

## 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    | 28.05                 | 28.87          | 33.01                | PASS    |
| Band2 | TestMode | 9262    | 28.14                 | 28.96          | 33.01                | PASS    |
| Band2 | TestMode | 9400    | 28.11                 | 28.93          | 33.01                | PASS    |
| Band2 | Voice    | 9400    | 28.00                 | 28.82          | 33.01                | PASS    |
| Band2 | TestMode | 9538    | 26.82                 | 27.64          | 33.01                | PASS    |
| Band2 | Voice    | 9538    | 26.71                 | 27.53          | 33.01                | PASS    |
| Band4 | Voice    | 1312    | 22.62                 | 23.54          | 30.00                | PASS    |
| Band4 | TestMode | 1312    | 22.44                 | 23.36          | 30.00                | PASS    |
| Band4 | Voice    | 1413    | 22.32                 | 23.24          | 30.00                | PASS    |
| Band4 | TestMode | 1413    | 22.40                 | 23.32          | 30.00                | PASS    |
| Band4 | TestMode | 1513    | 22.21                 | 23.13          | 30.00                | PASS    |
| Band4 | Voice    | 1513    | 22.36                 | 23.28          | 30.00                | PASS    |
| Band5 | Voice    | 4132    | 22.97                 | 20.11          | 38.45                | PASS    |
| Band5 | TestMode | 4132    | 23.03                 | 20.17          | 38.45                | PASS    |
| Band5 | TestMode | 4183    | 23.11                 | 20.25          | 38.45                | PASS    |
| Band5 | Voice    | 4183    | 23.13                 | 20.27          | 38.45                | PASS    |
| Band5 | Voice    | 4233    | 22.95                 | 20.09          | 38.45                | PASS    |
| Band5 | TestMode | 4233    | 23.07                 | 20.21          | 38.45                | PASS    |

### Test Result(HSDPA)

| Band  | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262    | 1       | 27.50                 | 28.32          | 33.01                | PASS    |
| Band2 | 9262    | 2       | 26.98                 | 27.80          | 33.01                | PASS    |
| Band2 | 9262    | 3       | 26.78                 | 27.60          | 33.01                | PASS    |
| Band2 | 9262    | 4       | 27.06                 | 27.88          | 33.01                | PASS    |
| Band2 | 9400    | 1       | 27.28                 | 28.10          | 33.01                | PASS    |
| Band2 | 9400    | 2       | 26.69                 | 27.51          | 33.01                | PASS    |
| Band2 | 9400    | 3       | 26.47                 | 27.29          | 33.01                | PASS    |
| Band2 | 9400    | 4       | 26.80                 | 27.62          | 33.01                | PASS    |
| Band2 | 9538    | 1       | 25.90                 | 26.72          | 33.01                | PASS    |
| Band2 | 9538    | 2       | 25.33                 | 26.15          | 33.01                | PASS    |
| Band2 | 9538    | 3       | 25.12                 | 25.94          | 33.01                | PASS    |
| Band2 | 9538    | 4       | 25.98                 | 26.80          | 33.01                | PASS    |

|       |      |   |       |       |       |      |
|-------|------|---|-------|-------|-------|------|
| Band4 | 1312 | 1 | 21.53 | 22.45 | 30.00 | PASS |
| Band4 | 1312 | 2 | 20.97 | 21.89 | 30.00 | PASS |
| Band4 | 1312 | 3 | 20.96 | 21.88 | 30.00 | PASS |
| Band4 | 1312 | 4 | 20.93 | 21.85 | 30.00 | PASS |
| Band4 | 1413 | 1 | 21.48 | 22.40 | 30.00 | PASS |
| Band4 | 1413 | 2 | 20.89 | 21.81 | 30.00 | PASS |
| Band4 | 1413 | 3 | 20.86 | 21.78 | 30.00 | PASS |
| Band4 | 1413 | 4 | 20.92 | 21.84 | 30.00 | PASS |
| Band4 | 1513 | 1 | 21.47 | 22.39 | 30.00 | PASS |
| Band4 | 1513 | 2 | 20.82 | 21.74 | 30.00 | PASS |
| Band4 | 1513 | 3 | 20.88 | 21.80 | 30.00 | PASS |
| Band4 | 1513 | 4 | 20.92 | 21.84 | 30.00 | PASS |
| Band5 | 4132 | 1 | 22.08 | 19.22 | 38.5  | PASS |
| Band5 | 4132 | 2 | 21.57 | 18.71 | 38.5  | PASS |
| Band5 | 4132 | 3 | 21.58 | 18.72 | 38.5  | PASS |
| Band5 | 4132 | 4 | 21.60 | 18.74 | 38.5  | PASS |
| Band5 | 4183 | 1 | 22.13 | 19.27 | 38.5  | PASS |
| Band5 | 4183 | 2 | 21.61 | 18.75 | 38.5  | PASS |
| Band5 | 4183 | 3 | 21.64 | 18.78 | 38.5  | PASS |
| Band5 | 4183 | 4 | 21.60 | 18.74 | 38.5  | PASS |
| Band5 | 4233 | 1 | 22.05 | 19.19 | 38.5  | PASS |
| Band5 | 4233 | 2 | 21.55 | 18.69 | 38.5  | PASS |
| Band5 | 4233 | 3 | 21.56 | 18.70 | 38.5  | PASS |
| Band5 | 4233 | 4 | 21.58 | 18.72 | 38.5  | PASS |

### Test Result(HSUPA)

| Band  | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262    | 1       | 26.51                 | 27.33          | 33.01                | PASS    |
| Band2 | 9262    | 2       | 26.99                 | 27.81          | 33.01                | PASS    |
| Band2 | 9262    | 3       | 27.47                 | 28.29          | 33.01                | PASS    |
| Band2 | 9262    | 4       | 26.48                 | 27.30          | 33.01                | PASS    |
| Band2 | 9262    | 5       | 27.76                 | 28.58          | 33.01                | PASS    |
| Band2 | 9400    | 1       | 26.89                 | 27.71          | 33.01                | PASS    |
| Band2 | 9400    | 2       | 26.82                 | 27.64          | 33.01                | PASS    |
| Band2 | 9400    | 3       | 27.26                 | 28.08          | 33.01                | PASS    |
| Band2 | 9400    | 4       | 26.34                 | 27.16          | 33.01                | PASS    |
| Band2 | 9400    | 5       | 27.61                 | 28.43          | 33.01                | PASS    |
| Band2 | 9538    | 1       | 26.47                 | 27.29          | 33.01                | PASS    |
| Band2 | 9538    | 2       | 25.48                 | 26.30          | 33.01                | PASS    |
| Band2 | 9538    | 3       | 25.92                 | 26.74          | 33.01                | PASS    |

|       |      |   |       |       |       |      |
|-------|------|---|-------|-------|-------|------|
| Band2 | 9538 | 4 | 24.98 | 25.80 | 33.01 | PASS |
| Band2 | 9538 | 5 | 26.30 | 27.33 | 33.01 | PASS |
| Band4 | 1312 | 1 | 19.44 | 20.36 | 30.00 | PASS |
| Band4 | 1312 | 2 | 19.96 | 20.88 | 30.00 | PASS |
| Band4 | 1312 | 3 | 20.47 | 21.39 | 30.00 | PASS |
| Band4 | 1312 | 4 | 19.55 | 20.47 | 30.00 | PASS |
| Band4 | 1312 | 5 | 21.47 | 22.39 | 30.00 | PASS |
| Band4 | 1413 | 1 | 19.36 | 20.28 | 30.00 | PASS |
| Band4 | 1413 | 2 | 19.91 | 20.83 | 30.00 | PASS |
| Band4 | 1413 | 3 | 20.40 | 21.32 | 30.00 | PASS |
| Band4 | 1413 | 4 | 19.44 | 20.36 | 30.00 | PASS |
| Band4 | 1413 | 5 | 21.42 | 22.34 | 30.00 | PASS |
| Band4 | 1513 | 1 | 19.35 | 20.27 | 30.00 | PASS |
| Band4 | 1513 | 2 | 19.91 | 20.83 | 30.00 | PASS |
| Band4 | 1513 | 3 | 20.42 | 21.34 | 30.00 | PASS |
| Band4 | 1513 | 4 | 19.43 | 20.35 | 30.00 | PASS |
| Band4 | 1513 | 5 | 21.43 | 22.35 | 30.00 | PASS |
| Band5 | 4132 | 1 | 20.08 | 17.22 | 38.5  | PASS |
| Band5 | 4132 | 2 | 20.50 | 17.64 | 38.5  | PASS |
| Band5 | 4132 | 3 | 21.01 | 18.15 | 38.5  | PASS |
| Band5 | 4132 | 4 | 20.10 | 17.24 | 38.5  | PASS |
| Band5 | 4132 | 5 | 22.11 | 19.25 | 38.5  | PASS |
| Band5 | 4183 | 1 | 20.15 | 17.29 | 38.5  | PASS |
| Band5 | 4183 | 2 | 20.59 | 17.73 | 38.5  | PASS |
| Band5 | 4183 | 3 | 21.10 | 18.24 | 38.5  | PASS |
| Band5 | 4183 | 4 | 20.18 | 17.32 | 38.5  | PASS |
| Band5 | 4183 | 5 | 22.14 | 19.28 | 38.5  | PASS |
| Band5 | 4233 | 1 | 20.07 | 17.21 | 38.5  | PASS |
| Band5 | 4233 | 2 | 20.49 | 17.63 | 38.5  | PASS |
| Band5 | 4233 | 3 | 21.00 | 18.14 | 38.5  | PASS |
| Band5 | 4233 | 4 | 20.07 | 17.21 | 38.5  | PASS |
| Band5 | 4233 | 5 | 22.06 | 19.20 | 38.5  | PASS |

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

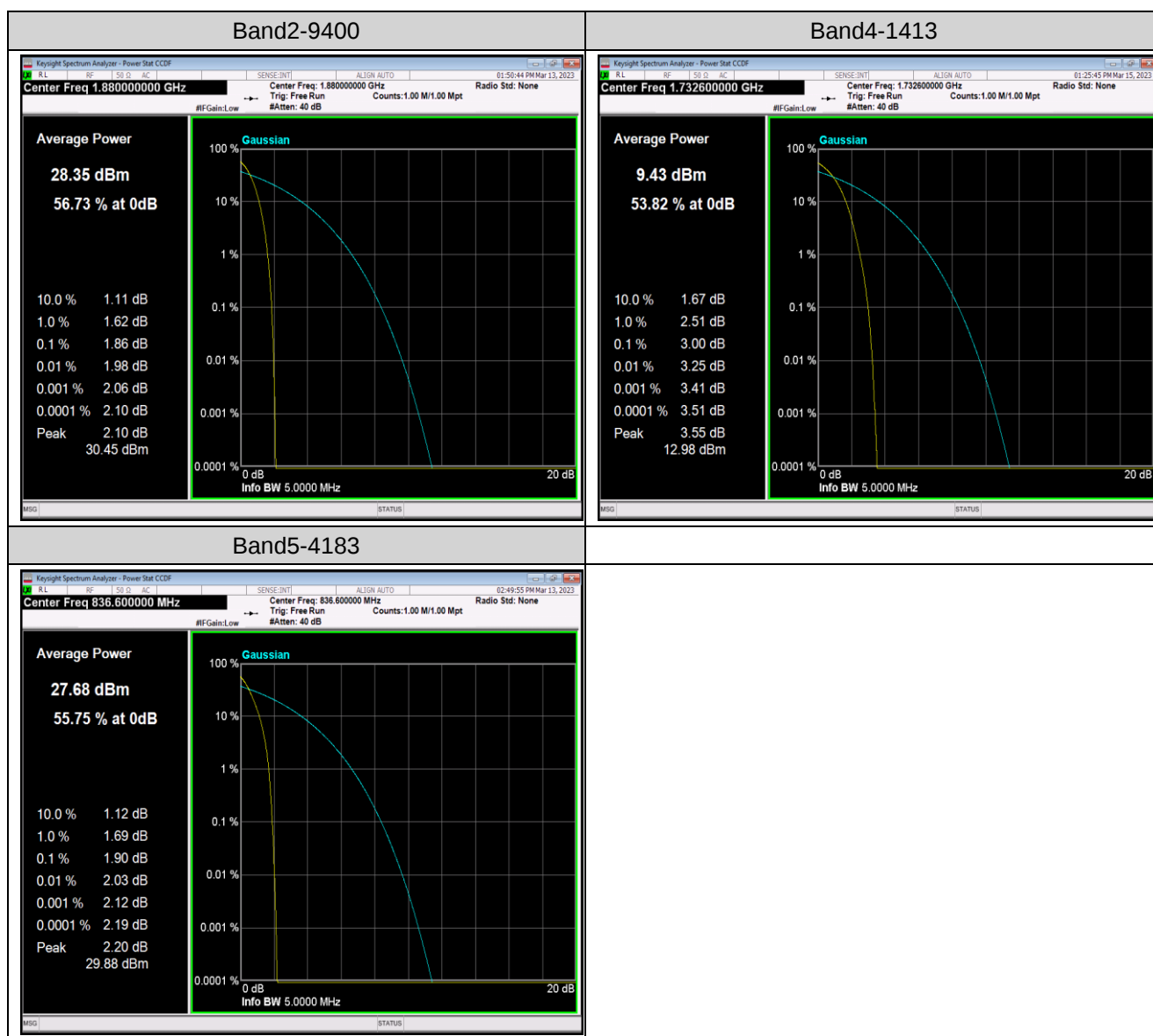
## AppendixB:Peak-to-Average Ratio

### Test Result(WCDMA)

| Band  | Channel | Peak-to-Average Ratio(dB) | Limit(dB) | Verdict |
|-------|---------|---------------------------|-----------|---------|
| Band2 | 9400    | 1.86                      | 13        | PASS    |
| Band4 | 1413    | 3                         | 13        | PASS    |
| Band5 | 4183    | 1.9                       | 13        | PASS    |

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

### Test Graphs(WCDMA)

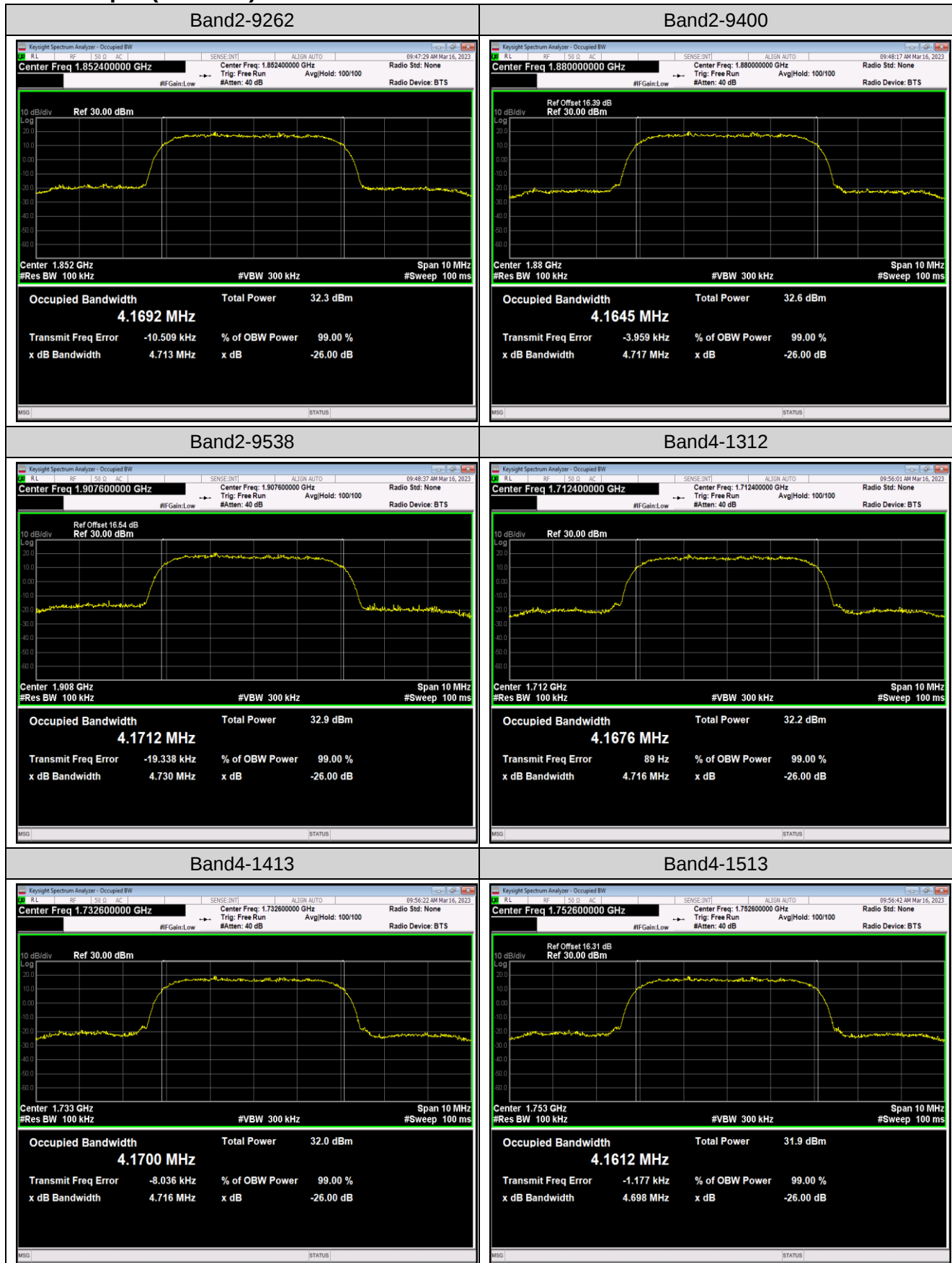


## AppendixC:26dB Bandwidth andOccupied Bandwidth

### Test Result(WCDMA)

| Band  | Channel | Occupied Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) | Limit(kHz) | Verdict |
|-------|---------|-----------------------------|-------------------------|------------|---------|
| Band2 | 9262    | 4.1692                      | 4.713                   | ---        | PASS    |
| Band2 | 9400    | 4.1645                      | 4.717                   | ---        | PASS    |
| Band2 | 9538    | 4.1712                      | 4.730                   | ---        | PASS    |
| Band4 | 1312    | 4.1676                      | 4.716                   | ---        | PASS    |
| Band4 | 1413    | 4.1700                      | 4.716                   | ---        | PASS    |
| Band4 | 1513    | 4.1612                      | 4.698                   | ---        | PASS    |
| Band5 | 4132    | 4.1634                      | 4.703                   | ---        | PASS    |
| Band5 | 4183    | 4.1692                      | 4.748                   | ---        | PASS    |
| Band5 | 4233    | 4.1543                      | 4.711                   | ---        | PASS    |

## Test Graphs(WCDMA)



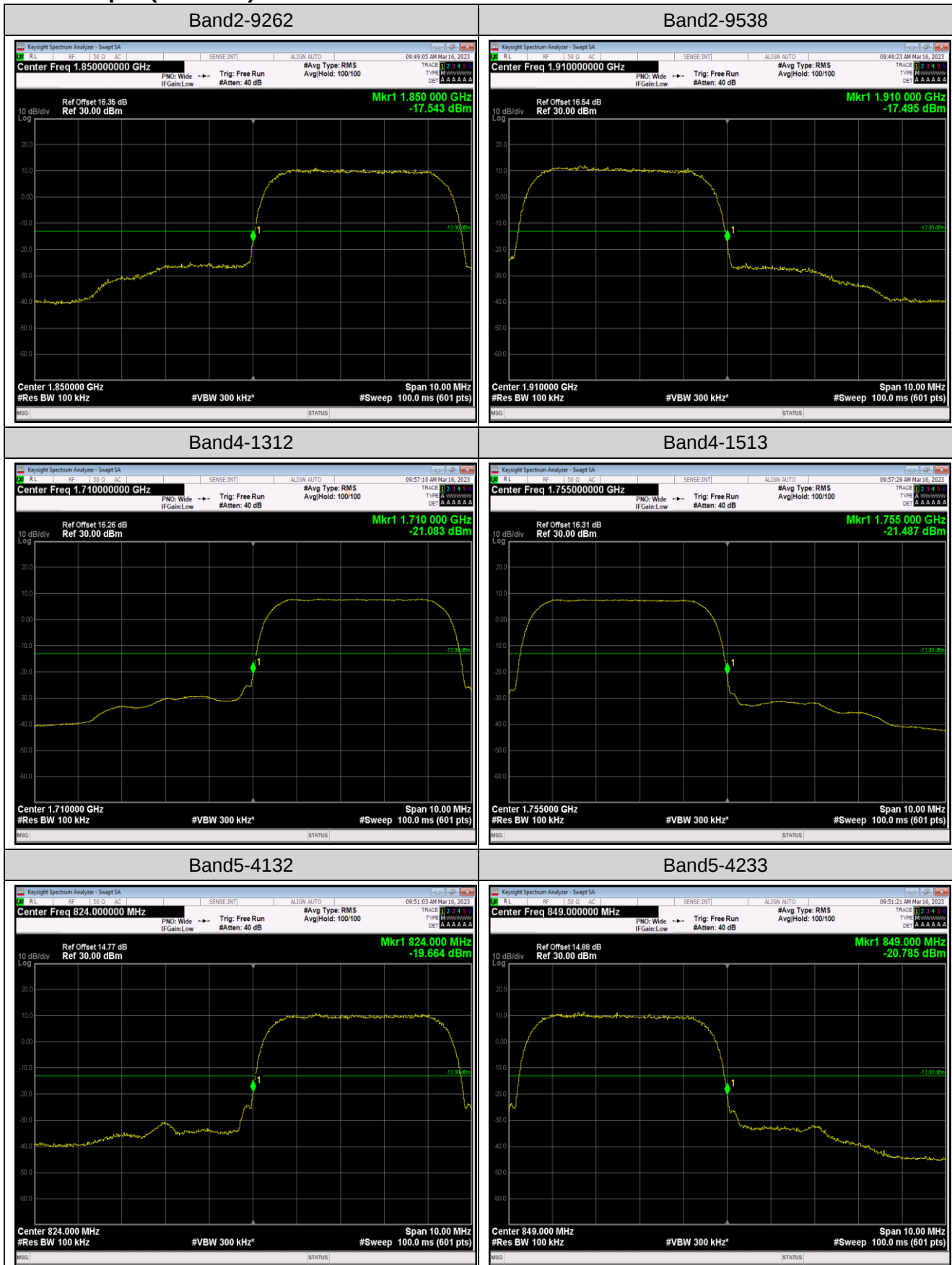


## AppendixD:Band Edge

### Test Result(WCDMA)

| Band  | Channel | Frequency (MHz) | Result (dBm) | Limit(dBm) | Verdict |
|-------|---------|-----------------|--------------|------------|---------|
| Band2 | 9262    | 1850.00         | -17.54       | -13        | PASS    |
| Band2 | 9538    | 1910.00         | -17.49       | -13        | PASS    |
| Band4 | 1312    | 1710.00         | -21.08       | -13        | PASS    |
| Band4 | 1513    | 1755.00         | -21.49       | -13        | PASS    |
| Band5 | 4132    | 824.00          | -19.66       | -13        | PASS    |
| Band5 | 4233    | 849.00          | -20.78       | -13        | PASS    |

## Test Graphs(WCDMA)

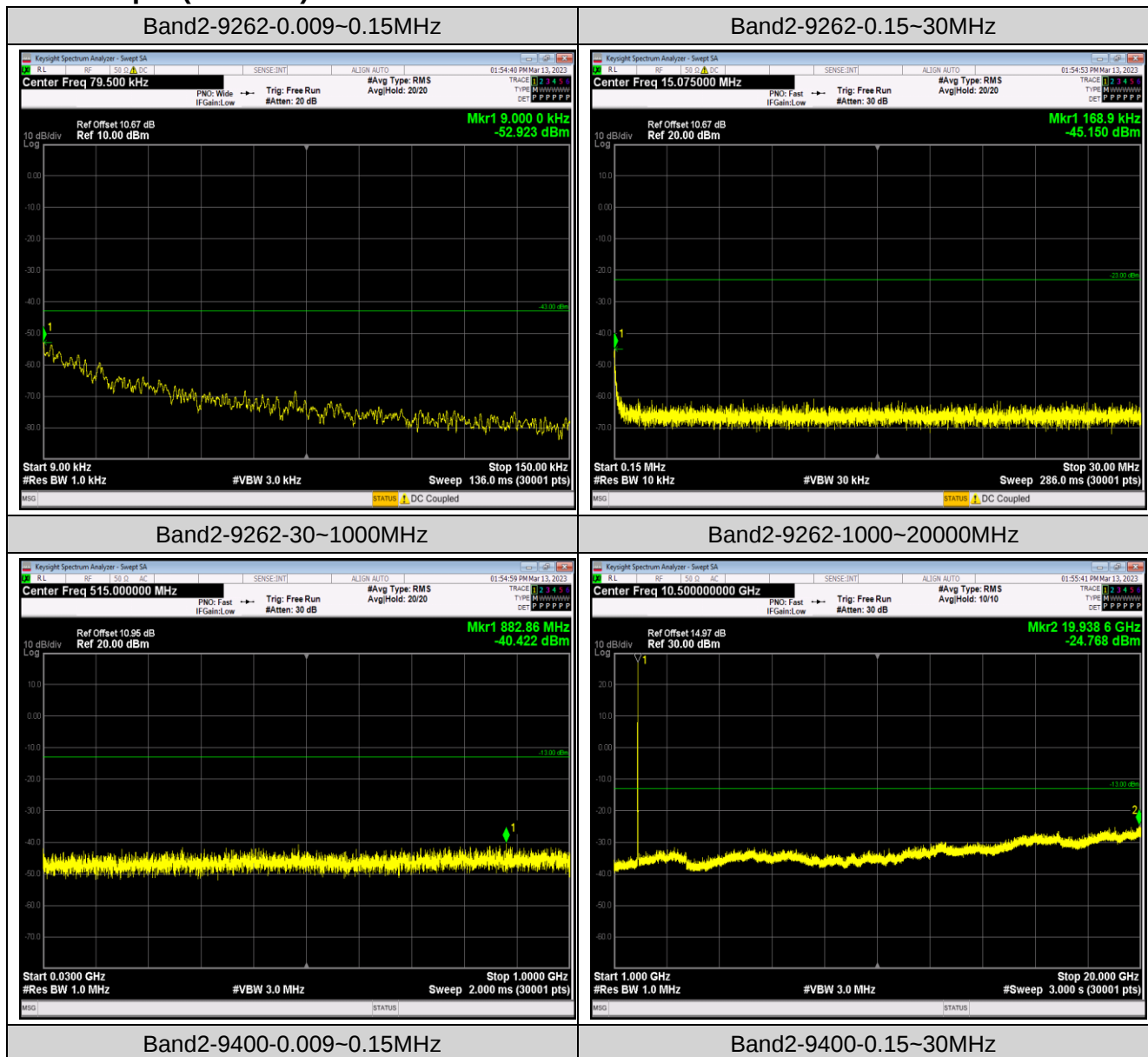


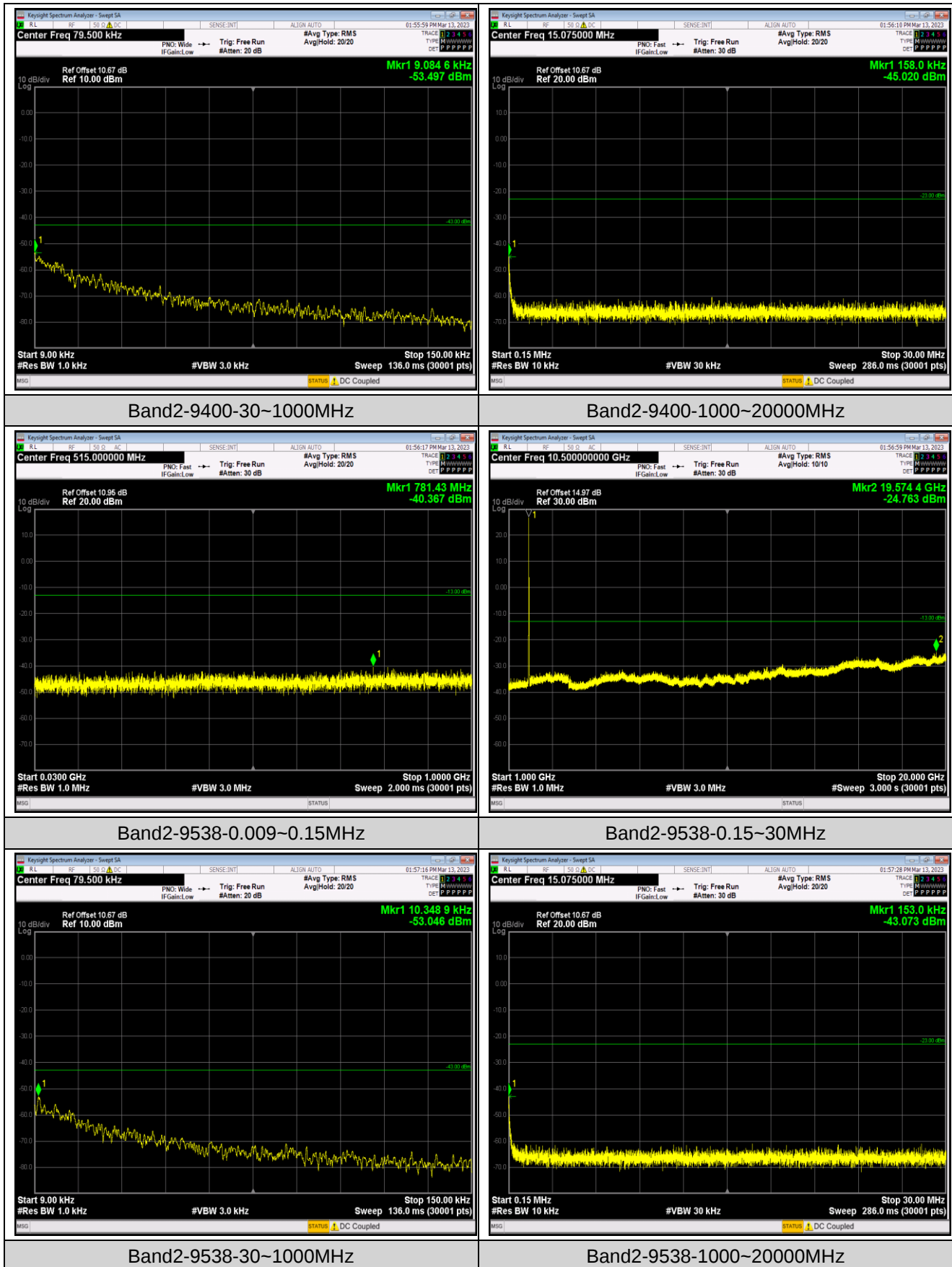
## AppendixE:Conducted SpuriousEmission

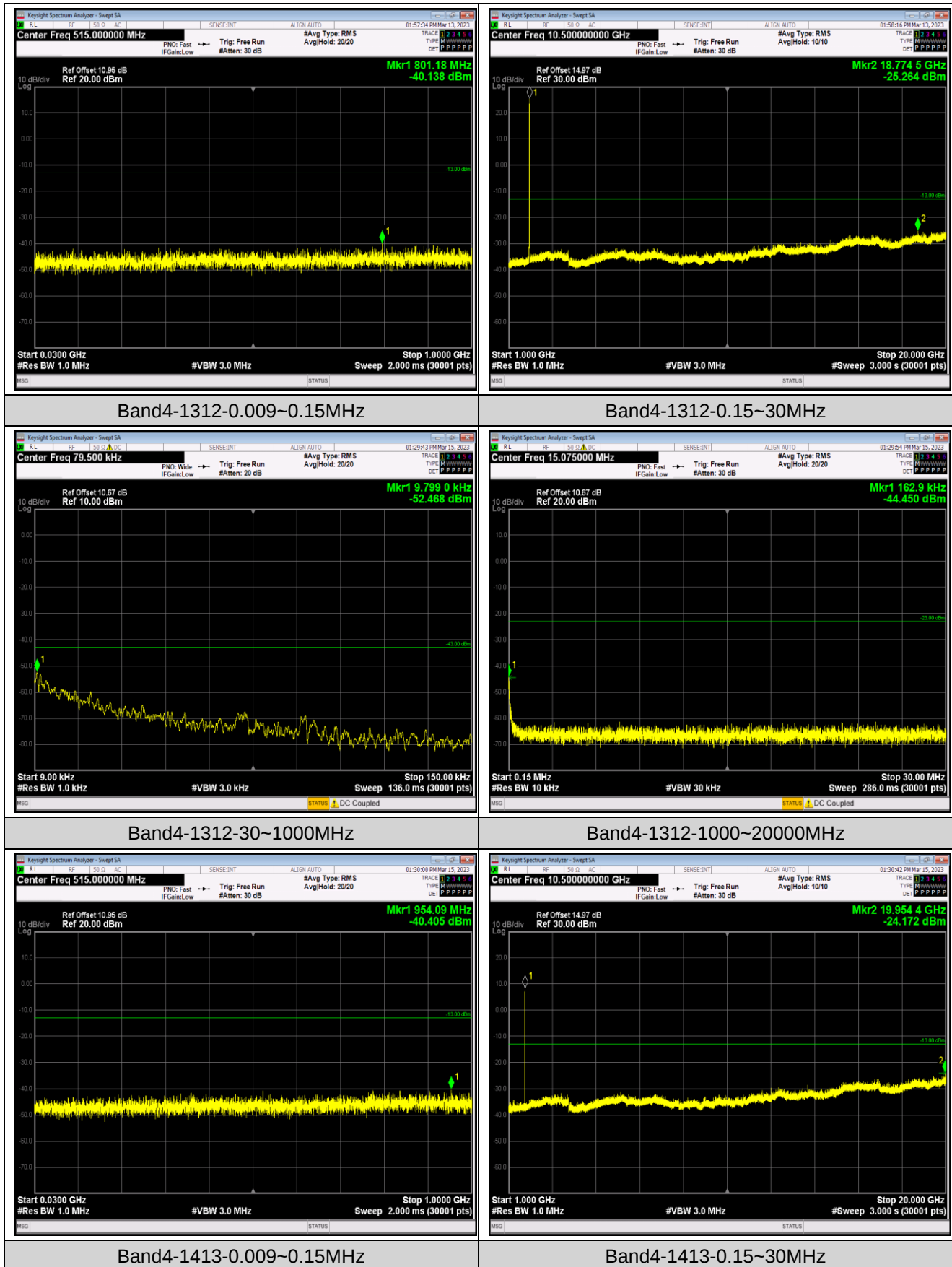
### Test Result(WCDMA)

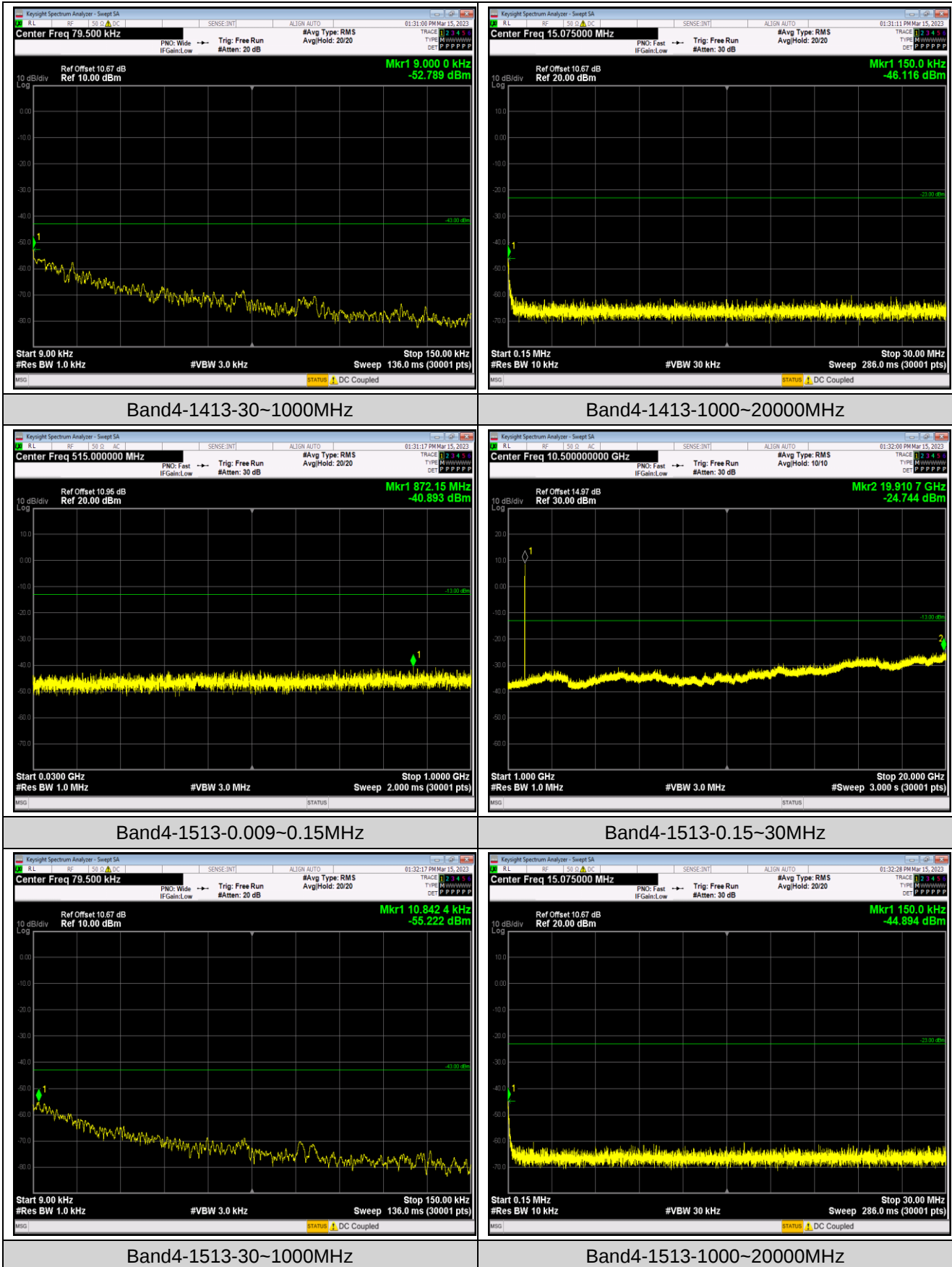
| Band  | Channel | Frequency Range (Mhz) | Frequency (dBm) | Result (dBm) | Limit (dBm) | Verdict |
|-------|---------|-----------------------|-----------------|--------------|-------------|---------|
| Band2 | 9262    | 0.009~0.15MHz         | 0.01            | -52.92       | -43         | PASS    |
| Band2 | 9262    | 0.15~30MHz            | 0.17            | -45.15       | -23         | PASS    |
| Band2 | 9262    | 30~1000MHz            | 882.86          | -40.42       | -13         | PASS    |
| Band2 | 9262    | 1000~20000MHz         | 19938.57        | -24.77       | -13         | PASS    |
| Band2 | 9400    | 0.009~0.15MHz         | 0.01            | -53.5        | -43         | PASS    |
| Band2 | 9400    | 0.15~30MHz            | 0.16            | -45.02       | -23         | PASS    |
| Band2 | 9400    | 30~1000MHz            | 781.43          | -40.37       | -13         | PASS    |
| Band2 | 9400    | 1000~20000MHz         | 19574.4         | -24.76       | -13         | PASS    |
| Band2 | 9538    | 0.009~0.15MHz         | 0.01            | -53.05       | -43         | PASS    |
| Band2 | 9538    | 0.15~30MHz            | 0.15            | -43.07       | -23         | PASS    |
| Band2 | 9538    | 30~1000MHz            | 801.18          | -40.14       | -13         | PASS    |
| Band2 | 9538    | 1000~20000MHz         | 18774.5         | -25.26       | -13         | PASS    |
| Band4 | 1312    | 0.009~0.15MHz         | 0.01            | -52.47       | -43         | PASS    |
| Band4 | 1312    | 0.15~30MHz            | 0.16            | -44.45       | -23         | PASS    |
| Band4 | 1312    | 30~1000MHz            | 954.09          | -40.41       | -13         | PASS    |
| Band4 | 1312    | 1000~20000MHz         | 19954.4         | -24.17       | -13         | PASS    |
| Band4 | 1413    | 0.009~0.15MHz         | 0.01            | -52.79       | -43         | PASS    |
| Band4 | 1413    | 0.15~30MHz            | 0.15            | -46.12       | -23         | PASS    |
| Band4 | 1413    | 30~1000MHz            | 872.15          | -40.89       | -13         | PASS    |
| Band4 | 1413    | 1000~20000MHz         | 19910.7         | -24.74       | -13         | PASS    |
| Band4 | 1513    | 0.009~0.15MHz         | 0.01            | -55.22       | -43         | PASS    |
| Band4 | 1513    | 0.15~30MHz            | 0.15            | -44.89       | -23         | PASS    |
| Band4 | 1513    | 30~1000MHz            | 905.97          | -40.47       | -13         | PASS    |
| Band4 | 1513    | 1000~20000MHz         | 19890.43        | -24.41       | -13         | PASS    |
| Band5 | 4132    | 0.009~0.15MHz         | 0.01            | -55.13       | -33         | PASS    |
| Band5 | 4132    | 0.15~30MHz            | 0.15            | -44.1        | -13         | PASS    |
| Band5 | 4132    | 30~1000MHz            | 692.93          | -49.27       | -13         | PASS    |
| Band5 | 4132    | 1000~10000MHz         | 7079.8          | -31.45       | -13         | PASS    |
| Band5 | 4183    | 0.009~0.15MHz         | 0.01            | -53.77       | -33         | PASS    |
| Band5 | 4183    | 0.15~30MHz            | 0.16            | -43.38       | -13         | PASS    |
| Band5 | 4183    | 30~1000MHz            | 532.82          | -49.76       | -13         | PASS    |
| Band5 | 4183    | 1000~10000MHz         | 5897.8          | -30.63       | -13         | PASS    |
| Band5 | 4233    | 0.009~0.15MHz         | 0.01            | -54.19       | -33         | PASS    |
| Band5 | 4233    | 0.15~30MHz            | 0.16            | -44.36       | -13         | PASS    |
| Band5 | 4233    | 30~1000MHz            | 740.1           | -50.37       | -13         | PASS    |
| Band5 | 4233    | 1000~10000MHz         | 5944            | -30.72       | -13         | PASS    |

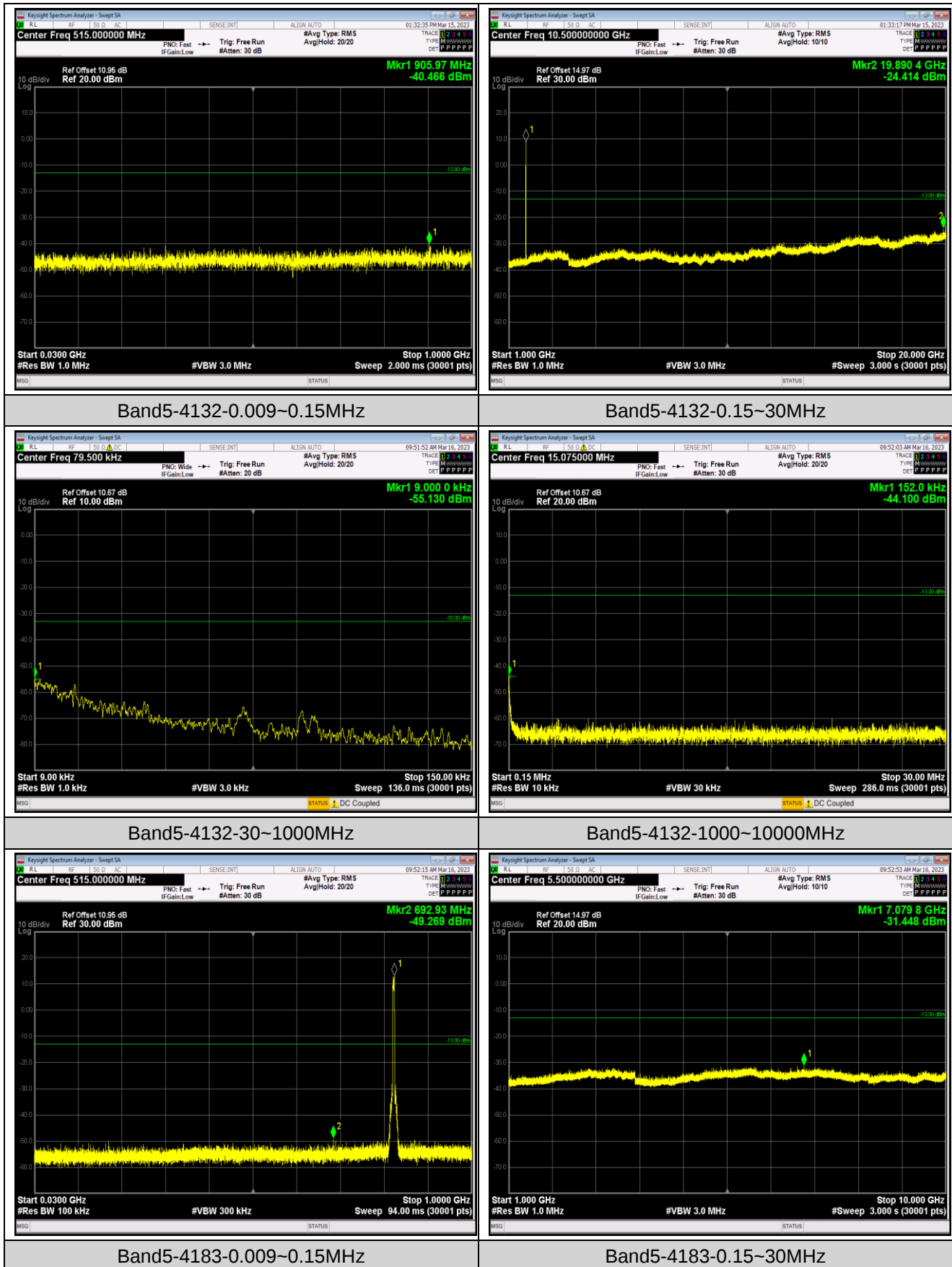
# Test Graphs(WCDMA)

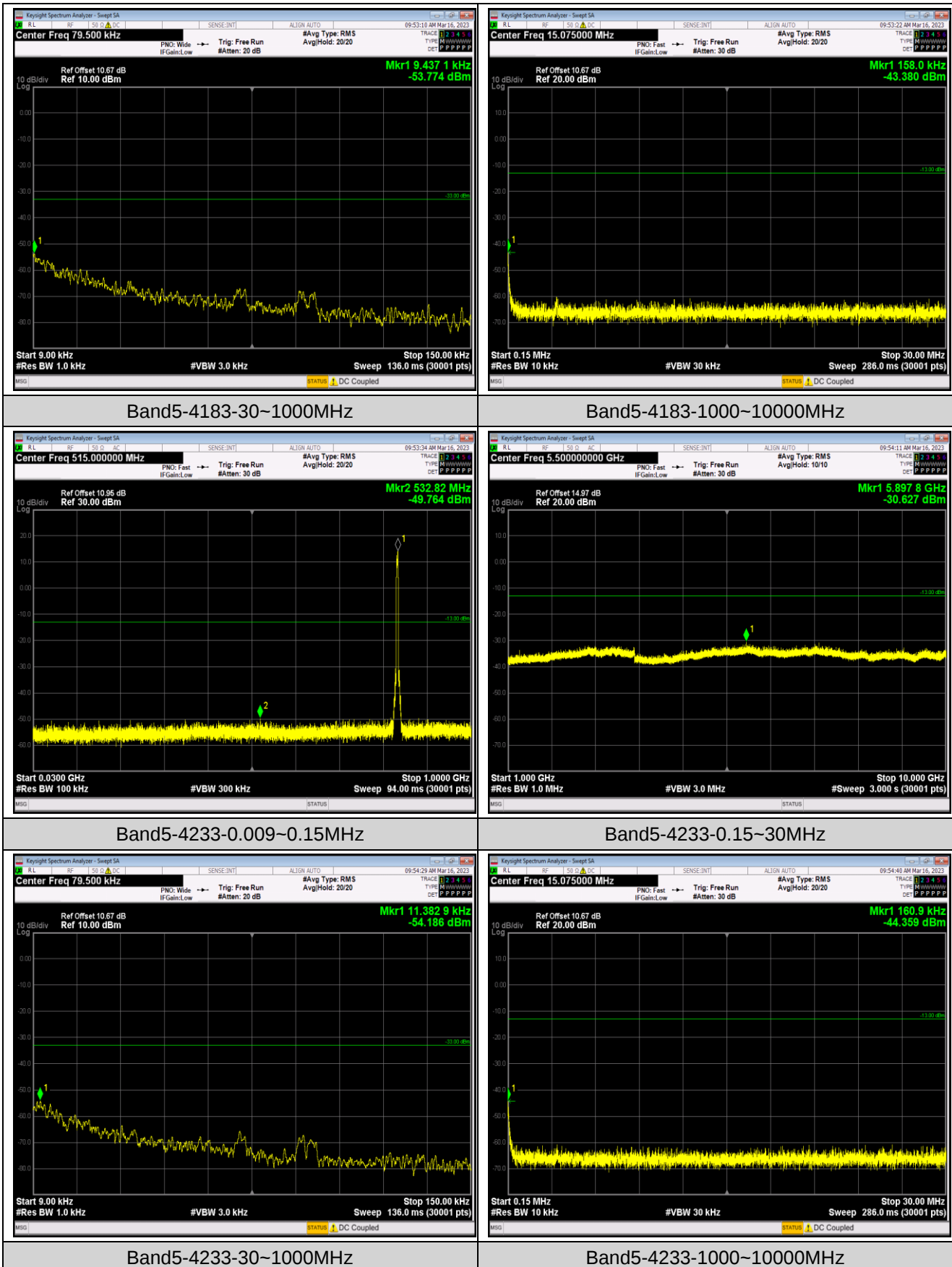


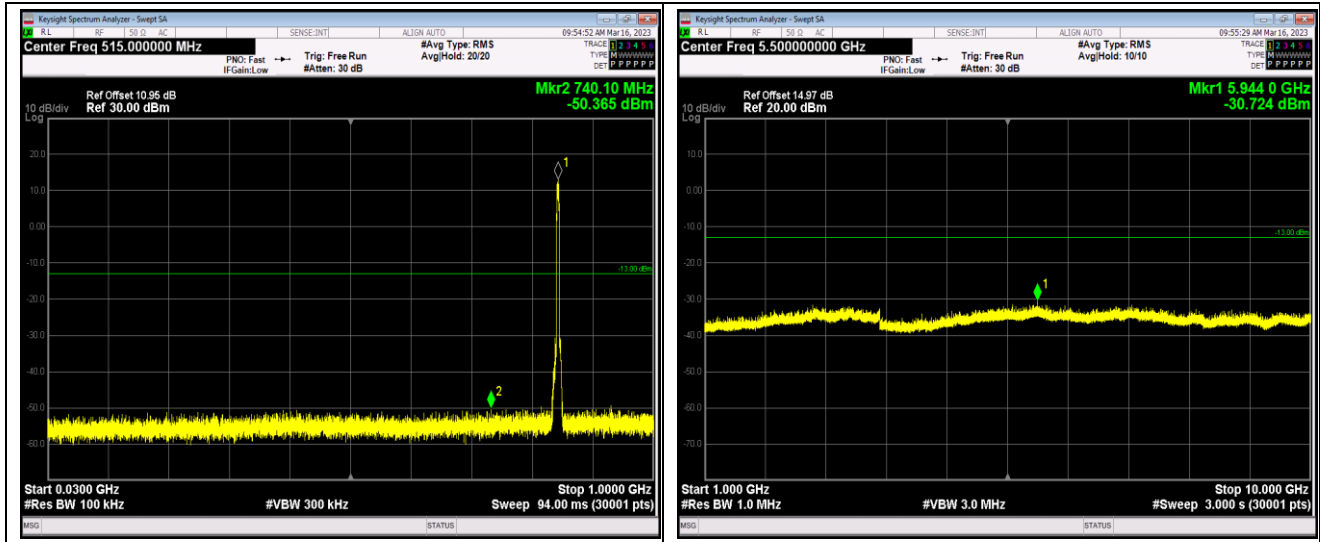












## Appendix F: Frequency Stability

### 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       |             |        |
| 3.85                                                                                        | -30                     | -5.13           | -0.006132 | ±2.5        | Pass   |
|                                                                                             | -20                     | -5.01           | -0.005989 |             |        |
|                                                                                             | -10                     | -6.34           | -0.007578 |             |        |
|                                                                                             | 0                       | -6.49           | -0.007758 |             |        |
|                                                                                             | 10                      | -5.99           | -0.007160 |             |        |
|                                                                                             | 20                      | -6.85           | -0.008188 |             |        |
|                                                                                             | 30                      | -6.97           | -0.008331 |             |        |
|                                                                                             | 40                      | -5.60           | -0.006694 |             |        |
|                                                                                             | 50                      | -4.66           | -0.005570 |             |        |
| Voltage                                                                                     |                         |                 |           |             |        |
| Temperature<br>(°C)                                                                         | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm) | Result |
|                                                                                             |                         | Hz              | ppm       |             |        |
| 25                                                                                          | 3.50                    | -6.57           | -0.007853 | ±2.5        | Pass   |
|                                                                                             | 3.85                    | -5.36           | -0.006407 |             |        |
|                                                                                             | 4.43                    | -4.06           | -0.004853 |             |        |
| 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       |                                       |        |
| 3.85                                                                                        | -30                     | -14.01          | -0.008086 | Within authorized<br>band for BAND IV | Pass   |
|                                                                                             | -20                     | -14.76          | -0.008519 |                                       |        |
|                                                                                             | -10                     | -11.27          | -0.006505 |                                       |        |
|                                                                                             | 0                       | -14.39          | -0.008305 |                                       |        |
|                                                                                             | 10                      | -12.82          | -0.007399 |                                       |        |
|                                                                                             | 20                      | -10.92          | -0.006303 |                                       |        |
|                                                                                             | 30                      | -10.06          | -0.005806 |                                       |        |
|                                                                                             | 40                      | -14.78          | -0.008531 |                                       |        |
|                                                                                             | 50                      | -9.66           | -0.005575 |                                       |        |
| Voltage                                                                                     |                         |                 |           |                                       |        |
| Temperature<br>(℃)                                                                          | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm)                           | Result |
|                                                                                             |                         | Hz              | ppm       |                                       |        |
| 25                                                                                          | 3.50                    | -16.39          | -0.009460 | Within authorized<br>band for BAND IV | Pass   |
|                                                                                             | 3.85                    | -19.32          | -0.011151 |                                       |        |
|                                                                                             | 4.43                    | -14.71          | -0.008490 |                                       |        |
| 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>(℃)      | Frequency error |           | Limit (ppm)                           | Result |
|                                                                                             |                         | Hz              | ppm       |                                       |        |
| 3.85                                                                                        | -30                     | -6.37           | -0.003388 | Within authorized<br>band for BAND II | Pass   |
|                                                                                             | -20                     | -2.37           | -0.001261 |                                       |        |
|                                                                                             | -10                     | -4.51           | -0.002399 |                                       |        |
|                                                                                             | 0                       | -7.94           | -0.004223 |                                       |        |
|                                                                                             | 10                      | -5.39           | -0.002867 |                                       |        |
|                                                                                             | 20                      | -7.00           | -0.003723 |                                       |        |
|                                                                                             | 30                      | -6.34           | -0.003372 |                                       |        |
|                                                                                             | 40                      | -7.90           | -0.004202 |                                       |        |
|                                                                                             | 50                      | -7.03           | -0.003739 |                                       |        |
| Voltage                                                                                     |                         |                 |           |                                       |        |
| Temperature<br>(℃)                                                                          | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm)                           | Result |
|                                                                                             |                         | Hz              | ppm       |                                       |        |
| 25                                                                                          | 3.50                    | -7.09           | -0.003771 | Within authorized<br>band for BAND II | Pass   |
|                                                                                             | 3.85                    | -6.56           | -0.003489 |                                       |        |
|                                                                                             | 4.43                    | -6.04           | -0.003213 |                                       |        |
| 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

