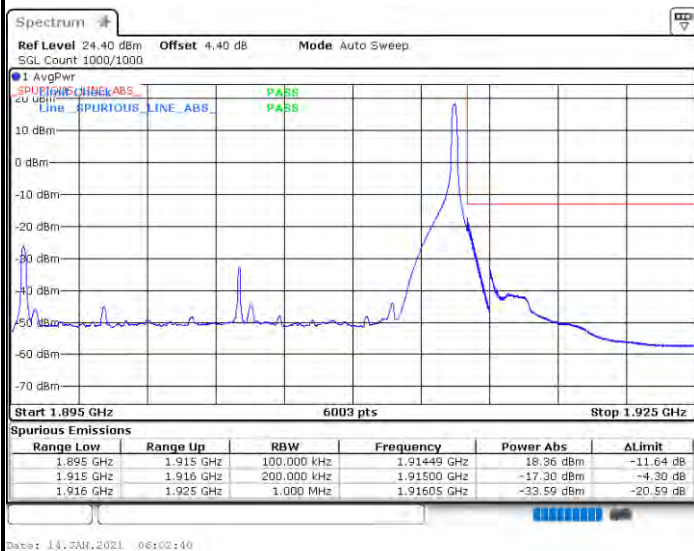




## FR1 n25 / 20MHz / DFT-S OFDM QPSK

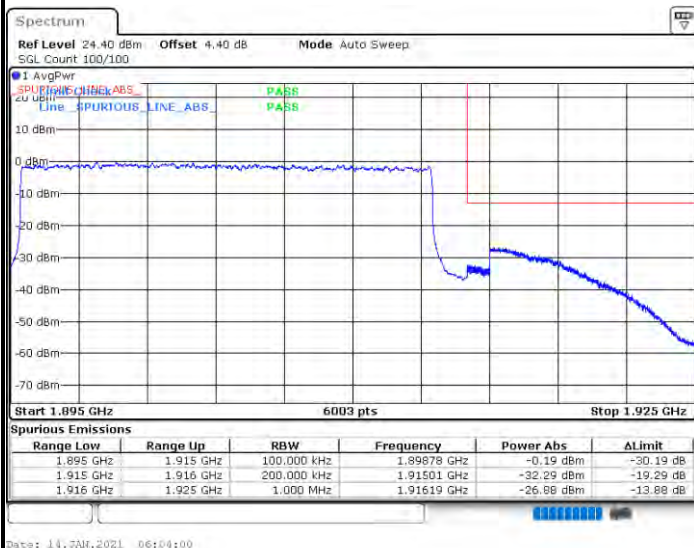
## Highest Band Edge / 1 RB

## Channel Power &lt; -13dBm Pass



## Highest Band Edge / Full RB

## Channel Power &lt; -13dBm Pass

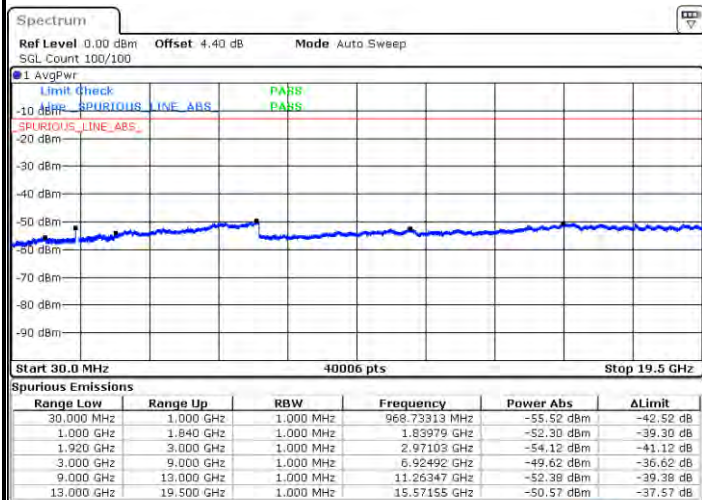




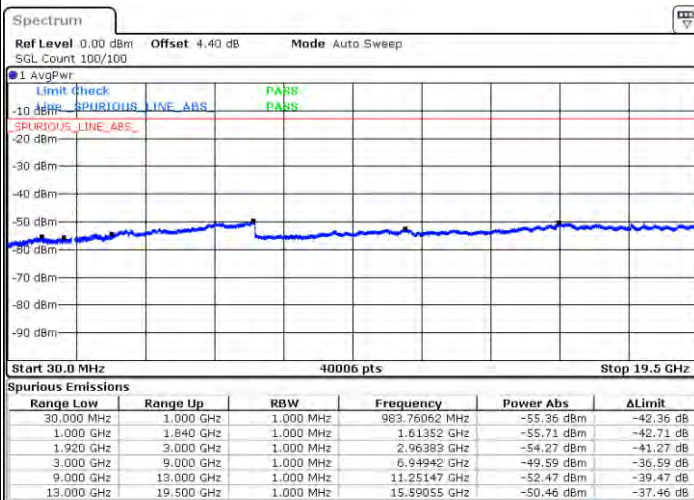
## Conducted Spurious Emission

FR1 n25 / 5MHz / DFT-S OFDM / BPSK

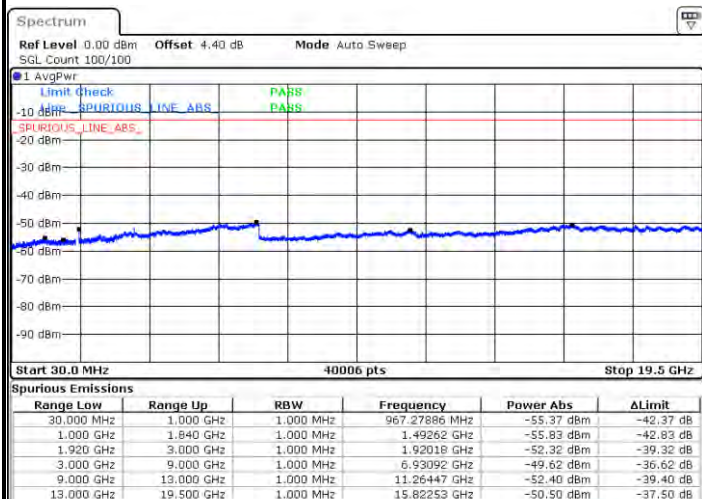
Lowest Channel / 1RB



Middle Channel / 1RB



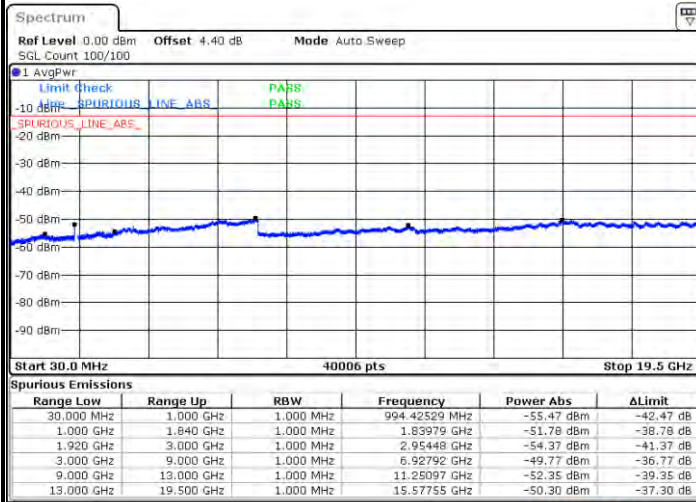
Highest Channel / 1RB





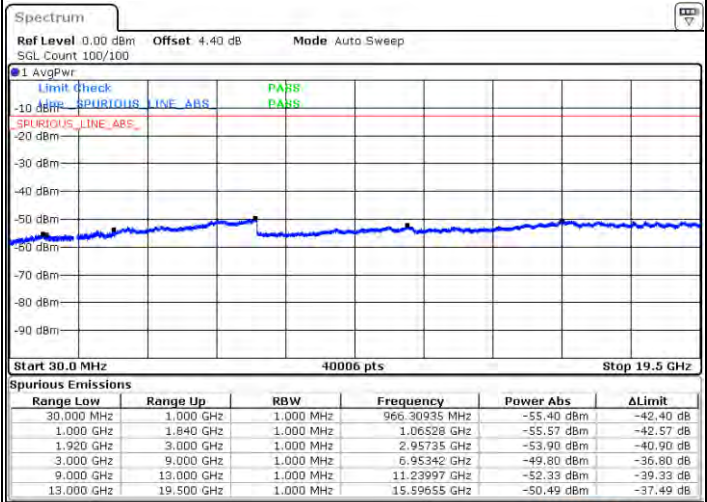
## FR1 n25 / 5MHz / DFT-S OFDM / QPSK

## Lowest Channel / 1RB



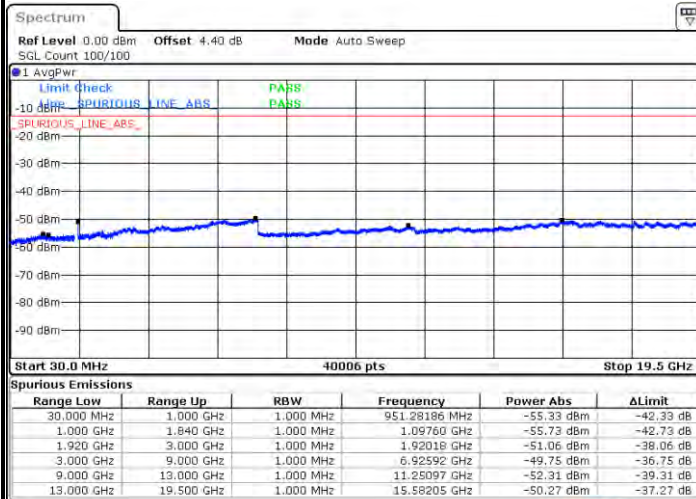
Date: 14.JAN.2021 06:43:33

## Middle Channel / 1RB



Date: 14.JAN.2021 07:13:23

## Highest Channel / 1RB

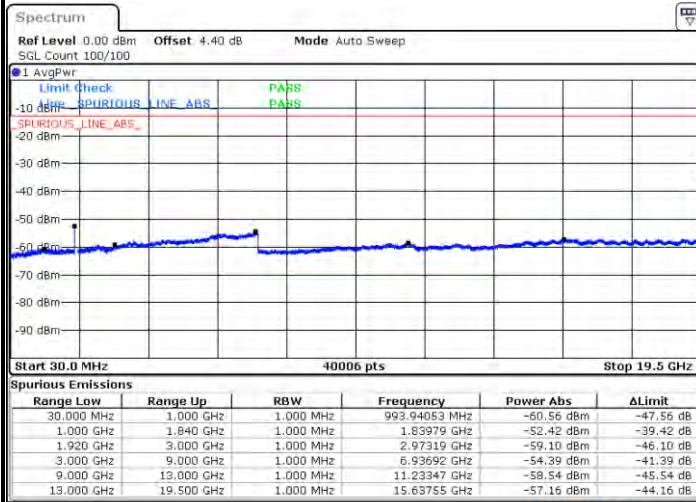


Date: 14.JAN.2021 07:35:13



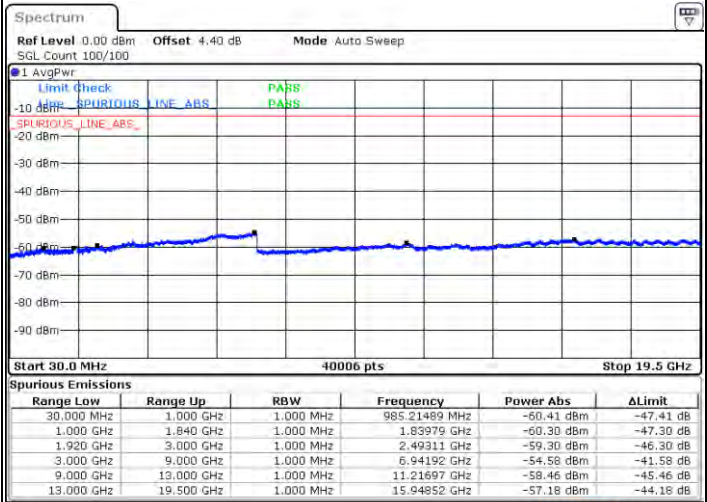
## FR1 n25 / 10MHz / DFT-S OFDM / BPSK

## Lowest Channel / 1RB



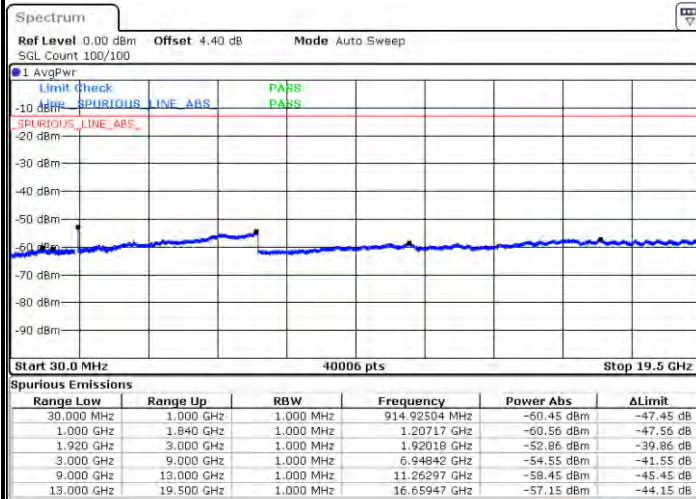
Date: 14.JAN.2021 06:11:40

## Middle Channel / 1RB



Date: 14.JAN.2021 06:18:29

## Highest Channel / 1RB

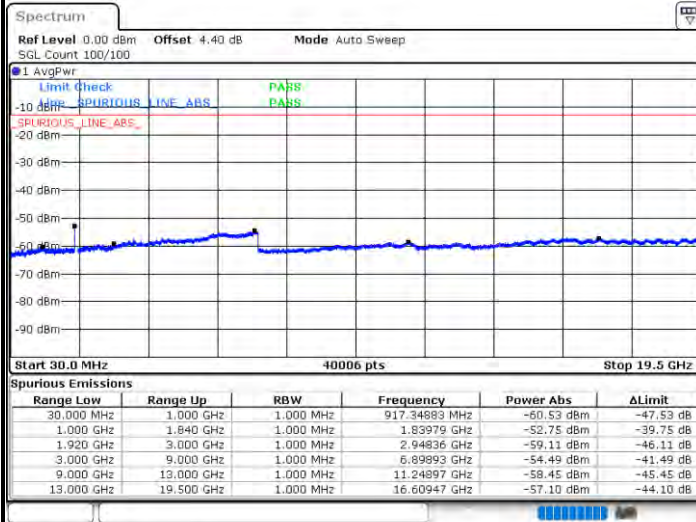


Date: 14.JAN.2021 06:24:29



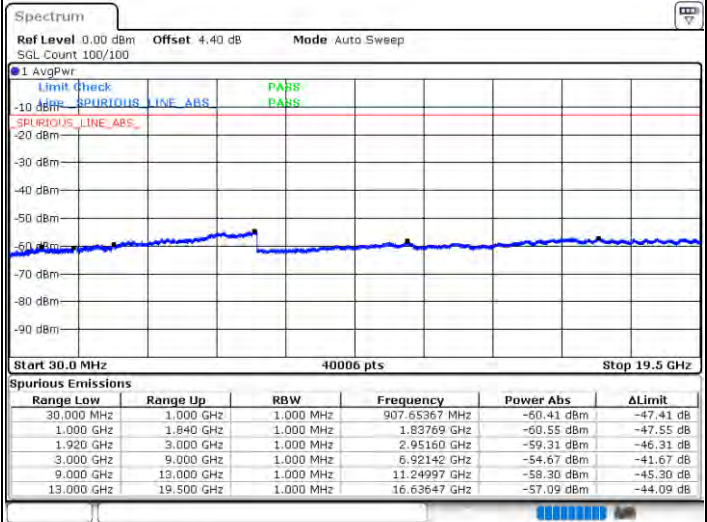
## FR1 n25 / 10MHz / DFT-S OFDM / QPSK

## Lowest Channel / 1RB



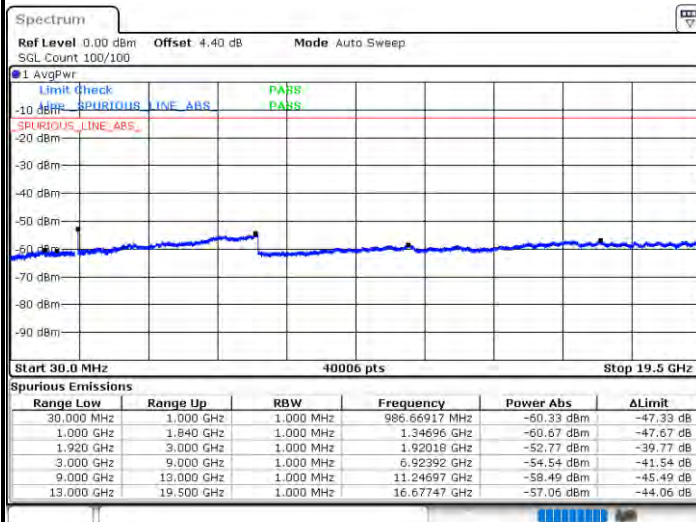
Date: 14.JAN.2021 06:13:34

## Middle Channel / 1RB



Date: 14.JAN.2021 06:21:13

## Highest Channel / 1RB

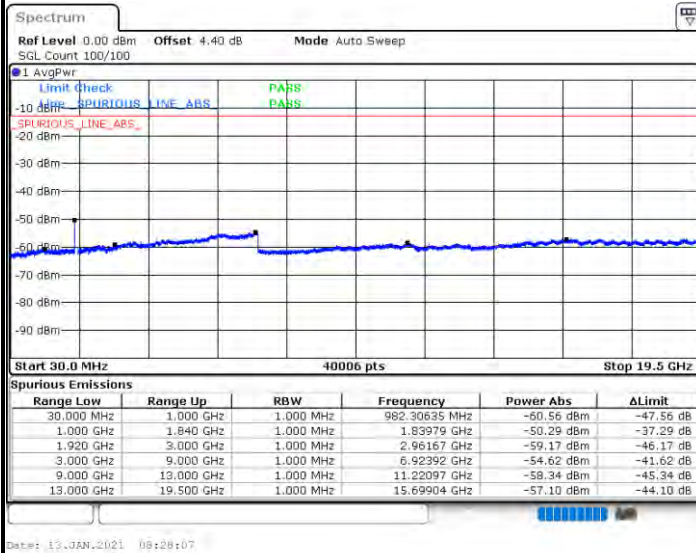


Date: 14.JAN.2021 06:22:47

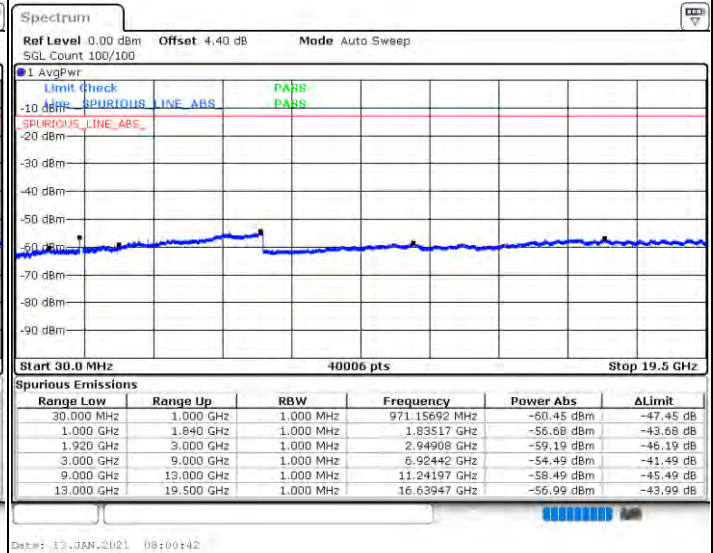


## FR1 n25 / 20MHz / DFT-S OFDM / BPSK

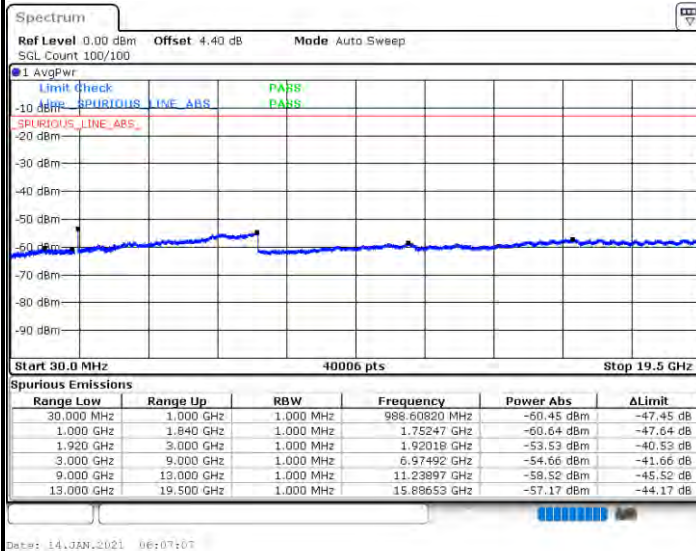
## Lowest Channel / 1RB



## Middle Channel / 1RB



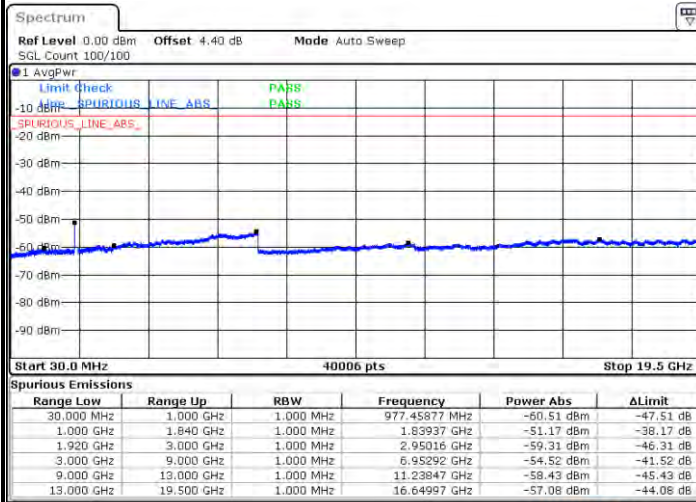
## Highest Channel / 1RB





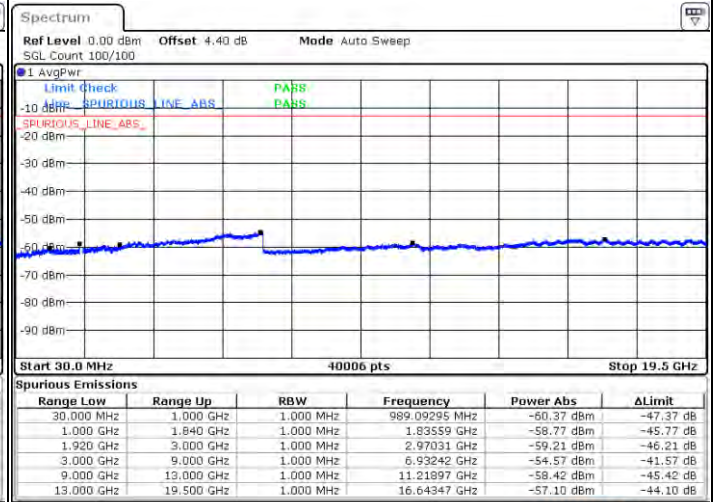
## FR1 n25 / 20MHz / DFT-S OFDM / QPSK

## Lowest Channel / 1RB



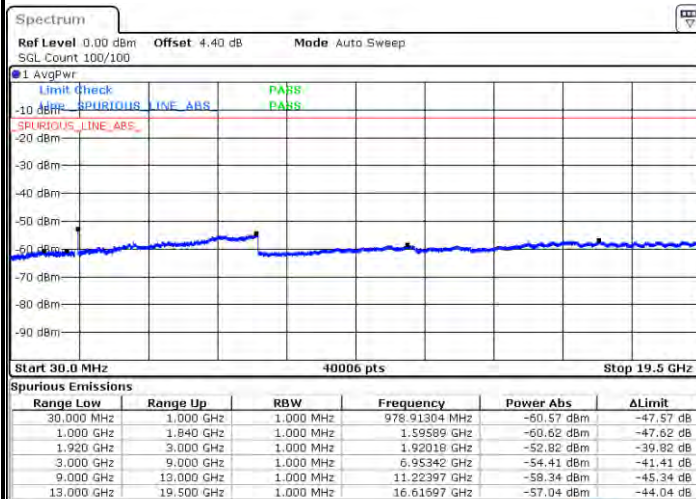
Date: 13.JAN.2021 09:32:15

## Middle Channel / 1RB



Date: 13.JAN.2021 07:54:23

## Highest Channel / 1RB



Date: 14.JAN.2021 06:08:29

## Frequency Stability

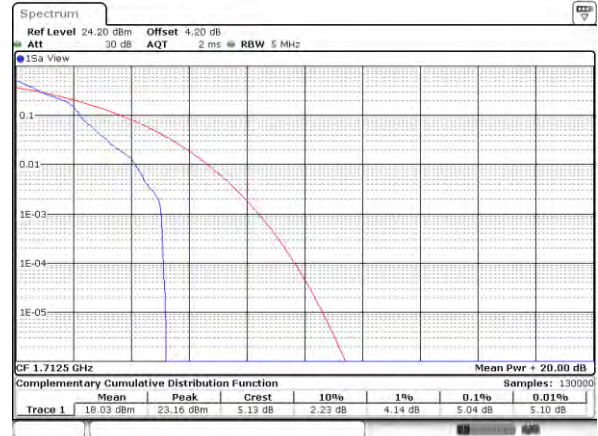
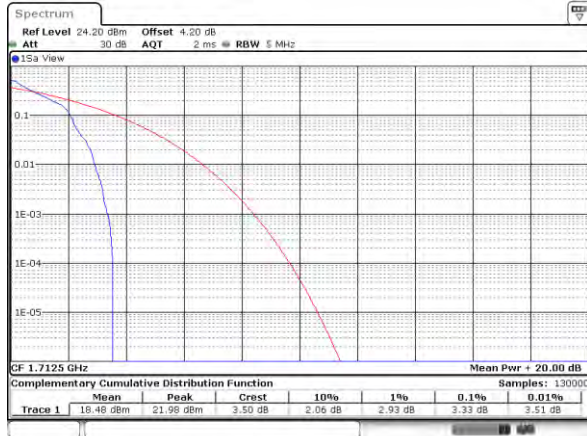
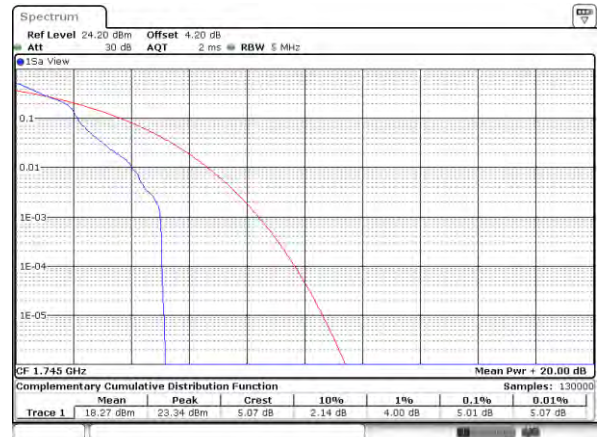
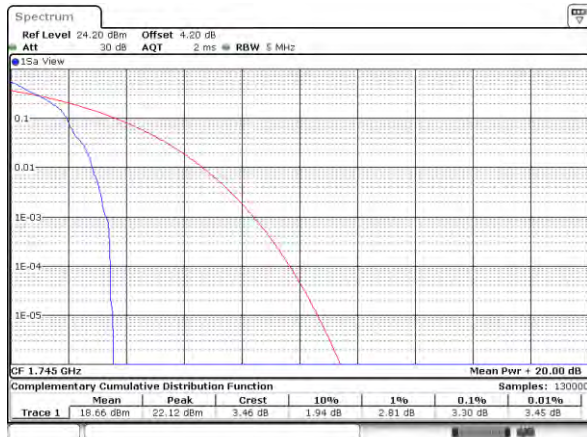
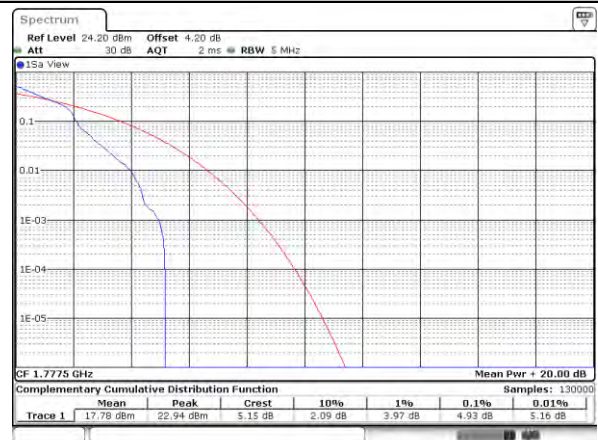
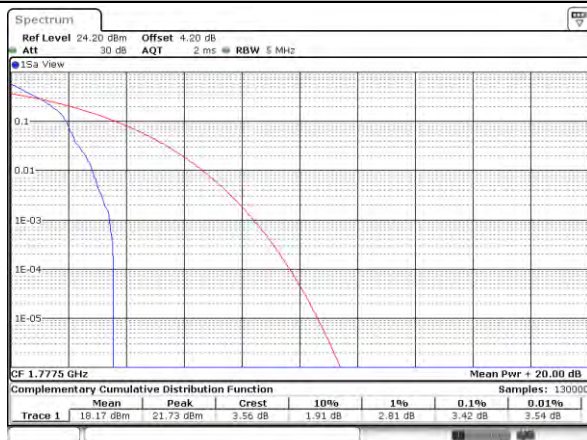
| Test Conditions  |                   | NR n25 (BPSK) / Middle Channel | Limit       |
|------------------|-------------------|--------------------------------|-------------|
| Temperature (°C) | Voltage (Volt)    | BW 20MHz                       | Within Band |
|                  |                   | Deviation (ppm)                | Result      |
| 50               | Normal Voltage    | 0.0025                         | PASS        |
| 40               | Normal Voltage    | 0.0017                         |             |
| 30               | Normal Voltage    | 0.0019                         |             |
| 20(Ref.)         | Normal Voltage    | 0.0013                         |             |
| 10               | Normal Voltage    | 0.0021                         |             |
| 0                | Normal Voltage    | 0.0012                         |             |
| -10              | Normal Voltage    | 0.0013                         |             |
| -20              | Normal Voltage    | 0.0015                         |             |
| -30              | Normal Voltage    | 0.0018                         |             |
| 20               | Maximum Voltage   | 0.0019                         |             |
| 20               | Normal Voltage    | 0.0015                         |             |
| 20               | Battery End Point | 0.0025                         |             |

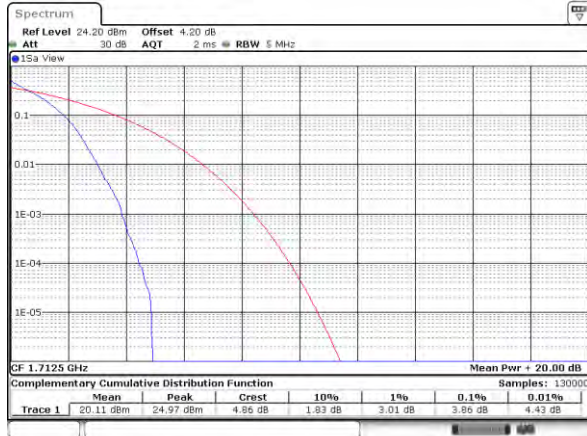
**Note:**

1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.14 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

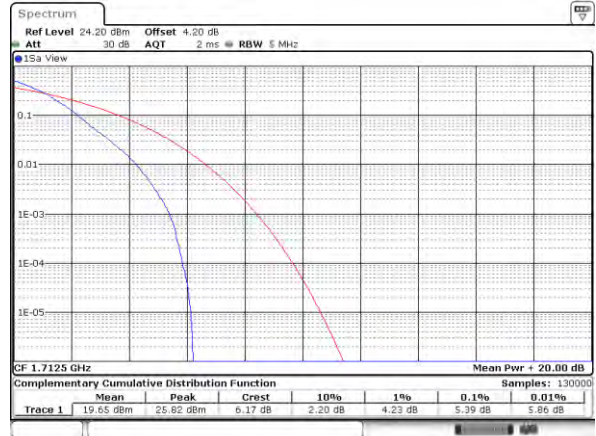
**FR1 n66 SA****Peak-to-Average Ratio**

| Mode       | FR1 n66 / 5MHz / 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  | 3.33                        | 3.86      | 5.04 | 5.39    | <b>PASS</b> |
| Middle CH  | 3.30                        | 3.86      | 5.01 | 5.42    |             |
| Highest CH | 3.42                        | 3.83      | 4.93 | 5.48    |             |

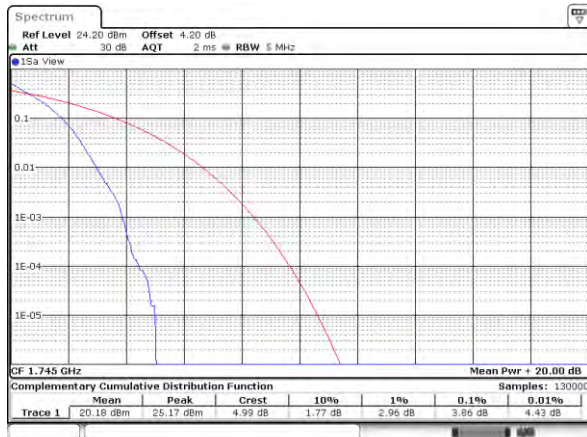
**FR1 n66 / 5MHz / DFT-S OFDM****PI/2 BPSK****QPSK****Lowest Channel / 1RB****Lowest Channel / 1RB****Middle Channel / 1 RB****Middle Channel / 1 RB****Highest Channel / 1 RB****Highest Channel / 1 RB**

**FR1 n66 / 5MHz / DFT-S OFDM**
**PI/2 BPSK**
**QPSK**
**Lowest Channel / Full RB**
**Lowest Channel / Full RB**


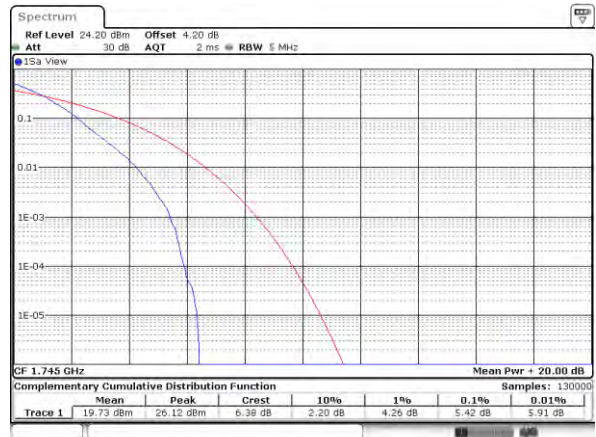
Date: 16.JAN.2021 03:52:33



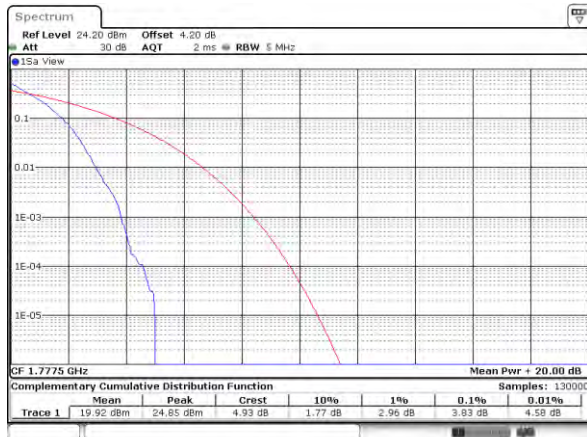
Date: 16.JAN.2021 03:54:39

**Middle Channel / Full RB**
**Middle Channel / Full RB**


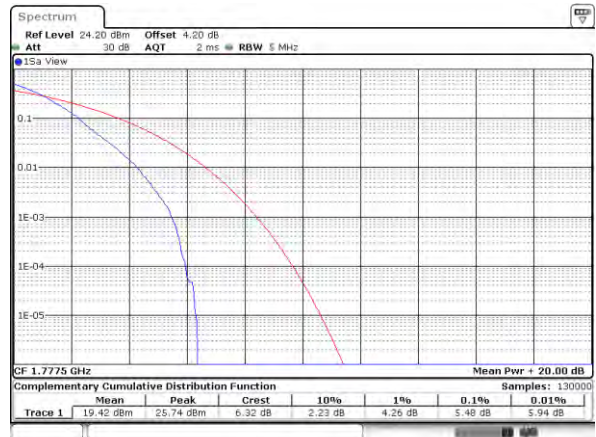
Date: 16.JAN.2021 03:58:29



Date: 16.JAN.2021 03:58:24

**Highest Channel / Full RB**
**Highest Channel / Full RB**


Date: 16.JAN.2021 04:09:55



Date: 16.JAN.2021 04:06:00

**26dB Bandwidth**

| Mode      | FR1 n66 : 26dB BW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|----------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 5MHz                             | 5MHz  | 5MHz  | 5MHz   |  |  |  |  |
| Mod.      | QPSK                             | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 4.83                             | 4.92  | 4.96  | 4.89   |  |  |  |  |

| Mode      | FR1 n66 : 26dB BW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|----------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 10MHz                            | 10MHz | 10MHz | 10MHz  |  |  |  |  |
| Mod.      | QPSK                             | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 9.81                             | 9.83  | 9.83  | 9.89   |  |  |  |  |

| Mode      | FR1 n66 : 26dB BW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|----------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 15MHz                            | 15MHz | 15MHz | 15MHz  |  |  |  |  |
| Mod.      | QPSK                             | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 14.89                            | 14.98 | 14.93 | 15.04  |  |  |  |  |

| Mode      | FR1 n66 : 26dB BW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|----------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 20MHz                            | 20MHz | 20MHz | 20MHz  |  |  |  |  |
| Mod.      | QPSK                             | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 20.06                            | 20.22 | 20.10 | 19.94  |  |  |  |  |

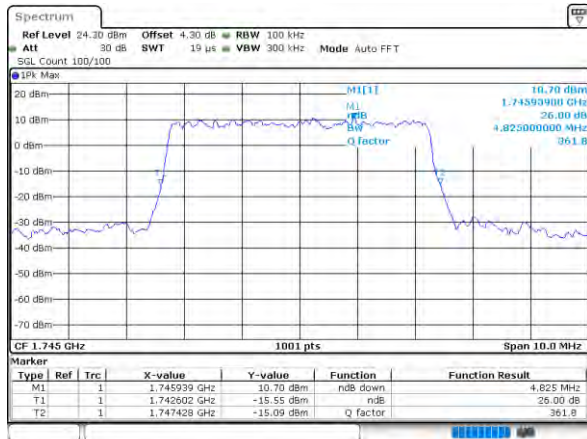
| Mode      | FR1 n66 : 26dB BW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|----------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 40MHz                            | 40MHz | 40MHz | 40MHz  |  |  |  |  |
| Mod.      | QPSK                             | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 40.99                            | 40.99 | 40.91 | 40.99  |  |  |  |  |



## FR1 n66 / 5MHz / CP-OFDM

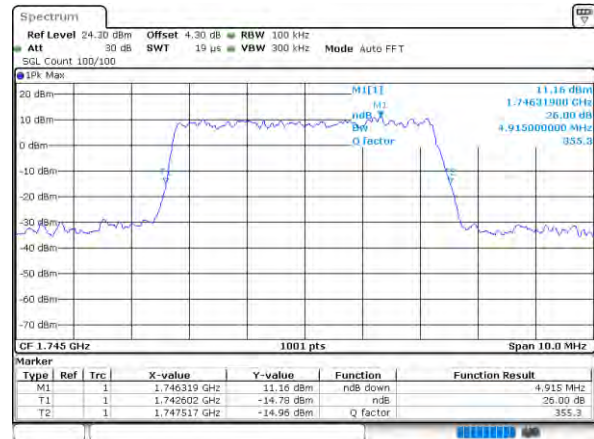
## QPSK

## Middle Channel



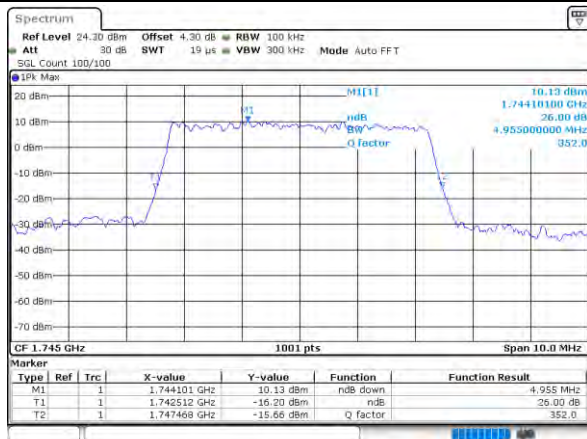
## 16QAM

## Middle Channel



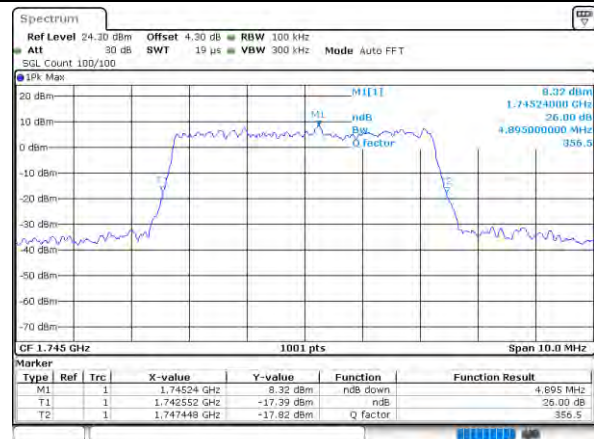
## 64QAM

## Middle Channel



## 256QAM

## Middle Channel





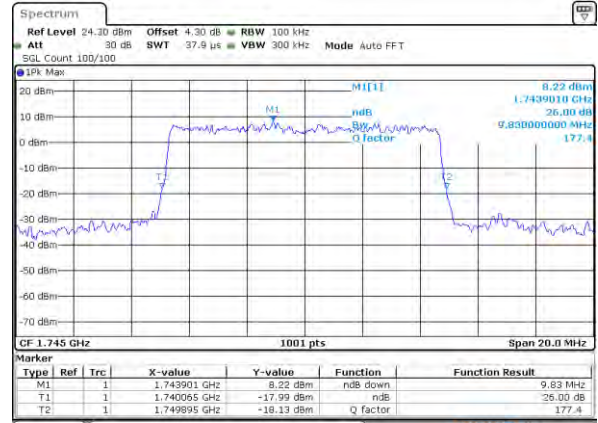
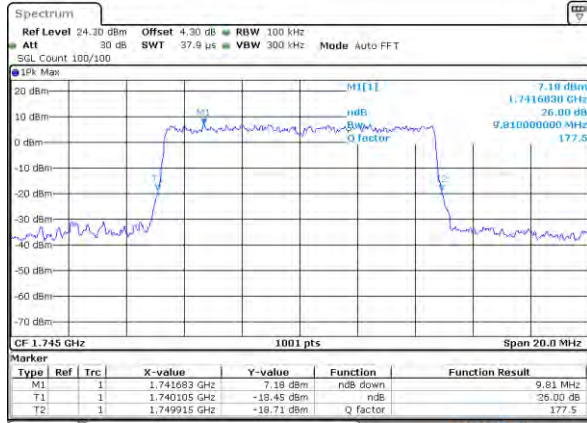
## FR1 n66 / 10MHz / CP-OFDM

## QPSK

## 16QAM

## Middle Channel

## Middle Channel

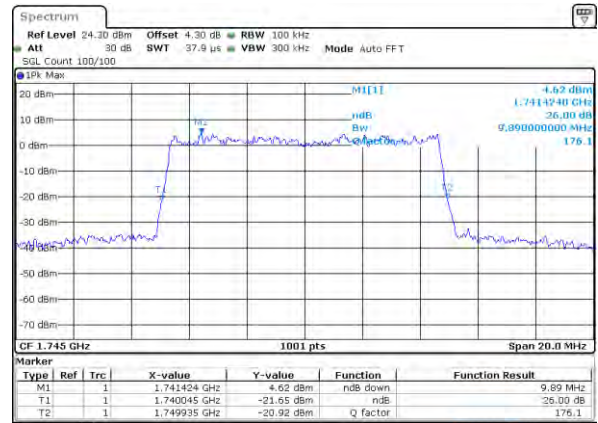


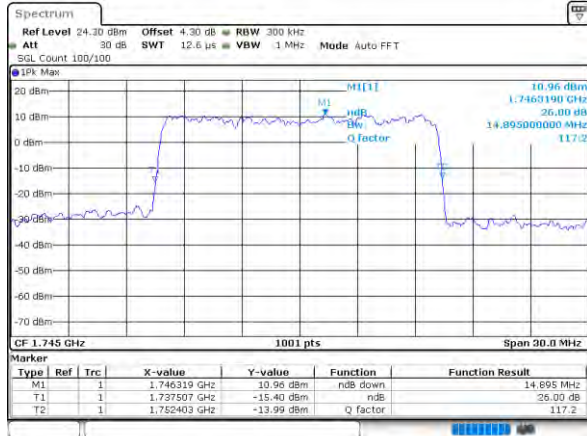
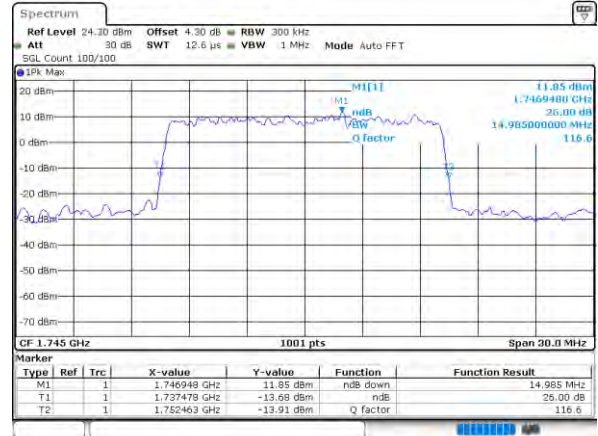
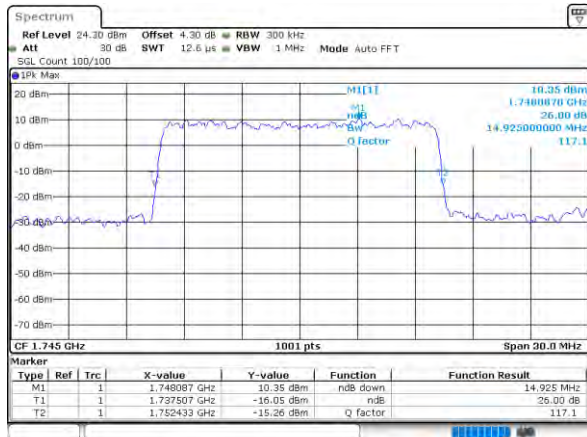
## 64QAM

## 256QAM

## Middle Channel

## Middle Channel



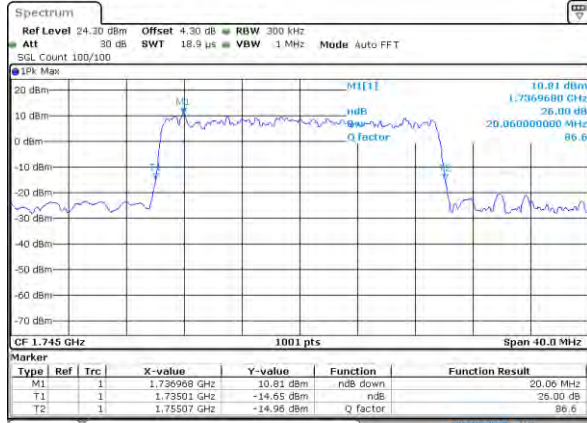
**FR1 n66 / 15MHz / CP-OFDM**
**QPSK**
**Middle Channel**

**16QAM**
**Middle Channel**

**64QAM**
**Middle Channel**

**256QAM**
**Middle Channel**




## FR1 n66 / 20MHz / CP-OFDM

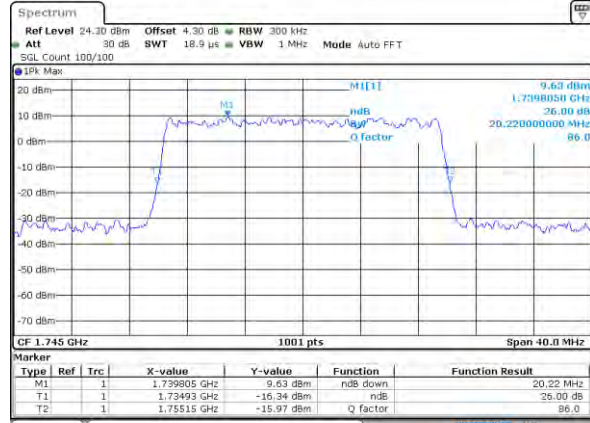
## QPSK

## Middle Channel



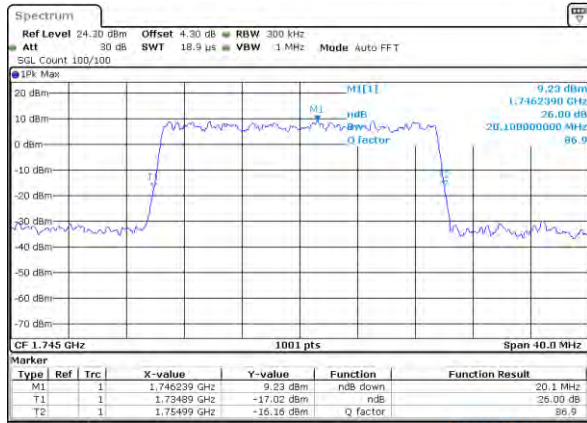
## 16QAM

## Middle Channel



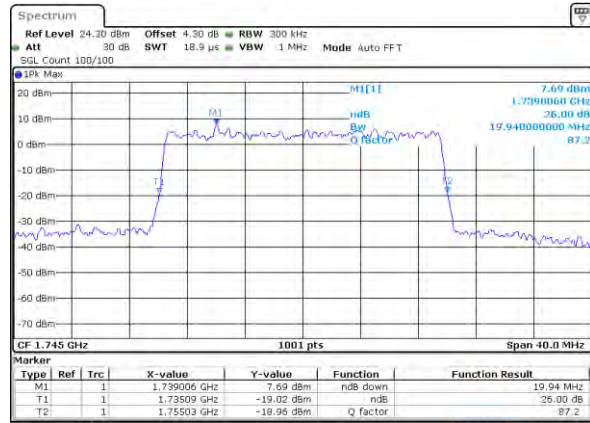
## 64QAM

## Middle Channel



## 256QAM

## Middle Channel

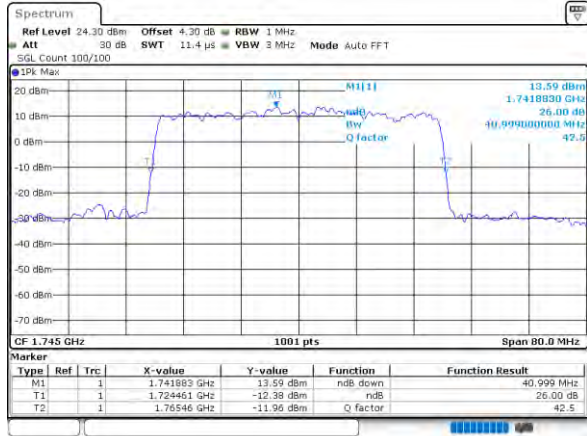




## FR1 n66 / 40MHz / CP-OFDM

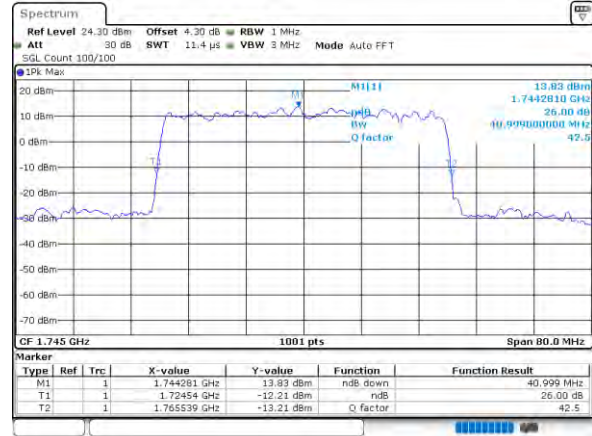
## QPSK

## Middle Channel



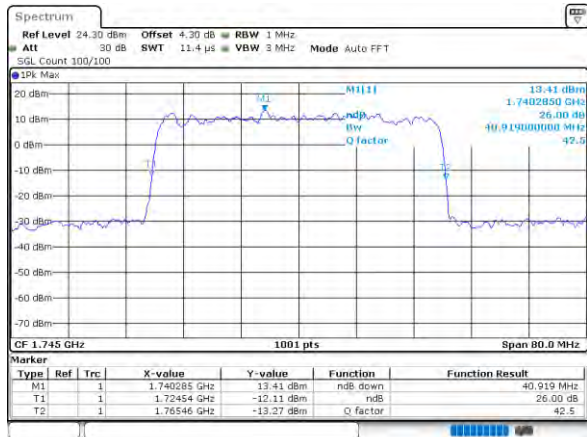
## 16QAM

## Middle Channel



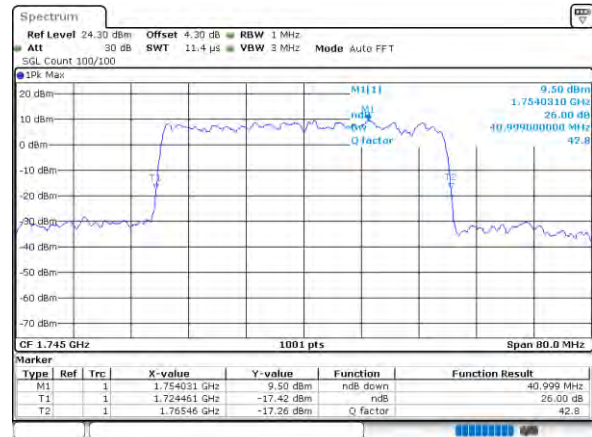
## 64QAM

## Middle Channel



## 256QAM

## Middle Channel



**Occupied Bandwidth**

| Mode      | FR1 n66 : OBW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 5MHz                         | 5MHz  | 5MHz  | 5MHz   |  |  |  |  |
| Mod.      | QPSK                         | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 4.48                         | 4.49  | 4.49  | 4.50   |  |  |  |  |

| Mode      | FR1 n66 : OBW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 10MHz                        | 10MHz | 10MHz | 10MHz  |  |  |  |  |
| Mod.      | QPSK                         | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 9.27                         | 9.29  | 9.27  | 9.27   |  |  |  |  |

| Mode      | FR1 n66 : OBW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 15MHz                        | 15MHz | 15MHz | 15MHz  |  |  |  |  |
| Mod.      | QPSK                         | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 14.12                        | 14.09 | 14.15 | 14.15  |  |  |  |  |

| Mode      | FR1 n66 : OBW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 20MHz                        | 20MHz | 20MHz | 20MHz  |  |  |  |  |
| Mod.      | QPSK                         | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 18.98                        | 19.02 | 18.86 | 18.98  |  |  |  |  |

| Mode      | FR1 n66 : OBW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 40MHz                        | 40MHz | 40MHz | 40MHz  |  |  |  |  |
| Mod.      | QPSK                         | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 38.68                        | 38.6  | 38.76 | 38.68  |  |  |  |  |



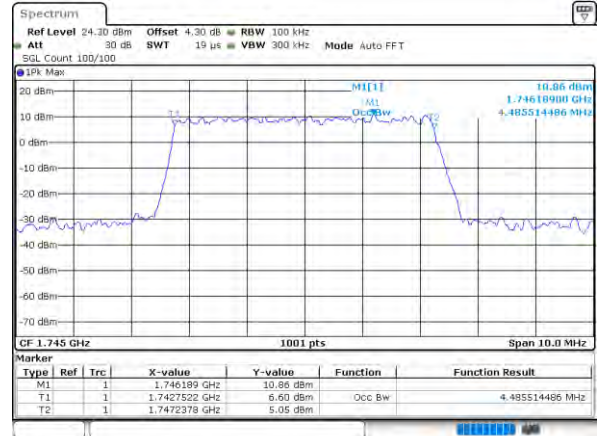
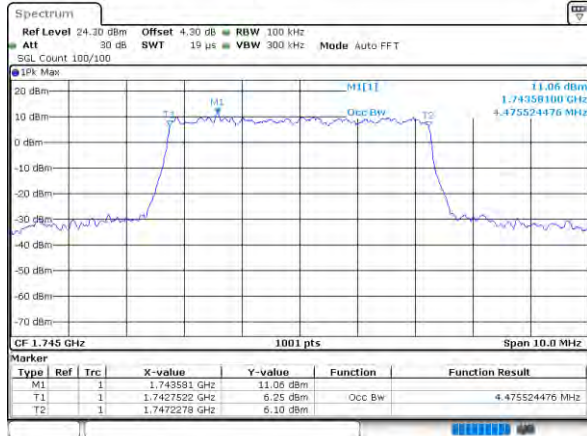
## FR1 n66 / 5MHz / CP-OFDM

## QPSK

## 16QAM

## Middle Channel

## Middle Channel

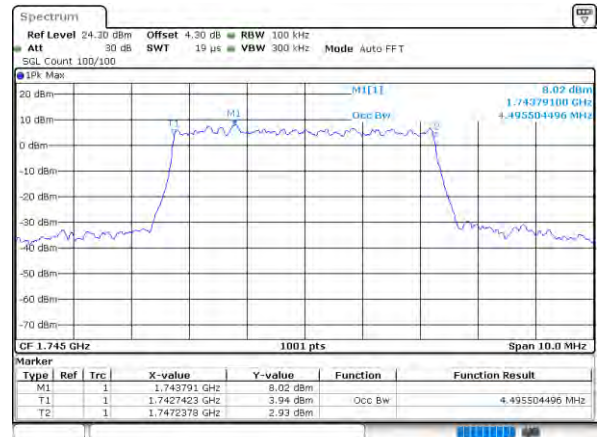
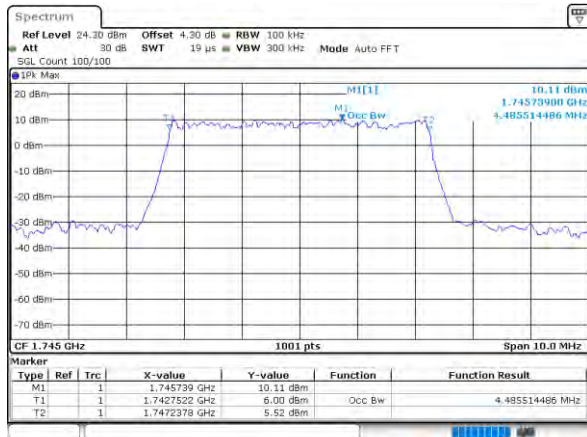


## 64QAM

## 256QAM

## Middle Channel

## Middle Channel

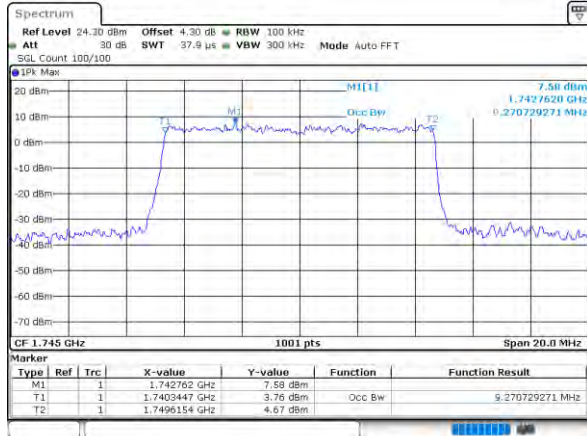




## FR1 n66 / 10MHz / CP-OFDM

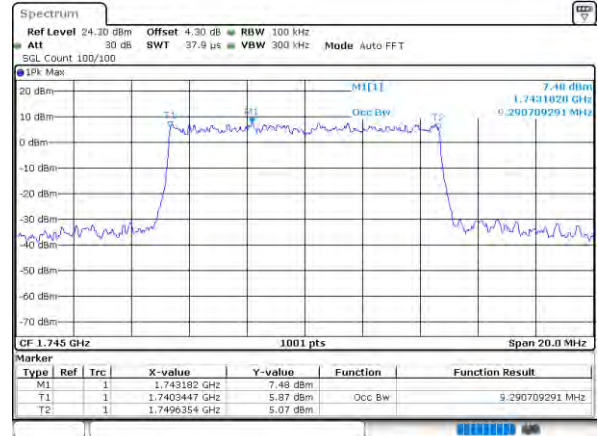
## QPSK

## Middle Channel



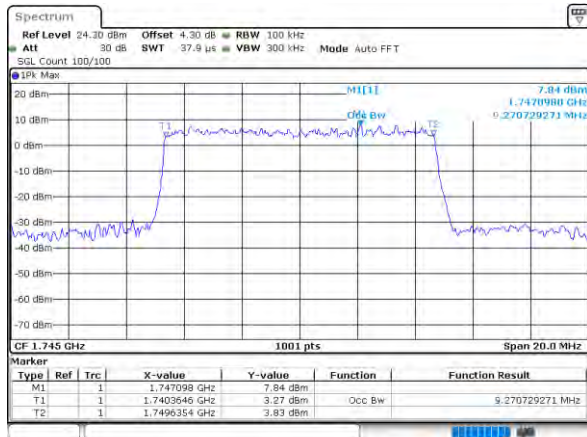
## 16QAM

## Middle Channel



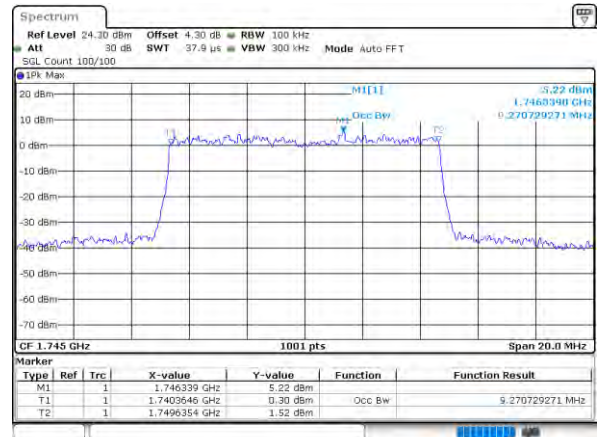
## 64QAM

## Middle Channel



## 256QAM

## Middle Channel

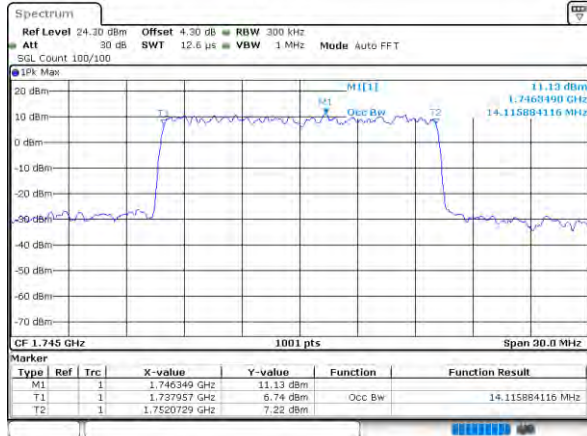




## FR1 n66 / 15MHz / CP-OFDM

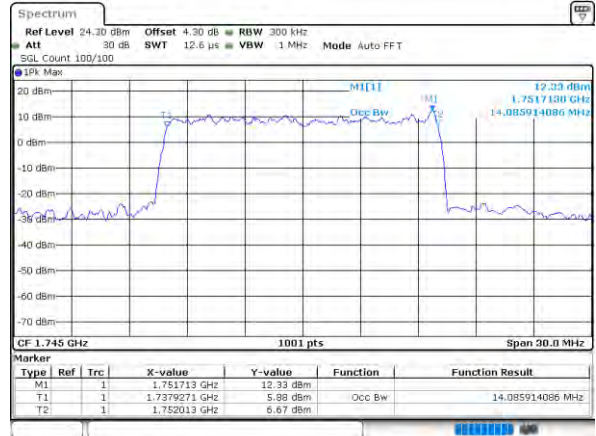
## QPSK

## Middle Channel



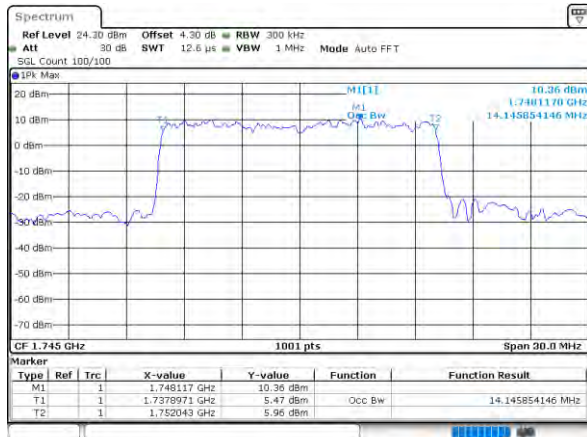
## 16QAM

## Middle Channel



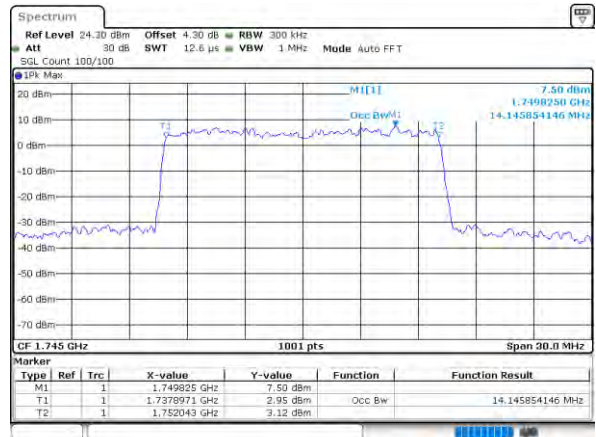
## 64QAM

## Middle Channel



## 256QAM

## Middle Channel

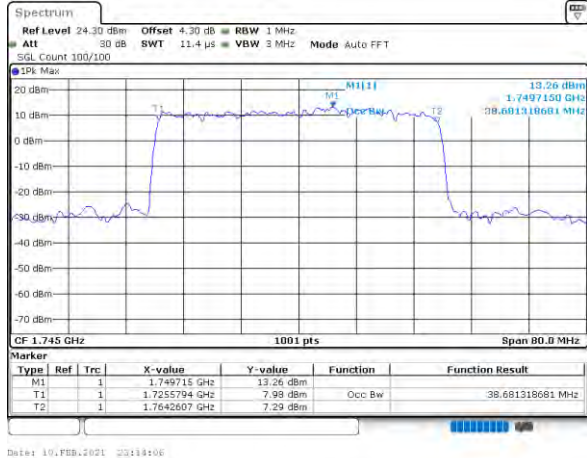




FR1 n66 / 20MHz / CP-OFDM

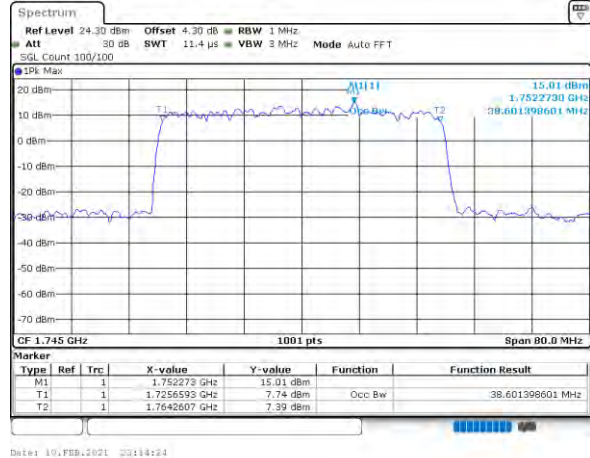
QPSK

Middle Channel



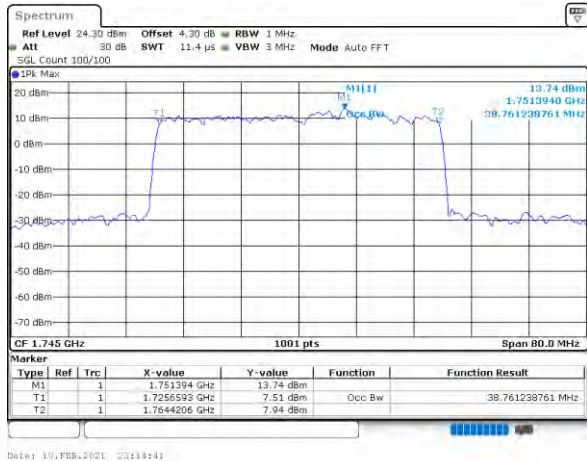
16QAM

Middle Channel



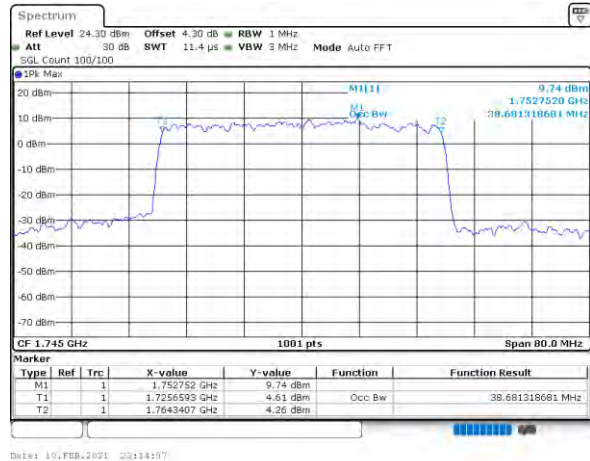
64QAM

Middle Channel



256QAM

Middle Channel





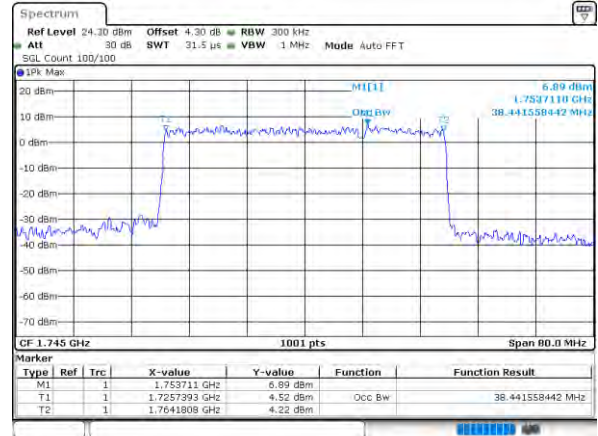
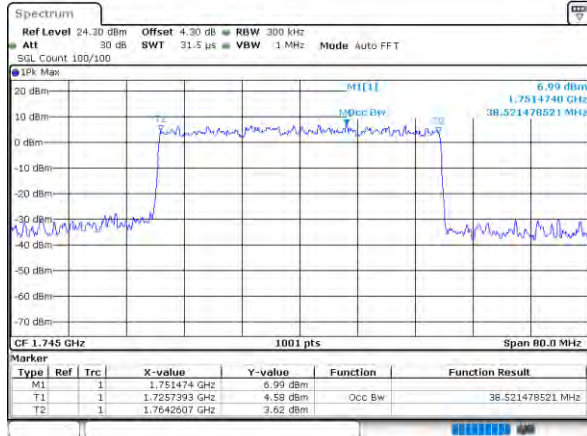
## FR1 n66 / 40MHz / CP-OFDM

## QPSK

## 16QAM

## Middle Channel

## Middle Channel

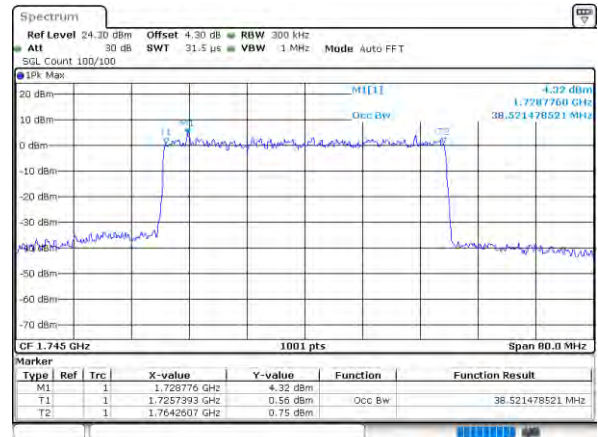
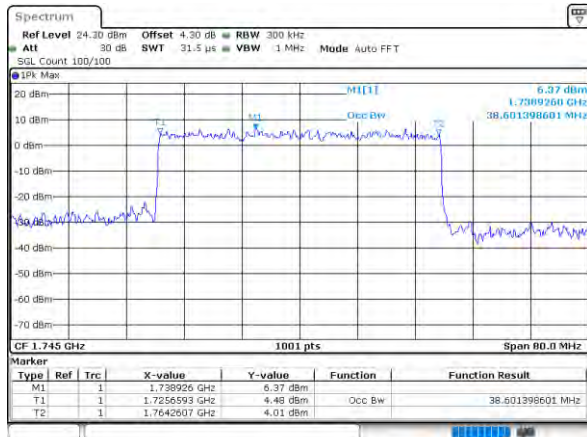


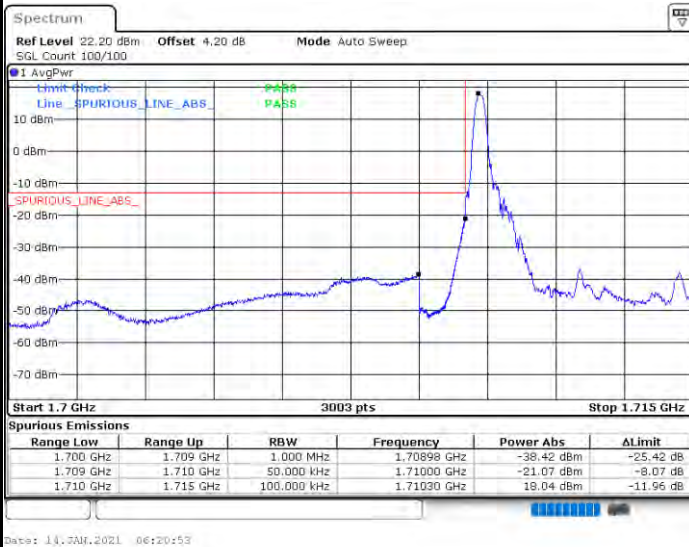
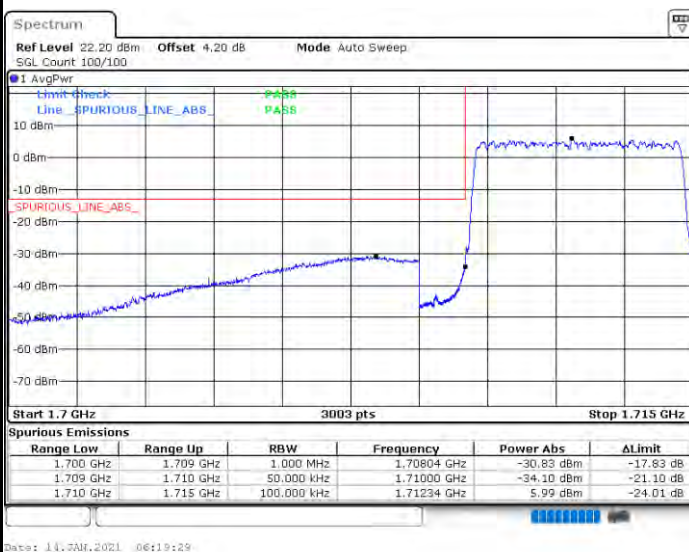
## 64QAM

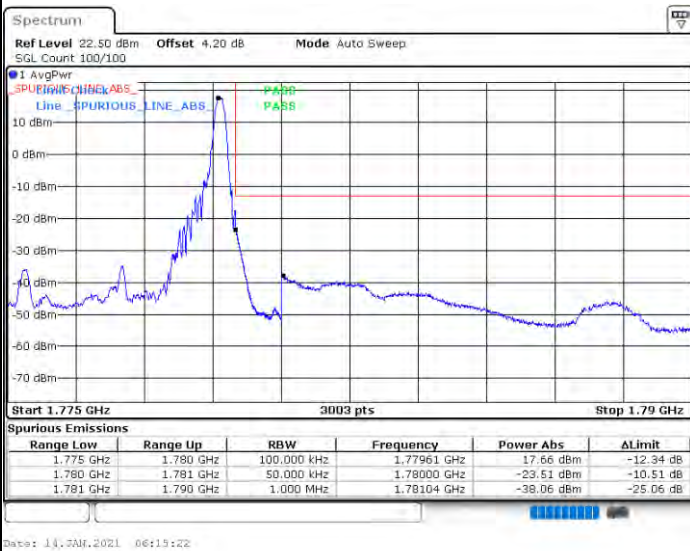
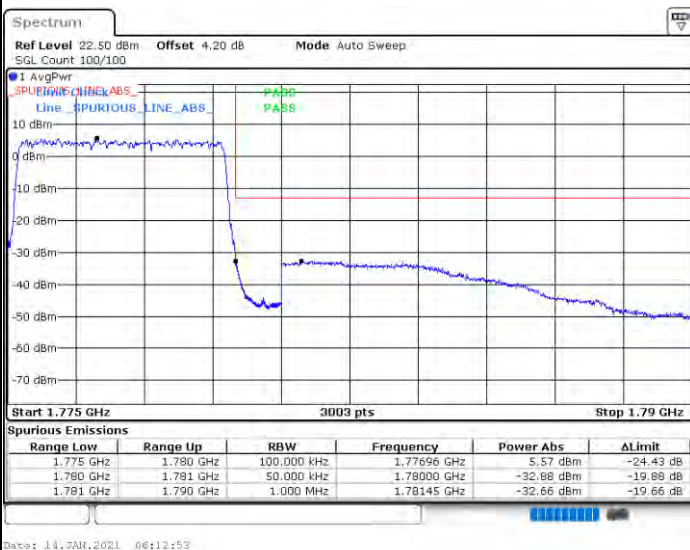
## 256QAM

## Middle Channel

## Middle Channel



**Conducted Band Edge****FR1 n66 / 5MHz / DFT-S OFDM BPSK****Lowest Band Edge / 1 RB****Channel Power < -13dBm Pass****Lowest Band Edge / Full RB****Channel Power < -13dBm Pass**

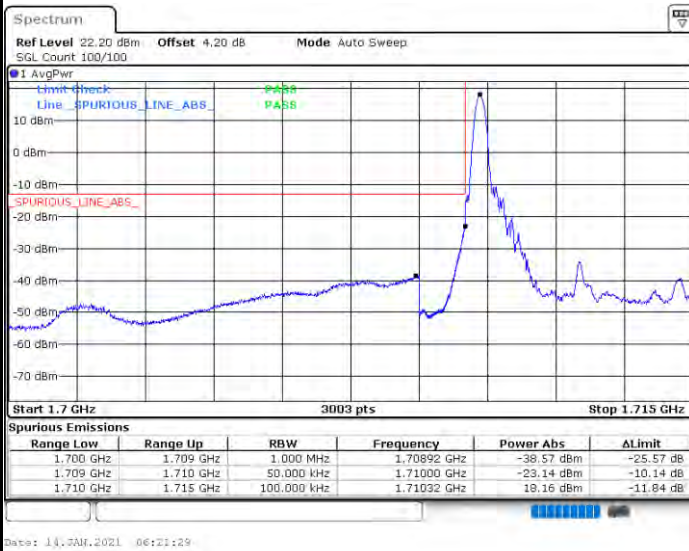
**FR1 n66 / 5MHz / DFT-S OFDM BPSK****Highest Band Edge / 1 RB****Channel Power < -13dBm Pass****Highest Band Edge / Full RB****Channel Power < -13dBm Pass**



## FR1 n66 / 5MHz / DFT-S OFDM QPSK

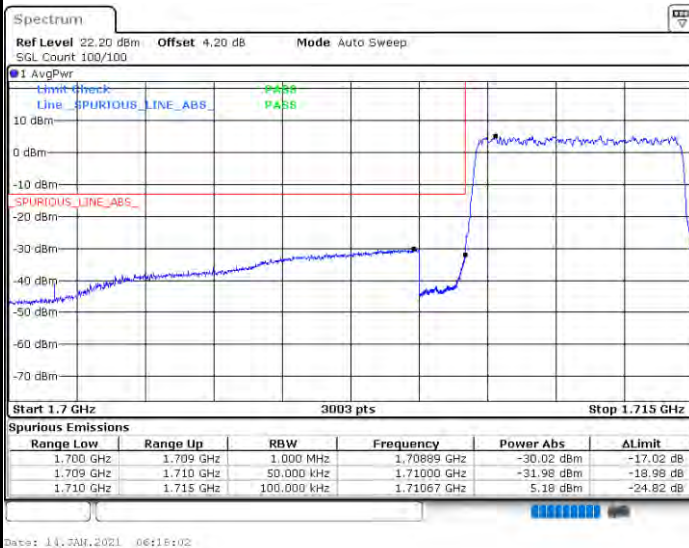
## Lowest Band Edge / 1 RB

## Channel Power &lt; -13dBm Pass



## Lowest Band Edge / Full RB

## Channel Power &lt; -13dBm Pass

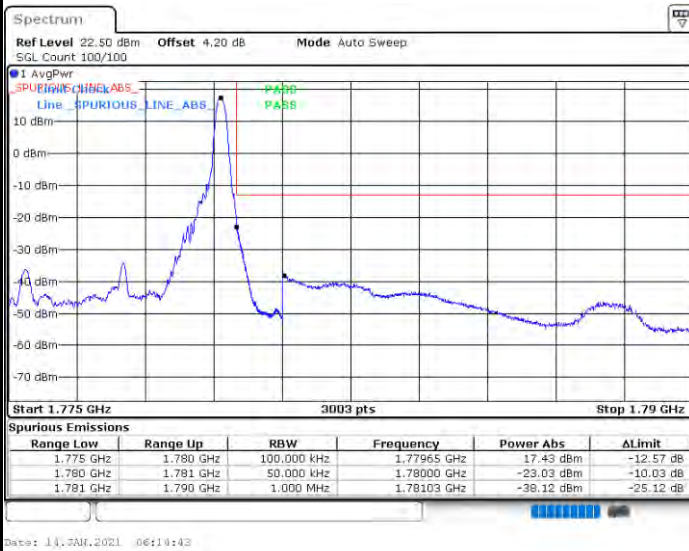




FR1 n66 / 5MHz / DFT-S OFDM QPSK

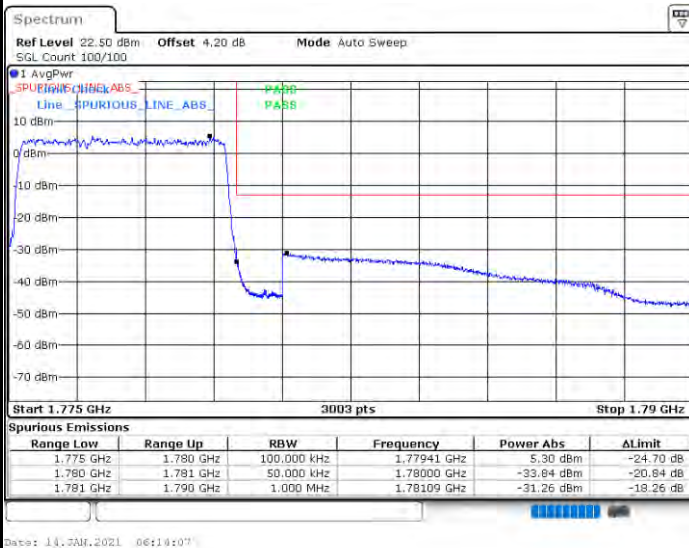
Highest Band Edge / 1 RB

Channel Power < -13dBm Pass



Highest Band Edge / Full RB

Channel Power < -13dBm Pass

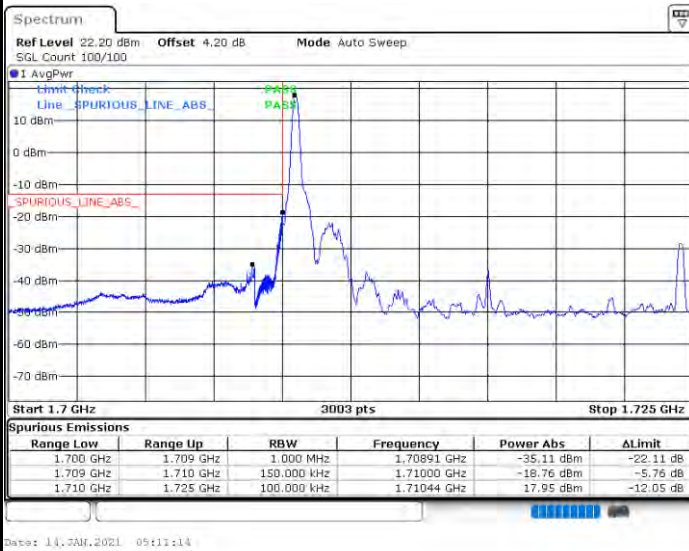




## FR1 n66 / 15MHz / DFT-S OFDM BPSK

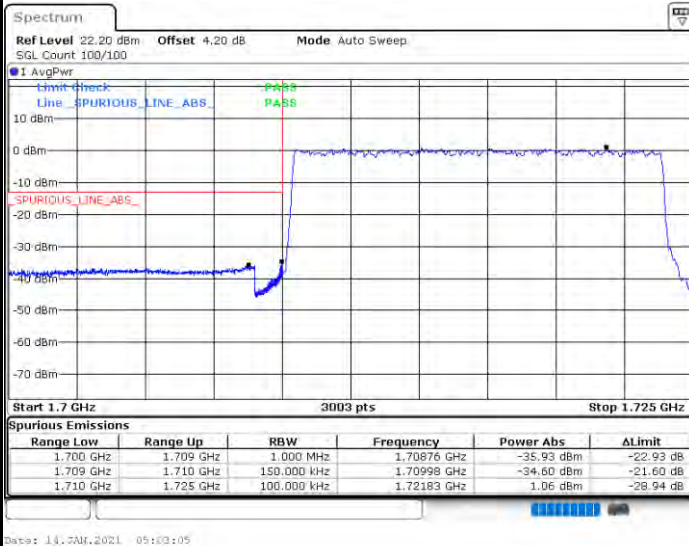
## Lowest Band Edge / 1 RB

## Channel Power &lt; -13dBm Pass



## Lowest Band Edge / Full RB

## Channel Power &lt; -13dBm Pass

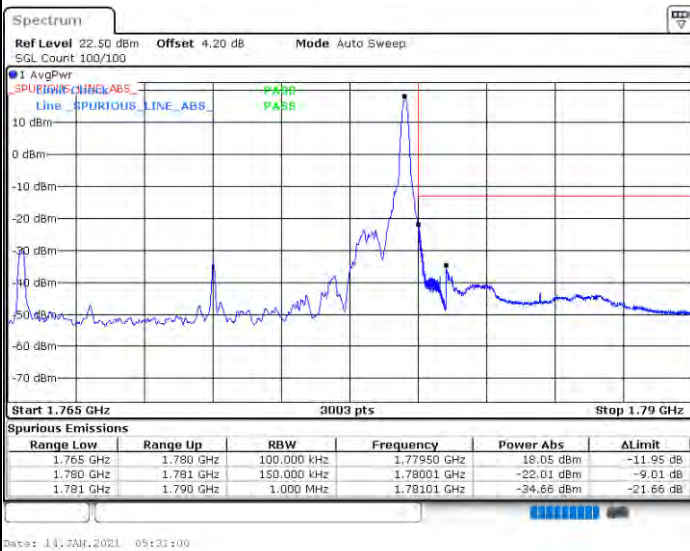




## FR1 n66 / 15MHz / DFT-S OFDM BPSK

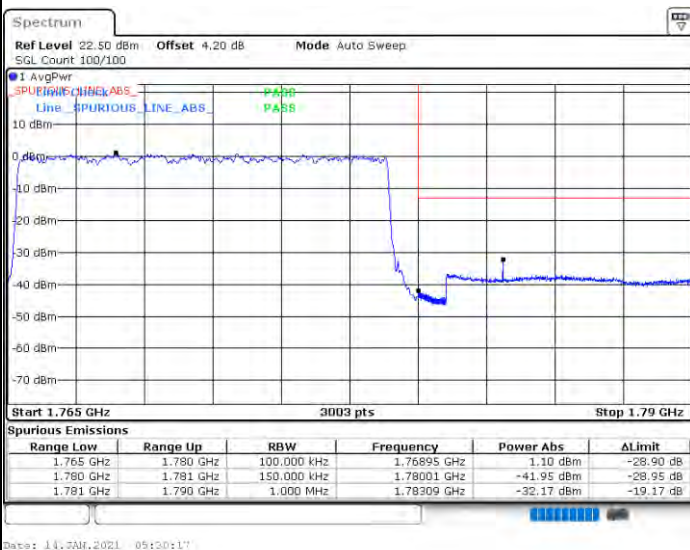
## Highest Band Edge / 1 RB

## Channel Power &lt; -13dBm Pass



## Highest Band Edge / Full RB

## Channel Power &lt; -13dBm Pass

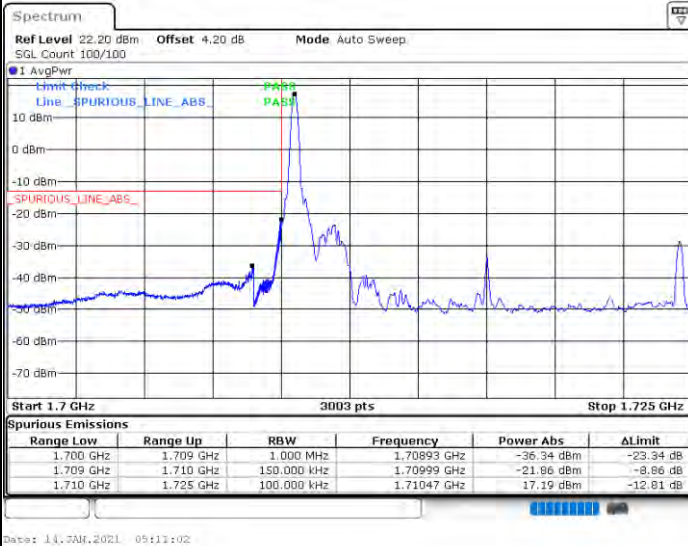




## FR1 n66 / 15MHz / DFT-S OFDM QPSK

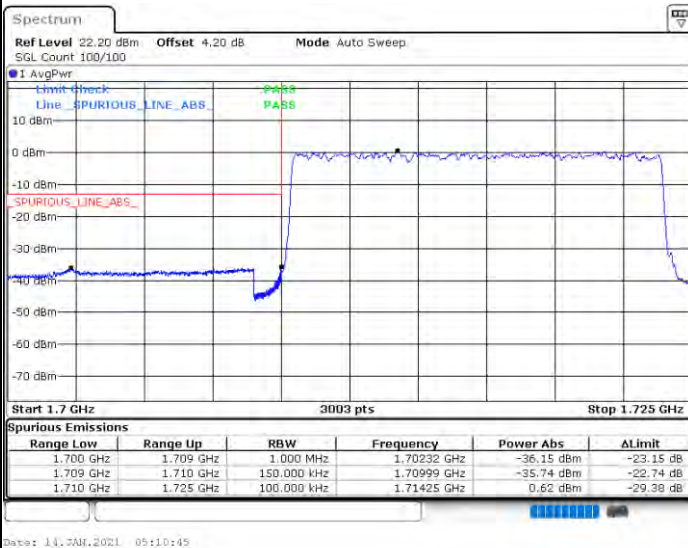
## Lowest Band Edge / 1 RB

## Channel Power &lt; -13dBm Pass



## Lowest Band Edge / Full RB

## Channel Power &lt; -13dBm Pass

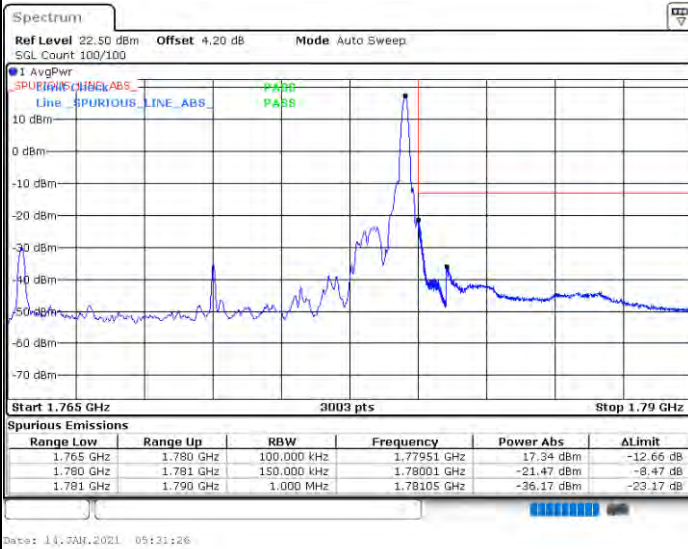




## FR1 n66 / 15MHz / DFT-S OFDM QPSK

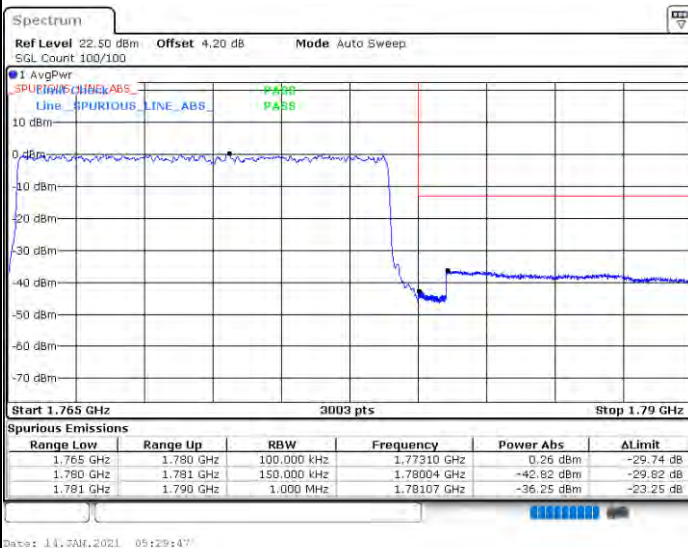
## Highest Band Edge / 1 RB

## Channel Power &lt; -13dBm Pass



## Highest Band Edge / Full RB

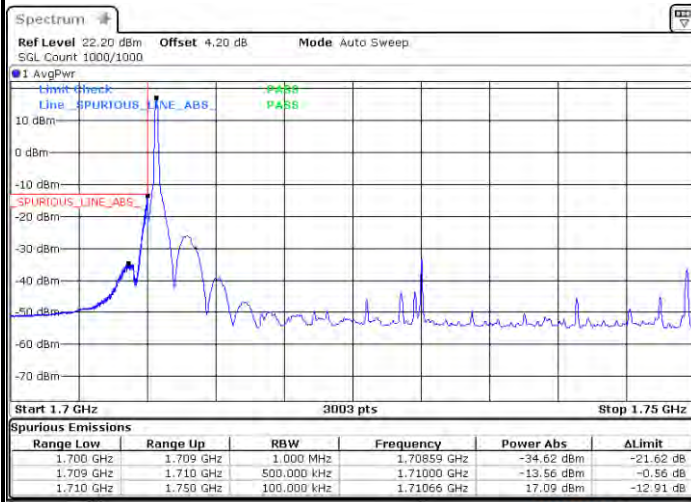
## Channel Power &lt; -13dBm Pass





## FR1 n66 / 40MHz / DFT-S OFDM BPSK

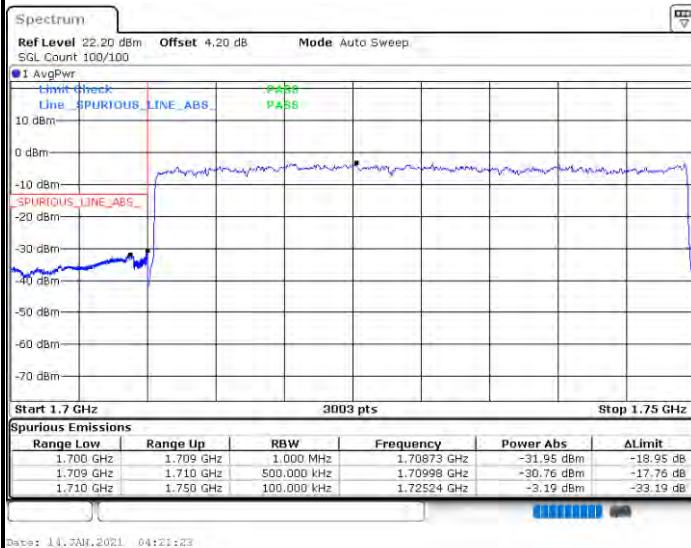
## Lowest Band Edge / 1 RB



## Channel Power &lt; -13dBm Pass



## Lowest Band Edge / Full RB



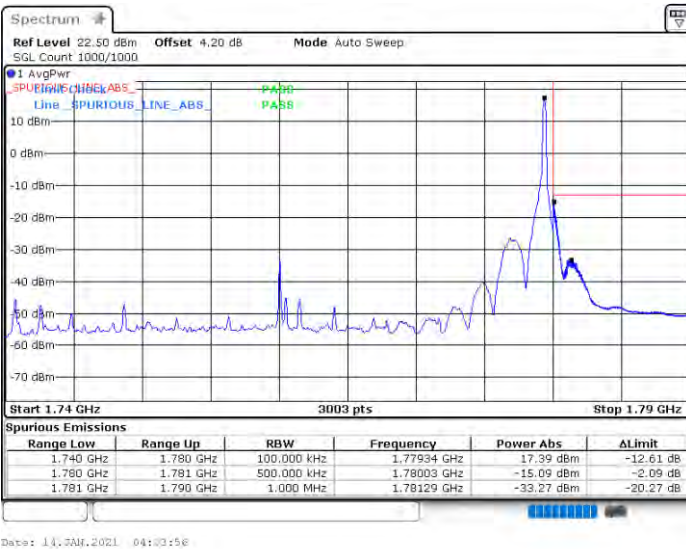
## Channel Power &lt; -13dBm Pass

/



## FR1 n66 / 40MHz / DFT-S OFDM BPSK

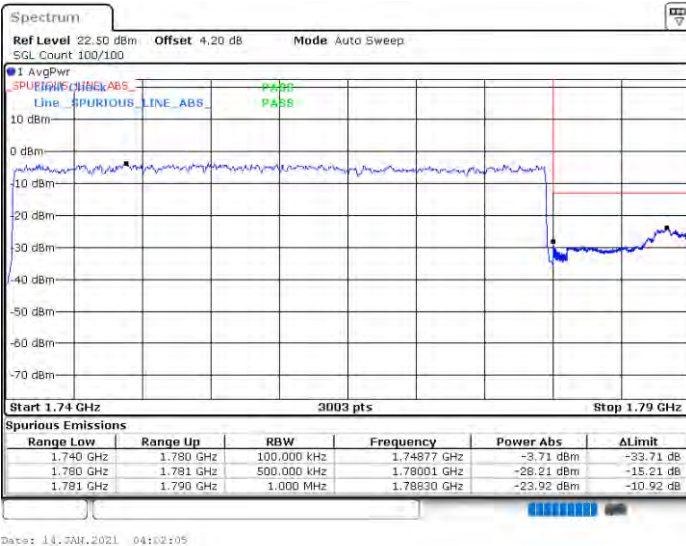
## Highest Band Edge / 1 RB



## Channel Power &lt; -13dBm Pass

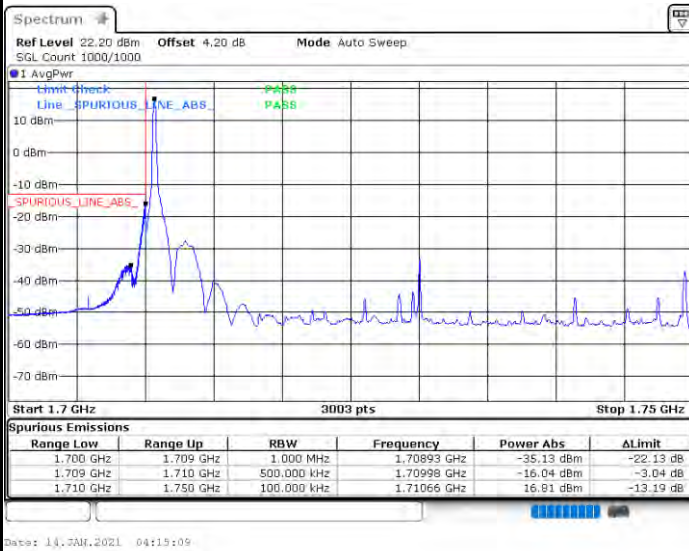
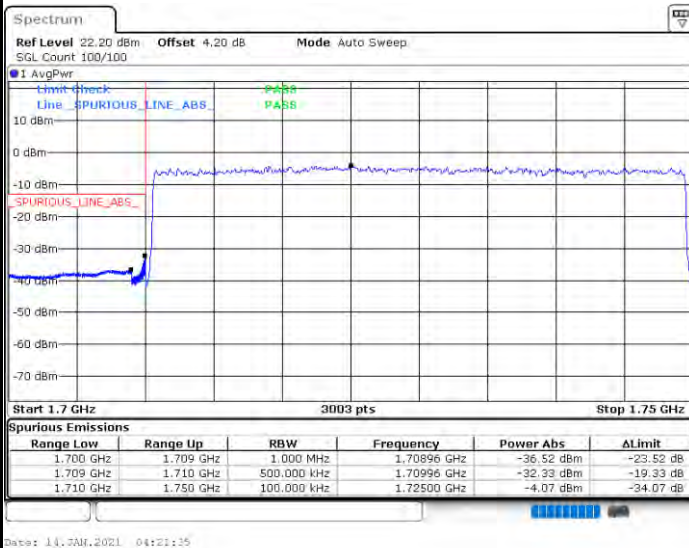


## Highest Band Edge / Full RB



## Channel Power &lt; -13dBm Pass

/

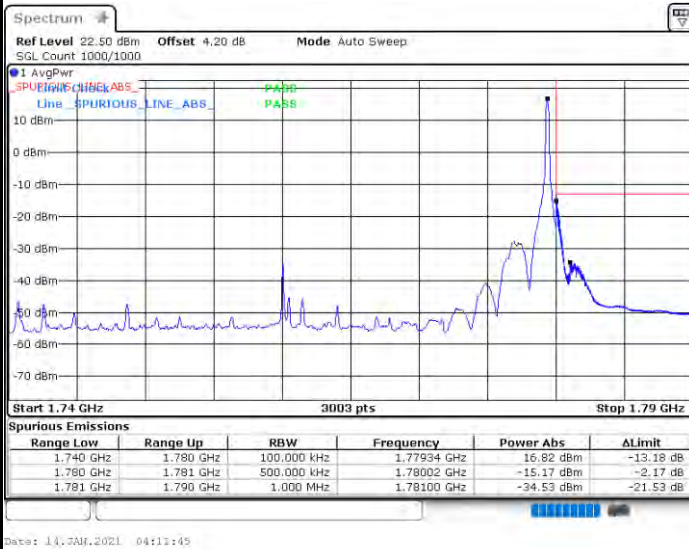
**FR1 n66 / 40MHz / DFT-S OFDM QPSK****Lowest Band Edge / 1 RB****Channel Power < -13dBm Pass****Lowest Band Edge / Full RB****Channel Power < -13dBm Pass**



## FR1 n66 / 40MHz / DFT-S OFDM QPSK

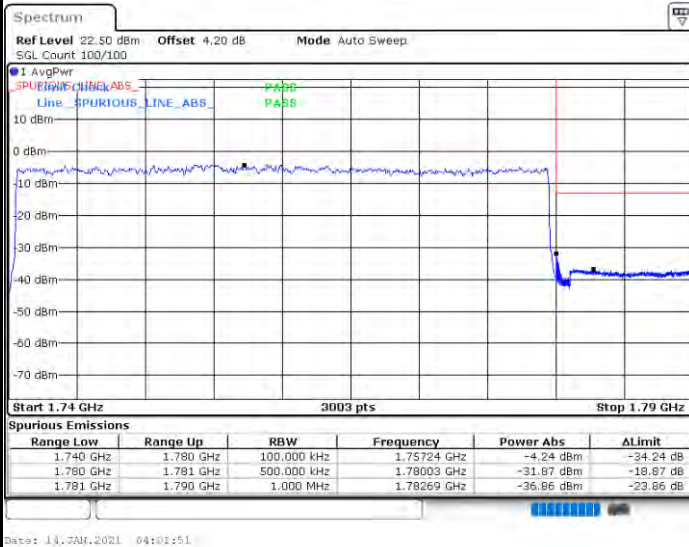
## Highest Band Edge / 1 RB

## Channel Power &lt; -13dBm Pass



## Highest Band Edge / Full RB

## Channel Power &lt; -13dBm Pass



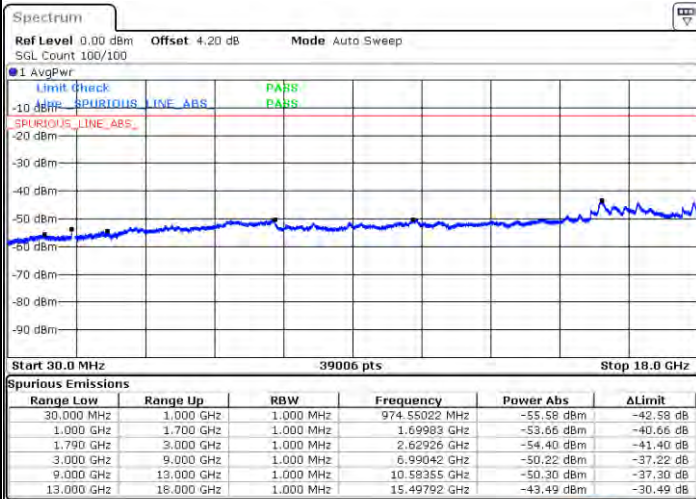


## Conducted Spurious Emission

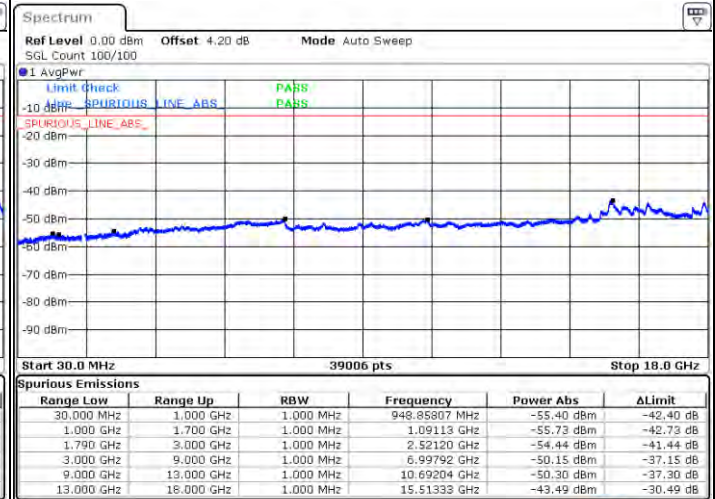
FR1 n66 / 5MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

Middle Channel / 1RB

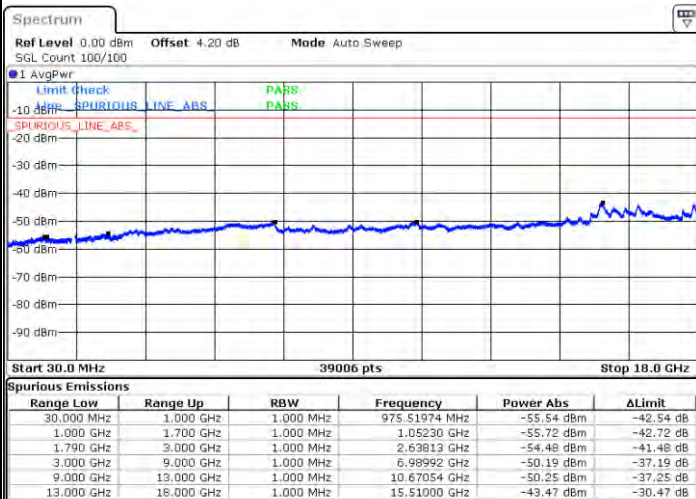


Date: 14.JAN.2021 06:03:16



Date: 14.JAN.2021 06:04:59

Highest Channel / 1RB

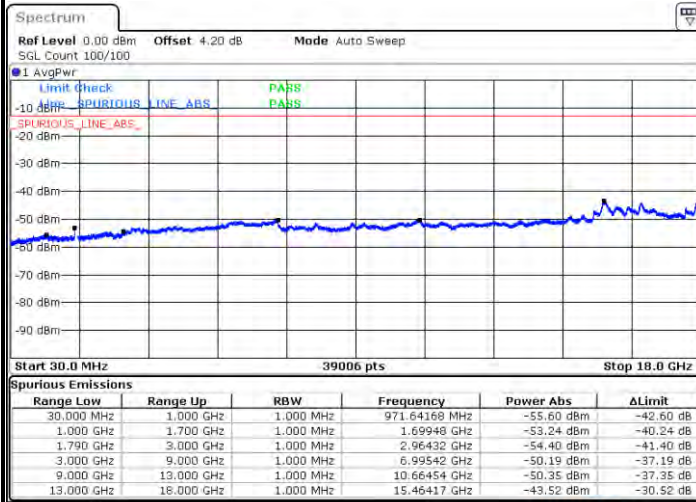


Date: 14.JAN.2021 06:11:27



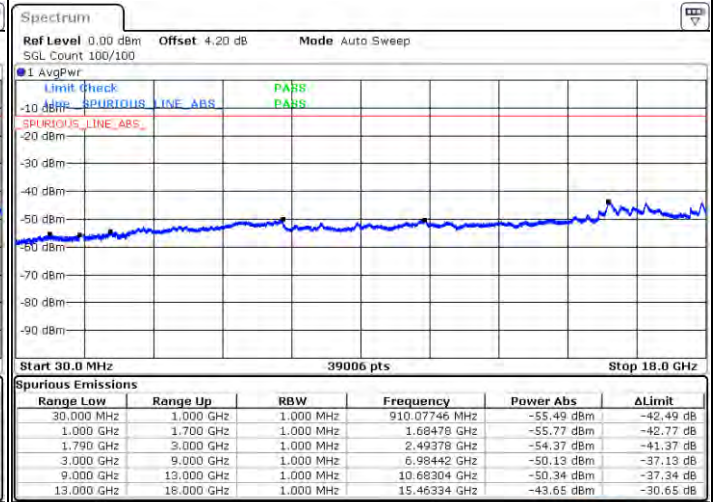
## FR1 n66 / 5MHz / DFT-S OFDM / QPSK

## Lowest Channel / 1RB



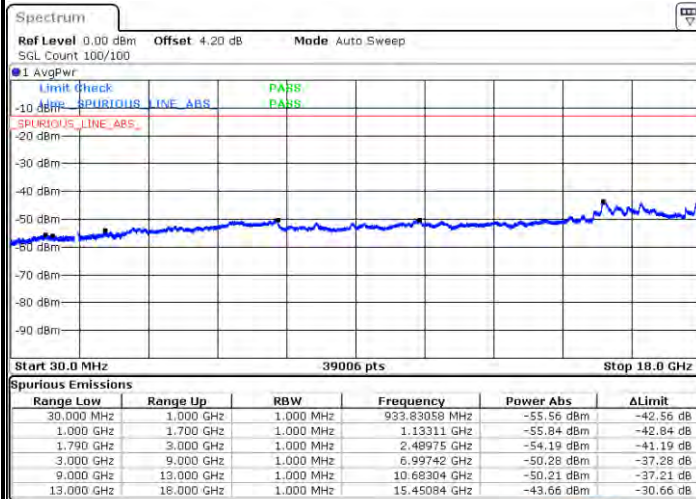
Date: 14.JAN.2021 06:01:52

## Middle Channel / 1RB



Date: 14.JAN.2021 06:07:34

## Highest Channel / 1RB

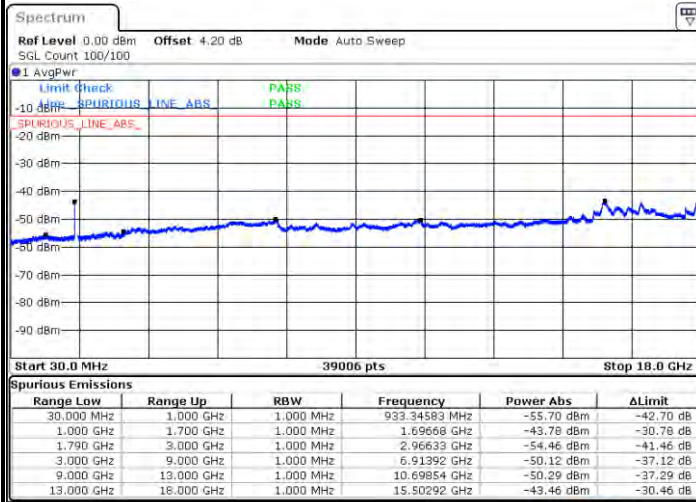


Date: 14.JAN.2021 06:08:36



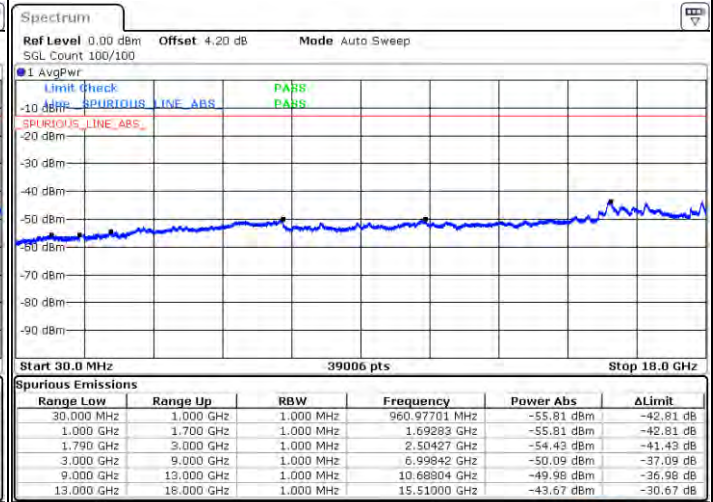
## FR1 n66 / 15MHz / DFT-S OFDM / BPSK

## Lowest Channel / 1RB



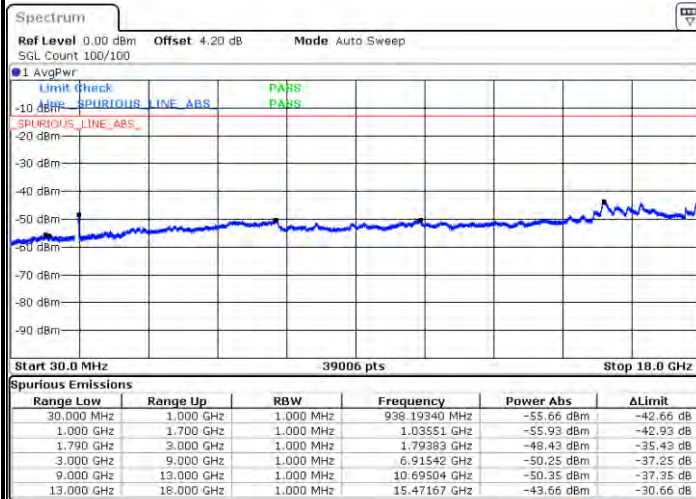
Date: 14.JAN.2021 09:14:02

## Middle Channel / 1RB



Date: 14.JAN.2021 09:25:09

## Highest Channel / 1RB

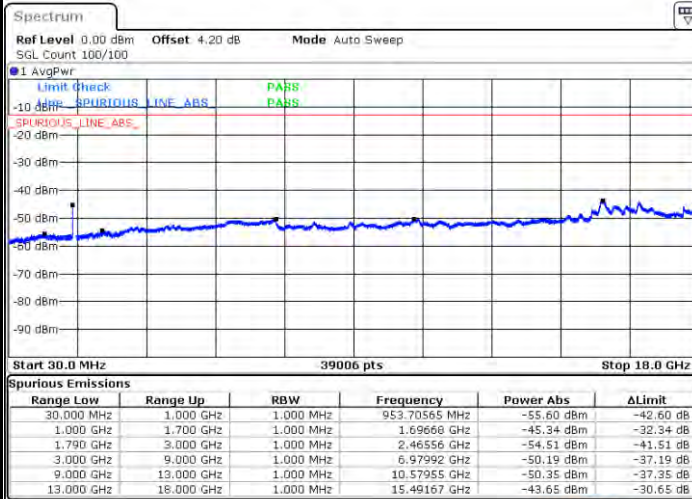


Date: 14.JAN.2021 09:34:12



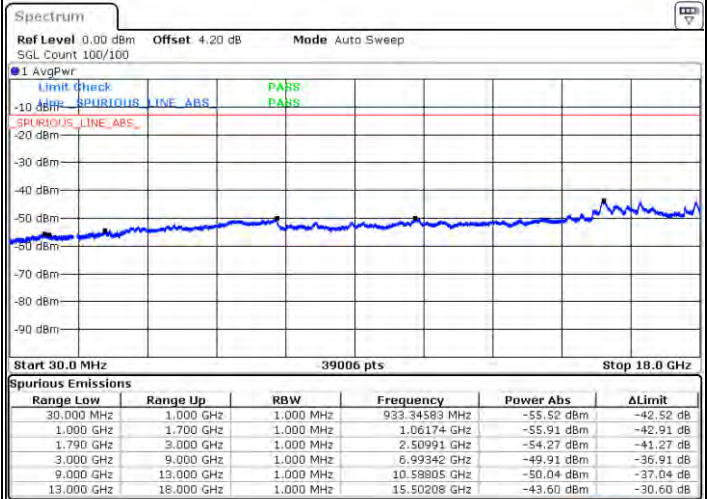
## FR1 n66 / 15MHz / DFT-S OFDM / QPSK

## Lowest Channel / 1RB



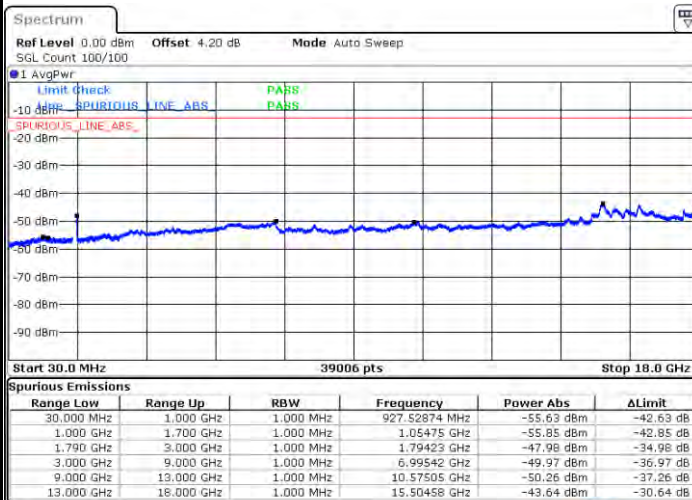
Date: 14.JAN.2021 09:21:40

## Middle Channel / 1RB



Date: 14.JAN.2021 09:26:50

## Highest Channel / 1RB

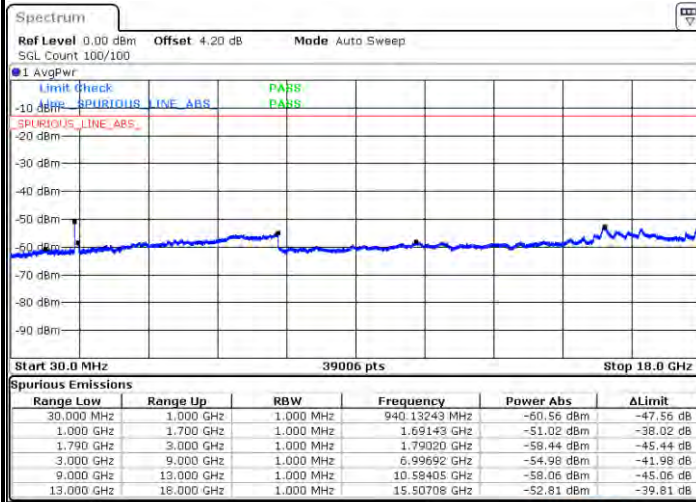


Date: 14.JAN.2021 09:32:46



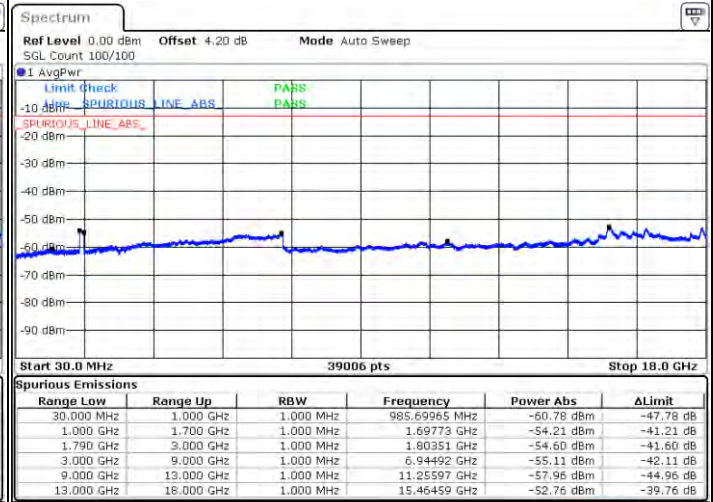
## FR1 n66 / 40MHz / DFT-S OFDM / BPSK

## Lowest Channel / 1RB



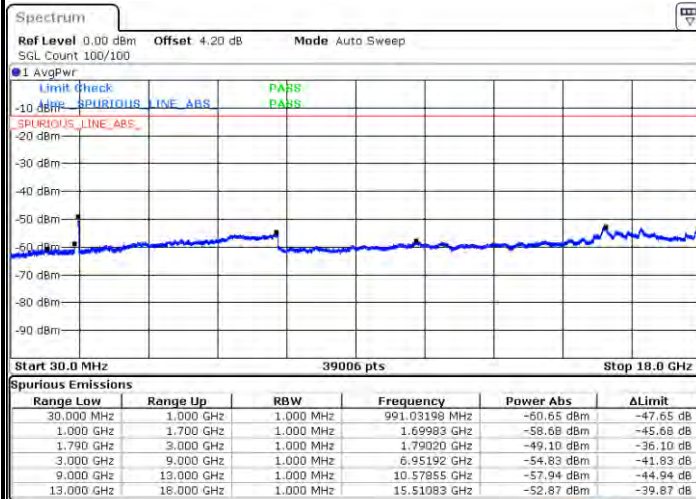
Date: 14.JAN.2021 03:47:11

## Middle Channel / 1RB



Date: 14.JAN.2021 03:43:38

## Highest Channel / 1RB

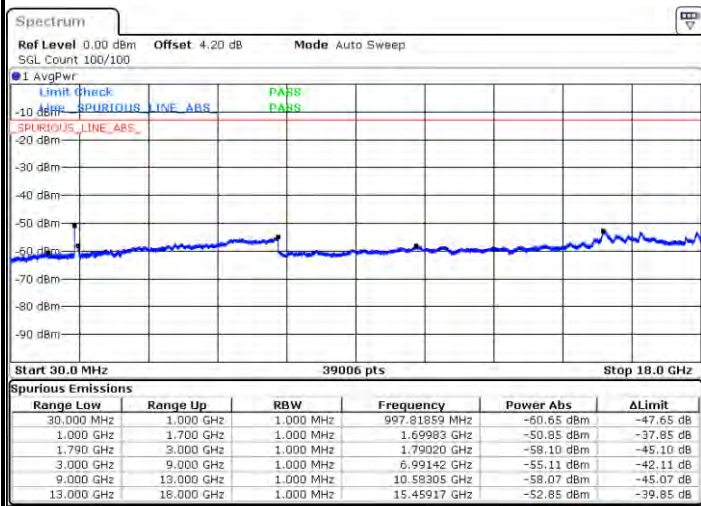


Date: 14.JAN.2021 04:00:16



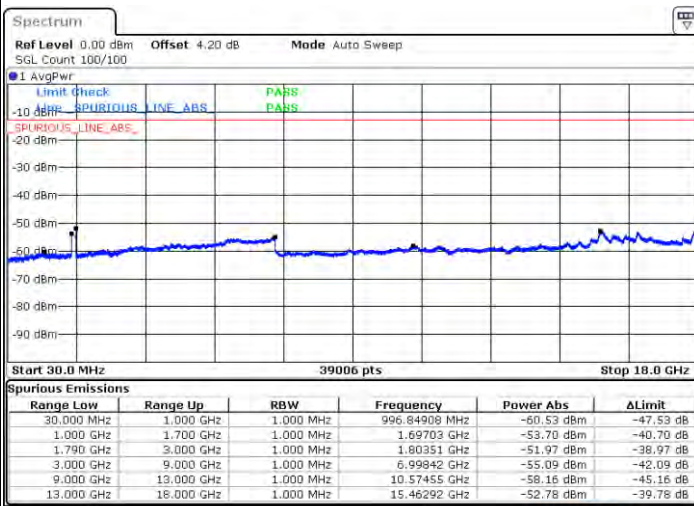
## FR1 n66 / 40MHz / DFT-S OFDM / QPSK

## Lowest Channel / 1RB



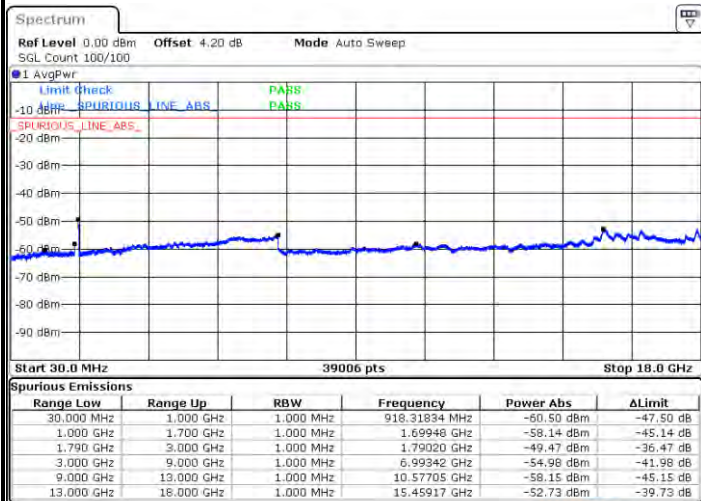
Date: 14.JAN.2021 03:51:32

## Middle Channel / 1RB



Date: 14.JAN.2021 03:46:45

## Highest Channel / 1RB



Date: 14.JAN.2021 03:58:44

## Frequency Stability

| Test Conditions  |                   | NR n66 (BPSK) / Middle Channel | Limit       |
|------------------|-------------------|--------------------------------|-------------|
| Temperature (°C) | Voltage (Volt)    | BW 20MHz                       | Within Band |
|                  |                   | Deviation (ppm)                | Result      |
| 50               | Normal Voltage    | 0.0022                         | PASS        |
| 40               | Normal Voltage    | 0.0018                         |             |
| 30               | Normal Voltage    | 0.0016                         |             |
| 20(Ref.)         | Normal Voltage    | 0.0013                         |             |
| 10               | Normal Voltage    | 0.0017                         |             |
| 0                | Normal Voltage    | 0.0012                         |             |
| -10              | Normal Voltage    | 0.0025                         |             |
| -20              | Normal Voltage    | 0.0015                         |             |
| -30              | Normal Voltage    | 0.0017                         |             |
| 20               | Maximum Voltage   | 0.0018                         |             |
| 20               | Normal Voltage    | 0.0013                         |             |
| 20               | Battery End Point | 0.0015                         |             |

**Note:**

1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.14 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

**FR1 n66 NSA****Peak-to-Average Ratio**

| Mode       | FR1 n66+48A / 5MHz / 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  | 3.51                            | 4.06      | 4.99 | 5.30    | <b>PASS</b> |
| Middle CH  | 3.54                            | 4.06      | 5.13 | 5.30    |             |
| Highest CH | 3.54                            | 4.00      | 5.07 | 5.30    |             |



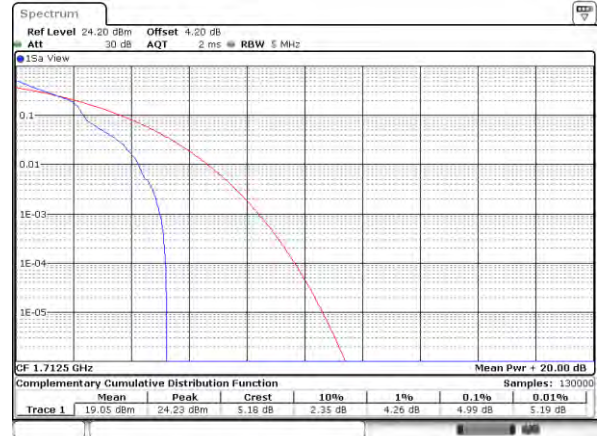
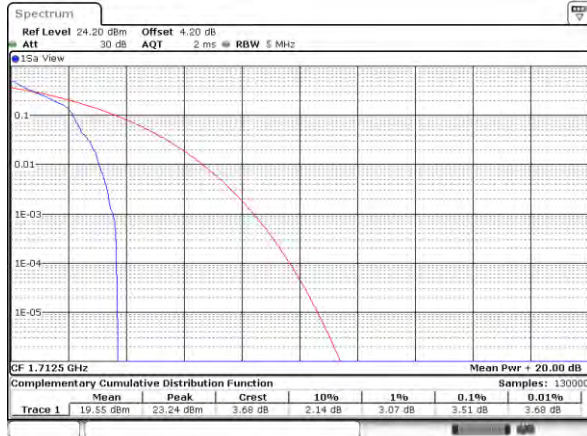
## FR1 n66+48A / 5MHz / DFT-S OFDM

## PI/2 BPSK

## QPSK

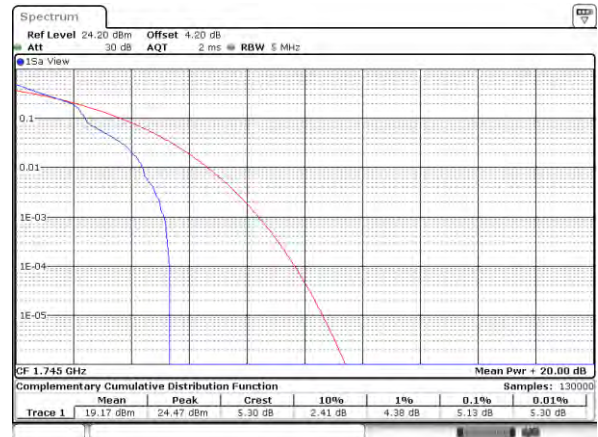
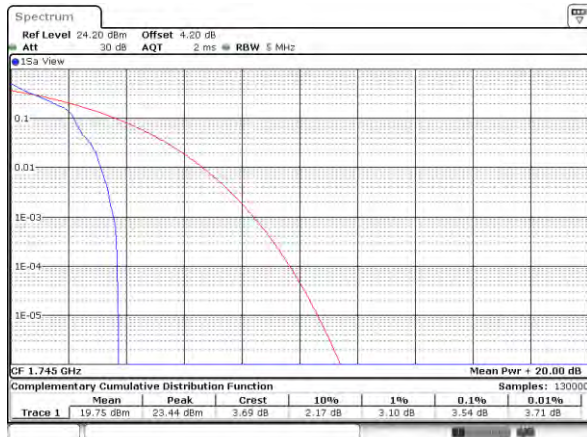
## Lowest Channel / 1RB

## Lowest Channel / 1RB



## Middle Channel / 1 RB

## Middle Channel / 1 RB



## Highest Channel / 1 RB

## Highest Channel / 1 RB





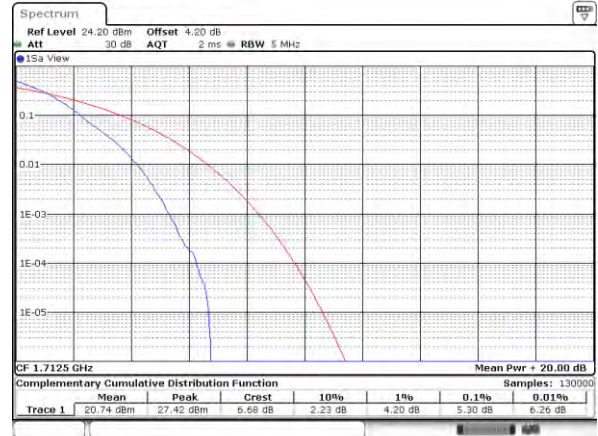
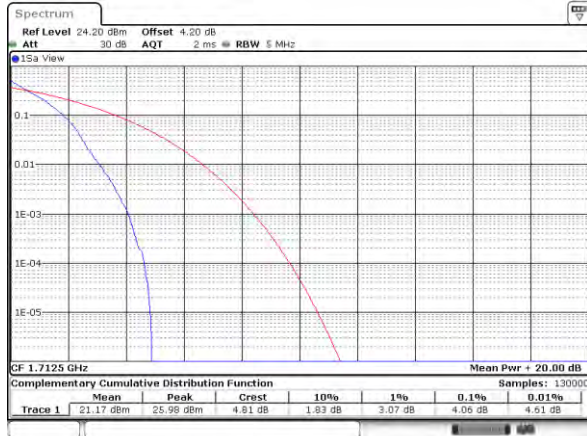
## FR1 n66+48A / 5MHz / DFT-S OFDM

## PI/2 BPSK

## QPSK

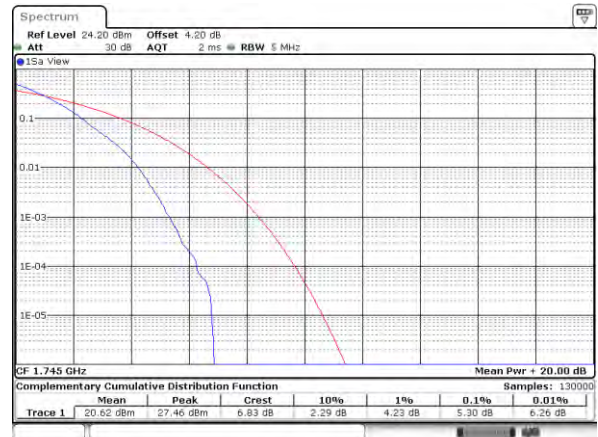
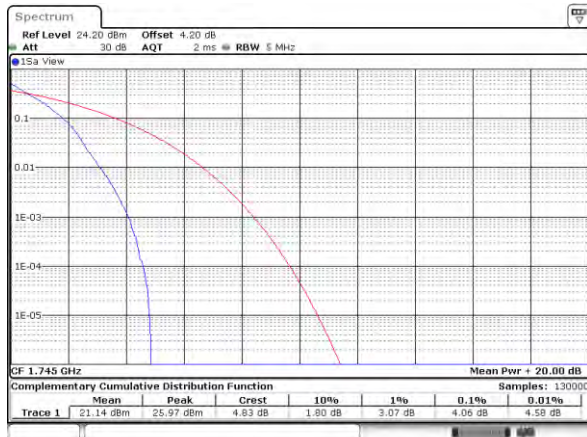
## Lowest Channel / Full RB

## Lowest Channel / Full RB



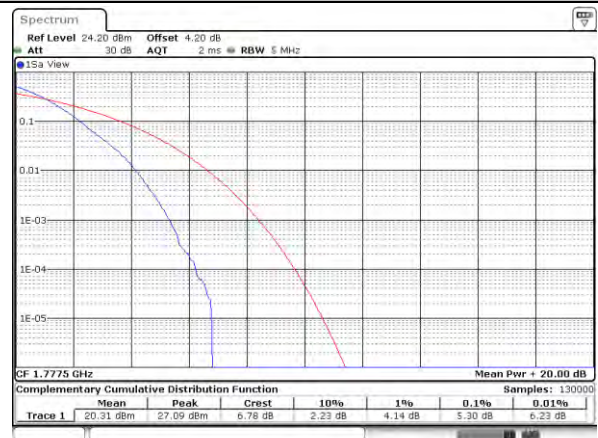
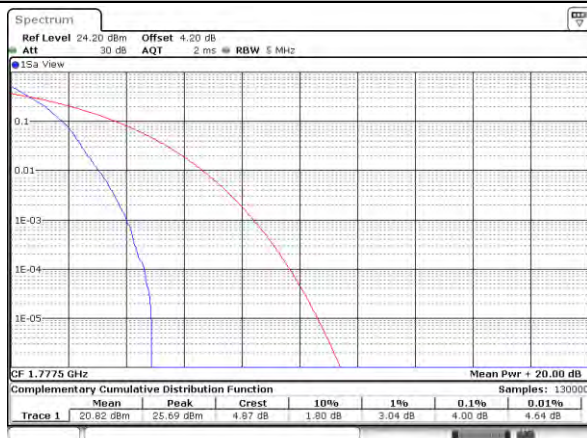
## Middle Channel / Full RB

## Middle Channel / Full RB



## Highest Channel / Full RB

## Highest Channel / Full RB



**26dB Bandwidth**

| Mode      | FR1 n66+48A : 26dB BW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|--------------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 5MHz                                 | 5MHz  | 5MHz  | 5MHz   |  |  |  |  |
| Mod.      | QPSK                                 | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 4.92                                 | 4.88  | 4.92  | 4.84   |  |  |  |  |

| Mode      | FR1 n66+48A : 26dB BW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|--------------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 10MHz                                | 10MHz | 10MHz | 10MHz  |  |  |  |  |
| Mod.      | QPSK                                 | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 9.95                                 | 9.81  | 9.79  | 9.83   |  |  |  |  |

| Mode      | FR1 n66+48A : 26dB BW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|--------------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 15MHz                                | 15MHz | 15MHz | 15MHz  |  |  |  |  |
| Mod.      | QPSK                                 | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 14.96                                | 14.93 | 14.98 | 14.84  |  |  |  |  |

| Mode      | FR1 n66+48A : 26dB BW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|--------------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 20MHz                                | 20MHz | 20MHz | 20MHz  |  |  |  |  |
| Mod.      | QPSK                                 | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 19.90                                | 19.90 | 19.90 | 19.98  |  |  |  |  |

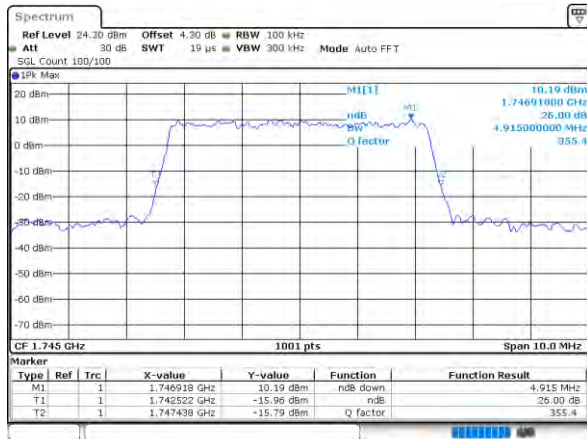
| Mode      | FR1 n66+48A : 26dB BW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|--------------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 40MHz                                | 40MHz | 40MHz | 40MHz  |  |  |  |  |
| Mod.      | QPSK                                 | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 41.00                                | 40.84 | 40.92 | 41.08  |  |  |  |  |



## FR1 n66+48A / 5MHz / CP-OFDM

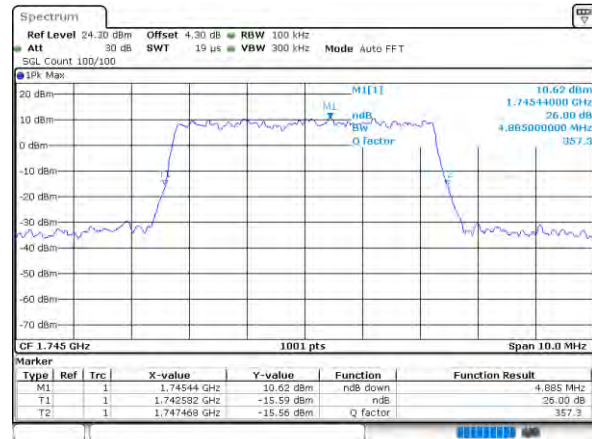
## QPSK

## Middle Channel



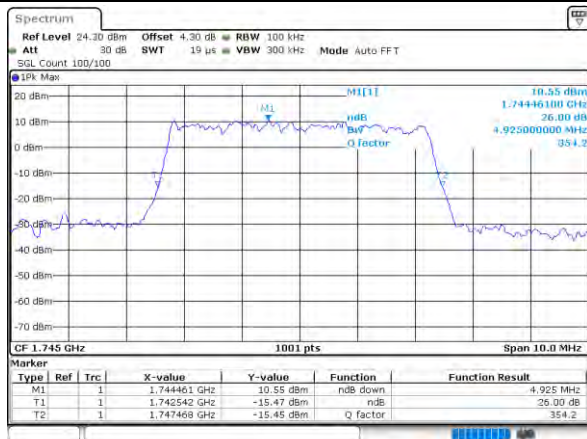
## 16QAM

## Middle Channel



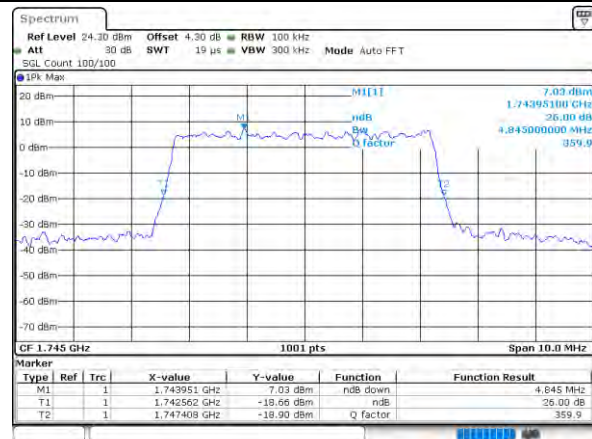
## 64QAM

## Middle Channel



## 256QAM

## Middle Channel





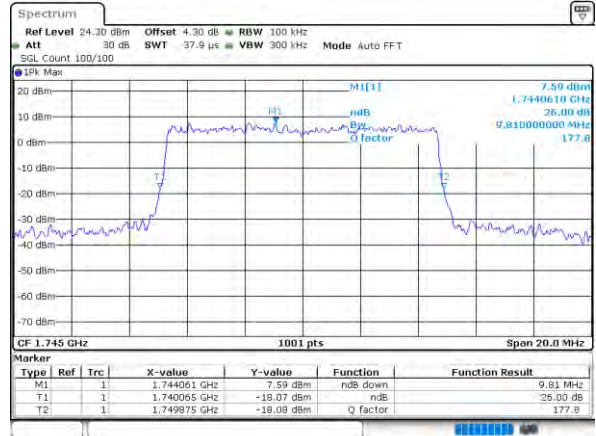
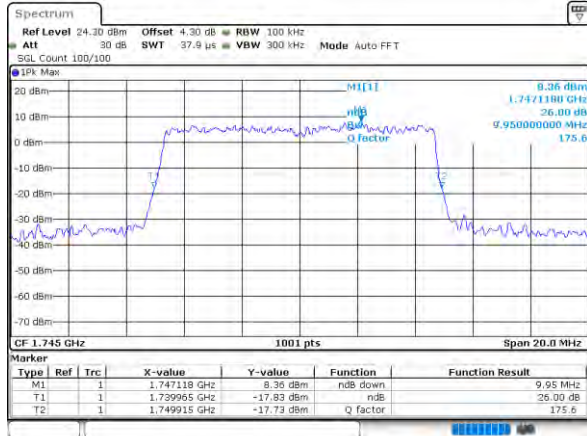
## FR1 n66+48A / 10MHz / CP-OFDM

## QPSK

## 16QAM

## Middle Channel

## Middle Channel

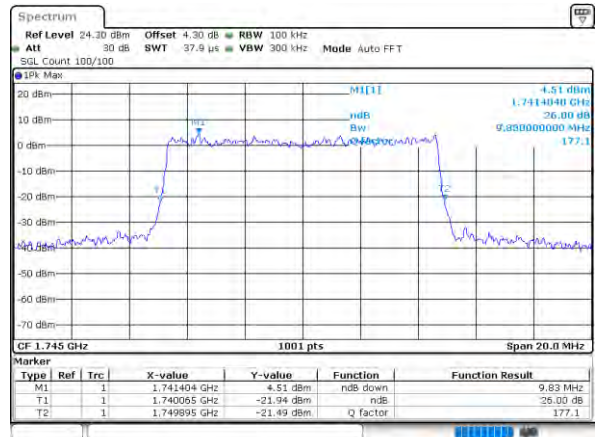
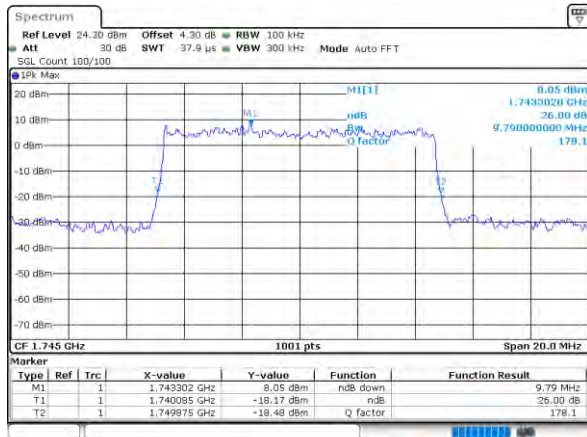


## 64QAM

## 256QAM

## Middle Channel

## Middle Channel





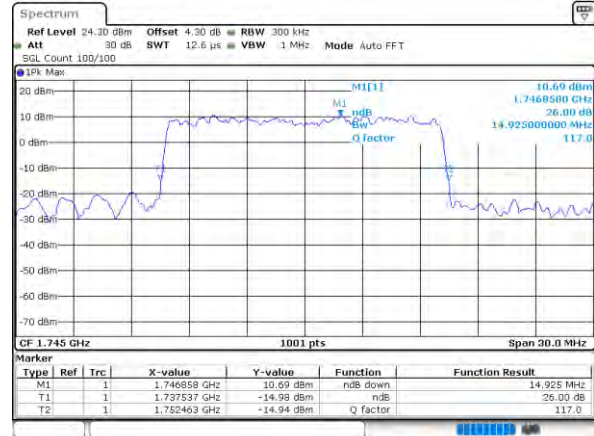
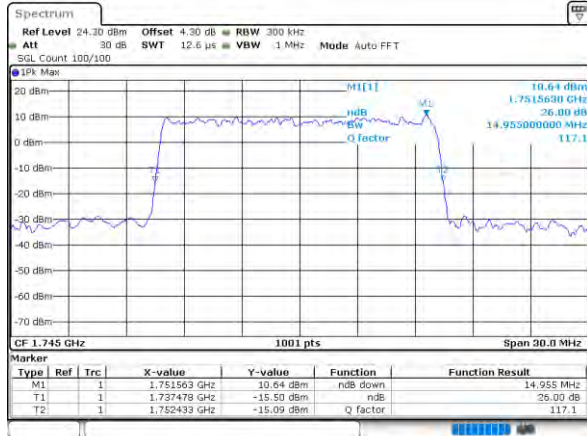
## FR1 n66+48A / 15MHz / CP-OFDM

## QPSK

## 16QAM

## Middle Channel

## Middle Channel

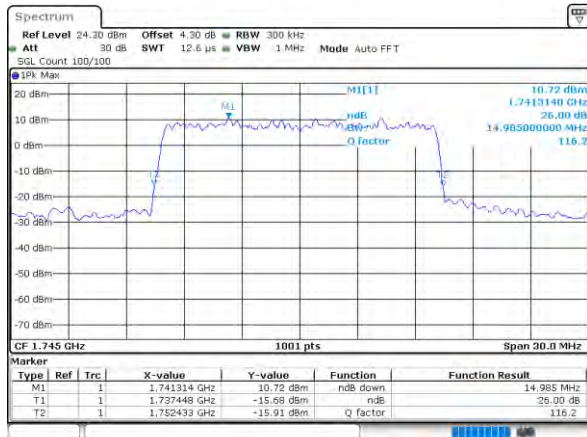


## 64QAM

## 256QAM

## Middle Channel

## Middle Channel

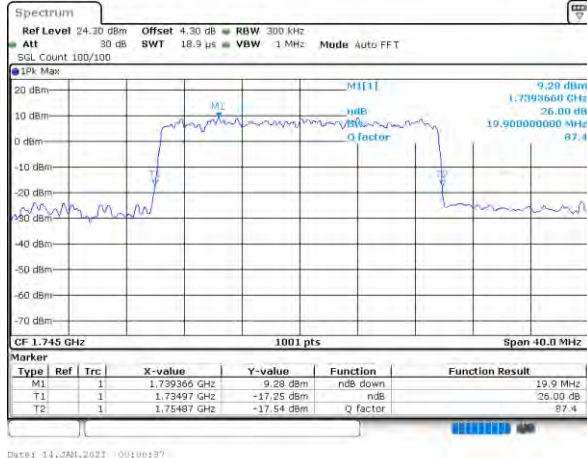




## FR1 n66+48A / 20MHz / CP-OFDM

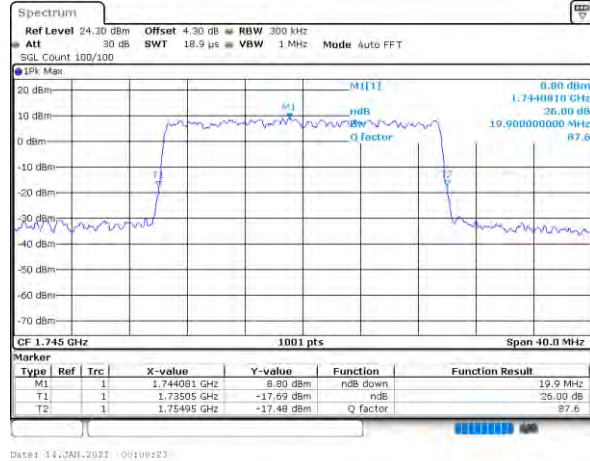
## QPSK

## Middle Channel



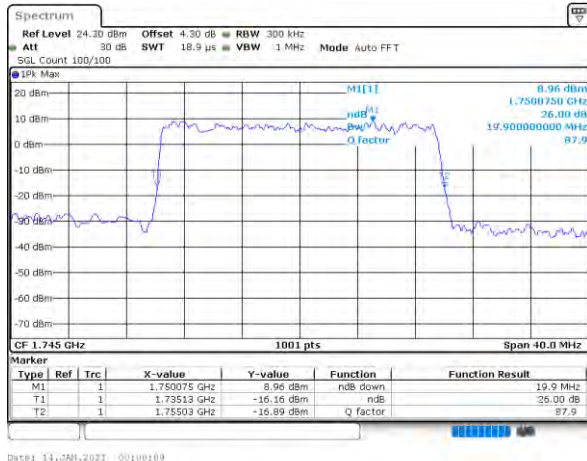
## 16QAM

## Middle Channel



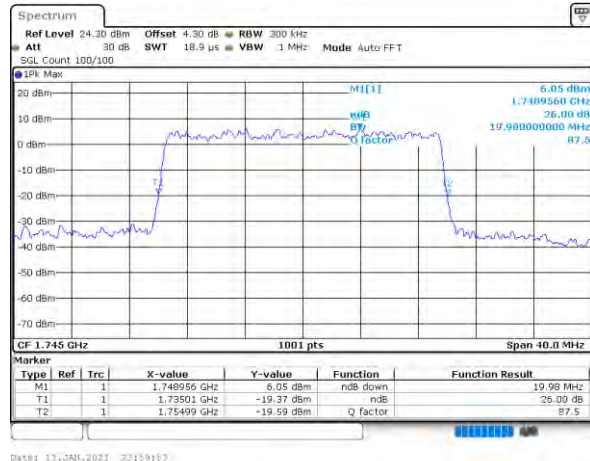
## 64QAM

## Middle Channel



## 256QAM

## Middle Channel





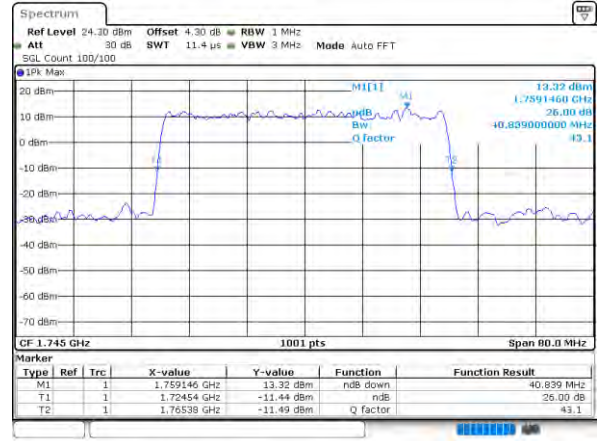
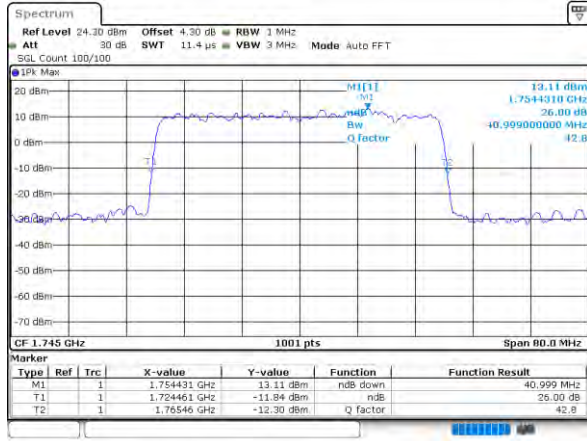
## FR1 n66+48A / 40MHz / CP-OFDM

## QPSK

## 16QAM

## Middle Channel

## Middle Channel

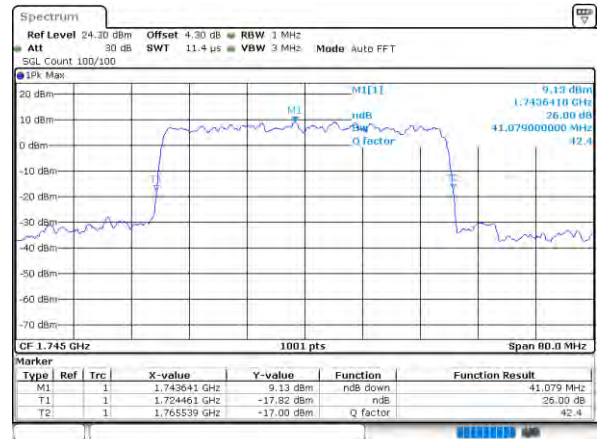
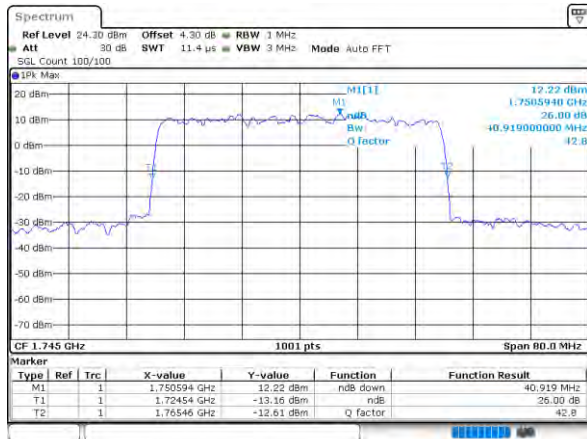


## 64QAM

## 256QAM

## Middle Channel

## Middle Channel



**Occupied Bandwidth**

| Mode      | FR1 n66+48A : OBW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|----------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 5MHz                             | 5MHz  | 5MHz  | 5MHz   |  |  |  |  |
| Mod.      | QPSK                             | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 4.49                             | 4.48  | 4.48  | 4.48   |  |  |  |  |

| Mode      | FR1 n66+48A : OBW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|----------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 10MHz                            | 10MHz | 10MHz | 10MHz  |  |  |  |  |
| Mod.      | QPSK                             | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 9.31                             | 9.29  | 9.31  | 9.27   |  |  |  |  |

| Mode      | FR1 n66+48A : OBW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|----------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 15MHz                            | 15MHz | 15MHz | 15MHz  |  |  |  |  |
| Mod.      | QPSK                             | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 14.15                            | 14.15 | 14.12 | 14.15  |  |  |  |  |

| Mode      | FR1 n66+48A : OBW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|----------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 20MHz                            | 20MHz | 20MHz | 20MHz  |  |  |  |  |
| Mod.      | QPSK                             | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 18.98                            | 18.98 | 18.94 | 18.98  |  |  |  |  |

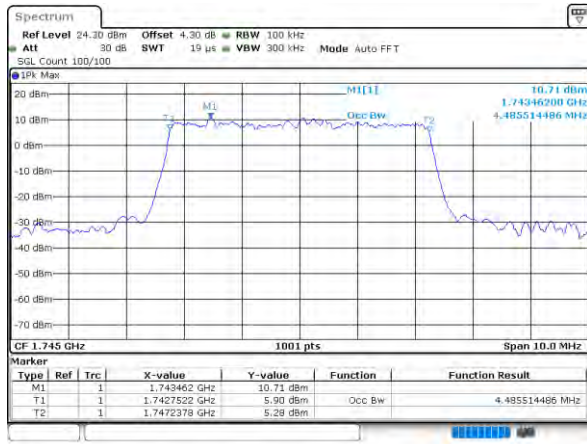
| Mode      | FR1 n66+48A : OBW(MHz) / CP-OFDM |       |       |        |  |  |  |  |
|-----------|----------------------------------|-------|-------|--------|--|--|--|--|
| BW        | 40MHz                            | 40MHz | 40MHz | 40MHz  |  |  |  |  |
| Mod.      | QPSK                             | 16QAM | 64QAM | 256QAM |  |  |  |  |
| Middle CH | 38.68                            | 38.60 | 38.92 | 38.68  |  |  |  |  |



## FR1 n66+48A / 5MHz / CP-OFDM

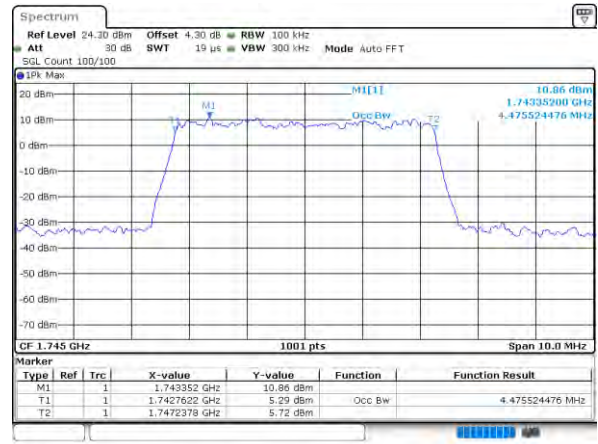
## QPSK

## Middle Channel



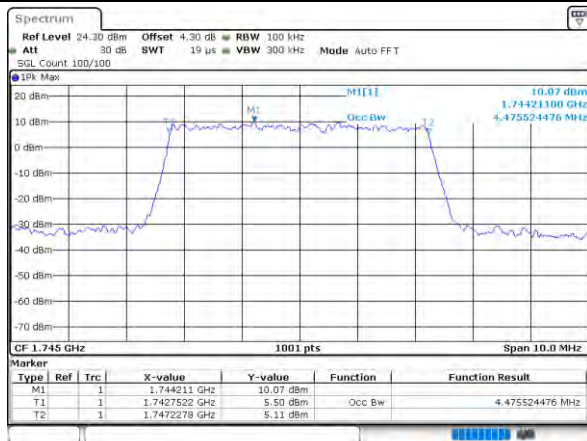
## 16QAM

## Middle Channel



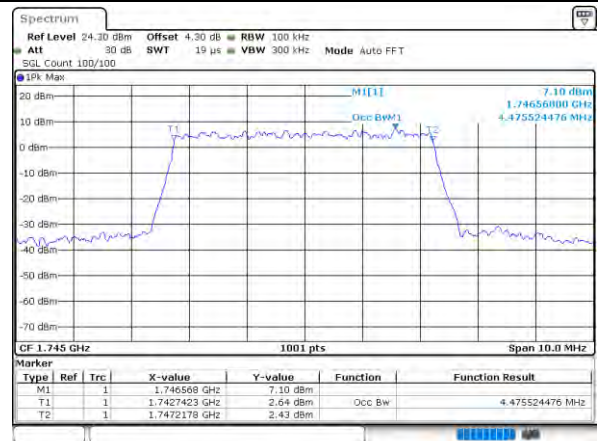
## 64QAM

## Middle Channel



## 256QAM

## Middle Channel





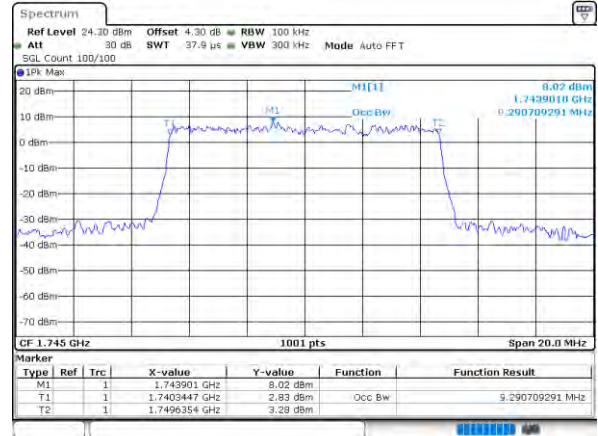
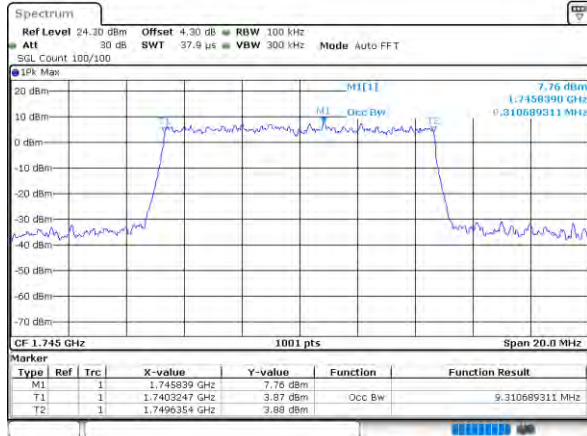
## FR1 n66+48A / 10MHz / CP-OFDM

## QPSK

## 16QAM

## Middle Channel

## Middle Channel

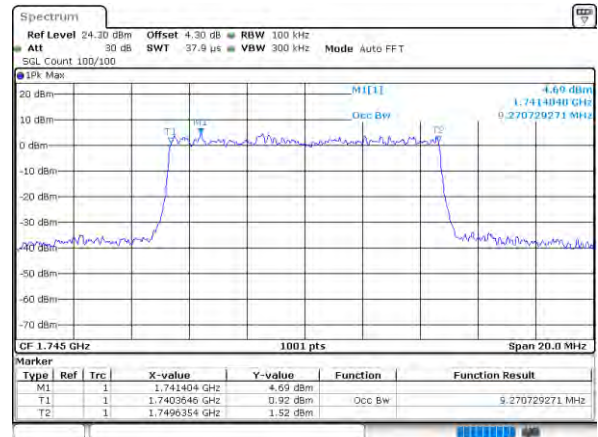
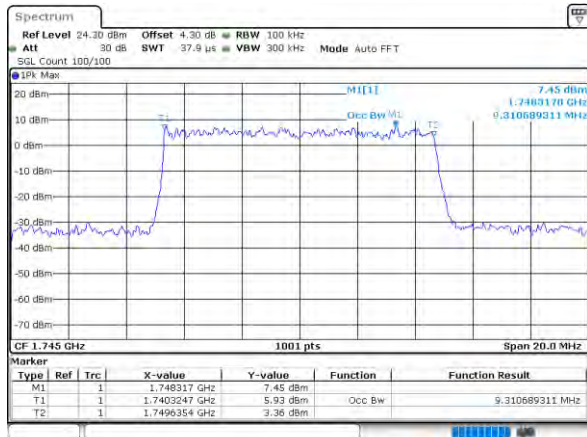


## 64QAM

## 256QAM

## Middle Channel

## Middle Channel

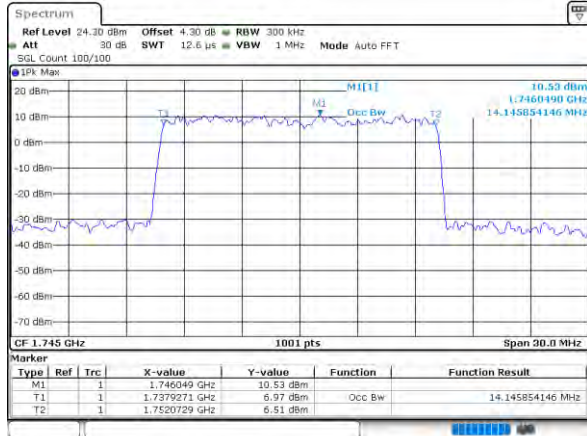




## FR1 n66+48A / 15MHz / CP-OFDM

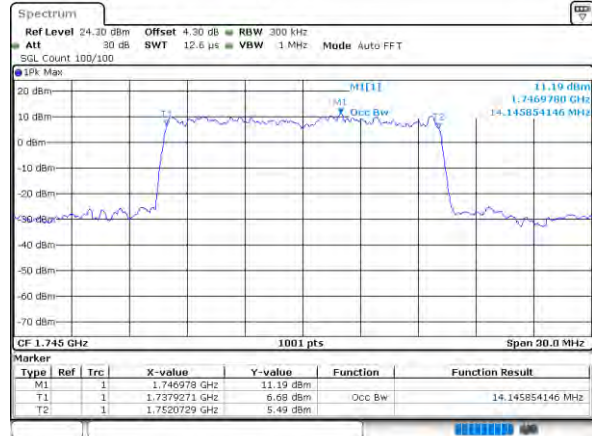
## QPSK

## Middle Channel



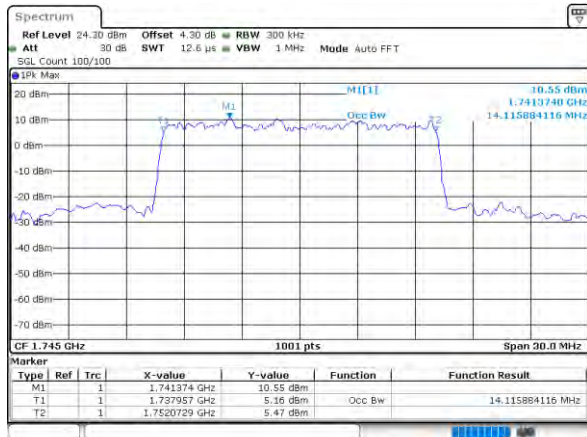
## 16QAM

## Middle Channel



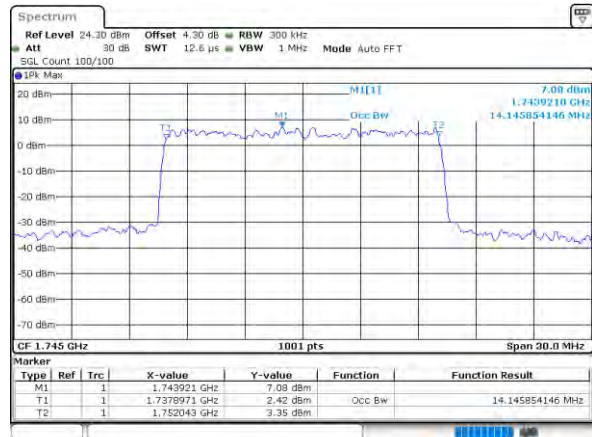
## 64QAM

## Middle Channel



## 256QAM

## Middle Channel

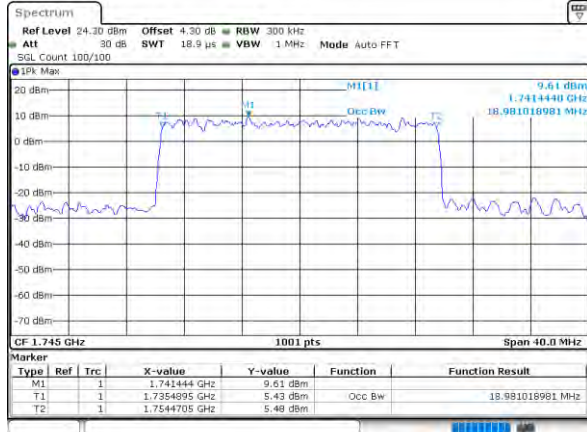




FR1 n66+48A / 20MHz / CP-OFDM

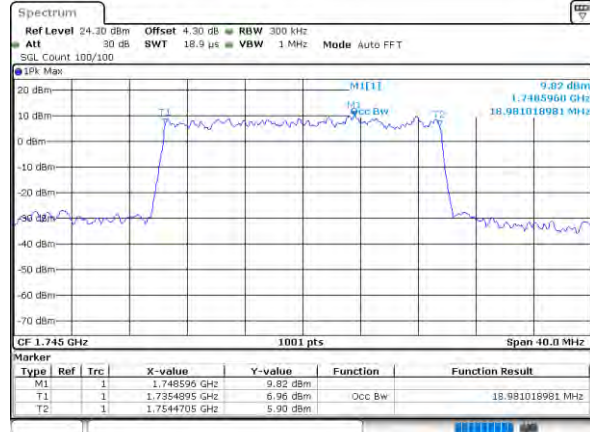
QPSK

Middle Channel



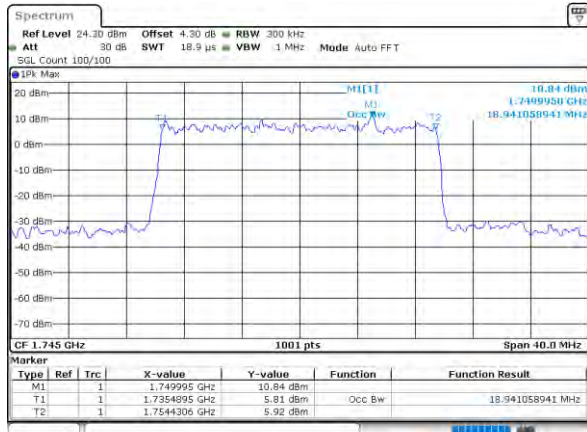
16QAM

Middle Channel



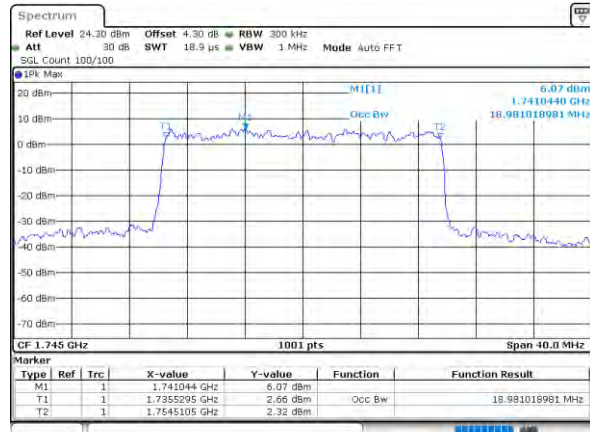
64QAM

Middle Channel



256QAM

Middle Channel





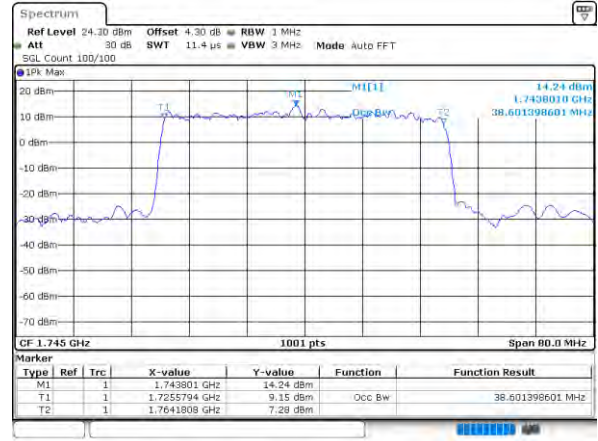
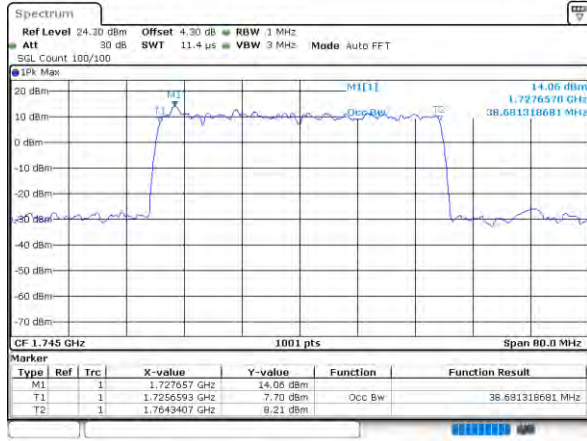
FR1 n66+48A / 40MHz / CP-OFDM

QPSK

16QAM

Middle Channel

Middle Channel

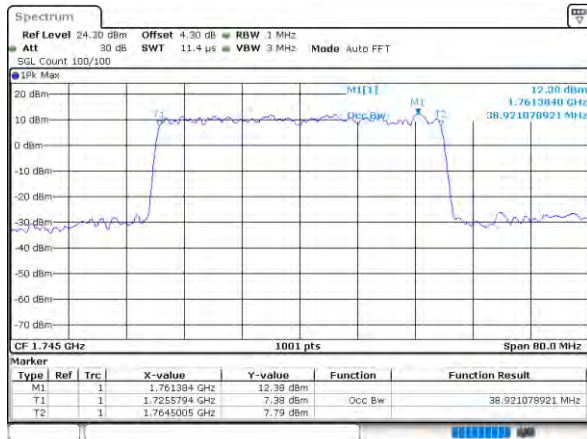


64QAM

256QAM

Middle Channel

Middle Channel



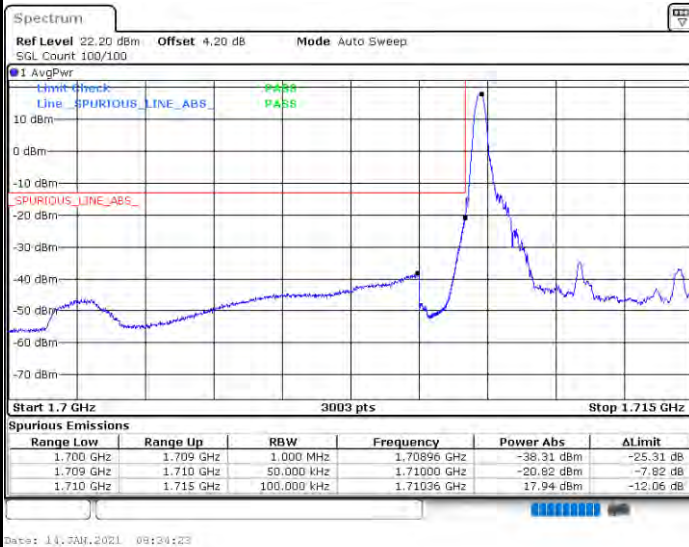


## Conducted Band Edge

FR1 n66+48A / 5MHz / DFT-S OFDM BPSK

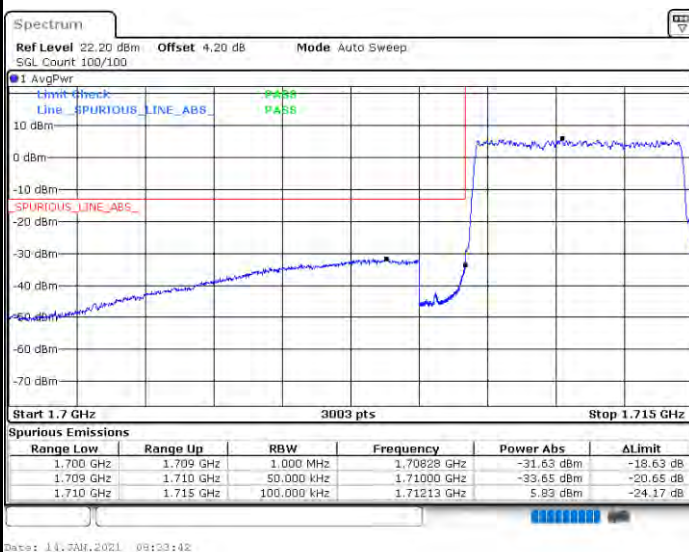
Lowest Band Edge / 1 RB

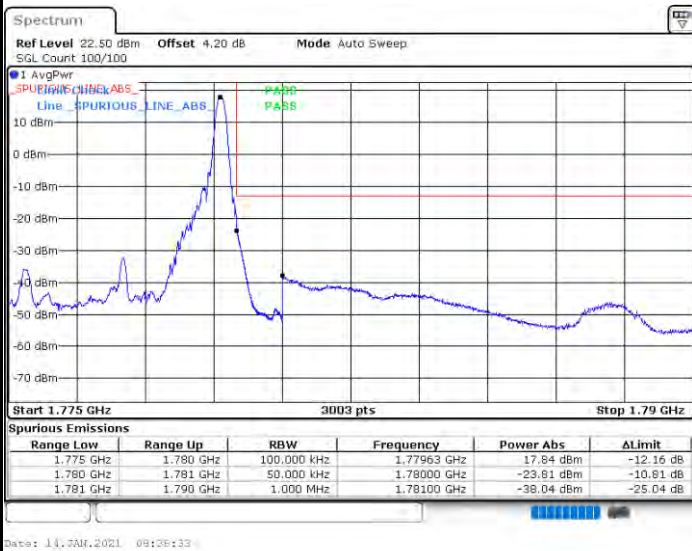
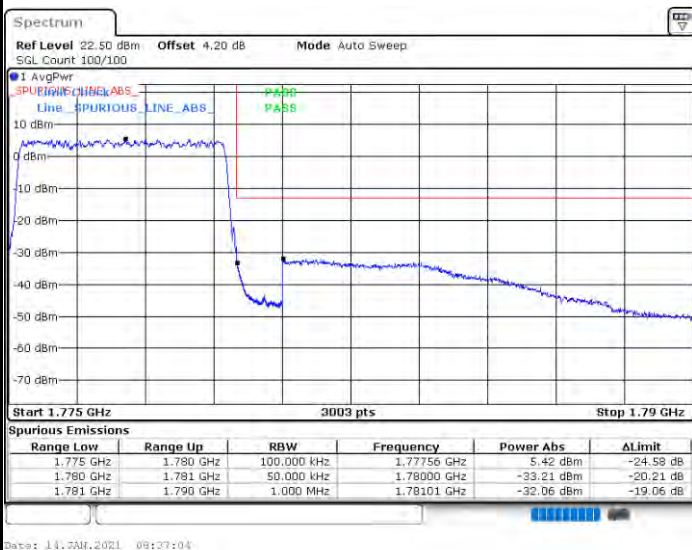
Channel Power &lt; -13dBm Pass



Lowest Band Edge / Full RB

Channel Power &lt; -13dBm Pass



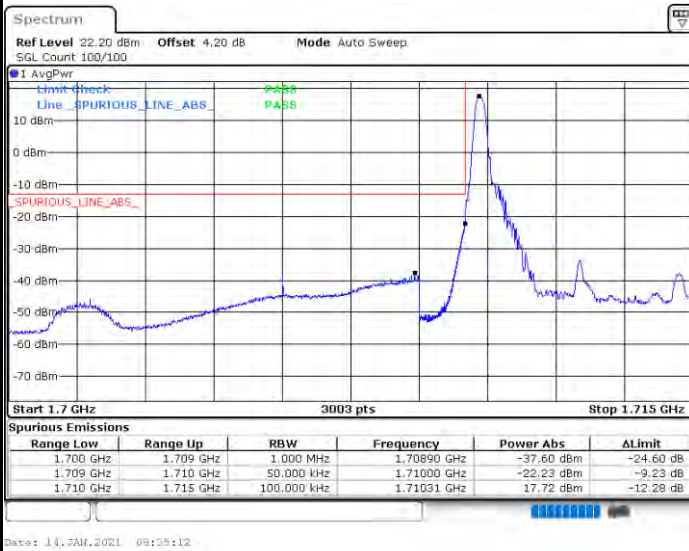
**FR1 n66+48A / 5MHz / DFT-S OFDM BPSK****Highest Band Edge / 1 RB****Channel Power < -13dBm Pass****Highest Band Edge / Full RB****Channel Power < -13dBm Pass**



FR1 n66+48A / 5MHz / DFT-S OFDM QPSK

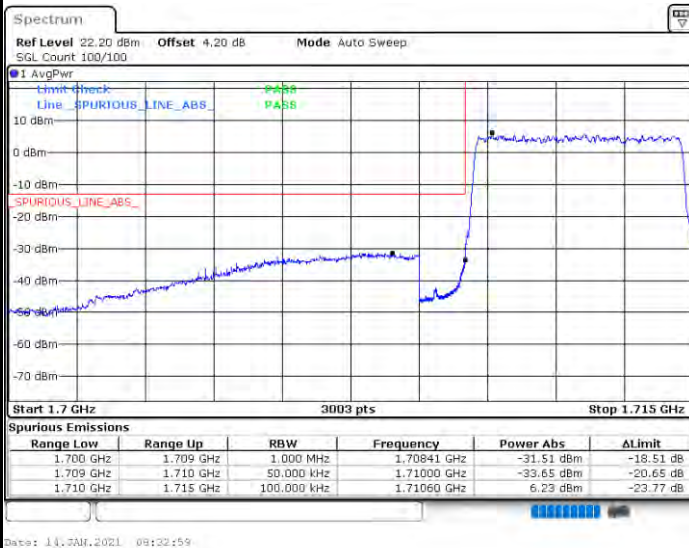
Lowest Band Edge / 1 RB

Channel Power < -13dBm Pass



Lowest Band Edge / Full RB

Channel Power < -13dBm Pass

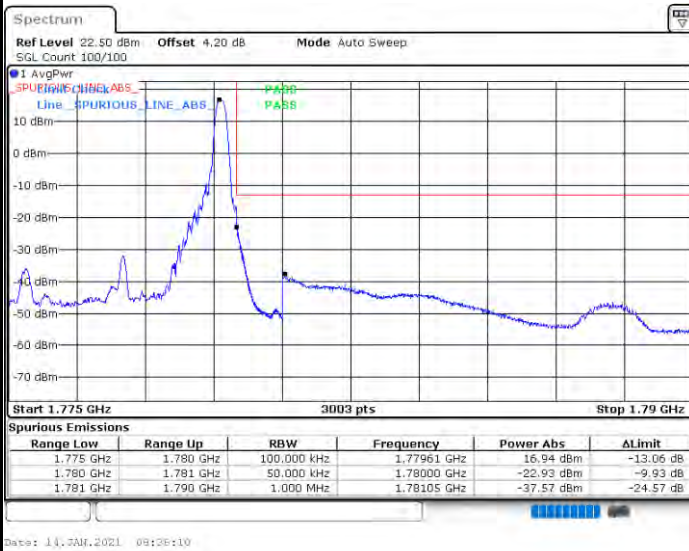




FR1 n66+48A / 5MHz / DFT-S OFDM QPSK

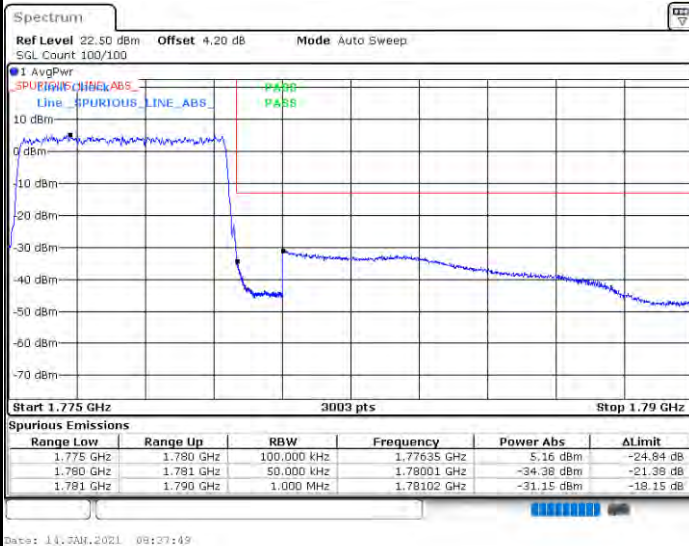
Highest Band Edge / 1 RB

Channel Power < -13dBm Pass



Highest Band Edge / Full RB

Channel Power < -13dBm Pass

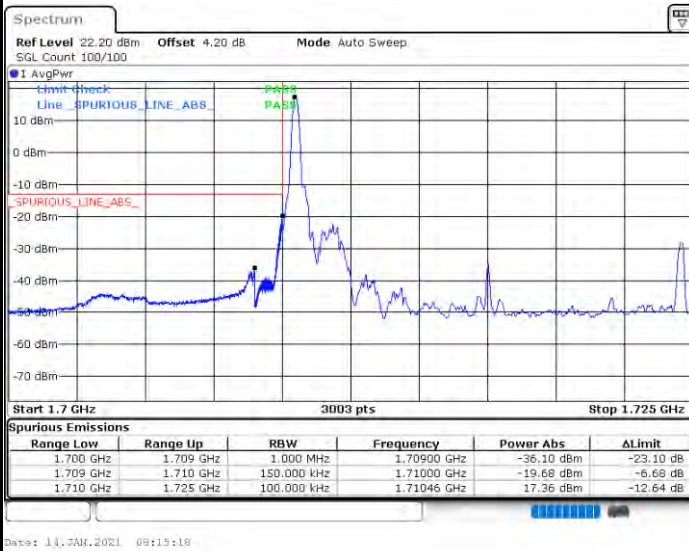




## FR1 n66+48A / 15MHz / DFT-S OFDM BPSK

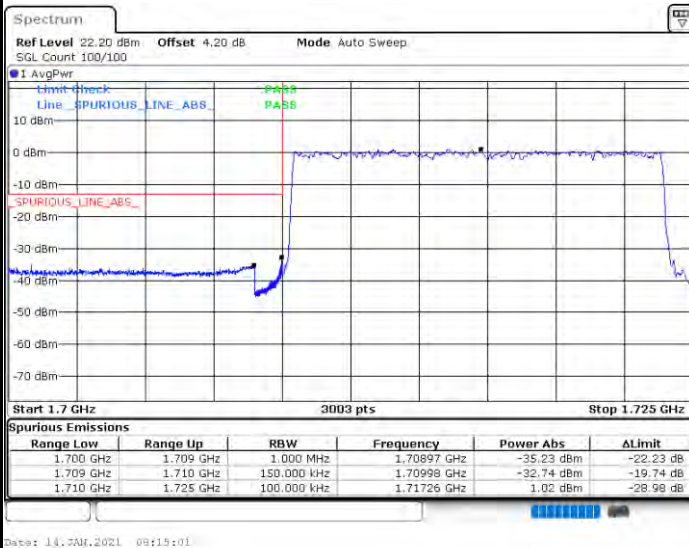
## Lowest Band Edge / 1 RB

## Channel Power &lt; -13dBm Pass



## Lowest Band Edge / Full RB

## Channel Power &lt; -13dBm Pass

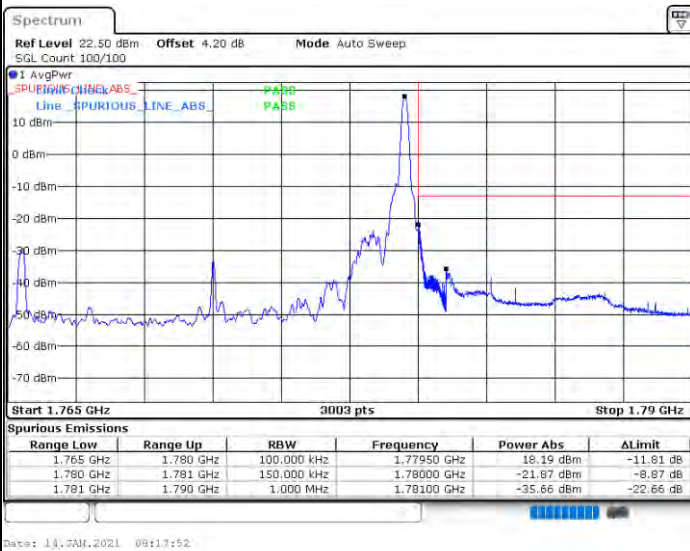




## FR1 n66+48A / 15MHz / DFT-S OFDM BPSK

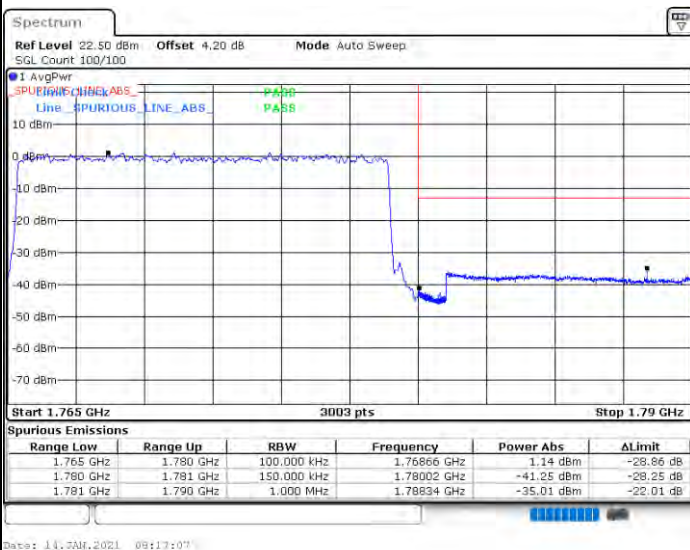
## Highest Band Edge / 1 RB

## Channel Power &lt; -13dBm Pass



## Highest Band Edge / Full RB

## Channel Power &lt; -13dBm Pass

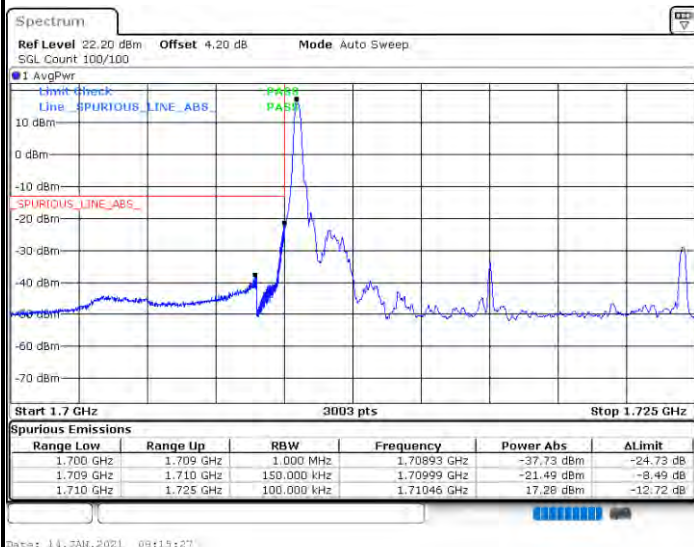




## FR1 n66+48A / 15MHz / DFT-S OFDM QPSK

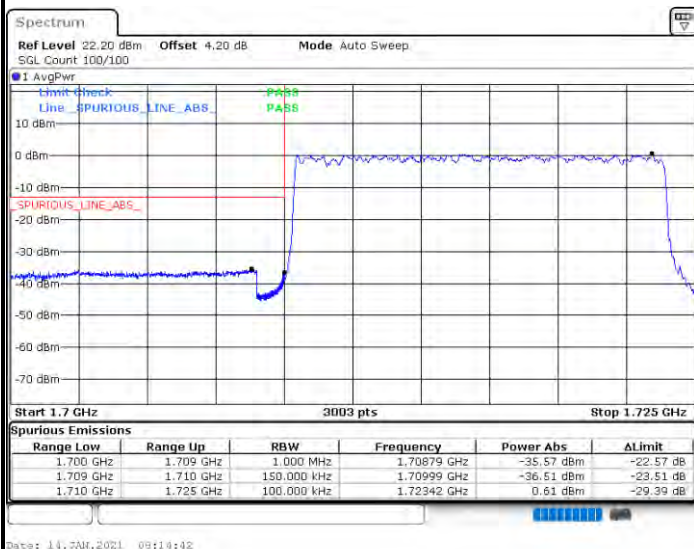
## Lowest Band Edge / 1 RB

## Channel Power &lt; -13dBm Pass



## Lowest Band Edge / Full RB

## Channel Power &lt; -13dBm Pass

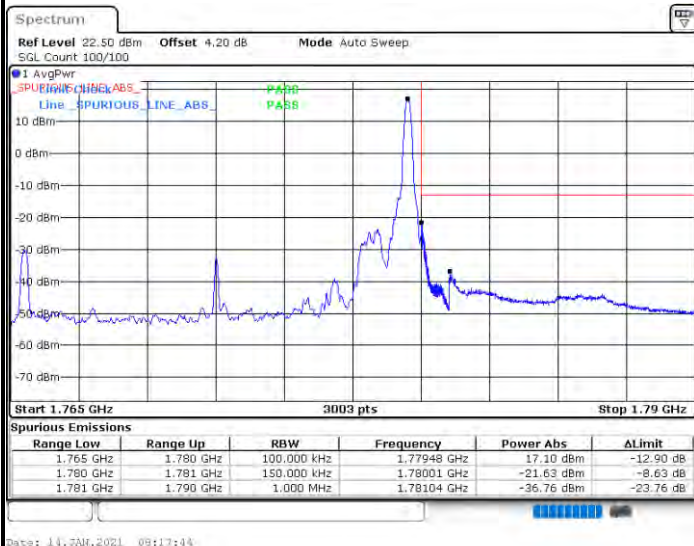




## FR1 n66+48A / 15MHz / DFT-S OFDM QPSK

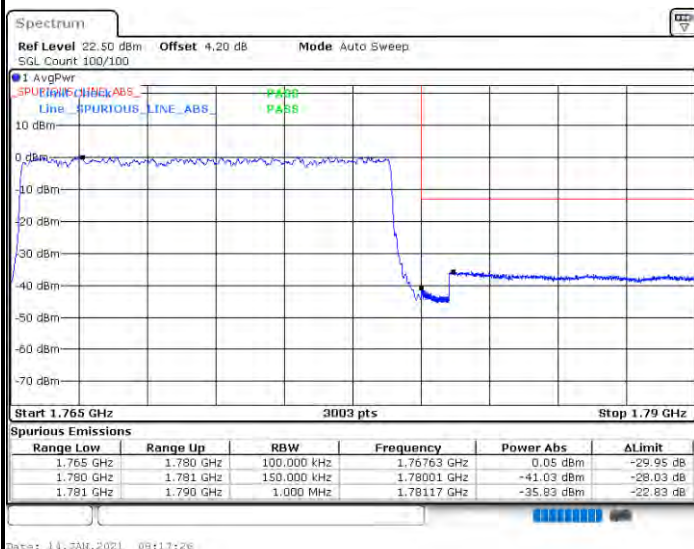
## Highest Band Edge / 1 RB

## Channel Power &lt; -13dBm Pass



## Highest Band Edge / Full RB

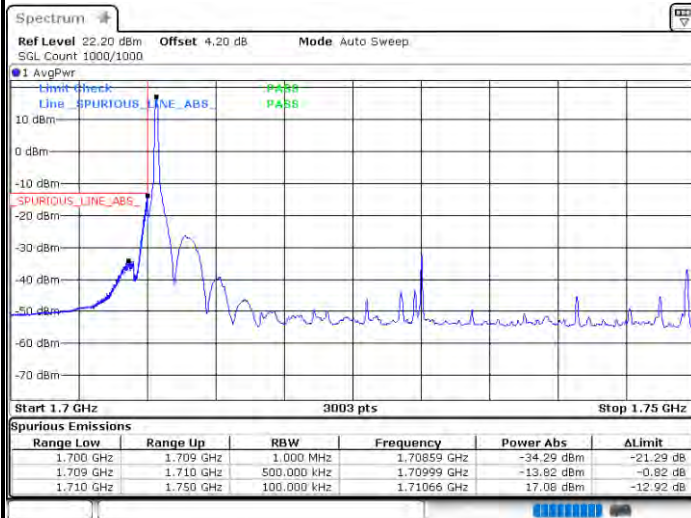
## Channel Power &lt; -13dBm Pass



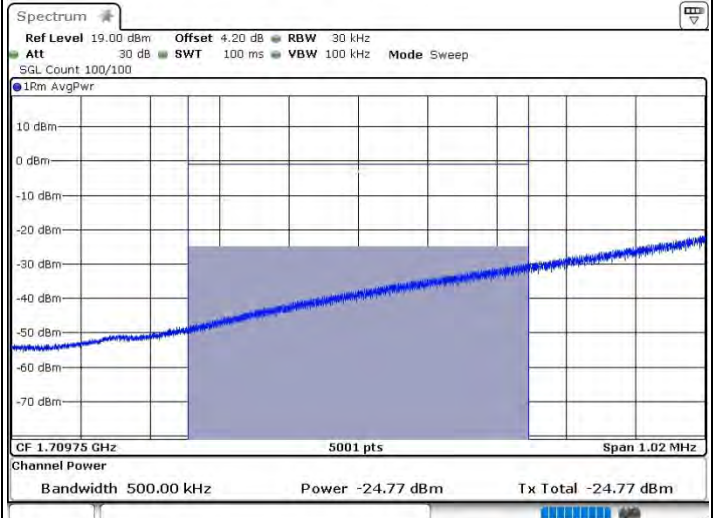


## FR1 n66+48A / 40MHz / DFT-S OFDM BPSK

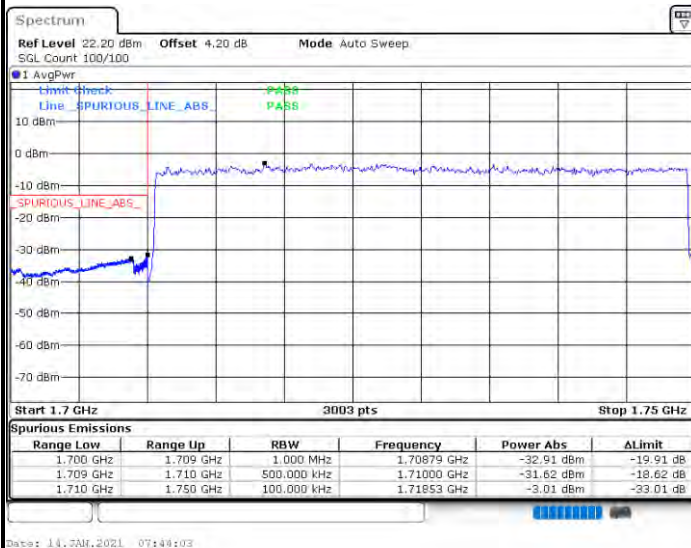
## Lowest Band Edge / 1 RB



## Channel Power &lt; -13dBm Pass

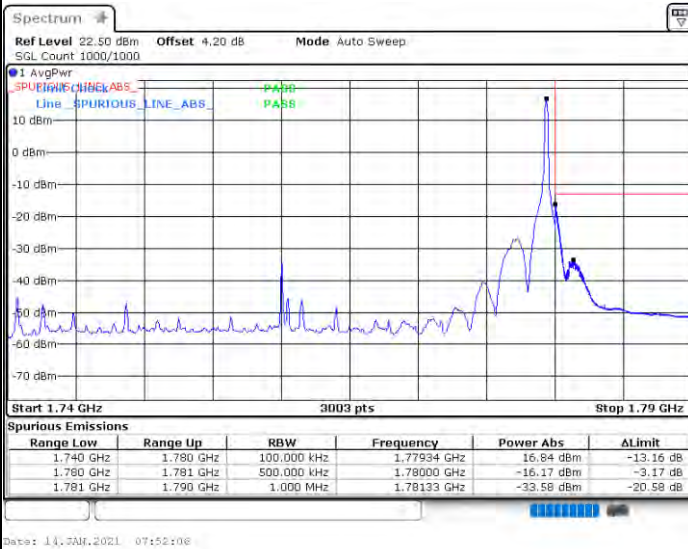
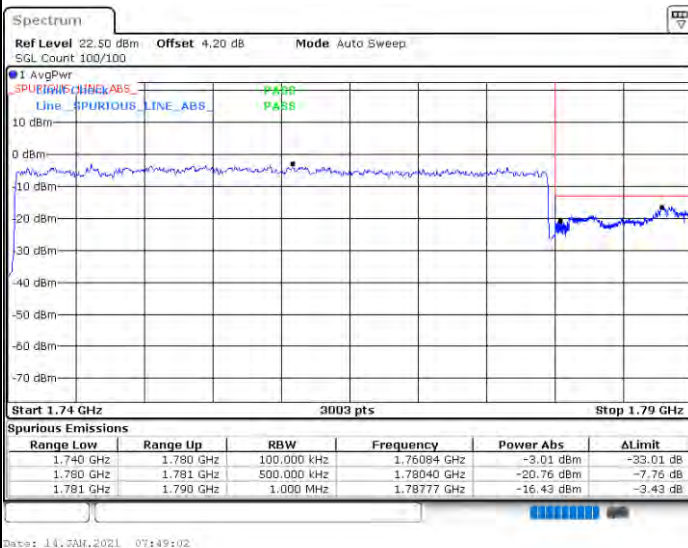


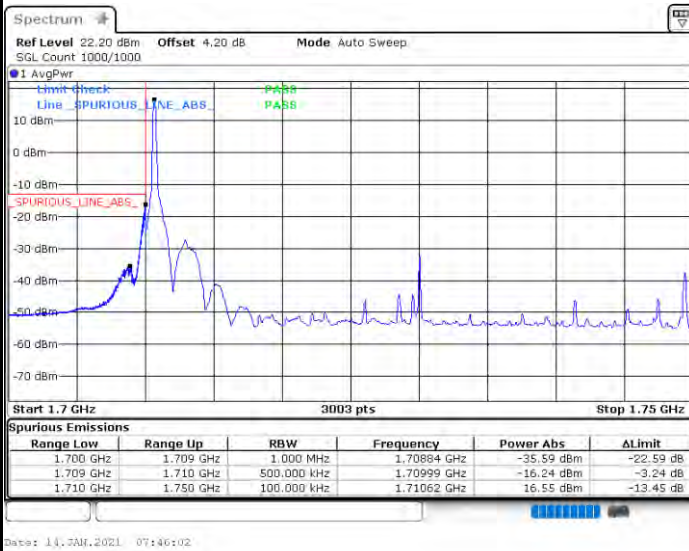
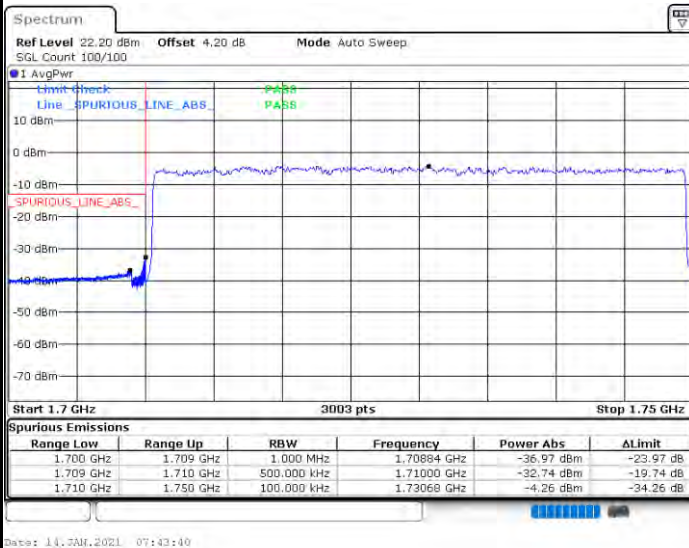
## Lowest Band Edge / Full RB



## Channel Power &lt; -13dBm Pass

/

**FR1 n66+48A / 40MHz / DFT-S OFDM BPSK****Highest Band Edge / 1 RB****Channel Power < -13dBm Pass****Highest Band Edge / Full RB****Channel Power < -13dBm Pass**

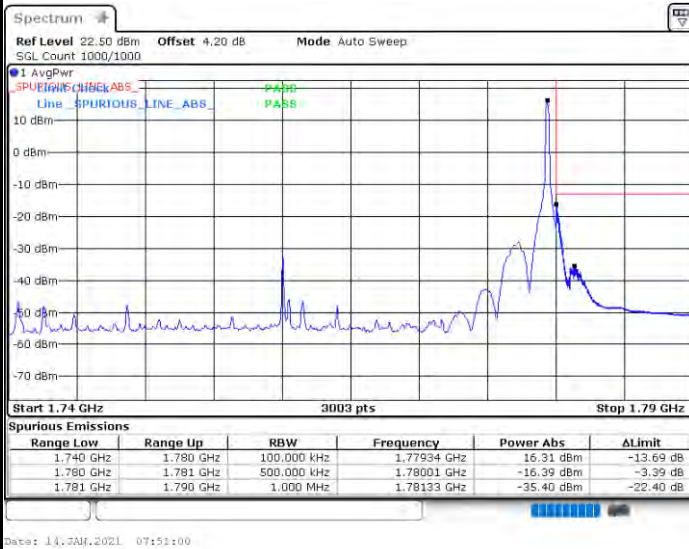
**FR1 n66+48A / 40MHz / DFT-S OFDM QPSK****Lowest Band Edge / 1 RB****Channel Power < -13dBm Pass****Lowest Band Edge / Full RB****Channel Power < -13dBm Pass**



## FR1 n66+48A / 40MHz / DFT-S OFDM QPSK

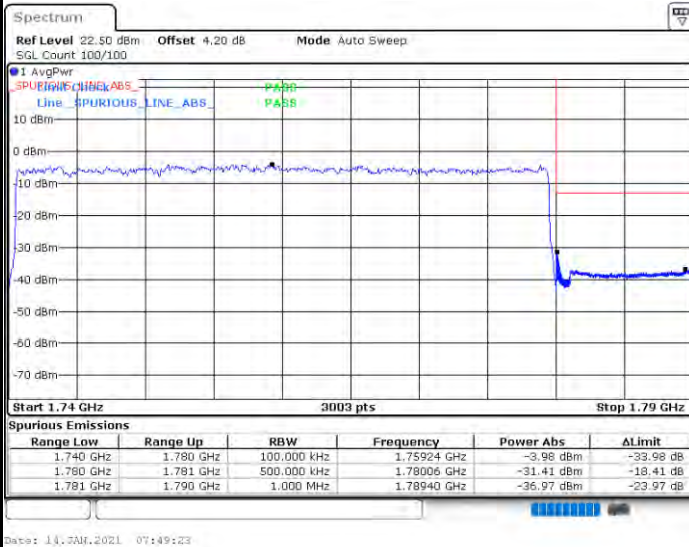
## Highest Band Edge / 1 RB

## Channel Power &lt; -13dBm Pass



## Highest Band Edge / Full RB

## Channel Power &lt; -13dBm Pass



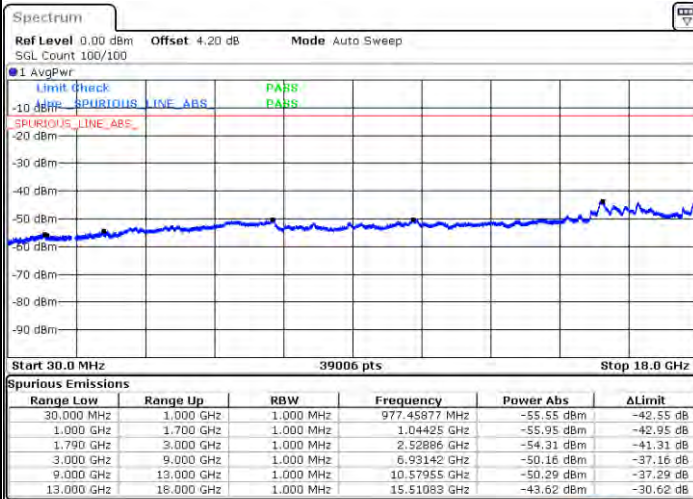


# Conducted Spurious Emission

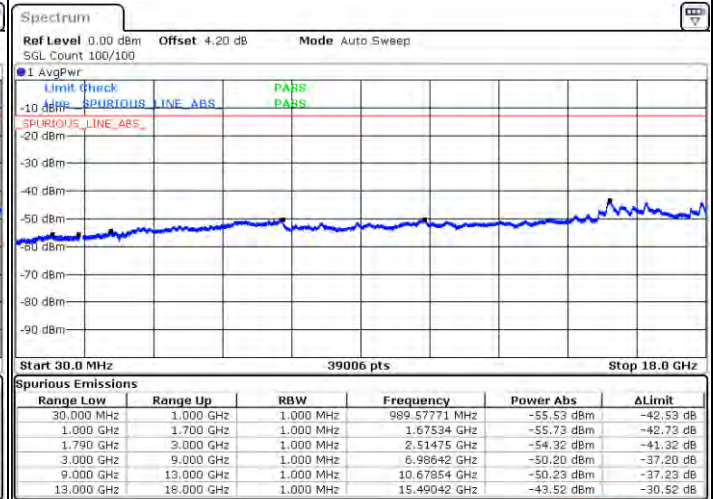
FR1 n66+48A / 5MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

Middle Channel / 1RB

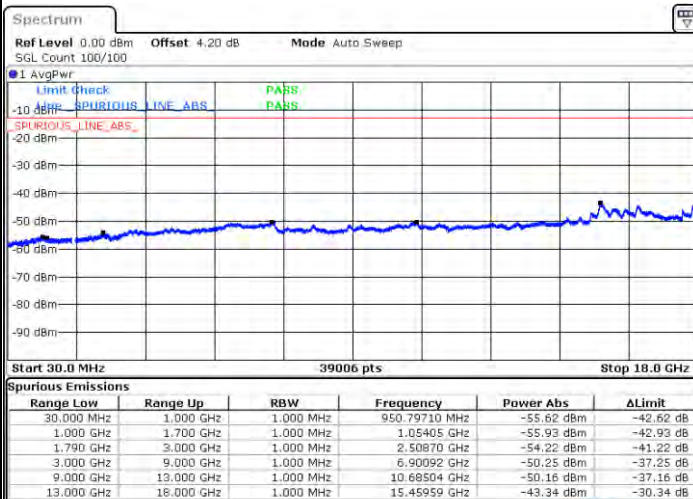


Date: 14.JAN.2021 09:08:06



Date: 14.JAN.2021 09:12:15

Highest Channel / 1RB

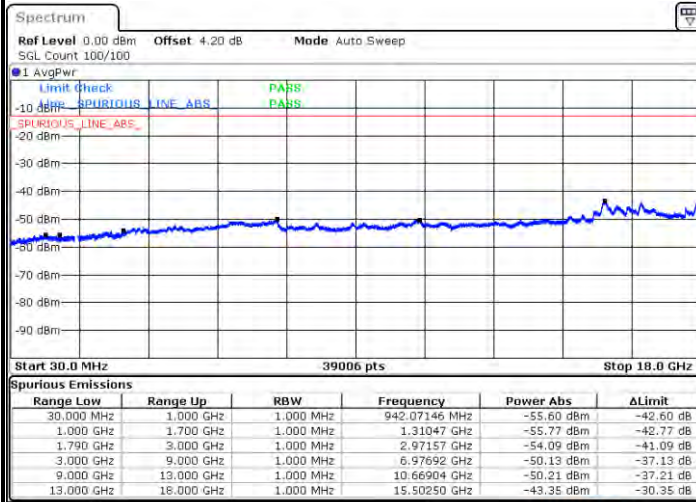


Date: 14.JAN.2021 09:13:14



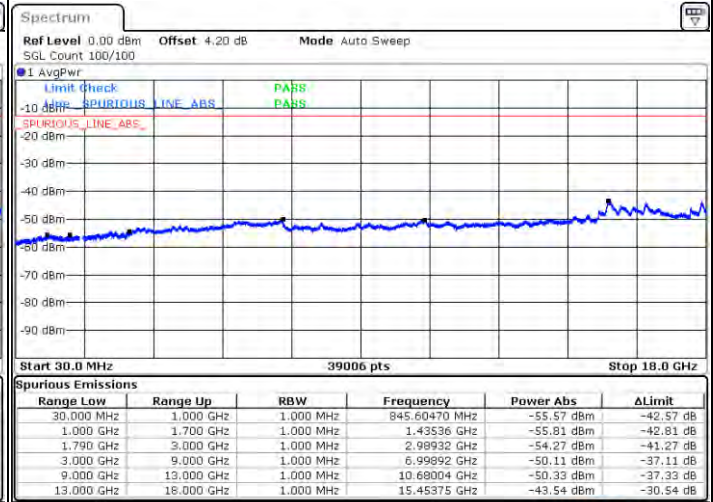
## FR1 n66+48A / 5MHz / DFT-S OFDM / QPSK

## Lowest Channel / 1RB



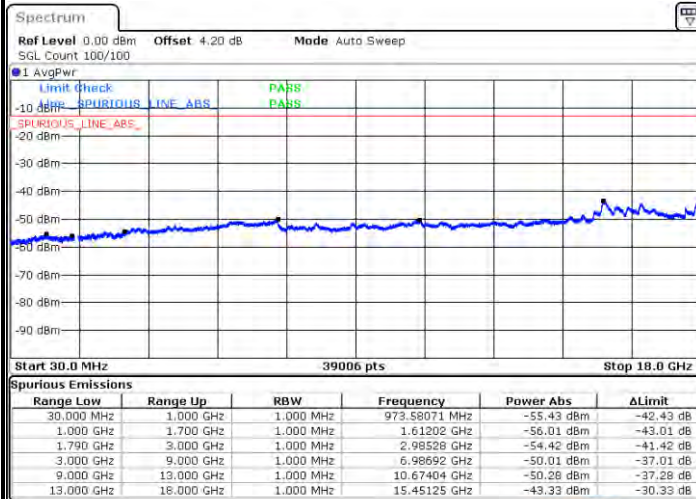
Date: 14.JAN.2021 08:10:17

## Middle Channel / 1RB



Date: 14.JAN.2021 08:11:14

## Highest Channel / 1RB

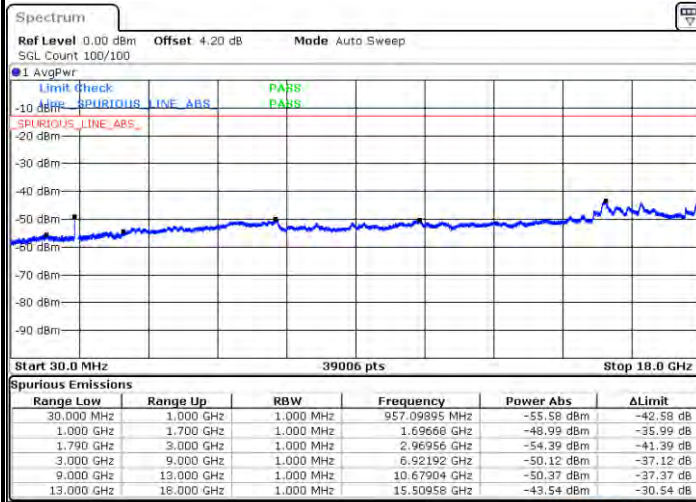


Date: 14.JAN.2021 09:14:15



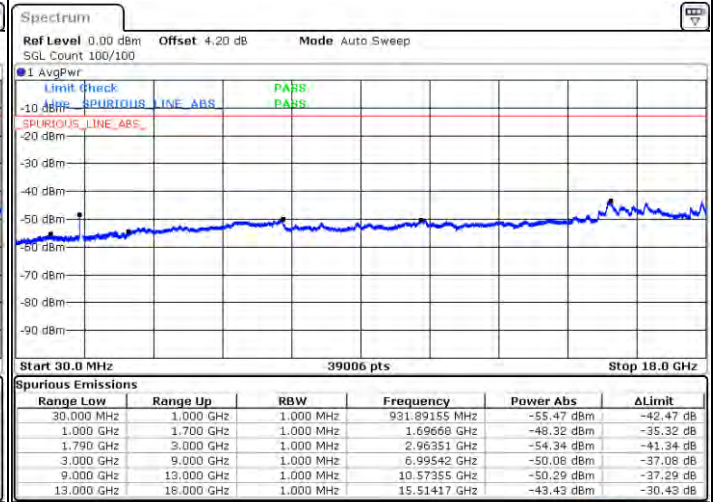
## FR1 n66+48A / 15MHz / DFT-S OFDM / BPSK

## Lowest Channel / 1RB



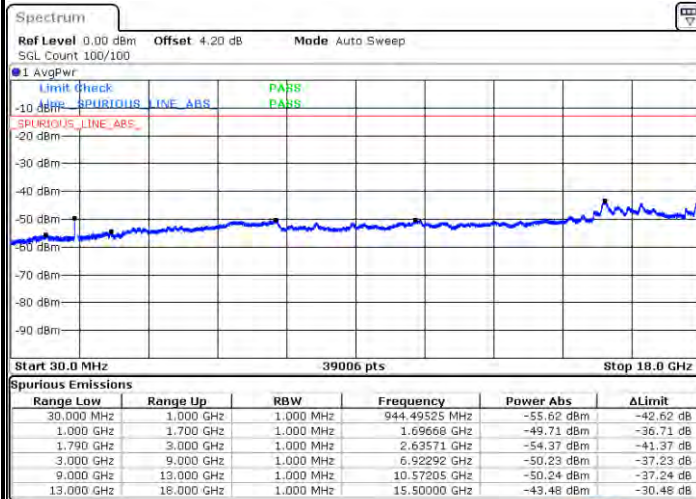
Date: 14.JAN.2021 07:55:03

## Middle Channel / 1RB



Date: 14.JAN.2021 07:56:53

## Highest Channel / 1RB



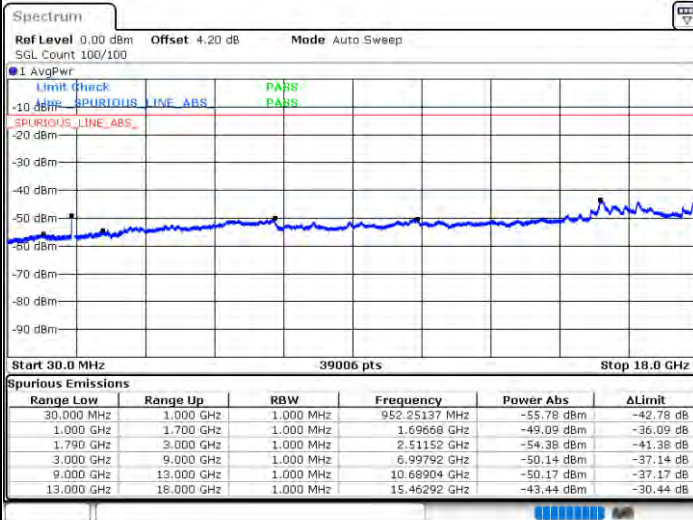
Date: 14.JAN.2021 07:59:52



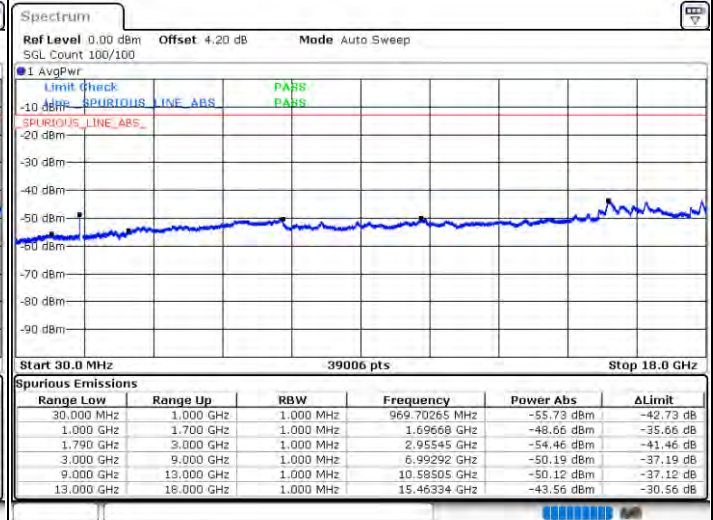
## FR1 n66+48A / 15MHz / DFT-S OFDM / QPSK

## Lowest Channel / 1RB

## Middle Channel / 1RB

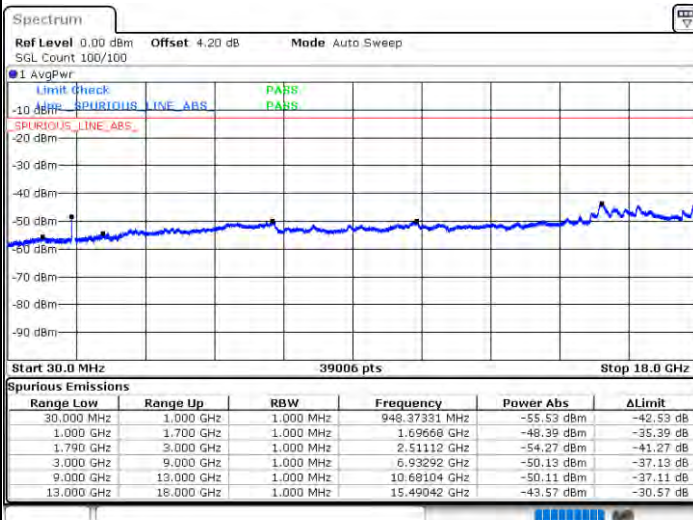


Date: 14.JAN.2021 07:56:37



Date: 14.JAN.2021 07:57:38

## Highest Channel / 1RB

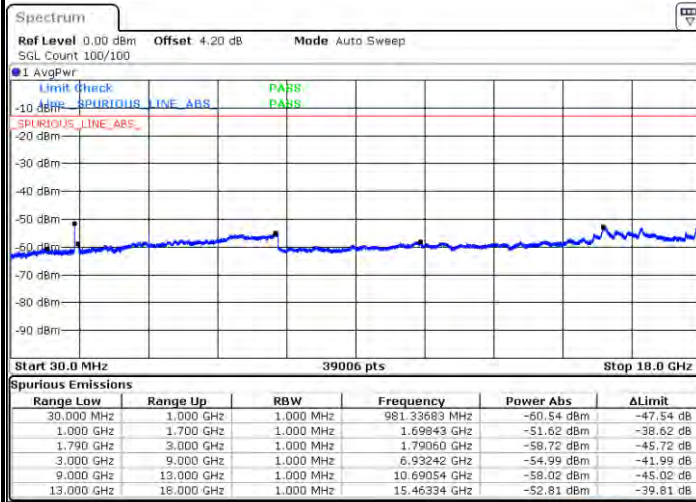


Date: 14.JAN.2021 09:01:02



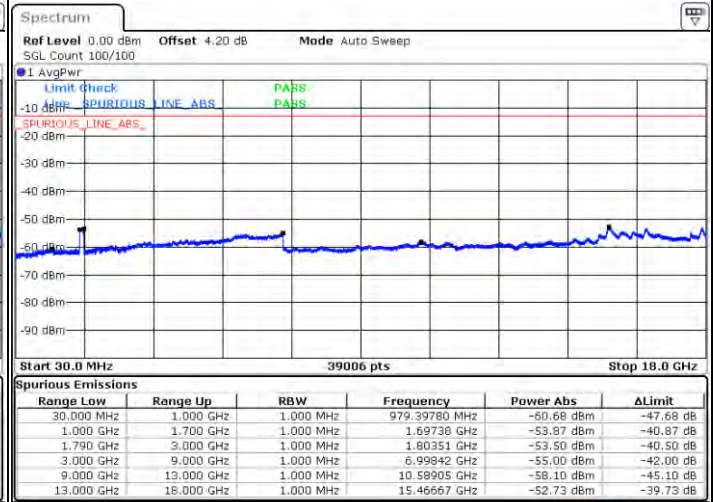
## FR1 n66+48A / 40MHz / DFT-S OFDM / BPSK

## Lowest Channel / 1RB



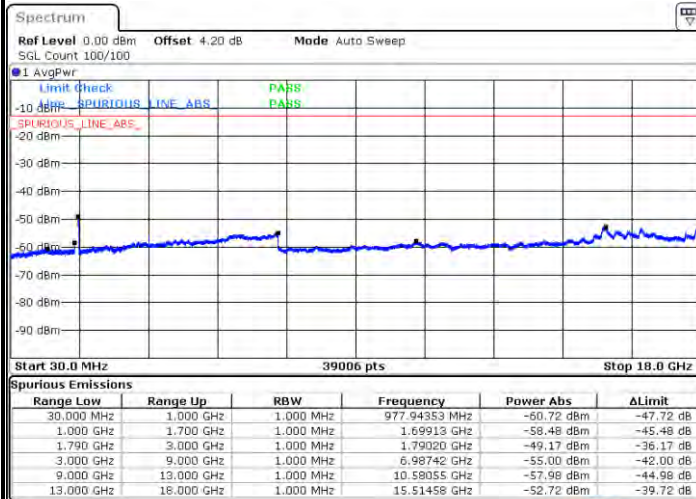
Date: 14.JAN.2021 07:22:53

## Middle Channel / 1RB



Date: 14.JAN.2021 07:16:55

## Highest Channel / 1RB

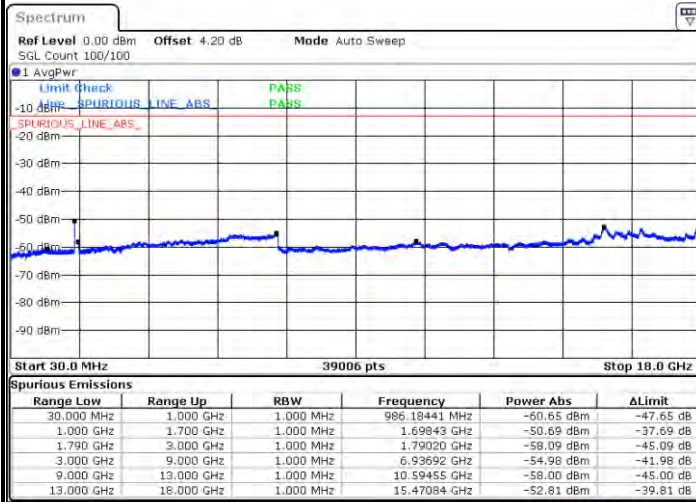


Date: 14.JAN.2021 07:24:59



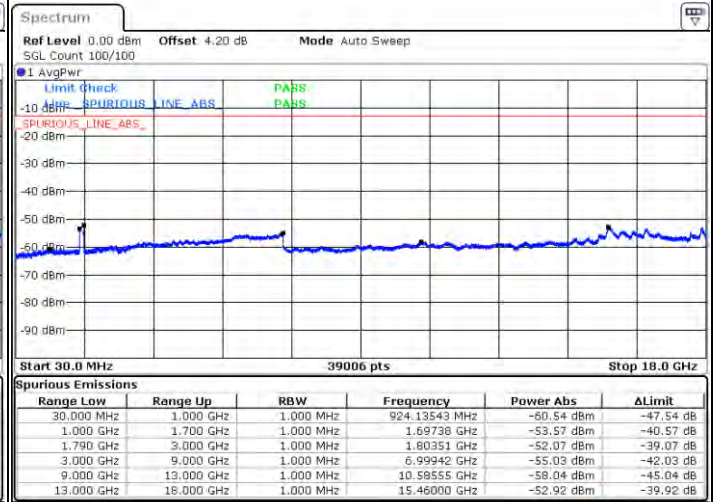
## FR1 n66+48A / 40MHz / DFT-S OFDM / QPSK

## Lowest Channel / 1RB



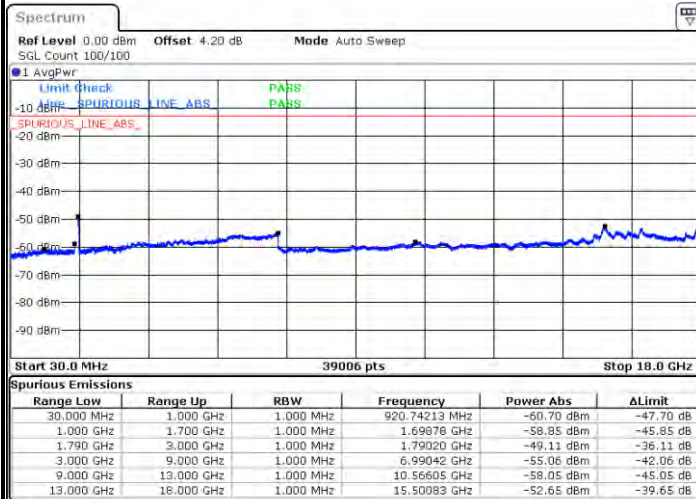
Date: 14.JAN.2021 07:21:45

## Middle Channel / 1RB



Date: 14.JAN.2021 07:20:16

## Highest Channel / 1RB



Date: 14.JAN.2021 07:26:02

## Frequency Stability

| Test Conditions  |                   | NR n66+48A (BPSK) / Middle Channel | Limit       |
|------------------|-------------------|------------------------------------|-------------|
| Temperature (°C) | Voltage (Volt)    | BW 40MHz                           | Within Band |
|                  |                   | Deviation (ppm)                    | Result      |
| 50               | Normal Voltage    | 0.0018                             | PASS        |
| 40               | Normal Voltage    | 0.0027                             |             |
| 30               | Normal Voltage    | 0.0012                             |             |
| 20(Ref.)         | Normal Voltage    | 0.0013                             |             |
| 10               | Normal Voltage    | 0.0021                             |             |
| 0                | Normal Voltage    | 0.0018                             |             |
| -10              | Normal Voltage    | 0.0019                             |             |
| -20              | Normal Voltage    | 0.0029                             |             |
| -30              | Normal Voltage    | 0.0017                             |             |
| 20               | Maximum Voltage   | 0.0031                             |             |
| 20               | Normal Voltage    | 0.0013                             |             |
| 20               | Battery End Point | 0.0022                             |             |

**Note:**

1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.14 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## Appendix B. Test Results of Radiated Test

### Radiated Spurious Emission NSA mode

| EN-DC_5A_n2A / LTE 10MHz + NR 20MHz / QPSK DFT-s-OFDM |                   |              |               |                   |                   |                    |                      |                       |                    |
|-------------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                               | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| NR n2 Lowest                                          | 3701.5            | -61.92       | -13           | -48.92            | -76.46            | -68.68             | 5.82                 | 12.58                 | H                  |
|                                                       | 5552.25           | -60.91       | -13           | -47.91            | -78.44            | -66.63             | 7.28                 | 13.00                 | H                  |
|                                                       | 7403              | -55.14       | -13           | -42.14            | -77.85            | -58.30             | 8.32                 | 11.48                 | H                  |
|                                                       | 3701.5            | -61.69       | -13           | -48.69            | -76.52            | -68.45             | 5.82                 | 12.58                 | V                  |
|                                                       | 5552.25           | -60.89       | -13           | -47.89            | -78.47            | -66.61             | 7.28                 | 13.00                 | V                  |
|                                                       | 7403              | -54.97       | -13           | -41.97            | -77.73            | -58.13             | 8.32                 | 11.48                 | V                  |
| LTE Band5 Lowest                                      | 1664.18           | -66.33       | -13           | -53.33            | -72.58            | -69.58             | 4.00                 | 9.40                  | H                  |
|                                                       | 2496.27           | -63.67       | -13           | -50.67            | -73.96            | -67.24             | 4.88                 | 10.60                 | H                  |
|                                                       | 3328.36           | -64.25       | -13           | -51.25            | -76.42            | -69.18             | 5.52                 | 12.60                 | H                  |
|                                                       | 1664.18           | -66.64       | -13           | -53.64            | -72.66            | -69.89             | 4.00                 | 9.40                  | V                  |
|                                                       | 2496.27           | -63.63       | -13           | -50.63            | -74.26            | -67.20             | 4.88                 | 10.60                 | V                  |
|                                                       | 3328.36           | -63.85       | -13           | -50.85            | -76.43            | -68.78             | 5.52                 | 12.60                 | V                  |
| NR n2 Middle                                          | 3741.5            | -61.61       | -13           | -48.61            | -76.24            | -68.36             | 5.85                 | 12.60                 | H                  |
|                                                       | 5612.25           | -60.39       | -13           | -47.39            | -78.11            | -66.19             | 7.30                 | 13.10                 | H                  |
|                                                       | 7483              | -54.83       | -13           | -41.83            | -77.24            | -57.98             | 8.35                 | 11.50                 | H                  |
|                                                       | 3741.5            | -61.43       | -13           | -48.43            | -76.27            | -68.18             | 5.85                 | 12.60                 | V                  |
|                                                       | 5612.25           | -60.17       | -13           | -47.17            | -77.8             | -65.97             | 7.30                 | 13.10                 | V                  |
|                                                       | 7483              | -55.00       | -13           | -42.00            | -77.35            | -58.15             | 8.35                 | 11.50                 | V                  |
| LTE Band5 Middle                                      | 1664.18           | -65.94       | -13           | -52.94            | -72.19            | -69.19             | 4.00                 | 9.40                  | H                  |
|                                                       | 2496.27           | -64.02       | -13           | -51.02            | -74.31            | -67.59             | 4.88                 | 10.60                 | H                  |
|                                                       | 3328.36           | -64.30       | -13           | -51.30            | -76.47            | -69.23             | 5.52                 | 12.60                 | H                  |
|                                                       | 1664.18           | -66.58       | -13           | -53.58            | -72.60            | -69.83             | 4.00                 | 9.40                  | V                  |
|                                                       | 2496.27           | -63.73       | -13           | -50.73            | -74.36            | -67.30             | 4.88                 | 10.60                 | V                  |
|                                                       | 3328.36           | -63.71       | -13           | -50.71            | -76.29            | -68.64             | 5.52                 | 12.60                 | V                  |
| NR n2 Highest                                         | 3781.5            | -61.80       | -13           | -48.80            | -76.50            | -68.54             | 5.88                 | 12.62                 | H                  |
|                                                       | 5672.25           | -60.41       | -13           | -47.41            | -78.27            | -66.22             | 7.32                 | 13.13                 | H                  |
|                                                       | 7563              | -55.53       | -13           | -42.53            | -77.74            | -58.69             | 8.38                 | 11.54                 | H                  |
|                                                       | 3781.5            | -61.58       | -13           | -48.58            | -76.41            | -68.32             | 5.88                 | 12.62                 | V                  |
|                                                       | 5672.25           | -60.76       | -13           | -47.76            | -78.59            | -66.57             | 7.32                 | 13.13                 | V                  |
|                                                       | 7563              | -55.78       | -13           | -42.78            | -77.81            | -58.94             | 8.38                 | 11.54                 | V                  |
| LTE Band5 Highest                                     | 1664.18           | -66.09       | -13           | -53.09            | -72.34            | -69.34             | 4.00                 | 9.40                  | H                  |
|                                                       | 2496.27           | -63.79       | -13           | -50.79            | -74.08            | -67.36             | 4.88                 | 10.60                 | H                  |
|                                                       | 3328.36           | -64.08       | -13           | -51.08            | -76.25            | -69.01             | 5.52                 | 12.60                 | H                  |
|                                                       | 1664.18           | -66.54       | -13           | -53.54            | -72.56            | -69.79             | 4.00                 | 9.40                  | V                  |
|                                                       | 2496.27           | -63.77       | -13           | -50.77            | -74.40            | -67.34             | 4.88                 | 10.60                 | V                  |
|                                                       | 3328.36           | -63.84       | -13           | -50.84            | -76.42            | -68.77             | 5.52                 | 12.60                 | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| EN-DC 2A_n5A / LTE 20MHz + NR 20MHz / QPSK DFT-s-OFDM |                   |              |               |                   |                   |                    |                      |                       |                    |
|-------------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                               | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| NR n5 Lowest                                          | 1650              | -66.85       | -13           | -53.85            | -73.10            | -70.08             | 3.98                 | 9.36                  | H                  |
|                                                       | 2475              | -64.50       | -13           | -51.50            | -74.84            | -68.05             | 4.85                 | 10.55                 | H                  |
|                                                       | 3300              | -63.83       | -13           | -50.83            | -76.23            | -68.76             | 5.50                 | 12.58                 | H                  |
|                                                       | 1650              | -67.04       | -13           | -54.04            | -73.18            | -70.27             | 3.98                 | 9.36                  | V                  |
|                                                       | 2475              | -64.23       | -13           | -51.23            | -74.93            | -67.78             | 4.85                 | 10.55                 | V                  |
|                                                       | 3300              | -63.37       | -13           | -50.37            | -76.22            | -68.30             | 5.50                 | 12.58                 | V                  |
| LTE Band2 Lowest                                      | 3742.18           | -61.63       | -13           | -48.63            | -76.26            | -68.38             | 5.85                 | 12.60                 | H                  |
|                                                       | 5613.27           | -60.63       | -13           | -47.63            | -78.35            | -66.43             | 7.30                 | 13.10                 | H                  |
|                                                       | 7484.36           | -55.42       | -13           | -42.42            | -77.83            | -58.57             | 8.35                 | 11.50                 | H                  |
|                                                       | 3742.18           | -61.26       | -13           | -48.26            | -76.1             | -68.01             | 5.85                 | 12.60                 | V                  |
|                                                       | 5613.27           | -60.61       | -13           | -47.61            | -78.24            | -66.41             | 7.30                 | 13.10                 | V                  |
|                                                       | 7484.36           | -55.60       | -13           | -42.60            | -77.94            | -58.75             | 8.35                 | 11.50                 | V                  |
| NR n5 Middle                                          | 1654.5            | -66.90       | -13           | -53.90            | -73.18            | -70.15             | 4.00                 | 9.40                  | H                  |
|                                                       | 2481.75           | -64.50       | -13           | -51.50            | -74.82            | -68.07             | 4.88                 | 10.60                 | H                  |
|                                                       | 3309              | -63.72       | -13           | -50.72            | -76.05            | -68.65             | 5.52                 | 12.60                 | H                  |
|                                                       | 1654.5            | -67.02       | -13           | -54.02            | -73.15            | -70.27             | 4.00                 | 9.40                  | V                  |
|                                                       | 2481.75           | -64.05       | -13           | -51.05            | -74.73            | -67.62             | 4.88                 | 10.60                 | V                  |
|                                                       | 3309              | -63.29       | -13           | -50.29            | -76.06            | -68.22             | 5.52                 | 12.60                 | V                  |
| LTE Band2 Middle                                      | 3742.18           | -61.25       | -13           | -48.25            | -75.88            | -68.00             | 5.85                 | 12.60                 | H                  |
|                                                       | 5613.27           | -60.29       | -13           | -47.29            | -78.01            | -66.09             | 7.30                 | 13.10                 | H                  |
|                                                       | 7484.36           | -55.13       | -13           | -42.13            | -77.54            | -58.28             | 8.35                 | 11.50                 | H                  |
|                                                       | 3742.18           | -61.14       | -13           | -48.14            | -75.98            | -67.89             | 5.85                 | 12.60                 | V                  |
|                                                       | 5613.27           | -60.31       | -13           | -47.31            | -77.94            | -66.11             | 7.30                 | 13.10                 | V                  |
|                                                       | 7484.36           | -55.23       | -13           | -42.23            | -77.57            | -58.38             | 8.35                 | 11.50                 | V                  |
| NR n5 Highest                                         | 1660              | -66.52       | -13           | -53.52            | -72.78            | -69.69             | 4.10                 | 9.42                  | H                  |
|                                                       | 2490              | -64.43       | -13           | -51.43            | -74.73            | -68.01             | 4.90                 | 10.63                 | H                  |
|                                                       | 3320              | -64.30       | -13           | -51.30            | -76.54            | -69.22             | 5.55                 | 12.62                 | H                  |
|                                                       | 1660              | -66.89       | -13           | -53.89            | -72.96            | -70.06             | 4.10                 | 9.42                  | V                  |
|                                                       | 2490              | -63.93       | -13           | -50.93            | -74.57            | -67.51             | 4.90                 | 10.63                 | V                  |
|                                                       | 3320              | -63.80       | -13           | -50.80            | -76.46            | -68.72             | 5.55                 | 12.62                 | V                  |
| LTE Band2 Highest                                     | 3742.18           | -61.61       | -13           | -48.61            | -76.24            | -68.36             | 5.85                 | 12.60                 | H                  |
|                                                       | 5613.27           | -60.50       | -13           | -47.50            | -78.22            | -66.30             | 7.30                 | 13.10                 | H                  |
|                                                       | 7484.36           | -55.57       | -13           | -42.57            | -77.98            | -58.72             | 8.35                 | 11.50                 | H                  |
|                                                       | 3742.18           | -61.48       | -13           | -48.48            | -76.32            | -68.23             | 5.85                 | 12.60                 | V                  |
|                                                       | 5613.27           | -60.74       | -13           | -47.74            | -78.37            | -66.54             | 7.30                 | 13.10                 | V                  |
|                                                       | 7484.36           | -55.49       | -13           | -42.49            | -77.83            | -58.64             | 8.35                 | 11.50                 | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| EN-DC 48A_n66A / LTE 20MHz + NR 40MHz / QPSK DFT-s-OFDM |                   |              |               |                   |                   |                    |                      |                       |                    |
|---------------------------------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                                                 | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| NR n66 Lowest                                           | 3422.8            | -66.11       | -13           | -53.11            | -54.35            | -72.99             | 5.60                 | 12.48                 | H                  |
|                                                         | 5134.2            | -63.54       | -13           | -50.54            | -56.08            | -69.22             | 7.10                 | 12.78                 | H                  |
|                                                         | 6845.6            | -60.23       | -13           | -47.23            | -55.37            | -63.62             | 8.38                 | 11.77                 | H                  |
|                                                         | 3422.8            | -65.76       | -13           | -52.76            | -54.57            | -72.64             | 5.60                 | 12.48                 | V                  |
|                                                         | 5134.2            | -63.89       | -13           | -50.89            | -56.37            | -69.57             | 7.10                 | 12.78                 | V                  |
|                                                         | 6845.6            | -60.82       | -13           | -47.82            | -55.72            | -64.21             | 8.38                 | 11.77                 | V                  |
| LTE Band48 Lowest                                       | 7332.00           | -58.03       | -40           | -18.03            | -55.19            | -61.33             | 8.30                 | 11.60                 | H                  |
|                                                         | 10998.00          | -53.34       | -40           | -13.34            | -57.27            | -54.86             | 10.48                | 12.00                 | H                  |
|                                                         | 14664.00          | -50.21       | -40           | -10.21            | -57.20            | -51.91             | 11.80                | 13.50                 | H                  |
|                                                         | 7332.00           | -57.76       | -40           | -17.76            | -54.96            | -61.06             | 8.30                 | 11.60                 | V                  |
|                                                         | 10998.00          | -53.48       | -40           | -13.48            | -57.08            | -55.00             | 10.48                | 12.00                 | V                  |
|                                                         | 14664.00          | -50.02       | -40           | -10.02            | -57.02            | -51.72             | 11.80                | 13.50                 | V                  |
| NR n66 Middle                                           | 3471.5            | -65.54       | -13           | -52.54            | -54.35            | -72.39             | 5.65                 | 12.50                 | H                  |
|                                                         | 5207.25           | -63.51       | -13           | -50.51            | -56.00            | -69.18             | 7.13                 | 12.80                 | H                  |
|                                                         | 6943              | -60.13       | -13           | -47.13            | -55.60            | -63.53             | 8.40                 | 11.80                 | H                  |
|                                                         | 3471.5            | -64.92       | -13           | -51.92            | -54.27            | -71.77             | 5.65                 | 12.50                 | V                  |
|                                                         | 5207.25           | -63.49       | -13           | -50.49            | -55.93            | -69.16             | 7.13                 | 12.80                 | V                  |
|                                                         | 6943              | -60.16       | -13           | -47.16            | -55.67            | -63.56             | 8.40                 | 11.80                 | V                  |
| LTE Band48 Middle                                       | 7332.00           | -57.93       | -40           | -17.93            | -55.09            | -61.23             | 8.30                 | 11.60                 | H                  |
|                                                         | 10998.00          | -53.13       | -40           | -13.13            | -57.06            | -54.65             | 10.48                | 12.00                 | H                  |
|                                                         | 14664.00          | -50.11       | -40           | -10.11            | -57.10            | -51.81             | 11.80                | 13.50                 | H                  |
|                                                         | 7332.00           | -57.75       | -40           | -17.75            | -54.95            | -61.05             | 8.30                 | 11.60                 | V                  |
|                                                         | 10998.00          | -53.53       | -40           | -13.53            | -57.13            | -55.05             | 10.48                | 12.00                 | V                  |
|                                                         | 14664.00          | -49.99       | -40           | -9.99             | -56.99            | -51.69             | 11.80                | 13.50                 | V                  |
| NR n66 Highest                                          | 3482.8            | -65.72       | -13           | -52.72            | -54.65            | -72.56             | 5.68                 | 12.52                 | H                  |
|                                                         | 5224.2            | -63.92       | -13           | -50.92            | -56.20            | -69.59             | 7.15                 | 12.82                 | H                  |
|                                                         | 6965.6            | -59.92       | -13           | -46.92            | -55.47            | -63.35             | 8.42                 | 11.85                 | H                  |
|                                                         | 3482.8            | -64.95       | -13           | -51.95            | -54.42            | -71.79             | 5.68                 | 12.52                 | V                  |
|                                                         | 5224.2            | -63.99       | -13           | -50.99            | -56.22            | -69.66             | 7.15                 | 12.82                 | V                  |
|                                                         | 6965.6            | -59.67       | -13           | -46.67            | -55.33            | -63.10             | 8.42                 | 11.85                 | V                  |
| LTE Band48 Highest                                      | 7332.00           | -57.83       | -40           | -17.83            | -54.99            | -61.13             | 8.30                 | 11.60                 | H                  |
|                                                         | 10998.00          | -53.53       | -40           | -13.53            | -57.46            | -55.05             | 10.48                | 12.00                 | H                  |
|                                                         | 14664.00          | -49.99       | -40           | -9.99             | -56.98            | -51.69             | 11.80                | 13.50                 | H                  |
|                                                         | 7332.00           | -57.80       | -40           | -17.80            | -55               | -61.10             | 8.30                 | 11.60                 | V                  |
|                                                         | 10998.00          | -53.59       | -40           | -13.59            | -57.19            | -55.11             | 10.48                | 12.00                 | V                  |
|                                                         | 14664.00          | -50.07       | -40           | -10.07            | -57.07            | -51.77             | 11.80                | 13.50                 | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

**Radiated Spurious Emission SA mode**

| 5G NR n2 / NR 20MHz / QPSK DFT-s-OFDM |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|---------------------------------------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                               | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest                                | 3701.50              | -61.85          | -13              | -48.85                  | -76.39                  | -68.61                   | 5.82                       | 12.58                       | H                     |
|                                       | 5552.25              | -60.61          | -13              | -47.61                  | -78.14                  | -66.33                   | 7.28                       | 13.00                       | H                     |
|                                       | 7403.00              | -54.75          | -13              | -41.75                  | -77.46                  | -57.91                   | 8.32                       | 11.48                       | H                     |
|                                       | 3701.50              | -61.05          | -13              | -48.05                  | -75.88                  | -67.81                   | 5.82                       | 12.58                       | V                     |
|                                       | 5552.25              | -60.53          | -13              | -47.53                  | -78.11                  | -66.25                   | 7.28                       | 13.00                       | V                     |
|                                       | 7403.00              | -54.89          | -13              | -41.89                  | -77.65                  | -58.05                   | 8.32                       | 11.48                       | V                     |
| Middle                                | 3741.50              | -61.26          | -13              | -48.26                  | -75.89                  | -68.01                   | 5.85                       | 12.60                       | H                     |
|                                       | 5612.25              | -60.14          | -13              | -47.14                  | -77.86                  | -65.94                   | 7.30                       | 13.10                       | H                     |
|                                       | 7483.00              | -54.59          | -13              | -41.59                  | -77.00                  | -57.74                   | 8.35                       | 11.50                       | H                     |
|                                       | 3741.50              | -61.25          | -13              | -48.25                  | -76.09                  | -68.00                   | 5.85                       | 12.60                       | V                     |
|                                       | 5612.25              | -60.24          | -13              | -47.24                  | -77.87                  | -66.04                   | 7.30                       | 13.10                       | V                     |
|                                       | 7483.00              | -54.88          | -13              | -41.88                  | -77.23                  | -58.03                   | 8.35                       | 11.50                       | V                     |
| Highest                               | 3781.50              | -61.56          | -13              | -48.56                  | -76.26                  | -68.30                   | 5.88                       | 12.62                       | H                     |
|                                       | 5672.25              | -60.24          | -13              | -47.24                  | -78.10                  | -66.05                   | 7.32                       | 13.13                       | H                     |
|                                       | 7563.00              | -55.25          | -13              | -42.25                  | -77.46                  | -58.41                   | 8.38                       | 11.54                       | H                     |
|                                       | 3781.50              | -61.39          | -13              | -48.39                  | -76.22                  | -68.13                   | 5.88                       | 12.62                       | V                     |
|                                       | 5672.25              | -60.24          | -13              | -47.24                  | -78.07                  | -66.05                   | 7.32                       | 13.13                       | V                     |
|                                       | 7563.00              | -55.61          | -13              | -42.61                  | -77.64                  | -58.77                   | 8.38                       | 11.54                       | V                     |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| 5G NR n5 / NR 20MHz / QPSK DFT-s-OFDM |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|---------------------------------------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                               | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest                                | 1650                 | -67.81          | -13              | -54.81                  | -74.06                  | -71.04                   | 3.98                       | 9.36                        | H                     |
|                                       | 2475                 | -65.07          | -13              | -52.07                  | -75.41                  | -68.62                   | 4.85                       | 10.55                       | H                     |
|                                       | 3300                 | -63.76          | -13              | -50.76                  | -76.16                  | -68.69                   | 5.50                       | 12.58                       | H                     |
|                                       | 1650                 | -67.86          | -13              | -54.86                  | -74.00                  | -71.09                   | 3.98                       | 9.36                        | V                     |
|                                       | 2475                 | -64.89          | -13              | -51.89                  | -75.59                  | -68.44                   | 4.85                       | 10.55                       | V                     |
|                                       | 3300                 | -63.36          | -13              | -50.36                  | -76.21                  | -68.29                   | 5.50                       | 12.58                       | V                     |
| Middle                                | 1654.5               | -67.87          | -13              | -54.87                  | -74.15                  | -71.12                   | 4.00                       | 9.40                        | H                     |
|                                       | 2481.75              | -65.23          | -13              | -52.23                  | -75.55                  | -68.80                   | 4.88                       | 10.60                       | H                     |
|                                       | 3309                 | -64.40          | -13              | -51.40                  | -76.73                  | -69.33                   | 5.52                       | 12.60                       | H                     |
|                                       | 1654.5               | -68.24          | -13              | -55.24                  | -74.37                  | -71.49                   | 4.00                       | 9.40                        | V                     |
|                                       | 2481.75              | -64.99          | -13              | -51.99                  | -75.67                  | -68.56                   | 4.88                       | 10.60                       | V                     |
|                                       | 3309                 | -63.69          | -13              | -50.69                  | -76.46                  | -68.62                   | 5.52                       | 12.60                       | V                     |
| Highest                               | 1660                 | -67.56          | -13              | -54.56                  | -73.82                  | -70.73                   | 4.10                       | 9.42                        | H                     |
|                                       | 2490                 | -64.82          | -13              | -51.82                  | -75.12                  | -68.40                   | 4.90                       | 10.63                       | H                     |
|                                       | 3320                 | -64.51          | -13              | -51.51                  | -76.75                  | -69.43                   | 5.55                       | 12.62                       | H                     |
|                                       | 1660                 | -67.84          | -13              | -54.84                  | -73.91                  | -71.01                   | 4.10                       | 9.42                        | V                     |
|                                       | 2490                 | -64.66          | -13              | -51.66                  | -75.30                  | -68.24                   | 4.90                       | 10.63                       | V                     |
|                                       | 3320                 | -64.05          | -13              | -51.05                  | -76.71                  | -68.97                   | 5.55                       | 12.62                       | V                     |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| 5G NR n25 / NR 20MHz / QPSK DFT-s-OFDM |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|----------------------------------------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                                | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest                                 | 3701.50              | -61.83          | -13              | -48.83                  | -76.37                  | -68.59                   | 5.82                       | 12.58                       | H                     |
|                                        | 5552.25              | -60.91          | -13              | -47.91                  | -78.44                  | -66.63                   | 7.28                       | 13.00                       | H                     |
|                                        | 7403.00              | -55.00          | -13              | -42.00                  | -77.71                  | -58.16                   | 8.32                       | 11.48                       | H                     |
|                                        | 3701.50              | -61.55          | -13              | -48.55                  | -76.38                  | -68.31                   | 5.82                       | 12.58                       | V                     |
|                                        | 5552.25              | -60.92          | -13              | -47.92                  | -78.5                   | -66.64                   | 7.28                       | 13.00                       | V                     |
|                                        | 7403.00              | -54.72          | -13              | -41.72                  | -77.48                  | -57.88                   | 8.32                       | 11.48                       | V                     |
| Middle                                 | 3746.5               | -61.50          | -13              | -48.50                  | -76.13                  | -68.25                   | 5.85                       | 12.60                       | H                     |
|                                        | 5619.75              | -60.27          | -13              | -47.27                  | -77.99                  | -66.07                   | 7.30                       | 13.10                       | H                     |
|                                        | 7493                 | -55.29          | -13              | -42.29                  | -77.64                  | -58.44                   | 8.35                       | 11.50                       | H                     |
|                                        | 3746.5               | -61.43          | -13              | -48.43                  | -76.27                  | -68.18                   | 5.85                       | 12.60                       | V                     |
|                                        | 5619.75              | -60.67          | -13              | -47.67                  | -78.3                   | -66.47                   | 7.30                       | 13.10                       | V                     |
|                                        | 7493                 | -55.16          | -13              | -42.16                  | -77.43                  | -58.31                   | 8.35                       | 11.50                       | V                     |
| Highest                                | 3791.36              | -61.75          | -13              | -48.75                  | -76.46                  | -68.49                   | 5.88                       | 12.62                       | H                     |
|                                        | 5687.04              | -59.79          | -13              | -46.79                  | -77.70                  | -65.60                   | 7.32                       | 13.13                       | H                     |
|                                        | 7582.72              | -55.50          | -13              | -42.50                  | -77.68                  | -58.66                   | 8.38                       | 11.54                       | H                     |
|                                        | 3791.36              | -61.69          | -13              | -48.69                  | -76.52                  | -68.43                   | 5.88                       | 12.62                       | V                     |
|                                        | 5687.04              | -59.96          | -13              | -46.96                  | -77.88                  | -65.77                   | 7.32                       | 13.13                       | V                     |
|                                        | 7582.72              | -55.79          | -13              | -42.79                  | -77.76                  | -58.95                   | 8.38                       | 11.54                       | V                     |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| 5G NR n66 / NR 40MHz / QPSK DFT-s-OFDM |                      |                 |                  |                         |                         |                          |                            |                             |                       |
|----------------------------------------|----------------------|-----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                                | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest                                 | 3421.84              | -63.73          | -13              | -50.73                  | -75.98                  | -70.61                   | 5.60                       | 12.48                       | H                     |
|                                        | 5132.76              | -60.36          | -13              | -47.36                  | -77.85                  | -66.04                   | 7.10                       | 12.78                       | H                     |
|                                        | 6843.68              | -57.83          | -13              | -44.83                  | -78.28                  | -61.22                   | 8.38                       | 11.77                       | H                     |
|                                        | 3421.84              | -62.83          | -13              | -49.83                  | -75.65                  | -69.71                   | 5.60                       | 12.48                       | V                     |
|                                        | 5132.76              | -60.32          | -13              | -47.32                  | -77.75                  | -66.00                   | 7.10                       | 12.78                       | V                     |
|                                        | 6843.68              | -57.93          | -13              | -44.93                  | -78.14                  | -61.32                   | 8.38                       | 11.77                       | V                     |
| Middle                                 | 3541.84              | -62.87          | -13              | -49.87                  | -76.51                  | -69.72                   | 5.65                       | 12.50                       | H                     |
|                                        | 5177.76              | -60.00          | -13              | -47.00                  | -77.54                  | -65.67                   | 7.13                       | 12.80                       | H                     |
|                                        | 6903.68              | -57.45          | -13              | -44.45                  | -78.18                  | -60.85                   | 8.40                       | 11.80                       | H                     |
|                                        | 3541.84              | -62.25          | -13              | -49.25                  | -76.41                  | -69.10                   | 5.65                       | 12.50                       | V                     |
|                                        | 5177.76              | -59.81          | -13              | -46.81                  | -77.29                  | -65.48                   | 7.13                       | 12.80                       | V                     |
|                                        | 6903.68              | -57.26          | -13              | -44.26                  | -77.92                  | -60.66                   | 8.40                       | 11.80                       | V                     |
| Highest                                | 3481.84              | -63.19          | -13              | -50.19                  | -76.12                  | -70.03                   | 5.68                       | 12.52                       | H                     |
|                                        | 5232.76              | -60.42          | -13              | -47.42                  | -77.58                  | -66.09                   | 7.15                       | 12.82                       | H                     |
|                                        | 6972                 | -56.63          | -13              | -43.63                  | -77.67                  | -60.06                   | 8.42                       | 11.85                       | H                     |
|                                        | 3481.84              | -62.71          | -13              | -49.71                  | -76.18                  | -69.55                   | 5.68                       | 12.52                       | V                     |
|                                        | 5232.76              | -60.60          | -13              | -47.60                  | -77.71                  | -66.27                   | 7.15                       | 12.82                       | V                     |
|                                        | 6963.68              | -56.55          | -13              | -43.55                  | -77.66                  | -59.98                   | 8.42                       | 11.85                       | V                     |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.