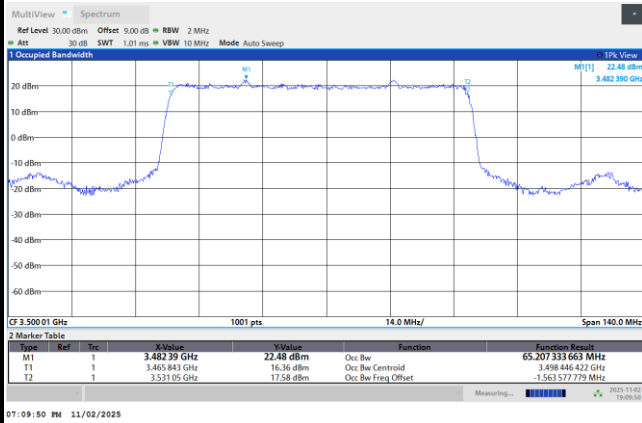


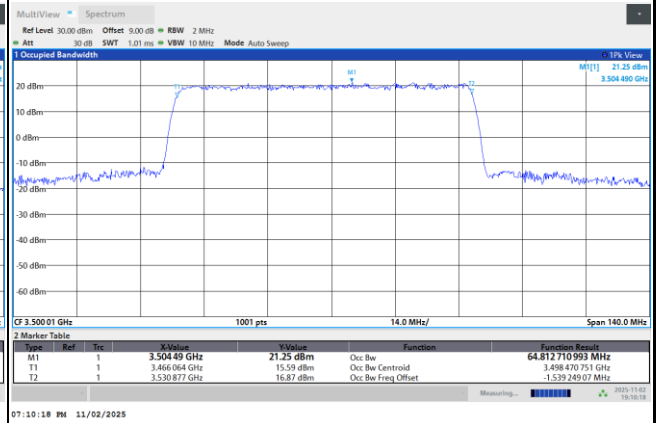
## FR1 n77 / 70MHz / DFT-S OFDM / Middle Channel / Full RB

### PI/2 BPSK



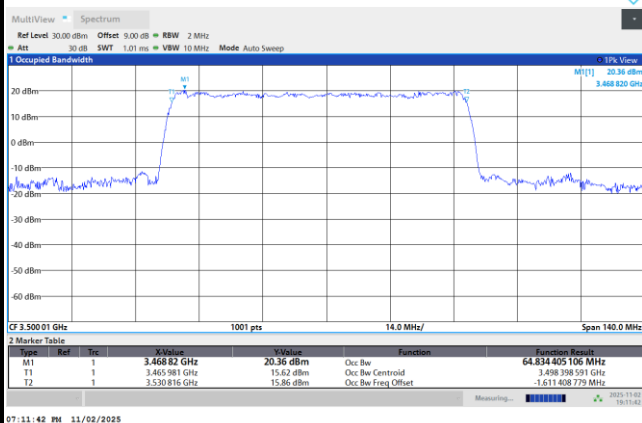
07:09:50 PM 11/02/2025

### QPSK



07:10:18 PM 11/02/2025

### 16QAM



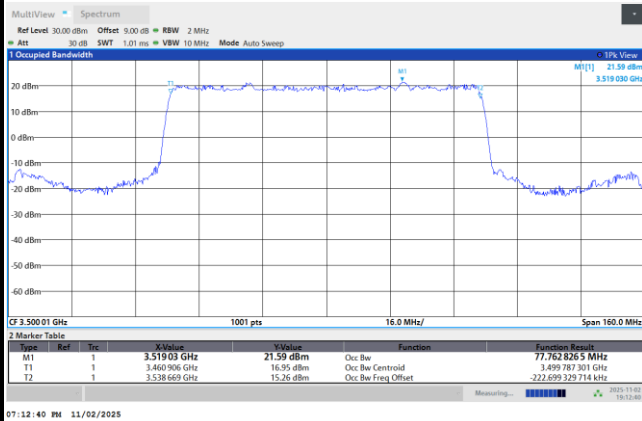
07:11:42 PM 11/02/2025



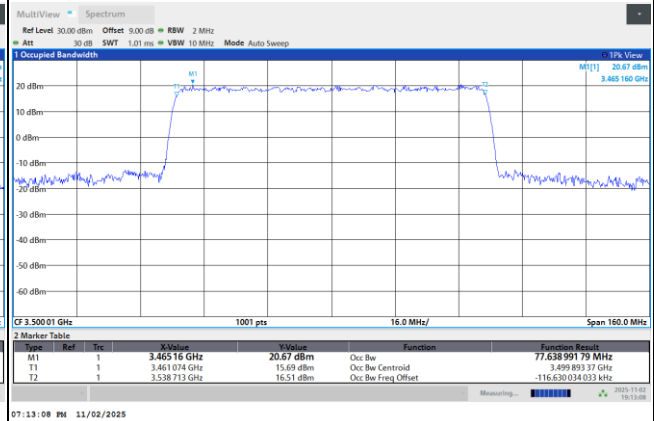
## FR1 n77 / 80MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK

## QPSK

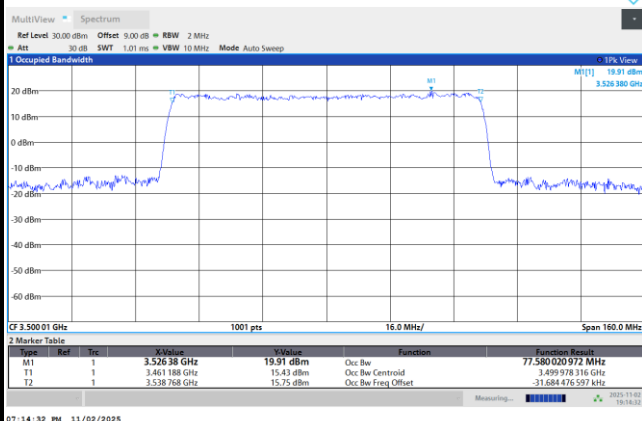


07:12:40 PM 11/02/2025



07:13:08 PM 11/02/2025

## 16QAM

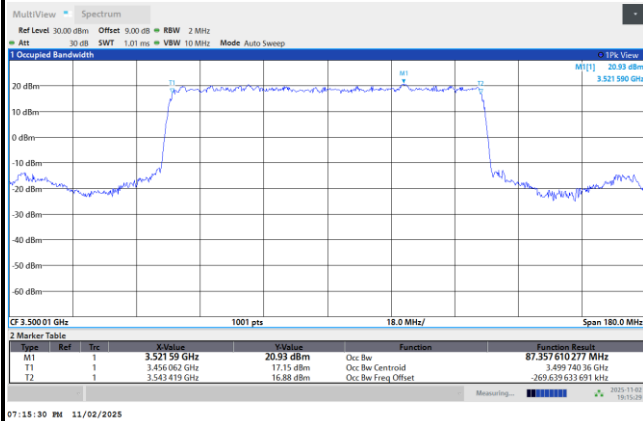


07:14:32 PM 11/02/2025



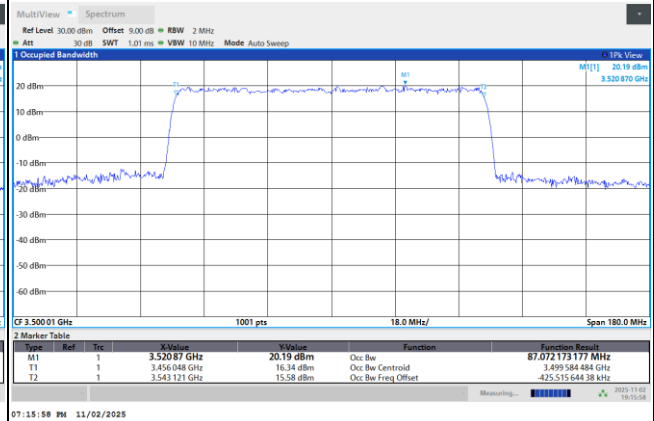
## FR1 n77 / 90MHz / DFT-S OFDM / Middle Channel / Full RB

## PI/2 BPSK



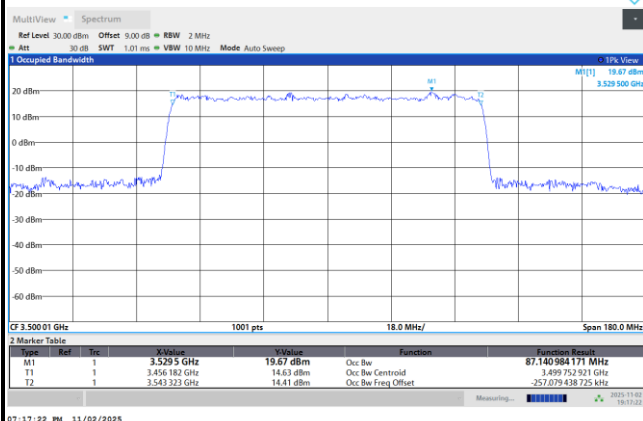
07:15:30 PM 11/02/2025

## QPSK



07:15:58 PM 11/02/2025

## 16QAM

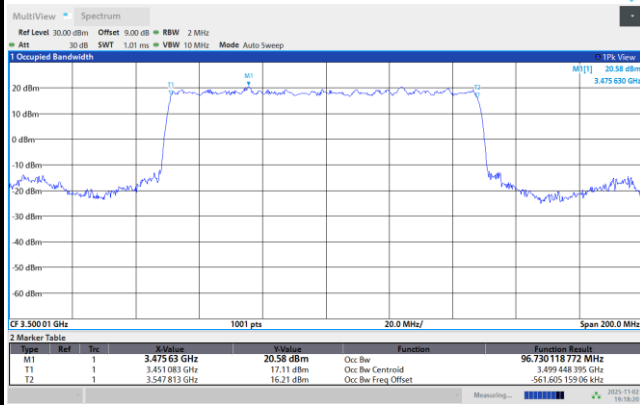


07:17:22 PM 11/02/2025

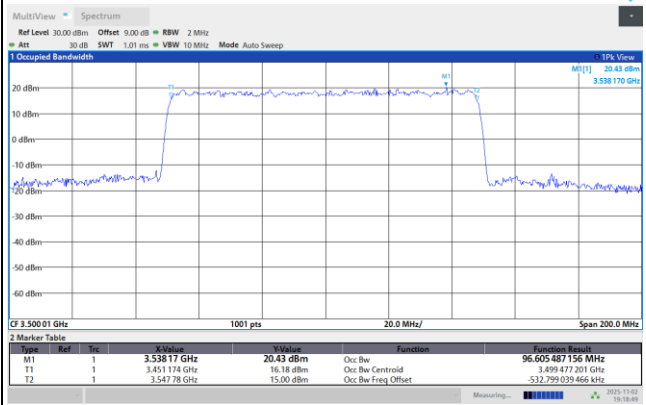


## FR1 n77 / 100MHz / DFT-S OFDM / Middle Channel / Full RB

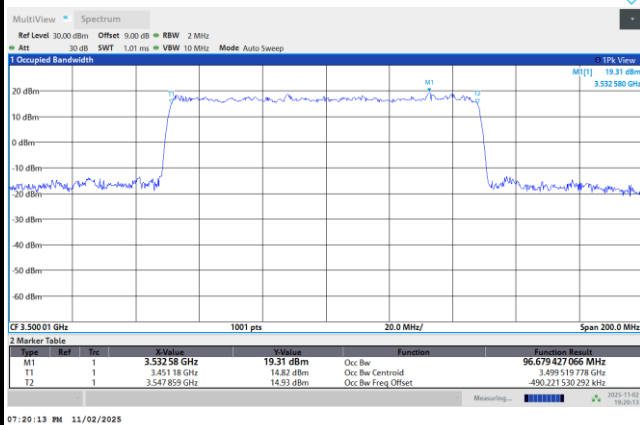
## PI/2 BPSK



## QPSK



## 16QAM



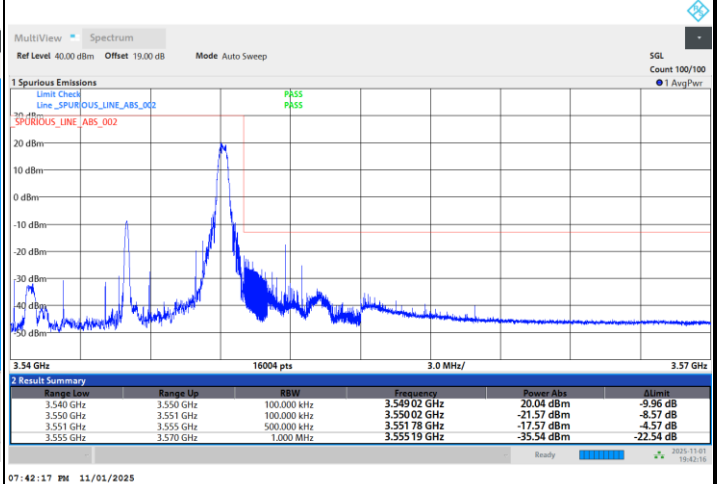
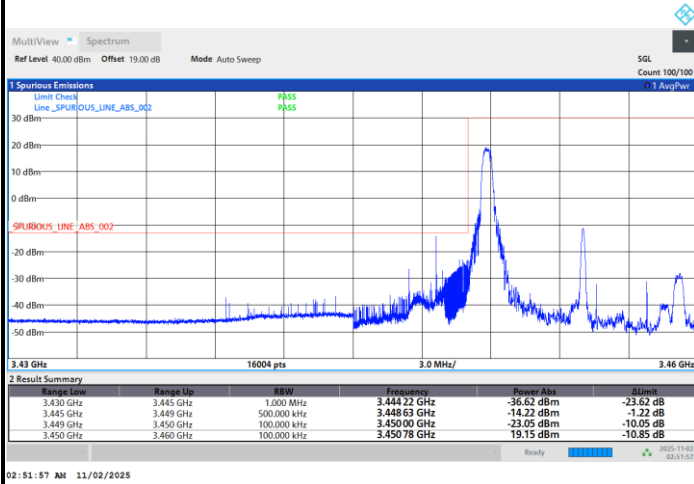


# Conducted Band Edge

FR1 n77 / 10MHz / DFT-S OFDM / PI/2 BPSK

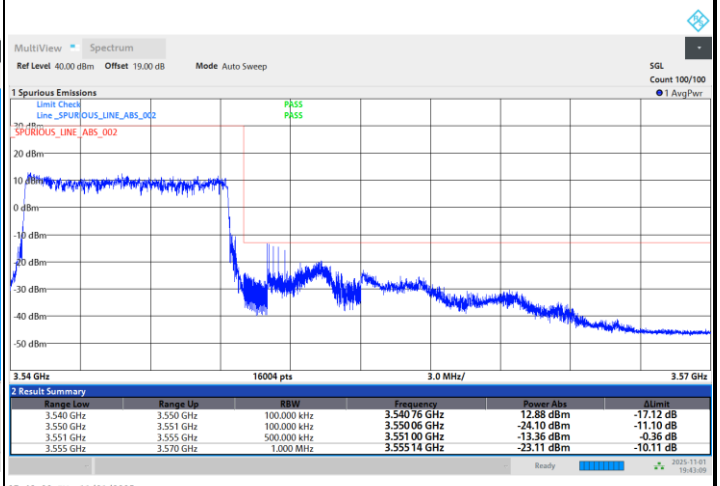
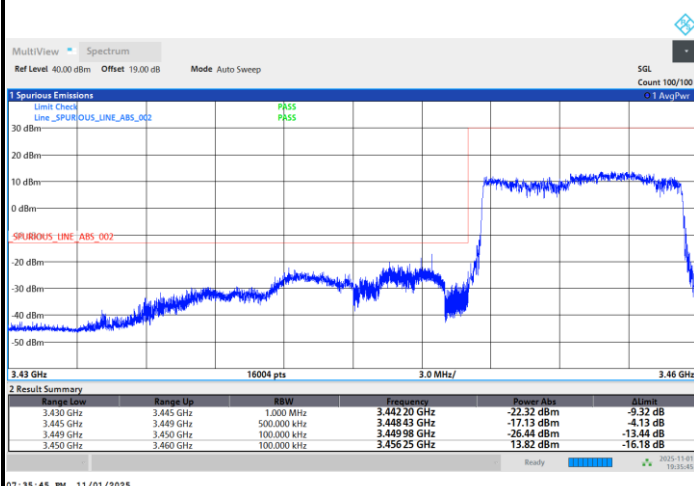
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

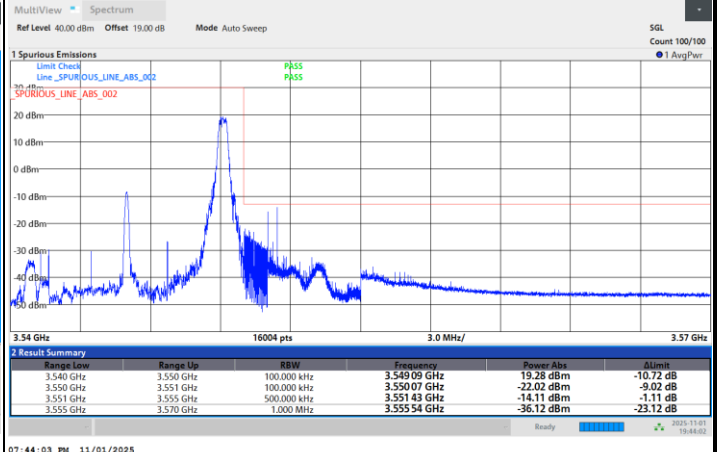
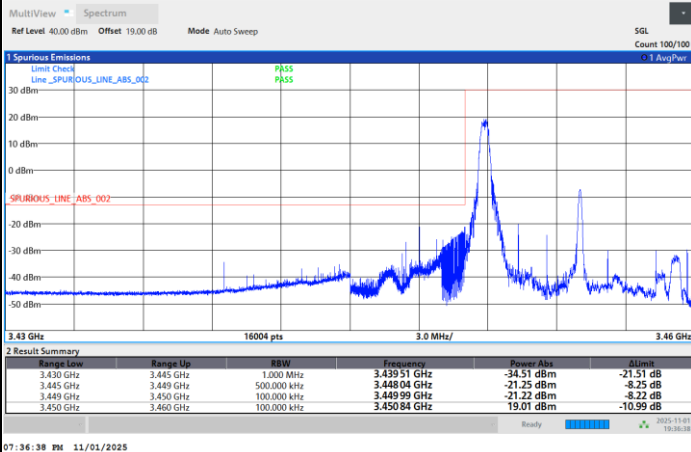




## FR1 n77 / 10MHz / DFT-S OFDM / QPSK

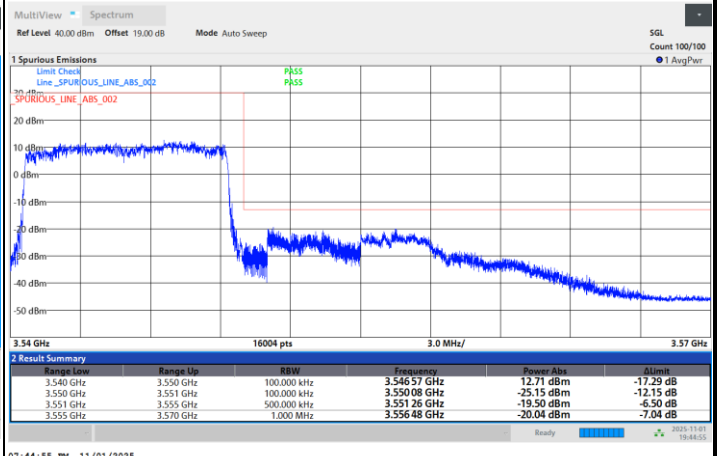
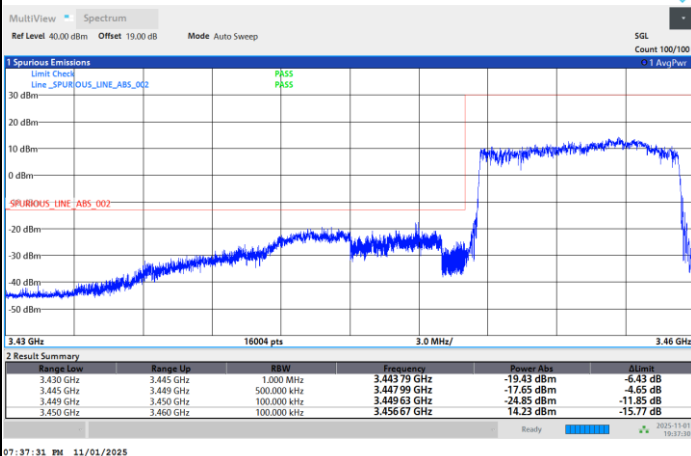
## Lowest Band Edge / 1RB0

## Highest Band Edge / 1RBmax



## Lowest Band Edge / Full RB

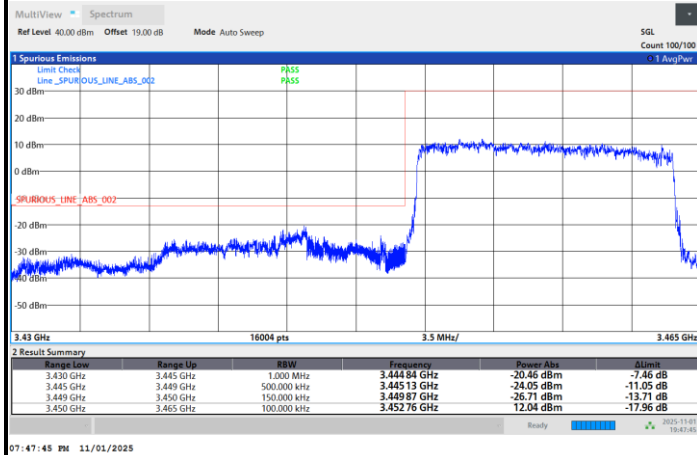
## Highest Band Edge / Full RB



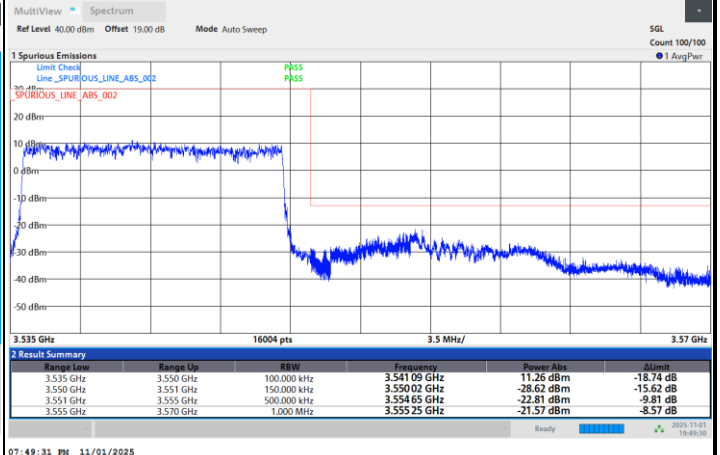


## FR1 n77 / 15MHz / DFT-S OFDM / PI/2 BPSK

## Lowest Band Edge / Full RB

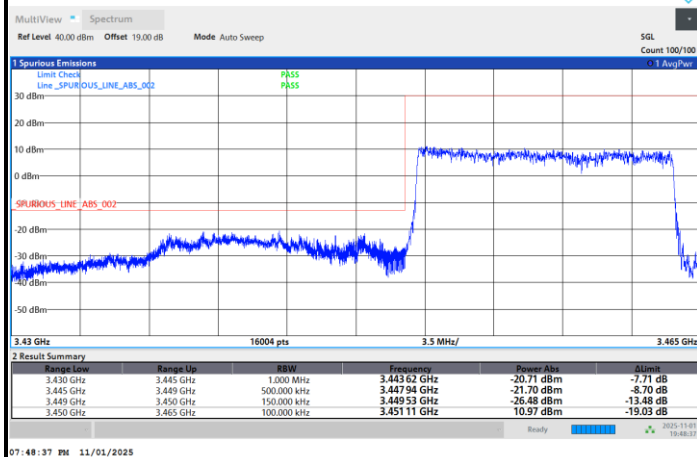


## Highest Band Edge / Full RB

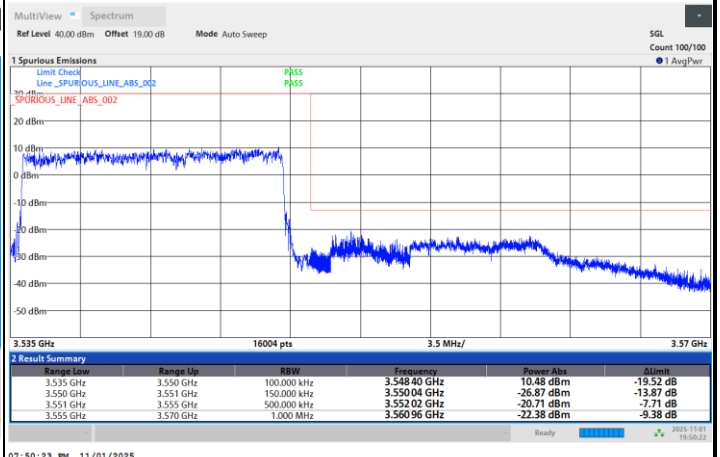


## FR1 n77 / 15MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / Full RB



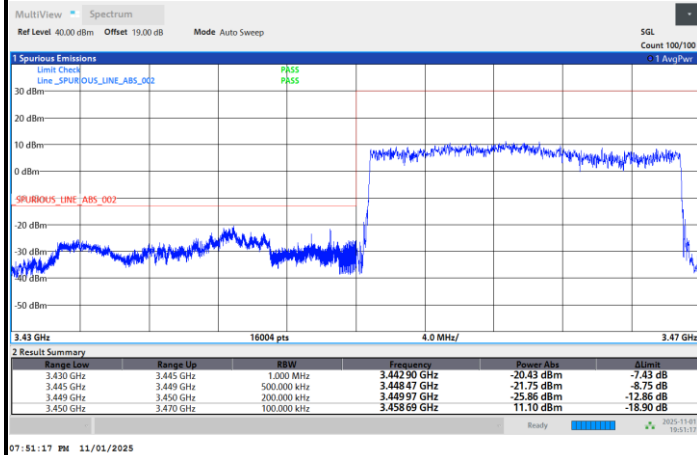
## Highest Band Edge / Full RB



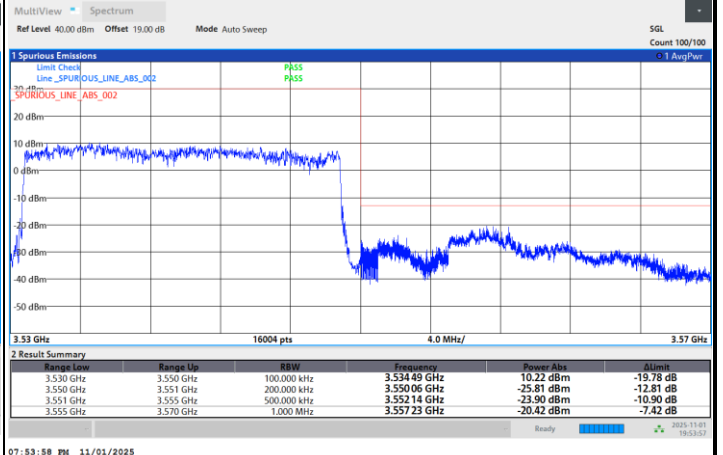


## FR1 n77 / 20MHz / DFT-S OFDM / PI/2 BPSK

## Lowest Band Edge / Full RB

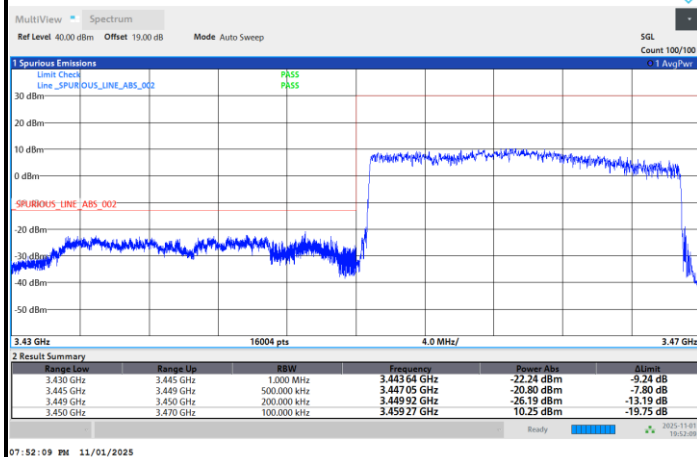


## Highest Band Edge / Full RB

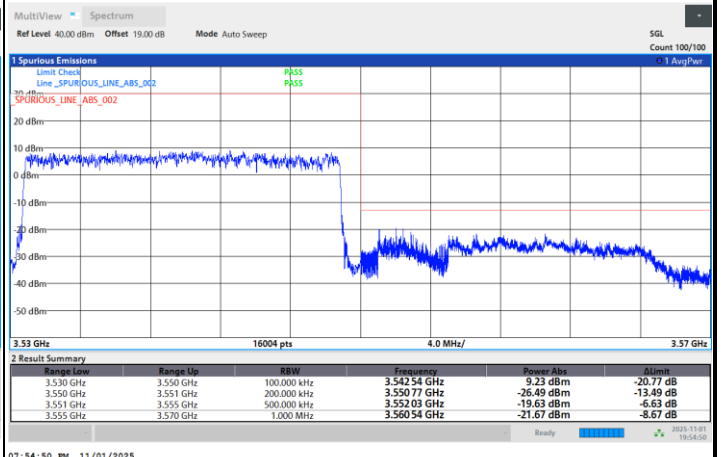


## FR1 n77 / 20MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / Full RB



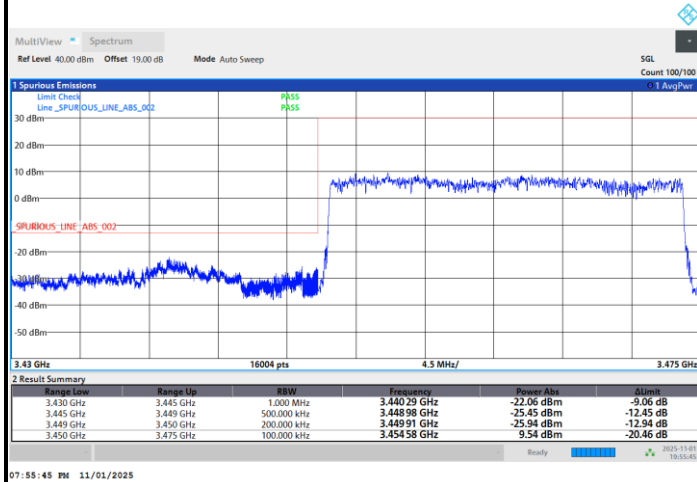
## Highest Band Edge / Full RB



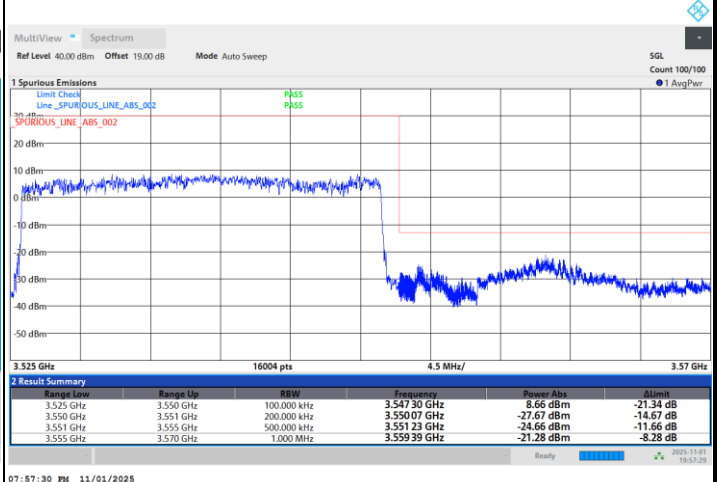


## FR1 n77 / 25MHz / DFT-S OFDM / PI/2 BPSK

## Lowest Band Edge / Full RB

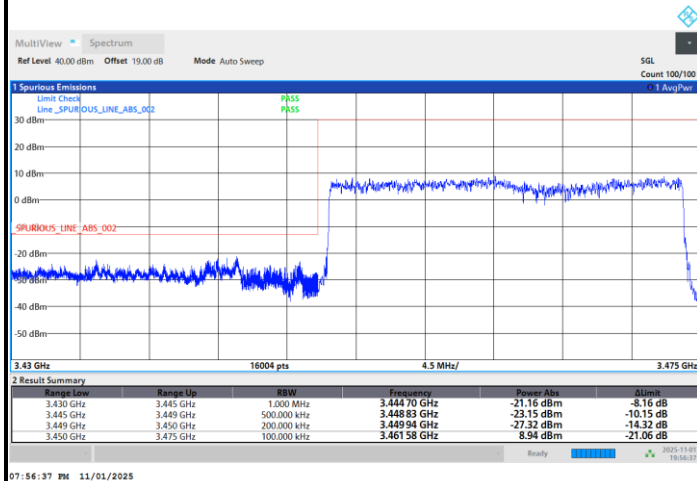


## Highest Band Edge / Full RB

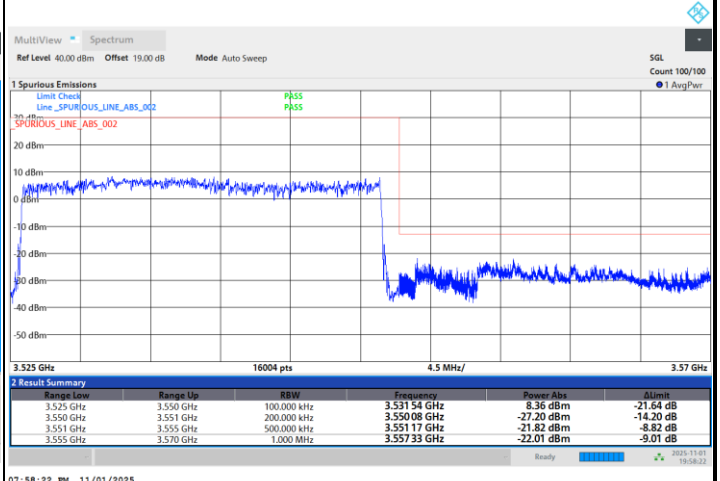


## FR1 n77 / 25MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / Full RB



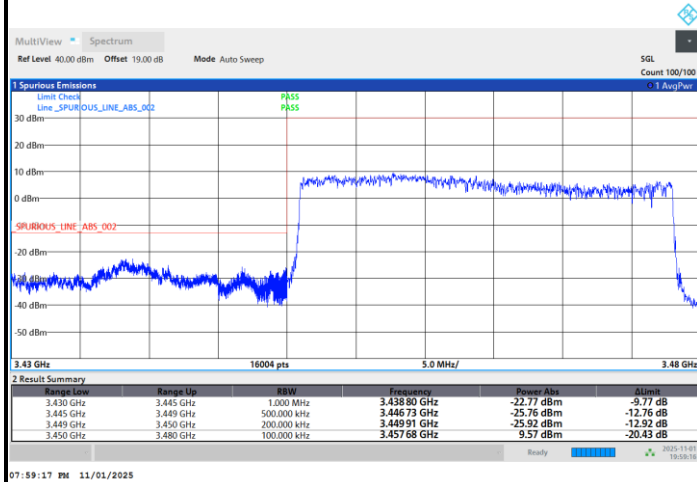
## Highest Band Edge / Full RB



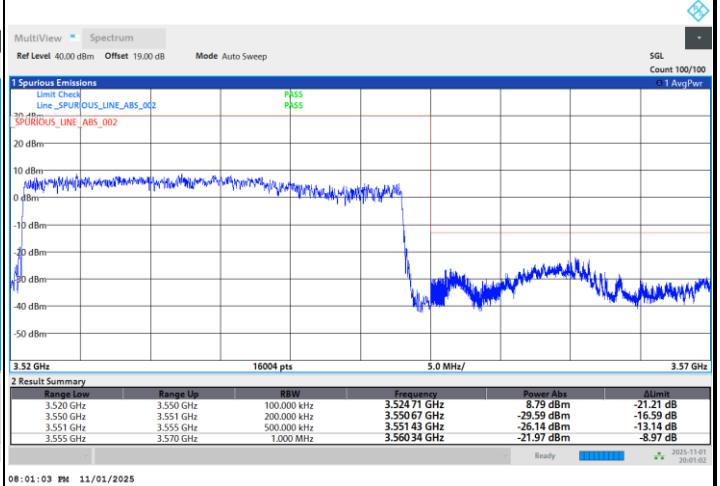


## FR1 n77 / 30MHz / DFT-S OFDM / PI/2 BPSK

## Lowest Band Edge / Full RB

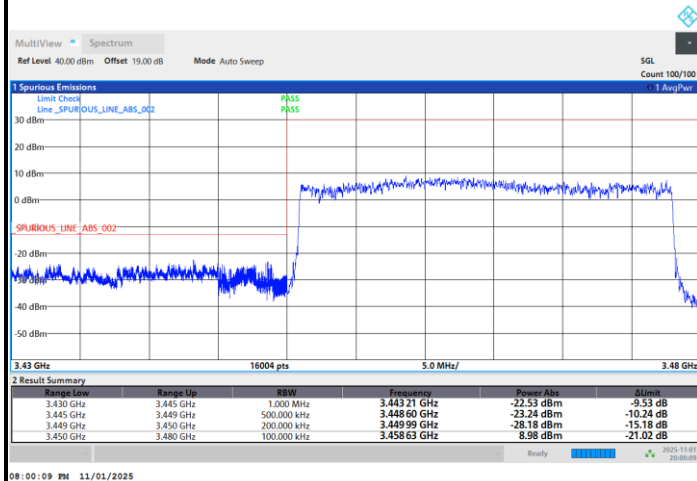


## Highest Band Edge / Full RB

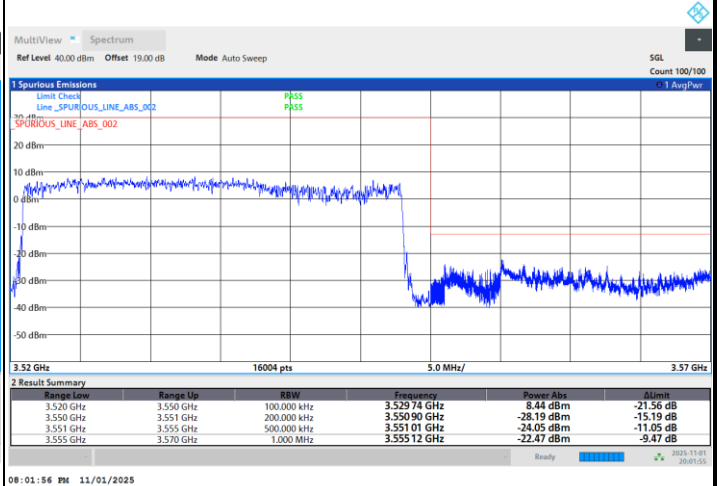


## FR1 n77 / 30MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / Full RB



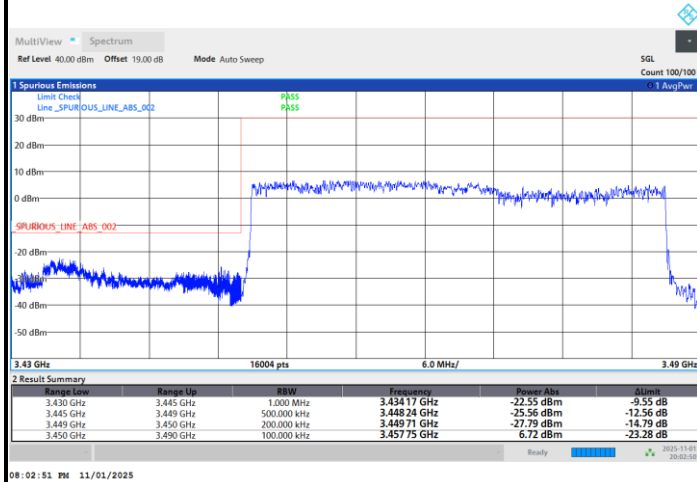
## Highest Band Edge / Full RB



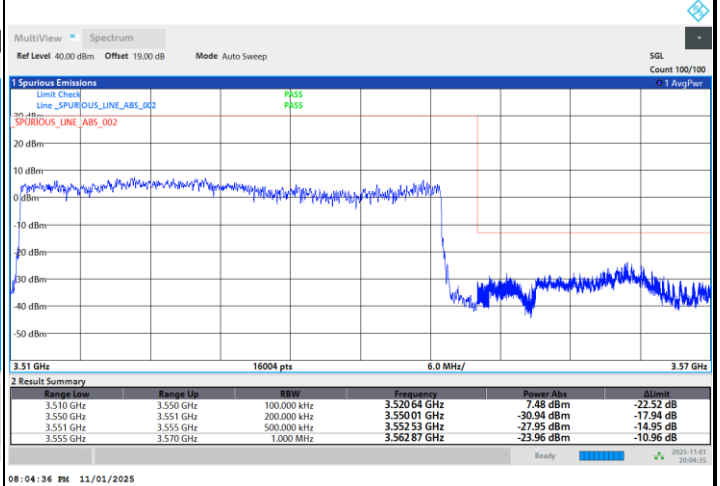


## FR1 n77 / 40MHz / DFT-S OFDM / PI/2 BPSK

## Lowest Band Edge / Full RB

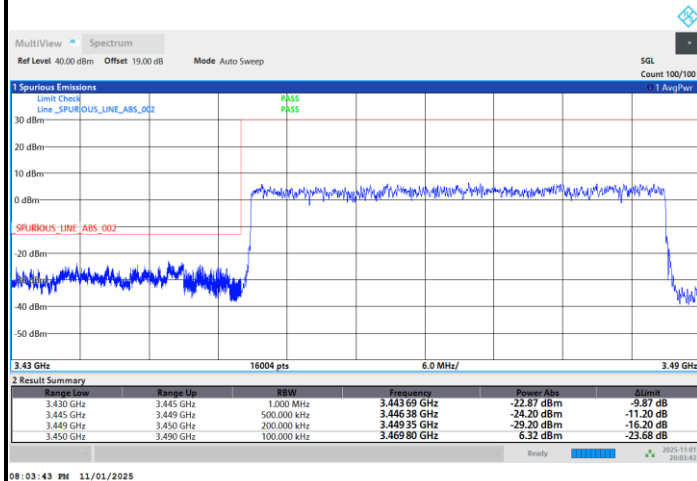


## Highest Band Edge / Full RB

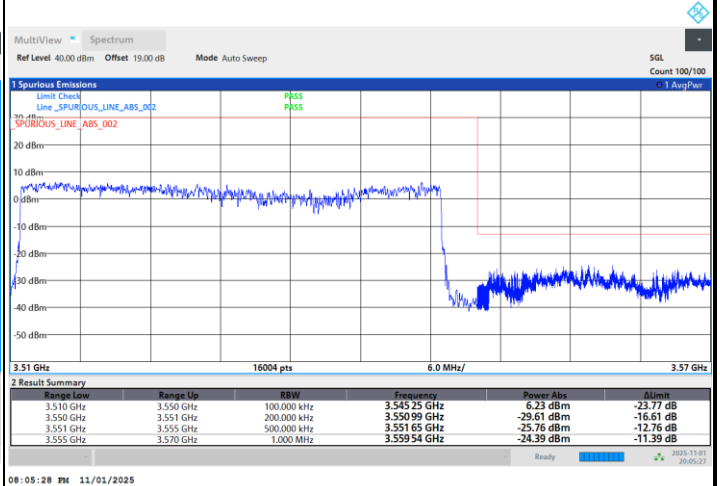


## FR1 n77 / 40MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / Full RB



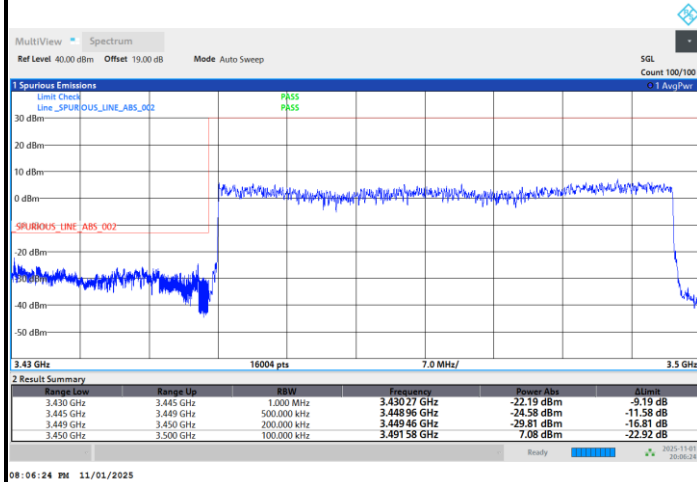
## Highest Band Edge / Full RB



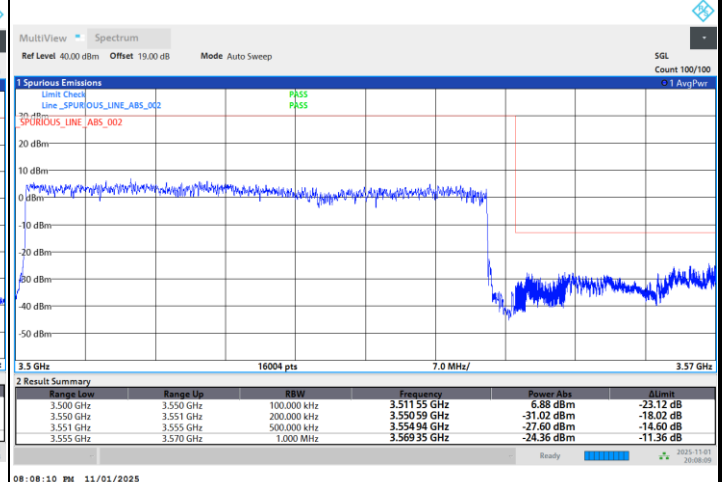


## FR1 n77 / 50MHz / DFT-S OFDM / PI/2 BPSK

## Lowest Band Edge / Full RB

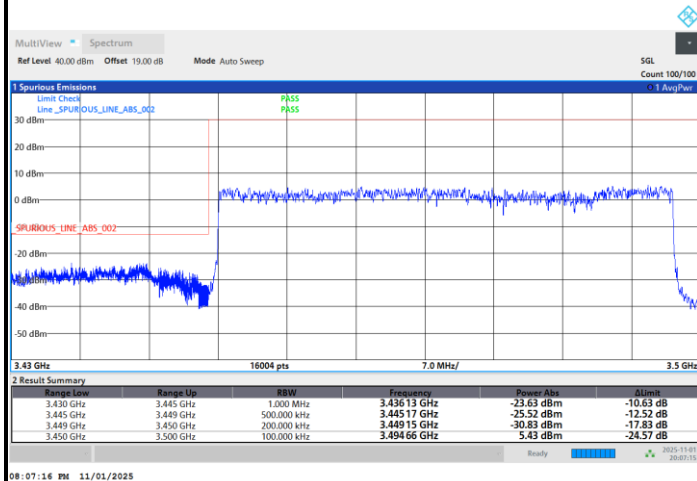


## Highest Band Edge / Full RB

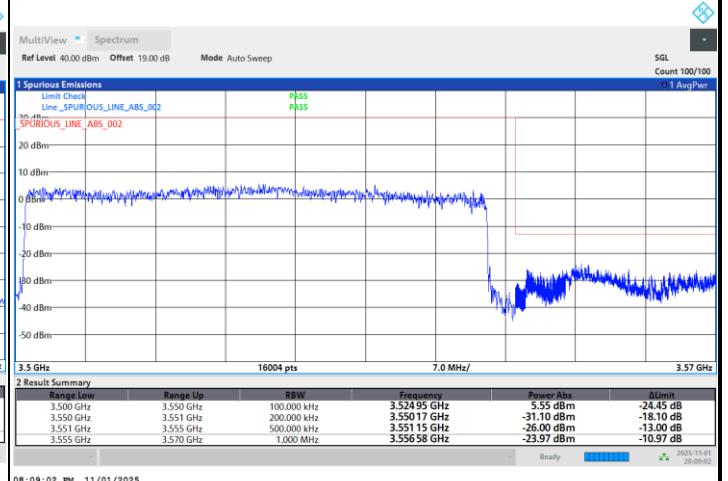


## FR1 n77 / 50MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / Full RB



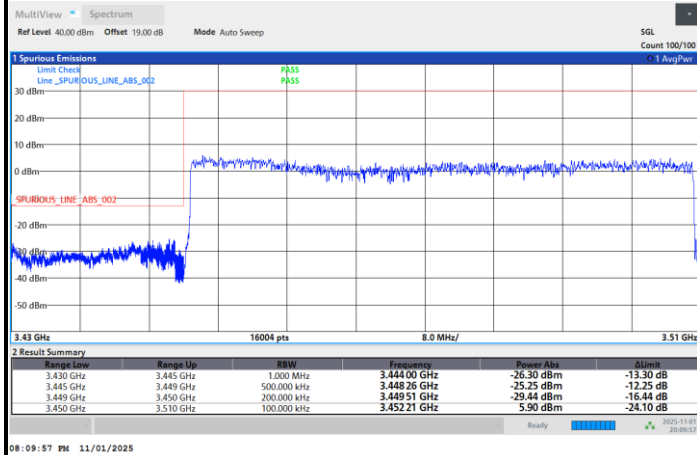
## Highest Band Edge / Full RB



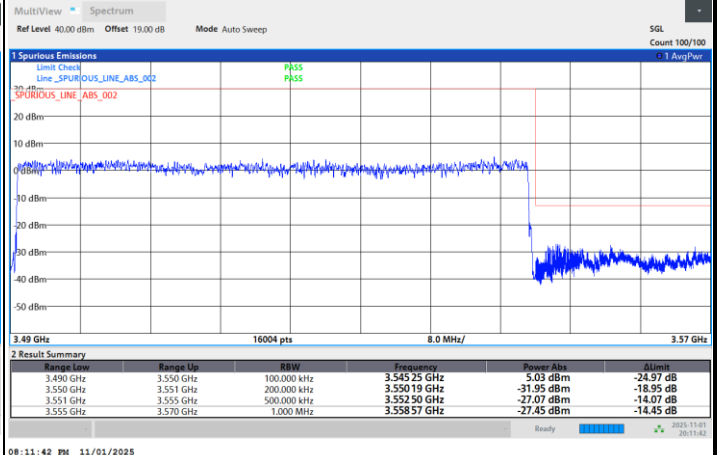


## FR1 n77 / 60MHz / DFT-S OFDM / PI/2 BPSK

## Lowest Band Edge / Full RB

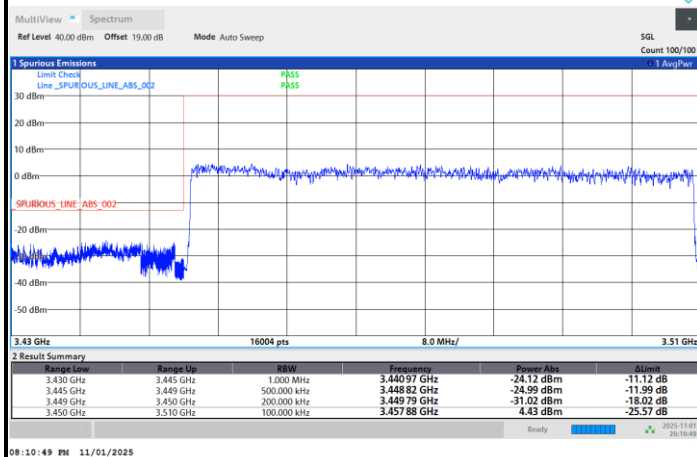


## Highest Band Edge / Full RB

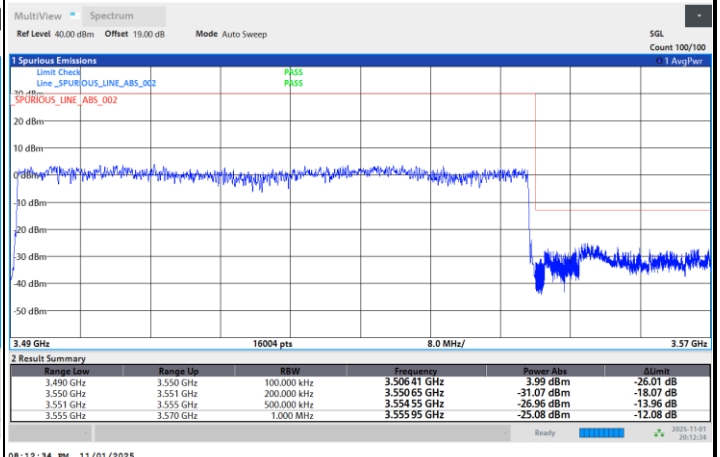


## FR1 n77 / 60MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / Full RB



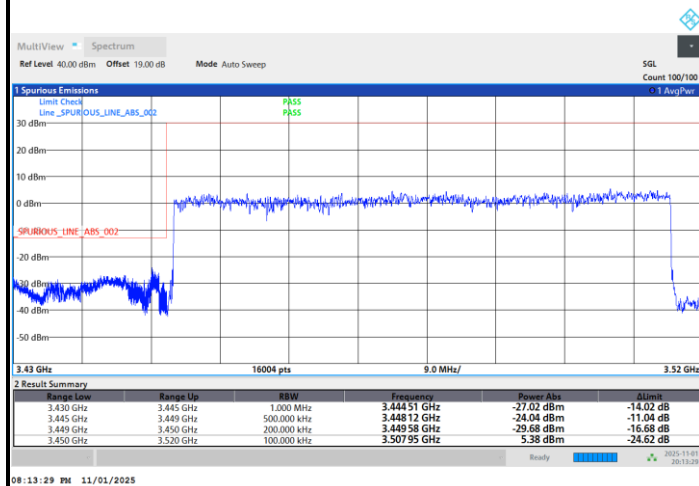
## Highest Band Edge / Full RB



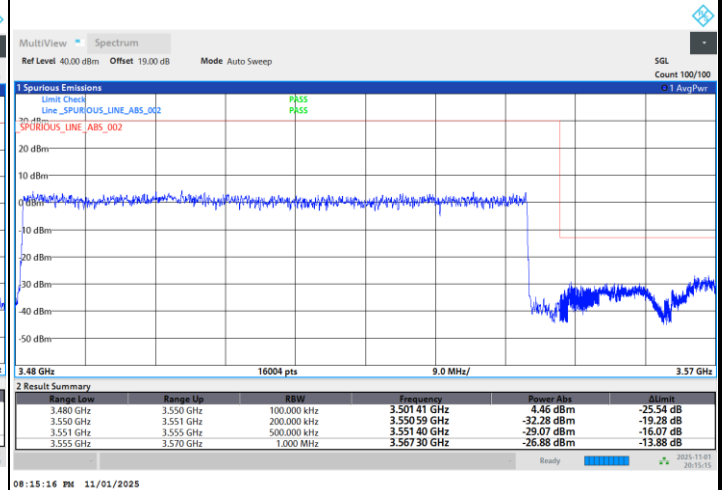


## FR1 n77 / 70MHz / DFT-S OFDM / PI/2 BPSK

## Lowest Band Edge / Full RB

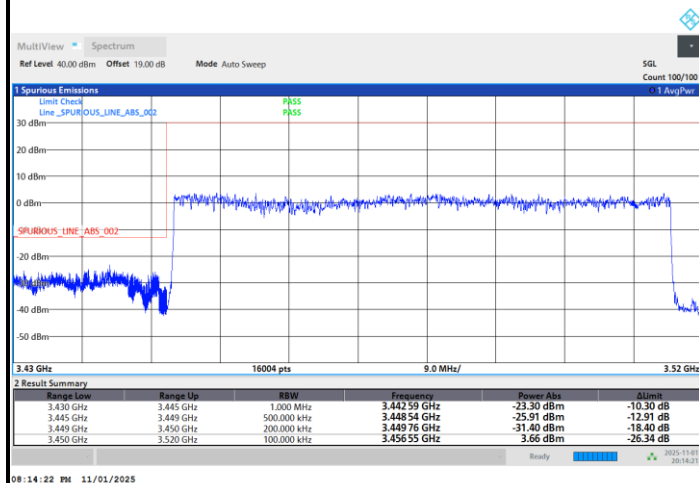


## Highest Band Edge / Full RB

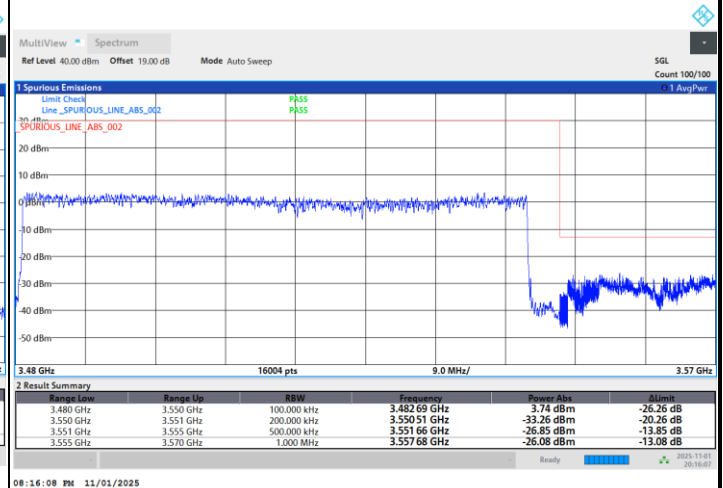


## FR1 n77 / 70MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / Full RB



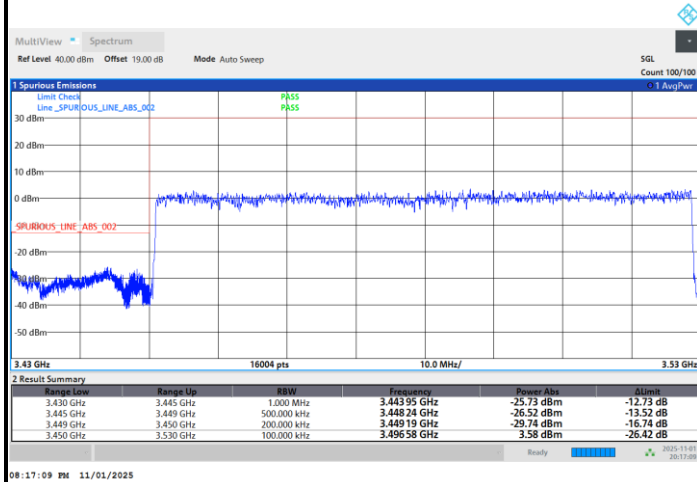
## Highest Band Edge / Full RB



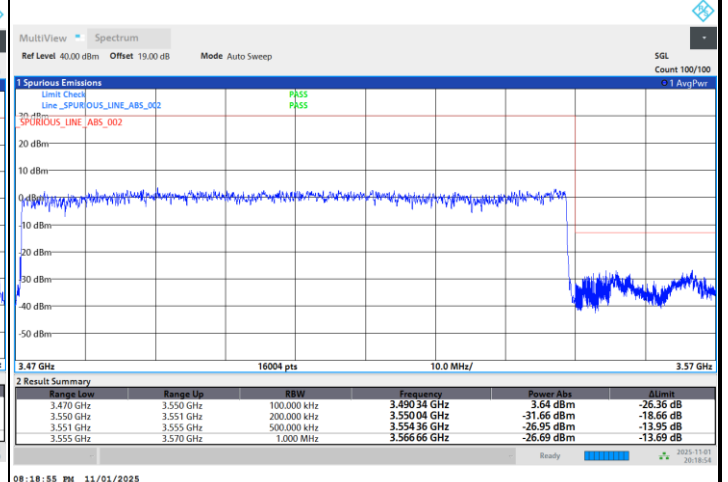


## FR1 n77 / 80MHz / DFT-S OFDM / PI/2 BPSK

## Lowest Band Edge / Full RB

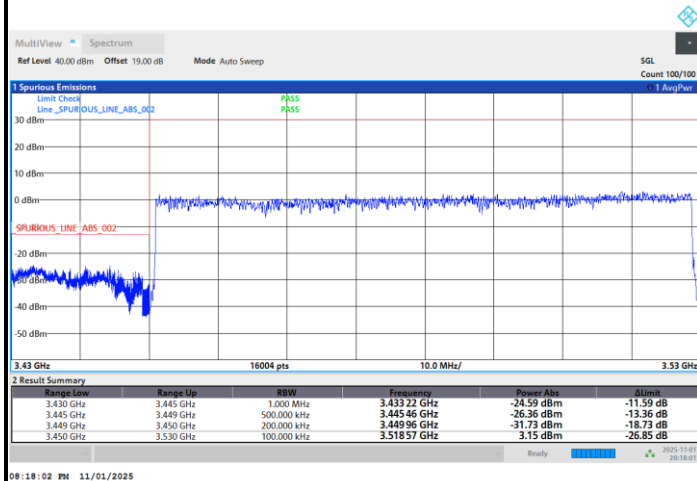


## Highest Band Edge / Full RB

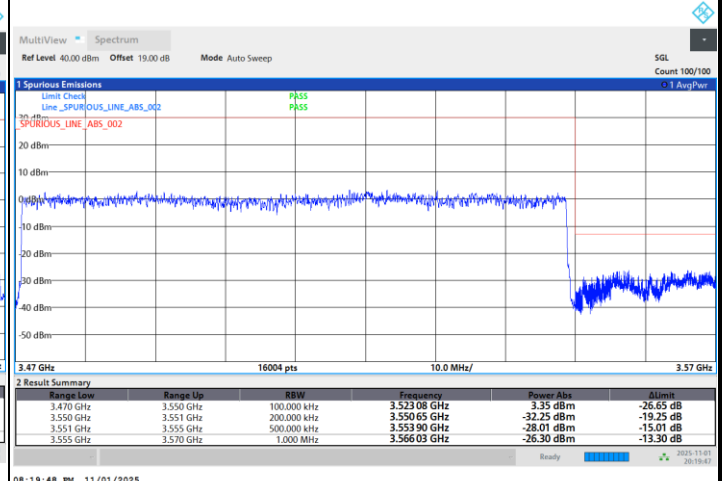


## FR1 n77 / 80MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / Full RB



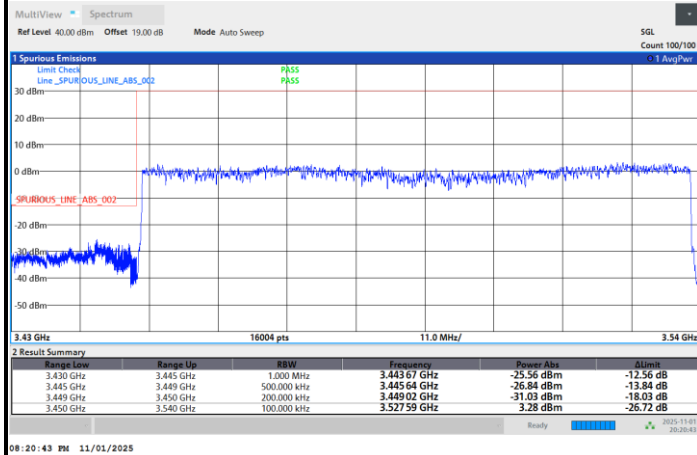
## Highest Band Edge / Full RB



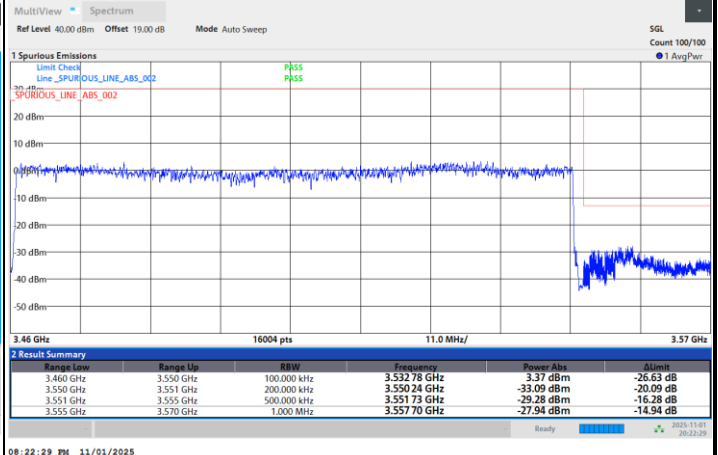


## FR1 n77 / 90MHz / DFT-S OFDM / PI/2 BPSK

## Lowest Band Edge / Full RB

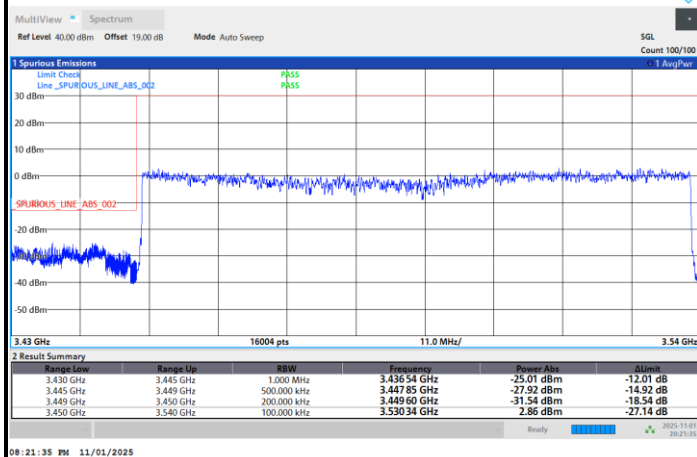


## Highest Band Edge / Full RB

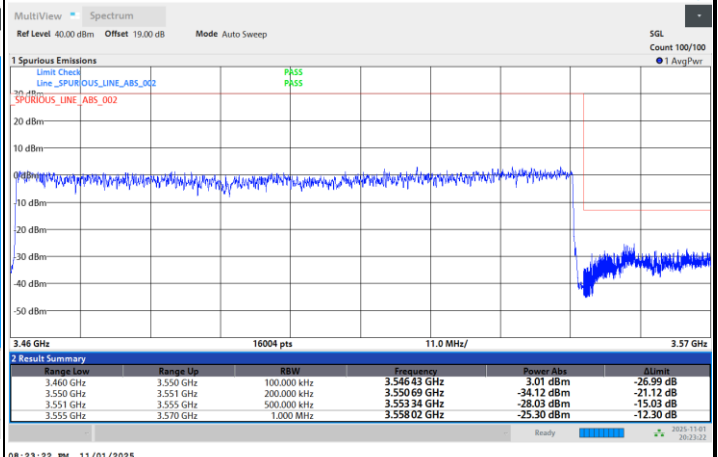


## FR1 n77 / 90MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / Full RB



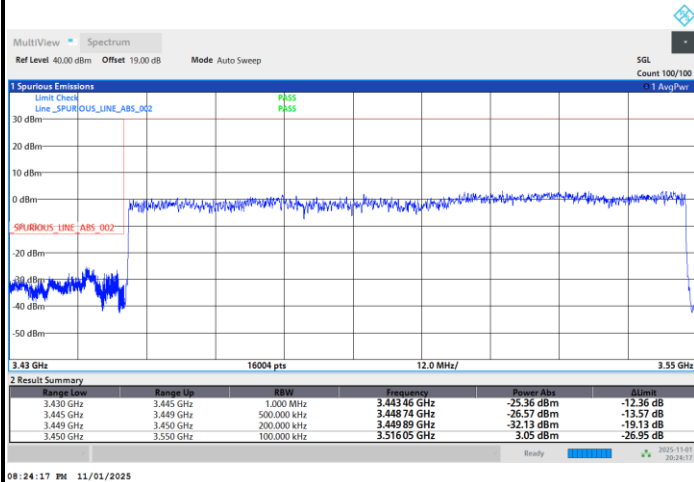
## Highest Band Edge / Full RB



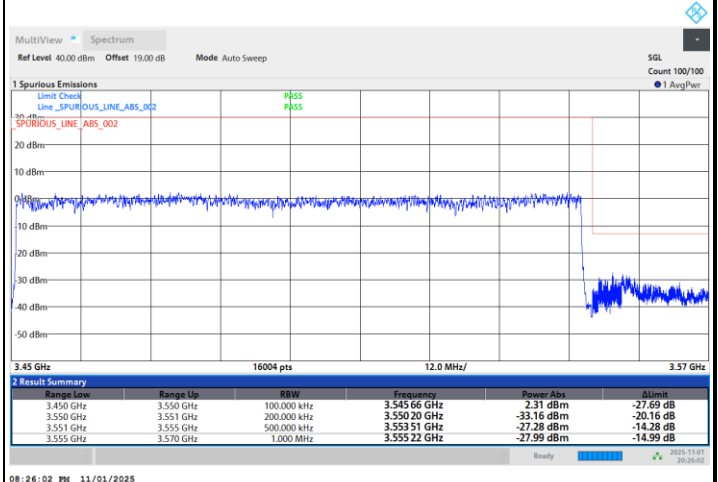


## FR1 n77 / 100MHz / DFT-S OFDM / PI/2 BPSK

## Middle Band Edge / Full RB

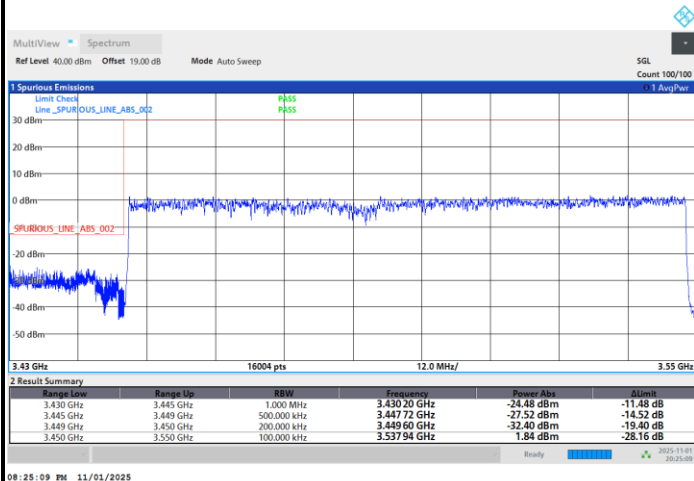


## Middle Band Edge / Full RB

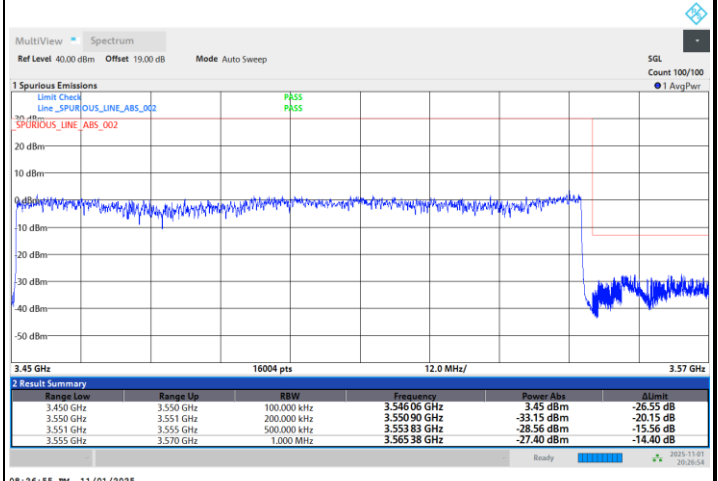


## FR1 n77 / 100MHz / DFT-S OFDM / QPSK

## Middle Band Edge / Full RB



## Middle Band Edge / Full RB

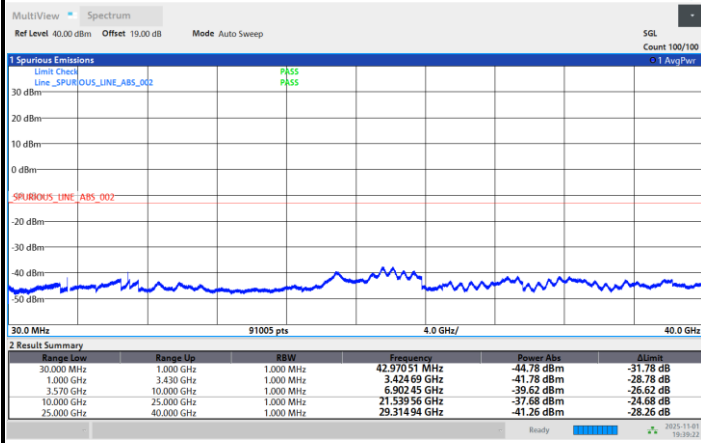




# Conducted Spurious Emission

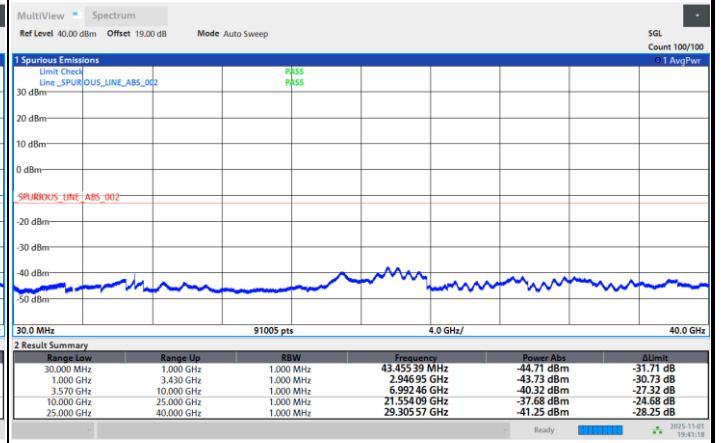
FR1 n77 / 10MHz / DFT-S OFDM / QPSK / 1RB1

## Lowest Channel



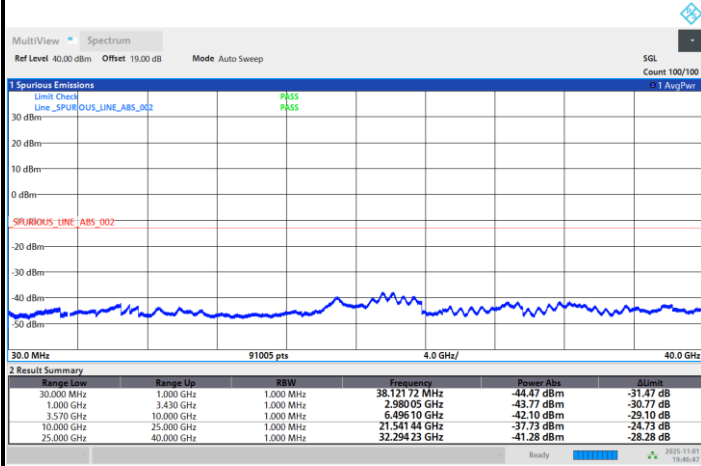
07:39:23 PM 11/01/2025

## Middle Channel



07:41:20 PM 11/01/2025

## Highest Channel



07:46:47 PM 11/01/2025

## Frequency Stability

| Test Conditions     |                   | FR1 n77 (BPSK) / Middle Channel 10M |                                         |                                             |        |
|---------------------|-------------------|-------------------------------------|-----------------------------------------|---------------------------------------------|--------|
| Temperature<br>(°C) | Voltage<br>(Volt) | Deviation (ppm)                     | Frequency Offset ( $\Delta f$ )<br>(Hz) | Within Authorized<br>Frequency<br>Block(Hz) | Result |
| 50                  | Normal Voltage    | 0.0013                              | -4.7                                    | Yes                                         | PASS   |
| 40                  | Normal Voltage    | 0.0017                              | -5.9                                    | Yes                                         |        |
| 30                  | Normal Voltage    | 0.0021                              | -7.2                                    | Yes                                         |        |
| 20(Ref.)            | Normal Voltage    | 0.0000                              | 0                                       | Yes                                         |        |
| 10                  | Normal Voltage    | 0.0019                              | 6.7                                     | Yes                                         |        |
| 0                   | Normal Voltage    | 0.0010                              | -3.4                                    | Yes                                         |        |
| -10                 | Normal Voltage    | 0.0004                              | 1.4                                     | Yes                                         |        |
| -20                 | Normal Voltage    | 0.0009                              | 3                                       | Yes                                         |        |
| -30                 | Normal Voltage    | 0.0024                              | -8.3                                    | Yes                                         |        |
| 20                  | Maximum Voltage   | 0.0025                              | 8.7                                     | Yes                                         |        |
| 20                  | Normal Voltage    | 0.0000                              | 0                                       | Yes                                         |        |
| 20                  | Minimum Voltage   | 0.0021                              | 7.5                                     | Yes                                         |        |

**Note:**

1. Normal Voltage = 3.3 V. ; Minimum Voltage = 3.05 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.
3. The frequency variation is sufficient to ensure that the occupied bandwidth of all operation channels stay within the operating frequency block or frequency block group.

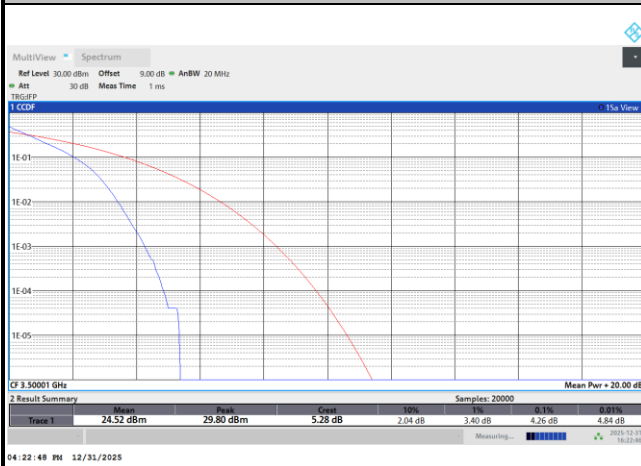
**FR1 n77\_Part27Q****MIMO <Ant. 0+2> (Ant. 2)****Peak-to-Average Ratio**

| Mode      | FR1 n77 / 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 | 4.26                         | 5.28    | 5.88    | 6.58    | <b>PASS</b> |
| Mode      | FR1 n77 / 20MHz / DFT-S OFDM |         |         |         |             |
| Mod.      | 256QAM                       |         |         |         | Limit: 13dB |
| RB Size   | Full RB                      |         |         |         | Result      |
| Middle CH | 6.86                         |         |         |         | <b>PASS</b> |

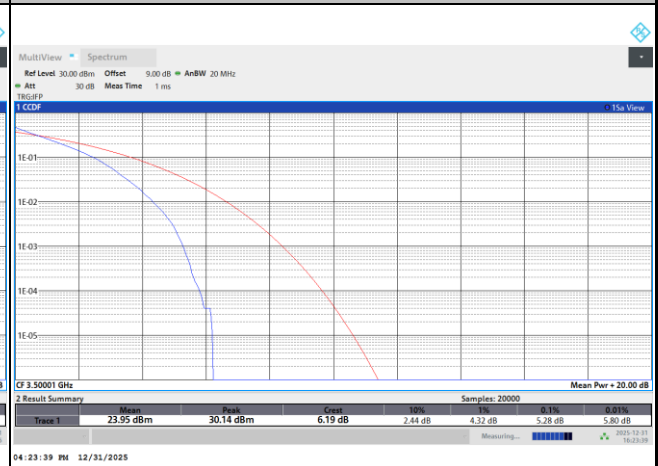


## FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

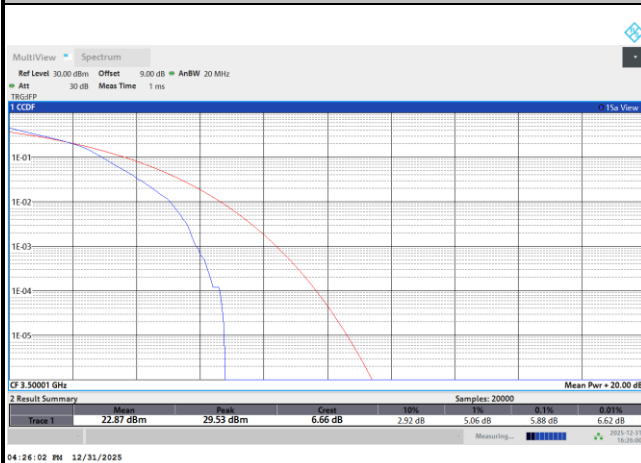
## PI/2 BPSK



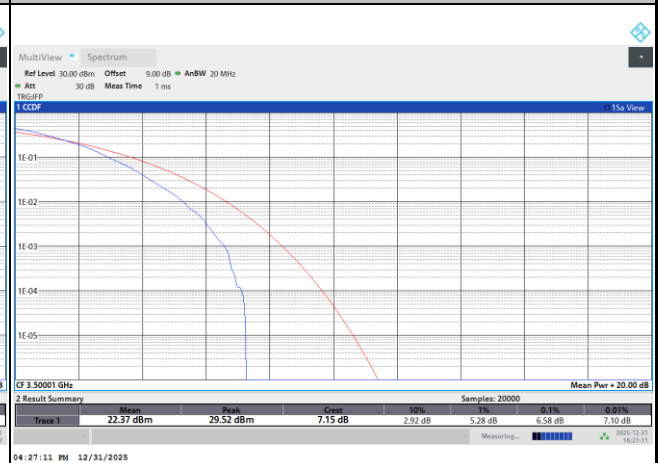
## QPSK



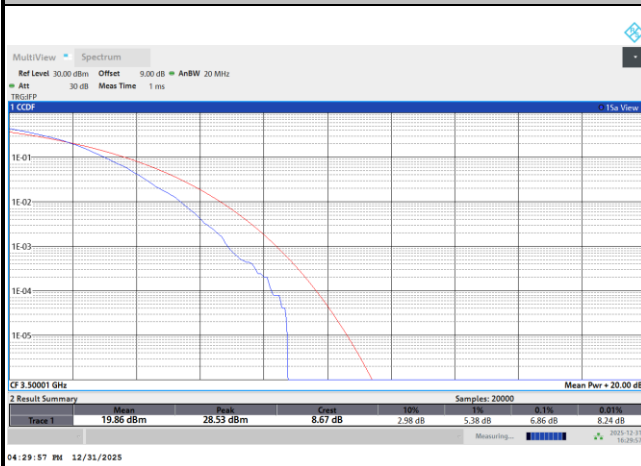
## 16QAM



## 64QAM



## 256QAM



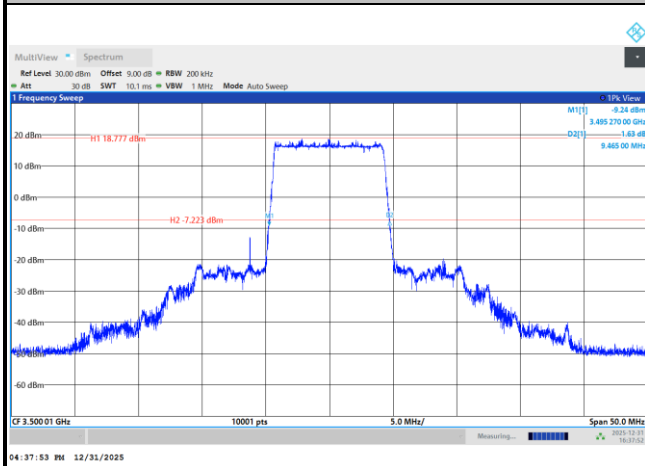
**26dB Bandwidth**

| Mode      | FR1 n77 : 26dB BW(MHz) / DFT-S OFDM |       |           |       |           |       |           |        |
|-----------|-------------------------------------|-------|-----------|-------|-----------|-------|-----------|--------|
| BW        | 10MHz                               |       | 15MHz     |       | 20MHz     |       | 25MHz     |        |
| Mod.      | PI/2 BPSK                           | QPSK  | PI/2 BPSK | QPSK  | PI/2 BPSK | QPSK  | PI/2 BPSK | QPSK   |
| Middle CH | 9.46                                | 10.98 | 13.83     | 13.95 | 19.25     | 19.88 | 24.26     | 24.19  |
| Mod.      | 16QAM                               |       | 16QAM     |       | 16QAM     |       | 16QAM     |        |
| Middle CH | 9.65                                |       | 13.99     |       | 19.29     |       | 24.86     |        |
| BW        | 30MHz                               |       | 40MHz     |       | 50MHz     |       | 60MHz     |        |
| Mod.      | PI/2 BPSK                           | QPSK  | PI/2 BPSK | QPSK  | PI/2 BPSK | QPSK  | PI/2 BPSK | QPSK   |
| Middle CH | 29.37                               | 29.49 | 38.32     | 38.36 | 48.32     | 48.39 | 62.76     | 63.03  |
| Mod.      | 16QAM                               |       | 16QAM     |       | 16QAM     |       | 16QAM     |        |
| Middle CH | 29.30                               |       | 38.41     |       | 48.45     |       | 62.79     |        |
| BW        | 70MHz                               |       | 80MHz     |       | 90MHz     |       | 100MHz    |        |
| Mod.      | PI/2 BPSK                           | QPSK  | PI/2 BPSK | QPSK  | PI/2 BPSK | QPSK  | PI/2 BPSK | QPSK   |
| Middle CH | 69.41                               | 69.22 | 82.19     | 82.40 | 91.87     | 92.00 | 101.59    | 101.54 |
| Mod.      | 16QAM                               |       | 16QAM     |       | 16QAM     |       | 16QAM     |        |
| Middle CH | 69.25                               |       | 82.13     |       | 91.81     |       | 101.47    |        |

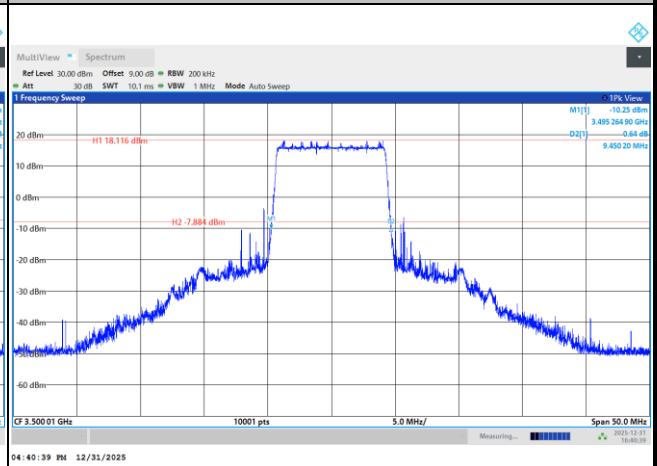


FR1 n77 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

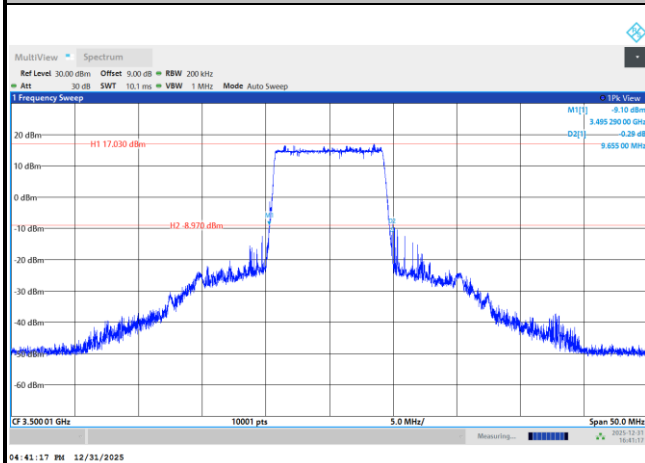
PI/2 BPSK



QPSK



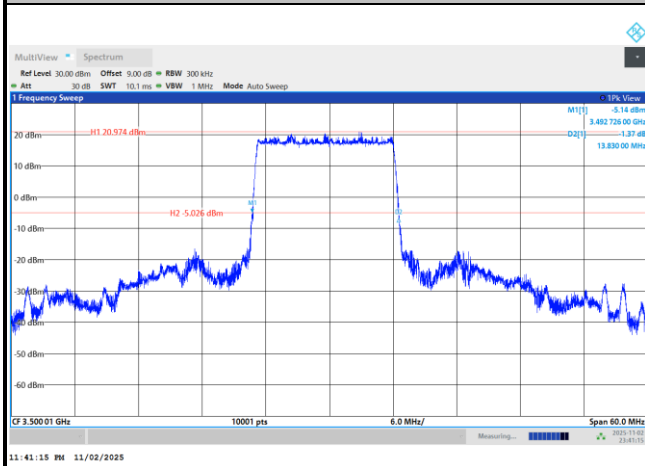
16QAM



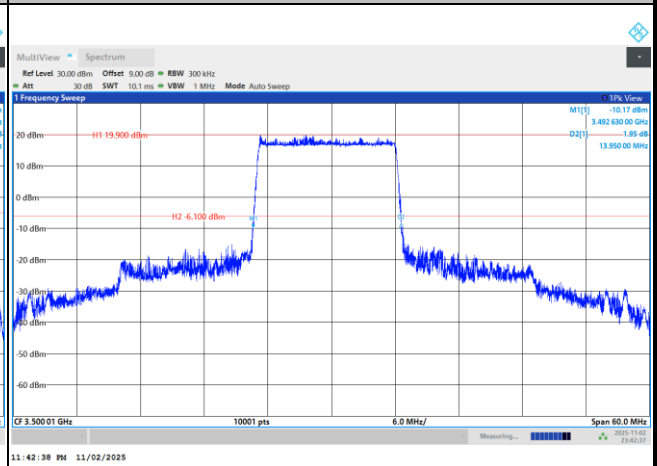


FR1 n77 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

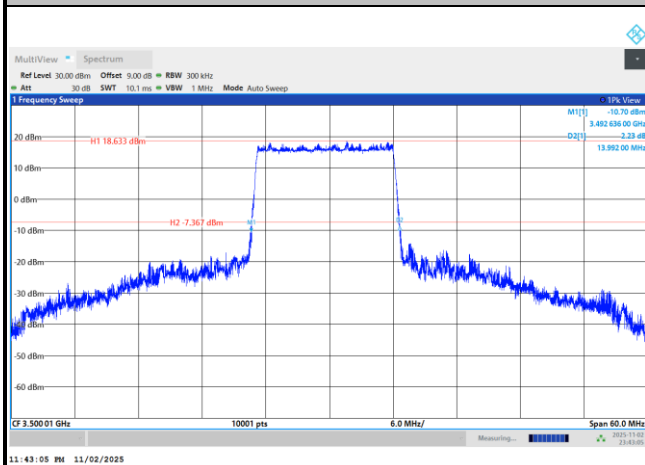
QPSK



QPSK



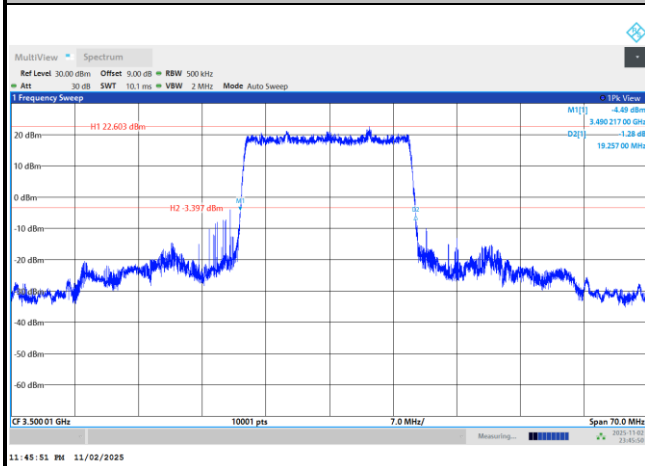
16QAM



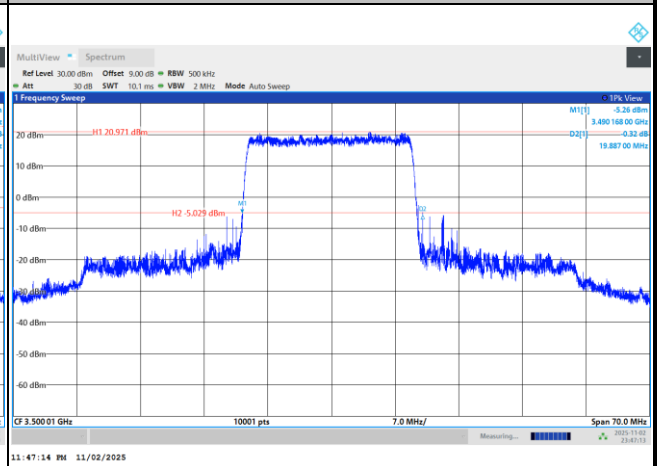


FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



QPSK



16QAM

