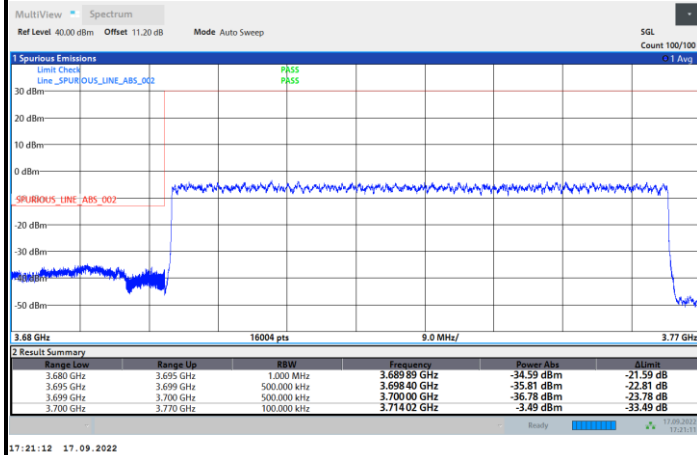


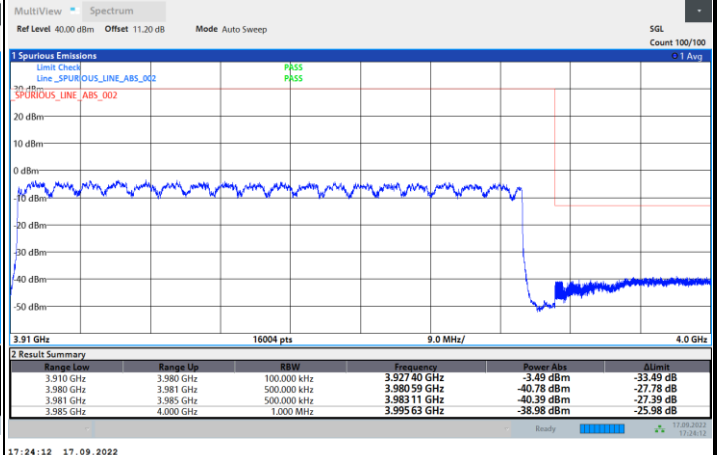


## FR1 n77 / 70MHz / DFT-S OFDM / 256QAM

## Lowest Band Edge / Full RB

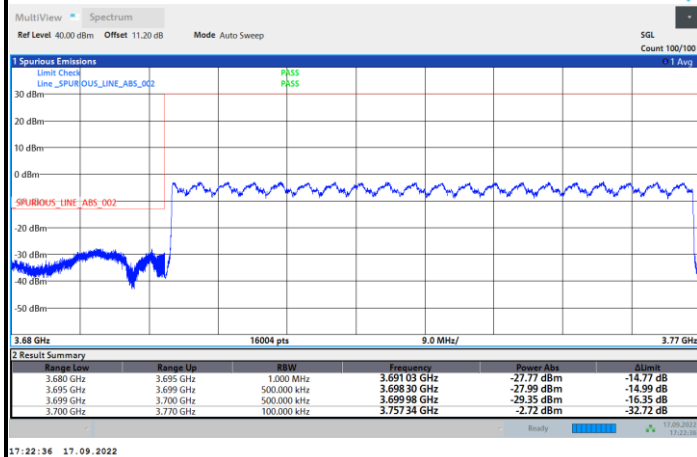


## Highest Band Edge / Full RB

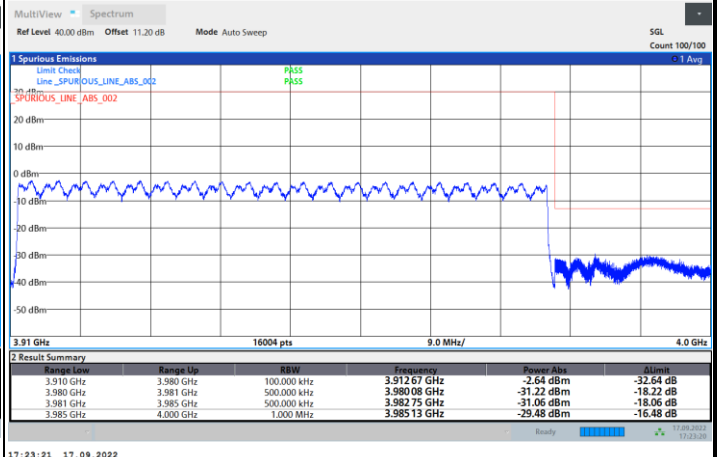


## FR1 n77 / 70MHz / CP OFDM / QPSK / Full RB

## Lowest Band Edge



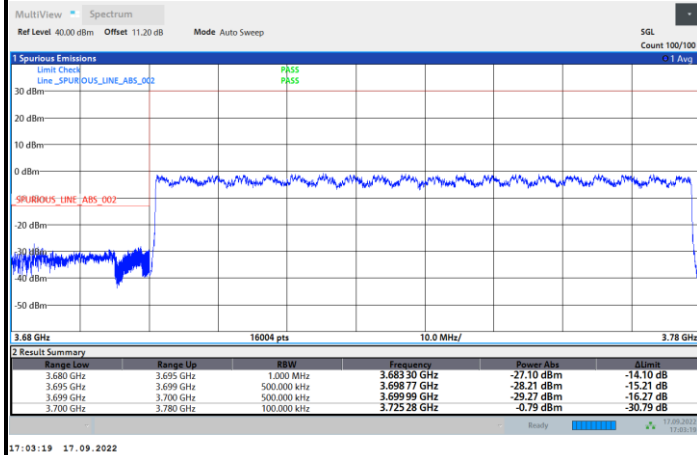
## Highest Band Edge



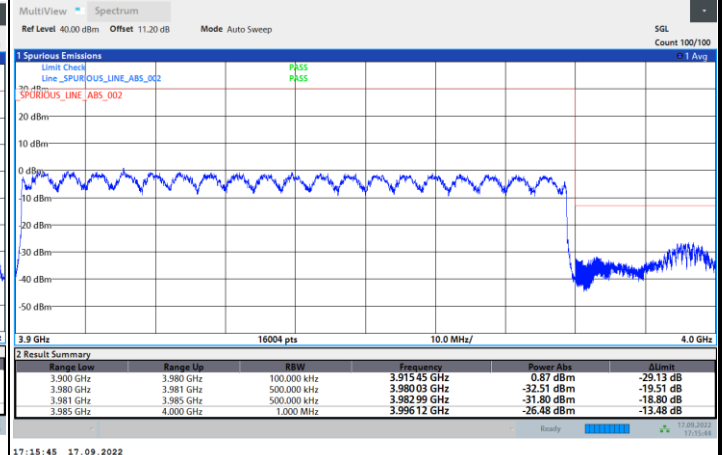


## FR1 n77 / 80MHz / DFT-S OFDM / PI/2 BPSK

## Lowest Band Edge / Full RB

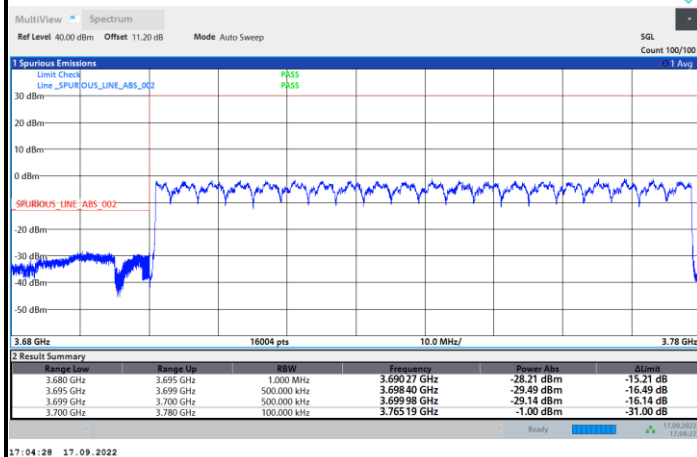


## Highest Band Edge / Full RB

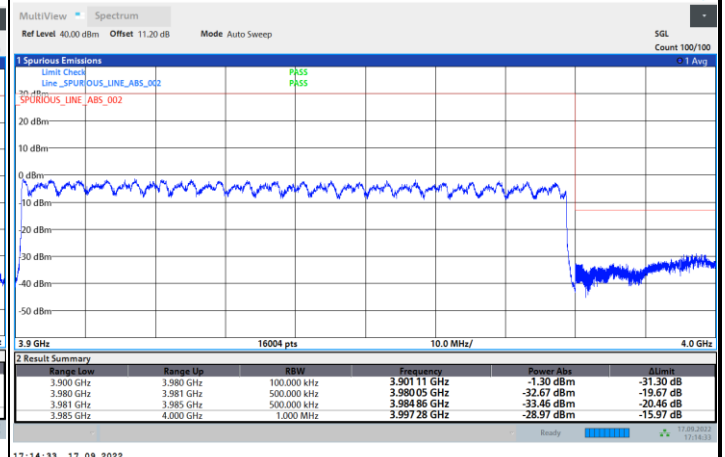


## FR1 n77 / 80MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / Full RB



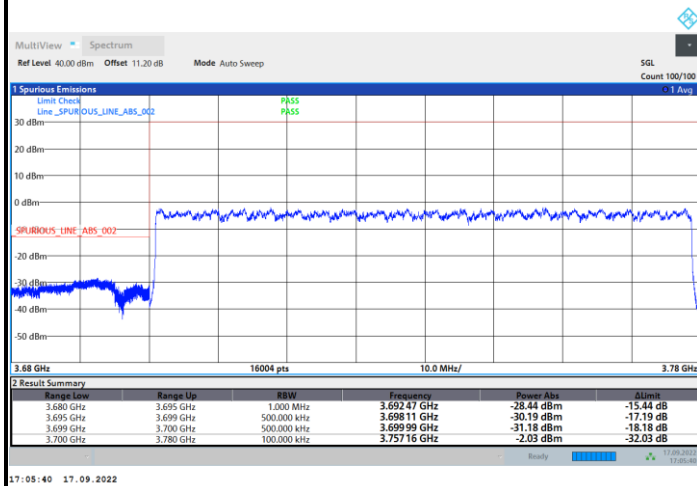
## Highest Band Edge / Full RB



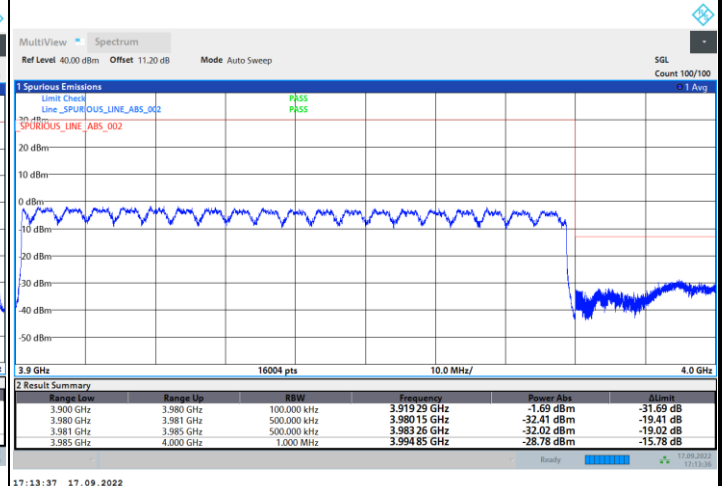


## FR1 n77 / 80MHz / DFT-S OFDM / 16QAM

## Lowest Band Edge / Full RB

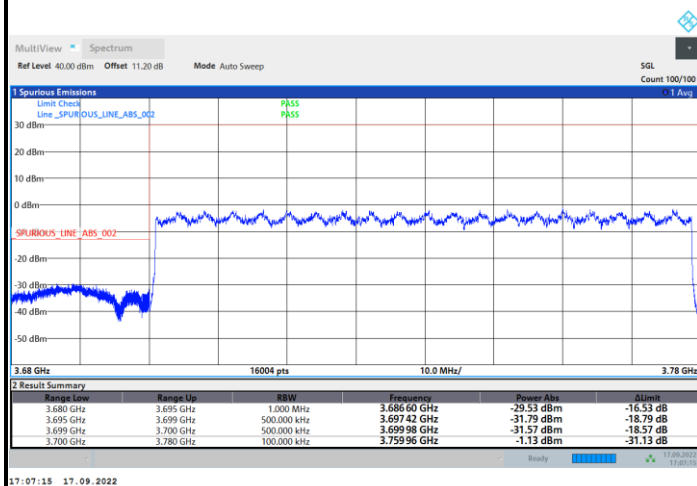


## Highest Band Edge / Full RB

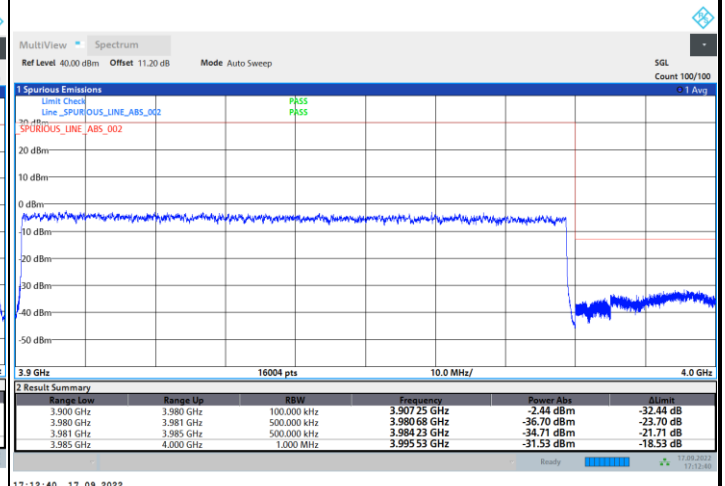


## FR1 n77 / 80MHz / DFT-S OFDM / 64QAM

## Lowest Band Edge / Full RB



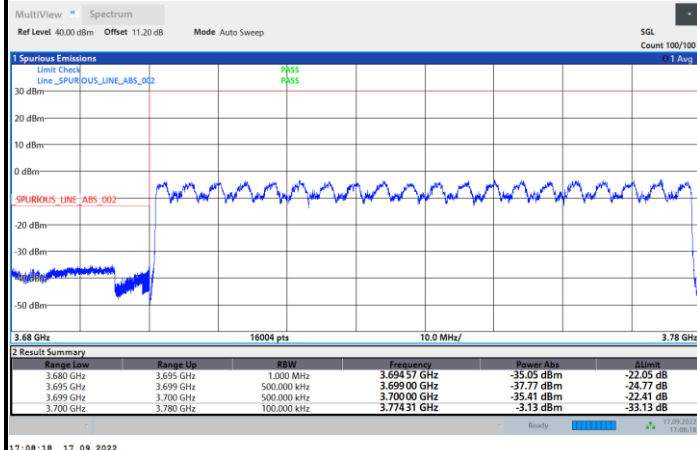
## Highest Band Edge / Full RB



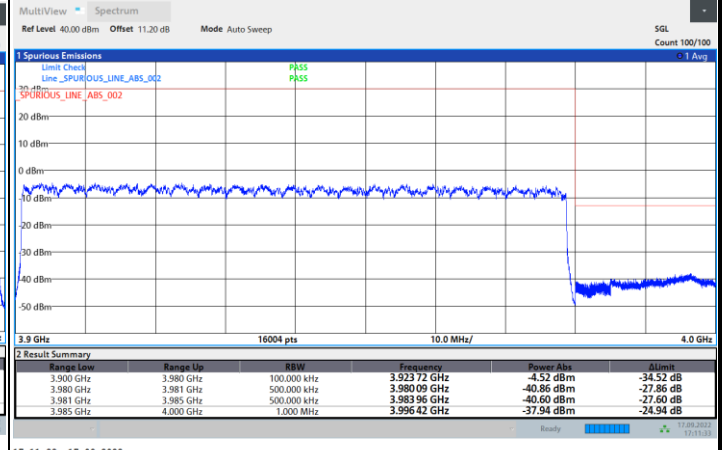


## FR1 n77 / 80MHz / DFT-S OFDM / 256QAM

## Lowest Band Edge / Full RB

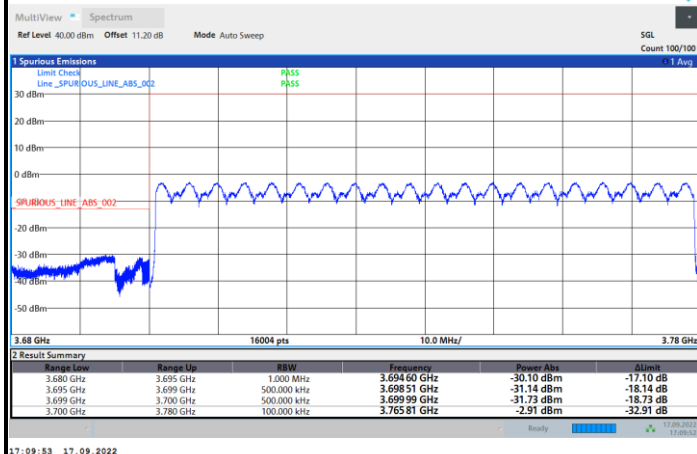


## Highest Band Edge / Full RB

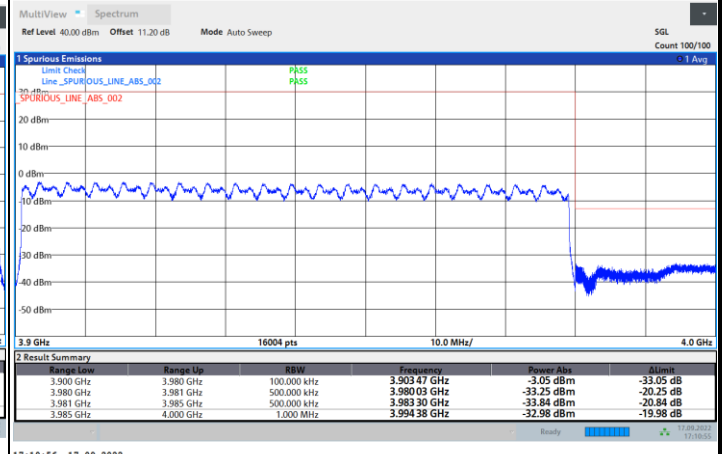


## FR1 n77 / 80MHz / CP OFDM / QPSK / Full RB

## Lowest Band Edge



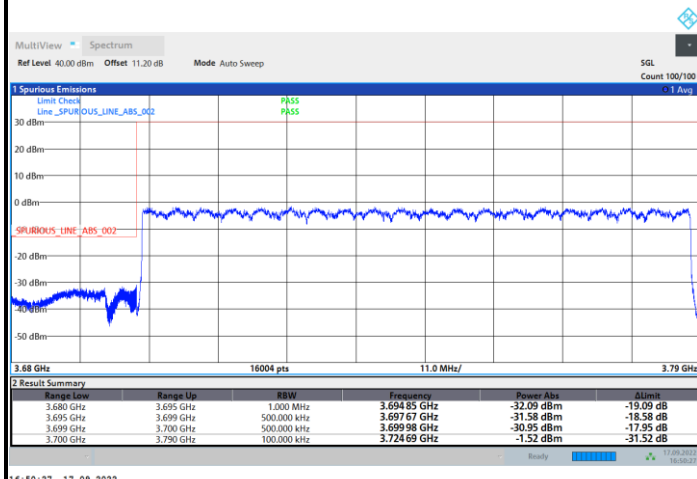
## Highest Band Edge





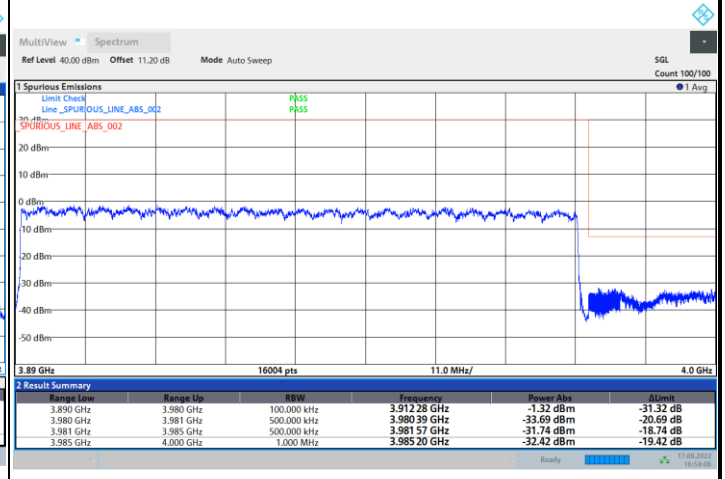
## FR1 n77 / 90MHz / DFT-S OFDM / PI/2 BPSK

## Lowest Band Edge / Full RB



16:50:27 17.09.2022

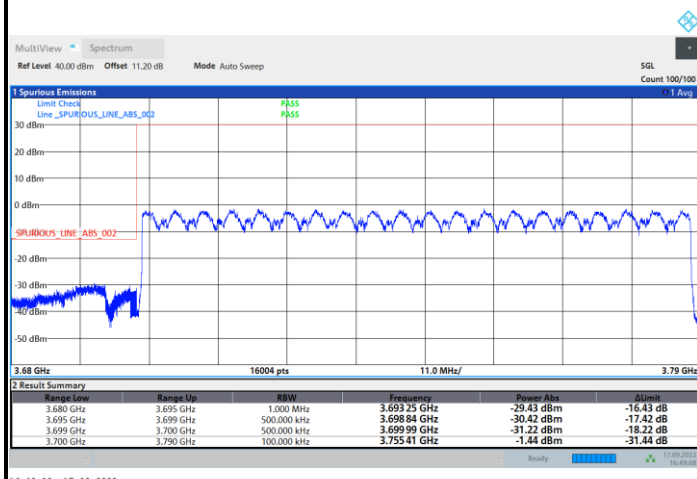
## Highest Band Edge / Full RB



16:59:07 17.09.2022

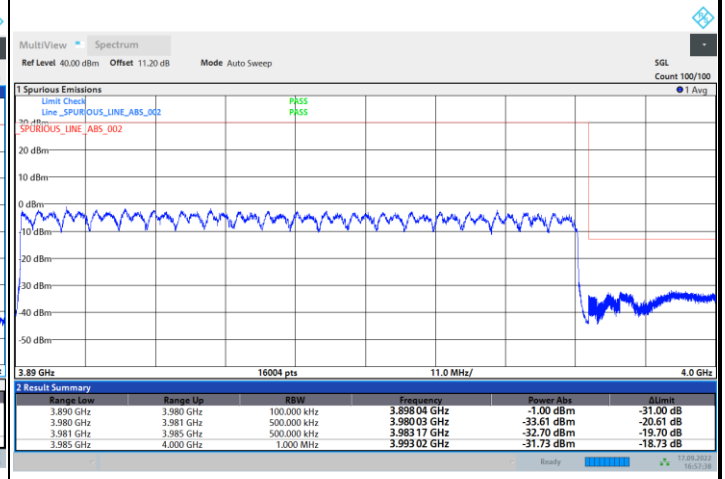
## FR1 n77 / 90MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / Full RB



16:49:09 17.09.2022

## Highest Band Edge / Full RB

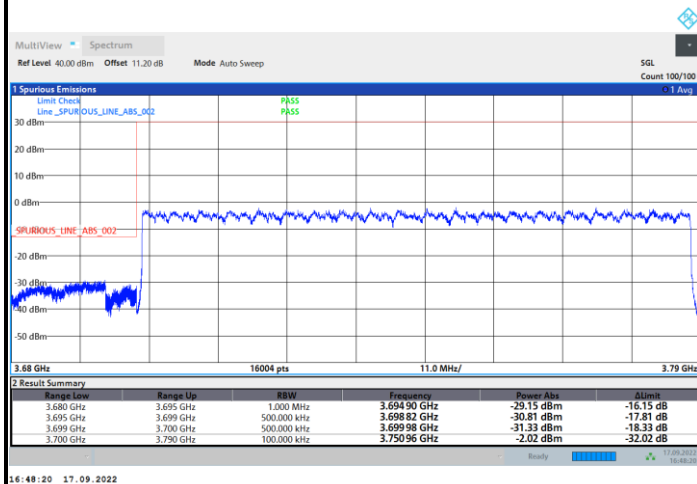


16:57:38 17.09.2022

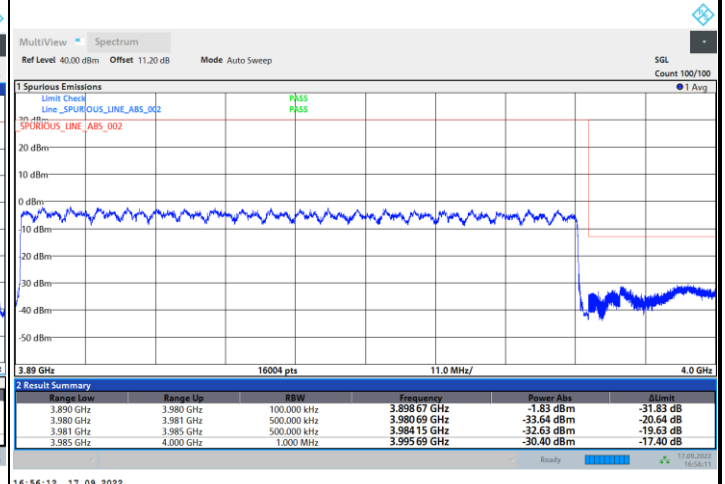


## FR1 n77 / 90MHz / DFT-S OFDM / 16QAM

## Lowest Band Edge / Full RB

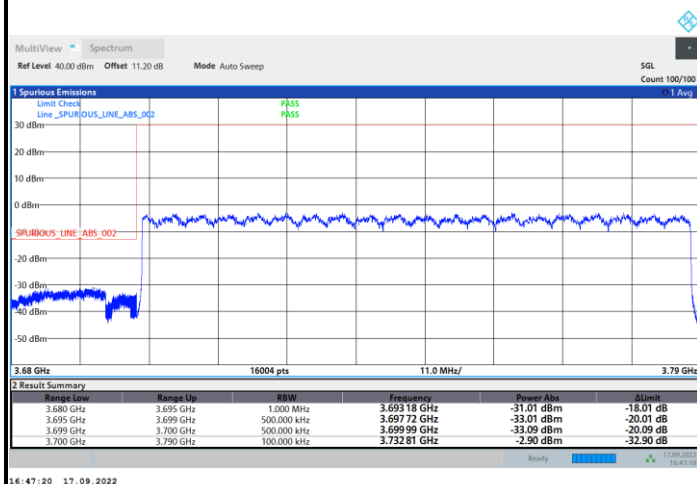


## Highest Band Edge / Full RB

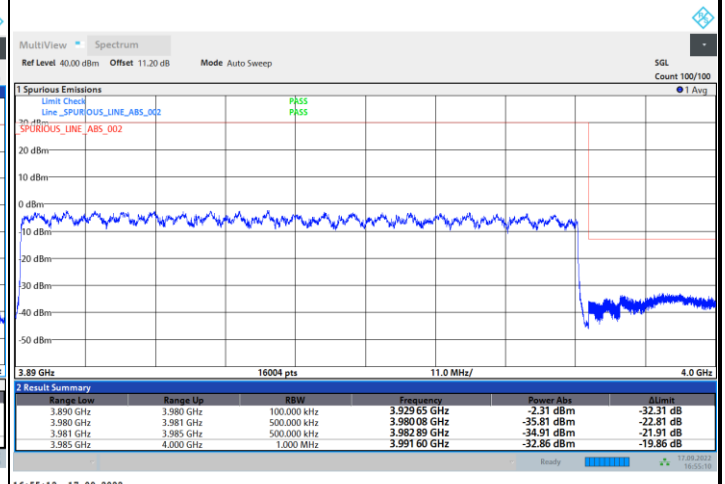


## FR1 n77 / 90MHz / DFT-S OFDM / 64QAM

## Lowest Band Edge / Full RB



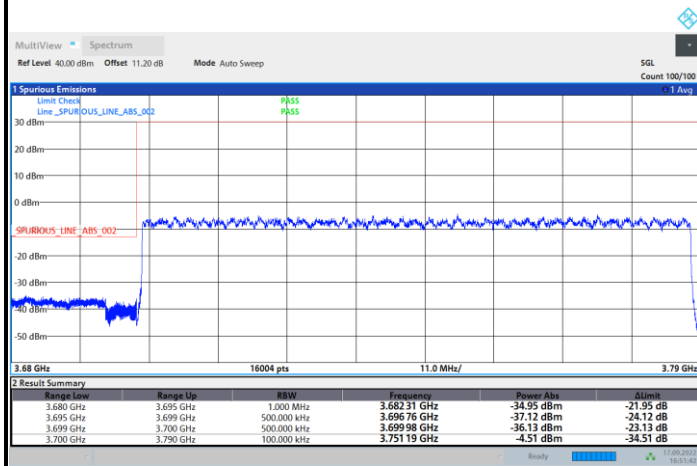
## Highest Band Edge / Full RB



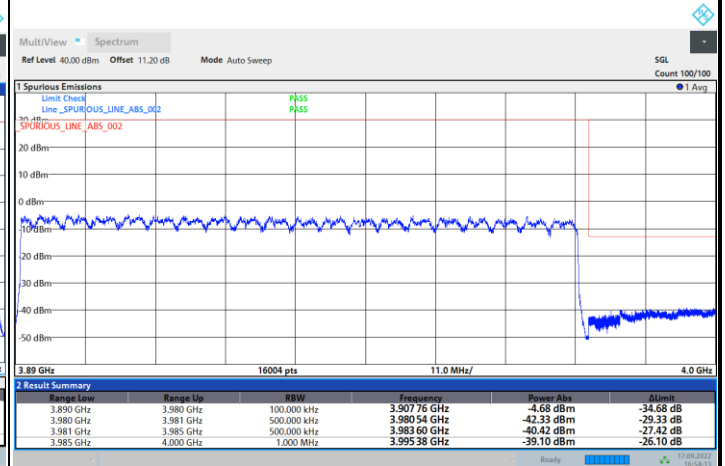


## FR1 n77 / 90MHz / DFT-S OFDM / 256QAM

## Lowest Band Edge / Full RB

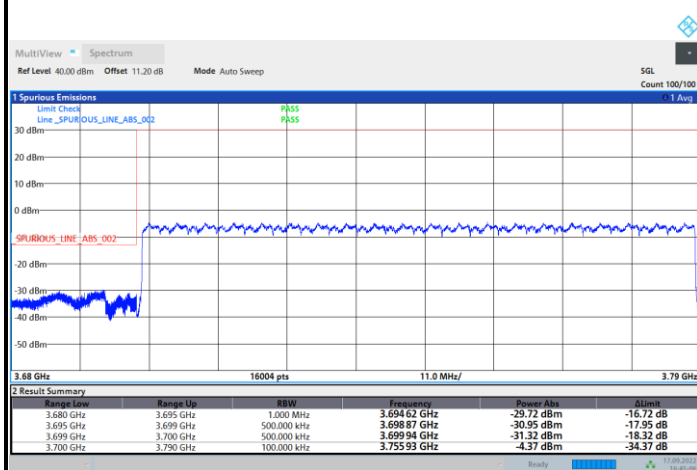


## Highest Band Edge / Full RB

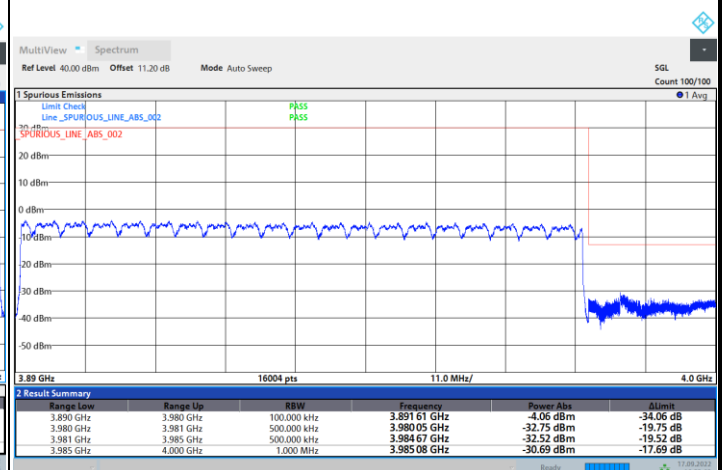


## FR1 n77 / 90MHz / CP OFDM / QPSK / Full RB

## Lowest Band Edge



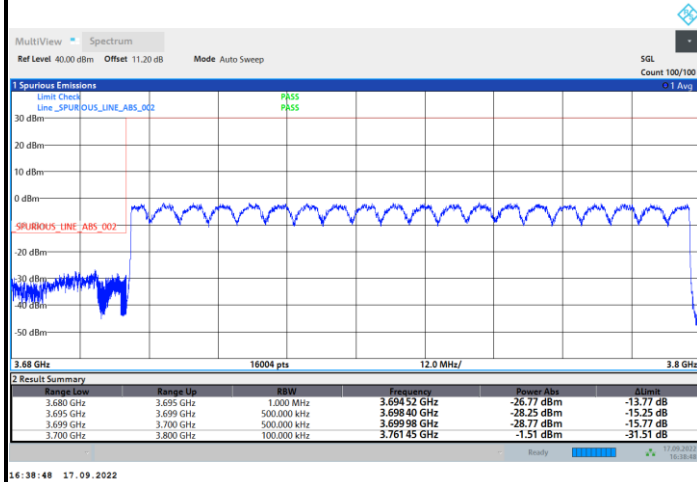
## Highest Band Edge



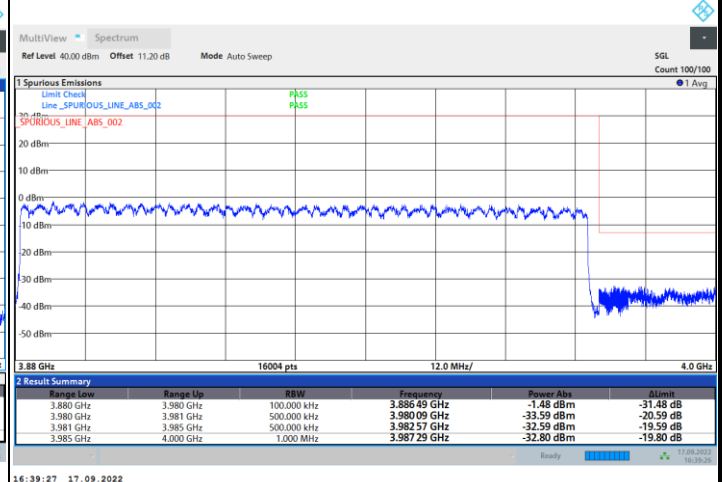


## FR1 n77 / 100MHz / DFT-S OFDM / PI/2 BPSK

## Lowest Band Edge / Full RB

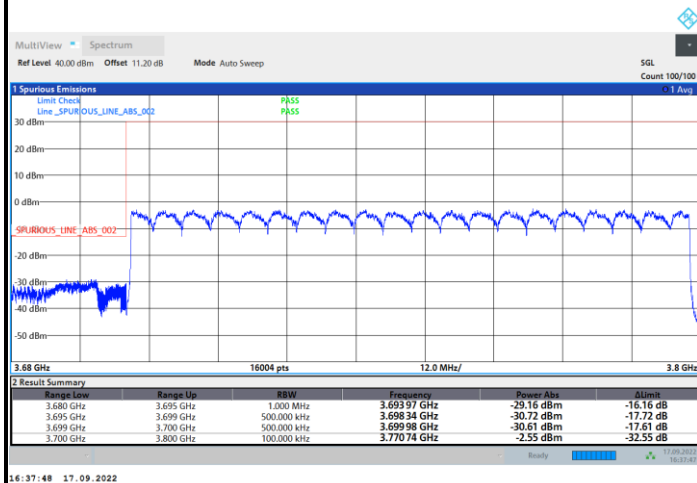


## Highest Band Edge / Full RB

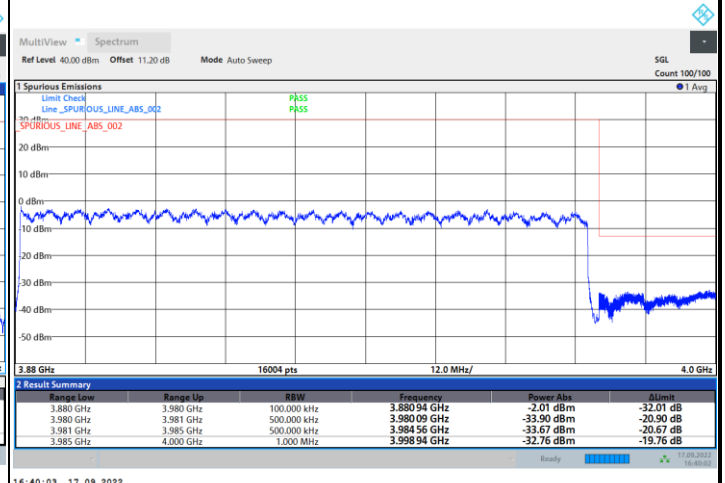


## FR1 n77 / 100MHz / DFT-S OFDM / QPSK

## Lowest Band Edge / Full RB



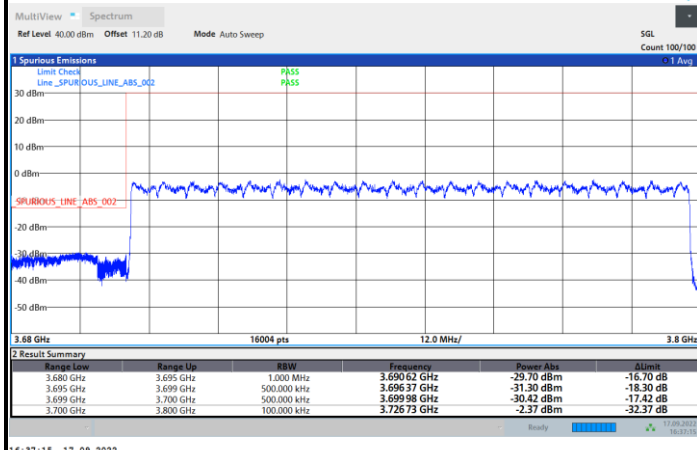
## Highest Band Edge / Full RB





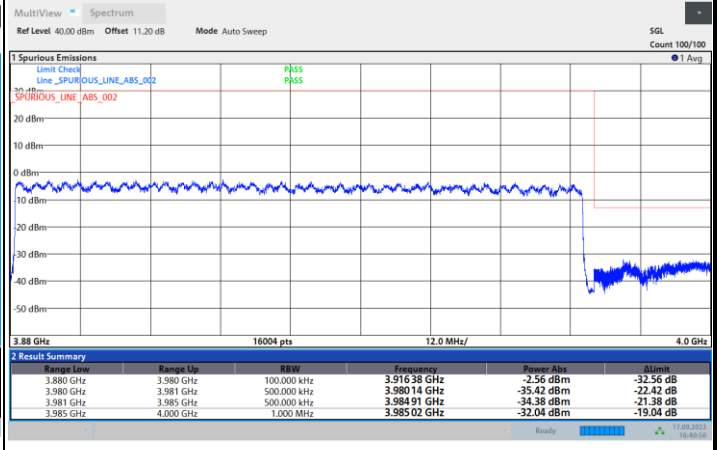
## FR1 n77 / 100MHz / DFT-S OFDM / 16QAM

### Lowest Band Edge / Full RB



16:37:15 17.09.2022

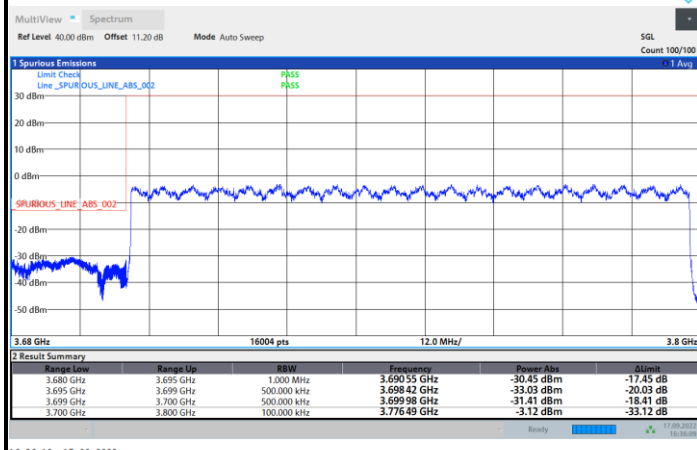
### Highest Band Edge / Full RB



16:40:57 17.09.2022

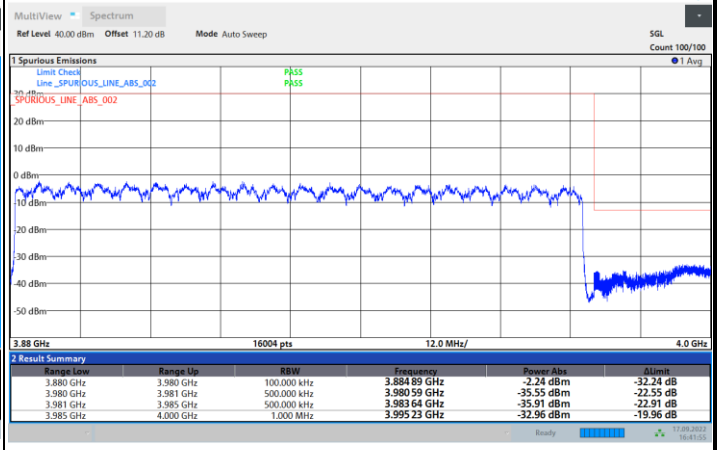
## FR1 n77 / 100MHz / DFT-S OFDM / 64QAM

### Lowest Band Edge / Full RB



16:36:10 17.09.2022

### Highest Band Edge / Full RB

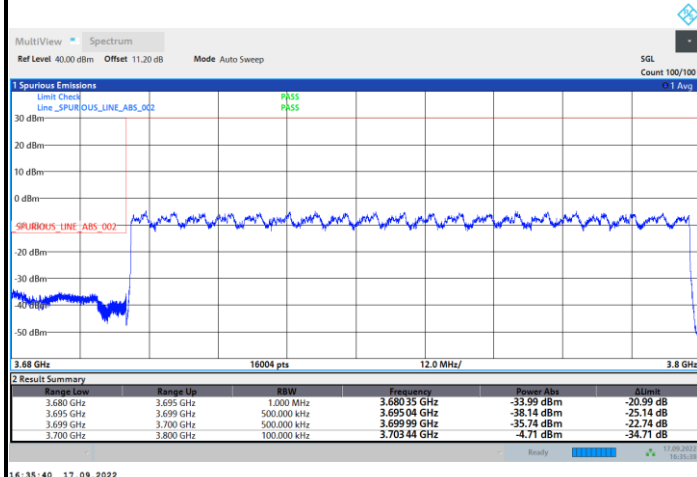


16:41:55 17.09.2022

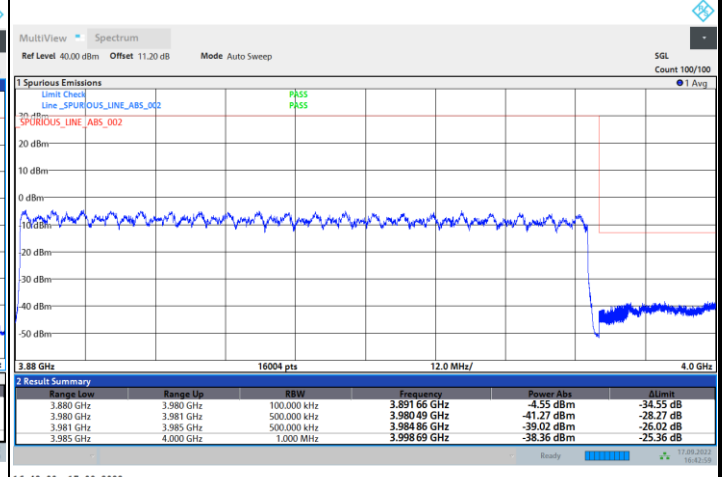


## FR1 n77 / 100MHz / DFT-S OFDM / 256QAM

## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

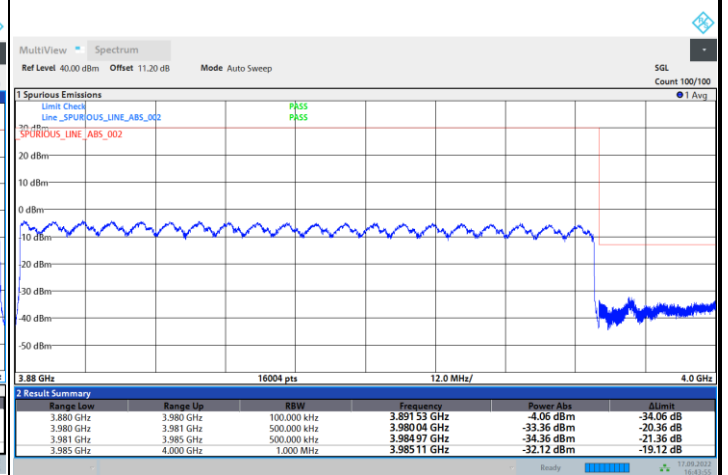


## FR1 n77 / 100MHz / CP OFDM / QPSK / Full RB

## Lowest Band Edge



## Highest Band Edge

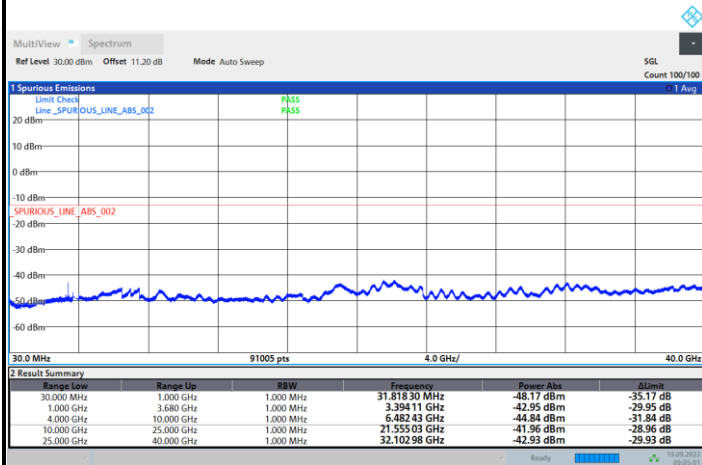




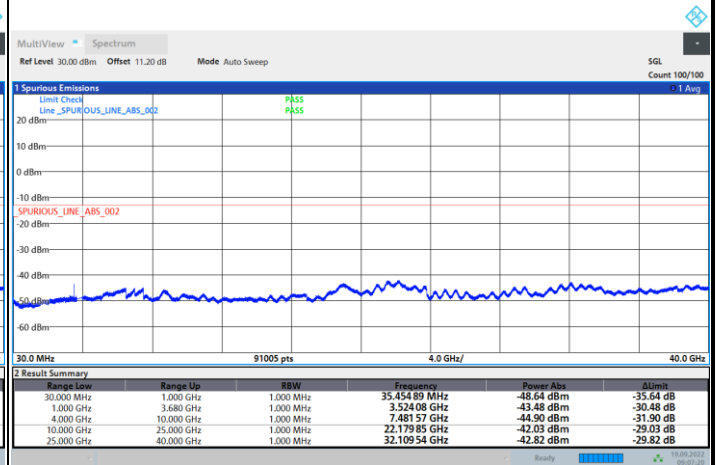
# Conducted Spurious Emission

FR1 n77 / 20MHz / DFT-S OFDM / QPSK / 1RB1

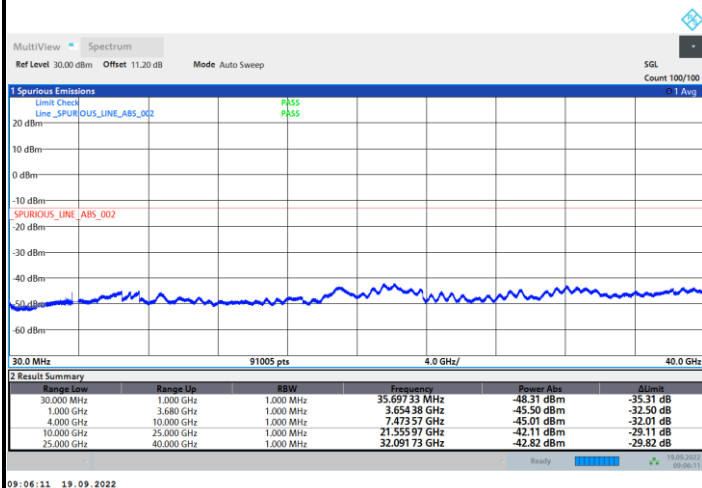
## Lowest Channel



## Middle Channel



## Highest Channel



## Frequency Stability

| Test Conditions     |                   | FR1 n77 (PI/2 BPSK) / Middle Channel | Limit   |
|---------------------|-------------------|--------------------------------------|---------|
| Temperature<br>(°C) | Voltage<br>(Volt) | BW 20MHz                             | Note 2. |
|                     |                   | Deviation (ppm)                      | Result  |
| 50                  | Normal Voltage    | 0.0016                               | PASS    |
| 40                  | Normal Voltage    | 0.0003                               |         |
| 30                  | Normal Voltage    | 0.0000                               |         |
| 20(Ref.)            | Normal Voltage    | 0.0000                               |         |
| 10                  | Normal Voltage    | 0.0022                               |         |
| 0                   | Normal Voltage    | 0.0026                               |         |
| -10                 | Normal Voltage    | 0.0010                               |         |
| -20                 | Normal Voltage    | 0.0025                               |         |
| -30                 | Normal Voltage    | 0.0027                               |         |
| 20                  | Maximum Voltage   | 0.0007                               |         |
| 20                  | Normal Voltage    | 0.0000                               |         |
| 20                  | Battery End Point | 0.0001                               |         |

**Note:**

1. Normal Voltage = 4.05 V. ; Battery End Point (BEP) = 3.85 V. ; Maximum Voltage = 4.35 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

## Appendix B. Test Results of Radiated Test

<Ant. 12>

### 5G NR n77 HPUE

| 5G NR n77_HPUE / 100MHz / PI/2 BPSK |                      |                 |                  |                  |                         |                          |                            |                             |                       |
|-------------------------------------|----------------------|-----------------|------------------|------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                             | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Margin<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                              | 7402                 | -40.53          | -13              | -27.53           | -71.43                  | -47.84                   | 1.94                       | 11.40                       | H                     |
|                                     | 11103                | -35.62          | -13              | -22.62           | -72.75                  | -41.85                   | 2.24                       | 10.62                       | H                     |
|                                     | 14808                | -28.66          | -13              | -15.66           | -71.58                  | -36.70                   | 2.58                       | 12.78                       | H                     |
|                                     | 18506                | -60.02          | -13              | -47.02           | -71.9                   | -72.22                   | 3.24                       | 17.59                       | H                     |
|                                     | 22208                | -60.89          | -13              | -47.89           | -76.62                  | -74.08                   | 3.52                       | 18.86                       | H                     |
|                                     | 25909                | -59.10          | -13              | -46.10           | -77.92                  | -72.11                   | 3.92                       | 19.08                       | H                     |
|                                     | 7402                 | -40.89          | -13              | -27.89           | -71.89                  | -48.20                   | 1.94                       | 11.40                       | V                     |
|                                     | 11103                | -35.59          | -13              | -22.59           | -72.67                  | -41.82                   | 2.24                       | 10.62                       | V                     |
|                                     | 14808                | -27.54          | -13              | -14.54           | -71.57                  | -35.58                   | 2.58                       | 12.78                       | V                     |
|                                     | 18506                | -62.52          | -13              | -49.52           | -74.18                  | -74.72                   | 3.24                       | 17.59                       | V                     |
|                                     | 22208                | -61.39          | -13              | -48.39           | -76.72                  | -74.58                   | 3.52                       | 18.86                       | V                     |
|                                     | 25909                | -59.36          | -13              | -46.36           | -77.87                  | -72.37                   | 3.92                       | 19.08                       | V                     |
| Middle                              | 7582                 | -41.40          | -13              | -28.40           | -71.92                  | -48.88                   | 1.90                       | 11.53                       | H                     |
|                                     | 11373                | -34.65          | -13              | -21.65           | -72.07                  | -41.10                   | 2.35                       | 10.95                       | H                     |
|                                     | 15168                | -28.76          | -13              | -15.76           | -71.02                  | -37.95                   | 2.60                       | 13.94                       | H                     |
|                                     | 18956                | -62.51          | -13              | -49.51           | -74.08                  | -74.25                   | 3.26                       | 17.14                       | H                     |
|                                     | 22748                | -60.05          | -13              | -47.05           | -76.58                  | -73.05                   | 3.55                       | 18.70                       | H                     |
|                                     | 26539                | -54.93          | -13              | -41.93           | -74.62                  | -67.51                   | 3.93                       | 18.65                       | H                     |
|                                     | 7582                 | -41.65          | -13              | -28.65           | -72.34                  | -49.13                   | 1.90                       | 11.53                       | V                     |
|                                     | 11373                | -35.10          | -13              | -22.10           | -72.59                  | -41.55                   | 2.35                       | 10.95                       | V                     |
|                                     | 15168                | -27.84          | -13              | -14.84           | -71.18                  | -37.03                   | 2.60                       | 13.94                       | V                     |
|                                     | 18956                | -63.92          | -13              | -50.92           | -75.26                  | -75.66                   | 3.26                       | 17.14                       | V                     |
|                                     | 22748                | -60.66          | -13              | -47.66           | -76.81                  | -73.66                   | 3.55                       | 18.70                       | V                     |
|                                     | 26539                | -56.52          | -13              | -43.52           | -75.83                  | -69.10                   | 3.93                       | 18.65                       | V                     |



|         |       |        |     |        |        |        |      |       |   |
|---------|-------|--------|-----|--------|--------|--------|------|-------|---|
| Highest | 7762  | -41.17 | -13 | -28.17 | -71.96 | -48.82 | 1.88 | 11.68 | H |
|         | 11643 | -33.84 | -13 | -20.84 | -71.99 | -40.84 | 2.46 | 11.61 | H |
|         | 15528 | -29.93 | -13 | -16.93 | -71.01 | -40.56 | 2.70 | 15.48 | H |
|         | 19406 | -63.46 | -13 | -50.46 | -75.77 | -75.51 | 3.23 | 17.42 | H |
|         | 23288 | -59.52 | -13 | -46.52 | -76.63 | -72.39 | 3.63 | 18.66 | H |
|         | 27169 | -56.95 | -13 | -43.95 | -77.52 | -70.24 | 3.93 | 19.37 | H |
|         | 7762  | -40.71 | -13 | -27.71 | -71.77 | -48.36 | 1.88 | 11.68 | V |
|         | 11643 | -34.01 | -13 | -21.01 | -72.07 | -41.01 | 2.46 | 11.61 | V |
|         | 15528 | -29.36 | -13 | -16.36 | -70.71 | -39.99 | 2.70 | 15.48 | V |
|         | 19406 | -63.30 | -13 | -50.30 | -75.35 | -75.35 | 3.23 | 17.42 | V |
|         | 23288 | -59.83 | -13 | -46.83 | -76.61 | -72.70 | 3.63 | 18.66 | V |
|         | 27169 | -57.49 | -13 | -44.49 | -77.7  | -70.78 | 3.93 | 19.37 | V |

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



&lt;Ant. 4 + Ant. 11&gt;

**EN-DC 5A-n77A HPUE**

| EN-DC 5A-n77A_HPUE / 10M + 100MHz / PI/2 BPSK |                      |                 |                  |                  |                         |                          |                            |                             |                       |
|-----------------------------------------------|----------------------|-----------------|------------------|------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                                       | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Margin<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                                        | 7402                 | -41.01          | -13              | -28.01           | -71.91                  | -48.32                   | 1.94                       | 11.40                       | H                     |
|                                               | 11103                | -35.85          | -13              | -22.85           | -72.98                  | -42.08                   | 2.24                       | 10.62                       | H                     |
|                                               | 14808                | -28.77          | -13              | -15.77           | -71.69                  | -36.81                   | 2.58                       | 12.78                       | H                     |
|                                               | 18506                | -54.66          | -13              | -41.66           | -66.54                  | -66.86                   | 3.24                       | 17.59                       | H                     |
|                                               | 22208                | -60.50          | -13              | -47.50           | -76.23                  | -73.69                   | 3.52                       | 18.86                       | H                     |
|                                               | 25909                | -54.34          | -13              | -41.34           | -73.16                  | -67.35                   | 3.92                       | 19.08                       | H                     |
|                                               | 7402                 | -40.51          | -13              | -27.51           | -71.51                  | -47.82                   | 1.94                       | 11.40                       | V                     |
|                                               | 11103                | -36.01          | -13              | -23.01           | -73.09                  | -42.24                   | 2.24                       | 10.62                       | V                     |
|                                               | 14808                | -27.57          | -13              | -14.57           | -71.6                   | -35.61                   | 2.58                       | 12.78                       | V                     |
|                                               | 18506                | -60.53          | -13              | -47.53           | -72.18                  | -72.73                   | 3.24                       | 17.59                       | V                     |
|                                               | 22208                | -61.46          | -13              | -48.46           | -76.79                  | -74.65                   | 3.52                       | 18.86                       | V                     |
|                                               | 25909                | -59.50          | -13              | -46.50           | -78.01                  | -72.51                   | 3.92                       | 19.08                       | V                     |
| Middle                                        | 7582                 | -41.41          | -13              | -28.41           | -71.93                  | -48.89                   | 1.90                       | 11.53                       | H                     |
|                                               | 11373                | -35.24          | -13              | -22.24           | -72.66                  | -41.69                   | 2.35                       | 10.95                       | H                     |
|                                               | 15168                | -29.09          | -13              | -16.09           | -71.35                  | -38.28                   | 2.60                       | 13.94                       | H                     |
|                                               | 18956                | -59.02          | -13              | -46.02           | -70.59                  | -70.76                   | 3.26                       | 17.14                       | H                     |
|                                               | 22748                | -59.71          | -13              | -46.71           | -76.24                  | -72.71                   | 3.55                       | 18.70                       | H                     |
|                                               | 26539                | -53.83          | -13              | -40.83           | -73.52                  | -66.41                   | 3.93                       | 18.65                       | H                     |
|                                               | 7582                 | -41.94          | -13              | -28.94           | -72.63                  | -49.42                   | 1.90                       | 11.53                       | V                     |
|                                               | 11373                | -35.20          | -13              | -22.20           | -72.69                  | -41.65                   | 2.35                       | 10.95                       | V                     |
|                                               | 15168                | -28.47          | -13              | -15.47           | -71.81                  | -37.66                   | 2.60                       | 13.94                       | V                     |
|                                               | 18956                | -64.02          | -13              | -51.02           | -75.36                  | -75.76                   | 3.26                       | 17.14                       | V                     |
|                                               | 22748                | -60.98          | -13              | -47.98           | -77.13                  | -73.98                   | 3.55                       | 18.70                       | V                     |
|                                               | 26539                | -56.47          | -13              | -43.47           | -75.78                  | -69.05                   | 3.93                       | 18.65                       | V                     |



|         |       |        |     |        |        |        |      |       |   |
|---------|-------|--------|-----|--------|--------|--------|------|-------|---|
| Highest | 7762  | -41.23 | -13 | -28.23 | -72.02 | -48.88 | 1.88 | 11.68 | H |
|         | 11643 | -34.02 | -13 | -21.02 | -72.17 | -41.02 | 2.46 | 11.61 | H |
|         | 15528 | -29.86 | -13 | -16.86 | -70.94 | -40.49 | 2.70 | 15.48 | H |
|         | 19406 | -59.92 | -13 | -46.92 | -72.23 | -71.97 | 3.23 | 17.42 | H |
|         | 23288 | -55.70 | -13 | -42.70 | -72.81 | -68.57 | 3.63 | 18.66 | H |
|         | 27169 | -54.32 | -13 | -41.32 | -74.89 | -67.61 | 3.93 | 19.37 | H |
|         | 7762  | -41.14 | -13 | -28.14 | -72.2  | -48.79 | 1.88 | 11.68 | V |
|         | 11643 | -34.10 | -13 | -21.10 | -72.16 | -41.10 | 2.46 | 11.61 | V |
|         | 15528 | -29.71 | -13 | -16.71 | -71.06 | -40.34 | 2.70 | 15.48 | V |
|         | 19406 | -62.07 | -13 | -49.07 | -74.12 | -74.12 | 3.23 | 17.42 | V |
|         | 23288 | -59.69 | -13 | -46.69 | -76.47 | -72.56 | 3.63 | 18.66 | V |
|         | 27169 | -55.93 | -13 | -42.93 | -76.14 | -69.22 | 3.93 | 19.37 | V |

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