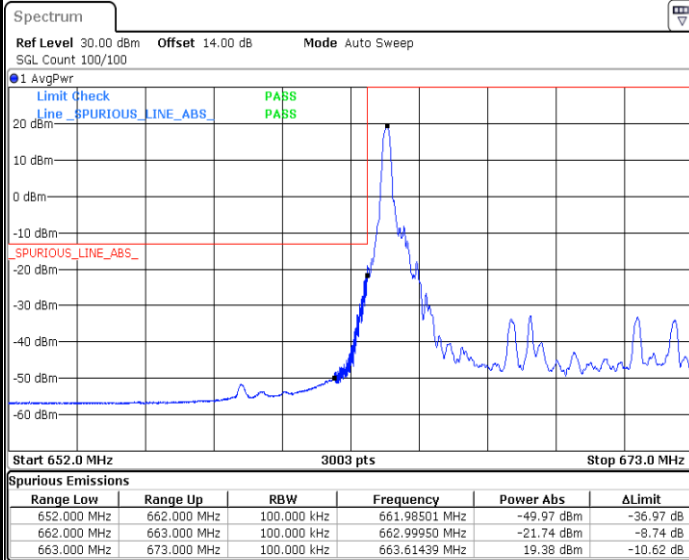


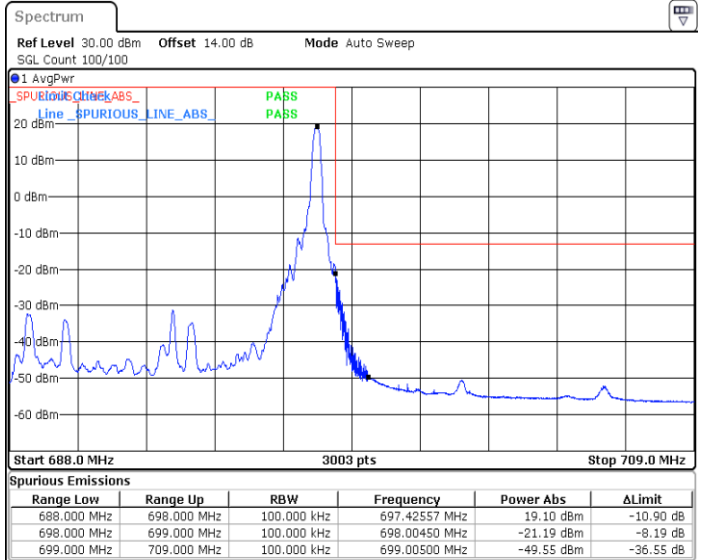


## LTE Band 71 / 10MHz / 64QAM

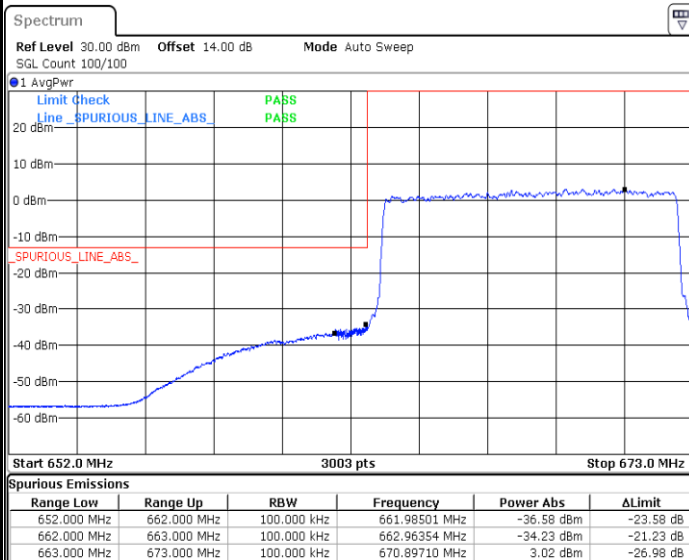
## Lowest Band Edge / 1RB



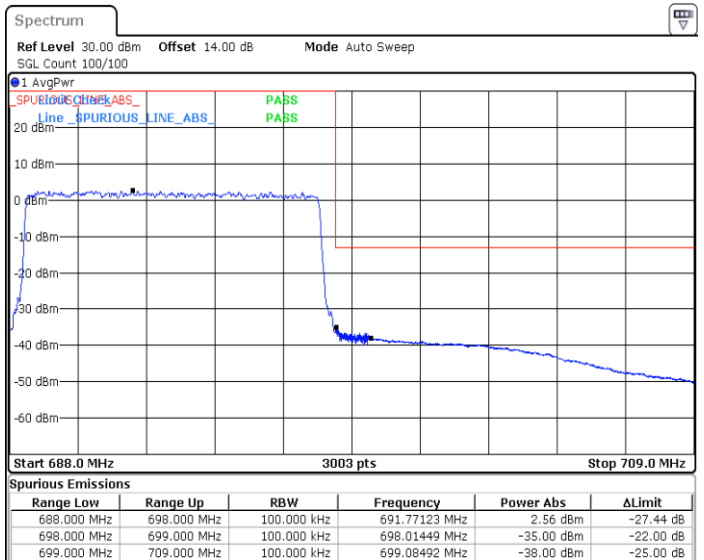
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



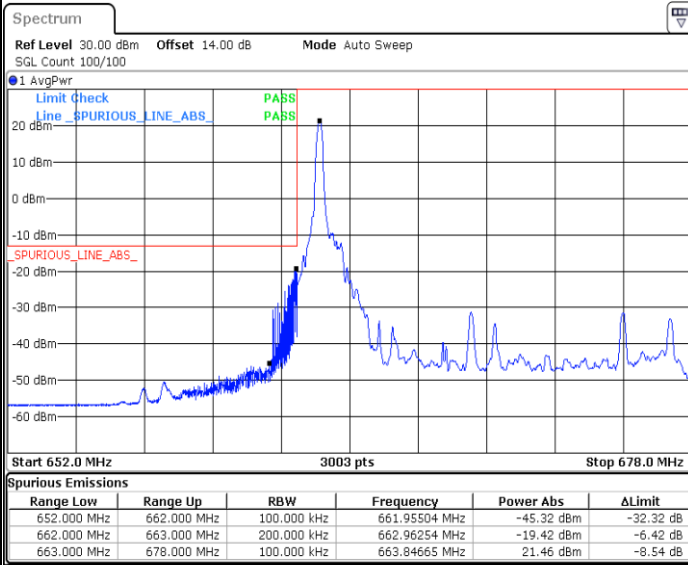
## Highest Band Edge / Full RB



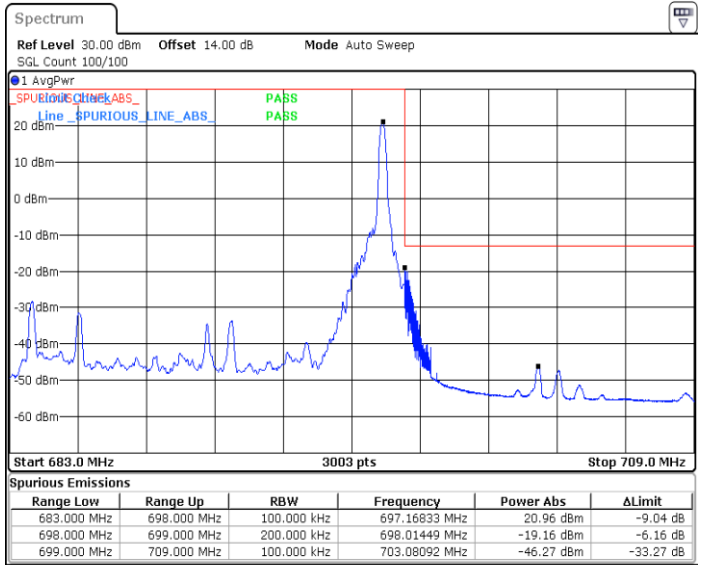


## LTE Band 71 / 15MHz / QPSK

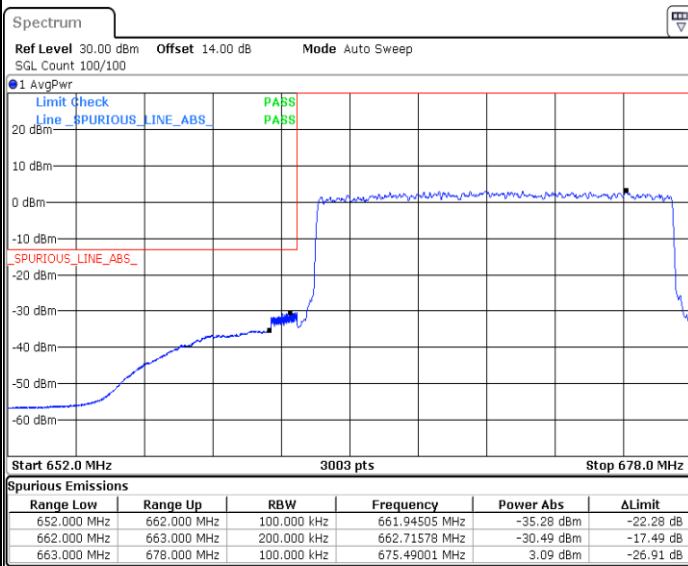
## Lowest Band Edge / 1 RB



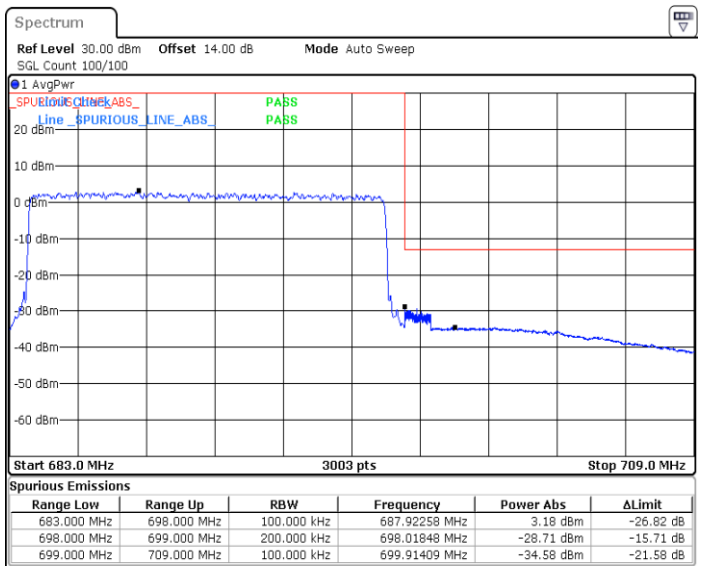
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



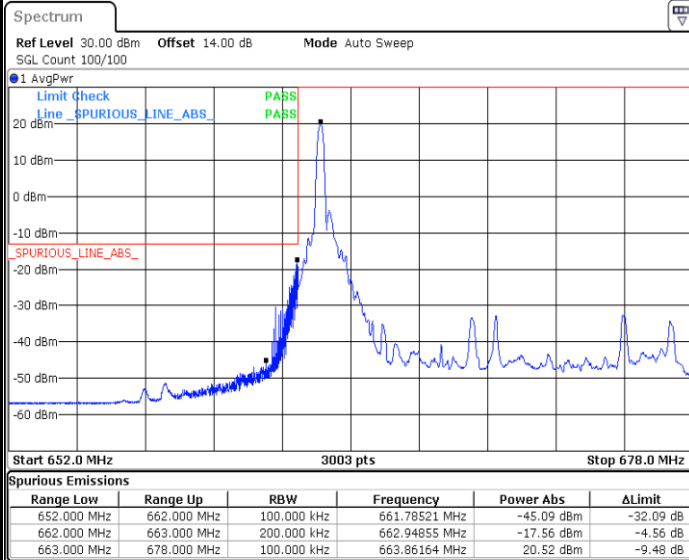
## Highest Band Edge / Full RB



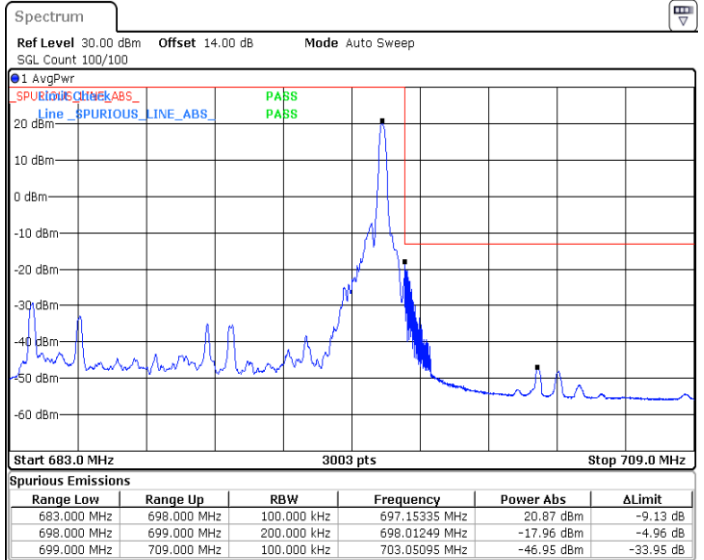


## LTE Band 71 / 15MHz / 16QAM

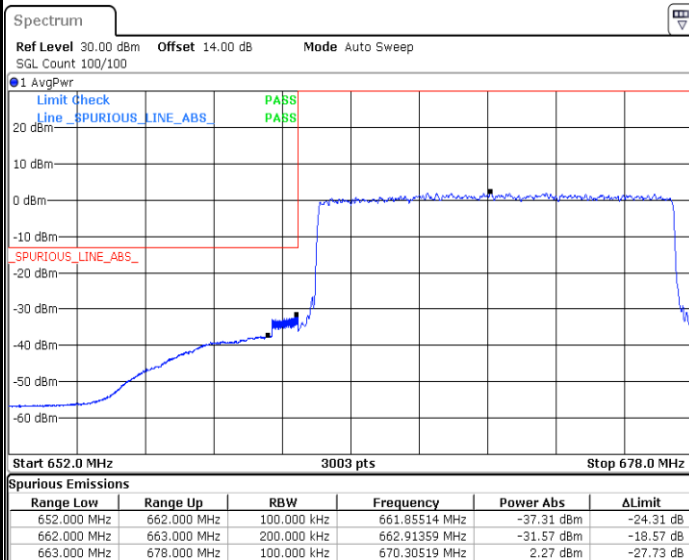
## Lowest Band Edge / 1RB



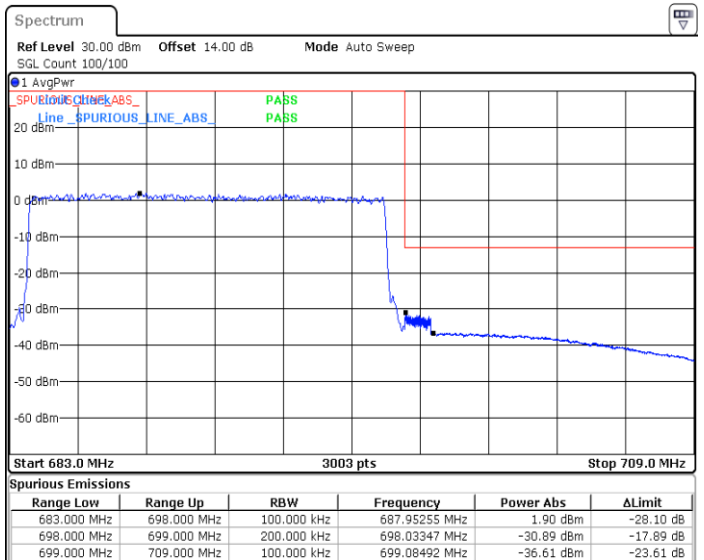
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



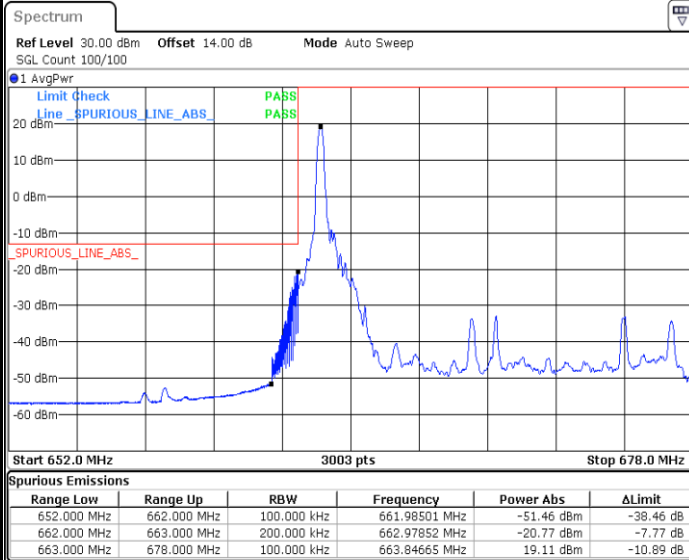
## Highest Band Edge / Full RB



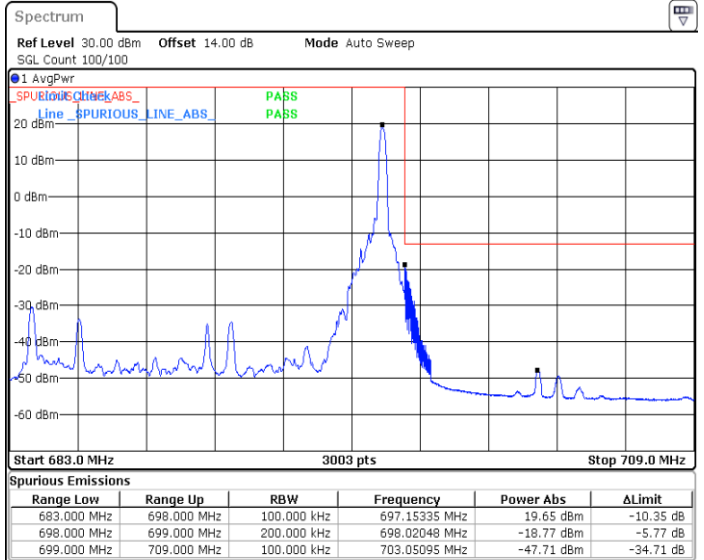


## LTE Band 71 / 15MHz / 64QAM

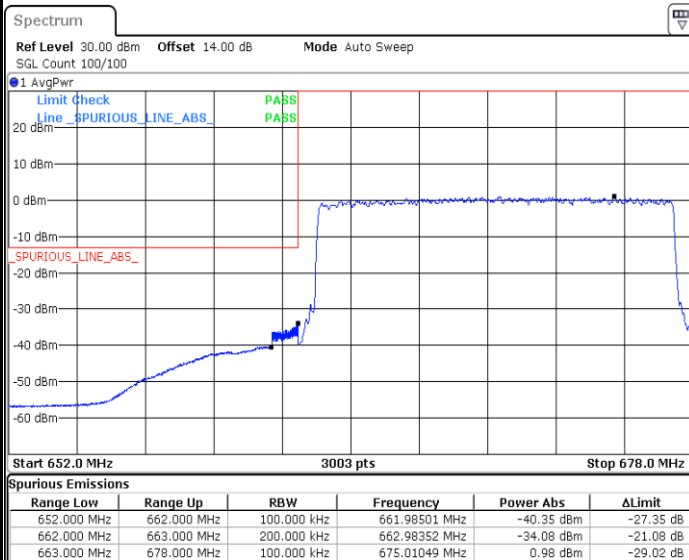
## Lowest Band Edge / 1RB



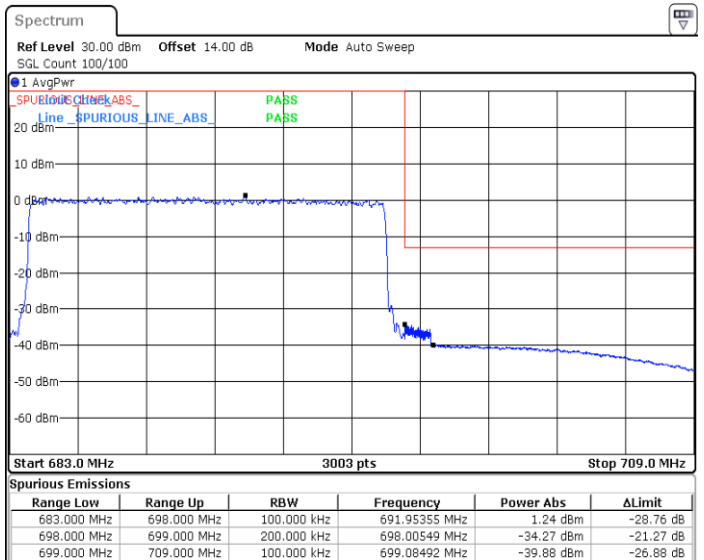
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



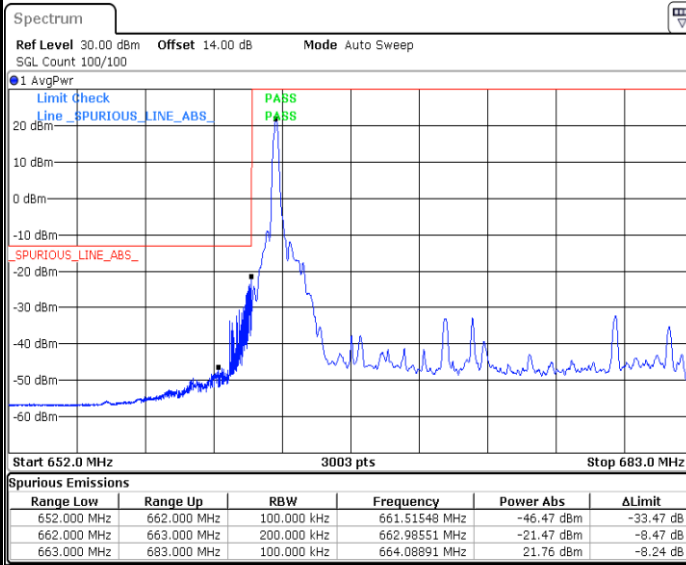
## Highest Band Edge / Full RB



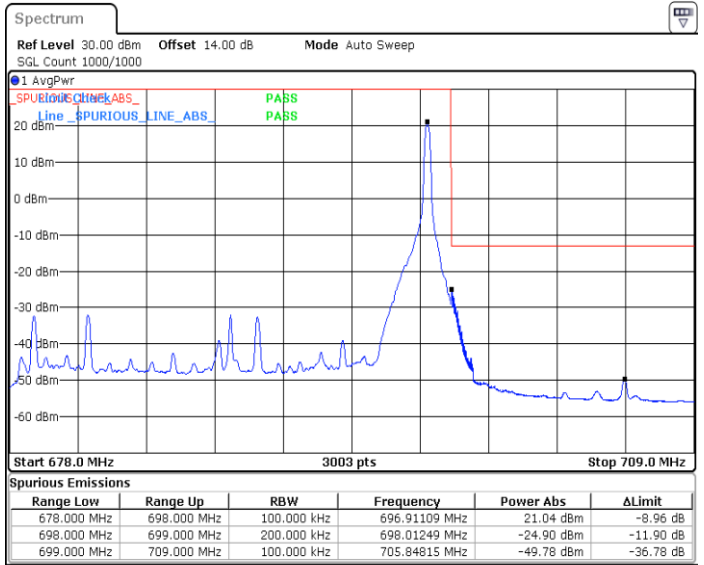


## LTE Band 71 / 20MHz / QPSK

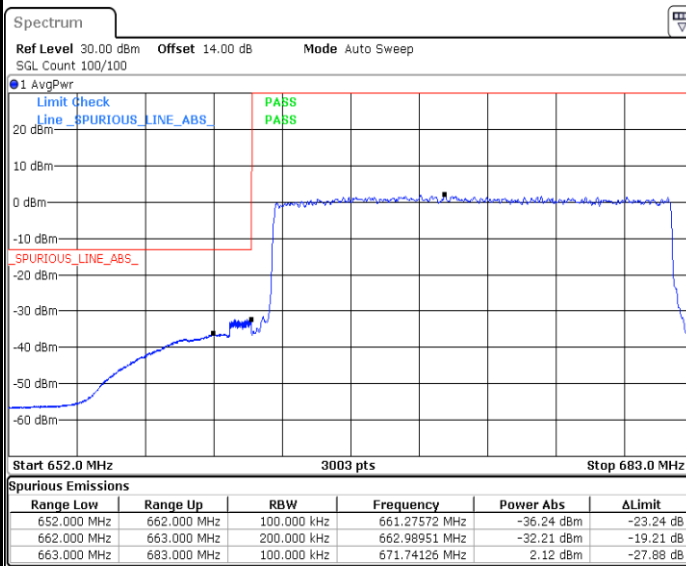
## Lowest Band Edge / 1 RB



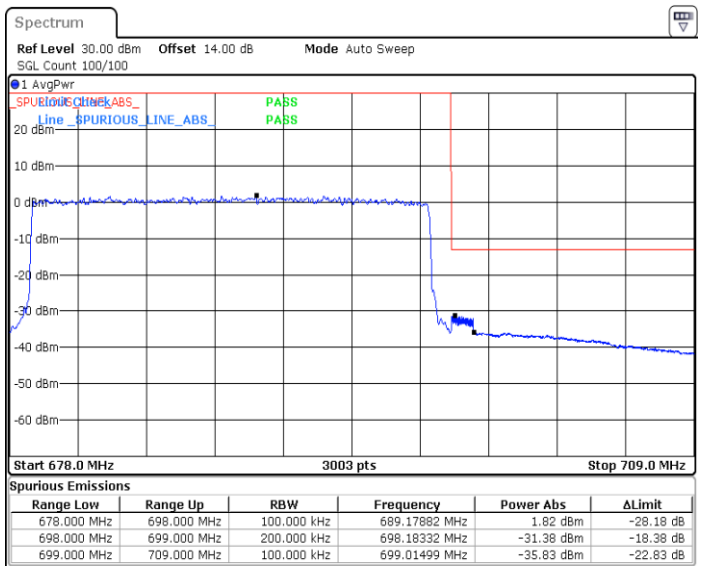
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



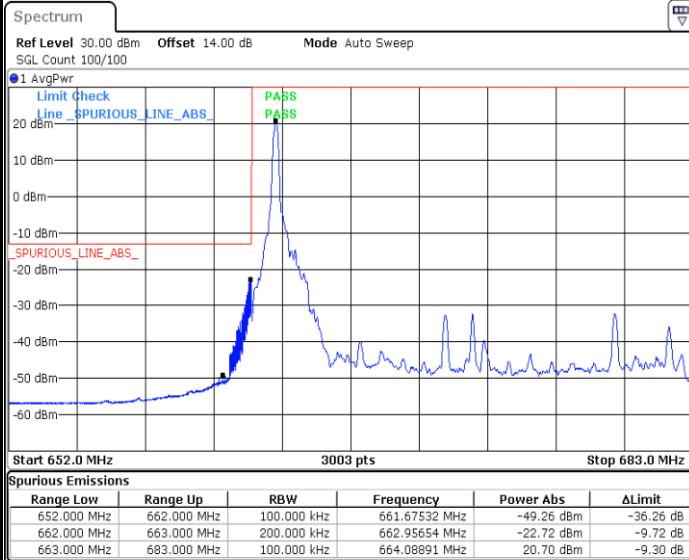
## Highest Band Edge / Full RB



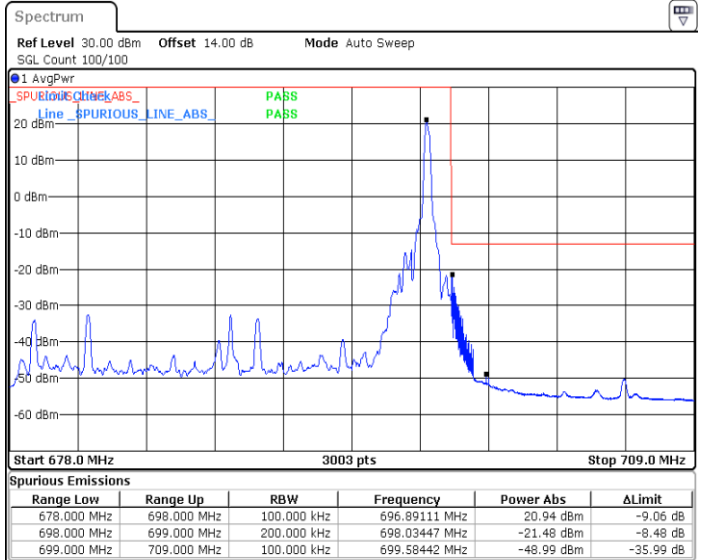


## LTE Band 71 / 20MHz / 16QAM

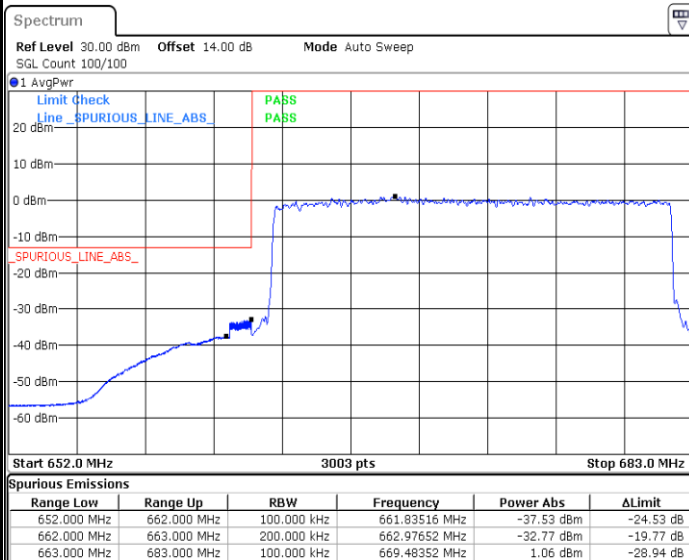
## Lowest Band Edge / 1RB



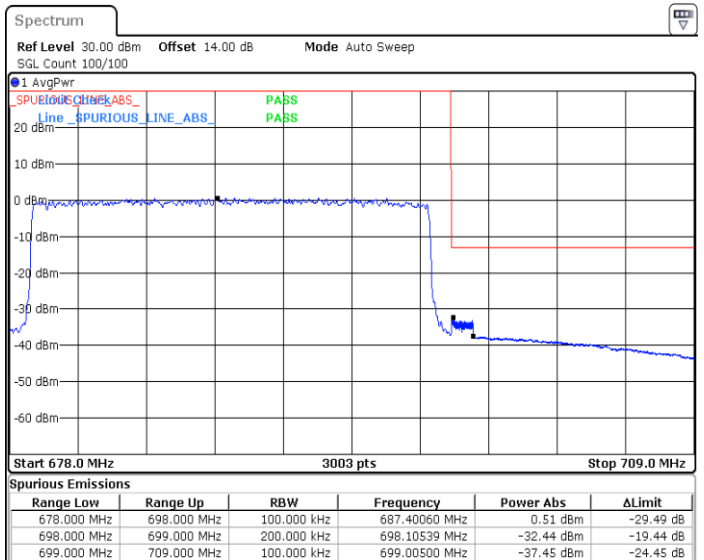
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



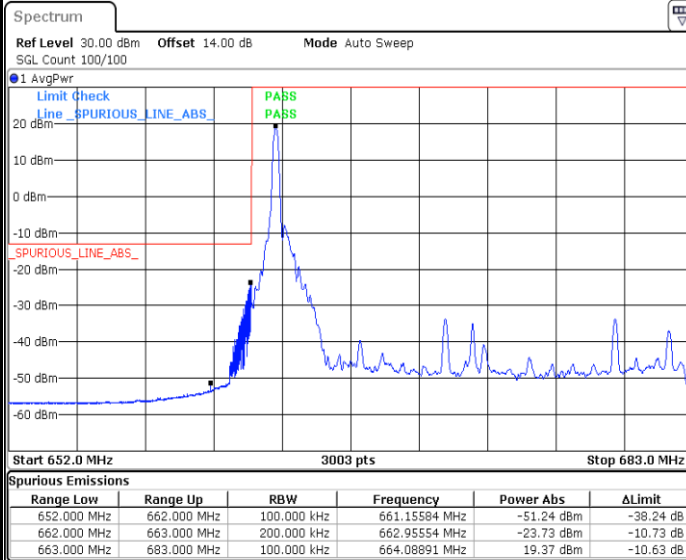
## Highest Band Edge / Full RB



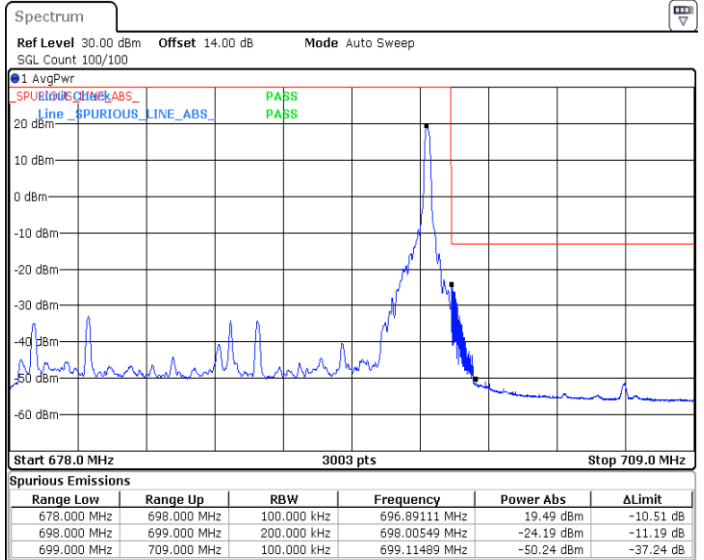


## LTE Band 71 / 20MHz / 64QAM

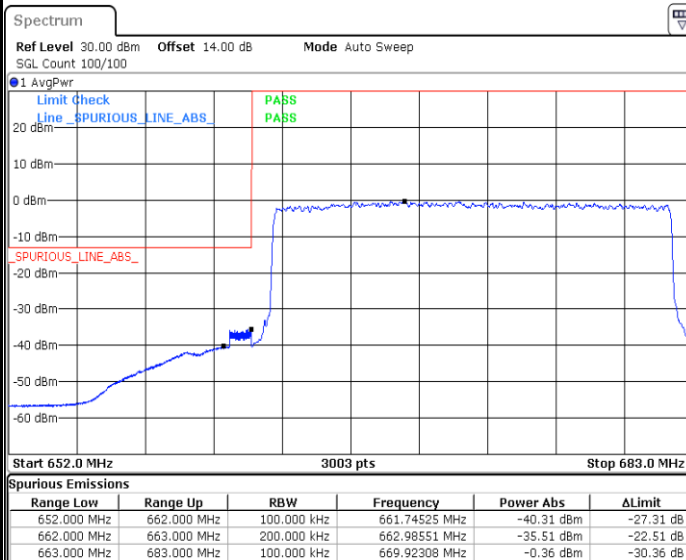
## Lowest Band Edge / 1RB



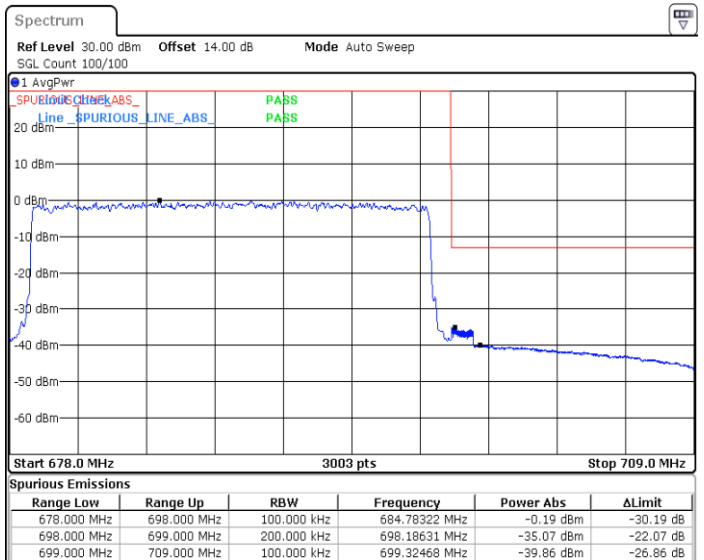
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

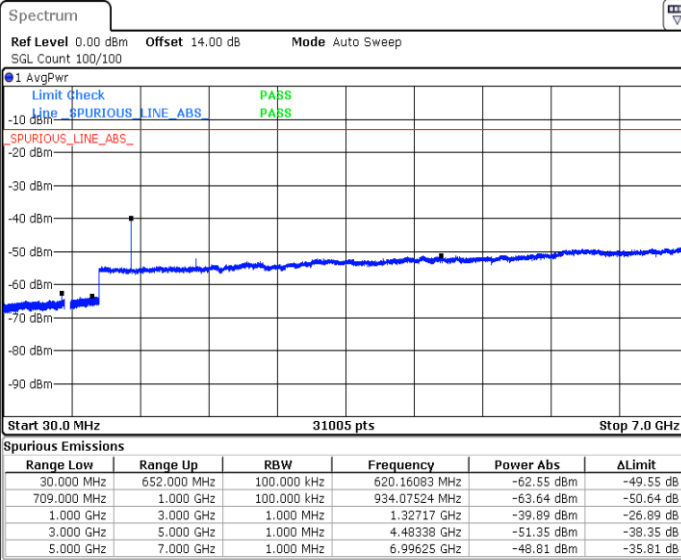




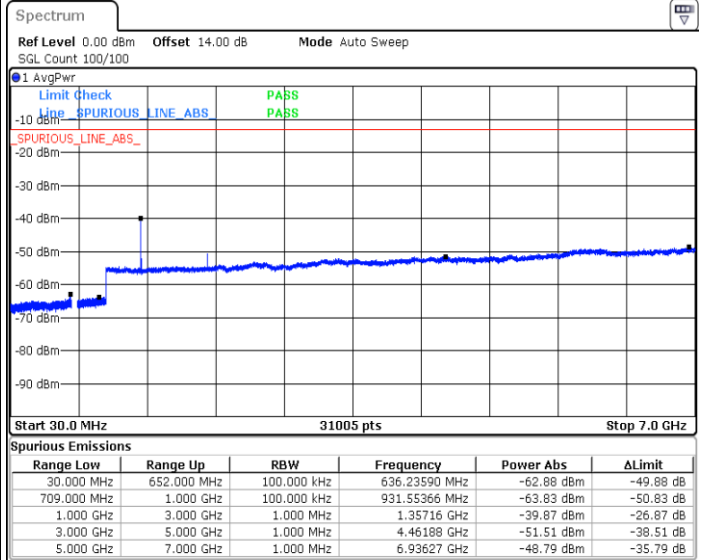
## Conducted Spurious Emission

### LTE Band 71 / 5MHz

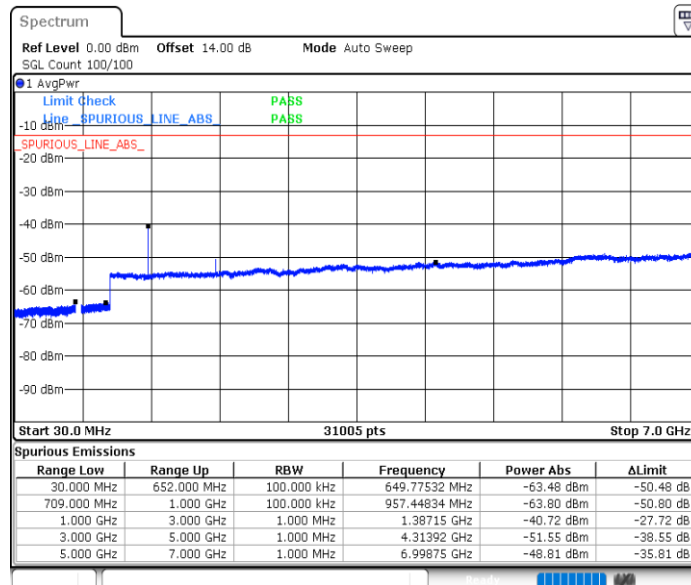
#### Lowest Channel / QPSK



#### Middle Channel / QPSK



#### Highest Channel / QPSK



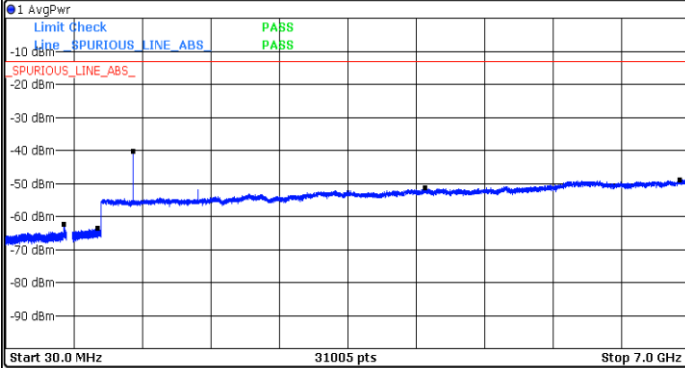


## LTE Band 71 / 10MHz

## Lowest Channel / QPSK

## Middle Channel / QPSK

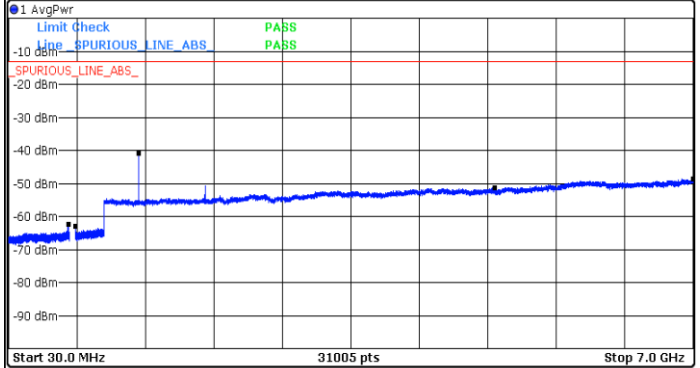
Spectrum

Ref Level 0.00 dBm Offset 14.00 dB Mode Auto Sweep  
SGL Count 100/100

Spurious Emissions

| Range Low   | Range Up    | RBW         | Frequency     | Power Abs  | ΔLimit    |
|-------------|-------------|-------------|---------------|------------|-----------|
| 30.000 MHz  | 652.000 MHz | 100.000 kHz | 621.73964 MHz | -62.34 dBm | -49.34 dB |
| 709.000 MHz | 1.000 GHz   | 100.000 kHz | 967.82561 MHz | -63.60 dBm | -50.60 dB |
| 1.000 GHz   | 3.000 GHz   | 1.000 MHz   | 1.32767 GHz   | -40.37 dBm | -27.37 dB |
| 3.000 GHz   | 5.000 GHz   | 1.000 MHz   | 4.30192 GHz   | -51.44 dBm | -38.44 dB |
| 5.000 GHz   | 7.000 GHz   | 1.000 MHz   | 6.89128 GHz   | -48.89 dBm | -35.89 dB |

Spectrum

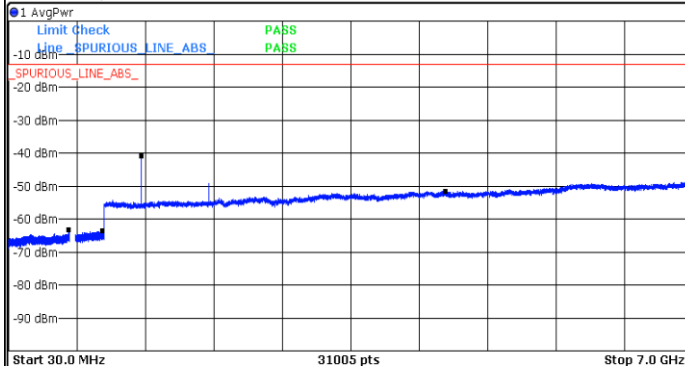
Ref Level 0.00 dBm Offset 14.00 dB Mode Auto Sweep  
SGL Count 100/100

Spurious Emissions

| Range Low   | Range Up    | RBW         | Frequency     | Power Abs  | ΔLimit    |
|-------------|-------------|-------------|---------------|------------|-----------|
| 30.000 MHz  | 652.000 MHz | 100.000 kHz | 635.75748 MHz | -62.40 dBm | -49.40 dB |
| 709.000 MHz | 1.000 GHz   | 100.000 kHz | 711.35186 MHz | -62.93 dBm | -49.93 dB |
| 1.000 GHz   | 3.000 GHz   | 1.000 MHz   | 1.35266 GHz   | -40.91 dBm | -27.91 dB |
| 3.000 GHz   | 5.000 GHz   | 1.000 MHz   | 4.97776 GHz   | -51.34 dBm | -38.34 dB |
| 5.000 GHz   | 7.000 GHz   | 1.000 MHz   | 6.99675 GHz   | -48.68 dBm | -35.68 dB |

## Highest Channel / QPSK

Spectrum

Ref Level 0.00 dBm Offset 14.00 dB Mode Auto Sweep  
SGL Count 100/100

Spurious Emissions

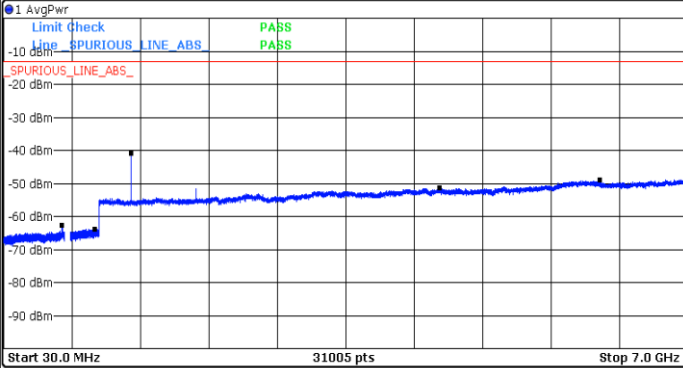
| Range Low   | Range Up    | RBW         | Frequency     | Power Abs  | ΔLimit    |
|-------------|-------------|-------------|---------------|------------|-----------|
| 30.000 MHz  | 652.000 MHz | 100.000 kHz | 642.64680 MHz | -63.41 dBm | -50.41 dB |
| 709.000 MHz | 1.000 GHz   | 100.000 kHz | 984.65231 MHz | -63.67 dBm | -50.67 dB |
| 1.000 GHz   | 3.000 GHz   | 1.000 MHz   | 1.37766 GHz   | -40.75 dBm | -27.75 dB |
| 3.000 GHz   | 5.000 GHz   | 1.000 MHz   | 4.48038 GHz   | -51.53 dBm | -38.53 dB |
| 5.000 GHz   | 7.000 GHz   | 1.000 MHz   | 6.96176 GHz   | -48.68 dBm | -35.68 dB |



## LTE Band 71 / 15MHz

## Lowest Channel / QPSK

Spectrum

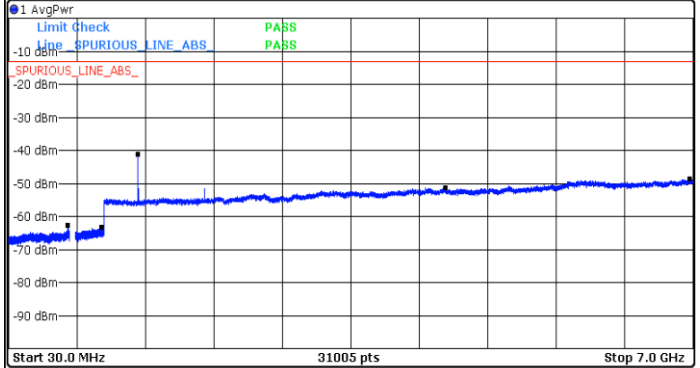
Ref Level 0.00 dBm Offset 14.00 dB Mode Auto Sweep  
SGL Count 100/100

Spurious Emissions

| Range Low   | Range Up    | RBW         | Frequency     | Power Abs  | ΔLimit    |
|-------------|-------------|-------------|---------------|------------|-----------|
| 30.000 MHz  | 652.000 MHz | 100.000 kHz | 619.49104 MHz | -62.80 dBm | -49.80 dB |
| 709.000 MHz | 1.000 GHz   | 100.000 kHz | 958.46667 MHz | -63.93 dBm | -50.93 dB |
| 1.000 GHz   | 3.000 GHz   | 1.000 MHz   | 1.32817 GHz   | -41.00 dBm | -28.00 dB |
| 3.000 GHz   | 5.000 GHz   | 1.000 MHz   | 4.46888 GHz   | -51.41 dBm | -38.41 dB |
| 5.000 GHz   | 7.000 GHz   | 1.000 MHz   | 6.09598 GHz   | -48.94 dBm | -35.94 dB |

## Middle Channel / QPSK

Spectrum

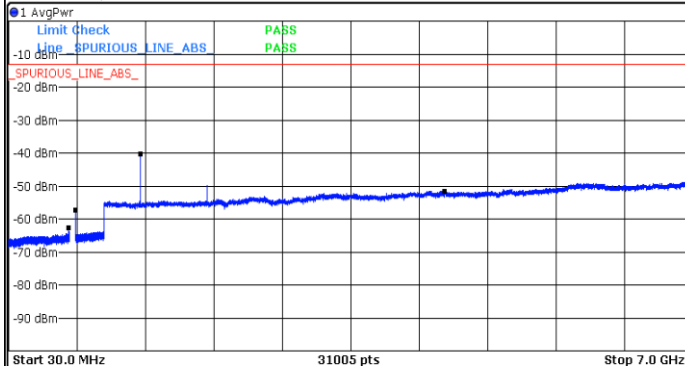
Ref Level 0.00 dBm Offset 14.00 dB Mode Auto Sweep  
SGL Count 100/100

Spurious Emissions

| Range Low   | Range Up    | RBW         | Frequency     | Power Abs  | ΔLimit    |
|-------------|-------------|-------------|---------------|------------|-----------|
| 30.000 MHz  | 652.000 MHz | 100.000 kHz | 633.70025 MHz | -62.63 dBm | -49.63 dB |
| 709.000 MHz | 1.000 GHz   | 100.000 kHz | 978.34836 MHz | -63.38 dBm | -50.38 dB |
| 1.000 GHz   | 3.000 GHz   | 1.000 MHz   | 1.34816 GHz   | -41.26 dBm | -28.26 dB |
| 3.000 GHz   | 5.000 GHz   | 1.000 MHz   | 4.47388 GHz   | -51.40 dBm | -38.40 dB |
| 5.000 GHz   | 7.000 GHz   | 1.000 MHz   | 6.96326 GHz   | -48.75 dBm | -35.75 dB |

## Highest Channel / QPSK

Spectrum

Ref Level 0.00 dBm Offset 14.00 dB Mode Auto Sweep  
SGL Count 100/100

Spurious Emissions

| Range Low   | Range Up    | RBW         | Frequency     | Power Abs  | ΔLimit    |
|-------------|-------------|-------------|---------------|------------|-----------|
| 30.000 MHz  | 652.000 MHz | 100.000 kHz | 640.49389 MHz | -62.81 dBm | -49.81 dB |
| 709.000 MHz | 1.000 GHz   | 100.000 kHz | 710.33353 MHz | -57.27 dBm | -44.27 dB |
| 1.000 GHz   | 3.000 GHz   | 1.000 MHz   | 1.36816 GHz   | -40.17 dBm | -27.17 dB |
| 3.000 GHz   | 5.000 GHz   | 1.000 MHz   | 4.46438 GHz   | -51.51 dBm | -38.51 dB |
| 5.000 GHz   | 7.000 GHz   | 1.000 MHz   | 6.99425 GHz   | -48.59 dBm | -35.59 dB |

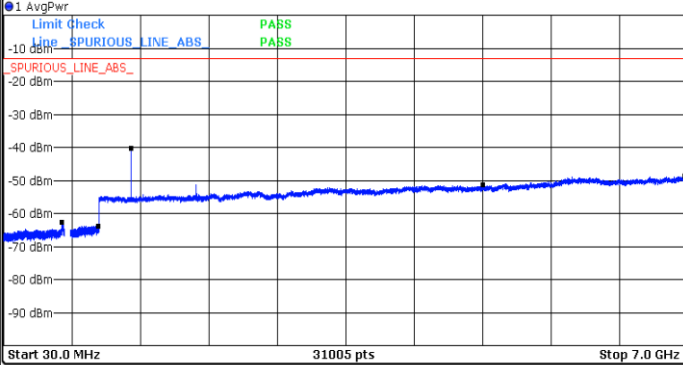


## LTE Band 71 / 20MHz

## Lowest Channel / QPSK

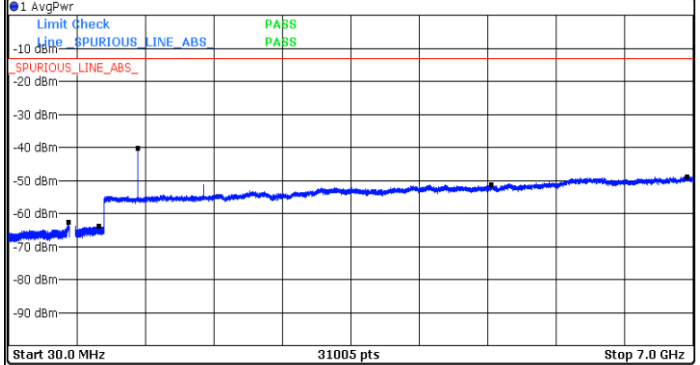
## Middle Channel / QPSK

Spectrum

Ref Level 0.00 dBm Offset 14.00 dB Mode Auto Sweep  
SGL Count 100/100

| Range Low   | Range Up    | RBW         | Frequency     | Power Abs  | ΔLimit    |
|-------------|-------------|-------------|---------------|------------|-----------|
| 30.000 MHz  | 652.000 MHz | 100.000 kHz | 619.87378 MHz | -62.63 dBm | -49.63 dB |
| 709.000 MHz | 1.000 GHz   | 100.000 kHz | 988.58015 MHz | -63.80 dBm | -50.80 dB |
| 1.000 GHz   | 3.000 GHz   | 1.000 MHz   | 1.32867 GHz   | -40.44 dBm | -27.44 dB |
| 3.000 GHz   | 5.000 GHz   | 1.000 MHz   | 4.90977 GHz   | -51.42 dBm | -38.42 dB |
| 5.000 GHz   | 7.000 GHz   | 1.000 MHz   | 6.96776 GHz   | -48.72 dBm | -35.72 dB |

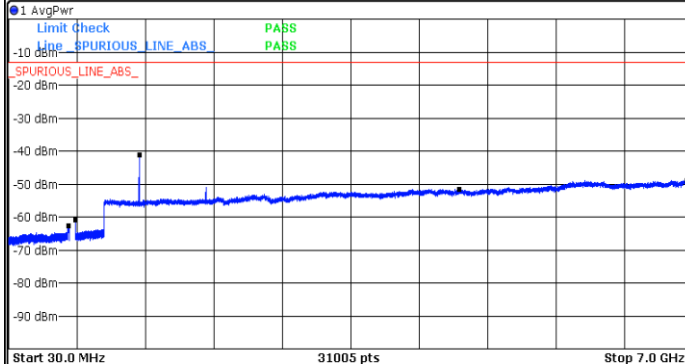
Spectrum

Ref Level 0.00 dBm Offset 14.00 dB Mode Auto Sweep  
SGL Count 100/100

| Range Low   | Range Up    | RBW         | Frequency     | Power Abs  | ΔLimit    |
|-------------|-------------|-------------|---------------|------------|-----------|
| 30.000 MHz  | 652.000 MHz | 100.000 kHz | 636.61864 MHz | -62.57 dBm | -49.57 dB |
| 709.000 MHz | 1.000 GHz   | 100.000 kHz | 943.67664 MHz | -63.84 dBm | -50.84 dB |
| 1.000 GHz   | 3.000 GHz   | 1.000 MHz   | 1.34366 GHz   | -40.43 dBm | -27.43 dB |
| 3.000 GHz   | 5.000 GHz   | 1.000 MHz   | 4.94276 GHz   | -51.33 dBm | -38.33 dB |
| 5.000 GHz   | 7.000 GHz   | 1.000 MHz   | 6.93427 GHz   | -48.91 dBm | -35.91 dB |

## Highest Channel / QPSK

Spectrum

Ref Level 0.00 dBm Offset 14.00 dB Mode Auto Sweep  
SGL Count 100/100

| Range Low   | Range Up    | RBW         | Frequency     | Power Abs  | ΔLimit    |
|-------------|-------------|-------------|---------------|------------|-----------|
| 30.000 MHz  | 652.000 MHz | 100.000 kHz | 636.71433 MHz | -62.82 dBm | -49.82 dB |
| 709.000 MHz | 1.000 GHz   | 100.000 kHz | 709.80012 MHz | -60.85 dBm | -47.85 dB |
| 1.000 GHz   | 3.000 GHz   | 1.000 MHz   | 1.35866 GHz   | -41.13 dBm | -28.13 dB |
| 3.000 GHz   | 5.000 GHz   | 1.000 MHz   | 4.61735 GHz   | -51.57 dBm | -38.57 dB |
| 5.000 GHz   | 7.000 GHz   | 1.000 MHz   | 6.93777 GHz   | -48.82 dBm | -35.82 dB |

## Frequency Stability

| Test Conditions     |                   | LTE Band 71 (QPSK) / Middle Channel | Limit   |
|---------------------|-------------------|-------------------------------------|---------|
| Temperature<br>(°C) | Voltage<br>(Volt) | BW 10MHz                            | Note 2. |
|                     |                   | Deviation (ppm)                     | Result  |
| 50                  | Normal Voltage    | 0.0028                              | PASS    |
| 40                  | Normal Voltage    | 0.0021                              |         |
| 30                  | Normal Voltage    | 0.0054                              |         |
| 20(Ref.)            | Normal Voltage    | 0.0000                              |         |
| 10                  | Normal Voltage    | 0.0037                              |         |
| 0                   | Normal Voltage    | 0.0012                              |         |
| -10                 | Normal Voltage    | 0.0018                              |         |
| -20                 | Normal Voltage    | 0.0041                              |         |
| -30                 | Normal Voltage    | 0.0022                              |         |
| 20                  | Maximum Voltage   | 0.0051                              |         |
| 20                  | Normal Voltage    | 0.0000                              |         |
| 20                  | Minimum Voltage   | 0.0044                              |         |

**Note:**

1. Normal Voltage = 3.3 V. ; Minimum Voltage = 3.135 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 7C

## 26dB Bandwidth

| Mode      | LTE Band 7C : 26dB BW(MHz) |             |             |             |
|-----------|----------------------------|-------------|-------------|-------------|
| QPSK      |                            |             |             |             |
| BW        | 10MHz+20MHz                | 15MHz+10MHz | 15MHz+15MHz | 15MHz+20MHz |
| Middle CH | 29.85                      | 25.13       | 30.45       | 34.76       |
| BW        | 20MHz+10MHz                | 20MHz+15MHz | 20MHz+20MHz | N/A         |
| Middle CH | 29.97                      | 34.90       | 39.80       |             |

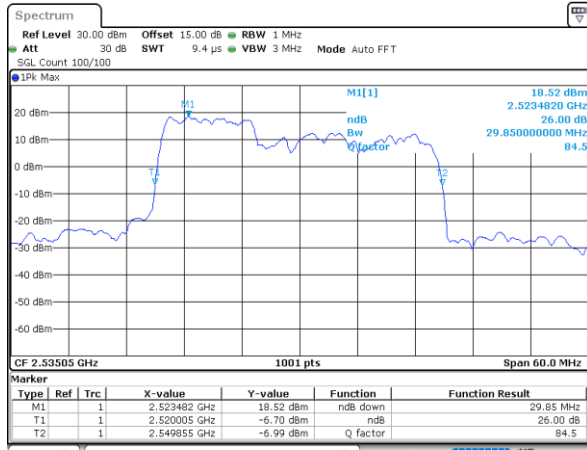
| Mode      | LTE Band 7C : 26dB BW(MHz) |             |             |             |
|-----------|----------------------------|-------------|-------------|-------------|
| 16QAM     |                            |             |             |             |
| BW        | 10MHz+20MHz                | 15MHz+10MHz | 15MHz+15MHz | 15MHz+20MHz |
| Middle CH | 29.79                      | 25.03       | 30.39       | 34.90       |
| BW        | 20MHz+10MHz                | 20MHz+15MHz | 20MHz+20MHz | N/A         |
| Middle CH | 30.09                      | 34.83       | 39.80       |             |



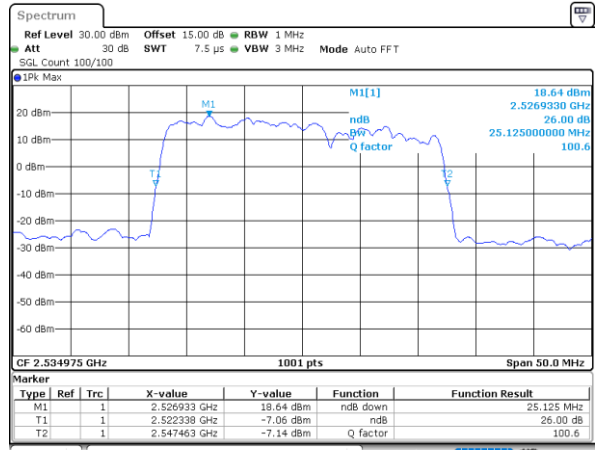
## LTE Band 7C

## QPSK

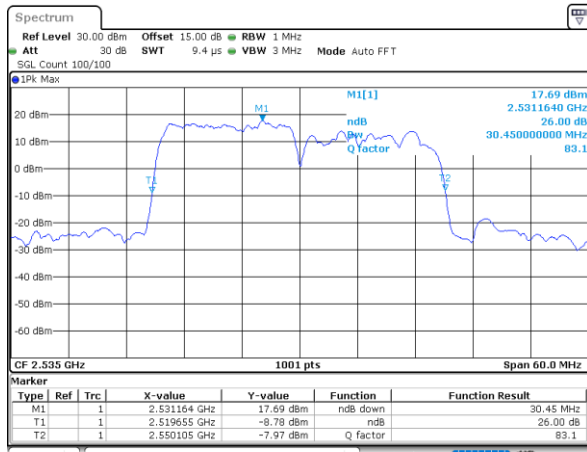
## Middle Channel / 10MHz+20MHz



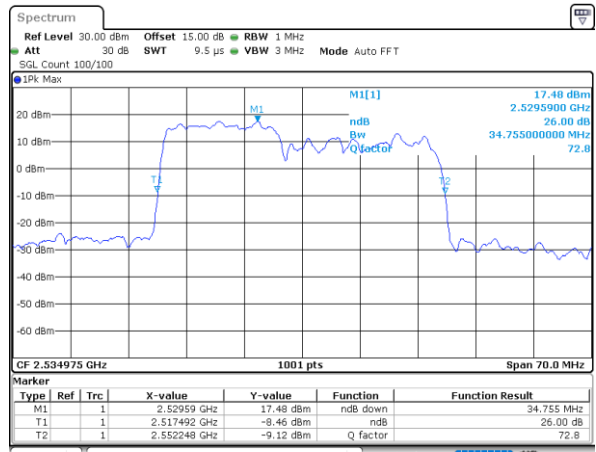
## Middle Channel / 15MHz+10MHz



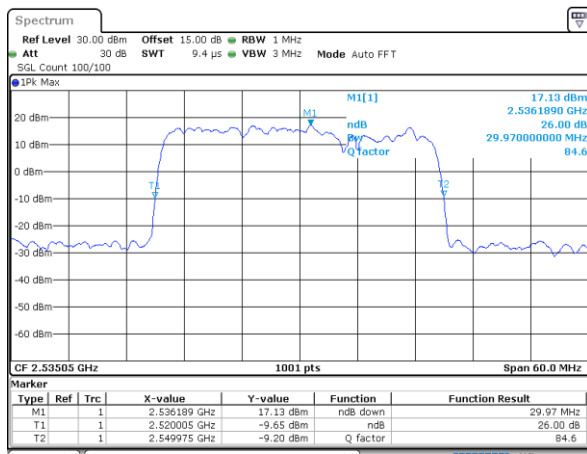
## Middle Channel / 15MHz+15MHz



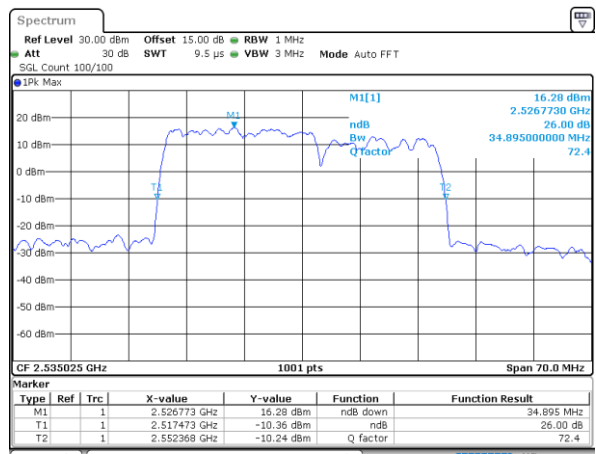
## Middle Channel / 15MHz+20MHz



## Middle Channel / 20MHz+10MHz



## Middle Channel / 20MHz+15MHz



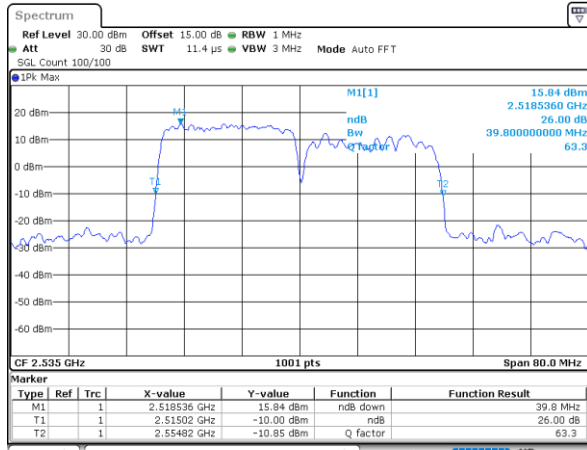


## LTE Band 7C

## QPSK

Middle Channel / 20MHz+20MHz

N/A

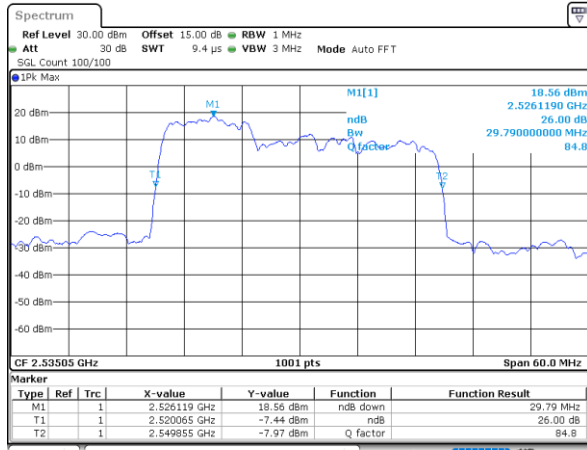




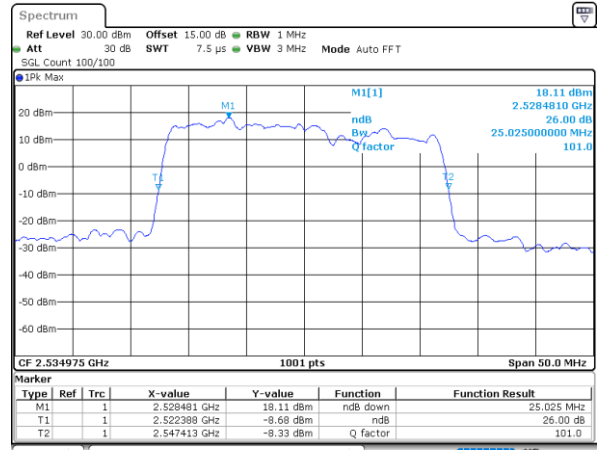
## LTE Band 7C

## 16QAM

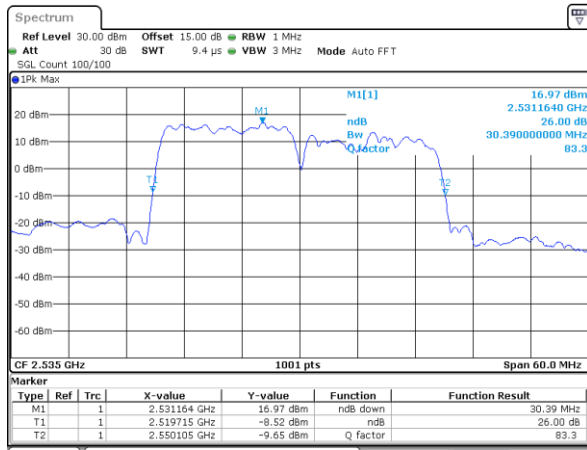
## Middle Channel / 10MHz+20MHz



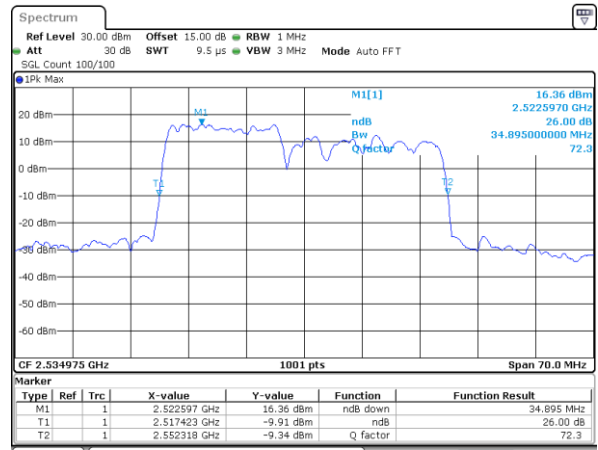
## Middle Channel / 15MHz+10MHz



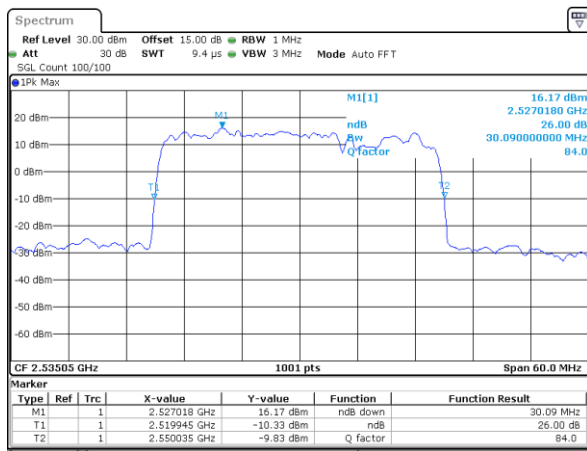
## Middle Channel / 15MHz+15MHz



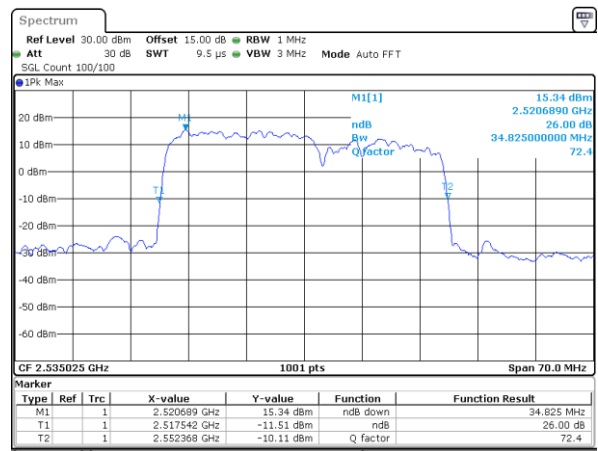
## Middle Channel / 15MHz+20MHz



## Middle Channel / 20MHz+10MHz



## Middle Channel / 20MHz+15MHz



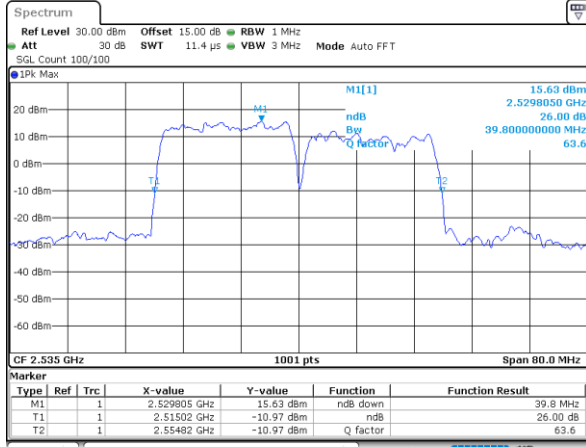


LTE Band 7C

16QAM

Middle Channel / 20MHz+20MHz

N/A



**Occupied Bandwidth**

| Mode      | LTE Band 7C : 99%OBW(MHz) |             |             |             |
|-----------|---------------------------|-------------|-------------|-------------|
| QPSK      |                           |             |             |             |
| BW        | 10MHz+20MHz               | 15MHz+10MHz | 15MHz+15MHz | 15MHz+20MHz |
| Middle CH | 27.81                     | 23.28       | 28.65       | 32.66       |
| BW        | 20MHz+10MHz               | 20MHz+15MHz | 20MHz+20MHz | N/A         |
| Middle CH | 27.93                     | 32.66       | 37.64       |             |

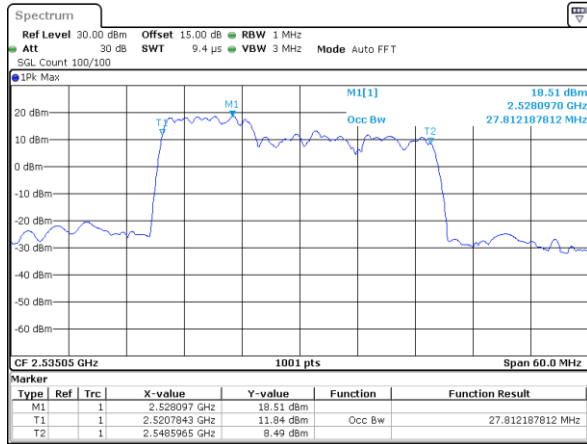
| Mode      | LTE Band 7C : 99%OBW(MHz) |             |             |             |
|-----------|---------------------------|-------------|-------------|-------------|
| 16QAM     |                           |             |             |             |
| BW        | 10MHz+20MHz               | 15MHz+10MHz | 15MHz+15MHz | 15MHz+20MHz |
| Middle CH | 27.81                     | 23.03       | 28.29       | 33.01       |
| BW        | 20MHz+10MHz               | 20MHz+15MHz | 20MHz+20MHz | N/A         |
| Middle CH | 27.81                     | 32.45       | 37.40       |             |



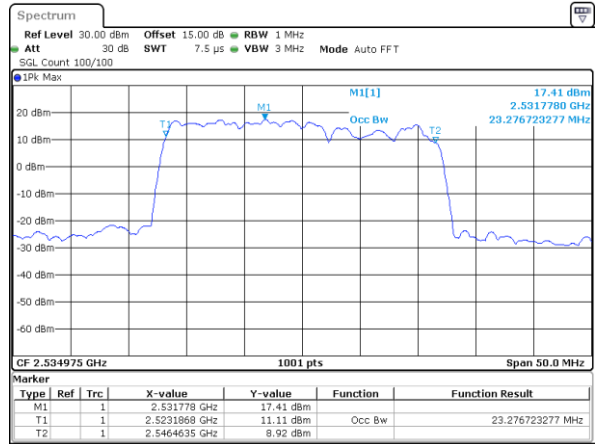
## LTE Band 7C

## QPSK

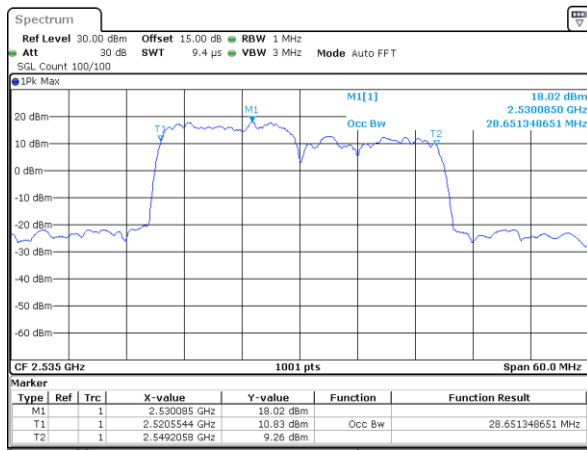
## Middle Channel / 10MHz+20MHz



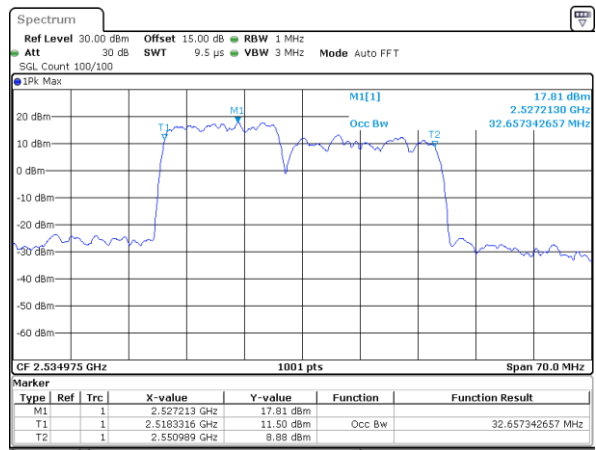
## Middle Channel / 15MHz+10MHz



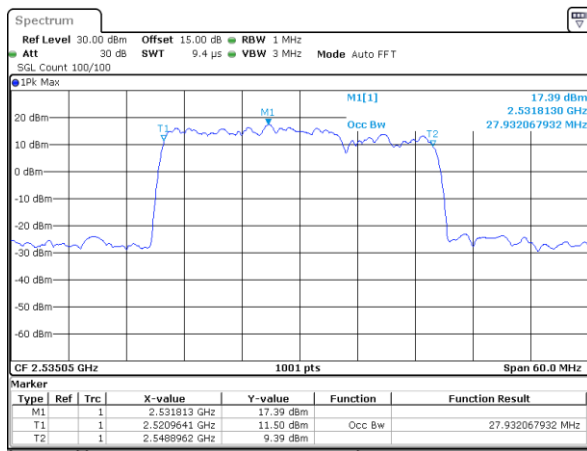
## Middle Channel / 15MHz+15MHz



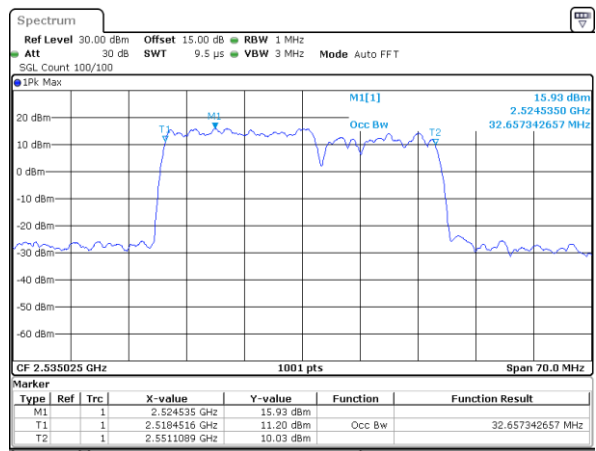
## Middle Channel / 15MHz+20MHz



## Middle Channel / 20MHz+10MHz



## Middle Channel / 20MHz+15MHz



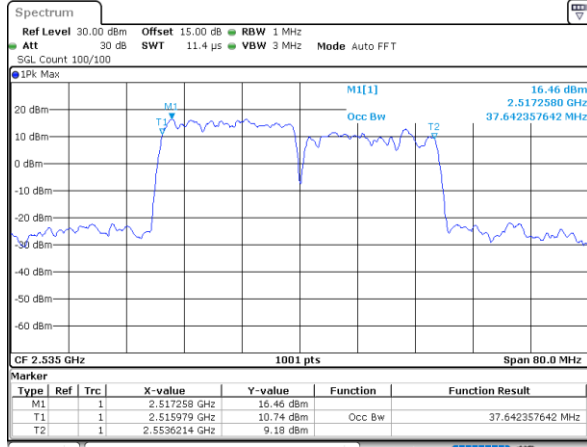


LTE Band 7C

QPSK

Middle Channel / 20MHz+20MHz

N/A

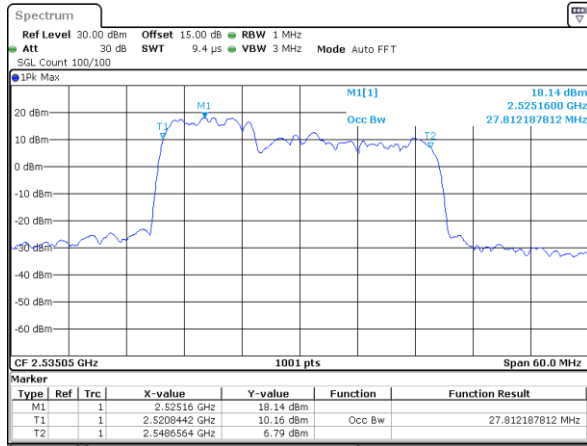




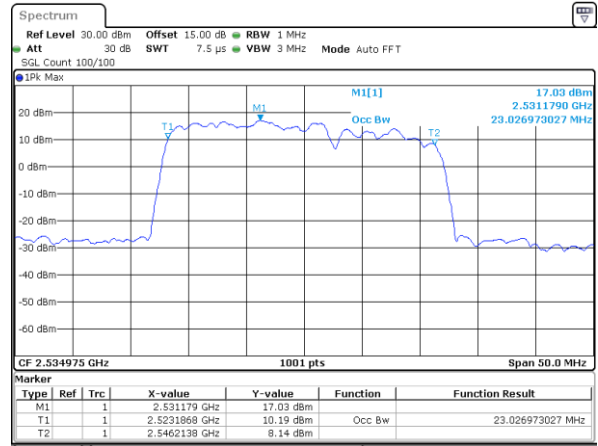
## LTE Band 7C

## 16QAM

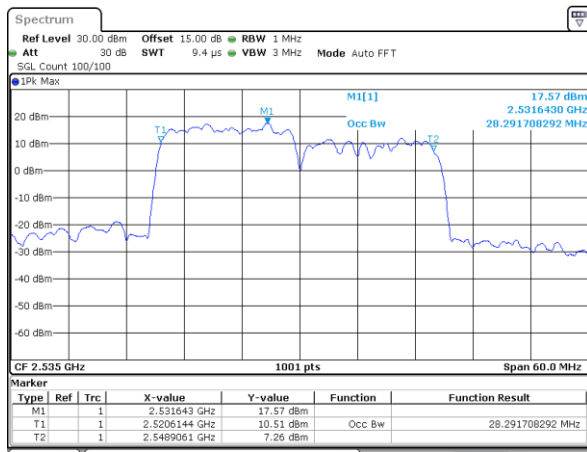
## Middle Channel / 10MHz+20MHz



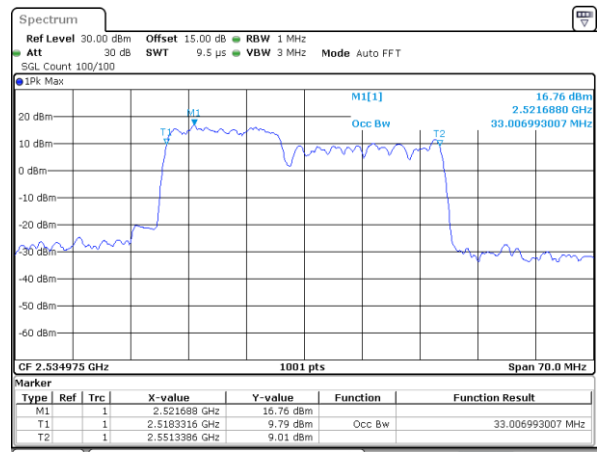
## Middle Channel / 15MHz+10MHz



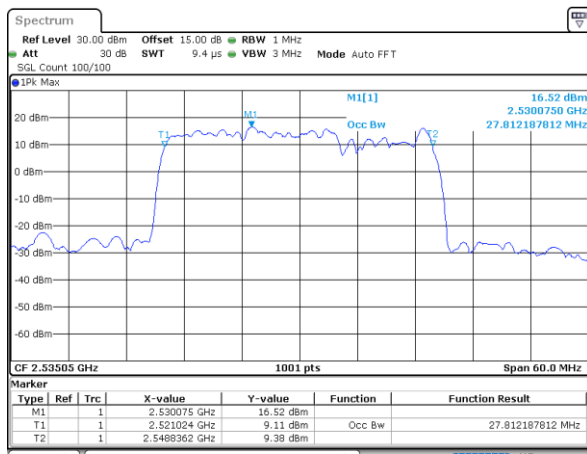
## Middle Channel / 15MHz+15MHz



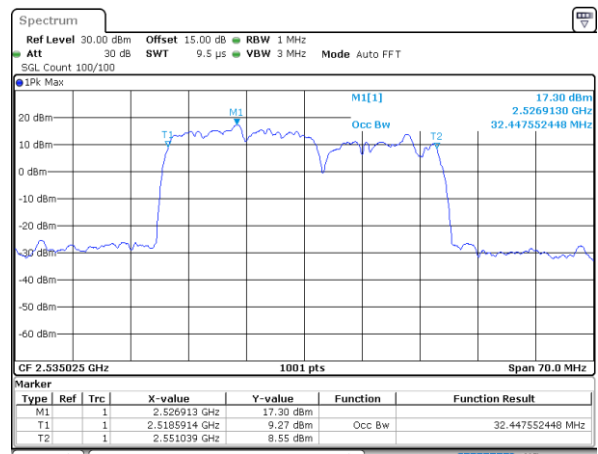
## Middle Channel / 15MHz+20MHz



## Middle Channel / 20MHz+10MHz



## Middle Channel / 20MHz+15MHz



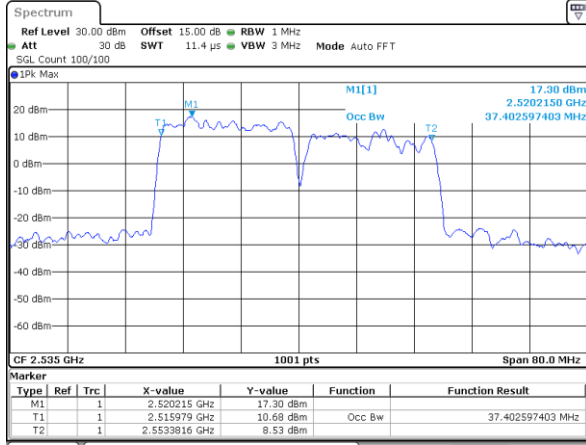


LTE Band 7C

16QAM

Middle Channel / 20MHz+20MHz

N/A



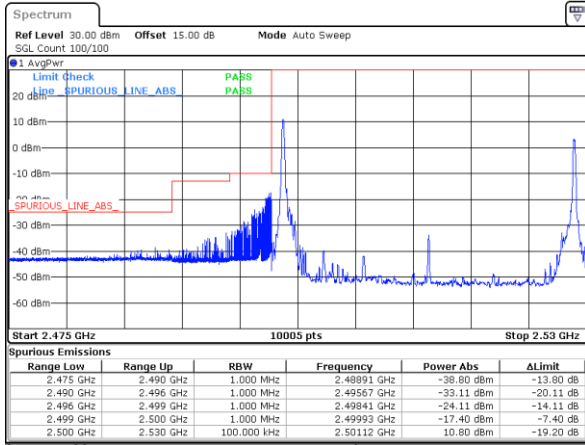


# Conducted Band Edge

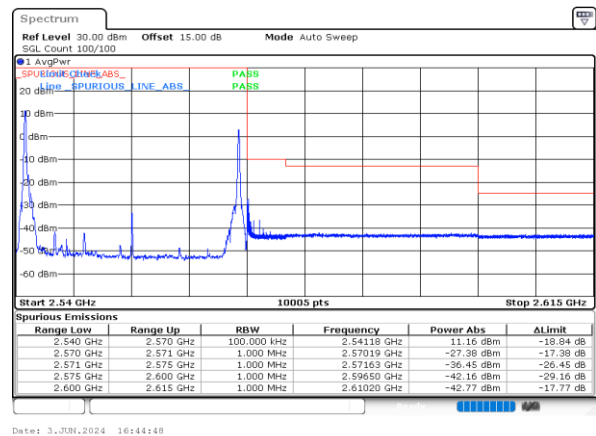
## LTE Band 7C / 10MHz+20MHz

### QPSK

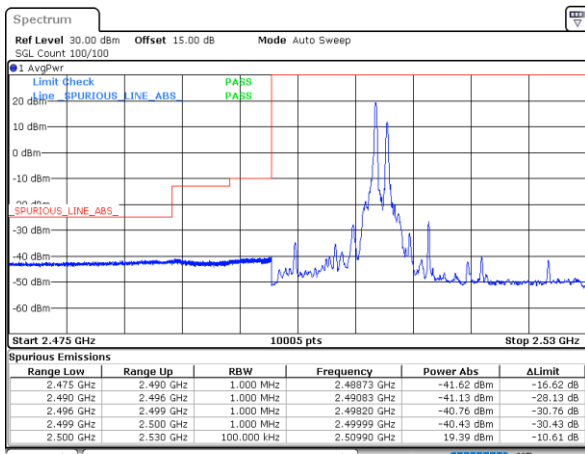
#### Lowest Band Edge / 1RB0 and 1RB99



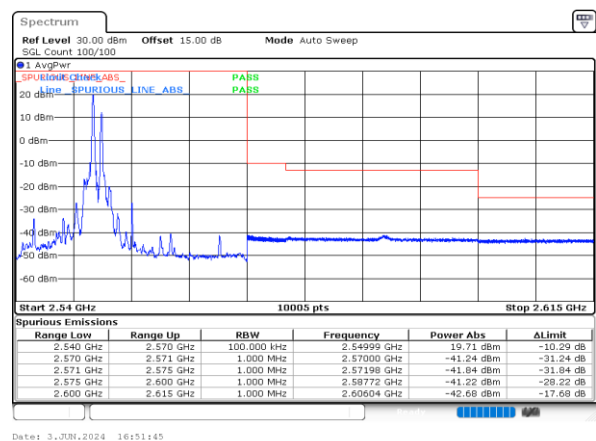
#### Highest Band Edge / 1RB0 and 1RB99



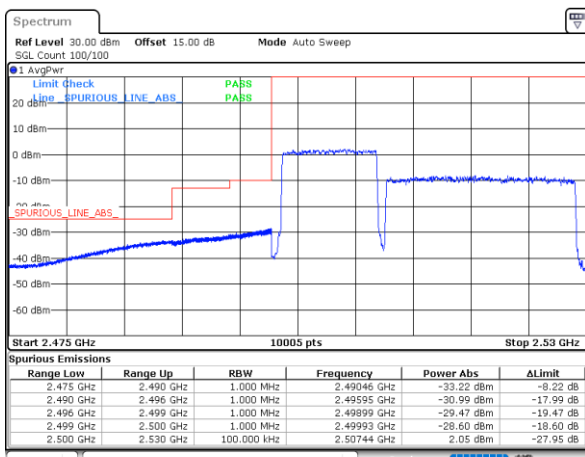
#### Lowest Band Edge / 1RB49 and 1RB0



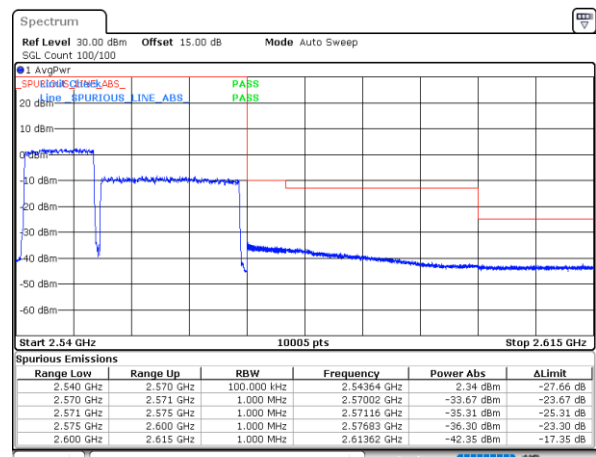
#### Highest Band Edge / 1RB49 and 1RB0



#### Lowest Band Edge / Full RB



#### Highest Band Edge / Full RB

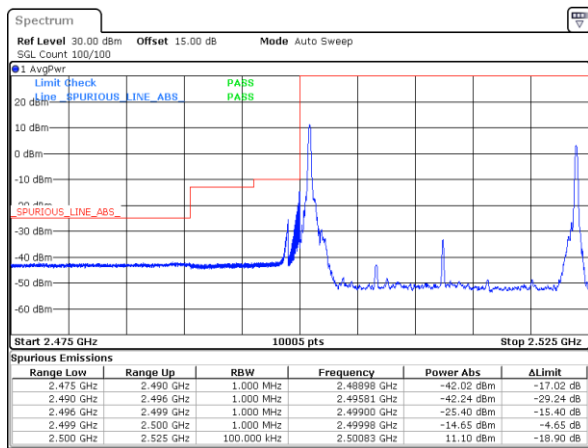




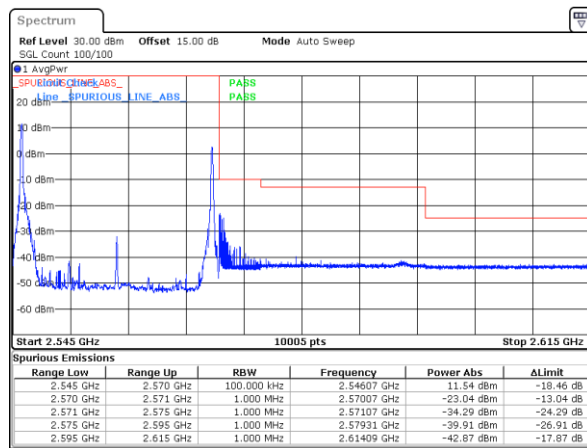
## LTE Band 7C / 15MHz+10MHz

## QPSK

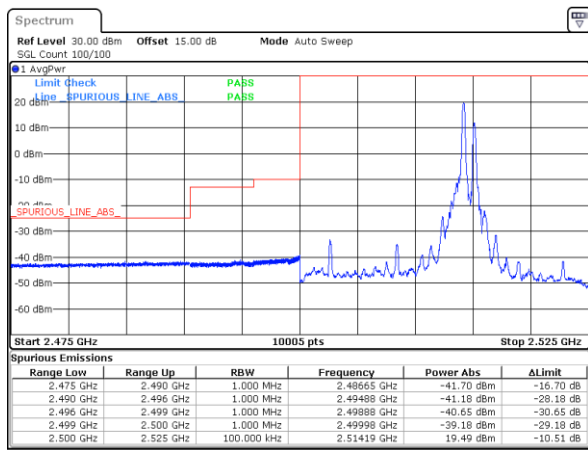
## Lowest Band Edge / 1RB0 and 1RB49



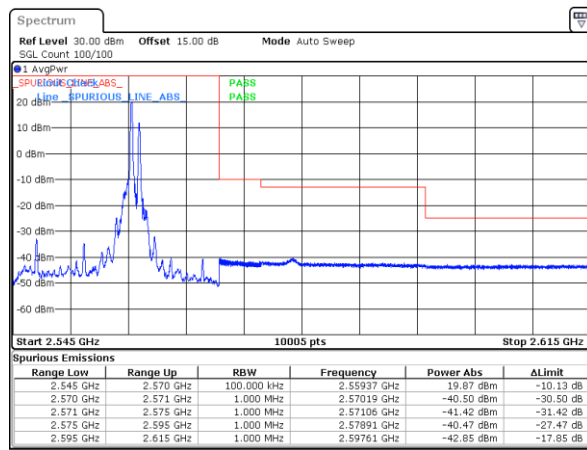
## Highest Band Edge / 1RB0 and 1RB49



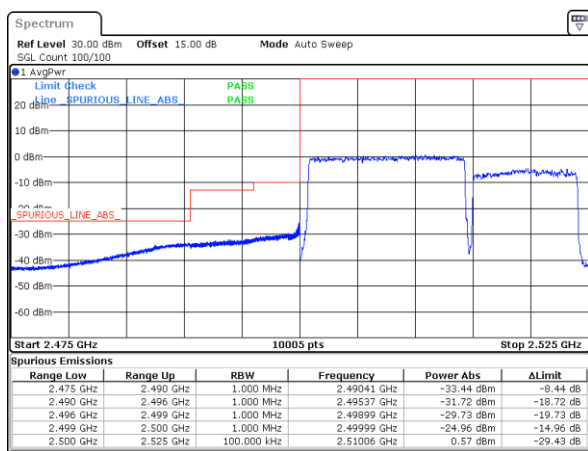
## Lowest Band Edge / 1RB74 and 1RB0



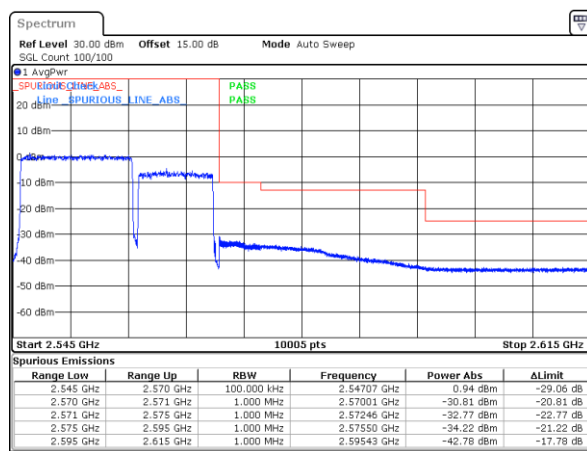
## Highest Band Edge / 1RB74 and 1RB0



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

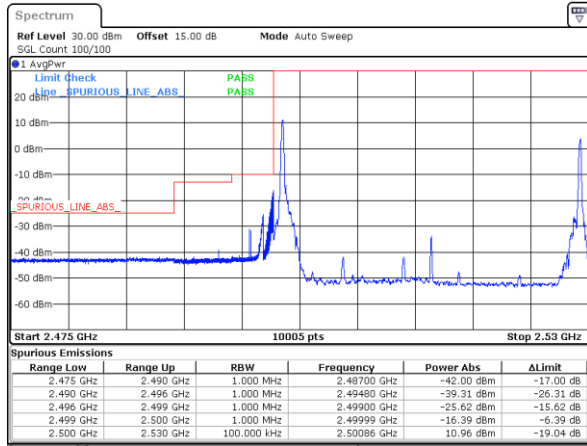




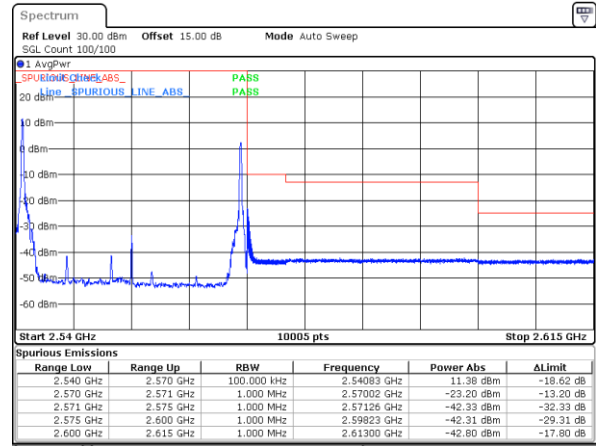
## LTE Band 7C / 15MHz+15MHz

## QPSK

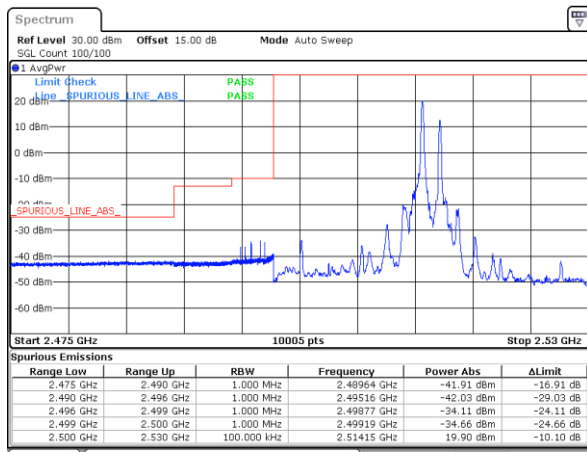
## Lowest Band Edge / 1RB0 and 1RB74



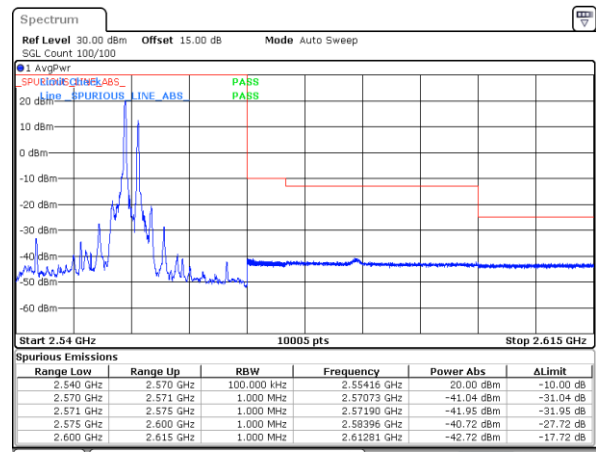
## Highest Band Edge / 1RB0 and 1RB74



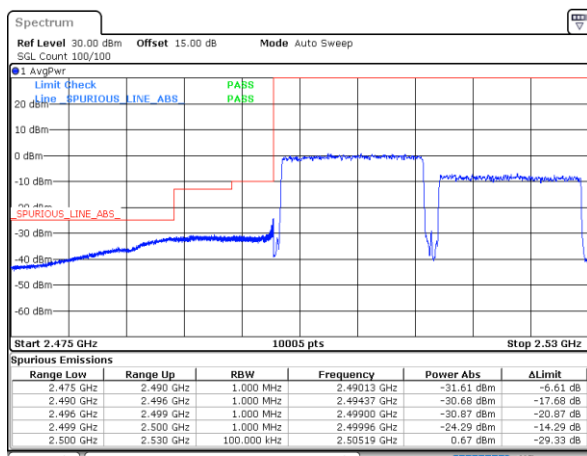
## Lowest Band Edge / 1RB74 and 1RB0



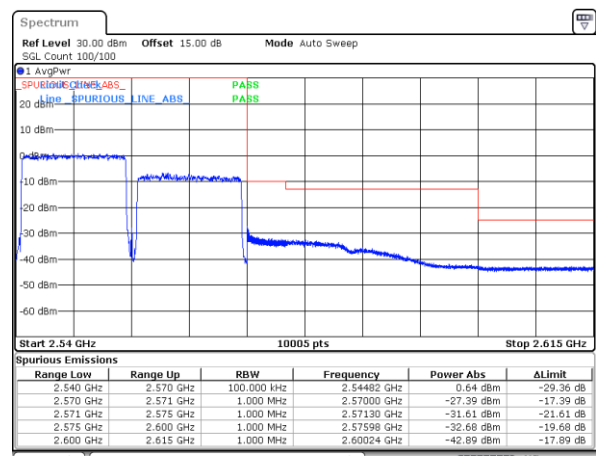
## Highest Band Edge / 1RB74 and 1RB0



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

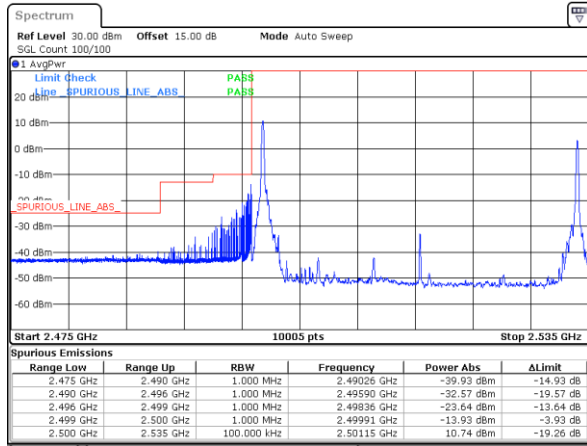




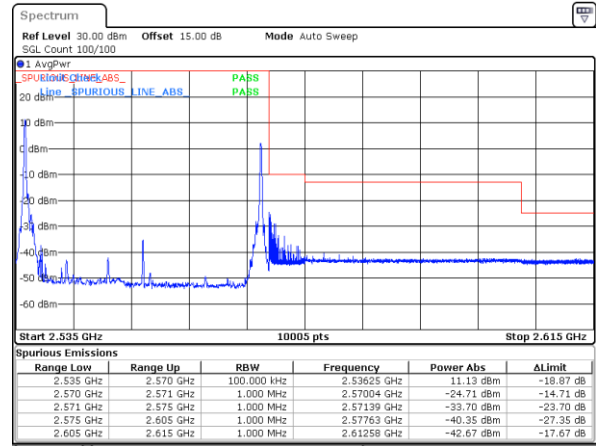
## LTE Band 7C / 15MHz+20MHz

## QPSK

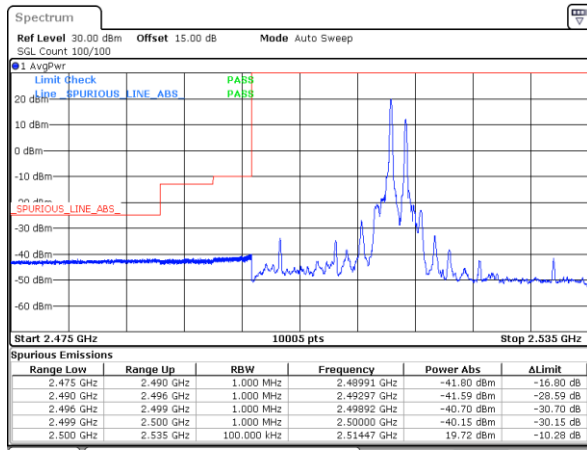
## Lowest Band Edge / 1RB0 and 1RB99



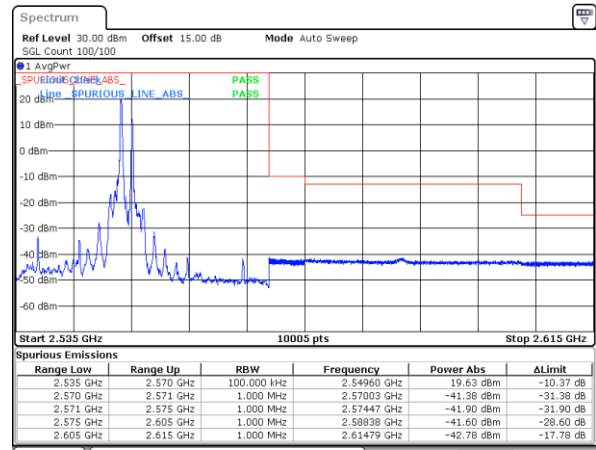
## Highest Band Edge / 1RB0 and 1RB99



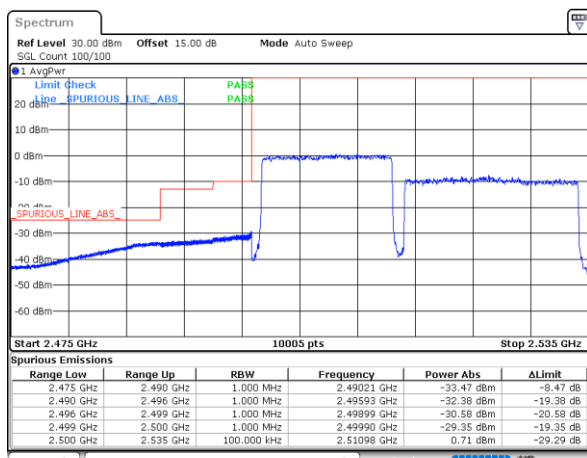
## Lowest Band Edge / 1RB74 and 1RB0



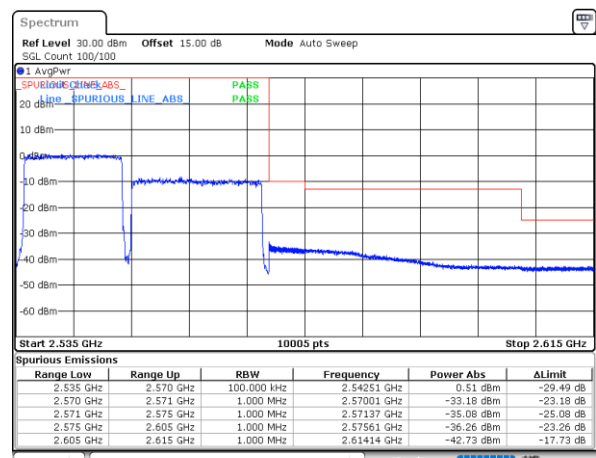
## Highest Band Edge / 1RB74 and 1RB0



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

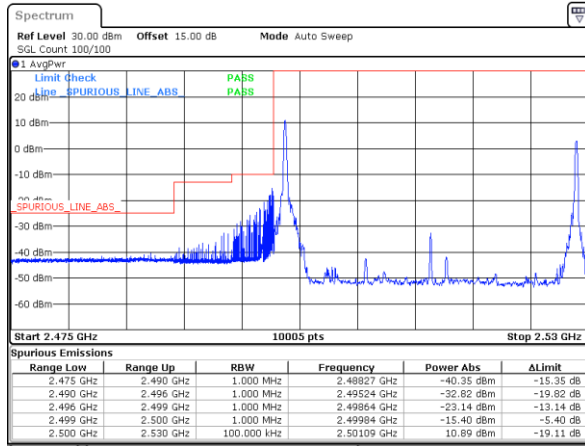




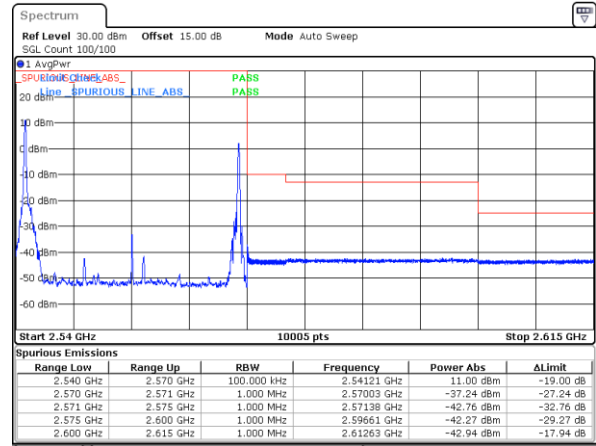
## LTE Band 7C / 20MHz+10MHz

## QPSK

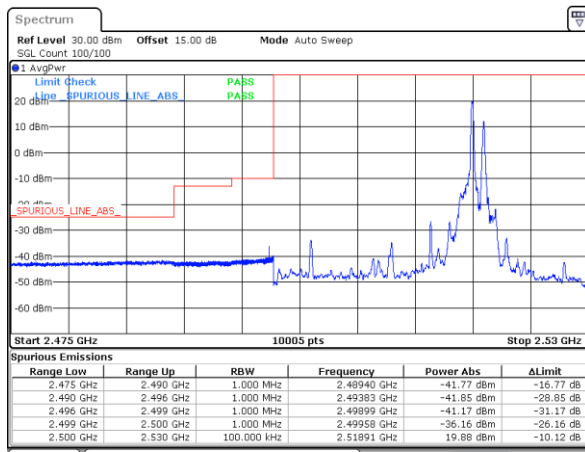
## Lowest Band Edge / 1RB0 and 1RB49



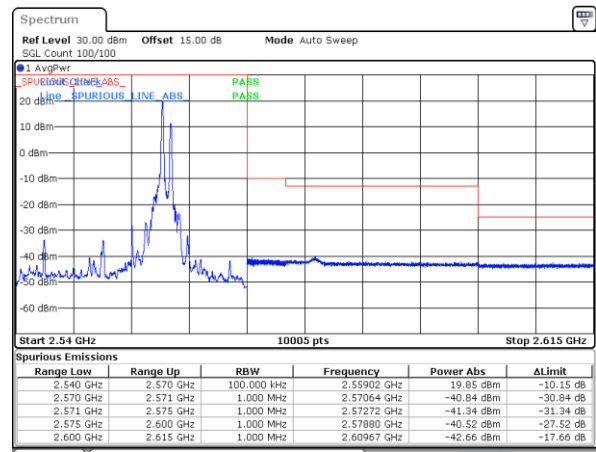
## Highest Band Edge / 1RB0 and 1RB49



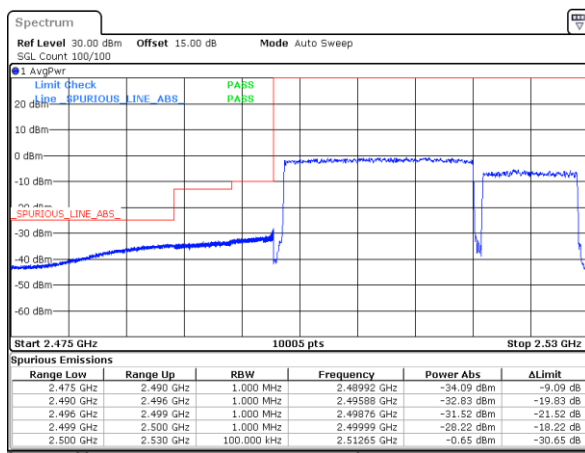
## Lowest Band Edge / 1RB99 and 1RB0



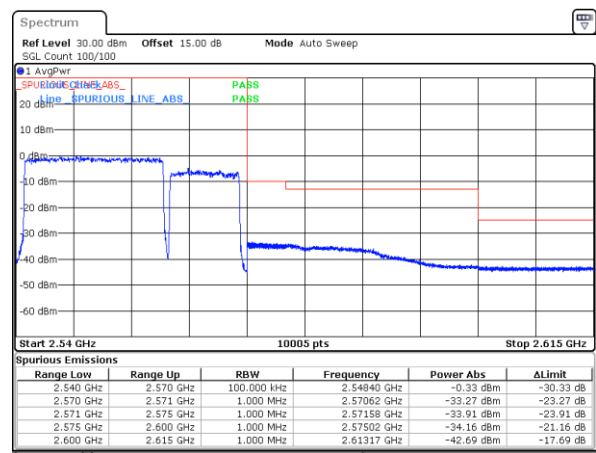
## Highest Band Edge / 1RB99 and 1RB0



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

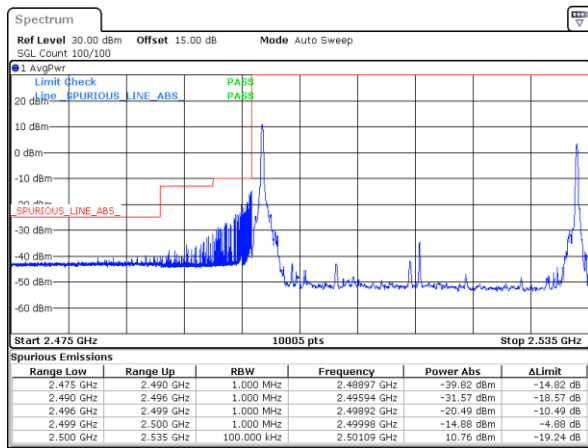




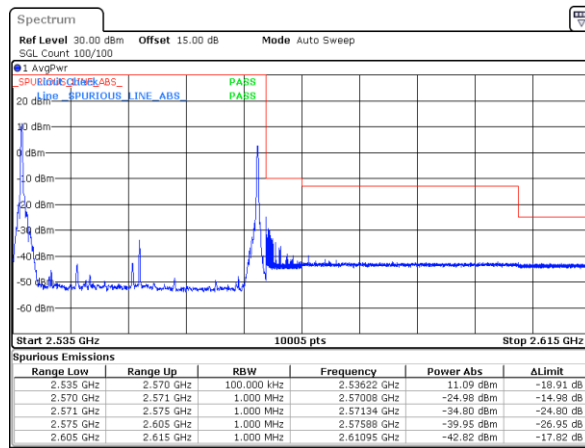
## LTE Band 7C / 20MHz+15MHz

## QPSK

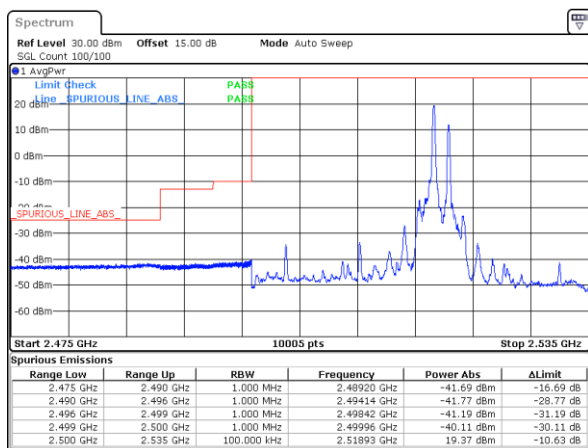
## Lowest Band Edge / 1RB0 and 1RB74



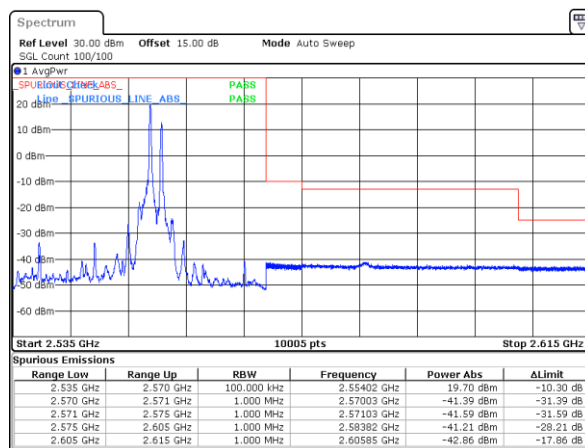
## Highest Band Edge / 1RB0 and 1RB74



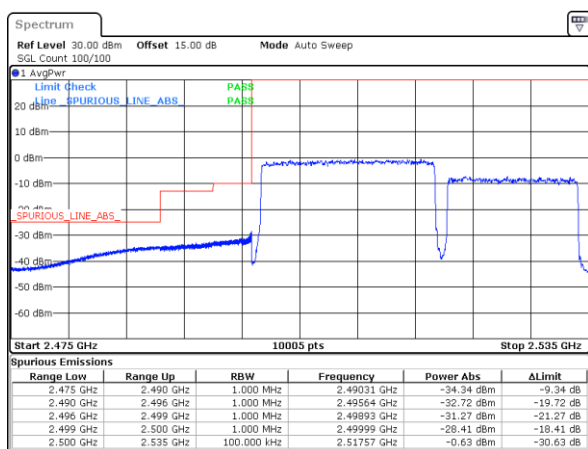
## Lowest Band Edge / 1RB99 and 1RB0



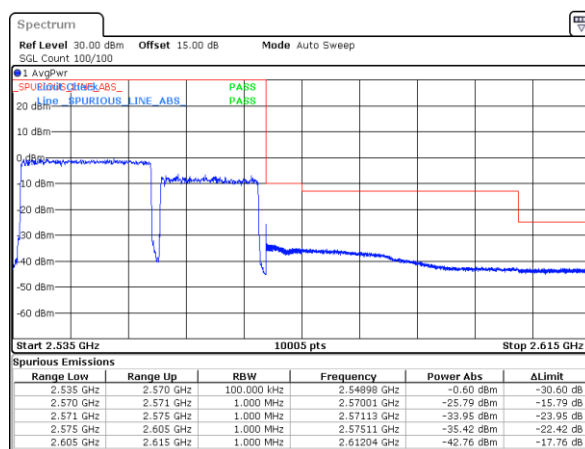
## Highest Band Edge / 1RB99 and 1RB0



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

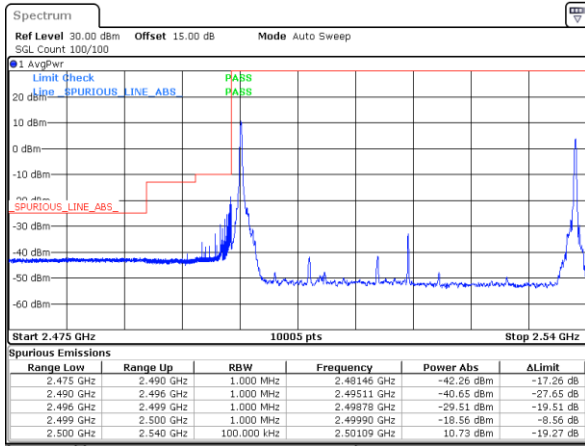




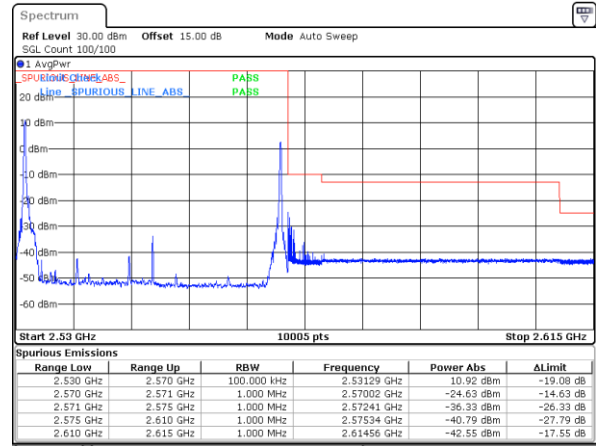
## LTE Band 7C / 20MHz+20MHz

## QPSK

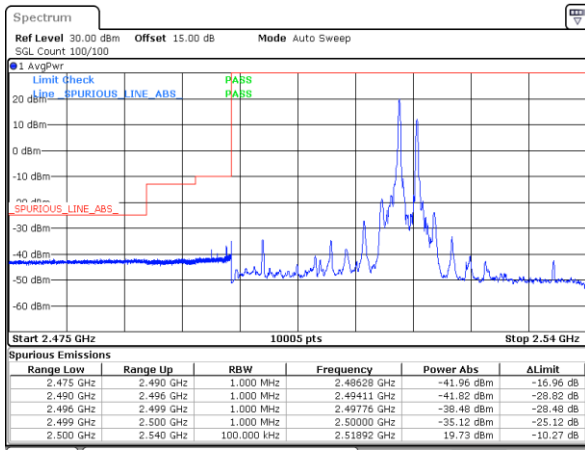
## Lowest Band Edge / 1RB0 and 1RB99



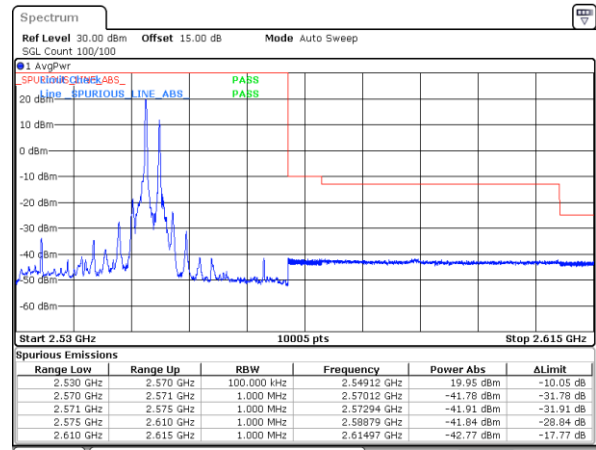
## Highest Band Edge / 1RB0 and 1RB99



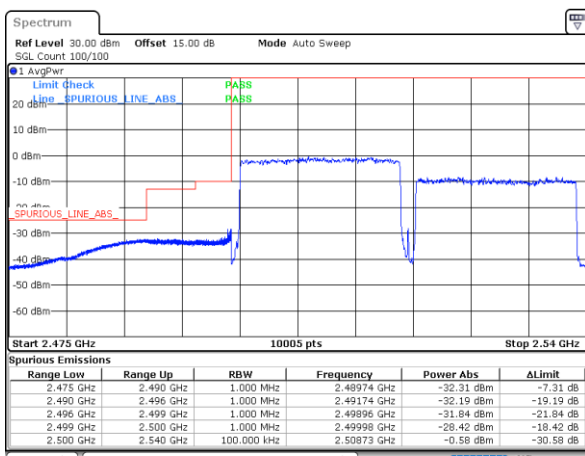
## Lowest Band Edge / 1RB99 and 1RB0



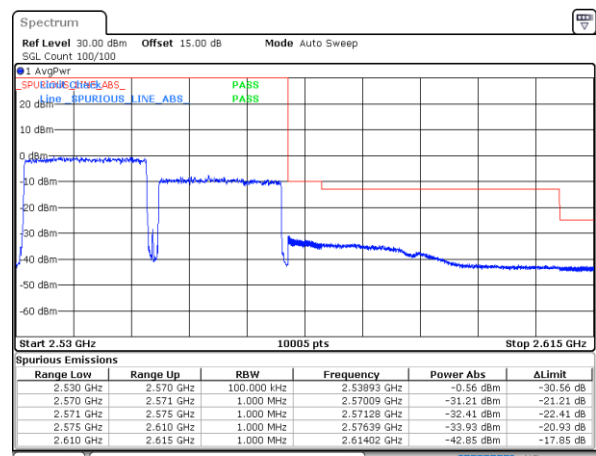
## Highest Band Edge / 1RB99 and 1RB0



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

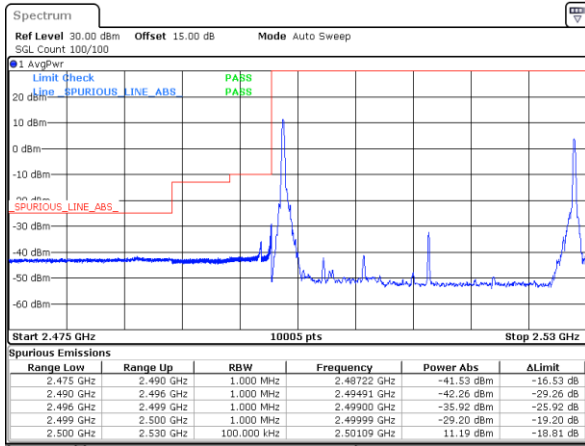




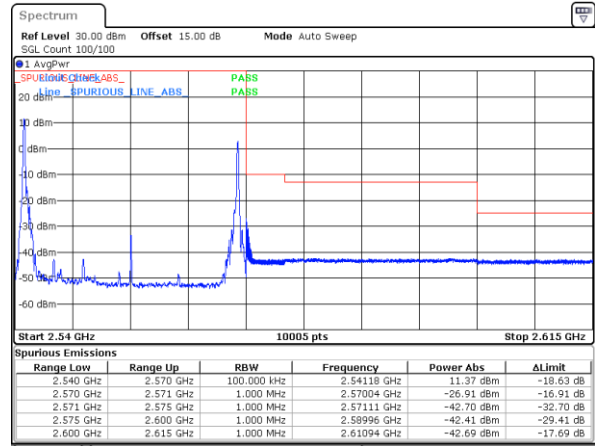
## LTE Band 7C / 10MHz+20MHz

## 16QAM

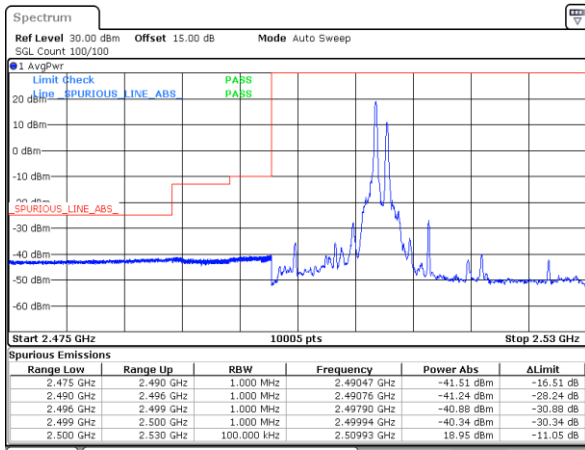
## Lowest Band Edge / 1RB0 and 1RB99



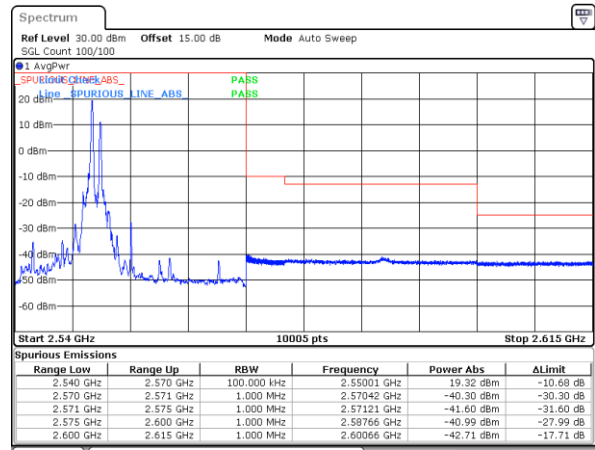
## Highest Band Edge / 1RB0 and 1RB99



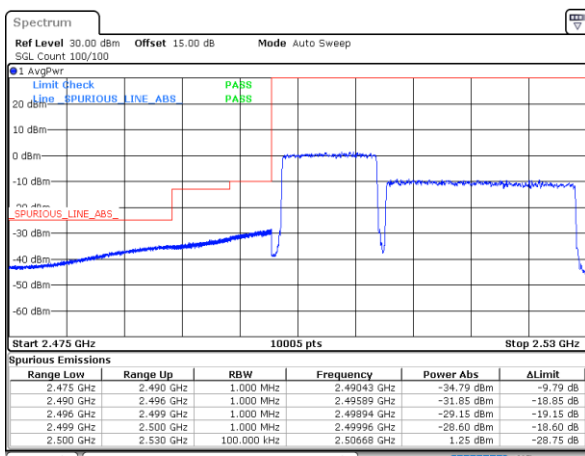
## Lowest Band Edge / 1RB49 and 1RB0



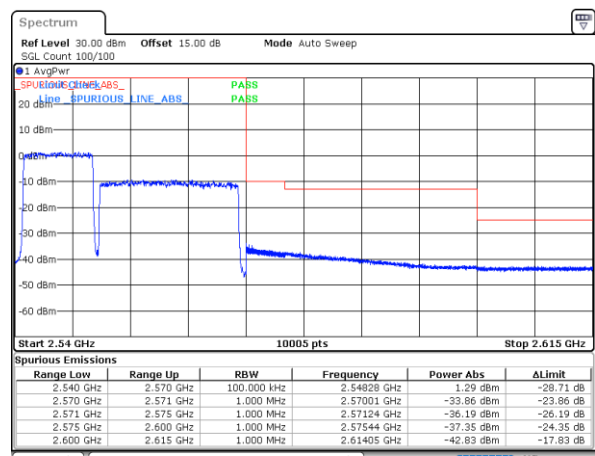
## Highest Band Edge / 1RB49 and 1RB0



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

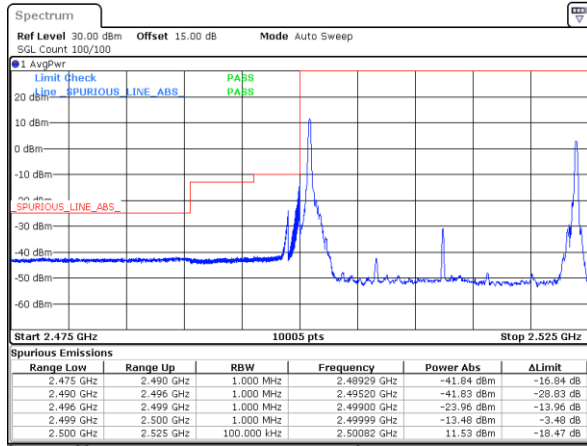




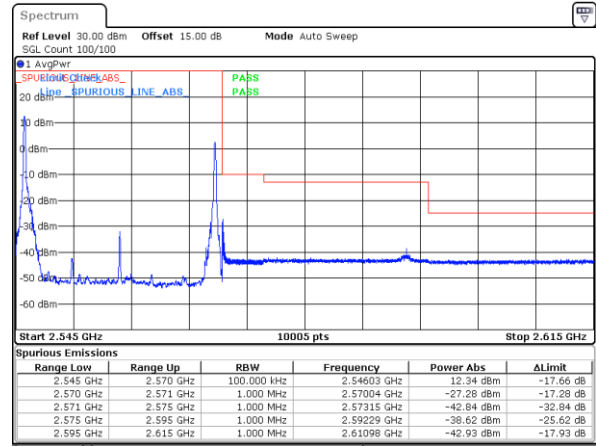
## LTE Band 7C / 15MHz+10MHz

## 16QAM

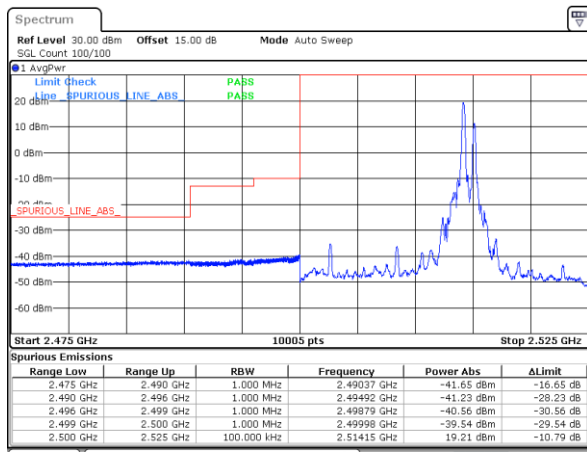
## Lowest Band Edge / 1RB0 and 1RB49



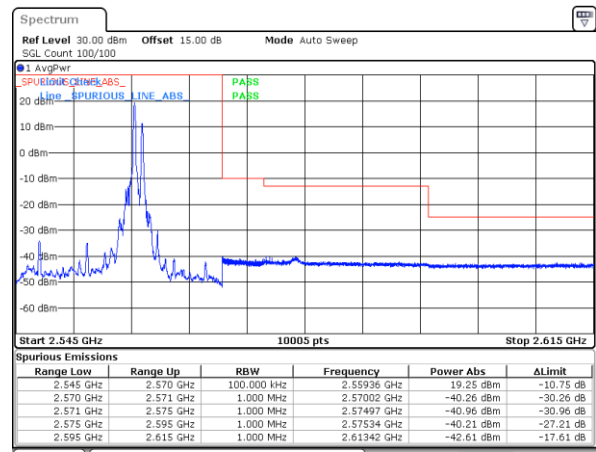
## Highest Band Edge / 1RB0 and 1RB49



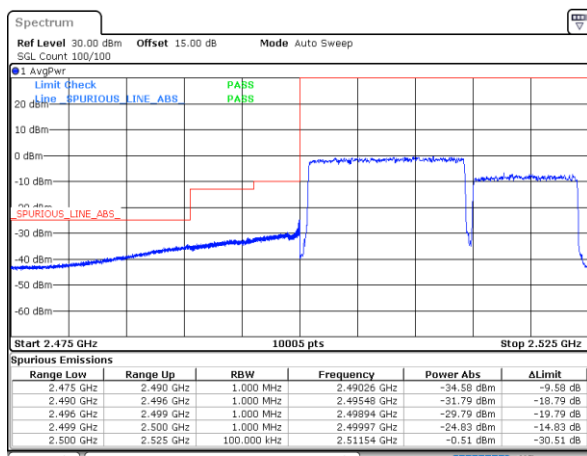
## Lowest Band Edge / 1RB74 and 1RB0



## Highest Band Edge / 1RB74 and 1RB0



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

