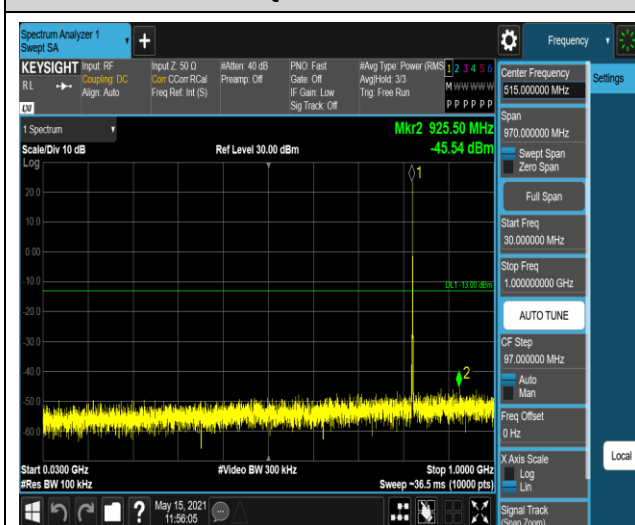
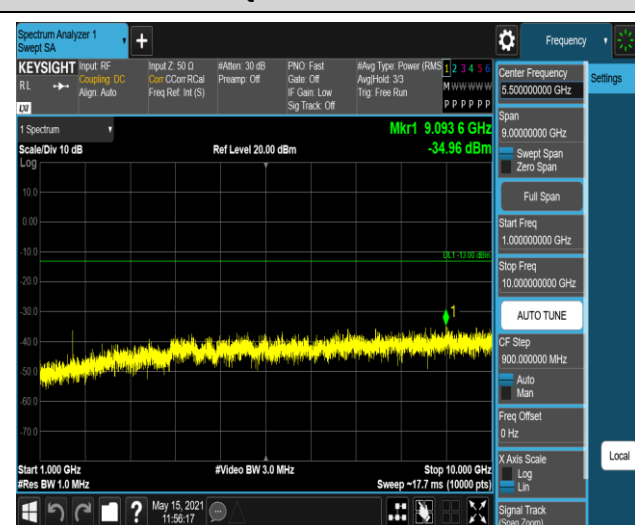


Band5-1.4MHz-QPSK-20407:30~1000MHz



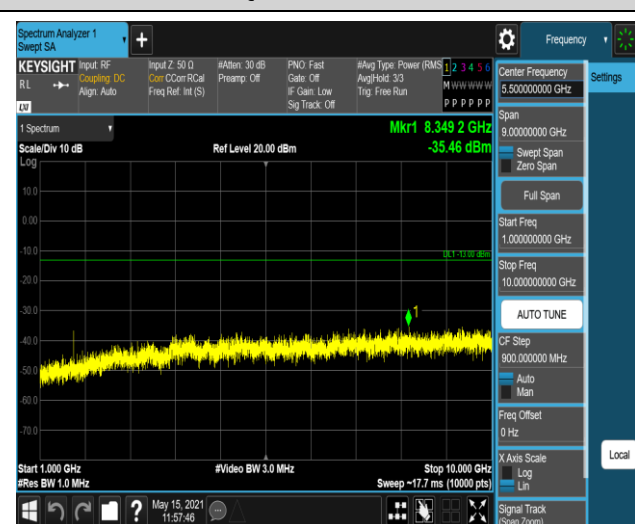
Band5-1.4MHz-QPSK-20407:1000~10000MHz



Band5-1.4MHz-QPSK-20525:30~1000MHz



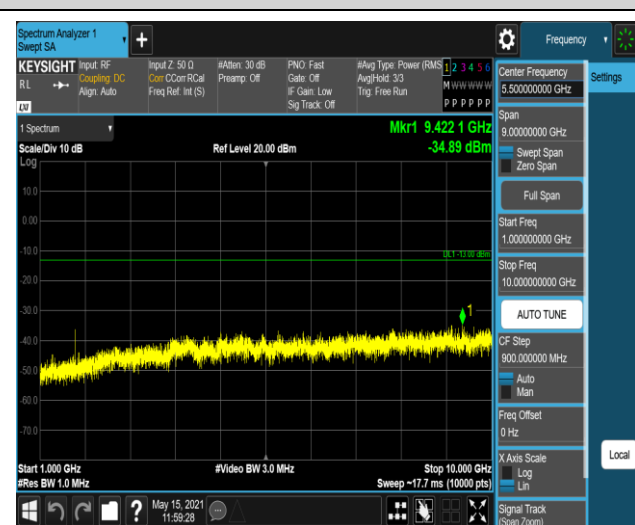
Band5-1.4MHz-QPSK-20525:1000~10000MHz



Band5-1.4MHz-QPSK-20643:30~1000MHz



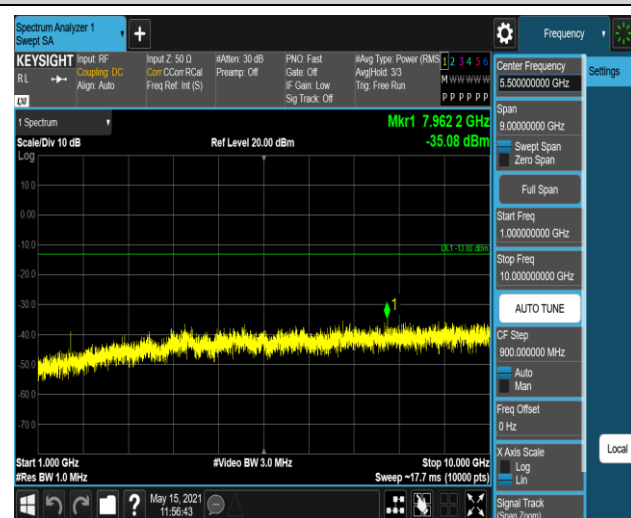
Band5-1.4MHz-QPSK-20643:1000~10000MHz



Band5-1.4MHz-16QAM-20407:30~1000MHz



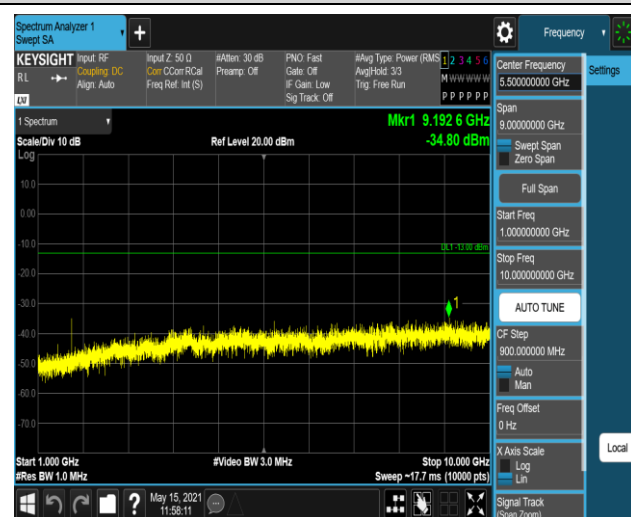
Band5-1.4MHz-16QAM-20407:1000~10000MHz



Band5-1.4MHz-16QAM-20525:30~1000MHz



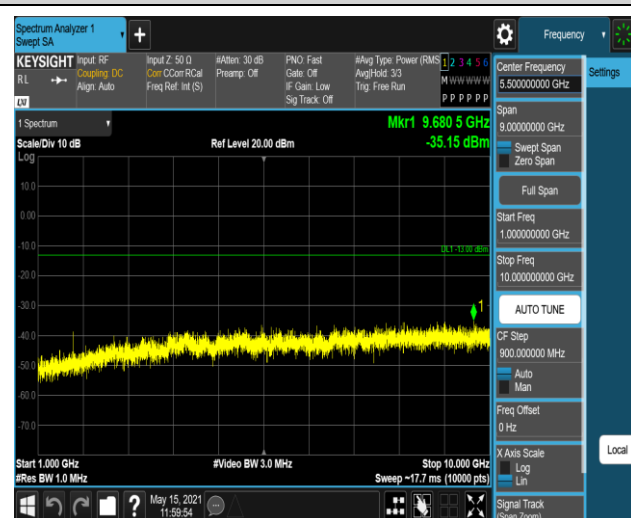
Band5-1.4MHz-16QAM-20525:1000~10000MHz



Band5-1.4MHz-16QAM-20643:30~1000MHz



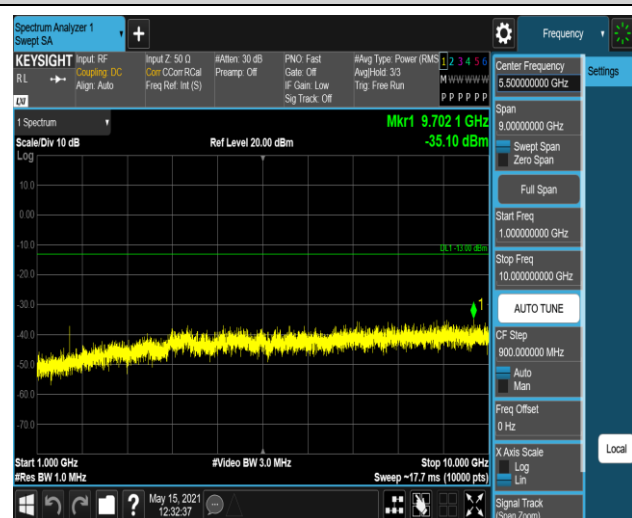
Band5-1.4MHz-16QAM-20643:1000~10000MHz



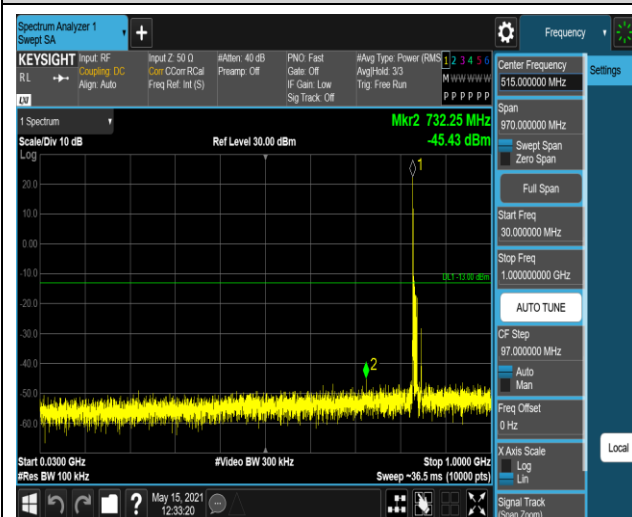
Band5-10MHz-QPSK-20450:30~1000MHz



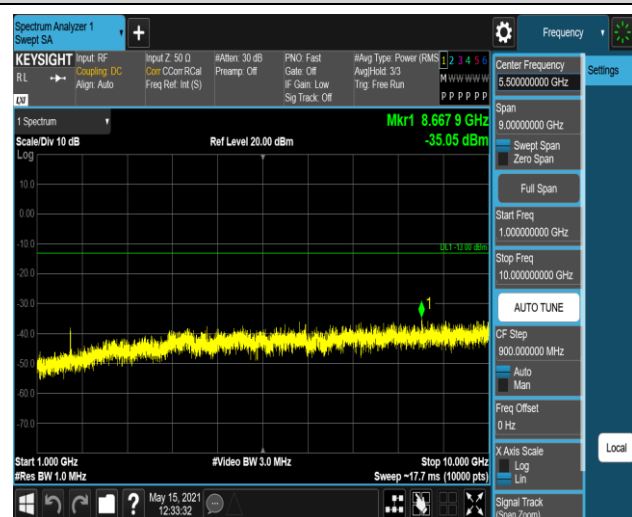
Band5-10MHz-QPSK-20450:1000~10000MHz



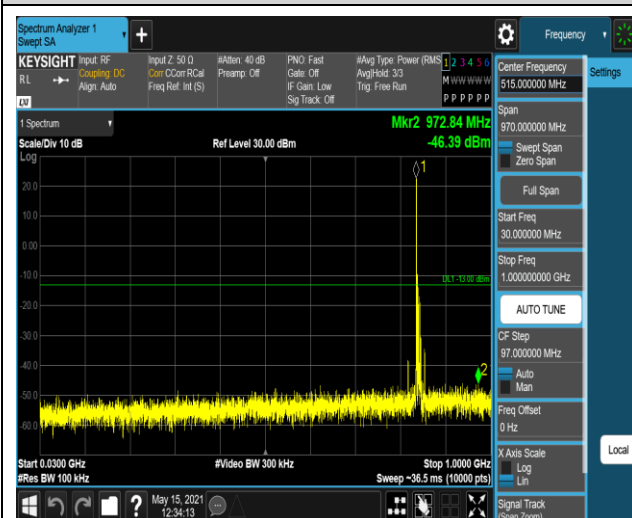
Band5-10MHz-QPSK-20525:30~1000MHz



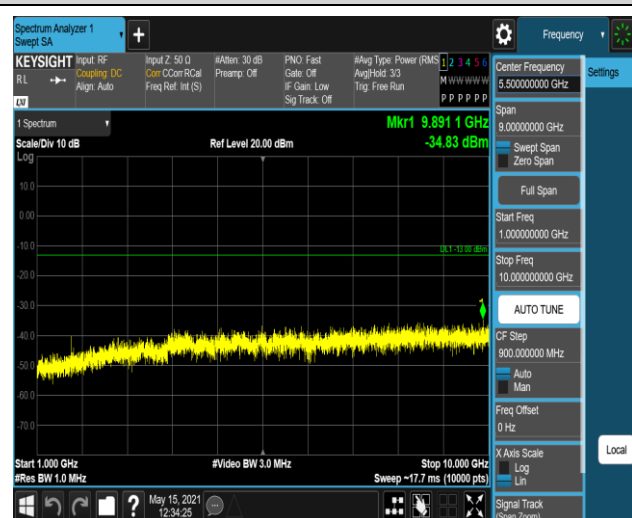
Band5-10MHz-QPSK-20525:1000~10000MHz



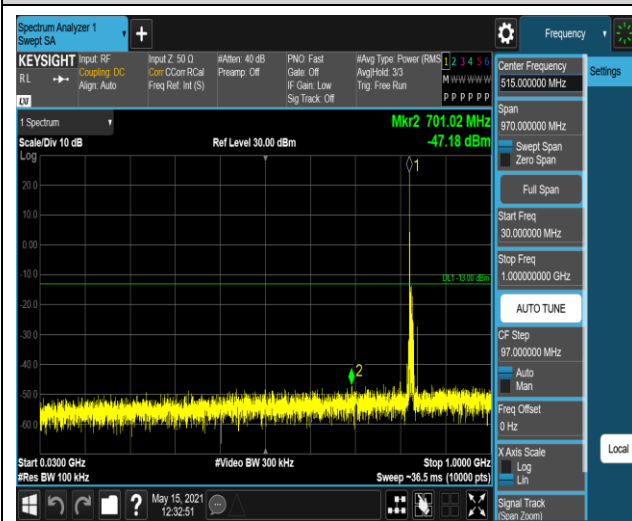
Band5-10MHz-QPSK-20600:30~1000MHz



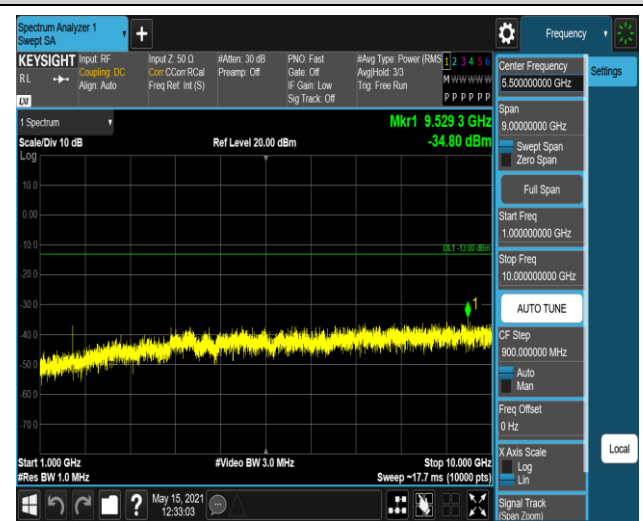
Band5-10MHz-QPSK-20600:1000~10000MHz



Band5-10MHz-16QAM-20450:30~1000MHz



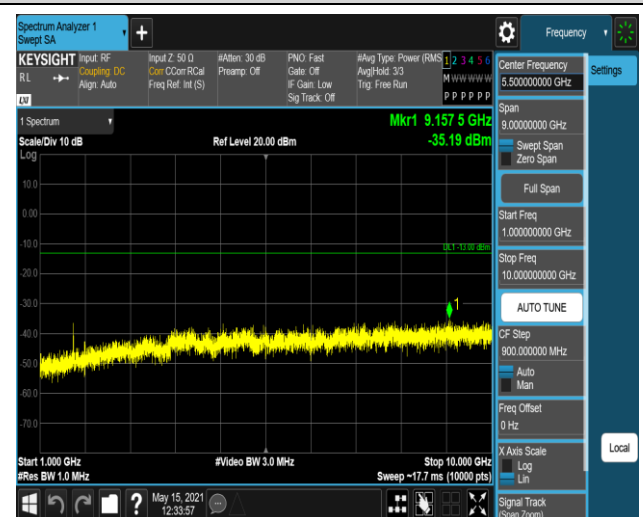
Band5-10MHz-16QAM-20450:1000~10000MHz



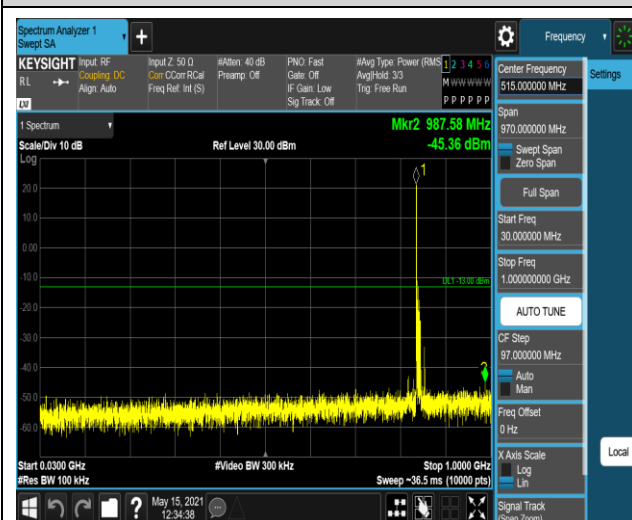
Band5-10MHz-16QAM-20525:30~1000MHz



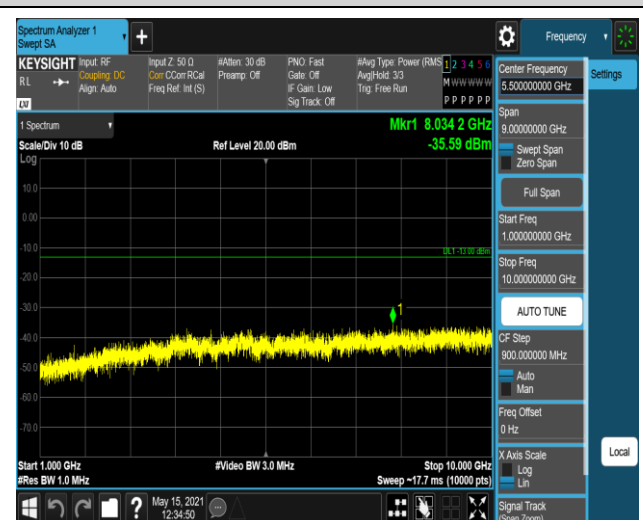
Band5-10MHz-16QAM-20525:1000~10000MHz



Band5-10MHz-16QAM-20600:30~1000MHz



Band5-10MHz-16QAM-20600:1000~10000MHz





Band7-5MHz-QPSK-20775:30~1000MHz



Band7-5MHz-QPSK-20775:1000~27000MHz



Band7-5MHz-QPSK-21100:30~1000MHz



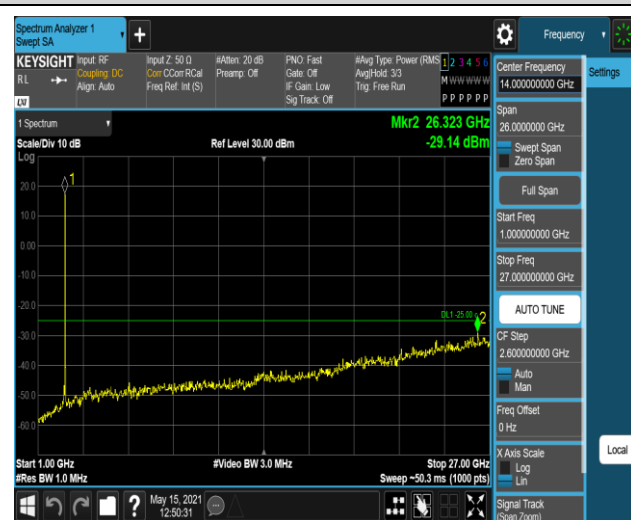
Band7-5MHz-QPSK-21100:1000~27000MHz



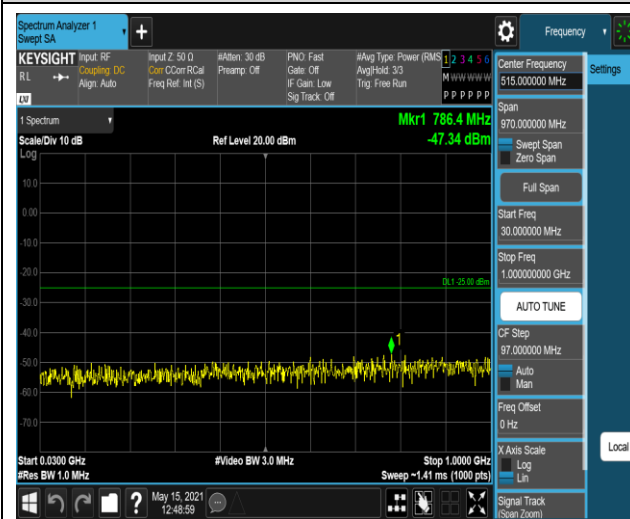
Band7-5MHz-QPSK-21425:30~1000MHz



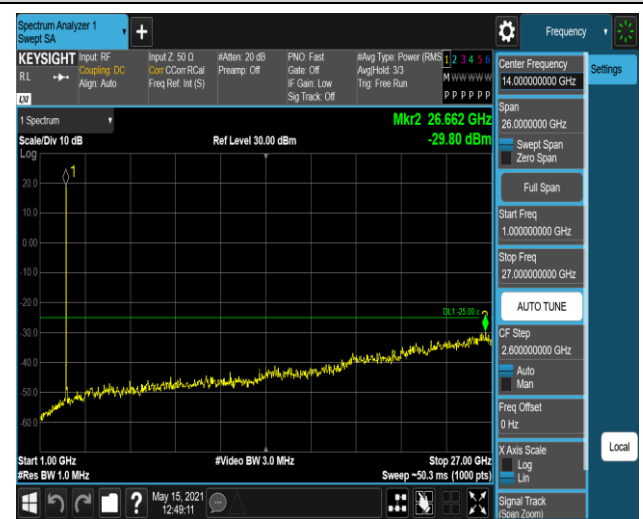
Band7-5MHz-QPSK-21425:1000~27000MHz



Band7-5MHz-16QAM-20775:30~1000MHz



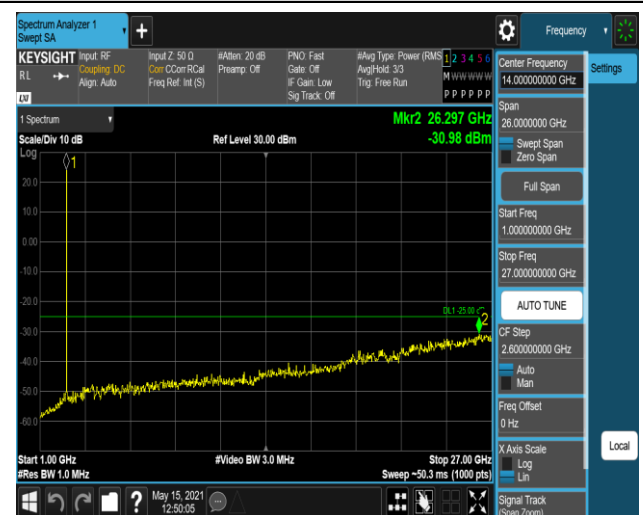
Band7-5MHz-16QAM-20775:1000~27000MHz



Band7-5MHz-16QAM-21100:30~1000MHz



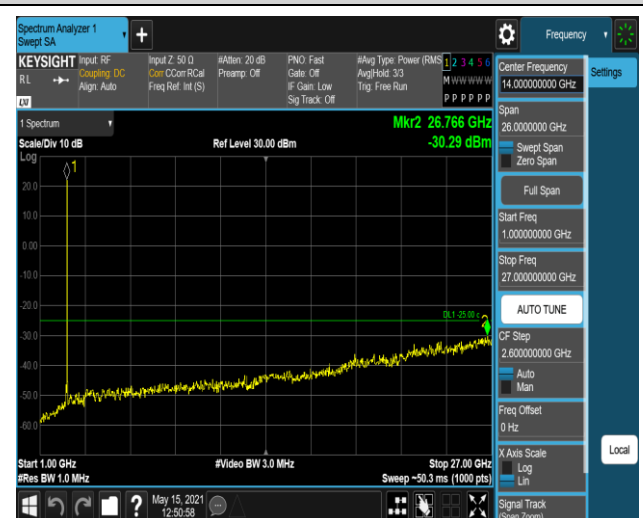
Band7-5MHz-16QAM-21100:1000~27000MHz



Band7-5MHz-16QAM-21425:30~1000MHz



Band7-5MHz-16QAM-21425:1000~27000MHz



Band7-20MHz-QPSK-20850:30~1000MHz



Band7-20MHz-QPSK-20850:1000~27000MHz



Band7-20MHz-QPSK-21100:30~1000MHz



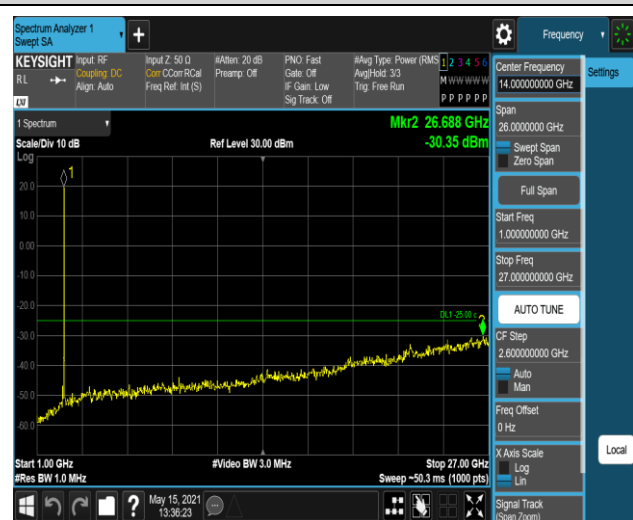
Band7-20MHz-QPSK-21100:1000~27000MHz



Band7-20MHz-QPSK-21350:30~1000MHz



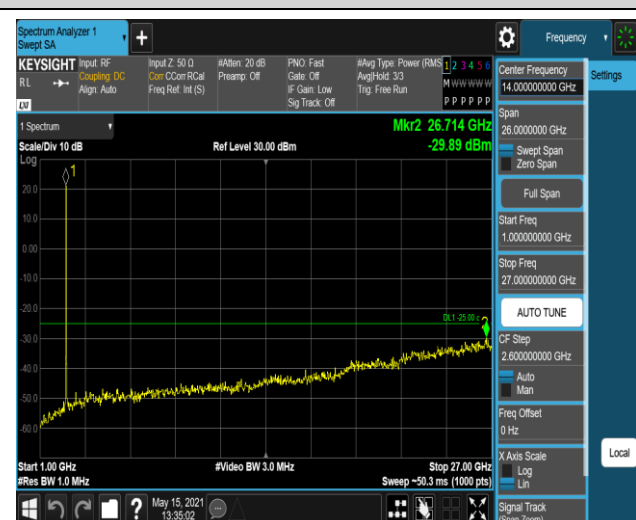
Band7-20MHz-QPSK-21350:1000~27000MHz



Band7-20MHz-16QAM-20850:30~1000MHz



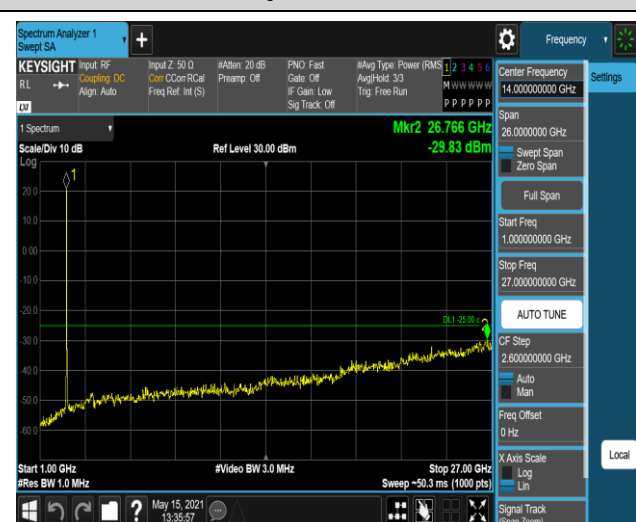
Band7-20MHz-16QAM-20850:1000~27000MHz



Band7-20MHz-16QAM-21100:30~1000MHz



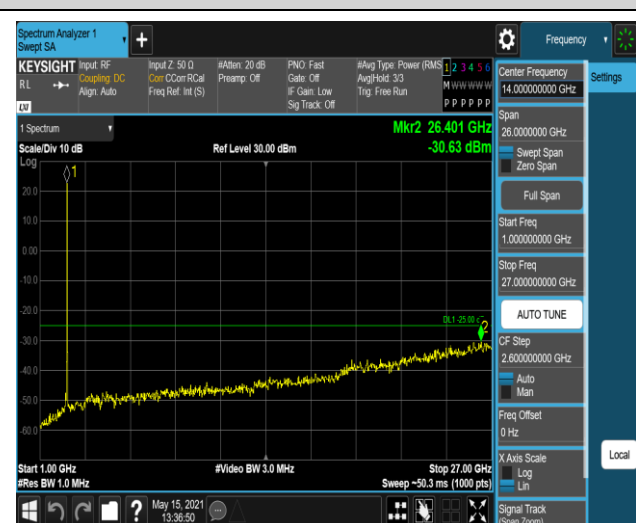
Band7-20MHz-16QAM-21100:1000~27000MHz



Band7-20MHz-16QAM-21350:30~1000MHz



Band7-20MHz-16QAM-21350:1000~27000MHz





## Appendix F: Frequency Stability

### Test Result (Worst case):

LTE Band 4 part:

| Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 Frequency=1732.5MHz |                         |                 |           |                                      |        |
|---------------------------------------------------------------------------------|-------------------------|-----------------|-----------|--------------------------------------|--------|
| Temperature                                                                     |                         |                 |           |                                      |        |
| Power supplied<br>(Vdc)                                                         | Temperature<br>(°C)     | Frequency error |           | Limit (ppm)                          | Result |
|                                                                                 |                         | Hz              | ppm       |                                      |        |
| QPSK                                                                            |                         |                 |           |                                      |        |
| 3.70                                                                            | -30                     | 10.70           | 0.006176  | Within authorized<br>band for Band 4 | Pass   |
|                                                                                 | -20                     | 14.46           | 0.008346  |                                      |        |
|                                                                                 | -10                     | 10.26           | 0.005922  |                                      |        |
|                                                                                 | 0                       | 9.18            | 0.005299  |                                      |        |
|                                                                                 | 10                      | 8.71            | 0.005027  |                                      |        |
|                                                                                 | 20                      | 11.19           | 0.006459  |                                      |        |
|                                                                                 | 30                      | 10.87           | 0.006274  |                                      |        |
|                                                                                 | 40                      | 14.79           | 0.008537  |                                      |        |
|                                                                                 | 50                      | 17.50           | 0.010101  |                                      |        |
| 16QAM                                                                           |                         |                 |           |                                      |        |
| 3.70                                                                            | -30                     | 34.40           | 0.019856  | Within authorized<br>band for Band 4 | Pass   |
|                                                                                 | -20                     | 36.78           | 0.021229  |                                      |        |
|                                                                                 | -10                     | 40.61           | 0.023440  |                                      |        |
|                                                                                 | 0                       | 46.55           | 0.026869  |                                      |        |
|                                                                                 | 10                      | -3.79           | -0.002188 |                                      |        |
|                                                                                 | 20                      | 5.01            | 0.002892  |                                      |        |
|                                                                                 | 30                      | 10.59           | 0.006113  |                                      |        |
|                                                                                 | 40                      | 23.69           | 0.013674  |                                      |        |
|                                                                                 | 50                      | 22.30           | 0.012872  |                                      |        |
| Voltage                                                                         |                         |                 |           |                                      |        |
| Temperature<br>(°C)                                                             | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm)                          | Result |
|                                                                                 |                         | Hz              | ppm       |                                      |        |
| QPSK                                                                            |                         |                 |           |                                      |        |
| 25                                                                              | 3.50                    | 7.18            | 0.004144  | Within authorized<br>band for Band 4 | Pass   |
|                                                                                 | 3.70                    | -31.41          | -0.018130 |                                      |        |
|                                                                                 | 4.25                    | 13.62           | 0.007861  |                                      |        |
| 16QAM                                                                           |                         |                 |           |                                      |        |
| 25                                                                              | 3.50                    | 26.79           | 0.015463  | Within authorized<br>band for Band 4 | Pass   |
|                                                                                 | 3.70                    | 14.88           | 0.008589  |                                      |        |
|                                                                                 | 4.25                    | 25.49           | 0.014713  |                                      |        |
| Note: Only the worst case shown in the report.                                  |                         |                 |           |                                      |        |

**LTE Band 5 part:**

| Reference Frequency: LTE Band 5(10MHz) Middle channel=20525 Frequency=836.5MHz |                         |                 |           |             |        |
|--------------------------------------------------------------------------------|-------------------------|-----------------|-----------|-------------|--------|
| Temperature                                                                    |                         |                 |           |             |        |
| Power supplied<br>(Vdc)                                                        | Temperature<br>(°C)     | Frequency error |           | Limit (ppm) | Result |
|                                                                                |                         | Hz              | ppm       |             |        |
| QPSK                                                                           |                         |                 |           |             |        |
| 3.70                                                                           | -30                     | -4.06           | -0.004854 | ±2.5        | Pass   |
|                                                                                | -20                     | -3.65           | -0.004363 |             |        |
|                                                                                | -10                     | -4.31           | -0.005152 |             |        |
|                                                                                | 0                       | -1.99           | -0.002379 |             |        |
|                                                                                | 10                      | -3.52           | -0.004208 |             |        |
|                                                                                | 20                      | -4.21           | -0.005033 |             |        |
|                                                                                | 30                      | -4.78           | -0.005714 |             |        |
|                                                                                | 40                      | -2.47           | -0.002953 |             |        |
|                                                                                | 50                      | -3.18           | -0.003802 |             |        |
| 16QAM                                                                          |                         |                 |           |             |        |
| 3.70                                                                           | -30                     | 4.01            | 0.004794  | ±2.5        | Pass   |
|                                                                                | -20                     | 3.32            | 0.003969  |             |        |
|                                                                                | -10                     | 3.00            | 0.003586  |             |        |
|                                                                                | 0                       | 4.89            | 0.005846  |             |        |
|                                                                                | 10                      | 6.47            | 0.007735  |             |        |
|                                                                                | 20                      | 5.84            | 0.006981  |             |        |
|                                                                                | 30                      | 8.08            | 0.009659  |             |        |
|                                                                                | 40                      | 9.44            | 0.011285  |             |        |
|                                                                                | 50                      | 8.71            | 0.010412  |             |        |
| Voltage                                                                        |                         |                 |           |             |        |
| Temperature<br>(°C)                                                            | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm) | Result |
|                                                                                |                         | Hz              | ppm       |             |        |
| QPSK                                                                           |                         |                 |           |             |        |
| 25                                                                             | 3.50                    | -3.40           | -0.004065 | ±2.5        | Pass   |
|                                                                                | 3.70                    | 10.31           | 0.012325  |             |        |
|                                                                                | 4.25                    | 3.09            | 0.003694  |             |        |
| 16QAM                                                                          |                         |                 |           |             |        |
| 25                                                                             | 3.50                    | 3.52            | 0.004208  | ±2.5        | Pass   |
|                                                                                | 3.70                    | -3.85           | -0.004603 |             |        |
|                                                                                | 4.25                    | 3.48            | 0.004160  |             |        |
| Note: Only the worst case shown in the report.                                 |                         |                 |           |             |        |

Note: Only the worst case shown in the report.

**LTE Band 7 part:**

| Reference Frequency: LTE Band 7(10MHz) Middle channel=21100 Frequency=2535.0MHz |                         |                 |           |                                      |        |
|---------------------------------------------------------------------------------|-------------------------|-----------------|-----------|--------------------------------------|--------|
| Temperature                                                                     |                         |                 |           |                                      |        |
| Power supplied<br>(Vdc)                                                         | Temperature<br>(°C)     | Frequency error |           | Limit (ppm)                          | Result |
|                                                                                 |                         | Hz              | ppm       |                                      |        |
| QPSK                                                                            |                         |                 |           |                                      |        |
| 3.70                                                                            | -30                     | -9.14           | -0.003606 | Within authorized<br>band for Band 7 | Pass   |
|                                                                                 | -20                     | 6.75            | 0.002663  |                                      |        |
|                                                                                 | -10                     | 14.65           | 0.005779  |                                      |        |
|                                                                                 | 0                       | 23.60           | 0.009310  |                                      |        |
|                                                                                 | 10                      | 15.48           | 0.006107  |                                      |        |
|                                                                                 | 20                      | -4.36           | -0.001720 |                                      |        |
|                                                                                 | 30                      | 5.81            | 0.002292  |                                      |        |
|                                                                                 | 40                      | -9.53           | -0.003759 |                                      |        |
|                                                                                 | 50                      | 10.80           | 0.004260  |                                      |        |
| 16QAM                                                                           |                         |                 |           |                                      |        |
| 3.70                                                                            | -30                     | 16.65           | 0.006568  | Within authorized<br>band for Band 7 | Pass   |
|                                                                                 | -20                     | 6.29            | 0.002481  |                                      |        |
|                                                                                 | -10                     | 5.92            | 0.002335  |                                      |        |
|                                                                                 | 0                       | 7.42            | 0.002927  |                                      |        |
|                                                                                 | 10                      | 9.27            | 0.003657  |                                      |        |
|                                                                                 | 20                      | 5.06            | 0.001996  |                                      |        |
|                                                                                 | 30                      | -7.12           | -0.002809 |                                      |        |
|                                                                                 | 40                      | -7.70           | -0.003037 |                                      |        |
|                                                                                 | 50                      | -10.13          | -0.003996 |                                      |        |
| Voltage                                                                         |                         |                 |           |                                      |        |
| Temperature<br>(°C)                                                             | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm)                          | Result |
|                                                                                 |                         | Hz              | ppm       |                                      |        |
| QPSK                                                                            |                         |                 |           |                                      |        |
| 25                                                                              | 3.50                    | -25.15          | -0.009921 | Within authorized<br>band for Band 7 | Pass   |
|                                                                                 | 3.70                    | -16.91          | -0.006671 |                                      |        |
|                                                                                 | 4.25                    | -7.15           | -0.002821 |                                      |        |
| 16QAM                                                                           |                         |                 |           |                                      |        |
| 25                                                                              | 3.50                    | 9.41            | 0.003712  | Within authorized<br>band for Band 7 | Pass   |
|                                                                                 | 3.70                    | 13.65           | 0.005385  |                                      |        |
|                                                                                 | 4.25                    | 14.33           | 0.005653  |                                      |        |
| Note: Only the worst case shown in the report.                                  |                         |                 |           |                                      |        |