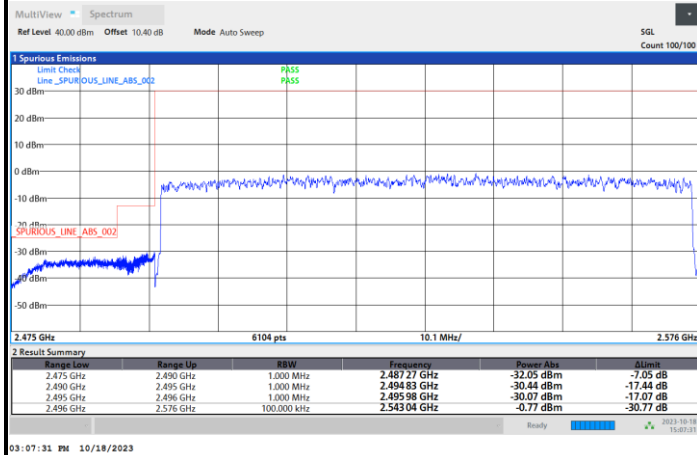


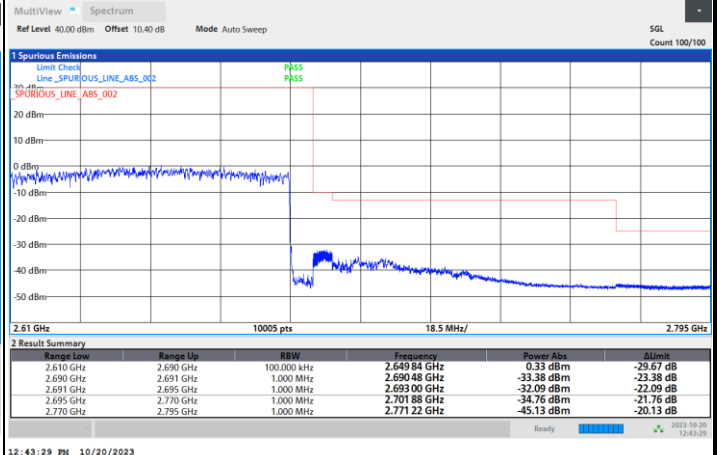


## FR1 n41 HPUE / 80MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / Full RB

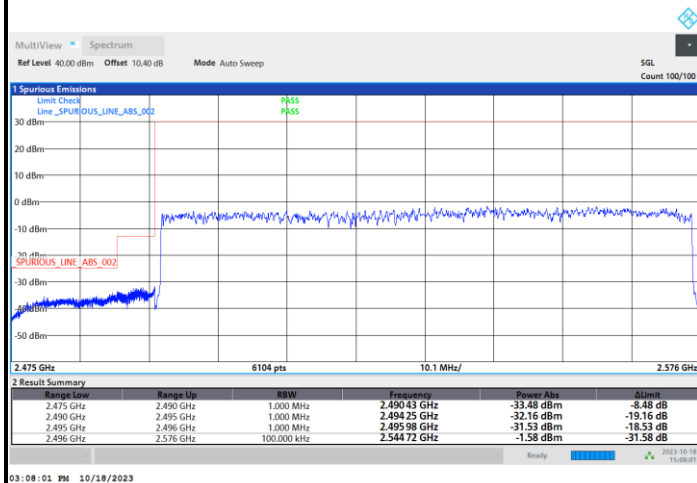


## Highest Band Edge / Full RB

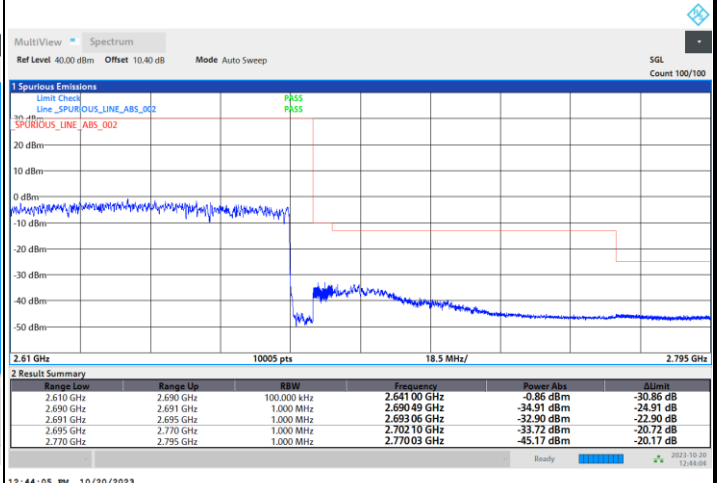


## FR1 n41 HPUE / 80MHz / DFT-S OFDM / 16QAM

## Lowest Band Edge / Full RB



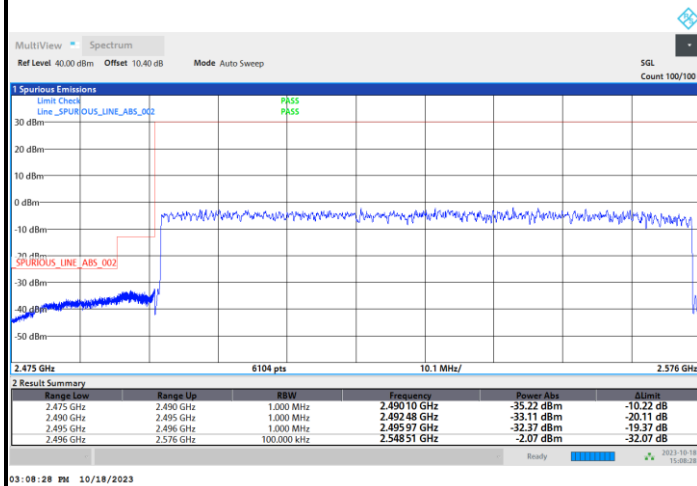
## Highest Band Edge / Full RB



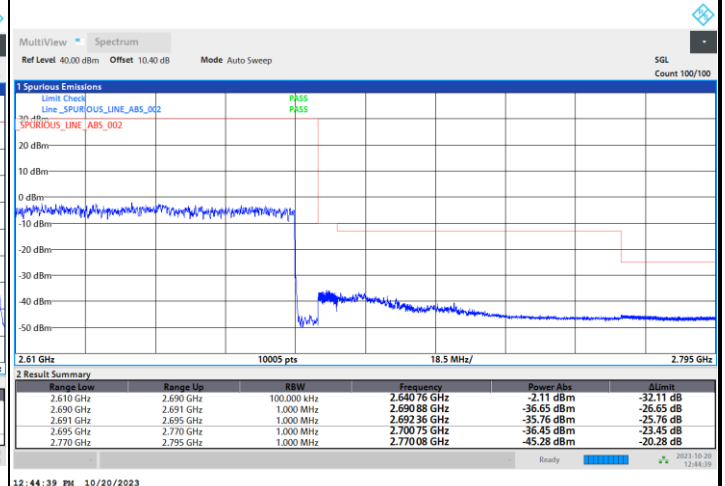


## FR1 n41 HPUE / 80MHz / DFT-S OFDM / 64QAM

## Lowest Band Edge / Full RB

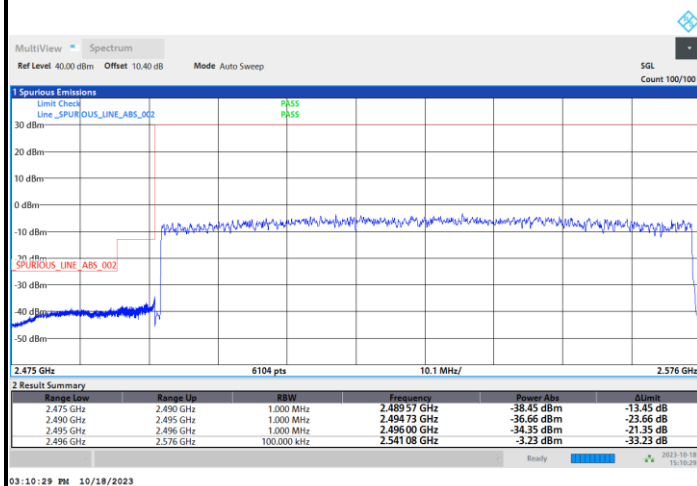


## Highest Band Edge / Full RB

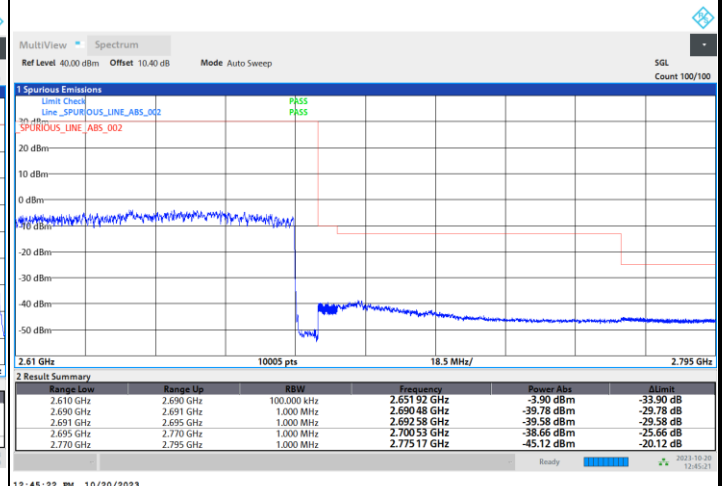


## FR1 n41 HPUE / 80MHz / DFT-S OFDM / 256QAM

## Lowest Band Edge / Full RB



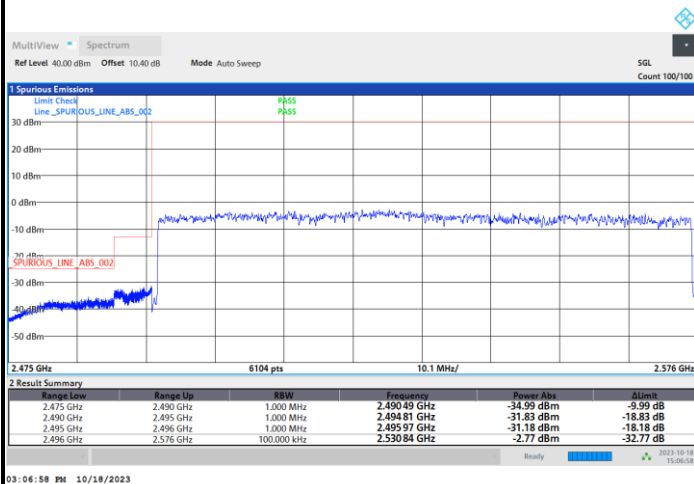
## Highest Band Edge / Full RB



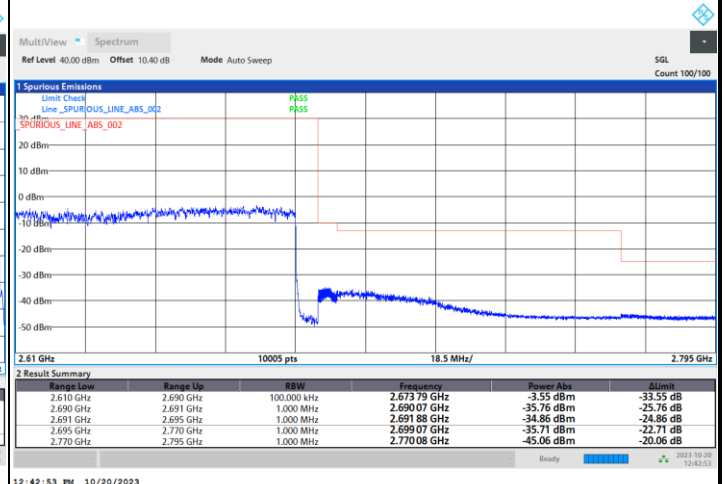


## FR1 n41 HPUE / 80MHz / CP OFDM / QPSK / Full RB

## Lowest Band Edge

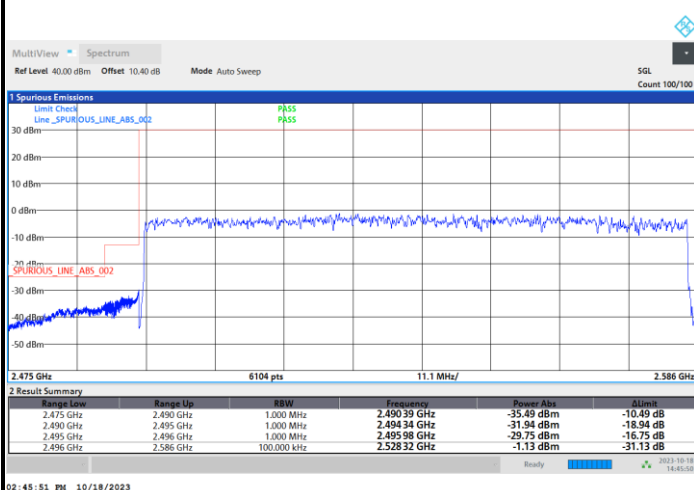


## Highest Band Edge

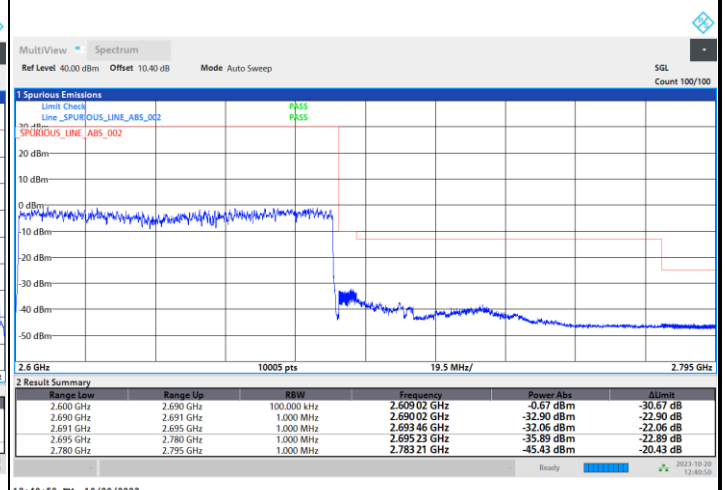


## FR1 n41 HPUE / 90MHz / DFT-S OFDM / PI/2 BPSK

## Lowest Band Edge / Full RB



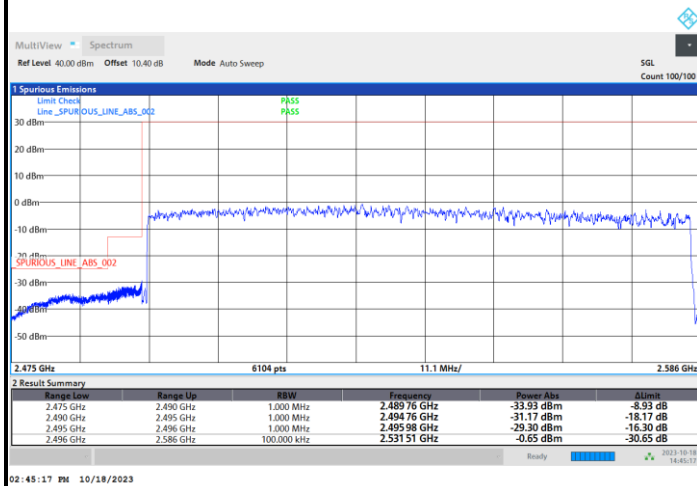
## Highest Band Edge / Full RB



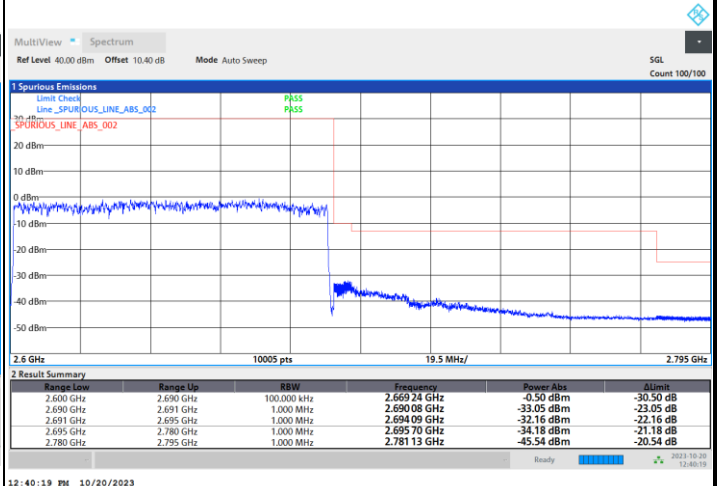


## FR1 n41 HPUE / 90MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / Full RB

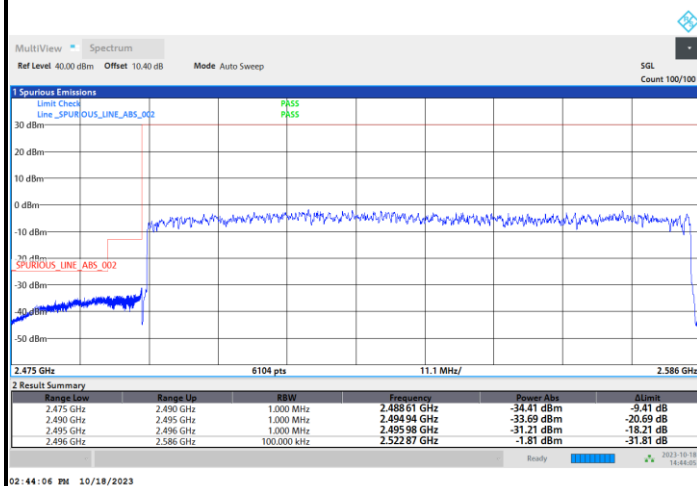


## Highest Band Edge / Full RB

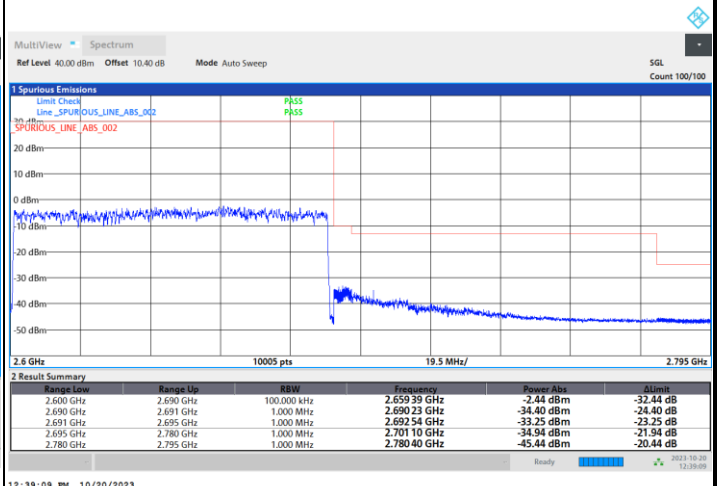


## FR1 n41 HPUE / 90MHz / DFT-S OFDM / 16QAM

## Lowest Band Edge / Full RB



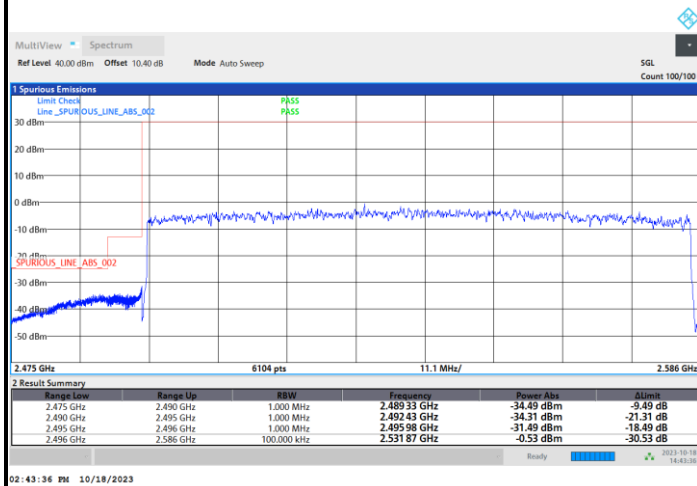
## Highest Band Edge / Full RB



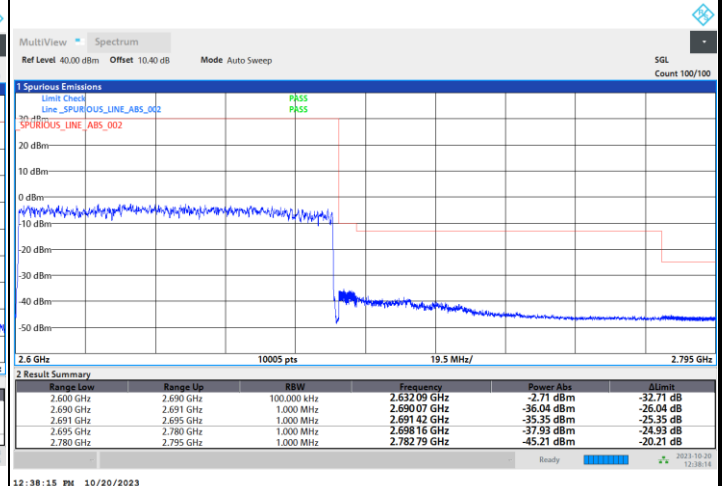


## FR1 n41 HPUE / 90MHz / DFT-S OFDM / 64QAM

## Lowest Band Edge / Full RB

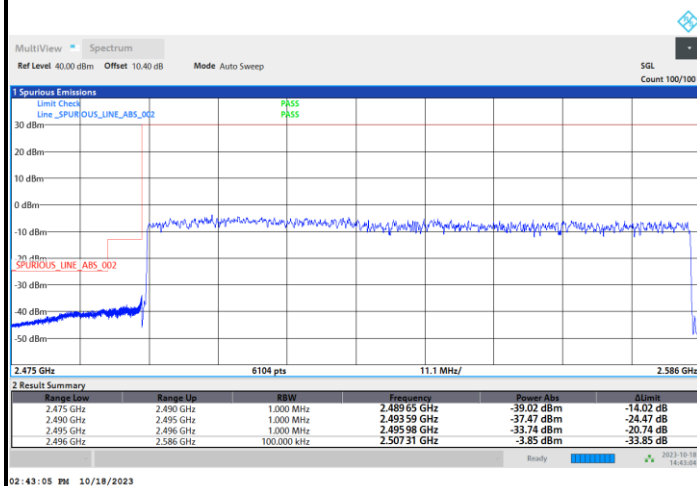


## Highest Band Edge / Full RB

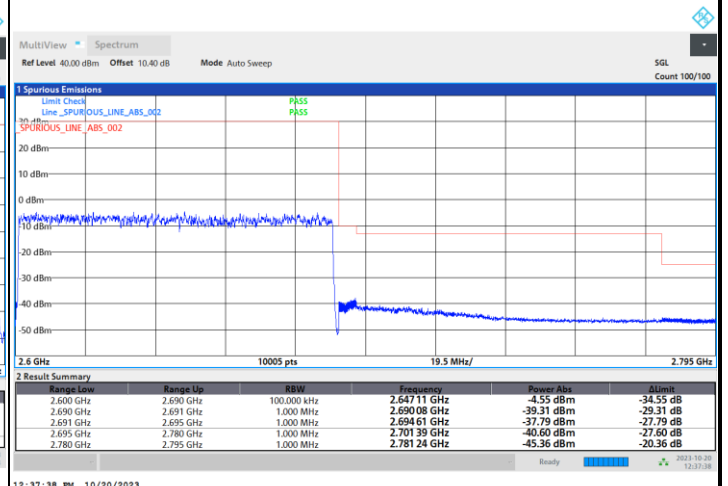


## FR1 n41 HPUE / 90MHz / DFT-S OFDM / 256QAM

## Lowest Band Edge / Full RB



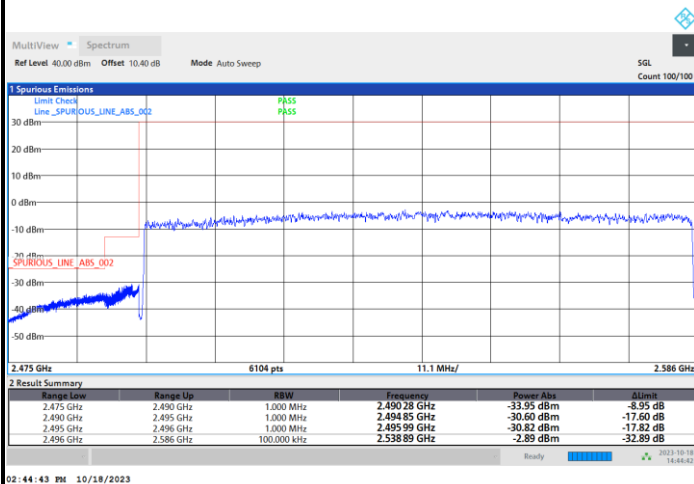
## Highest Band Edge / Full RB



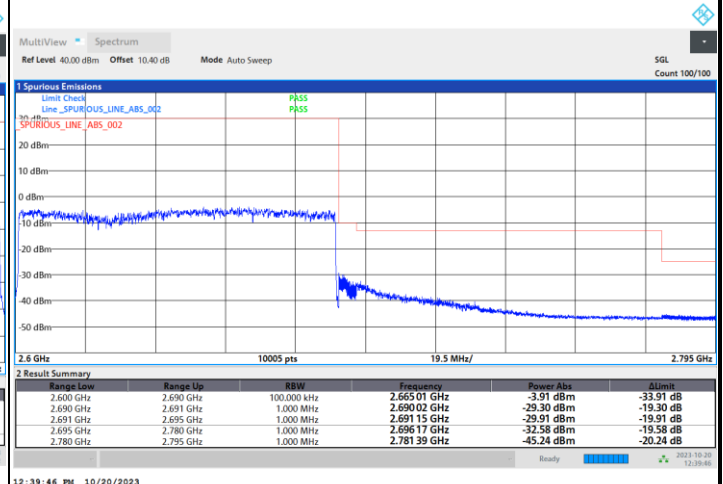


## FR1 n41 HPUE / 90MHz / CP OFDM / QPSK / Full RB

## Lowest Band Edge

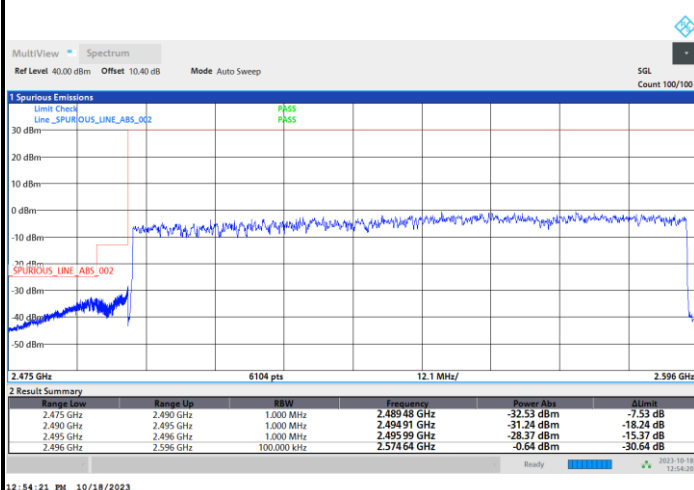


## Highest Band Edge

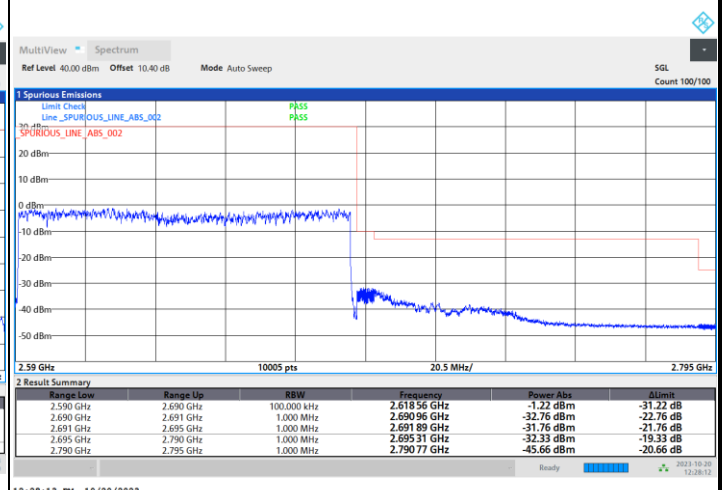


## FR1 n41 HPUE / 100MHz / DFT-S OFDM / PI/2 BPSK

## Lowest Band Edge / Full RB



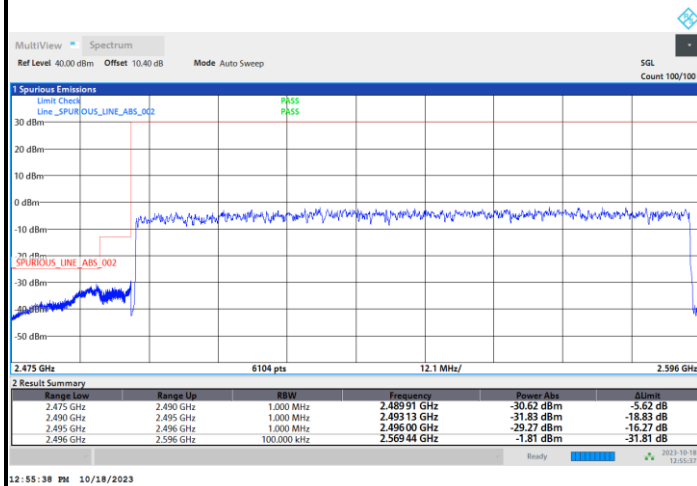
## Highest Band Edge / Full RB



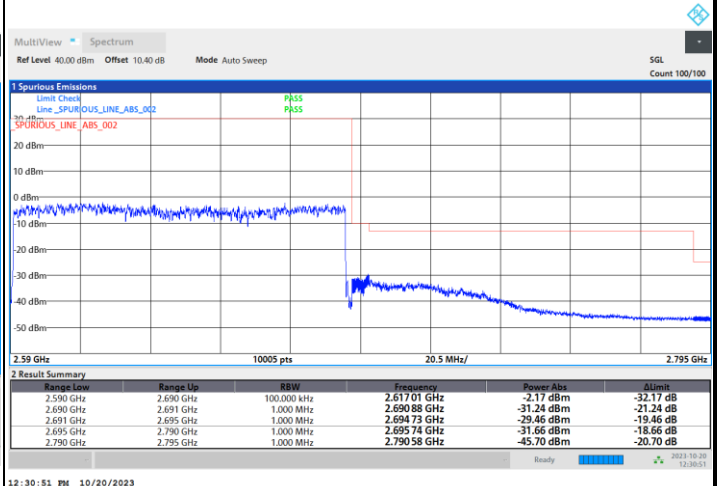


## FR1 n41 HPUE / 100MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / Full RB

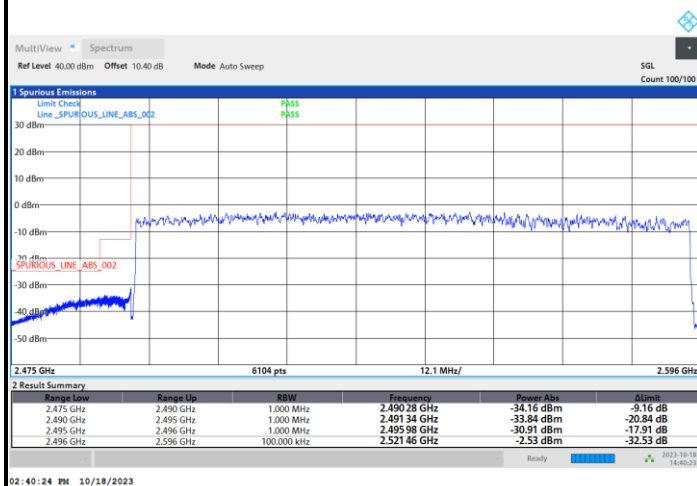


## Highest Band Edge / Full RB

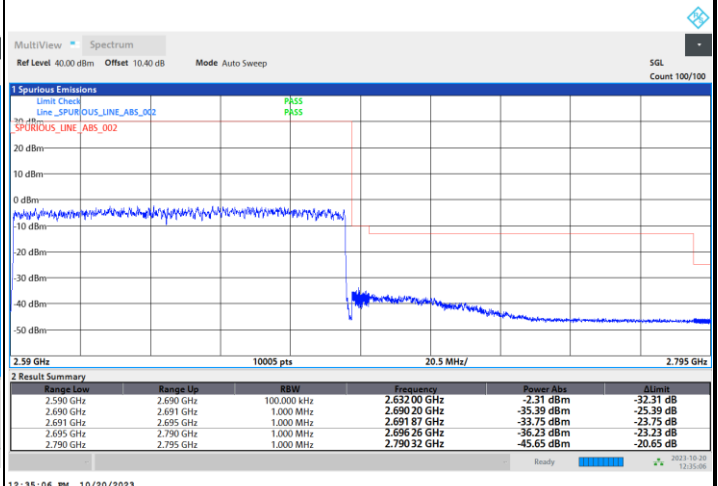


## FR1 n41 HPUE / 100MHz / DFT-S OFDM / 16QAM

## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

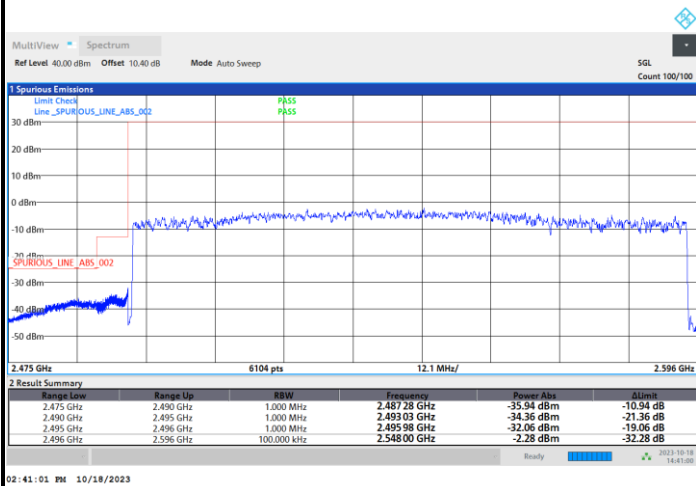




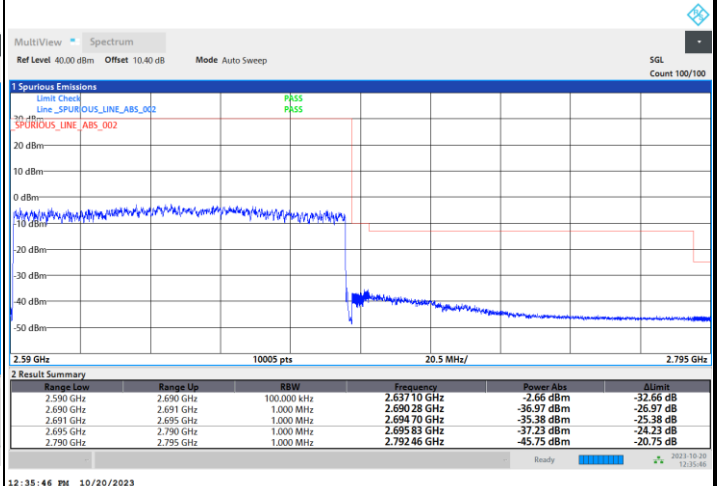
**Report No. : FG370621-01C**

## FR1 n41 HPUE / 100MHz / DFT-S OFDM / 64QAM

### Lowest Band Edge / Full RB

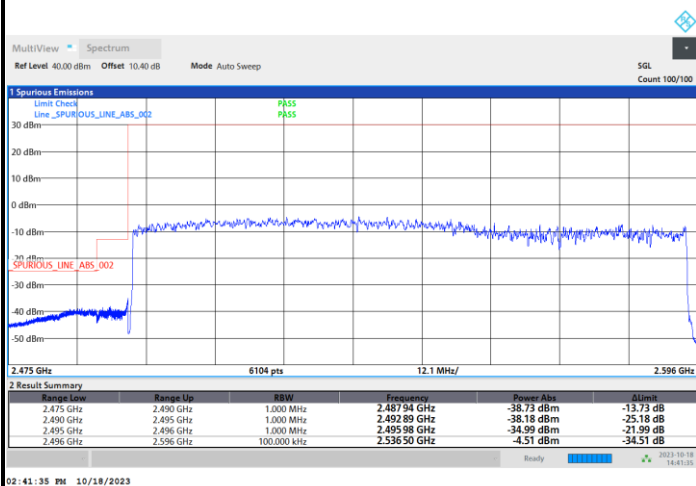


### Highest Band Edge / Full RB

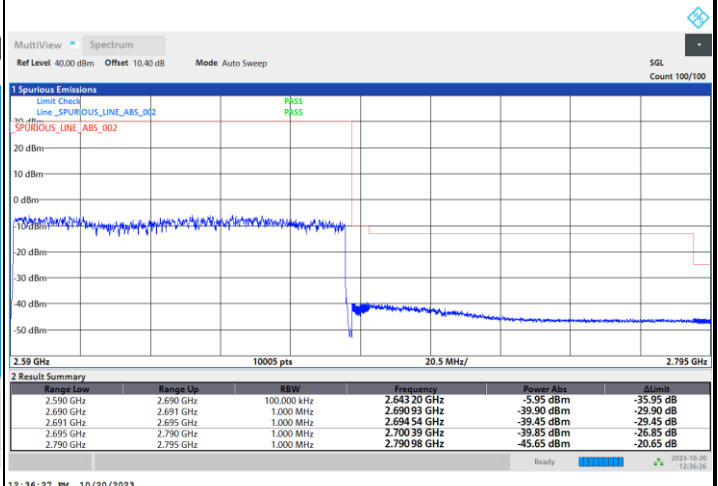


**FR1 n41 HPUE / 100MHz / DFT-S OFDM / 256QAM**

### Lowest Band Edge / Full RB



### Highest Band Edge / Full RB



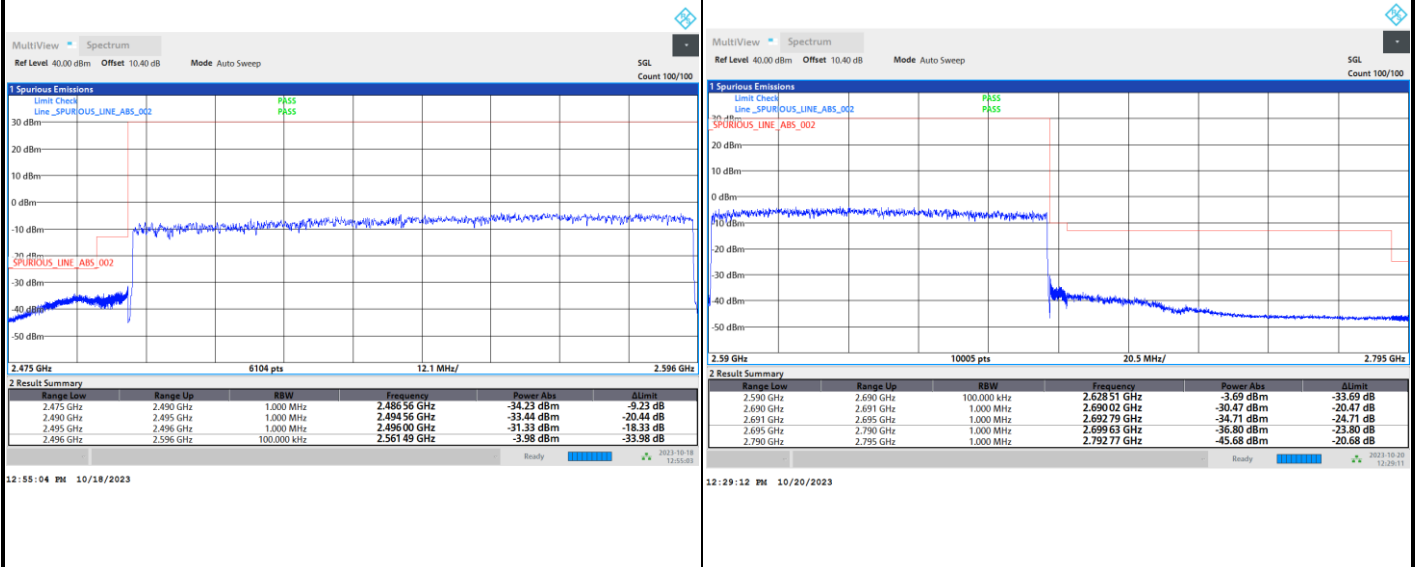




## FR1 n41 HPUE / 100MHz / CP OFDM / QPSK / Full RB

## Lowest Band Edge

## Highest Band Edge

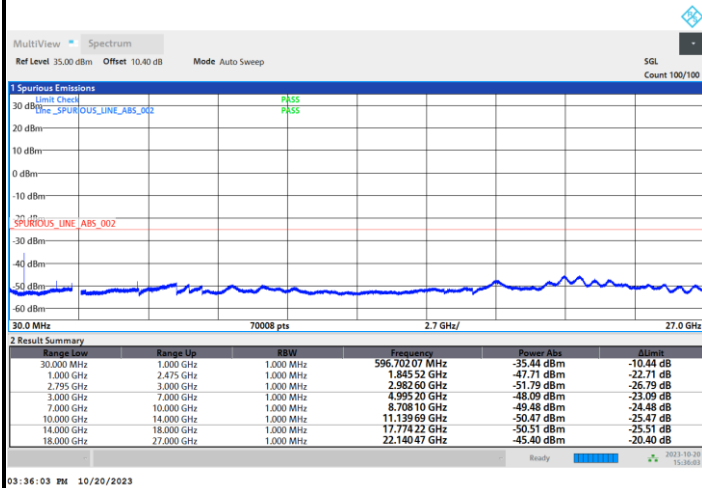




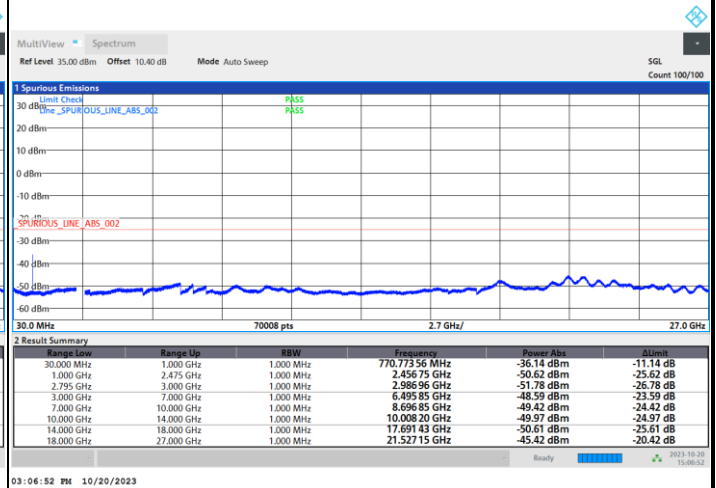
# Conducted Spurious Emission

## FR1 n41 HPUE / 20MHz / DFT-S OFDM / QPSK / 1RB1

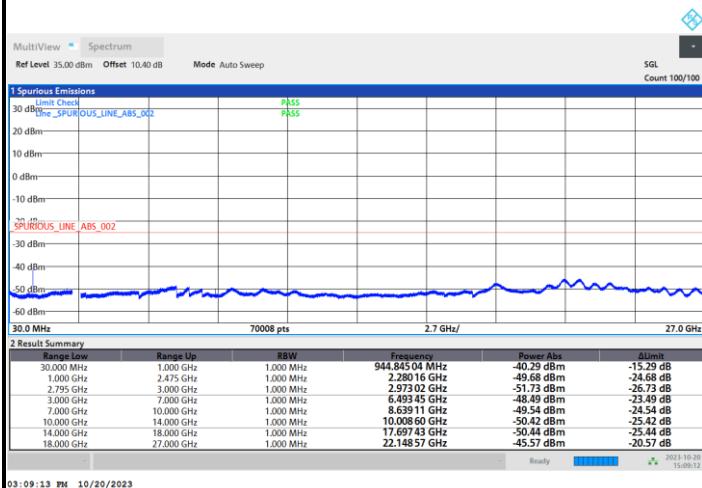
### Lowest Channel



### Middle Channel



### Highest Channel



## Frequency Stability

| Test Conditions     |                   | FR1 n41 HPUE (BPSK) / Middle Channel | Limit   |
|---------------------|-------------------|--------------------------------------|---------|
| Temperature<br>(°C) | Voltage<br>(Volt) | BW 20MHz                             | Note 2. |
|                     |                   | Deviation (ppm)                      | Result  |
| 50                  | Normal Voltage    | 0.0155                               | PASS    |
| 40                  | Normal Voltage    | 0.0083                               |         |
| 30                  | Normal Voltage    | 0.0034                               |         |
| 20(Ref.)            | Normal Voltage    | 0.0000                               |         |
| 10                  | Normal Voltage    | 0.0194                               |         |
| 0                   | Normal Voltage    | 0.0218                               |         |
| -10                 | Normal Voltage    | 0.0017                               |         |
| -20                 | Normal Voltage    | 0.0016                               |         |
| -30                 | Normal Voltage    | 0.0123                               |         |
| 20                  | Maximum Voltage   | 0.0072                               |         |
| 20                  | Normal Voltage    | 0.0000                               |         |
| 20                  | Battery End Point | 0.0194                               |         |

**Note:**

1. Normal Voltage = 3.8 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

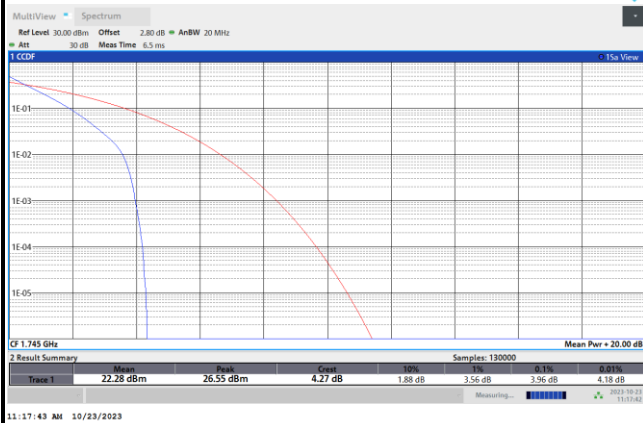
**FR1 n66****Peak-to-Average Ratio**

| Mode      | FR1 n66 / 20MHz / DFT-S OFDM |         |         |         |             |
|-----------|------------------------------|---------|---------|---------|-------------|
| Mod.      | PI/2 BPSK                    | QPSK    | 16QAM   | 64QAM   | Limit: 13dB |
| RB Size   | Full RB                      | Full RB | Full RB | Full RB | Result      |
| Middle CH | 3.96                         | 4.70    | 5.70    | 6.20    | <b>PASS</b> |
| Mode      | FR1 n66 / 20MHz / DFT-S OFDM |         |         |         |             |
| Mod.      | 256QAM                       |         |         |         | Limit: 13dB |
| RB Size   | Full RB                      |         |         |         | Result      |
| Middle CH | 6.68                         |         |         |         | <b>PASS</b> |

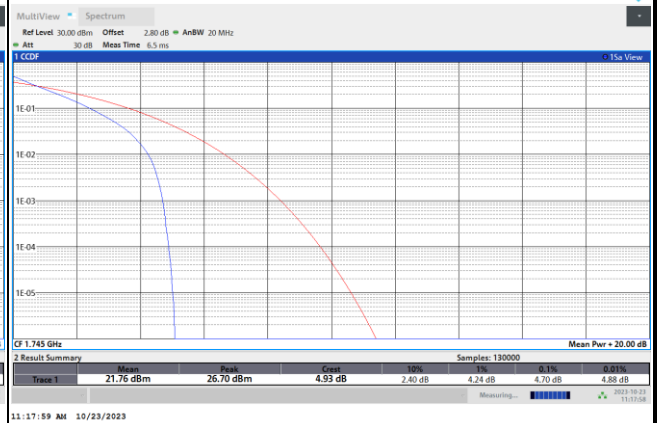


## FR1 n66 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

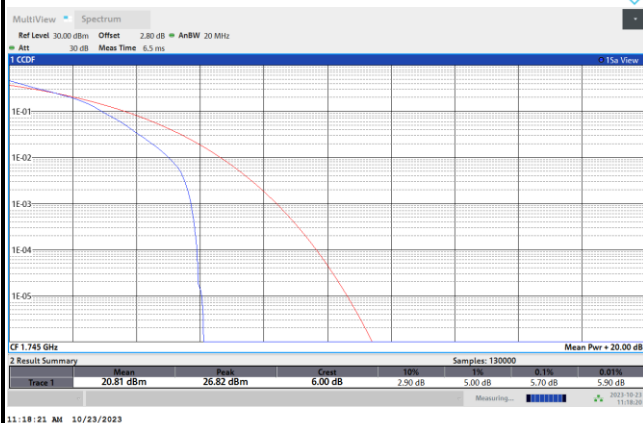
## PI/2 BPSK



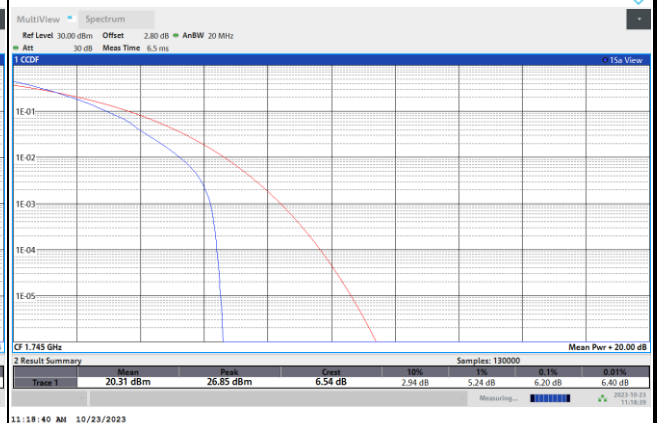
## QPSK



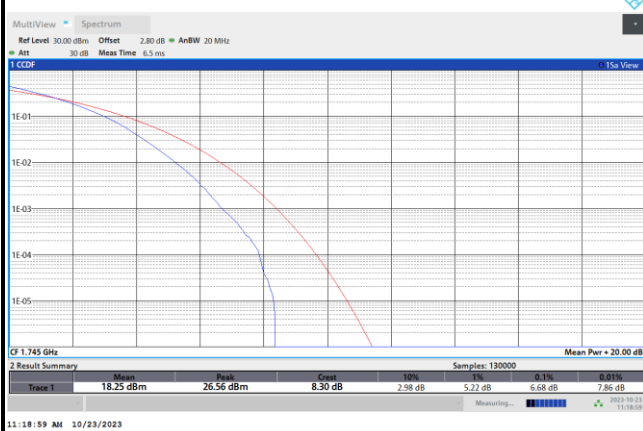
## 16QAM



## 64QAM



## 256QAM



**26dB Bandwidth**

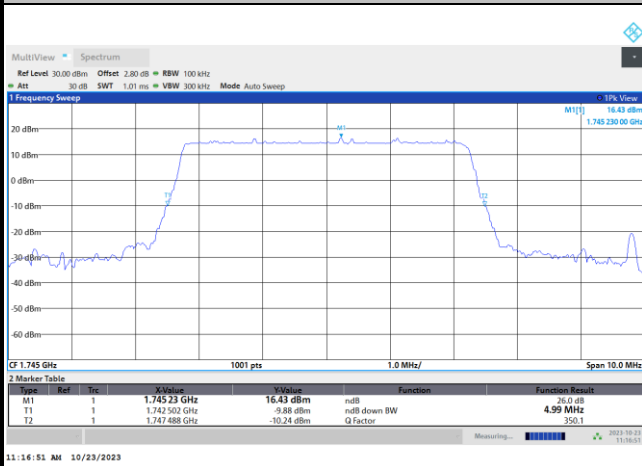
| Mode      | FR1 n66 : 26dB BW(MHz) / DFT-S OFDM |  |           |  |           |  |           |  |
|-----------|-------------------------------------|--|-----------|--|-----------|--|-----------|--|
| BW        | 5MHz                                |  | 10MHz     |  | 15MHz     |  | 20MHz     |  |
| Mod.      | PI/2 BPSK                           |  | PI/2 BPSK |  | PI/2 BPSK |  | PI/2 BPSK |  |
| Middle CH | 4.99                                |  | 9.51      |  | 14.39     |  | 18.94     |  |
| BW        | 25MHz                               |  | 30MHz     |  | 40MHz     |  |           |  |
| Mod.      | PI/2 BPSK                           |  | PI/2 BPSK |  | PI/2 BPSK |  |           |  |
| Middle CH | -                                   |  | -         |  | 41.08     |  |           |  |

| Mode      | FR1 n66 : 26dB BW(MHz) / CP OFDM |        |       |        |       |        |       |        |
|-----------|----------------------------------|--------|-------|--------|-------|--------|-------|--------|
| BW        | 5MHz                             |        | 10MHz |        | 15MHz |        | 20MHz |        |
| Mod.      | QPSK                             | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  |
| Middle CH | 5.00                             | 4.99   | 9.99  | 9.91   | 15.11 | 15.11  | 19.98 | 19.98  |
| Mod.      | 64QAM                            | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM |
| Middle CH | 4.99                             | 4.97   | 9.97  | 9.93   | 15.02 | 15.11  | 20.02 | 19.94  |
| BW        | 25MHz                            |        | 30MHz |        | 40MHz |        |       |        |
| Mod.      | QPSK                             | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  |       |        |
| Middle CH | -                                | -      | -     | -      | 41.16 | 41.16  |       |        |
| Mod.      | 64QAM                            | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM |       |        |
| Middle CH | -                                | -      | -     | -      | 41.08 | 41.08  |       |        |



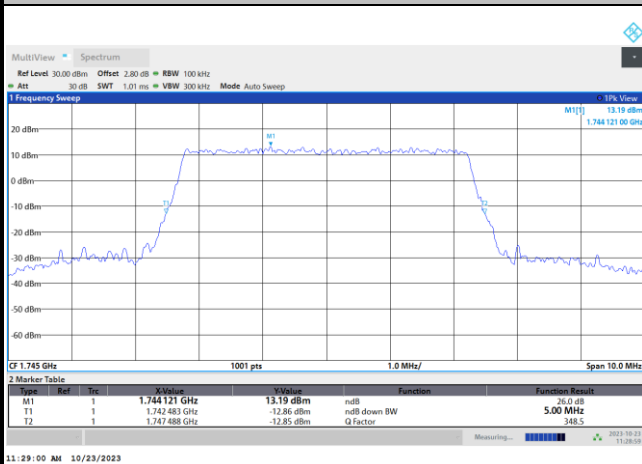
## FR1 n66 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

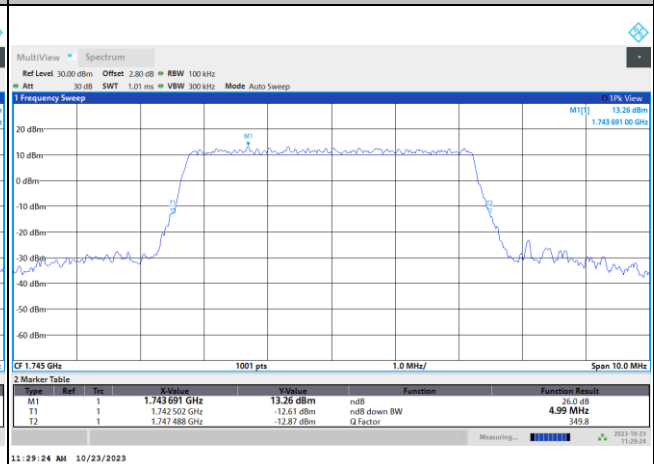


## FR1 n66 / 5MHz / CP OFDM / Middle Channel / Full RB

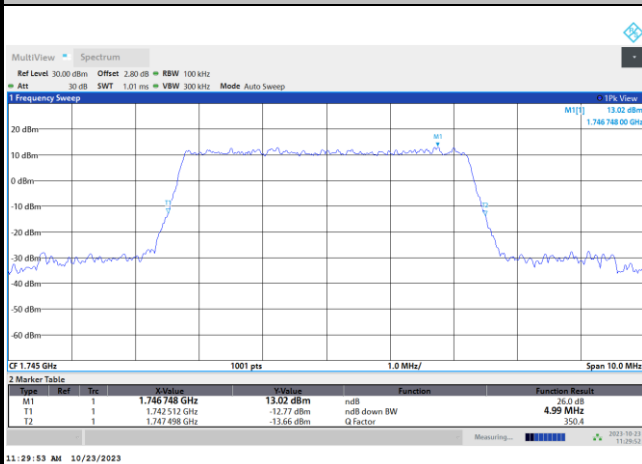
## QPSK



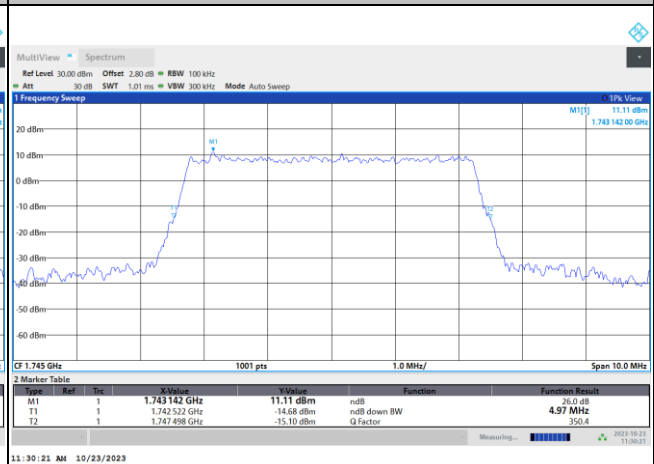
## 16QAM



## 64QAM



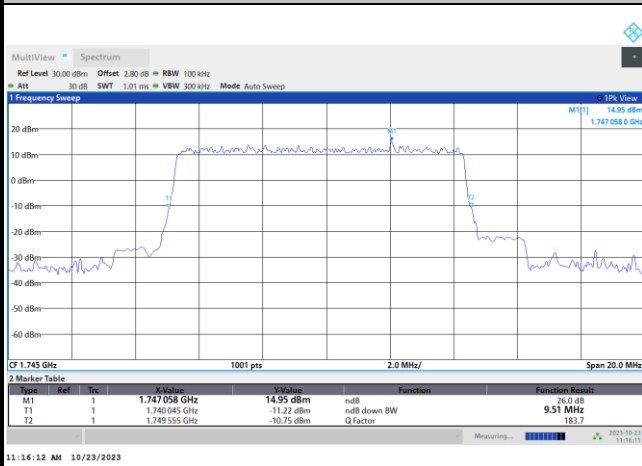
## 256QAM





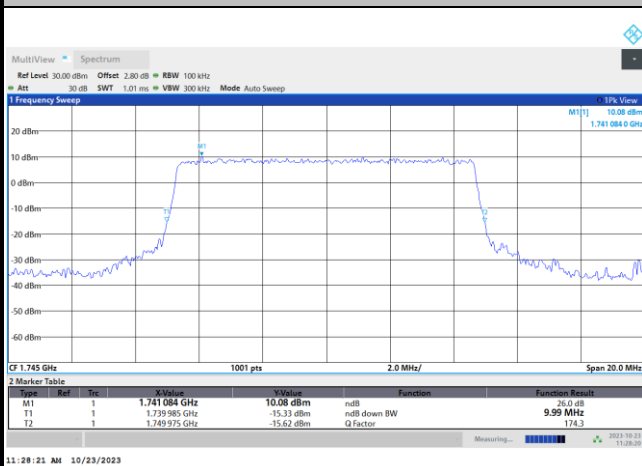
## FR1 n66 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

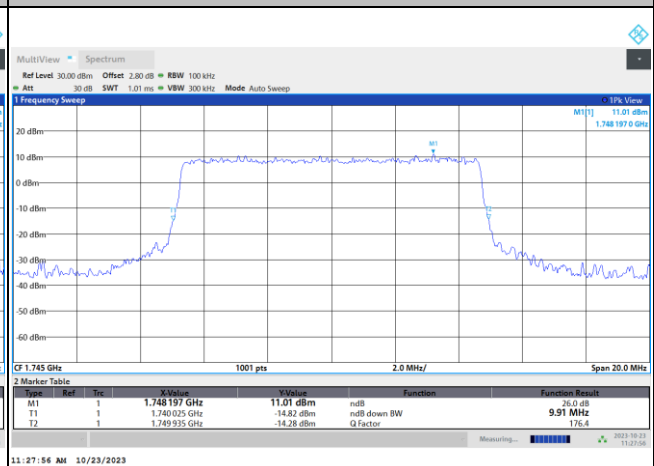


## FR1 n66 / 10MHz / CP OFDM / Middle Channel / Full RB

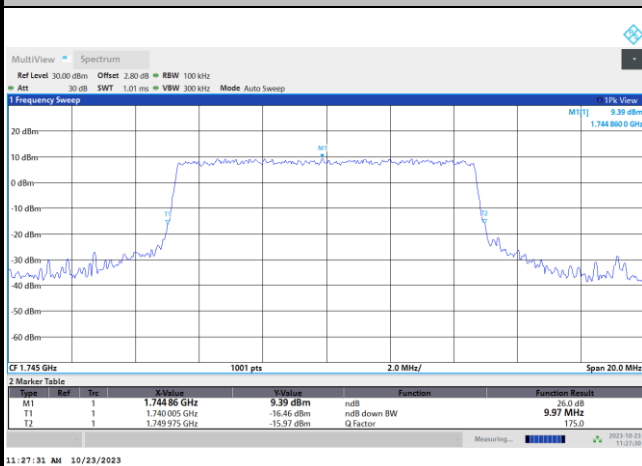
## QPSK



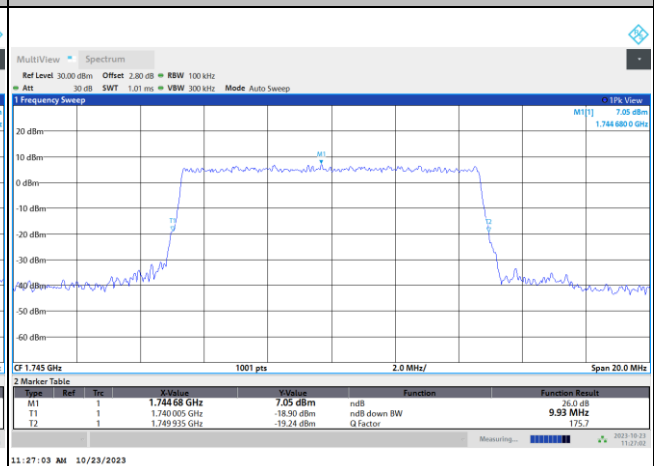
## 16QAM



## 64QAM



## 256QAM

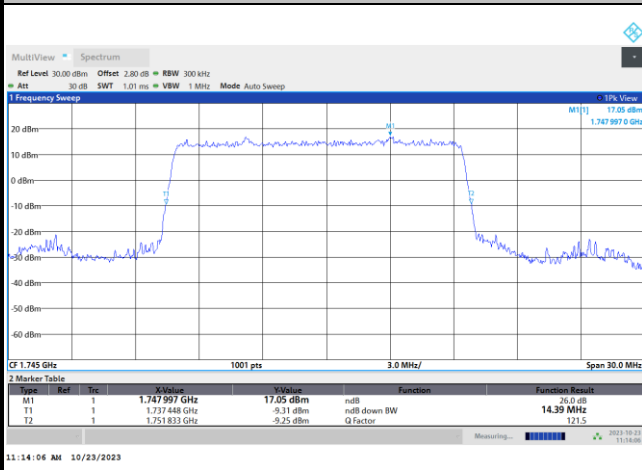






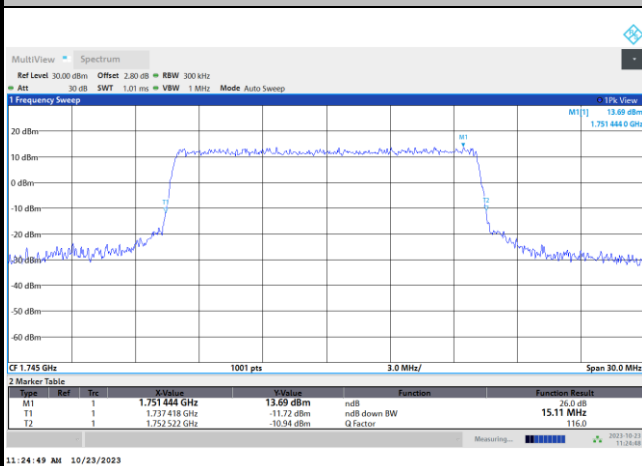
## FR1 n66 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

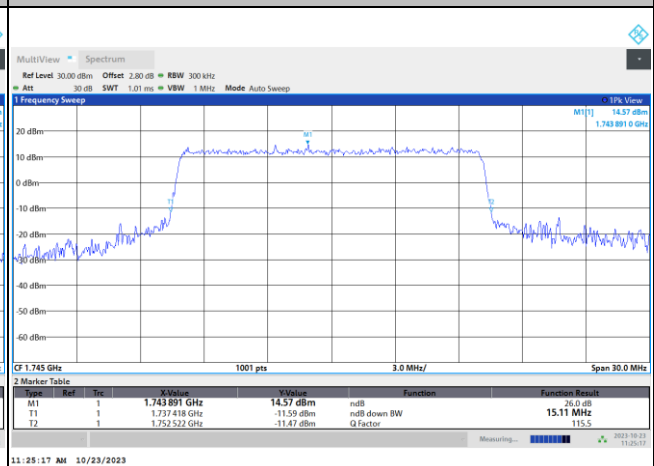


## FR1 n66 / 15MHz / CP OFDM / Middle Channel / Full RB

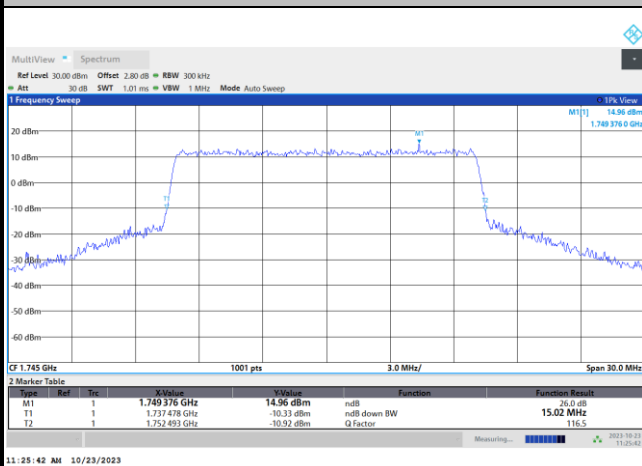
## QPSK



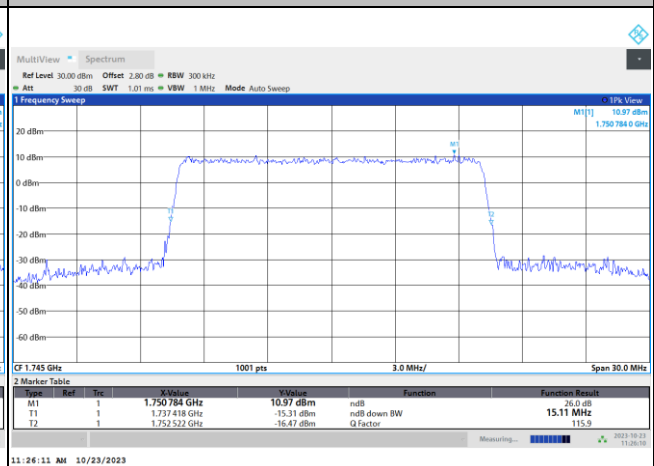
## 16QAM



## 64QAM



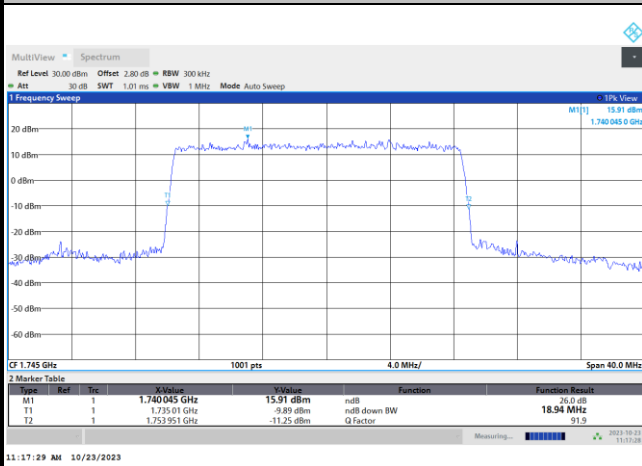
## 256QAM





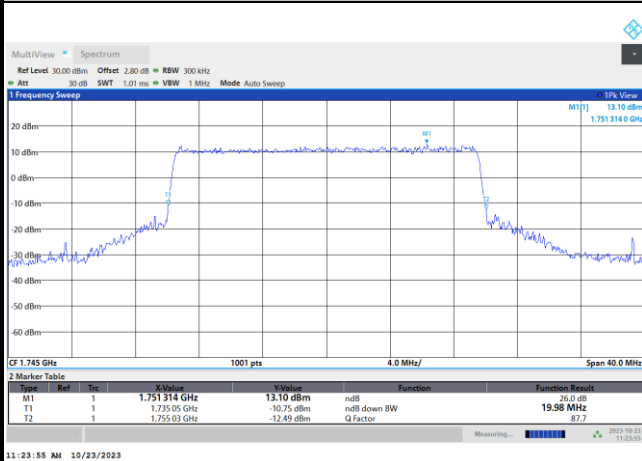
## FR1 n66 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

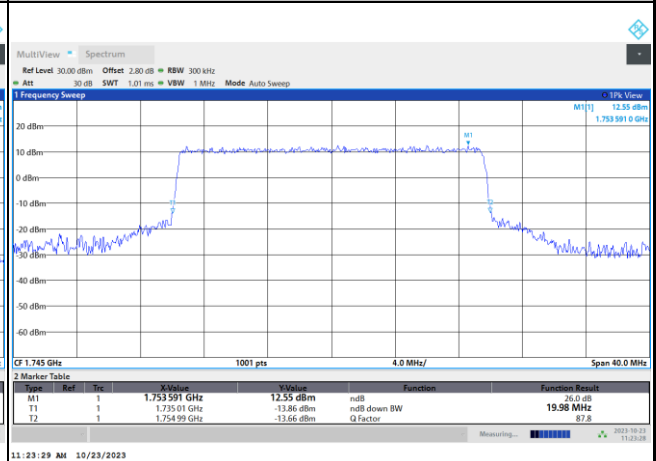


## FR1 n66 / 20MHz / CP OFDM / Middle Channel / Full RB

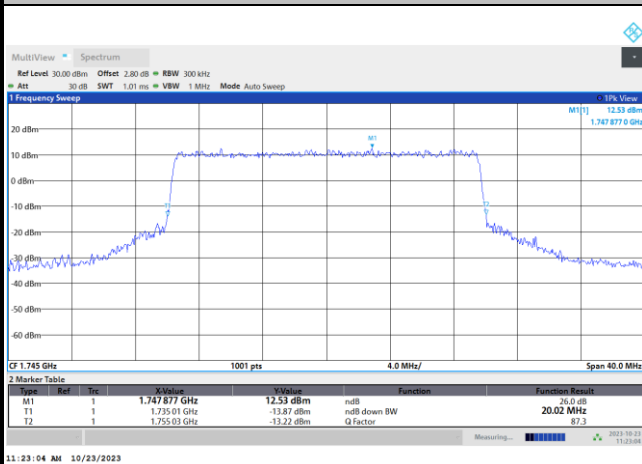
## QPSK



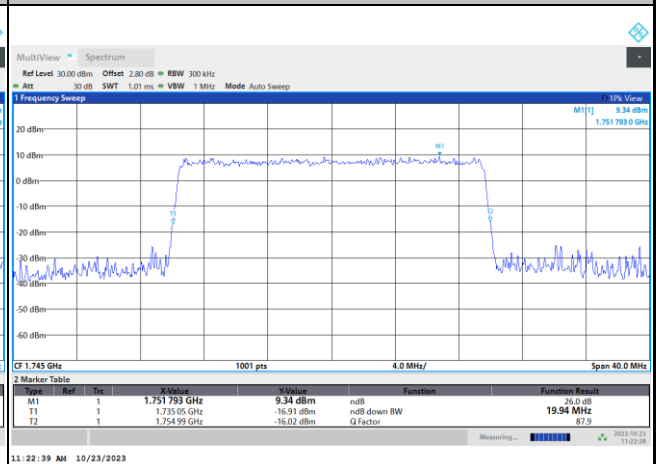
## 16QAM



## 64QAM



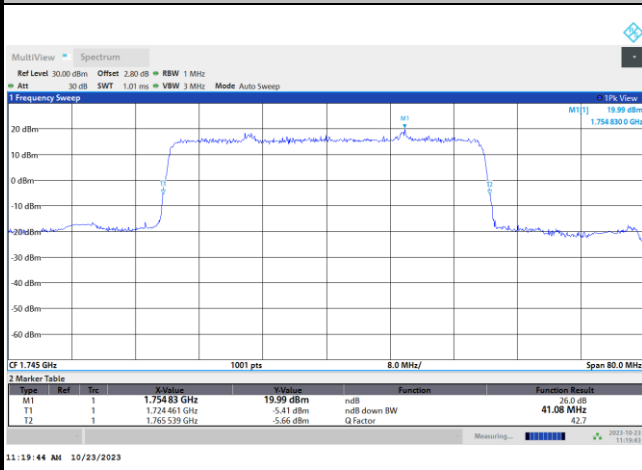
## 256QAM





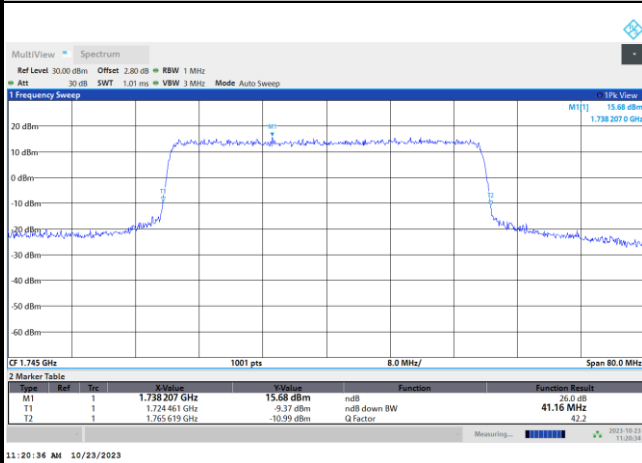
## FR1 n66 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

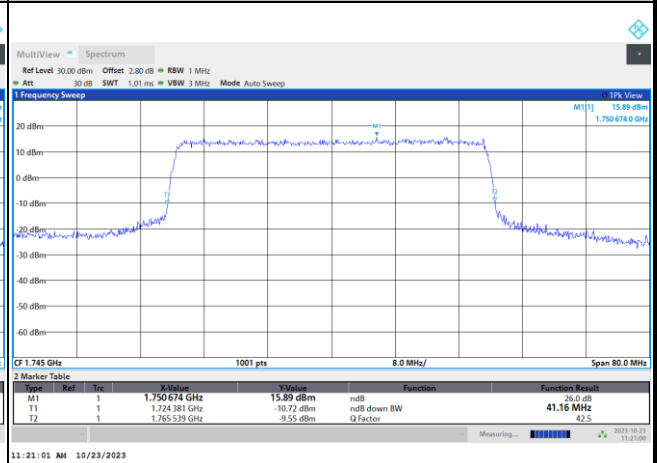


## FR1 n66 / 40MHz / CP OFDM / Middle Channel / Full RB

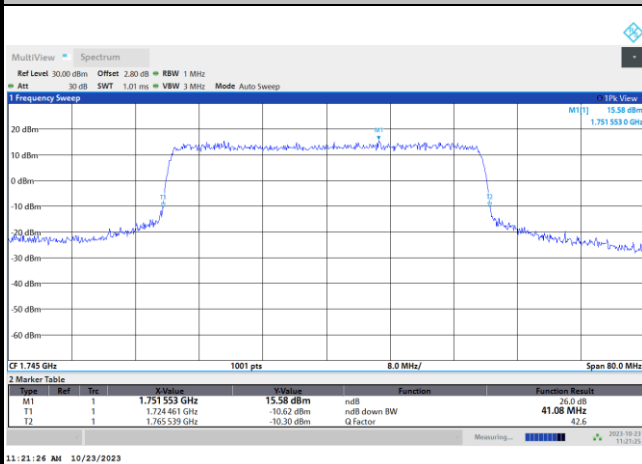
## QPSK



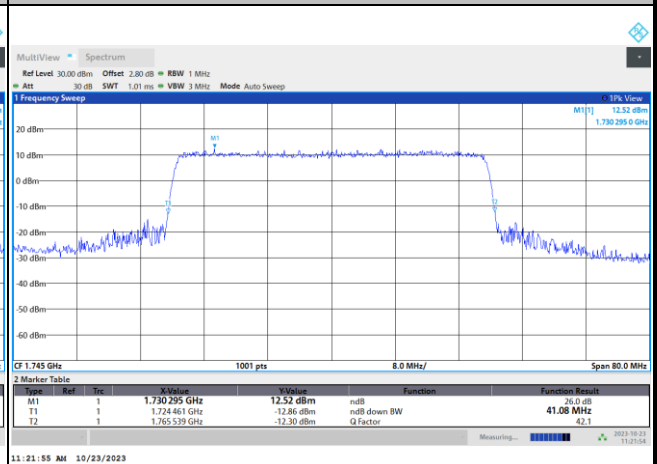
## 16QAM



## 64QAM



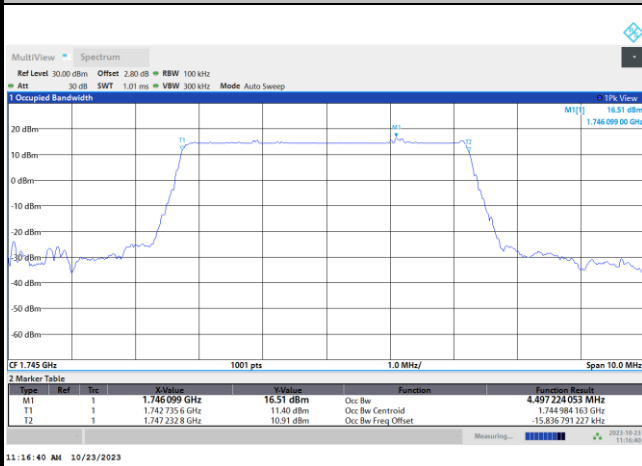
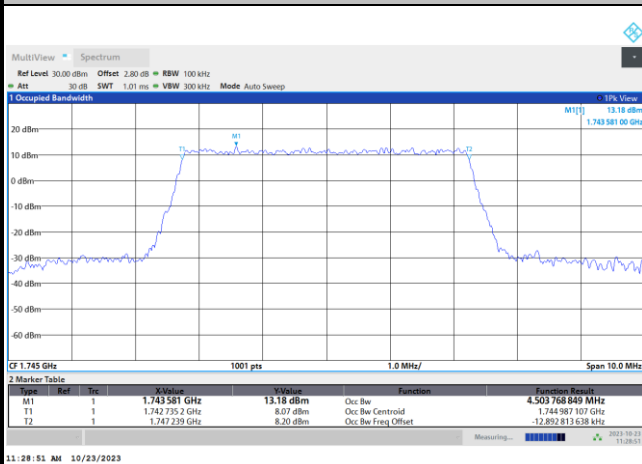
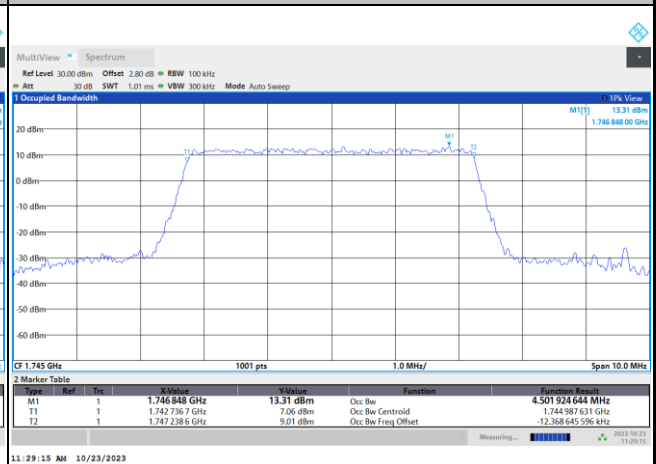
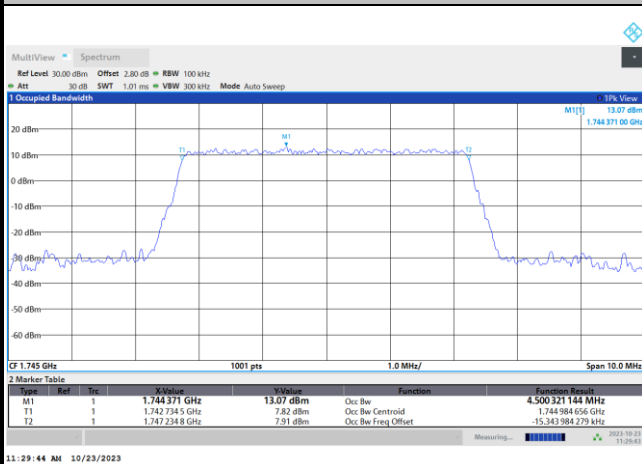
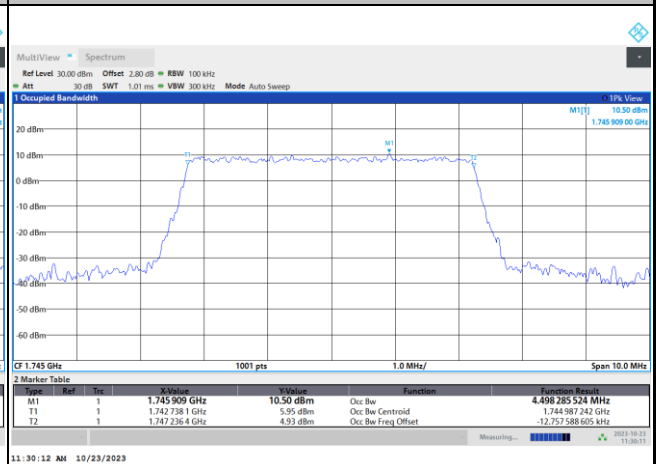
## 256QAM



**Occupied Bandwidth**

| Mode      | FR1 n66 : 99%OBW(MHz) / DFT-S OFDM |  |           |  |           |  |           |  |
|-----------|------------------------------------|--|-----------|--|-----------|--|-----------|--|
| BW        | 5MHz                               |  | 10MHz     |  | 15MHz     |  | 20MHz     |  |
| Mod.      | PI/2 BPSK                          |  | PI/2 BPSK |  | PI/2 BPSK |  | PI/2 BPSK |  |
| Middle CH | 4.49                               |  | 8.93      |  | 13.47     |  | 17.87     |  |
| BW        | 25MHz                              |  | 30MHz     |  | 40MHz     |  |           |  |
| Mod.      | PI/2 BPSK                          |  | PI/2 BPSK |  | PI/2 BPSK |  |           |  |
| Middle CH | -                                  |  | -         |  | 38.80     |  |           |  |

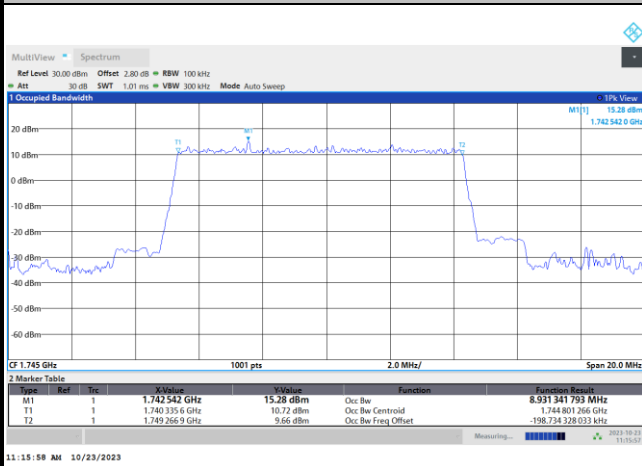
| Mode      | FR1 n66 : 99%OBW (MHz) / CP OFDM |        |       |        |       |        |       |        |
|-----------|----------------------------------|--------|-------|--------|-------|--------|-------|--------|
| BW        | 5MHz                             |        | 10MHz |        | 15MHz |        | 20MHz |        |
| Mod.      | QPSK                             | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  |
| Middle CH | 4.50                             | 4.50   | 9.28  | 9.27   | 14.14 | 14.20  | 18.93 | 18.94  |
| Mod.      | 64QAM                            | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM |
| Middle CH | 4.50                             | 4.49   | 9.28  | 9.28   | 14.17 | 14.13  | 18.95 | 18.93  |
| BW        | 25MHz                            |        | 30MHz |        | 40MHz |        |       |        |
| Mod.      | QPSK                             | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  |       |        |
| Middle CH | -                                | -      | -     | -      | 38.76 | 38.73  |       |        |
| Mod.      | 64QAM                            | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM |       |        |
| Middle CH | -                                | -      | -     | -      | 38.76 | 38.77  |       |        |

**FR1 n66 / 5MHz / DFT-S OFDM / Middle Channel / Full RB**
**PI/2 BPSK**

**FR1 n66 / 5MHz / CP OFDM / Middle Channel / Full RB**
**QPSK**

**16QAM**

**64QAM**

**256QAM**




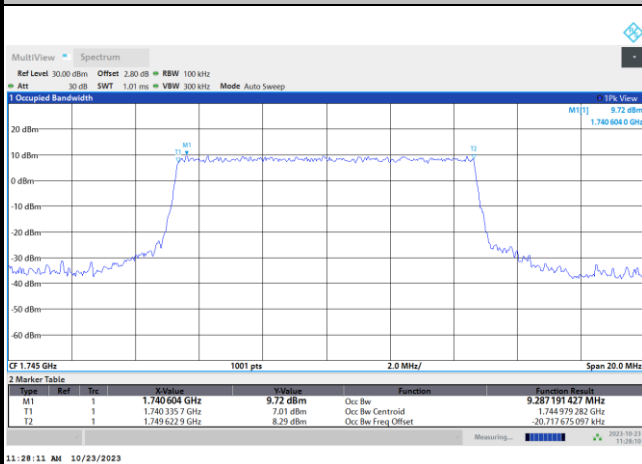
## FR1 n66 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

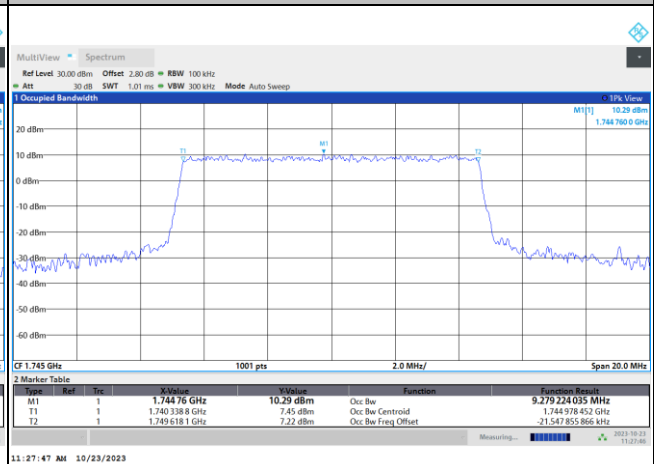


## FR1 n66 / 10MHz / CP OFDM / Middle Channel / Full RB

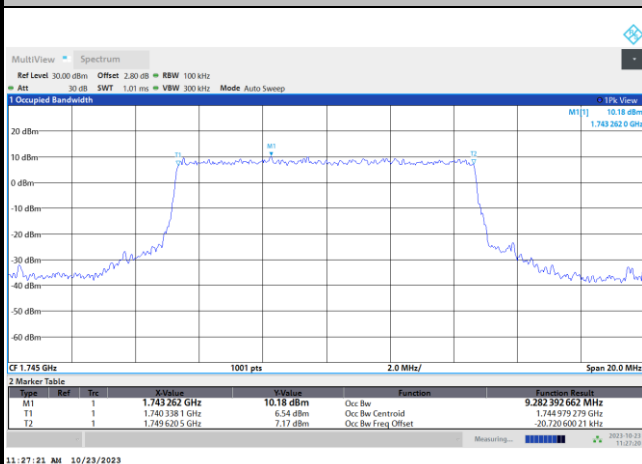
## QPSK



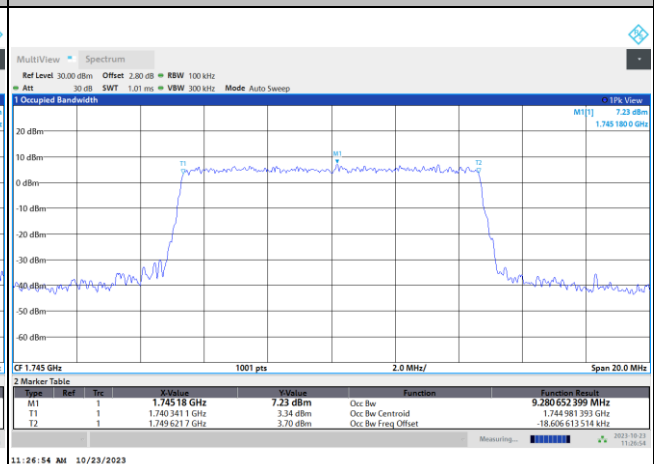
## 16QAM



## 64QAM



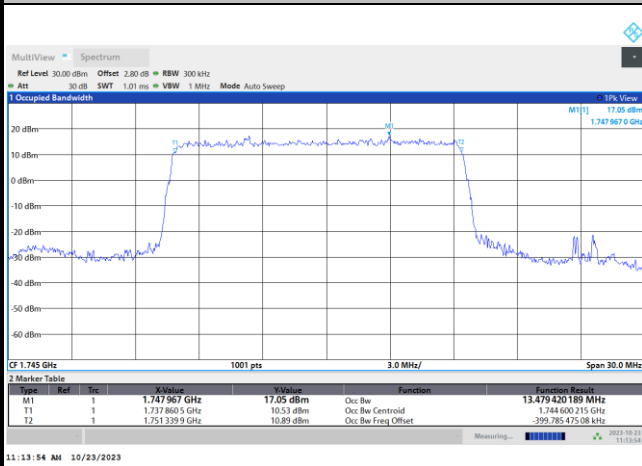
## 256QAM





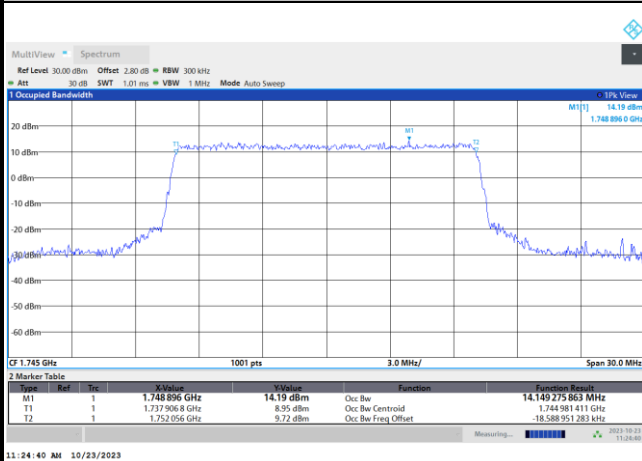
## FR1 n66 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

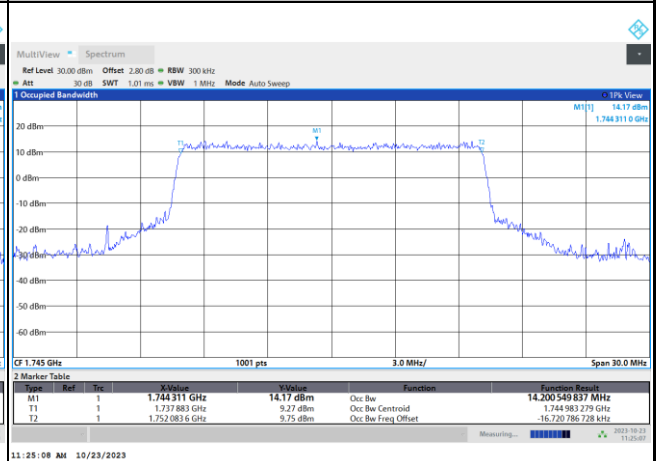


## FR1 n66 / 15MHz / CP OFDM / Middle Channel / Full RB

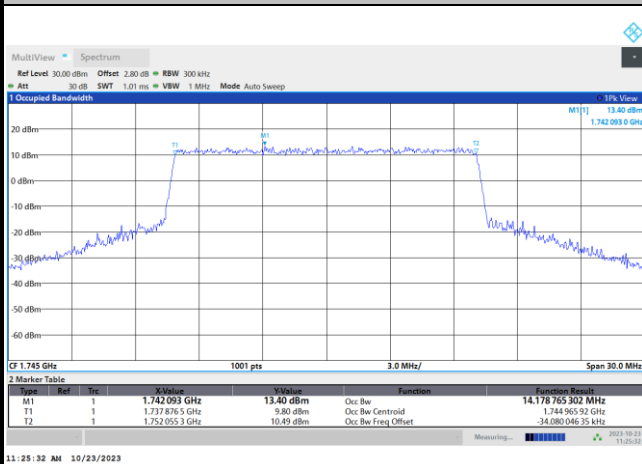
## QPSK



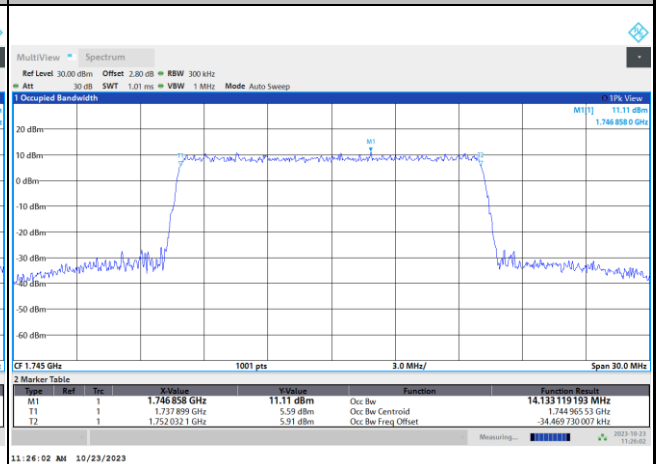
## 16QAM

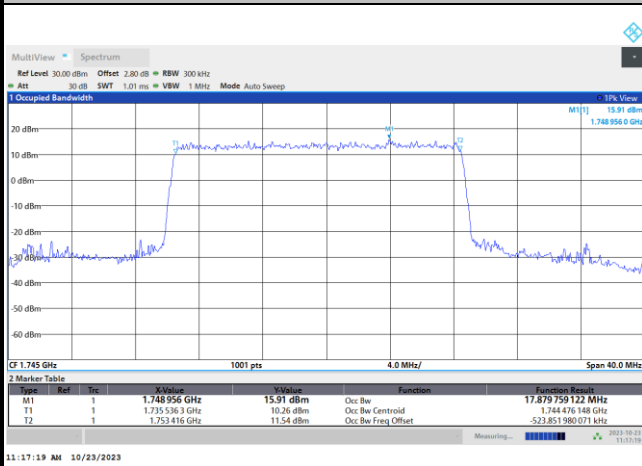
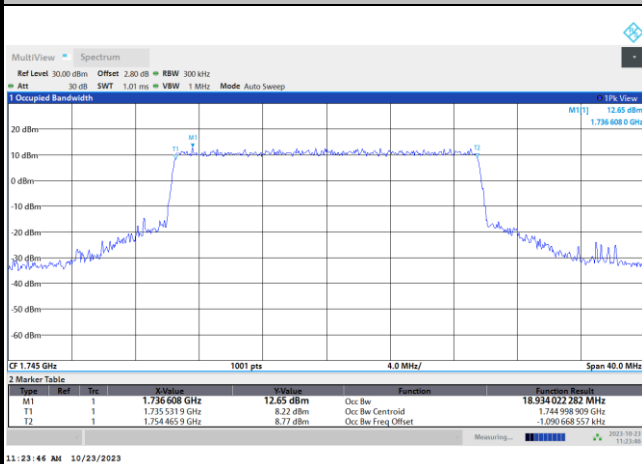
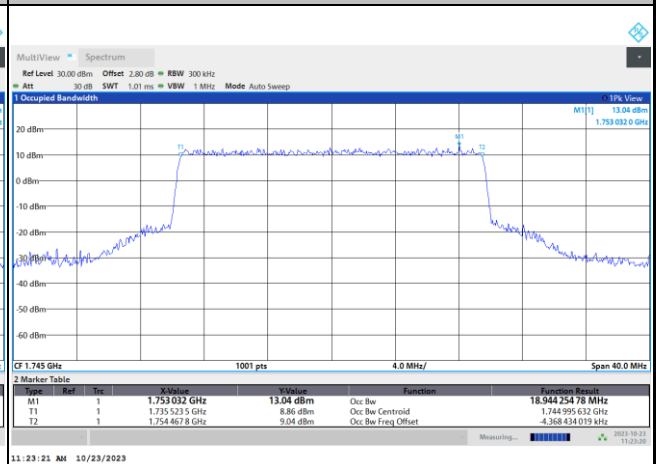
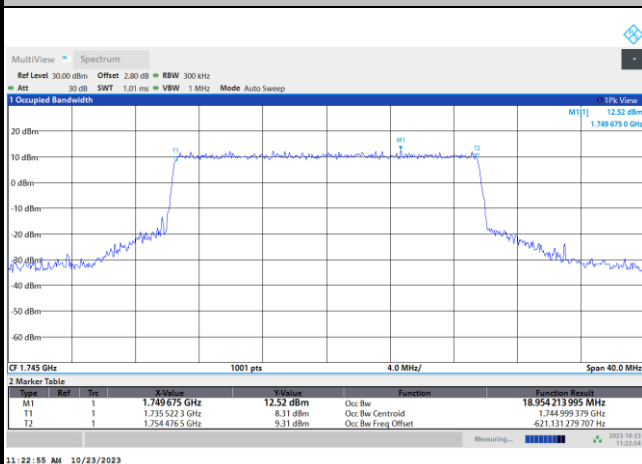


## 64QAM



## 256QAM



**FR1 n66 / 20MHz / DFT-S OFDM / Middle Channel / Full RB**
**PI/2 BPSK**

**FR1 n66 / 20MHz / CP OFDM / Middle Channel / Full RB**
**QPSK**

**16QAM**

**64QAM**

**256QAM**
