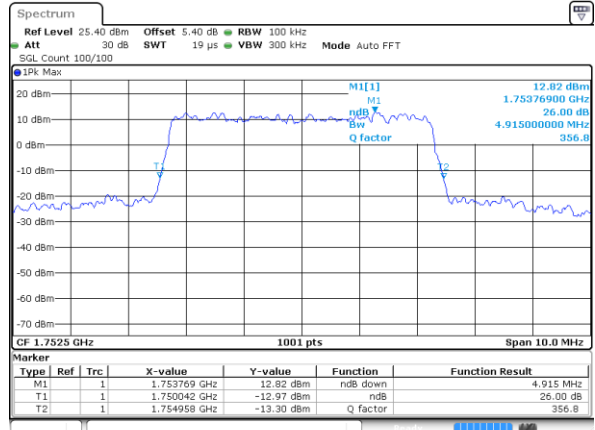
Date: 6 DEC 2019 07:22:13

Highest Channel / 5MHz / QPSK



Date: 6 DEC 2019 07:24:33

Highest Channel / 5MHz / 16QAM

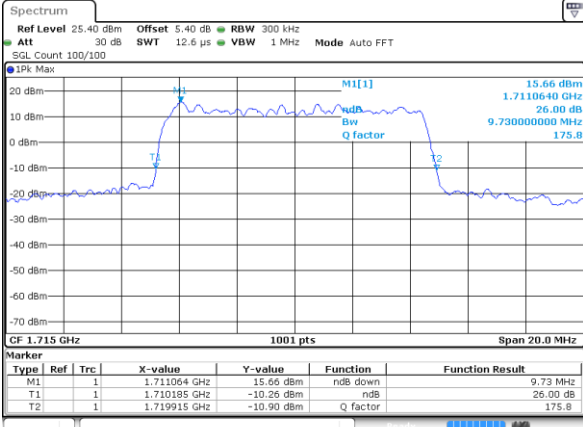


Date: 6 DEC 2019 07:24:43



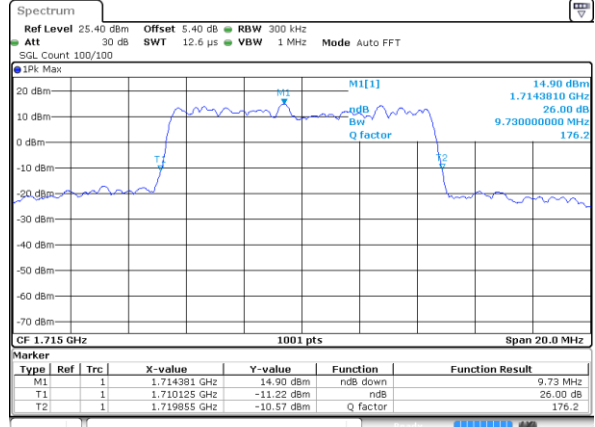
LTE Band 4

Lowest Channel / 10MHz / QPSK



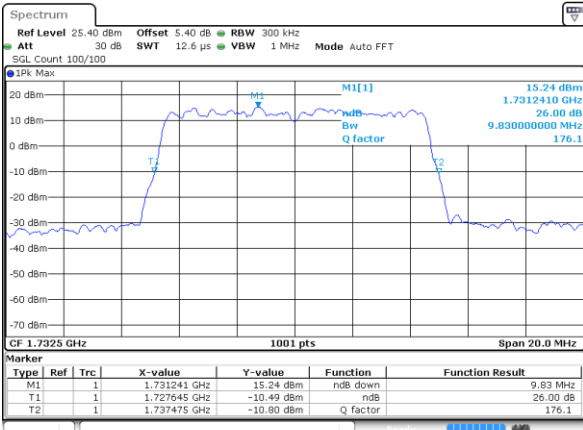
Date: 6 DEC 2019 07:31:31

Lowest Channel / 10MHz / 16QAM



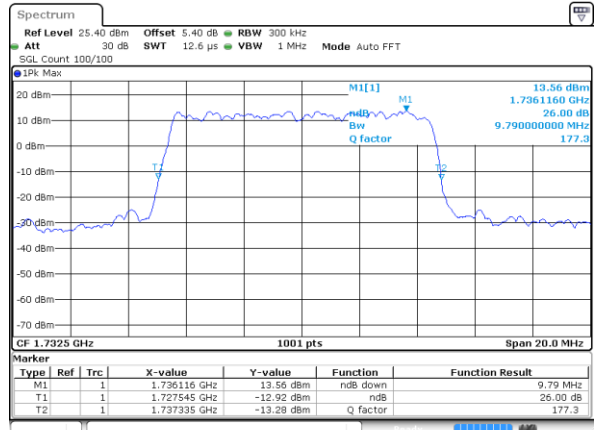
Date: 6 DEC 2019 07:31:41

Middle Channel / 10MHz / QPSK



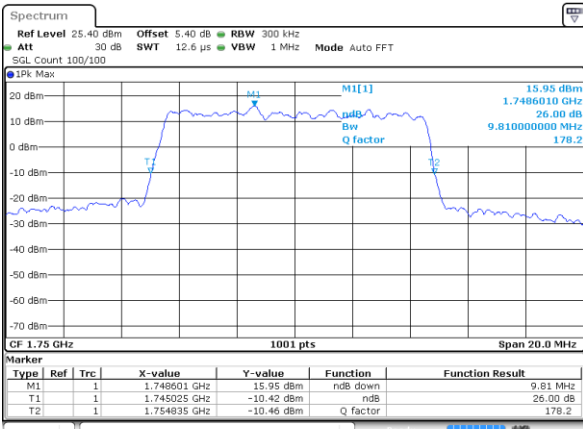
Date: 6 DEC 2019 07:38:30

Middle Channel / 10MHz / 16QAM



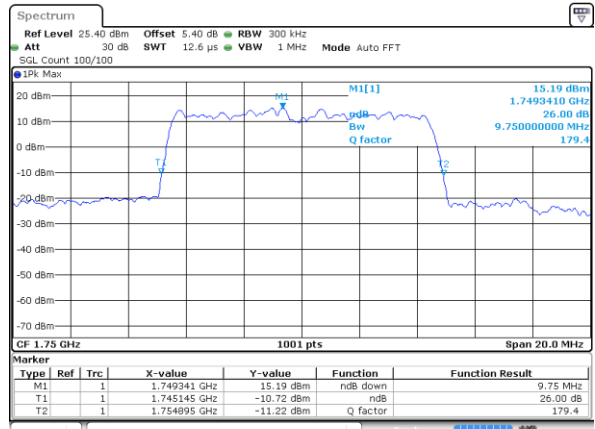
Date: 6 DEC 2019 07:38:40

Highest Channel / 10MHz / QPSK



Date: 6 DEC 2019 07:40:59

Highest Channel / 10MHz / 16QAM

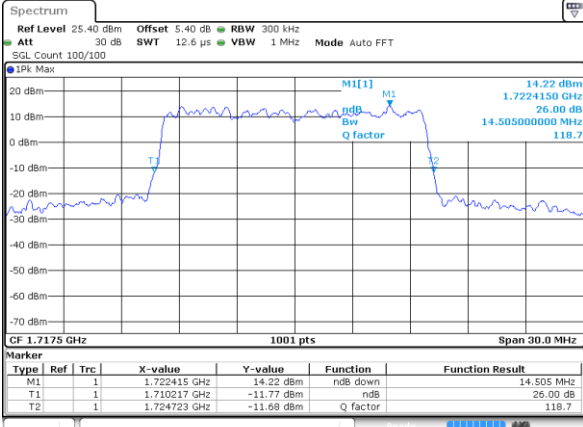


Date: 6 DEC 2019 07:41:09



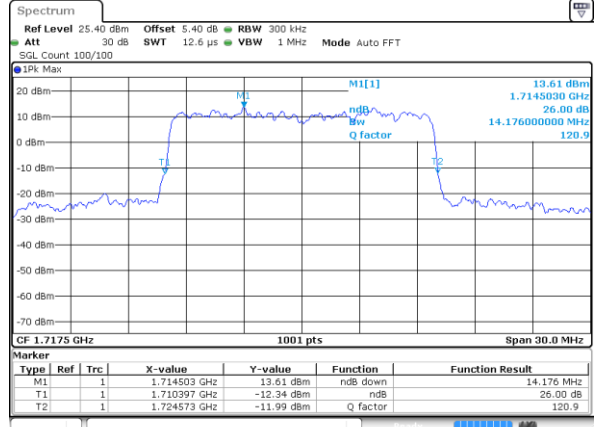
LTE Band 4

Lowest Channel / 15MHz / QPSK



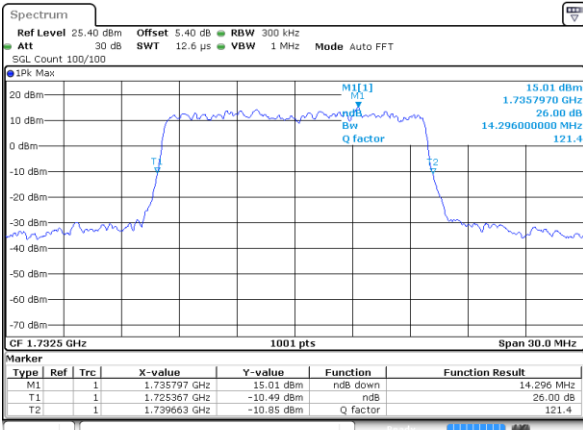
Date: 6 DEC 2019 07:47:58

Lowest Channel / 15MHz / 16QAM



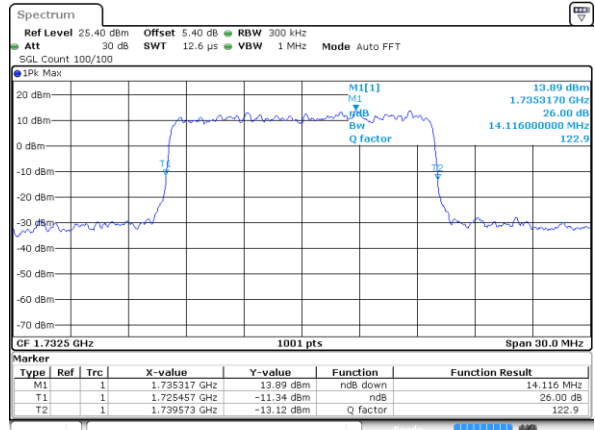
Date: 6 DEC 2019 07:48:08

Middle Channel / 15MHz / QPSK



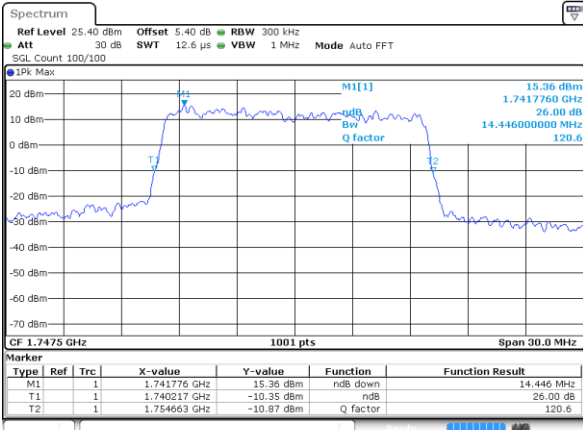
Date: 6 DEC 2019 07:54:57

Middle Channel / 15MHz / 16QAM



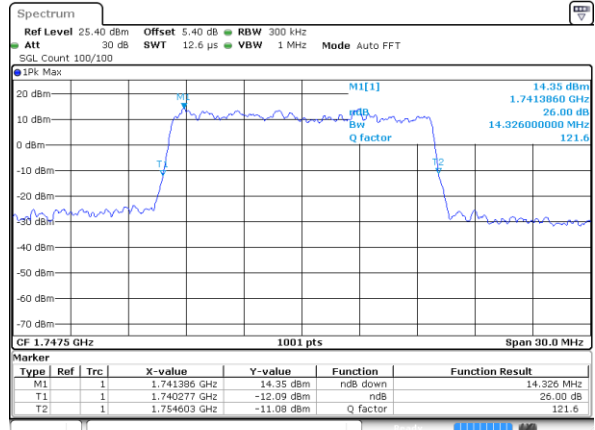
Date: 6 DEC 2019 07:55:07

Highest Channel / 15MHz / QPSK



Date: 6 DEC 2019 07:57:26

Highest Channel / 15MHz / 16QAM



Date: 6 DEC 2019 07:57:36