

## Appendix I: Test Data for E-UTRA Band 17

**Product Name: Smartphone**

**Trade Mark: S Smooth**

**Test Model: Smooth 6.5**

### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 24.6° C   |
| Relative Humidity: | 54.1%     |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Ken He    |
| Supervised by:     | Li Huan   |

## I.1: Effective (Isotropic) Radiated Power Output Data

### Test Result

|        |      |       |       |         |       |      |
|--------|------|-------|-------|---------|-------|------|
| Band17 | 5MHz | QPSK  | 23755 | 1RB#24  | 24.97 | PASS |
| Band17 | 5MHz | QPSK  | 23755 | 1RB#0   | 25.13 | PASS |
| Band17 | 5MHz | QPSK  | 23755 | 1RB#12  | 25.09 | PASS |
| Band17 | 5MHz | QPSK  | 23755 | 12RB#13 | 24.05 | PASS |
| Band17 | 5MHz | QPSK  | 23755 | 12RB#0  | 24.14 | PASS |
| Band17 | 5MHz | QPSK  | 23755 | 12RB#6  | 24.14 | PASS |
| Band17 | 5MHz | QPSK  | 23755 | 25RB#0  | 24.07 | PASS |
| Band17 | 5MHz | QPSK  | 23790 | 1RB#0   | 25.30 | PASS |
| Band17 | 5MHz | QPSK  | 23790 | 1RB#24  | 24.89 | PASS |
| Band17 | 5MHz | QPSK  | 23790 | 1RB#12  | 25.09 | PASS |
| Band17 | 5MHz | QPSK  | 23790 | 12RB#6  | 24.12 | PASS |
| Band17 | 5MHz | QPSK  | 23790 | 12RB#0  | 24.10 | PASS |
| Band17 | 5MHz | QPSK  | 23790 | 12RB#13 | 23.94 | PASS |
| Band17 | 5MHz | QPSK  | 23790 | 25RB#0  | 23.90 | PASS |
| Band17 | 5MHz | QPSK  | 23825 | 1RB#0   | 24.78 | PASS |
| Band17 | 5MHz | QPSK  | 23825 | 1RB#12  | 24.43 | PASS |
| Band17 | 5MHz | QPSK  | 23825 | 1RB#24  | 24.36 | PASS |
| Band17 | 5MHz | QPSK  | 23825 | 12RB#6  | 23.72 | PASS |
| Band17 | 5MHz | QPSK  | 23825 | 12RB#13 | 23.41 | PASS |
| Band17 | 5MHz | QPSK  | 23825 | 12RB#0  | 23.70 | PASS |
| Band17 | 5MHz | QPSK  | 23825 | 25RB#0  | 23.59 | PASS |
| Band17 | 5MHz | 16QAM | 23755 | 1RB#24  | 24.20 | PASS |
| Band17 | 5MHz | 16QAM | 23755 | 1RB#12  | 24.22 | PASS |
| Band17 | 5MHz | 16QAM | 23755 | 1RB#0   | 24.34 | PASS |
| Band17 | 5MHz | 16QAM | 23755 | 12RB#6  | 23.20 | PASS |
| Band17 | 5MHz | 16QAM | 23755 | 12RB#0  | 23.21 | PASS |
| Band17 | 5MHz | 16QAM | 23755 | 12RB#13 | 23.17 | PASS |
| Band17 | 5MHz | 16QAM | 23755 | 25RB#0  | 23.15 | PASS |
| Band17 | 5MHz | 16QAM | 23790 | 1RB#24  | 23.25 | PASS |
| Band17 | 5MHz | 16QAM | 23790 | 1RB#12  | 23.54 | PASS |
| Band17 | 5MHz | 16QAM | 23790 | 1RB#0   | 23.64 | PASS |
| Band17 | 5MHz | 16QAM | 23790 | 12RB#13 | 23.23 | PASS |
| Band17 | 5MHz | 16QAM | 23790 | 12RB#0  | 22.83 | PASS |
| Band17 | 5MHz | 16QAM | 23790 | 12RB#6  | 22.88 | PASS |

|        |       |       |       |         |       |      |
|--------|-------|-------|-------|---------|-------|------|
| Band17 | 5MHz  | 16QAM | 23790 | 25RB#0  | 22.98 | PASS |
| Band17 | 5MHz  | 16QAM | 23825 | 1RB#24  | 22.75 | PASS |
| Band17 | 5MHz  | 16QAM | 23825 | 1RB#12  | 22.85 | PASS |
| Band17 | 5MHz  | 16QAM | 23825 | 1RB#0   | 23.08 | PASS |
| Band17 | 5MHz  | 16QAM | 23825 | 12RB#6  | 23.10 | PASS |
| Band17 | 5MHz  | 16QAM | 23825 | 12RB#13 | 22.79 | PASS |
| Band17 | 5MHz  | 16QAM | 23825 | 12RB#0  | 23.10 | PASS |
| Band17 | 5MHz  | 16QAM | 23825 | 25RB#0  | 22.99 | PASS |
| Band17 | 10MHz | QPSK  | 23780 | 1RB#49  | 24.71 | PASS |
| Band17 | 10MHz | QPSK  | 23780 | 1RB#24  | 25.15 | PASS |
| Band17 | 10MHz | QPSK  | 23780 | 1RB#0   | 25.31 | PASS |
| Band17 | 10MHz | QPSK  | 23780 | 25RB#0  | 24.06 | PASS |
| Band17 | 10MHz | QPSK  | 23780 | 25RB#12 | 24.08 | PASS |
| Band17 | 10MHz | QPSK  | 23780 | 25RB#25 | 23.88 | PASS |
| Band17 | 10MHz | QPSK  | 23780 | 50RB#0  | 24.02 | PASS |
| Band17 | 10MHz | QPSK  | 23790 | 1RB#0   | 25.10 | PASS |
| Band17 | 10MHz | QPSK  | 23790 | 1RB#49  | 24.45 | PASS |
| Band17 | 10MHz | QPSK  | 23790 | 1RB#24  | 24.96 | PASS |
| Band17 | 10MHz | QPSK  | 23790 | 25RB#12 | 24.00 | PASS |
| Band17 | 10MHz | QPSK  | 23790 | 25RB#25 | 23.75 | PASS |
| Band17 | 10MHz | QPSK  | 23790 | 25RB#0  | 24.10 | PASS |
| Band17 | 10MHz | QPSK  | 23790 | 50RB#0  | 23.80 | PASS |
| Band17 | 10MHz | QPSK  | 23800 | 1RB#0   | 25.03 | PASS |
| Band17 | 10MHz | QPSK  | 23800 | 1RB#24  | 24.79 | PASS |
| Band17 | 10MHz | QPSK  | 23800 | 1RB#49  | 24.21 | PASS |
| Band17 | 10MHz | QPSK  | 23800 | 25RB#0  | 24.01 | PASS |
| Band17 | 10MHz | QPSK  | 23800 | 25RB#12 | 23.90 | PASS |
| Band17 | 10MHz | QPSK  | 23800 | 25RB#25 | 23.66 | PASS |
| Band17 | 10MHz | QPSK  | 23800 | 50RB#0  | 23.70 | PASS |
| Band17 | 10MHz | 16QAM | 23780 | 1RB#24  | 23.64 | PASS |
| Band17 | 10MHz | 16QAM | 23780 | 1RB#49  | 23.29 | PASS |
| Band17 | 10MHz | 16QAM | 23780 | 1RB#0   | 23.82 | PASS |
| Band17 | 10MHz | 16QAM | 23780 | 25RB#25 | 23.37 | PASS |
| Band17 | 10MHz | 16QAM | 23780 | 25RB#0  | 23.08 | PASS |
| Band17 | 10MHz | 16QAM | 23780 | 25RB#12 | 23.09 | PASS |
| Band17 | 10MHz | 16QAM | 23780 | 50RB#0  | 22.93 | PASS |
| Band17 | 10MHz | 16QAM | 23790 | 1RB#0   | 24.00 | PASS |
| Band17 | 10MHz | 16QAM | 23790 | 1RB#24  | 23.89 | PASS |

|        |       |       |       |         |       |      |
|--------|-------|-------|-------|---------|-------|------|
| Band17 | 10MHz | 16QAM | 23790 | 1RB#49  | 23.35 | PASS |
| Band17 | 10MHz | 16QAM | 23790 | 25RB#12 | 23.24 | PASS |
| Band17 | 10MHz | 16QAM | 23790 | 25RB#0  | 23.24 | PASS |
| Band17 | 10MHz | 16QAM | 23790 | 25RB#25 | 23.28 | PASS |
| Band17 | 10MHz | 16QAM | 23790 | 50RB#0  | 22.96 | PASS |
| Band17 | 10MHz | 16QAM | 23800 | 1RB#0   | 23.68 | PASS |
| Band17 | 10MHz | 16QAM | 23800 | 1RB#24  | 23.47 | PASS |
| Band17 | 10MHz | 16QAM | 23800 | 1RB#49  | 23.18 | PASS |
| Band17 | 10MHz | 16QAM | 23800 | 25RB#0  | 22.87 | PASS |
| Band17 | 10MHz | 16QAM | 23800 | 25RB#12 | 22.86 | PASS |
| Band17 | 10MHz | 16QAM | 23800 | 25RB#25 | 22.88 | PASS |
| Band17 | 10MHz | 16QAM | 23800 | 50RB#0  | 23.01 | PASS |

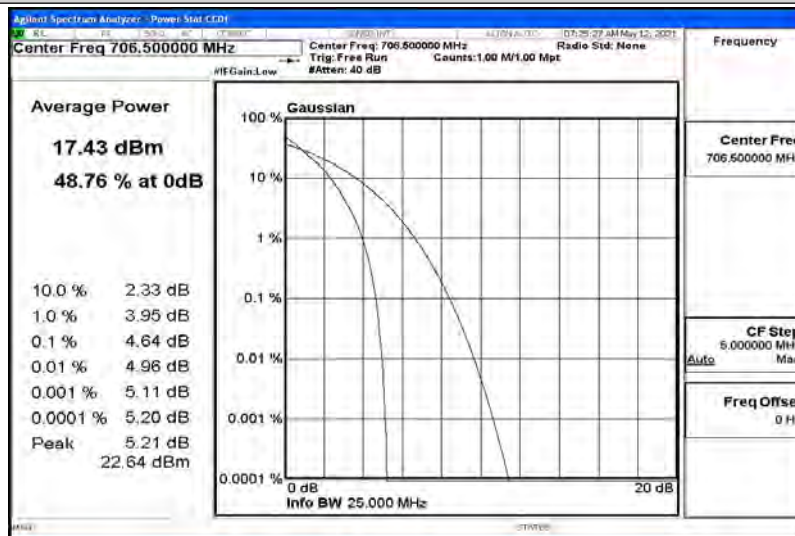
## I.2 Peak-to-Average Ratio(CCDF)

### Test Result

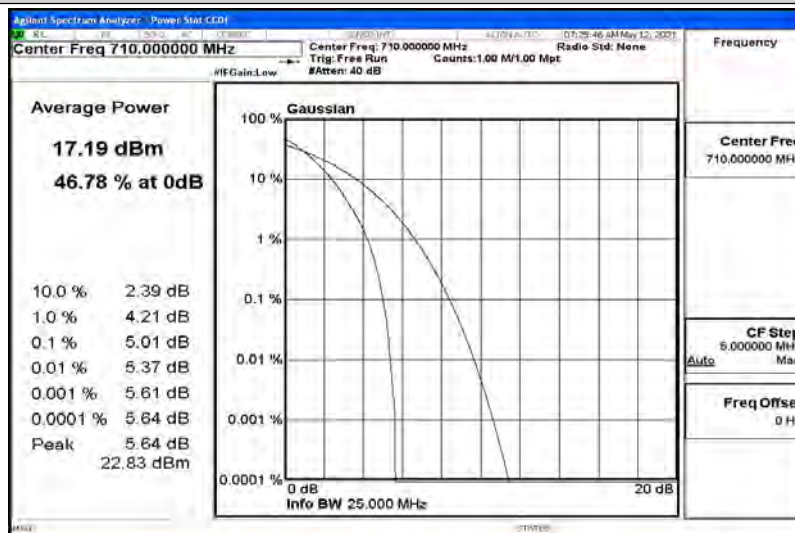
| Band   | Bandwidth | Modulation | Channel | RB Configuration | Result(dB) | Limit(dB) | Verdict |
|--------|-----------|------------|---------|------------------|------------|-----------|---------|
| Band17 | 5MHz      | QPSK       | 23755   | 25RB#0           | 4.64       | 13        | PASS    |
| Band17 | 5MHz      | QPSK       | 23790   | 25RB#0           | 5.01       | 13        | PASS    |
| Band17 | 5MHz      | QPSK       | 23825   | 25RB#0           | 5.34       | 13        | PASS    |
| Band17 | 5MHz      | 16QAM      | 23755   | 25RB#0           | 5.44       | 13        | PASS    |
| Band17 | 5MHz      | 16QAM      | 23790   | 25RB#0           | 5.77       | 13        | PASS    |
| Band17 | 5MHz      | 16QAM      | 23825   | 25RB#0           | 6.04       | 13        | PASS    |
| Band17 | 10MHz     | QPSK       | 23780   | 50RB#0           | 5.10       | 13        | PASS    |
| Band17 | 10MHz     | QPSK       | 23790   | 50RB#0           | 4.65       | 13        | PASS    |
| Band17 | 10MHz     | QPSK       | 23800   | 50RB#0           | 5.10       | 13        | PASS    |
| Band17 | 10MHz     | 16QAM      | 23780   | 50RB#0           | 5.66       | 13        | PASS    |
| Band17 | 10MHz     | 16QAM      | 23790   | 50RB#0           | 5.23       | 13        | PASS    |
| Band17 | 10MHz     | 16QAM      | 23800   | 50RB#0           | 5.91       | 13        | PASS    |

## Test Graphs

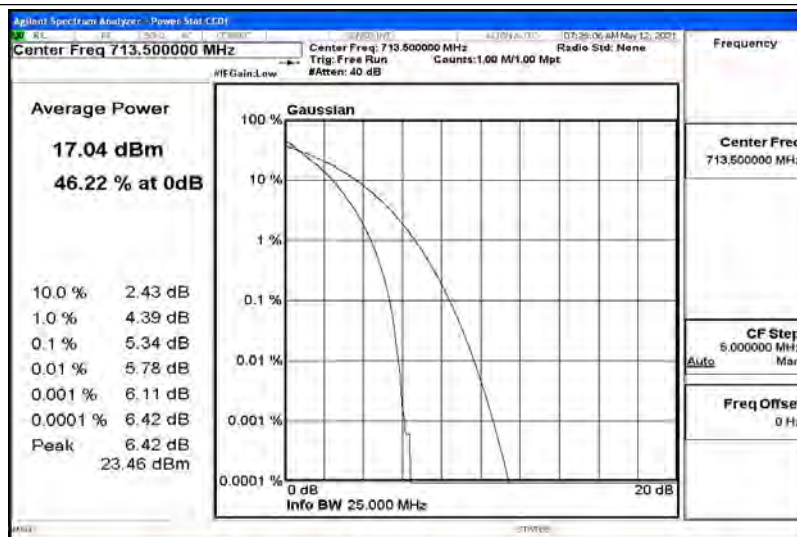
Band17-5MHz-QPSK-23755-25RB#0



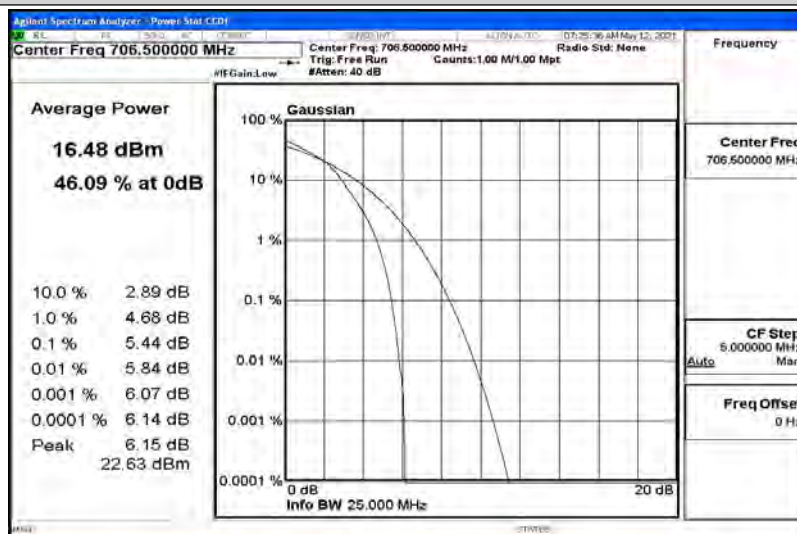
Band17-5MHz-QPSK-23790-25RB#0



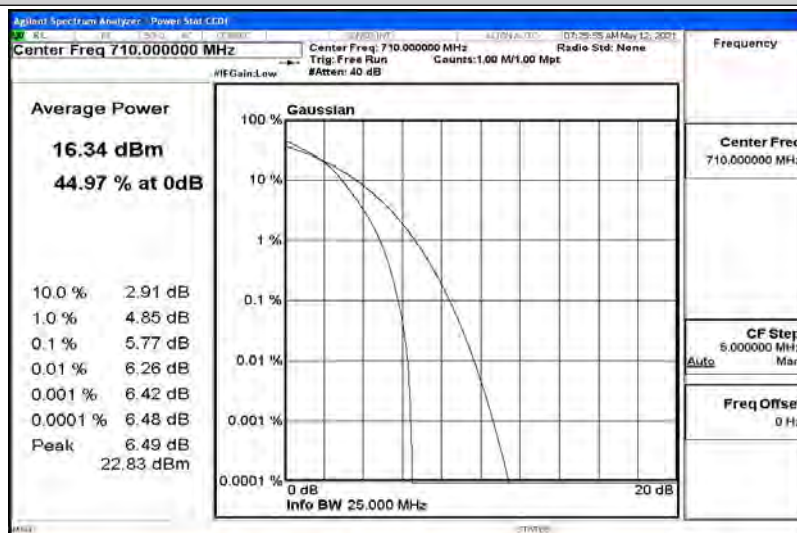
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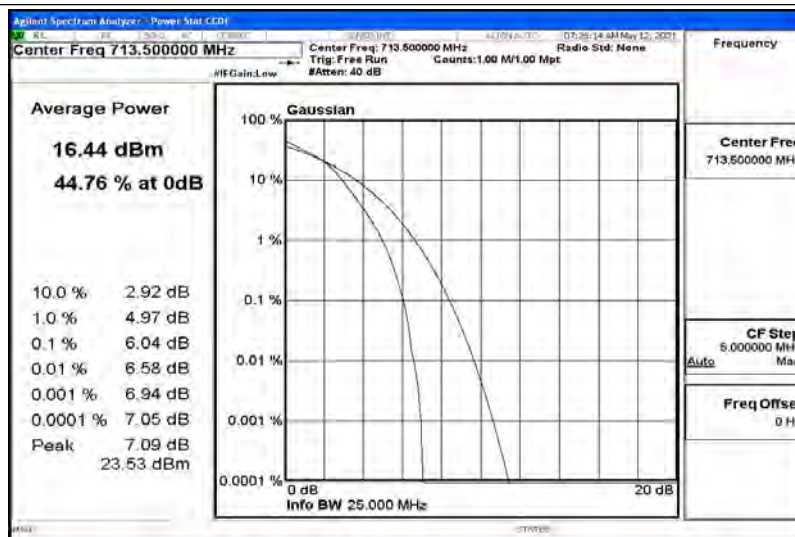
Band17-5MHz-16QAM-23755-25RB#0



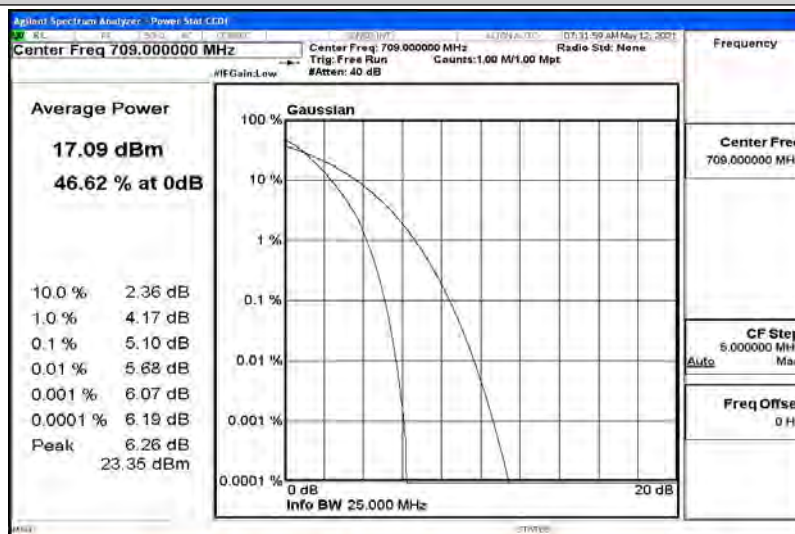
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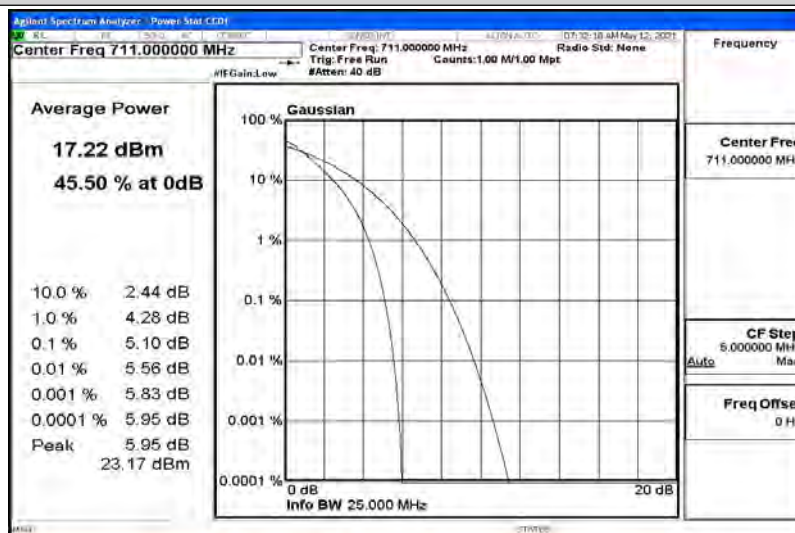
Band17-5MHz-16QAM-23825-25RB#0



Band17-10MHz-QPSK-23780-50RB#0

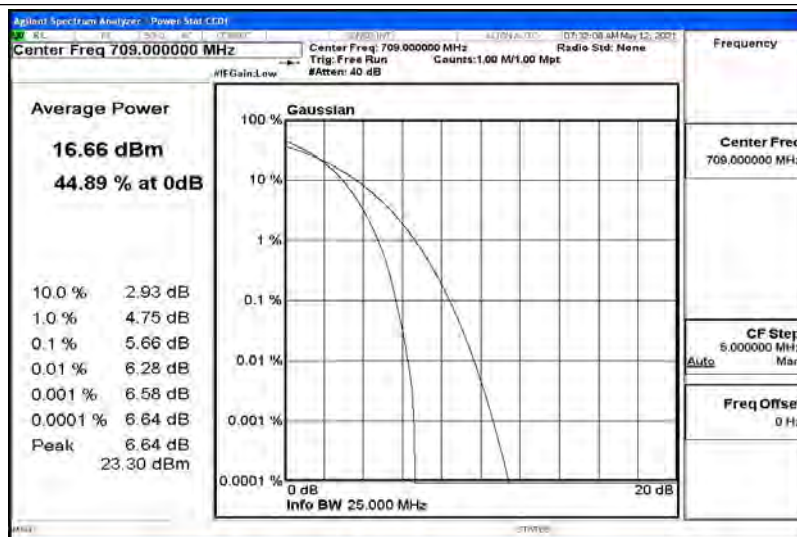


Band17-10MHz-QPSK-23800-50RB#0

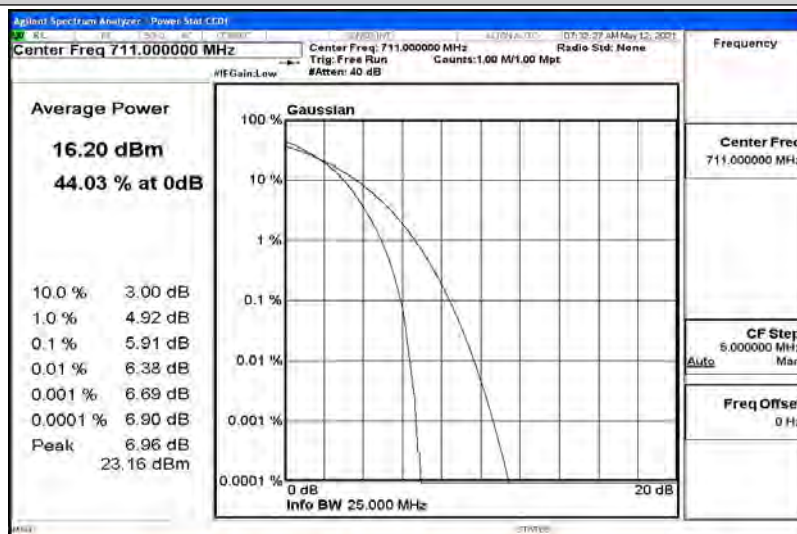


Band17-10MHz-16QAM-23780-50RB#0





## Band17-10MHz-16QAM-23800-50RB#0



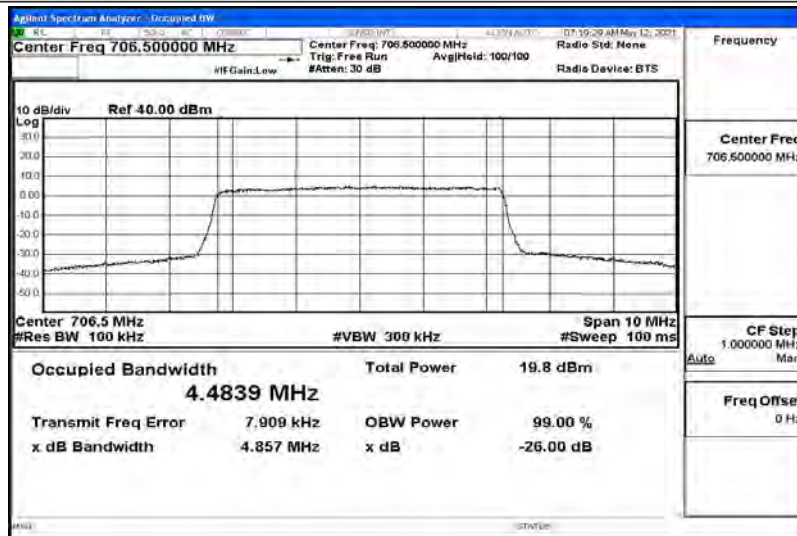
## I.3 26dB Bandwidth and Occupied Bandwidth

### Test Result

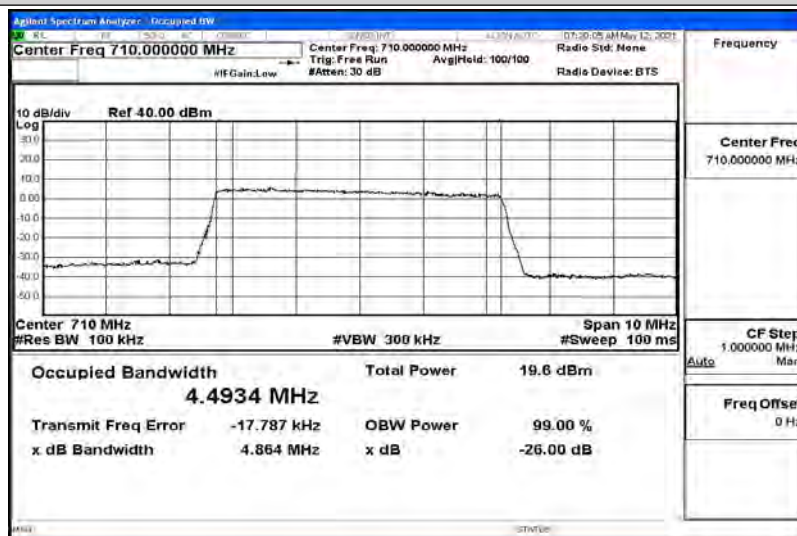
| Band   | Bandwidth | Modulation | Channel | RB Configuration | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
|--------|-----------|------------|---------|------------------|--------------------------|----------------------|---------|
| Band17 | 5MHz      | QPSK       | 23755   | 25RB#0           | 4.4839                   | 4.857                | PASS    |
| Band17 | 5MHz      | QPSK       | 23790   | 25RB#0           | 4.4934                   | 4.864                | PASS    |
| Band17 | 5MHz      | QPSK       | 23825   | 25RB#0           | 4.5100                   | 4.893                | PASS    |
| Band17 | 5MHz      | 16QAM      | 23755   | 25RB#0           | 4.4886                   | 4.872                | PASS    |
| Band17 | 5MHz      | 16QAM      | 23790   | 25RB#0           | 4.4994                   | 4.854                | PASS    |
| Band17 | 5MHz      | 16QAM      | 23825   | 25RB#0           | 4.5091                   | 4.880                | PASS    |
| Band17 | 10MHz     | QPSK       | 23780   | 50RB#0           | 8.9627                   | 9.537                | PASS    |
| Band17 | 10MHz     | QPSK       | 23790   | 50RB#0           | 8.9753                   | 9.538                | PASS    |
| Band17 | 10MHz     | QPSK       | 23800   | 50RB#0           | 9.0117                   | 9.591                | PASS    |
| Band17 | 10MHz     | 16QAM      | 23780   | 50RB#0           | 8.9484                   | 9.509                | PASS    |
| Band17 | 10MHz     | 16QAM      | 23790   | 50RB#0           | 8.9705                   | 9.533                | PASS    |
| Band17 | 10MHz     | 16QAM      | 23800   | 50RB#0           | 8.9946                   | 9.562                | PASS    |

## Test Graphs

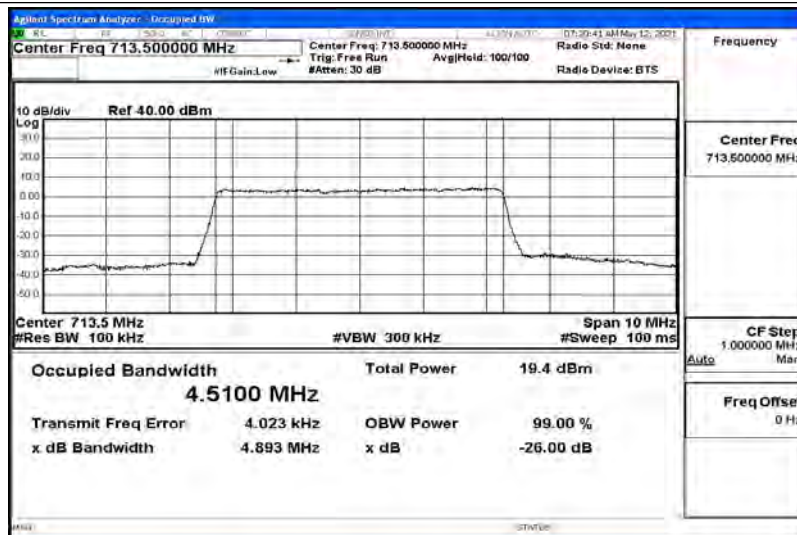
Band17-5MHz-QPSK-23755-25RB#0-4.4839



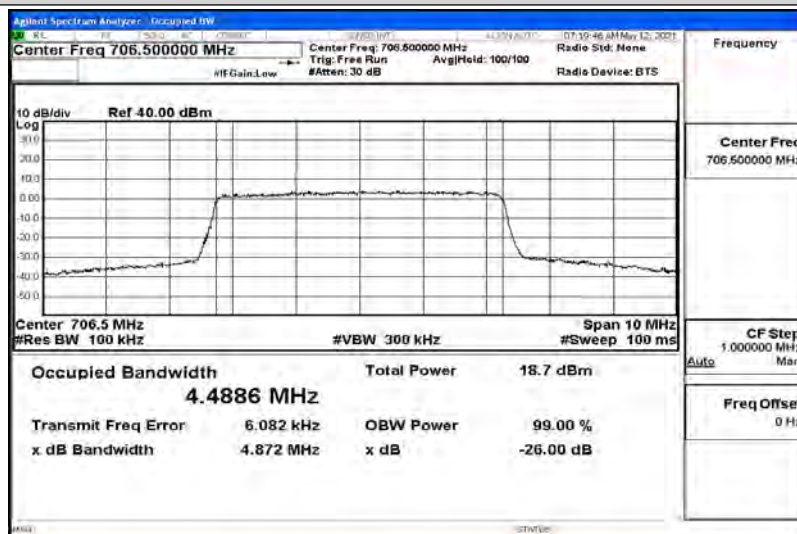
Band17-5MHz-QPSK-23790-25RB#0-4.4934



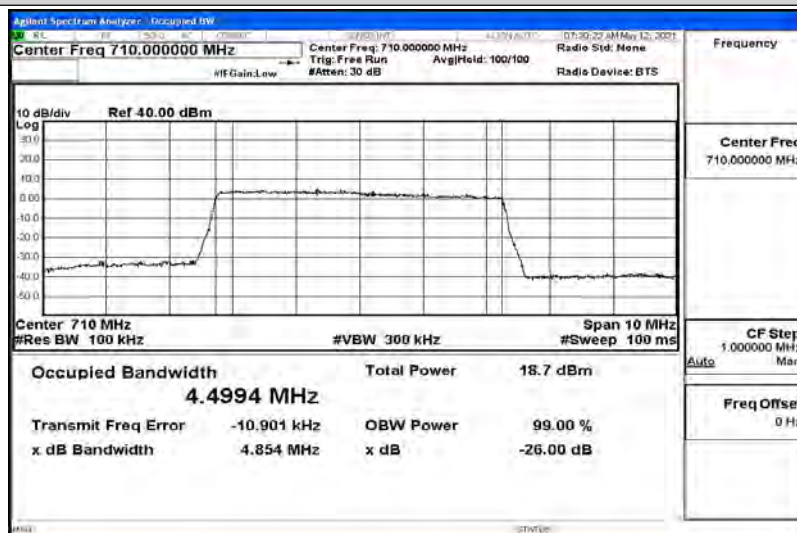
Band17-5MHz-QPSK-23825-25RB#0-4.5100



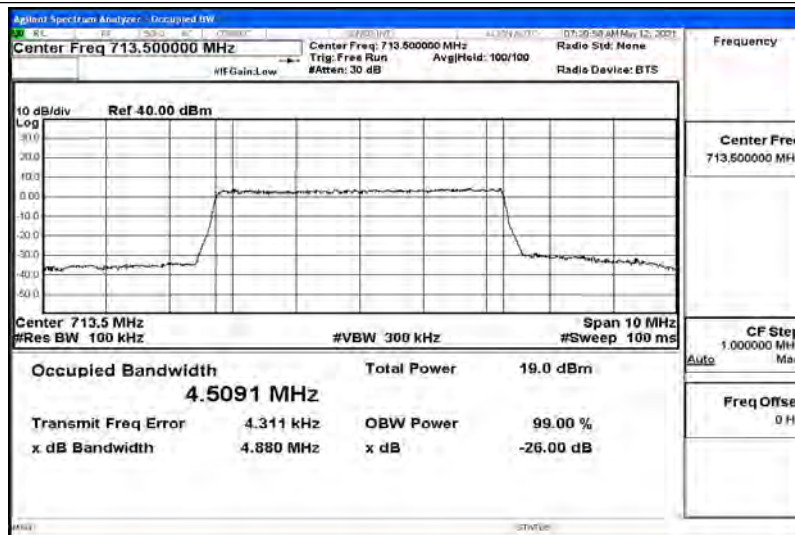
Band17-5MHz-16QAM-23755-25RB#0-4.4886



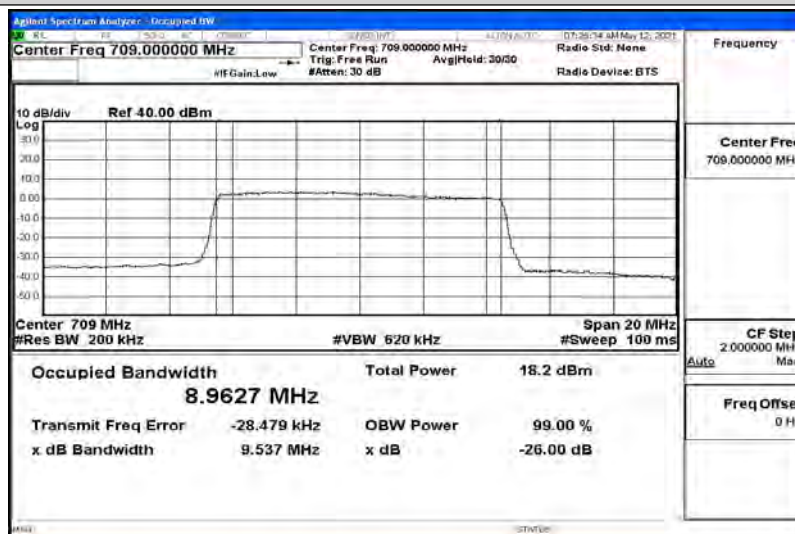
Band17-5MHz-16QAM-23790-25RB#0-4.4994



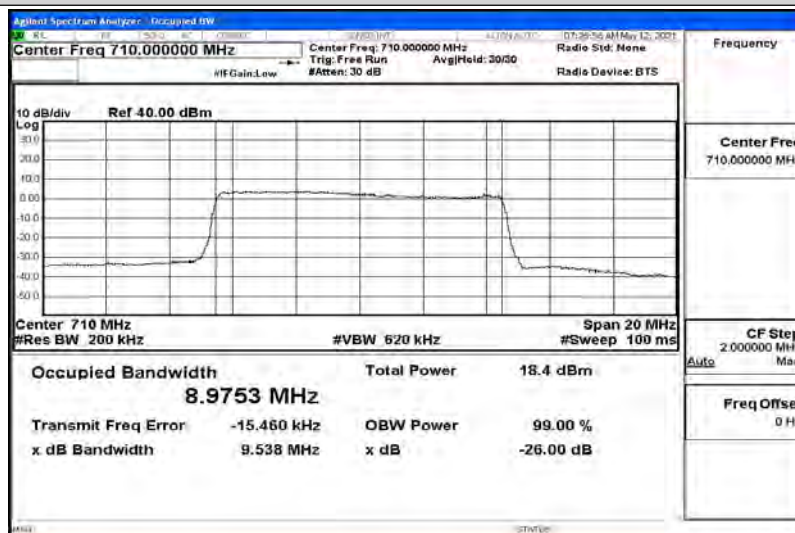
Band17-5MHz-16QAM-23825-25RB#0-4.5091



Band17-10MHz-QPSK-23780-50RB#0-8.9627

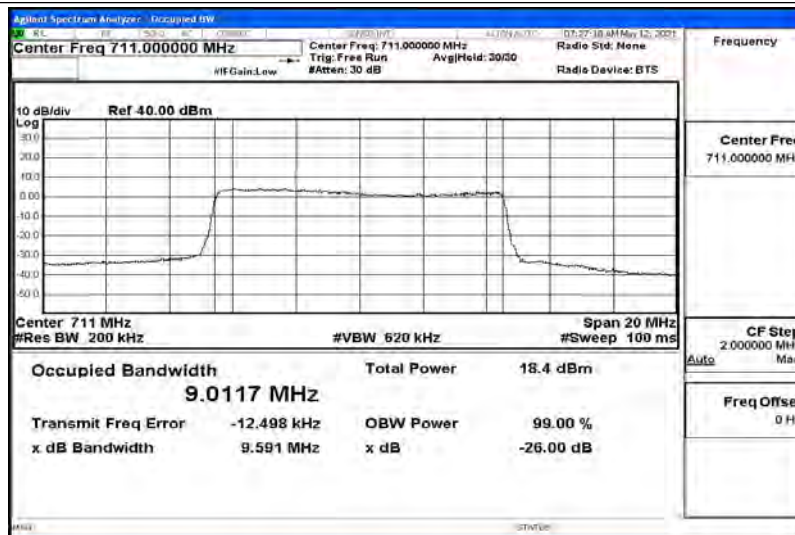


Band17-10MHz-QPSK-23790-50RB#0-8.9753

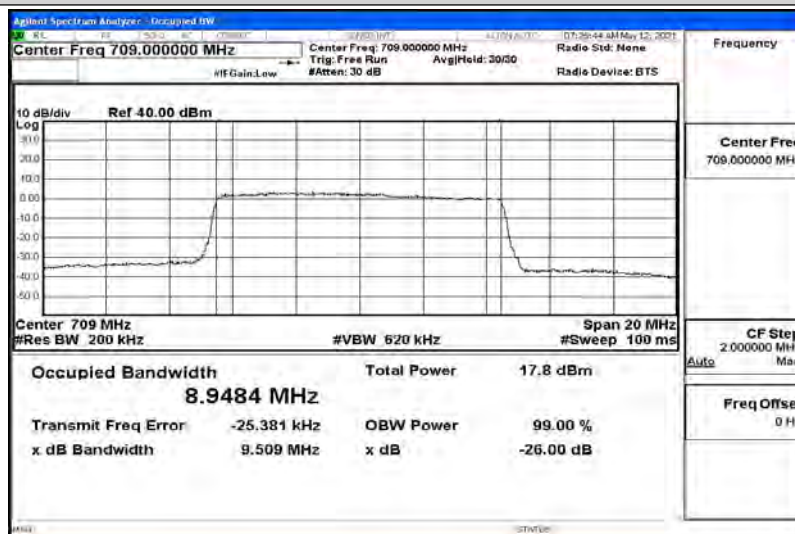


Band17-10MHz-QPSK-23800-50RB#0-9.0117

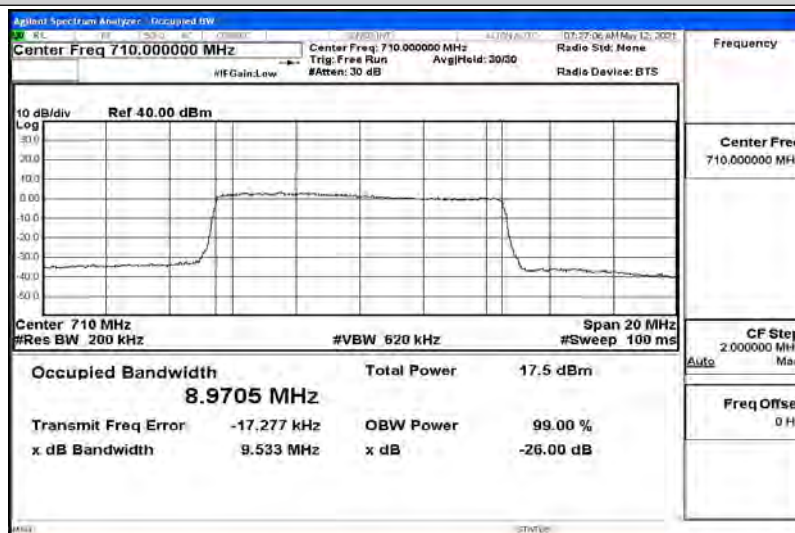




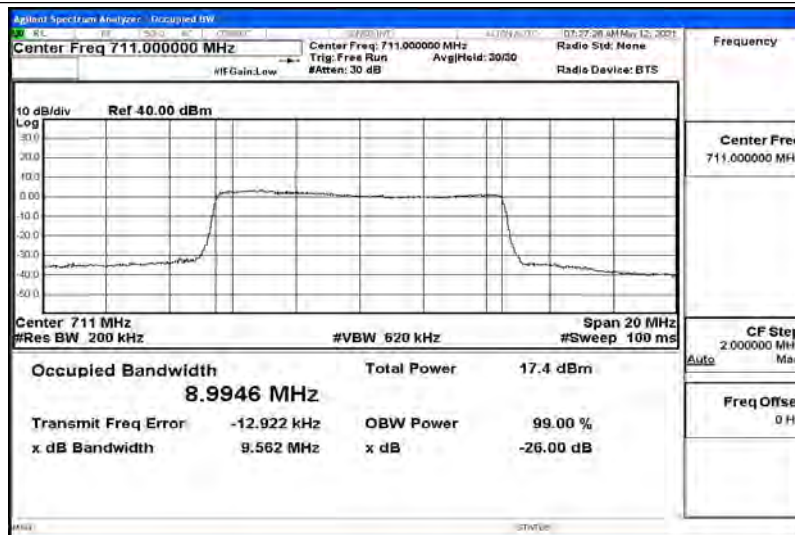
Band17-10MHz-16QAM-23780-50RB#0-8.9484



Band17-10MHz-16QAM-23790-50RB#0-8.9705



Band17-10MHz-16QAM-23800-50RB#0-8.9946



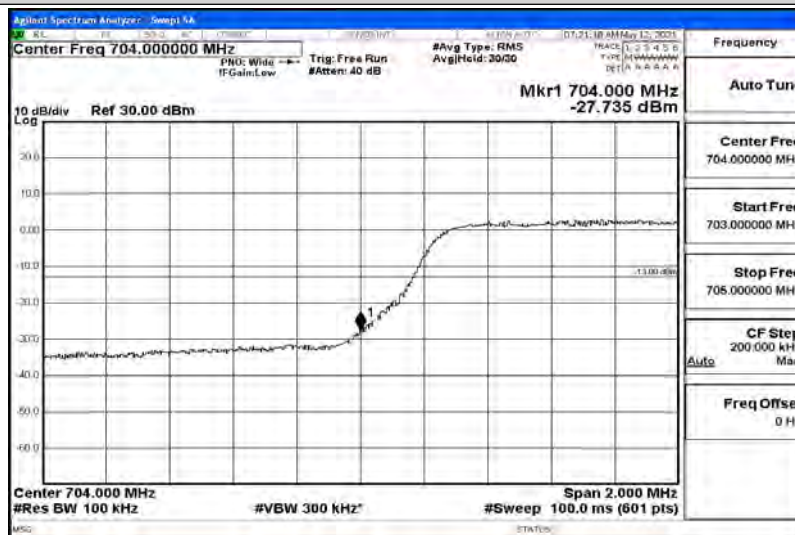
## I.4 Band Edge

### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Result(dBm) | Verdict |
|--------|-----------|------------|---------|------------------|-------------|---------|
| Band17 | 5MHz      | QPSK       | 23755   | 25RB#0           | -27.74      | PASS    |
| Band17 | 5MHz      | QPSK       | 23825   | 25RB#0           | -27.05      | PASS    |
| Band17 | 5MHz      | 16QAM      | 23755   | 25RB#0           | -28.41      | PASS    |
| Band17 | 5MHz      | 16QAM      | 23825   | 25RB#0           | -25.69      | PASS    |
| Band17 | 10MHz     | QPSK       | 23780   | 50RB#0           | -30.05      | PASS    |
| Band17 | 10MHz     | QPSK       | 23800   | 50RB#0           | -29.57      | PASS    |
| Band17 | 10MHz     | 16QAM      | 23780   | 50RB#0           | -29.20      | PASS    |
| Band17 | 10MHz     | 16QAM      | 23800   | 50RB#0           | -31.41      | PASS    |

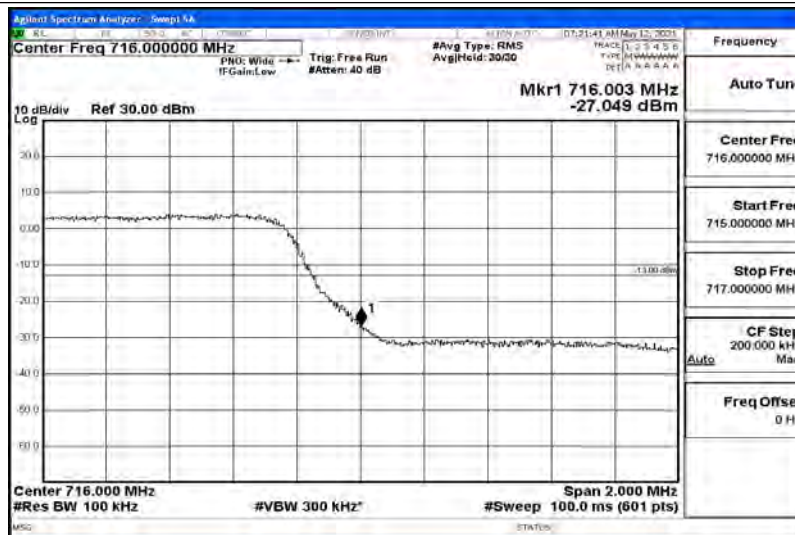
### Test Graphs

Band17-5MHz-QPSK-23755-25RB#0

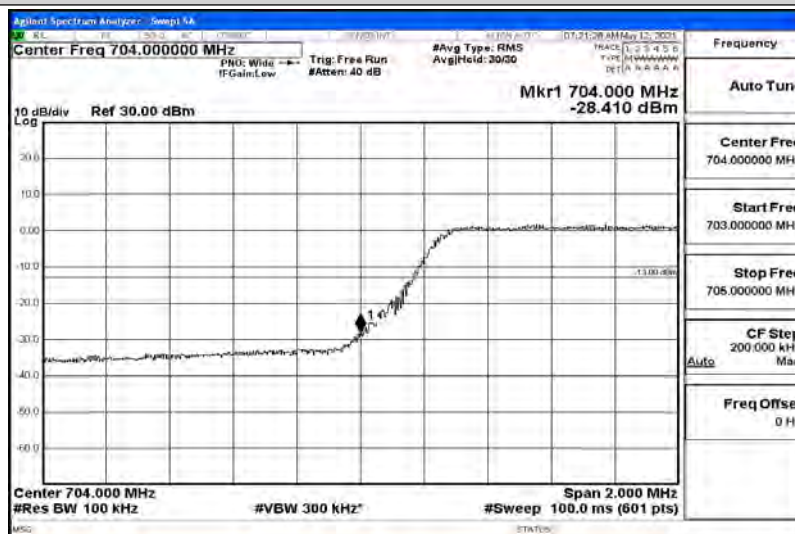


Band17-5MHz-QPSK-23825-25RB#0

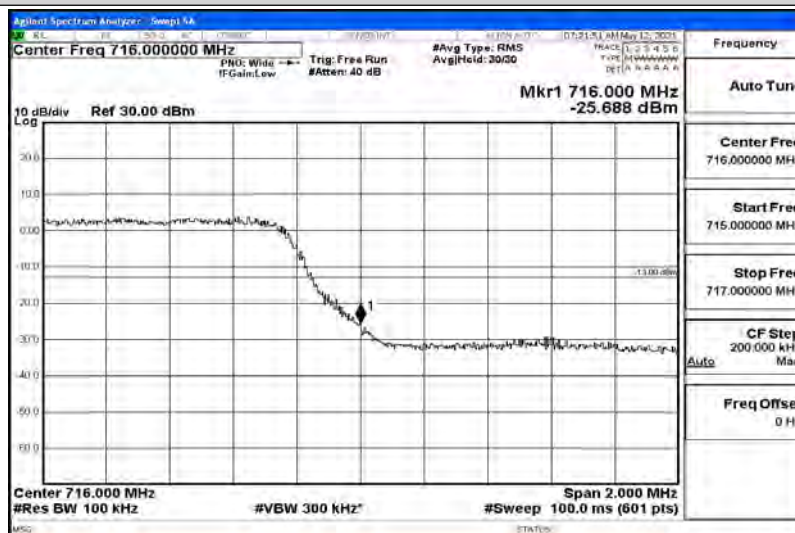




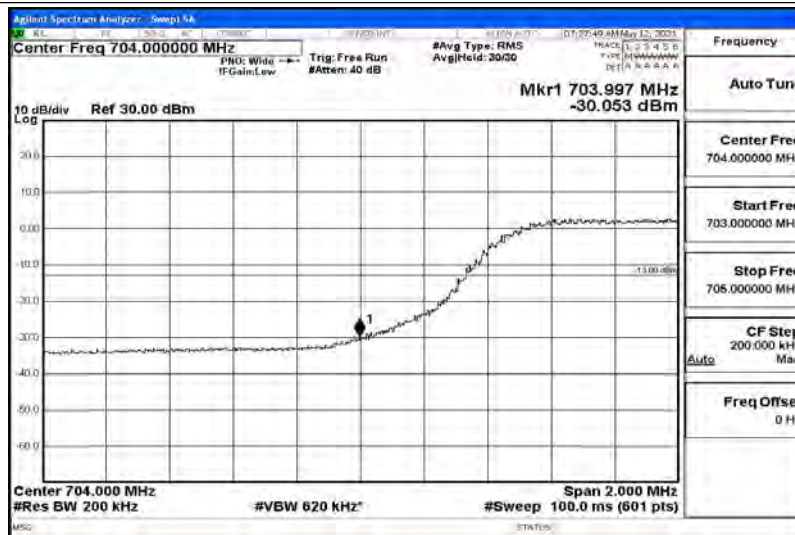
Band17-5MHz-16QAM-23755-25RB#0



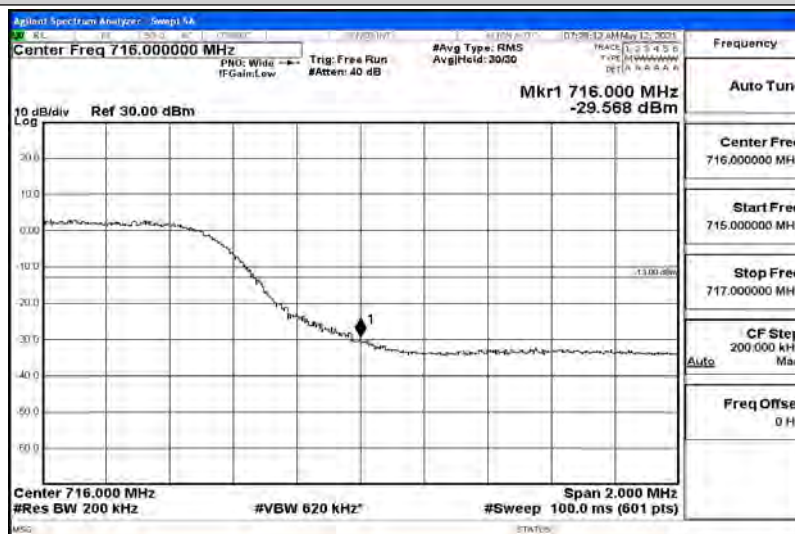
Band17-5MHz-16QAM-23825-25RB#0



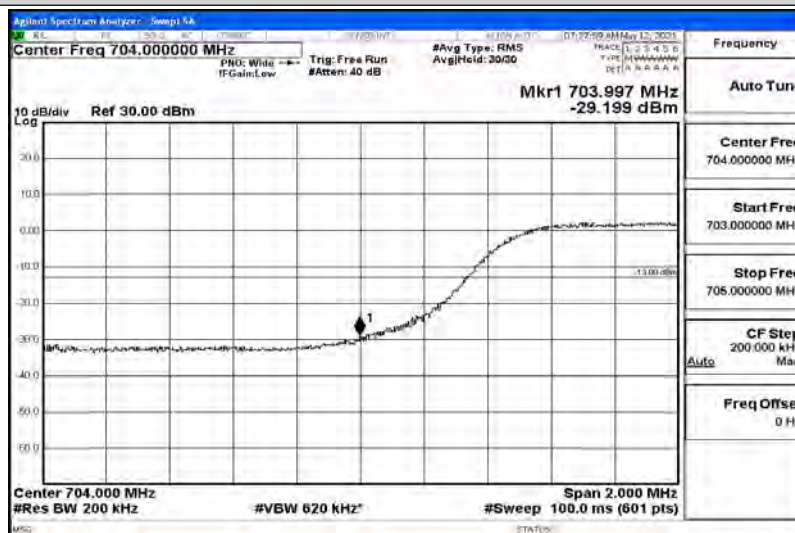
Band17-10MHz-QPSK-23780-50RB#0



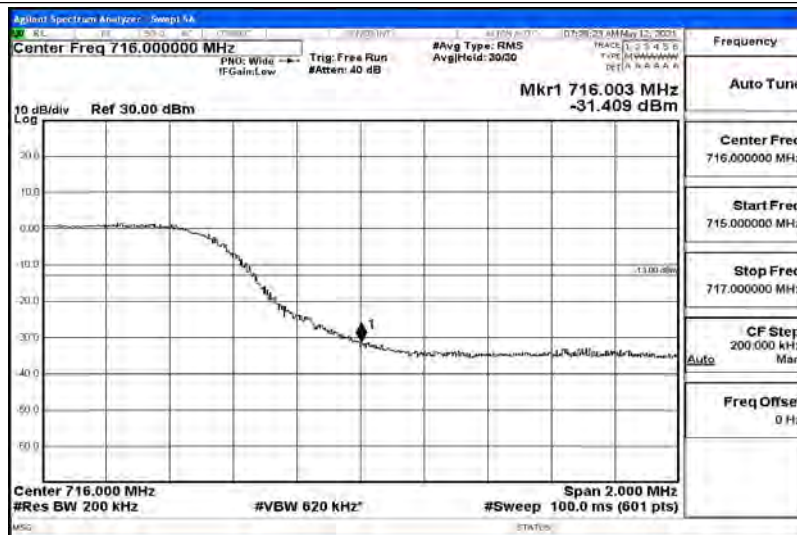
Band17-10MHz-QPSK-23800-50RB#0



Band17-10MHz-16QAM-23780-50RB#0



Band17-10MHz-16QAM-23800-50RB#0



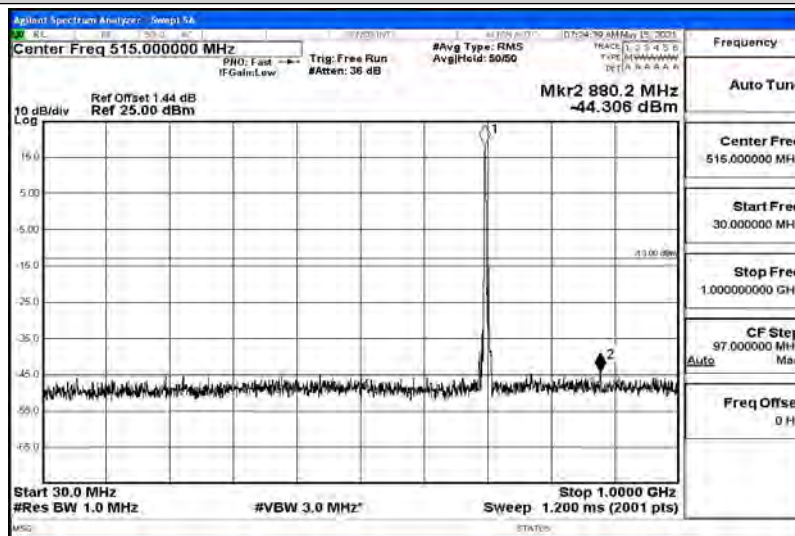
## I.5 Conducted Spurious Emission

### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Frequency Range      | Result (dBm) | Verdict |
|--------|-----------|------------|---------|------------------|----------------------|--------------|---------|
| Band17 | 5MHz      | QPSK       | 23755   | 1RB#0            | Range1:30~1000MHz    | -44.31       | PASS    |
| Band17 | 5MHz      | QPSK       | 23755   | 1RB#0            | Range2:1000~10000MHz | -46.58       | PASS    |
| Band17 | 5MHz      | QPSK       | 23790   | 1RB#0            | Range1:30~1000MHz    | -44.93       | PASS    |
| Band17 | 5MHz      | QPSK       | 23790   | 1RB#0            | Range2:1000~10000MHz | -46.66       | PASS    |
| Band17 | 5MHz      | QPSK       | 23825   | 1RB#0            | Range1:30~1000MHz    | -44.78       | PASS    |
| Band17 | 5MHz      | QPSK       | 23825   | 1RB#0            | Range2:1000~10000MHz | -46.59       | PASS    |
| Band17 | 5MHz      | 16QAM      | 23755   | 1RB#0            | Range1:30~1000MHz    | -43.64       | PASS    |
| Band17 | 5MHz      | 16QAM      | 23755   | 1RB#0            | Range2:1000~10000MHz | -46.55       | PASS    |
| Band17 | 5MHz      | 16QAM      | 23790   | 1RB#0            | Range1:30~1000MHz    | -44.85       | PASS    |
| Band17 | 5MHz      | 16QAM      | 23790   | 1RB#0            | Range2:1000~10000MHz | -46.43       | PASS    |
| Band17 | 5MHz      | 16QAM      | 23825   | 1RB#0            | Range1:30~1000MHz    | -45.26       | PASS    |
| Band17 | 5MHz      | 16QAM      | 23825   | 1RB#0            | Range2:1000~10000MHz | -46.52       | PASS    |
| Band17 | 10MHz     | QPSK       | 23780   | 1RB#0            | Range1:30~1000MHz    | -44.91       | PASS    |
| Band17 | 10MHz     | QPSK       | 23780   | 1RB#0            | Range2:1000~10000MHz | -46.66       | PASS    |
| Band17 | 10MHz     | QPSK       | 23790   | 1RB#0            | Range1:30~1000MHz    | -44.68       | PASS    |
| Band17 | 10MHz     | QPSK       | 23790   | 1RB#0            | Range2:1000~10000MHz | -46.42       | PASS    |
| Band17 | 10MHz     | QPSK       | 23800   | 1RB#0            | Range1:30~1000MHz    | -44.6        | PASS    |
| Band17 | 10MHz     | QPSK       | 23800   | 1RB#0            | Range2:1000~10000MHz | -46.74       | PASS    |
| Band17 | 10MHz     | 16QAM      | 23780   | 1RB#0            | Range1:30~1000MHz    | -45.03       | PASS    |
| Band17 | 10MHz     | 16QAM      | 23780   | 1RB#0            | Range2:1000~10000MHz | -46.72       | PASS    |
| Band17 | 10MHz     | 16QAM      | 23790   | 1RB#0            | Range1:30~1000MHz    | -44.48       | PASS    |
| Band17 | 10MHz     | 16QAM      | 23790   | 1RB#0            | Range2:1000~10000MHz | -46.66       | PASS    |
| Band17 | 10MHz     | 16QAM      | 23800   | 1RB#0            | Range1:30~1000MHz    | -44.29       | PASS    |
| Band17 | 10MHz     | 16QAM      | 23800   | 1RB#0            | Range2:1000~10000MHz | -46.57       | PASS    |

## Test Graphs

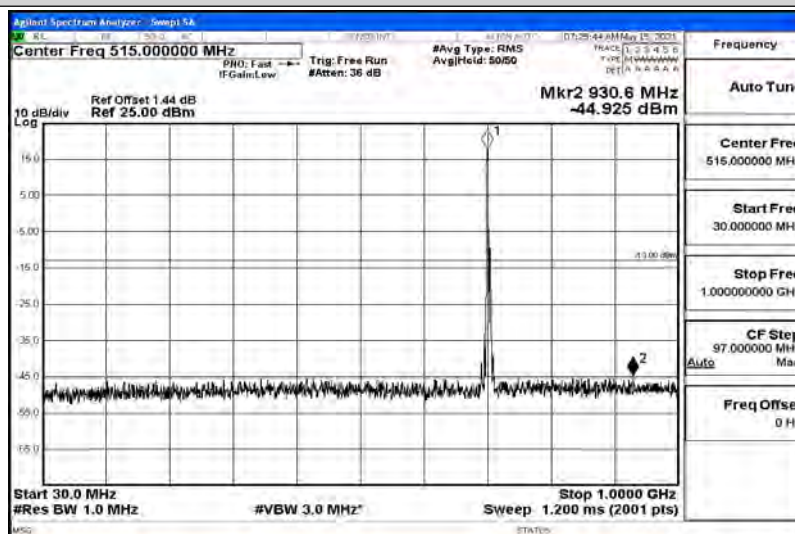
Band17-5MHz-QPSK-23755-1RB#0-Range1:30~1000MHz



Band17-5MHz-QPSK-23755-1RB#0-Range2:1000~10000MHz



Band17-5MHz-QPSK-23790-1RB#0-Range1:30~1000MHz

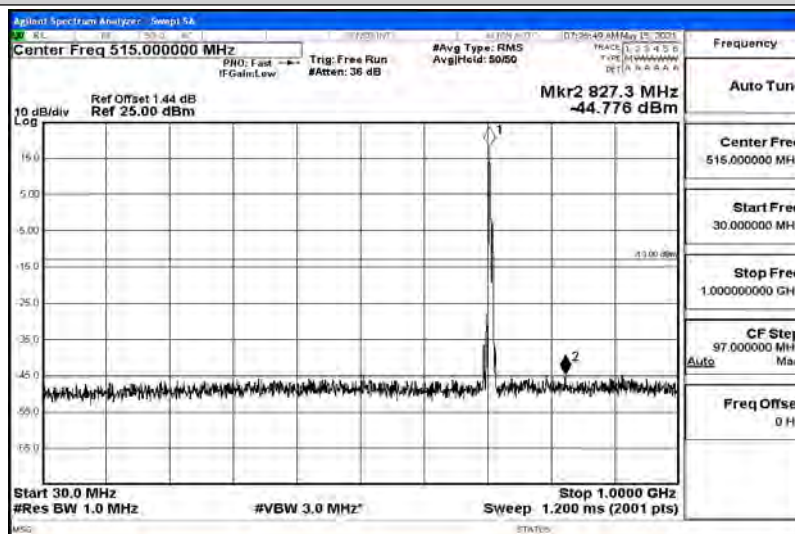


Band17-5MHz-QPSK-23790-1RB#0-Range2:1000~10000MHz

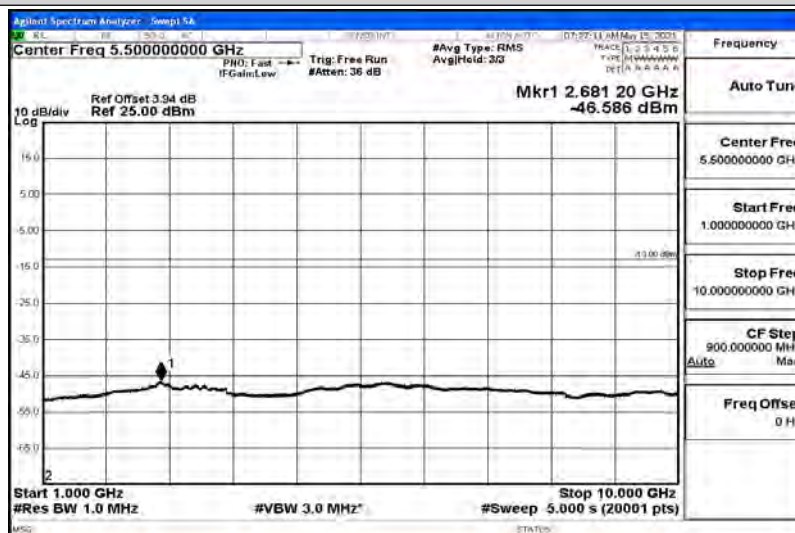




Band17-5MHz-QPSK-23825-1RB#0-Range1:30~1000MHz

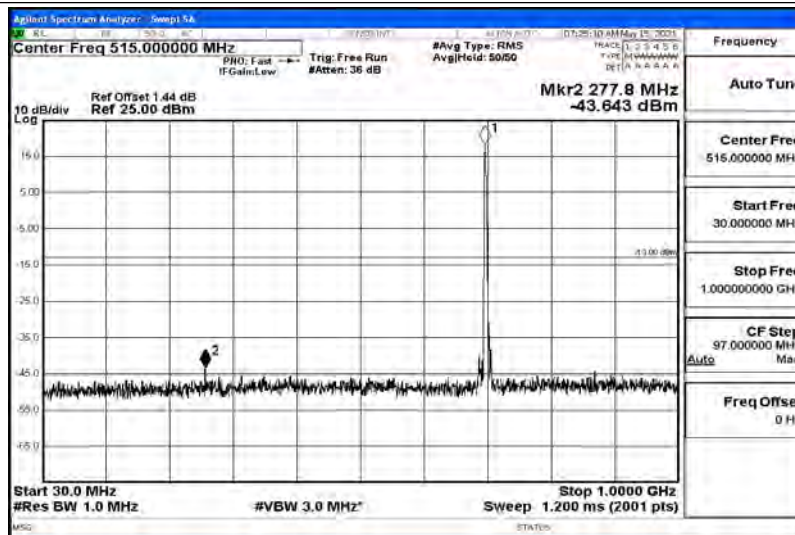


Band17-5MHz-QPSK-23825-1RB#0-Range2:1000~10000MHz



Band17-5MHz-16QAM-23755-1RB#0-Range1:30~1000MHz

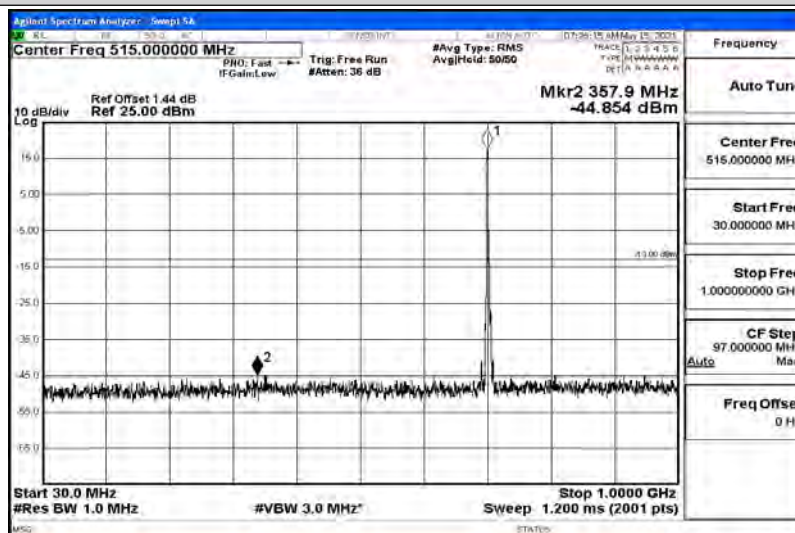




Band17-5MHz-16QAM-23755-1RB#0-Range2:1000~10000MHz



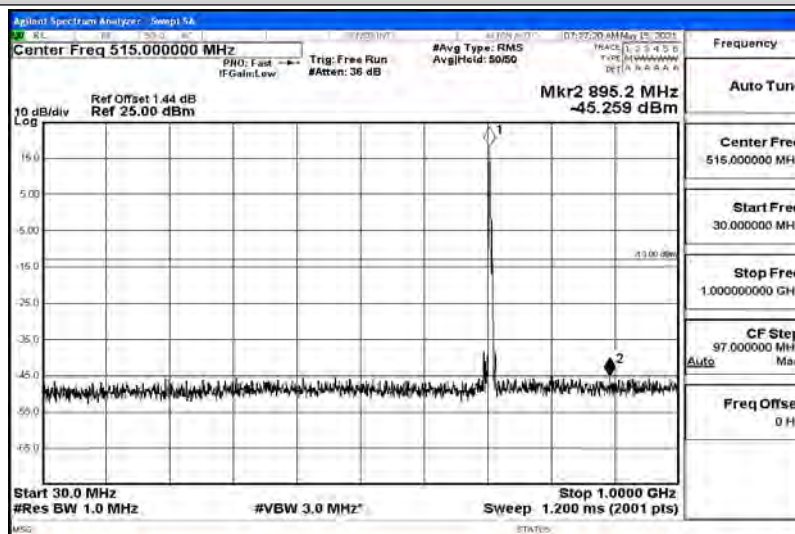
Band17-5MHz-16QAM-23790-1RB#0-Range1:30~1000MHz



Band17-5MHz-16QAM-23790-1RB#0-Range2:1000~10000MHz



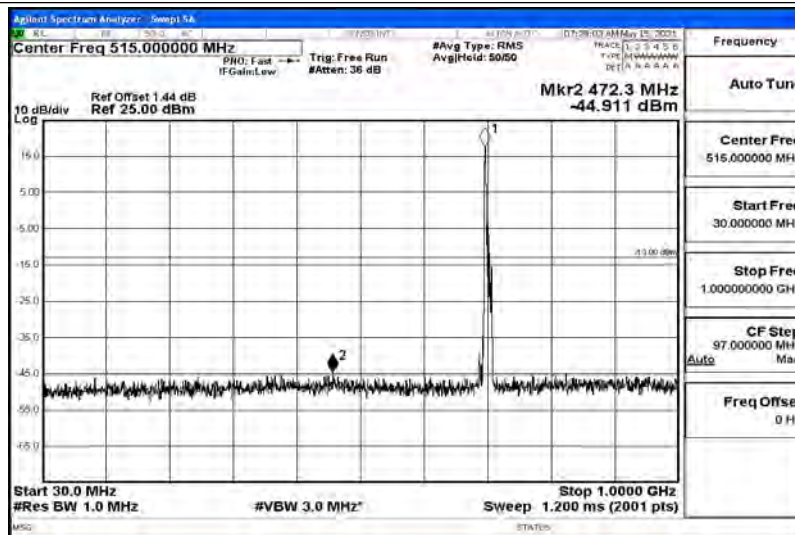
Band17-5MHz-16QAM-23825-1RB#0-Range1:30~1000MHz



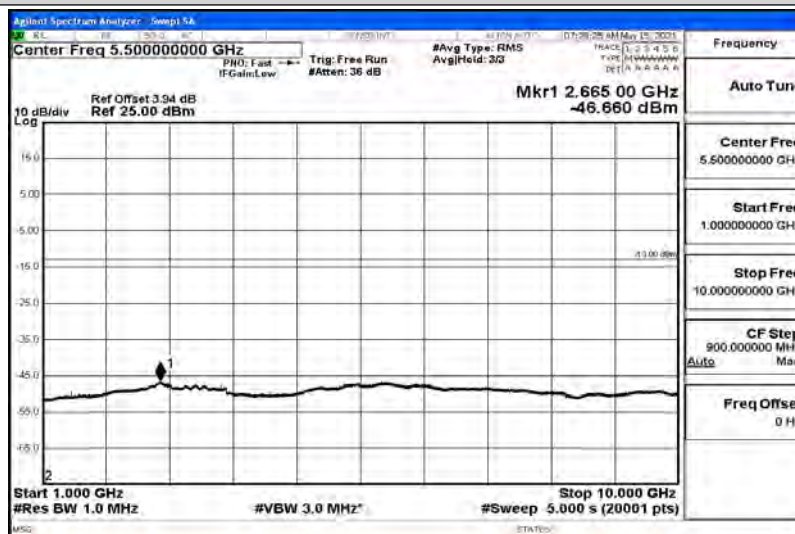
Band17-5MHz-16QAM-23825-1RB#0-Range2:1000~10000MHz



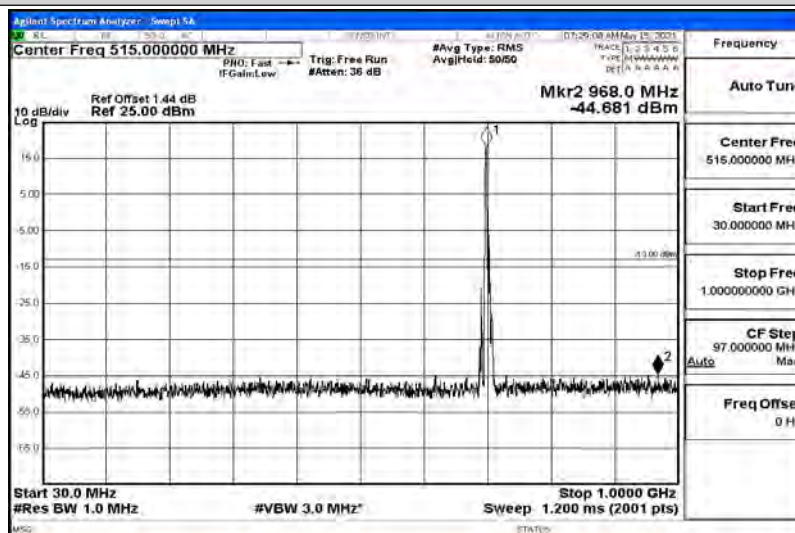
Band17-10MHz-QPSK-23780-1RB#0-Range1:30~1000MHz



Band17-10MHz-QPSK-23780-1RB#0-Range2:1000~10000MHz

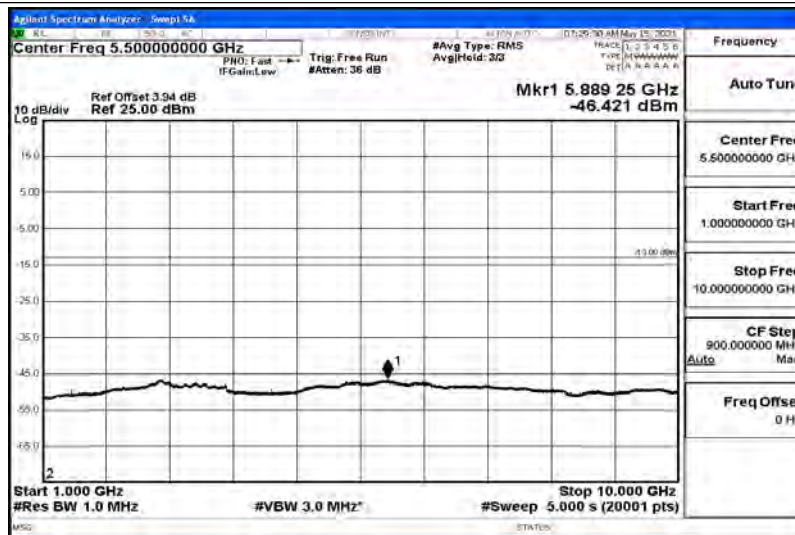


Band17-10MHz-QPSK-23790-1RB#0-Range1:30~1000MHz

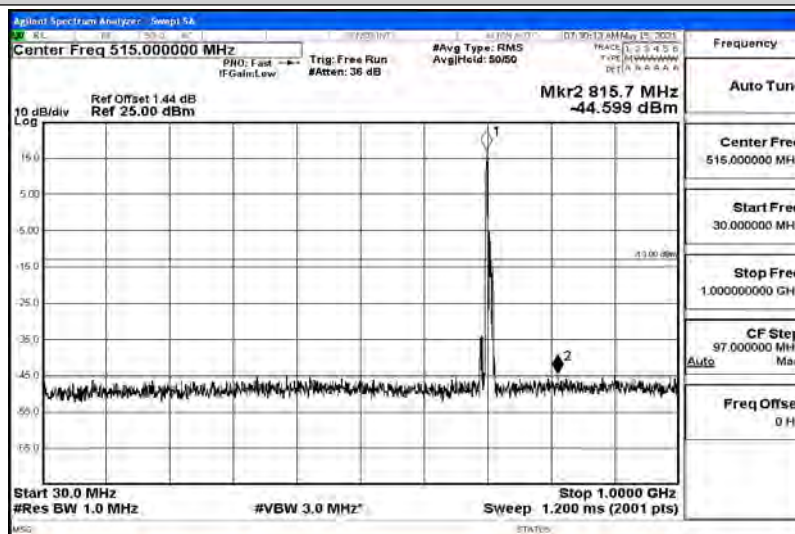


Band17-10MHz-QPSK-23790-1RB#0-Range2:1000~10000MHz





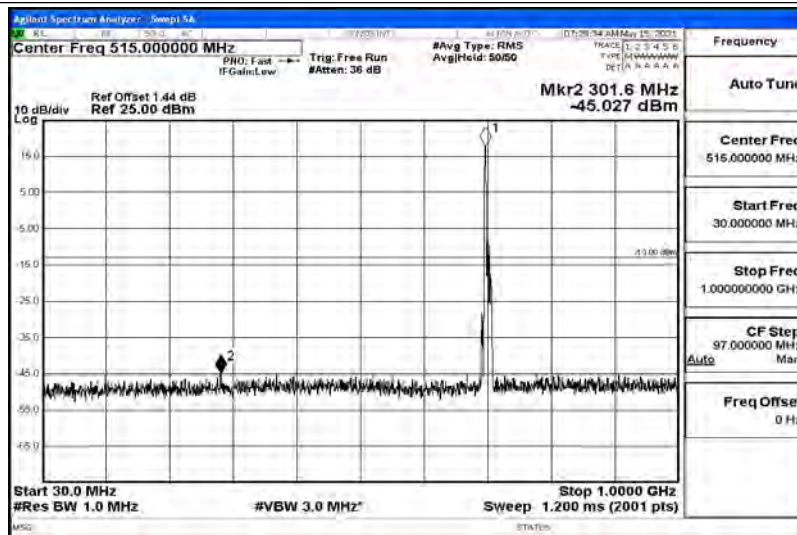
Band17-10MHz-QPSK-23800-1RB#0-Range1:30~1000MHz



Band17-10MHz-QPSK-23800-1RB#0-Range2:1000~10000MHz



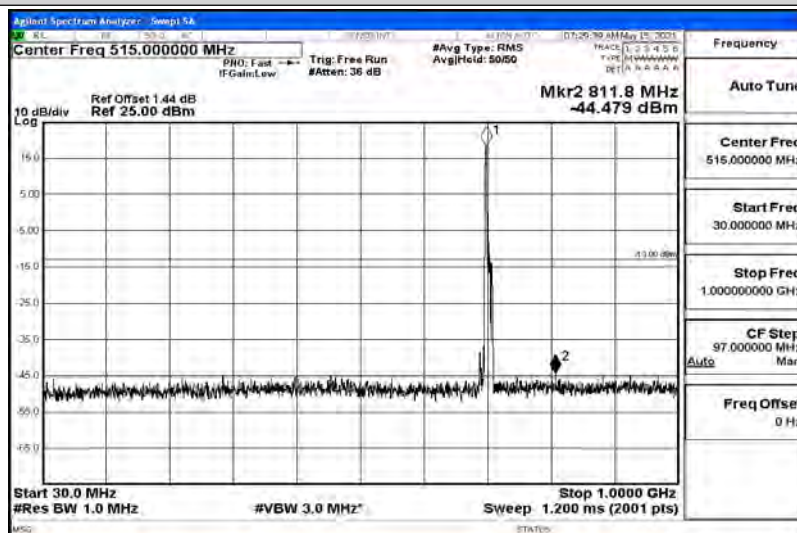
Band17-10MHz-16QAM-23780-1RB#0-Range1:30~1000MHz



Band17-10MHz-16QAM-23780-1RB#0-Range2:1000~10000MHz



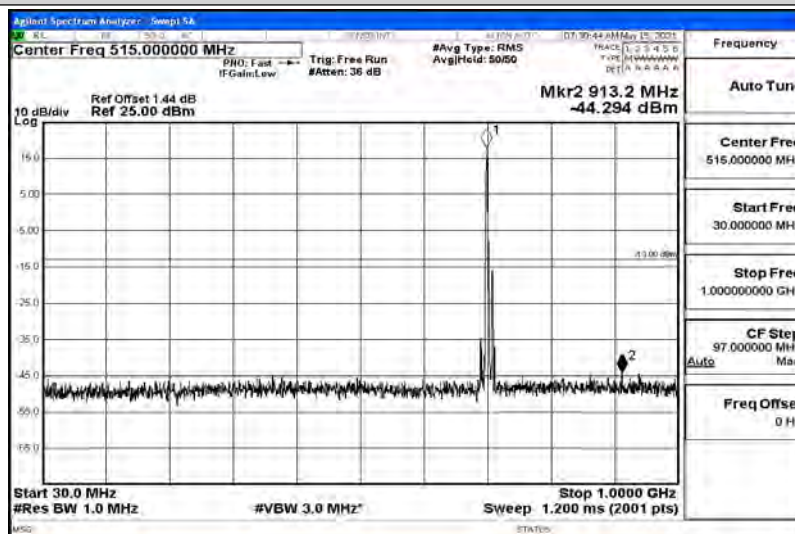
Band17-10MHz-16QAM-23790-1RB#0-Range1:30~1000MHz



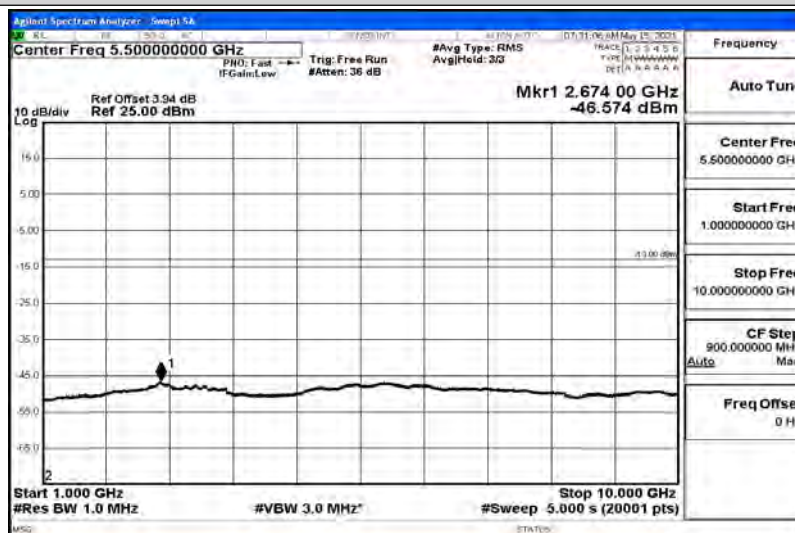
Band17-10MHz-16QAM-23790-1RB#0-Range2:1000~10000MHz



Band17-10MHz-16QAM-23800-1RB#0-Range1:30~1000MHz



Band17-10MHz-16QAM-23800-1RB#0-Range2:1000~10000MHz



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