

# APPENDIX REPORT

|                 |                 |                     |                     |
|-----------------|-----------------|---------------------|---------------------|
| Project No.     | SHT2003039604EW | Radio Specification | WCDMA               |
| Test sample No. | YPHT20030396027 | Model No.           | S341                |
| Start test date | 2020/04/03      | Finish date         | 2020/04/03          |
| Temperature     | 25°C            | Humidity            | 50%                 |
| Test Engineer   | Jess He         | Auditor             | <i>William.wang</i> |

| Appendix clause | Test item                              | Result |
|-----------------|----------------------------------------|--------|
| A               | Conducted Output Power                 | PASS   |
| B               | Peak-to-Average Ratio                  | PASS   |
| C               | 26 dB Bandwidth and Occupied Bandwidth | PASS   |
| D               | Band edge                              | PASS   |
| E               | Conducted Spurious Emission            | PASS   |
| F               | Frequency Stability                    | PASS   |

**8.1 Appendix A: Conducted Output Power**

## Test Result

| Band    | Channel | Power(dBm) | Limit(dBm) | Verdict |
|---------|---------|------------|------------|---------|
| Band II | 9262    | 22.83      | 33         | PASS    |
| Band II | 9400    | 22.96      | 33         | PASS    |
| Band II | 9538    | 23.10      | 33         | PASS    |
| Band V  | 4132    | 22.93      | 38.5       | PASS    |
| Band V  | 4182    | 22.62      | 38.5       | PASS    |
| Band V  | 4233    | 22.94      | 38.5       | PASS    |

| Band    | Channel | SubTest    | Power(dBm) | Limit(dBm) | Verdict |
|---------|---------|------------|------------|------------|---------|
| Band II | 9262    | HSDPA_Sub1 | 22.15      | 33         | PASS    |
| Band II | 9262    | HSDPA_Sub2 | 21.77      | 33         | PASS    |
| Band II | 9262    | HSDPA_Sub3 | 21.65      | 33         | PASS    |
| Band II | 9262    | HSDPA_Sub4 | 21.61      | 33         | PASS    |
| Band II | 9400    | HSDPA_Sub1 | 22.13      | 33         | PASS    |
| Band II | 9400    | HSDPA_Sub2 | 21.78      | 33         | PASS    |
| Band II | 9400    | HSDPA_Sub3 | 21.72      | 33         | PASS    |
| Band II | 9400    | HSDPA_Sub4 | 21.67      | 33         | PASS    |
| Band II | 9538    | HSDPA_Sub1 | 22.01      | 33         | PASS    |
| Band II | 9538    | HSDPA_Sub2 | 21.70      | 33         | PASS    |
| Band II | 9538    | HSDPA_Sub3 | 21.72      | 33         | PASS    |
| Band II | 9538    | HSDPA_Sub4 | 21.66      | 33         | PASS    |
| Band V  | 4132    | HSDPA_Sub1 | 21.73      | 38.5       | PASS    |
| Band V  | 4132    | HSDPA_Sub2 | 21.75      | 38.5       | PASS    |
| Band V  | 4132    | HSDPA_Sub3 | 21.78      | 38.5       | PASS    |
| Band V  | 4132    | HSDPA_Sub4 | 21.71      | 38.5       | PASS    |
| Band V  | 4182    | HSDPA_Sub1 | 21.86      | 38.5       | PASS    |
| Band V  | 4182    | HSDPA_Sub2 | 21.72      | 38.5       | PASS    |
| Band V  | 4182    | HSDPA_Sub3 | 21.71      | 38.5       | PASS    |
| Band V  | 4182    | HSDPA_Sub4 | 21.65      | 38.5       | PASS    |
| Band V  | 4233    | HSDPA_Sub1 | 21.63      | 38.5       | PASS    |
| Band V  | 4233    | HSDPA_Sub2 | 21.61      | 38.5       | PASS    |
| Band V  | 4233    | HSDPA_Sub3 | 21.65      | 38.5       | PASS    |
| Band V  | 4233    | HSDPA_Sub4 | 21.58      | 38.5       | PASS    |

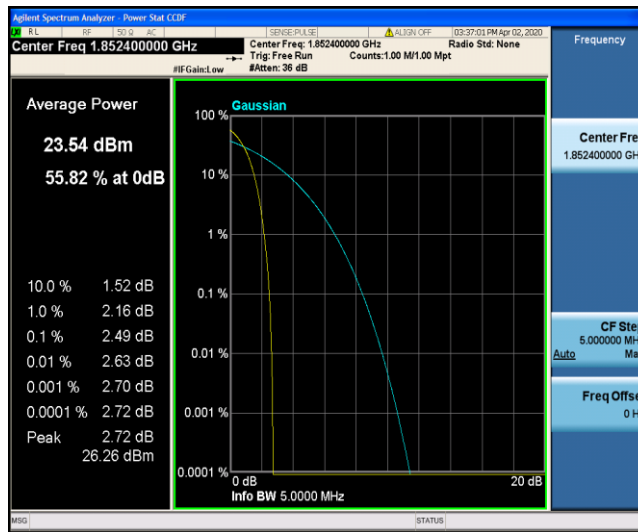
| Band    | Channel | SubTest    | Power(dBm) | Limit(dBm) | Verdict |
|---------|---------|------------|------------|------------|---------|
| Band II | 9262    | HSUPA_Sub1 | 21.02      | 33         | PASS    |
| Band II | 9262    | HSUPA_Sub2 | 21.37      | 33         | PASS    |
| Band II | 9262    | HSUPA_Sub3 | 21.17      | 33         | PASS    |
| Band II | 9262    | HSUPA_Sub4 | 21.45      | 33         | PASS    |
| Band II | 9262    | HSUPA_Sub5 | 22.23      | 33         | PASS    |
| Band II | 9400    | HSUPA_Sub1 | 21.94      | 33         | PASS    |
| Band II | 9400    | HSUPA_Sub2 | 21.46      | 33         | PASS    |
| Band II | 9400    | HSUPA_Sub3 | 21.41      | 33         | PASS    |
| Band II | 9400    | HSUPA_Sub4 | 21.48      | 33         | PASS    |
| Band II | 9400    | HSUPA_Sub5 | 22.41      | 33         | PASS    |
| Band II | 9538    | HSUPA_Sub1 | 21.87      | 33         | PASS    |
| Band II | 9538    | HSUPA_Sub2 | 21.55      | 33         | PASS    |
| Band II | 9538    | HSUPA_Sub3 | 21.36      | 33         | PASS    |
| Band II | 9538    | HSUPA_Sub4 | 21.63      | 33         | PASS    |
| Band II | 9538    | HSUPA_Sub5 | 22.43      | 33         | PASS    |
| Band V  | 4132    | HSUPA_Sub1 | 20.70      | 38.5       | PASS    |
| Band V  | 4132    | HSUPA_Sub2 | 21.46      | 38.5       | PASS    |
| Band V  | 4132    | HSUPA_Sub3 | 21.03      | 38.5       | PASS    |
| Band V  | 4132    | HSUPA_Sub4 | 21.68      | 38.5       | PASS    |
| Band V  | 4132    | HSUPA_Sub5 | 22.35      | 38.5       | PASS    |
| Band V  | 4182    | HSUPA_Sub1 | 21.62      | 38.5       | PASS    |
| Band V  | 4182    | HSUPA_Sub2 | 21.29      | 38.5       | PASS    |
| Band V  | 4182    | HSUPA_Sub3 | 21.06      | 38.5       | PASS    |
| Band V  | 4182    | HSUPA_Sub4 | 21.54      | 38.5       | PASS    |
| Band V  | 4182    | HSUPA_Sub5 | 22.26      | 38.5       | PASS    |
| Band V  | 4233    | HSUPA_Sub1 | 21.38      | 38.5       | PASS    |
| Band V  | 4233    | HSUPA_Sub2 | 21.28      | 38.5       | PASS    |
| Band V  | 4233    | HSUPA_Sub3 | 20.87      | 38.5       | PASS    |
| Band V  | 4233    | HSUPA_Sub4 | 21.59      | 38.5       | PASS    |
| Band V  | 4233    | HSUPA_Sub5 | 22.14      | 38.5       | PASS    |

## 8.2 Appendix B: Peak-to-Average Ratio

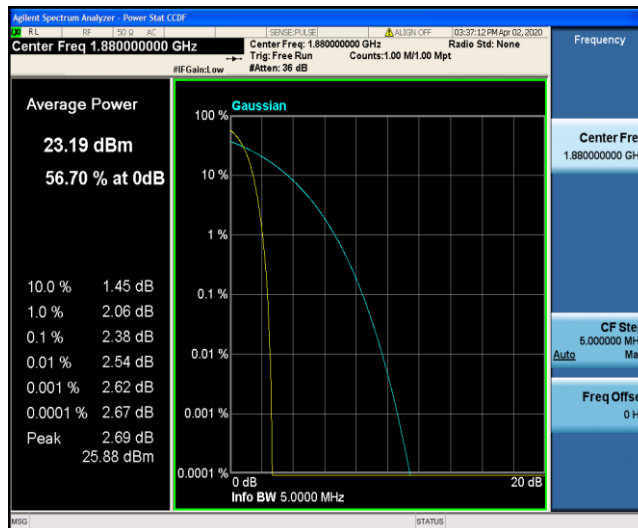
### Test Result

| Band    | Channel | Peak-to-Average Ratio(dB) | Limit(dB) | Verdict |
|---------|---------|---------------------------|-----------|---------|
| Band II | 9262    | 2.49                      | 13        | PASS    |
| Band II | 9400    | 2.38                      | 13        | PASS    |
| Band II | 9538    | 2.60                      | 13        | PASS    |
| Band V  | 4132    | 3.29                      | 13        | PASS    |
| Band V  | 4182    | 2.76                      | 13        | PASS    |
| Band V  | 4233    | 3.14                      | 13        | PASS    |

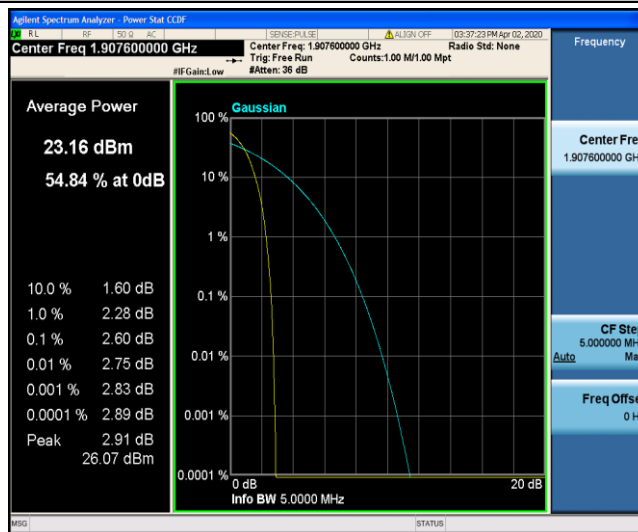
Test Graphs



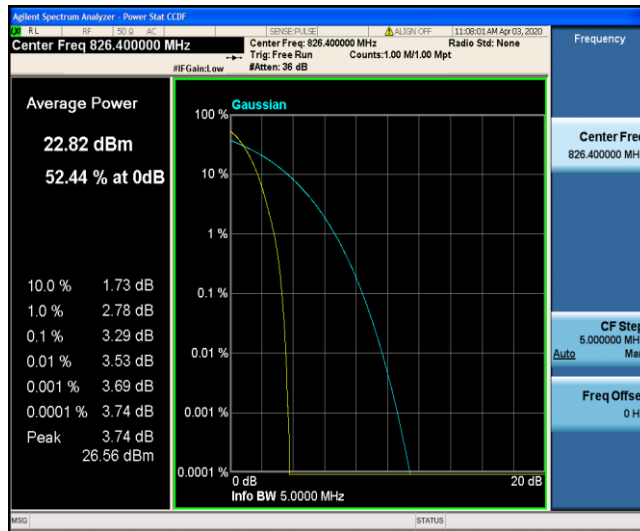
Band II\_9262



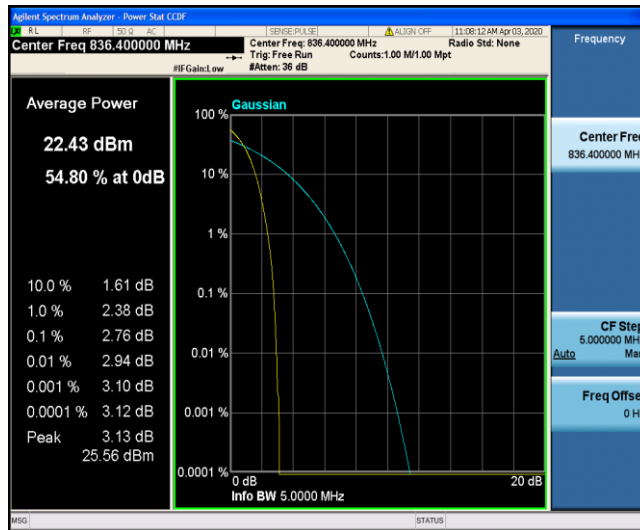
Band II\_9400



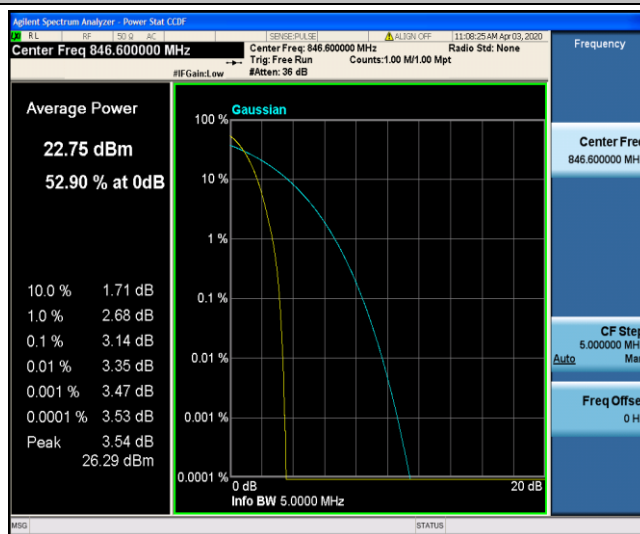
Band II\_9538



Band V\_4132



Band V\_4182



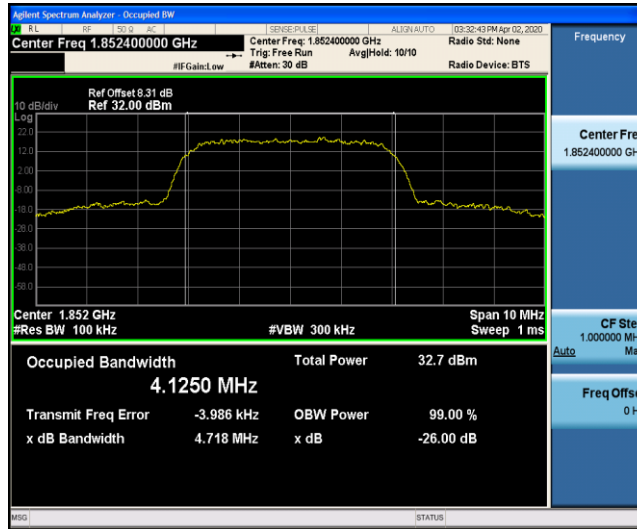
Band V\_4233

### 8.3 Appendix C: 26dB Bandwidth and Occupied Bandwidth

#### Test Result

| Band    | Channel | Occupied Bandwidth (kHz) | 26dB Bandwidth (kHz) | Limit(kHz) | Verdict |
|---------|---------|--------------------------|----------------------|------------|---------|
| Band II | 9262    | 4125.0                   | 4718                 | ---        | PASS    |
| Band II | 9400    | 4119.5                   | 4724                 | ---        | PASS    |
| Band II | 9538    | 4107.6                   | 4714                 | ---        | PASS    |
| Band V  | 4132    | 4101.7                   | 4654                 | ---        | PASS    |
| Band V  | 4182    | 4106.3                   | 4692                 | ---        | PASS    |
| Band V  | 4233    | 4114.7                   | 4671                 | ---        | PASS    |

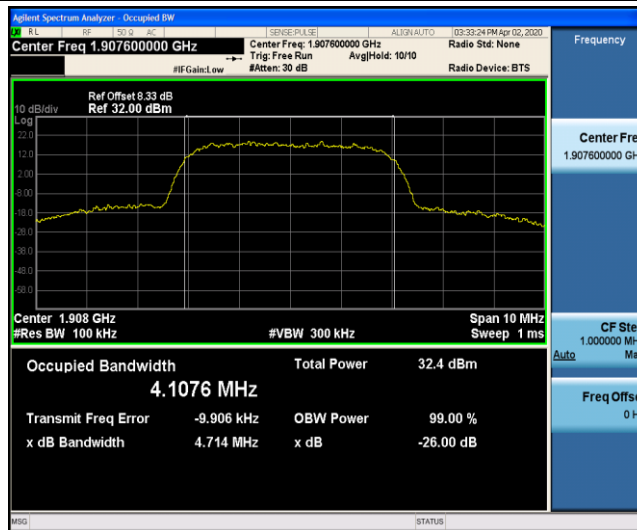
Test Graphs



Band II\_9262

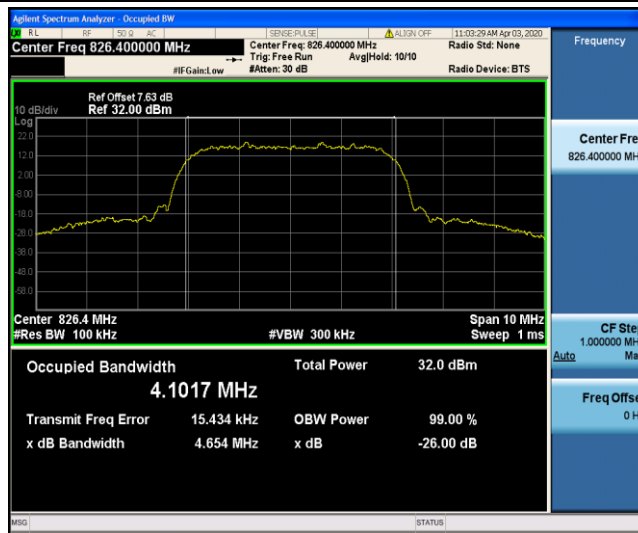


Band II\_9400

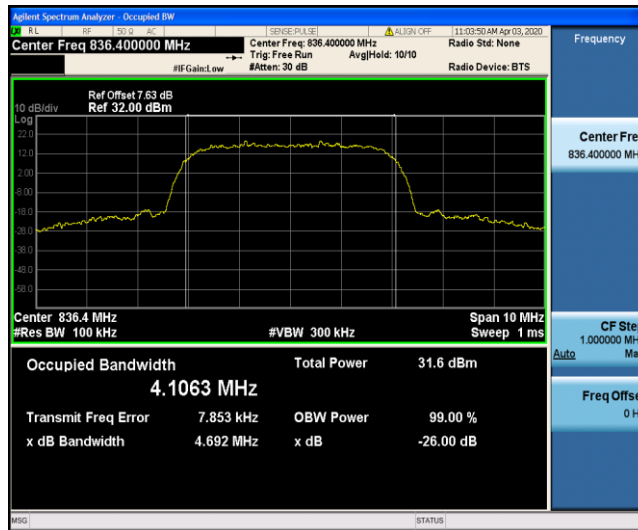


Band II\_9538

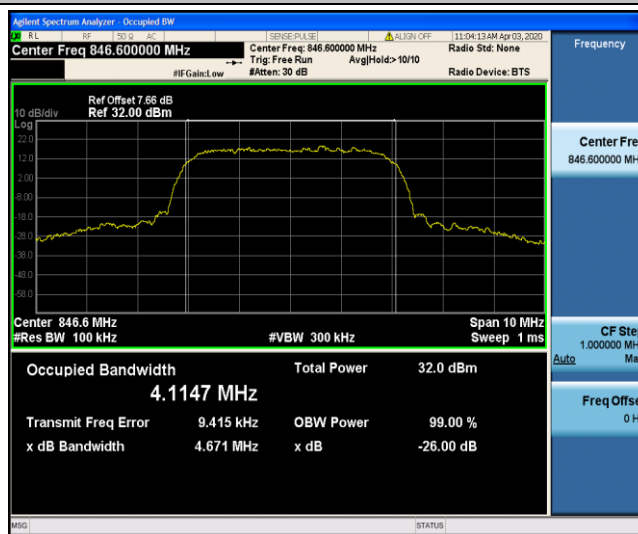




Band V\_4132



Band V\_4182



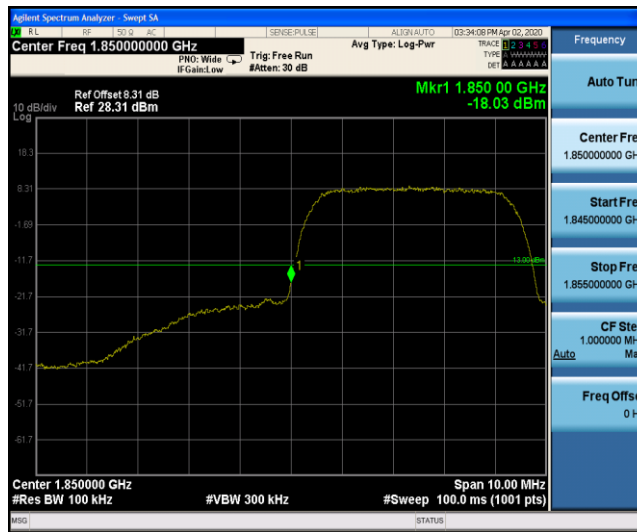
Band V\_4233

#### 8.4 Appendix D: Band Edge

##### Test Result

| Band    | Channel | Value(dBm) | Limit(dBm) | Verdict |
|---------|---------|------------|------------|---------|
| Band II | 9262    | -18.03     | -13        | PASS    |
| Band II | 9538    | -20.27     | -13        | PASS    |
| Band V  | 4132    | -23.20     | -13        | PASS    |
| Band V  | 4233    | -24.57     | -13        | PASS    |

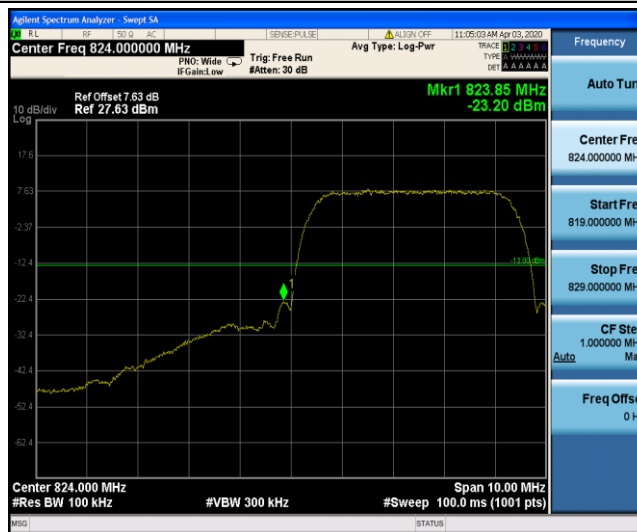
Test Graphs



Band II\_9262



Band II\_9538



Band V\_4132



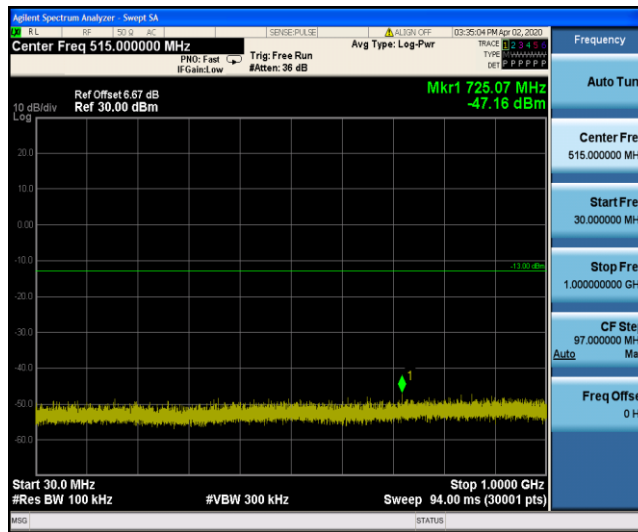
Band V\_4233

## 8.5 Appendix E: Conducted Spurious Emission

### Test Result

| Band    | Channel | Frequency Rang(Mhz) | Value(dBm) | Limit(dBm) | Verdict |
|---------|---------|---------------------|------------|------------|---------|
| Band II | 9262    | 30~1000             | -47.16     | -13        | PASS    |
| Band II | 9262    | 1000~20000          | -25.96     | -13        | PASS    |
| Band II | 9400    | 30~1000             | -46.74     | -13        | PASS    |
| Band II | 9400    | 1000~20000          | -26.61     | -13        | PASS    |
| Band II | 9538    | 30~1000             | -47.52     | -13        | PASS    |
| Band II | 9538    | 1000~20000          | -26.20     | -13        | PASS    |
| Band V  | 4132    | 30~1000             | -47.30     | -13        | PASS    |
| Band V  | 4132    | 1000~10000          | -32.82     | -13        | PASS    |
| Band V  | 4182    | 30~1000             | -47.31     | -13        | PASS    |
| Band V  | 4182    | 1000~10000          | -32.64     | -13        | PASS    |
| Band V  | 4233    | 30~1000             | -47.85     | -13        | PASS    |
| Band V  | 4233    | 1000~10000          | -32.81     | -13        | PASS    |

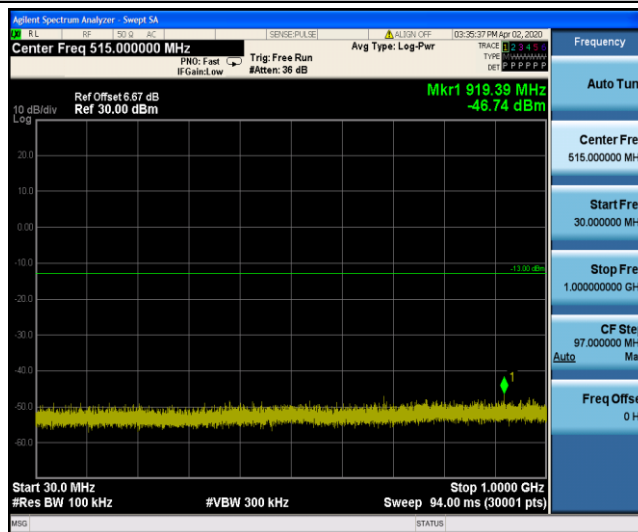
Test Graphs



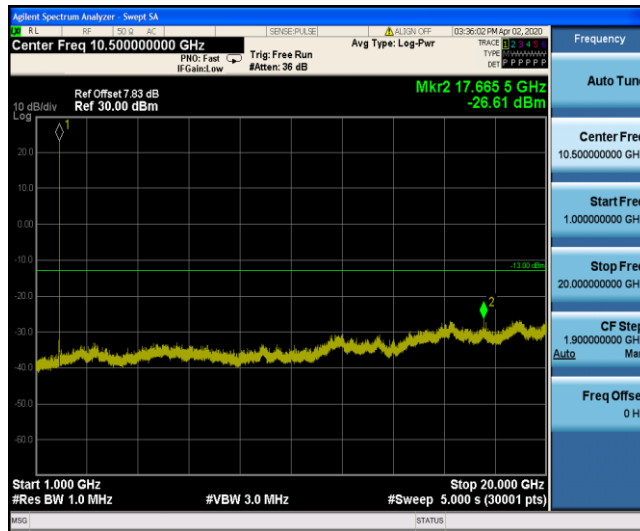
Band II\_9262



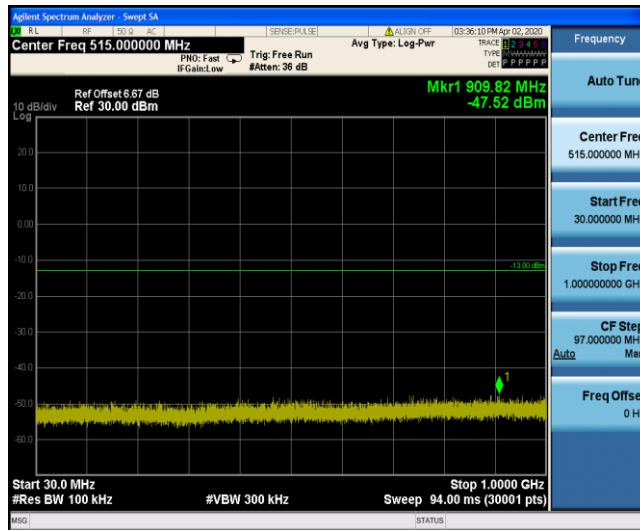
Band II\_9262



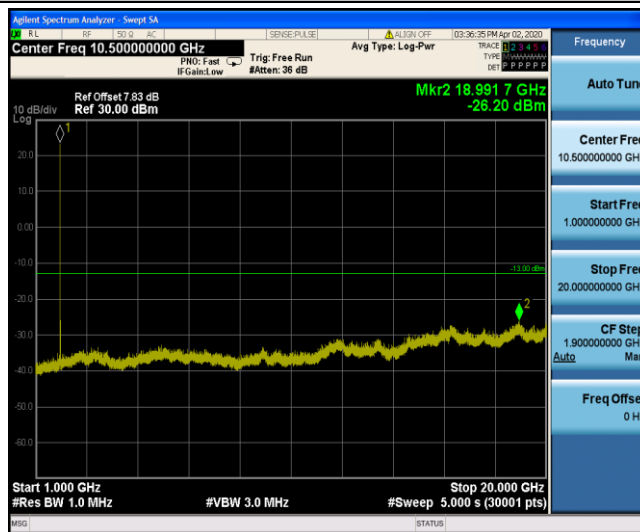
Band II\_9400



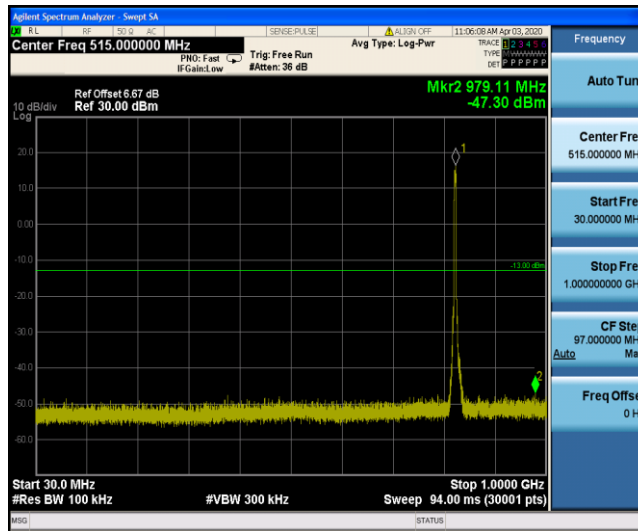
Band II\_9400



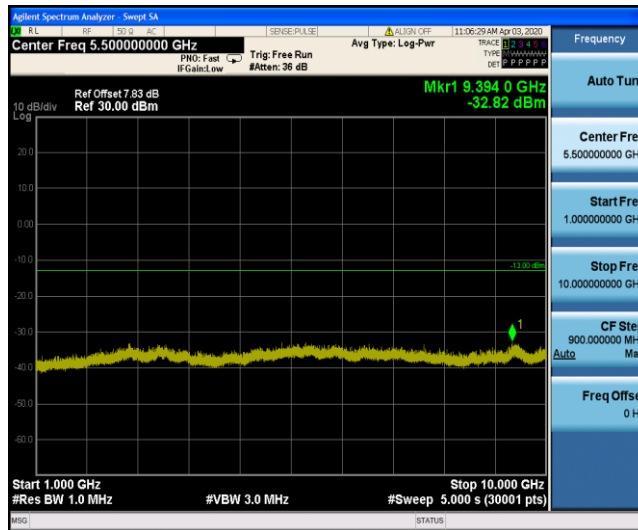
Band II\_9538



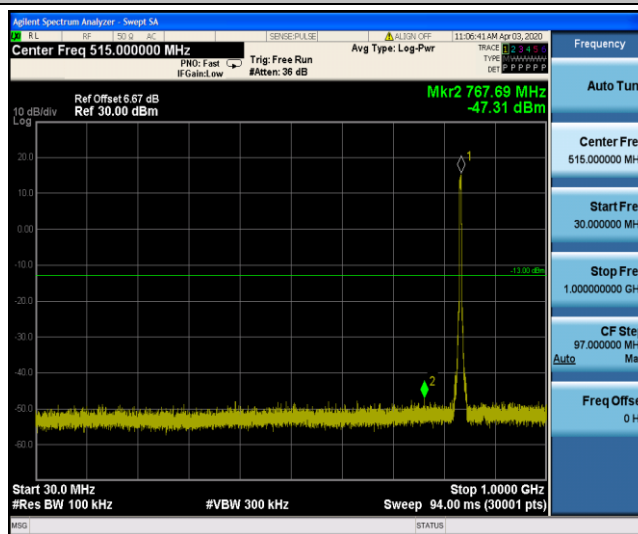
Band II\_9538



Band V\_4132

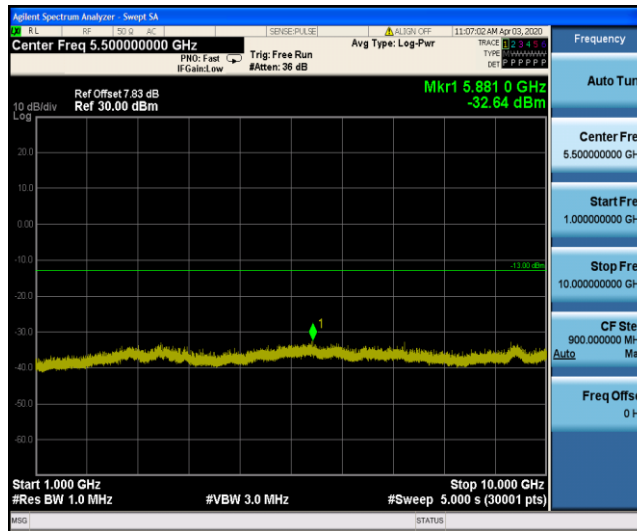


Band V\_4132

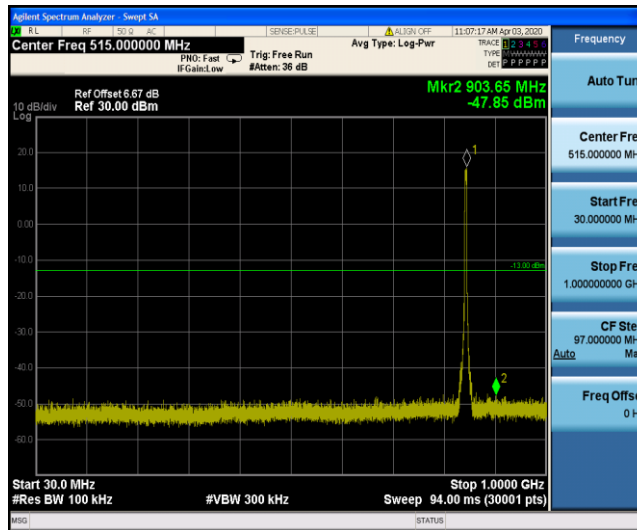


Band V\_4182

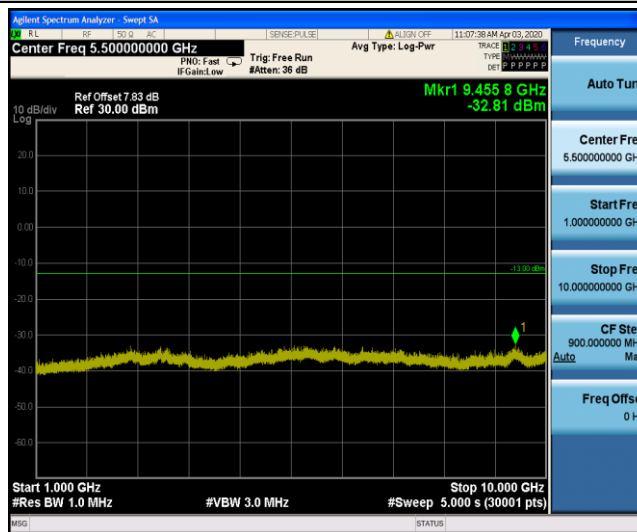




Band V\_4182



Band V\_4233



Band V\_4233

**8.6 Appendix F: Frequency Stability**

## Test Result

| Voltage |         |               |                  |                |                 |             |         |
|---------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band    | Channel | Voltage (Vdc) | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| Band II | 9262    | VL            | TN               | 6.29           | 0.003394        | 2.5         | PASS    |
| Band II | 9262    | VN            | TN               | 3.33           | 0.001799        | 2.5         | PASS    |
| Band II | 9262    | VH            | TN               | 5.99           | 0.003236        | 2.5         | PASS    |
| Band II | 9400    | VL            | TN               | 3.31           | 0.001762        | 2.5         | PASS    |
| Band II | 9400    | VN            | TN               | 6.60           | 0.003512        | 2.5         | PASS    |
| Band II | 9400    | VH            | TN               | 1.68           | 0.000894        | 2.5         | PASS    |
| Band II | 9538    | VL            | TN               | 6.29           | 0.003296        | 2.5         | PASS    |
| Band II | 9538    | VN            | TN               | 2.43           | 0.001275        | 2.5         | PASS    |
| Band II | 9538    | VH            | TN               | 4.86           | 0.002550        | 2.5         | PASS    |
| Band V  | 4132    | VL            | TN               | -4.19          | -0.005072       | 2.5         | PASS    |
| Band V  | 4132    | VN            | TN               | -1.66          | -0.002008       | 2.5         | PASS    |
| Band V  | 4132    | VH            | TN               | -1.90          | -0.002294       | 2.5         | PASS    |
| Band V  | 4182    | VL            | TN               | -3.05          | -0.003652       | 2.5         | PASS    |
| Band V  | 4182    | VN            | TN               | -7.38          | -0.008825       | 2.5         | PASS    |
| Band V  | 4182    | VH            | TN               | -7.37          | -0.008808       | 2.5         | PASS    |
| Band V  | 4233    | VL            | TN               | 1.37           | 0.001622        | 2.5         | PASS    |
| Band V  | 4233    | VN            | TN               | 0.53           | 0.000625        | 2.5         | PASS    |
| Band V  | 4233    | VH            | TN               | 3.98           | 0.004706        | 2.5         | PASS    |

| Temperature |         |               |                  |                |                 |             |         |
|-------------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band        | Channel | Voltage (Vdc) | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| Band II     | 9262    | VN            | -30              | 3.50           | 0.001888        | 2.5         | PASS    |
| Band II     | 9262    | VN            | -20              | 4.63           | 0.002498        | 2.5         | PASS    |
| Band II     | 9262    | VN            | -10              | 1.96           | 0.001058        | 2.5         | PASS    |
| Band II     | 9262    | VN            | 0                | 2.70           | 0.001460        | 2.5         | PASS    |
| Band II     | 9262    | VN            | 10               | 6.50           | 0.003510        | 2.5         | PASS    |
| Band II     | 9262    | VN            | 20               | 2.25           | 0.001216        | 2.5         | PASS    |
| Band II     | 9262    | VN            | 30               | 4.18           | 0.002255        | 2.5         | PASS    |
| Band II     | 9262    | VN            | 40               | 1.83           | 0.000988        | 2.5         | PASS    |
| Band II     | 9262    | VN            | 50               | 5.04           | 0.002718        | 2.5         | PASS    |
| Band II     | 9400    | VN            | -30              | 2.50           | 0.001332        | 2.5         | PASS    |
| Band II     | 9400    | VN            | -20              | 1.63           | 0.000867        | 2.5         | PASS    |
| Band II     | 9400    | VN            | -10              | -0.30          | -0.000160       | 2.5         | PASS    |
| Band II     | 9400    | VN            | 0                | 6.82           | 0.003626        | 2.5         | PASS    |
| Band II     | 9400    | VN            | 10               | 4.53           | 0.002408        | 2.5         | PASS    |
| Band II     | 9400    | VN            | 20               | 8.42           | 0.004478        | 2.5         | PASS    |
| Band II     | 9400    | VN            | 30               | 6.37           | 0.003386        | 2.5         | PASS    |
| Band II     | 9400    | VN            | 40               | 5.61           | 0.002983        | 2.5         | PASS    |
| Band II     | 9400    | VN            | 50               | 4.65           | 0.002473        | 2.5         | PASS    |
| Band II     | 9538    | VN            | -30              | 6.79           | 0.003562        | 2.5         | PASS    |
| Band II     | 9538    | VN            | -20              | 3.99           | 0.002092        | 2.5         | PASS    |
| Band II     | 9538    | VN            | -10              | 4.33           | 0.002272        | 2.5         | PASS    |
| Band II     | 9538    | VN            | 0                | 2.36           | 0.001237        | 2.5         | PASS    |
| Band II     | 9538    | VN            | 10               | 4.28           | 0.002242        | 2.5         | PASS    |
| Band II     | 9538    | VN            | 20               | 3.51           | 0.001841        | 2.5         | PASS    |
| Band II     | 9538    | VN            | 30               | 5.63           | 0.002951        | 2.5         | PASS    |
| Band II     | 9538    | VN            | 40               | 0.22           | 0.000116        | 2.5         | PASS    |
| Band II     | 9538    | VN            | 50               | 3.30           | 0.001732        | 2.5         | PASS    |
| Band V      | 4132    | VN            | -30              | -8.66          | -0.010481       | 2.5         | PASS    |
| Band V      | 4132    | VN            | -20              | -4.18          | -0.005063       | 2.5         | PASS    |
| Band V      | 4132    | VN            | -10              | -1.21          | -0.001463       | 2.5         | PASS    |
| Band V      | 4132    | VN            | 0                | -6.67          | -0.008067       | 2.5         | PASS    |
| Band V      | 4132    | VN            | 10               | 0.75           | 0.000909        | 2.5         | PASS    |
| Band V      | 4132    | VN            | 20               | -2.26          | -0.002735       | 2.5         | PASS    |
| Band V      | 4132    | VN            | 30               | -6.10          | -0.007383       | 2.5         | PASS    |
| Band V      | 4132    | VN            | 40               | -4.82          | -0.005834       | 2.5         | PASS    |
| Band V      | 4132    | VN            | 50               | 0.10           | 0.000121        | 2.5         | PASS    |
| Band V      | 4182    | VN            | -30              | -1.74          | -0.002078       | 2.5         | PASS    |
| Band V      | 4182    | VN            | -20              | -2.58          | -0.003087       | 2.5         | PASS    |
| Band V      | 4182    | VN            | -10              | -5.26          | -0.006285       | 2.5         | PASS    |
| Band V      | 4182    | VN            | 0                | -1.93          | -0.002309       | 2.5         | PASS    |
| Band V      | 4182    | VN            | 10               | -2.21          | -0.002642       | 2.5         | PASS    |
| Band V      | 4182    | VN            | 20               | -5.36          | -0.006405       | 2.5         | PASS    |
| Band V      | 4182    | VN            | 30               | -6.46          | -0.007722       | 2.5         | PASS    |
| Band V      | 4182    | VN            | 40               | -5.70          | -0.006816       | 2.5         | PASS    |
| Band V      | 4182    | VN            | 50               | -2.25          | -0.002685       | 2.5         | PASS    |
| Band V      | 4233    | VN            | -30              | -2.24          | -0.002644       | 2.5         | PASS    |

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|        |      |    |     |       |           |     |      |
|--------|------|----|-----|-------|-----------|-----|------|
| Band V | 4233 | VN | -20 | 1.41  | 0.001664  | 2.5 | PASS |
| Band V | 4233 | VN | -10 | 2.08  | 0.002459  | 2.5 | PASS |
| Band V | 4233 | VN | 0   | 0.91  | 0.001073  | 2.5 | PASS |
| Band V | 4233 | VN | 10  | -0.11 | -0.000135 | 2.5 | PASS |
| Band V | 4233 | VN | 20  | 2.90  | 0.003430  | 2.5 | PASS |
| Band V | 4233 | VN | 30  | -0.45 | -0.000532 | 2.5 | PASS |
| Band V | 4233 | VN | 40  | 4.84  | 0.005720  | 2.5 | PASS |
| Band V | 4233 | VN | 50  | 5.11  | 0.006041  | 2.5 | PASS |

-----End of the Report -----