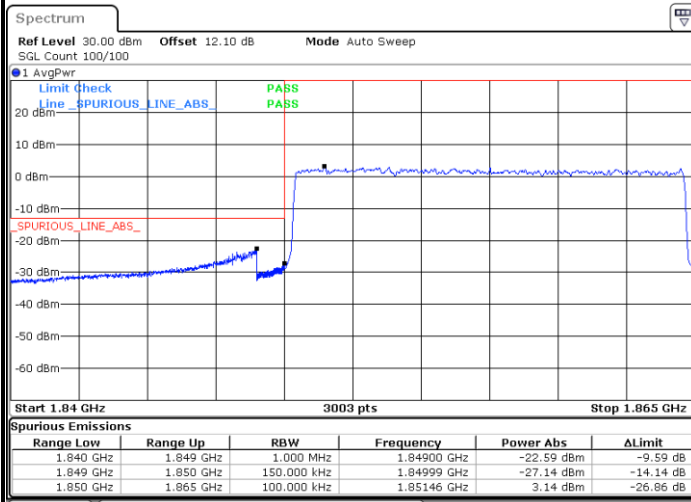


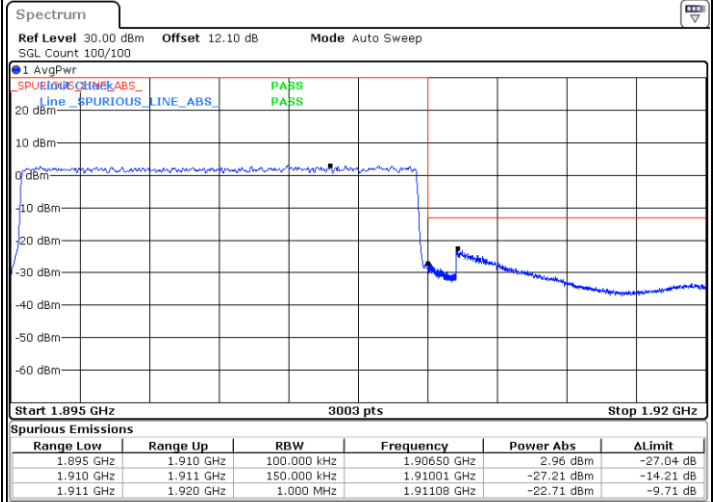


## FR1 n2 / 15MHz / CP OFDM / QPSK / Full RB

## Lowest Band Edge

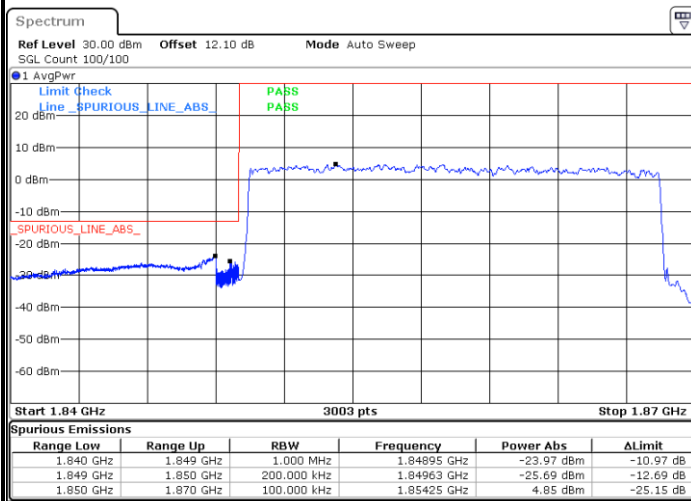


## Highest Band Edge

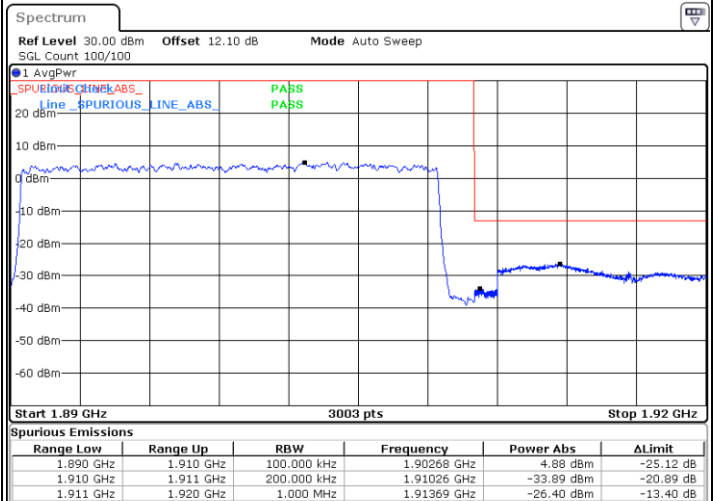


## FR1 n2 / 20MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

## Lowest Band Edge



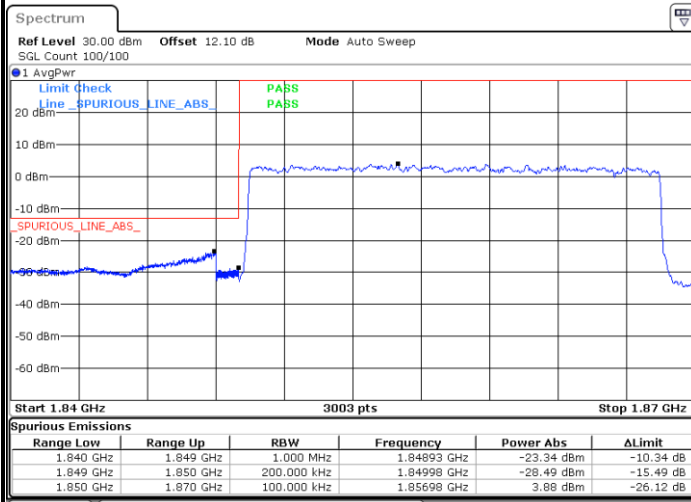
## Highest Band Edge



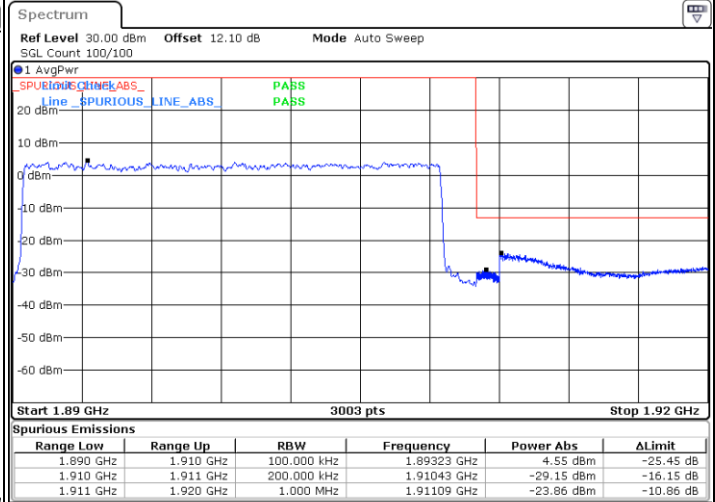


## FR1 n2 / 20MHz / DFT-s-OFDM / QPSK / Full RB

## Lowest Band Edge

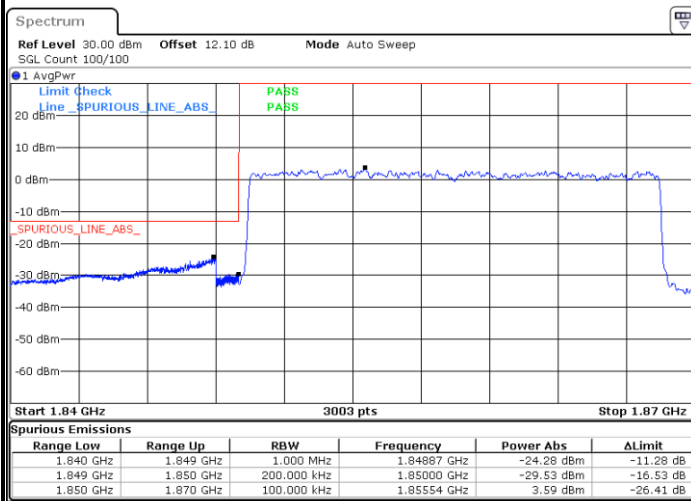


## Highest Band Edge

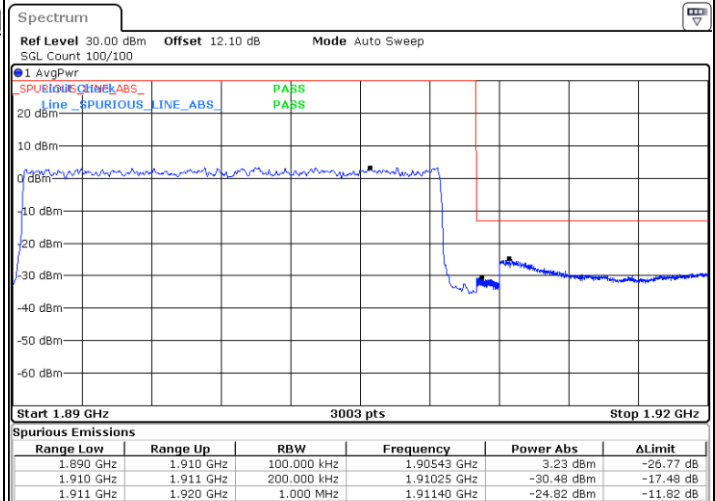


## FR1 n2 / 20MHz / DFT-s-OFDM / 16QAM / Full RB

## Lowest Band Edge



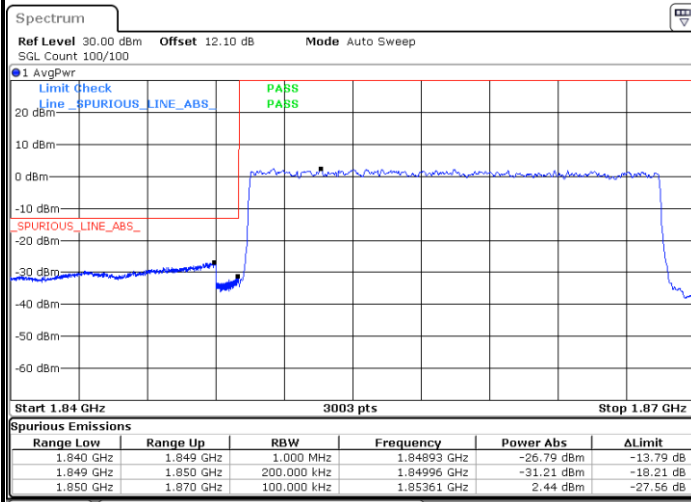
## Highest Band Edge



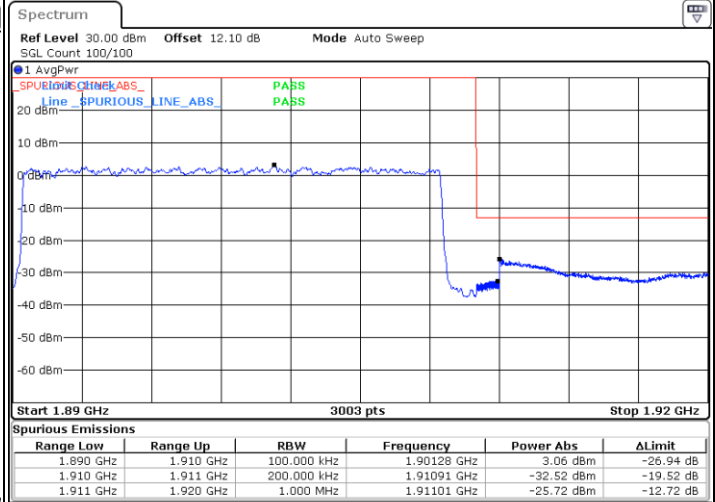


## FR1 n2 / 20MHz / DFT-s-OFDM / 64QAM / Full RB

## Lowest Band Edge

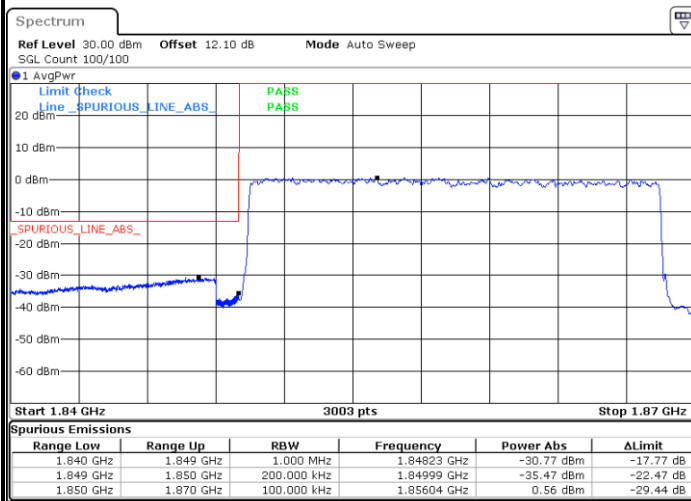


## Highest Band Edge

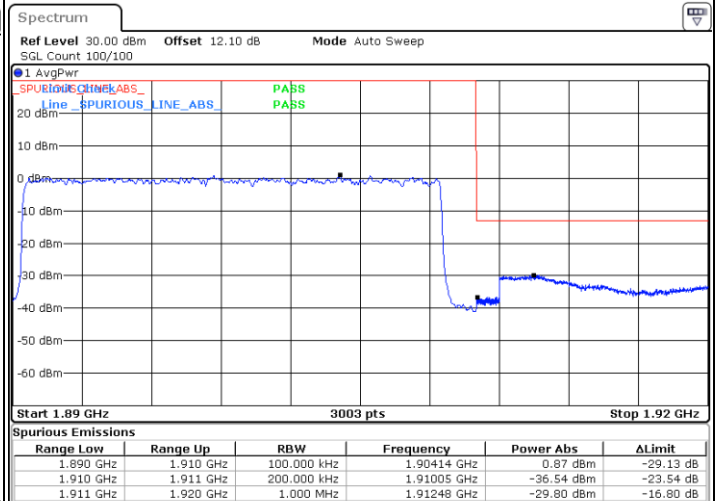


## FR1 n2 / 20MHz / DFT-s-OFDM / 256QAM / Full RB

## Lowest Band Edge



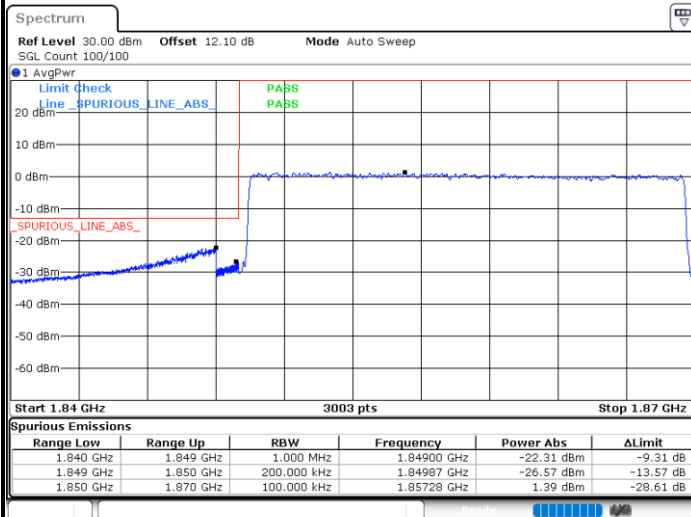
## Highest Band Edge





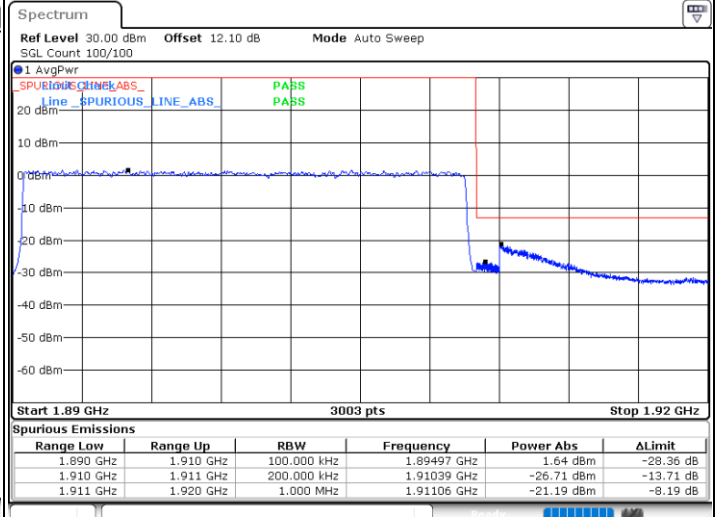
## FR1 n2 / 20MHz / CP OFDM / QPSK / Full RB

## Lowest Band Edge



Date: 11.MAR.2021 21:36:38

## Highest Band Edge



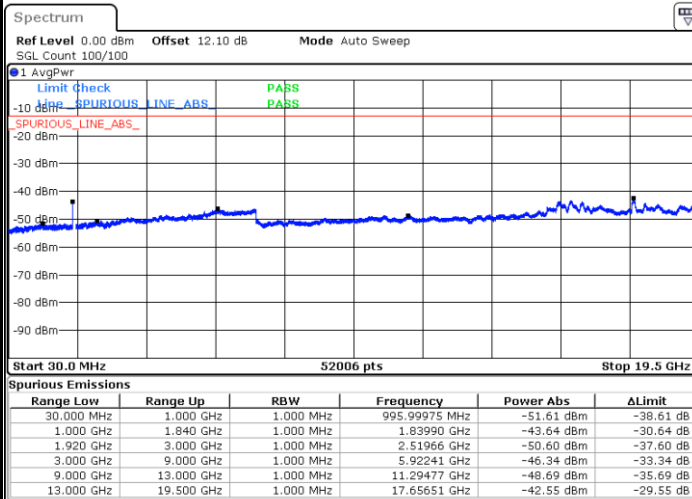
Date: 11.MAR.2021 21:37:10



## Conducted Spurious Emission

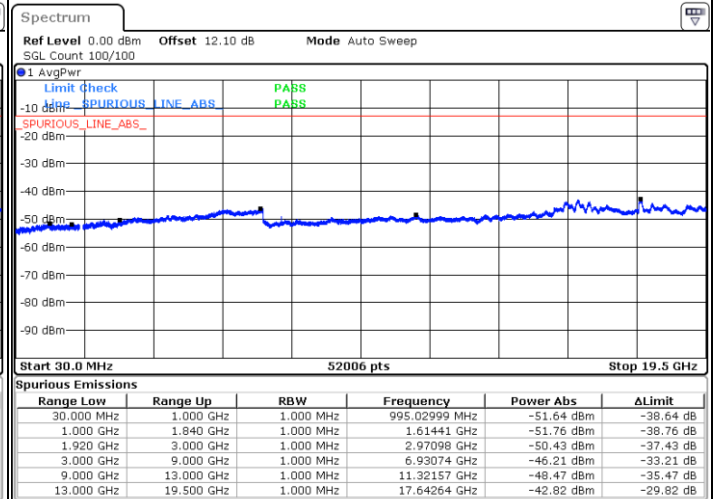
FR1 n2 / 5MHz / DFT-S OFDM / QPSK / 1RB1

### Lowest Channel



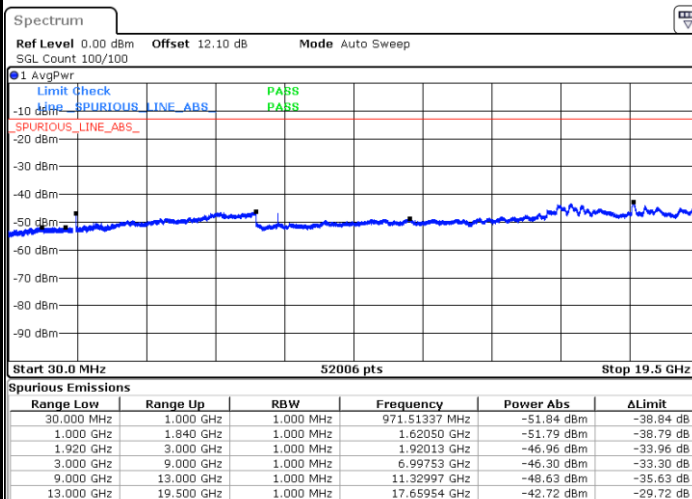
Date: 11.MAR.2021 21:45:15

### Middle Channel



Date: 11.MAR.2021 21:46:15

### Highest Channel



Date: 11.MAR.2021 21:47:19

## Frequency Stability

| Test Conditions  |                   | FR1 n2 (BPSK) / Middle Channel | Limit   |
|------------------|-------------------|--------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 20MHz                       | Note 2. |
|                  |                   | Deviation (ppm)                | Result  |
| 50               | Normal Voltage    | 0.0009                         | PASS    |
| 40               | Normal Voltage    | 0.0152                         |         |
| 30               | Normal Voltage    | 0.0005                         |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                         |         |
| 10               | Normal Voltage    | 0.0011                         |         |
| 0                | Normal Voltage    | 0.0007                         |         |
| -10              | Normal Voltage    | 0.0027                         |         |
| -20              | Normal Voltage    | 0.0021                         |         |
| -30              | Normal Voltage    | 0.0014                         |         |
| 20               | Maximum Voltage   | 0.0011                         |         |
| 20               | Normal Voltage    | 0.0026                         |         |
| 20               | Battery End Point | 0.0029                         |         |

**Note:**

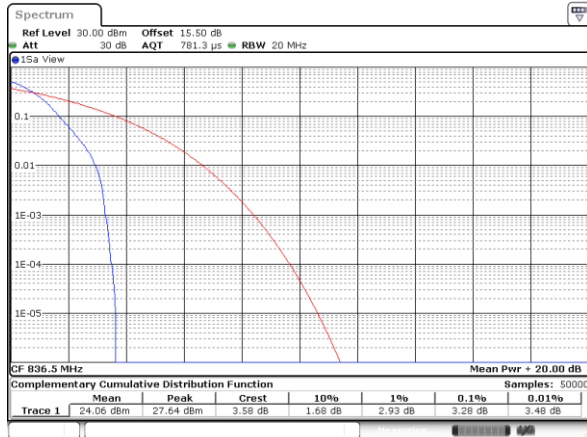
1. Normal Voltage =12 V. ; Battery End Point (BEP) =11.6 V. ; Maximum Voltage =12.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

**FR1 n5****Peak-to-Average Ratio**

| Mode      | FR1 n5 / 20MHz / DFT-S OFDM |         |         |         |             |
|-----------|-----------------------------|---------|---------|---------|-------------|
| Mod.      | PI/2 BPSK                   | QPSK    | 16QAM   | 64QAM   | Limit: 13dB |
| RB Size   | Full RB                     | Full RB | Full RB | Full RB | Result      |
| Middle CH | 3.28                        | 4.46    | 5.54    | 5.88    | <b>PASS</b> |
| Mode      | FR1 n5 / 20MHz / DFT-S OFDM |         |         |         |             |
| Mod.      | 256QAM                      |         |         |         | Limit: 13dB |
| RB Size   | Full RB                     |         |         |         | Result      |
| Middle CH | 6.49                        |         |         |         | <b>PASS</b> |

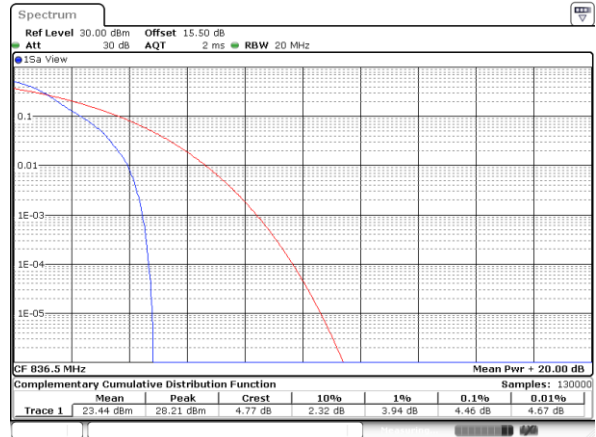
## FR1 n5 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

### PI/2 BPSK



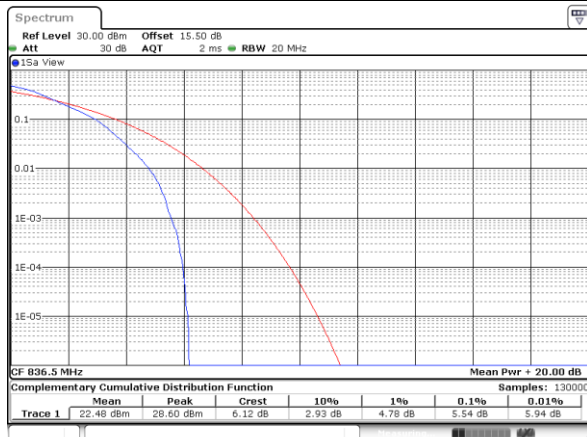
Date: 11.MAR.2021 22:31:24

### QPSK



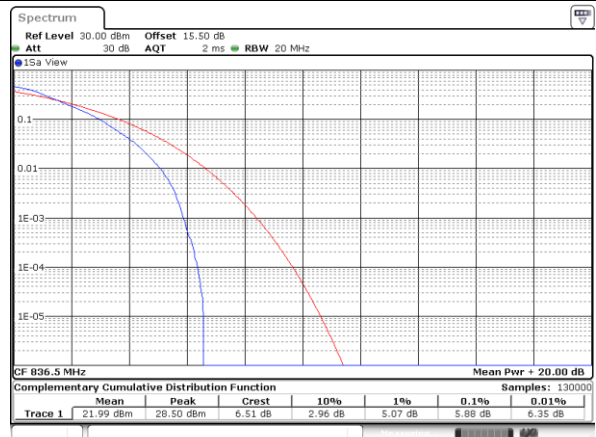
Date: 11.MAR.2021 22:31:44

### 16QAM



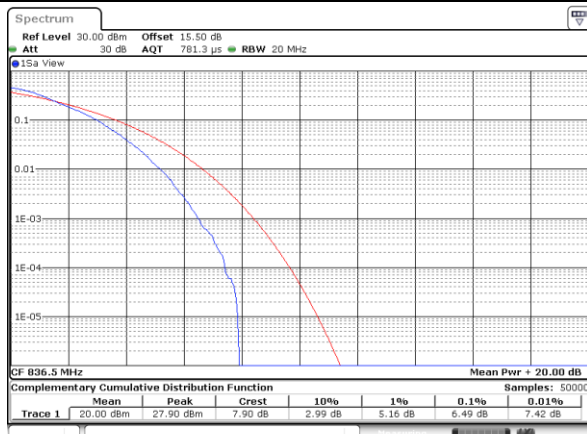
Date: 11.MAR.2021 22:32:03

### 64QAM



Date: 11.MAR.2021 22:32:22

### 256QAM



Date: 11.MAR.2021 22:33:15

**26dB Bandwidth**

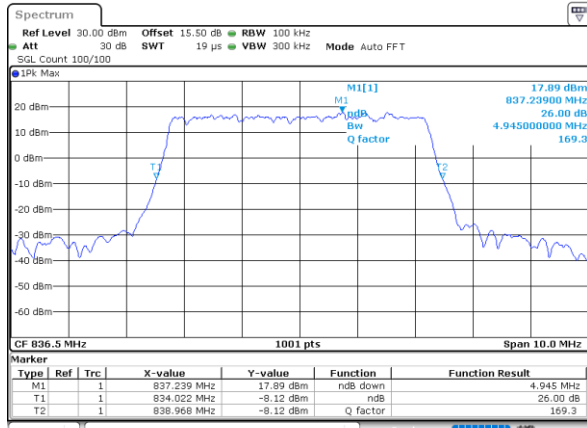
| Mode      | FR1 n5 : 26dB BW(MHz) / DFT-S OFDM |  |           |  |           |  |           |  |
|-----------|------------------------------------|--|-----------|--|-----------|--|-----------|--|
| BW        | 5MHz                               |  | 10MHz     |  | 15MHz     |  | 20MHz     |  |
| Mod.      | PI/2 BPSK                          |  | PI/2 BPSK |  | PI/2 BPSK |  | PI/2 BPSK |  |
| Middle CH | 4.95                               |  | 9.39      |  | 14.18     |  | 18.70     |  |

| Mode      | FR1 n5 : 26dB BW(MHz) / CP OFDM |        |       |        |       |        |       |        |
|-----------|---------------------------------|--------|-------|--------|-------|--------|-------|--------|
| BW        | 5MHz                            |        | 10MHz |        | 15MHz |        | 20MHz |        |
| Mod.      | QPSK                            | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  |
| Middle CH | 4.88                            | 4.97   | 9.95  | 9.69   | 14.84 | 14.93  | 19.70 | 19.86  |
| Mod.      | 64QAM                           | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM |
| Middle CH | 4.96                            | 4.89   | 9.69  | 9.93   | 14.87 | 15.02  | 19.78 | 19.82  |



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

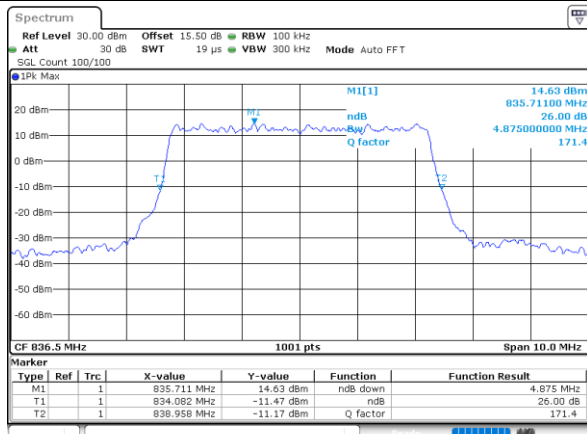
## PI/2 BPSK



Date: 11.MAR.2021 22:43:34

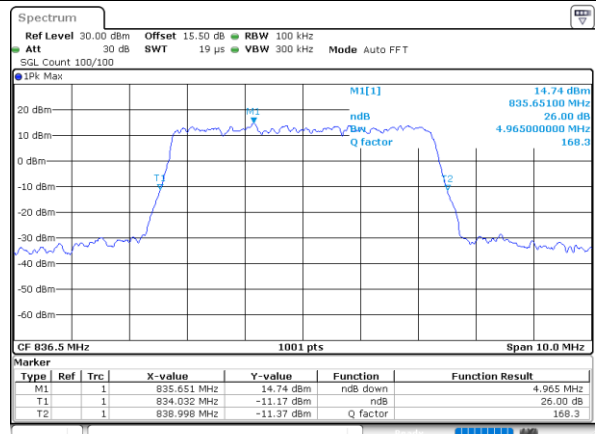
## FR1 n5 / 5MHz / CP OFDM / Middle Channel / Full RB

## QPSK



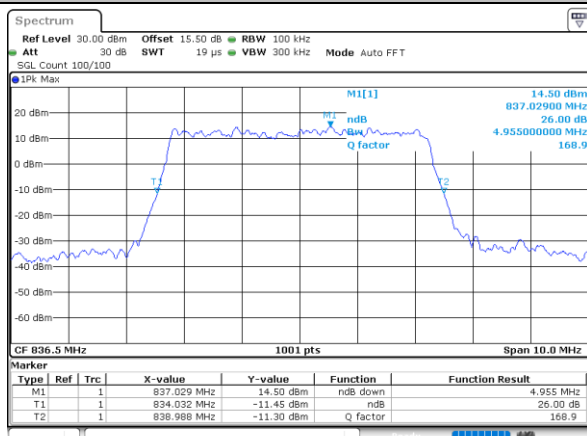
Date: 11.MAR.2021 22:44:08

## 16QAM



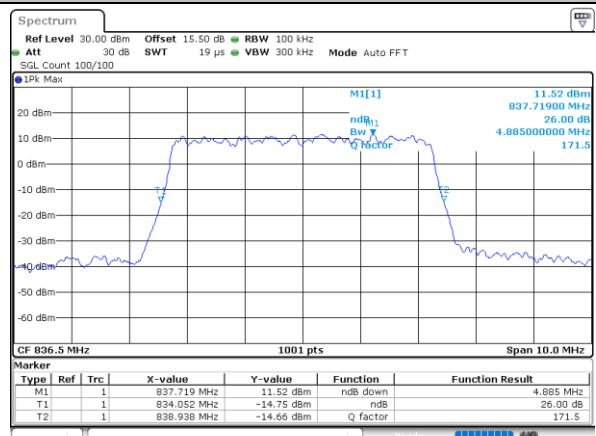
Date: 11.MAR.2021 22:44:34

## 64QAM



Date: 11.MAR.2021 22:44:51

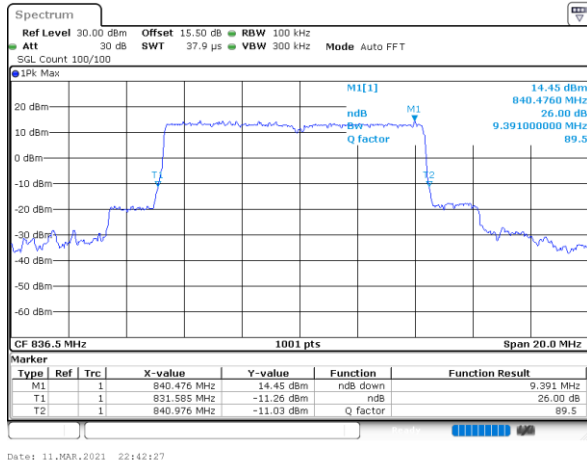
## 256QAM



Date: 11.MAR.2021 22:45:10

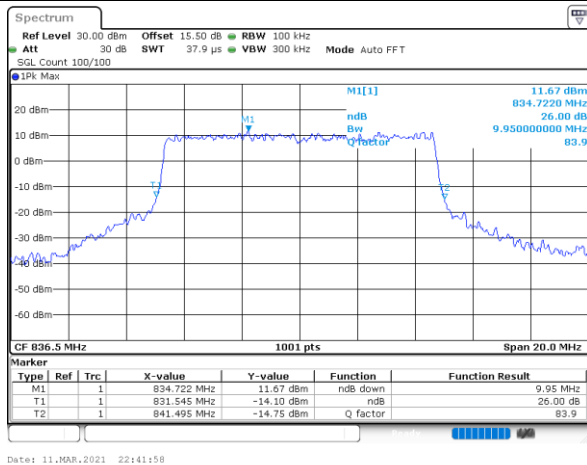
## FR1 n5 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

### PI/2 BPSK

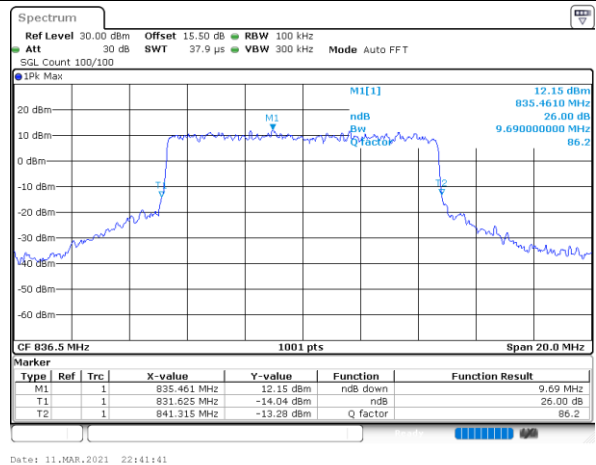


## FR1 n5 / 10MHz / CP OFDM / Middle Channel / Full RB

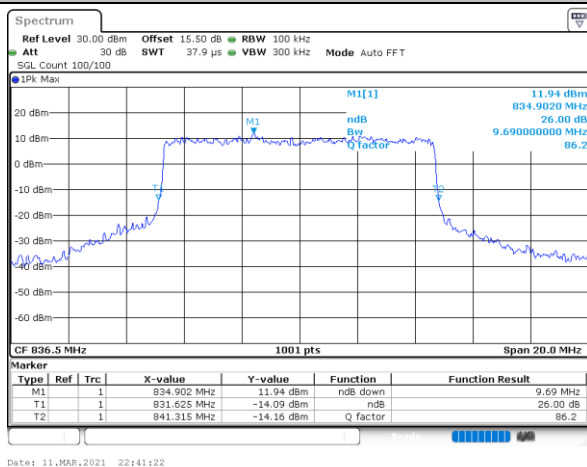
### QPSK



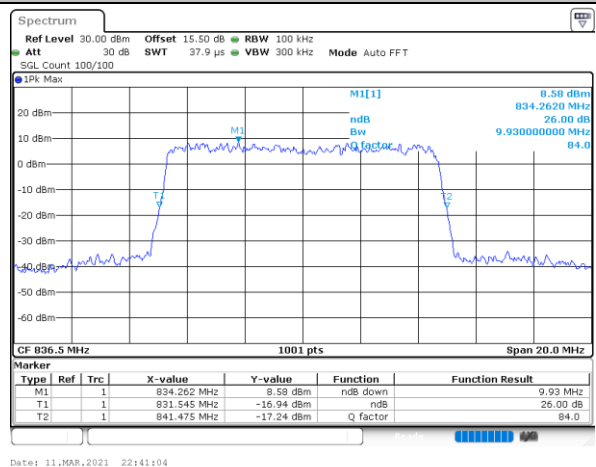
### 16QAM



### 64QAM

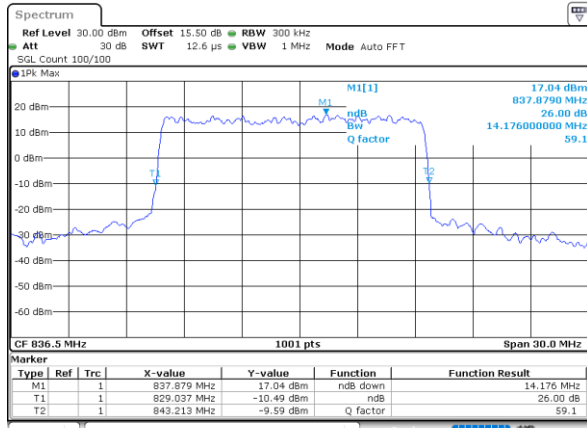


### 256QAM



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

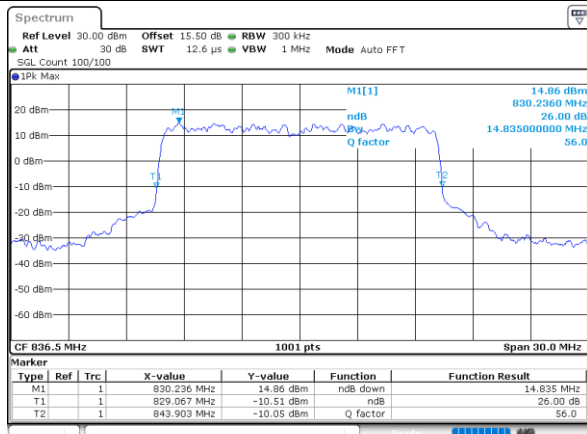
### PI/2 BPSK



Date: 11.MAR.2021 22:37:49

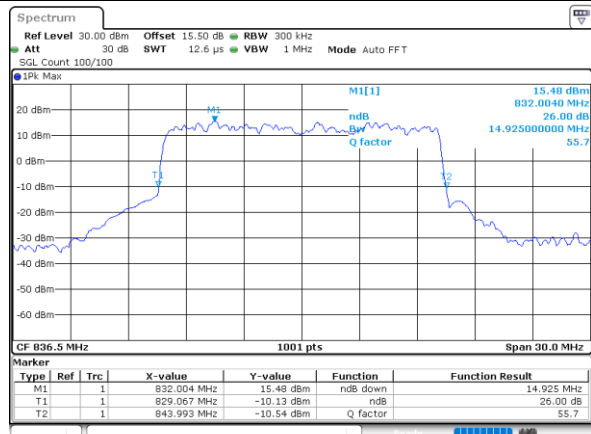
## FR1 n5 / 15MHz / CP OFDM / Middle Channel / Full RB

### QPSK



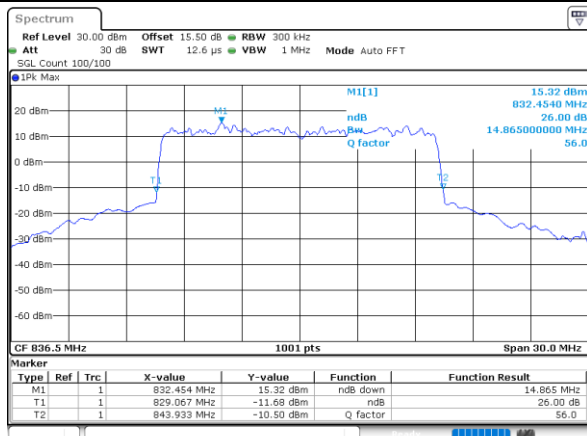
Date: 11.MAR.2021 22:38:20

### 16QAM



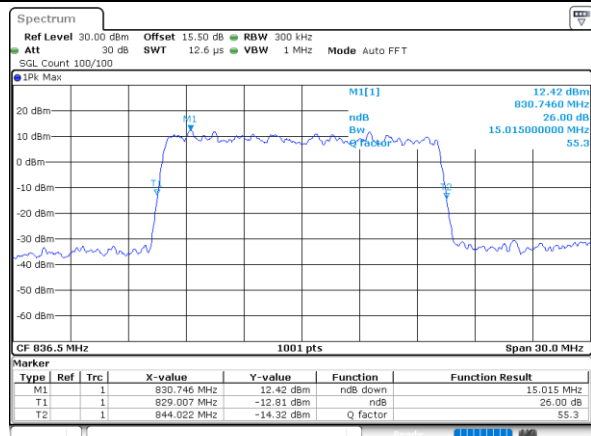
Date: 11.MAR.2021 22:38:37

### 64QAM



Date: 11.MAR.2021 22:38:54

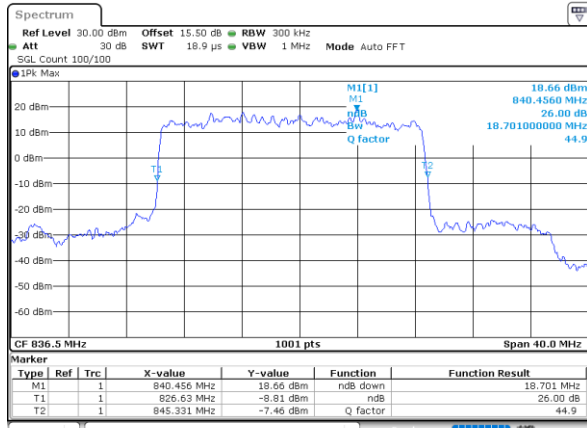
### 256QAM



Date: 11.MAR.2021 22:39:15

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

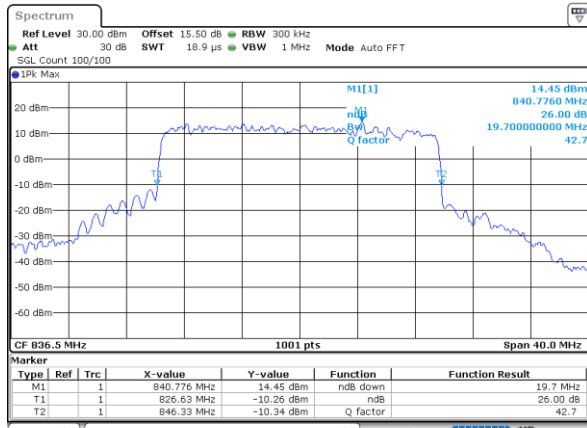
### PI/2 BPSK



Date: 11.MAR.2021 22:36:42

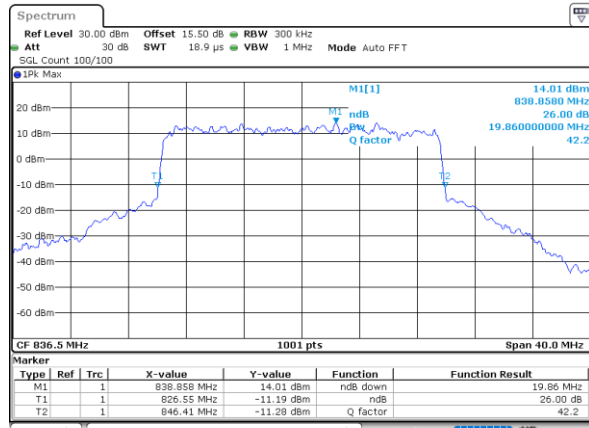
## FR1 n5 / 20MHz / CP OFDM / Middle Channel / Full RB

### QPSK



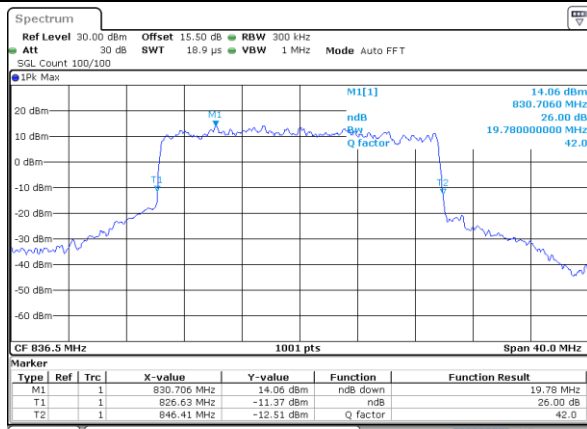
Date: 11.MAR.2021 22:36:11

### 16QAM



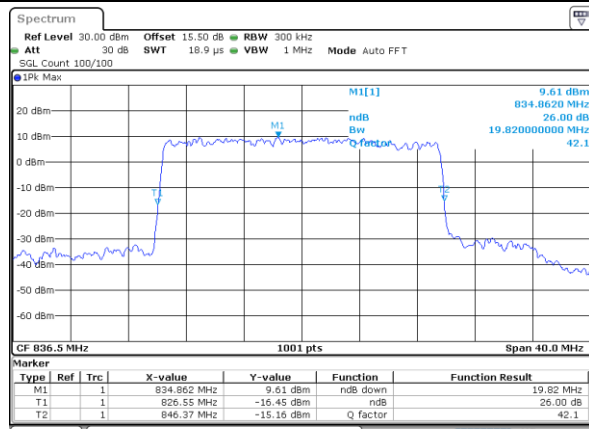
Date: 11.MAR.2021 22:35:54

### 64QAM



Date: 11.MAR.2021 22:35:37

### 256QAM

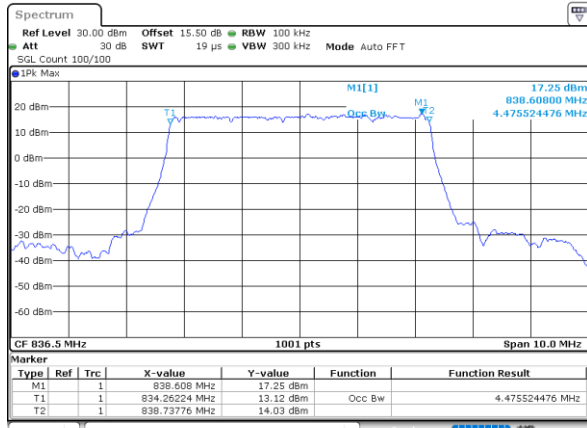
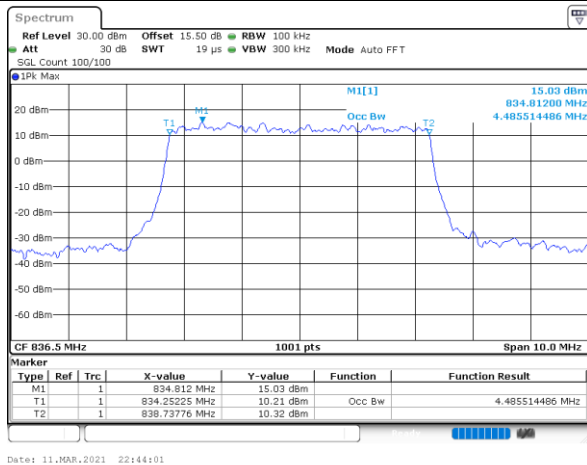
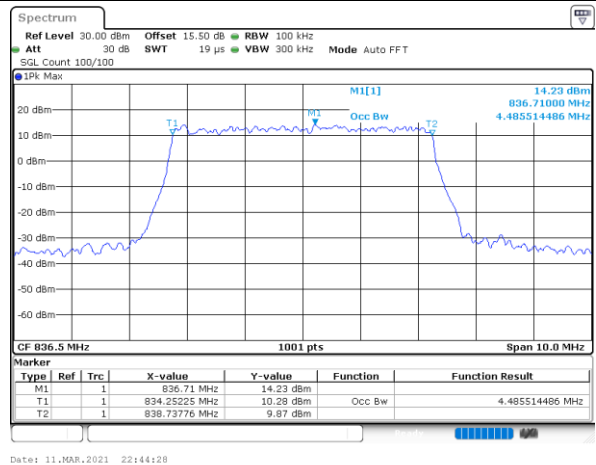
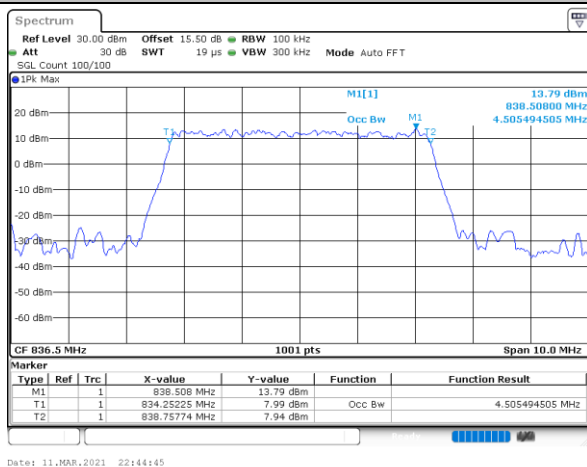
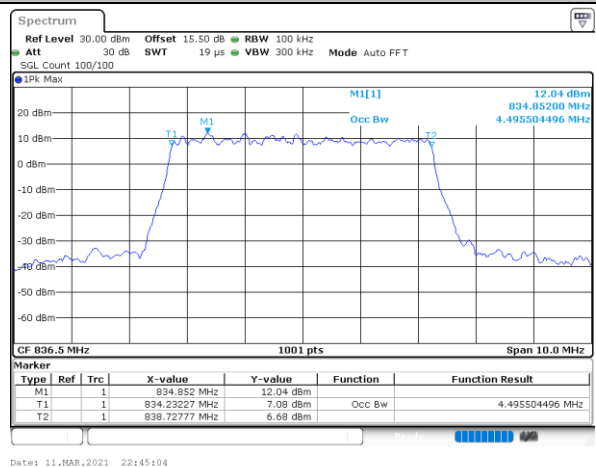


Date: 11.MAR.2021 22:35:18

**Occupied Bandwidth**

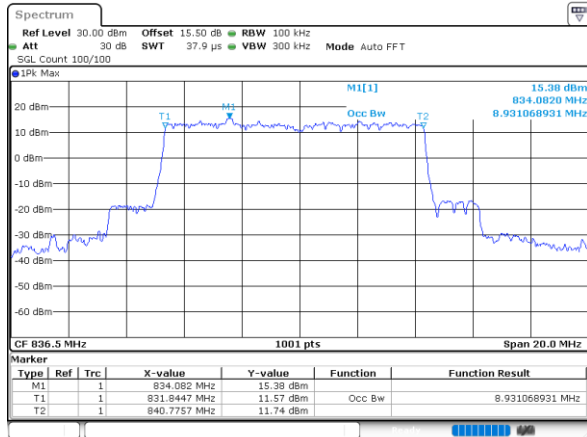
| Mode      | FR1 n5 : 99%OBW(MHz) / DFT-S OFDM |  |           |  |           |  |           |  |
|-----------|-----------------------------------|--|-----------|--|-----------|--|-----------|--|
| BW        | 5MHz                              |  | 10MHz     |  | 15MHz     |  | 20MHz     |  |
| Mod.      | PI/2 BPSK                         |  | PI/2 BPSK |  | PI/2 BPSK |  | PI/2 BPSK |  |
| Middle CH | 4.48                              |  | 8.93      |  | 13.49     |  | 17.86     |  |

| Mode      | FR1 n5 : 99%OBW (MHz) / CP OFDM |        |       |        |       |        |       |        |
|-----------|---------------------------------|--------|-------|--------|-------|--------|-------|--------|
| BW        | 5MHz                            |        | 10MHz |        | 15MHz |        | 20MHz |        |
| Mod.      | QPSK                            | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  | QPSK  | 16QAM  |
| Middle CH | 4.49                            | 4.49   | 9.27  | 9.27   | 14.09 | 14.18  | 18.90 | 18.90  |
| Mod.      | 64QAM                           | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM | 64QAM | 256QAM |
| Middle CH | 4.51                            | 4.50   | 9.29  | 9.29   | 14.18 | 14.12  | 18.98 | 18.86  |

**FR1 n5 / 5MHz / DFT-S OFDM / Middle Channel / Full RB**
**PI/2 BPSK**

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

**16QAM**

**64QAM**

**256QAM**


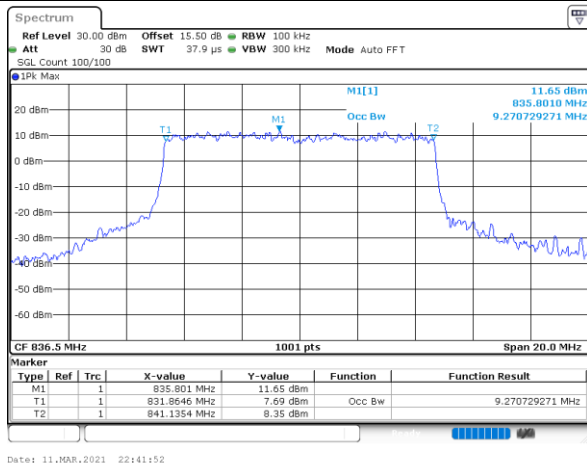
### FR1 n5 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

#### PI/2 BPSK

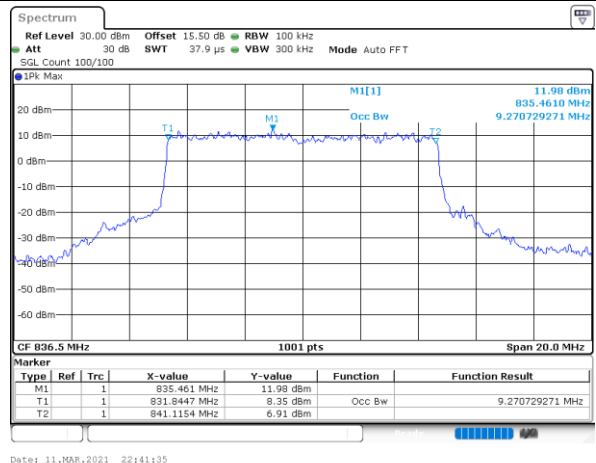


### FR1 n5 / 10MHz / CP OFDM / Middle Channel / Full RB

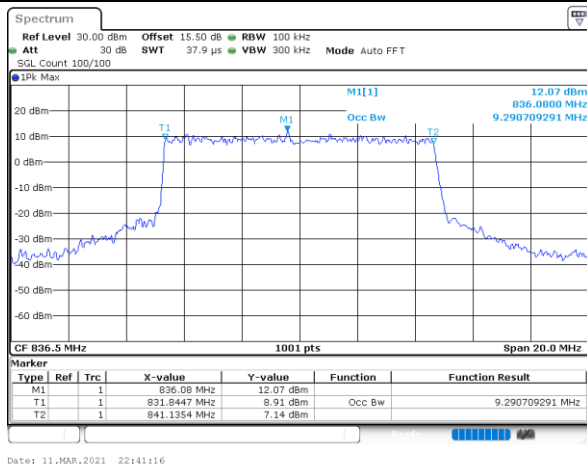
#### QPSK



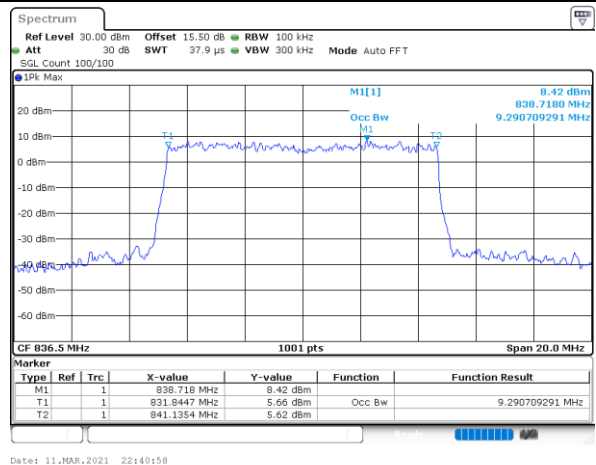
#### 16QAM



#### 64QAM

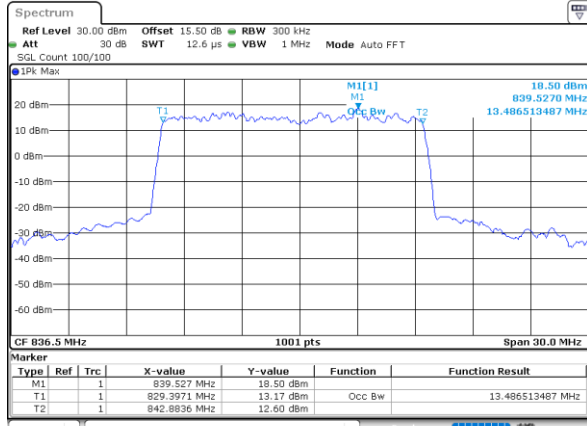


#### 256QAM



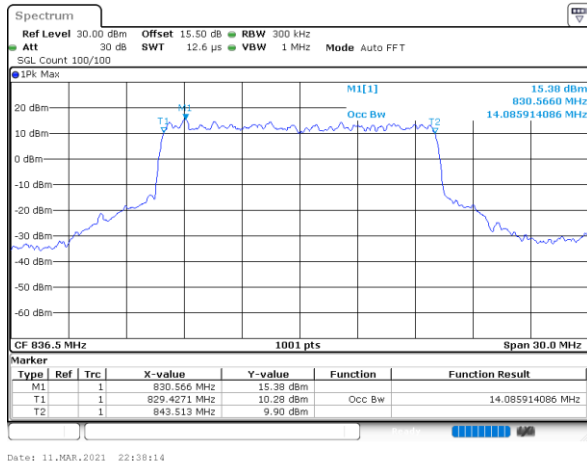
## FR1 n5 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

### PI/2 BPSK

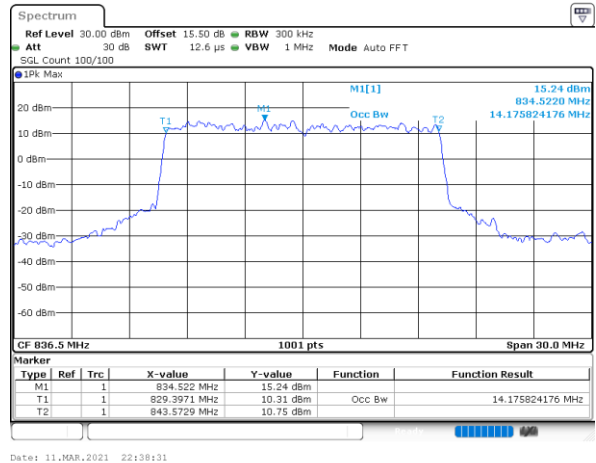


## FR1 n5 / 15MHz / CP OFDM / Middle Channel / Full RB

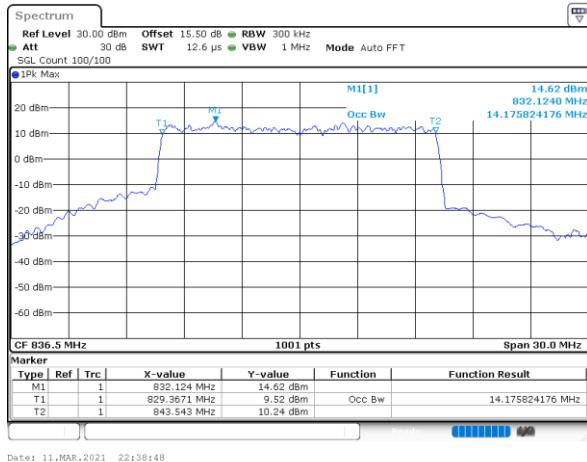
### QPSK



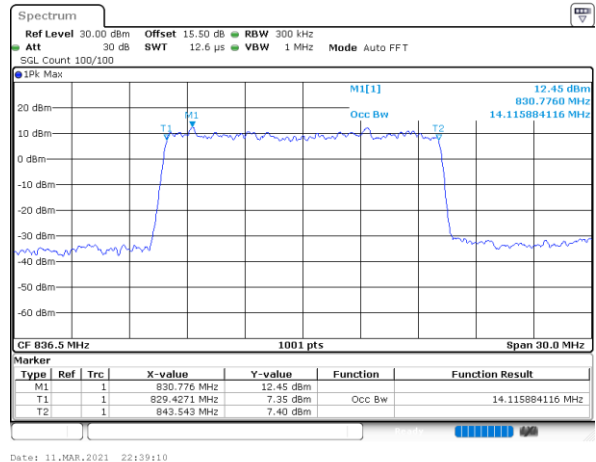
### 16QAM



### 64QAM

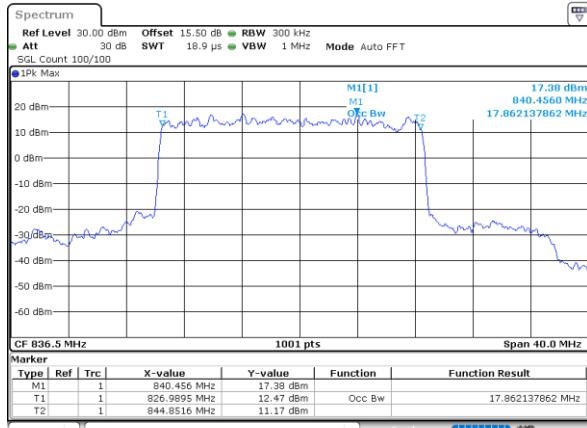


### 256QAM



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

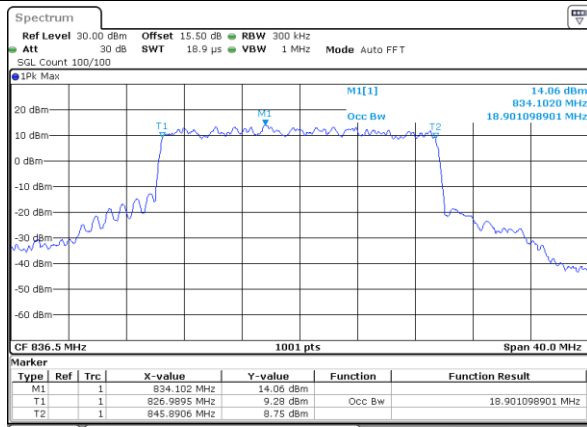
### PI/2 BPSK



Date: 11.MAR.2021 22:36:36

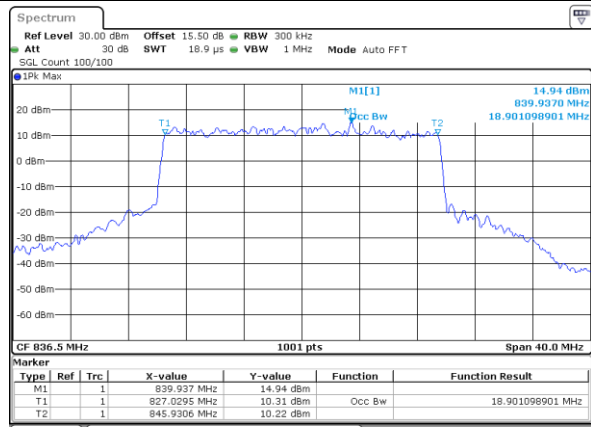
## FR1 n5 / 20MHz / CP OFDM / Middle Channel / Full RB

### QPSK



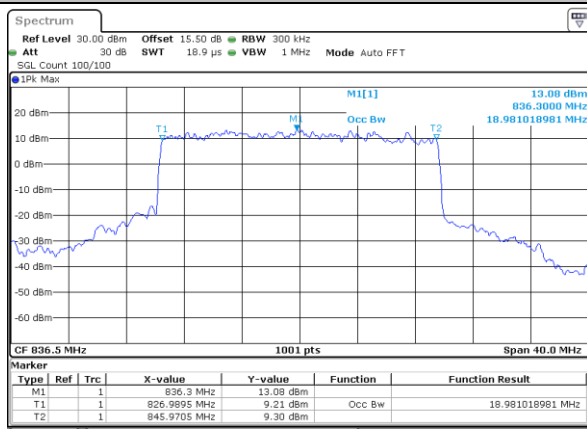
Date: 11.MAR.2021 22:36:05

### 16QAM



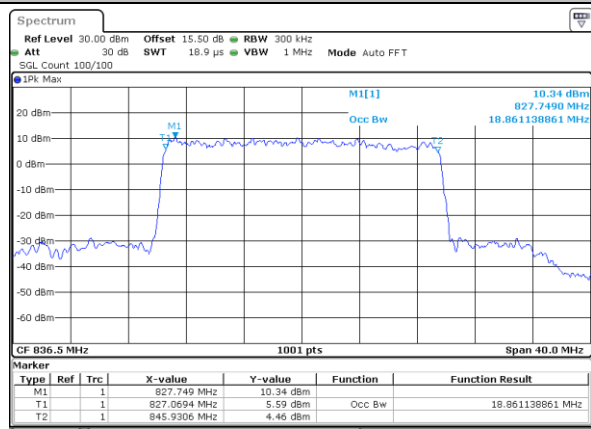
Date: 11.MAR.2021 22:35:48

### 64QAM



Date: 11.MAR.2021 22:35:32

### 256QAM



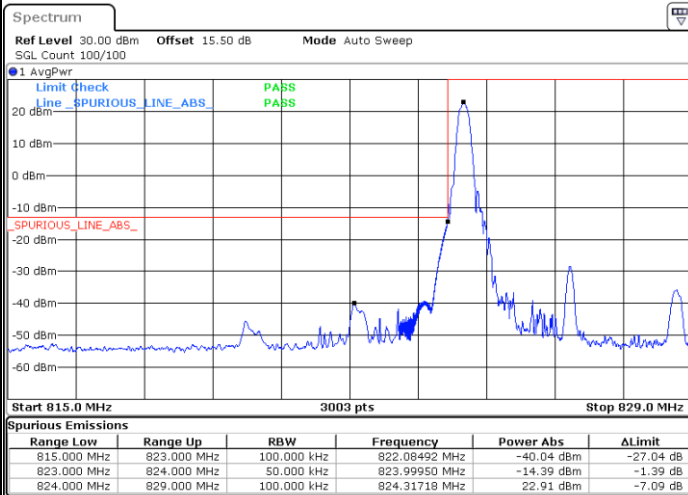
Date: 11.MAR.2021 22:34:56

**Conducted Band Edge**

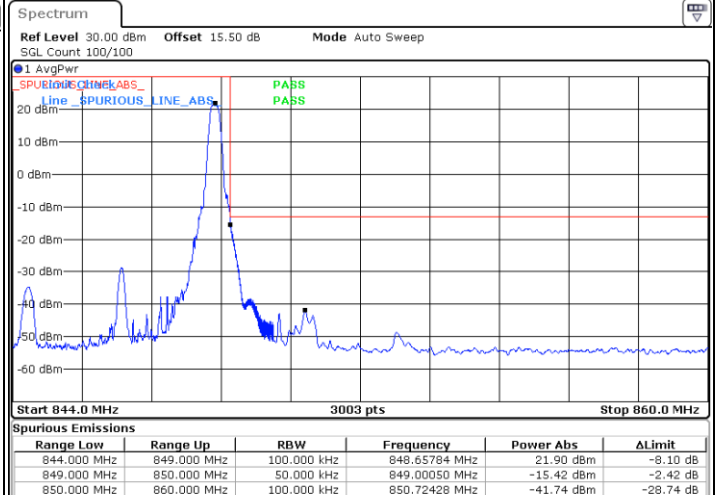
FR1 n5 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



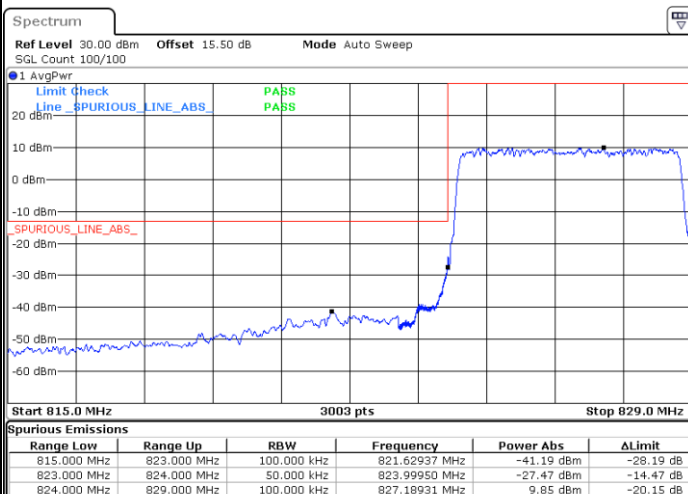
Date: 11.MAR.2021 22:46:47



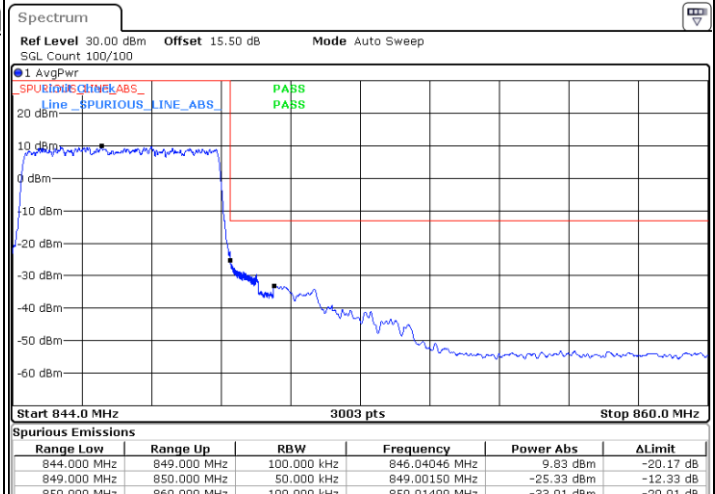
Date: 11.MAR.2021 23:04:55

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11.MAR.2021 23:01:57



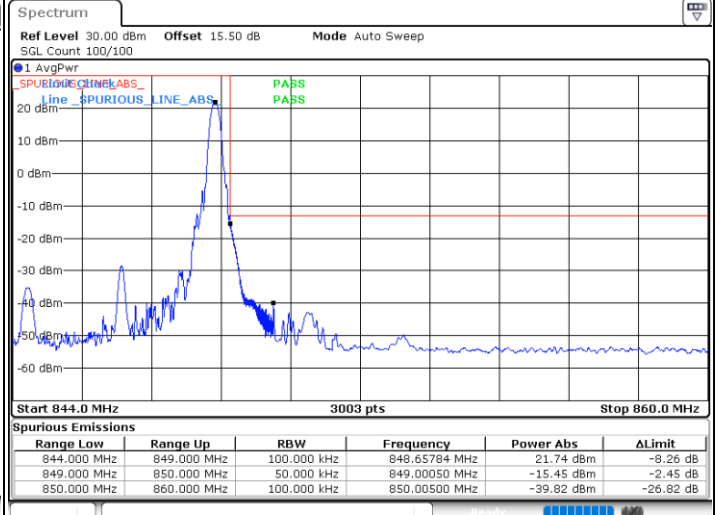
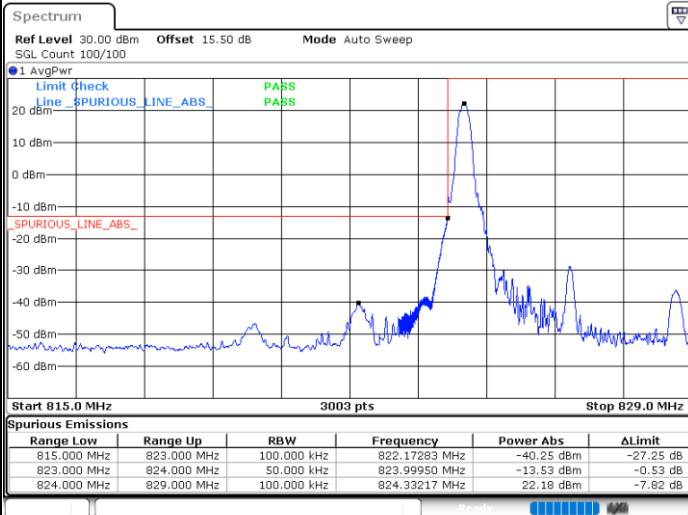
Date: 11.MAR.2021 23:11:46



## FR1 n5 / 5MHz / DFT-S OFDM / QPSK

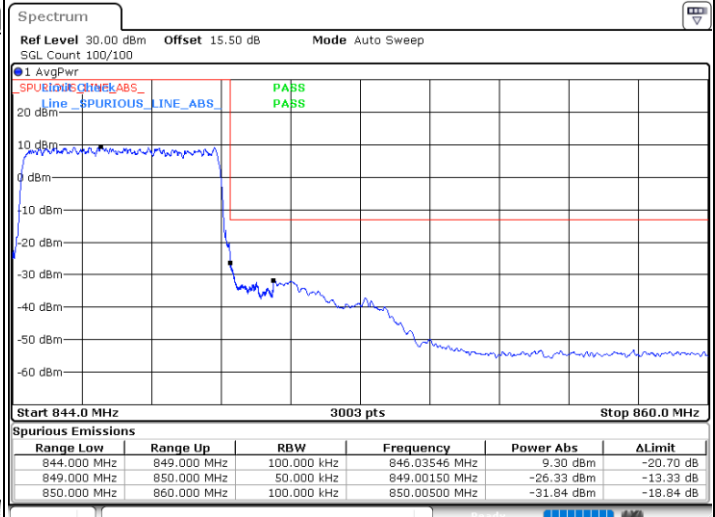
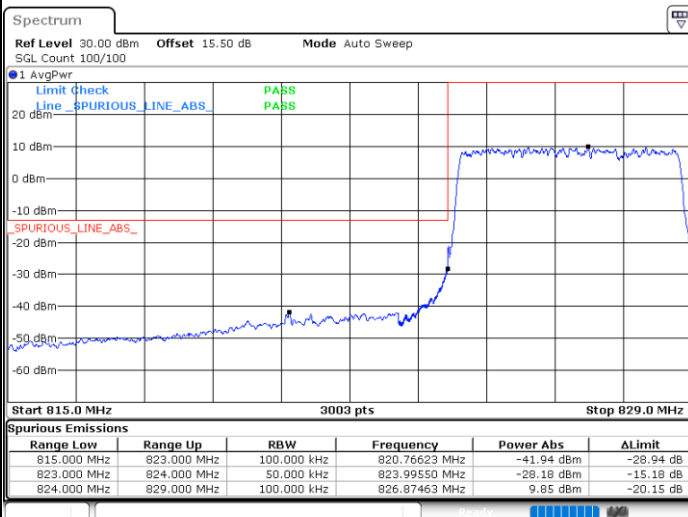
## Lowest Band Edge / 1RB0

## Highest Band Edge / 1RBmax



## Lowest Band Edge / Full RB

## Highest Band Edge / Full RB

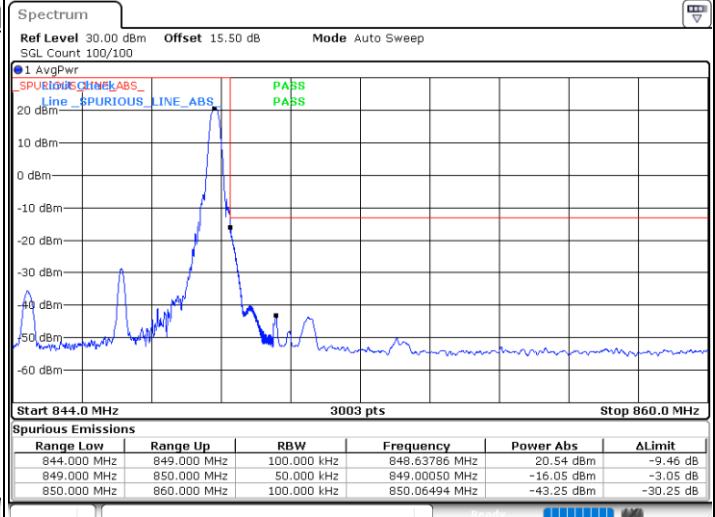
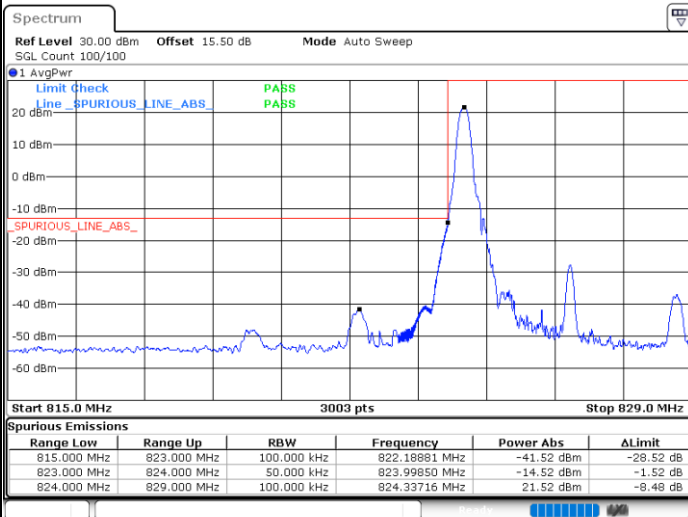




## FR1 n5 / 5MHz / DFT-S OFDM / 16QAM

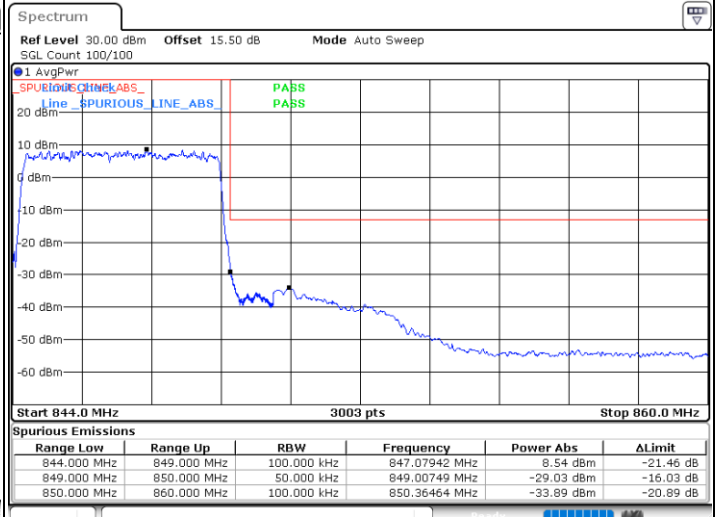
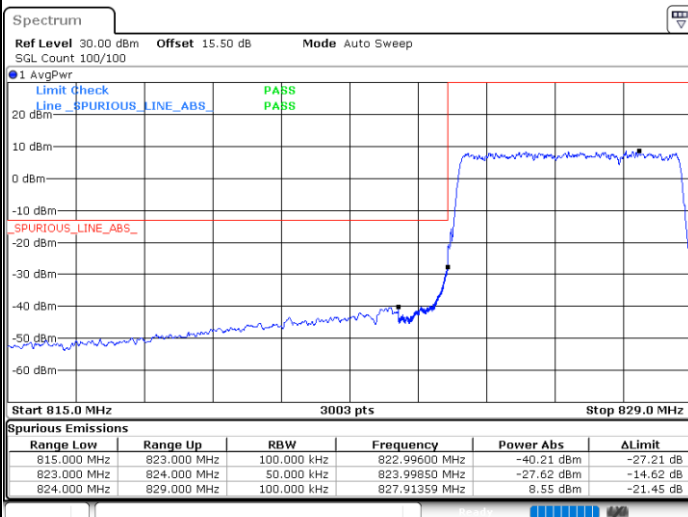
## Lowest Band Edge / 1RB0

## Highest Band Edge / 1RBmax



## Lowest Band Edge / Full RB

## Highest Band Edge / Full RB

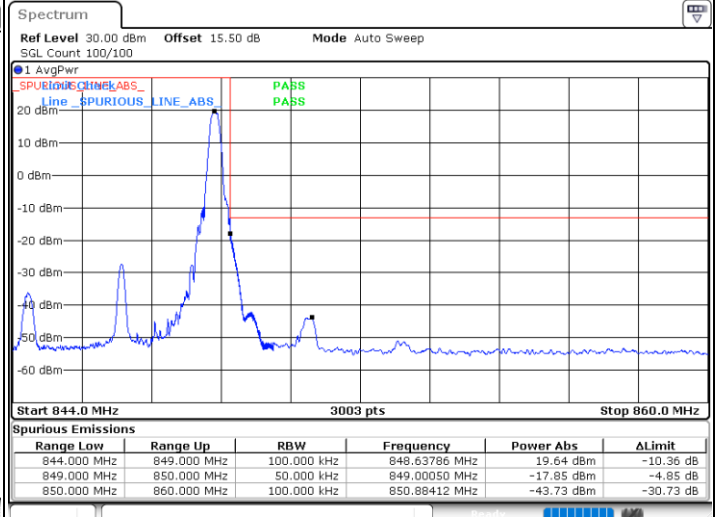
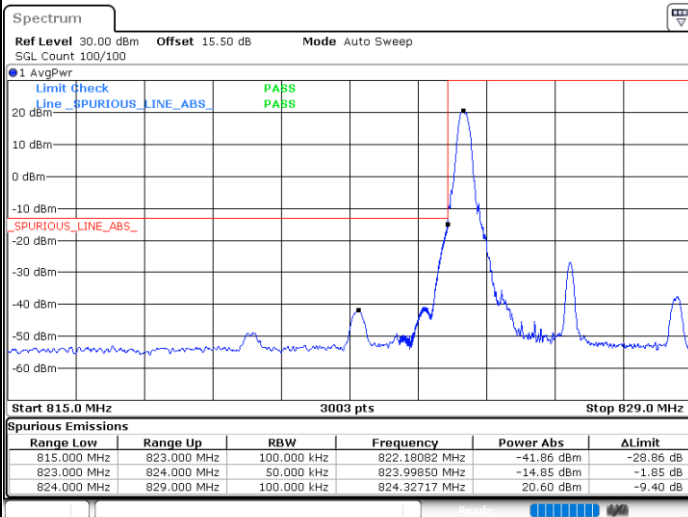




## FR1 n5 / 5MHz / DFT-S OFDM / 64QAM

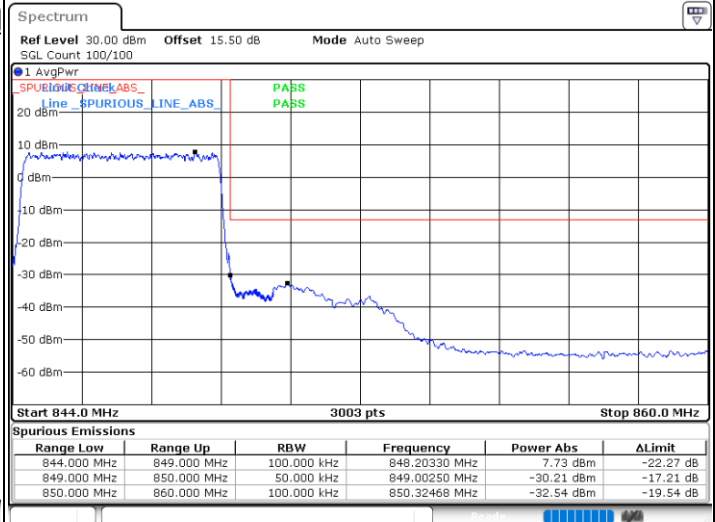
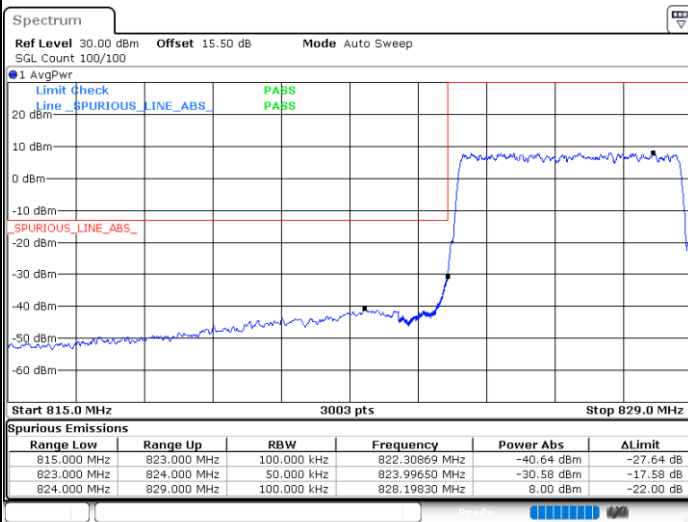
## Lowest Band Edge / 1RB0

## Highest Band Edge / 1RBmax



## Lowest Band Edge / Full RB

## Highest Band Edge / Full RB

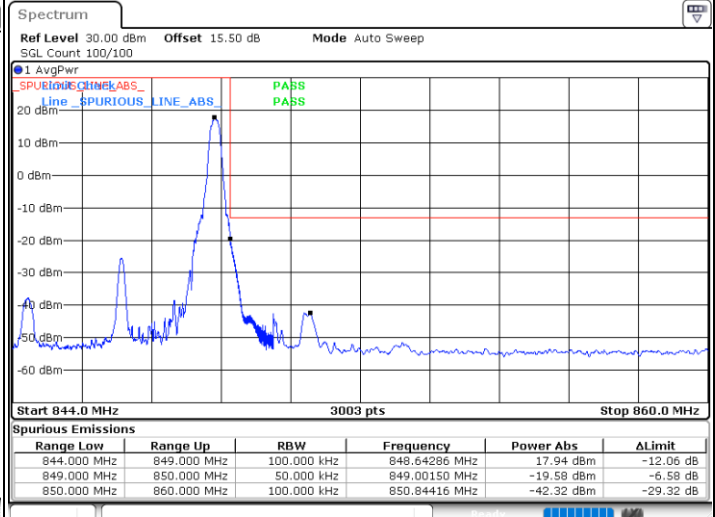
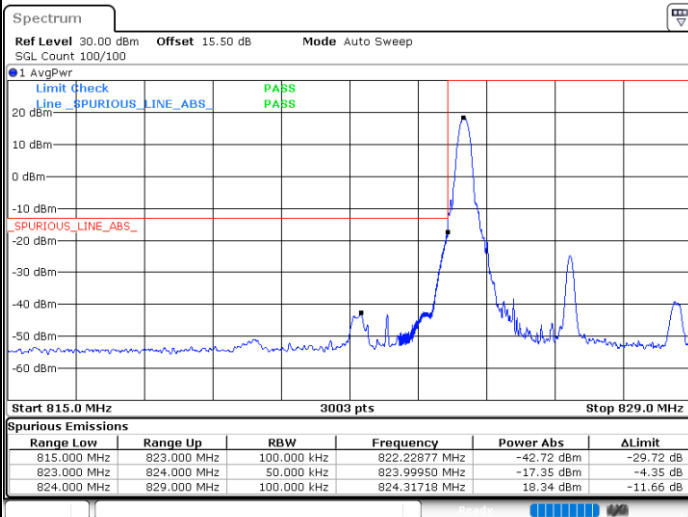




## FR1 n5 / 5MHz / DFT-S OFDM / 256QAM

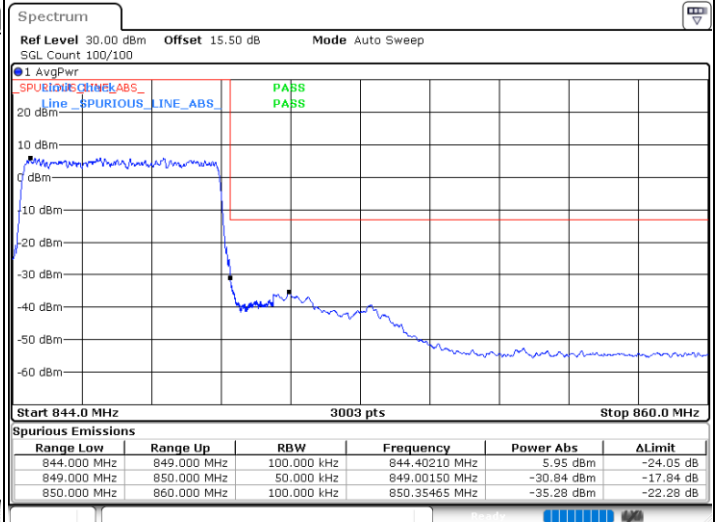
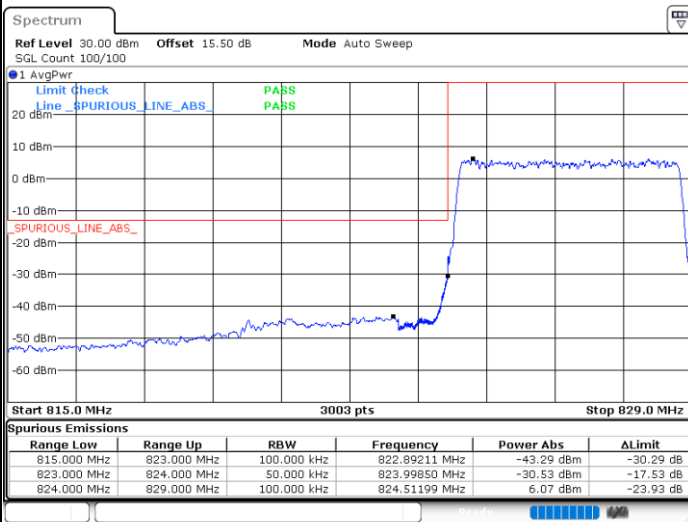
## Lowest Band Edge / 1RB0

## Highest Band Edge / 1RBmax



## Lowest Band Edge / Full RB

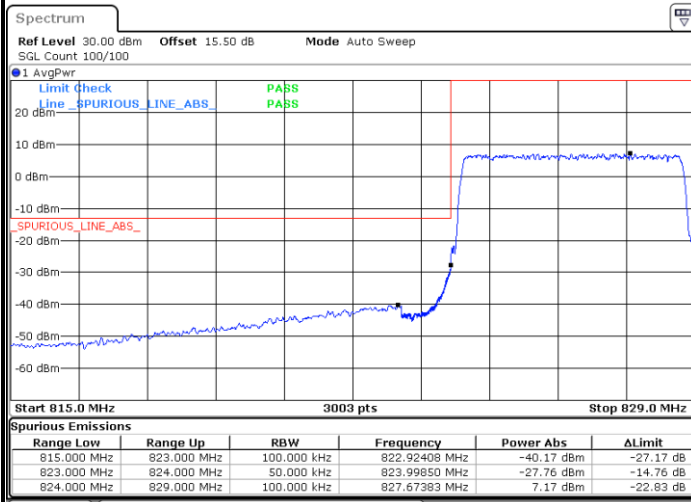
## Highest Band Edge / Full RB



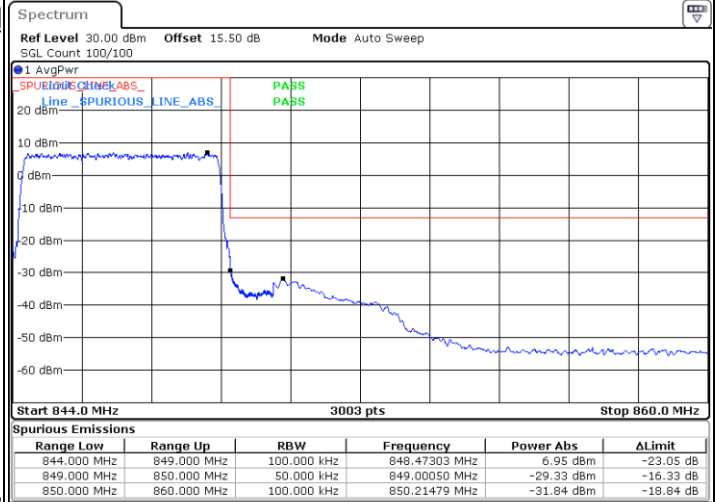


## FR1 n5 / 5MHz / CP OFDM / QPSK / Full RB

## Lowest Band Edge

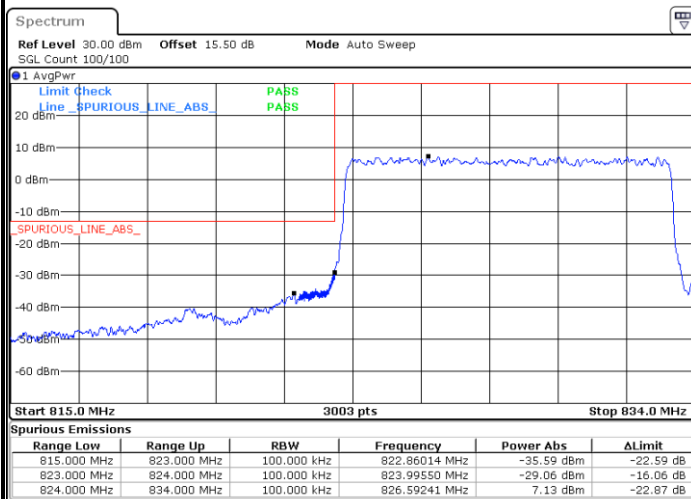


## Highest Band Edge

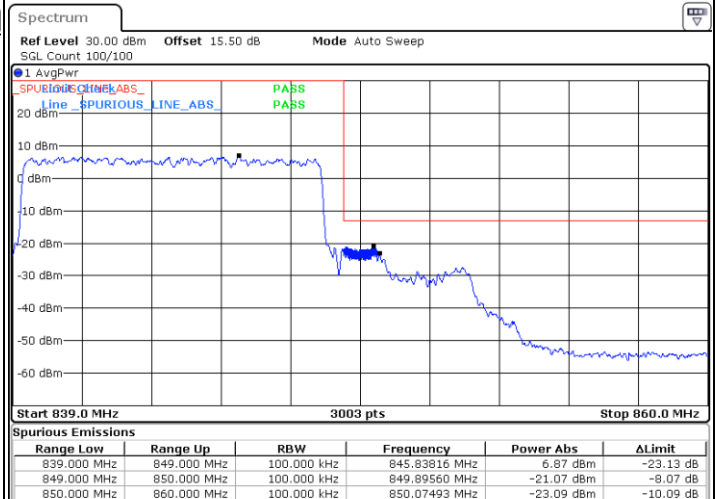


## FR1 n5 / 10MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

## Lowest Band Edge



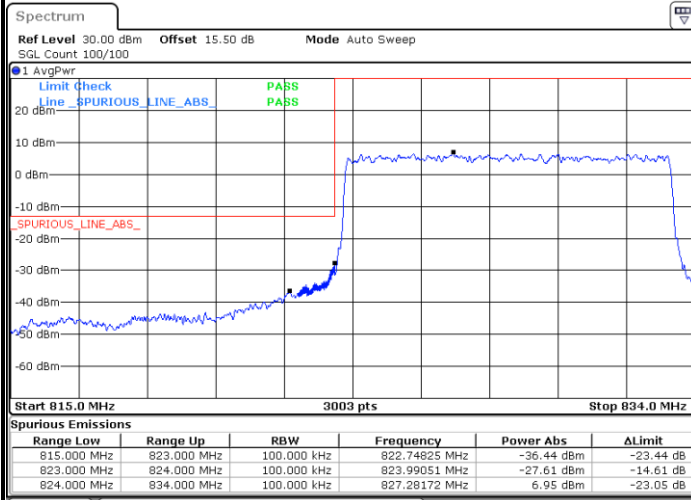
## Highest Band Edge



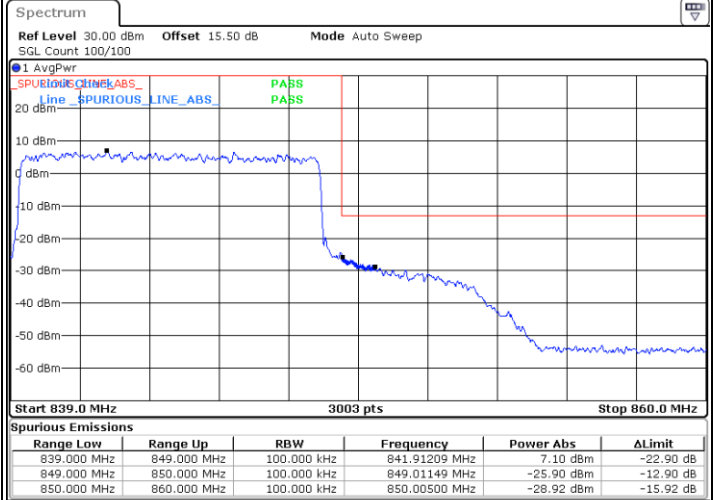


## FR1 n5 / 10MHz / DFT-s-OFDM / QPSK / Full RB

## Lowest Band Edge

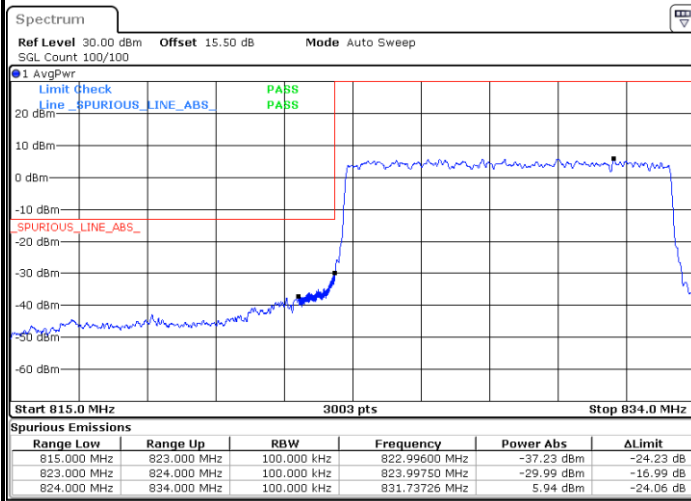


## Highest Band Edge

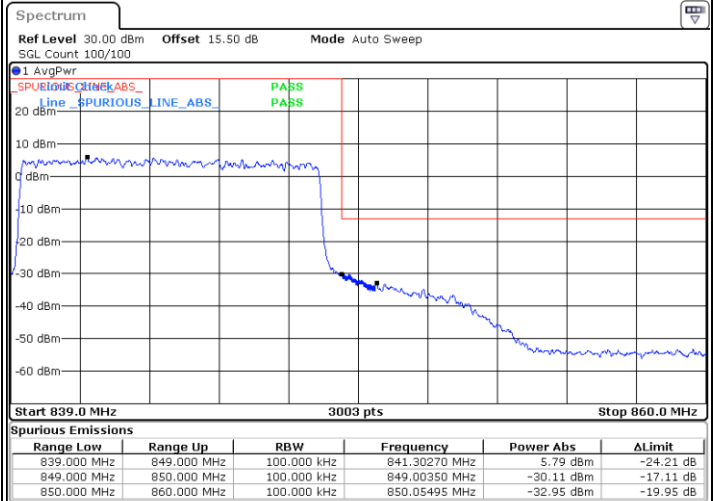


## FR1 n5 / 10MHz / DFT-s-OFDM / 16QAM / Full RB

## Lowest Band Edge



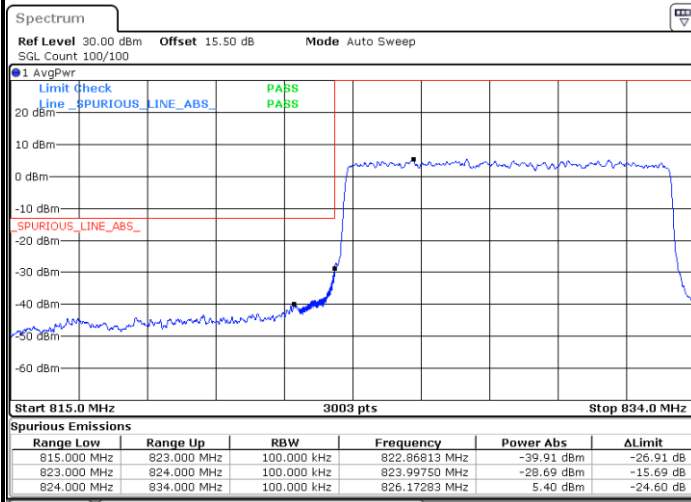
## Highest Band Edge



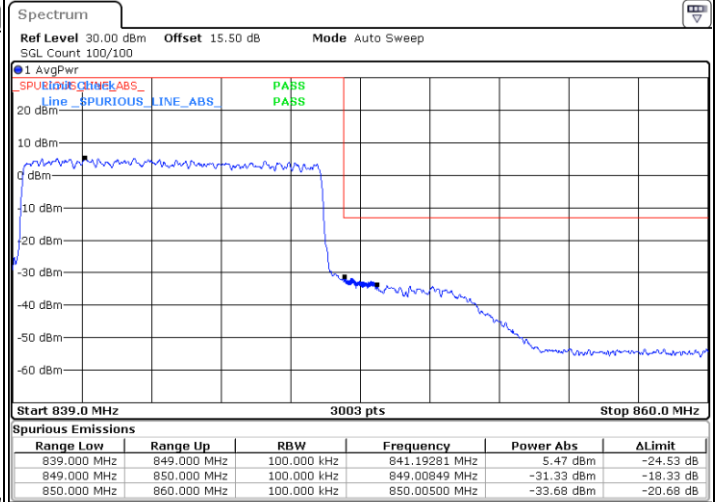


## FR1 n5 / 10MHz / DFT-s-OFDM / 64QAM / Full RB

## Lowest Band Edge

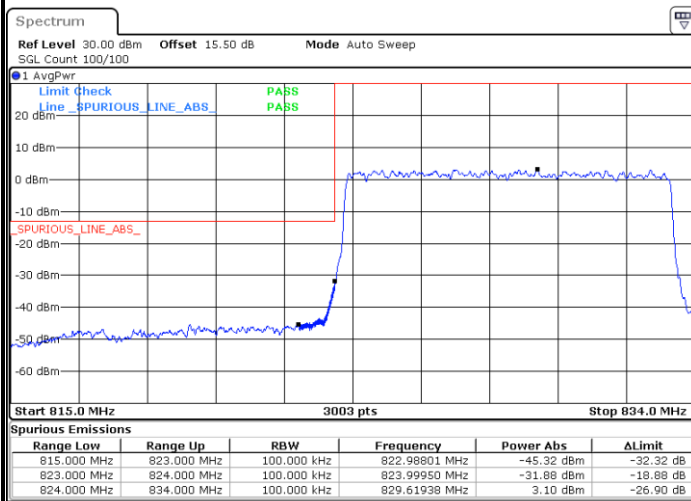


## Highest Band Edge

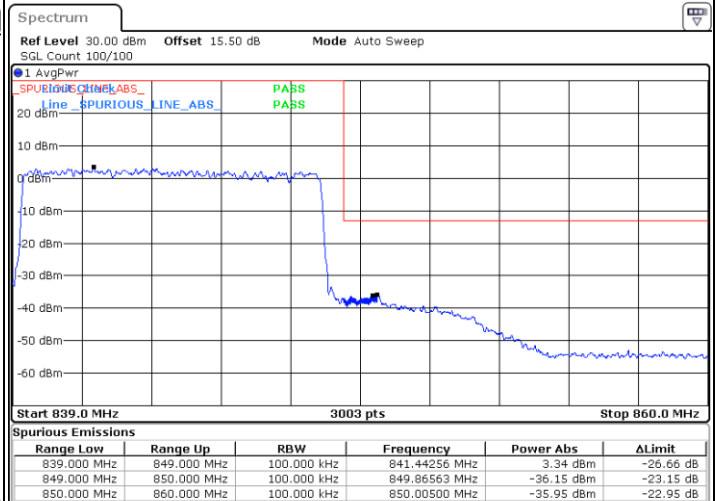


## FR1 n5 / 10MHz / DFT-s-OFDM / 256QAM / Full RB

## Lowest Band Edge



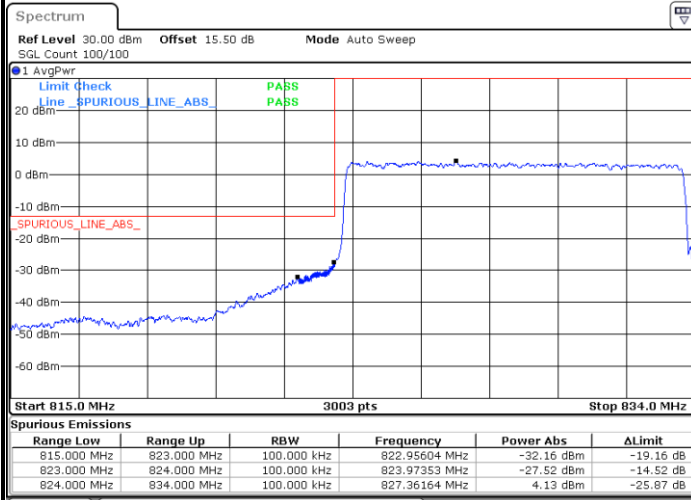
## Highest Band Edge



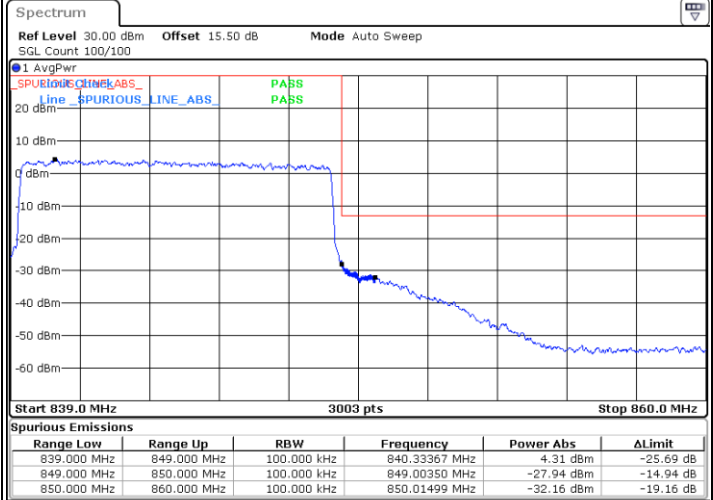


## FR1 n5 / 10MHz / CP OFDM / QPSK / Full RB

## Lowest Band Edge

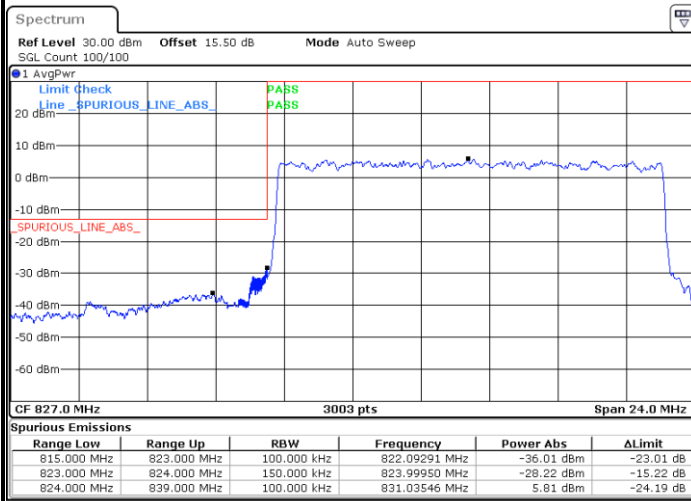


## Highest Band Edge

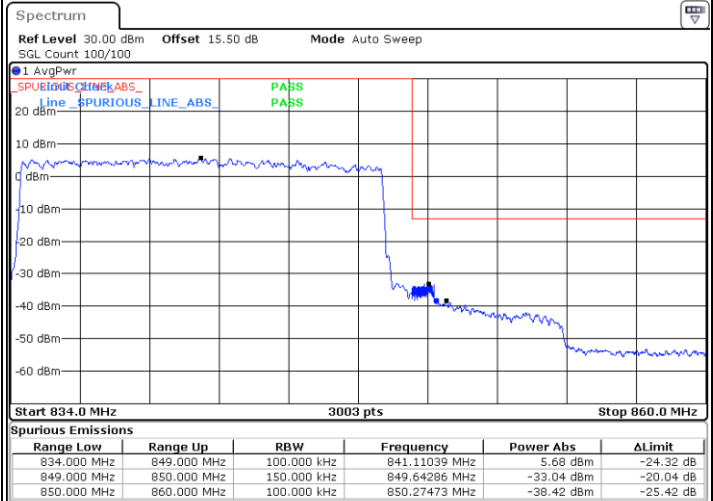


## FR1 n5 / 15MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

## Lowest Band Edge



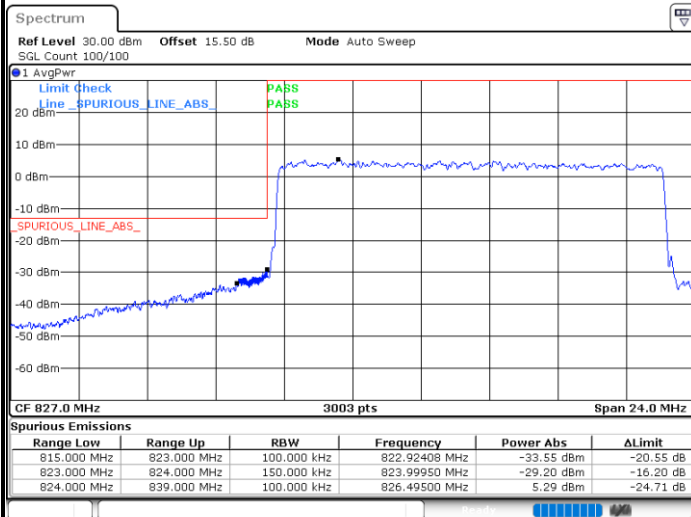
## Highest Band Edge



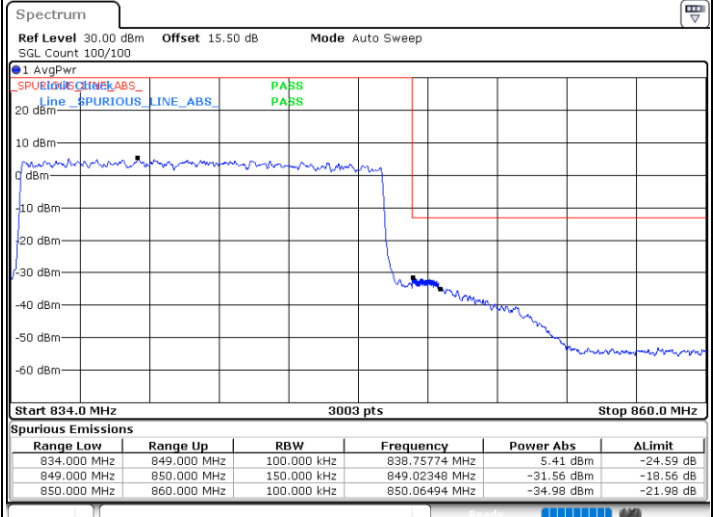


## FR1 n5 / 15MHz / DFT-s-OFDM / QPSK / Full RB

## Lowest Band Edge

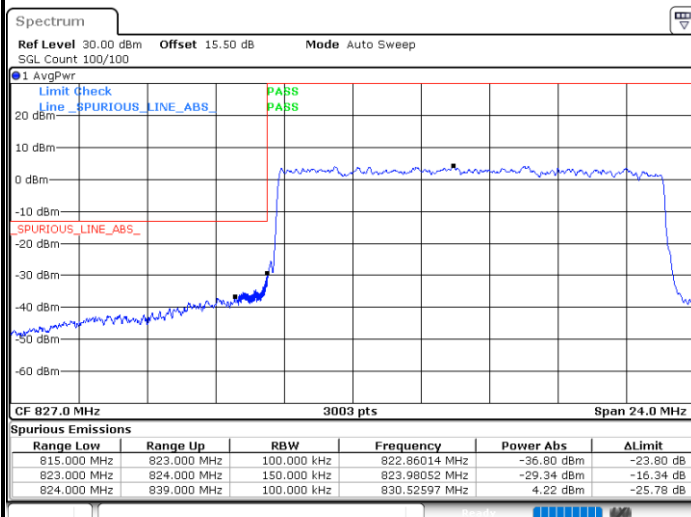


## Highest Band Edge

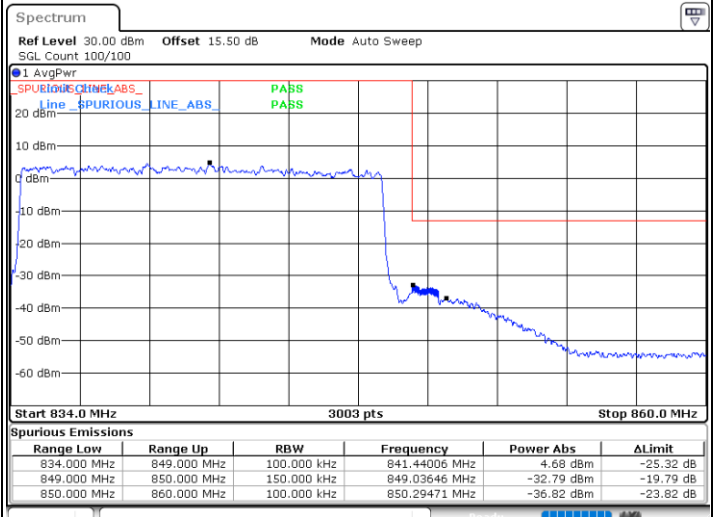


## FR1 n5 / 15MHz / DFT-s-OFDM / 16QAM / Full RB

## Lowest Band Edge



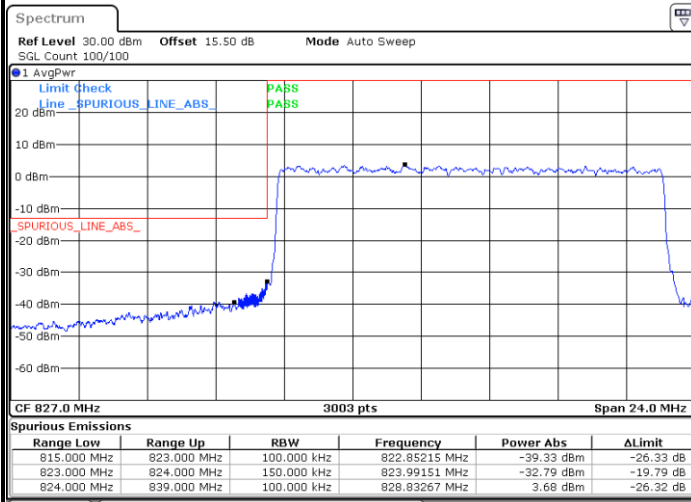
## Highest Band Edge



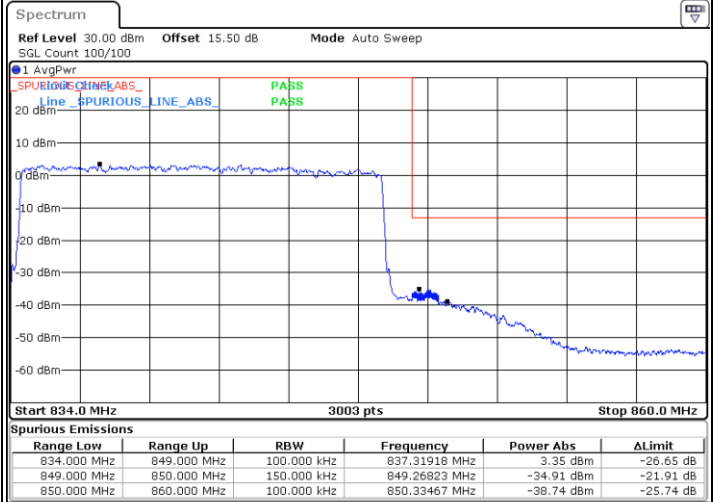


## FR1 n5 / 15MHz / DFT-s-OFDM / 64QAM / Full RB

## Lowest Band Edge

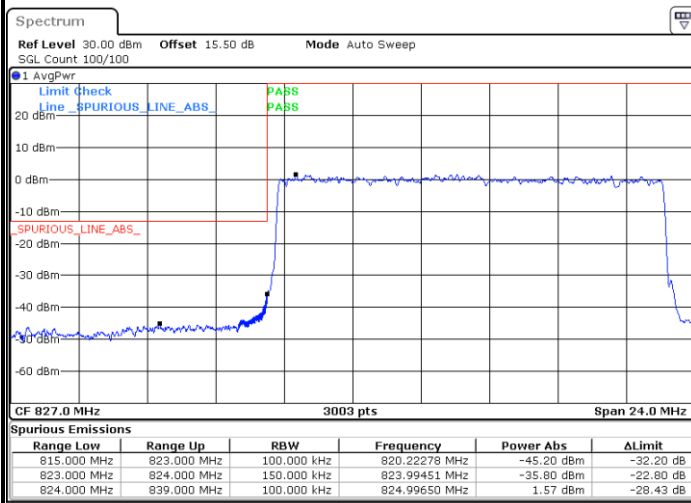


## Highest Band Edge

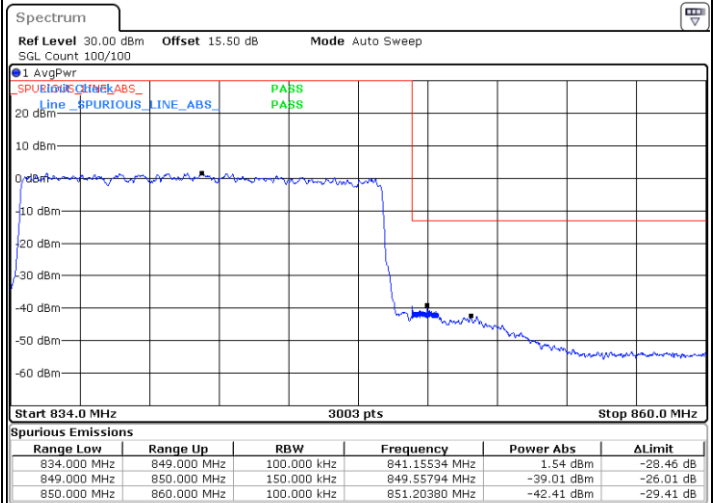


## FR1 n5 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

## Lowest Band Edge



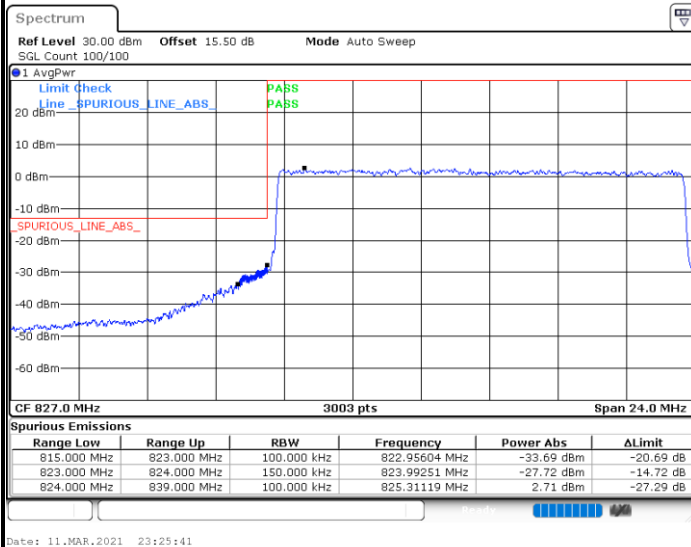
## Highest Band Edge



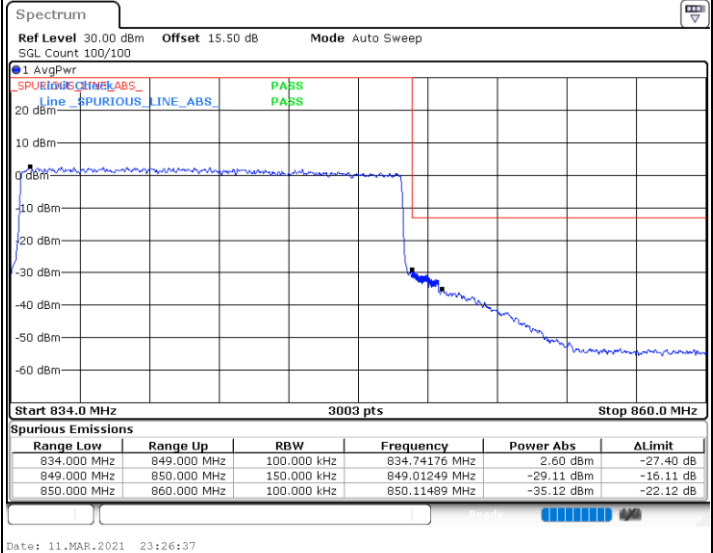


## FR1 n5 / 15MHz / CP OFDM / QPSK / Full RB

## Lowest Band Edge

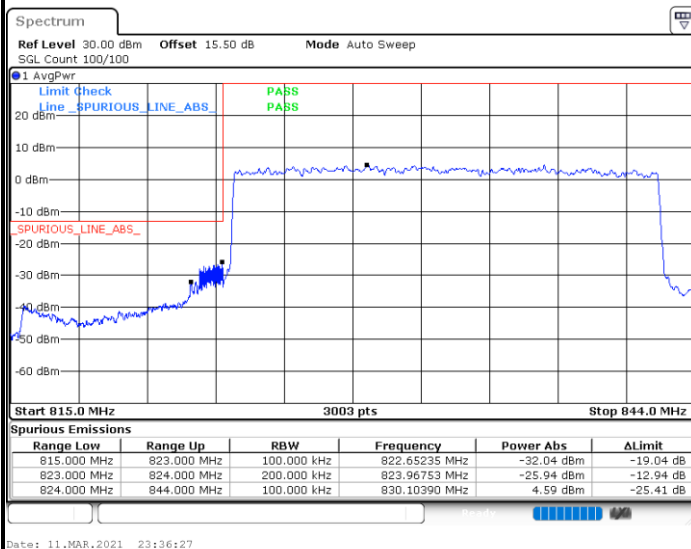


## Highest Band Edge

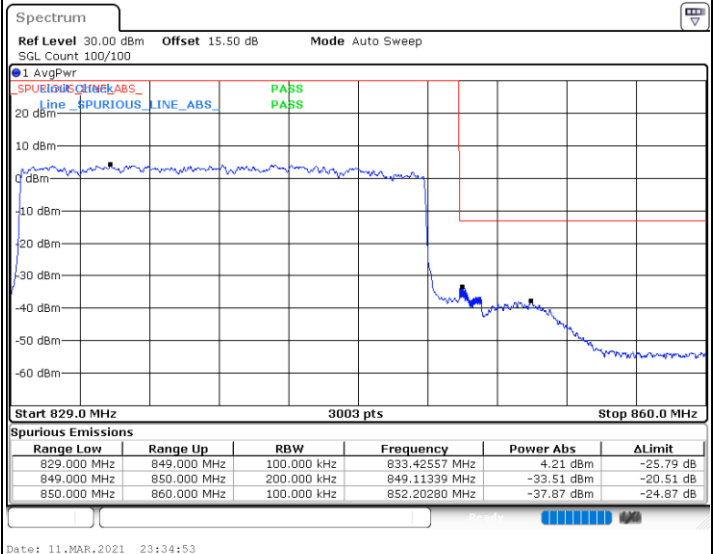


## FR1 n5 / 20MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

## Lowest Band Edge



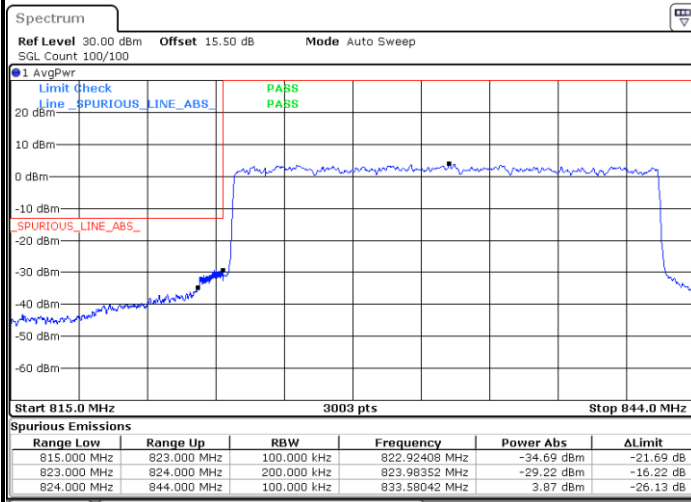
## Highest Band Edge



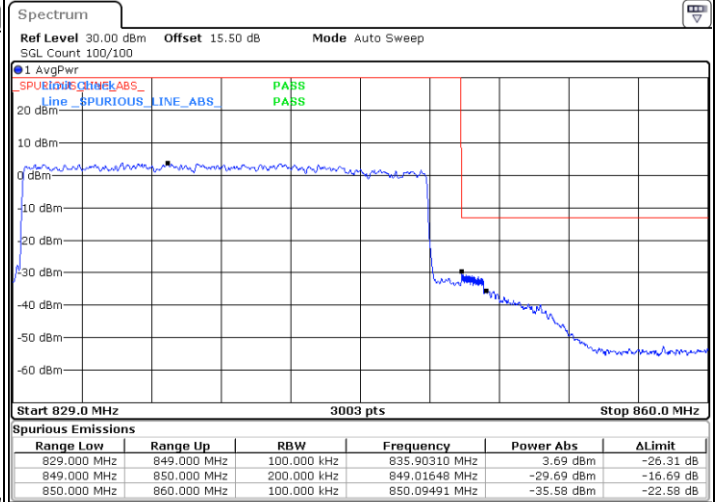


## FR1 n5 / 20MHz / DFT-s-OFDM / QPSK / Full RB

## Lowest Band Edge

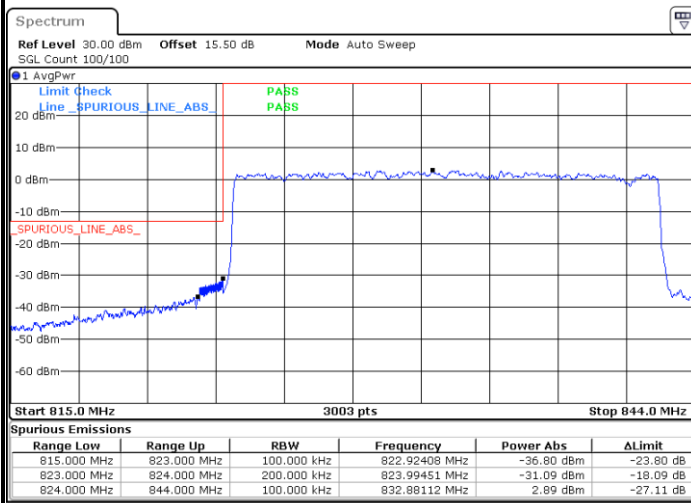


## Highest Band Edge



## FR1 n5 / 20MHz / DFT-s-OFDM / 16QAM / Full RB

## Lowest Band Edge



## Highest Band Edge

