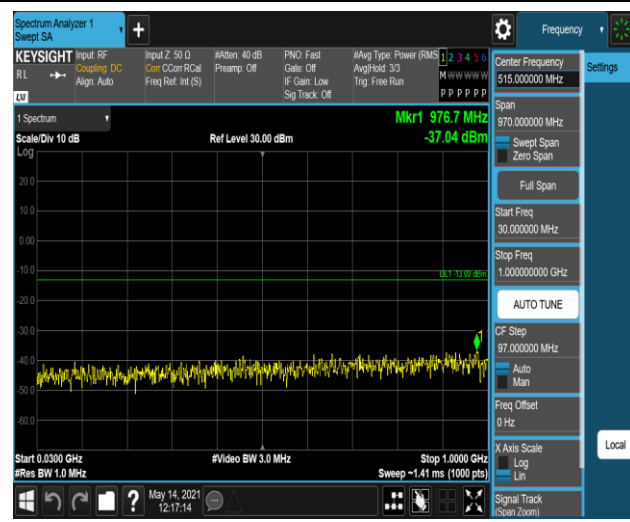


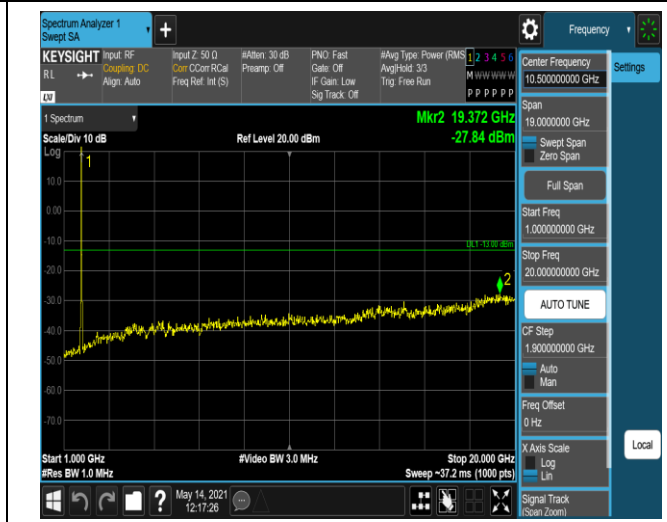
Band4-20MHz-QPSK-20300-1RB#0-Range1:30~10

00MHz



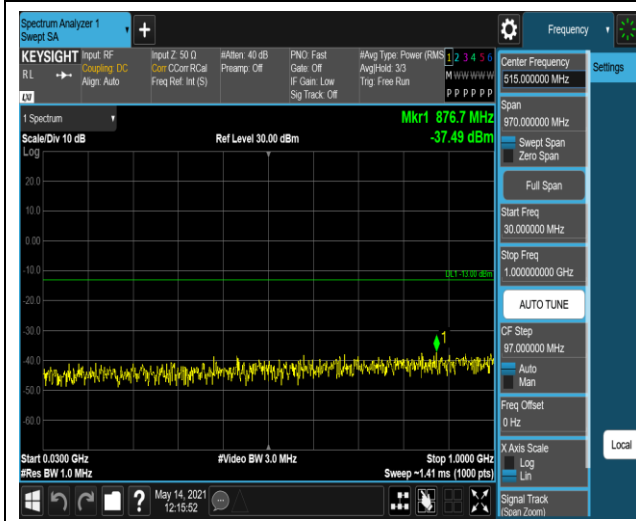
Band4-20MHz-QPSK-20300-1RB#0-Range2:1000~200

00MHz



Band4-20MHz-16QAM-20050-1RB#0-Range1:30~1

000MHz



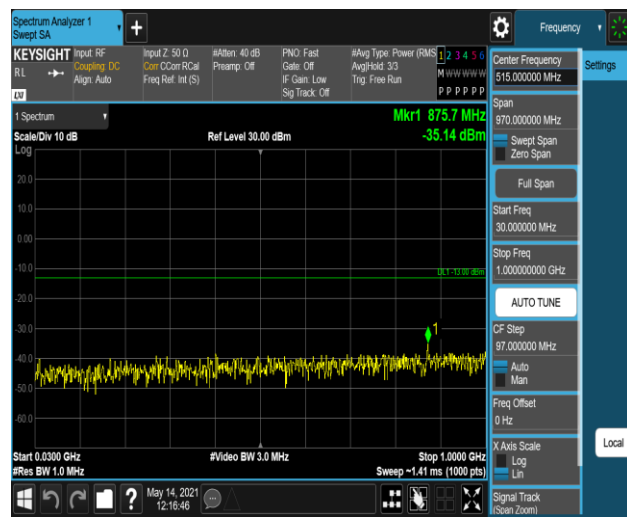
Band4-20MHz-16QAM-20050-1RB#0-Range2:1000~20

000MHz



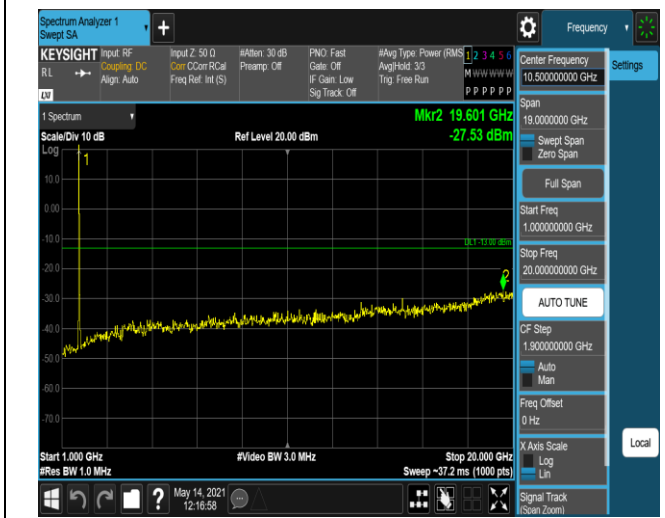
Band4-20MHz-16QAM-20175-1RB#0-Range1:30~1

000MHz



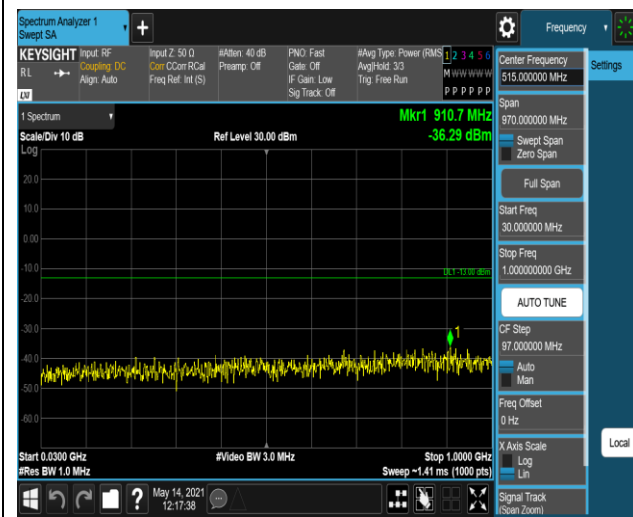
Band4-20MHz-16QAM-20175-1RB#0-Range2:1000~20

000MHz



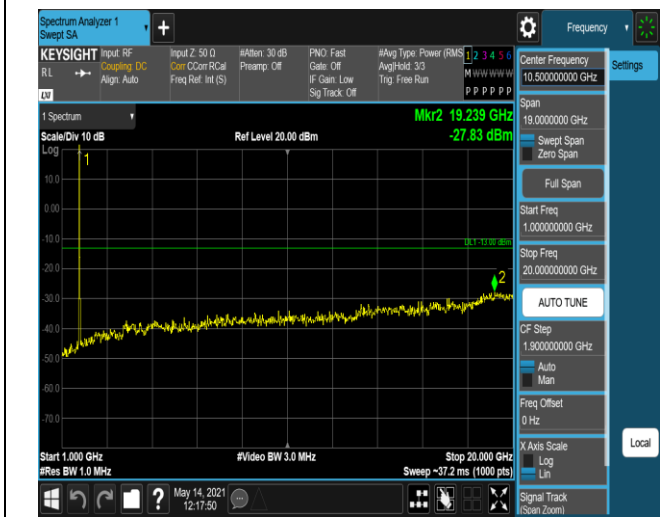
Band4-20MHz-16QAM-20300-1RB#0-Range1:30~1

000MHz

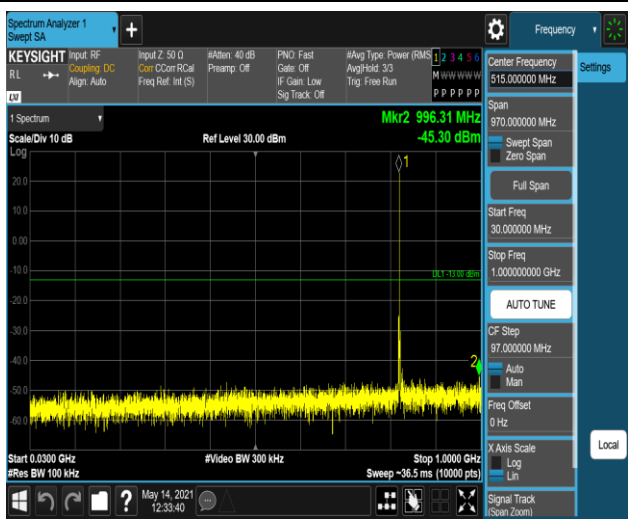


Band4-20MHz-16QAM-20300-1RB#0-Range2:1000~20

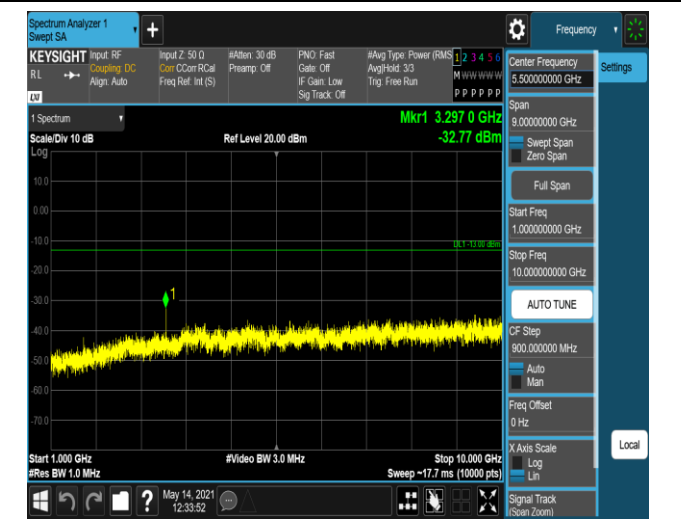
000MHz



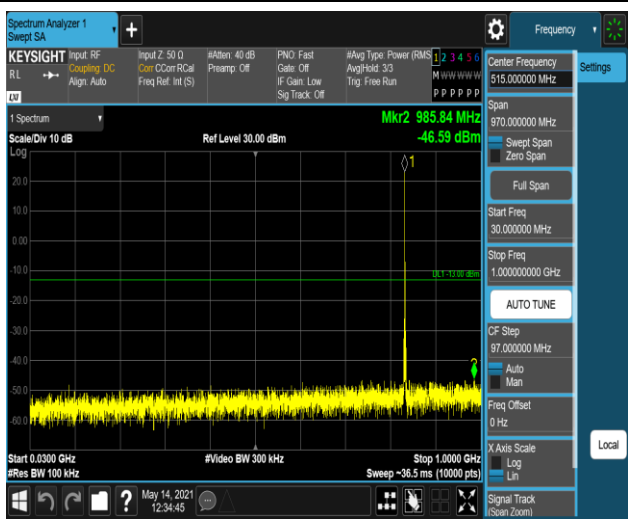
Band5-1.4MHz-QPSK-20407-1RB#0-Range1:30~1000MHz



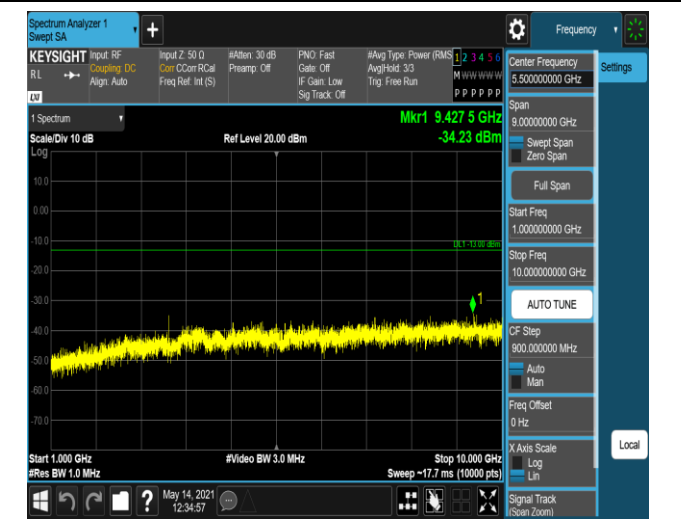
Band5-1.4MHz-QPSK-20407-1RB#0-Range2:1000~10000MHz



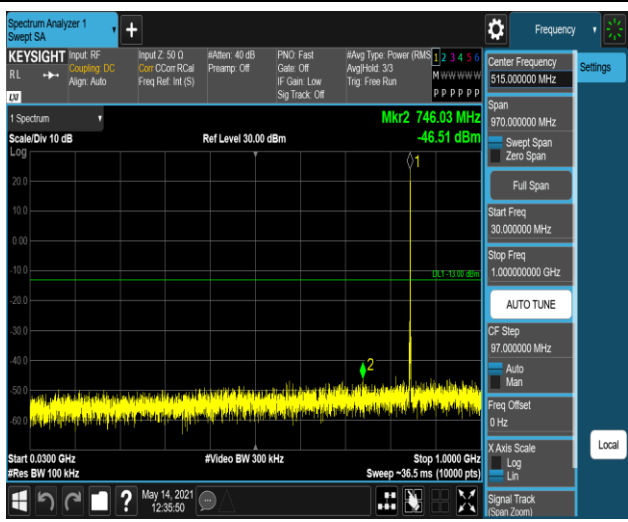
Band5-1.4MHz-QPSK-20525-1RB#0-Range1:30~1000MHz



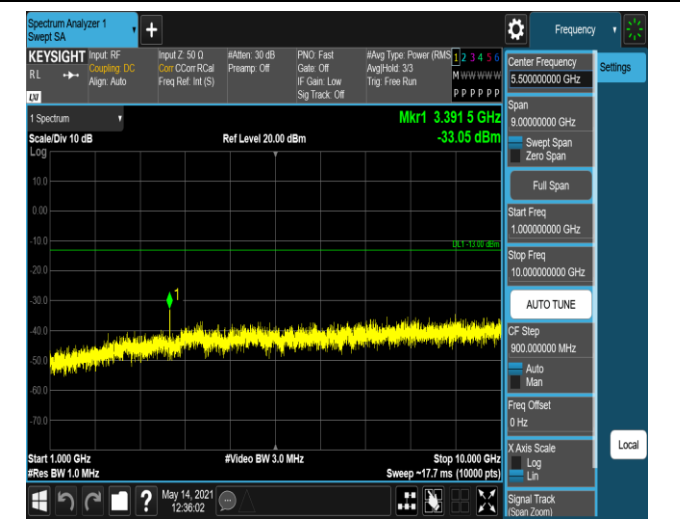
Band5-1.4MHz-QPSK-20525-1RB#0-Range2:1000~10000MHz



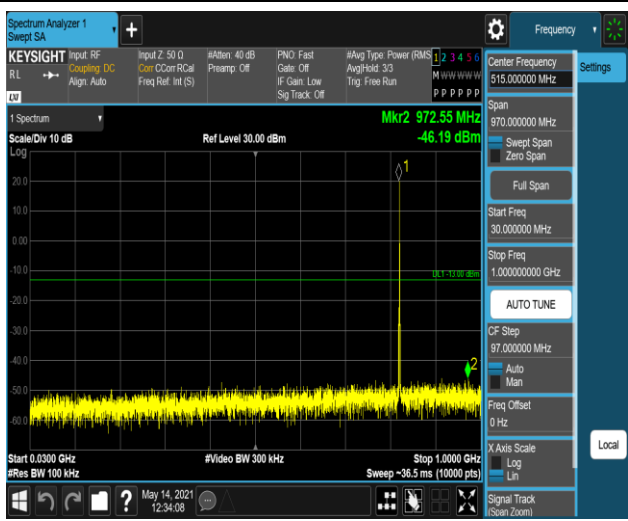
Band5-1.4MHz-QPSK-20643-1RB#0-Range1:30~1000MHz



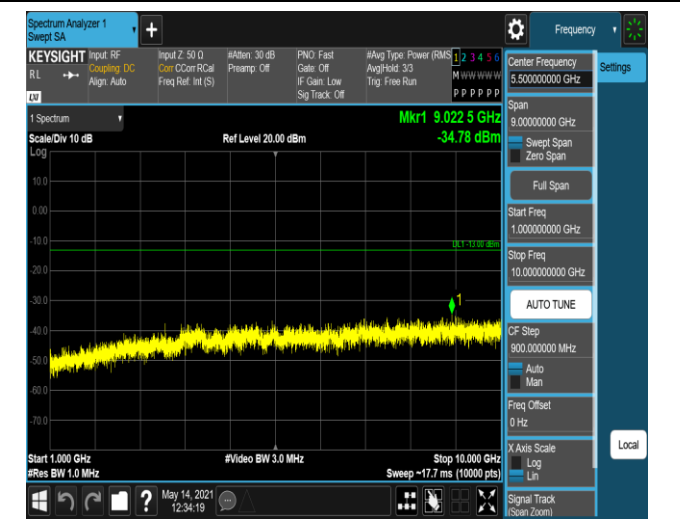
Band5-1.4MHz-QPSK-20643-1RB#0-Range2:1000~10000MHz

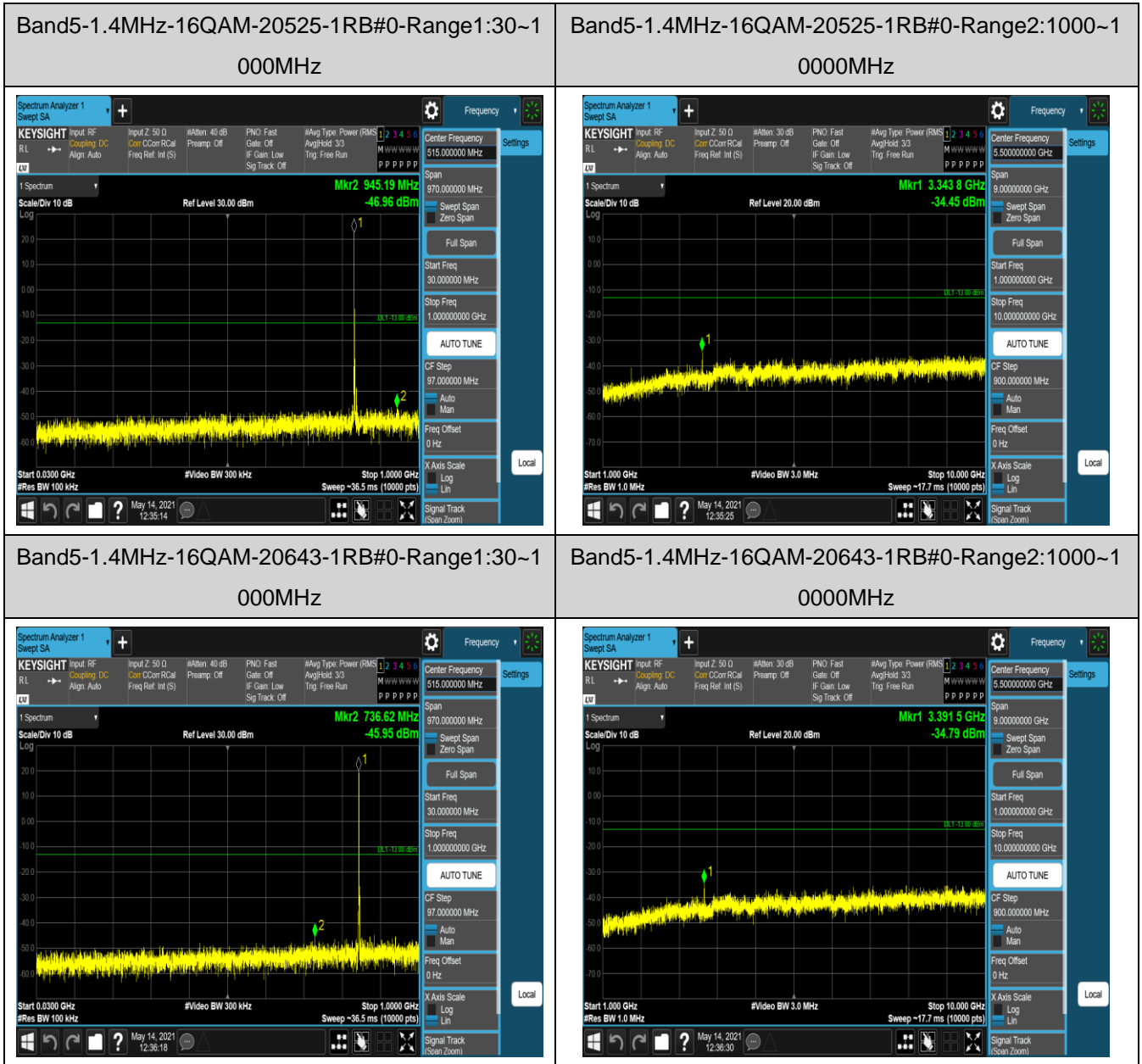


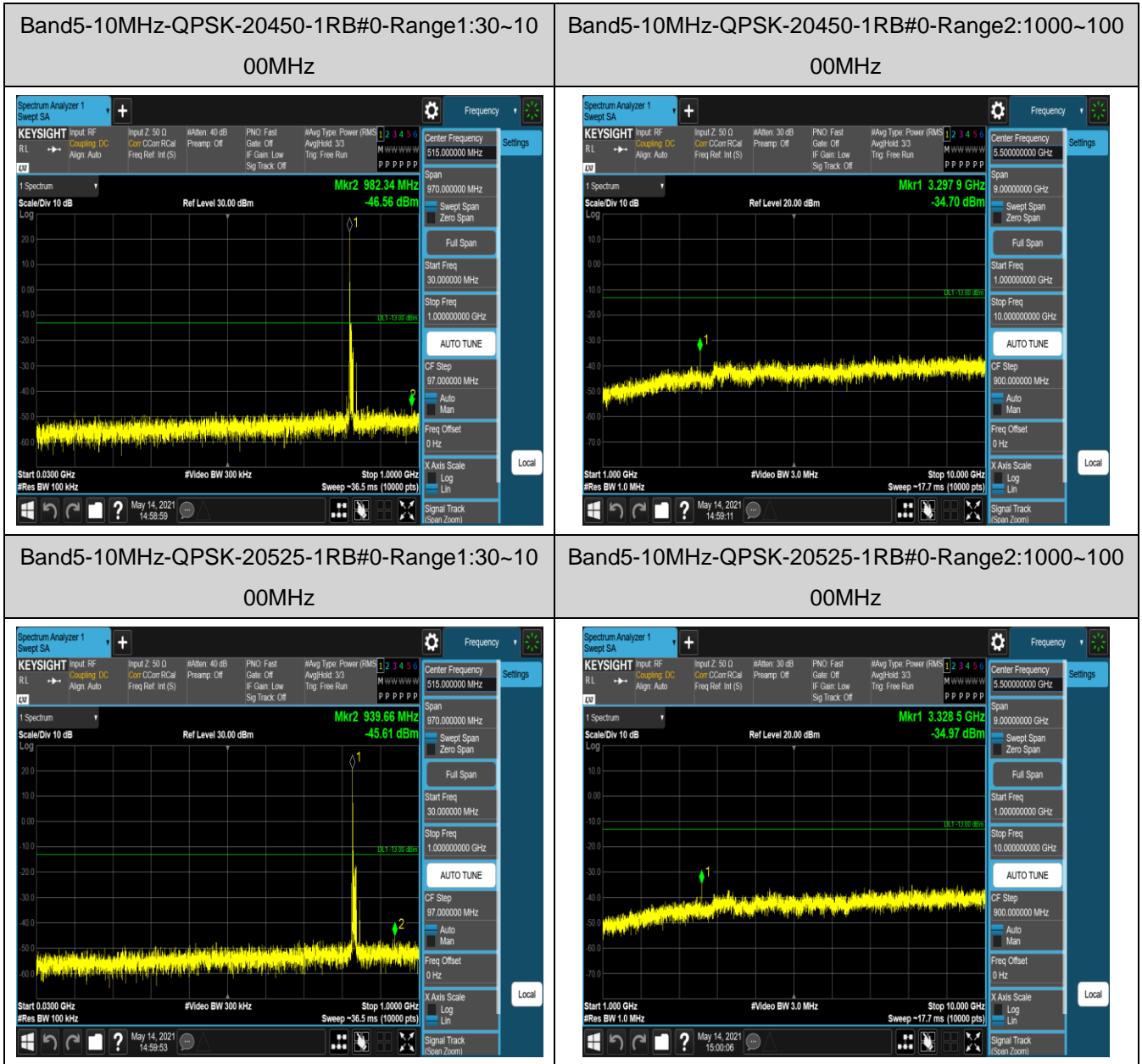
Band5-1.4MHz-16QAM-20407-1RB#0-Range1:30~1000MHz

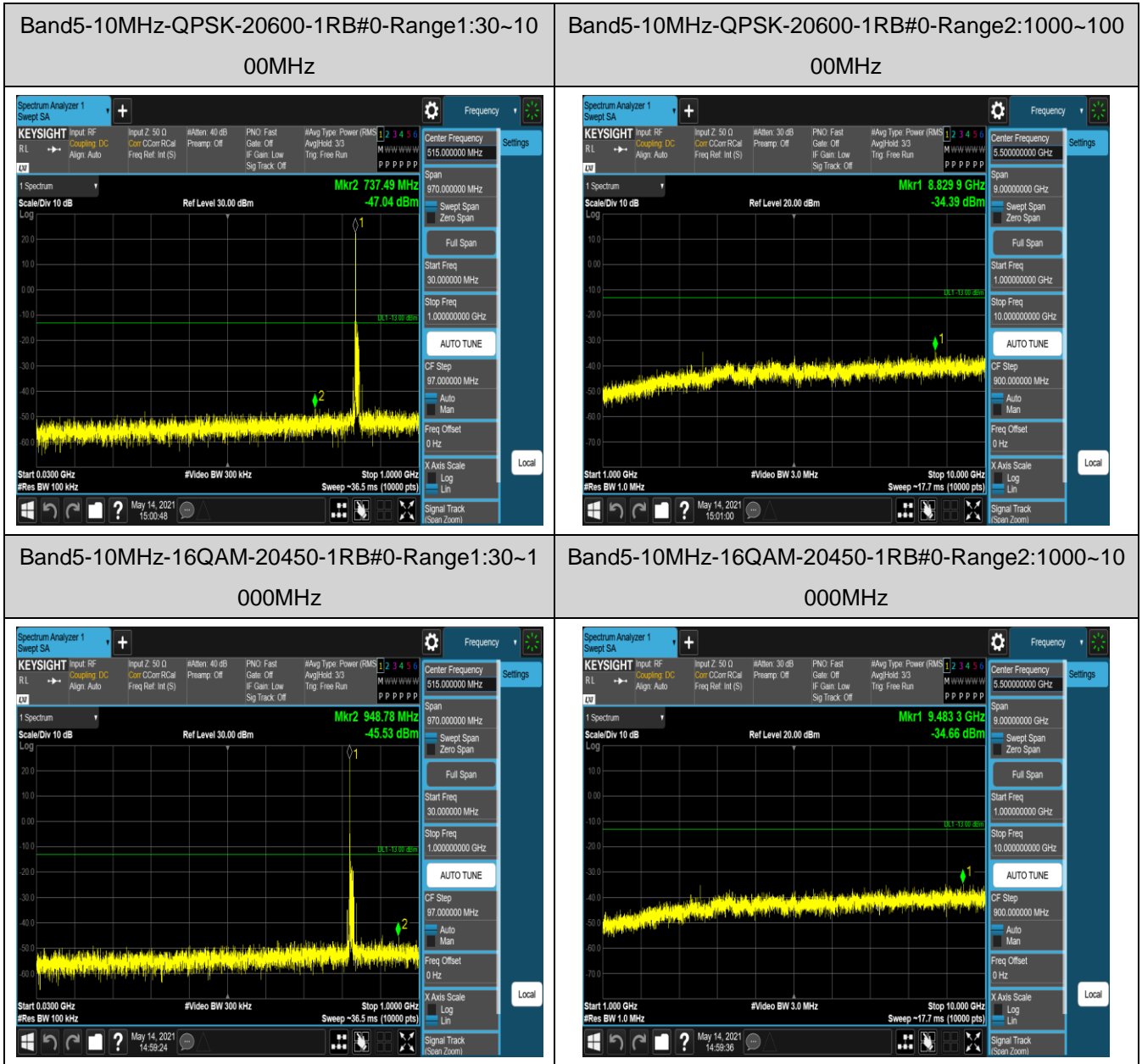


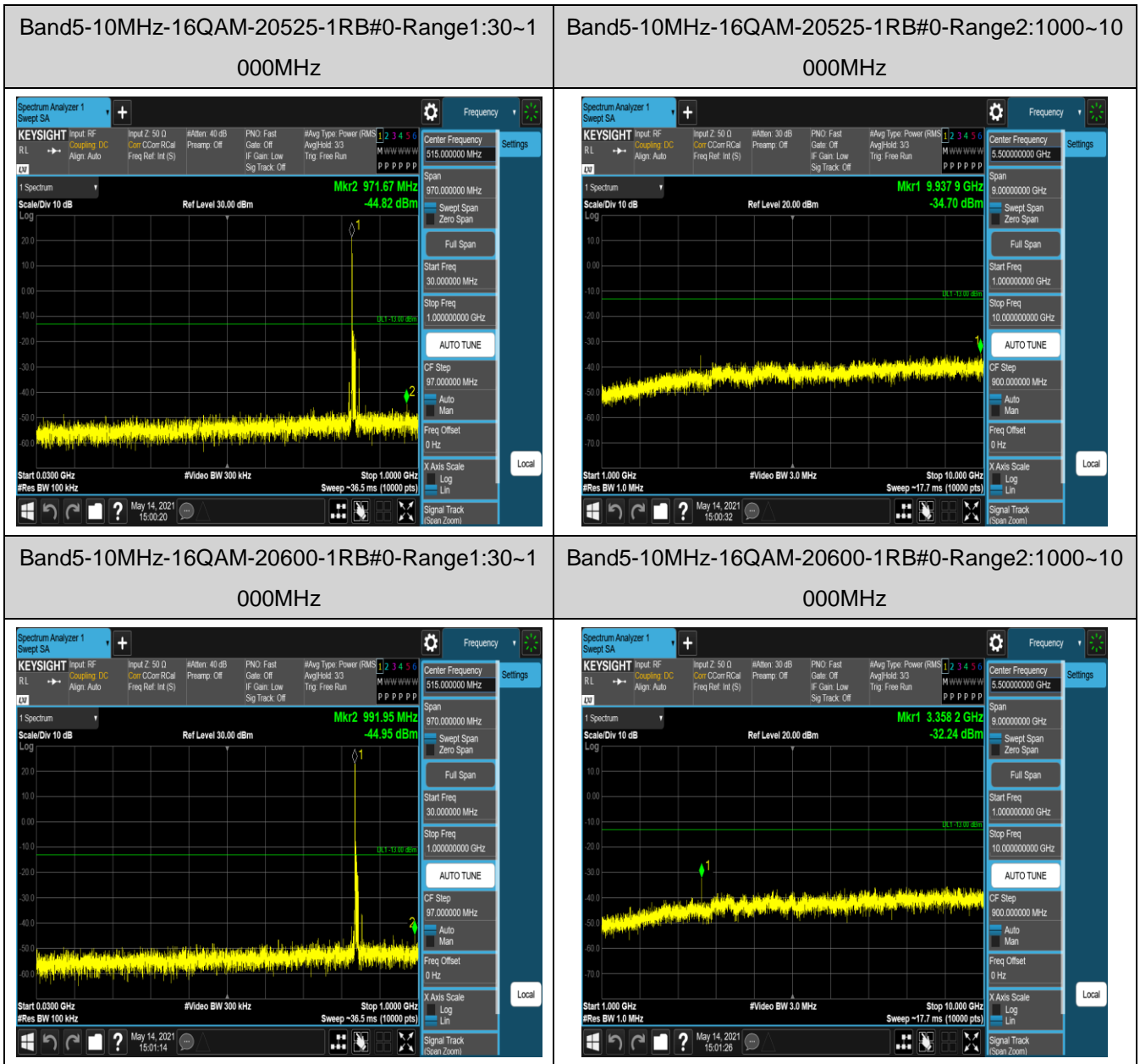
Band5-1.4MHz-16QAM-20407-1RB#0-Range2:1000~10000MHz



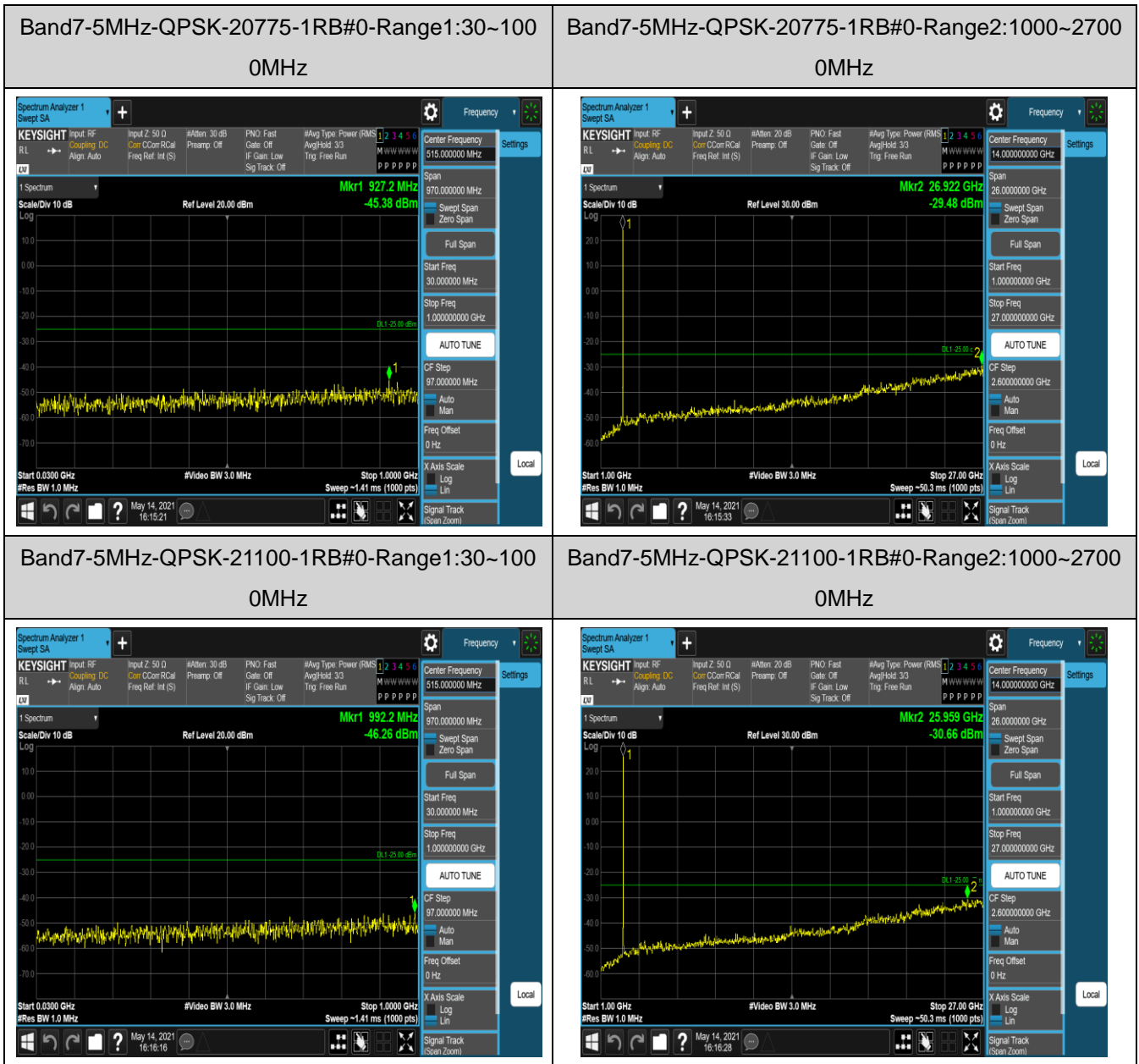


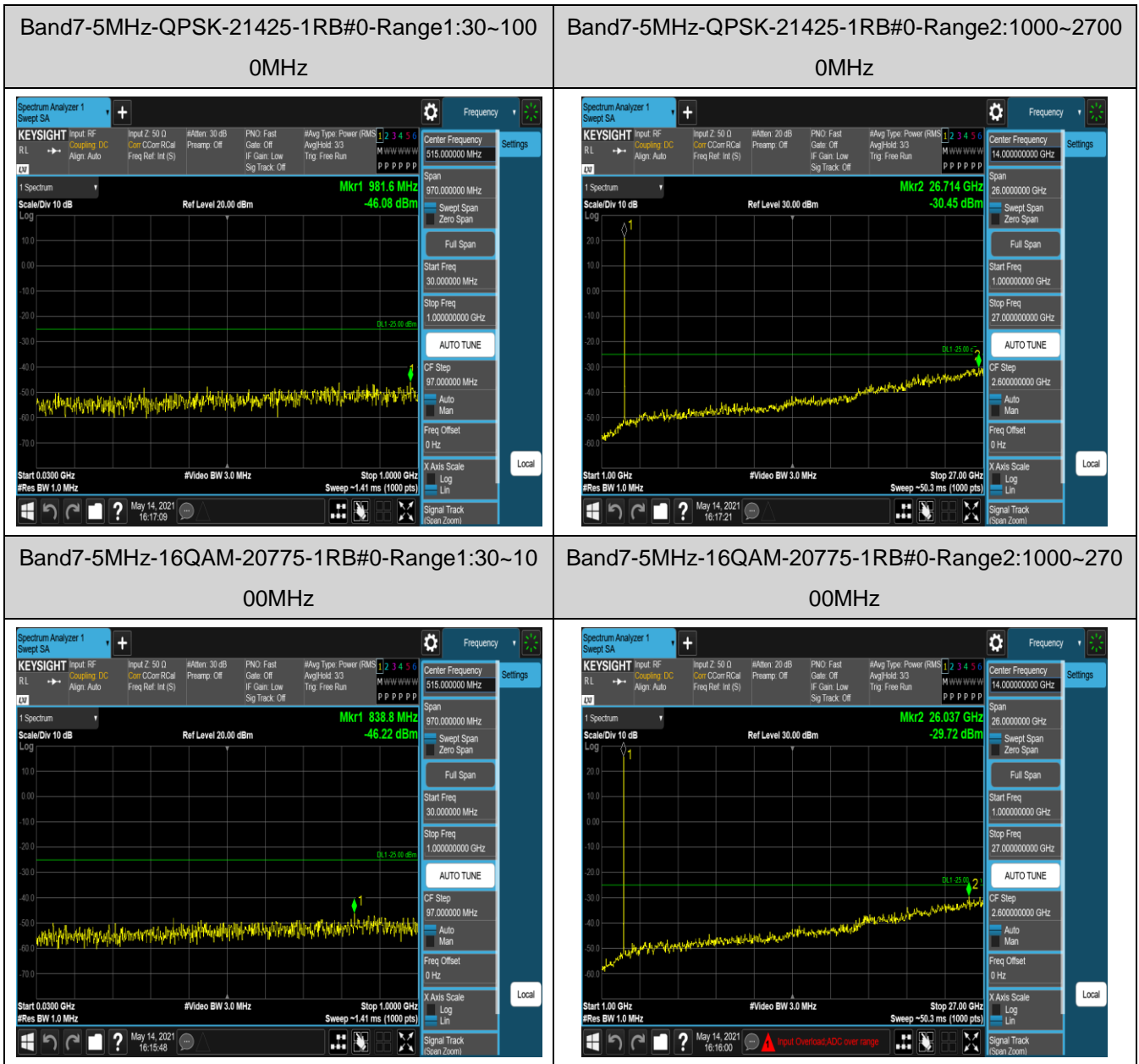






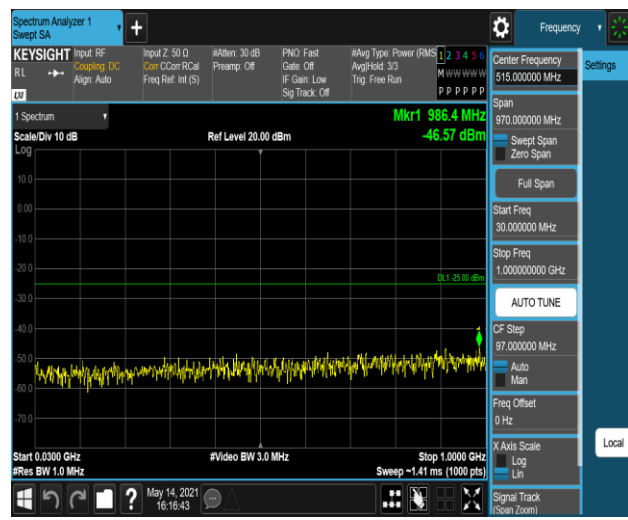






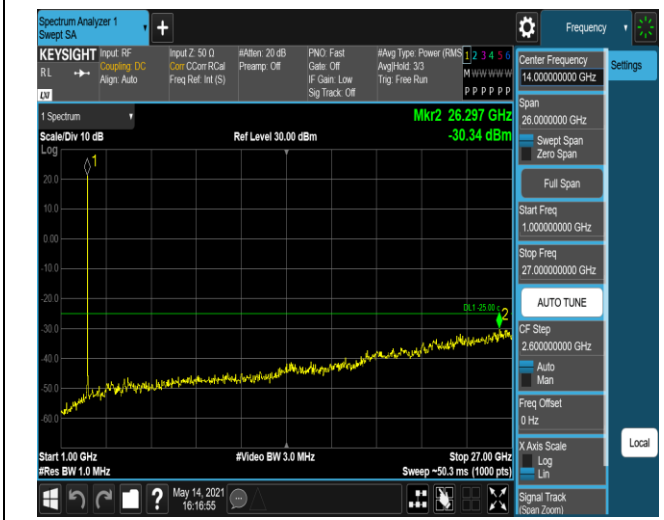
Band7-5MHz-16QAM-21100-1RB#0-Range1:30~10

00MHz



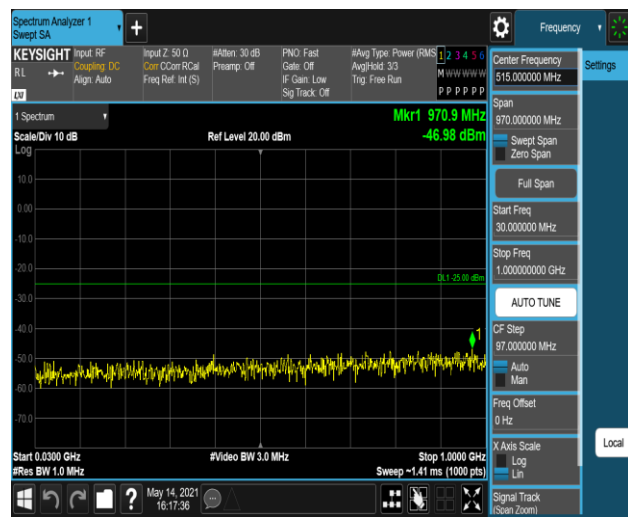
Band7-5MHz-16QAM-21100-1RB#0-Range2:1000~270

00MHz



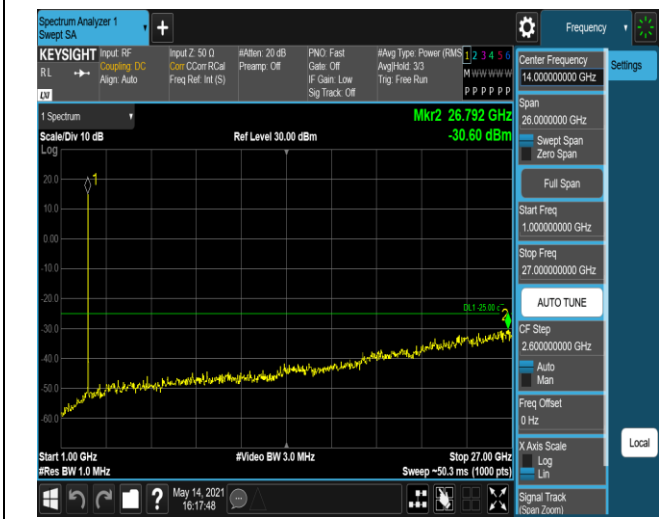
Band7-5MHz-16QAM-21425-1RB#0-Range1:30~10

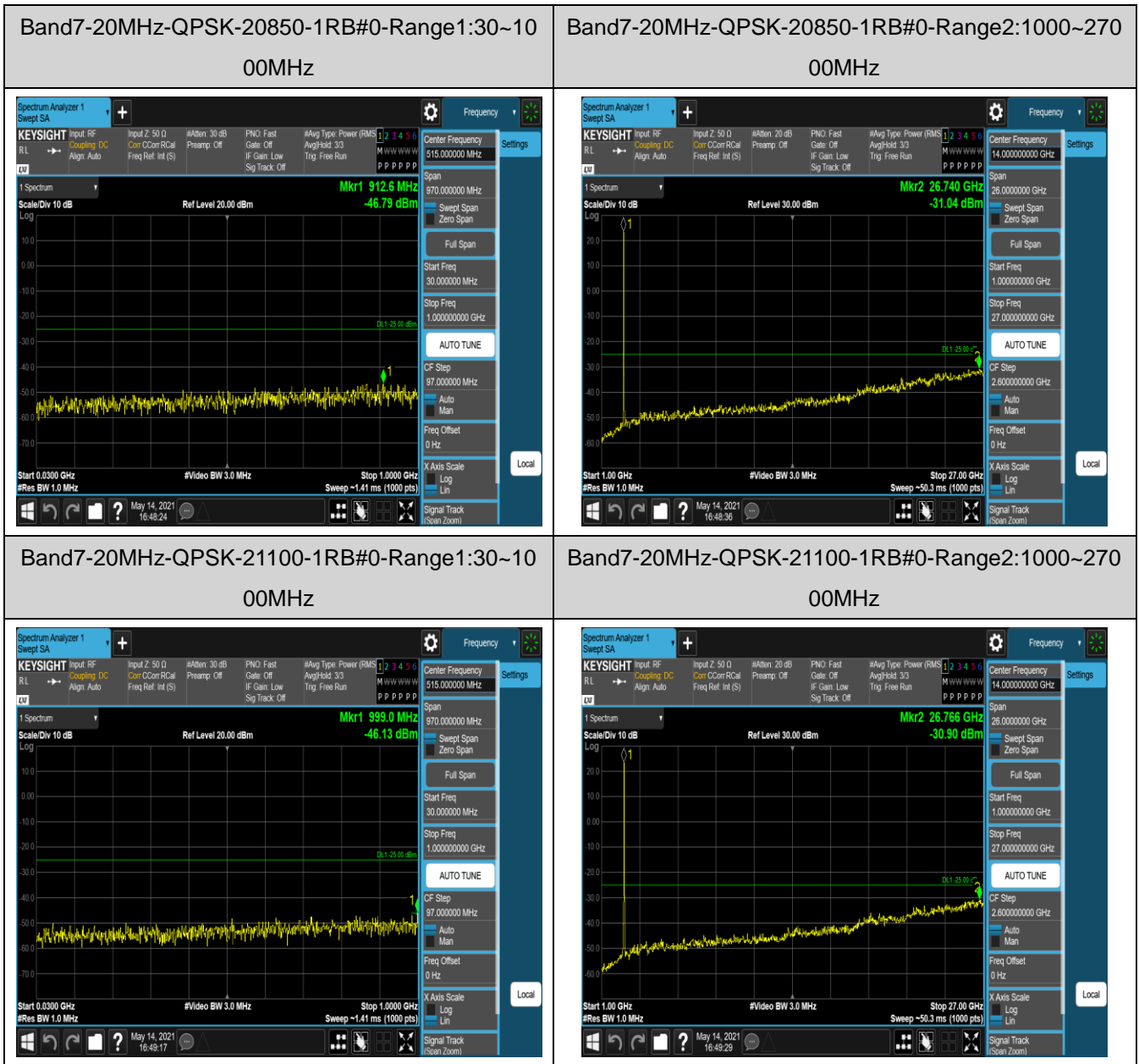
00MHz



Band7-5MHz-16QAM-21425-1RB#0-Range2:1000~270

00MHz





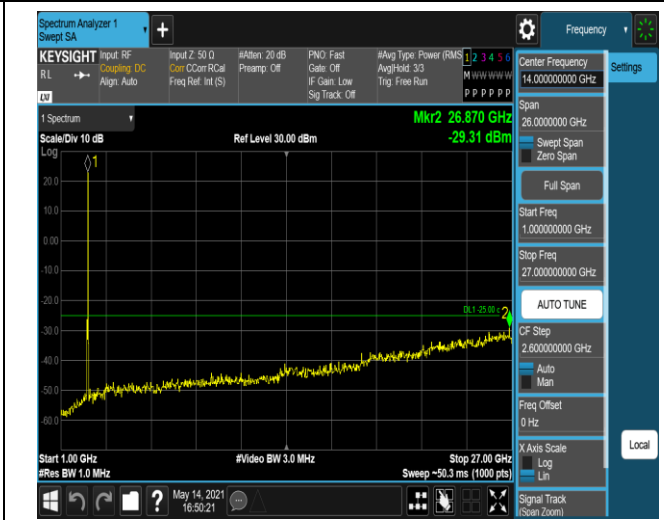
Band7-20MHz-QPSK-21350-1RB#0-Range1:30~10

00MHz



Band7-20MHz-QPSK-21350-1RB#0-Range2:1000~270

00MHz



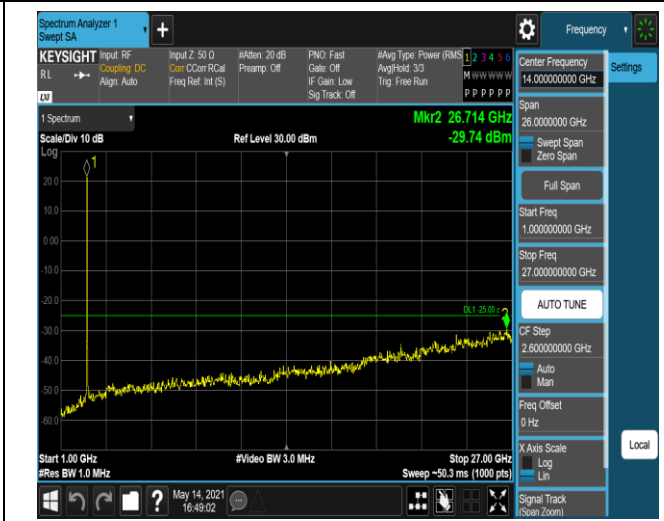
Band7-20MHz-16QAM-20850-1RB#0-Range1:30~1

000MHz



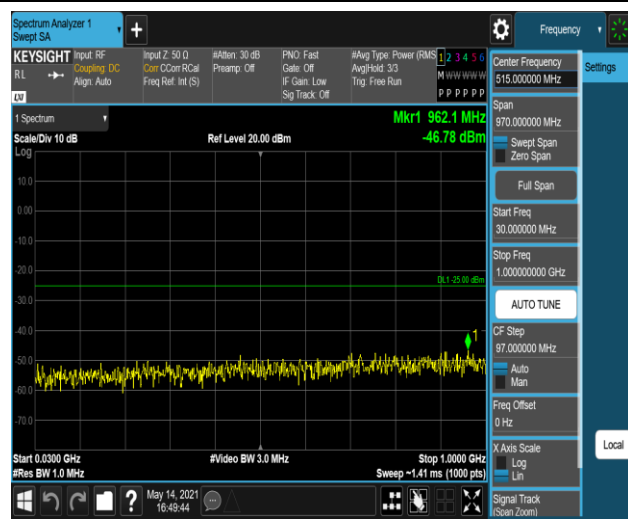
Band7-20MHz-16QAM-20850-1RB#0-Range2:1000~27

000MHz



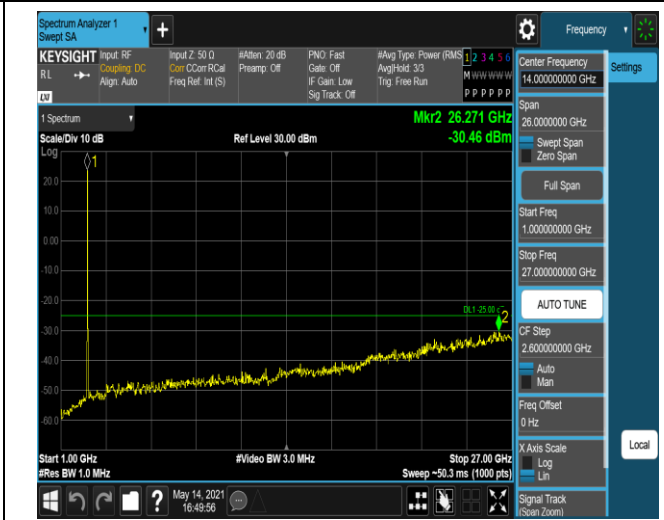
Band7-20MHz-16QAM-21100-1RB#0-Range1:30~1

000MHz



Band7-20MHz-16QAM-21100-1RB#0-Range2:1000~27

000MHz



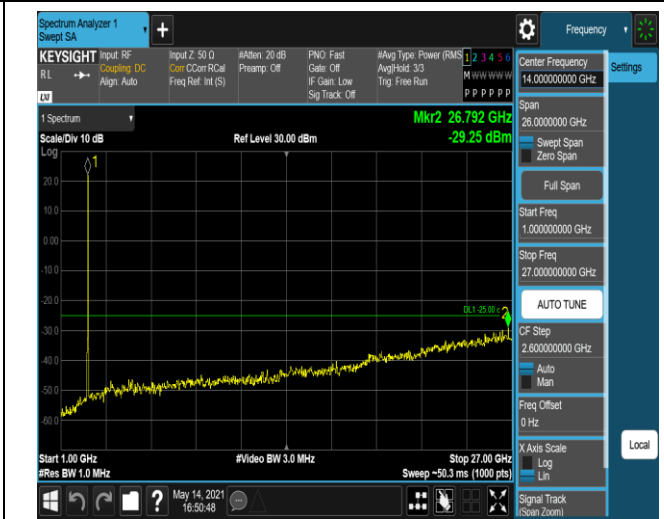
Band7-20MHz-16QAM-21350-1RB#0-Range1:30~1

000MHz



Band7-20MHz-16QAM-21350-1RB#0-Range2:1000~27

000MHz



## Appendix F: Frequency Stability

### Test Result (Worst case):

LTE Band 2 part:

| Reference Frequency: LTE Band 2 (10MHz) Middle channel=18900 Frequency=1880.0MHz |                      |                 |           |                                   |        |
|--|----------------------|-----------------|-----------|-----------------------------------|--------|
| Temperature  |                      |                 |           |                                   |        |
| Power supplied (Vdc)   | Temperature (°C)     | Frequency error |           | Limit (ppm)                       | Result |
|  |                      | Hz              | ppm       |                                   |        |
| QPSK   |                      |                 |           |                                   |        |
| 3.80   | -30                  | -31.07          | -0.016527 | Within authorized band for Band 2 | Pass   |
|  | -20                  | 8.50            | 0.004521  |                                   |        |
|  | -10                  | 18.05           | 0.009601  |                                   |        |
|  | 0                    | -12.42          | -0.006606 |                                   |        |
|  | 10                   | -8.91           | -0.004739 |                                   |        |
|  | 20                   | -27.18          | -0.014457 |                                   |        |
|  | 30                   | 6.08            | 0.003234  |                                   |        |
|  | 40                   | 5.16            | 0.002745  |                                   |        |
|  | 50                   | -10.39          | -0.005527 |                                   |        |
| 16QAM  |                      |                 |           |                                   |        |
| 3.80   | -30                  | 52.63           | 0.027995  | Within authorized band for Band 2 | Pass   |
|  | -20                  | 16.94           | 0.009011  |                                   |        |
|  | -10                  | 43.56           | 0.023170  |                                   |        |
|  | 0                    | -16.78          | -0.008926 |                                   |        |
|  | 10                   | 18.47           | 0.009824  |                                   |        |
|  | 20                   | 13.83           | 0.007356  |                                   |        |
|  | 30                   | 35.45           | 0.018856  |                                   |        |
|  | 40                   | 19.07           | 0.010144  |                                   |        |
|  | 50                   | 48.57           | 0.025835  |                                   |        |
| Voltage  |                      |                 |           |                                   |        |
| Temperature (°C)   | Power supplied (Vdc) | Frequency error |           | Limit (ppm)                       | Result |
|  |                      | Hz              | ppm       |                                   |        |
| QPSK   |                      |                 |           |                                   |        |
| 25   | 3.50                 | -6.27           | -0.003335 | Within authorized band for Band 2 | Pass   |
|  | 3.80                 | 46.23           | 0.024590  |                                   |        |
|  | 4.18                 | -24.23          | -0.012888 |                                   |        |
| 16QAM  |                      |                 |           |                                   |        |
| 25   | 3.50                 | -11.17          | -0.005941 | Within authorized band for Band 2 | Pass   |
|  | 3.80                 | -11.66          | -0.006202 |                                   |        |
|  | 4.18                 | 32.70           | 0.017394  |                                   |        |

Note: Only the worst case shown in the report.

**LTE Band 4 part:**

| Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 Frequency=1732.5MHz |                      |                 |           |                                   |        |
|---|----------------------|-----------------|-----------|-----------------------------------|--------|
| Temperature   |                      |                 |           |                                   |        |
| Power supplied (Vdc)  | Temperature (°C)     | Frequency error |           | Limit (ppm)                       | Result |
|   |                      | Hz              | ppm       |                                   |        |
| <b>QPSK</b>   |                      |                 |           |                                   |        |
| 3.80  | -30                  | -8.65           | -0.004993 | Within authorized band for Band 4 | Pass   |
|   | -20                  | 16.77           | 0.009680  |                                   |        |
|   | -10                  | 34.58           | 0.019960  |                                   |        |
|   | 0                    | 14.51           | 0.008375  |                                   |        |
|   | 10                   | 18.22           | 0.010517  |                                   |        |
|   | 20                   | 42.00           | 0.024242  |                                   |        |
|   | 30                   | 3.85            | 0.002222  |                                   |        |
|   | 40                   | 19.34           | 0.011163  |                                   |        |
|   | 50                   | 35.89           | 0.020716  |                                   |        |
| <b>16QAM</b>  |                      |                 |           |                                   |        |
| 3.80  | -30                  | 23.35           | 0.013478  | Within authorized band for Band 4 | Pass   |
|   | -20                  | 37.19           | 0.021466  |                                   |        |
|   | -10                  | 15.64           | 0.009027  |                                   |        |
|   | 0                    | 17.41           | 0.010049  |                                   |        |
|   | 10                   | 25.91           | 0.014955  |                                   |        |
|   | 20                   | 18.37           | 0.010603  |                                   |        |
|   | 30                   | 29.60           | 0.017085  |                                   |        |
|   | 40                   | 32.13           | 0.018545  |                                   |        |
|   | 50                   | 10.87           | 0.006274  |                                   |        |
| <b>Voltage</b>  |                      |                 |           |                                   |        |
| Temperature (°C)  | Power supplied (Vdc) | Frequency error |           | Limit (ppm)                       | Result |
|   |                      | Hz              | ppm       |                                   |        |
| <b>QPSK</b>   |                      |                 |           |                                   |        |
| 25  | 3.50                 | -16.71          | -0.009645 | Within authorized band for Band 4 | Pass   |
|   | 3.80                 | 8.07            | 0.004658  |                                   |        |
|   | 4.18                 | -8.30           | -0.004791 |                                   |        |
| <b>16QAM</b>  |                      |                 |           |                                   |        |
| 25  | 3.50                 | 27.88           | 0.016092  | Within authorized band for Band 4 | Pass   |
|   | 3.80                 | 39.64           | 0.022880  |                                   |        |
|   | 4.18                 | 33.26           | 0.019198  |                                   |        |

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 (Vdc)   | Temperature (°C)     | Frequency error |           | Limit (ppm)                       | Result |
|  |                      | Hz              | ppm       |                                   |        |
| QPSK   |                      |                 |           |                                   |        |
| 3.80   | -30                  | 3.06            | 0.003658  | Within authorized band for Band 5 | Pass   |
|  | -20                  | -17.12          | -0.020466 |                                   |        |
|  | -10                  | -26.87          | -0.032122 |                                   |        |
|  | 0                    | -34.32          | -0.041028 |                                   |        |
|  | 10                   | -44.36          | -0.053030 |                                   |        |
|  | 20                   | -12.16          | -0.014537 |                                   |        |
|  | 30                   | -8.67           | -0.010365 |                                   |        |
|  | 40                   | 4.88            | 0.005834  |                                   |        |
|  | 50                   | -6.88           | -0.008225 |                                   |        |
| 16QAM  |                      |                 |           |                                   |        |
| 3.80   | -30                  | 12.12           | 0.014489  | Within authorized band for Band 5 | Pass   |
|  | -20                  | 19.76           | 0.023622  |                                   |        |
|  | -10                  | 32.80           | 0.039211  |                                   |        |
|  | 0                    | 48.29           | 0.057729  |                                   |        |
|  | 10                   | 3.91            | 0.004674  |                                   |        |
|  | 20                   | 9.51            | 0.011369  |                                   |        |
|  | 30                   | -2.60           | -0.003108 |                                   |        |
|  | 40                   | -5.92           | -0.007077 |                                   |        |
|  | 50                   | -1.39           | -0.001662 |                                   |        |
| Voltage  |                      |                 |           |                                   |        |
| Temperature (°C)   | Power supplied (Vdc) | Frequency error |           | Limit (ppm)                       | Result |
|  |                      | Hz              | ppm       |                                   |        |
| QPSK   |                      |                 |           |                                   |        |
| 25   | 3.50                 | -12.55          | -0.015003 | Within authorized band for Band 5 | Pass   |
|  | 3.80                 | 4.91            | 0.005870  |                                   |        |
|  | 4.18                 | -39.32          | -0.047005 |                                   |        |
| 16QAM  |                      |                 |           |                                   |        |
| 25   | 3.50                 | 13.75           | 0.016438  | Within authorized band for Band 5 | Pass   |
|  | 3.80                 | -9.86           | -0.011787 |                                   |        |
|  | 4.18                 | 34.66           | 0.041435  |                                   |        |

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 (Vdc)  | Temperature (°C)     | Frequency error |           | Limit (ppm)                       | Result |
|   |                      | Hz              | ppm       |                                   |        |
| QPSK  |                      |                 |           |                                   |        |
| 3.80  | -30                  | -14.71          | -0.005803 | Within authorized band for Band 7 | Pass   |
|   | -20                  | -36.09          | -0.014237 |                                   |        |
|   | -10                  | -23.75          | -0.009369 |                                   |        |
|   | 0                    | -36.89          | -0.014552 |                                   |        |
|   | 10                   | -19.73          | -0.007783 |                                   |        |
|   | 20                   | -30.90          | -0.012189 |                                   |        |
|   | 30                   | -40.73          | -0.016067 |                                   |        |
|   | 40                   | -29.20          | -0.011519 |                                   |        |
|   | 50                   | -13.56          | -0.005349 |                                   |        |
| 16QAM   |                      |                 |           |                                   |        |
| 3.80  | -30                  | 15.98           | 0.006304  | Within authorized band for Band 7 | Pass   |
|   | -20                  | 22.62           | 0.008923  |                                   |        |
|   | -10                  | 40.17           | 0.015846  |                                   |        |
|   | 0                    | 30.90           | 0.012189  |                                   |        |
|   | 10                   | 46.75           | 0.018442  |                                   |        |
|   | 20                   | 35.23           | 0.013897  |                                   |        |
|   | 30                   | -22.40          | -0.008836 |                                   |        |
|   | 40                   | 5.28            | 0.002083  |                                   |        |
|   | 50                   | 36.62           | 0.014446  |                                   |        |
| Voltage   |                      |                 |           |                                   |        |
| Temperature (°C)  | Power supplied (Vdc) | Frequency error |           | Limit (ppm)                       | Result |
|   |                      | Hz              | ppm       |                                   |        |
| QPSK  |                      |                 |           |                                   |        |
| 25  | 3.50                 | 17.01           | 0.006710  | Within authorized band for Band 7 | Pass   |
|   | 3.80                 | 28.01           | 0.011049  |                                   |        |
|   | 4.18                 | -25.45          | -0.010039 |                                   |        |
| 16QAM   |                      |                 |           |                                   |        |
| 25  | 3.50                 | 14.10           | 0.005562  | Within authorized band for Band 7 | Pass   |
|   | 3.80                 | 18.07           | 0.007128  |                                   |        |
|   | 4.18                 | -6.81           | -0.002686 |                                   |        |

Note: Only the worst case shown in the report.