

## Appendix A Conduction Data for LTE

### 1.Transmitter Conducted Output Power And ERP/EIRP

#### Test Result

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB    | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP (W) | ERP/EIRP(Limit) (dBm) | Verdict |
|------|-----------------|---------|------------|------------|-------|-----------------------|----------------|--------------|-----------------------|---------|
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 1@0   | 22.26                 | 17.57          | 0.0572       | 34.77                 | PASS    |
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 1@12  | 22.33                 | 17.64          | 0.0581       | 34.77                 | PASS    |
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 1@24  | 22.23                 | 17.54          | 0.0568       | 34.77                 | PASS    |
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 12@0  | 21.29                 | 16.6           | 0.0457       | 34.77                 | PASS    |
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 12@6  | 21.21                 | 16.52          | 0.0449       | 34.77                 | PASS    |
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 12@11 | 21.28                 | 16.59          | 0.0456       | 34.77                 | PASS    |
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 25@0  | 21.28                 | 16.59          | 0.0456       | 34.77                 | PASS    |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 1@0   | 21.64                 | 16.95          | 0.0495       | 34.77                 | PASS    |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 1@12  | 21.59                 | 16.9           | 0.049        | 34.77                 | PASS    |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 1@24  | 21.61                 | 16.92          | 0.0492       | 34.77                 | PASS    |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 12@0  | 20.33                 | 15.64          | 0.0367       | 34.77                 | PASS    |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 12@6  | 20.28                 | 15.59          | 0.0363       | 34.77                 | PASS    |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 12@11 | 20.28                 | 15.59          | 0.0363       | 34.77                 | PASS    |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 25@0  | 20.29                 | 15.6           | 0.0363       | 34.77                 | PASS    |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 1@0   | 22.19                 | 17.5           | 0.0563       | 34.77                 | PASS    |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 1@12  | 22.27                 | 17.58          | 0.0573       | 34.77                 | PASS    |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 1@24  | 22.14                 | 17.45          | 0.0556       | 34.77                 | PASS    |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 12@0  | 21.26                 | 16.57          | 0.0454       | 34.77                 | PASS    |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 12@6  | 21.15                 | 16.46          | 0.0442       | 34.77                 | PASS    |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 12@11 | 21.26                 | 16.57          | 0.0454       | 34.77                 | PASS    |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 25@0  | 21.2                  | 16.51          | 0.0448       | 34.77                 | PASS    |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 1@0   | 21.24                 | 16.55          | 0.0452       | 34.77                 | PASS    |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 1@12  | 21.34                 | 16.65          | 0.0462       | 34.77                 | PASS    |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 1@24  | 21.1                  | 16.41          | 0.0437       | 34.77                 | PASS    |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 12@0  | 20.19                 | 15.5           | 0.0355       | 34.77                 | PASS    |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 12@6  | 20.25                 | 15.56          | 0.0359       | 34.77                 | PASS    |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 12@11 | 20.24                 | 15.55          | 0.0359       | 34.77                 | PASS    |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 25@0  | 20.18                 | 15.49          | 0.0354       | 34.77                 | PASS    |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 1@0   | 22.21                 | 17.52          | 0.0565       | 34.77                 | PASS    |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 1@12  | 22.34                 | 17.65          | 0.0583       | 34.77                 | PASS    |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 1@24  | 22.12                 | 17.43          | 0.0553       | 34.77                 | PASS    |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 12@0  | 21.34                 | 16.65          | 0.0462       | 34.77                 | PASS    |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 12@6  | 21.27                 | 16.58          | 0.0455       | 34.77                 | PASS    |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 12@11 | 21.25                 | 16.56          | 0.0453       | 34.77                 | PASS    |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 25@0  | 21.26                 | 16.57          | 0.0454       | 34.77                 | PASS    |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 1@0   | 20.8                  | 16.11          | 0.0408       | 34.77                 | PASS    |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 1@12  | 20.98                 | 16.29          | 0.0426       | 34.77                 | PASS    |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 1@24  | 20.92                 | 16.23          | 0.0419       | 34.77                 | PASS    |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 12@0  | 20.34                 | 15.65          | 0.0367       | 34.77                 | PASS    |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 12@6  | 20.36                 | 15.67          | 0.0369       | 34.77                 | PASS    |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 12@11 | 20.35                 | 15.66          | 0.0368       | 34.77                 | PASS    |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 25@0  | 20.38                 | 15.69          | 0.0371       | 34.77                 | PASS    |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 1@0   | 22.34                 | 17.65          | 0.0582       | 34.77                 | PASS    |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 1@24  | 22.31                 | 17.62          | 0.0579       | 34.77                 | PASS    |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 1@49  | 22.26                 | 17.57          | 0.0571       | 34.77                 | PASS    |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 25@0  | 21.13                 | 16.44          | 0.0441       | 34.77                 | PASS    |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 25@12 | 21.16                 | 16.47          | 0.0443       | 34.77                 | PASS    |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 25@24 | 21.18                 | 16.49          | 0.0445       | 34.77                 | PASS    |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 50@0  | 21.2                  | 16.51          | 0.0448       | 34.77                 | PASS    |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 1@0   | 21.38                 | 16.69          | 0.0466       | 34.77                 | PASS    |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 1@24  | 21.39                 | 16.7           | 0.0468       | 34.77                 | PASS    |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 1@49  | 21.28                 | 16.59          | 0.0457       | 34.77                 | PASS    |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 25@0  | 20.38                 | 15.69          | 0.037        | 34.77                 | PASS    |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 25@12 | 20.35                 | 15.66          | 0.0368       | 34.77                 | PASS    |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 25@24 | 20.29                 | 15.6           | 0.0363       | 34.77                 | PASS    |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 50@0  | 20.26                 | 15.57          | 0.0361       | 34.77                 | PASS    |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 1@0   | 22.35                 | 17.66          | 0.0584       | 34.77                 | PASS    |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 1@24  | 22.35                 | 17.66          | 0.0583       | 34.77                 | PASS    |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 1@49  | 22.29                 | 17.6           | 0.0575       | 34.77                 | PASS    |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 25@0  | 21.2                  | 16.51          | 0.0447       | 34.77                 | PASS    |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 25@12 | 21.19                 | 16.5           | 0.0446       | 34.77                 | PASS    |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 25@24 | 21.09                 | 16.4           | 0.0437       | 34.77                 | PASS    |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 50@0  | 21.09                 | 16.4           | 0.0436       | 34.77                 | PASS    |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 1@0   | 21.04                 | 16.35          | 0.0431       | 34.77                 | PASS    |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 1@24  | 20.97                 | 16.28          | 0.0424       | 34.77                 | PASS    |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 1@49  | 20.91                 | 16.22          | 0.0419       | 34.77                 | PASS    |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 25@0  | 20.28                 | 15.59          | 0.0362       | 34.77                 | PASS    |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 25@12 | 20.3                  | 15.61          | 0.0364       | 34.77                 | PASS    |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 25@24 | 20.32                 | 15.63          | 0.0365       | 34.77                 | PASS    |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 50@0  | 20.29                 | 15.6           | 0.0363       | 34.77                 | PASS    |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 1@0   | 22.28                 | 17.59          | 0.0574       | 34.77                 | PASS    |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 1@24  | 22.49                 | 17.8           | 0.0603       | 34.77                 | PASS    |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 1@49  | 22.35                 | 17.66          | 0.0583       | 34.77                 | PASS    |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 25@0  | 21.12                 | 16.43          | 0.0439       | 34.77                 | PASS    |

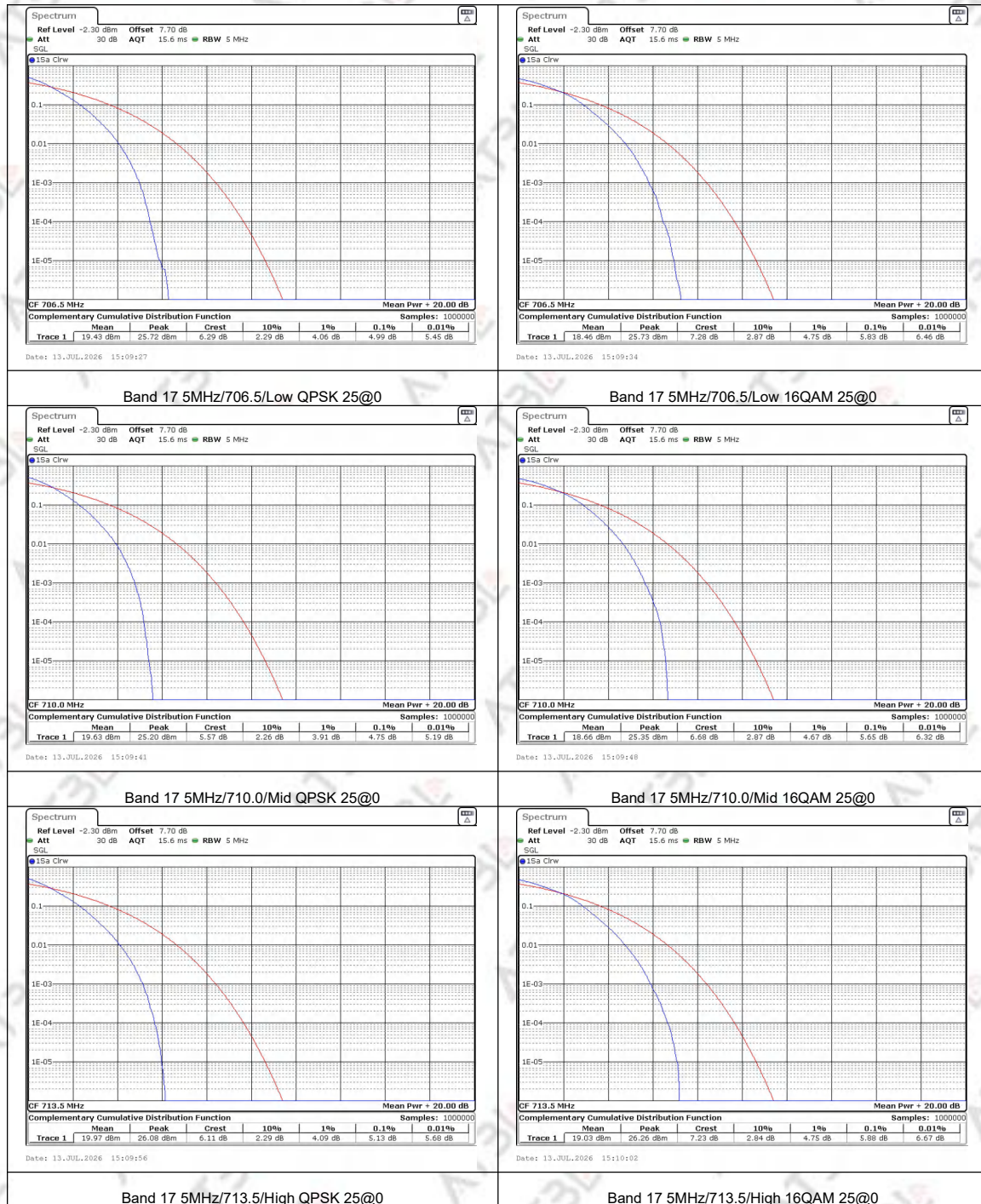
|    |      |       |       |       |       |       |       |        |       |      |
|----|------|-------|-------|-------|-------|-------|-------|--------|-------|------|
| 17 | 10.0 | 23800 | 711.0 | QPSK  | 25@12 | 21.22 | 16.53 | 0.045  | 34.77 | PASS |
| 17 | 10.0 | 23800 | 711.0 | QPSK  | 25@24 | 21.12 | 16.43 | 0.044  | 34.77 | PASS |
| 17 | 10.0 | 23800 | 711.0 | QPSK  | 50@0  | 21.13 | 16.44 | 0.0441 | 34.77 | PASS |
| 17 | 10.0 | 23800 | 711.0 | 16QAM | 1@0   | 21.72 | 17.03 | 0.0504 | 34.77 | PASS |
| 17 | 10.0 | 23800 | 711.0 | 16QAM | 1@24  | 21.82 | 17.13 | 0.0516 | 34.77 | PASS |
| 17 | 10.0 | 23800 | 711.0 | 16QAM | 1@49  | 21.68 | 16.99 | 0.05   | 34.77 | PASS |
| 17 | 10.0 | 23800 | 711.0 | 16QAM | 25@0  | 20.28 | 15.59 | 0.0362 | 34.77 | PASS |
| 17 | 10.0 | 23800 | 711.0 | 16QAM | 25@12 | 20.26 | 15.57 | 0.0361 | 34.77 | PASS |
| 17 | 10.0 | 23800 | 711.0 | 16QAM | 25@24 | 20.26 | 15.57 | 0.036  | 34.77 | PASS |
| 17 | 10.0 | 23800 | 711.0 | 16QAM | 50@0  | 20.22 | 15.53 | 0.0357 | 34.77 | PASS |

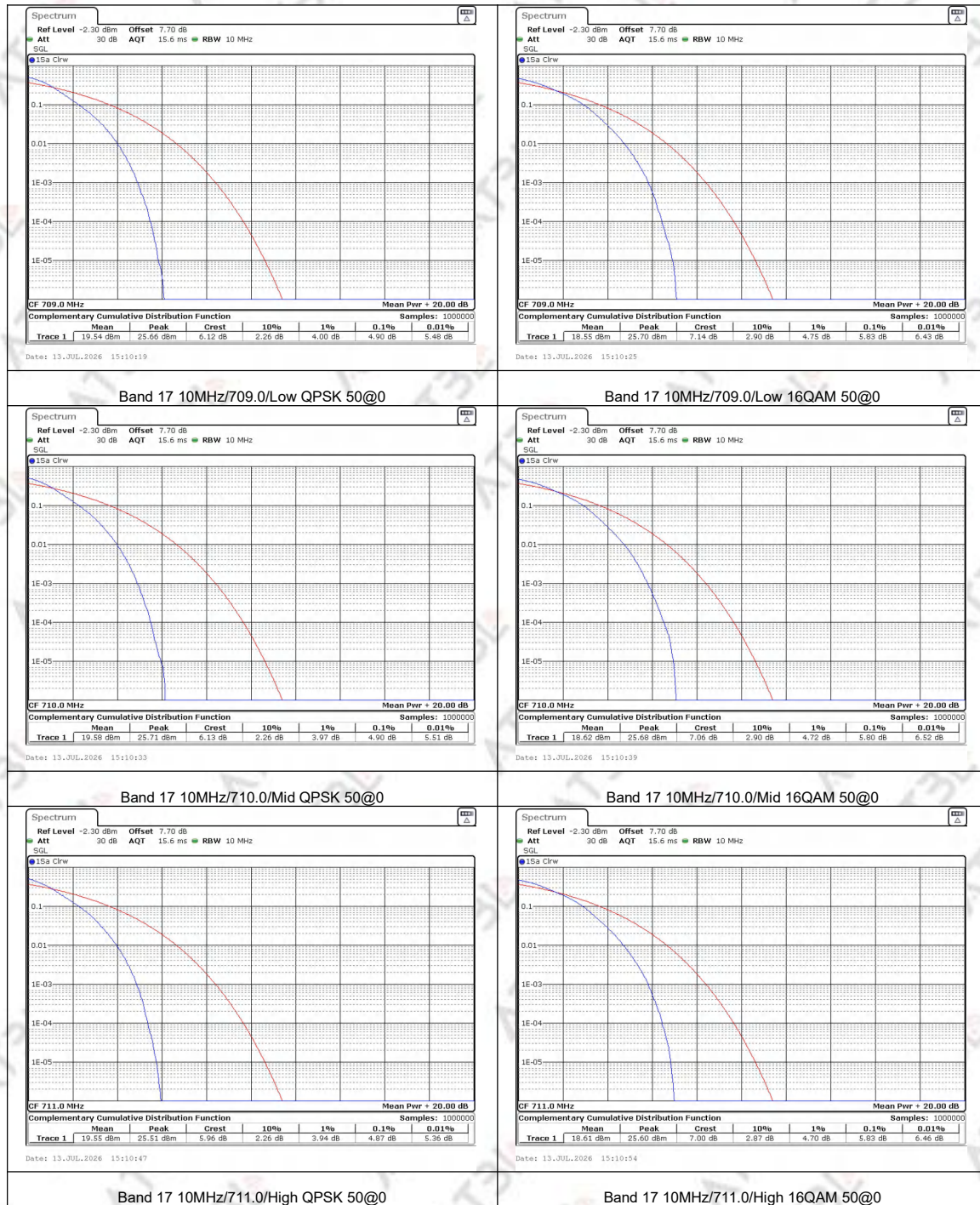
## 2. Peak to Average Ratio

### Test Result

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB   | Result (dB) | Limit (dB) | Verdict |
|------|-----------------|---------|------------|------------|------|-------------|------------|---------|
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 25@0 | 4.99        | 13         | PASS    |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 25@0 | 5.83        | 13         | PASS    |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 25@0 | 4.75        | 13         | PASS    |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 25@0 | 5.65        | 13         | PASS    |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 25@0 | 5.13        | 13         | PASS    |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 25@0 | 5.88        | 13         | PASS    |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 50@0 | 4.9         | 13         | PASS    |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 50@0 | 5.83        | 13         | PASS    |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 50@0 | 4.9         | 13         | PASS    |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 50@0 | 5.8         | 13         | PASS    |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 50@0 | 4.87        | 13         | PASS    |
| 17   | 10.0            | 23800   | 711.0      | 16QAM      | 50@0 | 5.83        | 13         | PASS    |

## Test Graphs



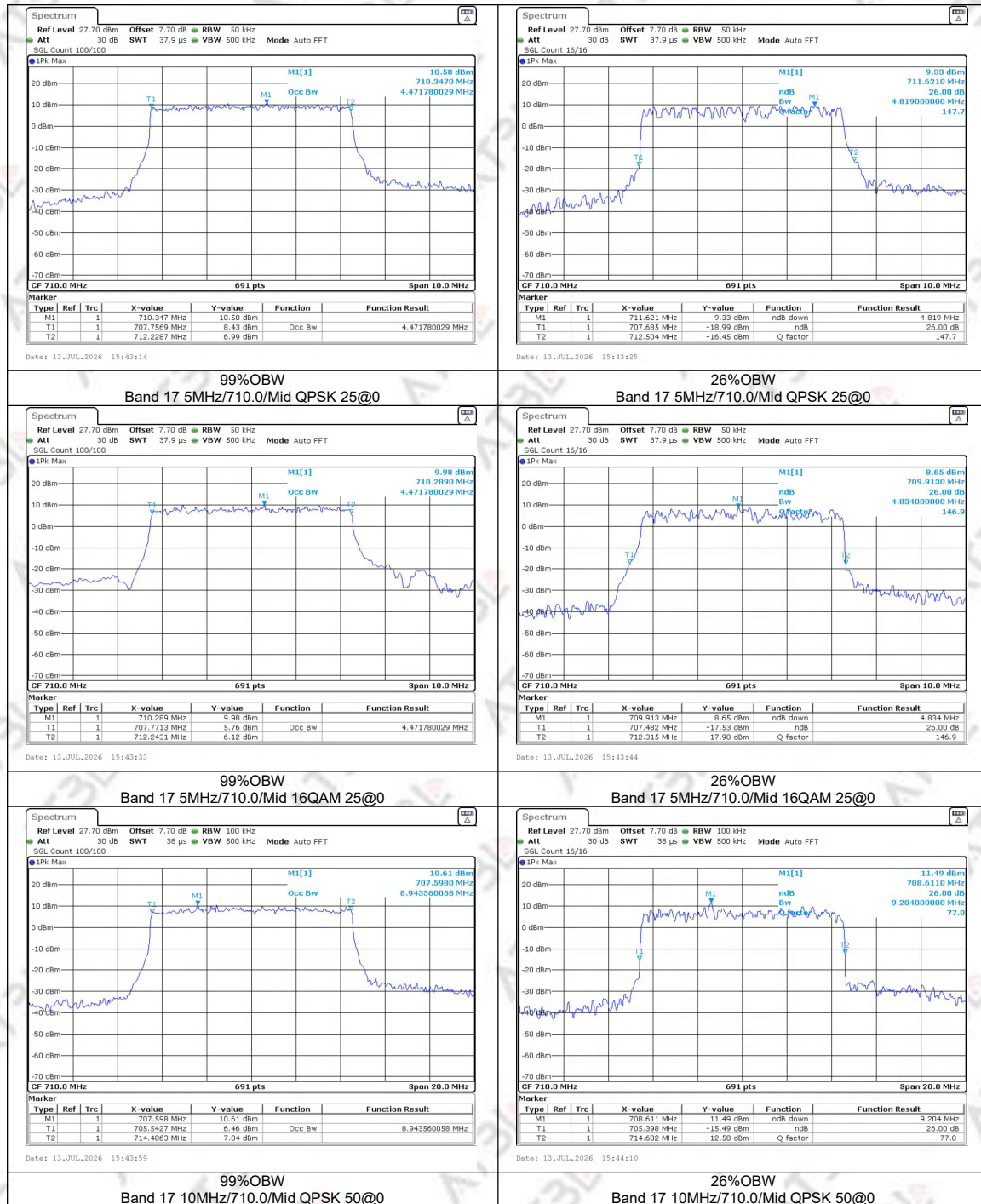


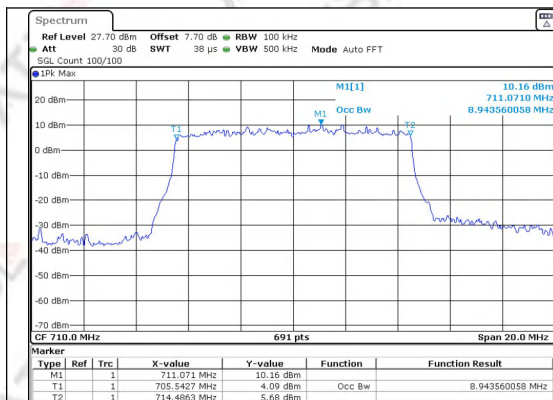
### 3.Occupied Bandwidth

#### Test Result

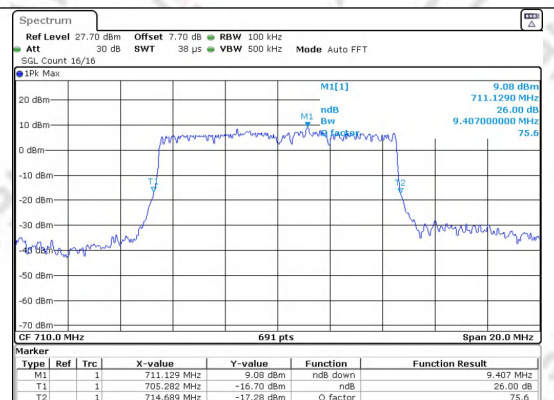
| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB   | OBW (MHz) | 26dB BW (MHz) | Verdict |
|------|-----------------|---------|------------|------------|------|-----------|---------------|---------|
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 25@0 | 4.4718    | 4.819         | PASS    |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 25@0 | 4.4718    | 4.834         | PASS    |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 50@0 | 8.9436    | 9.204         | PASS    |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 50@0 | 8.9436    | 9.407         | PASS    |

## Test Graphs





99%OBW  
Band 17 10MHz/710.0/Mid 16QAM 50@0



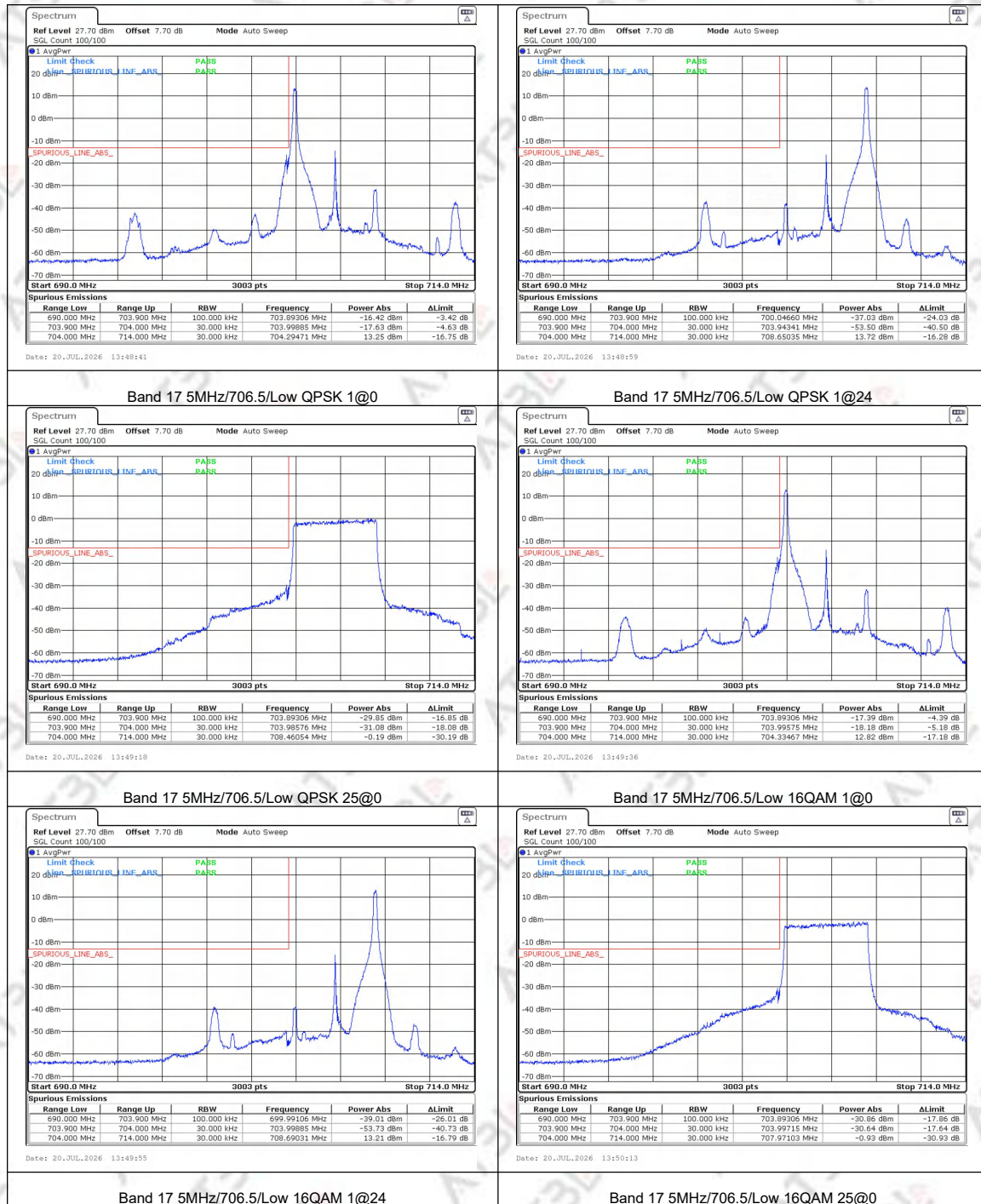
26%OBW  
Band 17 10MHz/710.0/Mid 16QAM 50@0

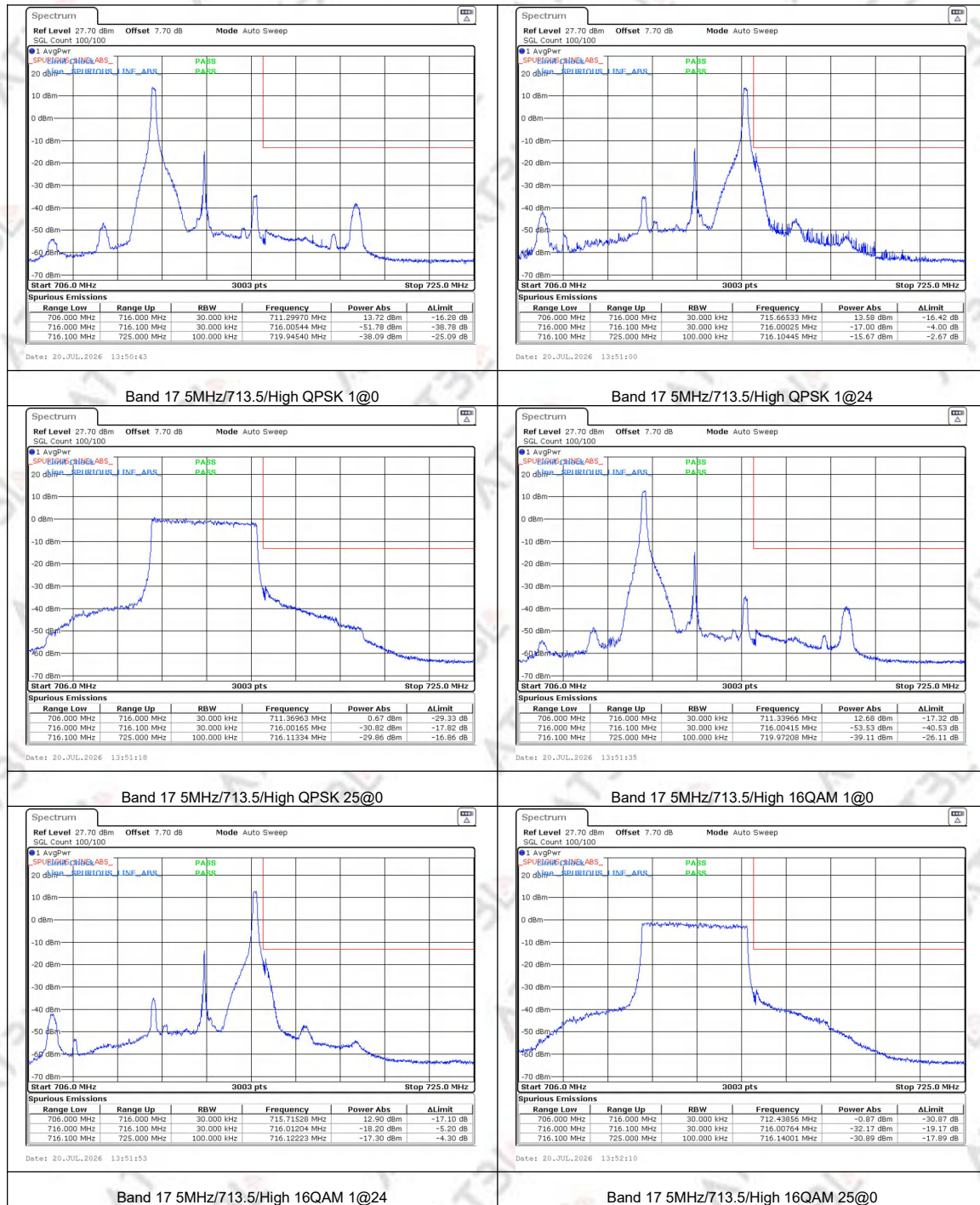
#### 4. Conducted Band Edge

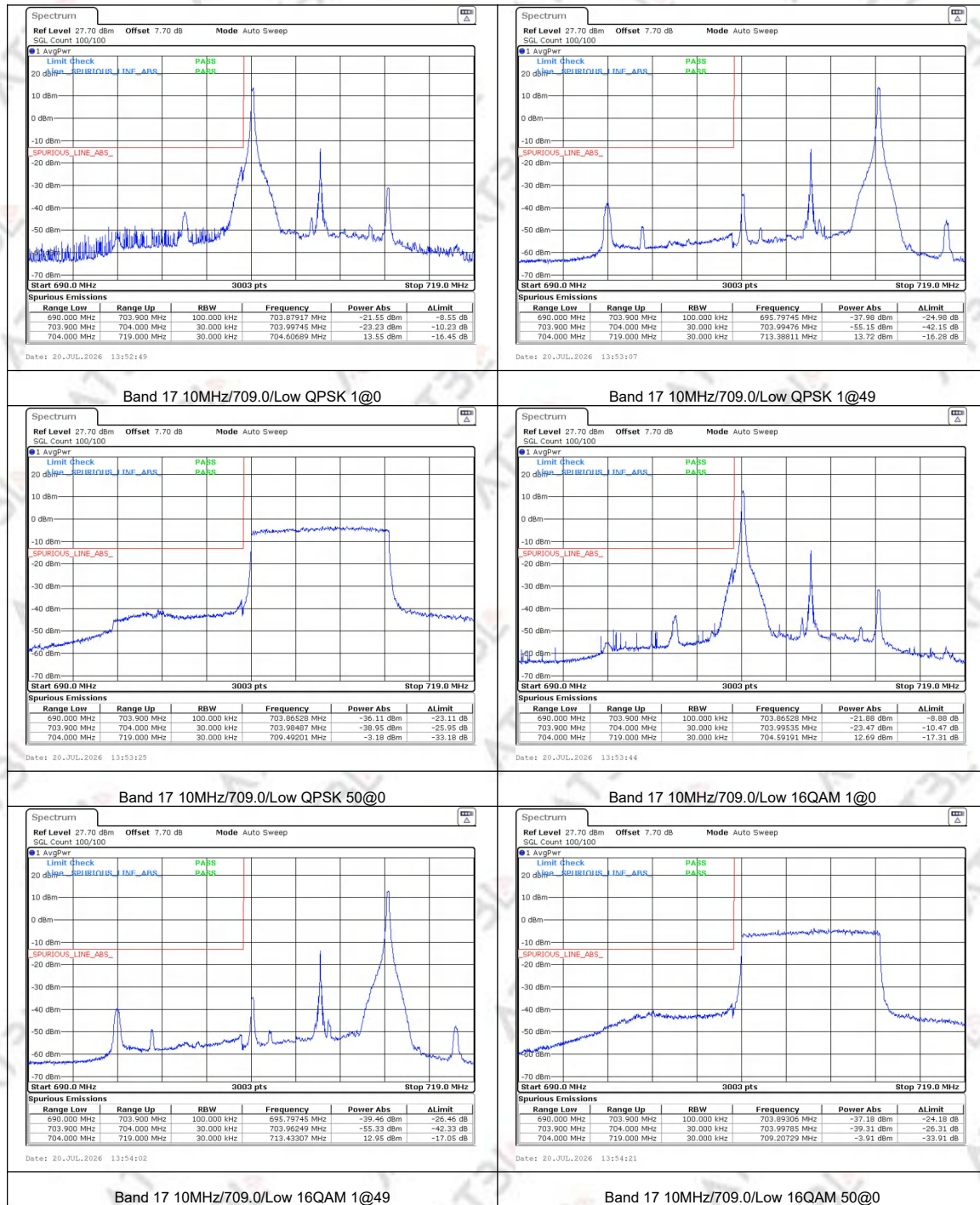
##### Test Result

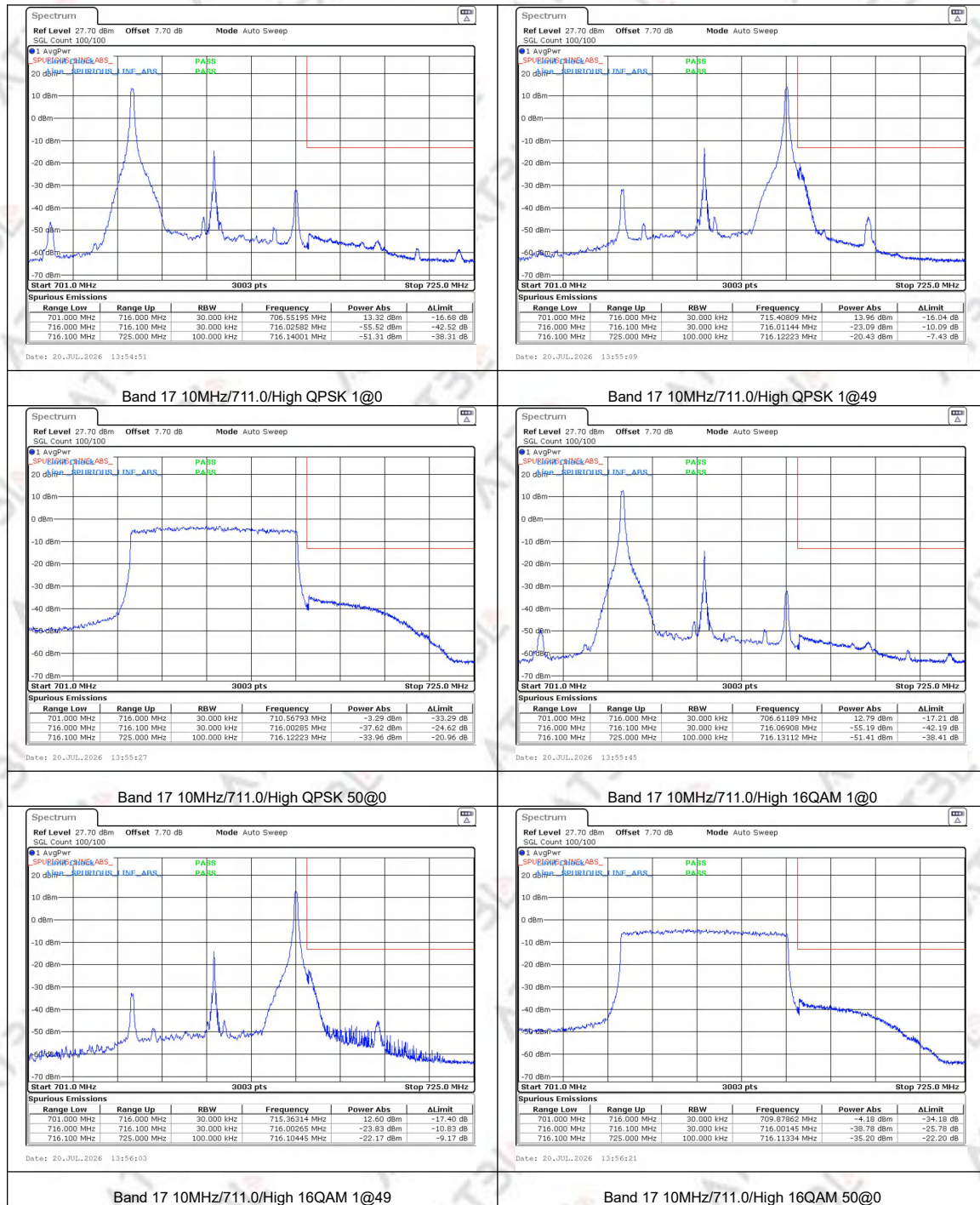
| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB   | Result    | Verdict |
|------|-----------------|---------|------------|------------|------|-----------|---------|
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 1@0  | see graph | PASS    |
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 1@24 | see graph | PASS    |
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 25@0 | see graph | PASS    |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 1@0  | see graph | PASS    |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 1@24 | see graph | PASS    |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 25@0 | see graph | PASS    |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 1@0  | see graph | PASS    |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 1@24 | see graph | PASS    |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 25@0 | see graph | PASS    |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 1@0  | see graph | PASS    |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 1@24 | see graph | PASS    |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 25@0 | see graph | PASS    |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 1@0  | see graph | PASS    |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 1@49 | see graph | PASS    |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 50@0 | see graph | PASS    |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 1@0  | see graph | PASS    |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 1@49 | see graph | PASS    |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 50@0 | see graph | PASS    |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 1@0  | see graph | PASS    |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 1@49 | see graph | PASS    |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 50@0 | see graph | PASS    |
| 17   | 10.0            | 23800   | 711.0      | 16QAM      | 1@0  | see graph | PASS    |
| 17   | 10.0            | 23800   | 711.0      | 16QAM      | 1@49 | see graph | PASS    |
| 17   | 10.0            | 23800   | 711.0      | 16QAM      | 50@0 | see graph | PASS    |

## Test Graphs







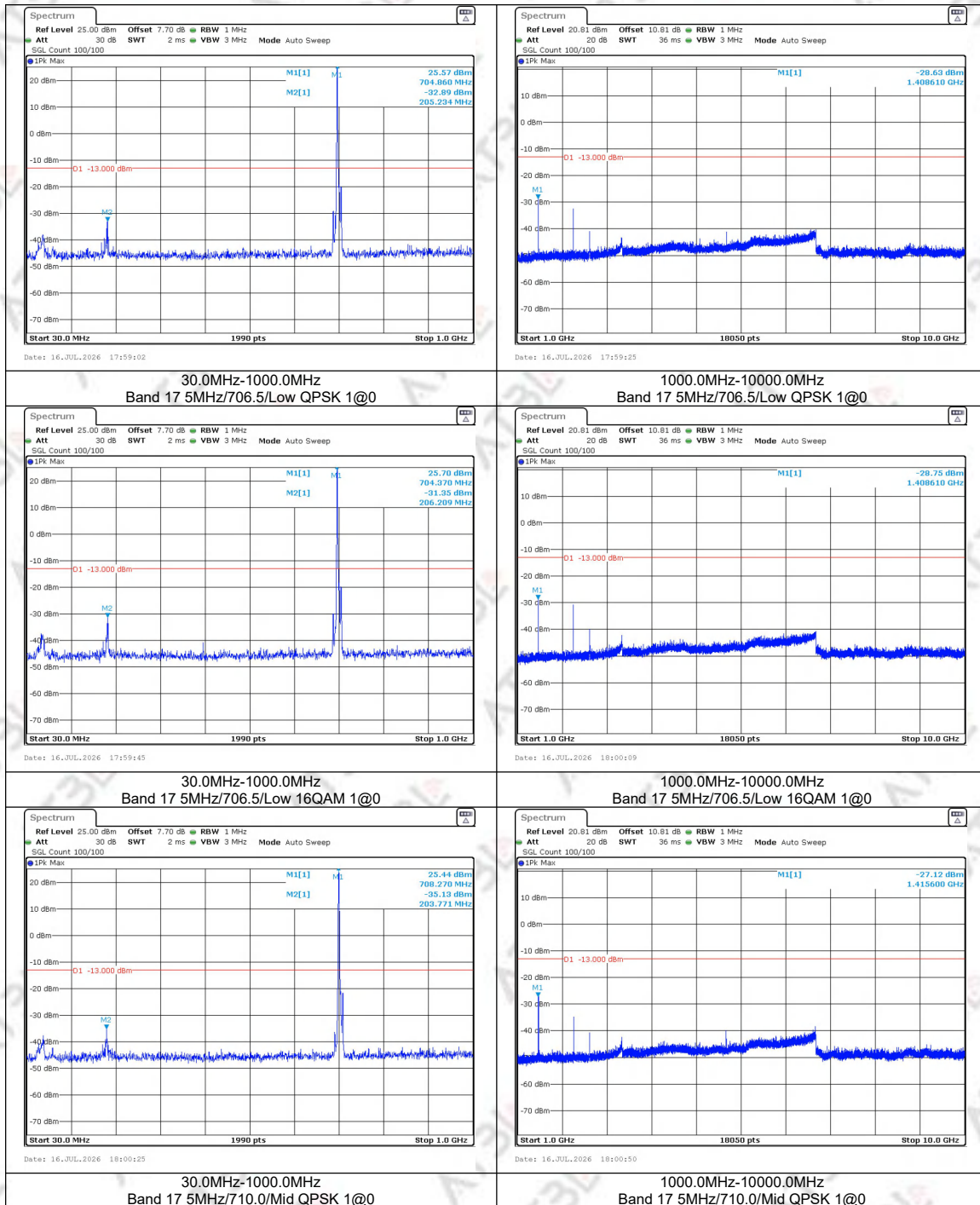


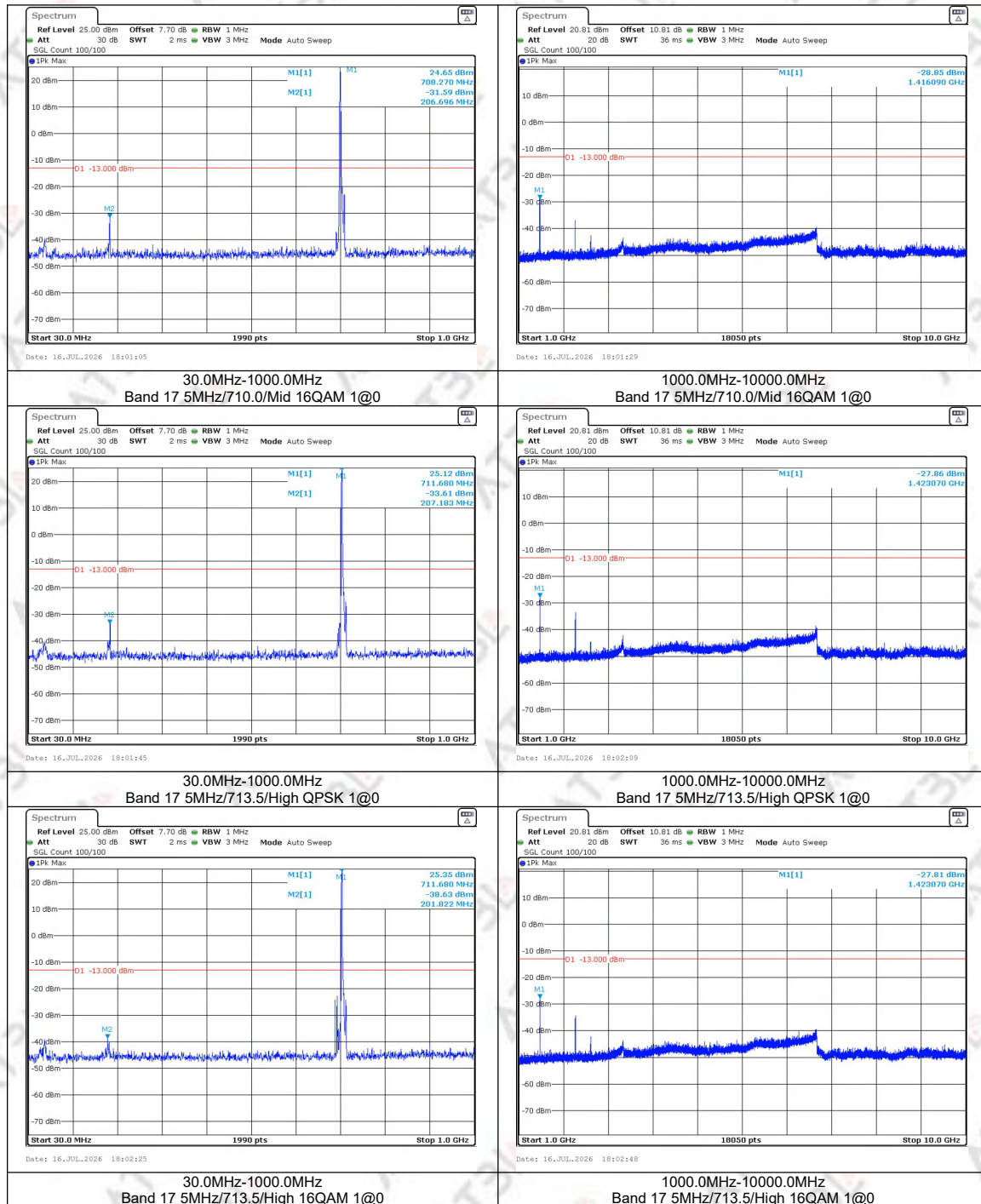
## 5. Conducted Spurious Emissions

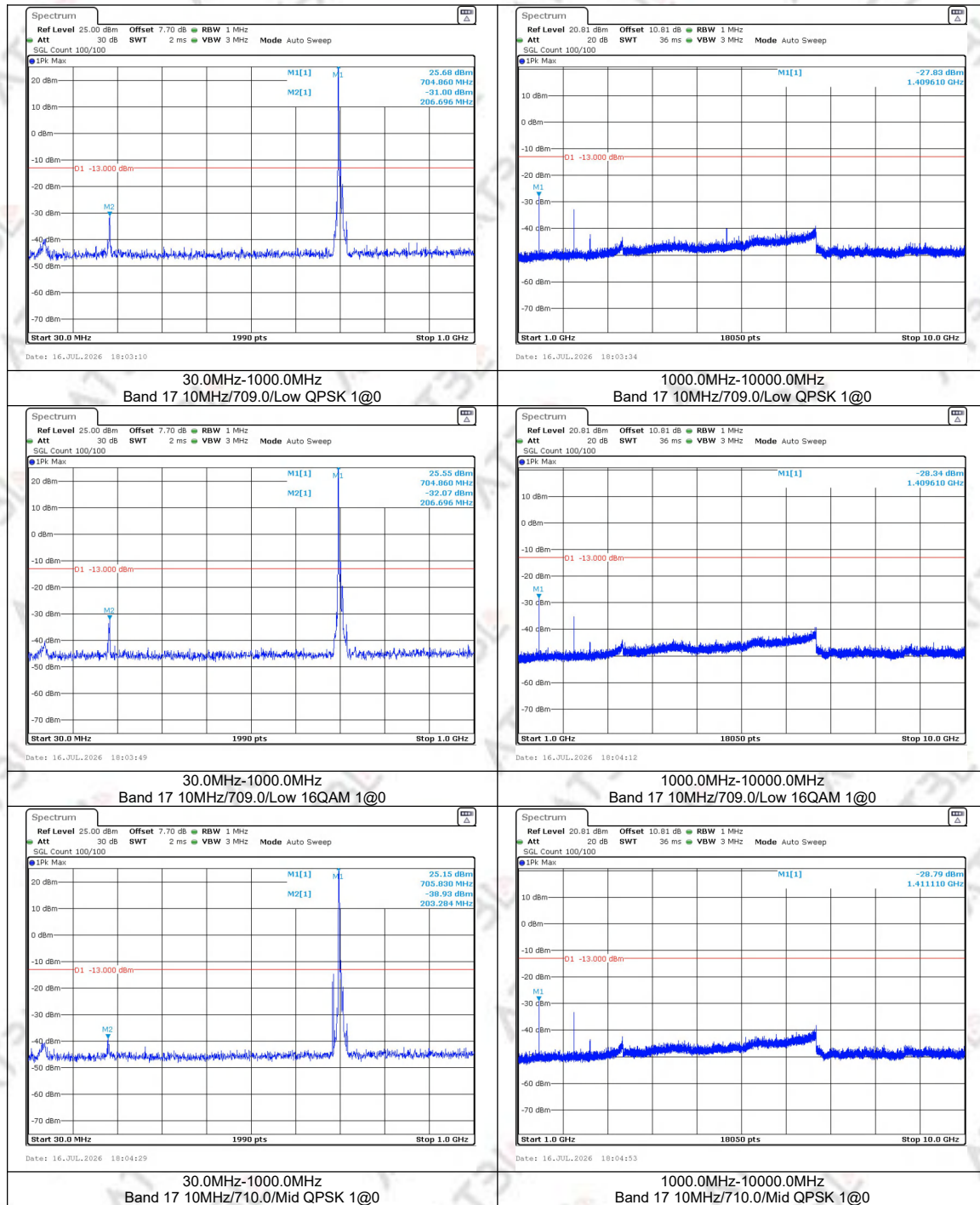
### Test Result

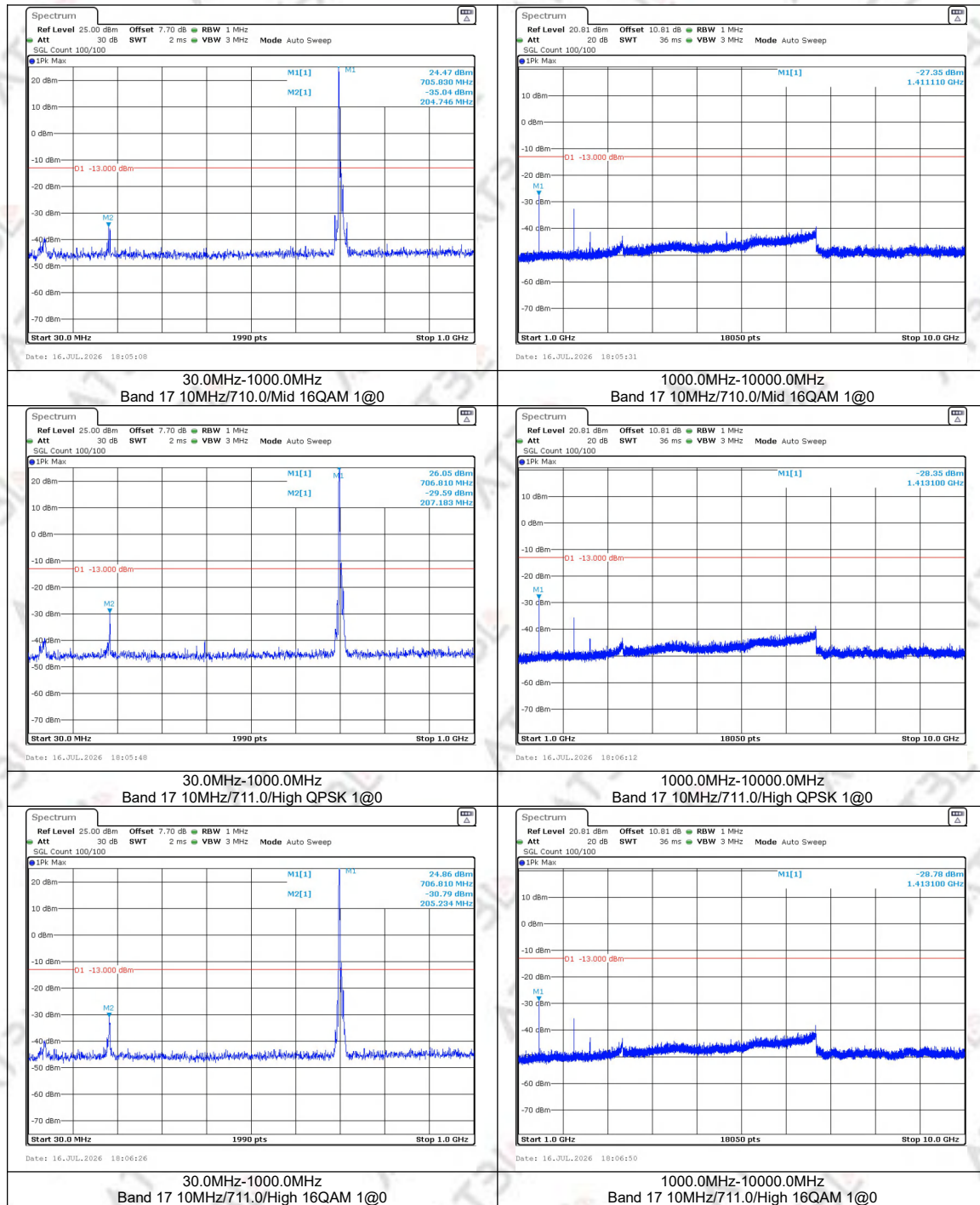
| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB  | StartFreq (MHz) | StopFreq (MHz) | Result (dBm) | Limit (dBm) | Verdict |
|------|-----------------|---------|------------|------------|-----|-----------------|----------------|--------------|-------------|---------|
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 1@0 | 30              | 1000           | -32.89       | -13         | PASS    |
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 1@0 | 1000            | 10000          | -28.63       | -13         | PASS    |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 1@0 | 30              | 1000           | -31.35       | -13         | PASS    |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 1@0 | 1000            | 10000          | -28.75       | -13         | PASS    |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 1@0 | 30              | 1000           | -35.13       | -13         | PASS    |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 1@0 | 1000            | 10000          | -27.12       | -13         | PASS    |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 1@0 | 30              | 1000           | -31.59       | -13         | PASS    |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 1@0 | 1000            | 10000          | -28.85       | -13         | PASS    |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 1@0 | 30              | 1000           | -33.61       | -13         | PASS    |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 1@0 | 1000            | 10000          | -27.86       | -13         | PASS    |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 1@0 | 30              | 1000           | -38.63       | -13         | PASS    |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 1@0 | 1000            | 10000          | -27.81       | -13         | PASS    |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 1@0 | 30              | 1000           | -31.0        | -13         | PASS    |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 1@0 | 1000            | 10000          | -27.83       | -13         | PASS    |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 1@0 | 30              | 1000           | -32.07       | -13         | PASS    |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 1@0 | 1000            | 10000          | -28.34       | -13         | PASS    |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 1@0 | 30              | 1000           | -38.93       | -13         | PASS    |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 1@0 | 1000            | 10000          | -28.79       | -13         | PASS    |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 1@0 | 30              | 1000           | -35.04       | -13         | PASS    |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 1@0 | 1000            | 10000          | -27.35       | -13         | PASS    |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 1@0 | 30              | 1000           | -29.59       | -13         | PASS    |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 1@0 | 1000            | 10000          | -28.35       | -13         | PASS    |
| 17   | 10.0            | 23800   | 711.0      | 16QAM      | 1@0 | 30              | 1000           | -30.79       | -13         | PASS    |
| 17   | 10.0            | 23800   | 711.0      | 16QAM      | 1@0 | 1000            | 10000          | -28.78       | -13         | PASS    |

## Test Graphs









## 6.Frequency Stability-TH-VH

### Test Result

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB   | Deviation (Hz) | Deviation (ppm) | Limit(ppm) | Verdict | Environment |
|------|-----------------|---------|------------|------------|------|----------------|-----------------|------------|---------|-------------|
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 25@0 | -8.81          | -0.01247        | ±2.5       | PASS    | TH/VH       |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 25@0 | -6.81          | -0.00964        | ±2.5       | PASS    | TH/VH       |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 25@0 | -2.89          | -0.00407        | ±2.5       | PASS    | TH/VH       |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 25@0 | -3.52          | -0.00496        | ±2.5       | PASS    | TH/VH       |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 25@0 | -8.77          | -0.01229        | ±2.5       | PASS    | TH/VH       |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 25@0 | -5.11          | -0.00716        | ±2.5       | PASS    | TH/VH       |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 50@0 | -8.08          | -0.0114         | ±2.5       | PASS    | TH/VH       |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 50@0 | -3.65          | -0.00514        | ±2.5       | PASS    | TH/VH       |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 50@0 | -3.02          | -0.00425        | ±2.5       | PASS    | TH/VH       |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 50@0 | -2.98          | -0.00419        | ±2.5       | PASS    | TH/VH       |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 50@0 | -8.1           | -0.01139        | ±2.5       | PASS    | TH/VH       |
| 17   | 10.0            | 23800   | 711.0      | 16QAM      | 50@0 | -8.05          | -0.01133        | ±2.5       | PASS    | TH/VH       |

## Frequency Stability-TH-VL

### Test Result

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB   | Deviation (Hz) | Deviation (ppm) | Limit(ppm) | Verdict | Environment |
|------|-----------------|---------|------------|------------|------|----------------|-----------------|------------|---------|-------------|
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 25@0 | -5.94          | -0.0084         | ±2.5       | PASS    | TH/VL       |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 25@0 | -8.68          | -0.01229        | ±2.5       | PASS    | TH/VL       |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 25@0 | -5.02          | -0.00707        | ±2.5       | PASS    | TH/VL       |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 25@0 | -7.55          | -0.01064        | ±2.5       | PASS    | TH/VL       |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 25@0 | -7.0           | -0.0098         | ±2.5       | PASS    | TH/VL       |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 25@0 | -2.25          | -0.00315        | ±2.5       | PASS    | TH/VL       |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 50@0 | -7.05          | -0.00995        | ±2.5       | PASS    | TH/VL       |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 50@0 | -6.09          | -0.0086         | ±2.5       | PASS    | TH/VL       |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 50@0 | -9.44          | -0.0133         | ±2.5       | PASS    | TH/VL       |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 50@0 | -6.38          | -0.00899        | ±2.5       | PASS    | TH/VL       |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 50@0 | 1.57           | 0.00221         | ±2.5       | PASS    | TH/VL       |
| 17   | 10.0            | 23800   | 711.0      | 16QAM      | 50@0 | -2.13          | -0.003          | ±2.5       | PASS    | TH/VL       |

## Frequency Stability-TH-VN

### Test Result

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB   | Deviation (Hz) | Deviation (ppm) | Limit(ppm) | Verdict | Environment |
|------|-----------------|---------|------------|------------|------|----------------|-----------------|------------|---------|-------------|
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 25@0 | -8.43          | -0.01193        | ±2.5       | PASS    | TH/VN       |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 25@0 | -5.35          | -0.00757        | ±2.5       | PASS    | TH/VN       |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 25@0 | -3.32          | -0.00467        | ±2.5       | PASS    | TH/VN       |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 25@0 | -8.68          | -0.01223        | ±2.5       | PASS    | TH/VN       |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 25@0 | -9.98          | -0.01399        | ±2.5       | PASS    | TH/VN       |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 25@0 | -2.73          | -0.00383        | ±2.5       | PASS    | TH/VN       |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 50@0 | -8.0           | -0.01128        | ±2.5       | PASS    | TH/VN       |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 50@0 | -2.8           | -0.00395        | ±2.5       | PASS    | TH/VN       |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 50@0 | -6.32          | -0.00891        | ±2.5       | PASS    | TH/VN       |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 50@0 | 1.03           | 0.00145         | ±2.5       | PASS    | TH/VN       |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 50@0 | -8.04          | -0.01131        | ±2.5       | PASS    | TH/VN       |
| 17   | 10.0            | 23800   | 711.0      | 16QAM      | 50@0 | -6.81          | -0.00958        | ±2.5       | PASS    | TH/VN       |

## Frequency Stability-TL-VH

### Test Result

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB   | Deviation (Hz) | Deviation (ppm) | Limit(ppm) | Verdict | Environment |
|------|-----------------|---------|------------|------------|------|----------------|-----------------|------------|---------|-------------|
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 25@0 | -7.95          | -0.01126        | ±2.5       | PASS    | TL/VH       |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 25@0 | -5.75          | -0.00814        | ±2.5       | PASS    | TL/VH       |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 25@0 | -6.31          | -0.00889        | ±2.5       | PASS    | TL/VH       |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 25@0 | -2.37          | -0.00334        | ±2.5       | PASS    | TL/VH       |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 25@0 | -2.22          | -0.00311        | ±2.5       | PASS    | TL/VH       |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 25@0 | -4.81          | -0.00674        | ±2.5       | PASS    | TL/VH       |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 50@0 | -8.08          | -0.0114         | ±2.5       | PASS    | TL/VH       |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 50@0 | -10.49         | -0.01479        | ±2.5       | PASS    | TL/VH       |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 50@0 | -4.45          | -0.00627        | ±2.5       | PASS    | TL/VH       |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 50@0 | -3.65          | -0.00514        | ±2.5       | PASS    | TL/VH       |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 50@0 | -5.71          | -0.00803        | ±2.5       | PASS    | TL/VH       |
| 17   | 10.0            | 23800   | 711.0      | 16QAM      | 50@0 | -5.36          | -0.00754        | ±2.5       | PASS    | TL/VH       |

## Frequency Stability-TL-VL

### Test Result

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB   | Deviation (Hz) | Deviation (ppm) | Limit(ppm) | Verdict | Environment |
|------|-----------------|---------|------------|------------|------|----------------|-----------------|------------|---------|-------------|
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 50@0 | -5.52          | -0.00779        | ±2.5       | PASS    | TL/VL       |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 50@0 | -3.91          | -0.00551        | ±2.5       | PASS    | TL/VL       |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 50@0 | -8.67          | -0.01221        | ±2.5       | PASS    | TL/VL       |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 50@0 | -6.41          | -0.00903        | ±2.5       | PASS    | TL/VL       |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 50@0 | -3.39          | -0.00477        | ±2.5       | PASS    | TL/VL       |
| 17   | 10.0            | 23800   | 711.0      | 16QAM      | 50@0 | -4.23          | -0.00596        | ±2.5       | PASS    | TL/VL       |

## Frequency Stability-TL-VN

### Test Result

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB   | Deviation (Hz) | Deviation (ppm) | Limit(ppm) | Verdict | Environment |
|------|-----------------|---------|------------|------------|------|----------------|-----------------|------------|---------|-------------|
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 25@0 | -1.2           | -0.0017         | ±2.5       | PASS    | TL/VN       |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 25@0 | -8.03          | -0.01136        | ±2.5       | PASS    | TL/VN       |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 25@0 | -4.26          | -0.006          | ±2.5       | PASS    | TL/VN       |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 25@0 | -5.66          | -0.00798        | ±2.5       | PASS    | TL/VN       |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 25@0 | -11.96         | -0.01676        | ±2.5       | PASS    | TL/VN       |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 25@0 | -6.94          | -0.00972        | ±2.5       | PASS    | TL/VN       |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 50@0 | 0.96           | 0.00135         | ±2.5       | PASS    | TL/VN       |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 50@0 | -8.38          | -0.01182        | ±2.5       | PASS    | TL/VN       |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 50@0 | -8.77          | -0.01235        | ±2.5       | PASS    | TL/VN       |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 50@0 | -1.86          | -0.00262        | ±2.5       | PASS    | TL/VN       |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 50@0 | -4.18          | -0.00587        | ±2.5       | PASS    | TL/VN       |
| 17   | 10.0            | 23800   | 711.0      | 16QAM      | 50@0 | -7.84          | -0.01103        | ±2.5       | PASS    | TL/VN       |

## Frequency Stability-TN-VH

### Test Result

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB   | Deviation (Hz) | Deviation (ppm) | Limit(ppm) | Verdict | Environment |
|------|-----------------|---------|------------|------------|------|----------------|-----------------|------------|---------|-------------|
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 25@0 | -5.71          | -0.00808        | ±2.5       | PASS    | TN/VH       |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 25@0 | -0.46          | -0.00065        | ±2.5       | PASS    | TN/VH       |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 25@0 | -13.02         | -0.01833        | ±2.5       | PASS    | TN/VH       |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 25@0 | -2.88          | -0.00405        | ±2.5       | PASS    | TN/VH       |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 25@0 | -12.25         | -0.01716        | ±2.5       | PASS    | TN/VH       |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 25@0 | -11.17         | -0.01566        | ±2.5       | PASS    | TN/VH       |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 50@0 | -1.44          | -0.00204        | ±2.5       | PASS    | TN/VH       |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 50@0 | -5.58          | -0.00787        | ±2.5       | PASS    | TN/VH       |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 50@0 | -7.72          | -0.01088        | ±2.5       | PASS    | TN/VH       |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 50@0 | 3.19           | 0.00449         | ±2.5       | PASS    | TN/VH       |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 50@0 | -2.63          | -0.0037         | ±2.5       | PASS    | TN/VH       |
| 17   | 10.0            | 23800   | 711.0      | 16QAM      | 50@0 | -2.02          | -0.00284        | ±2.5       | PASS    | TN/VH       |

## Frequency Stability-TN-VL

### Test Result

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB   | Deviation (Hz) | Deviation (ppm) | Limit(ppm) | Verdict | Environment |
|------|-----------------|---------|------------|------------|------|----------------|-----------------|------------|---------|-------------|
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 25@0 | -4.03          | -0.00571        | ±2.5       | PASS    | TN/VL       |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 25@0 | 2.96           | 0.00419         | ±2.5       | PASS    | TN/VL       |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 25@0 | -4.89          | -0.00689        | ±2.5       | PASS    | TN/VL       |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 25@0 | -5.31          | -0.00747        | ±2.5       | PASS    | TN/VL       |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 25@0 | -6.15          | -0.00862        | ±2.5       | PASS    | TN/VL       |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 25@0 | -9.93          | -0.01391        | ±2.5       | PASS    | TN/VL       |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 50@0 | -9.64          | -0.0136         | ±2.5       | PASS    | TN/VL       |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 50@0 | -12.42         | -0.01751        | ±2.5       | PASS    | TN/VL       |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 50@0 | -2.7           | -0.00381        | ±2.5       | PASS    | TN/VL       |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 50@0 | -2.86          | -0.00403        | ±2.5       | PASS    | TN/VL       |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 50@0 | -3.92          | -0.00551        | ±2.5       | PASS    | TN/VL       |
| 17   | 10.0            | 23800   | 711.0      | 16QAM      | 50@0 | -4.72          | -0.00664        | ±2.5       | PASS    | TN/VL       |

## Frequency Stability-TN-VN

### Test Result

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB   | Deviation (Hz) | Deviation (ppm) | Limit(ppm) | Verdict | Environment |
|------|-----------------|---------|------------|------------|------|----------------|-----------------|------------|---------|-------------|
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 25@0 | -2.68          | -0.00379        | ±2.5       | PASS    | TN/VN       |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 25@0 | -7.77          | -0.01099        | ±2.5       | PASS    | TN/VN       |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 25@0 | -4.19          | -0.0059         | ±2.5       | PASS    | TN/VN       |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 25@0 | 0.66           | 0.00093         | ±2.5       | PASS    | TN/VN       |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 25@0 | -8.34          | -0.01169        | ±2.5       | PASS    | TN/VN       |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 25@0 | -11.06         | -0.0155         | ±2.5       | PASS    | TN/VN       |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 50@0 | -10.14         | -0.01431        | ±2.5       | PASS    | TN/VN       |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 50@0 | 0.8            | 0.00113         | ±2.5       | PASS    | TN/VN       |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 50@0 | -3.89          | -0.00548        | ±2.5       | PASS    | TN/VN       |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 50@0 | -1.85          | -0.0026         | ±2.5       | PASS    | TN/VN       |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 50@0 | -10.5          | -0.01477        | ±2.5       | PASS    | TN/VN       |
| 17   | 10.0            | 23800   | 711.0      | 16QAM      | 50@0 | -9.0           | -0.01266        | ±2.5       | PASS    | TN/VN       |

## 7.Modulation Characteristics

### Test Result

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB   | Verdict |
|------|-----------------|---------|------------|------------|------|---------|
| 17   | 5.0             | 23755   | 706.5      | QPSK       | 25@0 | PASS    |
| 17   | 5.0             | 23755   | 706.5      | 16QAM      | 25@0 | PASS    |
| 17   | 5.0             | 23790   | 710.0      | QPSK       | 25@0 | PASS    |
| 17   | 5.0             | 23790   | 710.0      | 16QAM      | 25@0 | PASS    |
| 17   | 5.0             | 23825   | 713.5      | QPSK       | 25@0 | PASS    |
| 17   | 5.0             | 23825   | 713.5      | 16QAM      | 25@0 | PASS    |
| 17   | 10.0            | 23780   | 709.0      | QPSK       | 50@0 | PASS    |
| 17   | 10.0            | 23780   | 709.0      | 16QAM      | 50@0 | PASS    |
| 17   | 10.0            | 23790   | 710.0      | QPSK       | 50@0 | PASS    |
| 17   | 10.0            | 23790   | 710.0      | 16QAM      | 50@0 | PASS    |
| 17   | 10.0            | 23800   | 711.0      | QPSK       | 50@0 | PASS    |
| 17   | 10.0            | 23800   | 711.0      | 16QAM      | 50@0 | PASS    |

## Test Graphs

