

## Appendix I: Test Data for E-UTRA Band 12

**Product Name:** mobile phone

**Trade Mark:** Purism

**Test Model:** Librem 5

### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 24.6° C   |
| Relative Humidity: | 53.7%     |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Ken He    |
| Supervised by:     | LI HUAN   |

## I.1 Conducted Output Power

### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Result(dBm) | Verdict |
|--------|-----------|------------|---------|------------------|-------------|---------|
| Band12 | 1.4MHz    | QPSK       | 23017   | 1RB#0            | 24.27       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23017   | 1RB#2            | 24.53       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23017   | 1RB#5            | 24.54       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23017   | 3RB#0            | 24.25       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23017   | 3RB#1            | 24.26       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23017   | 3RB#3            | 24.48       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23017   | 6RB#0            | 24.35       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23095   | 1RB#0            | 24.64       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23095   | 1RB#5            | 24.58       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23095   | 1RB#2            | 24.62       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23095   | 3RB#0            | 24.49       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23095   | 3RB#1            | 24.48       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23095   | 3RB#3            | 24.48       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23095   | 6RB#0            | 24.43       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23173   | 1RB#5            | 25.11       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23173   | 1RB#0            | 25.69       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23173   | 1RB#2            | 25.40       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23173   | 3RB#0            | 25.57       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23173   | 3RB#1            | 25.56       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23173   | 3RB#3            | 25.22       | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23173   | 6RB#0            | 24.92       | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23017   | 1RB#0            | 23.34       | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23017   | 1RB#2            | 23.73       | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23017   | 1RB#5            | 23.68       | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23017   | 3RB#1            | 23.20       | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23017   | 3RB#0            | 23.19       | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23017   | 3RB#3            | 23.42       | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23017   | 6RB#0            | 23.25       | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23095   | 1RB#0            | 23.50       | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23095   | 1RB#2            | 23.50       | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23095   | 1RB#5            | 23.42       | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23095   | 3RB#3            | 23.32       | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23095   | 3RB#0            | 23.37       | PASS    |

|        |        |       |       |        |       |      |
|--------|--------|-------|-------|--------|-------|------|
| Band12 | 1.4MHz | 16QAM | 23095 | 3RB#1  | 23.37 | PASS |
| Band12 | 1.4MHz | 16QAM | 23095 | 6RB#0  | 23.48 | PASS |
| Band12 | 1.4MHz | 16QAM | 23173 | 1RB#2  | 24.64 | PASS |
| Band12 | 1.4MHz | 16QAM | 23173 | 1RB#0  | 24.90 | PASS |
| Band12 | 1.4MHz | 16QAM | 23173 | 1RB#5  | 24.30 | PASS |
| Band12 | 1.4MHz | 16QAM | 23173 | 3RB#0  | 24.56 | PASS |
| Band12 | 1.4MHz | 16QAM | 23173 | 3RB#1  | 24.55 | PASS |
| Band12 | 1.4MHz | 16QAM | 23173 | 3RB#3  | 24.21 | PASS |
| Band12 | 1.4MHz | 16QAM | 23173 | 6RB#0  | 24.06 | PASS |
| Band12 | 3MHz   | QPSK  | 23025 | 1RB#8  | 25.17 | PASS |
| Band12 | 3MHz   | QPSK  | 23025 | 1RB#14 | 25.15 | PASS |
| Band12 | 3MHz   | QPSK  | 23025 | 1RB#0  | 24.76 | PASS |
| Band12 | 3MHz   | QPSK  | 23025 | 8RB#0  | 24.69 | PASS |
| Band12 | 3MHz   | QPSK  | 23025 | 8RB#4  | 24.63 | PASS |
| Band12 | 3MHz   | QPSK  | 23025 | 8RB#7  | 24.81 | PASS |
| Band12 | 3MHz   | QPSK  | 23025 | 15RB#0 | 24.79 | PASS |
| Band12 | 3MHz   | QPSK  | 23095 | 1RB#0  | 24.79 | PASS |
| Band12 | 3MHz   | QPSK  | 23095 | 1RB#14 | 24.68 | PASS |
| Band12 | 3MHz   | QPSK  | 23095 | 1RB#8  | 24.84 | PASS |
| Band12 | 3MHz   | QPSK  | 23095 | 8RB#7  | 24.67 | PASS |
| Band12 | 3MHz   | QPSK  | 23095 | 8RB#0  | 24.66 | PASS |
| Band12 | 3MHz   | QPSK  | 23095 | 8RB#4  | 24.65 | PASS |
| Band12 | 3MHz   | QPSK  | 23095 | 15RB#0 | 24.63 | PASS |
| Band12 | 3MHz   | QPSK  | 23165 | 1RB#8  | 25.64 | PASS |
| Band12 | 3MHz   | QPSK  | 23165 | 1RB#0  | 25.62 | PASS |
| Band12 | 3MHz   | QPSK  | 23165 | 1RB#14 | 25.26 | PASS |
| Band12 | 3MHz   | QPSK  | 23165 | 8RB#0  | 25.15 | PASS |
| Band12 | 3MHz   | QPSK  | 23165 | 8RB#7  | 24.87 | PASS |
| Band12 | 3MHz   | QPSK  | 23165 | 8RB#4  | 25.14 | PASS |
| Band12 | 3MHz   | QPSK  | 23165 | 15RB#0 | 24.99 | PASS |
| Band12 | 3MHz   | 16QAM | 23025 | 1RB#14 | 24.27 | PASS |
| Band12 | 3MHz   | 16QAM | 23025 | 1RB#0  | 23.92 | PASS |
| Band12 | 3MHz   | 16QAM | 23025 | 1RB#8  | 24.35 | PASS |
| Band12 | 3MHz   | 16QAM | 23025 | 8RB#7  | 23.78 | PASS |
| Band12 | 3MHz   | 16QAM | 23025 | 8RB#4  | 23.82 | PASS |
| Band12 | 3MHz   | 16QAM | 23025 | 8RB#0  | 23.75 | PASS |
| Band12 | 3MHz   | 16QAM | 23025 | 15RB#0 | 23.68 | PASS |
| Band12 | 3MHz   | 16QAM | 23095 | 1RB#14 | 23.77 | PASS |

|        |      |       |       |         |       |      |
|--------|------|-------|-------|---------|-------|------|
| Band12 | 3MHz | 16QAM | 23095 | 1RB#0   | 23.86 | PASS |
| Band12 | 3MHz | 16QAM | 23095 | 1RB#8   | 23.98 | PASS |
| Band12 | 3MHz | 16QAM | 23095 | 8RB#7   | 23.69 | PASS |
| Band12 | 3MHz | 16QAM | 23095 | 8RB#0   | 23.69 | PASS |
| Band12 | 3MHz | 16QAM | 23095 | 8RB#4   | 23.78 | PASS |
| Band12 | 3MHz | 16QAM | 23095 | 15RB#0  | 23.58 | PASS |
| Band12 | 3MHz | 16QAM | 23165 | 1RB#8   | 24.66 | PASS |
| Band12 | 3MHz | 16QAM | 23165 | 1RB#0   | 24.83 | PASS |
| Band12 | 3MHz | 16QAM | 23165 | 1RB#14  | 24.46 | PASS |
| Band12 | 3MHz | 16QAM | 23165 | 8RB#0   | 24.15 | PASS |
| Band12 | 3MHz | 16QAM | 23165 | 8RB#4   | 24.33 | PASS |
| Band12 | 3MHz | 16QAM | 23165 | 8RB#7   | 24.07 | PASS |
| Band12 | 3MHz | 16QAM | 23165 | 15RB#0  | 24.07 | PASS |
| Band12 | 5MHz | QPSK  | 23035 | 1RB#0   | 24.41 | PASS |
| Band12 | 5MHz | QPSK  | 23035 | 1RB#12  | 25.18 | PASS |
| Band12 | 5MHz | QPSK  | 23035 | 1RB#24  | 24.81 | PASS |
| Band12 | 5MHz | QPSK  | 23035 | 12RB#0  | 24.63 | PASS |
| Band12 | 5MHz | QPSK  | 23035 | 12RB#6  | 24.58 | PASS |
| Band12 | 5MHz | QPSK  | 23035 | 12RB#13 | 24.67 | PASS |
| Band12 | 5MHz | QPSK  | 23035 | 25RB#0  | 24.59 | PASS |
| Band12 | 5MHz | QPSK  | 23095 | 1RB#0   | 24.73 | PASS |
| Band12 | 5MHz | QPSK  | 23095 | 1RB#24  | 24.56 | PASS |
| Band12 | 5MHz | QPSK  | 23095 | 1RB#12  | 24.78 | PASS |
| Band12 | 5MHz | QPSK  | 23095 | 12RB#0  | 24.50 | PASS |
| Band12 | 5MHz | QPSK  | 23095 | 12RB#6  | 24.50 | PASS |
| Band12 | 5MHz | QPSK  | 23095 | 12RB#13 | 24.42 | PASS |
| Band12 | 5MHz | QPSK  | 23095 | 25RB#0  | 24.41 | PASS |
| Band12 | 5MHz | QPSK  | 23155 | 1RB#24  | 24.97 | PASS |
| Band12 | 5MHz | QPSK  | 23155 | 1RB#0   | 25.27 | PASS |
| Band12 | 5MHz | QPSK  | 23155 | 1RB#12  | 25.22 | PASS |
| Band12 | 5MHz | QPSK  | 23155 | 12RB#0  | 24.98 | PASS |
| Band12 | 5MHz | QPSK  | 23155 | 12RB#6  | 24.96 | PASS |
| Band12 | 5MHz | QPSK  | 23155 | 12RB#13 | 24.89 | PASS |
| Band12 | 5MHz | QPSK  | 23155 | 25RB#0  | 24.90 | PASS |
| Band12 | 5MHz | 16QAM | 23035 | 1RB#0   | 23.36 | PASS |
| Band12 | 5MHz | 16QAM | 23035 | 1RB#12  | 24.14 | PASS |
| Band12 | 5MHz | 16QAM | 23035 | 1RB#24  | 23.85 | PASS |
| Band12 | 5MHz | 16QAM | 23035 | 12RB#6  | 23.57 | PASS |

|        |       |       |       |         |       |      |
|--------|-------|-------|-------|---------|-------|------|
| Band12 | 5MHz  | 16QAM | 23035 | 12RB#0  | 23.62 | PASS |
| Band12 | 5MHz  | 16QAM | 23035 | 12RB#13 | 23.71 | PASS |
| Band12 | 5MHz  | 16QAM | 23035 | 25RB#0  | 23.62 | PASS |
| Band12 | 5MHz  | 16QAM | 23095 | 1RB#0   | 23.68 | PASS |
| Band12 | 5MHz  | 16QAM | 23095 | 1RB#12  | 23.76 | PASS |
| Band12 | 5MHz  | 16QAM | 23095 | 1RB#24  | 23.56 | PASS |
| Band12 | 5MHz  | 16QAM | 23095 | 12RB#13 | 23.44 | PASS |
| Band12 | 5MHz  | 16QAM | 23095 | 12RB#0  | 23.53 | PASS |
| Band12 | 5MHz  | 16QAM | 23095 | 12RB#6  | 23.52 | PASS |
| Band12 | 5MHz  | 16QAM | 23095 | 25RB#0  | 23.46 | PASS |
| Band12 | 5MHz  | 16QAM | 23155 | 1RB#12  | 25.16 | PASS |
| Band12 | 5MHz  | 16QAM | 23155 | 1RB#0   | 24.40 | PASS |
| Band12 | 5MHz  | 16QAM | 23155 | 1RB#24  | 24.20 | PASS |
| Band12 | 5MHz  | 16QAM | 23155 | 12RB#0  | 23.93 | PASS |
| Band12 | 5MHz  | 16QAM | 23155 | 12RB#6  | 23.92 | PASS |
| Band12 | 5MHz  | 16QAM | 23155 | 12RB#13 | 23.89 | PASS |
| Band12 | 5MHz  | 16QAM | 23155 | 25RB#0  | 23.91 | PASS |
| Band12 | 10MHz | QPSK  | 23060 | 1RB#49  | 23.97 | PASS |
| Band12 | 10MHz | QPSK  | 23060 | 1RB#24  | 25.19 | PASS |
| Band12 | 10MHz | QPSK  | 23060 | 1RB#0   | 23.89 | PASS |
| Band12 | 10MHz | QPSK  | 23060 | 25RB#0  | 24.58 | PASS |
| Band12 | 10MHz | QPSK  | 23060 | 25RB#12 | 24.53 | PASS |
| Band12 | 10MHz | QPSK  | 23060 | 25RB#25 | 24.50 | PASS |
| Band12 | 10MHz | QPSK  | 23060 | 50RB#0  | 24.46 | PASS |
| Band12 | 10MHz | QPSK  | 23095 | 1RB#0   | 23.99 | PASS |
| Band12 | 10MHz | QPSK  | 23095 | 1RB#49  | 24.98 | PASS |
| Band12 | 10MHz | QPSK  | 23095 | 1RB#24  | 24.68 | PASS |
| Band12 | 10MHz | QPSK  | 23095 | 25RB#25 | 24.57 | PASS |
| Band12 | 10MHz | QPSK  | 23095 | 25RB#0  | 24.40 | PASS |
| Band12 | 10MHz | QPSK  | 23095 | 25RB#12 | 24.38 | PASS |
| Band12 | 10MHz | QPSK  | 23095 | 50RB#0  | 24.43 | PASS |
| Band12 | 10MHz | QPSK  | 23130 | 1RB#24  | 25.36 | PASS |
| Band12 | 10MHz | QPSK  | 23130 | 1RB#0   | 23.75 | PASS |
| Band12 | 10MHz | QPSK  | 23130 | 1RB#49  | 24.58 | PASS |
| Band12 | 10MHz | QPSK  | 23130 | 25RB#0  | 24.32 | PASS |
| Band12 | 10MHz | QPSK  | 23130 | 25RB#25 | 25.07 | PASS |
| Band12 | 10MHz | QPSK  | 23130 | 25RB#12 | 24.28 | PASS |
| Band12 | 10MHz | QPSK  | 23130 | 50RB#0  | 25.01 | PASS |

|        |       |       |       |         |       |      |
|--------|-------|-------|-------|---------|-------|------|
| Band12 | 10MHz | 16QAM | 23060 | 1RB#49  | 23.14 | PASS |
| Band12 | 10MHz | 16QAM | 23060 | 1RB#0   | 23.06 | PASS |
| Band12 | 10MHz | 16QAM | 23060 | 1RB#24  | 24.32 | PASS |
| Band12 | 10MHz | 16QAM | 23060 | 25RB#25 | 23.51 | PASS |
| Band12 | 10MHz | 16QAM | 23060 | 25RB#12 | 23.53 | PASS |
| Band12 | 10MHz | 16QAM | 23060 | 25RB#0  | 23.56 | PASS |
| Band12 | 10MHz | 16QAM | 23060 | 50RB#0  | 23.47 | PASS |
| Band12 | 10MHz | 16QAM | 23095 | 1RB#49  | 24.13 | PASS |
| Band12 | 10MHz | 16QAM | 23095 | 1RB#0   | 23.19 | PASS |
| Band12 | 10MHz | 16QAM | 23095 | 1RB#24  | 23.84 | PASS |
| Band12 | 10MHz | 16QAM | 23095 | 25RB#25 | 23.56 | PASS |
| Band12 | 10MHz | 16QAM | 23095 | 25RB#0  | 23.41 | PASS |
| Band12 | 10MHz | 16QAM | 23095 | 25RB#12 | 23.38 | PASS |
| Band12 | 10MHz | 16QAM | 23095 | 50RB#0  | 23.43 | PASS |
| Band12 | 10MHz | 16QAM | 23130 | 1RB#24  | 24.54 | PASS |
| Band12 | 10MHz | 16QAM | 23130 | 1RB#0   | 22.90 | PASS |
| Band12 | 10MHz | 16QAM | 23130 | 1RB#49  | 23.81 | PASS |
| Band12 | 10MHz | 16QAM | 23130 | 25RB#0  | 23.34 | PASS |
| Band12 | 10MHz | 16QAM | 23130 | 25RB#12 | 23.32 | PASS |
| Band12 | 10MHz | 16QAM | 23130 | 25RB#25 | 24.22 | PASS |
| Band12 | 10MHz | 16QAM | 23130 | 50RB#0  | 24.06 | PASS |

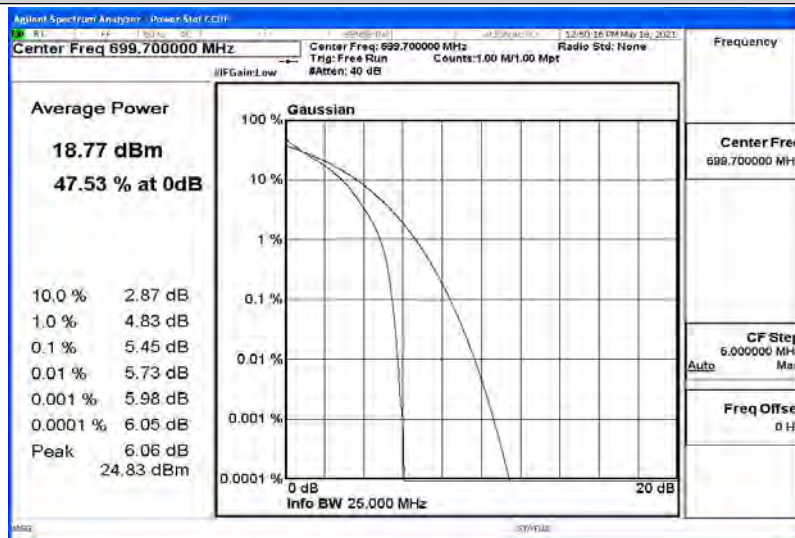
## I.2 Peak-to-Average Ratio(CCDF)

### Test Result

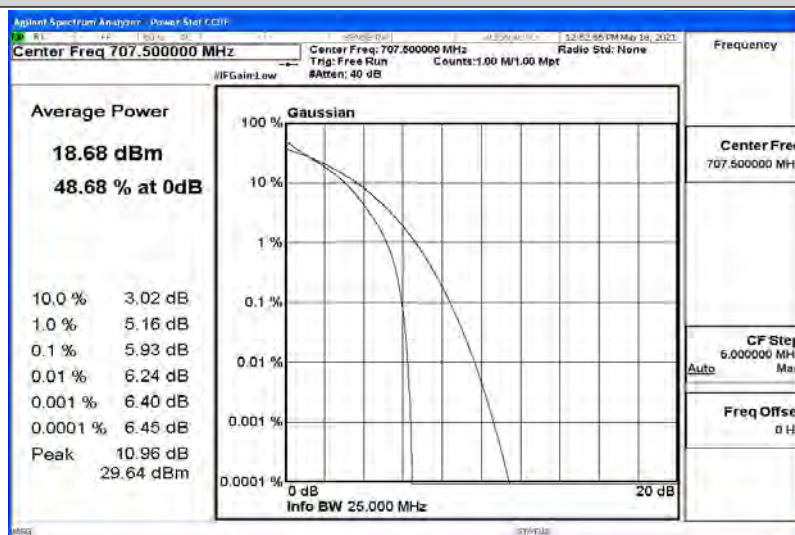
| Band   | Bandwidth | Modulation | Channel | RB Configuration | Result(dB) | Limit(dB) | Verdict |
|--------|-----------|------------|---------|------------------|------------|-----------|---------|
| Band12 | 1.4MHz    | QPSK       | 23017   | 6RB#0            | 5.45       | 13        | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23095   | 6RB#0            | 5.93       | 13        | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23173   | 6RB#0            | 4.27       | 13        | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23017   | 6RB#0            | 6.08       | 13        | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23095   | 6RB#0            | 6.40       | 13        | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23173   | 6RB#0            | 5.18       | 13        | PASS    |
| Band12 | 3MHz      | QPSK       | 23025   | 15RB#0           | 6.41       | 13        | PASS    |
| Band12 | 3MHz      | QPSK       | 23095   | 15RB#0           | 6.46       | 13        | PASS    |
| Band12 | 3MHz      | QPSK       | 23165   | 15RB#0           | 5.11       | 13        | PASS    |
| Band12 | 3MHz      | 16QAM      | 23025   | 15RB#0           | 6.24       | 13        | PASS    |
| Band12 | 3MHz      | 16QAM      | 23095   | 15RB#0           | 6.45       | 13        | PASS    |
| Band12 | 3MHz      | 16QAM      | 23165   | 15RB#0           | 5.11       | 13        | PASS    |
| Band12 | 5MHz      | QPSK       | 23035   | 25RB#0           | 5.54       | 13        | PASS    |
| Band12 | 5MHz      | QPSK       | 23095   | 25RB#0           | 5.77       | 13        | PASS    |
| Band12 | 5MHz      | QPSK       | 23155   | 25RB#0           | 4.62       | 13        | PASS    |
| Band12 | 5MHz      | 16QAM      | 23035   | 25RB#0           | 6.37       | 13        | PASS    |
| Band12 | 5MHz      | 16QAM      | 23095   | 25RB#0           | 6.56       | 13        | PASS    |
| Band12 | 5MHz      | 16QAM      | 23155   | 25RB#0           | 5.47       | 13        | PASS    |
| Band12 | 10MHz     | QPSK       | 23060   | 50RB#0           | 5.69       | 13        | PASS    |
| Band12 | 10MHz     | QPSK       | 23095   | 50RB#0           | 5.75       | 13        | PASS    |
| Band12 | 10MHz     | QPSK       | 23130   | 50RB#0           | 5.05       | 13        | PASS    |
| Band12 | 10MHz     | 16QAM      | 23060   | 50RB#0           | 6.75       | 13        | PASS    |
| Band12 | 10MHz     | 16QAM      | 23095   | 50RB#0           | 6.56       | 13        | PASS    |
| Band12 | 10MHz     | 16QAM      | 23130   | 50RB#0           | 5.97       | 13        | PASS    |

## Test Graphs

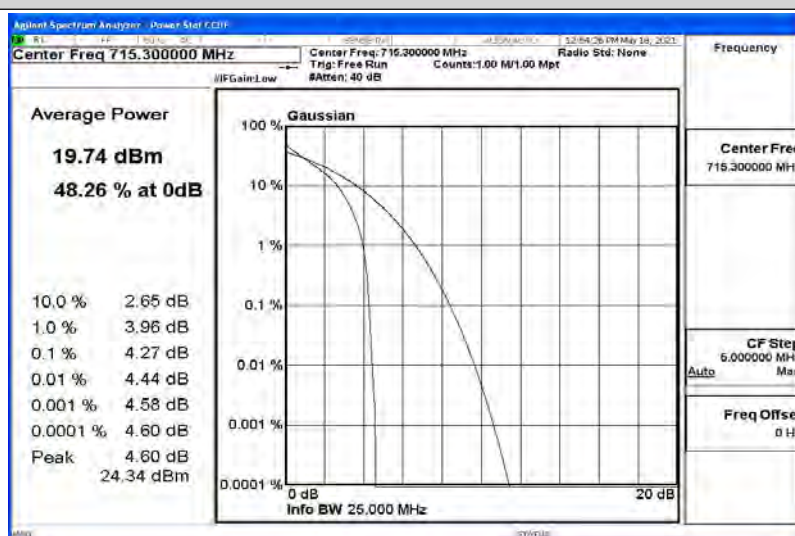
Band12-1.4MHz-QPSK-23017-6RB#0



Band12-1.4MHz-QPSK-23095-6RB#0

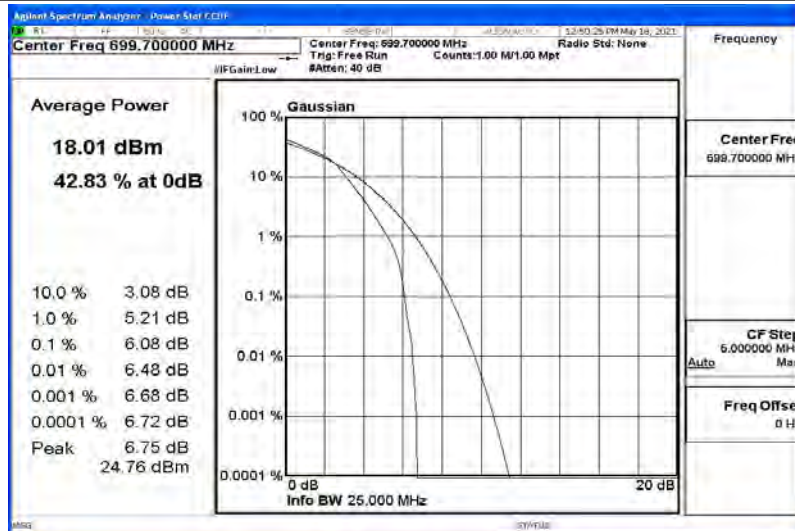


Band12-1.4MHz-QPSK-23173-6RB#0

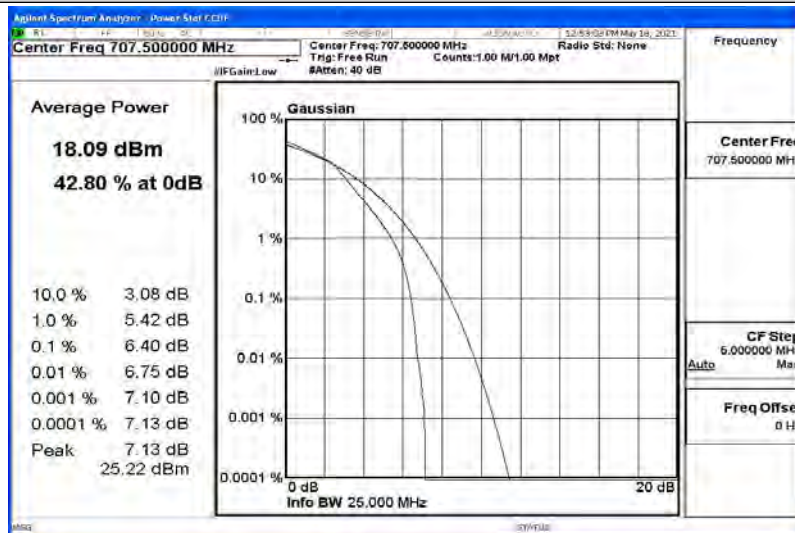




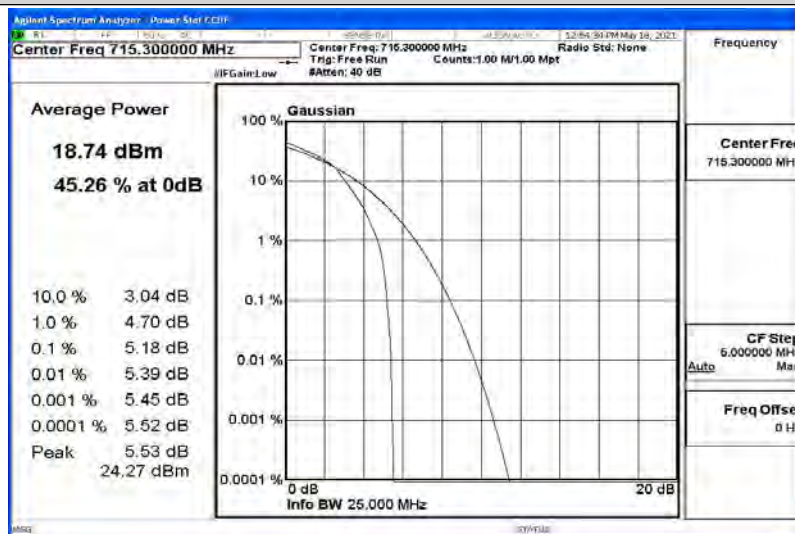
## Band12-1.4MHz-16QAM-23017-6RB#0



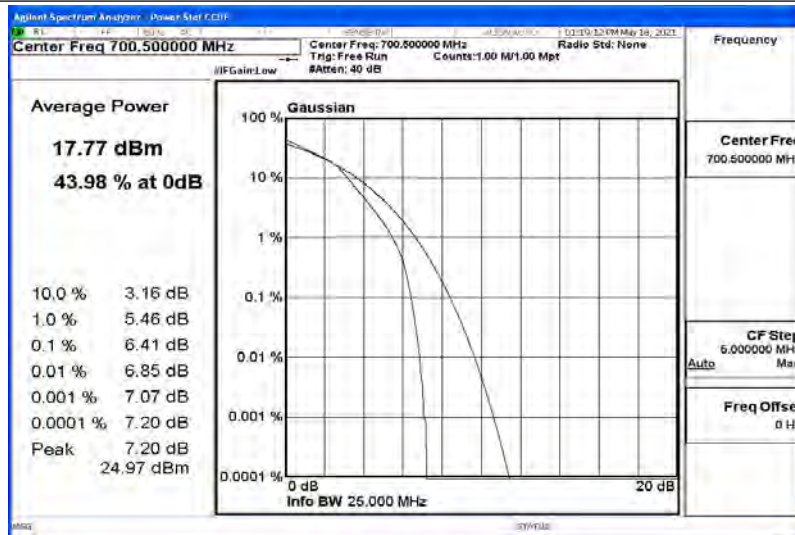
## Band12-1.4MHz-16QAM-23095-6RB#0



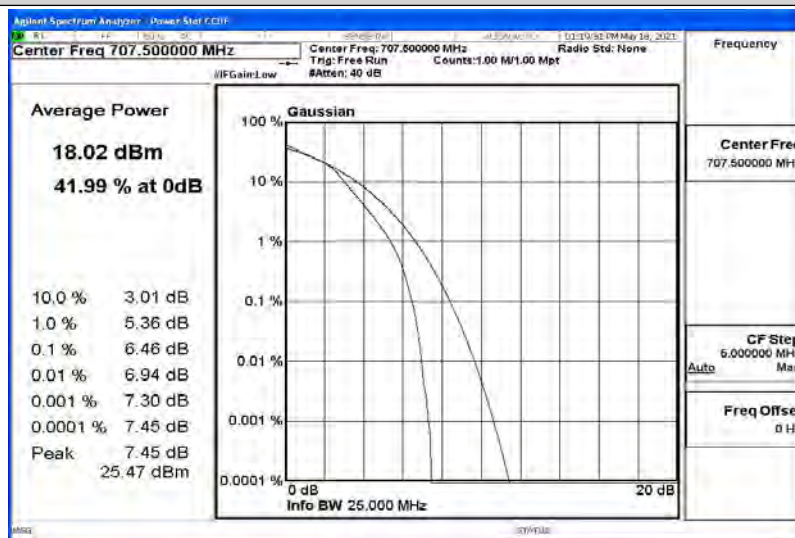
## Band12-1.4MHz-16QAM-23173-6RB#0



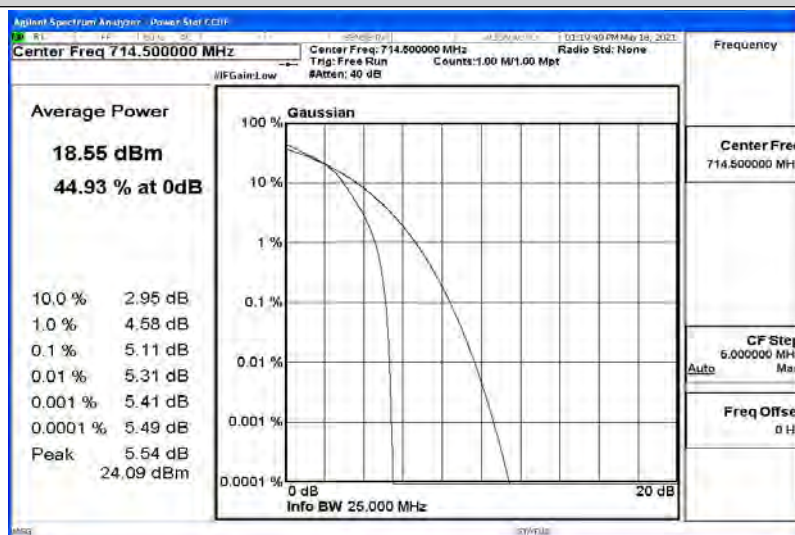
## Band12-3MHz-QPSK-23025-15RB#0



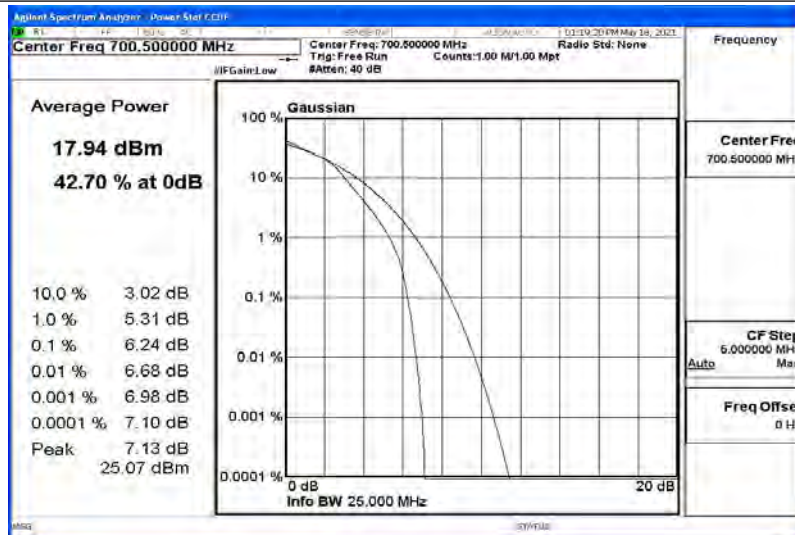
Band12-3MHz-QPSK-23095-15RB#0



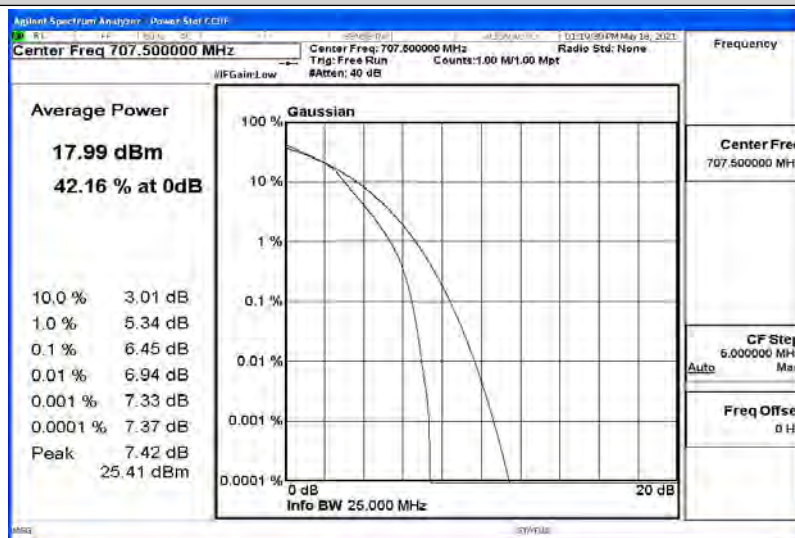
Band12-3MHz-QPSK-23165-15RB#0



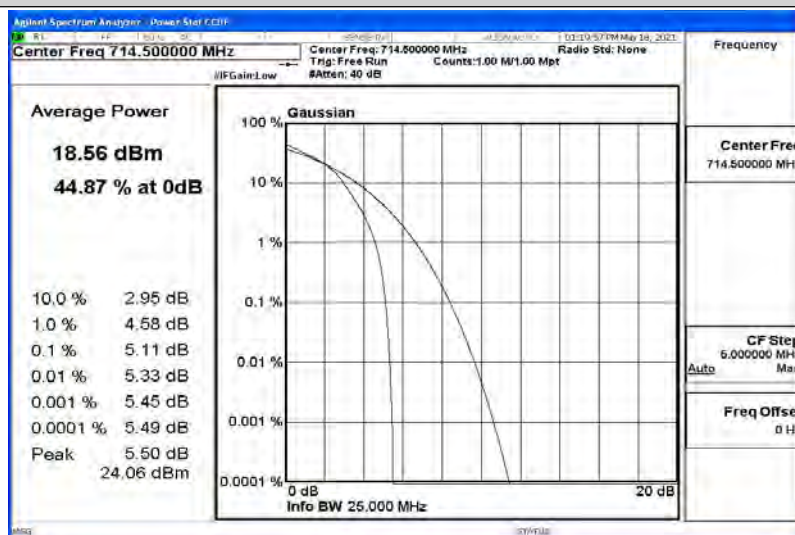
Band12-3MHz-16QAM-23025-15RB#0



Band12-3MHz-16QAM-23095-15RB#0

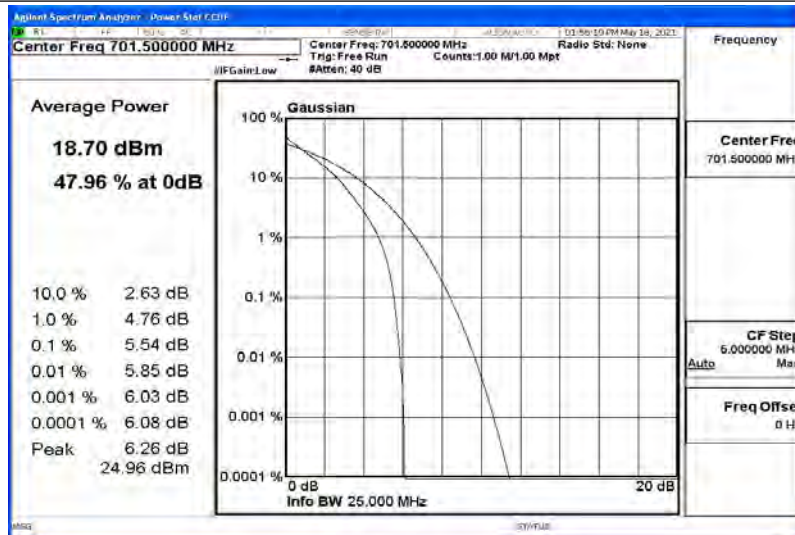


Band12-3MHz-16QAM-23165-15RB#0

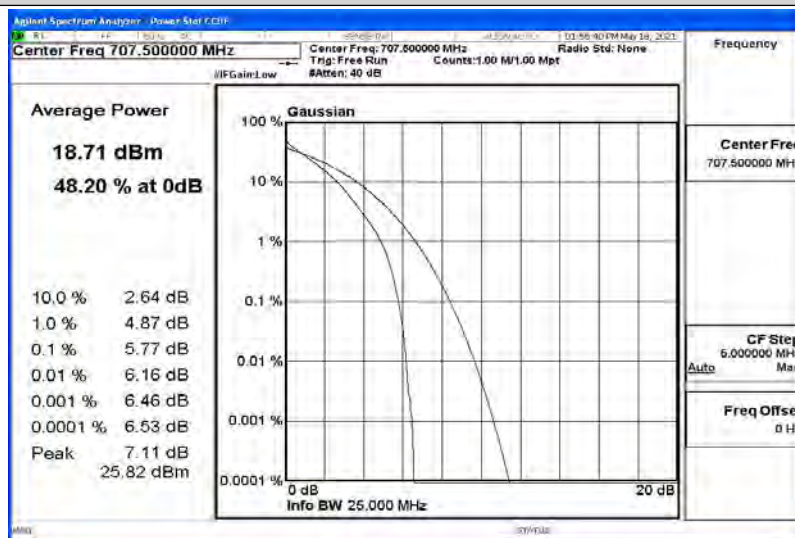


Band12-5MHz-QPSK-23035-25RB#0

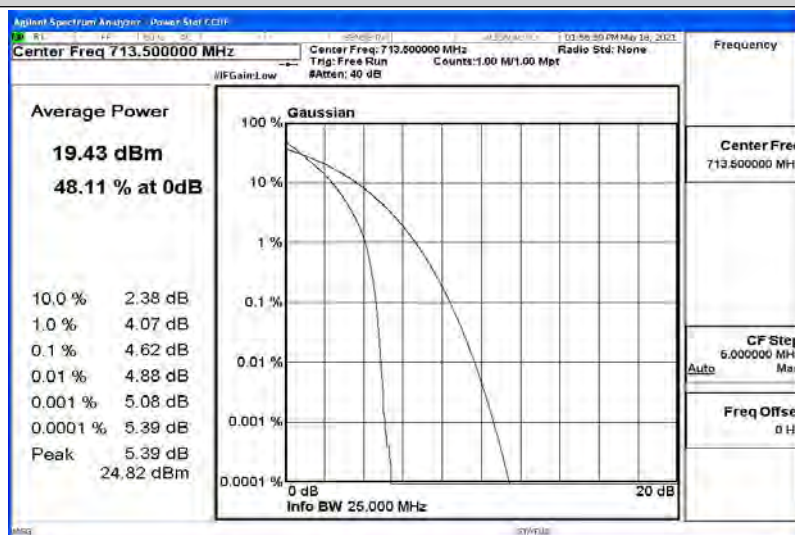




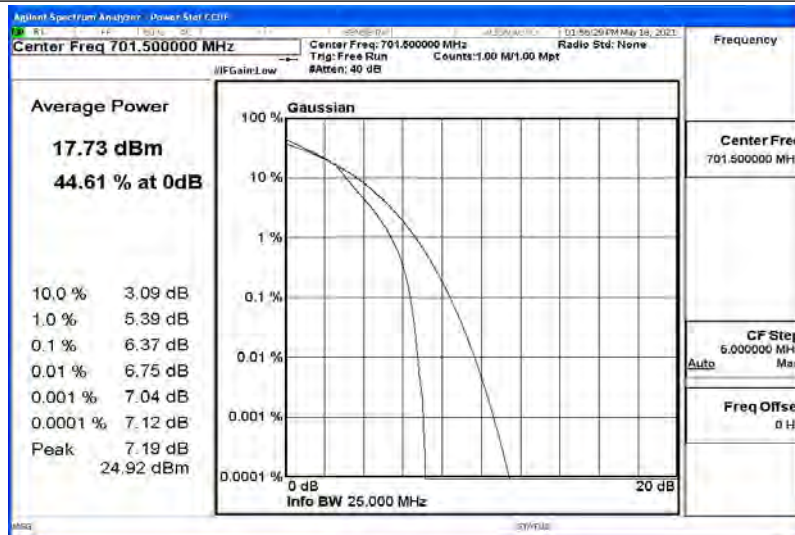
Band12-5MHz-QPSK-23095-25RB#0



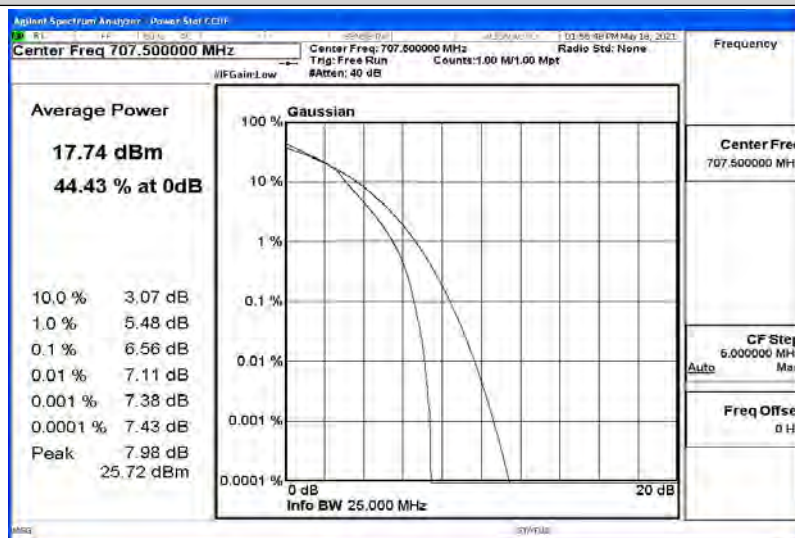
Band12-5MHz-QPSK-23155-25RB#0



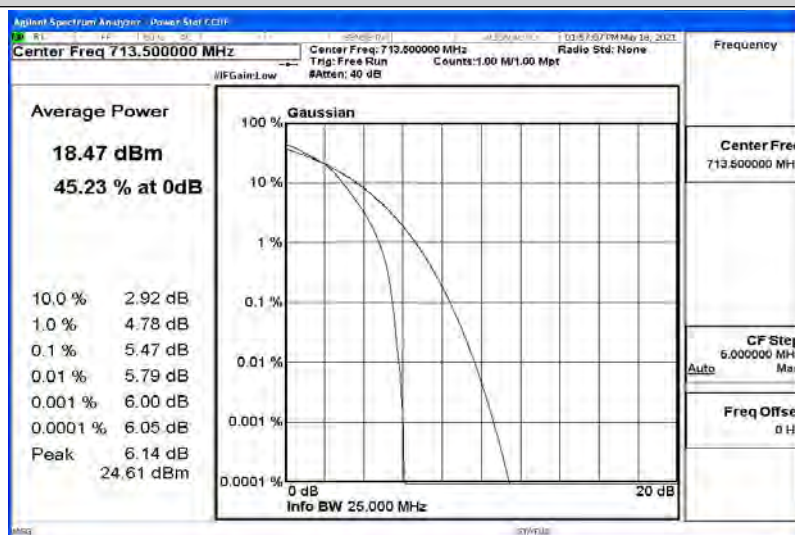
Band12-5MHz-16QAM-23035-25RB#0



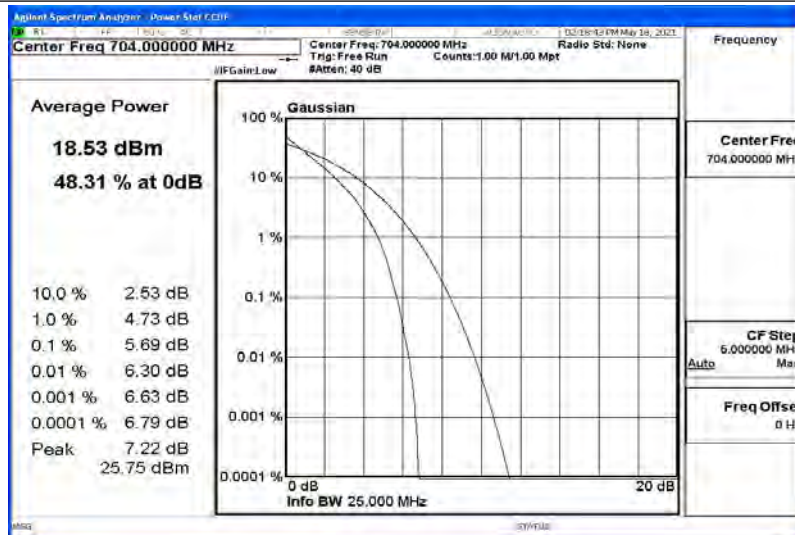
Band12-5MHz-16QAM-23095-25RB#0



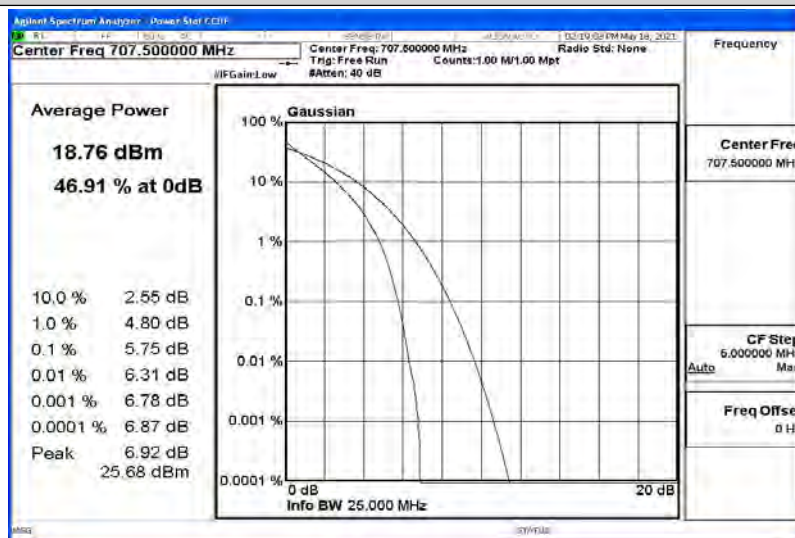
Band12-5MHz-16QAM-23155-25RB#0



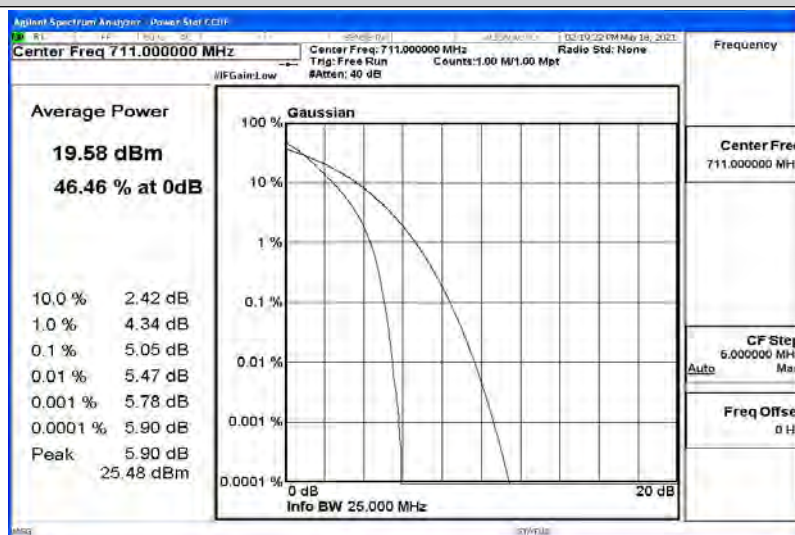
Band12-10MHz-QPSK-23060-50RB#0



Band12-10MHz-QPSK-23095-50RB#0

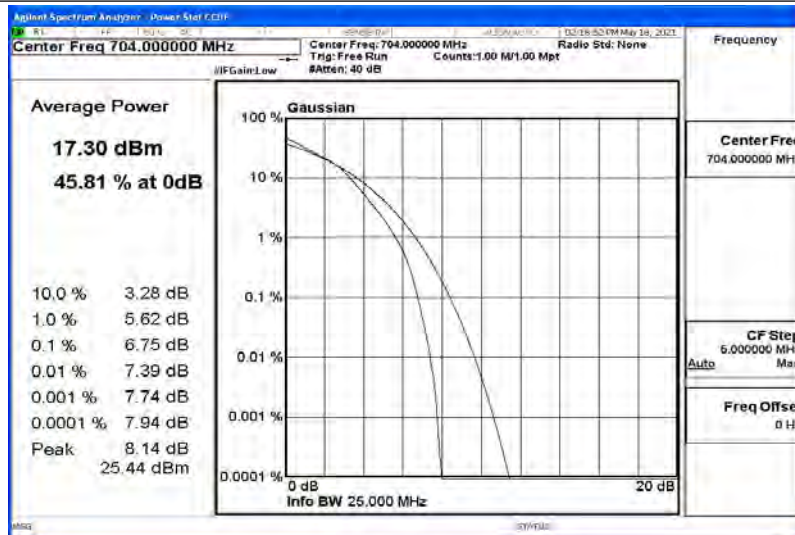


Band12-10MHz-QPSK-23130-50RB#0

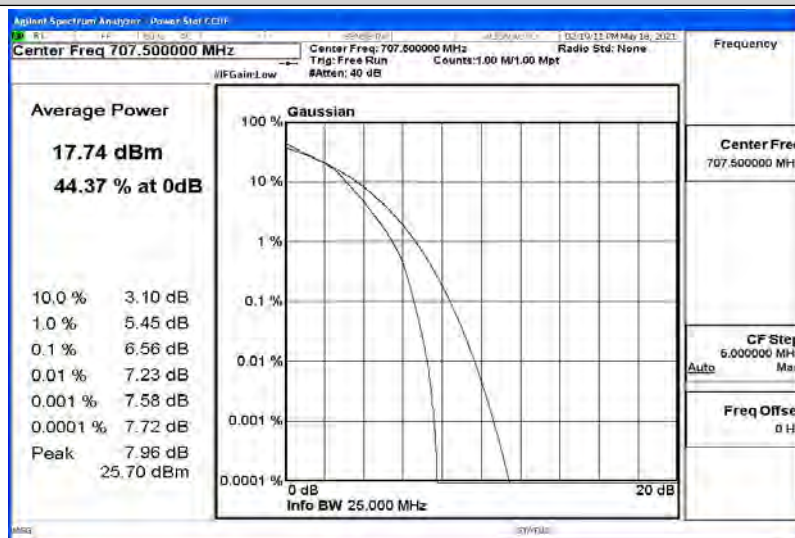


Band12-10MHz-16QAM-23060-50RB#0

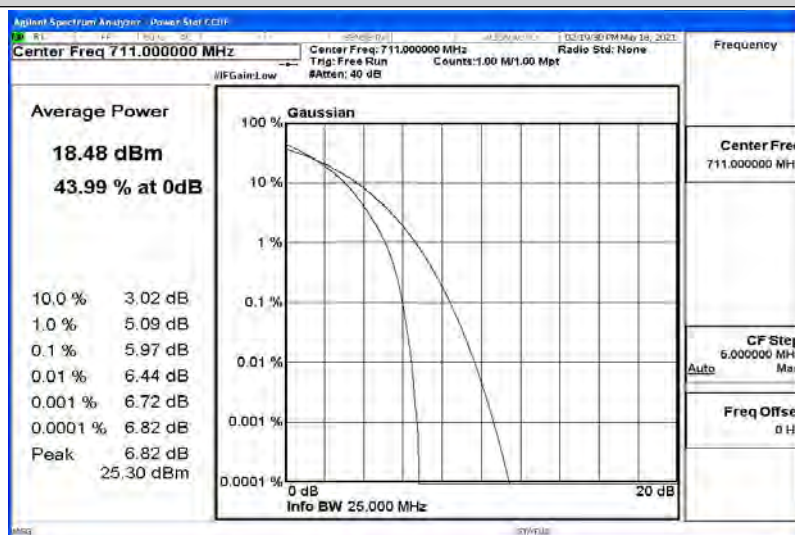




Band12-10MHz-16QAM-23095-50RB#0



Band12-10MHz-16QAM-23130-50RB#0



## I.3 26dB Bandwidth and Occupied Bandwidth

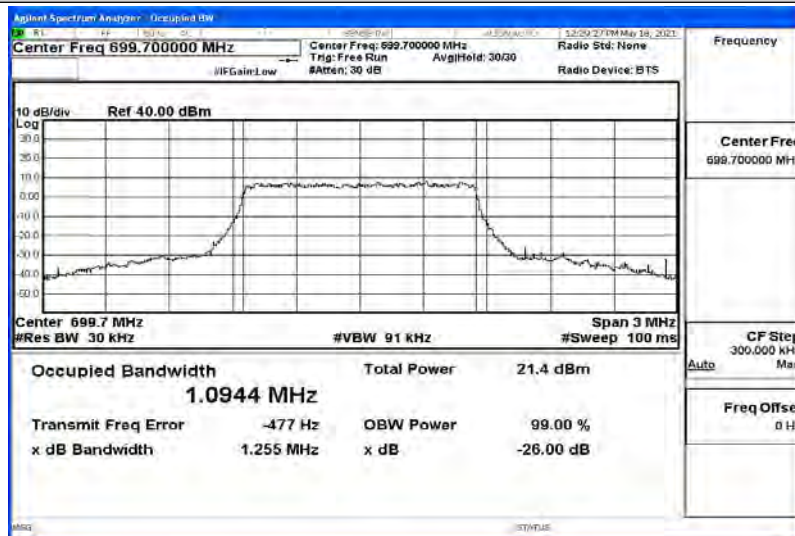
### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
|--------|-----------|------------|---------|------------------|--------------------------|----------------------|---------|
| Band12 | 1.4MHz    | QPSK       | 23017   | 6RB#0            | 1.0944                   | 1.255                | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23095   | 6RB#0            | 1.0900                   | 1.253                | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23173   | 6RB#0            | 1.0867                   | 1.260                | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23017   | 6RB#0            | 1.0913                   | 1.254                | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23095   | 6RB#0            | 1.0916                   | 1.262                | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23173   | 6RB#0            | 1.0898                   | 1.265                | PASS    |
| Band12 | 3MHz      | QPSK       | 23025   | 15RB#0           | 2.6891                   | 2.898                | PASS    |
| Band12 | 3MHz      | QPSK       | 23095   | 15RB#0           | 2.6979                   | 2.942                | PASS    |
| Band12 | 3MHz      | QPSK       | 23165   | 15RB#0           | 2.6903                   | 2.901                | PASS    |
| Band12 | 3MHz      | 16QAM      | 23025   | 15RB#0           | 2.6918                   | 2.914                | PASS    |
| Band12 | 3MHz      | 16QAM      | 23095   | 15RB#0           | 2.6994                   | 2.895                | PASS    |
| Band12 | 3MHz      | 16QAM      | 23165   | 15RB#0           | 2.6876                   | 2.916                | PASS    |
| Band12 | 5MHz      | QPSK       | 23035   | 25RB#0           | 4.5011                   | 4.862                | PASS    |
| Band12 | 5MHz      | QPSK       | 23095   | 25RB#0           | 4.5051                   | 4.918                | PASS    |
| Band12 | 5MHz      | QPSK       | 23155   | 25RB#0           | 4.4863                   | 4.872                | PASS    |
| Band12 | 5MHz      | 16QAM      | 23035   | 25RB#0           | 4.5018                   | 4.843                | PASS    |
| Band12 | 5MHz      | 16QAM      | 23095   | 25RB#0           | 4.5048                   | 4.885                | PASS    |
| Band12 | 5MHz      | 16QAM      | 23155   | 25RB#0           | 4.4797                   | 4.779                | PASS    |
| Band12 | 10MHz     | QPSK       | 23060   | 50RB#0           | 8.9501                   | 9.512                | PASS    |
| Band12 | 10MHz     | QPSK       | 23095   | 50RB#0           | 8.9868                   | 9.565                | PASS    |
| Band12 | 10MHz     | QPSK       | 23130   | 50RB#0           | 8.9437                   | 9.523                | PASS    |
| Band12 | 10MHz     | 16QAM      | 23060   | 50RB#0           | 8.9509                   | 9.501                | PASS    |
| Band12 | 10MHz     | 16QAM      | 23095   | 50RB#0           | 8.9718                   | 9.530                | PASS    |
| Band12 | 10MHz     | 16QAM      | 23130   | 50RB#0           | 8.9492                   | 9.494                | PASS    |

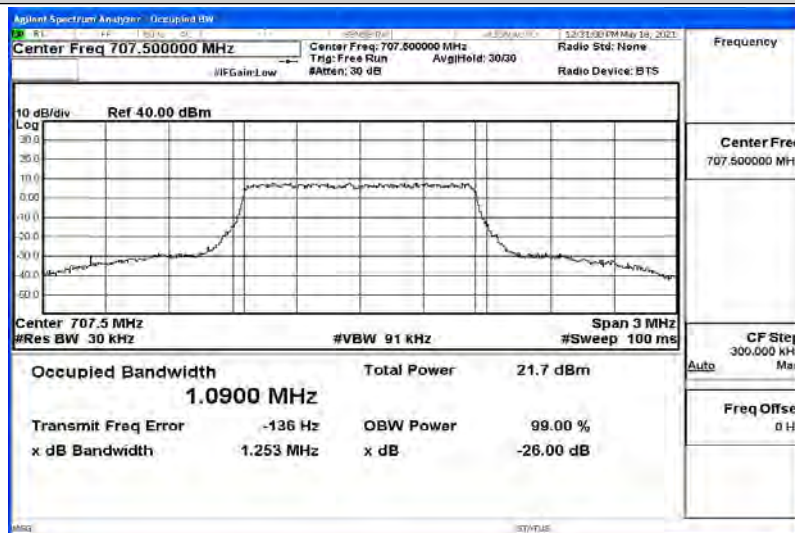


## Test Graphs

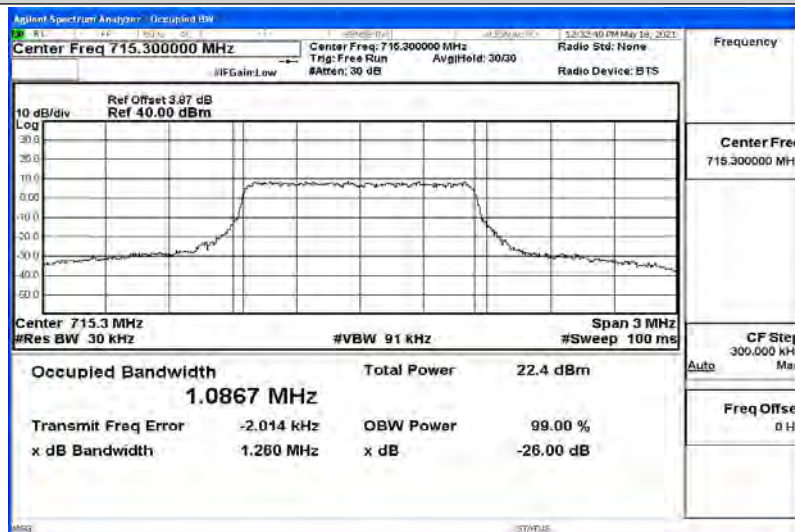
Band12-1.4MHz-QPSK-23017-6RB#0-1.0944



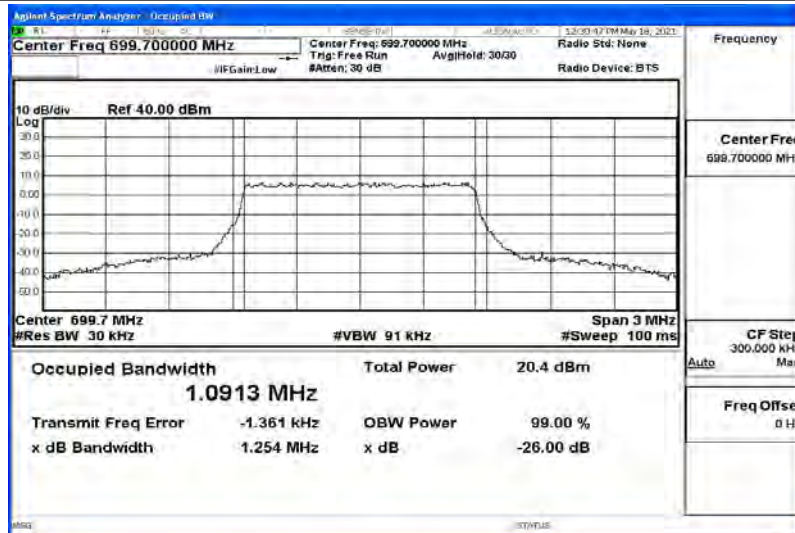
Band12-1.4MHz-QPSK-23095-6RB#0-1.0900



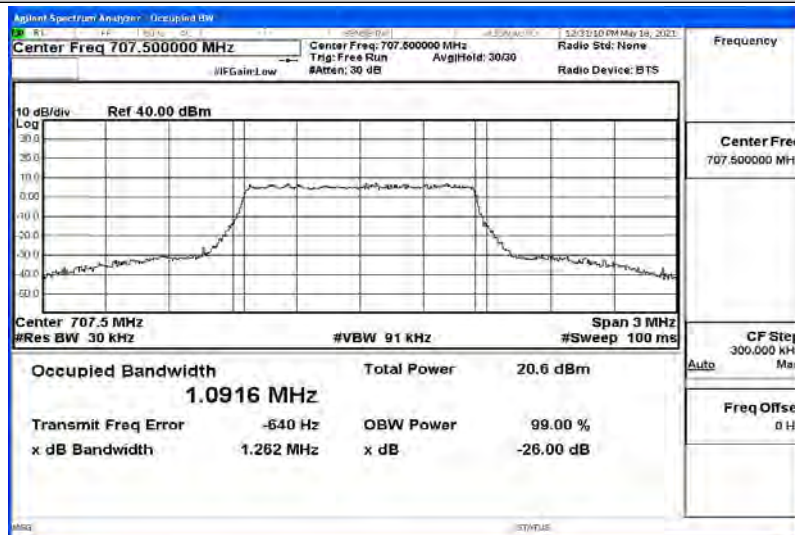
Band12-1.4MHz-QPSK-23173-6RB#0-1.0867



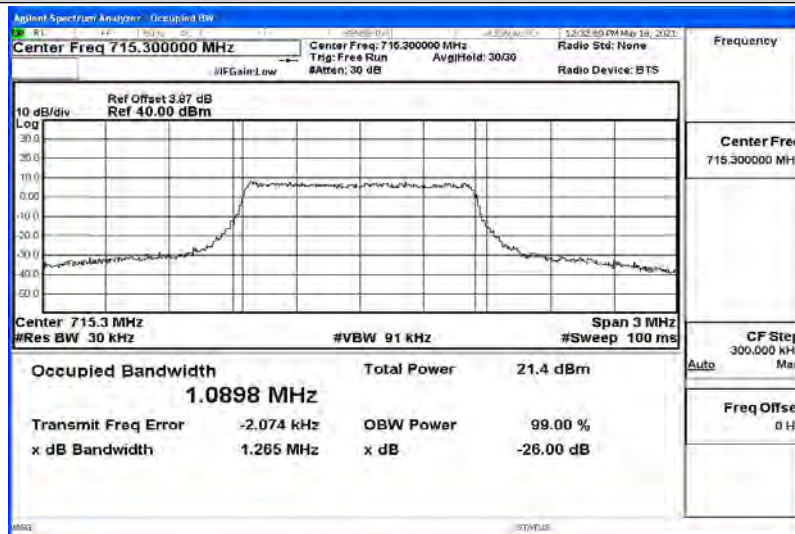
## Band12-1.4MHz-16QAM-23017-6RB#0-1.0913



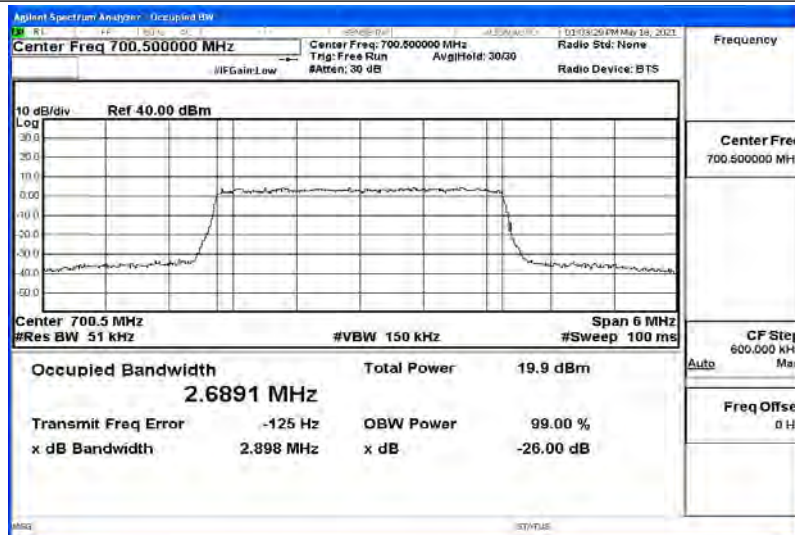
## Band12-1.4MHz-16QAM-23095-6RB#0-1.0916



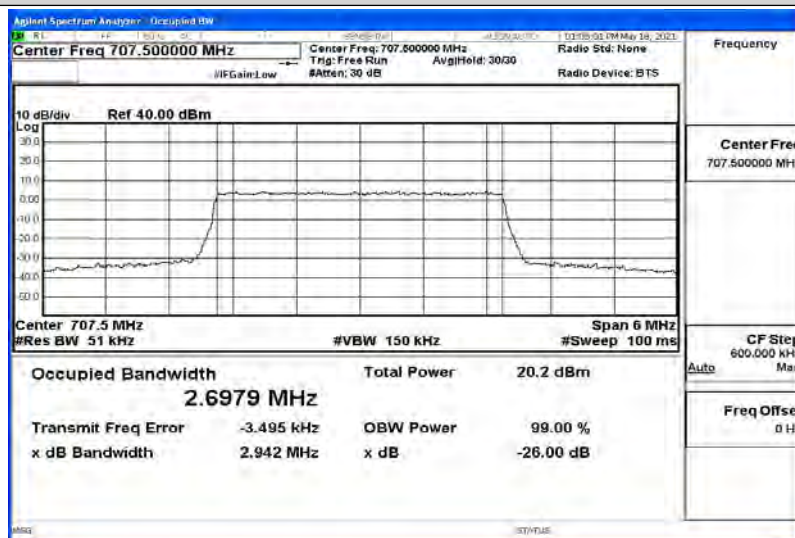
## Band12-1.4MHz-16QAM-23173-6RB#0-1.0898



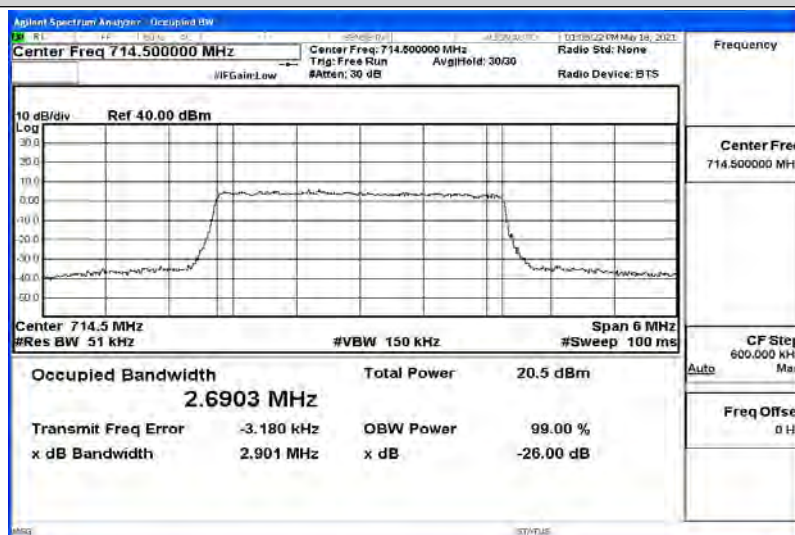
## Band12-3MHz-QPSK-23025-15RB#0-2.6891



Band12-3MHz-QPSK-23095-15RB#0-2.6979

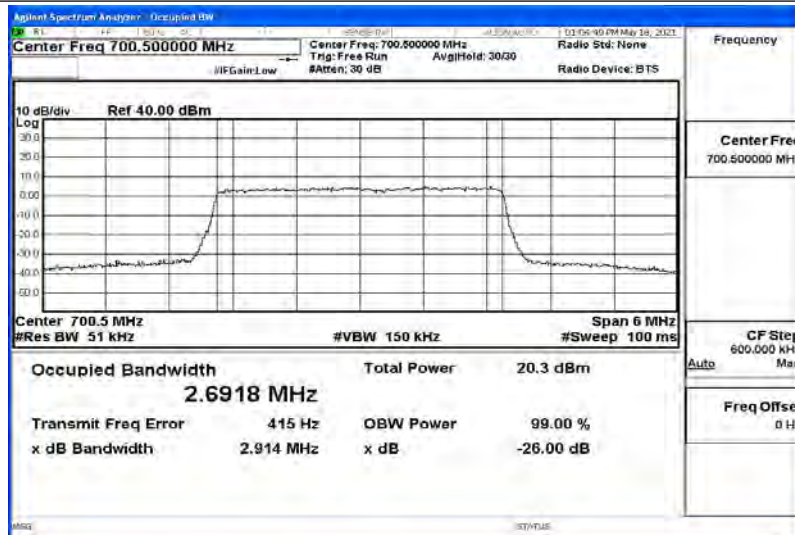


Band12-3MHz-QPSK-23165-15RB#0-2.6903

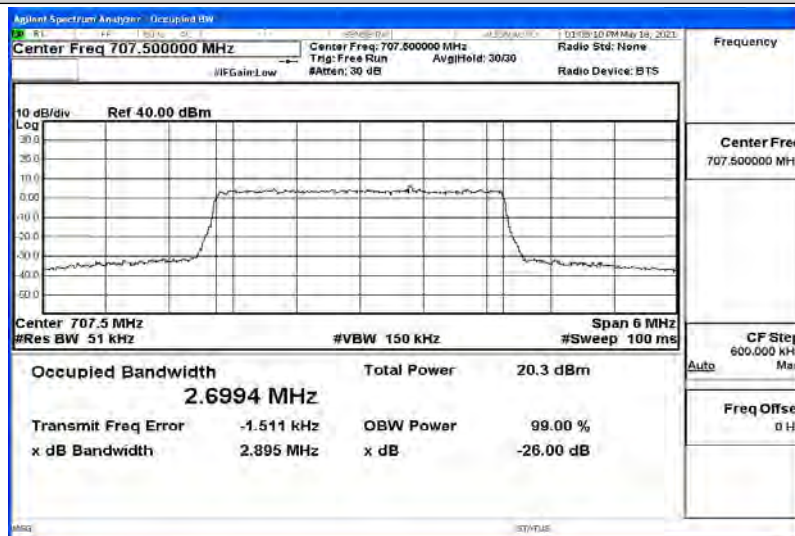


Band12-3MHz-16QAM-23025-15RB#0-2.6918

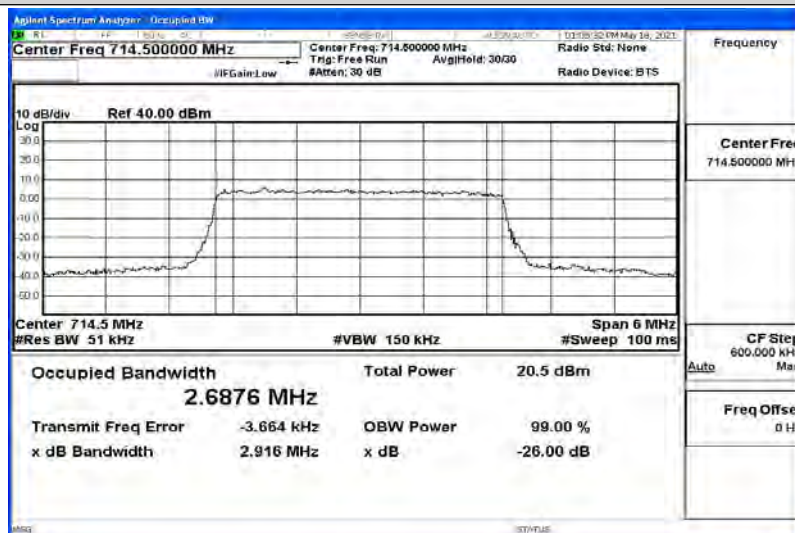




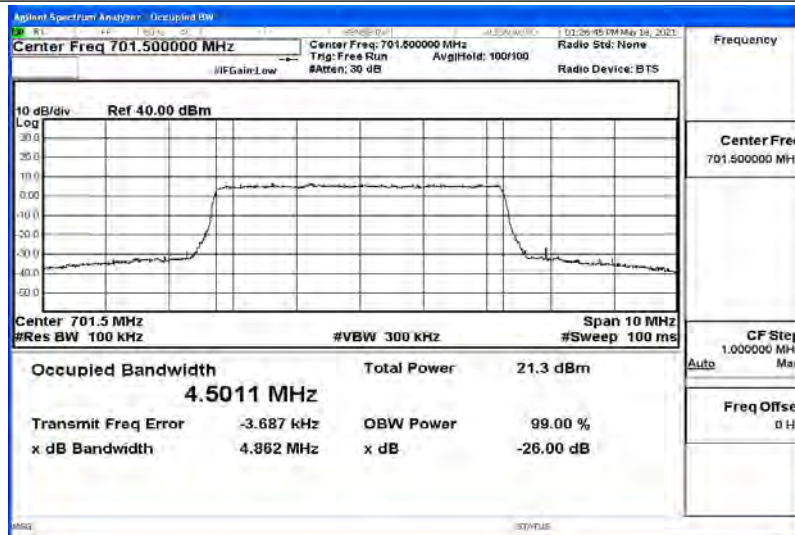
Band12-3MHz-16QAM-23095-15RB#0-2.6994



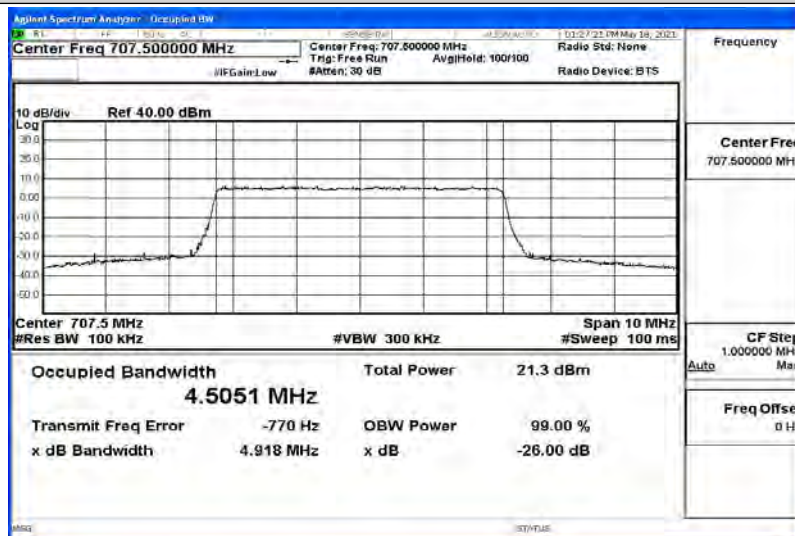
Band12-3MHz-16QAM-23165-15RB#0-2.6876



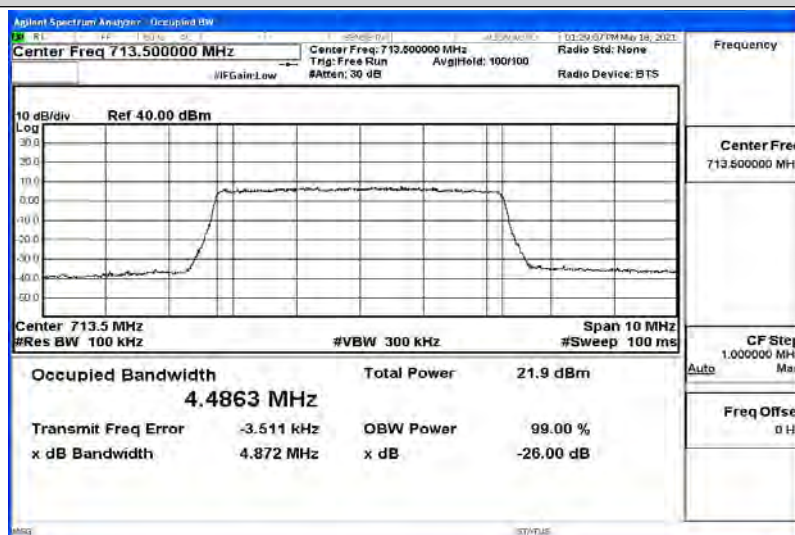
Band12-5MHz-QPSK-23035-25RB#0-4.5011



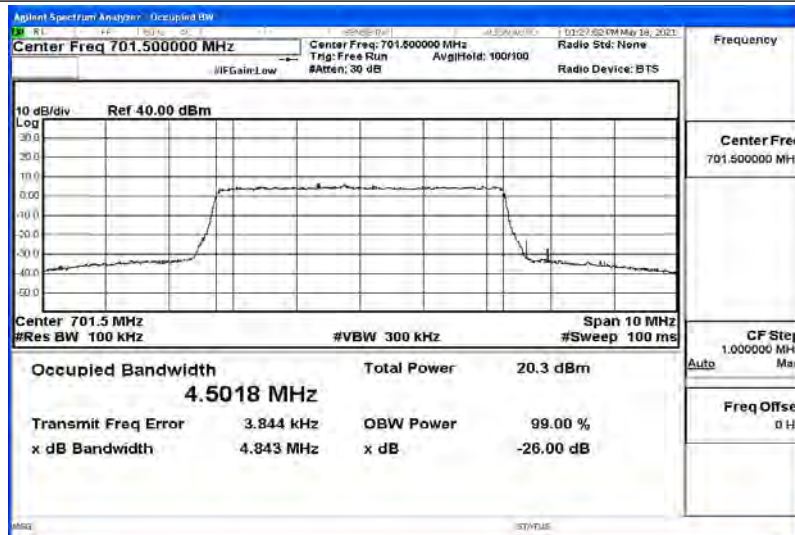
Band12-5MHz-QPSK-23095-25RB#0-4.5051



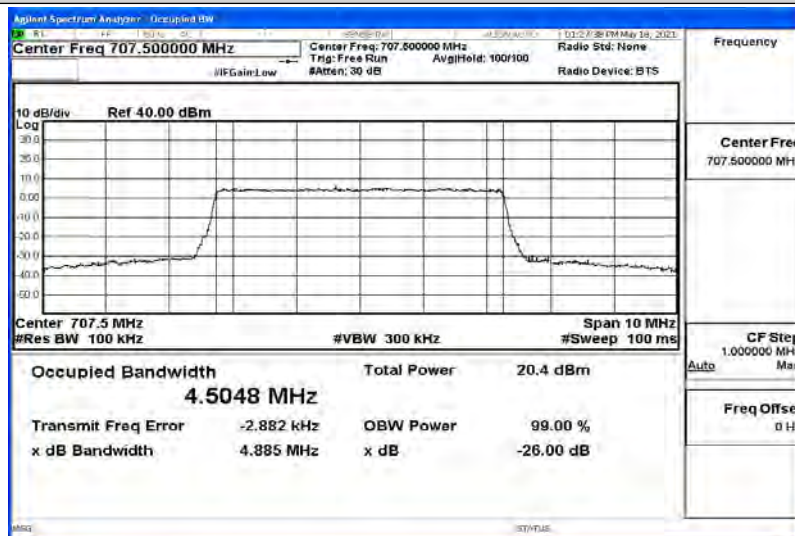
Band12-5MHz-QPSK-23155-25RB#0-4.4863



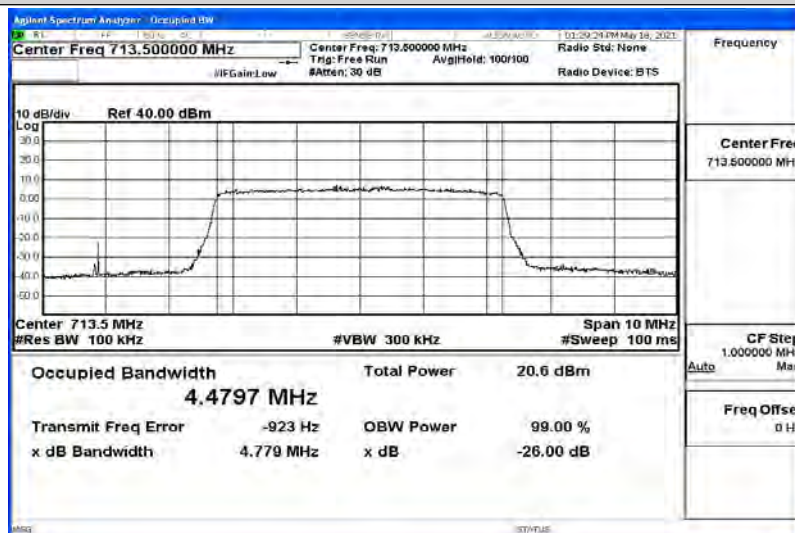
Band12-5MHz-16QAM-23035-25RB#0-4.5018



Band12-5MHz-16QAM-23095-25RB#0-4.5048

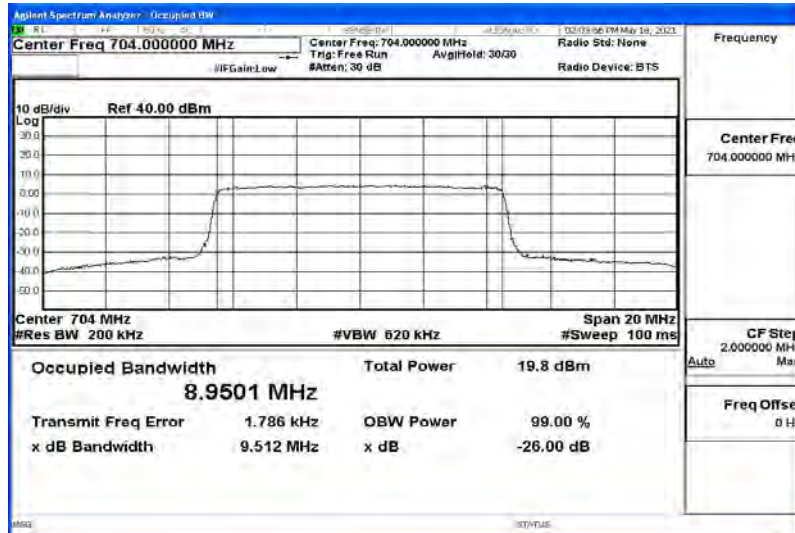


Band12-5MHz-16QAM-23155-25RB#0-4.4797

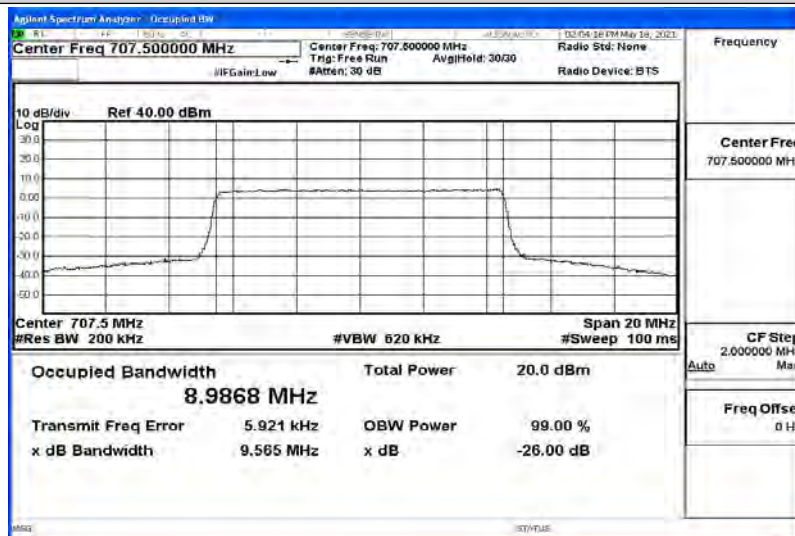


Band12-10MHz-QPSK-23060-50RB#0-8.9501

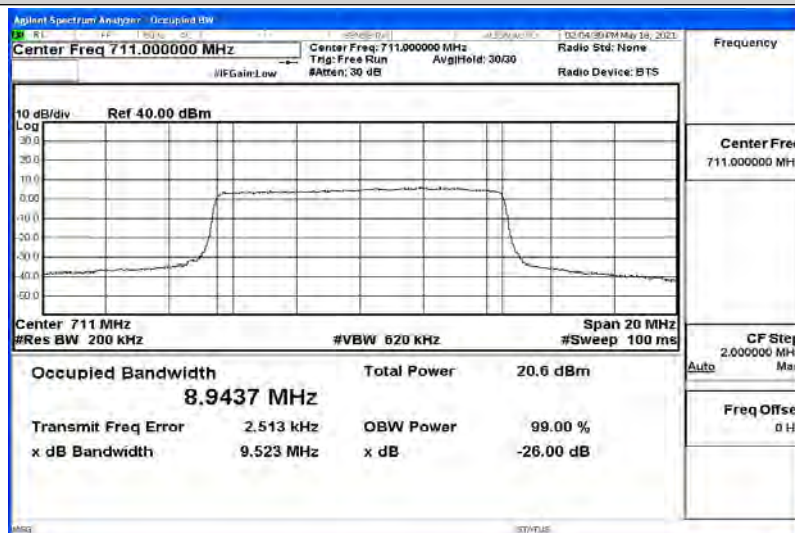




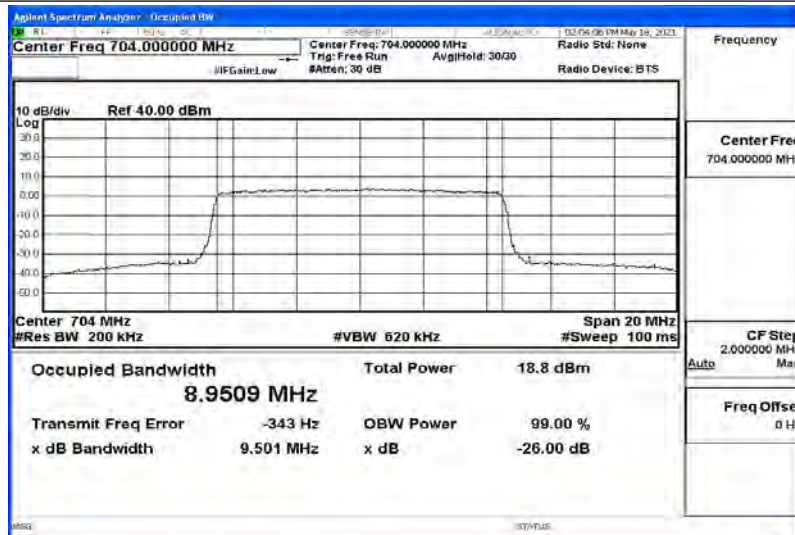
Band12-10MHz-QPSK-23095-50RB#0-8.9868



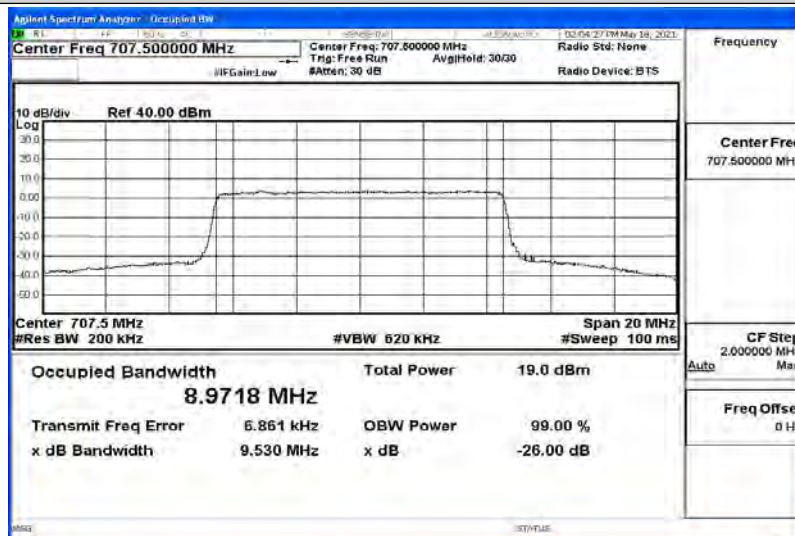
Band12-10MHz-QPSK-23130-50RB#0-8.9437



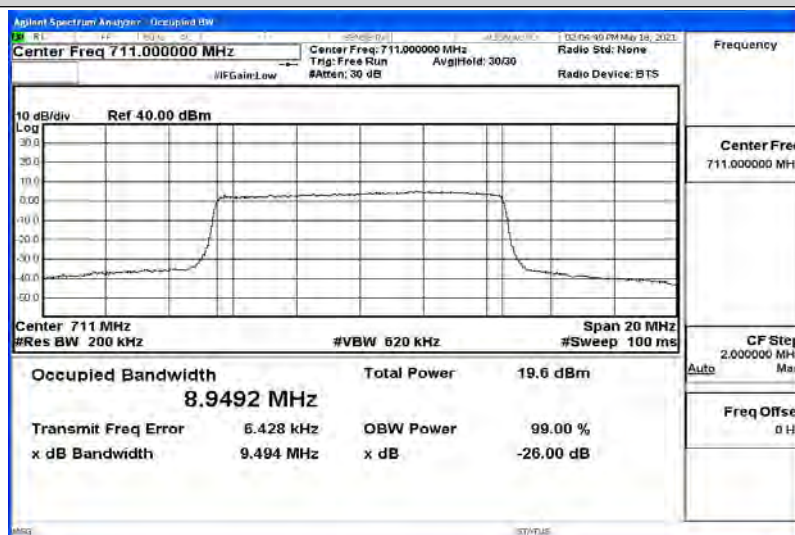
Band12-10MHz-16QAM-23060-50RB#0-8.9509



Band12-10MHz-16QAM-23095-50RB#0-8.9718



Band12-10MHz-16QAM-23130-50RB#0-8.9492



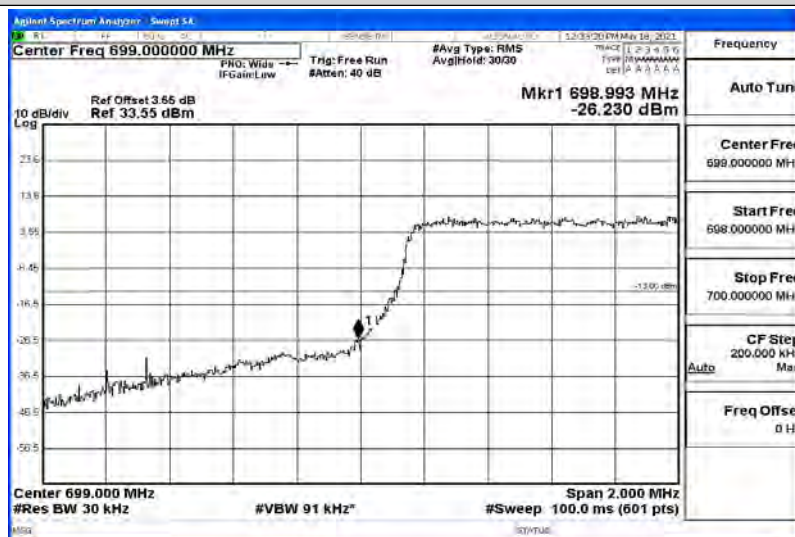
## I.4 Band Edge

### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Result(dBm) | Verdict |
|--------|-----------|------------|---------|------------------|-------------|---------|
| Band12 | 1.4MHz    | QPSK       | 23017   | 6RB#0            | -26.23      | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23173   | 6RB#0            | -24.59      | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23017   | 6RB#0            | -27.63      | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23173   | 6RB#0            | -24.05      | PASS    |
| Band12 | 3MHz      | QPSK       | 23025   | 15RB#0           | -23.84      | PASS    |
| Band12 | 3MHz      | QPSK       | 23165   | 15RB#0           | -25.84      | PASS    |
| Band12 | 3MHz      | 16QAM      | 23025   | 15RB#0           | -23.70      | PASS    |
| Band12 | 3MHz      | 16QAM      | 23165   | 15RB#0           | -25.78      | PASS    |
| Band12 | 5MHz      | QPSK       | 23035   | 25RB#0           | -24.58      | PASS    |
| Band12 | 5MHz      | QPSK       | 23155   | 25RB#0           | -25.75      | PASS    |
| Band12 | 5MHz      | 16QAM      | 23035   | 25RB#0           | -26.66      | PASS    |
| Band12 | 5MHz      | 16QAM      | 23155   | 25RB#0           | -25.59      | PASS    |
| Band12 | 10MHz     | QPSK       | 23060   | 50RB#0           | -29.11      | PASS    |
| Band12 | 10MHz     | QPSK       | 23130   | 50RB#0           | -28.58      | PASS    |
| Band12 | 10MHz     | 16QAM      | 23060   | 50RB#0           | -29.71      | PASS    |
| Band12 | 10MHz     | 16QAM      | 23130   | 50RB#0           | -29.23      | PASS    |

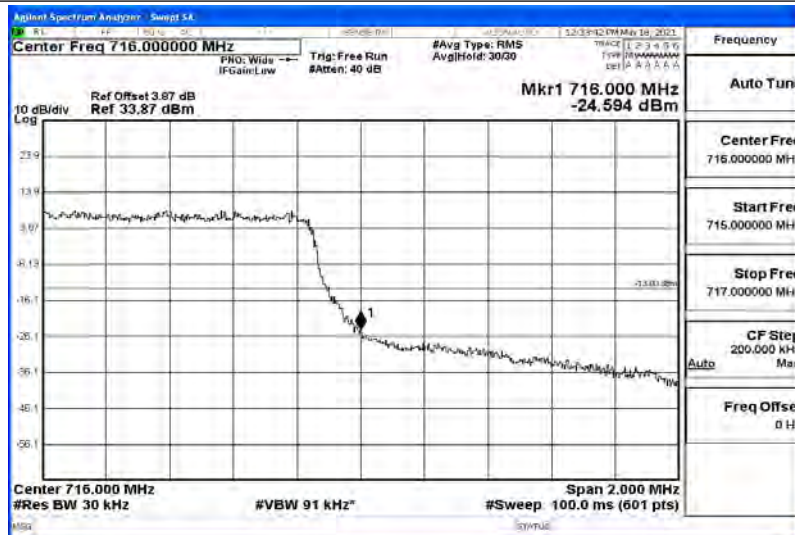
### Test Graphs

Band12-1.4MHz-QPSK-23017-6RB#0

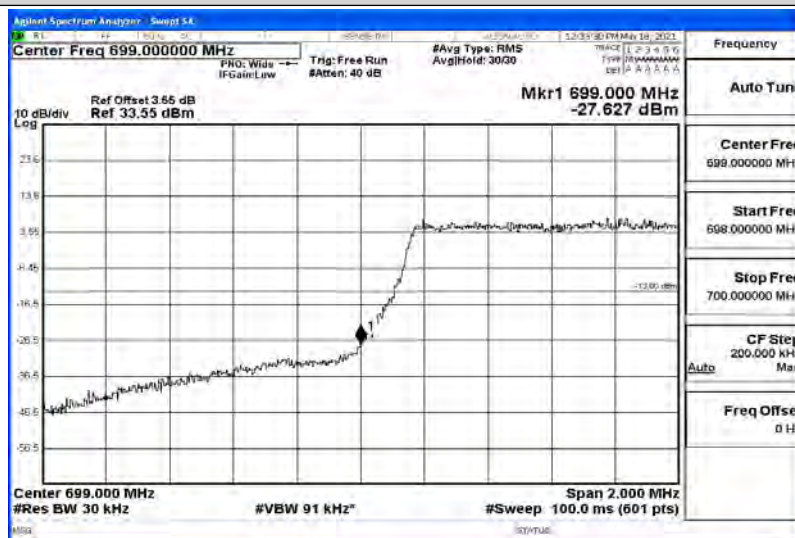


Band12-1.4MHz-QPSK-23173-6RB#0

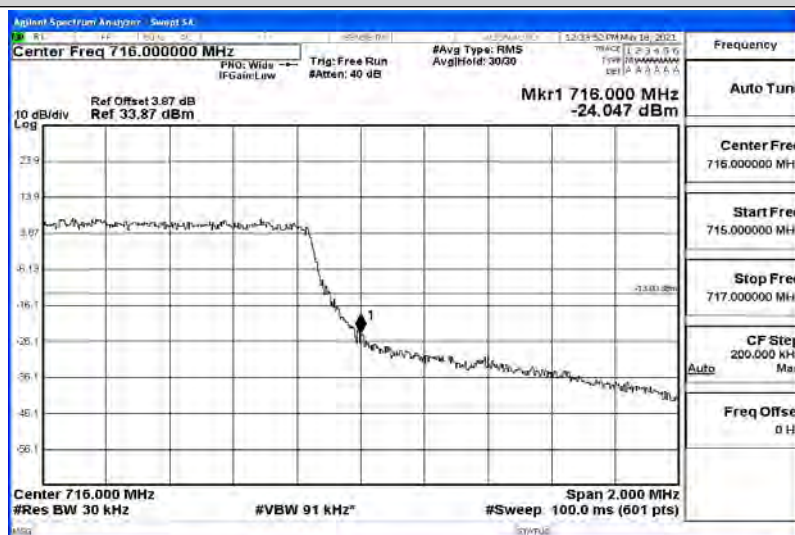




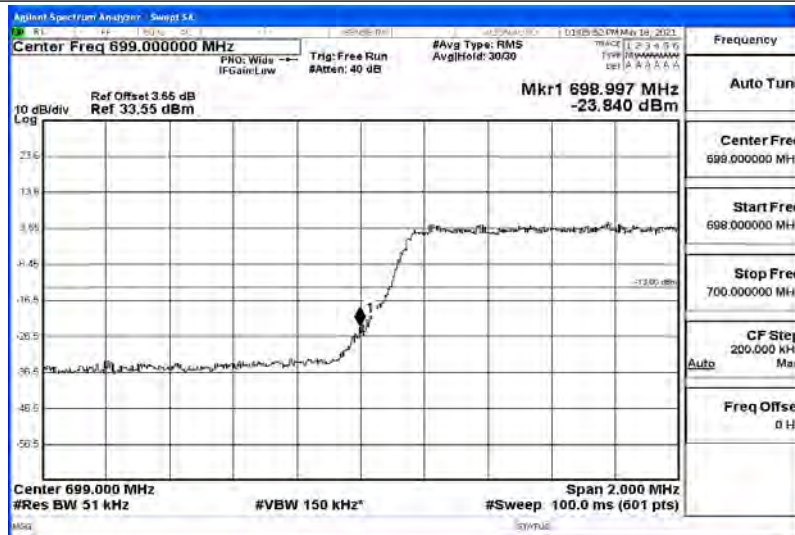
Band12-1.4MHz-16QAM-23017-6RB#0



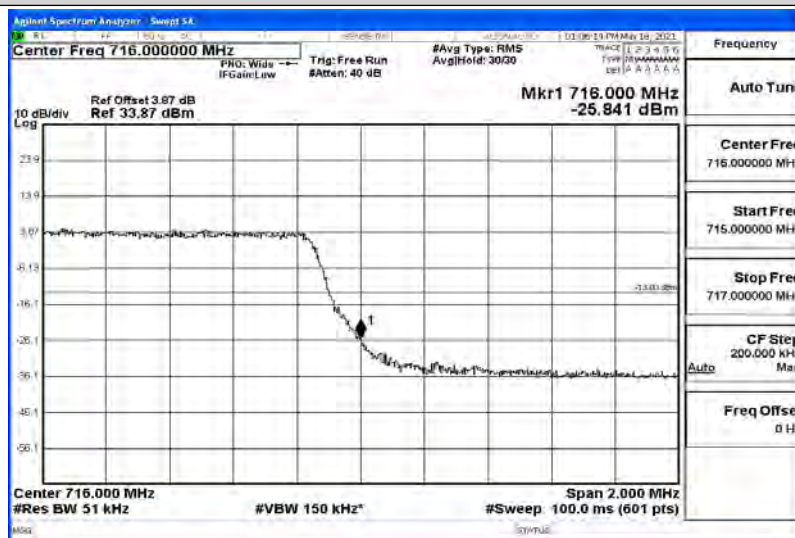
Band12-1.4MHz-16QAM-23173-6RB#0



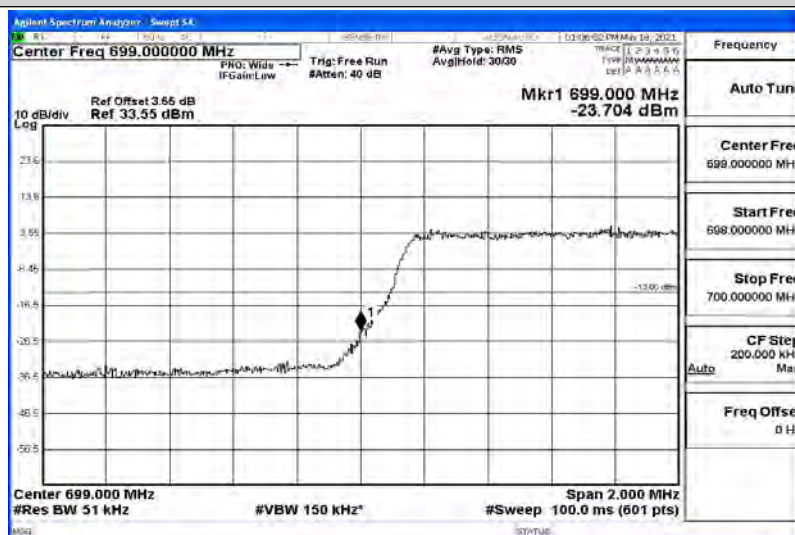
Band12-3MHz-QPSK-23025-15RB#0



Band12-3MHz-QPSK-23165-15RB#0

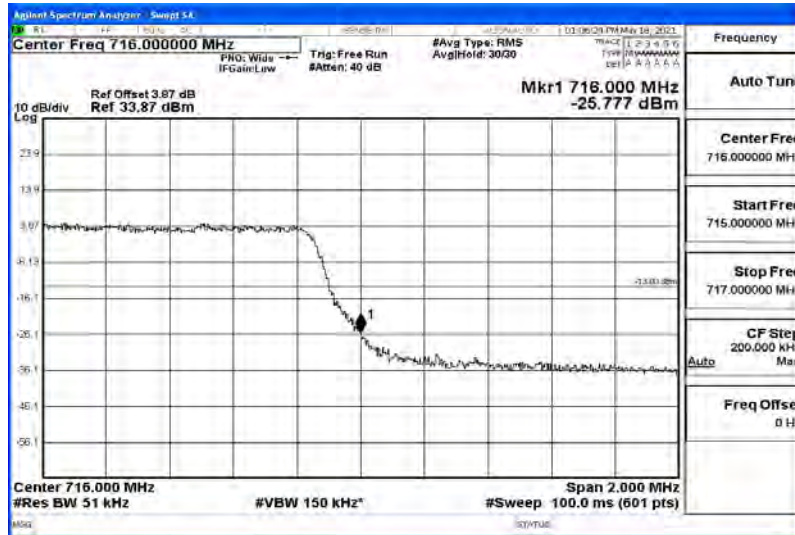


Band12-3MHz-16QAM-23025-15RB#0



Band12-3MHz-16QAM-23165-15RB#0

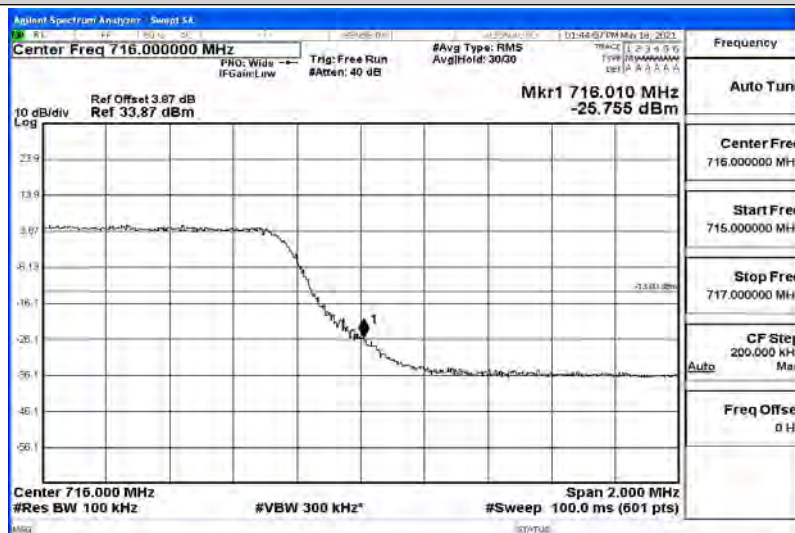




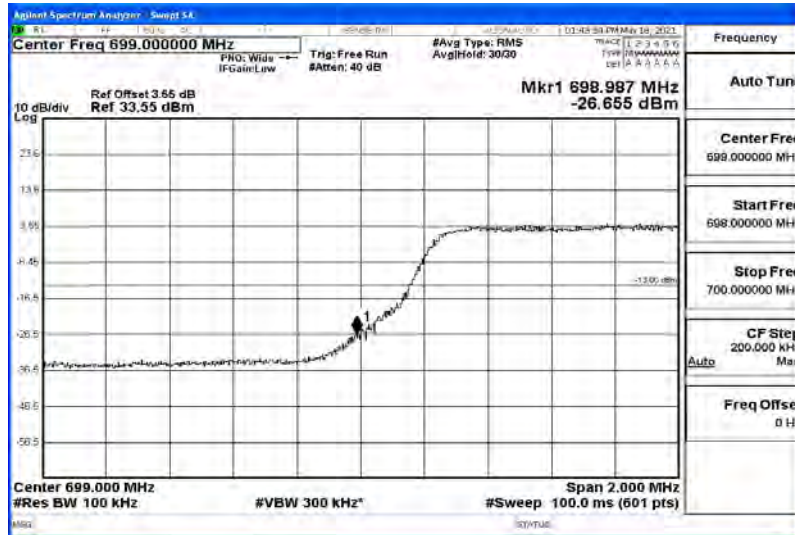
Band12-5MHz-QPSK-23035-25RB#0



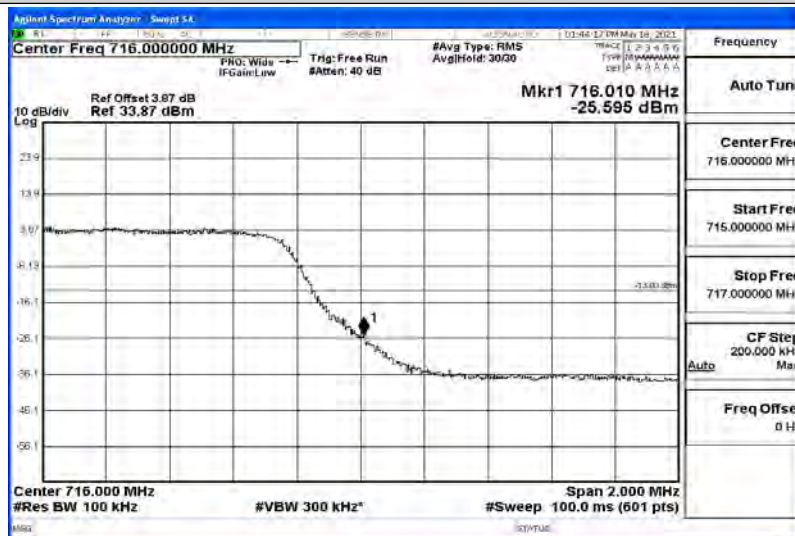
Band12-5MHz-QPSK-23155-25RB#0



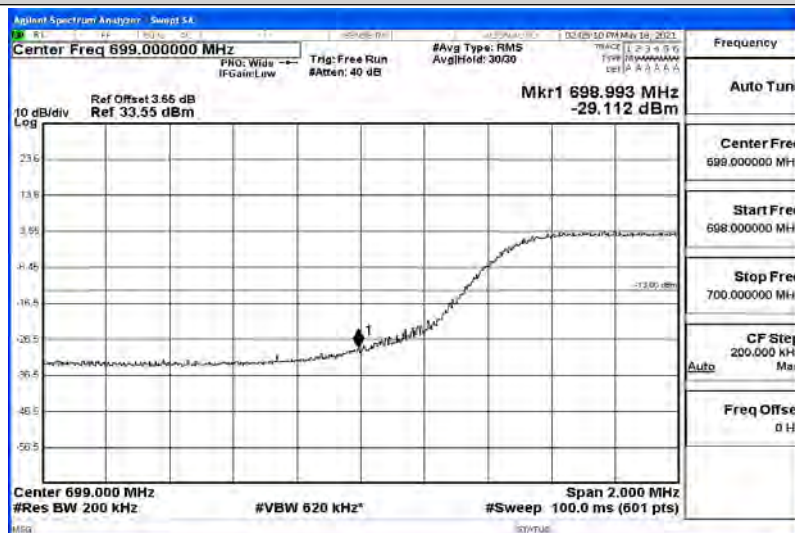
Band12-5MHz-16QAM-23035-25RB#0



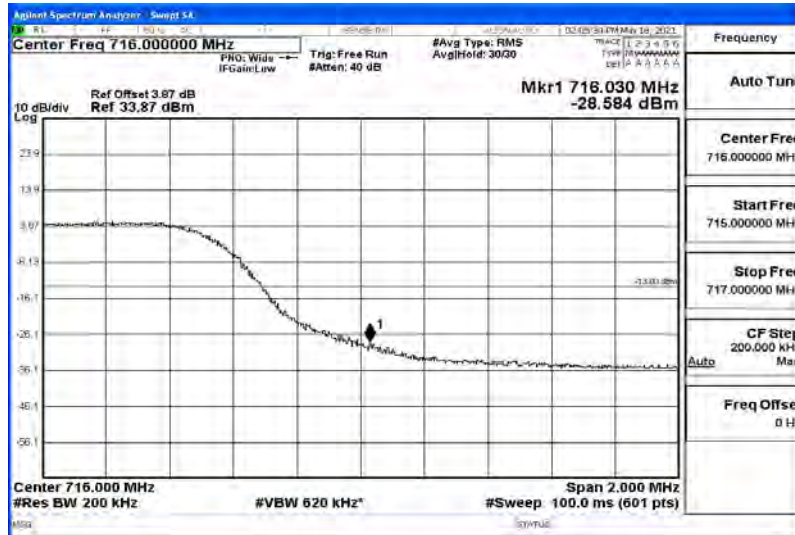
Band12-5MHz-16QAM-23155-25RB#0



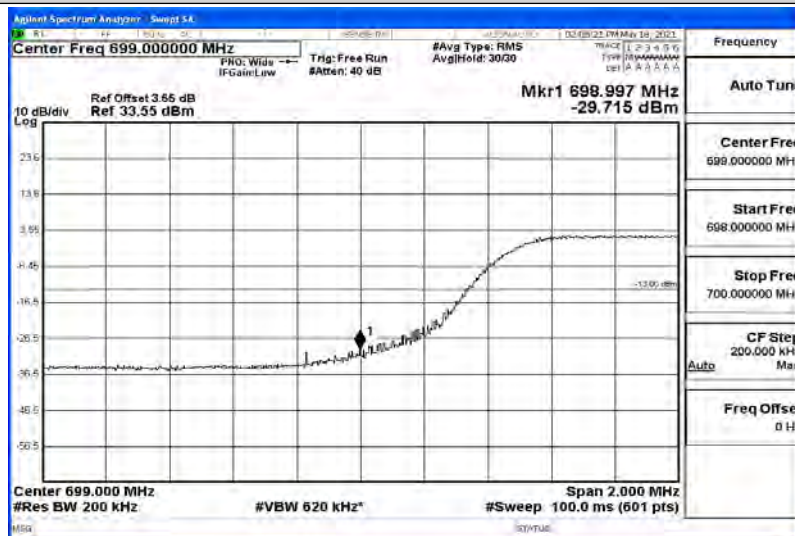
Band12-10MHz-QPSK-23060-50RB#0



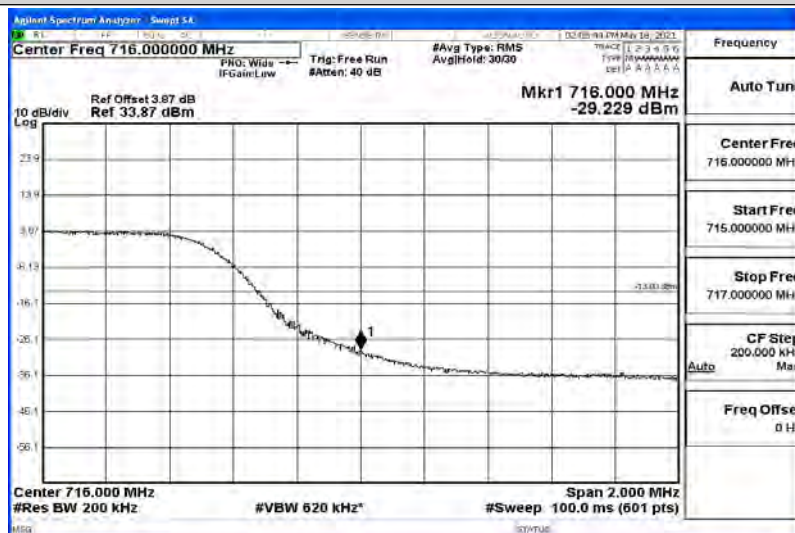
Band12-10MHz-QPSK-23130-50RB#0



Band12-10MHz-16QAM-23060-50RB#0



Band12-10MHz-16QAM-23130-50RB#0

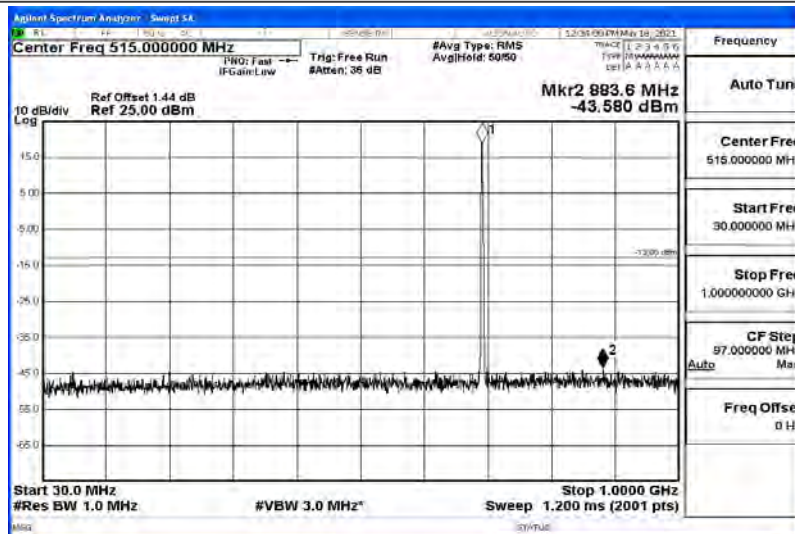




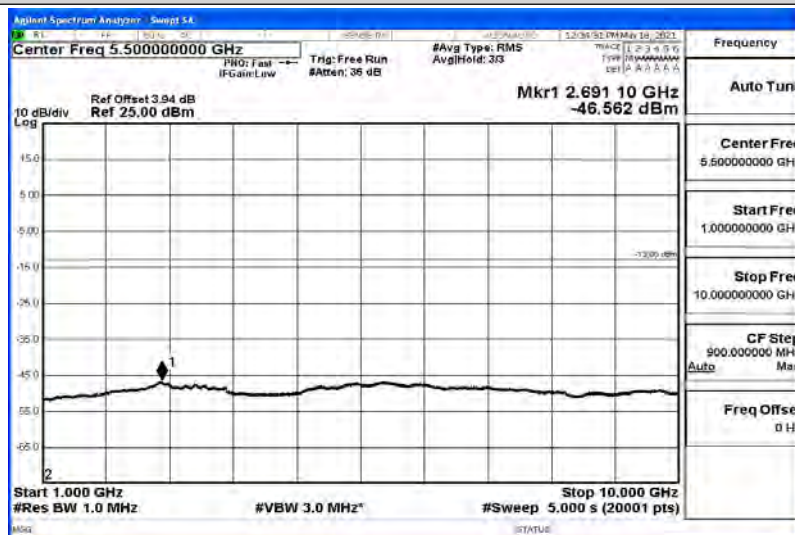
## I.5 Conducted Spurious Emission

### Test Graphs

Band12-1.4MHz-QPSK-23017-1RB#0-Range1:30~1000MHz

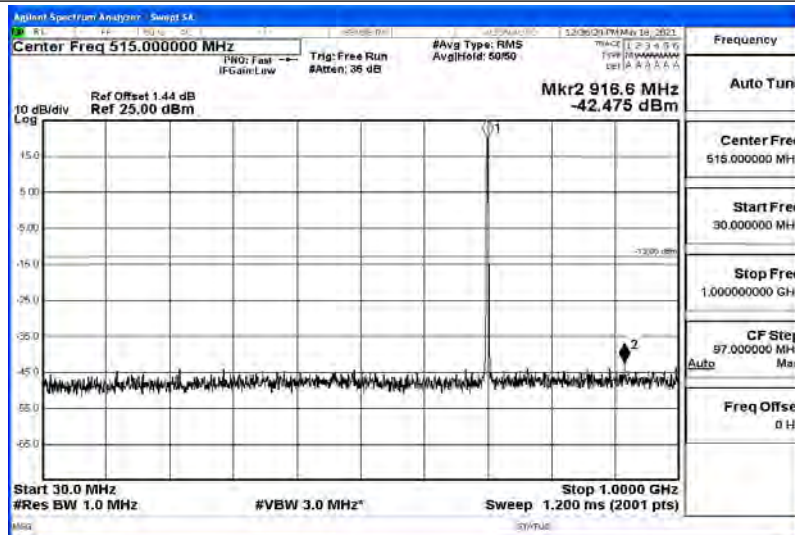


Band12-1.4MHz-QPSK-23017-1RB#0-Range2:1000~10000MHz

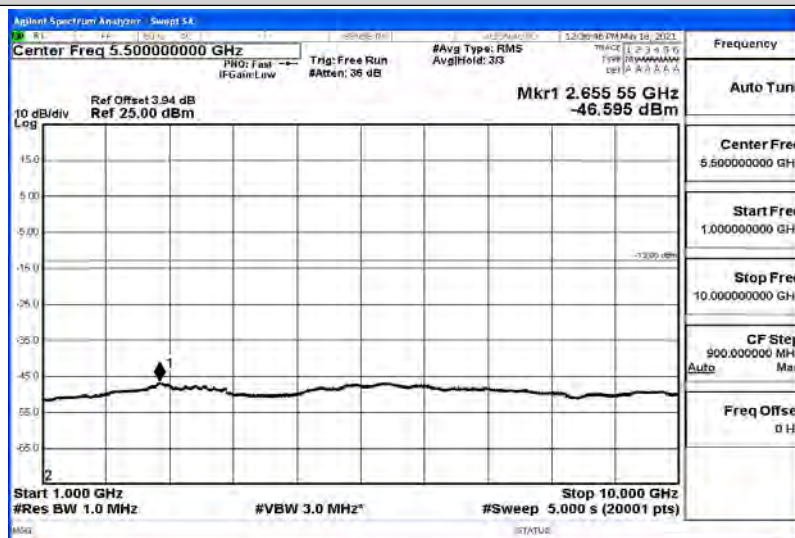


Band12-1.4MHz-QPSK-23095-1RB#0-Range1:30~1000MHz

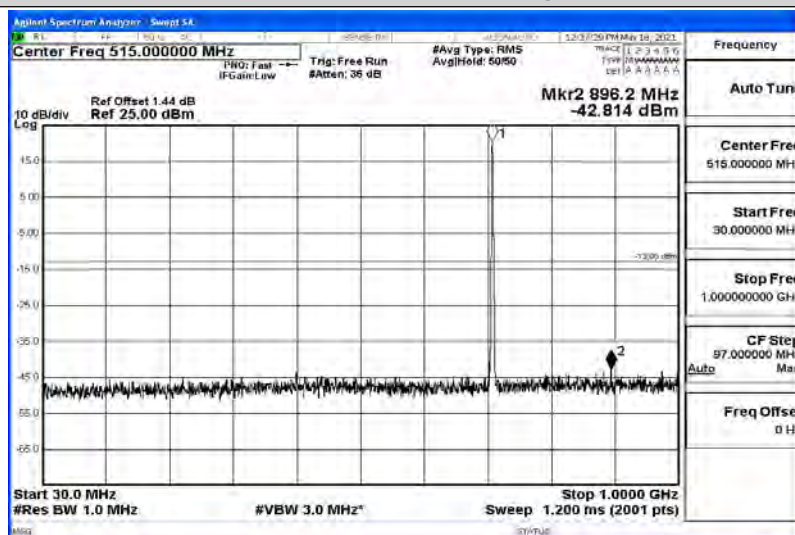




Band12-1.4MHz-QPSK-23095-1RB#0-Range2:1000~10000MHz



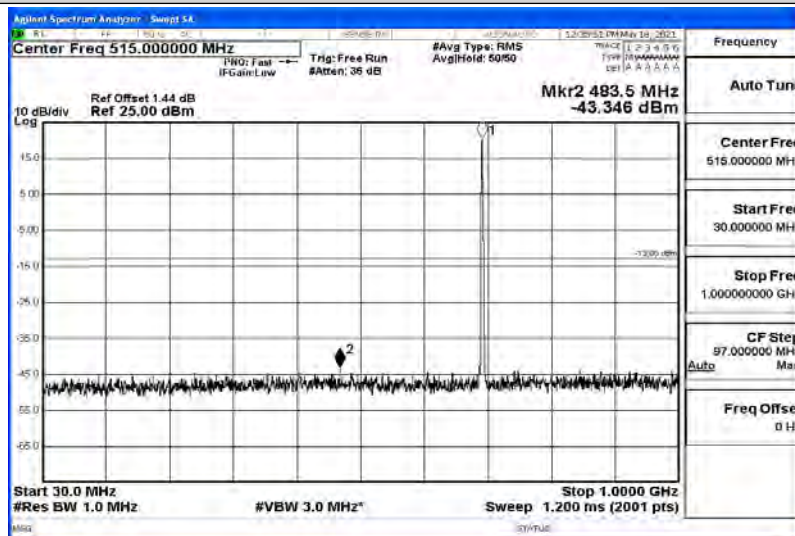
Band12-1.4MHz-QPSK-23173-1RB#0-Range1:30~1000MHz



Band12-1.4MHz-QPSK-23173-1RB#0-Range2:1000~10000MHz



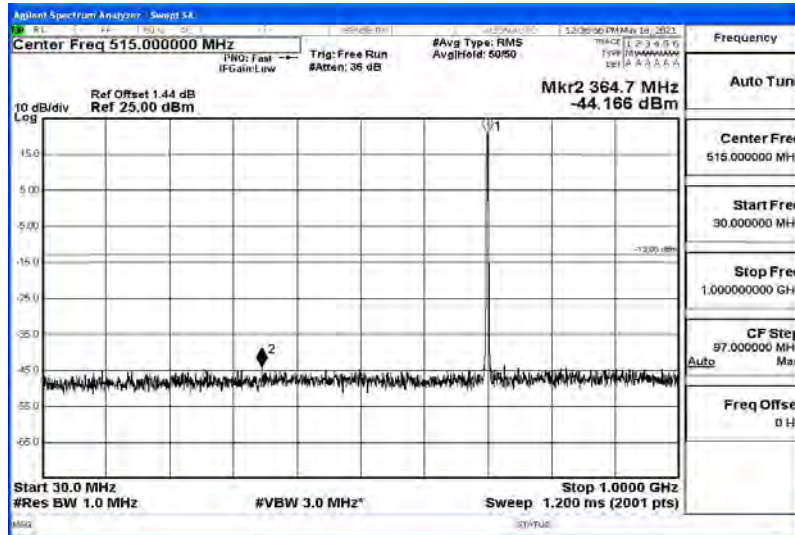
Band12-1.4MHz-16QAM-23017-1RB#0-Range1:30~1000MHz



Band12-1.4MHz-16QAM-23017-1RB#0-Range2:1000~10000MHz



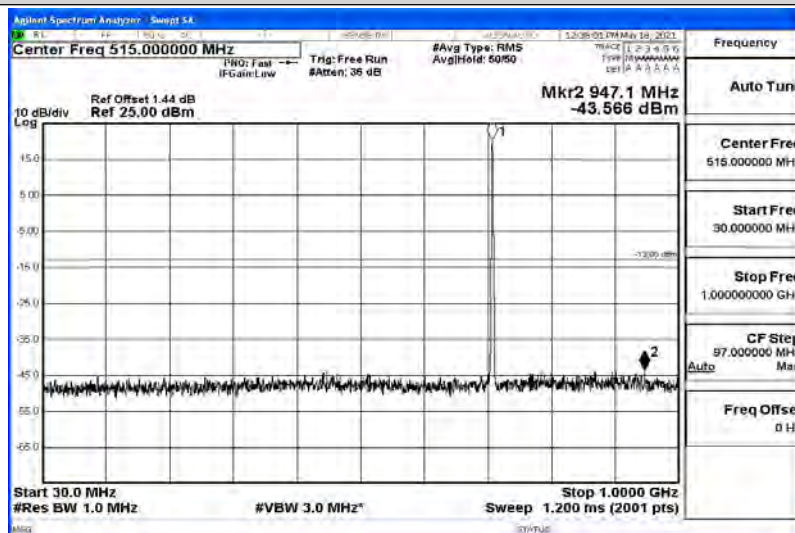
Band12-1.4MHz-16QAM-23095-1RB#0-Range1:30~1000MHz



Band12-1.4MHz-16QAM-23095-1RB#0-Range2:1000~10000MHz



Band12-1.4MHz-16QAM-23173-1RB#0-Range1:30~1000MHz

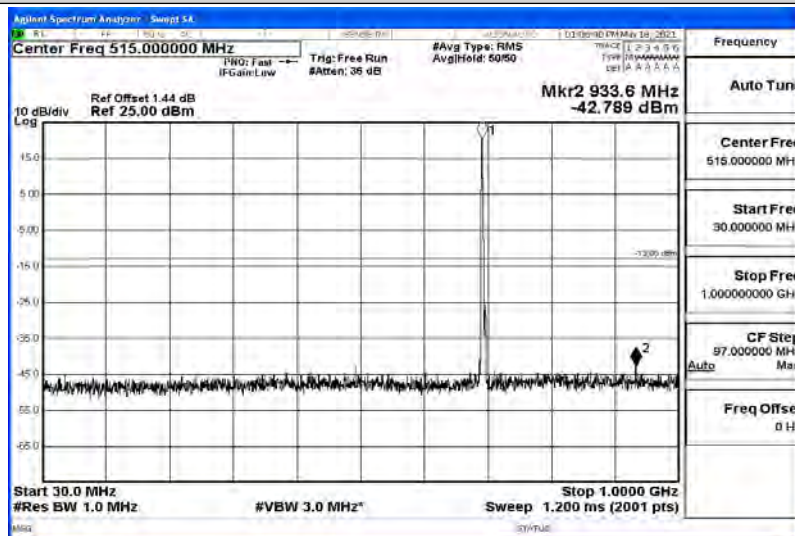


Band12-1.4MHz-16QAM-23173-1RB#0-Range2:1000~10000MHz





Band12-3MHz-QPSK-23025-1RB#0-Range1:30~1000MHz

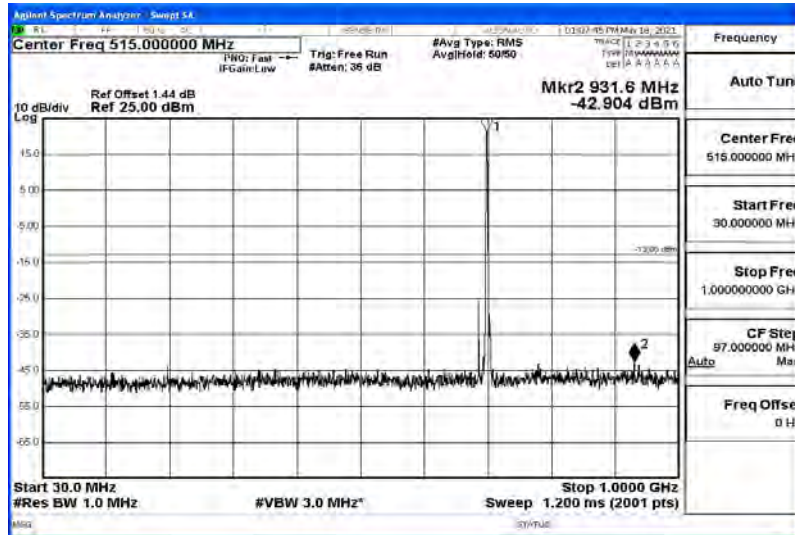


Band12-3MHz-QPSK-23025-1RB#0-Range2:1000~10000MHz



Band12-3MHz-QPSK-23095-1RB#0-Range1:30~1000MHz

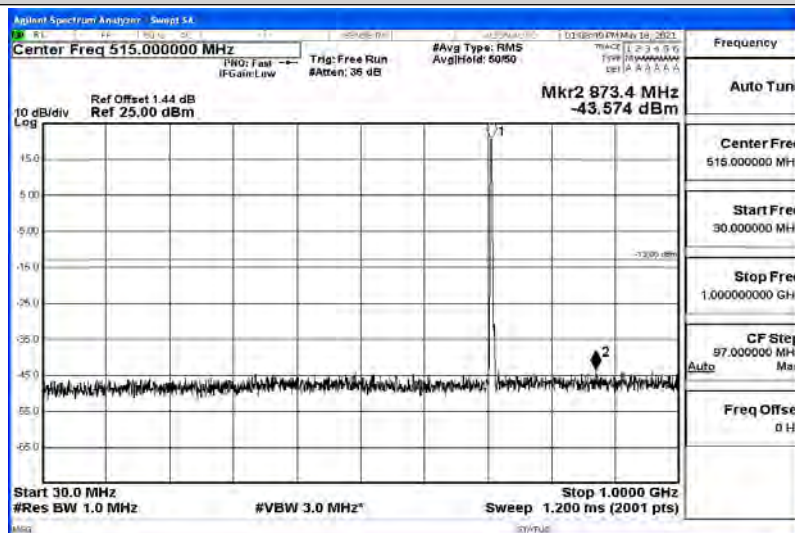




Band12-3MHz-QPSK-23095-1RB#0-Range2:1000~10000MHz



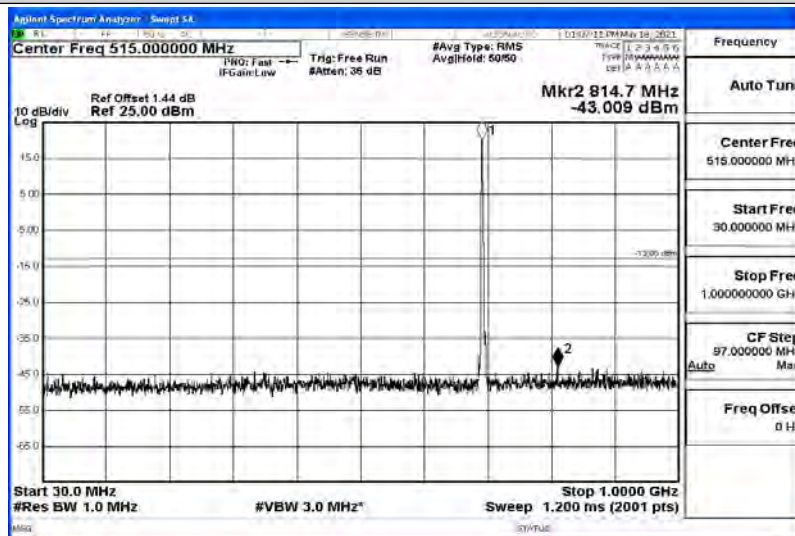
Band12-3MHz-QPSK-23165-1RB#0-Range1:30~1000MHz



Band12-3MHz-QPSK-23165-1RB#0-Range2:1000~10000MHz



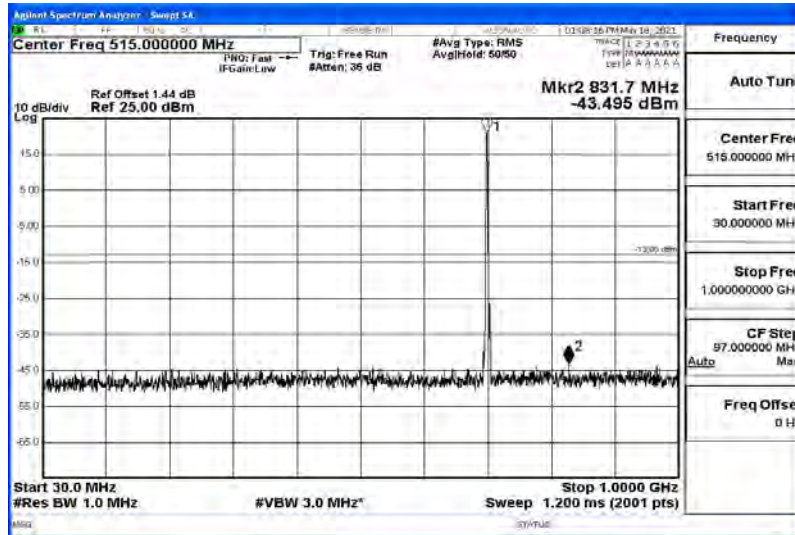
Band12-3MHz-16QAM-23025-1RB#0-Range1:30~1000MHz



Band12-3MHz-16QAM-23025-1RB#0-Range2:1000~10000MHz



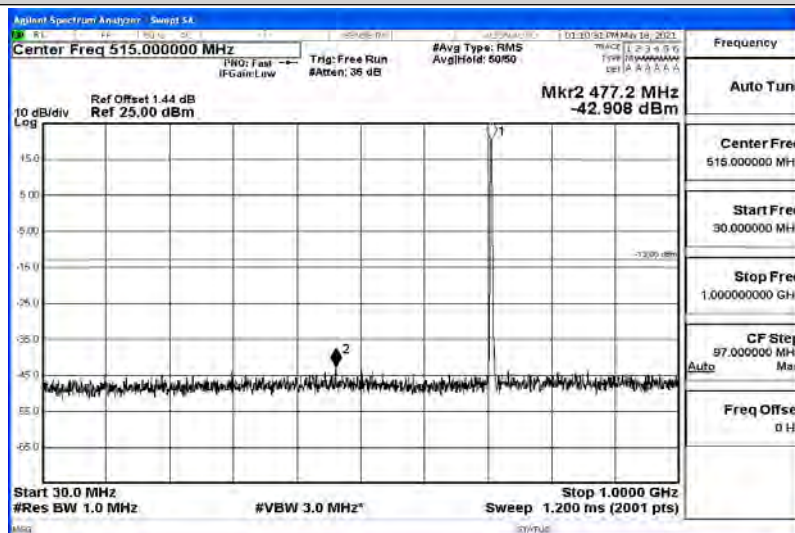
Band12-3MHz-16QAM-23095-1RB#0-Range1:30~1000MHz



Band12-3MHz-16QAM-23095-1RB#0-Range2:1000~10000MHz



Band12-3MHz-16QAM-23165-1RB#0-Range1:30~1000MHz

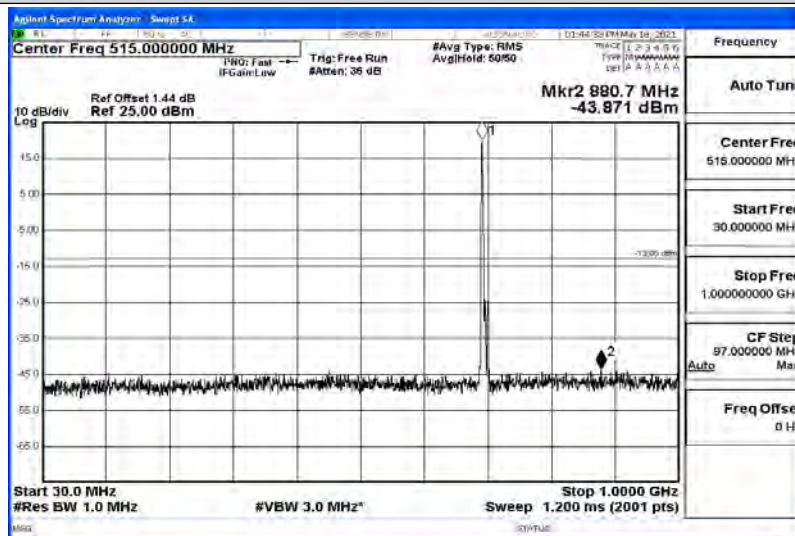


Band12-3MHz-16QAM-23165-1RB#0-Range2:1000~10000MHz





Band12-5MHz-QPSK-23035-1RB#0-Range1:30~1000MHz

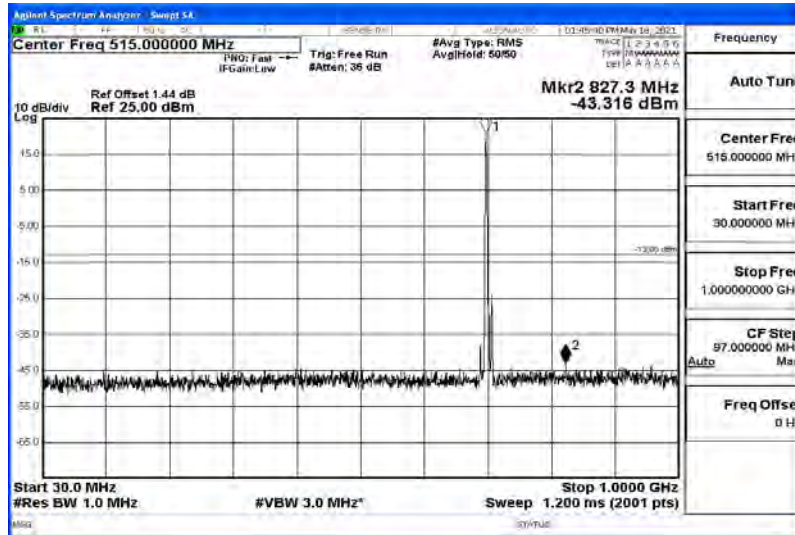


Band12-5MHz-QPSK-23035-1RB#0-Range2:1000~10000MHz

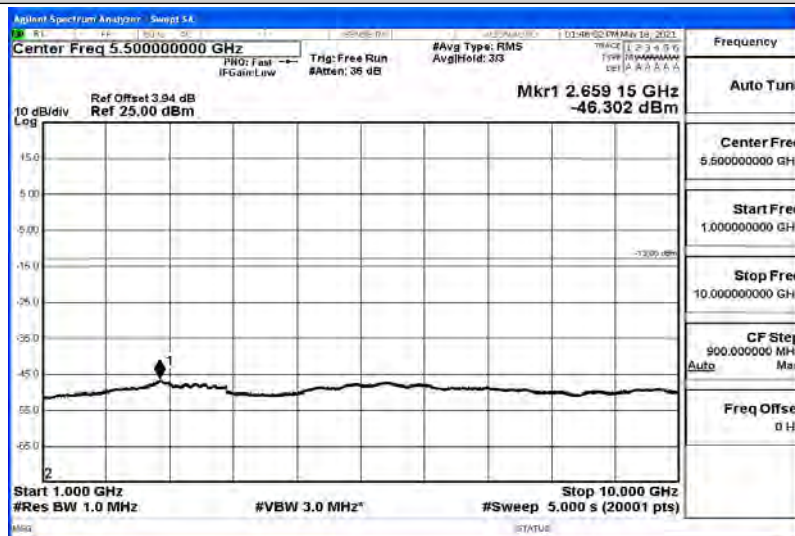


Band12-5MHz-QPSK-23095-1RB#0-Range1:30~1000MHz

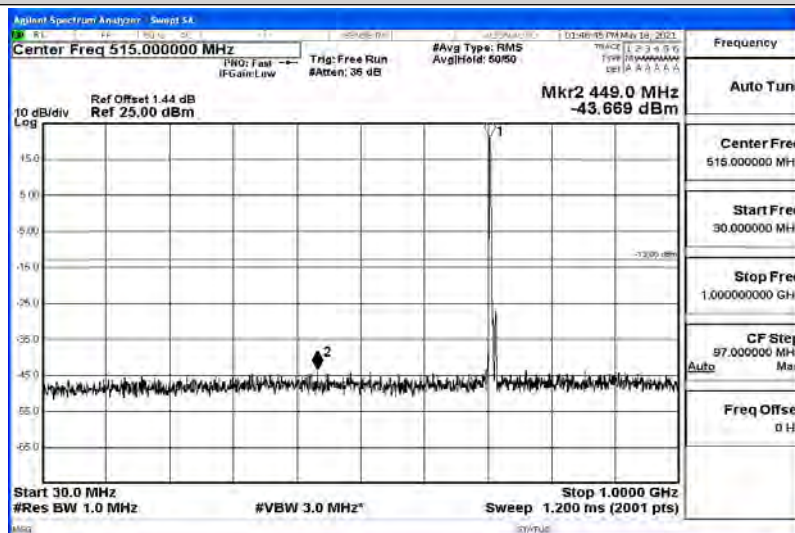




Band12-5MHz-QPSK-23095-1RB#0-Range2:1000~10000MHz



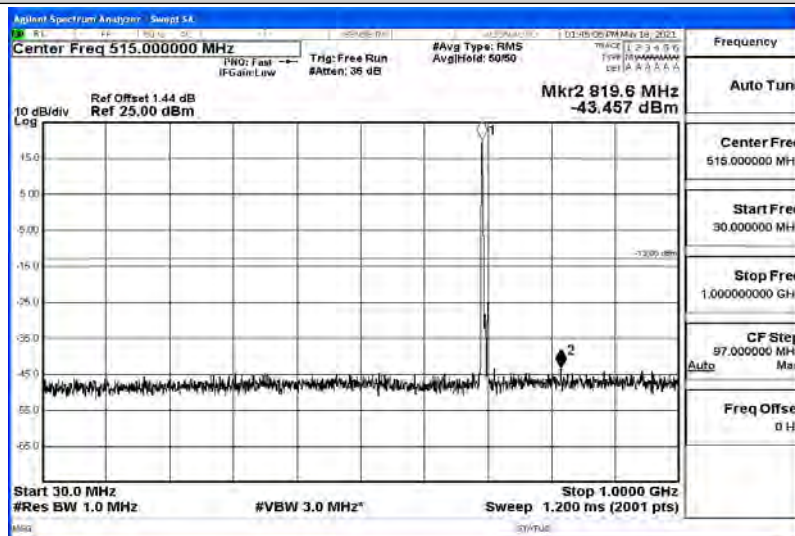
Band12-5MHz-QPSK-23155-1RB#0-Range1:30~1000MHz



Band12-5MHz-QPSK-23155-1RB#0-Range2:1000~10000MHz



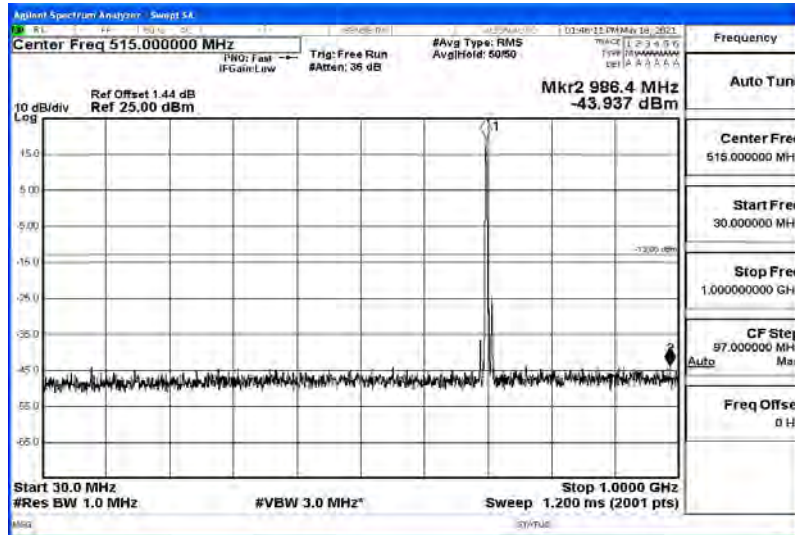
Band12-5MHz-16QAM-23035-1RB#0-Range1:30~1000MHz



Band12-5MHz-16QAM-23035-1RB#0-Range2:1000~10000MHz



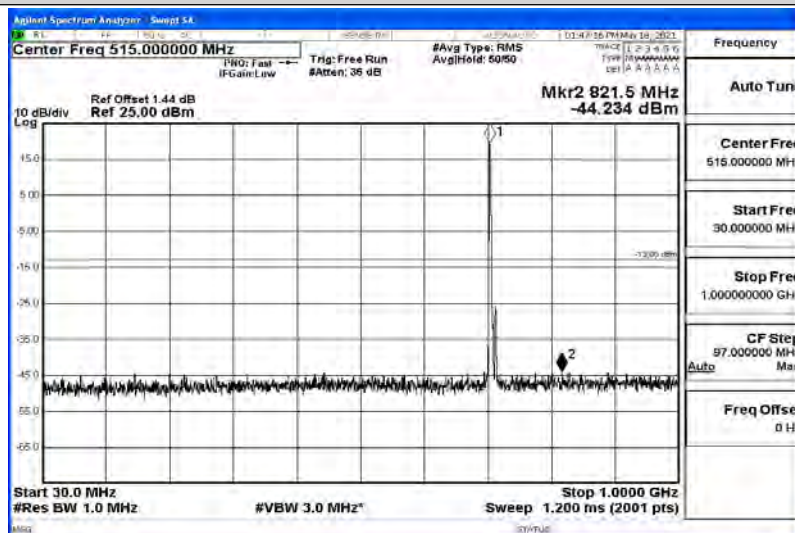
Band12-5MHz-16QAM-23095-1RB#0-Range1:30~1000MHz



Band12-5MHz-16QAM-23095-1RB#0-Range2:1000~10000MHz



Band12-5MHz-16QAM-23155-1RB#0-Range1:30~1000MHz

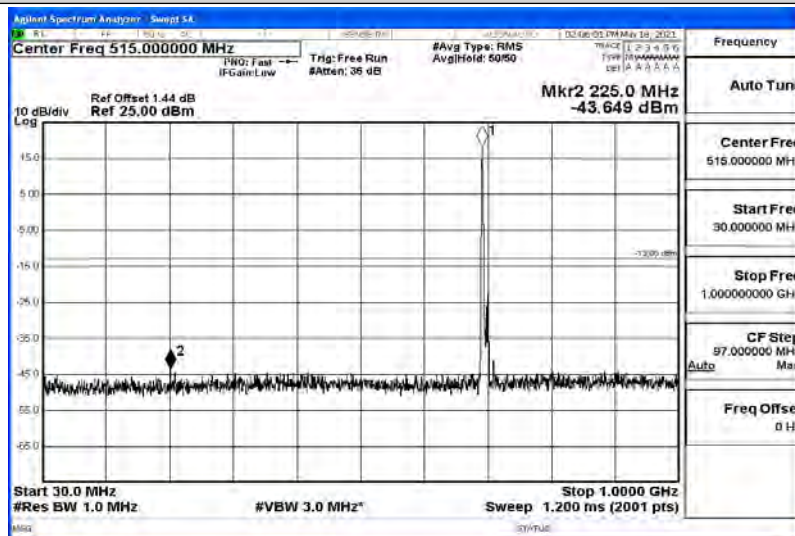


Band12-5MHz-16QAM-23155-1RB#0-Range2:1000~10000MHz





Band12-10MHz-QPSK-23060-1RB#0-Range1:30~1000MHz

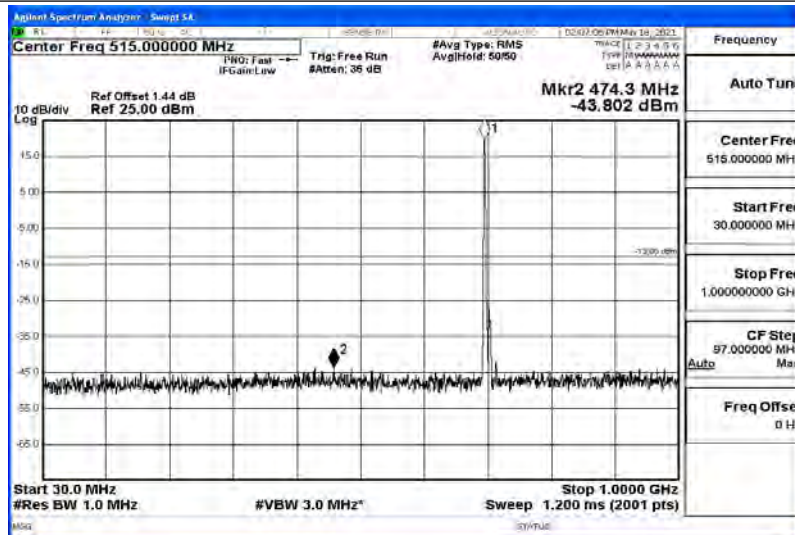


Band12-10MHz-QPSK-23060-1RB#0-Range2:1000~10000MHz

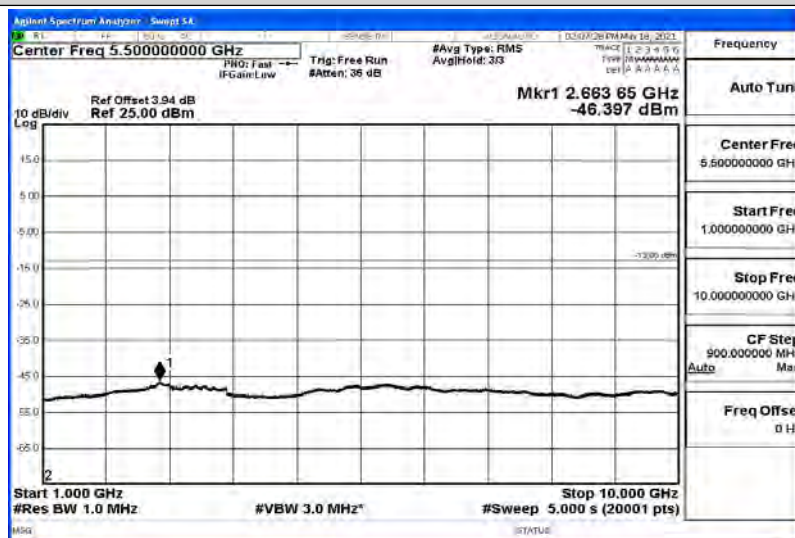


Band12-10MHz-QPSK-23095-1RB#0-Range1:30~1000MHz

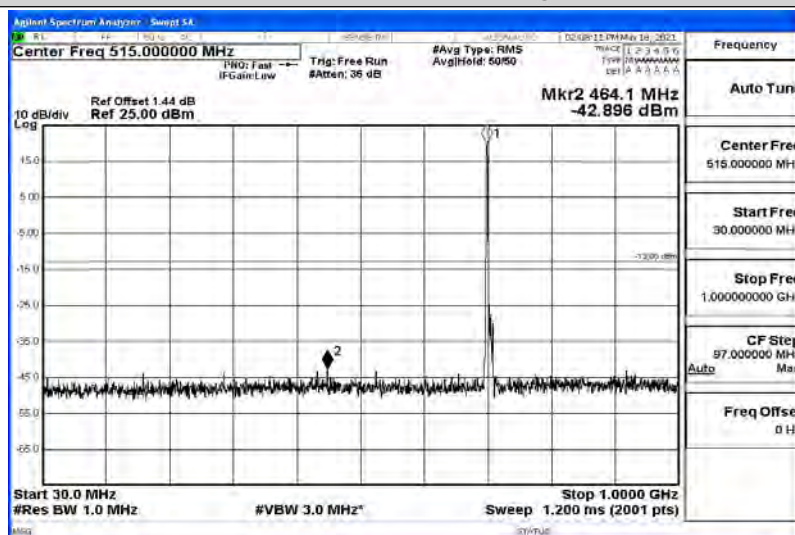




Band12-10MHz-QPSK-23095-1RB#0-Range2:1000~10000MHz



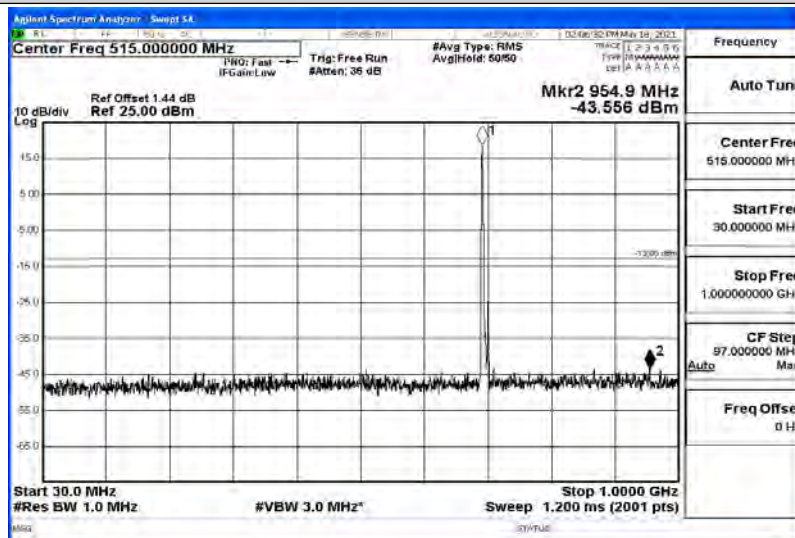
Band12-10MHz-QPSK-23130-1RB#0-Range1:30~1000MHz



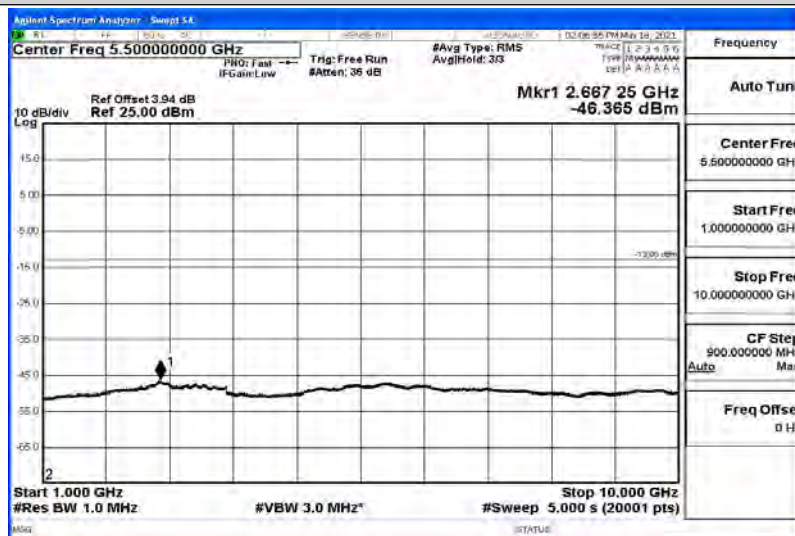
Band12-10MHz-QPSK-23130-1RB#0-Range2:1000~10000MHz



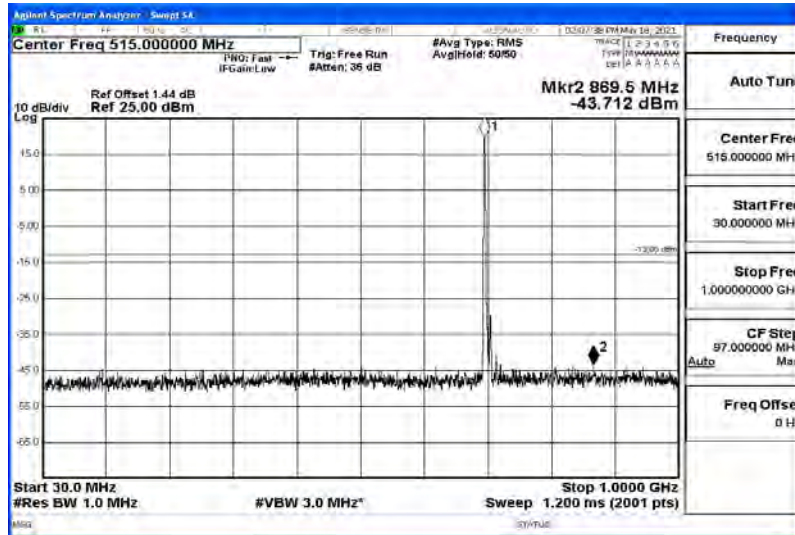
Band12-10MHz-16QAM-23060-1RB#0-Range1:30~1000MHz



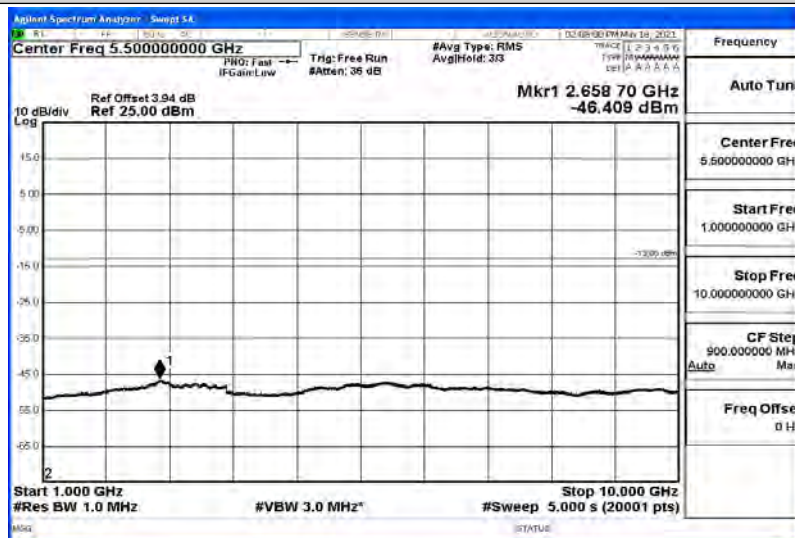
Band12-10MHz-16QAM-23060-1RB#0-Range2:1000~10000MHz



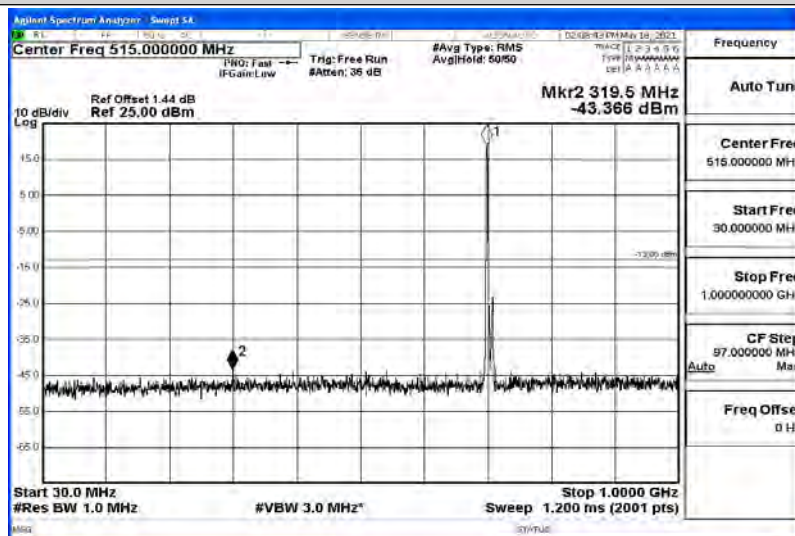
Band12-10MHz-16QAM-23095-1RB#0-Range1:30~1000MHz



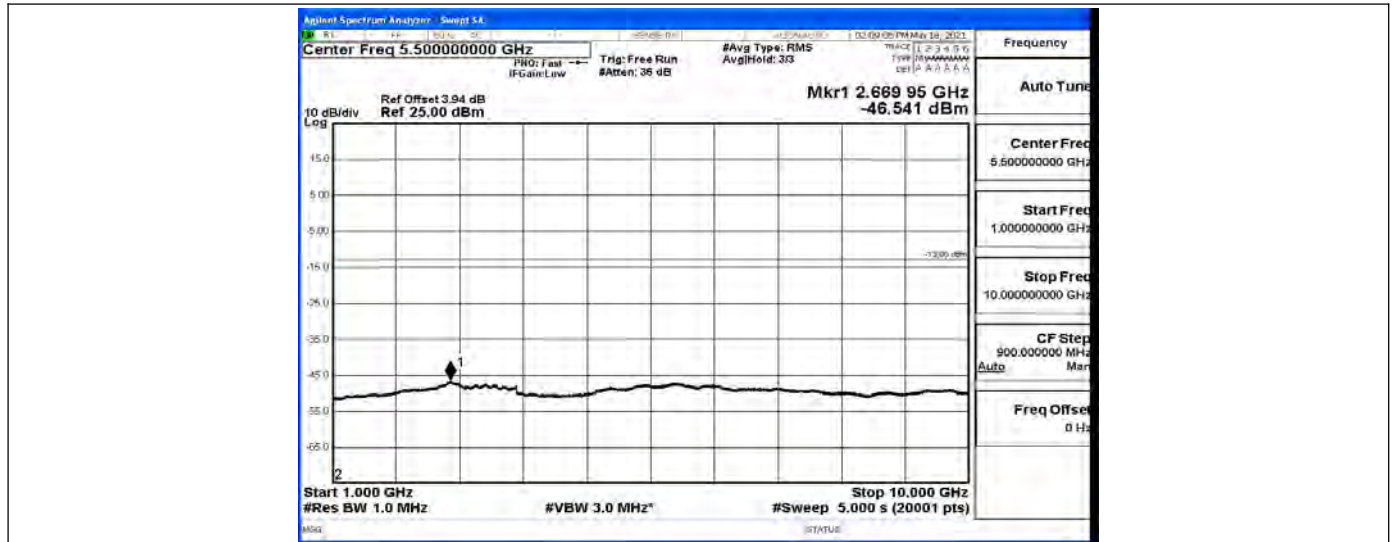
Band12-10MHz-16QAM-23095-1RB#0-Range2:1000~10000MHz



Band12-10MHz-16QAM-23130-1RB#0-Range1:30~1000MHz



Band12-10MHz-16QAM-23130-1RB#0-Range2:1000~10000MHz



Note: Not recorded test plots from 9 KHz to 30 MHz as emission levels 20dB lower than emission limit.