

## 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    | 23.27                 | 22.97          | 33.01                | PASS    |
| Band2 | TestMode | 9262    | 23.33                 | 23.03          | 33.01                | PASS    |
| Band2 | TestMode | 9400    | 23.77                 | 23.47          | 33.01                | PASS    |
| Band2 | Voice    | 9400    | 23.76                 | 23.46          | 33.01                | PASS    |
| Band2 | TestMode | 9538    | 23.89                 | 23.59          | 33.01                | PASS    |
| Band2 | Voice    | 9538    | 23.85                 | 23.55          | 33.01                | PASS    |
| Band4 | Voice    | 1312    | 23.52                 | 22.72          | 30.00                | PASS    |
| Band4 | TestMode | 1312    | 23.58                 | 22.78          | 30.00                | PASS    |
| Band4 | Voice    | 1413    | 23.18                 | 22.38          | 30.00                | PASS    |
| Band4 | TestMode | 1413    | 23.22                 | 22.42          | 30.00                | PASS    |
| Band4 | TestMode | 1513    | 23.40                 | 22.6           | 30.00                | PASS    |
| Band4 | Voice    | 1513    | 23.35                 | 22.55          | 30.00                | PASS    |
| Band5 | Voice    | 4132    | 24.05                 | 18.4           | 38.45                | PASS    |
| Band5 | TestMode | 4132    | 24.06                 | 18.41          | 38.45                | PASS    |
| Band5 | TestMode | 4183    | 24.08                 | 18.43          | 38.45                | PASS    |
| Band5 | Voice    | 4183    | 23.97                 | 18.32          | 38.45                | PASS    |
| Band5 | Voice    | 4233    | 23.88                 | 18.23          | 38.45                | PASS    |
| Band5 | TestMode | 4233    | 23.96                 | 18.31          | 38.45                | PASS    |

### Test Result(HSDPA)

| Band  | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262    | 1       | 23.23                 | 22.93          | 33.01                | PASS    |
| Band2 | 9262    | 2       | 22.98                 | 22.68          | 33.01                | PASS    |
| Band2 | 9262    | 3       | 22.74                 | 22.44          | 33.01                | PASS    |
| Band2 | 9262    | 4       | 22.87                 | 22.57          | 33.01                | PASS    |
| Band2 | 9400    | 1       | 23.81                 | 23.51          | 33.01                | PASS    |
| Band2 | 9400    | 2       | 23.52                 | 23.22          | 33.01                | PASS    |
| Band2 | 9400    | 3       | 23.41                 | 23.11          | 33.01                | PASS    |
| Band2 | 9400    | 4       | 23.43                 | 23.13          | 33.01                | PASS    |
| Band2 | 9538    | 1       | 23.89                 | 23.59          | 33.01                | PASS    |
| Band2 | 9538    | 2       | 23.47                 | 23.17          | 33.01                | PASS    |
| Band2 | 9538    | 3       | 23.36                 | 23.06          | 33.01                | PASS    |
| Band2 | 9538    | 4       | 23.37                 | 23.07          | 33.01                | PASS    |

|       |      |   |       |       |       |      |
|-------|------|---|-------|-------|-------|------|
| Band4 | 1312 | 1 | 23.56 | 22.76 | 30.00 | PASS |
| Band4 | 1312 | 2 | 23.56 | 22.76 | 30.00 | PASS |
| Band4 | 1312 | 3 | 23.49 | 22.69 | 30.00 | PASS |
| Band4 | 1312 | 4 | 23.50 | 22.7  | 30.00 | PASS |
| Band4 | 1413 | 1 | 23.93 | 23.13 | 30.00 | PASS |
| Band4 | 1413 | 2 | 23.96 | 23.16 | 30.00 | PASS |
| Band4 | 1413 | 3 | 23.92 | 23.12 | 30.00 | PASS |
| Band4 | 1413 | 4 | 23.94 | 23.14 | 30.00 | PASS |
| Band4 | 1513 | 1 | 23.40 | 22.6  | 30.00 | PASS |
| Band4 | 1513 | 2 | 23.43 | 22.63 | 30.00 | PASS |
| Band4 | 1513 | 3 | 23.30 | 22.5  | 30.00 | PASS |
| Band4 | 1513 | 4 | 23.33 | 22.53 | 30.00 | PASS |
| Band5 | 4132 | 1 | 23.25 | 17.6  | 38.5  | PASS |
| Band5 | 4132 | 2 | 23.09 | 17.44 | 38.5  | PASS |
| Band5 | 4132 | 3 | 22.72 | 17.07 | 38.5  | PASS |
| Band5 | 4132 | 4 | 22.68 | 17.03 | 38.5  | PASS |
| Band5 | 4183 | 1 | 23.41 | 17.76 | 38.5  | PASS |
| Band5 | 4183 | 2 | 23.11 | 17.46 | 38.5  | PASS |
| Band5 | 4183 | 3 | 22.78 | 17.13 | 38.5  | PASS |
| Band5 | 4183 | 4 | 22.80 | 17.15 | 38.5  | PASS |
| Band5 | 4233 | 1 | 23.37 | 17.72 | 38.5  | PASS |
| Band5 | 4233 | 2 | 23.16 | 17.51 | 38.5  | PASS |
| Band5 | 4233 | 3 | 22.64 | 16.99 | 38.5  | PASS |
| Band5 | 4233 | 4 | 22.66 | 17.01 | 38.5  | PASS |

## Test Result(HSUPA)

| Band  | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262    | 1       | 20.73                 | 20.43          | 33.01                | PASS    |
| Band2 | 9262    | 2       | 21.43                 | 21.13          | 33.01                | PASS    |
| Band2 | 9262    | 3       | 21.21                 | 20.91          | 33.01                | PASS    |
| Band2 | 9262    | 4       | 21.49                 | 21.19          | 33.01                | PASS    |
| Band2 | 9262    | 5       | 23.24                 | 22.94          | 33.01                | PASS    |
| Band2 | 9400    | 1       | 21.57                 | 21.27          | 33.01                | PASS    |
| Band2 | 9400    | 2       | 22.16                 | 21.86          | 33.01                | PASS    |
| Band2 | 9400    | 3       | 21.88                 | 21.58          | 33.01                | PASS    |
| Band2 | 9400    | 4       | 22.13                 | 21.83          | 33.01                | PASS    |
| Band2 | 9400    | 5       | 23.88                 | 23.58          | 33.01                | PASS    |
| Band2 | 9538    | 1       | 21.67                 | 21.37          | 33.01                | PASS    |
| Band2 | 9538    | 2       | 22.05                 | 21.75          | 33.01                | PASS    |
| Band2 | 9538    | 3       | 21.79                 | 21.49          | 33.01                | PASS    |

|       |      |   |       |       |       |      |
|-------|------|---|-------|-------|-------|------|
| Band2 | 9538 | 4 | 22.11 | 21.81 | 33.01 | PASS |
| Band2 | 9538 | 5 | 23.88 | 23.58 | 33.01 | PASS |
| Band4 | 1312 | 1 | 23.43 | 22.63 | 30.00 | PASS |
| Band4 | 1312 | 2 | 23.34 | 22.54 | 30.00 | PASS |
| Band4 | 1312 | 3 | 23.23 | 22.43 | 30.00 | PASS |
| Band4 | 1312 | 4 | 23.38 | 22.58 | 30.00 | PASS |
| Band4 | 1312 | 5 | 23.61 | 22.81 | 30.00 | PASS |
| Band4 | 1413 | 1 | 23.81 | 23.01 | 30.00 | PASS |
| Band4 | 1413 | 2 | 23.90 | 23.1  | 30.00 | PASS |
| Band4 | 1413 | 3 | 23.71 | 22.91 | 30.00 | PASS |
| Band4 | 1413 | 4 | 23.94 | 23.14 | 30.00 | PASS |
| Band4 | 1413 | 5 | 23.98 | 23.18 | 30.00 | PASS |
| Band4 | 1513 | 1 | 23.30 | 22.5  | 30.00 | PASS |
| Band4 | 1513 | 2 | 23.31 | 22.51 | 30.00 | PASS |
| Band4 | 1513 | 3 | 23.13 | 22.33 | 30.00 | PASS |
| Band4 | 1513 | 4 | 23.37 | 22.57 | 30.00 | PASS |
| Band4 | 1513 | 5 | 23.42 | 22.62 | 30.00 | PASS |
| Band5 | 4132 | 1 | 21.88 | 16.23 | 38.5  | PASS |
| Band5 | 4132 | 2 | 22.14 | 16.49 | 38.5  | PASS |
| Band5 | 4132 | 3 | 21.77 | 16.12 | 38.5  | PASS |
| Band5 | 4132 | 4 | 21.68 | 16.03 | 38.5  | PASS |
| Band5 | 4132 | 5 | 23.58 | 17.93 | 38.5  | PASS |
| Band5 | 4183 | 1 | 22.09 | 16.44 | 38.5  | PASS |
| Band5 | 4183 | 2 | 22.20 | 16.55 | 38.5  | PASS |
| Band5 | 4183 | 3 | 21.93 | 16.28 | 38.5  | PASS |
| Band5 | 4183 | 4 | 21.90 | 16.25 | 38.5  | PASS |
| Band5 | 4183 | 5 | 23.64 | 17.99 | 38.5  | PASS |
| Band5 | 4233 | 1 | 21.93 | 16.28 | 38.5  | PASS |
| Band5 | 4233 | 2 | 22.11 | 16.46 | 38.5  | PASS |
| Band5 | 4233 | 3 | 21.84 | 16.19 | 38.5  | PASS |
| Band5 | 4233 | 4 | 21.61 | 15.96 | 38.5  | PASS |
| Band5 | 4233 | 5 | 23.66 | 18.01 | 38.5  | PASS |

Remark: EIRP (dBm) = Conducted power (dBm) + Antenna Gain (dBi). (For Band2 & 4)  
ERP (dBm) = EIRP (dBm) - 2.15 (dB). (For Band5)

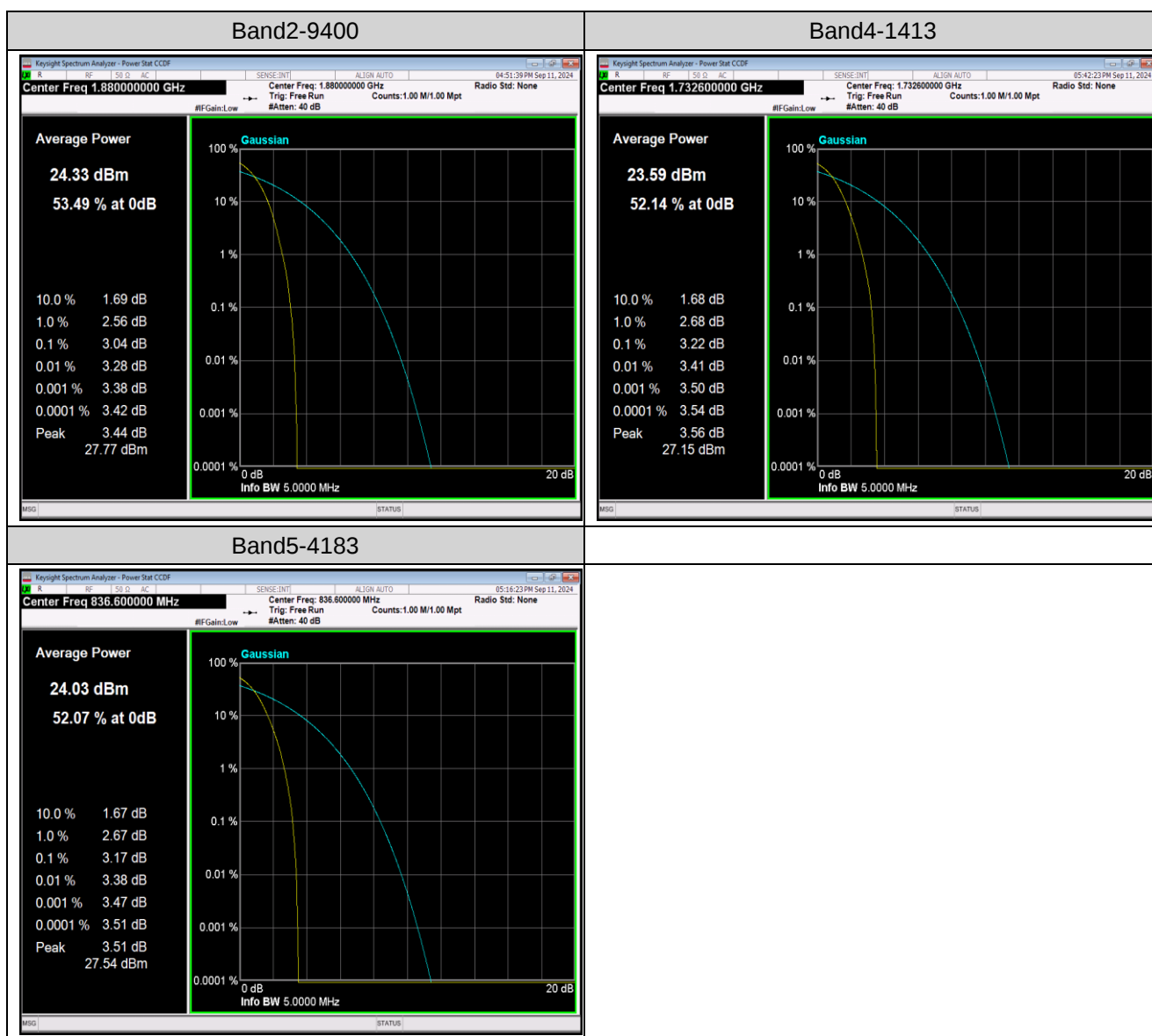
## AppendixB:Peak-to-Average Ratio

### Test Result(WCDMA)

| Band  | Channel | Peak-to-Average Ratio(dB) | Limit(dB) | Verdict |
|-------|---------|---------------------------|-----------|---------|
| Band2 | 9400    | 3.04                      | 13        | PASS    |
| Band4 | 1413    | 3.22                      | 13        | PASS    |
| Band5 | 4183    | 3.17                      | 13        | PASS    |

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

### Test Graphs(WCDMA)

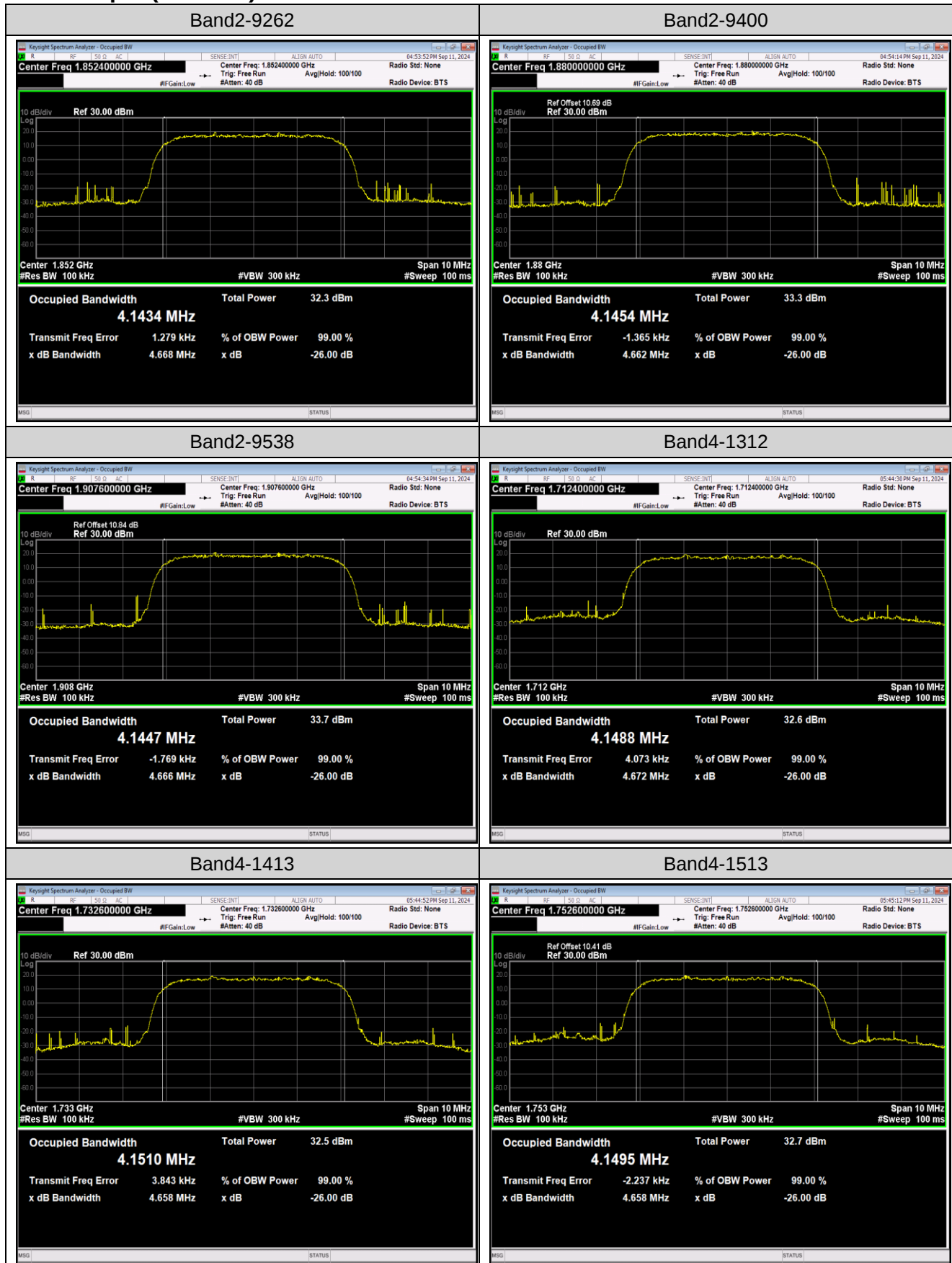


## AppendixC:26dB Bandwidth andOccupied Bandwidth

### Test Result(WCDMA)

| Band  | Channel | Occupied Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) | Limit(kHz) | Verdict |
|-------|---------|-----------------------------|-------------------------|------------|---------|
| Band2 | 9262    | 4.1434                      | 4.668                   | ---        | PASS    |
| Band2 | 9400    | 4.1454                      | 4.662                   | ---        | PASS    |
| Band2 | 9538    | 4.1447                      | 4.666                   | ---        | PASS    |
| Band4 | 1312    | 4.1488                      | 4.672                   | ---        | PASS    |
| Band4 | 1413    | 4.1510                      | 4.658                   | ---        | PASS    |
| Band4 | 1513    | 4.1495                      | 4.658                   | ---        | PASS    |
| Band5 | 4132    | 4.1540                      | 4.656                   | ---        | PASS    |
| Band5 | 4183    | 4.1380                      | 4.657                   | ---        | PASS    |
| Band5 | 4233    | 4.1411                      | 4.654                   | ---        | PASS    |

## Test Graphs(WCDMA)



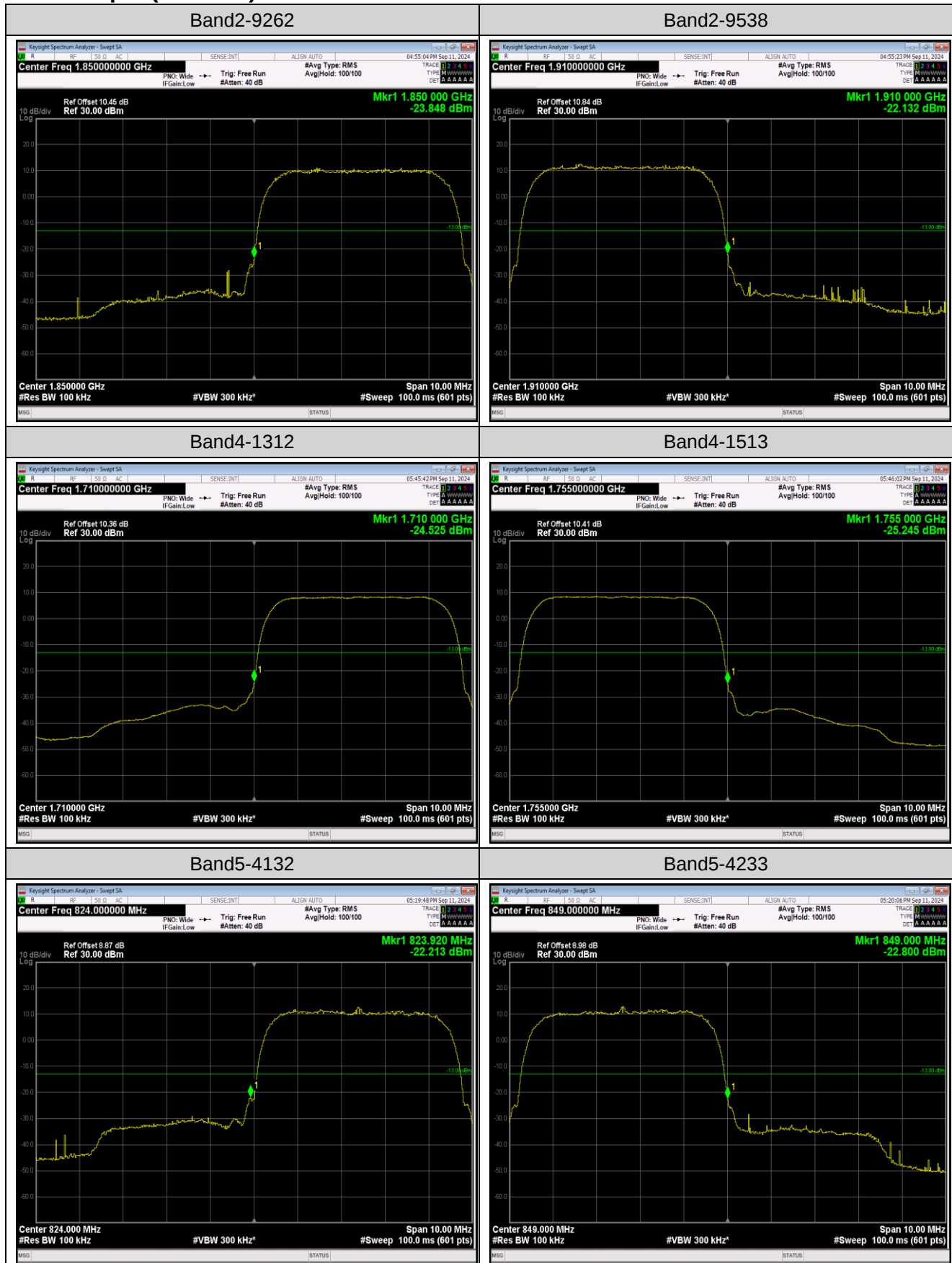


## AppendixD:Band Edge

### Test Result(WCDMA)

| Band  | Channel | Frequency (MHz) | Result (dBm) | Limit(dBm) | Verdict |
|-------|---------|-----------------|--------------|------------|---------|
| Band2 | 9262    | 1850.00         | -23.85       | -13        | PASS    |
| Band2 | 9538    | 1910.00         | -22.13       | -13        | PASS    |
| Band4 | 1312    | 1710.00         | -24.52       | -13        | PASS    |
| Band4 | 1513    | 1755.00         | -25.24       | -13        | PASS    |
| Band5 | 4132    | 823.92          | -22.21       | -13        | PASS    |
| Band5 | 4233    | 849.00          | -22.80       | -13        | PASS    |

## Test Graphs(WCDMA)

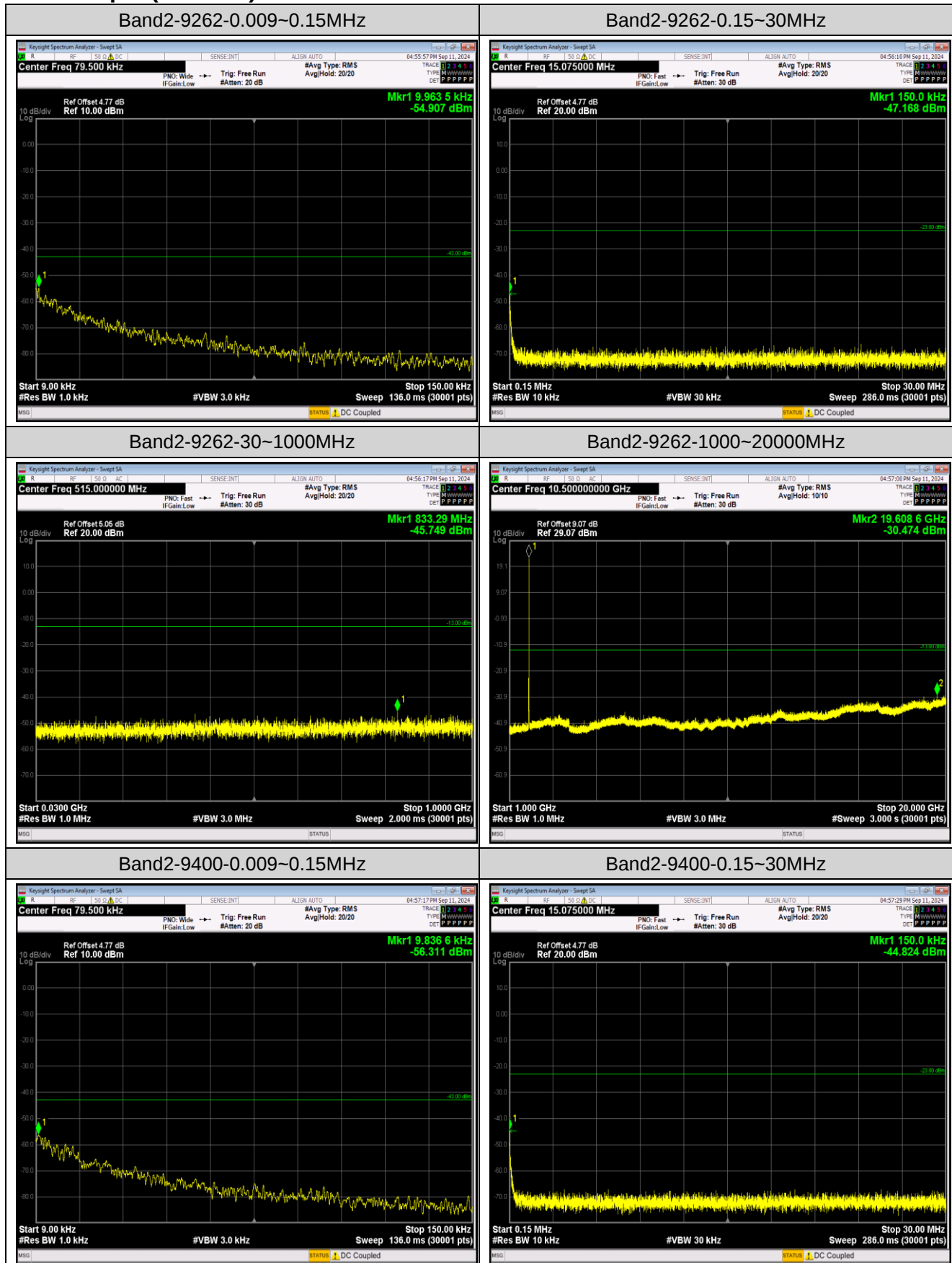


## AppendixE:Conducted SpuriousEmission

### Test Result(WCDMA)

| Band  | Channel | Frequency Range<br>(Mhz) | Frequency<br>(dBm) | Result<br>(dBm) | Limit<br>(dBm) | Verdict |
|-------|---------|--------------------------|--------------------|-----------------|----------------|---------|
| Band2 | 9262    | 0.009~0.15MHz            | 0.01               | -54.91          | -43            | PASS    |
| Band2 | 9262    | 0.15~30MHz               | 0.15               | -47.17          | -23            | PASS    |
| Band2 | 9262    | 30~1000MHz               | 833.29             | -45.75          | -13            | PASS    |
| Band2 | 9262    | 1000~20000MHz            | 19608.6            | -30.47          | -13            | PASS    |
| Band2 | 9400    | 0.009~0.15MHz            | 0.01               | -56.31          | -43            | PASS    |
| Band2 | 9400    | 0.15~30MHz               | 0.15               | -44.82          | -23            | PASS    |
| Band2 | 9400    | 30~1000MHz               | 781.17             | -46.71          | -13            | PASS    |
| Band2 | 9400    | 1000~20000MHz            | 19949.33           | -30.83          | -13            | PASS    |
| Band2 | 9538    | 0.009~0.15MHz            | 0.01               | -55.73          | -43            | PASS    |
| Band2 | 9538    | 0.15~30MHz               | 0.15               | -47.35          | -23            | PASS    |
| Band2 | 9538    | 30~1000MHz               | 765.87             | -45.2           | -13            | PASS    |
| Band2 | 9538    | 1000~20000MHz            | 19930.33           | -30.33          | -13            | PASS    |
| Band4 | 1312    | 0.009~0.15MHz            | 0.01               | -54.69          | -43            | PASS    |
| Band4 | 1312    | 0.15~30MHz               | 0.16               | -46.81          | -23            | PASS    |
| Band4 | 1312    | 30~1000MHz               | 934.2              | -45.93          | -13            | PASS    |
| Band4 | 1312    | 1000~20000MHz            | 19953.77           | -30.69          | -13            | PASS    |
| Band4 | 1413    | 0.009~0.15MHz            | 0.01               | -56.01          | -43            | PASS    |
| Band4 | 1413    | 0.15~30MHz               | 0.16               | -47.12          | -23            | PASS    |
| Band4 | 1413    | 30~1000MHz               | 963.56             | -45.96          | -13            | PASS    |
| Band4 | 1413    | 1000~20000MHz            | 19916.4            | -30.19          | -13            | PASS    |
| Band4 | 1513    | 0.009~0.15MHz            | 0.01               | -55.63          | -43            | PASS    |
| Band4 | 1513    | 0.15~30MHz               | 0.15               | -49.92          | -23            | PASS    |
| Band4 | 1513    | 30~1000MHz               | 842.8              | -45.66          | -13            | PASS    |
| Band4 | 1513    | 1000~20000MHz            | 19969.6            | -30.42          | -13            | PASS    |
| Band5 | 4132    | 0.009~0.15MHz            | 0.01               | -54.98          | -33            | PASS    |
| Band5 | 4132    | 0.15~30MHz               | 0.16               | -48.24          | -13            | PASS    |
| Band5 | 4132    | 30~1000MHz               | 967.31             | -55.67          | -13            | PASS    |
| Band5 | 4132    | 1000~10000MHz            | 7629.7             | -37.01          | -13            | PASS    |
| Band5 | 4183    | 0.009~0.15MHz            | 0.01               | -56.43          | -33            | PASS    |
| Band5 | 4183    | 0.15~30MHz               | 0.16               | -46.41          | -13            | PASS    |
| Band5 | 4183    | 30~1000MHz               | 723.03             | -55.08          | -13            | PASS    |
| Band5 | 4183    | 1000~10000MHz            | 6017.2             | -37.19          | -13            | PASS    |
| Band5 | 4233    | 0.009~0.15MHz            | 0.01               | -56.72          | -33            | PASS    |
| Band5 | 4233    | 0.15~30MHz               | 0.16               | -47.27          | -13            | PASS    |
| Band5 | 4233    | 30~1000MHz               | 538.8              | -55.78          | -13            | PASS    |
| Band5 | 4233    | 1000~10000MHz            | 5997.1             | -37.08          | -13            | PASS    |

## Test Graphs(WCDMA)

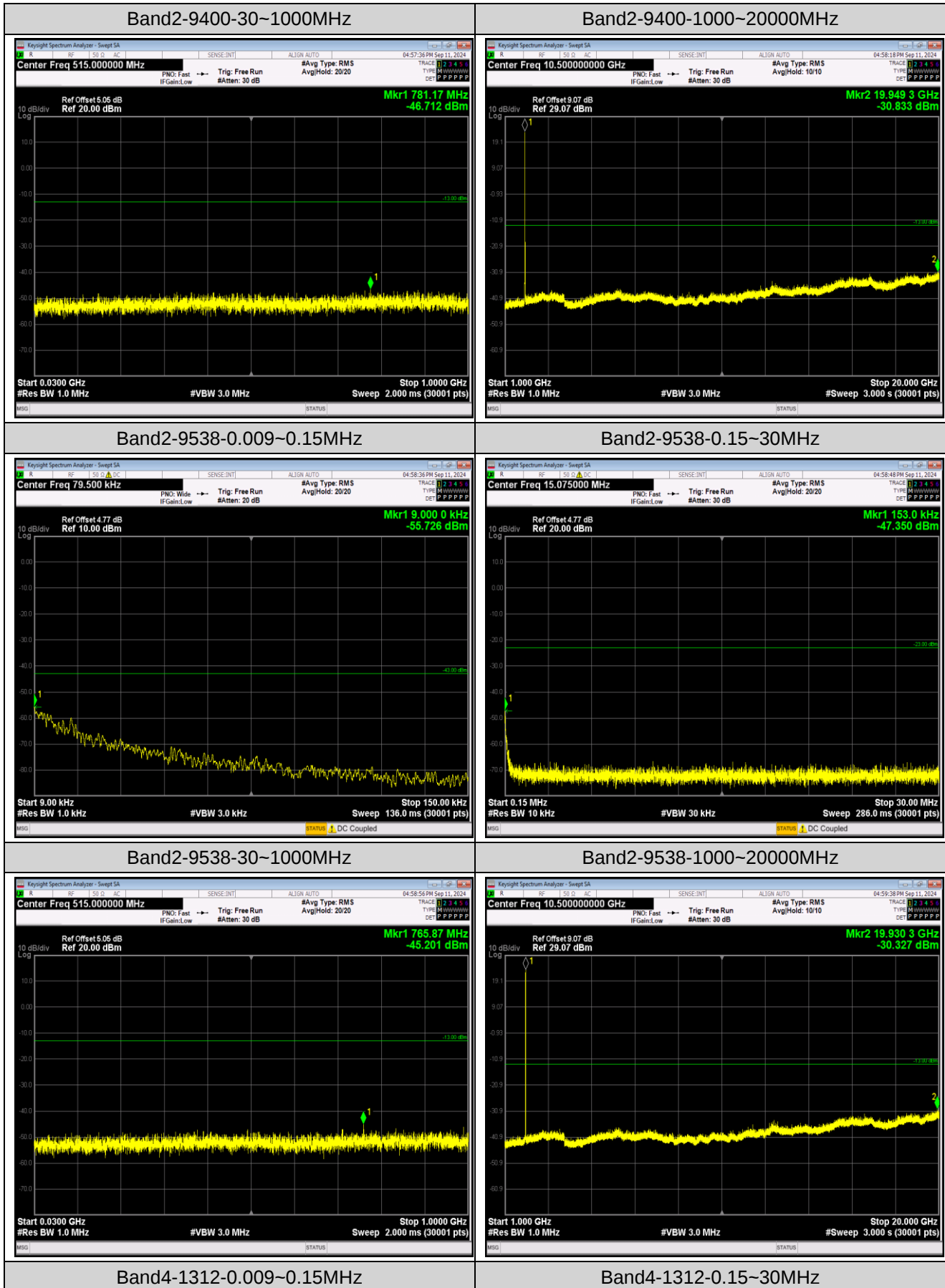


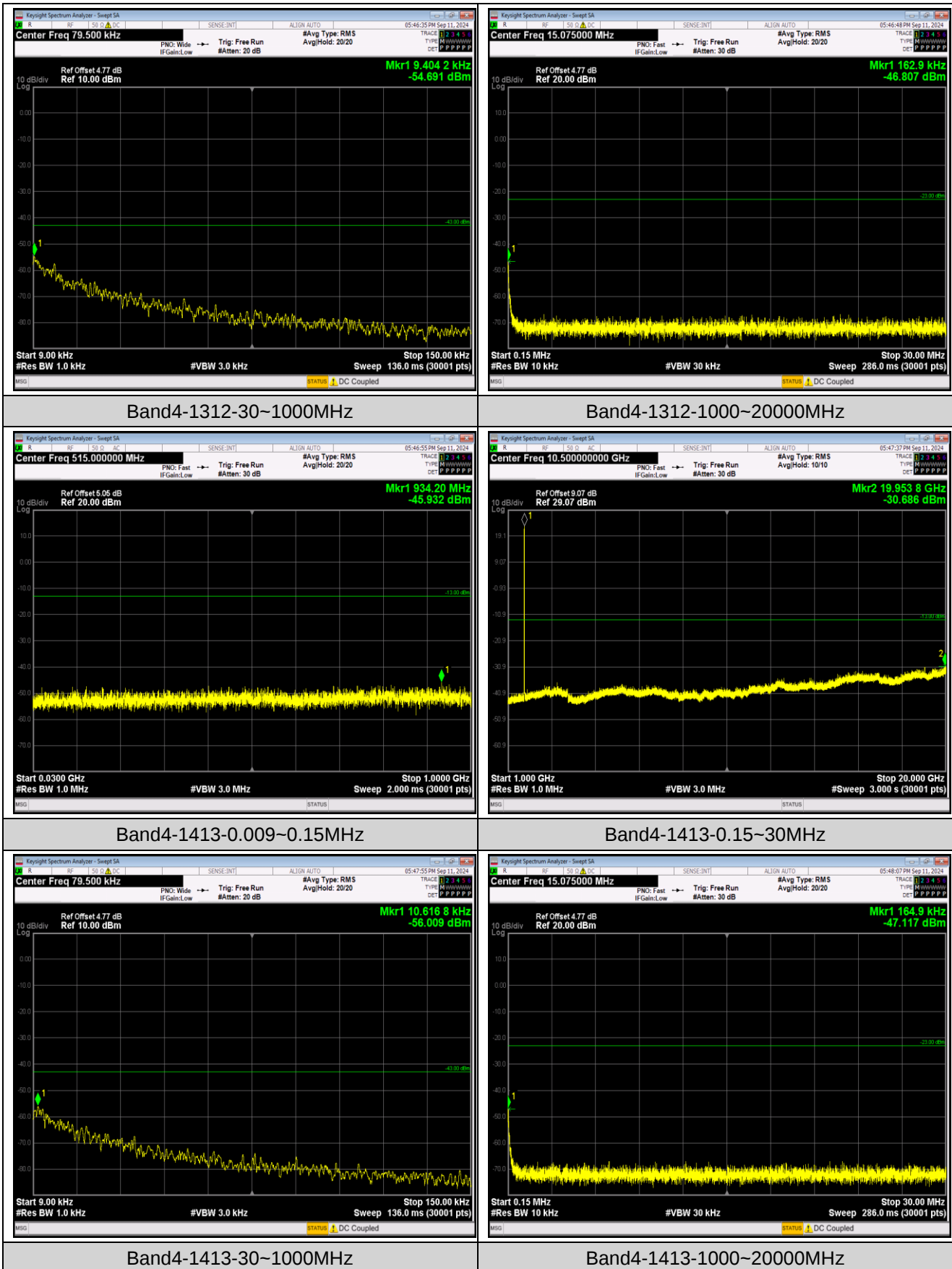
JianYan Testing Group Shenzhen Co., Ltd.

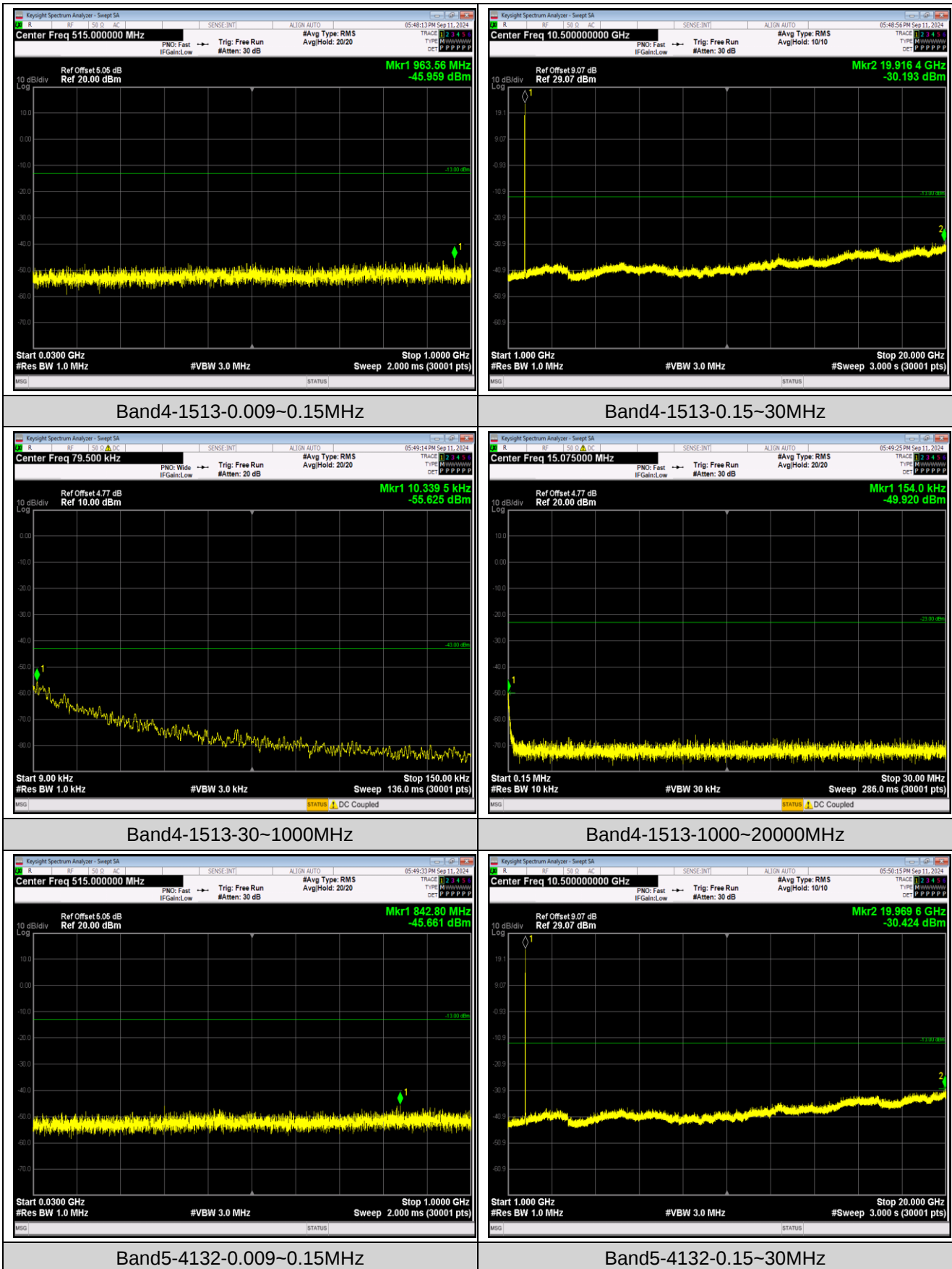
No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

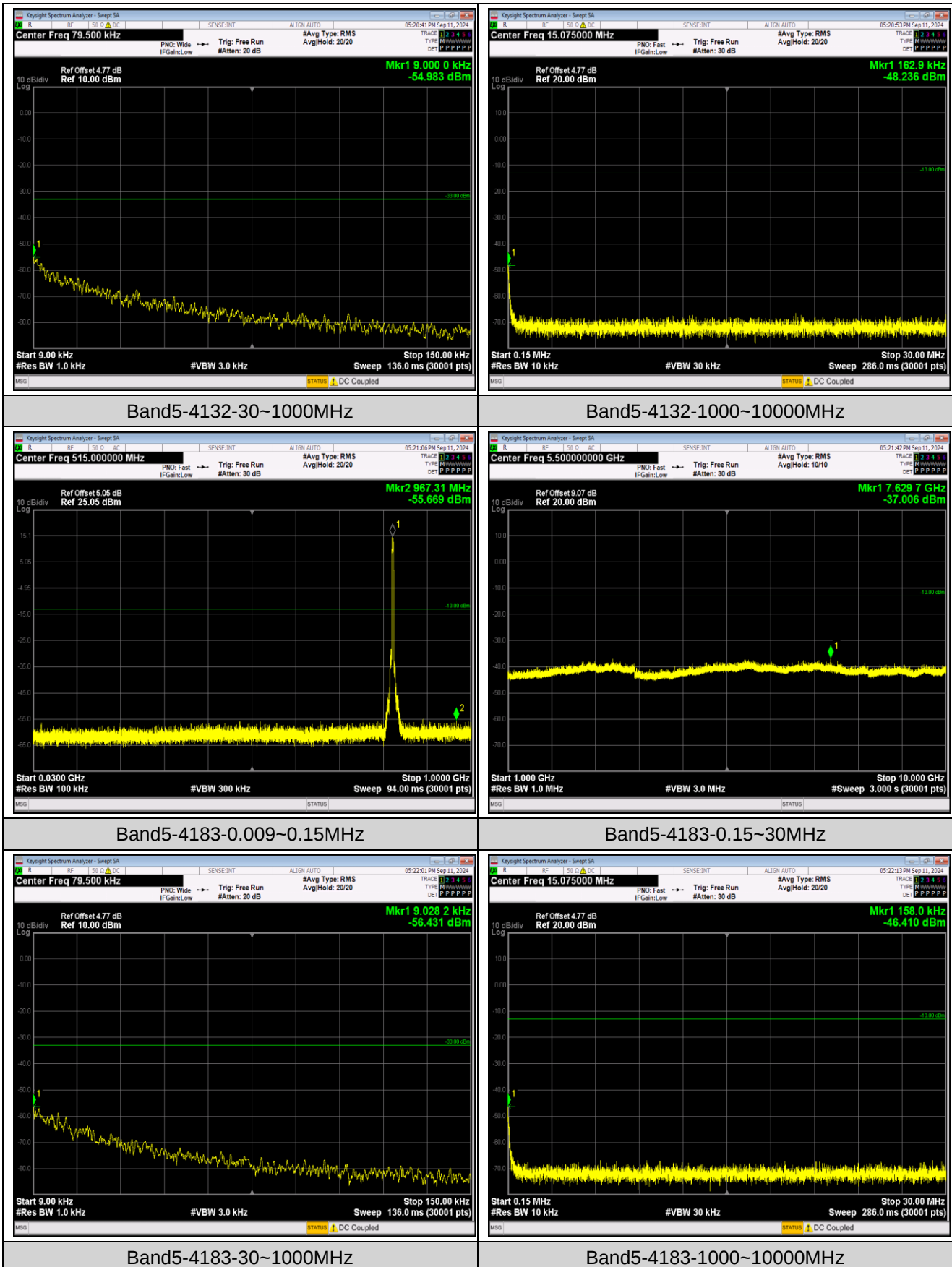
Tel: +86-755-23118282, Fax: +86-755-23116366

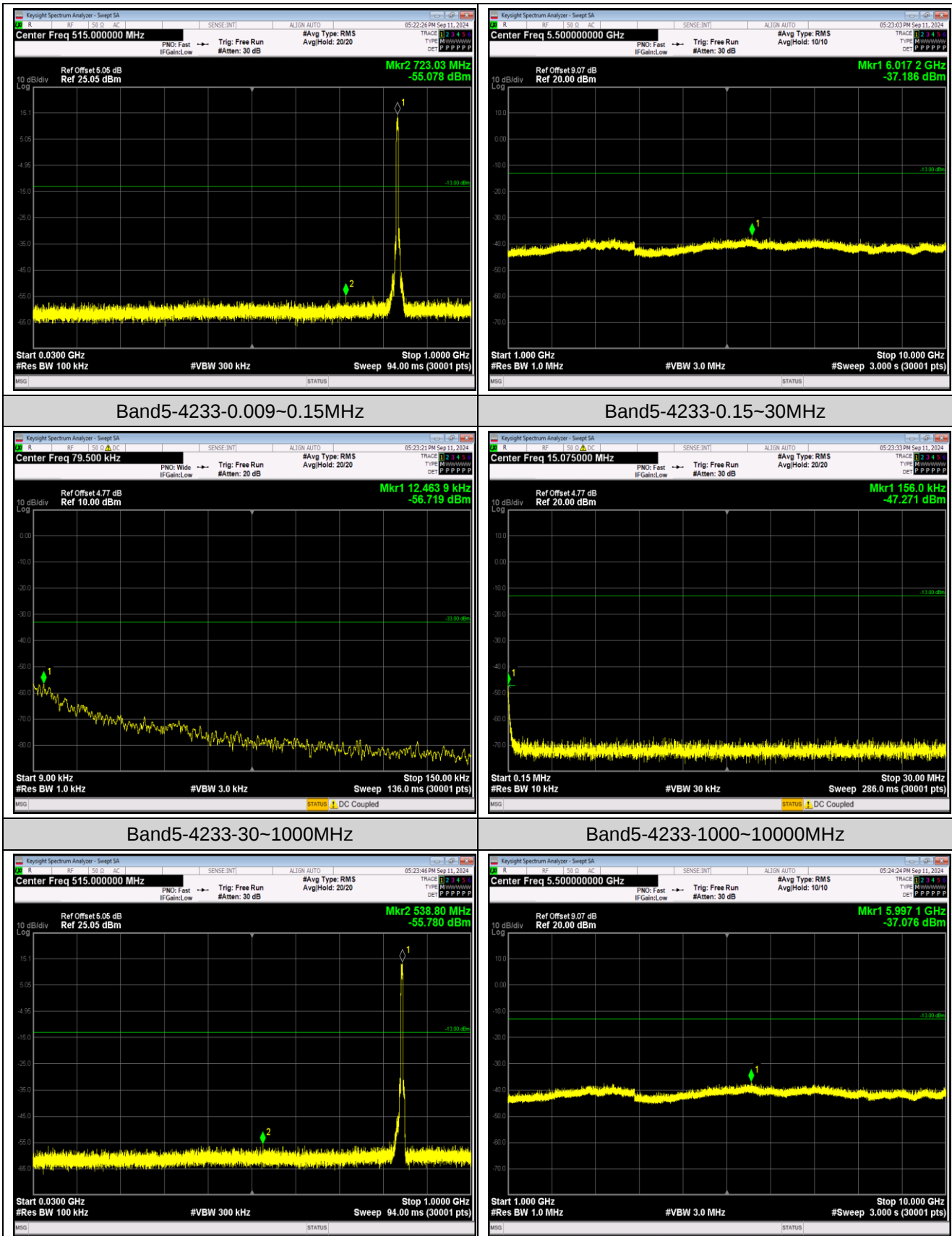
Project No.: JYTSZR2409024











## 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>(°C)     | Frequency error |           | Limit (ppm) | Result |
|                                                                                             |                         | Hz              | ppm       |             |        |
| 3.87                                                                                        | -30                     | -2.69           | -0.003215 | ±2.5        | Pass   |
|                                                                                             | -20                     | -1.57           | -0.001877 |             |        |
|                                                                                             | -10                     | 2.10            | 0.002510  |             |        |
|                                                                                             | 0                       | 0.46            | 0.000550  |             |        |
|                                                                                             | 10                      | 0.84            | 0.001004  |             |        |
|                                                                                             | 20                      | 1.49            | 0.001781  |             |        |
|                                                                                             | 30                      | 1.22            | 0.001458  |             |        |
|                                                                                             | 40                      | 0.46            | 0.000550  |             |        |
|                                                                                             | 50                      | -0.15           | -0.000179 |             |        |
| Voltage                                                                                     |                         |                 |           |             |        |
| Temperature<br>(°C)                                                                         | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm) | Result |
|                                                                                             |                         | Hz              | ppm       |             |        |
| 25                                                                                          | 3.00                    | -0.91           | -0.001088 | ±2.5        | Pass   |
|                                                                                             | 3.87                    | -0.12           | -0.000143 |             |        |
|                                                                                             | 4.45                    | 0.16            | 0.000191  |             |        |
| 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       |                                       |        |
| 3.87                                                                                        | -30                     | -5.29           | -0.003053 | Within authorized<br>band for BAND IV | Pass   |
|                                                                                             | -20                     | 5.18            | 0.002990  |                                       |        |
|                                                                                             | -10                     | 5.84            | 0.003371  |                                       |        |
|                                                                                             | 0                       | 3.16            | 0.001824  |                                       |        |
|                                                                                             | 10                      | 2.04            | 0.001177  |                                       |        |
|                                                                                             | 20                      | 6.06            | 0.003498  |                                       |        |
|                                                                                             | 30                      | -5.66           | -0.003267 |                                       |        |
|                                                                                             | 40                      | 1.01            | 0.000583  |                                       |        |
|                                                                                             | 50                      | -5.95           | -0.003434 |                                       |        |
| Voltage                                                                                     |                         |                 |           |                                       |        |
| Temperature<br>(°C)                                                                         | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm)                           | Result |
|                                                                                             |                         | Hz              | ppm       |                                       |        |
| 25                                                                                          | 3.00                    | -2.61           | -0.001506 | Within authorized<br>band for BAND IV | Pass   |
|                                                                                             | 3.87                    | 2.03            | 0.001172  |                                       |        |
|                                                                                             | 4.45                    | -4.55           | -0.002626 |                                       |        |
| 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       |                                       |        |
| 3.87                                                                                        | -30                     | -1.35           | -0.000718 | Within authorized<br>band for BAND II | Pass   |
|                                                                                             | -20                     | 3.98            | 0.002117  |                                       |        |
|                                                                                             | -10                     | 7.90            | 0.004202  |                                       |        |
|                                                                                             | 0                       | -2.34           | -0.001245 |                                       |        |
|                                                                                             | 10                      | -2.40           | -0.001277 |                                       |        |
|                                                                                             | 20                      | -2.50           | -0.001330 |                                       |        |
|                                                                                             | 30                      | 2.67            | 0.001420  |                                       |        |
|                                                                                             | 40                      | 1.73            | 0.000920  |                                       |        |
|                                                                                             | 50                      | 3.55            | 0.001888  |                                       |        |
| Voltage                                                                                     |                         |                 |           |                                       |        |
| Temperature<br>(°C)                                                                         | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm)                           | Result |
|                                                                                             |                         | Hz              | ppm       |                                       |        |
| 25                                                                                          | 3.00                    | -0.15           | -0.000080 | Within authorized<br>band for BAND II | Pass   |
|                                                                                             | 3.87                    | 4.71            | 0.002505  |                                       |        |
|                                                                                             | 4.45                    | 4.95            | 0.002633  |                                       |        |
| 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

