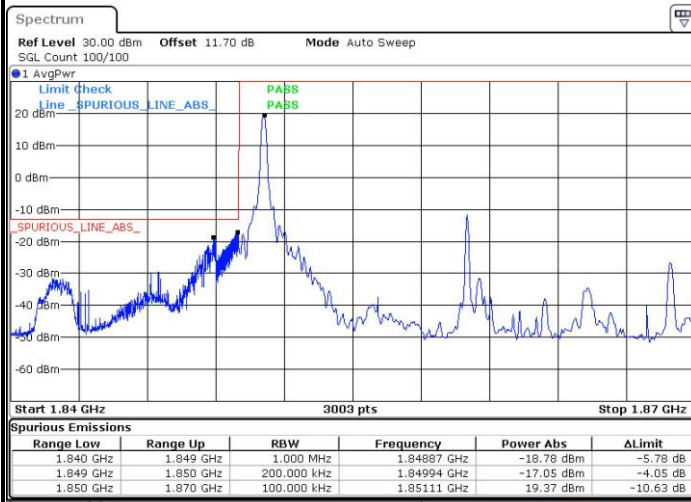




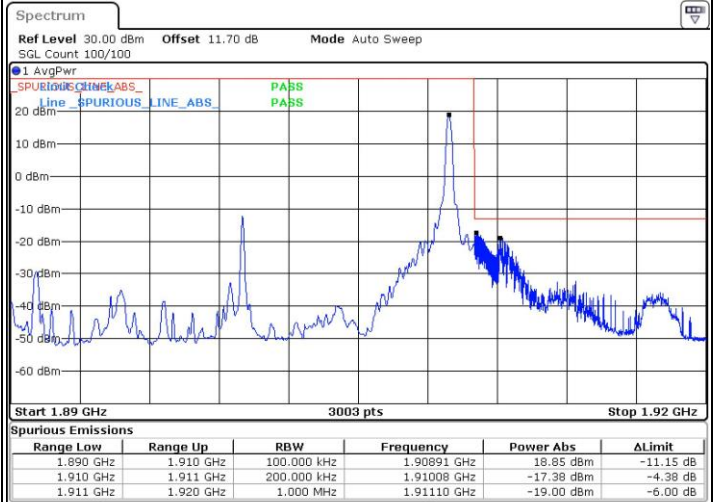
## LTE Band 2 / 20MHz / 16QAM

## Lowest Band Edge / 1 RB



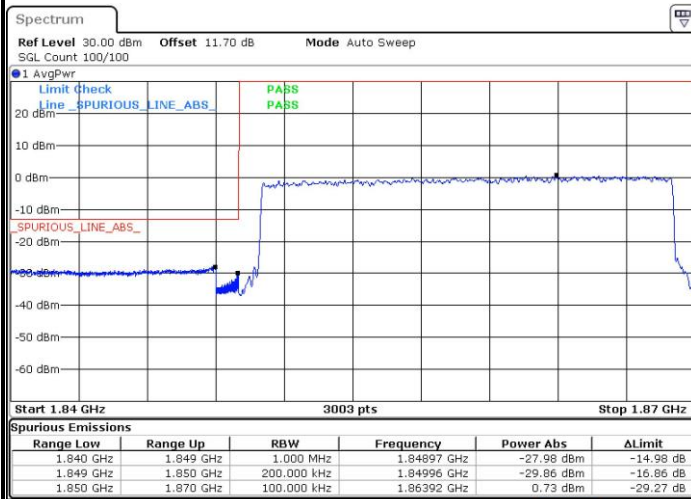
Date: 13 JUL 2018 00:16:12

## Highest Band Edge / 1 RB



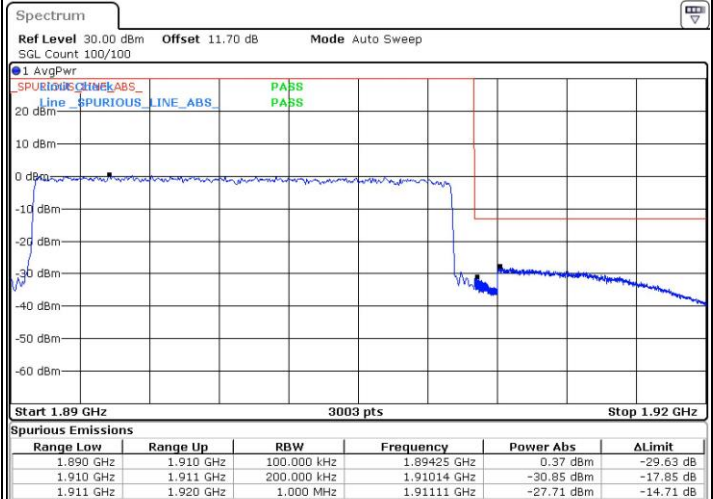
Date: 13 JUL 2018 00:27:05

## Lowest Band Edge / Full RB



Date: 13 JUL 2018 00:18:32

## Highest Band Edge / Full RB



Date: 13 JUL 2018 00:29:25

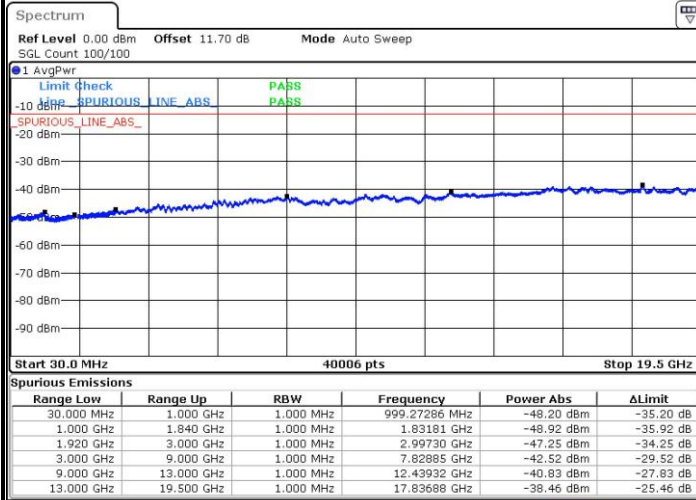


## **Conducted Spurious Emission**



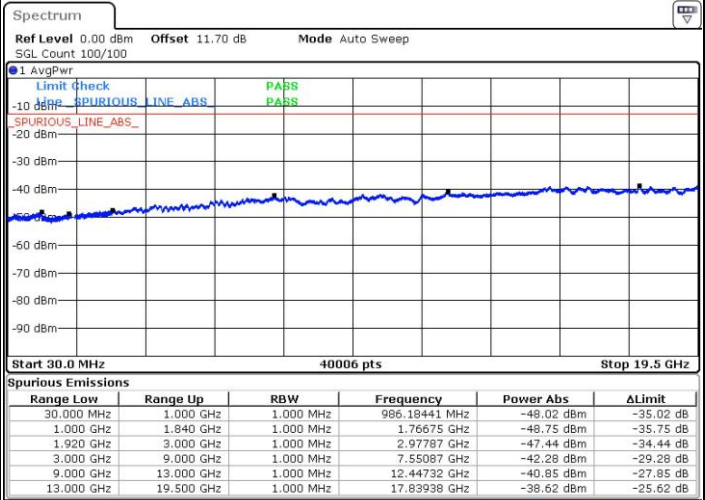
## LTE Band 2 / 1.4MHz

## Lowest Channel / QPSK



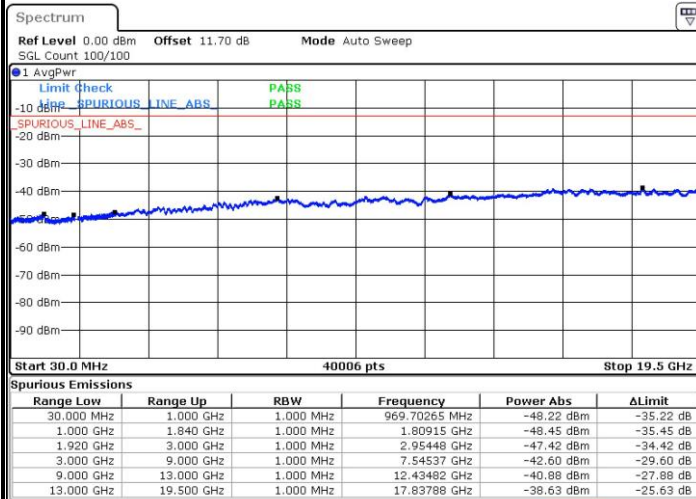
Date: 13 JUL 2018 00:50:26

## Lowest Channel / 16QAM



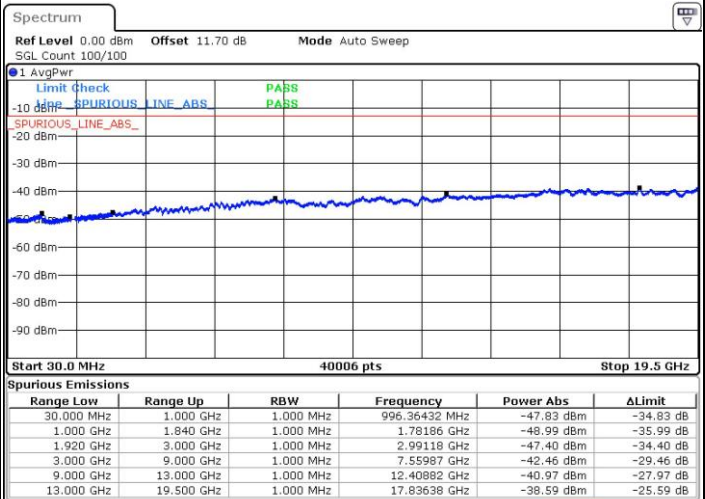
Date: 13 JUL 2018 00:51:37

## Middle Channel / QPSK



Date: 13 JUL 2018 00:53:33

## Middle Channel / 16QAM

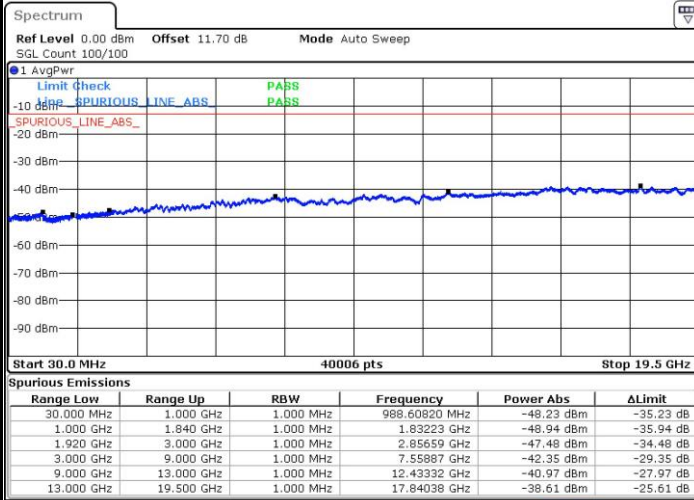


Date: 13 JUL 2018 00:54:43



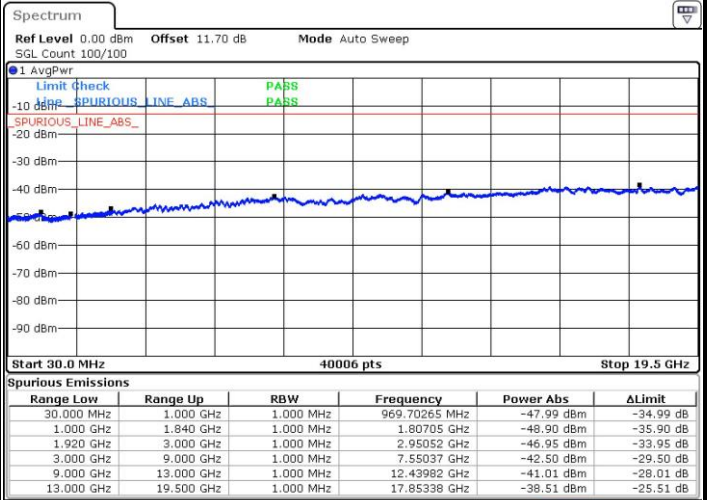
## LTE Band 2 / 1.4MHz

## Highest Channel / QPSK



Date: 13 JUL 2018 01:01:20

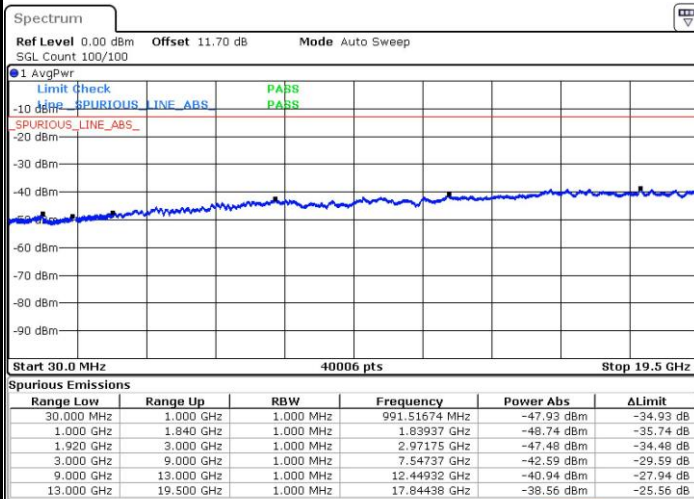
## Highest Channel / 16QAM



Date: 13 JUL 2018 01:02:31

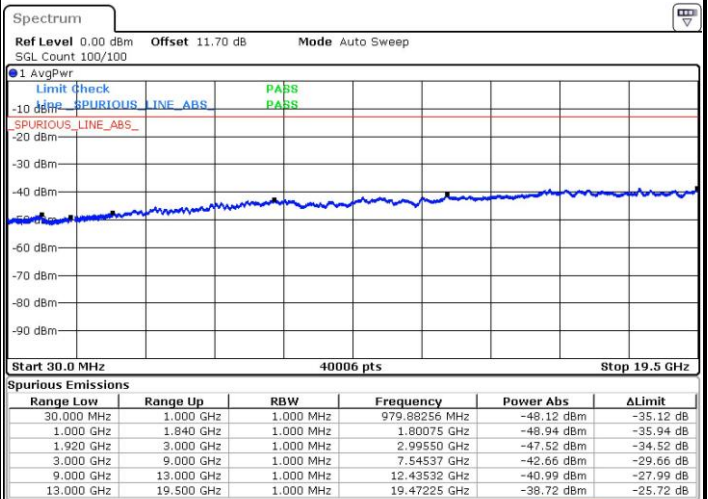
## LTE Band 2 / 3MHz

## Lowest Channel / QPSK



Date: 12 JUL 2018 20:41:41

## Lowest Channel / 16QAM

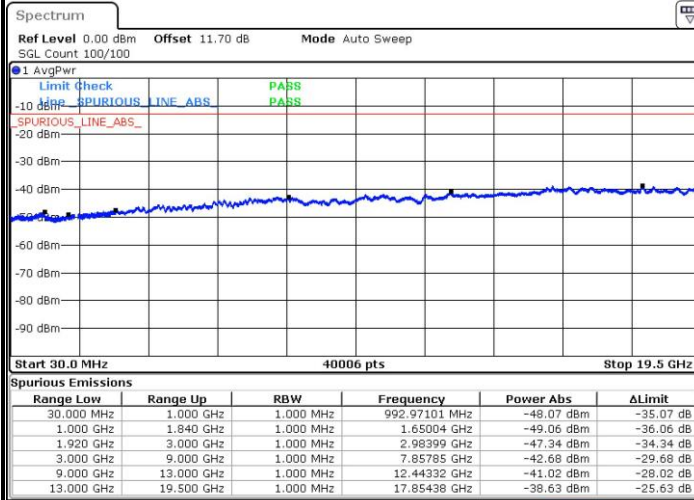


Date: 12 JUL 2018 20:42:51



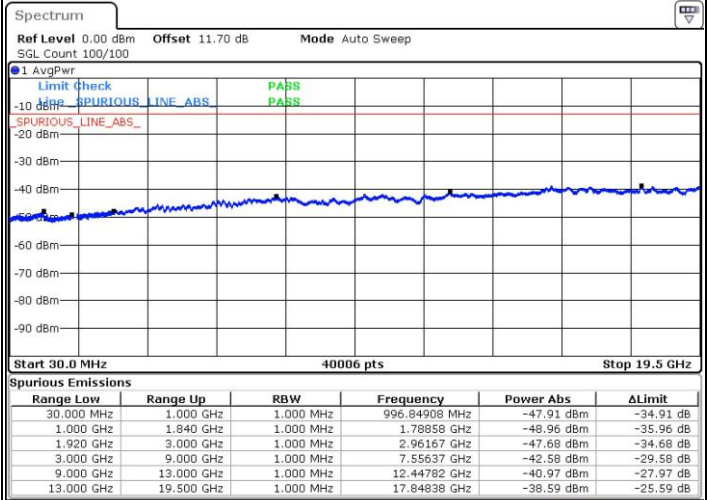
## LTE Band 2 / 3MHz

## Middle Channel / QPSK



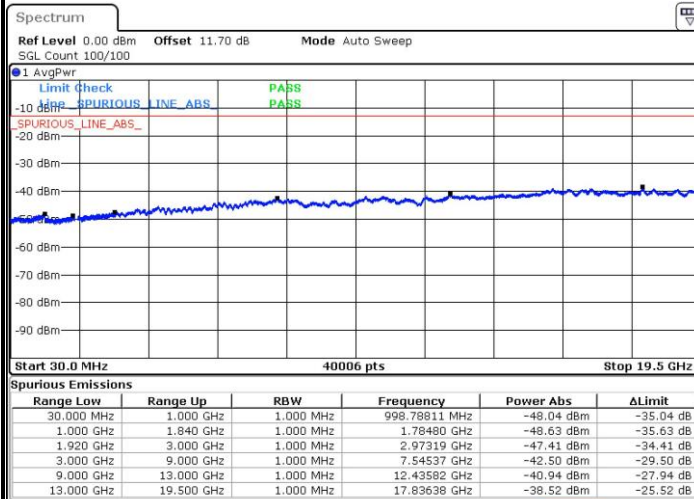
Date: 12 JUL 2018 20:44:47

## Middle Channel / 16QAM



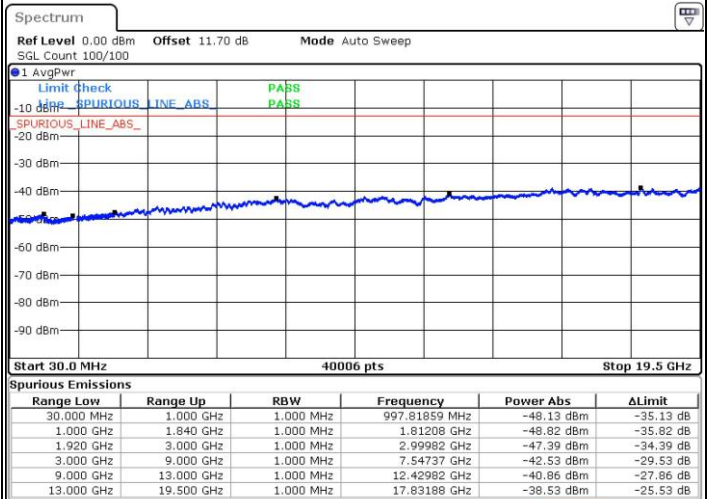
Date: 12 JUL 2018 20:45:58

## Highest Channel / QPSK



Date: 12 JUL 2018 22:21:53

## Highest Channel / 16QAM

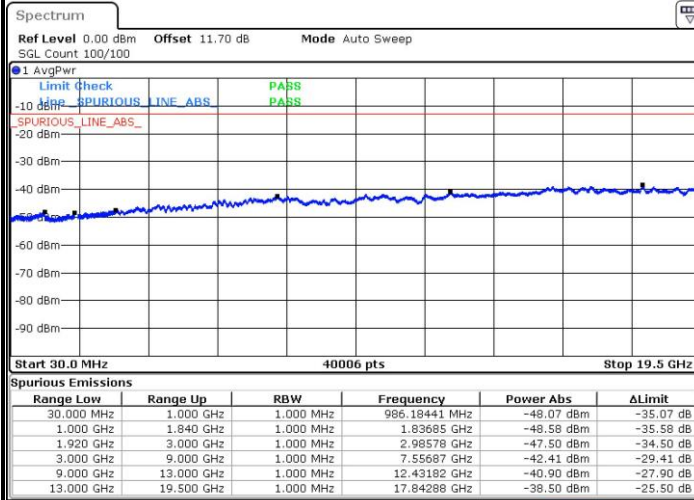


Date: 12 JUL 2018 22:23:03



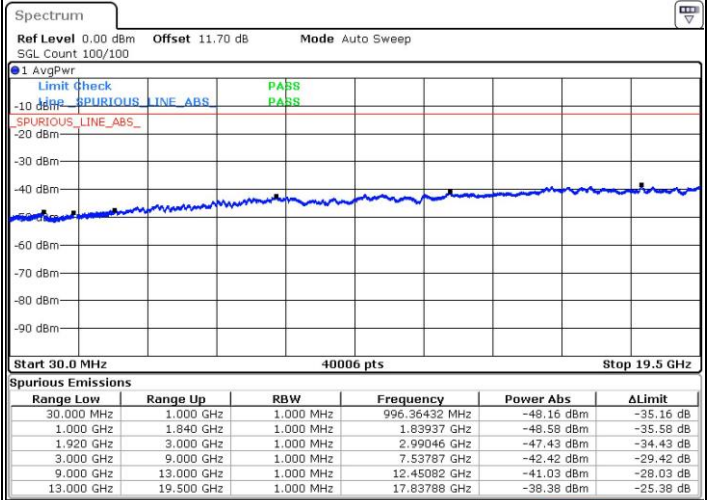
## LTE Band 2 / 5MHz

## Lowest Channel / QPSK



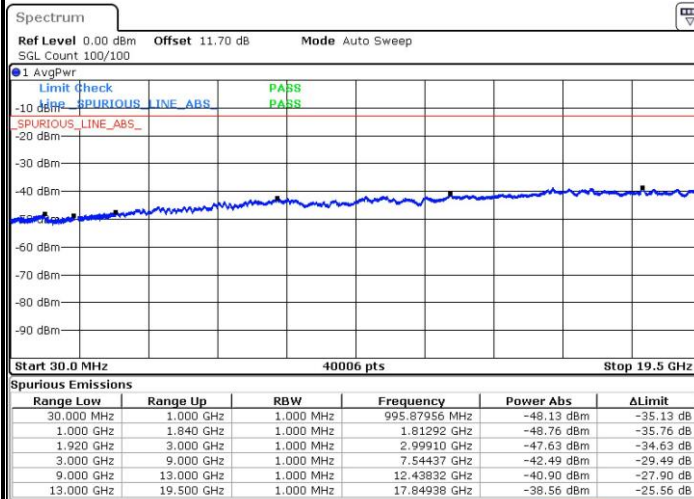
Date: 12 JUL 2018 22:29:39

## Lowest Channel / 16QAM



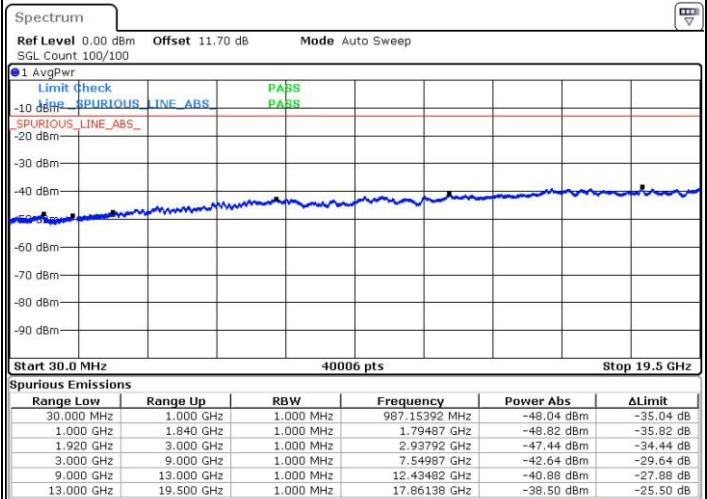
Date: 12 JUL 2018 22:30:50

## Middle Channel / QPSK



Date: 12 JUL 2018 22:32:46

## Middle Channel / 16QAM

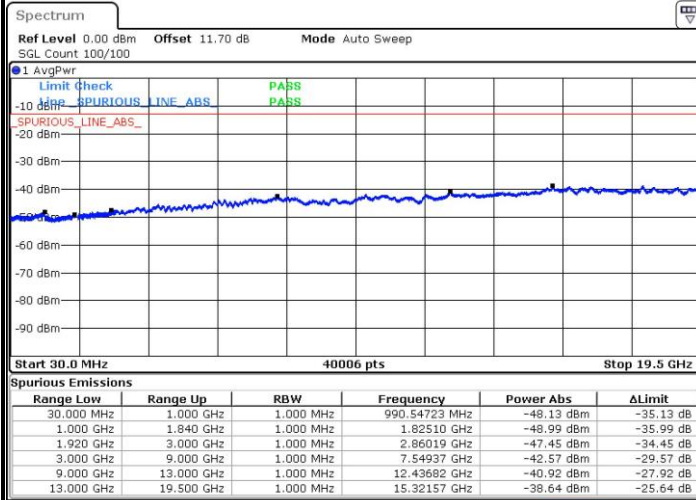


Date: 12 JUL 2018 22:33:56



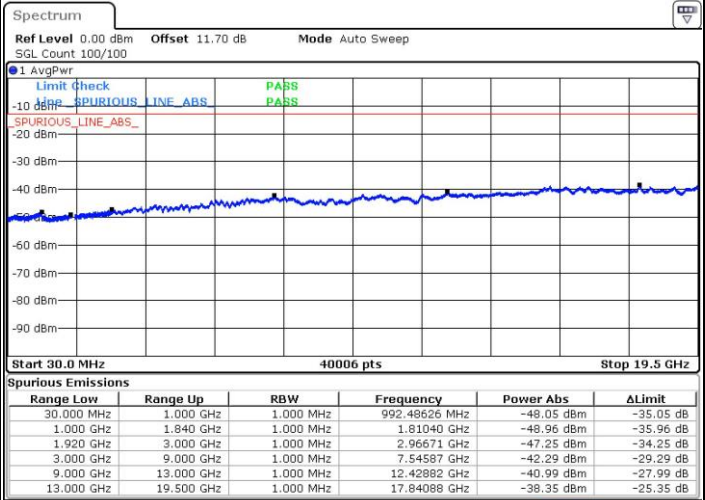
## LTE Band 2 / 5MHz

## Highest Channel / QPSK



Date: 12 JUL 2018 22:40:32

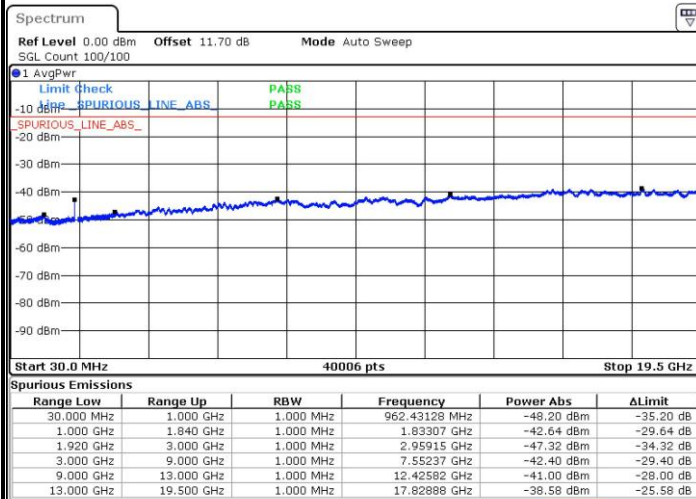
## Highest Channel / 16QAM



Date: 12 JUL 2018 22:41:43

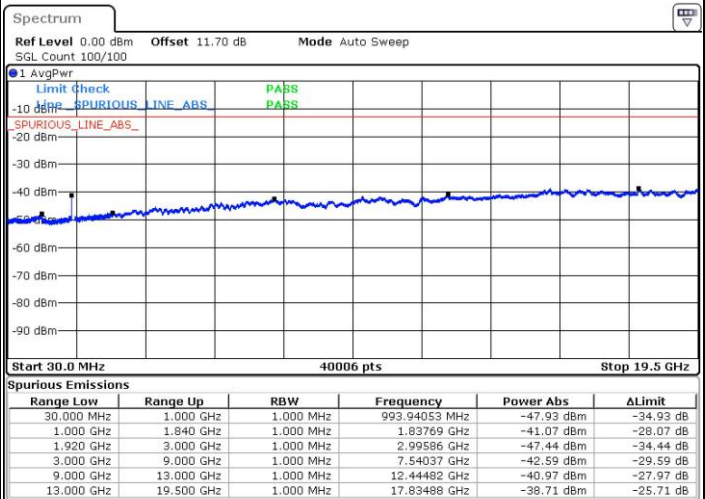
## LTE Band 2 / 10MHz

## Lowest Channel / QPSK



Date: 12 JUL 2018 22:48:19

## Lowest Channel / 16QAM

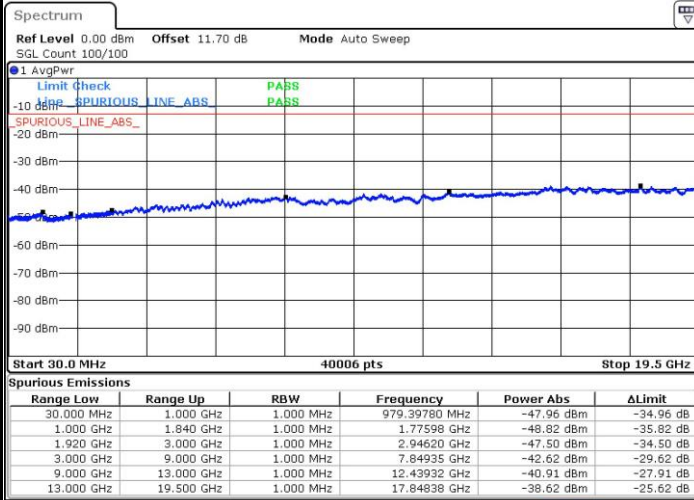


Date: 12 JUL 2018 22:49:29



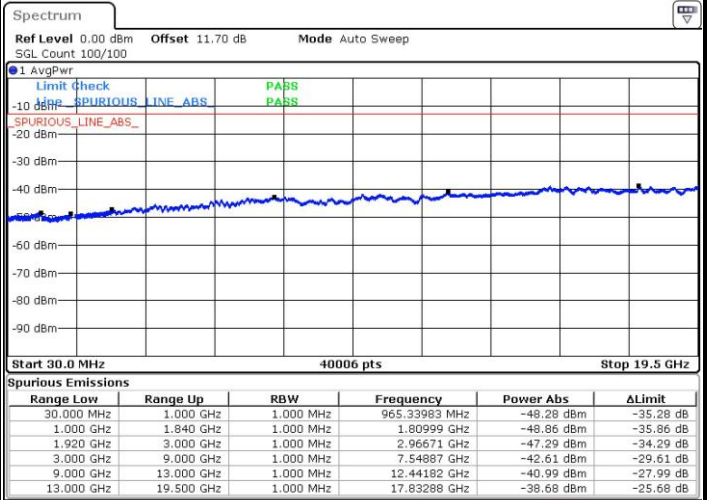
## LTE Band 2 / 10MHz

## Middle Channel / QPSK



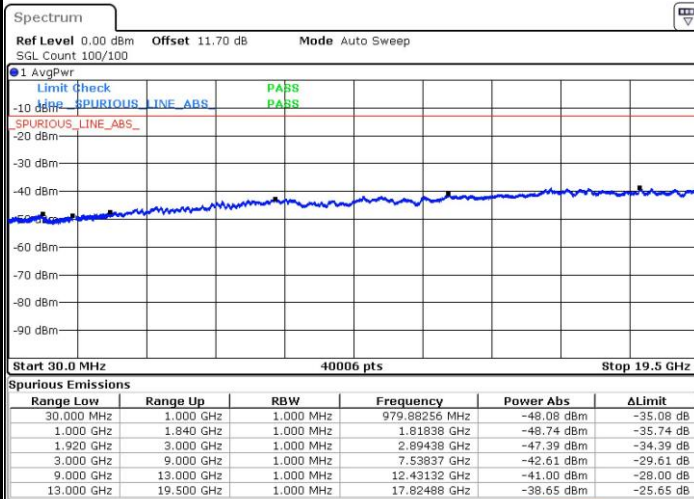
Date: 12 JUL 2018 22:51:26

## Middle Channel / 16QAM



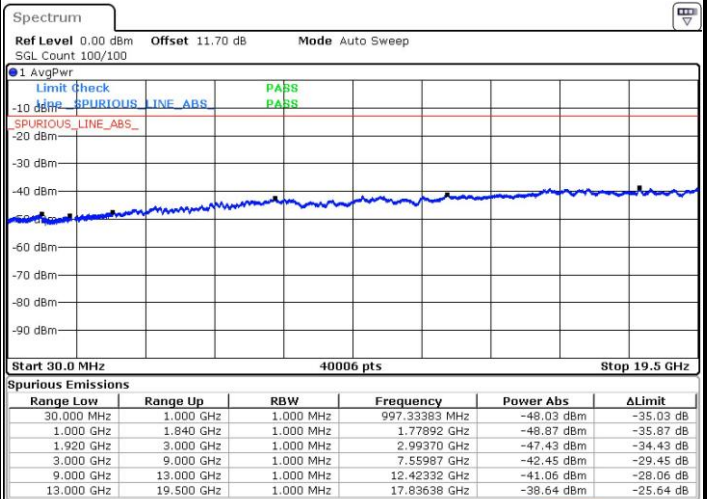
Date: 12 JUL 2018 23:27:54

## Highest Channel / QPSK



Date: 12 JUL 2018 23:34:30

## Highest Channel / 16QAM

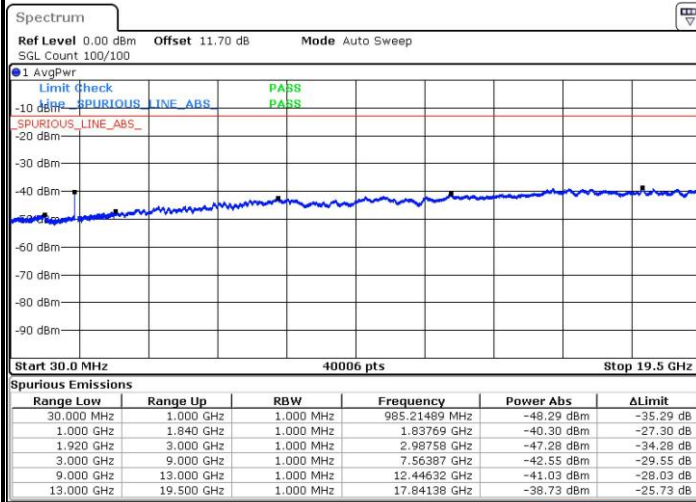


Date: 12 JUL 2018 23:35:40



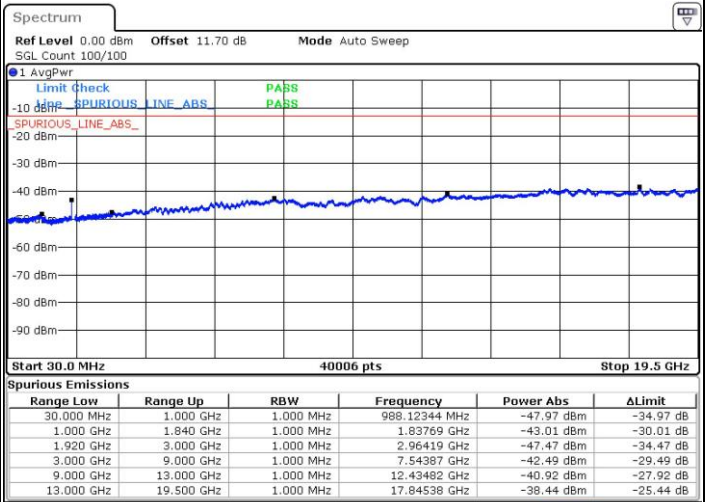
## LTE Band 2 / 15MHz

## Lowest Channel / QPSK



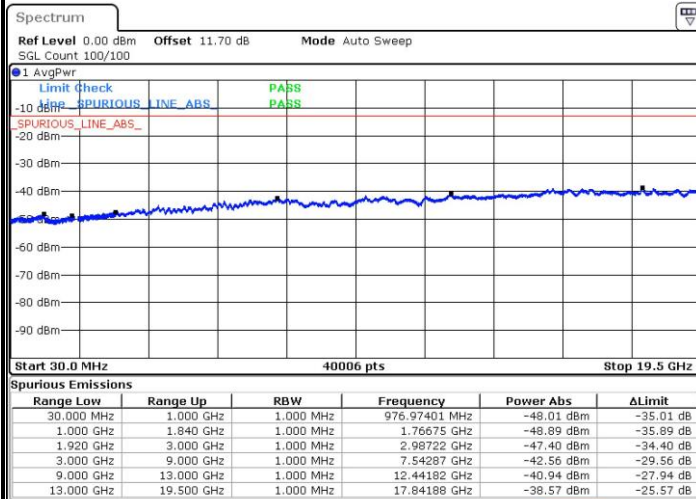
Date: 12 JUL 2018 23:42:16

## Lowest Channel / 16QAM



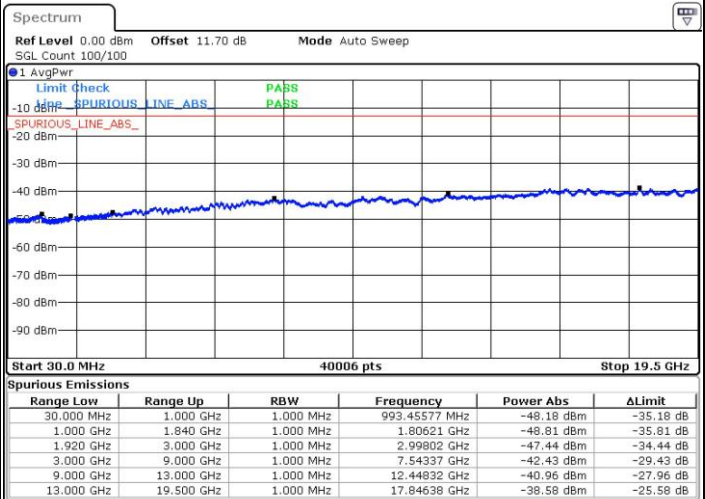
Date: 12 JUL 2018 23:43:27

## Middle Channel / QPSK



Date: 12 JUL 2018 23:45:23

## Middle Channel / 16QAM

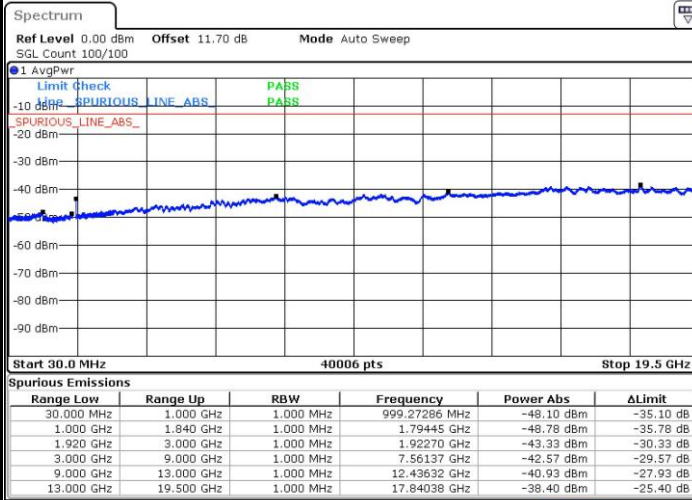


Date: 12 JUL 2018 23:46:33



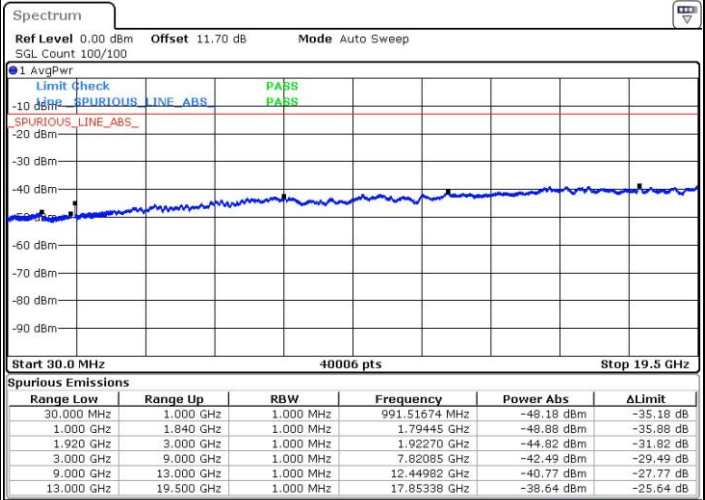
## LTE Band 2 / 15MHz

## Highest Channel / QPSK



Date: 12 JUL 2018 23:53:09

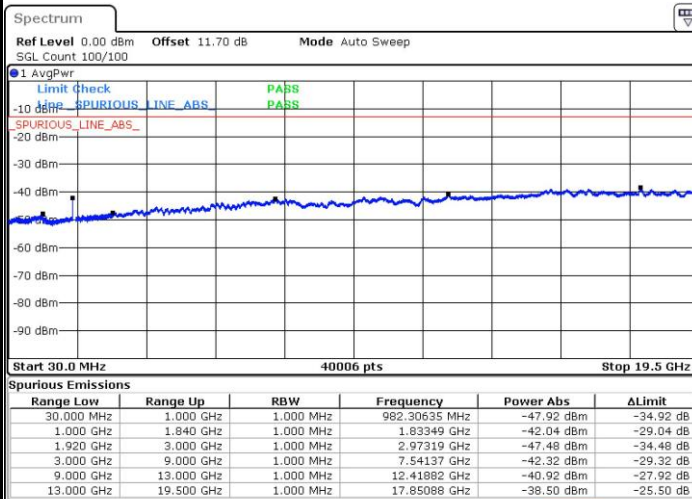
## Highest Channel / 16QAM



Date: 12 JUL 2018 23:54:20

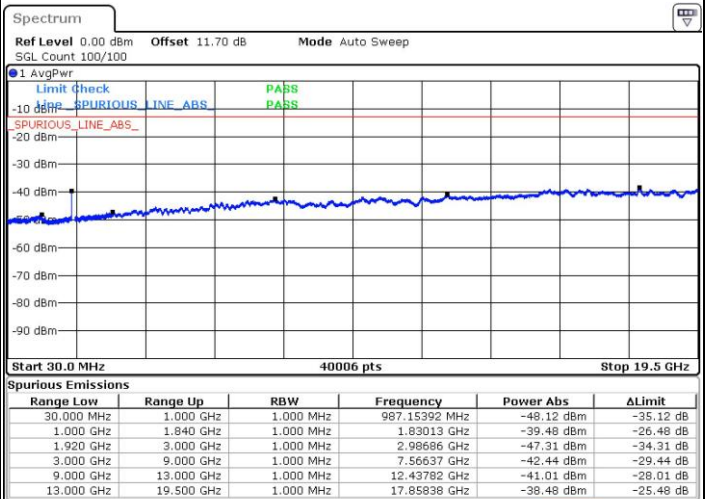
## LTE Band 2 / 20MHz

## Lowest Channel / QPSK



Date: 13 JUL 2018 00:19:42

## Lowest Channel / 16QAM

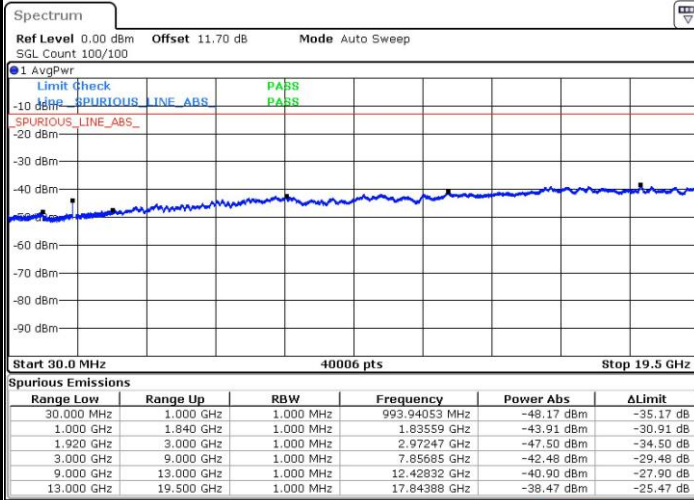


Date: 13 JUL 2018 00:20:53



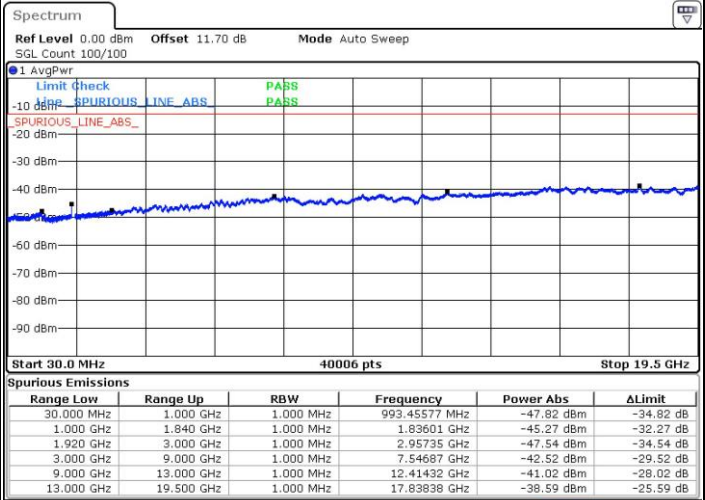
## LTE Band 2 / 20MHz

## Middle Channel / QPSK



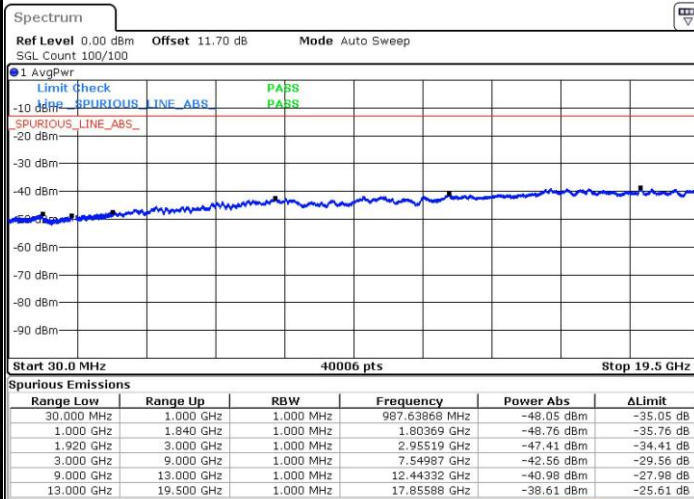
Date: 13 JUL 2018 00:22:49

## Middle Channel / 16QAM



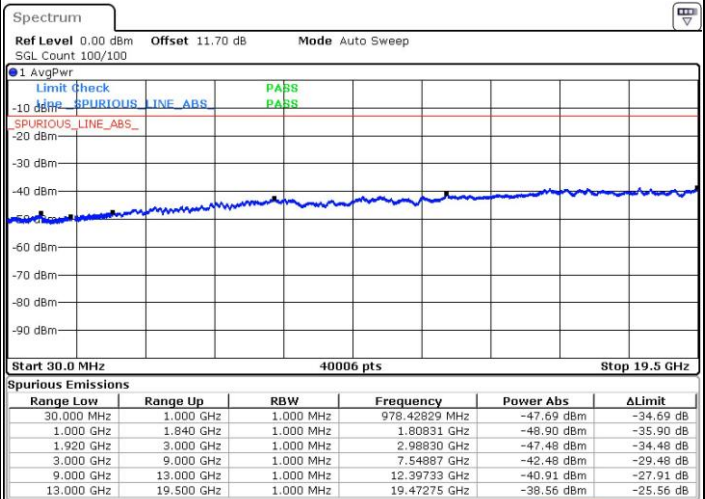
Date: 13 JUL 2018 00:24:00

## Highest Channel / QPSK



Date: 13 JUL 2018 00:30:36

## Highest Channel / 16QAM



Date: 13 JUL 2018 00:31:46

## 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    | 0.0048                             | PASS    |
| 40               | Normal Voltage    | 0.0075                             |         |
| 30               | Normal Voltage    | 0.0074                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0005                             |         |
| 0                | Normal Voltage    | 0.0019                             |         |
| -10              | Normal Voltage    | 0.0006                             |         |
| -20              | Normal Voltage    | 0.0054                             |         |
| -30              | Normal Voltage    | 0.0016                             |         |
| 20               | Maximum Voltage   | 0.0029                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0026                             |         |

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 4

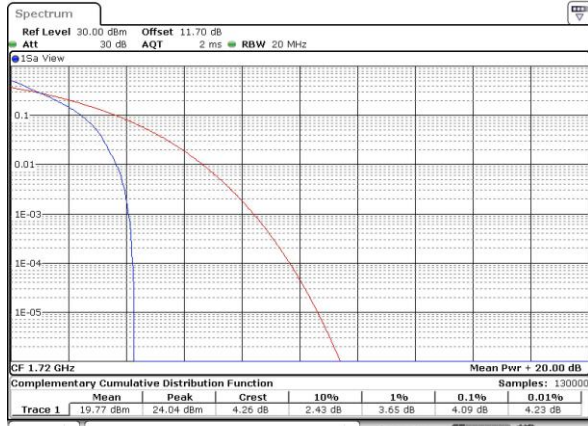
### Peak-to-Average Ratio

| Mode       | LTE Band 4 / 20MHz |         |       |         |             |
|------------|--------------------|---------|-------|---------|-------------|
| Mod.       | QPSK               |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 4.09               | 4.96    | 4.87  | 4.93    | PASS        |
| Middle CH  | 5.01               | 4.96    | 5.77  | 5.01    |             |
| Highest CH | 5.22               | 4.72    | 5.94  | 4.7     |             |

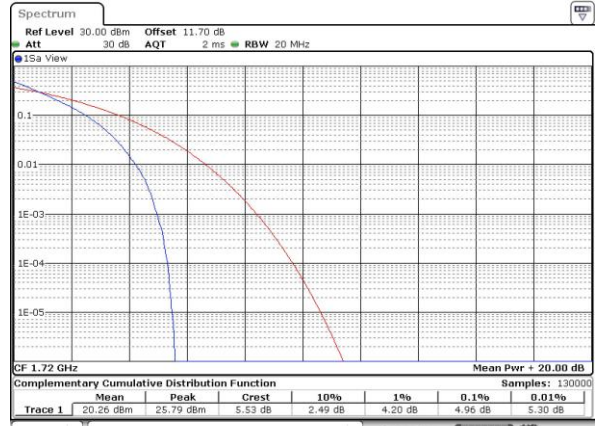


## LTE Band 4 / 20MHz / QPSK

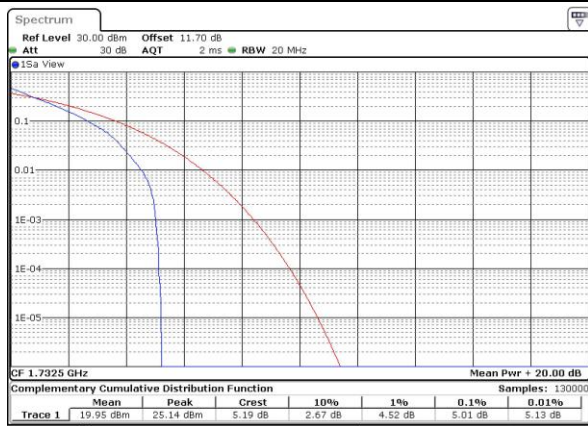
## Lowest Channel / 1RB



## Lowest Channel / Full RB



## Middle Channel / 1RB



## Middle Channel / Full RB



## Highest Channel / 1RB



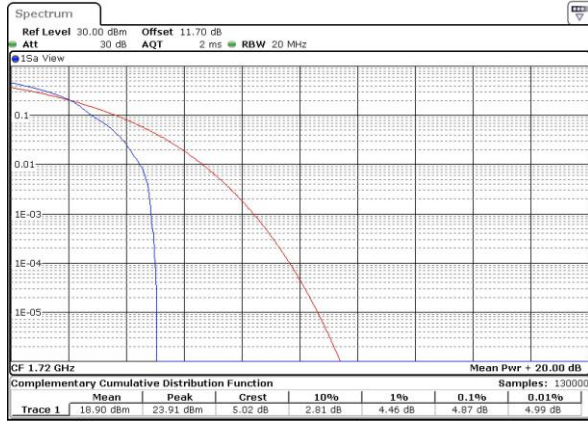
## Highest Channel / Full RB



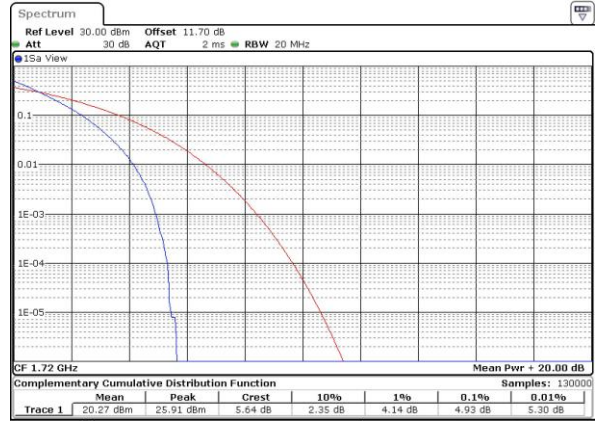


## LTE Band 4 / 20MHz / 16QAM

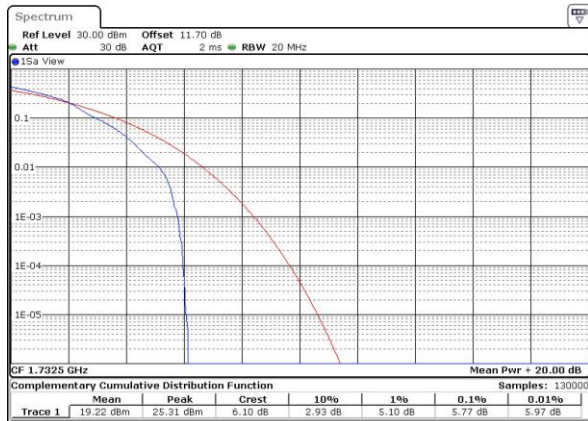
## Lowest Channel / 1RB



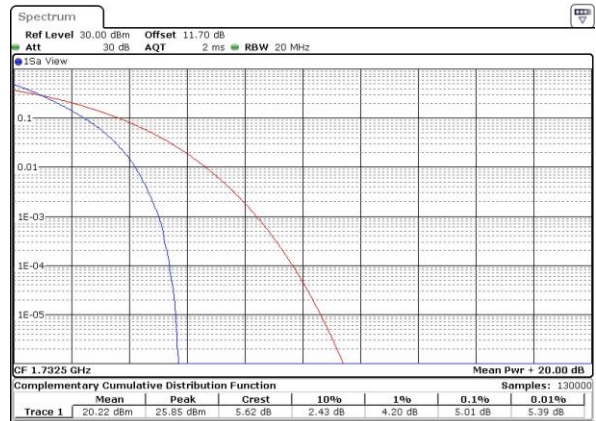
## Lowest Channel / Full RB



## Middle Channel / 1RB



## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB





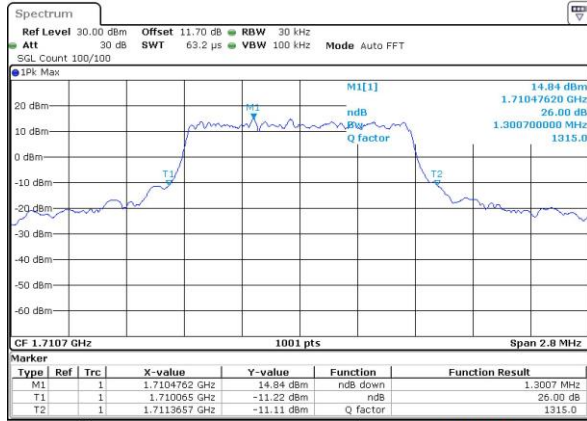
**26dB Bandwidth**

| Mode       | LTE Band 4 : 26dB BW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
|------------|---------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| BW         | 1.4MHz                    |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | QPSK                      | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | 1.30                      | 1.31  | 3.06 | 3.20  | 4.83 | 4.92  | 9.97  | 9.91  | 15.67 | 15.14 | 20.62 | 20.94 |
| Middle CH  | 1.33                      | 1.31  | 3.06 | 3.04  | 4.98 | 4.91  | 10.03 | 10.17 | 15.35 | 15.17 | 20.70 | 20.14 |
| Highest CH | 1.31                      | 1.32  | 2.99 | 3.15  | 5.04 | 4.97  | 9.81  | 9.81  | 15.02 | 14.90 | 20.14 | 20.66 |



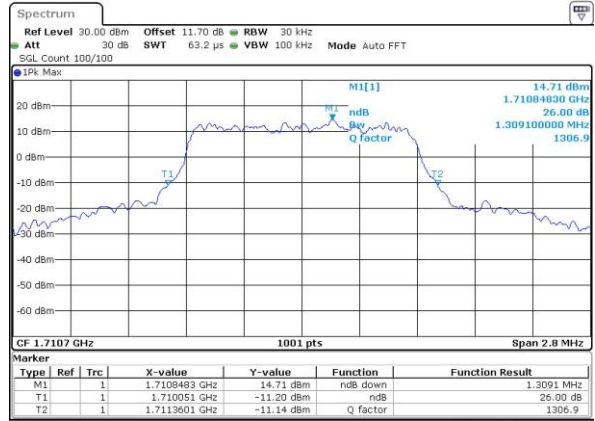
## LTE Band 4

## Lowest Channel / 1.4MHz / QPSK



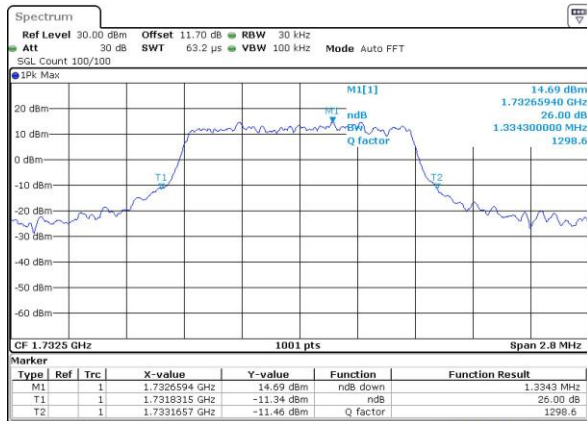
Date: 13 JUL 2018 02:47:37

## Lowest Channel / 1.4MHz / 16QAM



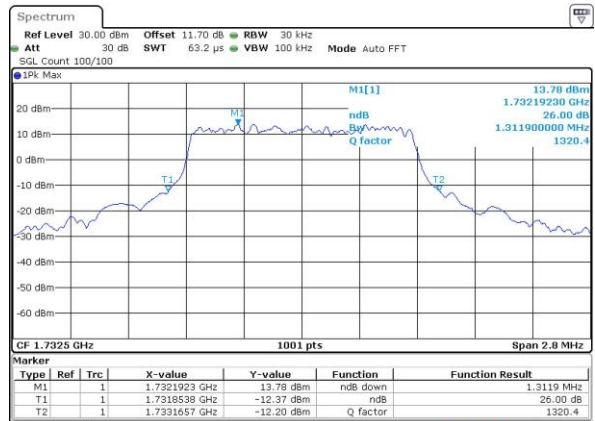
Date: 13 JUL 2018 02:47:48

## Middle Channel / 1.4MHz / QPSK



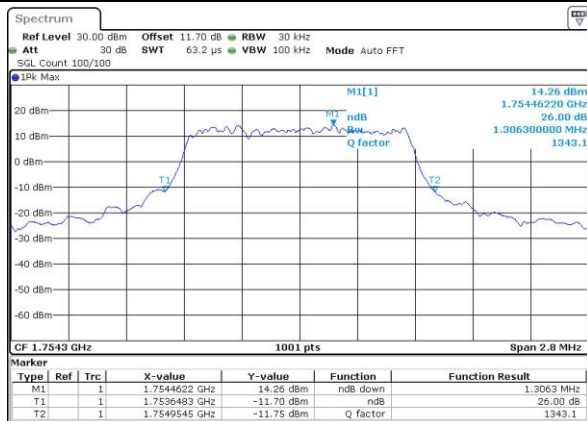
Date: 13 JUL 2018 02:55:23

## Middle Channel / 1.4MHz / 16QAM



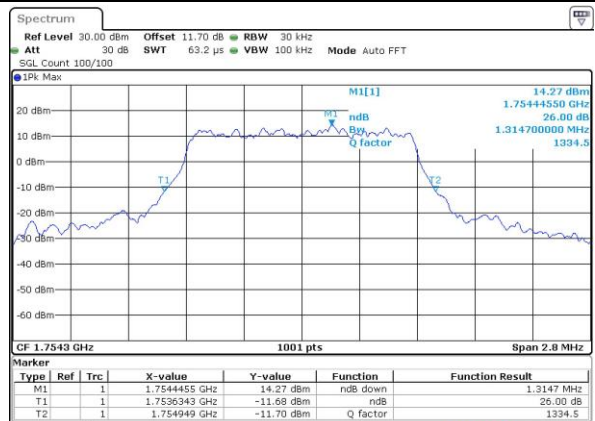
Date: 13 JUL 2018 02:55:35

## Highest Channel / 1.4MHz / QPSK



Date: 13 JUL 2018 02:58:30

## Highest Channel / 1.4MHz / 16QAM

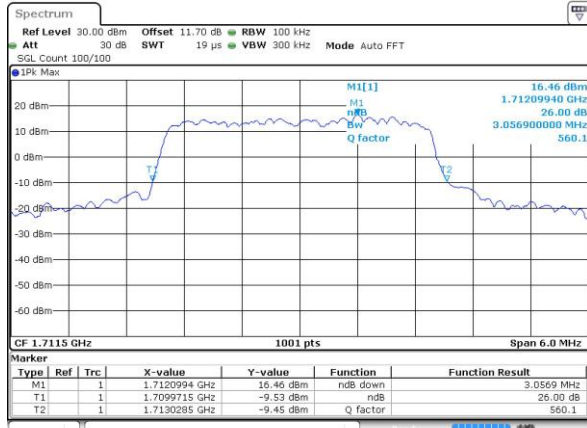


Date: 13 JUL 2018 02:58:41



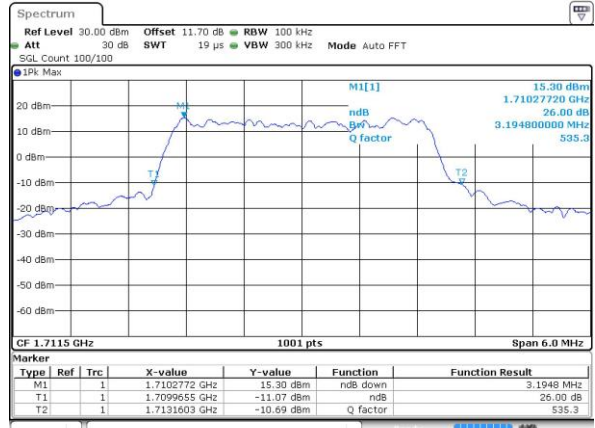
## LTE Band 4

## Lowest Channel / 3MHz / QPSK



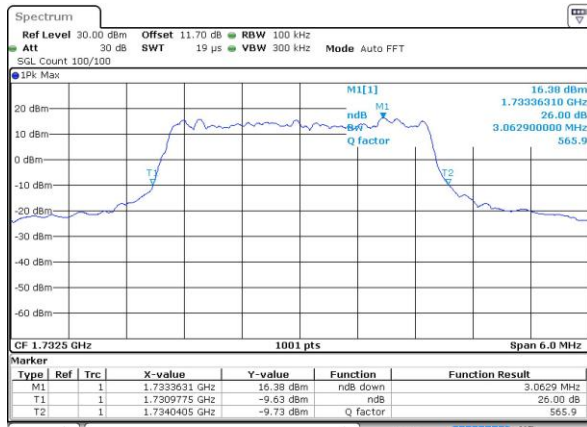
Date: 13 JUL 2018 01:14:15

## Lowest Channel / 3MHz / 16QAM



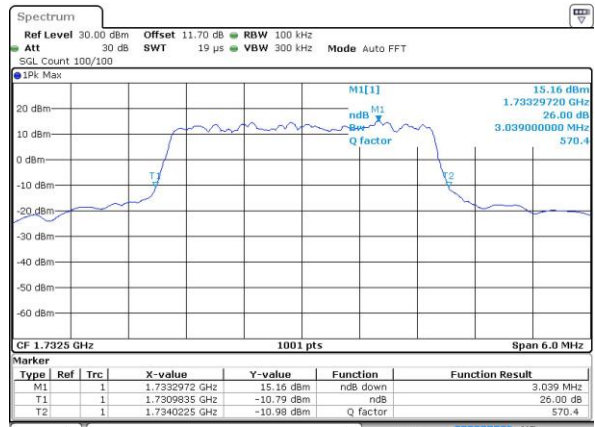
Date: 13 JUL 2018 01:14:27

## Middle Channel / 3MHz / QPSK



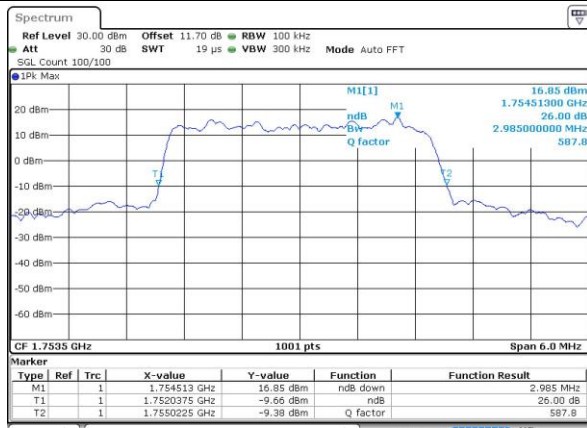
Date: 13 JUL 2018 01:22:02

## Middle Channel / 3MHz / 16QAM



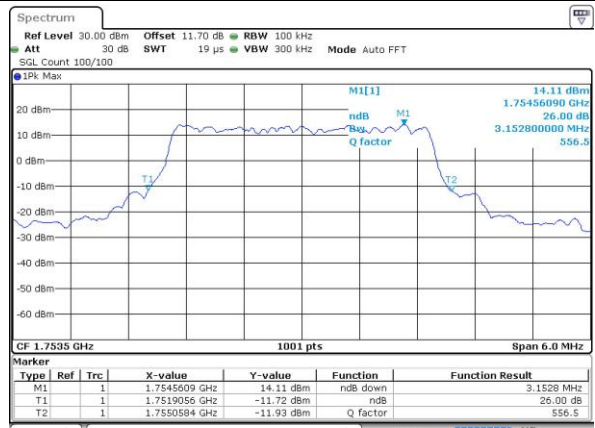
Date: 13 JUL 2018 01:22:13

## Highest Channel / 3MHz / QPSK



Date: 13 JUL 2018 01:25:08

## Highest Channel / 3MHz / 16QAM

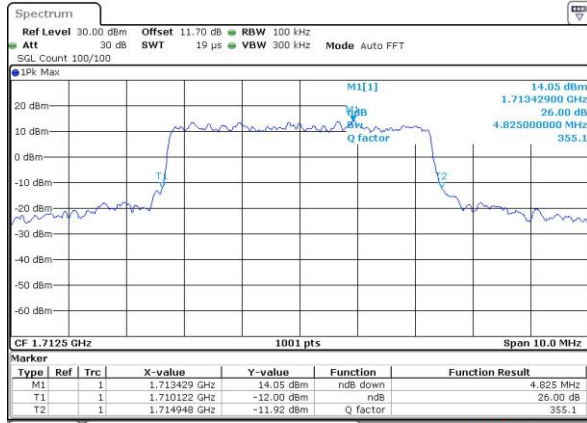


Date: 13 JUL 2018 01:25:20

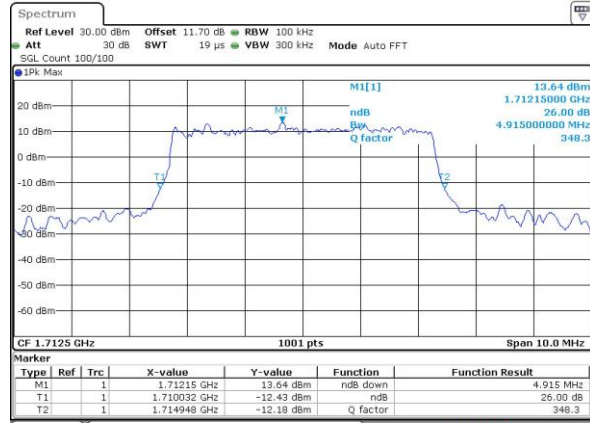


## LTE Band 4

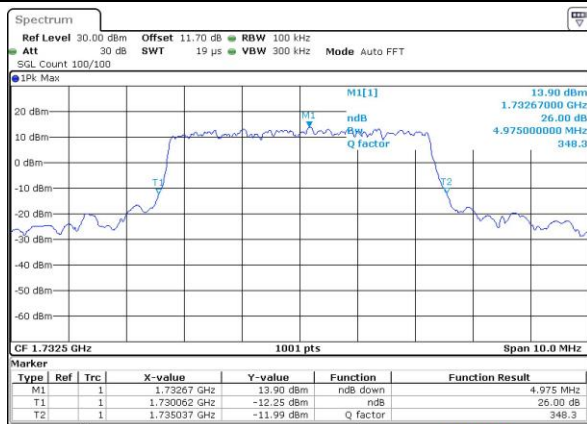
## Lowest Channel / 5MHz / QPSK



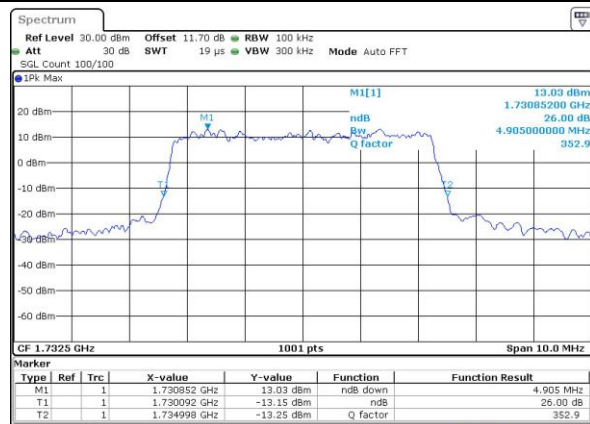
## Lowest Channel / 5MHz / 16QAM



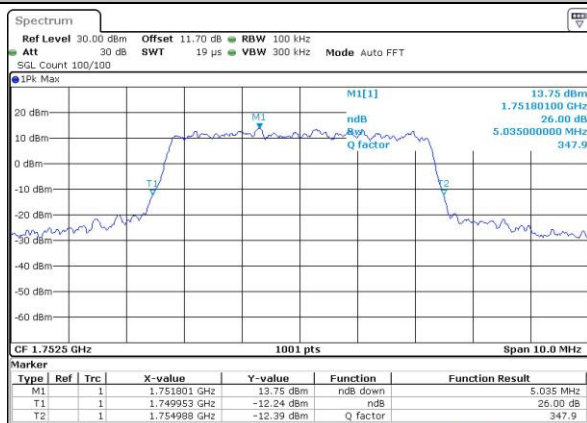
## Middle Channel / 5MHz / QPSK



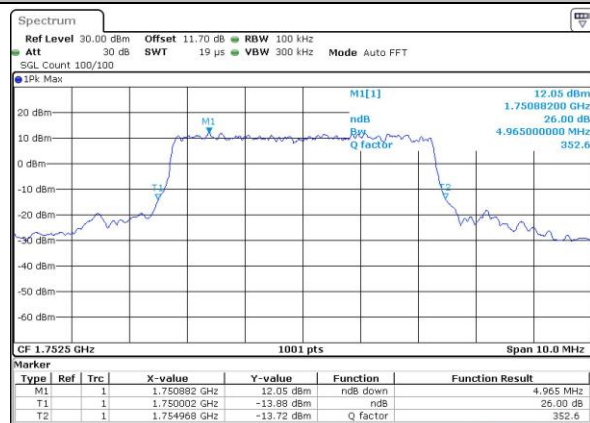
## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



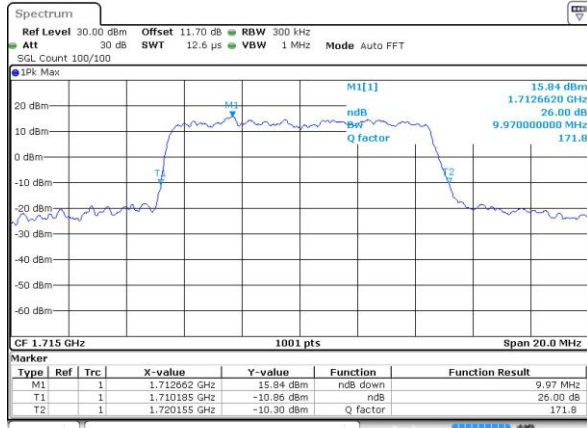
## Highest Channel / 5MHz / 16QAM





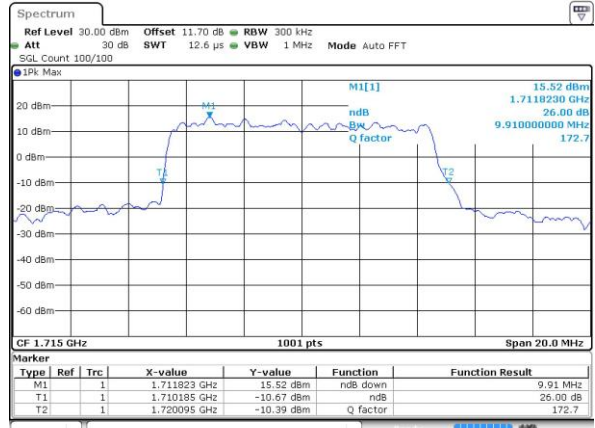
## LTE Band 4

## Lowest Channel / 10MHz / QPSK



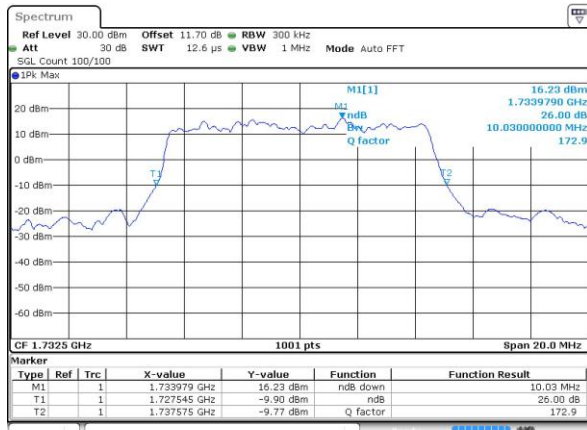
Date: 13 JUL 2018 01:51:36

## Lowest Channel / 10MHz / 16QAM



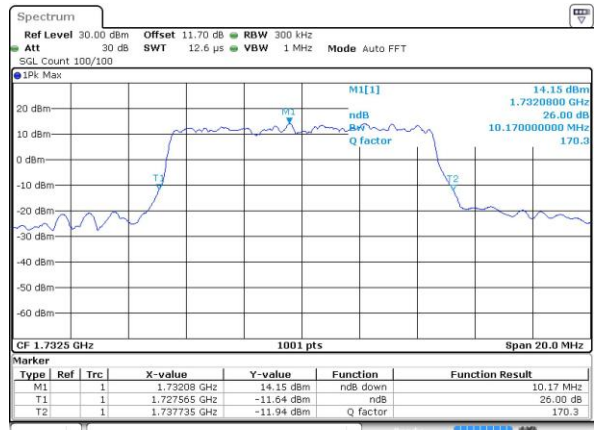
Date: 13 JUL 2018 01:51:47

## Middle Channel / 10MHz / QPSK



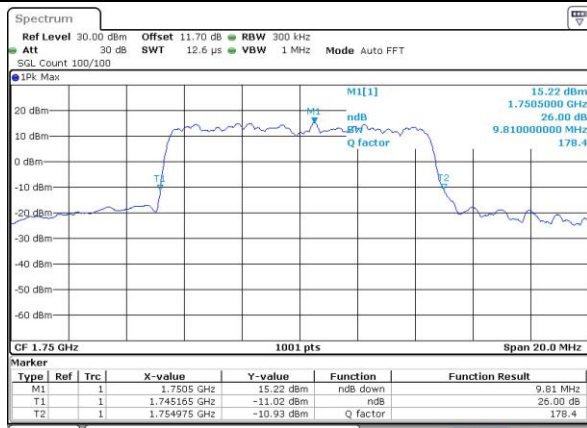
Date: 13 JUL 2018 01:59:22

## Middle Channel / 10MHz / 16QAM



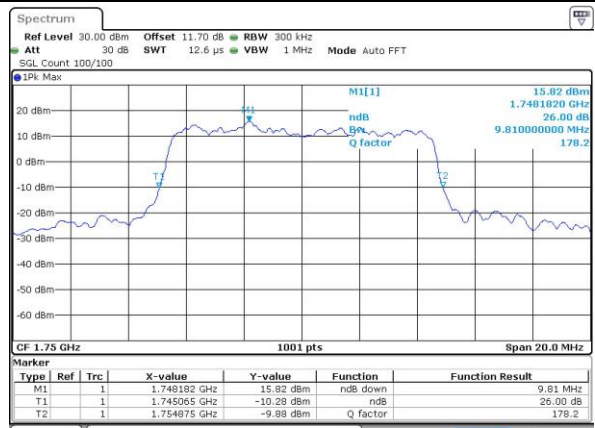
Date: 13 JUL 2018 01:59:34

## Highest Channel / 10MHz / QPSK



Date: 13 JUL 2018 02:02:29

## Highest Channel / 10MHz / 16QAM



Date: 13 JUL 2018 02:02:41