

## 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    | 23.04                 | 19.84          | 33.01                | PASS    |
| Band2 | TestMode | 9262    | 23.11                 | 19.91          | 33.01                | PASS    |
| Band2 | TestMode | 9400    | 23.15                 | 19.95          | 33.01                | PASS    |
| Band2 | Voice    | 9400    | 23.13                 | 19.93          | 33.01                | PASS    |
| Band2 | TestMode | 9538    | 23.14                 | 19.94          | 33.01                | PASS    |
| Band2 | Voice    | 9538    | 23.13                 | 19.93          | 33.01                | PASS    |
| Band4 | Voice    | 1312    | 22.88                 | 19.68          | 30.00                | PASS    |
| Band4 | TestMode | 1312    | 22.95                 | 19.75          | 30.00                | PASS    |
| Band4 | Voice    | 1413    | 23.03                 | 19.83          | 30.00                | PASS    |
| Band4 | TestMode | 1413    | 23.10                 | 19.9           | 30.00                | PASS    |
| Band4 | TestMode | 1513    | 23.09                 | 19.89          | 30.00                | PASS    |
| Band4 | Voice    | 1513    | 23.06                 | 19.86          | 30.00                | PASS    |
| Band5 | Voice    | 4132    | 24.02                 | 13.37          | 38.45                | PASS    |
| Band5 | TestMode | 4132    | 24.21                 | 13.56          | 38.45                | PASS    |
| Band5 | TestMode | 4183    | 23.98                 | 13.33          | 38.45                | PASS    |
| Band5 | Voice    | 4183    | 23.76                 | 13.11          | 38.45                | PASS    |
| Band5 | Voice    | 4233    | 24.10                 | 13.45          | 38.45                | PASS    |
| Band5 | TestMode | 4233    | 24.09                 | 13.44          | 38.45                | PASS    |

### Test Result(HSDPA)

| Band  | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262    | 1       | 23.10                 | 19.9           | 33.01                | PASS    |
| Band2 | 9262    | 2       | 23.05                 | 19.85          | 33.01                | PASS    |
| Band2 | 9262    | 3       | 22.07                 | 18.87          | 33.01                | PASS    |
| Band2 | 9262    | 4       | 22.23                 | 19.03          | 33.01                | PASS    |
| Band2 | 9400    | 1       | 23.47                 | 20.27          | 33.01                | PASS    |
| Band2 | 9400    | 2       | 23.43                 | 20.23          | 33.01                | PASS    |
| Band2 | 9400    | 3       | 22.34                 | 19.14          | 33.01                | PASS    |
| Band2 | 9400    | 4       | 22.62                 | 19.42          | 33.01                | PASS    |
| Band2 | 9538    | 1       | 23.48                 | 20.28          | 33.01                | PASS    |
| Band2 | 9538    | 2       | 23.42                 | 20.22          | 33.01                | PASS    |
| Band2 | 9538    | 3       | 22.54                 | 19.34          | 33.01                | PASS    |
| Band2 | 9538    | 4       | 22.76                 | 19.56          | 33.01                | PASS    |

|       |      |   |       |       |       |      |
|-------|------|---|-------|-------|-------|------|
| Band4 | 1312 | 1 | 22.80 | 19.6  | 30.00 | PASS |
| Band4 | 1312 | 2 | 22.84 | 19.64 | 30.00 | PASS |
| Band4 | 1312 | 3 | 22.83 | 19.63 | 30.00 | PASS |
| Band4 | 1312 | 4 | 22.84 | 19.64 | 30.00 | PASS |
| Band4 | 1413 | 1 | 22.67 | 19.47 | 30.00 | PASS |
| Band4 | 1413 | 2 | 22.75 | 19.55 | 30.00 | PASS |
| Band4 | 1413 | 3 | 22.76 | 19.56 | 30.00 | PASS |
| Band4 | 1413 | 4 | 22.72 | 19.52 | 30.00 | PASS |
| Band4 | 1513 | 1 | 22.49 | 19.29 | 30.00 | PASS |
| Band4 | 1513 | 2 | 22.56 | 19.36 | 30.00 | PASS |
| Band4 | 1513 | 3 | 22.51 | 19.31 | 30.00 | PASS |
| Band4 | 1513 | 4 | 22.51 | 19.31 | 30.00 | PASS |
| Band5 | 4132 | 1 | 24.87 | 14.22 | 38.5  | PASS |
| Band5 | 4132 | 2 | 24.46 | 13.81 | 38.5  | PASS |
| Band5 | 4132 | 3 | 23.96 | 13.31 | 38.5  | PASS |
| Band5 | 4132 | 4 | 24.00 | 13.35 | 38.5  | PASS |
| Band5 | 4183 | 1 | 24.70 | 14.05 | 38.5  | PASS |
| Band5 | 4183 | 2 | 24.30 | 13.65 | 38.5  | PASS |
| Band5 | 4183 | 3 | 23.82 | 13.17 | 38.5  | PASS |
| Band5 | 4183 | 4 | 23.83 | 13.18 | 38.5  | PASS |
| Band5 | 4233 | 1 | 24.50 | 13.85 | 38.5  | PASS |
| Band5 | 4233 | 2 | 24.10 | 13.45 | 38.5  | PASS |
| Band5 | 4233 | 3 | 23.61 | 12.96 | 38.5  | PASS |
| Band5 | 4233 | 4 | 23.63 | 12.98 | 38.5  | PASS |

### Test Result(HSUPA)

| Band  | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262    | 1       | 20.36                 | 17.16          | 33.01                | PASS    |
| Band2 | 9262    | 2       | 21.00                 | 17.8           | 33.01                | PASS    |
| Band2 | 9262    | 3       | 20.73                 | 17.53          | 33.01                | PASS    |
| Band2 | 9262    | 4       | 21.03                 | 17.83          | 33.01                | PASS    |
| Band2 | 9262    | 5       | 23.07                 | 19.87          | 33.01                | PASS    |
| Band2 | 9400    | 1       | 21.05                 | 17.85          | 33.01                | PASS    |
| Band2 | 9400    | 2       | 21.47                 | 18.27          | 33.01                | PASS    |
| Band2 | 9400    | 3       | 21.23                 | 18.03          | 33.01                | PASS    |
| Band2 | 9400    | 4       | 21.51                 | 18.31          | 33.01                | PASS    |
| Band2 | 9400    | 5       | 23.43                 | 20.23          | 33.01                | PASS    |
| Band2 | 9538    | 1       | 21.02                 | 17.82          | 33.01                | PASS    |
| Band2 | 9538    | 2       | 21.49                 | 18.29          | 33.01                | PASS    |
| Band2 | 9538    | 3       | 21.23                 | 18.03          | 33.01                | PASS    |

|       |      |   |       |       |       |      |
|-------|------|---|-------|-------|-------|------|
| Band2 | 9538 | 4 | 21.54 | 18.34 | 33.01 | PASS |
| Band2 | 9538 | 5 | 23.47 | 20.27 | 33.01 | PASS |
| Band4 | 1312 | 1 | 22.77 | 19.57 | 30.00 | PASS |
| Band4 | 1312 | 2 | 22.77 | 19.57 | 30.00 | PASS |
| Band4 | 1312 | 3 | 22.62 | 19.42 | 30.00 | PASS |
| Band4 | 1312 | 4 | 22.81 | 19.61 | 30.00 | PASS |
| Band4 | 1312 | 5 | 23.00 | 19.8  | 30.00 | PASS |
| Band4 | 1413 | 1 | 22.74 | 19.54 | 30.00 | PASS |
| Band4 | 1413 | 2 | 22.77 | 19.57 | 30.00 | PASS |
| Band4 | 1413 | 3 | 22.56 | 19.36 | 30.00 | PASS |
| Band4 | 1413 | 4 | 22.84 | 19.64 | 30.00 | PASS |
| Band4 | 1413 | 5 | 22.88 | 19.68 | 30.00 | PASS |
| Band4 | 1513 | 1 | 22.58 | 19.38 | 30.00 | PASS |
| Band4 | 1513 | 2 | 22.60 | 19.4  | 30.00 | PASS |
| Band4 | 1513 | 3 | 22.44 | 19.24 | 30.00 | PASS |
| Band4 | 1513 | 4 | 22.63 | 19.43 | 30.00 | PASS |
| Band4 | 1513 | 5 | 22.68 | 19.48 | 30.00 | PASS |
| Band5 | 4132 | 1 | 21.56 | 10.91 | 38.5  | PASS |
| Band5 | 4132 | 2 | 21.67 | 11.02 | 38.5  | PASS |
| Band5 | 4132 | 3 | 21.43 | 10.78 | 38.5  | PASS |
| Band5 | 4132 | 4 | 21.26 | 10.61 | 38.5  | PASS |
| Band5 | 4132 | 5 | 24.89 | 14.24 | 38.5  | PASS |
| Band5 | 4183 | 1 | 21.36 | 10.71 | 38.5  | PASS |
| Band5 | 4183 | 2 | 21.50 | 10.85 | 38.5  | PASS |
| Band5 | 4183 | 3 | 21.27 | 10.62 | 38.5  | PASS |
| Band5 | 4183 | 4 | 21.10 | 10.45 | 38.5  | PASS |
| Band5 | 4183 | 5 | 24.86 | 14.21 | 38.5  | PASS |
| Band5 | 4233 | 1 | 20.91 | 10.26 | 38.5  | PASS |
| Band5 | 4233 | 2 | 21.07 | 10.42 | 38.5  | PASS |
| Band5 | 4233 | 3 | 20.85 | 10.2  | 38.5  | PASS |
| Band5 | 4233 | 4 | 20.69 | 10.04 | 38.5  | PASS |
| Band5 | 4233 | 5 | 24.61 | 13.96 | 38.5  | PASS |

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

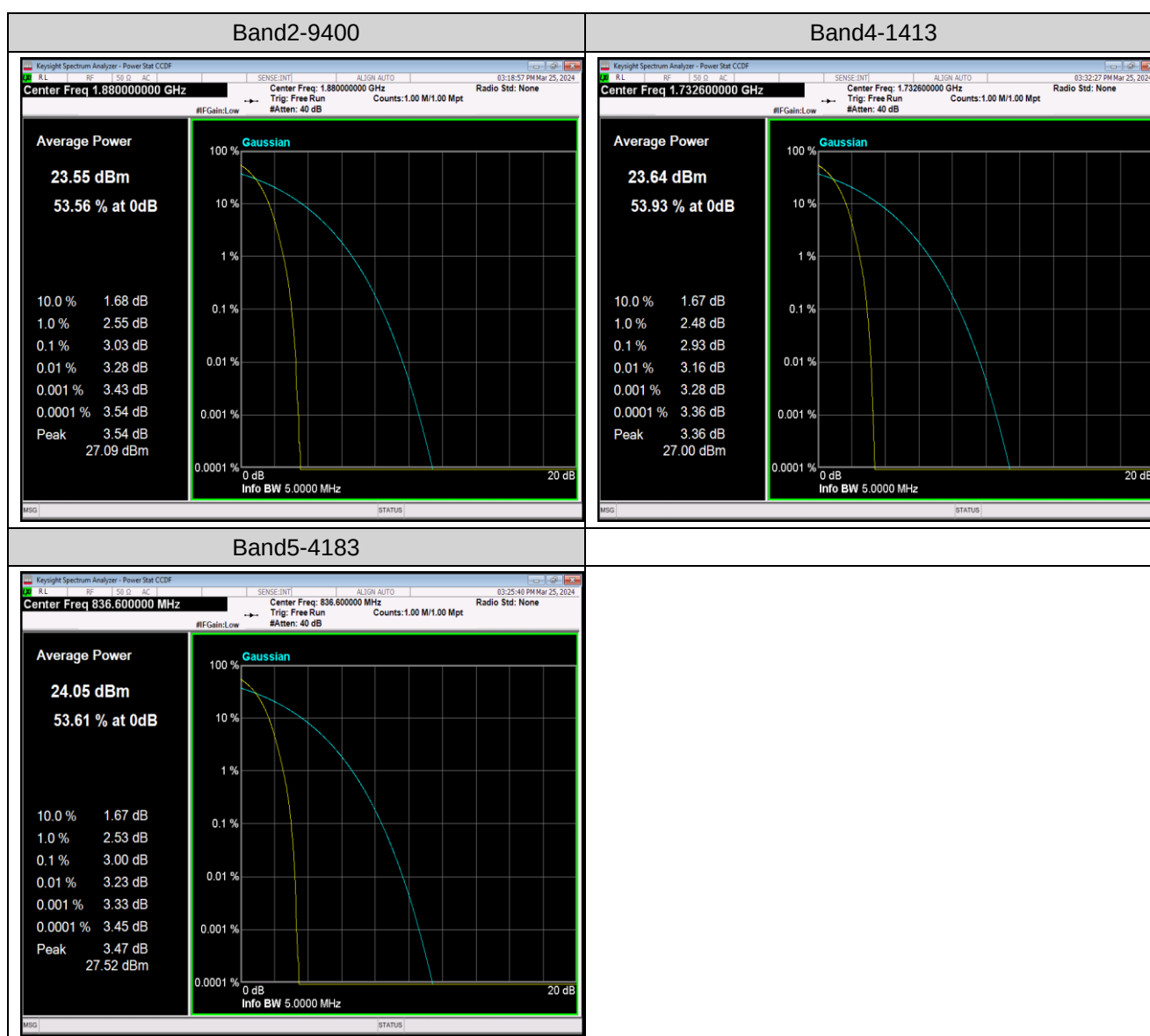
## AppendixB:Peak-to-Average Ratio

### Test Result(WCDMA)

| Band  | Channel | Peak-to-Average Ratio(dB) | Limit(dB) | Verdict |
|-------|---------|---------------------------|-----------|---------|
| Band2 | 9400    | 3.03                      | 13        | PASS    |
| Band4 | 1413    | 2.93                      | 13        | PASS    |
| Band5 | 4183    | 3                         | 13        | PASS    |

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

### Test Graphs(WCDMA)

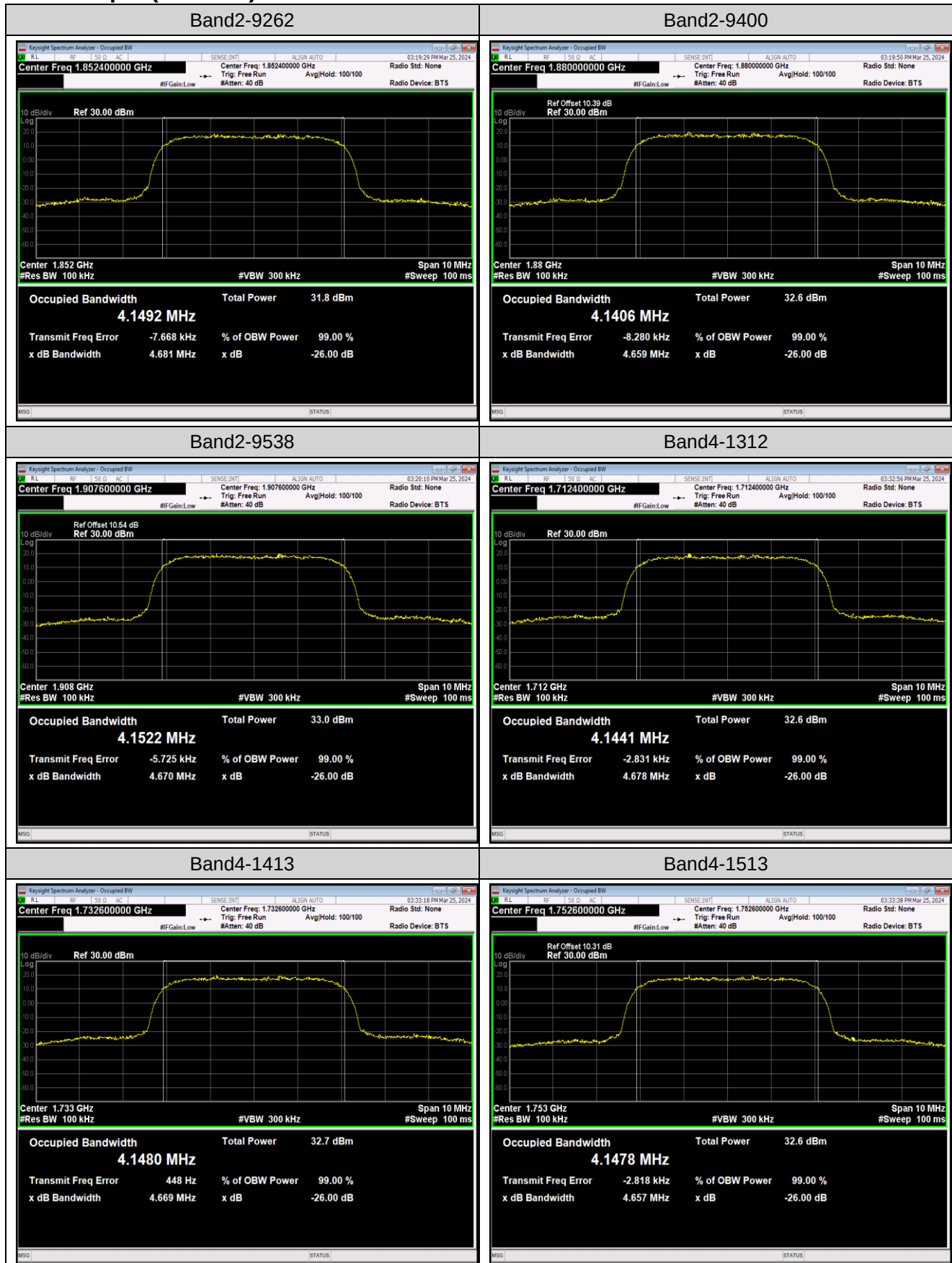


## AppendixC:26dB Bandwidth andOccupied Bandwidth

### Test Result(WCDMA)

| Band  | Channel | Occupied Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) | Limit(kHz) | Verdict |
|-------|---------|-----------------------------|-------------------------|------------|---------|
| Band2 | 9262    | 4.1492                      | 4.681                   | ---        | PASS    |
| Band2 | 9400    | 4.1406                      | 4.659                   | ---        | PASS    |
| Band2 | 9538    | 4.1522                      | 4.670                   | ---        | PASS    |
| Band4 | 1312    | 4.1441                      | 4.678                   | ---        | PASS    |
| Band4 | 1413    | 4.1480                      | 4.669                   | ---        | PASS    |
| Band4 | 1513    | 4.1478                      | 4.657                   | ---        | PASS    |
| Band5 | 4132    | 4.1452                      | 4.670                   | ---        | PASS    |
| Band5 | 4183    | 4.1439                      | 4.670                   | ---        | PASS    |
| Band5 | 4233    | 4.1503                      | 4.674                   | ---        | PASS    |

# Test Graphs(WCDMA)



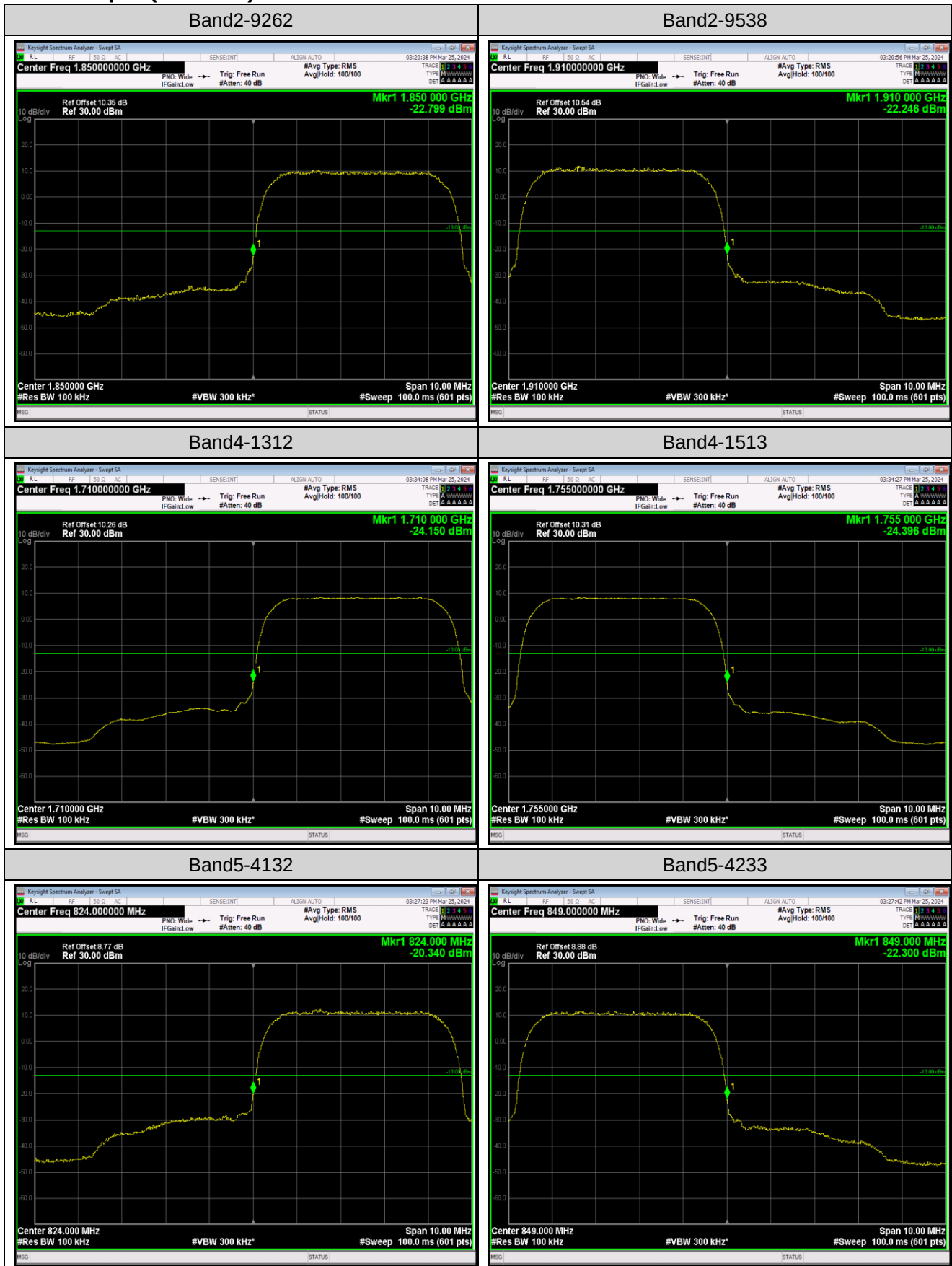


## AppendixD:Band Edge

### Test Result(WCDMA)

| Band  | Channel | Frequency (MHz) | Result (dBm) | Limit(dBm) | Verdict |
|-------|---------|-----------------|--------------|------------|---------|
| Band2 | 9262    | 1850.00         | -22.80       | -13        | PASS    |
| Band2 | 9538    | 1910.00         | -22.25       | -13        | PASS    |
| Band4 | 1312    | 1710.00         | -24.15       | -13        | PASS    |
| Band4 | 1513    | 1755.00         | -24.40       | -13        | PASS    |
| Band5 | 4132    | 824.00          | -20.34       | -13        | PASS    |
| Band5 | 4233    | 849.00          | -22.30       | -13        | PASS    |

## Test Graphs(WCDMA)

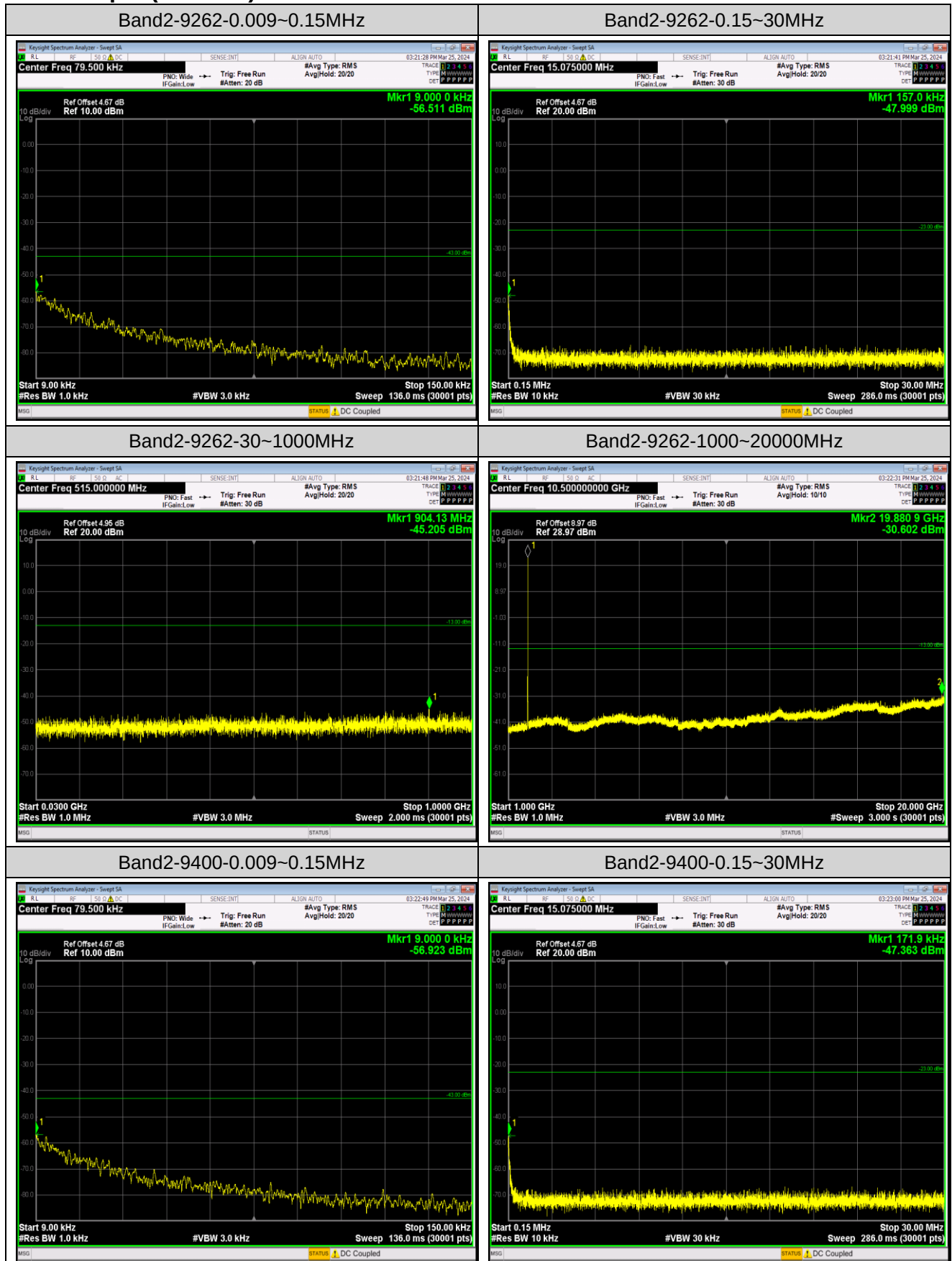


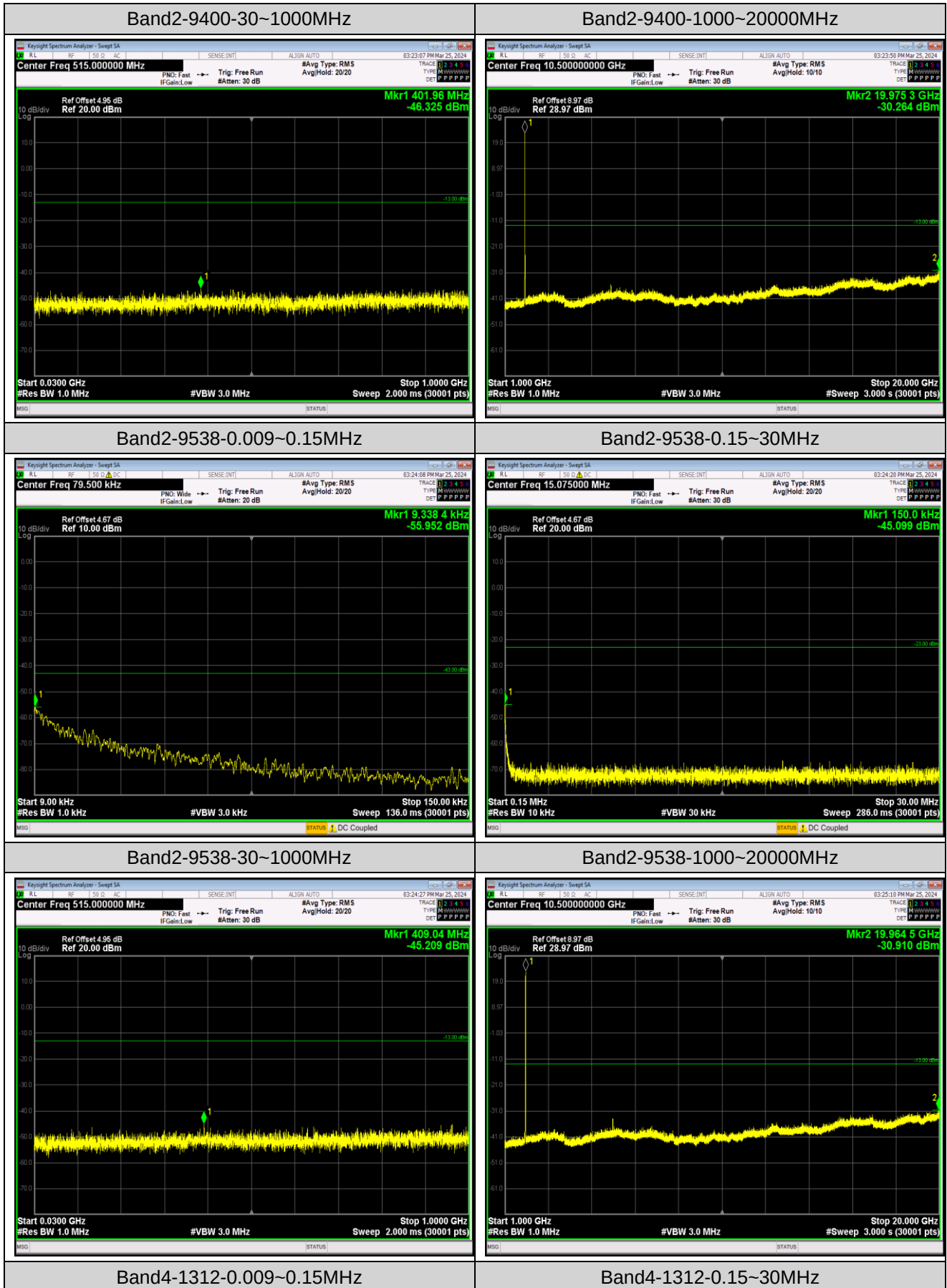
## AppendixE:Conducted SpuriousEmission

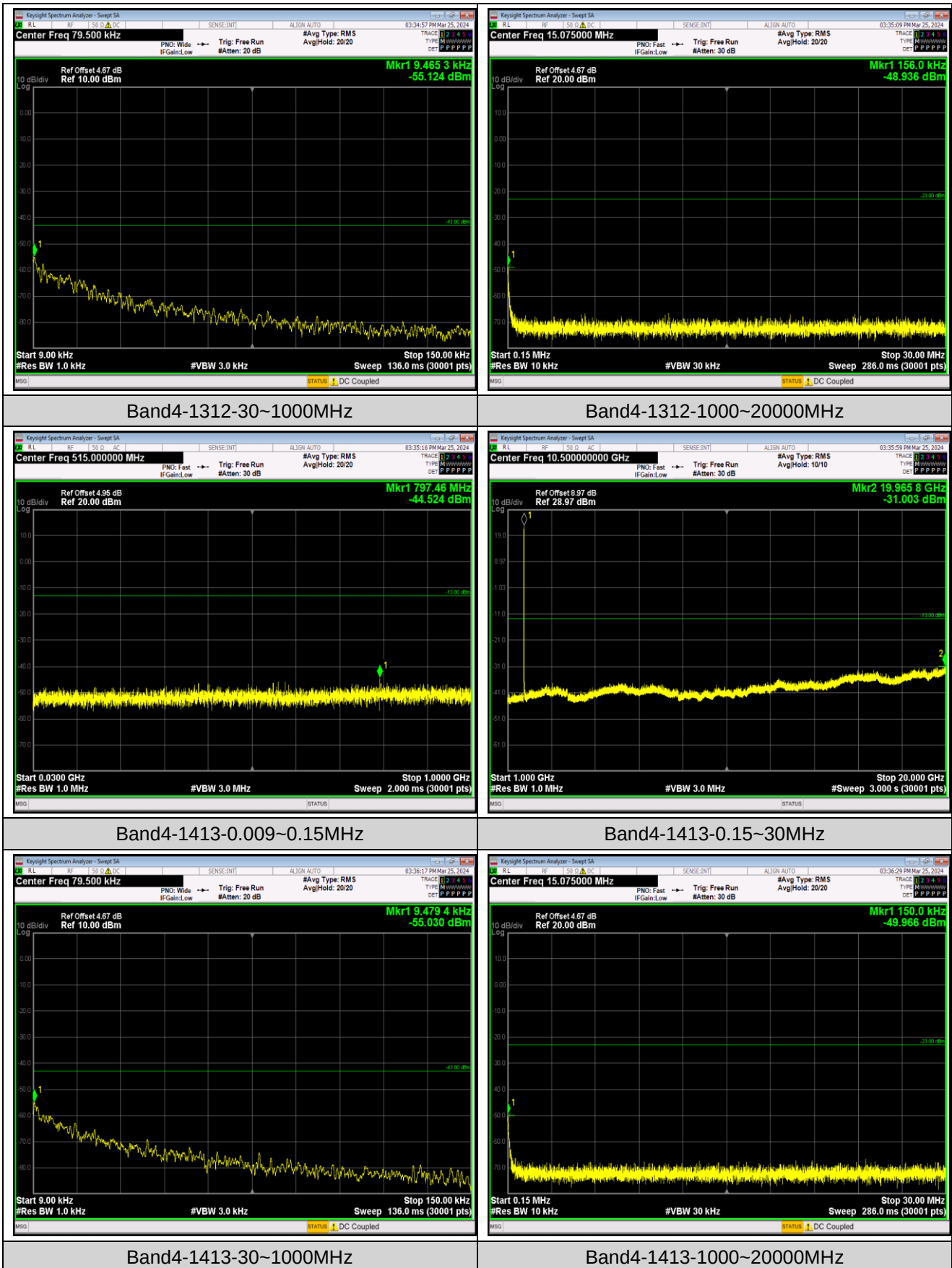
### Test Result(WCDMA)

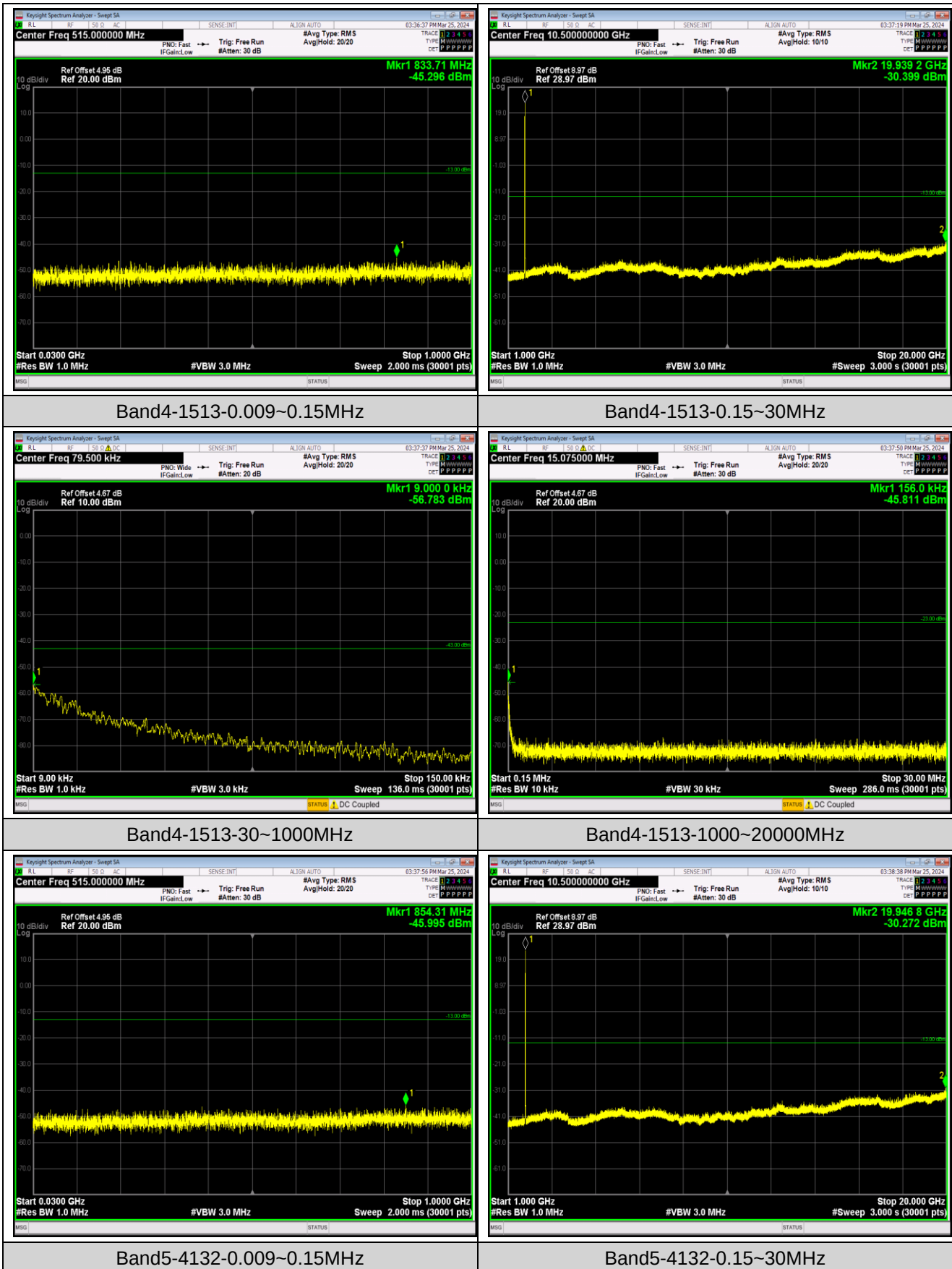
| Band  | Channel | Frequency Range (Mhz) | Frequency (dBm) | Result (dBm) | Limit (dBm) | Verdict |
|-------|---------|-----------------------|-----------------|--------------|-------------|---------|
| Band2 | 9262    | 0.009~0.15MHz         | 0.01            | -56.51       | -43         | PASS    |
| Band2 | 9262    | 0.15~30MHz            | 0.16            | -48          | -23         | PASS    |
| Band2 | 9262    | 30~1000MHz            | 904.13          | -45.21       | -13         | PASS    |
| Band2 | 9262    | 1000~20000MHz         | 19880.93        | -30.6        | -13         | PASS    |
| Band2 | 9400    | 0.009~0.15MHz         | 0.01            | -56.92       | -43         | PASS    |
| Band2 | 9400    | 0.15~30MHz            | 0.17            | -47.36       | -23         | PASS    |
| Band2 | 9400    | 30~1000MHz            | 401.96          | -46.33       | -13         | PASS    |
| Band2 | 9400    | 1000~20000MHz         | 19975.3         | -30.26       | -13         | PASS    |
| Band2 | 9538    | 0.009~0.15MHz         | 0.01            | -55.95       | -43         | PASS    |
| Band2 | 9538    | 0.15~30MHz            | 0.15            | -45.1        | -23         | PASS    |
| Band2 | 9538    | 30~1000MHz            | 409.04          | -45.21       | -13         | PASS    |
| Band2 | 9538    | 1000~20000MHz         | 19964.53        | -30.91       | -13         | PASS    |
| Band4 | 1312    | 0.009~0.15MHz         | 0.01            | -55.12       | -43         | PASS    |
| Band4 | 1312    | 0.15~30MHz            | 0.16            | -48.94       | -23         | PASS    |
| Band4 | 1312    | 30~1000MHz            | 797.46          | -44.52       | -13         | PASS    |
| Band4 | 1312    | 1000~20000MHz         | 19965.8         | -31          | -13         | PASS    |
| Band4 | 1413    | 0.009~0.15MHz         | 0.01            | -55.03       | -43         | PASS    |
| Band4 | 1413    | 0.15~30MHz            | 0.15            | -49.97       | -23         | PASS    |
| Band4 | 1413    | 30~1000MHz            | 833.71          | -45.3        | -13         | PASS    |
| Band4 | 1413    | 1000~20000MHz         | 19939.2         | -30.4        | -13         | PASS    |
| Band4 | 1513    | 0.009~0.15MHz         | 0.01            | -56.78       | -43         | PASS    |
| Band4 | 1513    | 0.15~30MHz            | 0.16            | -45.81       | -23         | PASS    |
| Band4 | 1513    | 30~1000MHz            | 854.31          | -46          | -13         | PASS    |
| Band4 | 1513    | 1000~20000MHz         | 19946.8         | -30.27       | -13         | PASS    |
| Band5 | 4132    | 0.009~0.15MHz         | 0.01            | -56.35       | -33         | PASS    |
| Band5 | 4132    | 0.15~30MHz            | 0.17            | -49.83       | -13         | PASS    |
| Band5 | 4132    | 30~1000MHz            | 402.77          | -54.63       | -13         | PASS    |
| Band5 | 4132    | 1000~10000MHz         | 3303.1          | -36.16       | -13         | PASS    |
| Band5 | 4183    | 0.009~0.15MHz         | 0.01            | -55.99       | -33         | PASS    |
| Band5 | 4183    | 0.15~30MHz            | 0.15            | -48.81       | -13         | PASS    |
| Band5 | 4183    | 30~1000MHz            | 648.31          | -54.38       | -13         | PASS    |
| Band5 | 4183    | 1000~10000MHz         | 6352.3          | -36.69       | -13         | PASS    |
| Band5 | 4233    | 0.009~0.15MHz         | 0.01            | -56.83       | -33         | PASS    |
| Band5 | 4233    | 0.15~30MHz            | 0.15            | -47.94       | -13         | PASS    |
| Band5 | 4233    | 30~1000MHz            | 978.79          | -55.42       | -13         | PASS    |
| Band5 | 4233    | 1000~10000MHz         | 5490.1          | -36.23       | -13         | PASS    |

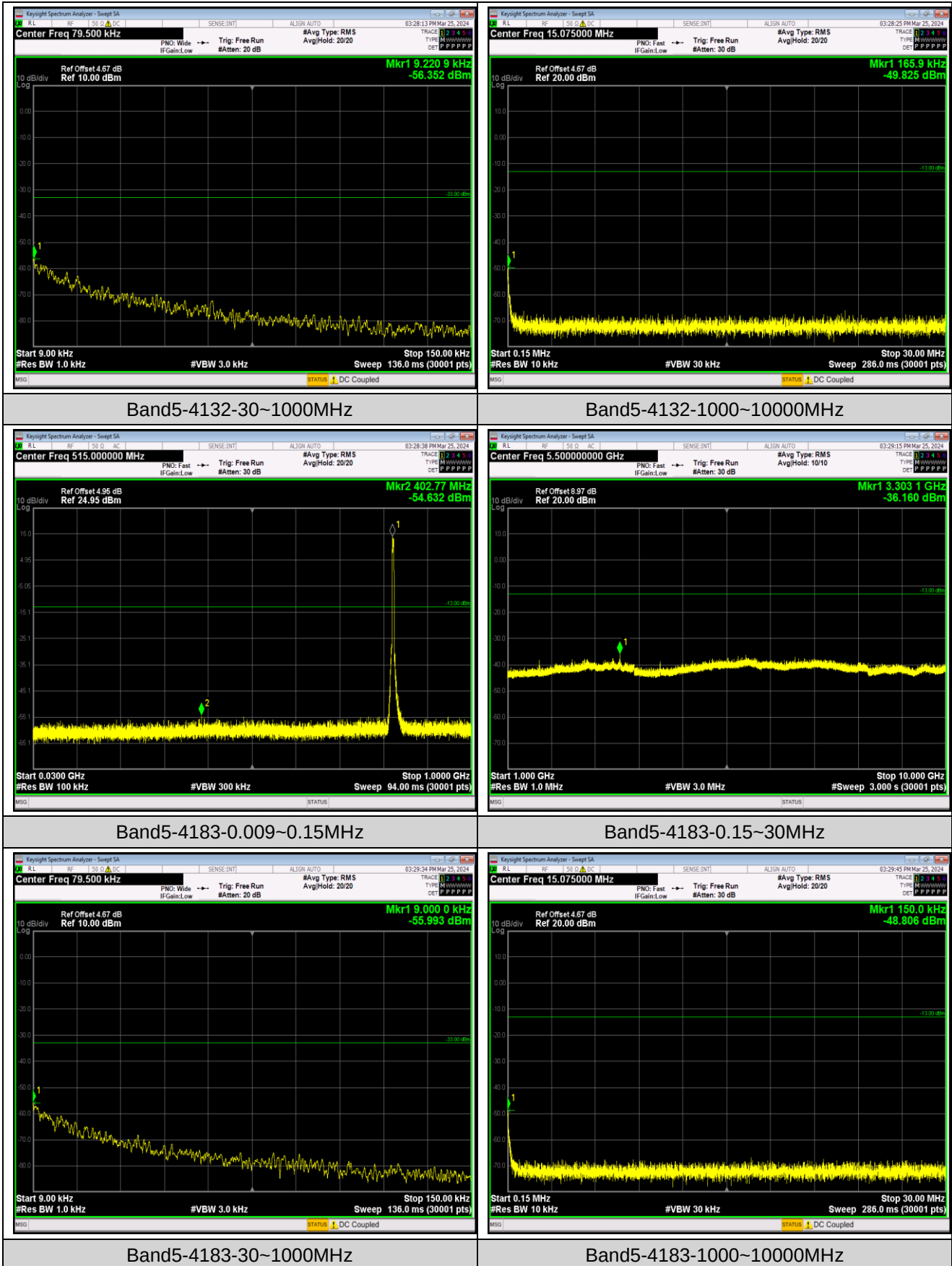
# Test Graphs(WCDMA)

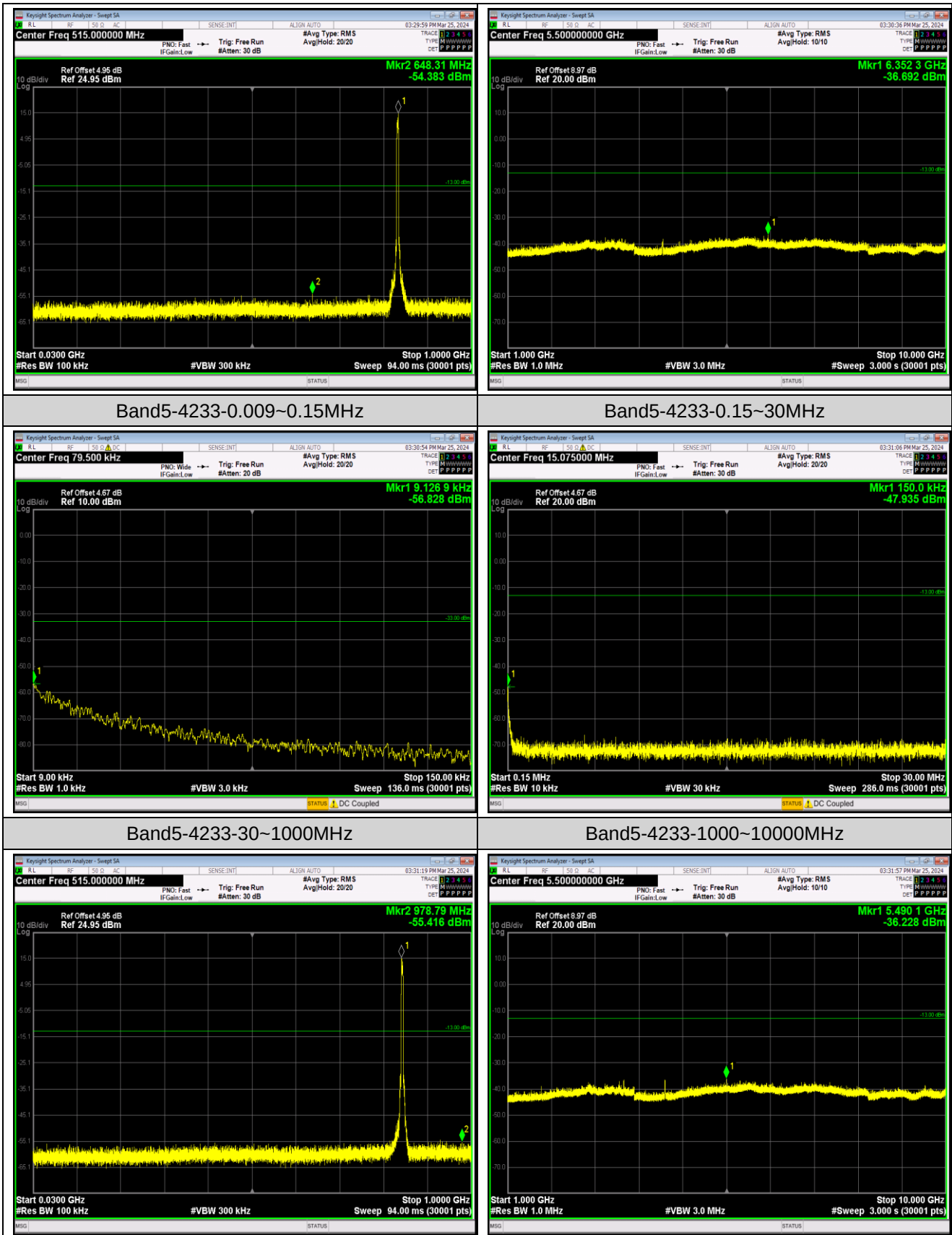












## AppendixF:Frequency Stability

### 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       |             |        |
| 3.85                                                                                        | -30                     | -0.94           | -0.001124 | ±2.5        | Pass   |
|                                                                                             | -20                     | -0.74           | -0.000885 |             |        |
|                                                                                             | -10                     | -1.66           | -0.001984 |             |        |
|                                                                                             | 0                       | 1.60            | 0.001913  |             |        |
|                                                                                             | 10                      | 0.69            | 0.000825  |             |        |
|                                                                                             | 20                      | 1.08            | 0.001291  |             |        |
|                                                                                             | 30                      | 1.21            | 0.001446  |             |        |
|                                                                                             | 40                      | 1.51            | 0.001805  |             |        |
|                                                                                             | 50                      | 0.26            | 0.000311  |             |        |
| Voltage                                                                                     |                         |                 |           |             |        |
| Temperature<br>(℃)                                                                          | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm) | Result |
|                                                                                             |                         | Hz              | ppm       |             |        |
| 25                                                                                          | 3.45                    | 1.42            | 0.001697  | ±2.5        | Pass   |
|                                                                                             | 3.85                    | 1.86            | 0.002223  |             |        |
|                                                                                             | 4.40                    | -0.87           | -0.001040 |             |        |
| 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                     | -0.26           | -0.000150 | Within authorized<br>band for BAND IV | Pass   |
|                                                                                             | -20                     | 4.41            | 0.002545  |                                       |        |
|                                                                                             | -10                     | 4.72            | 0.002724  |                                       |        |
|                                                                                             | 0                       | 2.41            | 0.001391  |                                       |        |
|                                                                                             | 10                      | 0.15            | 0.000087  |                                       |        |
|                                                                                             | 20                      | 2.68            | 0.001547  |                                       |        |
|                                                                                             | 30                      | -2.40           | -0.001385 |                                       |        |
|                                                                                             | 40                      | -1.62           | -0.000935 |                                       |        |
|                                                                                             | 50                      | 3.51            | 0.002026  |                                       |        |
| Voltage                                                                                     |                         |                 |           |                                       |        |
| Temperature<br>(℃)                                                                          | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm)                           | Result |
|                                                                                             |                         | Hz              | ppm       |                                       |        |
| 25                                                                                          | 3.45                    | 2.45            | 0.001414  | Within authorized<br>band for BAND IV | Pass   |
|                                                                                             | 3.85                    | 0.72            | 0.000416  |                                       |        |
|                                                                                             | 4.40                    | 1.27            | 0.000733  |                                       |        |
| 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       |                                       |        |
| 3.85                                                                                        | -30                     | 2.65            | 0.001410  | Within authorized<br>band for BAND II | Pass   |
|                                                                                             | -20                     | 1.69            | 0.000899  |                                       |        |
|                                                                                             | -10                     | 0.16            | 0.000085  |                                       |        |
|                                                                                             | 0                       | 4.63            | 0.002463  |                                       |        |
|                                                                                             | 10                      | 2.10            | 0.001117  |                                       |        |
|                                                                                             | 20                      | 3.07            | 0.001633  |                                       |        |
|                                                                                             | 30                      | 5.29            | 0.002814  |                                       |        |
|                                                                                             | 40                      | 0.32            | 0.000170  |                                       |        |
|                                                                                             | 50                      | -0.43           | -0.000229 |                                       |        |
| Voltage                                                                                     |                         |                 |           |                                       |        |
| Temperature<br>(°C)                                                                         | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm)                           | Result |
|                                                                                             |                         | Hz              | ppm       |                                       |        |
| 25                                                                                          | 3.45                    | -6.49           | -0.003452 | Within authorized<br>band for BAND II | Pass   |
|                                                                                             | 3.85                    | -5.81           | -0.003090 |                                       |        |
|                                                                                             | 4.40                    | 4.61            | 0.002452  |                                       |        |
| 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

