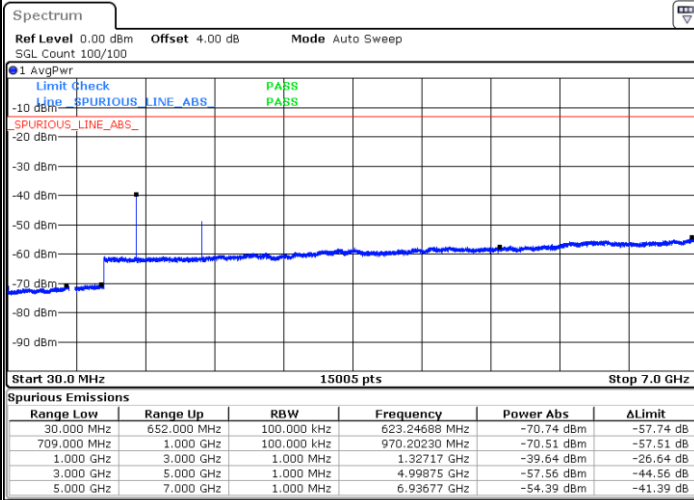




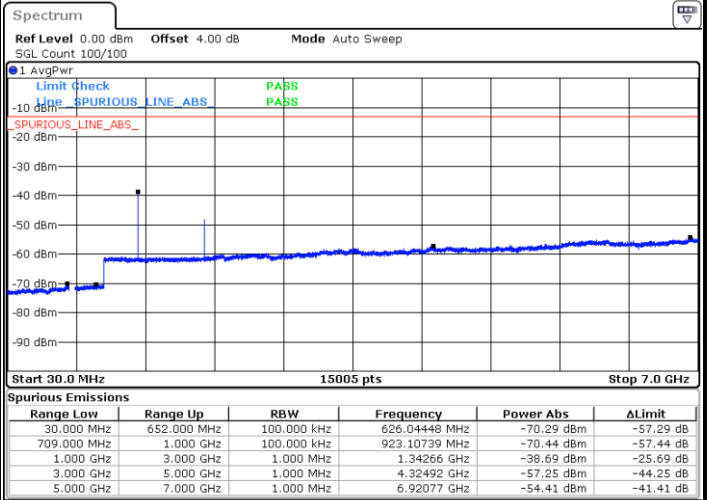
FR1 n71 / 20MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

Middle Channel / 1RB

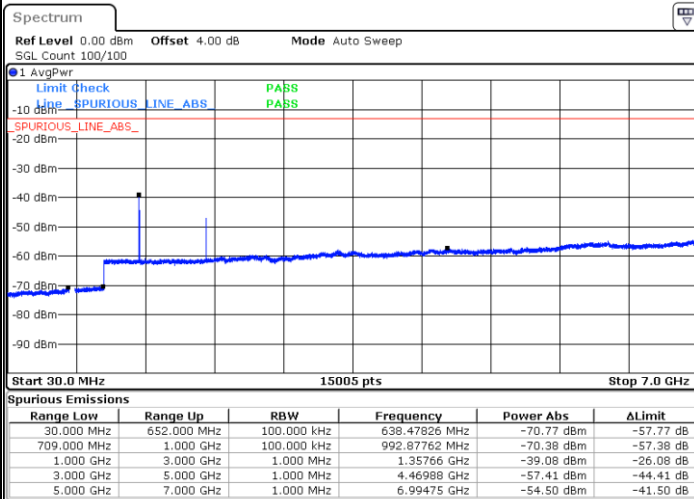


Date: 10.FEB.2021 18:43:00



Date: 10.FEB.2021 18:48:39

Highest Channel / 1RB



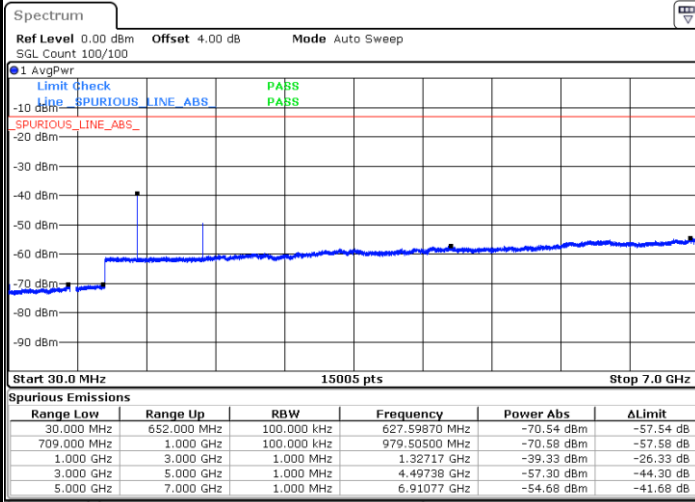
Date: 10.FEB.2021 19:17:39



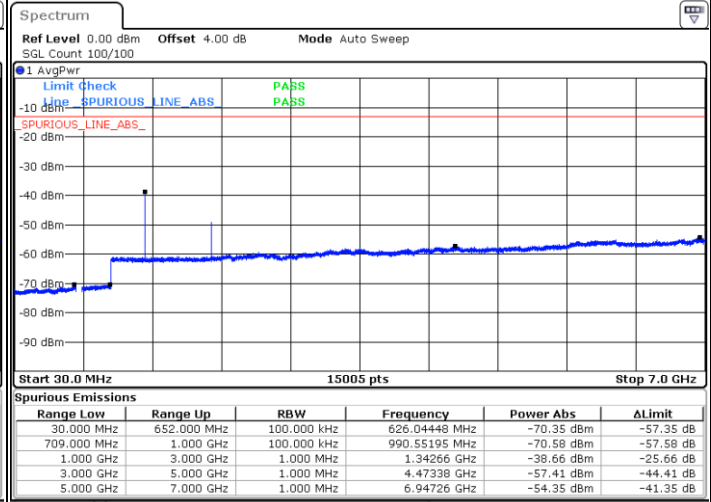
FR1 n71 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

Middle Channel / 1RB

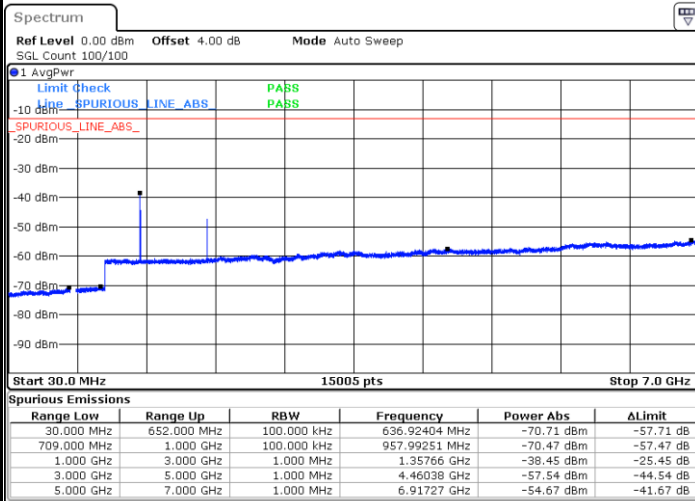


Date: 10.FEB.2021 18:42:43



Date: 10.FEB.2021 18:50:07

Highest Channel / 1RB



Date: 10.FEB.2021 19:15:54



Frequency Stability

| Test Conditions | | NR n71 (BPSK) / Middle Channel | Limit |
|------------------|-------------------|--------------------------------|-------------|
| Temperature (°C) | Voltage (Volt) | BW 20MHz | Within Band |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0025 | PASS |
| 40 | Normal Voltage | 0.0017 | |
| 30 | Normal Voltage | 0.0012 | |
| 20(Ref.) | Normal Voltage | 0.0015 | |
| 10 | Normal Voltage | 0.0013 | |
| 0 | Normal Voltage | 0.0012 | |
| -10 | Normal Voltage | 0.0021 | |
| -20 | Normal Voltage | 0.0015 | |
| -30 | Normal Voltage | 0.0017 | |
| 20 | Maximum Voltage | 0.0025 | |
| 20 | Normal Voltage | 0.0013 | |
| 20 | Battery End Point | 0.0026 | |

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.45 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



5G NR n41 NSA

Peak-to-Average Ratio

| Mode | FR1 n41+2A / 20MHz / DFT-S OFDM | | | | |
|------------|---------------------------------|-----------|------|---------|-------------|
| Mod. | PI/2 BPSK | PI/2 BPSK | QPSK | QPSK | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | 4.23 | 3.62 | 4.17 | 4.41 | PASS |
| Middle CH | 4.46 | 3.86 | 4.55 | 4.75 | |
| Highest CH | 4.43 | 3.86 | 4.67 | 4.67 | |



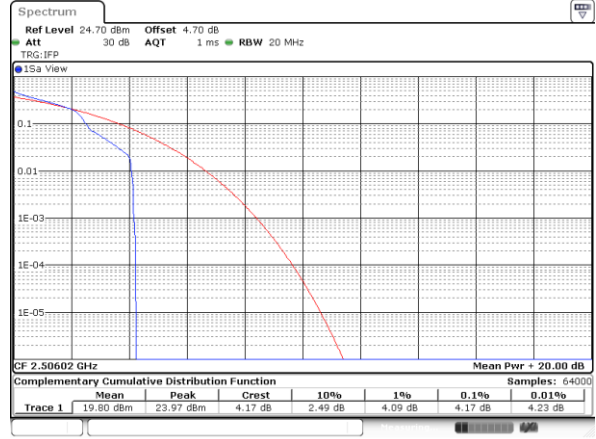
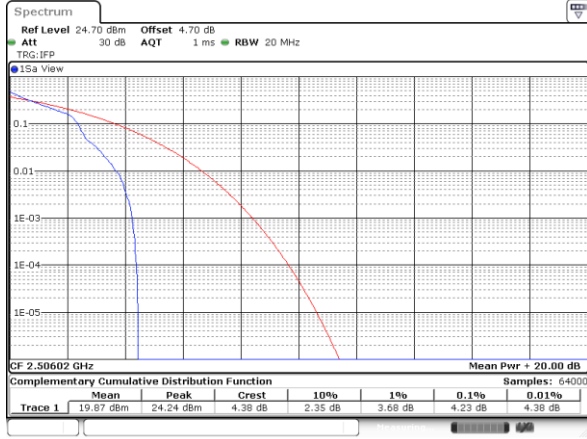
FR1 n41+2A / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / 1RB

Lowest Channel / 1RB

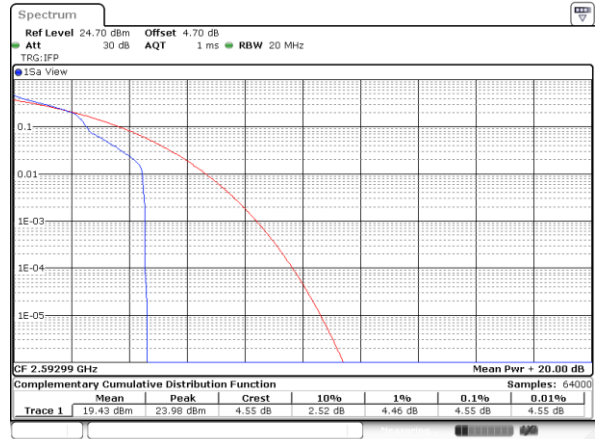
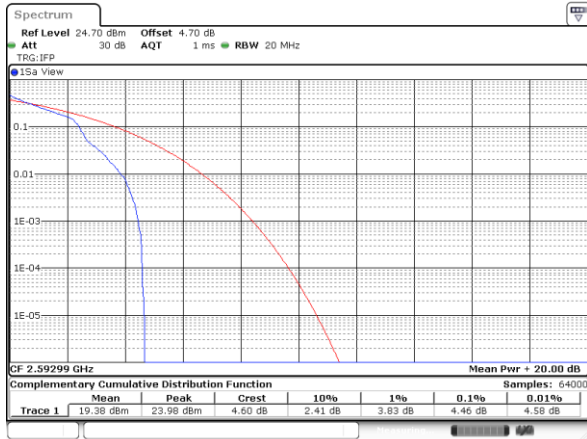


Date: 8.FEB.2021 14:16:12

Date: 8.FEB.2021 14:15:57

Middle Channel / 1 RB

Middle Channel / 1 RB

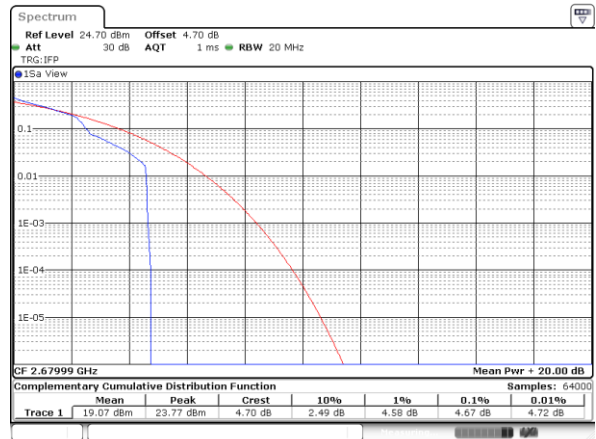
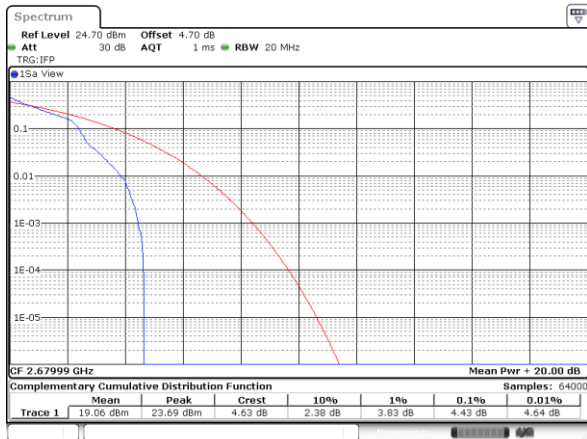


Date: 8.FEB.2021 14:13:50

Date: 8.FEB.2021 14:13:30

Highest Channel / 1 RB

Highest Channel / 1 RB



Date: 8.FEB.2021 14:10:52

Date: 8.FEB.2021 14:11:11



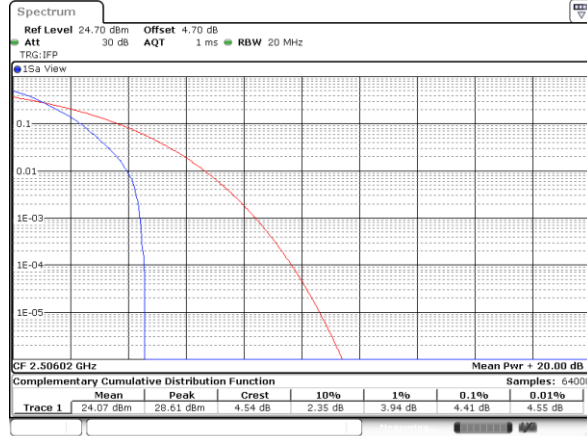
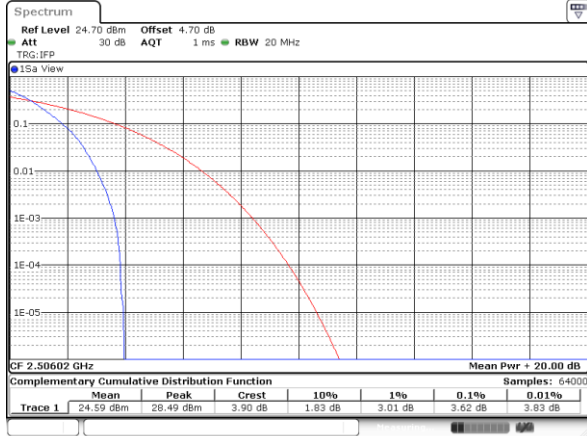
FR1 n41+2A / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / Full RB

Lowest Channel / Full RB

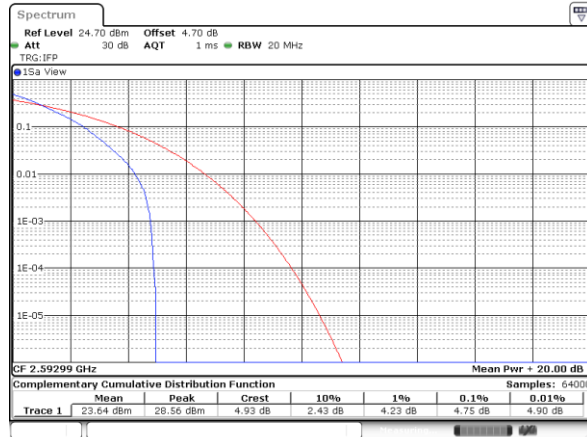
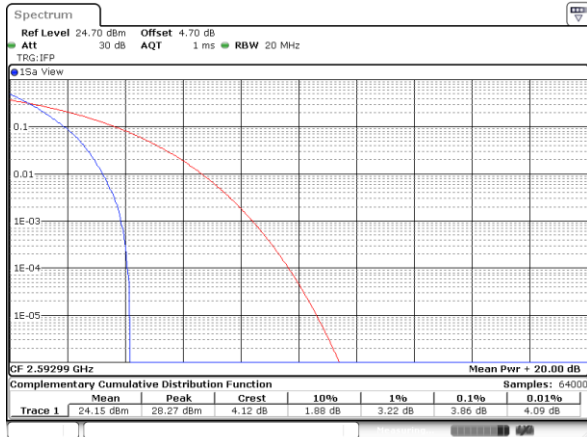


Date: 8.FEB.2021 14:14:28

Date: 8.FEB.2021 14:15:36

Middle Channel / Full RB

Middle Channel / Full RB

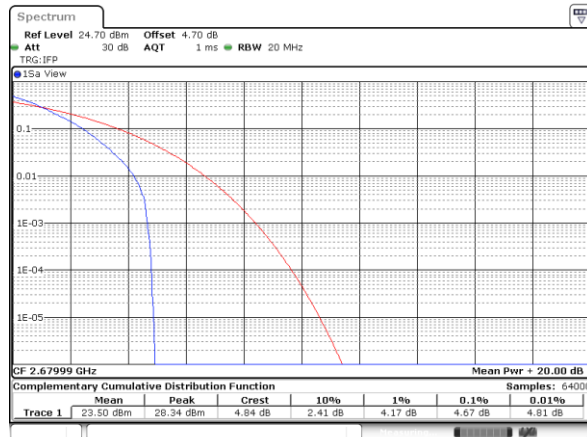
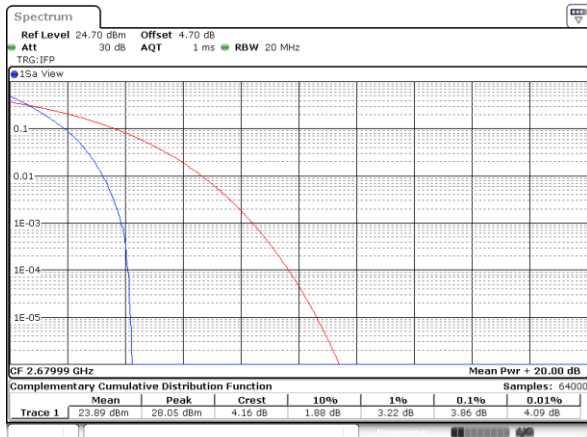


Date: 8.FEB.2021 14:12:43

Date: 8.FEB.2021 14:13:10

Highest Channel / Full RB

Highest Channel / Full RB



Date: 8.FEB.2021 14:11:51

Date: 8.FEB.2021 14:11:33



26dB Bandwidth

| Mode | FR1 n41+2A : 26dB BW(MHz) / CP-OFDM | | | | | | | |
|-----------|-------------------------------------|-------|-------|--------|--|--|--|--|
| BW | 20MHz | 20MHz | 20MHz | 20MHz | | | | |
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | | | | |
| Middle CH | 19.10 | 19.42 | 19.02 | 19.10 | | | | |

| Mode | FR1 n41+2A : 26dB BW(MHz) / CP-OFDM | | | | | | | |
|-----------|-------------------------------------|-------|-------|--------|--|--|--|--|
| BW | 30MHz | 30MHz | 30MHz | 30MHz | | | | |
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | | | | |
| Middle CH | 28.95 | 28.71 | 29.07 | 29.01 | | | | |

| Mode | FR1 n41+2A : 26dB BW(MHz) / CP-OFDM | | | | | | | |
|-----------|-------------------------------------|-------|-------|--------|--|--|--|--|
| BW | 40MHz | 40MHz | 40MHz | 40MHz | | | | |
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | | | | |
| Middle CH | 40.28 | 40.28 | 40.20 | 40.12 | | | | |

| Mode | FR1 n41+2A : 26dB BW(MHz) / CP-OFDM | | | | | | | |
|-----------|-------------------------------------|-------|-------|--------|--|--|--|--|
| BW | 50MHz | 50MHz | 50MHz | 50MHz | | | | |
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | | | | |
| Middle CH | 49.65 | 49.65 | 49.65 | 49.75 | | | | |

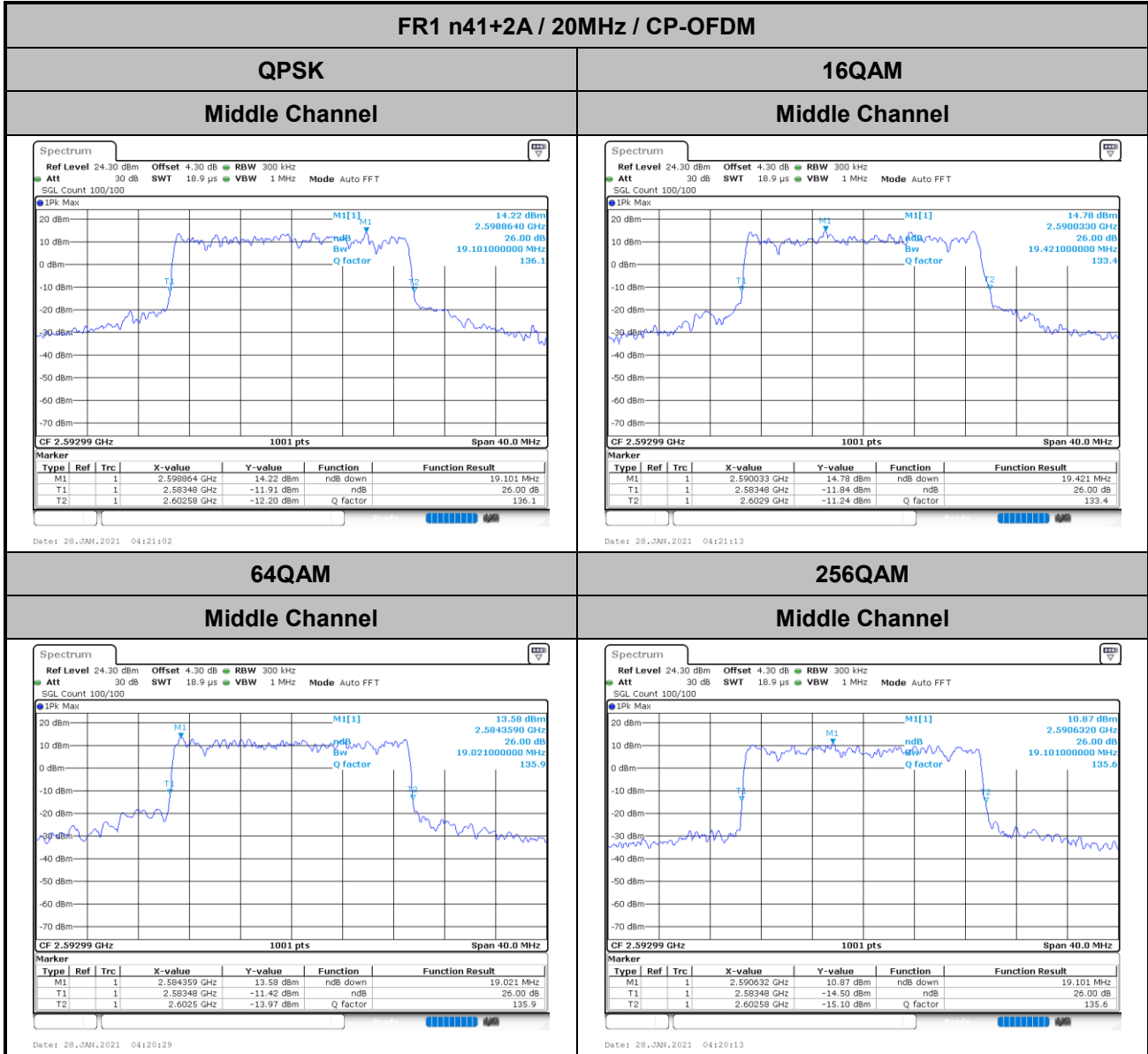
| Mode | FR1 n41+2A : 26dB BW(MHz) / CP-OFDM | | | | | | | |
|-----------|-------------------------------------|-------|-------|--------|--|--|--|--|
| BW | 60MHz | 60MHz | 60MHz | 60MHz | | | | |
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | | | | |
| Middle CH | 60.18 | 60.30 | 60.30 | 60.30 | | | | |

| Mode | FR1 n41+2A : 26dB BW(MHz) / CP-OFDM | | | | | | | |
|-----------|-------------------------------------|-------|-------|--------|--|--|--|--|
| BW | 80MHz | 80MHz | 80MHz | 80MHz | | | | |
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | | | | |
| Middle CH | 79.92 | 79.92 | 79.92 | 79.92 | | | | |

| Mode | FR1 n41+2A : 26dB BW(MHz) / CP-OFDM | | | | | | | |
|-----------|-------------------------------------|-------|-------|--------|--|--|--|--|
| BW | 90MHz | 90MHz | 90MHz | 90MHz | | | | |
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | | | | |
| Middle CH | 90.27 | 90.45 | 90.45 | 90.45 | | | | |



| | | | | | | | |
|-----------|-------------------------------------|--------|--------|--------|--|--|--|
| Mode | FR1 n41+2A : 26dB BW(MHz) / CP-OFDM | | | | | | |
| BW | 100MHz | 100MHz | 100MHz | 100MHz | | | |
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | | | |
| Middle CH | 100.30 | 100.30 | 100.50 | 100.30 | | | |





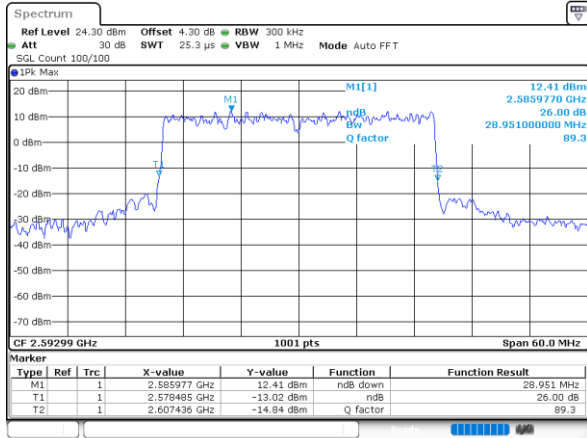
FR1 n41+2A / 30MHz / CP-OFDM

QPSK

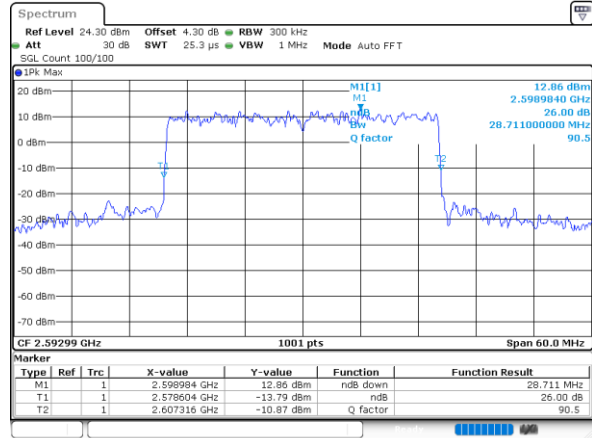
16QAM

Middle Channel

Middle Channel



Date: 28_JAN.2021 04:18:15



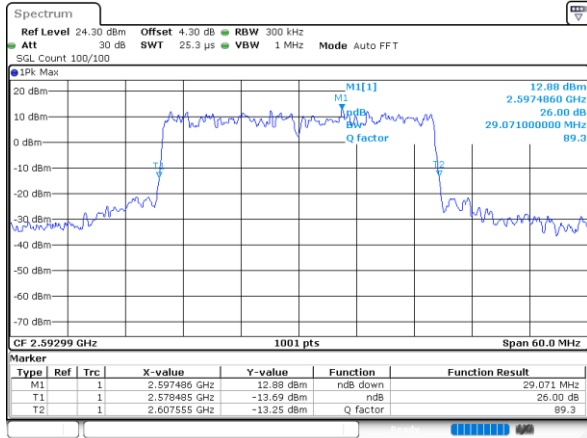
Date: 28_JAN.2021 04:18:45

64QAM

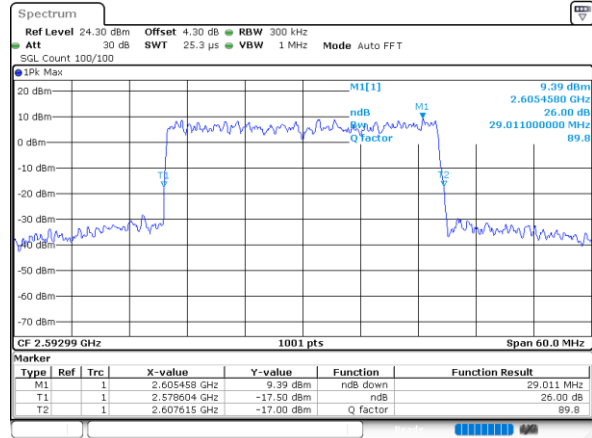
256QAM

Middle Channel

Middle Channel



Date: 28_JAN.2021 04:19:17



Date: 28_JAN.2021 04:19:48



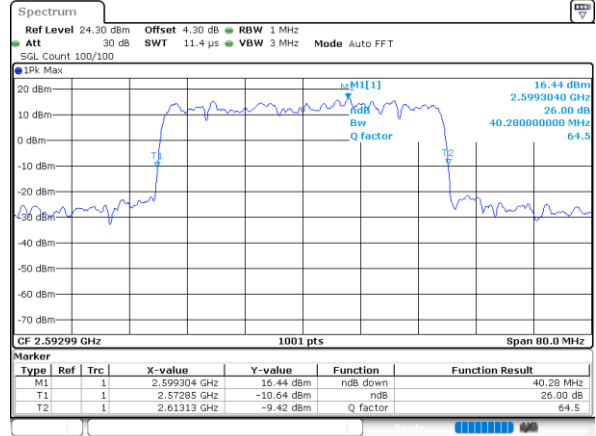
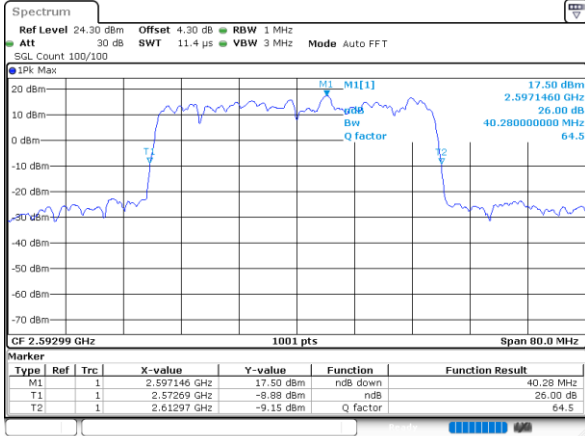
FR1 n41+2A / 40MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 28_JAN.2021 04:17:03

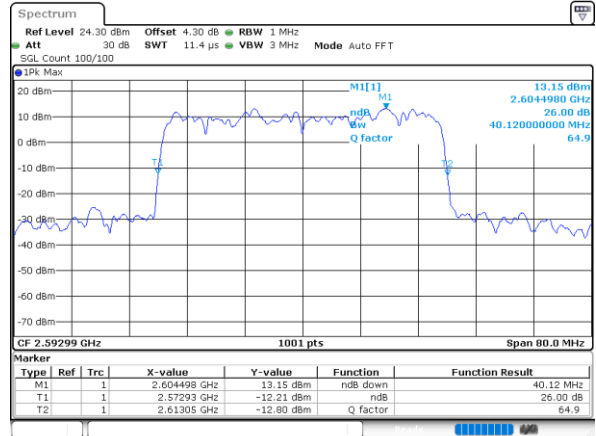
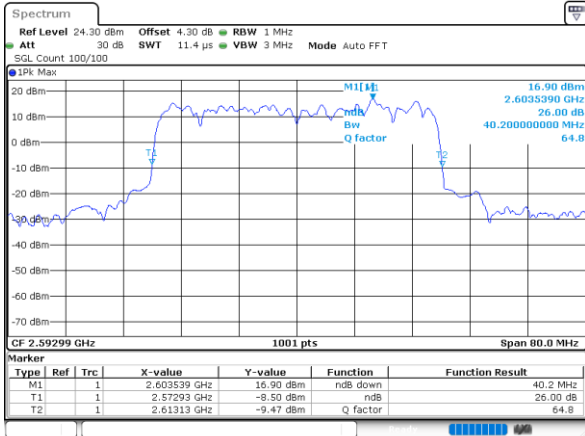
Date: 28_JAN.2021 04:16:45

64QAM

256QAM

Middle Channel

Middle Channel



Date: 28_JAN.2021 04:16:20

Date: 28_JAN.2021 04:16:02



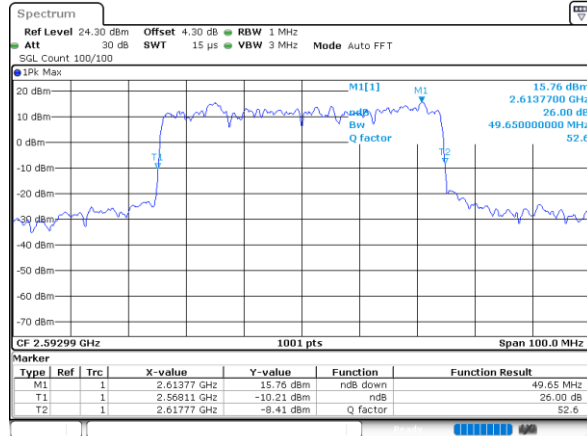
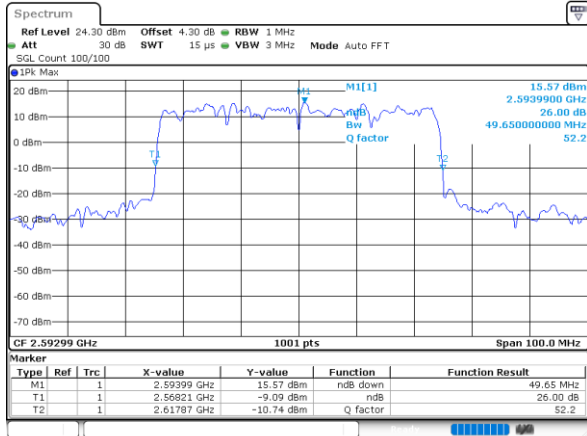
FR1 n41+2A / 50MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 28_JAN.2021 04:14:38

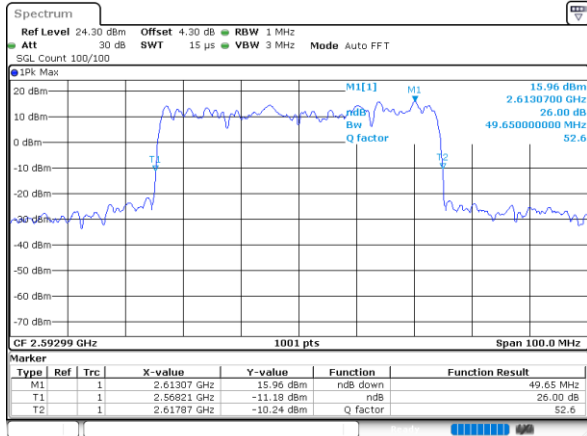
Date: 28_JAN.2021 04:14:56

64QAM

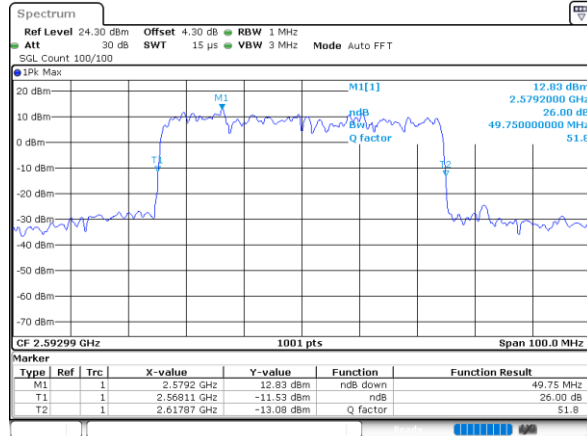
256QAM

Middle Channel

Middle Channel



Date: 28_JAN.2021 04:15:13



Date: 28_JAN.2021 04:15:30



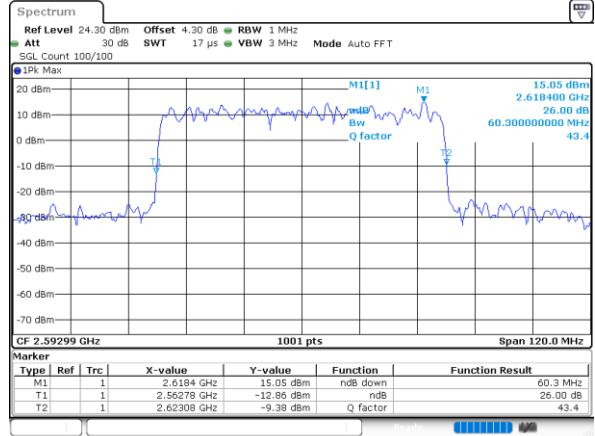
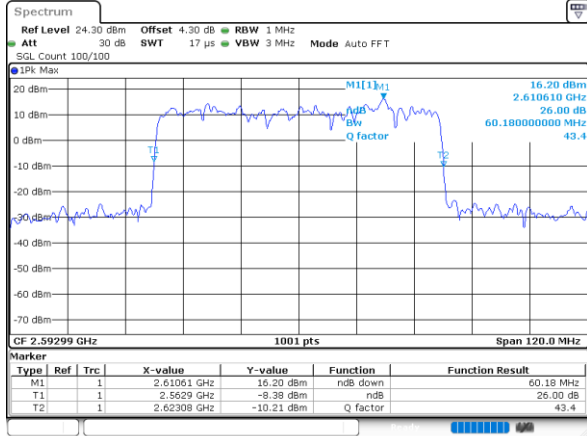
FR1 n41+2A / 60MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 28_JAN.2021 04:10:07

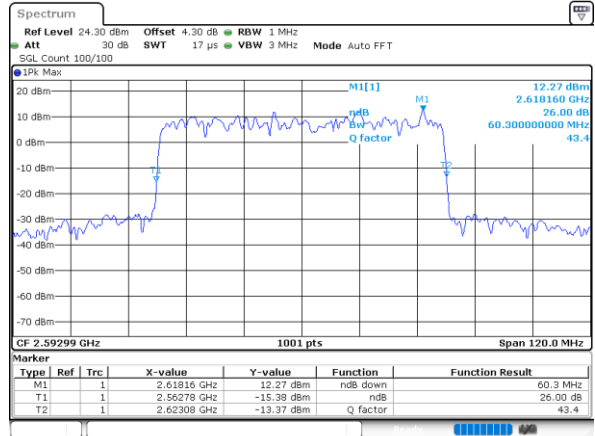
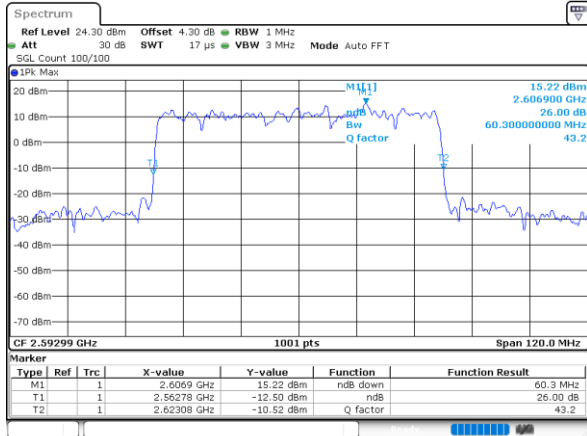
Date: 28_JAN.2021 04:09:50

64QAM

256QAM

Middle Channel

Middle Channel



Date: 28_JAN.2021 04:09:32

Date: 28_JAN.2021 04:09:13



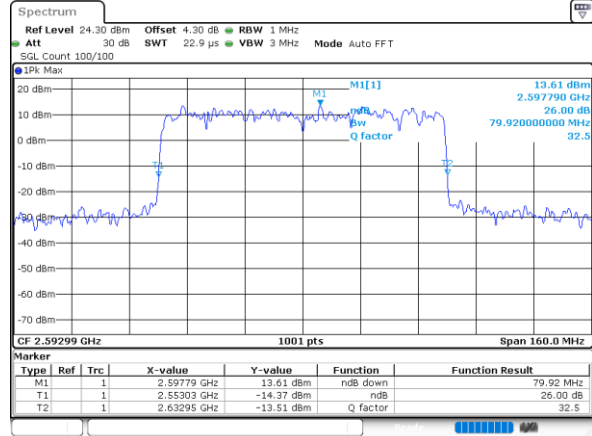
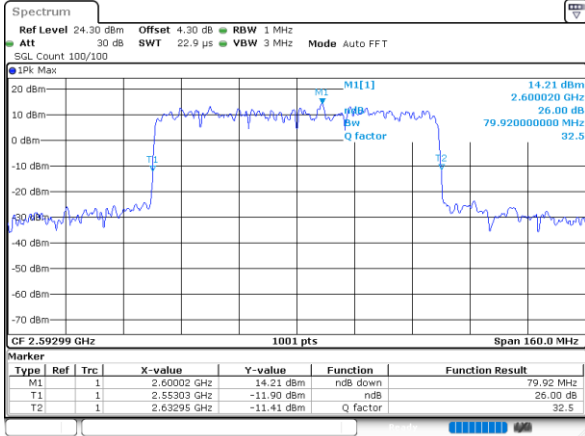
FR1 n41+2A / 80MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 28_JAN.2021 04:07:44

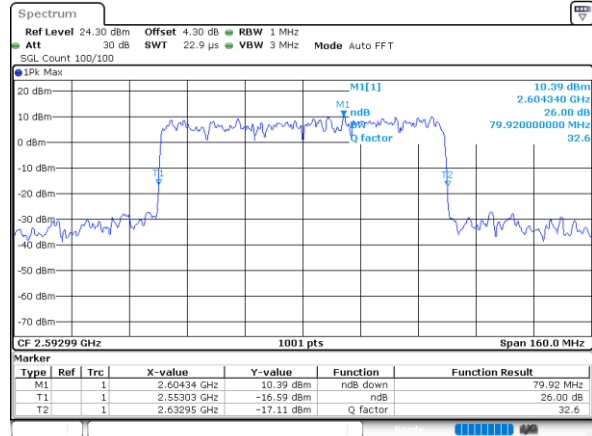
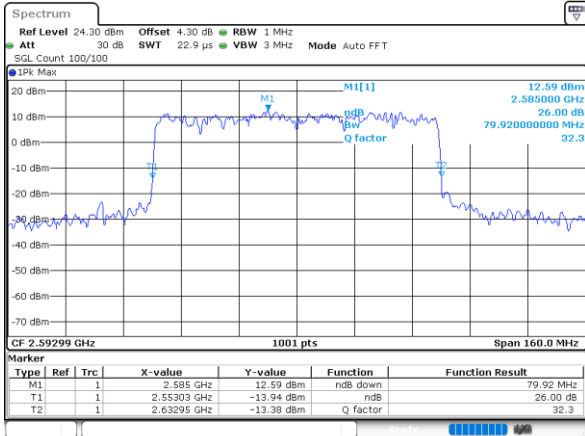
Date: 28_JAN.2021 04:08:05

64QAM

256QAM

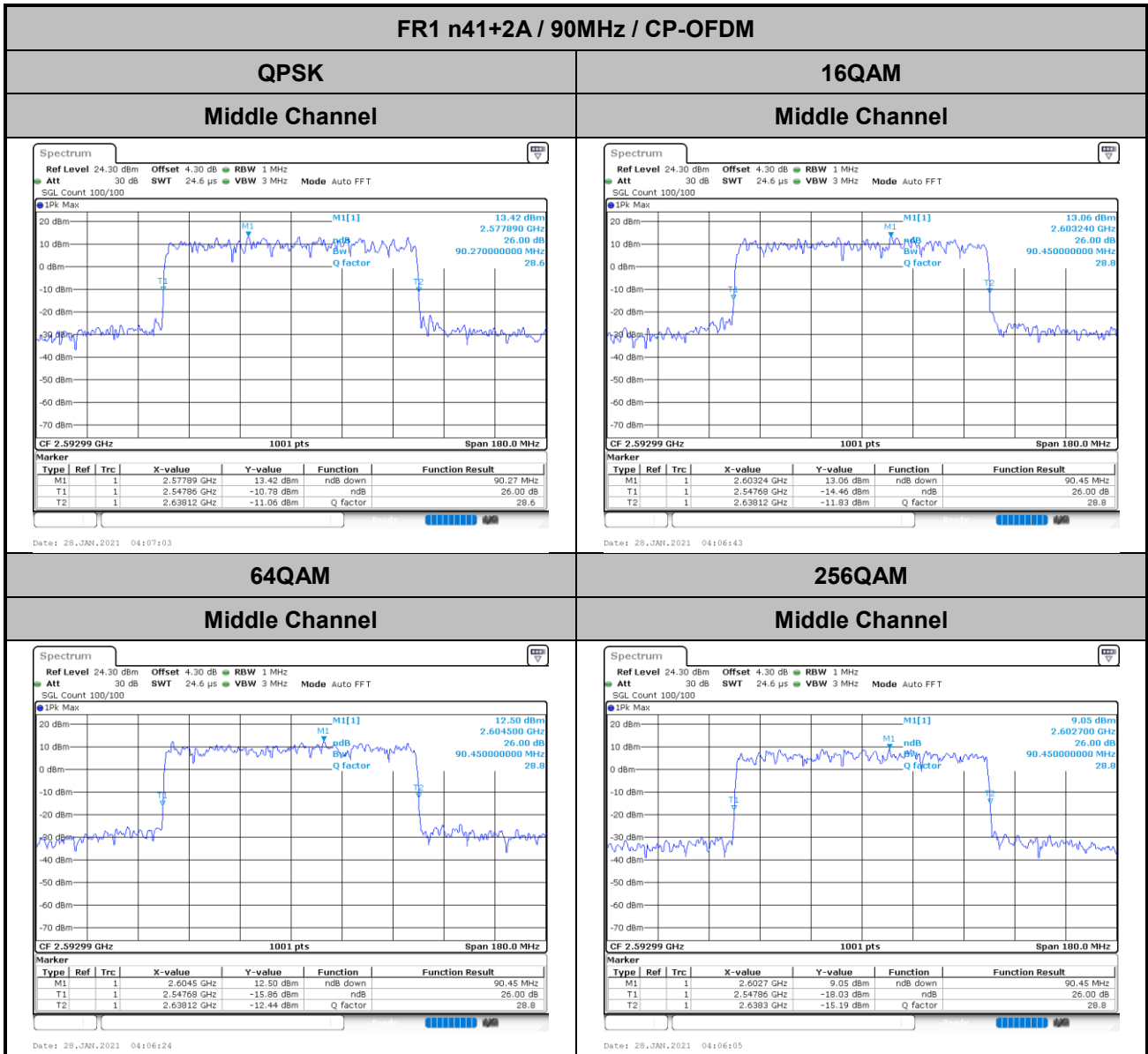
Middle Channel

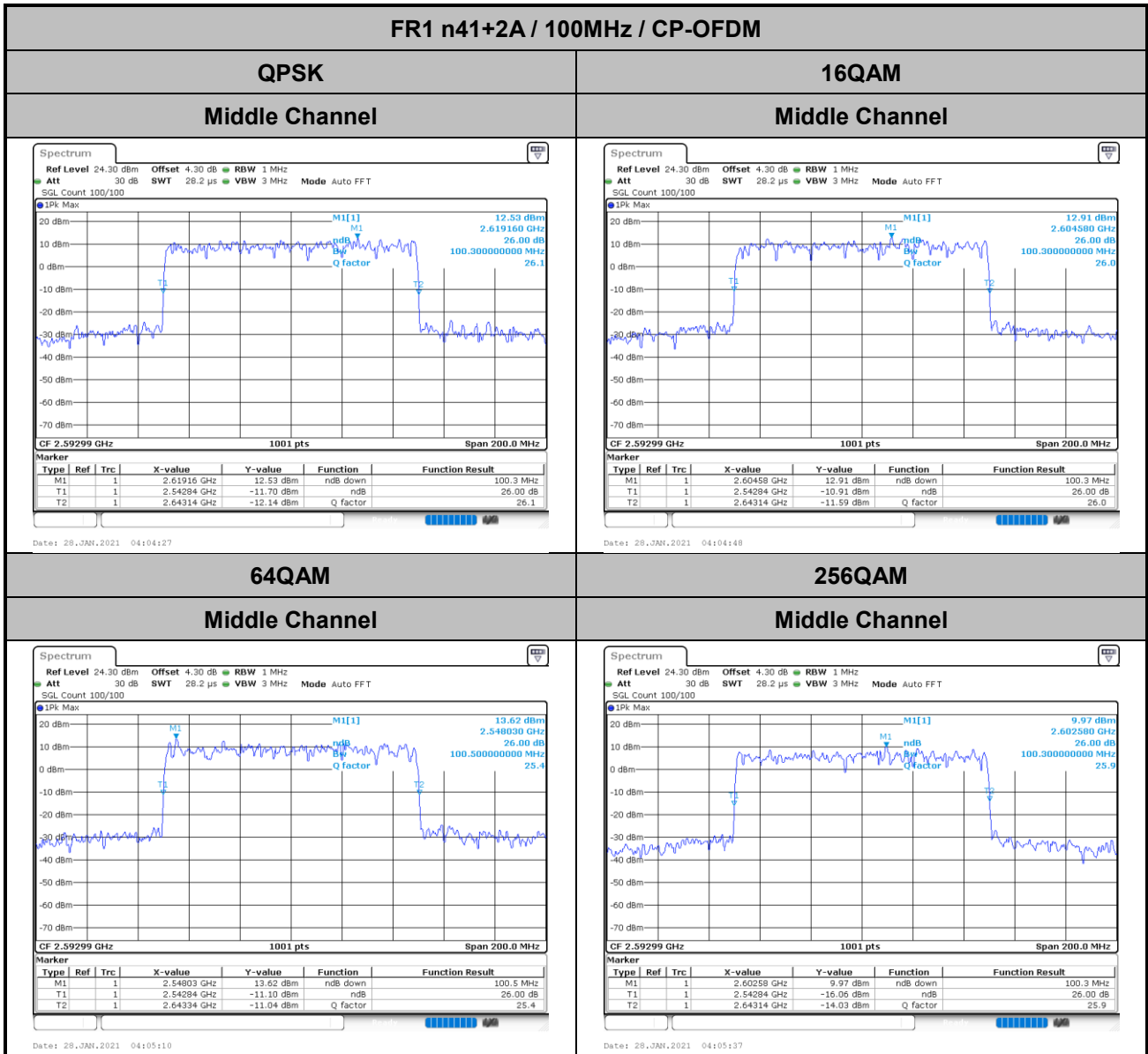
Middle Channel



Date: 28_JAN.2021 04:08:26

Date: 28_JAN.2021 04:08:46







Occupied Bandwidth

| Mode | FR1 n41+2A : OBW(MHz) / CP-OFDM | | | | | | | |
|-----------|---------------------------------|-------|-------|--------|--|--|--|--|
| BW | 20MHz | 20MHz | 20MHz | 20MHz | | | | |
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | | | | |
| Middle CH | 18.26 | 18.30 | 18.34 | 18.30 | | | | |

| Mode | FR1 n41+2A : OBW(MHz) / CP-OFDM | | | | | | | |
|-----------|---------------------------------|-------|-------|--------|--|--|--|--|
| BW | 30MHz | 30MHz | 30MHz | 30MHz | | | | |
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | | | | |
| Middle CH | 27.81 | 27.81 | 27.87 | 27.99 | | | | |

| Mode | FR1 n41+2A : OBW(MHz) / CP-OFDM | | | | | | | |
|-----------|---------------------------------|-------|-------|--------|--|--|--|--|
| BW | 40MHz | 40MHz | 40MHz | 40MHz | | | | |
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | | | | |
| Middle CH | 38.04 | 38.12 | 37.96 | 37.88 | | | | |

| Mode | FR1 n41+2A : OBW(MHz) / CP-OFDM | | | | | | | |
|-----------|---------------------------------|-------|-------|--------|--|--|--|--|
| BW | 50MHz | 50MHz | 50MHz | 50MHz | | | | |
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | | | | |
| Middle CH | 47.45 | 47.95 | 47.55 | 47.95 | | | | |

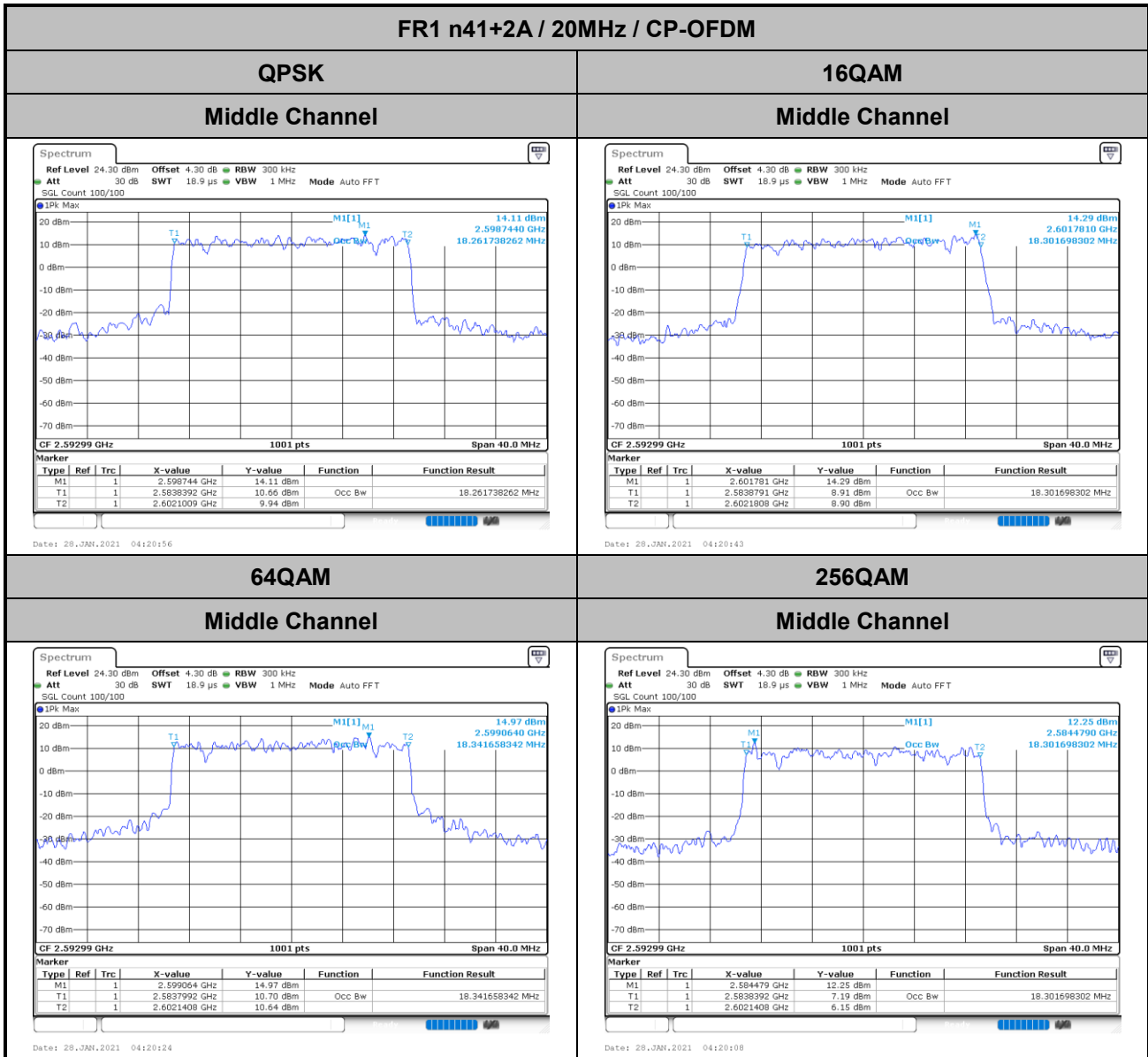
| Mode | FR1 n41+2A : OBW(MHz) / CP-OFDM | | | | | | | |
|-----------|---------------------------------|-------|-------|--------|--|--|--|--|
| BW | 60MHz | 60MHz | 60MHz | 60MHz | | | | |
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | | | | |
| Middle CH | 58.26 | 57.90 | 57.90 | 57.90 | | | | |

| Mode | FR1 n41+2A : OBW(MHz) / CP-OFDM | | | | | | | |
|-----------|---------------------------------|-------|-------|--------|--|--|--|--|
| BW | 80MHz | 80MHz | 80MHz | 80MHz | | | | |
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | | | | |
| Middle CH | 77.20 | 77.20 | 77.36 | 77.04 | | | | |

| Mode | FR1 n41+2A : OBW(MHz) / CP-OFDM | | | | | | | |
|-----------|---------------------------------|-------|-------|--------|--|--|--|--|
| BW | 90MHz | 90MHz | 90MHz | 90MHz | | | | |
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | | | | |
| Middle CH | 87.57 | 87.39 | 87.39 | 87.03 | | | | |



| | | | | | | | | |
|-----------|---------------------------------|--------|--------|--------|--|--|--|--|
| Mode | FR1 n41+2A : OBW(MHz) / CP-OFDM | | | | | | | |
| BW | 100MHz | 100MHz | 100MHz | 100MHz | | | | |
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | | | | |
| Middle CH | 97.70 | 97.30 | 97.50 | 96.70 | | | | |





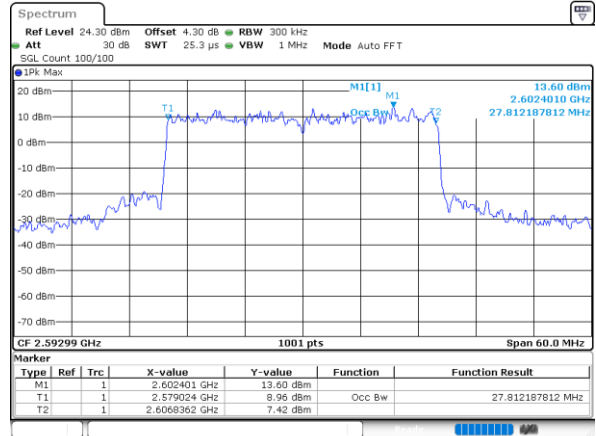
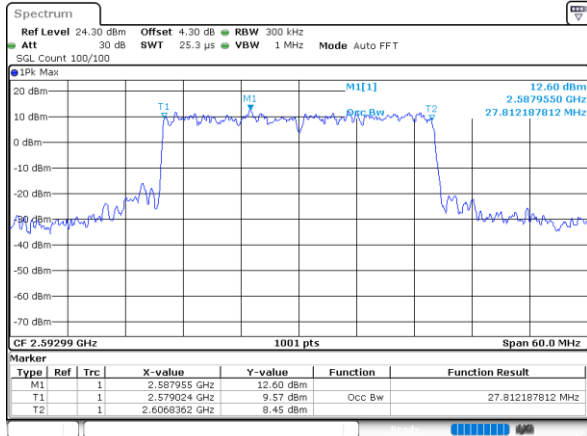
FR1 n41+2A / 30MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 28_JAN.2021 04:17:57

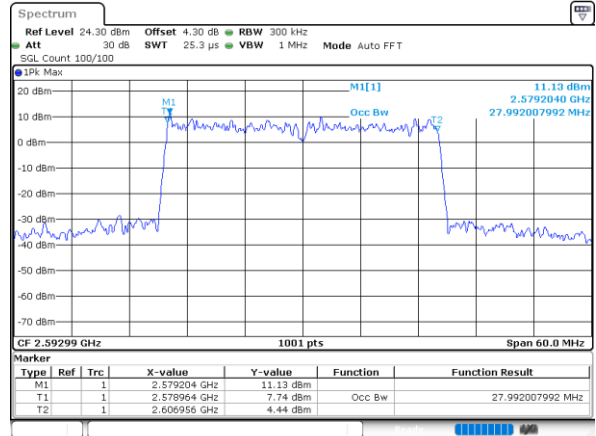
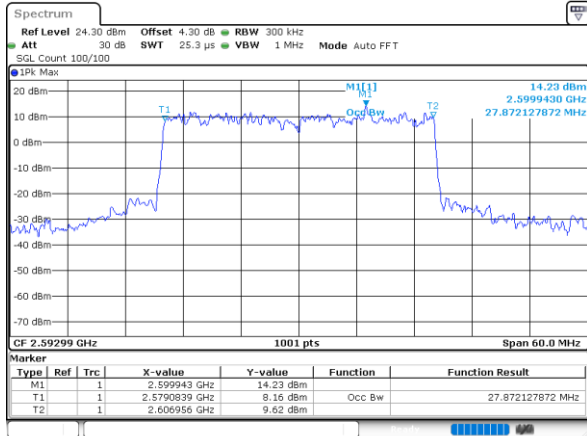
Date: 28_JAN.2021 04:18:34

64QAM

256QAM

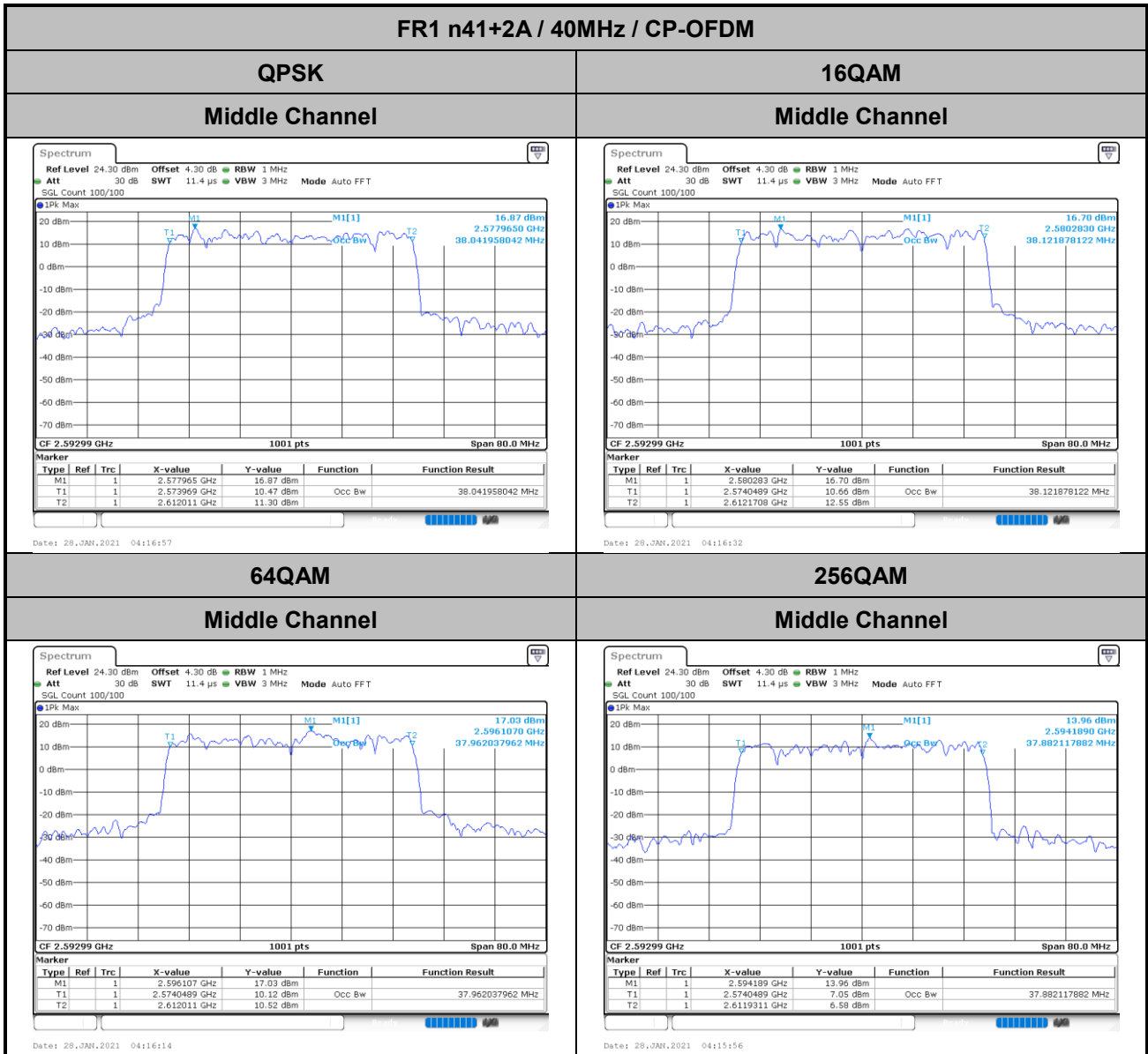
Middle Channel

Middle Channel



Date: 28_JAN.2021 04:19:04

Date: 28_JAN.2021 04:19:34





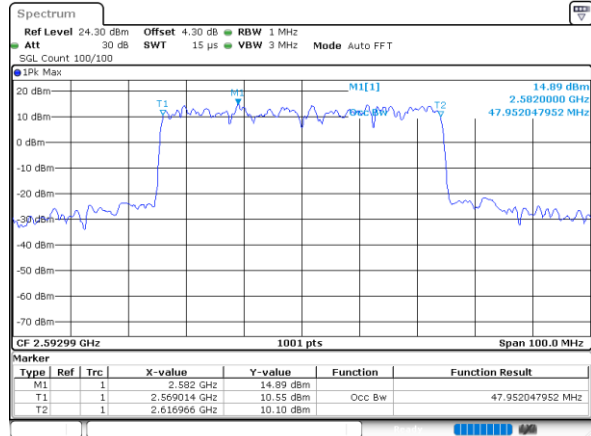
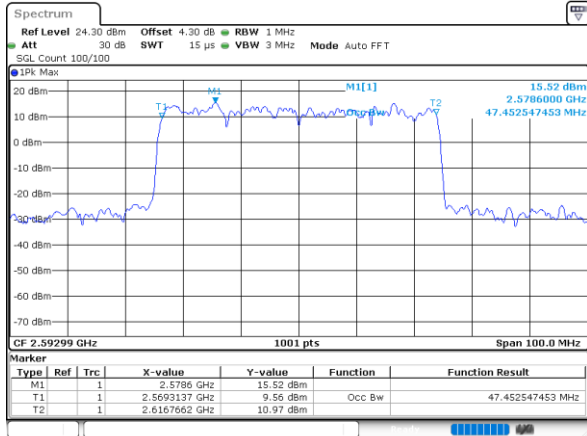
FR1 n41+2A / 50MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 28_JAN_2021 04:14:32

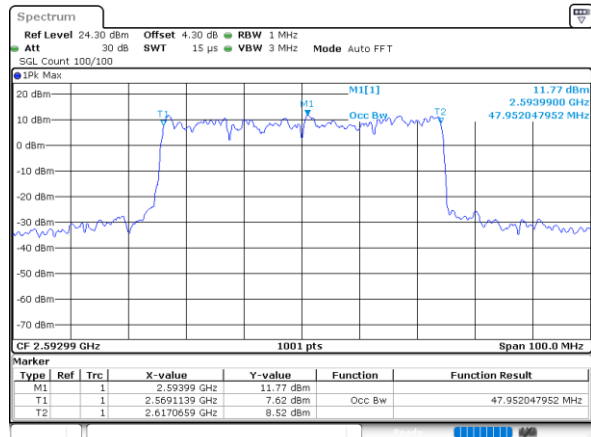
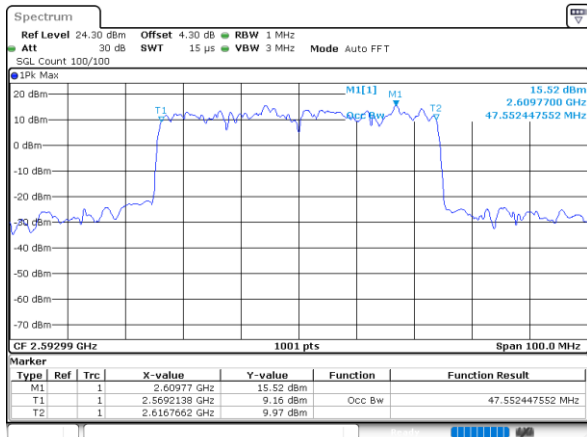
Date: 28_JAN_2021 04:14:50

64QAM

256QAM

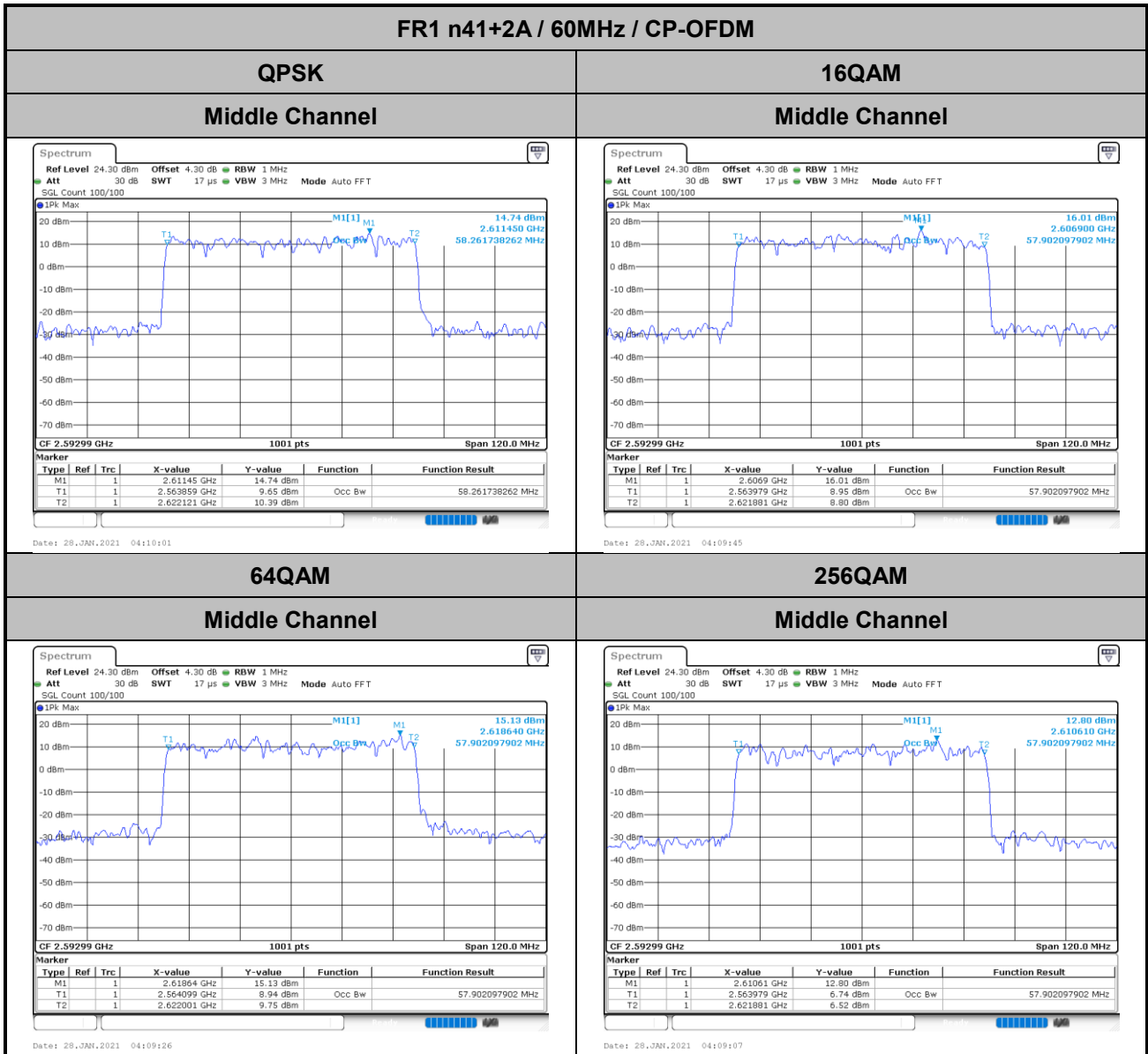
Middle Channel

Middle Channel



Date: 28_JAN_2021 04:15:07

Date: 28_JAN_2021 04:15:24





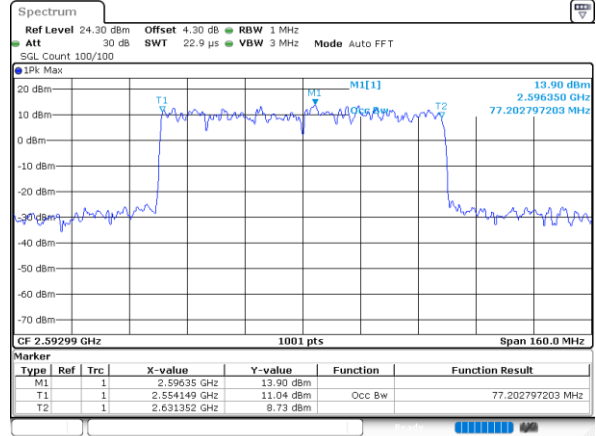
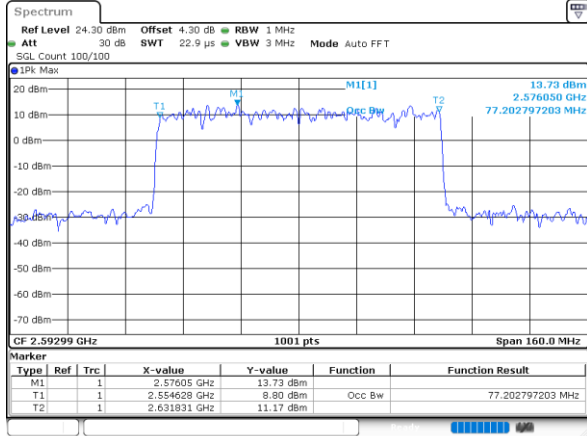
FR1 n41+2A / 80MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 28_JAN.2021 04:07:38

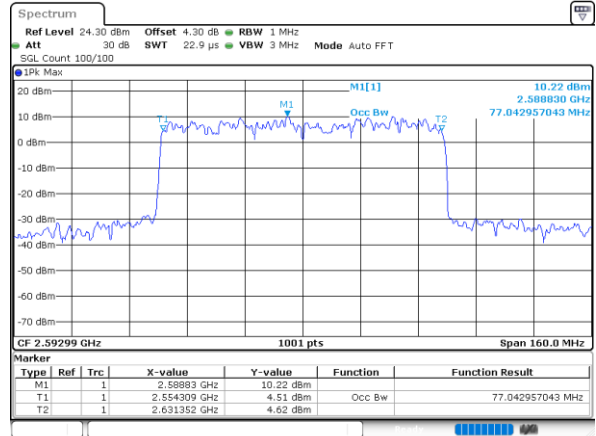
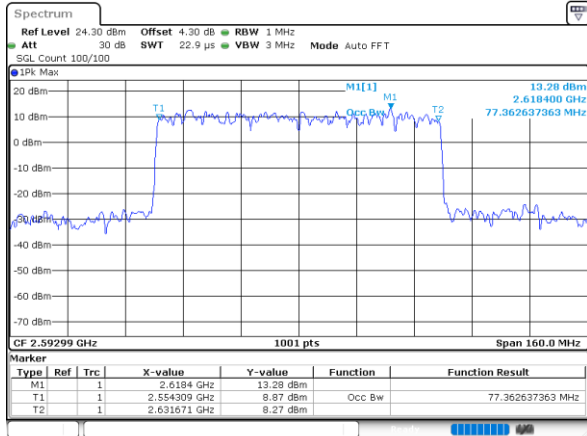
Date: 28_JAN.2021 04:07:58

64QAM

256QAM

Middle Channel

Middle Channel



Date: 28_JAN.2021 04:08:20

Date: 28_JAN.2021 04:08:40



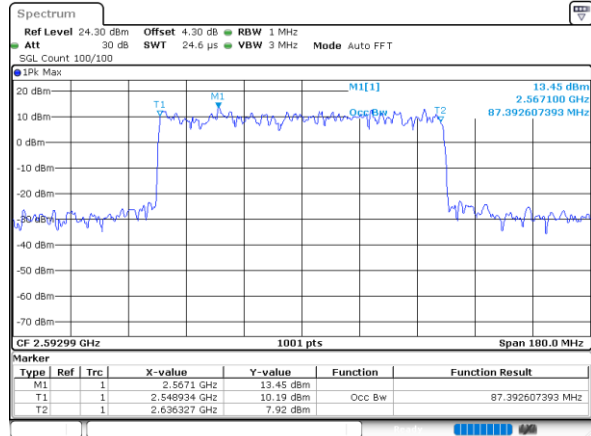
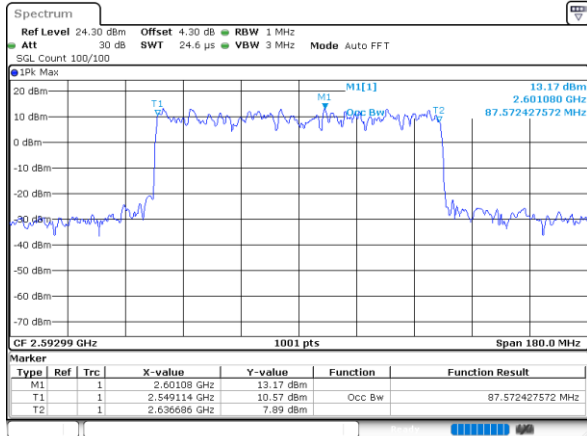
FR1 n41+2A / 90MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 28_JAN.2021 04:06:56

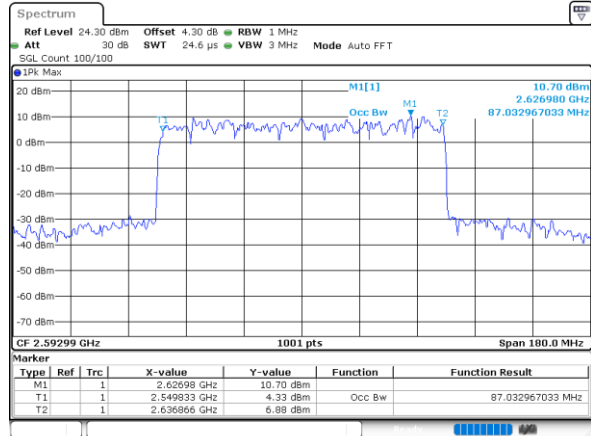
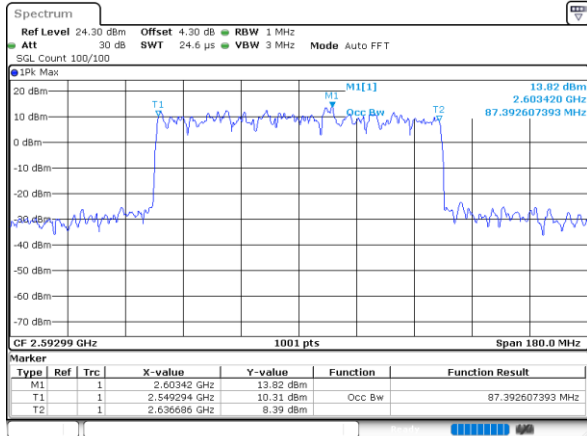
Date: 28_JAN.2021 04:06:36

64QAM

256QAM

Middle Channel

Middle Channel



Date: 28_JAN.2021 04:06:17

Date: 28_JAN.2021 04:05:58



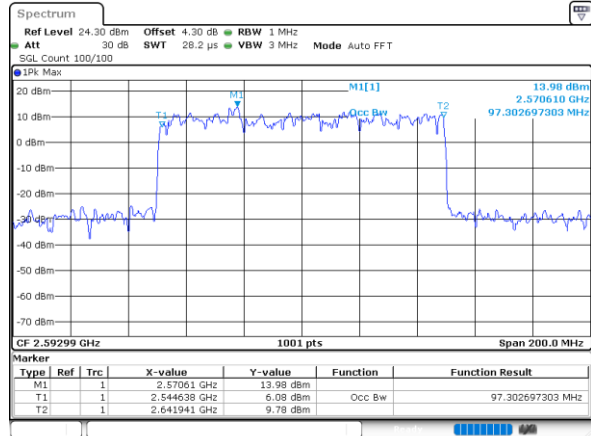
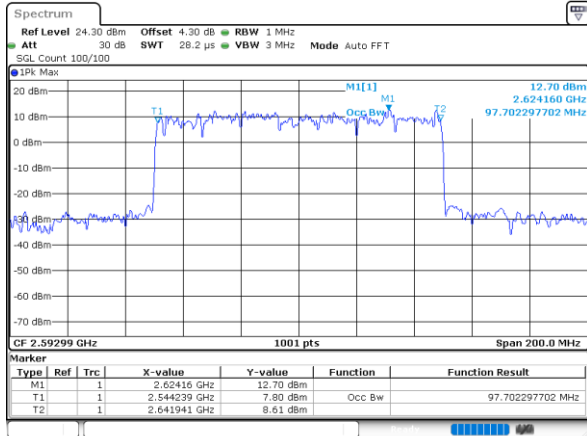
FR1 n41+2A / 100MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 28_JAN.2021 04:04:20

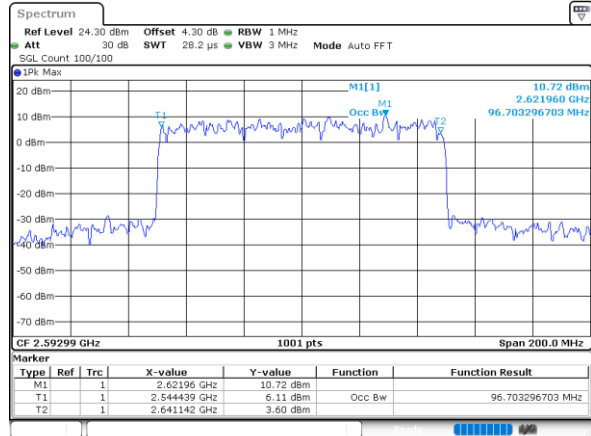
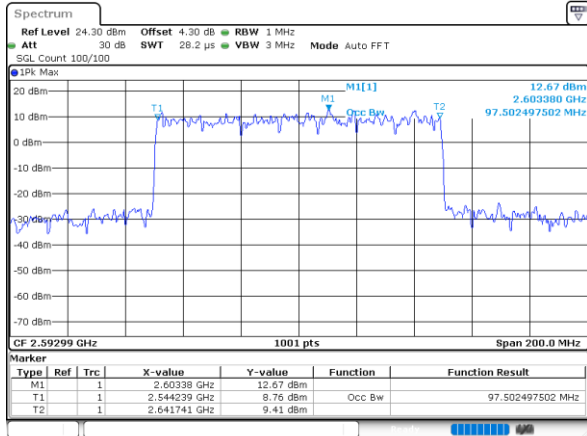
Date: 28_JAN.2021 04:04:41

64QAM

256QAM

Middle Channel

Middle Channel

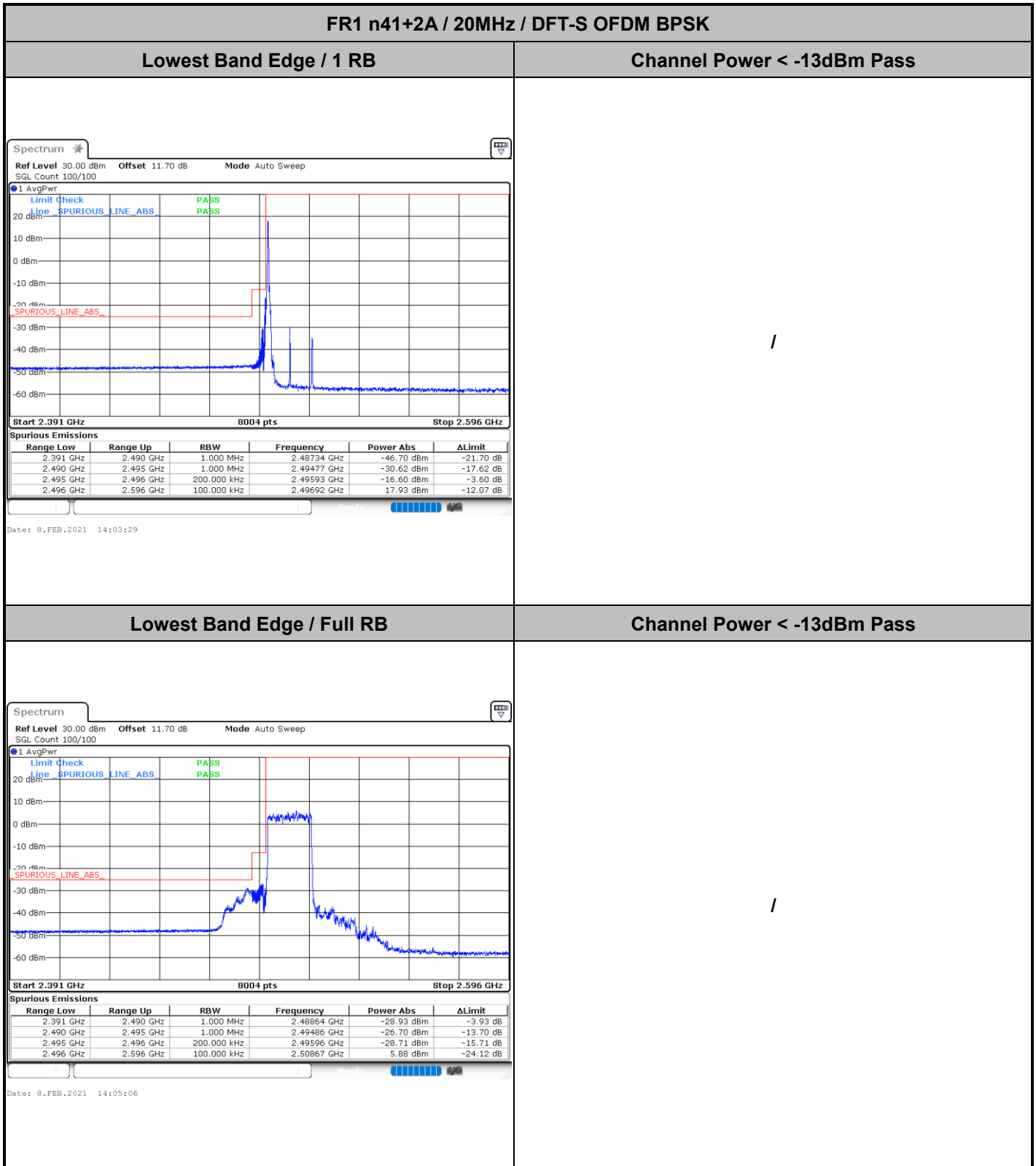


Date: 28_JAN.2021 04:05:03

Date: 28_JAN.2021 04:05:31



Conducted Band Edge

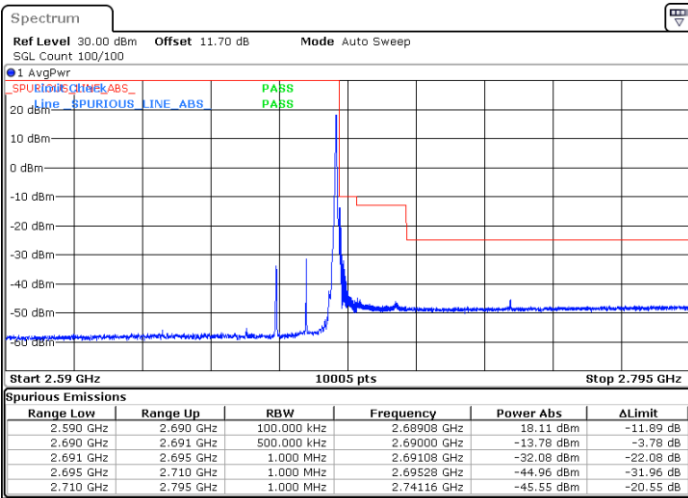




FR1 n41+2A / 20MHz / DFT-S OFDM BPSK

Highest Band Edge / 1 RB

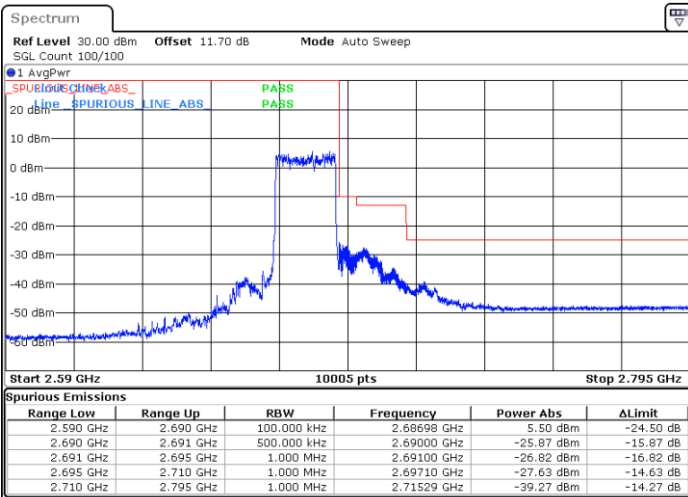
Channel Power < -13dBm Pass



Date: 8.FEB.2021 14:09:46

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



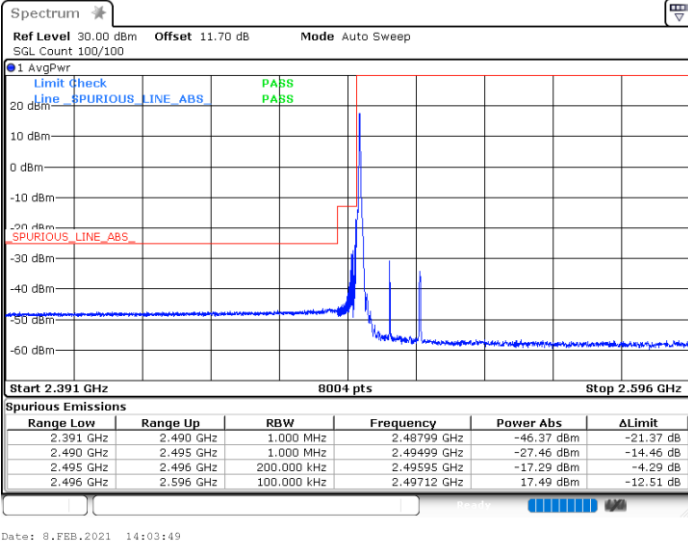
Date: 8.FEB.2021 14:05:40



FR1 n41+2A / 20MHz / DFT-S OFDM QPSK

Lowest Band Edge / 1 RB

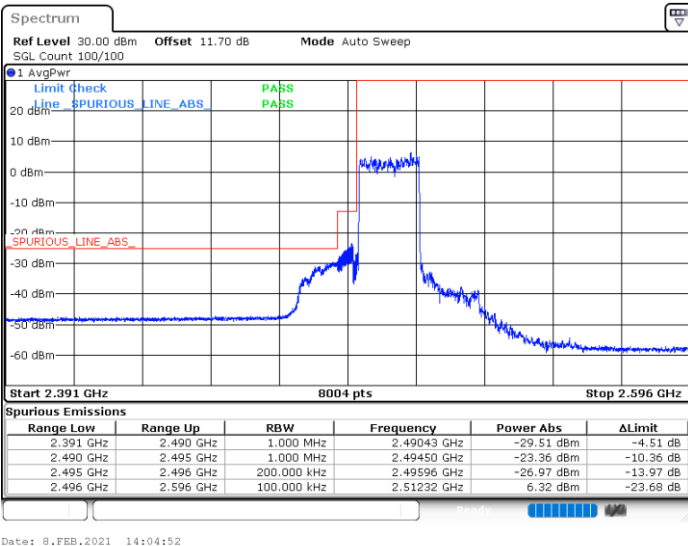
Channel Power < -13dBm Pass



/

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



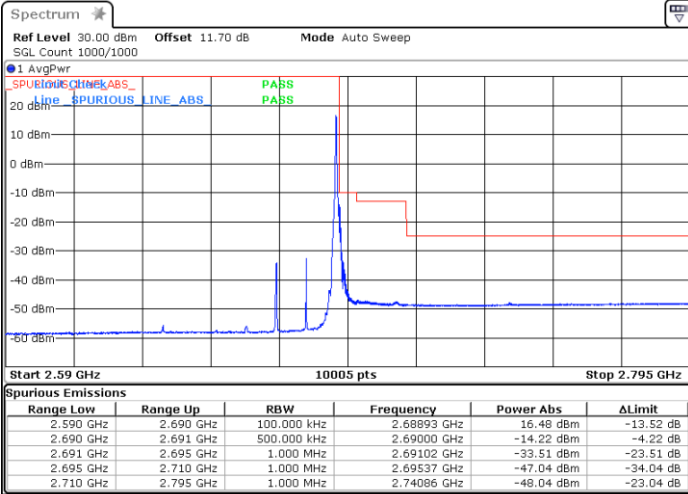
/



FR1 n41+2A / 20MHz / DFT-S OFDM QPSK

Highest Band Edge / 1 RB

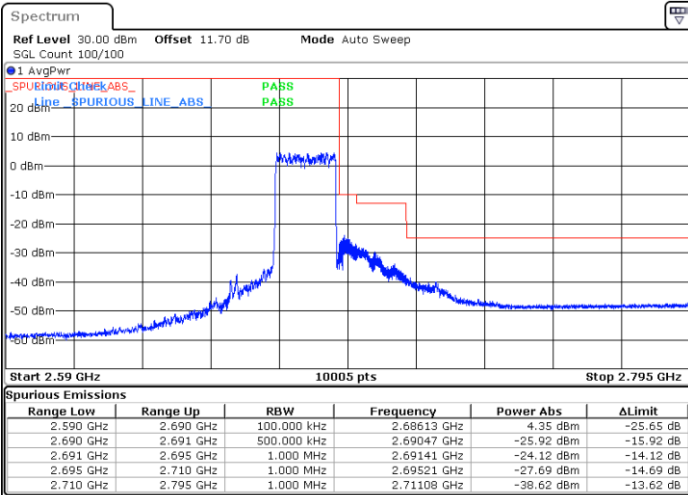
Channel Power < -13dBm Pass



Date: 8.FEB.2021 14:09:34

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



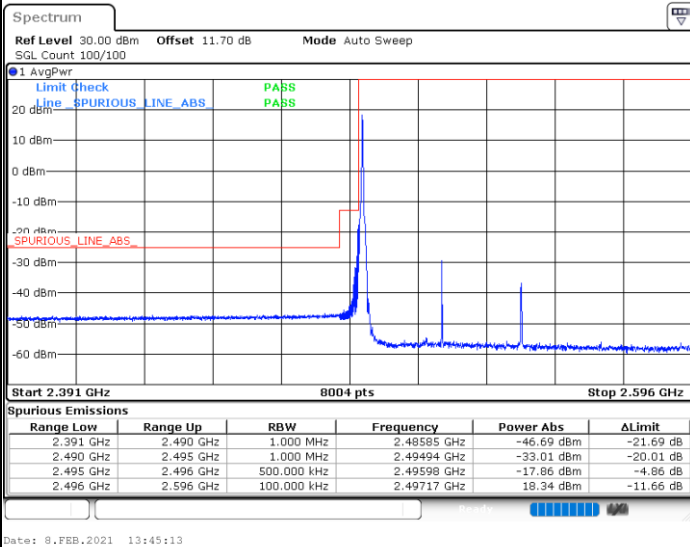
Date: 8.FEB.2021 14:05:54



FR1 n41+2A / 50MHz / DFT-S OFDM BPSK

Lowest Band Edge / 1 RB

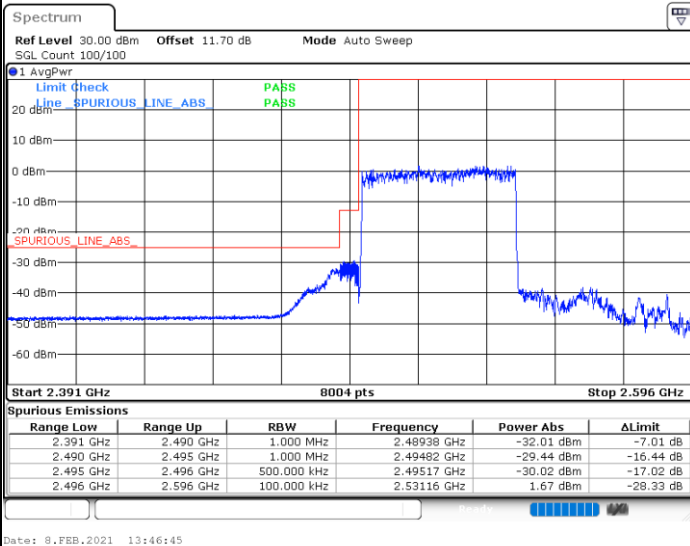
Channel Power < -13dBm Pass



/

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



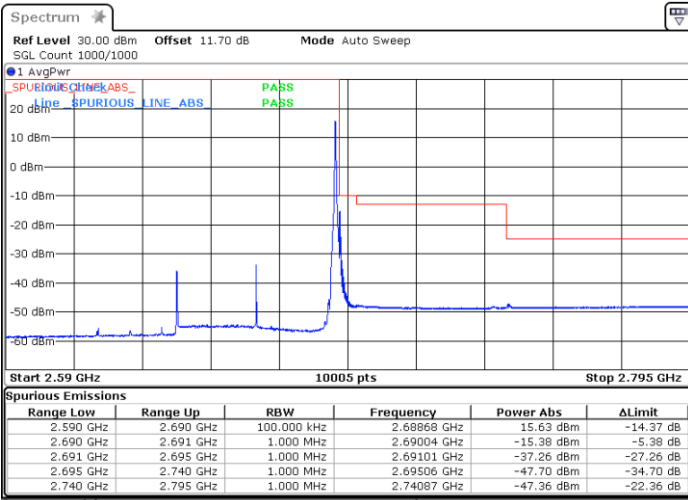
/



FR1 n41+2A / 50MHz / DFT-S OFDM BPSK

Highest Band Edge / 1 RB

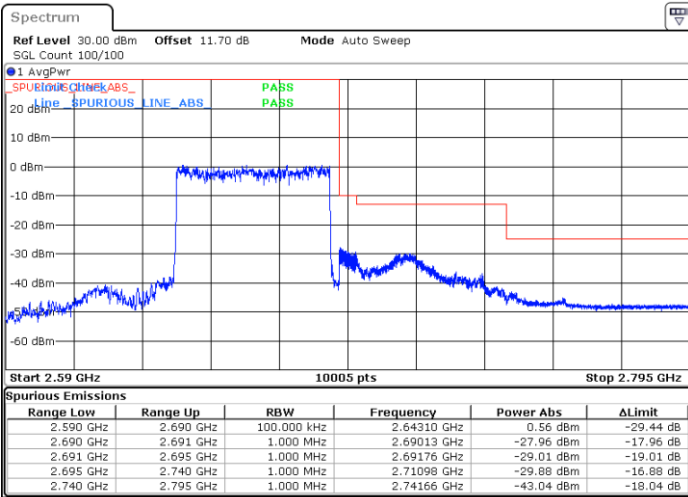
Channel Power < -13dBm Pass



/

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



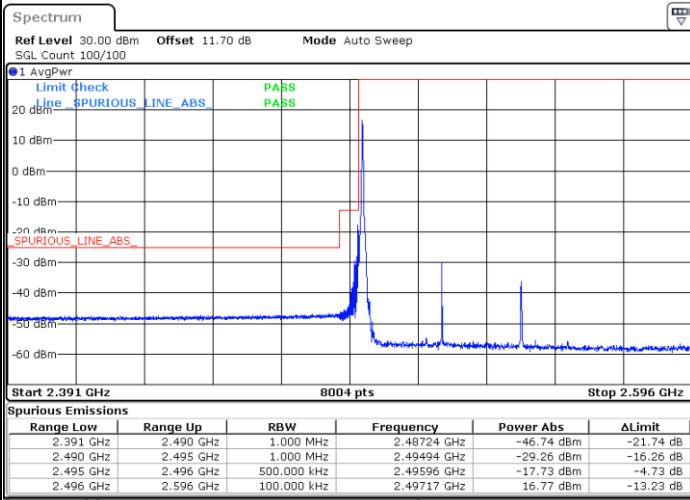
/



FR1 n41+2A / 50MHz / DFT-S OFDM QPSK

Lowest Band Edge / 1 RB

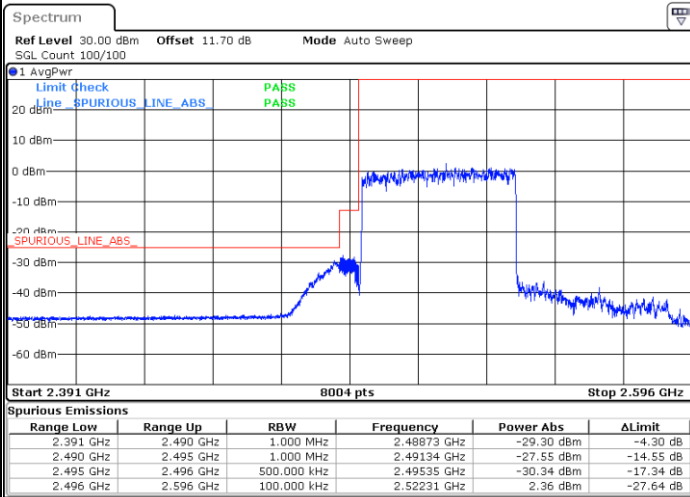
Channel Power < -13dBm Pass



Date: 8.FEB.2021 13:45:25

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



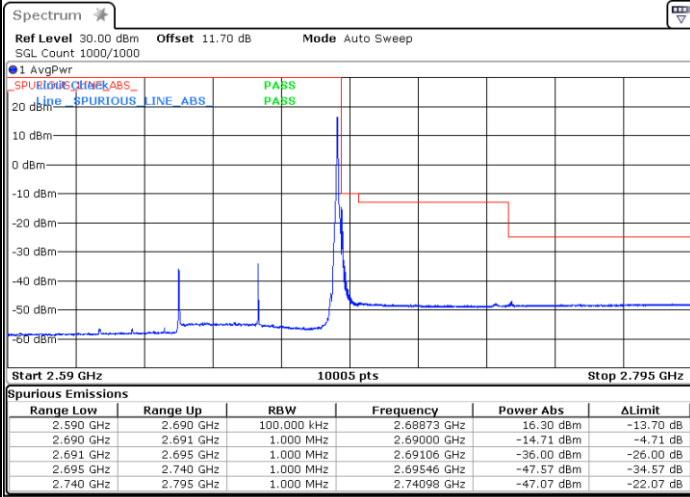
Date: 8.FEB.2021 13:46:24



FR1 n41+2A / 50MHz / DFT-S OFDM QPSK

Highest Band Edge / 1 RB

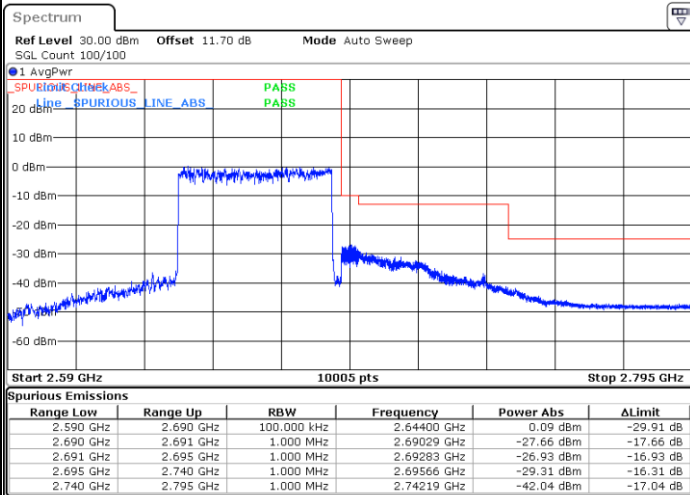
Channel Power < -13dBm Pass



Date: 8.FEB.2021 15:49:47

Highest Band Edge / Full RB

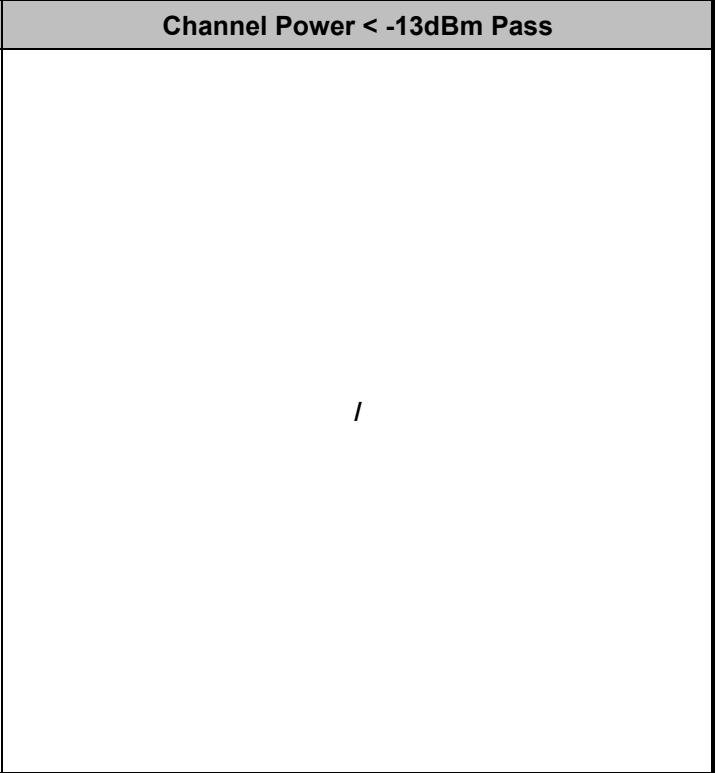
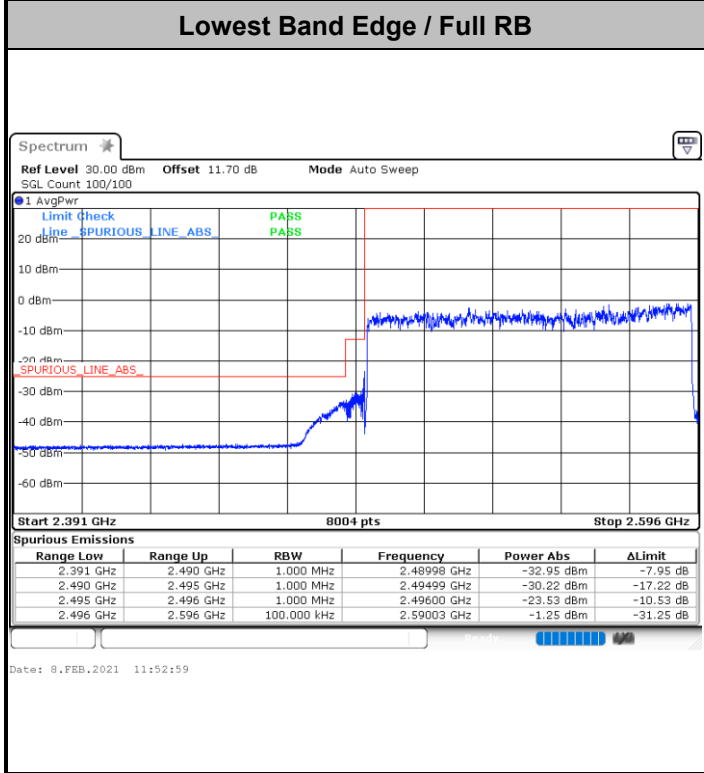
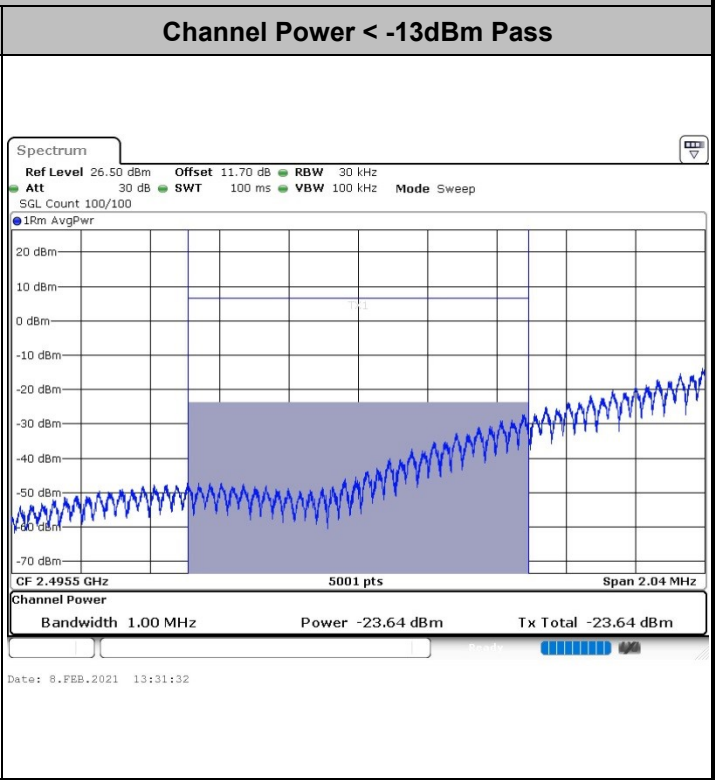
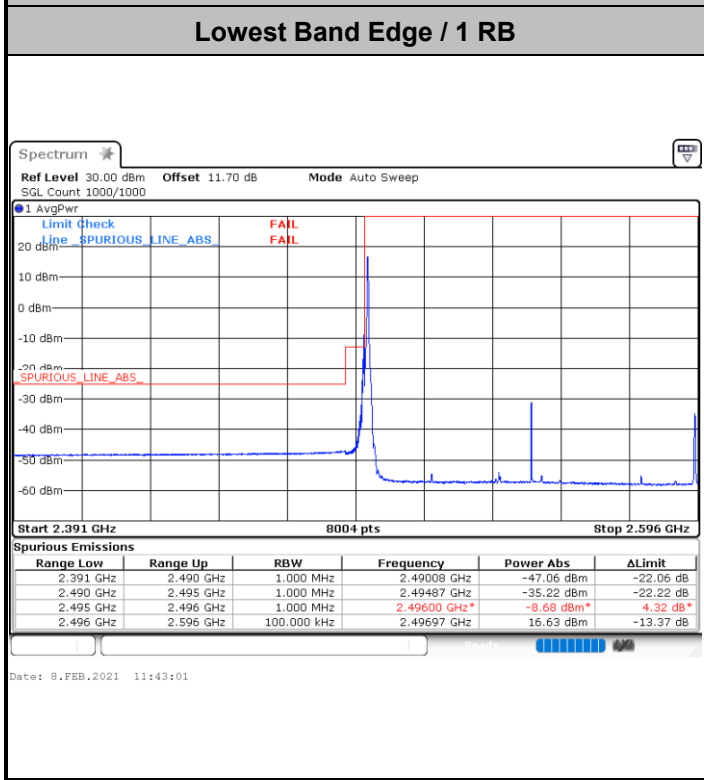
Channel Power < -13dBm Pass



Date: 8.FEB.2021 15:48:33

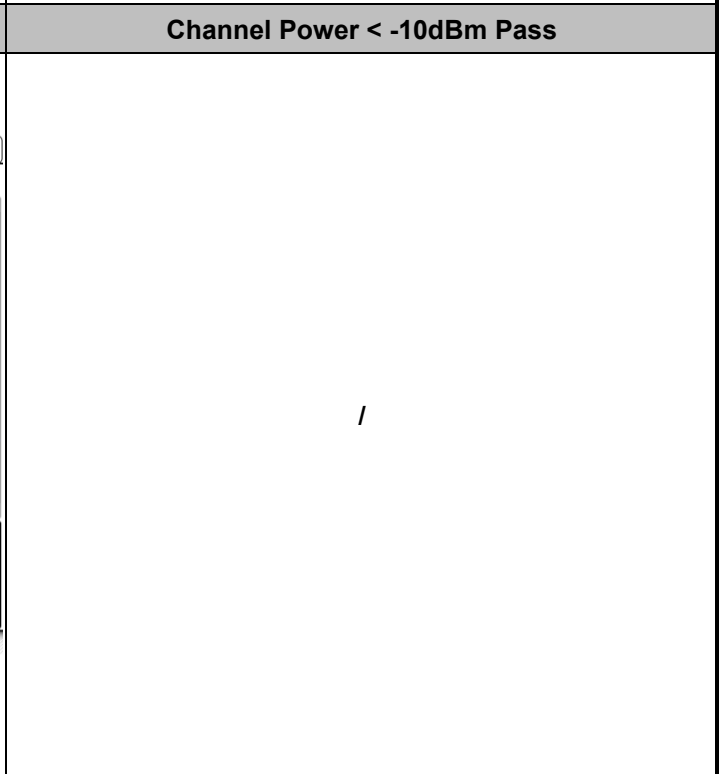
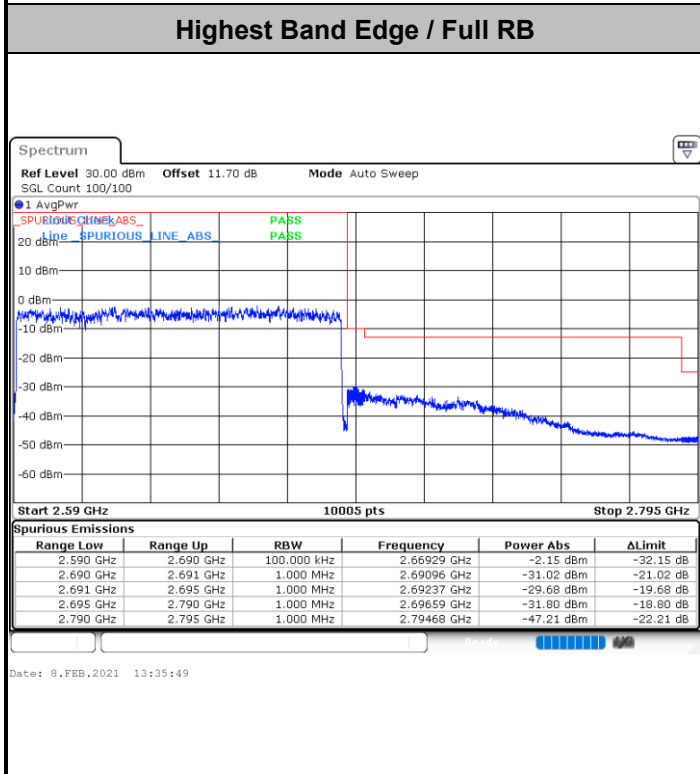
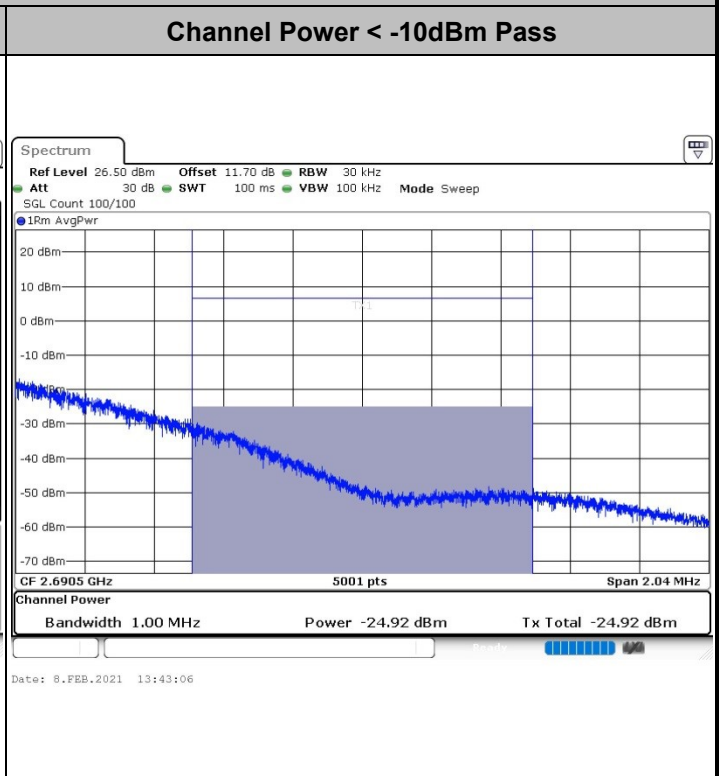
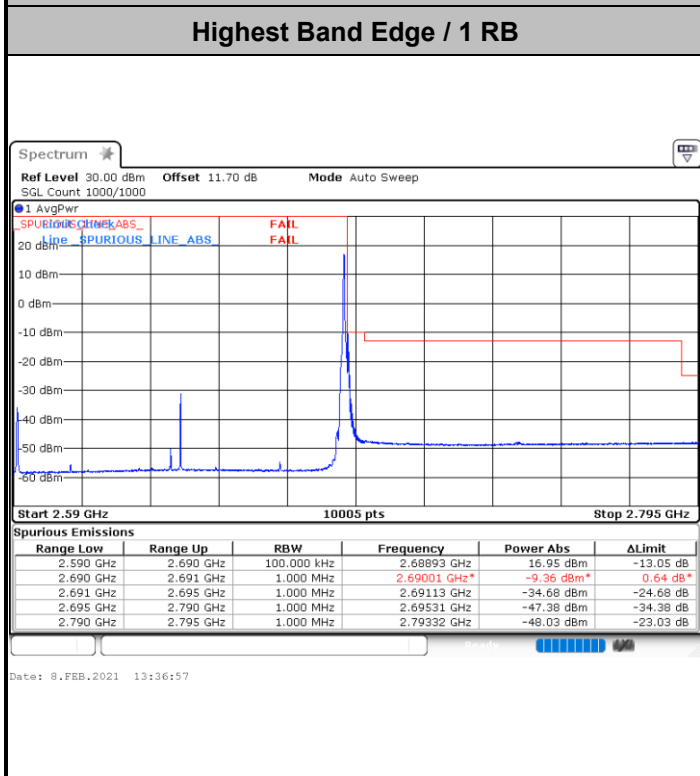


FR1 n41+2A / 100MHz / DFT-S OFDM BPSK



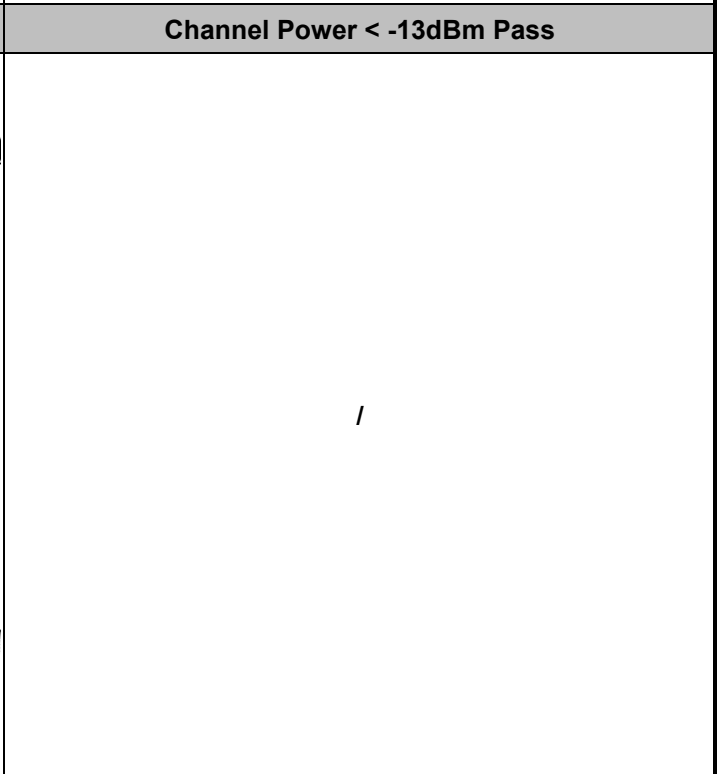
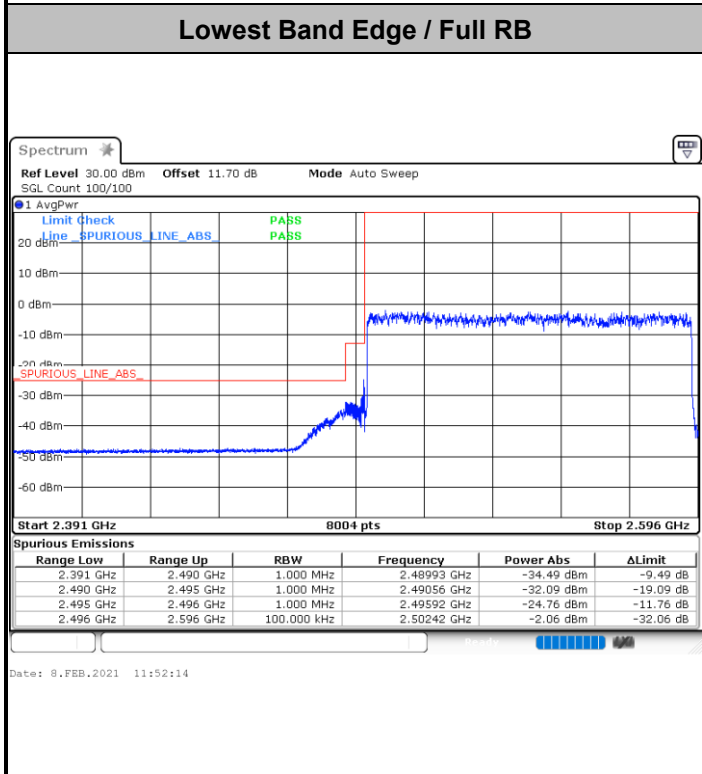
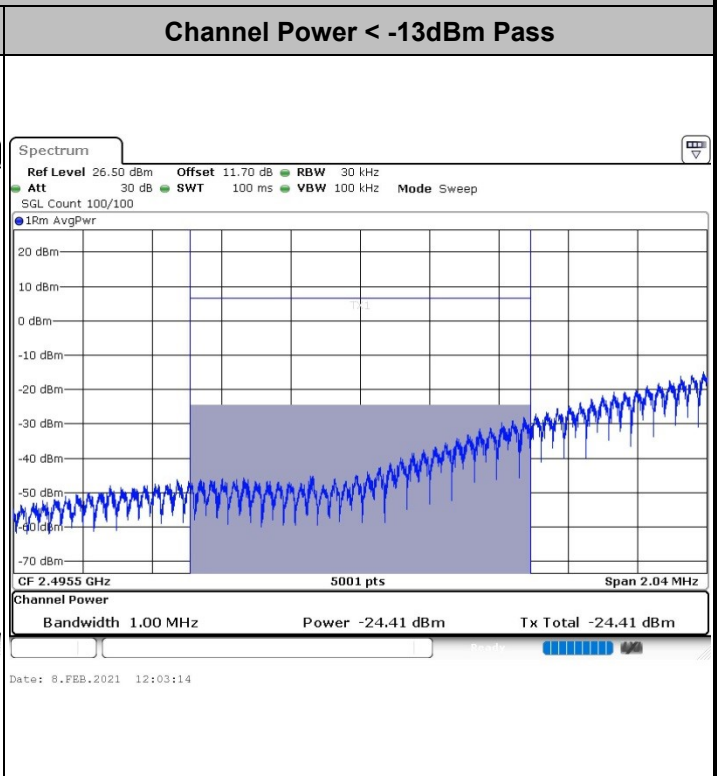
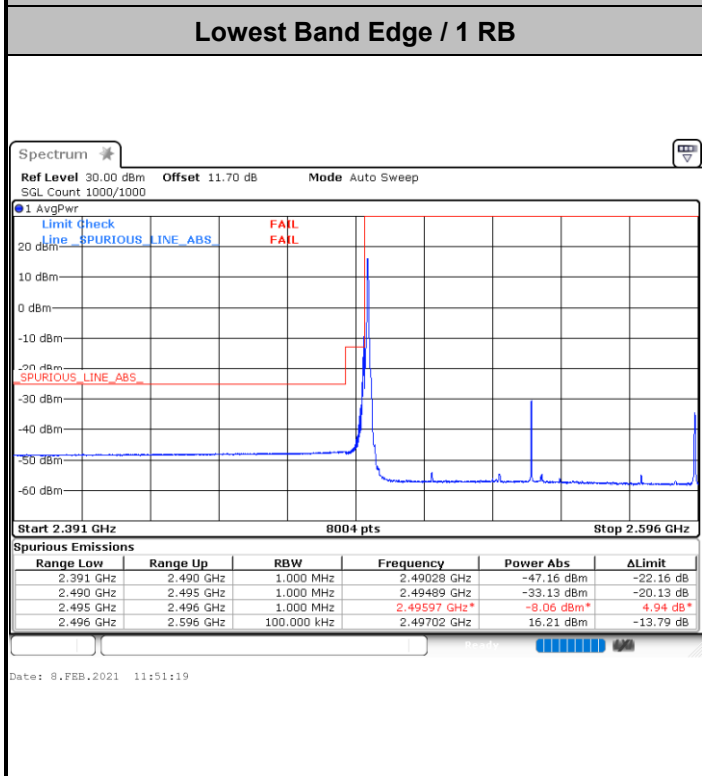


FR1 n41+2A / 100MHz / DFT-S OFDM BPSK



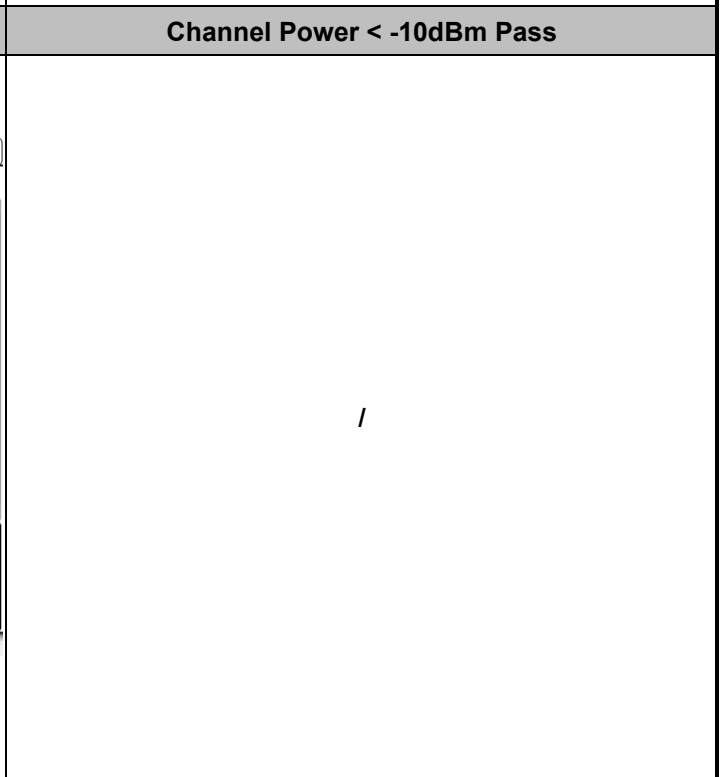
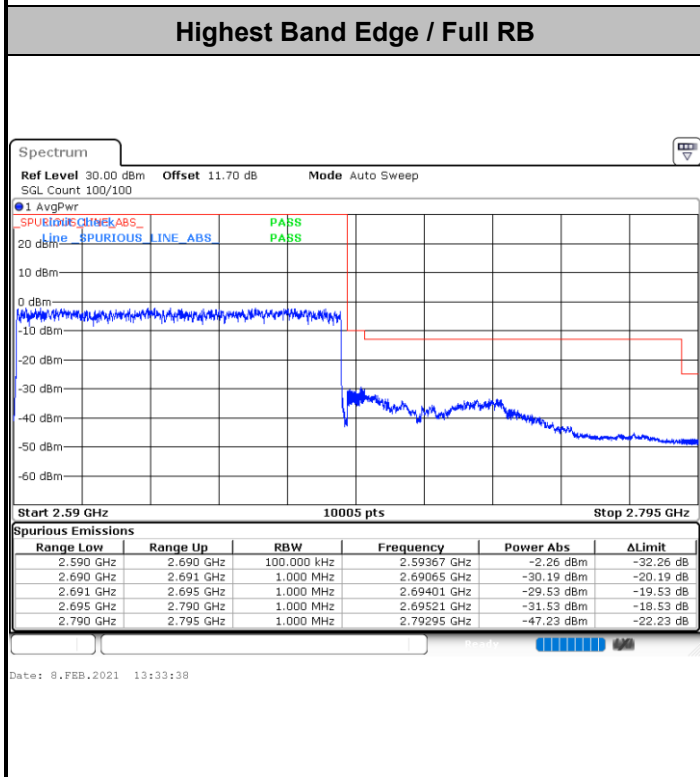
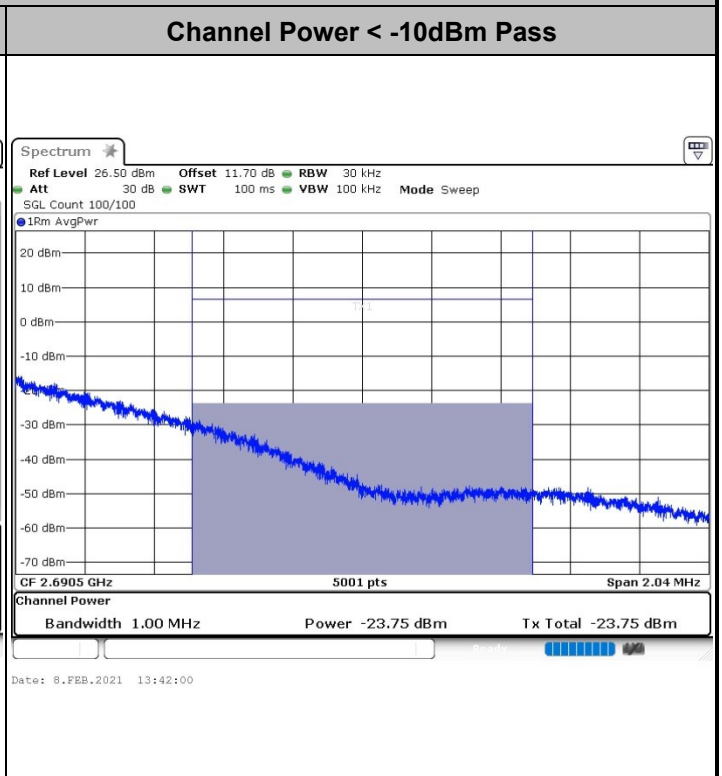
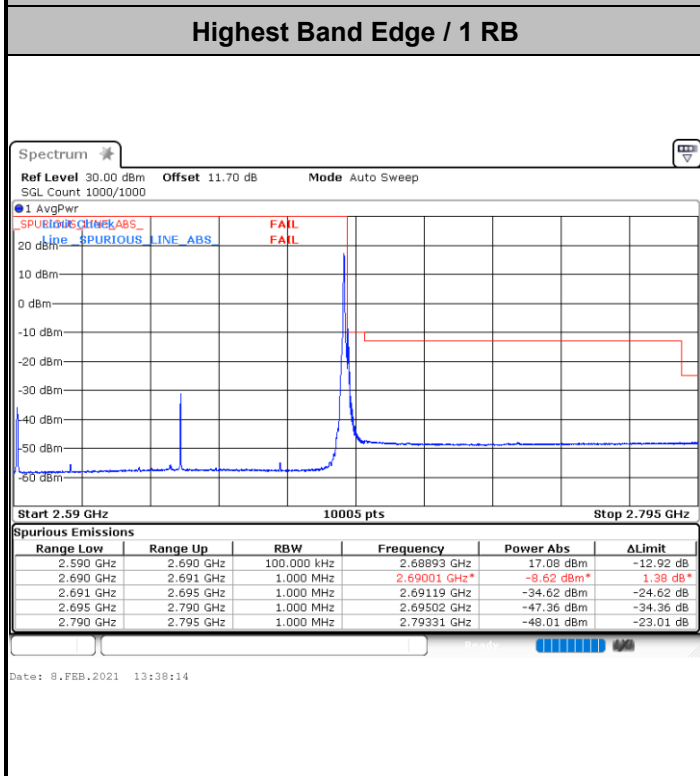


FR1 n41+2A / 100MHz / DFT-S OFDM QPSK





FR1 n41+2A / 100MHz / DFT-S OFDM QPSK





Conducted Spurious Emission

