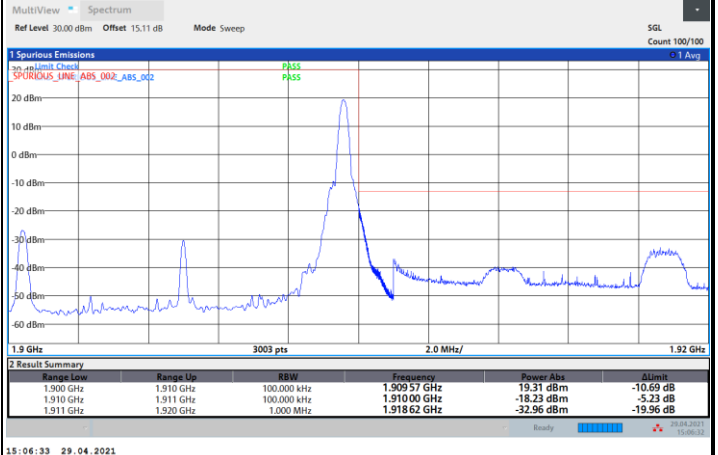
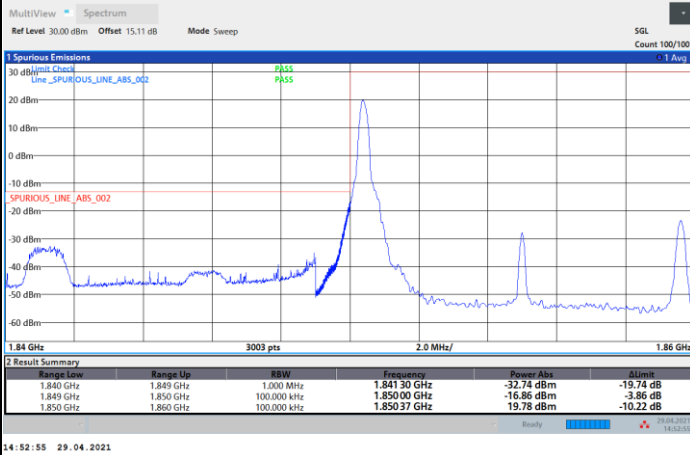




FR1 n2 / 10MHz / DFT-s-OFDM / 64QAM

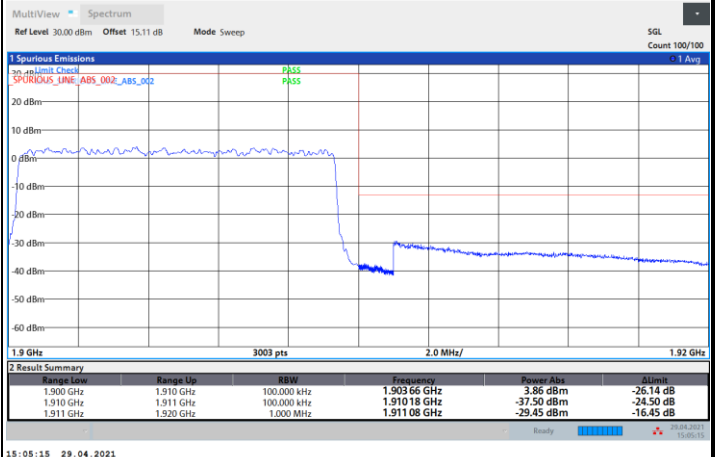
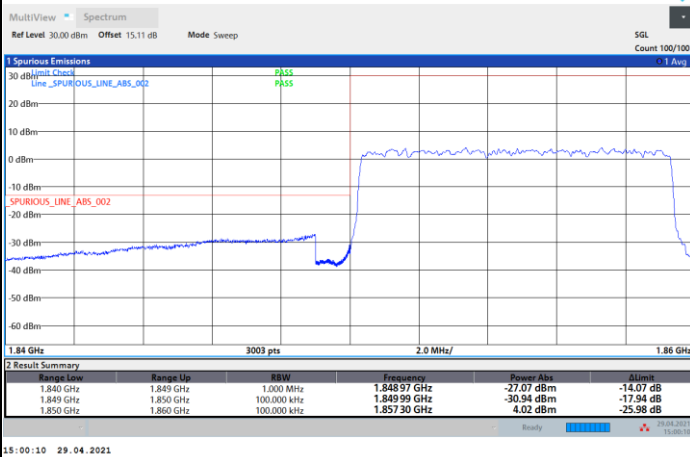
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

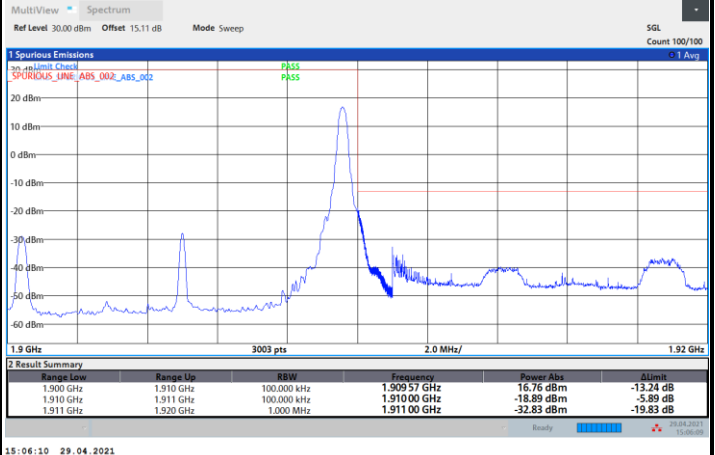
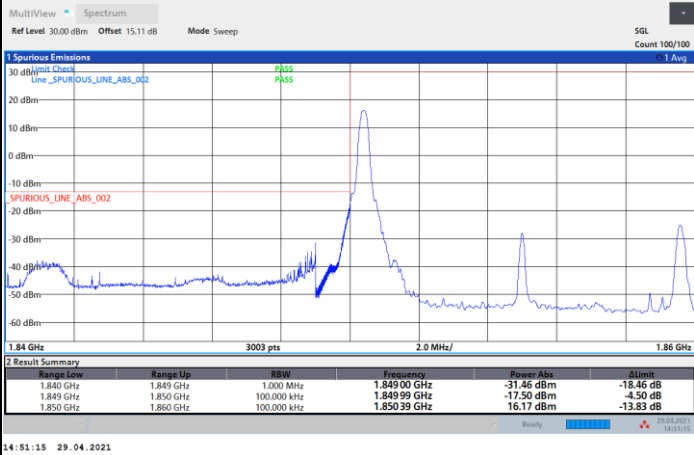




FR1 n2 / 10MHz / DFT-s-OFDM / 256QAM

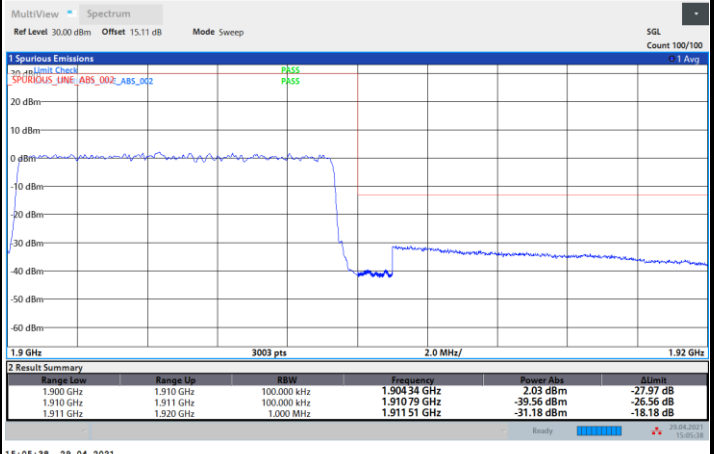
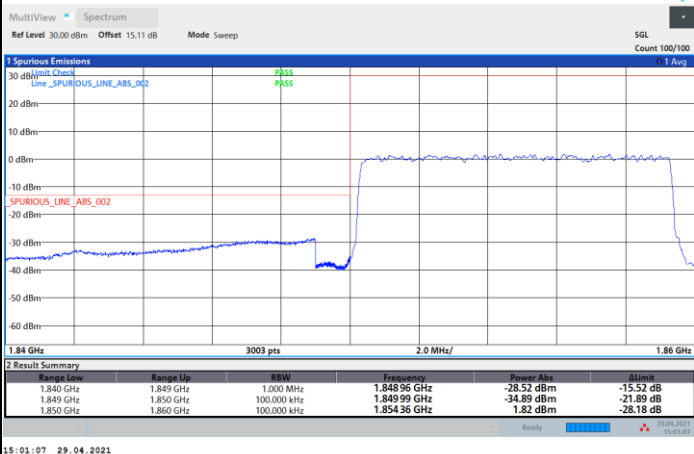
Lowest Band Edge / 1RB0

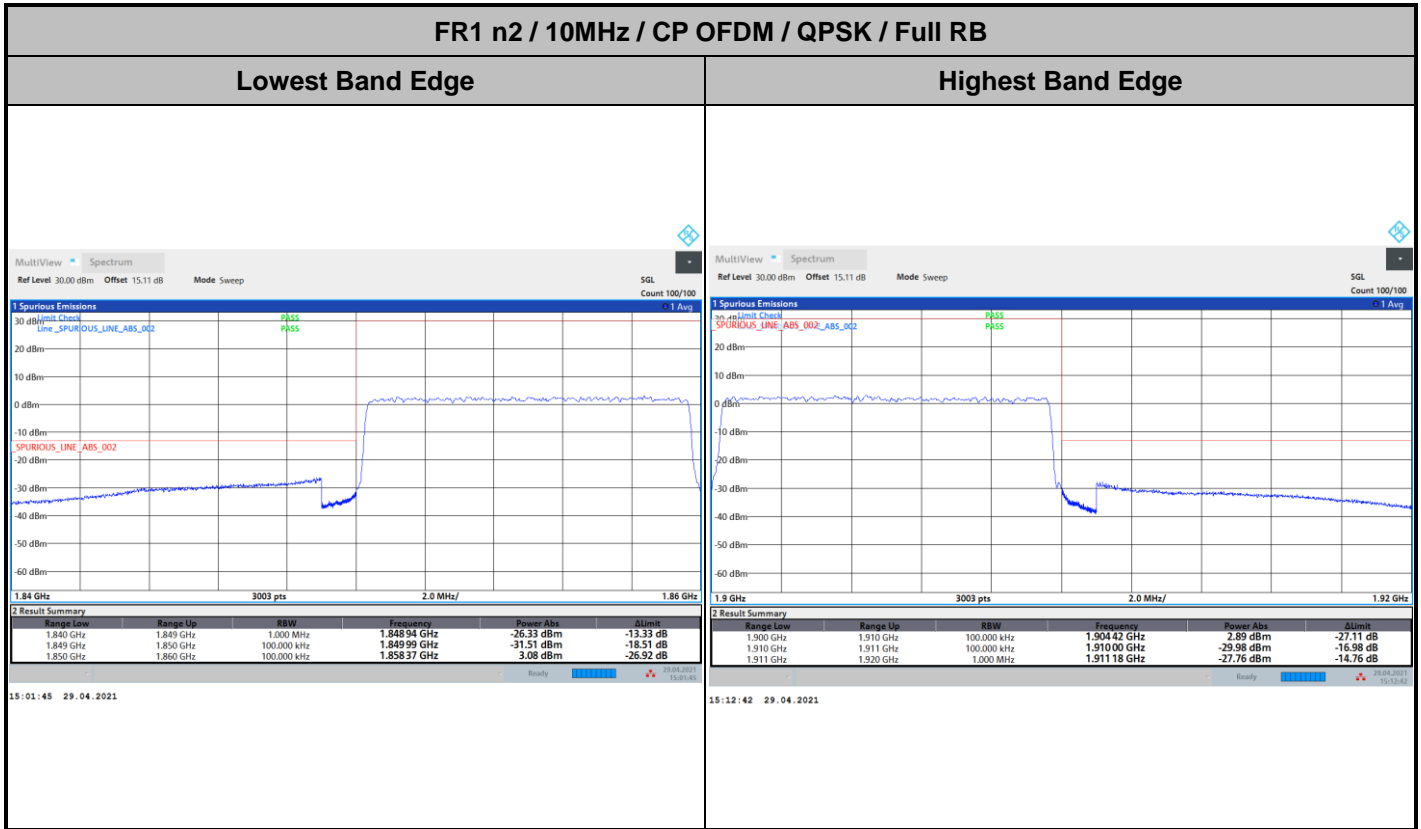
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB



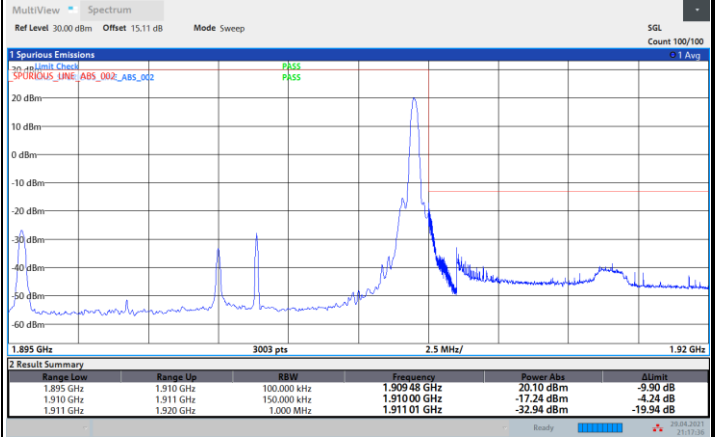
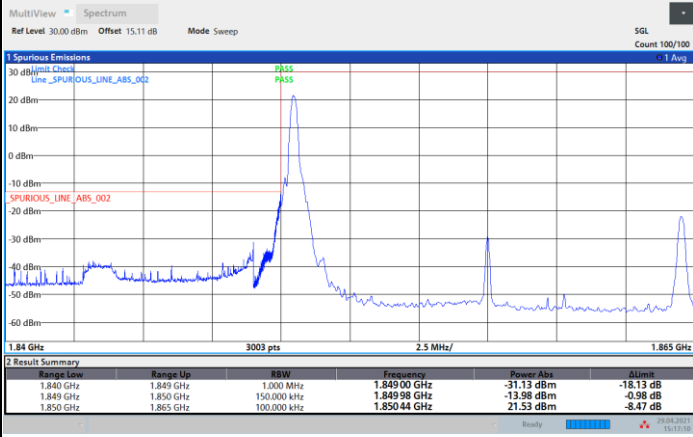




FR1 n2 / 15MHz / DFT-s-OFDM / PI/2 BPSK

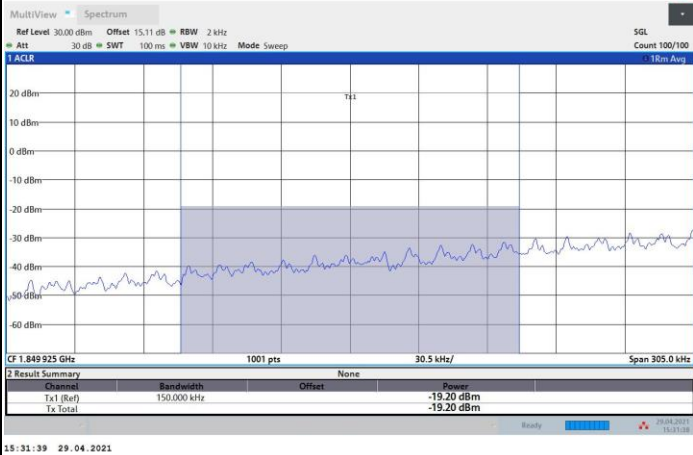
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Channel power -13 dBm > -19.20 dBm (Pass)

N/A

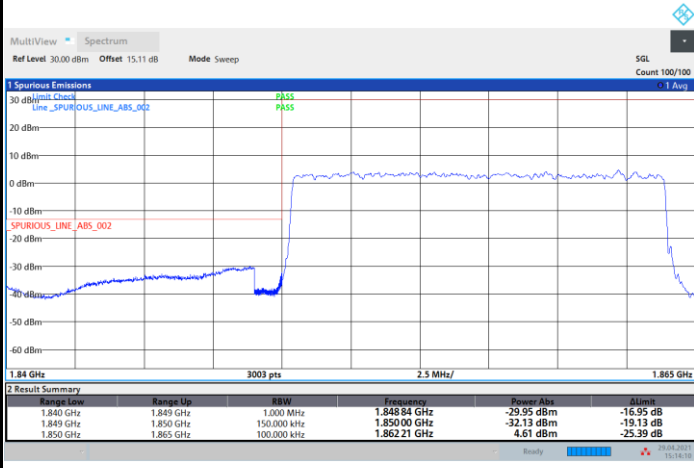




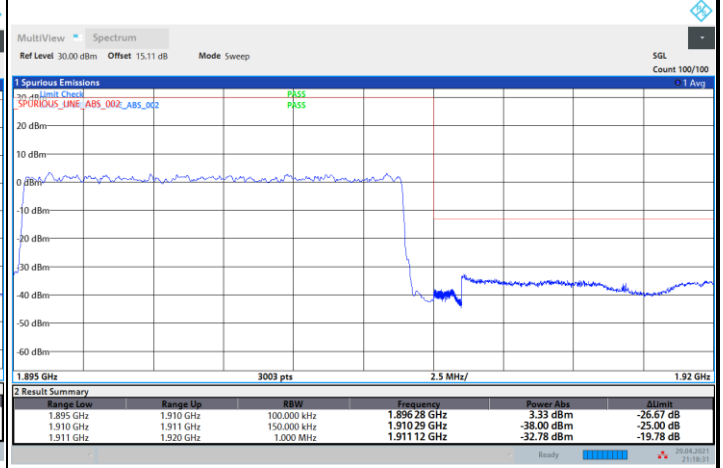
FR1 n2 / 15MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



15:14:11 29.04.2021



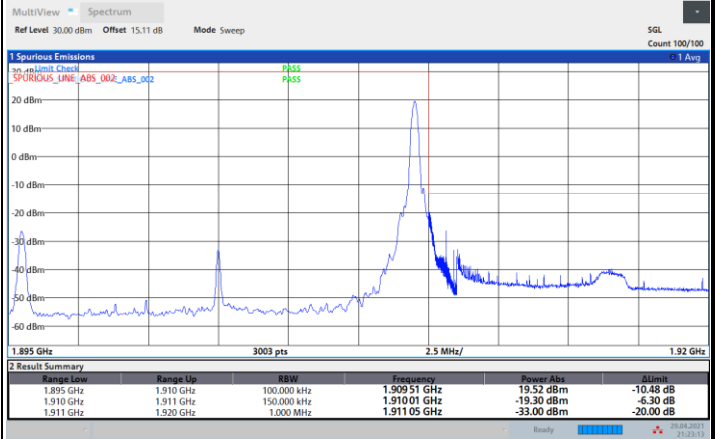
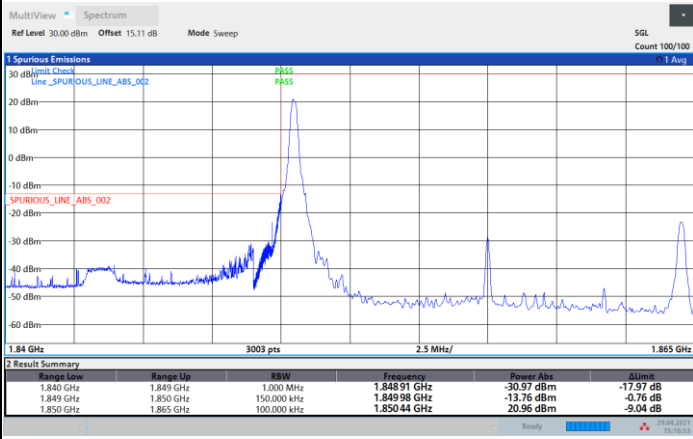
21:18:31 29.04.2021



FR1 n2 / 15MHz / DFT-s-OFDM / QPSK

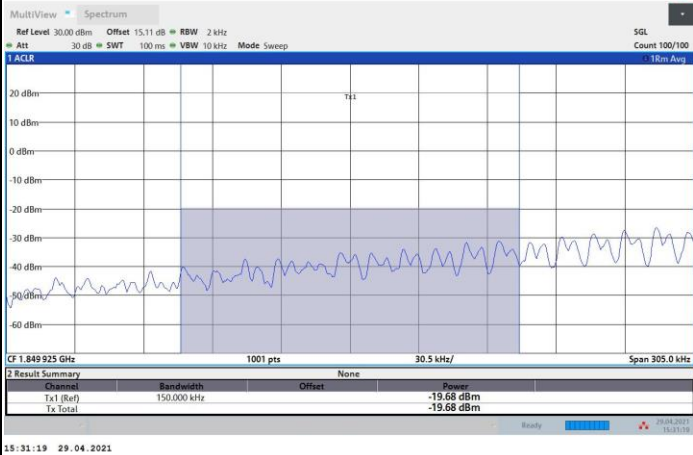
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Channel power -13 dBm > -19.68 dBm (Pass)

N/A

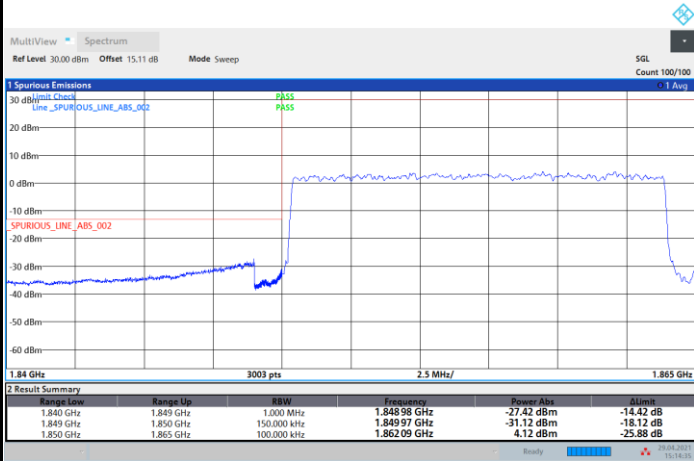




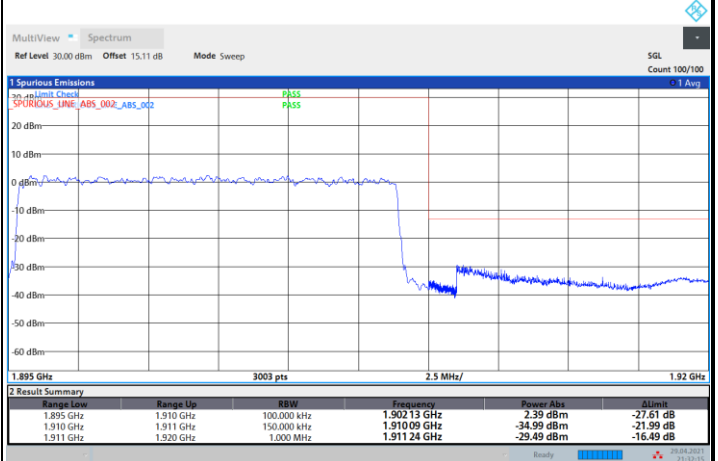
FR1 n2 / 15MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



15:14:36 29.04.2021



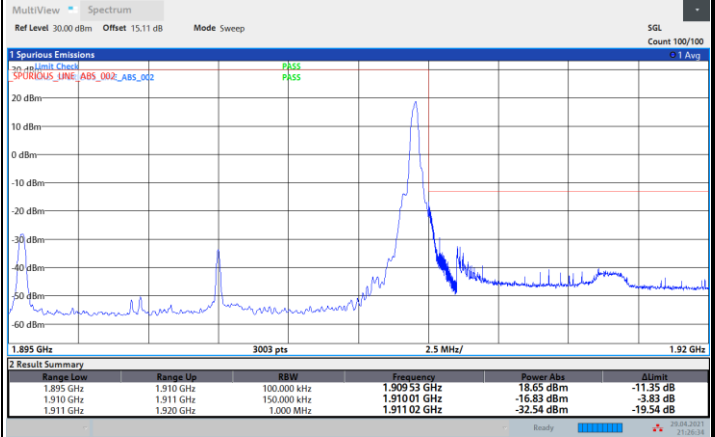
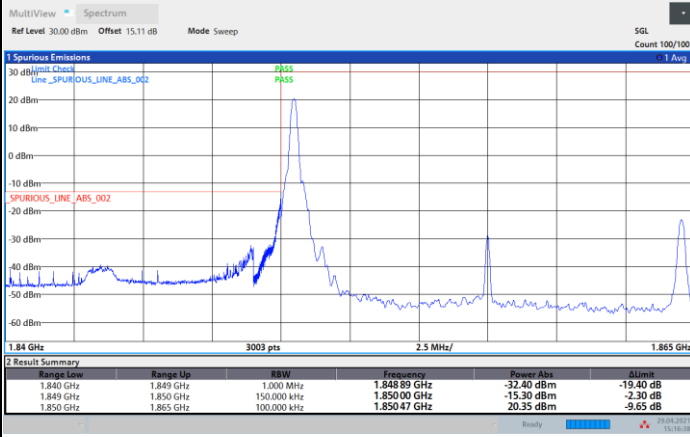
21:32:15 29.04.2021



FR1 n2 / 15MHz / DFT-s-OFDM / 16QAM

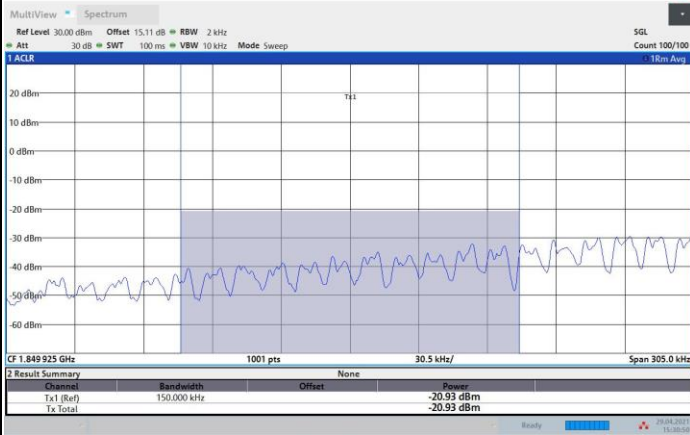
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Channel power -13 dBm > -20.93 dBm (Pass)

N/A

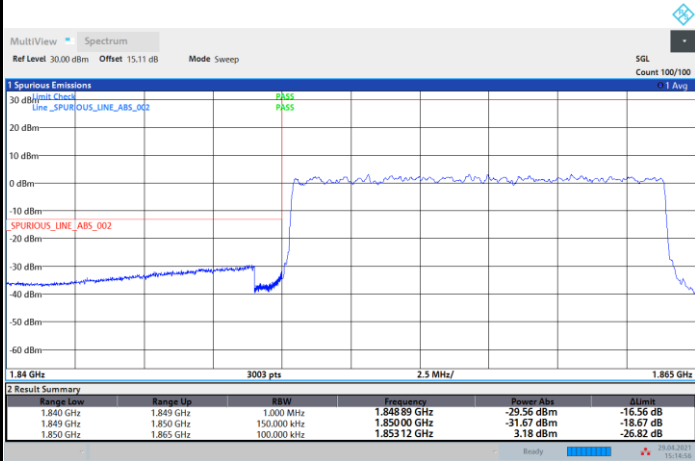




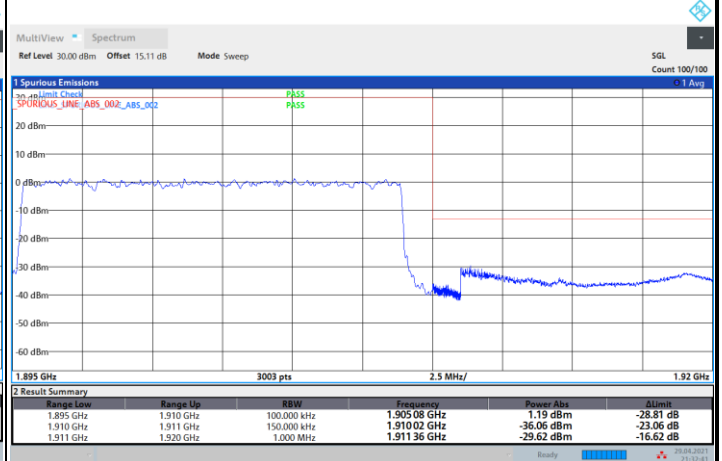
FR1 n2 / 15MHz / DFT-s-OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



15:14:57 29.04.2021



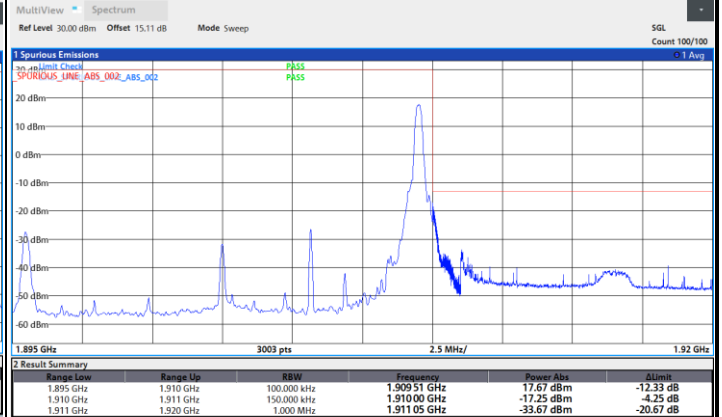
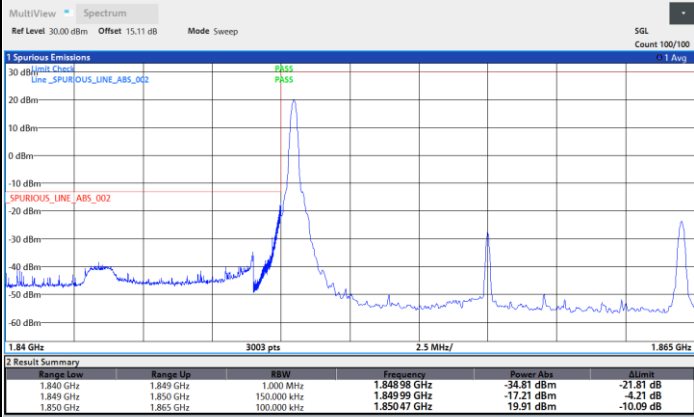
21:32:42 29.04.2021



FR1 n2 / 15MHz / DFT-s-OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

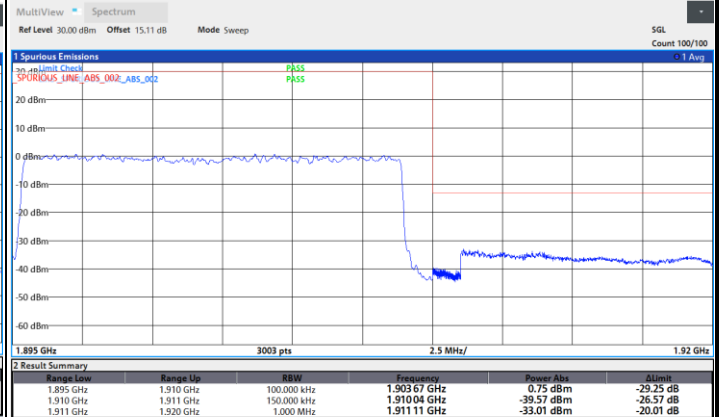
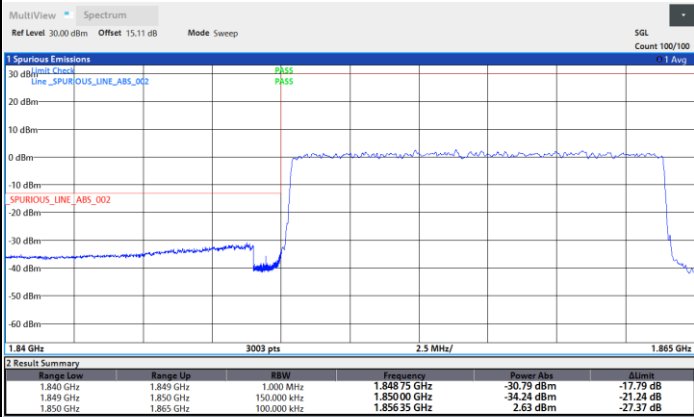


15:16:20 29.04.2021

21:29:29 29.04.2021

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



15:15:13 29.04.2021

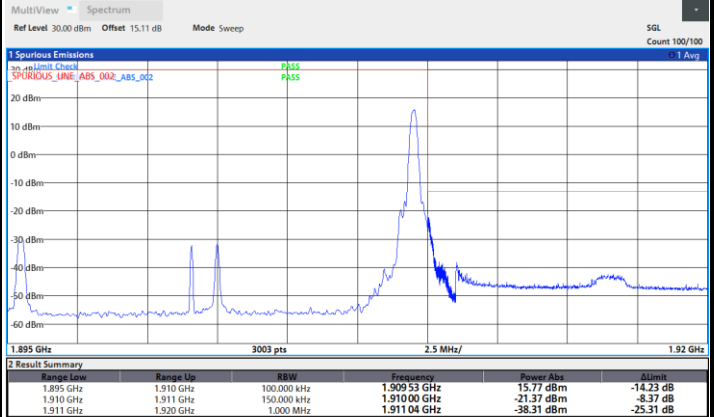
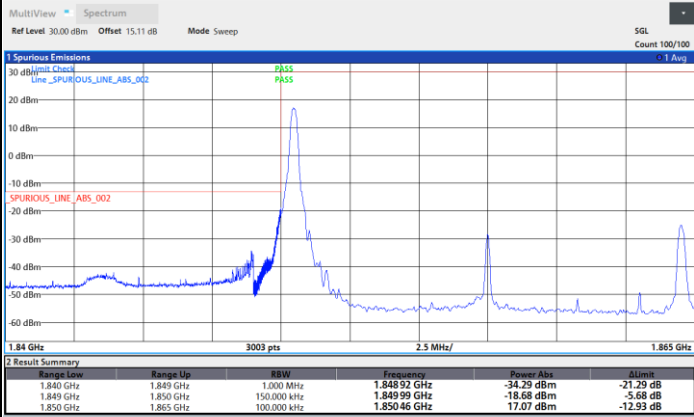
21:33:09 29.04.2021



FR1 n2 / 15MHz / DFT-s-OFDM / 256QAM

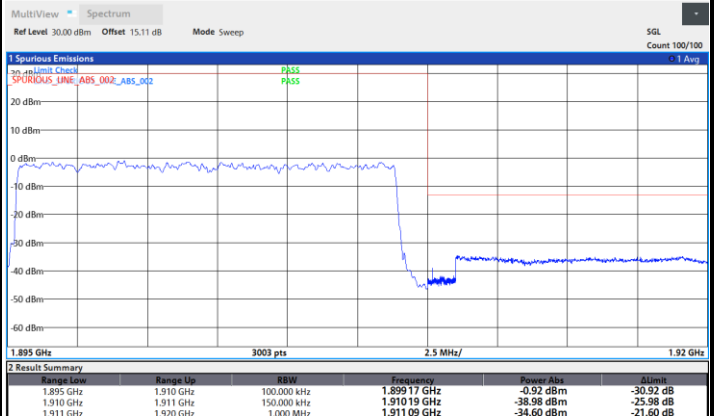
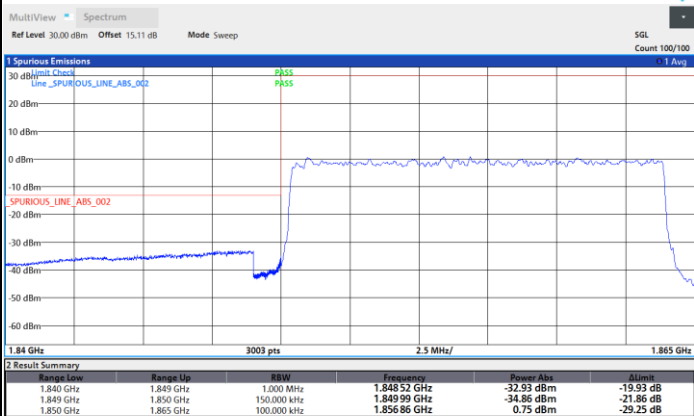
Lowest Band Edge / 1RB0

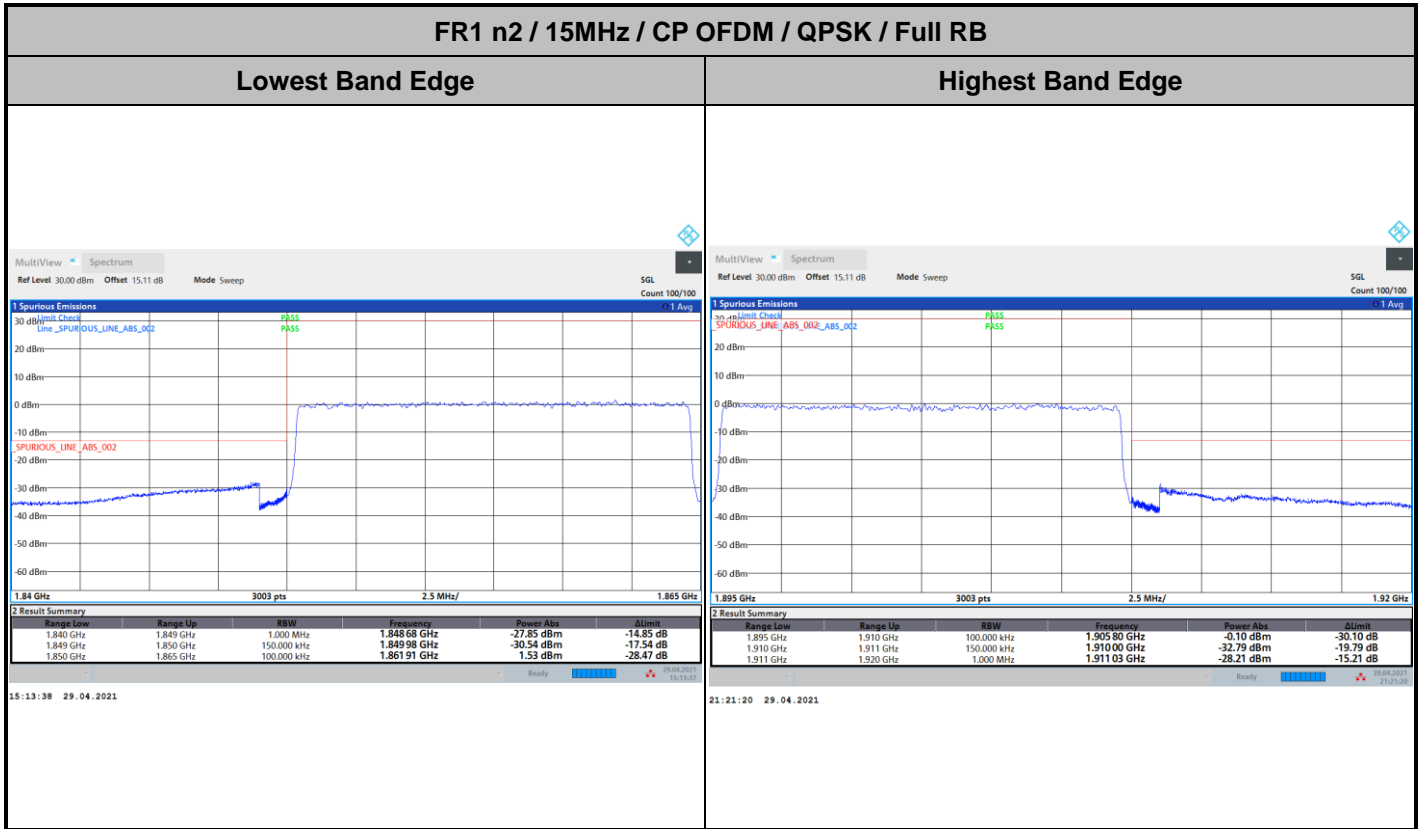
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB



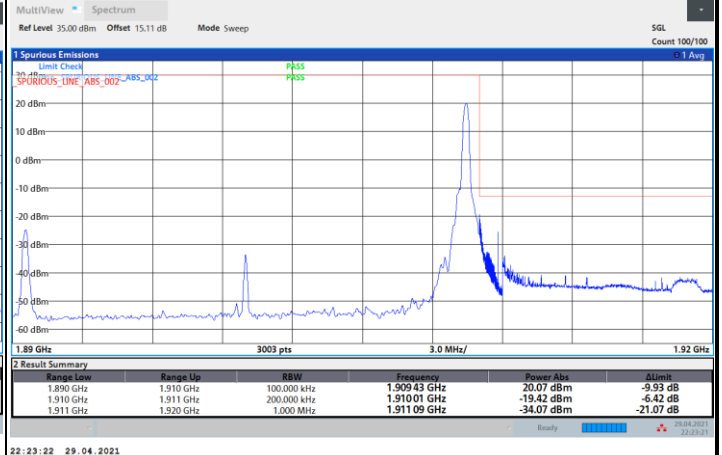
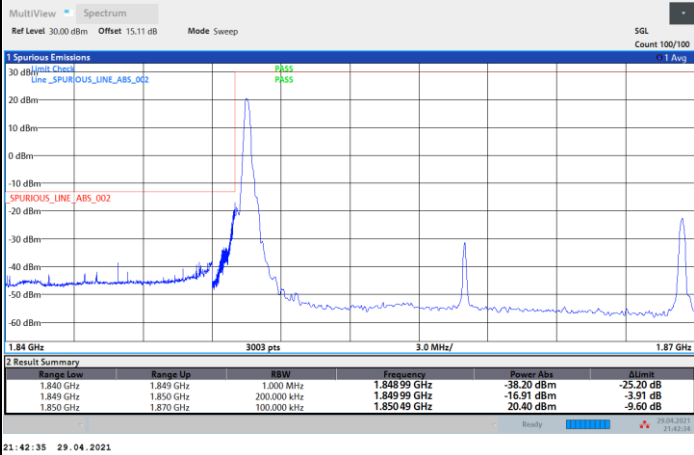




FR1 n2 / 20MHz / DFT-s-OFDM / PI/2 BPSK

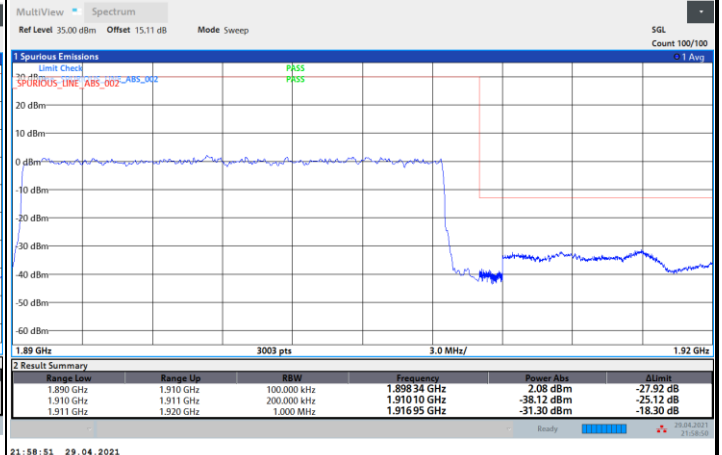
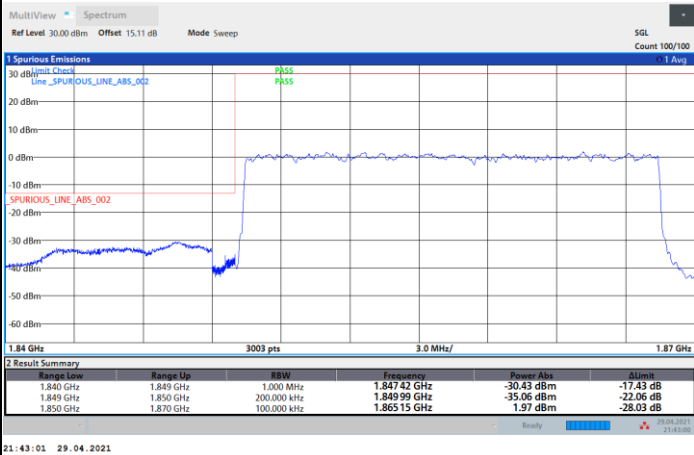
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

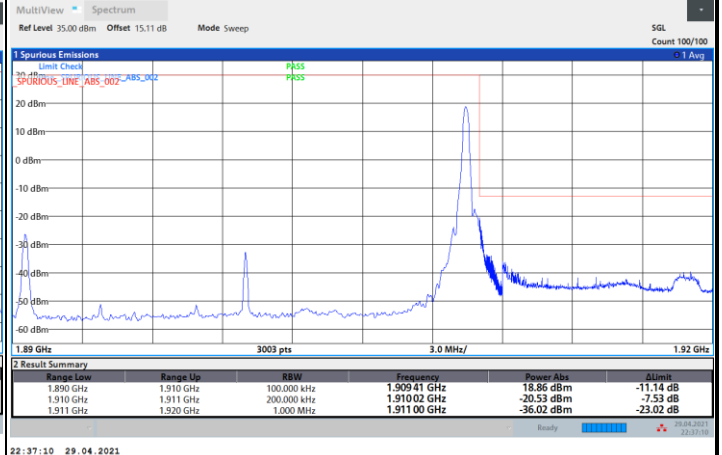
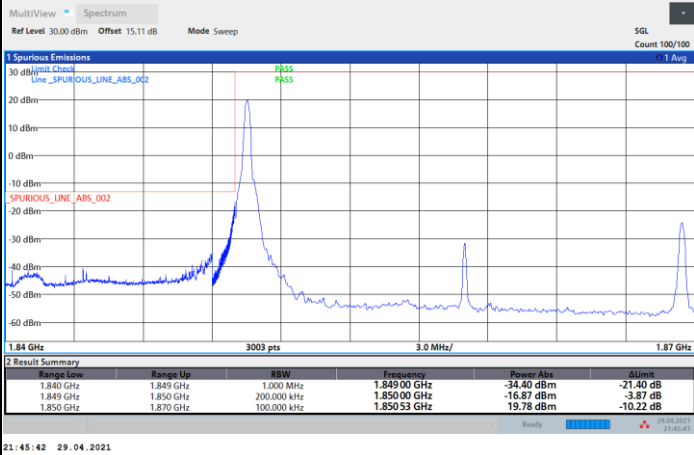




FR1 n2 / 20MHz / DFT-s-OFDM / QPSK

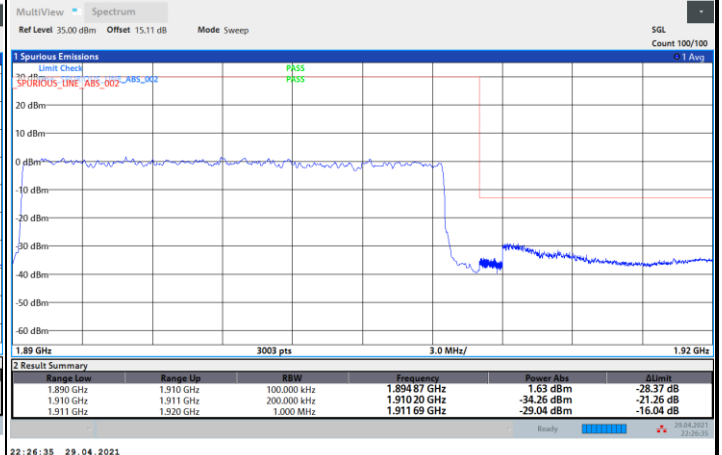
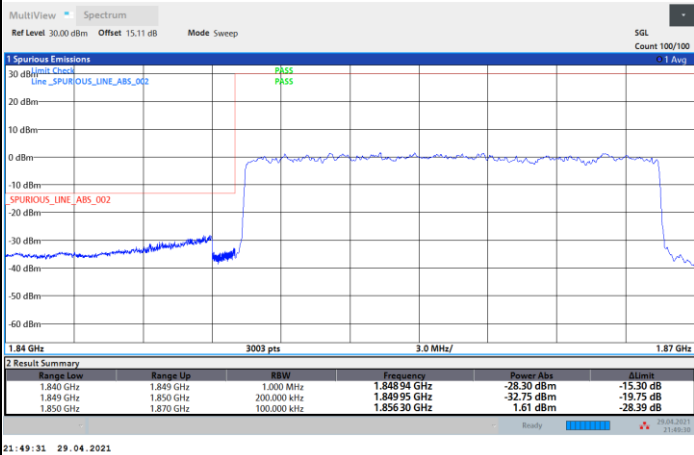
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

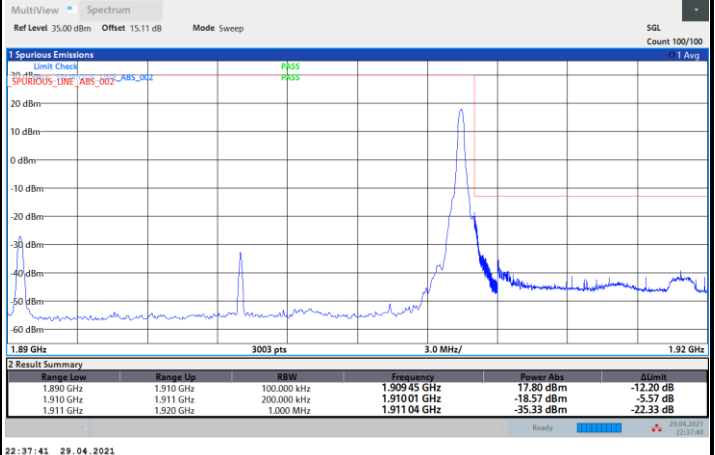
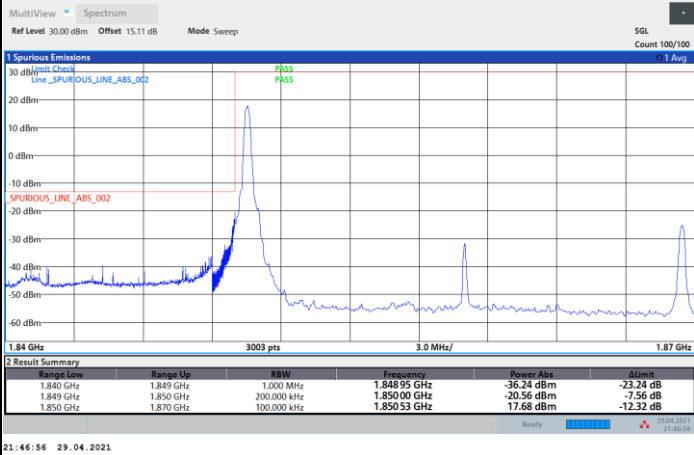




FR1 n2 / 20MHz / DFT-s-OFDM / 16QAM

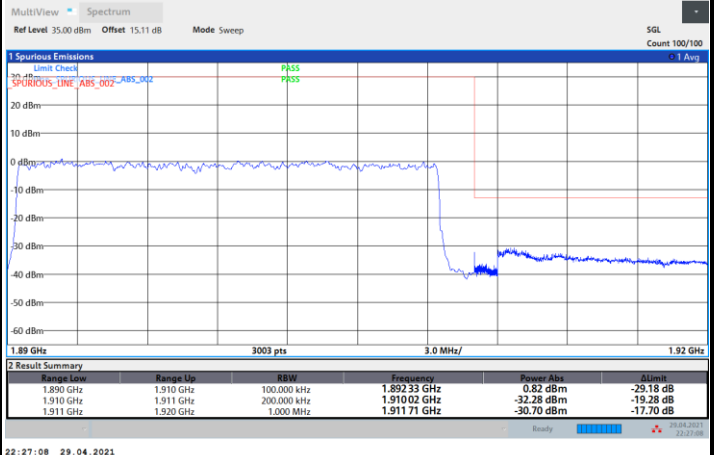
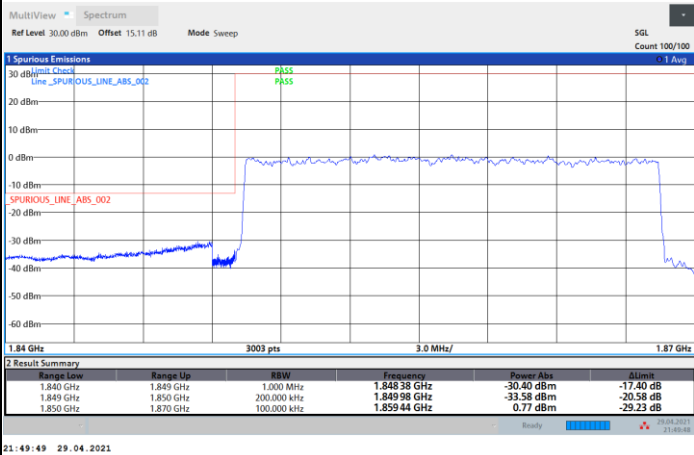
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

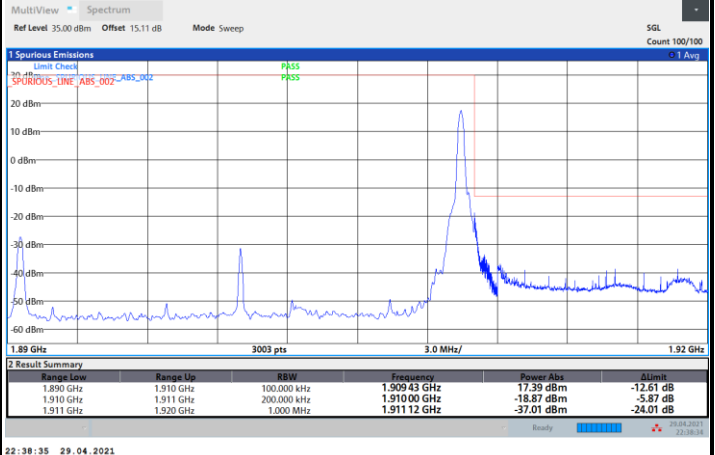
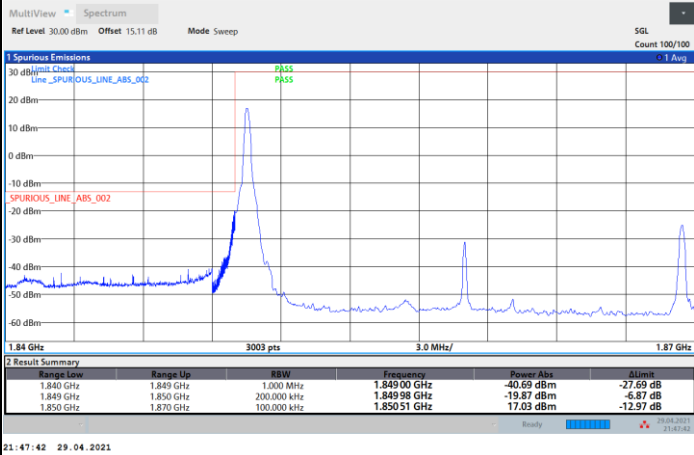




FR1 n2 / 20MHz / DFT-s-OFDM / 64QAM

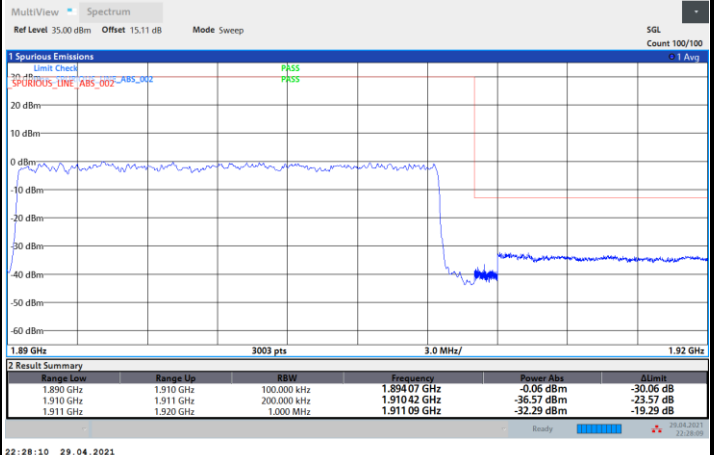
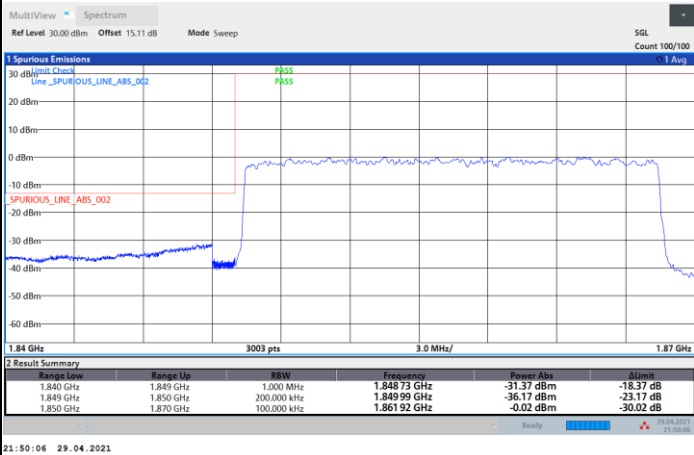
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

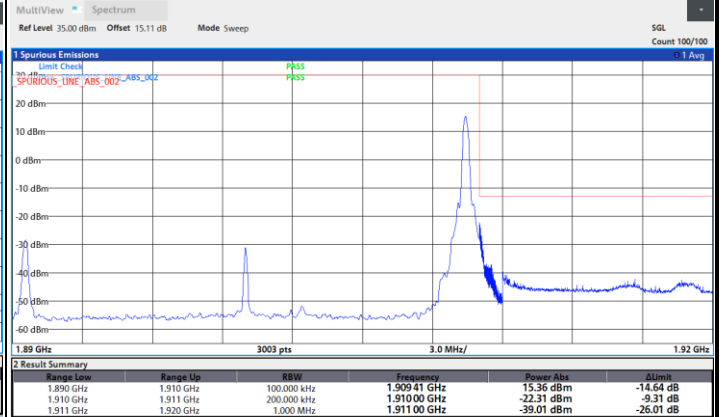
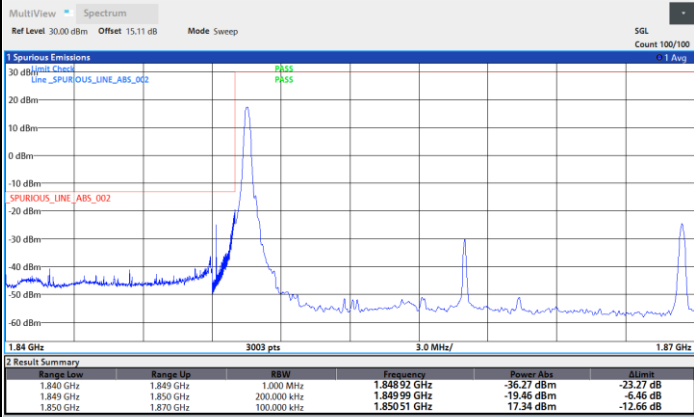




FR1 n2 / 20MHz / DFT-s-OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

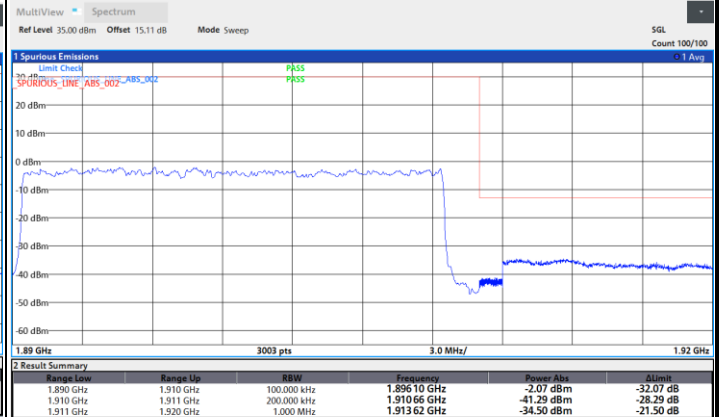
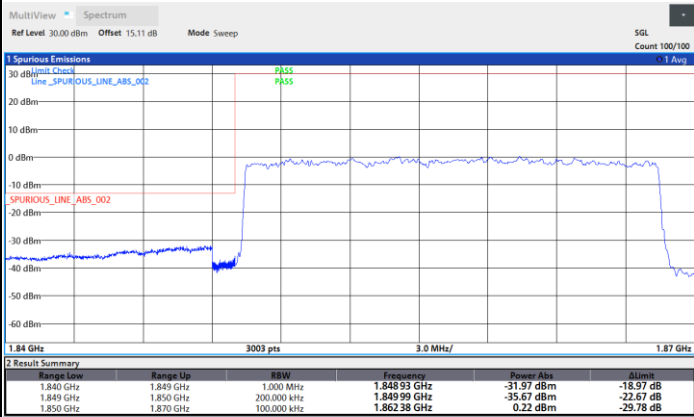


21:48:14 29.04.2021

22:42:53 29.04.2021

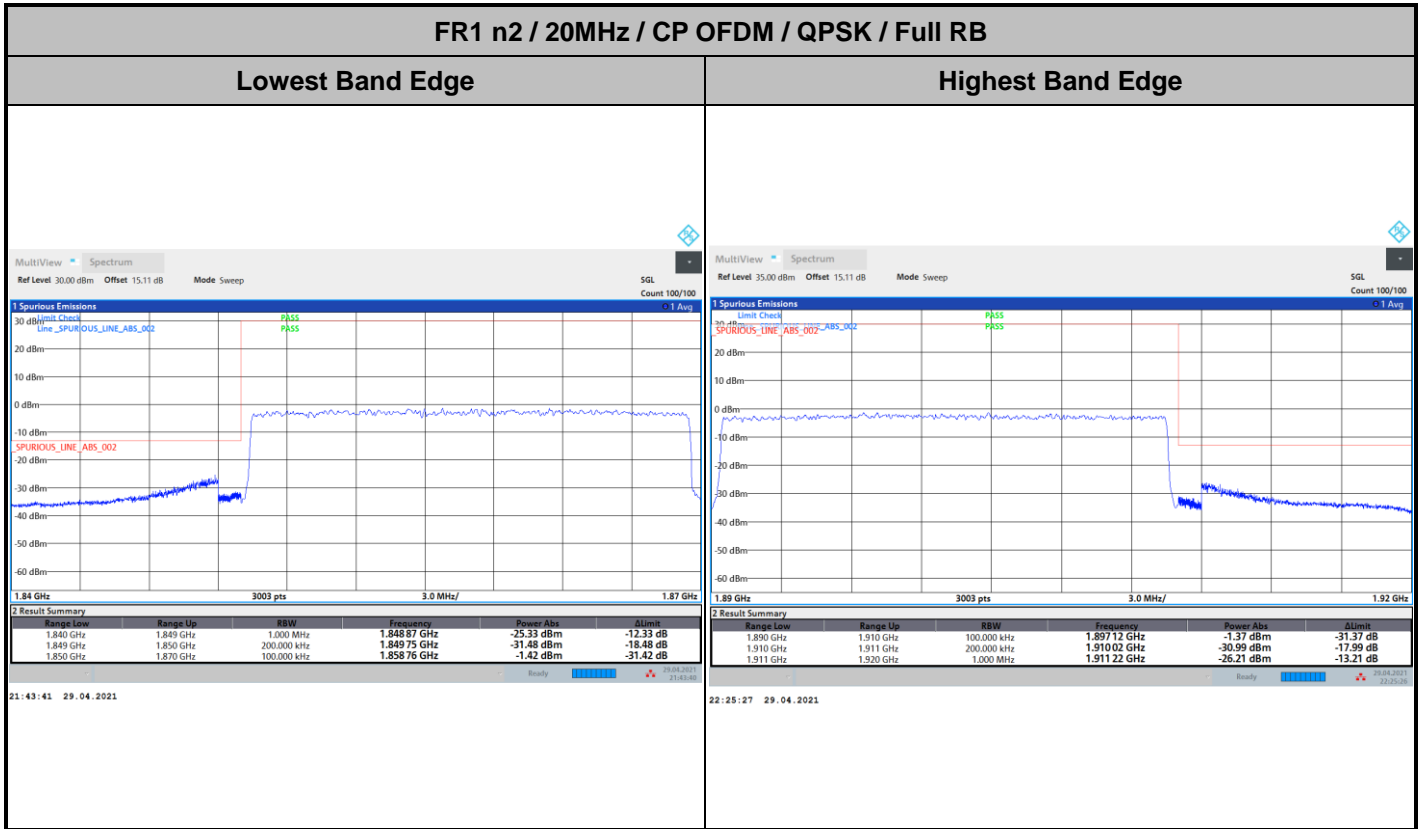
Lowest Band Edge / Full RB

Highest Band Edge / Full RB



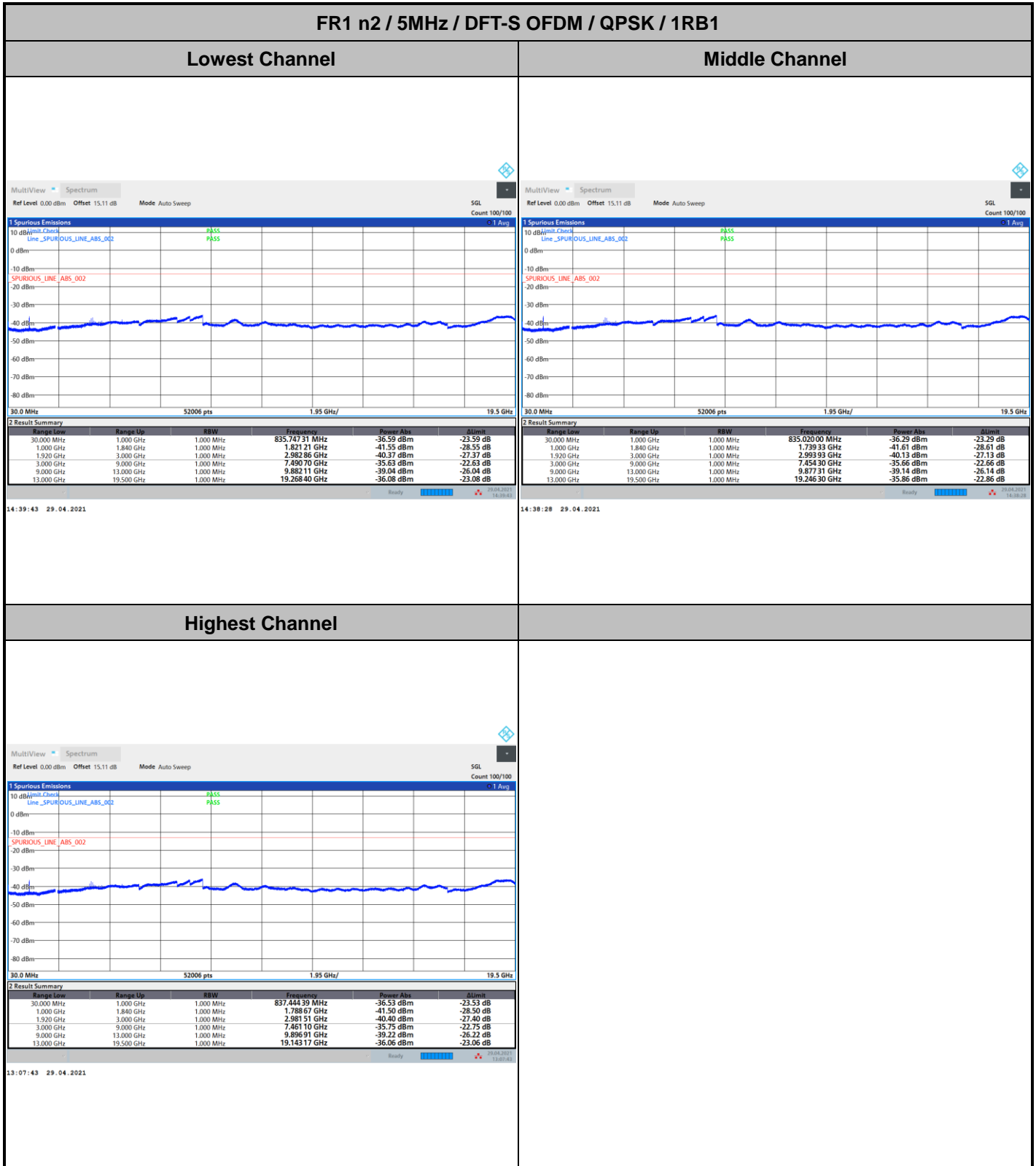
21:50:27 29.04.2021

22:28:43 29.04.2021





Conducted Spurious Emission





Frequency Stability

| Test Conditions | | FR1 n2 (BPSK) / Middle Channel | Limit |
|------------------|-------------------|--------------------------------|---------|
| Temperature (°C) | Voltage (Volt) | BW 20MHz | Note 2. |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0008 | PASS |
| 40 | Normal Voltage | 0.0080 | |
| 30 | Normal Voltage | 0.0003 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0087 | |
| 0 | Normal Voltage | 0.0059 | |
| -10 | Normal Voltage | 0.0004 | |
| -20 | Normal Voltage | 0.0073 | |
| -30 | Normal Voltage | 0.0056 | |
| 20 | Maximum Voltage | 0.0013 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0048 | |

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.67 V. ; Maximum Voltage =4.26 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



FR1 n5

<Main>

Peak-to-Average Ratio

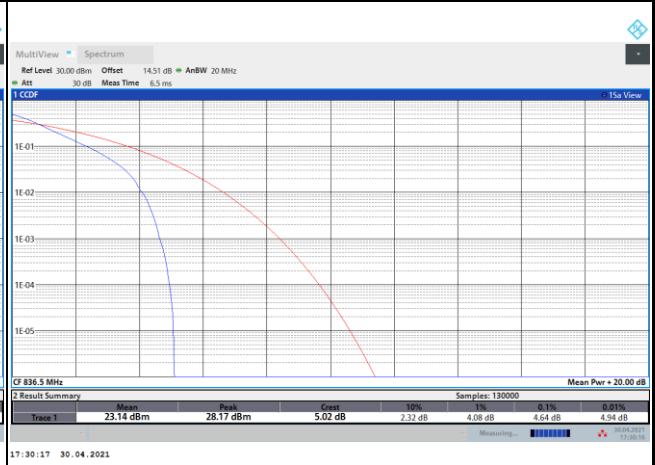
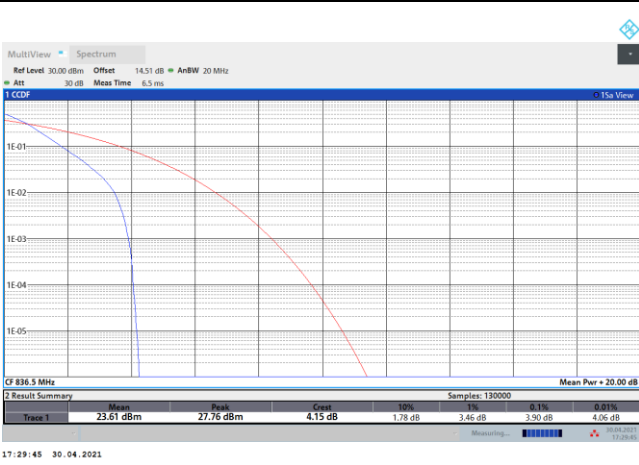
| Mode | FR1 n5 / 20MHz / DFT-S OFDM | | | | |
|-----------|-----------------------------|---------|---------|---------|-------------|
| Mod. | PI/2 BPSK | QPSK | 16QAM | 64QAM | Limit: 13dB |
| RB Size | Full RB | Full RB | Full RB | Full RB | Result |
| Middle CH | 3.90 | 4.64 | 5.56 | 6.00 | PASS |
| Mode | FR1 n5 / 20MHz / DFT-S OFDM | | | | |
| Mod. | 256QAM | | | | Limit: 13dB |
| RB Size | Full RB | | | | Result |
| Middle CH | 6.68 | | | | PASS |



FR1 n5 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

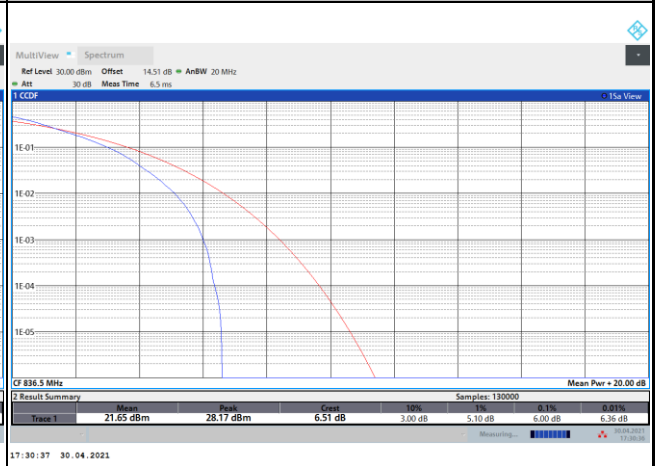
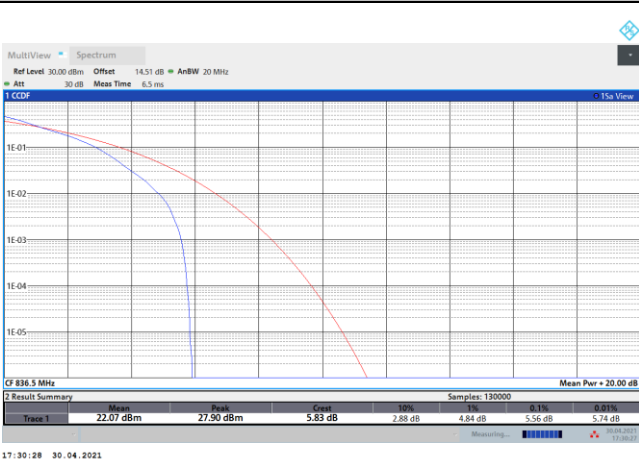
PI/2 BPSK

QPSK

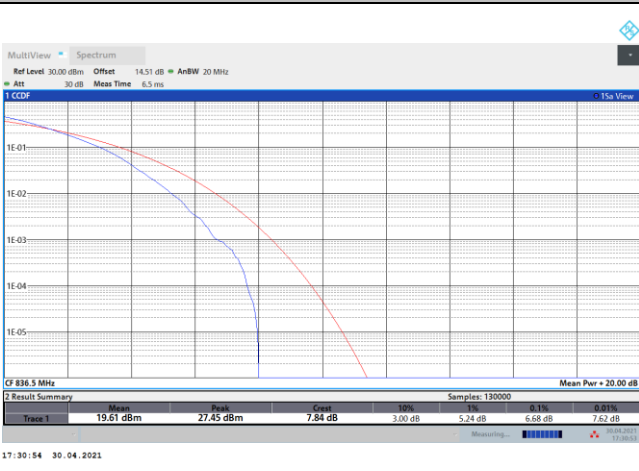


16QAM

64QAM



256QAM





26dB Bandwidth

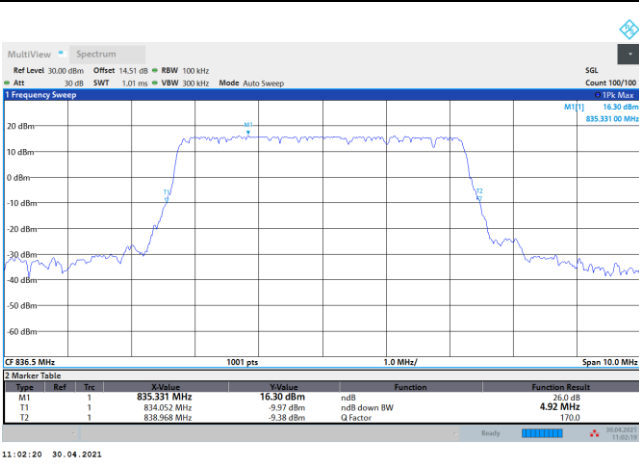
| Mode | FR1 n5 : 26dB BW(MHz) / DFT-S OFDM | | | | | | | |
|-----------|------------------------------------|--|-----------|--|-----------|--|-----------|--|
| BW | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | PI/2 BPSK | | PI/2 BPSK | | PI/2 BPSK | | PI/2 BPSK | |
| Middle CH | 4.92 | | 9.49 | | 14.18 | | 18.70 | |

| Mode | FR1 n5 : 26dB BW(MHz) / CP OFDM | | | | | | | |
|-----------|---------------------------------|--------|-------|--------|-------|--------|-------|--------|
| BW | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Middle CH | 4.95 | 5.03 | 9.85 | 9.81 | 15.08 | 14.96 | 19.94 | 19.90 |
| Mod. | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM |
| Middle CH | 4.89 | 4.97 | 9.81 | 9.87 | 14.99 | 14.93 | 19.82 | 19.86 |



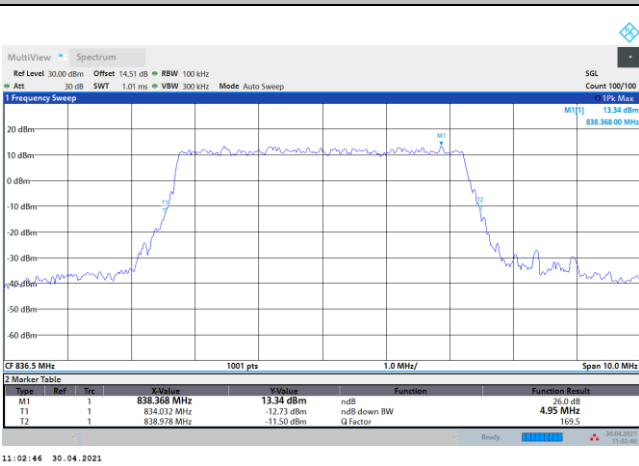
FR1 n5 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

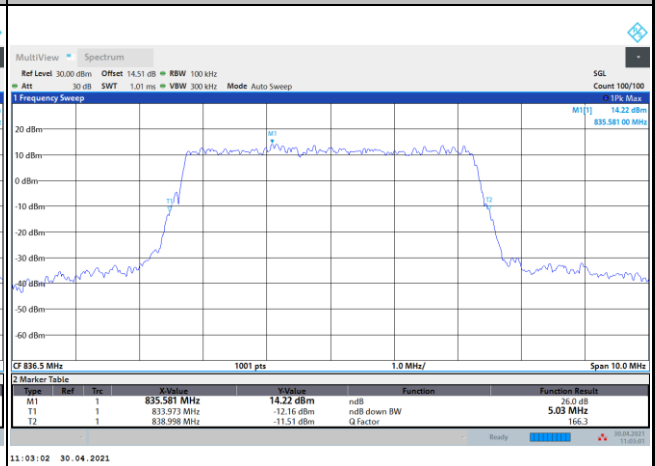


FR1 n5 / 5MHz / CP OFDM / Middle Channel / Full RB

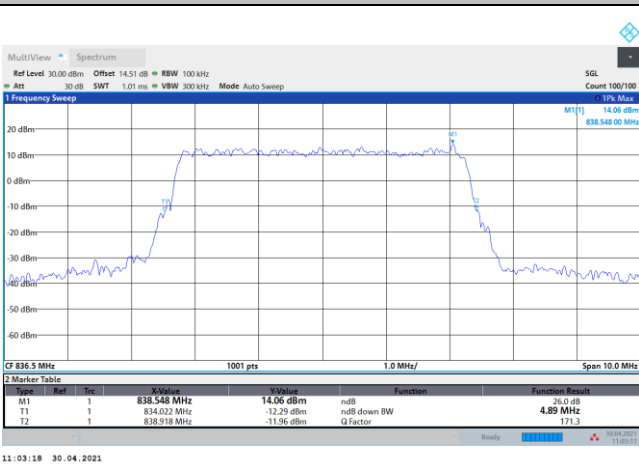
QPSK



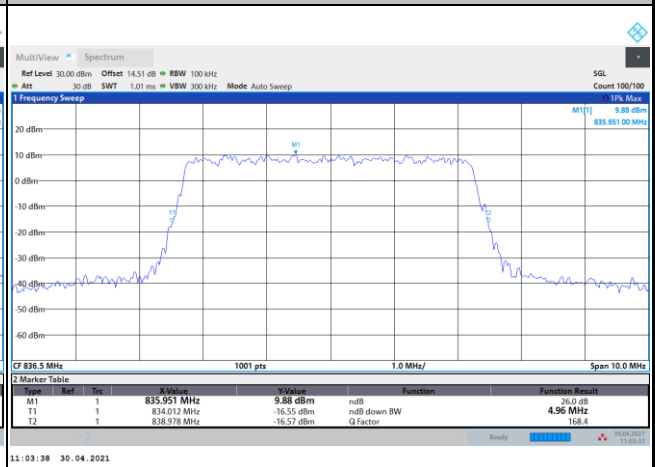
16QAM



64QAM



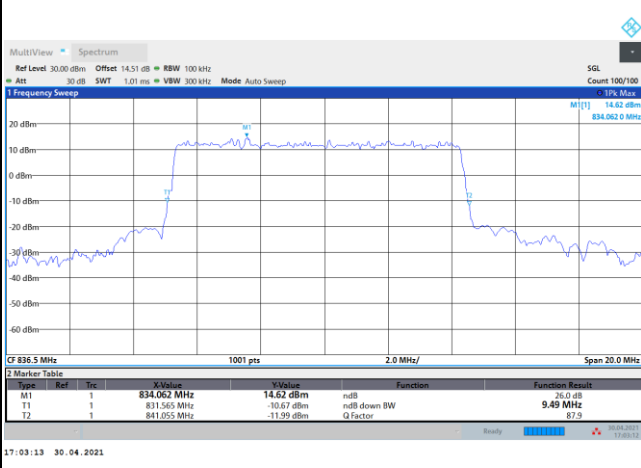
256QAM





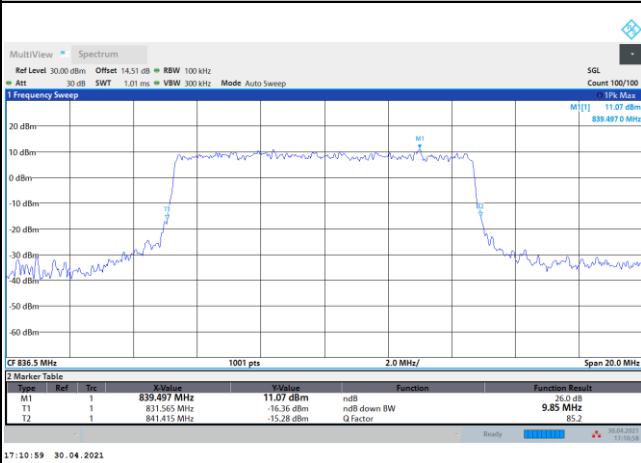
FR1 n5 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

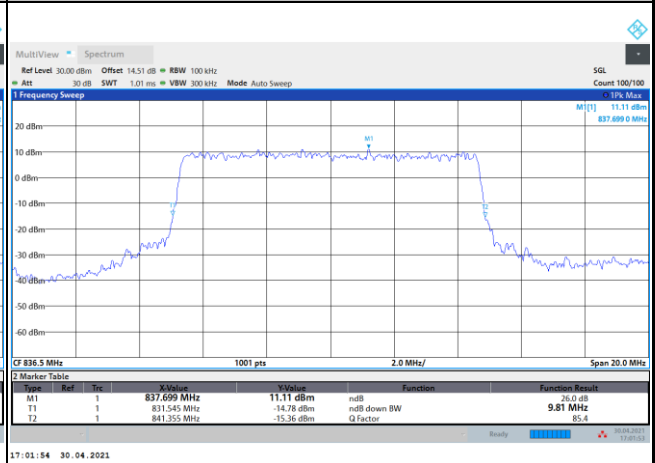


FR1 n5 / 10MHz / CP OFDM / Middle Channel / Full RB

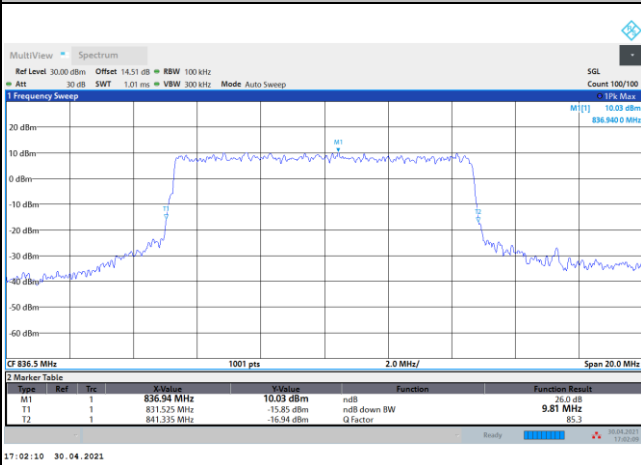
QPSK



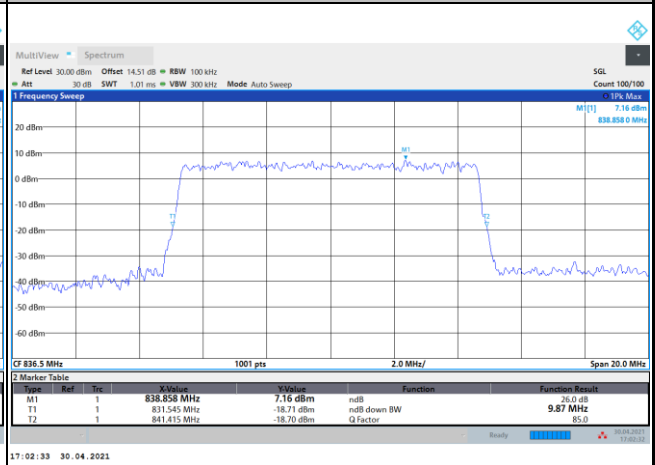
16QAM



64QAM



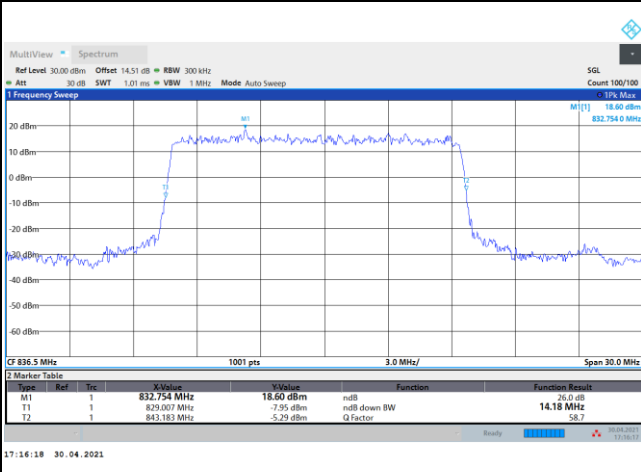
256QAM





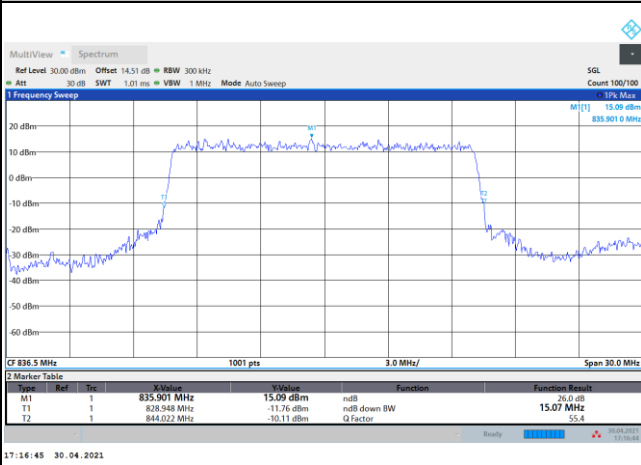
FR1 n5 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

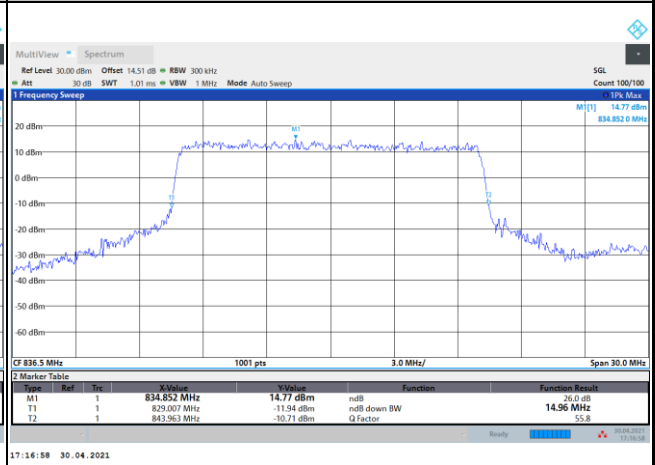


FR1 n5 / 15MHz / CP OFDM / Middle Channel / Full RB

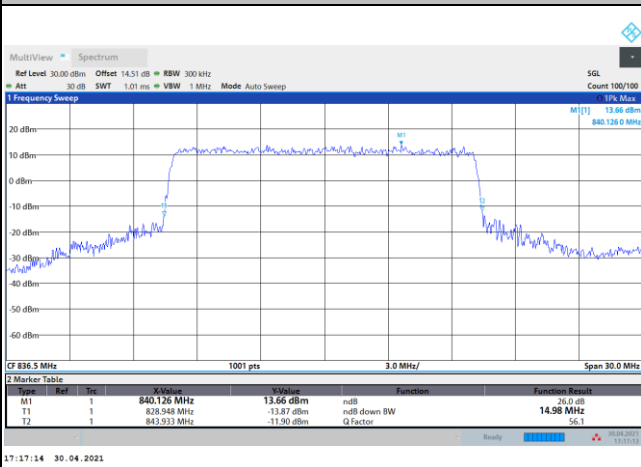
QPSK



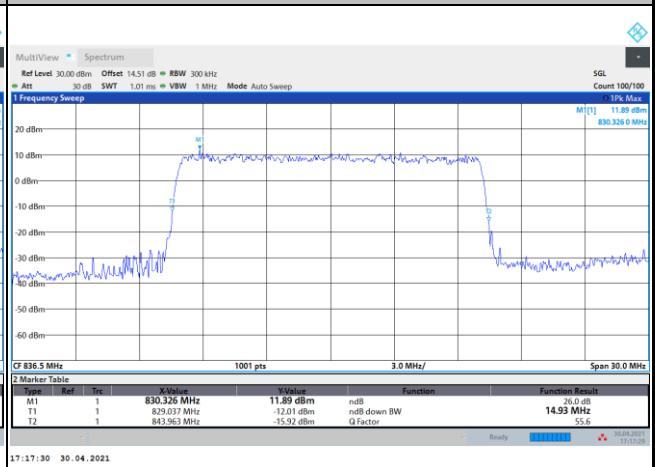
16QAM



64QAM



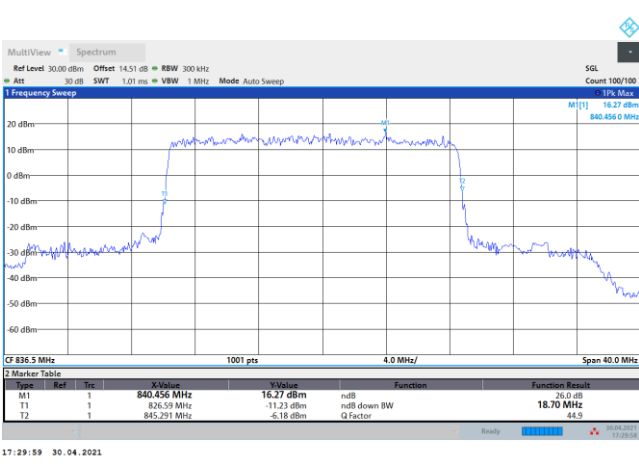
256QAM





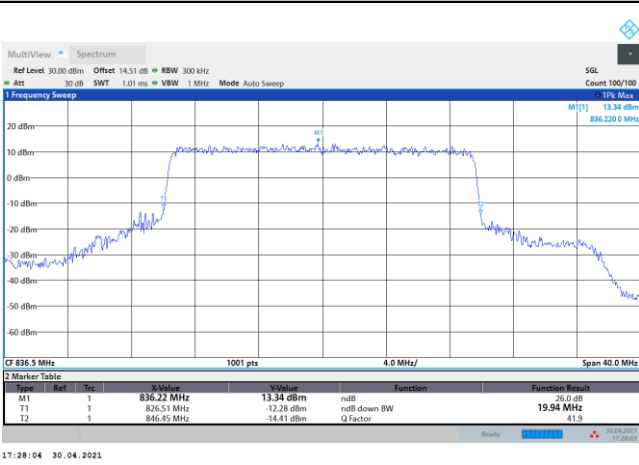
FR1 n5 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

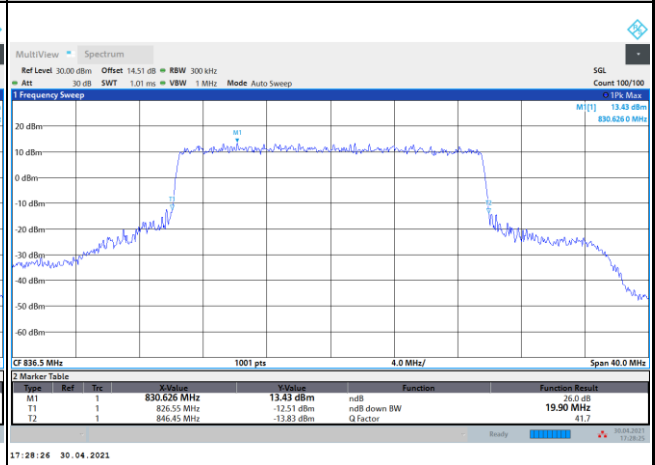


FR1 n5 / 20MHz / CP OFDM / Middle Channel / Full RB

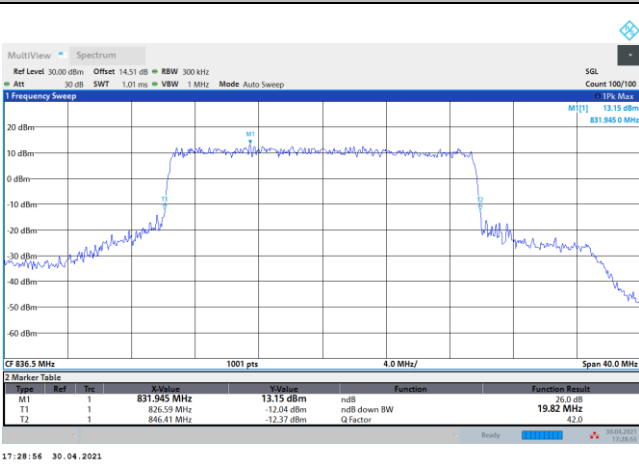
QPSK



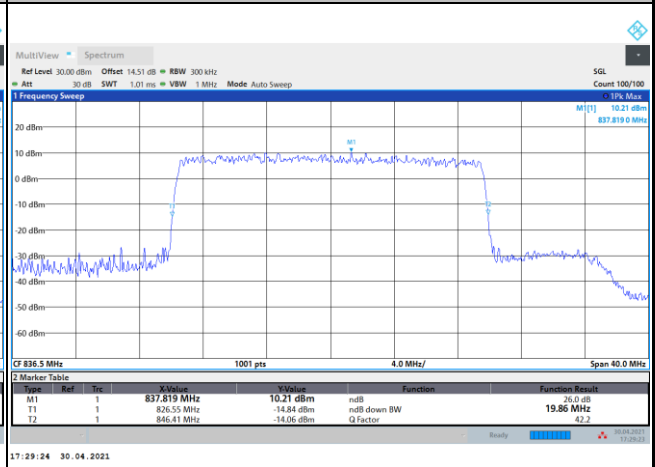
16QAM



64QAM



256QAM





Occupied Bandwidth

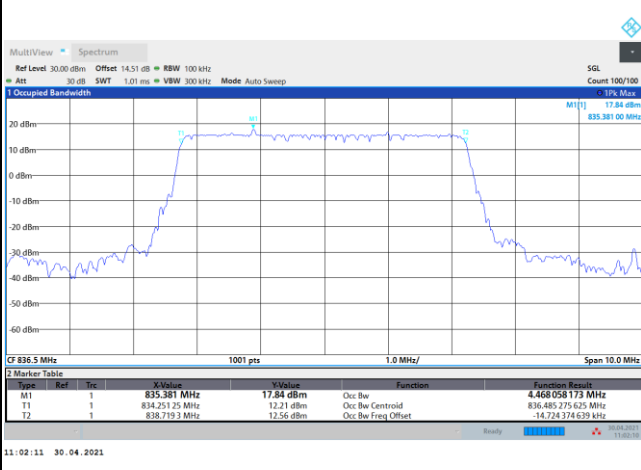
| Mode | FR1 n5 : 99%OBW(MHz) / DFT-S OFDM | | | | | | | |
|-----------|-----------------------------------|--|-----------|--|-----------|--|-----------|--|
| BW | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | PI/2 BPSK | | PI/2 BPSK | | PI/2 BPSK | | PI/2 BPSK | |
| Middle CH | 4.47 | | 8.91 | | 13.48 | | 17.87 | |

| Mode | FR1 n5 : 99%OBW (MHz) / CP OFDM | | | | | | | |
|-----------|---------------------------------|--------|-------|--------|-------|--------|-------|--------|
| BW | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Middle CH | 4.49 | 4.53 | 9.28 | 9.28 | 14.13 | 14.14 | 18.90 | 18.89 |
| Mod. | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM |
| Middle CH | 4.50 | 4.49 | 9.28 | 9.29 | 14.17 | 14.09 | 18.93 | 18.94 |



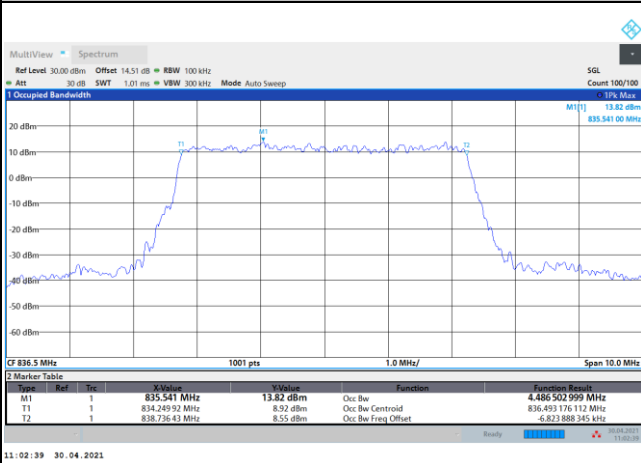
FR1 n5 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

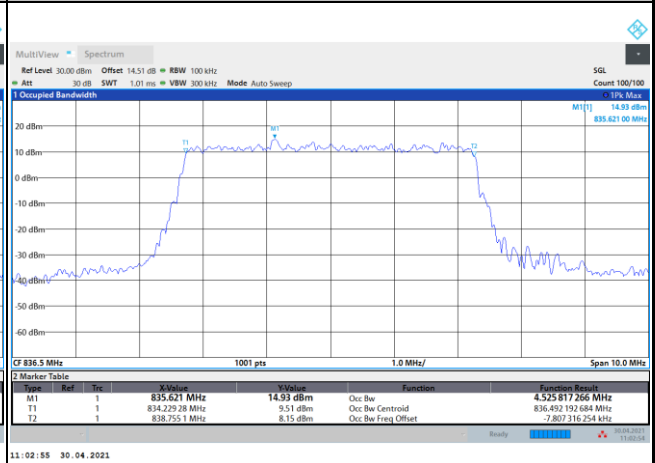


FR1 n5 / 5MHz / CP OFDM / Middle Channel / Full RB

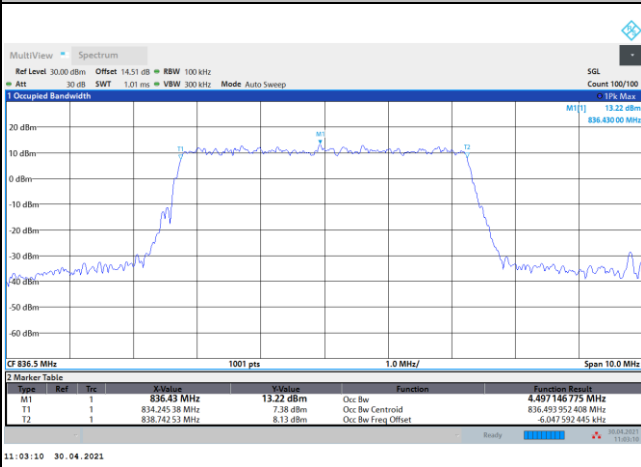
QPSK



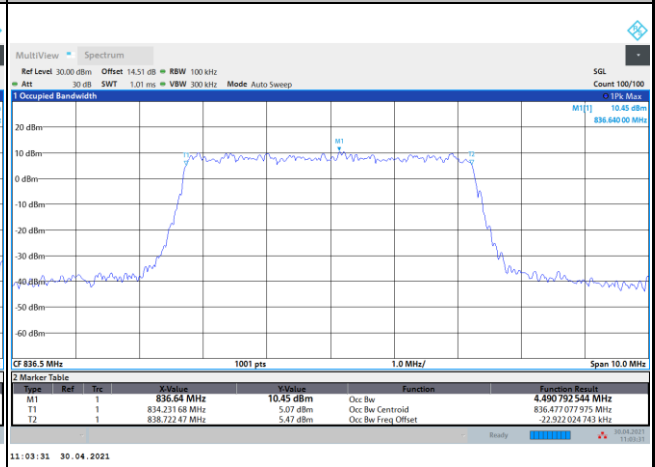
16QAM



64QAM



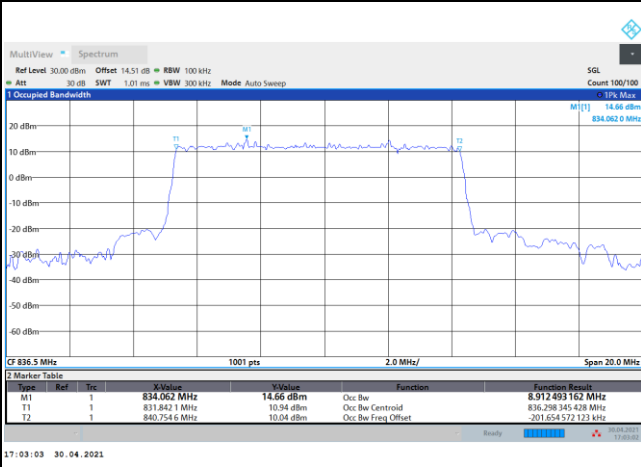
256QAM





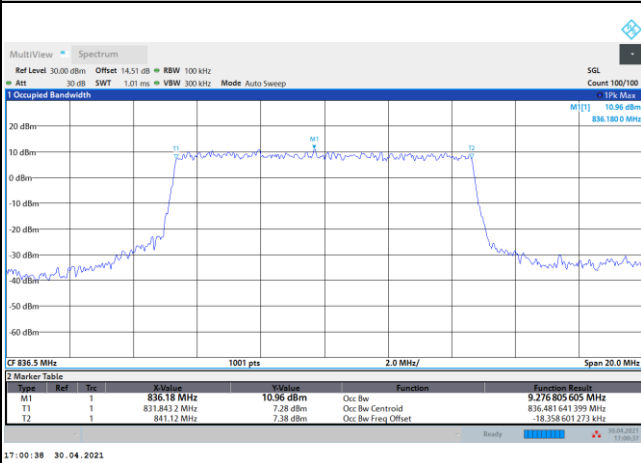
FR1 n5 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

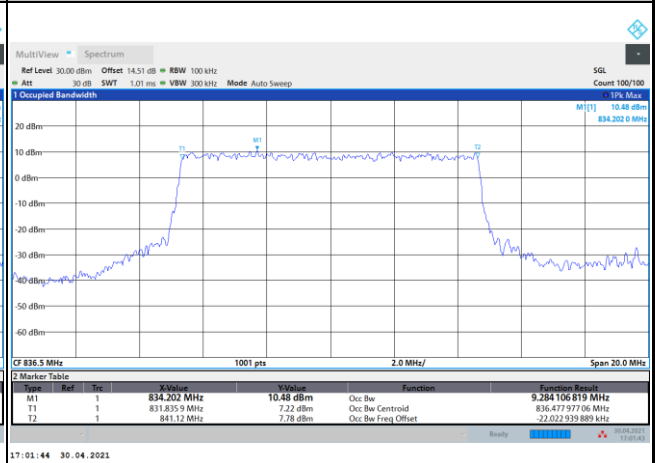


FR1 n5 / 10MHz / CP OFDM / Middle Channel / Full RB

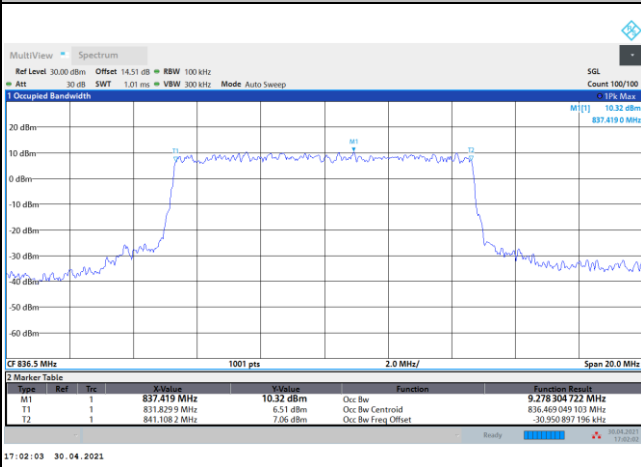
QPSK



16QAM



64QAM



256QAM

