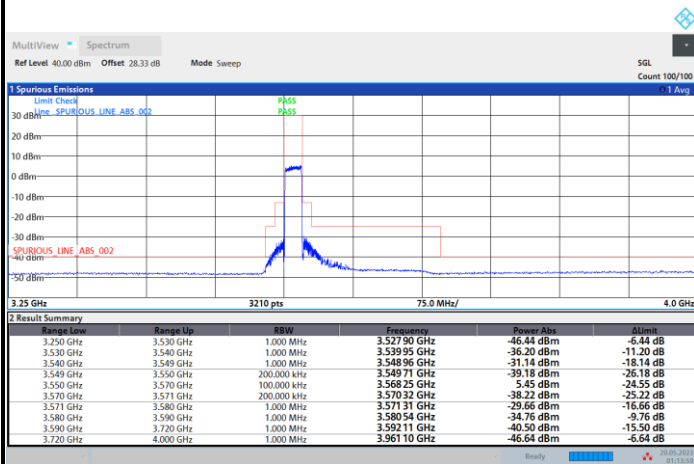




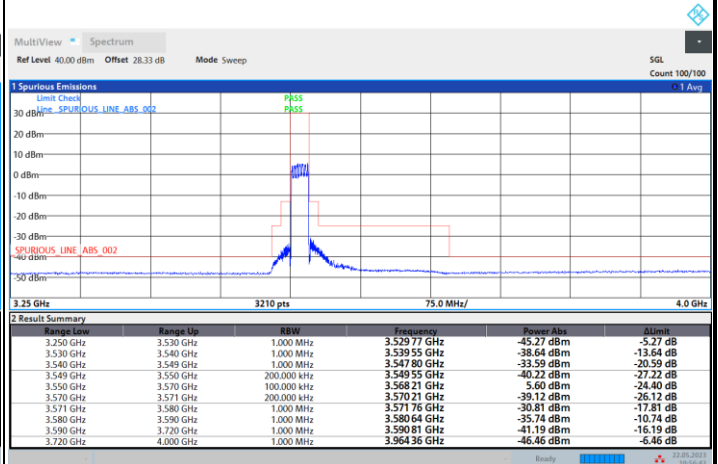
## FR1 n48 / 20MHz / Lowest Channel / MASK

## QPSK



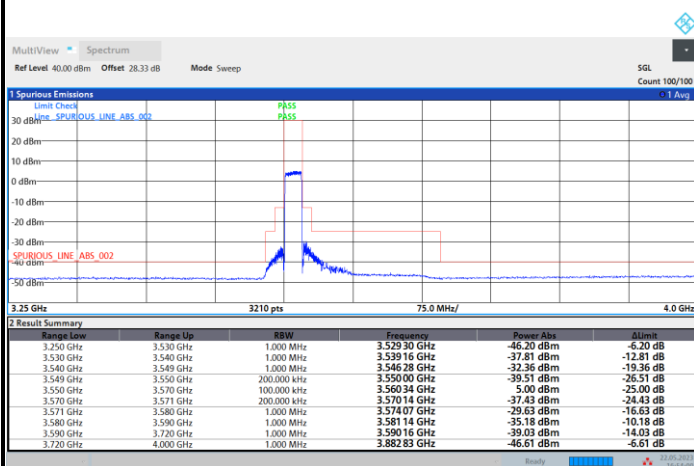
01:13:59 20.05.2023

## 16QAM



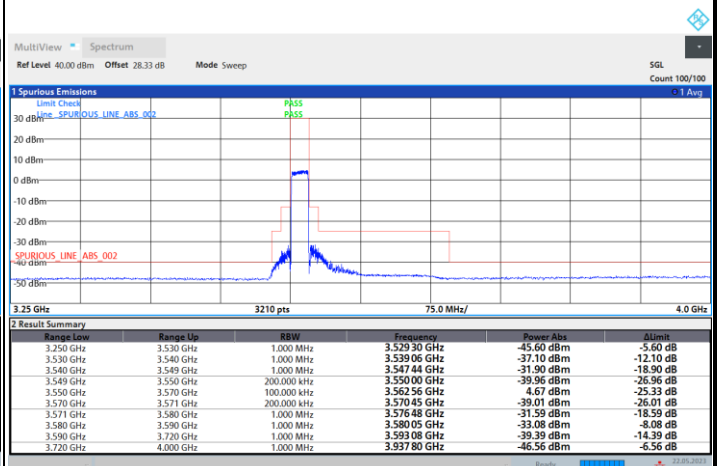
10:56:44 22.05.2023

## 64QAM



16:54:01 22.05.2023

## 256QAM

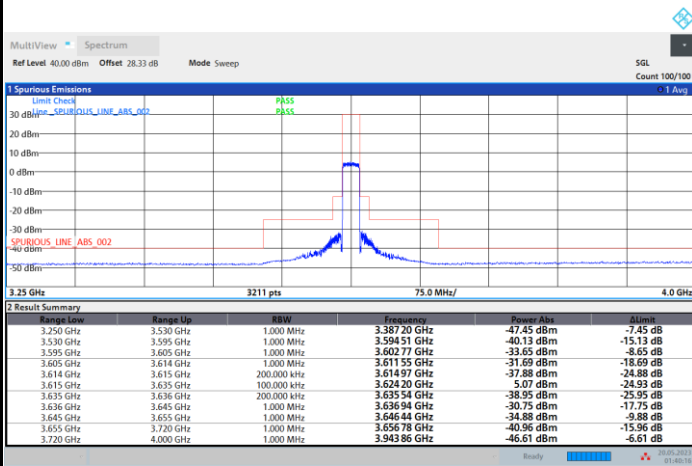


20:48:16 22.05.2023



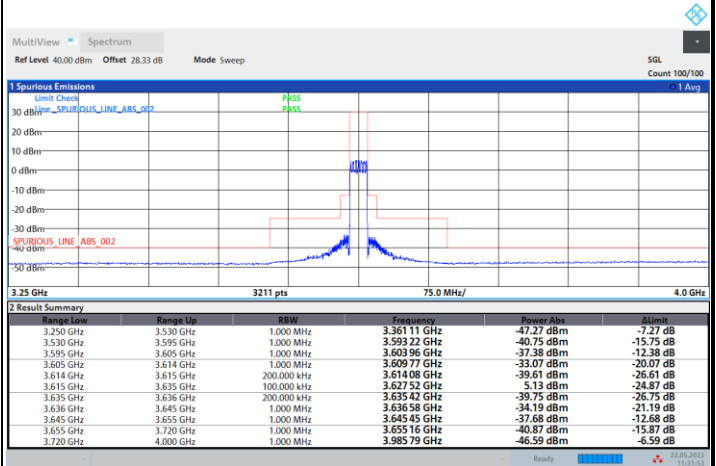
## FR1 n48 / 20MHz / Middle Channel / MASK

## QPSK



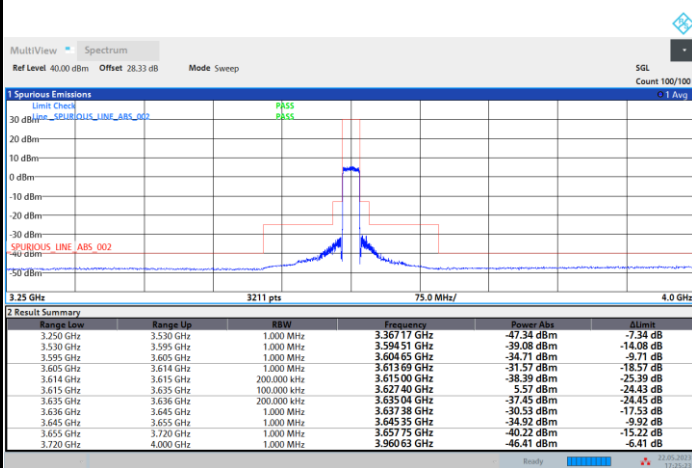
01:40:17 20.05.2023

## 16QAM



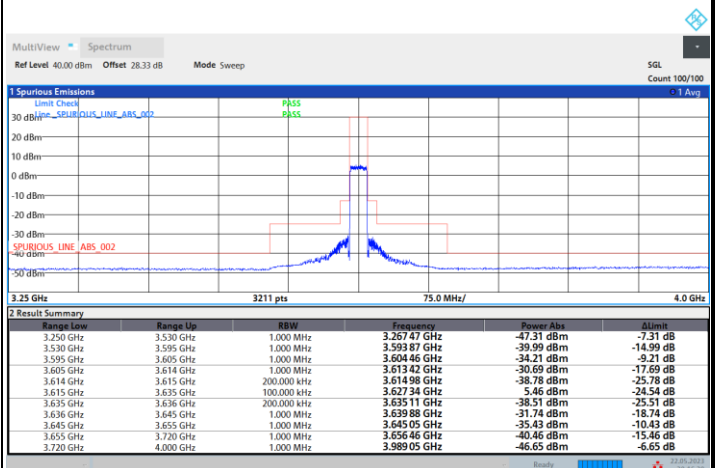
11:13:54 22.05.2023

## 64QAM



17:25:24 22.05.2023

## 256QAM

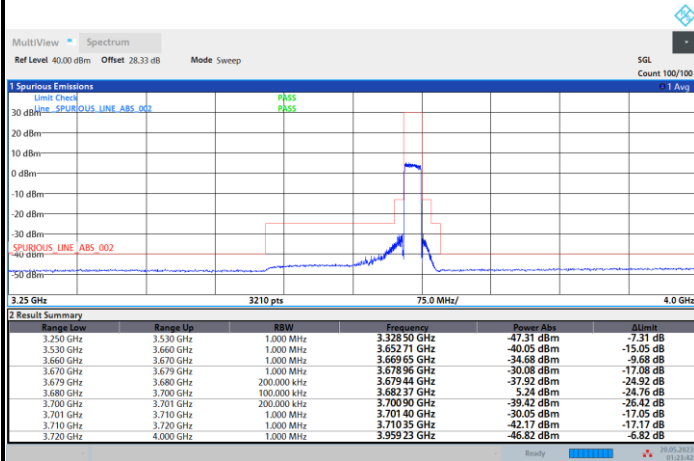


20:16:29 22.05.2023



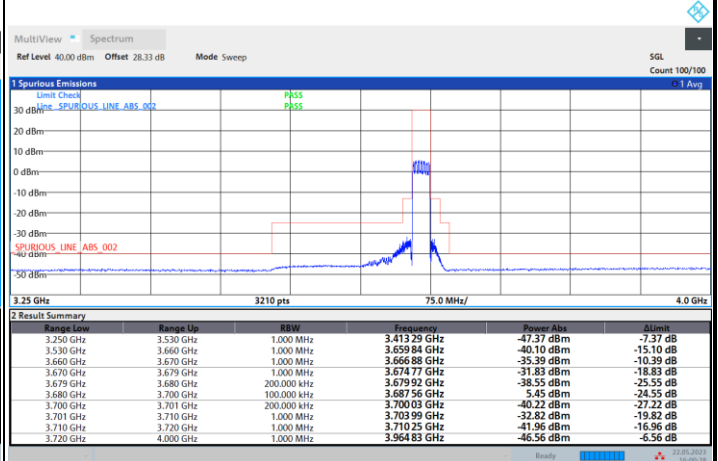
## FR1 n48 / 20MHz / Highest Channel / MASK

## QPSK



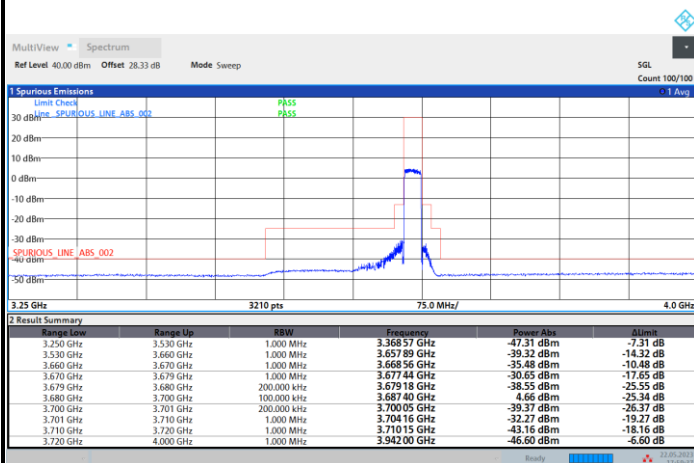
01:23:43 20.05.2023

## 16QAM



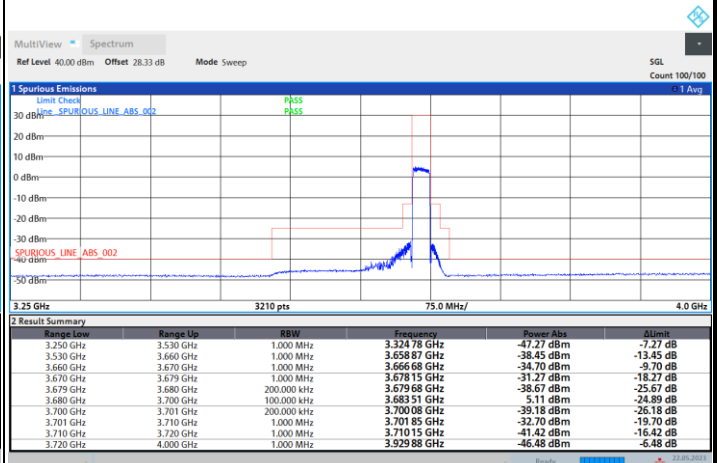
16:00:28 22.05.2023

## 64QAM



17:59:38 22.05.2023

## 256QAM

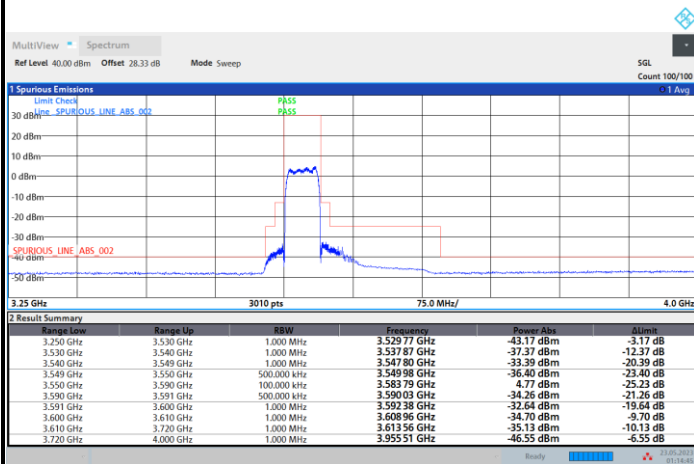


19:42:59 22.05.2023



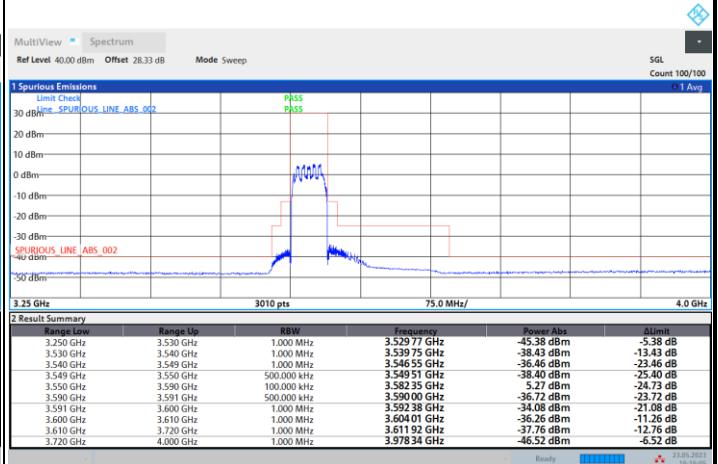
## FR1 n48 / 40MHz / Lowest Channel / MASK

## QPSK



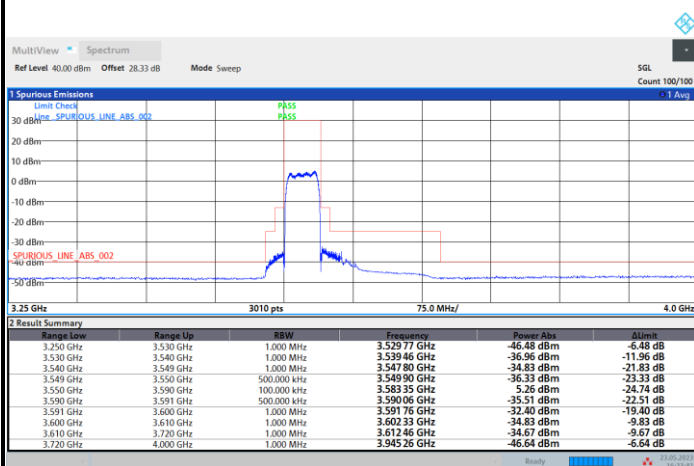
01:14:45 23.05.2023

## 16QAM



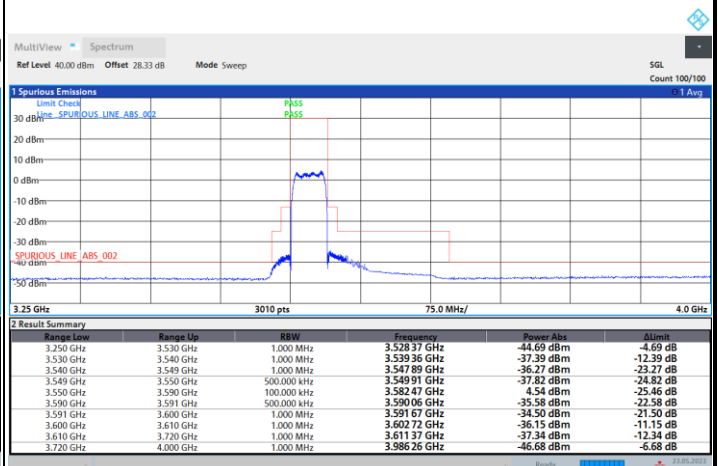
16:16:05 23.05.2023

## 64QAM



16:23:41 23.05.2023

## 256QAM

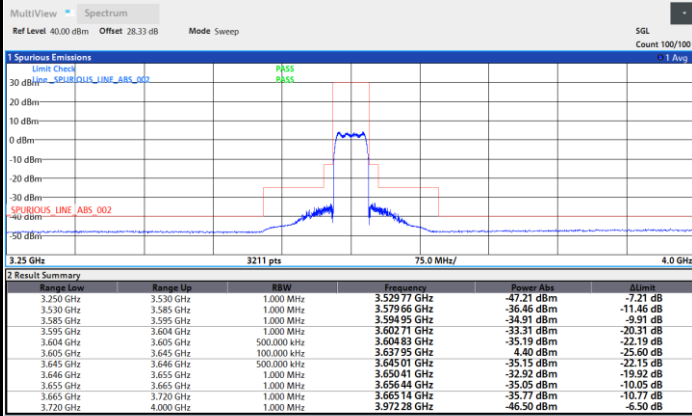


19:50:15 23.05.2023



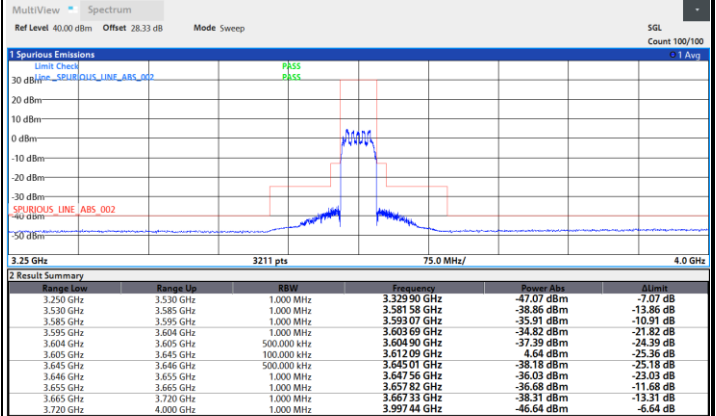
## FR1 n48 / 40MHz / Middle Channel / MASK

## QPSK



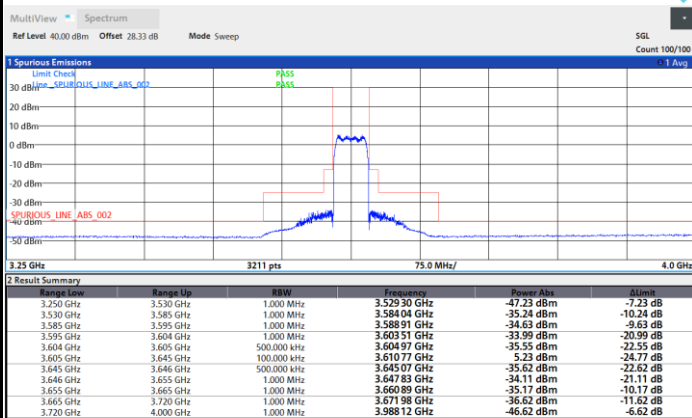
02:02:52 23.05.2023

## 16QAM



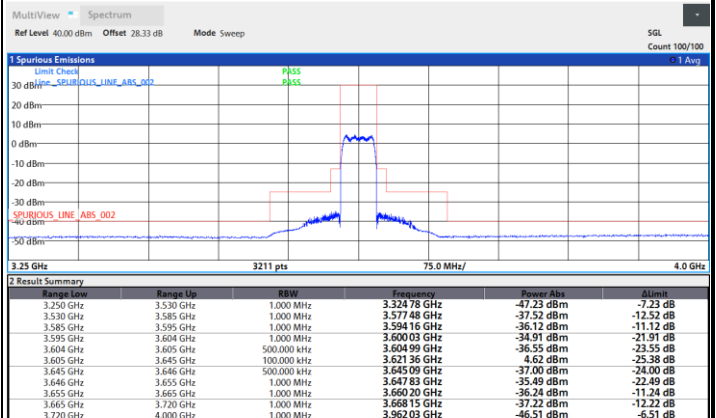
10:42:15 23.05.2023

## 64QAM



17:28:57 23.05.2023

## 256QAM

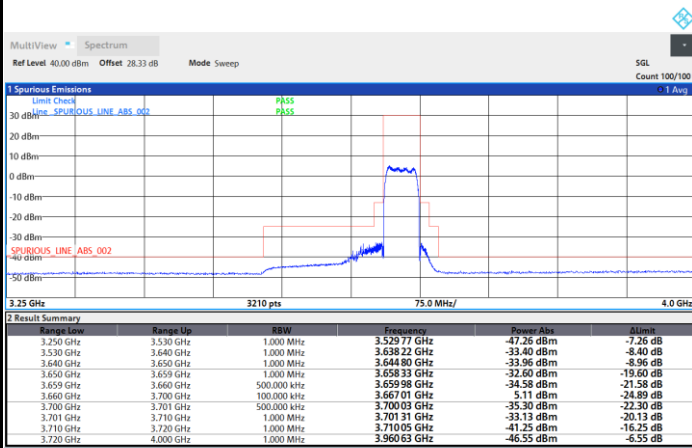


20:25:54 23.05.2023



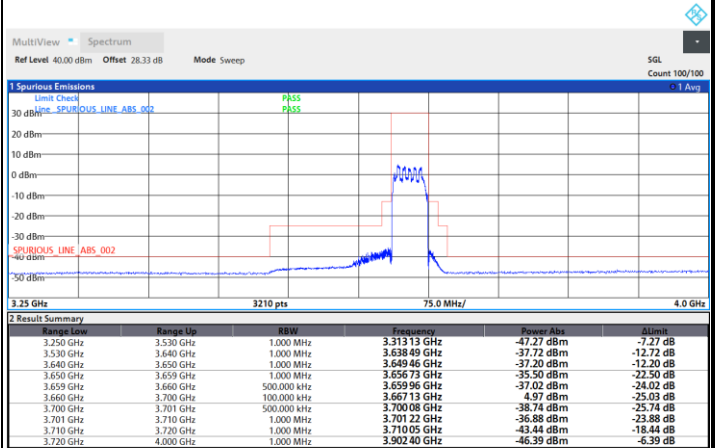
## FR1 n48 / 40MHz / Highest Channel / MASK

## QPSK



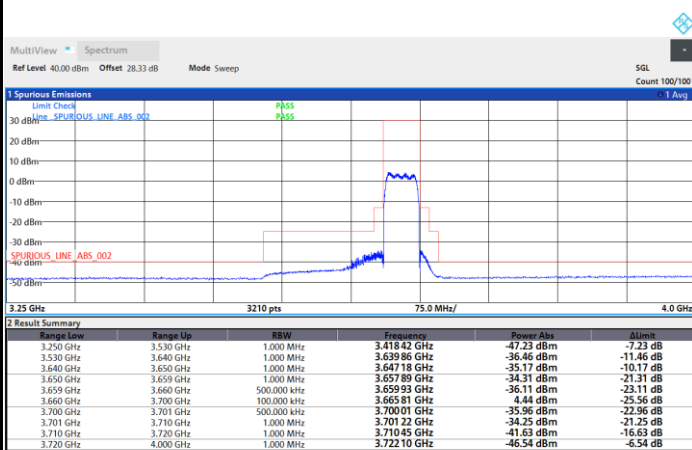
01:32:12 23.05.2023

## 16QAM



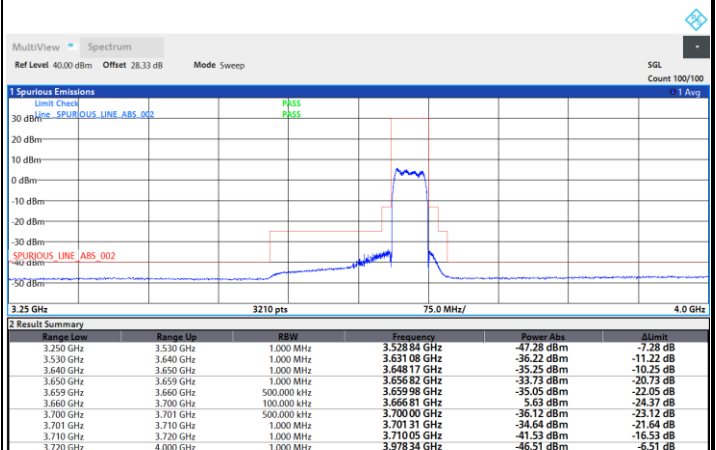
11:56:12 23.05.2023

## 64QAM



19:35:43 23.05.2023

## 256QAM

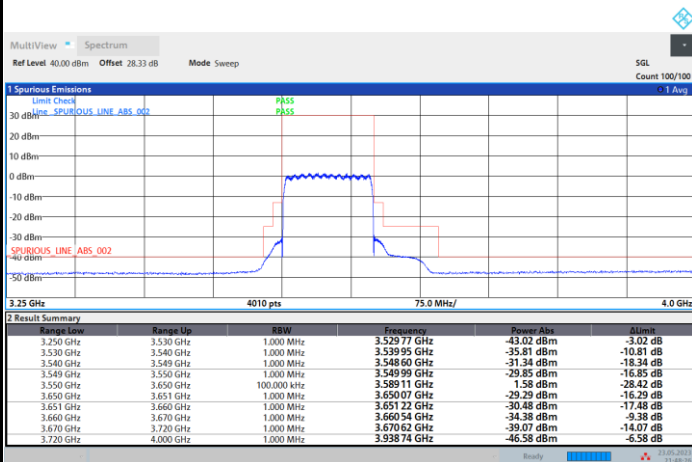


19:13:05 23.05.2023



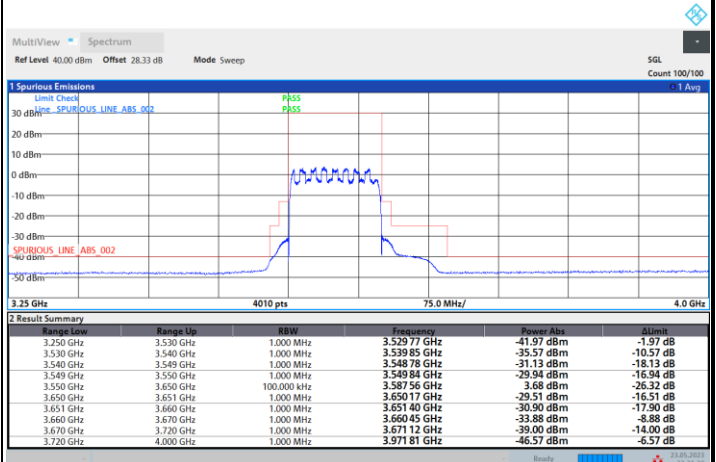
## FR1 n48 / 100MHz / Lowest Channel / MASK

## QPSK



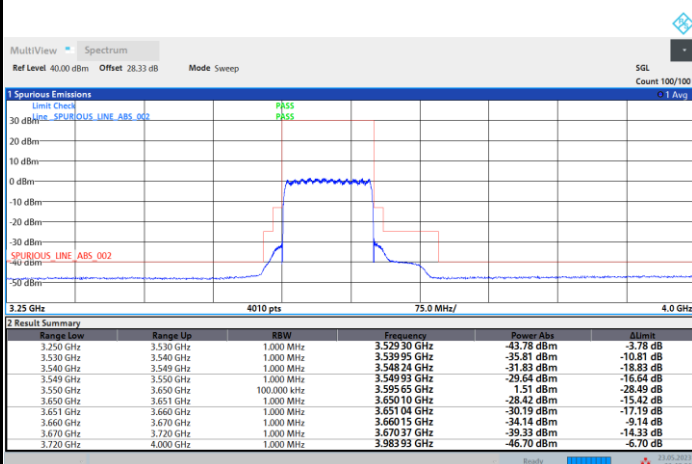
21:48:27 23.05.2023

## 16QAM



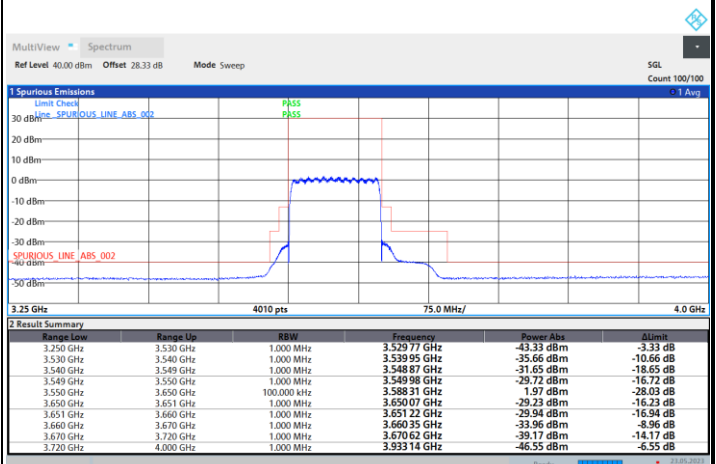
22:21:21 23.05.2023

## 64QAM



22:47:05 23.05.2023

## 256QAM

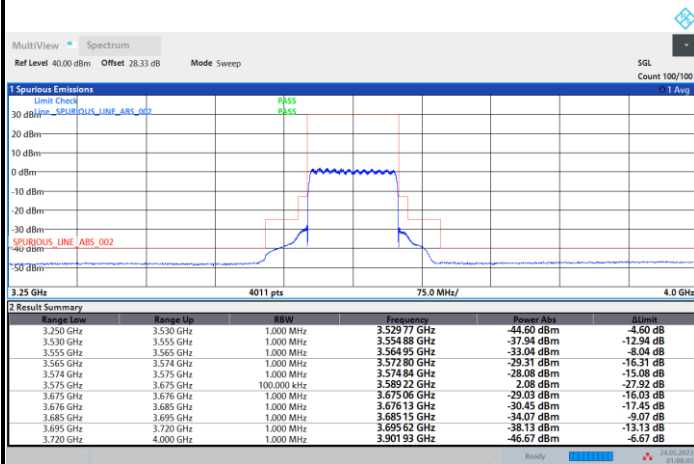


23:12:30 23.05.2023



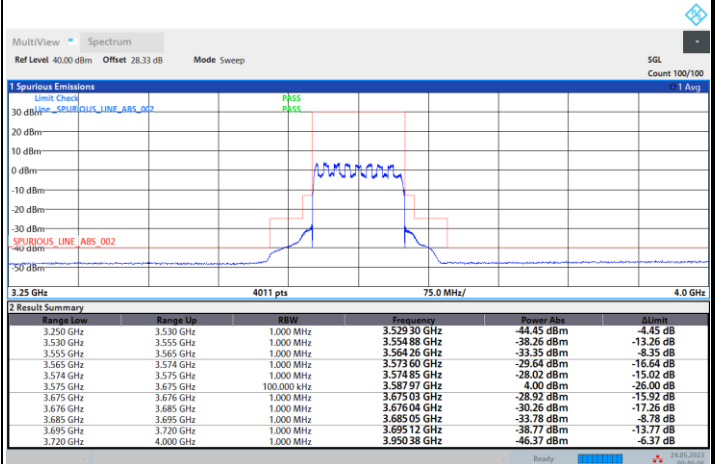
## FR1 n48 / 100MHz / Middle Channel / MASK

## QPSK



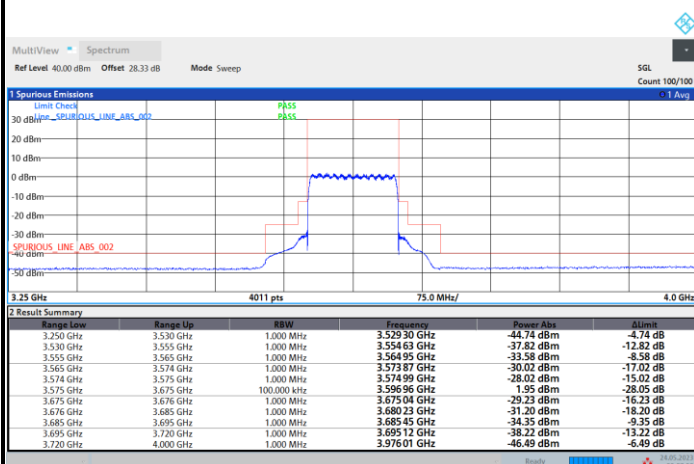
01:08:04 24.05.2023

## 16QAM



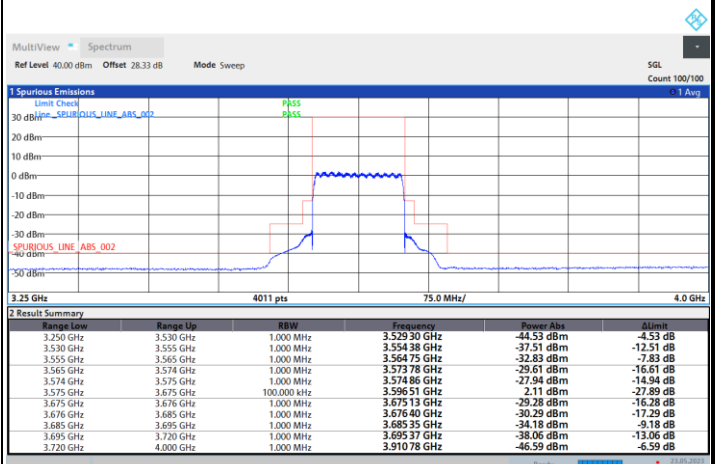
00:46:06 24.05.2023

## 64QAM



00:08:00 24.05.2023

## 256QAM

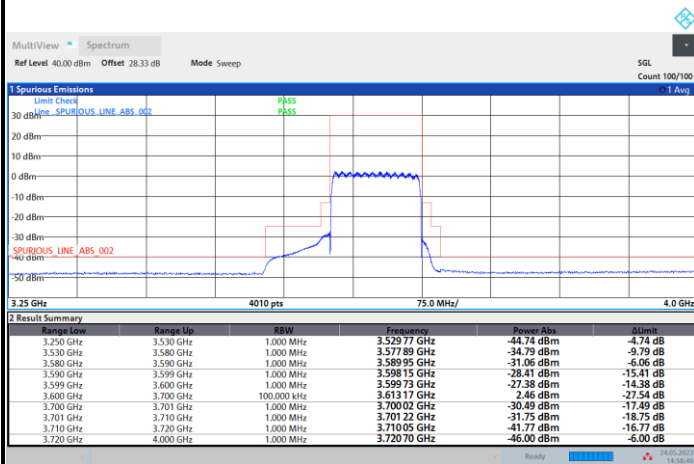


23:39:34 23.05.2023



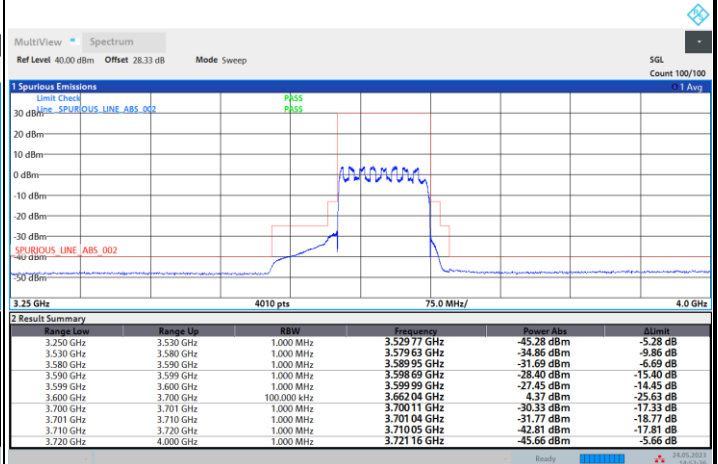
## FR1 n48 / 100MHz / Highest Channel / MASK

## QPSK



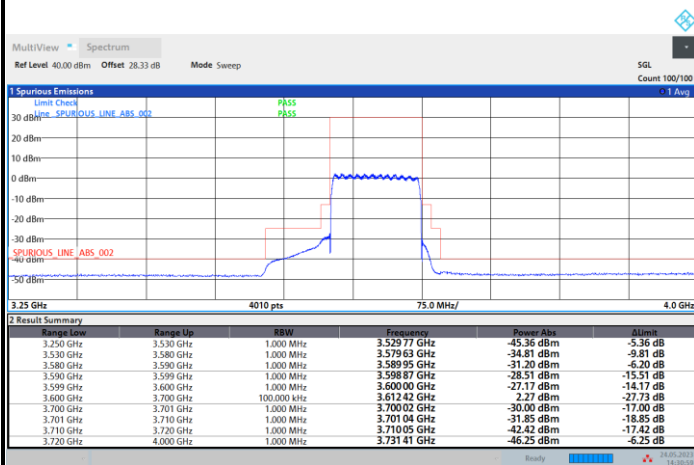
14:58:47 24.05.2023

## 16QAM



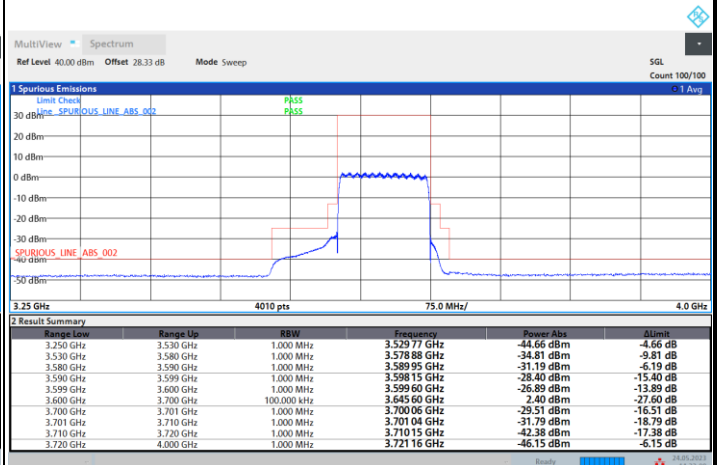
14:53:36 24.05.2023

## 64QAM



14:30:59 24.05.2023

## 256QAM



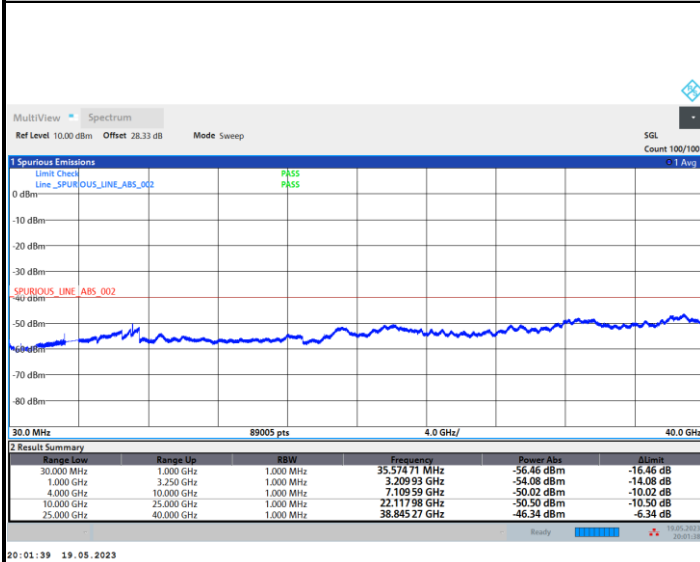
14:22:08 24.05.2023



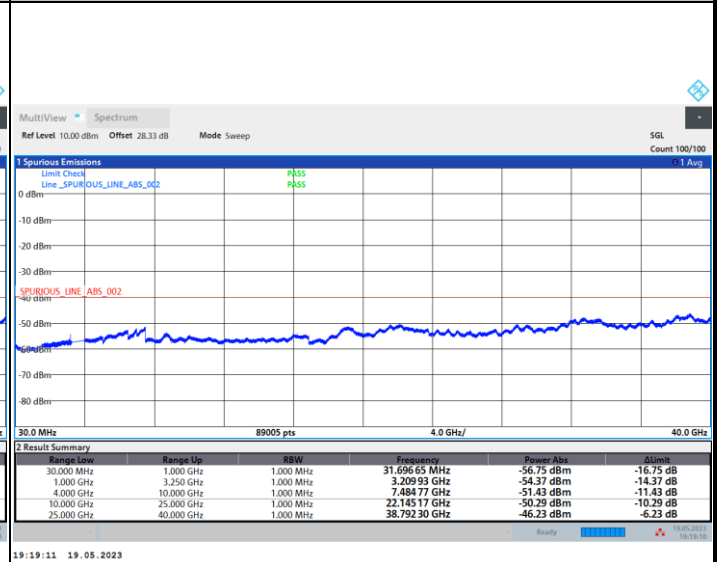
# Conducted Spurious Emission

## FR1 n48 / 10MHz / QPSK / CSE

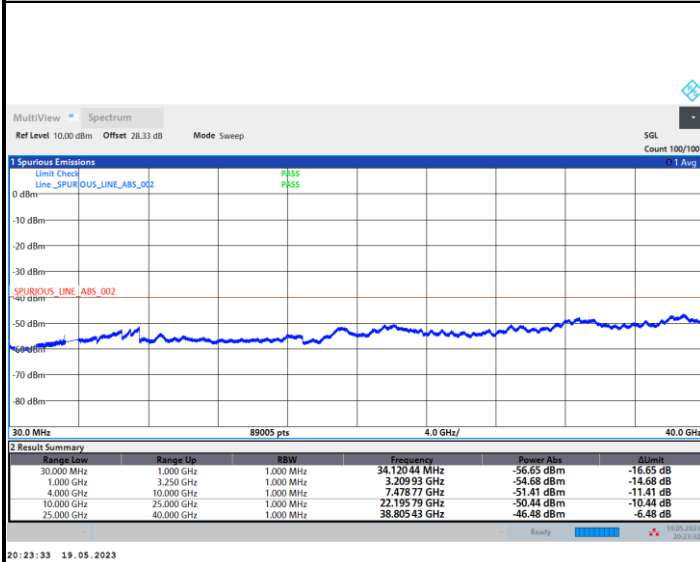
### Lowest Channel



### Middle Channel



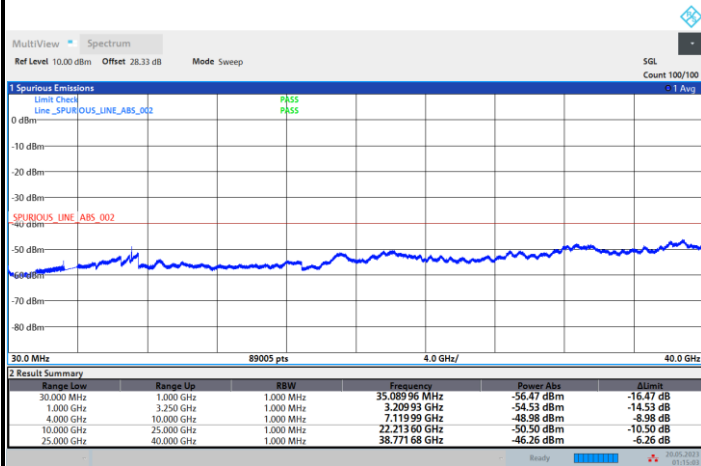
### Highest Channel



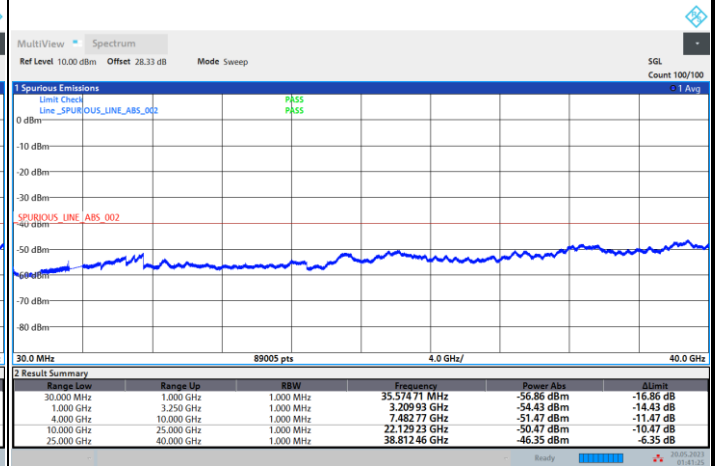


## FR1 n48 / 20MHz / QPSK / CSE

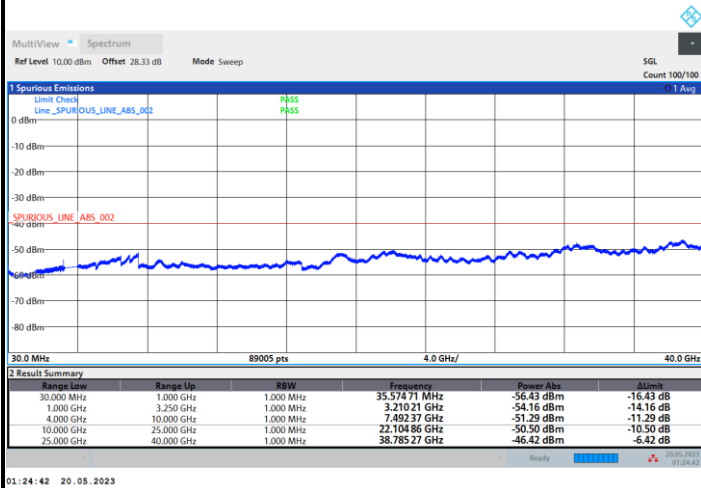
## Lowest Channel



## Middle Channel



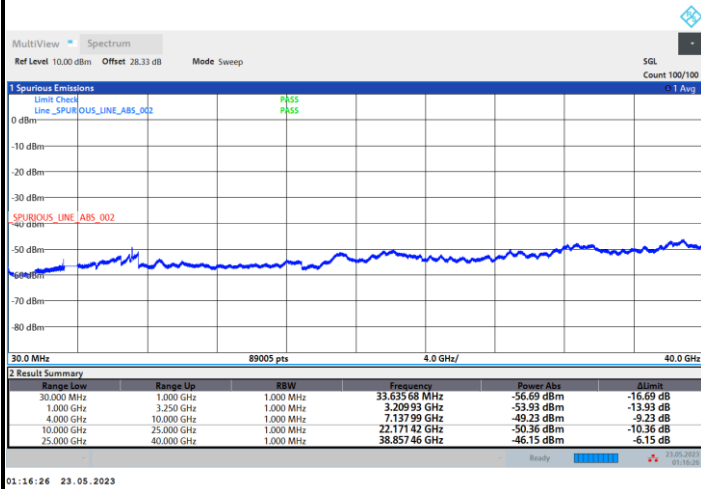
## Highest Channel



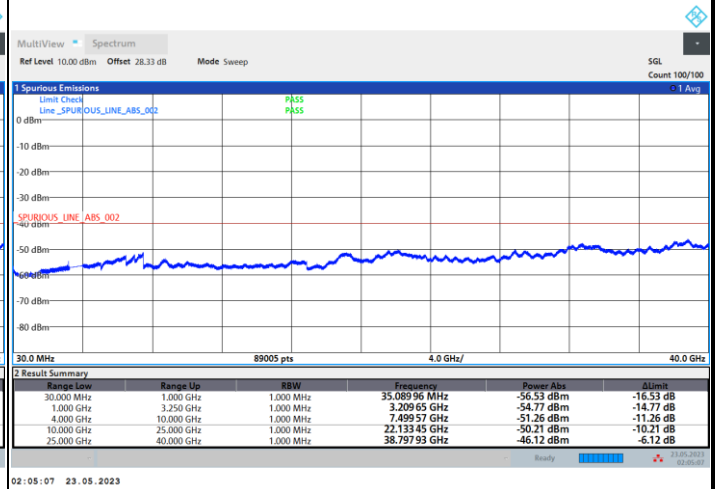


## FR1 n48 / 40MHz / QPSK / CSE

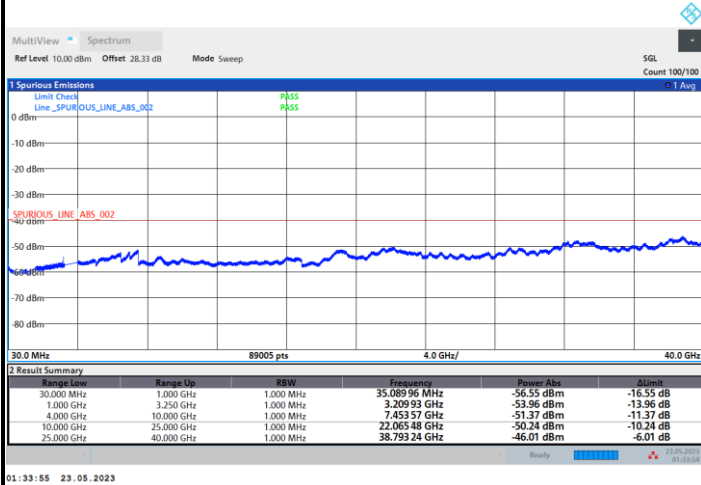
## Lowest Channel



## Middle Channel



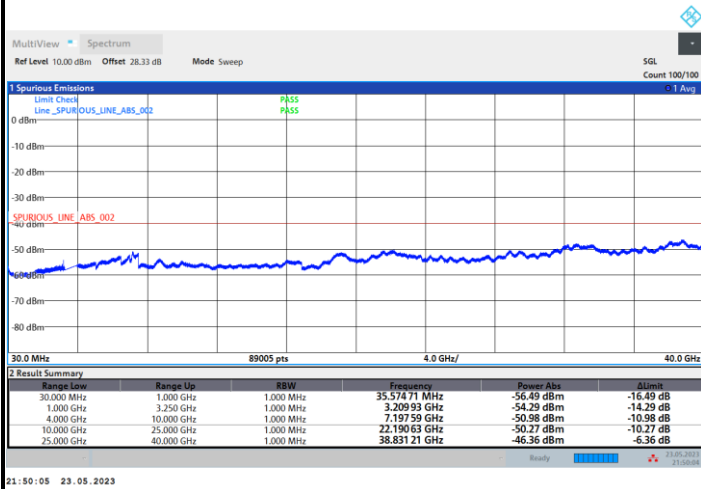
## Highest Channel



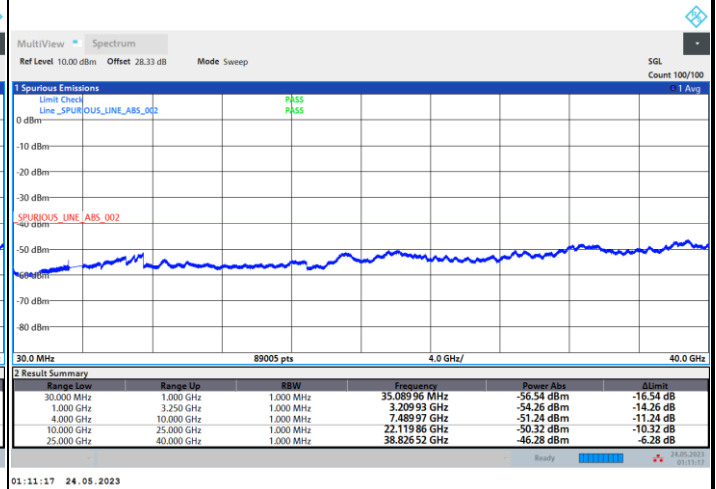


## FR1 n48 / 100MHz / QPSK / CSE

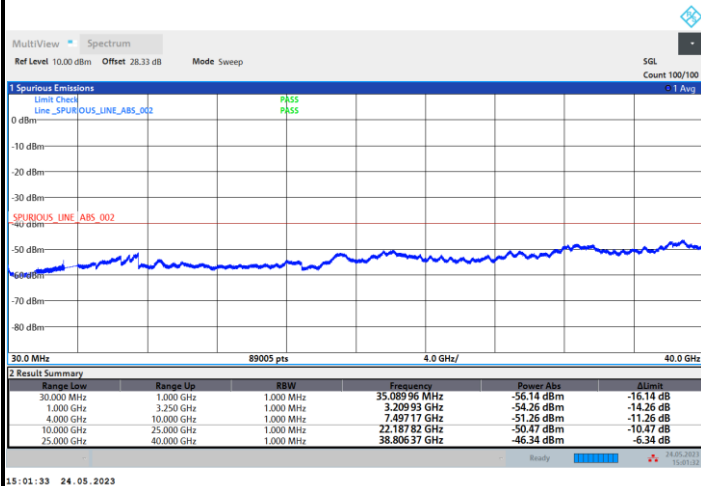
## Lowest Channel



## Middle Channel



## Highest Channel



## Frequency Stability

| Test Conditions     |                   | FR1 n48 (QPSK) / Middle Channel | Limit   |
|---------------------|-------------------|---------------------------------|---------|
| Temperature<br>(°C) | Voltage<br>(Volt) | BW 10MHz                        | Note 2. |
|                     |                   | Frequency offset (ppm)          | Result  |
| 50                  | Normal Voltage    | 0.0000                          | PASS    |
| 40                  | Normal Voltage    | 0.7172                          |         |
| 30                  | Normal Voltage    | 0.1655                          |         |
| 20(Ref.)            | Normal Voltage    | 0.0000                          |         |
| 10                  | Normal Voltage    | 0.0552                          |         |
| 0                   | Normal Voltage    | 0.2759                          |         |
| -10                 | Normal Voltage    | 0.1103                          |         |
| -20                 | Normal Voltage    | 0.3310                          |         |
| -30                 | Normal Voltage    | 0.3862                          |         |
| 20                  | Maximum Voltage   | 1.1586                          |         |
| 20                  | Normal Voltage    | 0.6069                          |         |
| 20                  | Minimum Voltage   | 1.1476                          |         |

**Note:**

1. Normal Voltage = 12 V. ; Minimum Voltage = 11.2 V. ; Maximum Voltage = 13.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

## FR1 n48 Conducted Test Items

### <MIMO ANT 4>

#### Maximum EIRP (dBm/10MHz)

| Mode      | FR1 n48 : Conducted (dBm/10MHz)<br><SISO> Lowest Channel |        |       |        |       |        |        |        |
|-----------|----------------------------------------------------------|--------|-------|--------|-------|--------|--------|--------|
| BW        | 10MHz                                                    |        | 20MHz |        | 40MHz |        | 50MHz  |        |
| Mod.      | QPSK                                                     | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Lowest CH | 16.02                                                    | 15.71  | 17.61 | 16.27  | 17.28 | 16.10  | -      | -      |
| Mod.      | 64QAM                                                    | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Lowest CH | 16.31                                                    | 16.59  | 17.56 | 17.68  | 16.98 | 17.41  | -      | -      |
| BW        | 60MHz                                                    |        | 80MHz |        | 90MHz |        | 100MHz |        |
| Mod.      | QPSK                                                     | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Lowest CH | -                                                        | -      | -     | -      | -     | -      | 14.21  | 14.95  |
| Mod.      | 64QAM                                                    | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Lowest CH | -                                                        | -      | -     | -      | -     | -      | 14.24  | 14.26  |

| Mode      | FR1 n48 : Maximum EIRP (dBm/10MHz)<br><MIMO 4TX> Lowest Channel |        |       |        |       |        |        |        |
|-----------|-----------------------------------------------------------------|--------|-------|--------|-------|--------|--------|--------|
| BW        | 10MHz                                                           |        | 20MHz |        | 40MHz |        | 50MHz  |        |
| Mod.      | QPSK                                                            | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Lowest CH | 27.34                                                           | 27.03  | 28.93 | 27.59  | 28.60 | 27.42  | -      | -      |
| Mod.      | 64QAM                                                           | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Lowest CH | 27.63                                                           | 27.91  | 28.88 | 29.00  | 28.30 | 28.73  | -      | -      |
| BW        | 60MHz                                                           |        | 80MHz |        | 90MHz |        | 100MHz |        |
| Mod.      | QPSK                                                            | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Lowest CH | -                                                               | -      | -     | -      | -     | -      | 25.53  | 26.27  |
| Mod.      | 64QAM                                                           | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Lowest CH | -                                                               | -      | -     | -      | -     | -      | 25.56  | 25.58  |
| Limit     | 30dBm/10MHz                                                     |        |       |        |       |        |        |        |
| Result    | PASS                                                            |        |       |        |       |        |        |        |

#### Note

1. The measured conducted result has included duty cycle offset factor.
2. The Maximum EIRP = conducted result + 6.02dB (4TX) + 5.3dBi MIMO antenna gain.

| Mode      | FR1 n48 : Conducted (dBm/10MHz)<br><SISO> Middle Channel |        |       |        |       |        |        |        |
|-----------|----------------------------------------------------------|--------|-------|--------|-------|--------|--------|--------|
| BW        | 10MHz                                                    |        | 20MHz |        | 40MHz |        | 50MHz  |        |
| Mod.      | QPSK                                                     | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 16.54                                                    | 15.99  | 17.95 | 16.35  | 17.22 | 16.10  | -      | -      |
| Mod.      | 64QAM                                                    | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 16.84                                                    | 16.33  | 17.55 | 17.52  | 17.33 | 17.04  | -      | -      |
| BW        | 60MHz                                                    |        | 80MHz |        | 90MHz |        | 100MHz |        |
| Mod.      | QPSK                                                     | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | -                                                        | -      | -     | -      | -     | -      | 14.70  | 14.76  |
| Mod.      | 64QAM                                                    | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | -                                                        | -      | -     | -      | -     | -      | 14.20  | 14.18  |

| Mode      | FR1 n48 : Maximum EIRP (dBm/10MHz)<br><MIMO 4TX> Middle Channel |        |       |        |       |        |        |        |
|-----------|-----------------------------------------------------------------|--------|-------|--------|-------|--------|--------|--------|
| BW        | 10MHz                                                           |        | 20MHz |        | 40MHz |        | 50MHz  |        |
| Mod.      | QPSK                                                            | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | 27.86                                                           | 27.31  | 29.27 | 27.67  | 28.54 | 27.42  | -      | -      |
| Mod.      | 64QAM                                                           | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | 28.16                                                           | 27.65  | 28.87 | 28.84  | 28.65 | 28.06  | -      | -      |
| BW        | 60MHz                                                           |        | 80MHz |        | 90MHz |        | 100MHz |        |
| Mod.      | QPSK                                                            | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Middle CH | -                                                               | -      | -     | -      | -     | -      | 26.02  | 26.08  |
| Mod.      | 64QAM                                                           | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Middle CH | -                                                               | -      | -     | -      | -     | -      | 25.52  | 25.50  |
| Limit     | 30dBm/10MHz                                                     |        |       |        |       |        |        |        |
| Result    | PASS                                                            |        |       |        |       |        |        |        |

**Note**

1. The measured conducted result has included duty cycle offset factor.
2. The Maximum EIRP = conducted result + 6.02dB (4TX) + 5.3dBi MIMO antenna gain.

| Mode       | FR1 n48 : Conducted (dBm/10MHz)<br><SISO> Highest Channel |        |       |        |       |        |        |        |
|------------|-----------------------------------------------------------|--------|-------|--------|-------|--------|--------|--------|
| BW         | 10MHz                                                     |        | 20MHz |        | 40MHz |        | 50MHz  |        |
| Mod.       | QPSK                                                      | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Highest CH | 16.11                                                     | 15.61  | 18.05 | 16.48  | 16.86 | 15.87  | -      | -      |
| Mod.       | 64QAM                                                     | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Highest CH | 16.00                                                     | 16.06  | 17.98 | 17.98  | 16.94 | 16.83  | -      | -      |
| BW         | 60MHz                                                     |        | 80MHz |        | 90MHz |        | 100MHz |        |
| Mod.       | QPSK                                                      | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Highest CH | -                                                         | -      | -     | -      | -     | -      | 14.11  | 14.69  |
| Mod.       | 64QAM                                                     | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Highest CH | -                                                         | -      | -     | -      | -     | -      | 14.07  | 14.08  |

| Mode       | FR1 n48 : Maximum EIRP (dBm/10MHz)<br><MIMO 4TX> Highest Channel |        |       |        |       |        |        |        |
|------------|------------------------------------------------------------------|--------|-------|--------|-------|--------|--------|--------|
| BW         | 10MHz                                                            |        | 20MHz |        | 40MHz |        | 50MHz  |        |
| Mod.       | QPSK                                                             | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Highest CH | 27.43                                                            | 26.93  | 29.37 | 27.80  | 28.18 | 27.19  | -      | -      |
| Mod.       | 64QAM                                                            | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Highest CH | 27.32                                                            | 27.38  | 29.30 | 29.30  | 28.26 | 27.85  | -      | -      |
| BW         | 60MHz                                                            |        | 80MHz |        | 90MHz |        | 100MHz |        |
| Mod.       | QPSK                                                             | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK   | 16QAM  |
| Highest CH | -                                                                | -      | -     | -      | -     | -      | 25.43  | 26.01  |
| Mod.       | 64QAM                                                            | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM  | 256QAM |
| Highest CH | -                                                                | -      | -     | -      | -     | -      | 25.39  | 25.40  |
| Limit      | 30dBm/10MHz                                                      |        |       |        |       |        |        |        |
| Result     | PASS                                                             |        |       |        |       |        |        |        |

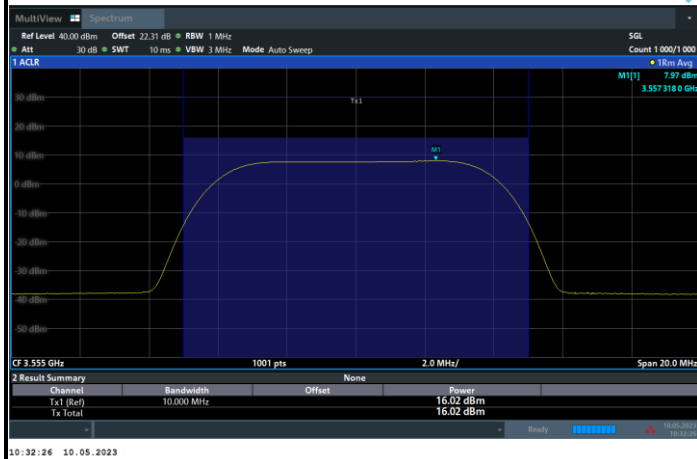
**Note**

1. The measured conducted result has included duty cycle offset factor.
2. The Maximum EIRP = conducted result + 6.02dB (4TX) + 5.3dBi MIMO antenna gain.

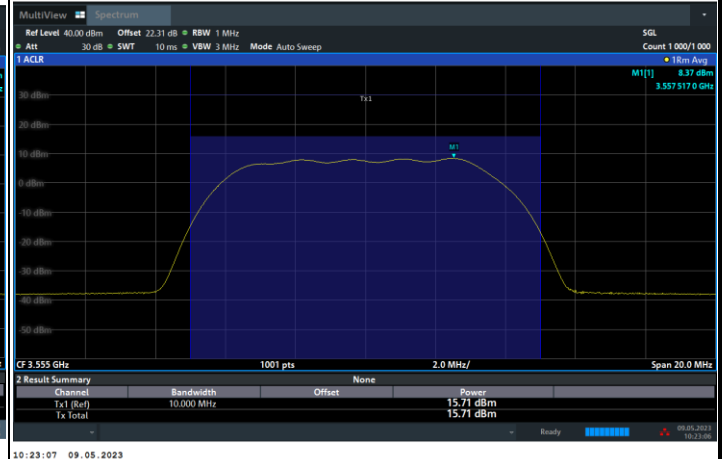


## FR1 n48 / 10MHz / Lowest Channel / Conducted (dBm/10MHz)

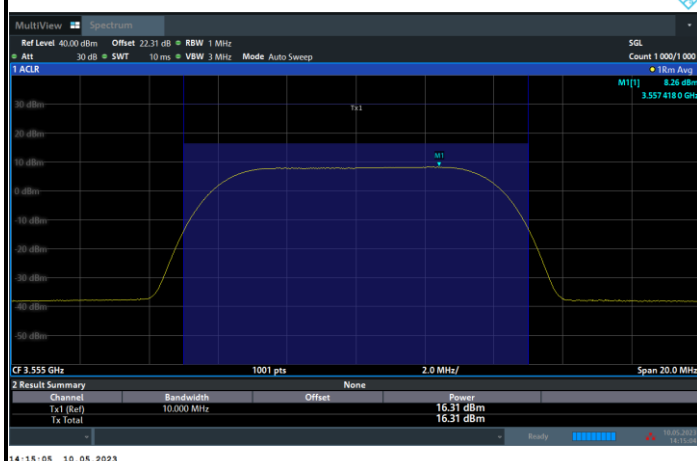
## QPSK



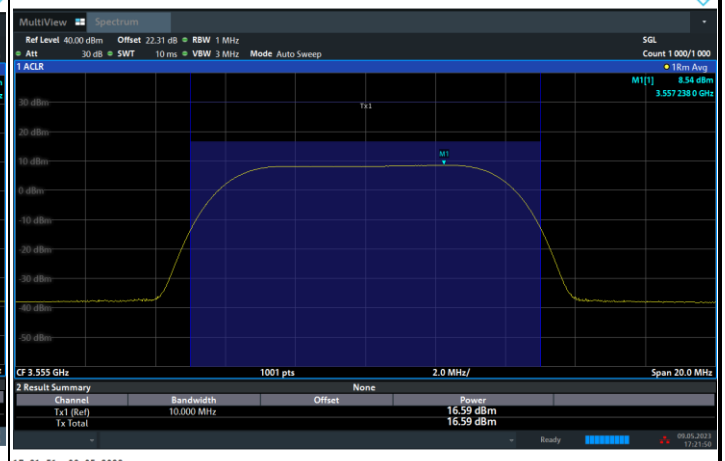
## 16QAM



## 64QAM



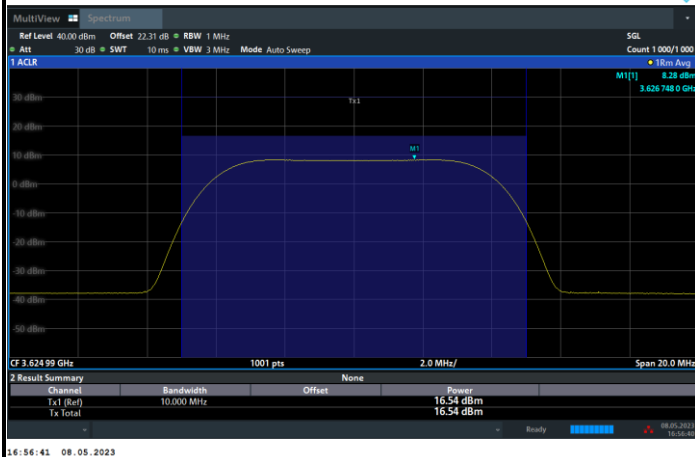
## 256QAM



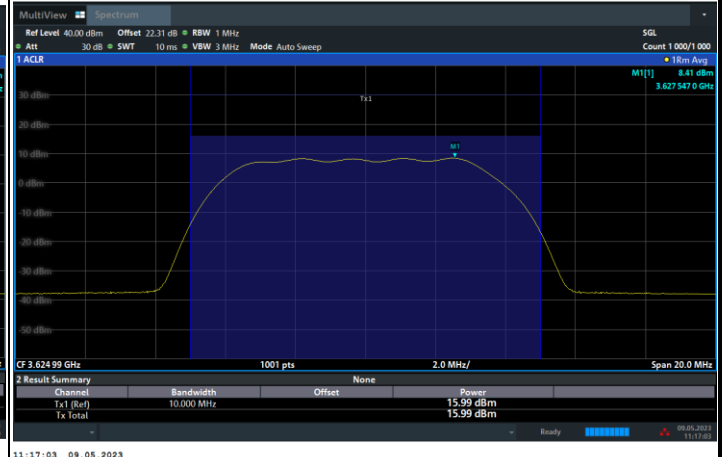


## FR1 n48 / 10MHz / Middle Channel / Conducted (dBm/10MHz)

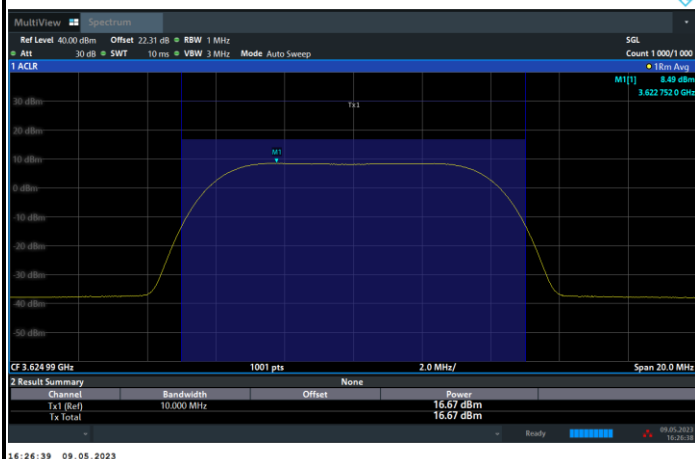
## QPSK



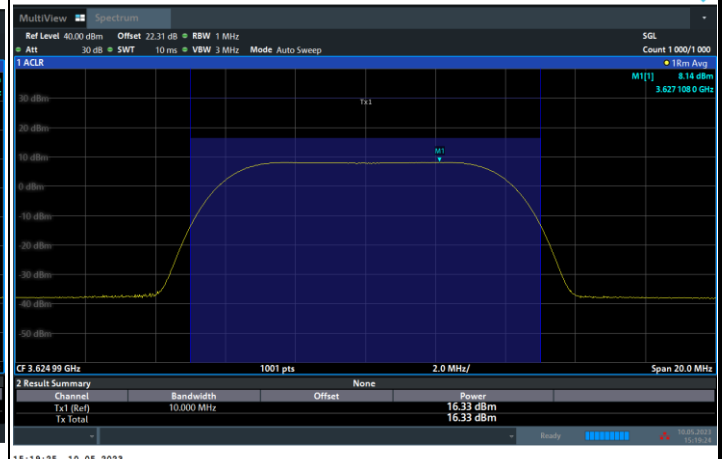
## 16QAM



## 64QAM



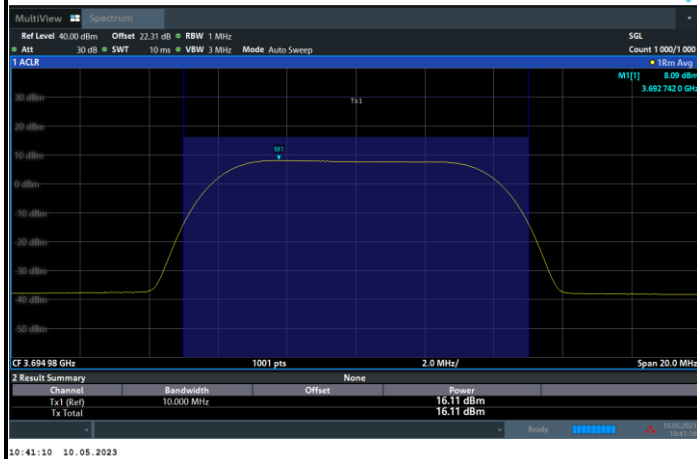
## 256QAM



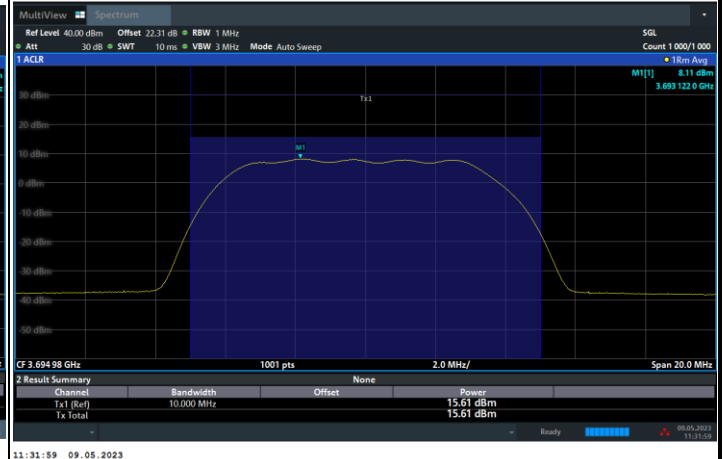


## FR1 n48 / 10MHz / Highest Channel / Conducted (dBm/10MHz)

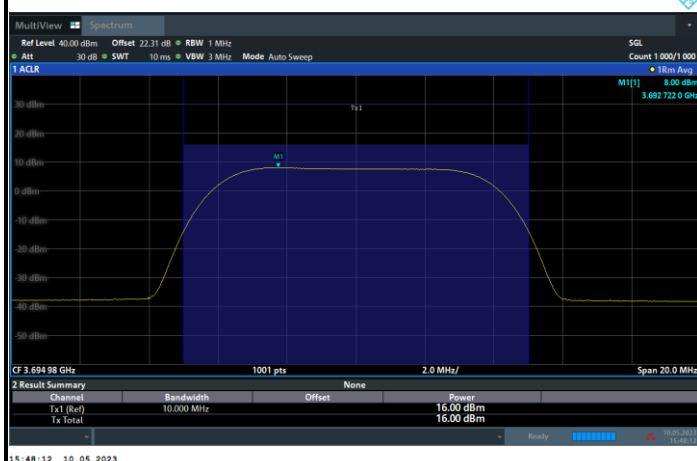
## QPSK



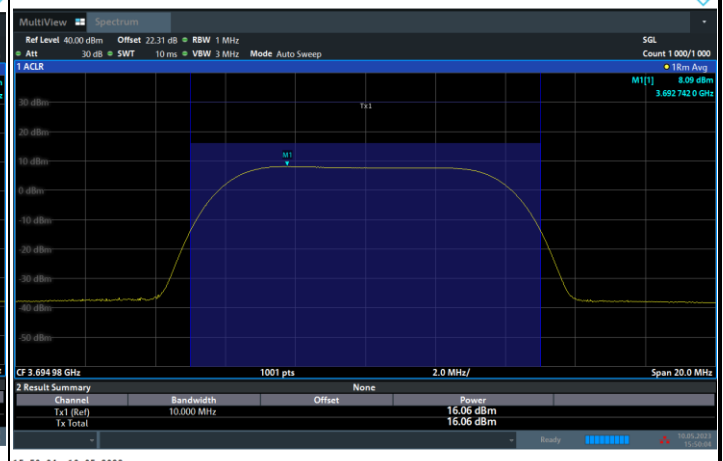
## 16QAM



## 64QAM



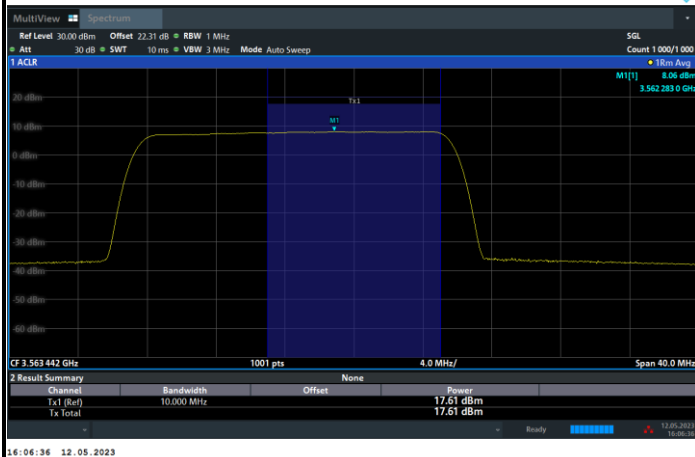
## 256QAM



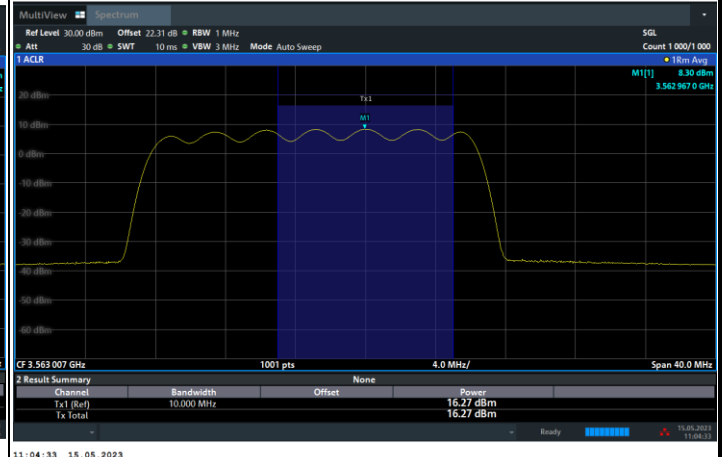


## FR1 n48 / 20MHz / Lowest Channel / Conducted (dBm/10MHz)

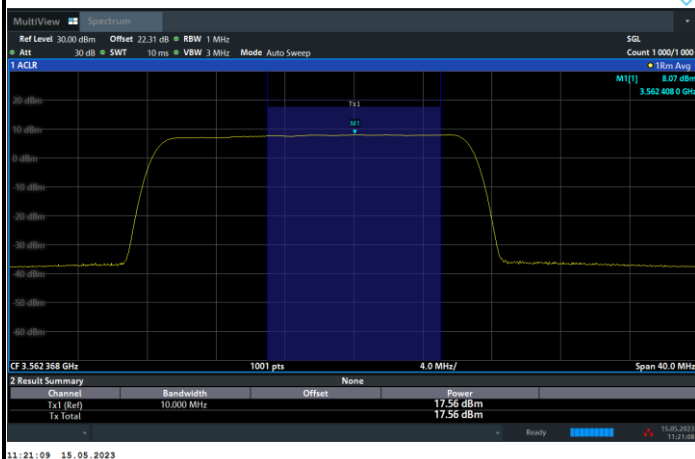
## QPSK



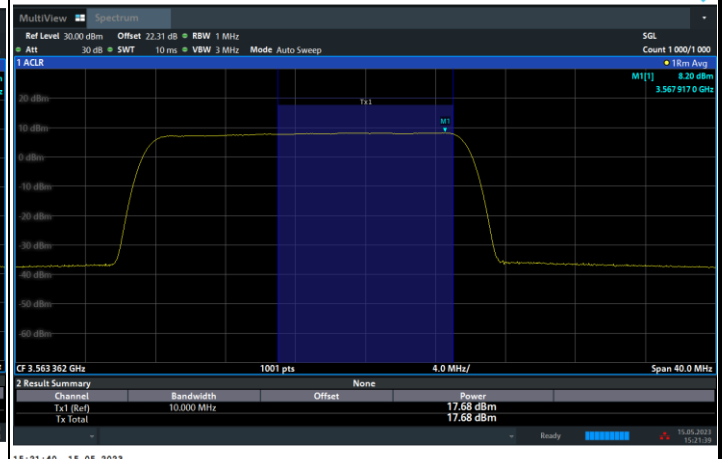
## 16QAM



## 64QAM



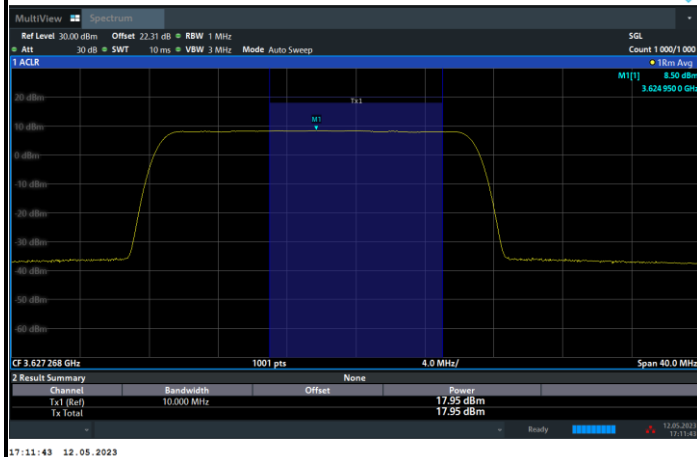
## 256QAM





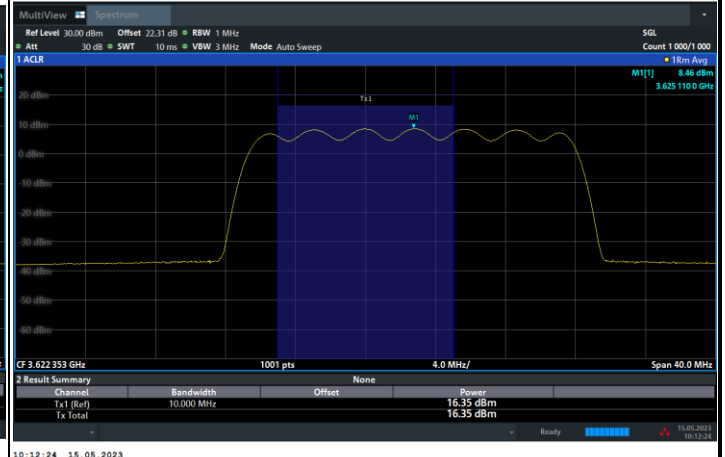
## FR1 n48 / 20MHz / Middle Channel / Conducted (dBm/10MHz)

## QPSK



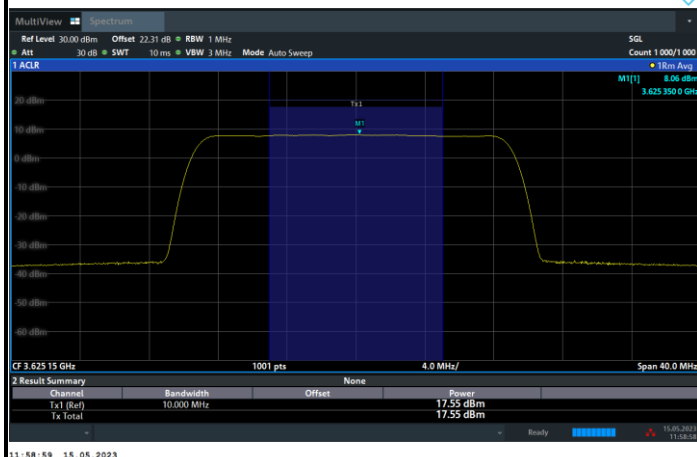
17:11:43 12.05.2023

## 16QAM



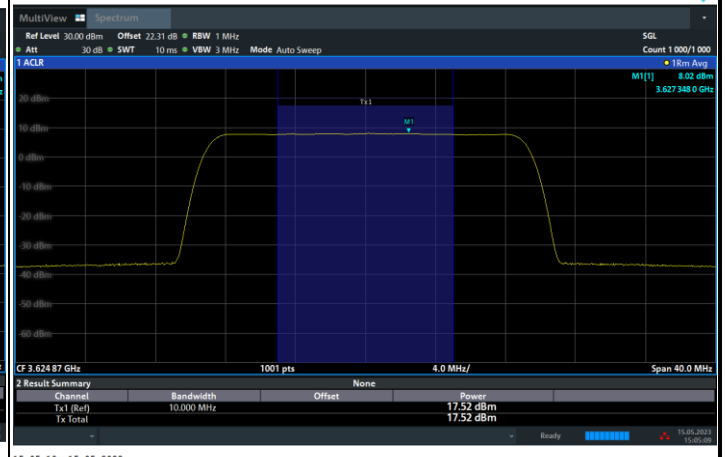
10:12:24 15.05.2023

## 64QAM



11:58:59 15.05.2023

## 256QAM

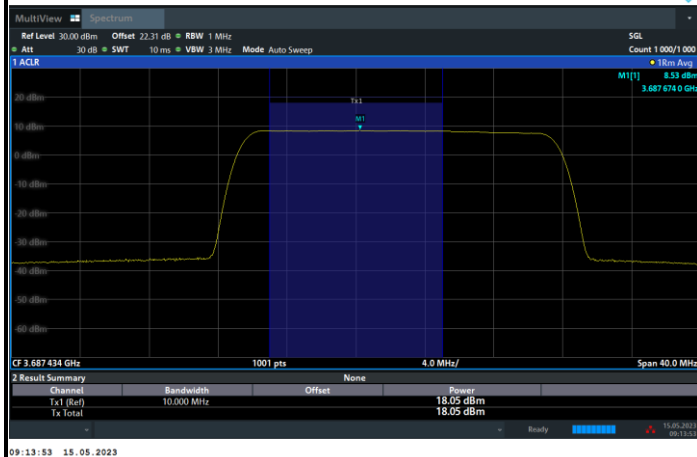


15:05:10 15.05.2023



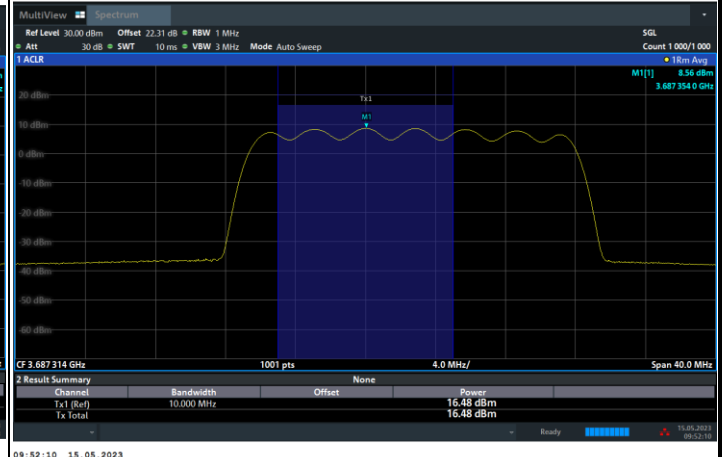
## FR1 n48 / 20MHz / Highest Channel / Conducted (dBm/10MHz)

## QPSK



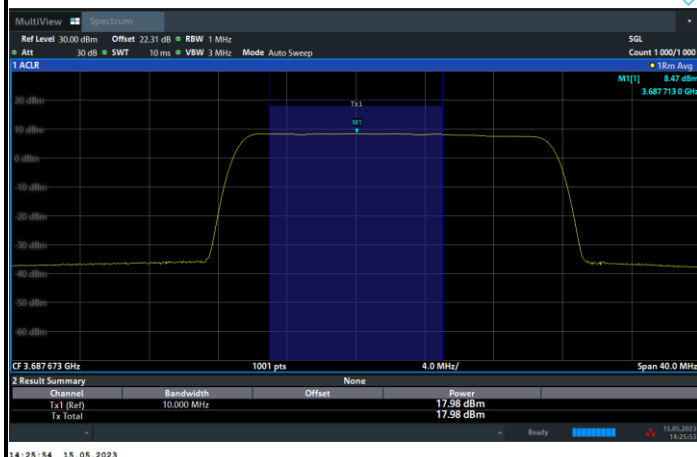
09:13:53 15.05.2023

## 16QAM



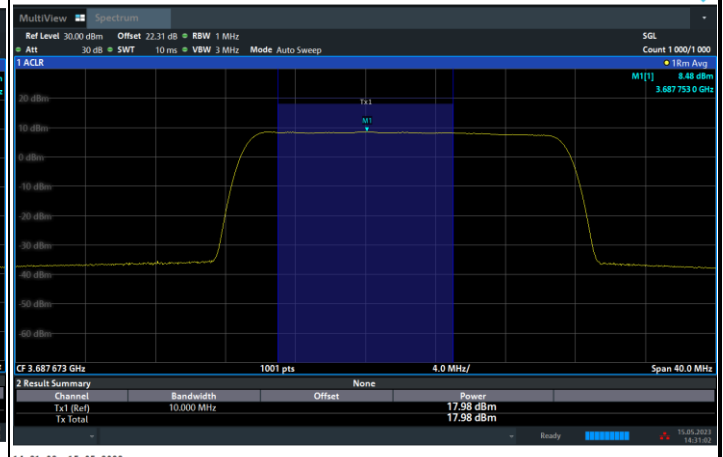
09:52:10 15.05.2023

## 64QAM



14:25:54 15.05.2023

## 256QAM



14:31:03 15.05.2023