

# Appendix-A LTE Band 14

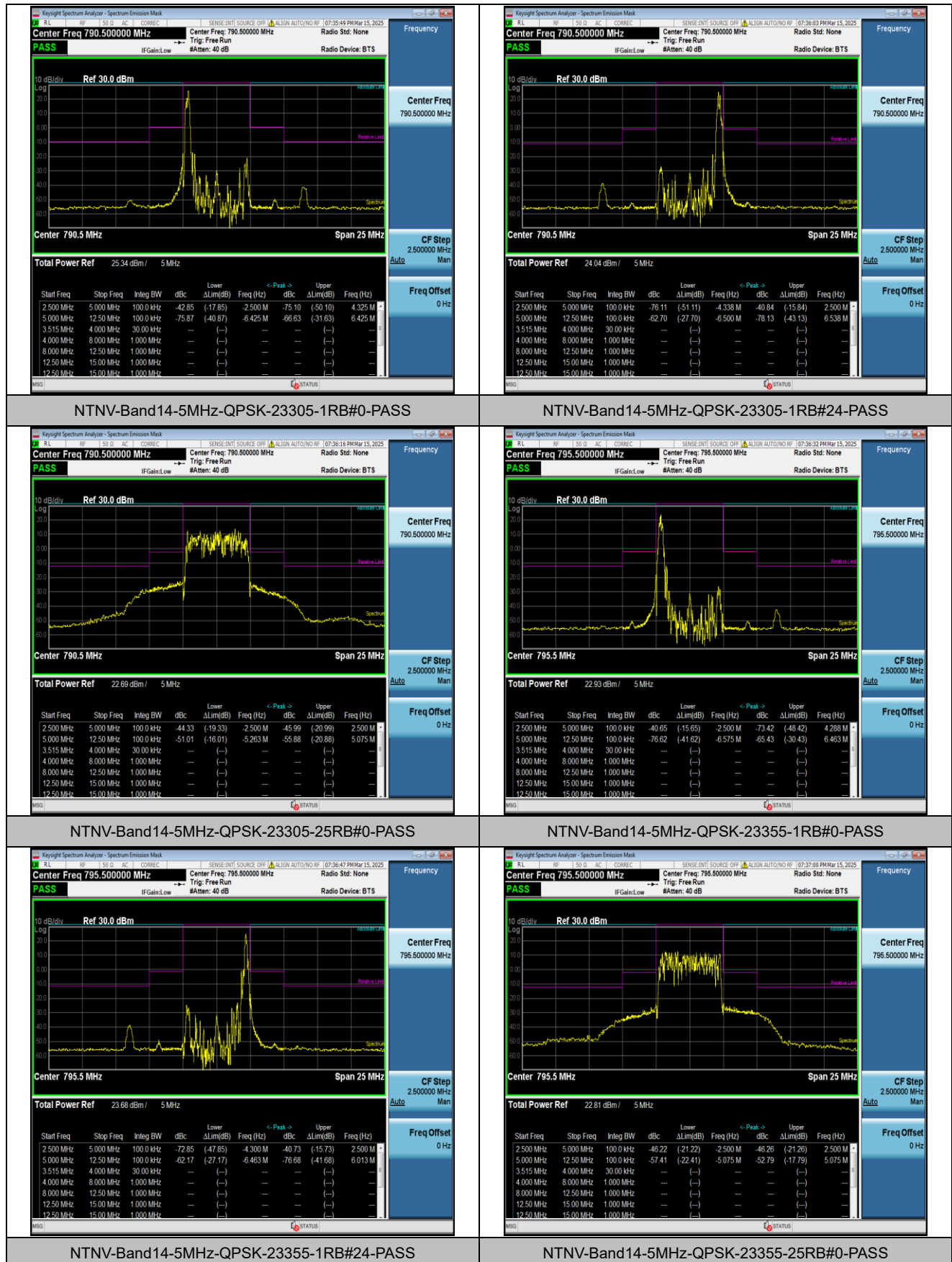
## Effective (Isotropic) Radiated Power Output Data

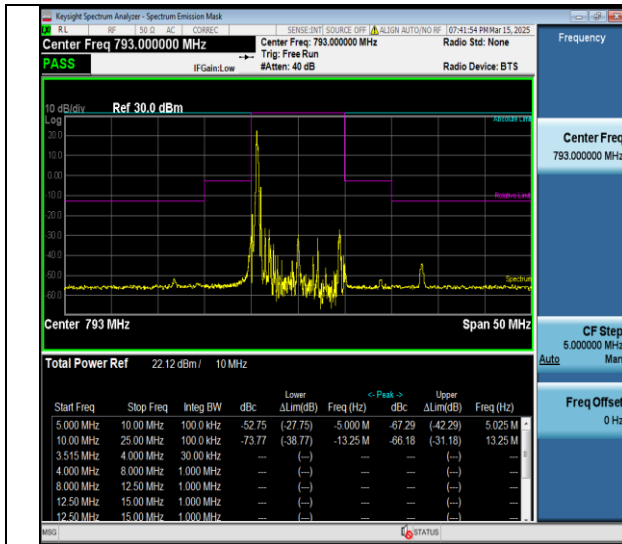
### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Result (dBm) | EIRP (dBm) | Limit (dBm) | Verdict |
|--------|-----------|------------|---------|------------------|--------------|------------|-------------|---------|
| Band14 | 5MHz      | QPSK       | 23305   | 1RB#0            | 23.37        | 20.72      | 34.77       | PASS    |
| Band14 | 5MHz      | QPSK       | 23305   | 1RB#12           | 23.44        | 20.79      | 34.77       | PASS    |
| Band14 | 5MHz      | QPSK       | 23305   | 1RB#24           | 23.36        | 20.71      | 34.77       | PASS    |
| Band14 | 5MHz      | QPSK       | 23305   | 25RB#0           | 22.39        | 19.74      | 34.77       | PASS    |
| Band14 | 5MHz      | 16QAM      | 23305   | 1RB#0            | 22.88        | 20.23      | 34.77       | PASS    |
| Band14 | 5MHz      | 16QAM      | 23305   | 1RB#12           | 22.67        | 20.02      | 34.77       | PASS    |
| Band14 | 5MHz      | 16QAM      | 23305   | 1RB#24           | 22.84        | 20.19      | 34.77       | PASS    |
| Band14 | 5MHz      | 16QAM      | 23305   | 25RB#0           | 21.5         | 18.85      | 34.77       | PASS    |
| Band14 | 5MHz      | QPSK       | 23330   | 1RB#0            | 23.38        | 20.73      | 34.77       | PASS    |
| Band14 | 5MHz      | QPSK       | 23330   | 1RB#12           | 23.2         | 20.55      | 34.77       | PASS    |
| Band14 | 5MHz      | QPSK       | 23330   | 1RB#24           | 23.2         | 20.55      | 34.77       | PASS    |
| Band14 | 5MHz      | QPSK       | 23330   | 25RB#0           | 22.25        | 19.6       | 34.77       | PASS    |
| Band14 | 5MHz      | 16QAM      | 23330   | 1RB#0            | 22.67        | 20.02      | 34.77       | PASS    |
| Band14 | 5MHz      | 16QAM      | 23330   | 1RB#12           | 22.59        | 19.94      | 34.77       | PASS    |
| Band14 | 5MHz      | 16QAM      | 23330   | 1RB#24           | 22.37        | 19.72      | 34.77       | PASS    |
| Band14 | 5MHz      | 16QAM      | 23330   | 25RB#0           | 21.4         | 18.75      | 34.77       | PASS    |
| Band14 | 5MHz      | QPSK       | 23355   | 1RB#0            | 23.25        | 20.6       | 34.77       | PASS    |
| Band14 | 5MHz      | QPSK       | 23355   | 1RB#12           | 23.27        | 20.62      | 34.77       | PASS    |
| Band14 | 5MHz      | QPSK       | 23355   | 1RB#24           | 23.24        | 20.59      | 34.77       | PASS    |
| Band14 | 5MHz      | QPSK       | 23355   | 25RB#0           | 22.18        | 19.53      | 34.77       | PASS    |
| Band14 | 5MHz      | 16QAM      | 23355   | 1RB#0            | 22.83        | 20.18      | 34.77       | PASS    |
| Band14 | 5MHz      | 16QAM      | 23355   | 1RB#12           | 22.43        | 19.78      | 34.77       | PASS    |
| Band14 | 5MHz      | 16QAM      | 23355   | 1RB#24           | 22.78        | 20.13      | 34.77       | PASS    |
| Band14 | 5MHz      | 16QAM      | 23355   | 25RB#0           | 21.36        | 18.71      | 34.77       | PASS    |
| Band14 | 10MHz     | QPSK       | 23330   | 1RB#0            | 23.13        | 20.48      | 34.77       | PASS    |
| Band14 | 10MHz     | QPSK       | 23330   | 1RB#24           | 23.31        | 20.66      | 34.77       | PASS    |
| Band14 | 10MHz     | QPSK       | 23330   | 1RB#49           | 23.17        | 20.52      | 34.77       | PASS    |
| Band14 | 10MHz     | QPSK       | 23330   | 50RB#0           | 22.28        | 19.63      | 34.77       | PASS    |
| Band14 | 10MHz     | 16QAM      | 23330   | 1RB#0            | 22.74        | 20.09      | 34.77       | PASS    |
| Band14 | 10MHz     | 16QAM      | 23330   | 1RB#24           | 22.82        | 20.17      | 34.77       | PASS    |
| Band14 | 10MHz     | 16QAM      | 23330   | 1RB#49           | 22.8         | 20.15      | 34.77       | PASS    |
| Band14 | 10MHz     | 16QAM      | 23330   | 50RB#0           | 21.45        | 18.8       | 34.77       | PASS    |

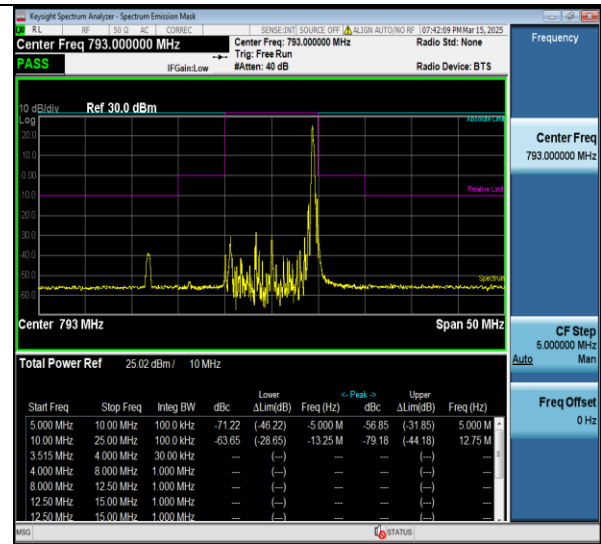
## Spectrum\_emission\_mask

## Test Graphs

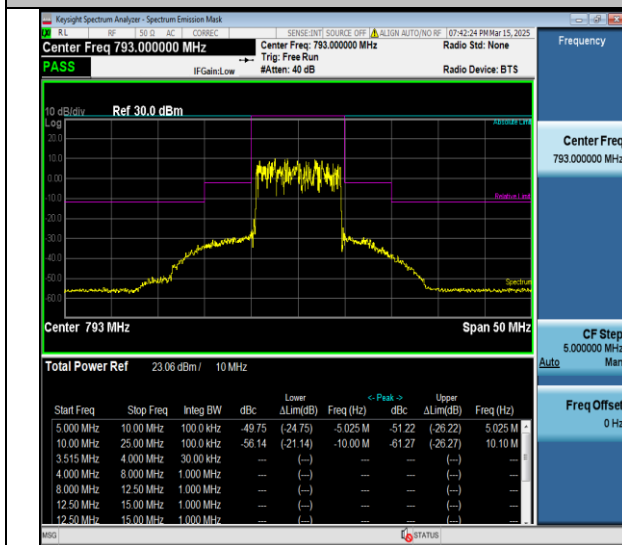




NTNV-Band14-10MHz-QPSK-23330-1RB#0-PASS



NTNV-Band14-10MHz-QPSK-23330-1RB#49-PASS



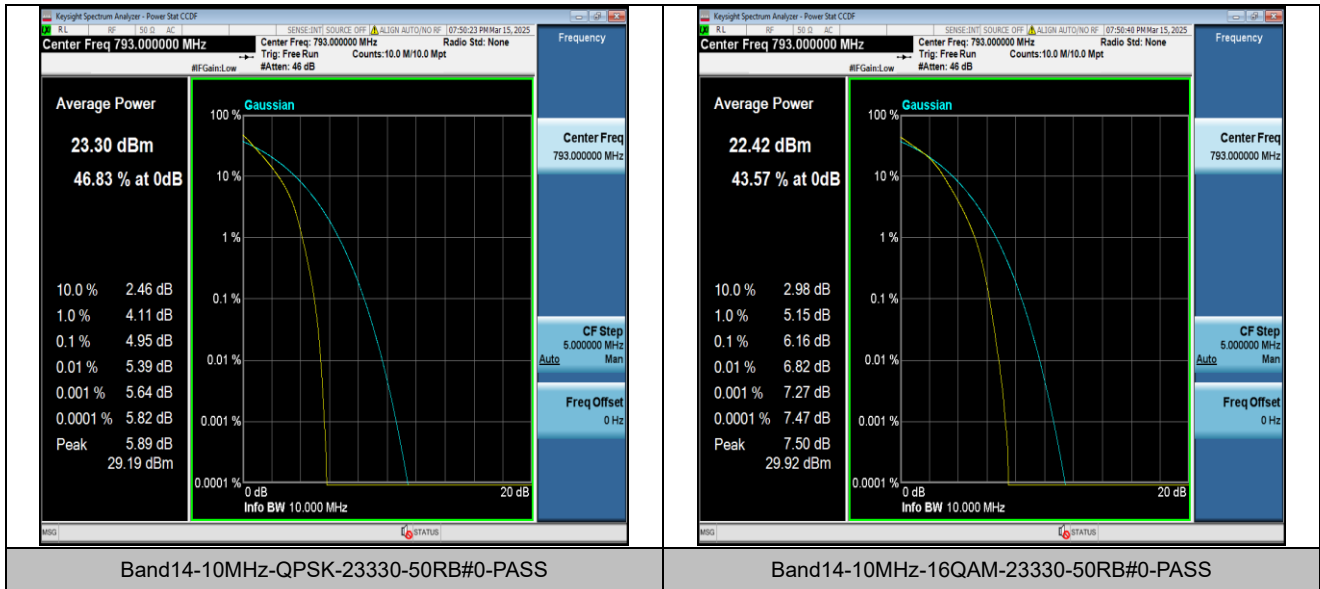
NTNV-Band14-10MHz-QPSK-23330-50RB#0-PASS

## Peak-to-Average Ratio(CCDF)

### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Result (dB) | Limit (dB) | Verdict |
|--------|-----------|------------|---------|------------------|-------------|------------|---------|
| Band14 | 10MHz     | QPSK       | 23330   | 50RB#0           | 4.95        | 13         | PASS    |
| Band14 | 10MHz     | 16QAM      | 23330   | 50RB#0           | 6.16        | 13         | PASS    |

## Test Graphs

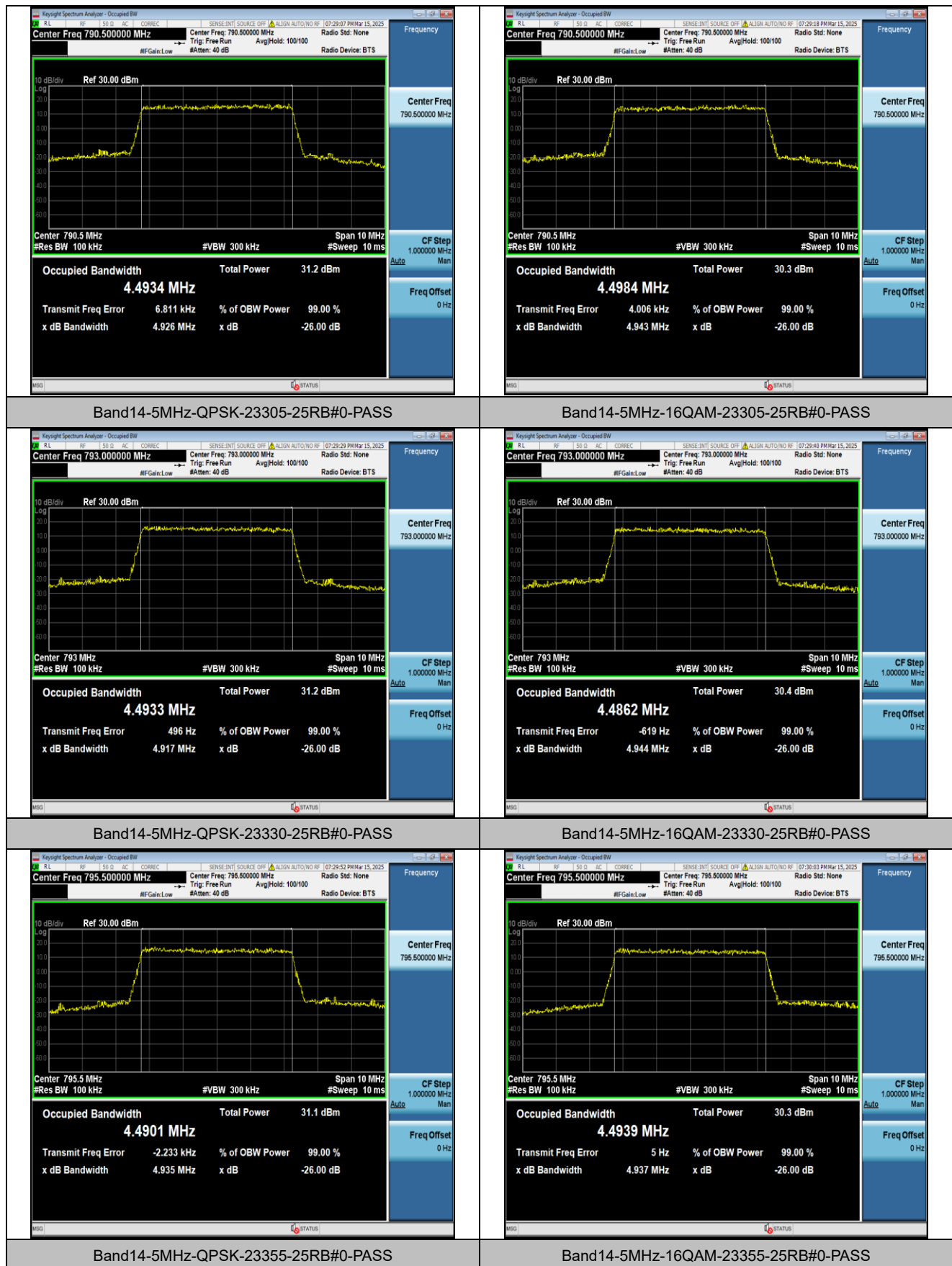


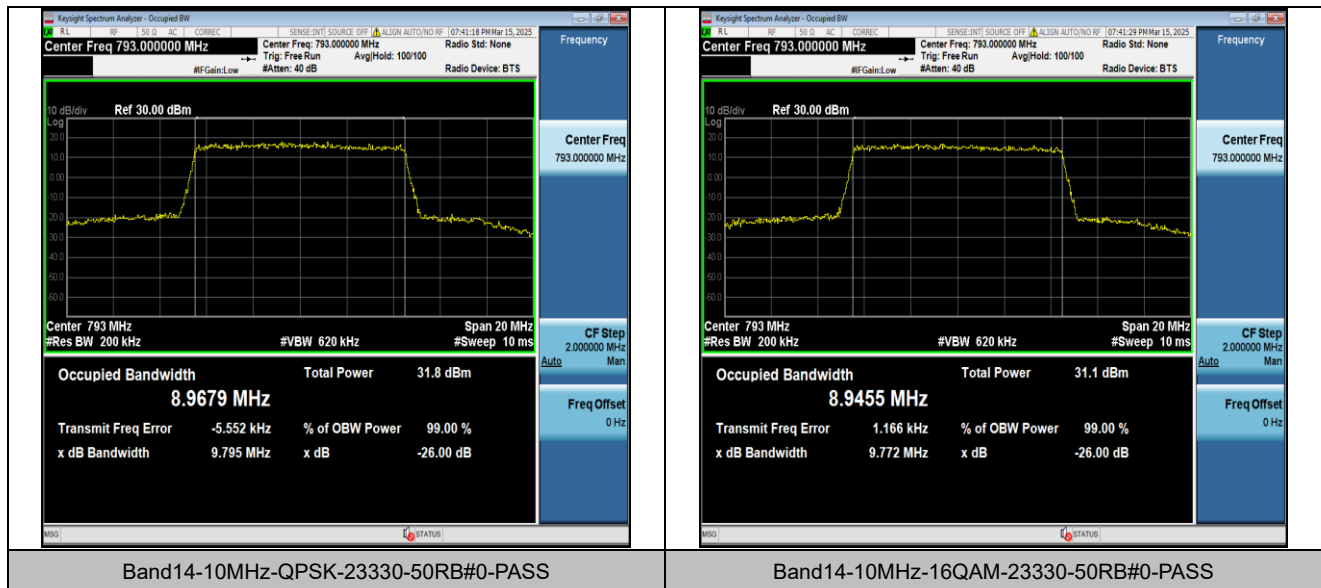
## 26dB Bandwidth and Occupied Bandwidth

### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | OBW (MHz) | 26dB EBW (MHz) | Verdict |
|--------|-----------|------------|---------|------------------|-----------|----------------|---------|
| Band14 | 5MHz      | QPSK       | 23305   | 25RB#0           | 4.4934    | 4.926          | PASS    |
| Band14 | 5MHz      | 16QAM      | 23305   | 25RB#0           | 4.4984    | 4.943          | PASS    |
| Band14 | 5MHz      | QPSK       | 23330   | 25RB#0           | 4.4933    | 4.917          | PASS    |
| Band14 | 5MHz      | 16QAM      | 23330   | 25RB#0           | 4.4862    | 4.944          | PASS    |
| Band14 | 5MHz      | QPSK       | 23355   | 25RB#0           | 4.4901    | 4.935          | PASS    |
| Band14 | 5MHz      | 16QAM      | 23355   | 25RB#0           | 4.4939    | 4.937          | PASS    |
| Band14 | 10MHz     | QPSK       | 23330   | 50RB#0           | 8.9679    | 9.795          | PASS    |
| Band14 | 10MHz     | 16QAM      | 23330   | 50RB#0           | 8.9455    | 9.772          | PASS    |

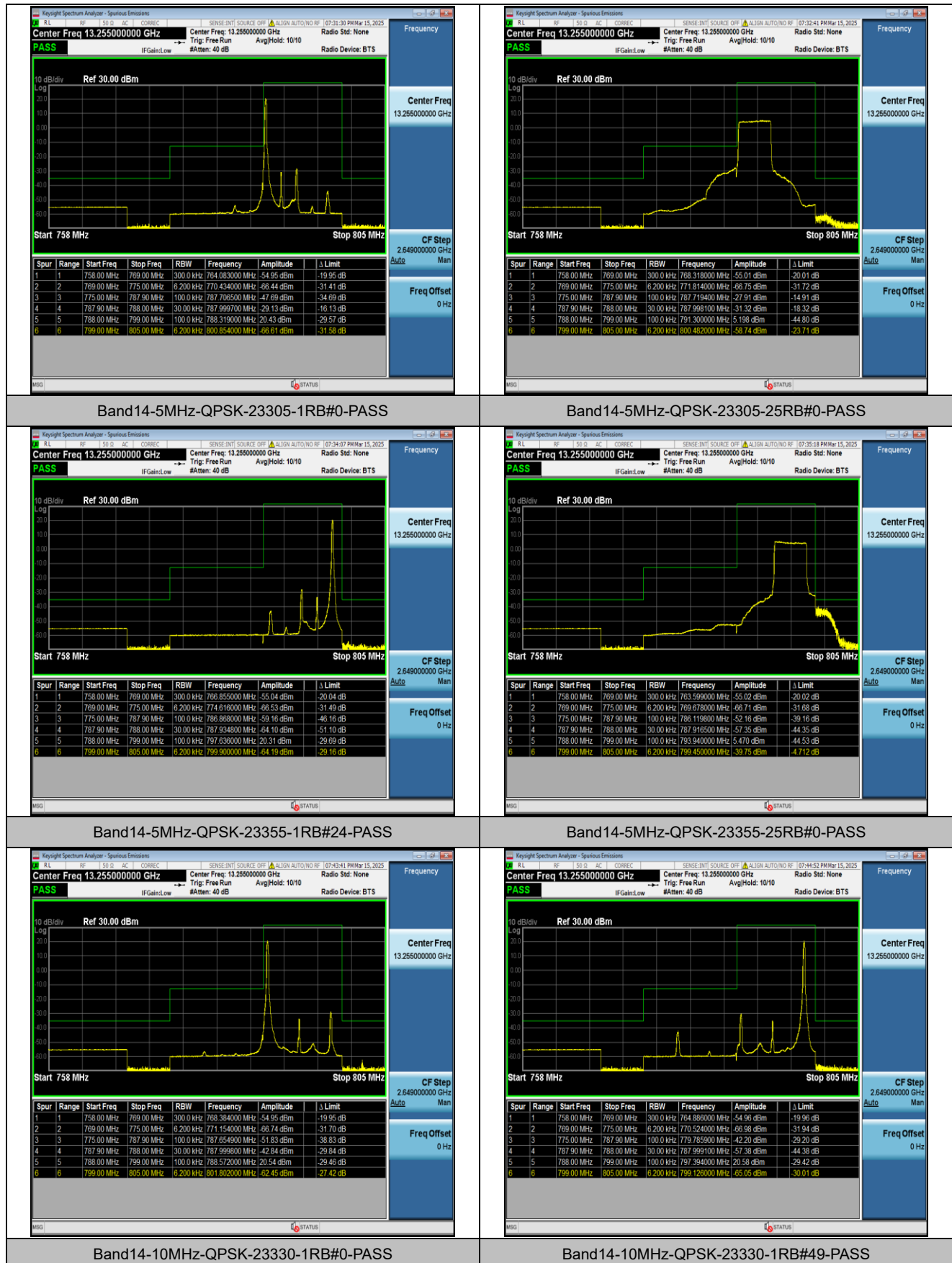
## Test Graphs





# Band Edge

## Test Graphs

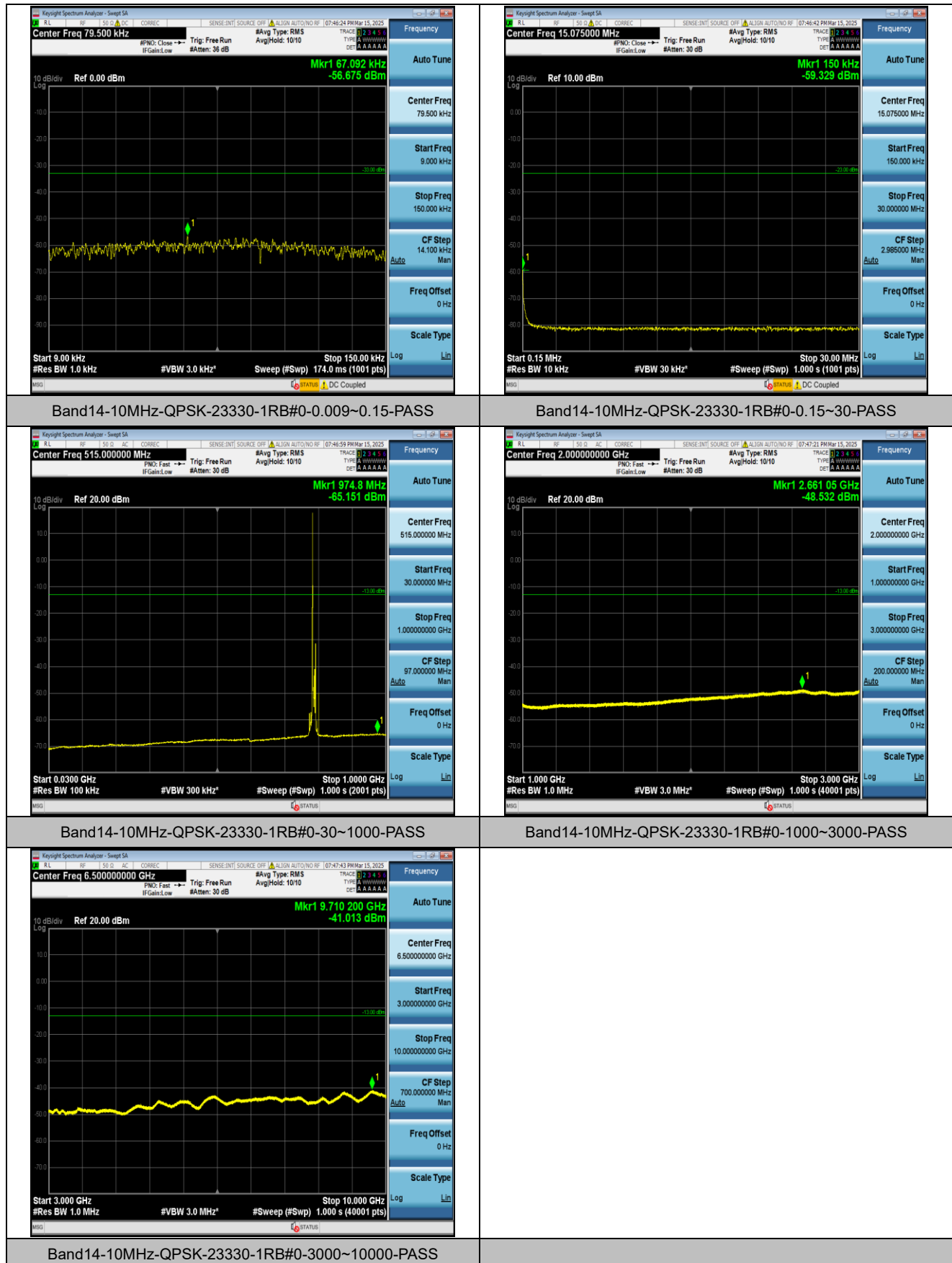




Band14-10MHz-QPSK-23330-50RB#0-PASS

# Conducted Spurious Emission

## Test Graphs



## Frequency Stability

### Test Result

| Voltage |           |            |         |              |               |                  |                |                 |         |
|---------|-----------|------------|---------|--------------|---------------|------------------|----------------|-----------------|---------|
| Band    | Bandwidth | Modulation | Channel | RB Configure | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Verdict |
| Band14  | 10MHz     | QPSK       | 23330   | 50RB#0       | VN            | NT               | -1.60          | -0.002018       | PASS    |
| Band14  | 10MHz     | QPSK       | 23330   | 50RB#0       | VL            | NT               | -2.70          | -0.003405       | PASS    |
| Band14  | 10MHz     | QPSK       | 23330   | 50RB#0       | VH            | NT               | -4.90          | -0.006179       | PASS    |

| Temperature |           |            |         |              |               |                  |                |                 |         |
|-------------|-----------|------------|---------|--------------|---------------|------------------|----------------|-----------------|---------|
| Band        | Bandwidth | Modulation | Channel | RB Configure | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Verdict |
| Band14      | 10MHz     | QPSK       | 23330   | 50RB#0       | NV            | -30              | -4.90          | -0.006179       | PASS    |
| Band14      | 10MHz     | QPSK       | 23330   | 50RB#0       | NV            | -20              | -1.20          | -0.001513       | PASS    |
| Band14      | 10MHz     | QPSK       | 23330   | 50RB#0       | NV            | -10              | -5.40          | -0.006810       | PASS    |
| Band14      | 10MHz     | QPSK       | 23330   | 50RB#0       | NV            | 0                | -6.80          | -0.008575       | PASS    |
| Band14      | 10MHz     | QPSK       | 23330   | 50RB#0       | NV            | 10               | -7.60          | -0.009584       | PASS    |
| Band14      | 10MHz     | QPSK       | 23330   | 50RB#0       | NV            | 20               | -7.00          | -0.008827       | PASS    |
| Band14      | 10MHz     | QPSK       | 23330   | 50RB#0       | NV            | 30               | -5.60          | -0.007062       | PASS    |
| Band14      | 10MHz     | QPSK       | 23330   | 50RB#0       | NV            | 40               | -5.20          | -0.006557       | PASS    |
| Band14      | 10MHz     | QPSK       | 23330   | 50RB#0       | NV            | 50               | -4.10          | -0.005170       | PASS    |

~The End~