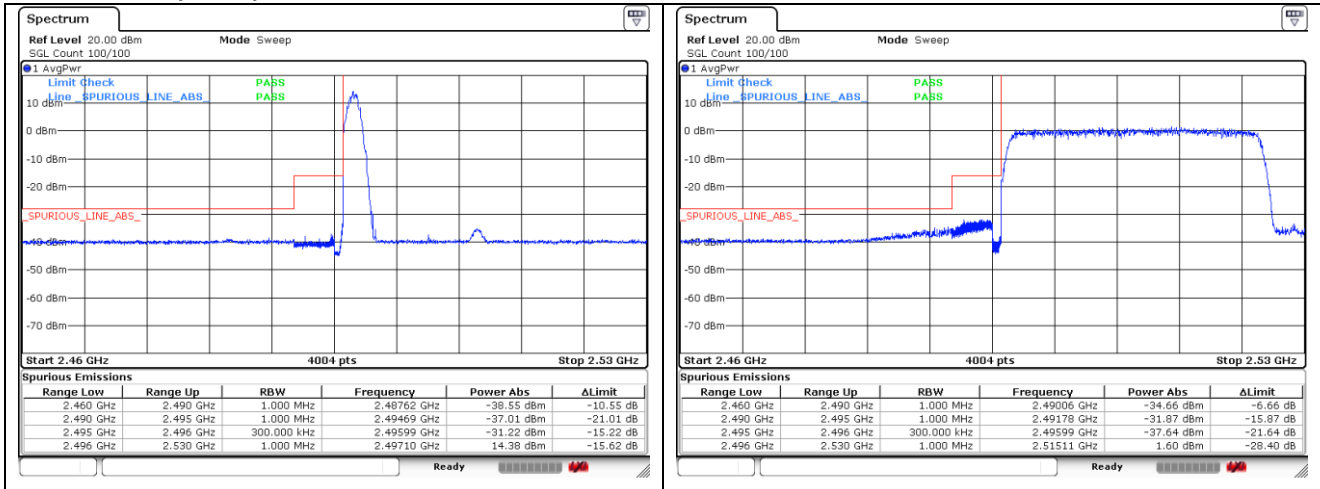
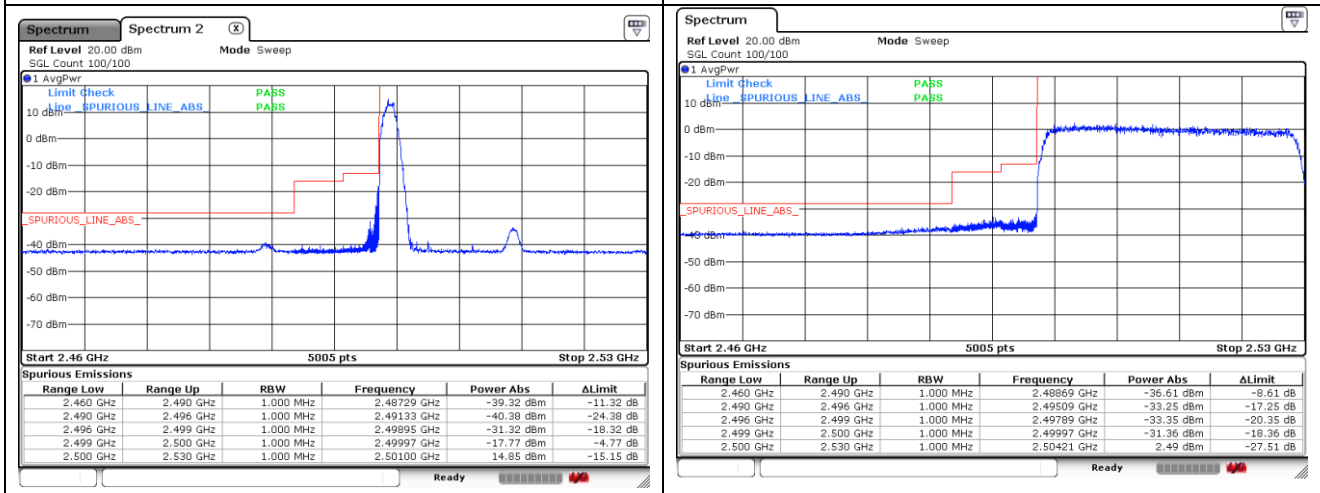


**NR band 41 (30 MHz)**



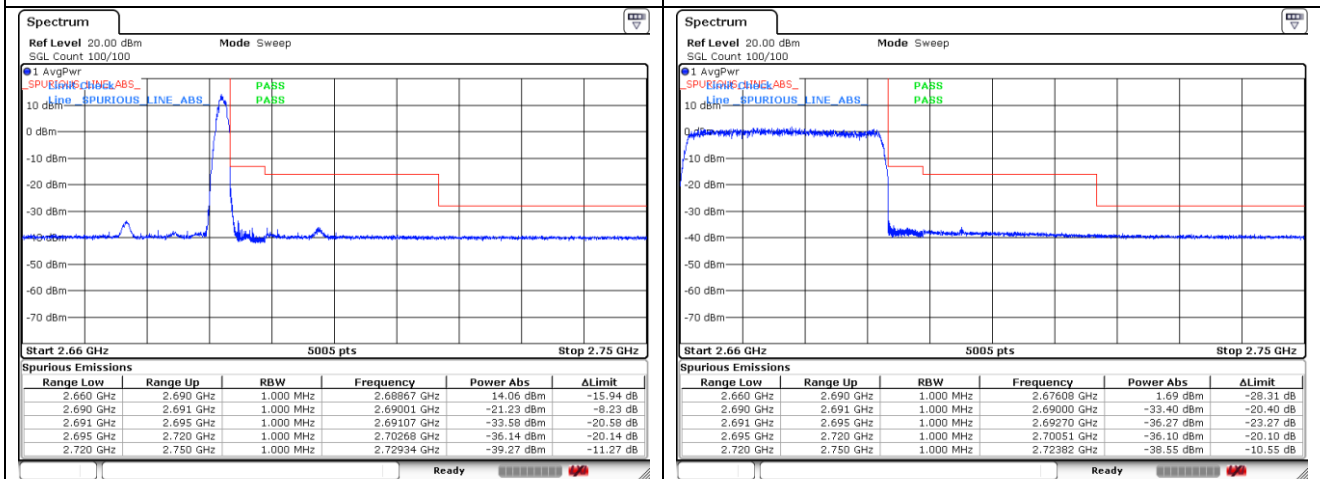
**CP-OFDM QPSK - FCC Low Channel - 1 RB**

**CP-OFDM QPSK - FCC Low Channel - Full RB**



**CP-OFDM QPSK - IC Low Channel - 1 RB**

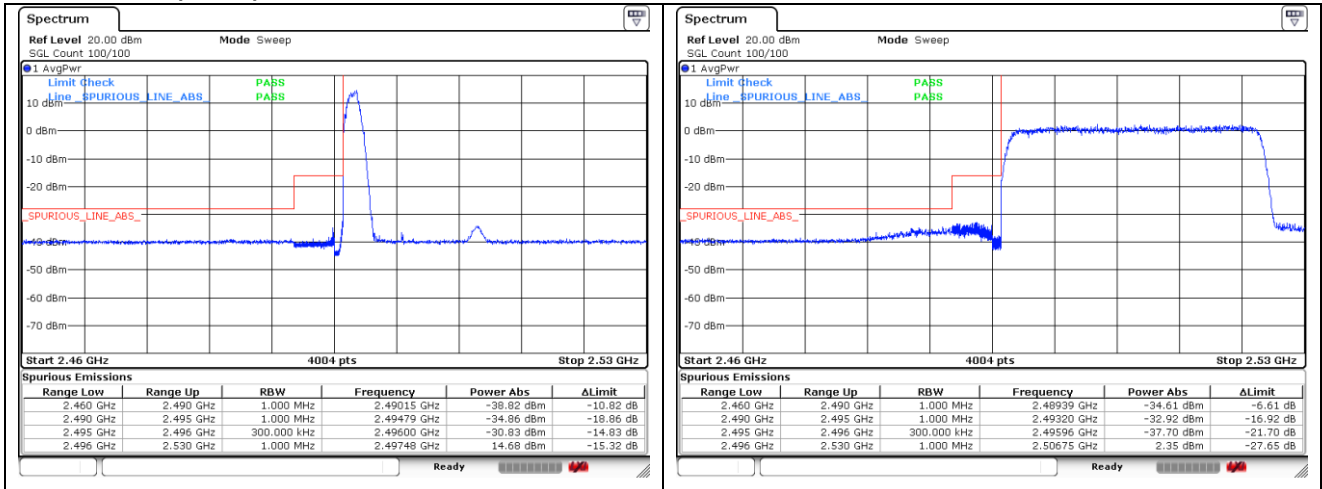
**CP-OFDM QPSK - IC Low Channel - Full RB**



**CP-OFDM QPSK - High Channel - 1 RB**

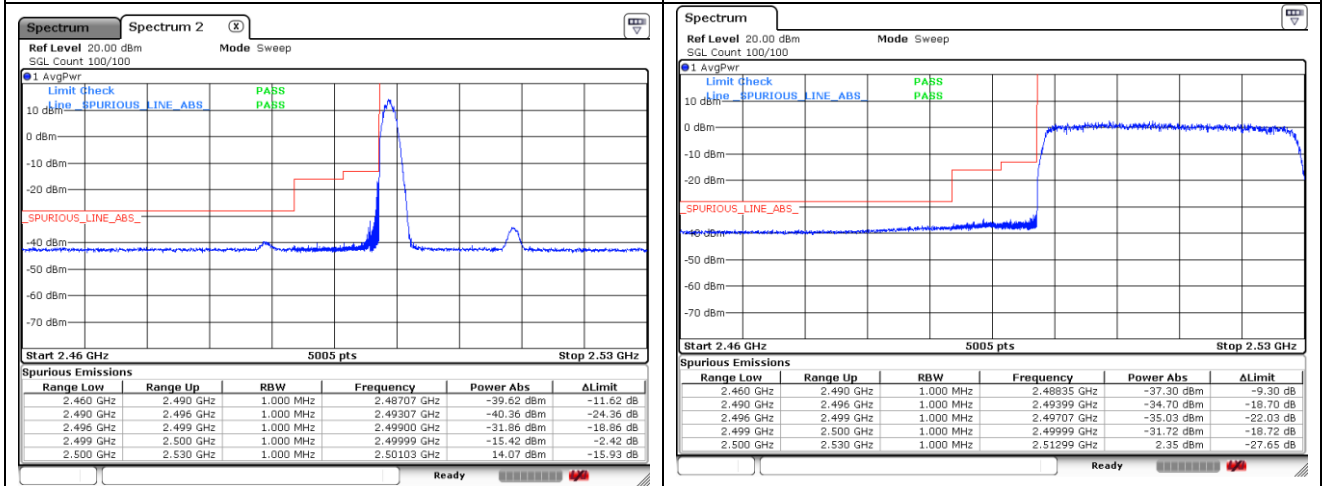
**CP-OFDM QPSK - High Channel - Full RB**

**NR band 41 (30 MHz)**



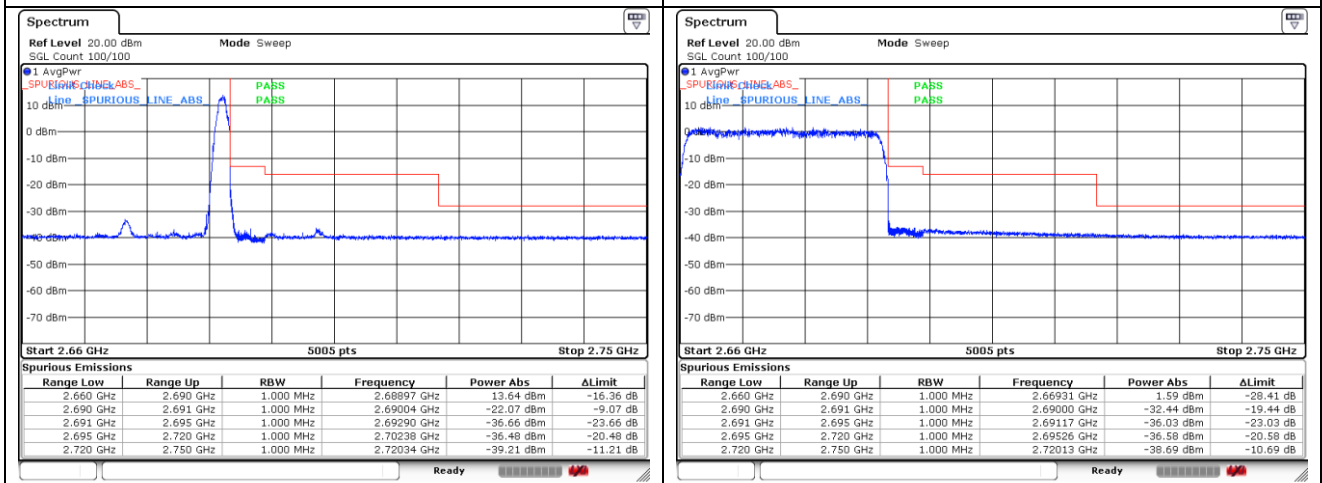
**CP-OFDM 16QAM - FCC Low Channel - 1 RB**

**CP-OFDM 16QAM - FCC Low Channel - Full RB**



**CP-OFDM 16QAM - IC Low Channel - 1 RB**

**CP-OFDM 16QAM - IC Low Channel - Full RB**

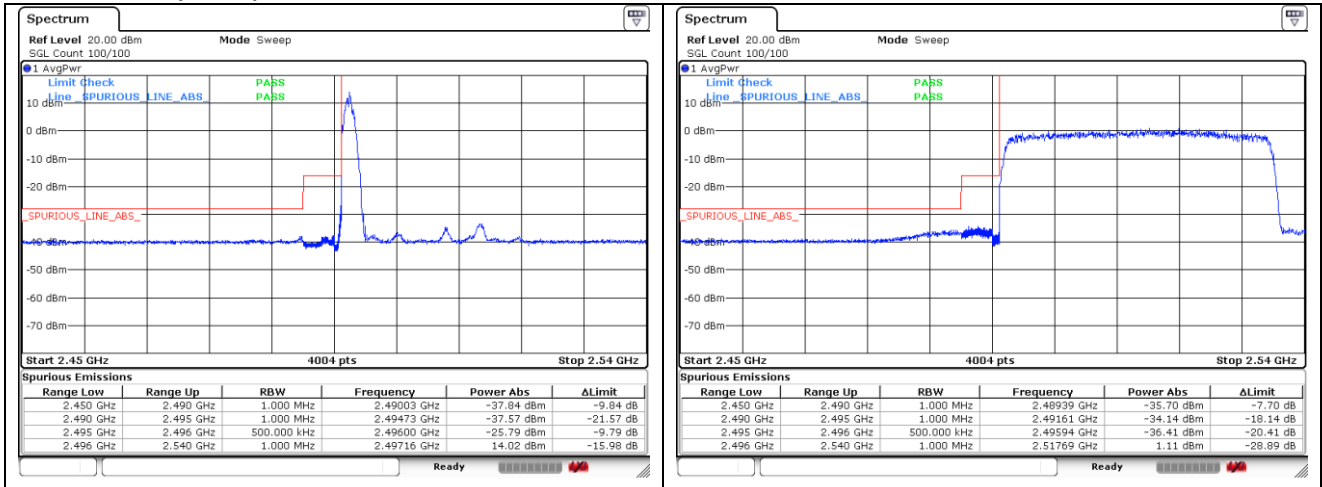


**CP-OFDM 16QAM - High Channel - 1 RB**

**CP-OFDM 16QAM - High Channel - Full RB**

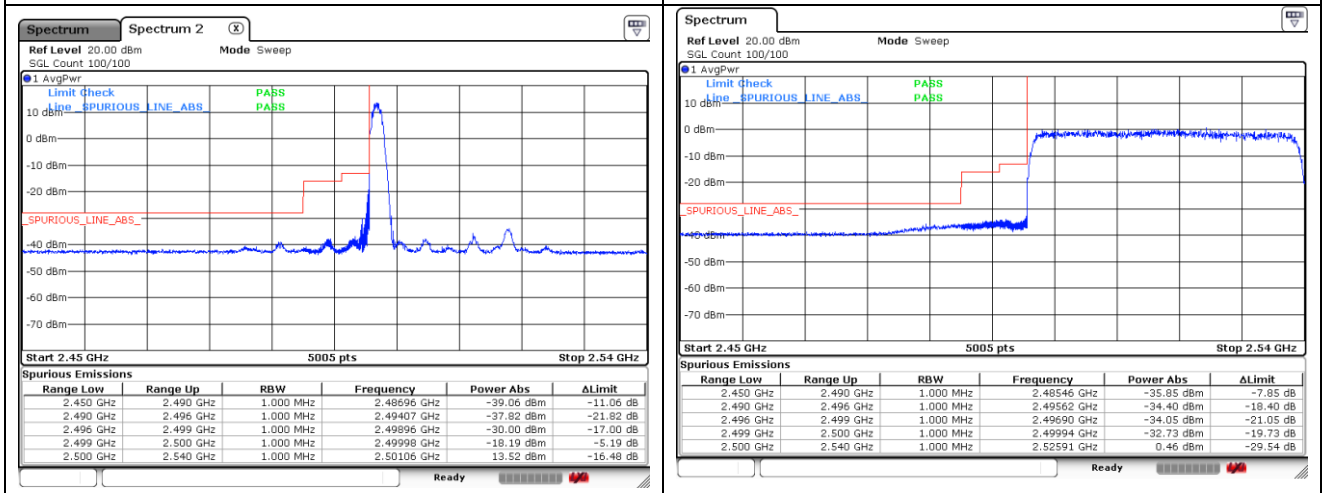


**NR band 41 (40 MHz)**



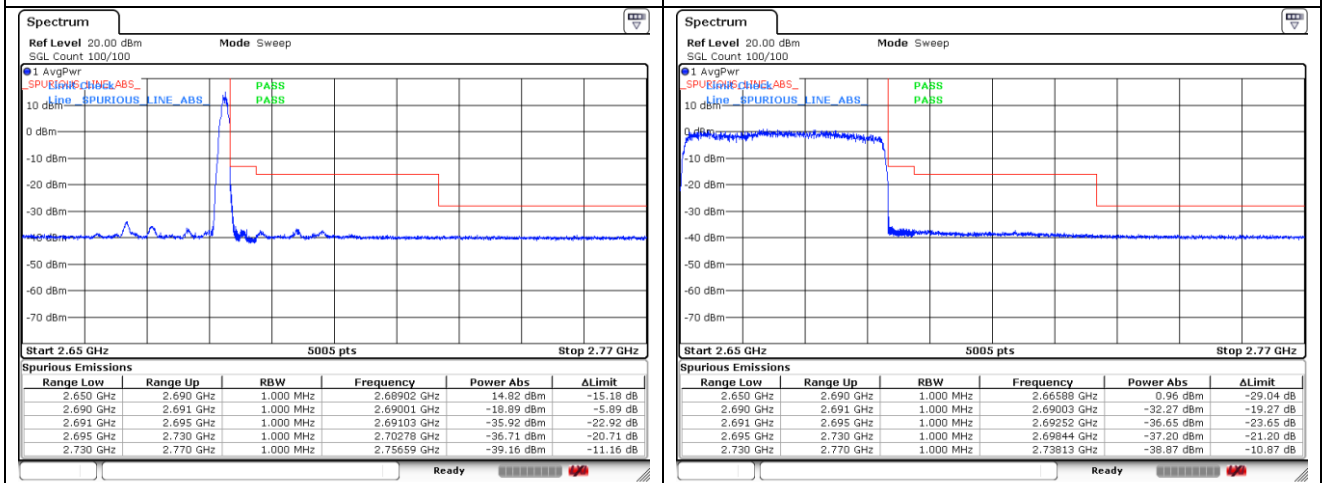
**CP-OFDM QPSK - FCC Low Channel - 1 RB**

**CP-OFDM QPSK - FCC Low Channel - Full RB**



**CP-OFDM QPSK - IC Low Channel - 1 RB**

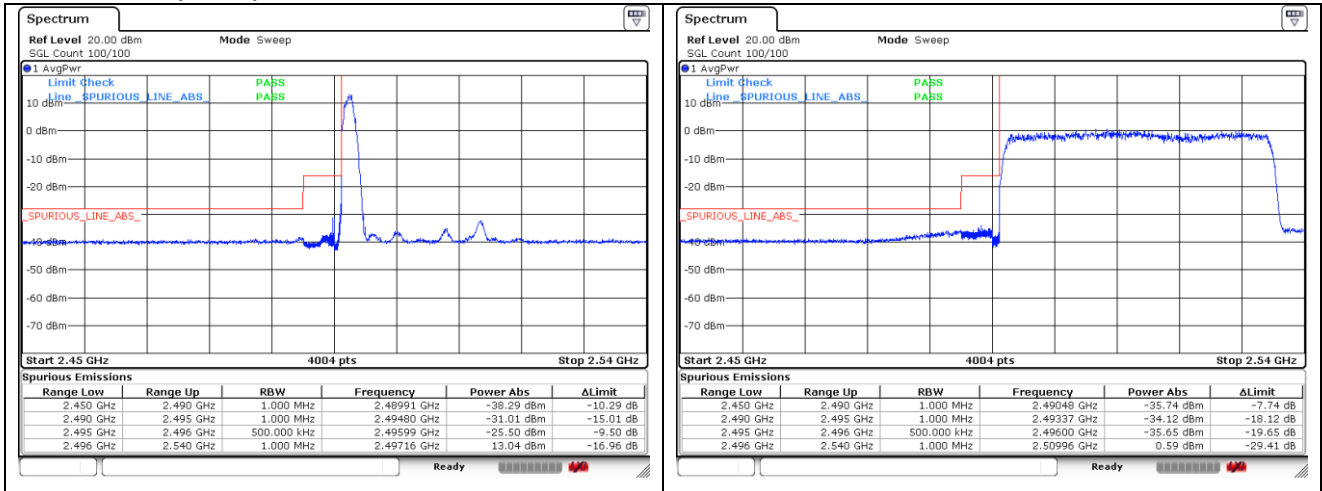
**CP-OFDM QPSK - IC Low Channel - Full RB**



**CP-OFDM QPSK - High Channel - 1 RB**

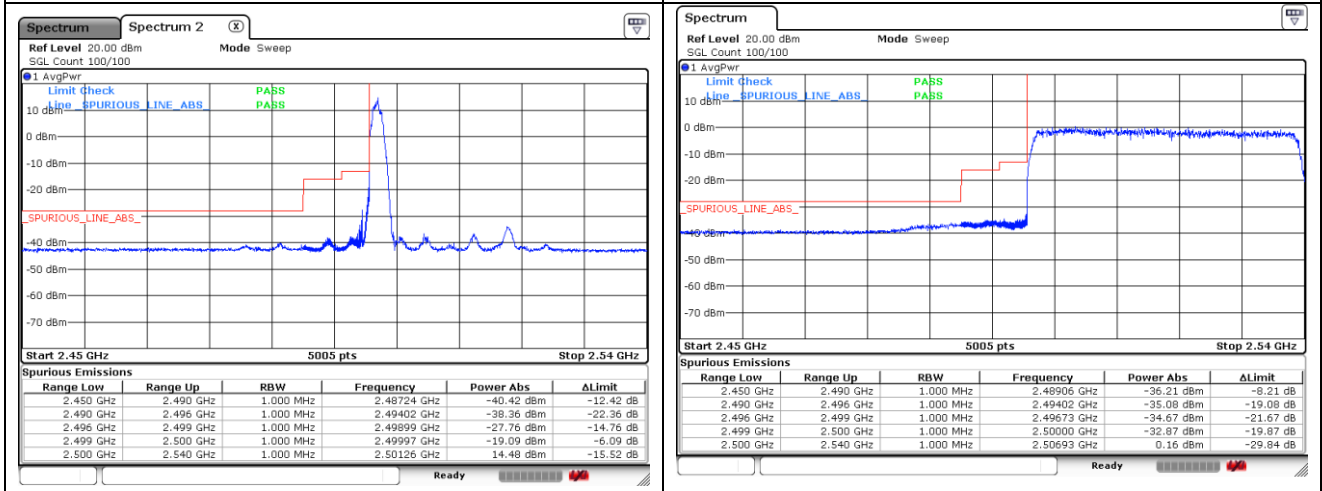
**CP-OFDM QPSK - High Channel - Full RB**

**NR band 41 (40 MHz)**



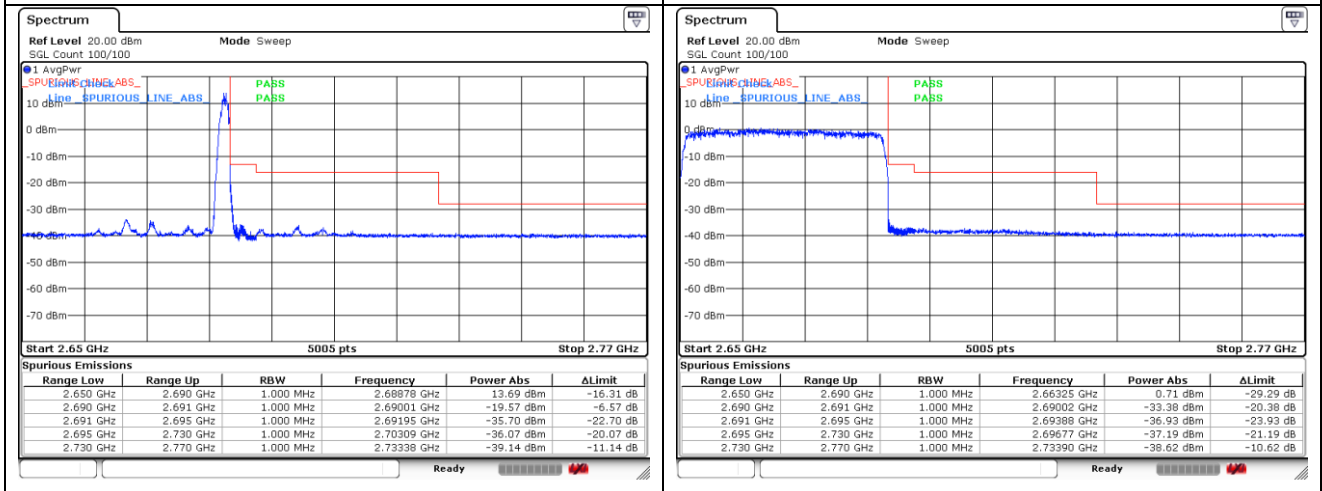
**CP-OFDM 16QAM - FCC Low Channel - 1 RB**

**CP-OFDM 16QAM - FCC Low Channel - Full RB**



**CP-OFDM 16QAM - IC Low Channel - 1 RB**

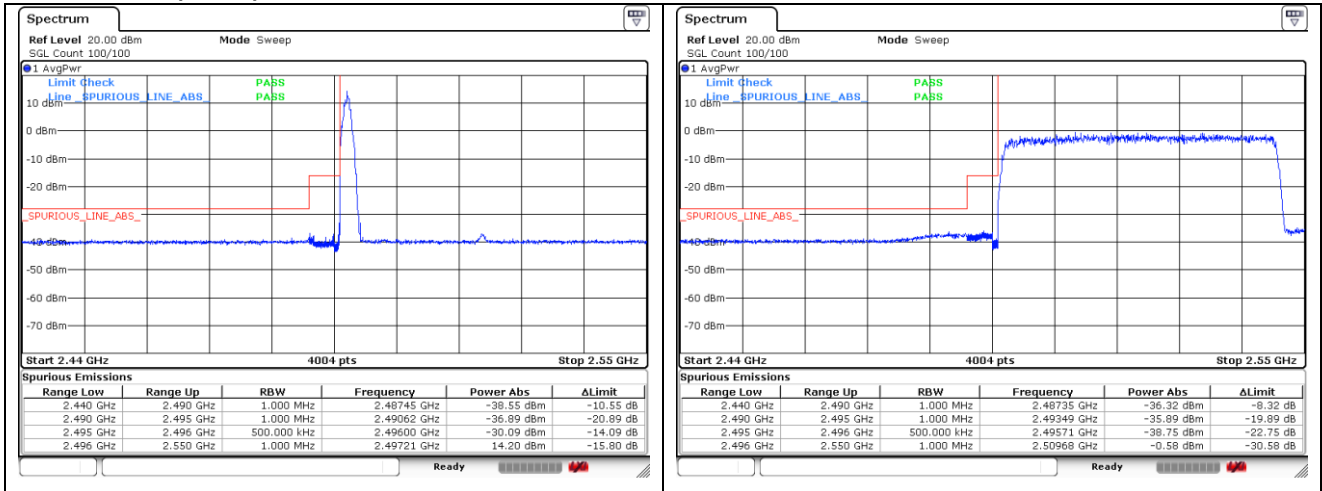
**CP-OFDM 16QAM - IC Low Channel - Full RB**



**CP-OFDM 16QAM - High Channel - 1 RB**

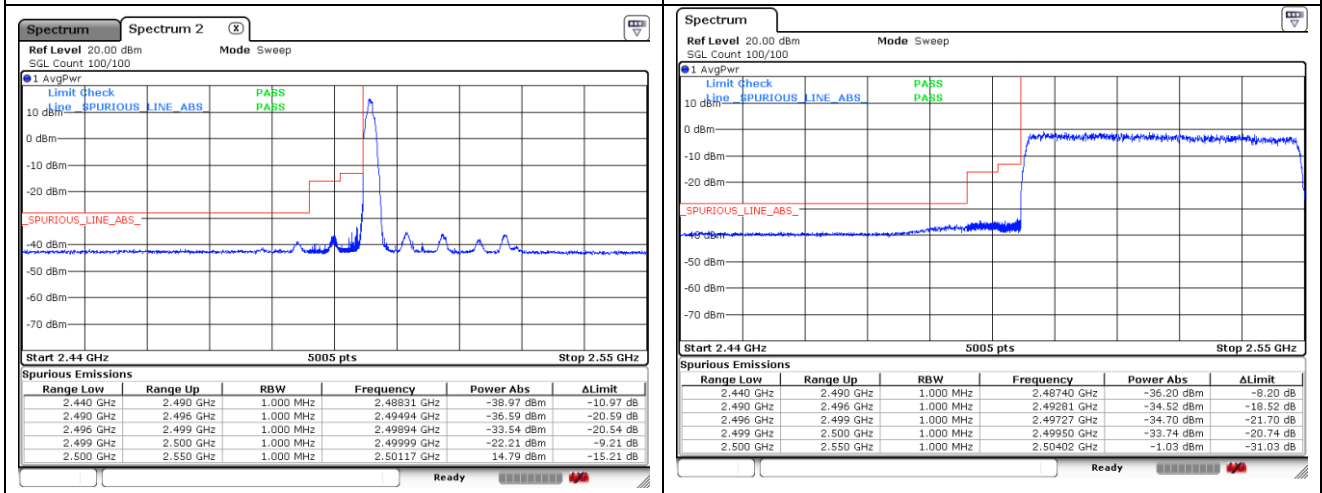
**CP-OFDM 16QAM - High Channel - Full RB**

**NR band 41 (50 MHz)**



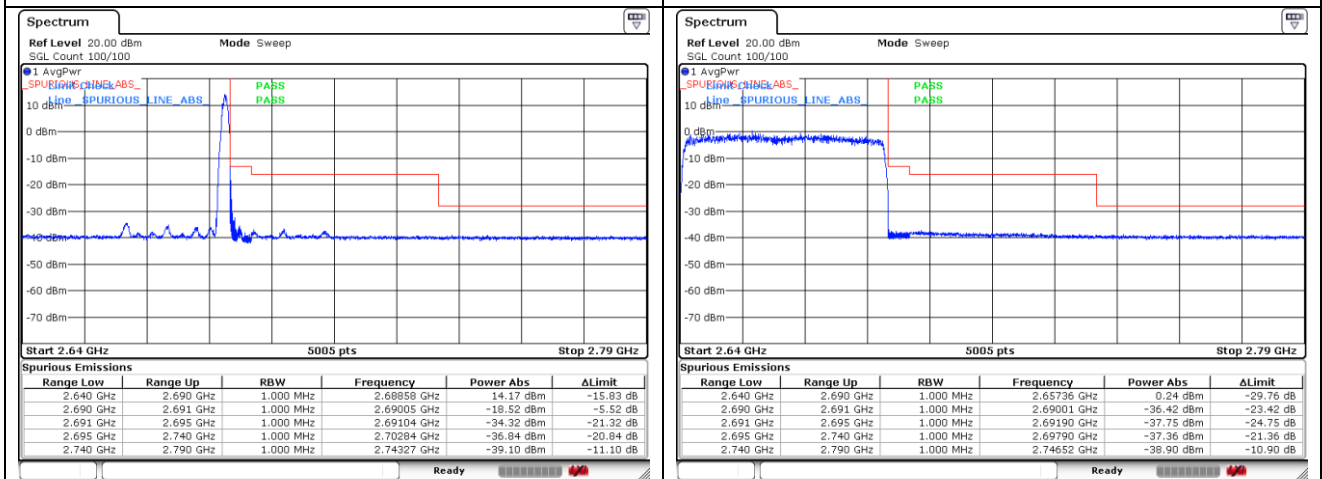
**CP-OFDM QPSK - FCC Low Channel - 1 RB**

**CP-OFDM QPSK - FCC Low Channel - Full RB**



**CP-OFDM QPSK - IC Low Channel - 1 RB**

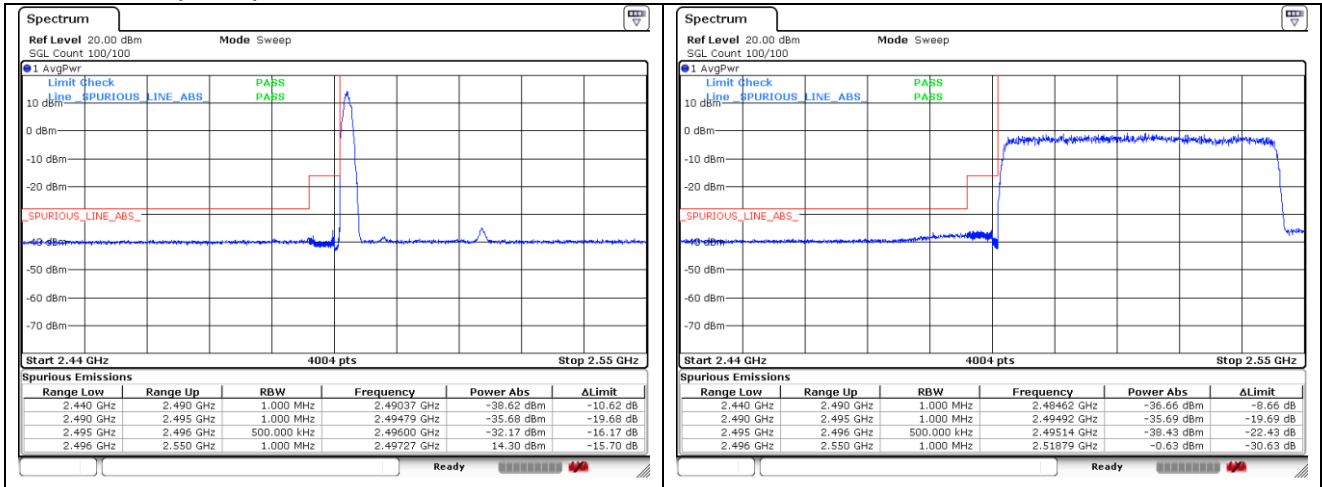
**CP-OFDM QPSK - IC Low Channel - Full RB**



**CP-OFDM QPSK - High Channel - 1 RB**

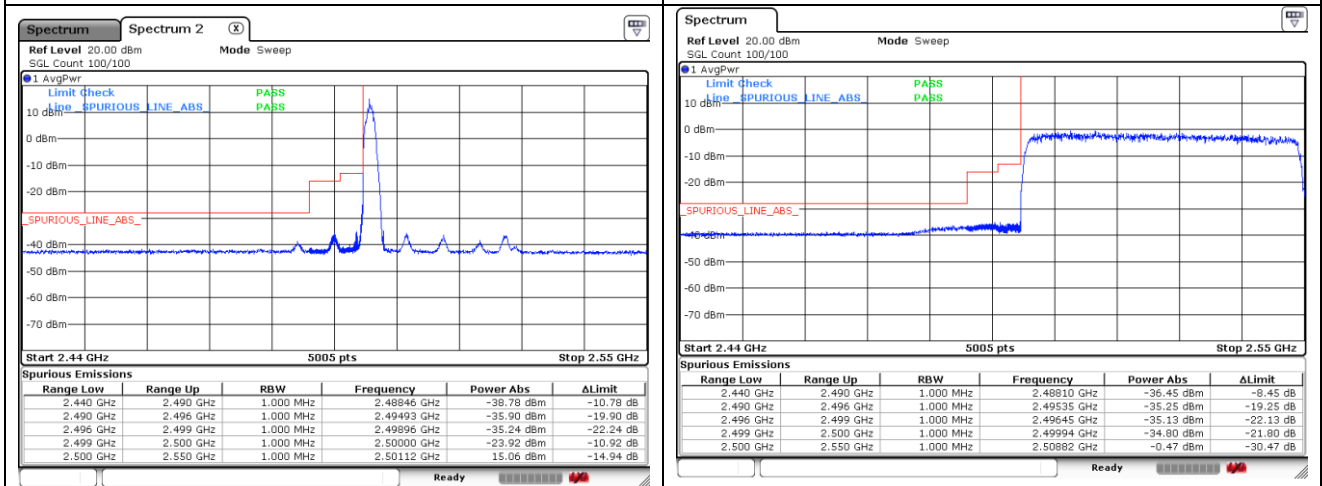
**CP-OFDM QPSK - High Channel - Full RB**

**NR band 41 (50 MHz)**



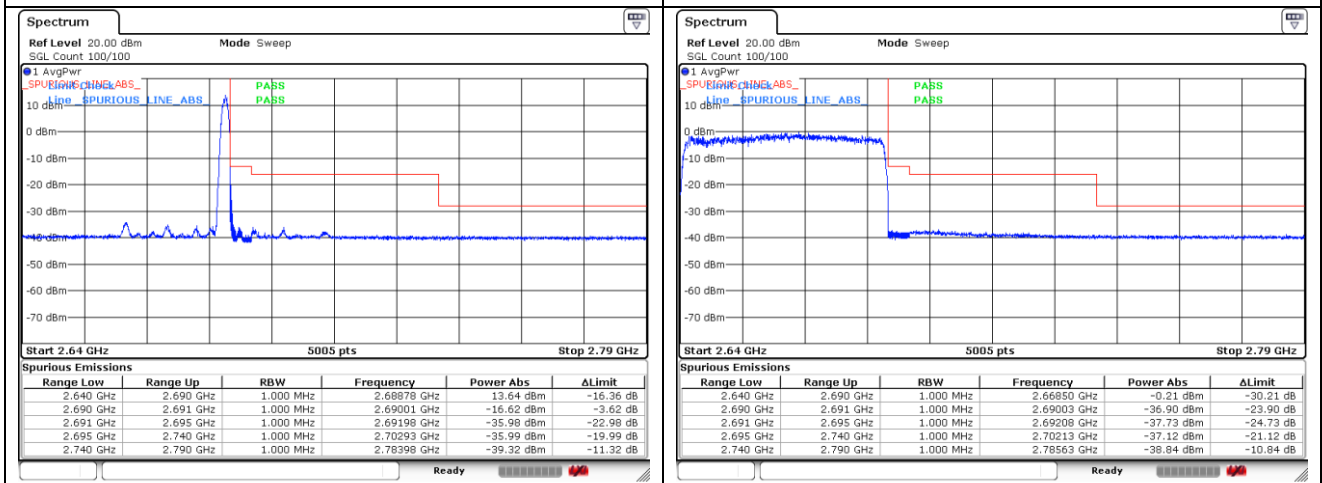
**CP-OFDM 16QAM - FCC Low Channel - 1 RB**

**CP-OFDM 16QAM - FCC Low Channel - Full RB**



**CP-OFDM 16QAM - IC Low Channel - 1 RB**

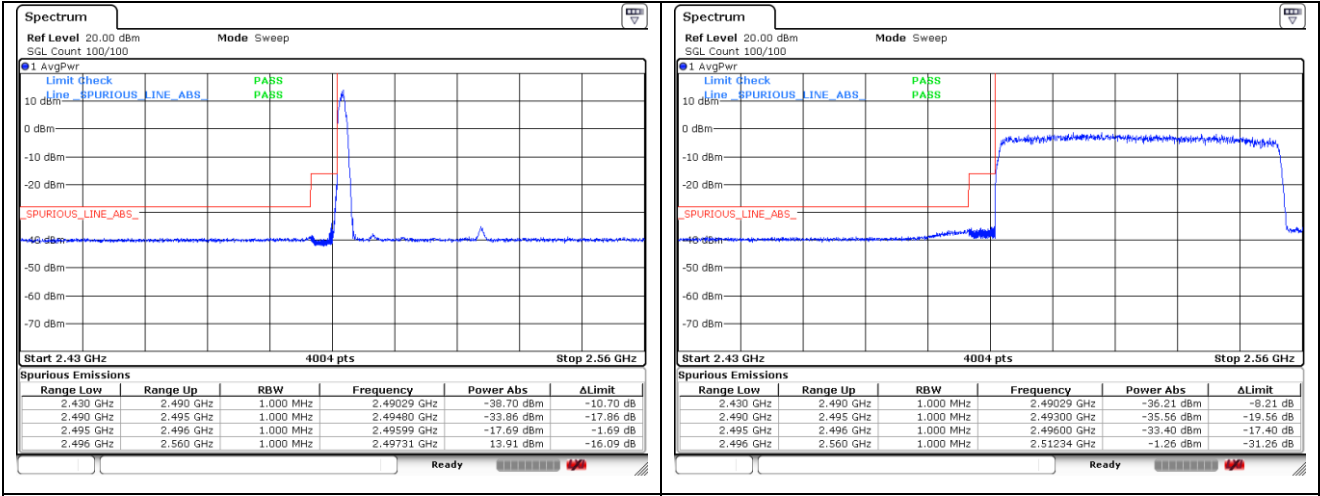
**CP-OFDM 16QAM - IC Low Channel - Full RB**



**CP-OFDM 16QAM - High Channel - 1 RB**

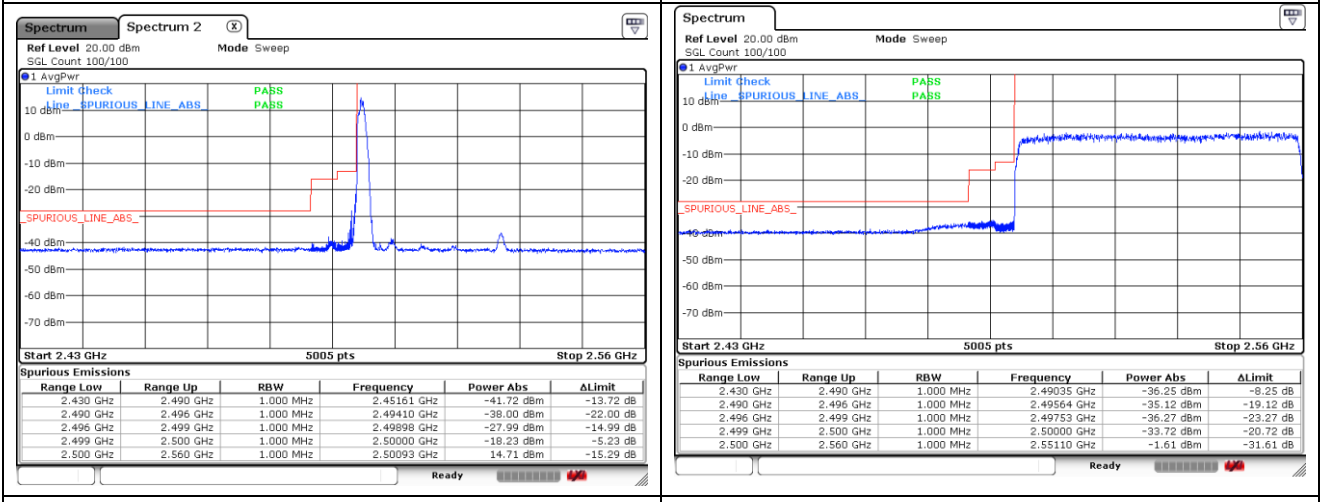
**CP-OFDM 16QAM - High Channel - Full RB**

**NR band 41 (60 MHz)**



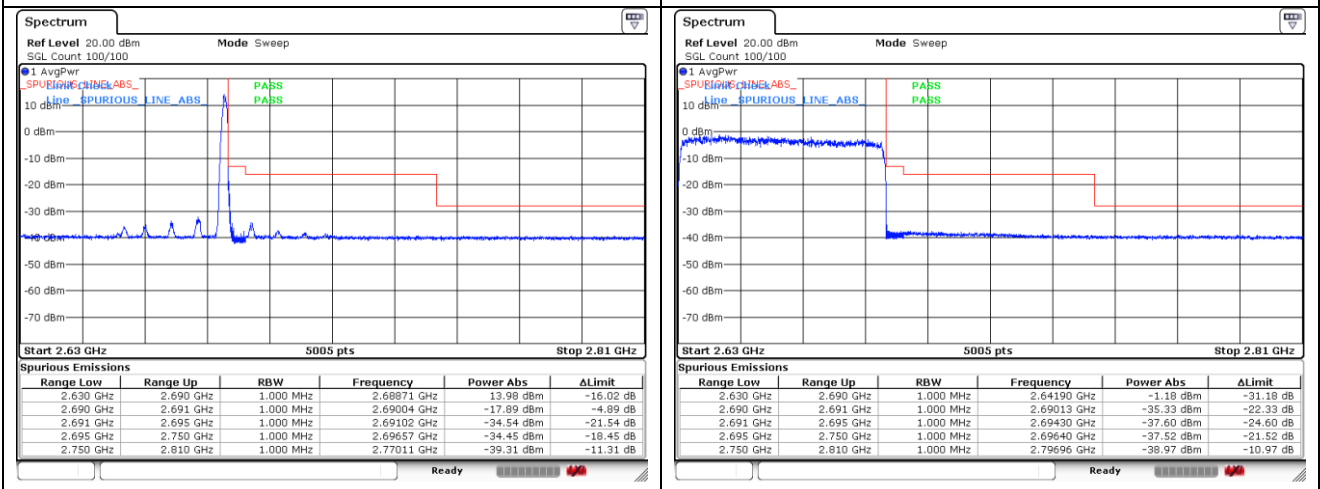
**CP-OFDM QPSK - FCC Low Channel - 1 RB**

**CP-OFDM QPSK - FCC Low Channel - Full RB**



**CP-OFDM QPSK - IC Low Channel - 1 RB**

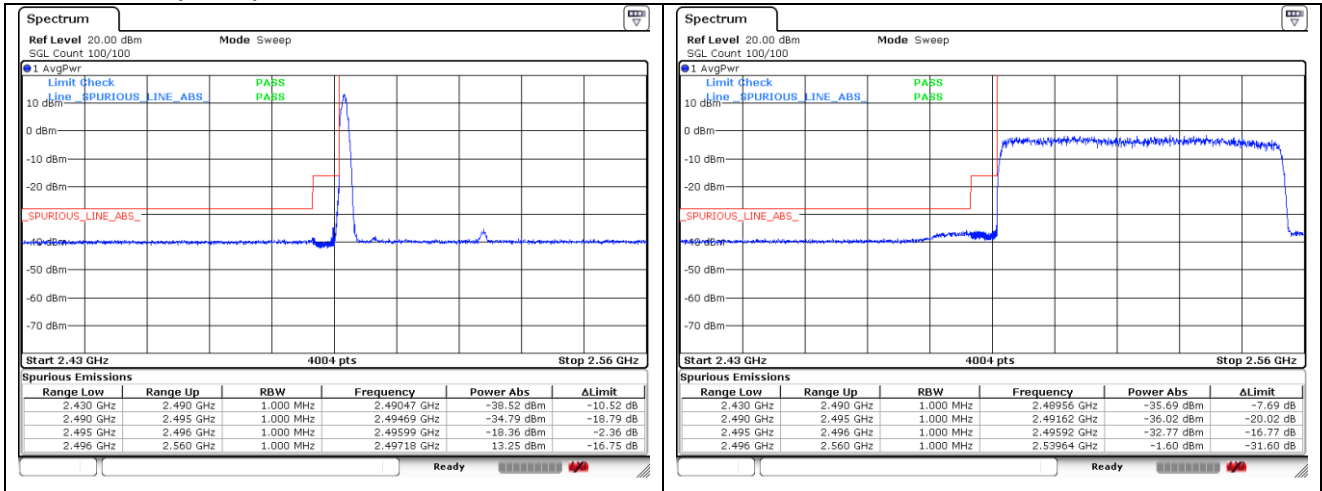
**CP-OFDM QPSK - IC Low Channel - Full RB**



**CP-OFDM QPSK - High Channel - 1 RB**

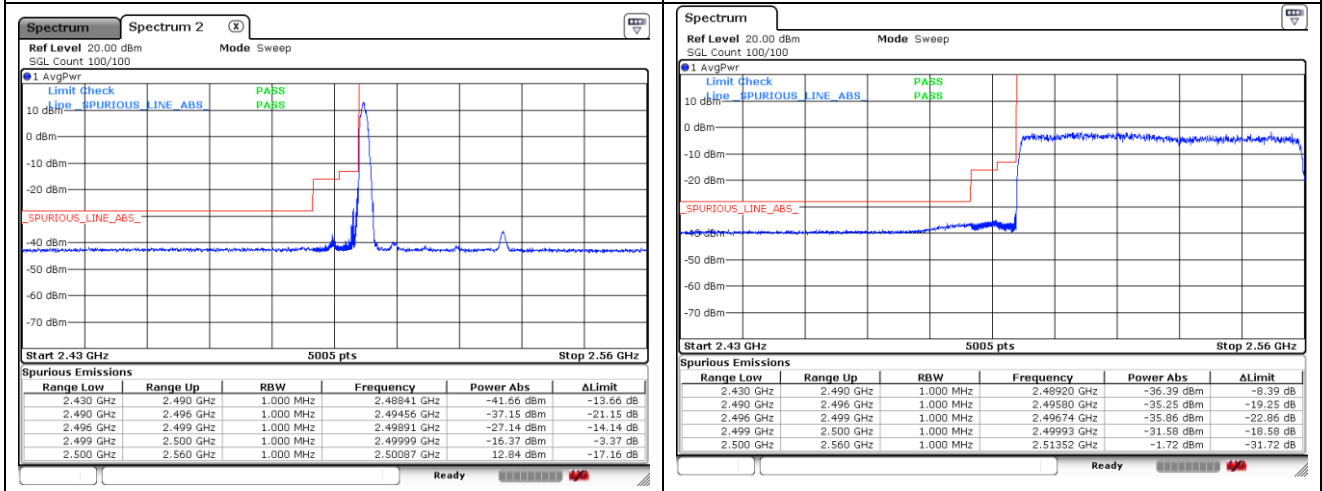
**CP-OFDM QPSK - High Channel - Full RB**

**NR band 41 (60 MHz)**



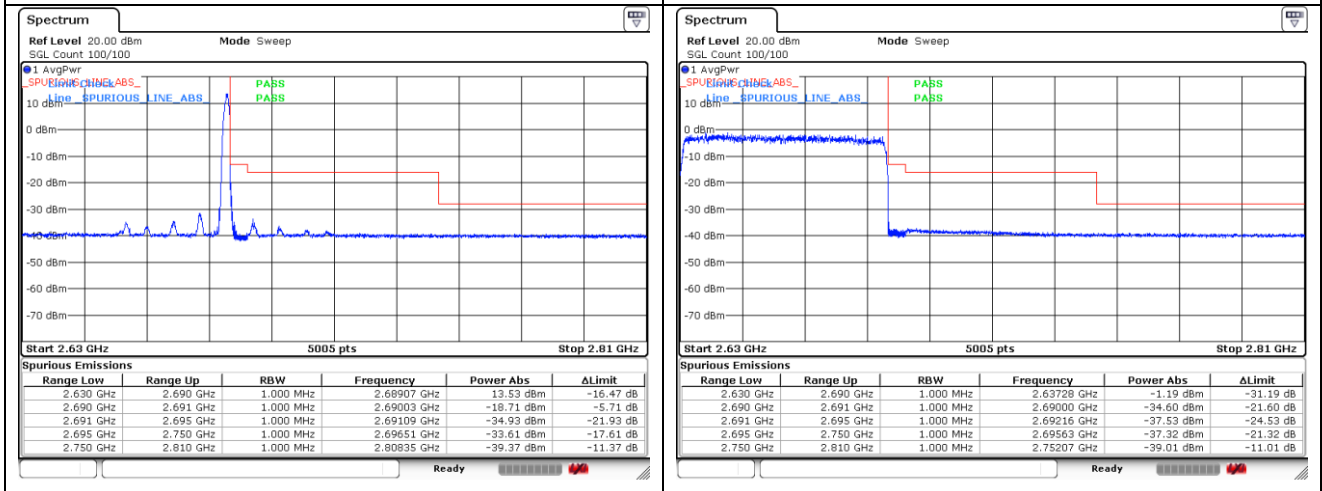
**CP-OFDM 16QAM - FCC Low Channel - 1 RB**

**CP-OFDM 16QAM - FCC Low Channel - Full RB**



**CP-OFDM 16QAM - IC Low Channel - 1 RB**

**CP-OFDM 16QAM - IC Low Channel - Full RB**

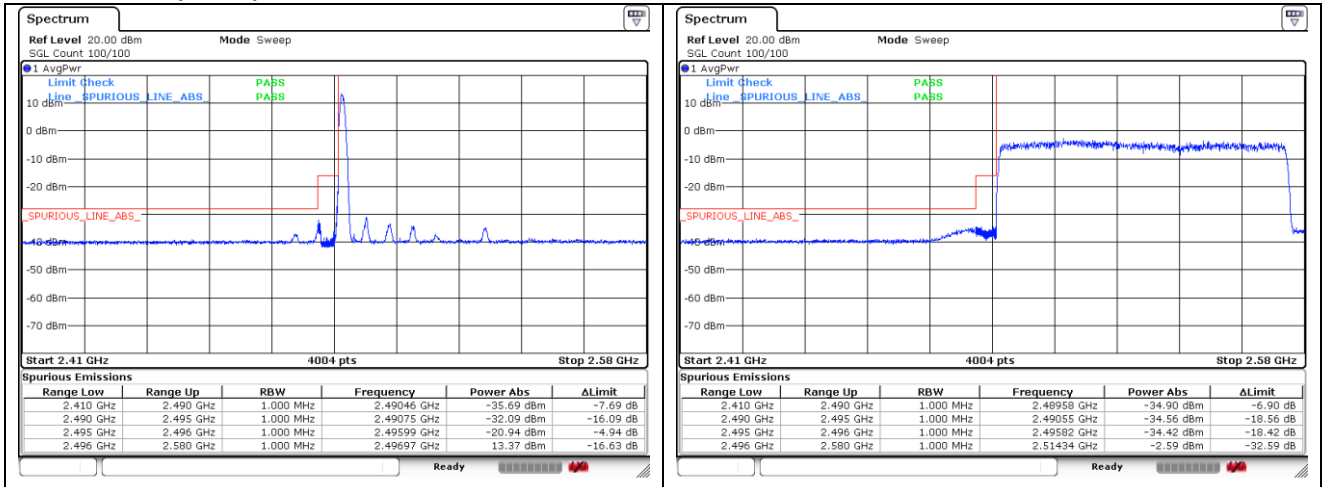


**CP-OFDM 16QAM - High Channel - 1 RB**

**CP-OFDM 16QAM - High Channel - Full RB**

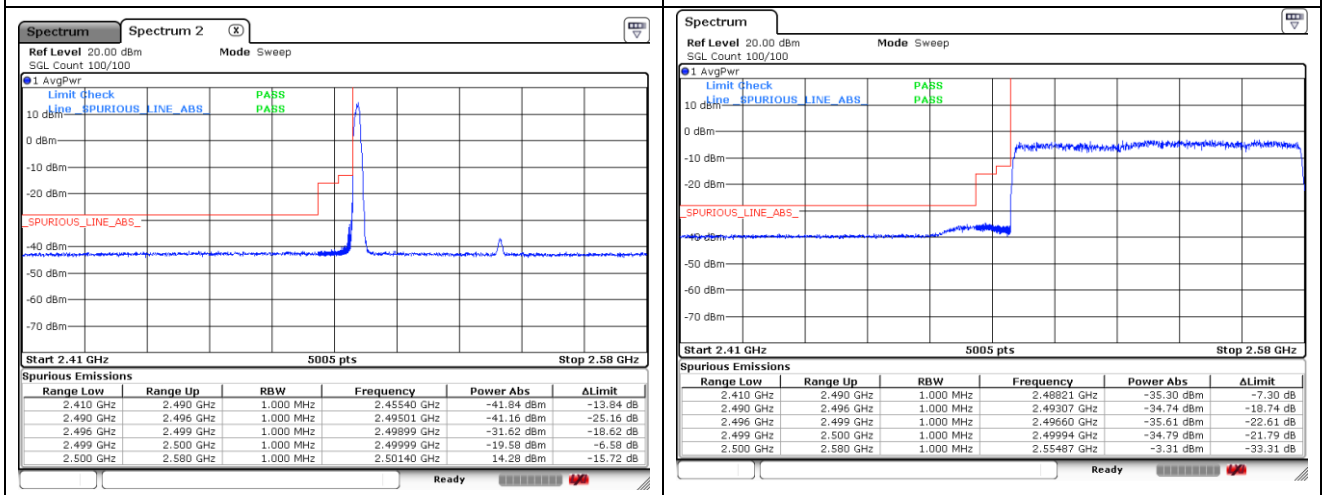


**NR band 41 (80 MHz)**



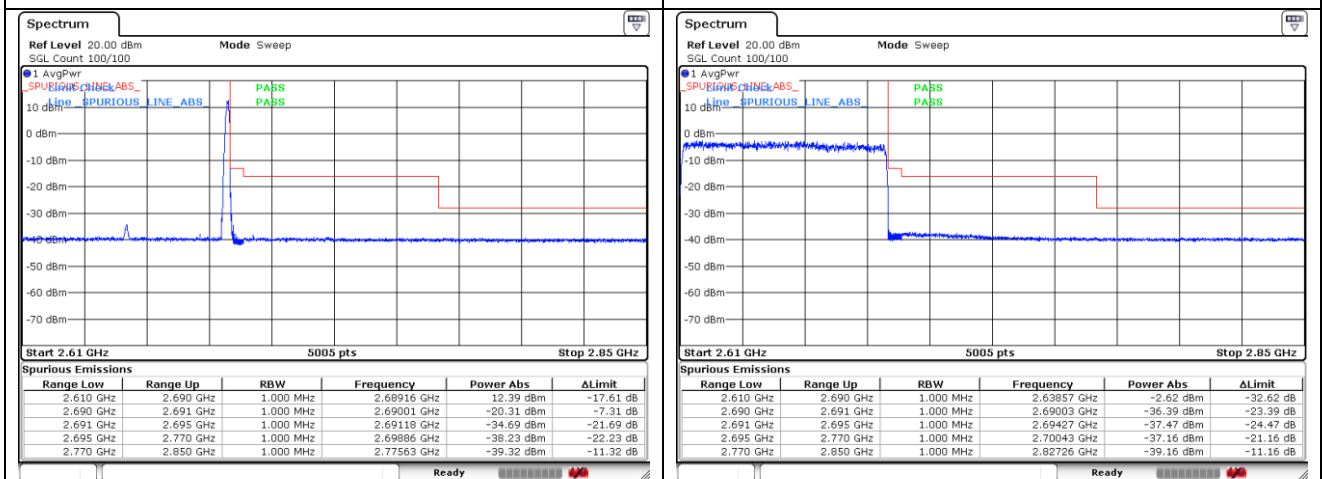
**CP-OFDM QPSK - FCC Low Channel - 1 RB**

**CP-OFDM QPSK - FCC Low Channel - Full RB**



**CP-OFDM QPSK - IC Low Channel - 1 RB**

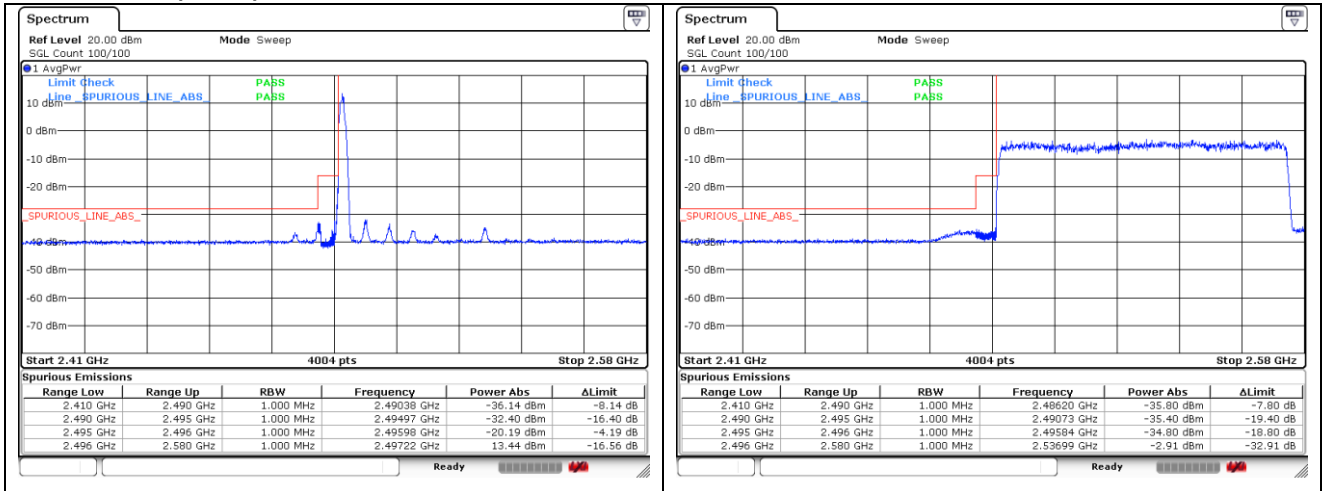
**CP-OFDM QPSK - IC Low Channel - Full RB**



**CP-OFDM QPSK - High Channel - 1 RB**

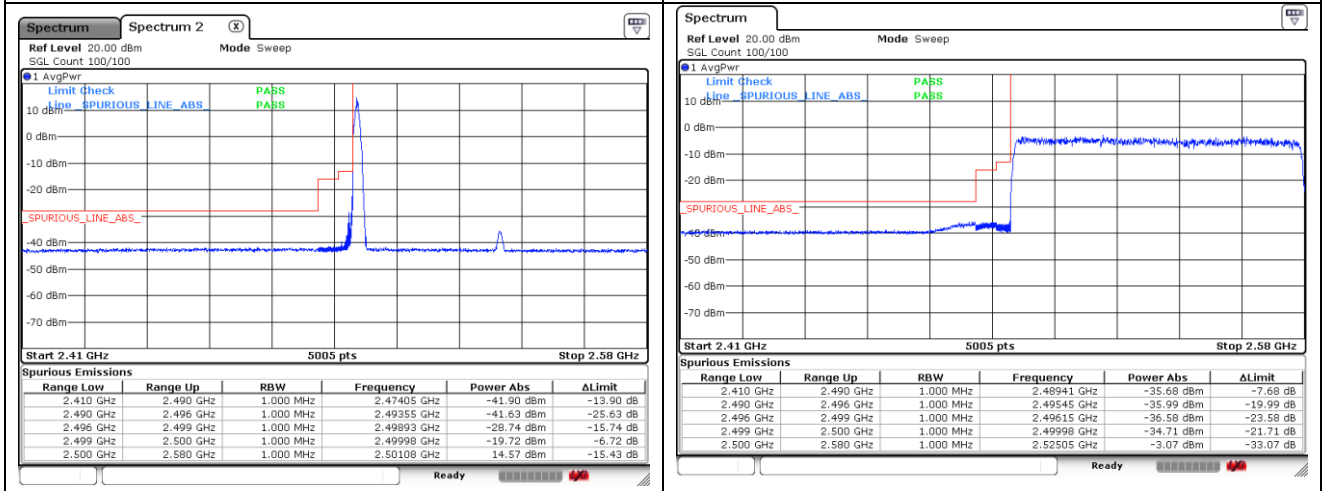
**CP-OFDM QPSK - High Channel - Full RB**

**NR band 41 (80 MHz)**



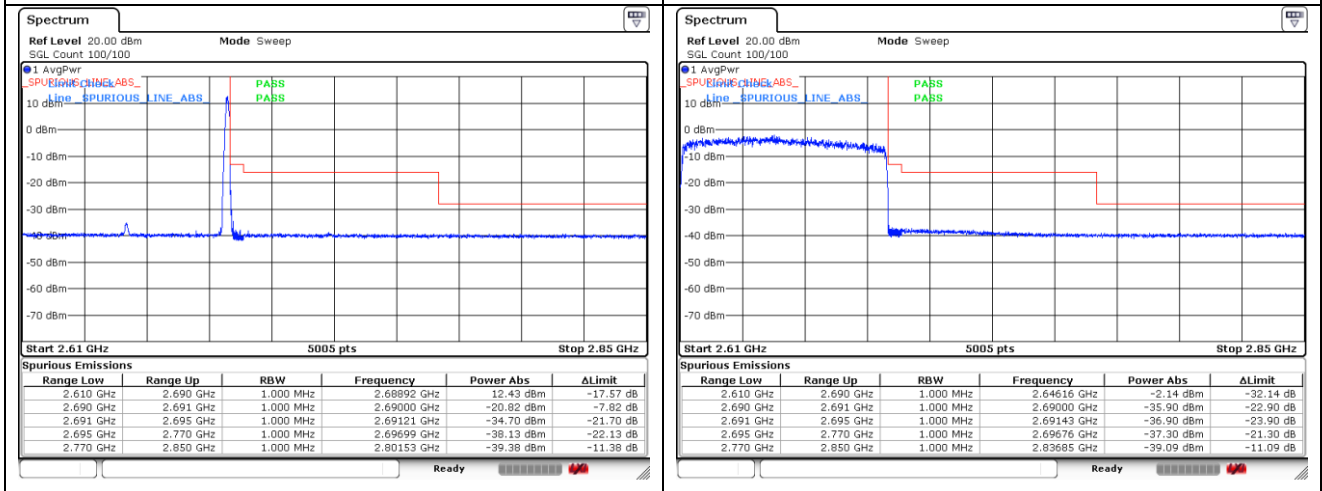
**CP-OFDM 16QAM - FCC Low Channel - 1 RB**

**CP-OFDM 16QAM - FCC Low Channel - Full RB**



**CP-OFDM 16QAM - IC Low Channel - 1 RB**

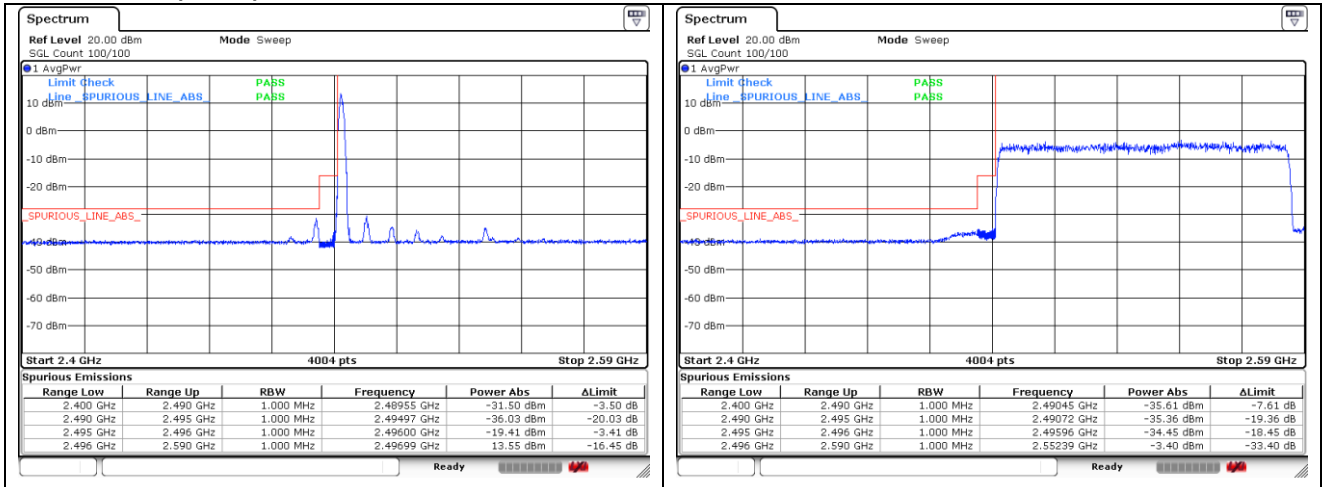
**CP-OFDM 16QAM - IC Low Channel - Full RB**



**CP-OFDM 16QAM - High Channel - 1 RB**

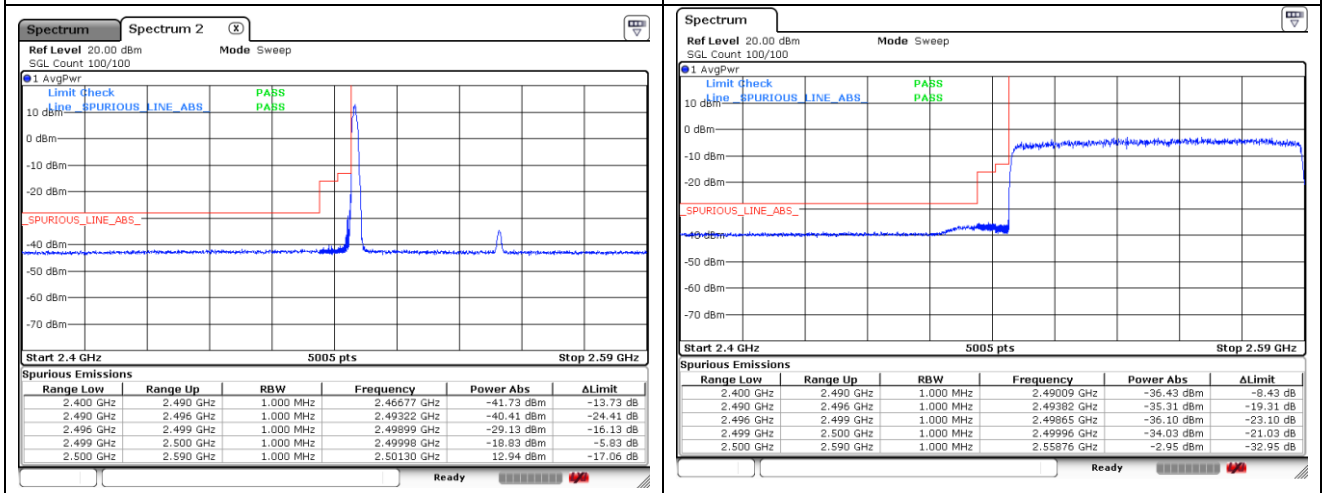
**CP-OFDM 16QAM - High Channel - Full RB**

**NR band 41 (90 MHz)**



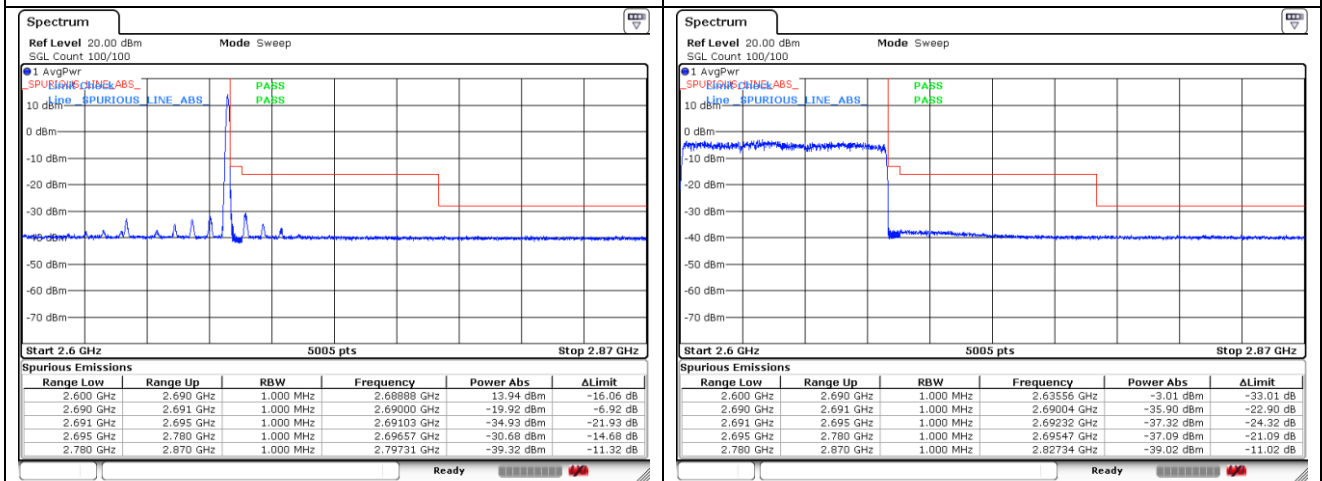
**CP-OFDM QPSK - FCC Low Channel - 1 RB**

**CP-OFDM QPSK - FCC Low Channel - Full RB**



**CP-OFDM QPSK - IC Low Channel - 1 RB**

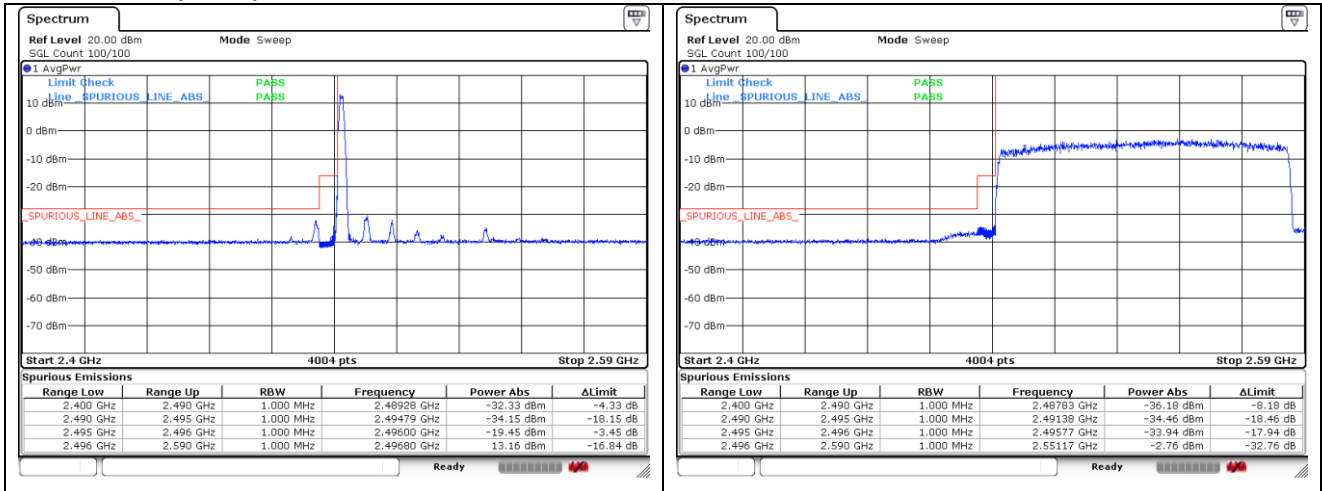
**CP-OFDM QPSK - IC Low Channel - Full RB**



**CP-OFDM QPSK - High Channel - 1 RB**

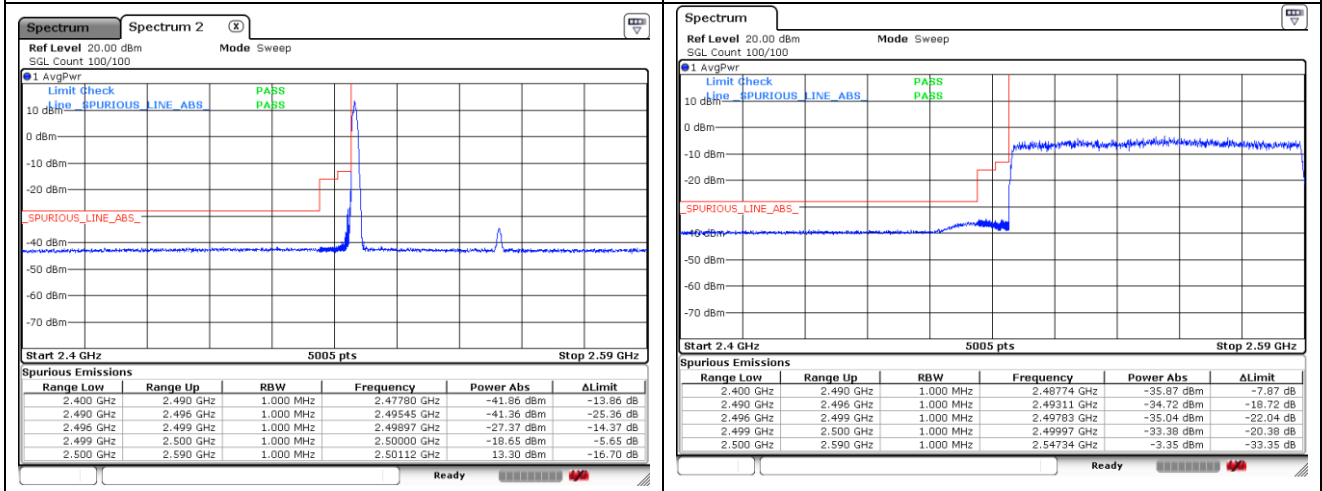
**CP-OFDM QPSK - High Channel - Full RB**

**NR band 41 (90 MHz)**



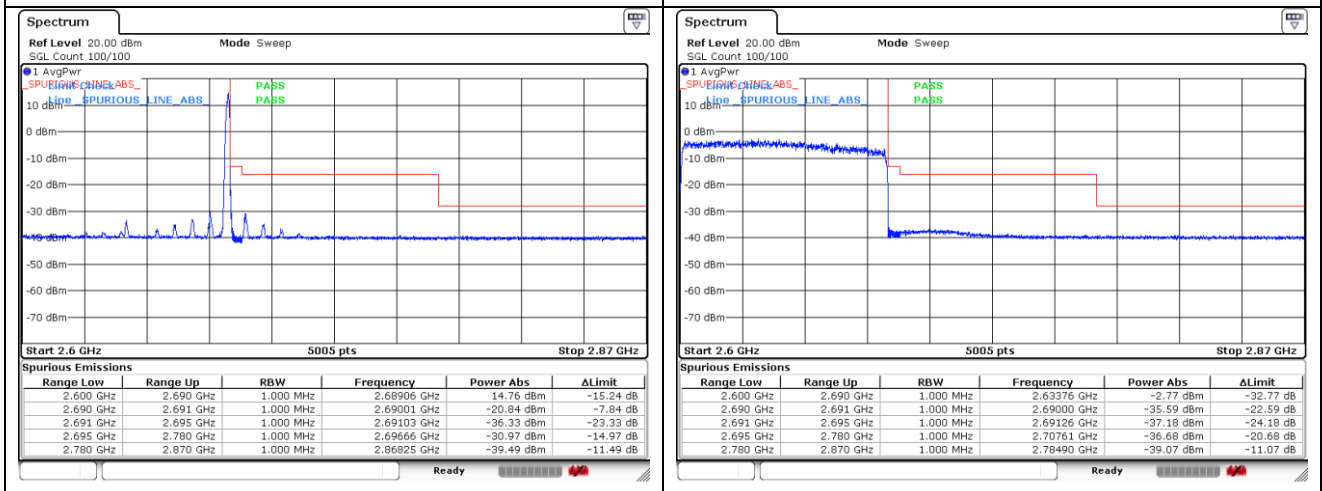
**CP-OFDM 16QAM - FCC Low Channel - 1 RB**

**CP-OFDM 16QAM - FCC Low Channel - Full RB**



**CP-OFDM 16QAM - IC Low Channel - 1 RB**

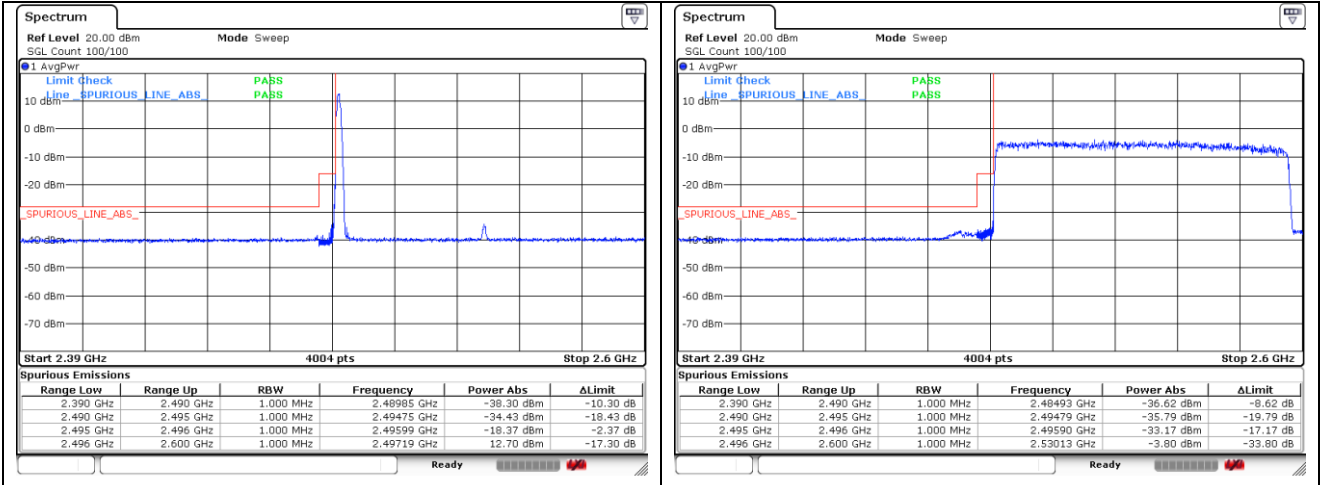
**CP-OFDM 16QAM - IC Low Channel - Full RB**



**CP-OFDM 16QAM - High Channel - 1 RB**

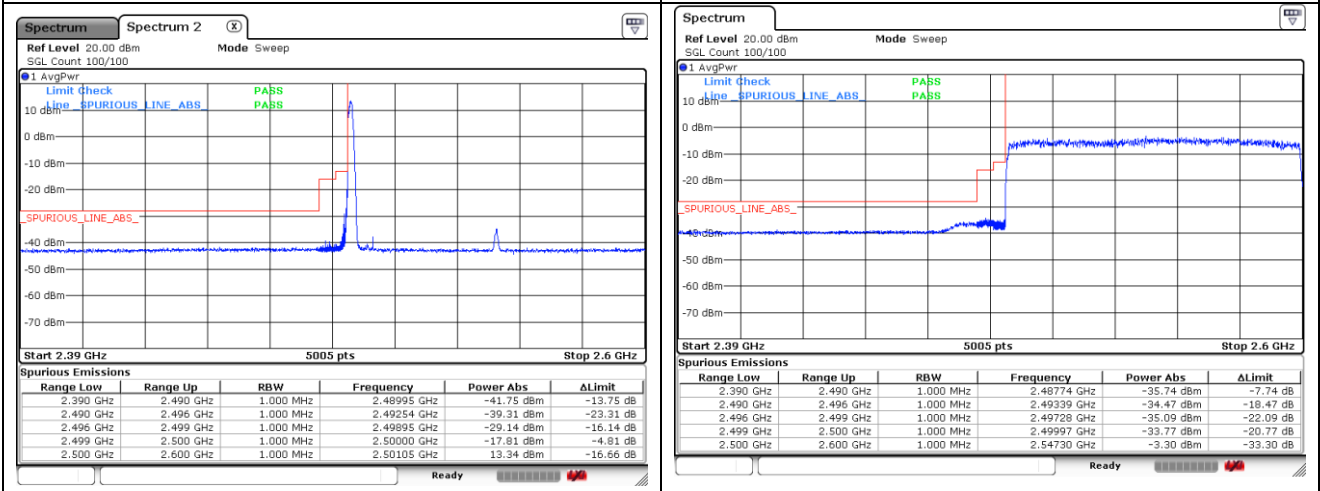
**CP-OFDM 16QAM - High Channel - Full RB**

**NR band 41 (100 MHz)**



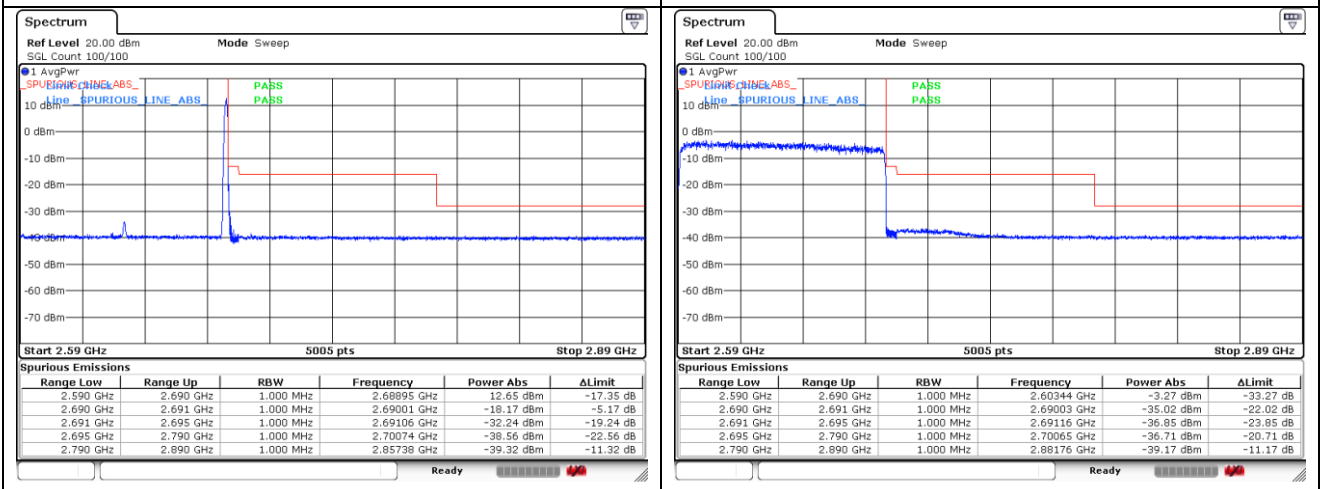
**CP-OFDM QPSK - FCC Low Channel - 1 RB**

**CP-OFDM QPSK - FCC Low Channel - Full RB**



**CP-OFDM QPSK - IC Low Channel - 1 RB**

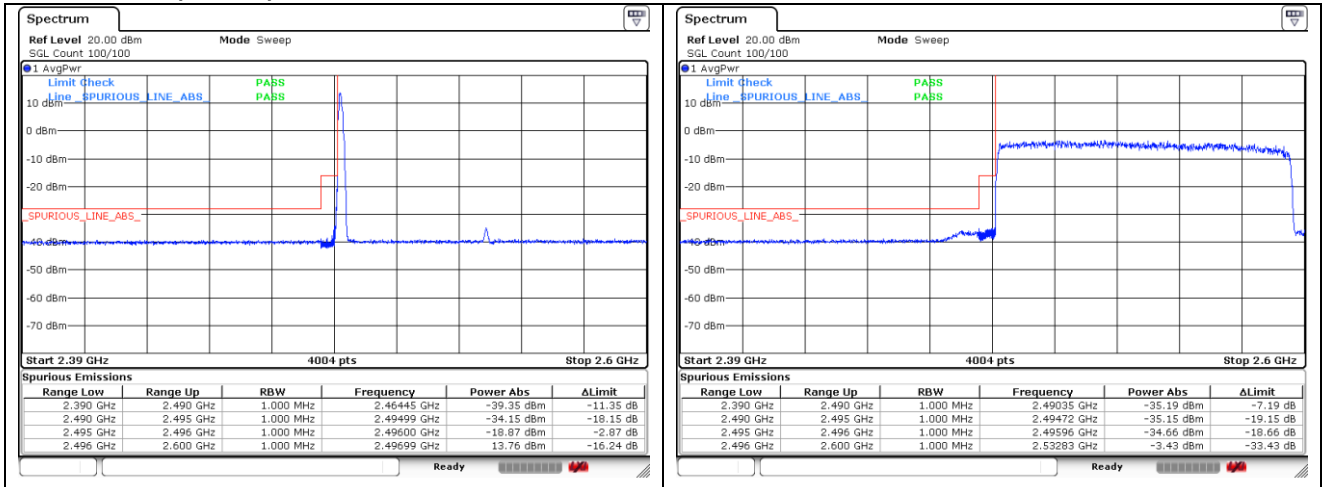
**CP-OFDM QPSK - IC Low Channel - Full RB**



**CP-OFDM QPSK - High Channel - 1 RB**

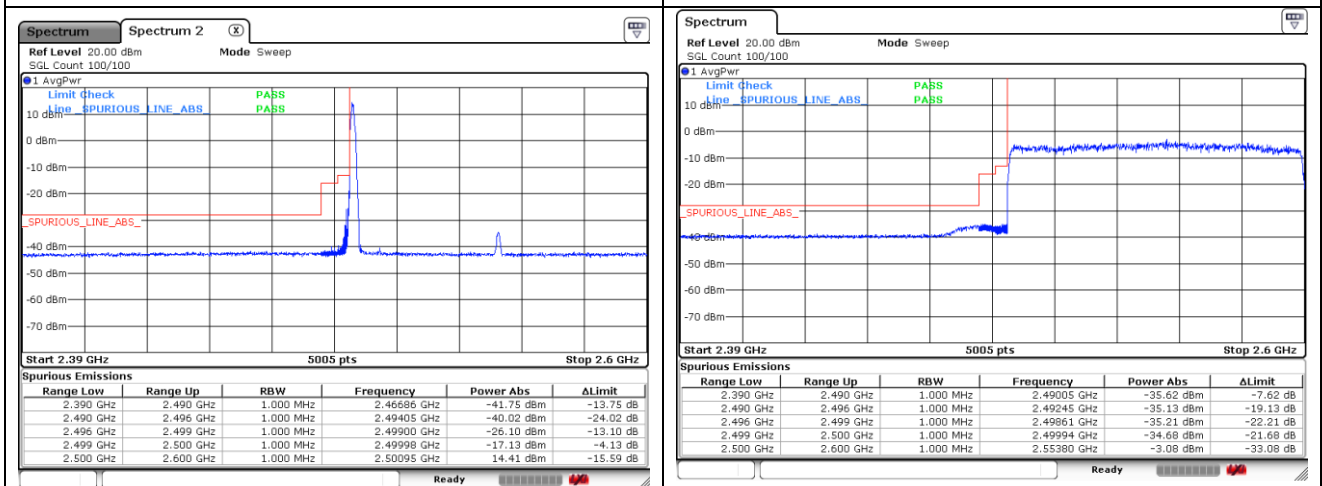
**CP-OFDM QPSK - High Channel - Full RB**

**NR band 41 (100 MHz)**



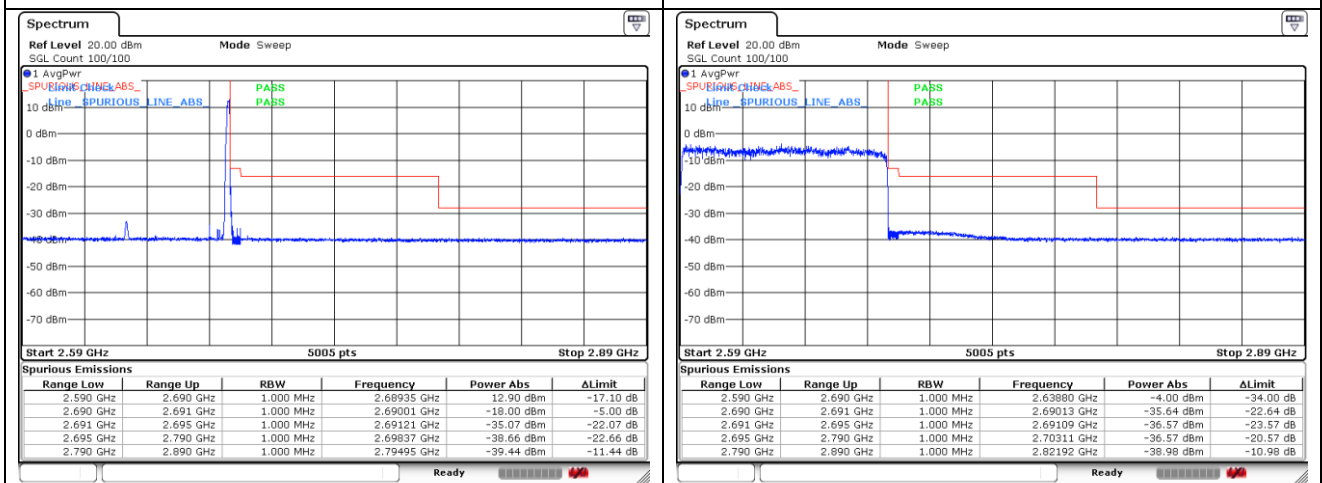
**CP-OFDM 16QAM - FCC Low Channel - 1 RB**

**CP-OFDM 16QAM - FCC Low Channel - Full RB**



**CP-OFDM 16QAM - IC Low Channel - 1 RB**

**CP-OFDM 16QAM - IC Low Channel - Full RB**



**CP-OFDM 16QAM - High Channel - 1 RB**

**CP-OFDM 16QAM - High Channel - Full RB**

## 8. Frequency Stability

### 8.1. Limit

#### FCC

- § 2.1055 (a), § 2.1055 (d) & following:

- §27.54, the frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

#### IC

- RSS-Gen Issue 5

6.11, for licensed devices, the following measurement conditions apply:

a. at the temperatures of -30°C (-22°F), +20°C (+68°F) and +50°C (+122°F), and at the manufacturer's rated supply voltage

- RSS-199 Issue 3

4.3, the transmitter frequency stability limit shall be determined as follows:

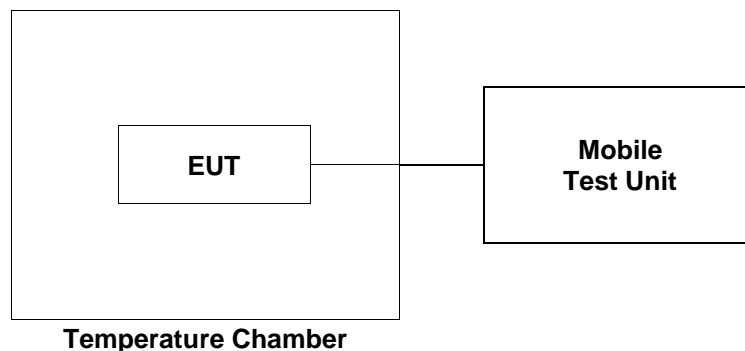
(a) the frequency offset shall be measured according to the procedure described in RSS-Gen and recorded.

(b) using a resolution bandwidth equal to that permitted within the 1 MHz band immediately outside the channel edge, as found in section 4.5, reference points will be selected at the unwanted emission limits, which comply with the attenuation specified in section 4.5 for the type of device under test, on the emission mask of the lowest and highest channels. The frequency at these points shall be recorded as  $f_L$  and  $f_H$  respectively.

The applicant shall ensure compliance with frequency stability requirements by showing that  $f_L$  minus the frequency offset and  $f_H$  plus the frequency offset is within the frequency range in which the equipment is designed to operate.

### 8.2. Test Procedure

1. Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to a Mobile Test Unit via feed-through attenuators.
2. The EUT was placed inside the temperature chamber.
3. After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from Mobile Test Unit.



### 8.3. Test Results

Ambient temperature : (23 ± 1) °C  
 Relative humidity : 47 % R.H.

#### NR band 41(FCC\_SISO) at middle channel

| Reference Frequency: 2 592.99 MHz       |                    |                                    |           |
|---|--------------------|------------------------------------|-----------|
| Frequency Stability versus Temperature  |                    |                                    |           |
| Environment Temperature (°C)            | Power Supplied (V) | Frequency Measure with Time Elapse |           |
|   |                    | Frequency Error (Hz)               | ppm       |
| 50                                      | 13.50              | -19.30                             | 0.002 62  |
| 40                                      |                    | -23.50                             | 0.001 00  |
| 30                                      |                    | -22.80                             | 0.001 27  |
| 20(Ref.)                                |                    | -26.10                             | -         |
| 10                                      |                    | -16.90                             | 0.003 55  |
| 0                                       |                    | 19.10                              | 0.017 43  |
| -10                                     |                    | 22.30                              | 0.018 67  |
| -20                                     |                    | 19.80                              | 0.017 70  |
| -30                                     |                    | -18.20                             | 0.003 05  |
| Frequency Stability versus Power Supply |                    |                                    |           |
| Environment Temperature (°C)            | Power Supplied (V) | Frequency Measure with Time Elapse |           |
|   |                    | Frequency Error (Hz)               | ppm       |
| 20                                      | 11.475 (85%)       | -24.30                             | 0.000 69  |
|   | 15.525 (115%)      | -29.50                             | -0.001 31 |



**NR band 41(IC\_SISO) at middle channel**

| Reference Frequency: 2 595.0 MHz        |                    |                                    |           |
|---|--------------------|------------------------------------|-----------|
| Frequency Stability versus Temperature  |                    |                                    |           |
| Environment Temperature (°C)            | Power Supplied (V) | Frequency Measure with Time Elapse |           |
|   |                    | Frequency Error (Hz)               | ppm       |
| 50                                      | 13.50              | 18.30                              | 0.014 10  |
| 40                                      |                    | -16.80                             | 0.000 58  |
| 30                                      |                    | -15.90                             | 0.000 92  |
| 20(Ref.)                                |                    | -18.30                             | -         |
| 10                                      |                    | -16.40                             | 0.000 73  |
| 0                                       |                    | 11.10                              | 0.011 33  |
| -10                                     |                    | 13.90                              | 0.012 41  |
| -20                                     |                    | 11.90                              | 0.011 64  |
| -30                                     |                    | 13.60                              | 0.012 29  |
| Frequency Stability versus Power Supply |                    |                                    |           |
| Environment Temperature (°C)            | Power Supplied (V) | Frequency Measure with Time Elapse |           |
|   |                    | Frequency Error (Hz)               | ppm       |
| 20                                      | 11.475 (85%)       | 23.70                              | 0.016 18  |
|   | 15.525 (115%)      | -22.90                             | -0.001 77 |

**NR band 41(FCC\_MIMO) at middle channel**

| Reference Frequency: 2 592.99 MHz       |                    |                                    |        |           |           |
|---|--------------------|------------------------------------|--------|-----------|-----------|
| Frequency Stability versus Temperature  |                    |                                    |        |           |           |
| Environment Temperature (°C)            | Power Supplied (V) | Frequency Measure with Time Elapse |        |           |           |
|   |                    | Frequency Error (Hz)               |        | ppm       |           |
|   |                    | Port 1                             | Port 2 | Port 1    | Port 2    |
| 50                                      | 13.50              | -15.90                             | -15.10 | 0.001 31  | 0.001 12  |
| 40                                      |                    | -19.90                             | -13.90 | -0.000 23 | 0.001 58  |
| 30                                      |                    | -18.30                             | -16.20 | 0.000 39  | 0.000 69  |
| 20(Ref.)                                |                    | -19.30                             | -18.00 | -         | -         |
| 10                                      |                    | -17.60                             | -14.00 | 0.000 66  | 0.001 54  |
| 0                                       |                    | -20.10                             | -18.30 | -0.000 31 | -0.000 12 |
| -10                                     |                    | -17.10                             | -12.20 | 0.000 85  | 0.002 24  |
| -20                                     |                    | -14.80                             | -16.80 | 0.001 74  | 0.000 46  |
| -30                                     |                    | 24.30                              | 17.80  | 0.016 81  | 0.013 81  |
| Frequency Stability versus Power Supply |                    |                                    |        |           |           |
| Environment Temperature (°C)            | Power Supplied (V) | Frequency Measure with Time Elapse |        |           |           |
|   |                    | Frequency Error (Hz)               |        | ppm       |           |
|   |                    | Port 1                             | Port 2 | Port 1    | Port 2    |
| 20                                      | 11.475 (85%)       | -25.70                             | -18.10 | -0.002 47 | -0.000 04 |
|   | 15.525 (115%)      | -16.70                             | -17.10 | 0.001 00  | 0.000 35  |

**NR band 41(IC\_MIMO) at middle channel**

| Reference Frequency: 2 595.0 MHz        |                    |                                    |        |           |           |
|---|--------------------|------------------------------------|--------|-----------|-----------|
| Frequency Stability versus Temperature  |                    |                                    |        |           |           |
| Environment Temperature (°C)            | Power Supplied (V) | Frequency Measure with Time Elapse |        |           |           |
|   |                    | Frequency Error (Hz)               |        | ppm       |           |
|   |                    | Port 1                             | Port 2 | Port 1    | Port 2    |
| 50                                      | 13.50              | -21.60                             | -20.40 | -0.001 50 | -0.000 62 |
| 40                                      |                    | -19.80                             | -17.80 | -0.000 81 | 0.000 39  |
| 30                                      |                    | -20.70                             | -16.30 | -0.001 16 | 0.000 96  |
| 20(Ref.)                                |                    | -17.70                             | -18.80 | -         | -         |
| 10                                      |                    | -17.30                             | -24.70 | 0.000 15  | -0.002 27 |
| 0                                       |                    | -14.80                             | -14.00 | 0.001 12  | 0.001 85  |
| -10                                     |                    | 14.30                              | 11.30  | 0.012 33  | 0.011 60  |
| -20                                     |                    | -18.90                             | -16.50 | -0.000 46 | 0.000 89  |
| -30                                     |                    | -13.30                             | -19.90 | 0.001 70  | -0.000 42 |
| Frequency Stability versus Power Supply |                    |                                    |        |           |           |
| Environment Temperature (°C)            | Power Supplied (V) | Frequency Measure with Time Elapse |        |           |           |
|   |                    | Frequency Error (Hz)               |        | ppm       |           |
|   |                    | Port 1                             | Port 2 | Port 1    | Port 2    |
| 20                                      | 11.475 (85%)       | -22.10                             | -13.60 | -0.001 70 | 0.002 00  |
|   | 15.525 (115%)      | -17.80                             | -16.70 | -0.000 04 | 0.000 81  |

**- End of the Test Report -**