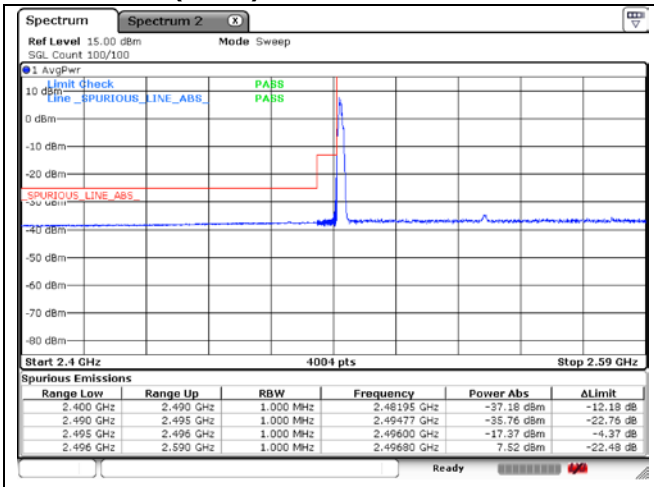
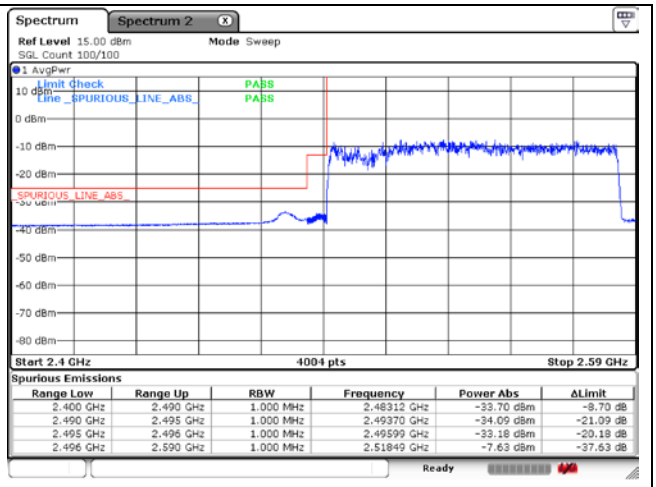
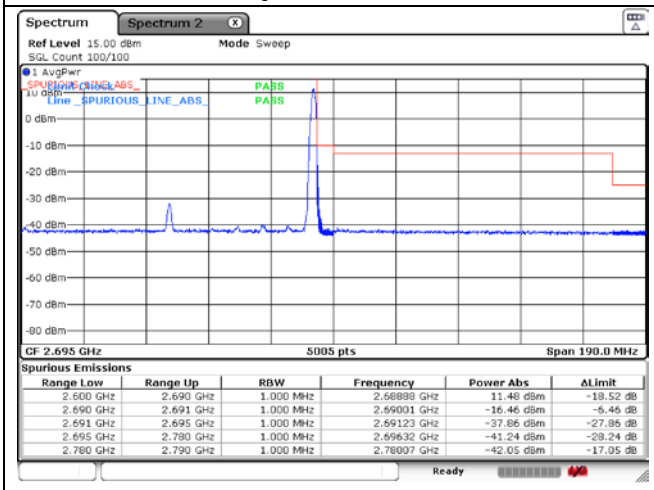
**NR band 41 (90 ㎒)**



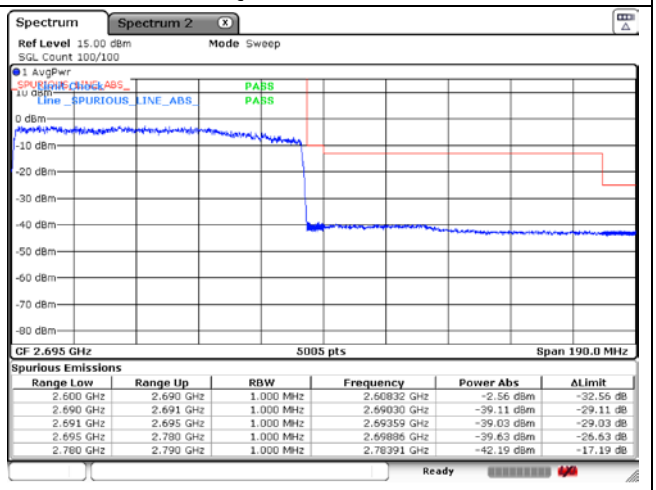

DFT-S-OFDM QPSK - Low Channel - 1 RB




DFT-S-OFDM QPSK - Low Channel - Full RB

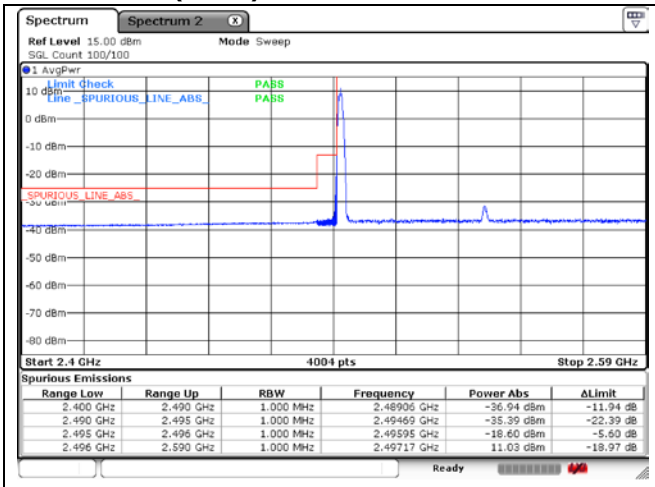



DFT-S-OFDM QPSK - High Channel - 1 RB

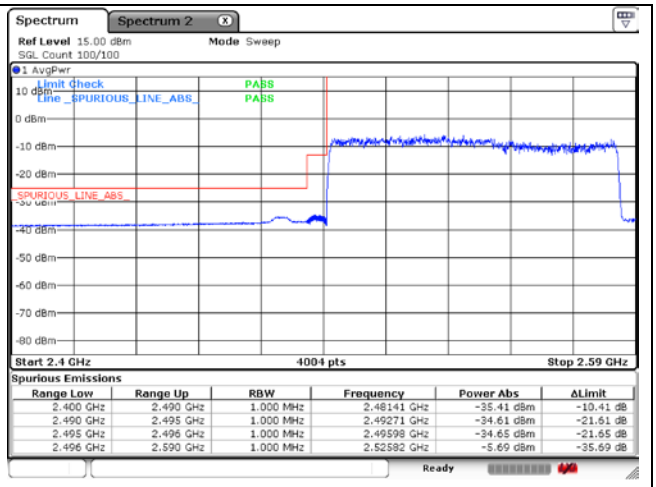



DFT-S-OFDM QPSK - High Channel - Full RB

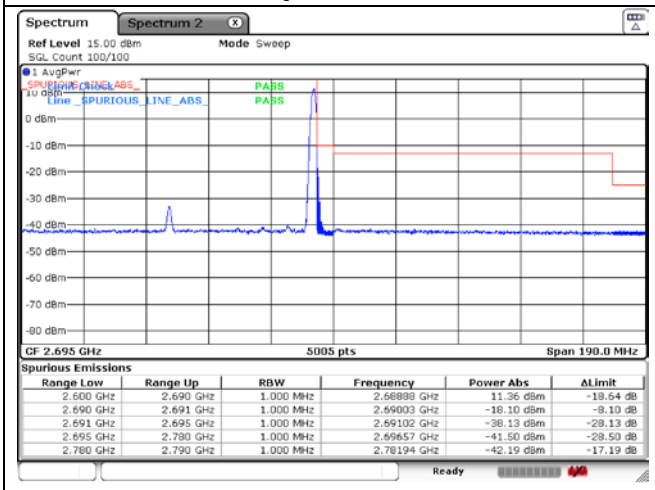
**NR band 41 (90 ㎒)**



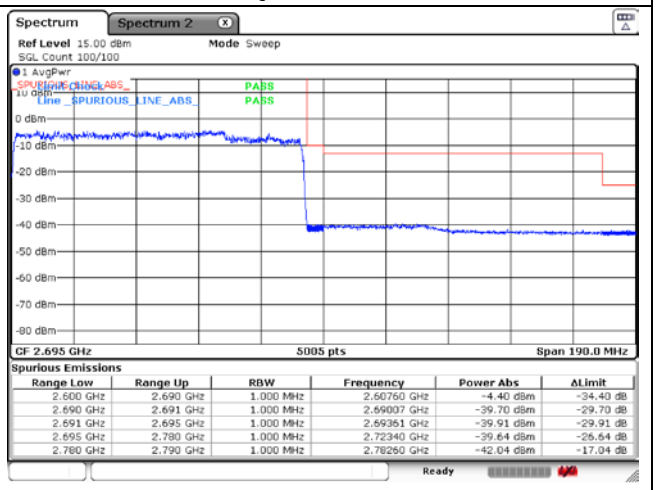

DFT-S-OFDM 16QAM - Low Channel - 1 RB




DFT-S-OFDM 16QAM - Low Channel - Full RB

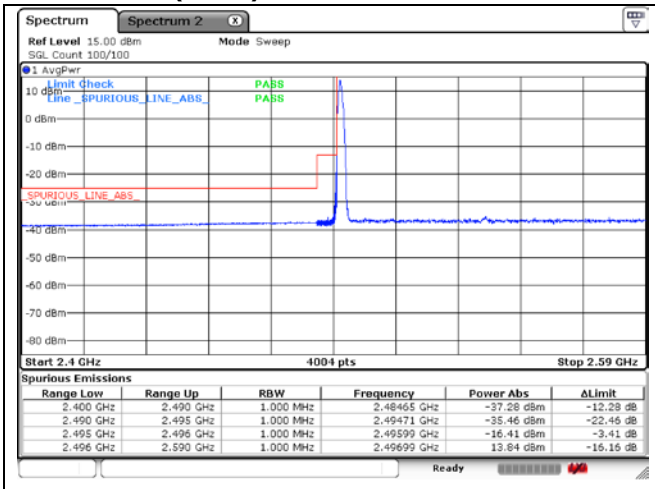



DFT-S-OFDM 16QAM - High Channel - 1 RB

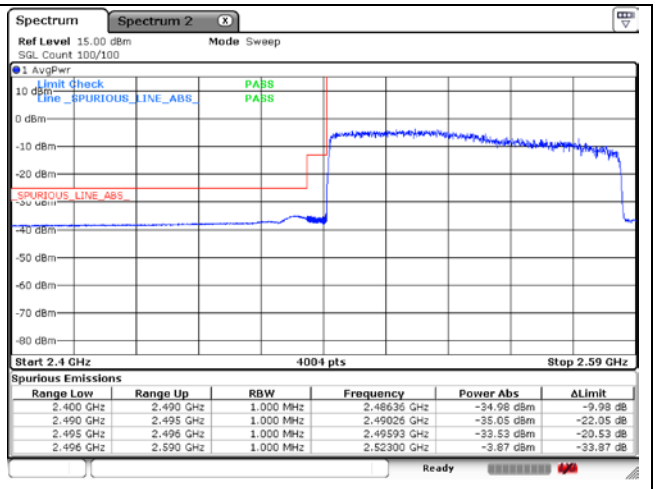



DFT-S-OFDM 16QAM - High Channel - Full RB

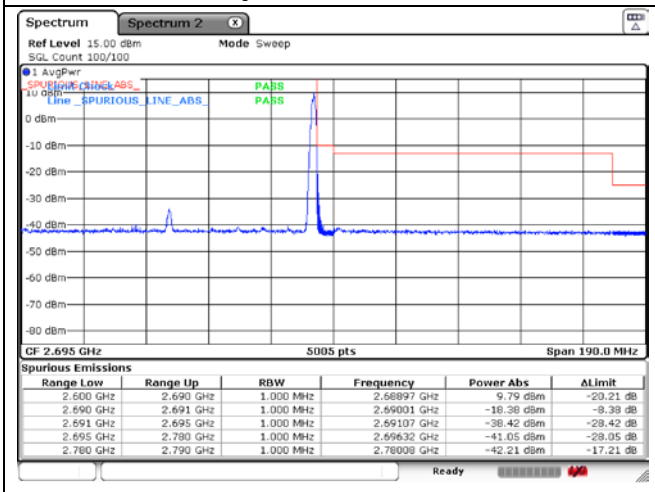
**NR band 41 (90 ㎒)**



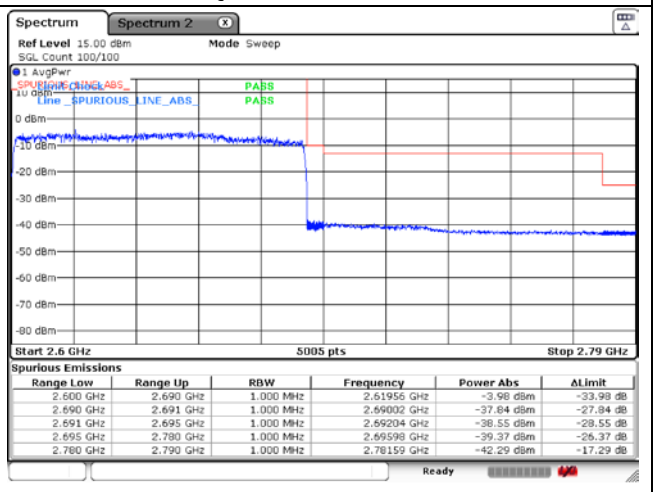

CP-OFDM QPSK - Low Channel - 1 RB




CP-OFDM QPSK - Low Channel - Full RB

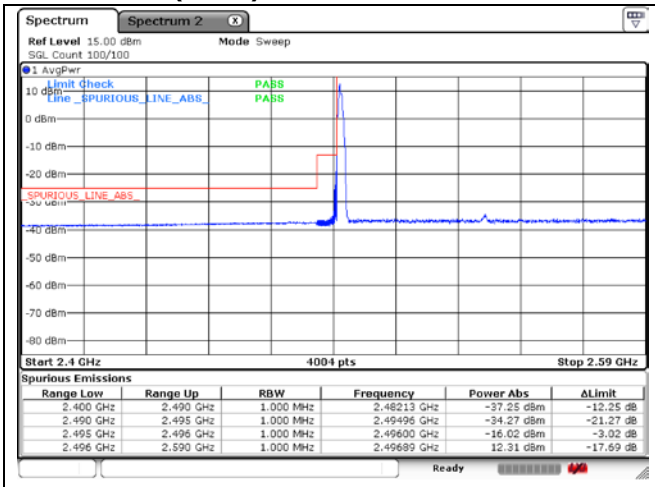



CP-OFDM QPSK - High Channel - 1 RB

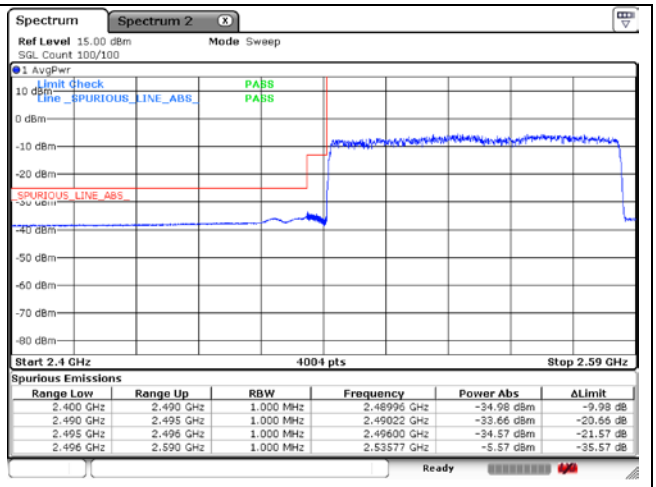



CP-OFDM QPSK - High Channel - Full RB

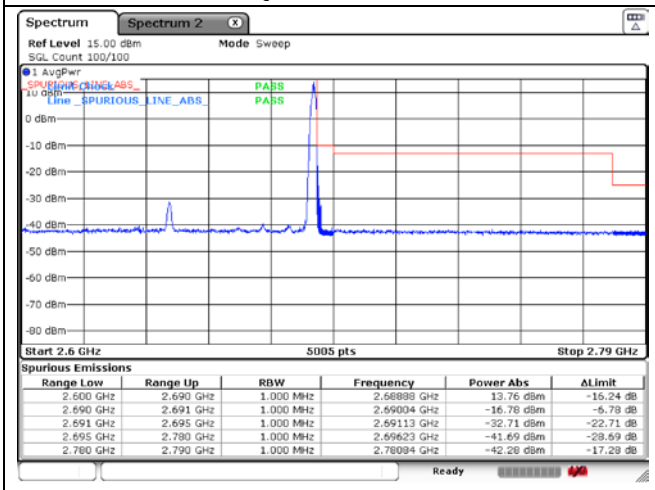
**NR band 41 (90 ㎒)**



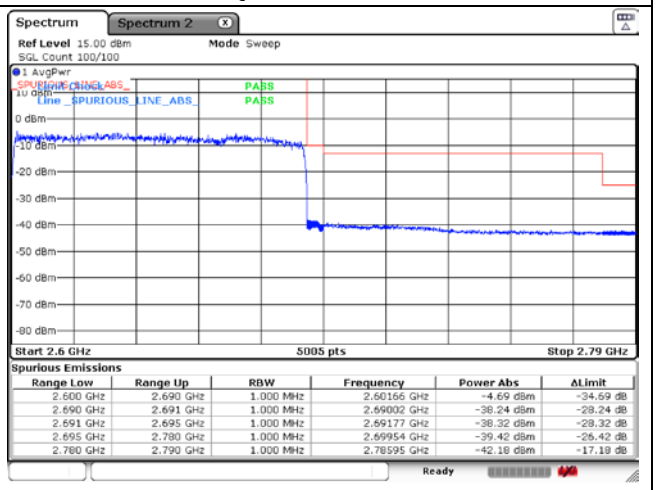

CP-OFDM 16QAM - Low Channel - 1 RB




CP-OFDM 16QAM - Low Channel - Full RB

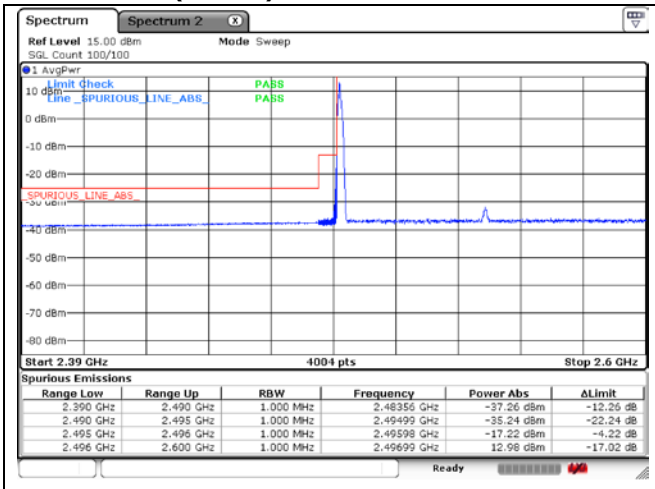



CP-OFDM 16QAM - High Channel - 1 RB

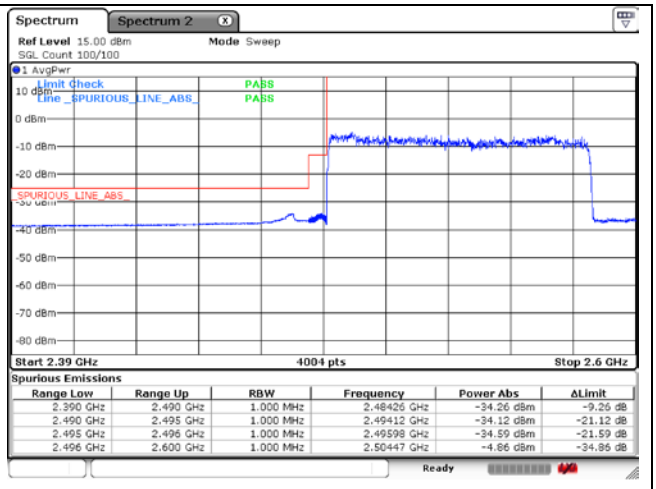



CP-OFDM 16QAM - High Channel - Full RB

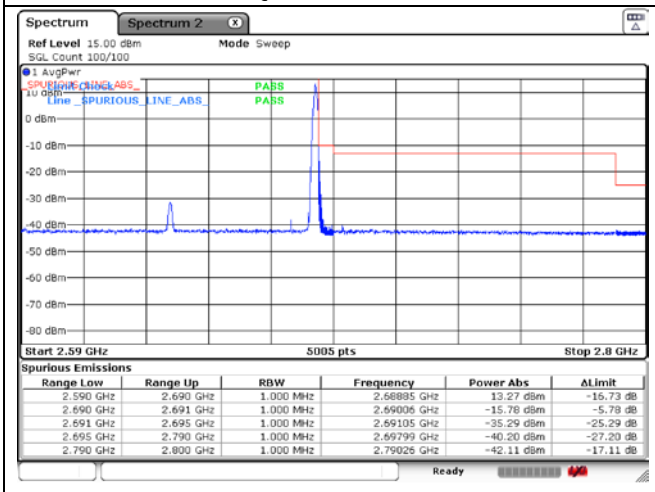
**NR band 41 (100 ㎒)**



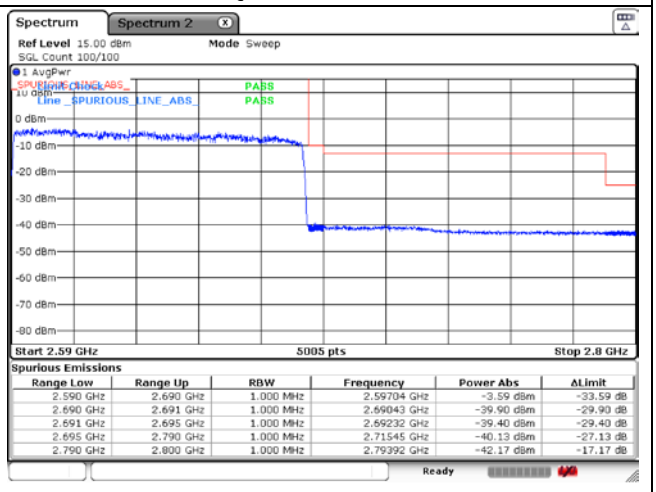

DFT-S-OFDM QPSK - Low Channel - 1 RB




DFT-S-OFDM QPSK - Low Channel - Full RB

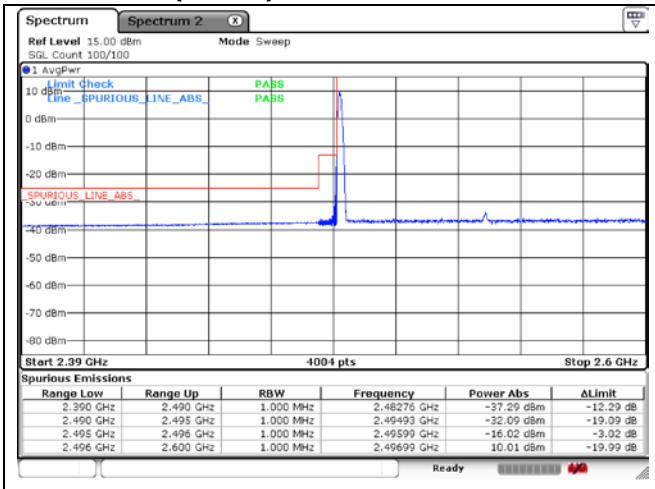



DFT-S-OFDM QPSK - High Channel - 1 RB

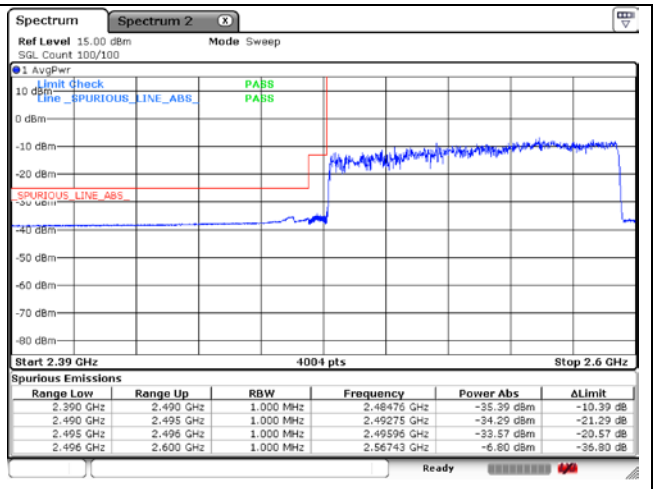



DFT-S-OFDM QPSK - High Channel - Full RB

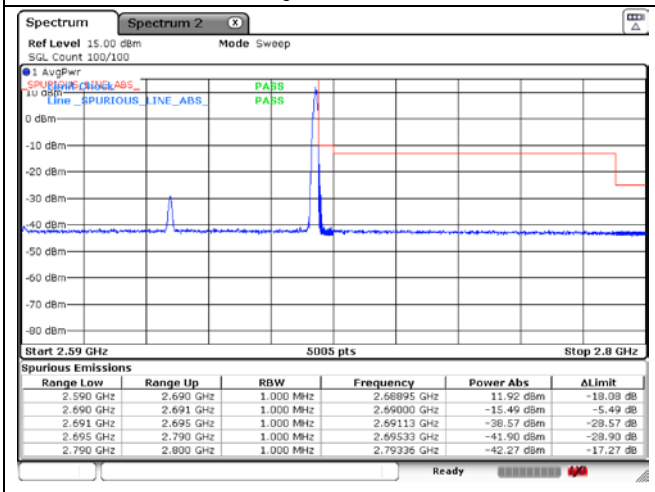
**NR band 41 (100 ㎒)**



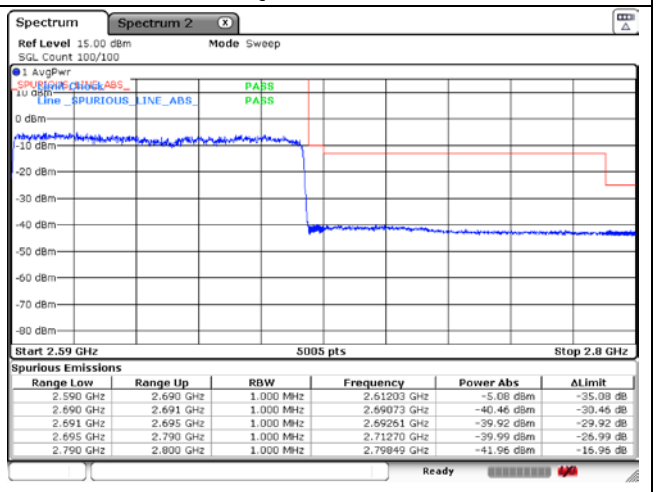

DFT-S-OFDM 16QAM - Low Channel - 1 RB




DFT-S-OFDM 16QAM - Low Channel - Full RB

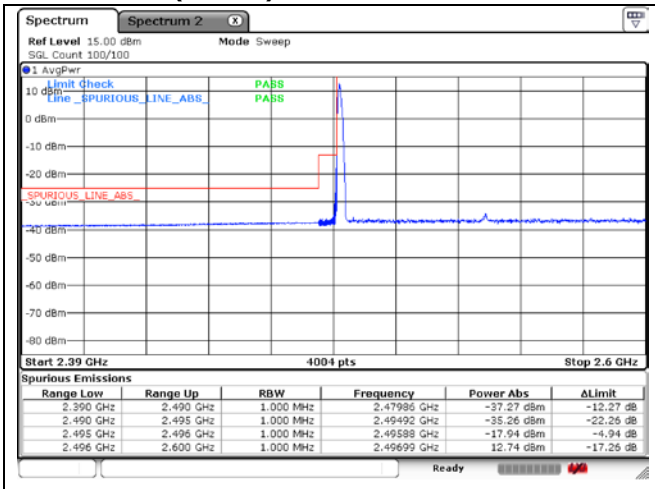



DFT-S-OFDM 16QAM - High Channel - 1 RB

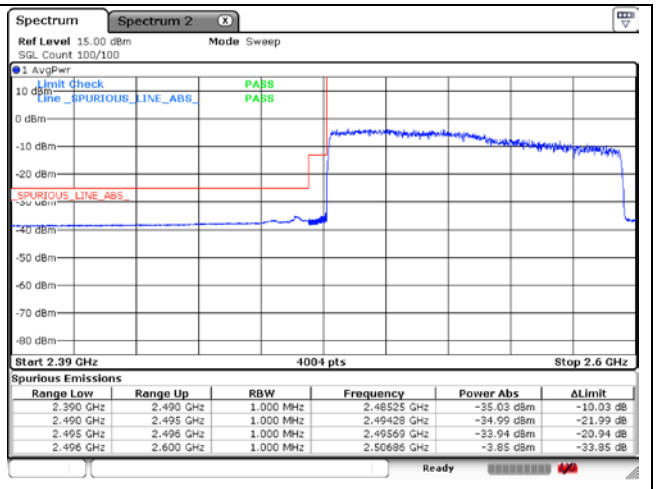



DFT-S-OFDM 16QAM - High Channel - Full RB

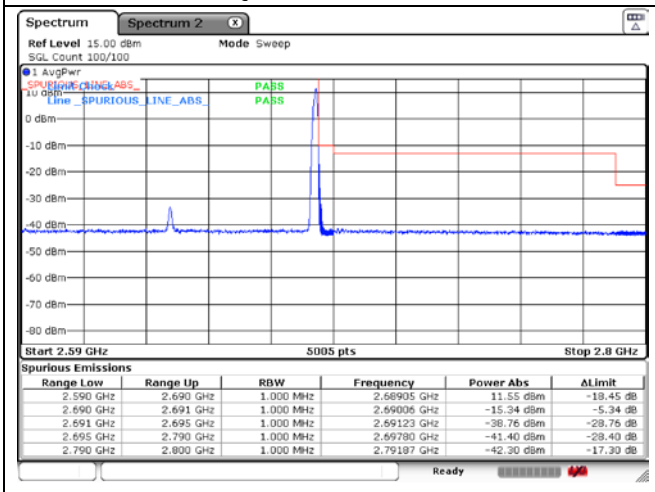
**NR band 41 (100 ㎒)**



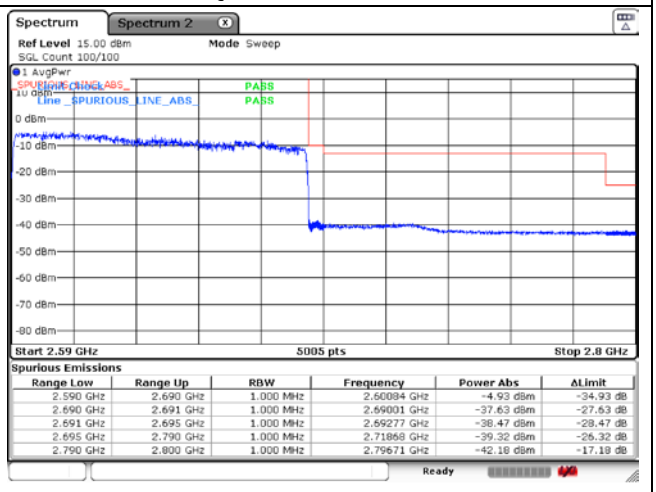

CP-OFDM QPSK - Low Channel - 1 RB




CP-OFDM QPSK - Low Channel - Full RB

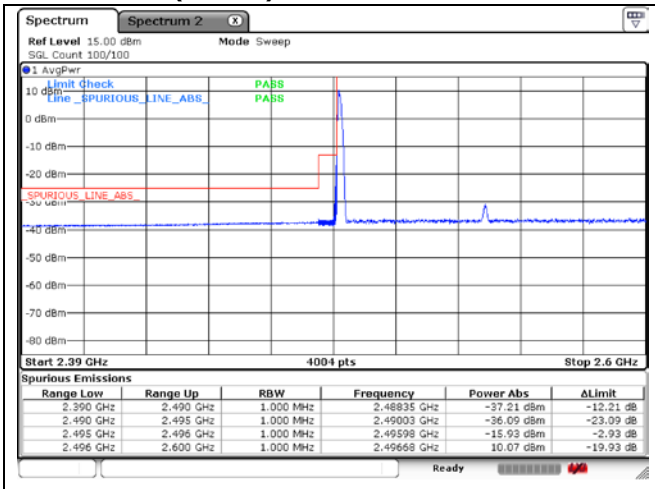



CP-OFDM QPSK - High Channel - 1 RB

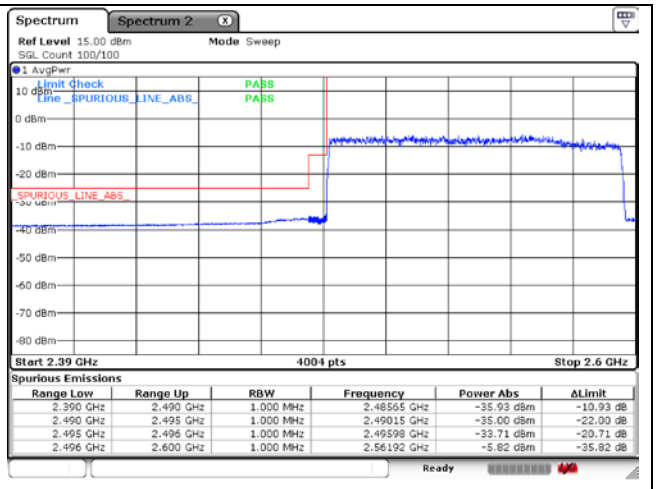



CP-OFDM QPSK - High Channel - Full RB

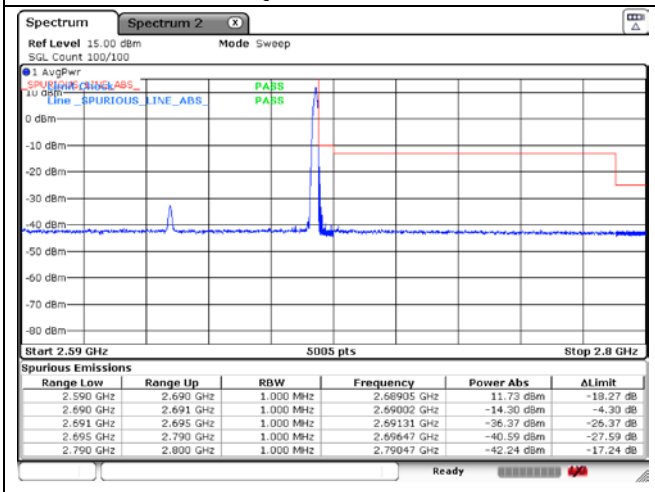
**NR band 41 (100 ㎒)**



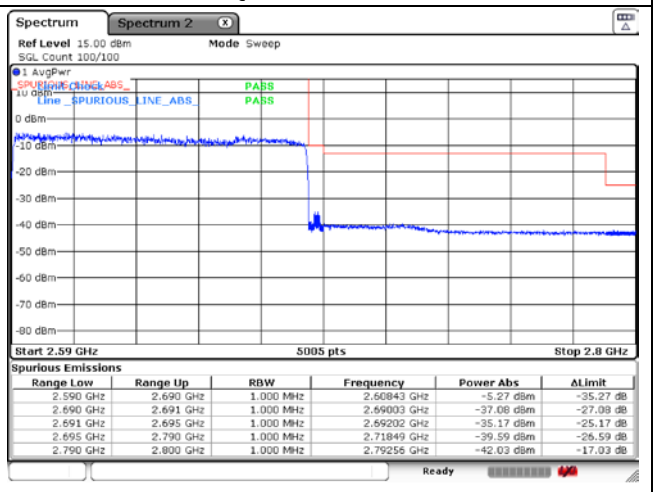

CP-OFDM 16QAM - Low Channel - 1 RB




CP-OFDM 16QAM - Low Channel - Full RB




CP-OFDM 16QAM - High Channel - 1 RB




CP-OFDM 16QAM - High Channel - Full RB

# 8. Frequency Stability

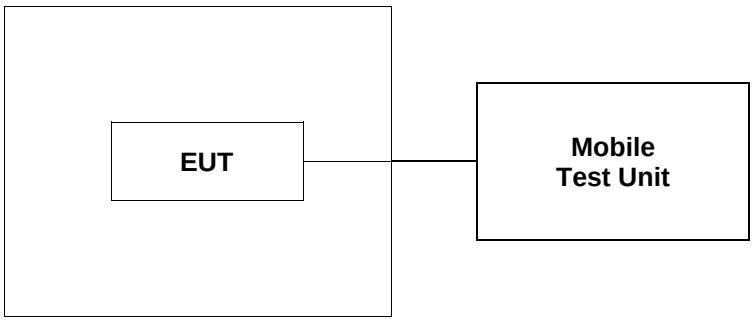
## 8.1. Limit

- § 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.

## 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.




**Temperature Chamber**

## 8.3. Test Results

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

**SIM 1**

**NR band 41 at middle channel**

| **Reference Frequency: 2 592.99 ㎒** | | | |
|---|---|---|---|
| **Frequency Stability versus Temperature** | | | |
| **Environment Temperature (℃)** | **Power Supplied (V)** | **Frequency Measure with Time Elapse** | |
| | | **Frequency Error (㎐)** | **ppm** |
| 50 | 12.5 | 13.70 | 0.010 37 |
| 40 | | 18.40 | 0.012 19 |
| 30 | | 24.80 | 0.014 65 |
| 20(Ref.) | | -13.20 | - |
| 10 | | 13.70 | 0.010 37 |
| 0 | | 20.70 | 0.013 07 |
| -10 | | 15.40 | 0.011 03 |
| -20 | | 12.30 | 0.009 83 |
| -30 | | 30.60 | 0.016 89 |
| **Frequency Stability versus Power Supply** | | | |
| **Environment Temperature (℃)** | **Power Supplied (V)** | **Frequency Measure with Time Elapse** | |
| | | **Frequency Error (㎐)** | **ppm** |
| 20 | 10.63 (85%) | -14.10 | -0.000 35 |
| | 14.38 (115%) | -12.80 | 0.000 15 |

**SIM 2**

**NR band 41 at middle channel**

| Reference Frequency: 2 592.99 ㎒ | | | |
|---|---|---|---|
| **Frequency Stability versus Temperature** | | | |
| **Environment Temperature (℃)** | **Power Supplied (V)** | **Frequency Measure with Time Elapse** | |
| | | **Frequency Error (㎐)** | **ppm** |
| 50 | 12.5 | 23.30 | 0.003 20 |
| 40 | | 13.90 | -0.000 42 |
| 30 | | 13.40 | -0.000 62 |
| 20(Ref.) | | 15.00 | - |
| 10 | | 22.10 | 0.002 74 |
| 0 | | 19.30 | 0.001 66 |
| -10 | | 17.30 | 0.000 89 |
| -20 | | 11.50 | -0.001 35 |
| -30 | | 26.60 | 0.004 47 |
| **Frequency Stability versus Power Supply** | | | |
| **Environment Temperature (℃)** | **Power Supplied (V)** | **Frequency Measure with Time Elapse** | |
| | | **Frequency Error (㎐)** | **ppm** |
| 20 | 10.63 (85%) | 13.70 | -0.000 50 |
| | 14.38 (115%) | 14.50 | -0.000 19 |

**- End of the Test Report -**