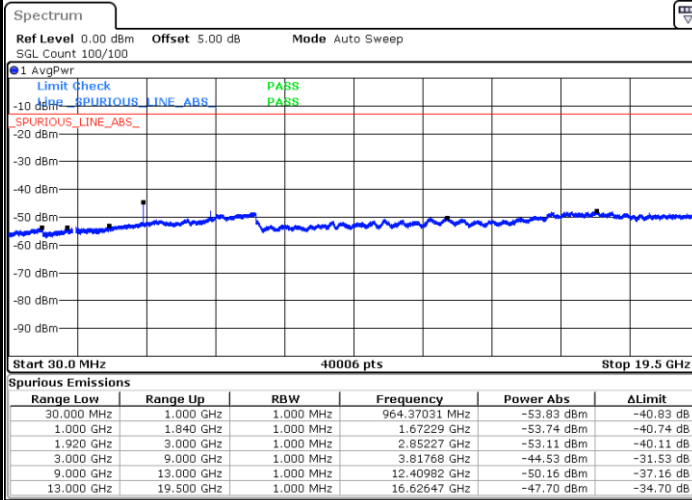




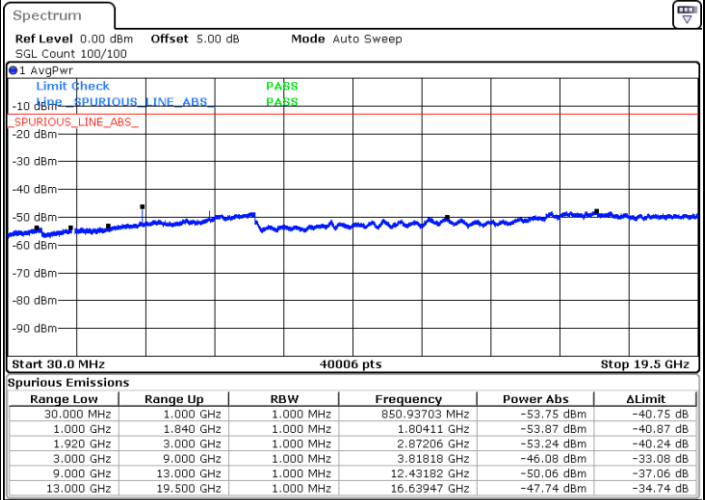
## LTE Band 2 / 1.4MHz

## Highest Channel / QPSK



Date: 7.SEP.2018 10:17:43

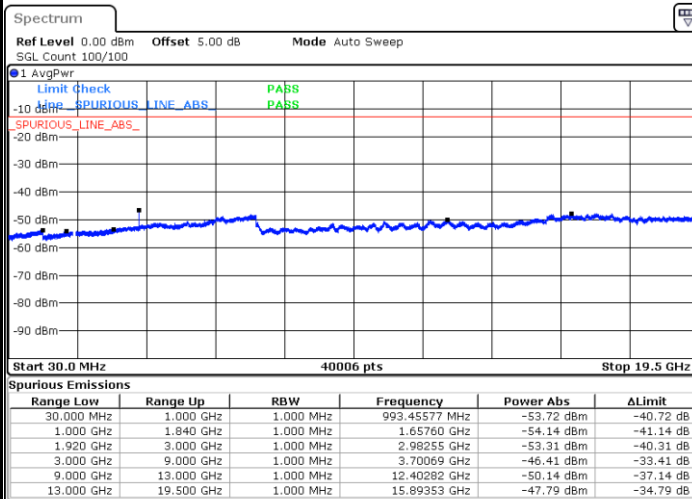
## Highest Channel / 16QAM



Date: 7.SEP.2018 10:18:39

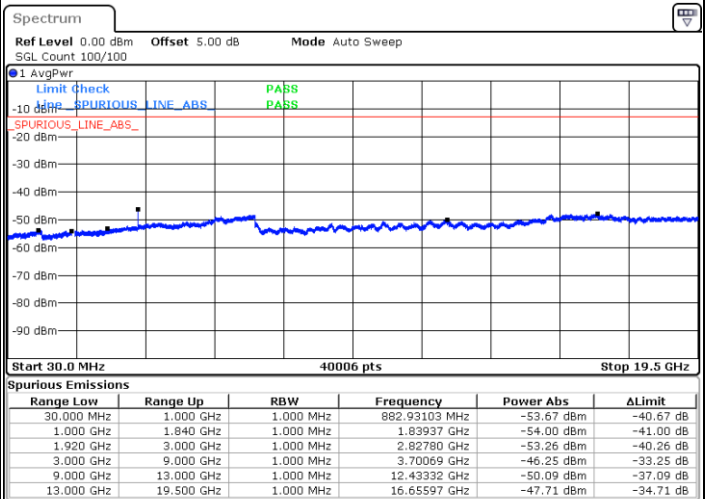
## LTE Band 2 / 3MHz

## Lowest Channel / QPSK



Date: 7.SEP.2018 10:24:49

## Lowest Channel / 16QAM

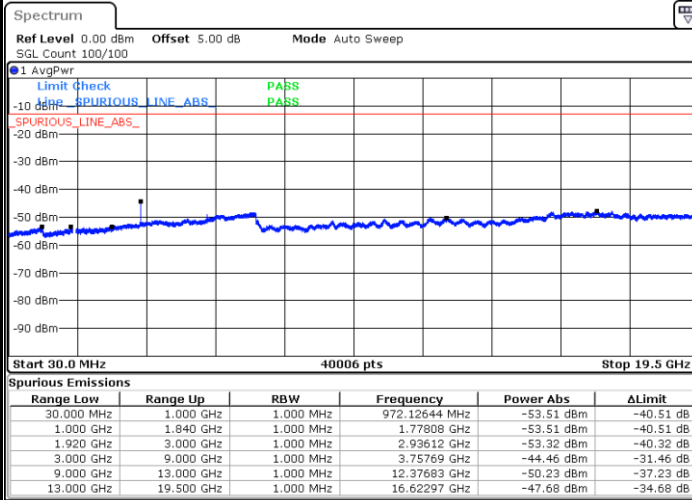


Date: 7.SEP.2018 10:25:45



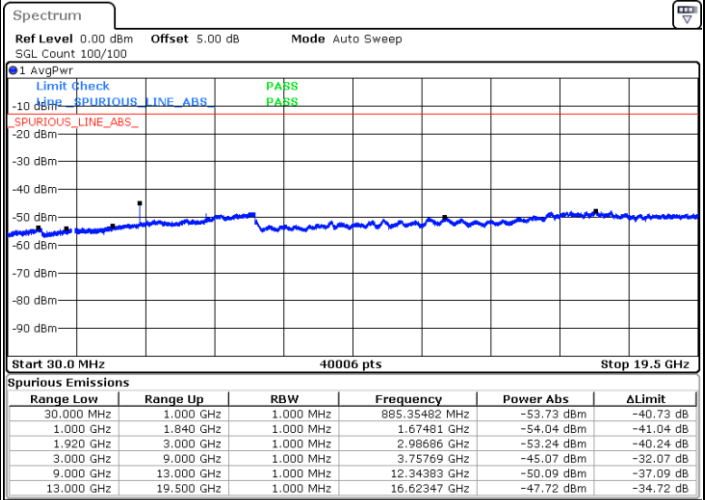
## LTE Band 2 / 3MHz

## Middle Channel / QPSK



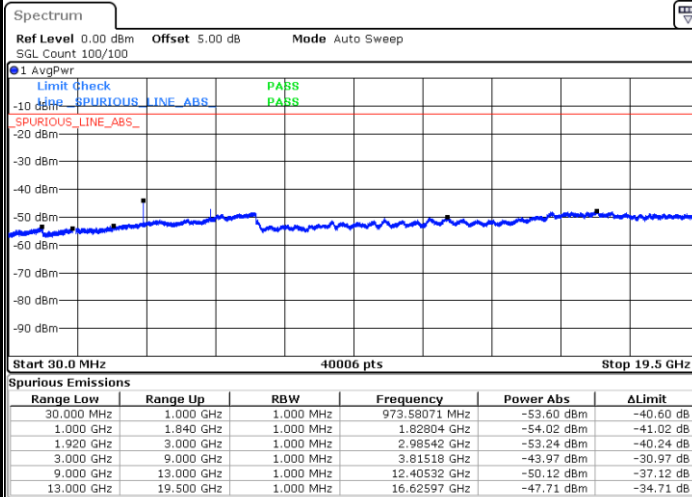
Date: 7.SEP.2018 10:27:23

## Middle Channel / 16QAM



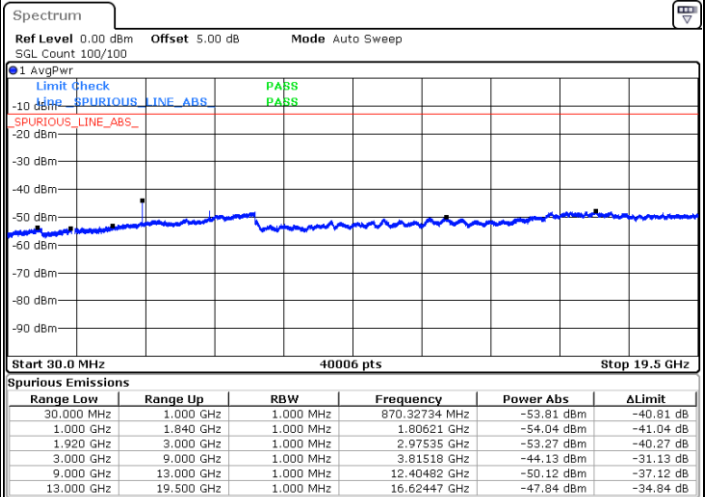
Date: 7.SEP.2018 10:28:18

## Highest Channel / QPSK



Date: 7.SEP.2018 10:34:29

## Highest Channel / 16QAM

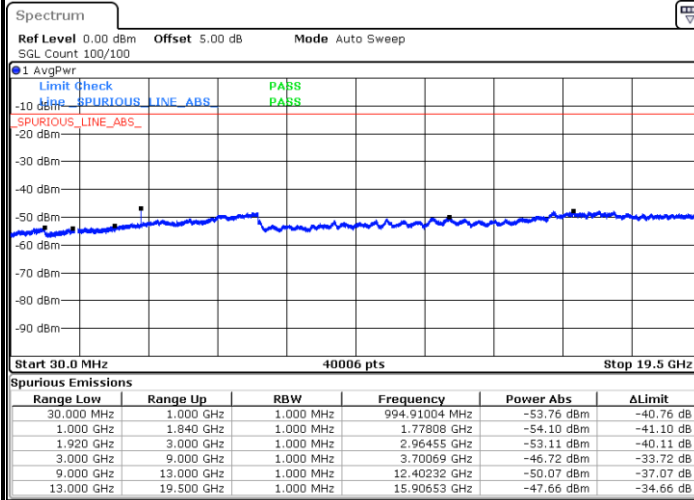


Date: 7.SEP.2018 10:35:24



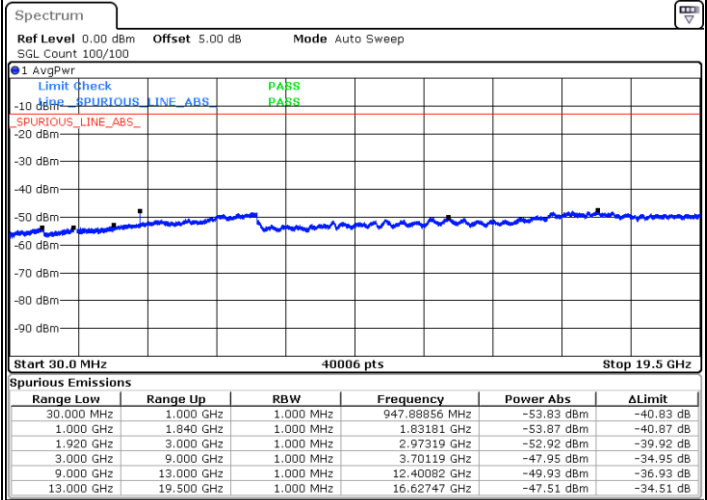
## LTE Band 2 / 5MHz

## Lowest Channel / QPSK



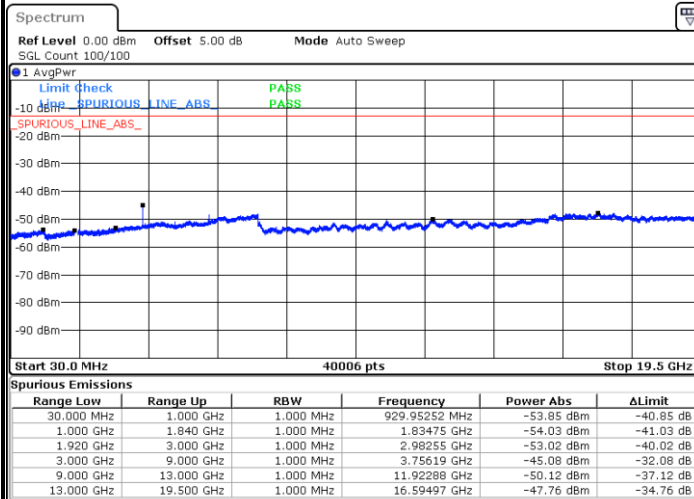
Date: 7.SEP.2018 10:41:35

## Lowest Channel / 16QAM



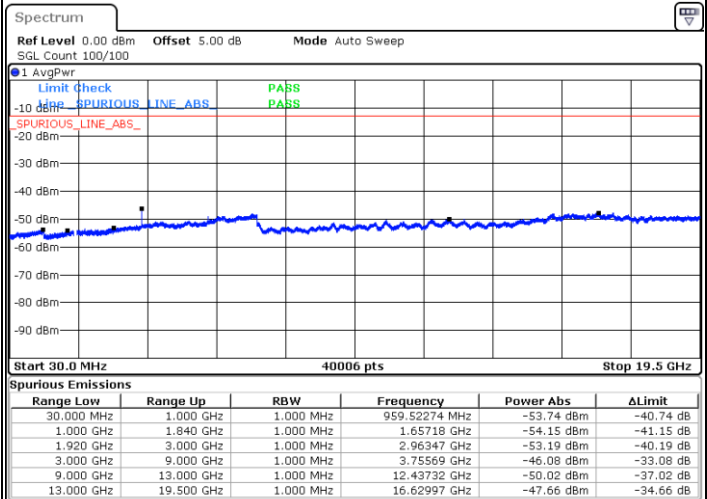
Date: 7.SEP.2018 10:42:31

## Middle Channel / QPSK



Date: 7.SEP.2018 10:44:09

## Middle Channel / 16QAM

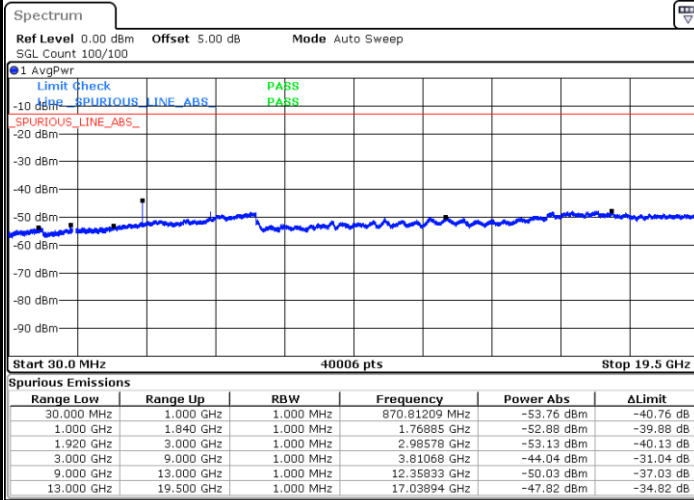


Date: 7.SEP.2018 10:45:04



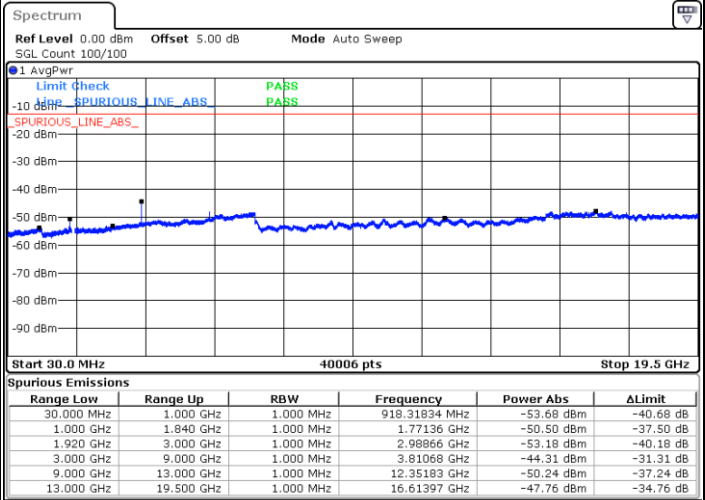
## LTE Band 2 / 5MHz

## Highest Channel / QPSK



Date: 7.SEP.2018 10:51:15

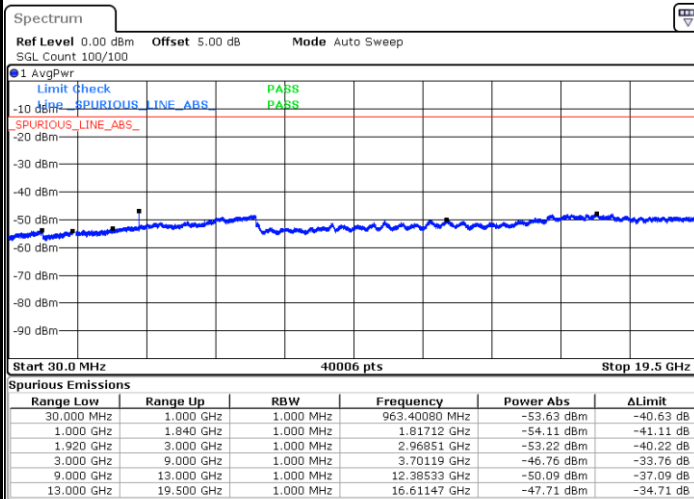
## Highest Channel / 16QAM



Date: 7.SEP.2018 10:52:10

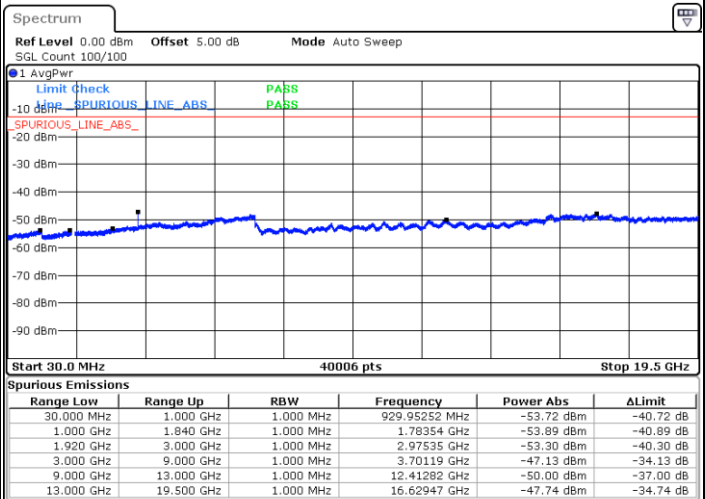
## LTE Band 2 / 10MHz

## Lowest Channel / QPSK



Date: 7.SEP.2018 10:58:21

## Lowest Channel / 16QAM

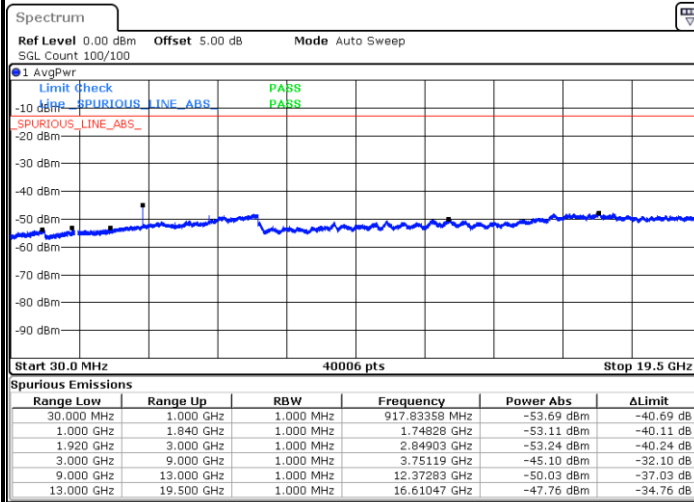


Date: 7.SEP.2018 10:59:16



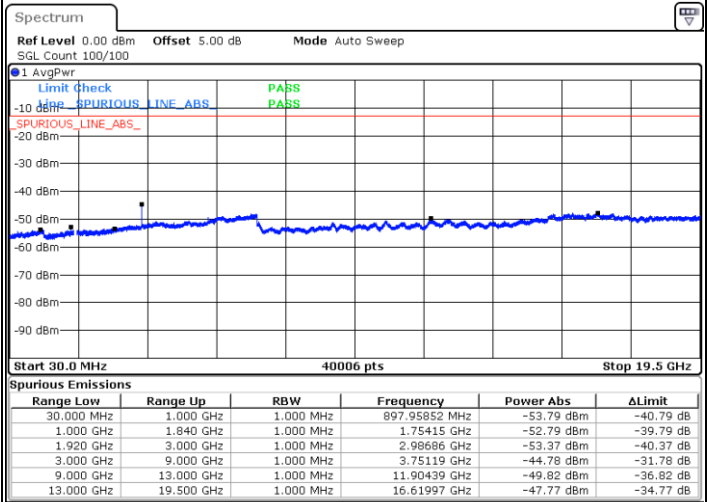
## LTE Band 2 / 10MHz

## Middle Channel / QPSK



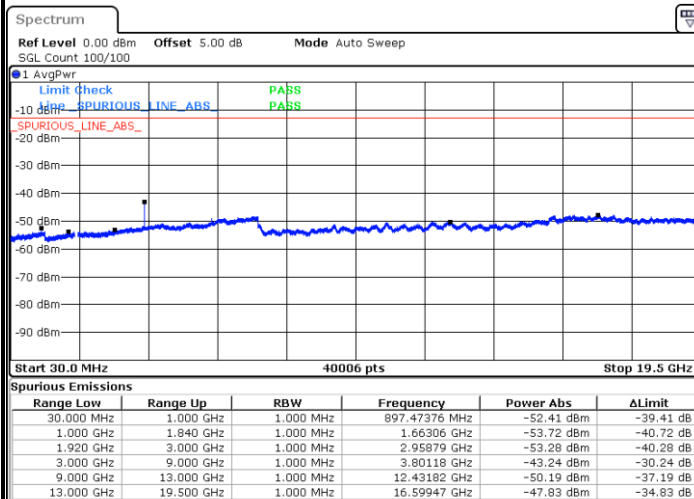
Date: 7.SEP.2018 11:00:54

## Middle Channel / 16QAM



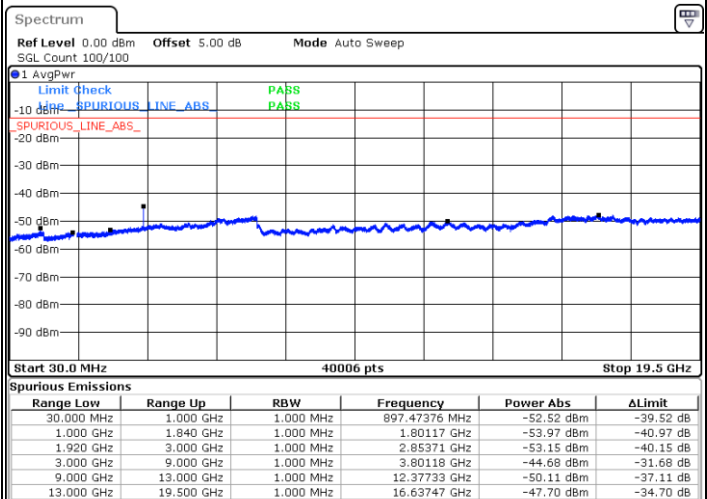
Date: 7.SEP.2018 11:01:49

## Highest Channel / QPSK



Date: 7.SEP.2018 11:08:00

## Highest Channel / 16QAM

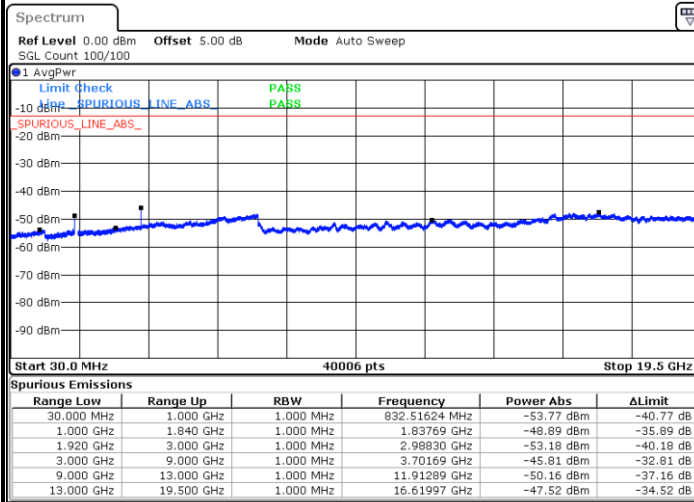


Date: 7.SEP.2018 11:08:56



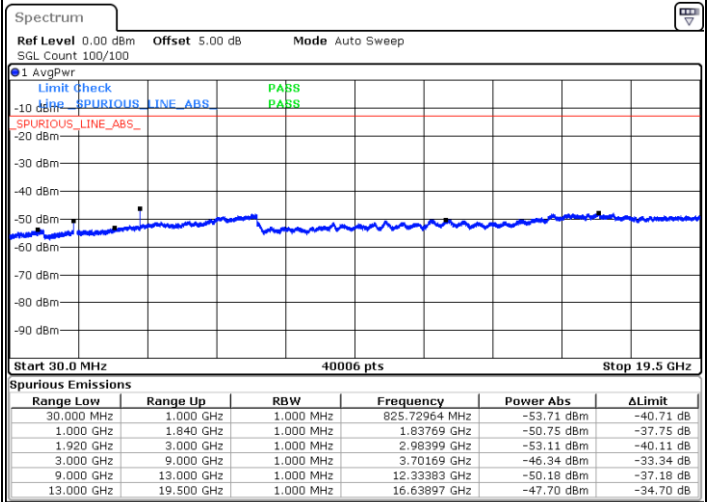
## LTE Band 2 / 15MHz

## Lowest Channel / QPSK



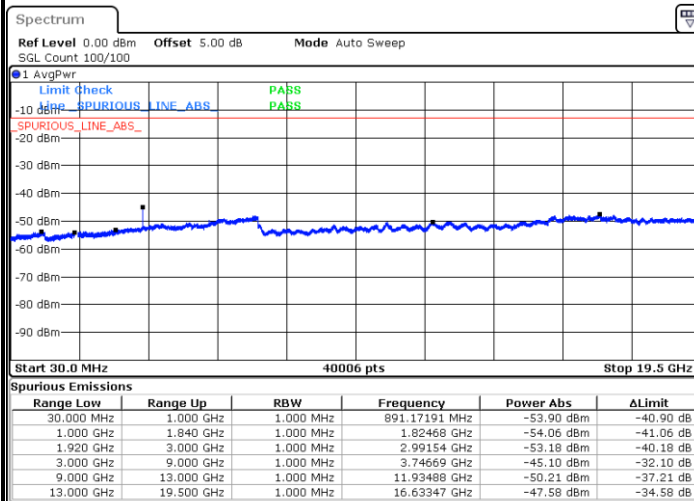
Date: 7.SEP.2018 11:15:06

## Lowest Channel / 16QAM



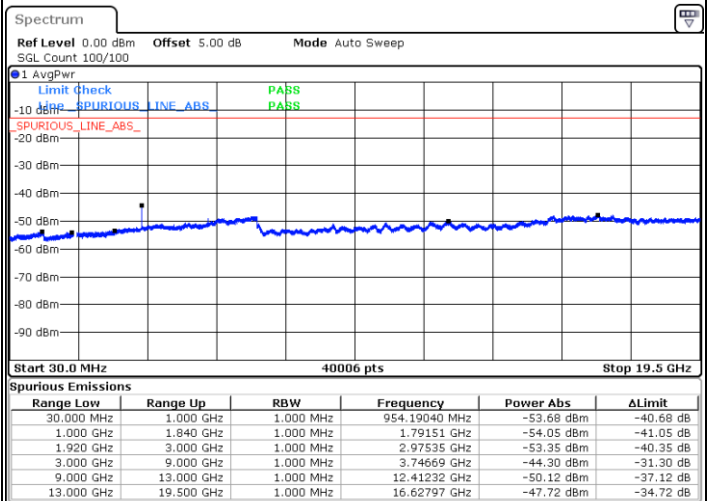
Date: 7.SEP.2018 11:16:02

## Middle Channel / QPSK



Date: 7.SEP.2018 11:17:40

## Middle Channel / 16QAM

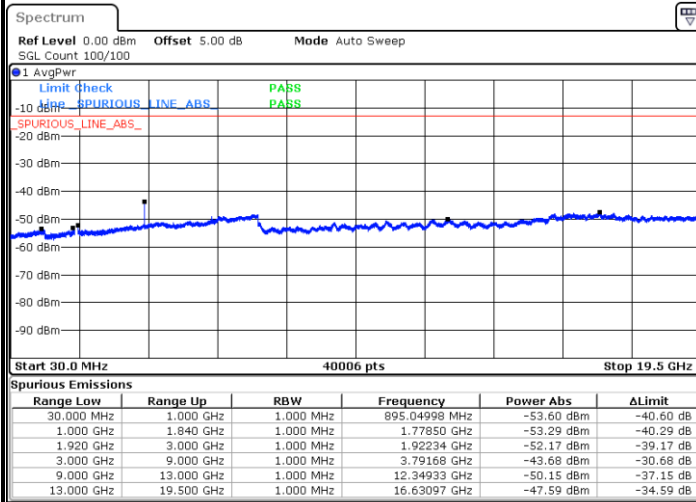


Date: 7.SEP.2018 11:18:35



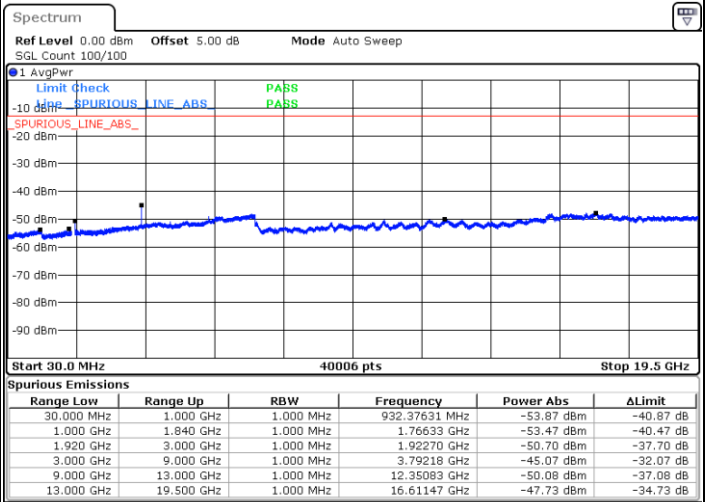
## LTE Band 2 / 15MHz

## Highest Channel / QPSK



Date: 7.SEP.2018 11:24:46

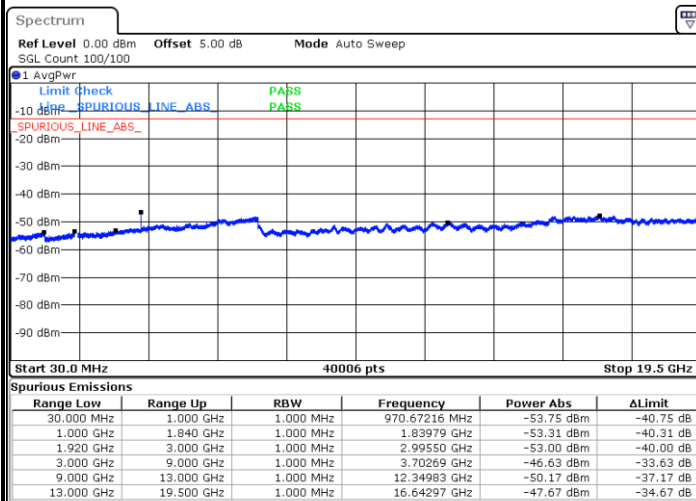
## Highest Channel / 16QAM



Date: 7.SEP.2018 11:25:41

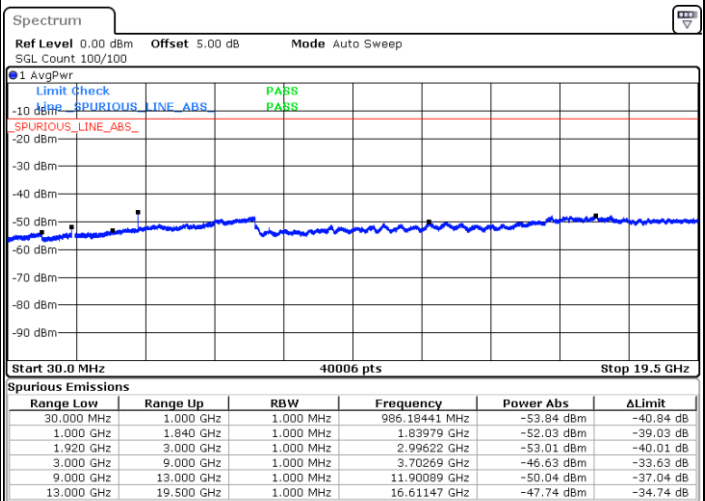
## LTE Band 2 / 20MHz

## Lowest Channel / QPSK



Date: 7.SEP.2018 11:31:52

## Lowest Channel / 16QAM

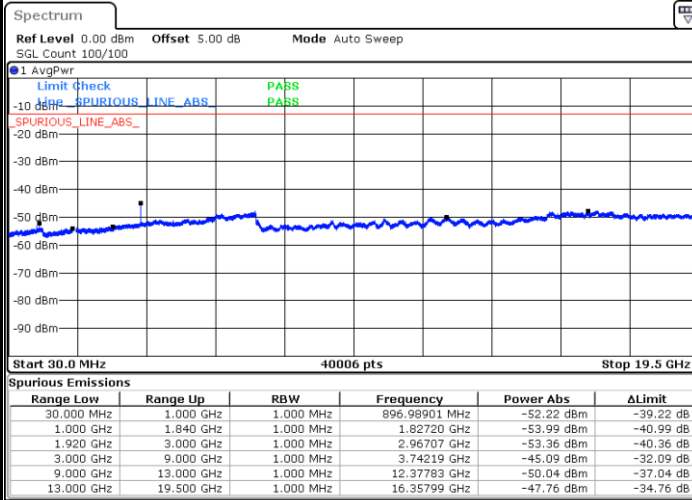


Date: 7.SEP.2018 11:32:48



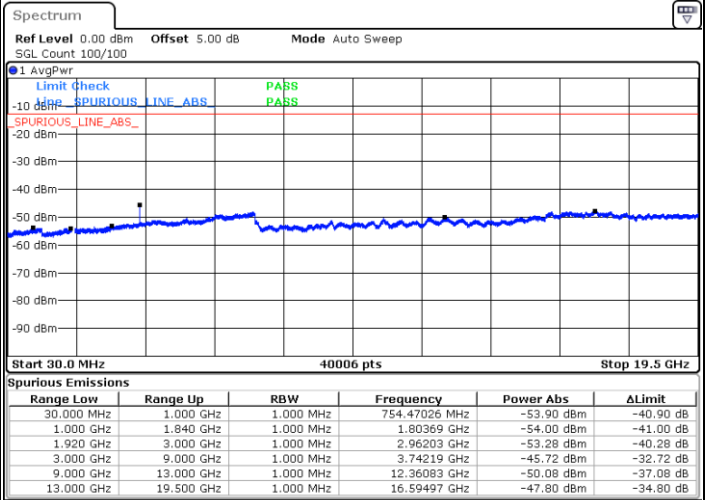
## LTE Band 2 / 20MHz

## Middle Channel / QPSK



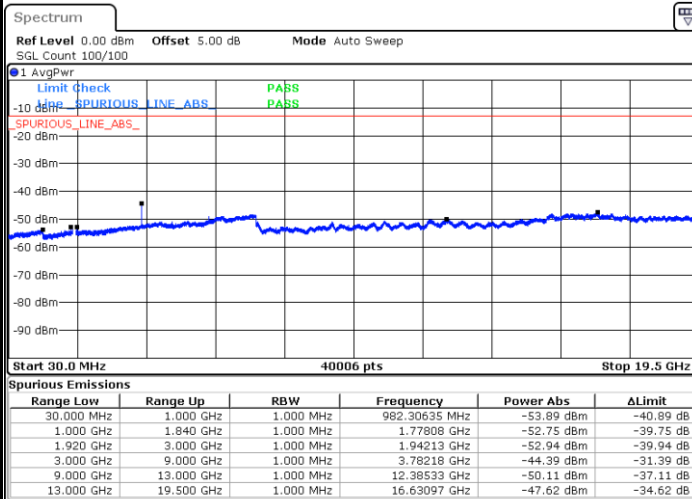
Date: 7.SEP.2018 11:34:26

## Middle Channel / 16QAM



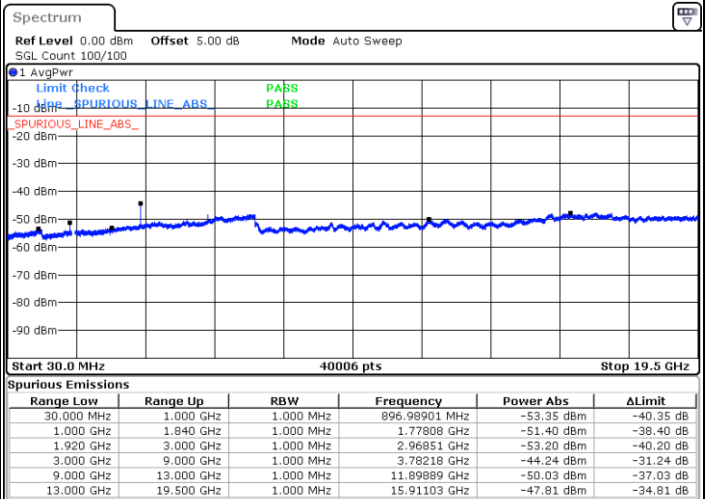
Date: 7.SEP.2018 11:35:21

## Highest Channel / QPSK



Date: 7.SEP.2018 11:41:32

## Highest Channel / 16QAM

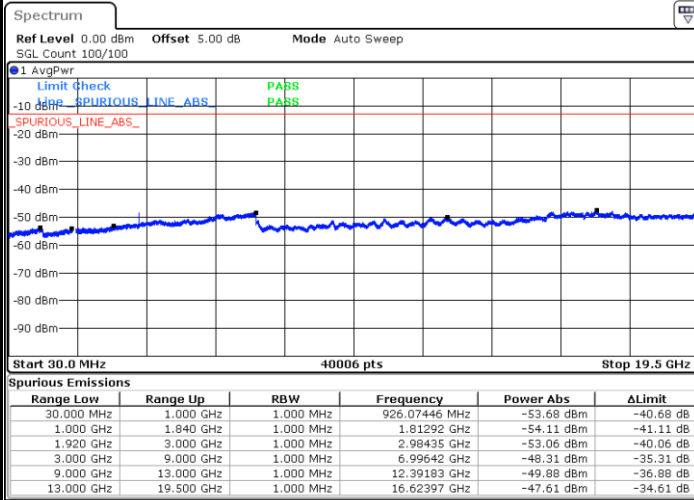


Date: 7.SEP.2018 11:42:27



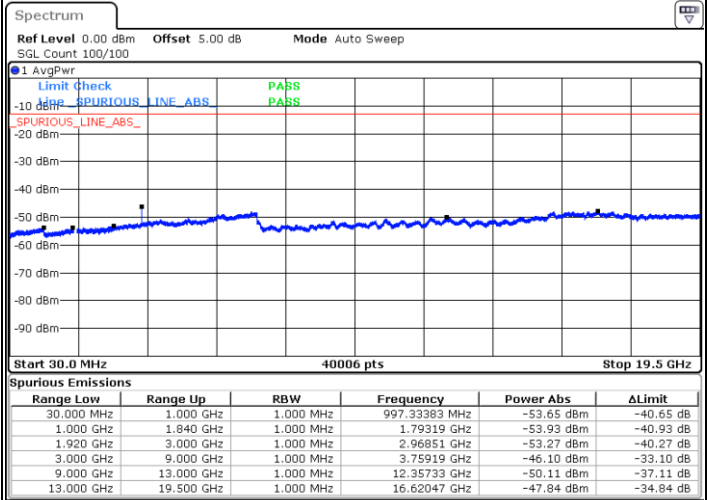
## LTE Band 2 / 1.4MHz

## Lowest Channel / 64QAM



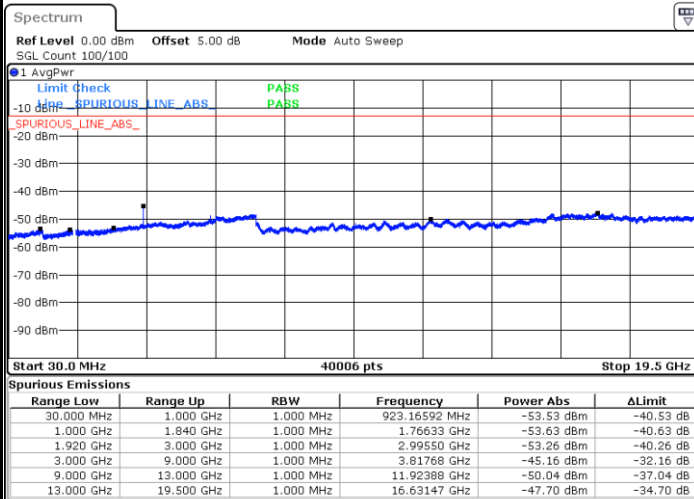
Date: 7.SEP.2018 12:26:03

## Middle Channel / 64QAM



Date: 7.SEP.2018 12:26:58

## Highest Channel / 64QAM

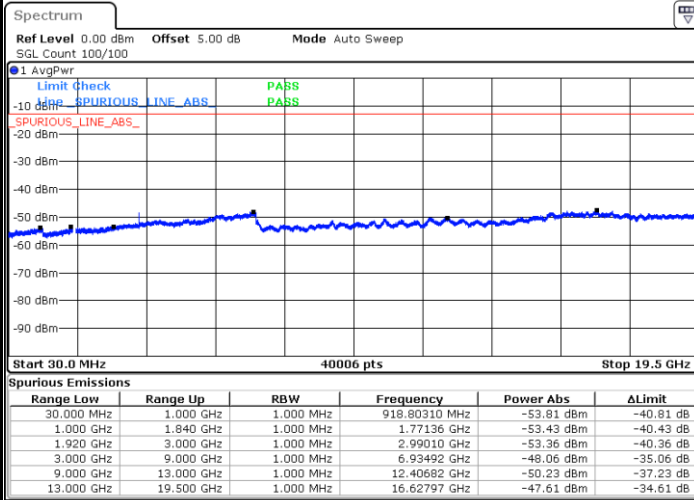


Date: 7.SEP.2018 12:27:54



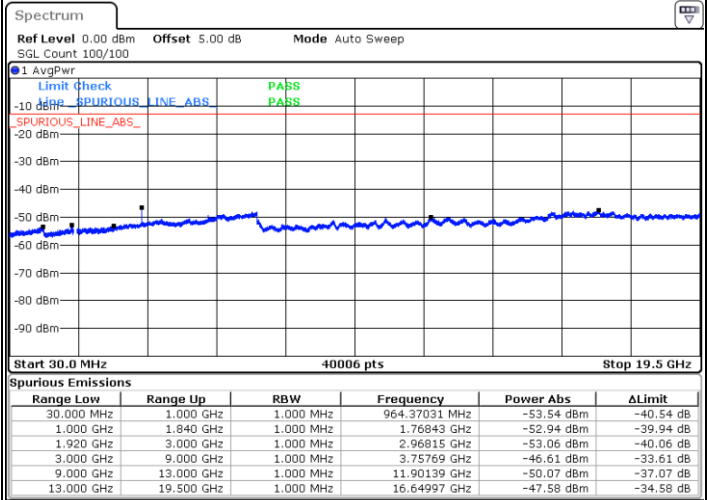
## LTE Band 2 / 3MHz

## Lowest Channel / 64QAM



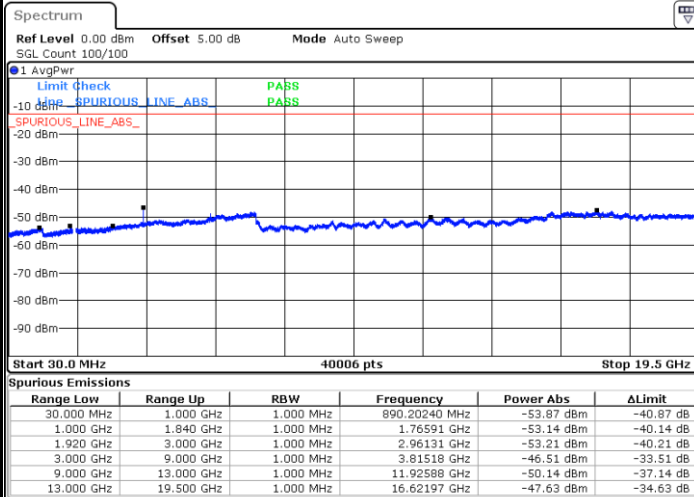
Date: 7.SEP.2018 12:28:50

## Middle Channel / 64QAM



Date: 7.SEP.2018 12:29:45

## Highest Channel / 64QAM

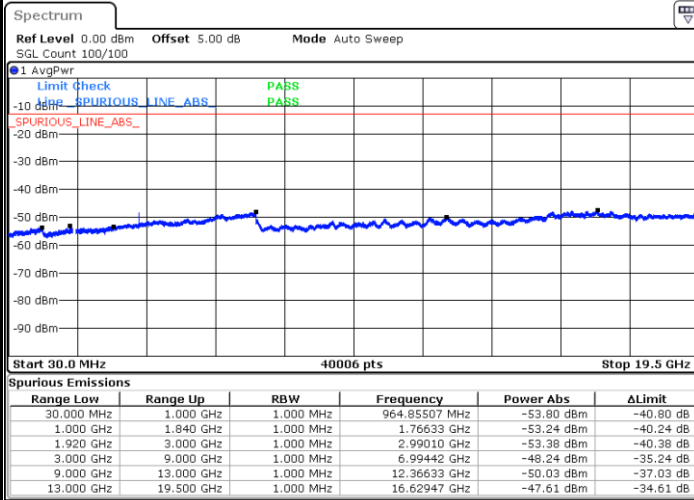


Date: 7.SEP.2018 12:30:41



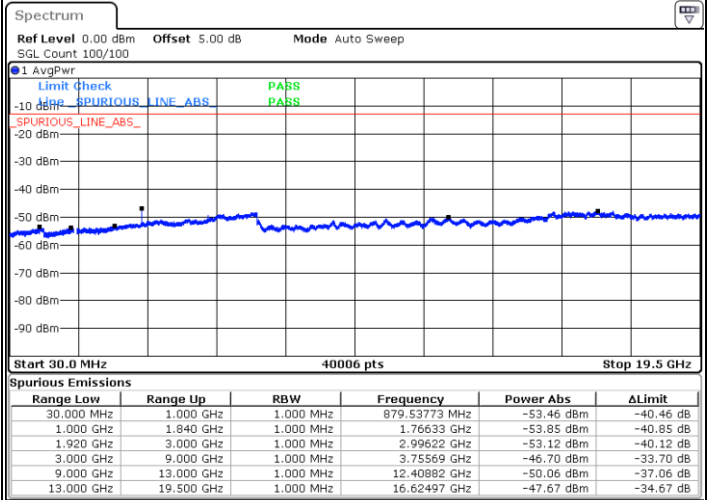
## LTE Band 2 / 5MHz

## Lowest Channel / 64QAM



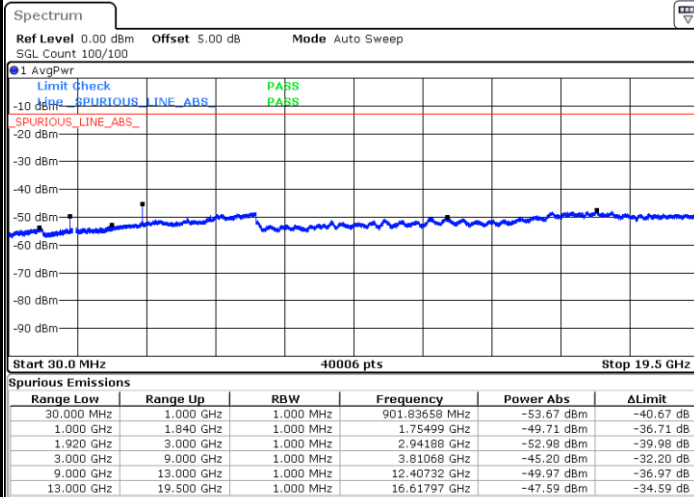
Date: 7.SEP.2018 12:31:36

## Middle Channel / 64QAM



Date: 7.SEP.2018 12:32:32

## Highest Channel / 64QAM

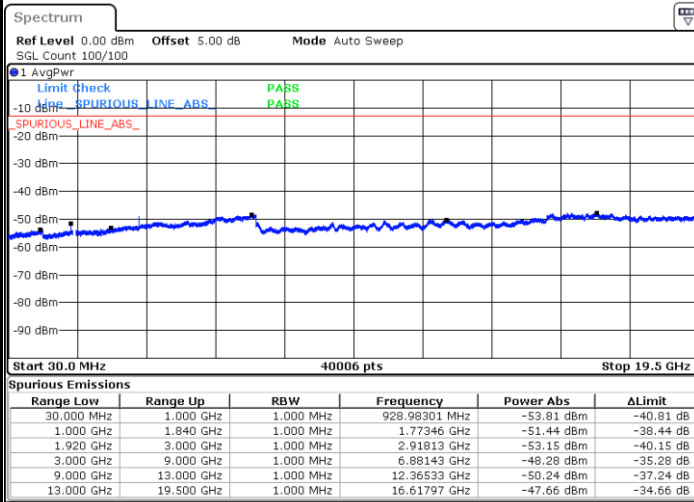


Date: 7.SEP.2018 12:33:27



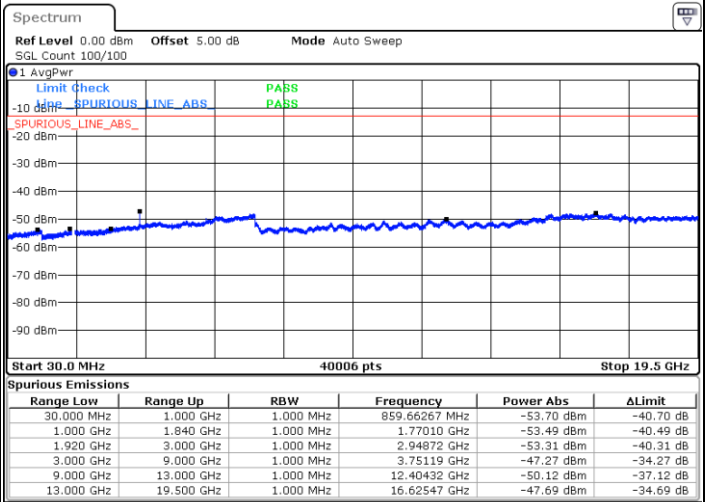
## LTE Band 2 / 10MHz

## Lowest Channel / 64QAM



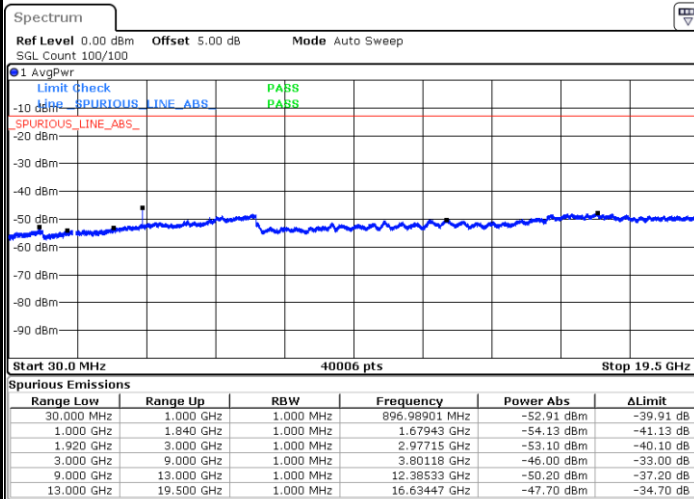
Date: 7.SEP.2018 12:34:23

## Middle Channel / 64QAM



Date: 7.SEP.2018 12:35:18

## Highest Channel / 64QAM

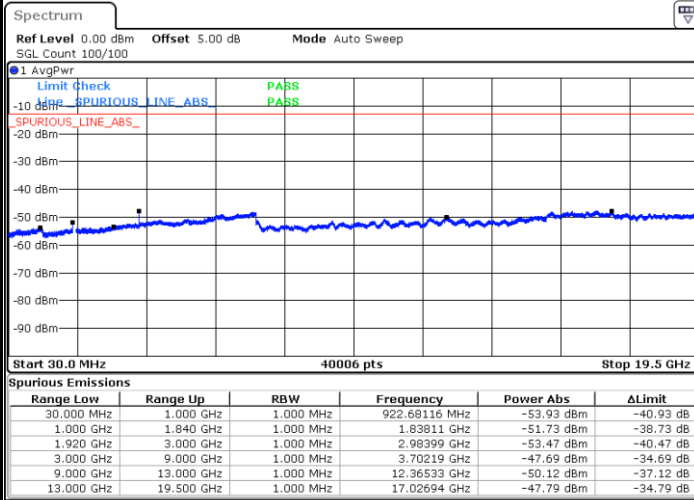


Date: 7.SEP.2018 12:36:14



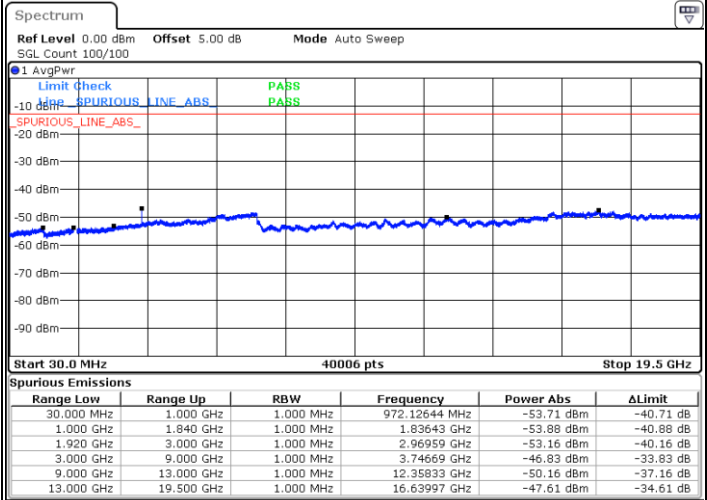
## LTE Band 2 / 15MHz

## Lowest Channel / 64QAM



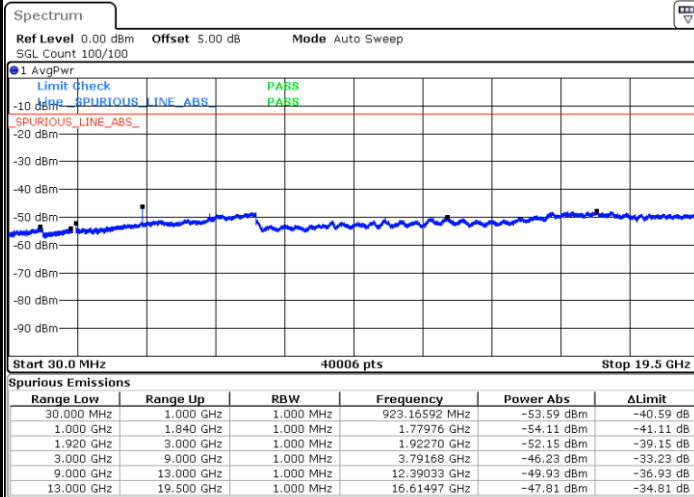
Date: 7.SEP.2018 12:37:09

## Middle Channel / 64QAM



Date: 7.SEP.2018 12:38:05

## Highest Channel / 64QAM

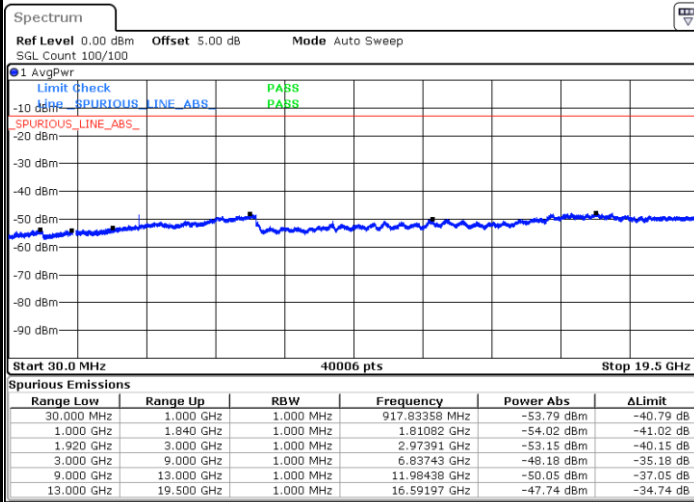


Date: 7.SEP.2018 12:39:00



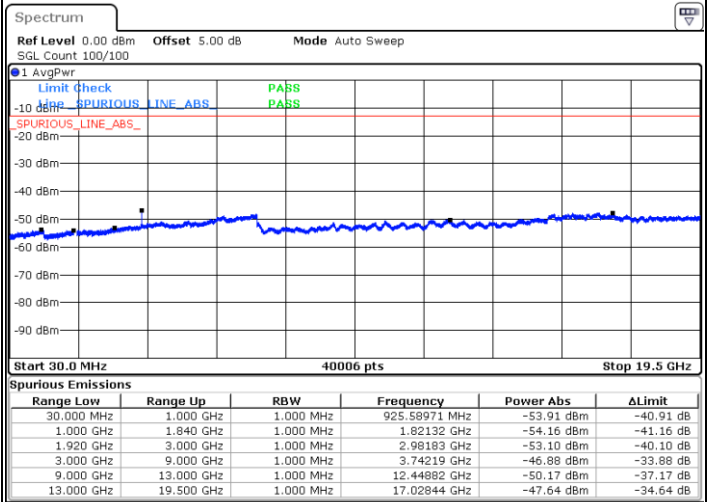
## LTE Band 2 / 20MHz

## Lowest Channel / 64QAM



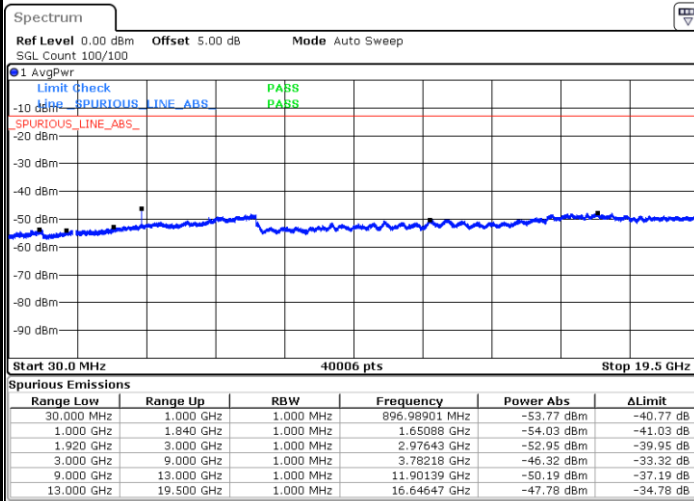
Date: 7.SEP.2018 12:39:56

## Middle Channel / 64QAM



Date: 7.SEP.2018 12:40:51

## Highest Channel / 64QAM



Date: 7.SEP.2018 12:41:47

## 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    | 0.0016                             | PASS    |
| 40               | Normal Voltage    | 0.0004                             |         |
| 30               | Normal Voltage    | 0.0012                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0007                             |         |
| 0                | Normal Voltage    | 0.0010                             |         |
| -10              | Normal Voltage    | 0.0014                             |         |
| -20              | Normal Voltage    | 0.0006                             |         |
| -30              | Normal Voltage    | 0.0001                             |         |
| 20               | Maximum Voltage   | 0.0003                             |         |
| 20               | Normal Voltage    | 0.0011                             |         |
| 20               | Battery End Point | 0.0007                             |         |

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 4

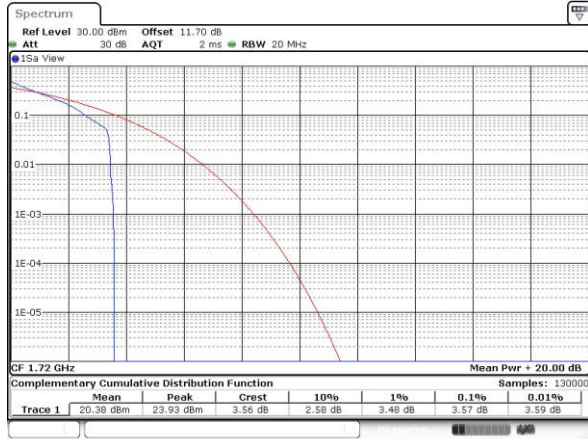
**Peak-to-Average Ratio**

| Mode       | LTE Band 4 / 20MHz |         |       |         |             |
|------------|--------------------|---------|-------|---------|-------------|
| Mod.       | QPSK               |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 3.57               | 4.52    | 5.1   | 5.97    | PASS        |
| Middle CH  | 3.54               | 4.55    | 5.19  | 5.86    |             |
| Highest CH | 3.57               | 4.61    | 5.07  | 5.91    |             |
| Mode       | LTE Band 4 / 20MHz |         |       |         |             |
| Mod.       | 64QAM              |         |       |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB |       |         | Result      |
| Lowest CH  | 6.38               | 6.41    | -     | -       | PASS        |
| Middle CH  | 7.04               | 6.35    | -     | -       |             |
| Highest CH | 6.35               | 6.41    | -     | -       |             |

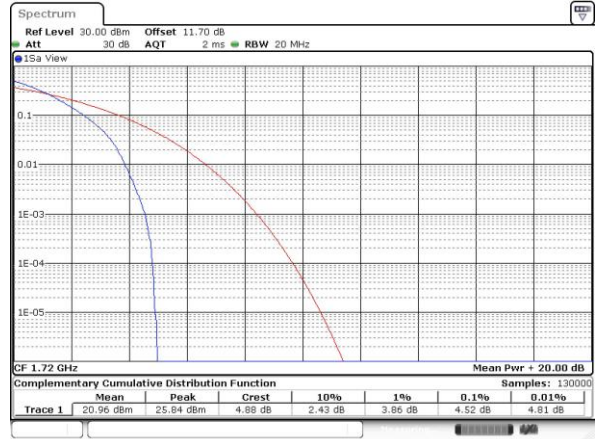


## LTE Band 4 / 20MHz / QPSK

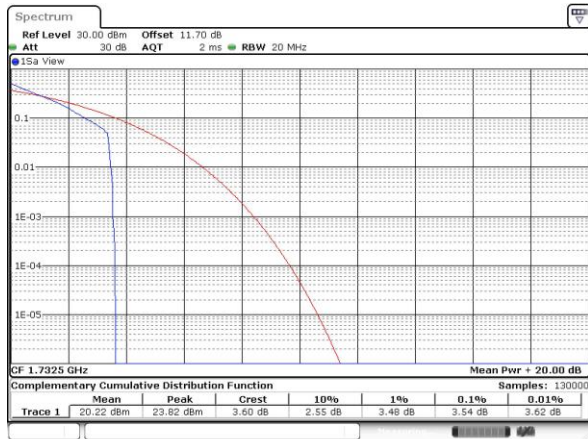
## Lowest Channel / 1RB



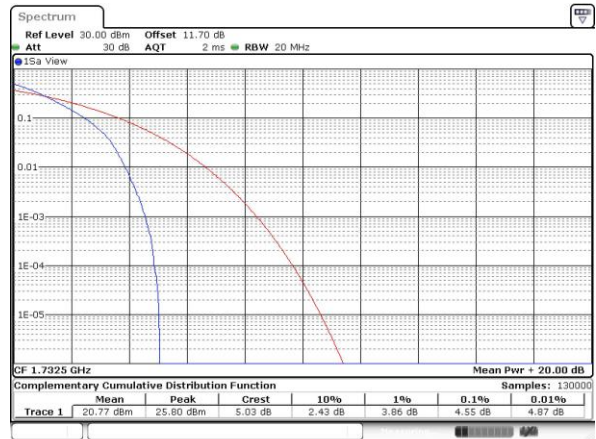
## Lowest Channel / Full RB



## Middle Channel / 1RB



## Middle Channel / Full RB



## Highest Channel / 1RB

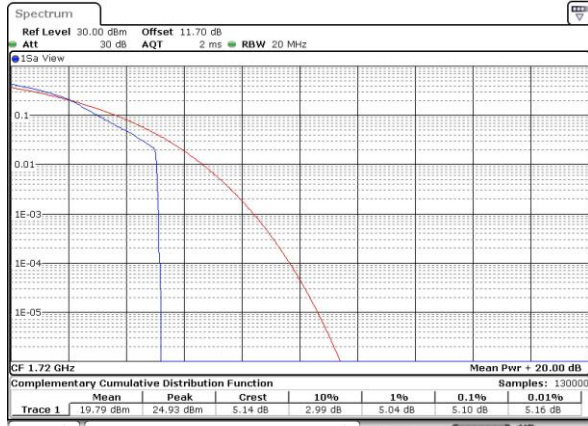


## Highest Channel / Full RB



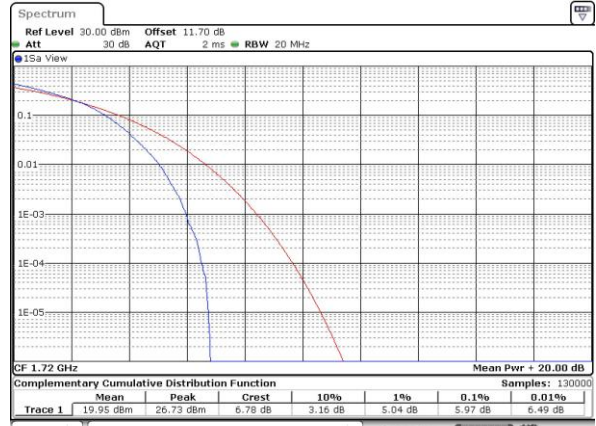
## LTE Band 4 / 20MHz / 16QAM

### Lowest Channel / 1RB



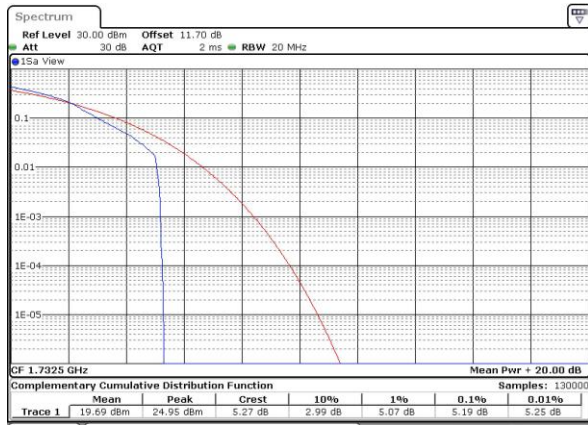
Date: 22 SEP 2018 02:41:16

### Lowest Channel / Full RB



Date: 22 SEP 2018 02:41:27

### Middle Channel / 1RB



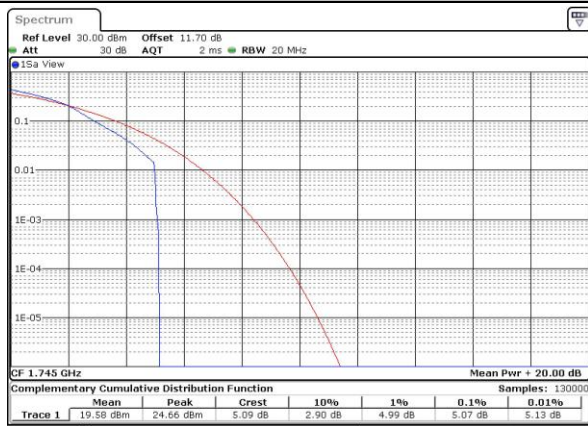
Date: 22 SEP 2018 02:41:37

### Middle Channel / Full RB



Date: 22 SEP 2018 02:41:48

### Highest Channel / 1RB



Date: 22 SEP 2018 02:41:59

### Highest Channel / Full RB

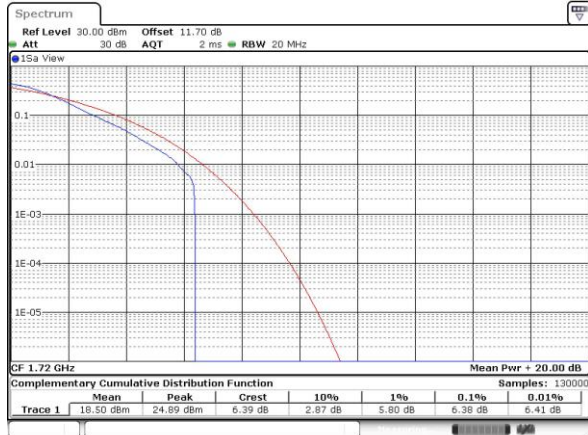


Date: 22 SEP 2018 02:42:09

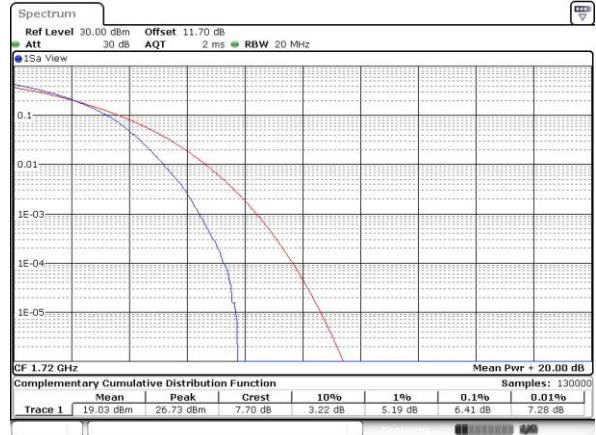


## LTE Band 4 / 20MHz / 64QAM

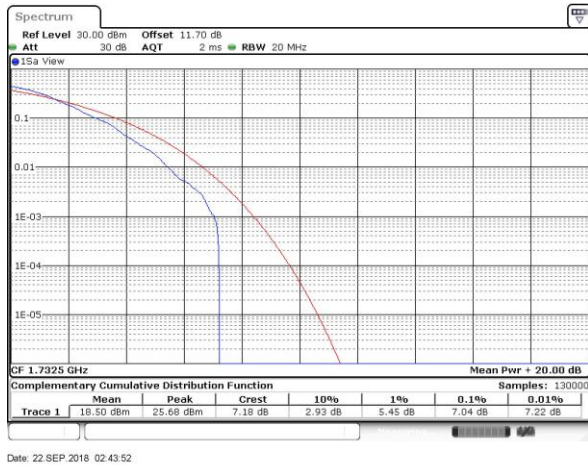
## Lowest Channel / 1RB



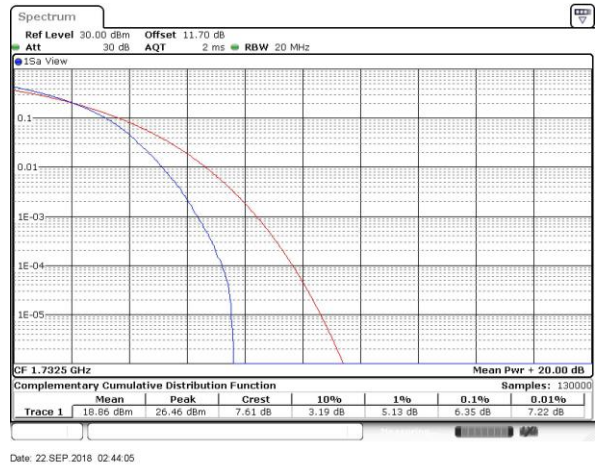
## Lowest Channel / Full RB



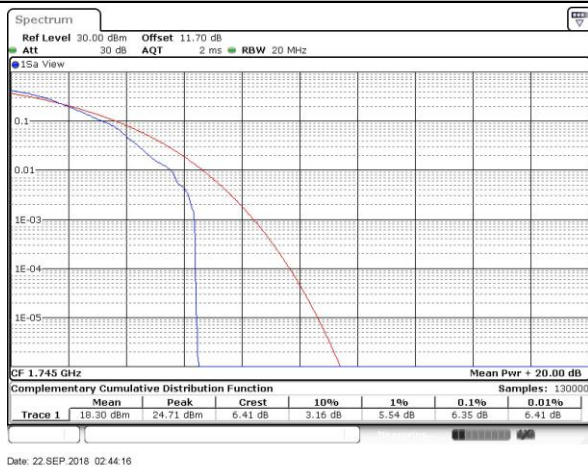
## Middle Channel / 1RB



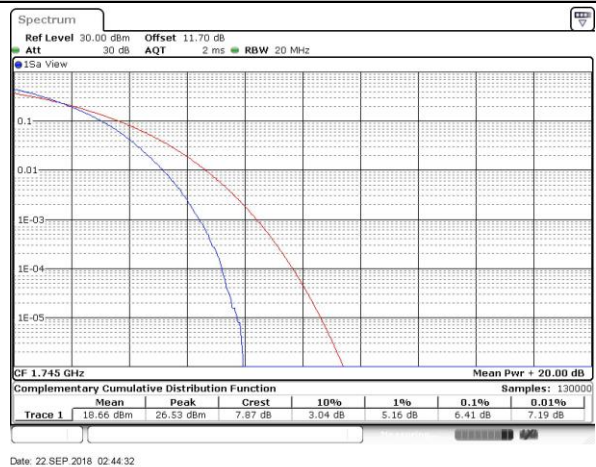
## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB



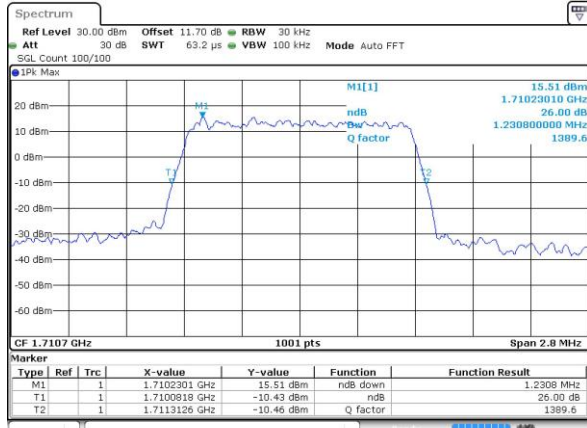
**26dB Bandwidth**

| 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  | 1.23                      | 1.23  | 2.98  | 3.03  | 4.94  | 4.88  | 9.77  | 9.75  | 14.42 | 14.48 | 20.3  | 20.1  |
| Middle CH  | 1.22                      | 1.24  | 3.07  | 3.06  | 4.95  | 4.84  | 9.95  | 9.71  | 14.45 | 14.36 | 20.18 | 20.34 |
| Highest CH | 1.23                      | 1.25  | 3.02  | 3.02  | 4.90  | 4.89  | 9.77  | 9.89  | 14.72 | 14.39 | 20.14 | 20.1  |
| Mode       | LTE Band 4 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                     |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.24                      | -     | 3.02  | -     | 4.91  | -     | 9.73  | -     | 14.51 | -     | 20.14 | -     |
| Middle CH  | 1.22                      | -     | 3.02  | -     | 4.93  | -     | 9.87  | -     | 14.33 | -     | 20.22 | -     |
| Highest CH | 1.22                      | -     | 3.00  | -     | 4.87  | -     | 9.81  | -     | 14.51 | -     | 20.10 | -     |

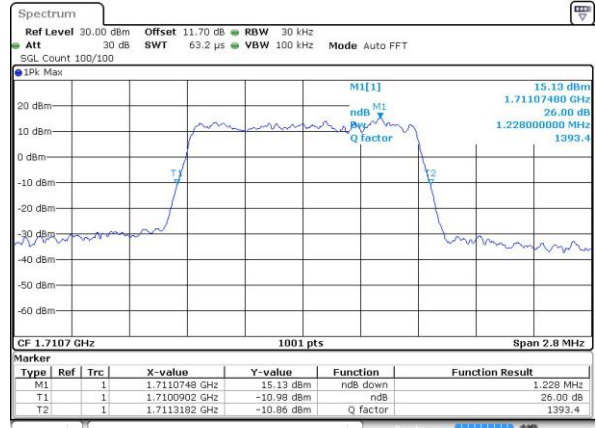


## LTE Band 4

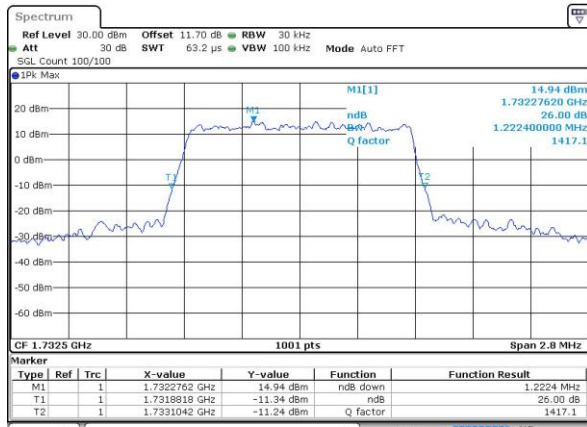
## Lowest Channel / 1.4MHz / QPSK



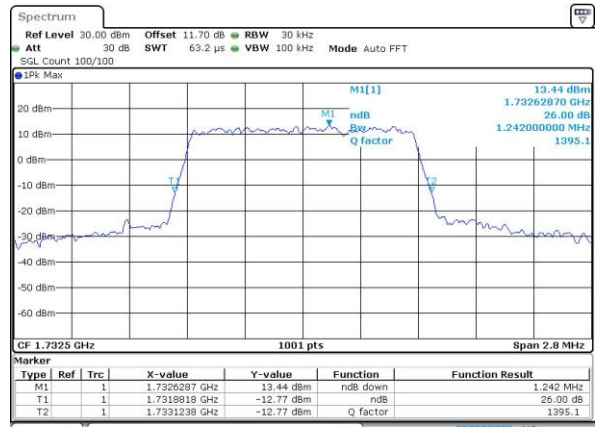
## Lowest Channel / 1.4MHz / 16QAM



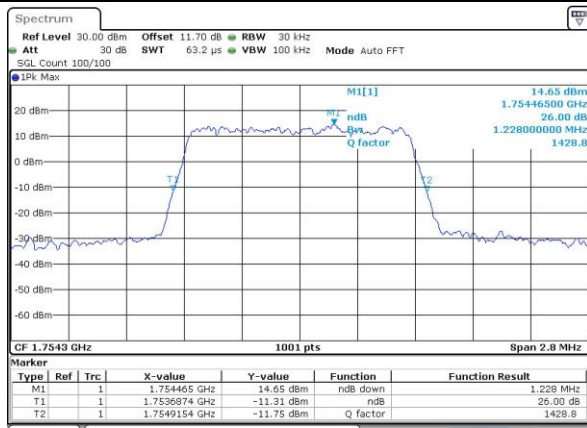
## Middle Channel / 1.4MHz / QPSK



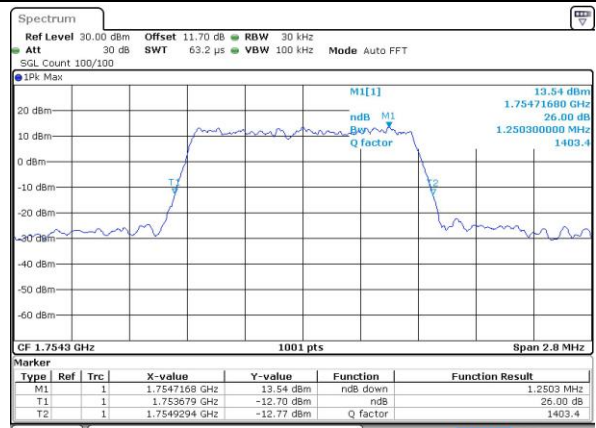
## Middle Channel / 1.4MHz / 16QAM



## Highest Channel / 1.4MHz / QPSK



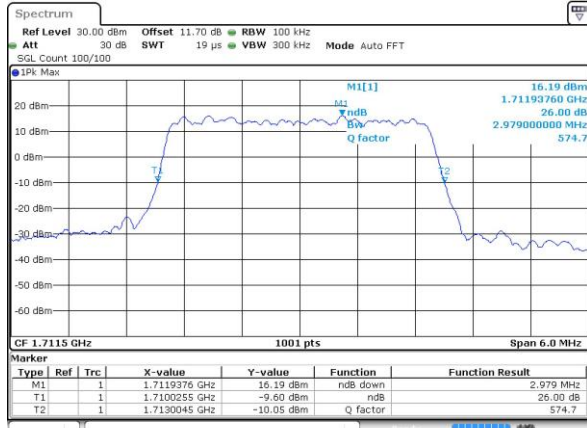
## Highest Channel / 1.4MHz / 16QAM





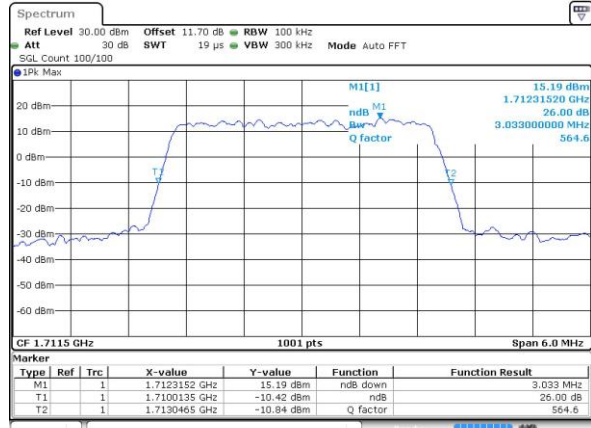
## LTE Band 4

## Lowest Channel / 3MHz / QPSK



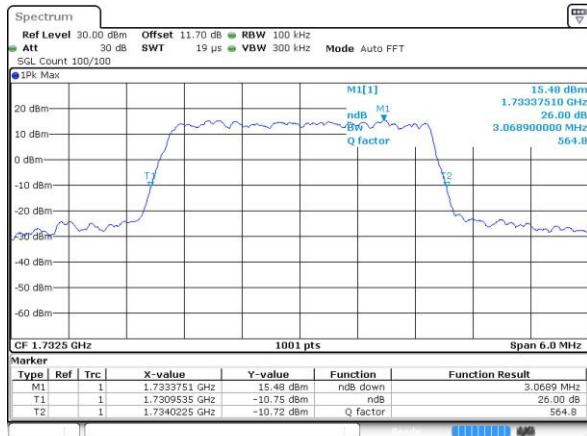
Date: 21 SEP 2018 23:43:19

## Lowest Channel / 3MHz / 16QAM



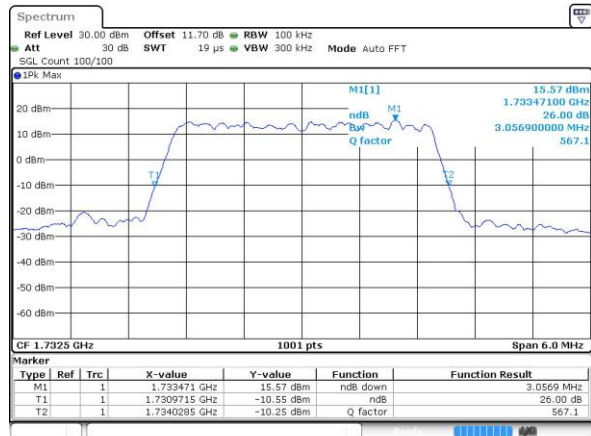
Date: 21 SEP 2018 23:43:31

## Middle Channel / 3MHz / QPSK



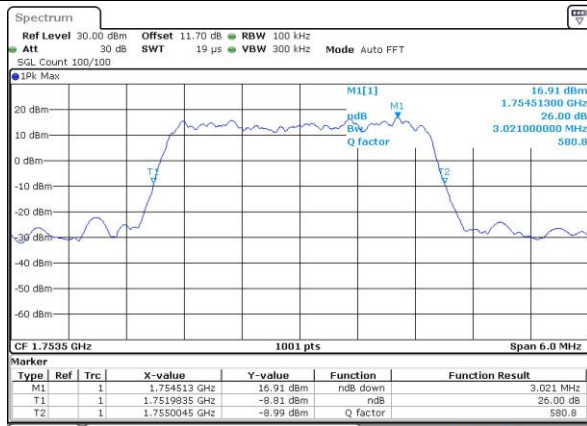
Date: 21 SEP 2018 23:50:06

## Middle Channel / 3MHz / 16QAM



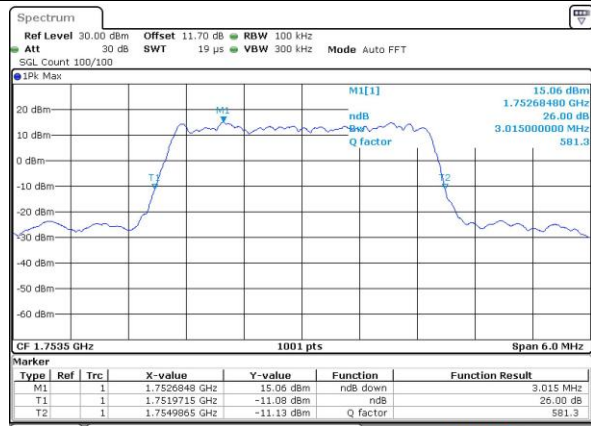
Date: 21 SEP 2018 23:50:18

## Highest Channel / 3MHz / QPSK



Date: 21 SEP 2018 23:52:53

## Highest Channel / 3MHz / 16QAM



Date: 21 SEP 2018 23:53:04