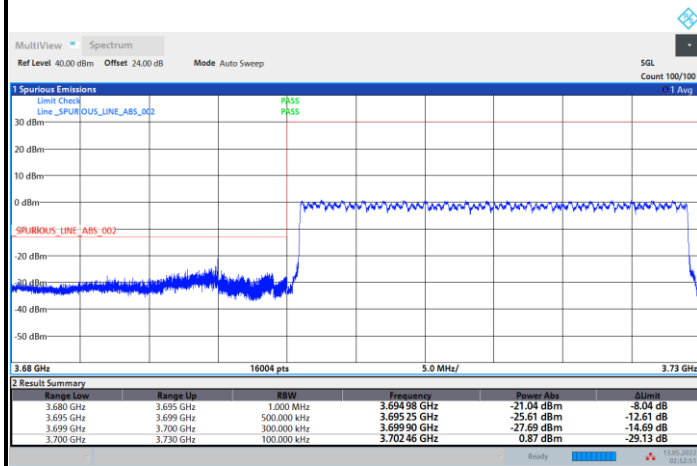


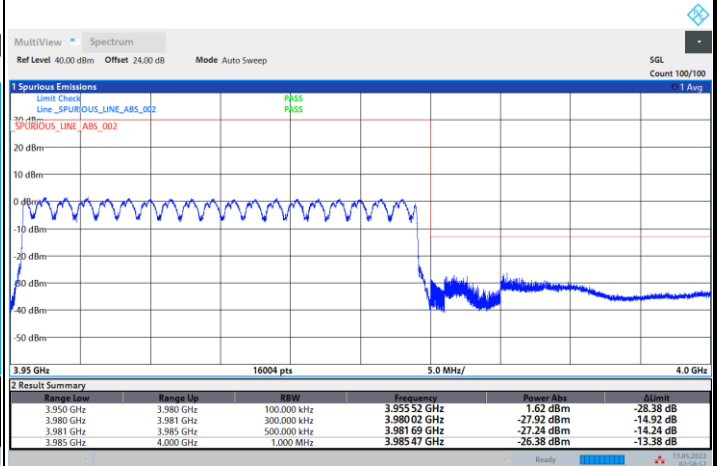


## FR1 n77 / 30MHz / CP OFDM / QPSK

## Lowest Band Edge / Full RB

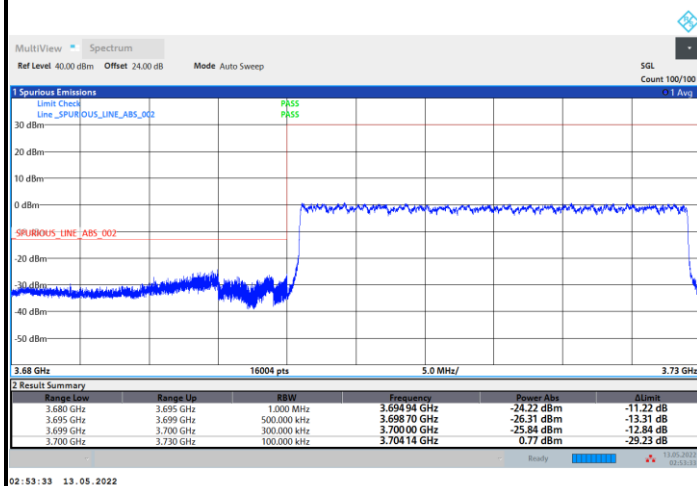


## Highest Band Edge / Full RB

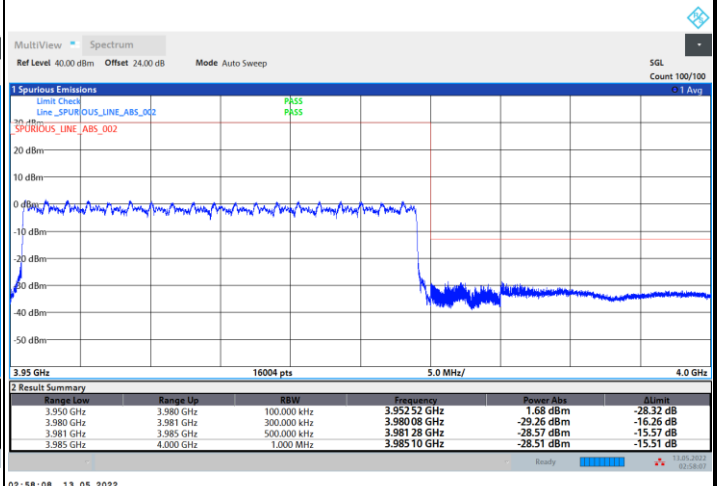


## FR1 n77 / 30MHz / CP OFDM / 16QAM

## Lowest Band Edge / Full RB



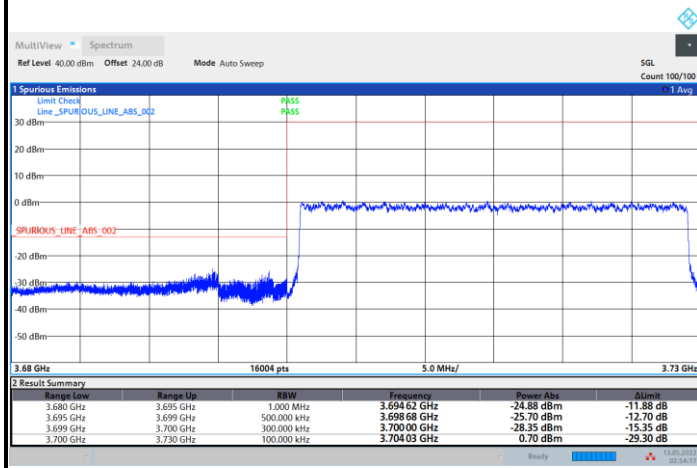
## Highest Band Edge / Full RB



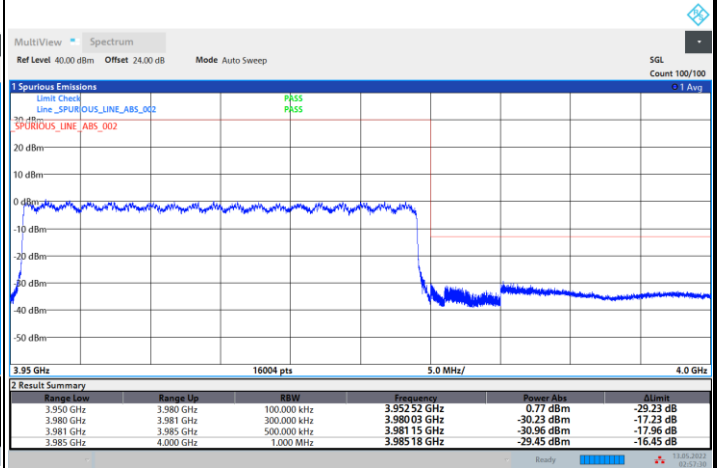


## FR1 n77 / 30MHz / CP OFDM / 64QAM

## Lowest Band Edge / Full RB

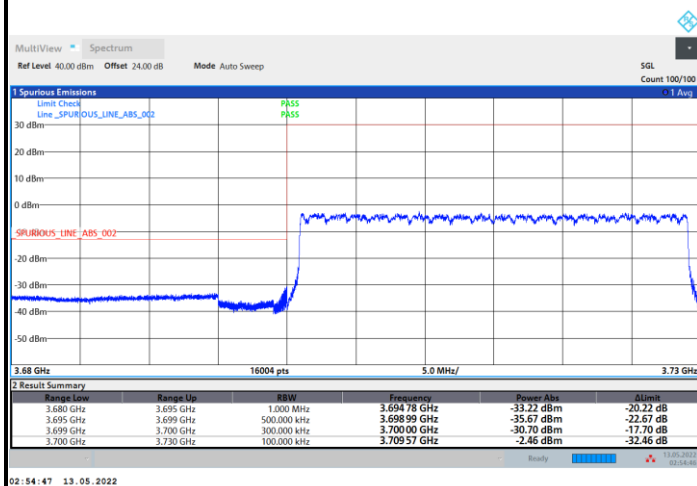


## Highest Band Edge / Full RB

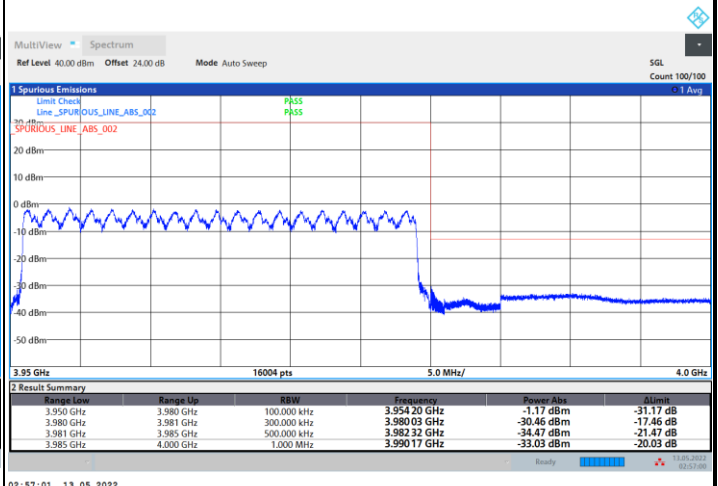


## FR1 n77 / 30MHz / CP OFDM / 256QAM

## Lowest Band Edge / Full RB



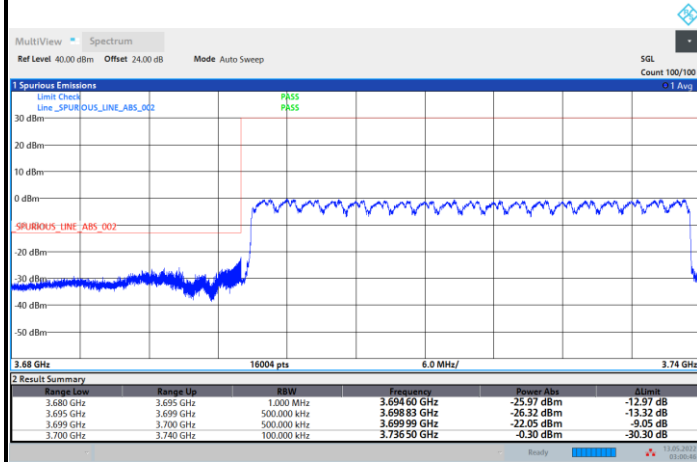
## Highest Band Edge / Full RB



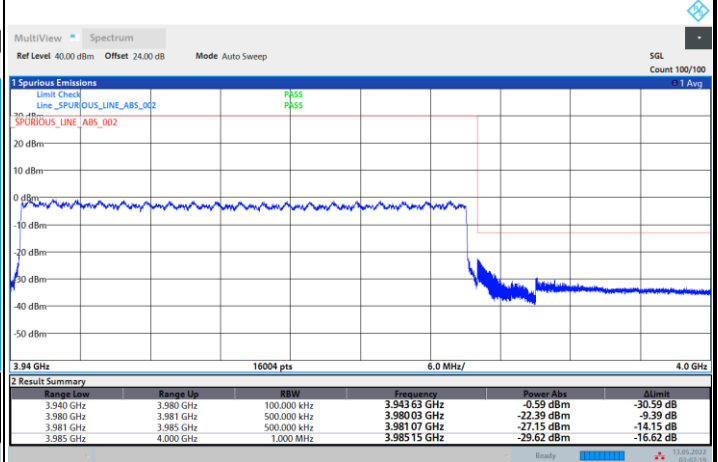


## FR1 n77 / 40MHz / CP OFDM / QPSK

## Lowest Band Edge / Full RB

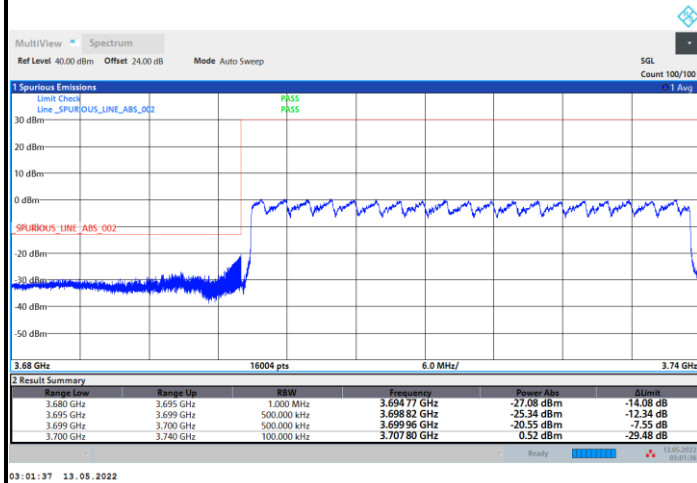


## Highest Band Edge / Full RB

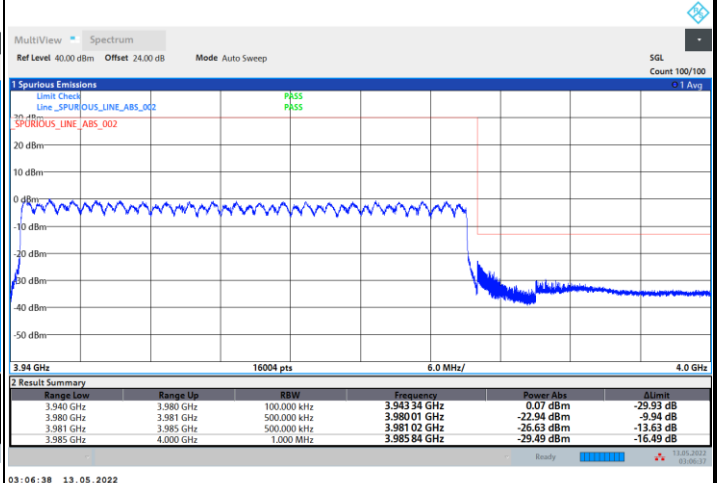


## FR1 n77 / 40MHz / CP OFDM / 16QAM

## Lowest Band Edge / Full RB



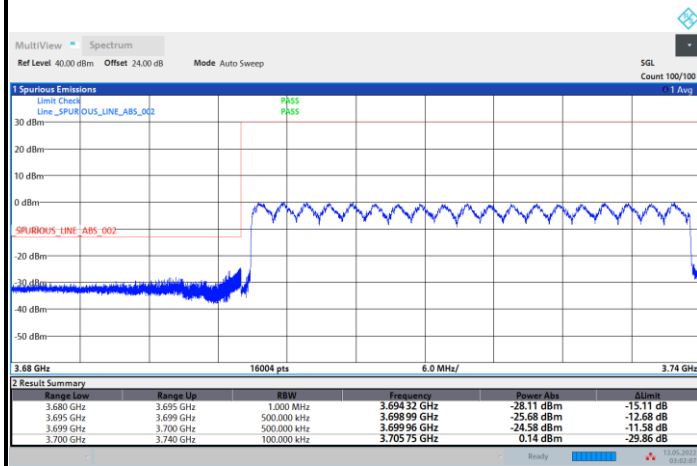
## Highest Band Edge / Full RB



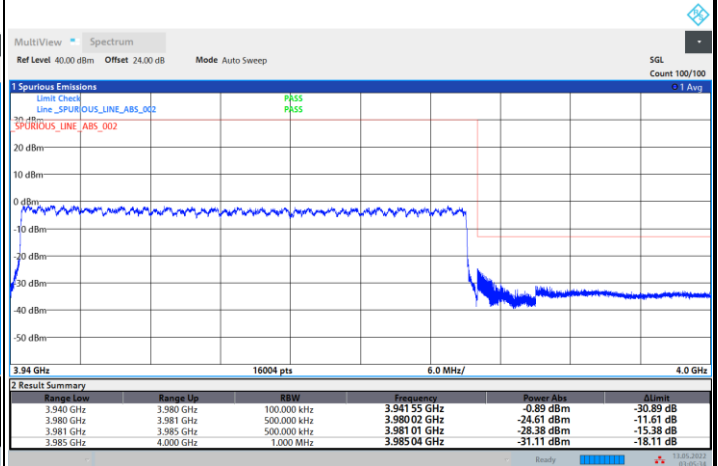


## FR1 n77 / 40MHz / CP OFDM / 64QAM

## Lowest Band Edge / Full RB

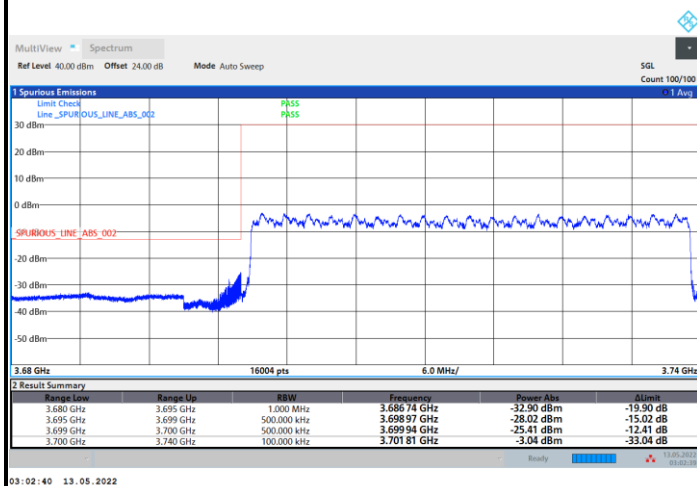


## Highest Band Edge / Full RB

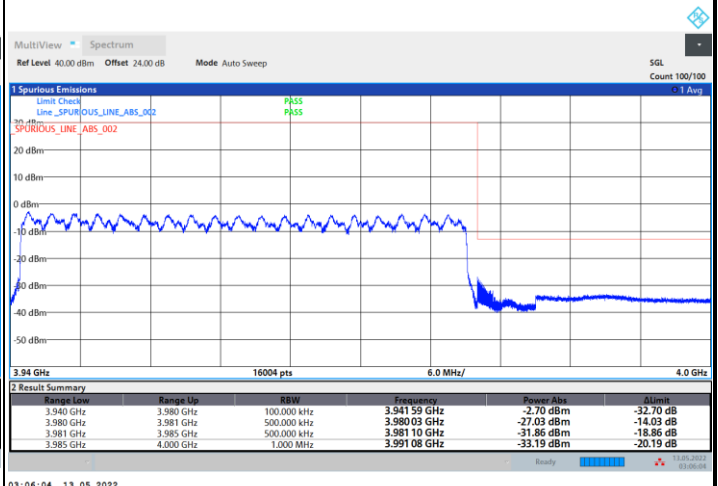


## FR1 n77 / 40MHz / CP OFDM / 256QAM

## Lowest Band Edge / Full RB



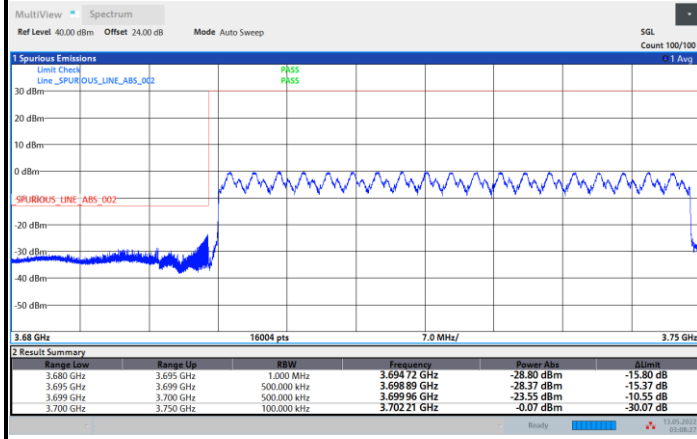
## Highest Band Edge / Full RB



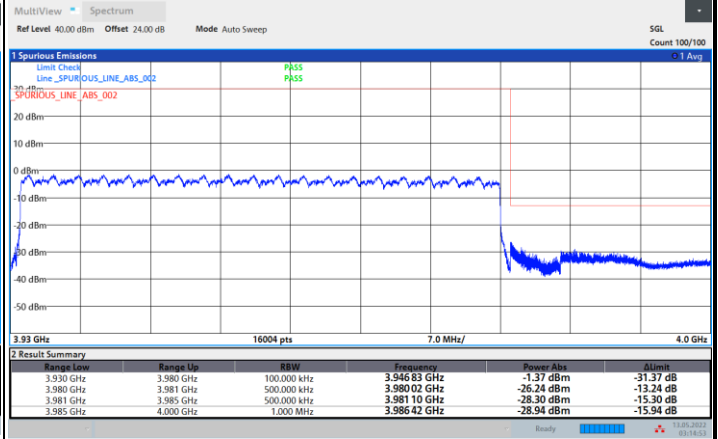


## FR1 n77 / 50MHz / CP OFDM / QPSK

## Lowest Band Edge / Full RB

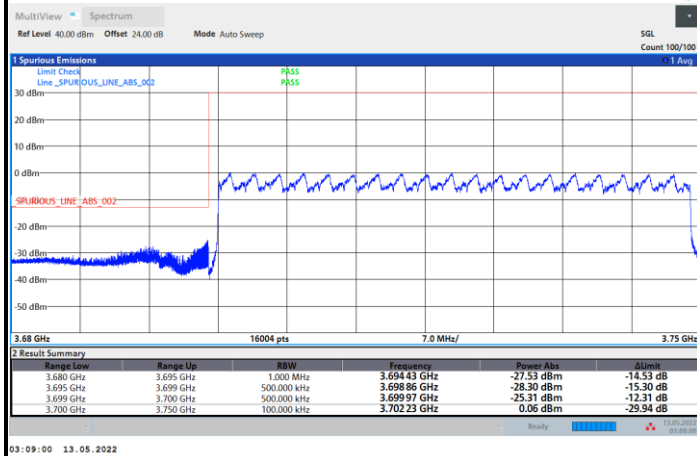


## Highest Band Edge / Full RB

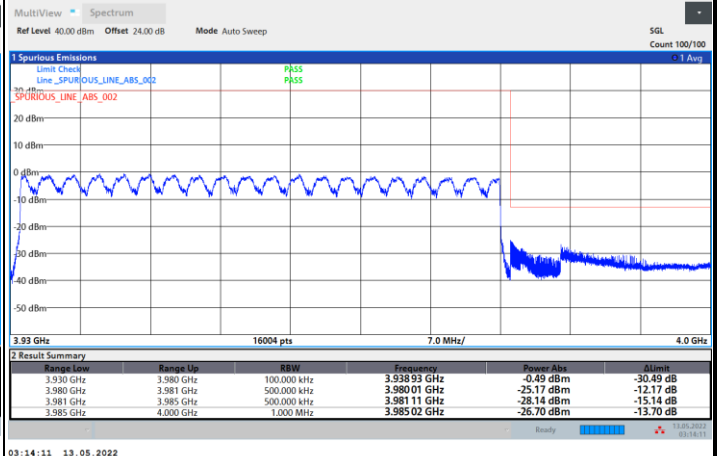


## FR1 n77 / 50MHz / CP OFDM / 16QAM

## Lowest Band Edge / Full RB



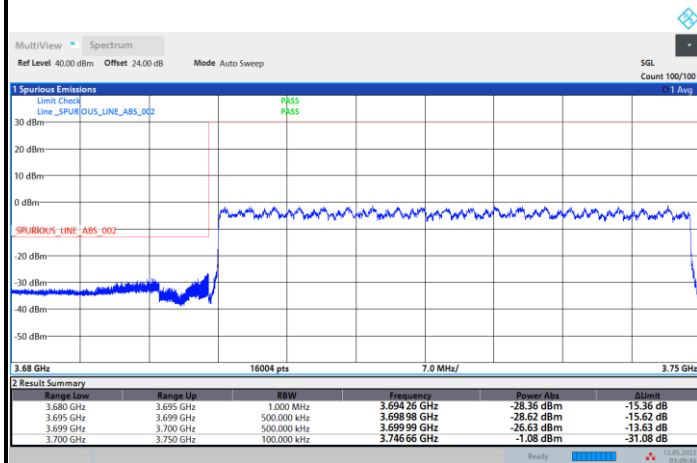
## Highest Band Edge / Full RB



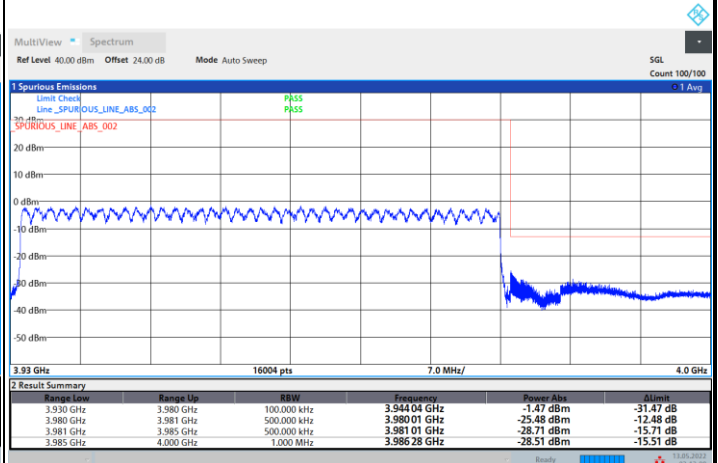


## FR1 n77 / 50MHz / CP OFDM / 64QAM

## Lowest Band Edge / Full RB

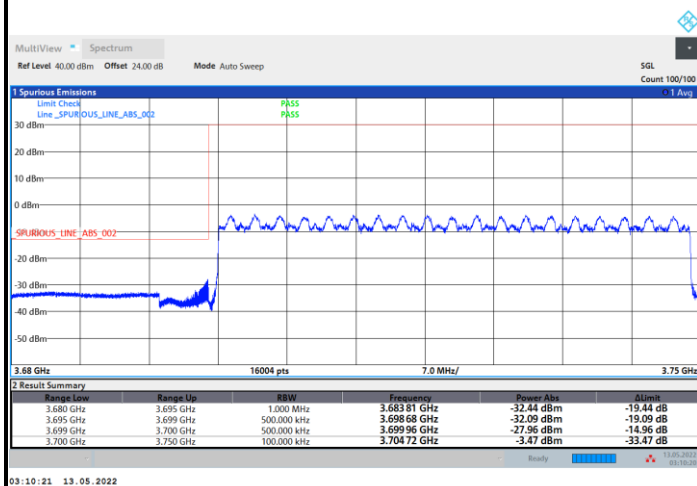


## Highest Band Edge / Full RB

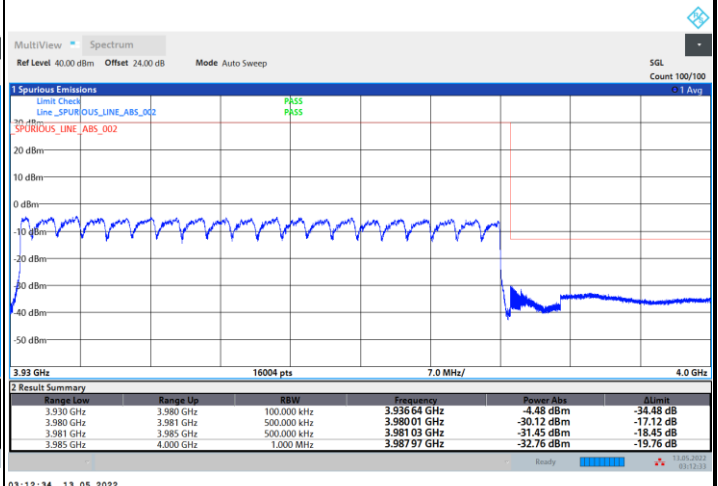


## FR1 n77 / 50MHz / CP OFDM / 256QAM

## Lowest Band Edge / Full RB



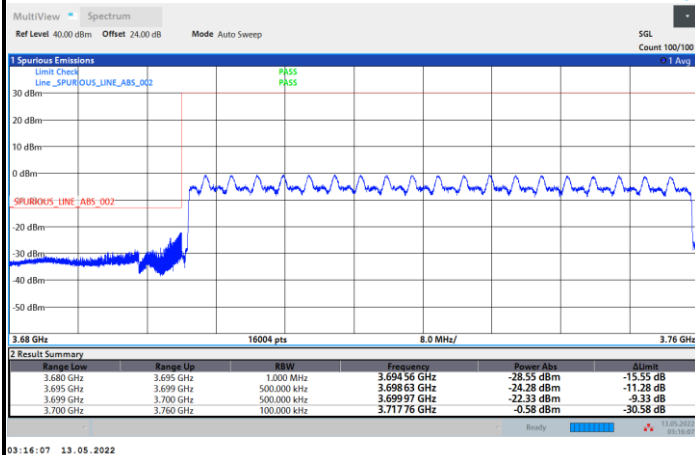
## Highest Band Edge / Full RB



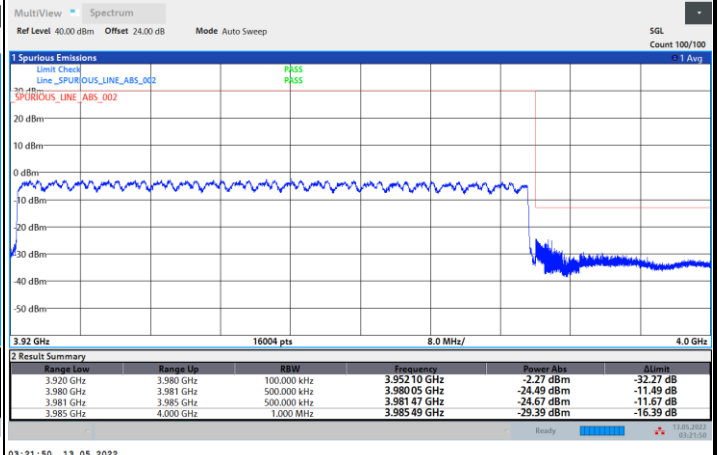


## FR1 n77 / 60MHz / CP OFDM / QPSK

## Lowest Band Edge / Full RB

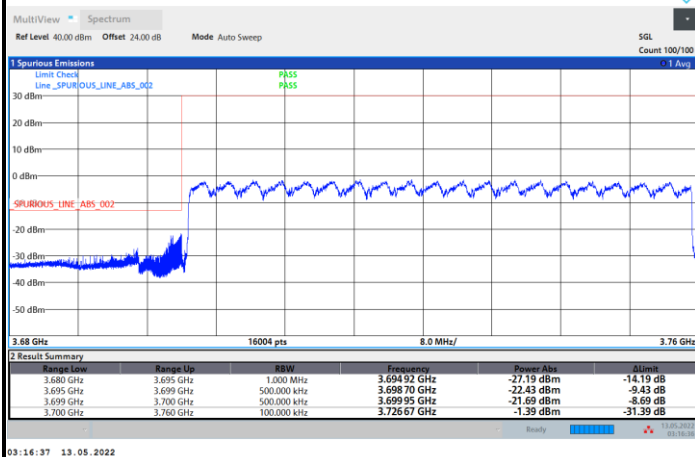


## Highest Band Edge / Full RB

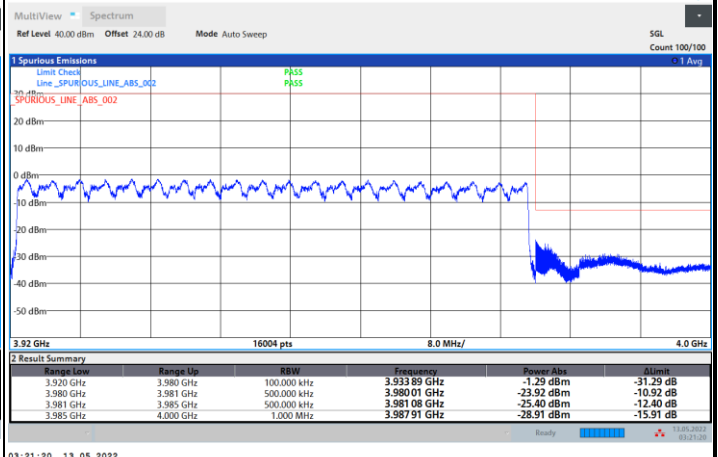


## FR1 n77 / 60MHz / CP OFDM / 16QAM

## Lowest Band Edge / Full RB



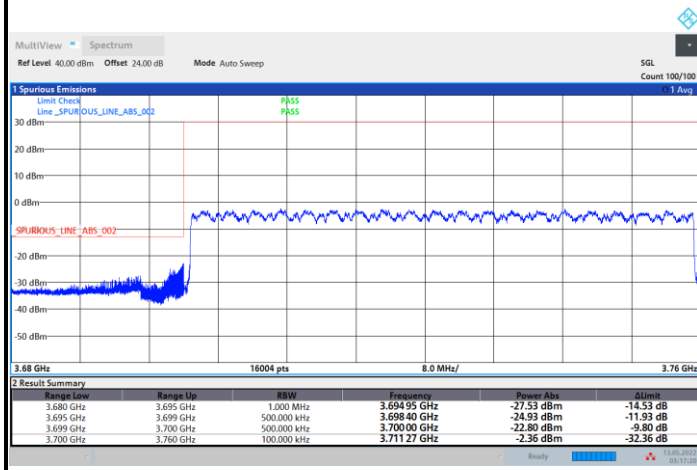
## Highest Band Edge / Full RB



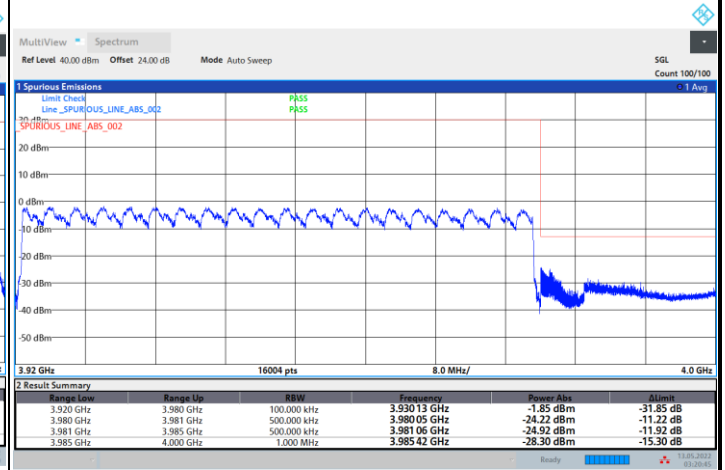


## FR1 n77 / 60MHz / CP OFDM / 64QAM

## Lowest Band Edge / Full RB

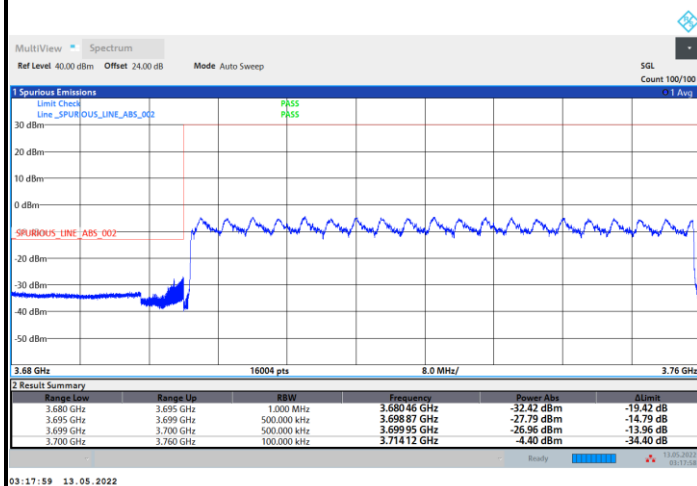


## Highest Band Edge / Full RB

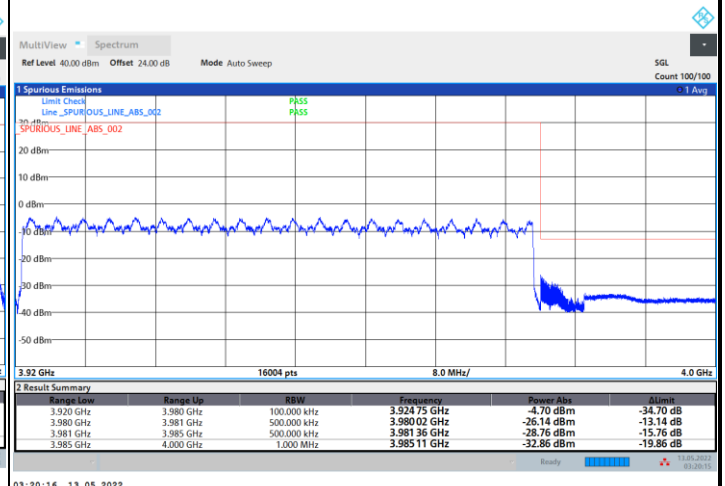


## FR1 n77 / 60MHz / CP OFDM / 256QAM

## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

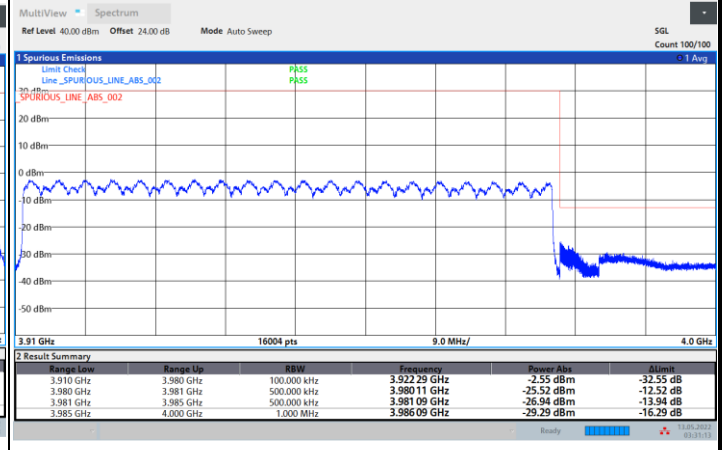
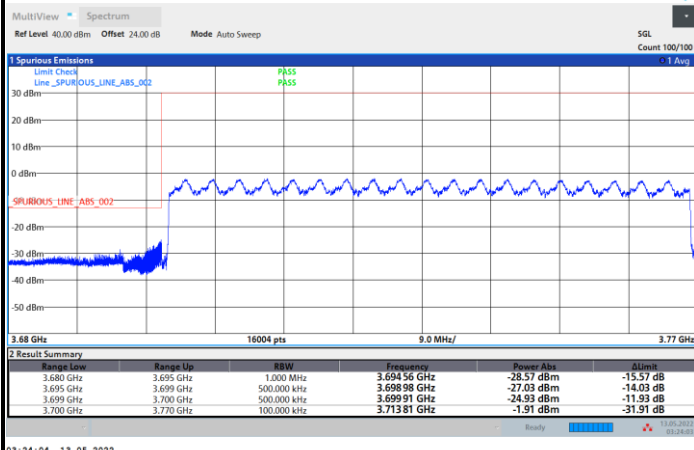




## FR1 n77 / 70MHz / CP OFDM / QPSK

## Lowest Band Edge / Full RB

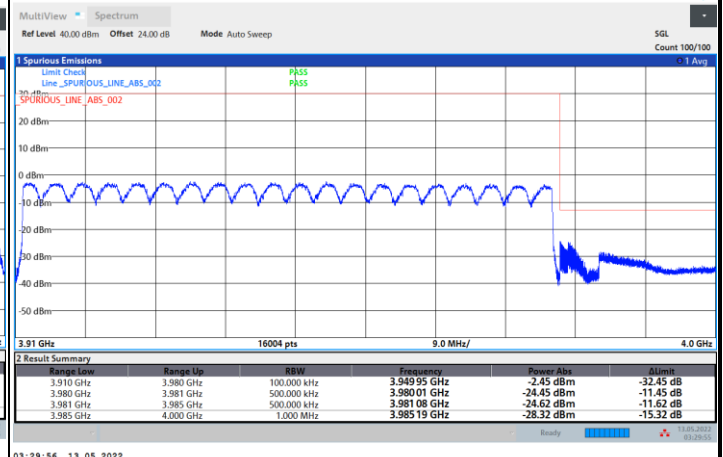
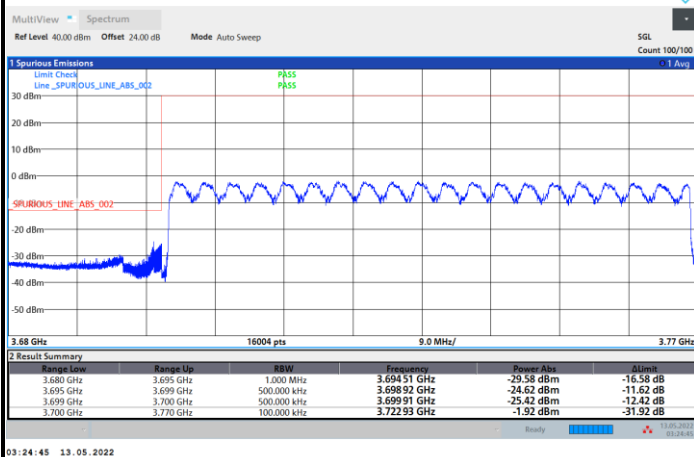
## Highest Band Edge / Full RB



## FR1 n77 / 70MHz / CP OFDM / 16QAM

## Lowest Band Edge / Full RB

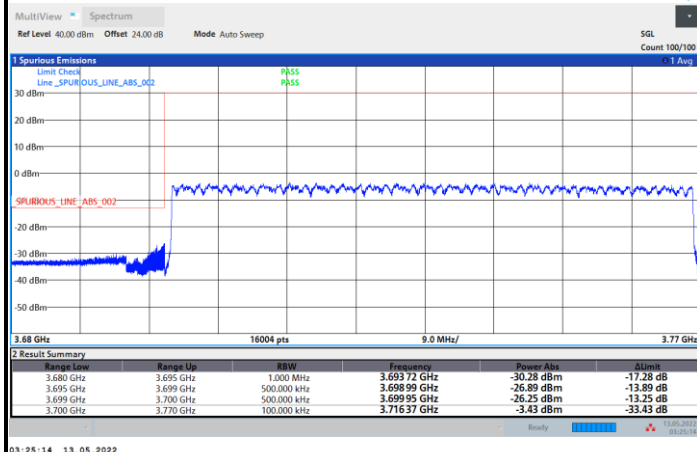
## Highest Band Edge / Full RB



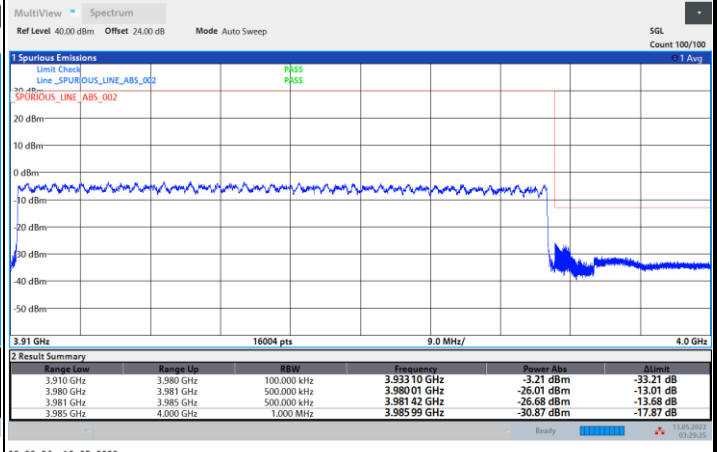


## FR1 n77 / 70MHz / CP OFDM / 64QAM

## Lowest Band Edge / Full RB

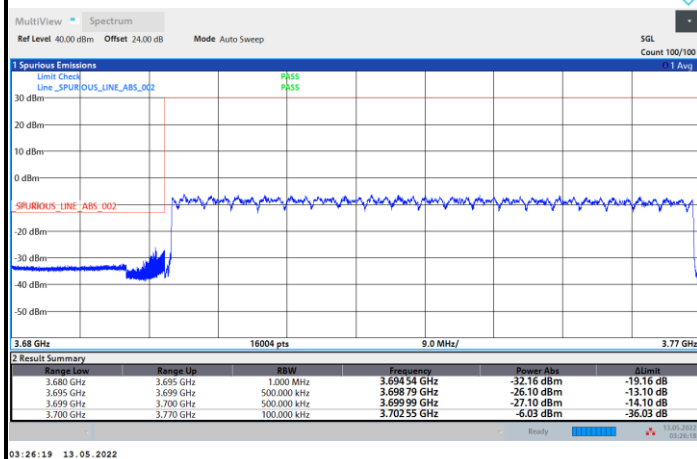


## Highest Band Edge / Full RB

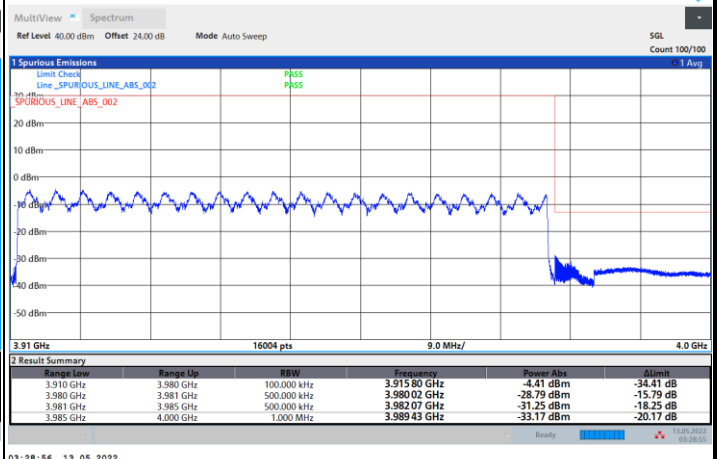


## FR1 n77 / 70MHz / CP OFDM / 256QAM

## Lowest Band Edge / Full RB



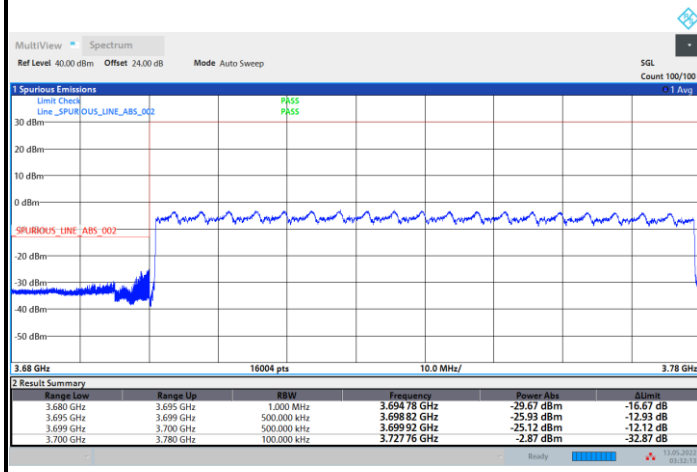
## Highest Band Edge / Full RB



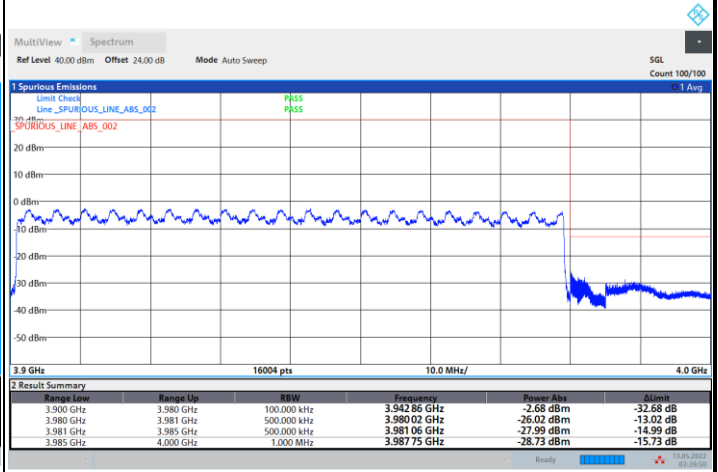


## FR1 n77 / 80MHz / CP OFDM / QPSK

## Lowest Band Edge / Full RB

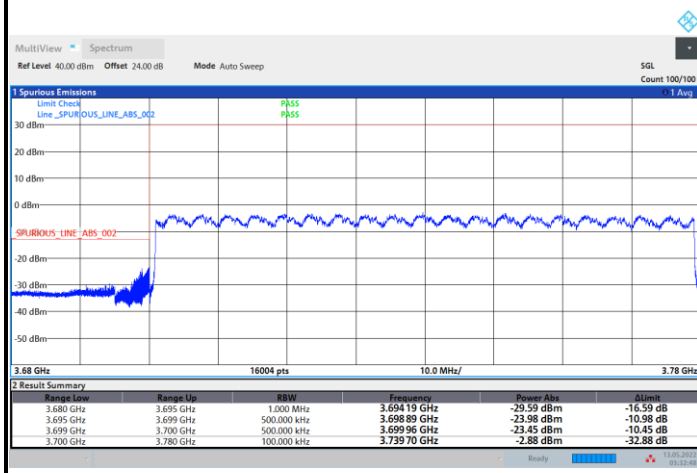


## Highest Band Edge / Full RB

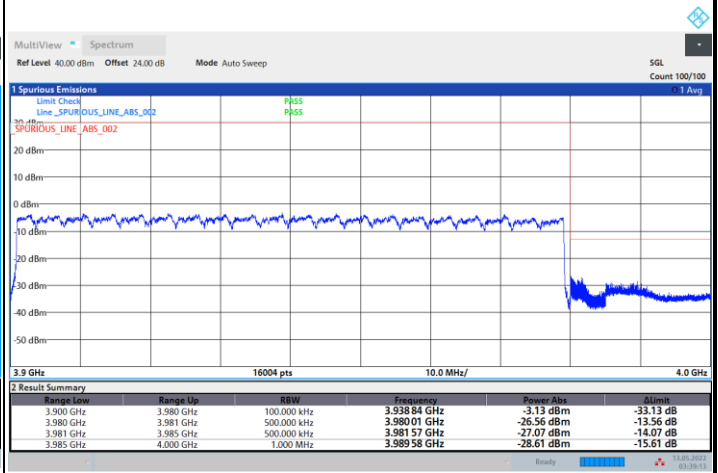


## FR1 n77 / 80MHz / CP OFDM / 16QAM

## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

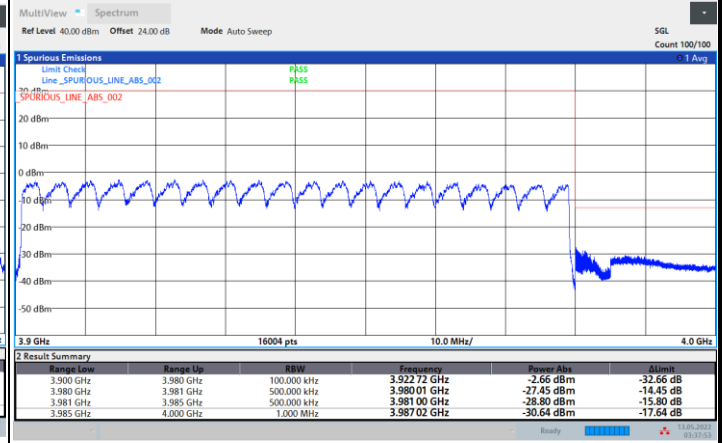
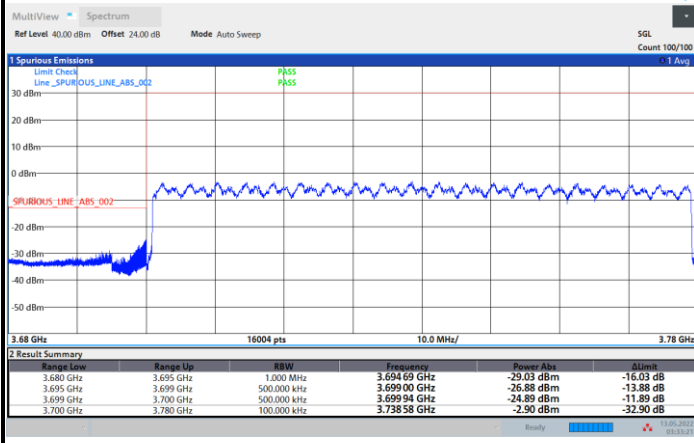




## FR1 n77 / 80MHz / CP OFDM / 64QAM

## Lowest Band Edge / Full RB

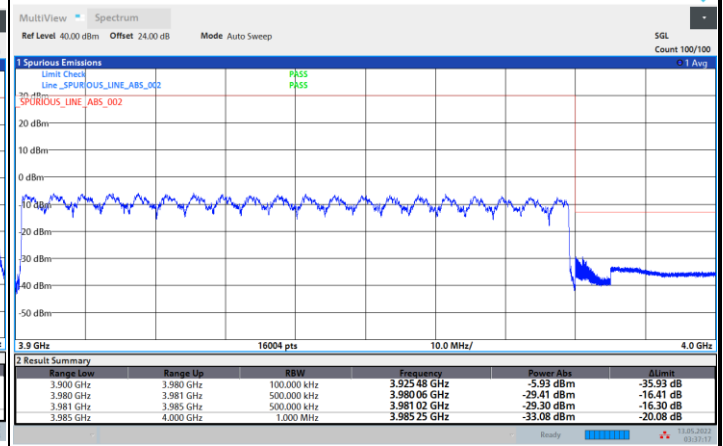
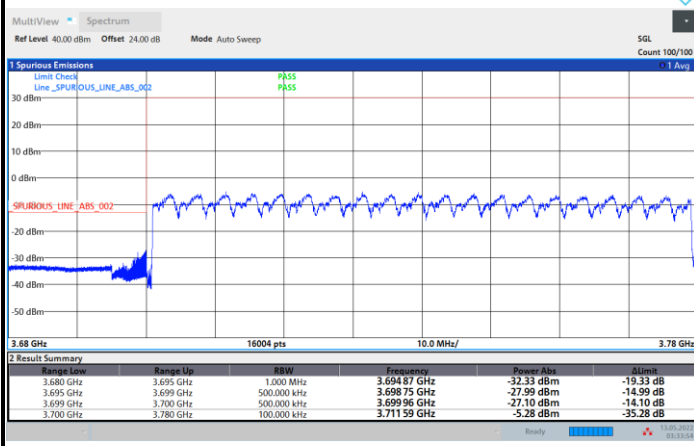
## Highest Band Edge / Full RB



## FR1 n77 / 80MHz / CP OFDM / 256QAM

## Lowest Band Edge / Full RB

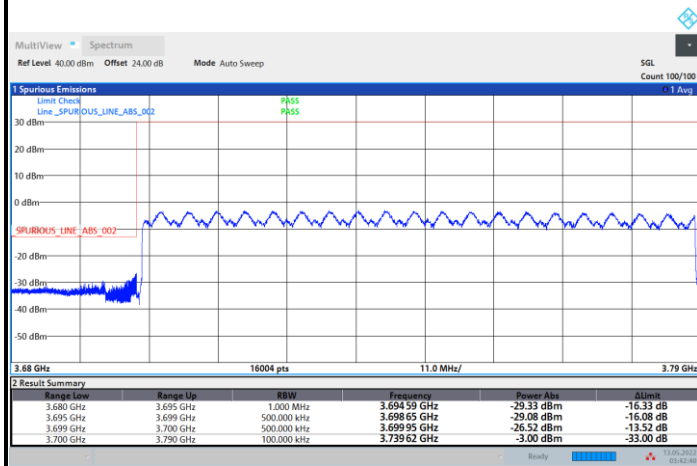
## Highest Band Edge / Full RB



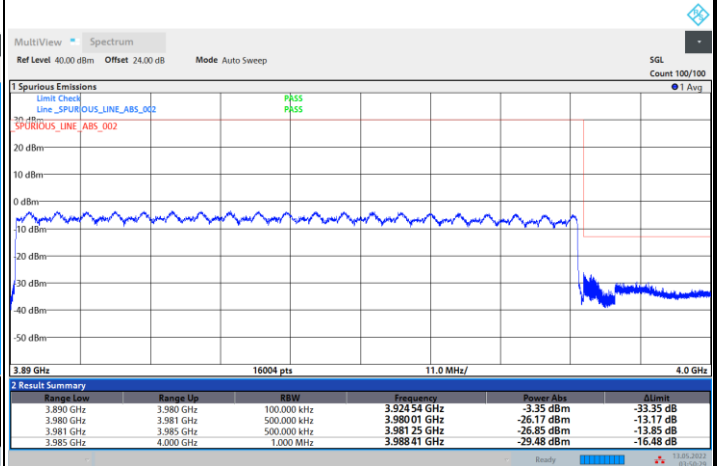


## FR1 n77 / 90MHz / CP OFDM / QPSK

## Lowest Band Edge / Full RB

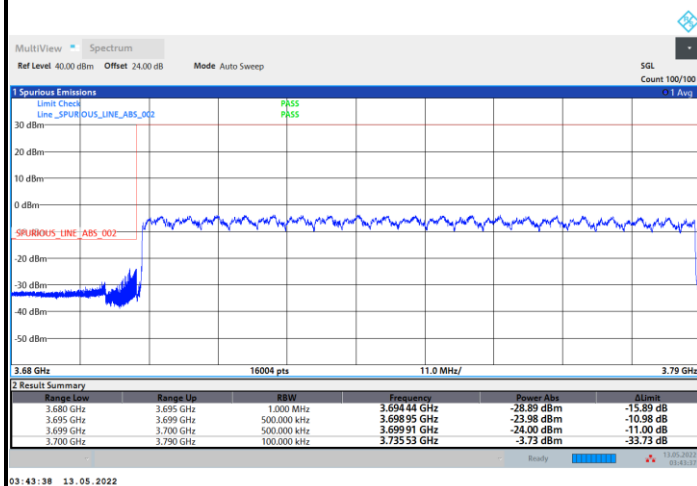


## Highest Band Edge / Full RB

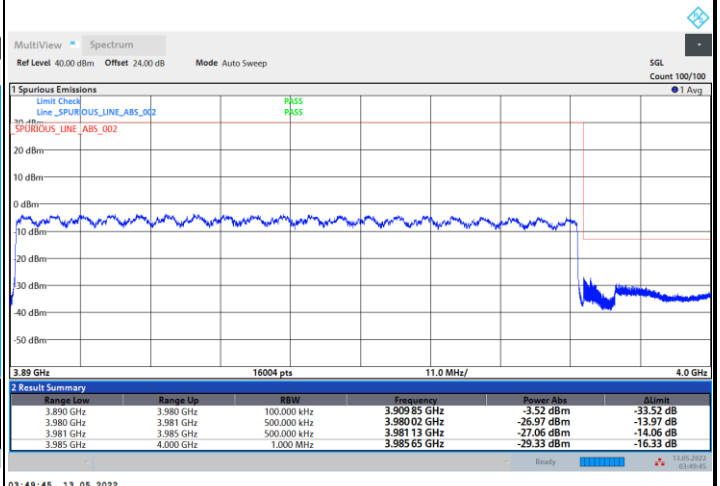


## FR1 n77 / 90MHz / CP OFDM / 16QAM

## Lowest Band Edge / Full RB



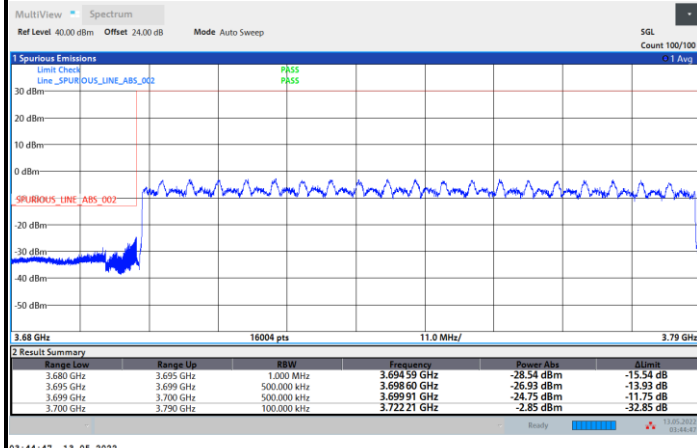
## Highest Band Edge / Full RB



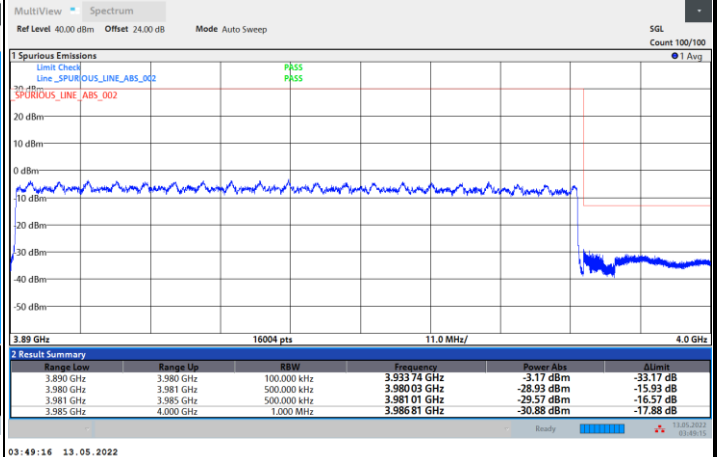


## FR1 n77 / 90MHz / CP OFDM / 64QAM

## Lowest Band Edge / Full RB

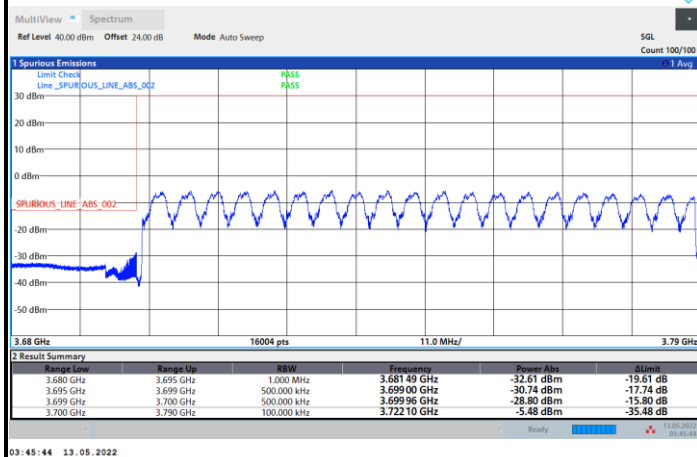


## Highest Band Edge / Full RB

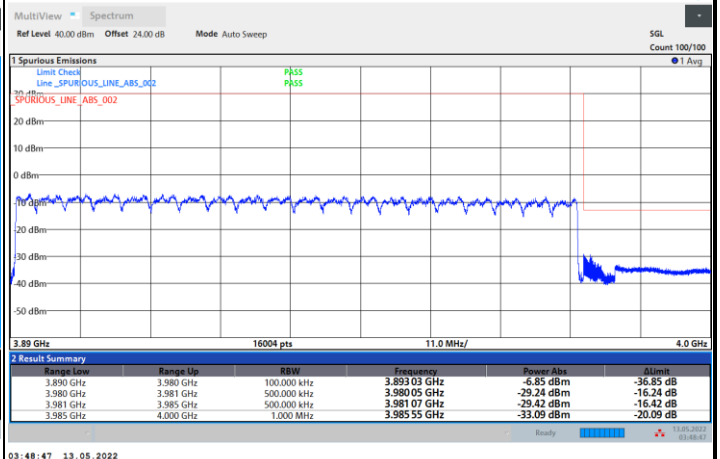


## FR1 n77 / 90MHz / CP OFDM / 256QAM

## Lowest Band Edge / Full RB



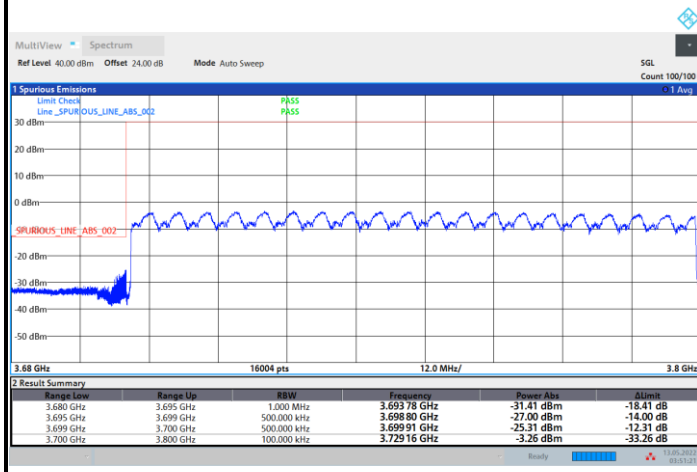
## Highest Band Edge / Full RB



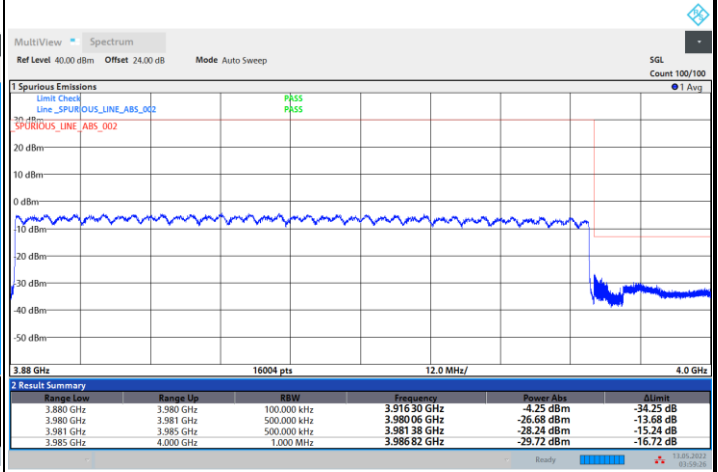


## FR1 n77 / 100MHz / CP OFDM / QPSK

## Lowest Band Edge / Full RB

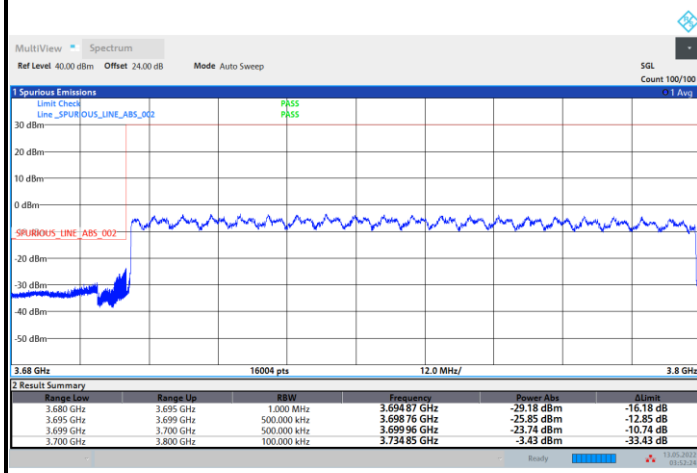


## Highest Band Edge / Full RB

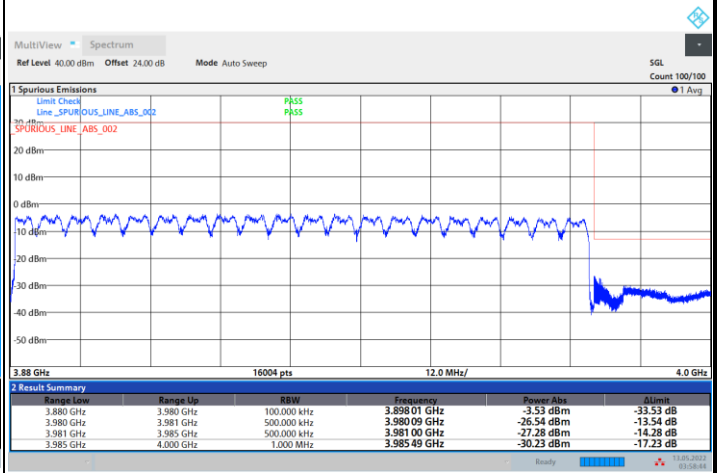


## FR1 n77 / 100MHz / CP OFDM / 16QAM

## Lowest Band Edge / Full RB



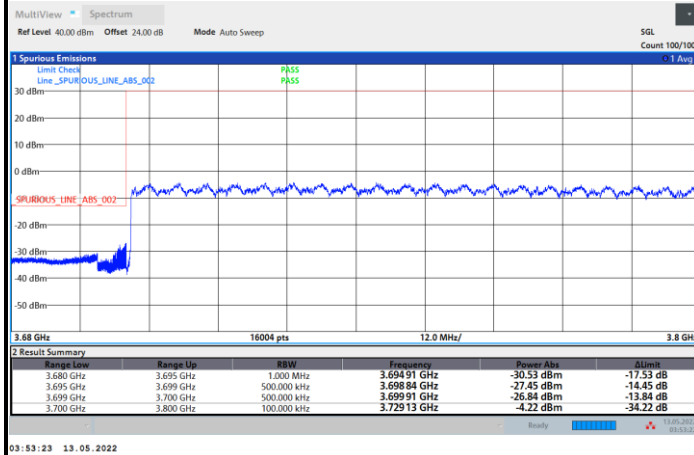
## Highest Band Edge / Full RB



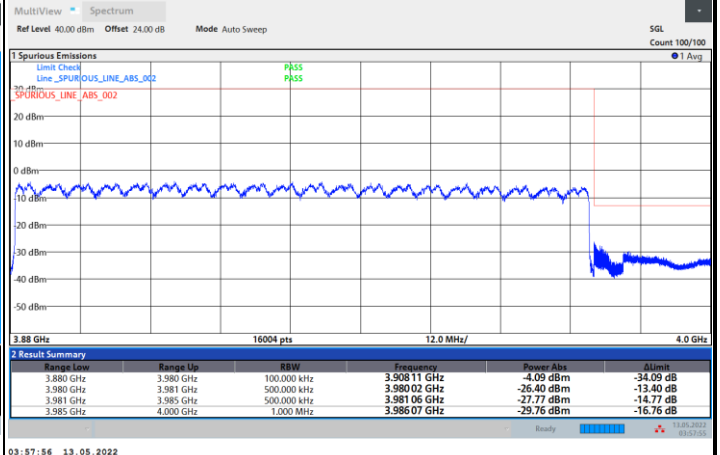


## FR1 n77 / 100MHz / CP OFDM / 64QAM

## Lowest Band Edge / Full RB

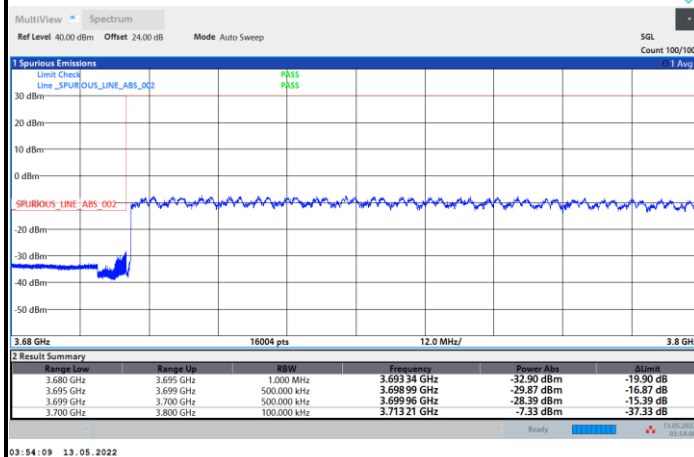


## Highest Band Edge / Full RB

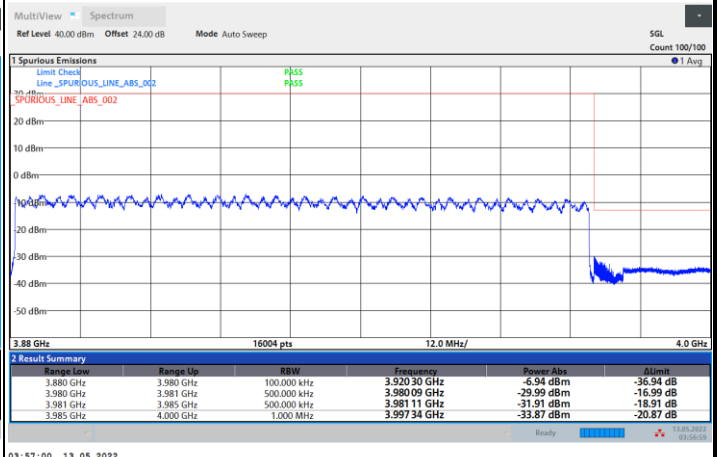


## FR1 n77 / 100MHz / CP OFDM / 256QAM

## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

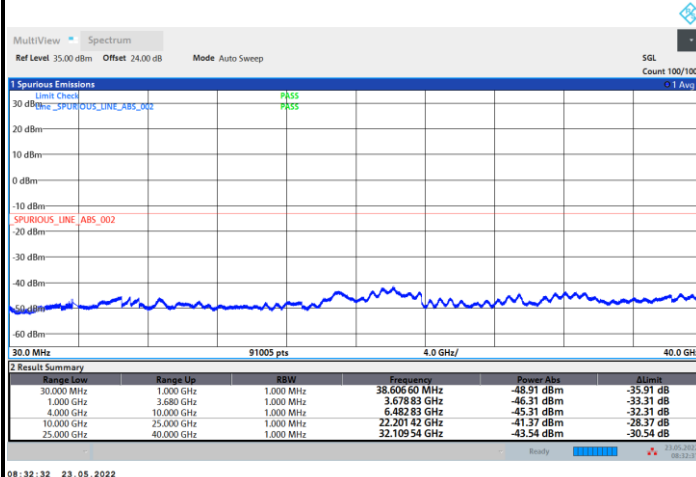




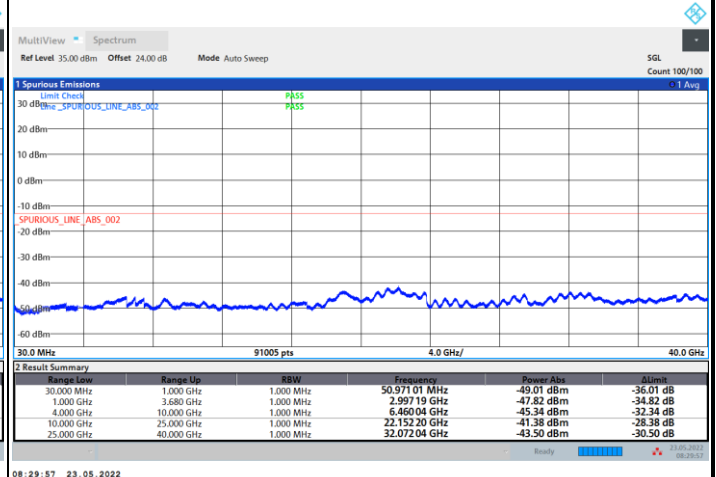
# Conducted Spurious Emission

FR1 n77 / 10MHz / CP OFDM / QPSK / 1RB1

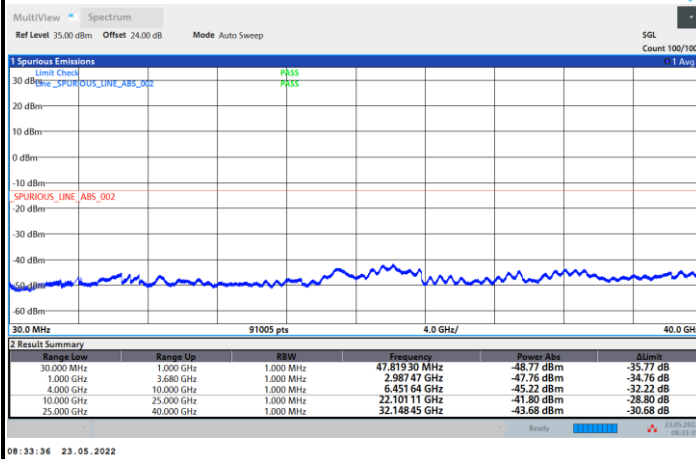
## Lowest Channel



## Middle Channel



## Highest Channel



## Frequency Stability

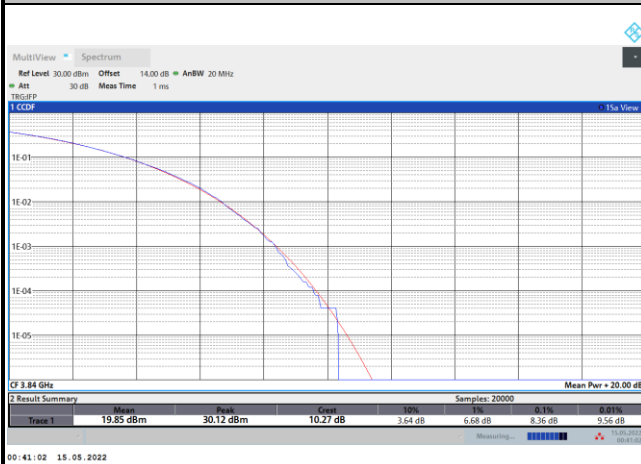
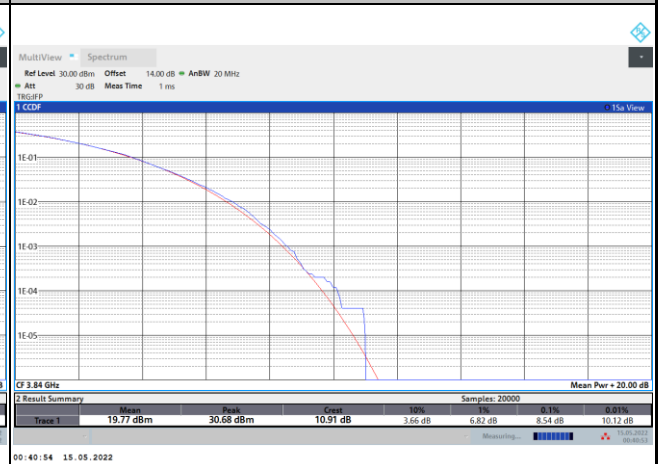
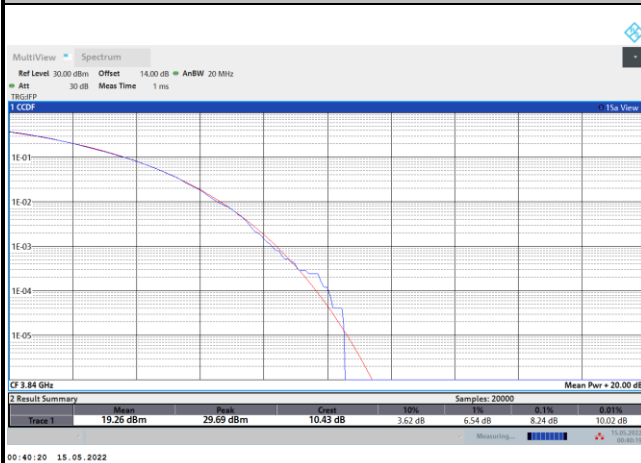
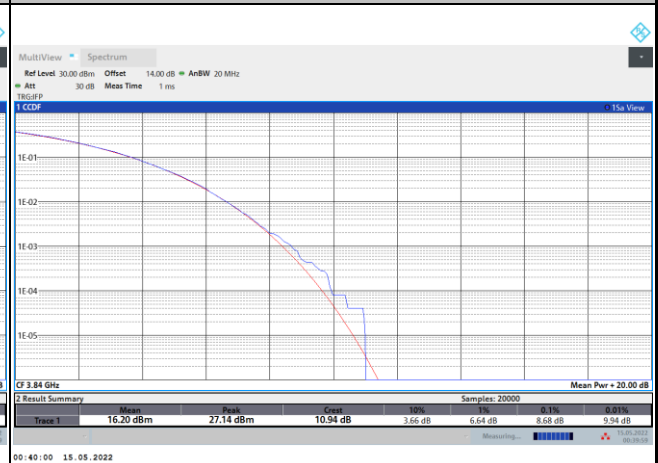
| Test Conditions     |                   | FR1 n77 (BPSK) / Middle Channel | Limit   |
|---------------------|-------------------|---------------------------------|---------|
| Temperature<br>(°C) | Voltage<br>(Volt) | BW 20MHz                        | Note 2. |
|                     |                   | Deviation (ppm)                 | Result  |
| 50                  | Normal Voltage    | 0.0001                          | PASS    |
| 40                  | Normal Voltage    | 0.0033                          |         |
| 30                  | Normal Voltage    | 0.0026                          |         |
| 20(Ref.)            | Normal Voltage    | 0.0000                          |         |
| 10                  | Normal Voltage    | 0.0012                          |         |
| 0                   | Normal Voltage    | 0.0009                          |         |
| -10                 | Normal Voltage    | 0.0011                          |         |
| -20                 | Normal Voltage    | 0.0021                          |         |
| -30                 | Normal Voltage    | 0.0016                          |         |
| 20                  | Maximum Voltage   | 0.0024                          |         |
| 20                  | Normal Voltage    | 0.0000                          |         |
| 20                  | Battery End Point | 0.0029                          |         |

**Note:**

1. Normal Voltage = 3.85 V. ; Battery End Point (BEP) = 3.40 V. ; Maximum Voltage = 4.30 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

**<MIMO Mode>****MIMO <Ant. 1>****Peak-to-Average Ratio**

| Mode      | FR1 n77 / 20MHz / CP OFDM |         |         |         |             |
|-----------|---------------------------|---------|---------|---------|-------------|
| Mod.      | QPSK                      | 16QAM   | 64QAM   | 256QAM  | Limit: 13dB |
| RB Size   | Full RB                   | Full RB | Full RB | Full RB | Result      |
| Middle CH | 8.36                      | 8.54    | 8.24    | 8.68    | <b>PASS</b> |

**FR1 n77 / 20MHz /CP OFDM / Middle Channel / Full RB**
**QPSK**

**16QAM**

**64QAM**

**256QAM**


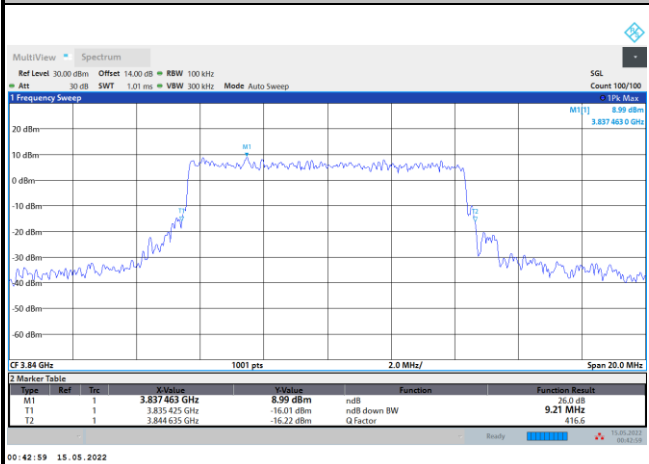
**26dB Bandwidth**

| Mode      | FR1 n77 : 26dB BW(MHz) / CP OFDM |        |       |        |       |        |        |        |
|-----------|----------------------------------|--------|-------|--------|-------|--------|--------|--------|
| BW        | 10MHz                            |        | 15MHz |        | 20MHz |        | 25MHz  |        |
| Mod.      | QPSK                             | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 9.21                             | 9.29   | 14.51 | 14.42  | 19.14 | 19.14  | 24.13  | 24.18  |
| Mod.      | 64QAM                            | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 9.29                             | 9.21   | 14.57 | 14.66  | 19.18 | 19.06  | 24.23  | 24.33  |
| BW        | 30MHz                            |        | 40MHz |        | 50MHz |        | 60MHz  |        |
| Mod.      | QPSK                             | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 28.95                            | 28.95  | 40.52 | 40.60  | 50.25 | 50.25  | 60.78  | 60.30  |
| Mod.      | 64QAM                            | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 28.77                            | 28.89  | 40.36 | 40.20  | 50.65 | 50.25  | 60.54  | 61.14  |
| BW        | 70MHz                            |        | 80MHz |        | 90MHz |        | 100MHz |        |
| Mod.      | QPSK                             | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 70.49                            | 70.63  | 80.56 | 80.56  | 90.63 | 90.81  | 101.30 | 101.30 |
| Mod.      | 64QAM                            | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 70.35                            | 70.07  | 80.24 | 80.72  | 91.17 | 90.27  | 100.70 | 101.30 |

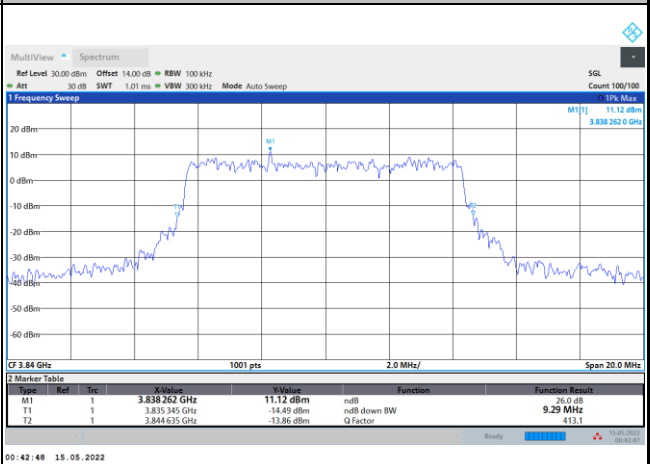


## FR1 n77 / 10MHz / CP OFDM / Middle Channel / Full RB

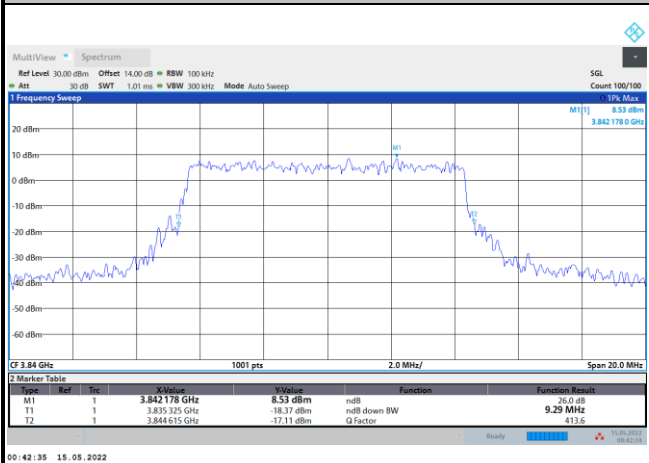
## QPSK



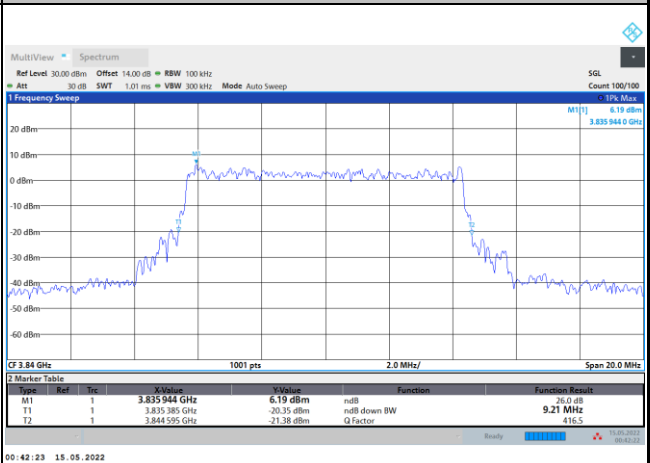
## 16QAM



## 64QAM



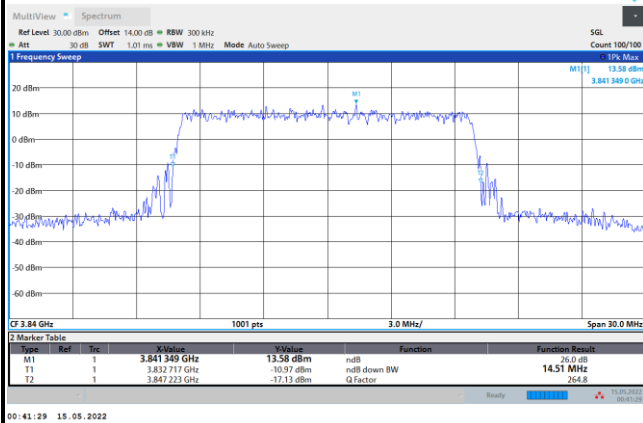
## 256QAM



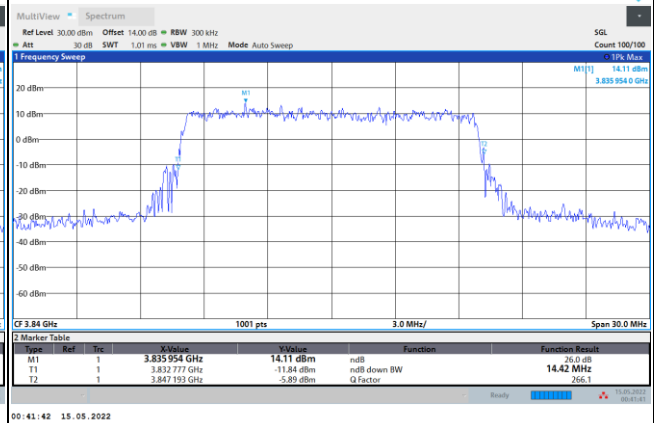


## FR1 n77 / 15MHz / CP OFDM / Middle Channel / Full RB

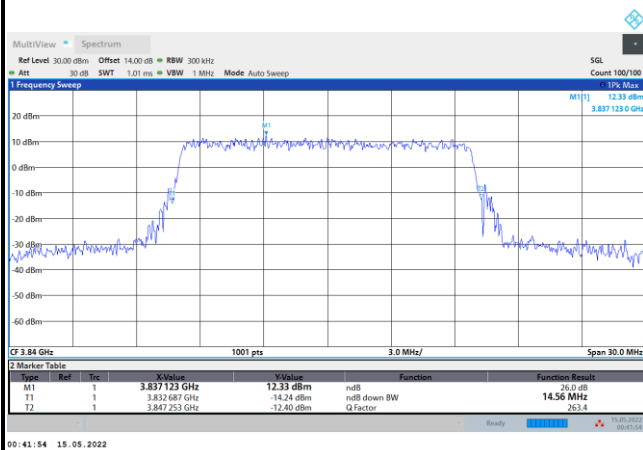
## QPSK



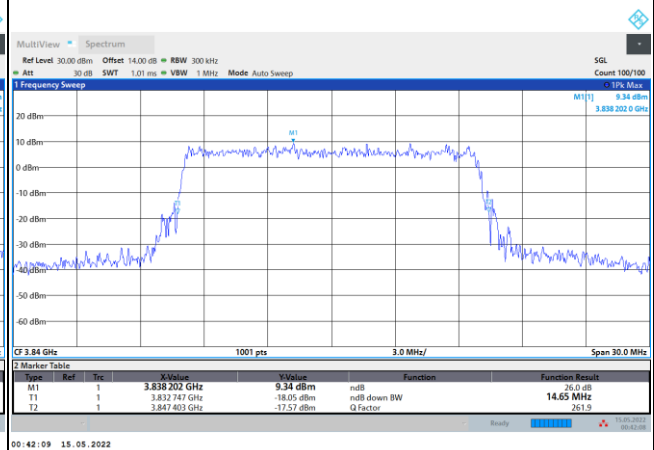
## 16QAM



## 64QAM



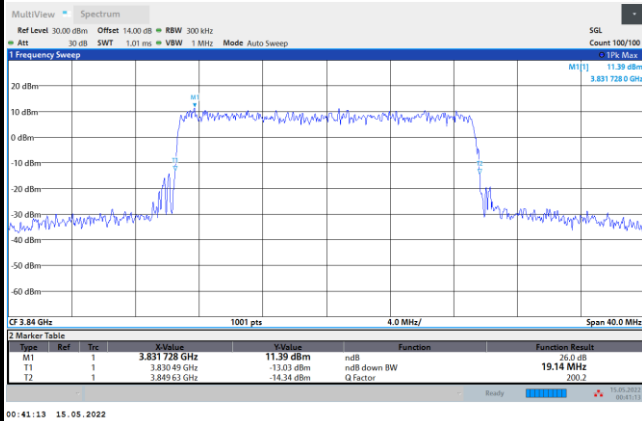
## 256QAM



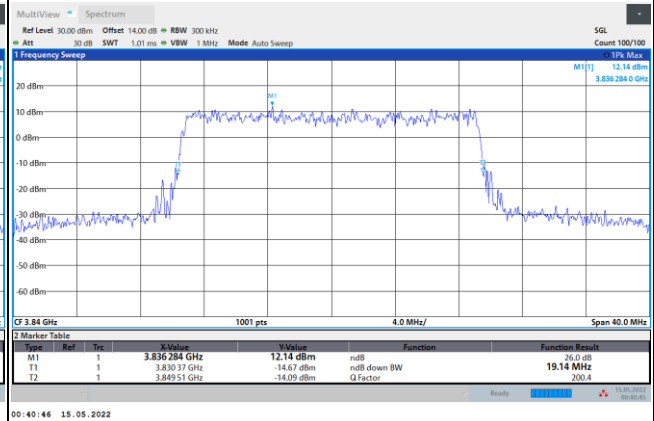


## FR1 n77 / 20MHz / CP OFDM / Middle Channel / Full RB

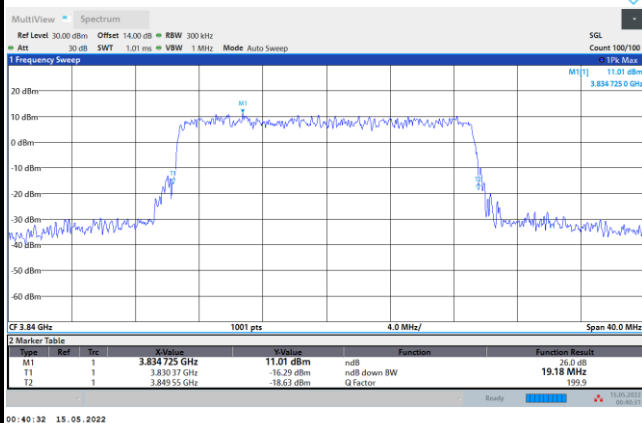
## QPSK



## 16QAM



## 64QAM



## 256QAM

