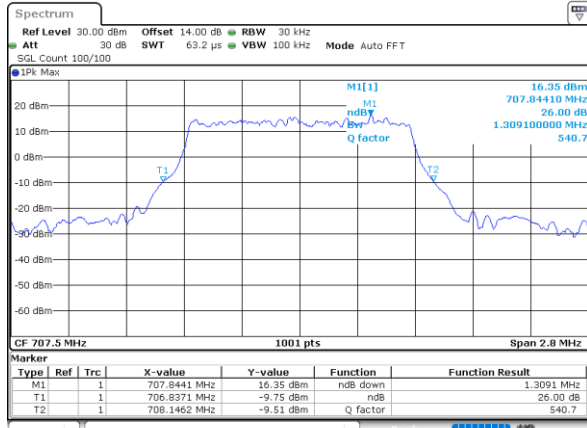




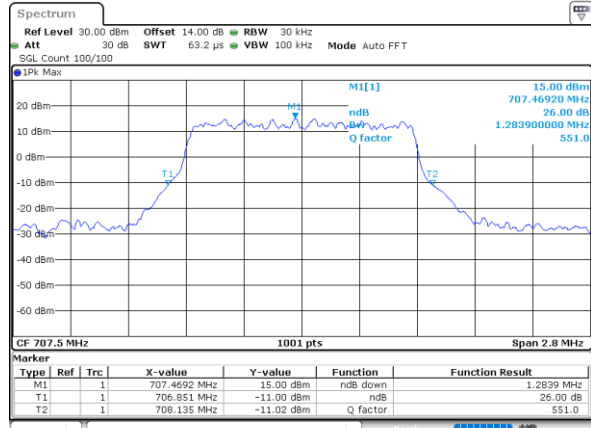
## LTE Band 12

## Middle Channel / 1.4MHz / QPSK



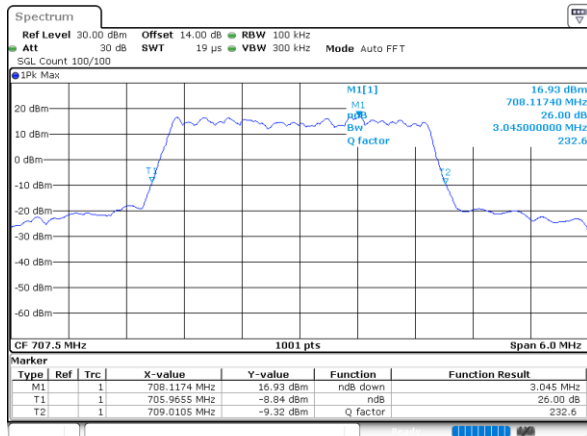
Date: 24.OCT.2024 17:30:57

## Middle Channel / 1.4MHz / 16QAM



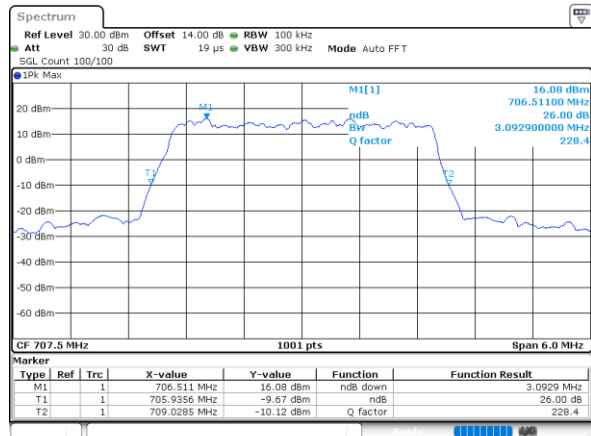
Date: 24.OCT.2024 17:31:40

## Middle Channel / 3MHz / QPSK



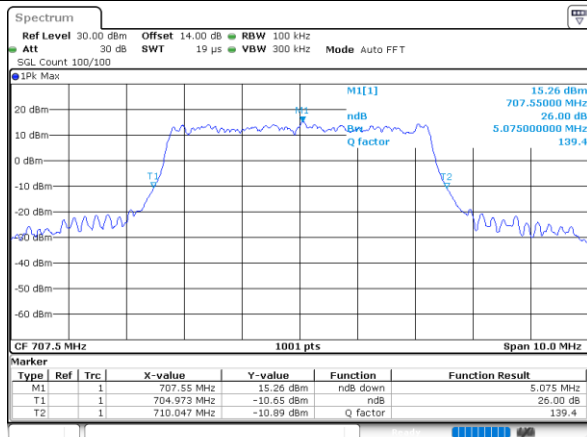
Date: 24.OCT.2024 17:46:16

## Middle Channel / 3MHz / 16QAM



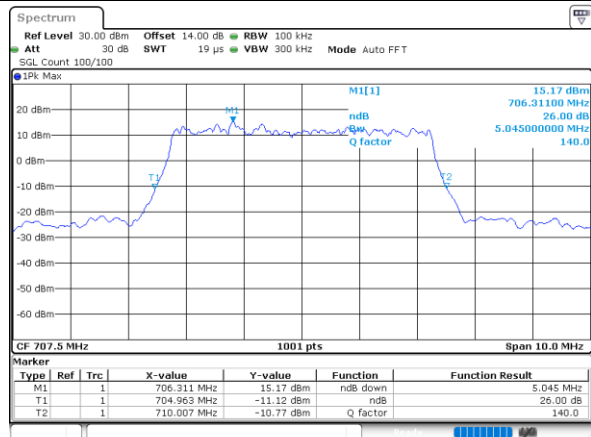
Date: 24.OCT.2024 17:46:58

## Middle Channel / 5MHz / QPSK



Date: 24.OCT.2024 18:01:34

## Middle Channel / 5MHz / 16QAM

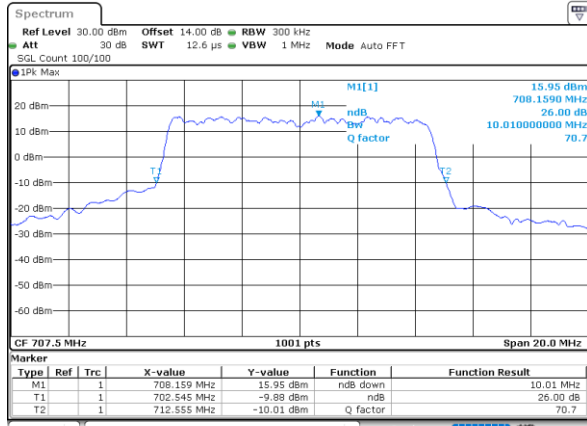


Date: 24.OCT.2024 18:02:17



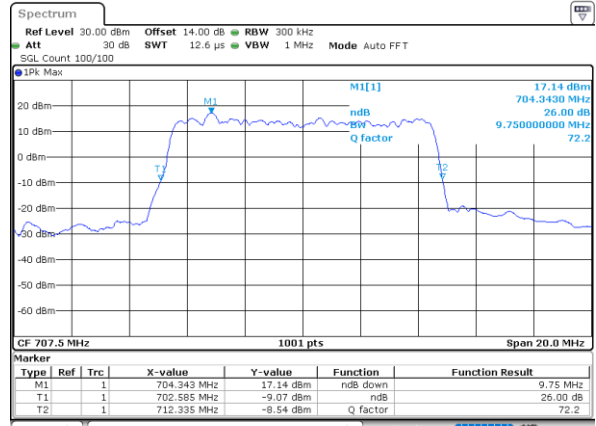
## LTE Band 12

## Middle Channel / 10MHz / QPSK



Date: 24.OCT.2024 18:16:53

## Middle Channel / 10MHz / 16QAM



Date: 24.OCT.2024 18:17:36



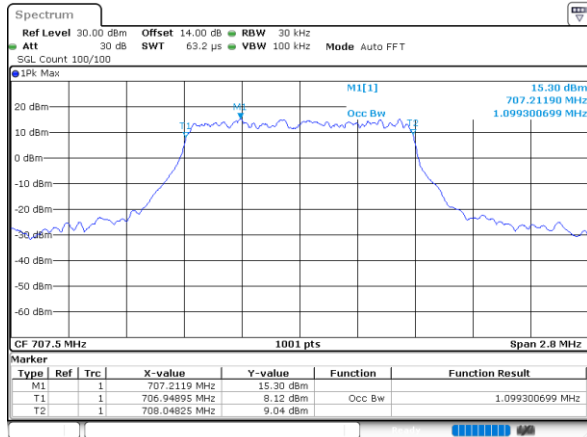
## Occupied Bandwidth

| Mode      | LTE Band 12 : 99%OBW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
|-----------|---------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| BW        | 1.4MHz                    |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.      | QPSK                      | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Middle CH | 1.10                      | 1.10  | 2.72 | 2.73  | 4.52 | 4.51  | 9.09  | 9.05  | -     | -     | -     | -     |

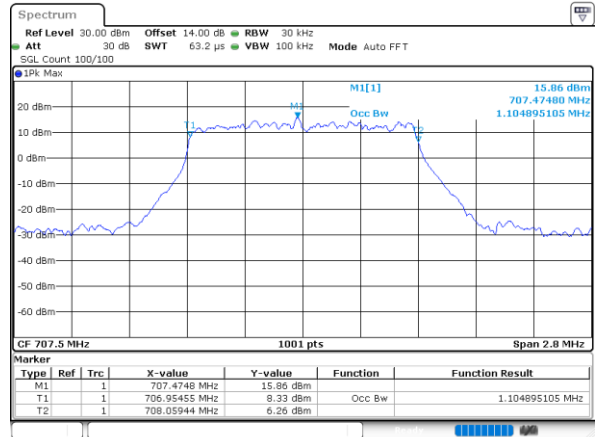


## LTE Band 12

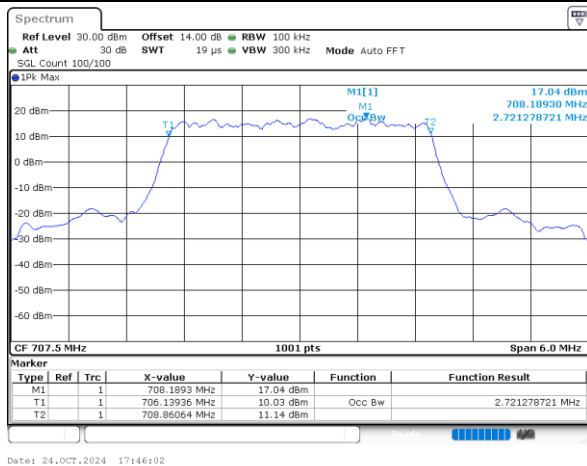
## Middle Channel / 1.4MHz / QPSK



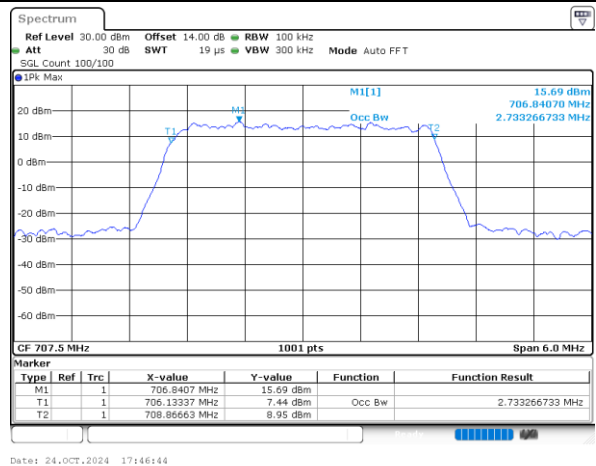
## Middle Channel / 1.4MHz / 16QAM



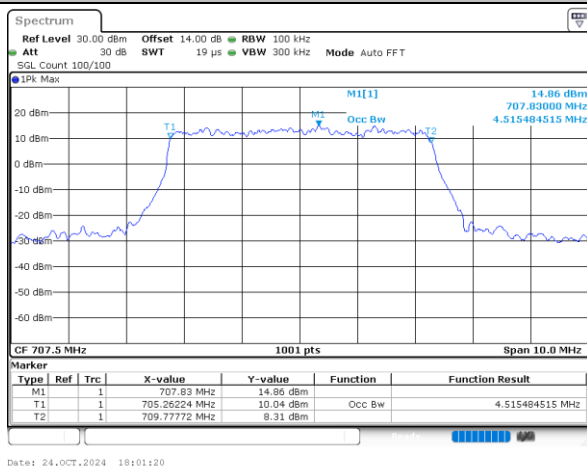
## Middle Channel / 3MHz / QPSK



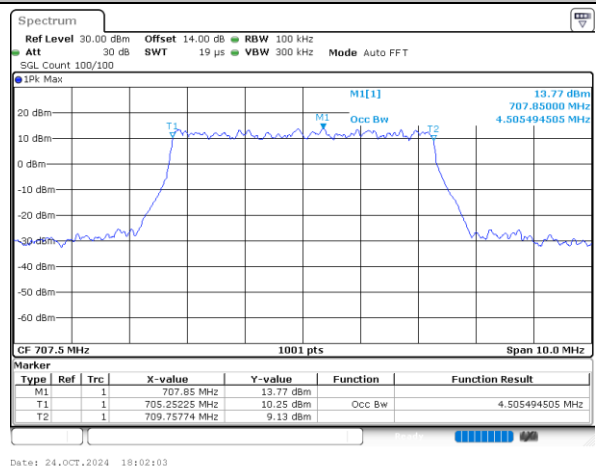
## Middle Channel / 3MHz / 16QAM



## Middle Channel / 5MHz / QPSK



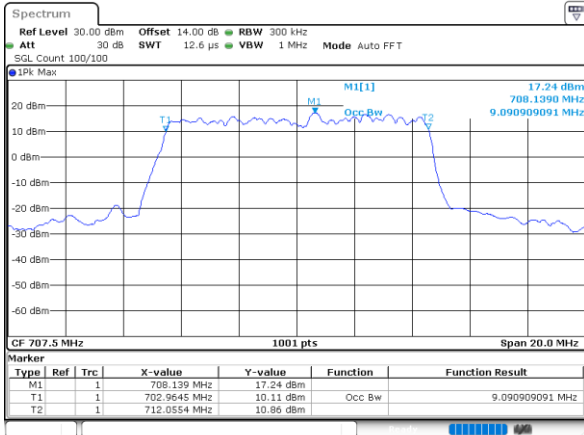
## Middle Channel / 5MHz / 16QAM





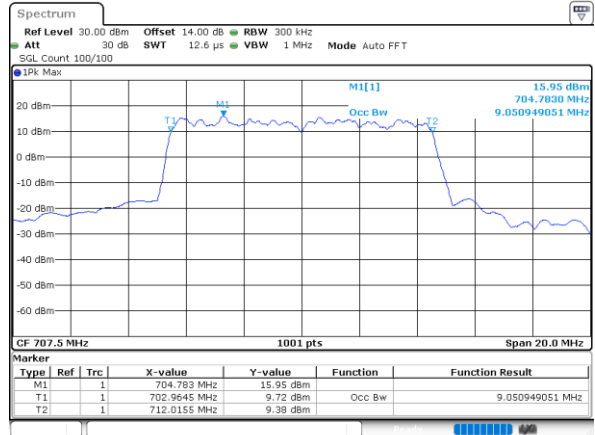
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 24.OCT.2024 18:16:39

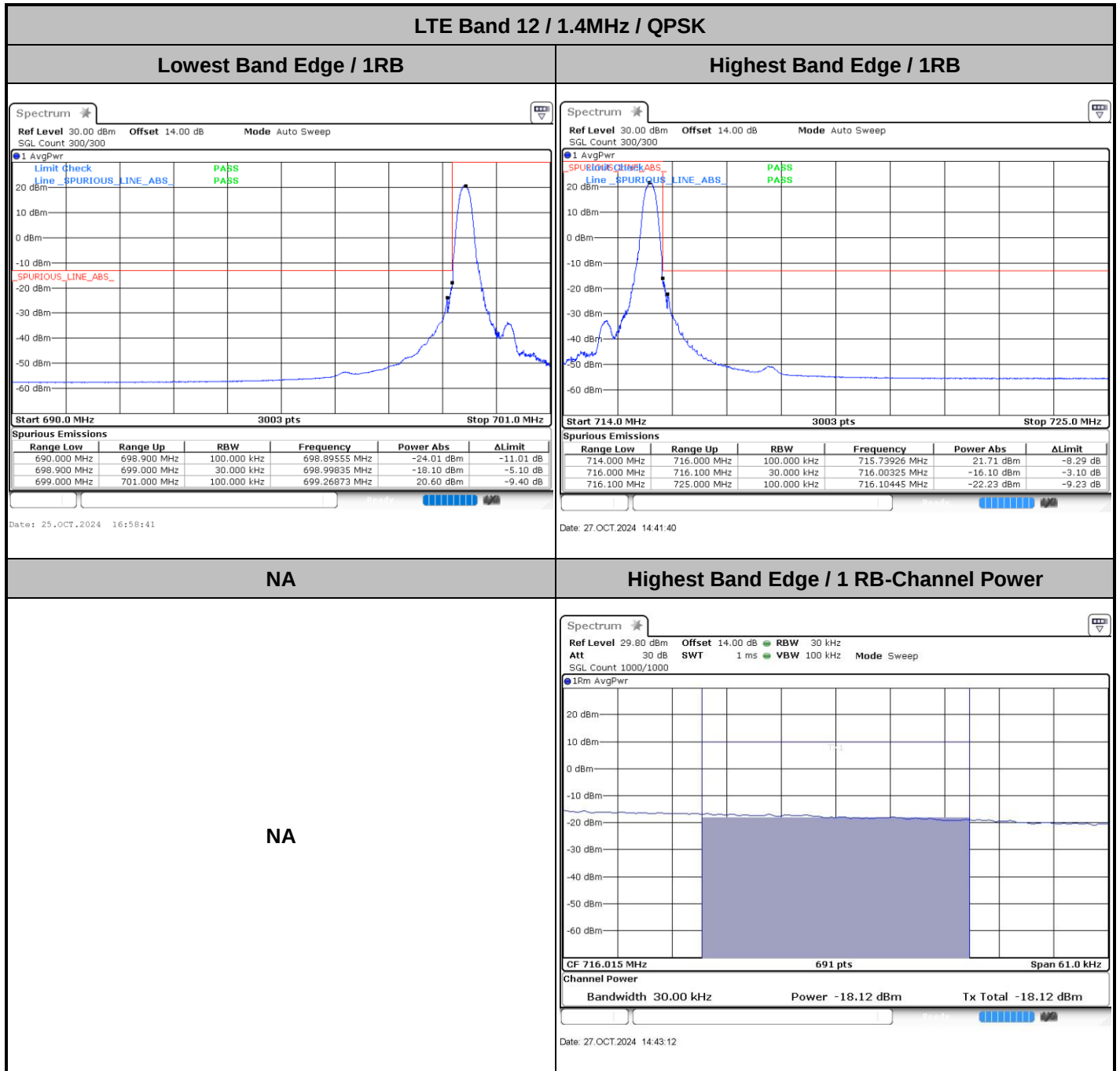
Middle Channel / 10MHz / 16QAM

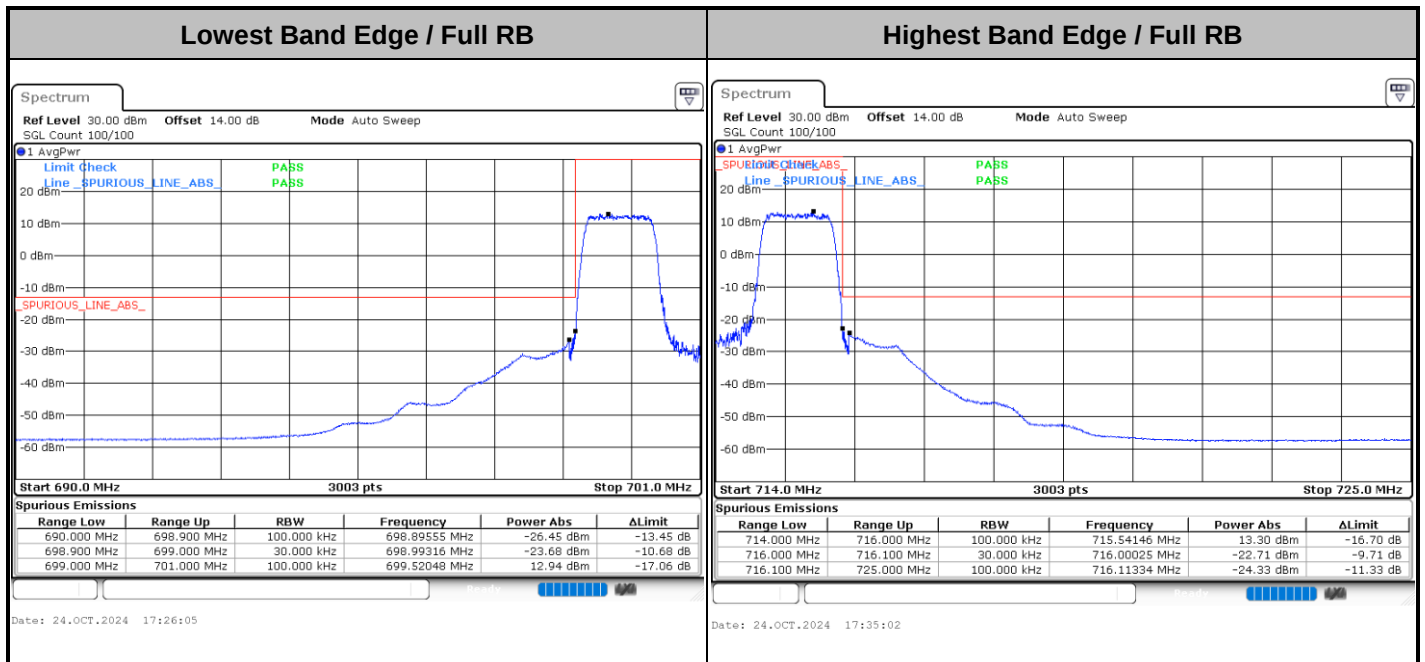


Date: 24.OCT.2024 18:17:22



## Conducted Band Edge

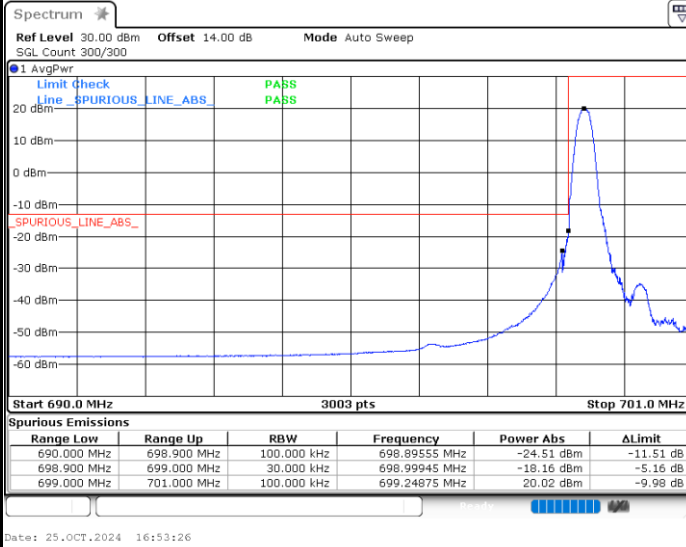




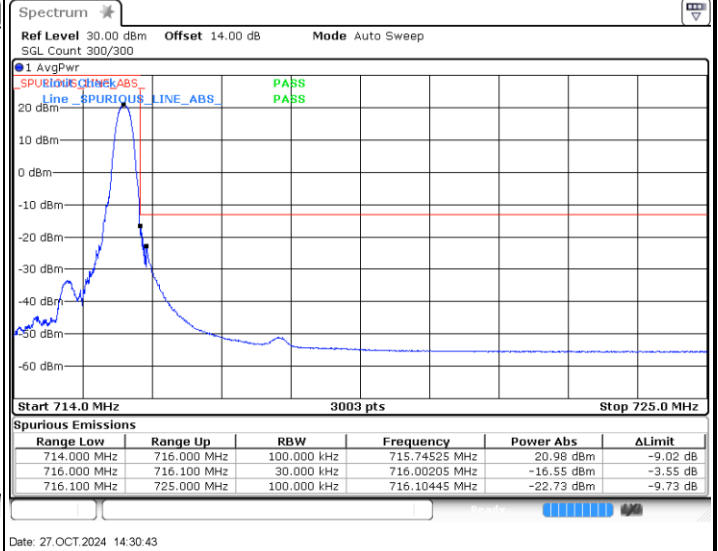


## LTE Band 12 / 1.4MHz / 16QAM

## Lowest Band Edge / 1 RB

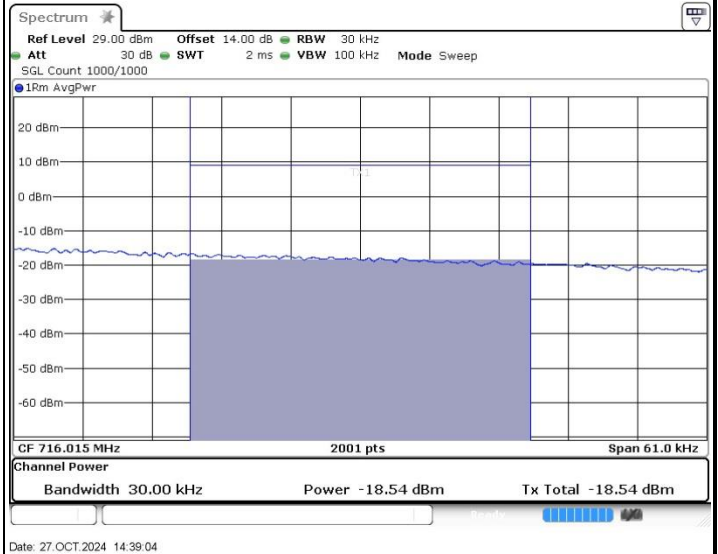


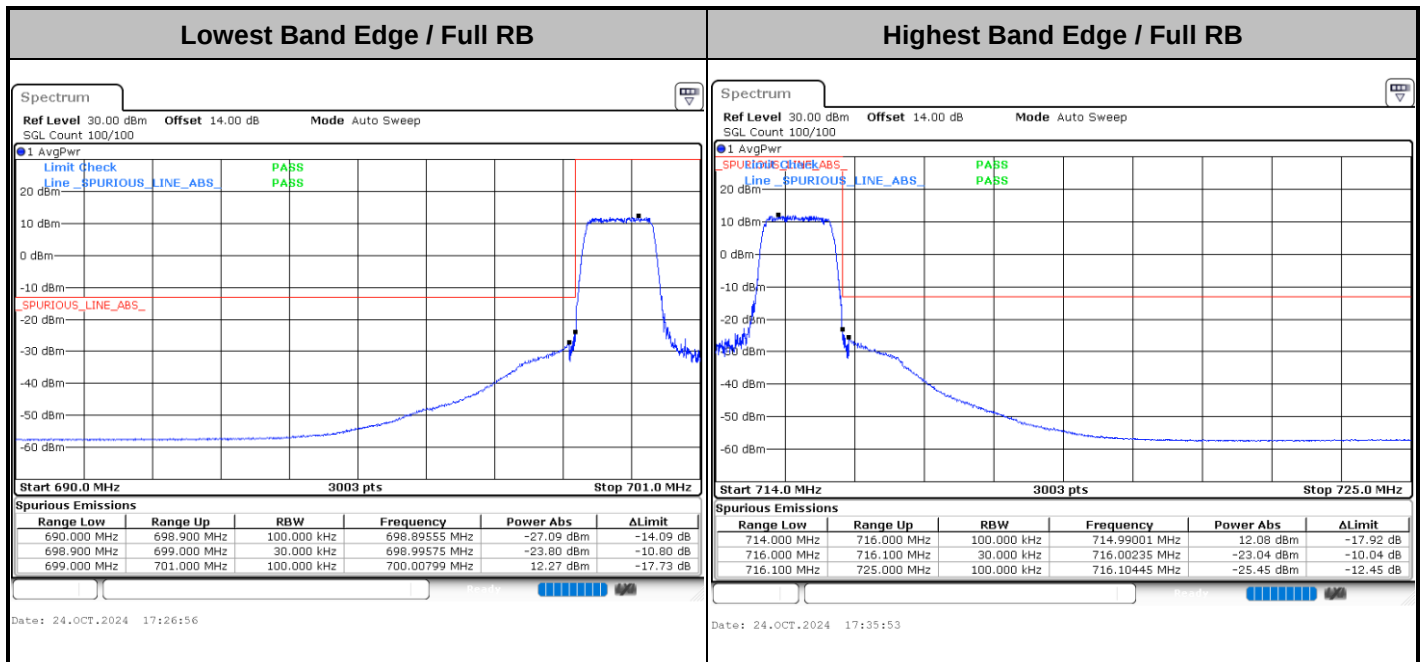
## Highest Band Edge / 1 RB



## NA

## Highest Band Edge / 1 RB- Channel Power

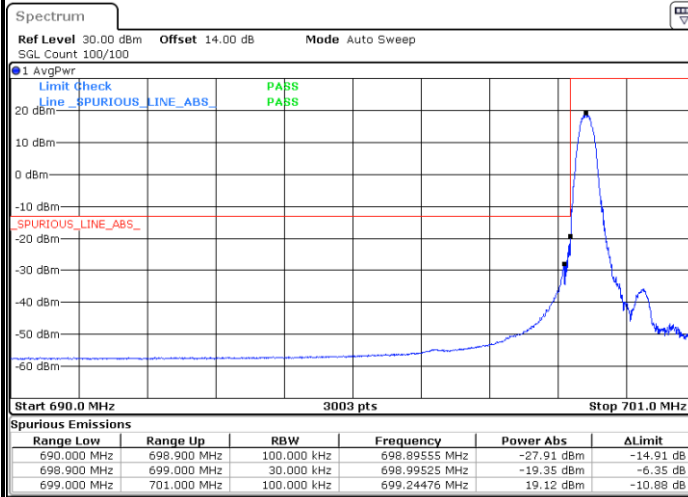






## LTE Band 12 / 1.4MHz / 64QAM

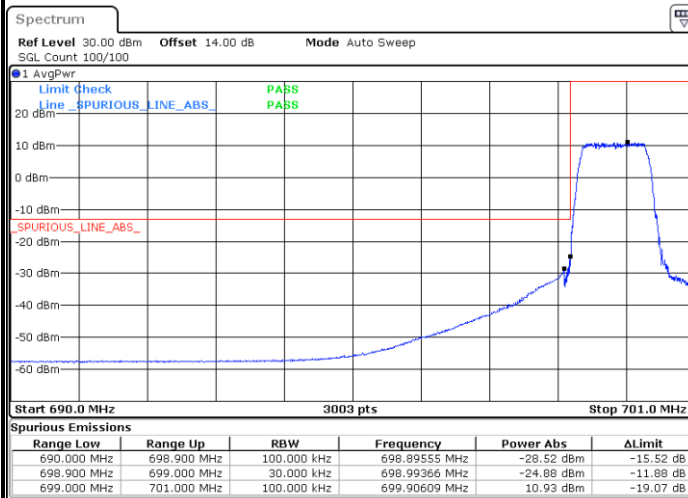
## Lowest Band Edge / 1 RB



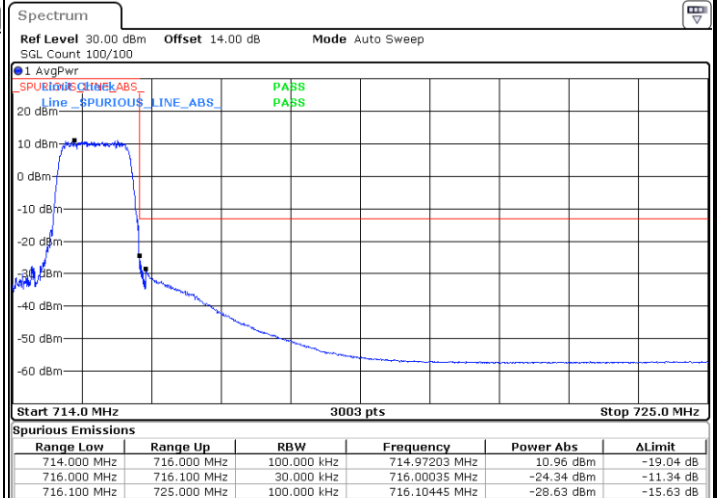
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



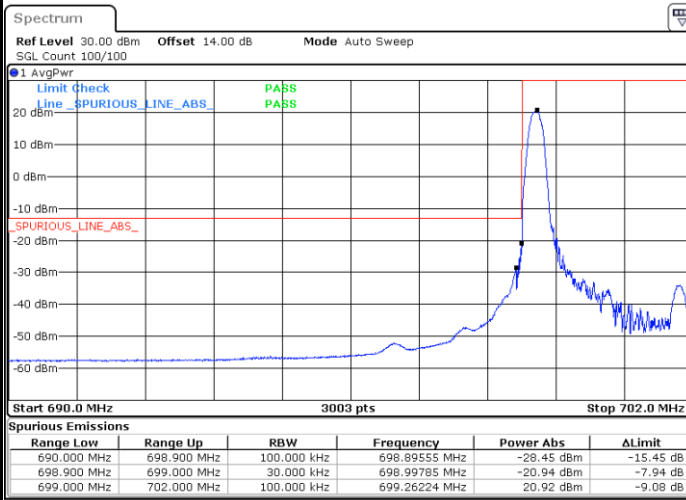
## Highest Band Edge / Full RB



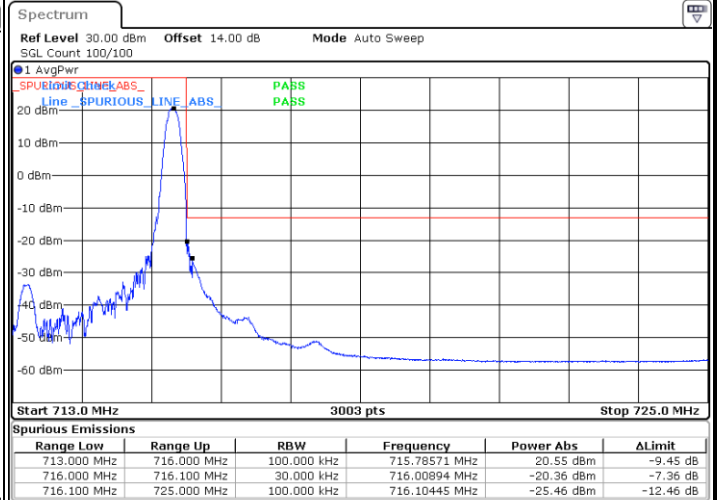


## LTE Band 12 / 3MHz / QPSK

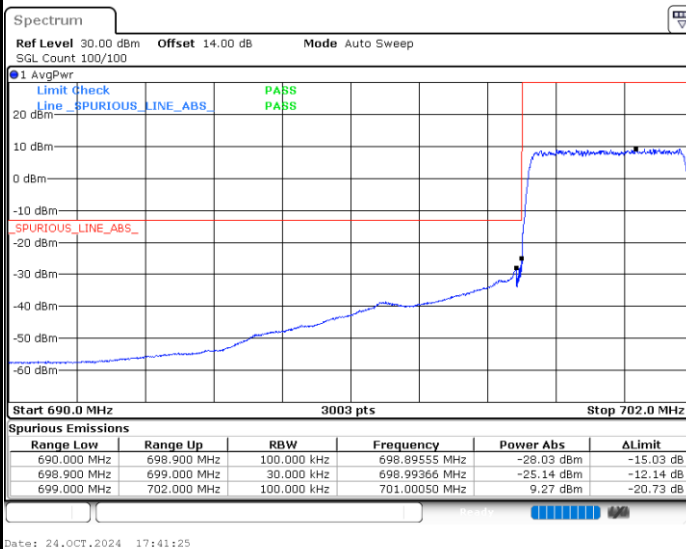
## Lowest Band Edge / 1RB



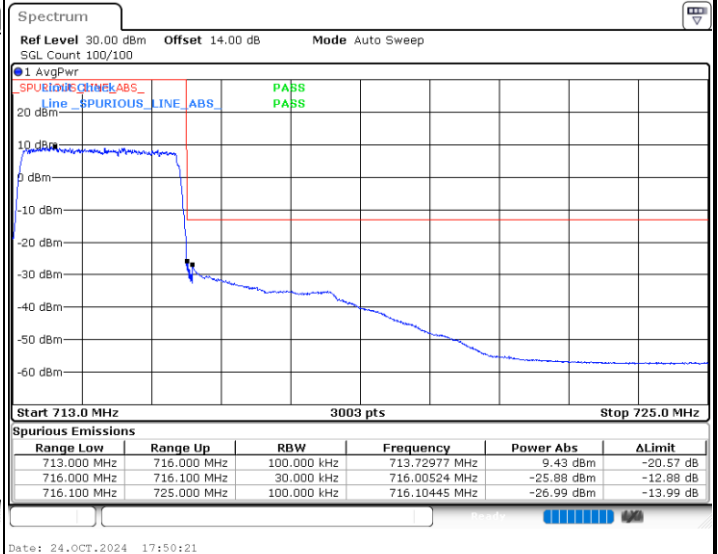
## Highest Band Edge / 1RB



## Lowest Band Edge / Full RB



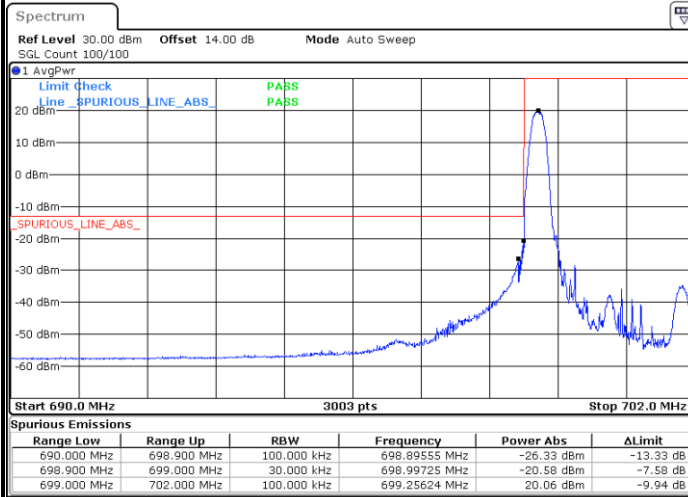
## Highest Band Edge / Full RB



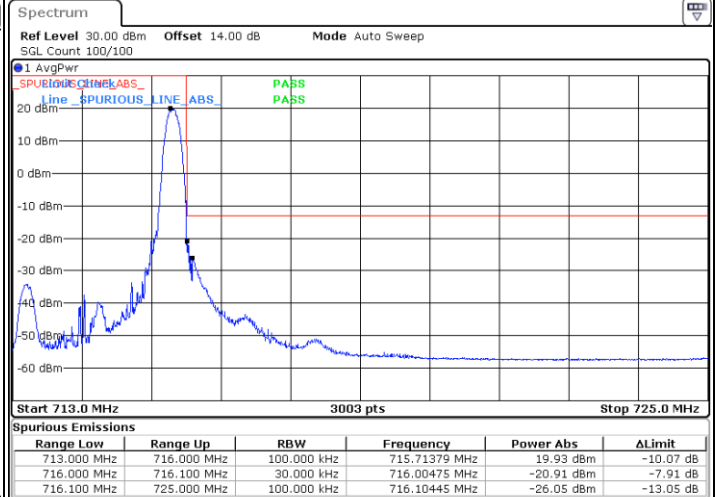


## LTE Band 12 / 3MHz / 16QAM

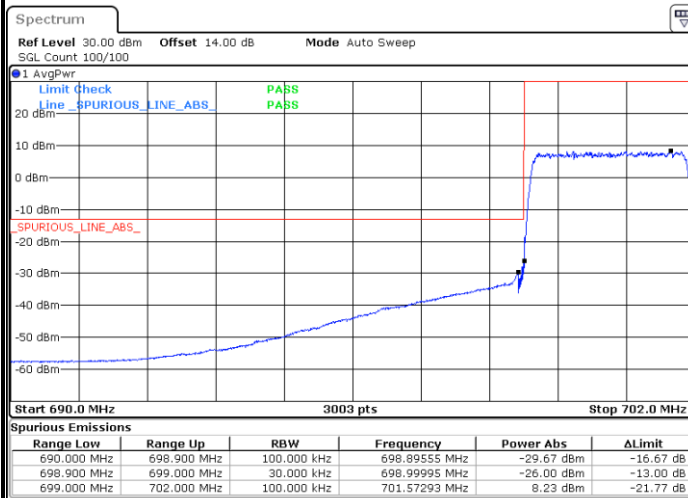
## Lowest Band Edge / 1 RB



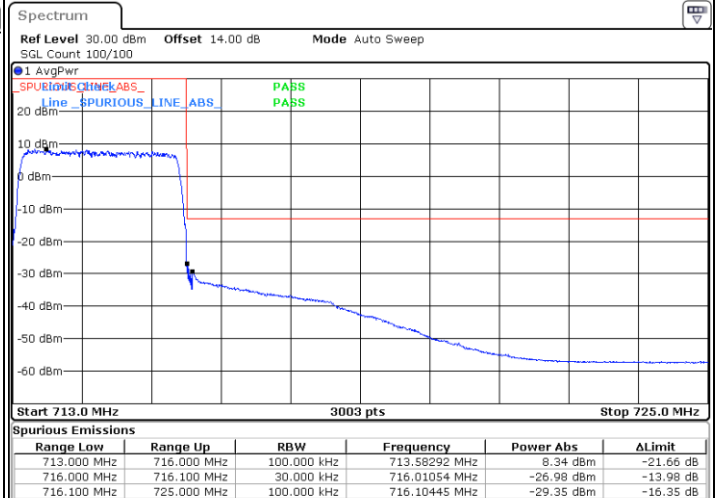
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



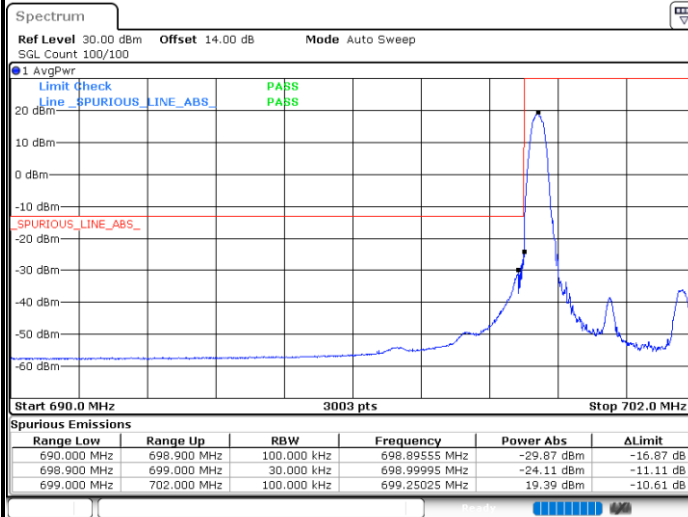
## Highest Band Edge / Full RB



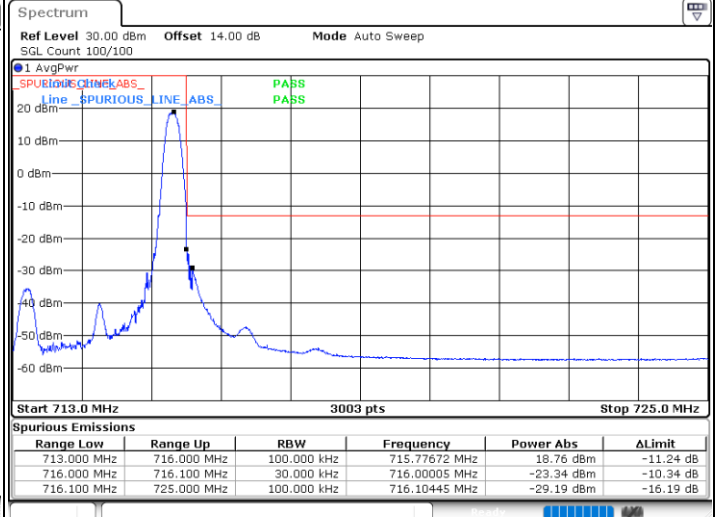


## LTE Band 12 / 3MHz / 64QAM

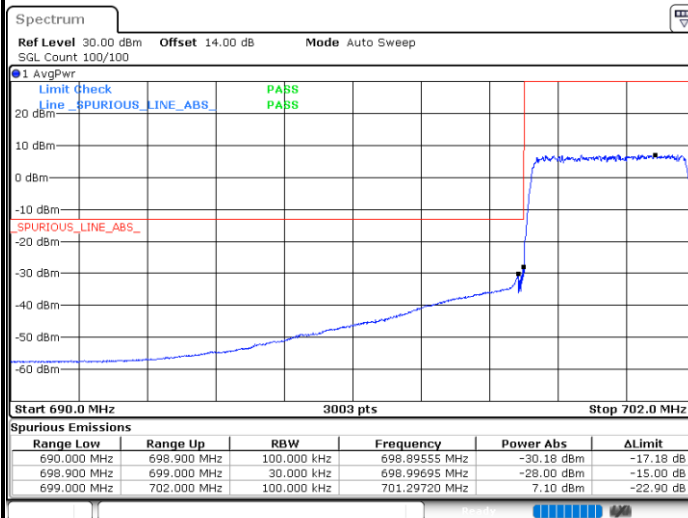
## Lowest Band Edge / 1 RB



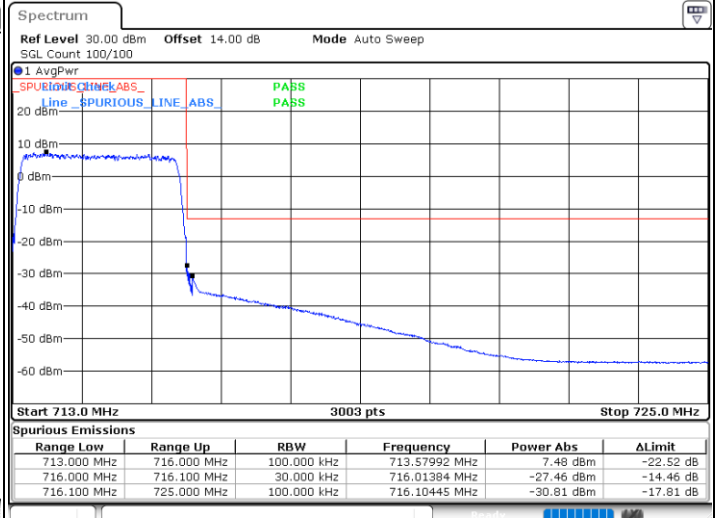
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



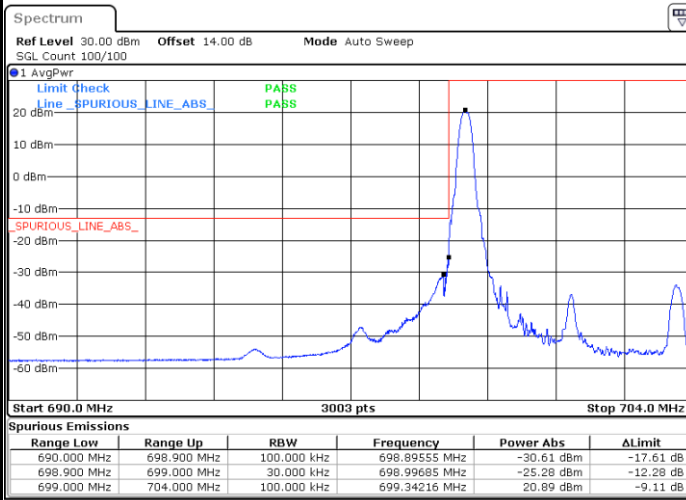
## Highest Band Edge / Full RB



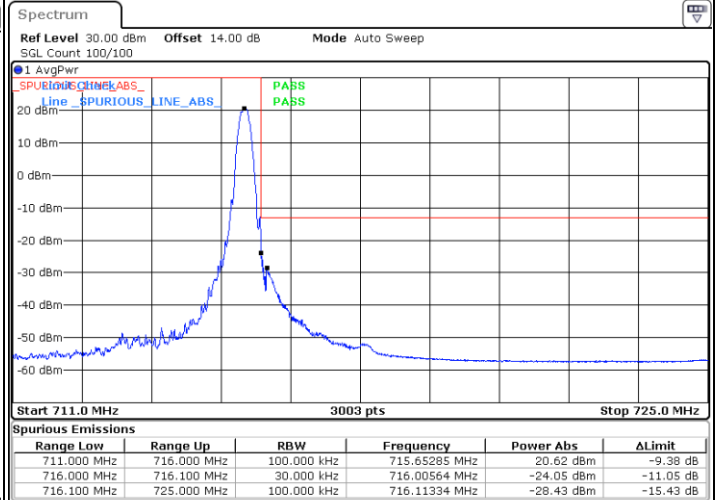


## LTE Band 12 / 5MHz / QPSK

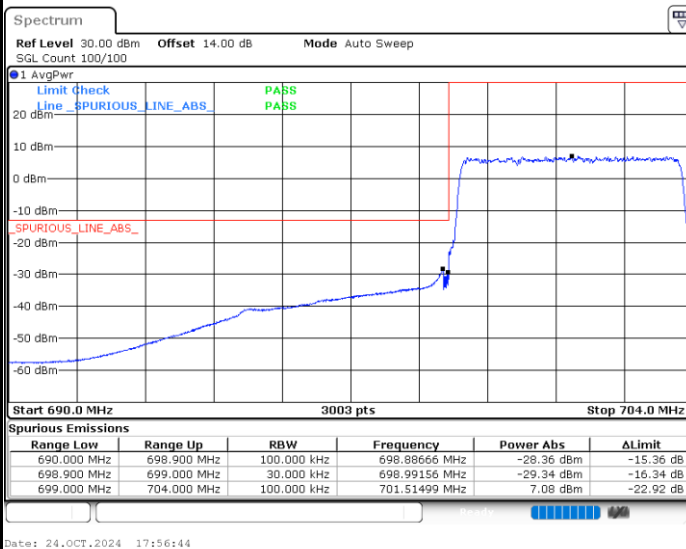
## Lowest Band Edge / 1RB



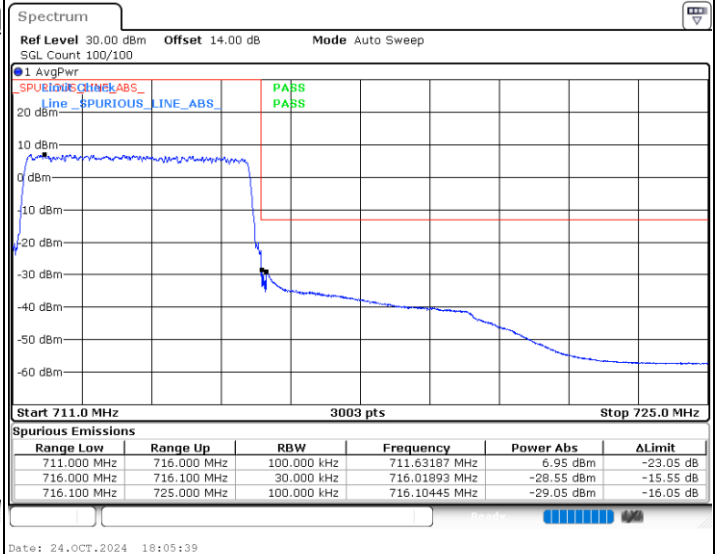
## Highest Band Edge / 1RB



## Lowest Band Edge / Full RB



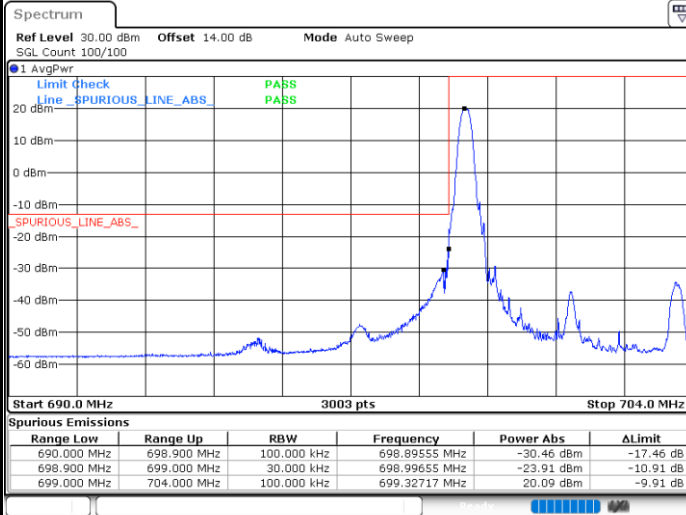
## Highest Band Edge / Full RB



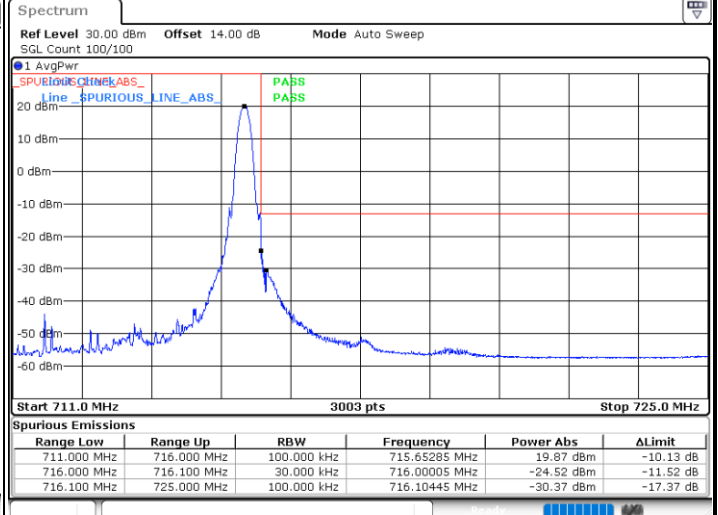


## LTE Band 12 / 5MHz / 16QAM

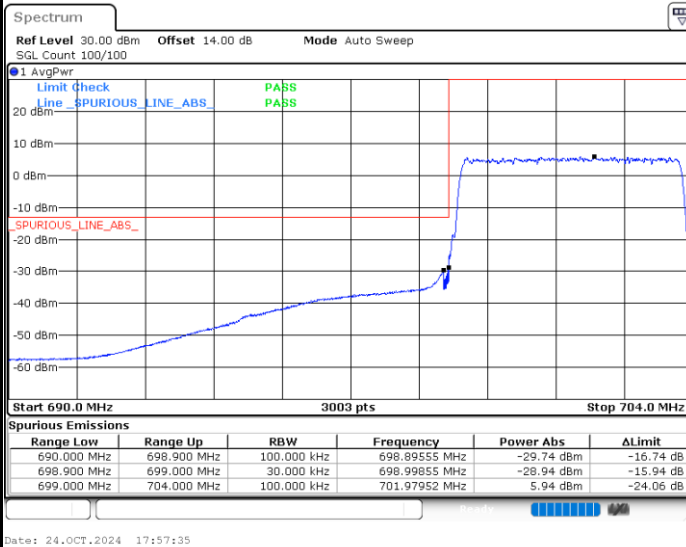
## Lowest Band Edge / 1 RB



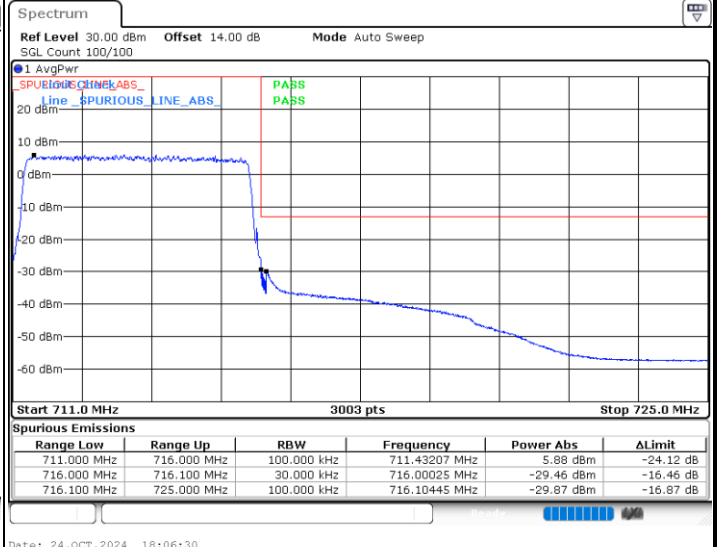
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



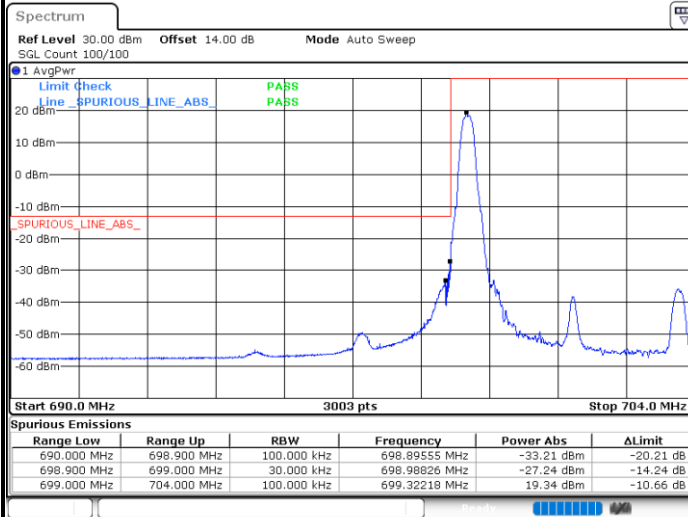
## Highest Band Edge / Full RB



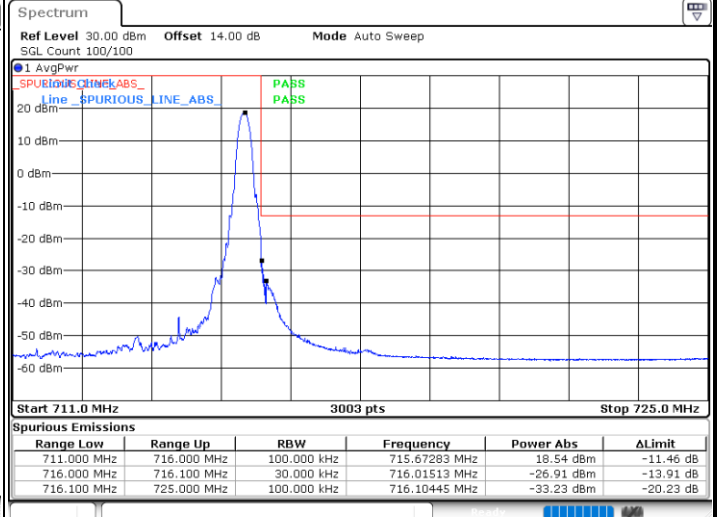


## LTE Band 12 / 5MHz / 64QAM

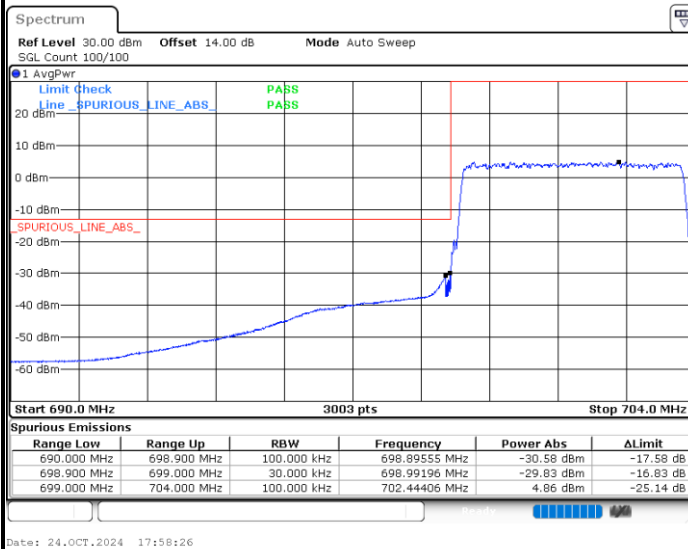
## Lowest Band Edge / 1 RB



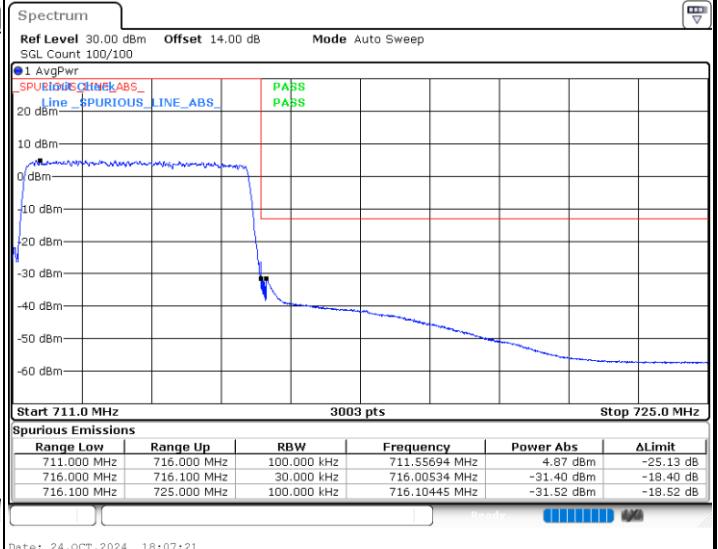
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



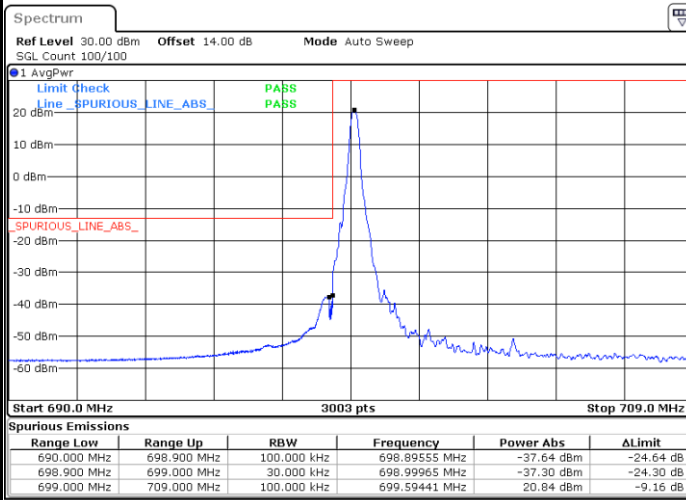
## Highest Band Edge / Full RB



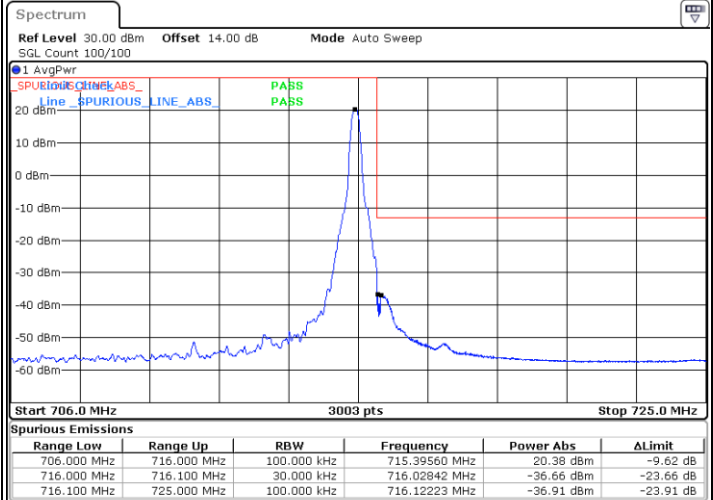


## LTE Band 12 / 10MHz / QPSK

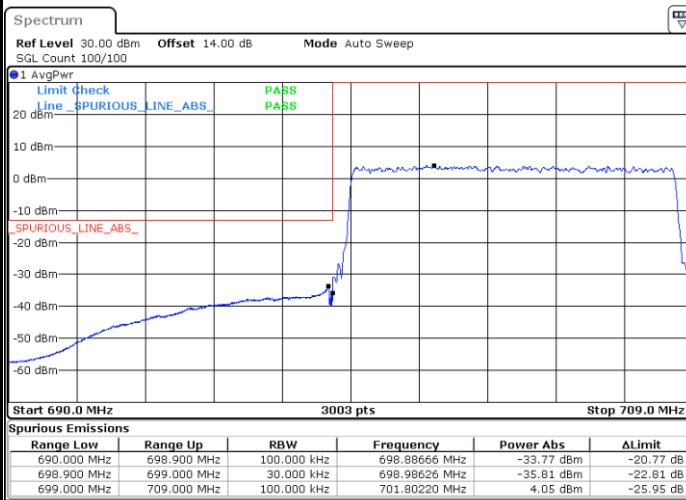
## Lowest Band Edge / 1RB



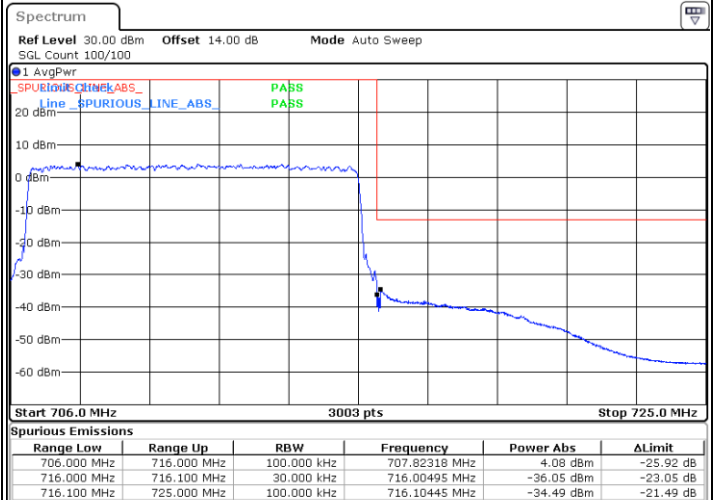
## Highest Band Edge / 1RB



## Lowest Band Edge / Full RB



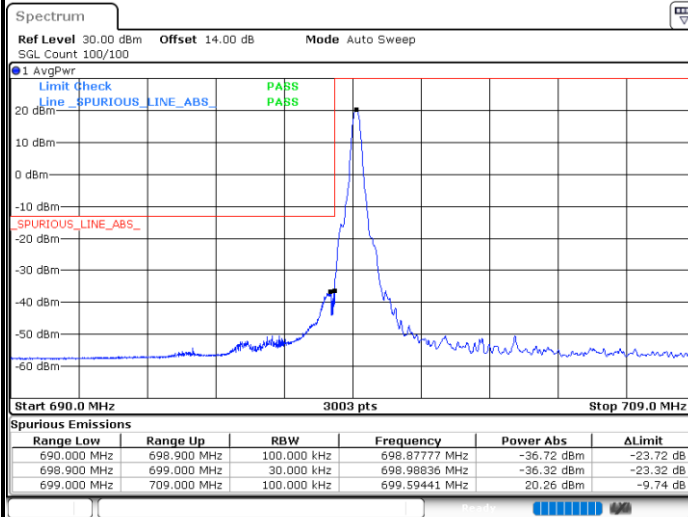
## Highest Band Edge / Full RB



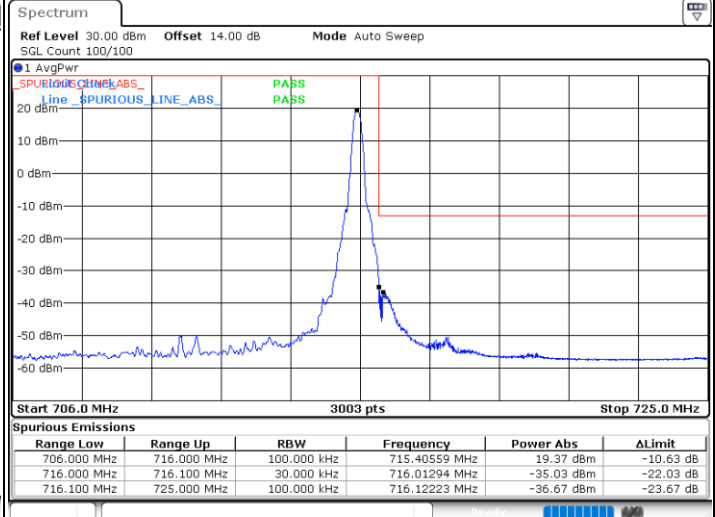


## LTE Band 12 / 10MHz / 16QAM

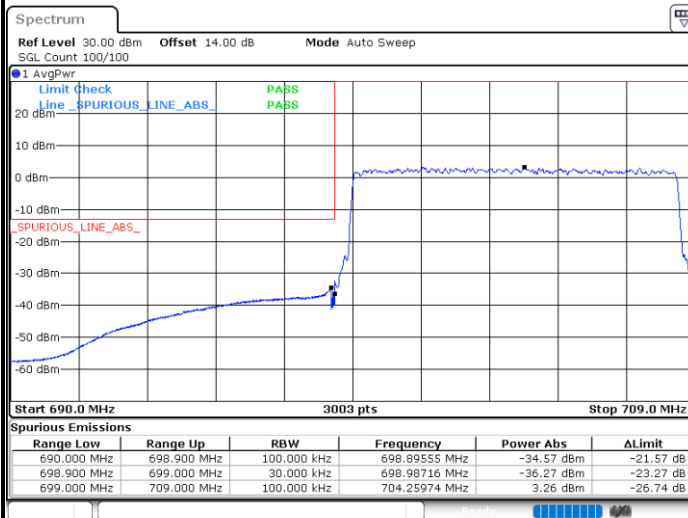
## Lowest Band Edge / 1 RB



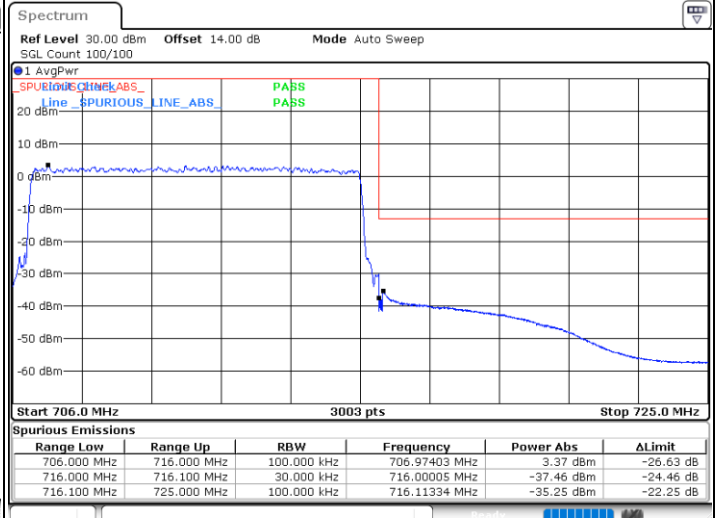
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



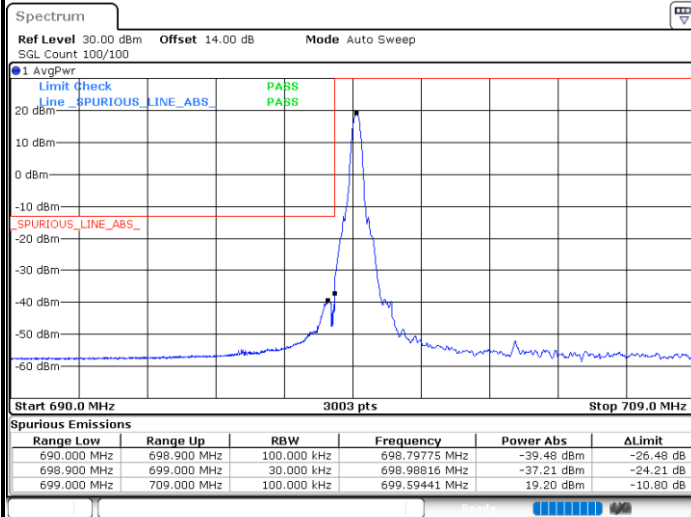
## Highest Band Edge / Full RB



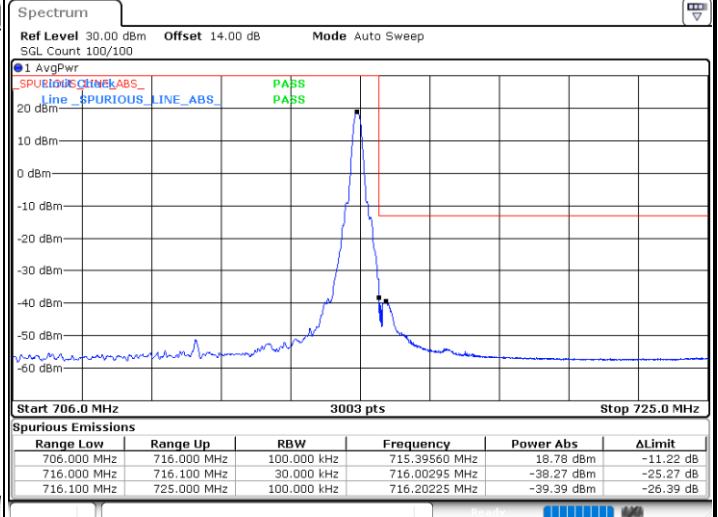


## LTE Band 12 / 10MHz / 64QAM

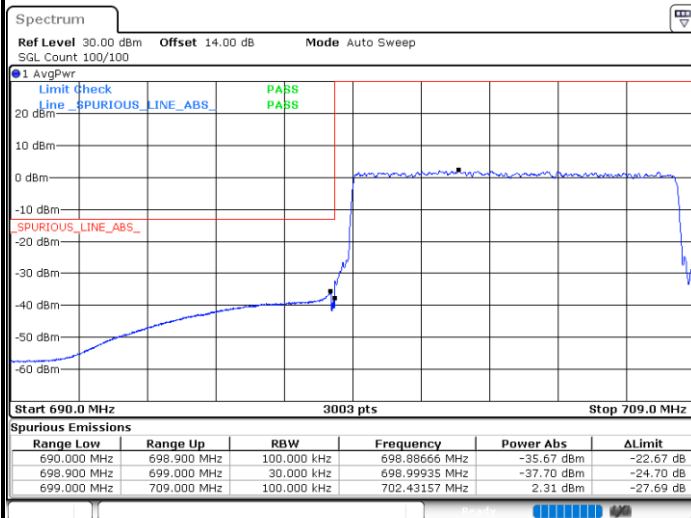
## Lowest Band Edge / 1 RB



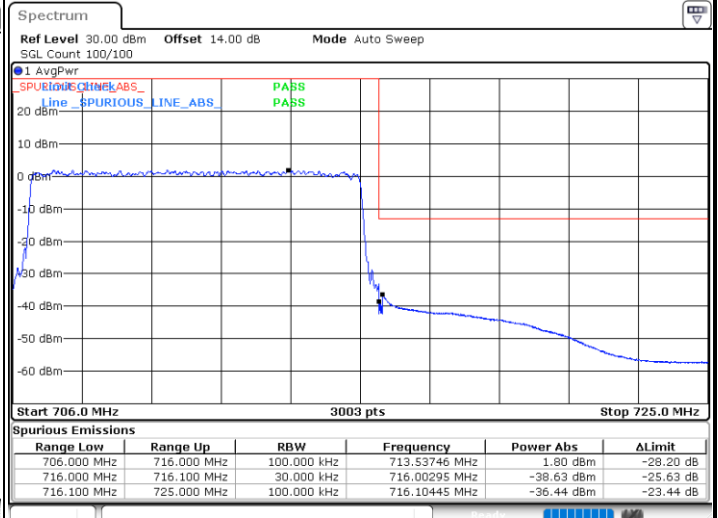
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

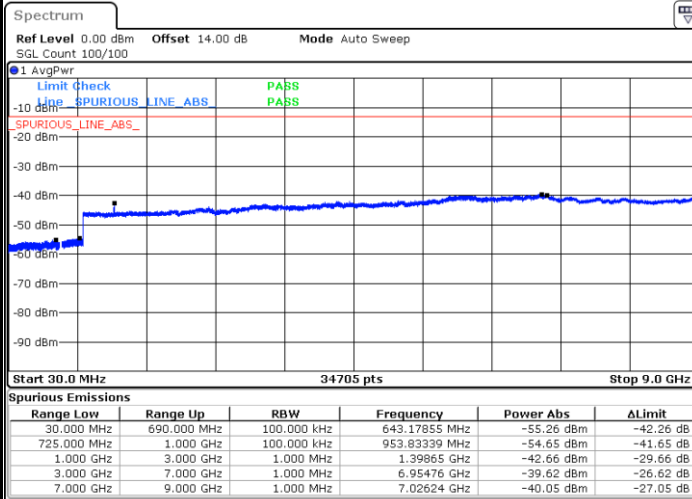




# Conducted Spurious Emission

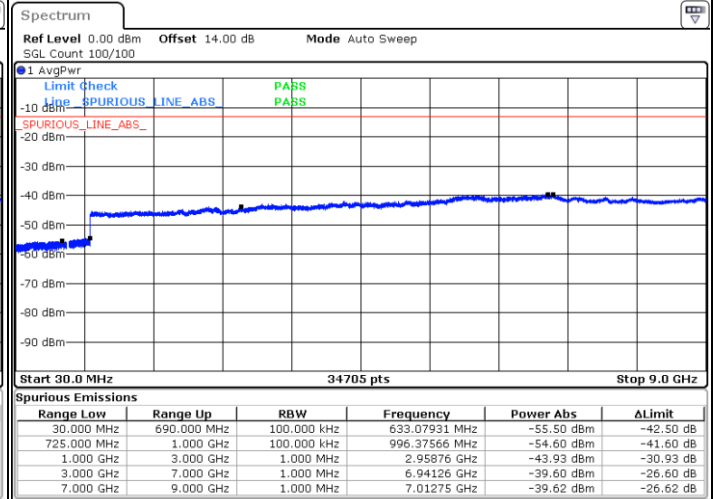
## LTE Band 12 / 1.4MHz

### Lowest Channel / QPSK



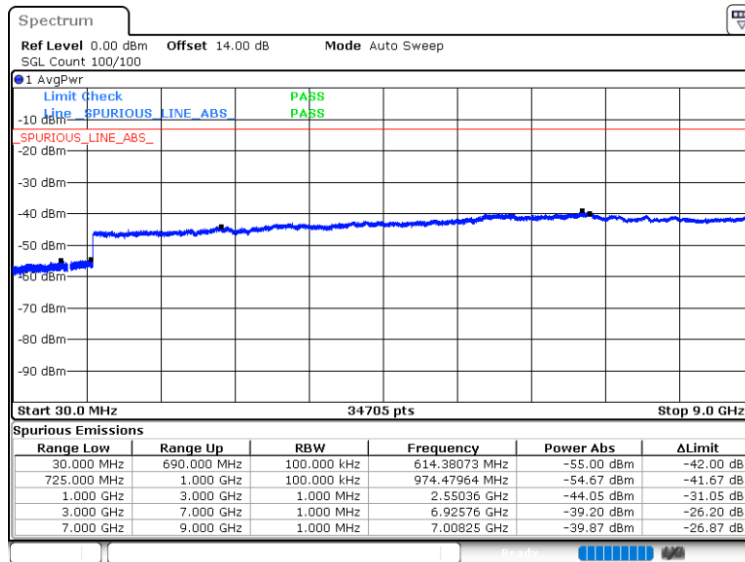
Date: 24.OCT.2024 17:29:01

### Middle Channel / QPSK



Date: 24.OCT.2024 17:30:14

### Highest Channel / QPSK

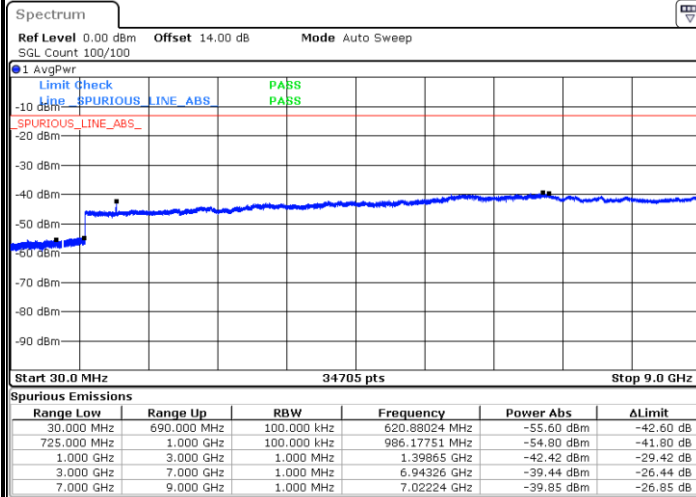


Date: 24.OCT.2024 17:37:57



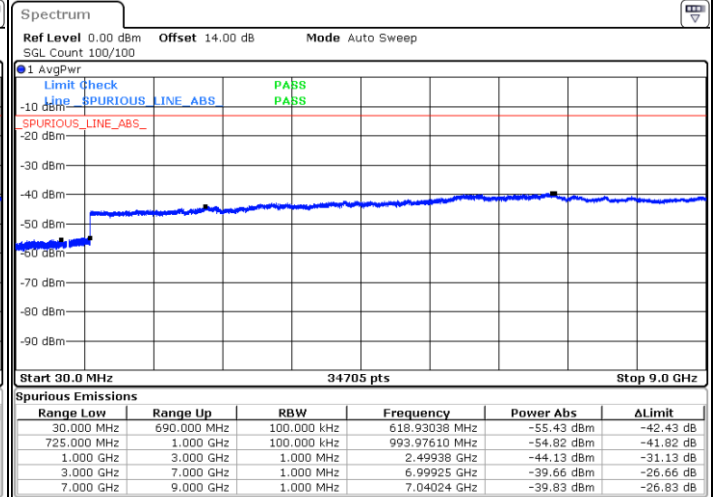
## LTE Band 12 / 3MHz

## Lowest Channel / QPSK



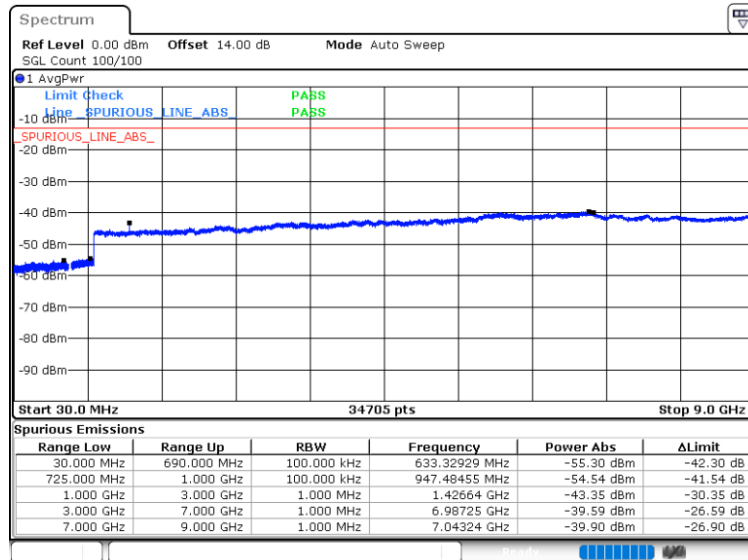
Date: 24.OCT.2024 17:44:20

## Middle Channel / QPSK



Date: 24.OCT.2024 17:45:33

## Highest Channel / QPSK

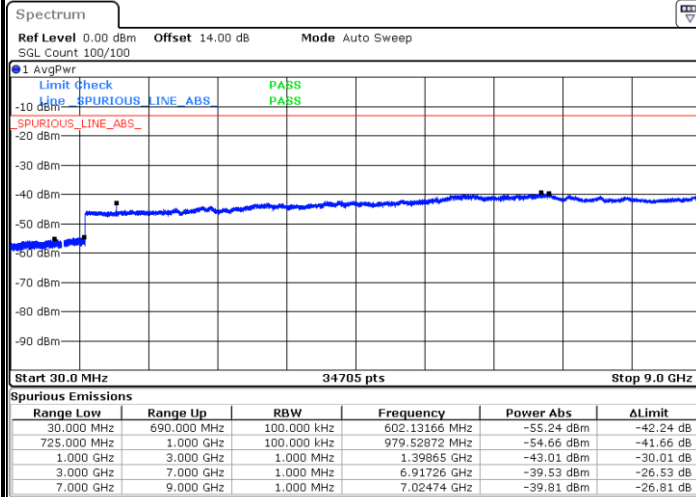


Date: 24.OCT.2024 17:53:16



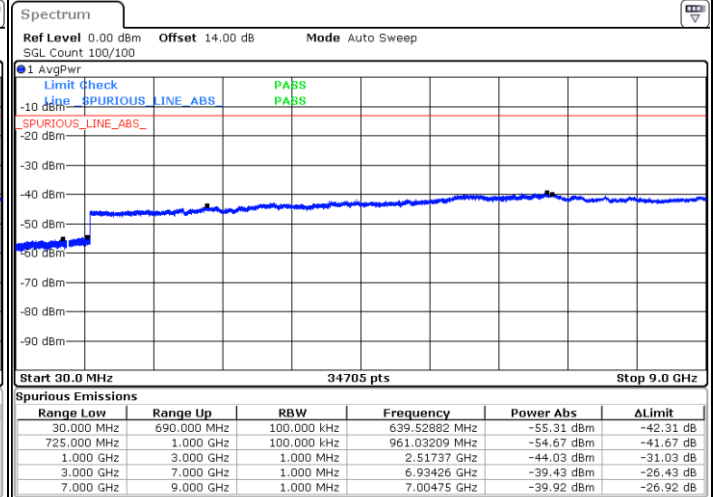
## LTE Band 12 / 5MHz

## Lowest Channel / QPSK



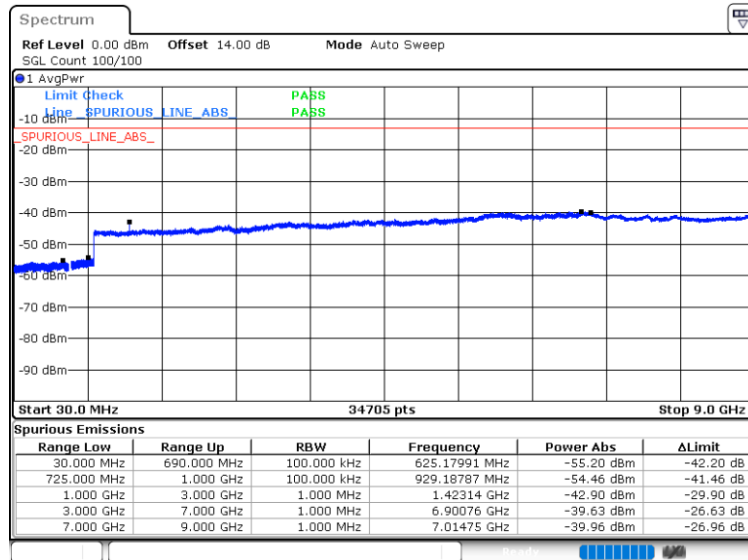
Date: 24.OCT.2024 17:59:39

## Middle Channel / QPSK



Date: 24.OCT.2024 18:00:51

## Highest Channel / QPSK

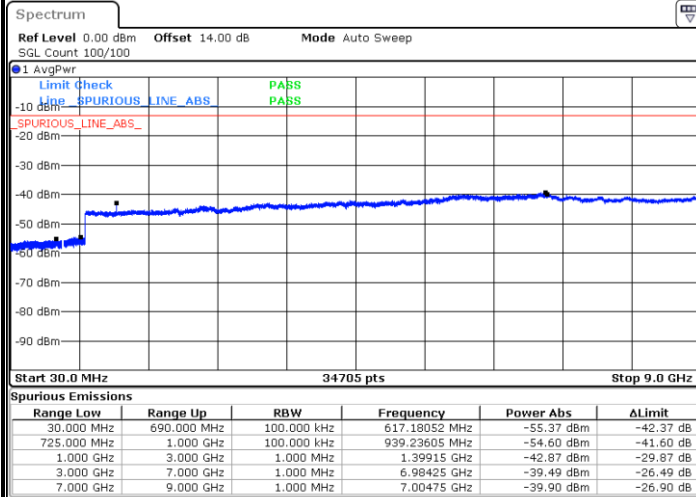


Date: 24.OCT.2024 18:08:34



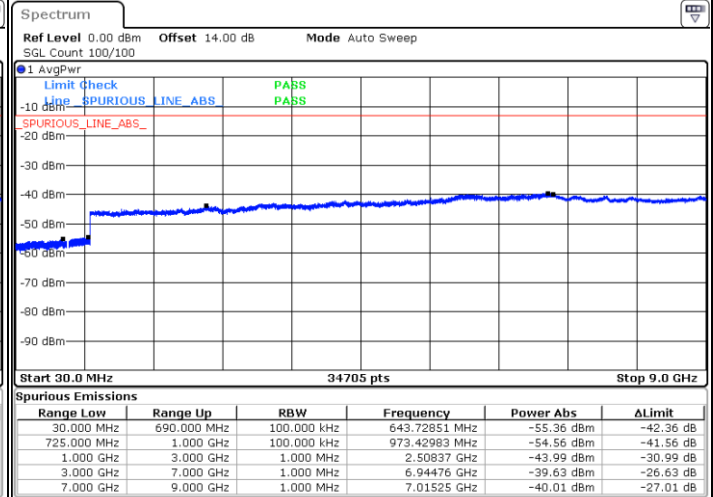
## LTE Band 12 / 10MHz

## Lowest Channel / QPSK



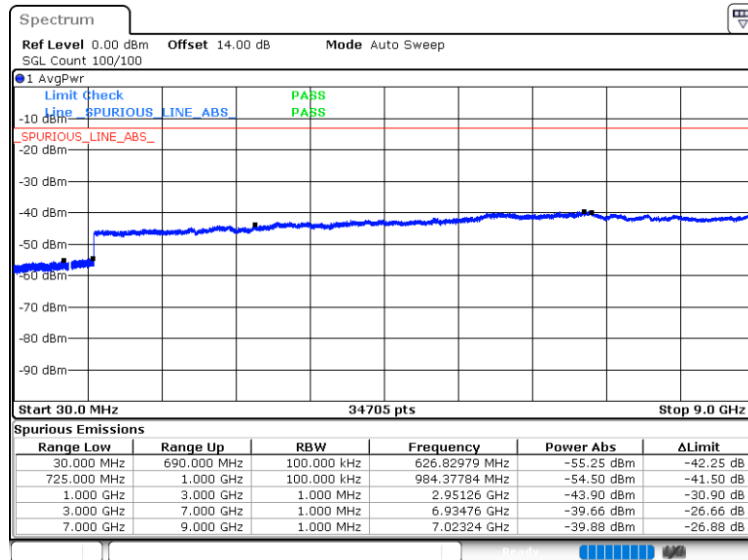
Date: 24.OCT.2024 18:14:58

## Middle Channel / QPSK



Date: 24.OCT.2024 18:16:10

## Highest Channel / QPSK



Date: 24.OCT.2024 18:23:53

## Frequency Stability

| Test Conditions  |                   | LTE Band 12 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                            | Note 2. |
|                  |                   | Deviation (ppm)                     | Result  |
| 50               | Normal Voltage    | 0.0010                              | PASS    |
| 40               | Normal Voltage    | 0.0013                              |         |
| 30               | Normal Voltage    | 0.0004                              |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                              |         |
| 10               | Normal Voltage    | 0.0007                              |         |
| 0                | Normal Voltage    | 0.0011                              |         |
| -10              | Normal Voltage    | 0.0014                              |         |
| -20              | Normal Voltage    | 0.0001                              |         |
| -30              | Normal Voltage    | 0.0007                              |         |
| 20               | Maximum Voltage   | 0.0017                              |         |
| 20               | Normal Voltage    | 0.0000                              |         |
| 20               | Battery End Point | 0.0010                              |         |

**Note:**

1. Normal Voltage = 3.89 V.; Battery End Point (BEP) = 3.6 V.; Maximum Voltage = 4.48 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 41

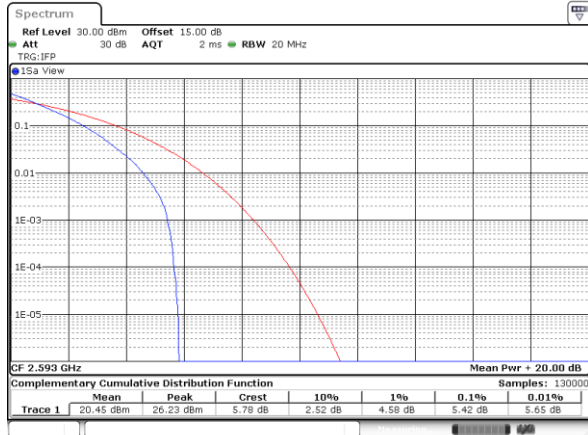
### Peak-to-Average Ratio

| Mode      | LTE Band 41 / 20MHz |         |         |             |
|-----------|---------------------|---------|---------|-------------|
| Mod.      | QPSK                | 16QAM   | 64QAM   | Limit: 13dB |
| RB Size   | Full RB             | Full RB | Full RB | Result      |
| Middle CH | 5.42                | 6.43    | 6.87    | PASS        |



LTE Band 41 / 20MHz / QPSK

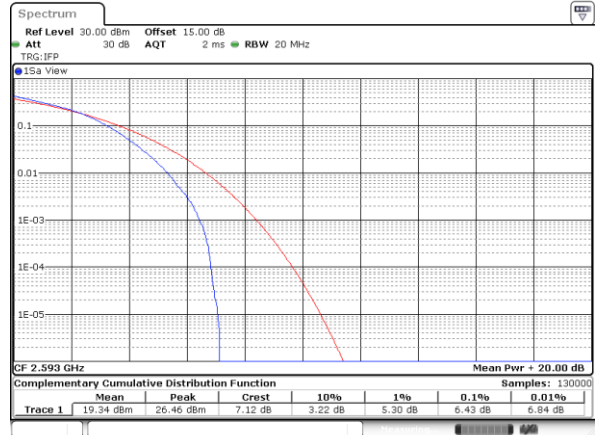
Middle Channel / Full RB



Date: 23.OCT.2024 20:45:37

LTE Band 41 / 20MHz / 16QAM

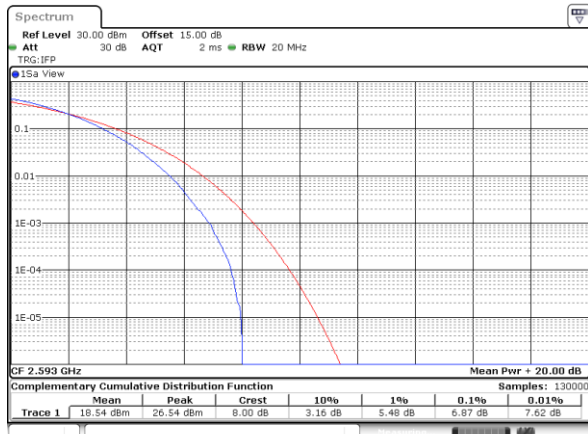
Middle Channel / Full RB



Date: 23.OCT.2024 20:46:06

LTE Band 41 / 20MHz / 64QAM

Middle Channel / Full RB



Date: 23.OCT.2024 20:46:36



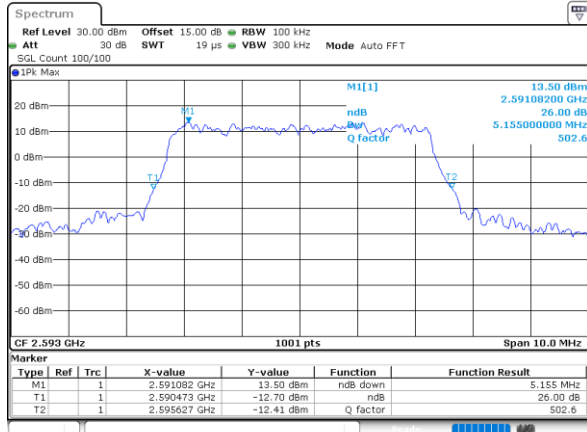
26dB Bandwidth

| Mode      | LTE Band 41 : 26dB BW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
|-----------|----------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| BW        | 1.4MHz                     |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.      | QPSK                       | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Middle CH | -                          | -     | -    | -     | 5.16 | 4.90  | 9.85  | 10.13 | 14.45 | 14.45 | 18.74 | 19.10 |



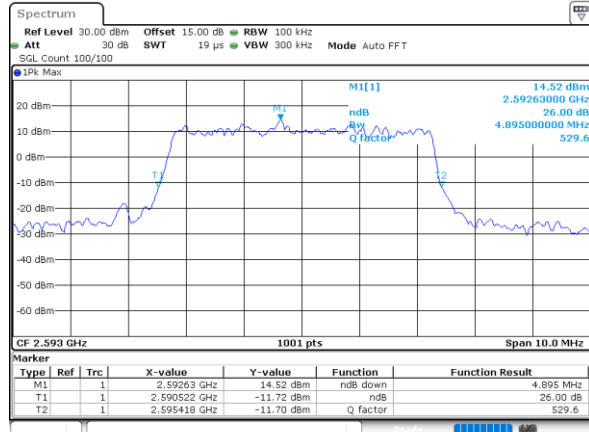
## LTE Band 41

## Middle Channel / 5MHz / QPSK



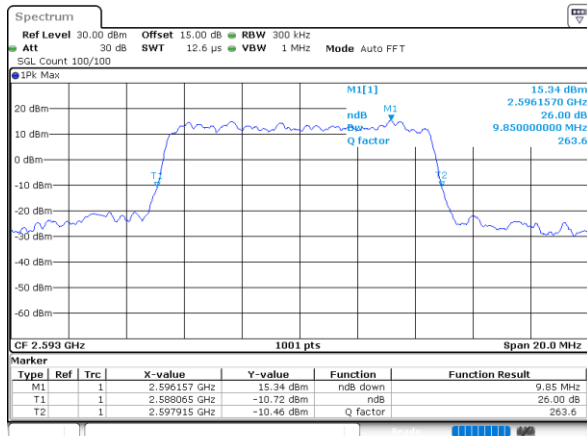
Date: 23.OCT.2024 19:58:07

## Middle Channel / 5MHz / 16QAM



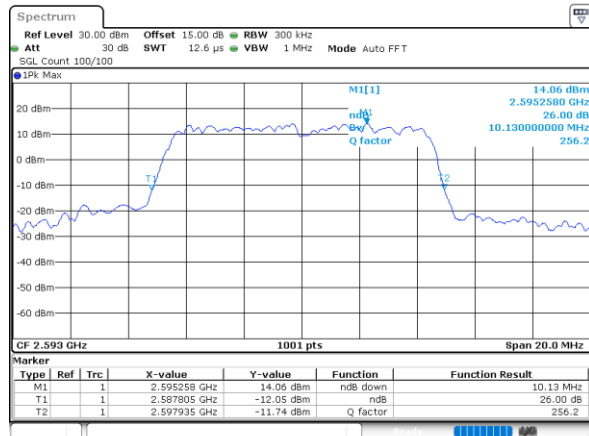
Date: 23.OCT.2024 19:58:50

## Middle Channel / 10MHz / QPSK



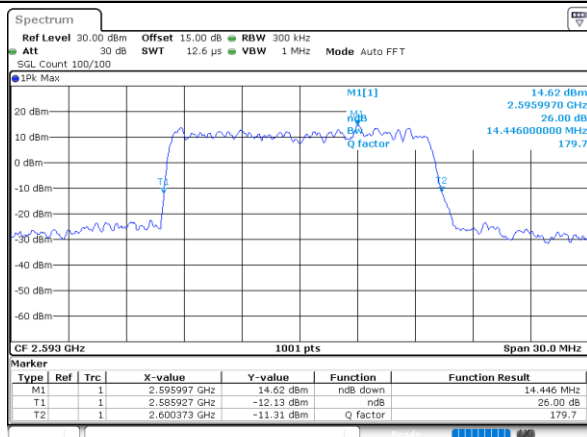
Date: 23.OCT.2024 20:14:35

## Middle Channel / 10MHz / 16QAM



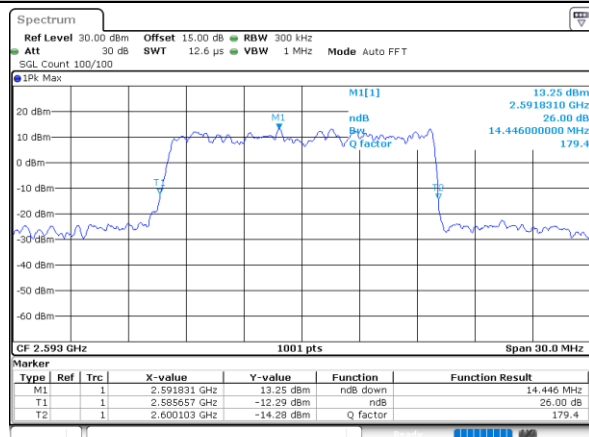
Date: 23.OCT.2024 20:15:17

## Middle Channel / 15MHz / QPSK



Date: 23.OCT.2024 20:28:48

## Middle Channel / 15MHz / 16QAM

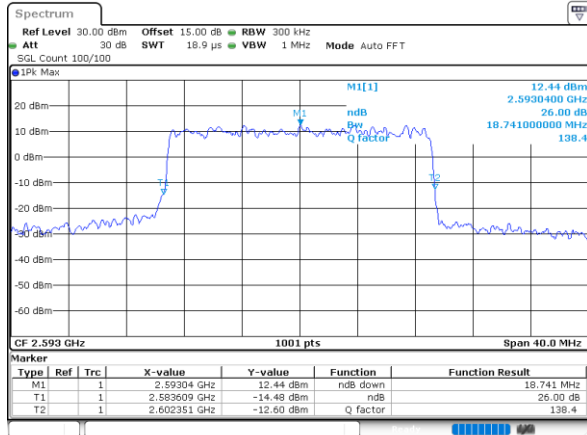


Date: 23.OCT.2024 20:29:31



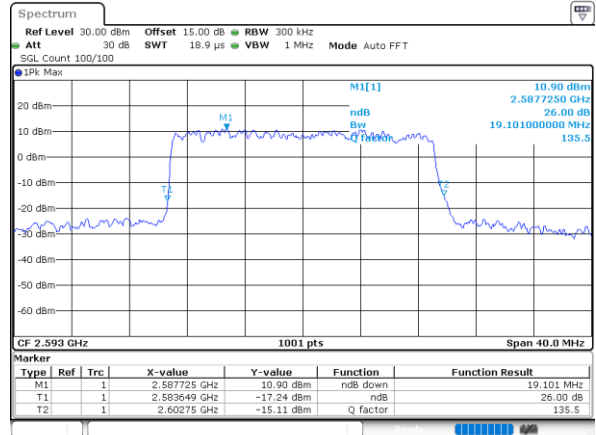
## LTE Band 41

## Middle Channel / 20MHz / QPSK



Date: 23.OCT.2024 20:44:24

## Middle Channel / 20MHz / 16QAM



Date: 23.OCT.2024 20:45:07



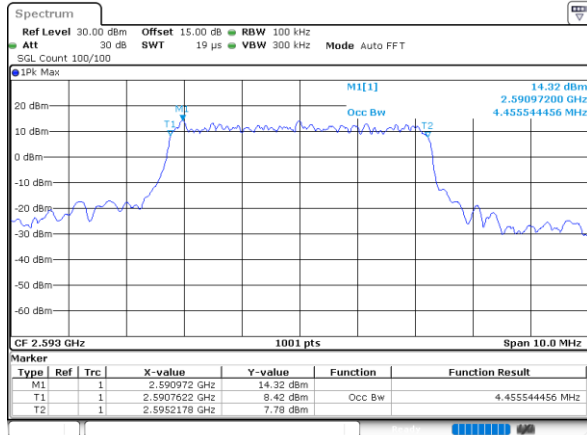
## Occupied Bandwidth

| Mode      | LTE Band 41 : 99%OBW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
|-----------|---------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| BW        | 1.4MHz                    |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.      | QPSK                      | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Middle CH | -                         | -     | -    | -     | 4.46 | 4.50  | 8.93  | 9.03  | 13.55 | 13.49 | 17.94 | 17.90 |



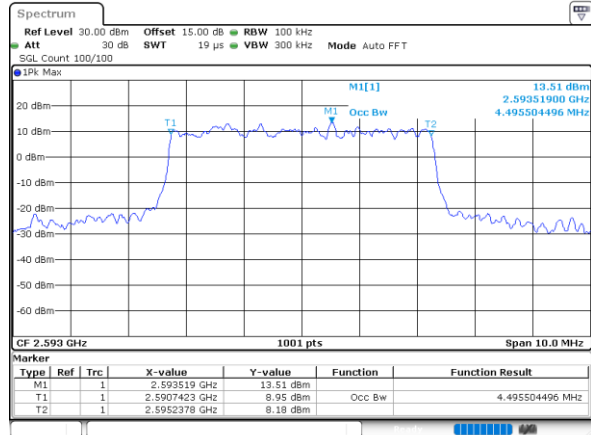
## LTE Band 41

## Middle Channel / 5MHz / QPSK



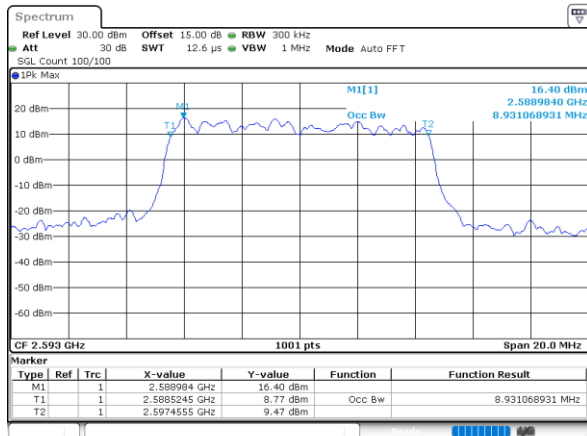
Date: 23.OCT.2024 19:57:53

## Middle Channel / 5MHz / 16QAM



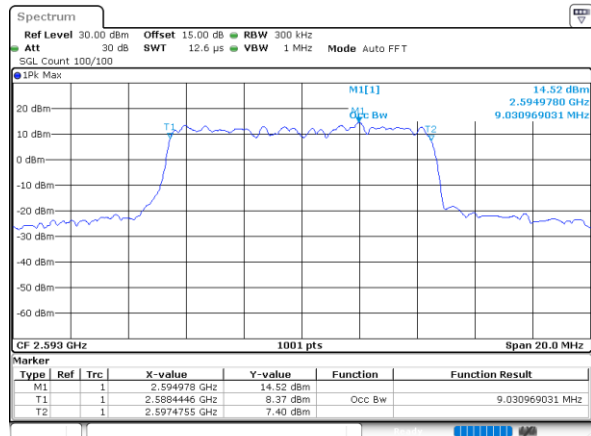
Date: 23.OCT.2024 19:58:36

## Middle Channel / 10MHz / QPSK



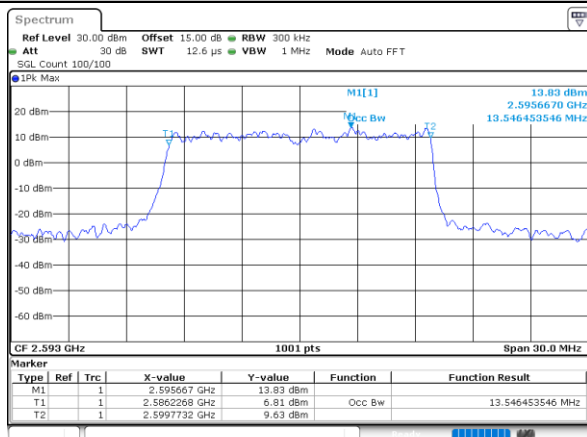
Date: 23.OCT.2024 20:14:21

## Middle Channel / 10MHz / 16QAM



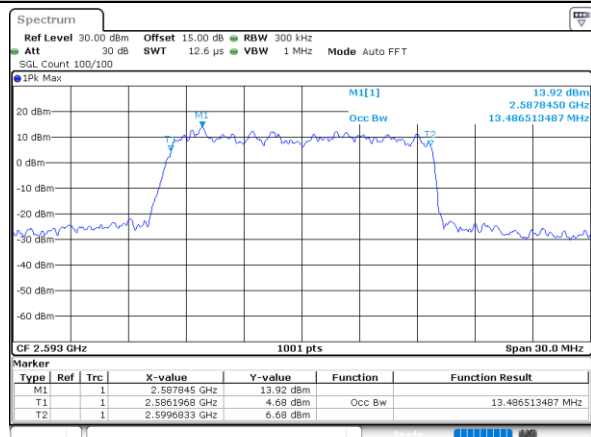
Date: 23.OCT.2024 20:15:03

## Middle Channel / 15MHz / QPSK



Date: 23.OCT.2024 20:28:34

## Middle Channel / 15MHz / 16QAM

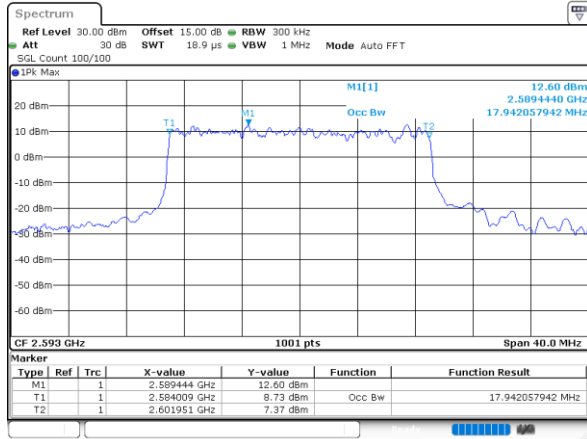


Date: 23.OCT.2024 20:29:17



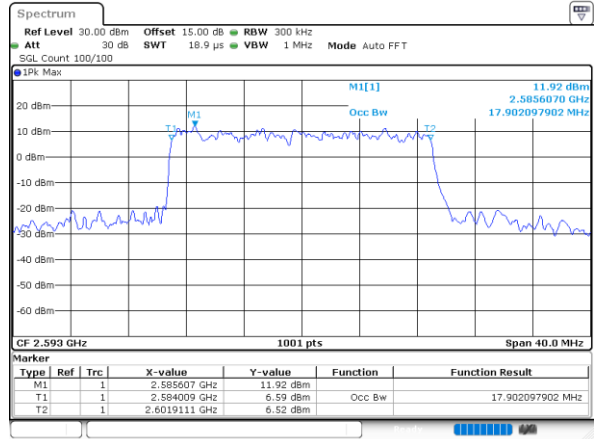
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 23.OCT.2024 20:44:10

Middle Channel / 20MHz / 16QAM



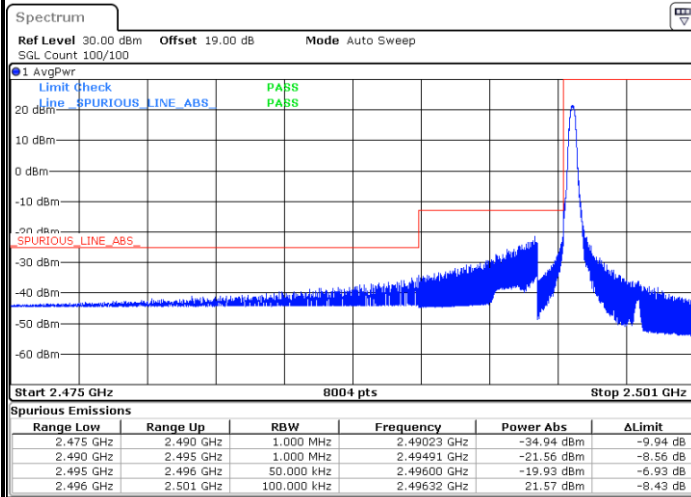
Date: 23.OCT.2024 20:44:53



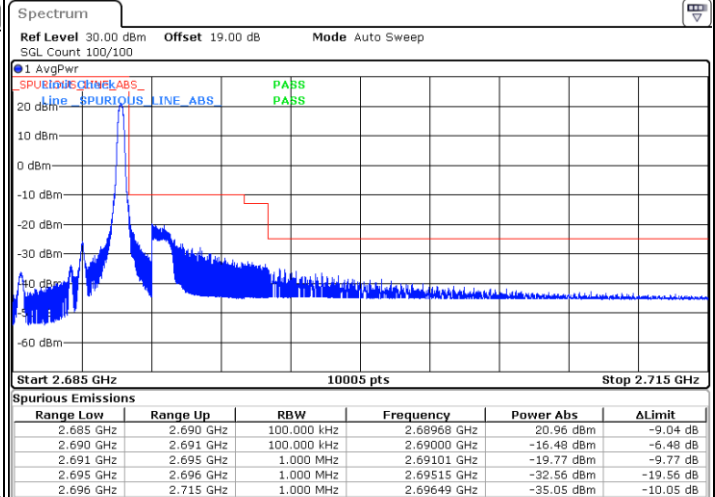
# Conducted Band Edge

## LTE Band 41 / 5MHz / QPSK

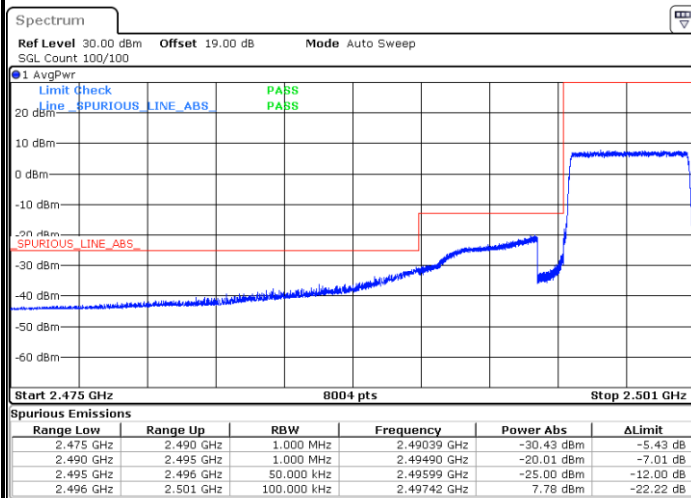
### Lowest Band Edge / 1 RB



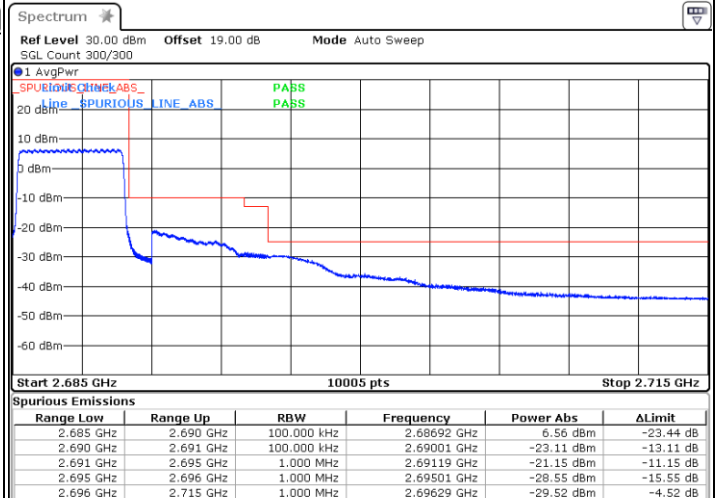
### Highest Band Edge / 1 RB



### Lowest Band Edge / Full RB



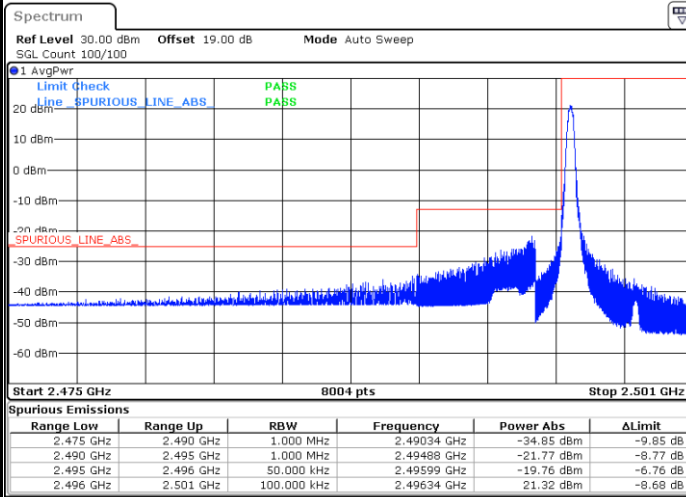
### Highest Band Edge / Full RB





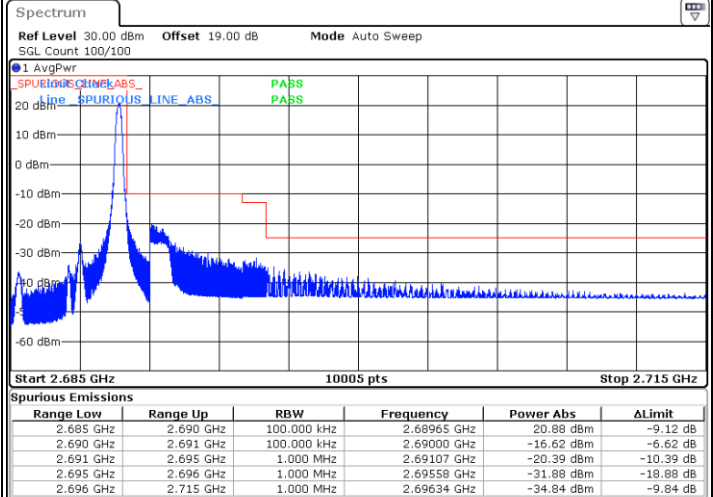
## LTE Band 41 / 5MHz / 16QAM

## Lowest Band Edge / 1RB



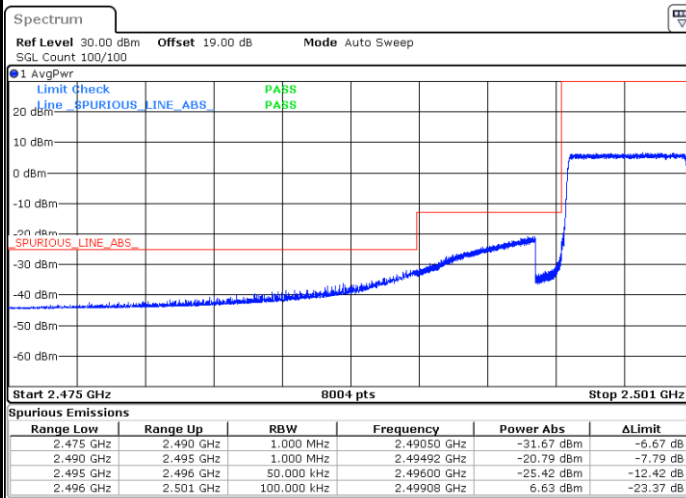
Date: 26.OCT.2024 11:03:09

## Highest Band Edge / 1 RB



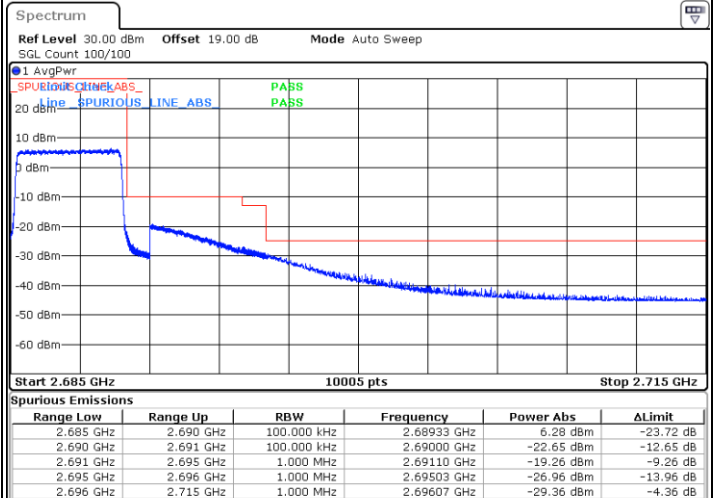
Date: 26.OCT.2024 11:09:18

## Lowest Band Edge / Full RB



Date: 26.OCT.2024 11:06:11

## Highest Band Edge / Full RB

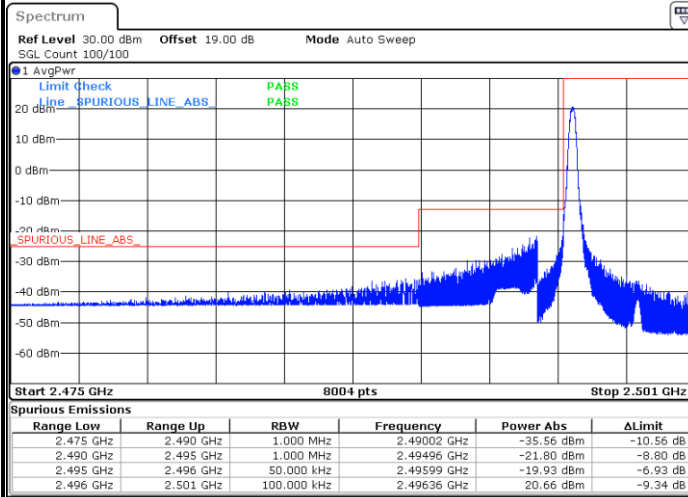


Date: 26.OCT.2024 11:12:28



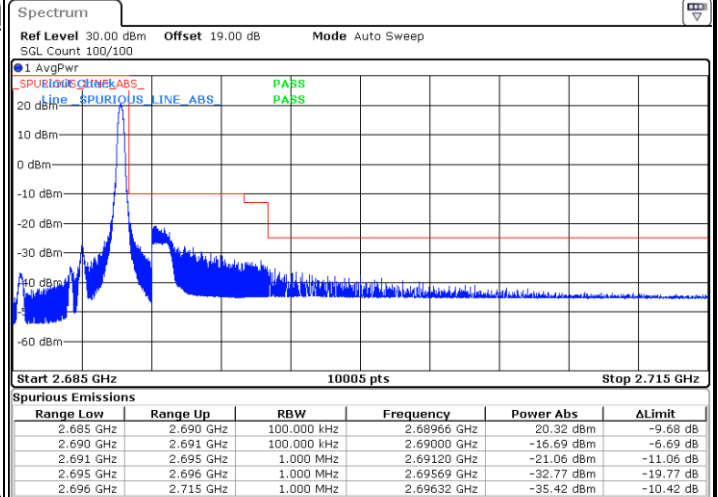
## LTE Band 41 / 5MHz / 64QAM

## Lowest Band Edge / 1RB



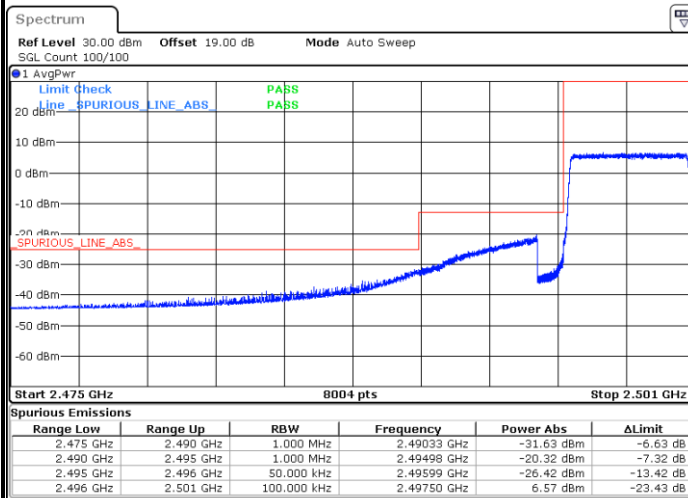
Date: 26.OCT.2024 11:04:10

## Highest Band Edge / 1 RB



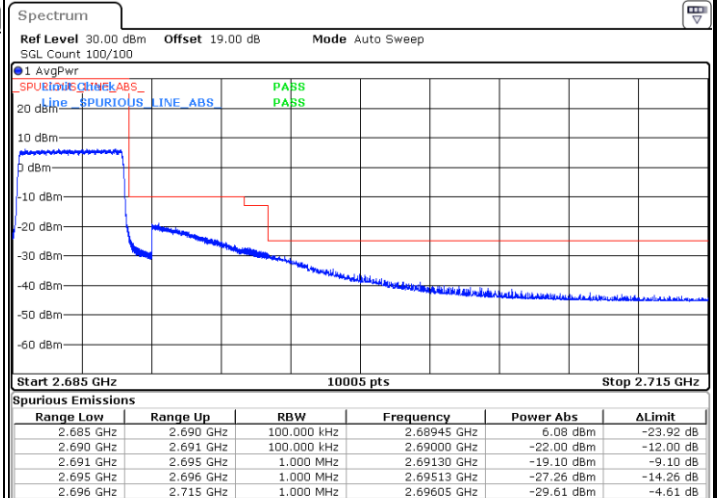
Date: 26.OCT.2024 11:10:21

## Lowest Band Edge / Full RB



Date: 26.OCT.2024 11:05:11

## Highest Band Edge / Full RB

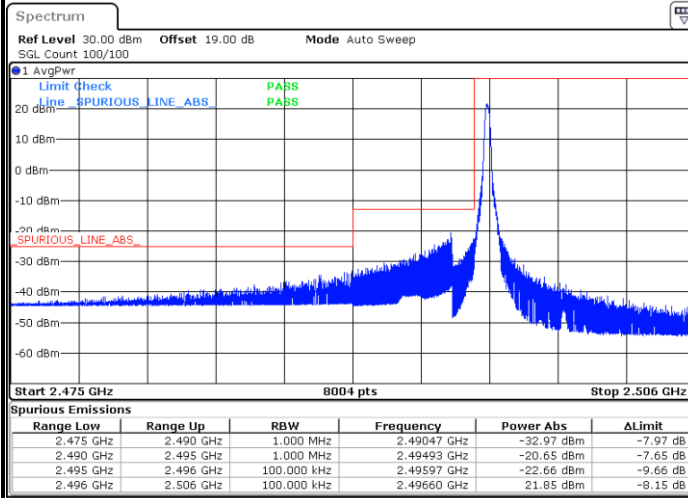


Date: 26.OCT.2024 11:11:24

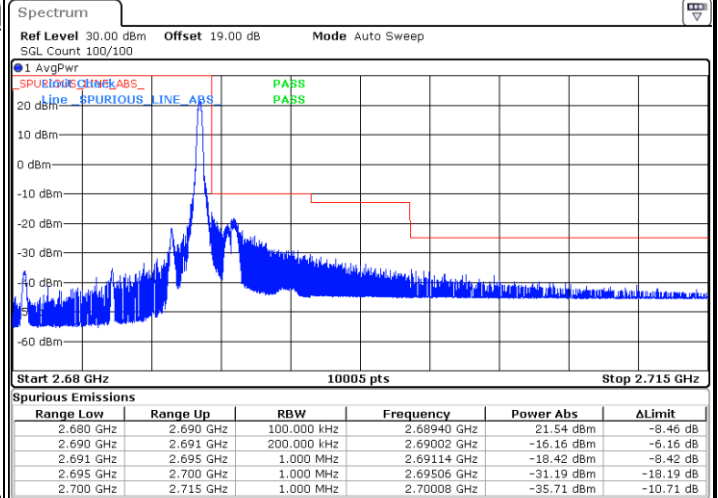


## LTE Band 41 / 10MHz / QPSK

## Lowest Band Edge / 1 RB

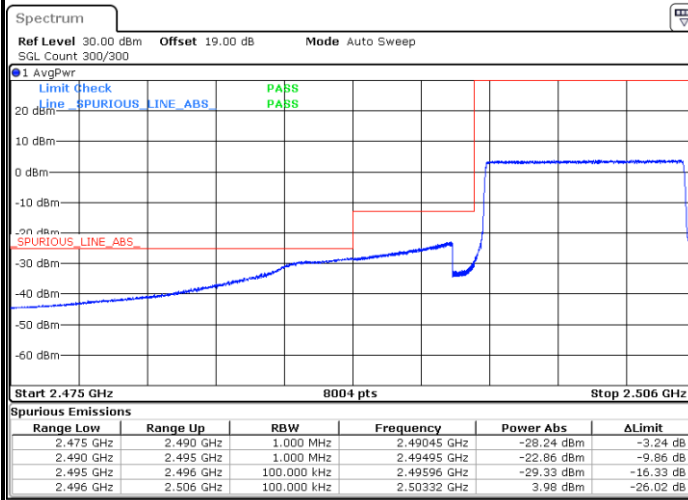


## Highest Band Edge / 1 RB



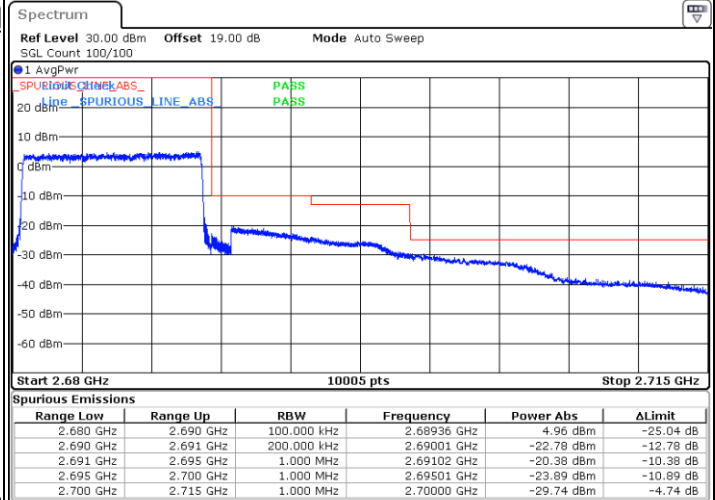


## Lowest Band Edge / Full RB



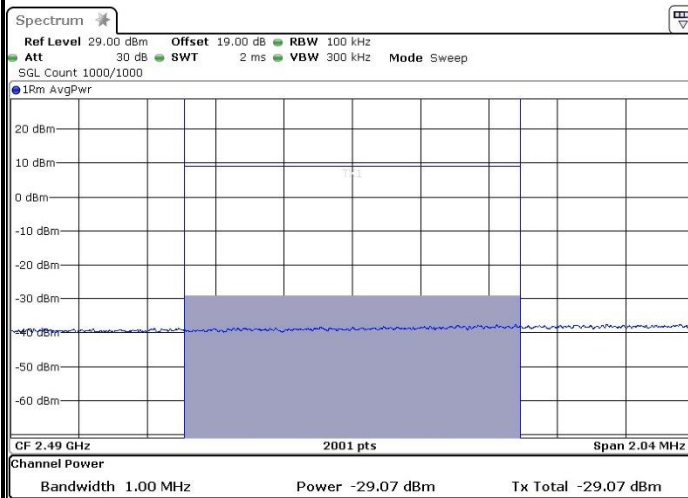
Date: 27.OCT.2024 12:31:41

## Highest Band Edge / Full RB



Date: 26.OCT.2024 11:26:18

## Lowest Band Edge / Full RB- Channel Power



Date: 27.OCT.2024 12:39:58