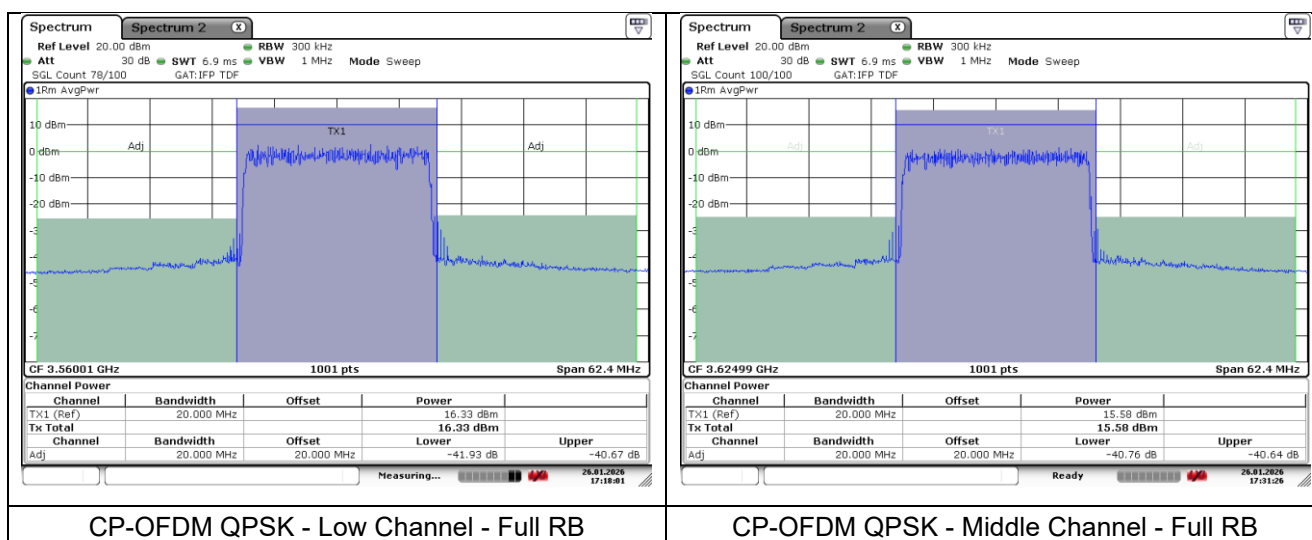
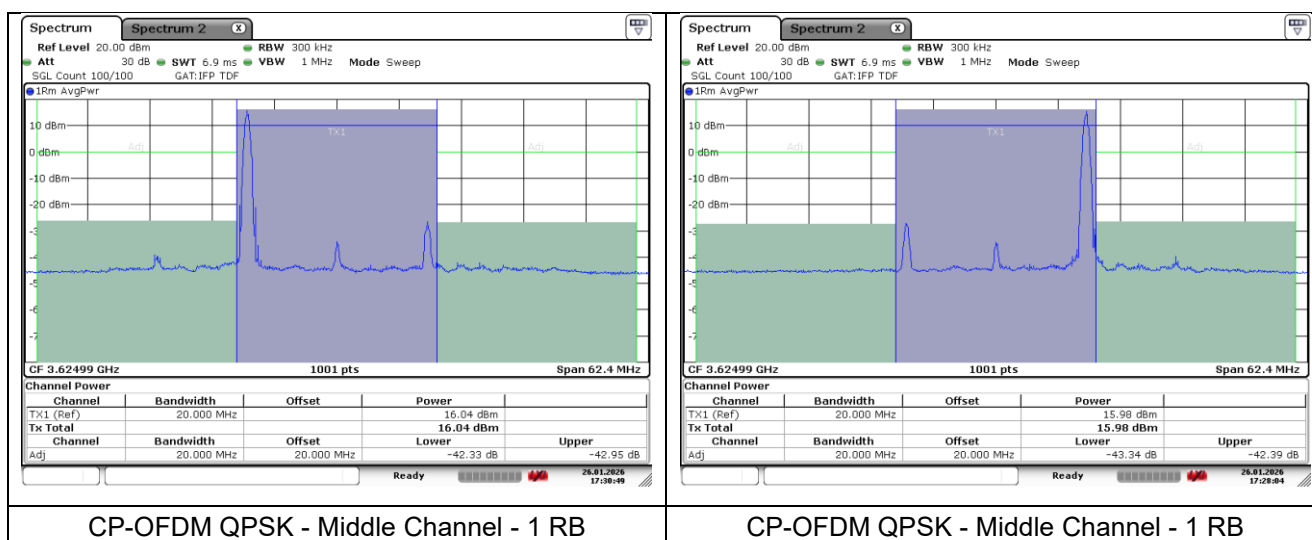
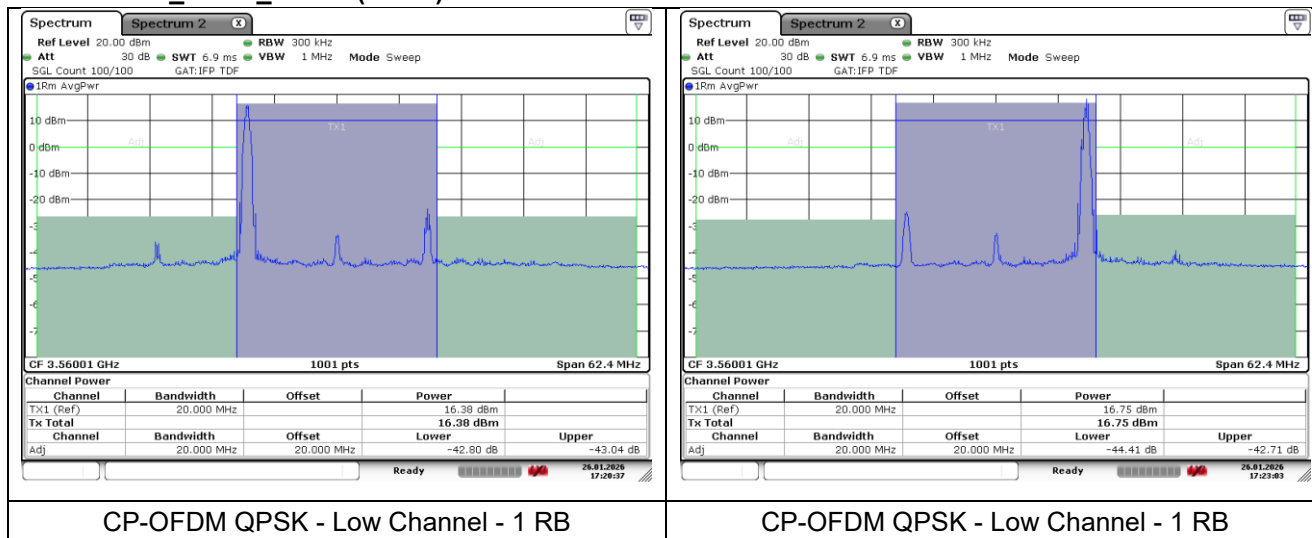
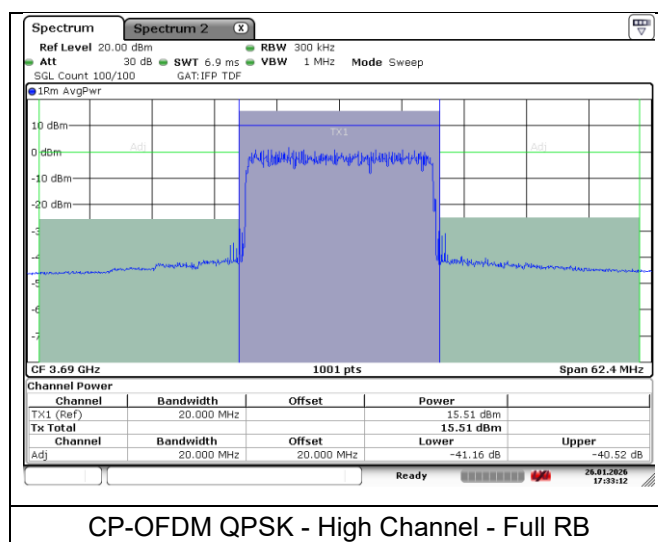
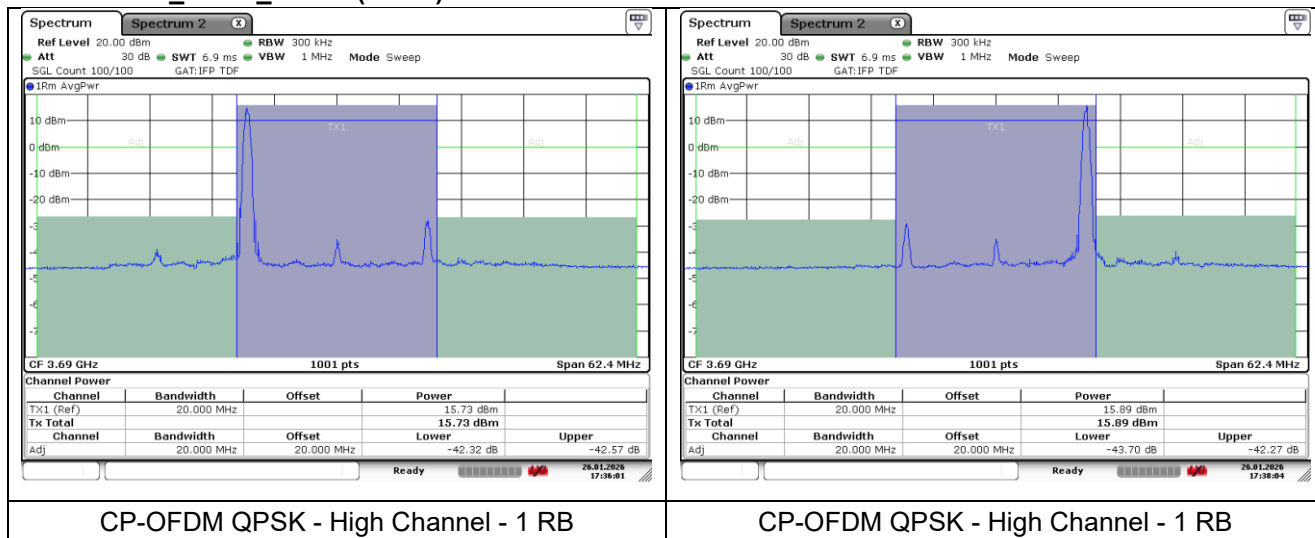


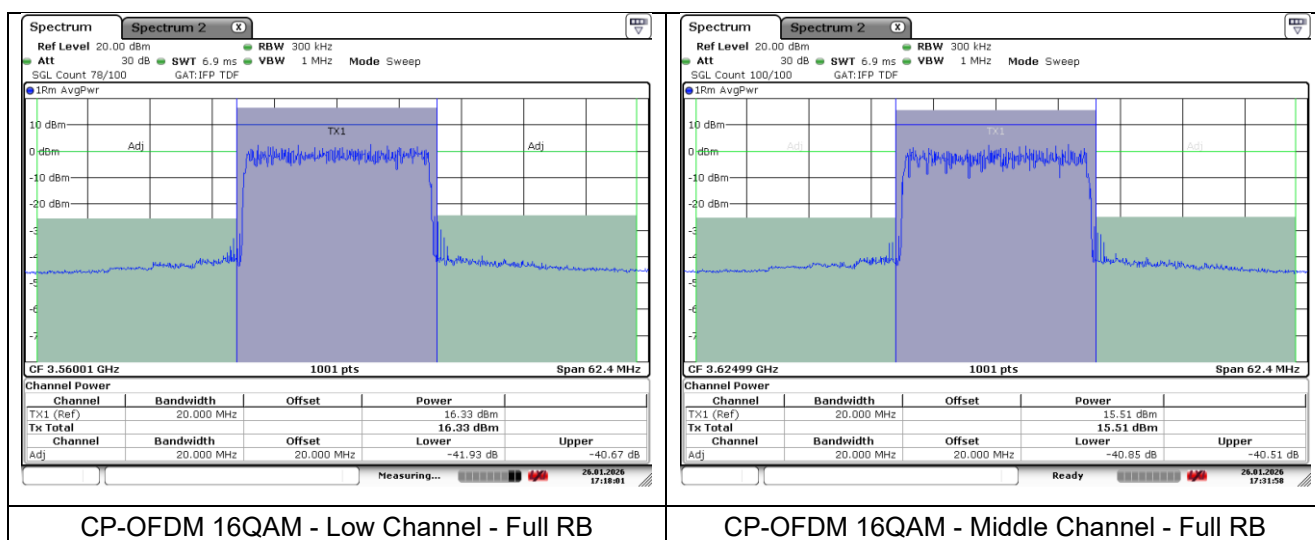
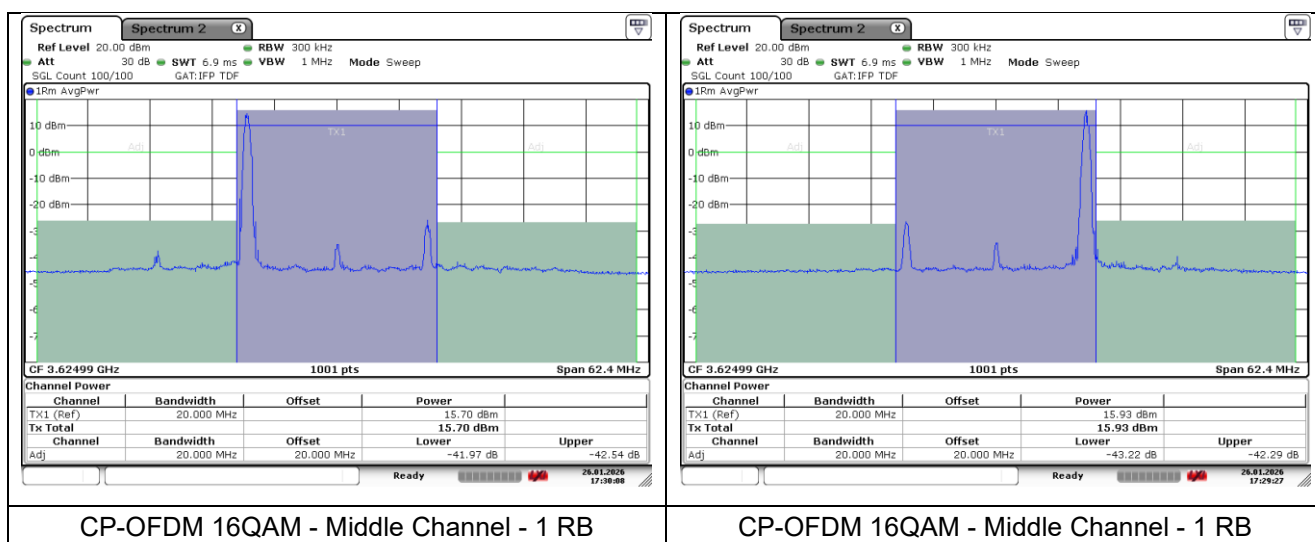
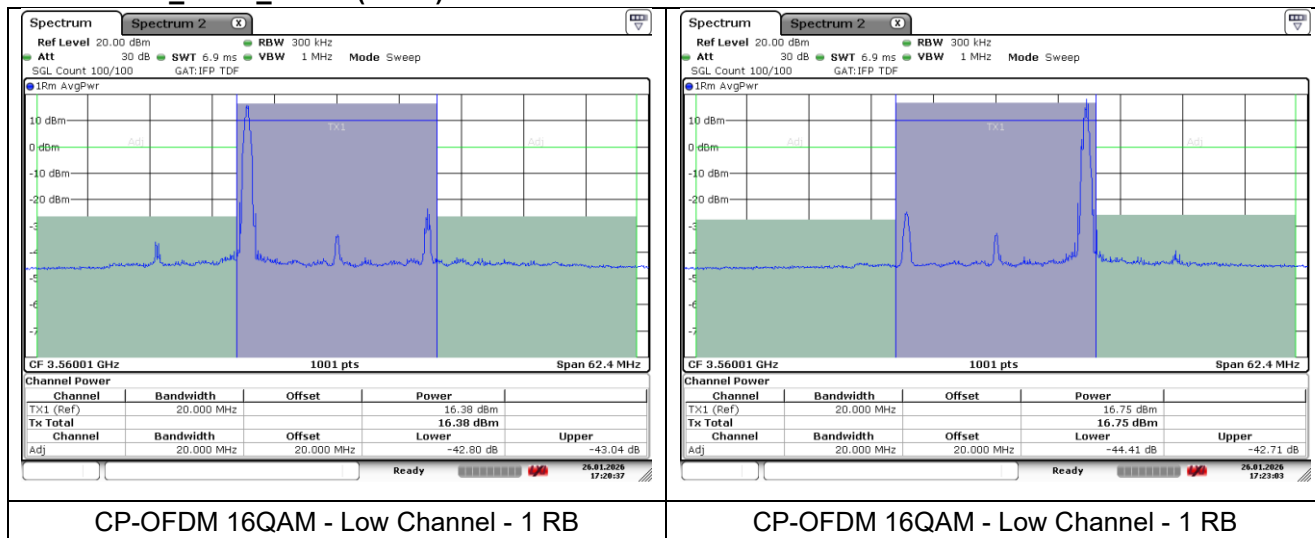
**NR band 48\_MIMO\_ANT.2 (20 MHz)**



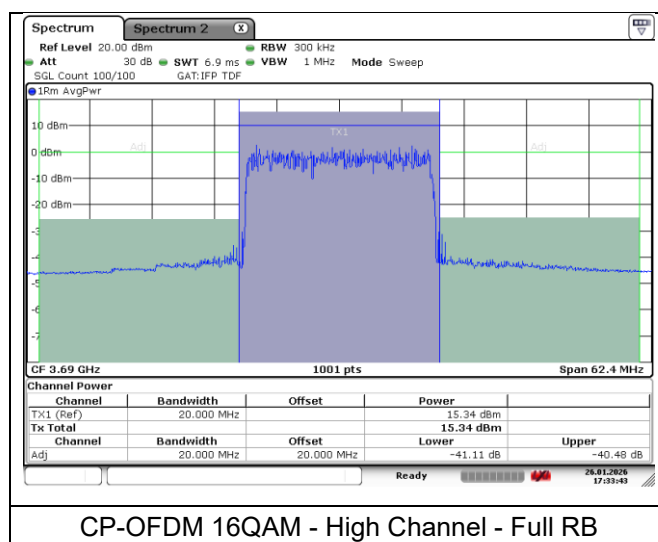
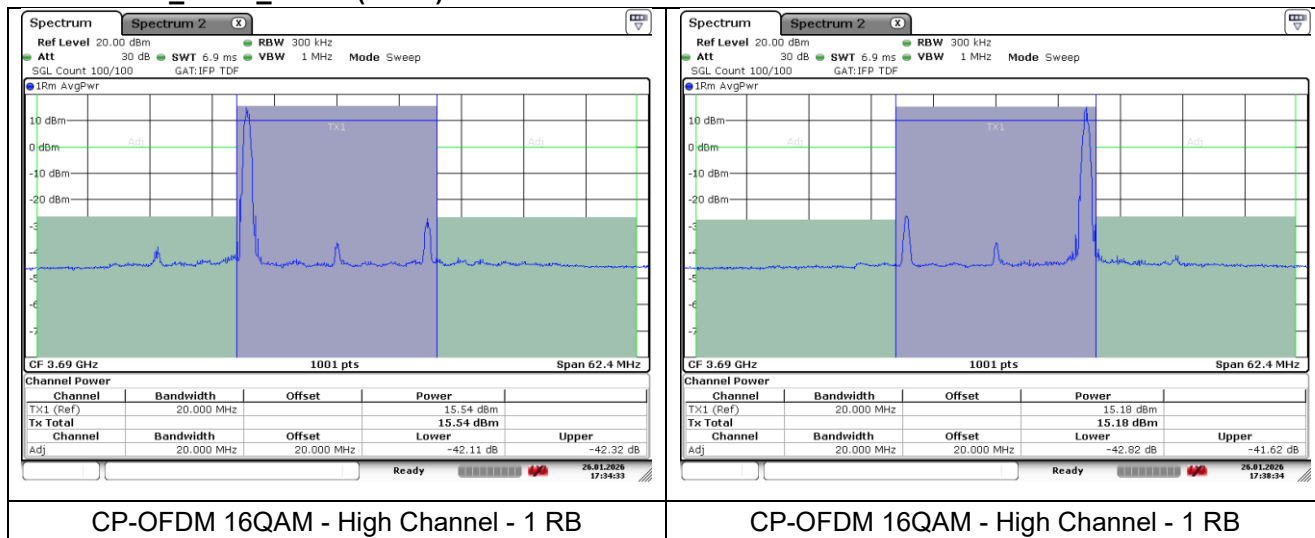
## NR band 48\_MIMO\_ANT.2 (20 MHz)



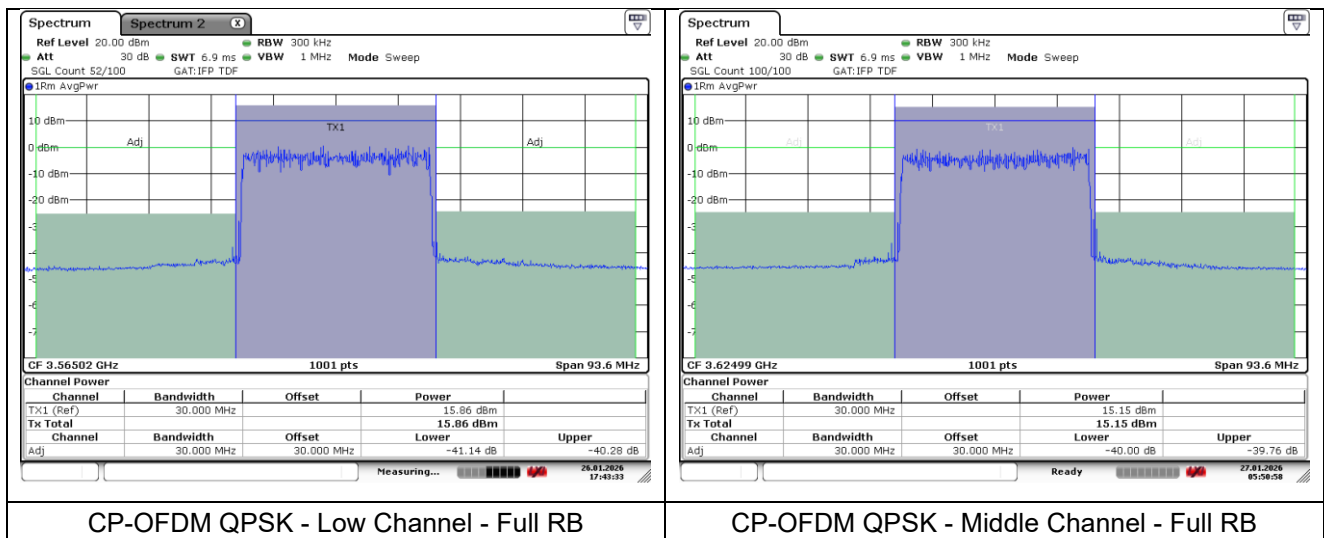
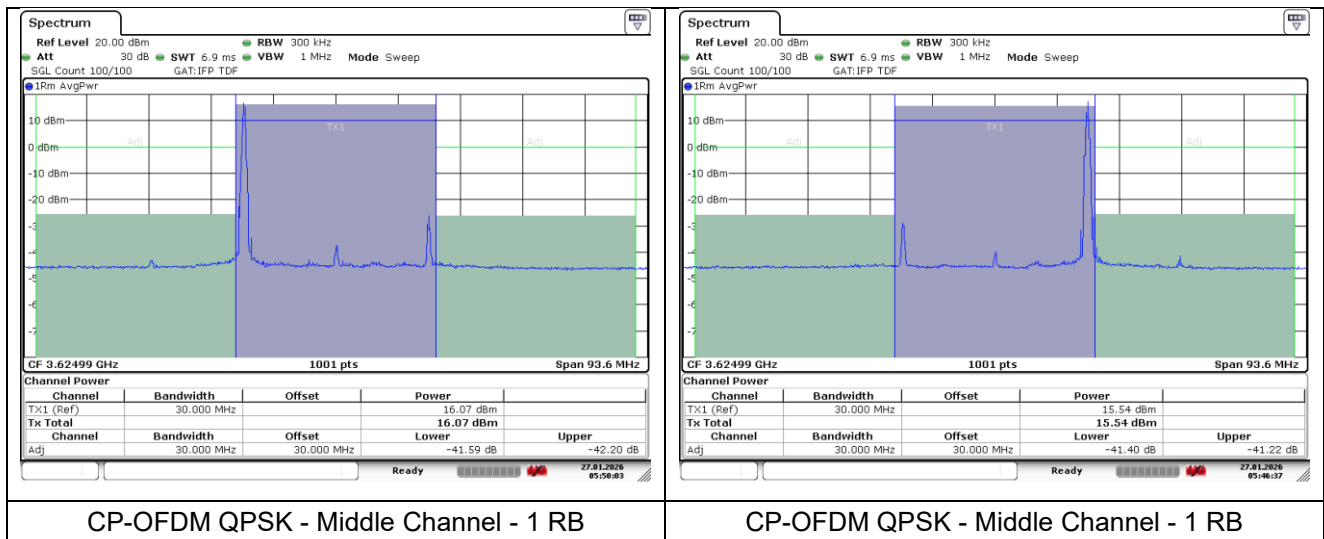
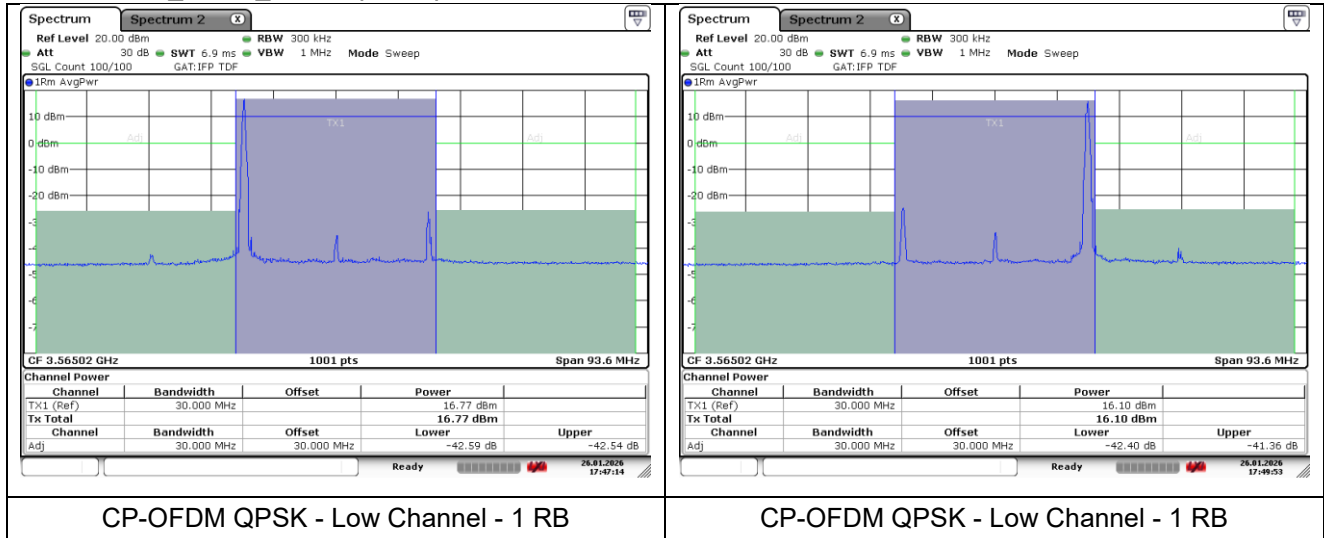
**NR band 48\_MIMO\_ANT.2 (20 MHz)**



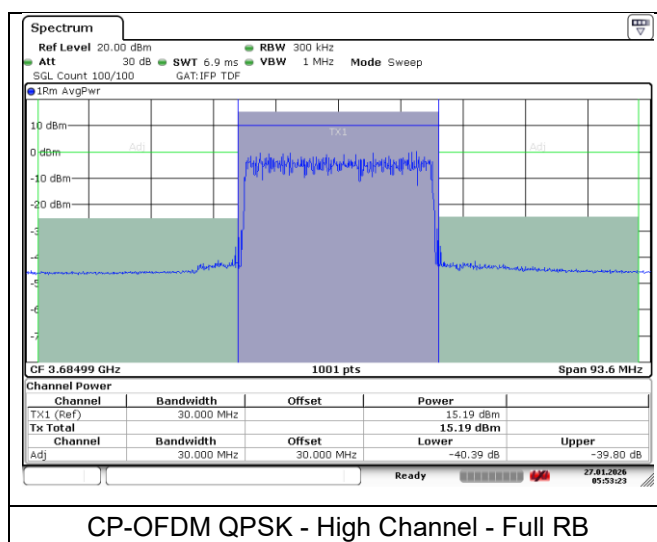
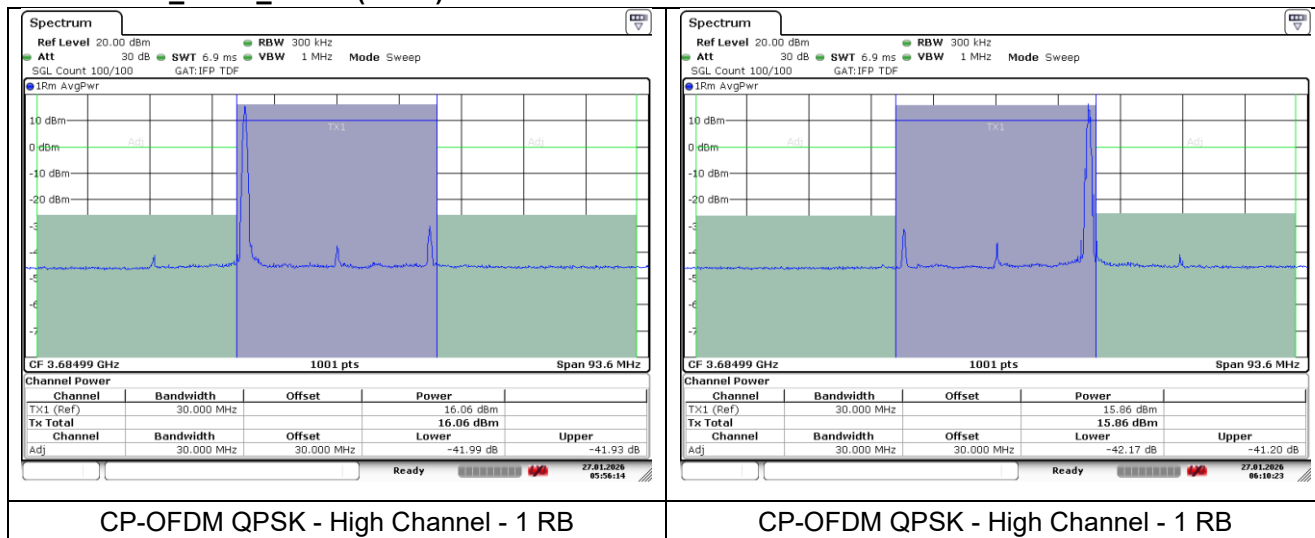
**NR band 48\_MIMO\_ANT.2 (20 MHz)**



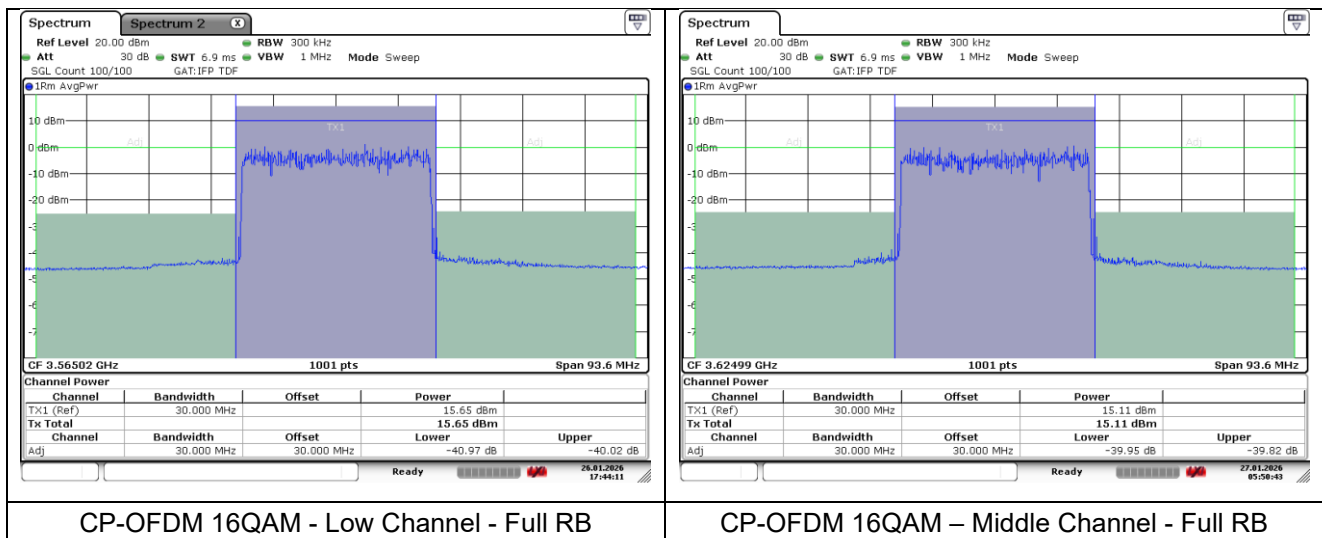
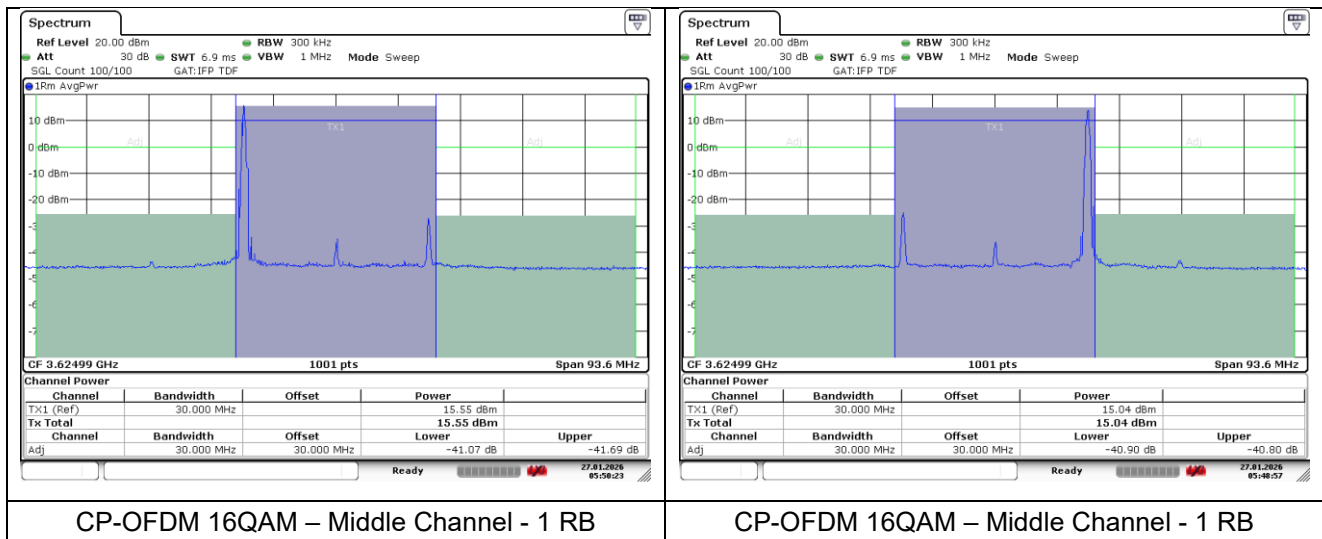
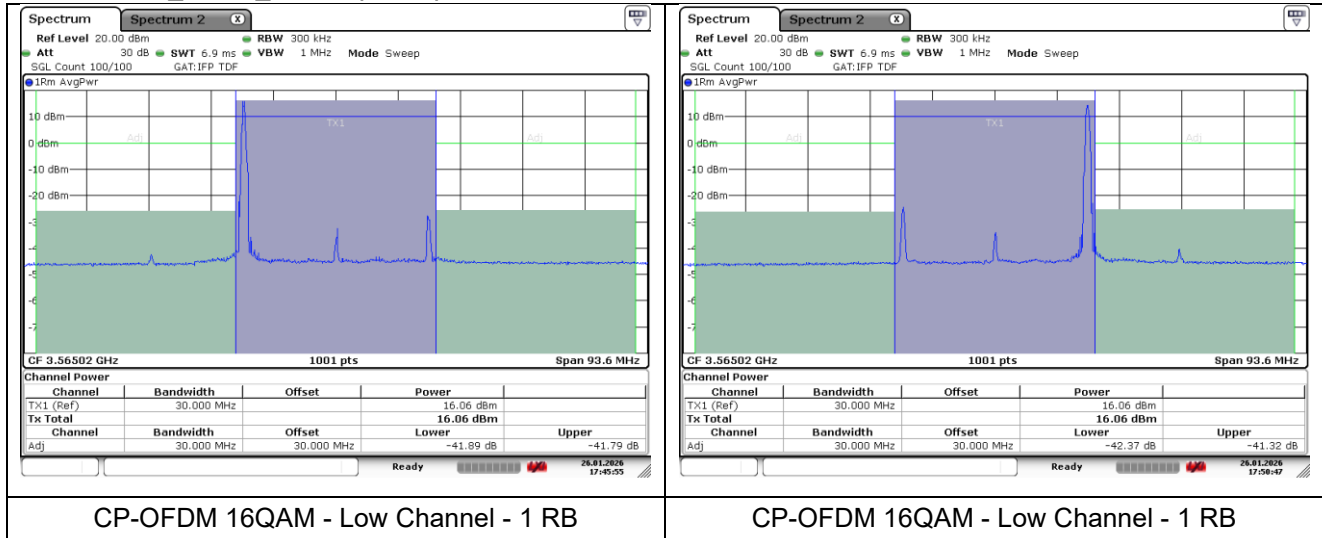
**NR band 48\_MIMO\_ANT.2 (30 MHz)**



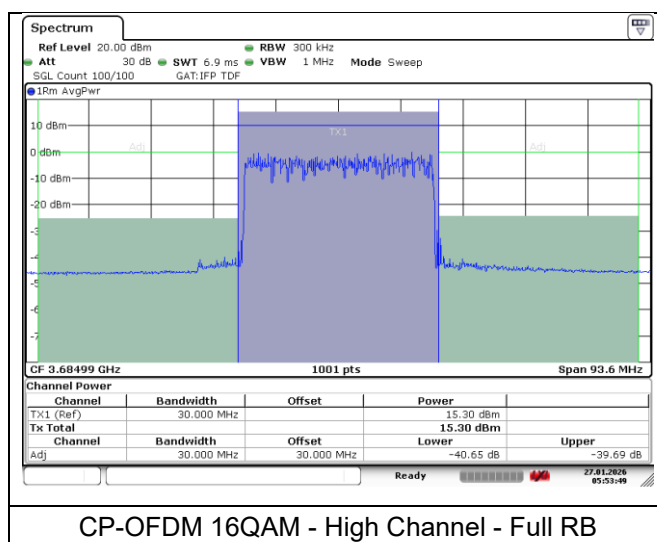
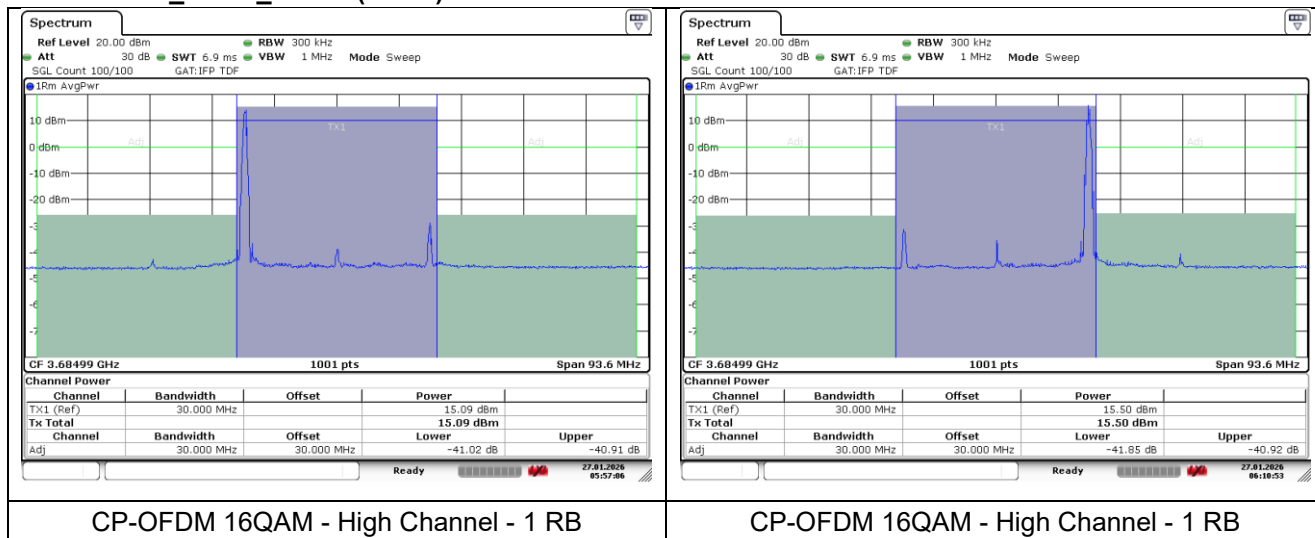
## NR band 48\_MIMO\_ANT.2 (30 MHz)



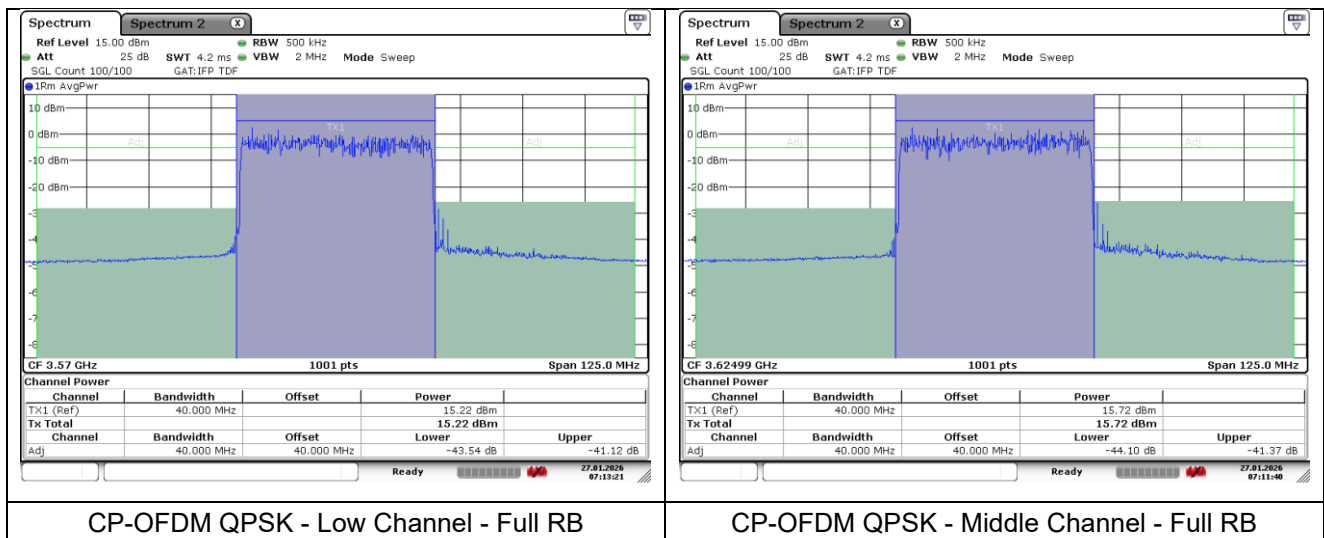
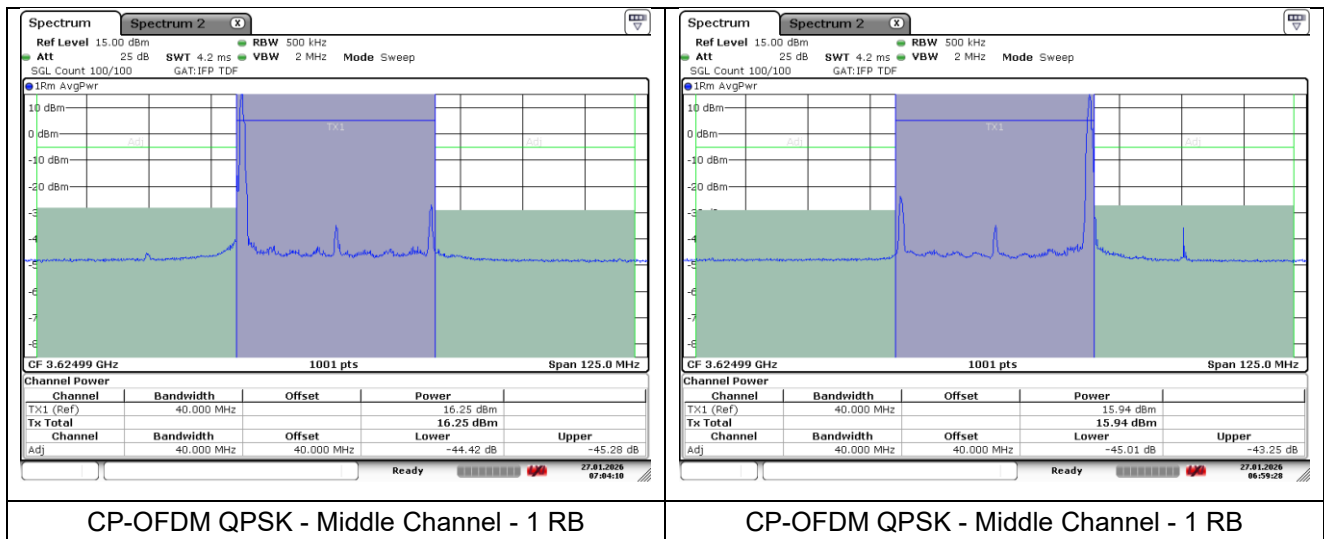
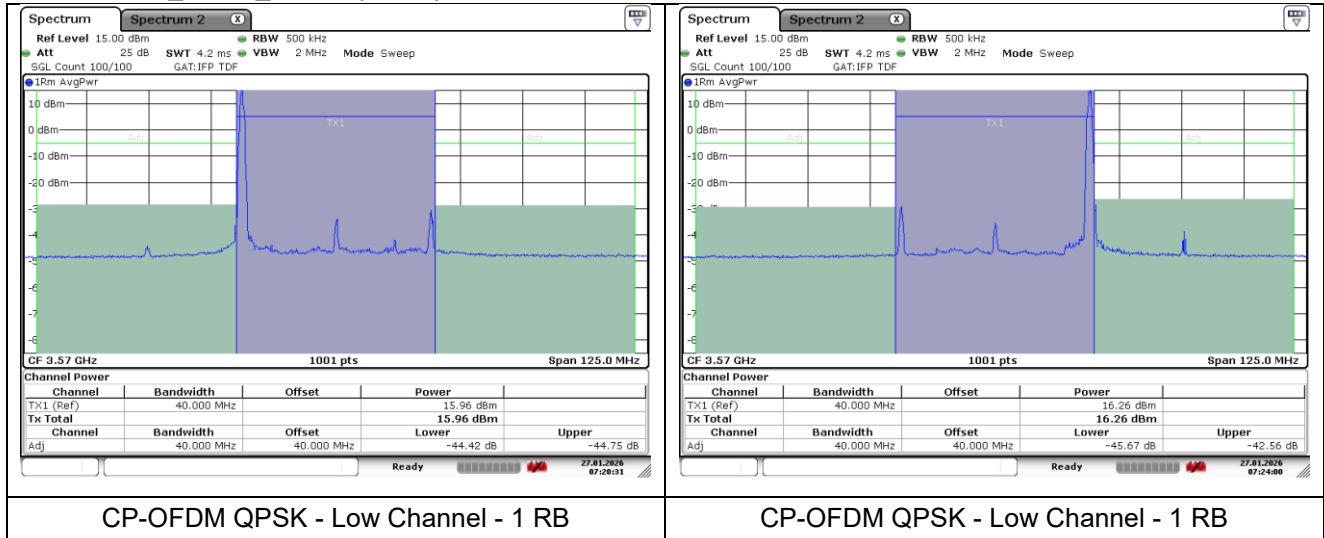
**NR band 48\_MIMO\_ANT.2 (30 MHz)**



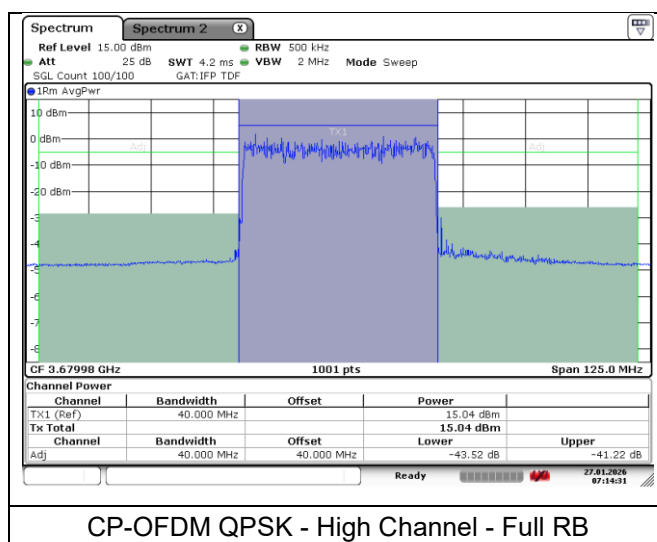
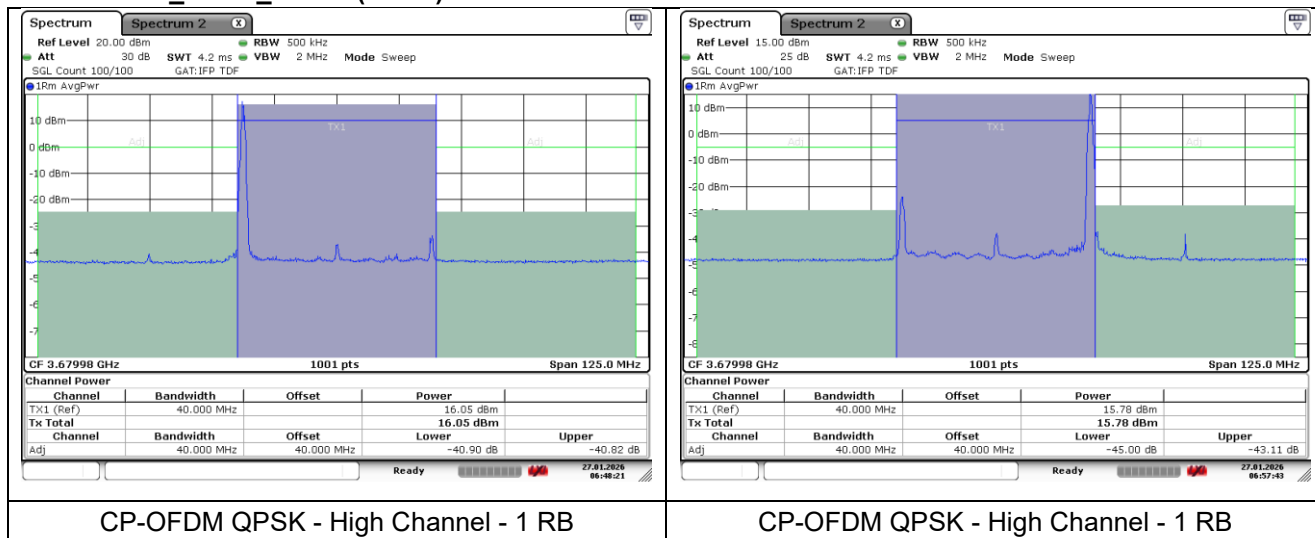
**NR band 48\_MIMO\_ANT.2 (30 MHz)**



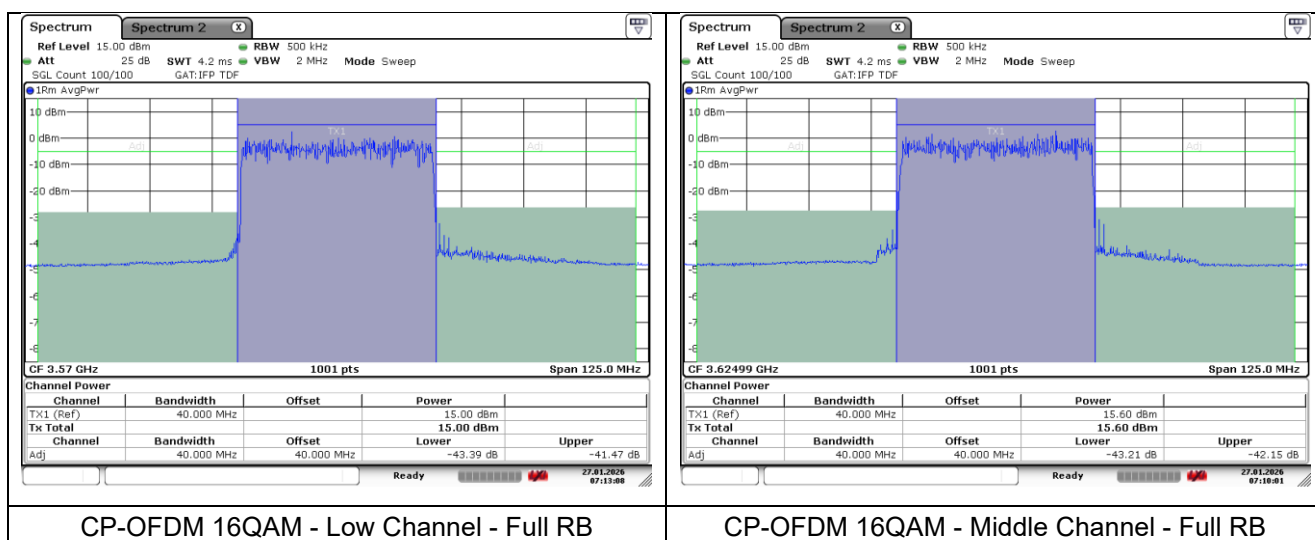
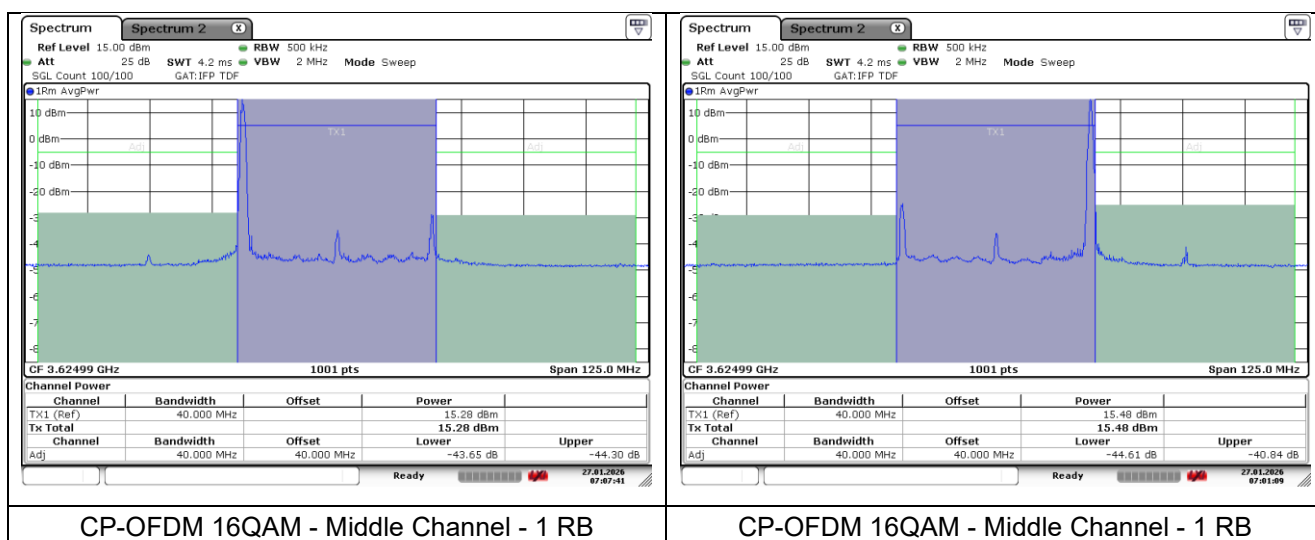
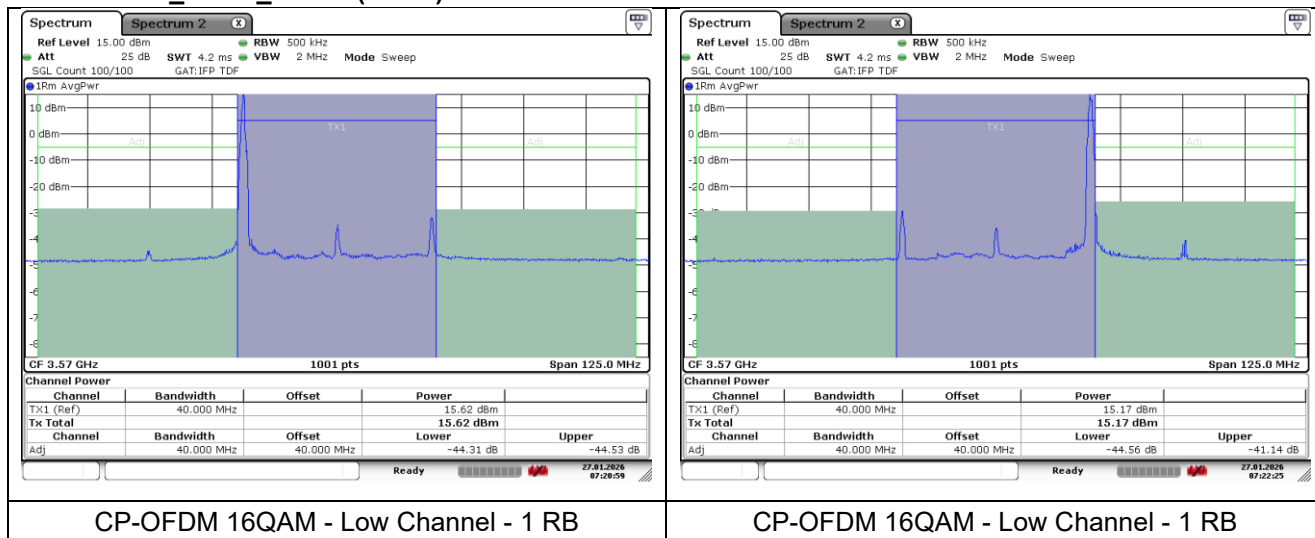
**NR band 48\_MIMO\_ANT.2 (40 MHz)**



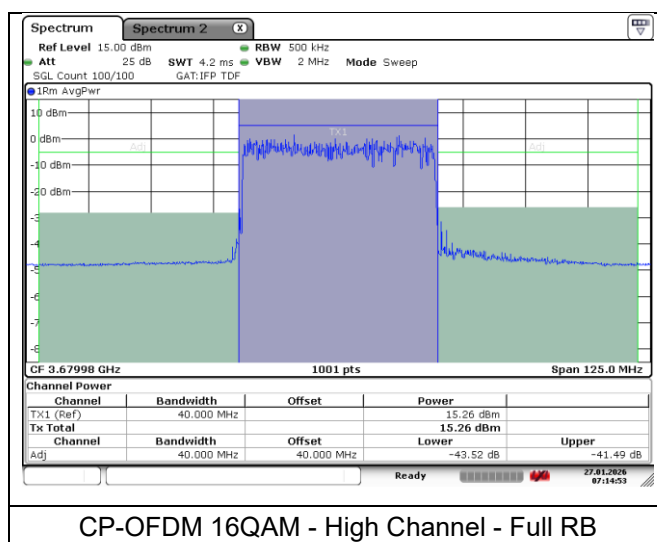
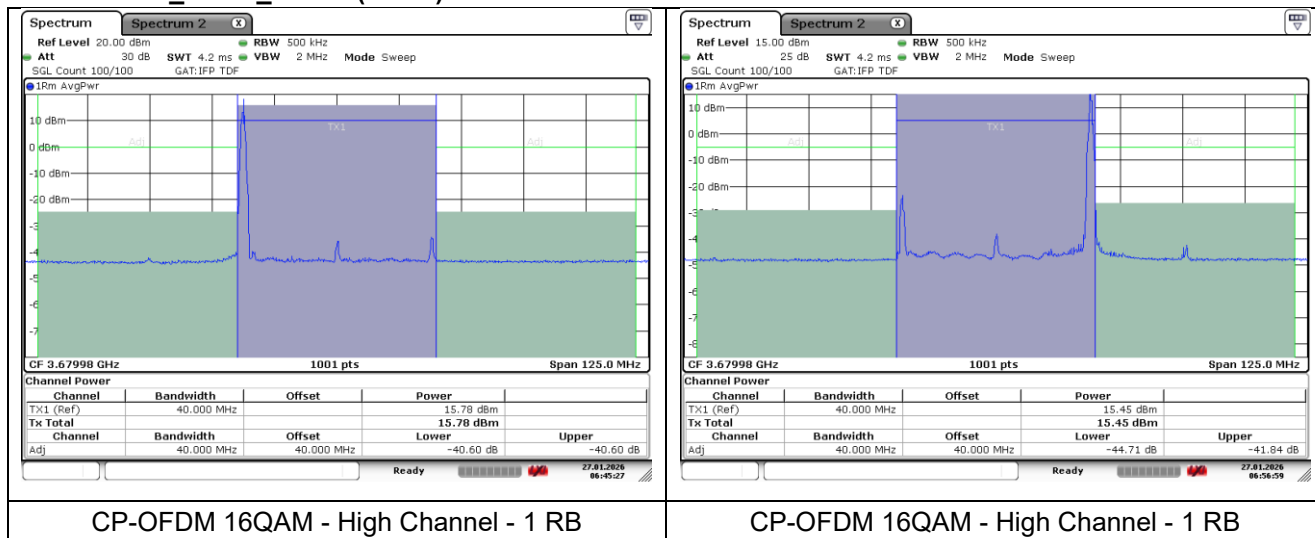
## NR band 48\_MIMO\_ANT.2 (40 MHz)



**NR band 48\_MIMO\_ANT.2 (40 MHz)**



## NR band 48\_MIMO\_ANT.2 (40 MHz)



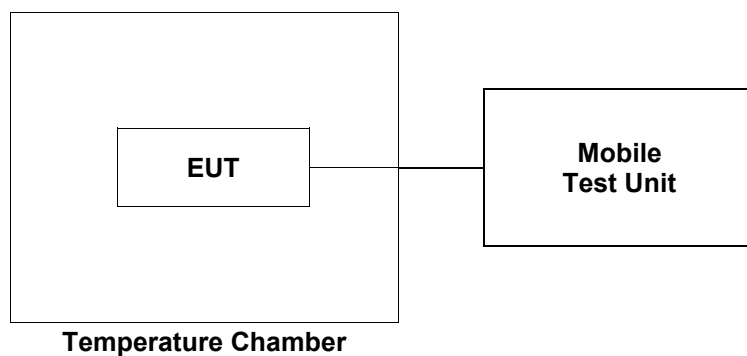
## 8. Frequency Stability

### 8.1. Limit

- § 2.1055 (a), § 2.1055 (d)

### 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 %

#### LTE band 48 at middle channel

| Reference Frequency: 3 625.0 MHz        |                    |                                    |           |
|-----------------------------------------|--------------------|------------------------------------|-----------|
| Frequency Stability versus Temperature  |                    |                                    |           |
| Environment Temperature (°C)            | Power Supplied (V) | Frequency Measure with Time Elapse |           |
|                                         |                    | Frequency Error (Hz)               | ppm       |
| 50                                      | 4.0                | 23.0                               | 0.007 83  |
| 40                                      |                    | -11.6                              | -0.001 71 |
| 30                                      |                    | 4.7                                | 0.002 79  |
| 20(Ref.)                                |                    | -5.4                               | -         |
| 10                                      |                    | 5.7                                | 0.003 06  |
| 0                                       |                    | 8.3                                | 0.003 78  |
| -10                                     |                    | -7.7                               | -0.000 63 |
| -20                                     |                    | 15.5                               | 0.005 77  |
| -30                                     |                    | 17.9                               | 0.006 43  |
| Frequency Stability versus Power Supply |                    |                                    |           |
| Environment Temperature (°C)            | Power Supplied (V) | Frequency Measure with Time Elapse |           |
|                                         |                    | Frequency Error (Hz)               | ppm       |
| 20                                      | 3.40 (85%)         | 3.4                                | 0.002 43  |
|                                         | 4.60 (115%)        | -2.2                               | 0.000 88  |

**NR band 48\_SISO at middle channel**

| Reference Frequency: 3 624.99 MHz       |                    |                                    |           |
|-----------------------------------------|--------------------|------------------------------------|-----------|
| Frequency Stability versus Temperature  |                    |                                    |           |
| Environment Temperature (°C)            | Power Supplied (V) | Frequency Measure with Time Elapse |           |
|                                         |                    | Frequency Error (Hz)               | ppm       |
| 50                                      | 4.0                | -11.6                              | -0.002 12 |
| 40                                      |                    | -10.5                              | -0.001 82 |
| 30                                      |                    | -6.8                               | -0.000 80 |
| 20(Ref.)                                |                    | -3.9                               | -         |
| 10                                      |                    | -9.8                               | -0.001 63 |
| 0                                       |                    | -7.5                               | -0.000 99 |
| -10                                     |                    | -4.1                               | 0.000 14  |
| -20                                     |                    | -6.9                               | -0.000 63 |
| -30                                     |                    | -5.5                               | -0.000 25 |
| Frequency Stability versus Power Supply |                    |                                    |           |
| Environment Temperature (°C)            | Power Supplied (V) | Frequency Measure with Time Elapse |           |
|                                         |                    | Frequency Error (Hz)               | ppm       |
| 20                                      | 3.40 (85%)         | 2.6                                | 0.001 79  |
|                                         | 4.60 (115%)        | 0.8                                | 0.001 30  |

**NR band 48\_MIMO at middle channel**

| Reference Frequency: 3 624.99 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                                      | 4.0                | -13.5                              | -13.5  | -0.002 95 | -0.002 95 |
| 40                                      |                    | -5.5                               | -5.5   | -0.000 74 | -0.000 74 |
| 30                                      |                    | -7.4                               | -7.4   | -0.001 27 | -0.001 27 |
| 20(Ref.)                                |                    | -2.8                               | -2.8   | -         | -         |
| 10                                      |                    | -8.7                               | -8.7   | -0.001 63 | -0.001 63 |
| 0                                       |                    | -6.4                               | -6.4   | -0.000 99 | -0.000 99 |
| -10                                     |                    | -8.7                               | -8.7   | -0.001 21 | -0.001 21 |
| -20                                     |                    | -9.6                               | -9.6   | -0.001 88 | -0.001 88 |
| -30                                     |                    | -8.9                               | -8.9   | -0.001 68 | -0.001 68 |
| 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                                      | 3.40 (85%)         | -9.3                               | -9.3   | -0.001 79 | -0.001 79 |
|                                         | 4.60 (115%)        | -3.1                               | -3.1   | -0.000 08 | -0.000 08 |

**- End of the Test Report -**