

## Effective (Isotropic) Radiated Power Output Data

### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Result(dBm) | Gain (dBi) | E(I)RP(dBm) | Limit(dBm) | Verdict |
|--------|-----------|------------|---------|------------------|-------------|------------|-------------|------------|---------|
| Band13 | 5MHz      | QPSK       | 23205   | 1RB#0            | 23.96       | 4.45       | 26.26       | 34.8       | PASS    |
| Band13 | 5MHz      | QPSK       | 23205   | 25RB#0           | 23.01       | 4.45       | 25.31       | 34.8       | PASS    |
| Band13 | 5MHz      | QPSK       | 23205   | 1RB#12           | 23.78       | 4.45       | 26.08       | 34.8       | PASS    |
| Band13 | 5MHz      | QPSK       | 23205   | 1RB#24           | 23.83       | 4.45       | 26.13       | 34.8       | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 1RB#0            | 23.67       | 4.45       | 25.97       | 34.8       | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 25RB#0           | 22.76       | 4.45       | 25.06       | 34.8       | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 1RB#12           | 23.79       | 4.45       | 26.09       | 34.8       | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 1RB#24           | 23.83       | 4.45       | 26.13       | 34.8       | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 1RB#0            | 23.84       | 4.45       | 26.14       | 34.8       | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 25RB#0           | 23.05       | 4.45       | 25.35       | 34.8       | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 1RB#12           | 23.96       | 4.45       | 26.26       | 34.8       | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 1RB#24           | 24.06       | 4.45       | 26.36       | 34.8       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23205   | 1RB#0            | 22.84       | 4.45       | 25.14       | 34.8       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23205   | 25RB#0           | 22.06       | 4.45       | 24.36       | 34.8       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23205   | 1RB#12           | 22.63       | 4.45       | 24.93       | 34.8       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23205   | 1RB#24           | 22.84       | 4.45       | 25.14       | 34.8       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23230   | 1RB#0            | 22.93       | 4.45       | 25.23       | 34.8       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23230   | 25RB#0           | 21.79       | 4.45       | 24.09       | 34.8       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23230   | 1RB#12           | 22.95       | 4.45       | 25.25       | 34.8       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23230   | 1RB#24           | 23.01       | 4.45       | 25.31       | 34.8       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23255   | 1RB#0            | 23.02       | 4.45       | 25.32       | 34.8       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23255   | 25RB#0           | 22.05       | 4.45       | 24.35       | 34.8       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23255   | 1RB#12           | 23.07       | 4.45       | 25.37       | 34.8       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23255   | 1RB#24           | 23.14       | 4.45       | 25.44       | 34.8       | PASS    |
| Band13 | 10MHz     | QPSK       | 23230   | 1RB#0            | 23.86       | 4.45       | 26.16       | 34.8       | PASS    |
| Band13 | 10MHz     | QPSK       | 23230   | 50RB#0           | 22.77       | 4.45       | 25.07       | 34.8       | PASS    |
| Band13 | 10MHz     | QPSK       | 23230   | 1RB#24           | 23.71       | 4.45       | 26.01       | 34.8       | PASS    |
| Band13 | 10MHz     | QPSK       | 23230   | 1RB#49           | 23.82       | 4.45       | 26.12       | 34.8       | PASS    |
| Band13 | 10MHz     | 16QAM      | 23230   | 27RB#0           | 21.92       | 4.45       | 24.22       | 34.8       | PASS    |
| Band13 | 10MHz     | 16QAM      | 23230   | 1RB#0            | 23.01       | 4.45       | 25.31       | 34.8       | PASS    |
| Band13 | 10MHz     | 16QAM      | 23230   | 1RB#24           | 22.89       | 4.45       | 25.19       | 34.8       | PASS    |
| Band13 | 10MHz     | 16QAM      | 23230   | 1RB#49           | 23.02       | 4.45       | 25.32       | 34.8       | PASS    |

## Peak-to-Average Ratio(CCDF)

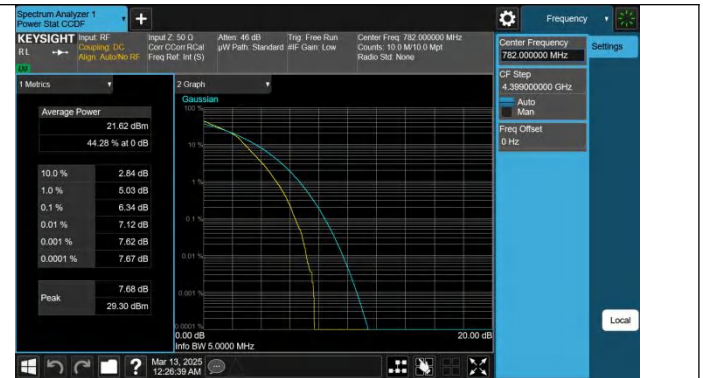
### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Result(dB) | Limit(dB) | Verdict |
|--------|-----------|------------|---------|------------------|------------|-----------|---------|
| Band13 | 5MHz      | QPSK       | 23230   | 25RB#0           | 5.69       | 13        | PASS    |
| Band13 | 5MHz      | 16QAM      | 23230   | 25RB#0           | 6.34       | 13        | PASS    |
| Band13 | 10MHz     | QPSK       | 23230   | 50RB#0           | 5.66       | 13        | PASS    |
| Band13 | 10MHz     | 16QAM      | 23230   | 27RB#0           | 6.38       | 13        | PASS    |

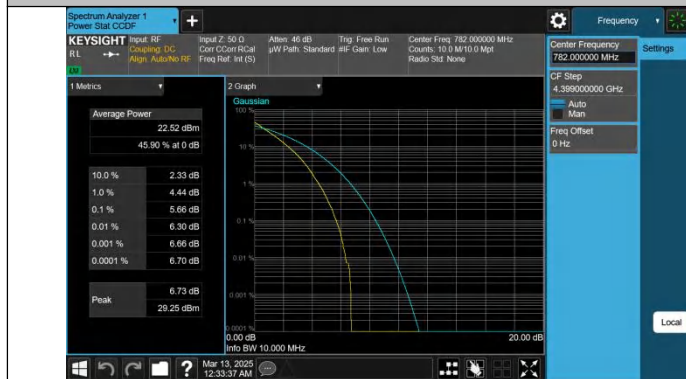
## Test Graphs



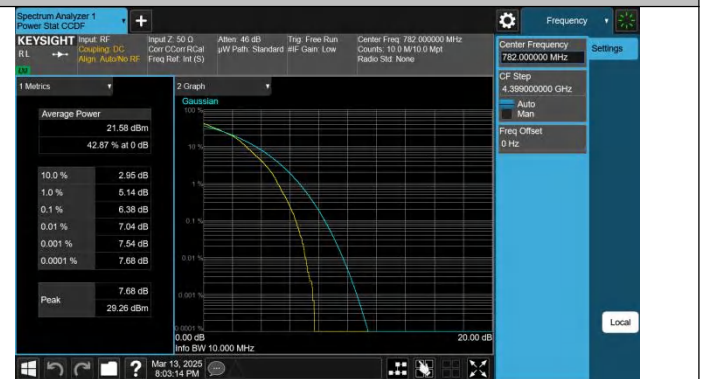
Band13-5MHz-QPSK-23230-25RB#0-PASS



Band13-5MHz-16QAM-23230-25RB#0-PASS



Band13-10MHz-QPSK-23230-50RB#0-PASS



Band13-10MHz-16QAM-23230-27RB#0-PASS

## 26dB Bandwidth and Occupied Bandwidth

### Test Result

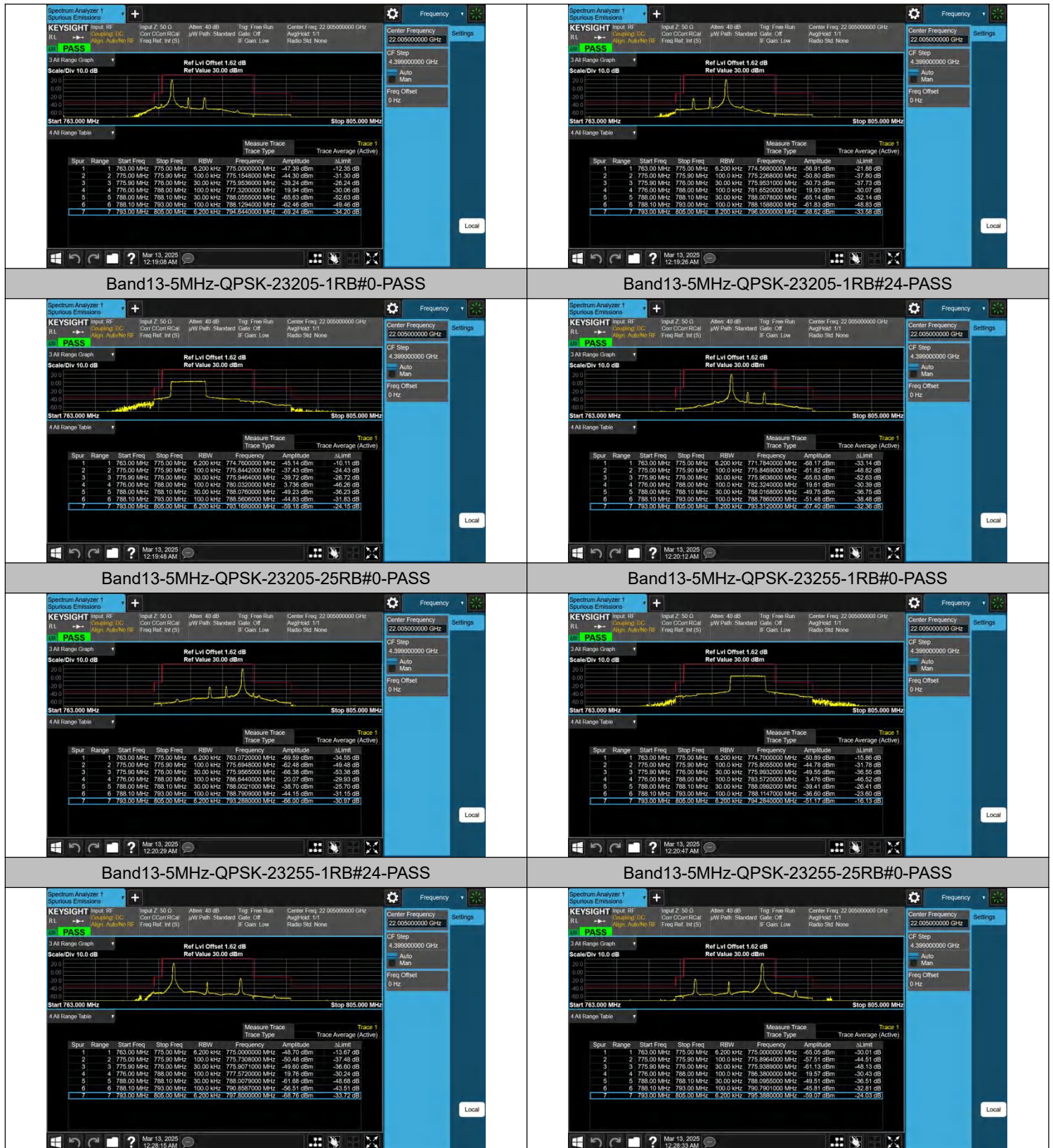
| Band   | Bandwidth | Modulation | Channel | RB Configuration | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
|--------|-----------|------------|---------|------------------|--------------------------|----------------------|---------|
| Band13 | 5MHz      | QPSK       | 23230   | 25RB#0           | 4.5128                   | 5.107                | PASS    |
| Band13 | 5MHz      | 16QAM      | 23230   | 25RB#0           | 4.5051                   | 5.372                | PASS    |
| Band13 | 10MHz     | QPSK       | 23230   | 50RB#0           | 8.9671                   | 10.21                | PASS    |
| Band13 | 10MHz     | 16QAM      | 23230   | 27RB#0           | 5.0315                   | 6.317                | PASS    |

## Test Graphs



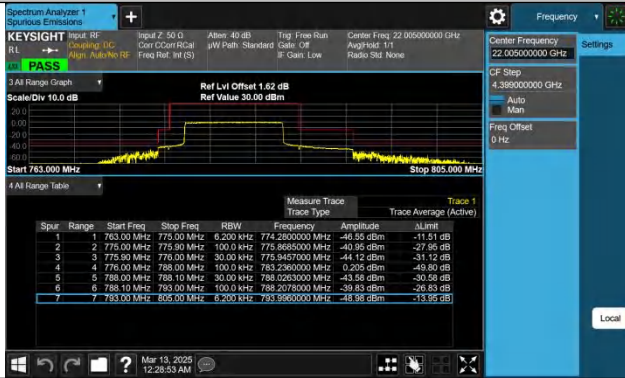
# Band Edge

## Test Graphs



Band13-10MHz-QPSK-23230-1RB#0-PASS

Band13-10MHz-QPSK-23230-1RB#49-PASS

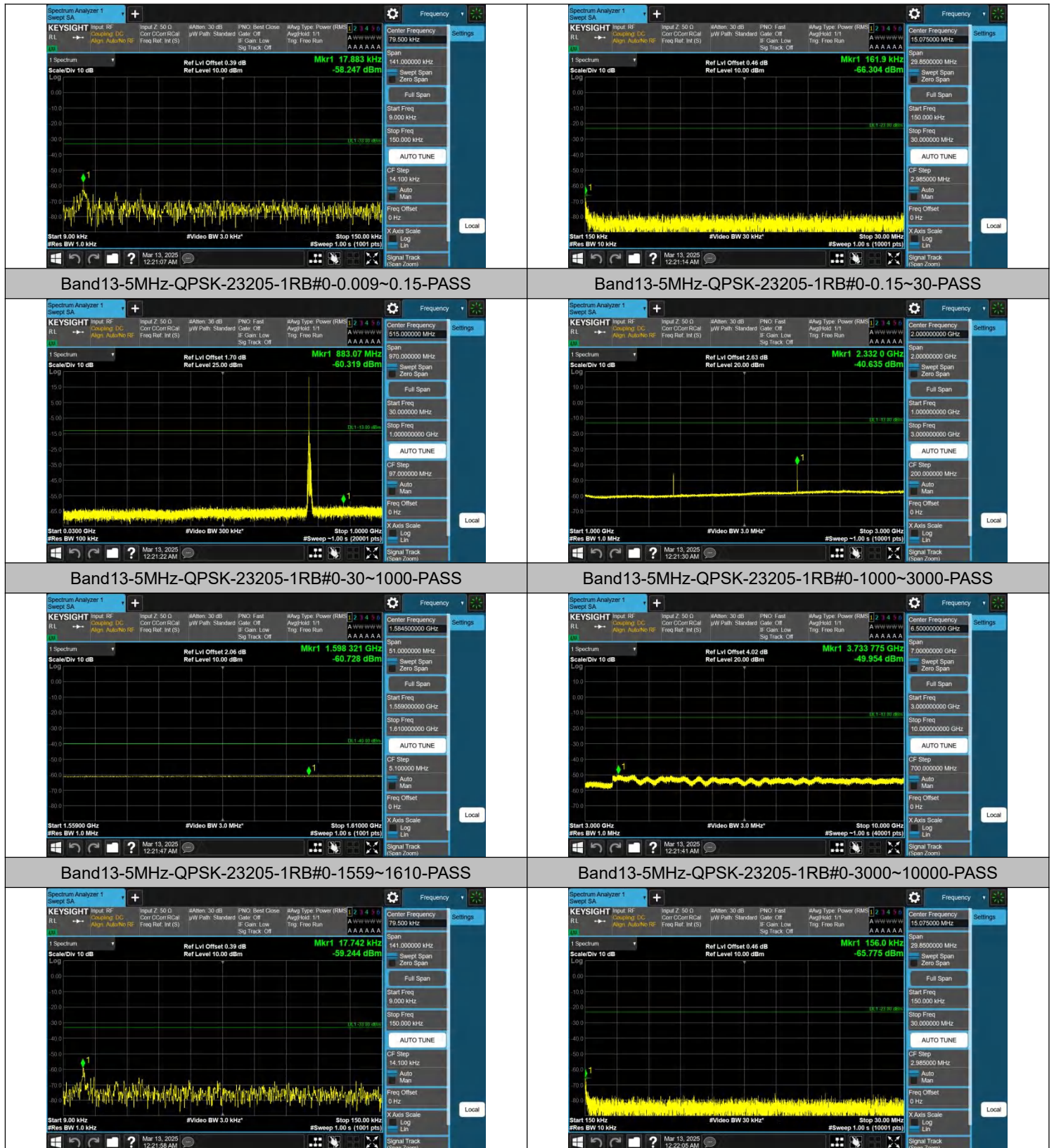


Band13-10MHz-QPSK-23230-50RB#0-PASS



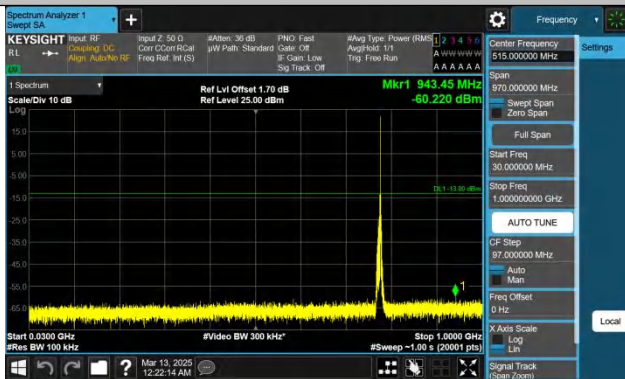
# Conducted Spurious Emission

## Test Graphs





Band13-5MHz-QPSK-23205-1RB#24-0.009~0.15-PASS



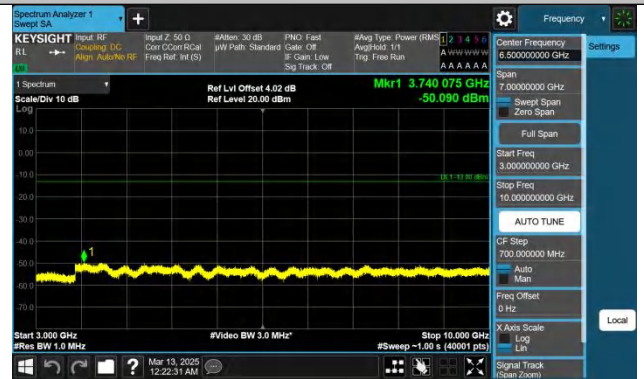
Band13-5MHz-QPSK-23205-1RB#24-0.15~30-PASS



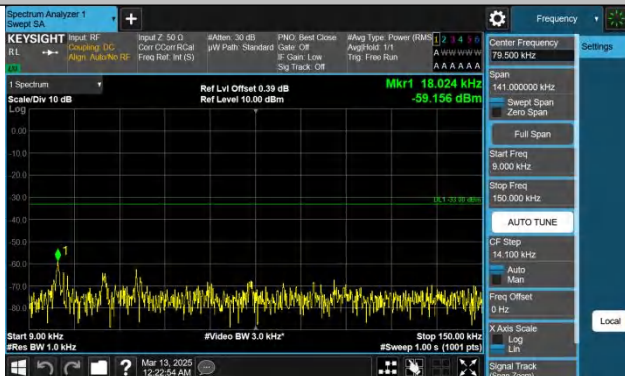
Band13-5MHz-QPSK-23205-1RB#24-30~1000-PASS



Band13-5MHz-QPSK-23205-1RB#24-1000~3000-PASS



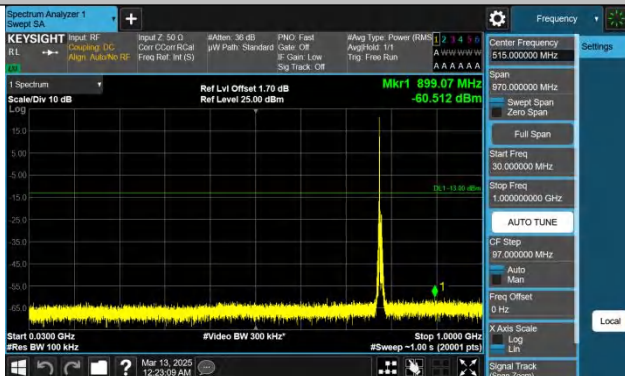
Band13-5MHz-QPSK-23205-1RB#24-1559~1610-PASS



Band13-5MHz-QPSK-23205-1RB#24-3000~10000-PASS



Band13-5MHz-QPSK-23230-1RB#0-0.009~0.15-PASS



Band13-5MHz-QPSK-23230-1RB#0-0.15~30-PASS

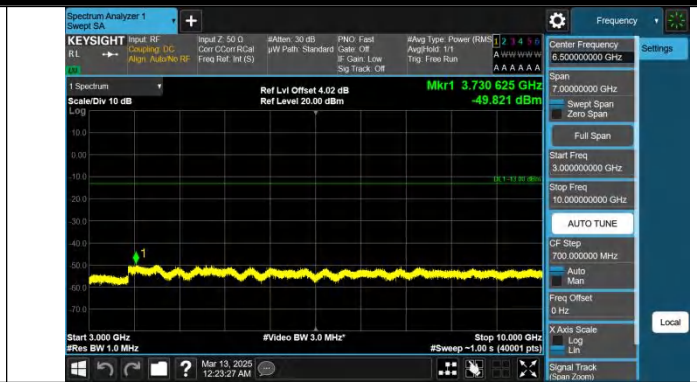


Band13-5MHz-QPSK-23230-1RB#0-30~1000-PASS

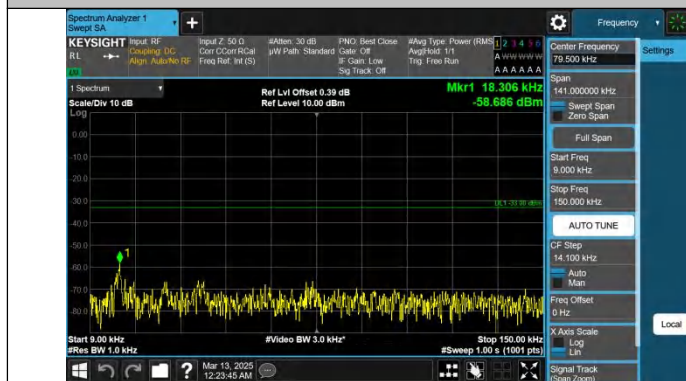
Band13-5MHz-QPSK-23230-1RB#0-1000~3000-PASS



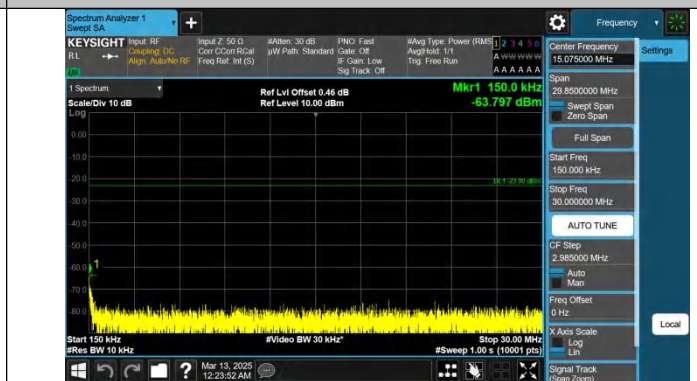
Band13-5MHz-QPSK-23230-1RB#0-1559~1610-PASS



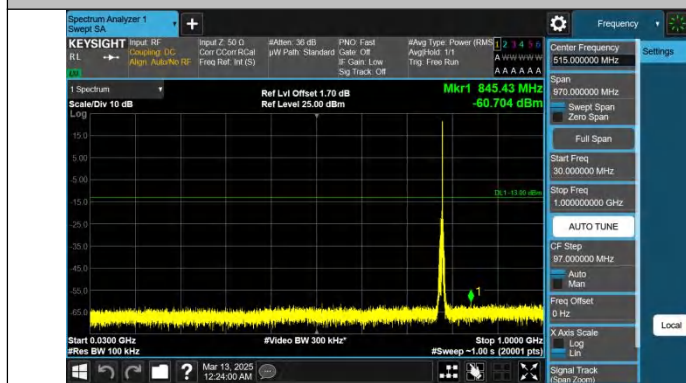
Band13-5MHz-QPSK-23230-1RB#0-3000~10000-PASS



Band13-5MHz-QPSK-23230-1RB#24-0.009~0.15-PASS



Band13-5MHz-QPSK-23230-1RB#24-0.15~30-PASS



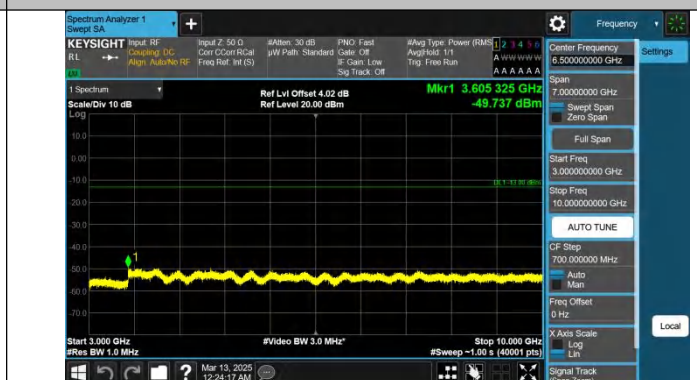
Band13-5MHz-QPSK-23230-1RB#24-30~1000-PASS



Band13-5MHz-QPSK-23230-1RB#24-1000~3000-PASS

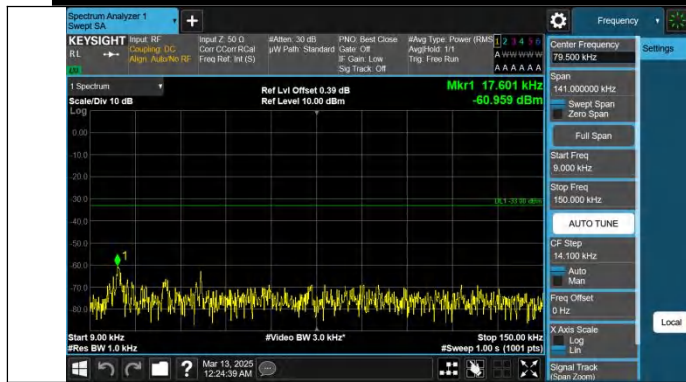


Band13-5MHz-QPSK-23230-1RB#24-1559~1610-PASS

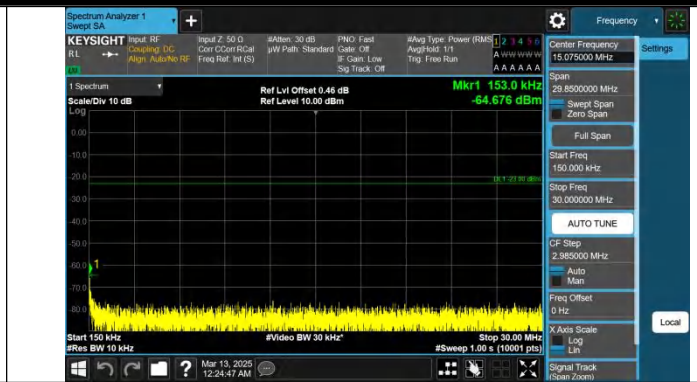


Band13-5MHz-QPSK-23230-1RB#24-3000~10000-PASS

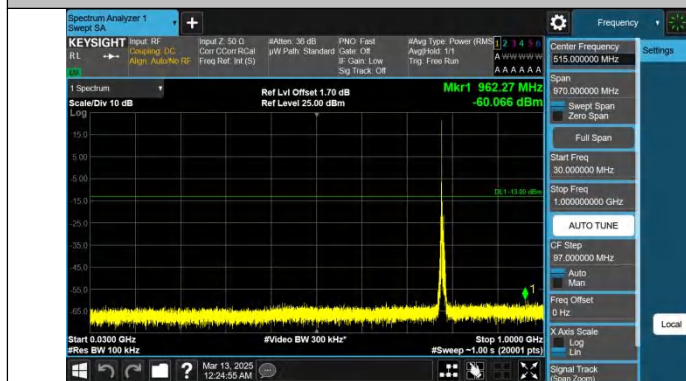




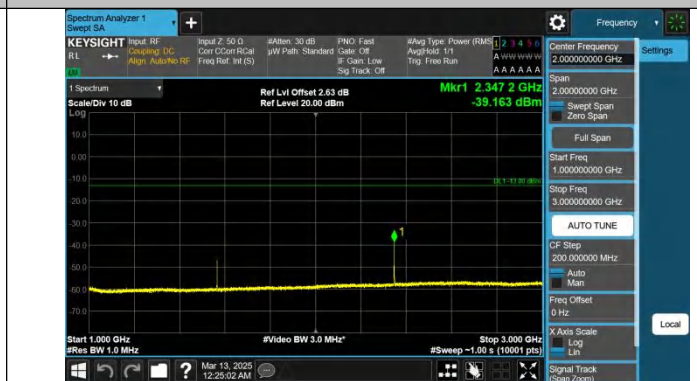
Band13-5MHz-QPSK-23255-1RB#0-0.009~0.15-PASS



Band13-5MHz-QPSK-23255-1RB#0-0.15~30-PASS



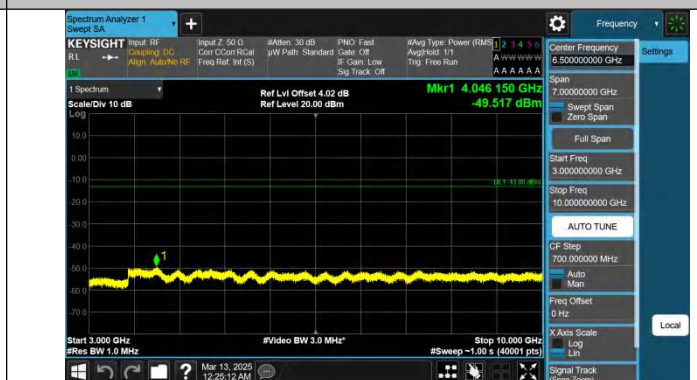
Band13-5MHz-QPSK-23255-1RB#0-30~1000-PASS



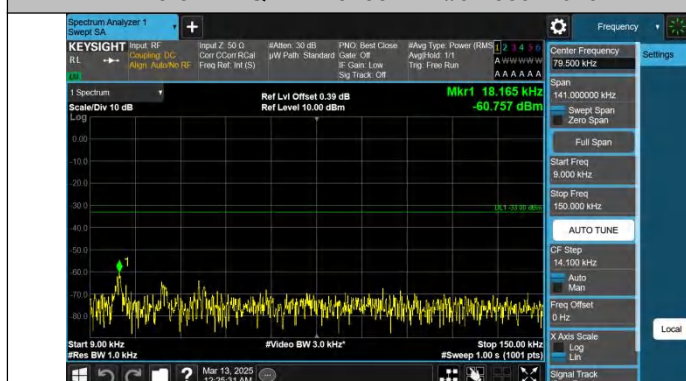
Band13-5MHz-QPSK-23255-1RB#0-1000~3000-PASS



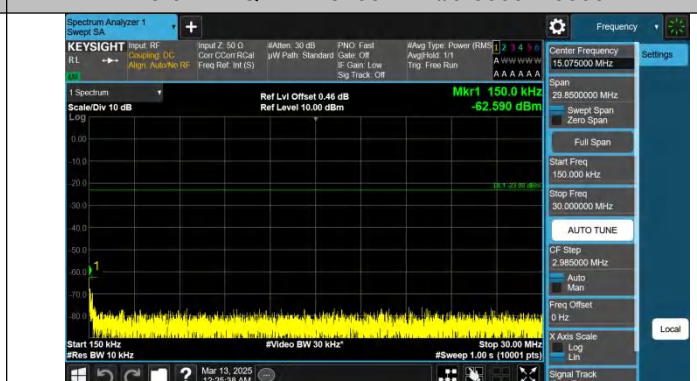
Band13-5MHz-QPSK-23255-1RB#0-1559~1610-PASS



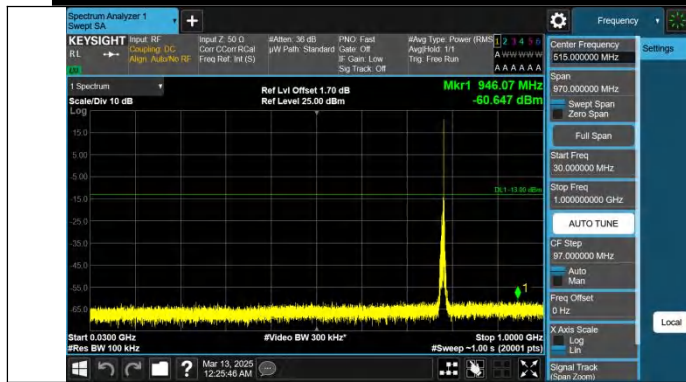
Band13-5MHz-QPSK-23255-1RB#0-3000~10000-PASS



Band13-5MHz-QPSK-23255-1RB#24-0.009~0.15-PASS



Band13-5MHz-QPSK-23255-1RB#24-0.15~30-PASS



Band13-5MHz-QPSK-23255-1RB#24-30~1000-PASS



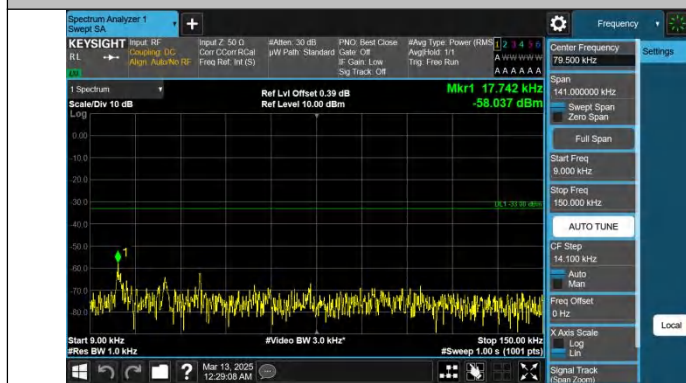
Band13-5MHz-QPSK-23255-1RB#24-1000~3000-PASS



Band13-5MHz-QPSK-23255-1RB#24-1559~1610-PASS



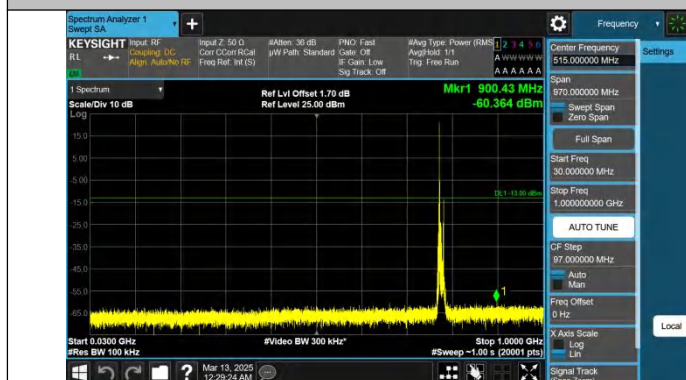
Band13-5MHz-QPSK-23255-1RB#24-3000~10000-PASS



Band13-10MHz-QPSK-23230-1RB#0-0.009~0.15-PASS



Band13-10MHz-QPSK-23230-1RB#0-0.15~30-PASS



Band13-10MHz-QPSK-23230-1RB#0-30~1000-PASS

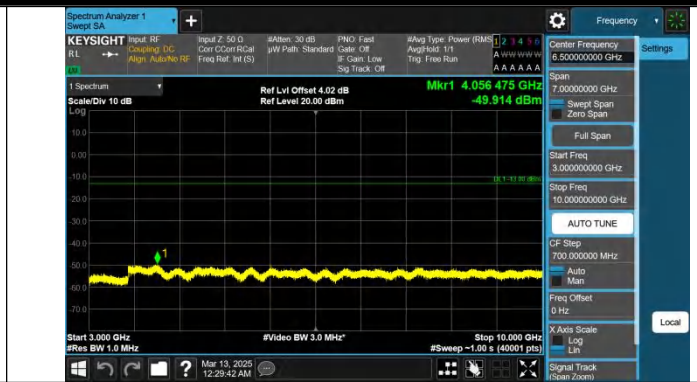


Band13-10MHz-QPSK-23230-1RB#0-1000~3000-PASS

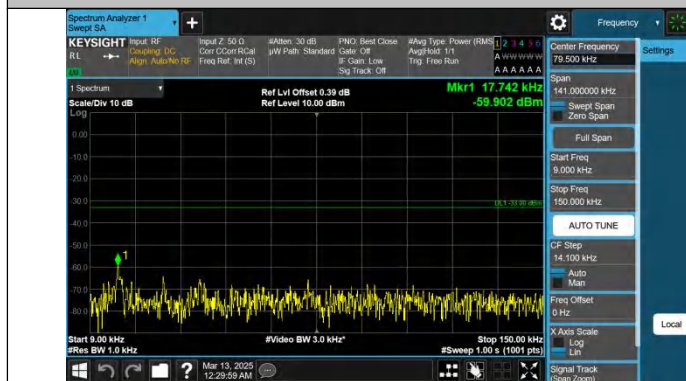




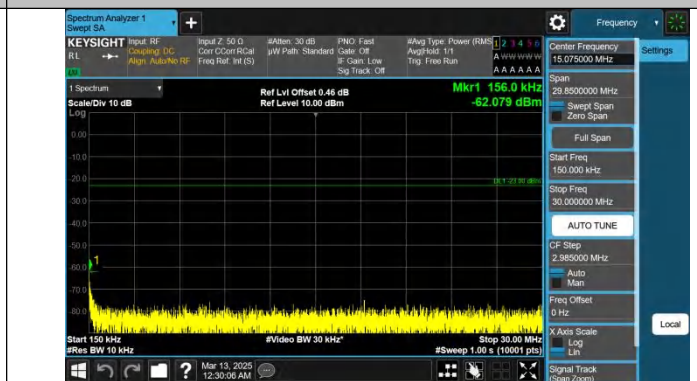
Band13-10MHz-QPSK-23230-1RB#0-1559~1610-PASS



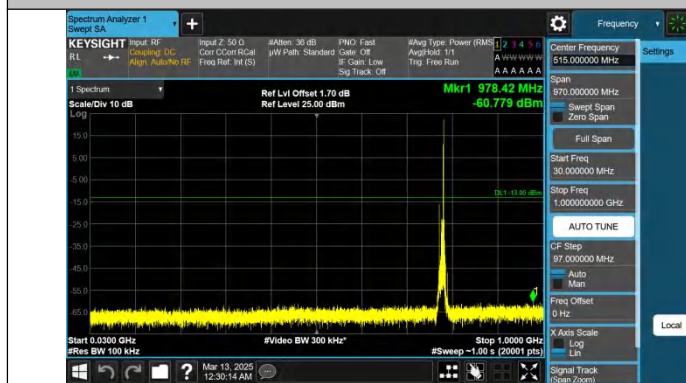
Band13-10MHz-QPSK-23230-1RB#0-3000~10000-PASS



Band13-10MHz-QPSK-23230-1RB#49-0.009~0.15-PASS



Band13-10MHz-QPSK-23230-1RB#49-0.15~30-PASS



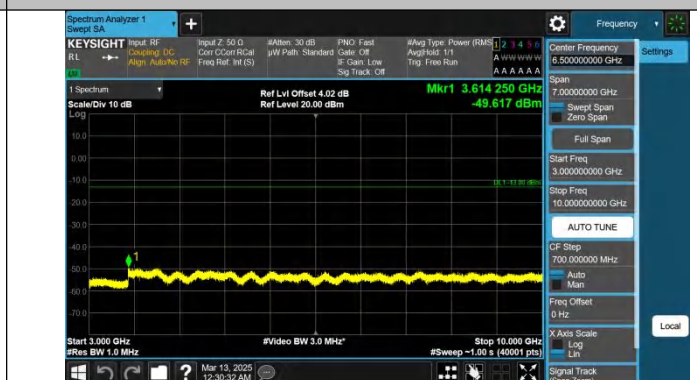
Band13-10MHz-QPSK-23230-1RB#49-30~1000-PASS



Band13-10MHz-QPSK-23230-1RB#49-1000~3000-PASS



Band13-10MHz-QPSK-23230-1RB#49-1559~1610-PASS



Band13-10MHz-QPSK-23230-1RB#49-3000~10000-PASS



## Frequency Stability

### Test Result

| Voltage |           |            |         |                  |               |                  |                |                 |             |           |           |             |         |
|---------|-----------|------------|---------|------------------|---------------|------------------|----------------|-----------------|-------------|-----------|-----------|-------------|---------|
| Band    | Bandwidth | Modulation | Channel | RB Configuration | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | FL (MHz)  | FH (MHz)  | Limit (MHz) | Verdict |
| Band 13 | 10MHz     | QPSK       | 23230   | 50RB#0           | VN            | NT               | -4420.00       | -5.652174       | ±NA         | 777.53613 | 786.45503 | 777-787     | PASS    |
| Band 13 | 10MHz     | QPSK       | 23230   | 50RB#0           | VL            | NT               | -1660.00       | -2.122762       | ±NA         | 777.53694 | 786.45974 | 777-787     | PASS    |
| Band 13 | 10MHz     | QPSK       | 23230   | 50RB#0           | VH            | NT               | -2260.00       | -2.890026       | ±NA         | 777.53964 | 786.45584 | 777-787     | PASS    |

| Temperature |           |            |         |                  |               |                  |                |                 |             |           |           |             |         |
|-------------|-----------|------------|---------|------------------|---------------|------------------|----------------|-----------------|-------------|-----------|-----------|-------------|---------|
| Band        | Bandwidth | Modulation | Channel | RB Configuration | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | FL (MHz)  | FH (MHz)  | Limit (MHz) | Verdict |
| Band 13     | 10MHz     | QPSK       | 23230   | 50RB#0           | NV            | -30              | -6690.00       | -8.554987       | ±NA         | 777.53271 | 786.45391 | 777-787     | PASS    |
| Band 13     | 10MHz     | QPSK       | 23230   | 50RB#0           | NV            | -20              | -1800.00       | -2.301790       | ±NA         | 777.5406  | 786.4558  | 777-787     | PASS    |
| Band 13     | 10MHz     | QPSK       | 23230   | 50RB#0           | NV            | -10              | -2260.00       | -2.890026       | ±NA         | 777.53764 | 786.45784 | 777-787     | PASS    |
| Band 13     | 10MHz     | QPSK       | 23230   | 50RB#0           | NV            | 0                | -3700.00       | -4.731458       | ±NA         | 777.5363  | 786.4563  | 777-787     | PASS    |
| Band 13     | 10MHz     | QPSK       | 23230   | 50RB#0           | NV            | 10               | -4650.00       | -5.946292       | ±NA         | 777.5354  | 786.4553  | 777-787     | PASS    |
| Band 13     | 10MHz     | QPSK       | 23230   | 50RB#0           | NV            | 20               | -1890.00       | -2.416880       | ±NA         | 777.54121 | 786.45501 | 777-787     | PASS    |
| Band 13     | 10MHz     | QPSK       | 23230   | 50RB#0           | NV            | 30               | -5980.00       | -7.647059       | ±NA         | 777.53507 | 786.45297 | 777-787     | PASS    |
| Band 13     | 10MHz     | QPSK       | 23230   | 50RB#0           | NV            | 40               | -4680.00       | -5.984655       | ±NA         | 777.53827 | 786.45237 | 777-787     | PASS    |
| Band 13     | 10MHz     | QPSK       | 23230   | 50RB#0           | NV            | 50               | -5290.00       | -6.764706       | ±NA         | 777.53636 | 786.45306 | 777-787     | PASS    |

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