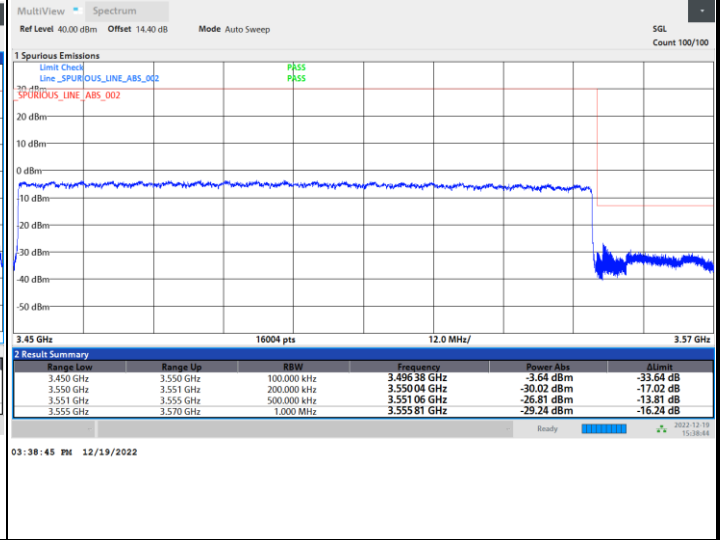
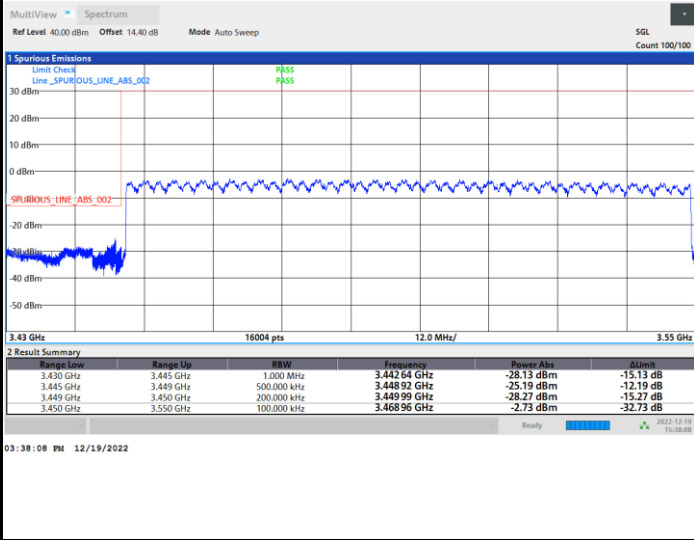




FR1 n77 / 100MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

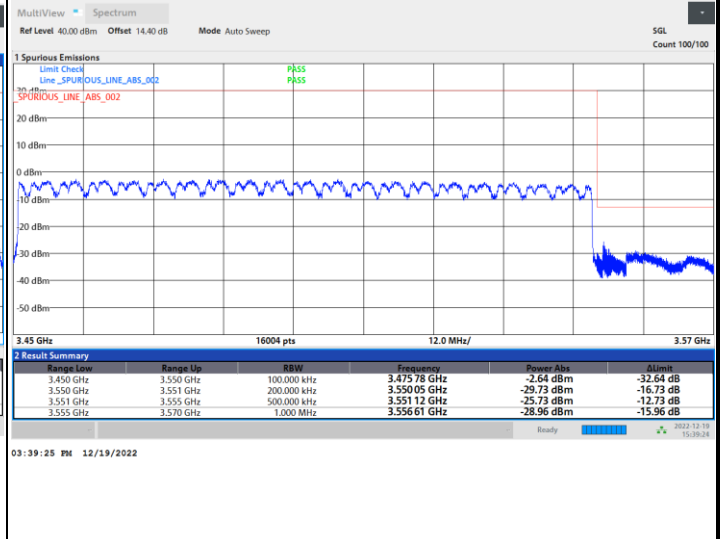
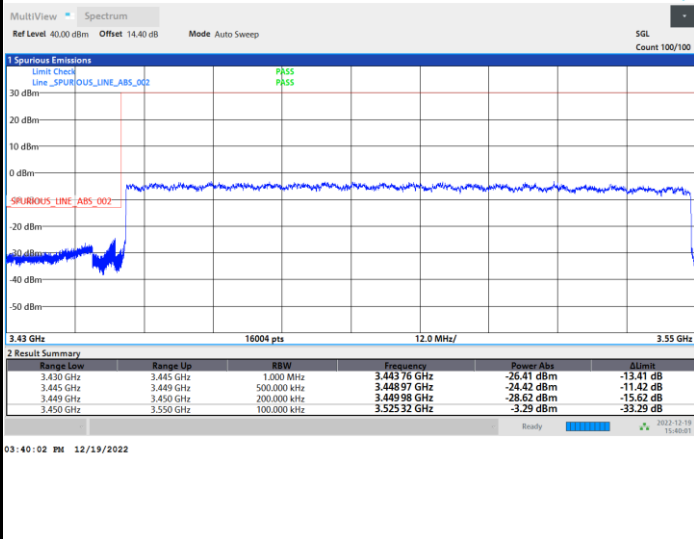
Highest Band Edge / Full RB



FR1 n77 / 100MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

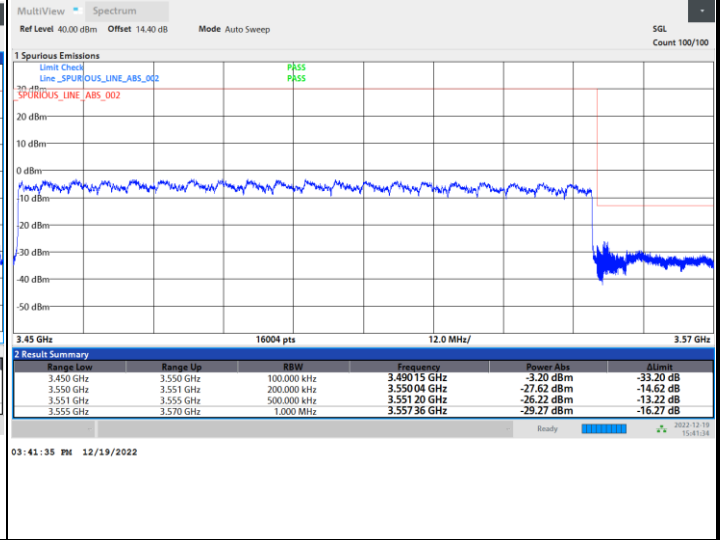
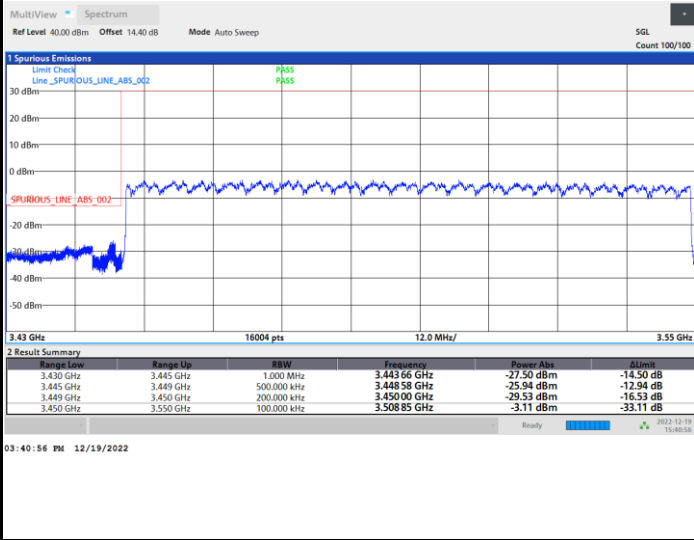




FR1 n77 / 100MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

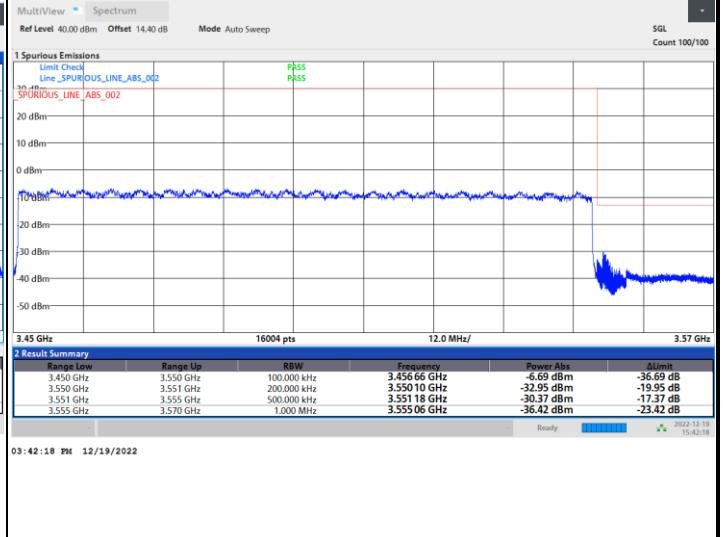
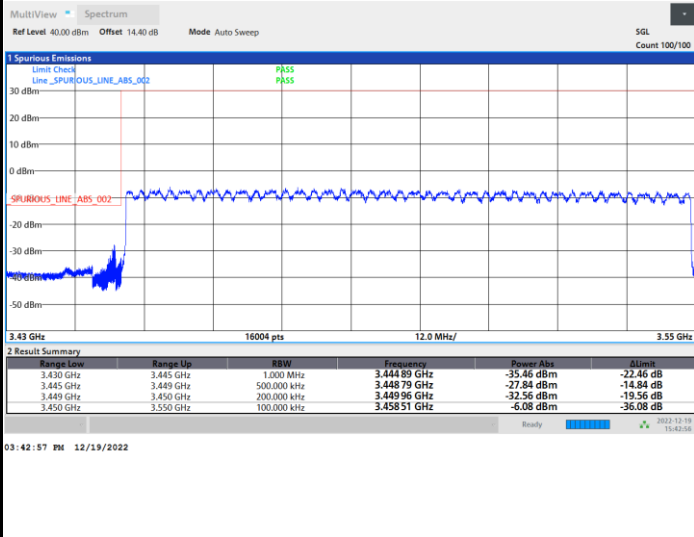
Highest Band Edge / Full RB



FR1 n77 / 100MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



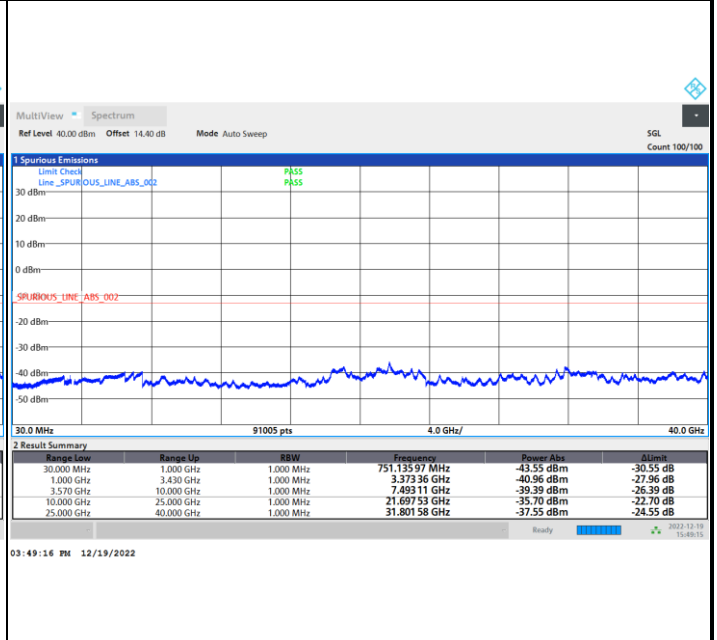
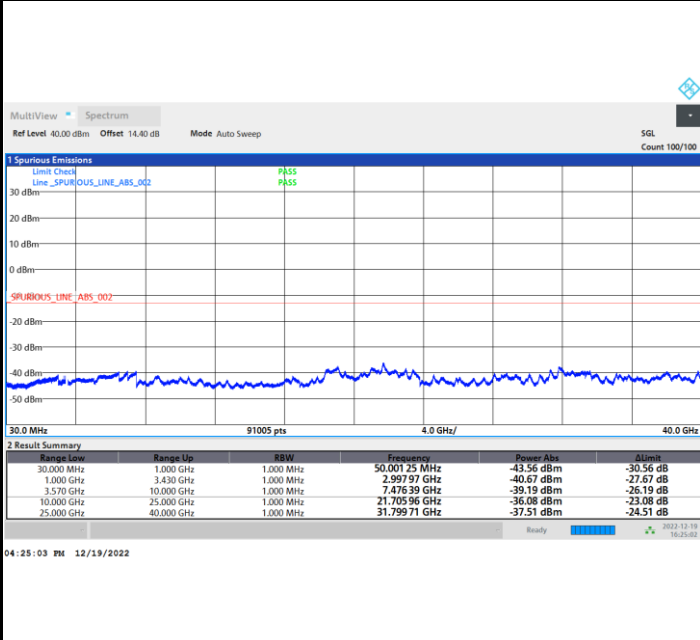


# Conducted Spurious Emission

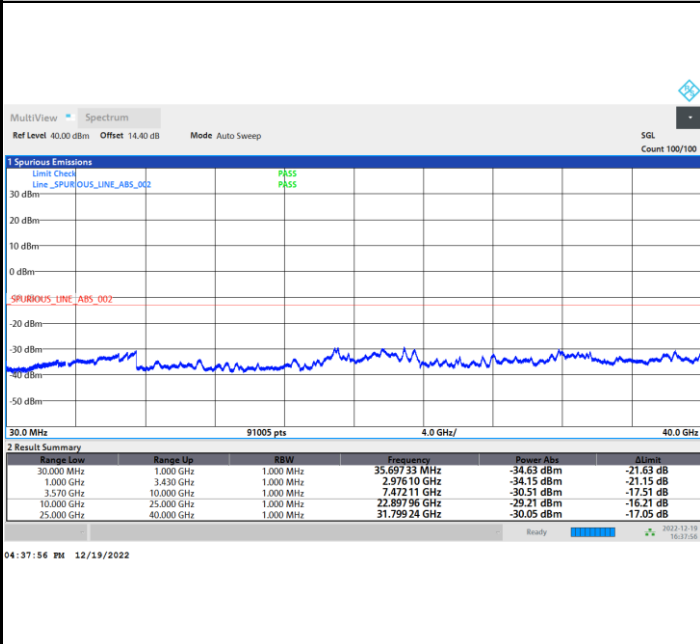
FR1 n77 / 10MHz / CP OFDM / QPSK / 1RB1

## Lowest Channel

## Middle Channel



## Highest Channel





### Frequency Stability

| Test Conditions     |                   | FR1 n77 (QPSK) / Middle Channel | Limit   |
|---------------------|-------------------|---------------------------------|---------|
| Temperature<br>(°C) | Voltage<br>(Volt) | BW 20MHz                        | Note 2. |
|                     |                   | Deviation (ppm)                 | Result  |
| 50                  | Normal Voltage    | 0.0013                          | PASS    |
| 40                  | Normal Voltage    | 0.0005                          |         |
| 30                  | Normal Voltage    | 0.0013                          |         |
| 20(Ref.)            | Normal Voltage    | 0.0000                          |         |
| 10                  | Normal Voltage    | 0.0035                          |         |
| 0                   | Normal Voltage    | 0.0018                          |         |
| -10                 | Normal Voltage    | 0.0007                          |         |
| -20                 | Normal Voltage    | 0.0016                          |         |
| -30                 | Normal Voltage    | 0.0007                          |         |
| 20                  | Maximum Voltage   | 0.0031                          |         |
| 20                  | Normal Voltage    | 0.0000                          |         |
| 20                  | Battery End Point | 0.0018                          |         |

**Note:**

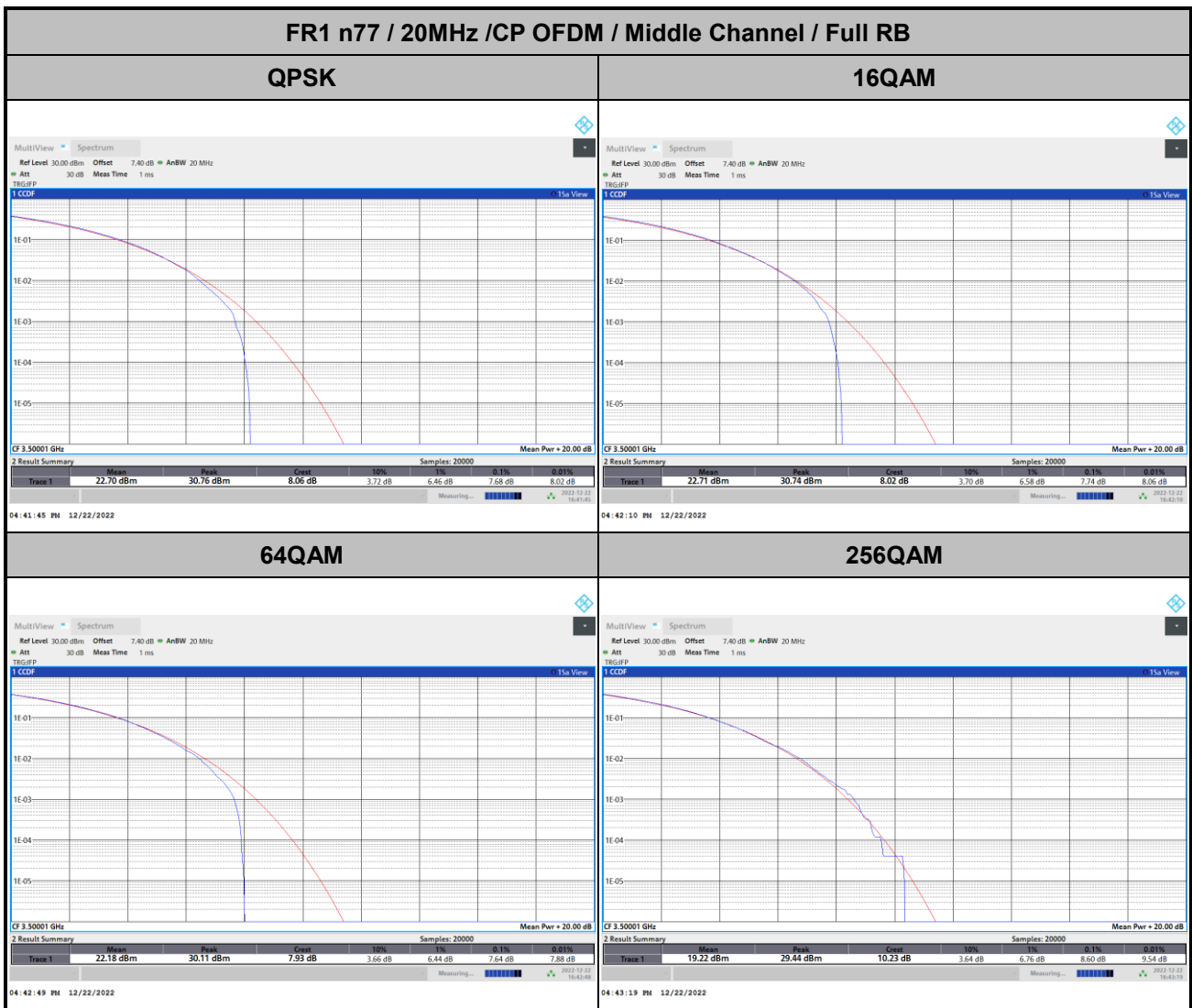
1. Normal Voltage = 3.88 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



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 | 7.68                      | 7.74    | 7.64    | 8.60    | PASS        |





**26dB Bandwidth**

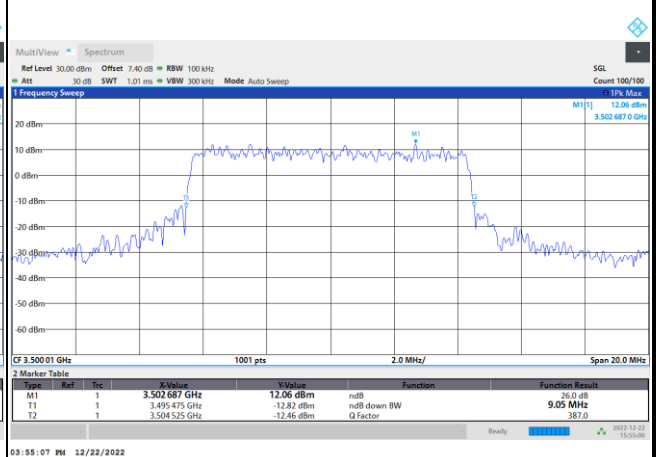
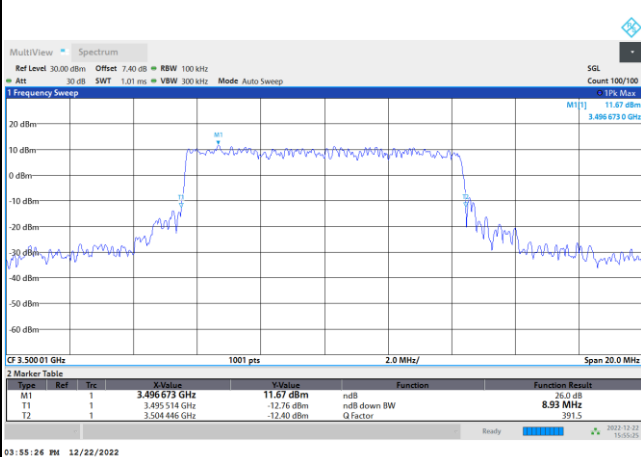
| Mode      | FR1 n77 : 26dB BW(MHz) / CP OFDM |        |       |        |       |        |        |        |
|-----------|----------------------------------|--------|-------|--------|-------|--------|--------|--------|
| BW        | 10MHz                            |        | 15MHz |        | 20MHz |        | 25MHz  |        |
| Mod.      | QPSK                             | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 8.93                             | 9.05   | 14.54 | 14.45  | 19.26 | 19.10  | 24.38  | 24.08  |
| Mod.      | 64QAM                            | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 9.25                             | 9.15   | 14.60 | 14.72  | 19.22 | 19.10  | 24.18  | 24.08  |
| BW        | 30MHz                            |        | 40MHz |        | 50MHz |        | 60MHz  |        |
| Mod.      | QPSK                             | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 28.89                            | 28.83  | 40.52 | 40.28  | 50.55 | 50.05  | 60.54  | 60.42  |
| Mod.      | 64QAM                            | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 28.95                            | 29.19  | 41.16 | 40.52  | 50.35 | 50.05  | 60.78  | 60.66  |
| BW        | 70MHz                            |        | 80MHz |        | 90MHz |        | 100MHz |        |
| Mod.      | QPSK                             | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 70.35                            | 70.21  | 80.56 | 80.56  | 90.63 | 90.81  | 100.70 | 100.50 |
| Mod.      | 64QAM                            | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 70.91                            | 70.49  | 80.24 | 80.88  | 90.81 | 90.27  | 100.50 | 100.50 |



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

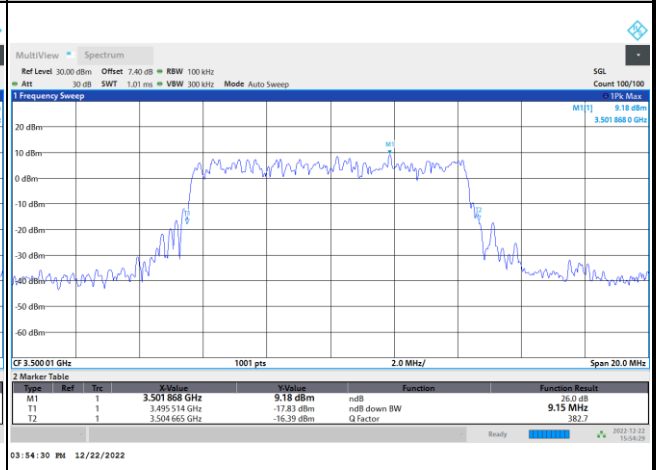
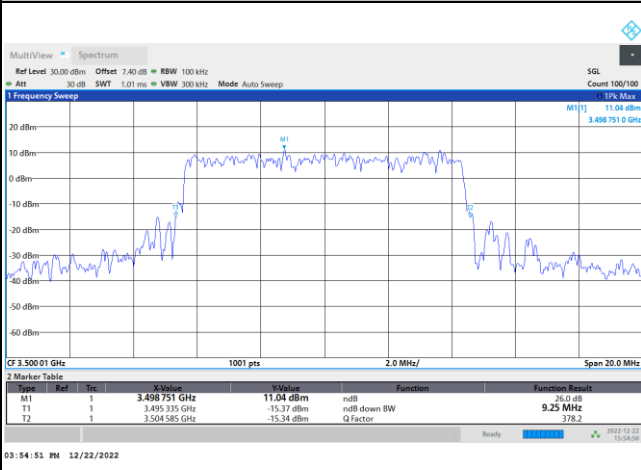
QPSK

16QAM



64QAM

256QAM

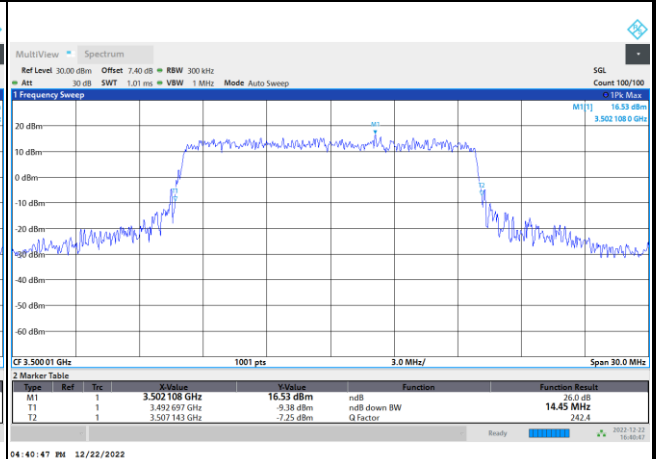
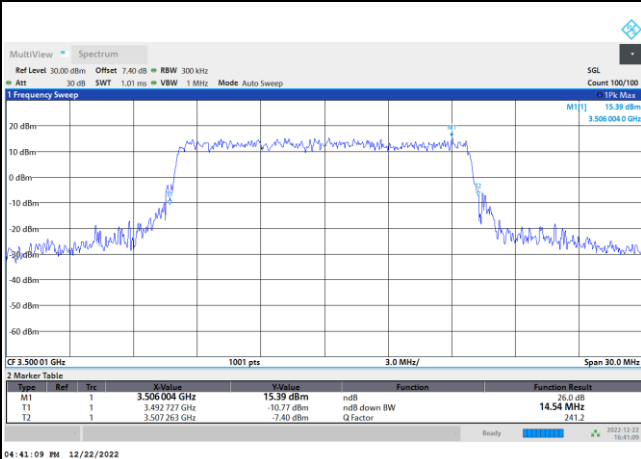




FR1 n77 / 15MHz / CP OFDM / Middle Channel / Full RB

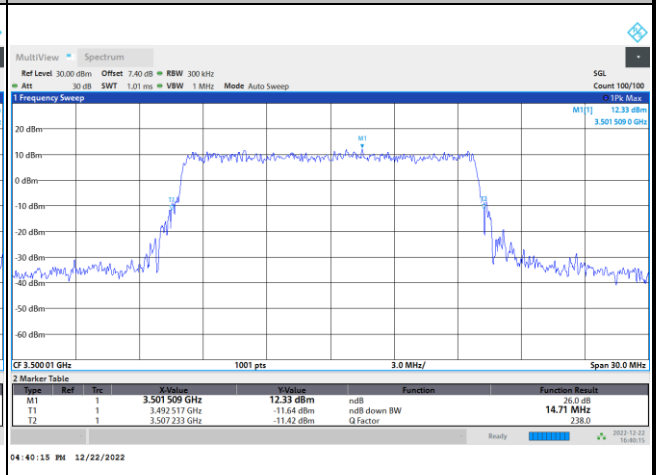
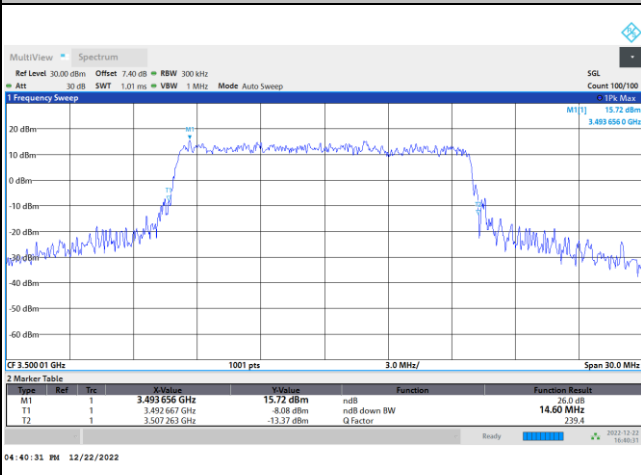
QPSK

16QAM



64QAM

256QAM



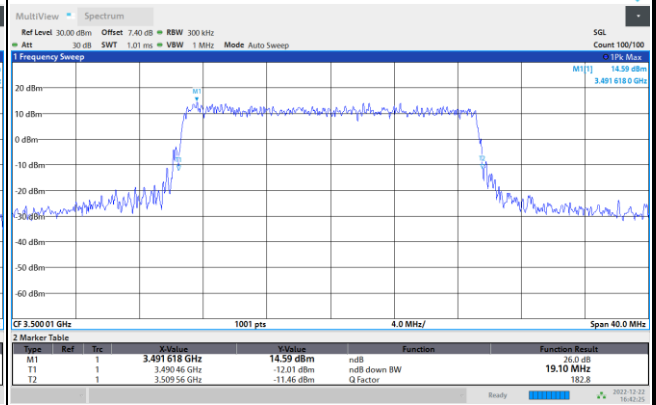
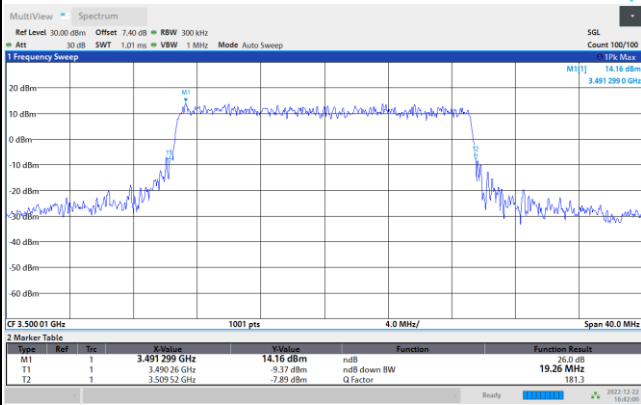




FR1 n77 / 20MHz / CP OFDM / Middle Channel / Full RB

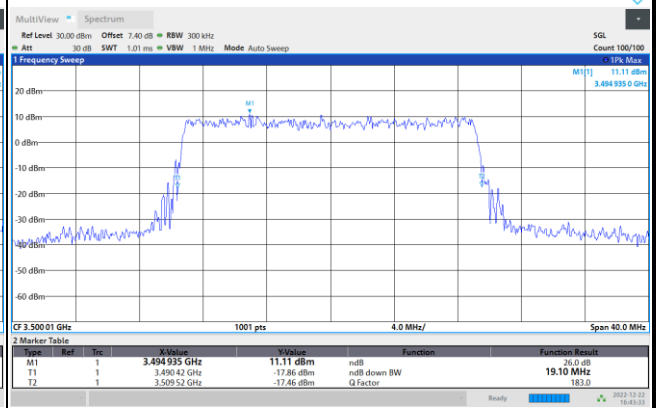
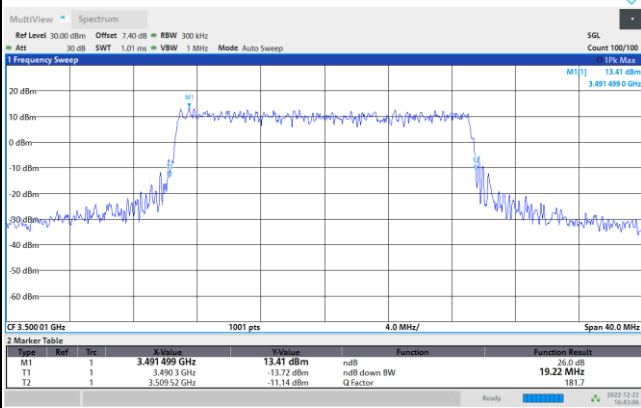
QPSK

16QAM



64QAM

256QAM

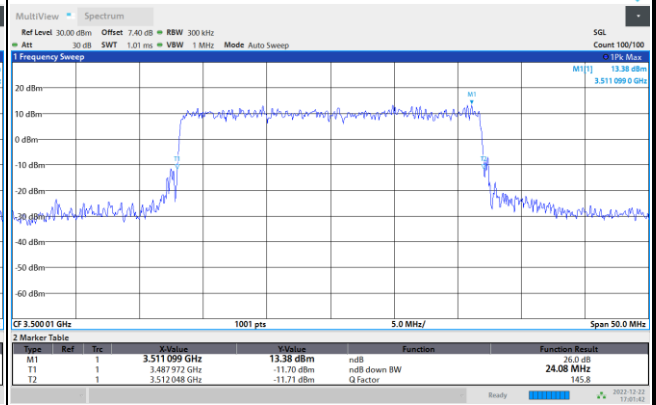
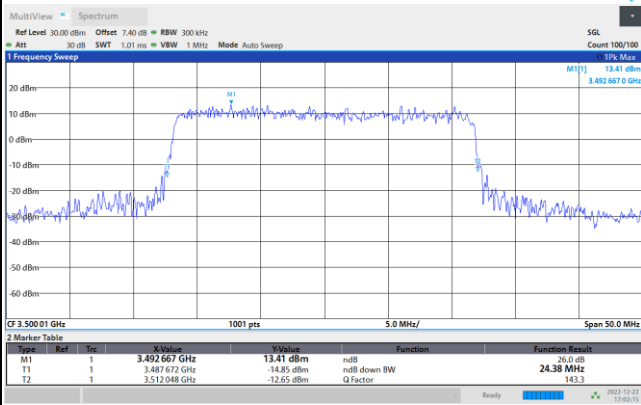




FR1 n77 / 25MHz / CP OFDM / Middle Channel / Full RB

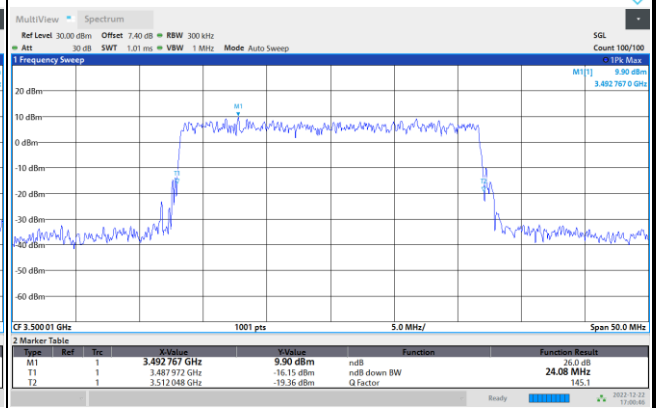
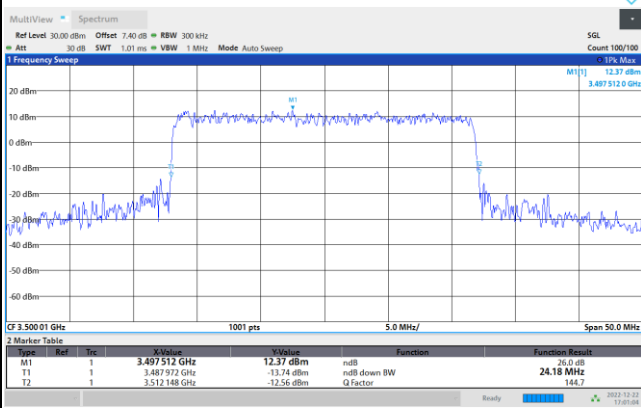
QPSK

16QAM



64QAM

256QAM

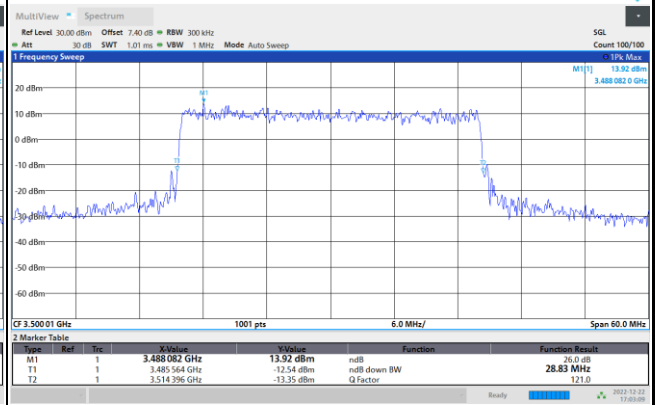
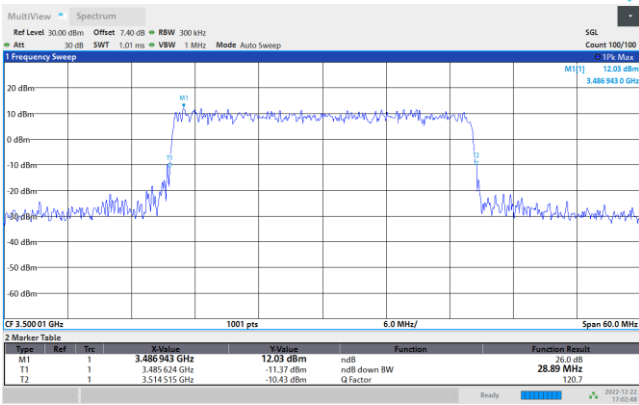




FR1 n77 / 30MHz / CP OFDM / Middle Channel / Full RB

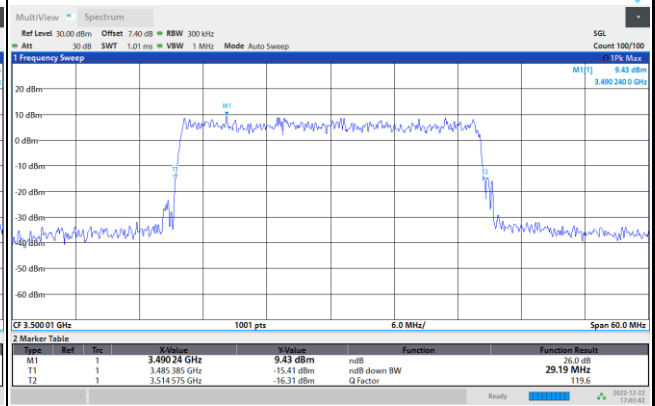
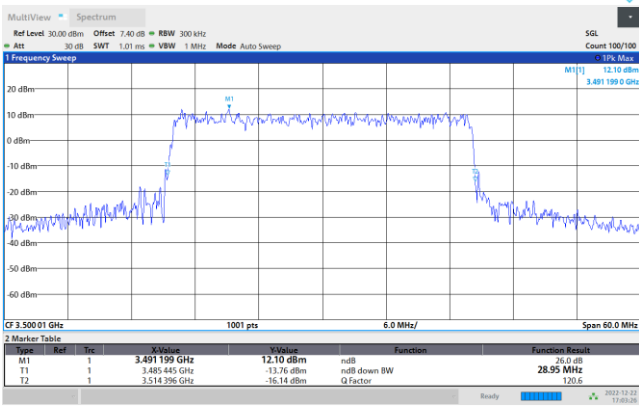
QPSK

16QAM



64QAM

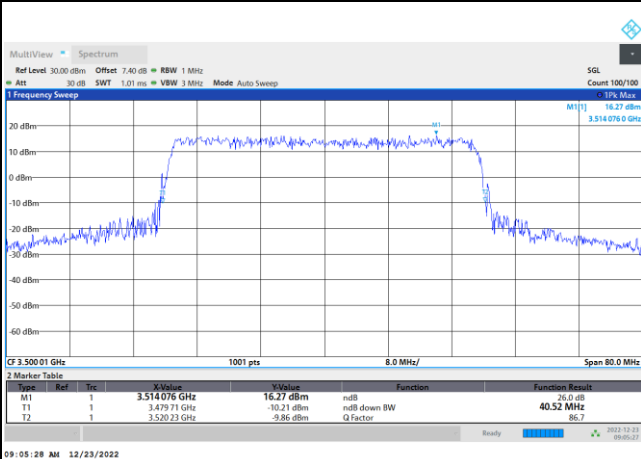
256QAM





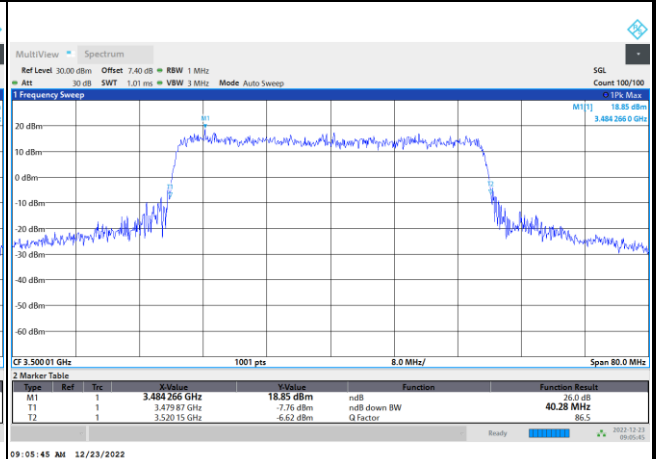
FR1 n77 / 40MHz / CP OFDM / Middle Channel / Full RB

QPSK



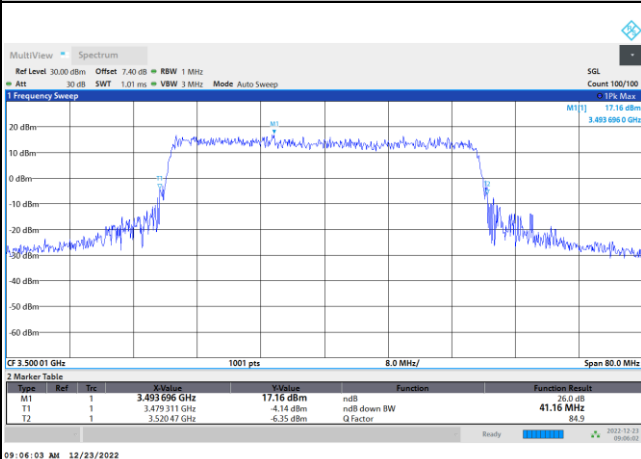
09:05:28 AM 12/23/2022

16QAM



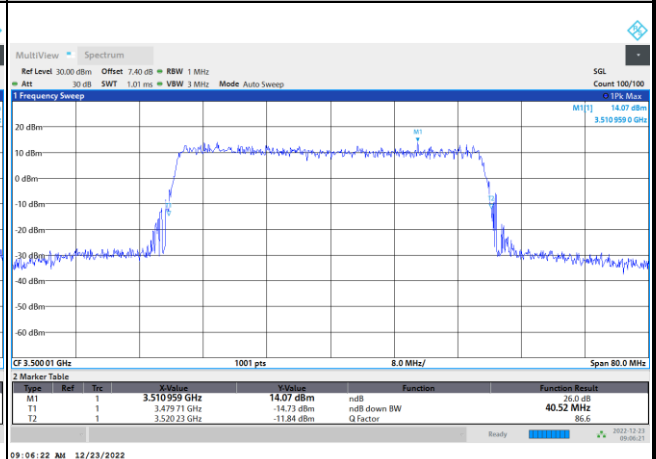
09:05:45 AM 12/23/2022

64QAM



09:06:03 AM 12/23/2022

256QAM



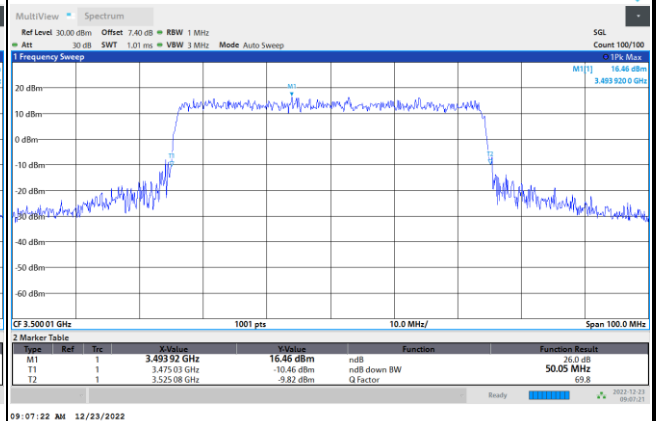
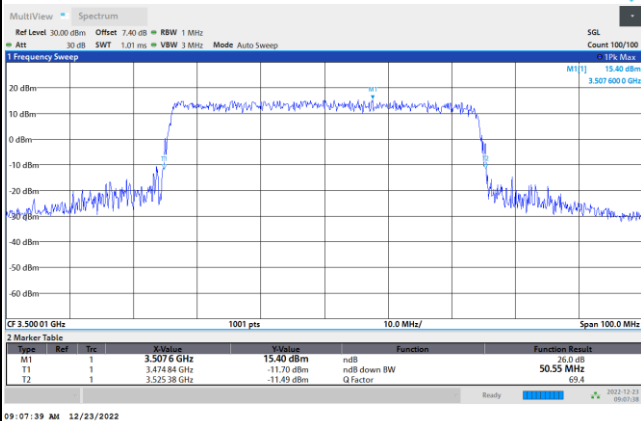
09:06:22 AM 12/23/2022



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

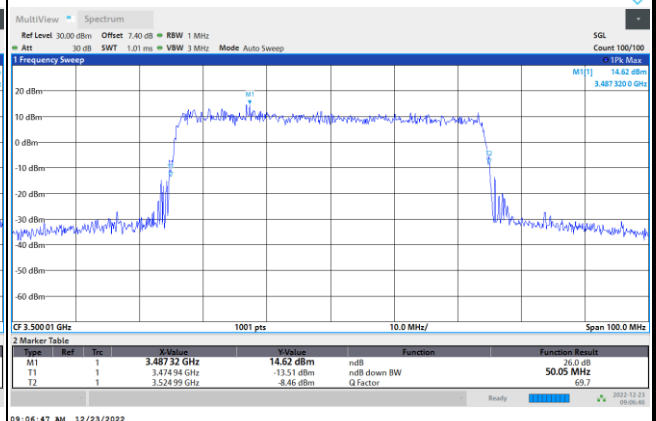
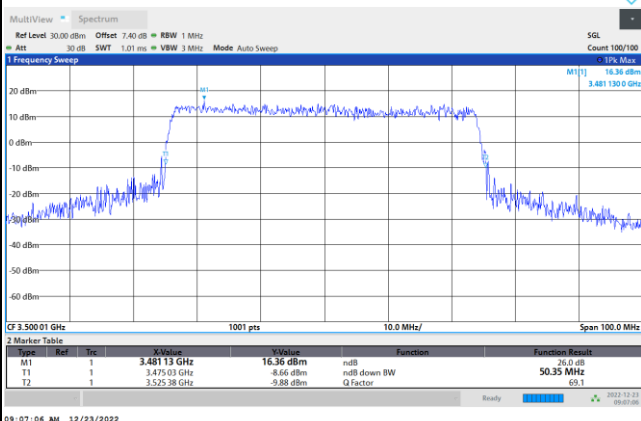
QPSK

16QAM



64QAM

256QAM

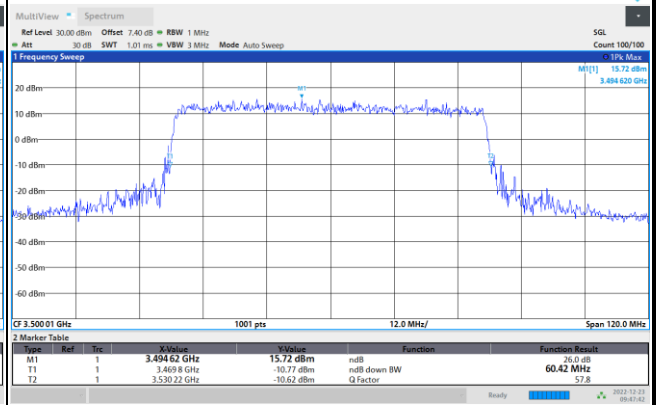
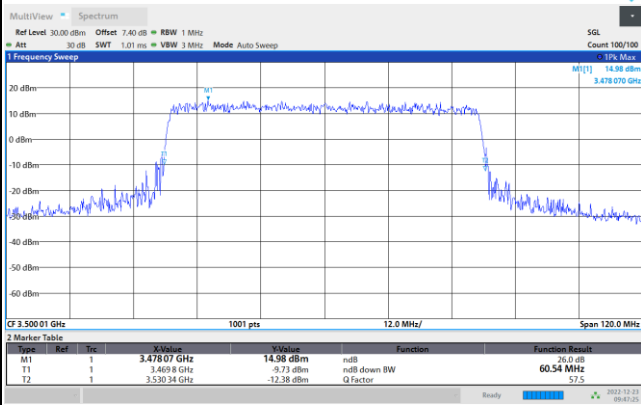




FR1 n77 / 60MHz / CP OFDM / Middle Channel / Full RB

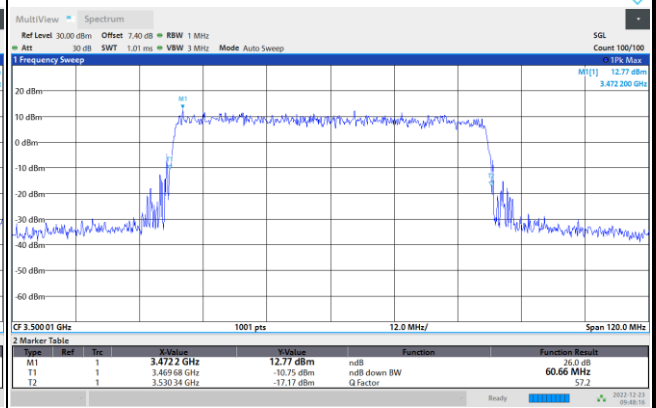
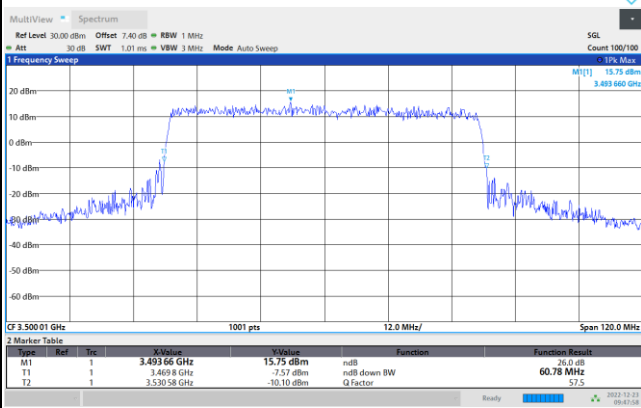
QPSK

16QAM



64QAM

256QAM

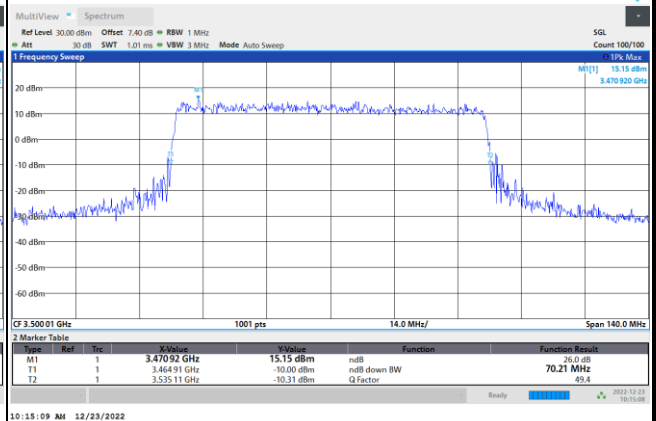
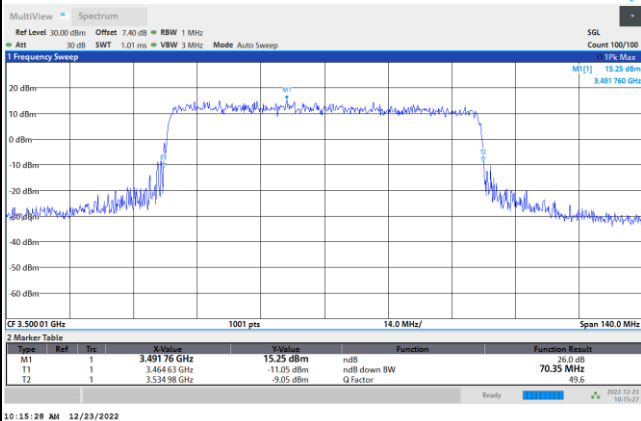




FR1 n77 / 70MHz / CP OFDM / Middle Channel / Full RB

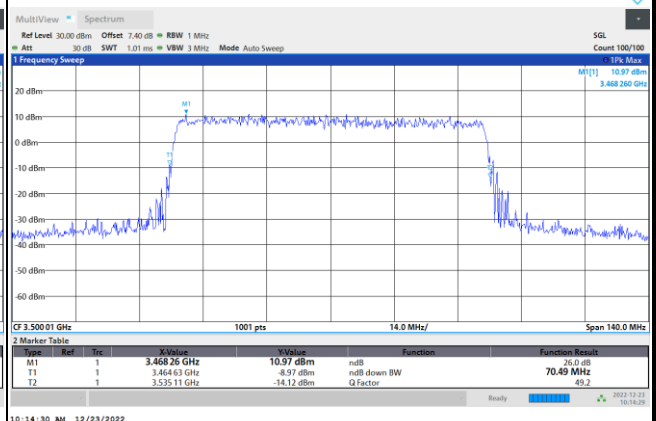
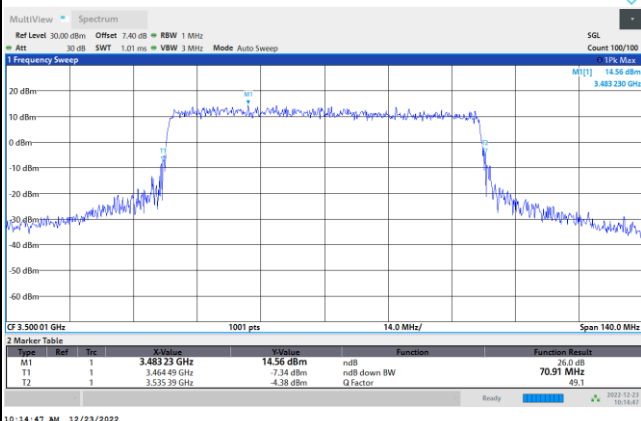
QPSK

16QAM



64QAM

256QAM

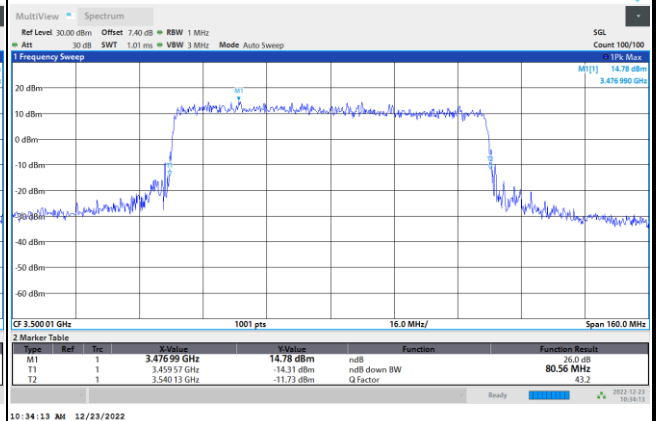
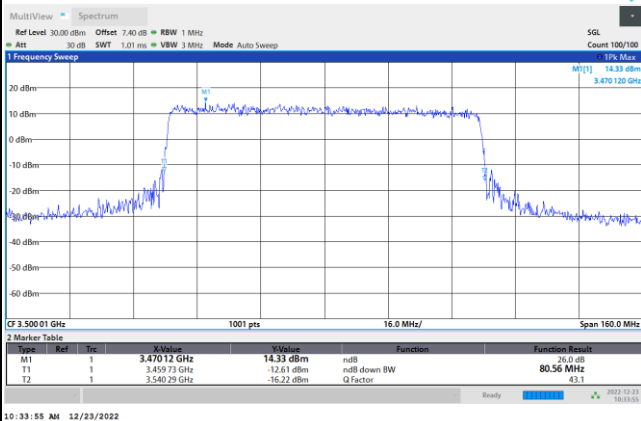




FR1 n77 / 80MHz / CP OFDM / Middle Channel / Full RB

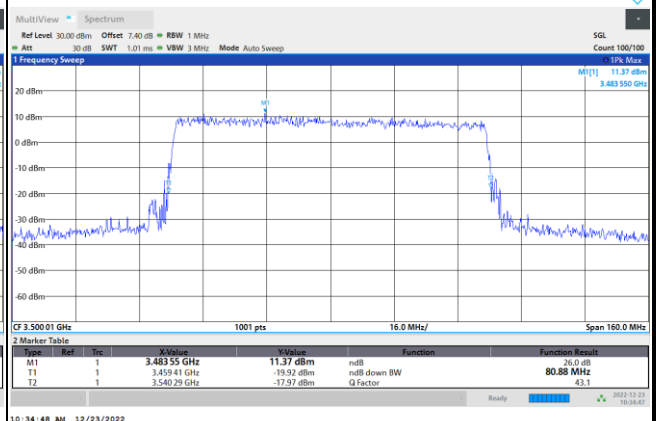
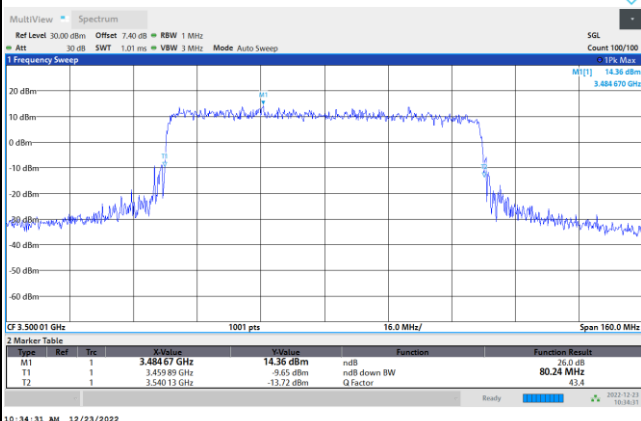
QPSK

16QAM



64QAM

256QAM



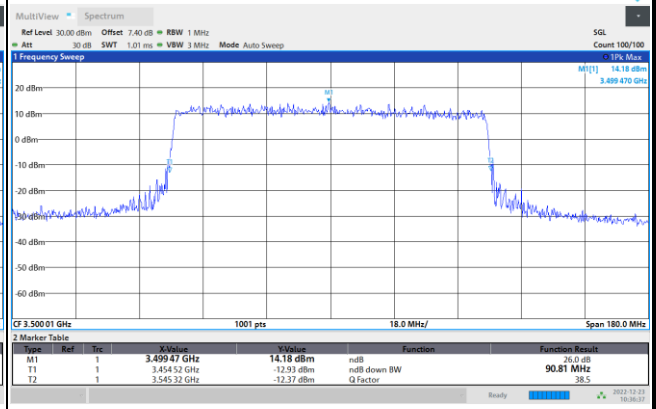
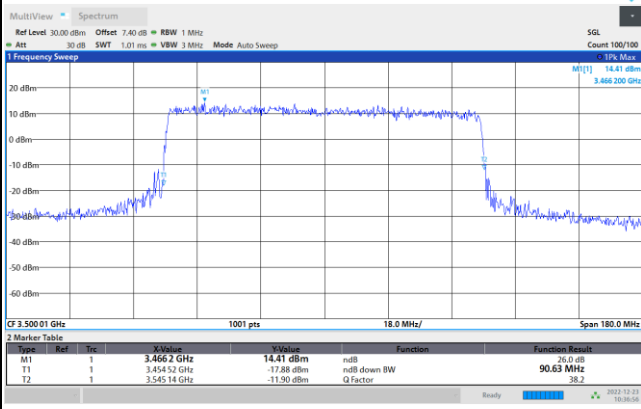




FR1 n77 / 90MHz / CP OFDM / Middle Channel / Full RB

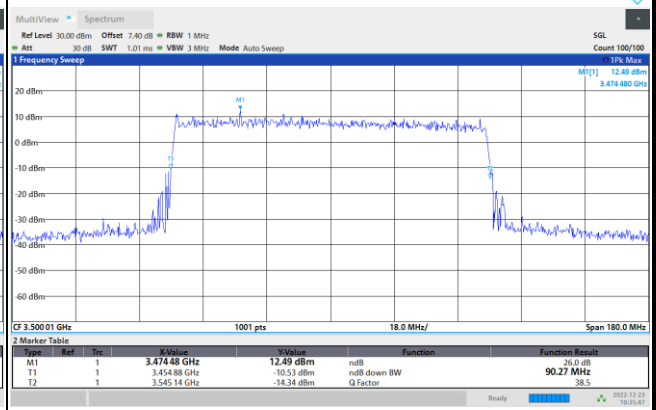
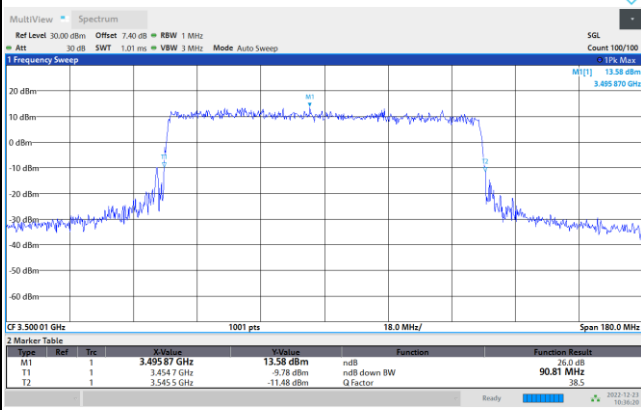
QPSK

16QAM



64QAM

256QAM

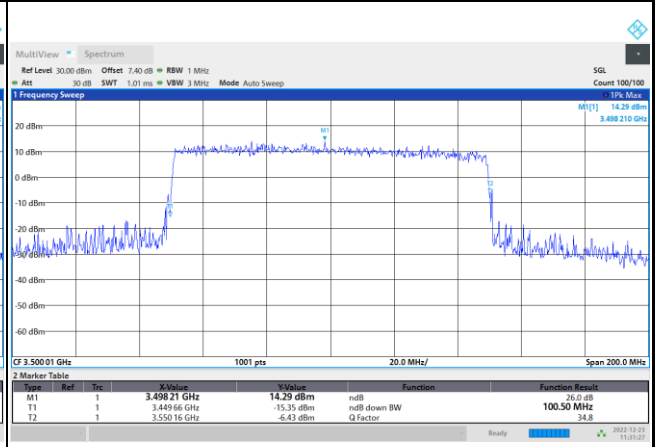
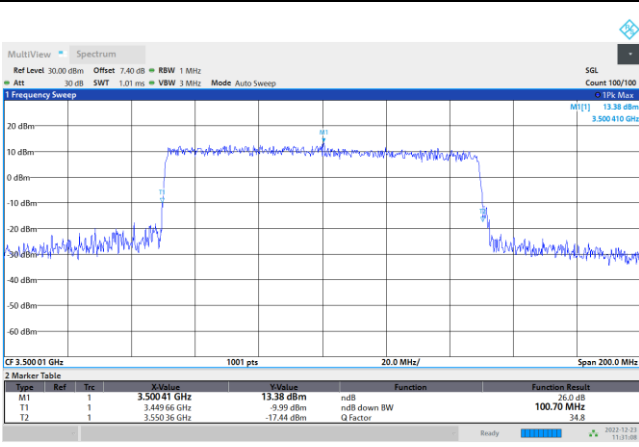




FR1 n77 / 100MHz / CP OFDM / Middle Channel / Full RB

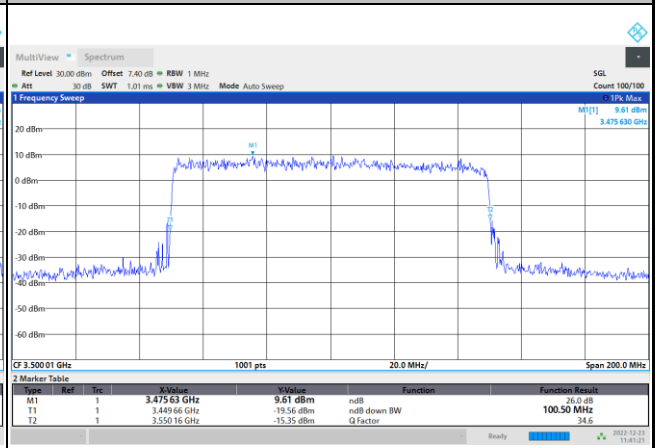
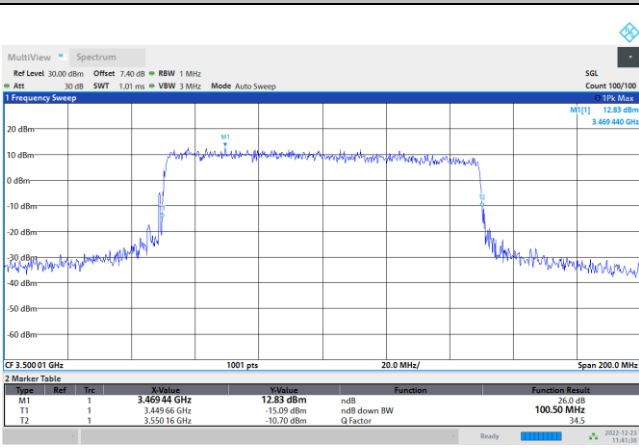
QPSK

16QAM



64QAM

256QAM





Occupied Bandwidth

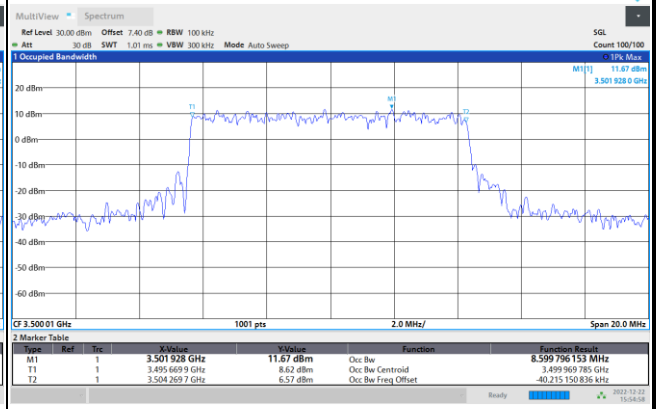
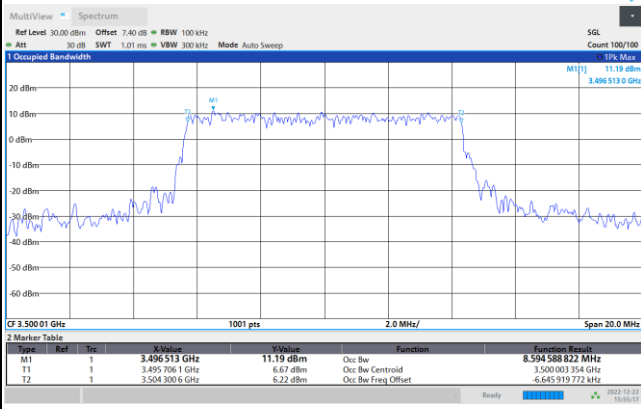
| Mode      | FR1 n77 : OB BW(MHz) / CP OFDM |        |       |        |       |        |        |        |
|-----------|--------------------------------|--------|-------|--------|-------|--------|--------|--------|
| BW        | 10MHz                          |        | 15MHz |        | 20MHz |        | 25MHz  |        |
| Mod.      | QPSK                           | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 8.59                           | 8.59   | 13.64 | 13.62  | 18.25 | 18.25  | 23.24  | 23.20  |
| Mod.      | 64QAM                          | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 8.57                           | 8.59   | 13.63 | 13.64  | 18.19 | 18.19  | 23.26  | 23.27  |
| BW        | 30MHz                          |        | 40MHz |        | 50MHz |        | 60MHz  |        |
| Mod.      | QPSK                           | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 27.81                          | 27.89  | 38.05 | 38.21  | 47.63 | 47.46  | 57.68  | 57.76  |
| Mod.      | 64QAM                          | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 27.85                          | 27.87  | 38.13 | 38.01  | 47.53 | 47.47  | 57.78  | 57.84  |
| BW        | 70MHz                          |        | 80MHz |        | 90MHz |        | 100MHz |        |
| Mod.      | QPSK                           | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 67.31                          | 67.47  | 77.44 | 77.27  | 87.17 | 87.07  | 97.15  | 97.05  |
| Mod.      | 64QAM                          | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 67.34                          | 67.32  | 77.22 | 77.42  | 87.17 | 87.40  | 96.99  | 97.03  |



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

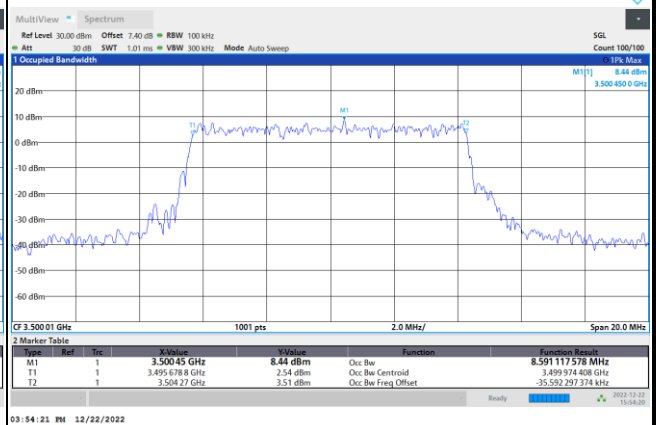
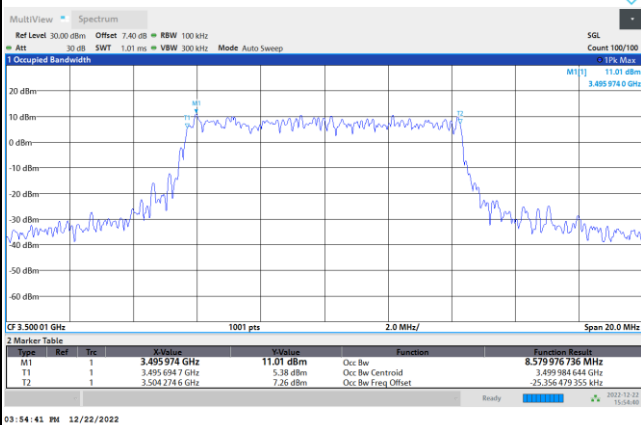
QPSK

16QAM



64QAM

256QAM

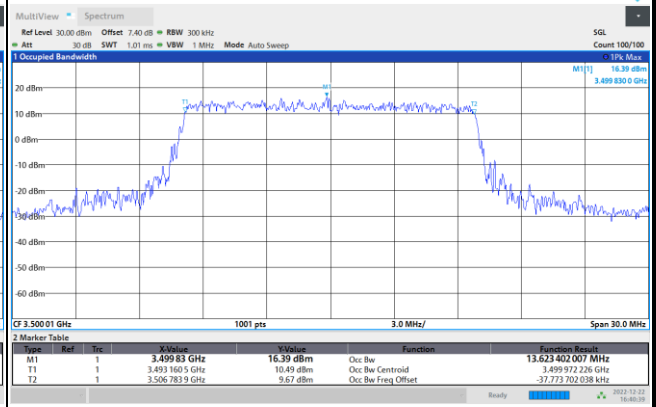
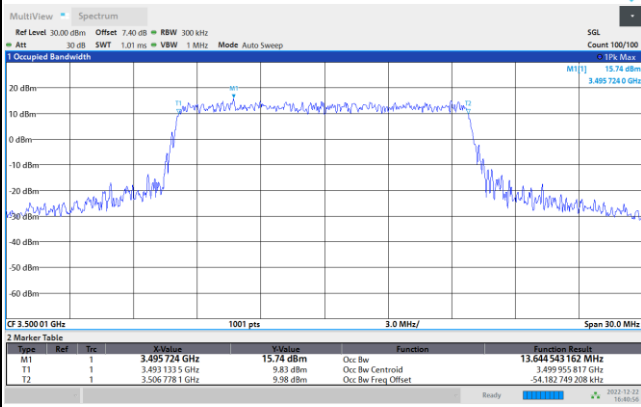




FR1 n77 / 15MHz / CP OFDM / Middle Channel / Full RB

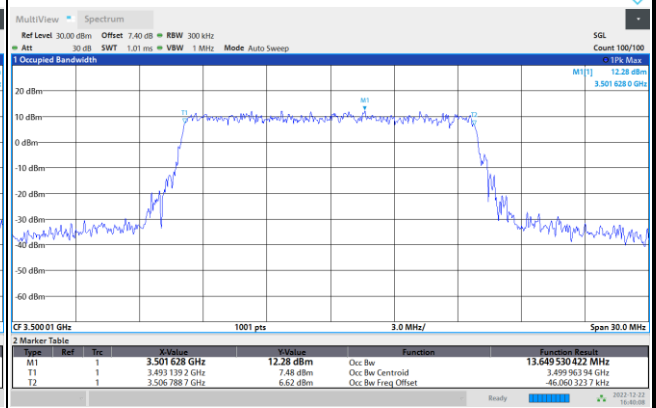
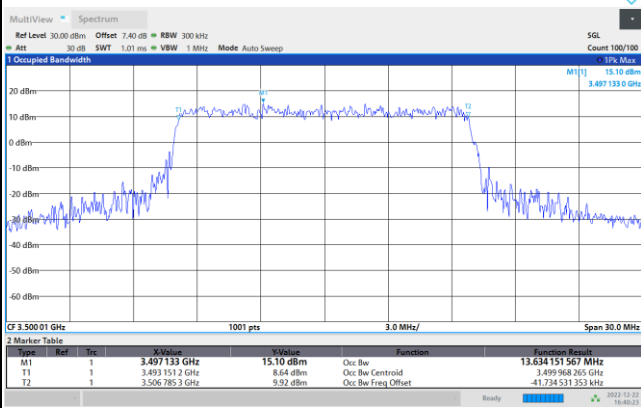
QPSK

16QAM



64QAM

256QAM

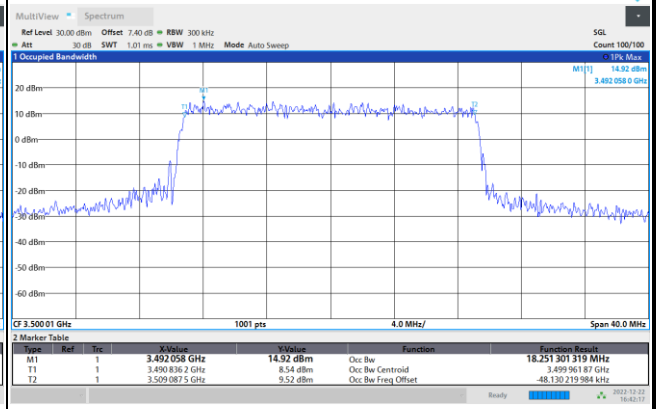
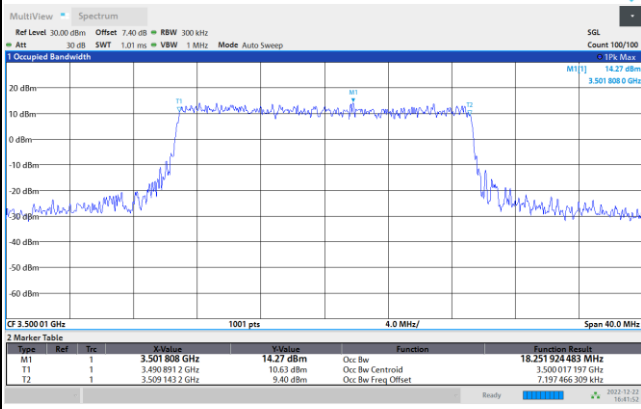




FR1 n77 / 20MHz / CP OFDM / Middle Channel / Full RB

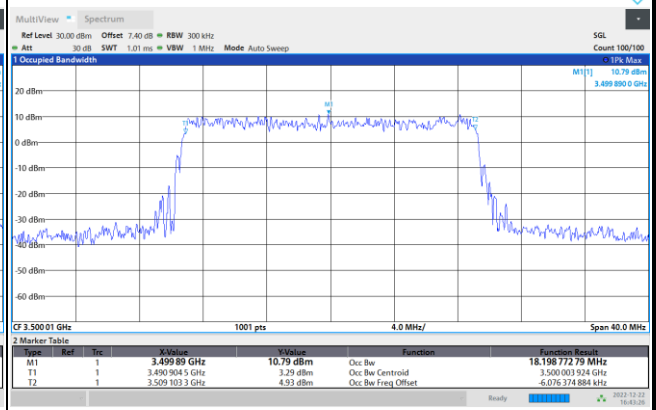
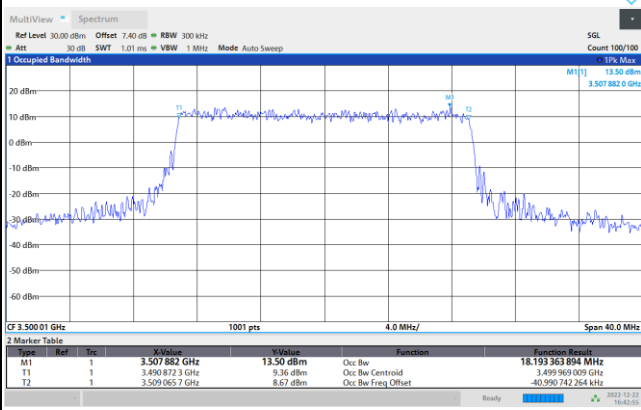
QPSK

16QAM



64QAM

256QAM

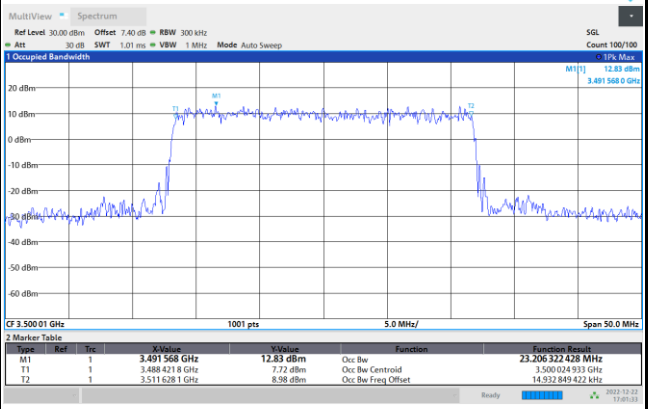
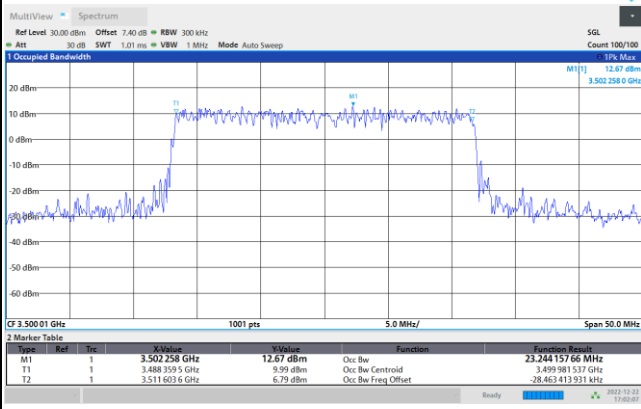




FR1 n77 / 25MHz / CP OFDM / Middle Channel / Full RB

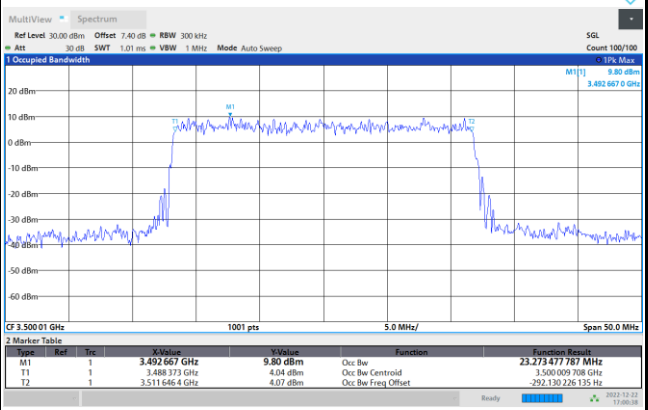
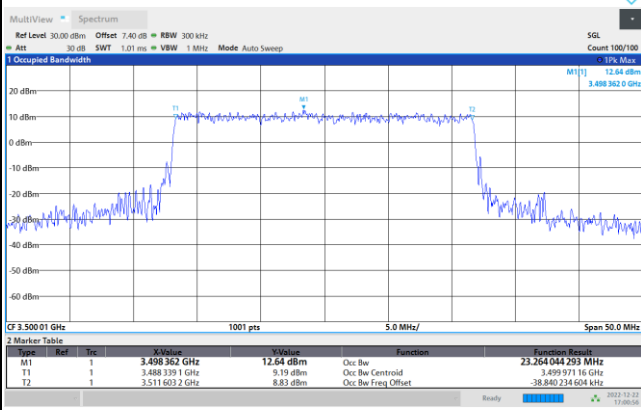
QPSK

16QAM



64QAM

256QAM

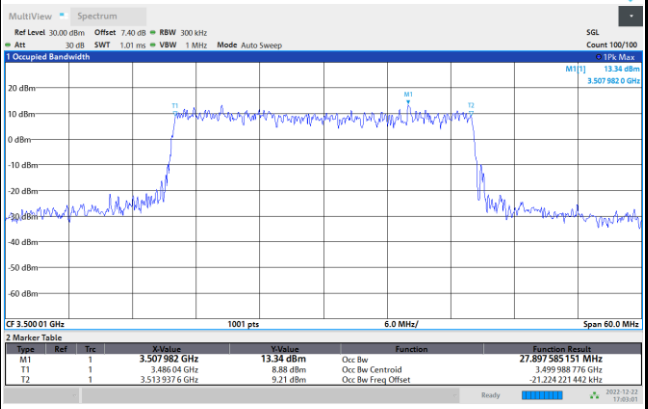
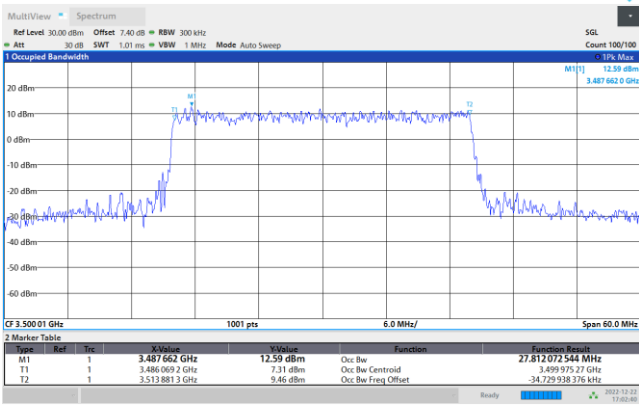




FR1 n77 / 30MHz / CP OFDM / Middle Channel / Full RB

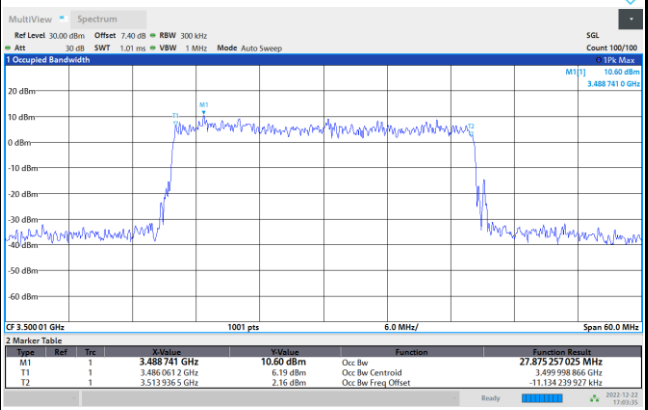
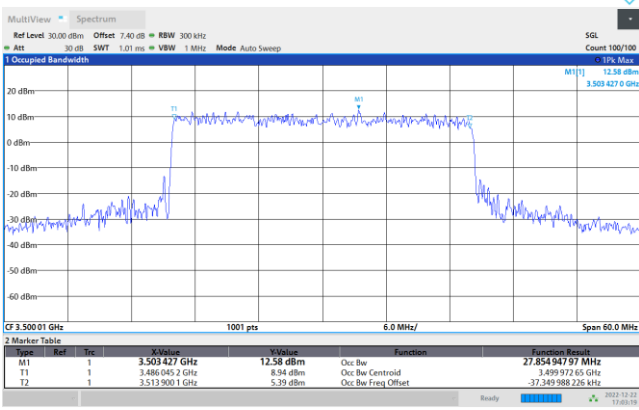
QPSK

16QAM



64QAM

256QAM

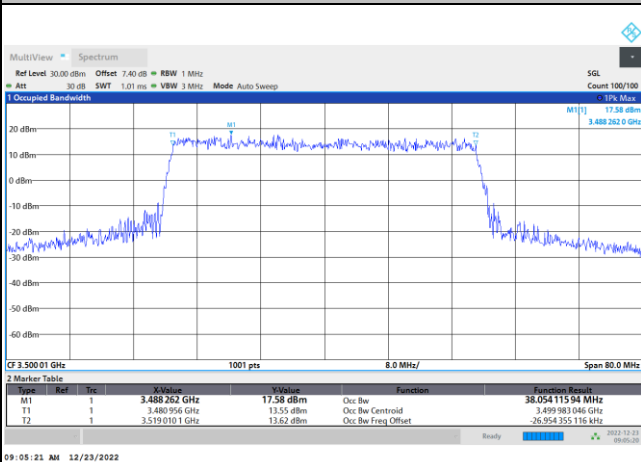






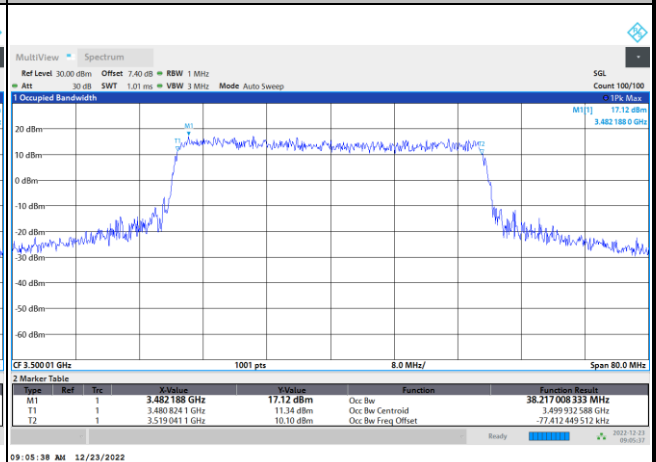
FR1 n77 / 40MHz / CP OFDM / Middle Channel / Full RB

QPSK



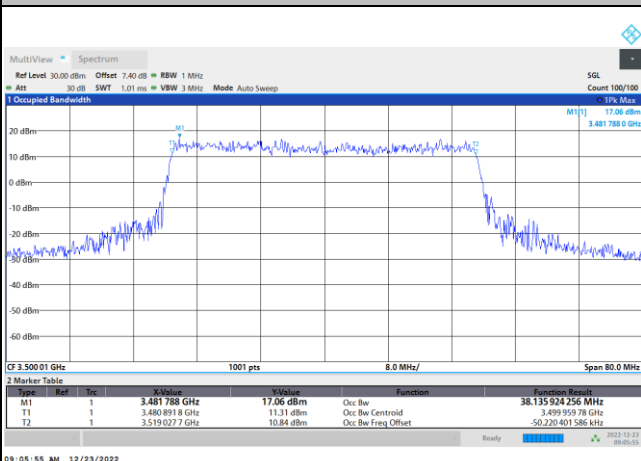
09:05:21 AM 12/23/2022

16QAM



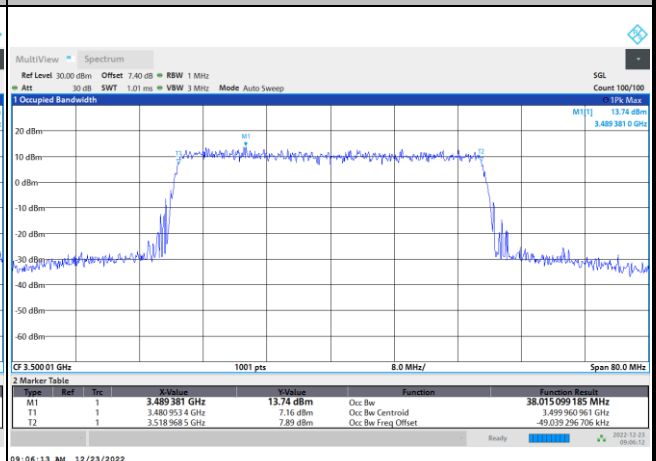
09:05:38 AM 12/23/2022

64QAM



09:05:55 AM 12/23/2022

256QAM



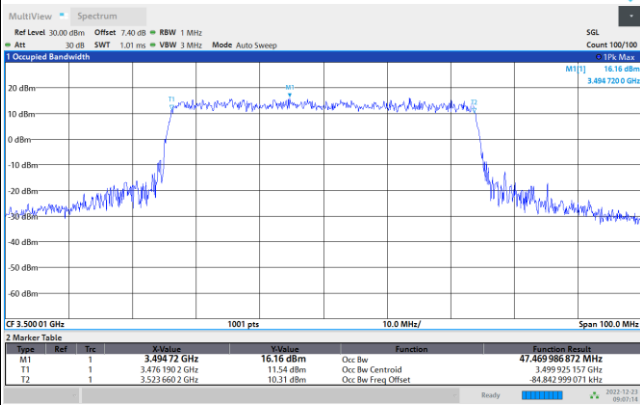
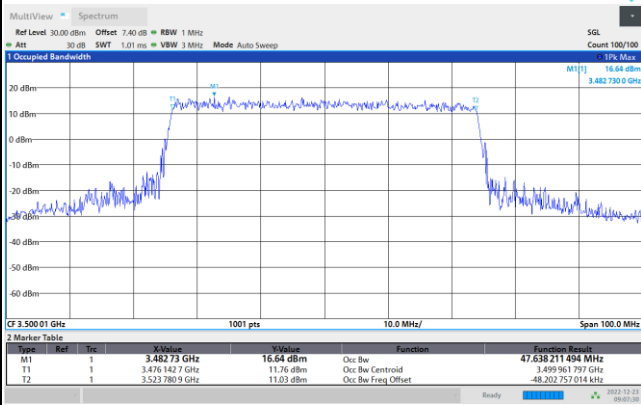
09:06:13 AM 12/23/2022



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

QPSK

16QAM



64QAM

256QAM

