

## 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    | 23.37                 | 21.5           | 33.01                | PASS    |
| Band2 | TestMode | 9262    | 23.32                 | 21.45          | 33.01                | PASS    |
| Band2 | TestMode | 9400    | 23.96                 | 22.09          | 33.01                | PASS    |
| Band2 | Voice    | 9400    | 23.84                 | 21.97          | 33.01                | PASS    |
| Band2 | TestMode | 9538    | 23.80                 | 21.93          | 33.01                | PASS    |
| Band2 | Voice    | 9538    | 23.85                 | 21.98          | 33.01                | PASS    |
| Band4 | Voice    | 1312    | 23.84                 | 20.8           | 30.00                | PASS    |
| Band4 | TestMode | 1312    | 23.82                 | 20.78          | 30.00                | PASS    |
| Band4 | TestMode | 1413    | 23.65                 | 20.61          | 30.00                | PASS    |
| Band4 | Voice    | 1413    | 23.54                 | 20.5           | 30.00                | PASS    |
| Band4 | Voice    | 1513    | 23.75                 | 20.71          | 30.00                | PASS    |
| Band4 | TestMode | 1513    | 23.77                 | 20.73          | 30.00                | PASS    |
| Band5 | TestMode | 4132    | 24.18                 | 16.01          | 38.45                | PASS    |
| Band5 | Voice    | 4132    | 24.11                 | 15.94          | 38.45                | PASS    |
| Band5 | TestMode | 4183    | 24.13                 | 15.96          | 38.45                | PASS    |
| Band5 | Voice    | 4183    | 24.17                 | 16             | 38.45                | PASS    |
| Band5 | Voice    | 4233    | 24.09                 | 15.92          | 38.45                | PASS    |
| Band5 | TestMode | 4233    | 24.17                 | 16             | 38.45                | PASS    |

### Test Result(HSDPA)

| Band  | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262    | 1       | 22.80                 | 20.93          | 33.01                | PASS    |
| Band2 | 9262    | 2       | 22.91                 | 21.04          | 33.01                | PASS    |
| Band2 | 9262    | 3       | 22.95                 | 21.08          | 33.01                | PASS    |
| Band2 | 9262    | 4       | 22.94                 | 21.07          | 33.01                | PASS    |
| Band2 | 9400    | 1       | 24.10                 | 22.23          | 33.01                | PASS    |
| Band2 | 9400    | 2       | 23.57                 | 21.7           | 33.01                | PASS    |
| Band2 | 9400    | 3       | 23.55                 | 21.68          | 33.01                | PASS    |
| Band2 | 9400    | 4       | 23.60                 | 21.73          | 33.01                | PASS    |
| Band2 | 9538    | 1       | 23.60                 | 21.73          | 33.01                | PASS    |
| Band2 | 9538    | 2       | 23.42                 | 21.55          | 33.01                | PASS    |
| Band2 | 9538    | 3       | 23.43                 | 21.56          | 33.01                | PASS    |
| Band2 | 9538    | 4       | 23.47                 | 21.6           | 33.01                | PASS    |

|       |      |   |       |       |       |      |
|-------|------|---|-------|-------|-------|------|
| Band4 | 1312 | 1 | 23.86 | 20.82 | 30.00 | PASS |
| Band4 | 1312 | 2 | 23.41 | 20.37 | 30.00 | PASS |
| Band4 | 1312 | 3 | 23.46 | 20.42 | 30.00 | PASS |
| Band4 | 1312 | 4 | 23.41 | 20.37 | 30.00 | PASS |
| Band4 | 1413 | 1 | 23.67 | 20.63 | 30.00 | PASS |
| Band4 | 1413 | 2 | 23.20 | 20.16 | 30.00 | PASS |
| Band4 | 1413 | 3 | 23.24 | 20.2  | 30.00 | PASS |
| Band4 | 1413 | 4 | 23.17 | 20.13 | 30.00 | PASS |
| Band4 | 1513 | 1 | 23.82 | 20.78 | 30.00 | PASS |
| Band4 | 1513 | 2 | 23.30 | 20.26 | 30.00 | PASS |
| Band4 | 1513 | 3 | 23.33 | 20.29 | 30.00 | PASS |
| Band4 | 1513 | 4 | 23.27 | 20.23 | 30.00 | PASS |
| Band5 | 4132 | 1 | 24.21 | 16.04 | 38.5  | PASS |
| Band5 | 4132 | 2 | 23.72 | 15.55 | 38.5  | PASS |
| Band5 | 4132 | 3 | 23.77 | 15.6  | 38.5  | PASS |
| Band5 | 4132 | 4 | 23.71 | 15.54 | 38.5  | PASS |
| Band5 | 4183 | 1 | 24.16 | 15.99 | 38.5  | PASS |
| Band5 | 4183 | 2 | 23.66 | 15.49 | 38.5  | PASS |
| Band5 | 4183 | 3 | 23.72 | 15.55 | 38.5  | PASS |
| Band5 | 4183 | 4 | 23.67 | 15.5  | 38.5  | PASS |
| Band5 | 4233 | 1 | 24.23 | 16.06 | 38.5  | PASS |
| Band5 | 4233 | 2 | 23.75 | 15.58 | 38.5  | PASS |
| Band5 | 4233 | 3 | 23.79 | 15.62 | 38.5  | PASS |
| Band5 | 4233 | 4 | 23.75 | 15.58 | 38.5  | PASS |

## Test Result(HSUPA)

| Band  | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262    | 1       | 21.35                 | 19.48          | 33.01                | PASS    |
| Band2 | 9262    | 2       | 21.88                 | 20.01          | 33.01                | PASS    |
| Band2 | 9262    | 3       | 22.35                 | 20.48          | 33.01                | PASS    |
| Band2 | 9262    | 4       | 21.38                 | 19.51          | 33.01                | PASS    |
| Band2 | 9262    | 5       | 23.34                 | 21.47          | 33.01                | PASS    |
| Band2 | 9400    | 1       | 21.93                 | 20.06          | 33.01                | PASS    |
| Band2 | 9400    | 2       | 22.41                 | 20.54          | 33.01                | PASS    |
| Band2 | 9400    | 3       | 22.95                 | 21.08          | 33.01                | PASS    |
| Band2 | 9400    | 4       | 21.93                 | 20.06          | 33.01                | PASS    |
| Band2 | 9400    | 5       | 23.91                 | 22.04          | 33.01                | PASS    |
| Band2 | 9538    | 1       | 21.81                 | 19.94          | 33.01                | PASS    |
| Band2 | 9538    | 2       | 22.32                 | 20.45          | 33.01                | PASS    |
| Band2 | 9538    | 3       | 22.85                 | 20.98          | 33.01                | PASS    |

|       |      |   |       |       |       |      |
|-------|------|---|-------|-------|-------|------|
| Band2 | 9538 | 4 | 21.84 | 19.97 | 33.01 | PASS |
| Band2 | 9538 | 5 | 23.84 | 21.97 | 33.01 | PASS |
| Band4 | 1312 | 1 | 21.83 | 18.79 | 30.00 | PASS |
| Band4 | 1312 | 2 | 22.30 | 19.26 | 30.00 | PASS |
| Band4 | 1312 | 3 | 22.81 | 19.77 | 30.00 | PASS |
| Band4 | 1312 | 4 | 21.84 | 18.8  | 30.00 | PASS |
| Band4 | 1312 | 5 | 23.80 | 20.76 | 30.00 | PASS |
| Band4 | 1413 | 1 | 21.62 | 18.58 | 30.00 | PASS |
| Band4 | 1413 | 2 | 22.11 | 19.07 | 30.00 | PASS |
| Band4 | 1413 | 3 | 22.63 | 19.59 | 30.00 | PASS |
| Band4 | 1413 | 4 | 21.64 | 18.6  | 30.00 | PASS |
| Band4 | 1413 | 5 | 23.61 | 20.57 | 30.00 | PASS |
| Band4 | 1513 | 1 | 21.76 | 18.72 | 30.00 | PASS |
| Band4 | 1513 | 2 | 22.24 | 19.2  | 30.00 | PASS |
| Band4 | 1513 | 3 | 22.75 | 19.71 | 30.00 | PASS |
| Band4 | 1513 | 4 | 21.77 | 18.73 | 30.00 | PASS |
| Band4 | 1513 | 5 | 23.75 | 20.71 | 30.00 | PASS |
| Band5 | 4132 | 1 | 22.18 | 14.01 | 38.5  | PASS |
| Band5 | 4132 | 2 | 22.72 | 14.55 | 38.5  | PASS |
| Band5 | 4132 | 3 | 23.20 | 15.03 | 38.5  | PASS |
| Band5 | 4132 | 4 | 22.20 | 14.03 | 38.5  | PASS |
| Band5 | 4132 | 5 | 24.20 | 16.03 | 38.5  | PASS |
| Band5 | 4183 | 1 | 22.14 | 13.97 | 38.5  | PASS |
| Band5 | 4183 | 2 | 22.64 | 14.47 | 38.5  | PASS |
| Band5 | 4183 | 3 | 23.16 | 14.99 | 38.5  | PASS |
| Band5 | 4183 | 4 | 22.16 | 13.99 | 38.5  | PASS |
| Band5 | 4183 | 5 | 24.15 | 15.98 | 38.5  | PASS |
| Band5 | 4233 | 1 | 22.23 | 14.06 | 38.5  | PASS |
| Band5 | 4233 | 2 | 22.72 | 14.55 | 38.5  | PASS |
| Band5 | 4233 | 3 | 23.22 | 15.05 | 38.5  | PASS |
| Band5 | 4233 | 4 | 22.25 | 14.08 | 38.5  | PASS |
| Band5 | 4233 | 5 | 24.21 | 16.04 | 38.5  | PASS |

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

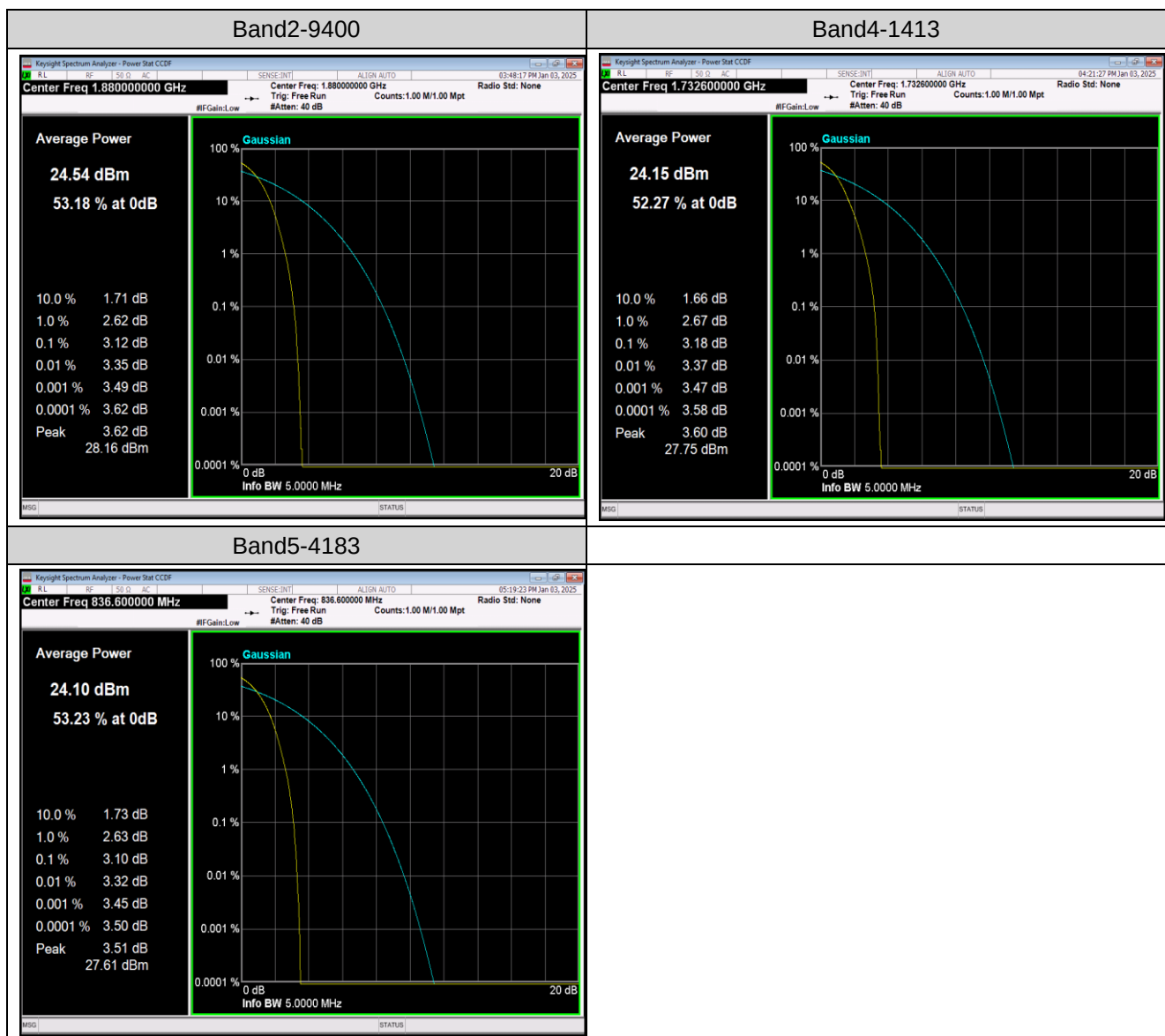
## AppendixB:Peak-to-Average Ratio

### Test Result(WCDMA)

| Band  | Channel | Peak-to-Average Ratio(dB) | Limit(dB) | Verdict |
|-------|---------|---------------------------|-----------|---------|
| Band2 | 9400    | 3.12                      | 13        | PASS    |
| Band4 | 1413    | 3.18                      | 13        | PASS    |
| Band5 | 4183    | 3.1                       | 13        | PASS    |

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

### Test Graphs(WCDMA)

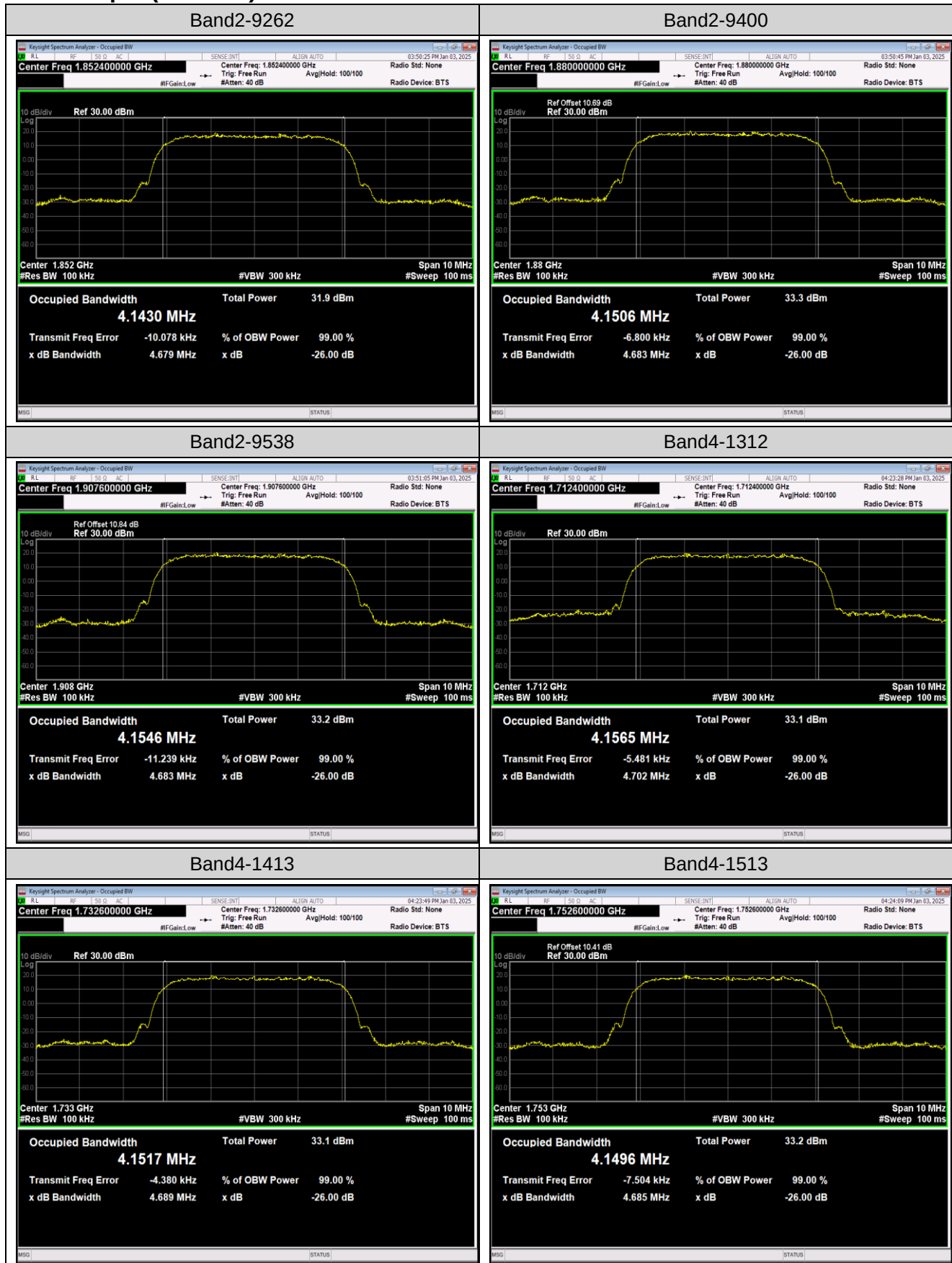


## AppendixC:26dB Bandwidth andOccupied Bandwidth

### Test Result(WCDMA)

| Band  | Channel | Occupied Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) | Limit(kHz) | Verdict |
|-------|---------|-----------------------------|-------------------------|------------|---------|
| Band2 | 9262    | 4.1430                      | 4.679                   | ---        | PASS    |
| Band2 | 9400    | 4.1506                      | 4.683                   | ---        | PASS    |
| Band2 | 9538    | 4.1546                      | 4.683                   | ---        | PASS    |
| Band4 | 1312    | 4.1565                      | 4.702                   | ---        | PASS    |
| Band4 | 1413    | 4.1517                      | 4.689                   | ---        | PASS    |
| Band4 | 1513    | 4.1496                      | 4.685                   | ---        | PASS    |
| Band5 | 4132    | 4.1465                      | 4.706                   | ---        | PASS    |
| Band5 | 4183    | 4.1442                      | 4.677                   | ---        | PASS    |
| Band5 | 4233    | 4.1403                      | 4.675                   | ---        | PASS    |

## Test Graphs(WCDMA)



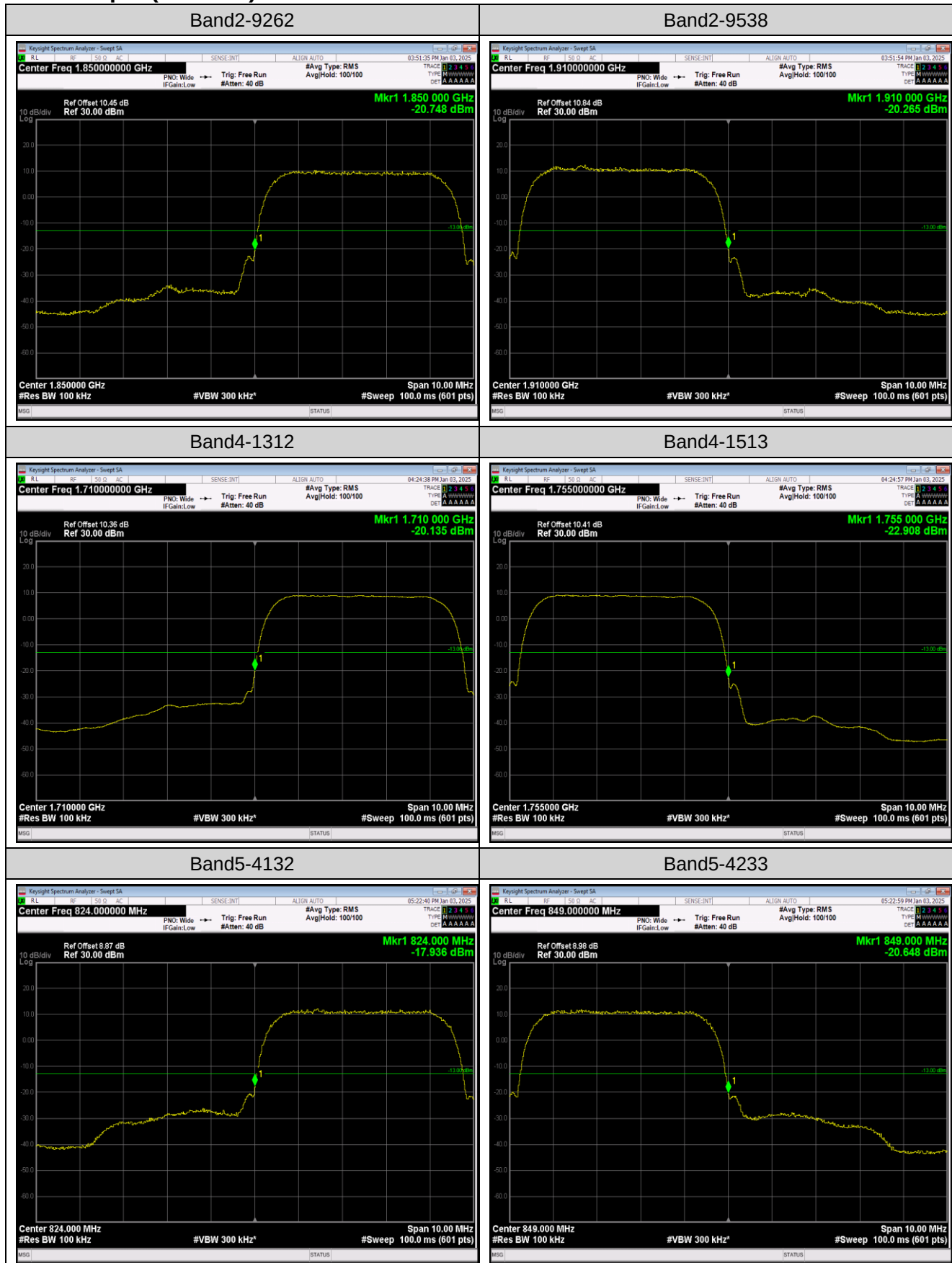


## AppendixD:Band Edge

### Test Result(WCDMA)

| Band  | Channel | Frequency (MHz) | Result (dBm) | Limit(dBm) | Verdict |
|-------|---------|-----------------|--------------|------------|---------|
| Band2 | 9262    | 1850.00         | -20.75       | -13        | PASS    |
| Band2 | 9538    | 1910.00         | -20.26       | -13        | PASS    |
| Band4 | 1312    | 1710.00         | -20.13       | -13        | PASS    |
| Band4 | 1513    | 1755.00         | -22.91       | -13        | PASS    |
| Band5 | 4132    | 824.00          | -17.94       | -13        | PASS    |
| Band5 | 4233    | 849.00          | -20.65       | -13        | PASS    |

## Test Graphs(WCDMA)



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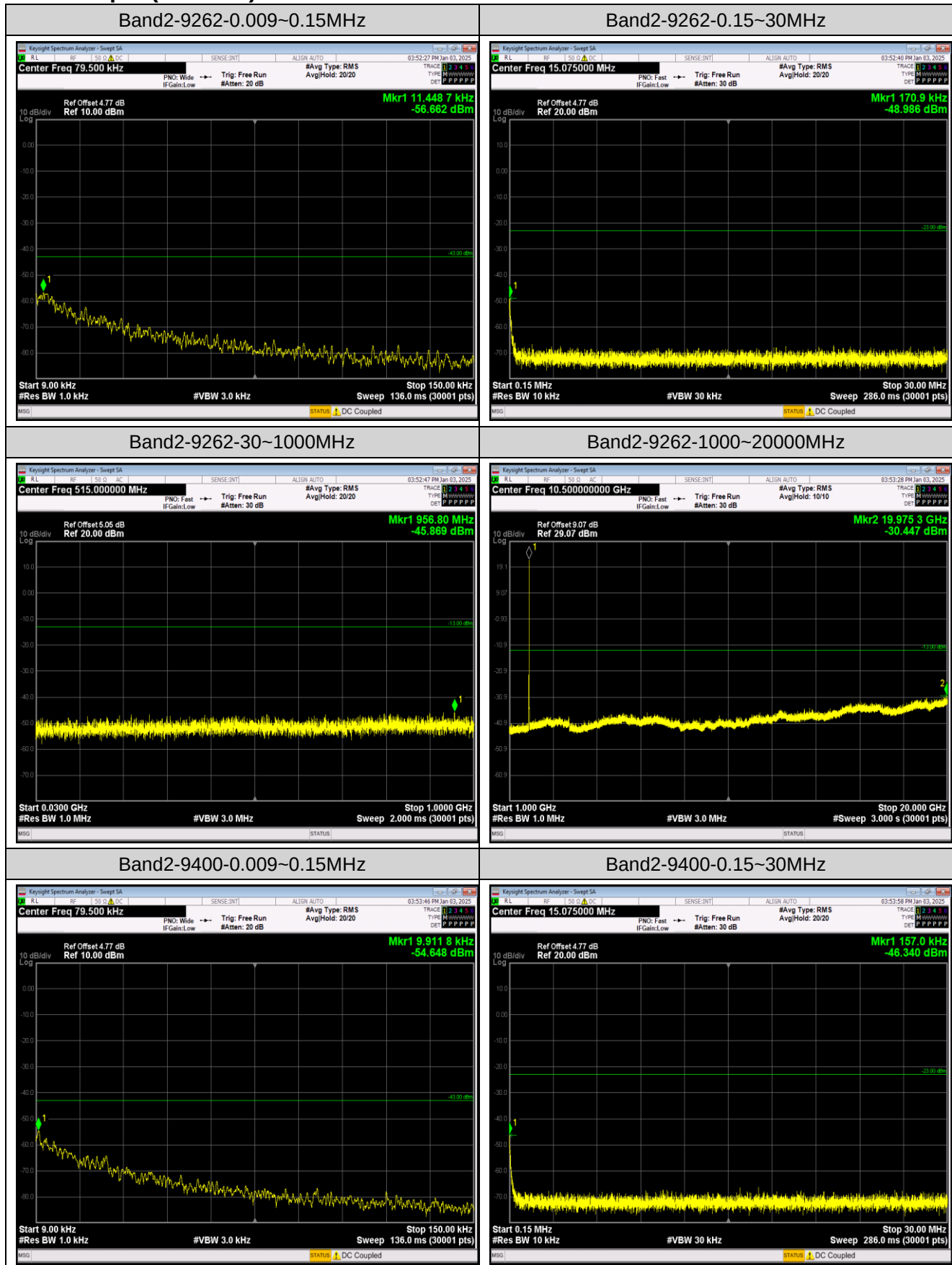
Project No.: JYTSZR2412118

## 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            | -56.66       | -43         | PASS    |
| Band2 | 9262    | 0.15~30MHz            | 0.17            | -48.99       | -23         | PASS    |
| Band2 | 9262    | 30~1000MHz            | 956.8           | -45.87       | -13         | PASS    |
| Band2 | 9262    | 1000~20000MHz         | 19975.3         | -30.45       | -13         | PASS    |
| Band2 | 9400    | 0.009~0.15MHz         | 0.01            | -54.65       | -43         | PASS    |
| Band2 | 9400    | 0.15~30MHz            | 0.16            | -46.34       | -23         | PASS    |
| Band2 | 9400    | 30~1000MHz            | 745.76          | -45.1        | -13         | PASS    |
| Band2 | 9400    | 1000~20000MHz         | 19949.33        | -30.95       | -13         | PASS    |
| Band2 | 9538    | 0.009~0.15MHz         | 0.01            | -54.98       | -43         | PASS    |
| Band2 | 9538    | 0.15~30MHz            | 0.15            | -47.43       | -23         | PASS    |
| Band2 | 9538    | 30~1000MHz            | 223.55          | -45.1        | -13         | PASS    |
| Band2 | 9538    | 1000~20000MHz         | 19833.43        | -29.82       | -13         | PASS    |
| Band4 | 1312    | 0.009~0.15MHz         | 0.01            | -54.84       | -43         | PASS    |
| Band4 | 1312    | 0.15~30MHz            | 0.15            | -44.49       | -23         | PASS    |
| Band4 | 1312    | 30~1000MHz            | 880.85          | -45.98       | -13         | PASS    |
| Band4 | 1312    | 1000~20000MHz         | 19909.43        | -29.42       | -13         | PASS    |
| Band4 | 1413    | 0.009~0.15MHz         | 0.01            | -54.52       | -43         | PASS    |
| Band4 | 1413    | 0.15~30MHz            | 0.16            | -47.95       | -23         | PASS    |
| Band4 | 1413    | 30~1000MHz            | 469.44          | -45.9        | -13         | PASS    |
| Band4 | 1413    | 1000~20000MHz         | 19882.83        | -30.61       | -13         | PASS    |
| Band4 | 1513    | 0.009~0.15MHz         | 0.01            | -55.65       | -43         | PASS    |
| Band4 | 1513    | 0.15~30MHz            | 0.16            | -46.53       | -23         | PASS    |
| Band4 | 1513    | 30~1000MHz            | 743.56          | -45.39       | -13         | PASS    |
| Band4 | 1513    | 1000~20000MHz         | 19977.2         | -30.41       | -13         | PASS    |
| Band5 | 4132    | 0.009~0.15MHz         | 0.01            | -56.55       | -33         | PASS    |
| Band5 | 4132    | 0.15~30MHz            | 0.16            | -48.67       | -13         | PASS    |
| Band5 | 4132    | 30~1000MHz            | 639.9           | -54.71       | -13         | PASS    |
| Band5 | 4132    | 1000~10000MHz         | 6021.1          | -36.45       | -13         | PASS    |
| Band5 | 4183    | 0.009~0.15MHz         | 0.01            | -55.43       | -33         | PASS    |
| Band5 | 4183    | 0.15~30MHz            | 0.19            | -48.87       | -13         | PASS    |
| Band5 | 4183    | 30~1000MHz            | 941.96          | -54.44       | -13         | PASS    |
| Band5 | 4183    | 1000~10000MHz         | 5671.9          | -36.78       | -13         | PASS    |
| Band5 | 4233    | 0.009~0.15MHz         | 0.01            | -55.67       | -33         | PASS    |
| Band5 | 4233    | 0.15~30MHz            | 0.16            | -47.99       | -13         | PASS    |
| Band5 | 4233    | 30~1000MHz            | 496.31          | -54.5        | -13         | PASS    |
| Band5 | 4233    | 1000~10000MHz         | 5963.5          | -36.53       | -13         | PASS    |

## Test Graphs(WCDMA)

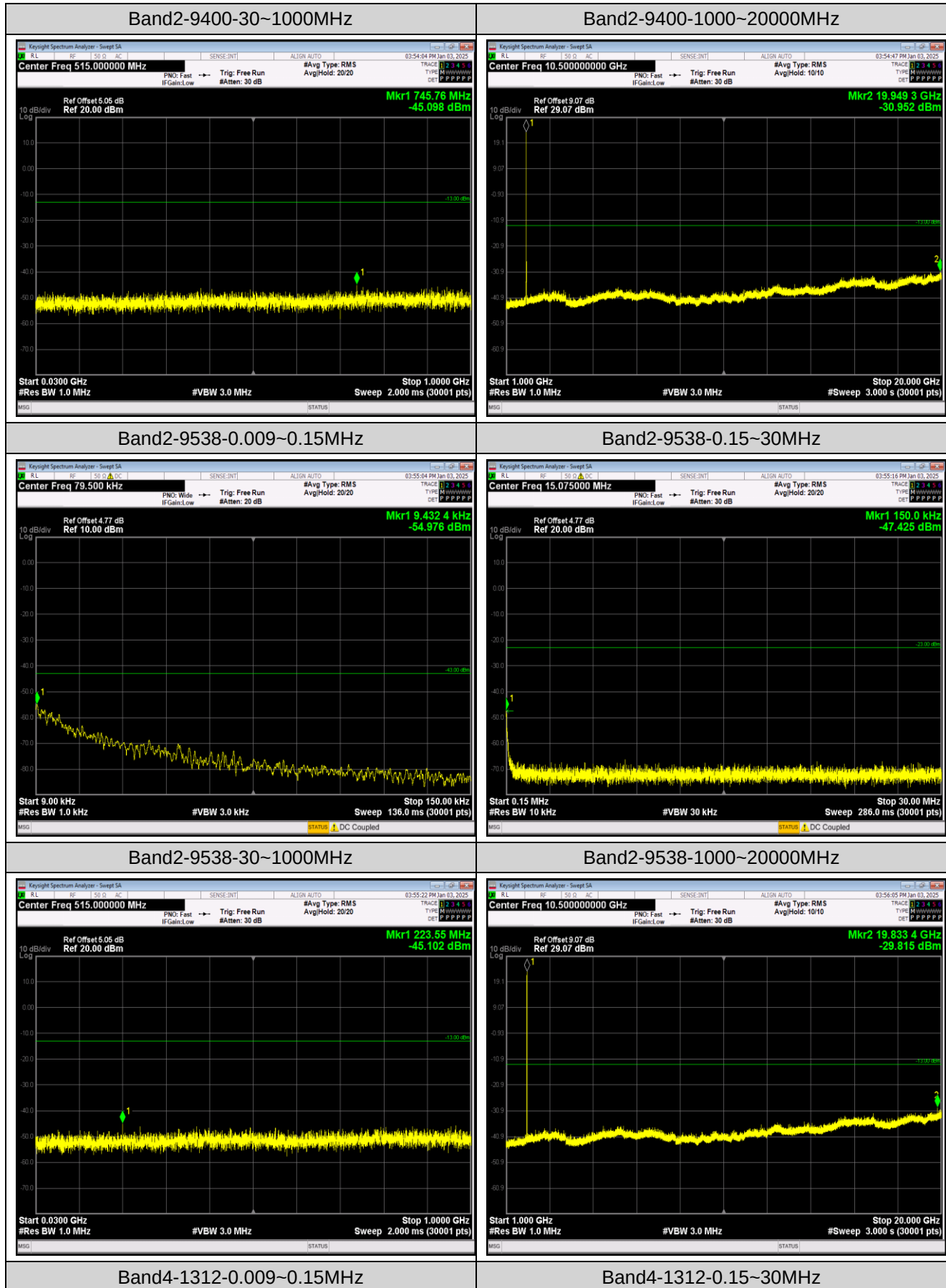


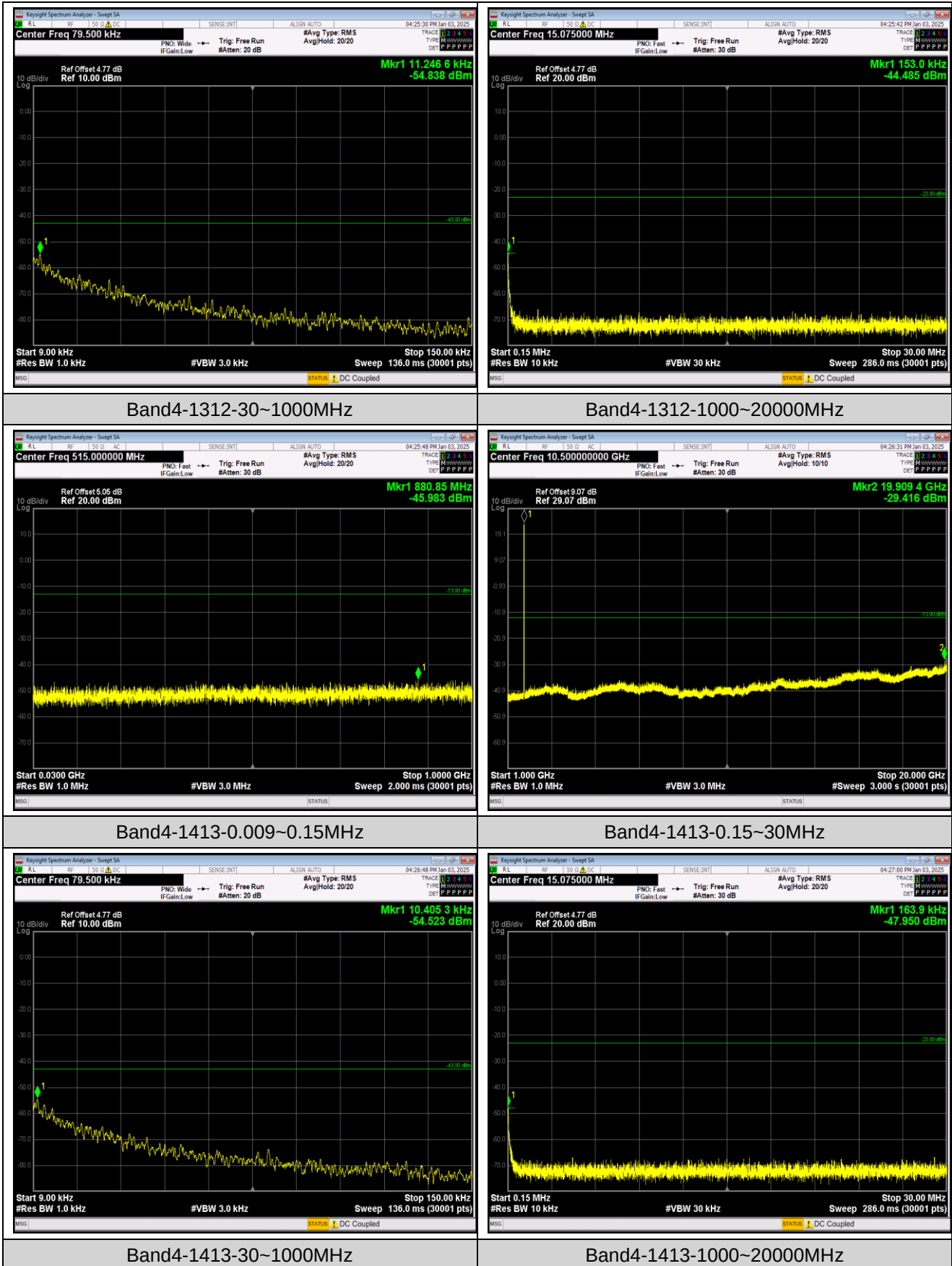
JianYan Testing Group Shenzhen Co., Ltd.

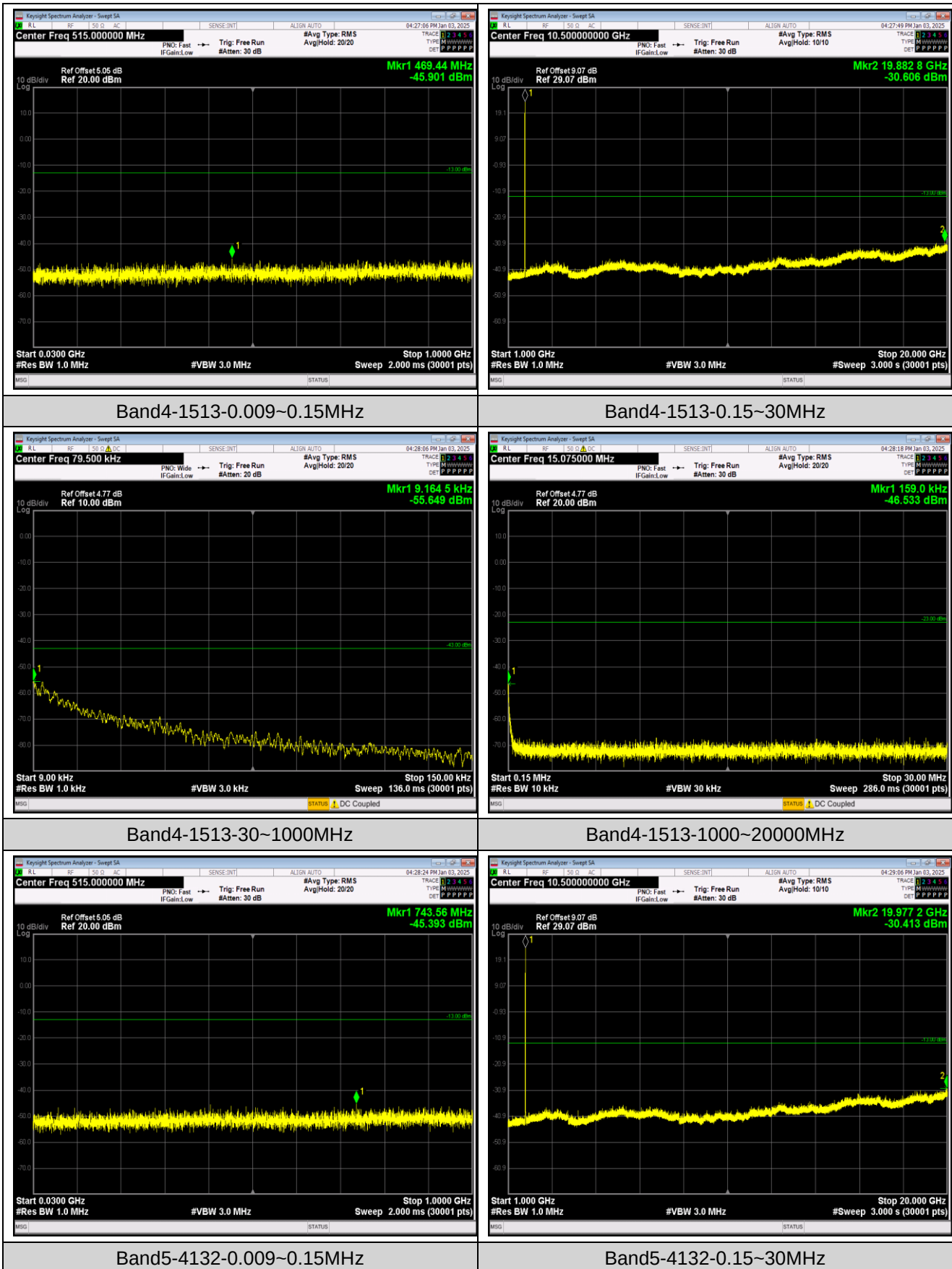
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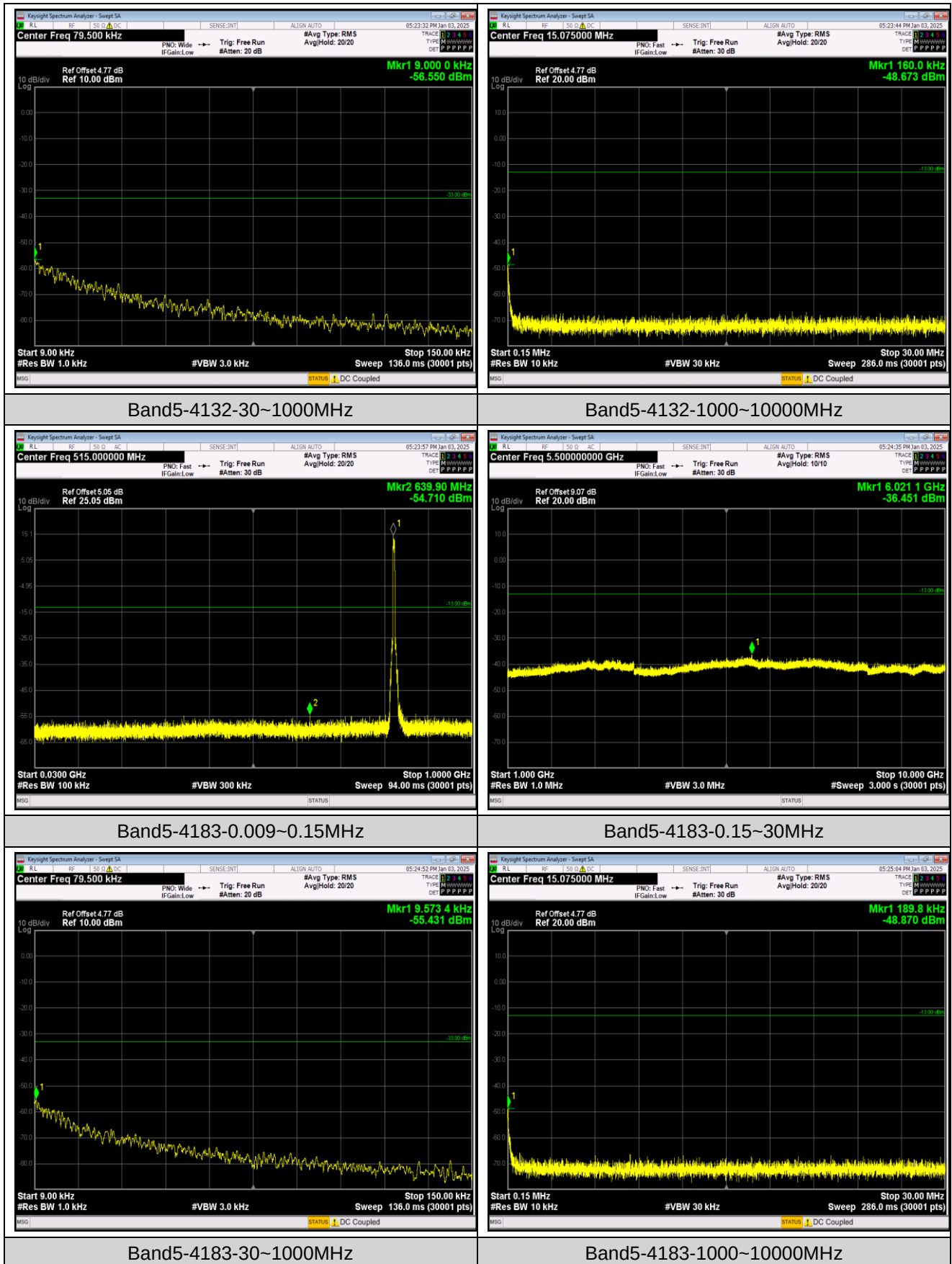
Tel: +86-755-23118282, Fax: +86-755-23116366

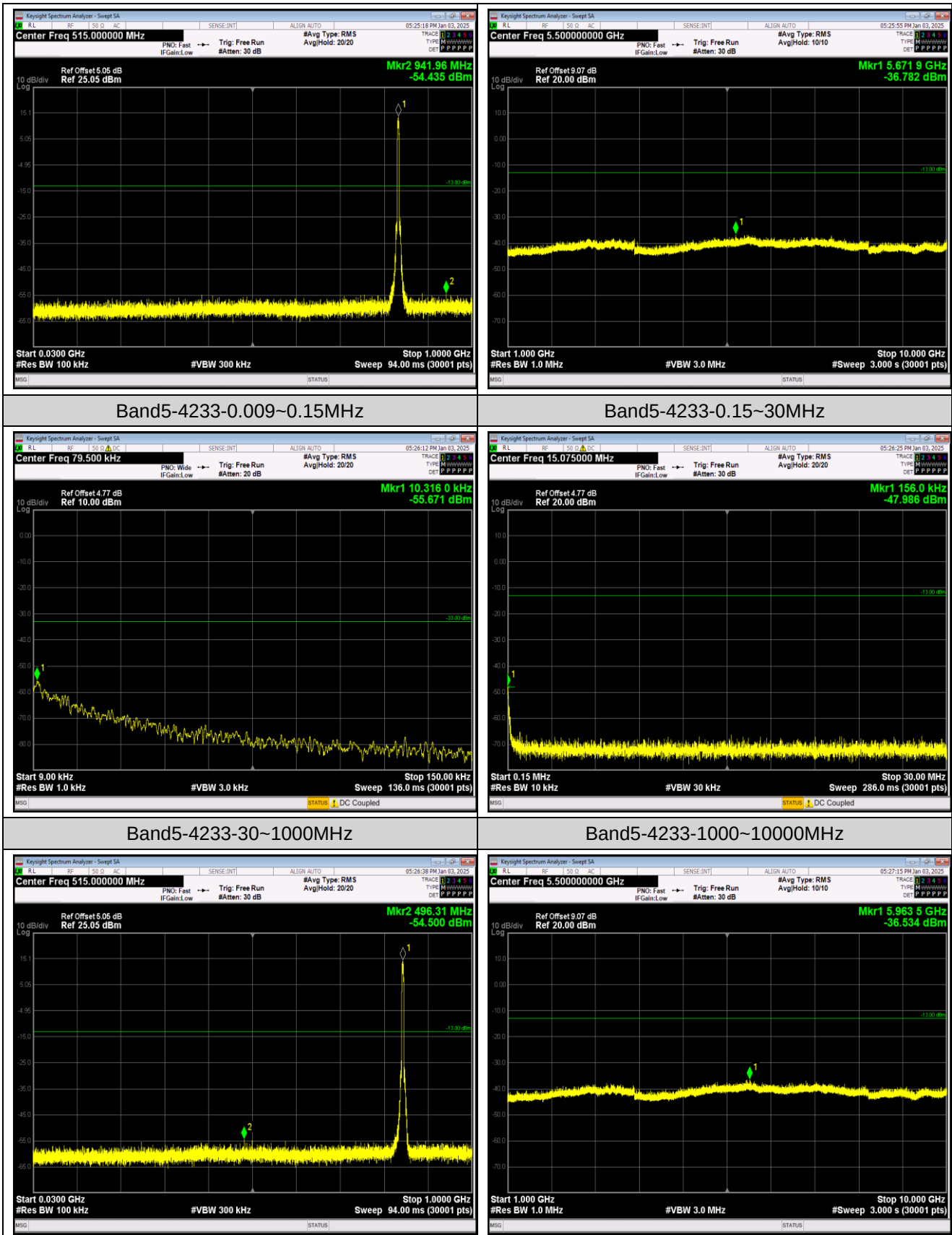
Project No.: JYTSZR2412118











## 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                     | -1.62           | -0.001936 | ±2.5        | Pass   |
|                                                                                             | -20                     | -1.44           | -0.001721 |             |        |
|                                                                                             | -10                     | -0.94           | -0.001124 |             |        |
|                                                                                             | 0                       | -0.71           | -0.000849 |             |        |
|                                                                                             | 10                      | -0.57           | -0.000681 |             |        |
|                                                                                             | 20                      | -0.66           | -0.000789 |             |        |
|                                                                                             | 30                      | -1.47           | -0.001757 |             |        |
|                                                                                             | 40                      | -1.05           | -0.001255 |             |        |
|                                                                                             | 50                      | -0.63           | -0.000753 |             |        |
| Voltage                                                                                     |                         |                 |           |             |        |
| Temperature<br>(℃)                                                                          | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm) | Result |
|                                                                                             |                         | Hz              | ppm       |             |        |
| 25                                                                                          | 3.45                    | -0.65           | -0.000777 | ±2.5        | Pass   |
|                                                                                             | 3.91                    | -0.82           | -0.000980 |             |        |
|                                                                                             | 4.50                    | -0.07           | -0.000084 |             |        |
| 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>(℃)      | Frequency error |           | Limit (ppm)                           | Result |
|                                                                                             |                         | Hz              | ppm       |                                       |        |
| 3.91                                                                                        | -30                     | -1.55           | -0.000895 | Within authorized<br>band for BAND IV | Pass   |
|                                                                                             | -20                     | 0.85            | 0.000491  |                                       |        |
|                                                                                             | -10                     | 0.54            | 0.000312  |                                       |        |
|                                                                                             | 0                       | 1.27            | 0.000733  |                                       |        |
|                                                                                             | 10                      | 0.46            | 0.000265  |                                       |        |
|                                                                                             | 20                      | 0.11            | 0.000063  |                                       |        |
|                                                                                             | 30                      | -0.28           | -0.000162 |                                       |        |
|                                                                                             | 40                      | -0.03           | -0.000017 |                                       |        |
|                                                                                             | 50                      | -1.76           | -0.001016 |                                       |        |
| Voltage                                                                                     |                         |                 |           |                                       |        |
| Temperature<br>(℃)                                                                          | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm)                           | Result |
|                                                                                             |                         | Hz              | ppm       |                                       |        |
| 25                                                                                          | 3.45                    | 0.46            | 0.000265  | Within authorized<br>band for BAND IV | Pass   |
|                                                                                             | 3.91                    | 0.51            | 0.000294  |                                       |        |
|                                                                                             | 4.50                    | 0.70            | 0.000404  |                                       |        |
| 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                     | 3.77            | 0.002005 | Within authorized<br>band for BAND II | Pass   |
|                                                                                             | -20                     | 3.04            | 0.001617 |                                       |        |
|                                                                                             | -10                     | 2.99            | 0.001590 |                                       |        |
|                                                                                             | 0                       | 2.33            | 0.001239 |                                       |        |
|                                                                                             | 10                      | 3.20            | 0.001702 |                                       |        |
|                                                                                             | 20                      | 3.83            | 0.002037 |                                       |        |
|                                                                                             | 30                      | 3.45            | 0.001835 |                                       |        |
|                                                                                             | 40                      | 2.75            | 0.001463 |                                       |        |
|                                                                                             | 50                      | 3.06            | 0.001628 |                                       |        |
| Voltage                                                                                     |                         |                 |          |                                       |        |
| Temperature<br>(°C)                                                                         | Power supplied<br>(Vdc) | Frequency error |          | Limit (ppm)                           | Result |
|                                                                                             |                         | Hz              | ppm      |                                       |        |
| 25                                                                                          | 3.45                    | 3.61            | 0.001920 | Within authorized<br>band for BAND II | Pass   |
|                                                                                             | 3.91                    | 3.88            | 0.002064 |                                       |        |
|                                                                                             | 4.50                    | 3.00            | 0.001596 |                                       |        |
| 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

