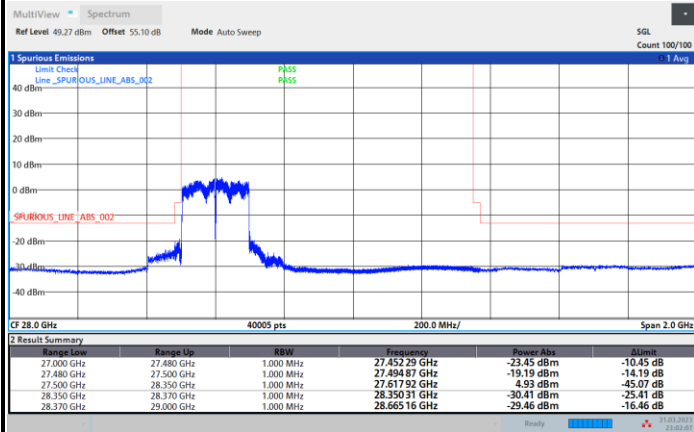




## CP-OFDM Module A

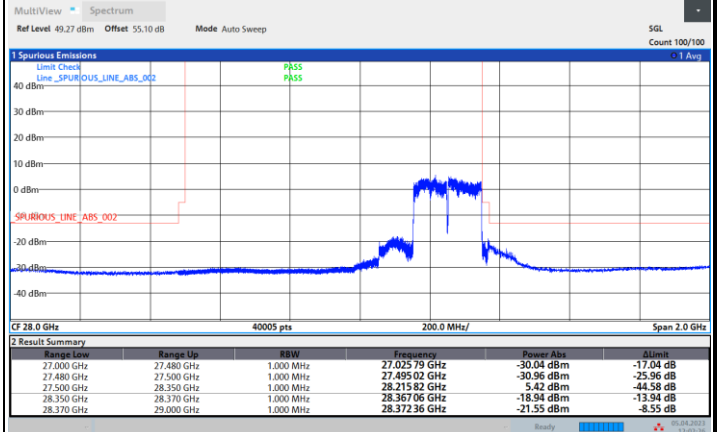
## NR Band n261 / 200MHz / QPSK

## Lowest Band Edge / Full RB



23:02:07 31.03.2023

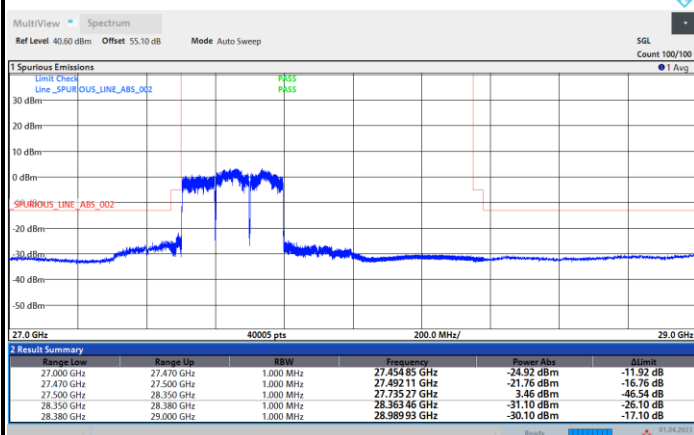
## Highest Band Edge / Full RB



12:02:27 05.04.2023

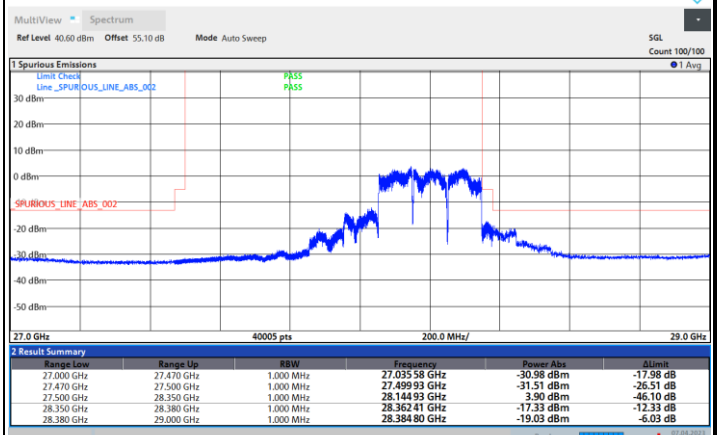
## NR Band n261 / 300MHz / QPSK

## Lowest Band Edge / Full RB



02:59:09 01.04.2023

## Highest Band Edge / Full RB



04:35:22 07.04.2023

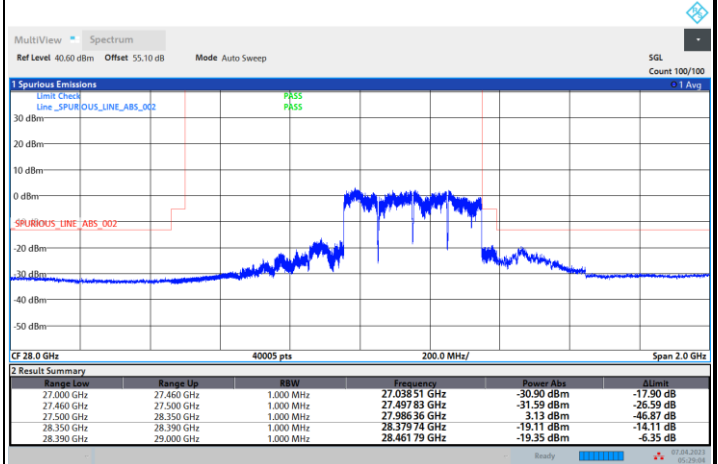
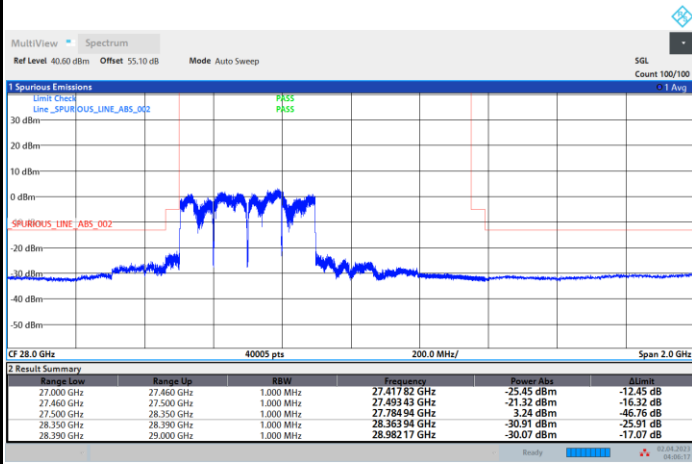


## CP-OFDM Module A

## NR Band n261 / 400MHz / QPSK

## Lowest Band Edge / Full RB

## Highest Band Edge / Full RB

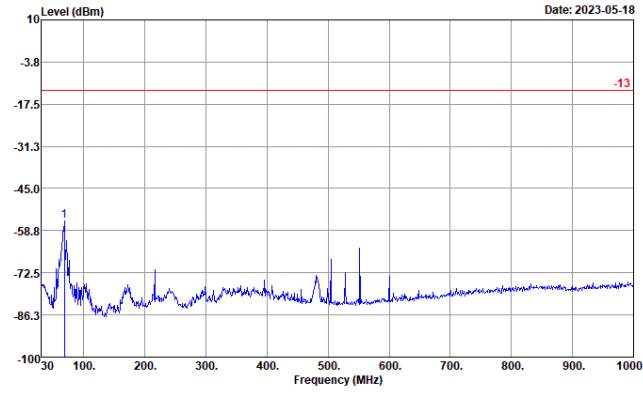




## Spurious Emission

### NR Band n261 (30MHz-1GHz)

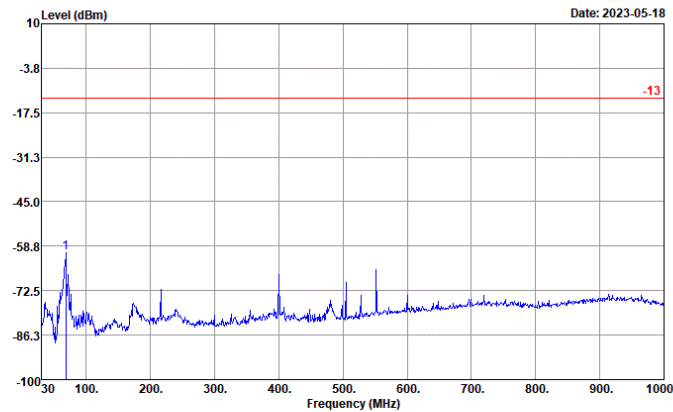
#### Horizontal



Site : 03CH10-HY  
Condition : -13 EIRP\_WO HORIZONTAL  
Project : 2D0208-01  
          : n261 MA

|   | Freq  | Level  | Over   | Limit  | Read   |
|---|-------|--------|--------|--------|--------|
|   | MHz   | dBm    | Limit  | Line   | Level  |
| 1 | 67.83 | -55.49 | -42.49 | -13.00 | -50.53 |

#### Vertical



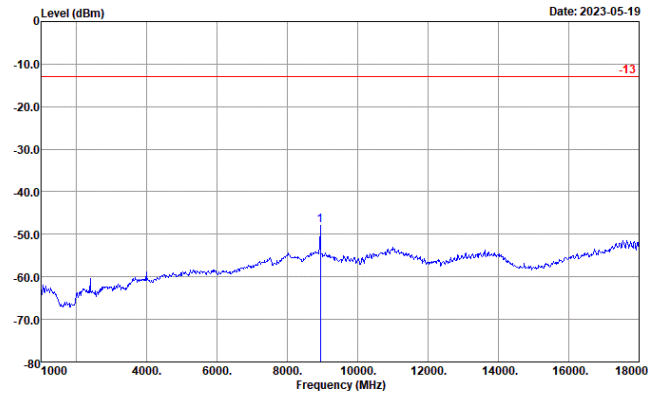
Site : 03CH10-HY  
Condition : -13 EIRP\_WO VERTICAL  
Project : 2D0208-01  
          : n261 MA

|   | Freq  | Level  | Over   | Limit  | Read   |
|---|-------|--------|--------|--------|--------|
|   | MHz   | dBm    | Limit  | Line   | Level  |
| 1 | 67.83 | -60.68 | -47.68 | -13.00 | -52.50 |



NR Band n261 (1GHz-18GHz)

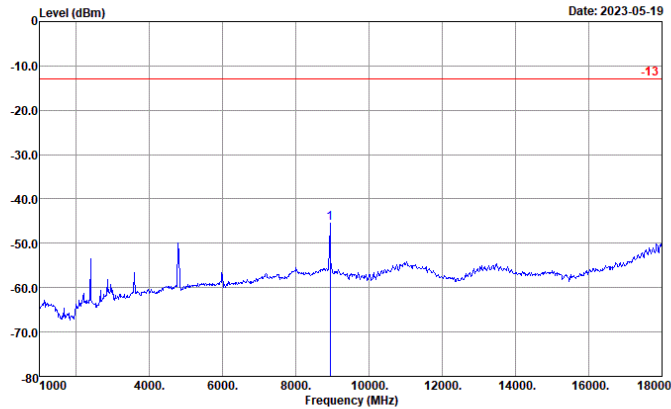
Horizontal



Site : 03CH10-HY  
Condition : -13 EIRP\_WO HORIZONTAL  
Project : 2D0208-01  
: n261 MA

|   | Freq    | Level  | Over<br>Limit | Limit<br>Line | Read<br>Level |
|---|---------|--------|---------------|---------------|---------------|
|   | MHz     | dBm    | dB            | dBm           | dBm           |
| 1 | 8939.00 | -47.85 | -34.85        | -13.00        | -48.45        |

Vertical



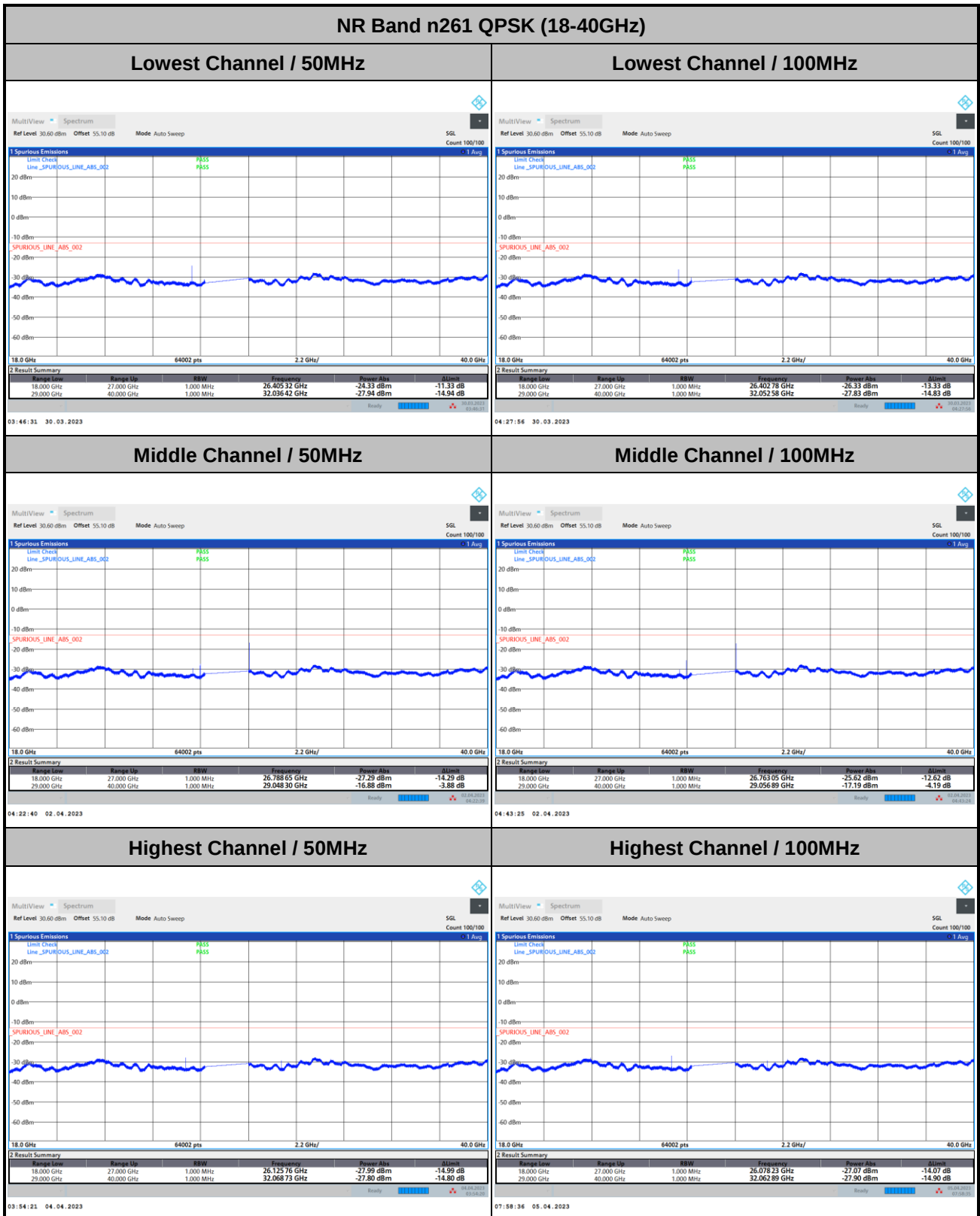
Site : 03CH10-HY  
Condition : -13 EIRP\_WO VERTICAL  
Project : 2D0208-01  
: n261 MA

|   | Freq    | Level  | Over<br>Limit | Limit<br>Line | Read<br>Level |
|---|---------|--------|---------------|---------------|---------------|
|   | MHz     | dBm    | dB            | dBm           | dBm           |
| 1 | 8939.00 | -45.47 | -32.47        | -13.00        | -45.47        |



Spurious emission between 18GHz to 40GHz worst case plot is reported as following.

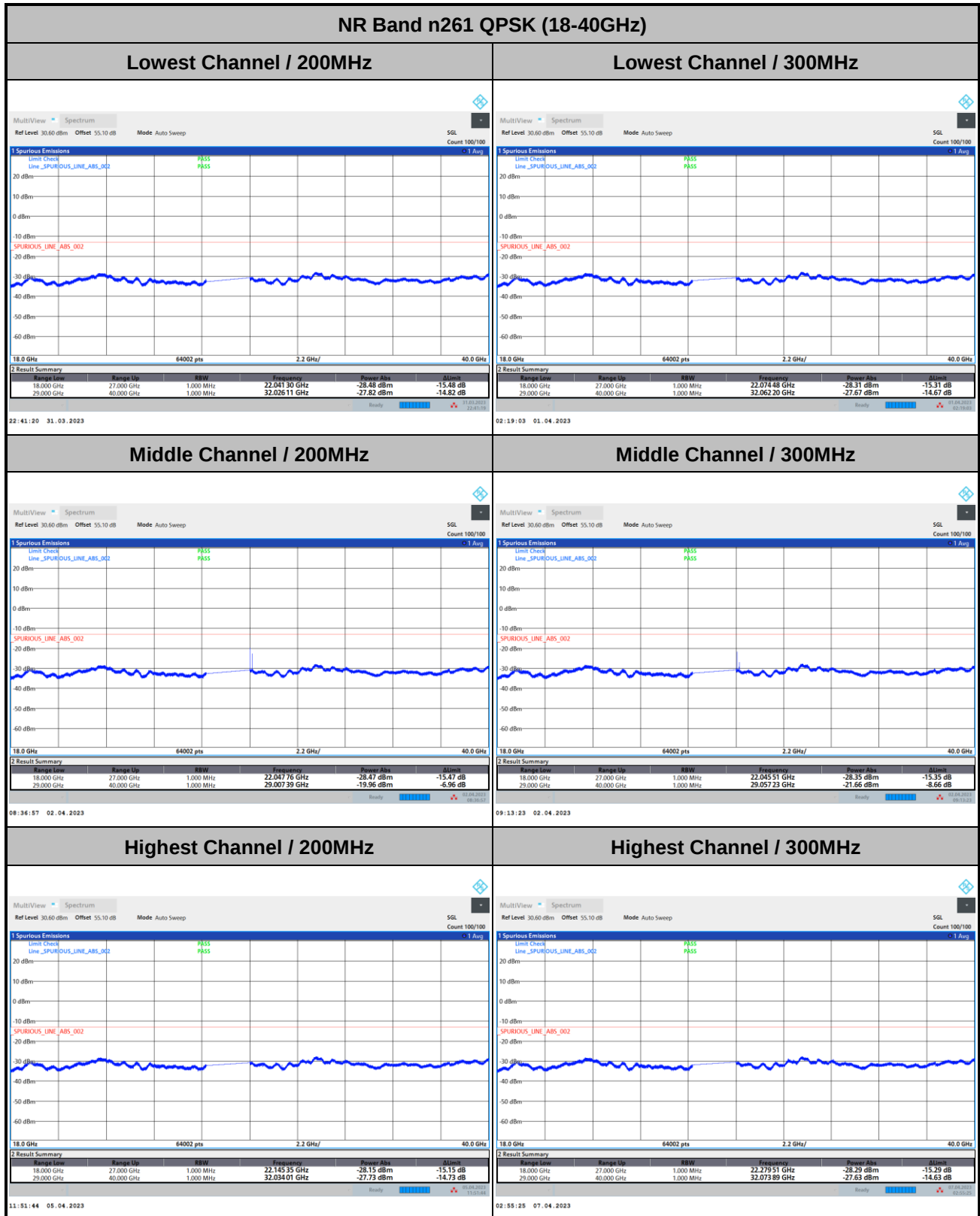
### DFT-s-OFDM Module A



Remark: In band and out of band frequencies are omitted.



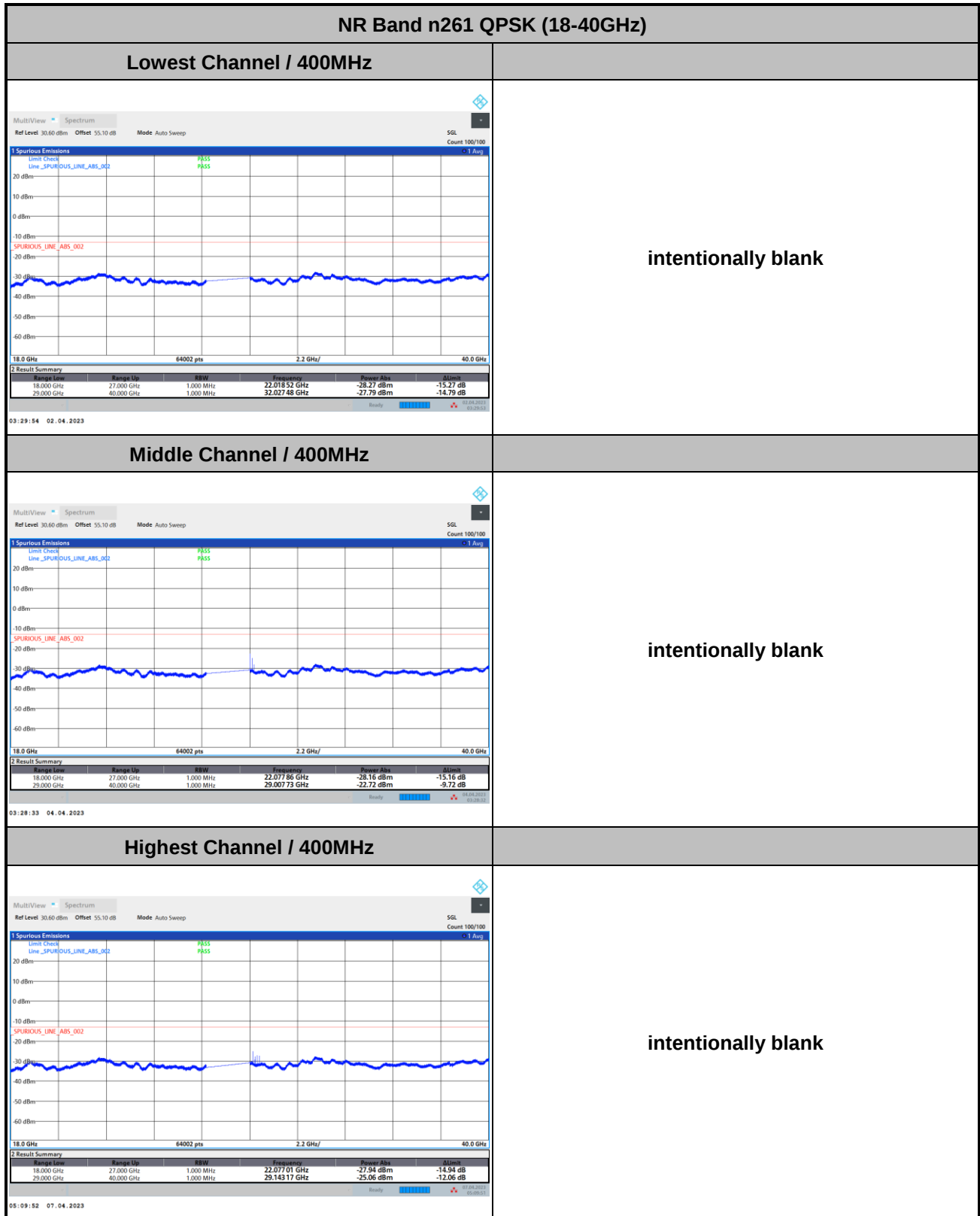
## DFT-s-OFDM Module A



Remark: In band and out of band frequencies are omitted.



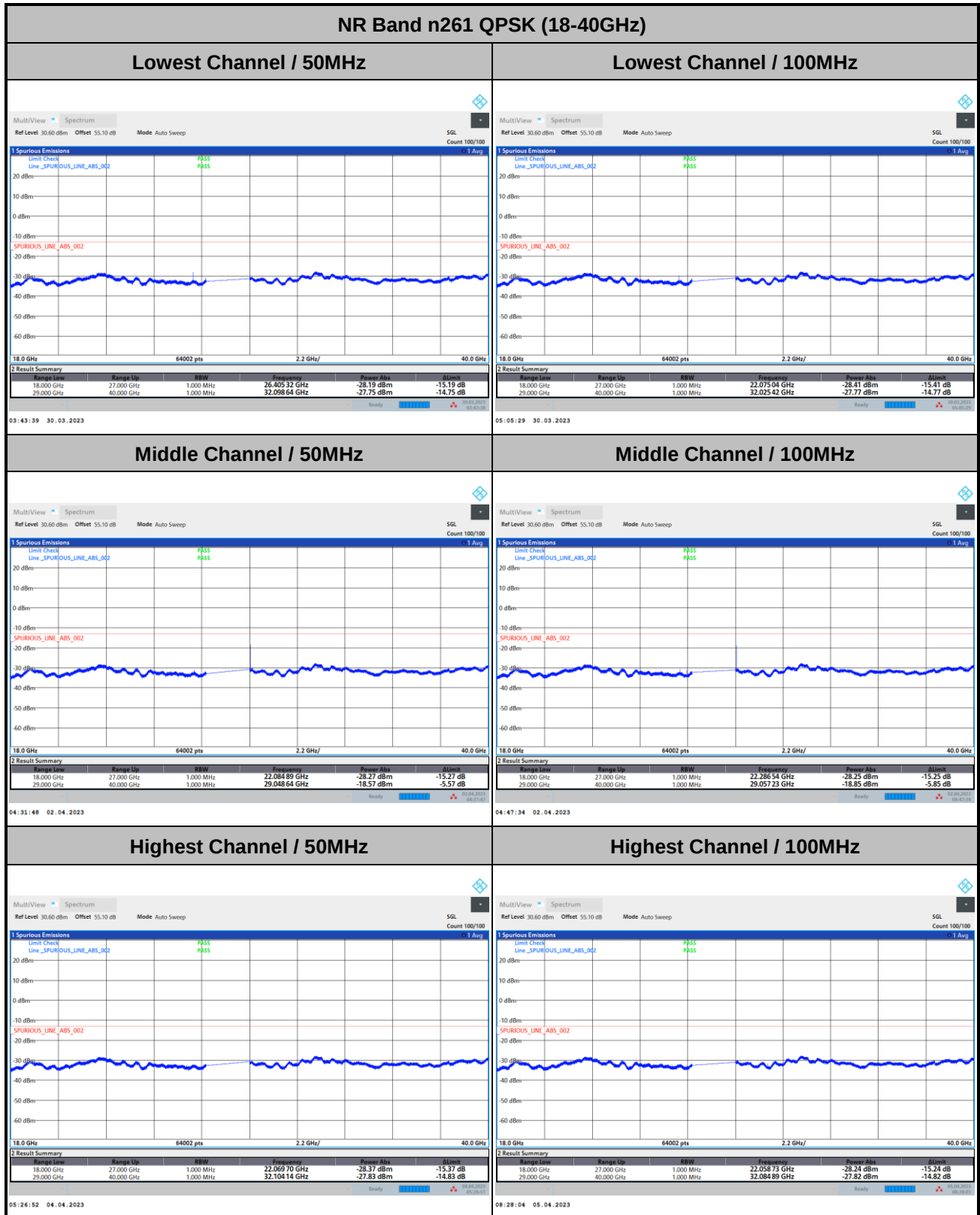
## DFT-s-OFDM Module A



Remark: In band and out of band frequencies are omitted.



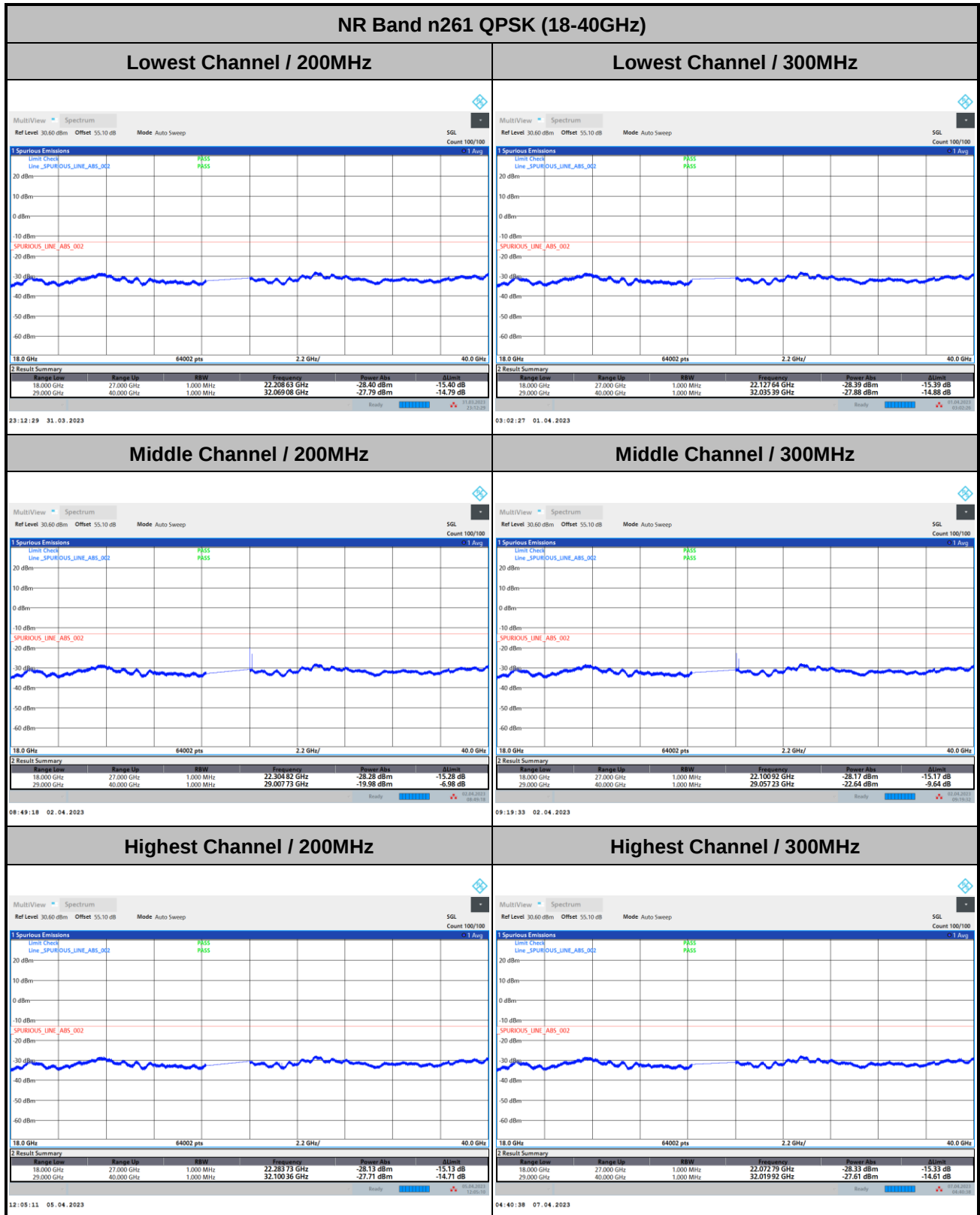
## CP-OFDM Module A



Remark: In band and out of band frequencies are omitted.



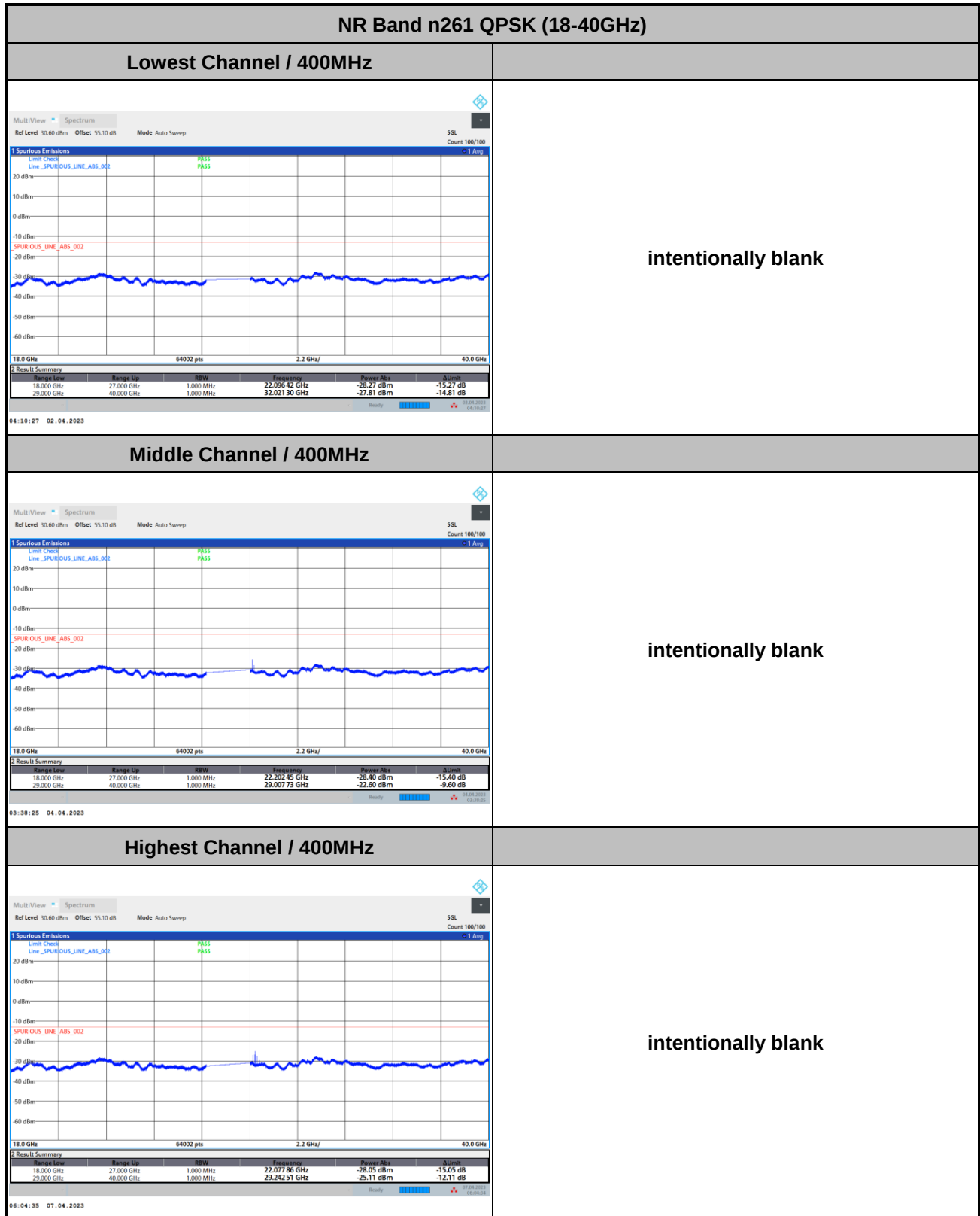
## CP-OFDM Module A



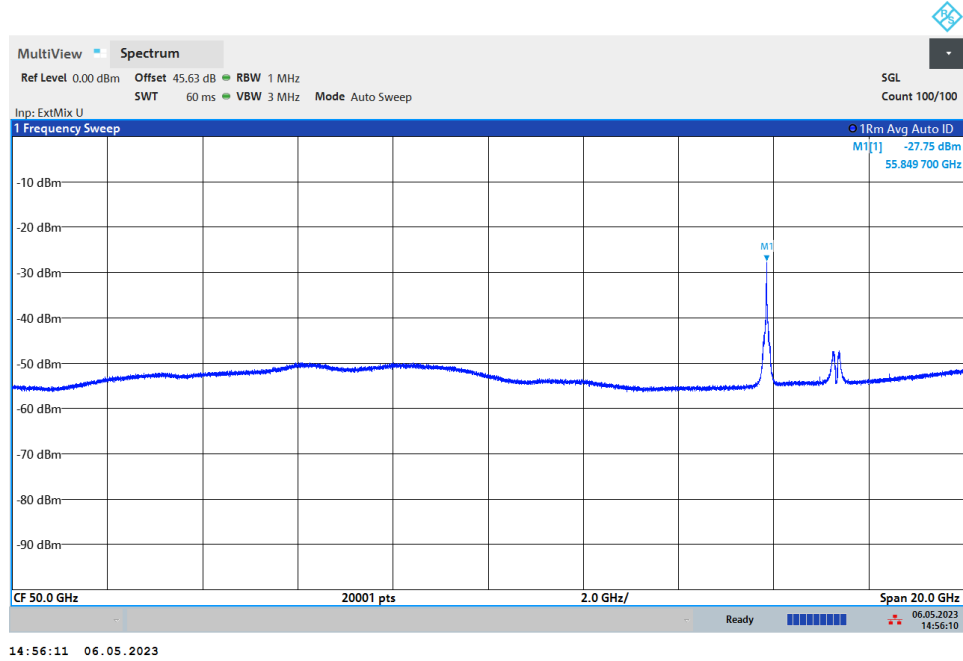
Remark: In band and out of band frequencies are omitted.



## CP-OFDM Module A

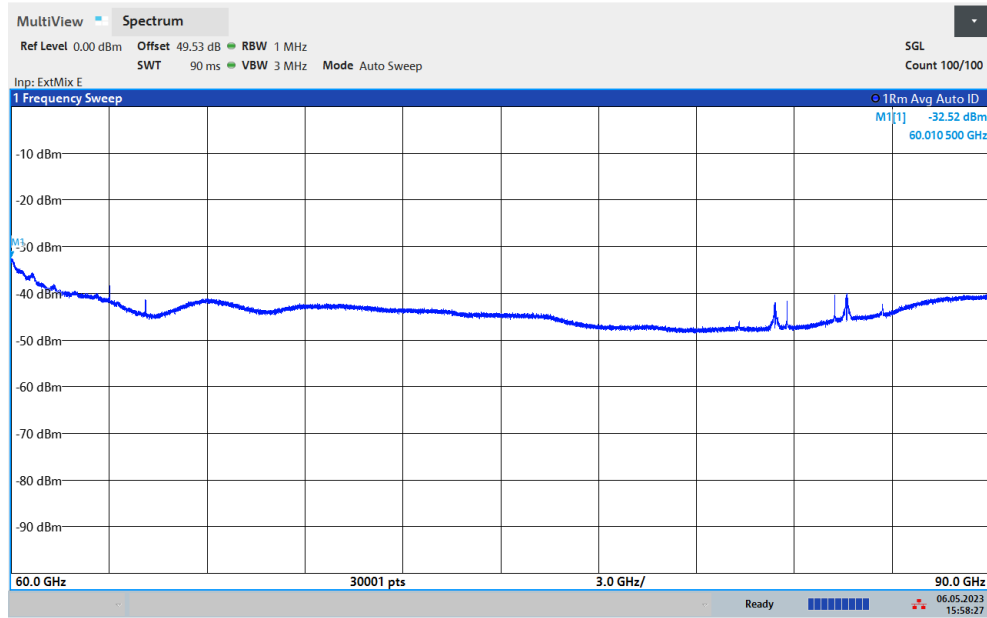


Remark: In band and out of band frequencies are omitted.

**NR Band n261**
**(40GHz-60GHz)**


$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 + \text{Duty Factor}$$

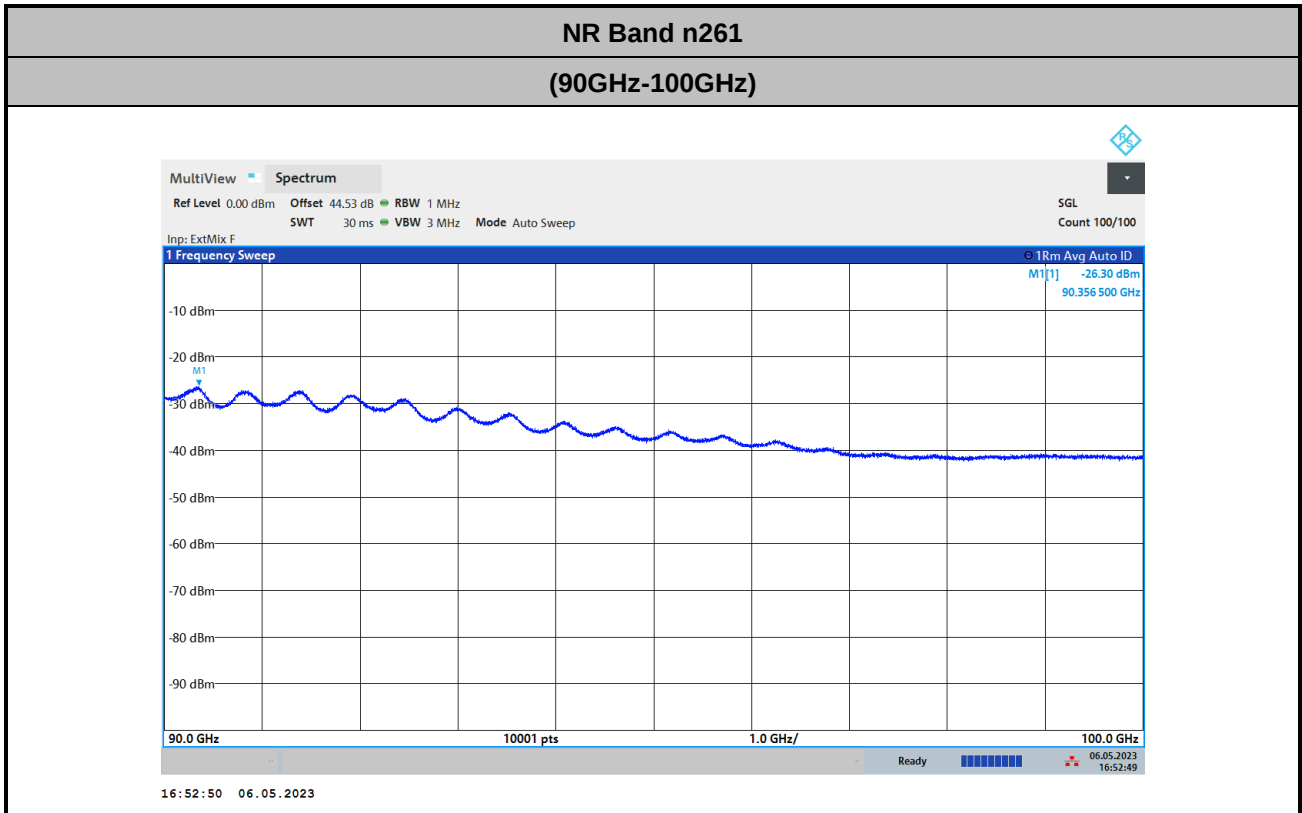
$$= 43 + 0.43 + 107 + 20\log(1) - 104.8 = 45.63(\text{dB})$$

**NR Band n261**
**(60GHz-90GHz)**


15:58:28 06.05.2023

$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 + \text{Duty Factor}$$

$$= 46.9 + 0.43 + 107 + 20\log(1) - 104.8 = 49.53 \text{ (dB)}$$



$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 + \text{Duty Factor}$$

$$= 47.92 + 0.43 + 107 + 20\log(0.5) - 104.8 = 44.53 \text{ (dB)}$$

## Frequency Stability

| Test Conditions  |                   | NR Band n261 / Middle Channel |                 |                 | Limit   |
|------------------|-------------------|-------------------------------|-----------------|-----------------|---------|
| Temperature (°C) | Voltage (Volt)    | CW tone                       |                 |                 | Note 2. |
|                  |                   | Frequency (GHz)               | Deviation (kHz) | Deviation (ppm) | Result  |
| 50               | Normal Voltage    | 27.925013                     | -13.000         | 0.466           | Pass    |
| 40               | Normal Voltage    | 27.925032                     | -32.000         | 1.146           |         |
| 30               | Normal Voltage    | 27.9250569                    | -56.900         | 2.038           |         |
| 20(Ref.)         | Normal Voltage    | 27.925                        | 0.000           | 0.000           |         |
| 10               | Normal Voltage    | 27.9250899                    | -89.900         | 3.219           |         |
| 0                | Normal Voltage    | 27.9251079                    | -107.900        | 3.864           |         |
| -10              | Normal Voltage    | 27.9251718                    | -171.800        | 6.152           |         |
| -20              | Normal Voltage    | 27.9251758                    | -175.800        | 6.295           |         |
| -30              | Normal Voltage    | 27.9251788                    | -178.800        | 6.403           |         |
| 20               | Maximum Voltage   | 27.9250789                    | -78.900         | 2.825           |         |
| 20               | Normal Voltage    | 27.9250839                    | -83.900         | 3.004           |         |
| 20               | Battery End Point | 27.9250809                    | -80.900         | 2.897           |         |

**Note:**

1. Normal Voltage =3.89 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the operation band.

## NR Band n261 Module B AGH+V

### Occupied Bandwidth

| Mode       | DFT-s-OFDM Module B NR Band n261 : 99%OBW(MHz) |       |       |        |       |       |        |        |        |
|------------|------------------------------------------------|-------|-------|--------|-------|-------|--------|--------|--------|
| BW         | 50MHz                                          |       |       | 100MHz |       |       | 200MHz |        |        |
| Mod.       | QPSK                                           | 16QAM | 64QAM | QPSK   | 16QAM | 64QAM | QPSK   | 16QAM  | 64QAM  |
| Lowest CH  | 46.01                                          | 45.96 | 45.69 | 91.43  | 91.34 | 91.35 | 189.69 | 189.67 | 189.61 |
| Middle CH  | 46.15                                          | 46.04 | 45.82 | 91.28  | 91.30 | 91.31 | 189.95 | 189.28 | 189.53 |
| Highest CH | 46.09                                          | 46.15 | 45.86 | 91.35  | 91.24 | 91.22 | 190.13 | 189.56 | 189.73 |

| Mode       | DFT-s-OFDM Module B NR Band n261 : 99%OBW(MHz) |        |        |        |        |        |
|------------|------------------------------------------------|--------|--------|--------|--------|--------|
| BW         | 300MHz                                         |        |        | 400MHz |        |        |
| Mod.       | QPSK                                           | 16QAM  | 64QAM  | QPSK   | 16QAM  | 64QAM  |
| Lowest CH  | 287.87                                         | 287.52 | 287.94 | 386.22 | 386.24 | 386.79 |
| Middle CH  | 288.39                                         | 288.09 | 288.04 | 386.65 | 386.57 | 386.43 |
| Highest CH | 288.26                                         | 287.65 | 287.70 | 385.69 | 385.10 | 385.78 |

| Mode       | CP-OFDM Module B NR Band n261 : 99%OBW(MHz) |        |        |
|------------|---------------------------------------------|--------|--------|
| BW         | 50MHz                                       | 100MHz | 200MHz |
| Mod.       | QPSK                                        | QPSK   | QPSK   |
| Lowest CH  | 46.08                                       | 94.46  | 193.06 |
| Middle CH  | 46.18                                       | 94.18  | 193.50 |
| Highest CH | 46.34                                       | 94.62  | 194.17 |

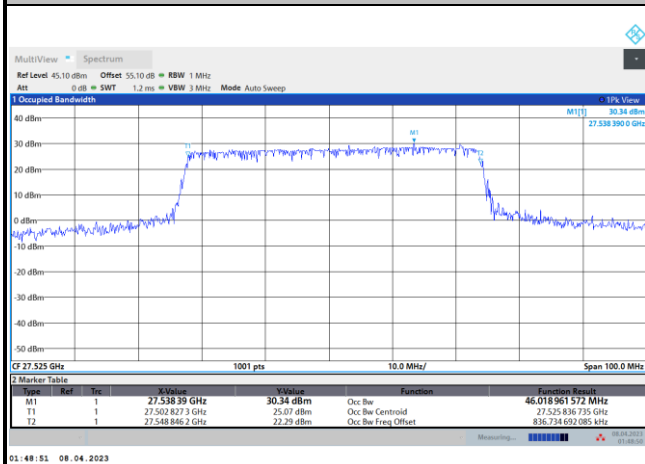
| Mode       | CP-OFDM Module B NR Band n261 : 99%OBW(MHz) |        |
|------------|---------------------------------------------|--------|
| BW         | 300MHz                                      | 400MHz |
| Mod.       | QPSK                                        | QPSK   |
| Lowest CH  | 293.03                                      | 389.31 |
| Middle CH  | 291.72                                      | 390.43 |
| Highest CH | 292.35                                      | 389.77 |



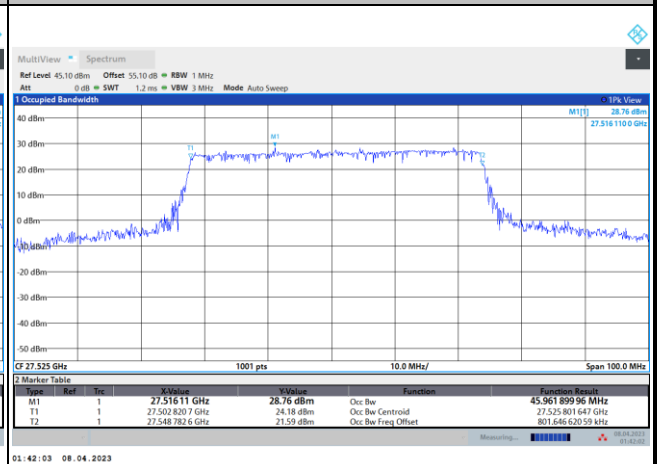
## DFT-s-OFDM Module B

## NR Band n261

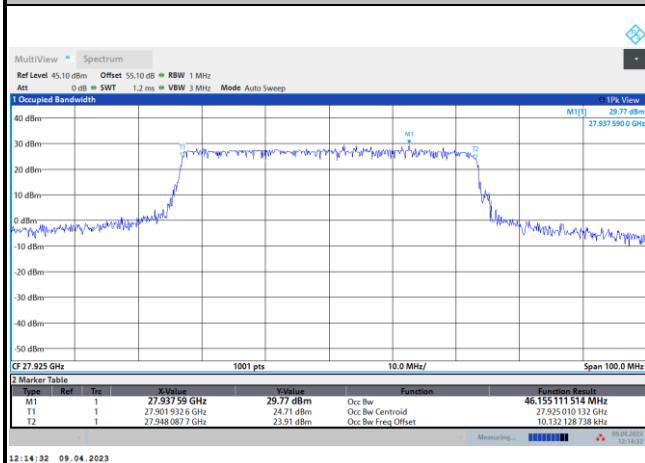
## Lowest Channel / 50MHz / QPSK



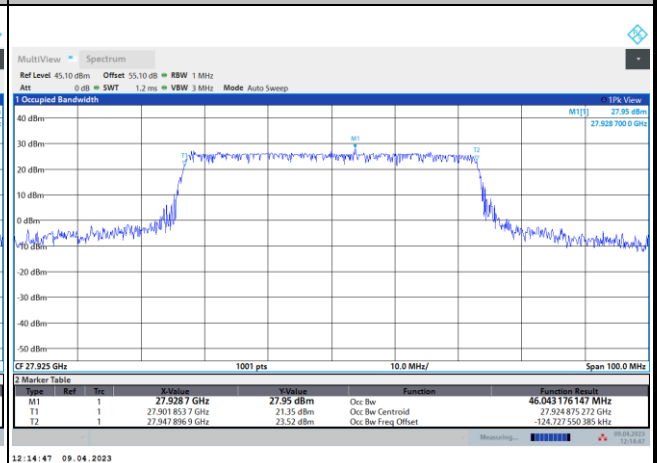
## Lowest Channel / 50MHz / 16QAM



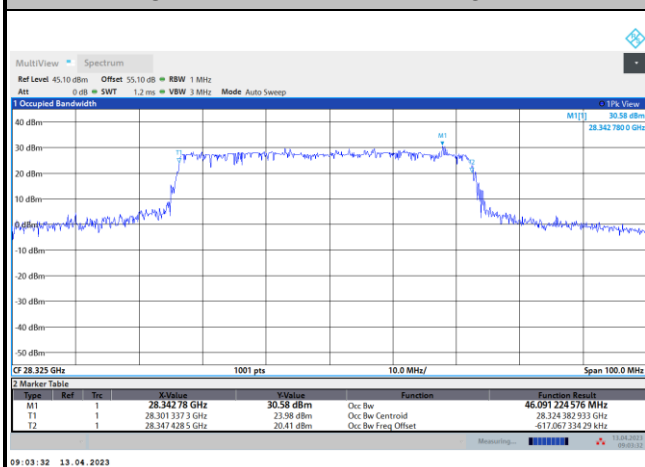
## Middle Channel / 50MHz / QPSK



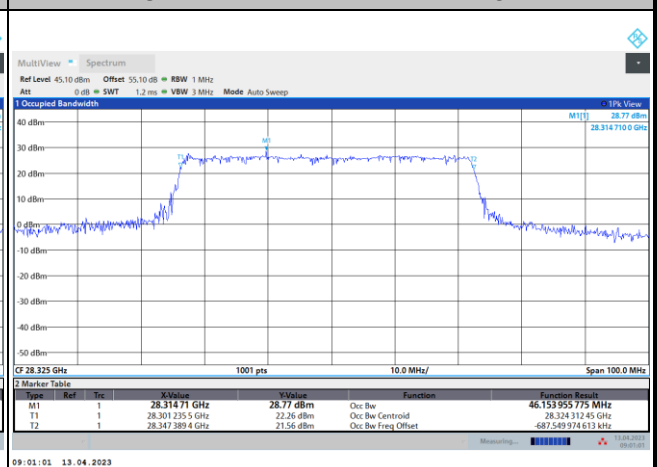
## Middle Channel / 50MHz / 16QAM



## Highest Channel / 50MHz / QPSK



## Highest Channel / 50MHz / 16QAM

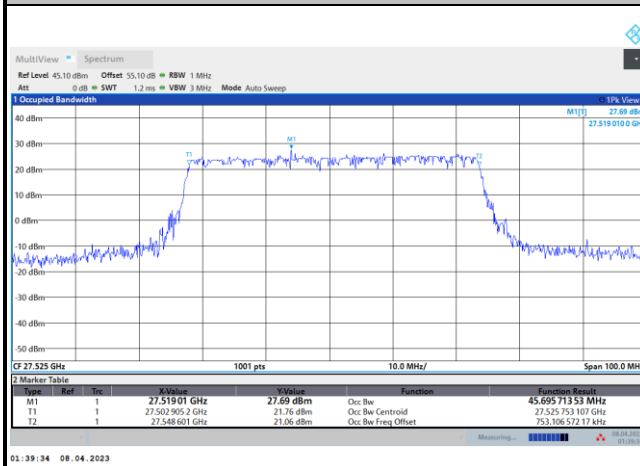




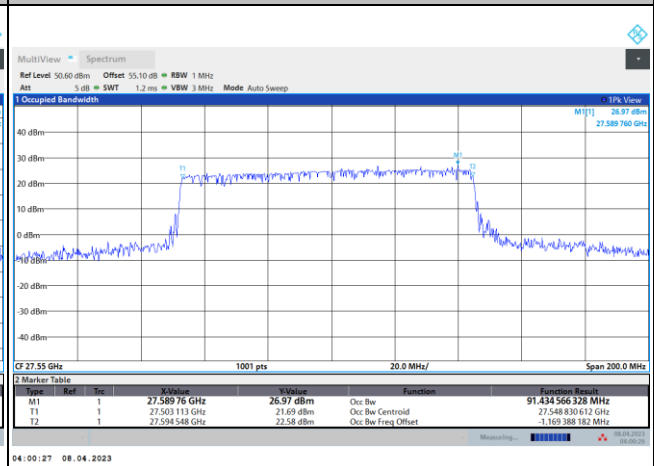
## DFT-s-OFDM Module B

## NR Band n261

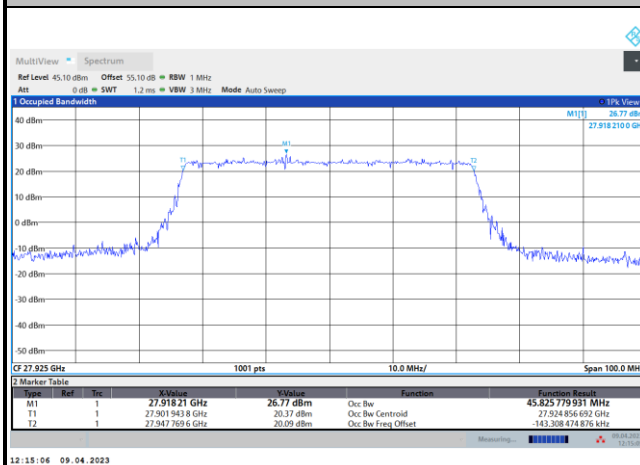
## Lowest Channel / 50MHz / 64QAM



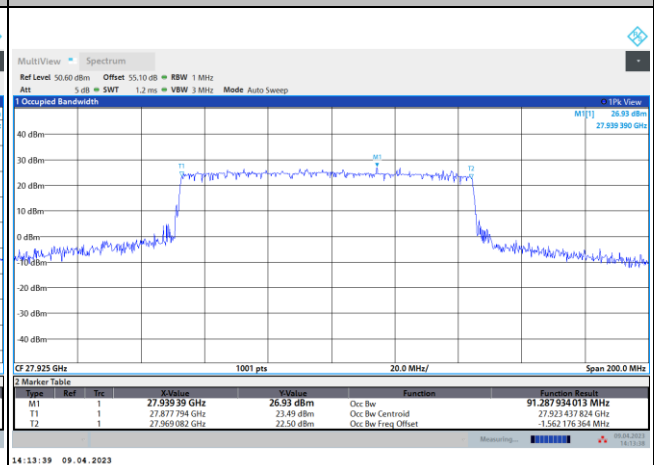
## Lowest Channel / 100MHz / QPSK



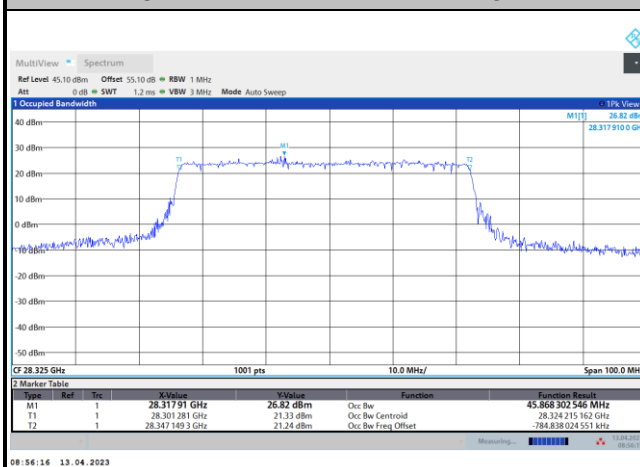
## Middle Channel / 50MHz / 64QAM



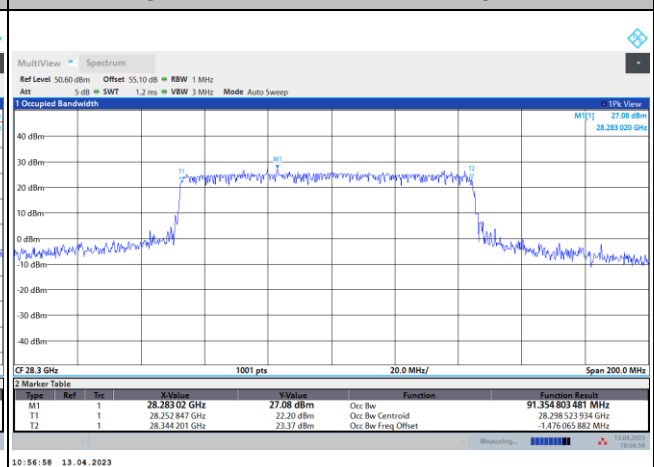
## Middle Channel / 100MHz / QPSK



## Highest Channel / 50MHz / 64QAM



## Highest Channel / 100MHz / QPSK

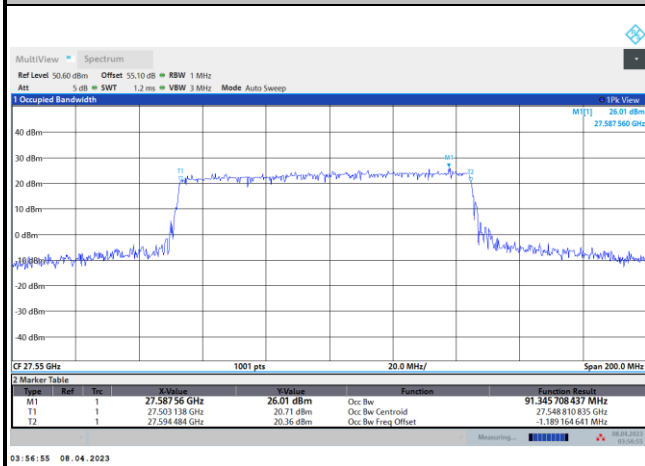




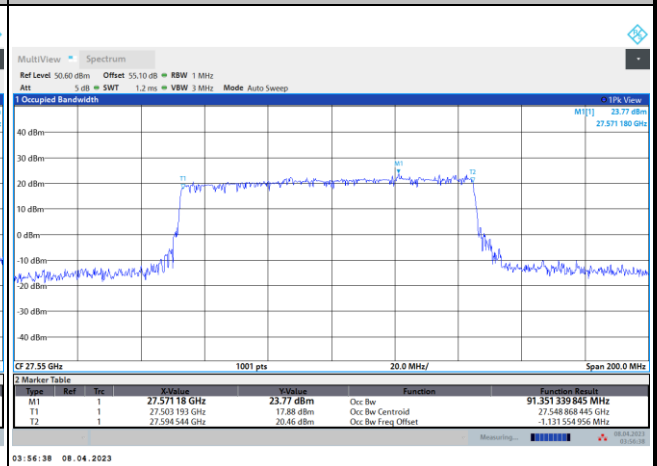
## DFT-s-OFDM Module B

## NR Band n261

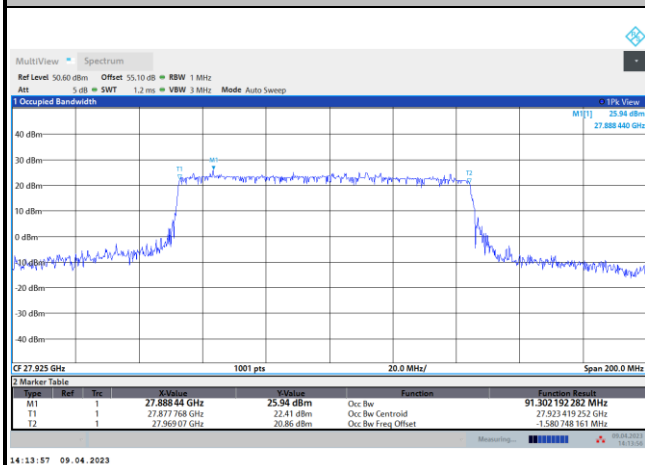
## Lowest Channel / 100MHz / 16QAM



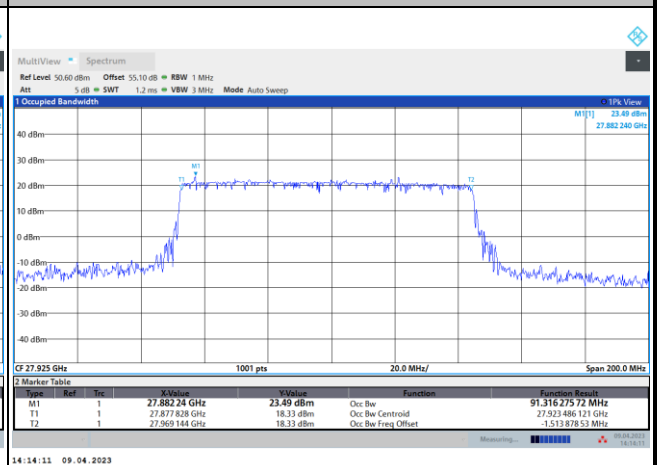
## Lowest Channel / 100MHz / 64QAM



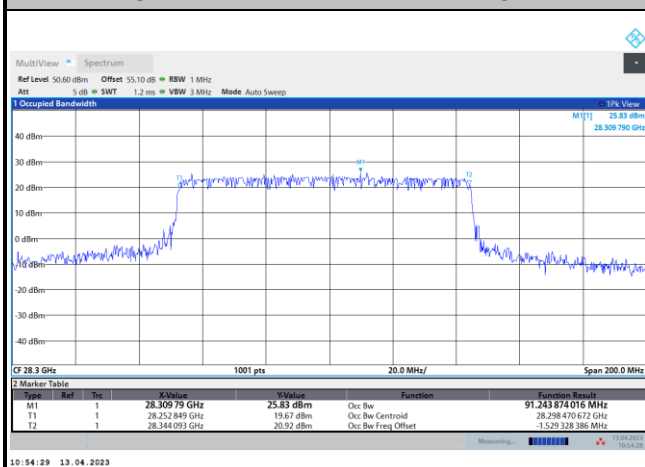
## Middle Channel / 100MHz / 16QAM



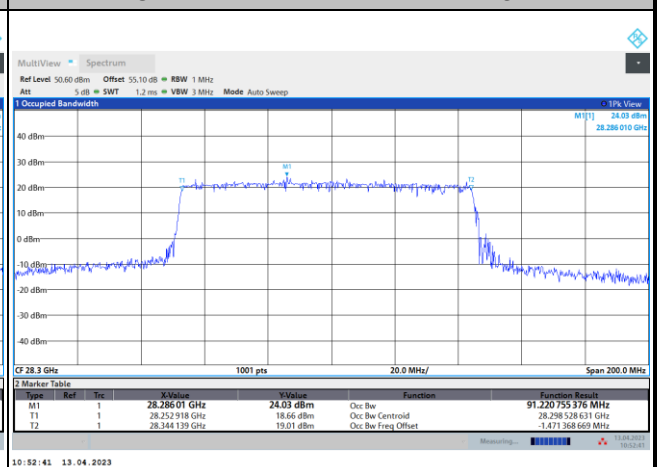
## Middle Channel / 100MHz / 64QAM



## Highest Channel / 100MHz / 16QAM



## Highest Channel / 100MHz / 64QAM

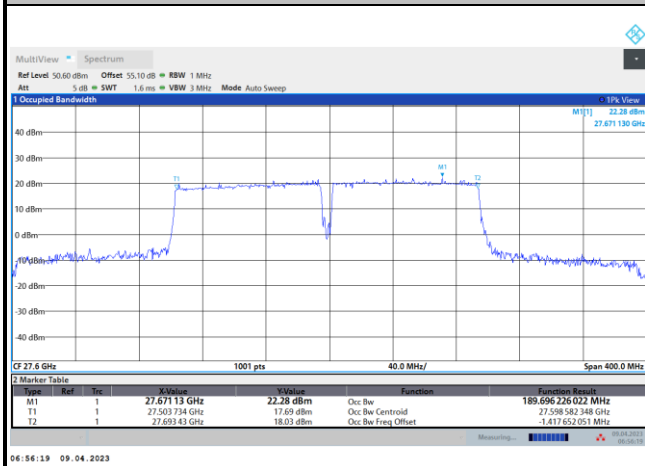




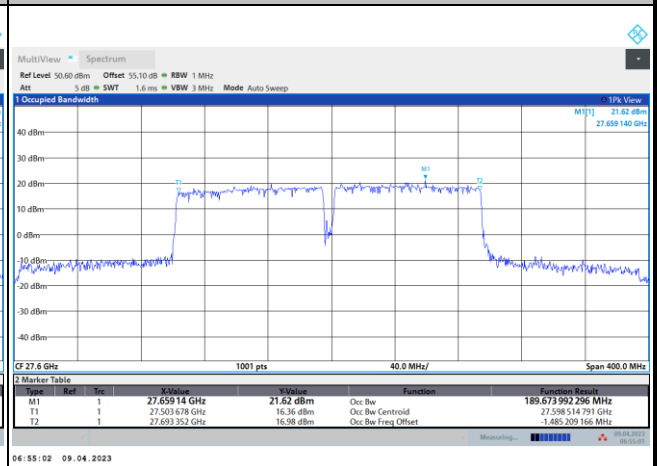
## DFT-s-OFDM Module B

## NR Band n261

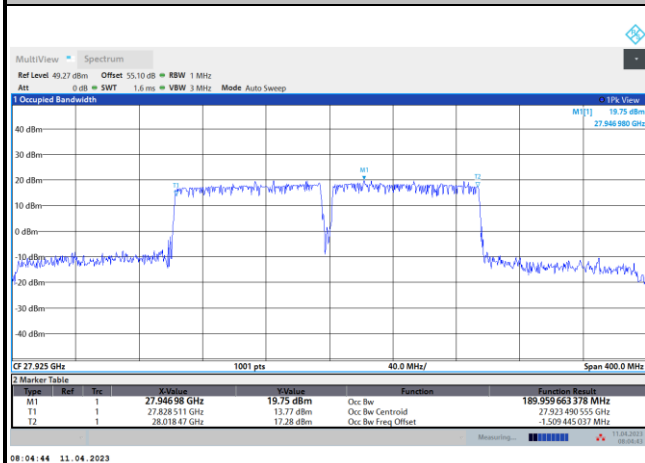
## Lowest Channel / 200MHz / QPSK



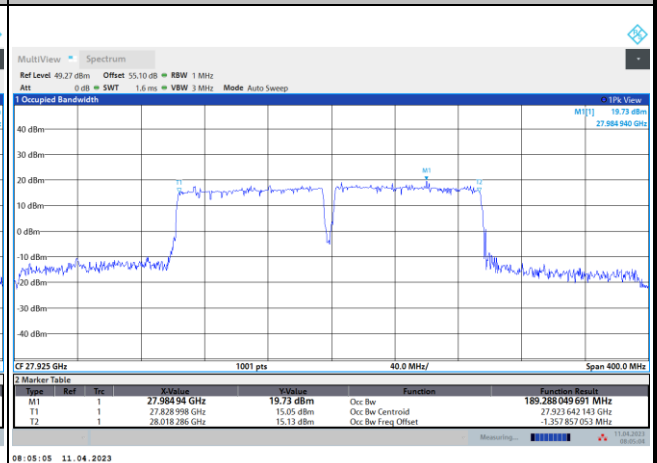
## Lowest Channel / 200MHz / 16QAM



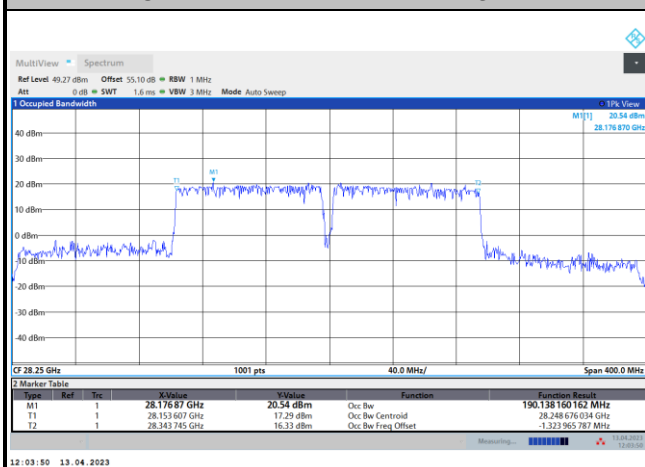
## Middle Channel / 200MHz / QPSK



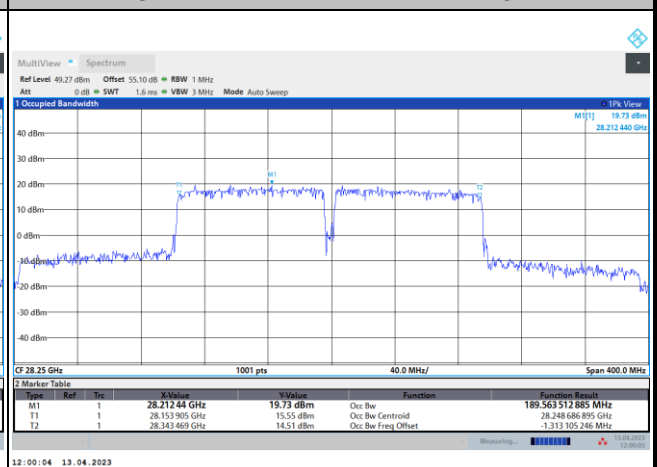
## Middle Channel / 200MHz / 16QAM



## Highest Channel / 200MHz / QPSK



## Highest Channel / 200MHz / 16QAM

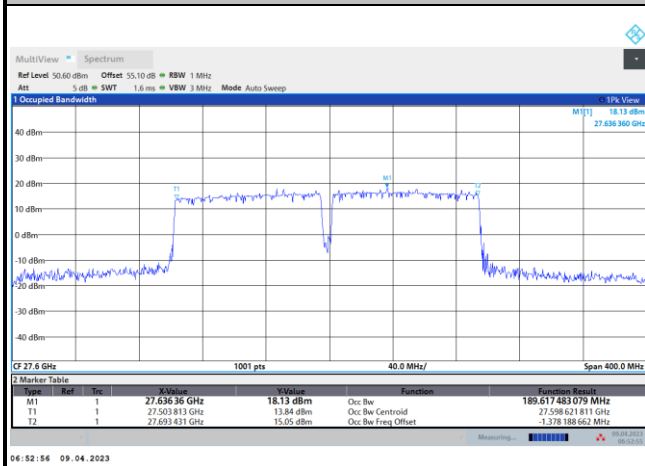




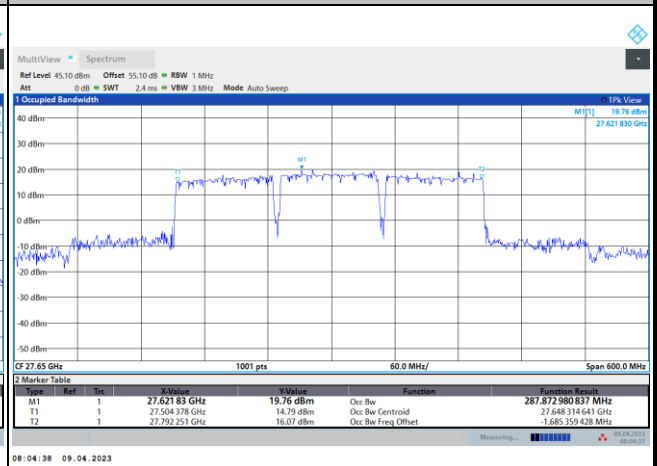
## DFT-s-OFDM Module B

## NR Band n261

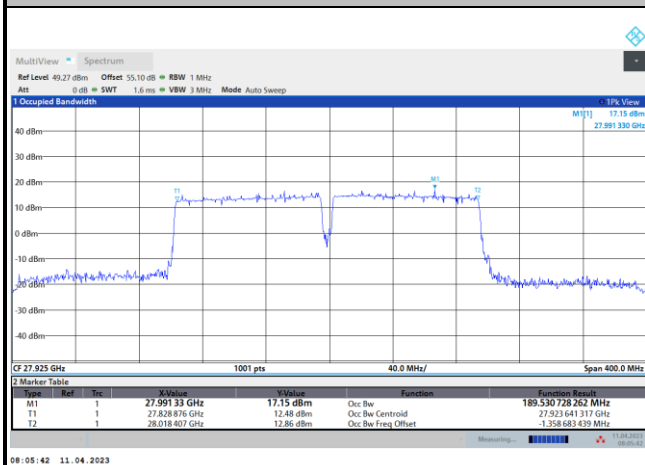
## Lowest Channel / 200MHz / 64QAM



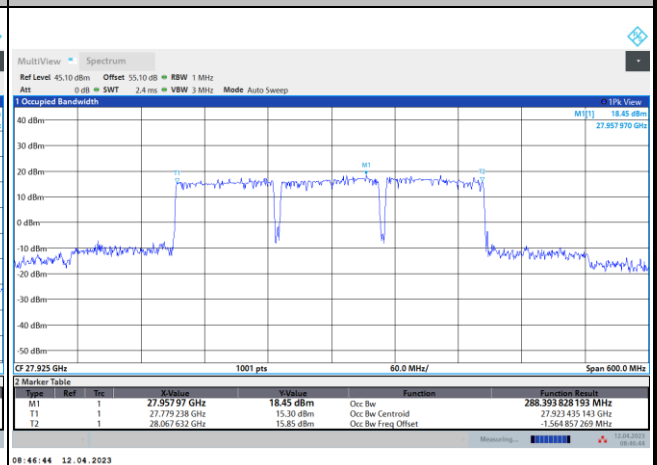
## Lowest Channel / 300MHz / QPSK



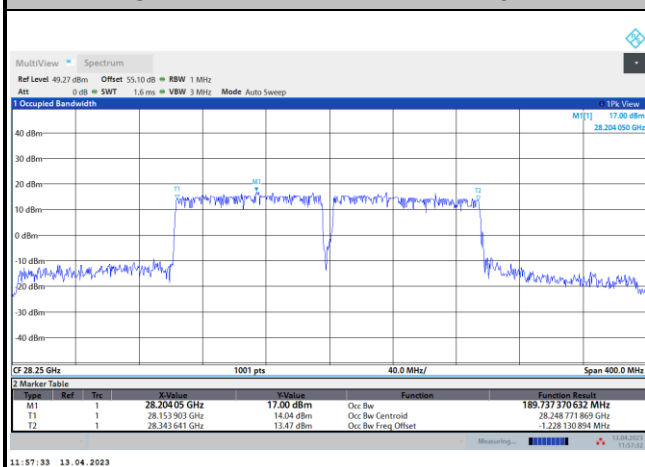
## Middle Channel / 200MHz / 64QAM



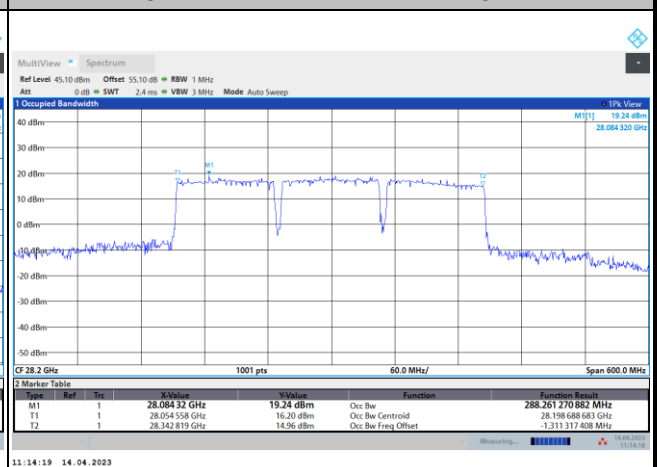
## Middle Channel / 300MHz / QPSK



## Highest Channel / 200MHz / 64QAM



## Highest Channel / 300MHz / QPSK

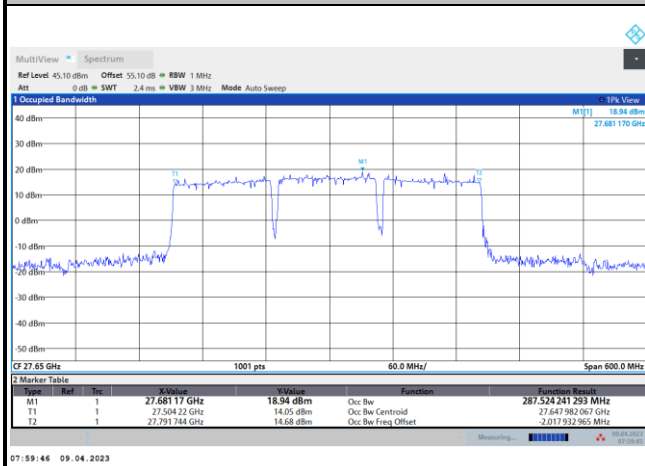




## DFT-s-OFDM Module B

## NR Band n261

## Lowest Channel / 300MHz / 16QAM



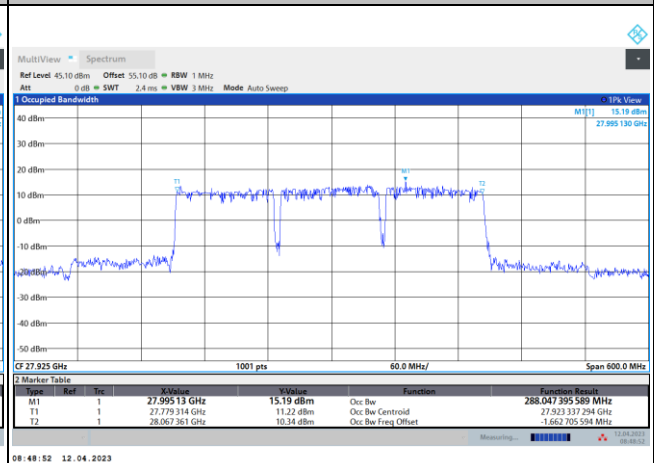
## Lowest Channel / 300MHz / 64QAM



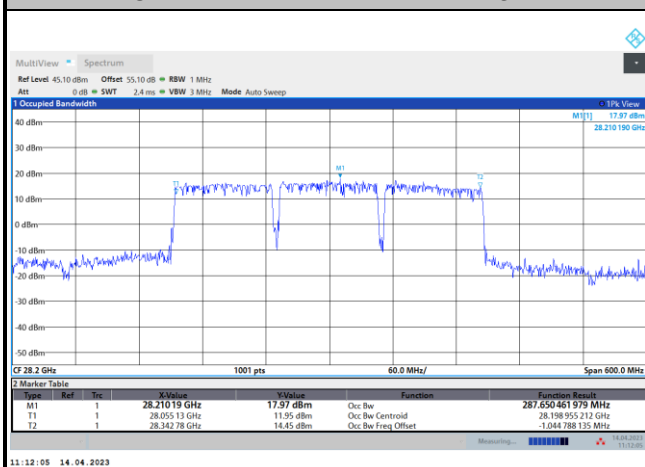
## Middle Channel / 300MHz / 16QAM



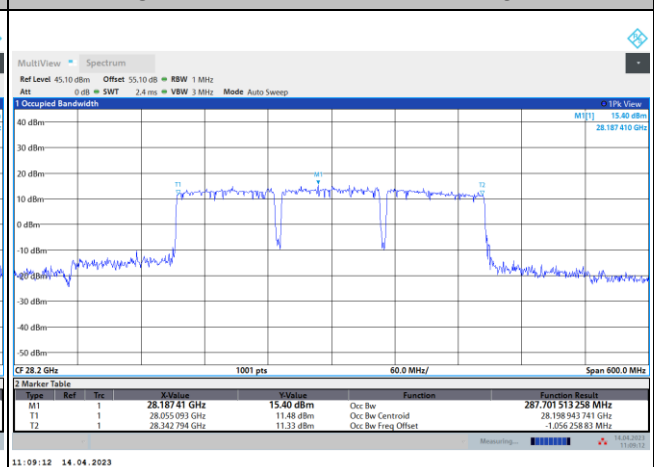
## Middle Channel / 300MHz / 64QAM



## Highest Channel / 300MHz / 16QAM



## Highest Channel / 300MHz / 64QAM





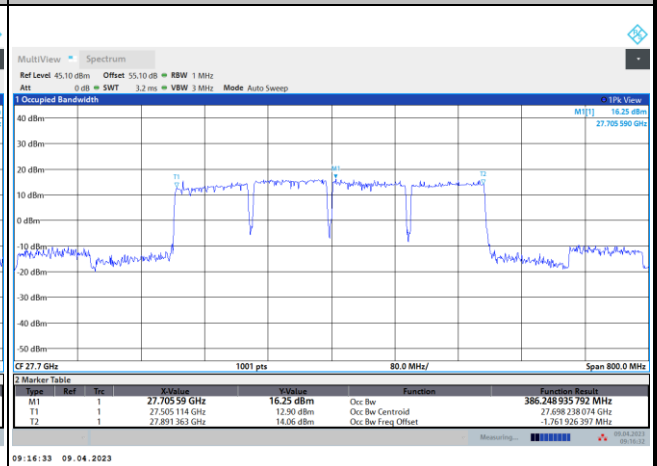
## DFT-s-OFDM Module B

## NR Band n261

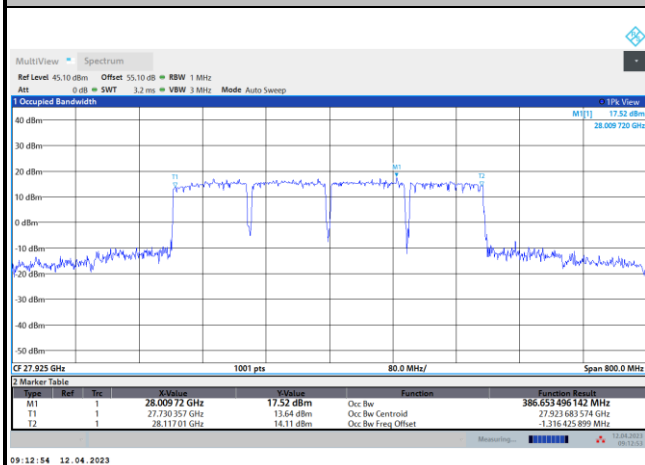
## Lowest Channel / 400MHz / QPSK



## Lowest Channel / 400MHz / 16QAM



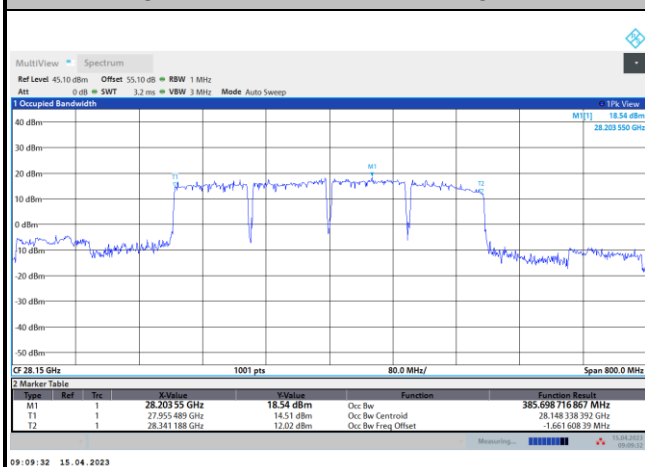
## Middle Channel / 400MHz / QPSK



## Middle Channel / 400MHz / 16QAM



## Highest Channel / 400MHz / QPSK



## Highest Channel / 400MHz / 16QAM





## DFT-s-OFDM Module B

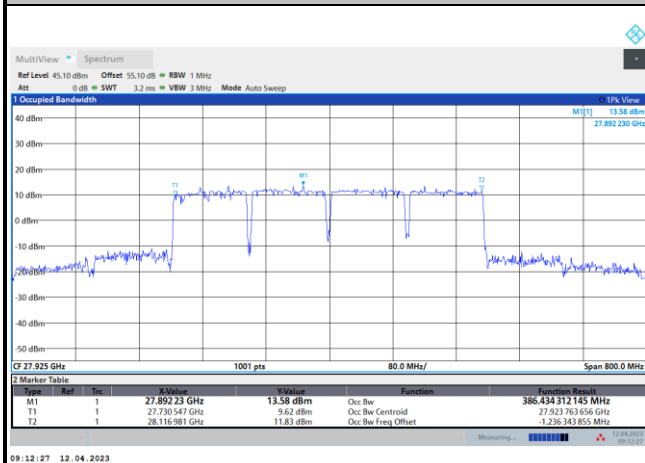
## NR Band n261

## Lowest Channel / 400MHz / 64QAM



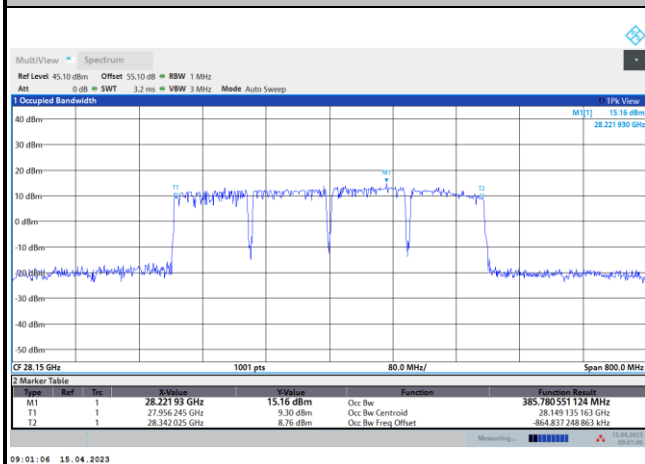
intentionally blank

## Middle Channel / 400MHz / 64QAM



intentionally blank

## Highest Channel / 400MHz / 64QAM



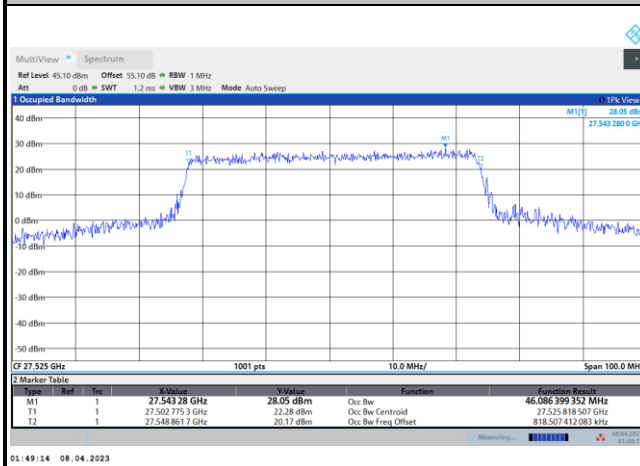
intentionally blank



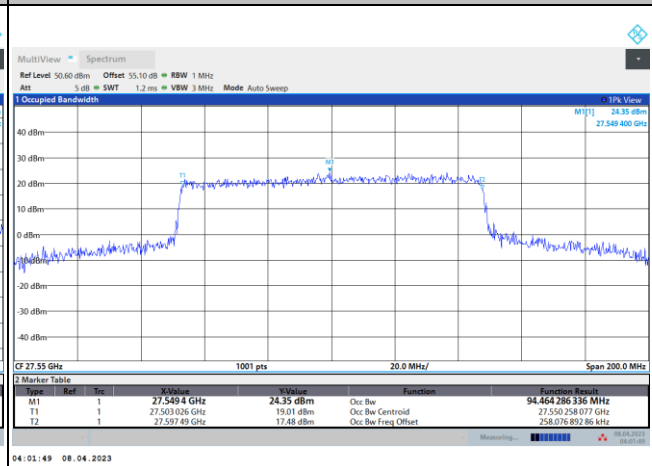
## CP-OFDM Module B

## NR Band n261

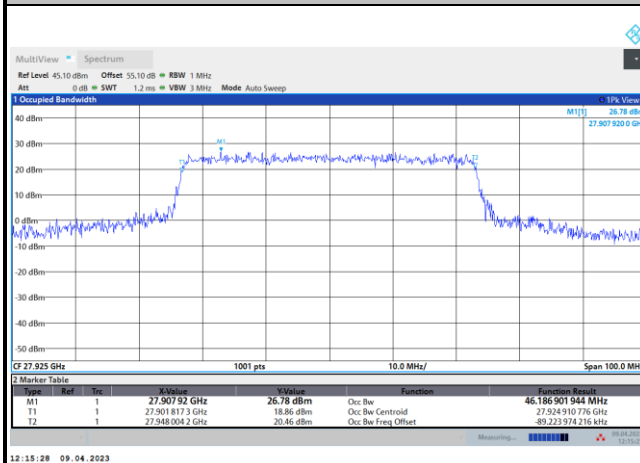
## Lowest Channel / 50MHz / QPSK



## Lowest Channel / 100MHz / QPSK



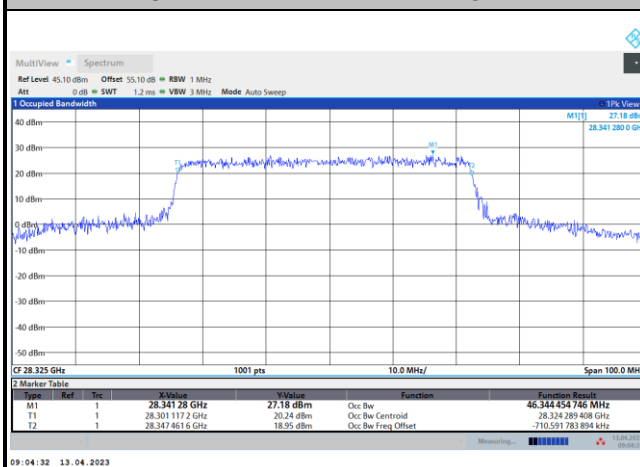
## Middle Channel / 50MHz / QPSK



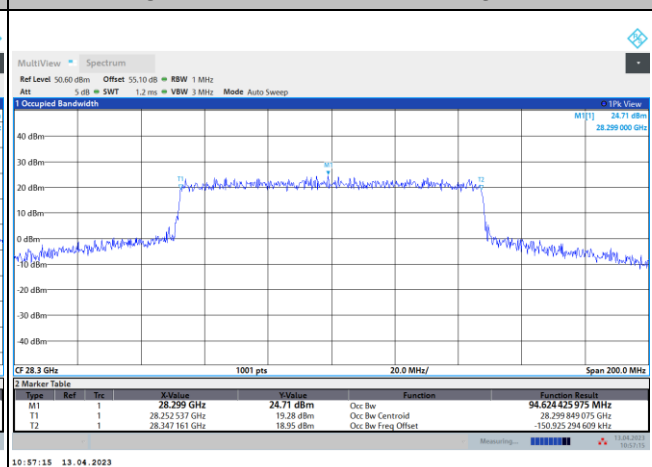
## Middle Channel / 100MHz / QPSK



## Highest Channel / 50MHz / QPSK



## Highest Channel / 100MHz / QPSK

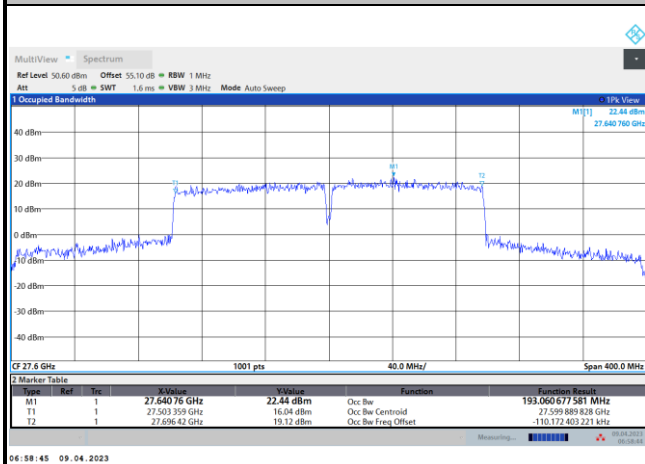




## CP-OFDM Module B

## NR Band n261

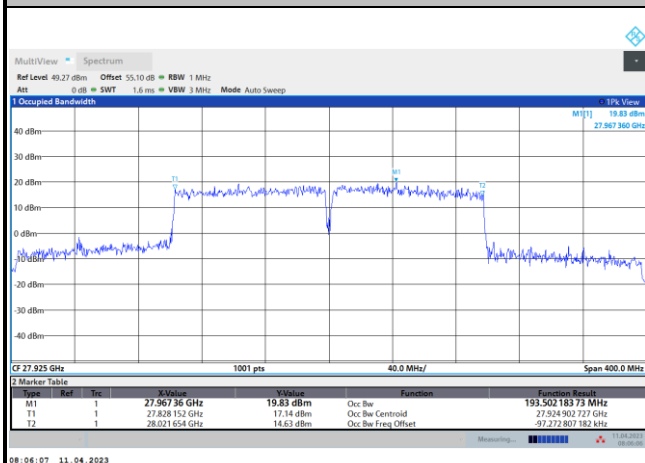
## Lowest Channel / 200MHz / QPSK



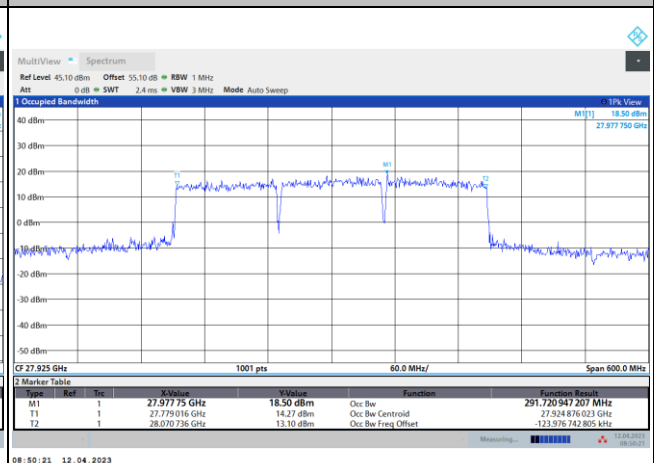
## Lowest Channel / 300MHz / QPSK



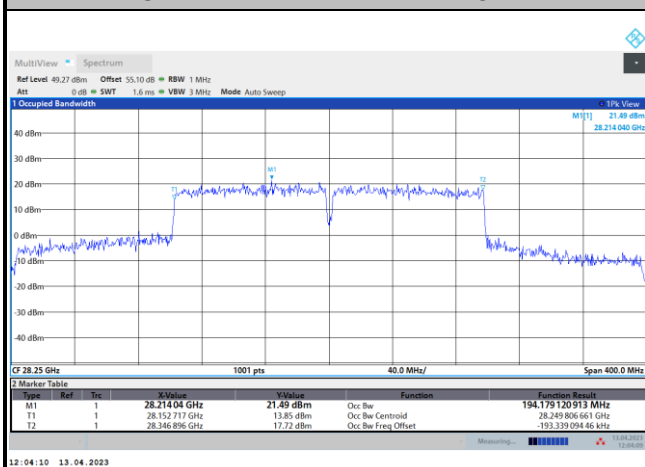
## Middle Channel / 200MHz / QPSK



## Middle Channel / 300MHz / QPSK



## Highest Channel / 200MHz / QPSK



## Highest Channel / 300MHz / QPSK

