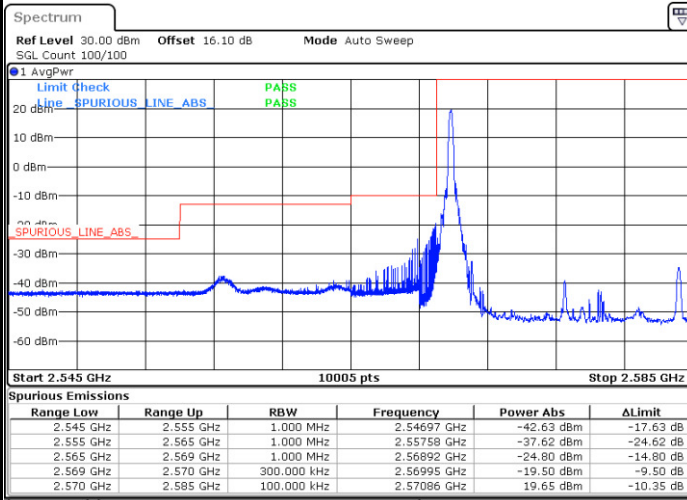




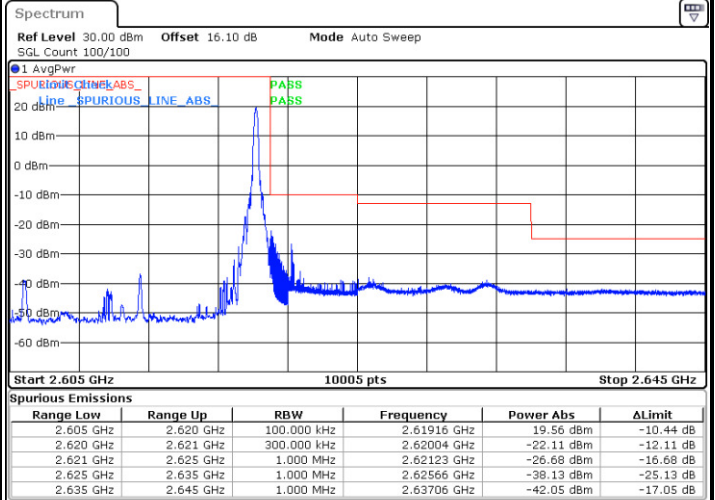
LTE Band 38 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



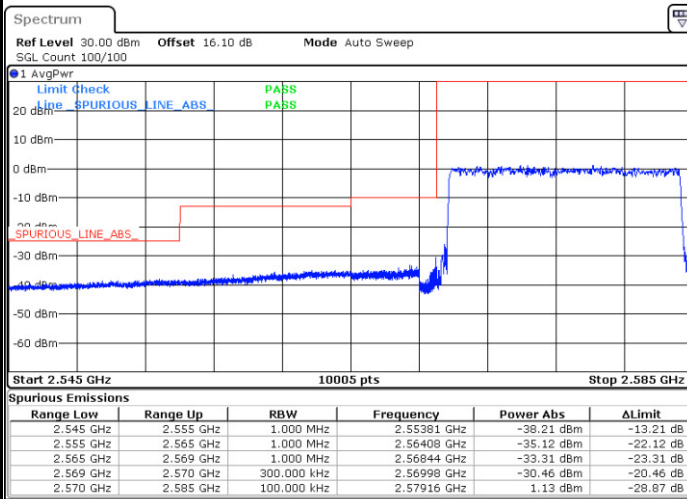
Date: 16.FEB.2018 11:03:26

Highest Band Edge / 1 RB



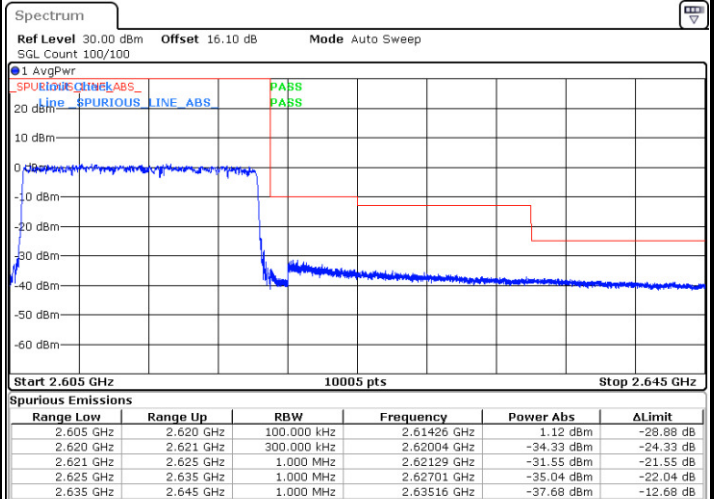
Date: 16.FEB.2018 11:10:12

Lowest Band Edge / Full RB



Date: 16.FEB.2018 11:05:42

Highest Band Edge / Full RB

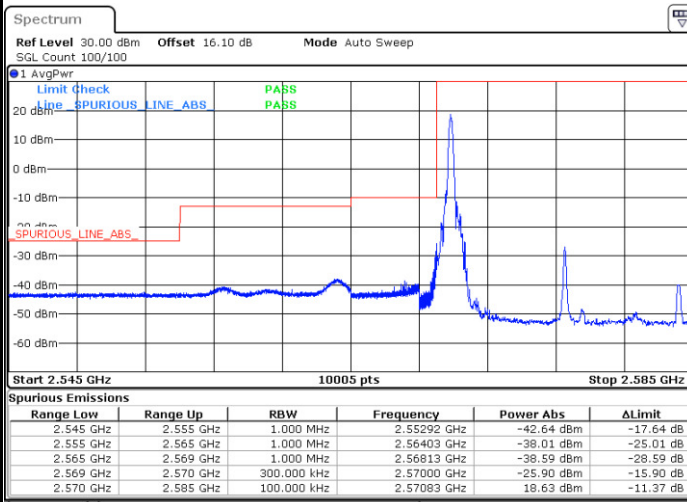


Date: 16.FEB.2018 11:07:57



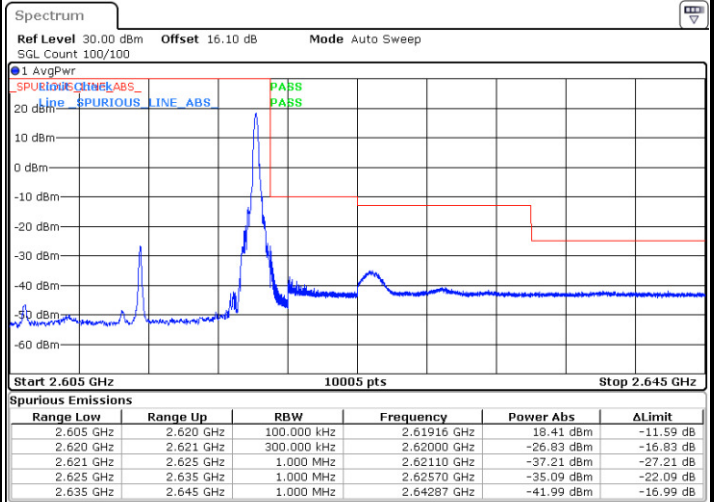
LTE Band 38 / 15MHz / 64QAM

Lowest Band Edge / 1 RB



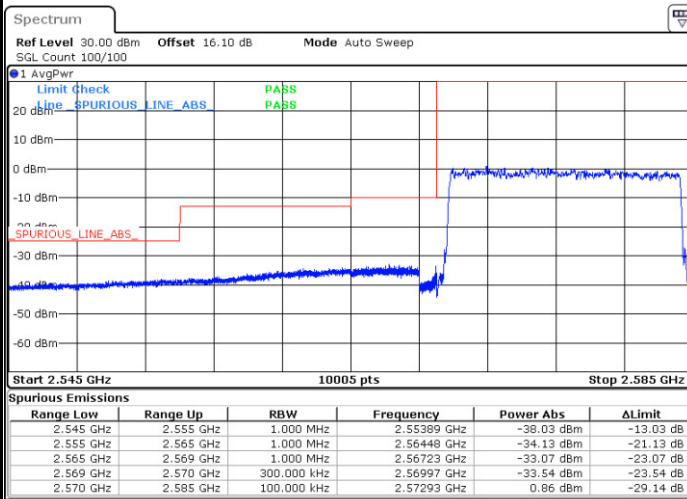
Date: 16.FEB.2018 12:13:02

Highest Band Edge / 1 RB



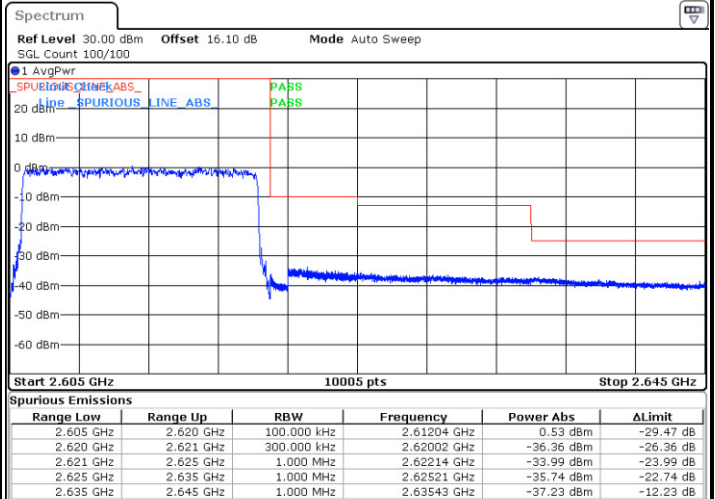
Date: 16.FEB.2018 12:16:25

Lowest Band Edge / Full RB



Date: 16.FEB.2018 12:14:09

Highest Band Edge / Full RB

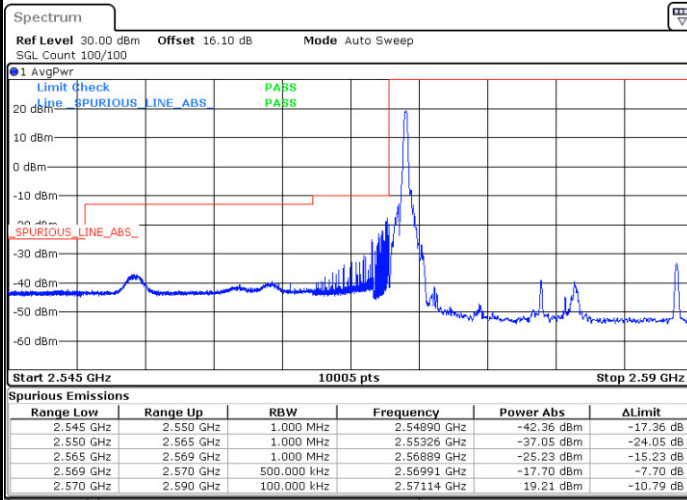


Date: 16.FEB.2018 12:15:17



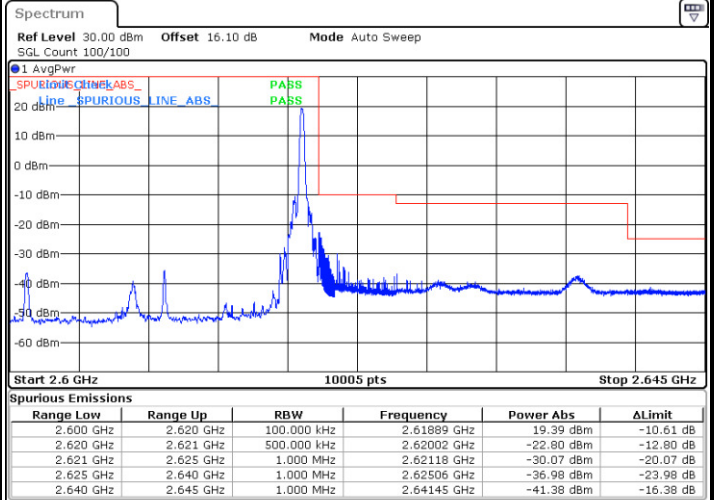
LTE Band 38 / 20MHz / QPSK

Lowest Band Edge / 1 RB



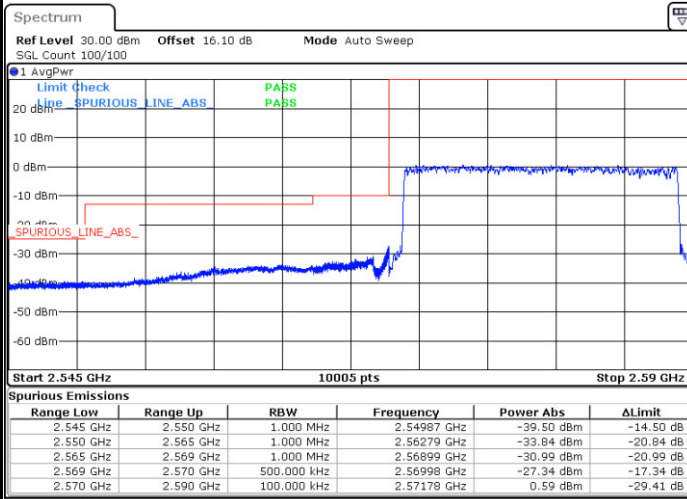
Date: 16.FEB.2018 11:11:19

Highest Band Edge / 1 RB



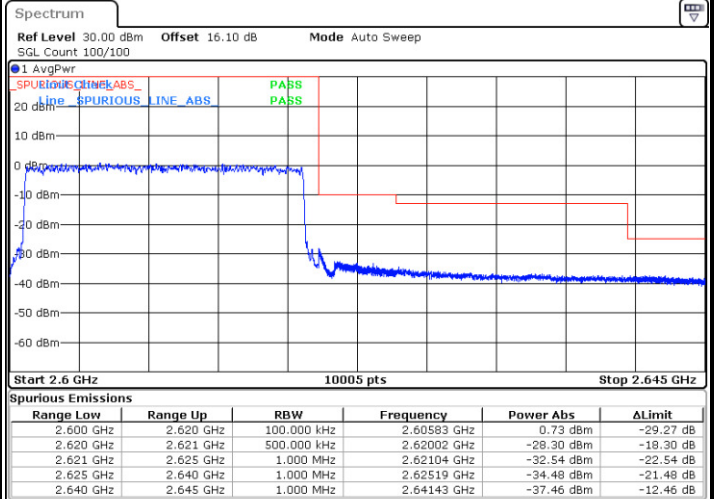
Date: 16.FEB.2018 11:18:05

Lowest Band Edge / Full RB



Date: 16.FEB.2018 11:13:35

Highest Band Edge / Full RB

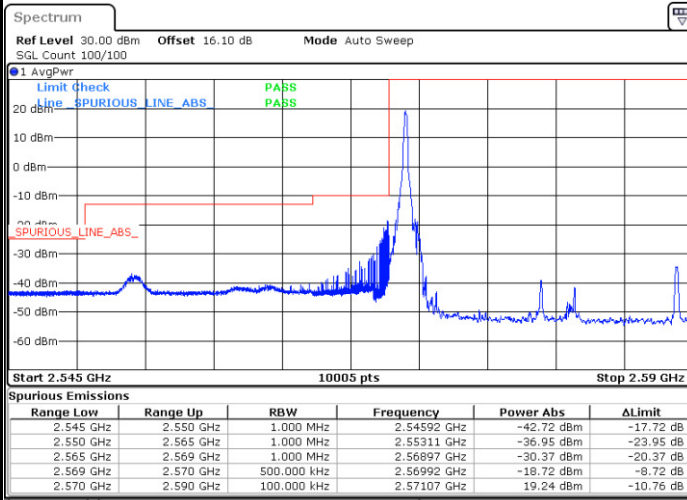


Date: 16.FEB.2018 11:15:50



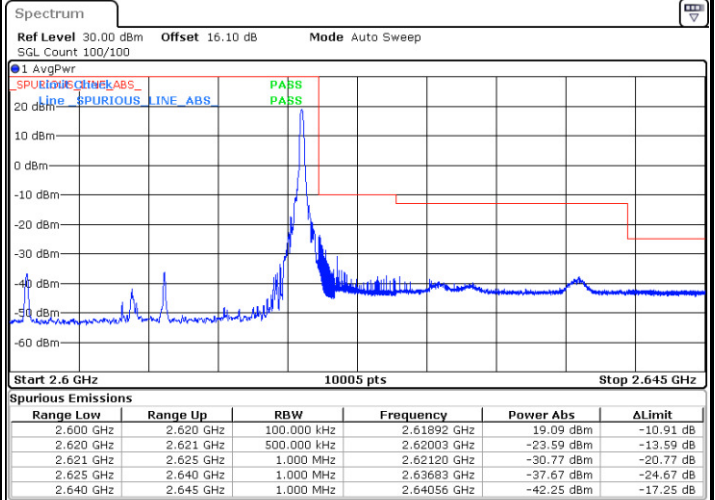
LTE Band 38 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



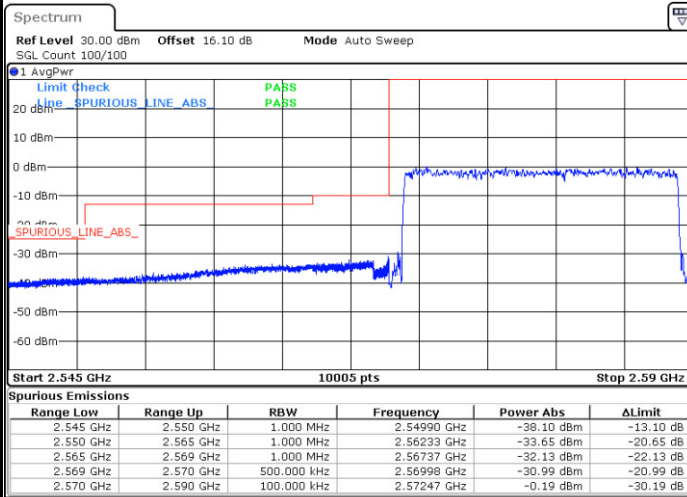
Date: 16.FEB.2018 11:12:27

Highest Band Edge / 1 RB



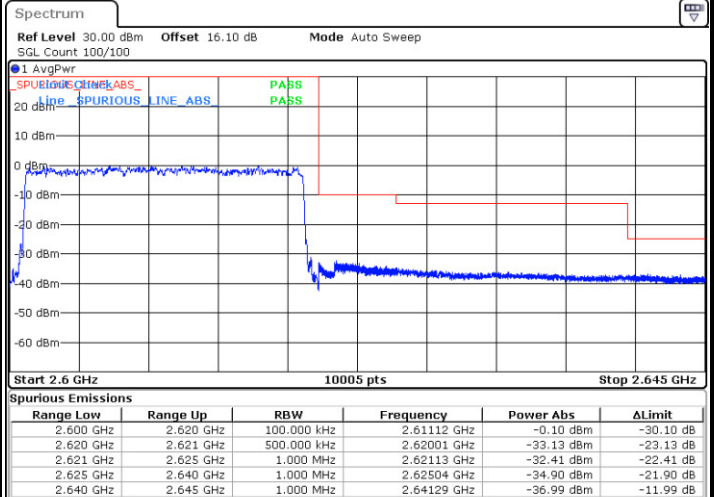
Date: 16.FEB.2018 11:19:13

Lowest Band Edge / Full RB



Date: 16.FEB.2018 11:14:42

Highest Band Edge / Full RB

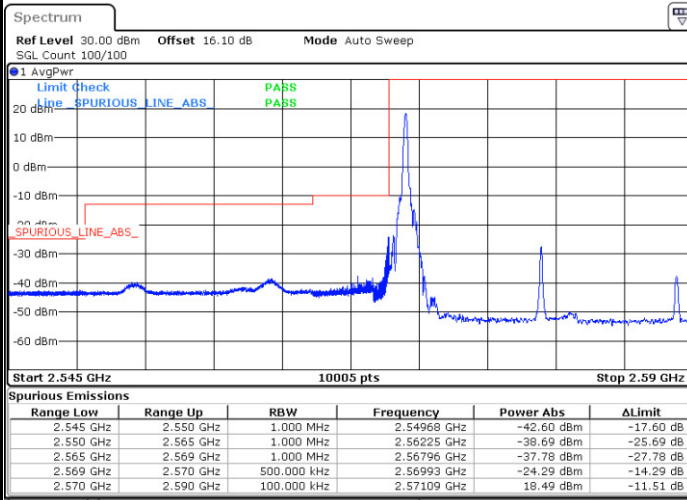


Date: 16.FEB.2018 11:16:57



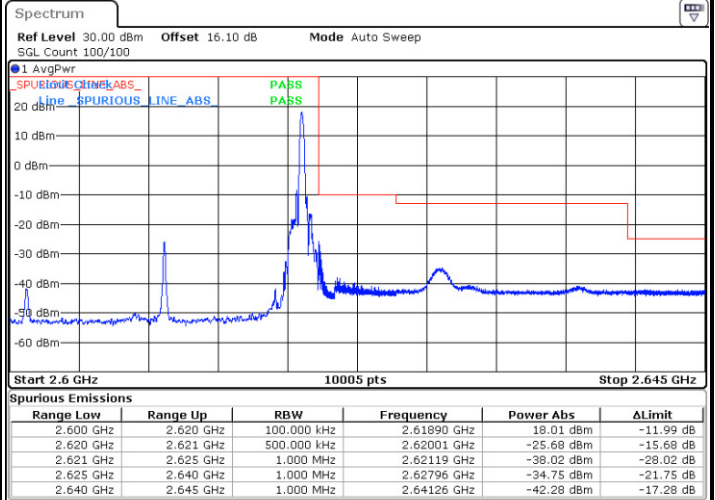
LTE Band 38 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



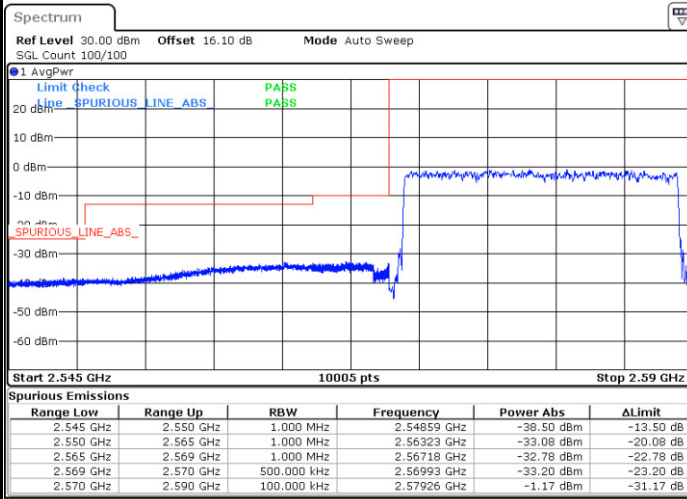
Date: 16.FEB.2018 12:17:32

Highest Band Edge / 1 RB



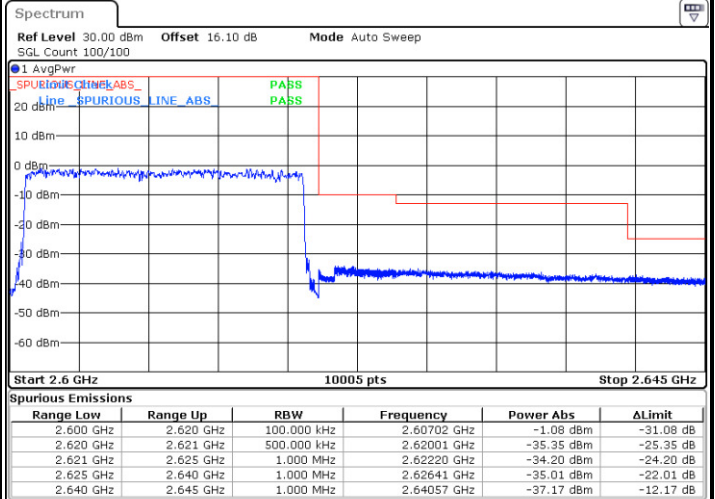
Date: 16.FEB.2018 12:20:55

Lowest Band Edge / Full RB



Date: 16.FEB.2018 12:18:40

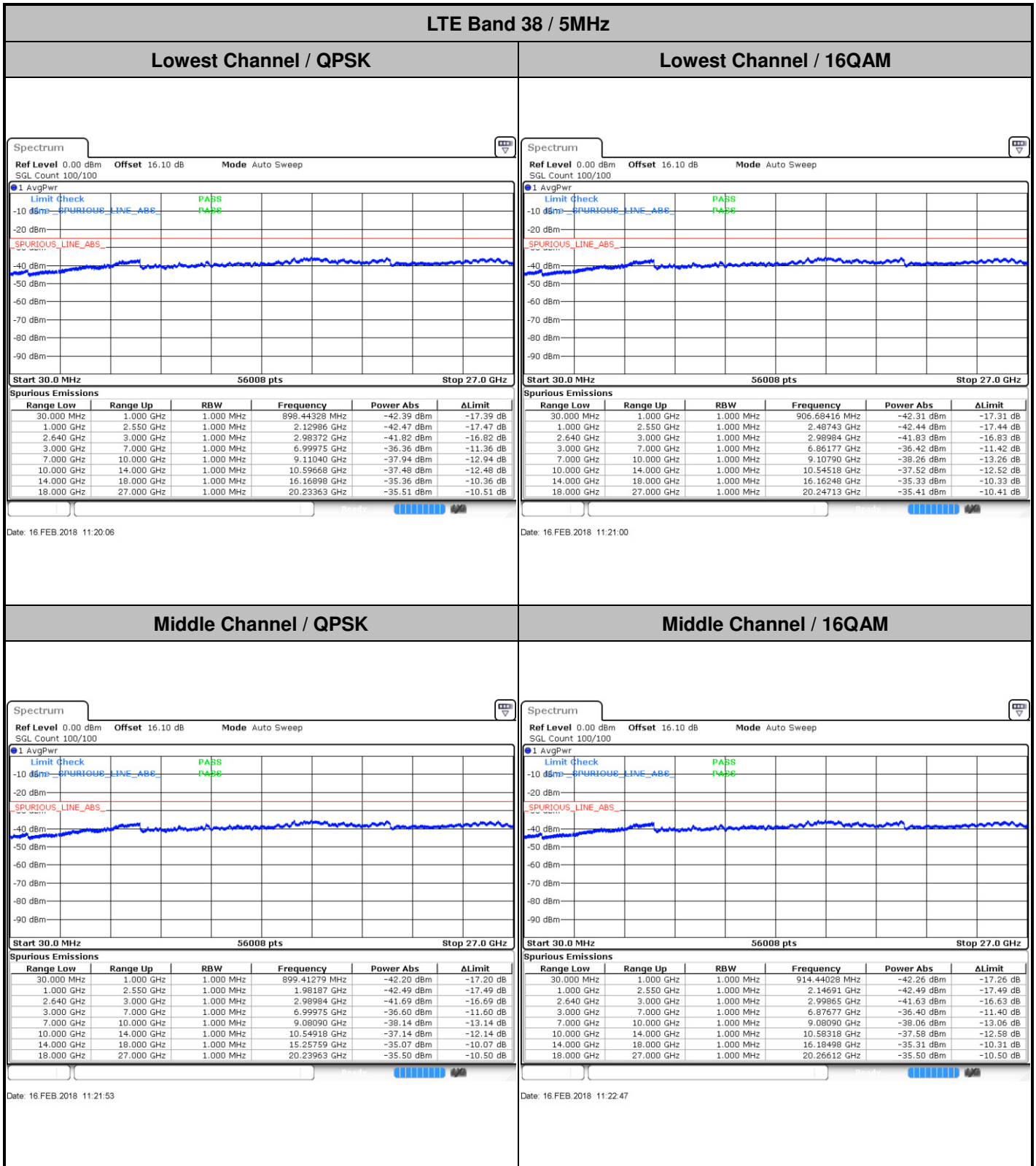
Highest Band Edge / Full RB



Date: 16.FEB.2018 12:19:47



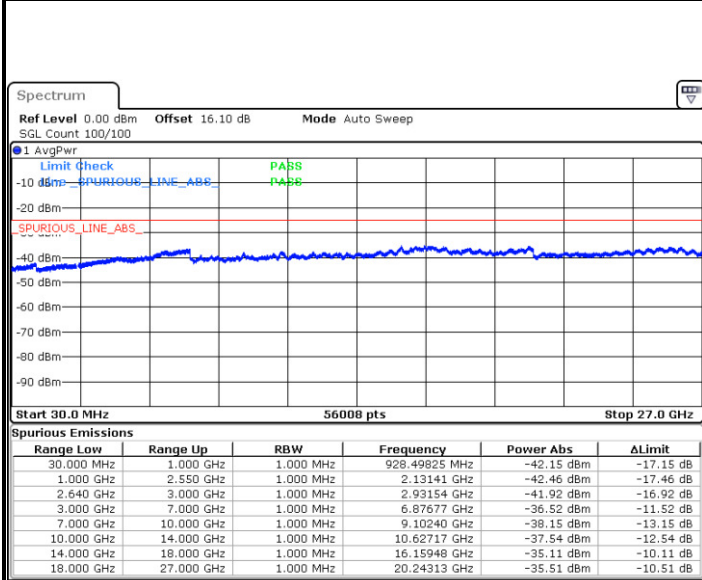
# Conducted Spurious Emission





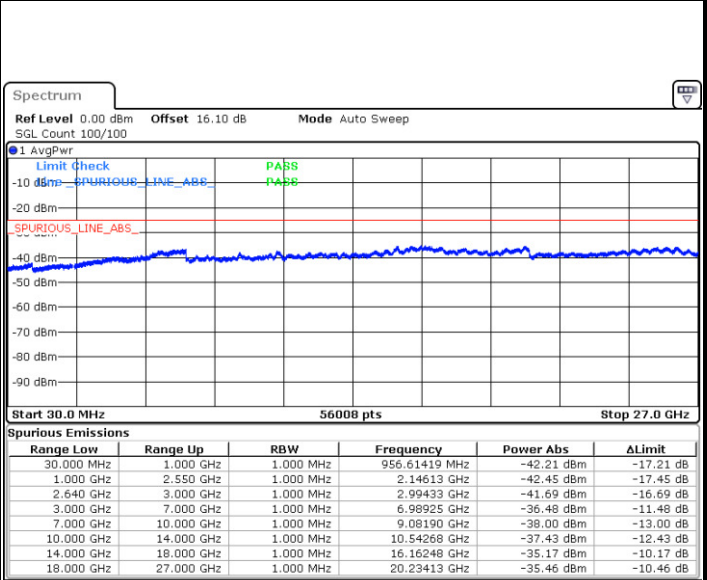
LTE Band 38 / 5MHz

Highest Channel / QPSK



Date: 16.FEB.2018 11:23:41

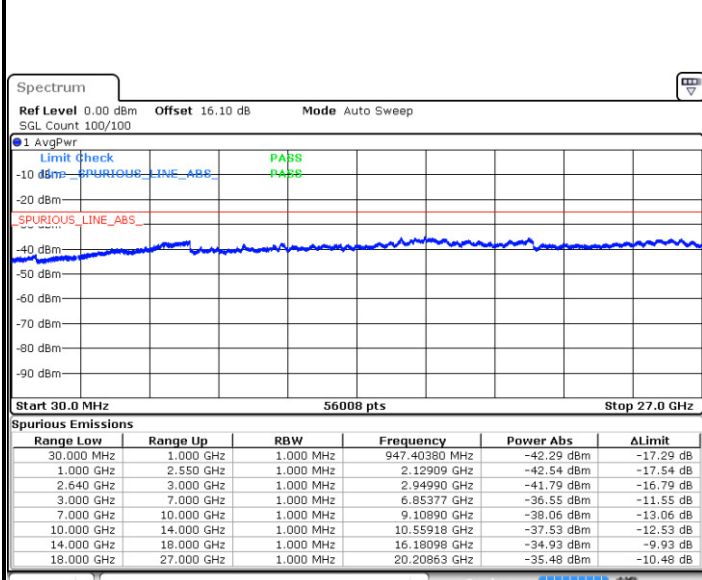
Highest Channel / 16QAM



Date: 16.FEB.2018 11:24:35

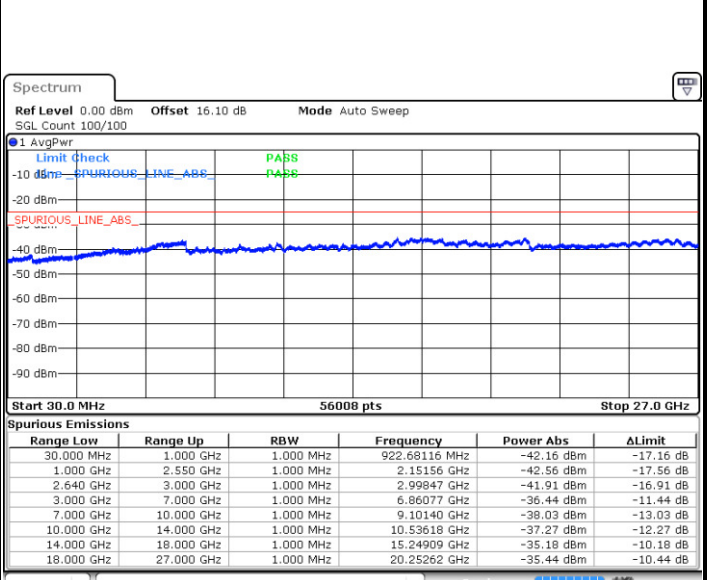
LTE Band 38 / 10MHz

Lowest Channel / QPSK



Date: 16.FEB.2018 11:25:29

Lowest Channel / 16QAM



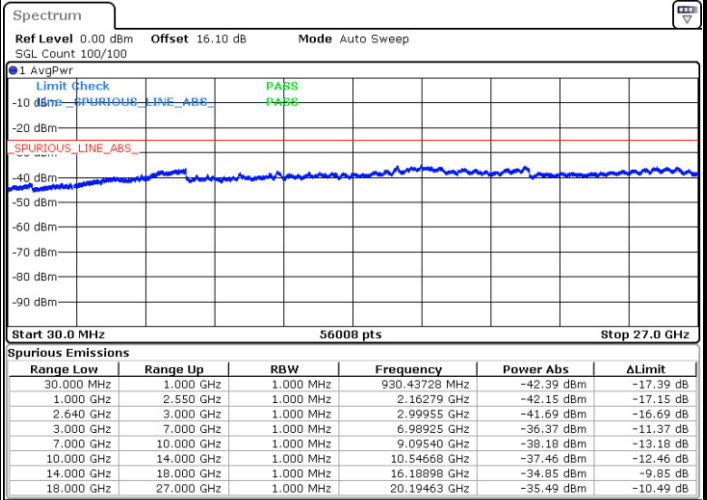
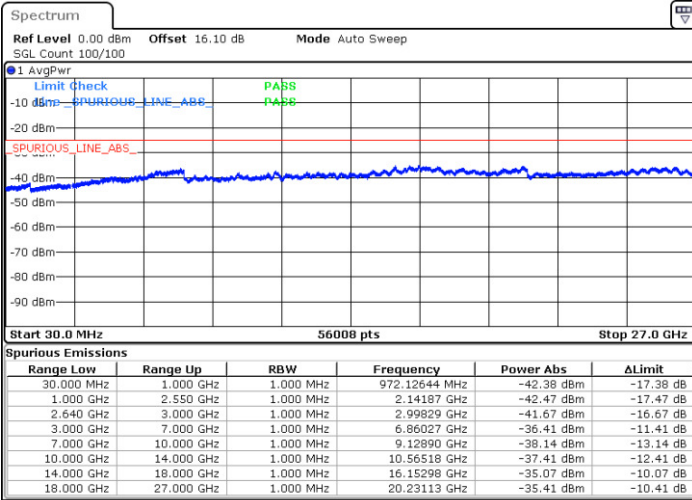
Date: 16.FEB.2018 11:26:22



LTE Band 38 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

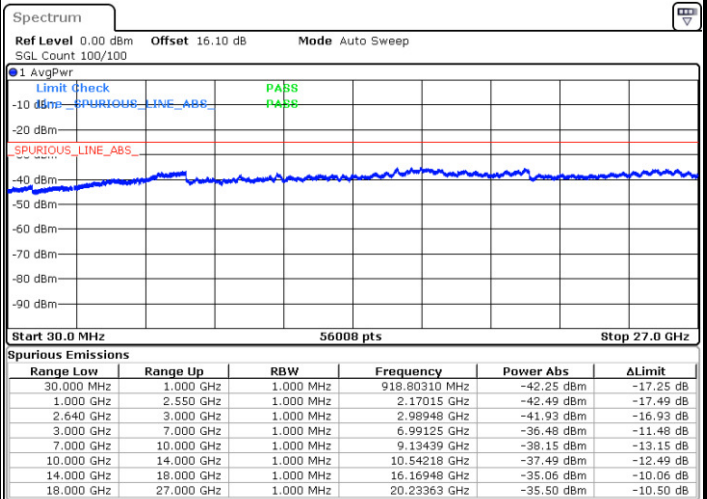
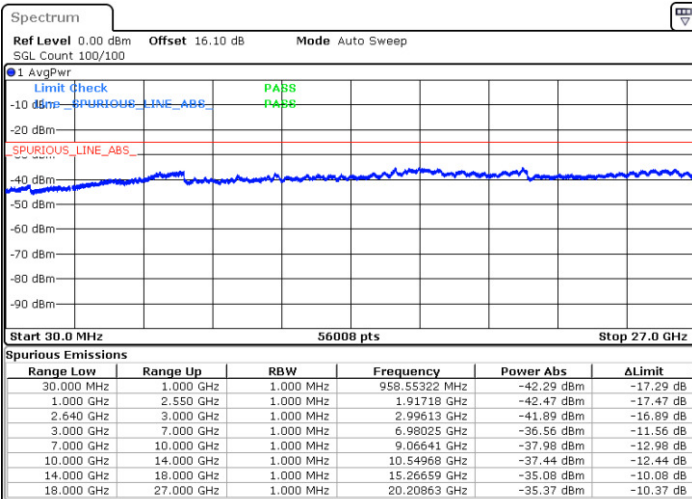


Date: 16.FEB.2018 11:27:16

Date: 16.FEB.2018 11:28:10

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 16.FEB.2018 11:29:04

Date: 16.FEB.2018 11:29:57

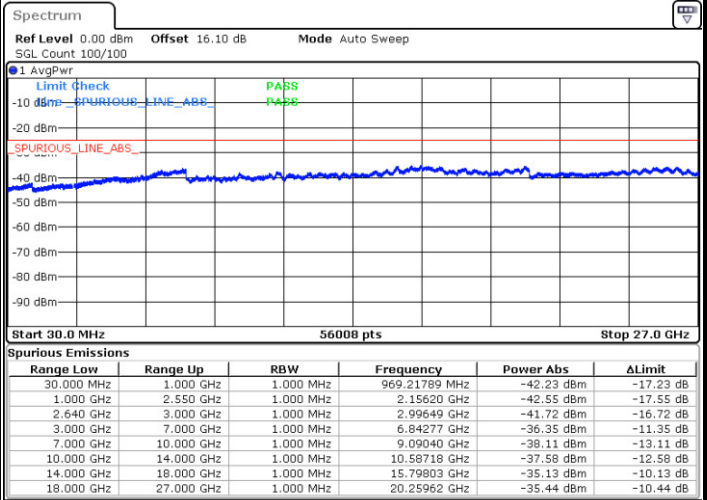
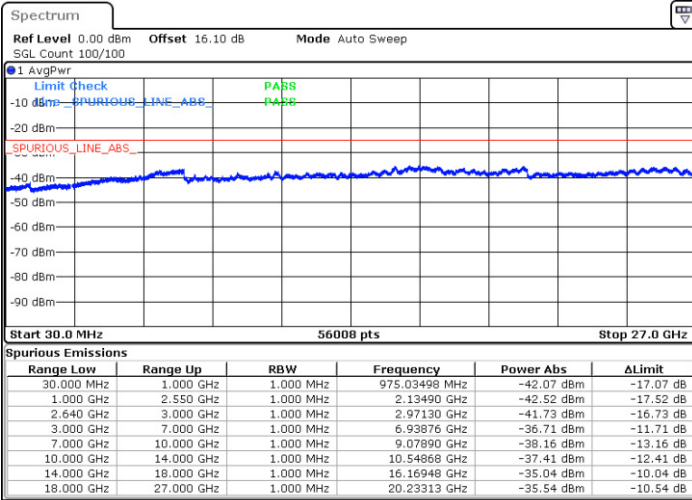




LTE Band 38 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

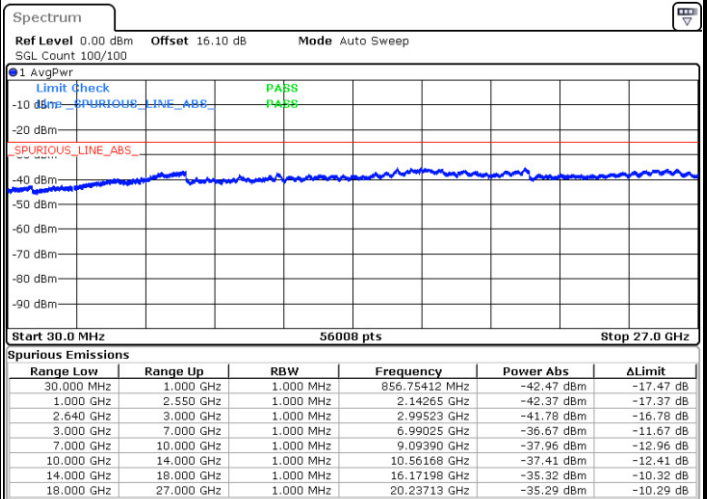
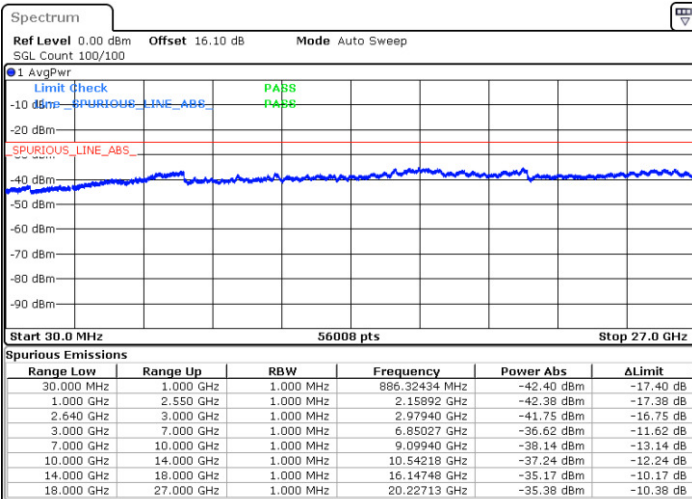


Date: 16.FEB.2018 11:30:51

Date: 16.FEB.2018 11:31:45

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 16.FEB.2018 11:32:39

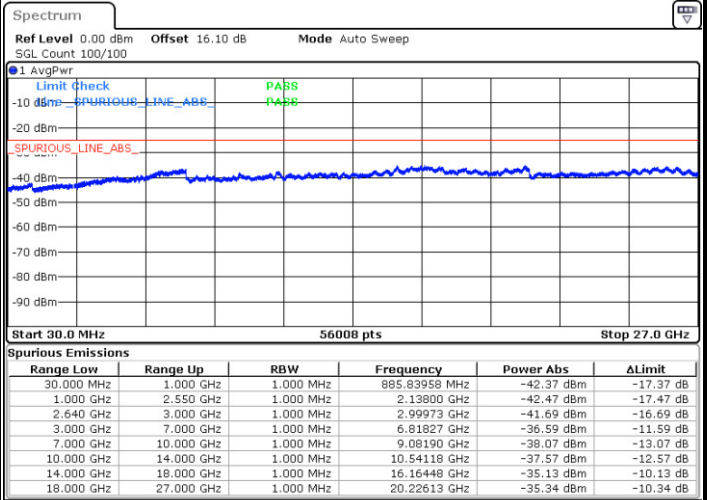
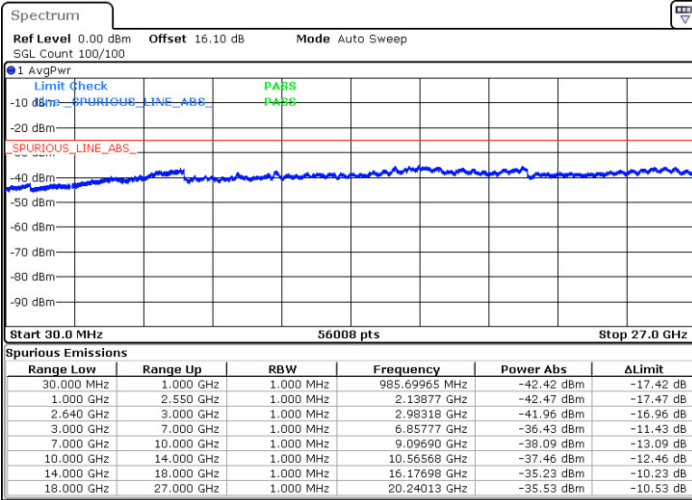
Date: 16.FEB.2018 11:33:32



LTE Band 38 / 15MHz

Highest Channel / QPSK

Highest Channel / 16QAM



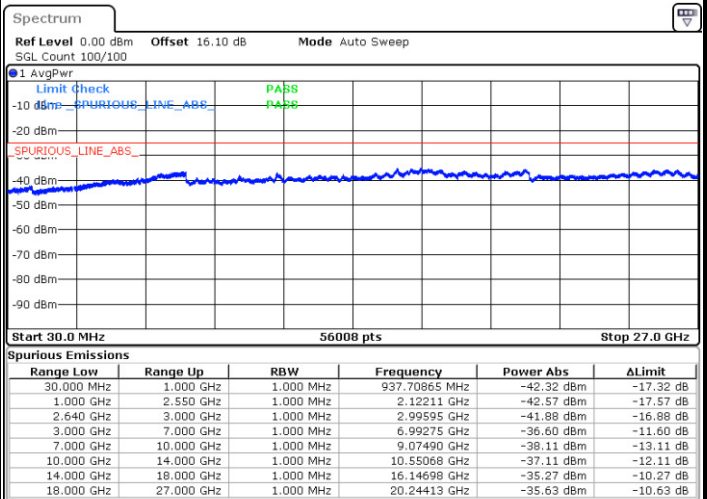
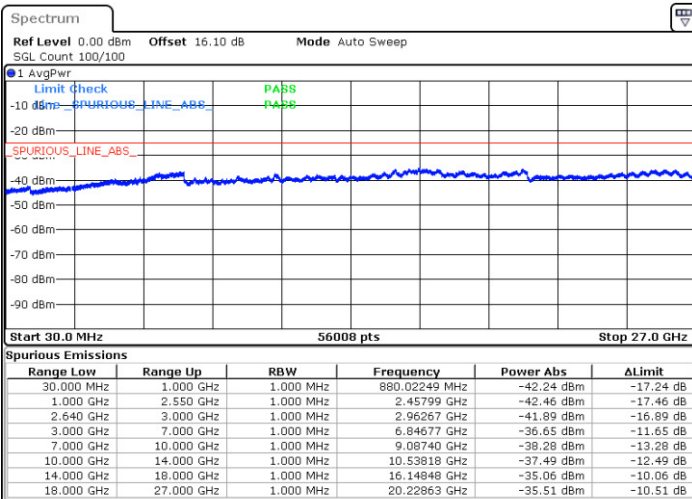
Date: 16.FEB.2018 11:34:26

Date: 16.FEB.2018 11:35:20

LTE Band 38 / 20MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 16.FEB.2018 11:36:14

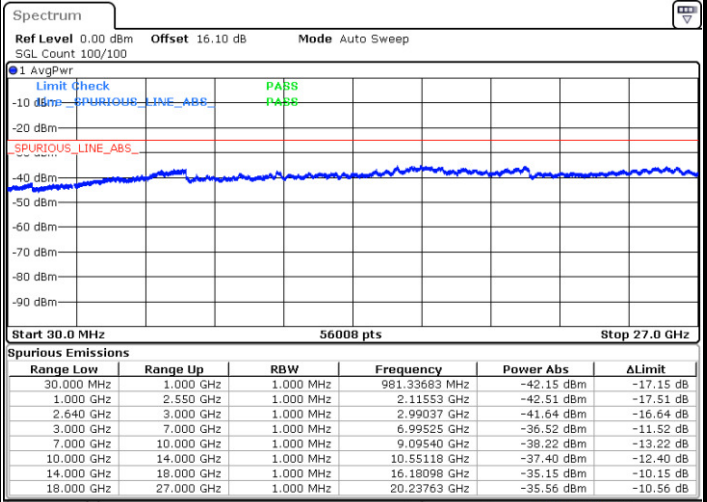
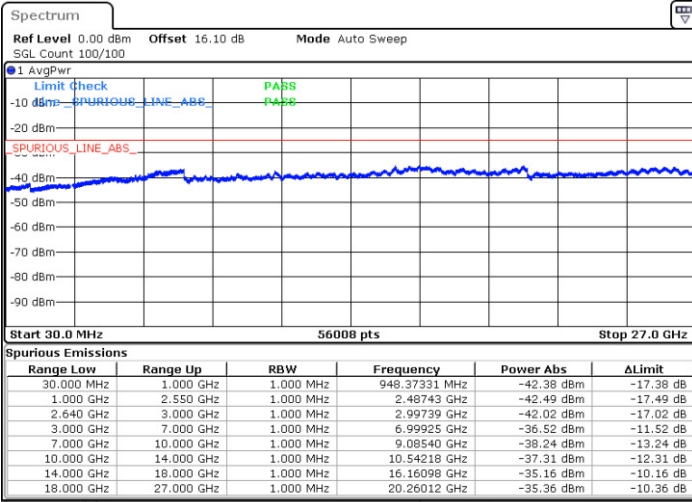
Date: 16.FEB.2018 11:37:08



LTE Band 38 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

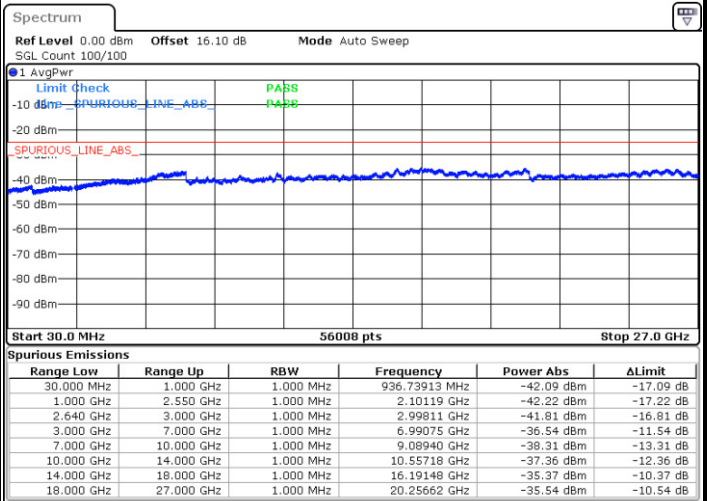
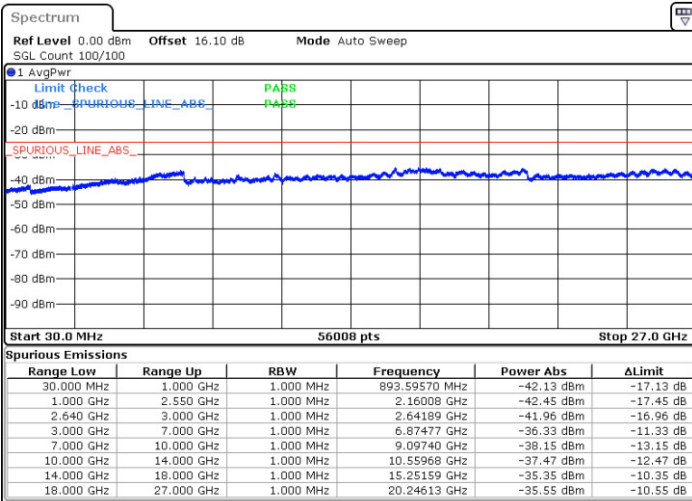


Date: 16.FEB.2018 11:38:01

Date: 16.FEB.2018 11:38:55

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 16.FEB.2018 11:39:49

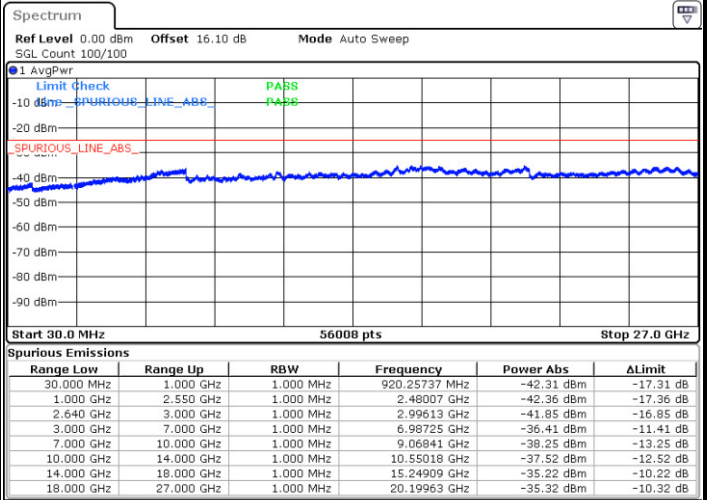
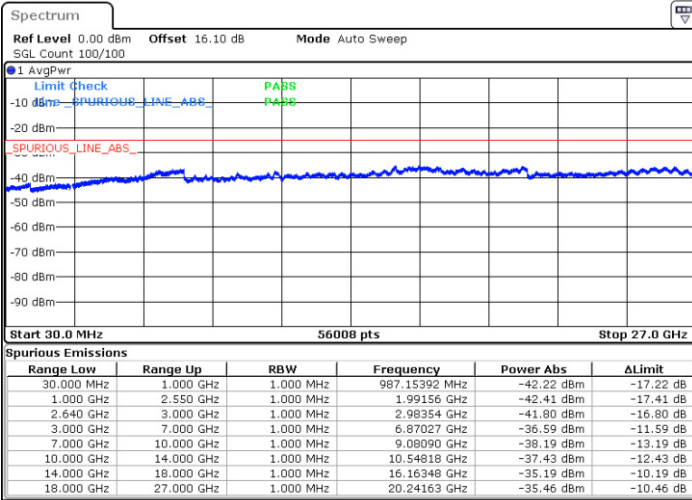
Date: 16.FEB.2018 11:40:43



LTE Band 38 / 5MHz

Lowest Channel / 64QAM

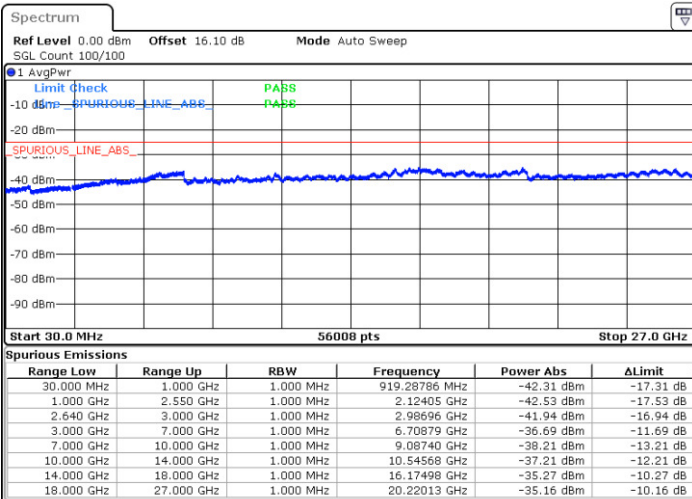
Middle Channel / 64QAM



Date: 16.FEB.2018 12:21:48

Date: 16.FEB.2018 12:22:42

Highest Channel / 64QAM



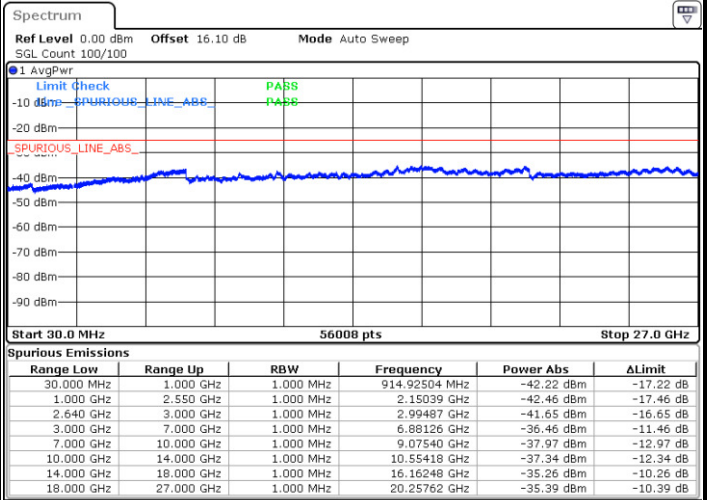
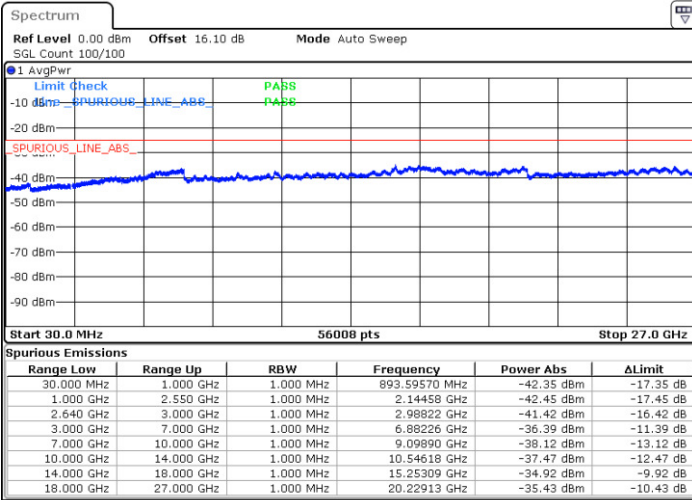
Date: 16.FEB.2018 12:23:36



LTE Band 38 / 10MHz

Lowest Channel / 64QAM

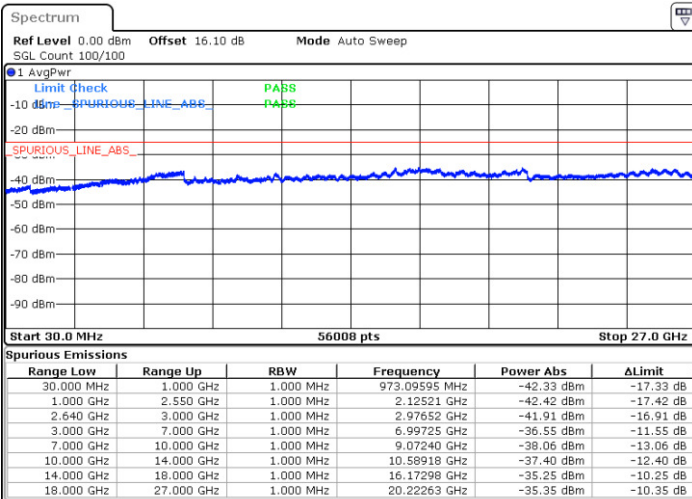
Middle Channel / 64QAM



Date: 16.FEB.2018 12:24:29

Date: 16.FEB.2018 12:25:23

Highest Channel / 64QAM



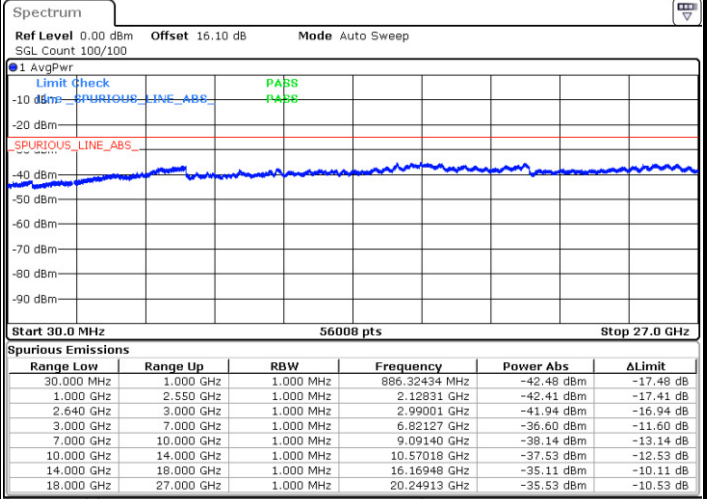
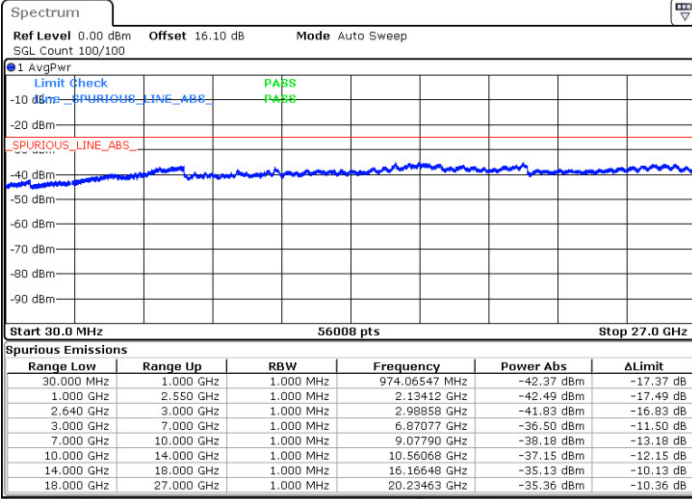
Date: 16.FEB.2018 12:26:17



LTE Band 38 / 15MHz

Lowest Channel / 64QAM

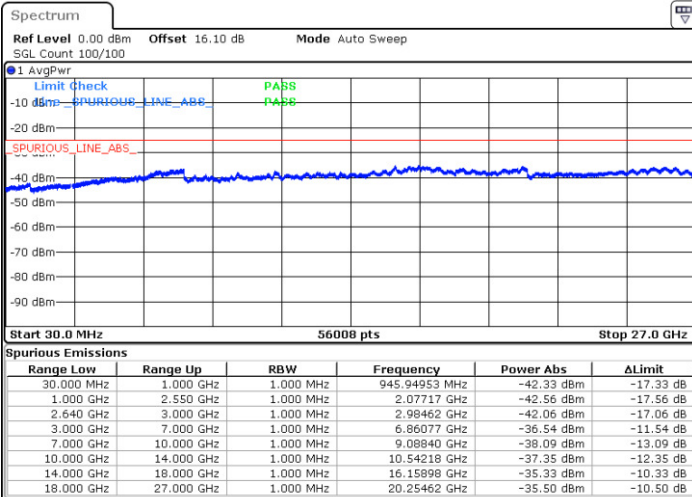
Middle Channel / 64QAM



Date: 16.FEB.2018 12:27:11

Date: 16.FEB.2018 12:28:05

Highest Channel / 64QAM



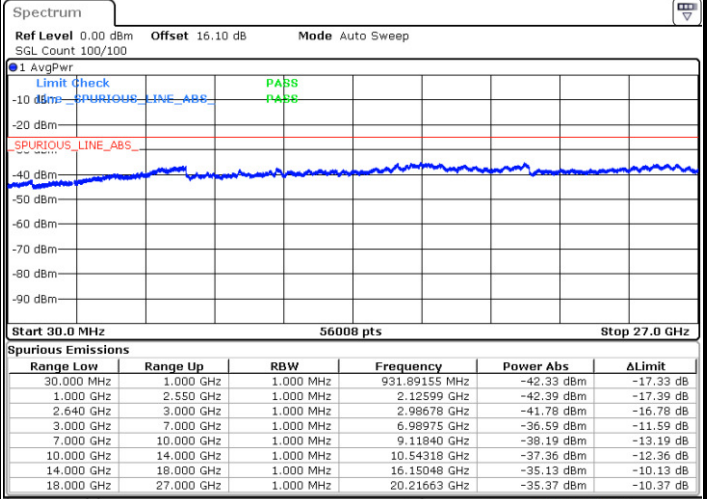
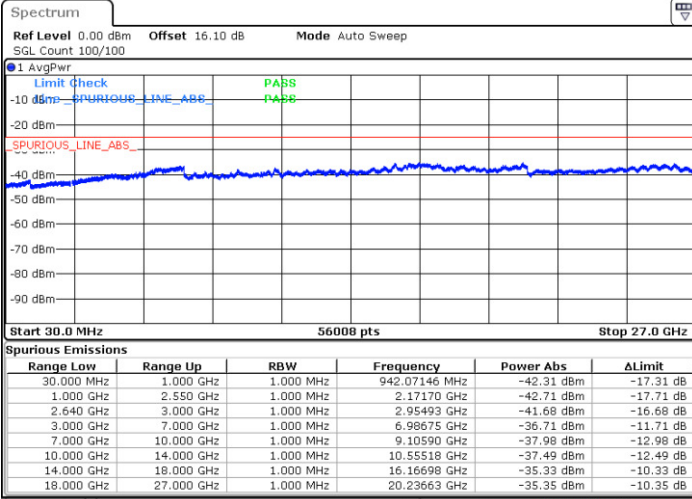
Date: 16.FEB.2018 12:28:58



LTE Band 38 / 20MHz

Lowest Channel / 64QAM

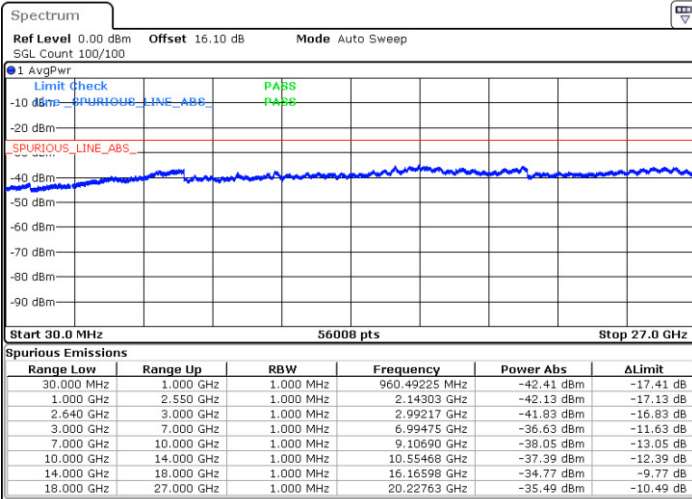
Middle Channel / 64QAM



Date: 16.FEB.2018 12:29:52

Date: 16.FEB.2018 12:30:46

Highest Channel / 64QAM



Date: 16.FEB.2018 12:31:40



**Frequency Stability**

| Test Conditions  |                   | LTE Band 38 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                            | Note 2. |
|                  |                   | Deviation (ppm)                     | Result  |
| 50               | Normal Voltage    | 0.0013                              | PASS    |
| 40               | Normal Voltage    | 0.0020                              |         |
| 30               | Normal Voltage    | 0.0020                              |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                              |         |
| 10               | Normal Voltage    | 0.0031                              |         |
| 0                | Normal Voltage    | 0.0007                              |         |
| -10              | Normal Voltage    | 0.0012                              |         |
| -20              | Normal Voltage    | 0.0013                              |         |
| -30              | Normal Voltage    | 0.0028                              |         |
| 20               | Maximum Voltage   | 0.0029                              |         |
| 20               | Normal Voltage    | 0.0000                              |         |
| 20               | Battery End Point | 0.0017                              |         |

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.





# LTE Band 41

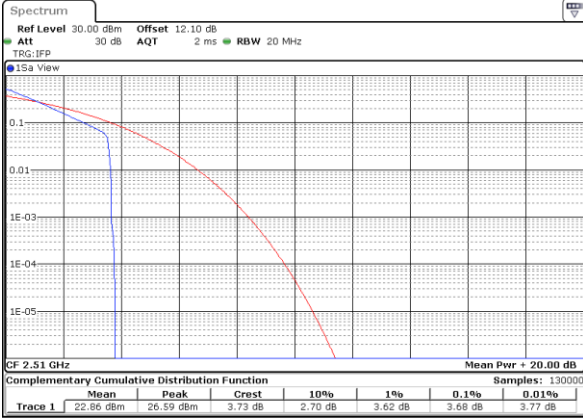
## Peak-to-Average Ratio

| Mode       | LTE Band 41 / 20MHz |         |       |         |             |
|------------|---------------------|---------|-------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 3.74                | 4.38    | 5.07  | 5.74    | PASS        |
| Middle CH  | 3.65                | 4.32    | 5.71  | 5.74    |             |
| Highest CH | 3.68                | 4.35    | 5.16  | 5.65    |             |
| Mode       | LTE Band 41 / 20MHz |         |       |         |             |
| Mod.       | 64QAM               |         |       |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB |       |         | Result      |
| Lowest CH  | 6.17                | 6.26    | -     | -       | PASS        |
| Middle CH  | 6.61                | 6.23    | -     | -       |             |
| Highest CH | 5.86                | 6.20    | -     | -       |             |



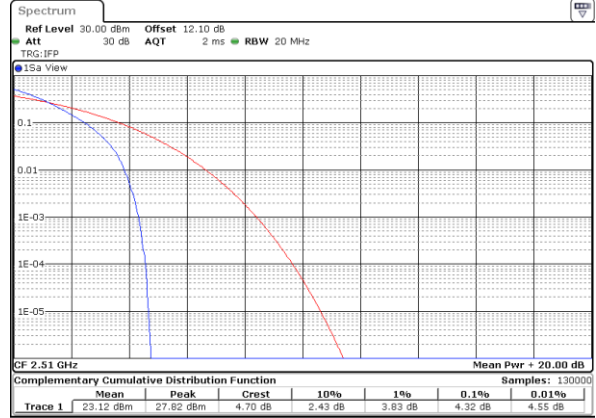
LTE Band 41 / 20MHz / QPSK

Lowest Channel / 1RB



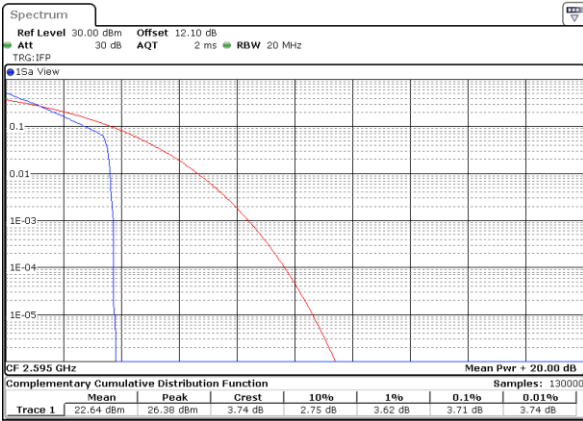
Date: 14 FEB 2018 18:44:38

Lowest Channel / Full RB



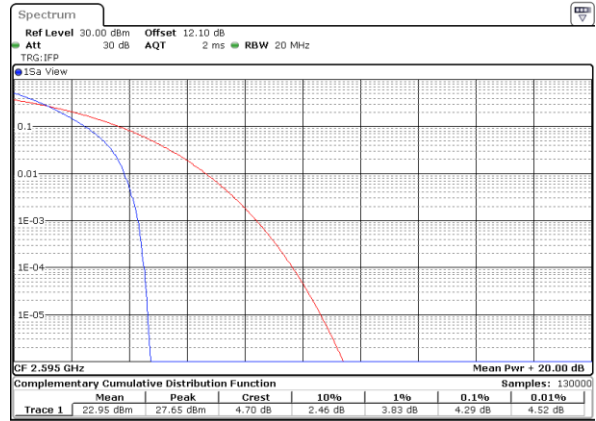
Date: 14 FEB 2018 18:45:09

Middle Channel / 1RB



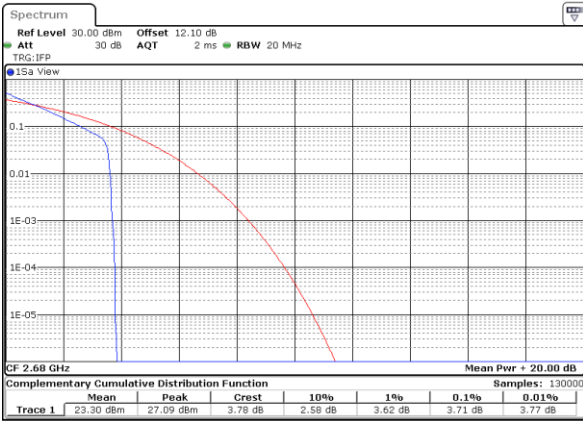
Date: 14 FEB 2018 18:45:23

Middle Channel / Full RB



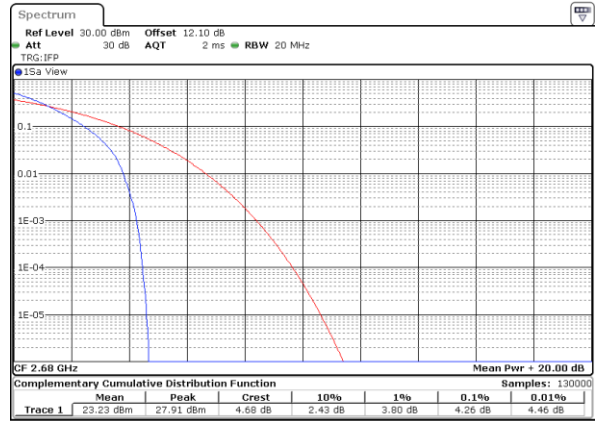
Date: 14 FEB 2018 18:45:35

Highest Channel / 1RB



Date: 14 FEB 2018 18:45:49

Highest Channel / Full RB

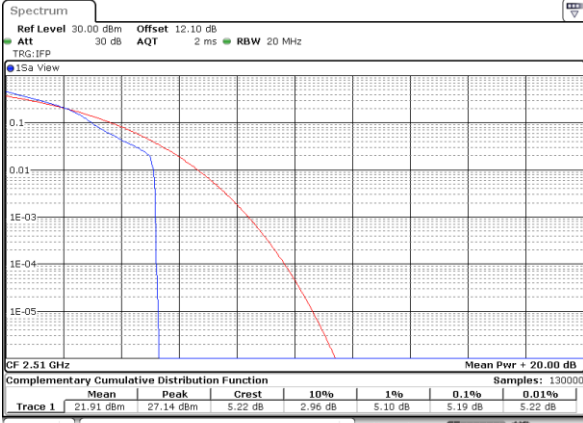


Date: 14 FEB 2018 18:46:04



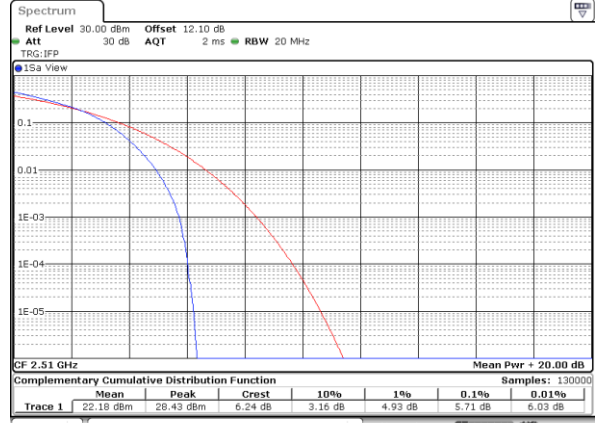
LTE Band 41 / 20MHz / 16QAM

Lowest Channel / 1RB



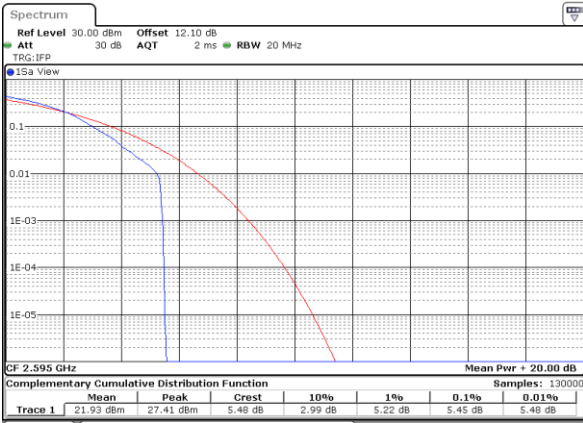
Date: 14 FEB 2018 18:42:55

Lowest Channel / Full RB



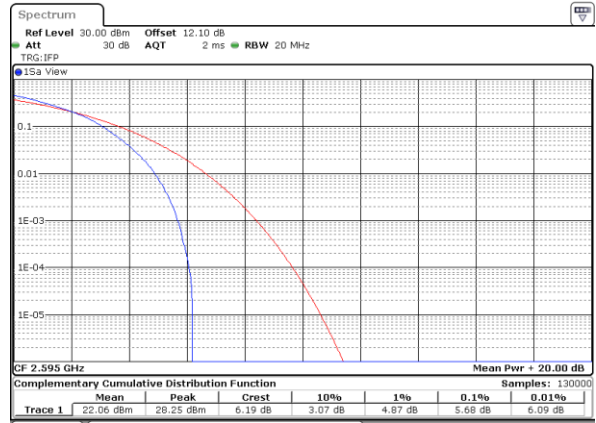
Date: 14 FEB 2018 18:43:25

Middle Channel / 1RB



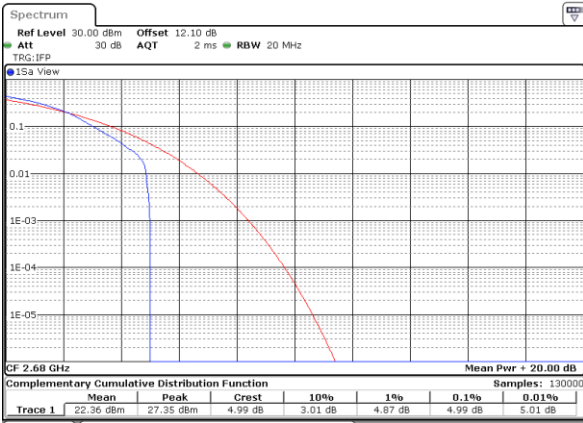
Date: 14 FEB 2018 18:43:37

Middle Channel / Full RB



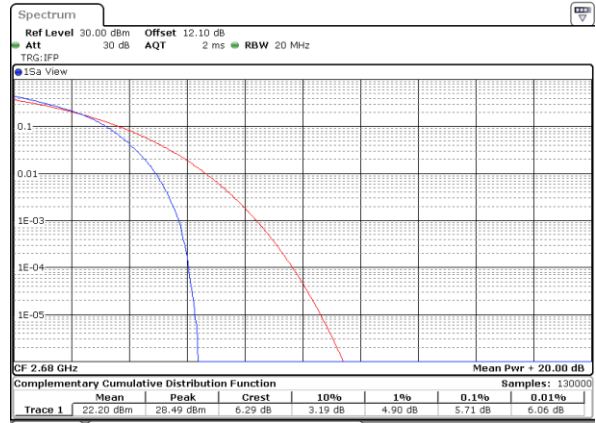
Date: 14 FEB 2018 18:43:49

Highest Channel / 1RB



Date: 14 FEB 2018 18:44:02

Highest Channel / Full RB

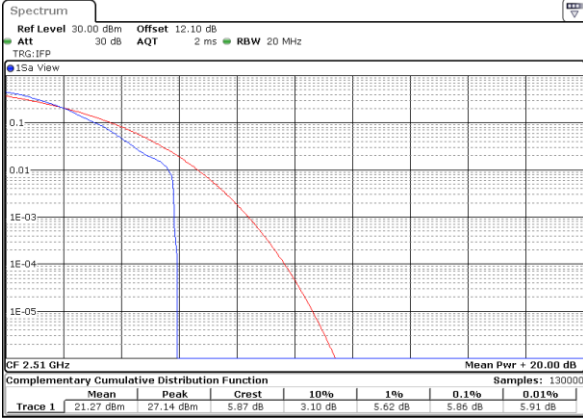


Date: 14 FEB 2018 18:44:14



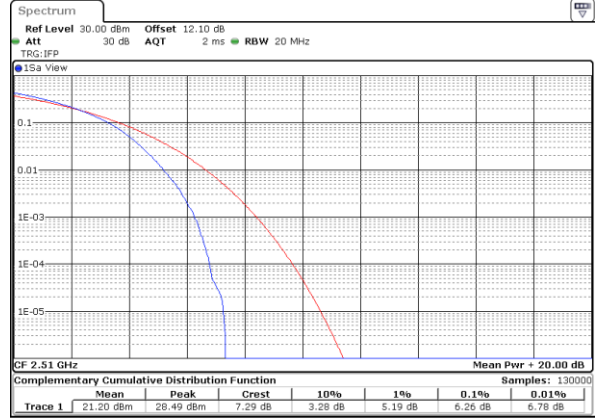
LTE Band 41 / 20MHz / 64QAM

Lowest Channel / 1RB



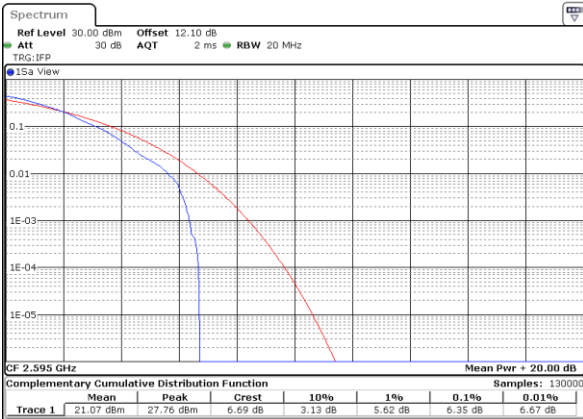
Date: 14 FEB 2018 18:41:38

Lowest Channel / Full RB



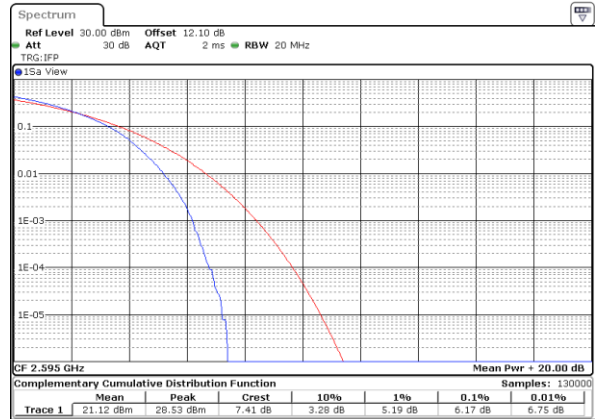
Date: 14 FEB 2018 18:41:50

Middle Channel / 1RB



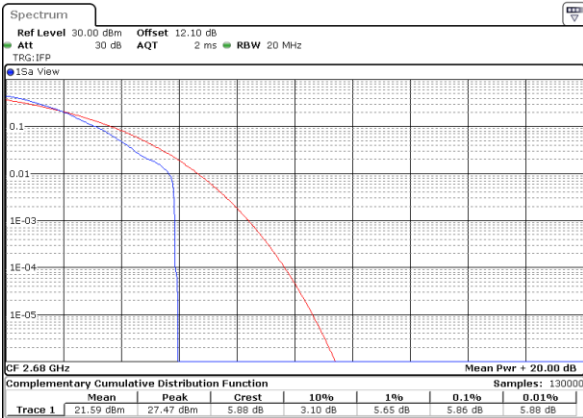
Date: 14 FEB 2018 18:42:03

Middle Channel / Full RB



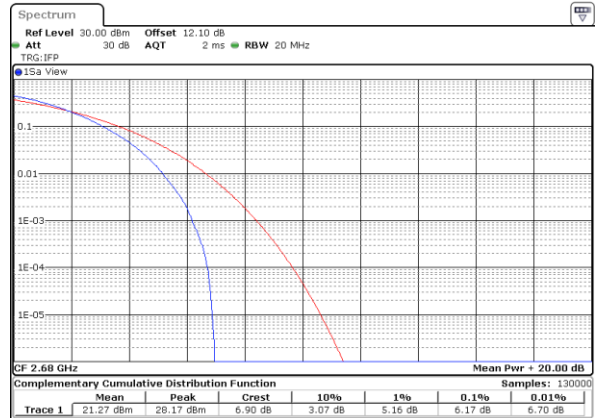
Date: 14 FEB 2018 18:42:15

Highest Channel / 1RB



Date: 14 FEB 2018 18:42:30

Highest Channel / Full RB



Date: 14 FEB 2018 18:42:42



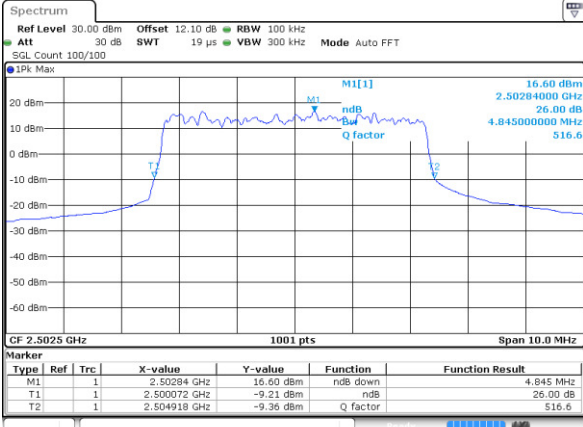
**26dB Bandwidth**

| Mode       | LTE Band 41 : 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  | -                          | -     | -     | -     | 4.94  | 4.85  | 9.65  | 9.65  | 14.39 | 14.15 | 20.06 | 20.14 |
| Middle CH  | -                          | -     | -     | -     | 4.90  | 4.78  | 9.87  | 9.61  | 14.33 | 14.15 | 19.98 | 20.02 |
| Highest CH | -                          | -     | -     | -     | 4.91  | 4.80  | 9.79  | 9.69  | 14.36 | 14.12 | 20.06 | 20.02 |
| Mode       | LTE Band 41 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                     |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                      |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | -                          | -     | -     | -     | 4.81  | -     | 9.91  | -     | 14.24 | -     | 20.10 | -     |
| Middle CH  | -                          | -     | -     | -     | 4.84  | -     | 9.83  | -     | 14.18 | -     | 20.18 | -     |
| Highest CH | -                          | -     | -     | -     | 4.89  | -     | 9.89  | -     | 14.21 | -     | 20.06 | -     |



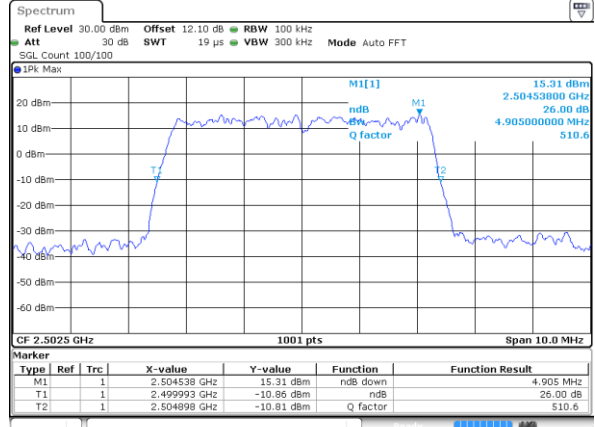
LTE Band 41

Lowest Channel / 5MHz / QPSK



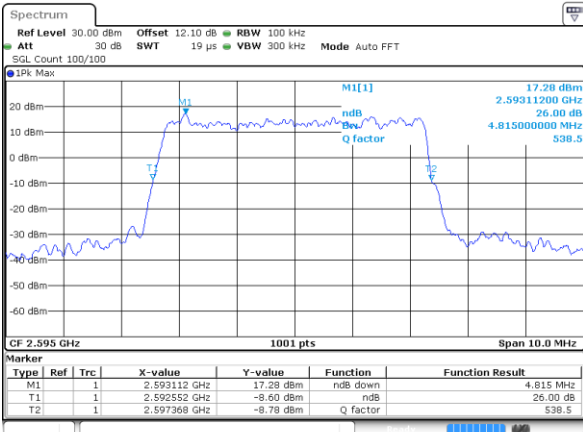
Date: 14 FEB 2018 18:18:31

Lowest Channel / 5MHz / 16QAM



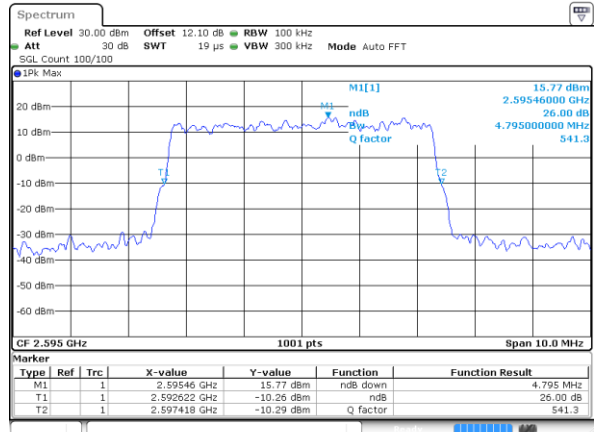
Date: 14 FEB 2018 18:18:41

Middle Channel / 5MHz / QPSK



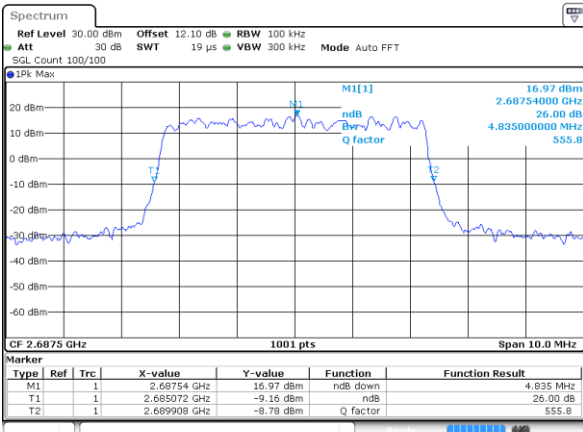
Date: 14 FEB 2018 18:19:11

Middle Channel / 5MHz / 16QAM



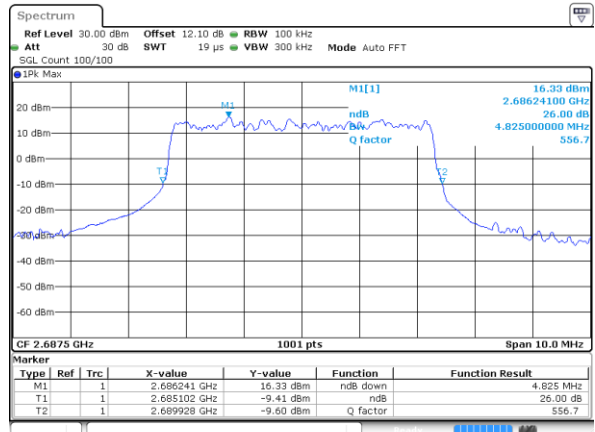
Date: 14 FEB 2018 18:19:21

Highest Channel / 5MHz / QPSK



Date: 14 FEB 2018 18:19:50

Highest Channel / 5MHz / 16QAM

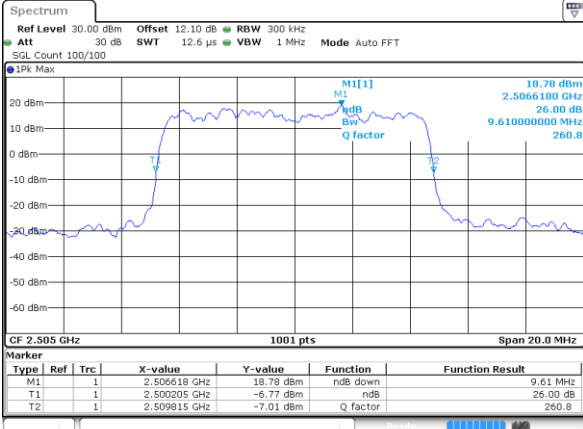


Date: 14 FEB 2018 18:20:00



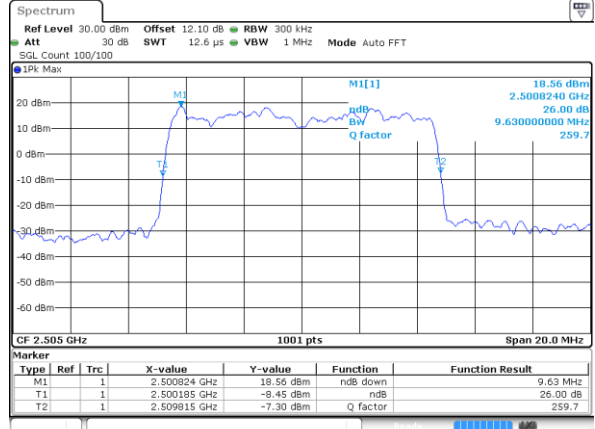
LTE Band 41

Lowest Channel / 10MHz / QPSK



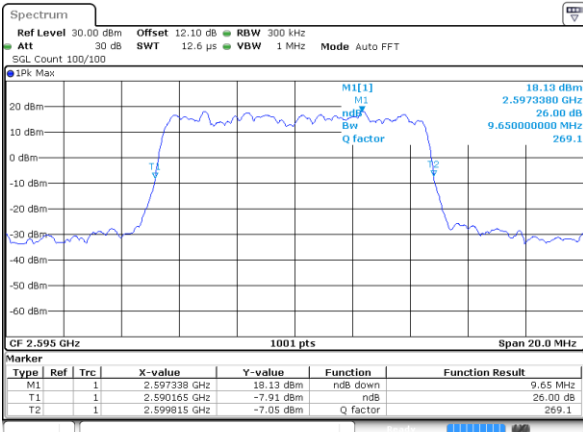
Date: 14 FEB 2018 18:20:30

Lowest Channel / 10MHz / 16QAM



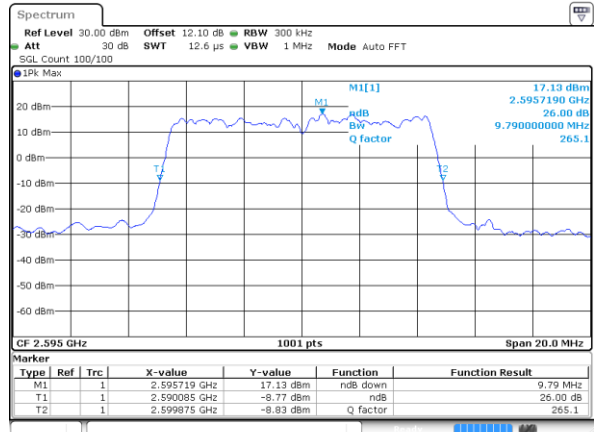
Date: 14 FEB 2018 18:20:40

Middle Channel / 10MHz / QPSK



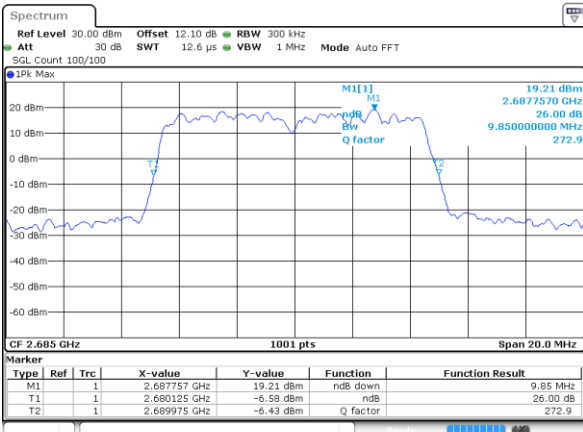
Date: 14 FEB 2018 18:21:09

Middle Channel / 10MHz / 16QAM



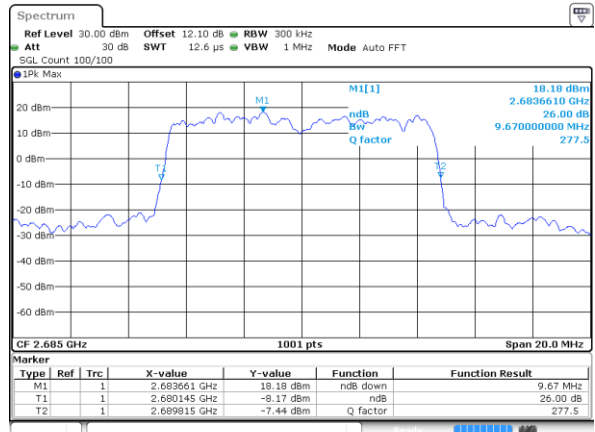
Date: 14 FEB 2018 18:21:19

Highest Channel / 10MHz / QPSK



Date: 14 FEB 2018 18:21:49

Highest Channel / 10MHz / 16QAM

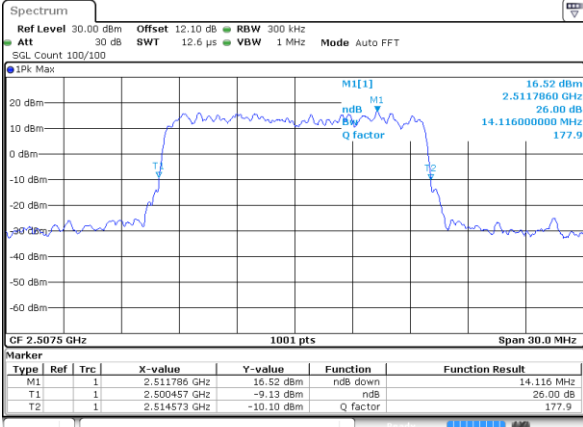


Date: 14 FEB 2018 18:21:59



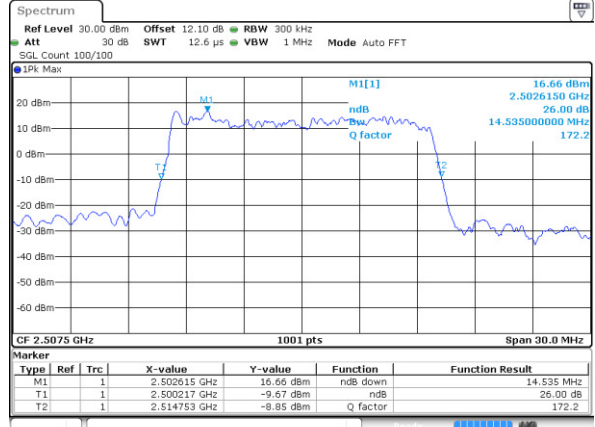
LTE Band 41

Lowest Channel / 15MHz / QPSK



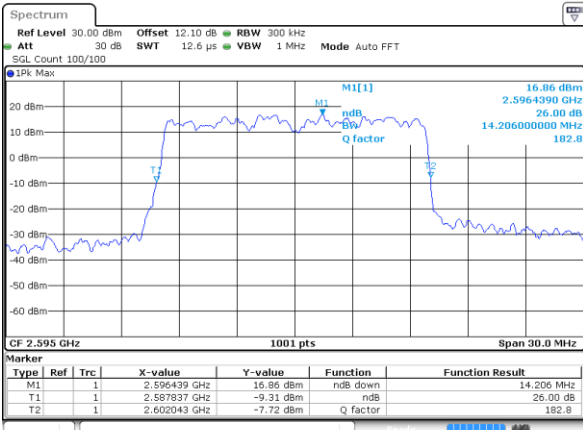
Date: 14 FEB 2018 18:22:28

Lowest Channel / 15MHz / 16QAM



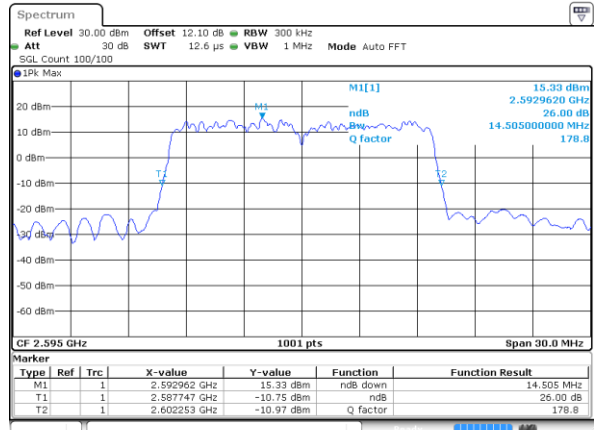
Date: 14 FEB 2018 18:22:38

Middle Channel / 15MHz / QPSK



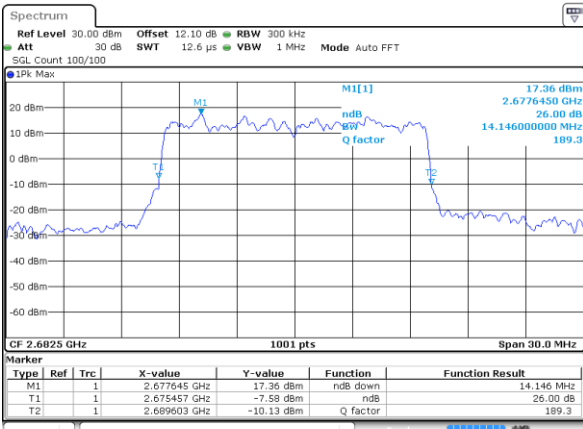
Date: 14 FEB 2018 18:23:08

Middle Channel / 15MHz / 16QAM



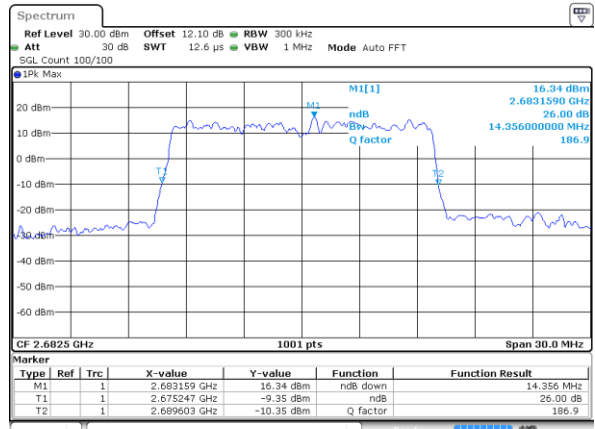
Date: 14 FEB 2018 18:23:18

Highest Channel / 15MHz / QPSK



Date: 14 FEB 2018 18:23:47

Highest Channel / 15MHz / 16QAM



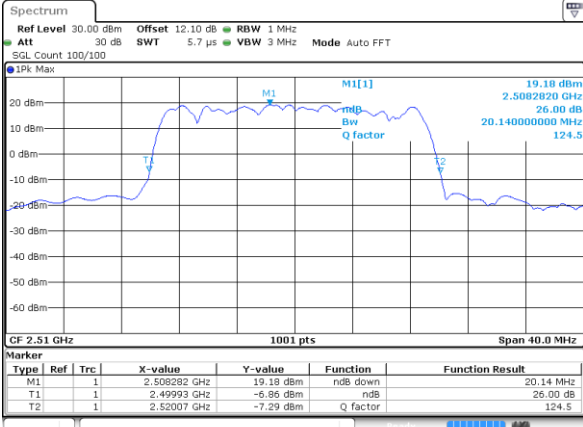
Date: 14 FEB 2018 18:23:57





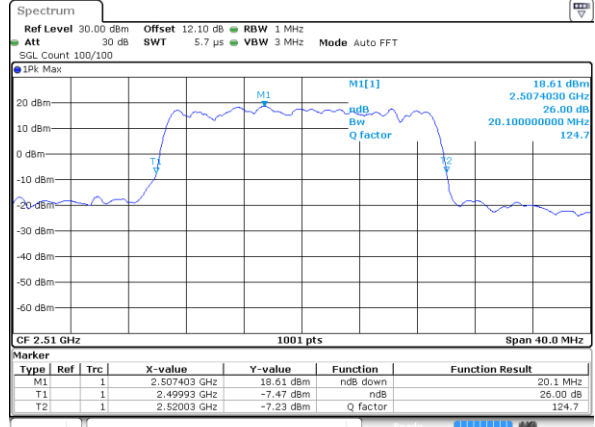
LTE Band 41

Lowest Channel / 20MHz / QPSK



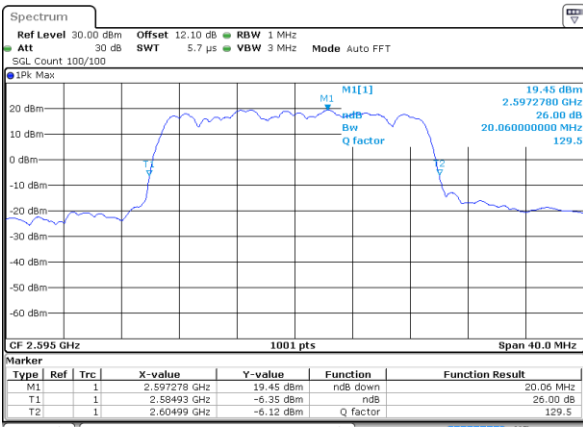
Date: 14 FEB 2018 18:34:14

Lowest Channel / 20MHz / 16QAM



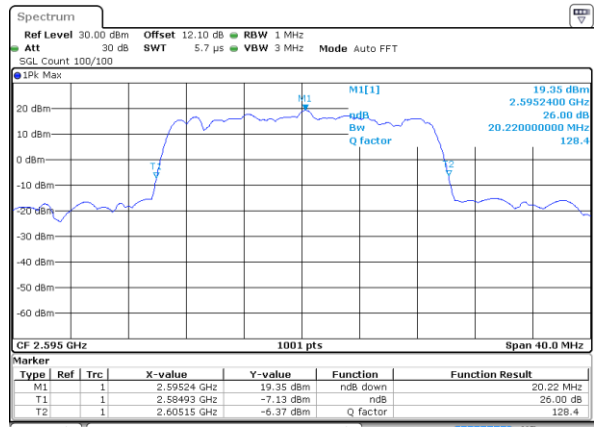
Date: 14 FEB 2018 18:34:24

Middle Channel / 20MHz / QPSK



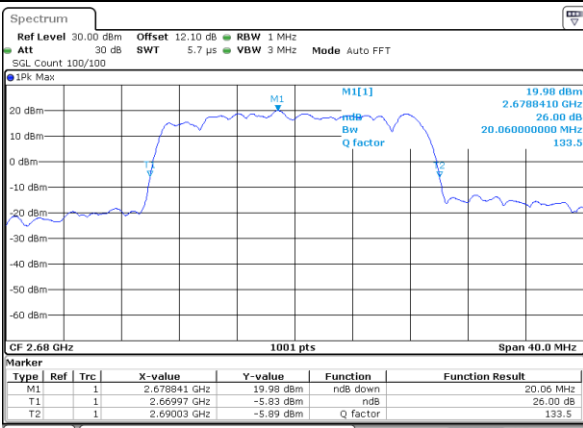
Date: 14 FEB 2018 18:34:54

Middle Channel / 20MHz / 16QAM



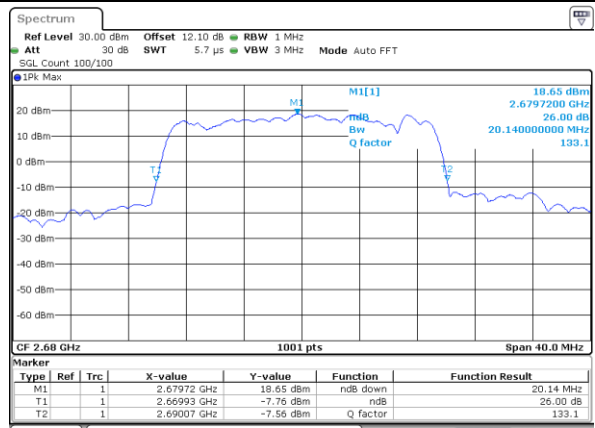
Date: 14 FEB 2018 18:35:03

Highest Channel / 20MHz / QPSK



Date: 14 FEB 2018 18:35:33

Highest Channel / 20MHz / 16QAM



Date: 14 FEB 2018 18:35:43