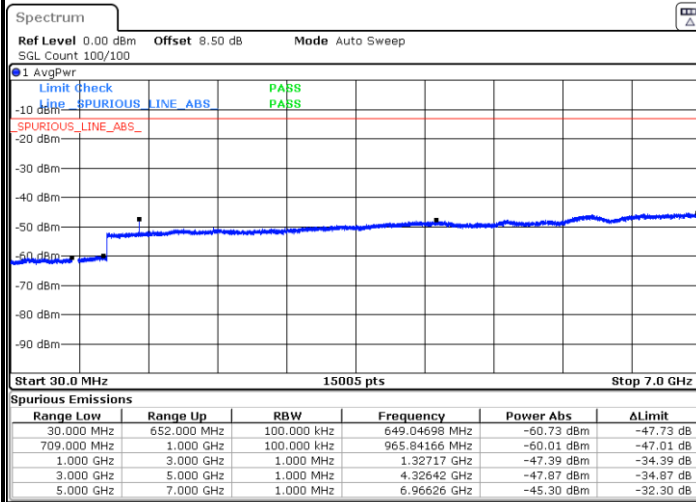




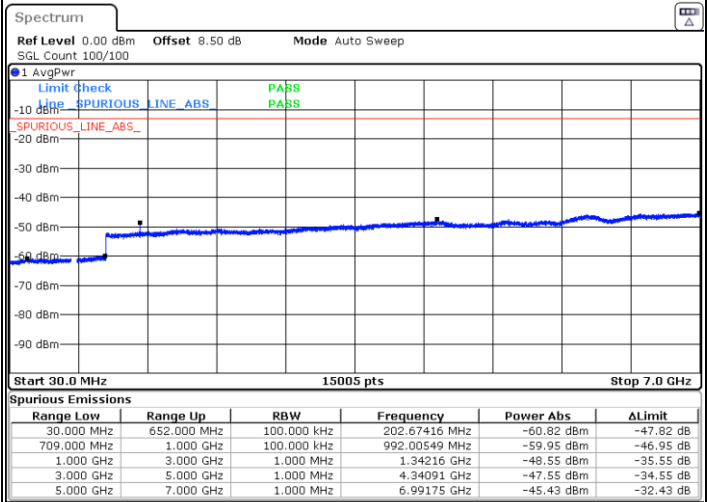
## FR1 n71 / 20MHz / DFT-S OFDM / QPSK

## Lowest Channel / 1RB0



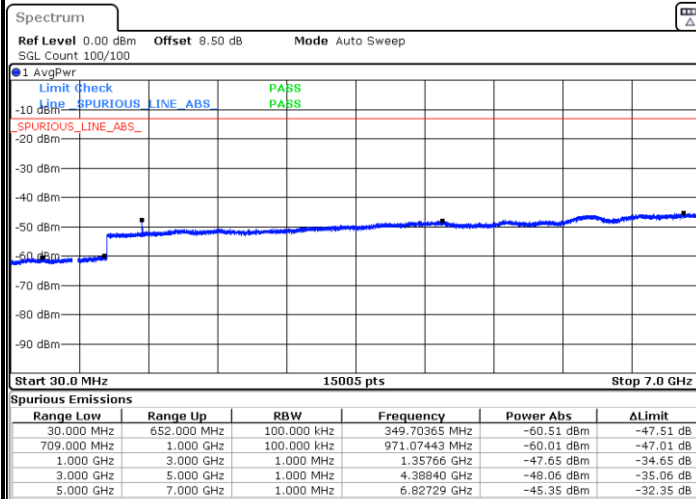
Date: 4 AUG.2020 01:35:21

## Middle Channel / 1RB0



Date: 4 AUG.2020 02:06:37

## Highest Channel / 1RB0



Date: 4 AUG.2020 02:29:33

**Frequency Stability**

| Test Conditions  |                   | FR1 n71 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|---------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 20MHz                        | Note 2. |
|                  |                   | Deviation (ppm)                 | Result  |
| 50               | Normal Voltage    | 0.0024                          | PASS    |
| 40               | Normal Voltage    | 0.0005                          |         |
| 30               | Normal Voltage    | 0.0022                          |         |
| 20(Ref.)         | Normal Voltage    | 0.0004                          |         |
| 10               | Normal Voltage    | 0.0010                          |         |
| 0                | Normal Voltage    | 0.0009                          |         |
| -10              | Normal Voltage    | 0.0031                          |         |
| -20              | Normal Voltage    | 0.0015                          |         |
| -30              | Normal Voltage    | 0.0004                          |         |
| 20               | Maximum Voltage   | 0.0032                          |         |
| 20               | Normal Voltage    | 0.0022                          |         |
| 20               | Battery End Point | 0.0001                          |         |

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.135 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## Appendix B. Test Results of Radiated Test

### Radiated Spurious Emission\_SA mode

#### Antenna 2

| 5G NR n7 / 20MHz / QPSK |                      |                 |                  |                         |                          |                            |                             |                       |
|-------------------------|----------------------|-----------------|------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                 | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest                  | 5001                 | -66.56          | -13              | -53.56                  | -76.77                   | 3.03                       | 13.24                       | H                     |
|                         | 7503                 | -61.48          | -13              | -48.48                  | -70.93                   | 3.56                       | 13.01                       | H                     |
|                         | 10004.36             | -58.76          | -13              | -45.76                  | -68.28                   | 3.92                       | 13.44                       | H                     |
|                         | 5001                 | -61.72          | -13              | -48.72                  | -71.93                   | 3.03                       | 13.24                       | V                     |
|                         | 7503.27              | -60.96          | -13              | -47.96                  | -70.41                   | 3.56                       | 13.01                       | V                     |
|                         | 10004.36             | -57.75          | -13              | -44.75                  | -67.27                   | 3.92                       | 13.44                       | V                     |
| Middle                  | 5052                 | -67.04          | -13              | -54.04                  | -77.25                   | 3.03                       | 13.24                       | H                     |
|                         | 7578                 | -61.15          | -13              | -48.15                  | -70.60                   | 3.56                       | 13.01                       | H                     |
|                         | 10104.36             | -58.26          | -13              | -45.26                  | -67.78                   | 3.92                       | 13.44                       | H                     |
|                         | 5052                 | -65.85          | -13              | -52.85                  | -76.06                   | 3.03                       | 13.24                       | V                     |
|                         | 7578                 | -61.00          | -13              | -48.00                  | -70.45                   | 3.56                       | 13.01                       | V                     |
|                         | 10104.36             | -57.96          | -13              | -44.96                  | -67.48                   | 3.92                       | 13.44                       | V                     |
| Highest                 | 5102                 | -65.52          | -13              | -52.52                  | -75.73                   | 3.03                       | 13.24                       | H                     |
|                         | 7653                 | -60.91          | -13              | -47.91                  | -70.36                   | 3.56                       | 13.01                       | H                     |
|                         | 10204                | -58.33          | -13              | -45.33                  | -67.85                   | 3.92                       | 13.44                       | H                     |
|                         | 5103                 | -62.49          | -13              | -49.49                  | -72.70                   | 3.03                       | 13.24                       | V                     |
|                         | 7653                 | -60.61          | -13              | -47.61                  | -70.06                   | 3.56                       | 13.01                       | V                     |
|                         | 10204.36             | -58.62          | -13              | -45.62                  | -68.14                   | 3.92                       | 13.44                       | V                     |

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



| 5G NR n41 / 20MHz / QPSK |                      |                 |                  |                         |                          |                            |                             |                       |
|--------------------------|----------------------|-----------------|------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                  | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest                   | 5002                 | -66.67          | -13              | -53.67                  | -76.88                   | 3.03                       | 13.24                       | H                     |
|                          | 7504                 | -61.14          | -13              | -48.14                  | -70.59                   | 3.56                       | 13.01                       | H                     |
|                          | 10000                | -58.05          | -13              | -45.05                  | -67.57                   | 3.92                       | 13.44                       | H                     |
|                          | 5002.2               | -66.77          | -13              | -53.77                  | -76.98                   | 3.03                       | 13.24                       | V                     |
|                          | 7504                 | -60.72          | -13              | -47.72                  | -70.17                   | 3.56                       | 13.01                       | V                     |
|                          | 10000                | -58.09          | -13              | -45.09                  | -67.61                   | 3.92                       | 13.44                       | V                     |
| Middle                   | 5096                 | -66.85          | -13              | -53.85                  | -77.06                   | 3.03                       | 13.24                       | H                     |
|                          | 7644                 | -60.29          | -13              | -47.29                  | -69.74                   | 3.56                       | 13.01                       | H                     |
|                          | 10190                | -57.59          | -13              | -44.59                  | -67.11                   | 3.92                       | 13.44                       | H                     |
|                          | 5096                 | -66.61          | -13              | -53.61                  | -76.82                   | 3.03                       | 13.24                       | V                     |
|                          | 7644                 | -60.25          | -13              | -47.25                  | -69.70                   | 3.56                       | 13.01                       | V                     |
|                          | 10190                | -57.99          | -13              | -44.99                  | -67.51                   | 3.92                       | 13.44                       | V                     |
| Highest                  | 7410                 | -60.51          | -13              | -47.51                  | -70.72                   | 3.03                       | 13.24                       | H                     |
|                          | 11118                | -56.26          | -13              | -43.26                  | -65.71                   | 3.56                       | 13.01                       | H                     |
|                          | 14820                | -53.79          | -13              | -40.79                  | -63.31                   | 3.92                       | 13.44                       | H                     |
|                          | 7410                 | -60.13          | -13              | -47.13                  | -70.34                   | 3.03                       | 13.24                       | V                     |
|                          | 11118                | -56.19          | -13              | -43.19                  | -65.64                   | 3.56                       | 13.01                       | V                     |
|                          | 14820                | -52.50          | -13              | -39.50                  | -62.02                   | 3.92                       | 13.44                       | V                     |

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

**Antenna 1**

| 5G NR n66 / 20MHz / QPSK |                      |                 |                  |                         |                          |                            |                             |                       |
|--------------------------|----------------------|-----------------|------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                  | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest                   | 3423                 | -60.54          | -13              | -47.54                  | -71.28                   | 2.604                      | 13.34                       | H                     |
|                          | 5133                 | -53.66          | -13              | -40.66                  | -64.17                   | 3.011                      | 13.52                       | H                     |
|                          | 6844                 | -51.15          | -13              | -38.15                  | -61.35                   | 3.271                      | 13.47                       | H                     |
|                          | 3423                 | -60.37          | -13              | -47.37                  | -71.11                   | 2.604                      | 13.34                       | V                     |
|                          | 5133                 | -54.20          | -13              | -41.20                  | -64.71                   | 3.011                      | 13.52                       | V                     |
|                          | 6844                 | -51.25          | -13              | -38.25                  | -61.45                   | 3.271                      | 13.47                       | V                     |
| Middle                   | 3471                 | -60.17          | -13              | -47.17                  | -70.91                   | 2.604                      | 13.34                       | H                     |
|                          | 5208                 | -54.44          | -13              | -41.44                  | -64.95                   | 3.011                      | 13.52                       | H                     |
|                          | 6948                 | -50.95          | -13              | -37.95                  | -61.15                   | 3.271                      | 13.47                       | H                     |
|                          | 3471                 | -60.25          | -13              | -47.25                  | -70.99                   | 2.604                      | 13.34                       | V                     |
|                          | 5208                 | -54.68          | -13              | -41.68                  | -65.19                   | 3.011                      | 13.52                       | V                     |
|                          | 6948                 | -50.50          | -13              | -37.50                  | -60.70                   | 3.271                      | 13.47                       | V                     |
| Highest                  | 3522                 | -59.27          | -13              | -46.27                  | -70.01                   | 2.604                      | 13.34                       | H                     |
|                          | 5283                 | -55.23          | -13              | -42.23                  | -65.74                   | 3.011                      | 13.52                       | H                     |
|                          | 7044                 | -50.57          | -13              | -37.57                  | -60.77                   | 3.271                      | 13.47                       | H                     |
|                          | 3522                 | -58.82          | -13              | -45.82                  | -69.56                   | 2.604                      | 13.34                       | V                     |
|                          | 5283                 | -55.54          | -13              | -42.54                  | -66.05                   | 3.011                      | 13.52                       | V                     |
|                          | 7044                 | -50.38          | -13              | -37.38                  | -60.58                   | 3.271                      | 13.47                       | V                     |

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



| 5G NR n71 / 20MHz / QPSK |                      |                |                  |                         |                          |                            |                               |                       |
|--------------------------|----------------------|----------------|------------------|-------------------------|--------------------------|----------------------------|-------------------------------|-----------------------|
| Channel                  | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>( dBi ) | Polarization<br>(H/V) |
| Lowest                   | 1328                 | -62.88         | -13              | -49.88                  | -64.63                   | 1.02                       | 4.92                          | H                     |
|                          | 1992                 | -63.70         | -13              | -50.70                  | -65.67                   | 1.27                       | 5.39                          | H                     |
|                          | 2656                 | -62.30         | -13              | -49.30                  | -65.23                   | 1.49                       | 6.57                          | H                     |
|                          | 1328                 | -61.13         | -13              | -48.13                  | -62.88                   | 1.02                       | 4.92                          | V                     |
|                          | 1992                 | -63.88         | -13              | -50.88                  | -65.85                   | 1.27                       | 5.39                          | V                     |
|                          | 2656                 | -62.16         | -13              | -49.16                  | -65.09                   | 1.49                       | 6.57                          | V                     |
| Middle                   | 1342                 | -61.82         | -13              | -48.82                  | -63.57                   | 1.02                       | 4.92                          | H                     |
|                          | 2014                 | -56.06         | -13              | -43.06                  | -58.03                   | 1.27                       | 5.39                          | H                     |
|                          | 2686                 | -61.94         | -13              | -48.94                  | -64.87                   | 1.49                       | 6.57                          | H                     |
|                          | 1342                 | -59.83         | -13              | -46.83                  | -61.58                   | 1.02                       | 4.92                          | V                     |
|                          | 2014                 | -54.58         | -13              | -41.58                  | -56.55                   | 1.27                       | 5.39                          | V                     |
|                          | 2686                 | -61.84         | -13              | -48.84                  | -64.77                   | 1.49                       | 6.57                          | V                     |
| Highest                  | 1358                 | -63.28         | -13              | -50.28                  | -65.03                   | 1.02                       | 4.92                          | H                     |
|                          | 2036                 | -49.50         | -13              | -36.50                  | -51.47                   | 1.27                       | 5.39                          | H                     |
|                          | 2716                 | -62.09         | -13              | -49.09                  | -65.02                   | 1.49                       | 6.57                          | H                     |
|                          | 1358                 | -60.25         | -13              | -47.25                  | -62.00                   | 1.02                       | 4.92                          | V                     |
|                          | 2036                 | -49.28         | -13              | -36.28                  | -51.25                   | 1.27                       | 5.39                          | V                     |
|                          | 2716                 | -61.67         | -13              | -48.67                  | -64.60                   | 1.49                       | 6.57                          | V                     |

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