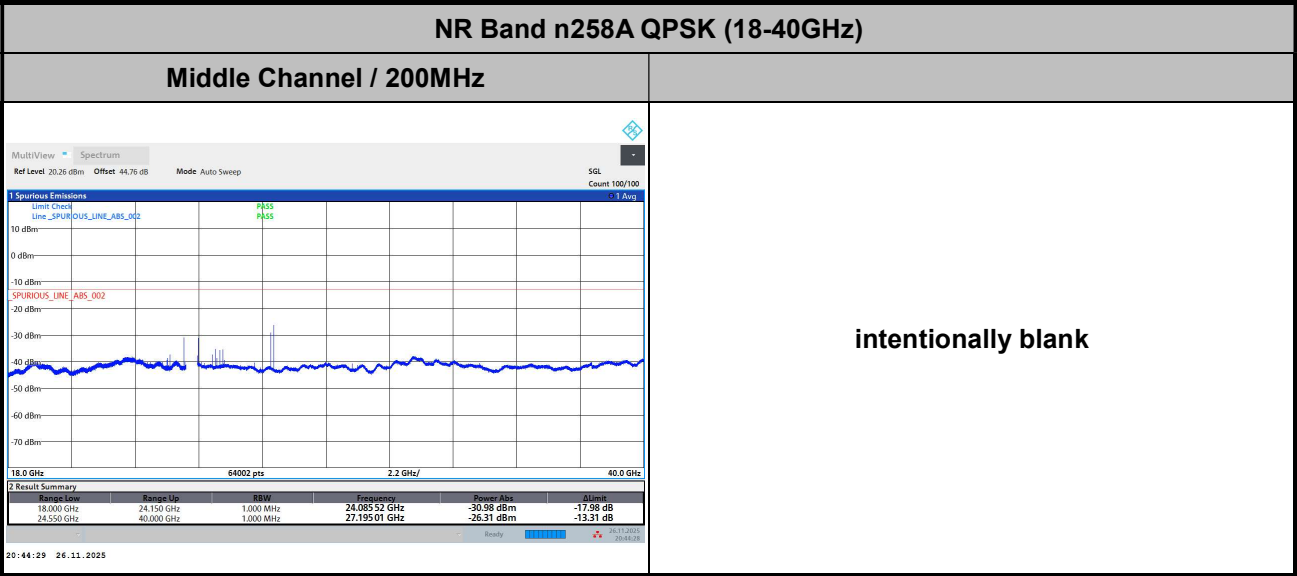


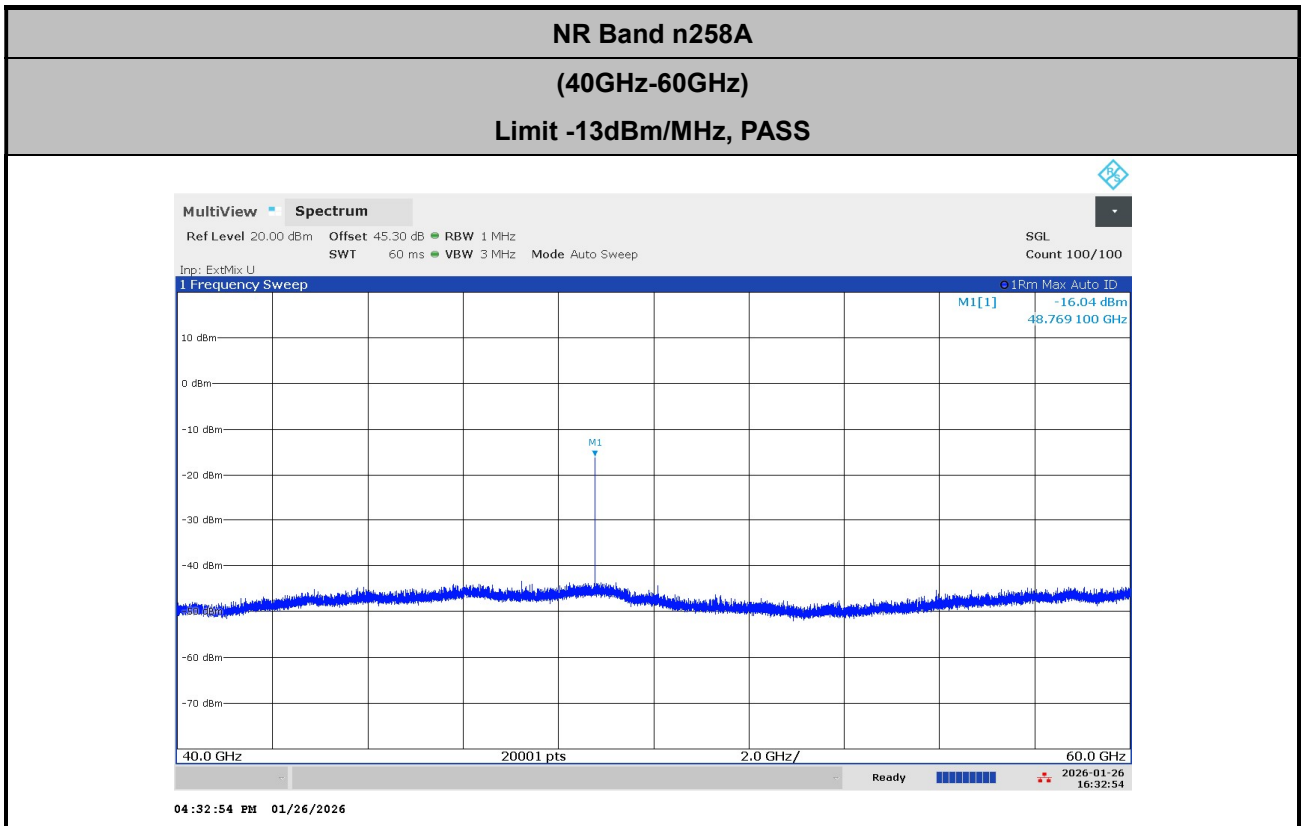


CP-OFDM



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

There is no significant spurious emission signal found for frequency started from 40GHz up to 100GHz.  
Only the noise floor is reported.



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

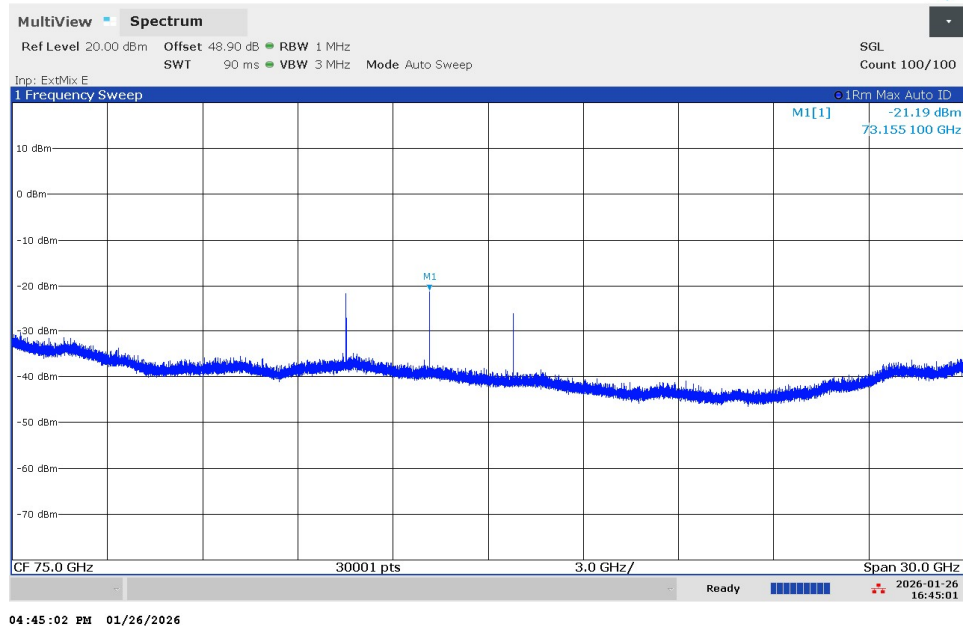
$$= 42.6 + 0.5 + 107 + 20\log(1) - 104.8 = 45.3 \text{ (dB)}$$



NR Band n258A

(60GHz-90GHz)

Limit -13dBm/MHz, PASS



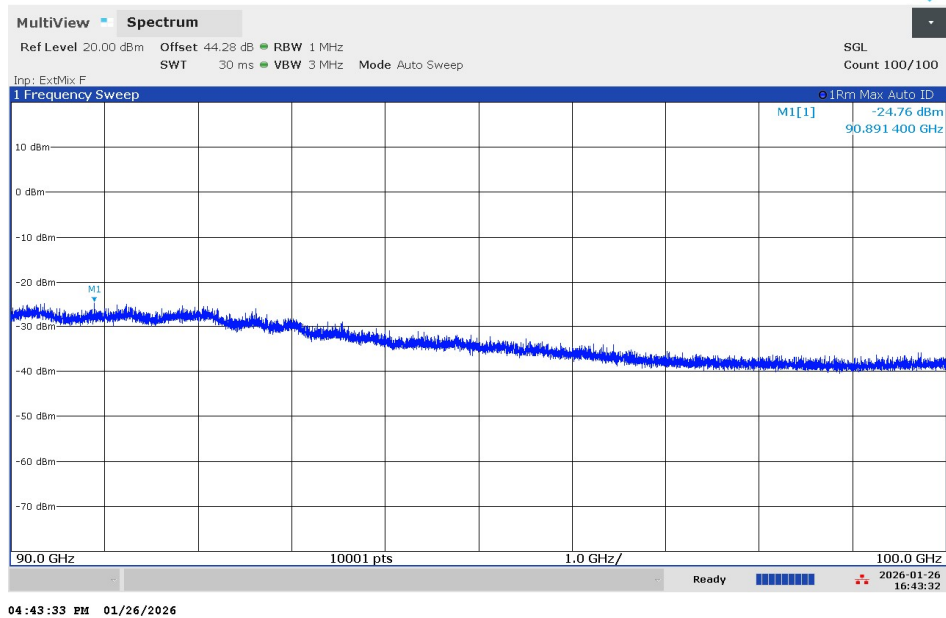
$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 46.2 + 0.5 + 107 + 20\log(1) - 104.8 = 48.9 \text{ (dB)} \end{aligned}$$



NR Band n258A

(90GHz-100GHz)

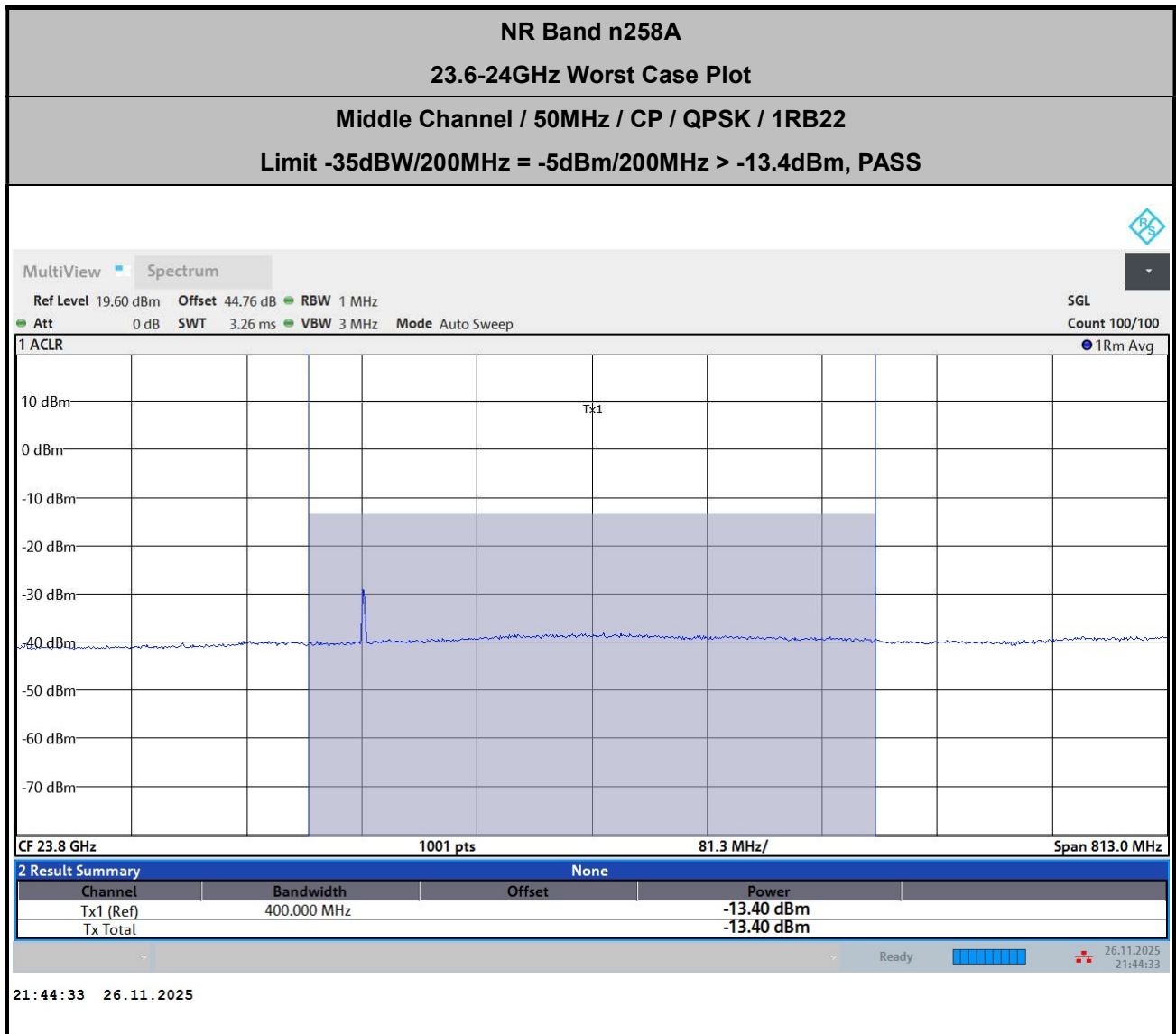
Limit -13dBm/MHz, PASS



$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8$$
$$= 47.6 + 0.5 + 107 + 20\log(0.5) - 104.8 = 44.28 \text{ (dB)}$$

Additional requirement for 24GHz bands: Limits of 47 CFR 30.203(d)(2) is applied.

For mobile equipment brought into use after September 1, 2027, the maximum conducted output power or the total radiated power of emissions in any 200 MHz of the 23.6-24.0 GHz band shall not exceed -39 dBW (for base stations) or -35 dBW (for mobile stations).



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

$$= 39.1 + 3.46 + 107 + 20\log(1) - 104.8 = 44.76(\text{dB})$$

Note: Channel power integration method is used to measure total power over 400MHz from 23.6GHz to 24GHz in order to show compliance against limit within any 200MHz interval.

## Frequency Stability

| Test Conditions  |                   | NR Band n258A / Middle Channel |                 |                 | Limit   |
|------------------|-------------------|--------------------------------|-----------------|-----------------|---------|
| Temperature (°C) | Voltage (Volt)    | CW tone                        |                 |                 | Note 2. |
|                  |                   | Frequency (GHz)                | Deviation (kHz) | Deviation (ppm) | Result  |
| 50               | Normal Voltage    | 24.350031968                   | 4.995           | 0.205           | Pass    |
| 40               | Normal Voltage    | 24.350033966                   | 2.997           | 0.123           |         |
| 30               | Normal Voltage    | 24.350035964                   | 0.999           | 0.041           |         |
| 20(Ref.)         | Normal Voltage    | 24.350036963                   | 0.000           | 0.000           |         |
| 10               | Normal Voltage    | 24.350040959                   | -3.996          | 0.164           |         |
| 0                | Normal Voltage    | 24.350044955                   | -7.992          | 0.328           |         |
| -10              | Normal Voltage    | 24.350047952                   | -10.989         | 0.451           |         |
| -20              | Normal Voltage    | 24.350051948                   | -14.985         | 0.615           |         |
| -30              | Normal Voltage    | 24.350052947                   | -15.984         | 0.656           |         |
| 20               | Maximum Voltage   | 24.350036963                   | 0.000           | 0.000           |         |
| 20               | Normal Voltage    | 24.350036963                   | 0.000           | 0.000           |         |
| 20               | Battery End Point | 24.350036963                   | 0.000           | 0.000           |         |

**Note:**

1. Normal Voltage = 3.9 V. ; Minimum Voltage = 3.6 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the operation band.

## NR Band n258B

### Occupied Bandwidth

| Mode       | DFT-s-OFDM NR Band n258B : 99%OBW(MHz) |       |       |        |       |       |        |        |        |
|------------|----------------------------------------|-------|-------|--------|-------|-------|--------|--------|--------|
| BW         | 50MHz                                  |       |       | 100MHz |       |       | 200MHz |        |        |
| Mod.       | QPSK                                   | 16QAM | 64QAM | QPSK   | 16QAM | 64QAM | QPSK   | 16QAM  | 64QAM  |
| Lowest CH  | 46.48                                  | 46.65 | 46.51 | 87.13  | 87.11 | 86.79 | 185.93 | 185.73 | 185.68 |
| Middle CH  | 46.44                                  | 46.49 | 46.54 | 87.27  | 87.33 | 87.05 | 185.93 | 185.98 | 185.54 |
| Highest CH | 46.48                                  | 46.68 | 46.58 | 87.43  | 87.23 | 87.20 | 186.16 | 186.40 | 185.59 |

| Mode       | DFT-s-OFDM NR Band n258B : 99%OBW(MHz) |        |        |        |        |        |
|------------|----------------------------------------|--------|--------|--------|--------|--------|
| BW         | 300MHz                                 |        |        | 400MHz |        |        |
| Mod.       | QPSK                                   | 16QAM  | 64QAM  | QPSK   | 16QAM  | 64QAM  |
| Lowest CH  | 286.23                                 | 287.03 | 286.47 | 386.31 | 386.59 | 386.68 |
| Middle CH  | 286.63                                 | 286.42 | 286.26 | 386.71 | 386.83 | 387.03 |
| Highest CH | 286.38                                 | 286.70 | 286.54 | 387.11 | 387.40 | 387.20 |

| Mode       | CP-OFDM NR Band n258B : 99%OBW(MHz) |        |        |
|------------|-------------------------------------|--------|--------|
| BW         | 50MHz                               | 100MHz | 200MHz |
| Mod.       | QPSK                                | QPSK   | QPSK   |
| Lowest CH  | 46.31                               | 87.71  | 186.46 |
| Middle CH  | 46.35                               | 88.42  | 186.34 |
| Highest CH | 46.44                               | 89.47  | 186.51 |

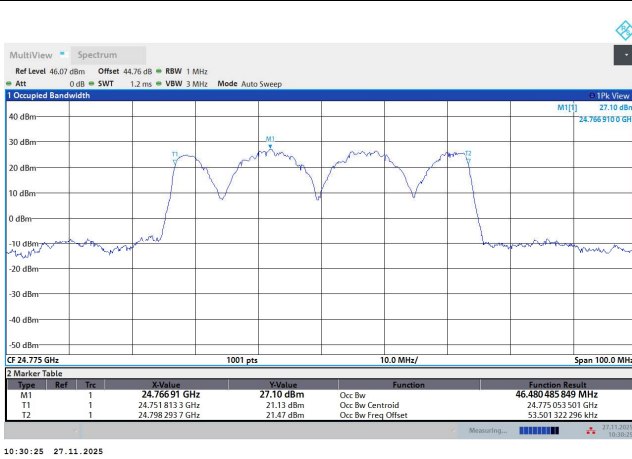
| Mode       | CP-OFDM NR Band n258B : 99%OBW(MHz) |        |
|------------|-------------------------------------|--------|
| BW         | 300MHz                              | 400MHz |
| Mod.       | QPSK                                | QPSK   |
| Lowest CH  | 287.13                              | 387.13 |
| Middle CH  | 286.79                              | 387.23 |
| Highest CH | 286.41                              | 387.41 |



## DFT-s-OFDM

## NR Band n258B

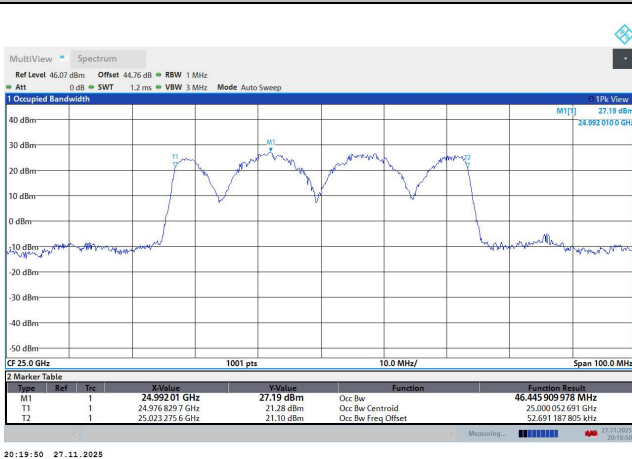
## Lowest Channel / 50MHz / QPSK



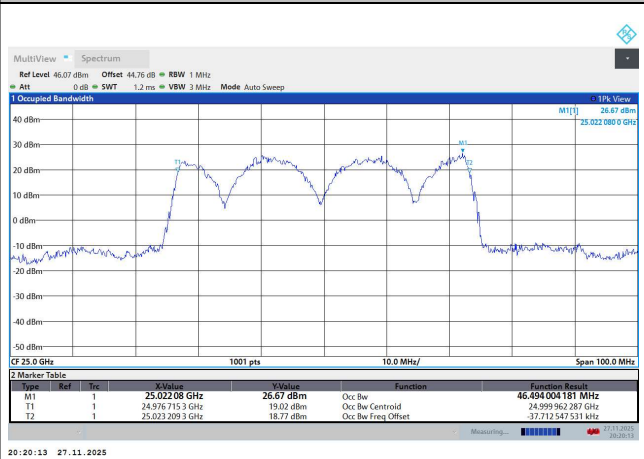
## Lowest Channel / 50MHz / 16QAM



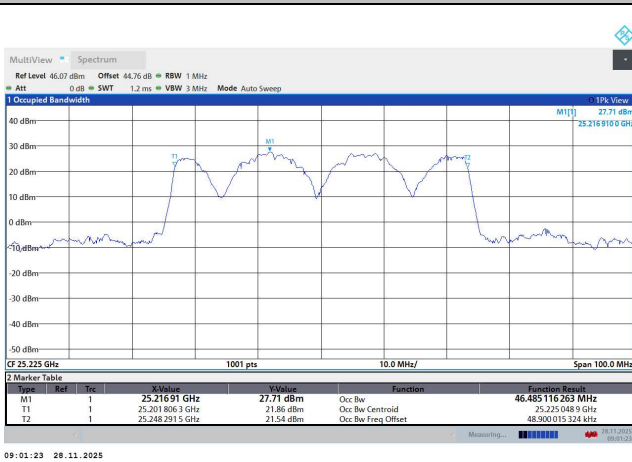
## Middle Channel / 50MHz / QPSK



## Middle Channel / 50MHz / 16QAM



## Highest Channel / 50MHz / QPSK



## Highest Channel / 50MHz / 16QAM

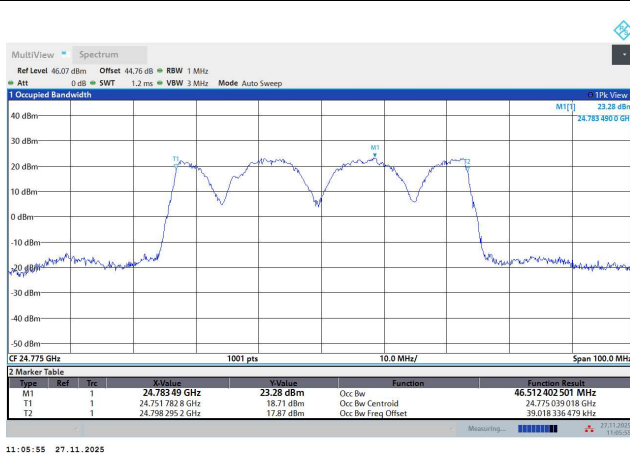




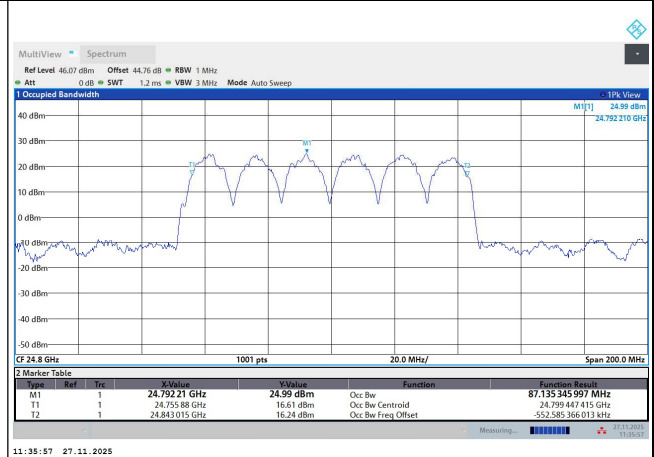
## DFT-s-OFDM

## NR Band n258B

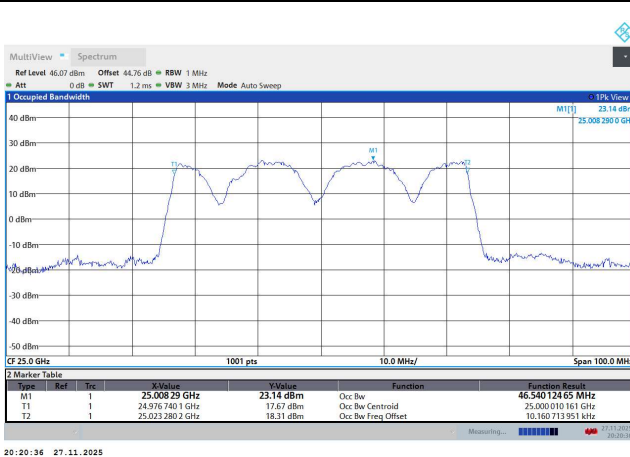
## Lowest Channel / 50MHz / 64QAM



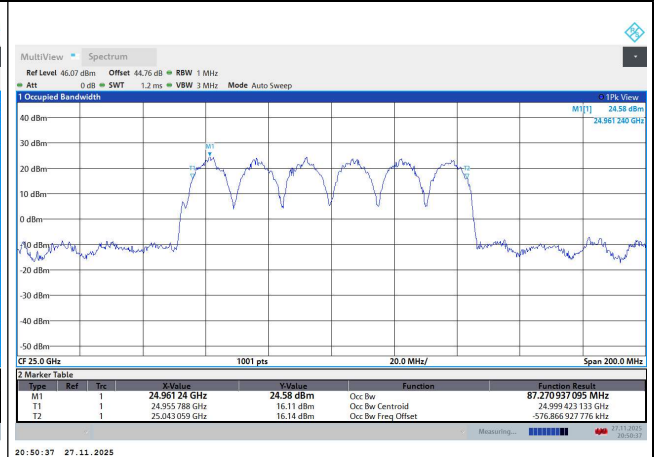
## Lowest Channel / 100MHz / QPSK



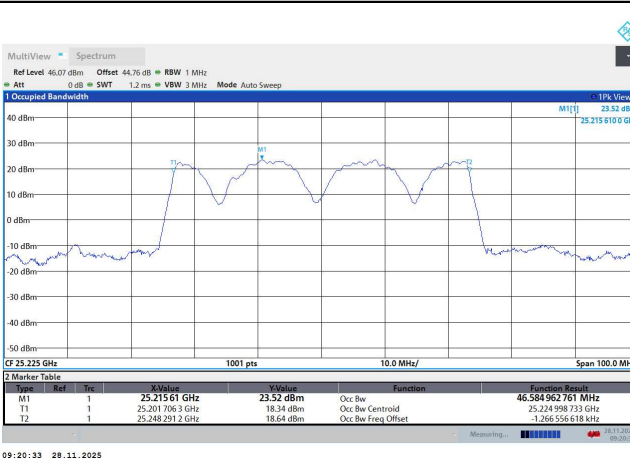
## Middle Channel / 50MHz / 64QAM



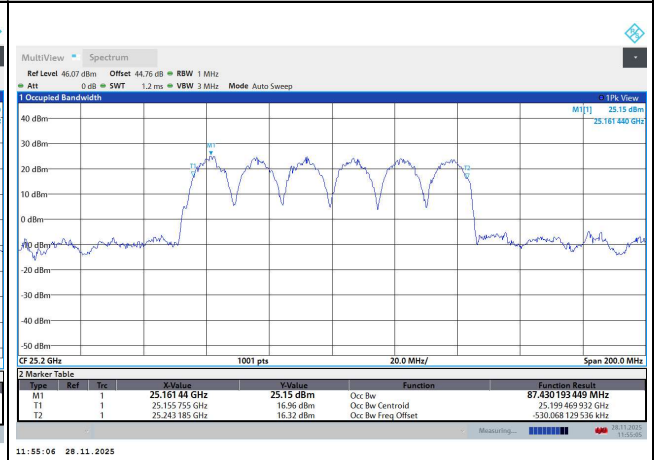
## Middle Channel / 100MHz / QPSK



## Highest Channel / 50MHz / 64QAM



## Highest Channel / 100MHz / QPSK

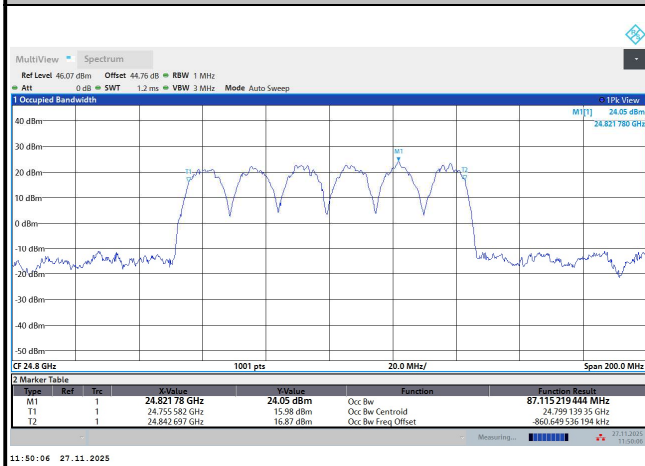




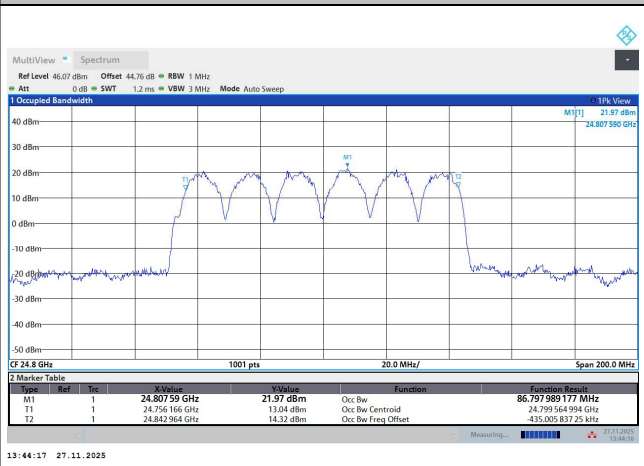
## DFT-s-OFDM

## NR Band n258B

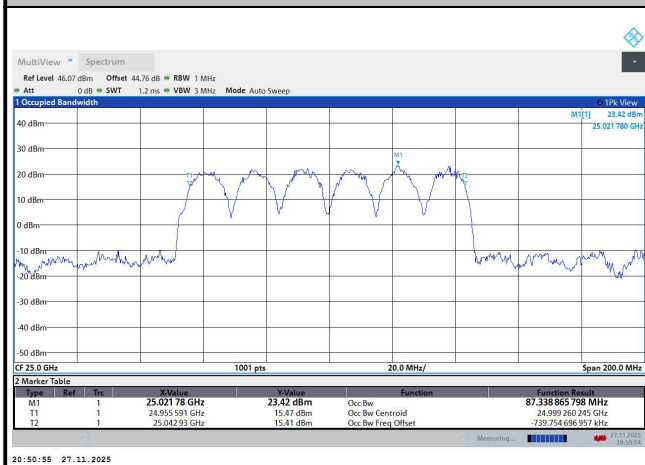
## Lowest Channel / 100MHz / 16QAM



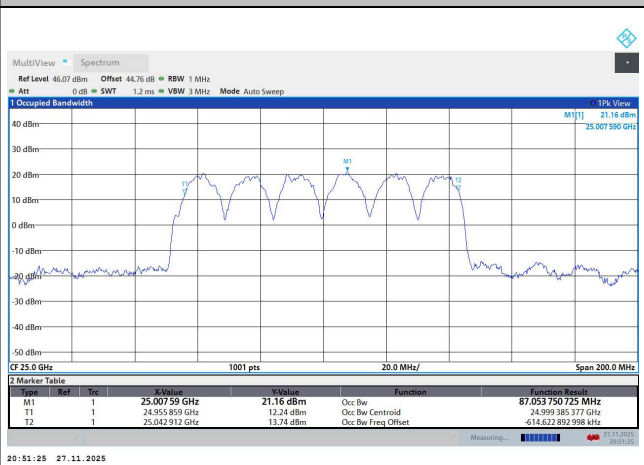
## Lowest Channel / 100MHz / 64QAM



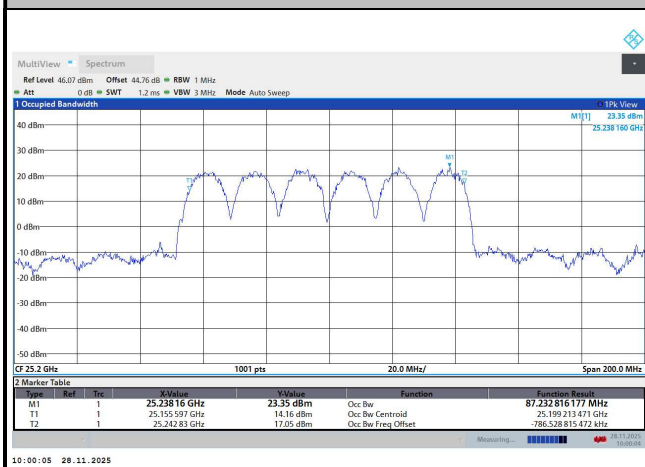
## Middle Channel / 100MHz / 16QAM



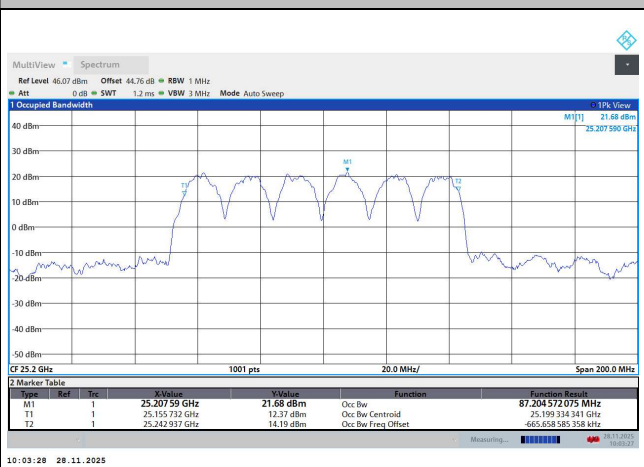
## Middle Channel / 100MHz / 64QAM



## Highest Channel / 100MHz / 16QAM



## Highest Channel / 100MHz / 64QAM

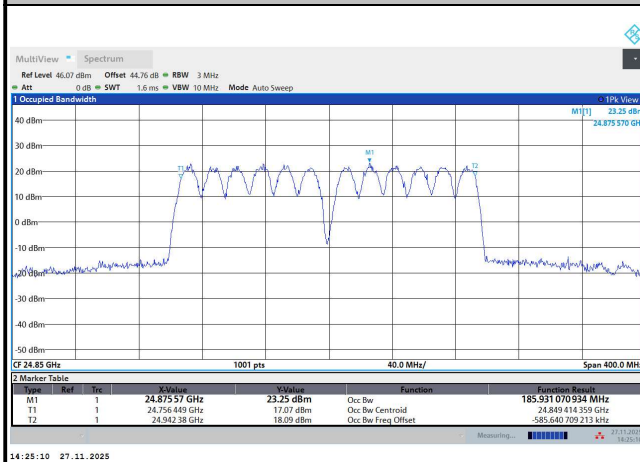




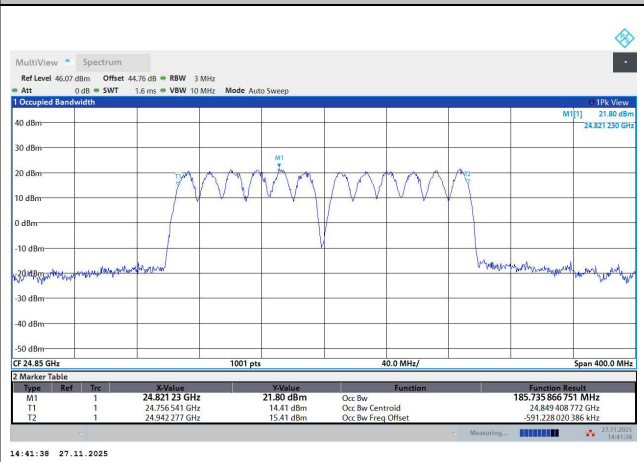
## DFT-s-OFDM

## NR Band n258B

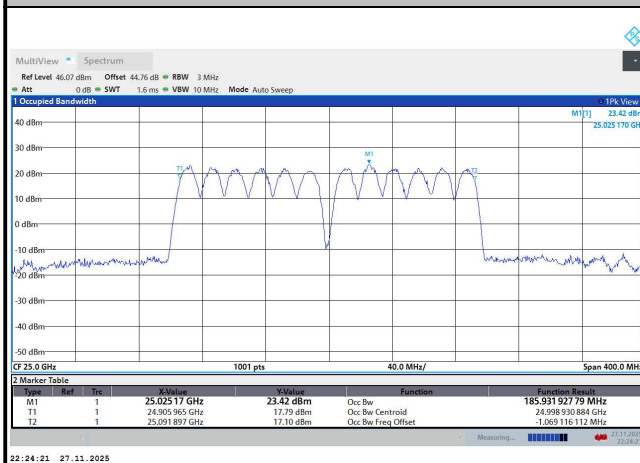
## Lowest Channel / 200MHz / QPSK



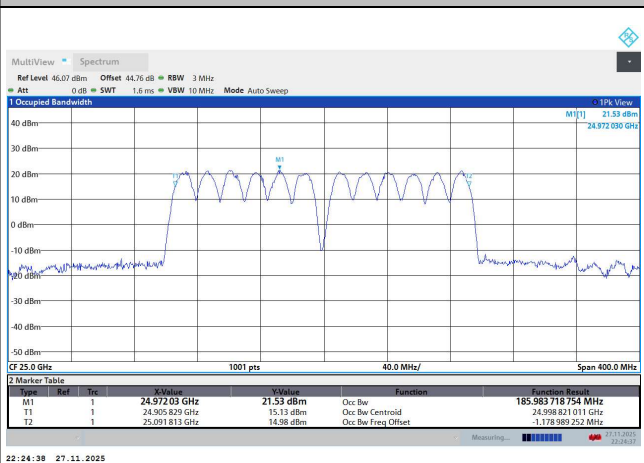
## Lowest Channel / 200MHz / 16QAM



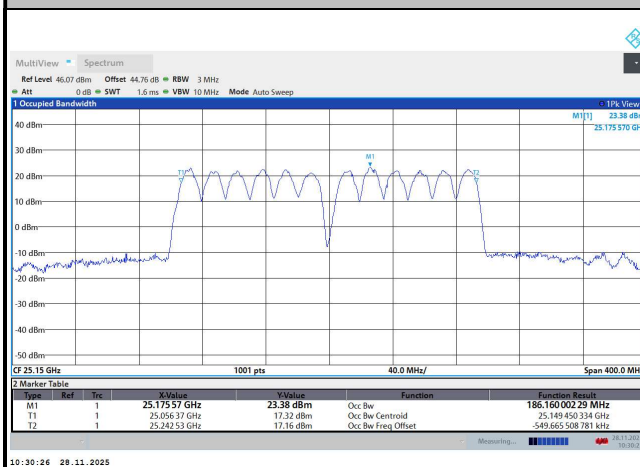
## Middle Channel / 200MHz / QPSK



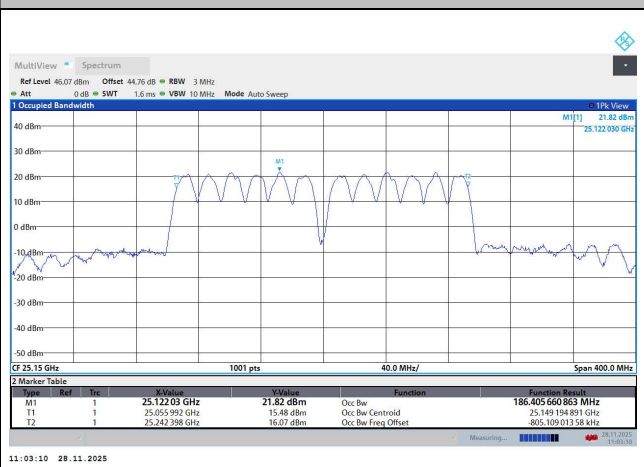
## Middle Channel / 200MHz / 16QAM



## Highest Channel / 200MHz / QPSK



## Highest Channel / 200MHz / 16QAM

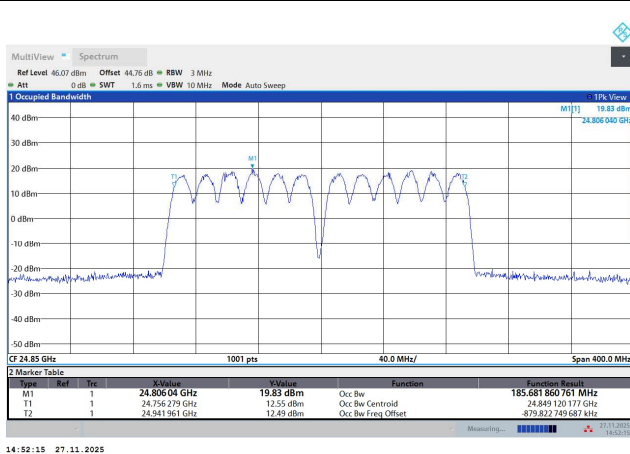




## DFT-s-OFDM

## NR Band n258B

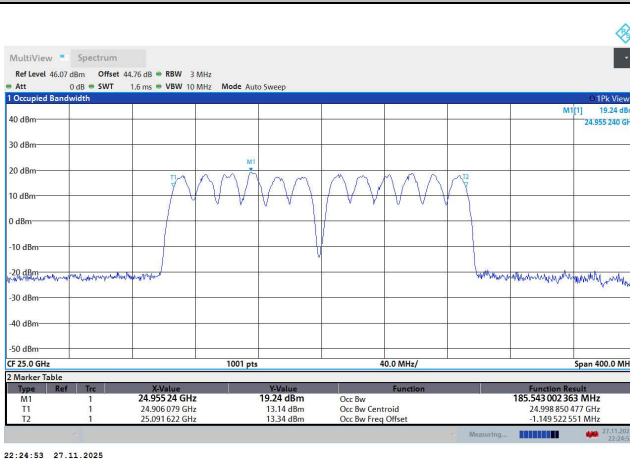
## Lowest Channel / 200MHz / 64QAM



## Lowest Channel / 300MHz / QPSK



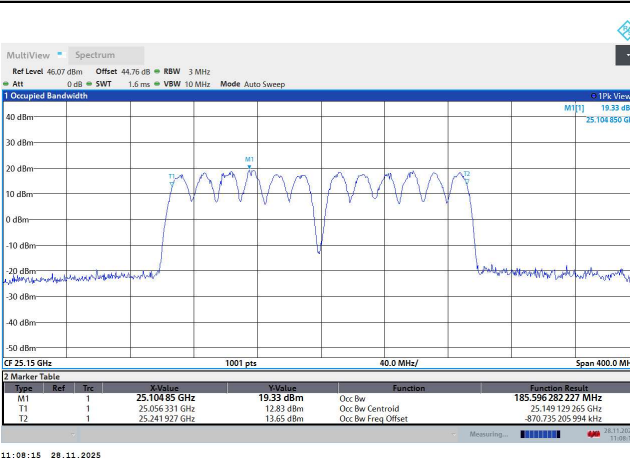
## Middle Channel / 200MHz / 64QAM



## Middle Channel / 300MHz / QPSK



## Highest Channel / 200MHz / 64QAM



## Highest Channel / 300MHz / QPSK

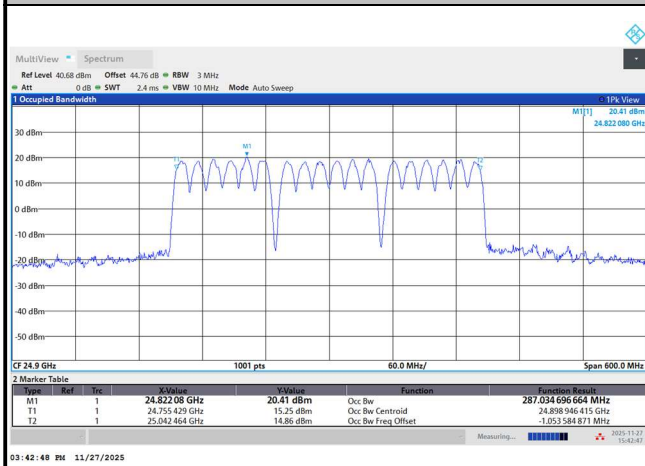




## DFT-s-OFDM

## NR Band n258B

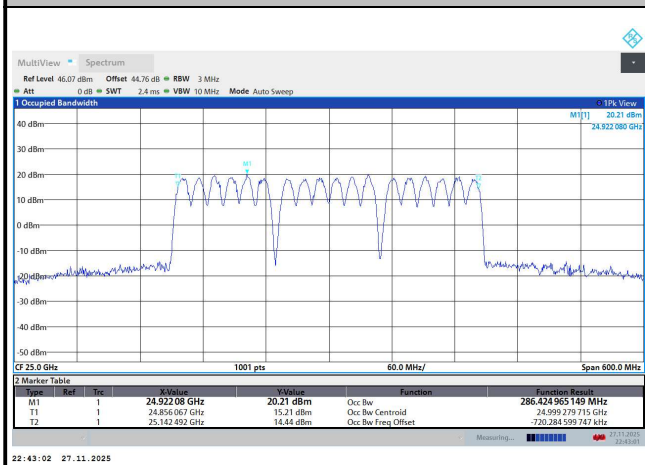
## Lowest Channel / 300MHz / 16QAM



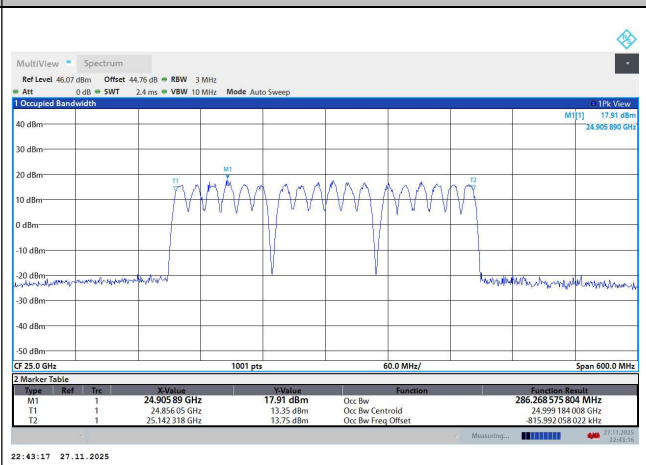
## Lowest Channel / 300MHz / 64QAM



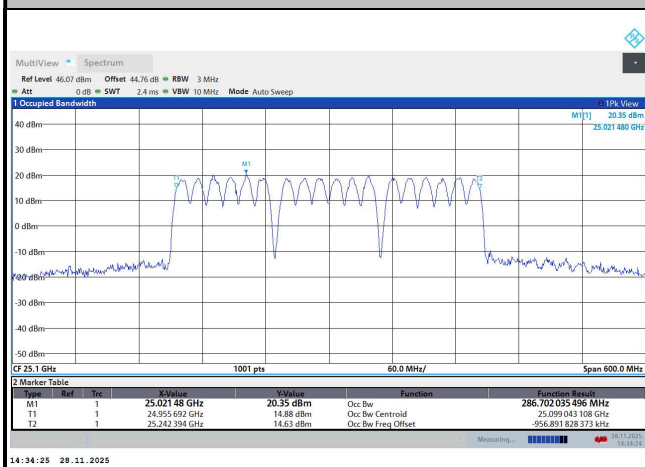
## Middle Channel / 300MHz / 16QAM



## Middle Channel / 300MHz / 64QAM



## Highest Channel / 300MHz / 16QAM



## Highest Channel / 300MHz / 64QAM

