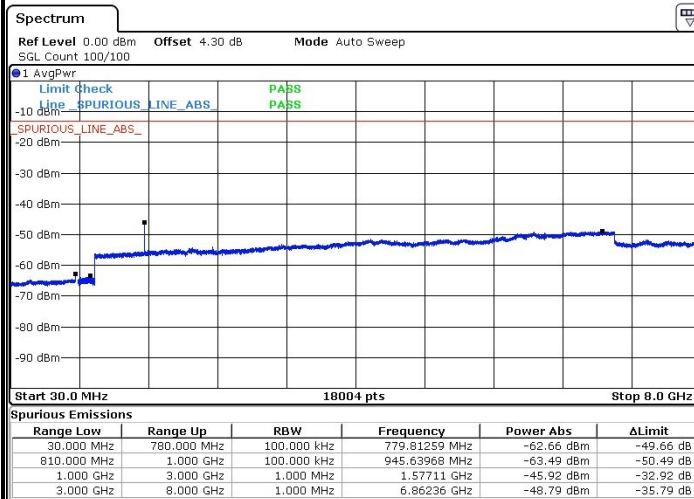




# Conducted Spurious Emission

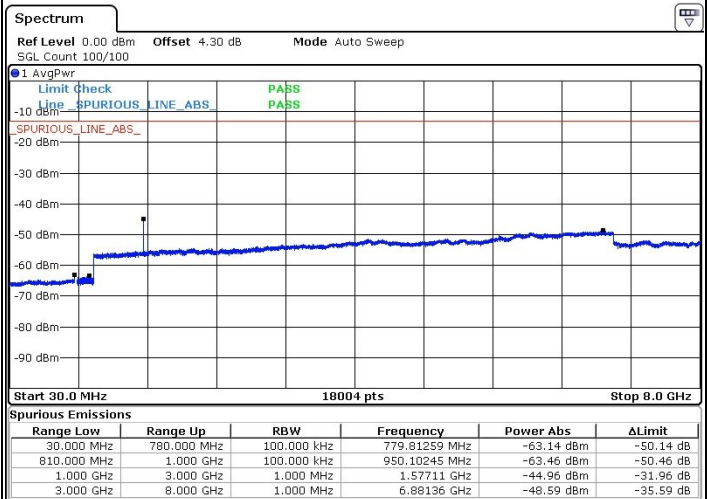
## LTE Band 14 / 5MHz

### Lowest Channel / QPSK



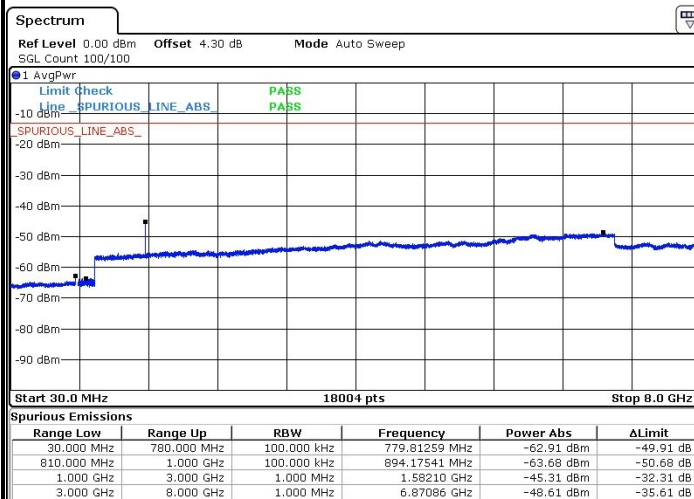
Date: 4 MAY 2019 15:59:52

### Lowest Channel / 16QAM



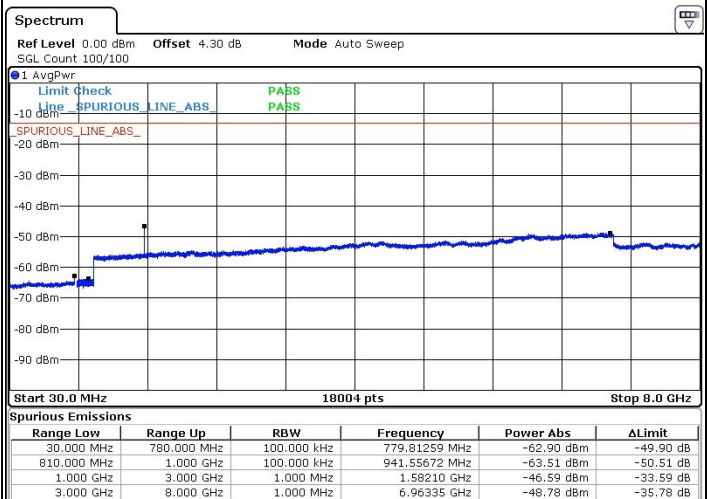
Date: 4 MAY 2019 16:00:39

### Middle Channel / QPSK



Date: 4 MAY 2019 15:57:50

### Middle Channel / 16QAM

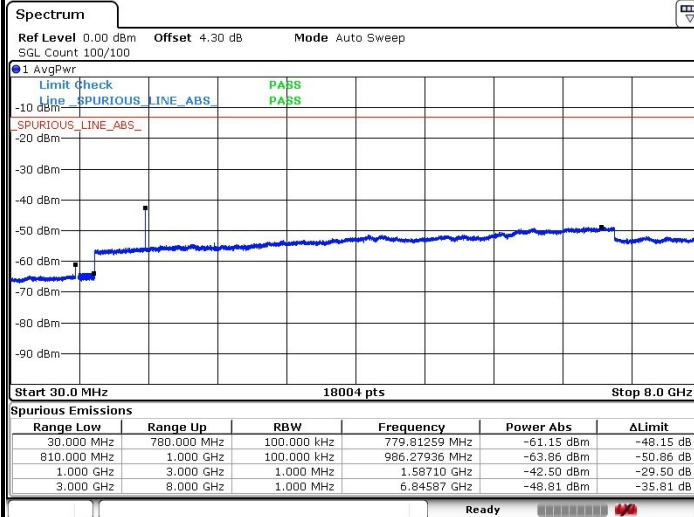


Date: 4 MAY 2019 15:58:20



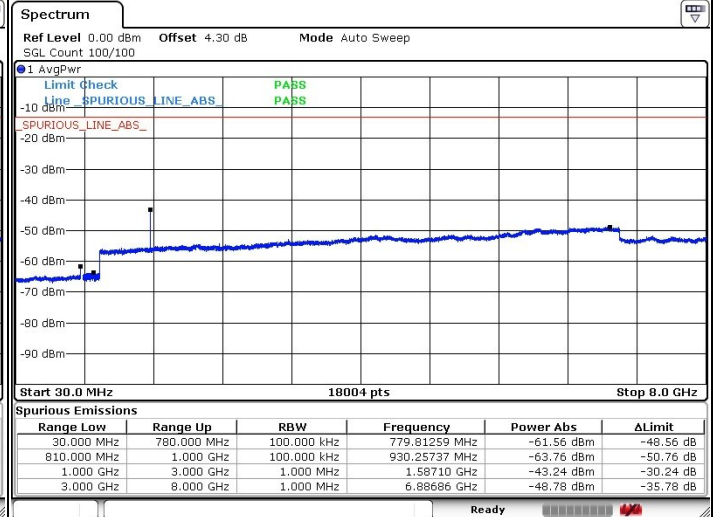
## LTE Band 14 / 5MHz

## Highest Channel / QPSK



Date: 4 MAY 2019 16:02:08

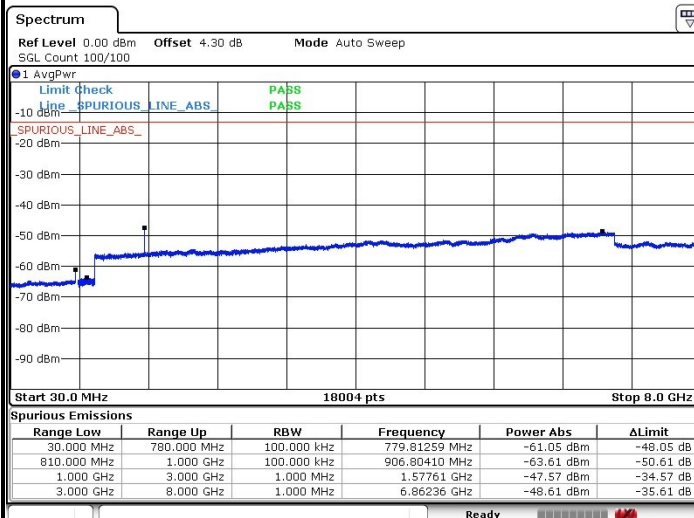
## Highest Channel / 16QAM



Date: 4 MAY 2019 16:02:52

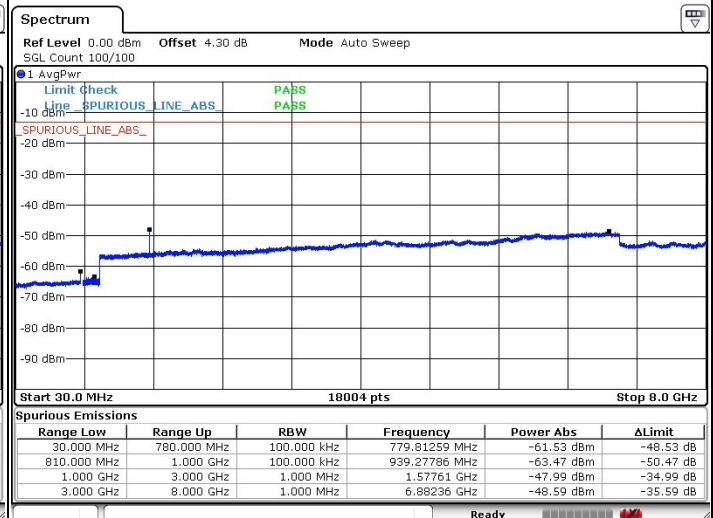
## LTE Band 14 / 10MHz

## Middle Channel / QPSK



Date: 4 MAY 2019 15:54:21

## Middle Channel / 16QAM



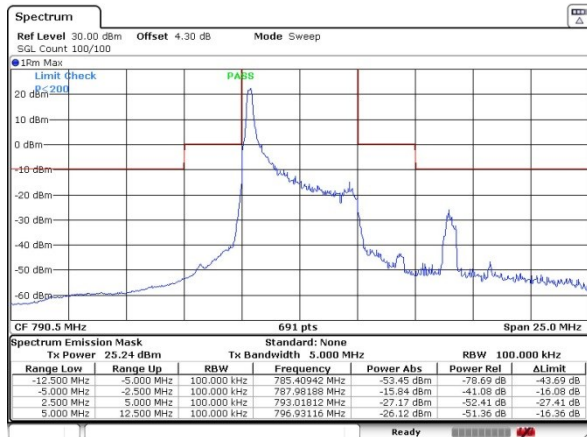
Date: 4 MAY 2019 15:55:40



# Emission Mask

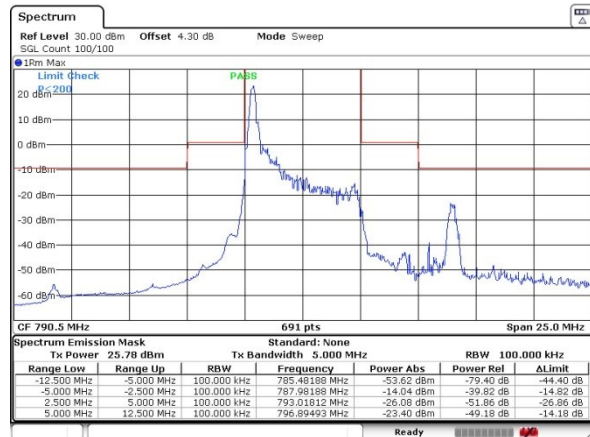
## LTE Band 14/ 5M(1RB0)

### Lowest Channel / 5MHz / QPSK



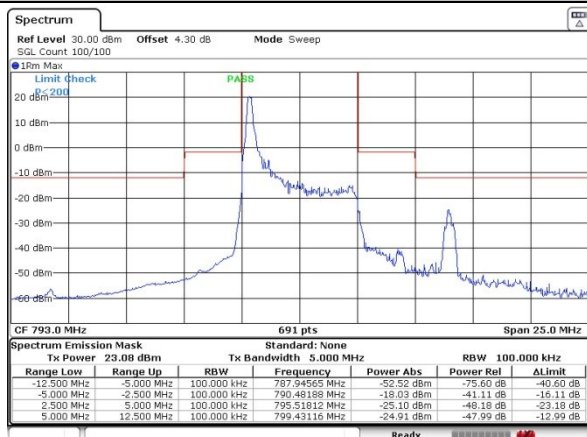
Date: 15 MAY 2019 22:25:42

### Lowest Channel / 5MHz / 16QAM



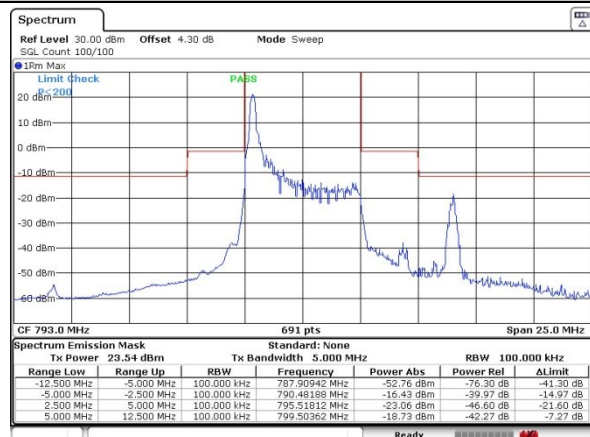
Date: 15 MAY 2019 22:28:41

### Middle Channel / 5MHz / QPSK



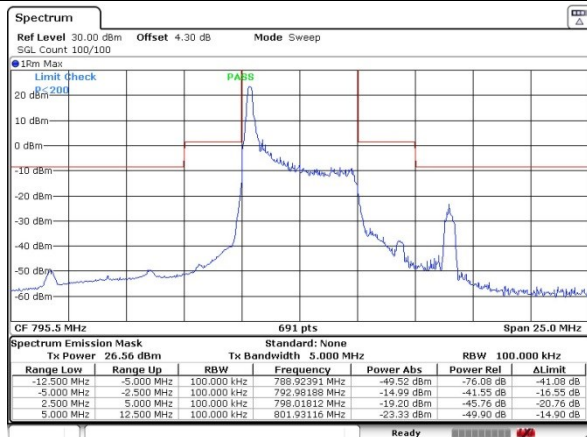
Date: 15 MAY 2019 22:28:58

### Middle Channel / 5MHz / 16QAM



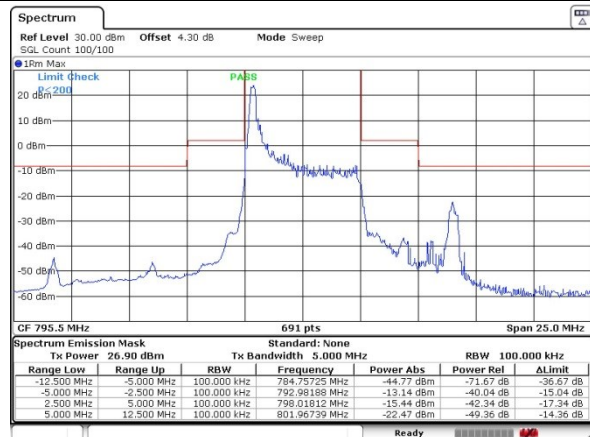
Date: 15 MAY 2019 22:28:44

### Highest Channel / 5MHz / QPSK



Date: 15 MAY 2019 22:21:27

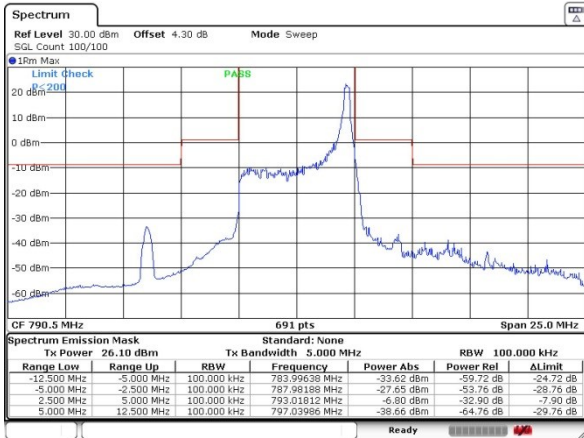
### Highest Channel / 5MHz / 16QAM



Date: 15 MAY 2019 22:28:28

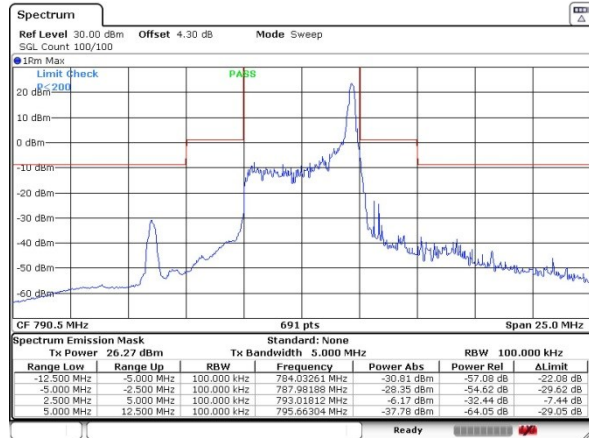
### LTE Band 14/ 5M(1RBmax)

#### Lowest Channel / 5MHz / QPSK



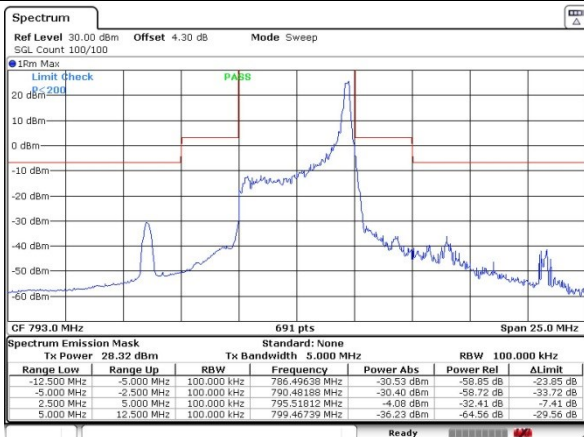
Date: 15 MAY 2019 22:36:34

#### Lowest Channel / 5MHz / 16QAM



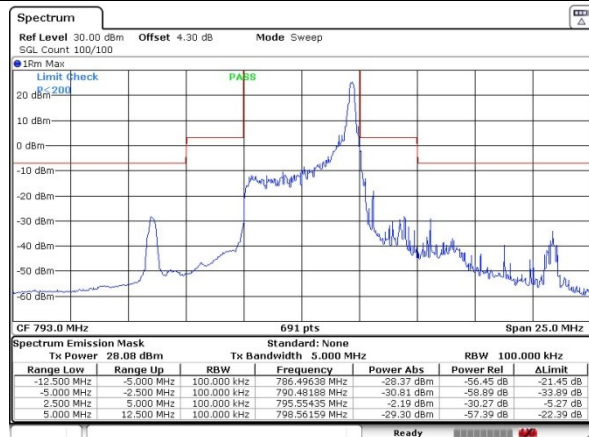
Date: 15 MAY 2019 22:37:33

#### Middle Channel / 5MHz / QPSK



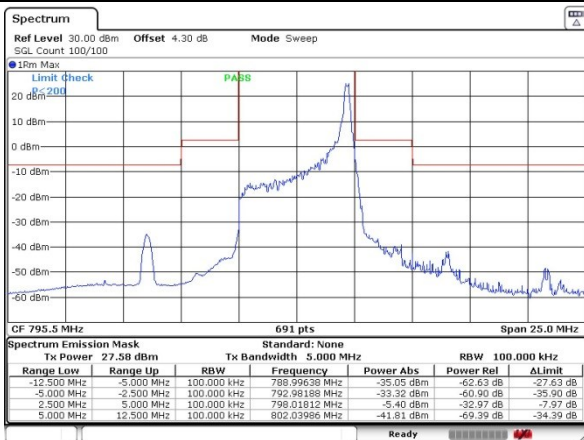
Date: 15 MAY 2019 22:32:28

#### Middle Channel / 5MHz / 16QAM



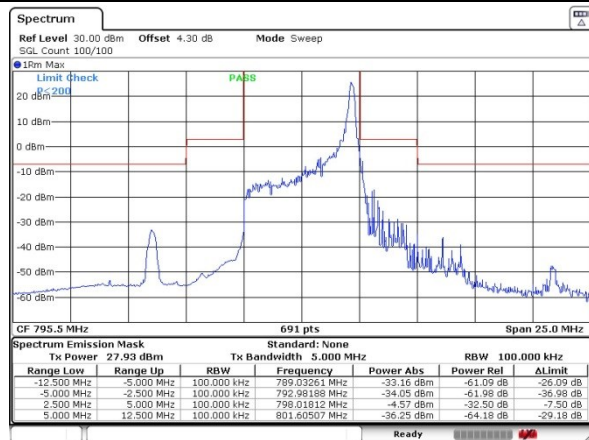
Date: 15 MAY 2019 22:31:19

#### Highest Channel / 5MHz / QPSK



Date: 15 MAY 2019 22:39:42

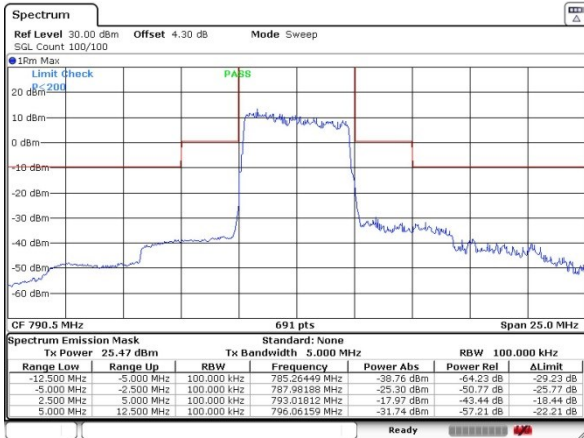
#### Highest Channel / 5MHz / 16QAM



Date: 15 MAY 2019 22:40:39

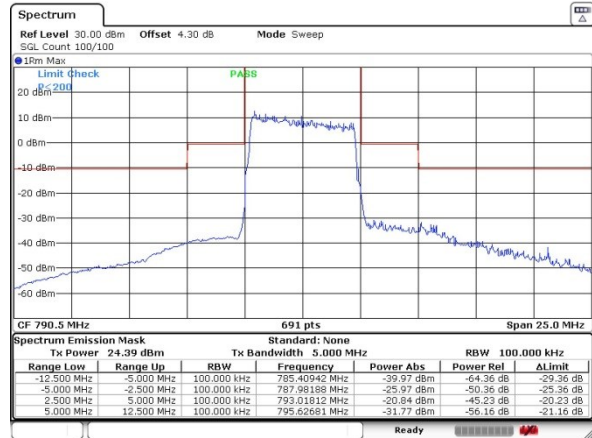
## LTE Band 14/ 5M(fullIRB0)

### Lowest Channel / 5MHz / QPSK



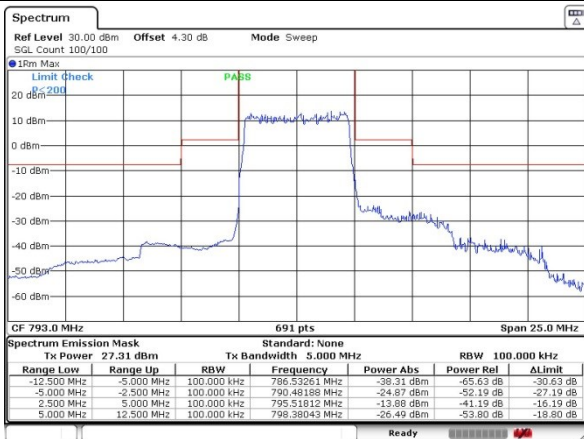
Date: 15 MAY 2019 22:56:36

### Lowest Channel / 5MHz / 16QAM



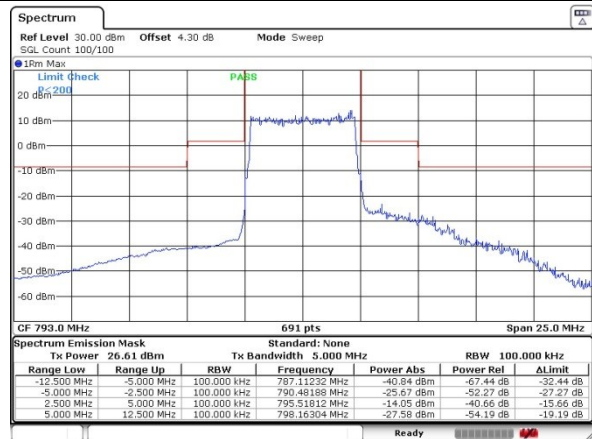
Date: 15 MAY 2019 22:57:35

### Middle Channel / 5MHz / QPSK



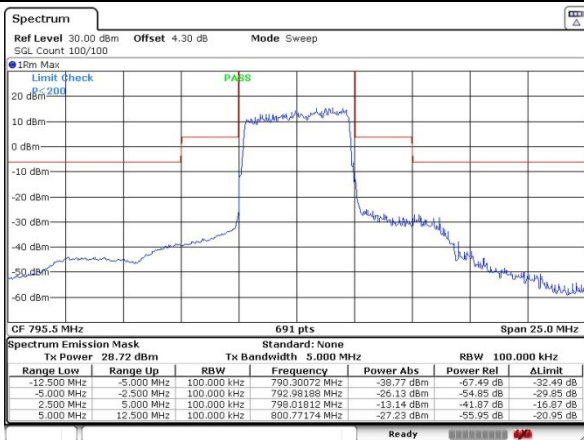
Date: 15 MAY 2019 22:49:16

### Middle Channel / 5MHz / 16QAM



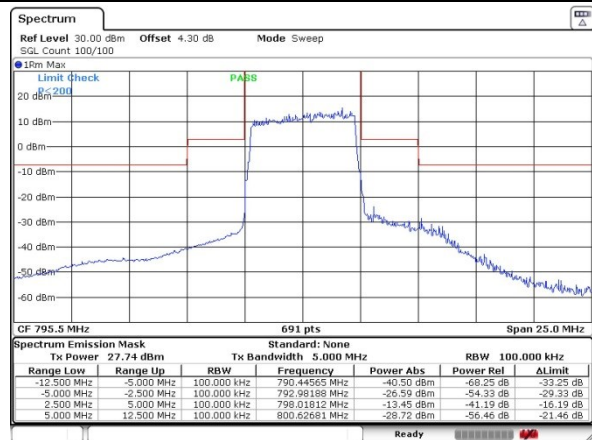
Date: 15 MAY 2019 22:50:10

### Highest Channel / 5MHz / QPSK

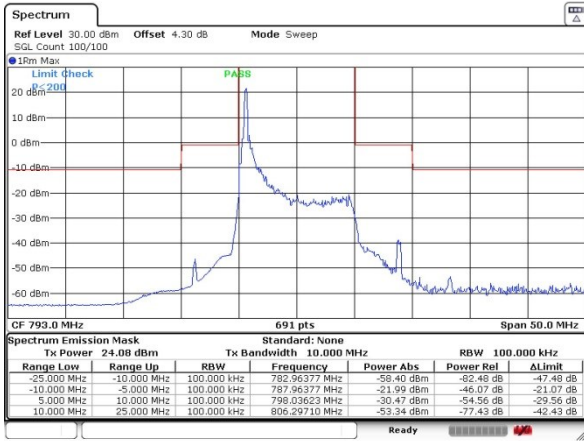


Date: 15 MAY 2019 22:44:21

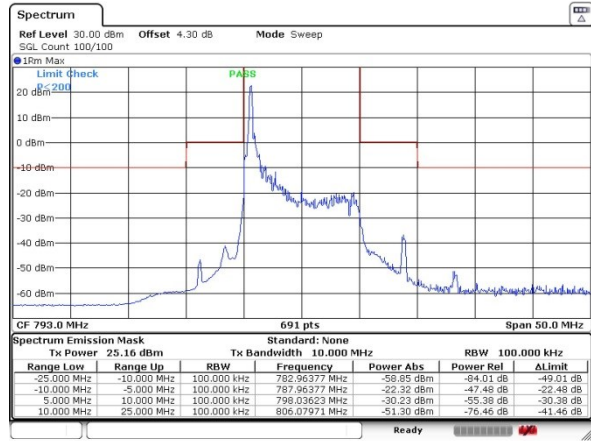
### Highest Channel / 5MHz / 16QAM



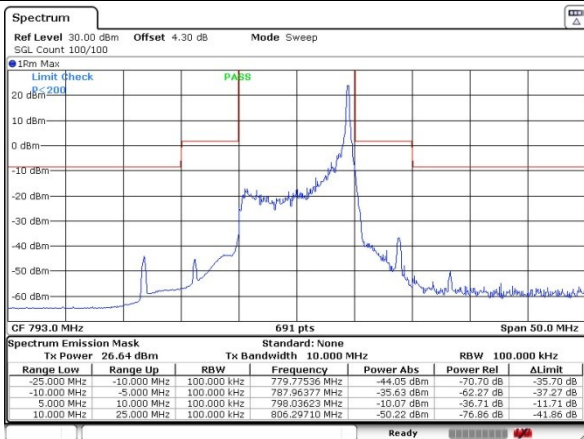
Date: 15 MAY 2019 22:46:32

**LTE Band 14/ 10MHz**
**Middle Channel / 1RB0 / QPSK**


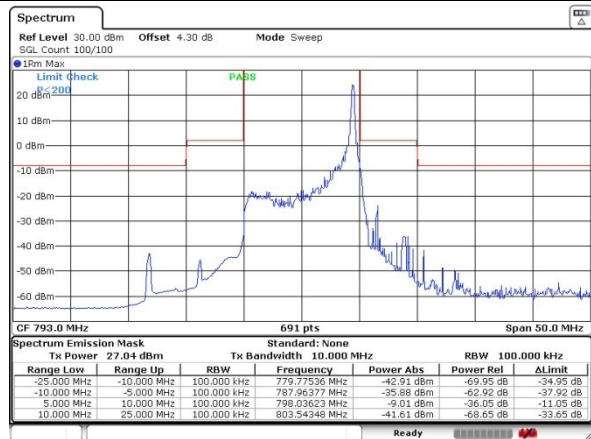
Date: 15 MAY 2019 23:11:07

**Middle Channel / 1RB0 / 16QAM**


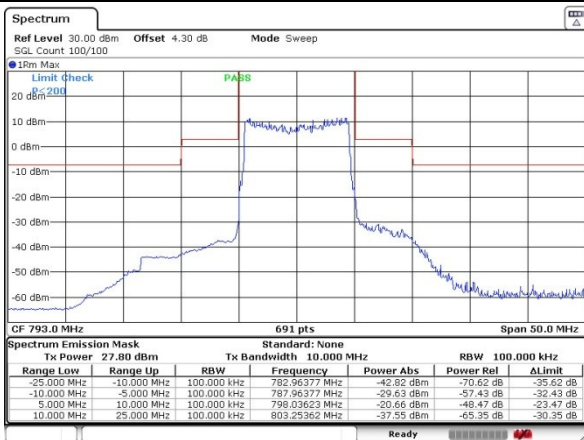
Date: 15 MAY 2019 23:12:23

**Middle Channel / 1RBmax / QPSK**


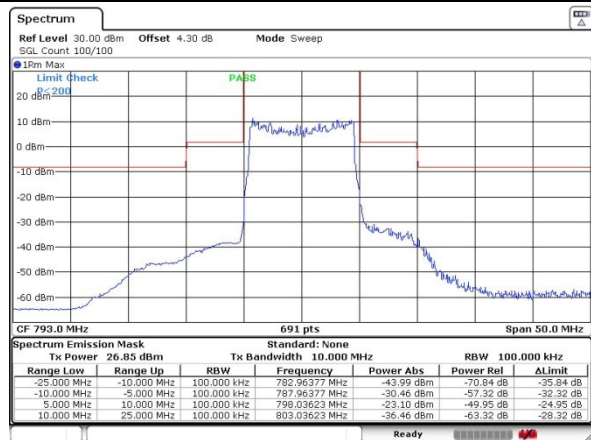
Date: 15 MAY 2019 23:14:54

**Middle Channel / 1RBmax / 16QAM**


Date: 15 MAY 2019 23:16:09

**Middle Channel / fullRB0 / QPSK**


Date: 15 MAY 2019 23:18:44

**Middle Channel / fullRB0 / 16QAM**


Date: 15 MAY 2019 23:20:11

## Frequency Stability

| Test Conditions  |                   | LTE Band 14 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                            | Note 2. |
|                  |                   | Deviation (ppm)                     | Result  |
| 50               | Normal Voltage    | 0.0044                              | PASS    |
| 40               | Normal Voltage    | 0.0035                              |         |
| 30               | Normal Voltage    | 0.0005                              |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                              |         |
| 10               | Normal Voltage    | 0.0026                              |         |
| 0                | Normal Voltage    | 0.0040                              |         |
| -10              | Normal Voltage    | 0.0011                              |         |
| -20              | Normal Voltage    | 0.0044                              |         |
| -30              | Normal Voltage    | 0.0006                              |         |
| 20               | Maximum Voltage   | 0.0037                              |         |
| 20               | Normal Voltage    | 0.0006                              |         |
| 20               | Battery End Point | 0.0026                              |         |

**Note:**

1. Normal Voltage =3.3V. ; Battery End Point (BEP) =3V. ; Maximum Voltage =3.6V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

## Appendix B. Test Results of Radiated Test

### Field Strength of Spurious Radiated

| LTE Band 14 / 5MHz / QPSK / RB Size 1 Offset 0                                           |                   |             |               |                   |                    |                      |                       |                    |
|------------------------------------------------------------------------------------------|-------------------|-------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Bandwidth                                                                                | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest                                                                                   | 1576              | -53.30      | -40           | -13.30            | -55.01             | 2.23                 | 6.09                  | H                  |
|                                                                                          | 2365.02           | -67.80      | -13           | -54.80            | -68.33             | 2.83                 | 5.51                  | H                  |
|                                                                                          | 3153              | -57.89      | -13           | -44.89            | -59.83             | 3.21                 | 7.30                  | H                  |
|                                                                                          | 1576              | -60.85      | -40           | -20.85            | -62.56             | 2.23                 | 6.09                  | V                  |
|                                                                                          | 2365.02           | -67.25      | -13           | -54.25            | -67.78             | 2.83                 | 5.51                  | V                  |
|                                                                                          | 3153              | -61.83      | -13           | -48.83            | -63.77             | 3.21                 | 7.30                  | V                  |
| Middle                                                                                   | 1582              | -59.09      | -40           | -19.09            | -60.80             | 2.23                 | 6.09                  | H                  |
|                                                                                          | 2372.52           | -66.47      | -13           | -53.47            | -67.00             | 2.83                 | 5.51                  | H                  |
|                                                                                          | 3162              | -63.36      | -13           | -50.36            | -65.30             | 3.21                 | 7.30                  | H                  |
|                                                                                          | 1582              | -55.64      | -40           | -15.64            | -57.35             | 2.23                 | 6.09                  | V                  |
|                                                                                          | 2372              | -66.16      | -13           | -53.16            | -66.69             | 2.83                 | 5.51                  | V                  |
|                                                                                          | 3162              | -60.31      | -13           | -47.31            | -62.25             | 3.21                 | 7.30                  | V                  |
| Highest                                                                                  | 1586              | -53.00      | -40           | -13.00            | -54.71             | 2.23                 | 6.09                  | H                  |
|                                                                                          | 2380              | -64.75      | -13           | -51.75            | -65.28             | 2.83                 | 5.51                  | H                  |
|                                                                                          | 3174              | -58.23      | -13           | -45.23            | -60.17             | 3.21                 | 7.30                  | H                  |
|                                                                                          | 1586              | -60.25      | -40           | -20.25            | -61.96             | 2.23                 | 6.09                  | V                  |
|                                                                                          | 2484              | -65.51      | -13           | -52.51            | -66.04             | 2.83                 | 5.51                  | V                  |
|                                                                                          | 3174              | -61.22      | -13           | -48.22            | -63.16             | 3.21                 | 7.30                  | V                  |
| Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line. |                   |             |               |                   |                    |                      |                       |                    |
| Test Result                                                                              |                   |             |               |                   | PASS               |                      |                       |                    |

| LTE Band 14 / 10MHz / QPSK / RB Size 1 Offset 0                                          |                   |             |               |                   |                    |                      |                       |                    |
|------------------------------------------------------------------------------------------|-------------------|-------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Bandwidth                                                                                | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle                                                                                   | 1578              | -53.78      | -40           | -13.78            | -55.49             | 2.23                 | 6.09                  | H                  |
|                                                                                          | 2365.77           | -67.79      | -13           | -54.79            | -68.32             | 2.83                 | 5.51                  | H                  |
|                                                                                          | 3153              | -58.67      | -13           | -45.67            | -60.61             | 3.21                 | 7.30                  | H                  |
|                                                                                          | 1578              | -61.56      | -40           | -21.56            | -63.27             | 2.23                 | 6.09                  | V                  |
|                                                                                          | 2366              | -67.73      | -13           | -54.73            | -68.26             | 2.83                 | 5.51                  | V                  |
|                                                                                          | 3153              | -61.52      | -13           | -48.52            | -63.46             | 3.21                 | 7.30                  | V                  |
| Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line. |                   |             |               |                   |                    |                      |                       |                    |
| Test Result                                                                              |                   |             |               |                   | PASS               |                      |                       |                    |