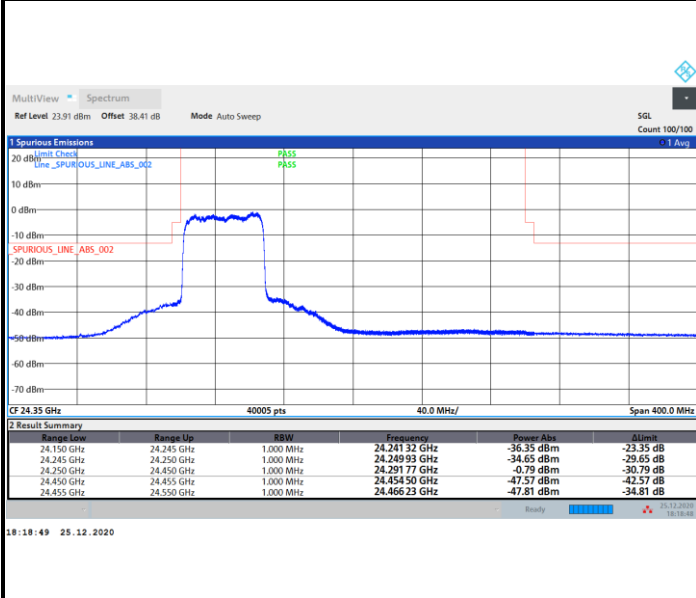




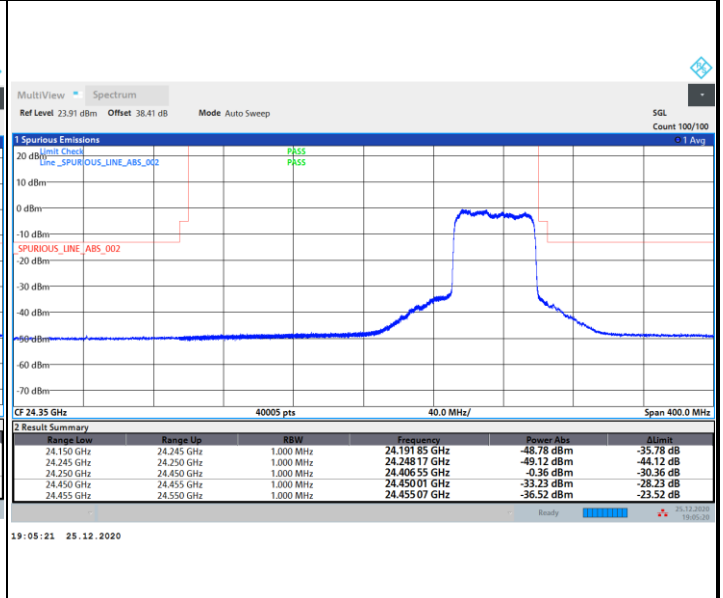
DFT-s-OFDM Module 1

NR Band n258A / 50MHz / 16QAM

Lowest Band Edge / Full RB

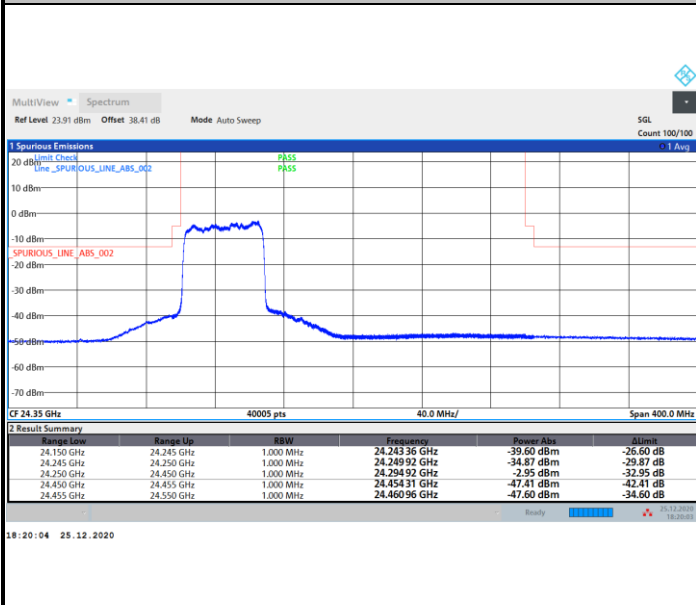


Highest Band Edge / Full RB

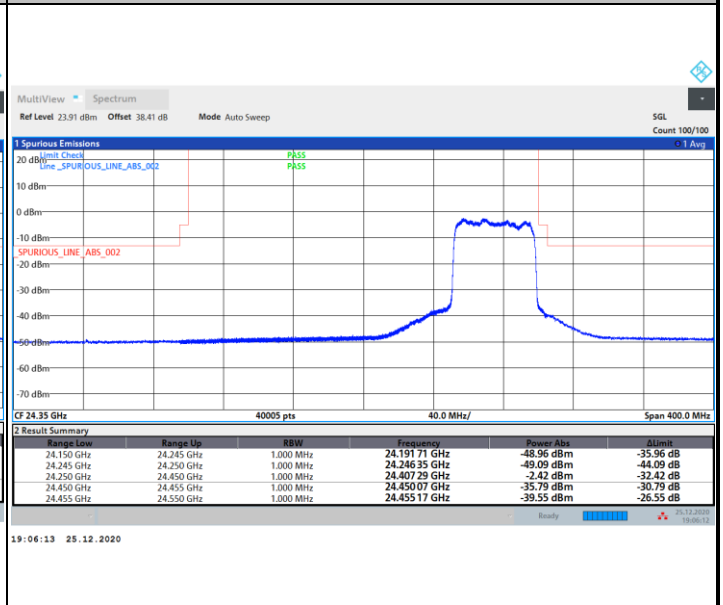


NR Band n258A / 50MHz / 64QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

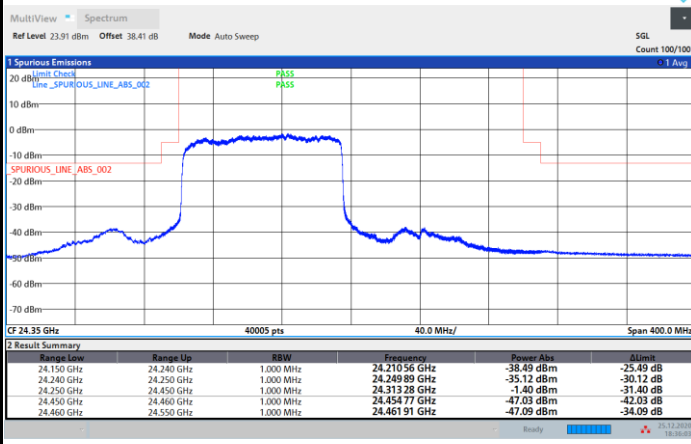




DFT-s-OFDM Module 1

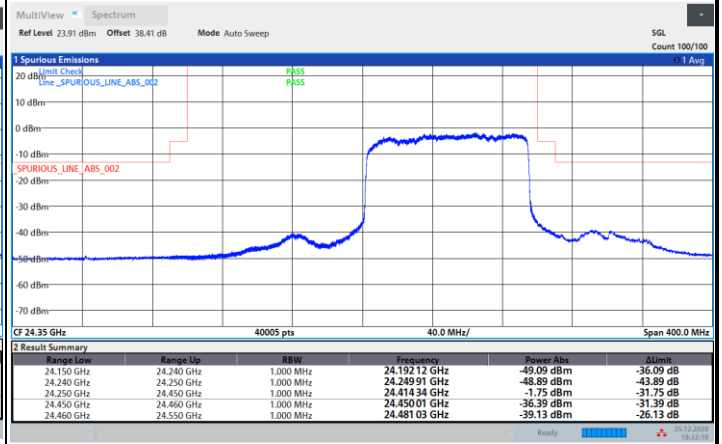
NR Band n258A / 100MHz / BPSK

Lowest Band Edge / Full RB



18:36:04 25.12.2020

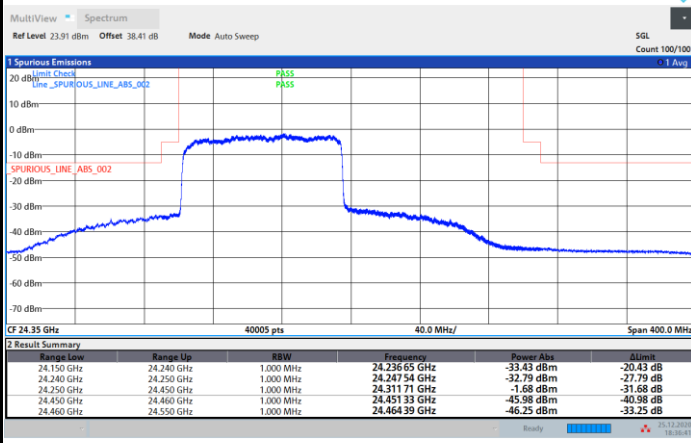
Highest Band Edge / Full RB



19:32:20 25.12.2020

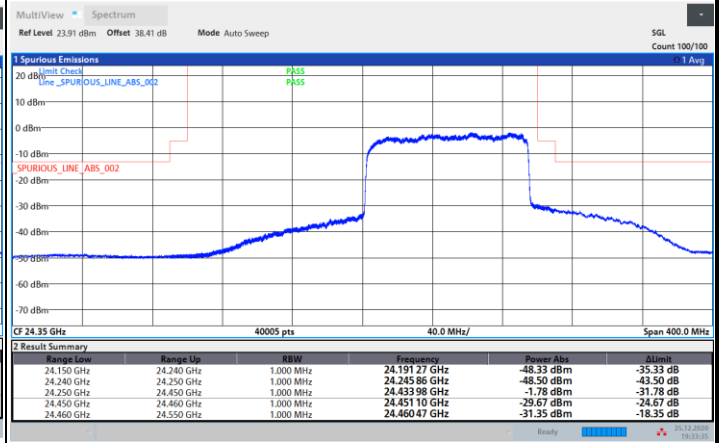
NR Band n258A / 100MHz / QPSK

Lowest Band Edge / Full RB



18:36:42 25.12.2020

Highest Band Edge / Full RB



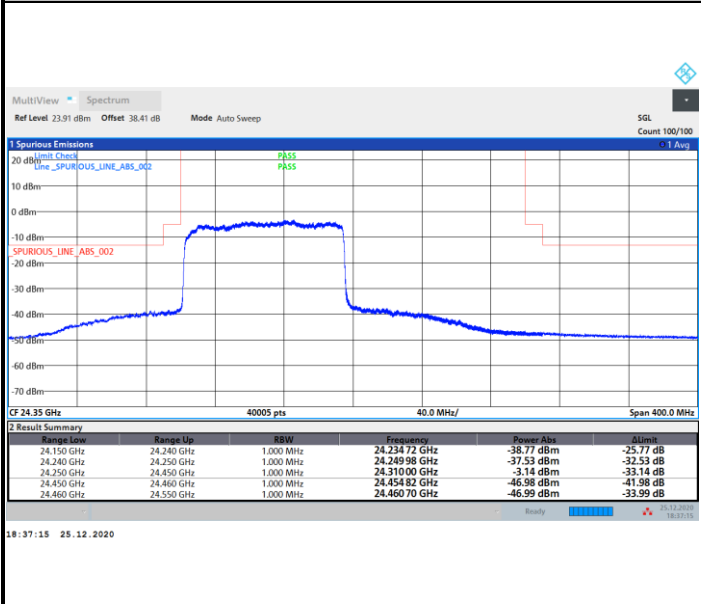
19:33:36 25.12.2020



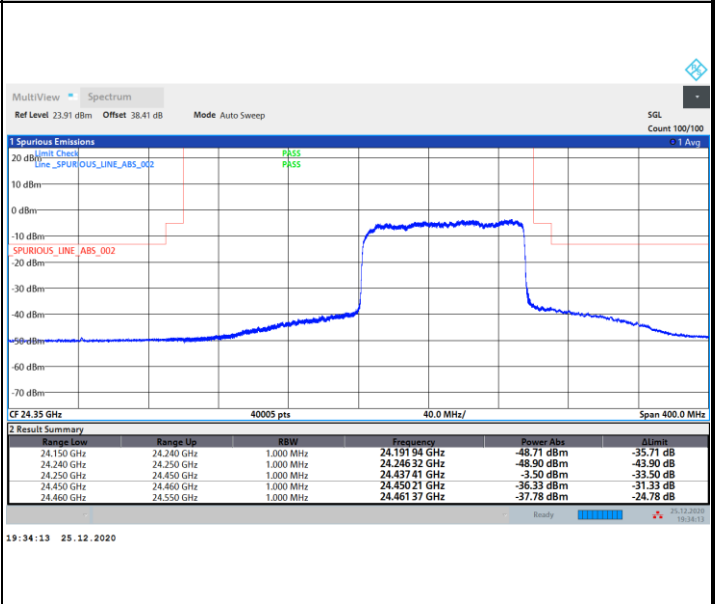
DFT-s-OFDM Module 1

NR Band n258A / 100MHz / 16QAM

Lowest Band Edge / Full RB

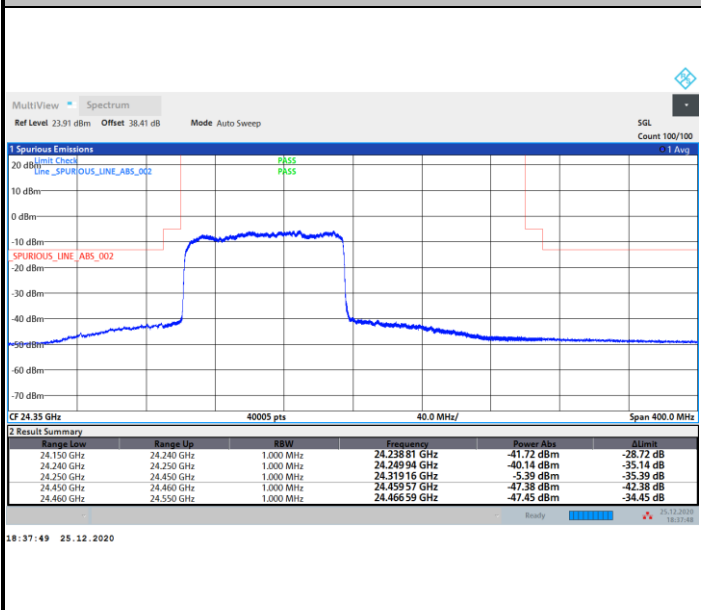


Highest Band Edge / Full RB

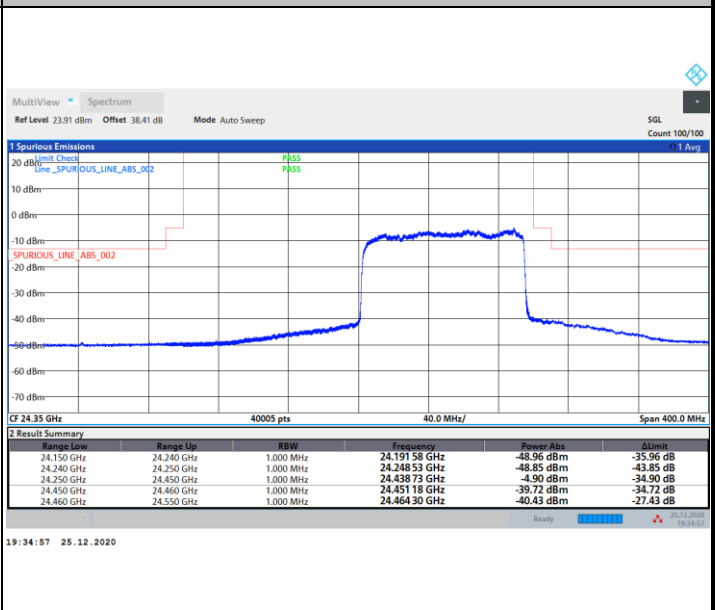


NR Band n258A / 100MHz / 64QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

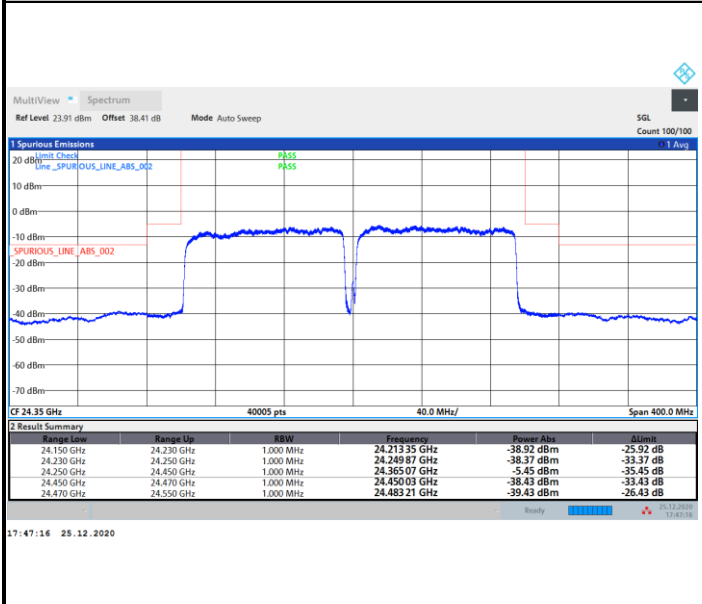




DFT-s-OFDM Module 1

NR Band n258A / 200MHz / BPSK

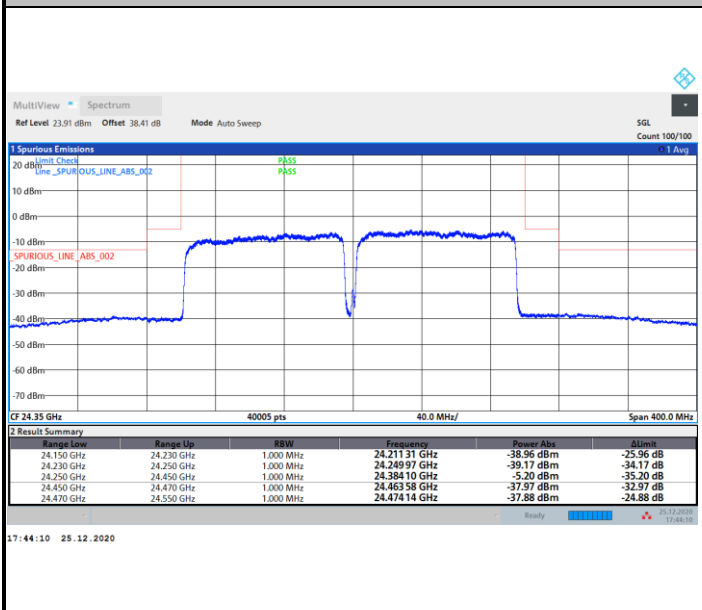
Middle Band Edge / Full RB



intentionally blank

NR Band n258A / 200MHz / QPSK

Middle Band Edge / Full RB



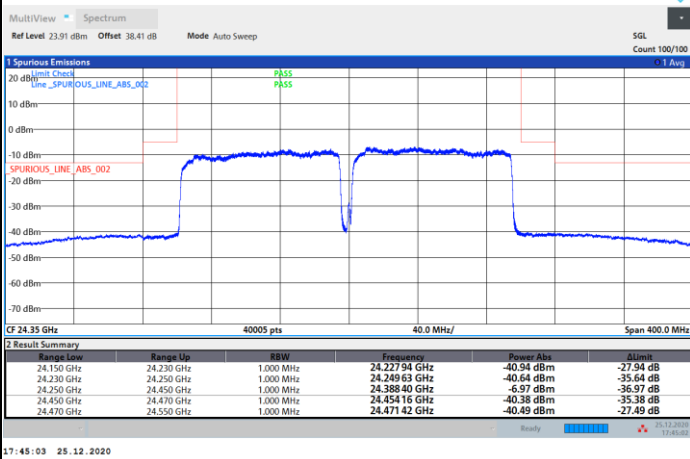
intentionally blank



DFT-s-OFDM Module 1

NR Band n258A / 200MHz / 16QAM

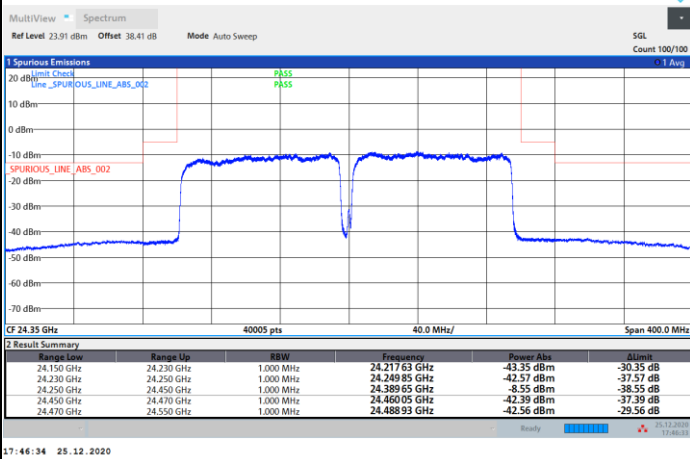
Middle Band Edge / Full RB



intentionally blank

NR Band n258A / 200MHz / 64QAM

Middle Band Edge / Full RB

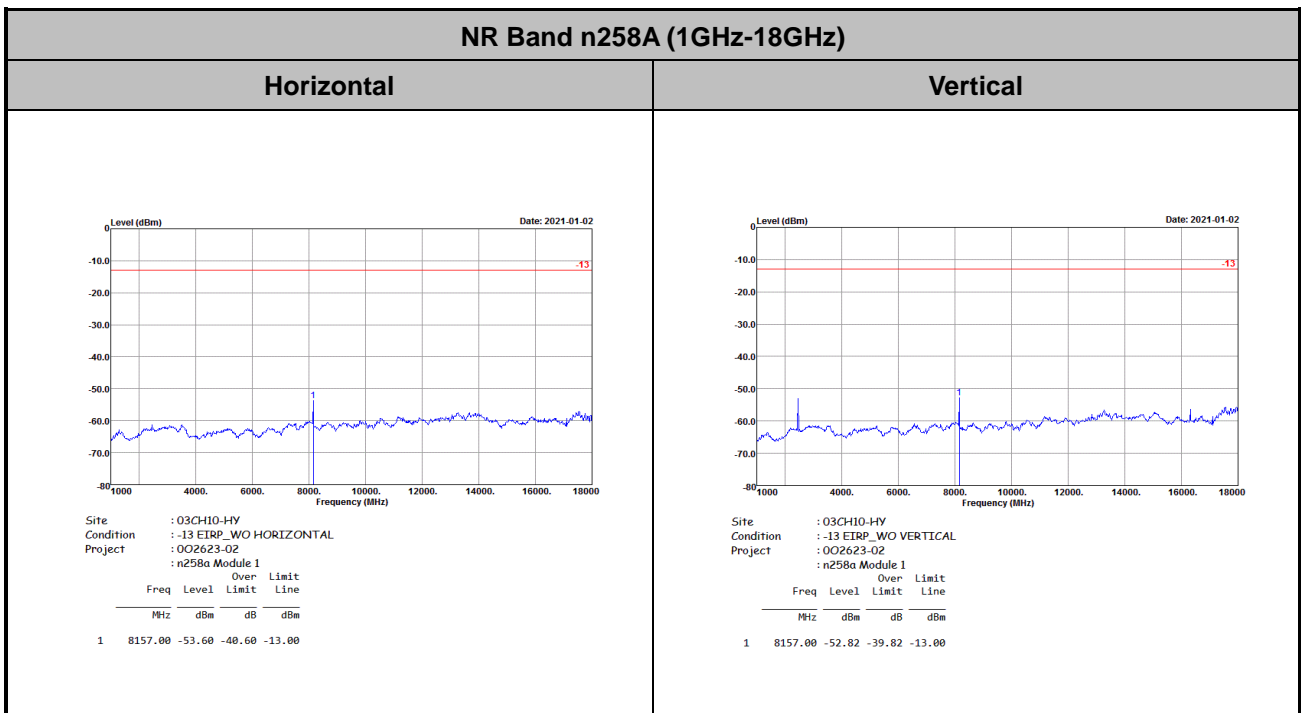
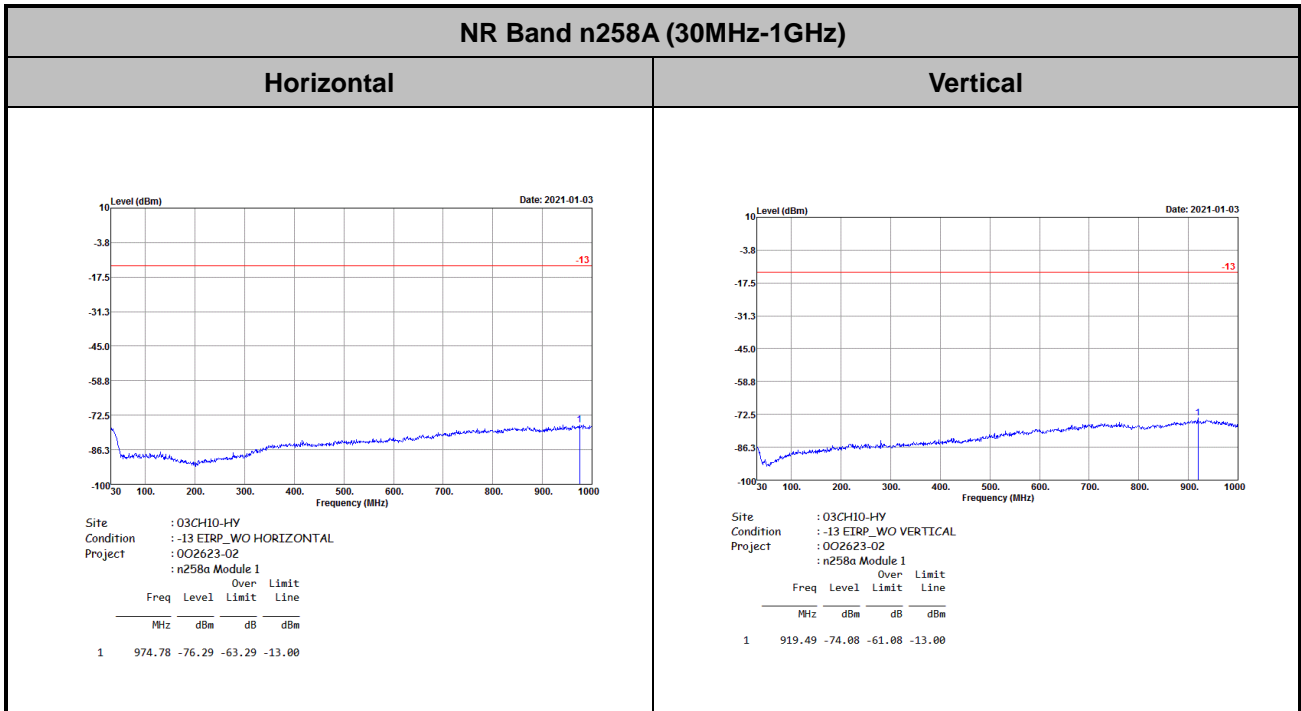


intentionally blank



# Spurious Emission

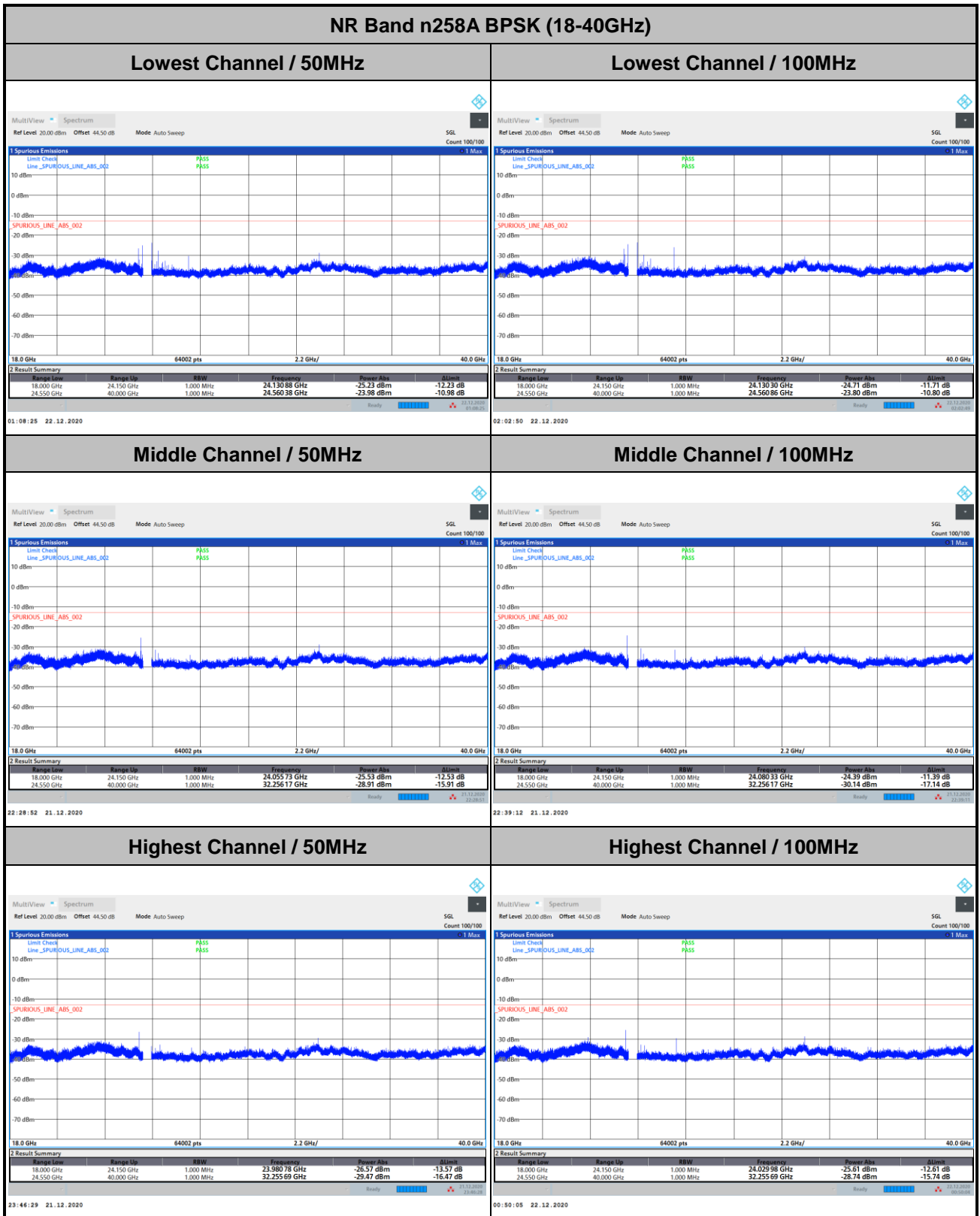
There is no significant spurious emission signal found for frequency started from 30MHz up to 18GHz.  
Only the noise floor is reported.





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

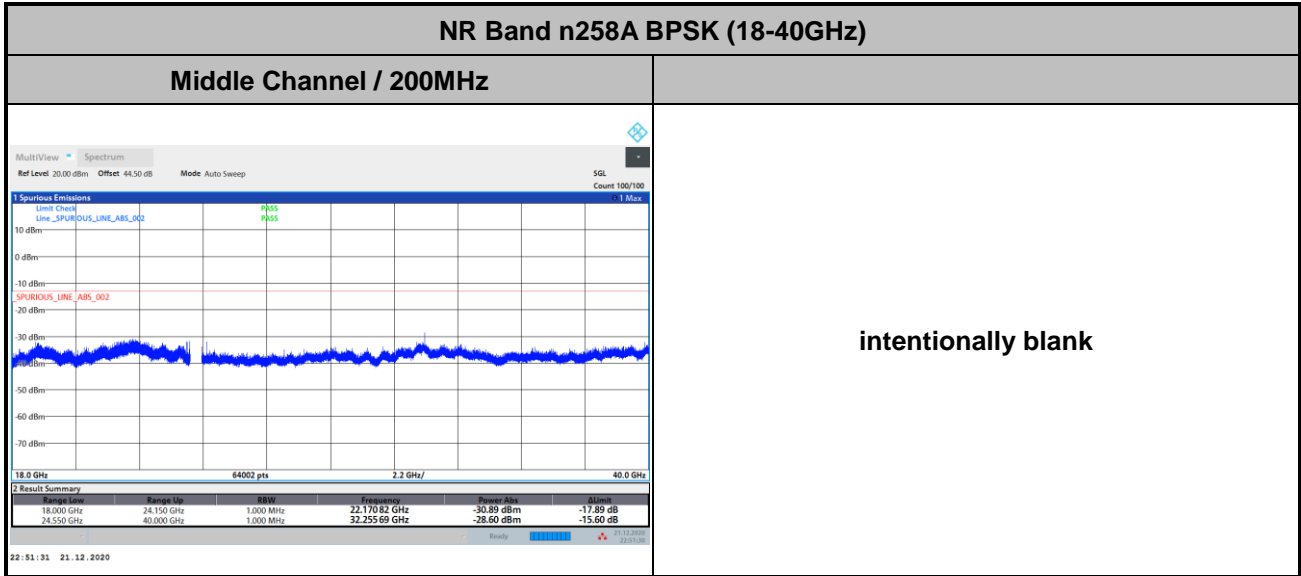
AG0 DFT-s-OFDM Module 1



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



AG0 DFT-s-OFDM Module 1



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

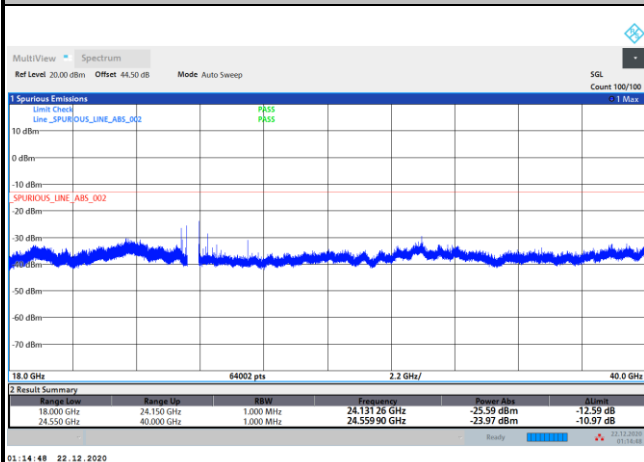




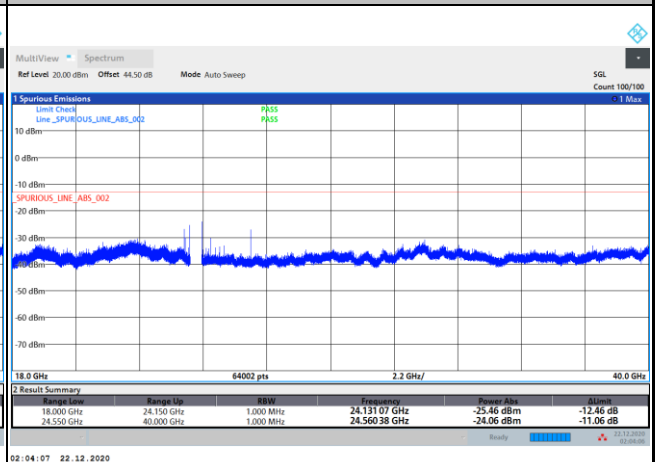
AG0 DFT-s-OFDM Module 1

NR Band n258A QPSK (18-40GHz)

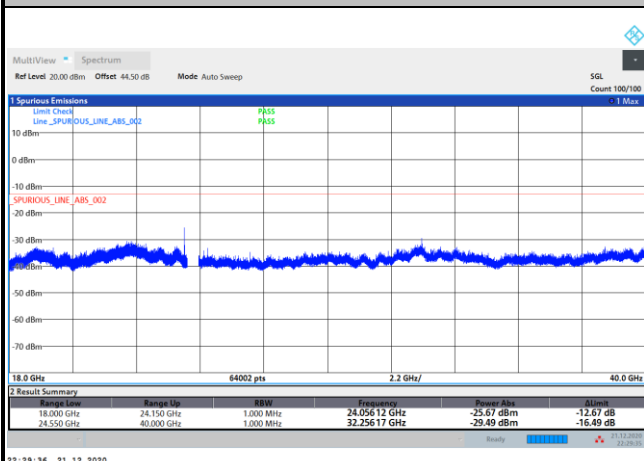
Lowest Channel / 50MHz



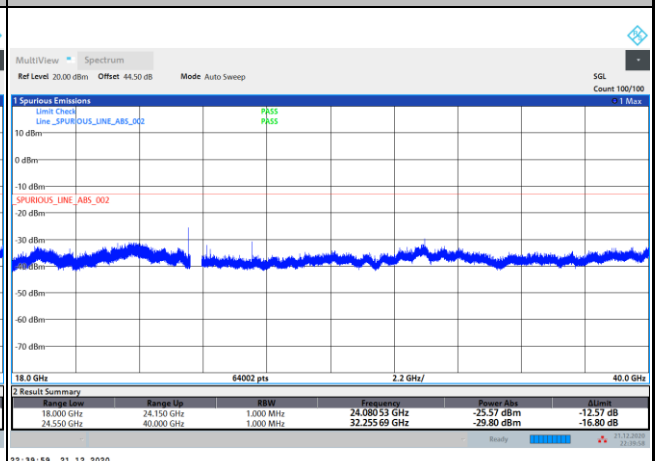
Lowest Channel / 100MHz



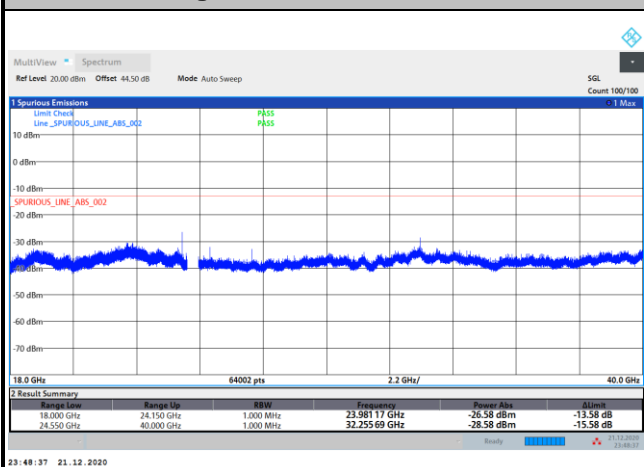
Middle Channel / 50MHz



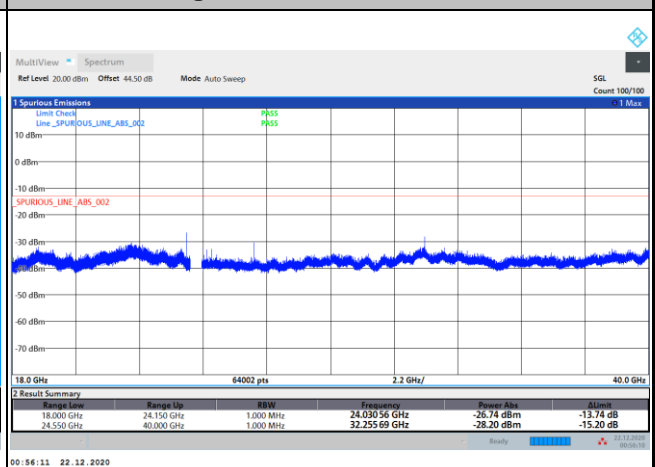
Middle Channel / 100MHz



Highest Channel / 50MHz



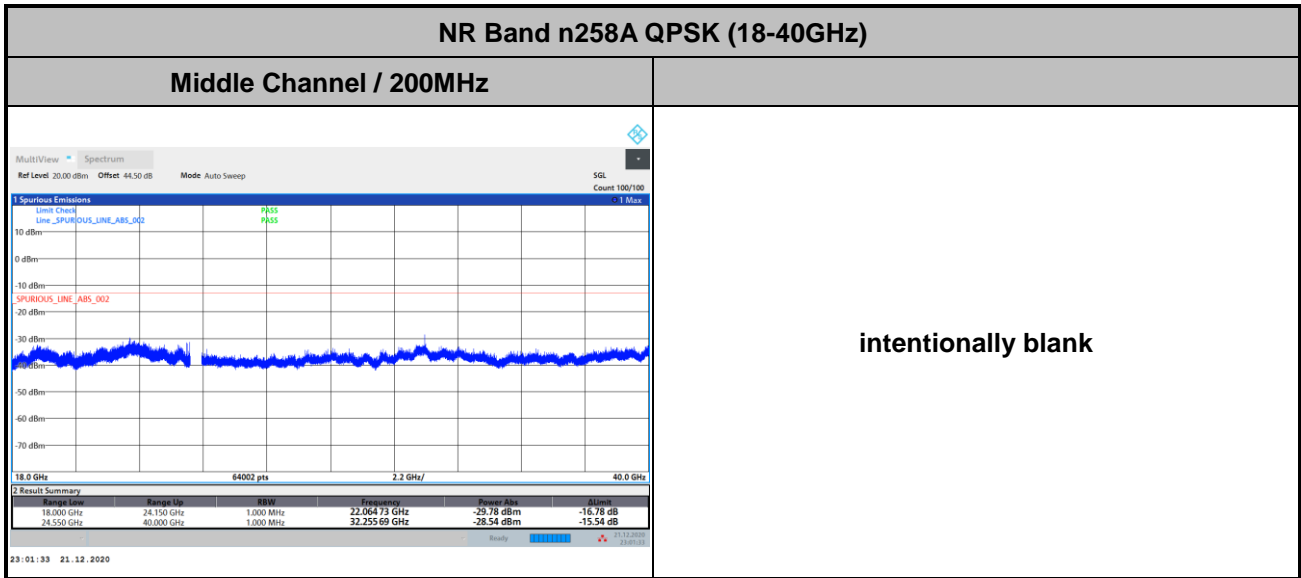
Highest Channel / 100MHz



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



AG0 DFT-s-OFDM Module 1



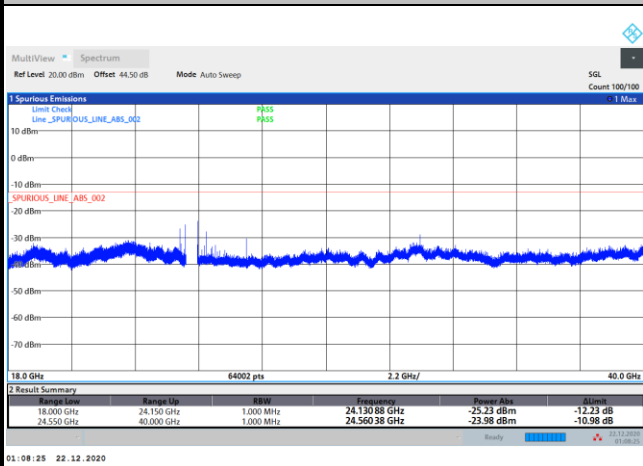
**Remark:** In band and out of band frequencies are omitted.



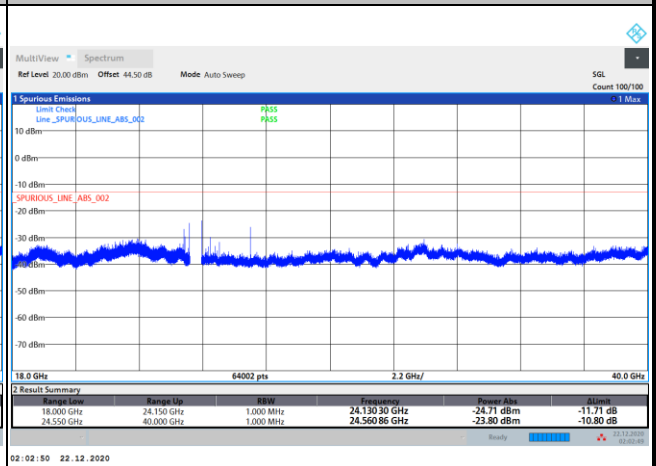
AG1 DFT-s-OFDM Module 1

NR Band n258A BPSK (18-40GHz)

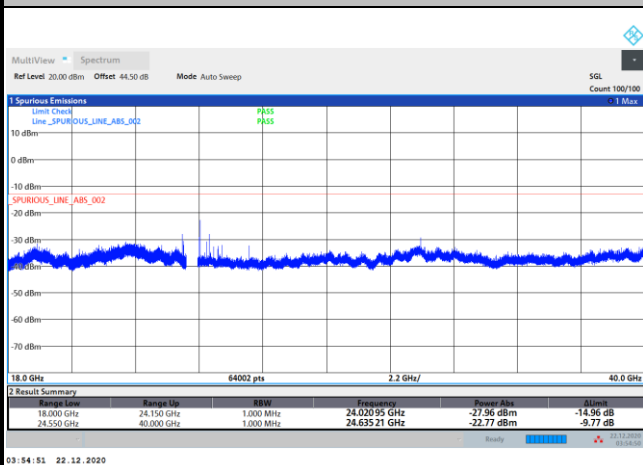
Lowest Channel / 50MHz



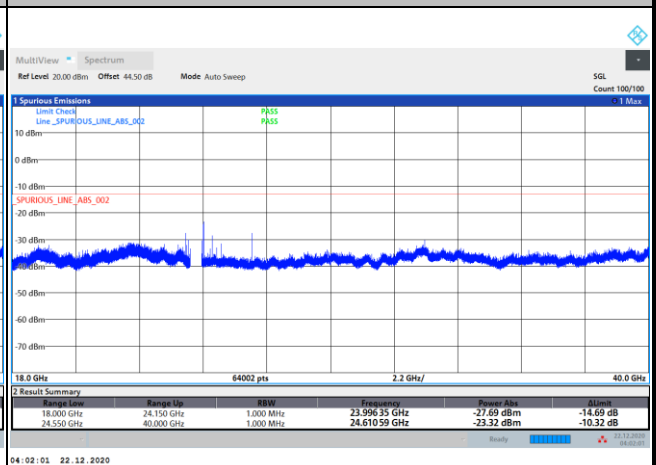
Lowest Channel / 100MHz



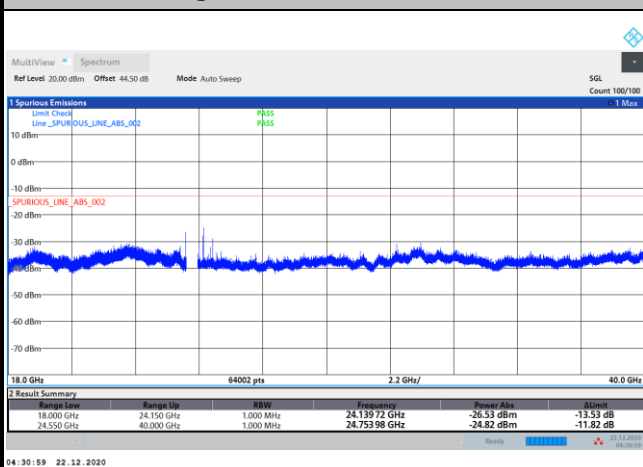
Middle Channel / 50MHz



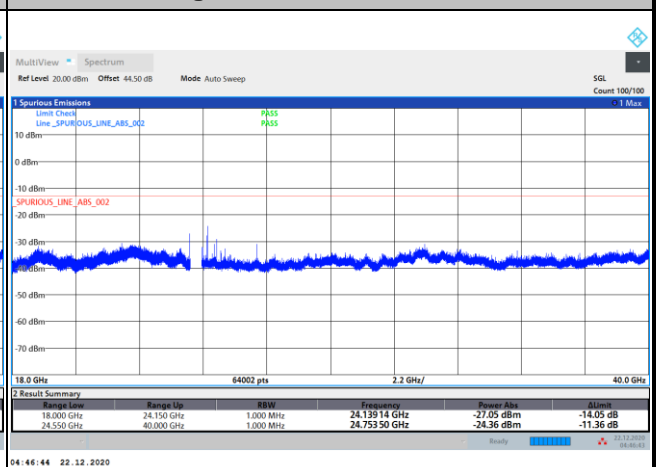
Middle Channel / 100MHz



Highest Channel / 50MHz



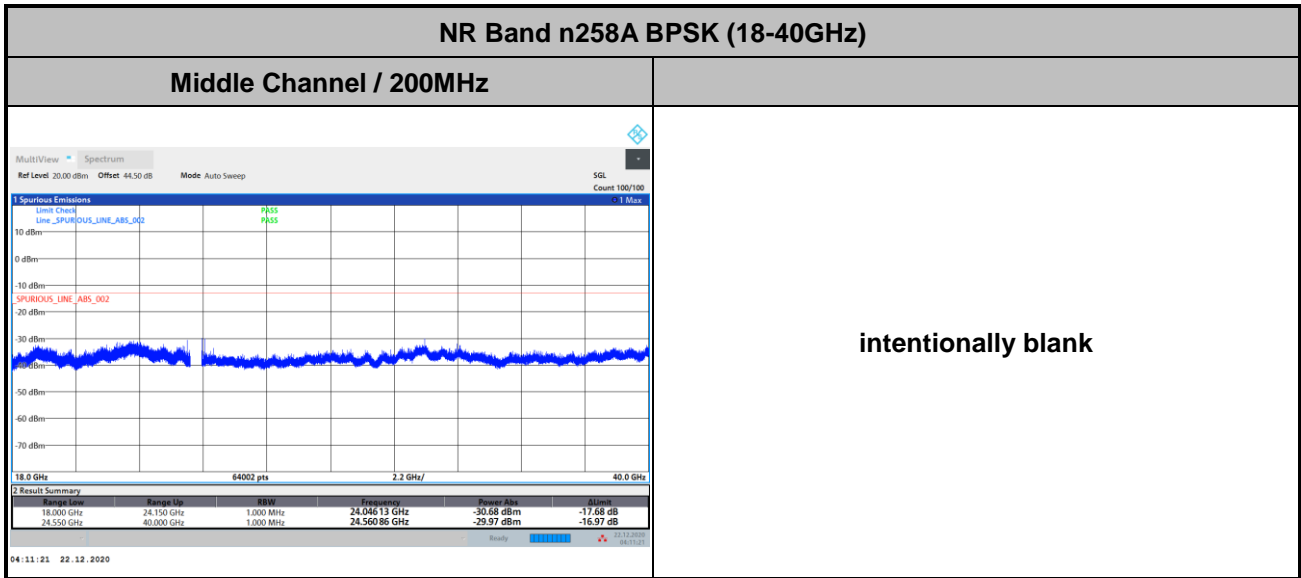
Highest Channel / 100MHz



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



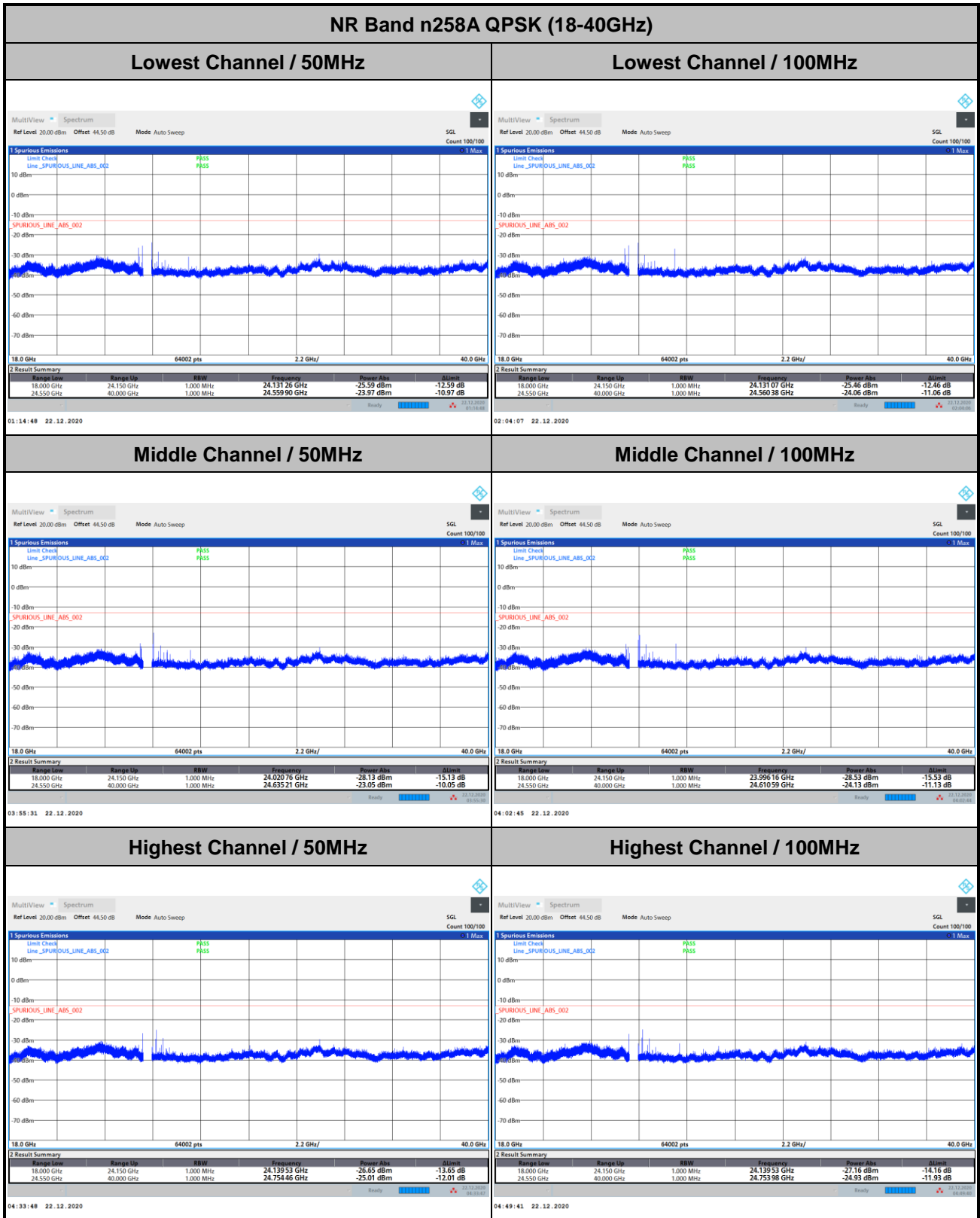
AG1 DFT-s-OFDM Module 1



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



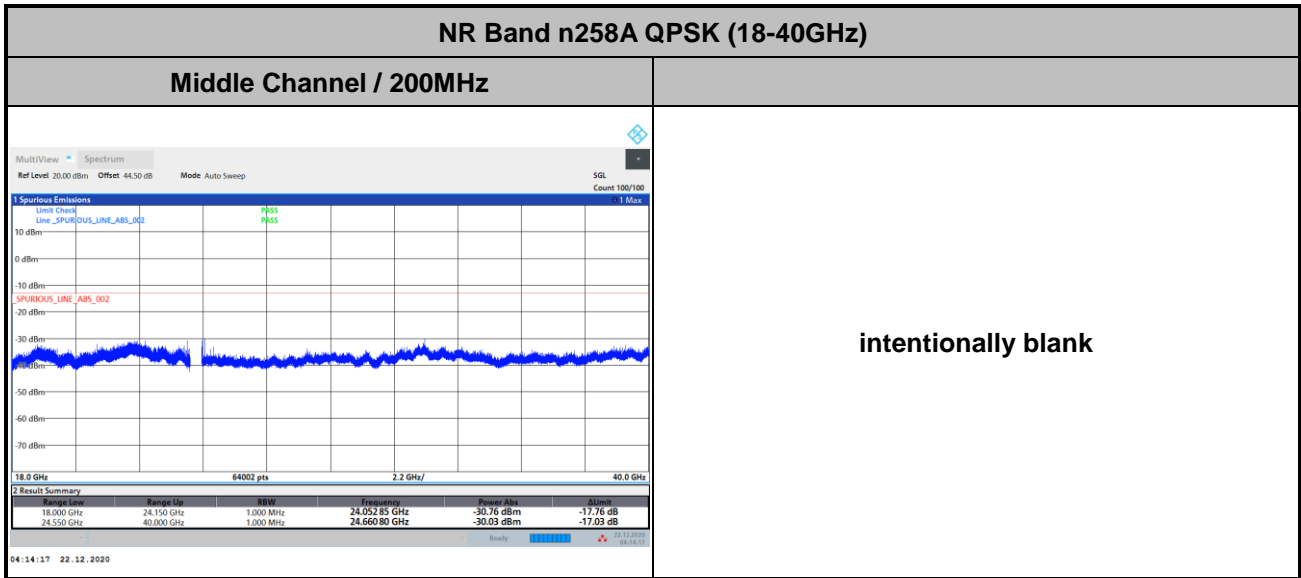
AG1 DFT-s-OFDM Module 1



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



AG1 DFT-s-OFDM Module 1



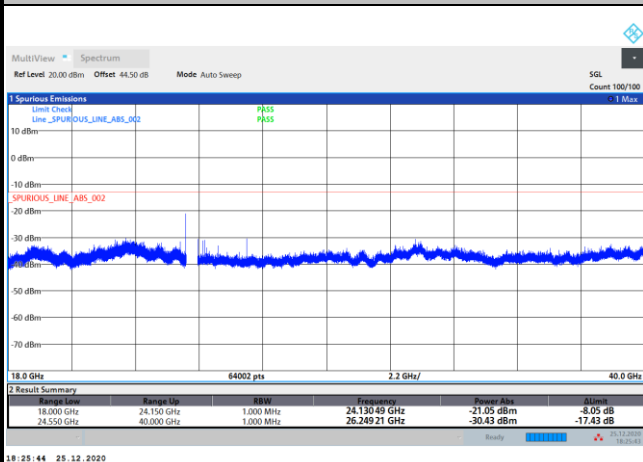
Remark: In band and out of band frequencies are omitted.



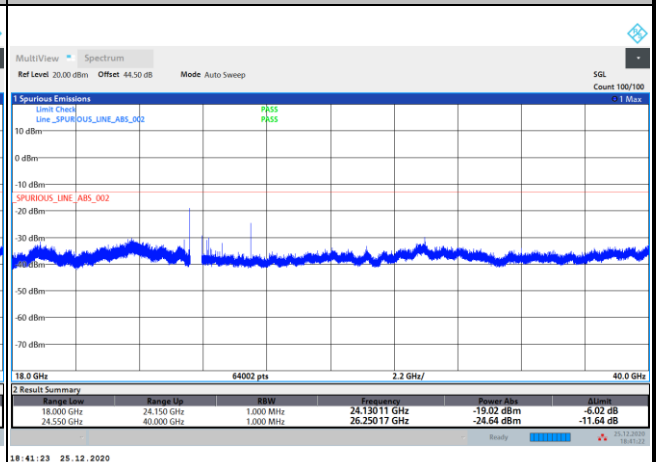
AG0+1 DFT-s-OFDM Module 1

NR Band n258A BPSK (18-40GHz)

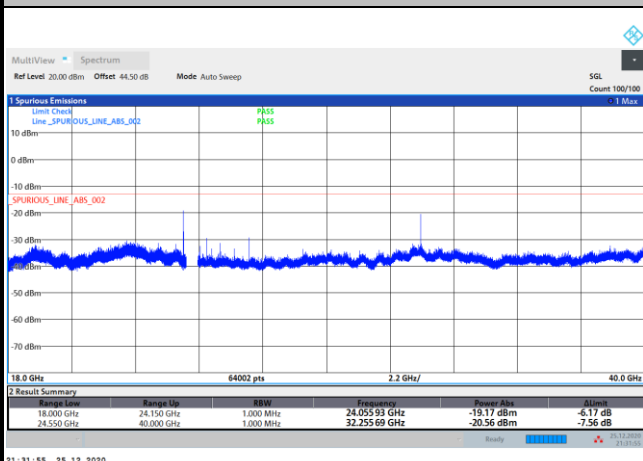
Lowest Channel / 50MHz



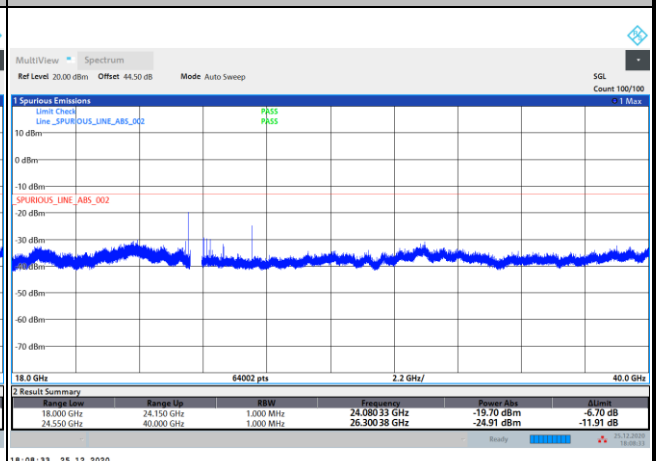
Lowest Channel / 100MHz



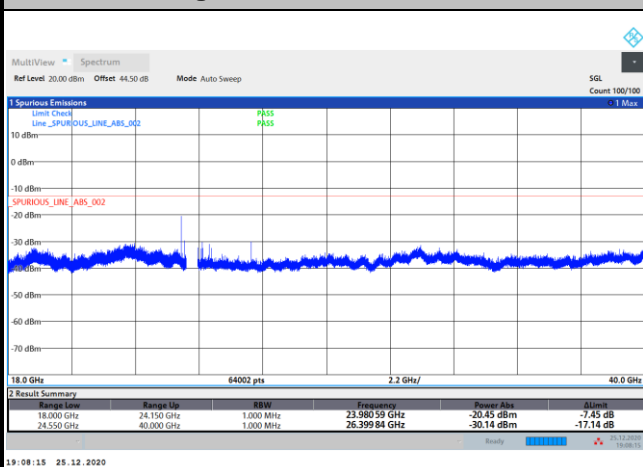
Middle Channel / 50MHz



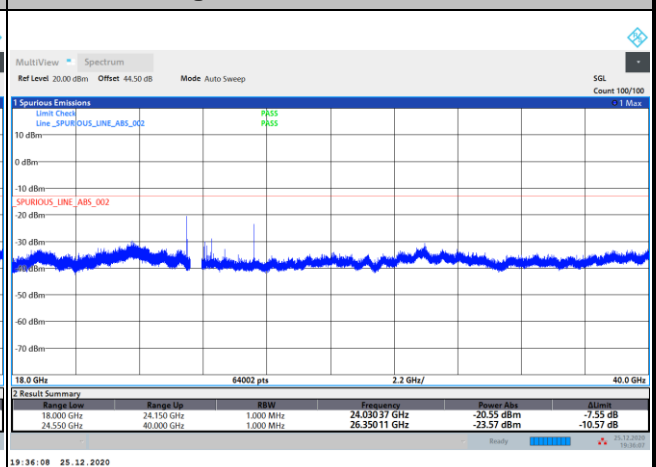
Middle Channel / 100MHz



Highest Channel / 50MHz



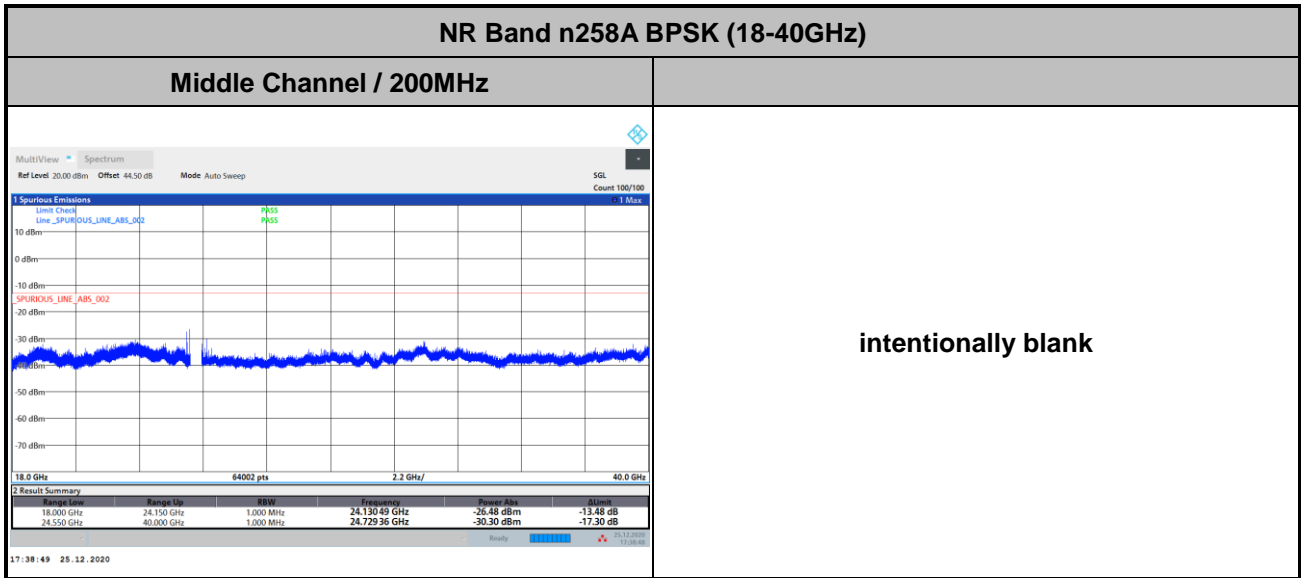
Highest Channel / 100MHz



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



AG0+1 DFT-s-OFDM Module 1



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

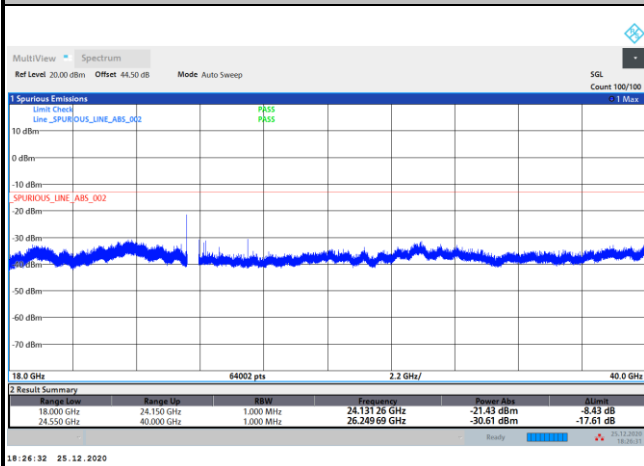




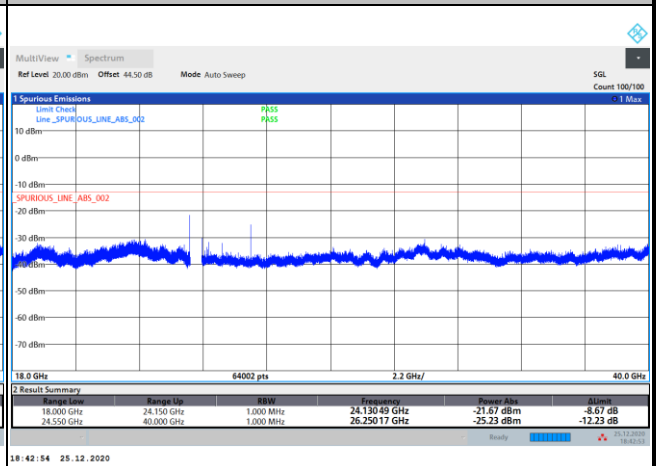
AG0+1 DFT-s-OFDM Module 1

NR Band n258A QPSK (18-40GHz)

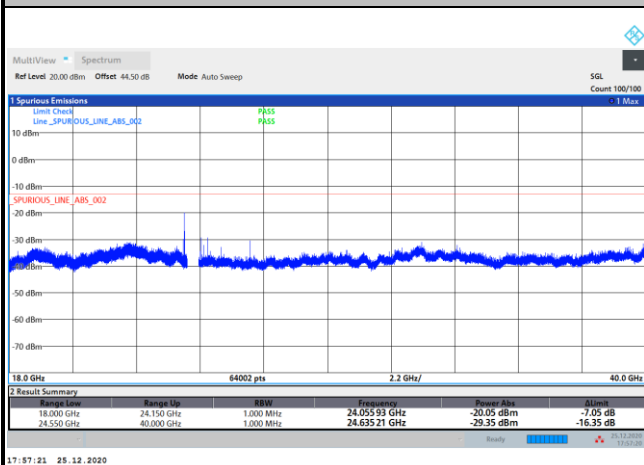
Lowest Channel / 50MHz



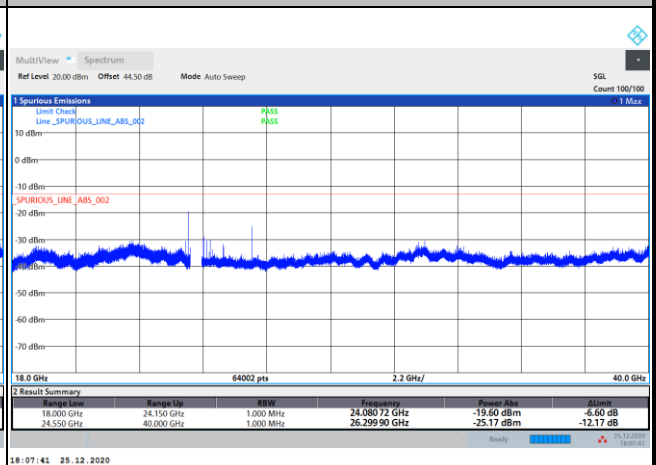
Lowest Channel / 100MHz



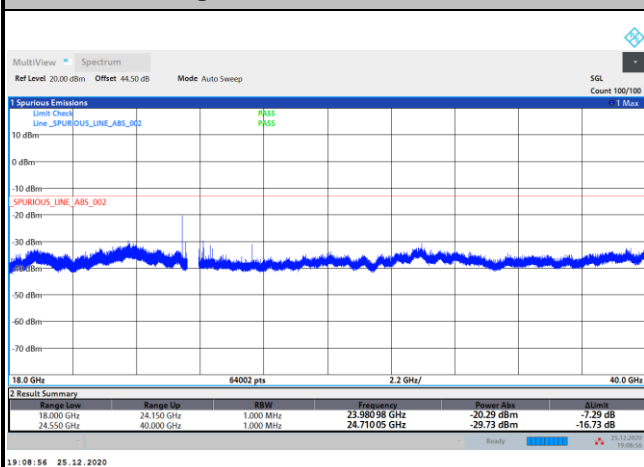
Middle Channel / 50MHz



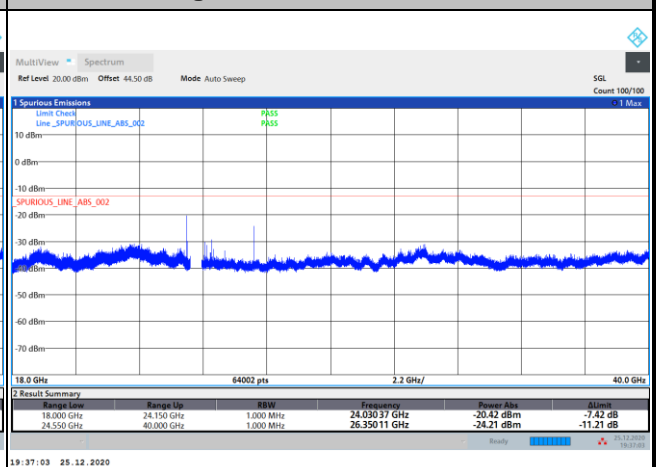
Middle Channel / 100MHz



Highest Channel / 50MHz



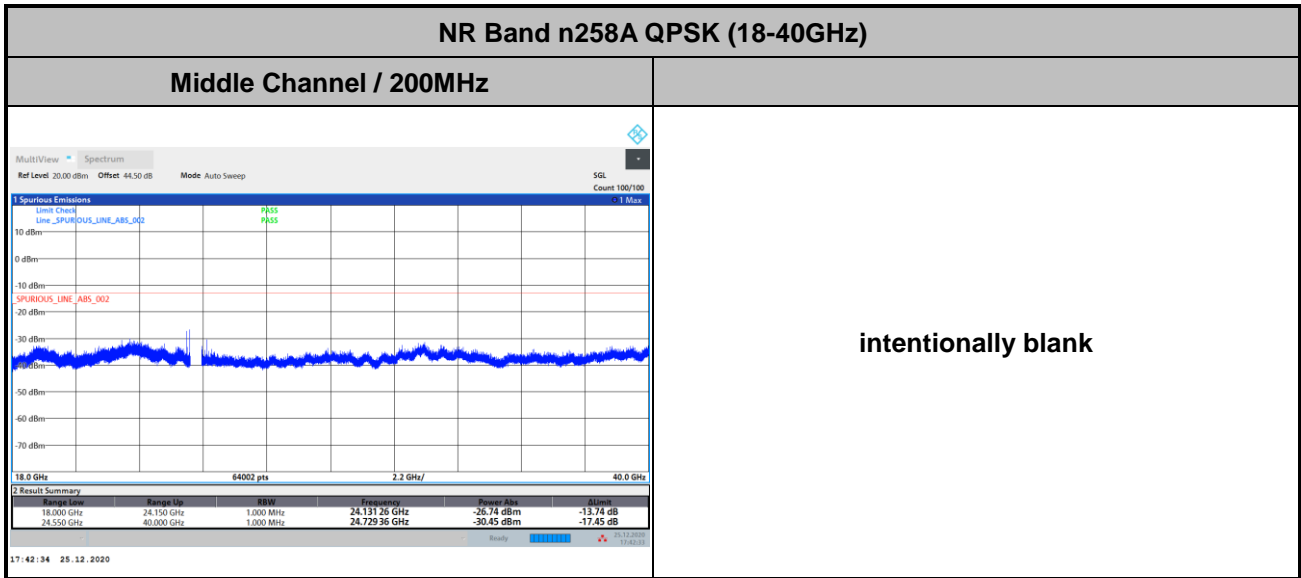
Highest Channel / 100MHz



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



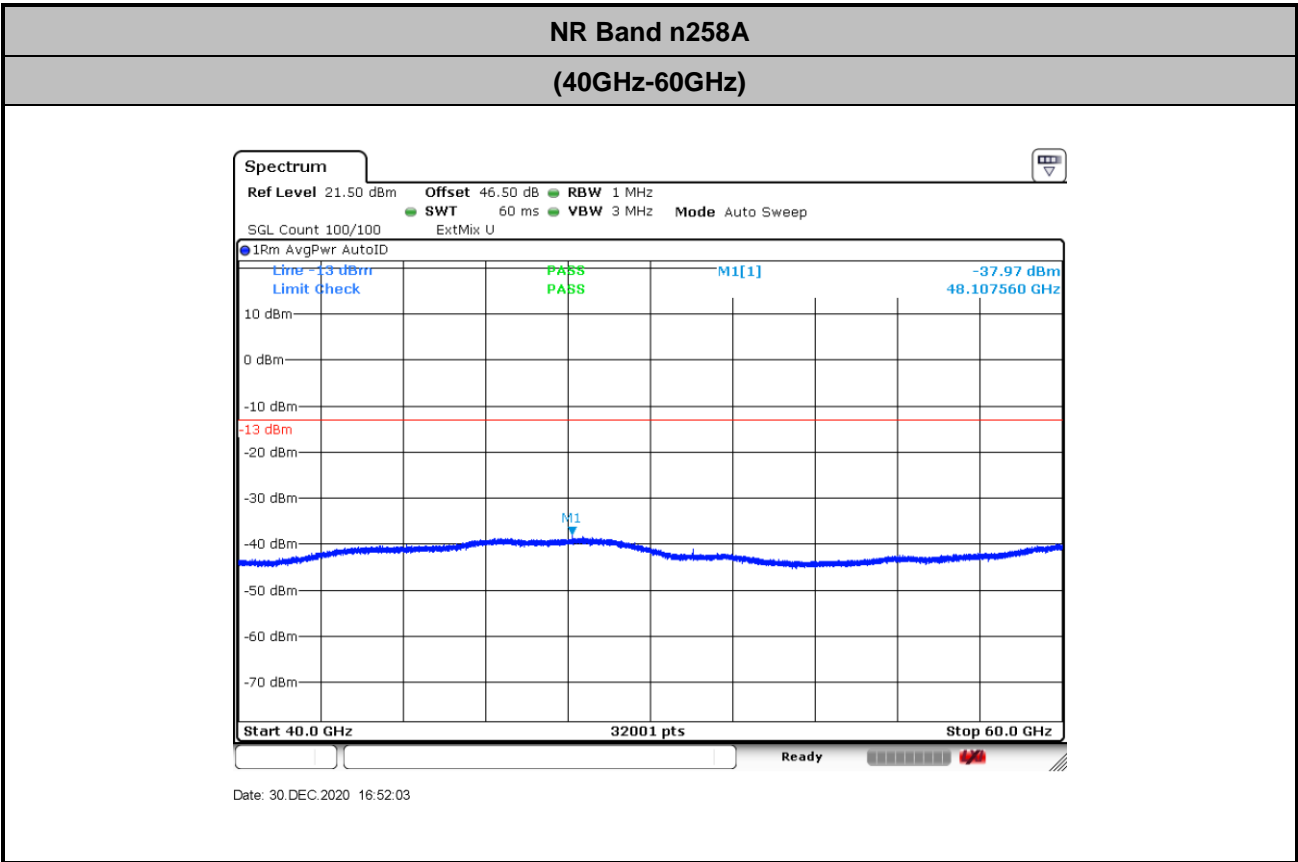
AG0+1 DFT-s-OFDM Module 1



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.

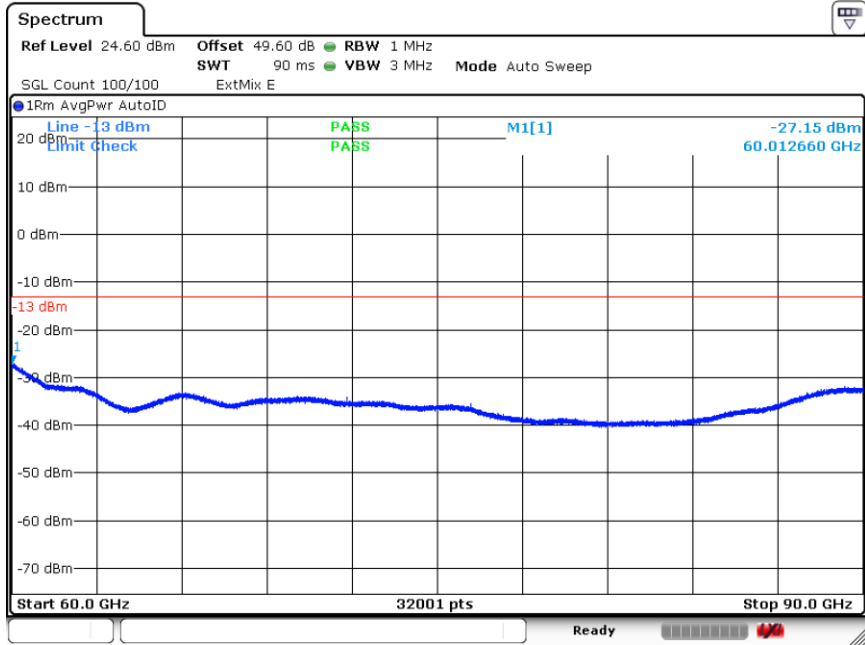


**Remark:** Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log(D) – 104.8  
 = 42.3 + 2 + 107 + 20log(1) – 104.8 = 46.5 (dB)



NR Band n258A

(60GHz-90GHz)



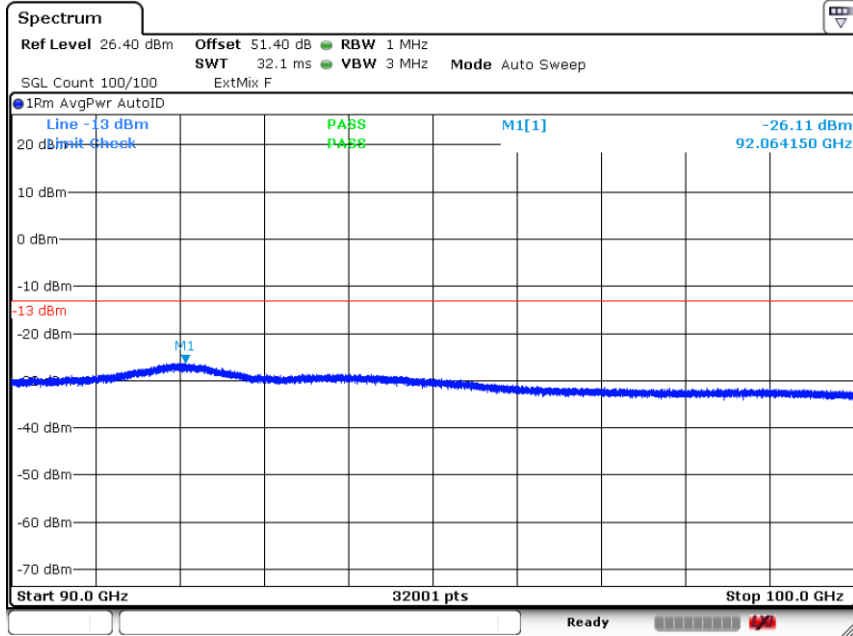
Date: 30 DEC.2020 17:09:47

**Remark:** Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log (D) – 104.8  
 = 45.4 + 2 + 107 + 20log(1) – 104.8 = 49.6 (dB)



NR Band n258A

(90GHz-100GHz)



Date: 30.DEC.2020 17:31:54

**Remark:** Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log (D) – 104.8  
= 47.2 + 2 + 107 + 20log(1) – 104.8 = 51.4 (dB)



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    | 24.35018332                    | -183.320        | 7.529           | Pass    |
| 40               | Normal Voltage    | 24.3500979                     | -97.900         | 4.021           |         |
| 30               | Normal Voltage    | 24.35004695                    | -46.950         | 1.928           |         |
| 20(Ref.)         | Normal Voltage    | 24.35                          | 0.000           | 0.000           |         |
| 10               | Normal Voltage    | 24.34996354                    | 36.460          | 1.497           |         |
| 0                | Normal Voltage    | 24.34994106                    | 58.940          | 2.421           |         |
| -10              | Normal Voltage    | 24.34991858                    | 81.420          | 3.344           |         |
| -20              | Normal Voltage    | 24.34989361                    | 106.390         | 4.369           |         |
| -30              | Normal Voltage    | 24.34988511                    | 114.890         | 4.718           |         |
| 20               | Maximum Voltage   | 24.3500005                     | -0.500          | 0.021           |         |
| 20               | Normal Voltage    | 24.349995                      | 5.000           | 0.205           |         |
| 20               | Battery End Point | 24.34999301                    | 6.990           | 0.287           |         |

Note:

1. Normal Voltage =7.74 V. ; Battery End Point (BEP) =7.2 V. ; Maximum Voltage =8.9 V.
2. The frequency fundamental emissions stay within the operation band.



# NR Band n258A Module 2

## Occupied Bandwidth

AG0

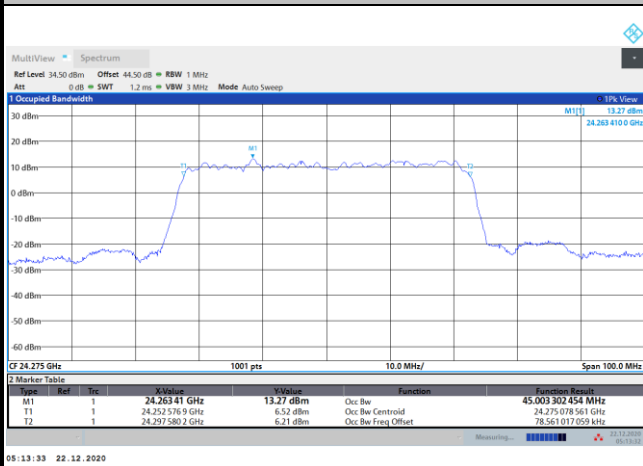
| Mode       | DFT-s-OFDM Module 2 NR Band n258A : 99%OBW(MHz) |       |       |       |        |       |       |       |        |        |        |        |
|------------|---|-------|-------|-------|--------|-------|-------|-------|--------|--------|--------|--------|
| BW         | 50MHz   |       |       |       | 100MHz |       |       |       | 200MHz |        |        |        |
| Mod.       | BPSK  | QPSK  | 16QAM | 64QAM | BPSK   | QPSK  | 16QAM | 64QAM | BPSK   | QPSK   | 16QAM  | 64QAM  |
| Lowest CH  | 45.00   | 45.51 | 45.14 | 45.32 | 89.96  | 90.20 | 90.18 | 90.38 | -      | -      | -      | -      |
| Middle CH  | 45.03   | 45.51 | 45.14 | 45.32 | 90.11  | 90.25 | 90.29 | 90.51 | 189.05 | 189.01 | 188.73 | 189.14 |
| Highest CH | 45.25   | 45.48 | 45.21 | 45.39 | 89.91  | 90.20 | 89.90 | 90.07 | -      | -      | -      | -      |



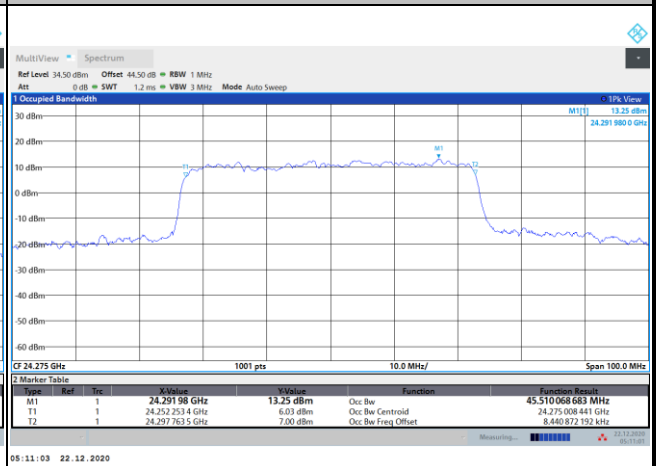
DFT-s-OFDM Module 2

NR Band n258A

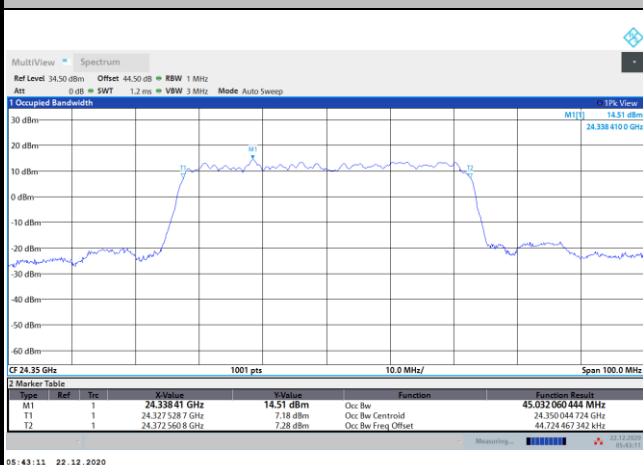
Lowest Channel / 50MHz / BPSK



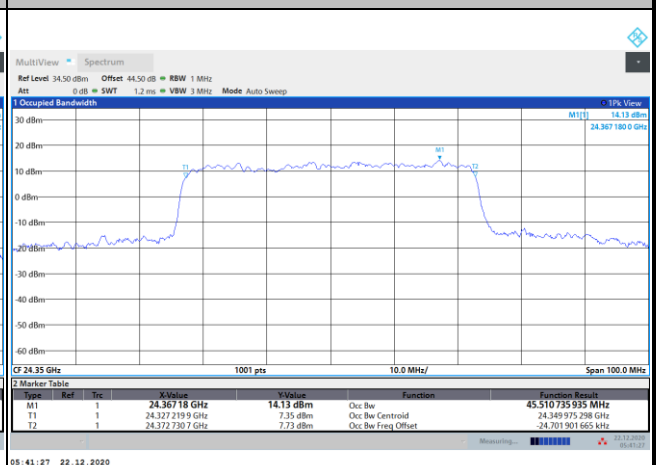
Lowest Channel / 50MHz / QPSK



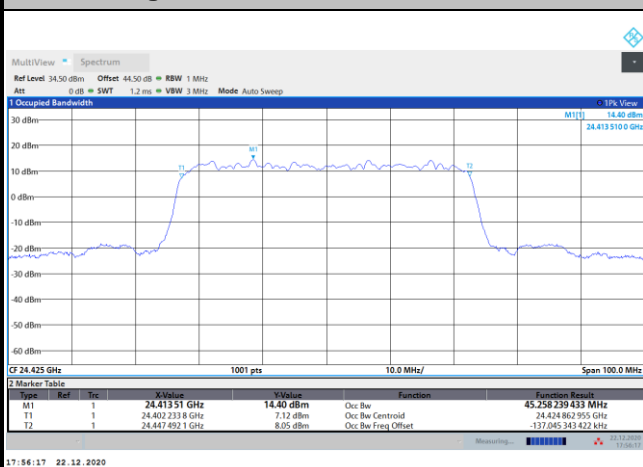
Middle Channel / 50MHz / BPSK



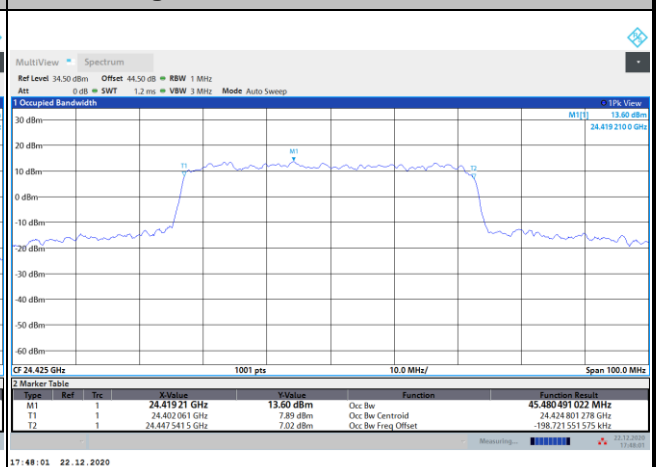
Middle Channel / 50MHz / QPSK



Highest Channel / 50MHz / BPSK



Highest Channel / 50MHz / QPSK



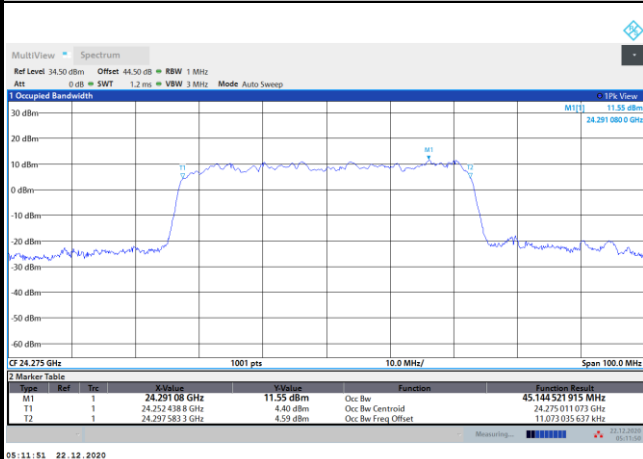




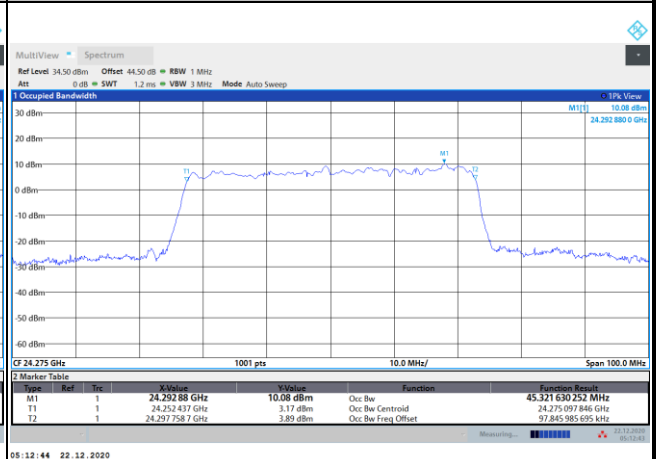
DFT-s-OFDM Module 2

NR Band n258A

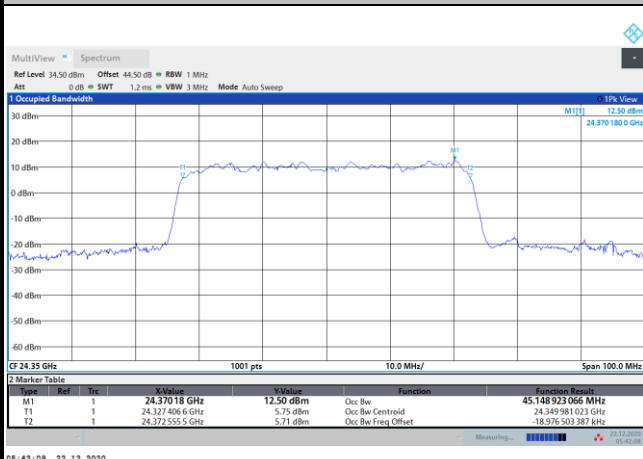
Lowest Channel / 50MHz / 16QAM



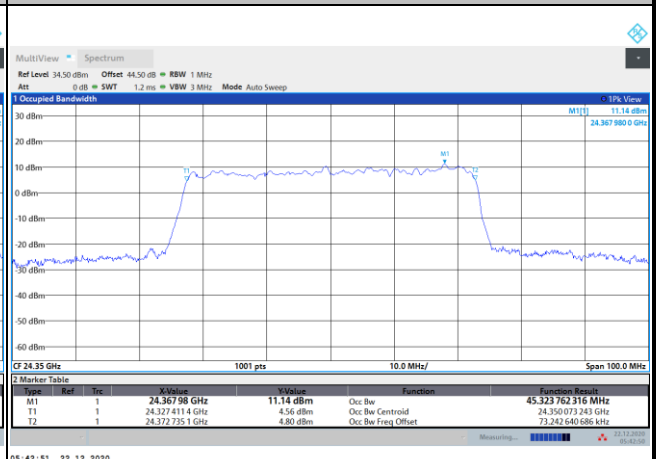
Lowest Channel / 50MHz / 64QAM



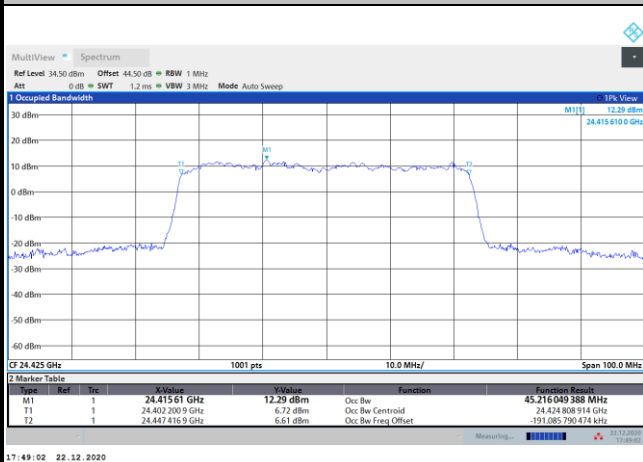
Middle Channel / 50MHz / 16QAM



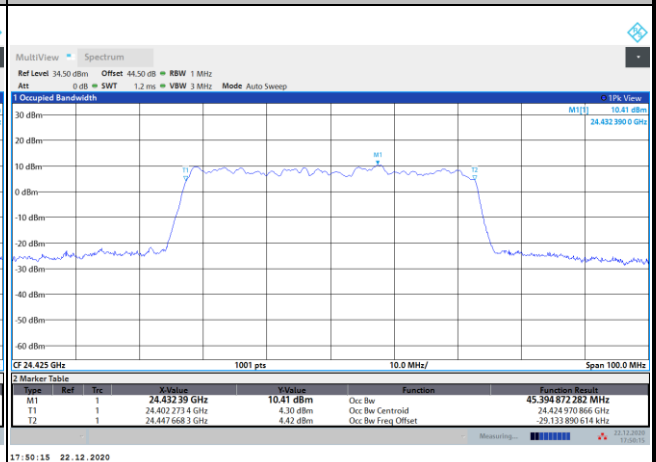
Middle Channel / 50MHz / 64QAM



Highest Channel / 50MHz / 16QAM



Highest Channel / 50MHz / 64QAM

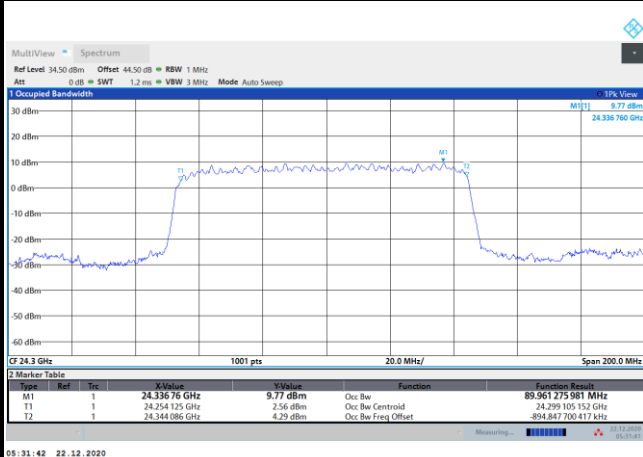




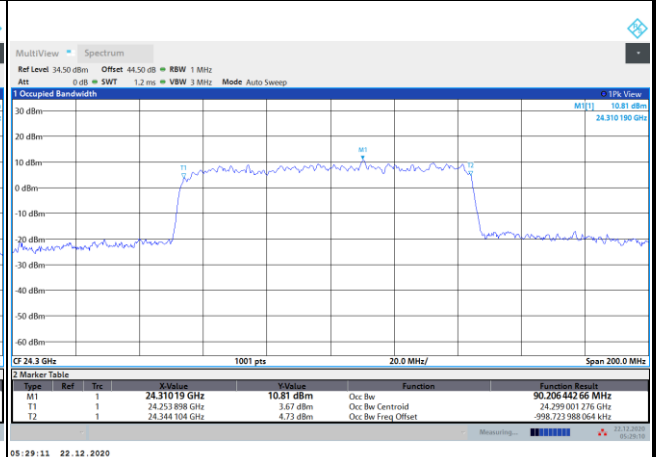
DFT-s-OFDM Module 2

NR Band n258A

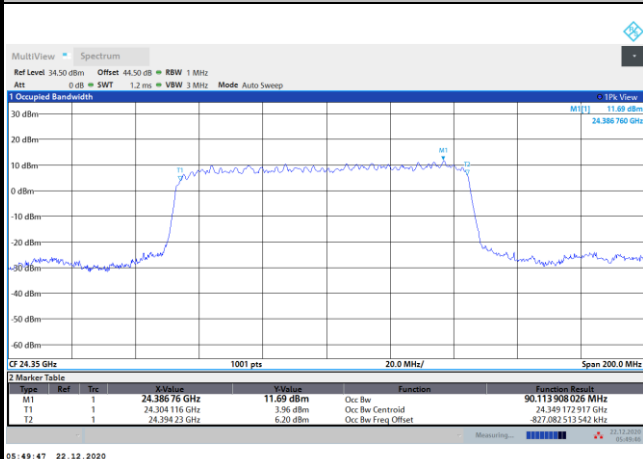
Lowest Channel / 100MHz / BPSK



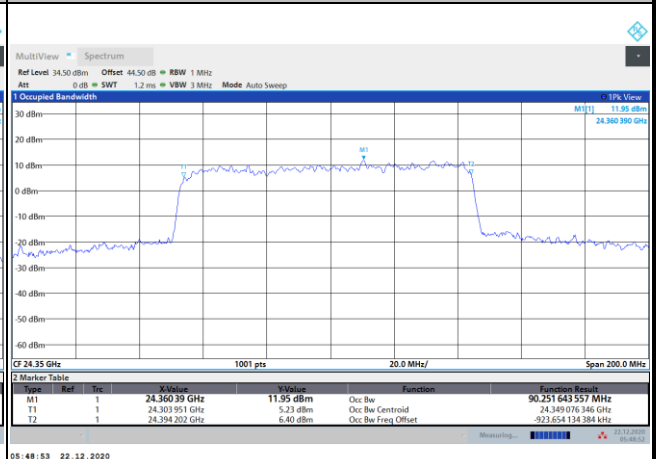
Lowest Channel / 100MHz / QPSK



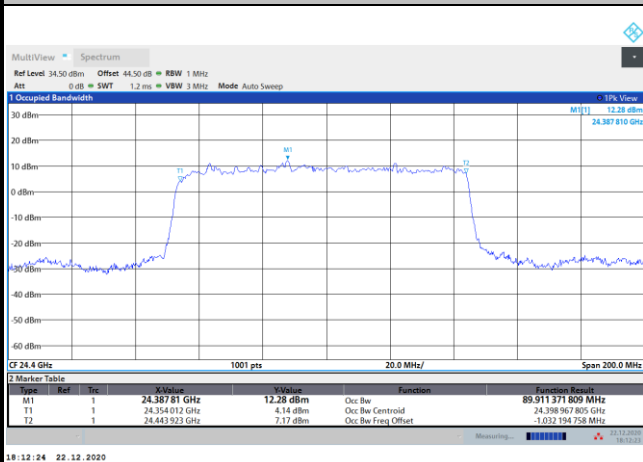
Middle Channel / 100MHz / BPSK



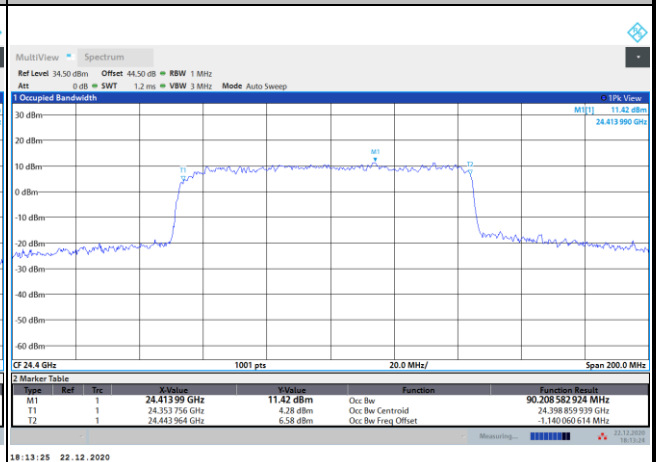
Middle Channel / 100MHz / QPSK



Highest Channel / 100MHz / BPSK



Highest Channel / 100MHz / QPSK

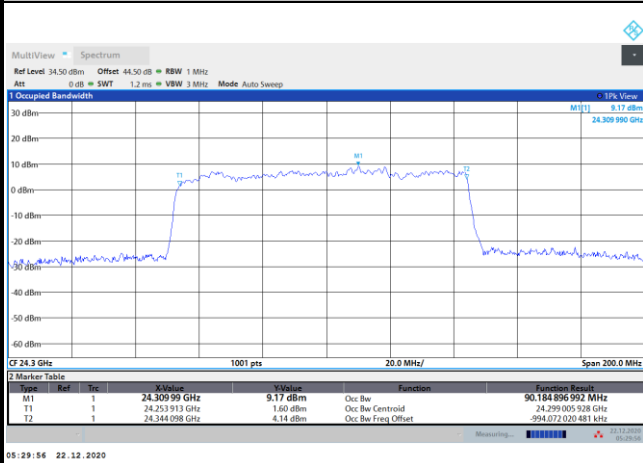




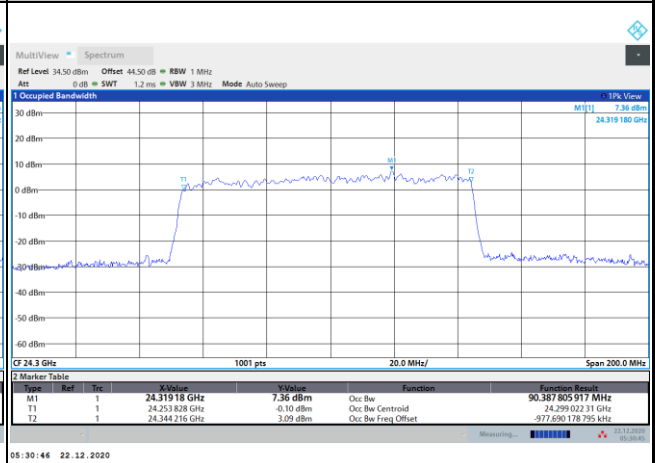
DFT-s-OFDM Module 2

NR Band n258A

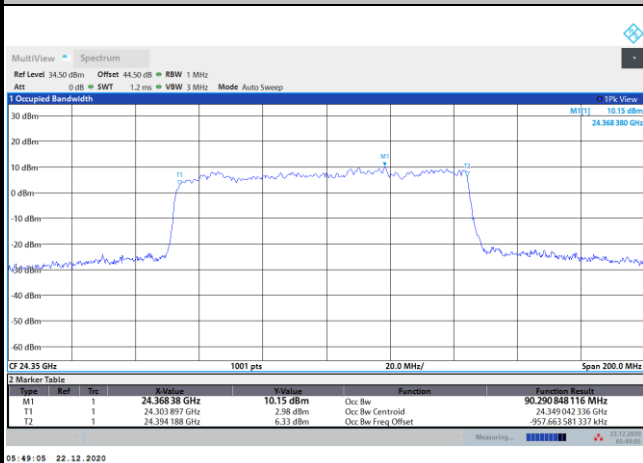
Lowest Channel / 100MHz / 16QAM



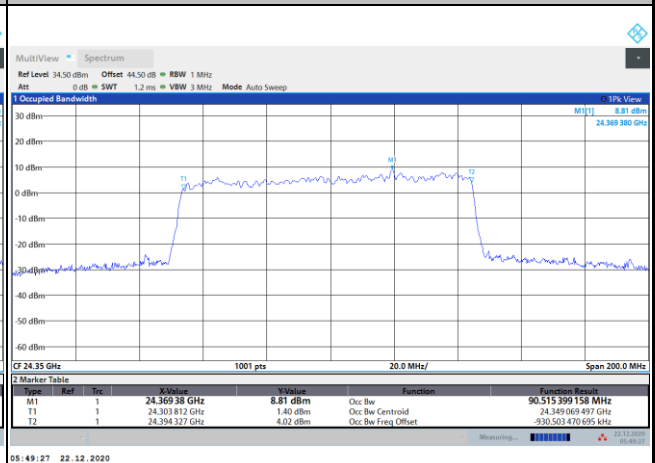
Lowest Channel / 100MHz / 64QAM



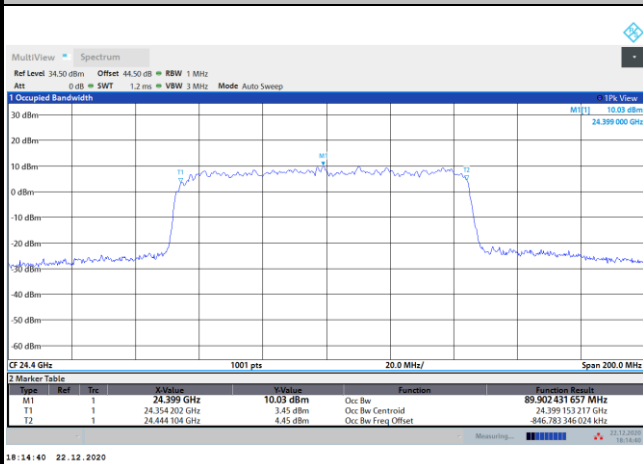
Middle Channel / 100MHz / 16QAM



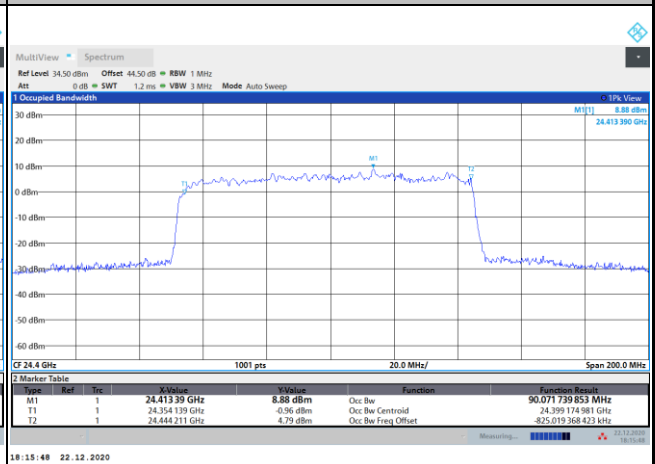
Middle Channel / 100MHz / 64QAM



Highest Channel / 100MHz / 16QAM



Highest Channel / 100MHz / 64QAM

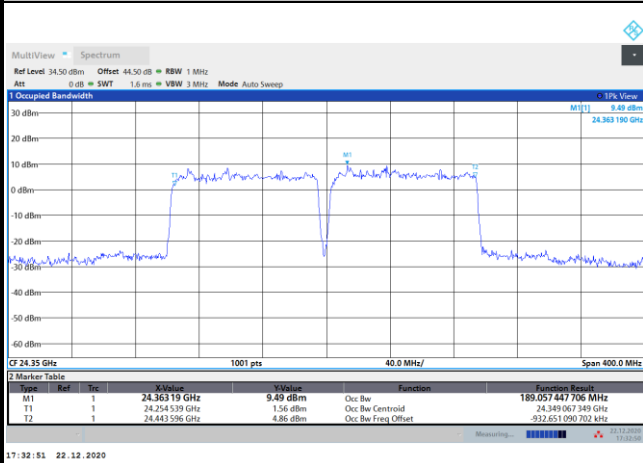




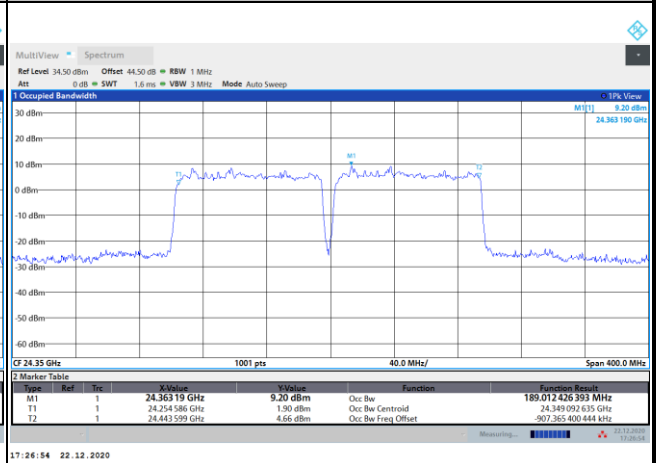
DFT-s-OFDM Module 2

NR Band n258A

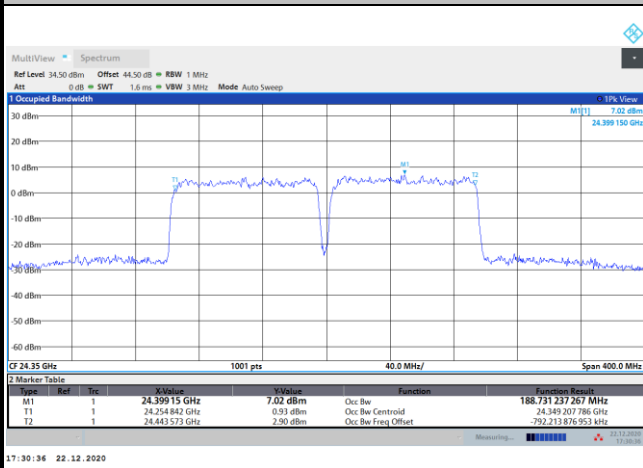
Middle Channel / 200MHz / BPSK



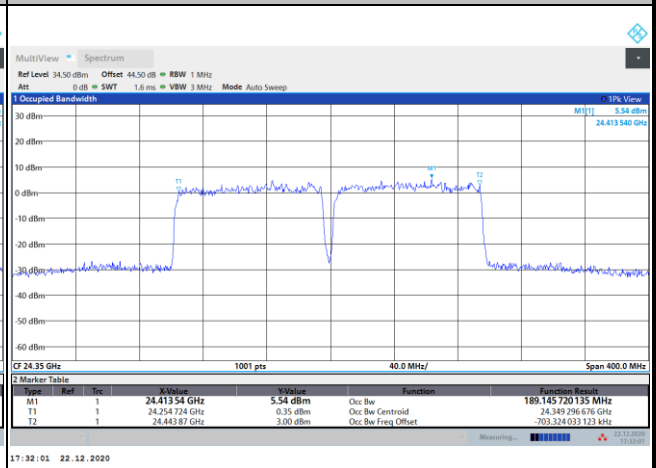
Middle Channel / 200MHz / QPSK



Middle Channel / 200MHz / 16QAM



Middle Channel / 200MHz / 64QAM





AG1

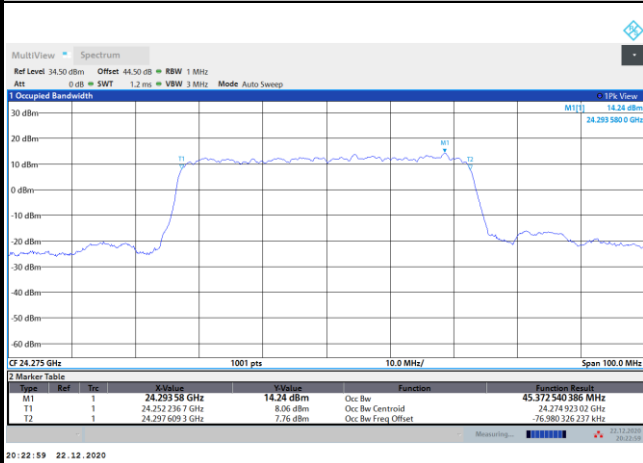
| Mode       | DFT-s-OFDM Module 2 NR Band n258A : 99%OBW(MHz) |       |       |       |        |       |       |       |        |        |        |        |
|------------|---|-------|-------|-------|--------|-------|-------|-------|--------|--------|--------|--------|
| BW         | 50MHz   |       |       |       | 100MHz |       |       |       | 200MHz |        |        |        |
| Mod.       | BPSK  | QPSK  | 16QAM | 64QAM | BPSK   | QPSK  | 16QAM | 64QAM | BPSK   | QPSK   | 16QAM  | 64QAM  |
| Lowest CH  | 45.37   | 45.35 | 45.16 | 45.26 | 90.00  | 90.17 | 90.62 | 90.13 | -      | -      | -      | -      |
| Middle CH  | 45.41   | 45.26 | 45.36 | 45.22 | 90.15  | 90.28 | 90.77 | 90.33 | 188.72 | 188.84 | 189.52 | 188.66 |
| Highest CH | 45.44   | 45.27 | 45.34 | 45.22 | 89.87  | 90.02 | 90.49 | 89.98 | -      | -      | -      | -      |



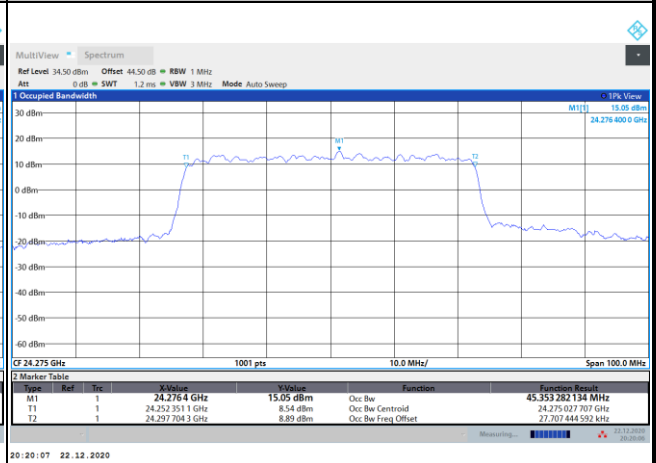
DFT-s-OFDM Module 2

NR Band n258A

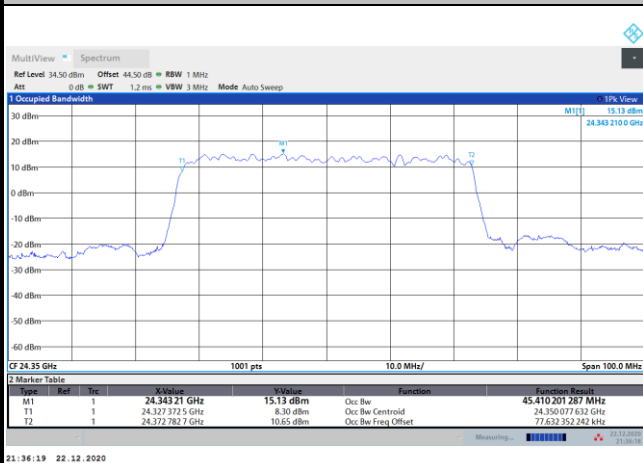
Lowest Channel / 50MHz / BPSK



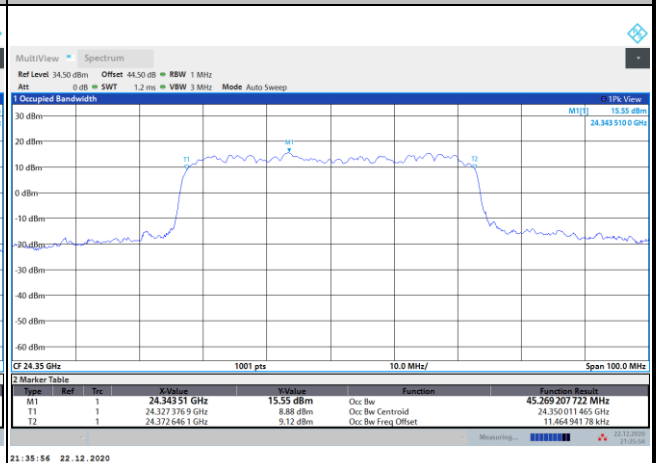
Lowest Channel / 50MHz / QPSK



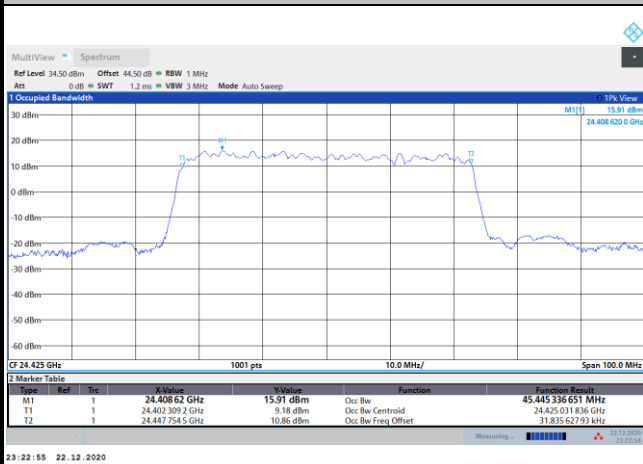
Middle Channel / 50MHz / BPSK



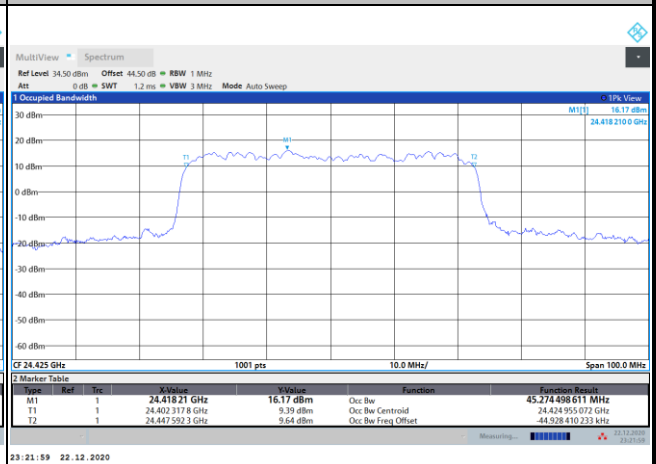
Middle Channel / 50MHz / QPSK



Highest Channel / 50MHz / BPSK



Highest Channel / 50MHz / QPSK

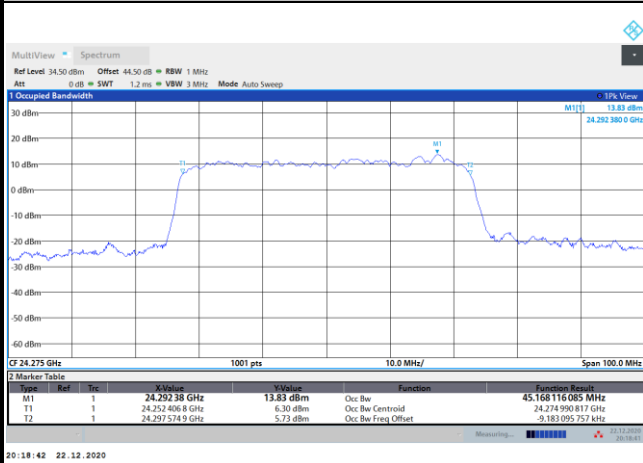




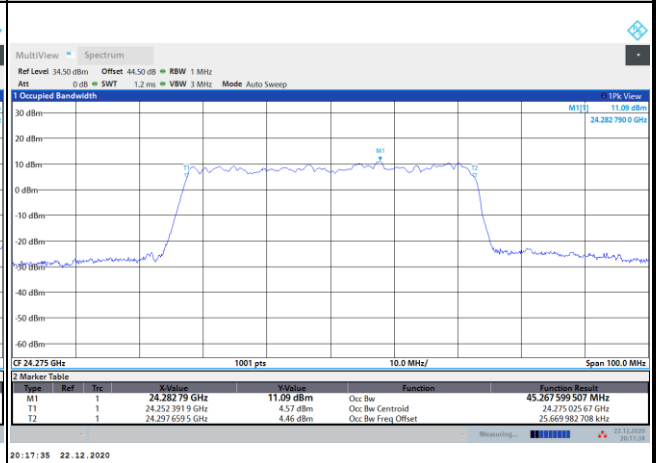
DFT-s-OFDM Module 2

NR Band n258A

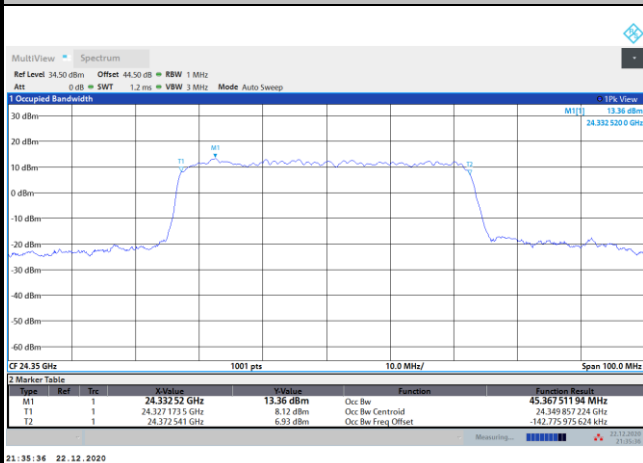
Lowest Channel / 50MHz / 16QAM



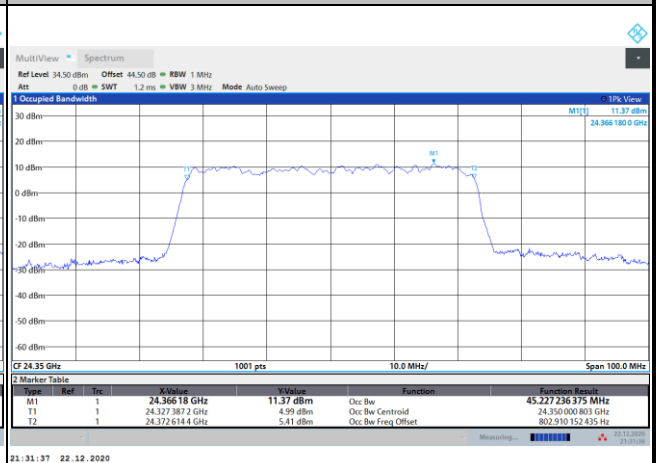
Lowest Channel / 50MHz / 64QAM



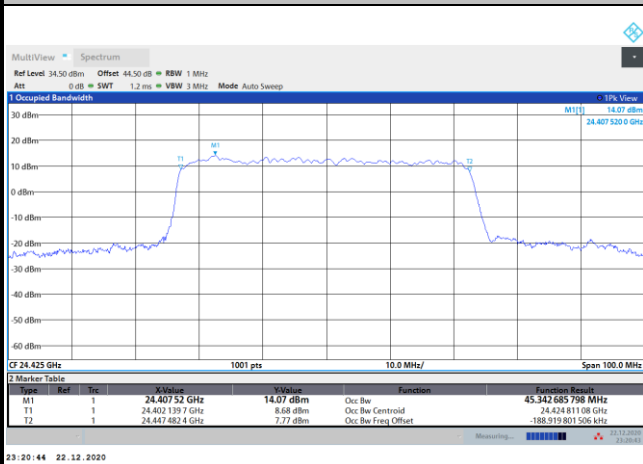
Middle Channel / 50MHz / 16QAM



Middle Channel / 50MHz / 64QAM



Highest Channel / 50MHz / 16QAM



Highest Channel / 50MHz / 64QAM

