

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 | 23.29 | 21.89 | 33.01 | PASS |
| Band2 | TestMode | 9262 | 23.21 | 21.81 | 33.01 | PASS |
| Band2 | TestMode | 9400 | 23.34 | 21.94 | 33.01 | PASS |
| Band2 | Voice | 9400 | 23.31 | 21.91 | 33.01 | PASS |
| Band2 | TestMode | 9538 | 23.39 | 21.99 | 33.01 | PASS |
| Band2 | Voice | 9538 | 23.27 | 21.87 | 33.01 | PASS |
| Band4 | Voice | 1312 | 23.69 | 21.67 | 30.00 | PASS |
| Band4 | TestMode | 1312 | 23.67 | 21.65 | 30.00 | PASS |
| Band4 | Voice | 1413 | 23.49 | 21.47 | 30.00 | PASS |
| Band4 | TestMode | 1413 | 23.64 | 21.62 | 30.00 | PASS |
| Band4 | TestMode | 1513 | 23.68 | 21.66 | 30.00 | PASS |
| Band4 | Voice | 1513 | 23.59 | 21.57 | 30.00 | PASS |
| Band5 | Voice | 4132 | 23.72 | 16.41 | 38.45 | PASS |
| Band5 | TestMode | 4132 | 23.72 | 16.41 | 38.45 | PASS |
| Band5 | TestMode | 4183 | 23.81 | 16.5 | 38.45 | PASS |
| Band5 | Voice | 4183 | 23.73 | 16.42 | 38.45 | PASS |
| Band5 | Voice | 4233 | 23.62 | 16.31 | 38.45 | PASS |
| Band5 | TestMode | 4233 | 23.75 | 16.44 | 38.45 | PASS |

Test Result(HSDPA)

| Band | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262 | 1 | 22.31 | 20.91 | 33.01 | PASS |
| Band2 | 9262 | 2 | 21.74 | 20.34 | 33.01 | PASS |
| Band2 | 9262 | 3 | 21.82 | 20.42 | 33.01 | PASS |
| Band2 | 9262 | 4 | 21.75 | 20.35 | 33.01 | PASS |
| Band2 | 9400 | 1 | 22.35 | 20.95 | 33.01 | PASS |
| Band2 | 9400 | 2 | 21.81 | 20.41 | 33.01 | PASS |
| Band2 | 9400 | 3 | 21.82 | 20.42 | 33.01 | PASS |
| Band2 | 9400 | 4 | 21.84 | 20.44 | 33.01 | PASS |
| Band2 | 9538 | 1 | 22.39 | 20.99 | 33.01 | PASS |
| Band2 | 9538 | 2 | 21.86 | 20.46 | 33.01 | PASS |
| Band2 | 9538 | 3 | 21.85 | 20.45 | 33.01 | PASS |
| Band2 | 9538 | 4 | 21.84 | 20.44 | 33.01 | PASS |

| | | | | | | |
|-------|------|---|-------|-------|-------|------|
| Band4 | 1312 | 1 | 23.69 | 21.67 | 30.00 | PASS |
| Band4 | 1312 | 2 | 23.19 | 21.17 | 30.00 | PASS |
| Band4 | 1312 | 3 | 23.18 | 21.16 | 30.00 | PASS |
| Band4 | 1312 | 4 | 23.16 | 21.14 | 30.00 | PASS |
| Band4 | 1413 | 1 | 23.69 | 21.67 | 30.00 | PASS |
| Band4 | 1413 | 2 | 23.17 | 21.15 | 30.00 | PASS |
| Band4 | 1413 | 3 | 23.18 | 21.16 | 30.00 | PASS |
| Band4 | 1413 | 4 | 23.16 | 21.14 | 30.00 | PASS |
| Band4 | 1513 | 1 | 23.68 | 21.66 | 30.00 | PASS |
| Band4 | 1513 | 2 | 23.18 | 21.16 | 30.00 | PASS |
| Band4 | 1513 | 3 | 23.16 | 21.14 | 30.00 | PASS |
| Band4 | 1513 | 4 | 23.13 | 21.11 | 30.00 | PASS |
| Band5 | 4132 | 1 | 22.77 | 15.46 | 38.5 | PASS |
| Band5 | 4132 | 2 | 22.23 | 14.92 | 38.5 | PASS |
| Band5 | 4132 | 3 | 22.27 | 14.96 | 38.5 | PASS |
| Band5 | 4132 | 4 | 22.23 | 14.92 | 38.5 | PASS |
| Band5 | 4183 | 1 | 22.83 | 15.52 | 38.5 | PASS |
| Band5 | 4183 | 2 | 22.28 | 14.97 | 38.5 | PASS |
| Band5 | 4183 | 3 | 22.29 | 14.98 | 38.5 | PASS |
| Band5 | 4183 | 4 | 22.27 | 14.96 | 38.5 | PASS |
| Band5 | 4233 | 1 | 22.78 | 15.47 | 38.5 | PASS |
| Band5 | 4233 | 2 | 22.28 | 14.97 | 38.5 | PASS |
| Band5 | 4233 | 3 | 22.27 | 14.96 | 38.5 | PASS |
| Band5 | 4233 | 4 | 22.24 | 14.93 | 38.5 | PASS |

Test Result(HSUPA)

| Band | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262 | 1 | 21.29 | 19.89 | 33.01 | PASS |
| Band2 | 9262 | 2 | 21.77 | 20.37 | 33.01 | PASS |
| Band2 | 9262 | 3 | 22.29 | 20.89 | 33.01 | PASS |
| Band2 | 9262 | 4 | 21.29 | 19.89 | 33.01 | PASS |
| Band2 | 9262 | 5 | 23.31 | 21.91 | 33.01 | PASS |
| Band2 | 9400 | 1 | 21.35 | 19.95 | 33.01 | PASS |
| Band2 | 9400 | 2 | 21.83 | 20.43 | 33.01 | PASS |
| Band2 | 9400 | 3 | 22.32 | 20.92 | 33.01 | PASS |
| Band2 | 9400 | 4 | 21.36 | 19.96 | 33.01 | PASS |
| Band2 | 9400 | 5 | 23.36 | 21.96 | 33.01 | PASS |
| Band2 | 9538 | 1 | 21.37 | 19.97 | 33.01 | PASS |
| Band2 | 9538 | 2 | 21.87 | 20.47 | 33.01 | PASS |
| Band2 | 9538 | 3 | 22.34 | 20.94 | 33.01 | PASS |

| | | | | | | |
|-------|------|---|-------|-------|-------|------|
| Band2 | 9538 | 4 | 21.37 | 19.97 | 33.01 | PASS |
| Band2 | 9538 | 5 | 23.40 | 22 | 33.01 | PASS |
| Band4 | 1312 | 1 | 21.70 | 19.68 | 30.00 | PASS |
| Band4 | 1312 | 2 | 22.20 | 20.18 | 30.00 | PASS |
| Band4 | 1312 | 3 | 22.70 | 20.68 | 30.00 | PASS |
| Band4 | 1312 | 4 | 21.70 | 19.68 | 30.00 | PASS |
| Band4 | 1312 | 5 | 23.70 | 21.68 | 30.00 | PASS |
| Band4 | 1413 | 1 | 21.70 | 19.68 | 30.00 | PASS |
| Band4 | 1413 | 2 | 22.17 | 20.15 | 30.00 | PASS |
| Band4 | 1413 | 3 | 22.66 | 20.64 | 30.00 | PASS |
| Band4 | 1413 | 4 | 21.70 | 19.68 | 30.00 | PASS |
| Band4 | 1413 | 5 | 23.71 | 21.69 | 30.00 | PASS |
| Band4 | 1513 | 1 | 21.68 | 19.66 | 30.00 | PASS |
| Band4 | 1513 | 2 | 22.15 | 20.13 | 30.00 | PASS |
| Band4 | 1513 | 3 | 22.70 | 20.68 | 30.00 | PASS |
| Band4 | 1513 | 4 | 21.71 | 19.69 | 30.00 | PASS |
| Band4 | 1513 | 5 | 23.69 | 21.67 | 30.00 | PASS |
| Band5 | 4132 | 1 | 21.78 | 14.47 | 38.5 | PASS |
| Band5 | 4132 | 2 | 22.22 | 14.91 | 38.5 | PASS |
| Band5 | 4132 | 3 | 22.73 | 15.42 | 38.5 | PASS |
| Band5 | 4132 | 4 | 21.79 | 14.48 | 38.5 | PASS |
| Band5 | 4132 | 5 | 23.80 | 16.49 | 38.5 | PASS |
| Band5 | 4183 | 1 | 21.84 | 14.53 | 38.5 | PASS |
| Band5 | 4183 | 2 | 22.26 | 14.95 | 38.5 | PASS |
| Band5 | 4183 | 3 | 22.76 | 15.45 | 38.5 | PASS |
| Band5 | 4183 | 4 | 21.85 | 14.54 | 38.5 | PASS |
| Band5 | 4183 | 5 | 23.85 | 16.54 | 38.5 | PASS |
| Band5 | 4233 | 1 | 21.81 | 14.5 | 38.5 | PASS |
| Band5 | 4233 | 2 | 22.20 | 14.89 | 38.5 | PASS |
| Band5 | 4233 | 3 | 22.71 | 15.4 | 38.5 | PASS |
| Band5 | 4233 | 4 | 21.80 | 14.49 | 38.5 | PASS |
| Band5 | 4233 | 5 | 23.81 | 16.5 | 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)

AppendixB:Peak-to-Average Ratio

Test Result(WCDMA)

| Band | Channel | Peak-to-Average Ratio(dB) | Limit(dB) | Verdict |
|-------|---------|---------------------------|-----------|---------|
| Band2 | 9400 | 2.97 | 13 | PASS |
| Band4 | 1413 | 3.14 | 13 | PASS |
| Band5 | 4183 | 3.02 | 13 | PASS |

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

Test Graphs(WCDMA)

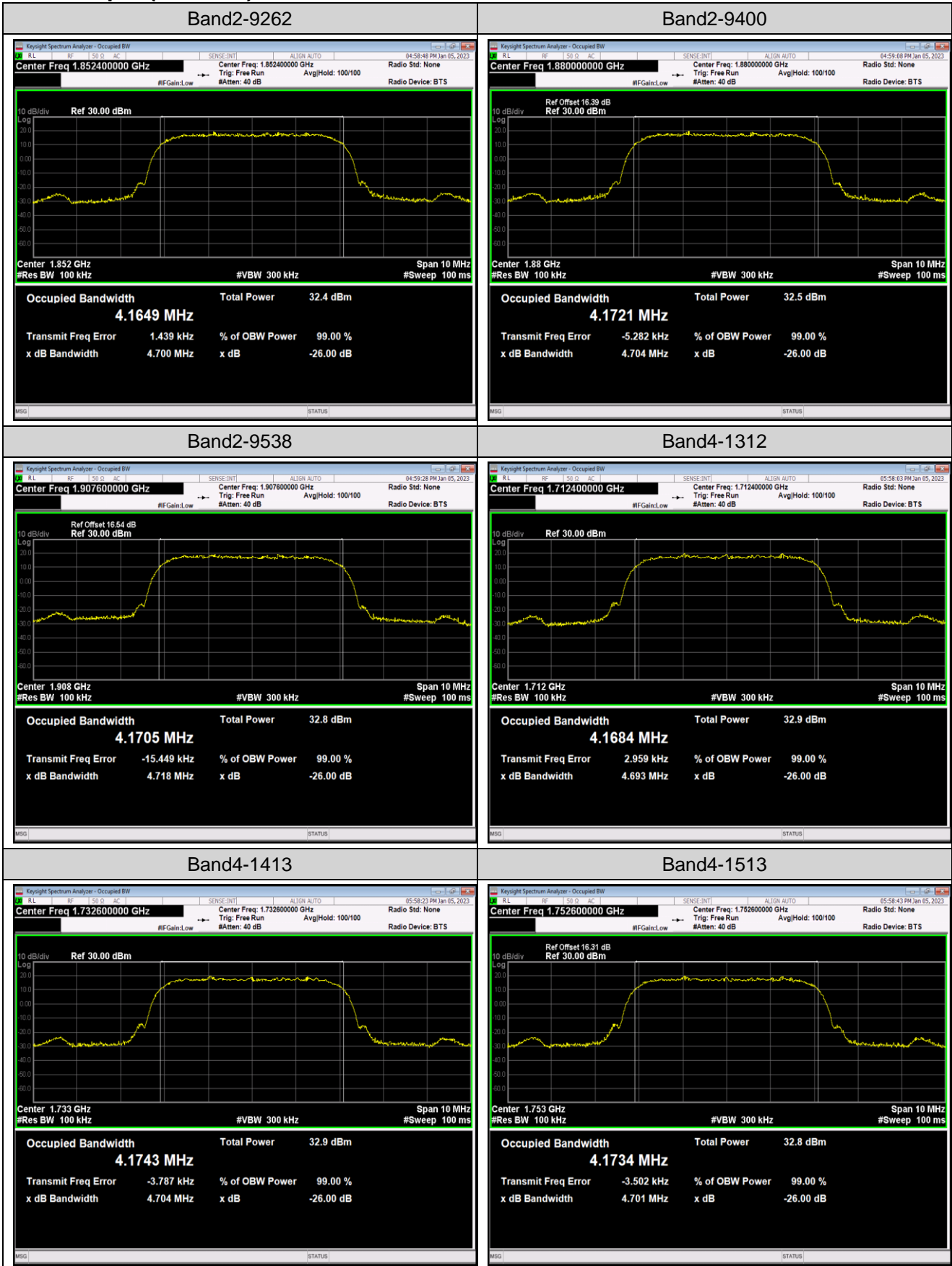


AppendixC:26dB Bandwidth andOccupied Bandwidth

Test Result(WCDMA)

| Band | Channel | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Limit(kHz) | Verdict |
|-------|---------|-----------------------------|-------------------------|------------|---------|
| Band2 | 9262 | 4.1649 | 4.700 | --- | PASS |
| Band2 | 9400 | 4.1721 | 4.704 | --- | PASS |
| Band2 | 9538 | 4.1705 | 4.718 | --- | PASS |
| Band4 | 1312 | 4.1684 | 4.693 | --- | PASS |
| Band4 | 1413 | 4.1743 | 4.704 | --- | PASS |
| Band4 | 1513 | 4.1734 | 4.701 | --- | PASS |
| Band5 | 4132 | 4.1632 | 4.709 | --- | PASS |
| Band5 | 4183 | 4.1763 | 4.718 | --- | PASS |
| Band5 | 4233 | 4.1712 | 4.699 | --- | PASS |

Test Graphs(WCDMA)



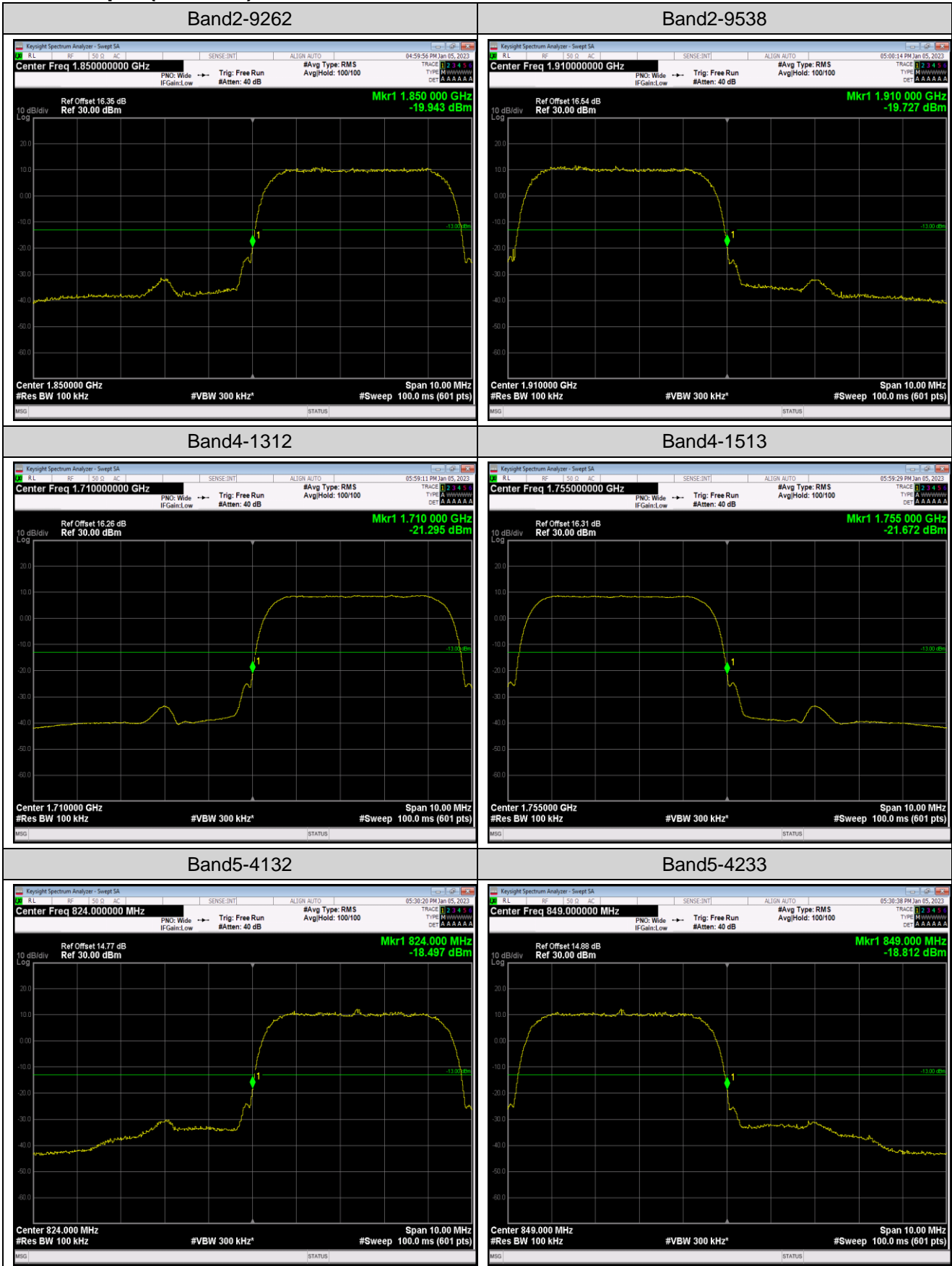


AppendixD:Band Edge

Test Result(WCDMA)

| Band | Channel | Frequency (MHz) | Result (dBm) | Limit(dBm) | Verdict |
|-------|---------|-----------------|--------------|------------|---------|
| Band2 | 9262 | 1850.00 | -19.94 | -13 | PASS |
| Band2 | 9538 | 1910.00 | -19.73 | -13 | PASS |
| Band4 | 1312 | 1710.00 | -21.30 | -13 | PASS |
| Band4 | 1513 | 1755.00 | -21.67 | -13 | PASS |
| Band5 | 4132 | 824.00 | -18.50 | -13 | PASS |
| Band5 | 4233 | 849.00 | -18.81 | -13 | PASS |

Test Graphs(WCDMA)



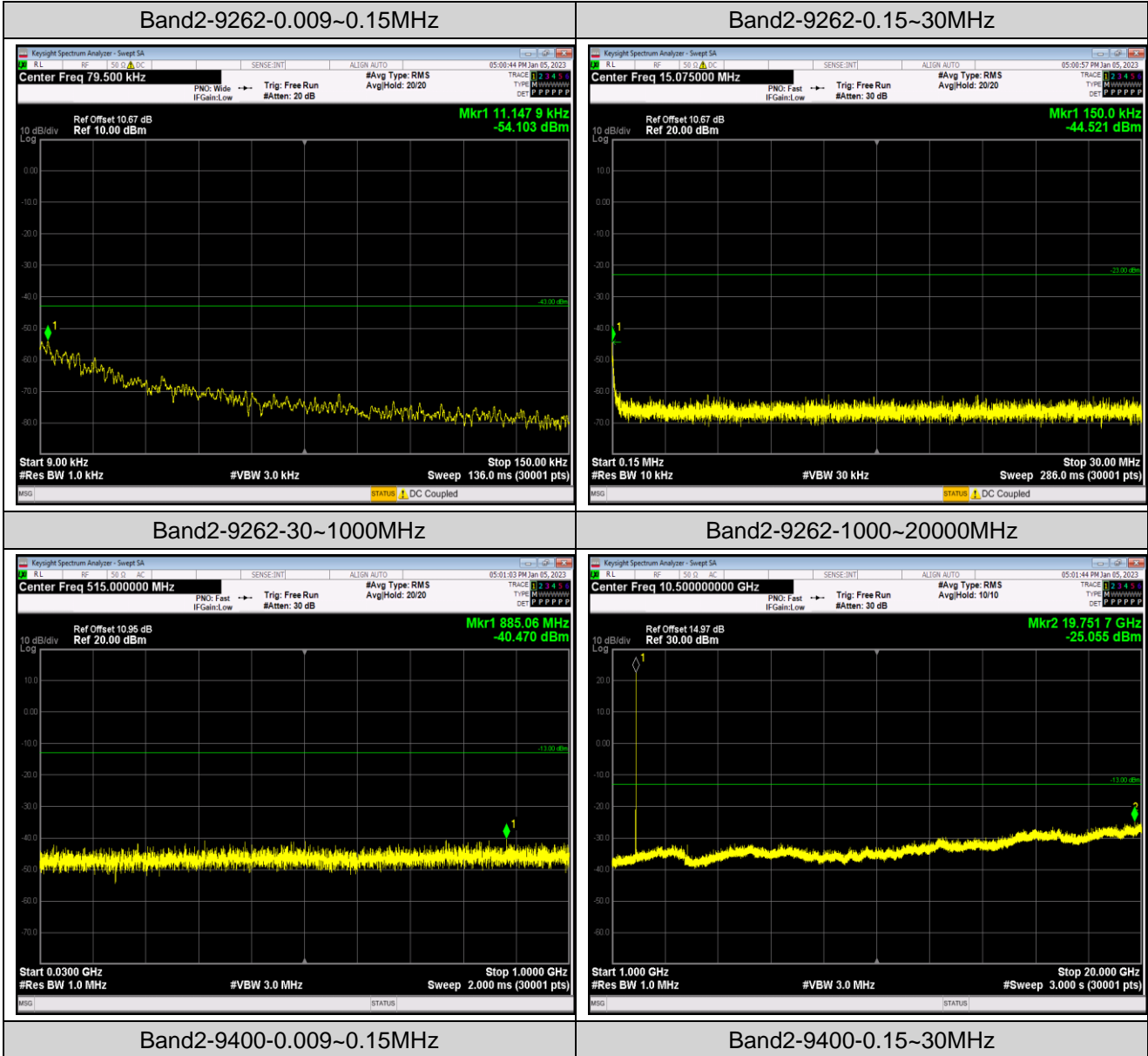
AppendixE:Conducted SpuriousEmission

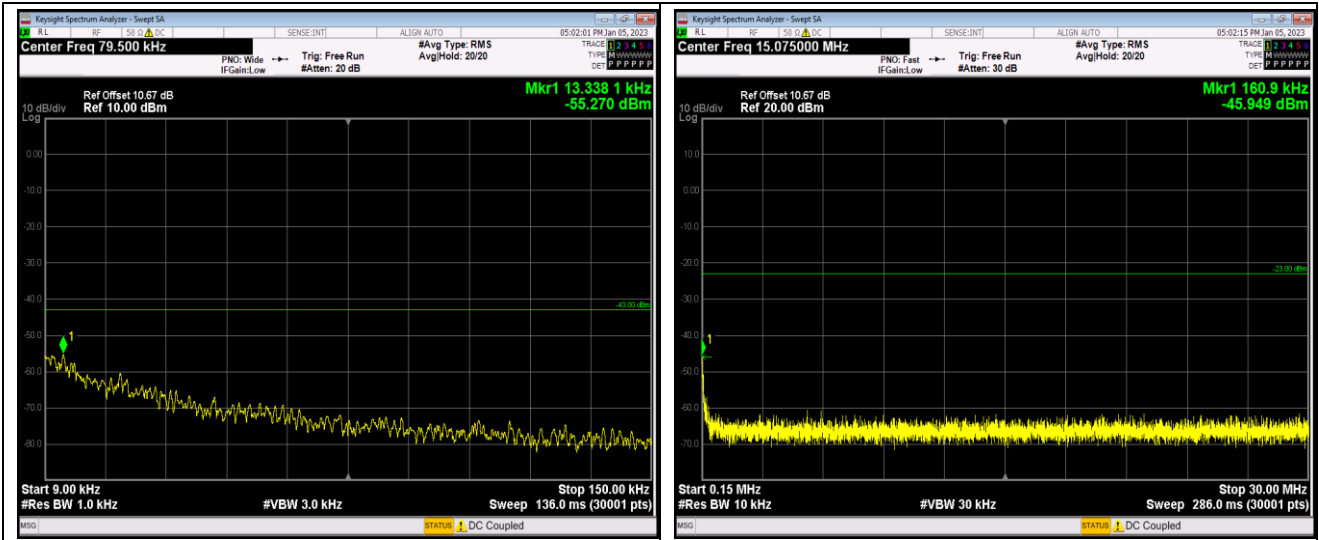
Test Result(WCDMA)

| Band | Channel | Frequency Range (Mhz) | Frequency (dBm) | Result (dBm) | Limit (dBm) | Verdict |
|-------|---------|-----------------------|-----------------|--------------|-------------|---------|
| Band2 | 9262 | 0.009~0.15MHz | 0.01 | -54.1 | -43 | PASS |
| Band2 | 9262 | 0.15~30MHz | 0.15 | -44.52 | -23 | PASS |
| Band2 | 9262 | 30~1000MHz | 885.06 | -40.47 | -13 | PASS |
| Band2 | 9262 | 1000~20000MHz | 19751.73 | -25.06 | -13 | PASS |
| Band2 | 9400 | 0.009~0.15MHz | 0.01 | -55.27 | -43 | PASS |
| Band2 | 9400 | 0.15~30MHz | 0.16 | -45.95 | -23 | PASS |
| Band2 | 9400 | 30~1000MHz | 484.41 | -39.72 | -13 | PASS |
| Band2 | 9400 | 1000~20000MHz | 19864.47 | -25.02 | -13 | PASS |
| Band2 | 9538 | 0.009~0.15MHz | 0.01 | -54.48 | -43 | PASS |
| Band2 | 9538 | 0.15~30MHz | 0.15 | -44.87 | -23 | PASS |
| Band2 | 9538 | 30~1000MHz | 824.56 | -39.15 | -13 | PASS |
| Band2 | 9538 | 1000~20000MHz | 19927.8 | -24.96 | -13 | PASS |
| Band4 | 1312 | 0.009~0.15MHz | 0.01 | -53.94 | -43 | PASS |
| Band4 | 1312 | 0.15~30MHz | 0.15 | -45.82 | -23 | PASS |
| Band4 | 1312 | 30~1000MHz | 825.11 | -40.36 | -13 | PASS |
| Band4 | 1312 | 1000~20000MHz | 19871.43 | -25.36 | -13 | PASS |
| Band4 | 1413 | 0.009~0.15MHz | 0.01 | -54.82 | -43 | PASS |
| Band4 | 1413 | 0.15~30MHz | 0.15 | -46.18 | -23 | PASS |
| Band4 | 1413 | 30~1000MHz | 858.25 | -40.25 | -13 | PASS |
| Band4 | 1413 | 1000~20000MHz | 19935.4 | -24.87 | -13 | PASS |
| Band4 | 1513 | 0.009~0.15MHz | 0.01 | -53.83 | -43 | PASS |
| Band4 | 1513 | 0.15~30MHz | 0.15 | -46.45 | -23 | PASS |
| Band4 | 1513 | 30~1000MHz | 834.68 | -40.18 | -13 | PASS |
| Band4 | 1513 | 1000~20000MHz | 19837.87 | -25.14 | -13 | PASS |
| Band5 | 4132 | 0.009~0.15MHz | 0.01 | -52.94 | -33 | PASS |
| Band5 | 4132 | 0.15~30MHz | 0.15 | -44 | -13 | PASS |
| Band5 | 4132 | 30~1000MHz | 993.44 | -49.18 | -13 | PASS |
| Band5 | 4132 | 1000~10000MHz | 5970.4 | -30.61 | -13 | PASS |
| Band5 | 4183 | 0.009~0.15MHz | 0.01 | -53.34 | -33 | PASS |
| Band5 | 4183 | 0.15~30MHz | 0.15 | -46.85 | -13 | PASS |
| Band5 | 4183 | 30~1000MHz | 950.66 | -49.97 | -13 | PASS |
| Band5 | 4183 | 1000~10000MHz | 3269.5 | -31.46 | -13 | PASS |
| Band5 | 4233 | 0.009~0.15MHz | 0.01 | -52.8 | -33 | PASS |
| Band5 | 4233 | 0.15~30MHz | 0.15 | -44.56 | -13 | PASS |
| Band5 | 4233 | 30~1000MHz | 960.23 | -49.37 | -13 | PASS |

| | | | | | | |
|-------|------|---------------|--------|-------|-----|------|
| Band5 | 4233 | 1000~10000MHz | 6067.3 | -31.1 | -13 | PASS |
|-------|------|---------------|--------|-------|-----|------|

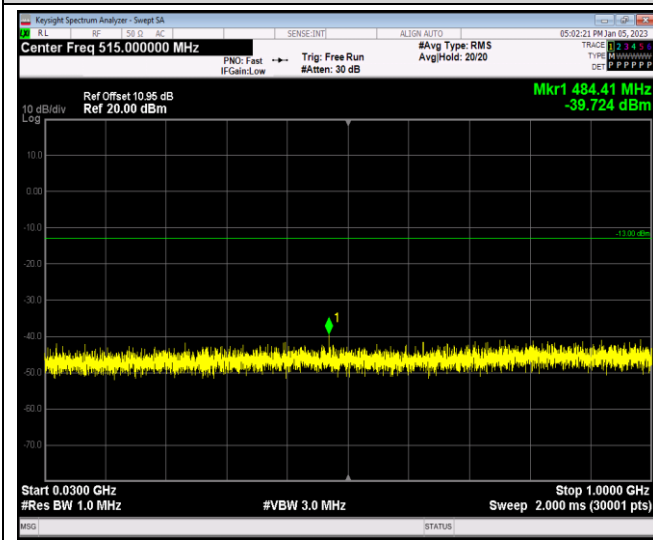
Test Graphs(WCDMA)



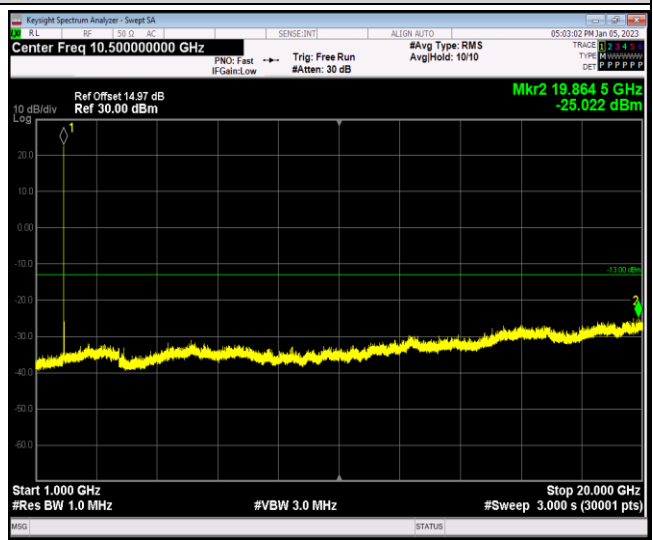


Band2-9400-30~1000MHz

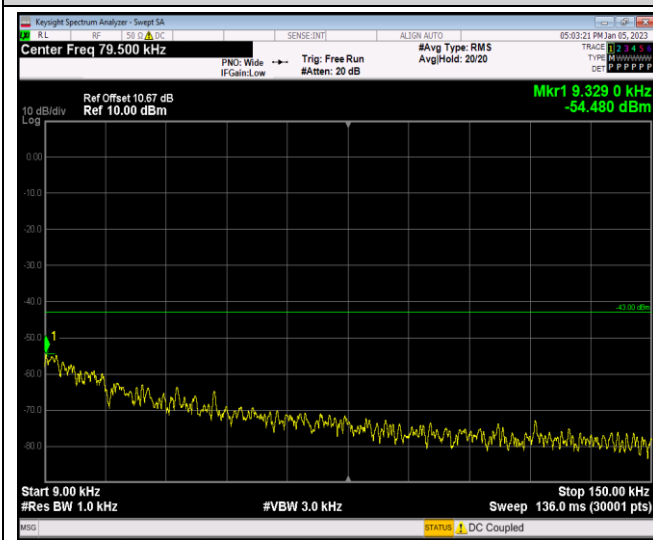
Band2-9400-1000~20000MHz



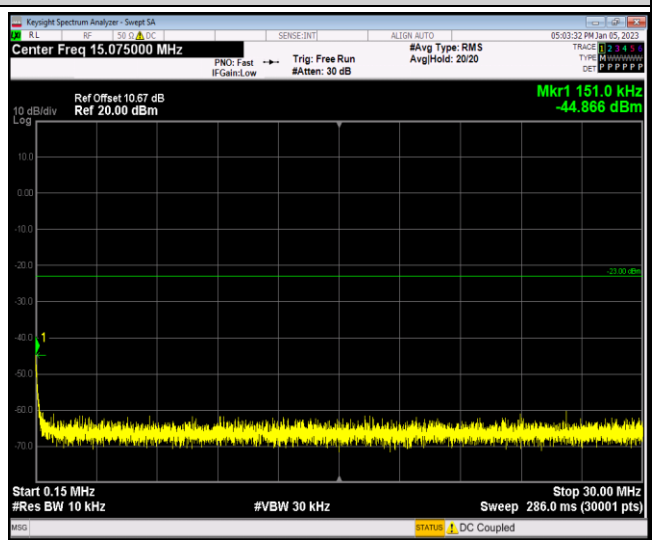
Band2-9538-0.009~0.15MHz



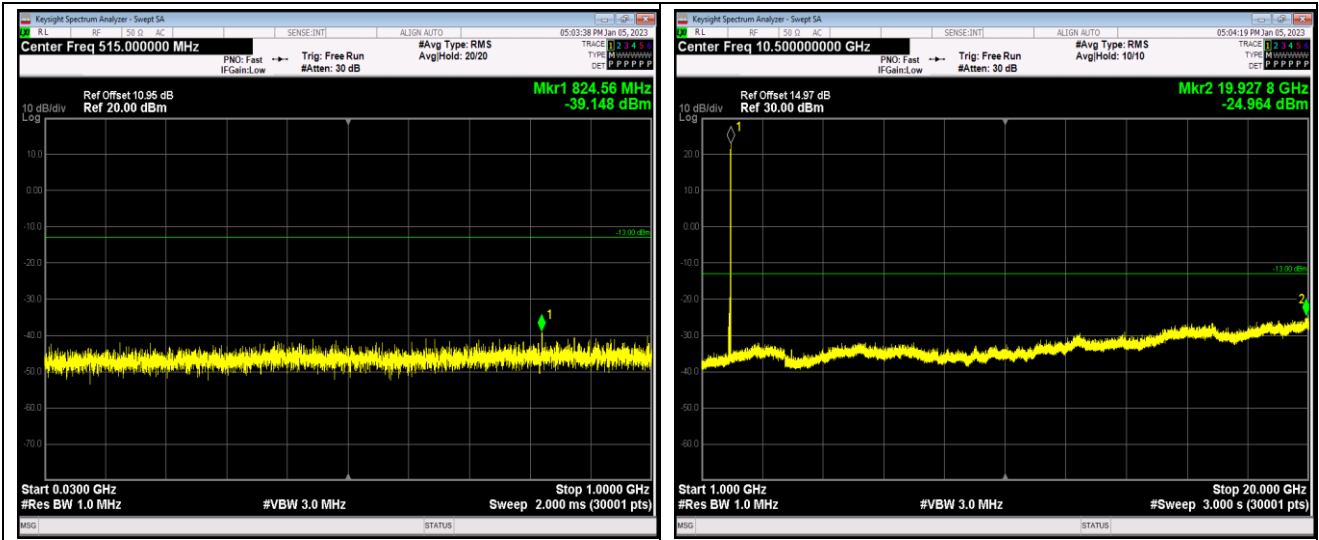
Band2-9538-0.15~30MHz



Band2-9538-30~1000MHz

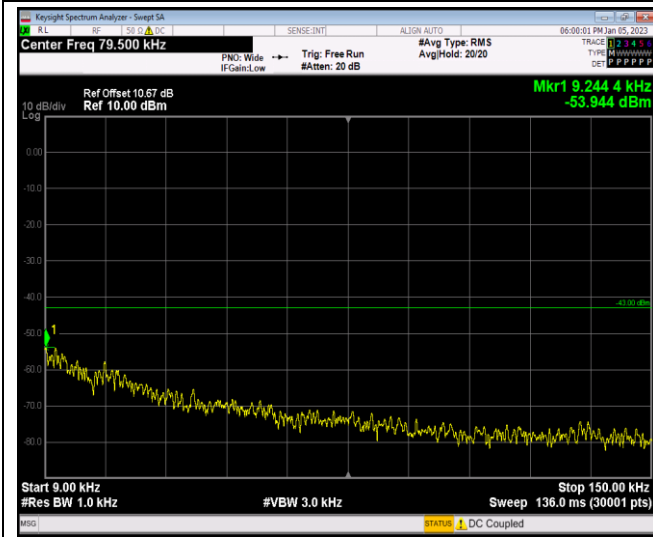


Band2-9538-1000~20000MHz

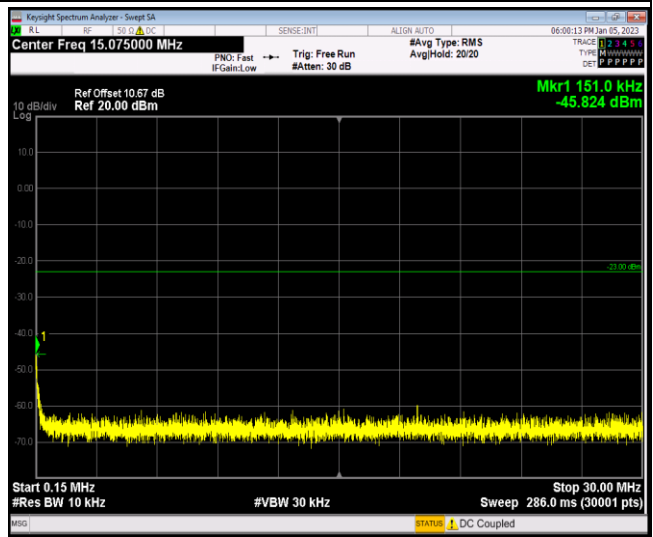


Band4-1312-0.009~0.15MHz

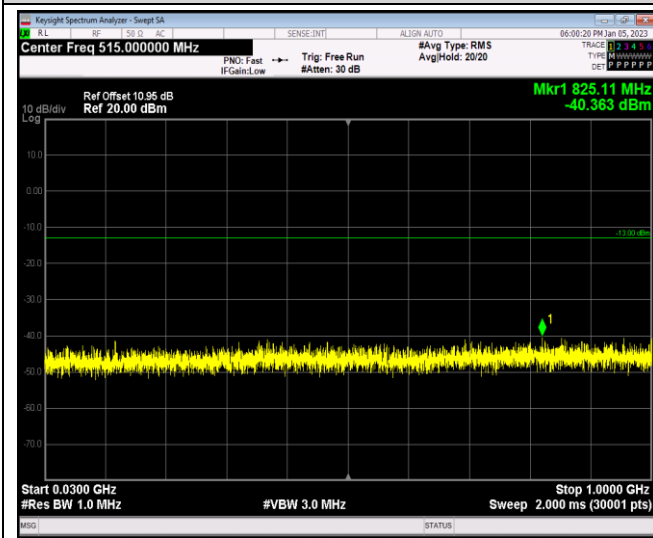
Band4-1312-0.15~30MHz



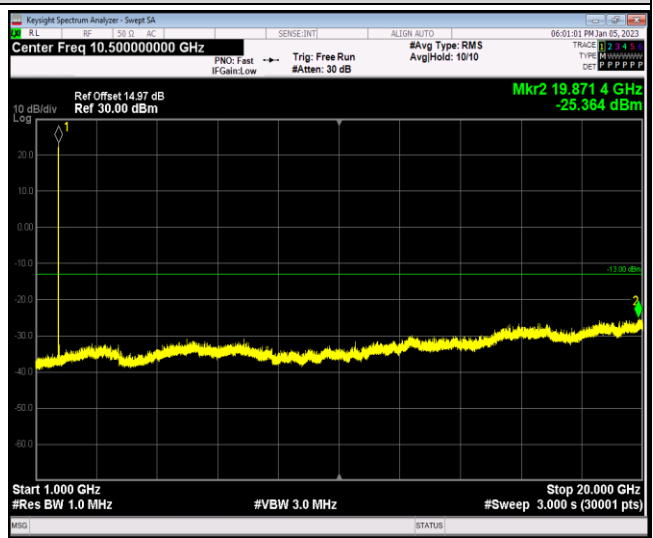
Band4-1312-30~1000MHz



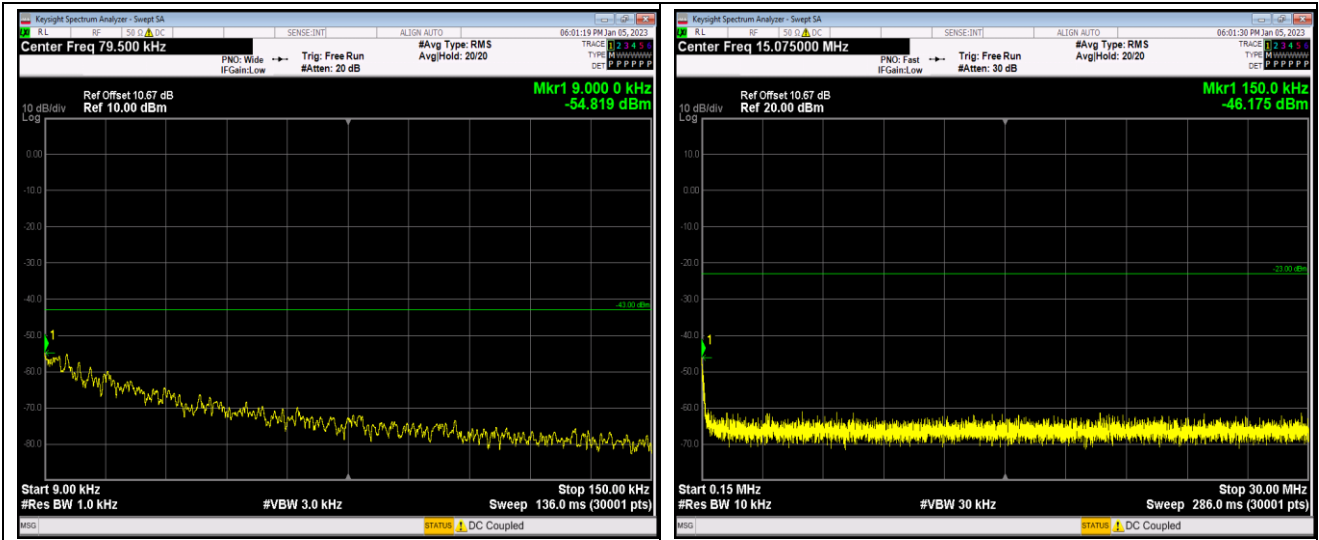
Band4-1312-1000~20000MHz



Band4-1413-0.009~0.15MHz

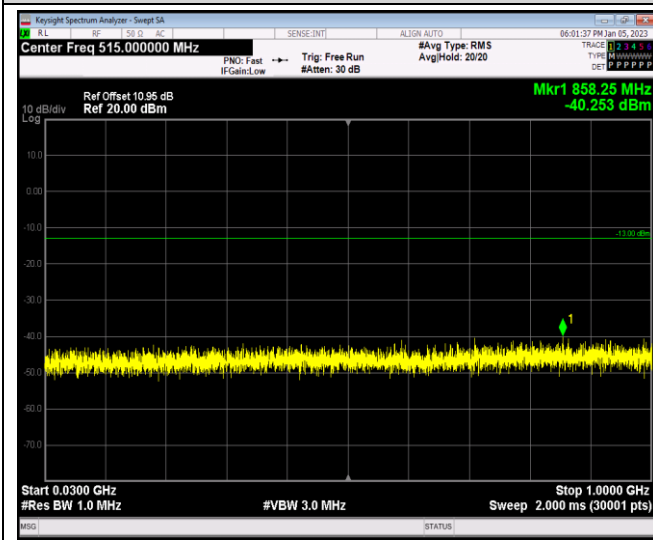


Band4-1413-0.15~30MHz

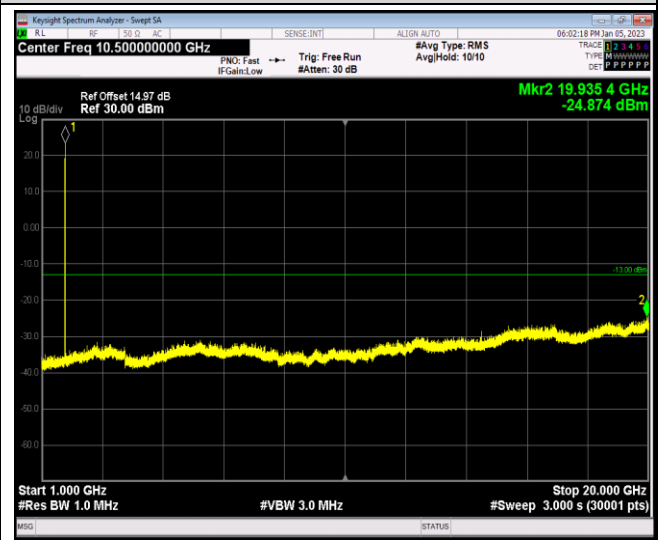


Band4-1413-30~1000MHz

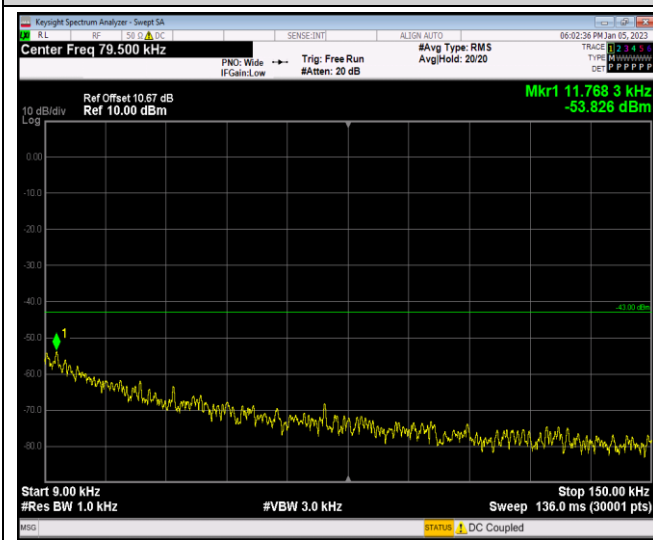
Band4-1413-1000~20000MHz



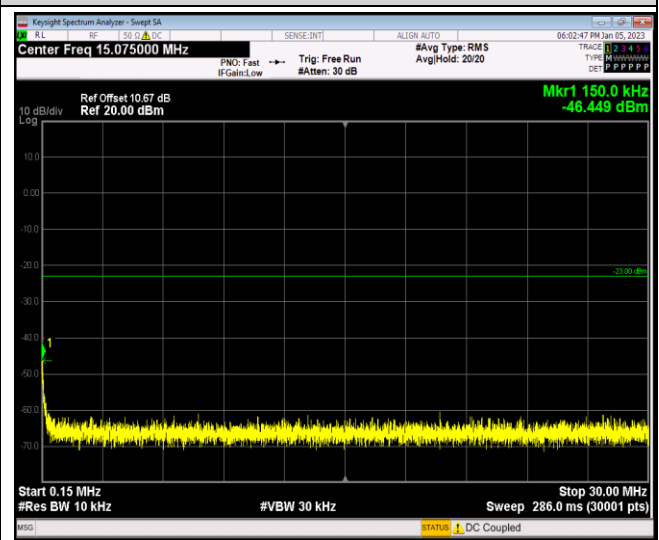
Band4-1513-0.009~0.15MHz



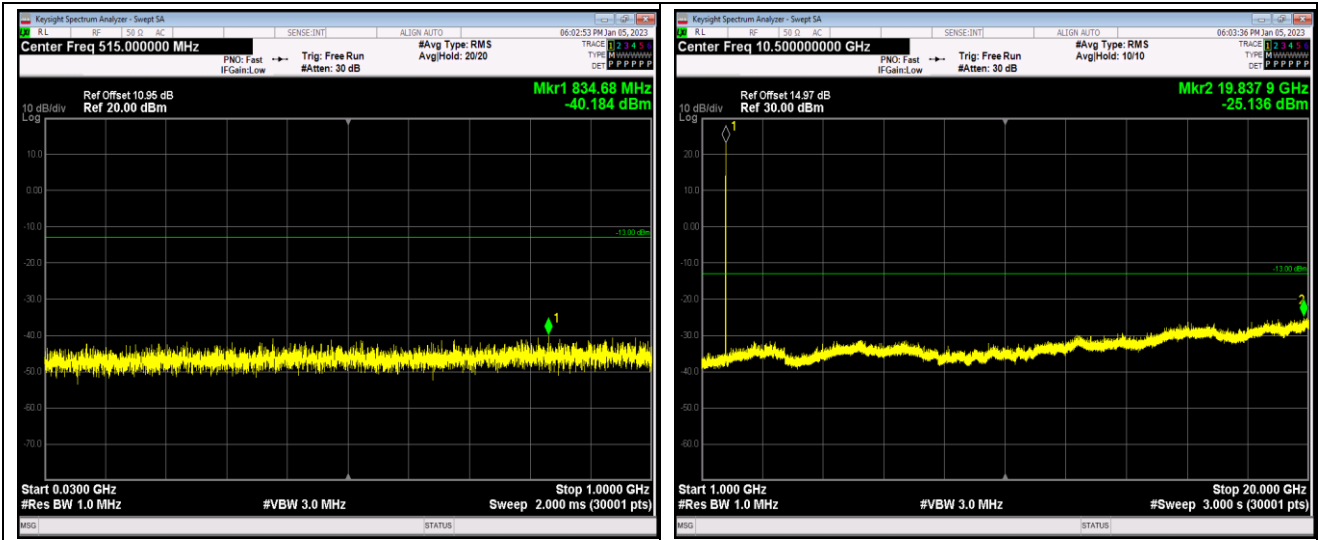
Band4-1513-0.15~30MHz



Band4-1513-30~1000MHz

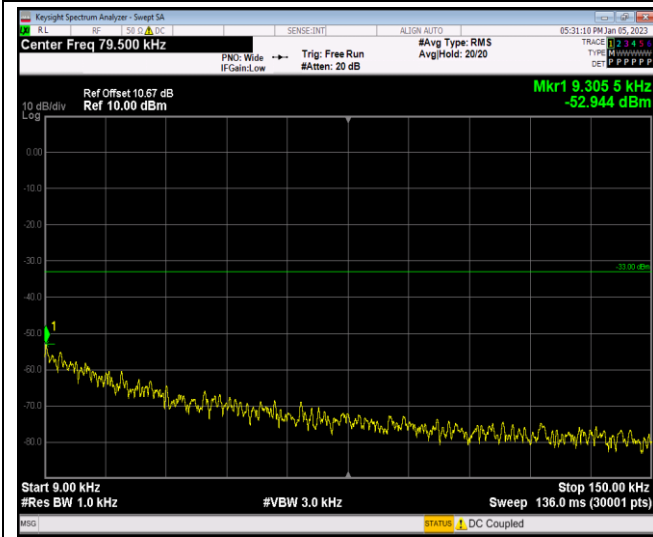


Band4-1513-1000~20000MHz

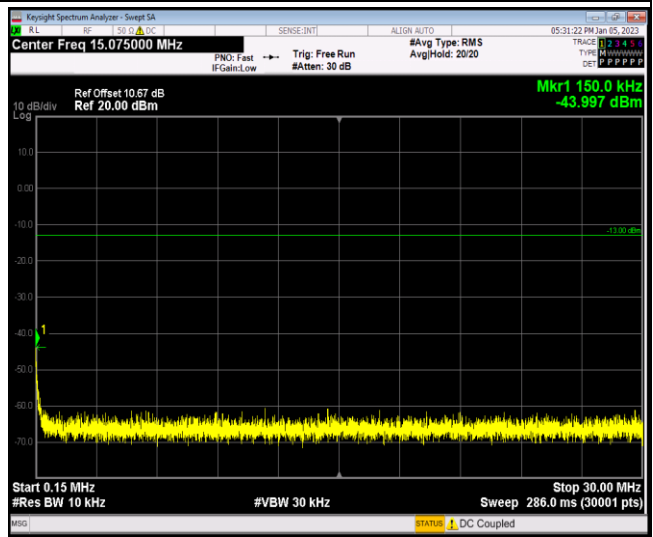


Band5-4132-0.009~0.15MHz

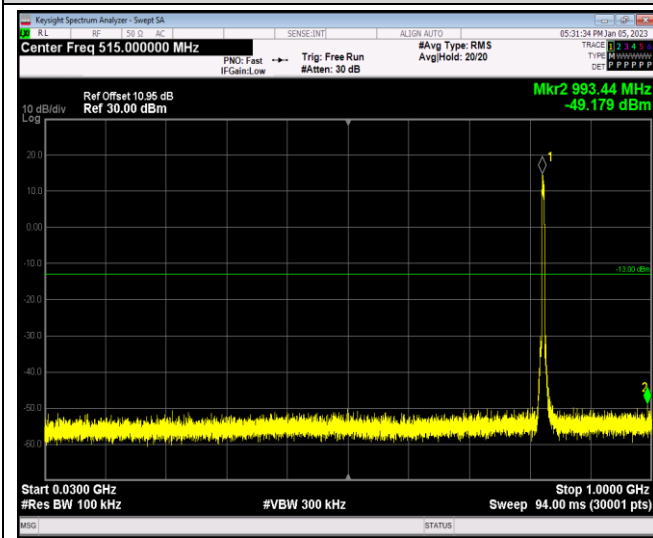
Band5-4132-0.15~30MHz



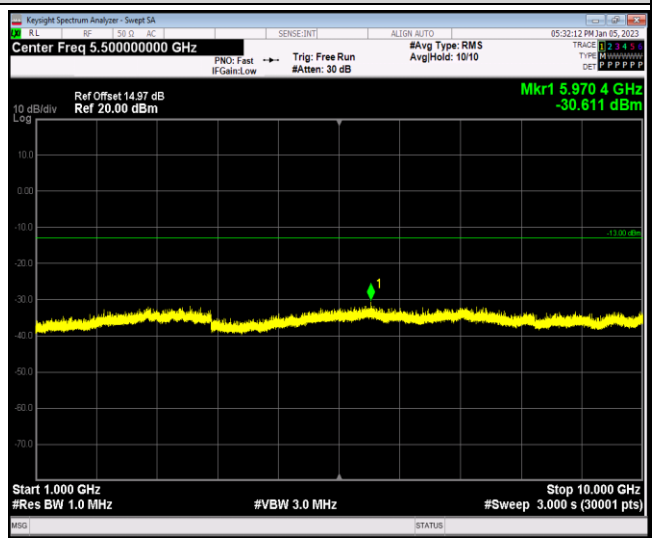
Band5-4132-30~1000MHz



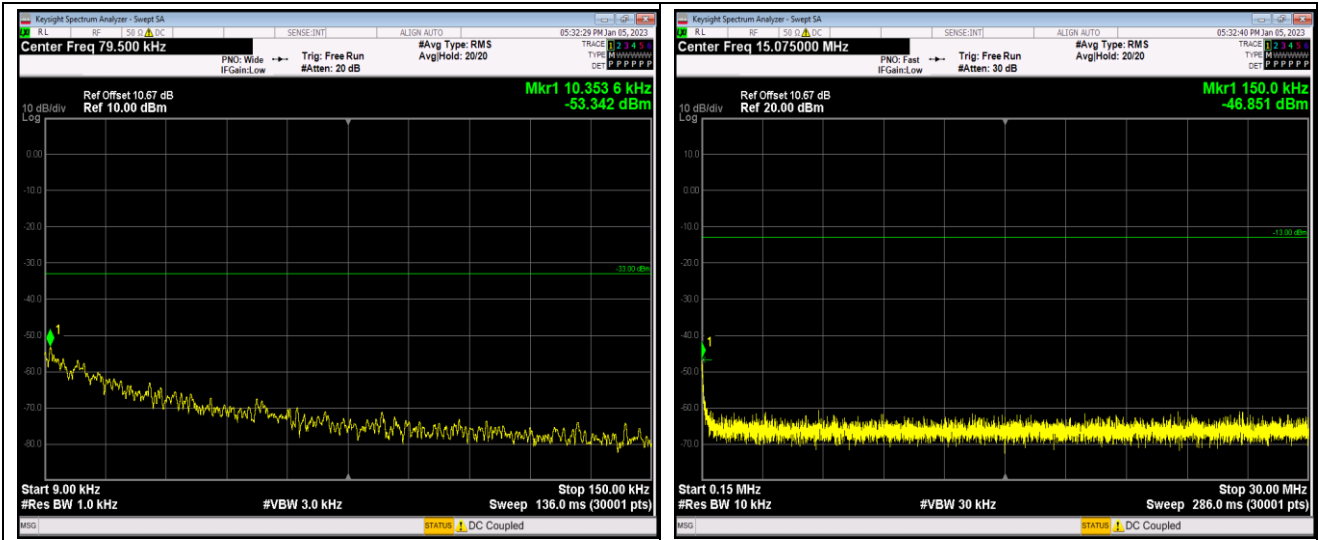
Band5-4132-1000~10000MHz



Band5-4183-0.009~0.15MHz

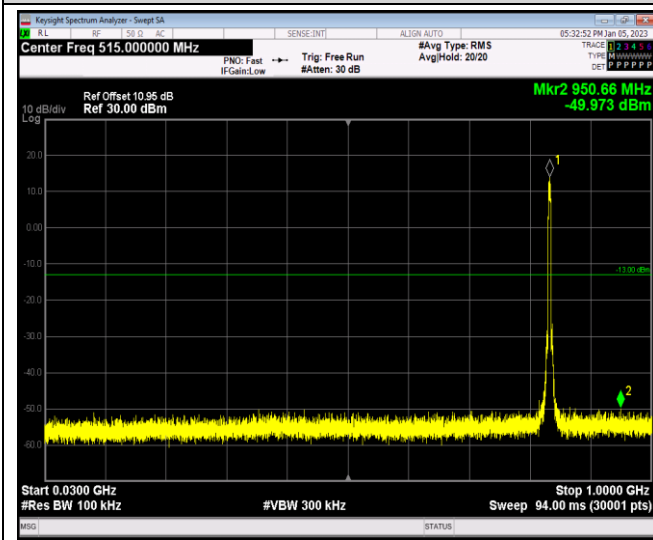


Band5-4183-0.15~30MHz

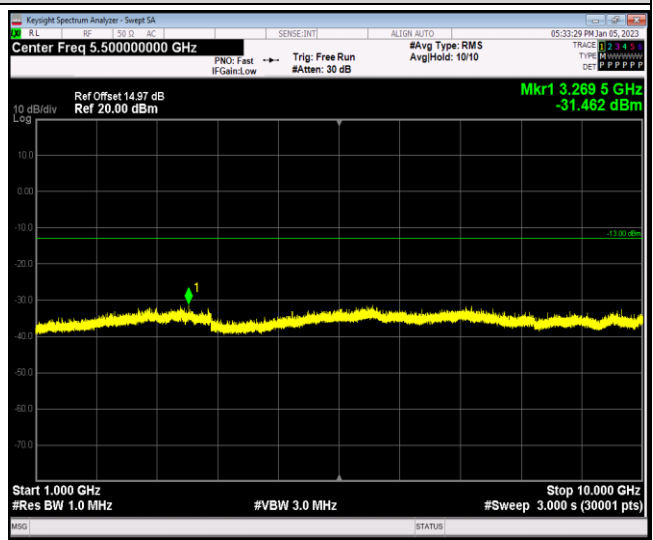


Band5-4183-30~1000MHz

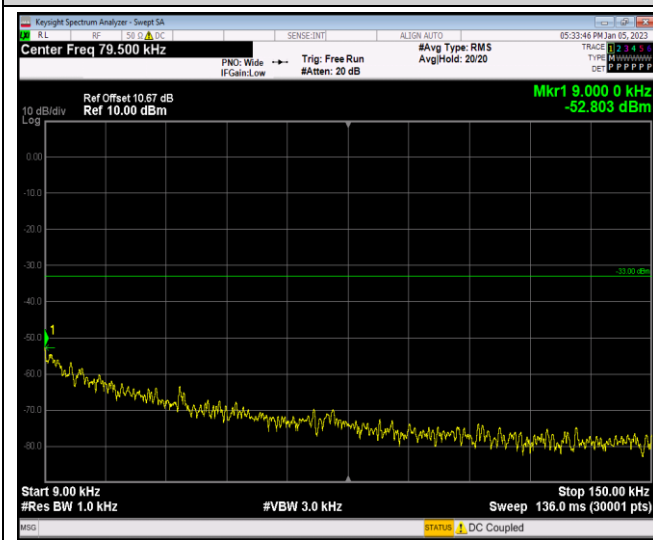
Band5-4183-1000~10000MHz



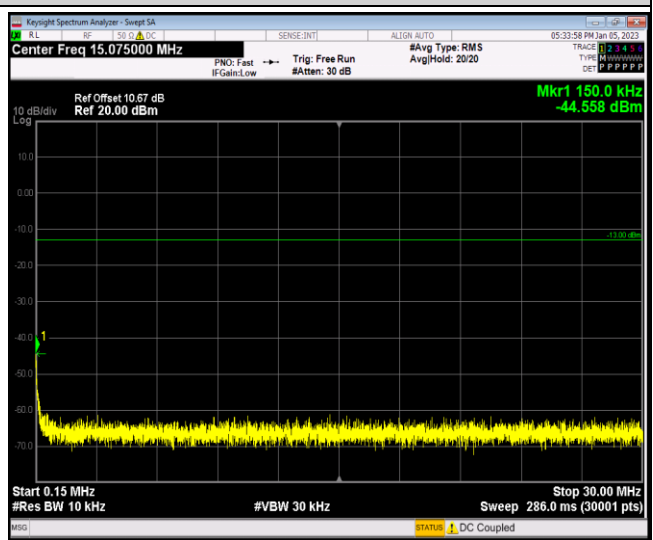
Band5-4233-0.009~0.15MHz



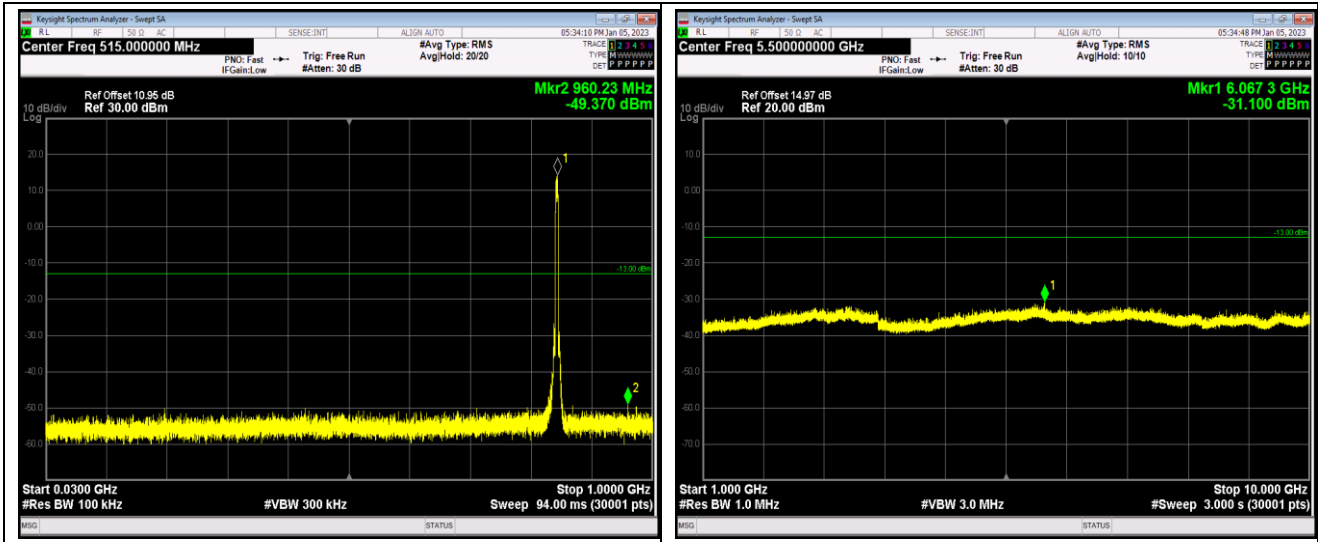
Band5-4233-0.15~30MHz



Band5-4233-30~1000MHz



Band5-4233-1000~10000MHz



AppendixF:Frequency Stability

Test Result

| Reference Frequency: WCDMA BAND 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 | -8.00 | -0.009563 | ±2.5 | Pass |
| | -20 | -12.76 | -0.015252 | | |
| | -10 | -9.76 | -0.011666 | | |
| | 0 | -9.00 | -0.010758 | | |
| | 10 | -6.68 | -0.007985 | | |
| | 20 | -10.75 | -0.012850 | | |
| | 30 | -12.26 | -0.014655 | | |
| | 40 | -14.02 | -0.016758 | | |
| | 50 | -9.72 | -0.011618 | | |
| Voltage | | | | | |
| Temperature (°C) | Power supplied (Vdc) | Frequency error | | Limit (ppm) | Result |
| | | Hz | ppm | | |
| 25 | 3.40 | -11.69 | -0.013973 | ±2.5 | Pass |
| | 3.87 | -12.84 | -0.015348 | | |
| | 4.45 | -13.15 | -0.015718 | | |
| 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 | -12.25 | -0.006516 | Within authorized band for BAND IV | Pass |
| | -20 | -13.62 | -0.007861 | | |
| | -10 | -12.45 | -0.007186 | | |
| | 0 | -11.11 | -0.006412 | | |
| | 10 | -11.01 | -0.006355 | | |
| | 20 | -15.06 | -0.008692 | | |
| | 30 | -15.08 | -0.008704 | | |
| | 40 | -14.58 | -0.008415 | | |
| | 50 | -10.78 | -0.006222 | | |
| Voltage | | | | | |
| Temperature (°C) | Power supplied (Vdc) | Frequency error | | Limit (ppm) | Result |
| | | Hz | ppm | | |
| 25 | 3.40 | -11.74 | -0.006776 | Within authorized band for BAND IV | Pass |
| | 3.87 | -13.67 | -0.007890 | | |
| | 4.45 | -14.53 | -0.008386 | | |
| 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 | | |
| 3.87 | -30 | -9.77 | -0.005197 | Within authorized band for BAND II | Pass |
| | -20 | -12.62 | -0.006713 | | |
| | -10 | -13.50 | -0.007181 | | |
| | 0 | -11.64 | -0.006191 | | |
| | 10 | -13.50 | -0.007181 | | |
| | 20 | -14.71 | -0.007824 | | |
| | 30 | -10.34 | -0.005500 | | |
| | 40 | -12.97 | -0.006899 | | |
| | 50 | -12.55 | -0.007464 | | |
| Voltage | | | | | |
| Temperature (°C) | Power supplied (Vdc) | Frequency error | | Limit (ppm) | Result |
| | | Hz | ppm | | |
| 25 | 3.40 | -13.85 | -0.007367 | Within authorized band for BAND II | Pass |
| | 3.87 | -12.39 | -0.006590 | | |
| | 4.45 | -14.83 | -0.007888 | | |
| 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

