

Appendix A: 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 | 23.00 | 23.43 | 33.01 | PASS |
| Band2 | TestMode | 9262 | 23.04 | 23.47 | 33.01 | PASS |
| Band2 | TestMode | 9400 | 23.19 | 23.62 | 33.01 | PASS |
| Band2 | Voice | 9400 | 22.95 | 23.38 | 33.01 | PASS |
| Band2 | TestMode | 9538 | 22.87 | 23.3 | 33.01 | PASS |
| Band2 | Voice | 9538 | 22.79 | 23.22 | 33.01 | PASS |
| Band4 | Voice | 1312 | 23.05 | 24.08 | 30.00 | PASS |
| Band4 | TestMode | 1312 | 23.00 | 24.03 | 30.00 | PASS |
| Band4 | Voice | 1413 | 23.06 | 24.09 | 30.00 | PASS |
| Band4 | TestMode | 1413 | 23.12 | 24.15 | 30.00 | PASS |
| Band4 | TestMode | 1513 | 23.15 | 24.18 | 30.00 | PASS |
| Band4 | Voice | 1513 | 23.16 | 24.19 | 30.00 | PASS |
| Band5 | Voice | 4132 | 23.18 | 19.1 | 38.45 | PASS |
| Band5 | TestMode | 4132 | 23.35 | 19.27 | 38.45 | PASS |
| Band5 | TestMode | 4183 | 23.44 | 19.36 | 38.45 | PASS |
| Band5 | Voice | 4183 | 23.29 | 19.21 | 38.45 | PASS |
| Band5 | Voice | 4233 | 23.17 | 19.09 | 38.45 | PASS |
| Band5 | TestMode | 4233 | 23.33 | 19.25 | 38.45 | PASS |

Test Result(HSDPA)

| Band | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262 | 1 | 21.97 | 22.4 | 33.01 | PASS |
| Band2 | 9262 | 2 | 21.42 | 21.85 | 33.01 | PASS |
| Band2 | 9262 | 3 | 21.43 | 21.86 | 33.01 | PASS |
| Band2 | 9262 | 4 | 21.41 | 21.84 | 33.01 | PASS |
| Band2 | 9400 | 1 | 22.11 | 22.54 | 33.01 | PASS |
| Band2 | 9400 | 2 | 21.56 | 21.99 | 33.01 | PASS |
| Band2 | 9400 | 3 | 21.58 | 22.01 | 33.01 | PASS |
| Band2 | 9400 | 4 | 21.57 | 22 | 33.01 | PASS |
| Band2 | 9538 | 1 | 21.81 | 22.24 | 33.01 | PASS |
| Band2 | 9538 | 2 | 21.25 | 21.68 | 33.01 | PASS |
| Band2 | 9538 | 3 | 21.27 | 21.7 | 33.01 | PASS |
| Band2 | 9538 | 4 | 21.22 | 21.65 | 33.01 | PASS |

| | | | | | | |
|-------|------|---|-------|-------|-------|------|
| Band4 | 1312 | 1 | 22.06 | 23.09 | 30.00 | PASS |
| Band4 | 1312 | 2 | 21.41 | 22.44 | 30.00 | PASS |
| Band4 | 1312 | 3 | 21.52 | 22.55 | 30.00 | PASS |
| Band4 | 1312 | 4 | 21.49 | 22.52 | 30.00 | PASS |
| Band4 | 1413 | 1 | 22.21 | 23.24 | 30.00 | PASS |
| Band4 | 1413 | 2 | 21.52 | 22.55 | 30.00 | PASS |
| Band4 | 1413 | 3 | 21.61 | 22.64 | 30.00 | PASS |
| Band4 | 1413 | 4 | 21.64 | 22.67 | 30.00 | PASS |
| Band4 | 1513 | 1 | 22.21 | 23.24 | 30.00 | PASS |
| Band4 | 1513 | 2 | 21.68 | 22.71 | 30.00 | PASS |
| Band4 | 1513 | 3 | 21.70 | 22.73 | 30.00 | PASS |
| Band4 | 1513 | 4 | 21.68 | 22.71 | 30.00 | PASS |
| Band5 | 4132 | 1 | 22.28 | 18.2 | 38.5 | PASS |
| Band5 | 4132 | 2 | 21.82 | 17.74 | 38.5 | PASS |
| Band5 | 4132 | 3 | 21.81 | 17.73 | 38.5 | PASS |
| Band5 | 4132 | 4 | 21.77 | 17.69 | 38.5 | PASS |
| Band5 | 4183 | 1 | 22.42 | 18.34 | 38.5 | PASS |
| Band5 | 4183 | 2 | 21.91 | 17.83 | 38.5 | PASS |
| Band5 | 4183 | 3 | 21.94 | 17.86 | 38.5 | PASS |
| Band5 | 4183 | 4 | 21.92 | 17.84 | 38.5 | PASS |
| Band5 | 4233 | 1 | 22.35 | 18.27 | 38.5 | PASS |
| Band5 | 4233 | 2 | 21.83 | 17.75 | 38.5 | PASS |
| Band5 | 4233 | 3 | 21.86 | 17.78 | 38.5 | PASS |
| Band5 | 4233 | 4 | 21.88 | 17.8 | 38.5 | PASS |

Test Result(HSUPA)

| Band | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262 | 1 | 19.93 | 20.36 | 33.01 | PASS |
| Band2 | 9262 | 2 | 20.35 | 20.78 | 33.01 | PASS |
| Band2 | 9262 | 3 | 20.87 | 21.3 | 33.01 | PASS |
| Band2 | 9262 | 4 | 19.93 | 20.36 | 33.01 | PASS |
| Band2 | 9262 | 5 | 21.93 | 22.36 | 33.01 | PASS |
| Band2 | 9400 | 1 | 20.07 | 20.5 | 33.01 | PASS |
| Band2 | 9400 | 2 | 20.52 | 20.95 | 33.01 | PASS |
| Band2 | 9400 | 3 | 21.02 | 21.45 | 33.01 | PASS |
| Band2 | 9400 | 4 | 20.12 | 20.55 | 33.01 | PASS |
| Band2 | 9400 | 5 | 22.11 | 22.54 | 33.01 | PASS |
| Band2 | 9538 | 1 | 19.75 | 20.18 | 33.01 | PASS |
| Band2 | 9538 | 2 | 20.17 | 20.6 | 33.01 | PASS |
| Band2 | 9538 | 3 | 20.72 | 21.15 | 33.01 | PASS |

| | | | | | | |
|-------|------|---|-------|-------|-------|------|
| Band2 | 9538 | 4 | 19.80 | 20.23 | 33.01 | PASS |
| Band2 | 9538 | 5 | 21.78 | 22.21 | 33.01 | PASS |
| Band4 | 1312 | 1 | 20.05 | 21.08 | 30.00 | PASS |
| Band4 | 1312 | 2 | 20.47 | 21.5 | 30.00 | PASS |
| Band4 | 1312 | 3 | 20.97 | 22 | 30.00 | PASS |
| Band4 | 1312 | 4 | 19.95 | 20.98 | 30.00 | PASS |
| Band4 | 1312 | 5 | 22.04 | 23.07 | 30.00 | PASS |
| Band4 | 1413 | 1 | 20.17 | 21.2 | 30.00 | PASS |
| Band4 | 1413 | 2 | 20.57 | 21.6 | 30.00 | PASS |
| Band4 | 1413 | 3 | 21.09 | 22.12 | 30.00 | PASS |
| Band4 | 1413 | 4 | 20.11 | 21.14 | 30.00 | PASS |
| Band4 | 1413 | 5 | 22.18 | 23.21 | 30.00 | PASS |
| Band4 | 1513 | 1 | 20.20 | 21.23 | 30.00 | PASS |
| Band4 | 1513 | 2 | 20.58 | 21.61 | 30.00 | PASS |
| Band4 | 1513 | 3 | 21.08 | 22.11 | 30.00 | PASS |
| Band4 | 1513 | 4 | 20.11 | 21.14 | 30.00 | PASS |
| Band4 | 1513 | 5 | 22.19 | 23.22 | 30.00 | PASS |
| Band5 | 4132 | 1 | 20.34 | 16.26 | 38.5 | PASS |
| Band5 | 4132 | 2 | 20.84 | 16.76 | 38.5 | PASS |
| Band5 | 4132 | 3 | 21.34 | 17.26 | 38.5 | PASS |
| Band5 | 4132 | 4 | 20.38 | 16.3 | 38.5 | PASS |
| Band5 | 4132 | 5 | 22.34 | 18.26 | 38.5 | PASS |
| Band5 | 4183 | 1 | 20.44 | 16.36 | 38.5 | PASS |
| Band5 | 4183 | 2 | 20.94 | 16.86 | 38.5 | PASS |
| Band5 | 4183 | 3 | 21.45 | 17.37 | 38.5 | PASS |
| Band5 | 4183 | 4 | 20.46 | 16.38 | 38.5 | PASS |
| Band5 | 4183 | 5 | 22.46 | 18.38 | 38.5 | PASS |
| Band5 | 4233 | 1 | 20.37 | 16.29 | 38.5 | PASS |
| Band5 | 4233 | 2 | 20.90 | 16.82 | 38.5 | PASS |
| Band5 | 4233 | 3 | 21.39 | 17.31 | 38.5 | PASS |
| Band5 | 4233 | 4 | 20.38 | 16.3 | 38.5 | PASS |
| Band5 | 4233 | 5 | 22.38 | 18.3 | 38.5 | PASS |

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

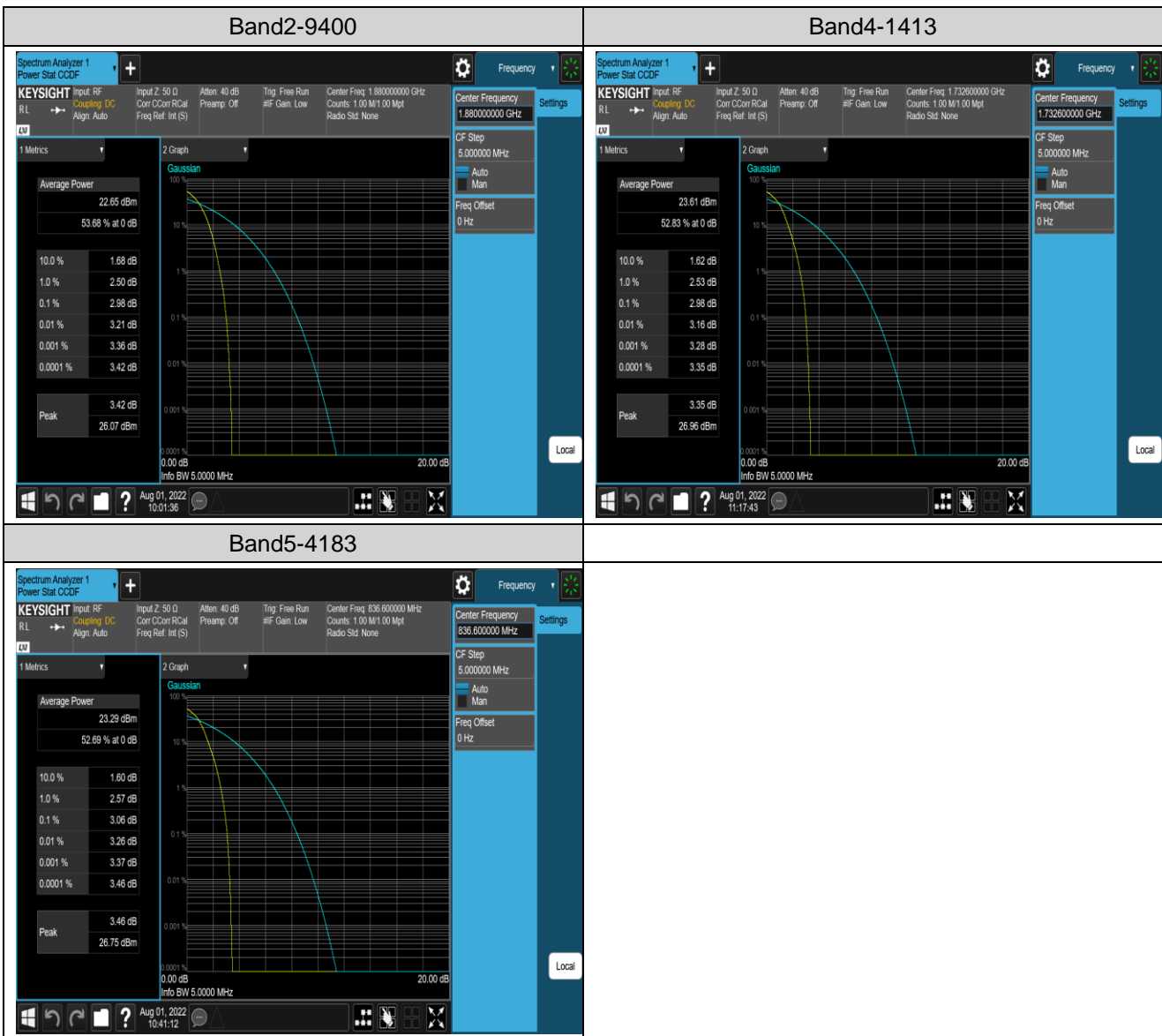
Appendix B: Peak-to-Average Ratio

Test Result(WCDMA)

| Band | Channel | Peak-to-Average Ratio(dB) | Limit(dB) | Verdict |
|-------|---------|---------------------------|-----------|---------|
| Band2 | 9400 | 2.98 | 13 | PASS |
| Band4 | 1413 | 2.98 | 13 | PASS |
| Band5 | 4183 | 3.06 | 13 | PASS |

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

Test Graphs(WCDMA)

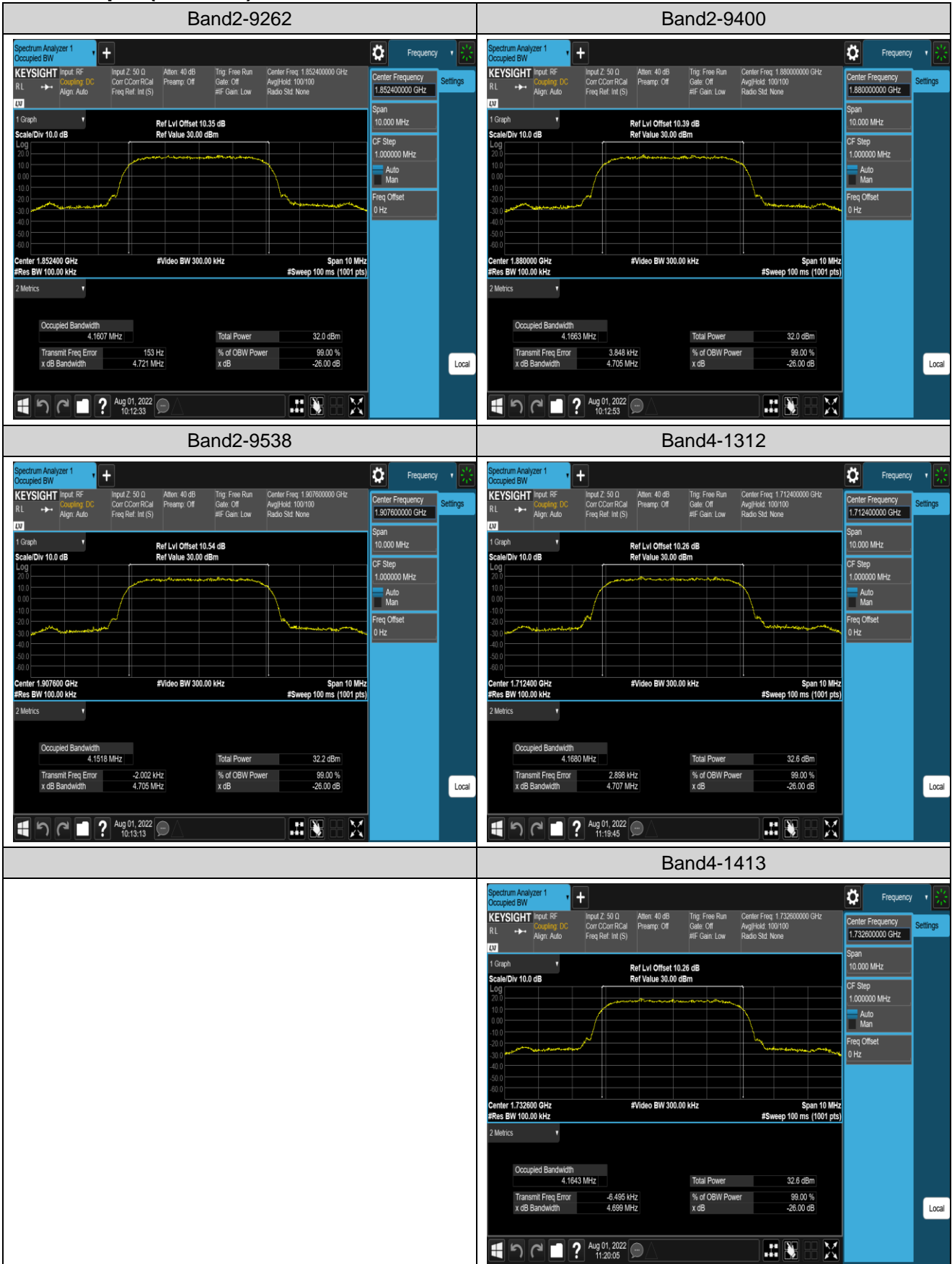


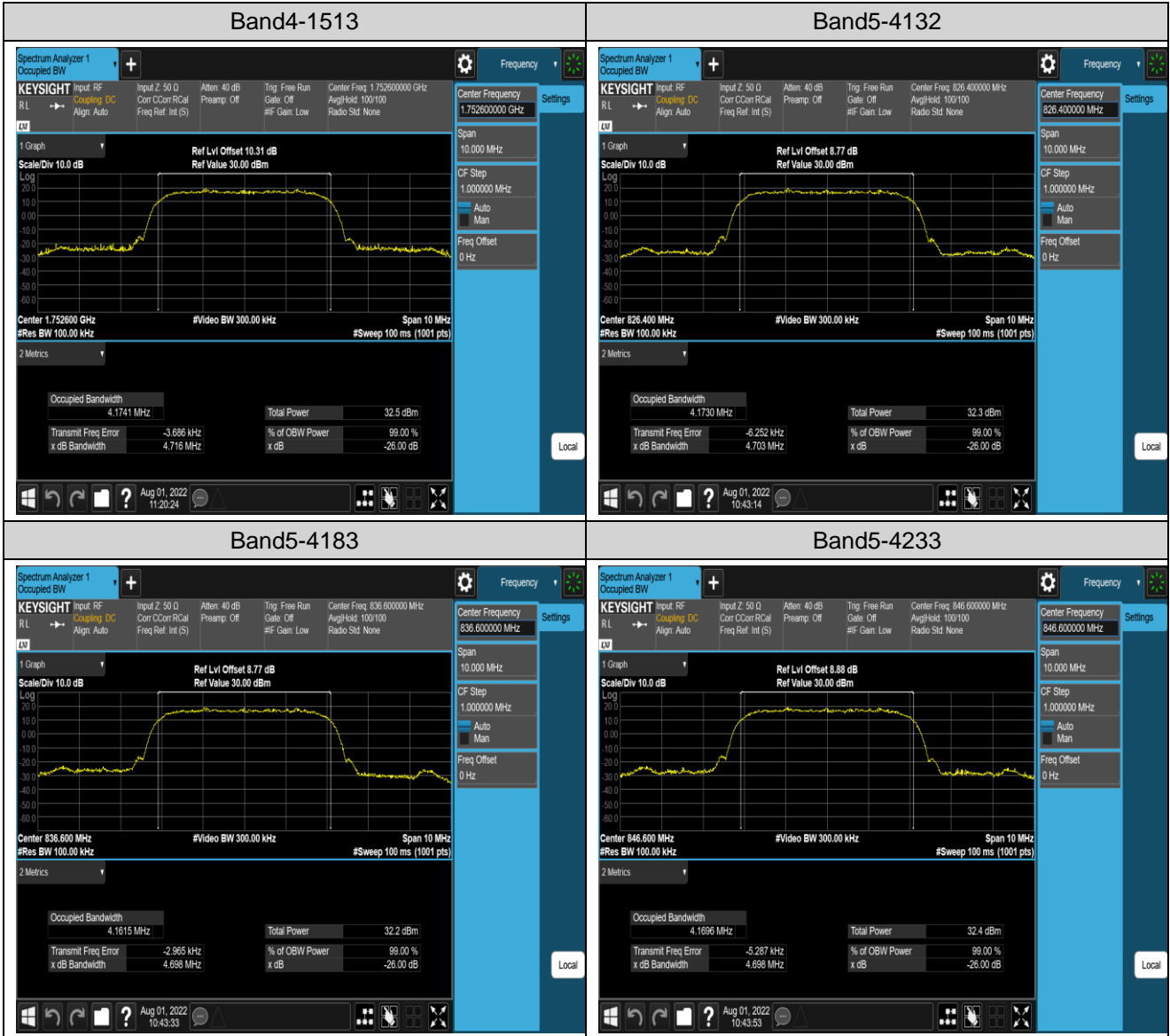
AppendixC:26dB Bandwidth andOccupied Bandwidth

Test Result(WCDMA)

| Band | Channel | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Limit(kHz) | Verdict |
|-------|---------|-----------------------------|-------------------------|------------|---------|
| Band2 | 9262 | 4.1607 | 4.721 | --- | PASS |
| Band2 | 9400 | 4.1663 | 4.705 | --- | PASS |
| Band2 | 9538 | 4.1518 | 4.705 | --- | PASS |
| Band4 | 1312 | 4.1680 | 4.707 | --- | PASS |
| Band4 | 1413 | 4.1643 | 4.699 | --- | PASS |
| Band4 | 1513 | 4.1741 | 4.716 | --- | PASS |
| Band5 | 4132 | 4.1730 | 4.703 | --- | PASS |
| Band5 | 4183 | 4.1615 | 4.698 | --- | PASS |
| Band5 | 4233 | 4.1696 | 4.698 | --- | PASS |

Test Graphs(WCDMA)



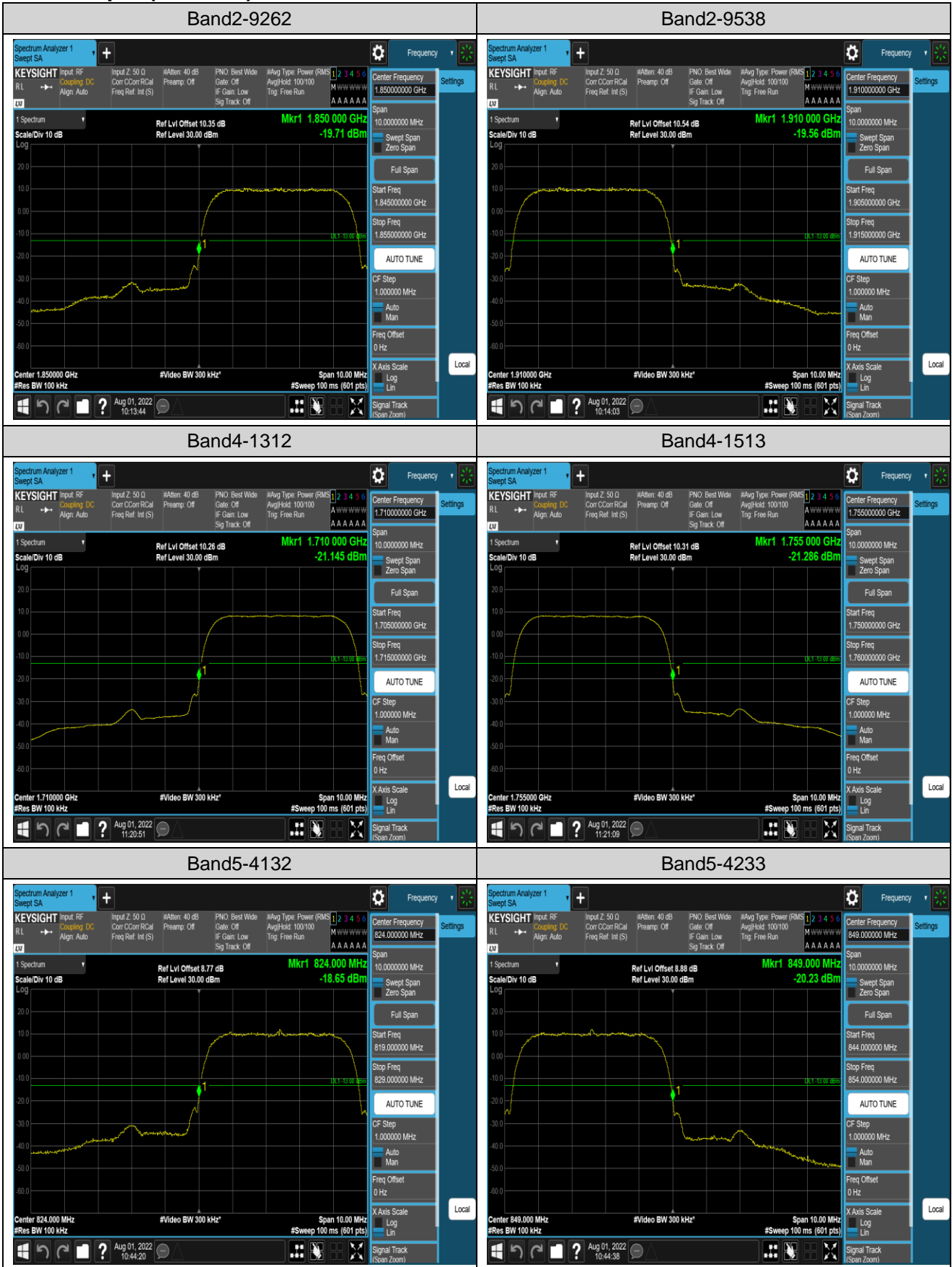


AppendixD:Band Edge

Test Result(WCDMA)

| Band | Channel | Frequency (MHz) | Result (dBm) | Limit(dBm) | Verdict |
|-------|---------|-----------------|--------------|------------|---------|
| Band2 | 9262 | 1850.00 | -19.71 | -13 | PASS |
| Band2 | 9538 | 1910.00 | -19.56 | -13 | PASS |
| Band4 | 1312 | 1710.00 | -21.15 | -13 | PASS |
| Band4 | 1513 | 1755.00 | -21.29 | -13 | PASS |
| Band5 | 4132 | 824.00 | -18.65 | -13 | PASS |
| Band5 | 4233 | 849.00 | -20.23 | -13 | PASS |

Test Graphs(WCDMA)

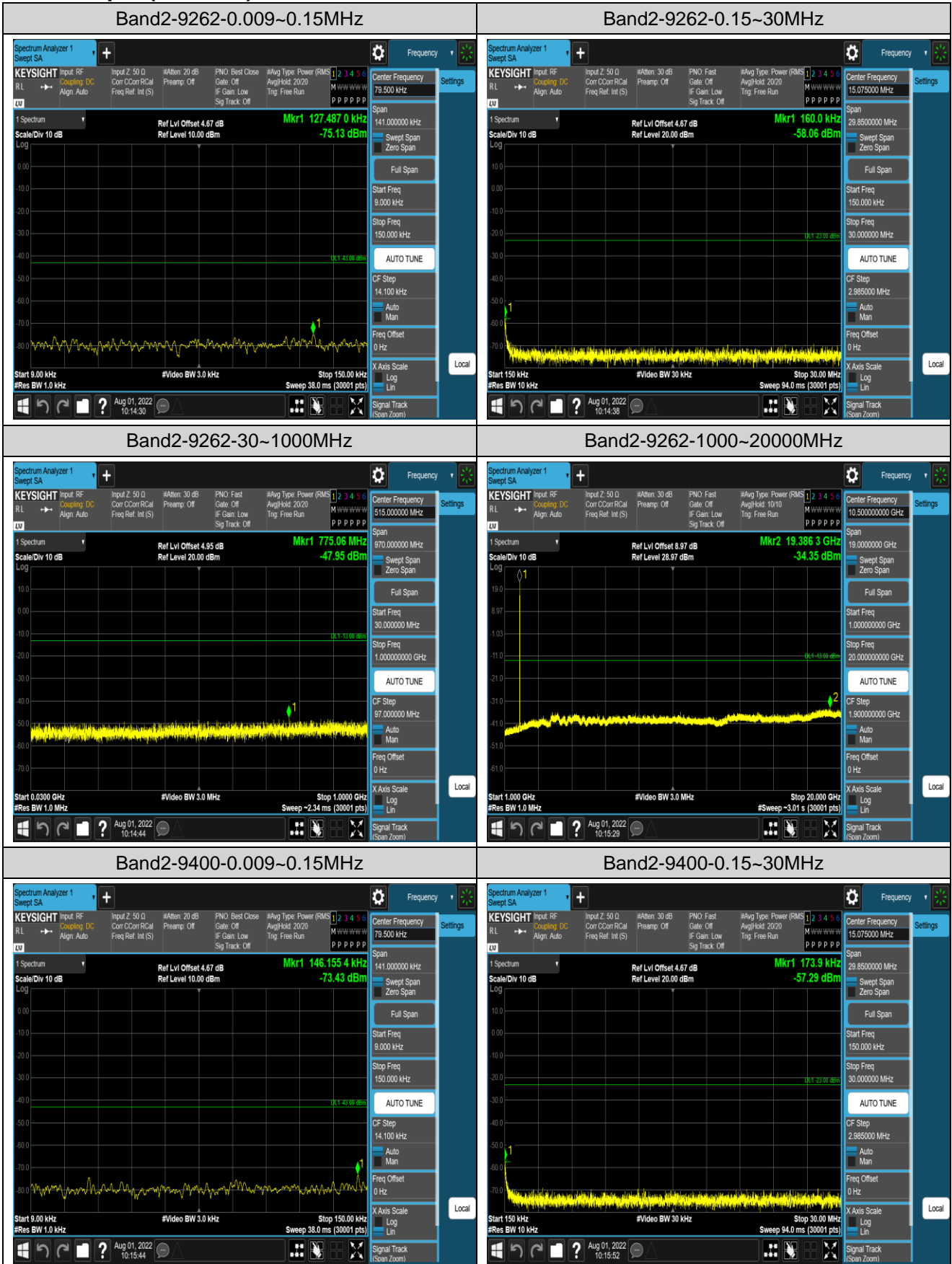


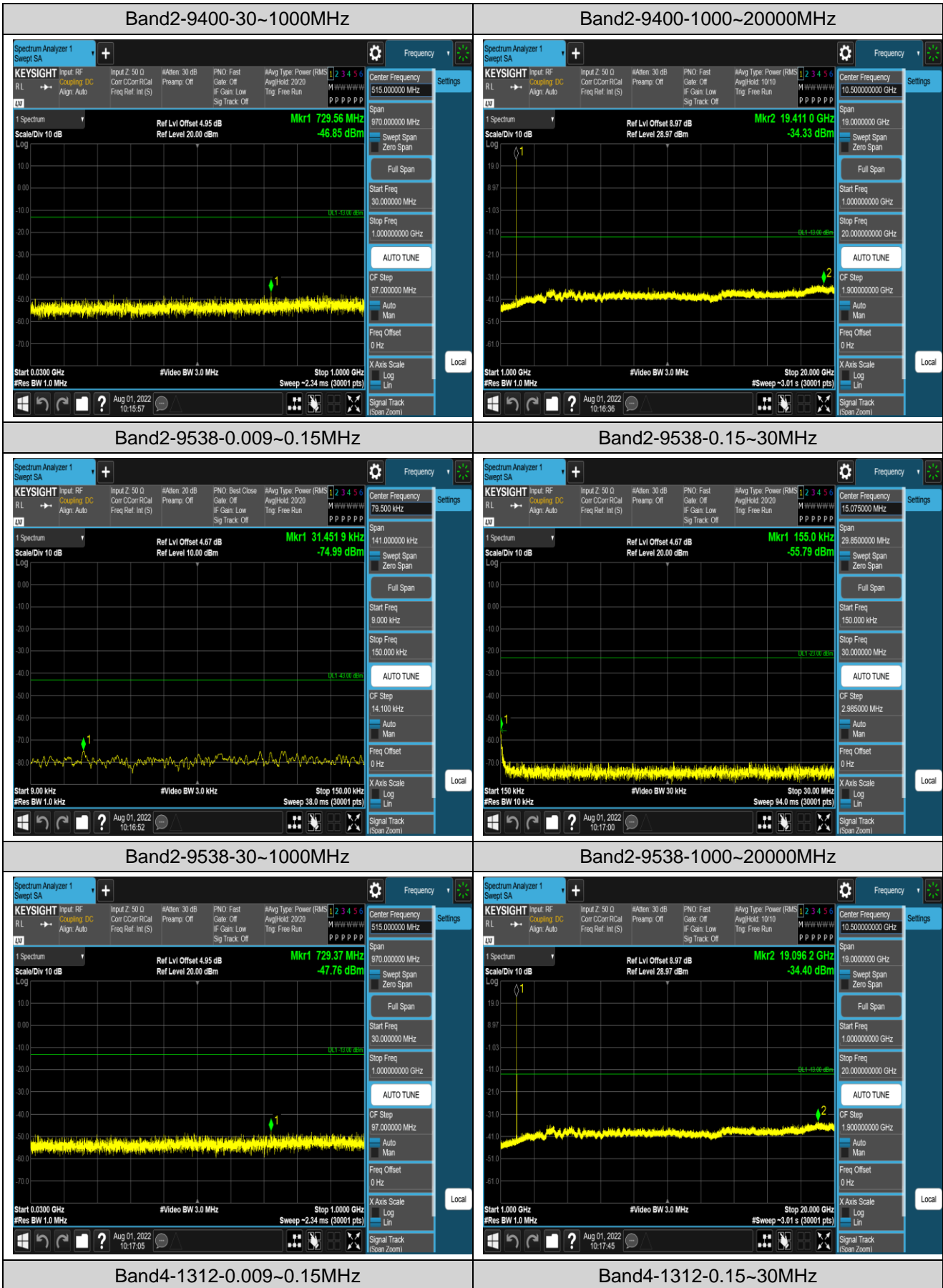
Appendix E: Conducted Spurious Emission

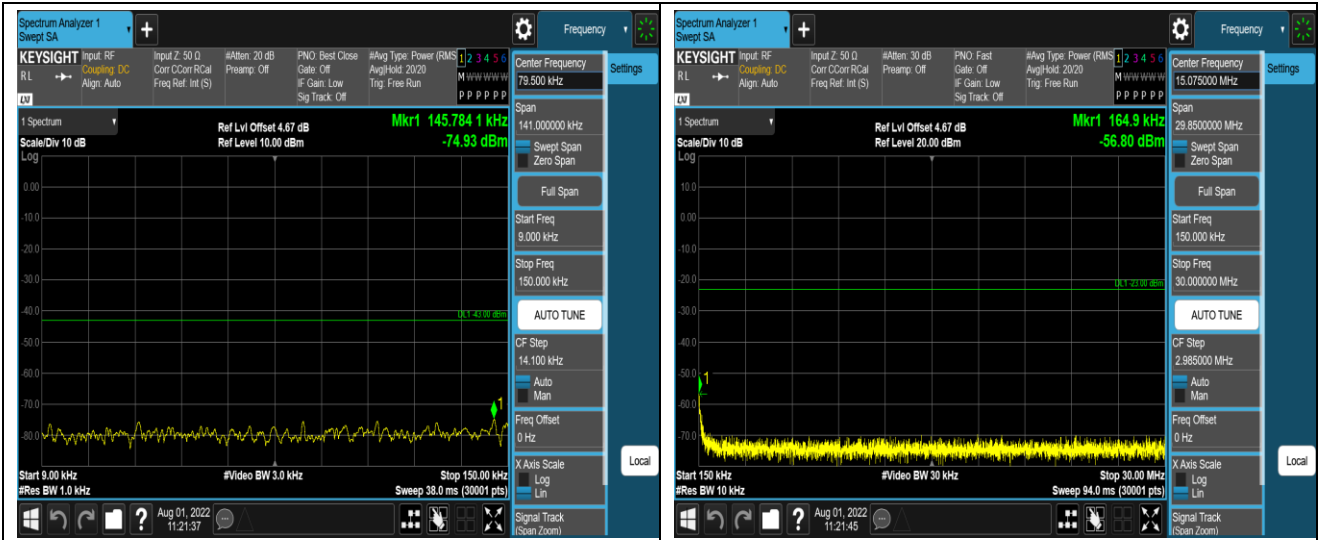
Test Result(WCDMA)

| Band | Channel | Frequency Range (Mhz) | Frequency (dBm) | Result (dBm) | Limit (dBm) | Verdict |
|-------|---------|-----------------------|-----------------|--------------|-------------|---------|
| Band2 | 9262 | 0.009~0.15MHz | 0.13 | -75.13 | -43 | PASS |
| Band2 | 9262 | 0.15~30MHz | 0.16 | -58.06 | -23 | PASS |
| Band2 | 9262 | 30~1000MHz | 775.06 | -47.95 | -13 | PASS |
| Band2 | 9262 | 1000~20000MHz | 19386.3 | -34.35 | -13 | PASS |
| Band2 | 9400 | 0.009~0.15MHz | 0.15 | -73.44 | -43 | PASS |
| Band2 | 9400 | 0.15~30MHz | 0.17 | -57.29 | -23 | PASS |
| Band2 | 9400 | 30~1000MHz | 729.56 | -46.85 | -13 | PASS |
| Band2 | 9400 | 1000~20000MHz | 19411 | -34.33 | -13 | PASS |
| Band2 | 9538 | 0.009~0.15MHz | 0.03 | -74.99 | -43 | PASS |
| Band2 | 9538 | 0.15~30MHz | 0.15 | -55.79 | -23 | PASS |
| Band2 | 9538 | 30~1000MHz | 729.37 | -47.76 | -13 | PASS |
| Band2 | 9538 | 1000~20000MHz | 19096.23 | -34.4 | -13 | PASS |
| Band4 | 1312 | 0.009~0.15MHz | 0.15 | -74.93 | -43 | PASS |
| Band4 | 1312 | 0.15~30MHz | 0.16 | -56.8 | -23 | PASS |
| Band4 | 1312 | 30~1000MHz | 757.44 | -47.64 | -13 | PASS |
| Band4 | 1312 | 1000~20000MHz | 18824.53 | -33.4 | -13 | PASS |
| Band4 | 1413 | 0.009~0.15MHz | 0.15 | -74.03 | -43 | PASS |
| Band4 | 1413 | 0.15~30MHz | 0.17 | -58.55 | -23 | PASS |
| Band4 | 1413 | 30~1000MHz | 77.63 | -48.05 | -13 | PASS |
| Band4 | 1413 | 1000~20000MHz | 19837.23 | -33.45 | -13 | PASS |
| Band4 | 1513 | 0.009~0.15MHz | 0.09 | -75.29 | -43 | PASS |
| Band4 | 1513 | 0.15~30MHz | 0.17 | -57.08 | -23 | PASS |
| Band4 | 1513 | 30~1000MHz | 913.35 | -47.8 | -13 | PASS |
| Band4 | 1513 | 1000~20000MHz | 19347.67 | -33.76 | -13 | PASS |
| Band5 | 4132 | 0.009~0.15MHz | 0.1 | -75.11 | -33 | PASS |
| Band5 | 4132 | 0.15~30MHz | 0.16 | -56.4 | -13 | PASS |
| Band5 | 4132 | 30~1000MHz | 998.32 | -57.65 | -13 | PASS |
| Band5 | 4132 | 1000~10000MHz | 5020.3 | -36.15 | -13 | PASS |
| Band5 | 4183 | 0.009~0.15MHz | 0.06 | -74.42 | -33 | PASS |
| Band5 | 4183 | 0.15~30MHz | 0.16 | -58.38 | -13 | PASS |
| Band5 | 4183 | 30~1000MHz | 997.48 | -58.03 | -13 | PASS |
| Band5 | 4183 | 1000~10000MHz | 3718.9 | -35.94 | -13 | PASS |
| Band5 | 4233 | 0.009~0.15MHz | 0.12 | -74.71 | -33 | PASS |
| Band5 | 4233 | 0.15~30MHz | 0.19 | -58.4 | -13 | PASS |
| Band5 | 4233 | 30~1000MHz | 973.91 | -58.39 | -13 | PASS |
| Band5 | 4233 | 1000~10000MHz | 3968.2 | -35.88 | -13 | PASS |

Test Graphs(WCDMA)

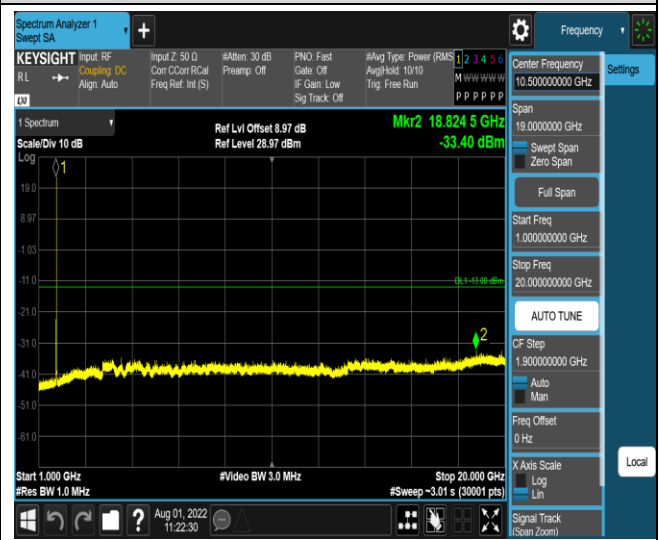
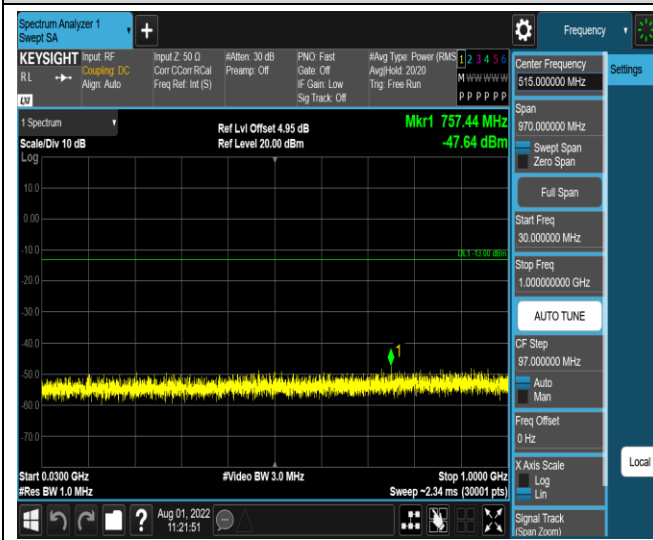






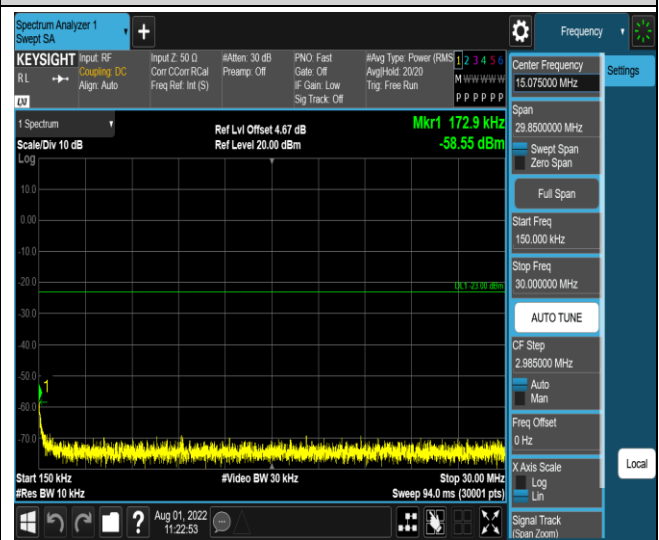
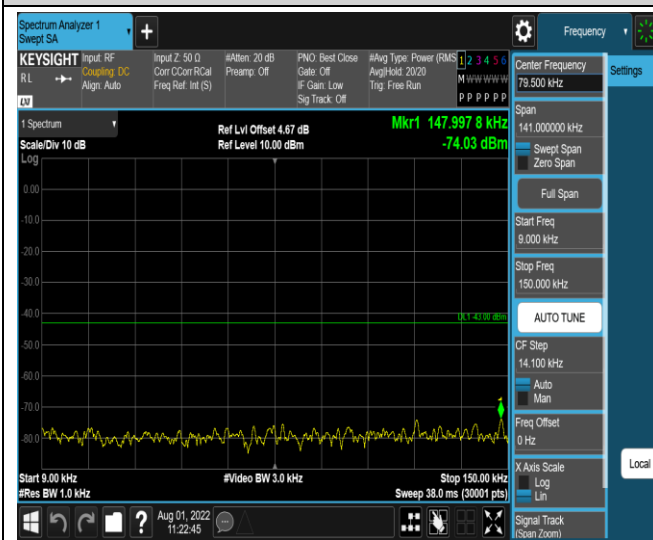
Band4-1312-30~1000MHz

Band4-1312-1000~20000MHz



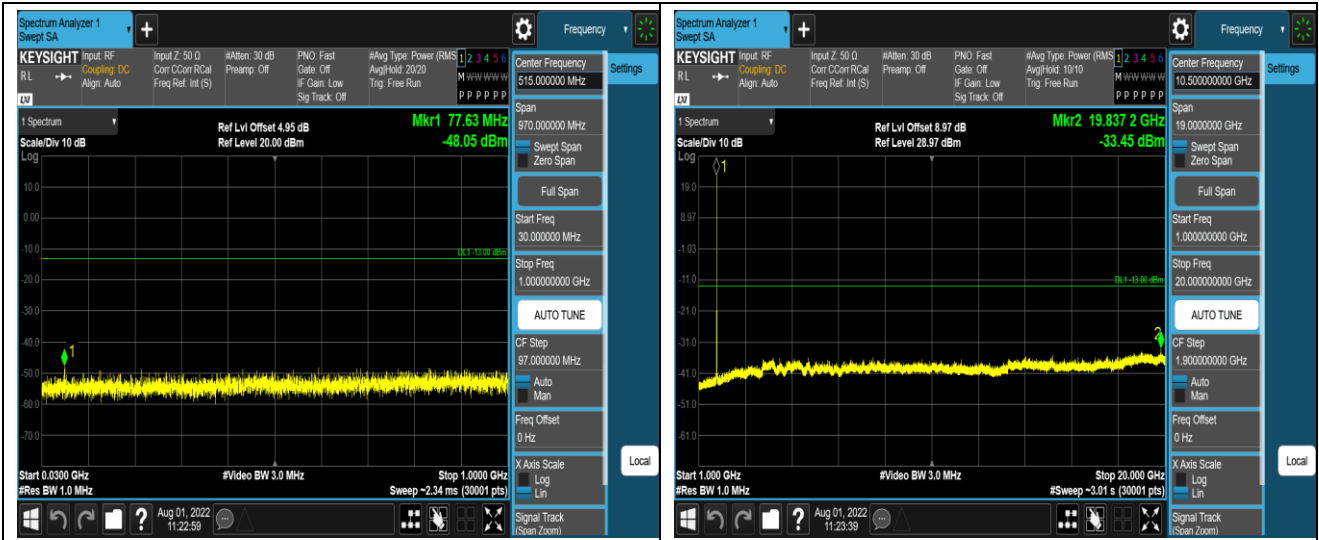
Band4-1413-0.009~0.15MHz

Band4-1413-0.15~30MHz



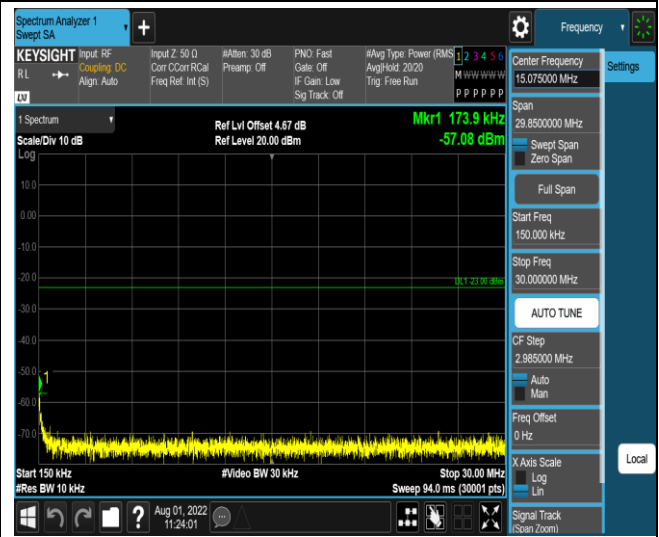
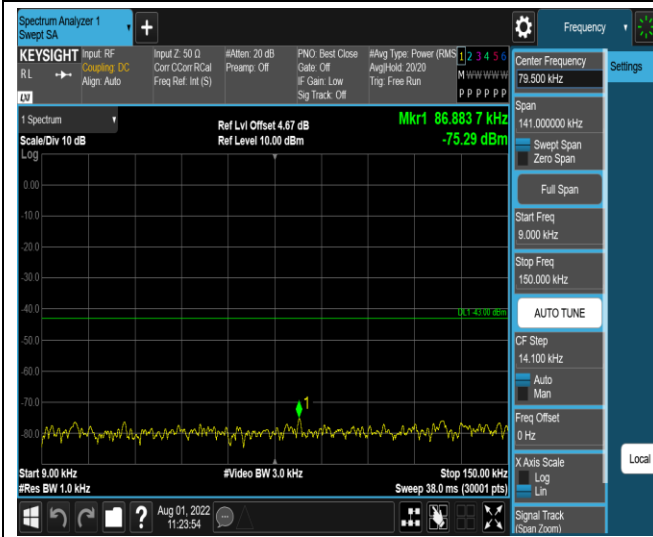
Band4-1413-30~1000MHz

Band4-1413-1000~20000MHz



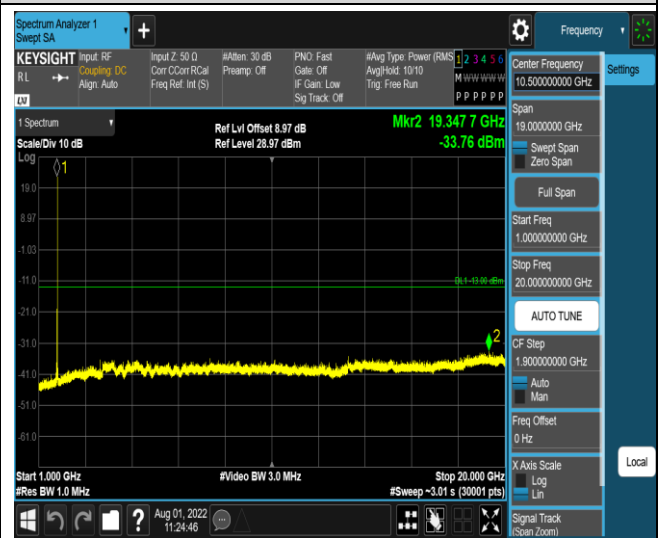
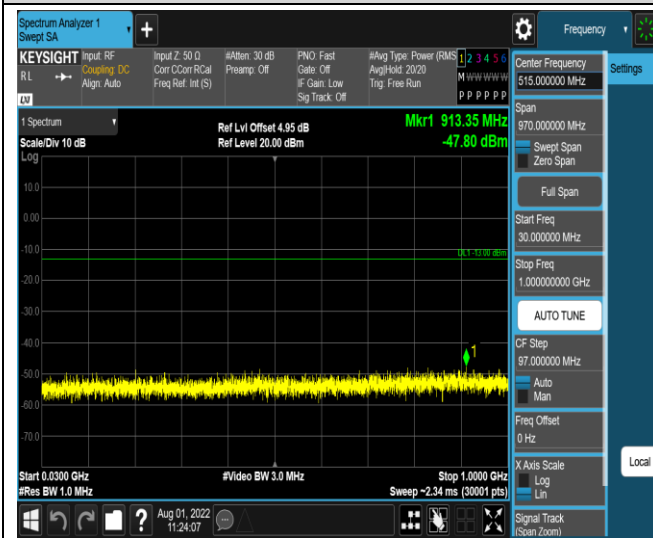
Band4-1513-0.009~0.15MHz

Band4-1513-0.15~30MHz



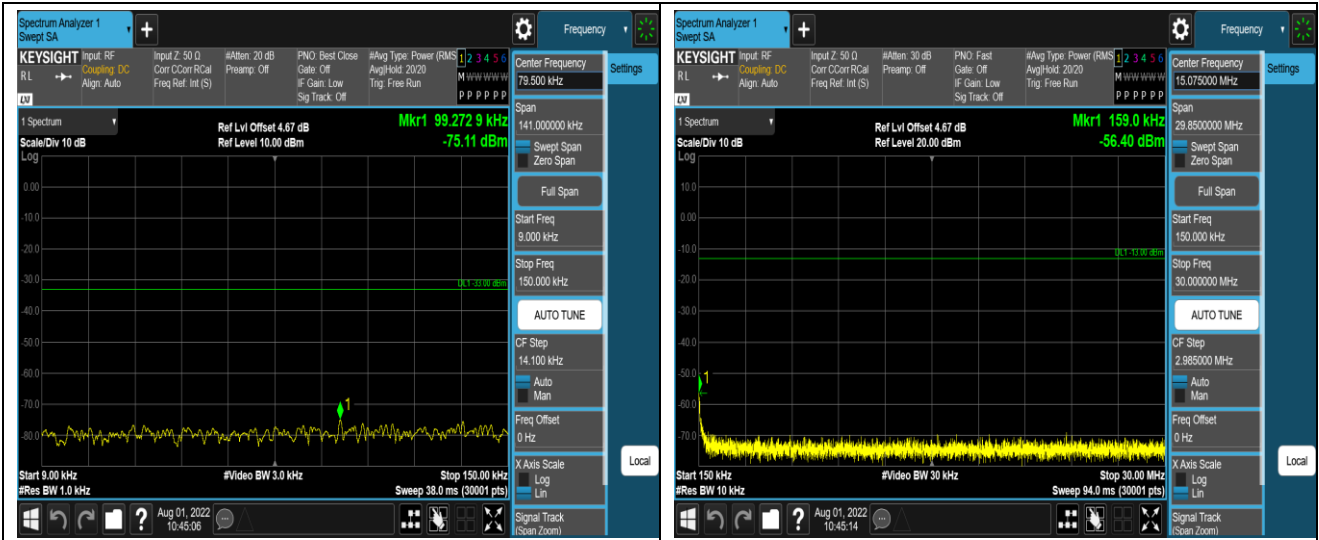
Band4-1513-30~1000MHz

Band4-1513-1000~20000MHz



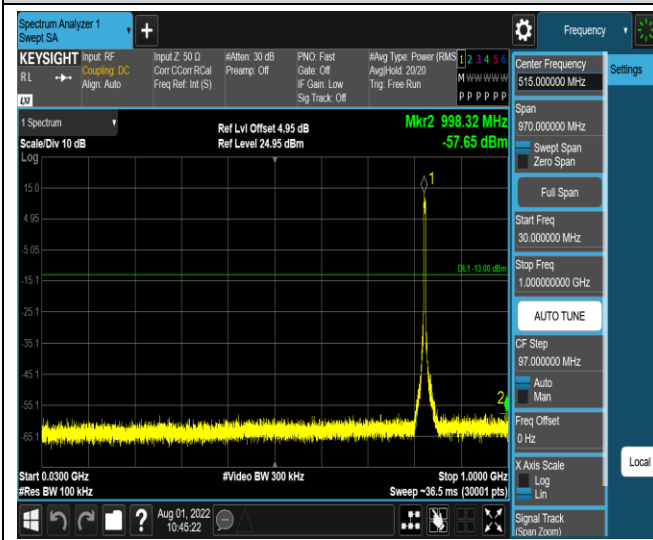
Band5-4132-0.009~0.15MHz

Band5-4132-0.15~30MHz



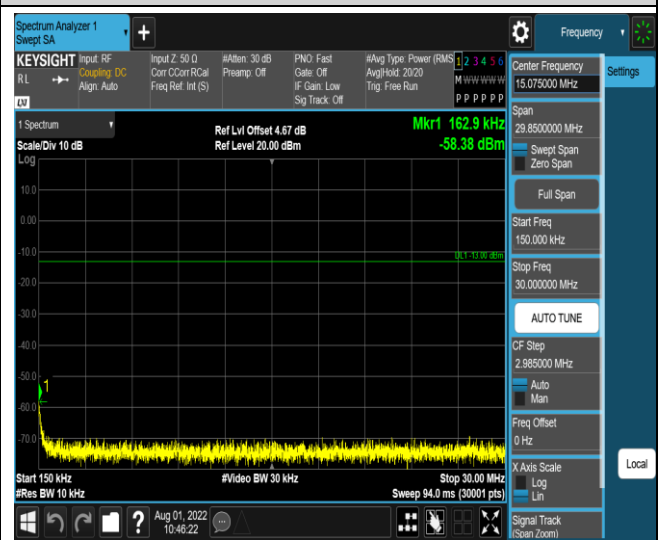
Band5-4132-30~1000MHz

Band5-4132-1000~10000MHz



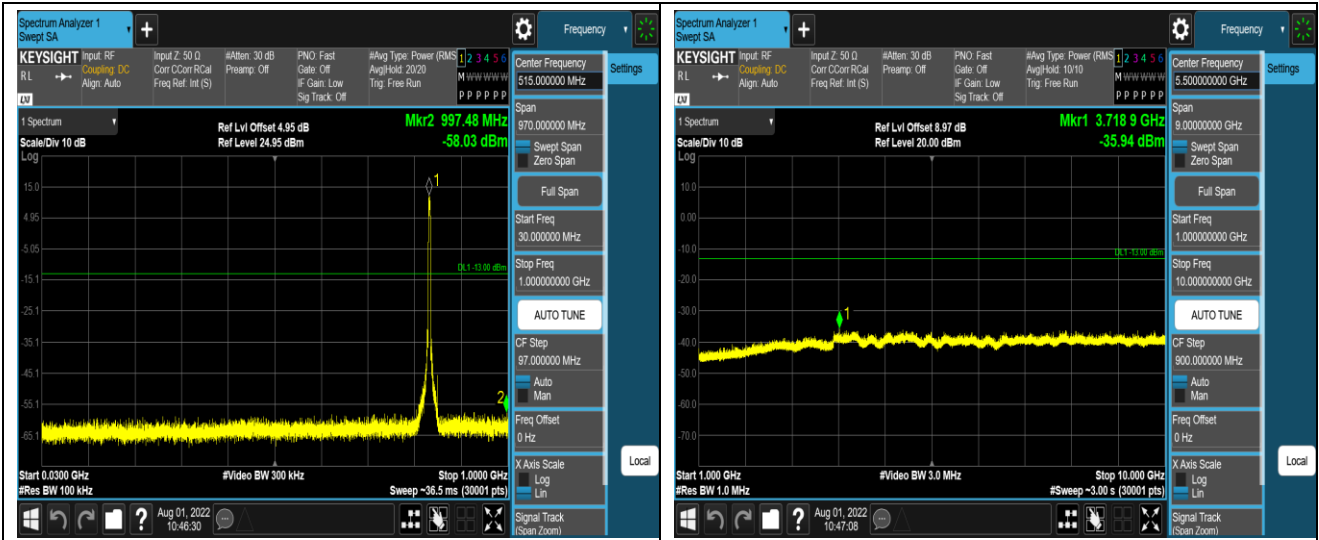
Band5-4183-0.009~0.15MHz

Band5-4183-0.15~30MHz



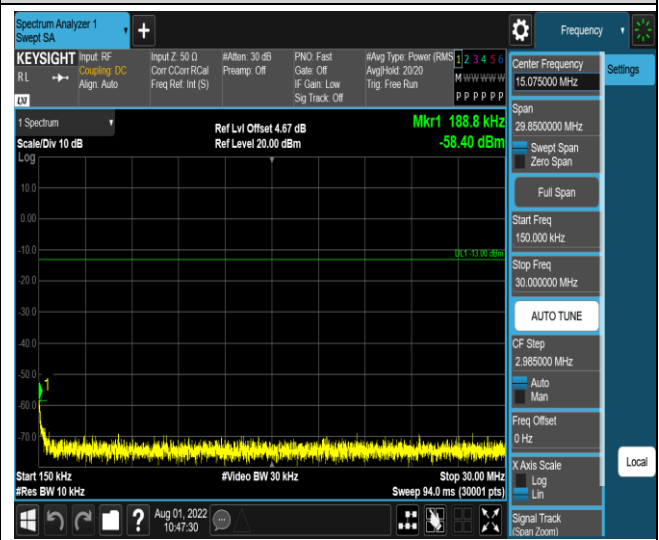
Band5-4183-30~1000MHz

Band5-4183-1000~10000MHz



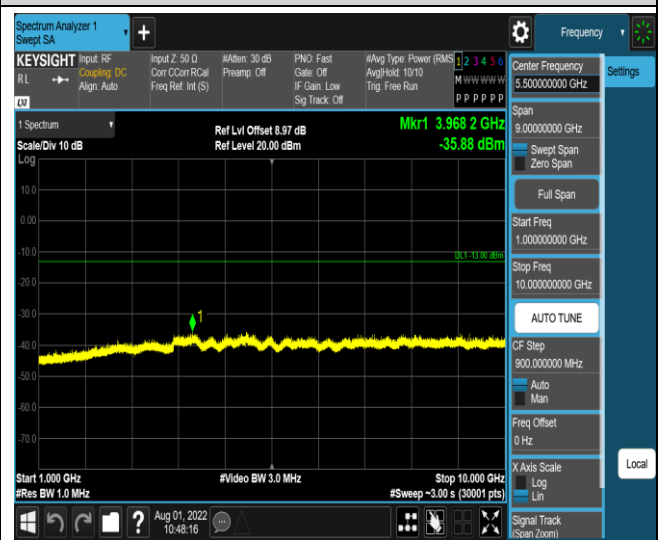
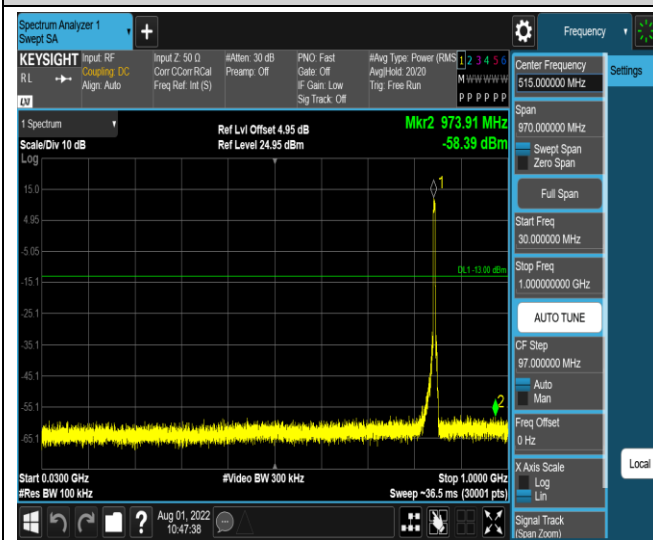
Band5-4233-0.009~0.15MHz

Band5-4233-0.15~30MHz



Band5-4233-30~1000MHz

Band5-4233-1000~10000MHz



Appendix F: Frequency Stability

Test Result

| Reference Frequency: WCDMA BAND V 12.2k RMC Middle channel=4183 Frequency=836.6MHz | | | | | |
|---|----------------------|-----------------|-----------|-------------|--------|
| Temperature | | | | | |
| Power supplied (Vdc) | Temperature (°C) | Frequency error | | Limit (ppm) | Result |
| | | Hz | ppm | | |
| 3.85 | -30 | -11.34 | -0.013555 | ±2.5 | Pass |
| | -20 | -6.48 | -0.007746 | | |
| | -10 | -12.45 | -0.014882 | | |
| | 0 | -7.93 | -0.009479 | | |
| | 10 | -11.27 | -0.013471 | | |
| | 20 | -10.09 | -0.012061 | | |
| | 30 | -6.33 | -0.007566 | | |
| | 40 | -11.54 | -0.013794 | | |
| | 50 | -5.31 | -0.006347 | | |
| Voltage | | | | | |
| Temperature (°C) | Power supplied (Vdc) | Frequency error | | Limit (ppm) | Result |
| | | Hz | ppm | | |
| 25 | 3.50 | -9.96 | -0.011905 | ±2.5 | Pass |
| | 3.85 | -6.86 | -0.008200 | | |
| | 4.43 | -6.69 | -0.007997 | | |
| 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 (Vdc) | Temperature (°C) | Frequency error | | Limit (ppm) | Result |
| | | Hz | ppm | | |
| 3.85 | -30 | -9.52 | -0.005495 | Within authorized band for BAND IV | Pass |
| | -20 | -11.72 | -0.006764 | | |
| | -10 | -10.11 | -0.005835 | | |
| | 0 | -6.39 | -0.003688 | | |
| | 10 | -7.97 | -0.004600 | | |
| | 20 | -8.92 | -0.005148 | | |
| | 30 | -10.01 | -0.005777 | | |
| | 40 | -10.14 | -0.005852 | | |
| | 50 | -6.69 | -0.003861 | | |
| Voltage | | | | | |
| Temperature (°C) | Power supplied (Vdc) | Frequency error | | Limit (ppm) | Result |
| | | Hz | ppm | | |
| 25 | 3.50 | -9.20 | -0.005310 | Within authorized band for BAND IV | Pass |
| | 3.85 | -6.57 | -0.003792 | | |
| | 4.43 | -12.10 | -0.006984 | | |
| 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 (Vdc) | Temperature (°C) | Frequency error | | Limit (ppm) | Result |
| | | Hz | ppm | | |
| 3.85 | -30 | -9.51 | -0.005059 | Within authorized band for BAND II | Pass |
| | -20 | -9.88 | -0.005255 | | |
| | -10 | -8.43 | -0.004484 | | |
| | 0 | -6.58 | -0.003500 | | |
| | 10 | -7.17 | -0.003814 | | |
| | 20 | -5.24 | -0.002787 | | |
| | 30 | -9.26 | -0.004926 | | |
| | 40 | -6.84 | -0.003638 | | |
| | 50 | -5.14 | -0.002734 | | |
| Voltage | | | | | |
| Temperature (°C) | Power supplied (Vdc) | Frequency error | | Limit (ppm) | Result |
| | | Hz | ppm | | |
| 25 | 3.50 | -7.80 | -0.004149 | Within authorized band for BAND II | Pass |
| | 3.85 | -5.01 | -0.002665 | | |
| | 4.43 | -11.97 | -0.006367 | | |
| 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

