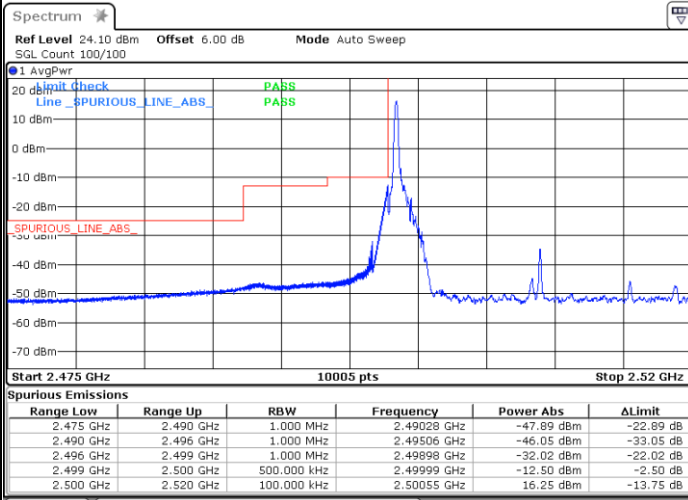




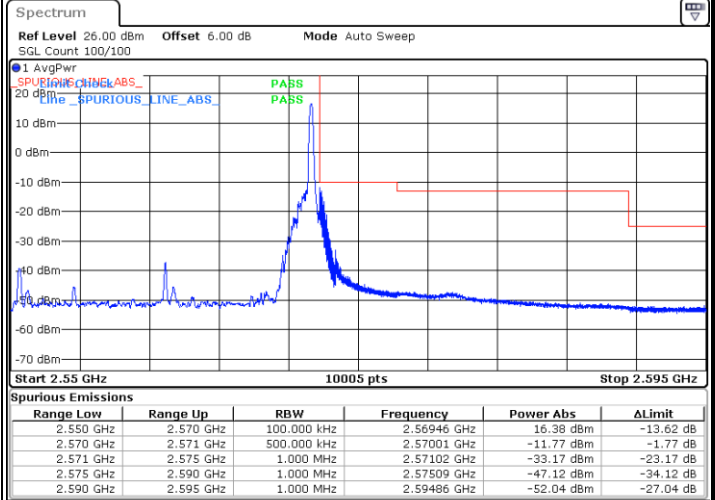
## FR1 n7 / 20MHz / DFT-s-OFDM / PI/2 256QAM

## Lowest Band Edge / 1RB0

## Highest Band Edge / 1RBMAX



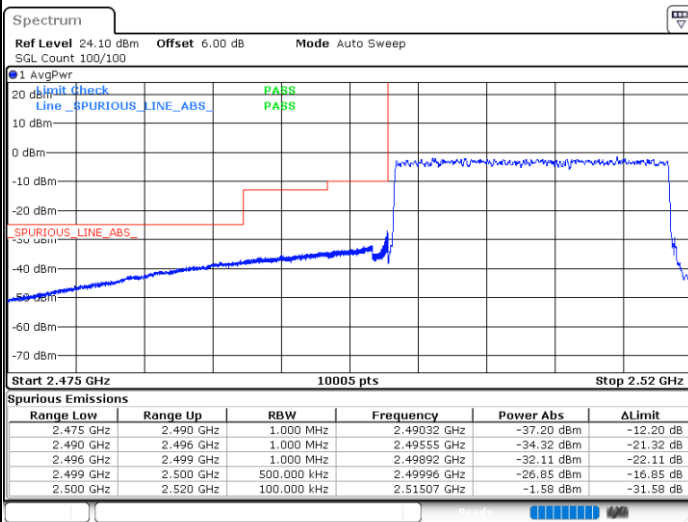
Date: 15.FEB.2022 02:13:38



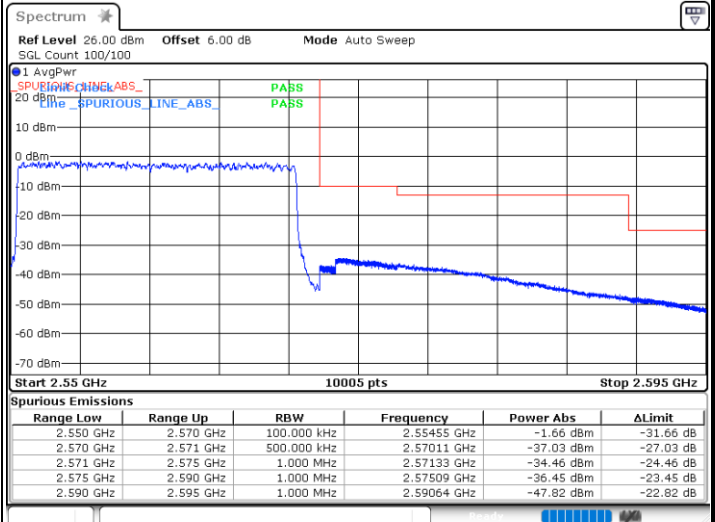
Date: 15.FEB.2022 02:39:58

## Lowest Band Edge / Full RB

## Highest Band Edge / Full RB



Date: 15.FEB.2022 02:10:58



Date: 15.FEB.2022 02:36:12

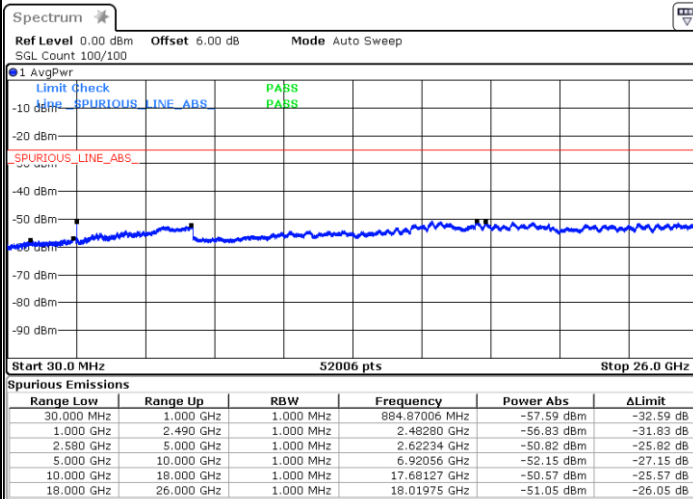


## Conducted Spurious Emission

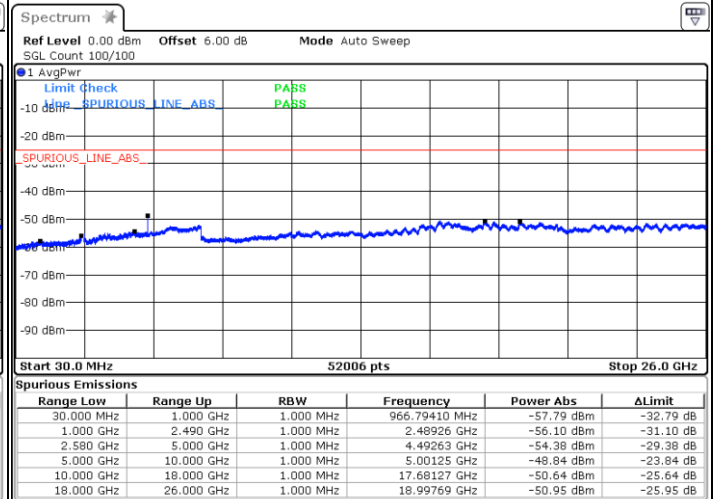
FR1 n7 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

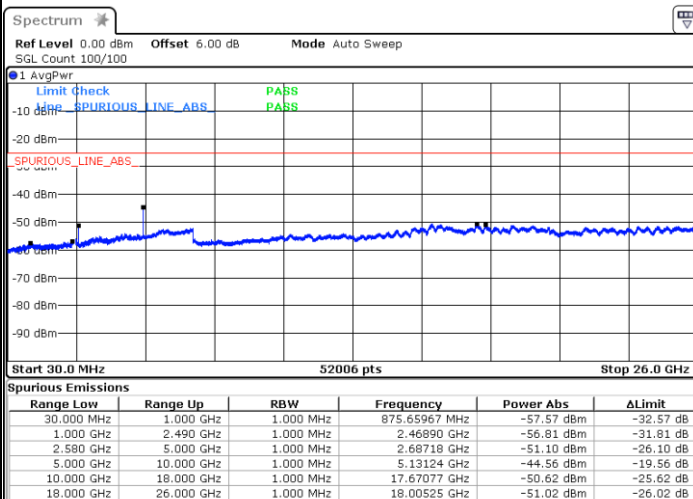


Date: 14.FEB.2022 22:32:37



Date: 14.FEB.2022 22:34:24

Highest Channel / 1RB1

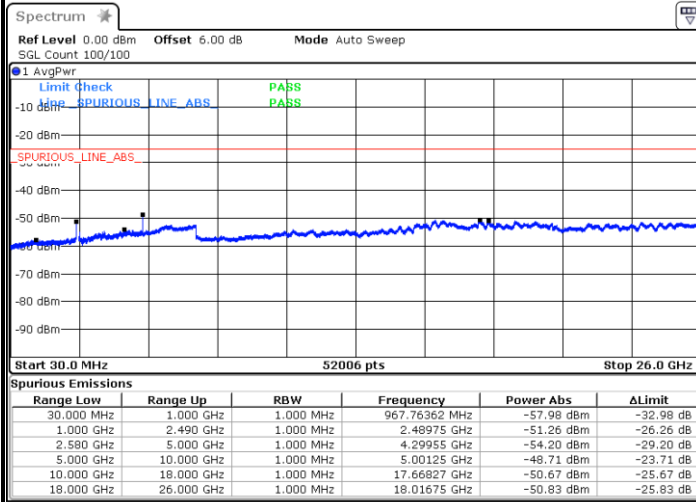


Date: 14.FEB.2022 22:40:51



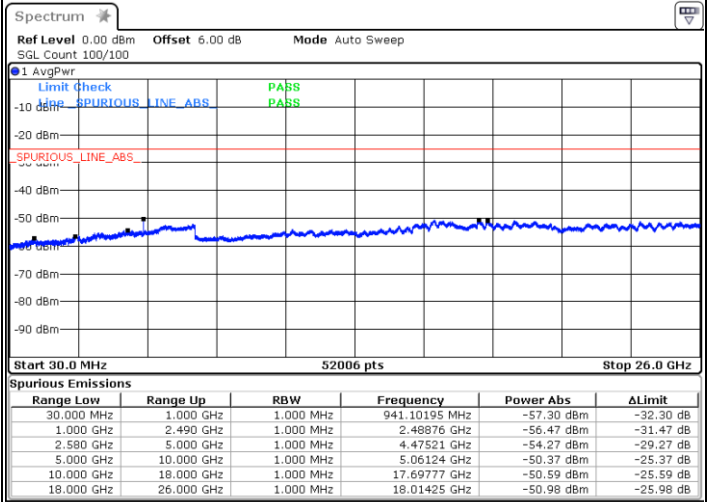
## FR1 n7 / 10MHz / DFT-S OFDM / QPSK

## Lowest Channel / 1RB1



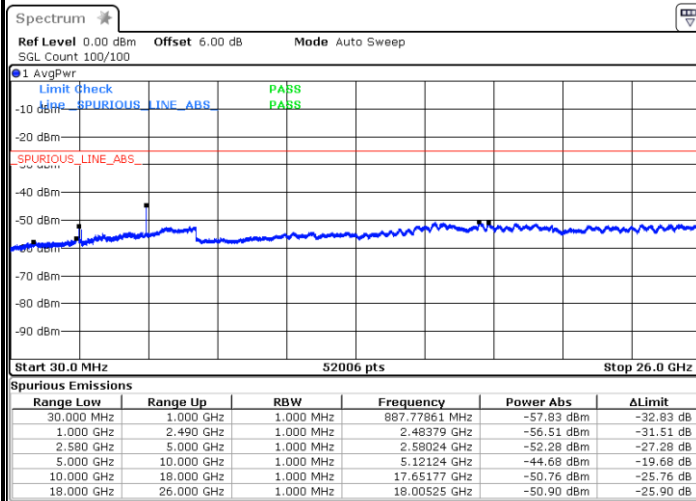
Date: 15.FEB.2022 01:22:15

## Middle Channel / 1RB1



Date: 15.FEB.2022 01:24:10

## Highest Channel / 1RB1

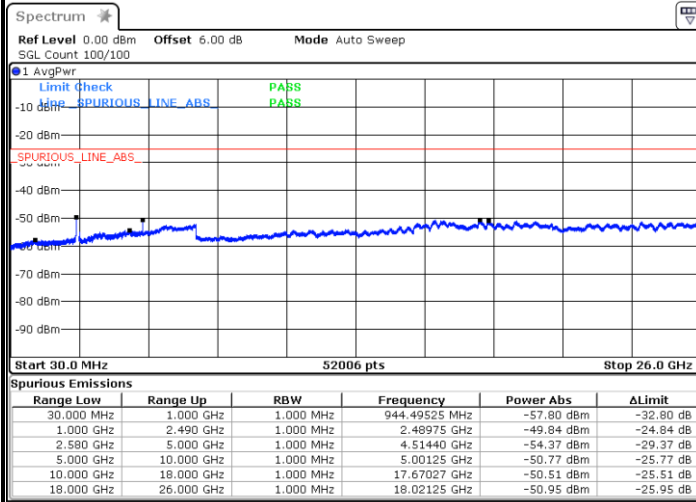


Date: 15.FEB.2022 01:26:05



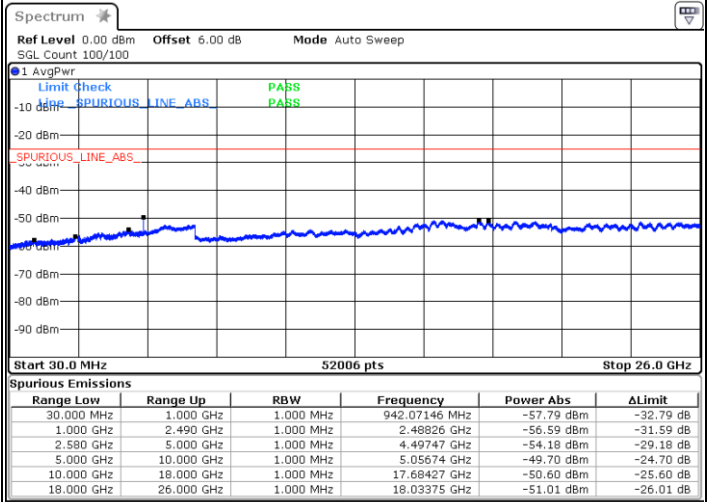
## FR1 n7 / 15MHz / DFT-S OFDM / QPSK

## Lowest Channel / 1RB1



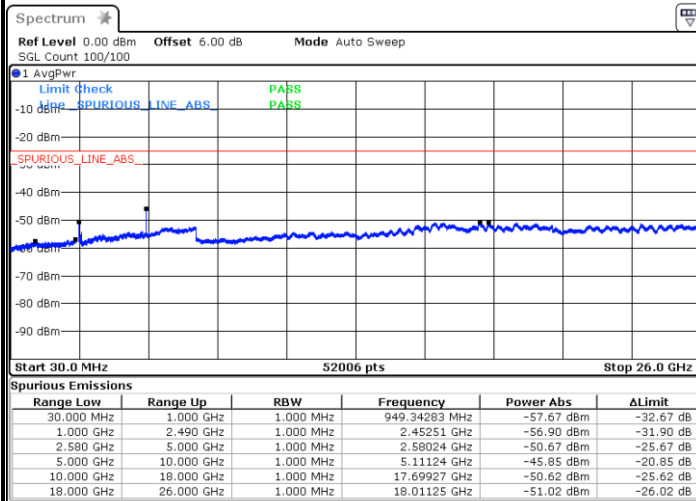
Date: 15.FEB.2022 01:45:25

## Middle Channel / 1RB1



Date: 15.FEB.2022 01:46:55

## Highest Channel / 1RB1

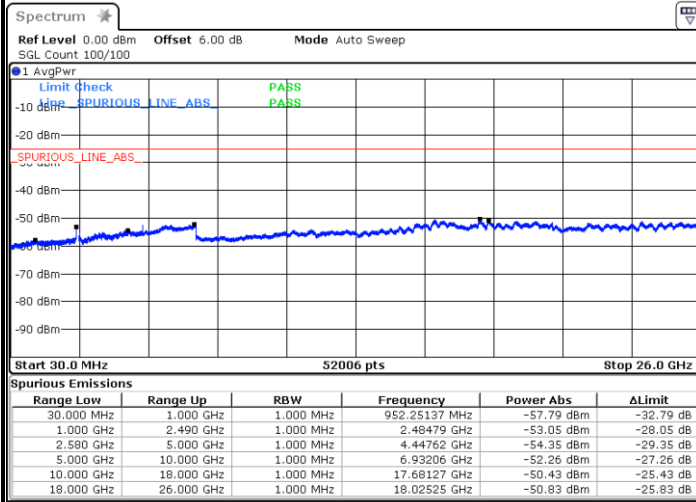


Date: 15.FEB.2022 01:49:41



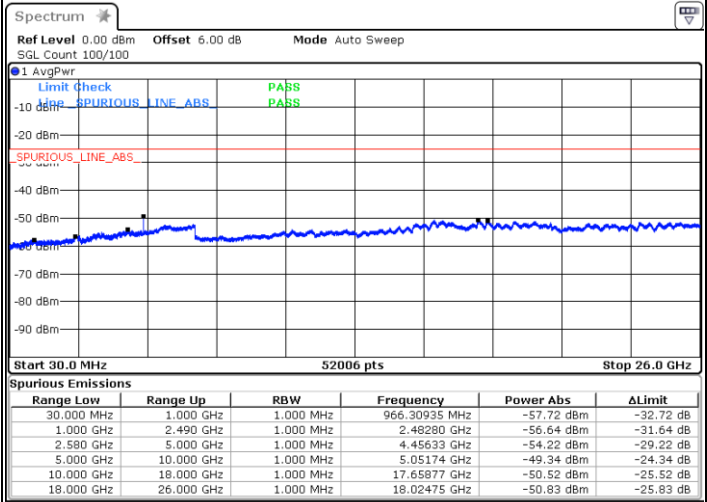
## FR1 n7 / 20MHz / DFT-S OFDM / QPSK

## Lowest Channel / 1RB1



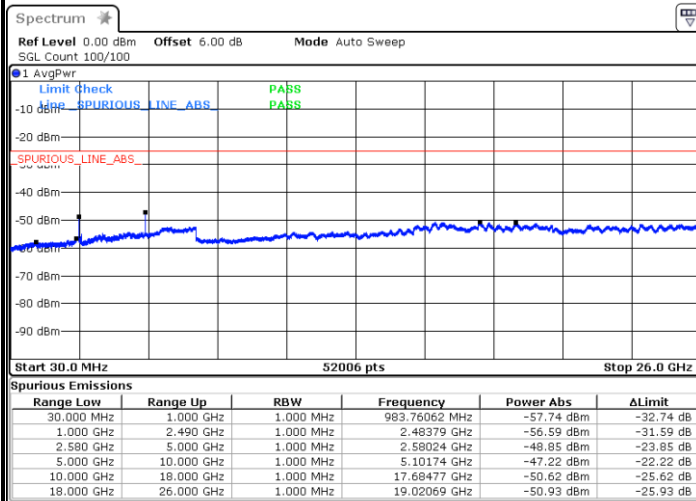
Date: 15.FEB.2022 02:29:31

## Middle Channel / 1RB1



Date: 15.FEB.2022 02:30:56

## Highest Channel / 1RB1



Date: 15.FEB.2022 02:32:17

## Frequency Stability

| Test Conditions  |                   | FR1 n7 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|--------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 20MHz                       | Note 2. |
|                  |                   | Deviation (ppm)                | Result  |
| 50               | Normal Voltage    | 0.0005                         | PASS    |
| 40               | Normal Voltage    | 0.0008                         |         |
| 30               | Normal Voltage    | 0.0008                         |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                         |         |
| 10               | Normal Voltage    | 0.0014                         |         |
| 0                | Normal Voltage    | 0.0018                         |         |
| -10              | Normal Voltage    | 0.0009                         |         |
| -20              | Normal Voltage    | 0.0008                         |         |
| -30              | Normal Voltage    | 0.0021                         |         |
| 20               | Maximum Voltage   | 0.0012                         |         |
| 20               | Normal Voltage    | 0.0012                         |         |
| 20               | Battery End Point | 0.0023                         |         |

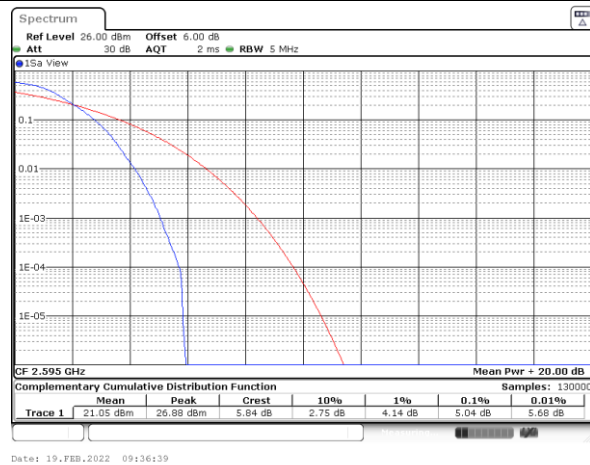
**Note:**

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

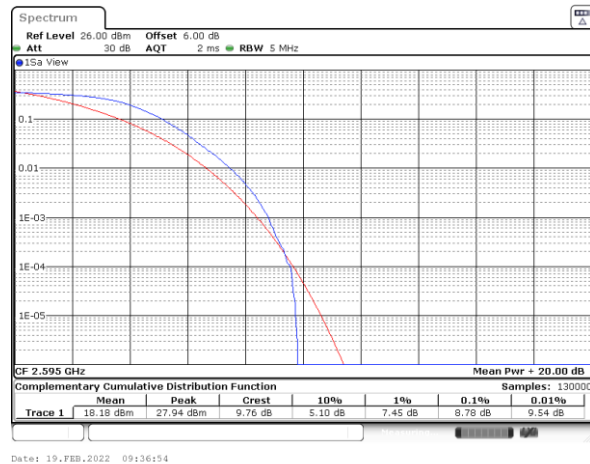
**FR1 n38****Peak-to-Average Ratio**

| Mode      | FR1 n38 / 5MHz / DFT-S OFDM |      |       |       |             |
|-----------|-----------------------------|------|-------|-------|-------------|
| Mod.      | 5M                          |      |       |       | Limit: 13dB |
| RB Size   | BPSK                        | QPSK | 16QAM | 64QAM | Result      |
| Middle CH | 5.04                        | 8.78 | 6.26  | 6.49  | PASS        |
| RB Size   | 256QAM                      |      |       |       |             |
| Middle CH | 7.68                        |      |       |       |             |

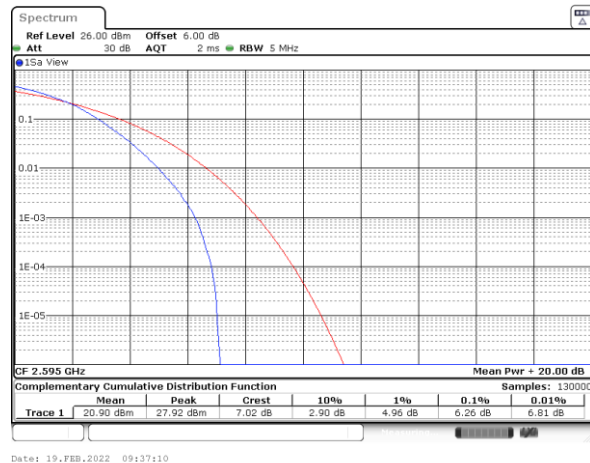
### BPSK



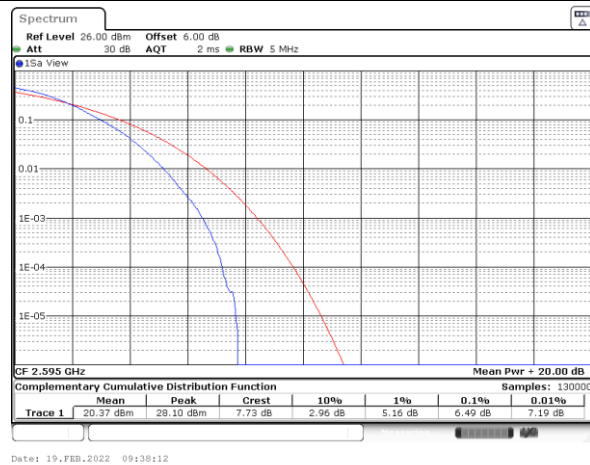
### QPSK



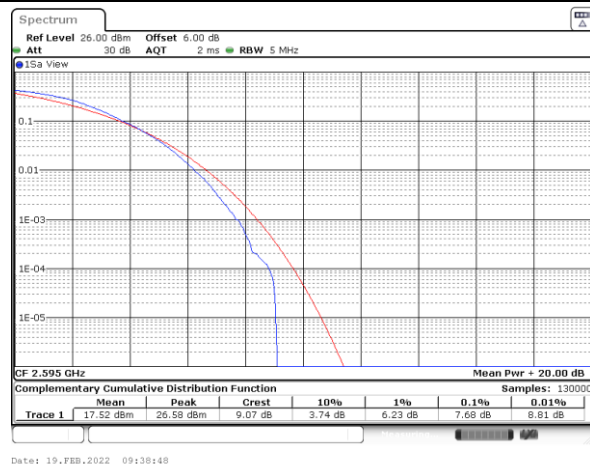
### 16QAM



## 64QAM

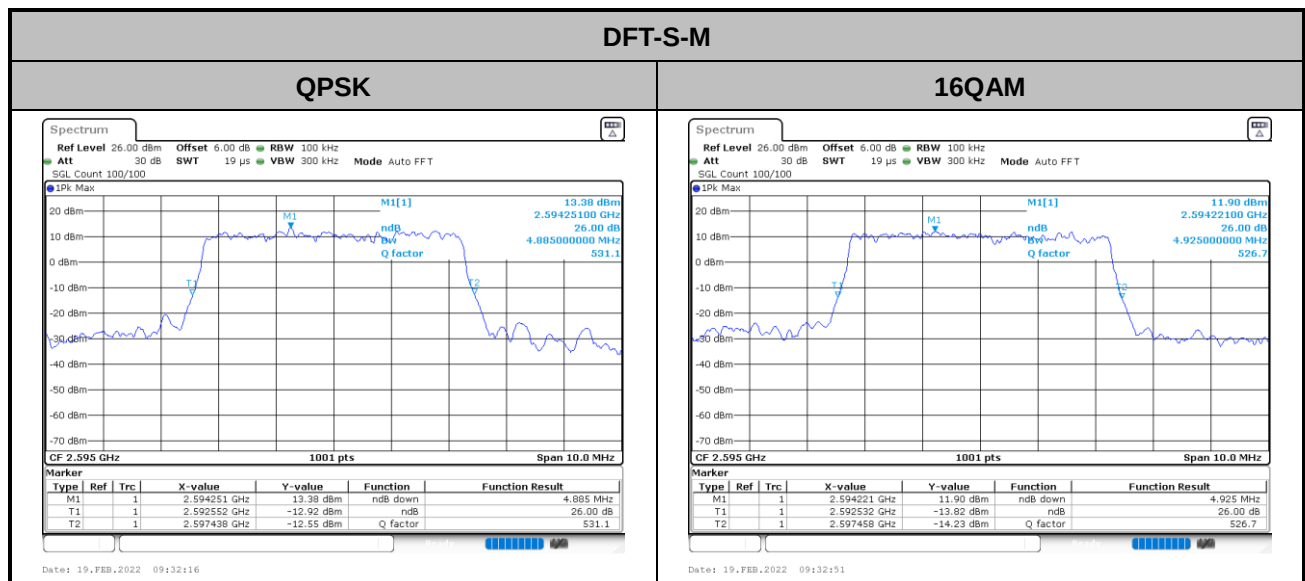


## 256QAM



## 26dB Bandwidth

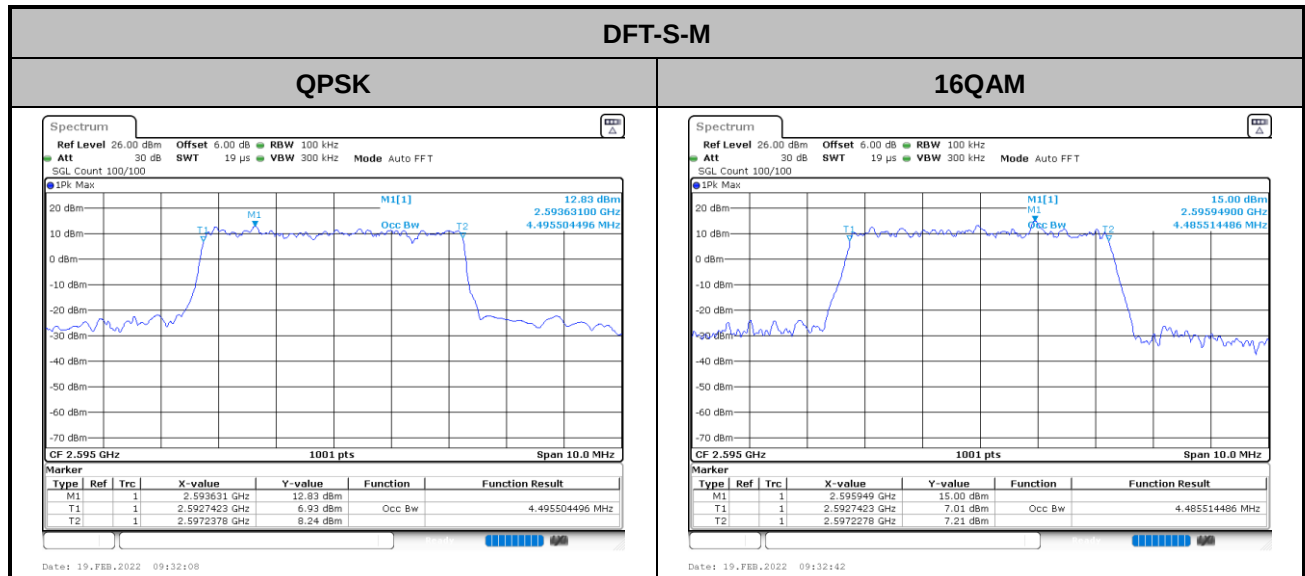
| Mode | FR1 n38 : 26dB BW(5MHz) / DFT-S OFDM |       |
|------|--------------------------------------|-------|
| BW   | DFT-S                                |       |
|      | QPSK                                 | 16QAM |
| Mod. | 4.89                                 | 4.93  |





## Occupied Bandwidth

| Mode | FR1 n38 : OB BW(5MHz) / DFT-S OFDM |       |
|------|------------------------------------|-------|
| BW   | DFT-S                              |       |
|      | QPSK                               | 16QAM |
| Mod. | 4.50                               | 4.49  |

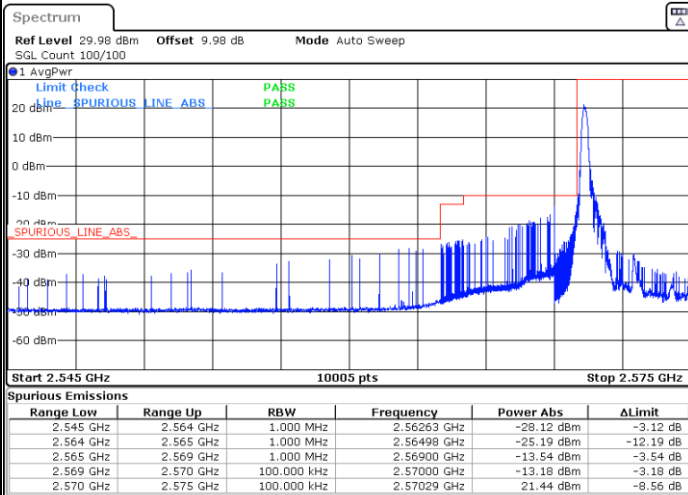


**Conducted Band Edge**

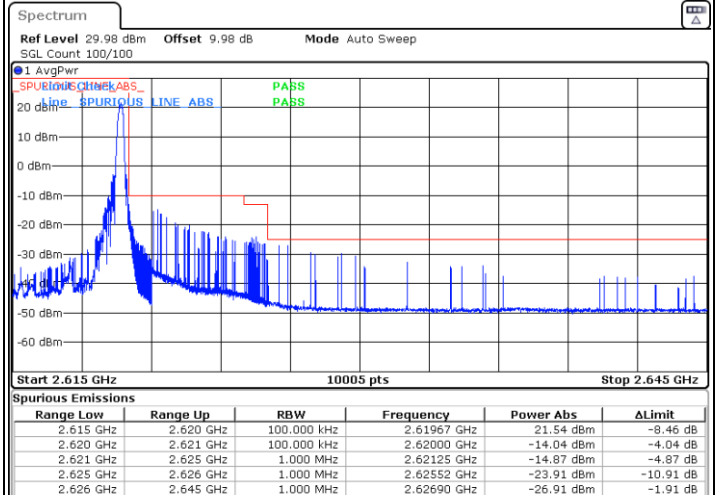
FR1 n38 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



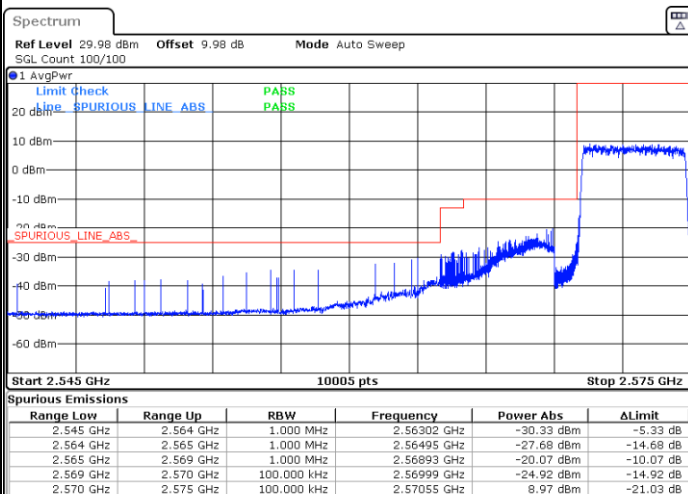
Date: 14 MAR 2022 16:05:09



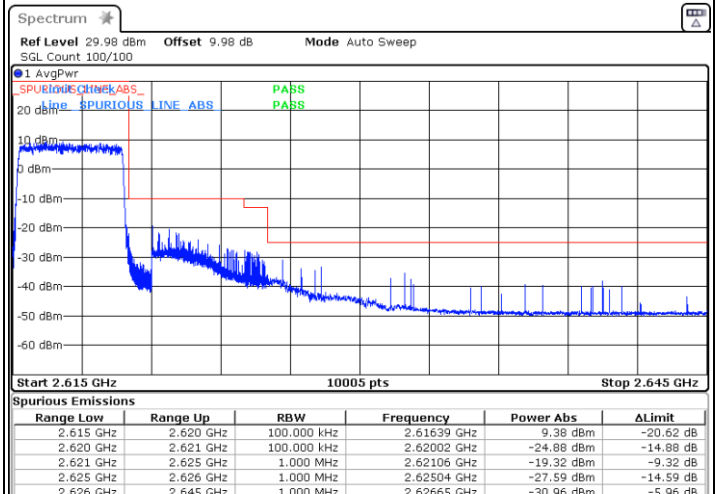
Date: 14 MAR 2022 16:33:36

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14 MAR 2022 16:06:28



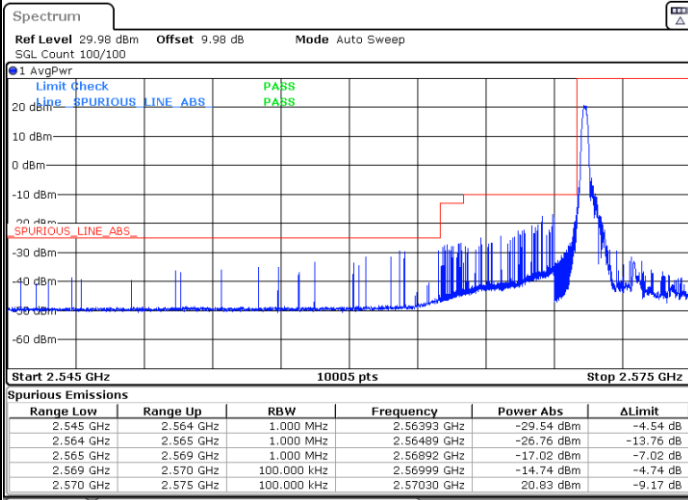
Date: 14 MAR 2022 16:27:09



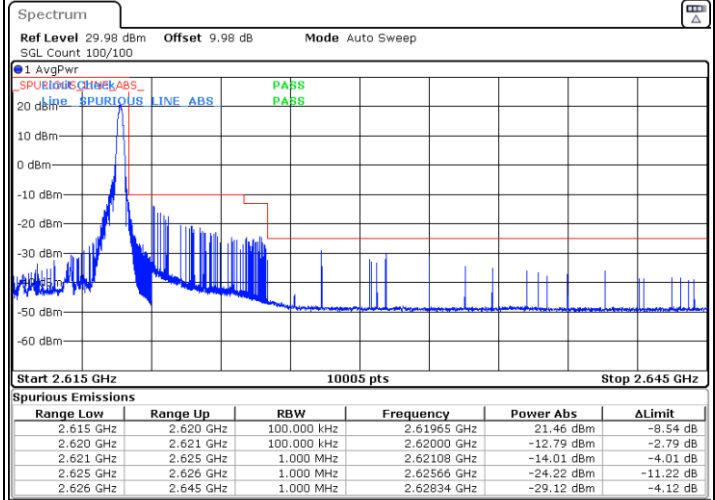
## FR1 n38 / 5MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / 1RB0

## Highest Band Edge / 1RBmax



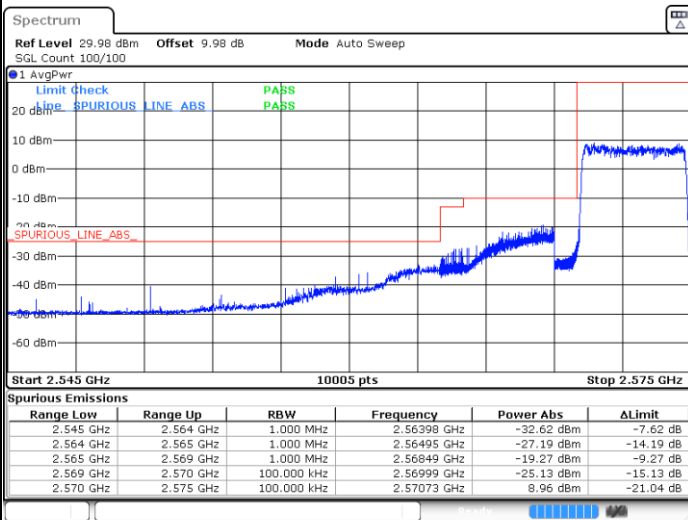
Date: 14 MAR 2022 16:03:41



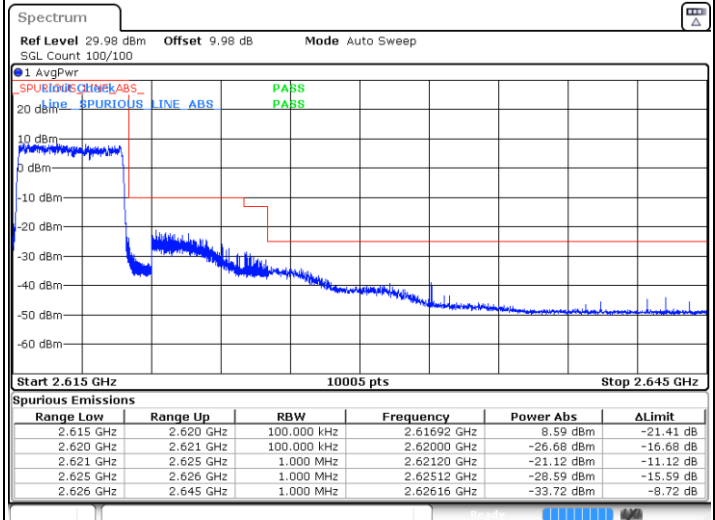
Date: 14 MAR 2022 16:33:07

## Lowest Band Edge / Full RB

## Highest Band Edge / Full RB



Date: 14 MAR 2022 16:13:12



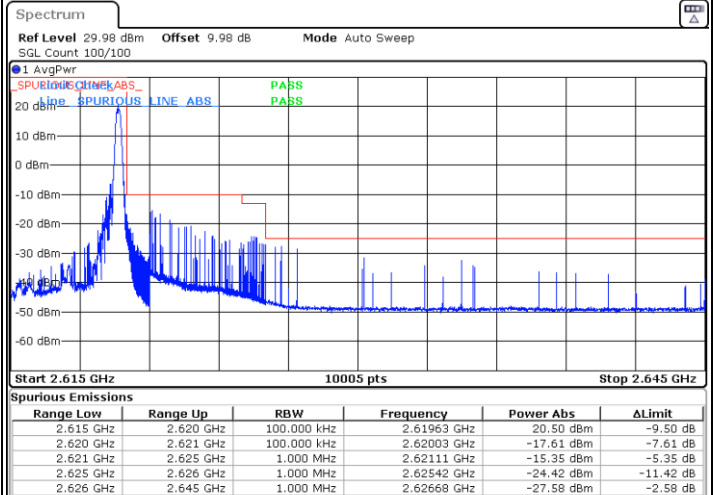
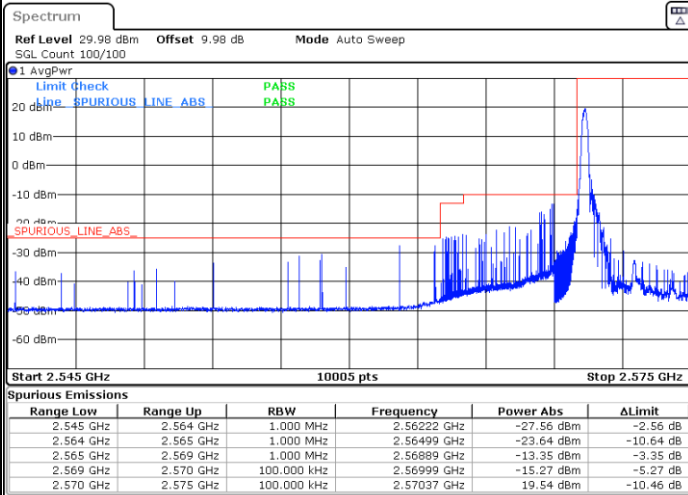
Date: 14 MAR 2022 16:25:28



## FR1 n38 / 5MHz / DFT-S OFDM / 16Q

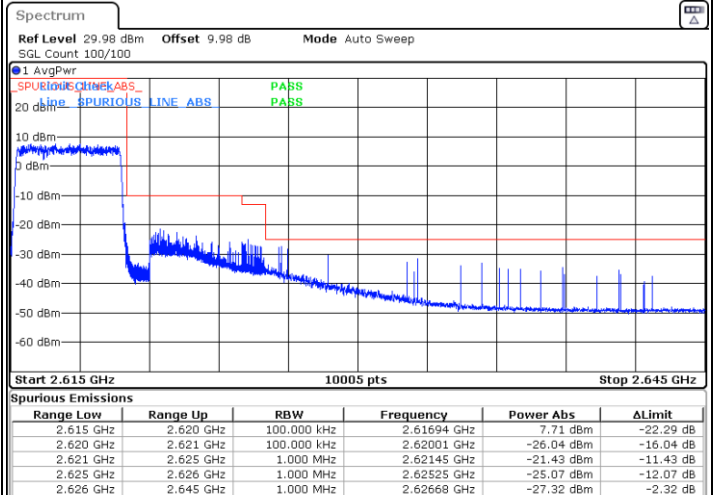
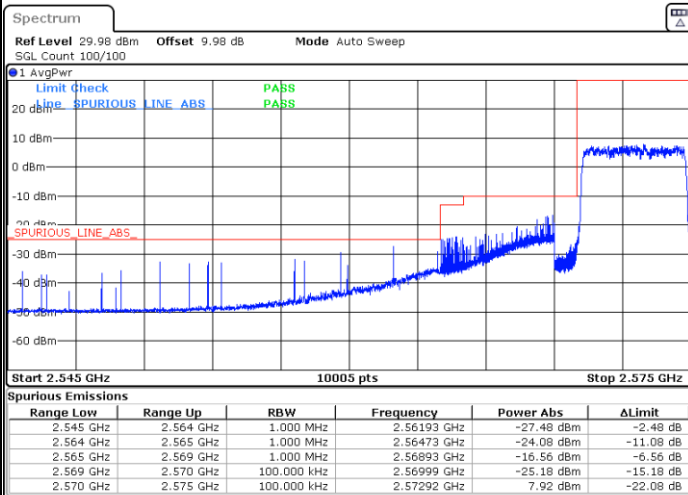
## Lowest Band Edge / 1RB0

## Highest Band Edge / 1RBmax



## Lowest Band Edge / Full RB

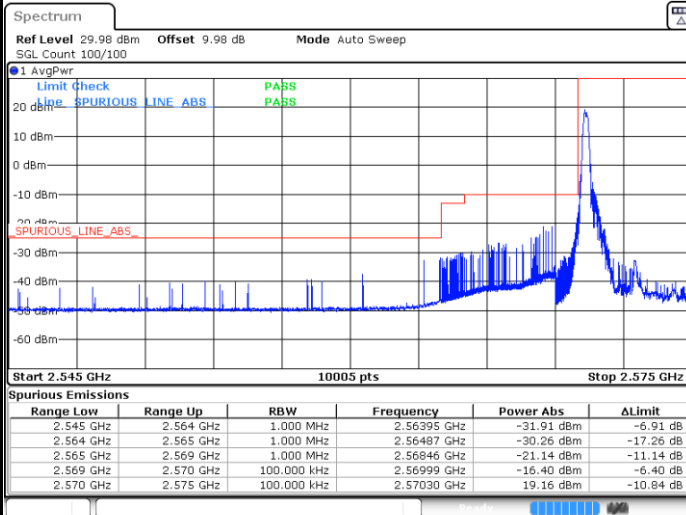
## Highest Band Edge / Full RB



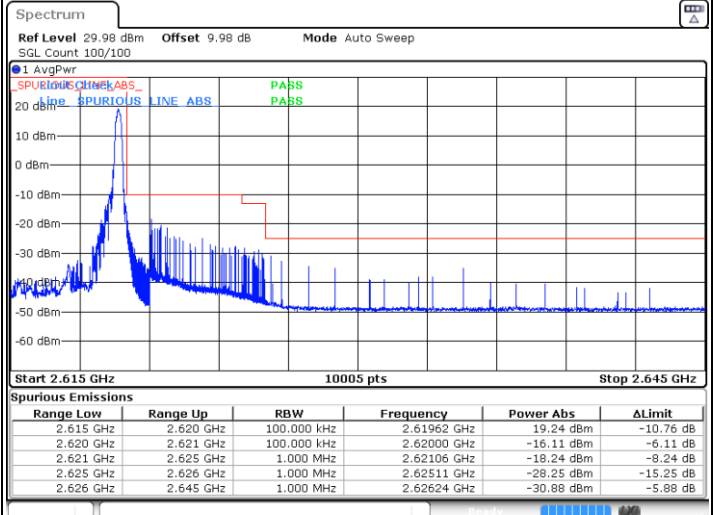


## FR1 n38 / 5MHz / DFT-S OFDM / 64Q

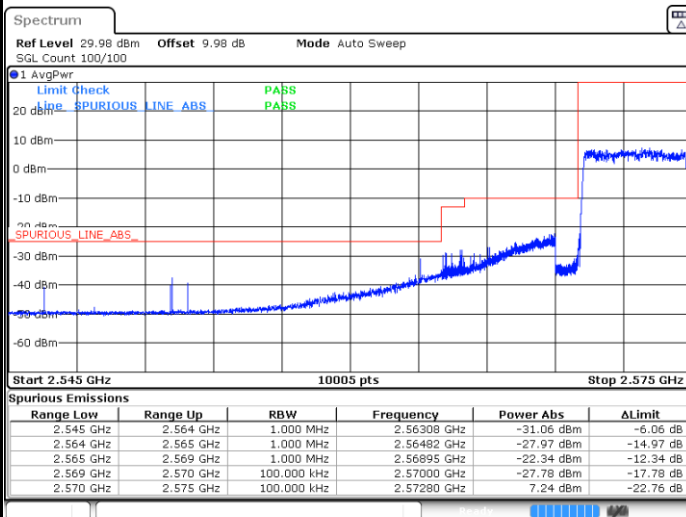
## Lowest Band Edge / 1RB0



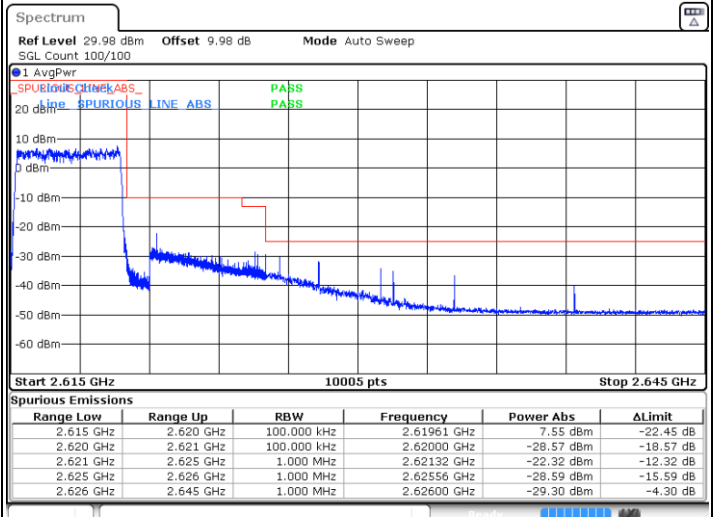
## Highest Band Edge / 1RB24



## Lowest Band Edge / Full RB



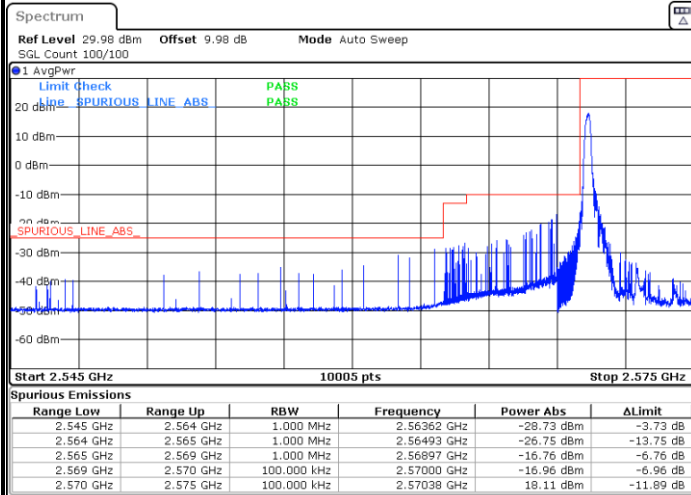
## Highest Band Edge / Full RB



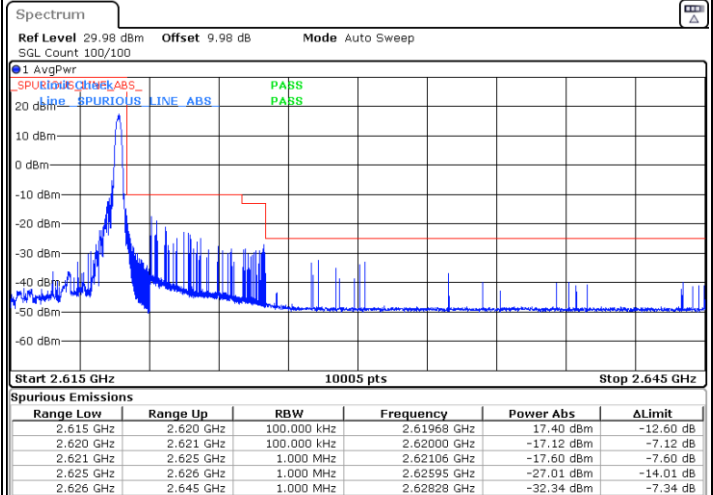


## FR1 n38 / 5MHz / DFT-S OFDM / 256Q

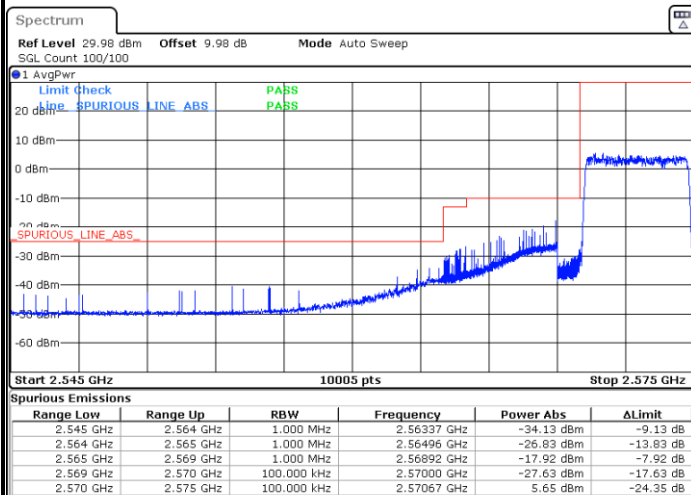
## Lowest Band Edge / 1RB0



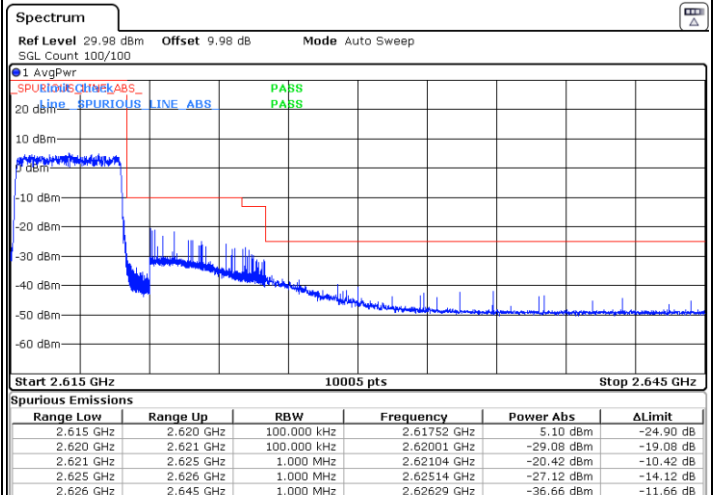
## Highest Band Edge / 1RB24



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB



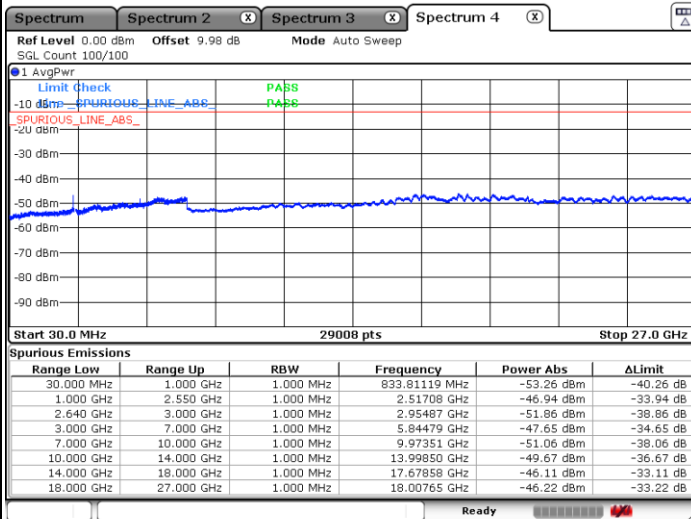


# Conducted Spurious Emission

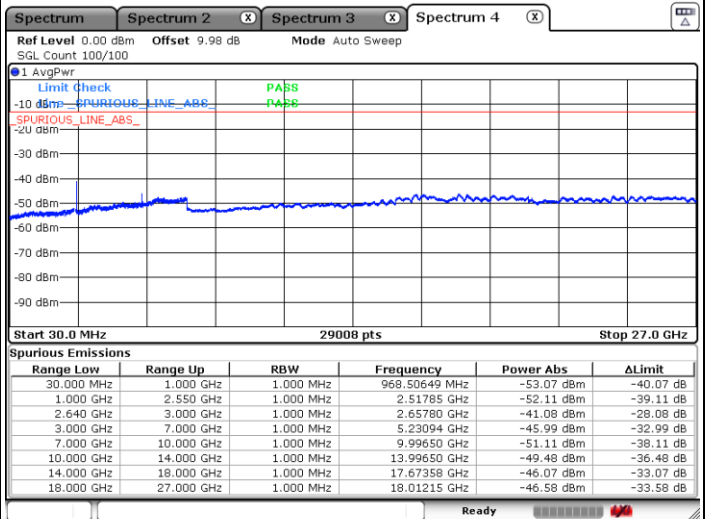
FR1 n38 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

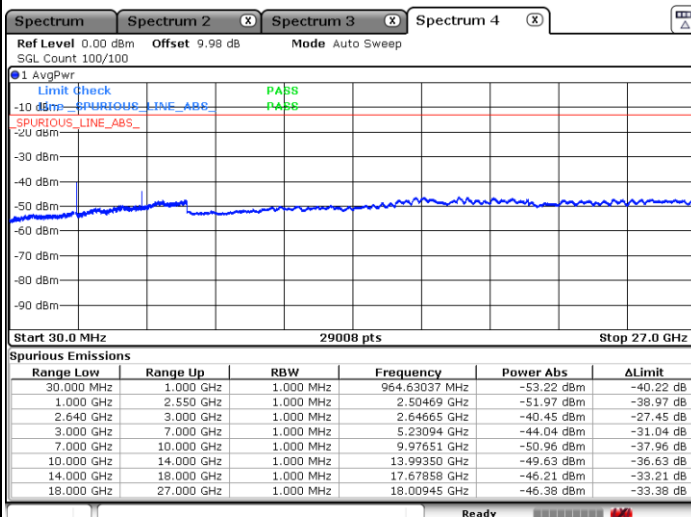


Date: 19.FEB.2022 10:52:27



Date: 19.FEB.2022 10:50:55

Highest Channel / 1RB1



Date: 19.FEB.2022 10:54:00

## Frequency Stability

| Test Conditions  |                   | FR1 n38 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|---------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 5MHz                         | Note 2. |
|                  |                   | Deviation (ppm)                 | Result  |
| 50               | Normal Voltage    | 0.0024                          | PASS    |
| 5                | Normal Voltage    | 0.0012                          |         |
| 30               | Normal Voltage    | 0.0019                          |         |
| 20(Ref.)         | Normal Voltage    | 0.0036                          |         |
| 10               | Normal Voltage    | 0.0015                          |         |
| 0                | Normal Voltage    | 0.0025                          |         |
| -10              | Normal Voltage    | 0.0017                          |         |
| -20              | Normal Voltage    | 0.0003                          |         |
| -30              | Normal Voltage    | 0.0024                          |         |
| 20               | Maximum Voltage   | 0.0037                          |         |
| 20               | Normal Voltage    | 0.0006                          |         |
| 20               | Battery End Point | 0.0036                          |         |

**Note:**

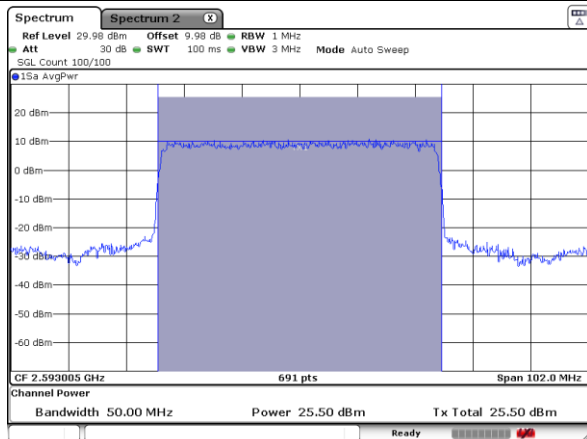
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

**FR1 n41****Peak-to-Average Ratio**

| Mode      | FR1 n41 / 50MHz / DFT-S OFDM |      |       |       |             |
|-----------|------------------------------|------|-------|-------|-------------|
| Mod.      | 50M                          |      |       |       | Limit: 13dB |
| RB Size   | BPSK                         | QPSK | 16QAM | 64QAM | Result      |
| Middle CH | 6.06                         | 6.08 | 5.98  | 6.09  | PASS        |
| RB Size   | 256QAM                       |      |       |       |             |
| Middle CH | 6.20                         |      |       |       |             |

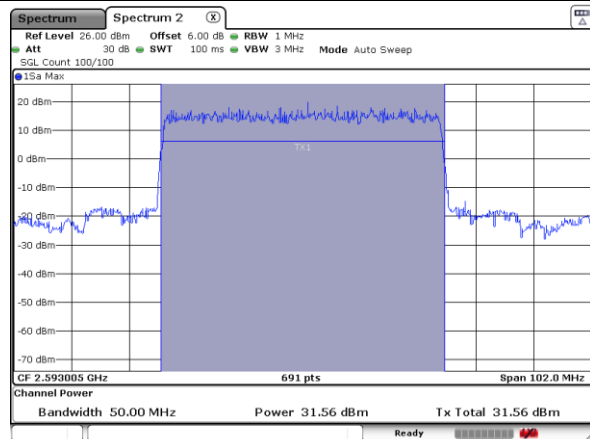


## BPSK-A



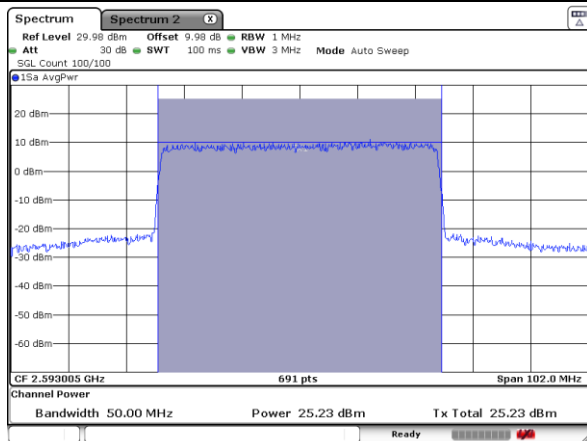
Date: 20.FEB.2022 04:02:00

## BPSK-P



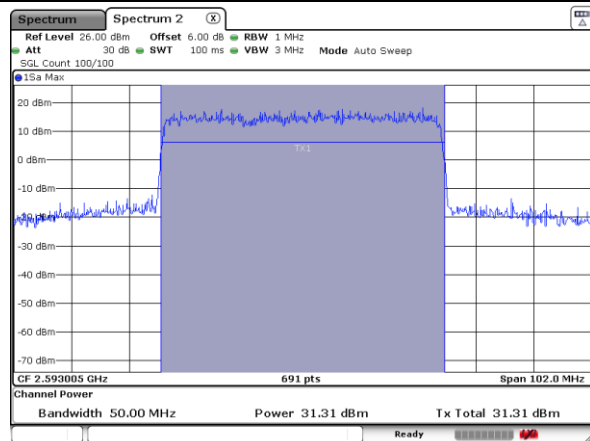
Date: 20.FEB.2022 04:02:39

## QPSK-A



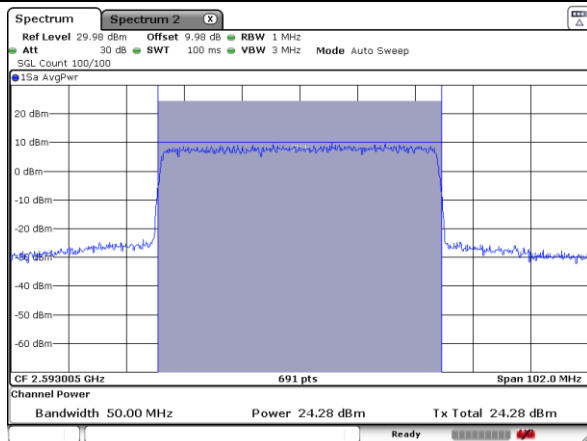
Date: 20.FEB.2022 04:03:37

## QPSK-P



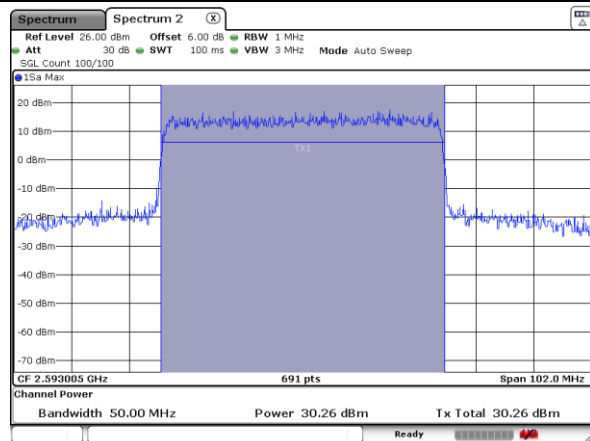
Date: 20.FEB.2022 04:03:14

## 16QAM-A



Date: 20.FEB.2022 04:04:04

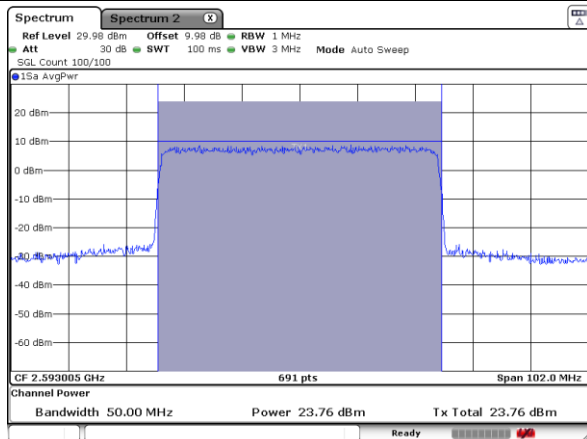
## 16QAM-P



Date: 20.FEB.2022 04:04:27

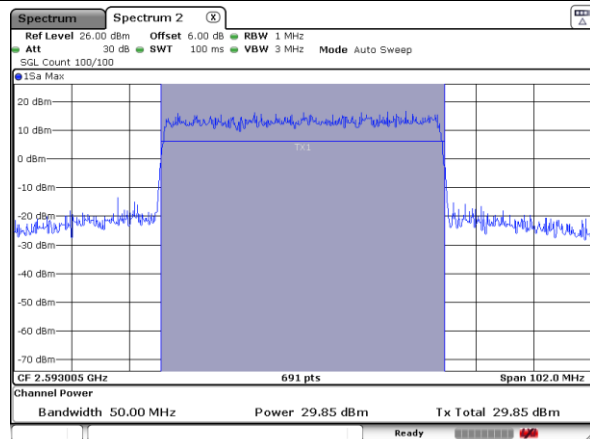


64QAM-A



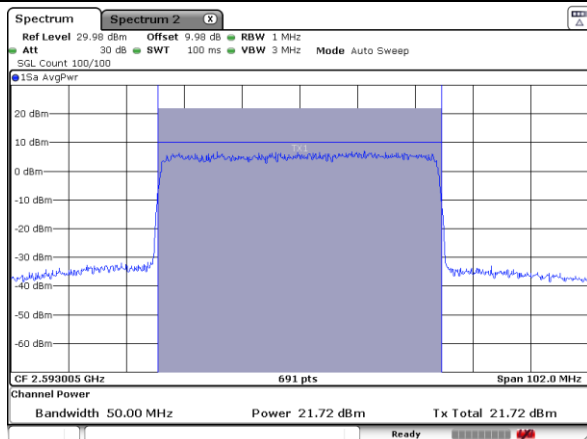
Date: 20.FEB.2022 04:04:55

64QAM-P



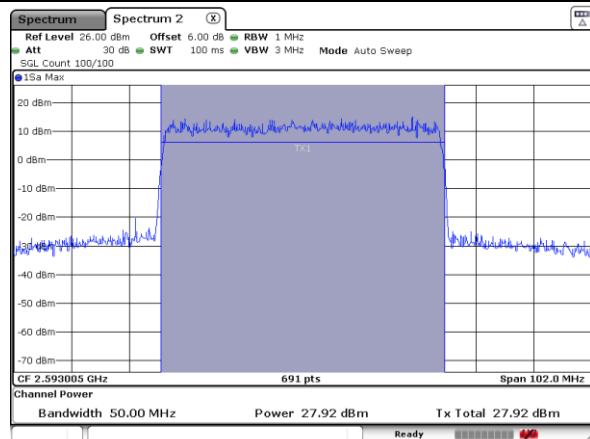
Date: 20.FEB.2022 04:05:24

256QAM-A



Date: 20.FEB.2022 04:06:03

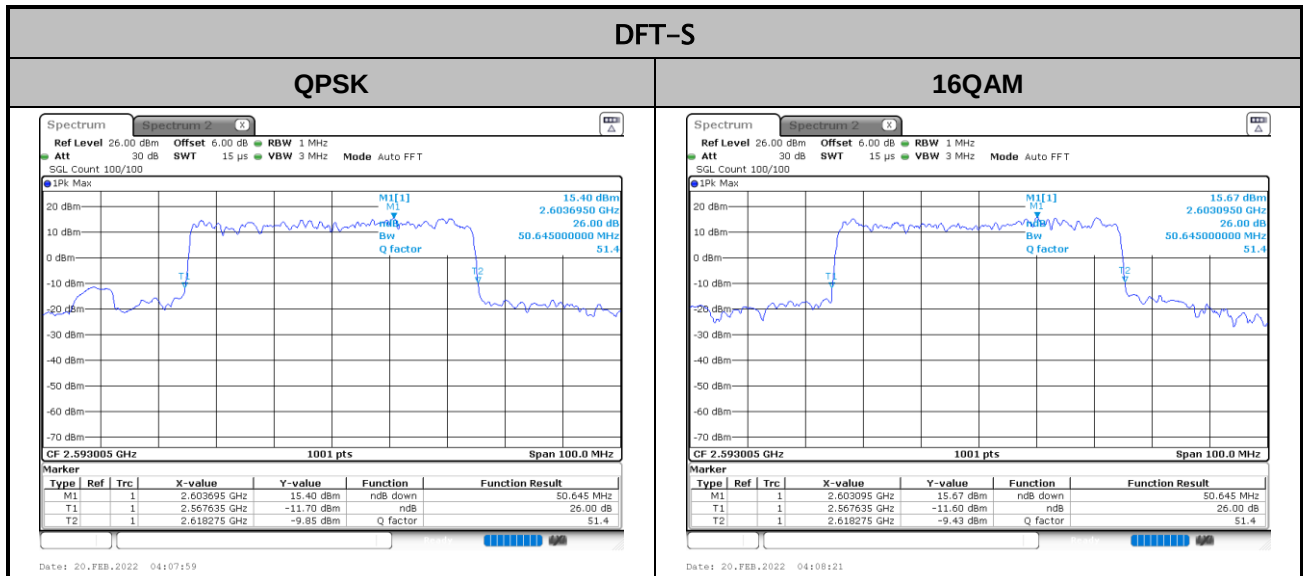
256QAM-P



Date: 20.FEB.2022 04:06:27

## 26dB Bandwidth

|           |                                       |       |
|-----------|---------------------------------------|-------|
| Mode      | FR1 n41 : 26dB BW(50MHz) / DFT-S OFDM |       |
| BW        | DFT-S                                 |       |
| Mod.      | QPSK                                  | 16QAM |
| Middle CH | 50.65                                 | 50.65 |



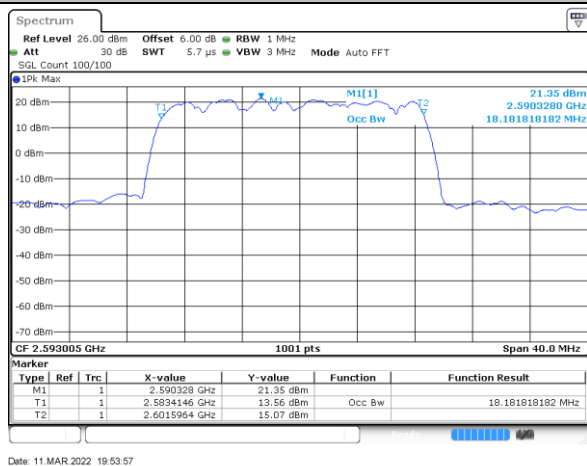


## Occupied Bandwidth

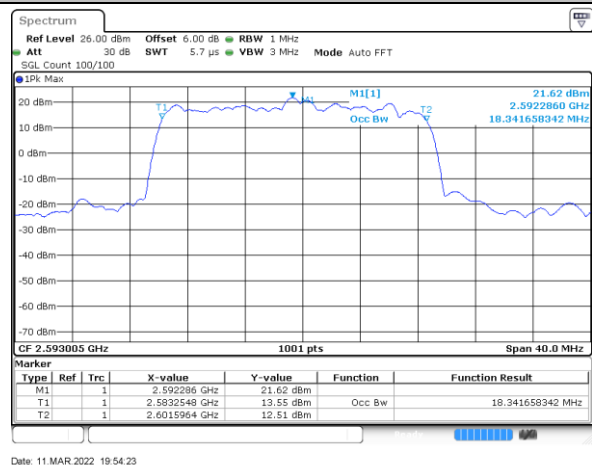
| Mode      | FR1 n41 : OB BW(MHz) / DFT-S OFDM |       |
|-----------|-----------------------------------|-------|
| BW        | DFT-S/20M                         |       |
| Mod.      | QPSK                              | 16QAM |
| Middle CH | 18.18                             | 18.34 |
| BW        | DFT-S/50M                         |       |
| Mod.      | QPSK                              | 16QAM |
| Middle CH | 48.05                             | 48.25 |

### DFT-S/20M

#### QPSK

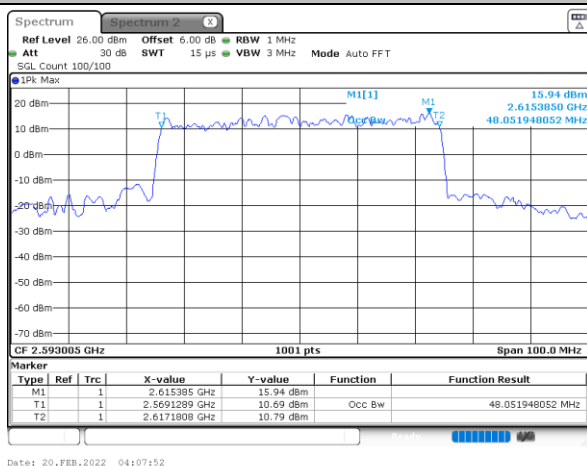


#### 16QAM

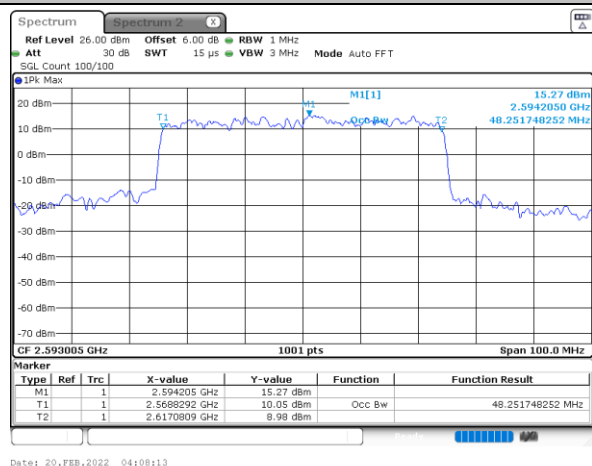


### DFT-S/50M

#### QPSK



#### 16QAM

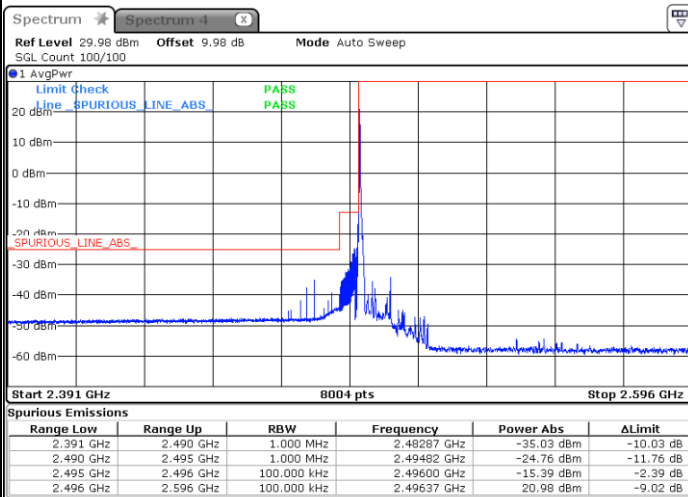


**Conducted Band Edge**

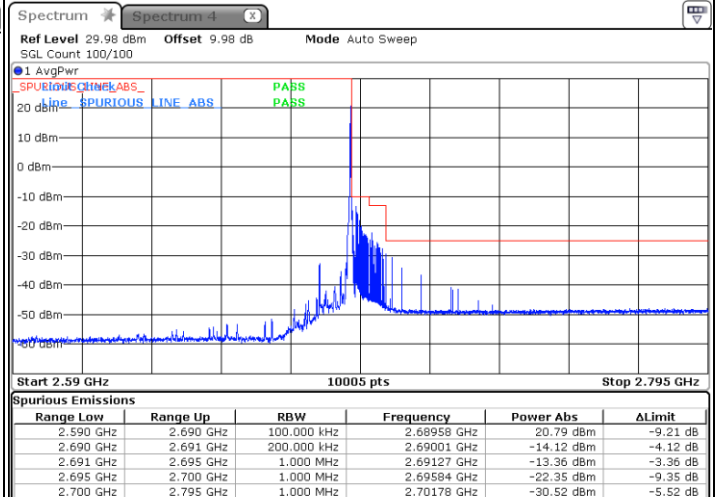
FR1 n41 / 10MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



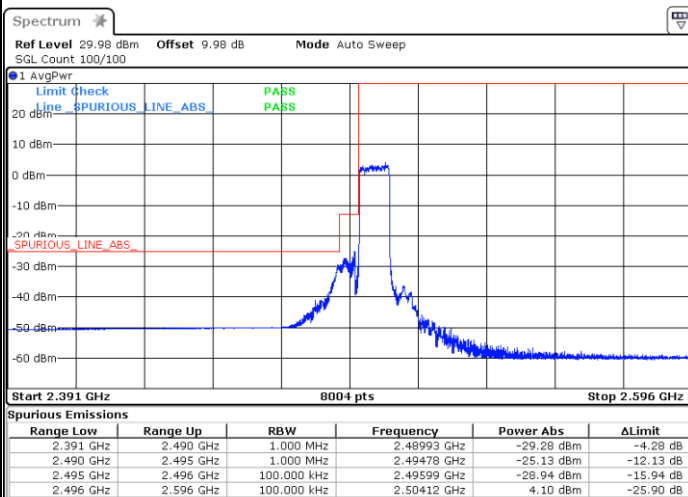
Date: 19.FEB.2022 22:11:13



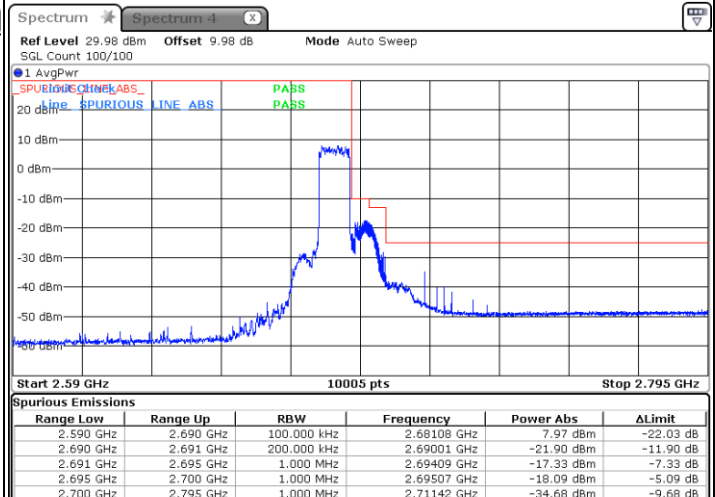
Date: 19.FEB.2022 21:47:34

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 1.MAR.2022 09:58:29



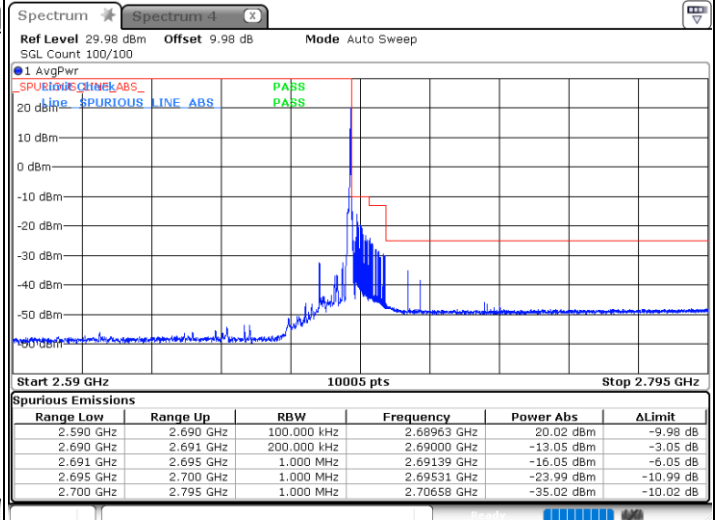
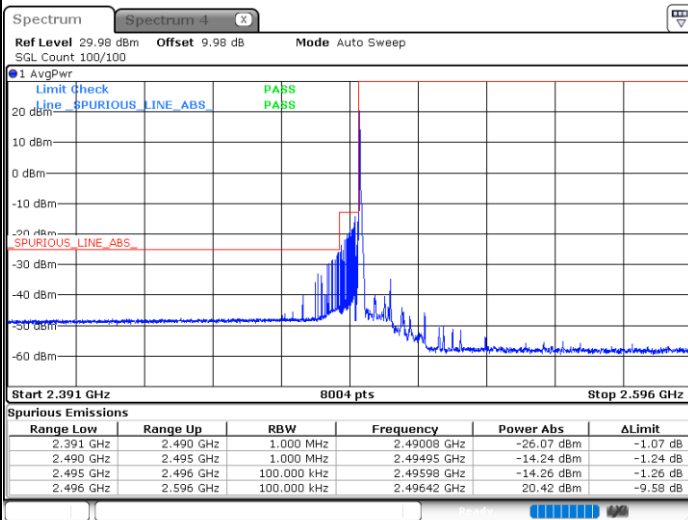
Date: 19.FEB.2022 21:36:34



## FR1 n41 / 10MHz / DFT-S OFDM / QPSK

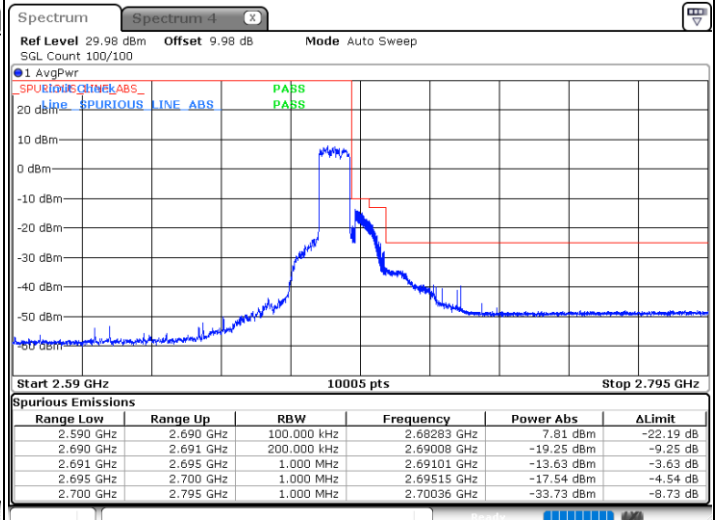
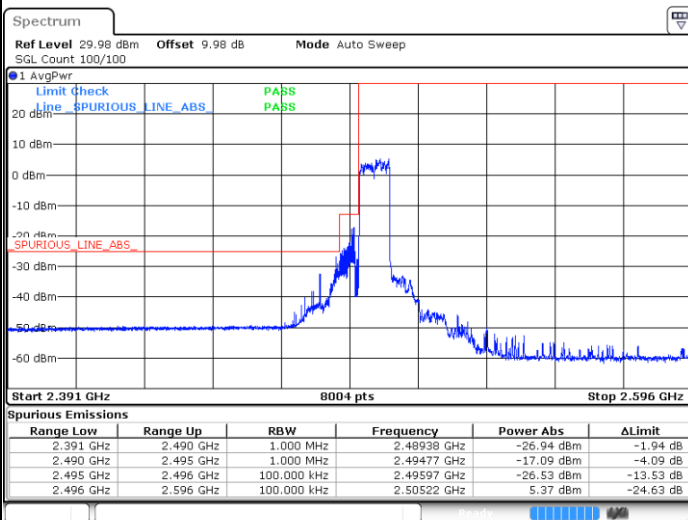
## Lowest Band Edge / 1RB0

## Highest Band Edge / 1RBmax



## Lowest Band Edge / Full RB

## Highest Band Edge / Full RB

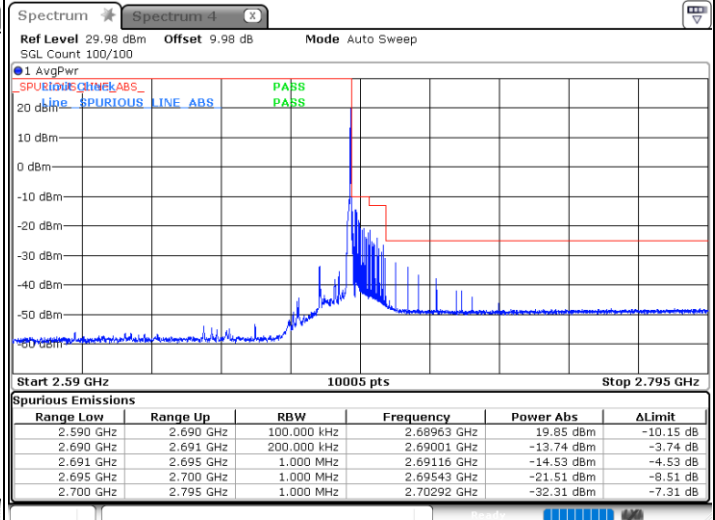
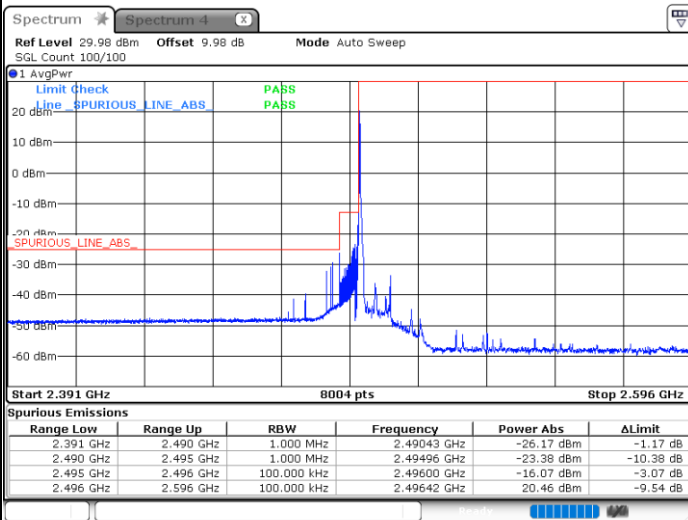




## FR1 n41 / 10MHz / DFT-S OFDM / 16Q

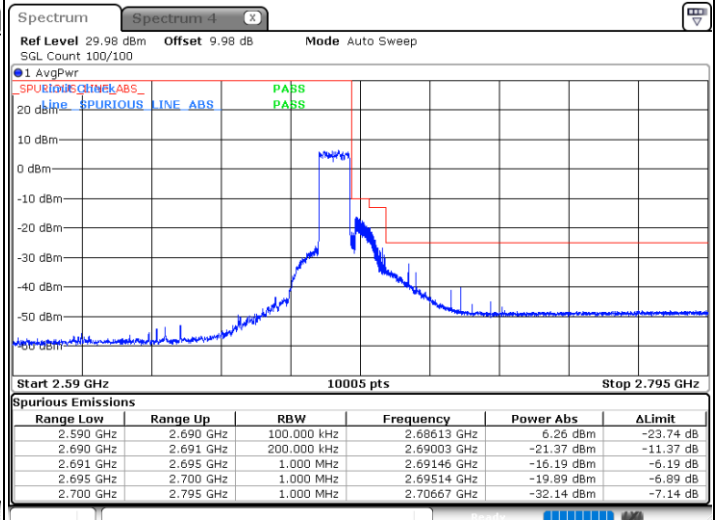
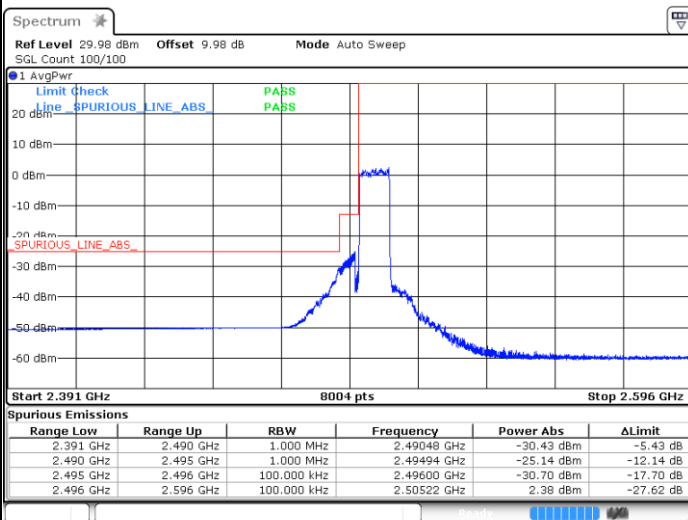
## Lowest Band Edge / 1RB0

## Highest Band Edge / 1RBmax



## Lowest Band Edge / Full RB

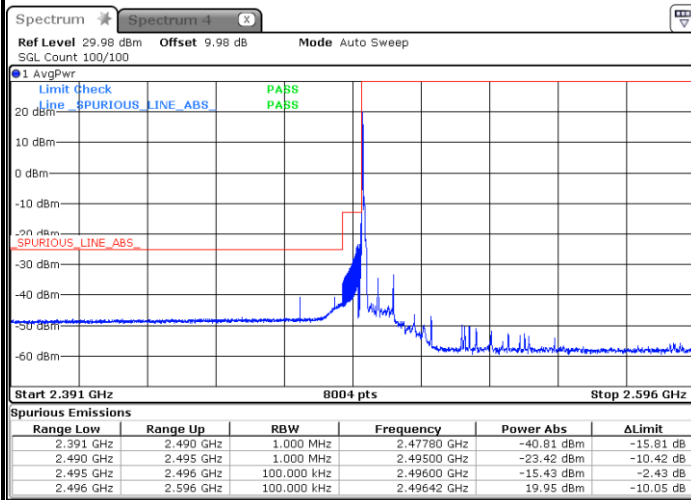
## Highest Band Edge / Full RB



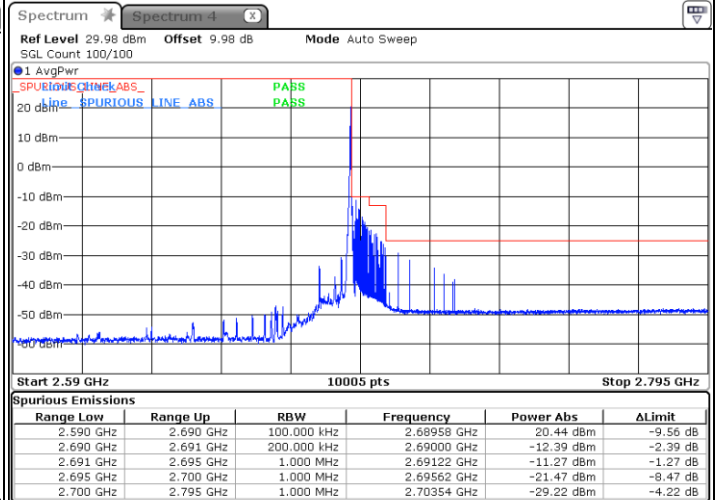


## FR1 n41 / 10MHz / DFT-S OFDM / 64Q

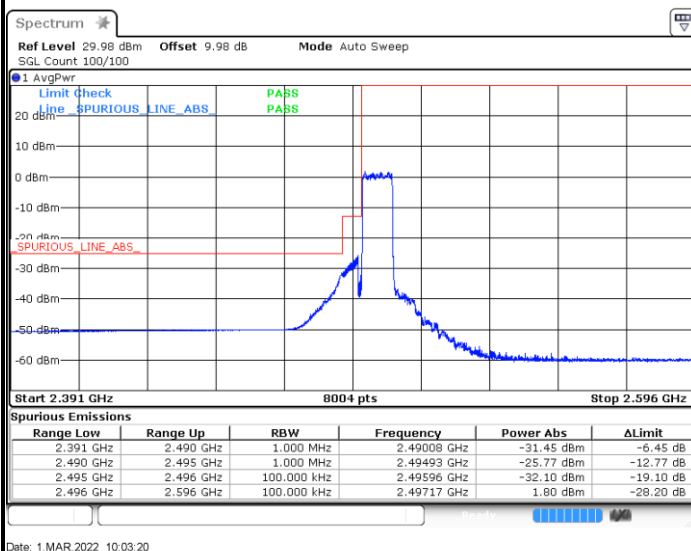
## Lowest Band Edge / 1RB0



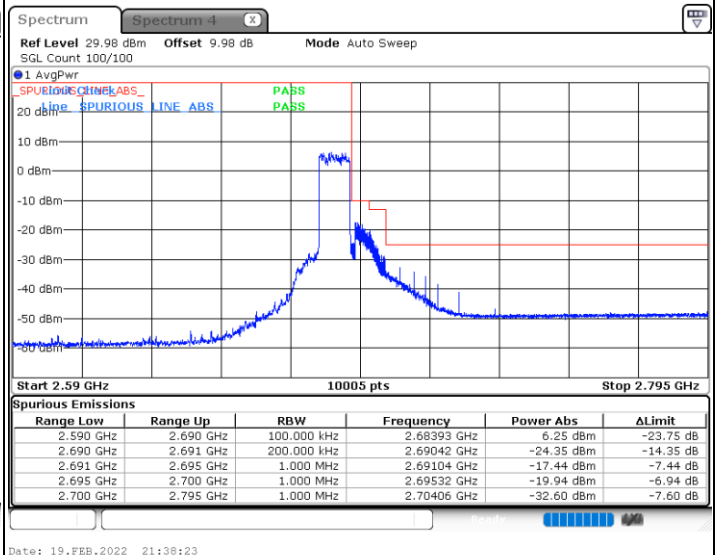
## Highest Band Edge / 1RB24



## Lowest Band Edge / Full RB



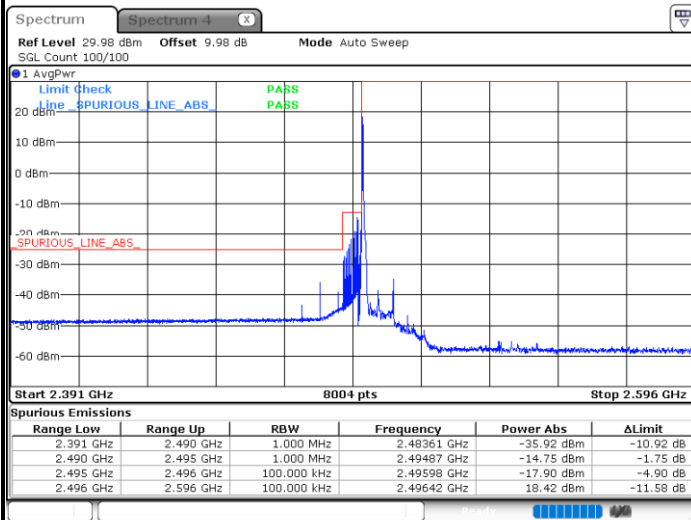
## Highest Band Edge / Full RB



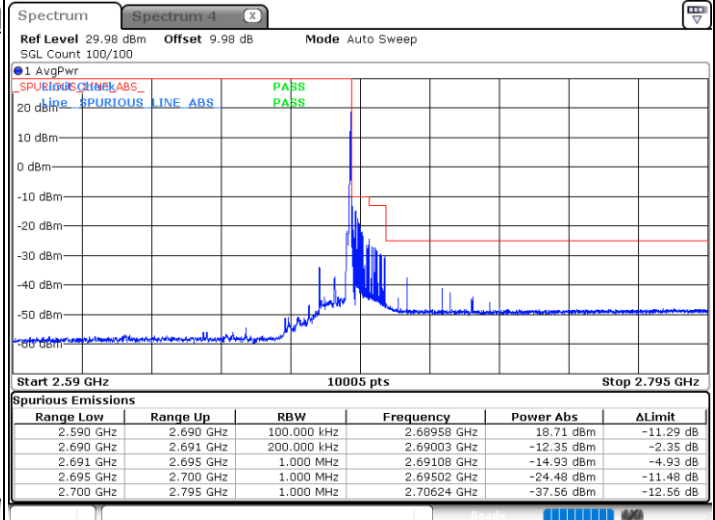


## FR1 n41 / 10MHz / DFT-S OFDM / 256Q

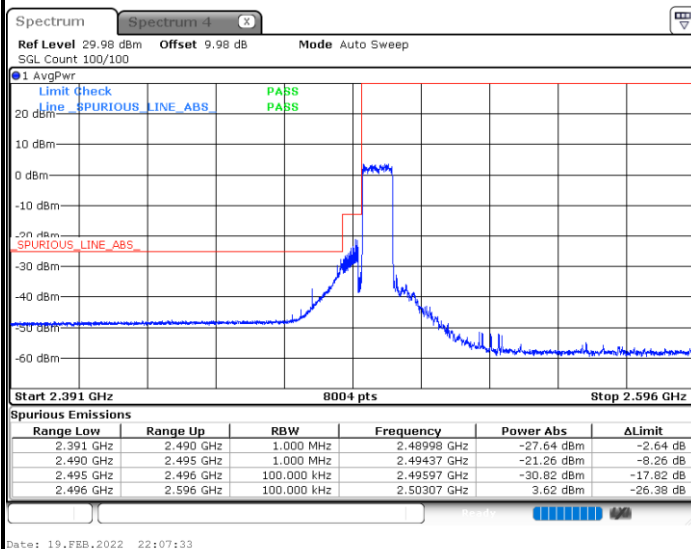
## Lowest Band Edge / 1RB0



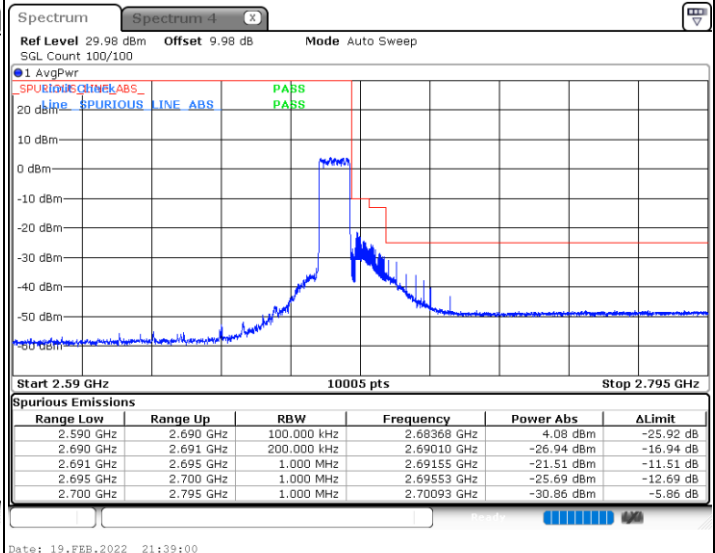
## Highest Band Edge / 1RB24



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

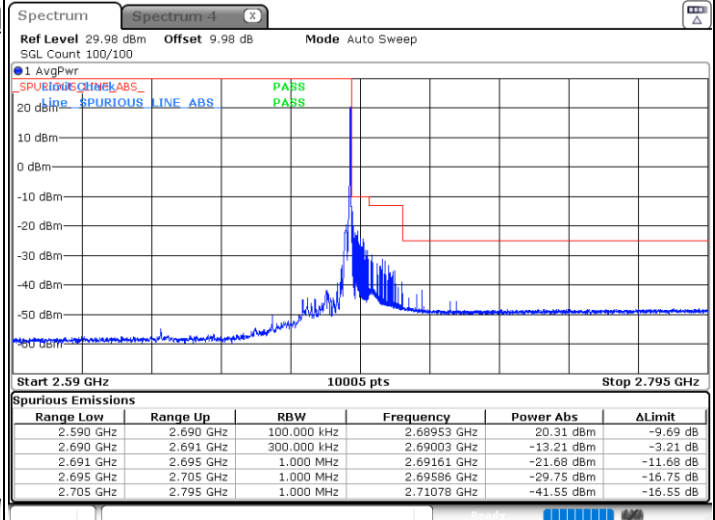
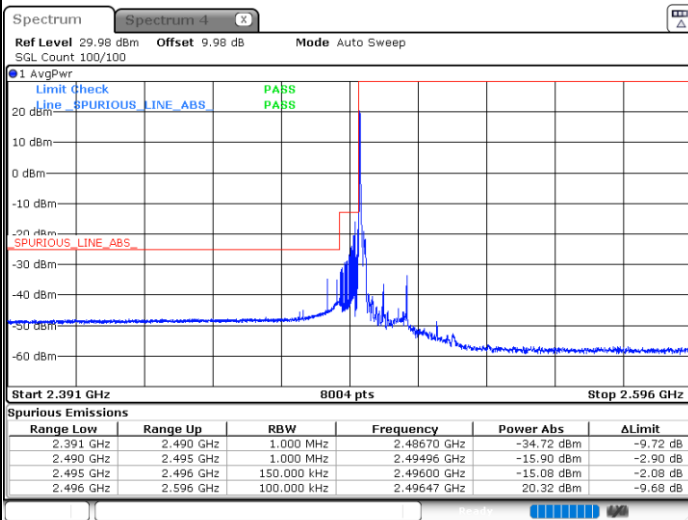




## FR1 n41 /15MHz / DFT-S OFDM / PI/2 BPSK

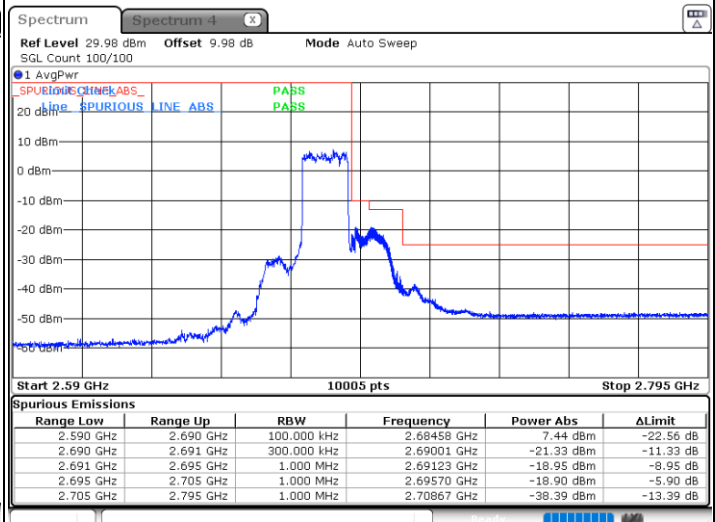
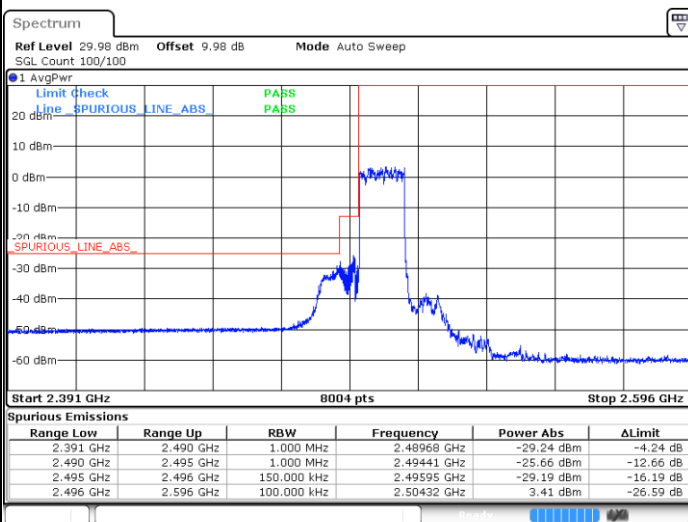
## Lowest Band Edge / 1RB0

## Highest Band Edge / 1RBmax



## Lowest Band Edge / Full RB

## Highest Band Edge / Full RB

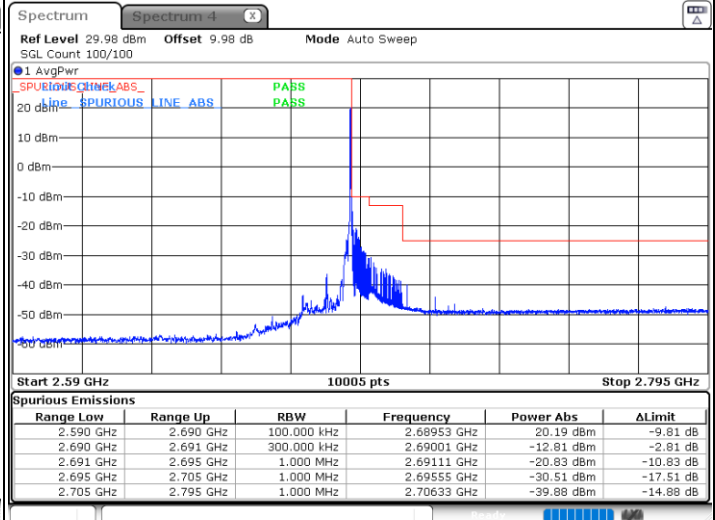
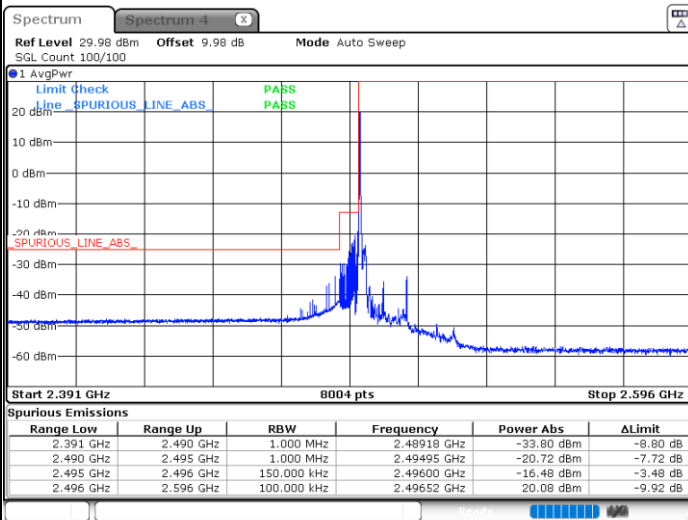




## FR1 n41 / 15MHz / DFT-S OFDM / QPSK

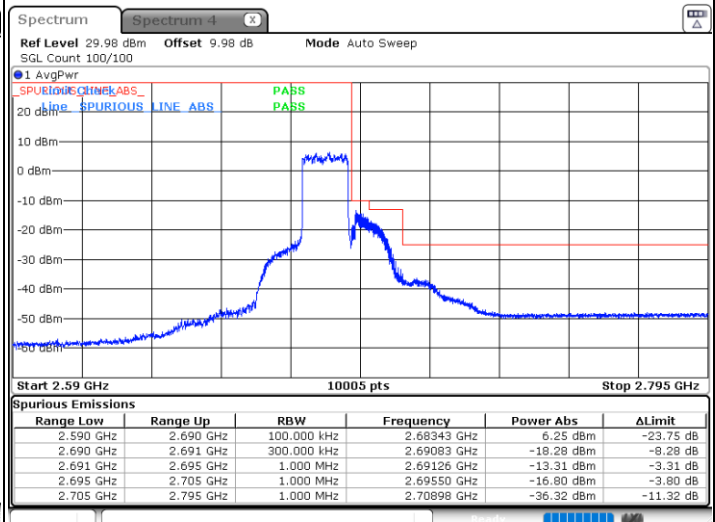
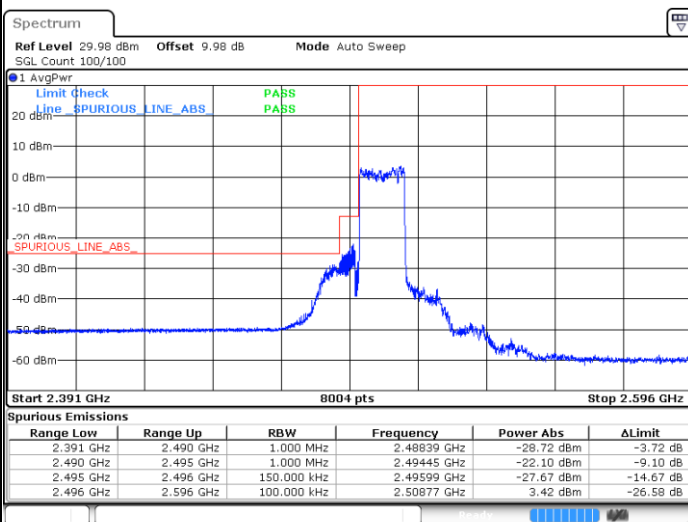
## Lowest Band Edge / 1RB0

## Highest Band Edge / 1RBmax



## Lowest Band Edge / Full RB

## Highest Band Edge / Full RB

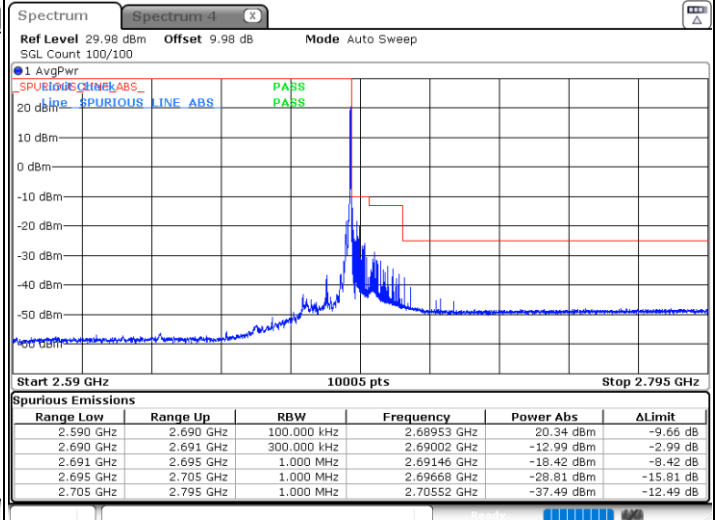
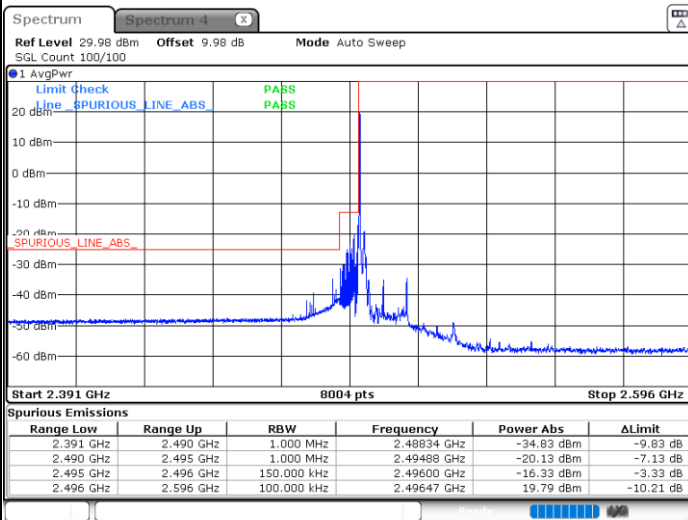




## FR1 n41 / 15MHz / DFT-S OFDM / 16Q

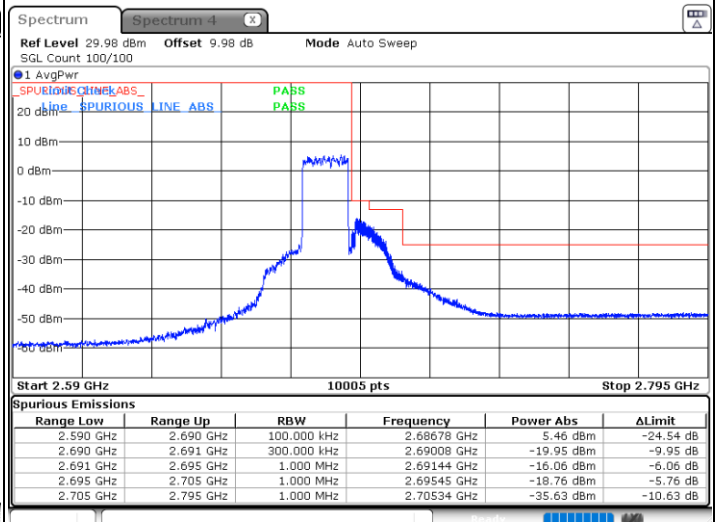
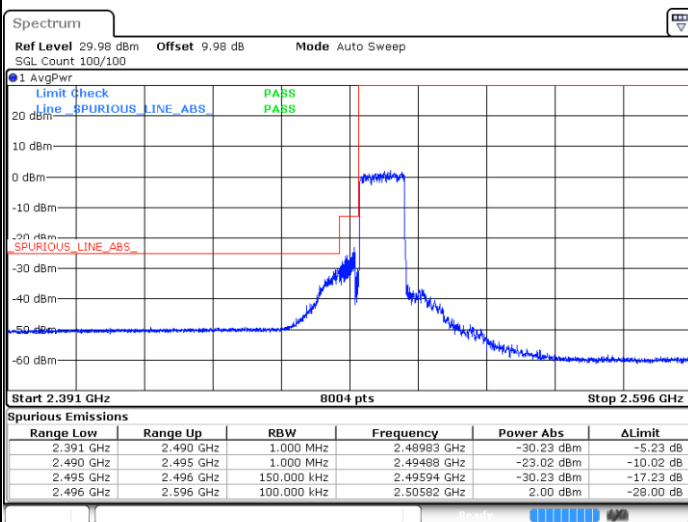
## Lowest Band Edge / 1RB0

## Highest Band Edge / 1RBmax



## Lowest Band Edge / Full RB

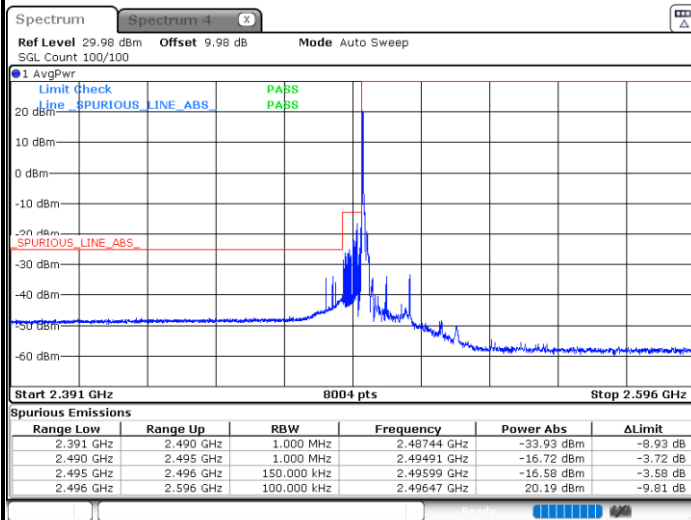
## Highest Band Edge / Full RB



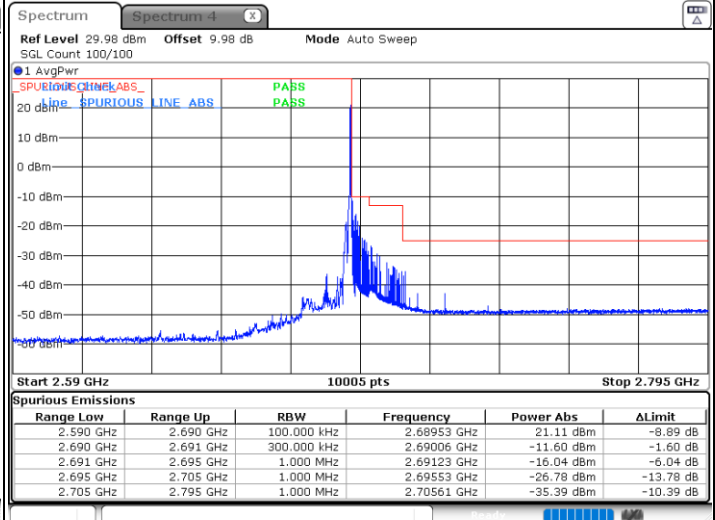


## FR1 n41 / 15MHz / DFT-S OFDM / 64Q

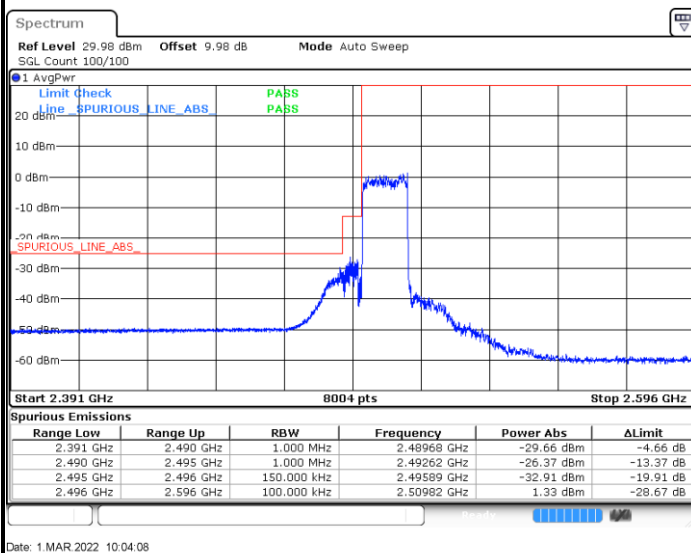
## Lowest Band Edge / 1RB0



## Highest Band Edge / 1RB24



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

