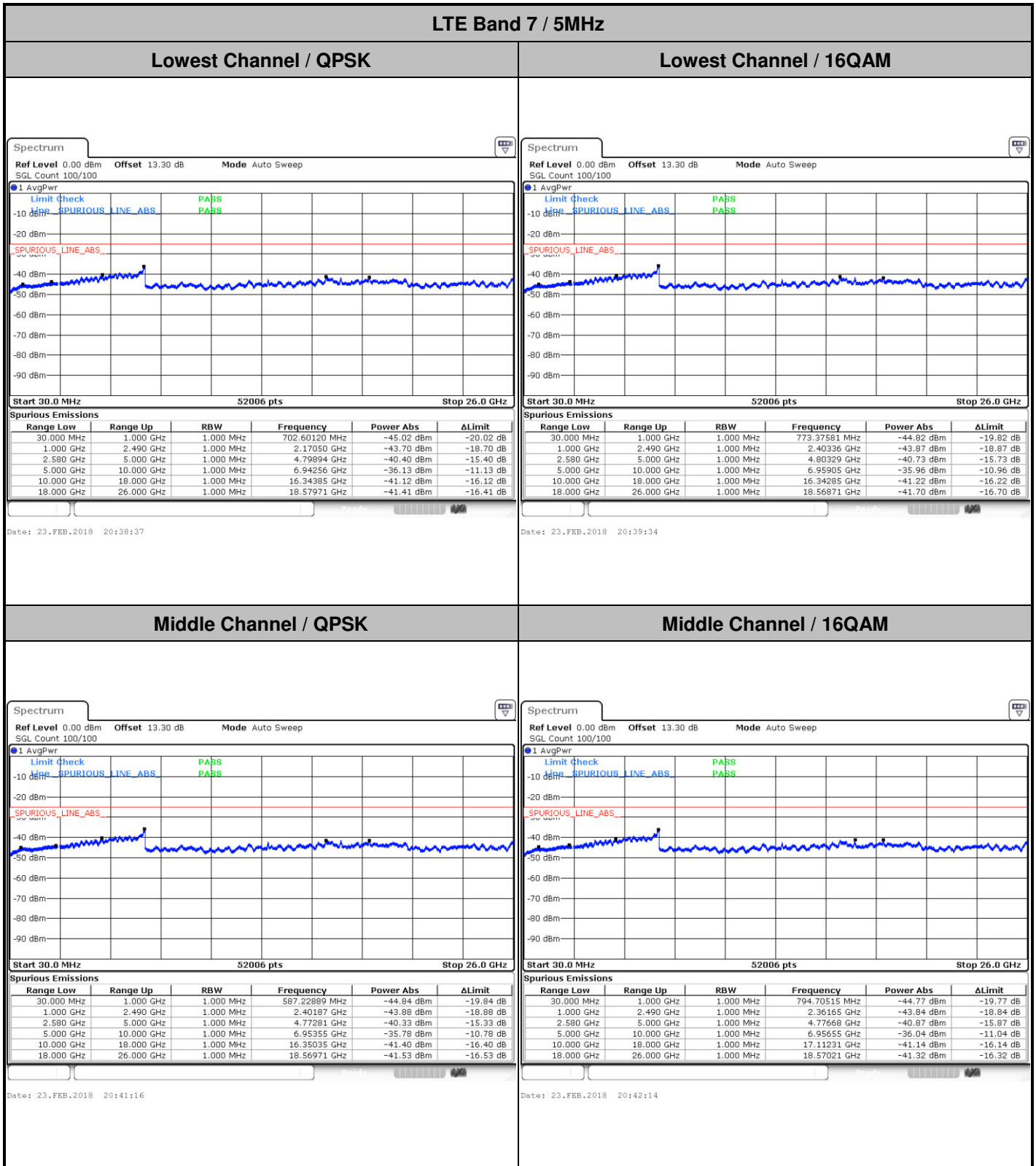




# Conducted Spurious Emission

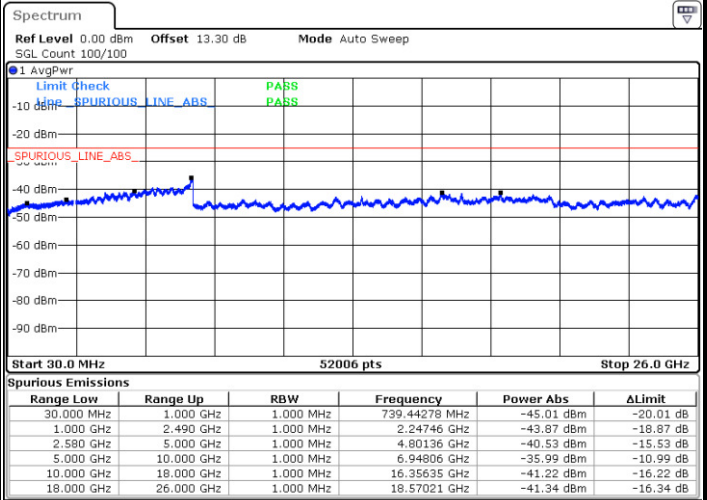
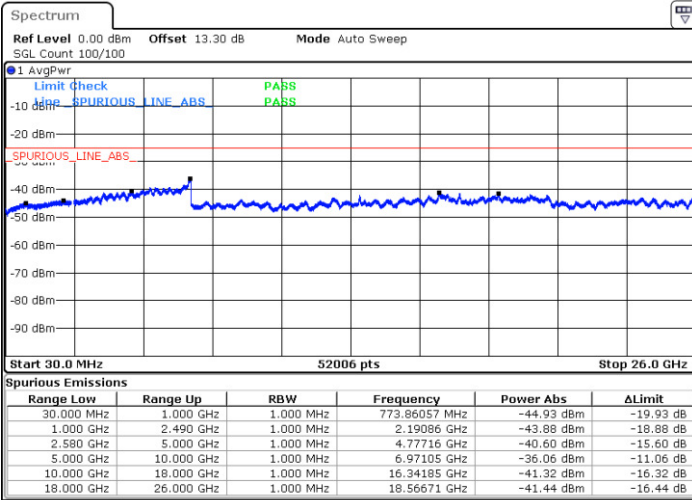




LTE Band 7 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



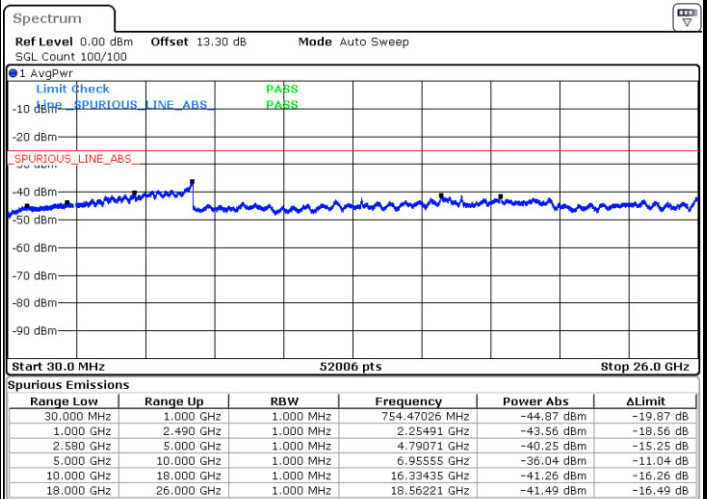
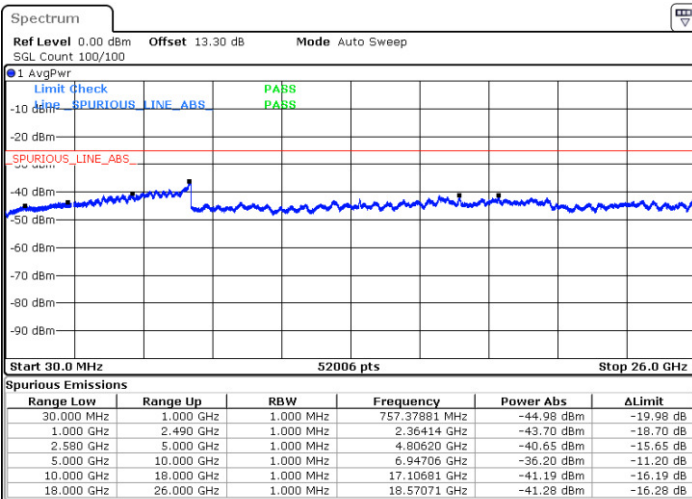
Date: 23.FEB.2018 20:48:35

Date: 23.FEB.2018 20:49:32

LTE Band 7 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 23.FEB.2018 20:55:51

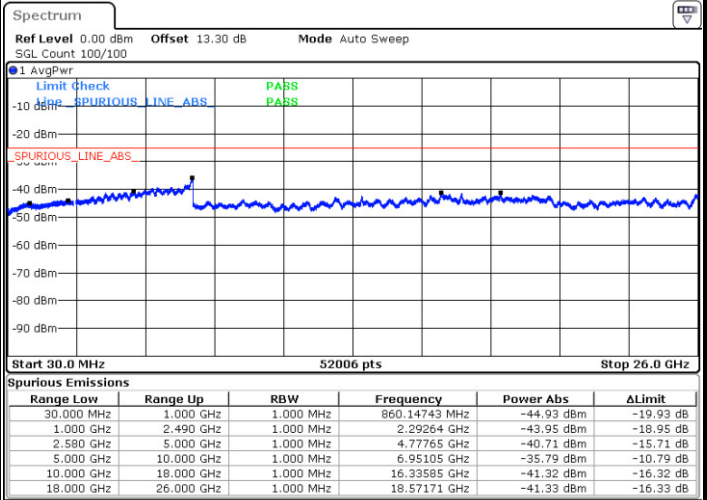
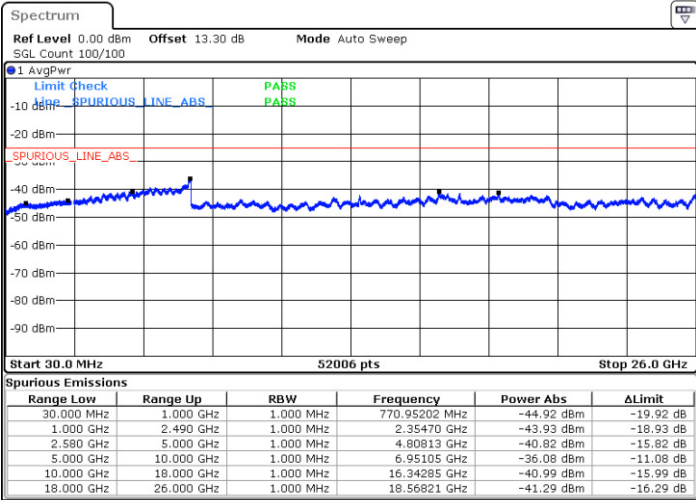
Date: 23.FEB.2018 20:56:49



LTE Band 7 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

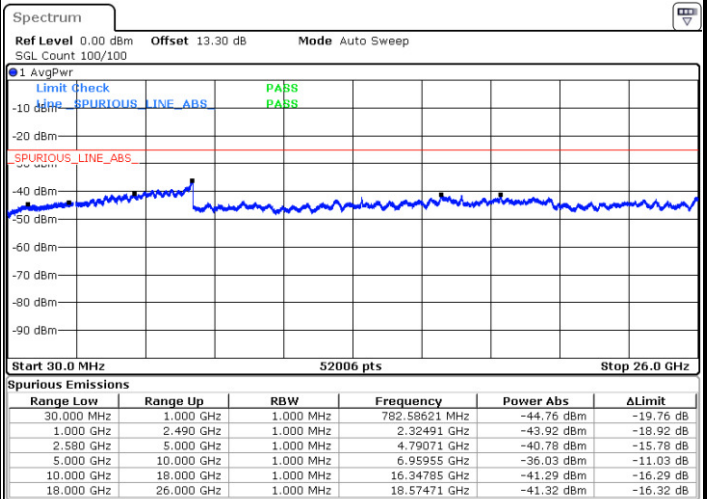
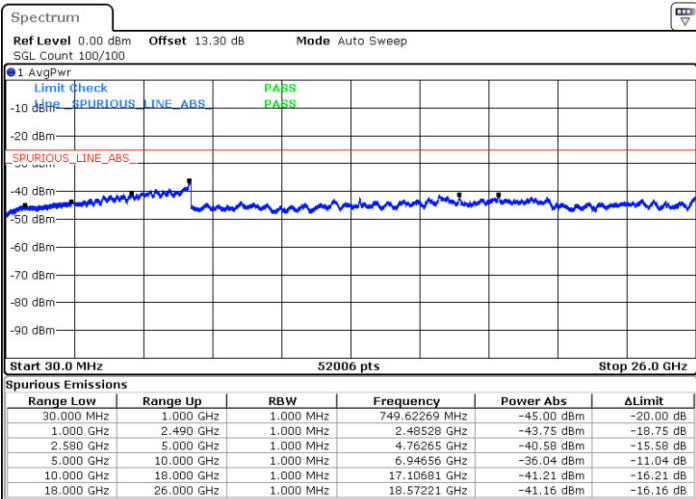


Date: 23.FEB.2018 20:58:31

Date: 23.FEB.2018 20:59:28

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 23.FEB.2018 21:05:49

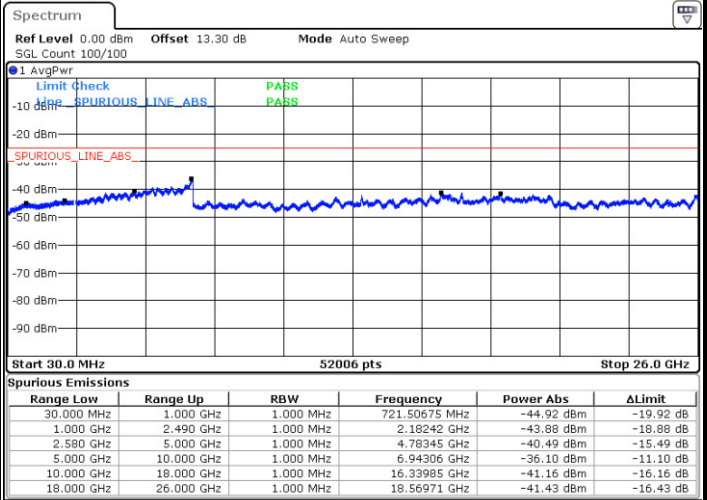
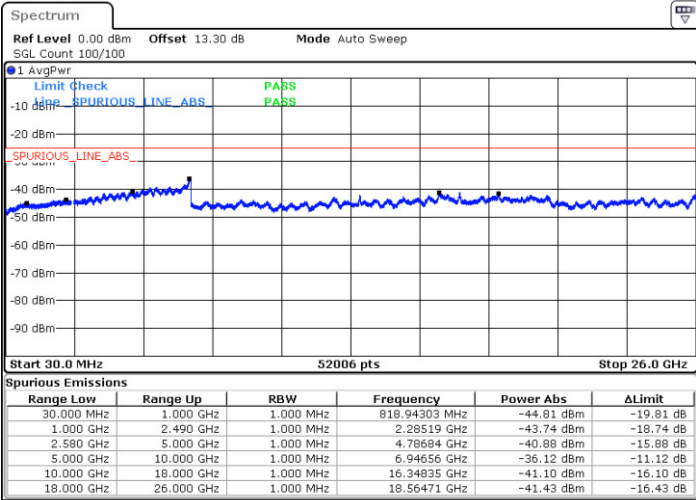
Date: 23.FEB.2018 21:06:46



LTE Band 7 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

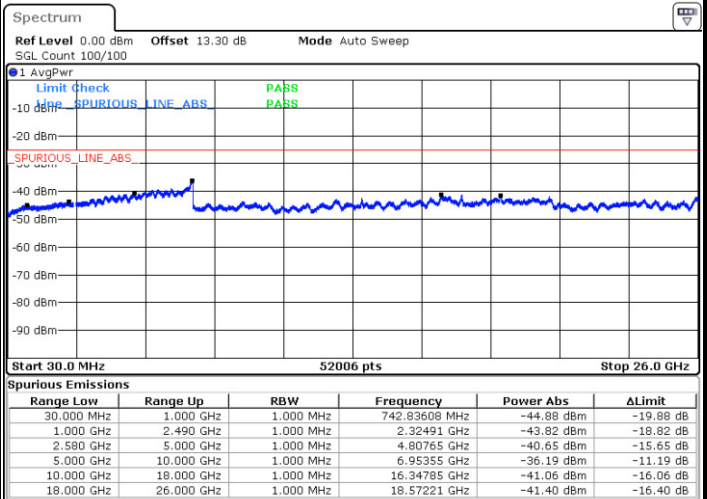
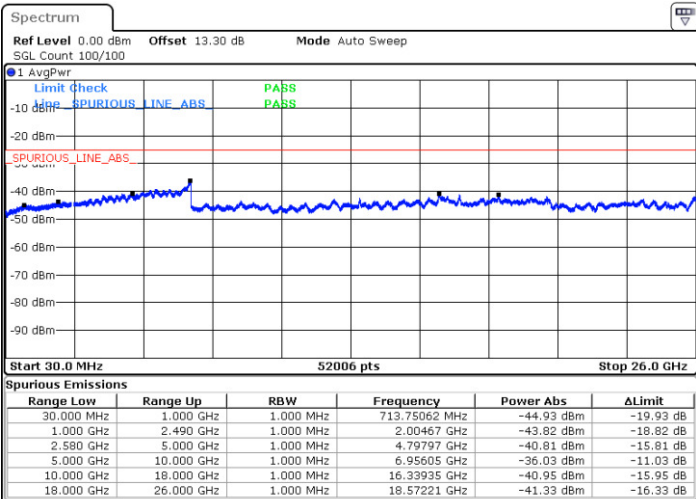


Date: 23.FEB.2018 21:13:06

Date: 23.FEB.2018 21:14:03

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 23.FEB.2018 21:15:46

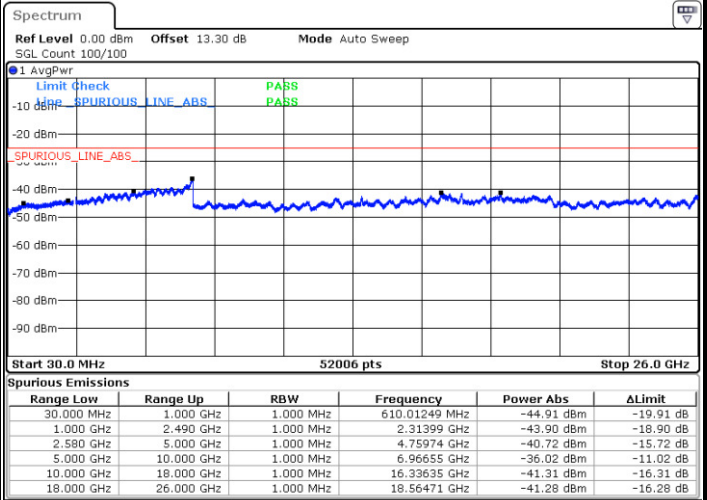
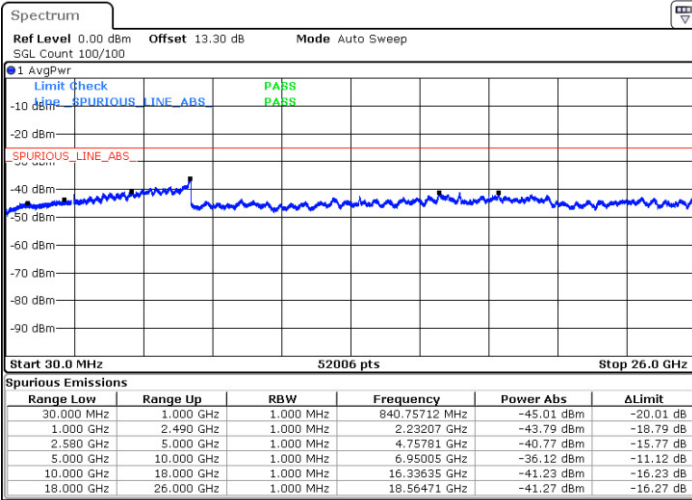
Date: 23.FEB.2018 21:16:44



LTE Band 7 / 15MHz

Highest Channel / QPSK

Highest Channel / 16QAM



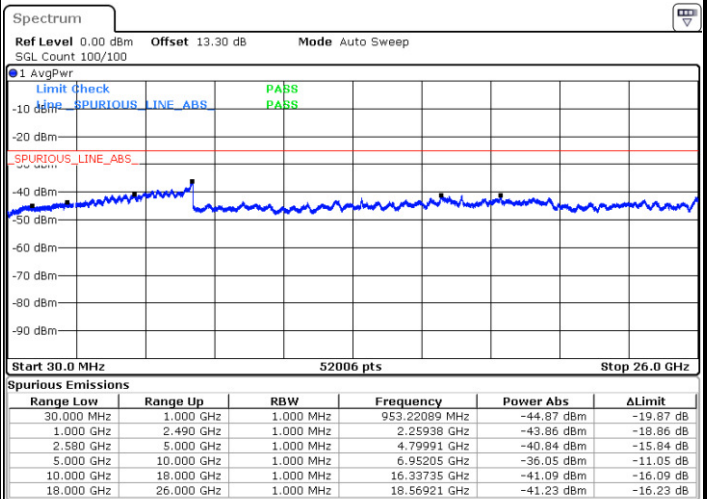
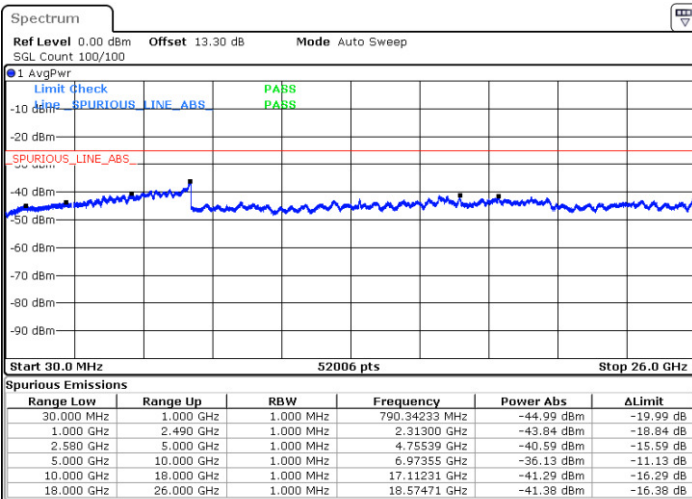
Date: 23.FEB.2018 21:23:04

Date: 23.FEB.2018 21:24:01

LTE Band 7 / 20MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 23.FEB.2018 21:30:22

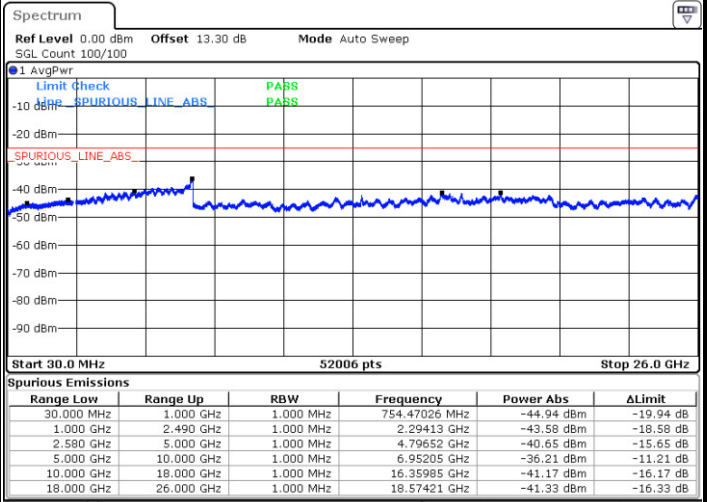
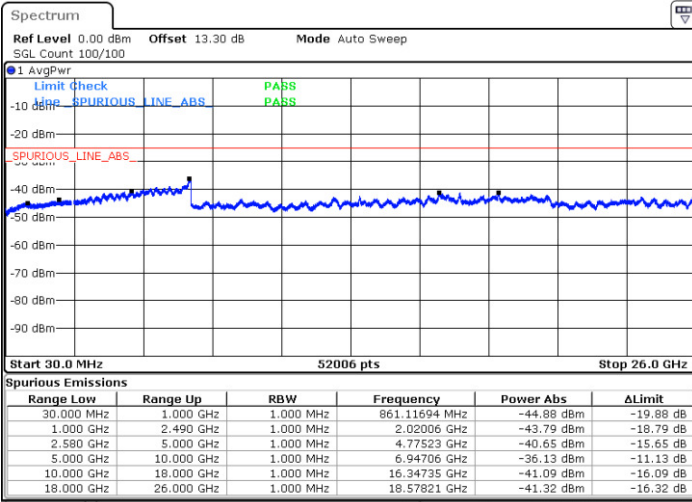
Date: 23.FEB.2018 21:31:20



LTE Band 7 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

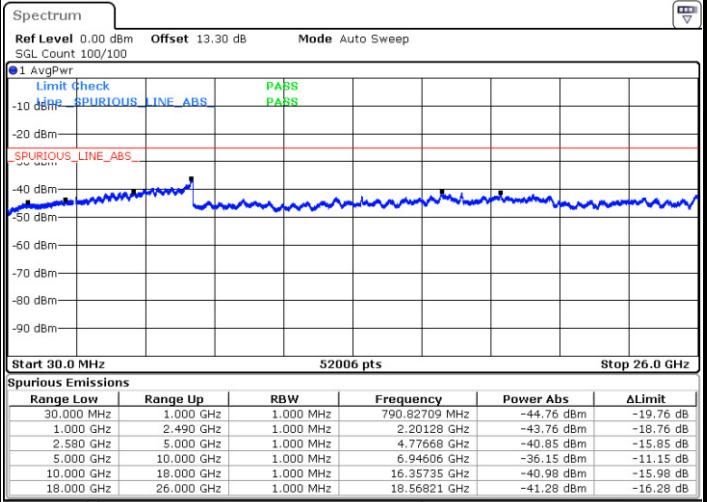
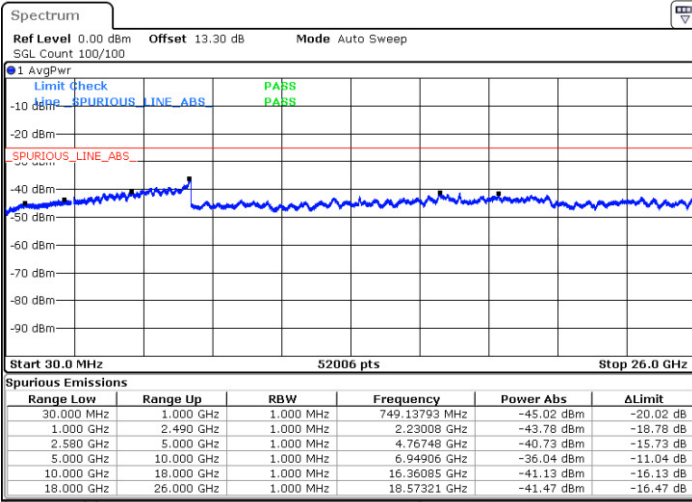


Date: 23.FEB.2018 21:33:03

Date: 23.FEB.2018 21:34:00

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 23.FEB.2018 21:40:21

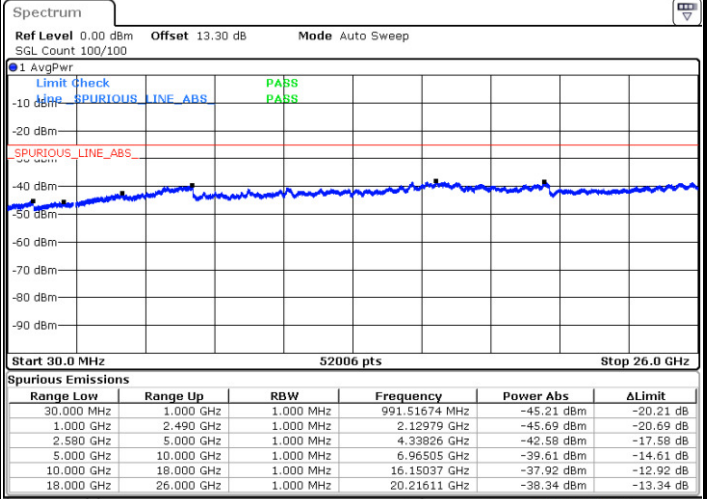
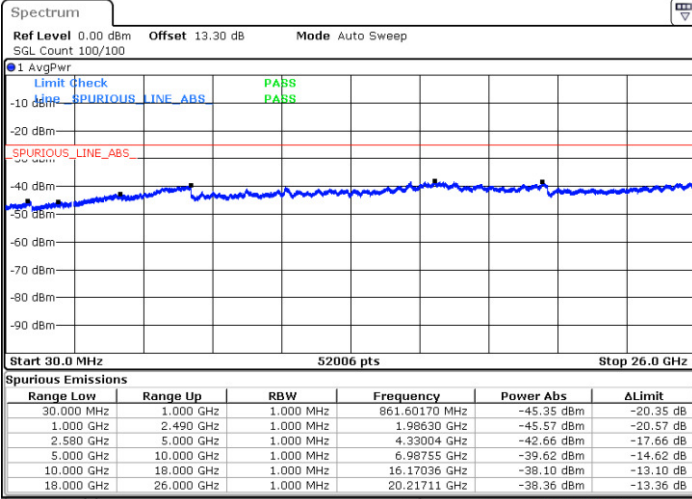
Date: 23.FEB.2018 21:41:16



LTE Band 7 / 5MHz

Lowest Channel / 64QAM

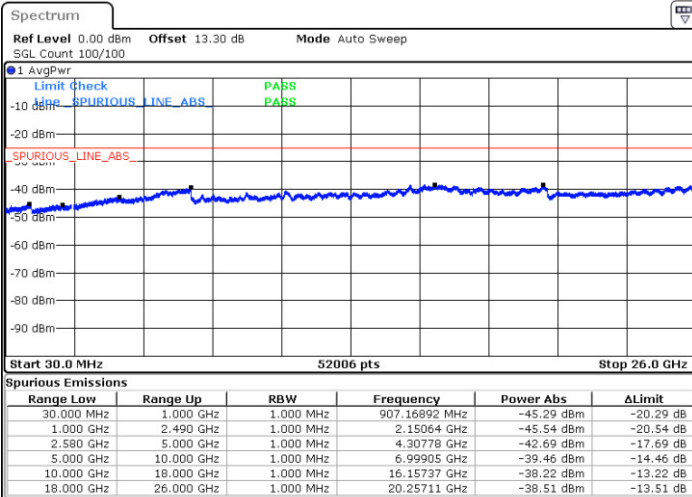
Middle Channel / 64QAM



Date: 26 FEB 2018 21:53:22

Date: 26 FEB 2018 21:54:35

Highest Channel / 64QAM



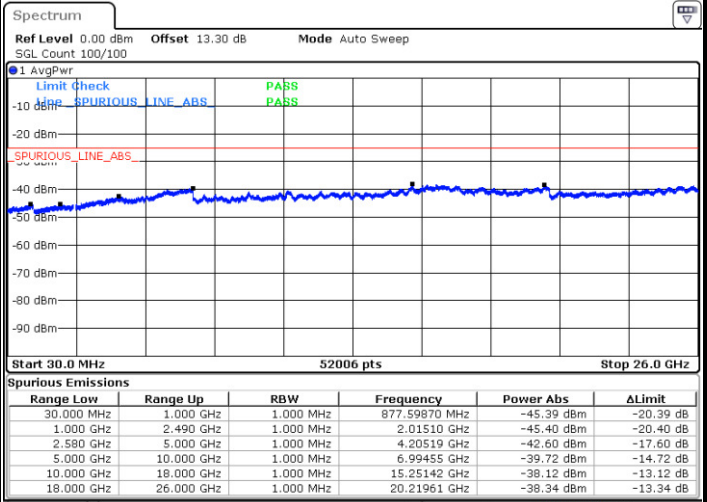
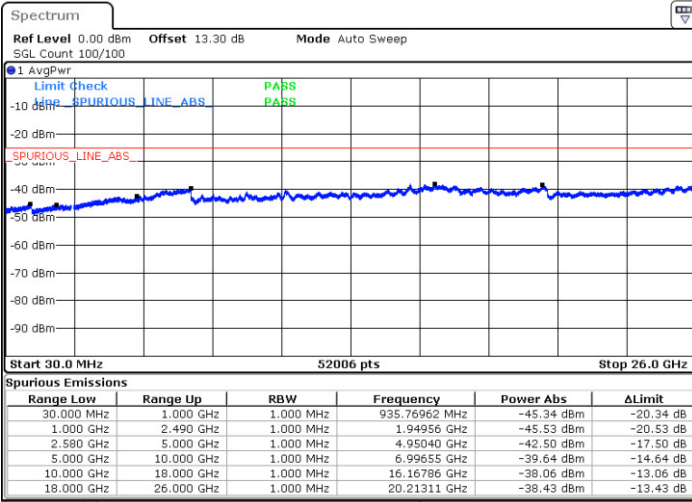
Date: 26 FEB 2018 21:58:02



LTE Band 7 / 10MHz

Lowest Channel / 64QAM

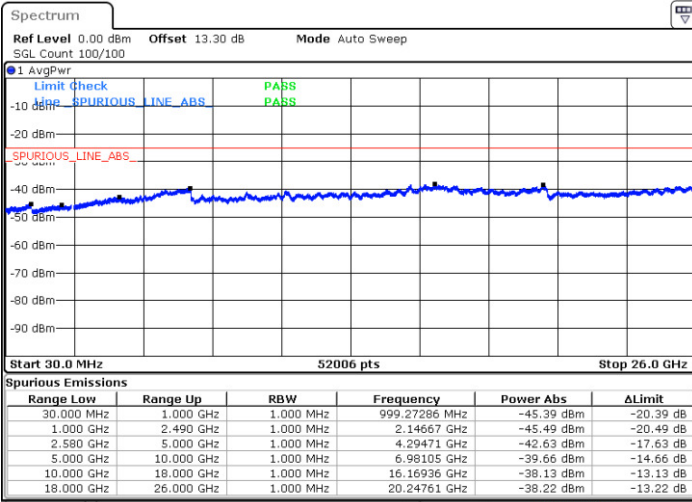
Middle Channel / 64QAM



Date: 26 FEB 2018 22:01:29

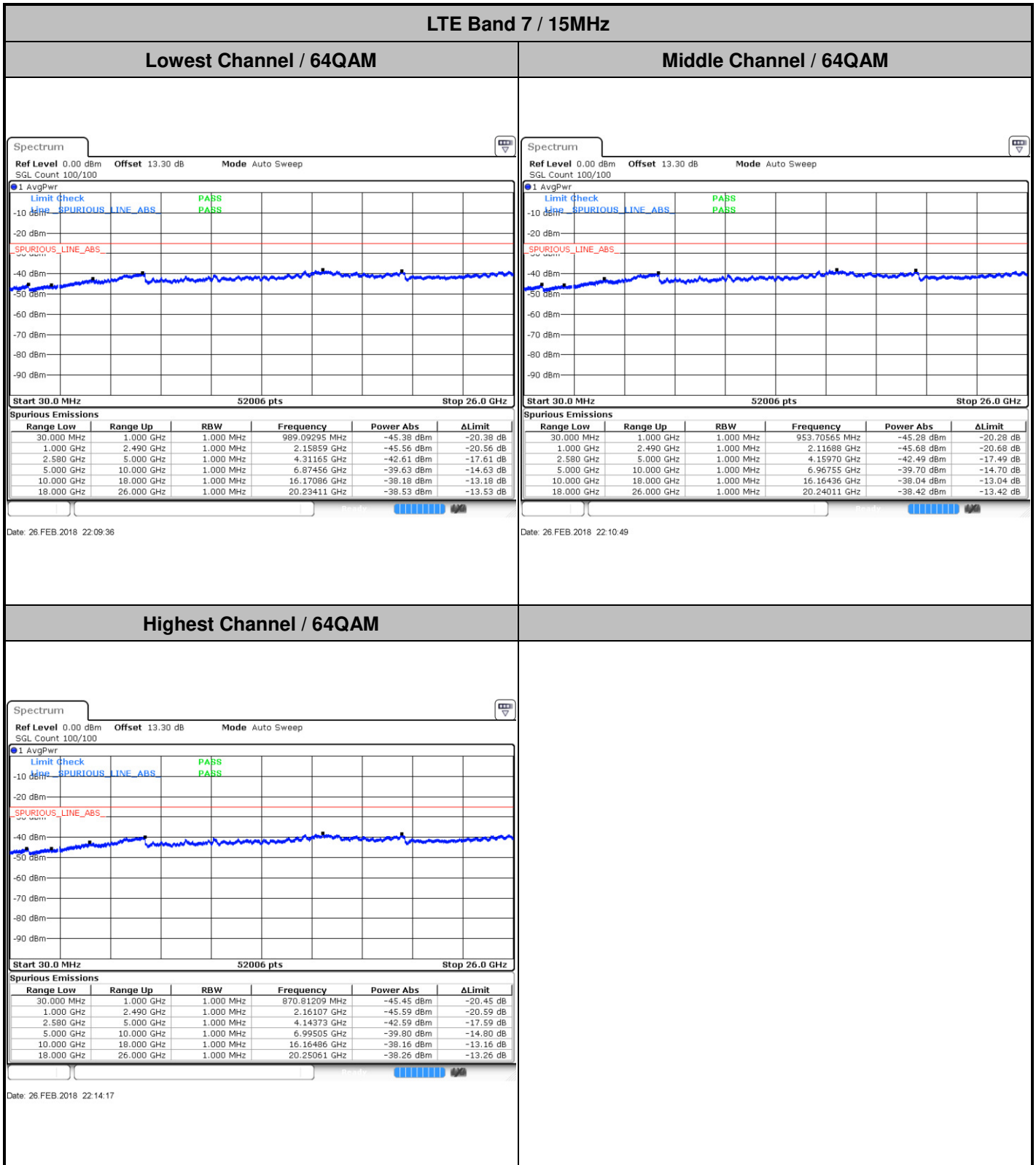
Date: 26 FEB 2018 22:02:42

Highest Channel / 64QAM



Date: 26 FEB 2018 22:06:09



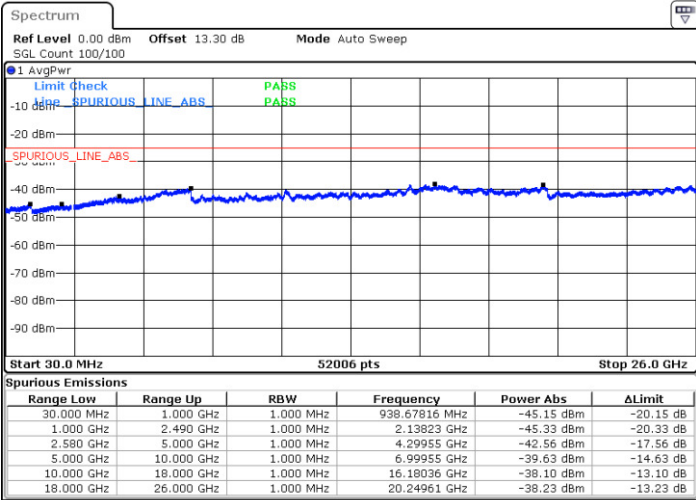




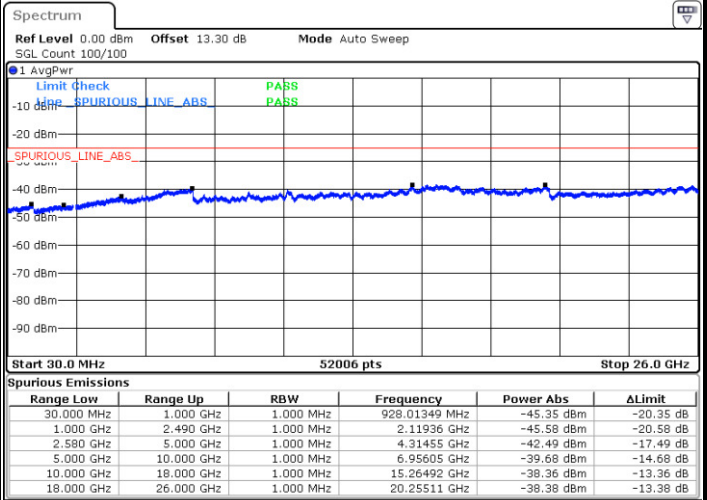
LTE Band 7 / 20MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

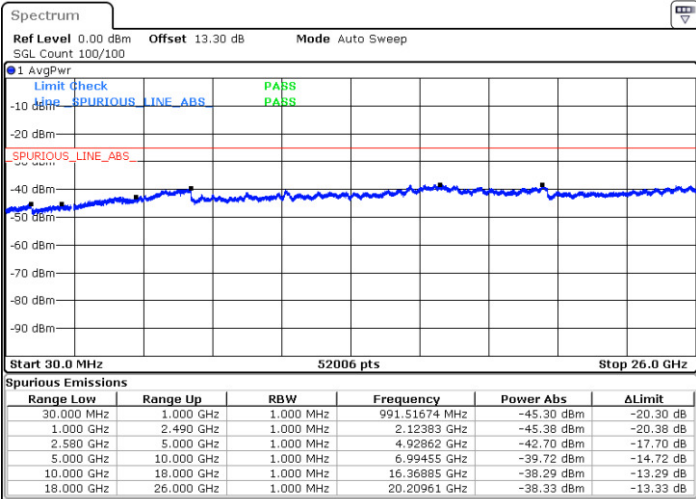


Date: 26 FEB 2018 22:17:46



Date: 26 FEB 2018 22:18:58

Highest Channel / 64QAM



Date: 26 FEB 2018 22:22:26



Frequency Stability

| Test Conditions  |                   | LTE Band 7 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                           | Note 2. |
|                  |                   | Deviation (ppm)                    | Result  |
| 50               | Normal Voltage    | 0.0002                             | PASS    |
| 40               | Normal Voltage    | 0.0002                             |         |
| 30               | Normal Voltage    | 0.0006                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0011                             |         |
| 0                | Normal Voltage    | 0.0026                             |         |
| -10              | Normal Voltage    | 0.0031                             |         |
| -20              | Normal Voltage    | 0.0048                             |         |
| -30              | Normal Voltage    | 0.0033                             |         |
| 20               | Maximum Voltage   | 0.0028                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0036                             |         |

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 41

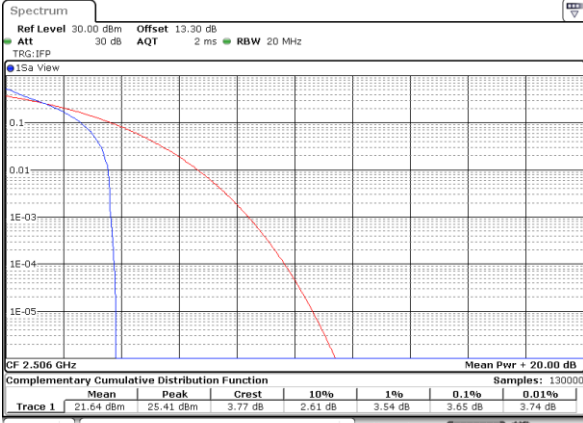
## Peak-to-Average Ratio

| Mode       | LTE Band 41 / 20MHz |         |       |         |             |
|------------|---------------------|---------|-------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 3.65                | 4.72    | 4.46  | 5.83    | PASS        |
| Middle CH  | 4.70                | 5.07    | 5.48  | 6.12    |             |
| Highest CH | 3.91                | 4.96    | 4.96  | 5.94    |             |
| Mode       | LTE Band 41 / 20MHz |         |       |         |             |
| Mod.       | 64QAM               |         |       |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB |       |         | Result      |
| Lowest CH  | 5.28                | 6.41    | -     | -       | PASS        |
| Middle CH  | 6.41                | 6.67    | -     | -       |             |
| Highest CH | 5.51                | 6.43    | -     | -       |             |



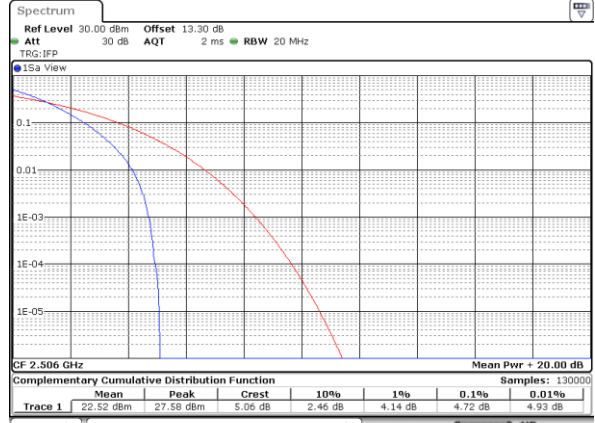
LTE Band 41 / 20MHz / QPSK

Lowest Channel / 1RB



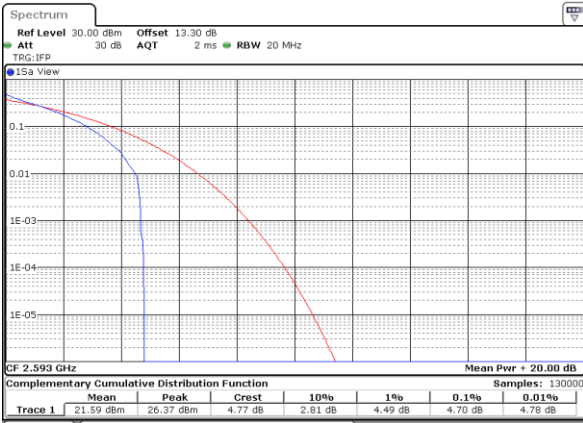
Date: 26 FEB 2018 19:20:01

Lowest Channel / Full RB



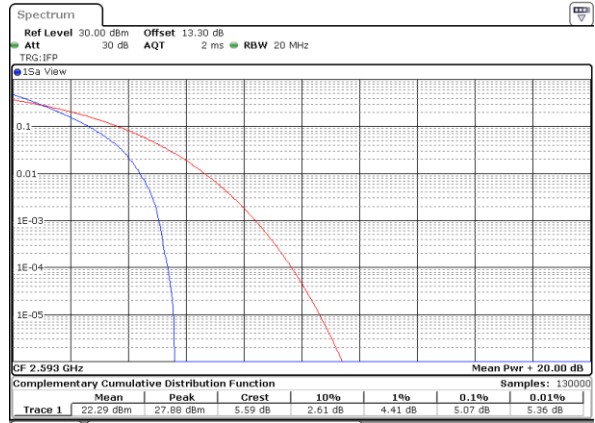
Date: 26 FEB 2018 19:20:15

Middle Channel / 1RB



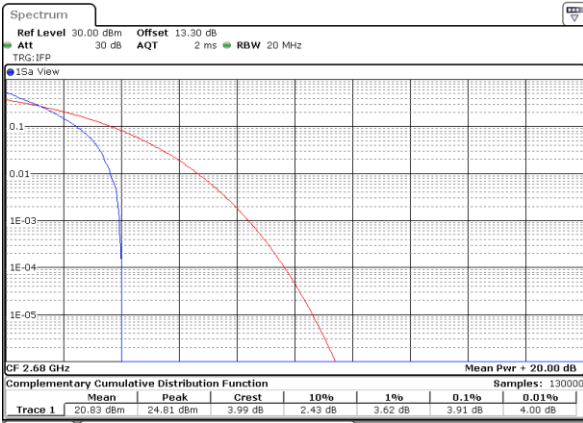
Date: 26 FEB 2018 19:20:29

Middle Channel / Full RB



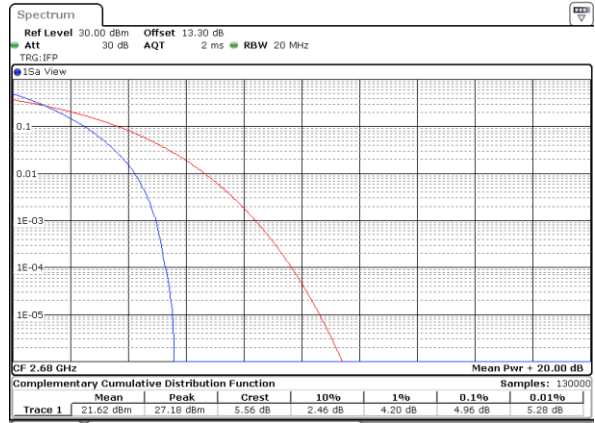
Date: 26 FEB 2018 19:20:42

Highest Channel / 1RB



Date: 26 FEB 2018 19:20:55

Highest Channel / Full RB

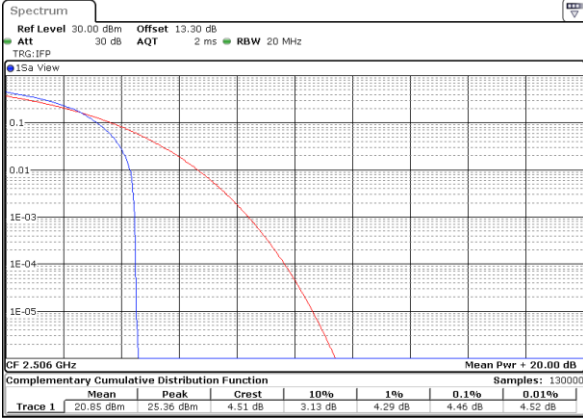


Date: 26 FEB 2018 19:21:10



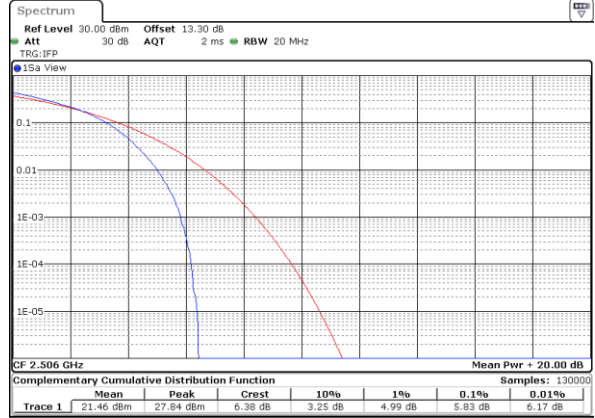
LTE Band 41 / 20MHz / 16QAM

Lowest Channel / 1RB



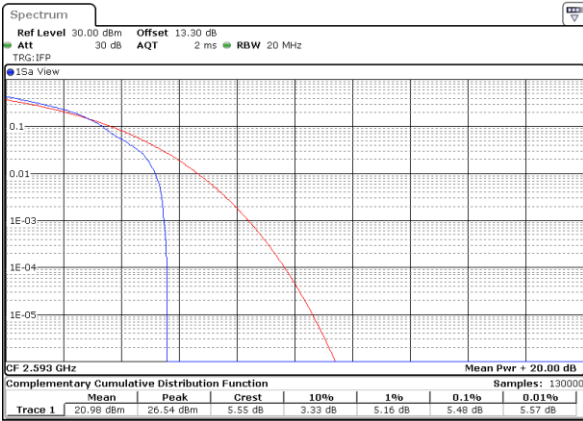
Date: 26 FEB 2018 19:18:04

Lowest Channel / Full RB



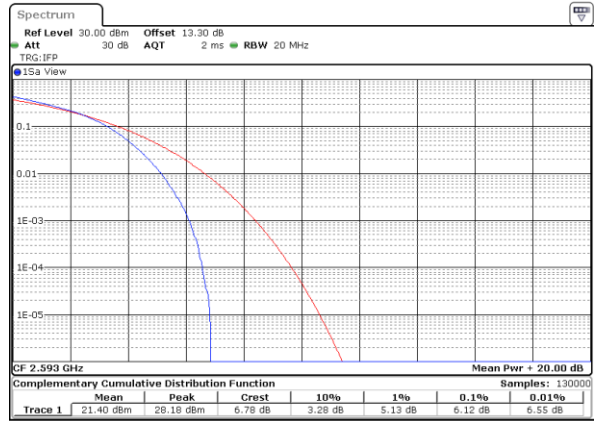
Date: 26 FEB 2018 19:18:18

Middle Channel / 1RB



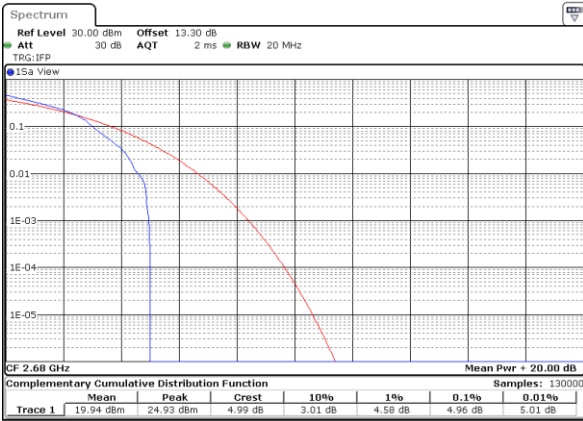
Date: 26 FEB 2018 19:18:32

Middle Channel / Full RB



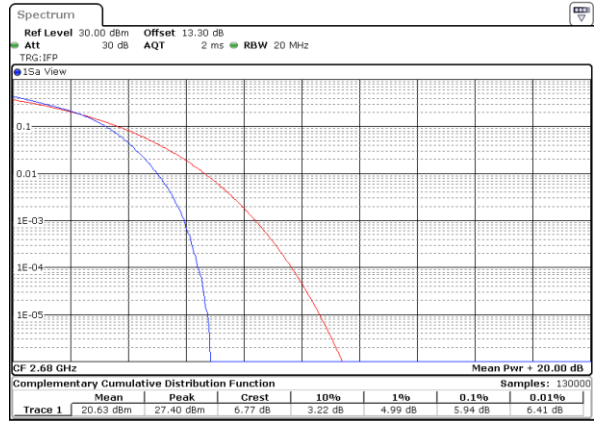
Date: 26 FEB 2018 19:18:49

Highest Channel / 1RB



Date: 26 FEB 2018 19:19:32

Highest Channel / Full RB

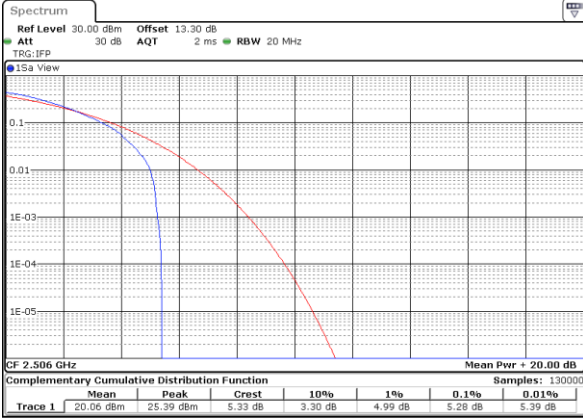


Date: 26 FEB 2018 19:19:45



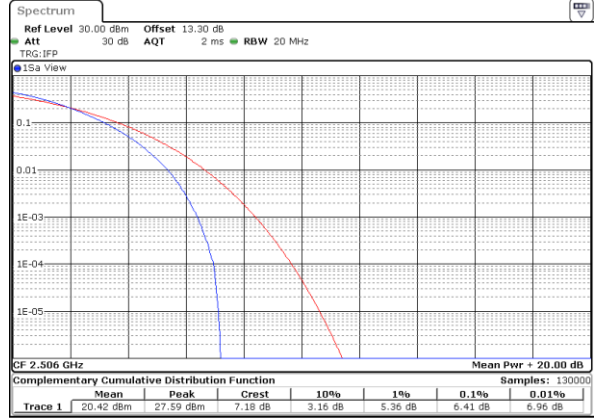
LTE Band 41 / 20MHz / 64QAM

Lowest Channel / 1RB



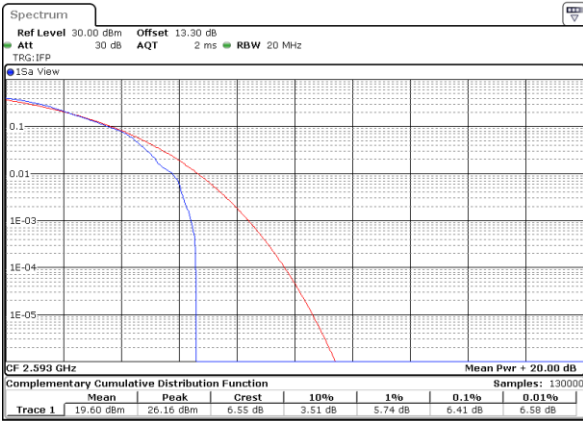
Date: 26 FEB 2018 21:17:22

Lowest Channel / Full RB



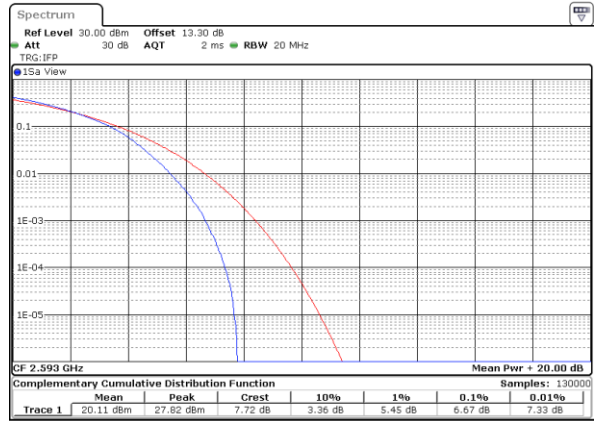
Date: 26 FEB 2018 21:17:36

Middle Channel / 1RB



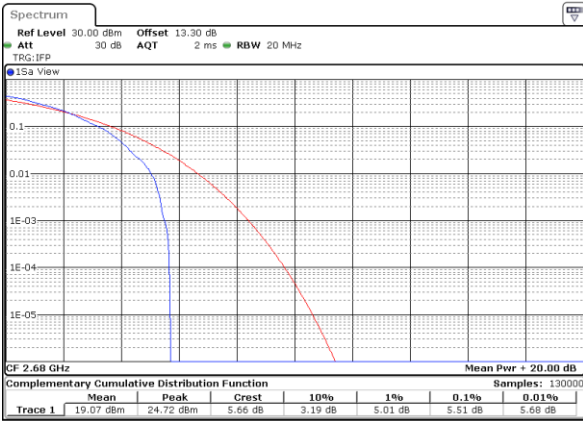
Date: 26 FEB 2018 21:17:54

Middle Channel / Full RB



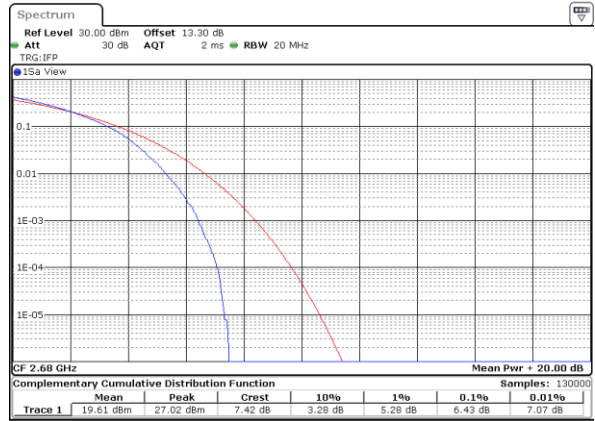
Date: 26 FEB 2018 21:18:07

Highest Channel / 1RB



Date: 26 FEB 2018 21:18:22

Highest Channel / Full RB



Date: 26 FEB 2018 21:18:37



**26dB Bandwidth**

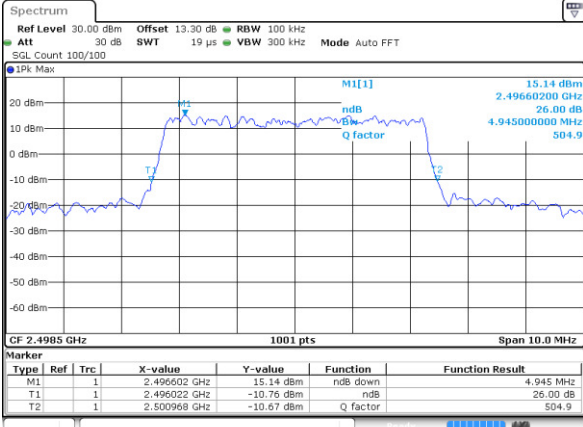
| Mode       | LTE Band 41 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
|------------|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BW         | 1.4MHz                     |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | QPSK                       | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | -                          | -     | -     | -     | 4.95  | 4.88  | 9.85  | 9.61  | 14.15 | 14.21 | 20.02 | 20.26 |
| Middle CH  | -                          | -     | -     | -     | 4.87  | 4.84  | 9.63  | 9.65  | 14.15 | 14.45 | 19.98 | 20.14 |
| Highest CH | -                          | -     | -     | -     | 4.93  | 4.70  | 9.77  | 9.63  | 14.48 | 14.42 | 20.02 | 20.14 |
| Mode       | LTE Band 41 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                     |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                      |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | -                          | -     | -     | -     | 4.74  | -     | 9.71  | -     | 14.27 | -     | 20.06 | -     |
| Middle CH  | -                          | -     | -     | -     | 4.88  | -     | 9.81  | -     | 14.15 | -     | 19.98 | -     |
| Highest CH | -                          | -     | -     | -     | 4.86  | -     | 9.75  | -     | 14.24 | -     | 20.10 | -     |





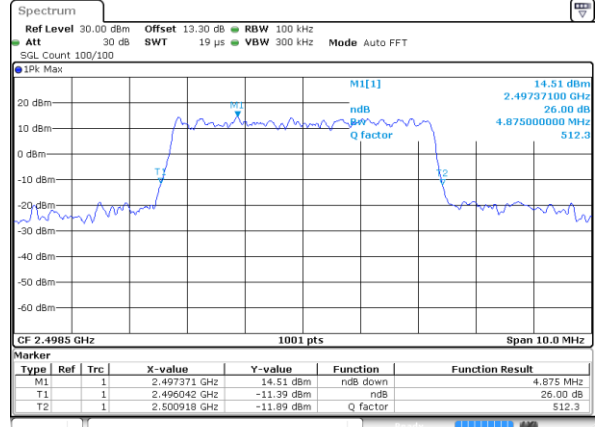
LTE Band 41

Lowest Channel / 5MHz / QPSK



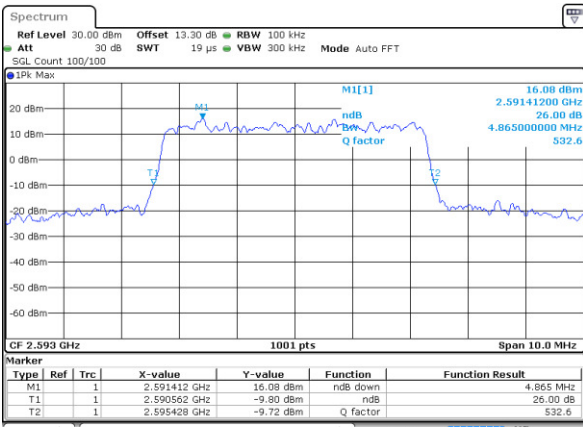
Date: 26 FEB 2018 19:10:12

Lowest Channel / 5MHz / 16QAM



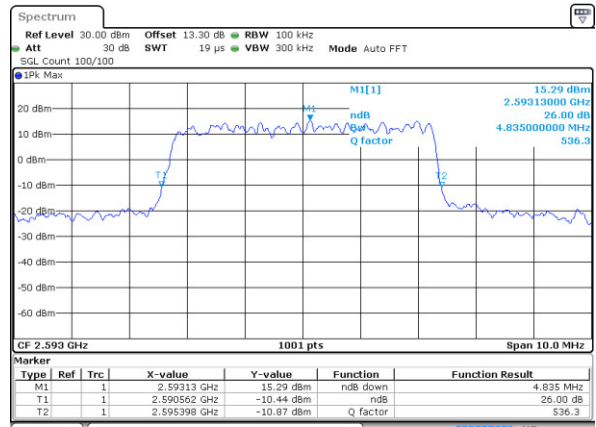
Date: 26 FEB 2018 19:10:22

Middle Channel / 5MHz / QPSK



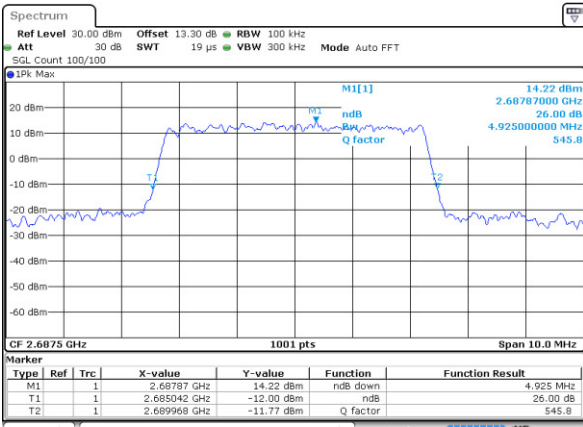
Date: 26 FEB 2018 19:10:51

Middle Channel / 5MHz / 16QAM



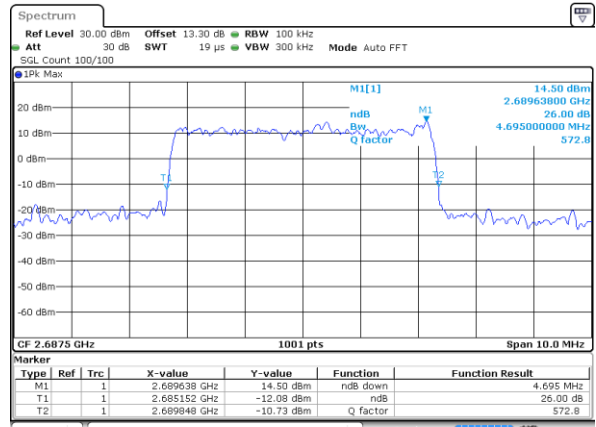
Date: 26 FEB 2018 19:11:01

Highest Channel / 5MHz / QPSK



Date: 26 FEB 2018 19:11:31

Highest Channel / 5MHz / 16QAM

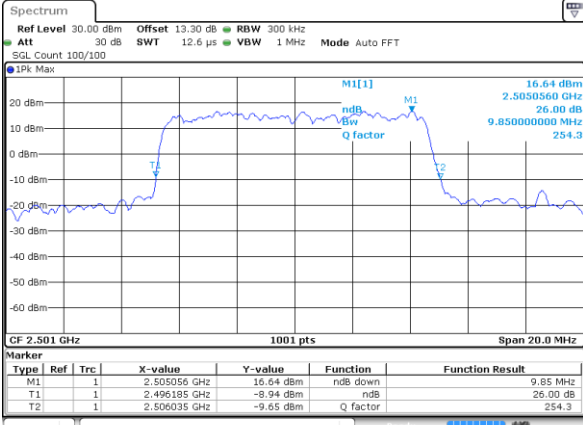


Date: 26 FEB 2018 19:11:40



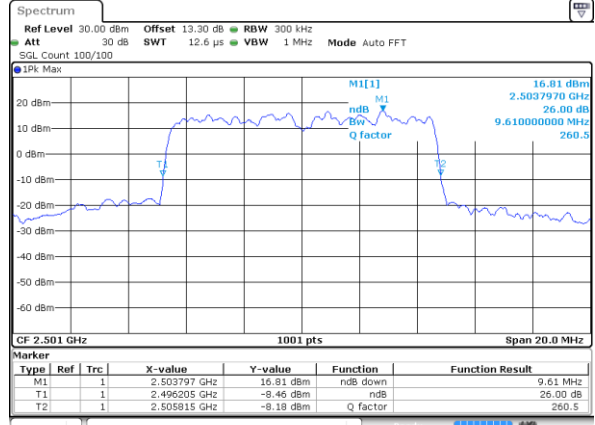
LTE Band 41

Lowest Channel / 10MHz / QPSK



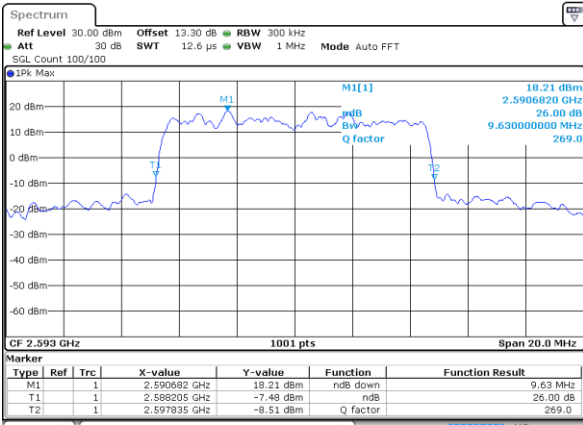
Date: 26 FEB 2018 19:12:10

Lowest Channel / 10MHz / 16QAM



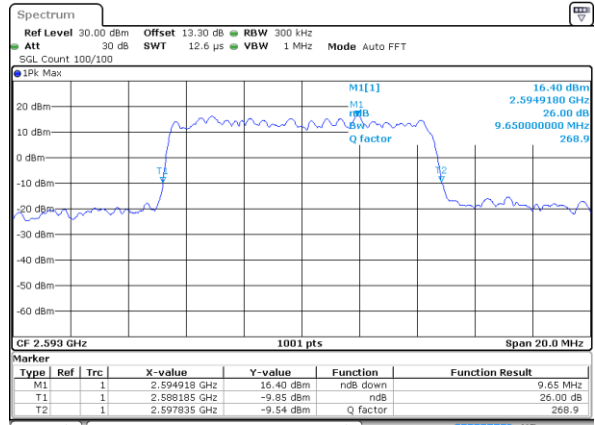
Date: 26 FEB 2018 19:12:20

Middle Channel / 10MHz / QPSK



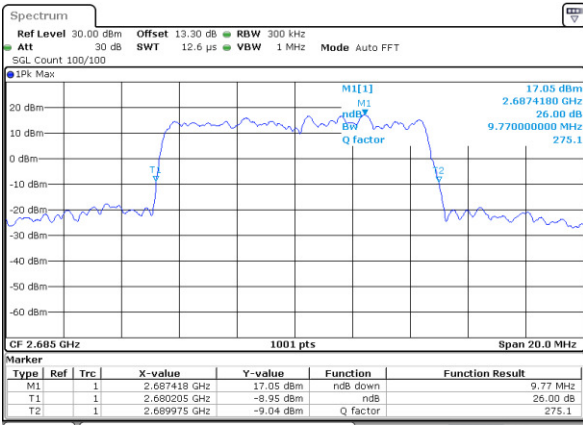
Date: 26 FEB 2018 19:12:49

Middle Channel / 10MHz / 16QAM



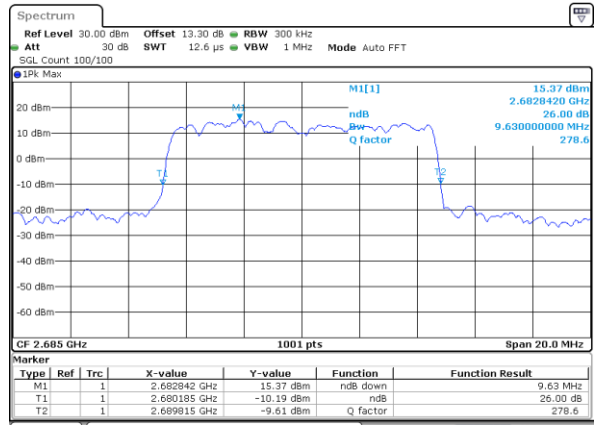
Date: 26 FEB 2018 19:12:59

Highest Channel / 10MHz / QPSK



Date: 26 FEB 2018 19:13:29

Highest Channel / 10MHz / 16QAM

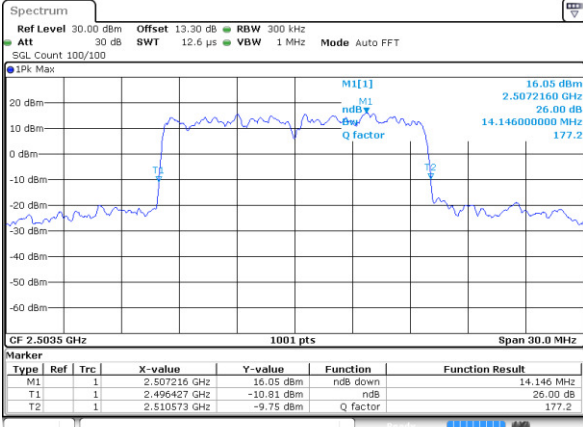


Date: 26 FEB 2018 19:13:38



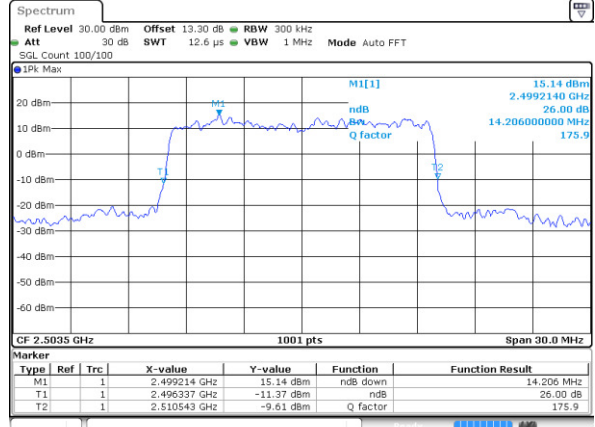
LTE Band 41

Lowest Channel / 15MHz / QPSK



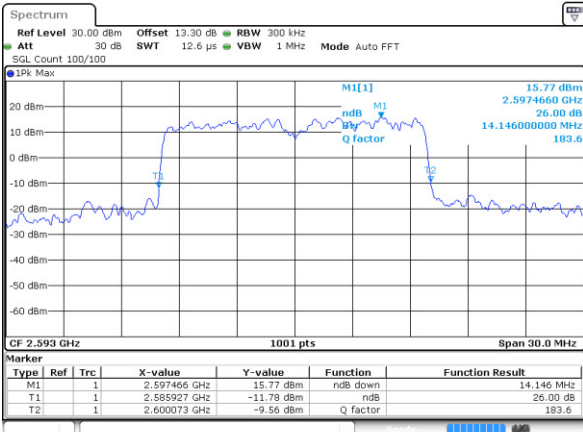
Date: 26 FEB 2018 19:14:08

Lowest Channel / 15MHz / 16QAM



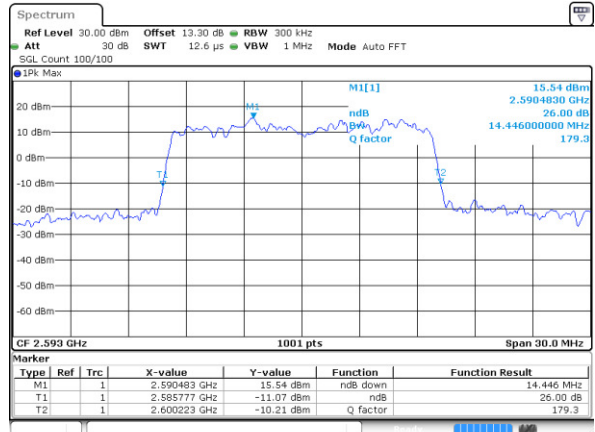
Date: 26 FEB 2018 19:14:18

Middle Channel / 15MHz / QPSK



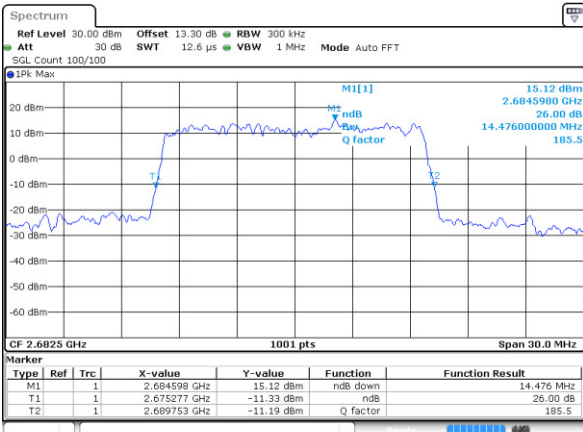
Date: 26 FEB 2018 19:14:47

Middle Channel / 15MHz / 16QAM



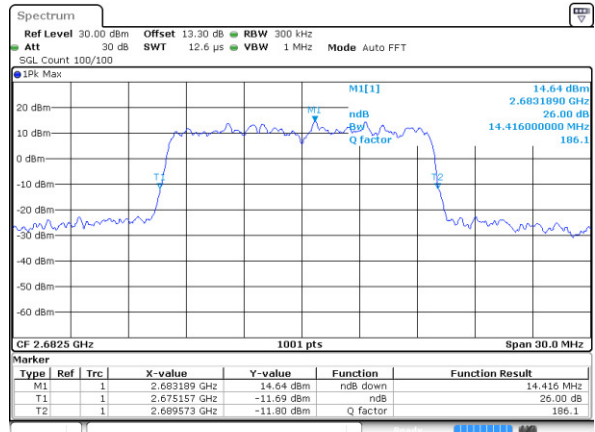
Date: 26 FEB 2018 19:14:57

Highest Channel / 15MHz / QPSK



Date: 26 FEB 2018 19:15:27

Highest Channel / 15MHz / 16QAM

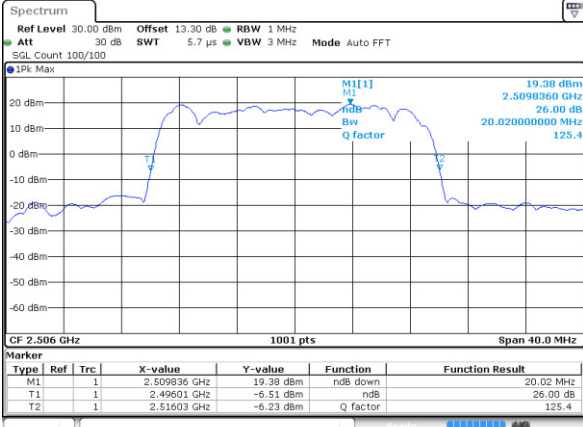


Date: 26 FEB 2018 19:15:37



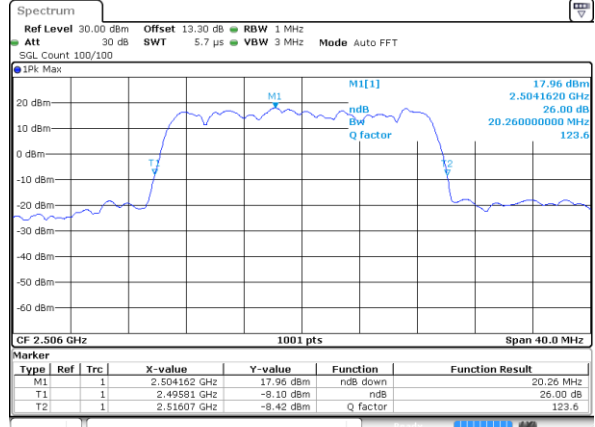
LTE Band 41

Lowest Channel / 20MHz / QPSK



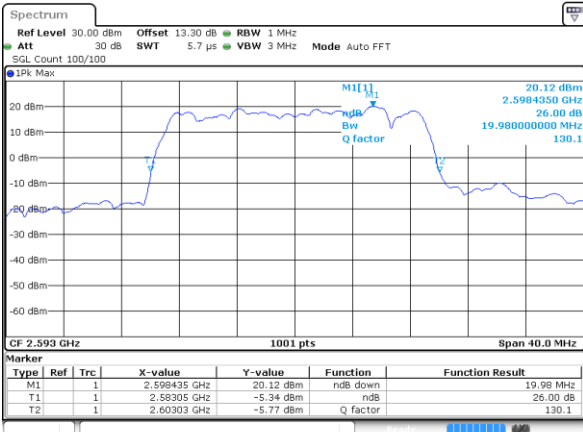
Date: 26 FEB 2018 19:16:06

Lowest Channel / 20MHz / 16QAM



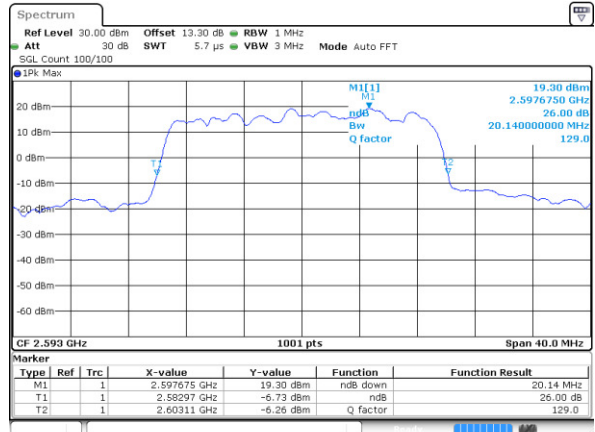
Date: 26 FEB 2018 19:16:16

Middle Channel / 20MHz / QPSK



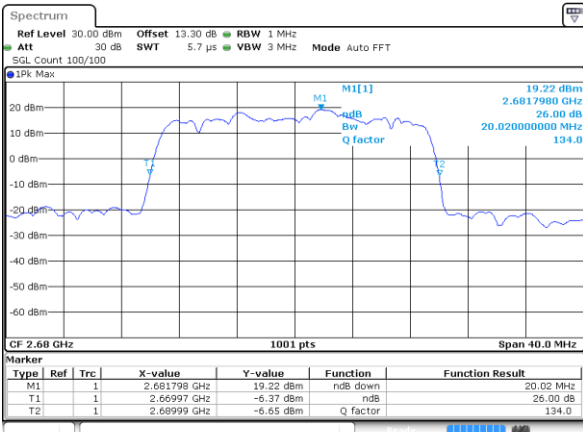
Date: 26 FEB 2018 19:16:46

Middle Channel / 20MHz / 16QAM



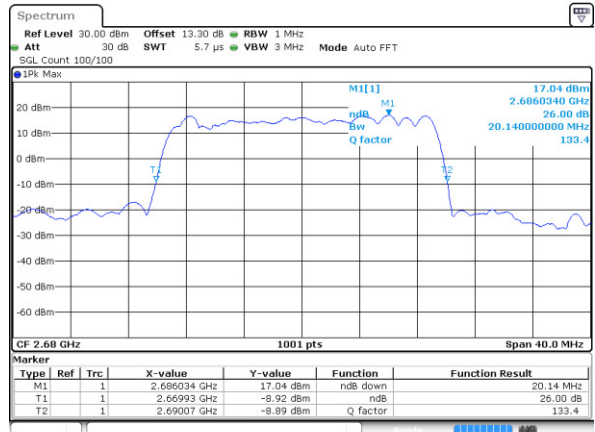
Date: 26 FEB 2018 19:16:55

Highest Channel / 20MHz / QPSK



Date: 26 FEB 2018 19:17:25

Highest Channel / 20MHz / 16QAM

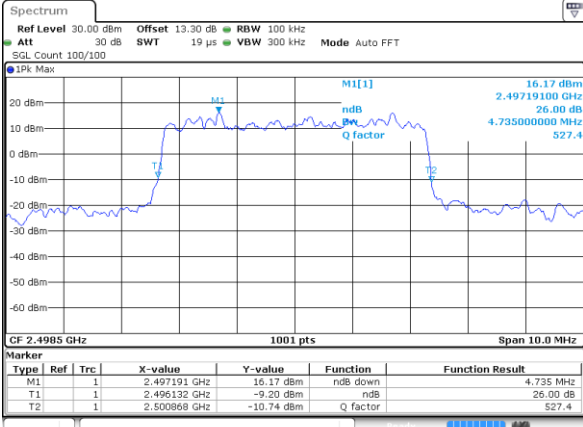


Date: 26 FEB 2018 19:17:35



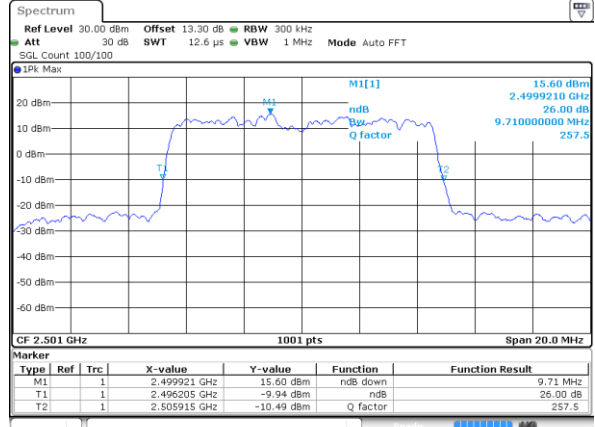
LTE Band 41

Lowest Channel / 5MHz / QPSK



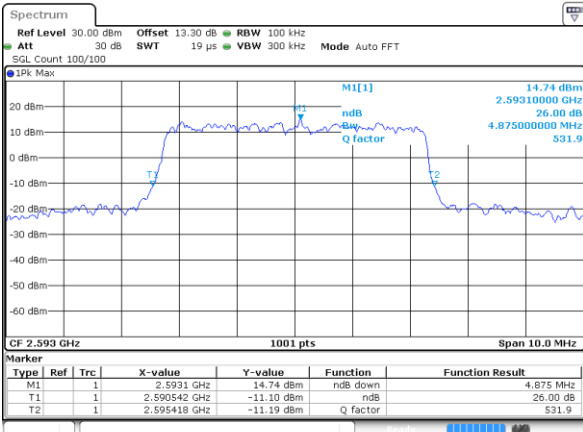
Date: 26 FEB 2018 21:12:19

Lowest Channel / 10MHz / 16QAM



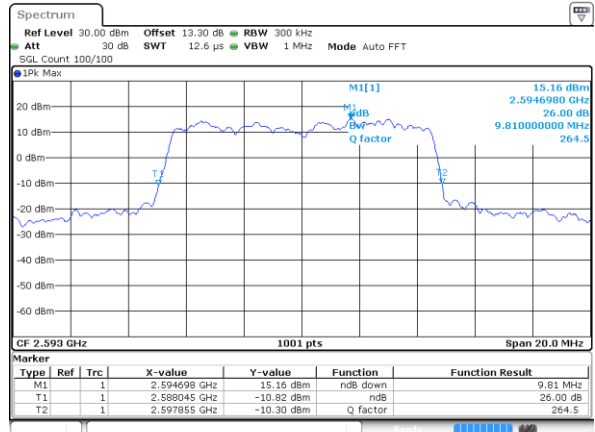
Date: 26 FEB 2018 21:13:17

Middle Channel / 5MHz / QPSK



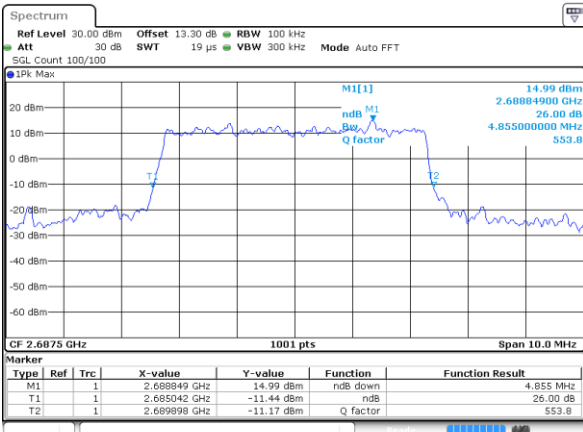
Date: 26 FEB 2018 21:12:38

Middle Channel / 10MHz / 16QAM



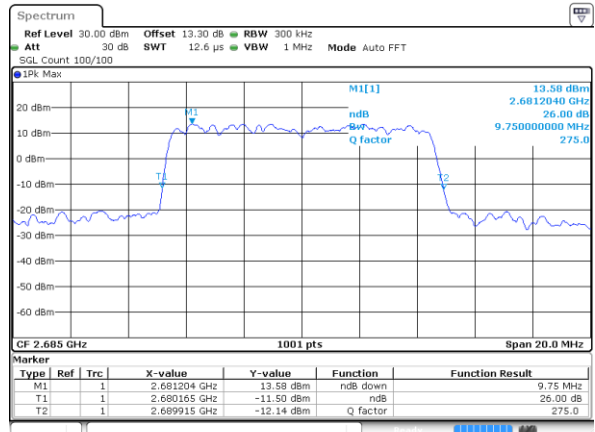
Date: 26 FEB 2018 21:13:37

Highest Channel / 5MHz / QPSK



Date: 26 FEB 2018 21:12:58

Highest Channel / 10MHz / 16QAM

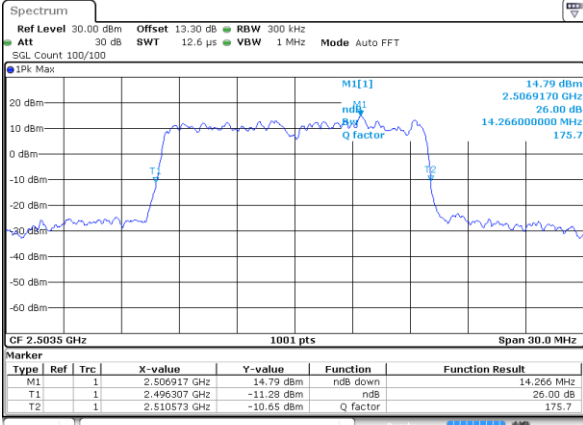


Date: 26 FEB 2018 21:13:56



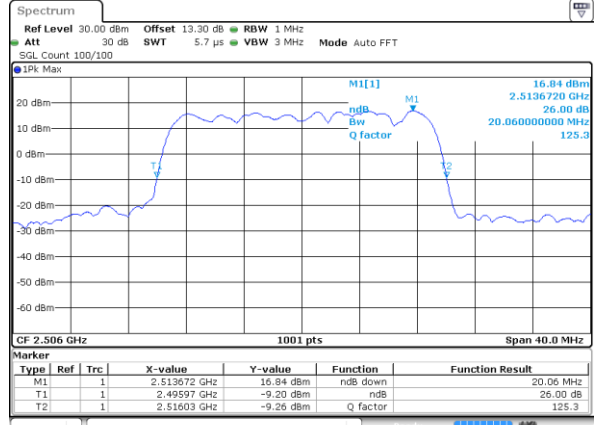
LTE Band 41

Lowest Channel / 15MHz / QPSK



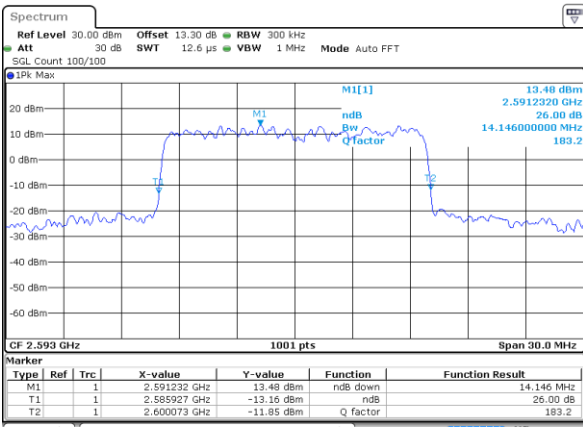
Date: 26 FEB 2018 21:14:16

Lowest Channel / 20MHz / 16QAM



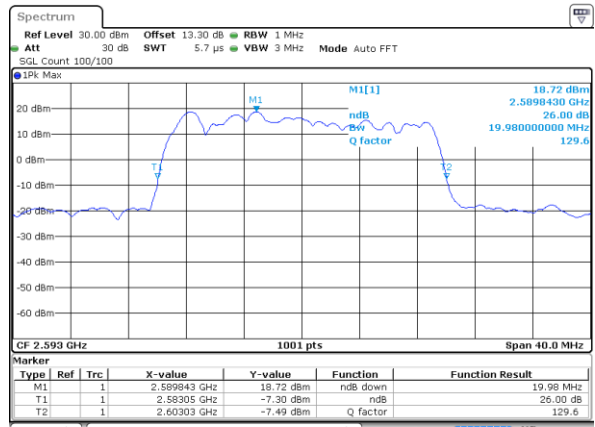
Date: 26 FEB 2018 21:15:15

Middle Channel / 15MHz / QPSK



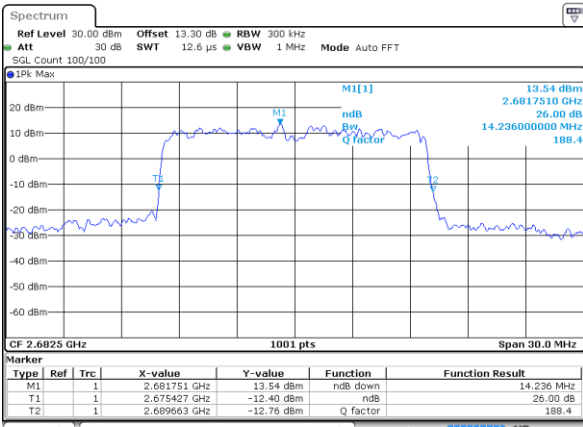
Date: 26 FEB 2018 21:14:35

Middle Channel / 20MHz / 16QAM



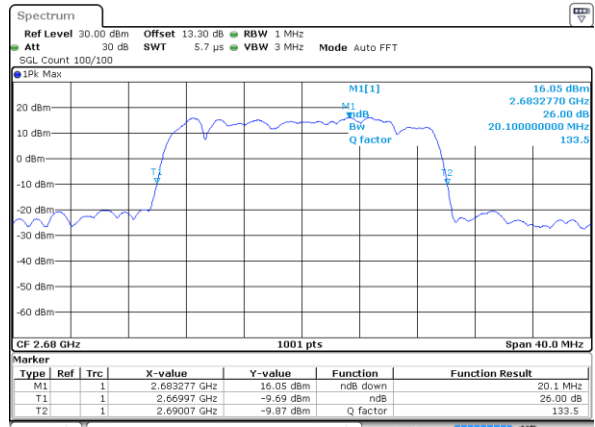
Date: 26 FEB 2018 21:15:34

Highest Channel / 15MHz / QPSK



Date: 26 FEB 2018 21:14:55

Highest Channel / 20MHz / 16QAM



Date: 26 FEB 2018 21:15:54



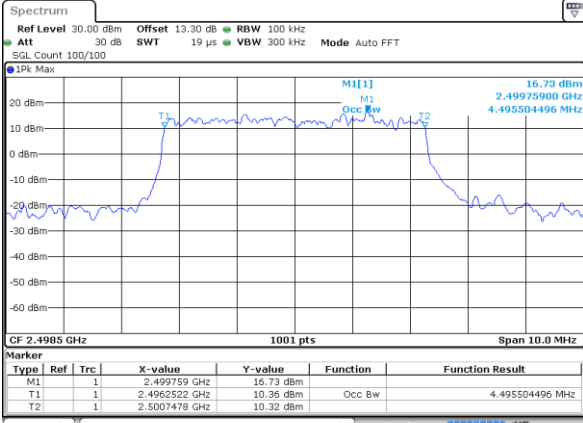
**Occupied Bandwidth**

| Mode       | LTE Band 41 : 99%OBW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
|------------|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | QPSK                      | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | -                         | -     | -     | -     | 4.50  | 4.49  | 8.97  | 8.93  | 13.40 | 13.40 | 18.26 | 18.30 |
| Middle CH  | -                         | -     | -     | -     | 4.48  | 4.52  | 9.03  | 9.03  | 13.37 | 13.37 | 18.30 | 18.38 |
| Highest CH | -                         | -     | -     | -     | 4.53  | 4.51  | 9.07  | 9.03  | 13.40 | 13.37 | 18.42 | 18.38 |
| Mode       | LTE Band 41 : 99%OBW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                     |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | -                         | -     | -     | -     | 4.49  | -     | 8.99  | -     | 13.46 | -     | 18.26 | -     |
| Middle CH  | -                         | -     | -     | -     | 4.51  | -     | 9.01  | -     | 13.40 | -     | 18.38 | -     |
| Highest CH | -                         | -     | -     | -     | 4.51  | -     | 9.01  | -     | 13.40 | -     | 18.34 | -     |



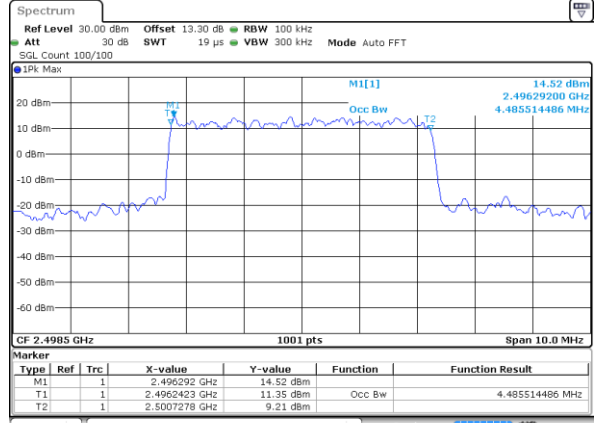
LTE Band 41

Lowest Channel / 5MHz / QPSK



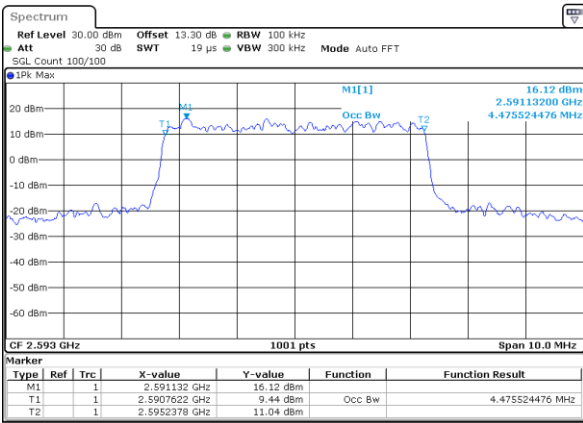
Date: 26 FEB 2018 19:09:52

Lowest Channel / 5MHz / 16QAM



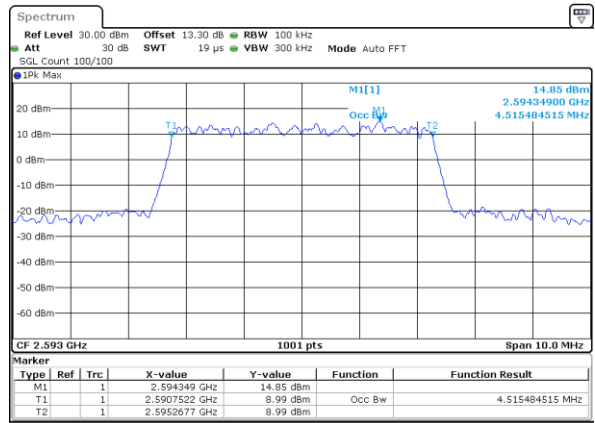
Date: 26 FEB 2018 19:10:02

Middle Channel / 5MHz / QPSK



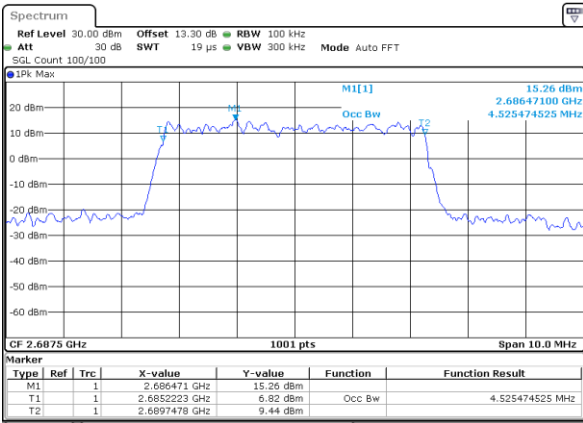
Date: 26 FEB 2018 19:10:32

Middle Channel / 5MHz / 16QAM



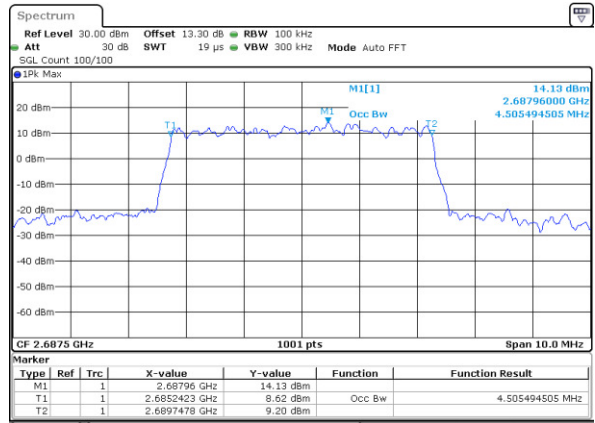
Date: 26 FEB 2018 19:10:41

Highest Channel / 5MHz / QPSK



Date: 26 FEB 2018 19:11:11

Highest Channel / 5MHz / 16QAM



Date: 26 FEB 2018 19:11:21