

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 | 23.76 | 23.26 | 33.01 | PASS |
| Band2 | TestMode | 9262 | 23.76 | 23.26 | 33.01 | PASS |
| Band2 | TestMode | 9400 | 23.80 | 23.3 | 33.01 | PASS |
| Band2 | Voice | 9400 | 23.77 | 23.27 | 33.01 | PASS |
| Band2 | TestMode | 9538 | 23.80 | 23.3 | 33.01 | PASS |
| Band2 | Voice | 9538 | 23.64 | 23.14 | 33.01 | PASS |
| Band4 | Voice | 1312 | 23.32 | 25.72 | 30.00 | PASS |
| Band4 | TestMode | 1312 | 23.38 | 25.78 | 30.00 | PASS |
| Band4 | Voice | 1413 | 23.38 | 25.78 | 30.00 | PASS |
| Band4 | TestMode | 1413 | 23.38 | 25.78 | 30.00 | PASS |
| Band4 | TestMode | 1513 | 23.26 | 25.66 | 30.00 | PASS |
| Band4 | Voice | 1513 | 23.23 | 25.63 | 30.00 | PASS |
| Band5 | Voice | 4132 | 24.08 | 20.43 | 38.45 | PASS |
| Band5 | TestMode | 4132 | 24.07 | 20.42 | 38.45 | PASS |
| Band5 | TestMode | 4183 | 24.21 | 20.56 | 38.45 | PASS |
| Band5 | Voice | 4183 | 24.21 | 20.56 | 38.45 | PASS |
| Band5 | Voice | 4233 | 24.20 | 20.55 | 38.45 | PASS |
| Band5 | TestMode | 4233 | 24.23 | 20.58 | 38.45 | PASS |

Test Result(HSDPA)

| Band | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262 | 1 | 22.77 | 22.27 | 33.01 | PASS |
| Band2 | 9262 | 2 | 22.26 | 21.76 | 33.01 | PASS |
| Band2 | 9262 | 3 | 22.29 | 21.79 | 33.01 | PASS |
| Band2 | 9262 | 4 | 22.21 | 21.71 | 33.01 | PASS |
| Band2 | 9400 | 1 | 22.77 | 22.27 | 33.01 | PASS |
| Band2 | 9400 | 2 | 22.28 | 21.78 | 33.01 | PASS |
| Band2 | 9400 | 3 | 22.30 | 21.8 | 33.01 | PASS |
| Band2 | 9400 | 4 | 22.26 | 21.76 | 33.01 | PASS |
| Band2 | 9538 | 1 | 22.79 | 22.29 | 33.01 | PASS |
| Band2 | 9538 | 2 | 22.30 | 21.8 | 33.01 | PASS |
| Band2 | 9538 | 3 | 22.27 | 21.77 | 33.01 | PASS |
| Band2 | 9538 | 4 | 22.26 | 21.76 | 33.01 | PASS |

| | | | | | | |
|-------|------|---|-------|-------|-------|------|
| Band4 | 1312 | 1 | 23.06 | 22.36 | 30.00 | PASS |
| Band4 | 1312 | 2 | 22.52 | 21.82 | 30.00 | PASS |
| Band4 | 1312 | 3 | 22.53 | 21.83 | 30.00 | PASS |
| Band4 | 1312 | 4 | 22.51 | 21.81 | 30.00 | PASS |
| Band4 | 1413 | 1 | 23.07 | 22.37 | 30.00 | PASS |
| Band4 | 1413 | 2 | 22.49 | 21.79 | 30.00 | PASS |
| Band4 | 1413 | 3 | 22.52 | 21.82 | 30.00 | PASS |
| Band4 | 1413 | 4 | 22.53 | 21.83 | 30.00 | PASS |
| Band4 | 1513 | 1 | 22.99 | 22.29 | 30.00 | PASS |
| Band4 | 1513 | 2 | 22.42 | 21.72 | 30.00 | PASS |
| Band4 | 1513 | 3 | 22.49 | 21.79 | 30.00 | PASS |
| Band4 | 1513 | 4 | 22.49 | 21.79 | 30.00 | PASS |
| Band5 | 4132 | 1 | 23.10 | 19.45 | 38.5 | PASS |
| Band5 | 4132 | 2 | 22.52 | 18.87 | 38.5 | PASS |
| Band5 | 4132 | 3 | 22.56 | 18.91 | 38.5 | PASS |
| Band5 | 4132 | 4 | 22.59 | 18.94 | 38.5 | PASS |
| Band5 | 4183 | 1 | 23.23 | 19.58 | 38.5 | PASS |
| Band5 | 4183 | 2 | 22.69 | 19.04 | 38.5 | PASS |
| Band5 | 4183 | 3 | 22.70 | 19.05 | 38.5 | PASS |
| Band5 | 4183 | 4 | 22.69 | 19.04 | 38.5 | PASS |
| Band5 | 4233 | 1 | 23.27 | 19.62 | 38.5 | PASS |
| Band5 | 4233 | 2 | 22.73 | 19.08 | 38.5 | PASS |
| Band5 | 4233 | 3 | 22.76 | 19.11 | 38.5 | PASS |
| Band5 | 4233 | 4 | 22.76 | 19.11 | 38.5 | PASS |

Test Result(HSUPA)

| Band | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262 | 1 | 20.81 | 20.31 | 33.01 | PASS |
| Band2 | 9262 | 2 | 21.26 | 20.76 | 33.01 | PASS |
| Band2 | 9262 | 3 | 21.79 | 21.29 | 33.01 | PASS |
| Band2 | 9262 | 4 | 20.84 | 20.34 | 33.01 | PASS |
| Band2 | 9262 | 5 | 22.77 | 22.27 | 33.01 | PASS |
| Band2 | 9400 | 1 | 20.86 | 20.36 | 33.01 | PASS |
| Band2 | 9400 | 2 | 21.35 | 20.85 | 33.01 | PASS |
| Band2 | 9400 | 3 | 21.79 | 21.29 | 33.01 | PASS |
| Band2 | 9400 | 4 | 20.86 | 20.36 | 33.01 | PASS |
| Band2 | 9400 | 5 | 22.83 | 22.33 | 33.01 | PASS |
| Band2 | 9538 | 1 | 20.85 | 20.35 | 33.01 | PASS |
| Band2 | 9538 | 2 | 21.36 | 20.86 | 33.01 | PASS |
| Band2 | 9538 | 3 | 21.79 | 21.29 | 33.01 | PASS |

| | | | | | | |
|-------|------|---|-------|-------|-------|------|
| Band2 | 9538 | 4 | 20.85 | 20.35 | 33.01 | PASS |
| Band2 | 9538 | 5 | 22.82 | 22.32 | 33.01 | PASS |
| Band4 | 1312 | 1 | 21.09 | 20.39 | 30.00 | PASS |
| Band4 | 1312 | 2 | 21.59 | 20.89 | 30.00 | PASS |
| Band4 | 1312 | 3 | 22.08 | 21.38 | 30.00 | PASS |
| Band4 | 1312 | 4 | 21.12 | 20.42 | 30.00 | PASS |
| Band4 | 1312 | 5 | 23.11 | 22.41 | 30.00 | PASS |
| Band4 | 1413 | 1 | 21.11 | 20.41 | 30.00 | PASS |
| Band4 | 1413 | 2 | 21.60 | 20.9 | 30.00 | PASS |
| Band4 | 1413 | 3 | 22.08 | 21.38 | 30.00 | PASS |
| Band4 | 1413 | 4 | 21.15 | 20.45 | 30.00 | PASS |
| Band4 | 1413 | 5 | 23.08 | 22.38 | 30.00 | PASS |
| Band4 | 1513 | 1 | 21.04 | 20.34 | 30.00 | PASS |
| Band4 | 1513 | 2 | 21.51 | 20.81 | 30.00 | PASS |
| Band4 | 1513 | 3 | 21.99 | 21.29 | 30.00 | PASS |
| Band4 | 1513 | 4 | 21.04 | 20.34 | 30.00 | PASS |
| Band4 | 1513 | 5 | 23.02 | 22.32 | 30.00 | PASS |
| Band5 | 4132 | 1 | 21.17 | 17.52 | 38.5 | PASS |
| Band5 | 4132 | 2 | 21.61 | 17.96 | 38.5 | PASS |
| Band5 | 4132 | 3 | 22.08 | 18.43 | 38.5 | PASS |
| Band5 | 4132 | 4 | 21.17 | 17.52 | 38.5 | PASS |
| Band5 | 4132 | 5 | 21.10 | 17.45 | 38.5 | PASS |
| Band5 | 4183 | 1 | 21.31 | 17.66 | 38.5 | PASS |
| Band5 | 4183 | 2 | 21.67 | 18.02 | 38.5 | PASS |
| Band5 | 4183 | 3 | 22.21 | 18.56 | 38.5 | PASS |
| Band5 | 4183 | 4 | 21.30 | 17.65 | 38.5 | PASS |
| Band5 | 4183 | 5 | 21.10 | 17.45 | 38.5 | PASS |
| Band5 | 4233 | 1 | 21.34 | 17.69 | 38.5 | PASS |
| Band5 | 4233 | 2 | 21.72 | 18.07 | 38.5 | PASS |
| Band5 | 4233 | 3 | 22.27 | 18.62 | 38.5 | PASS |
| Band5 | 4233 | 4 | 21.38 | 17.73 | 38.5 | PASS |
| Band5 | 4233 | 5 | 21.33 | 17.68 | 38.5 | PASS |

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

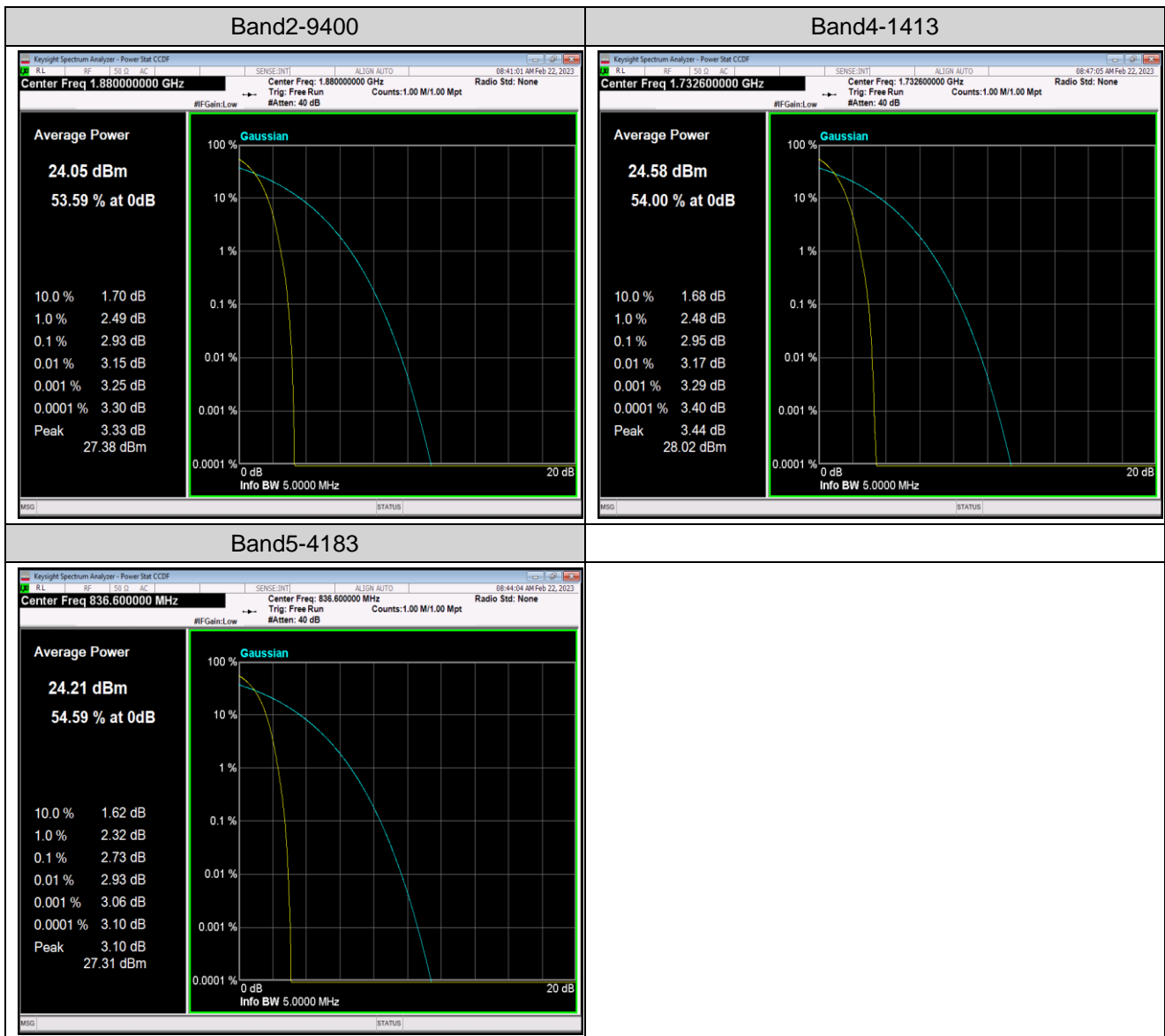
AppendixB:Peak-to-Average Ratio

Test Result(WCDMA)

| Band | Channel | Peak-to-Average Ratio(dB) | Limit(dB) | Verdict |
|-------|---------|---------------------------|-----------|---------|
| Band2 | 9400 | 2.93 | 13 | PASS |
| Band4 | 1413 | 2.95 | 13 | PASS |
| Band5 | 4183 | 2.73 | 13 | PASS |

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

Test Graphs(WCDMA)

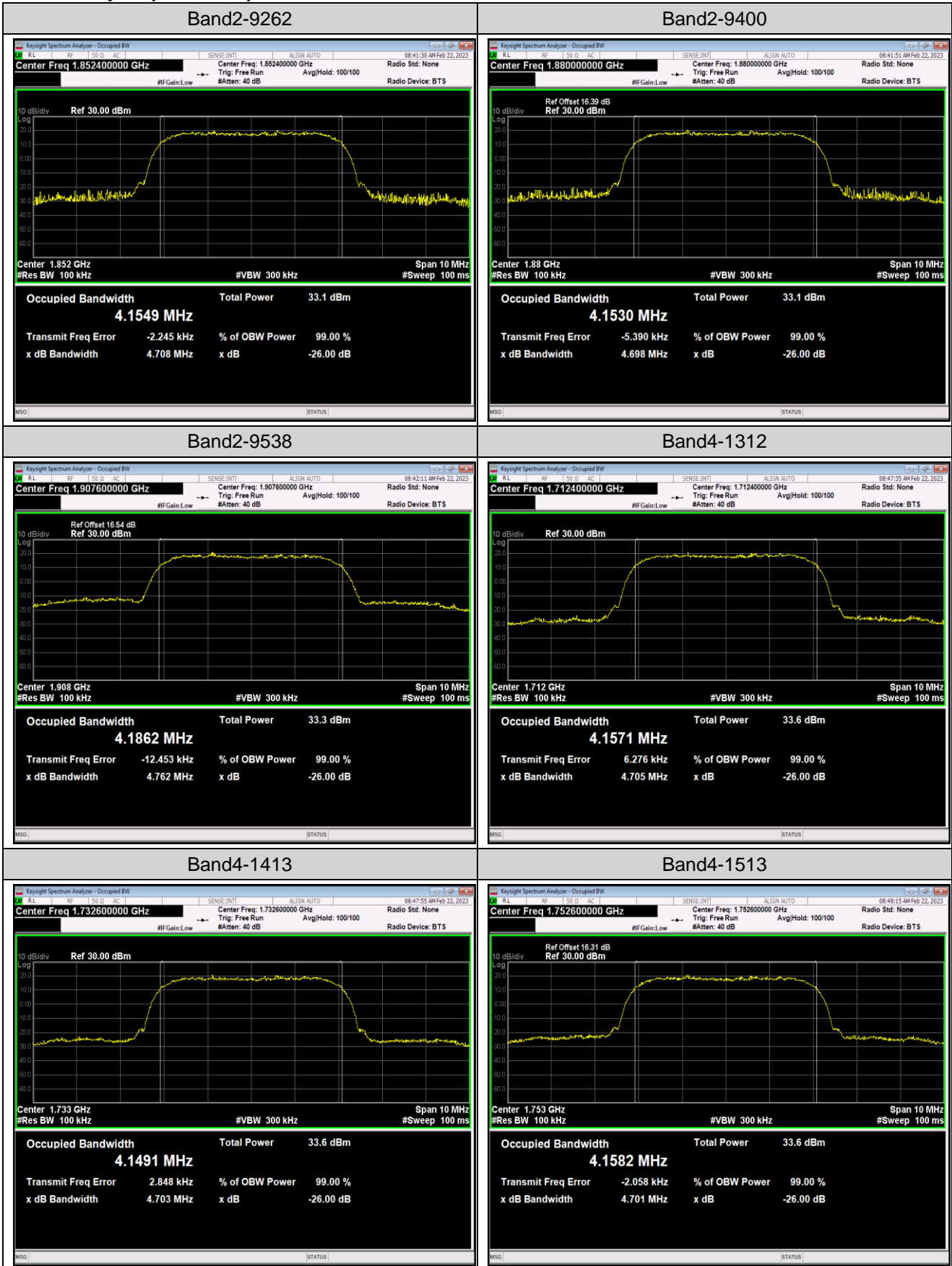


AppendixC:26dB Bandwidth andOccupied Bandwidth

Test Result(WCDMA)

| Band | Channel | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Limit(kHz) | Verdict |
|-------|---------|-----------------------------|-------------------------|------------|---------|
| Band2 | 9262 | 4.1549 | 4.708 | --- | PASS |
| Band2 | 9400 | 4.1530 | 4.698 | --- | PASS |
| Band2 | 9538 | 4.1862 | 4.762 | --- | PASS |
| Band4 | 1312 | 4.1571 | 4.705 | --- | PASS |
| Band4 | 1413 | 4.1491 | 4.703 | --- | PASS |
| Band4 | 1513 | 4.1582 | 4.701 | --- | PASS |
| Band5 | 4132 | 4.1575 | 4.719 | --- | PASS |
| Band5 | 4183 | 4.1651 | 4.720 | --- | PASS |
| Band5 | 4233 | 4.1716 | 4.728 | --- | PASS |

Test Graphs(WCDMA)



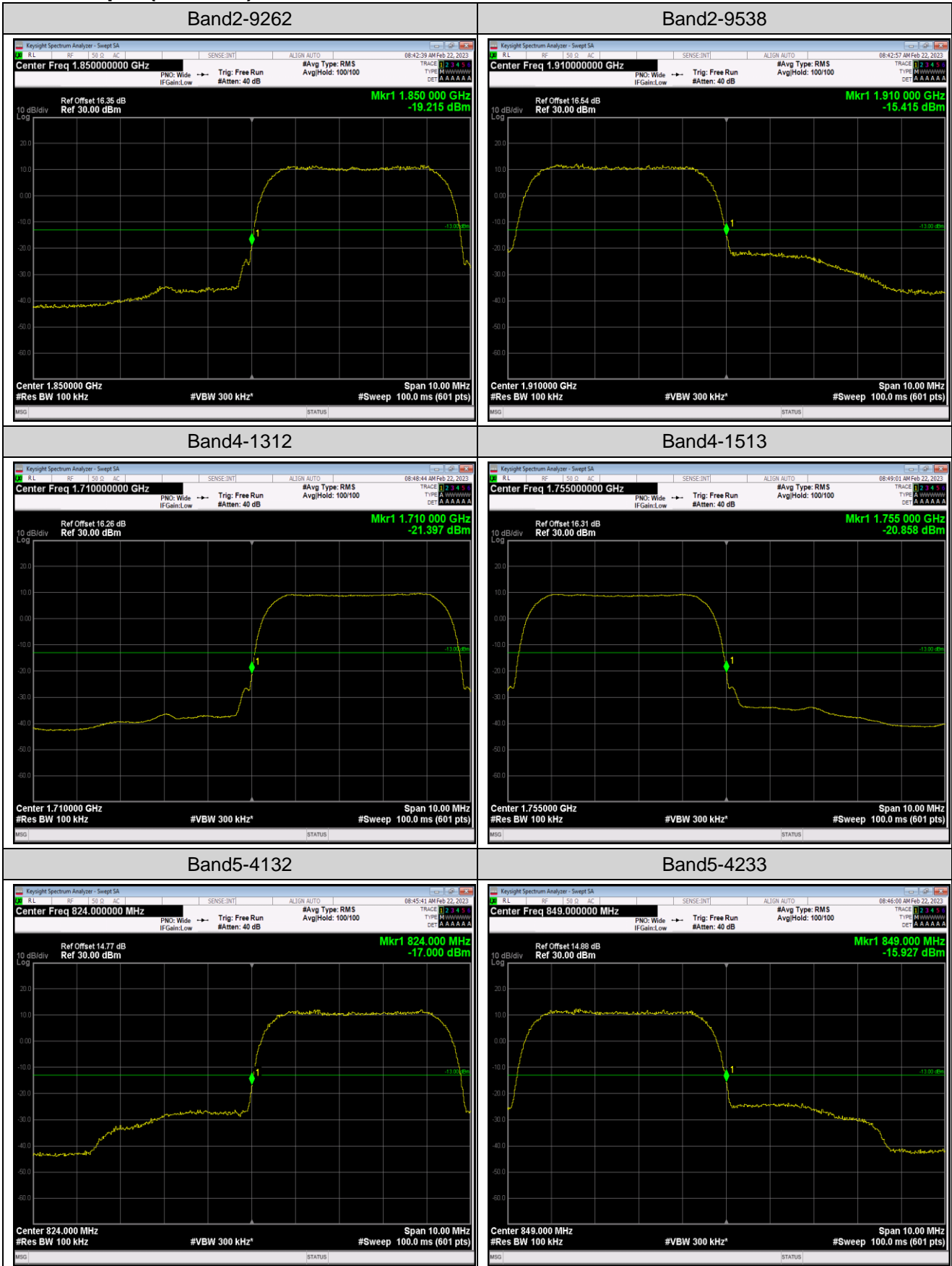


AppendixD:Band Edge

Test Result(WCDMA)

| Band | Channel | Frequency (MHz) | Result (dBm) | Limit(dBm) | Verdict |
|-------|---------|-----------------|--------------|------------|---------|
| Band2 | 9262 | 1850.00 | -19.21 | -13 | PASS |
| Band2 | 9538 | 1910.00 | -15.42 | -13 | PASS |
| Band4 | 1312 | 1710.00 | -21.40 | -13 | PASS |
| Band4 | 1513 | 1755.00 | -20.86 | -13 | PASS |
| Band5 | 4132 | 824.00 | -17.00 | -13 | PASS |
| Band5 | 4233 | 849.00 | -15.93 | -13 | PASS |

Test Graphs(WCDMA)

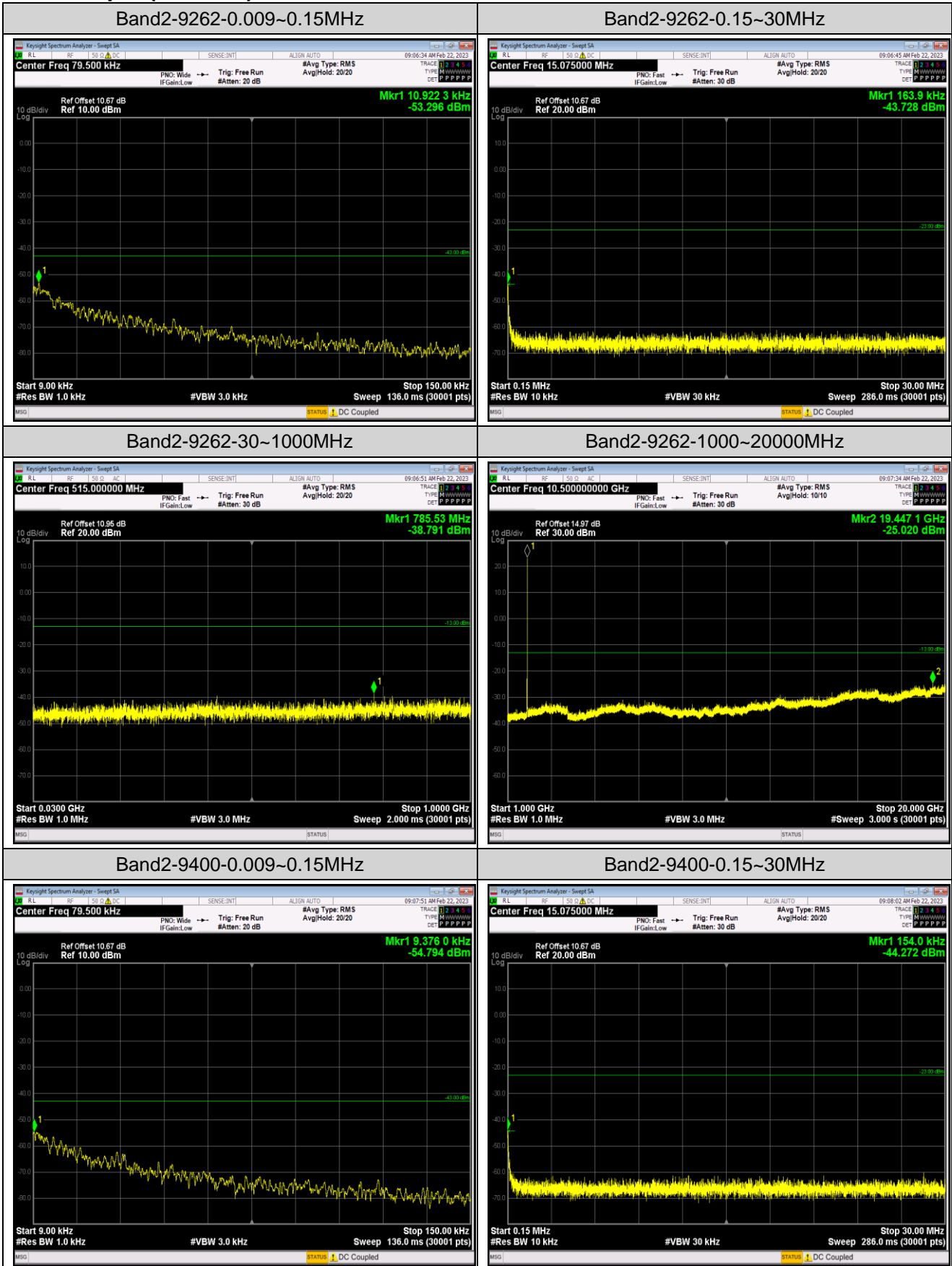


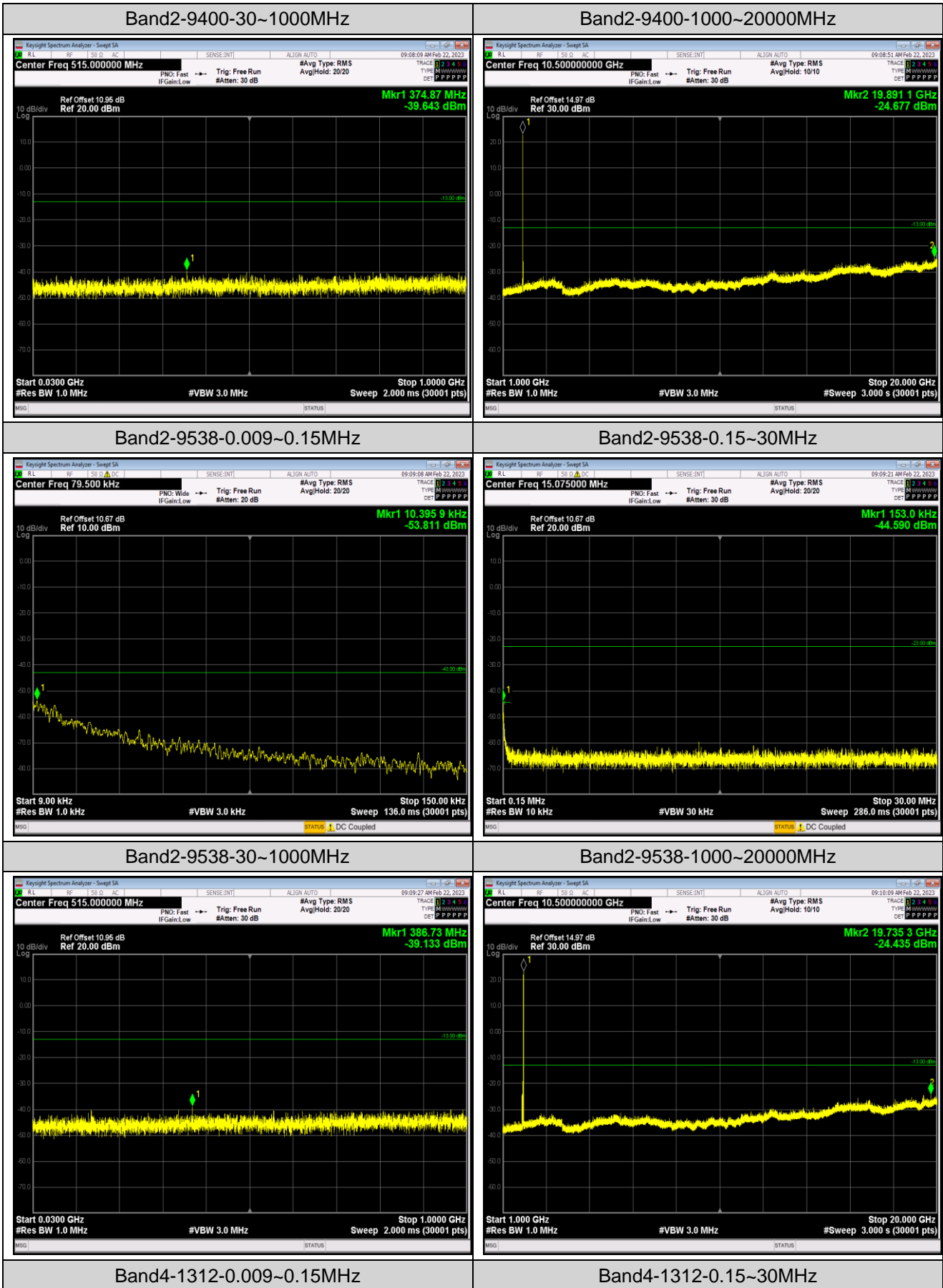
Appendix E: Conducted Spurious Emission

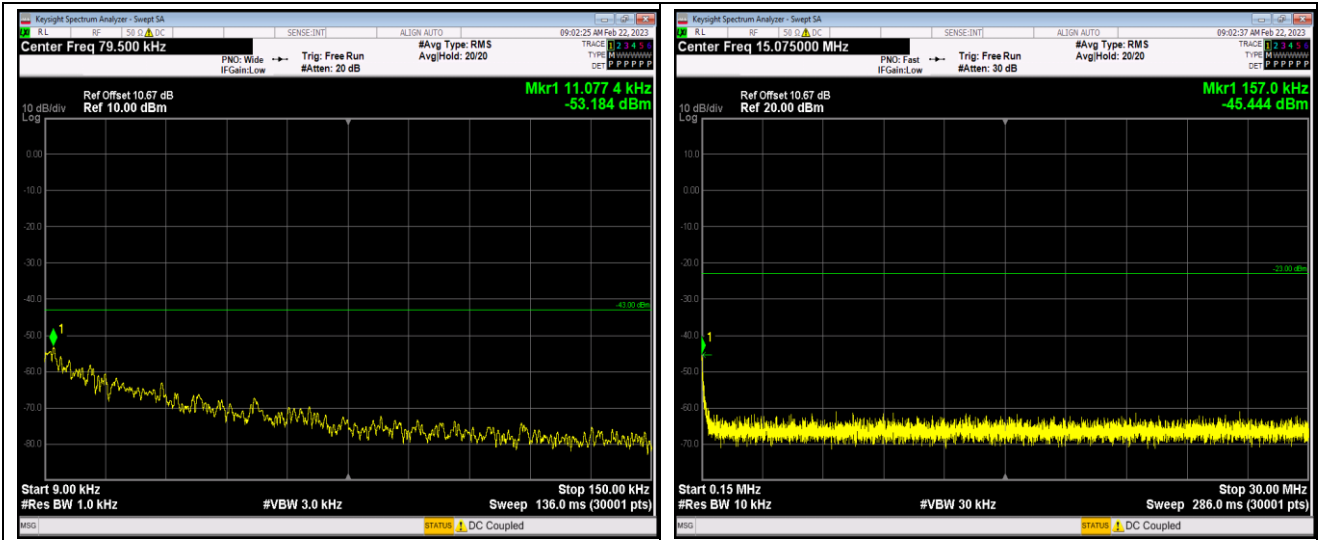
Test Result (WCDMA)

| Band | Channel | Frequency Range (Mhz) | Frequency (dBm) | Result (dBm) | Limit (dBm) | Verdict |
|-------|---------|-----------------------|-----------------|--------------|-------------|---------|
| Band2 | 9262 | 0.009~0.15MHz | 0.01 | -53.3 | -43 | PASS |
| Band2 | 9262 | 0.15~30MHz | 0.16 | -43.73 | -23 | PASS |
| Band2 | 9262 | 30~1000MHz | 785.53 | -38.79 | -13 | PASS |
| Band2 | 9262 | 1000~20000MHz | 19447.1 | -25.02 | -13 | PASS |
| Band2 | 9400 | 0.009~0.15MHz | 0.01 | -54.79 | -43 | PASS |
| Band2 | 9400 | 0.15~30MHz | 0.15 | -44.27 | -23 | PASS |
| Band2 | 9400 | 30~1000MHz | 374.87 | -39.64 | -13 | PASS |
| Band2 | 9400 | 1000~20000MHz | 19891.07 | -24.68 | -13 | PASS |
| Band2 | 9538 | 0.009~0.15MHz | 0.01 | -53.81 | -43 | PASS |
| Band2 | 9538 | 0.15~30MHz | 0.15 | -44.59 | -23 | PASS |
| Band2 | 9538 | 30~1000MHz | 386.73 | -39.13 | -13 | PASS |
| Band2 | 9538 | 1000~20000MHz | 19735.27 | -24.44 | -13 | PASS |
| Band4 | 1312 | 0.009~0.15MHz | 0.01 | -53.18 | -43 | PASS |
| Band4 | 1312 | 0.15~30MHz | 0.16 | -45.44 | -23 | PASS |
| Band4 | 1312 | 30~1000MHz | 783.59 | -39.56 | -13 | PASS |
| Band4 | 1312 | 1000~20000MHz | 19918.3 | -23.95 | -13 | PASS |
| Band4 | 1413 | 0.009~0.15MHz | 0.01 | -53.97 | -43 | PASS |
| Band4 | 1413 | 0.15~30MHz | 0.15 | -44.33 | -23 | PASS |
| Band4 | 1413 | 30~1000MHz | 947.04 | -38.99 | -13 | PASS |
| Band4 | 1413 | 1000~20000MHz | 19873.33 | -24.74 | -13 | PASS |
| Band4 | 1513 | 0.009~0.15MHz | 0.01 | -50.95 | -43 | PASS |
| Band4 | 1513 | 0.15~30MHz | 0.15 | -45.94 | -23 | PASS |
| Band4 | 1513 | 30~1000MHz | 850.3 | -39.32 | -13 | PASS |
| Band4 | 1513 | 1000~20000MHz | 18709.9 | -25.16 | -13 | PASS |
| Band5 | 4132 | 0.009~0.15MHz | 0.01 | -53.38 | -33 | PASS |
| Band5 | 4132 | 0.15~30MHz | 0.16 | -46.5 | -13 | PASS |
| Band5 | 4132 | 30~1000MHz | 942.83 | -49.09 | -13 | PASS |
| Band5 | 4132 | 1000~10000MHz | 3172.6 | -31.34 | -13 | PASS |
| Band5 | 4183 | 0.009~0.15MHz | 0.01 | -53.03 | -33 | PASS |
| Band5 | 4183 | 0.15~30MHz | 0.16 | -45.55 | -13 | PASS |
| Band5 | 4183 | 30~1000MHz | 999.39 | -49.27 | -13 | PASS |
| Band5 | 4183 | 1000~10000MHz | 2632.9 | -31.45 | -13 | PASS |
| Band5 | 4233 | 0.009~0.15MHz | 0.01 | -51.32 | -33 | PASS |
| Band5 | 4233 | 0.15~30MHz | 0.15 | -45.63 | -13 | PASS |
| Band5 | 4233 | 30~1000MHz | 448.04 | -48.64 | -13 | PASS |
| Band5 | 4233 | 1000~10000MHz | 5980.3 | -31.21 | -13 | PASS |

Test Graphs(WCDMA)

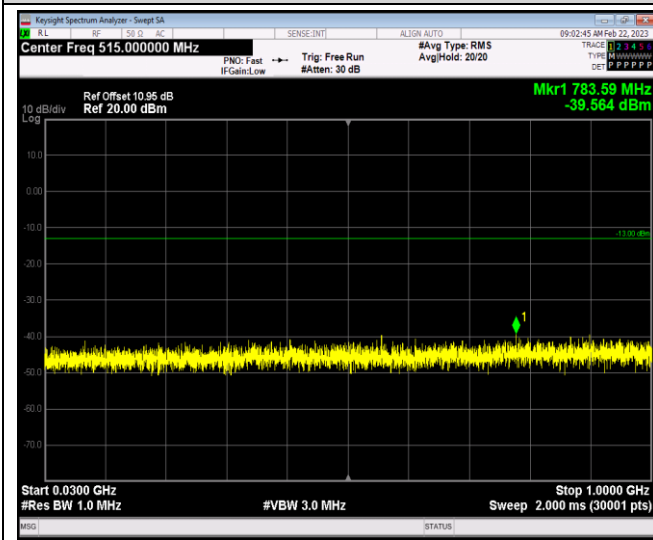




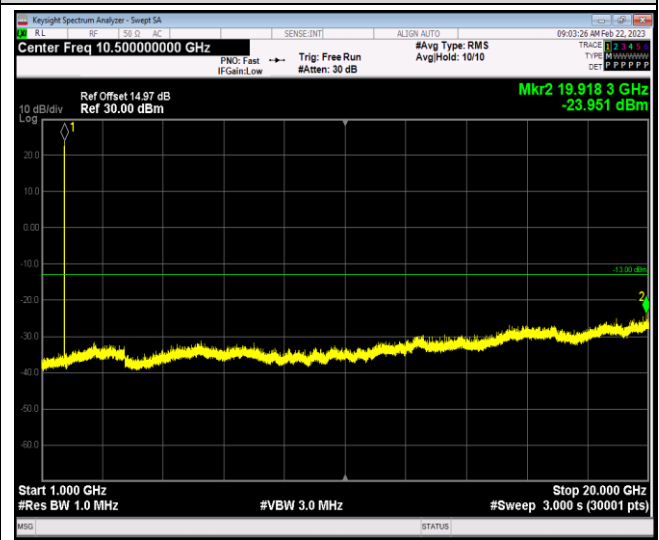


Band4-1312-30~1000MHz

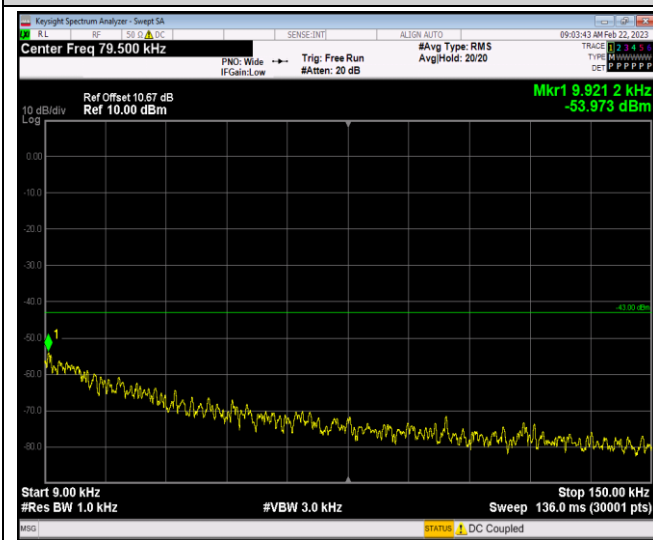
Band4-1312-1000~20000MHz



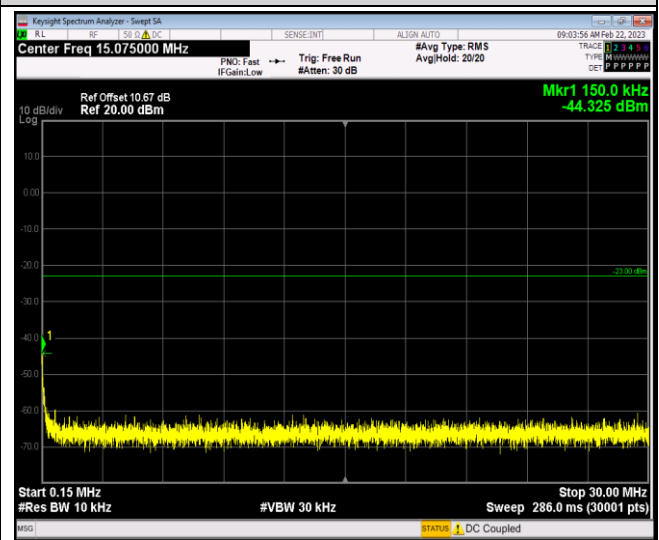
Band4-1413-0.009~0.15MHz



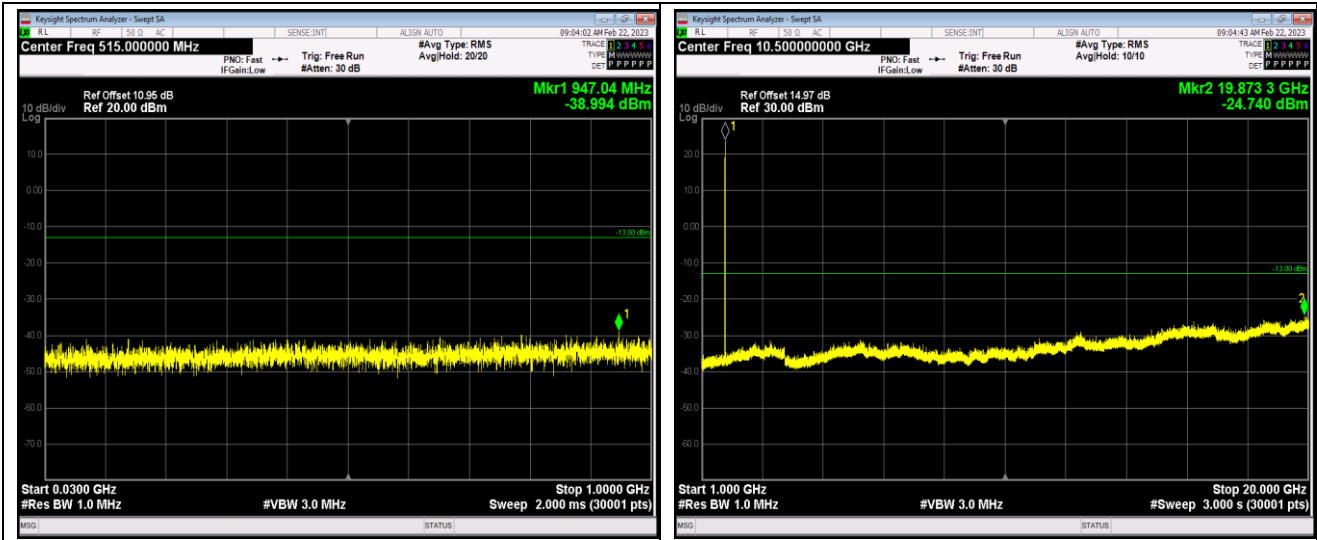
Band4-1413-0.15~30MHz



Band4-1413-30~1000MHz

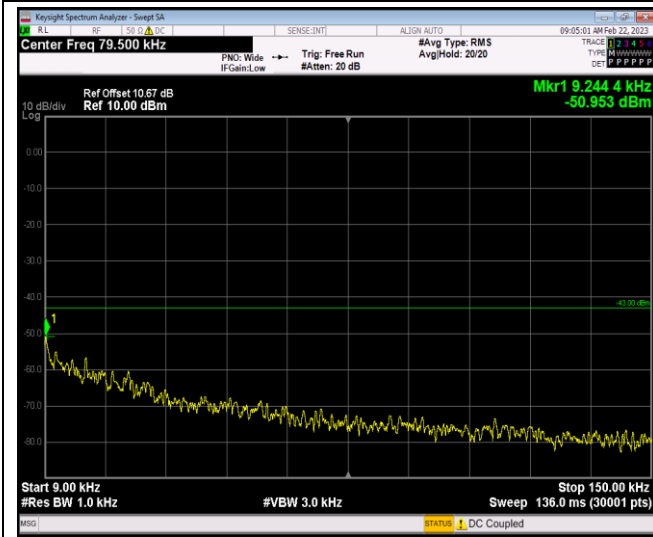


Band4-1413-1000~20000MHz

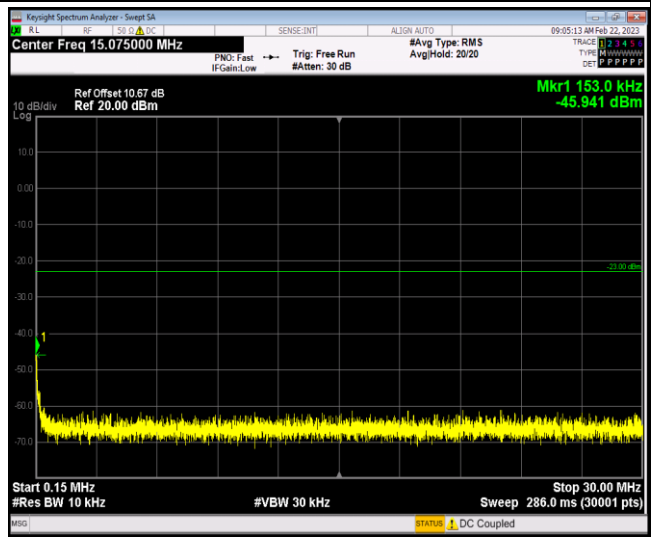


Band4-1513-0.009~0.15MHz

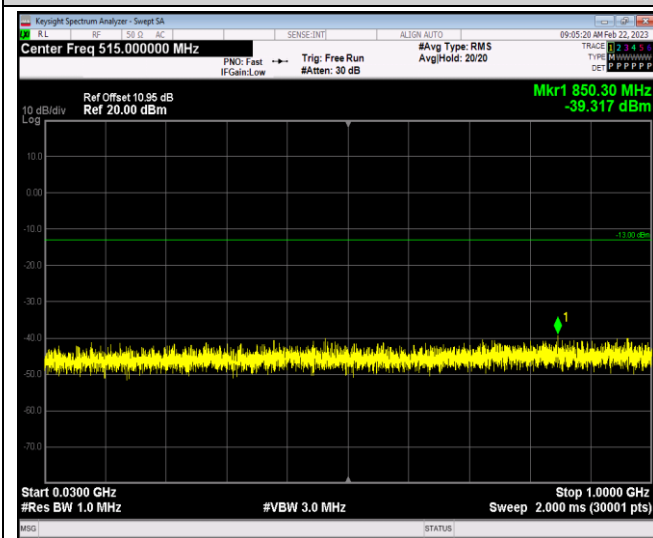
Band4-1513-0.15~30MHz



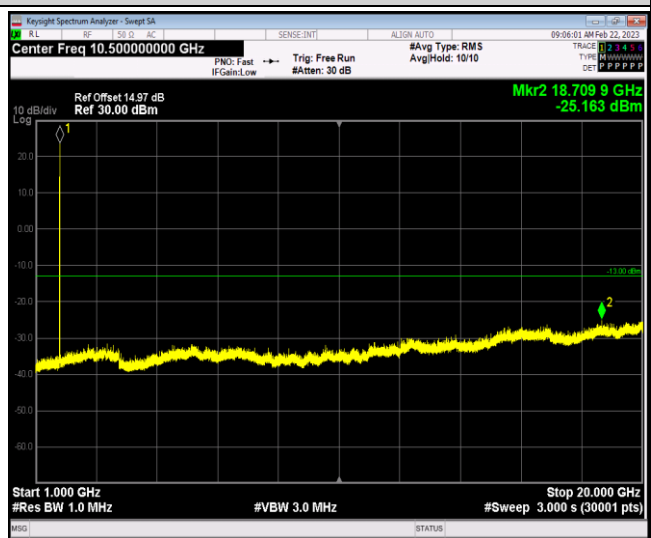
Band4-1513-30~1000MHz



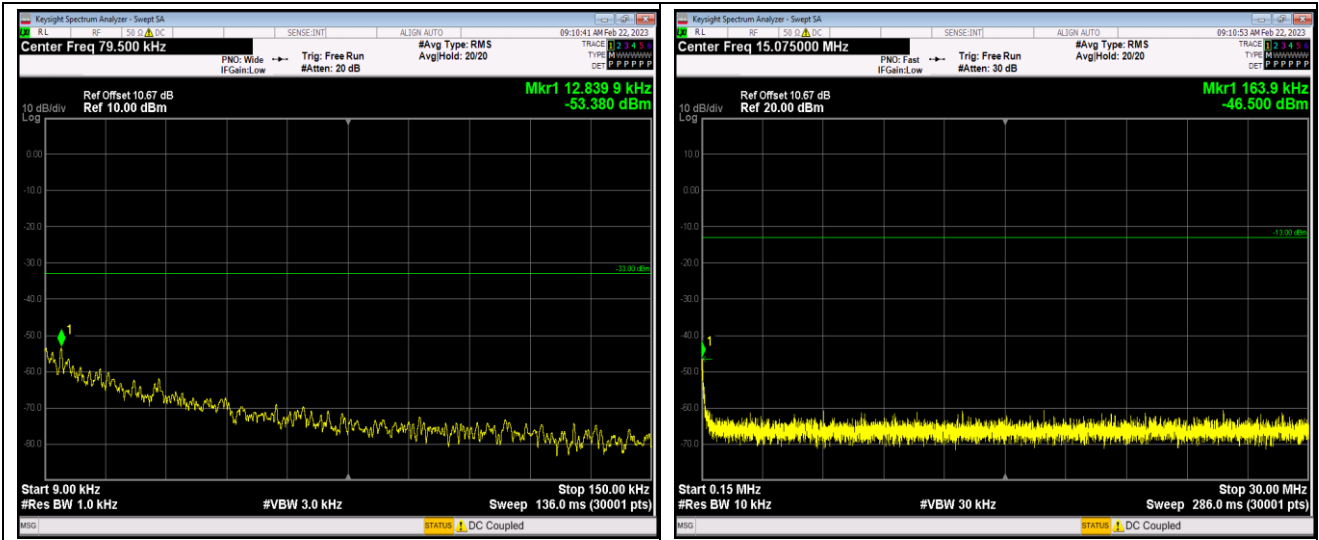
Band4-1513-1000~20000MHz



Band5-4132-0.009~0.15MHz

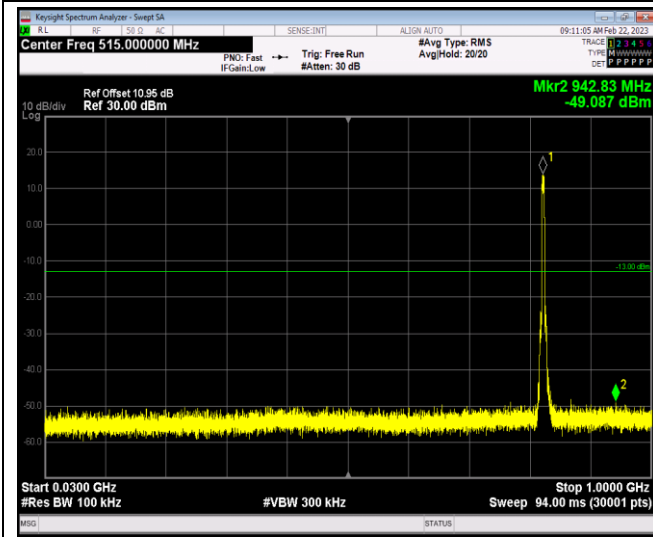


Band5-4132-0.15~30MHz

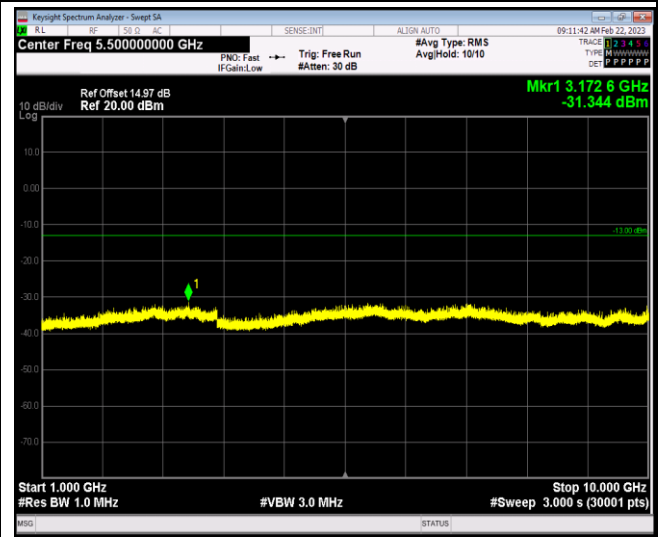


Band5-4132-30~1000MHz

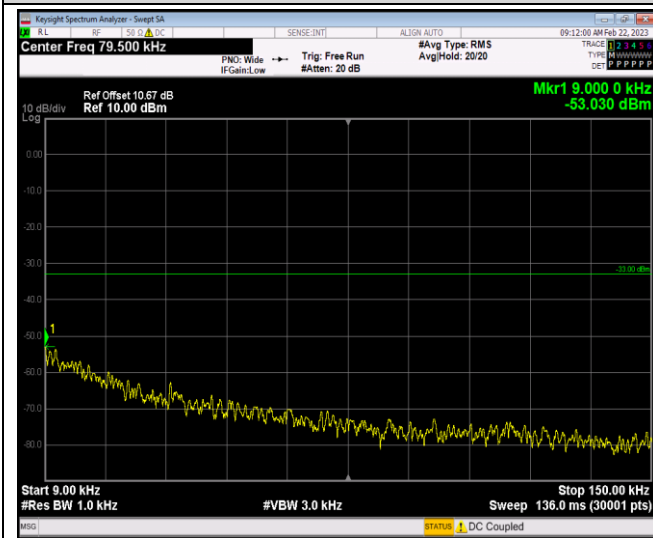
Band5-4132-1000~10000MHz



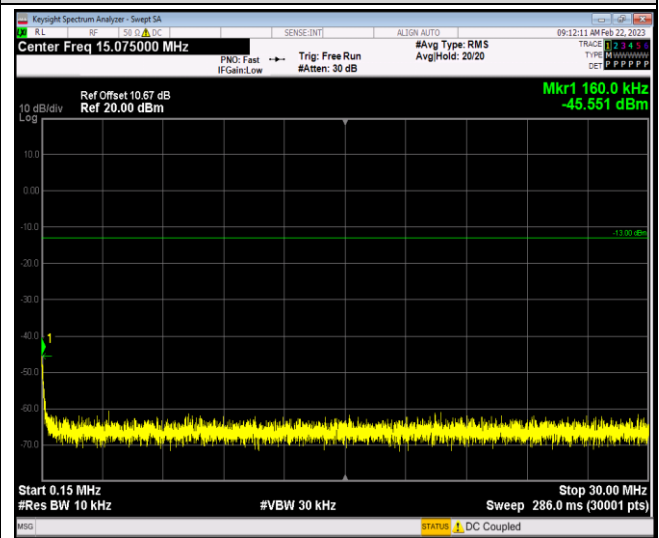
Band5-4183-0.009~0.15MHz



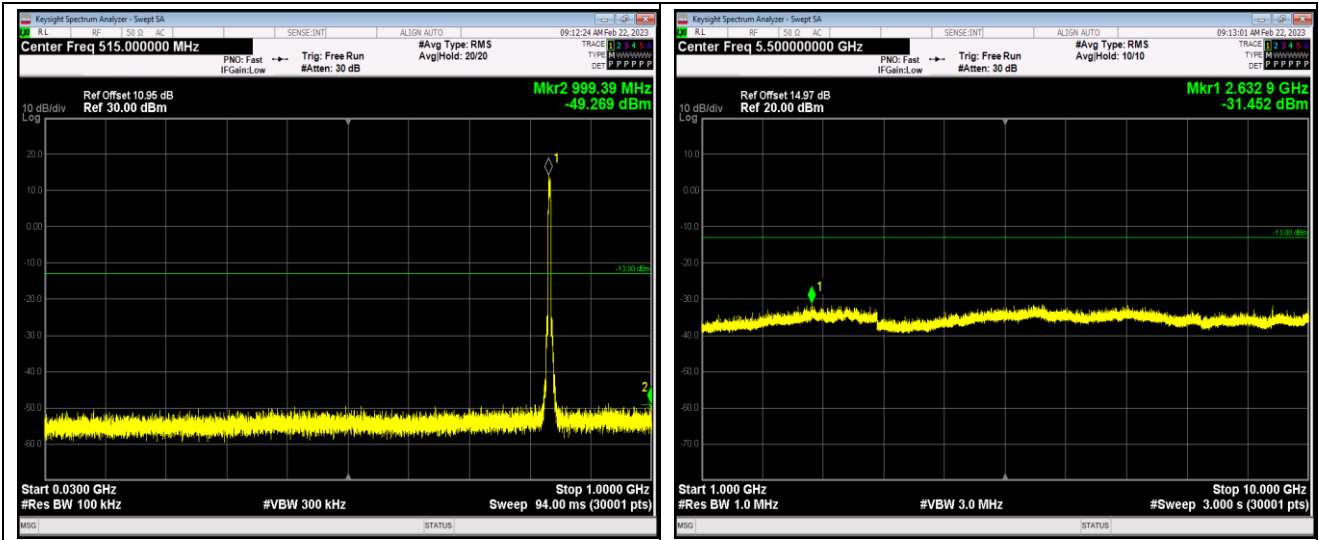
Band5-4183-0.15~30MHz



Band5-4183-30~1000MHz

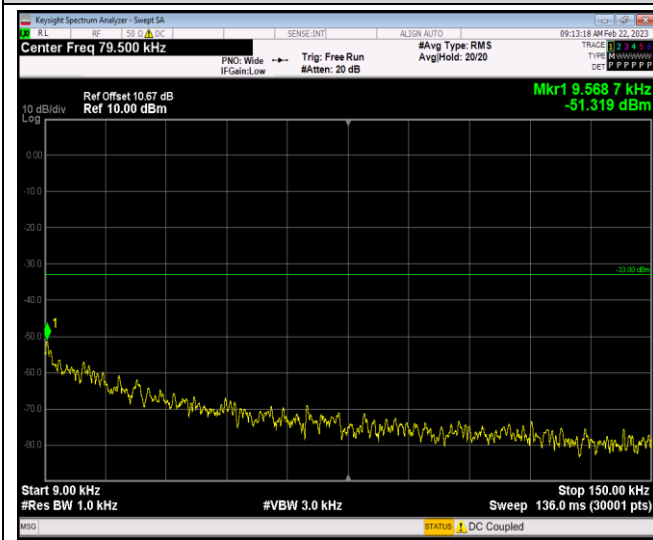


Band5-4183-1000~10000MHz

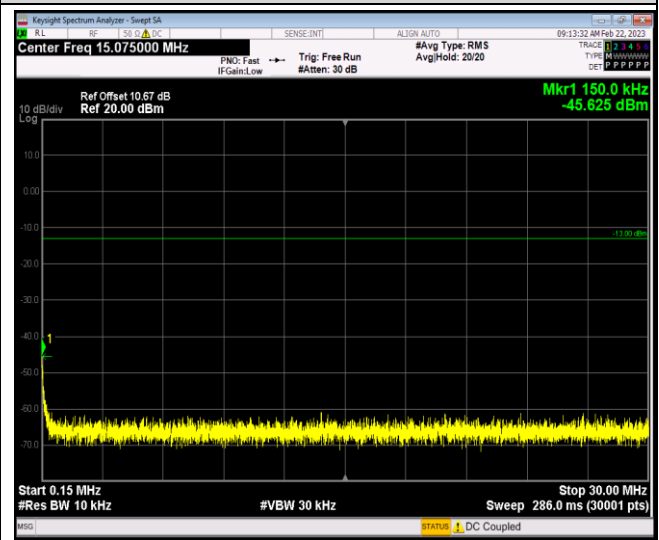


Band5-4233-0.009~0.15MHz

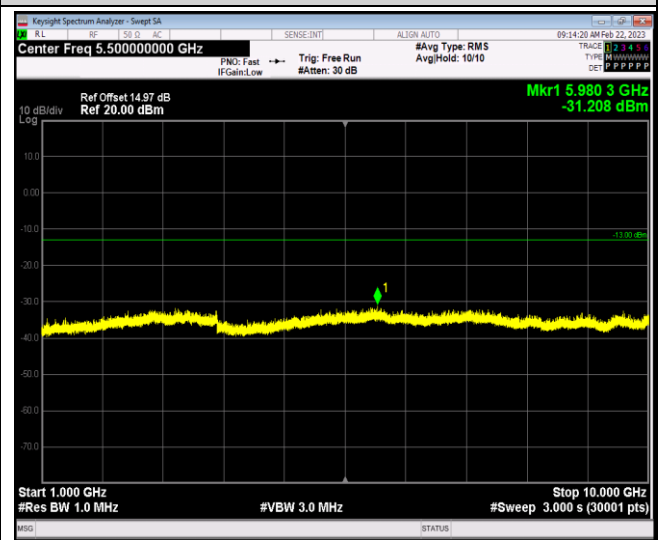
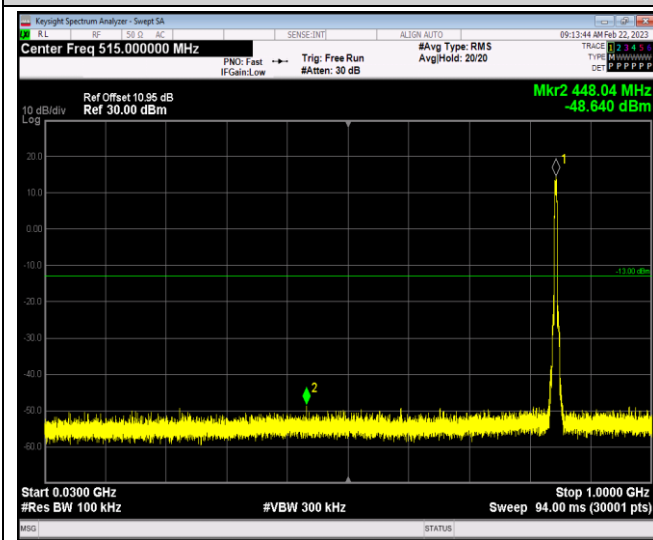
Band5-4233-0.15~30MHz



Band5-4233-30~1000MHz



Band5-4233-1000~10000MHz



AppendixF:Frequency Stability

Test Result

| 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 | | |
| 3.87 | -30 | 0.37 | 0.000197 | Within authorized band for BAND II | Pass |
| | -20 | -4.20 | -0.002234 | | |
| | -10 | -0.57 | -0.000303 | | |
| | 0 | -3.99 | -0.002122 | | |
| | 10 | -0.55 | -0.000293 | | |
| | 20 | -2.58 | -0.001372 | | |
| | 30 | -4.59 | -0.002441 | | |
| | 40 | -2.34 | -0.001245 | | |
| | 50 | -3.52 | -0.001872 | | |
| Voltage | | | | | |
| Temperature (°C) | Power supplied (Vdc) | Frequency error | | Limit (ppm) | Result |
| | | Hz | ppm | | |
| 25 | 3.45 | -6.15 | -0.003271 | Within authorized band for BAND II | Pass |
| | 3.87 | -4.48 | -0.002383 | | |
| | 4.45 | -3.63 | -0.001931 | | |
| 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 | | |
| 3.87 | -30 | -5.74 | -0.003313 | Within authorized band for BAND IV | Pass |
| | -20 | -4.82 | -0.002782 | | |
| | -10 | -5.61 | -0.003238 | | |
| | 0 | -3.65 | -0.002107 | | |
| | 10 | -2.62 | -0.001512 | | |
| | 20 | -5.66 | -0.003267 | | |
| | 30 | -4.25 | -0.002453 | | |
| | 40 | -3.05 | -0.001760 | | |
| | 50 | -3.76 | -0.002170 | | |
| Voltage | | | | | |
| Temperature (°C) | Power supplied (Vdc) | Frequency error | | Limit (ppm) | Result |
| | | Hz | ppm | | |
| 25 | 3.45 | -8.93 | -0.005154 | Within authorized band for BAND IV | Pass |
| | 3.87 | -9.57 | -0.005523 | | |
| | 4.45 | -6.34 | -0.003659 | | |
| Remark: All channel had been tested, but only the worst case data displayed in this report. | | | | | |

| 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 | | |
| 3.87 | -30 | -3.43 | -0.004100 | ±2.5 | Pass |
| | -20 | -3.65 | -0.004363 | | |
| | -10 | -3.24 | -0.003873 | | |
| | 0 | -4.06 | -0.004853 | | |
| | 10 | -5.03 | -0.006012 | | |
| | 20 | -2.45 | -0.002929 | | |
| | 30 | -4.34 | -0.005188 | | |
| | 40 | -4.78 | -0.005714 | | |
| | 50 | -4.46 | -0.005331 | | |
| Voltage | | | | | |
| Temperature (°C) | Power supplied (Vdc) | Frequency error | | Limit (ppm) | Result |
| | | Hz | ppm | | |
| 25 | 3.45 | -3.91 | -0.004674 | ±2.5 | Pass |
| | 3.87 | -3.63 | -0.004339 | | |
| | 4.45 | -4.81 | -0.005749 | | |
| 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

