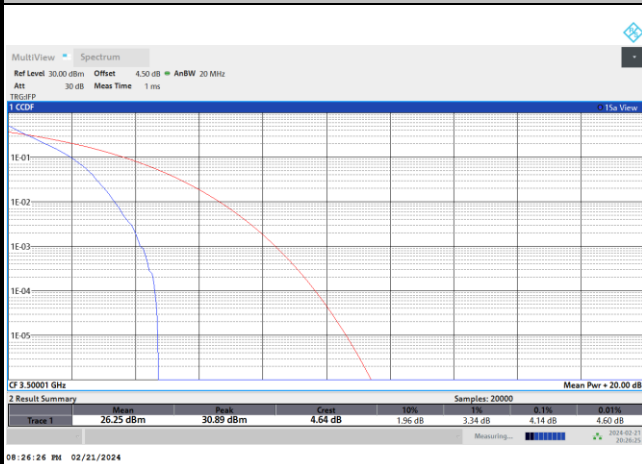


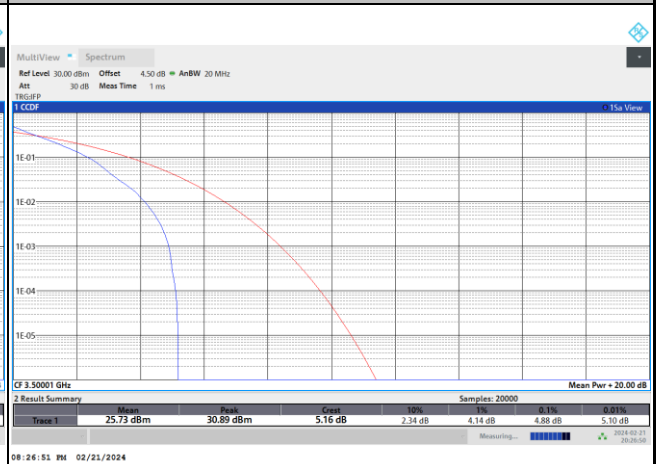


## FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

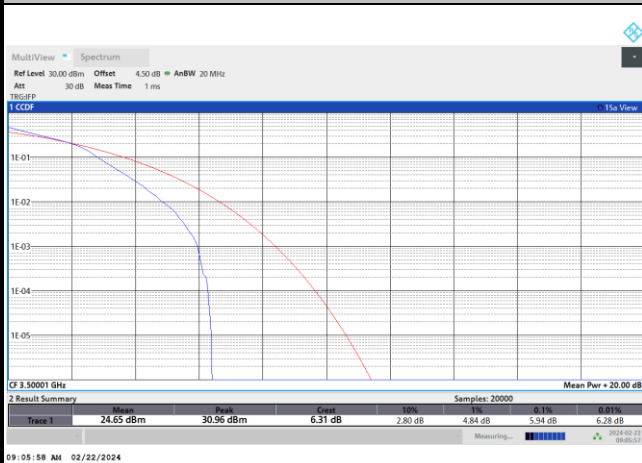
## PI/2 BPSK



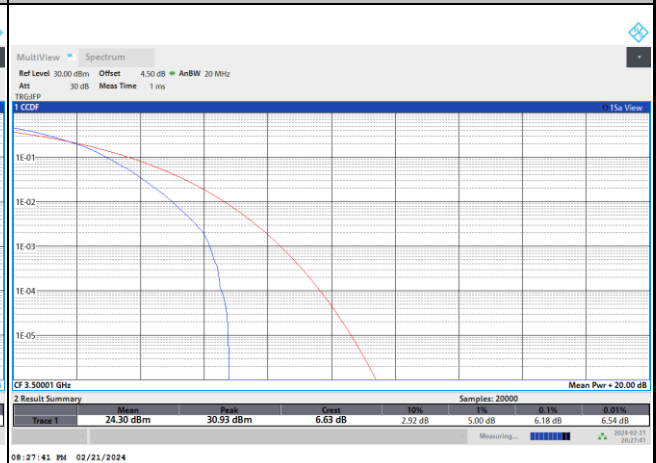
## QPSK



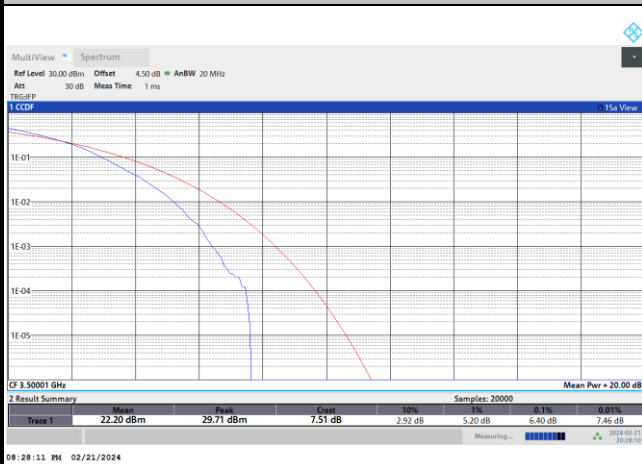
## 16QAM



## 64QAM



## 256QAM



**26dB Bandwidth**

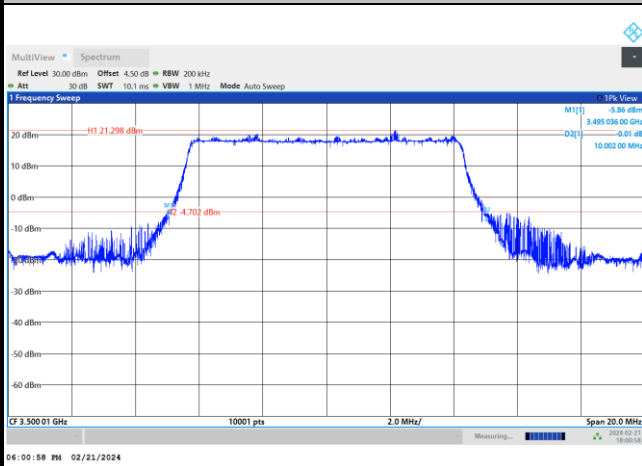
| Mode      | FR1 n77 : 26dB BW(MHz) / DFT-S OFDM |           |           |           |           |           |           |           |
|-----------|-------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| BW        | 10MHz                               | 15MHz     | 20MHz     | 25MHz     | 30MHz     | 40MHz     | 50MHz     | 60MHz     |
| Mod.      | PI/2 BPSK                           | PI/2 BPSK | PI/2 BPSK | PI/2 BPSK | PI/2 BPSK | PI/2 BPSK | PI/2 BPSK | PI/2 BPSK |
| Middle CH | 10.00                               | 14.88     | 20.36     | -         | 31.67     | 40.27     | 50.32     | 63.37     |
| BW        | 70MHz                               | 80MHz     | 90MHz     | 100MHz    |           |           |           |           |
| Mod.      | PI/2 BPSK                           | PI/2 BPSK | PI/2 BPSK | PI/2 BPSK |           |           |           |           |
| Middle CH | 70.54                               | 81.71     | 92.07     | 101.58    |           |           |           |           |

| Mode      | FR1 n77 : 26dB BW(MHz) / CP OFDM |        |       |        |       |        |        |        |
|-----------|----------------------------------|--------|-------|--------|-------|--------|--------|--------|
| BW        | 10MHz                            |        | 15MHz |        | 20MHz |        | 25MHz  |        |
| Mod.      | QPSK                             | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 10.65                            | 10.24  | 18.23 | 17.46  | 24.49 | 24.38  | -      | -      |
| Mod.      | 64QAM                            | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 13.31                            | 10.16  | 17.05 | 15.47  | 21.70 | 20.70  | -      | -      |
| BW        | 30MHz                            |        | 40MHz |        | 50MHz |        | 60MHz  |        |
| Mod.      | QPSK                             | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 32.70                            | 33.73  | 43.68 | 44.64  | 52.70 | 52.54  | 63.25  | 62.92  |
| Mod.      | 64QAM                            | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 30.94                            | 33.50  | 41.52 | 43.48  | 55.14 | 50.53  | 64.60  | 63.15  |
| BW        | 70MHz                            |        | 80MHz |        | 90MHz |        | 100MHz |        |
| Mod.      | QPSK                             | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 72.94                            | 73.13  | 81.08 | 80.67  | 93.42 | 93.06  | 103.38 | 103.86 |
| Mod.      | 64QAM                            | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 72.66                            | 73.08  | 81.02 | 80.97  | 94.77 | 92.57  | 104.18 | 103.82 |



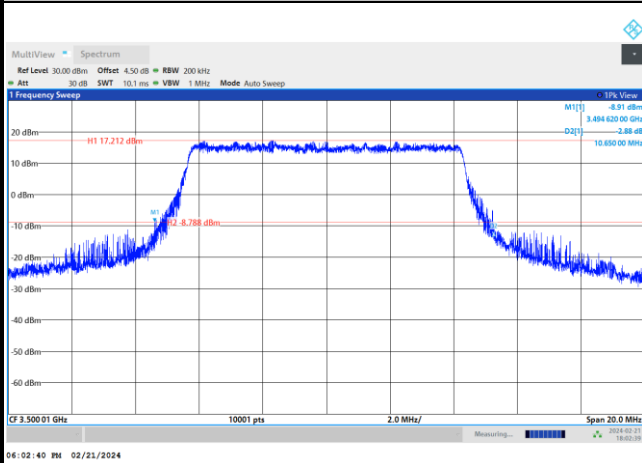
## FR1 n77 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

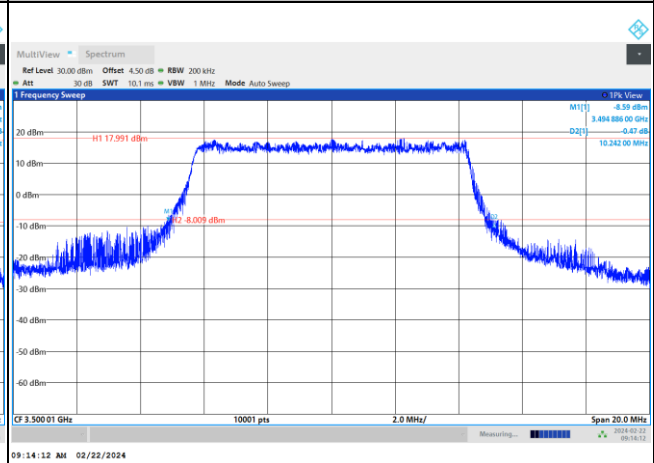


## FR1 n77 / 10MHz / CP OFDM / Middle Channel / Full RB

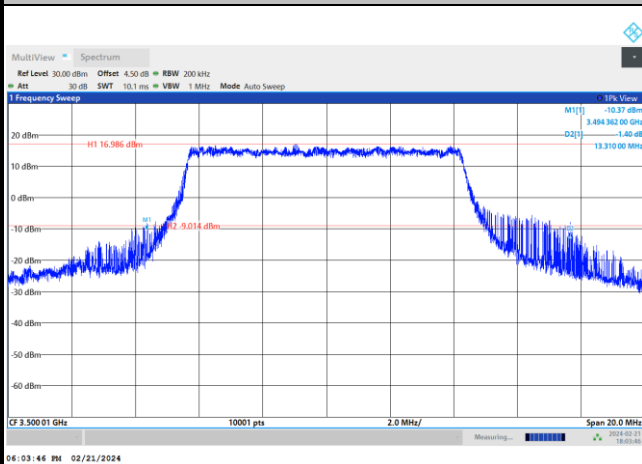
## QPSK



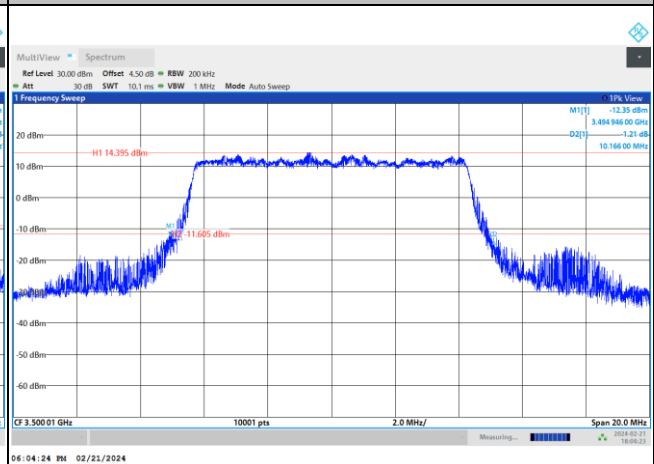
## 16QAM



## 64QAM



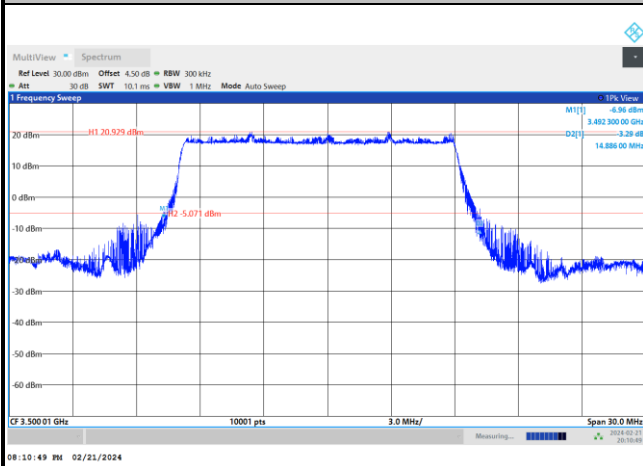
## 256QAM





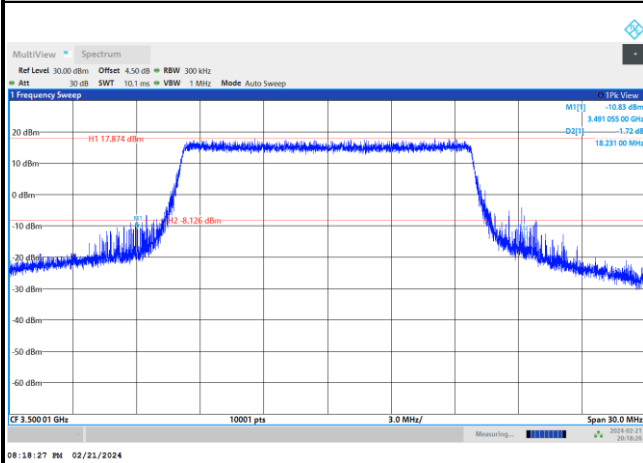
## FR1 n77 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

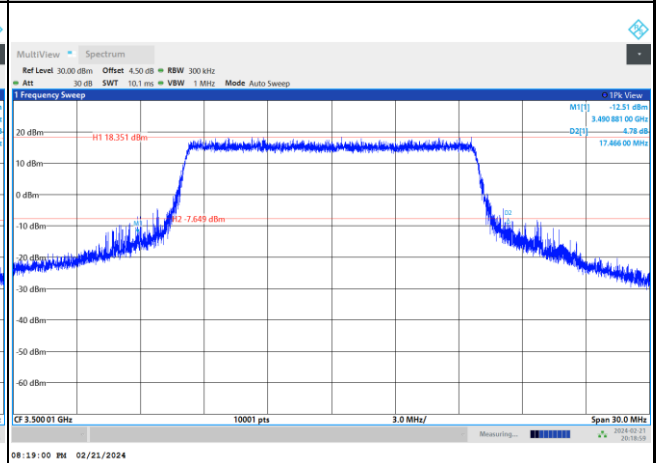


## FR1 n77 / 15MHz / CP OFDM / Middle Channel / Full RB

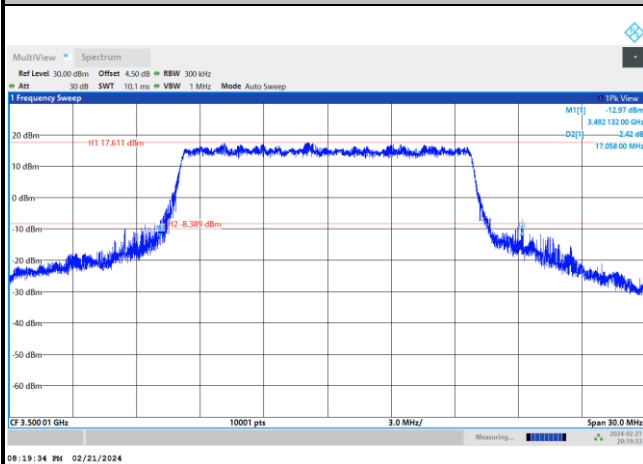
## QPSK



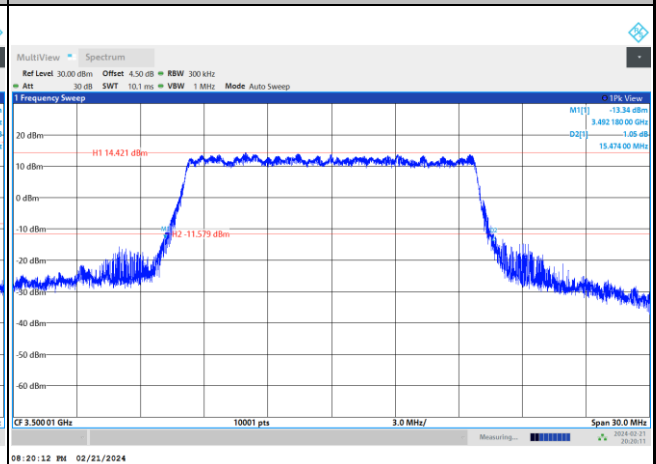
## 16QAM



## 64QAM



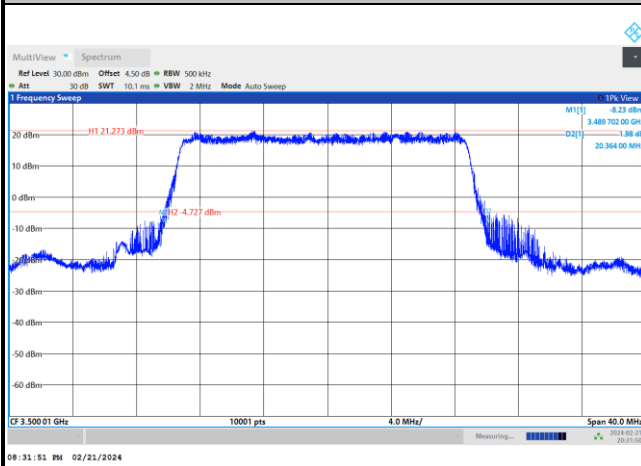
## 256QAM





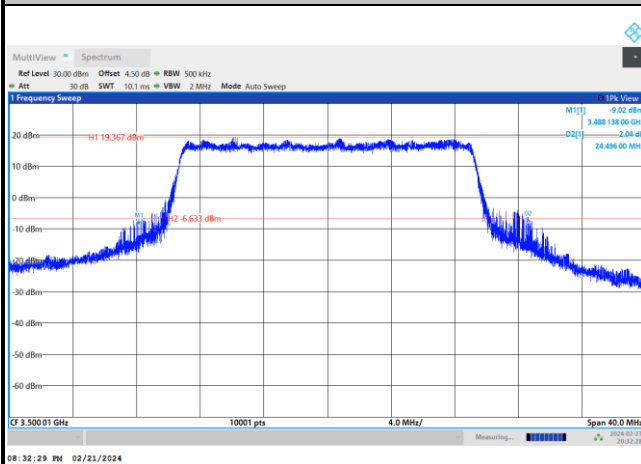
## FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

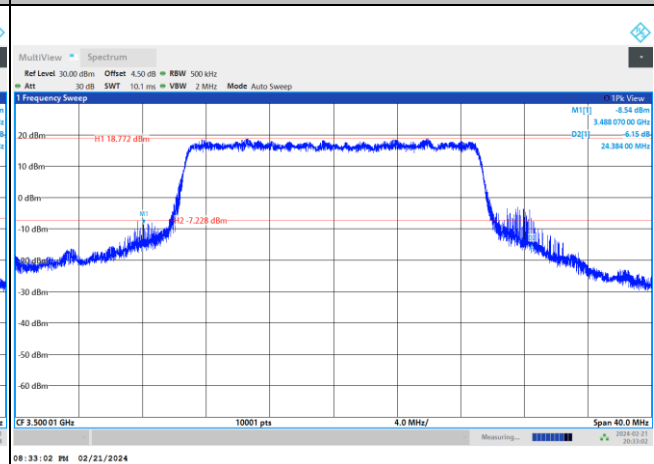


## FR1 n77 / 20MHz / CP OFDM / Middle Channel / Full RB

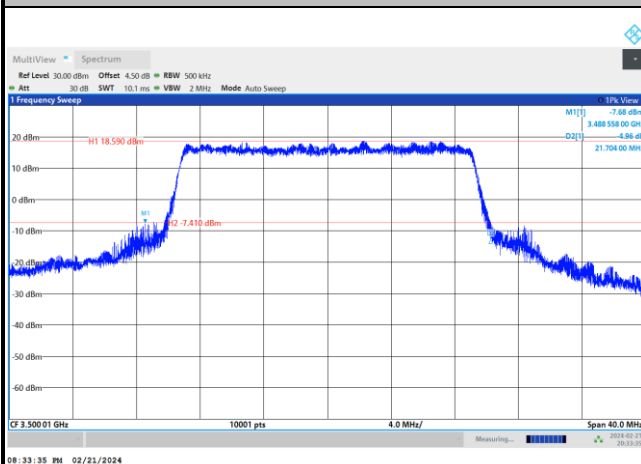
## QPSK



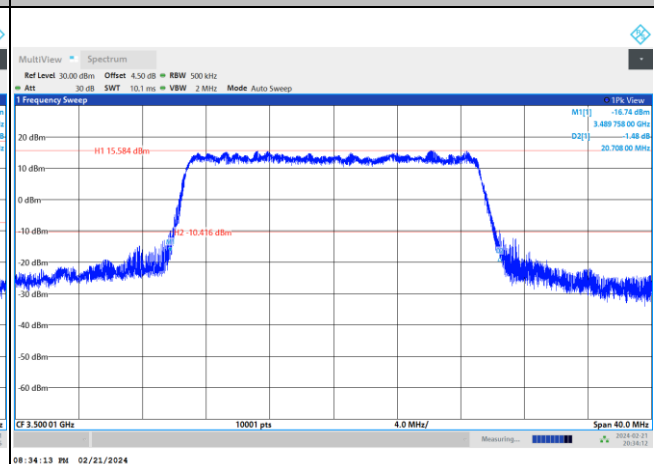
## 16QAM



## 64QAM



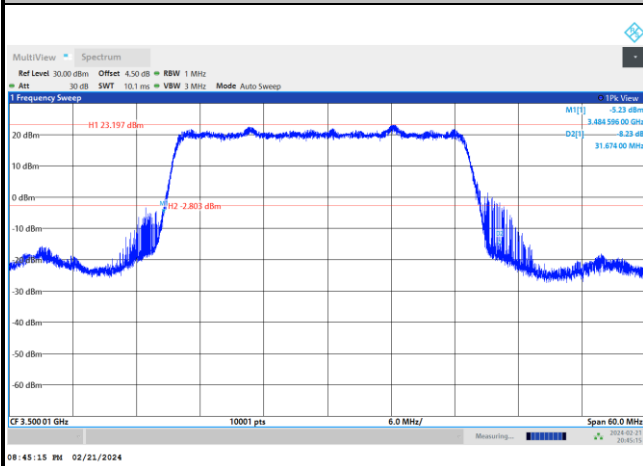
## 256QAM





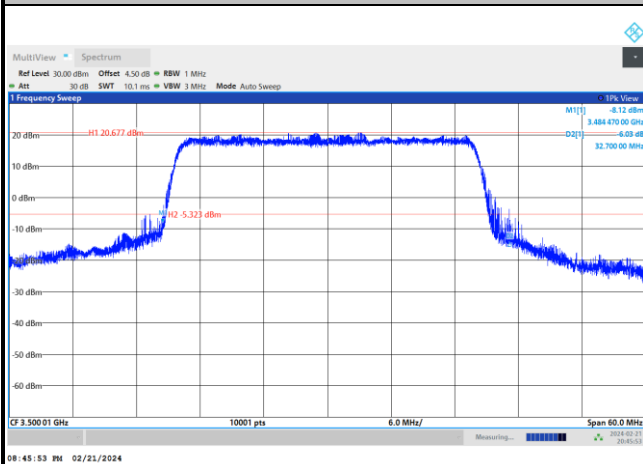
## FR1 n77 / 30MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

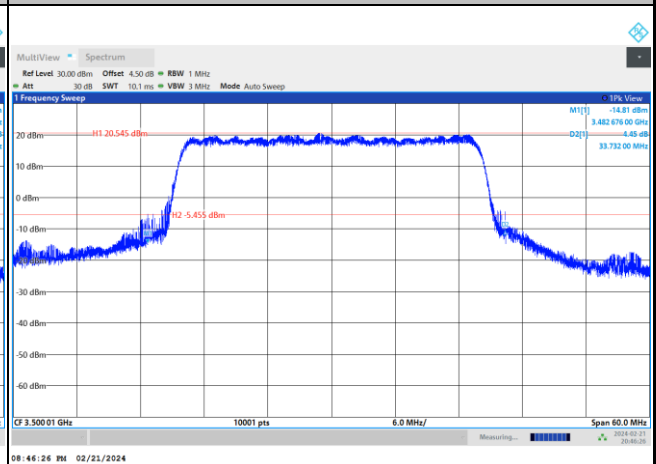


## FR1 n77 / 30MHz / CP OFDM / Middle Channel / Full RB

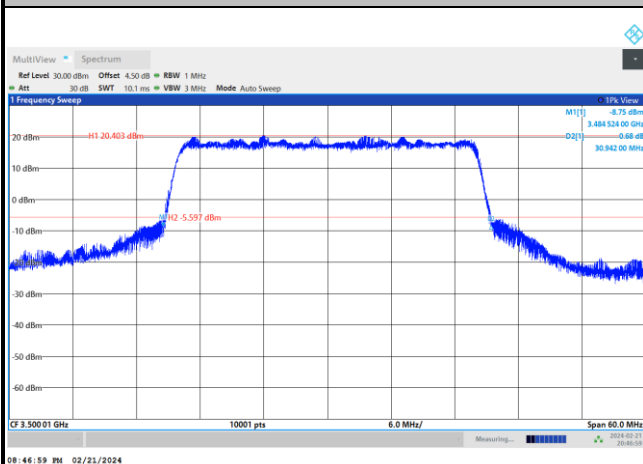
## QPSK



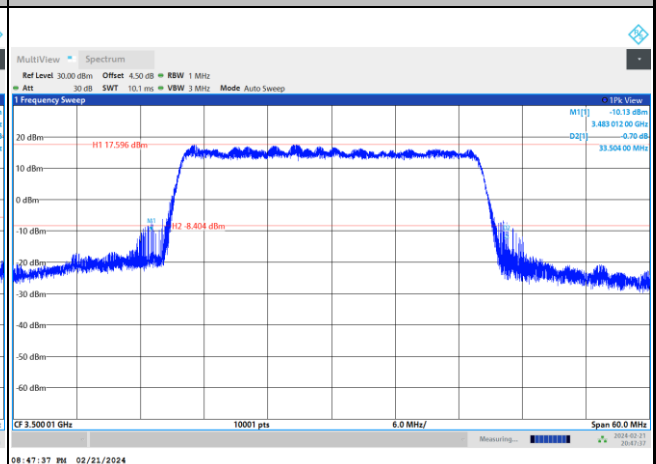
## 16QAM



## 64QAM



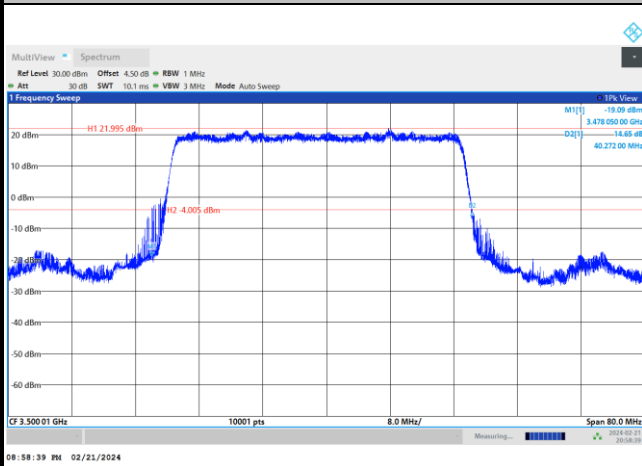
## 256QAM





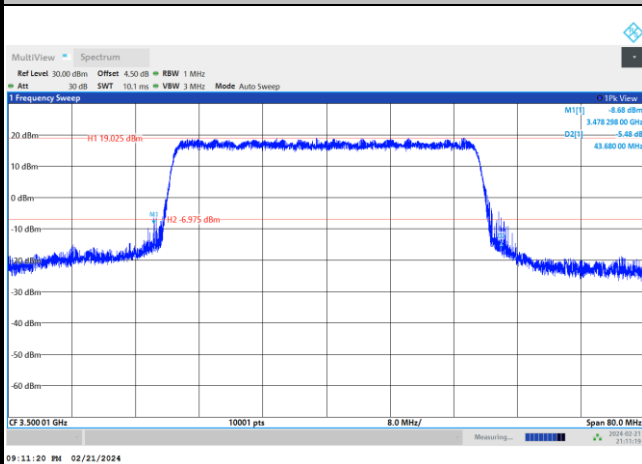
## FR1 n77 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

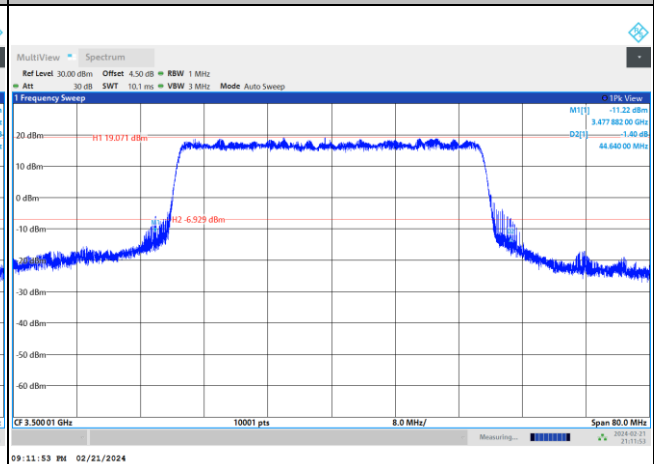


## FR1 n77 / 40MHz / CP OFDM / Middle Channel / Full RB

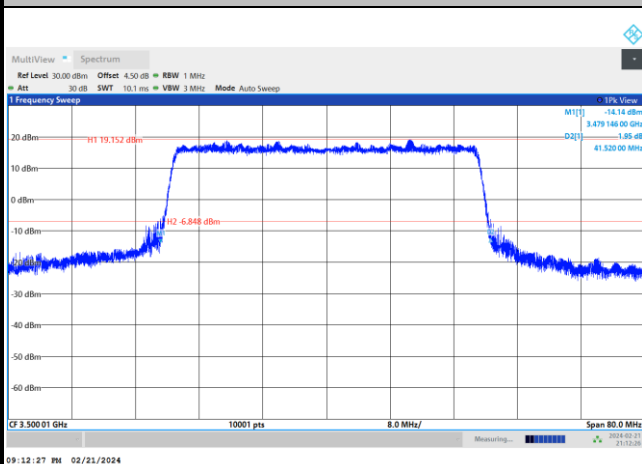
**QPSK**



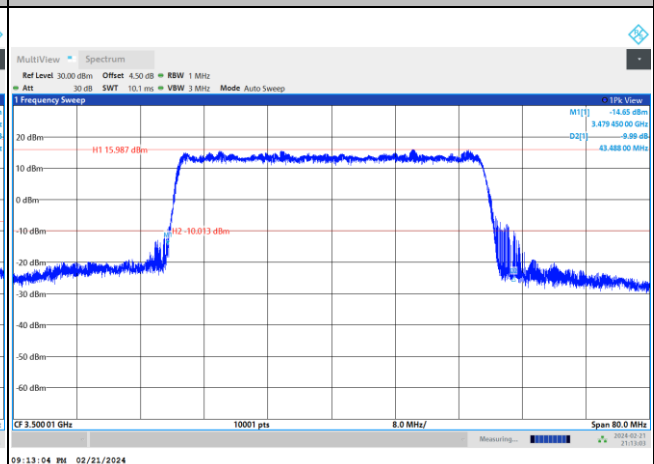
## 16QAM

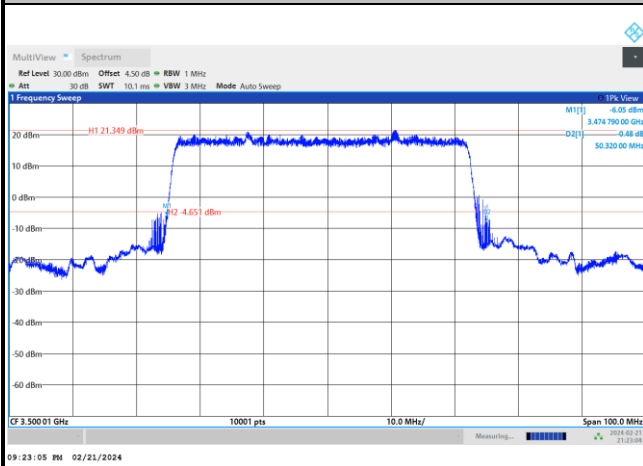
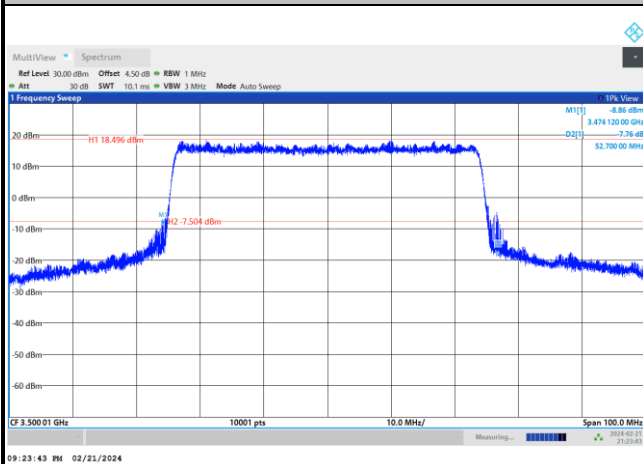
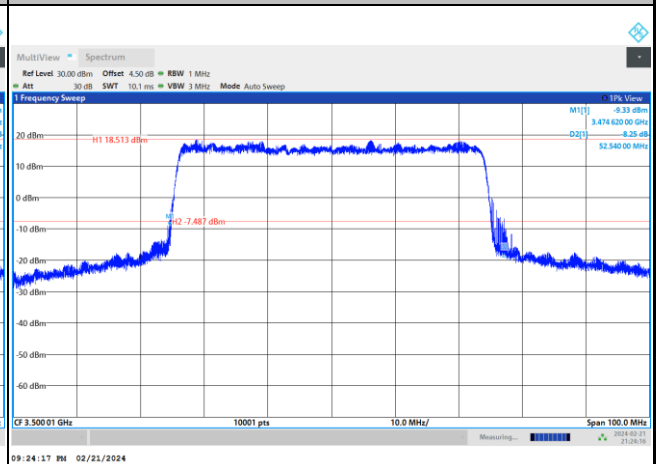
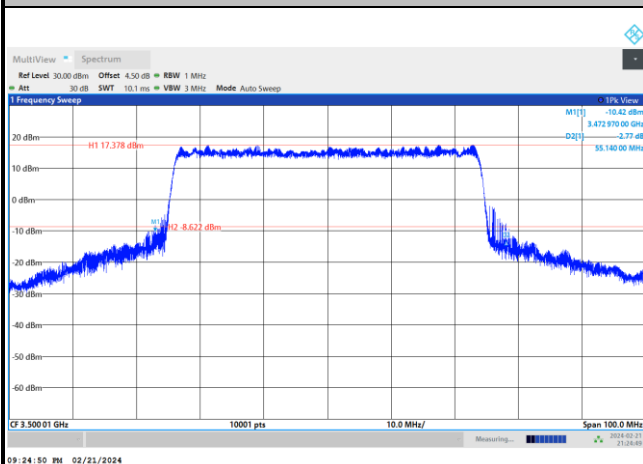
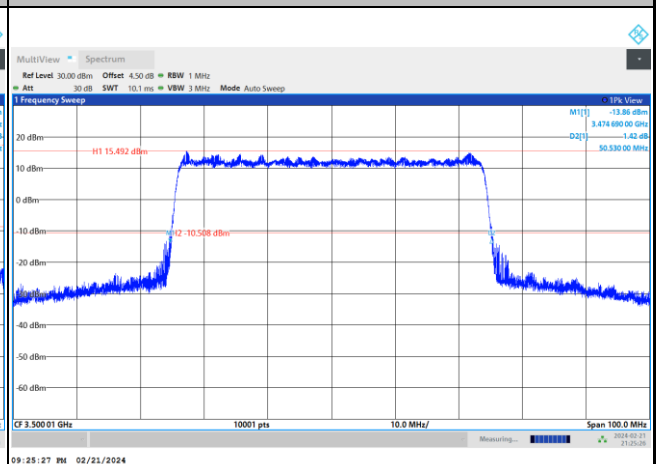


## 64QAM

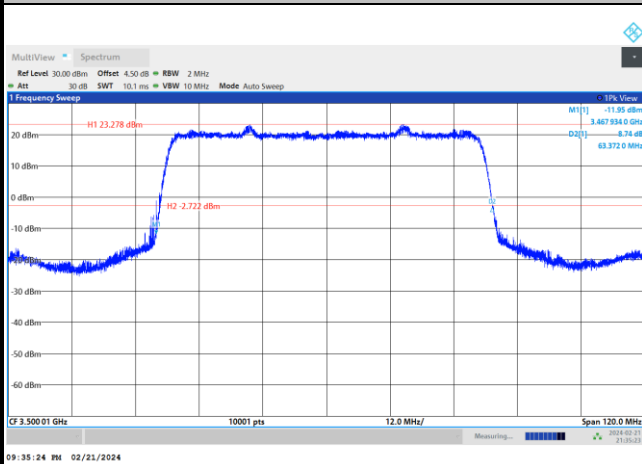
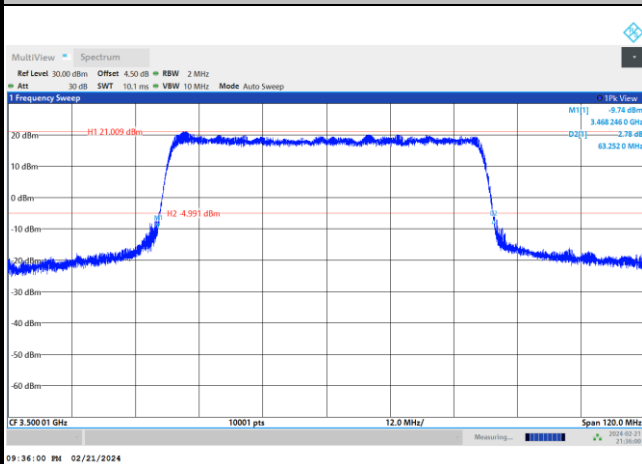
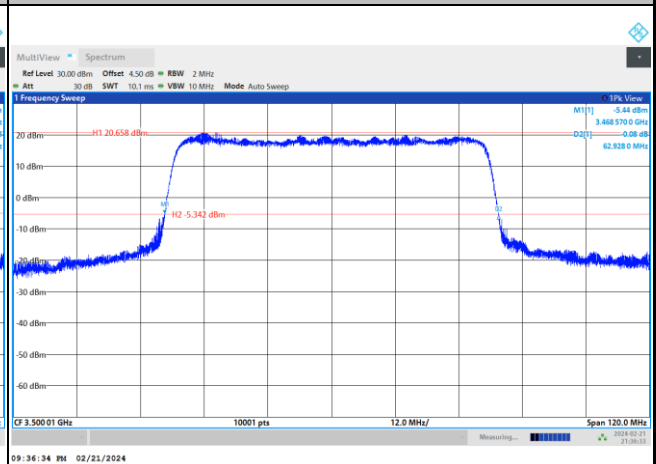
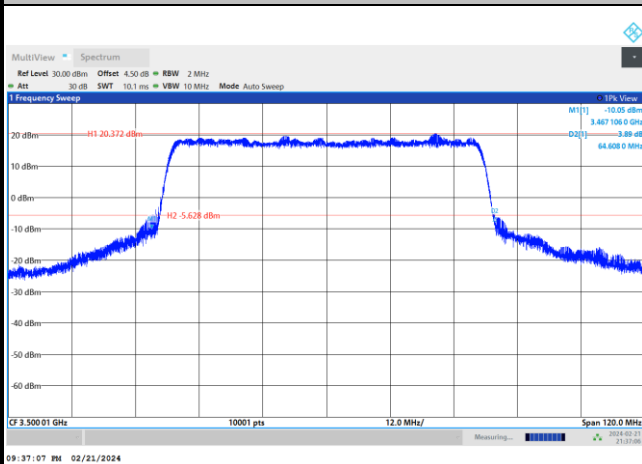
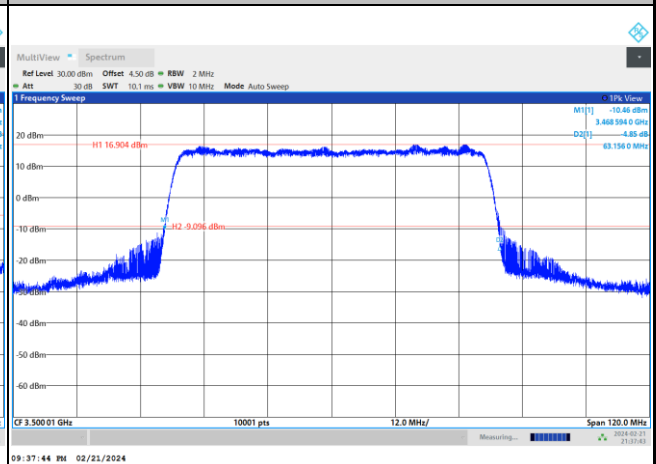


## 256QAM



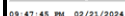
**FR1 n77 / 50MHz / DFT-S OFDM / Middle Channel / Full RB**
**PI/2 BPSK**

**FR1 n77 / 50MHz / CP OFDM / Middle Channel / Full RB**
**QPSK**

**16QAM**

**64QAM**

**256QAM**




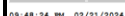
**FR1 n77 / 60MHz / DFT-S OFDM / Middle Channel / Full RB**
**PI/2 BPSK**

**FR1 n77 / 60MHz / CP OFDM / Middle Channel / Full RB**
**QPSK**

**16QAM**

**64QAM**

**256QAM**




## PI/2 BPSK



**QPSK**



09:48:58 AM 03/21/2024

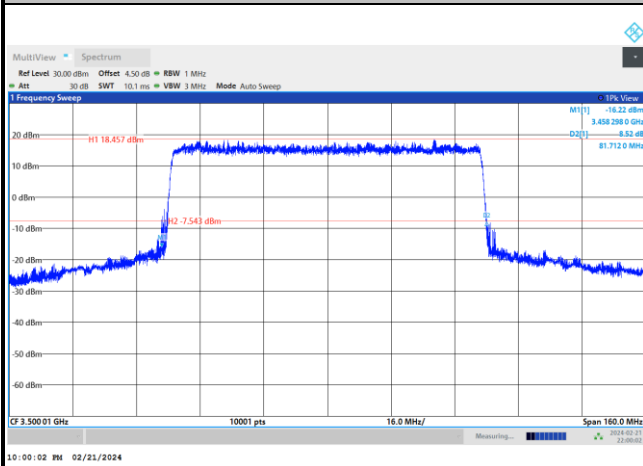
09:49:30 PM 02/21/2024

09:50:08 PM 02/21/2024



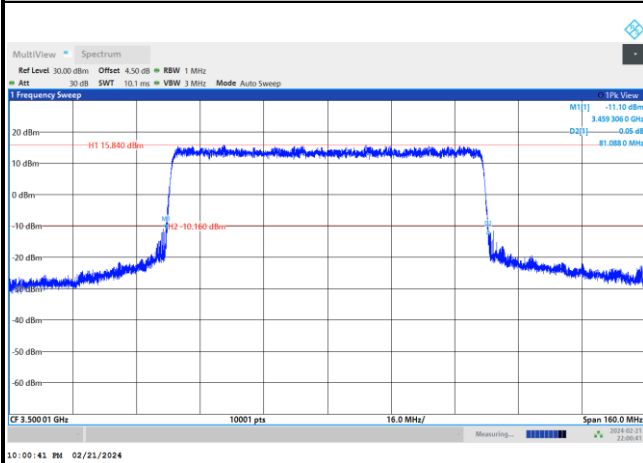
## FR1 n77 / 80MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

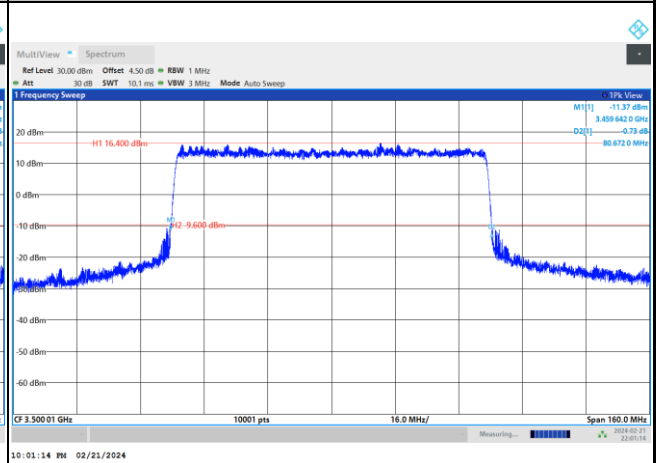


## FR1 n77 / 80MHz / CP OFDM / Middle Channel / Full RB

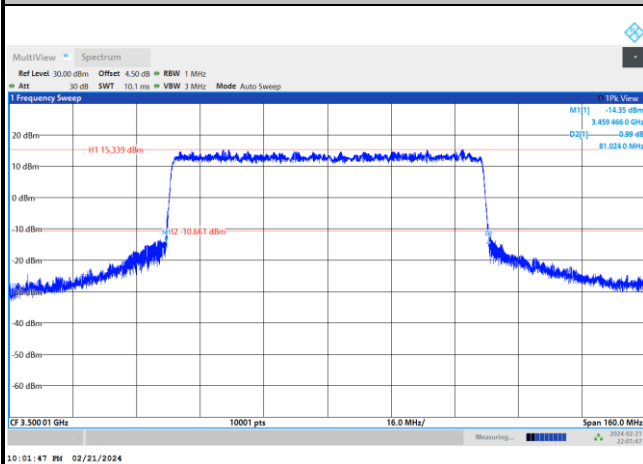
## QPSK



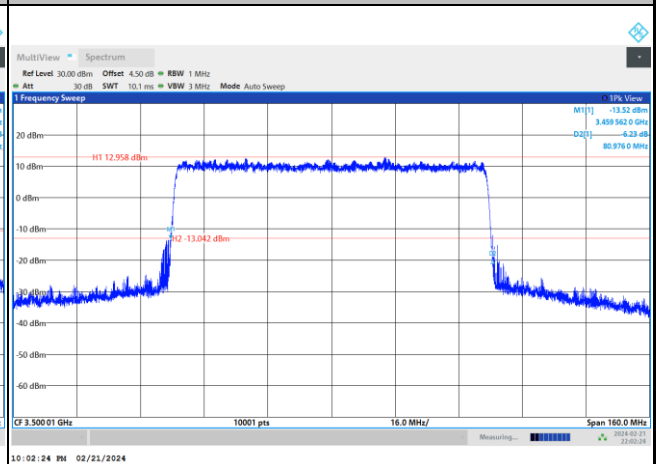
## 16QAM

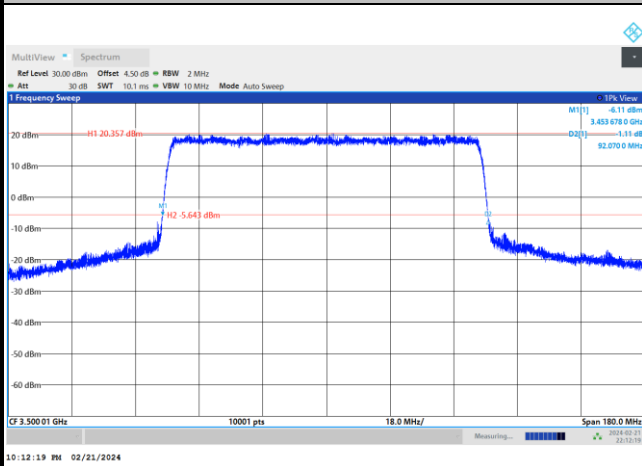
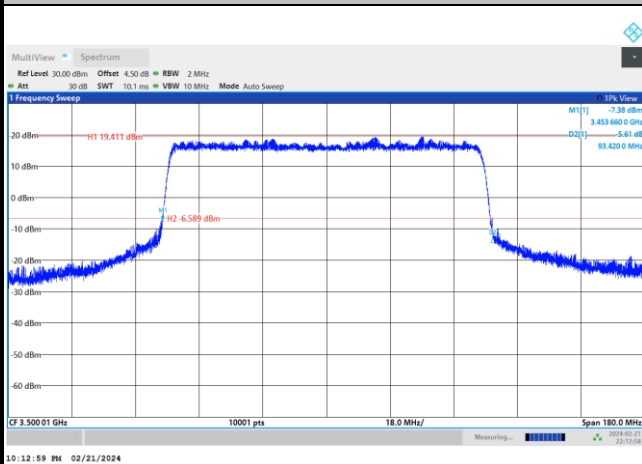
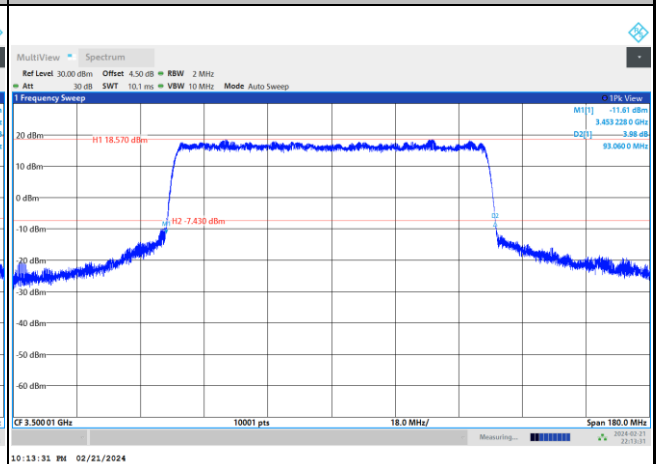
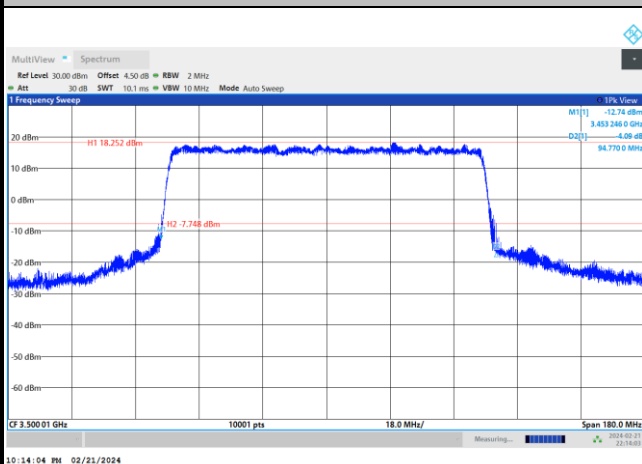
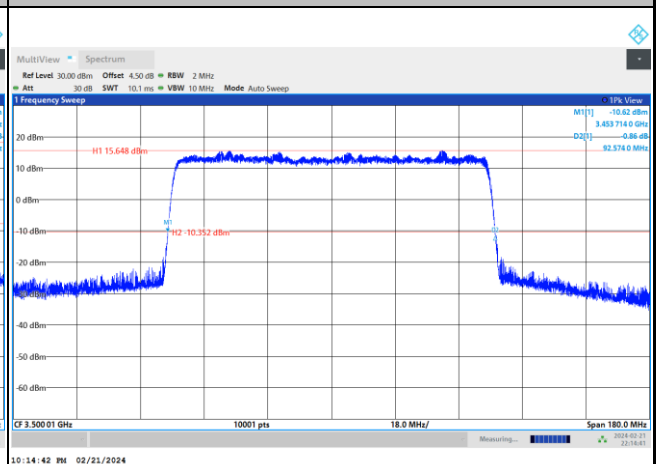


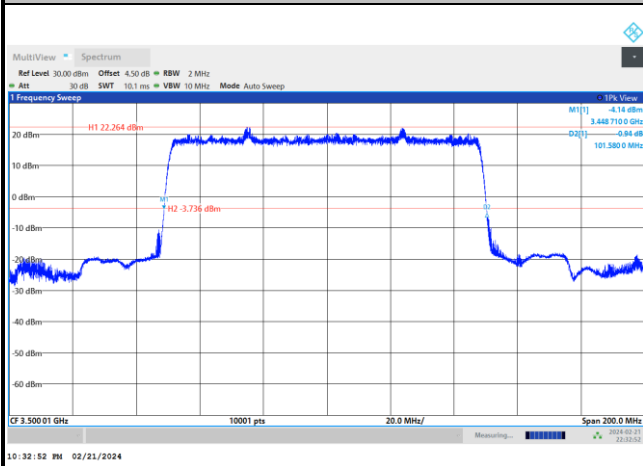
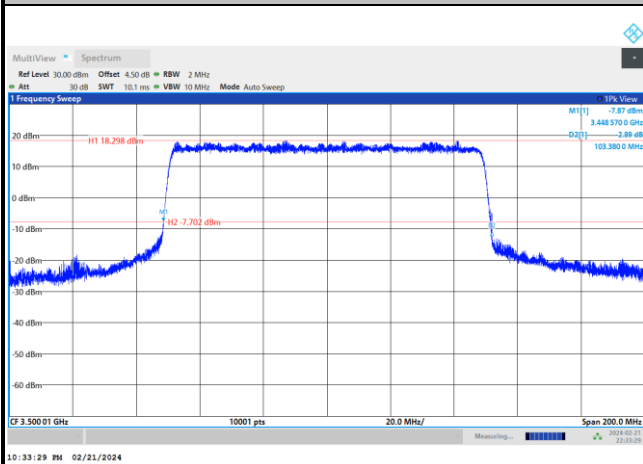
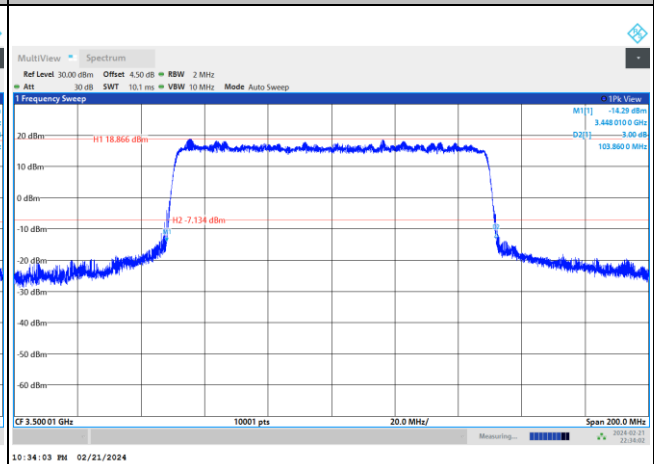
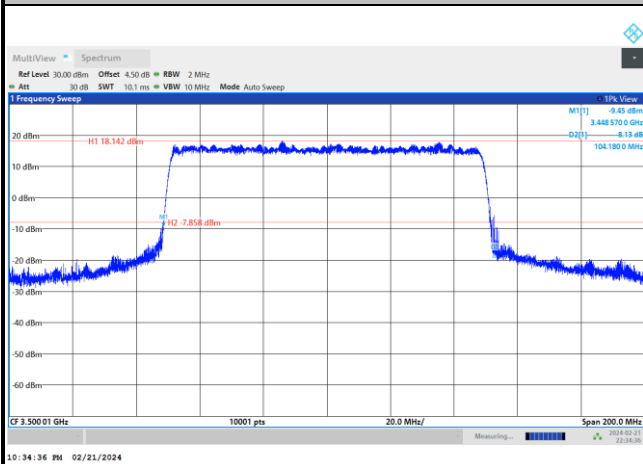
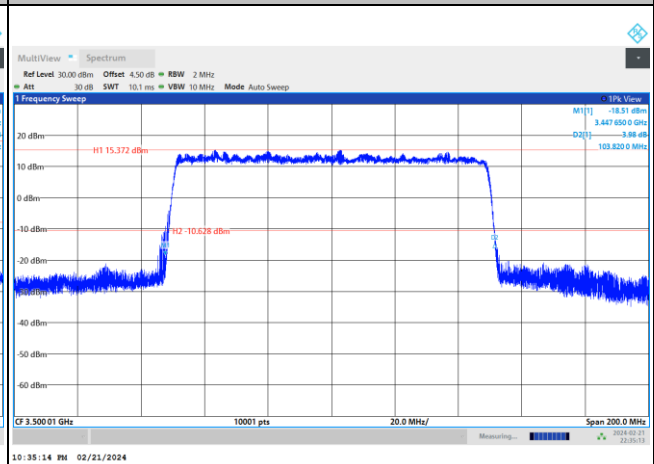
## 64QAM



## 256QAM



**FR1 n77 / 90MHz / DFT-S OFDM / Middle Channel / Full RB**
**PI/2 BPSK**

**FR1 n77 / 90MHz / CP OFDM / Middle Channel / Full RB**
**QPSK**

**16QAM**

**64QAM**

**256QAM**


**FR1 n77 / 100MHz / DFT-S OFDM / Middle Channel / Full RB**
**PI/2 BPSK**

**FR1 n77 / 100MHz / CP OFDM / Middle Channel / Full RB**
**QPSK**

**16QAM**

**64QAM**

**256QAM**


**Occupied Bandwidth**

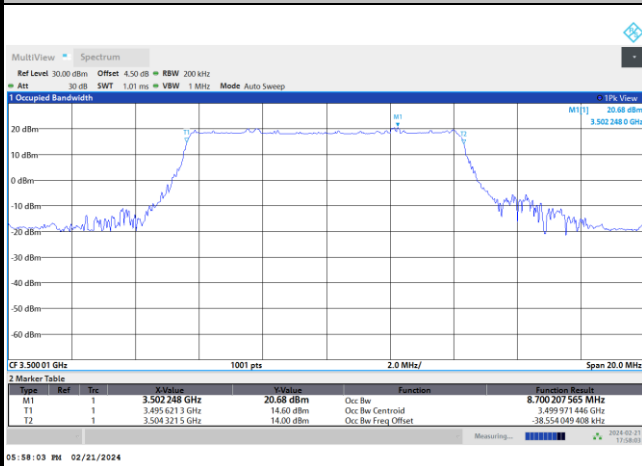
| Mode      | FR1 n77 : OB BW(MHz) / DFT-S OFDM |           |           |           |           |           |           |           |
|-----------|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| BW        | 10MHz                             | 15MHz     | 20MHz     | 25MHz     | 30MHz     | 40MHz     | 50MHz     | 60MHz     |
| Mod.      | PI/2 BPSK                         | PI/2 BPSK | PI/2 BPSK | PI/2 BPSK | PI/2 BPSK | PI/2 BPSK | PI/2 BPSK | PI/2 BPSK |
| Middle CH | 8.70                              | 12.99     | 18.04     | -         | 27.30     | 36.08     | 45.85     | 58.55     |
| BW        | 70MHz                             | 80MHz     | 90MHz     | 100MHz    |           |           |           |           |
| Mod.      | PI/2 BPSK                         | PI/2 BPSK | PI/2 BPSK | PI/2 BPSK |           |           |           |           |
| Middle CH | 64.83                             | 77.51     | 87.18     | 96.81     |           |           |           |           |

| Mode      | FR1 n77 : OB BW(MHz) / CP OFDM |        |       |        |       |        |        |        |
|-----------|--------------------------------|--------|-------|--------|-------|--------|--------|--------|
| BW        | 10MHz                          |        | 15MHz |        | 20MHz |        | 25MHz  |        |
| Mod.      | QPSK                           | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 8.69                           | 8.67   | 13.67 | 13.71  | 18.42 | 18.41  | -      | -      |
| Mod.      | 64QAM                          | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 8.73                           | 8.69   | 13.70 | 13.67  | 18.37 | 18.41  | -      | -      |
| BW        | 30MHz                          |        | 40MHz |        | 50MHz |        | 60MHz  |        |
| Mod.      | QPSK                           | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 28.22                          | 28.18  | 38.03 | 38.04  | 47.68 | 47.67  | 58.67  | 58.47  |
| Mod.      | 64QAM                          | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 28.24                          | 28.24  | 38.13 | 38.27  | 47.61 | 47.66  | 58.59  | 58.37  |
| BW        | 70MHz                          |        | 80MHz |        | 90MHz |        | 100MHz |        |
| Mod.      | QPSK                           | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 68.03                          | 67.94  | 77.86 | 77.75  | 87.60 | 87.74  | 97.59  | 97.56  |
| Mod.      | 64QAM                          | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 68.11                          | 67.91  | 77.94 | 77.68  | 88.06 | 87.96  | 97.65  | 97.83  |



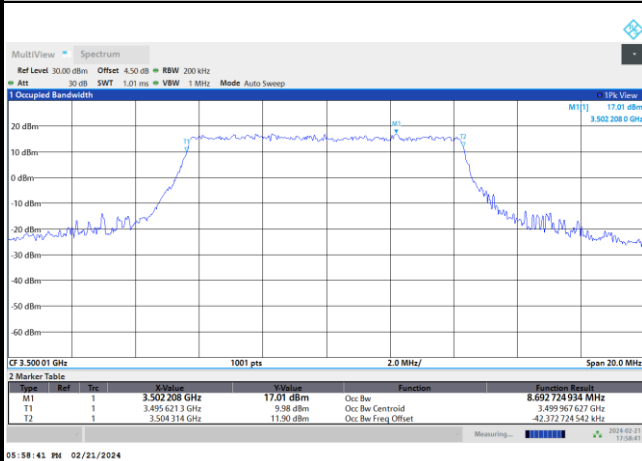
## FR1 n77 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

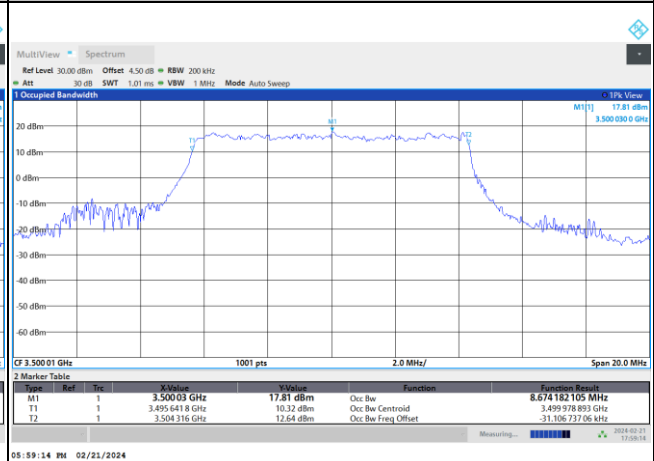


## FR1 n77 / 10MHz / CP OFDM / Middle Channel / Full RB

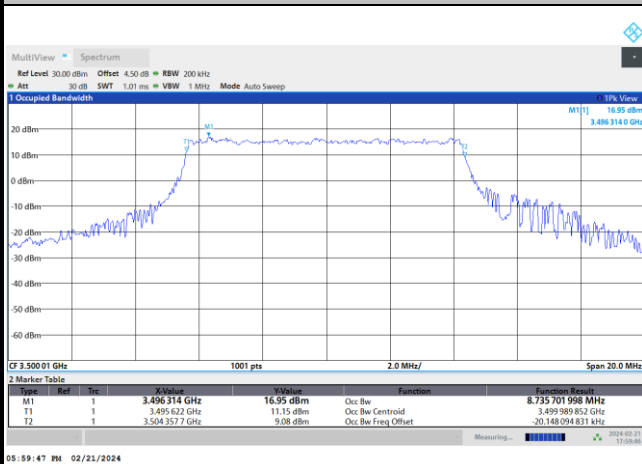
## QPSK



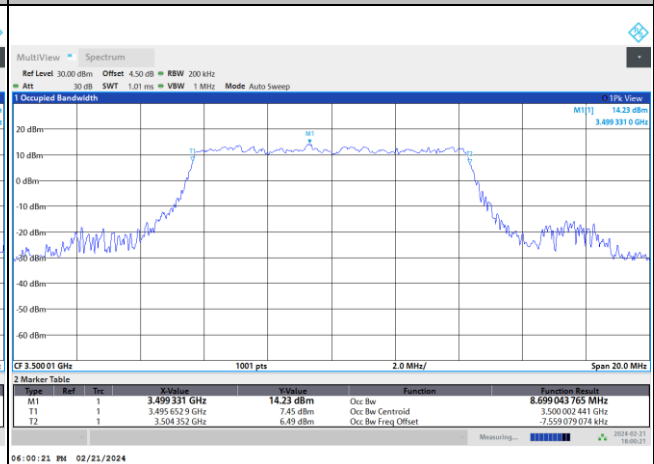
## 16QAM



## 64QAM

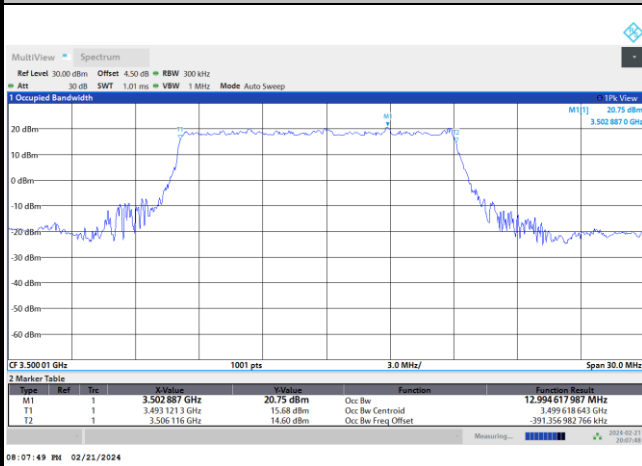


## 256QAM



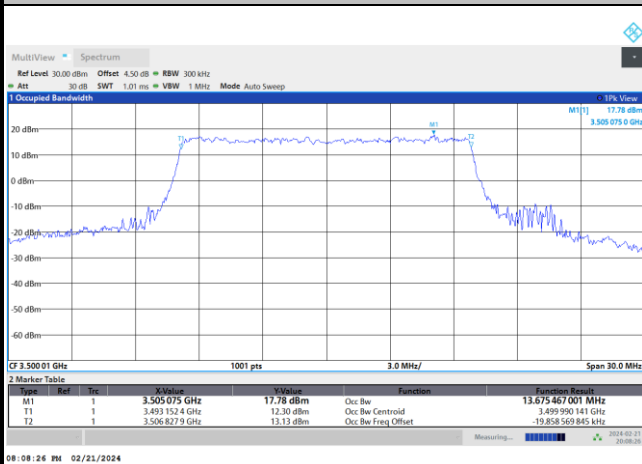
### FR1 n77 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

#### PI/2 BPSK

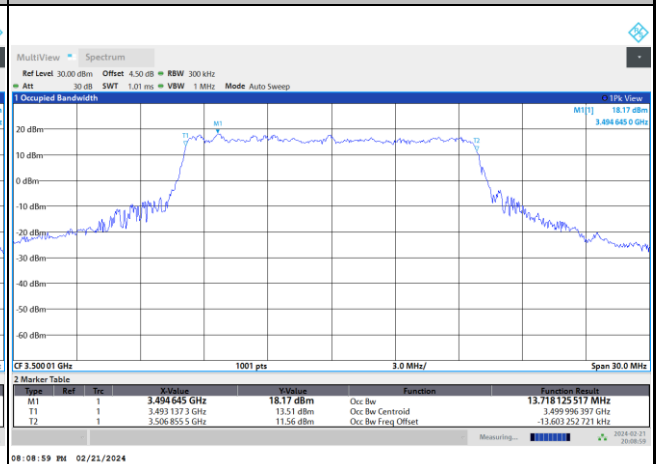


### FR1 n77 / 15MHz / CP OFDM / Middle Channel / Full RB

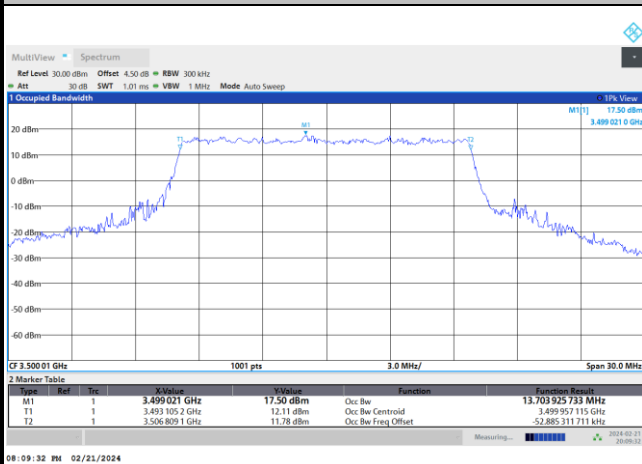
#### QPSK



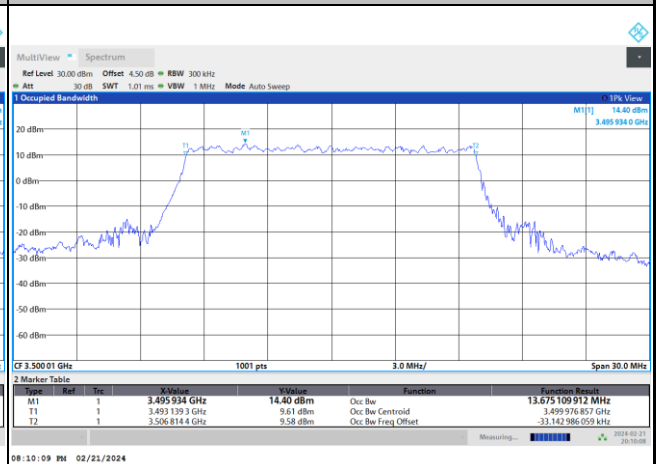
#### 16QAM



#### 64QAM



#### 256QAM

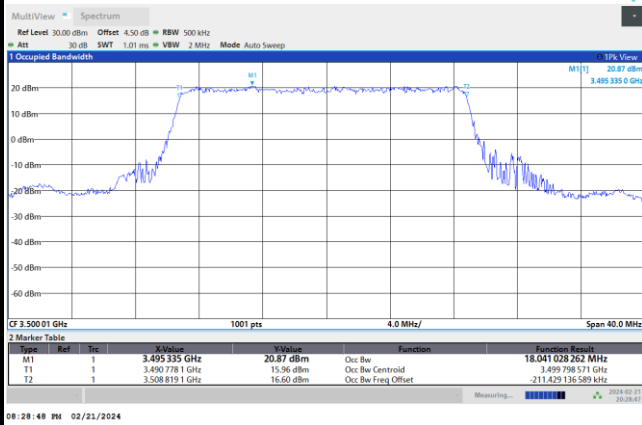






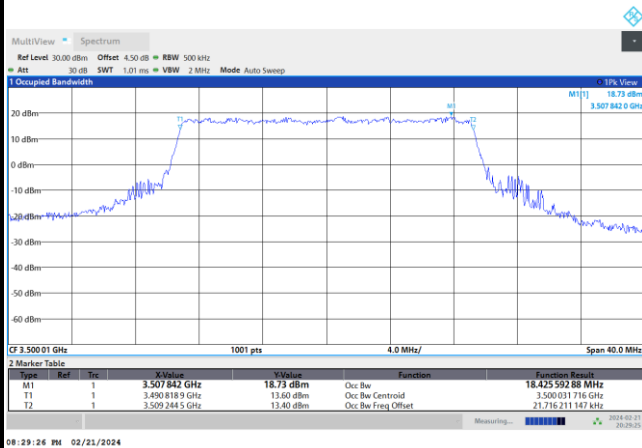
## FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

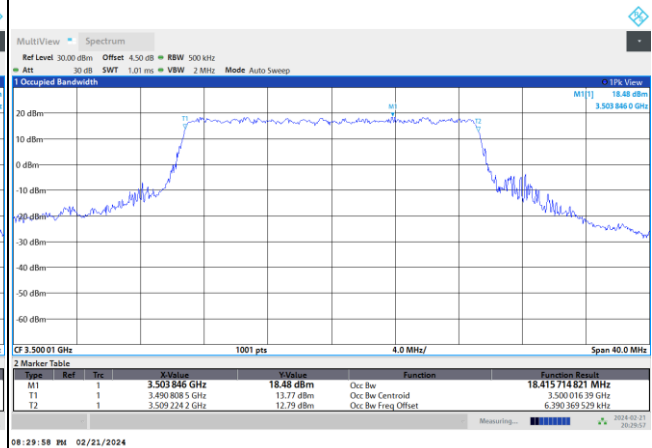


## FR1 n77 / 20MHz / CP OFDM / Middle Channel / Full RB

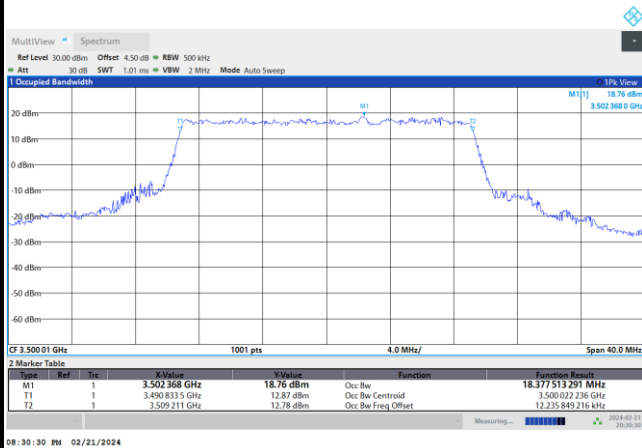
## QPSK



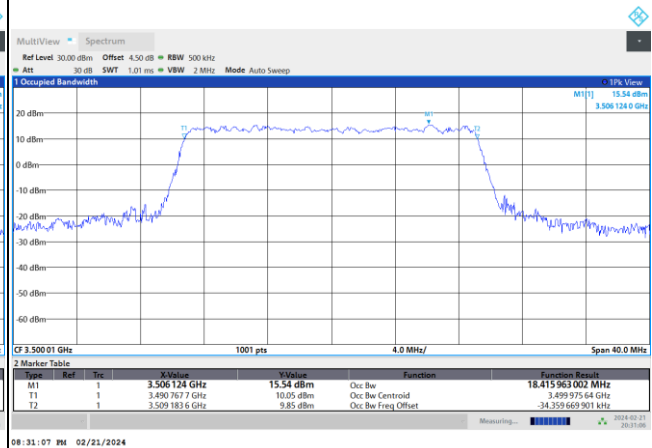
## 16QAM



## 64QAM



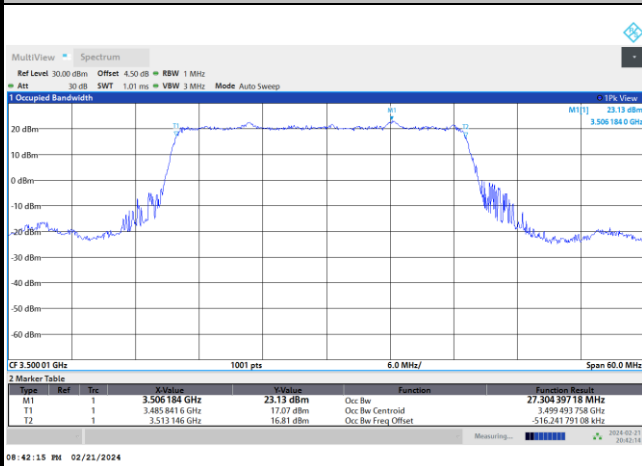
## 256QAM





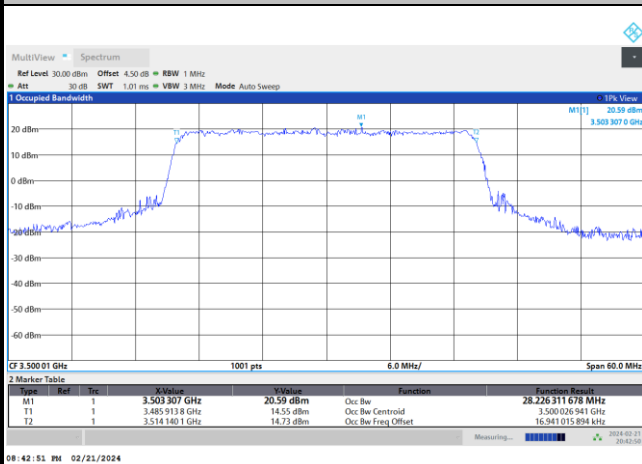
## FR1 n77 / 30MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

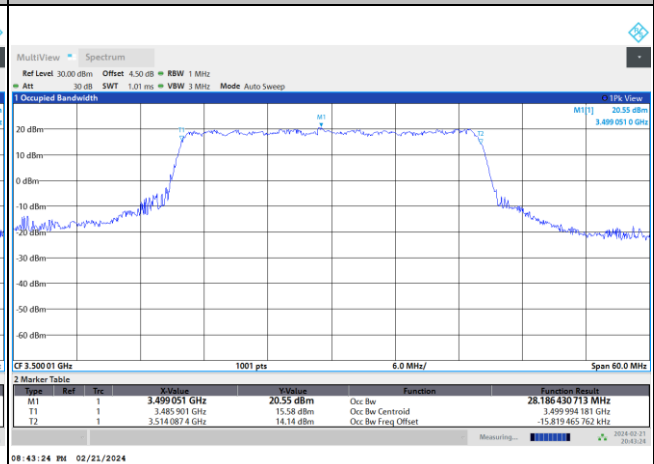


## FR1 n77 / 30MHz / CP OFDM / Middle Channel / Full RB

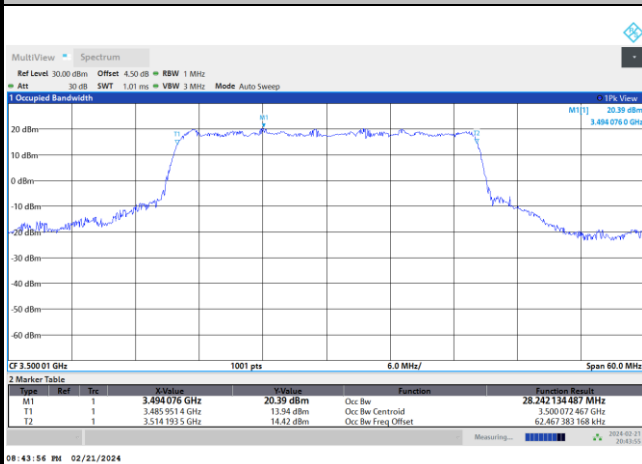
## QPSK



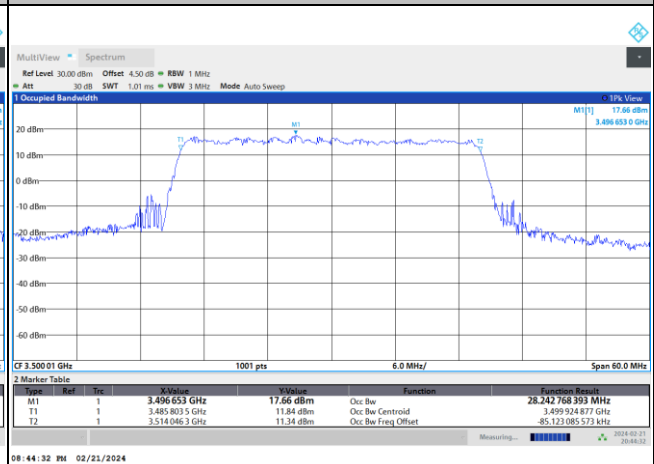
## 16QAM



## 64QAM



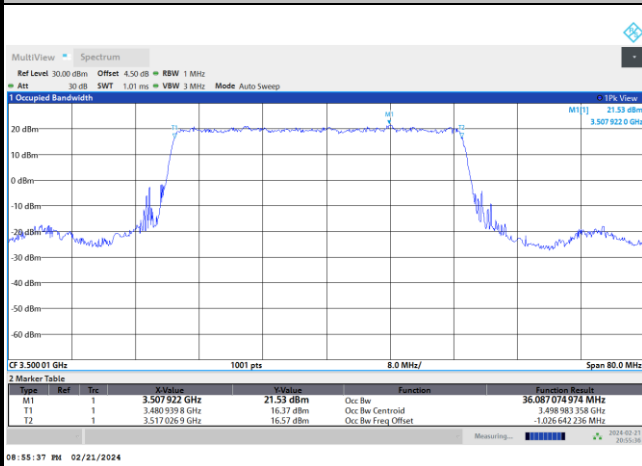
## 256QAM





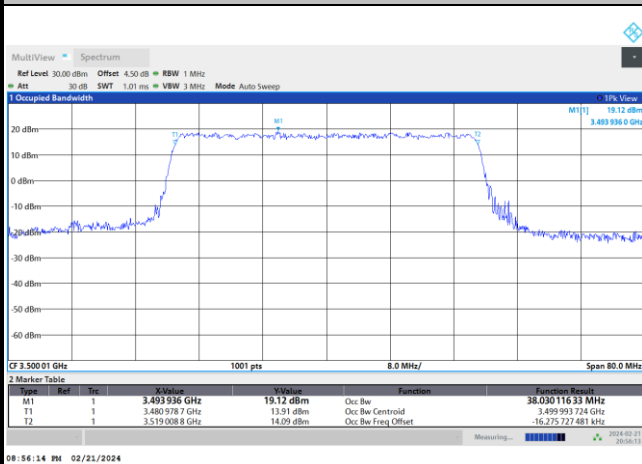
## FR1 n77 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

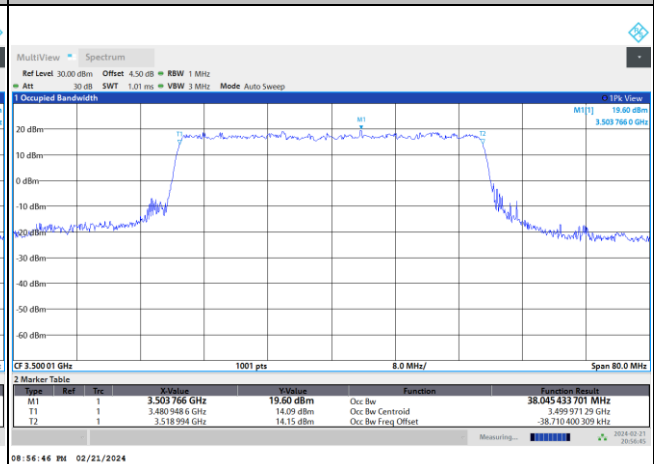


## FR1 n77 / 40MHz / CP OFDM / Middle Channel / Full RB

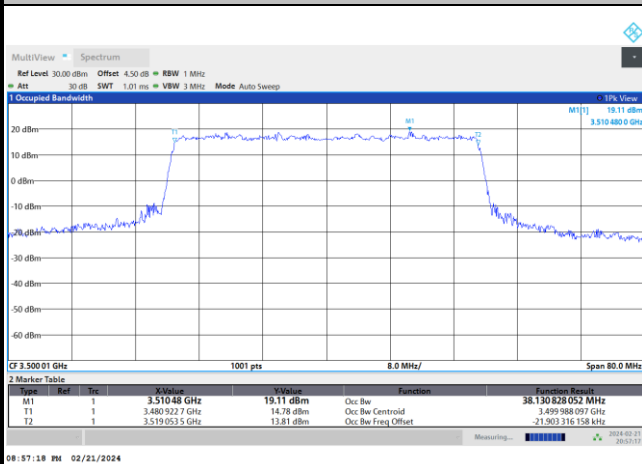
## QPSK



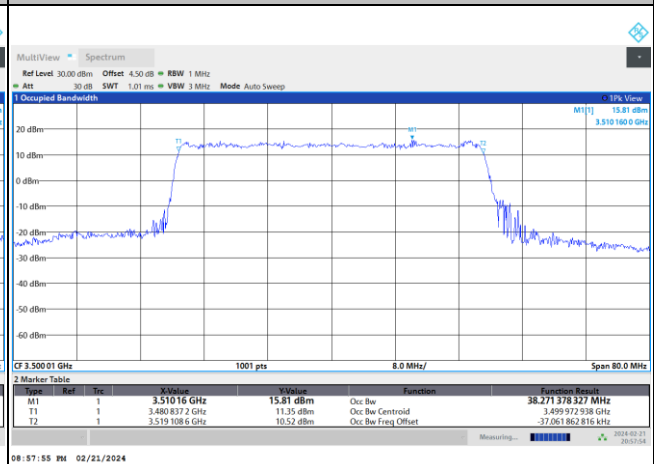
## 16QAM



## 64QAM



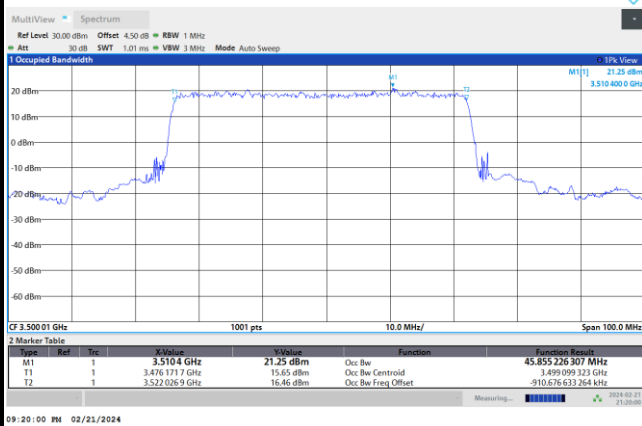
## 256QAM





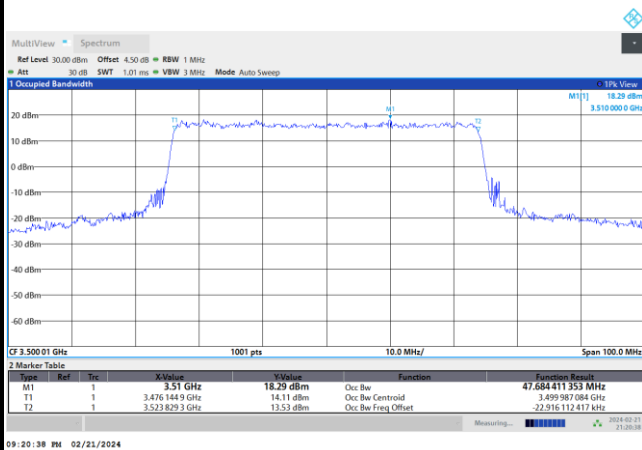
## FR1 n77 / 50MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

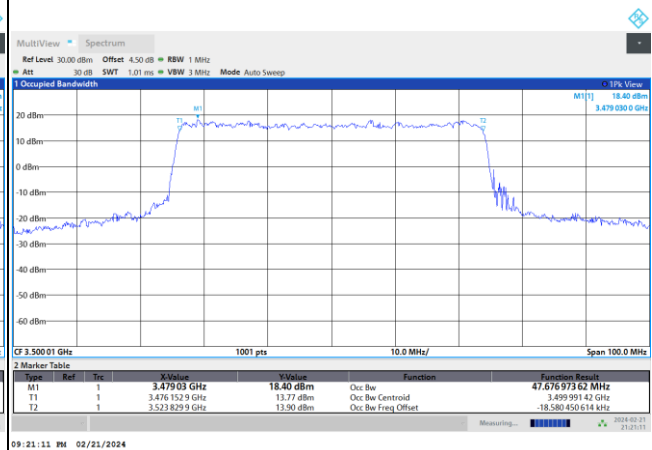


## FR1 n77 / 50MHz / CP OFDM / Middle Channel / Full RB

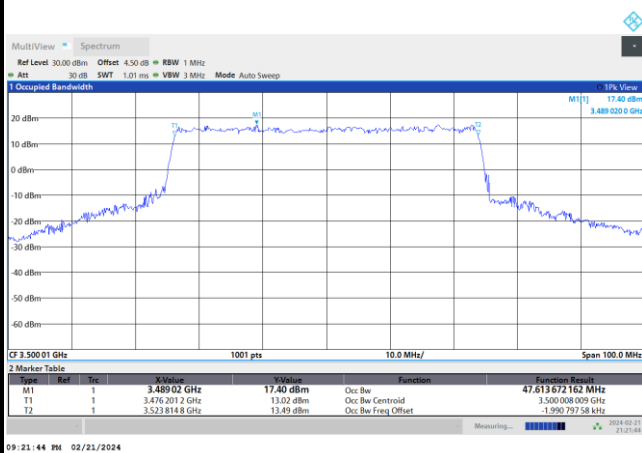
## QPSK



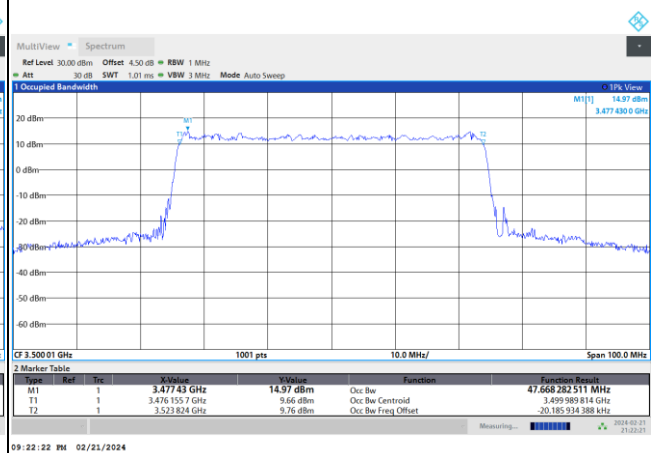
## 16QAM



## 64QAM



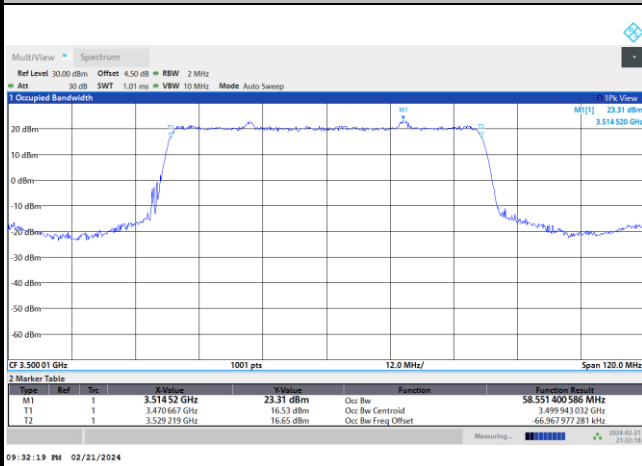
## 256QAM





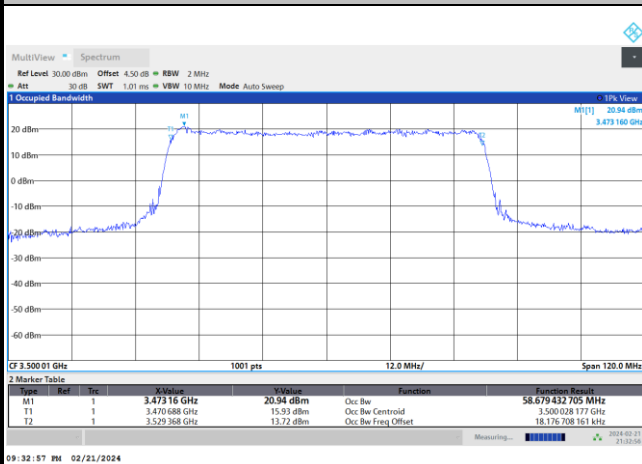
## FR1 n77 / 60MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

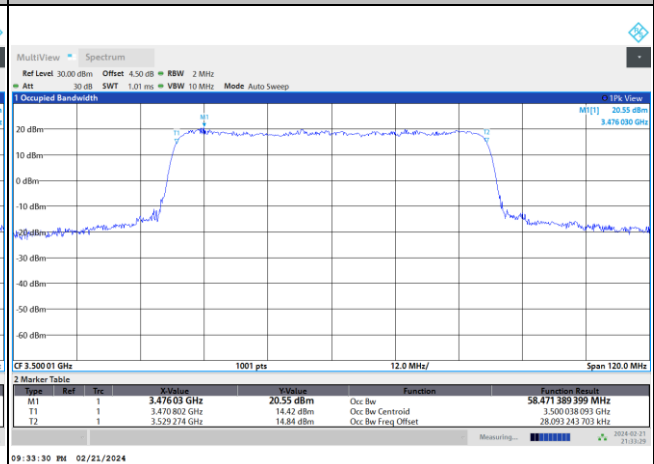


## FR1 n77 / 60MHz / CP OFDM / Middle Channel / Full RB

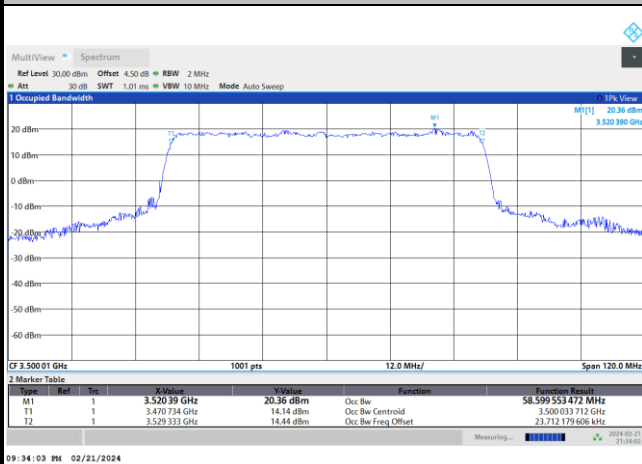
## QPSK



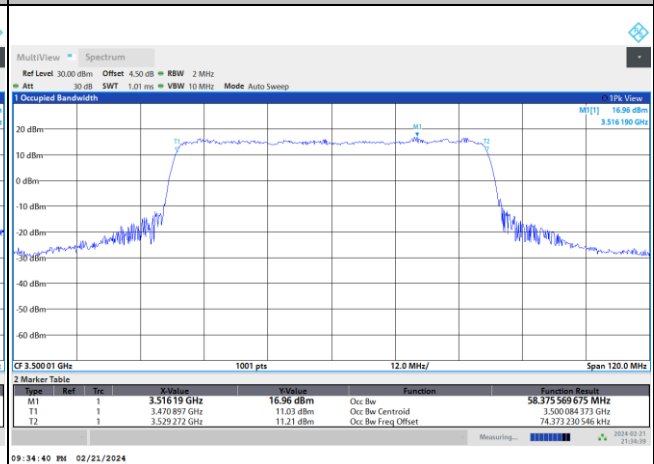
## 16QAM



## 64QAM



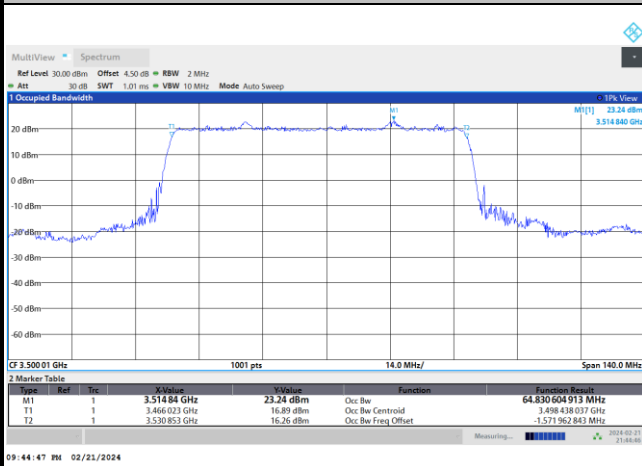
## 256QAM





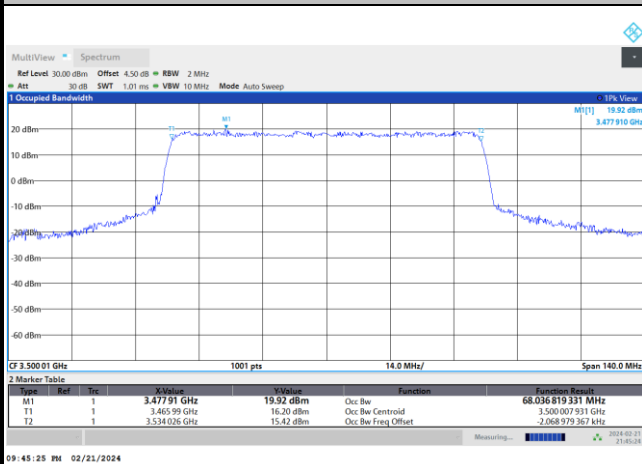
## FR1 n77 / 70MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

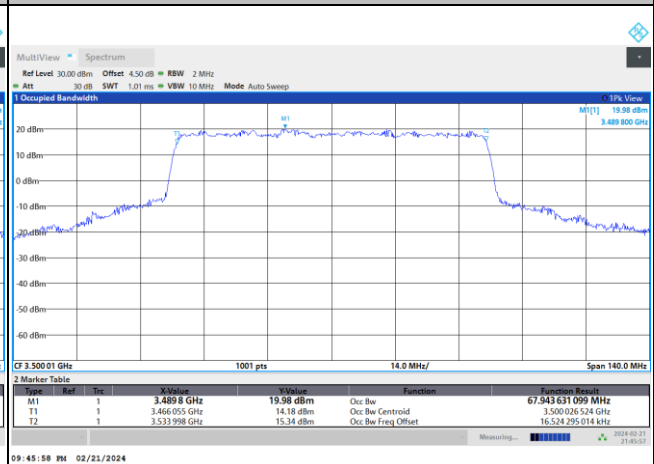


## FR1 n77 / 70MHz / CP OFDM / Middle Channel / Full RB

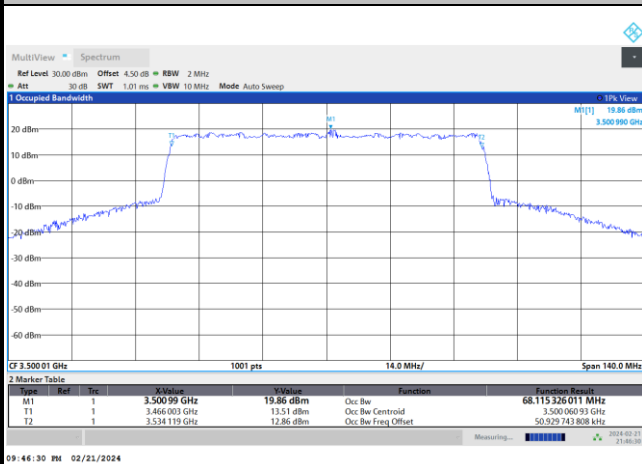
## QPSK



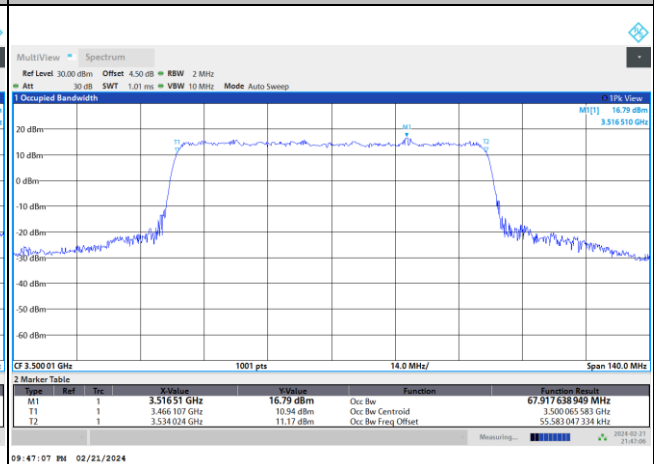
## 16QAM



## 64QAM



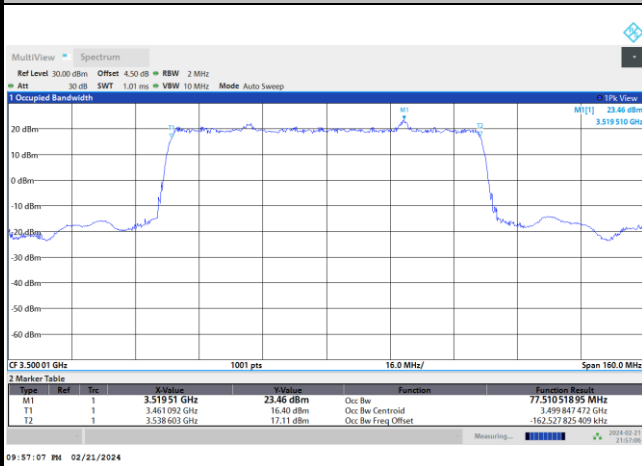
## 256QAM





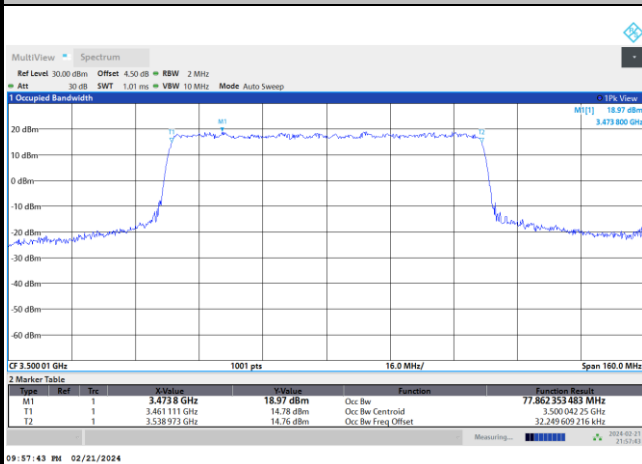
## FR1 n77 / 80MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

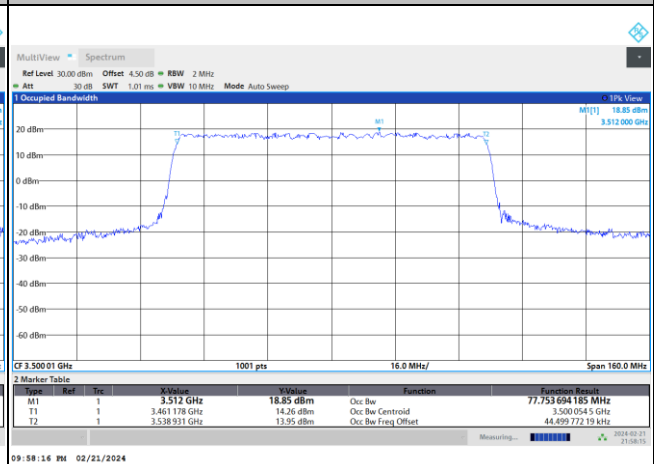


## FR1 n77 / 80MHz / CP OFDM / Middle Channel / Full RB

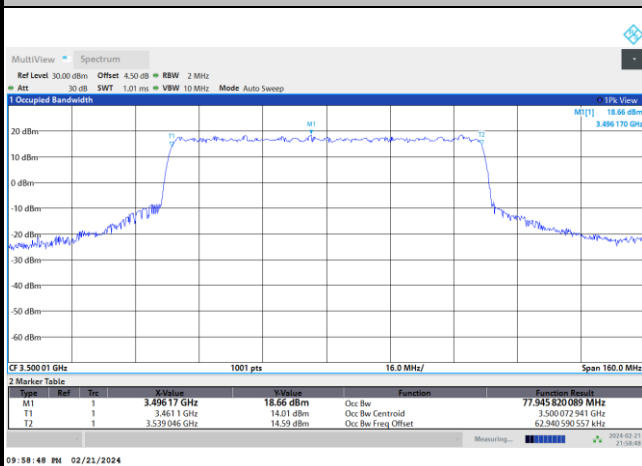
## QPSK



## 16QAM



## 64QAM



## 256QAM

