

## AppendixA: Effective (Isotropic) Radiated Power Output Data

### Test Result(WCDMA)

| Band  | Type     | Channel | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|----------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | Voice    | 9262    | 22.64                 | 20.64          | 33.01                | PASS    |
| Band2 | TestMode | 9262    | 22.63                 | 20.63          | 33.01                | PASS    |
| Band2 | TestMode | 9400    | 22.78                 | 20.78          | 33.01                | PASS    |
| Band2 | Voice    | 9400    | 22.70                 | 20.7           | 33.01                | PASS    |
| Band2 | TestMode | 9538    | 22.94                 | 20.94          | 33.01                | PASS    |
| Band2 | Voice    | 9538    | 22.92                 | 20.92          | 33.01                | PASS    |
| Band4 | Voice    | 1312    | 22.77                 | 20.77          | 30.00                | PASS    |
| Band4 | TestMode | 1312    | 22.80                 | 20.8           | 30.00                | PASS    |
| Band4 | TestMode | 1413    | 22.78                 | 20.78          | 30.00                | PASS    |
| Band4 | Voice    | 1413    | 22.73                 | 20.73          | 30.00                | PASS    |
| Band4 | Voice    | 1513    | 22.70                 | 20.7           | 30.00                | PASS    |
| Band4 | TestMode | 1513    | 22.76                 | 20.76          | 30.00                | PASS    |
| Band5 | TestMode | 4132    | 23.83                 | 14.68          | 38.45                | PASS    |
| Band5 | Voice    | 4132    | 23.75                 | 14.6           | 38.45                | PASS    |
| Band5 | TestMode | 4183    | 23.87                 | 14.72          | 38.45                | PASS    |
| Band5 | Voice    | 4183    | 23.73                 | 14.58          | 38.45                | PASS    |
| Band5 | Voice    | 4233    | 23.72                 | 14.57          | 38.45                | PASS    |
| Band5 | TestMode | 4233    | 23.82                 | 14.67          | 38.45                | PASS    |

### Test Result(HSDPA)

| Band  | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262    | 1       | 21.69                 | 19.69          | 33.01                | PASS    |
| Band2 | 9262    | 2       | 21.09                 | 19.09          | 33.01                | PASS    |
| Band2 | 9262    | 3       | 21.08                 | 19.08          | 33.01                | PASS    |
| Band2 | 9262    | 4       | 21.10                 | 19.1           | 33.01                | PASS    |
| Band2 | 9400    | 1       | 21.78                 | 19.78          | 33.01                | PASS    |
| Band2 | 9400    | 2       | 21.19                 | 19.19          | 33.01                | PASS    |
| Band2 | 9400    | 3       | 21.23                 | 19.23          | 33.01                | PASS    |
| Band2 | 9400    | 4       | 21.20                 | 19.2           | 33.01                | PASS    |
| Band2 | 9538    | 1       | 21.96                 | 19.96          | 33.01                | PASS    |
| Band2 | 9538    | 2       | 21.38                 | 19.38          | 33.01                | PASS    |
| Band2 | 9538    | 3       | 21.37                 | 19.37          | 33.01                | PASS    |
| Band2 | 9538    | 4       | 21.41                 | 19.41          | 33.01                | PASS    |

|       |      |   |       |       |       |      |
|-------|------|---|-------|-------|-------|------|
| Band4 | 1312 | 1 | 21.80 | 19.8  | 30.00 | PASS |
| Band4 | 1312 | 2 | 21.22 | 19.22 | 30.00 | PASS |
| Band4 | 1312 | 3 | 21.25 | 19.25 | 30.00 | PASS |
| Band4 | 1312 | 4 | 21.21 | 19.21 | 30.00 | PASS |
| Band4 | 1413 | 1 | 21.78 | 19.78 | 30.00 | PASS |
| Band4 | 1413 | 2 | 21.21 | 19.21 | 30.00 | PASS |
| Band4 | 1413 | 3 | 21.22 | 19.22 | 30.00 | PASS |
| Band4 | 1413 | 4 | 21.19 | 19.19 | 30.00 | PASS |
| Band4 | 1513 | 1 | 21.73 | 19.73 | 30.00 | PASS |
| Band4 | 1513 | 2 | 21.22 | 19.22 | 30.00 | PASS |
| Band4 | 1513 | 3 | 21.23 | 19.23 | 30.00 | PASS |
| Band4 | 1513 | 4 | 21.21 | 19.21 | 30.00 | PASS |
| Band5 | 4132 | 1 | 22.84 | 13.69 | 38.5  | PASS |
| Band5 | 4132 | 2 | 22.28 | 13.13 | 38.5  | PASS |
| Band5 | 4132 | 3 | 22.31 | 13.16 | 38.5  | PASS |
| Band5 | 4132 | 4 | 22.28 | 13.13 | 38.5  | PASS |
| Band5 | 4183 | 1 | 22.86 | 13.71 | 38.5  | PASS |
| Band5 | 4183 | 2 | 22.33 | 13.18 | 38.5  | PASS |
| Band5 | 4183 | 3 | 22.36 | 13.21 | 38.5  | PASS |
| Band5 | 4183 | 4 | 22.32 | 13.17 | 38.5  | PASS |
| Band5 | 4233 | 1 | 22.81 | 13.66 | 38.5  | PASS |
| Band5 | 4233 | 2 | 22.27 | 13.12 | 38.5  | PASS |
| Band5 | 4233 | 3 | 22.30 | 13.15 | 38.5  | PASS |
| Band5 | 4233 | 4 | 22.26 | 13.11 | 38.5  | PASS |

### Test Result(HSUPA)

| Band  | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262    | 1       | 20.63                 | 18.63          | 33.01                | PASS    |
| Band2 | 9262    | 2       | 21.14                 | 19.14          | 33.01                | PASS    |
| Band2 | 9262    | 3       | 21.67                 | 19.67          | 33.01                | PASS    |
| Band2 | 9262    | 4       | 20.62                 | 18.62          | 33.01                | PASS    |
| Band2 | 9262    | 5       | 22.66                 | 20.66          | 33.01                | PASS    |
| Band2 | 9400    | 1       | 20.75                 | 18.75          | 33.01                | PASS    |
| Band2 | 9400    | 2       | 21.20                 | 19.2           | 33.01                | PASS    |
| Band2 | 9400    | 3       | 21.78                 | 19.78          | 33.01                | PASS    |
| Band2 | 9400    | 4       | 20.79                 | 18.79          | 33.01                | PASS    |
| Band2 | 9400    | 5       | 22.77                 | 20.77          | 33.01                | PASS    |
| Band2 | 9538    | 1       | 20.90                 | 18.9           | 33.01                | PASS    |
| Band2 | 9538    | 2       | 21.42                 | 19.42          | 33.01                | PASS    |
| Band2 | 9538    | 3       | 21.89                 | 19.89          | 33.01                | PASS    |

|       |      |   |       |       |       |      |
|-------|------|---|-------|-------|-------|------|
| Band2 | 9538 | 4 | 20.95 | 18.95 | 33.01 | PASS |
| Band2 | 9538 | 5 | 22.92 | 20.92 | 33.01 | PASS |
| Band4 | 1312 | 1 | 20.80 | 18.8  | 30.00 | PASS |
| Band4 | 1312 | 2 | 21.29 | 19.29 | 30.00 | PASS |
| Band4 | 1312 | 3 | 21.78 | 19.78 | 30.00 | PASS |
| Band4 | 1312 | 4 | 20.76 | 18.76 | 30.00 | PASS |
| Band4 | 1312 | 5 | 22.85 | 20.85 | 30.00 | PASS |
| Band4 | 1413 | 1 | 20.76 | 18.76 | 30.00 | PASS |
| Band4 | 1413 | 2 | 21.26 | 19.26 | 30.00 | PASS |
| Band4 | 1413 | 3 | 21.74 | 19.74 | 30.00 | PASS |
| Band4 | 1413 | 4 | 20.78 | 18.78 | 30.00 | PASS |
| Band4 | 1413 | 5 | 22.78 | 20.78 | 30.00 | PASS |
| Band4 | 1513 | 1 | 20.79 | 18.79 | 30.00 | PASS |
| Band4 | 1513 | 2 | 21.26 | 19.26 | 30.00 | PASS |
| Band4 | 1513 | 3 | 21.76 | 19.76 | 30.00 | PASS |
| Band4 | 1513 | 4 | 20.78 | 18.78 | 30.00 | PASS |
| Band4 | 1513 | 5 | 22.79 | 20.79 | 30.00 | PASS |
| Band5 | 4132 | 1 | 20.88 | 11.73 | 38.5  | PASS |
| Band5 | 4132 | 2 | 21.36 | 12.21 | 38.5  | PASS |
| Band5 | 4132 | 3 | 21.87 | 12.72 | 38.5  | PASS |
| Band5 | 4132 | 4 | 20.92 | 11.77 | 38.5  | PASS |
| Band5 | 4132 | 5 | 22.89 | 13.74 | 38.5  | PASS |
| Band5 | 4183 | 1 | 20.91 | 11.76 | 38.5  | PASS |
| Band5 | 4183 | 2 | 21.36 | 12.21 | 38.5  | PASS |
| Band5 | 4183 | 3 | 21.91 | 12.76 | 38.5  | PASS |
| Band5 | 4183 | 4 | 20.91 | 11.76 | 38.5  | PASS |
| Band5 | 4183 | 5 | 22.90 | 13.75 | 38.5  | PASS |
| Band5 | 4233 | 1 | 20.90 | 11.75 | 38.5  | PASS |
| Band5 | 4233 | 2 | 21.35 | 12.2  | 38.5  | PASS |
| Band5 | 4233 | 3 | 21.89 | 12.74 | 38.5  | PASS |
| Band5 | 4233 | 4 | 20.92 | 11.77 | 38.5  | PASS |
| Band5 | 4233 | 5 | 22.90 | 13.75 | 38.5  | PASS |

Remark: EIRP (dBm) = Conducted power (dBm) + Antenna Gain (dBi). (For Band2)  
ERP (dBm) = EIRP (dBm) - 2.15 (dB). (For Band5)

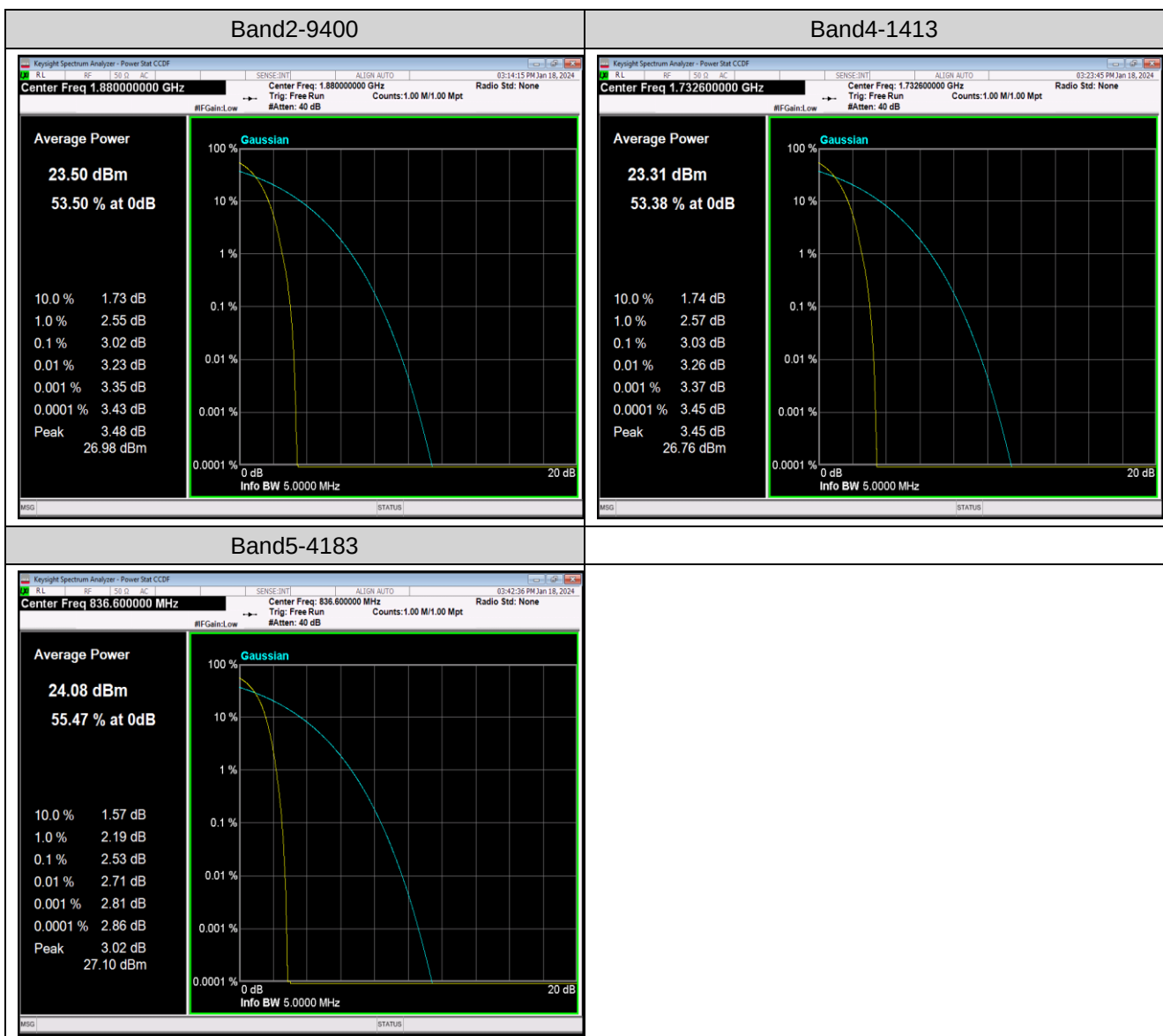
## AppendixB:Peak-to-Average Ratio

### Test Result(WCDMA)

| Band  | Channel | Peak-to-Average Ratio(dB) | Limit(dB) | Verdict |
|-------|---------|---------------------------|-----------|---------|
| Band2 | 9400    | 3.02                      | 13        | PASS    |
| Band4 | 1413    | 3.03                      | 13        | PASS    |
| Band5 | 4183    | 2.53                      | 13        | PASS    |

Remark: All channel had been tested, but only the worst case data displayed in this report.

### Test Graphs(WCDMA)



## AppendixC:26dB Bandwidth andOccupied Bandwidth

### Test Result(WCDMA)

| Band  | Channel | Occupied Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) | Limit(kHz) | Verdict |
|-------|---------|-----------------------------|-------------------------|------------|---------|
| Band2 | 9262    | 4.1545                      | 4.696                   | ---        | PASS    |
| Band2 | 9400    | 4.1596                      | 4.693                   | ---        | PASS    |
| Band2 | 9538    | 4.1564                      | 4.685                   | ---        | PASS    |
| Band4 | 1312    | 4.1459                      | 4.682                   | ---        | PASS    |
| Band4 | 1413    | 4.1531                      | 4.689                   | ---        | PASS    |
| Band4 | 1513    | 4.1679                      | 4.692                   | ---        | PASS    |
| Band5 | 4132    | 4.1673                      | 4.747                   | ---        | PASS    |
| Band5 | 4183    | 4.1670                      | 4.733                   | ---        | PASS    |
| Band5 | 4233    | 4.1713                      | 4.752                   | ---        | PASS    |

# Test Graphs(WCDMA)





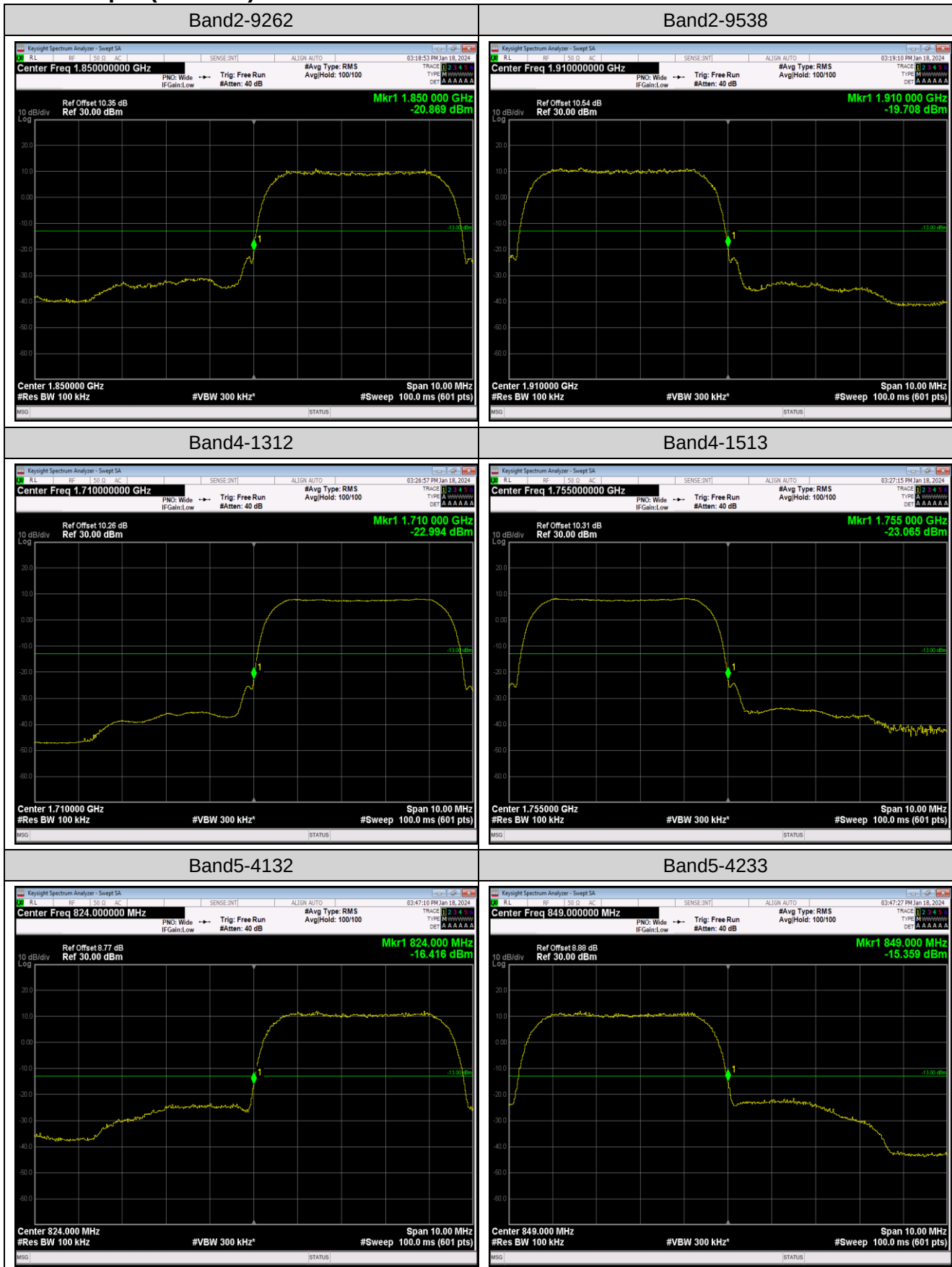
## AppendixD:Band Edge

### Test Result(WCDMA)

| Band  | Channel | Frequency (MHz) | Result (dBm) | Limit(dBm) | Verdict |
|-------|---------|-----------------|--------------|------------|---------|
| Band2 | 9262    | 1850.00         | -20.87       | -13        | PASS    |
| Band2 | 9538    | 1910.00         | -19.71       | -13        | PASS    |
| Band4 | 1312    | 1710.00         | -22.99       | -13        | PASS    |
| Band4 | 1513    | 1755.00         | -23.06       | -13        | PASS    |
| Band5 | 4132    | 824.00          | -16.42       | -13        | PASS    |
| Band5 | 4233    | 849.00          | -15.36       | -13        | PASS    |



# Test Graphs(WCDMA)

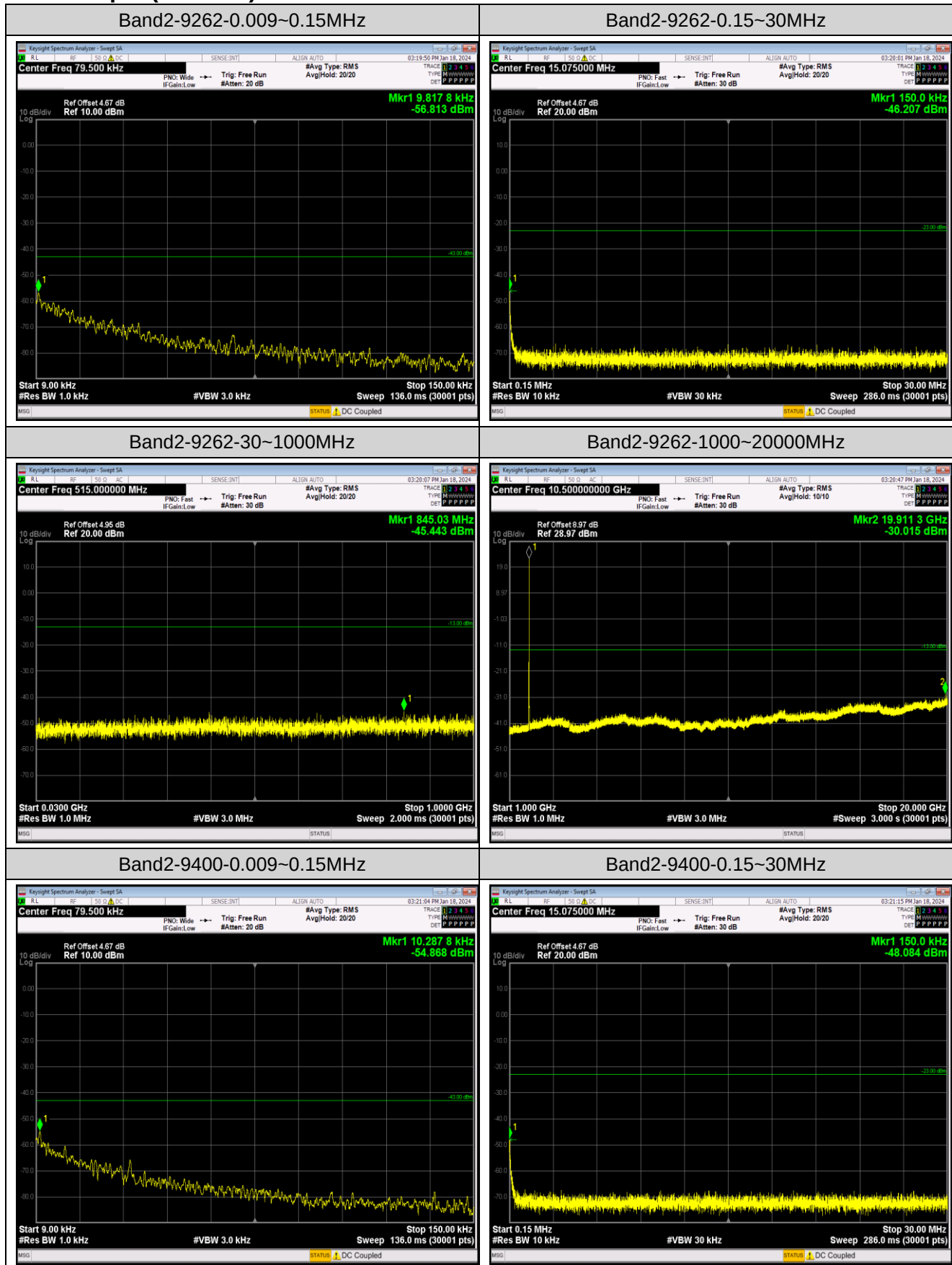


## AppendixE:Conducted SpuriousEmission

### Test Result(WCDMA)

| Band  | Channel | Frequency Range (Mhz) | Frequency (dBm) | Result (dBm) | Limit (dBm) | Verdict |
|-------|---------|-----------------------|-----------------|--------------|-------------|---------|
| Band2 | 9262    | 0.009~0.15MHz         | 0.01            | -56.81       | -43         | PASS    |
| Band2 | 9262    | 0.15~30MHz            | 0.15            | -46.21       | -23         | PASS    |
| Band2 | 9262    | 30~1000MHz            | 845.03          | -45.44       | -13         | PASS    |
| Band2 | 9262    | 1000~20000MHz         | 19911.33        | -30.02       | -13         | PASS    |
| Band2 | 9400    | 0.009~0.15MHz         | 0.01            | -54.87       | -43         | PASS    |
| Band2 | 9400    | 0.15~30MHz            | 0.15            | -48.08       | -23         | PASS    |
| Band2 | 9400    | 30~1000MHz            | 518.04          | -45.38       | -13         | PASS    |
| Band2 | 9400    | 1000~20000MHz         | 19986.7         | -30.38       | -13         | PASS    |
| Band2 | 9538    | 0.009~0.15MHz         | 0.01            | -55.31       | -43         | PASS    |
| Band2 | 9538    | 0.15~30MHz            | 0.16            | -49.65       | -23         | PASS    |
| Band2 | 9538    | 30~1000MHz            | 770.21          | -45.54       | -13         | PASS    |
| Band2 | 9538    | 1000~20000MHz         | 18705.47        | -30.72       | -13         | PASS    |
| Band4 | 1312    | 0.009~0.15MHz         | 0.01            | -58.2        | -43         | PASS    |
| Band4 | 1312    | 0.15~30MHz            | 0.16            | -49.01       | -23         | PASS    |
| Band4 | 1312    | 30~1000MHz            | 888.94          | -45.05       | -13         | PASS    |
| Band4 | 1312    | 1000~20000MHz         | 19995.57        | -31.11       | -13         | PASS    |
| Band4 | 1413    | 0.009~0.15MHz         | 0.01            | -58.83       | -43         | PASS    |
| Band4 | 1413    | 0.15~30MHz            | 0.15            | -49.08       | -23         | PASS    |
| Band4 | 1413    | 30~1000MHz            | 874.03          | -46.04       | -13         | PASS    |
| Band4 | 1413    | 1000~20000MHz         | 19841.03        | -30.52       | -13         | PASS    |
| Band4 | 1513    | 0.009~0.15MHz         | 0.01            | -55.98       | -43         | PASS    |
| Band4 | 1513    | 0.15~30MHz            | 0.15            | -49.58       | -23         | PASS    |
| Band4 | 1513    | 30~1000MHz            | 959.32          | -45.34       | -13         | PASS    |
| Band4 | 1513    | 1000~20000MHz         | 19943.63        | -30.45       | -13         | PASS    |
| Band5 | 4132    | 0.009~0.15MHz         | 0.01            | -57.21       | -33         | PASS    |
| Band5 | 4132    | 0.15~30MHz            | 0.17            | -49.85       | -13         | PASS    |
| Band5 | 4132    | 30~1000MHz            | 383.99          | -54.73       | -13         | PASS    |
| Band5 | 4132    | 1000~10000MHz         | 5886.4          | -37.08       | -13         | PASS    |
| Band5 | 4183    | 0.009~0.15MHz         | 0.01            | -56.15       | -33         | PASS    |
| Band5 | 4183    | 0.15~30MHz            | 0.15            | -47.4        | -13         | PASS    |
| Band5 | 4183    | 30~1000MHz            | 386.18          | -55.2        | -13         | PASS    |
| Band5 | 4183    | 1000~10000MHz         | 5905            | -36.76       | -13         | PASS    |
| Band5 | 4233    | 0.009~0.15MHz         | 0.01            | -56.06       | -33         | PASS    |
| Band5 | 4233    | 0.15~30MHz            | 0.15            | -47.2        | -13         | PASS    |
| Band5 | 4233    | 30~1000MHz            | 505.11          | -55.19       | -13         | PASS    |
| Band5 | 4233    | 1000~10000MHz         | 5998.6          | -36.47       | -13         | PASS    |

# Test Graphs(WCDMA)

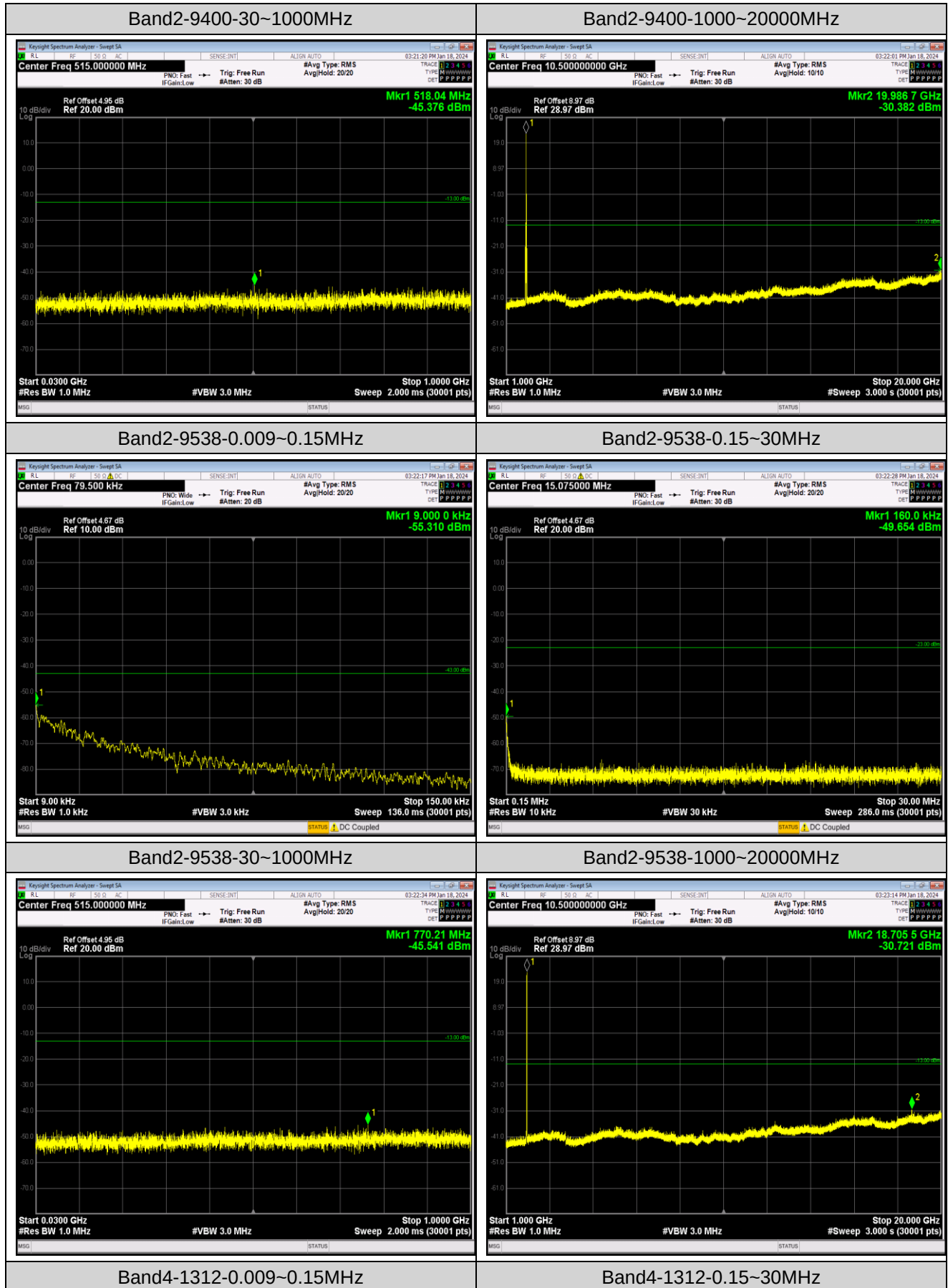


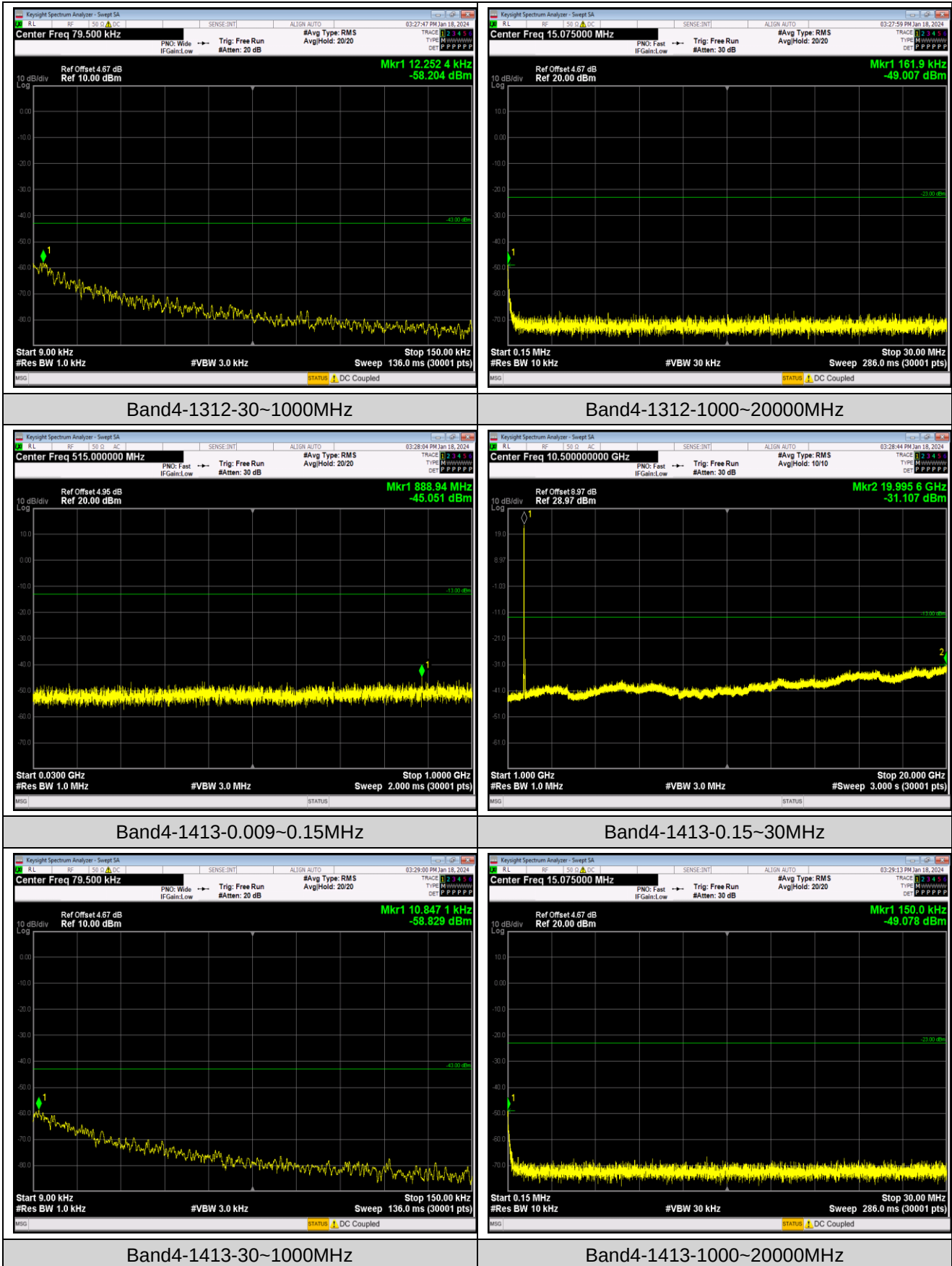
JianYan Testing Group Shenzhen Co., Ltd.

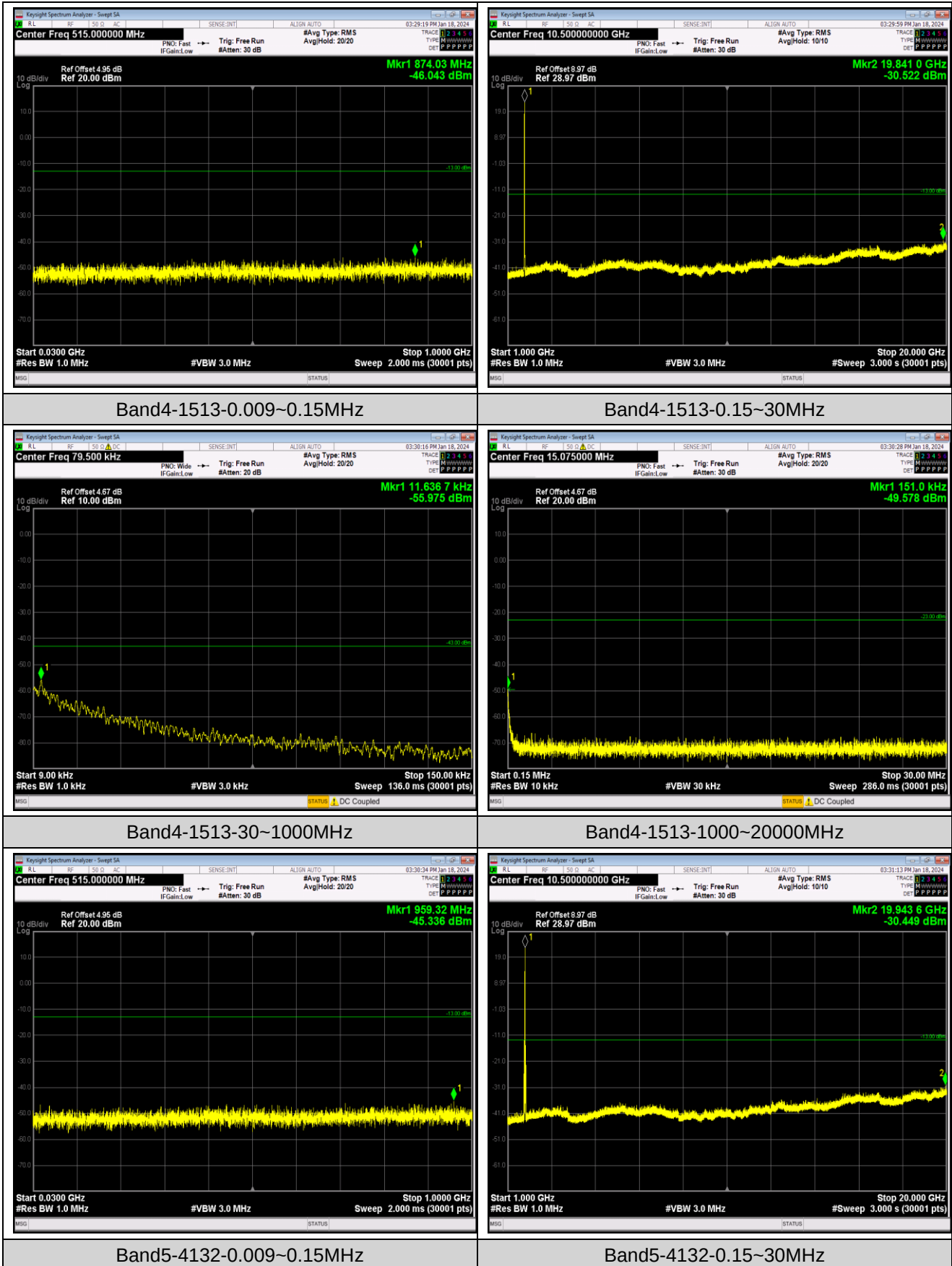
No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

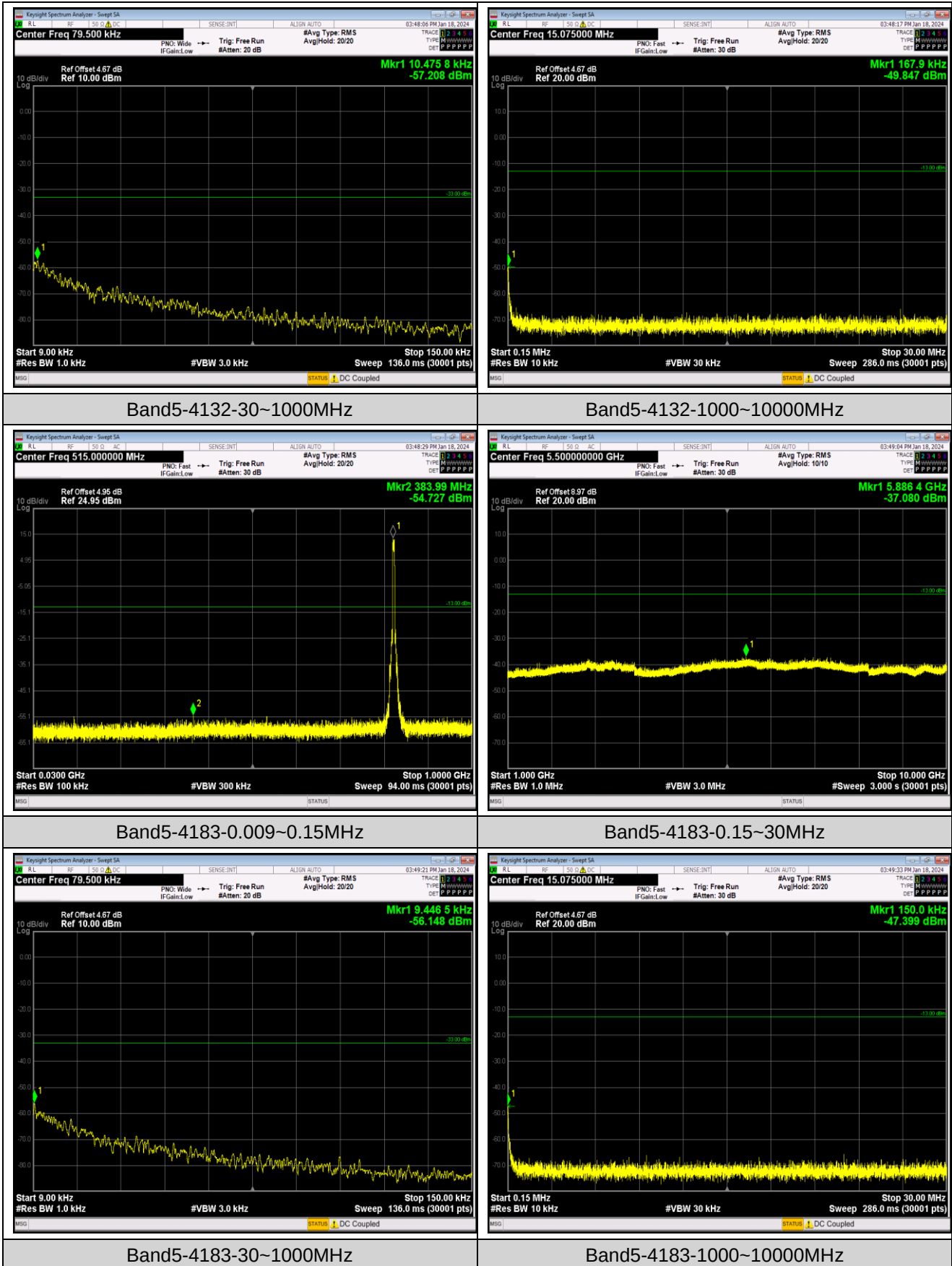
Tel: +86-755-23118282, Fax: +86-755-23116366

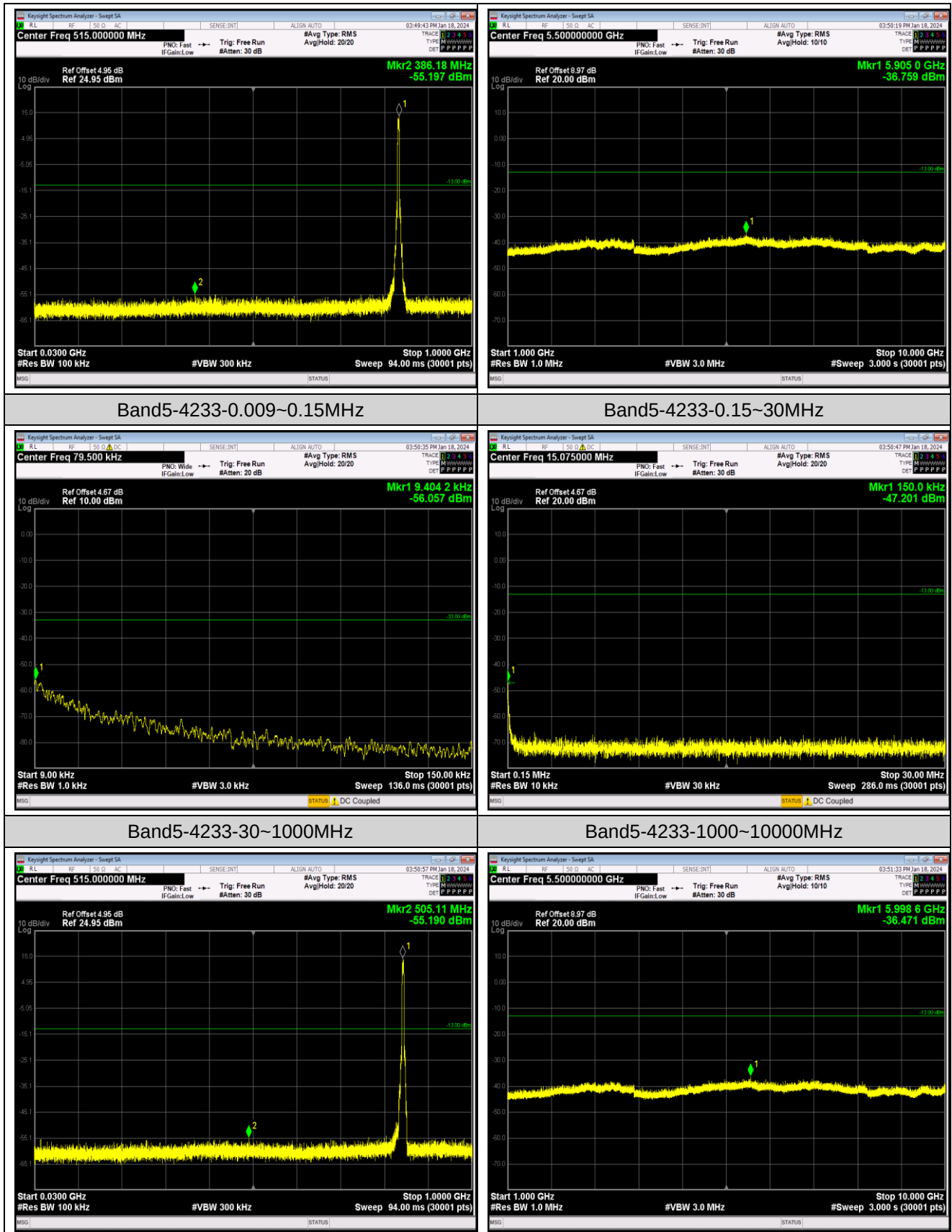
Project No.: JYTSZR2312022













## AppendixF:Frequency Stability

### Test Result

| Reference Frequency: WCDMA BAND V 12.2k RMC Middle channel=4183 Frequency=836.6MHz          |                         |                 |           |             |        |
|---------------------------------------------------------------------------------------------|-------------------------|-----------------|-----------|-------------|--------|
| Temperature                                                                                 |                         |                 |           |             |        |
| Power supplied<br>(Vdc)                                                                     | Temperature<br>(℃)      | Frequency error |           | Limit (ppm) | Result |
|                                                                                             |                         | Hz              | ppm       |             |        |
| 3.91                                                                                        | -30                     | -4.64           | -0.005546 | ±2.5        | Pass   |
|                                                                                             | -20                     | -4.55           | -0.005439 |             |        |
|                                                                                             | -10                     | -4.48           | -0.005355 |             |        |
|                                                                                             | 0                       | -4.86           | -0.005809 |             |        |
|                                                                                             | 10                      | -4.28           | -0.005116 |             |        |
|                                                                                             | 20                      | -4.30           | -0.005140 |             |        |
|                                                                                             | 30                      | -4.20           | -0.005020 |             |        |
|                                                                                             | 40                      | -3.50           | -0.004184 |             |        |
|                                                                                             | 50                      | -5.31           | -0.006347 |             |        |
| Voltage                                                                                     |                         |                 |           |             |        |
| Temperature<br>(℃)                                                                          | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm) | Result |
|                                                                                             |                         | Hz              | ppm       |             |        |
| 25                                                                                          | 3.45                    | -5.51           | -0.006586 | ±2.5        | Pass   |
|                                                                                             | 3.91                    | -6.04           | -0.007220 |             |        |
|                                                                                             | 4.50                    | -5.17           | -0.006180 |             |        |
| Remark: All channel had been tested, but only the worst case data displayed in this report. |                         |                 |           |             |        |

| Reference Frequency: WCDMA BAND IV 12.2k RMC Middle Frequency=1413 channel=1732.6MHz        |                         |                 |           |                                       |        |
|---------------------------------------------------------------------------------------------|-------------------------|-----------------|-----------|---------------------------------------|--------|
| Temperature                                                                                 |                         |                 |           |                                       |        |
| Power supplied<br>(Vdc)                                                                     | Temperature<br>(°C)     | Frequency error |           | Limit (ppm)                           | Result |
|                                                                                             |                         | Hz              | ppm       |                                       |        |
| 3.91                                                                                        | -30                     | -3.60           | -0.002078 | Within authorized<br>band for BAND IV | Pass   |
|                                                                                             | -20                     | -2.78           | -0.001605 |                                       |        |
|                                                                                             | -10                     | -2.05           | -0.001183 |                                       |        |
|                                                                                             | 0                       | -3.30           | -0.001905 |                                       |        |
|                                                                                             | 10                      | -6.08           | -0.003509 |                                       |        |
|                                                                                             | 20                      | -5.47           | -0.003157 |                                       |        |
|                                                                                             | 30                      | -5.14           | -0.002967 |                                       |        |
|                                                                                             | 40                      | -5.06           | -0.002920 |                                       |        |
|                                                                                             | 50                      | -4.56           | -0.002632 |                                       |        |
| Voltage                                                                                     |                         |                 |           |                                       |        |
| Temperature<br>(°C)                                                                         | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm)                           | Result |
|                                                                                             |                         | Hz              | ppm       |                                       |        |
| 25                                                                                          | 3.45                    | -5.62           | -0.003244 | Within authorized<br>band for BAND IV | Pass   |
|                                                                                             | 3.91                    | -6.39           | -0.003688 |                                       |        |
|                                                                                             | 4.50                    | -4.06           | -0.002343 |                                       |        |
| Remark: All channel had been tested, but only the worst case data displayed in this report. |                         |                 |           |                                       |        |

| Reference Frequency: WCDMA BAND II 12.2k RMC Middle Frequency=9400 channel=1880MHz          |                         |                 |           |                                       |        |
|---------------------------------------------------------------------------------------------|-------------------------|-----------------|-----------|---------------------------------------|--------|
| Temperature                                                                                 |                         |                 |           |                                       |        |
| Power supplied<br>(Vdc)                                                                     | Temperature<br>(°C)     | Frequency error |           | Limit (ppm)                           | Result |
|                                                                                             |                         | Hz              | ppm       |                                       |        |
| 3.91                                                                                        | -30                     | -4.21           | -0.002239 | Within authorized<br>band for BAND II | Pass   |
|                                                                                             | -20                     | -3.63           | -0.001931 |                                       |        |
|                                                                                             | -10                     | -3.05           | -0.001622 |                                       |        |
|                                                                                             | 0                       | -2.40           | -0.001277 |                                       |        |
|                                                                                             | 10                      | -2.43           | -0.001293 |                                       |        |
|                                                                                             | 20                      | -2.07           | -0.001101 |                                       |        |
|                                                                                             | 30                      | -1.49           | -0.000793 |                                       |        |
|                                                                                             | 40                      | -2.55           | -0.001356 |                                       |        |
|                                                                                             | 50                      | -2.99           | -0.001590 |                                       |        |
| Voltage                                                                                     |                         |                 |           |                                       |        |
| Temperature<br>(°C)                                                                         | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm)                           | Result |
|                                                                                             |                         | Hz              | ppm       |                                       |        |
| 25                                                                                          | 3.45                    | -5.37           | -0.002856 | Within authorized<br>band for BAND II | Pass   |
|                                                                                             | 3.91                    | -6.75           | -0.003590 |                                       |        |
|                                                                                             | 4.50                    | -4.93           | -0.002622 |                                       |        |
| Remark: All channel had been tested, but only the worst case data displayed in this report. |                         |                 |           |                                       |        |

## Appendix G: Modulation Characteristics

### Test Result

| Band  | Channel | Result | Verdict |
|-------|---------|--------|---------|
| Band2 | 9400    | PASS   | PASS    |
| Band4 | 1413    | PASS   | PASS    |
| Band5 | 4183    | PASS   | PASS    |

Remark: All channel had been tested, but only the worst case data displayed in this report.

### Test Graphs

