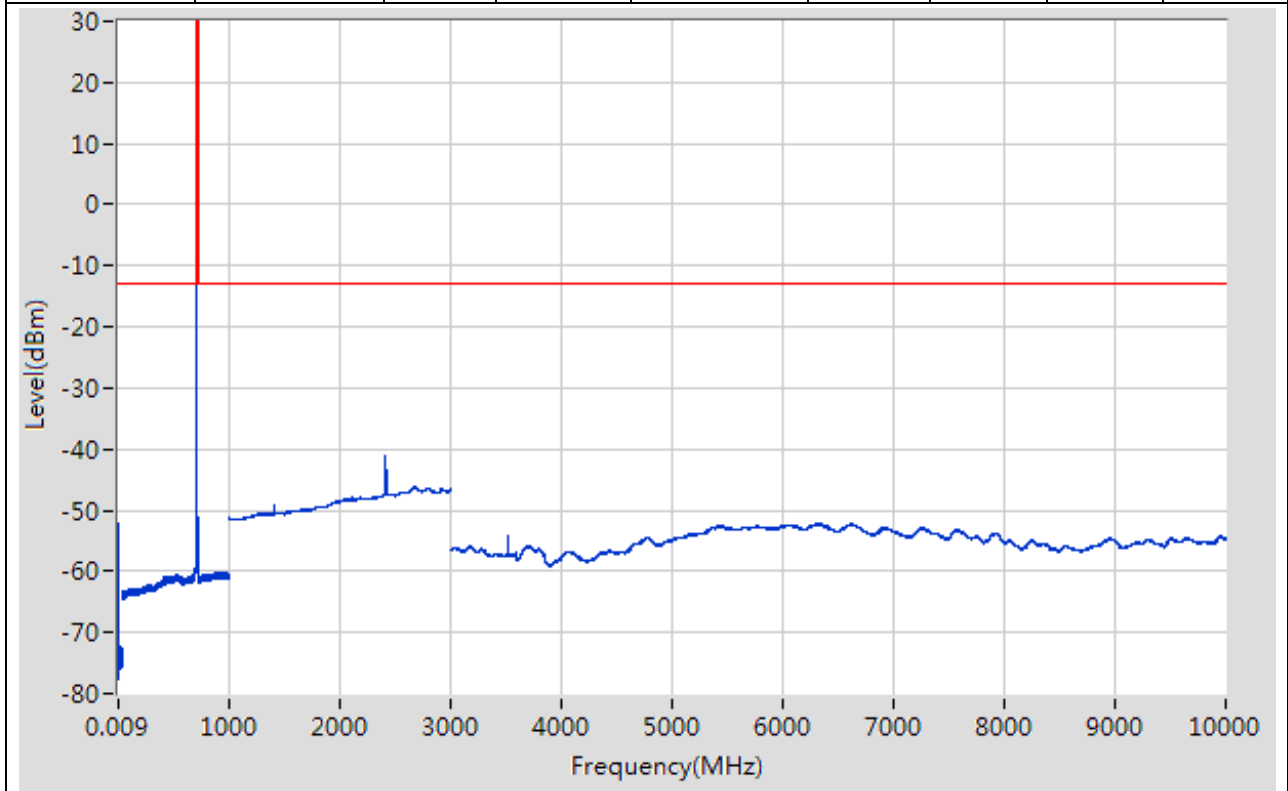# Annex C. LTE Transmitter Spurious Emissions
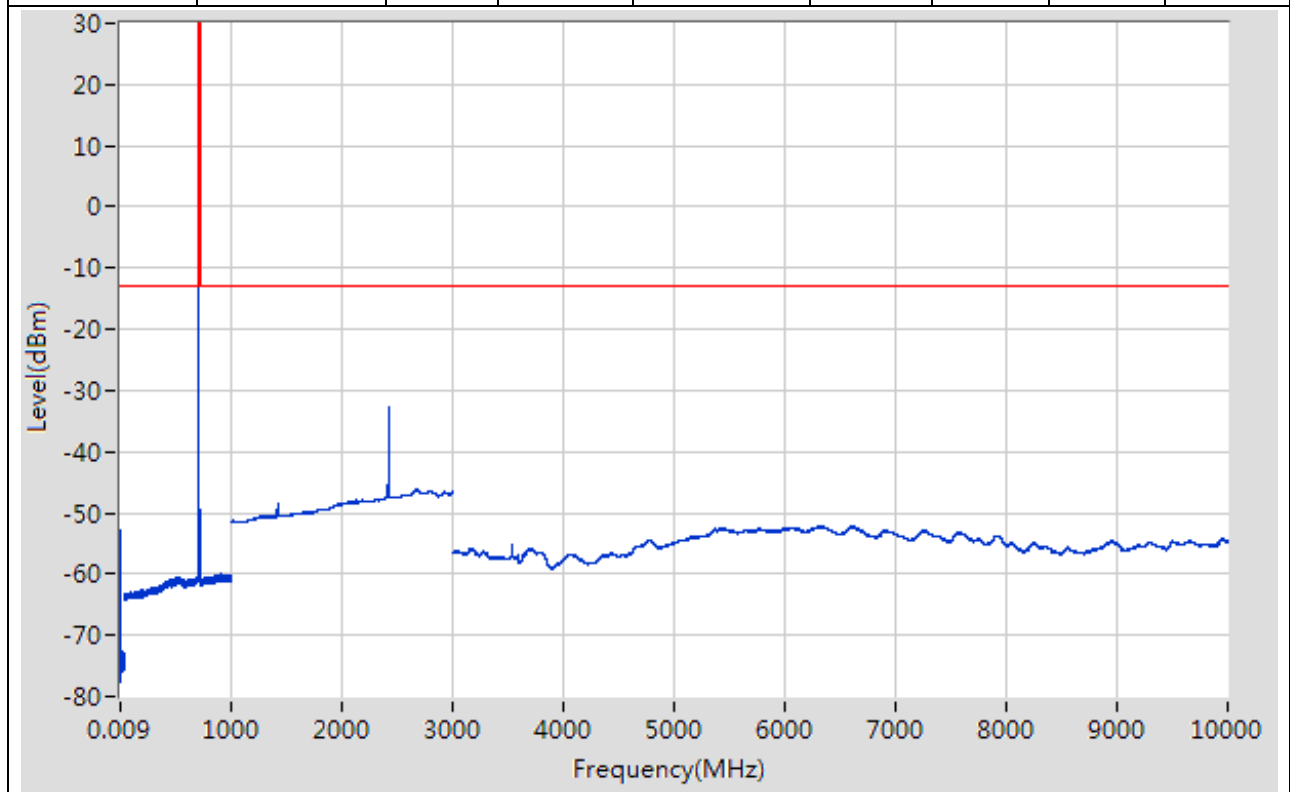
# 1. LTE_Band17

## 1.1. LTE Transmitter Spurious Emissions(NTNV)(Subtest:1, Channel:23755, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:LOW)

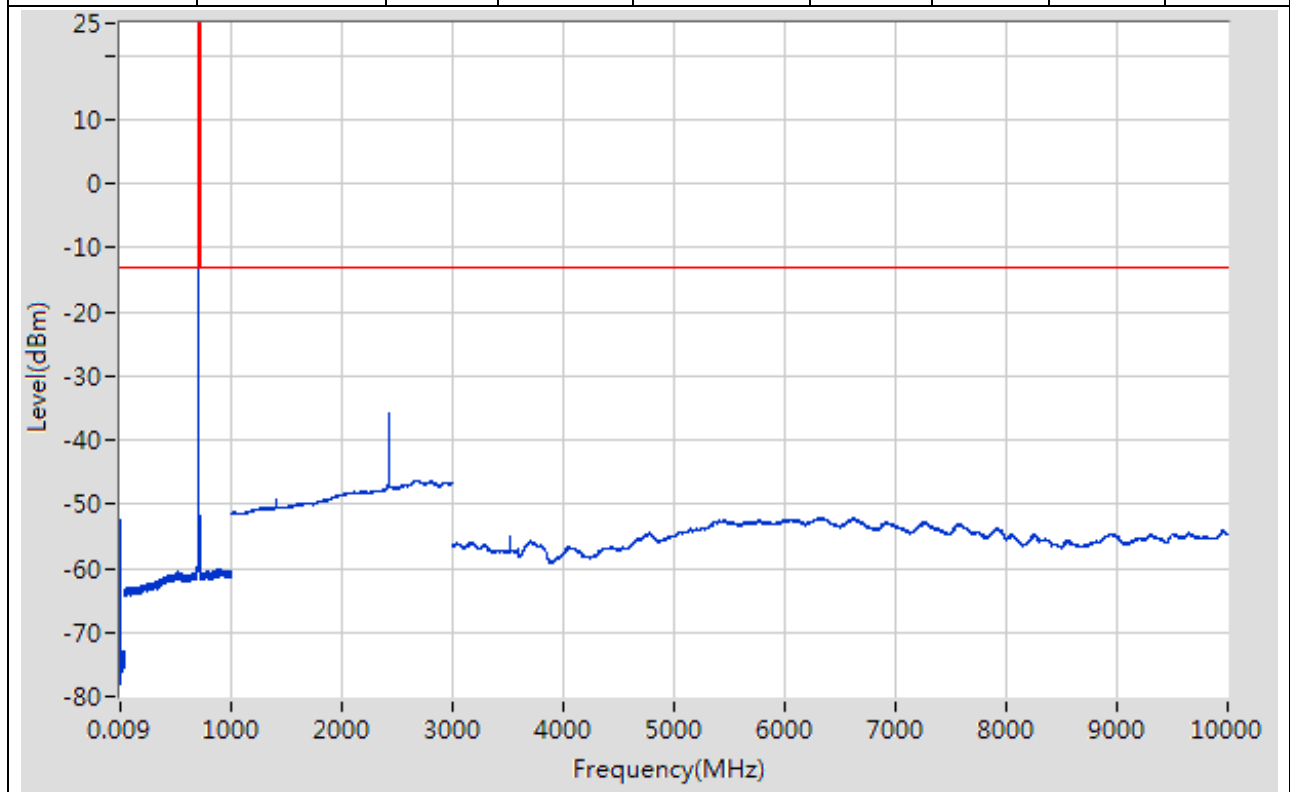| Start Frequency (MHz) | Stop Frequency (MHz) | RBW (MHz) | Detector | Frequency (MHz) | Power (dBm) | Limit (dBm) | Verdict | Sweep Point |
|---|---|---|---|---|---|---|---|---|
| 0.009 | 0.15 | 0.001 | RMS | 0.011 | -54.28 | -13 | Pass | 601 |
| 0.15 | 30 | 0.01 | RMS | 0.15 | -52.05 | -13 | Pass | 2985 |
| 30 | 695 | 0.1 | RMS | 694.9 | -59.6 | -13 | Pass | 6650 |
| 695 | 725 | 0.1 | RMS | 704.35 | 20.34 | 60 | Pass | 601 |
| 725 | 1000 | 0.1 | RMS | 891.16 | -60.09 | -13 | Pass | 2750 |
| 1000 | 3000 | 1 | RMS | 2411.706 | -40.94 | -13 | Pass | 2000 |
| 3000 | 10000 | 1 | RMS | 6316.474 | -52.13 | -13 | Pass | 7000 |

## 1.2. LTE Transmitter Spurious Emissions(NTNV)(Subtest:2, Channel:23755, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

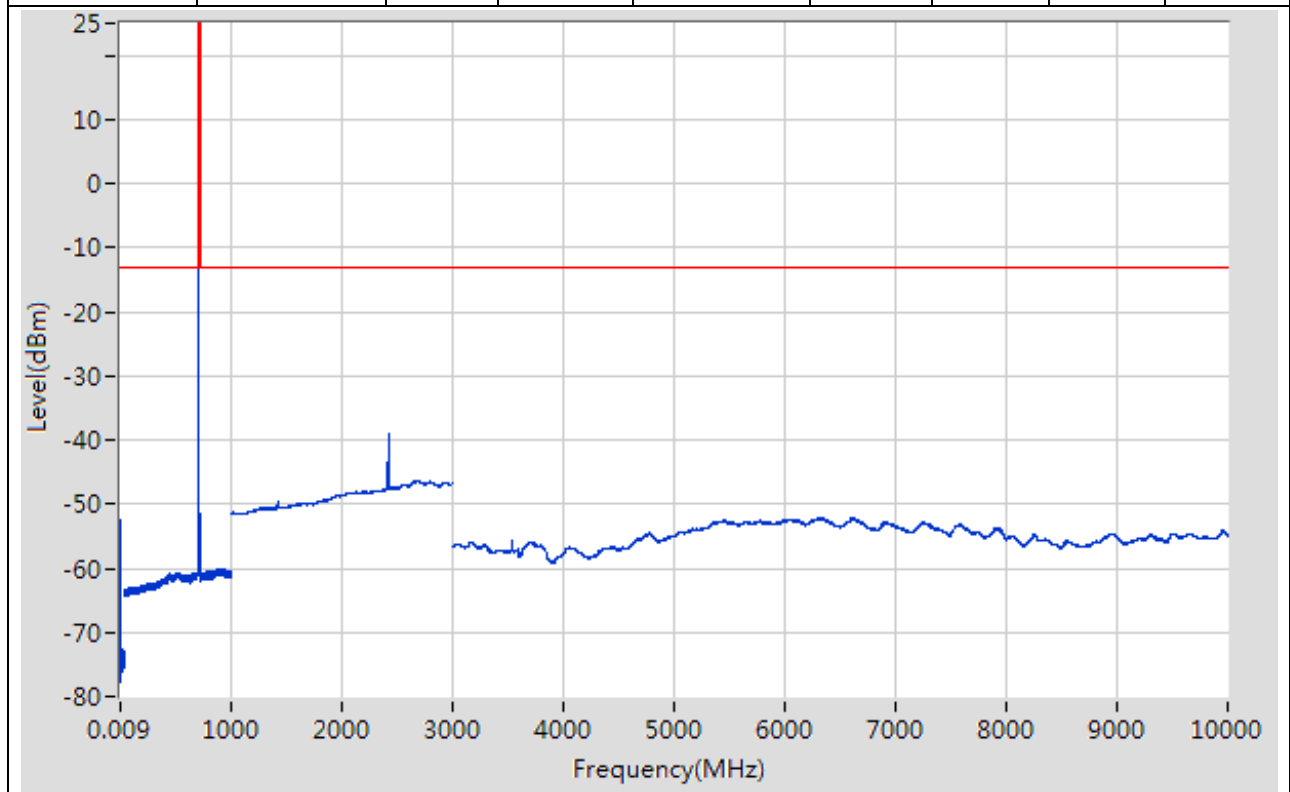| Start Frequency (MHz) | Stop Frequency (MHz) | RBW (MHz) | Detector | Frequency (MHz) | Power (dBm) | Limit (dBm) | Verdict | Sweep Point |
|---|---|---|---|---|---|---|---|---|
| 0.009 | 0.15 | 0.001 | RMS | 0.009 | -53.2 | -13 | Pass | 601 |
| 0.15 | 30 | 0.01 | RMS | 0.15 | -52.96 | -13 | Pass | 2985 |
| 30 | 695 | 0.1 | RMS | 694.6 | -60.47 | -13 | Pass | 6650 |
| 695 | 725 | 0.1 | RMS | 708.65 | 20.44 | 60 | Pass | 601 |
| 725 | 1000 | 0.1 | RMS | 898.963 | -60.01 | -13 | Pass | 2750 |
| 1000 | 3000 | 1 | RMS | 2418.709 | -32.84 | -13 | Pass | 2000 |
| 3000 | 10000 | 1 | RMS | 6321.474 | -52.12 | -13 | Pass | 7000 |

## 1.3. LTE Transmitter Spurious Emissions(NTNV)(Subtest:3, Channel:23755, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:LOW)

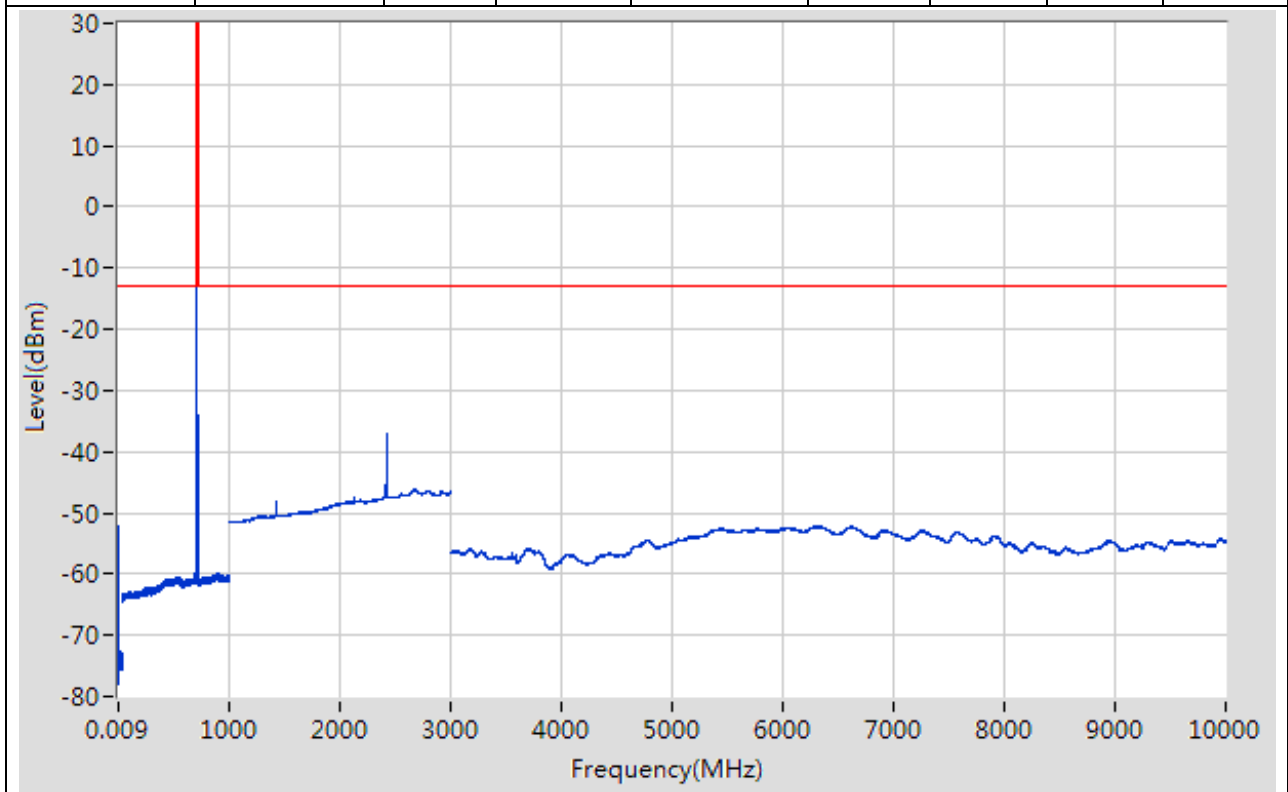| Start Frequency (MHz) | Stop Frequency (MHz) | RBW (MHz) | Detector | Frequency (MHz) | Power (dBm) | Limit (dBm) | Verdict | Sweep Point |
|---|---|---|---|---|---|---|---|---|
| 0.009 | 0.15 | 0.001 | RMS | 0.01 | -53.96 | -13 | Pass | 601 |
| 0.15 | 30 | 0.01 | RMS | 0.15 | -52.58 | -13 | Pass | 2985 |
| 30 | 695 | 0.1 | RMS | 695 | -59.88 | -13 | Pass | 6650 |
| 695 | 725 | 0.1 | RMS | 704.35 | 19.75 | 60 | Pass | 601 |
| 725 | 1000 | 0.1 | RMS | 867.752 | -60.21 | -13 | Pass | 2750 |
| 1000 | 3000 | 1 | RMS | 2418.709 | -35.89 | -13 | Pass | 2000 |
| 3000 | 10000 | 1 | RMS | 6302.472 | -52.18 | -13 | Pass | 7000 |

## 1.4. LTE Transmitter Spurious Emissions(NTNV)(Subtest:4, Channel:23755, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

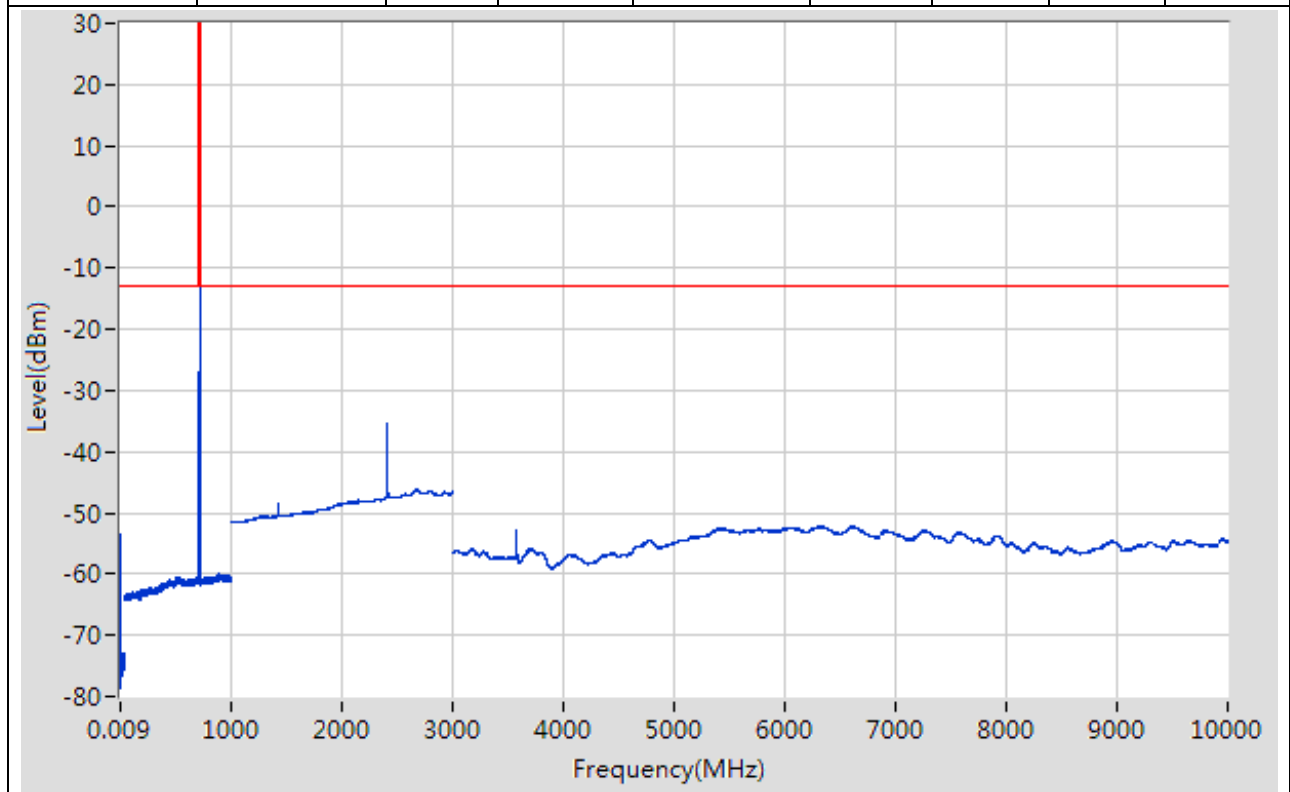| Start Frequency (MHz) | Stop Frequency (MHz) | RBW (MHz) | Detector | Frequency (MHz) | Power (dBm) | Limit (dBm) | Verdict | Sweep Point |
|---|---|---|---|---|---|---|---|---|
| 0.009 | 0.15 | 0.001 | RMS | 0.011 | -53.81 | -13 | Pass | 601 |
| 0.15 | 30 | 0.01 | RMS | 0.15 | -52.35 | -13 | Pass | 2985 |
| 30 | 695 | 0.1 | RMS | 694.8 | -60.44 | -13 | Pass | 6650 |
| 695 | 725 | 0.1 | RMS | 708.65 | 19.08 | 60 | Pass | 601 |
| 725 | 1000 | 0.1 | RMS | 882.957 | -60.12 | -13 | Pass | 2750 |
| 1000 | 3000 | 1 | RMS | 2416.708 | -39.03 | -13 | Pass | 2000 |
| 3000 | 10000 | 1 | RMS | 6330.476 | -52.22 | -13 | Pass | 7000 |

## 1.5. LTE Transmitter Spurious Emissions(NTNV)(Subtest:11, Channel:23825, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:LOW)

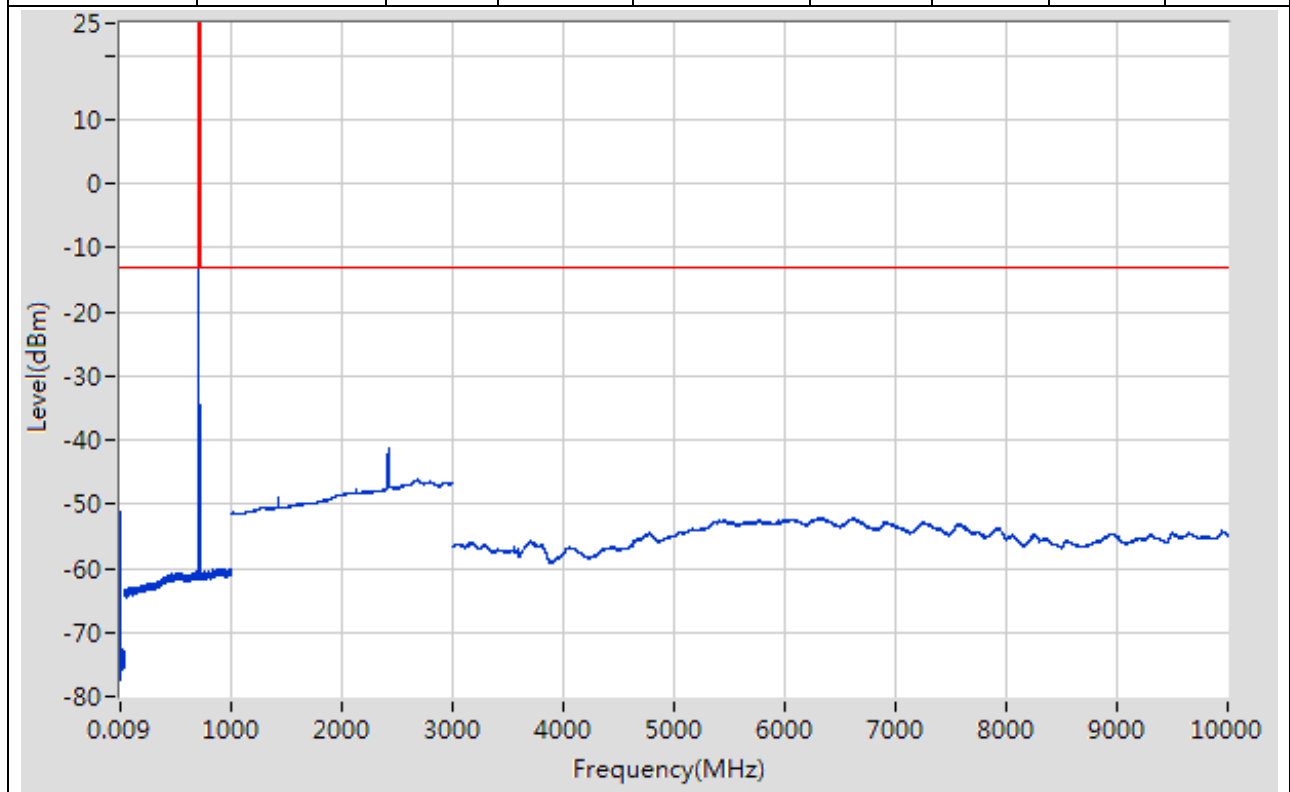| Start Frequency (MHz) | Stop Frequency (MHz) | RBW (MHz) | Detector | Frequency (MHz) | Power (dBm) | Limit (dBm) | Verdict | Sweep Point |
|---|---|---|---|---|---|---|---|---|
| 0.009 | 0.15 | 0.001 | RMS | 0.01 | -53.68 | -13 | Pass | 601 |
| 0.15 | 30 | 0.01 | RMS | 0.15 | -52.08 | -13 | Pass | 2985 |
| 30 | 695 | 0.1 | RMS | 692.2 | -59.92 | -13 | Pass | 6650 |
| 695 | 725 | 0.1 | RMS | 711.35 | 21.06 | 60 | Pass | 601 |
| 725 | 1000 | 0.1 | RMS | 883.258 | -59.96 | -13 | Pass | 2750 |
| 1000 | 3000 | 1 | RMS | 2419.71 | -36.92 | -13 | Pass | 2000 |
| 3000 | 10000 | 1 | RMS | 6632.519 | -52.21 | -13 | Pass | 7000 |

## 1.6. LTE Transmitter Spurious Emissions(NTNV)(Subtest:12, Channel:23825, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

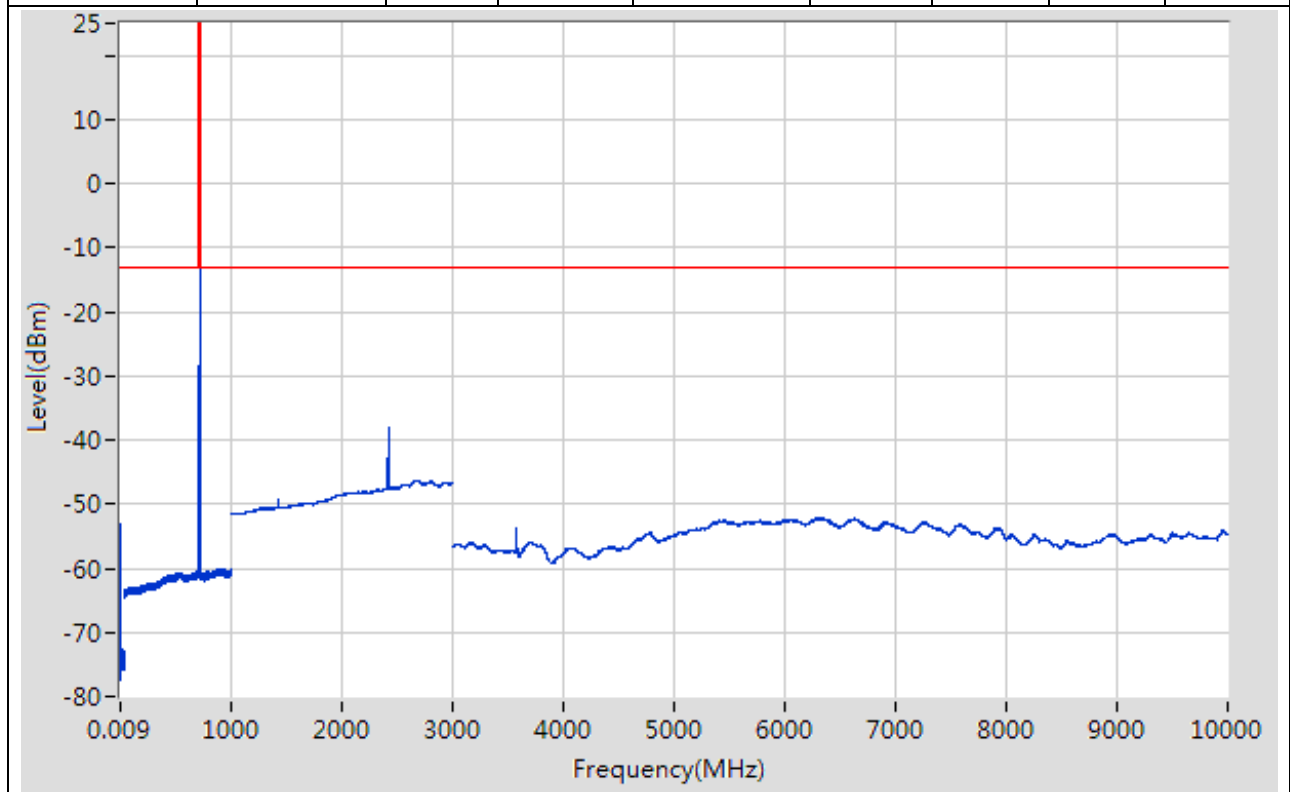| Start Frequency (MHz) | Stop Frequency (MHz) | RBW (MHz) | Detector | Frequency (MHz) | Power (dBm) | Limit (dBm) | Verdict | Sweep Point |
|---|---|---|---|---|---|---|---|---|
| 0.009 | 0.15 | 0.001 | RMS | 0.013 | -54.71 | -13 | Pass | 601 |
| 0.15 | 30 | 0.01 | RMS | 0.15 | -53.54 | -13 | Pass | 2985 |
| 30 | 695 | 0.1 | RMS | 694.1 | -60.55 | -13 | Pass | 6650 |
| 695 | 725 | 0.1 | RMS | 715.65 | 20.74 | 60 | Pass | 601 |
| 725 | 1000 | 0.1 | RMS | 890.56 | -59.99 | -13 | Pass | 2750 |
| 1000 | 3000 | 1 | RMS | 2414.707 | -35.51 | -13 | Pass | 2000 |
| 3000 | 10000 | 1 | RMS | 6325.475 | -52.19 | -13 | Pass | 7000 |

## 1.7. LTE Transmitter Spurious Emissions(NTNV)(Subtest:13, Channel:23825, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:LOW)

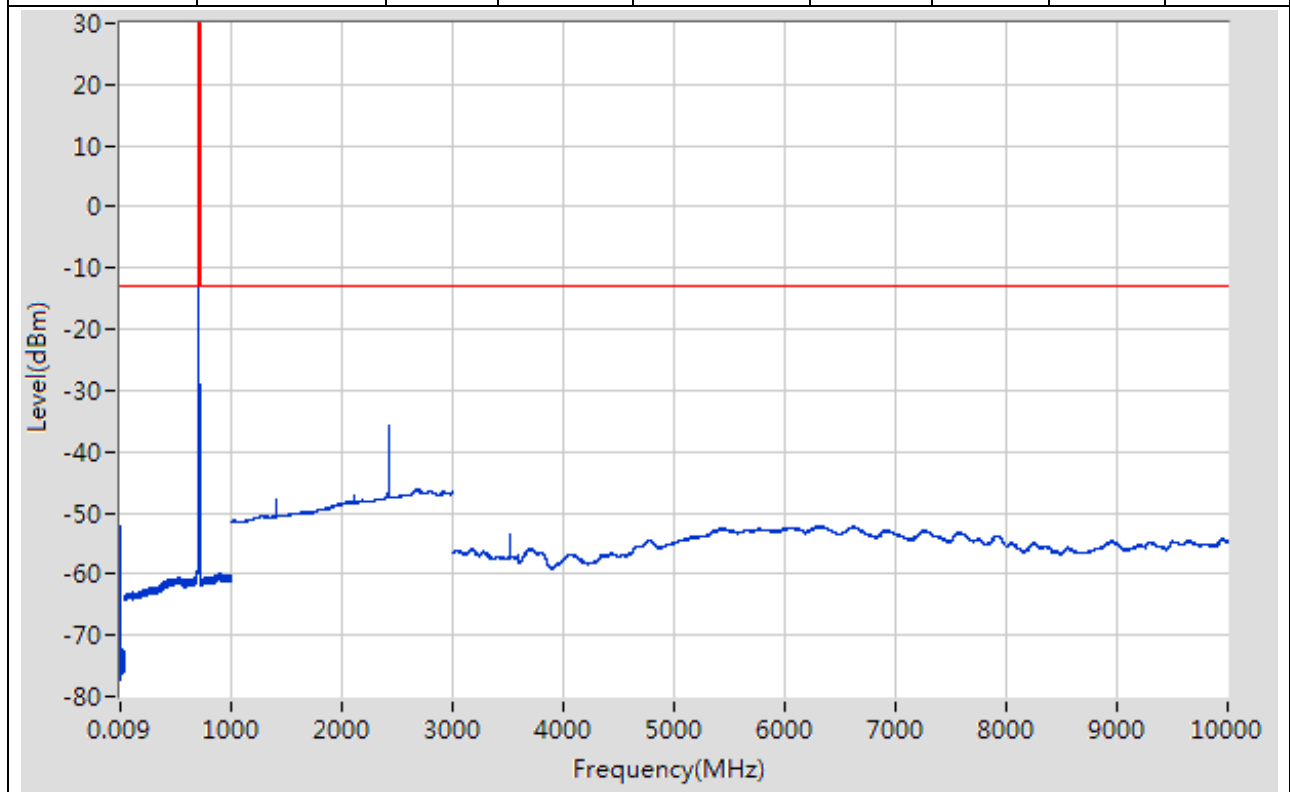| Start Frequency (MHz) | Stop Frequency (MHz) | RBW (MHz) | Detector | Frequency (MHz) | Power (dBm) | Limit (dBm) | Verdict | Sweep Point |
|---|---|---|---|---|---|---|---|---|
| 0.009 | 0.15 | 0.001 | RMS | 0.009 | -54.17 | -13 | Pass | 601 |
| 0.15 | 30 | 0.01 | RMS | 0.15 | -51.1 | -13 | Pass | 2985 |
| 30 | 695 | 0.1 | RMS | 692.2 | -60.34 | -13 | Pass | 6650 |
| 695 | 725 | 0.1 | RMS | 711.35 | 19.94 | 60 | Pass | 601 |
| 725 | 1000 | 0.1 | RMS | 914.569 | -60.02 | -13 | Pass | 2750 |
| 1000 | 3000 | 1 | RMS | 2421.711 | -41.19 | -13 | Pass | 2000 |
| 3000 | 10000 | 1 | RMS | 6322.475 | -52.23 | -13 | Pass | 7000 |

## 1.8. LTE Transmitter Spurious Emissions(NTNV)(Subtest:14, Channel:23825, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

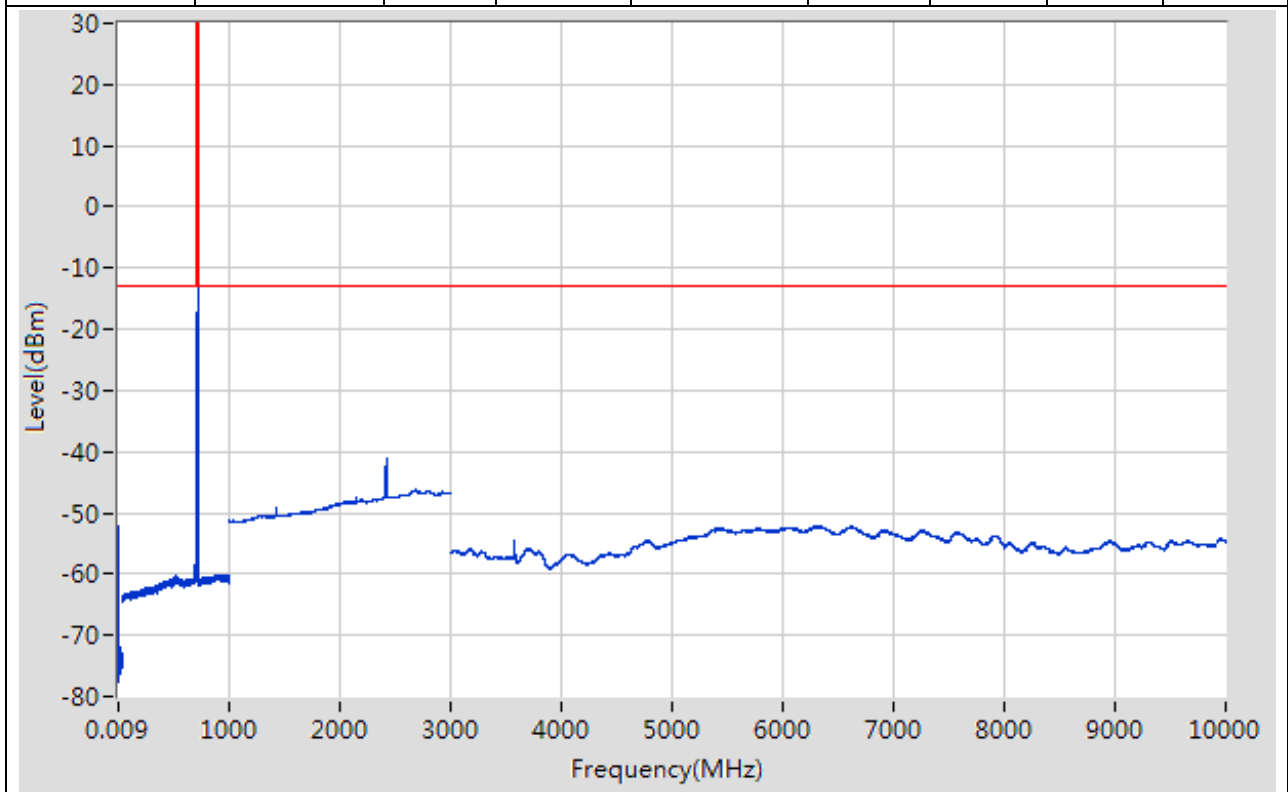| Start Frequency (MHz) | Stop Frequency (MHz) | RBW (MHz) | Detector | Frequency (MHz) | Power (dBm) | Limit (dBm) | Verdict | Sweep Point |
|---|---|---|---|---|---|---|---|---|
| 0.009 | 0.15 | 0.001 | RMS | 0.009 | -53.84 | -13 | Pass | 601 |
| 0.15 | 30 | 0.01 | RMS | 0.15 | -53.1 | -13 | Pass | 2985 |
| 30 | 695 | 0.1 | RMS | 694.2 | -60.5 | -13 | Pass | 6650 |
| 695 | 725 | 0.1 | RMS | 715.65 | 19.12 | 60 | Pass | 601 |
| 725 | 1000 | 0.1 | RMS | 895.062 | -60.02 | -13 | Pass | 2750 |
| 1000 | 3000 | 1 | RMS | 2416.708 | -38.06 | -13 | Pass | 2000 |
| 3000 | 10000 | 1 | RMS | 6342.477 | -52.22 | -13 | Pass | 7000 |

## 1.9. LTE Transmitter Spurious Emissions(NTNV)(Subtest:15, Channel:23780, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)

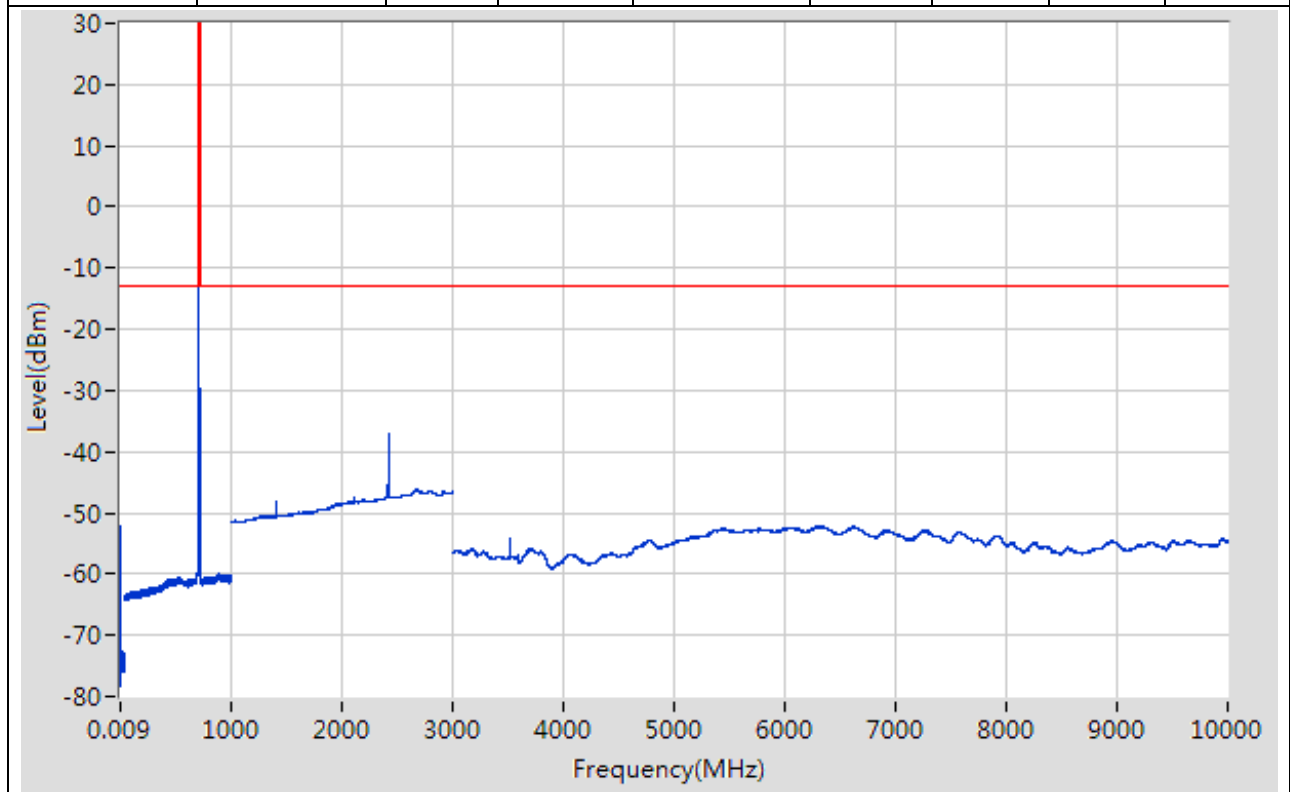| Start Frequency (MHz) | Stop Frequency (MHz) | RBW (MHz) | Detector | Frequency (MHz) | Power (dBm) | Limit (dBm) | Verdict | Sweep Point |
|---|---|---|---|---|---|---|---|---|
| 0.009 | 0.15 | 0.001 | RMS | 0.01 | -53.2 | -13 | Pass | 601 |
| 0.15 | 30 | 0.01 | RMS | 0.15 | -52.16 | -13 | Pass | 2985 |
| 30 | 695 | 0.1 | RMS | 695 | -59.48 | -13 | Pass | 6650 |
| 695 | 725 | 0.1 | RMS | 704.6 | 21.16 | 60 | Pass | 601 |
| 725 | 1000 | 0.1 | RMS | 889.06 | -59.98 | -13 | Pass | 2750 |
| 1000 | 3000 | 1 | RMS | 2418.709 | -35.77 | -13 | Pass | 2000 |
| 3000 | 10000 | 1 | RMS | 6302.472 | -52.18 | -13 | Pass | 7000 |

## 1.10. LTE Transmitter Spurious Emissions(NTNV)(Subtest:16, Channel:23780, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

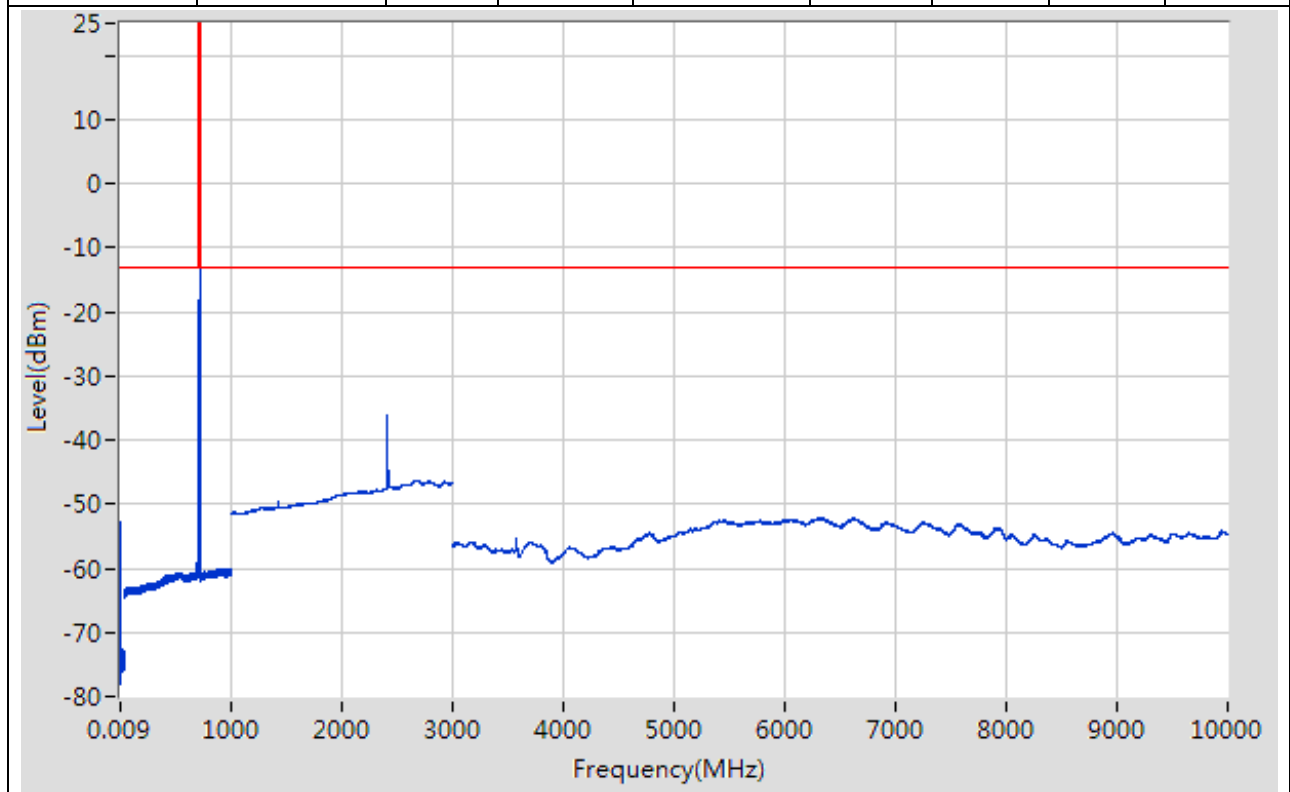| Start Frequency (MHz) | Stop Frequency (MHz) | RBW (MHz) | Detector | Frequency (MHz) | Power (dBm) | Limit (dBm) | Verdict | Sweep Point |
|---|---|---|---|---|---|---|---|---|
| 0.009 | 0.15 | 0.001 | RMS | 0.01 | -53.22 | -13 | Pass | 601 |
| 0.15 | 30 | 0.01 | RMS | 0.15 | -52.11 | -13 | Pass | 2985 |
| 30 | 695 | 0.1 | RMS | 694.2 | -58.66 | -13 | Pass | 6650 |
| 695 | 725 | 0.1 | RMS | 713.4 | 20.82 | 60 | Pass | 601 |
| 725 | 1000 | 0.1 | RMS | 895.762 | -60.08 | -13 | Pass | 2750 |
| 1000 | 3000 | 1 | RMS | 2421.711 | -41.03 | -13 | Pass | 2000 |
| 3000 | 10000 | 1 | RMS | 6304.472 | -52.18 | -13 | Pass | 7000 |

## 1.11. LTE Transmitter Spurious Emissions(NTNV)(Subtest:17, Channel:23780, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:LOW)

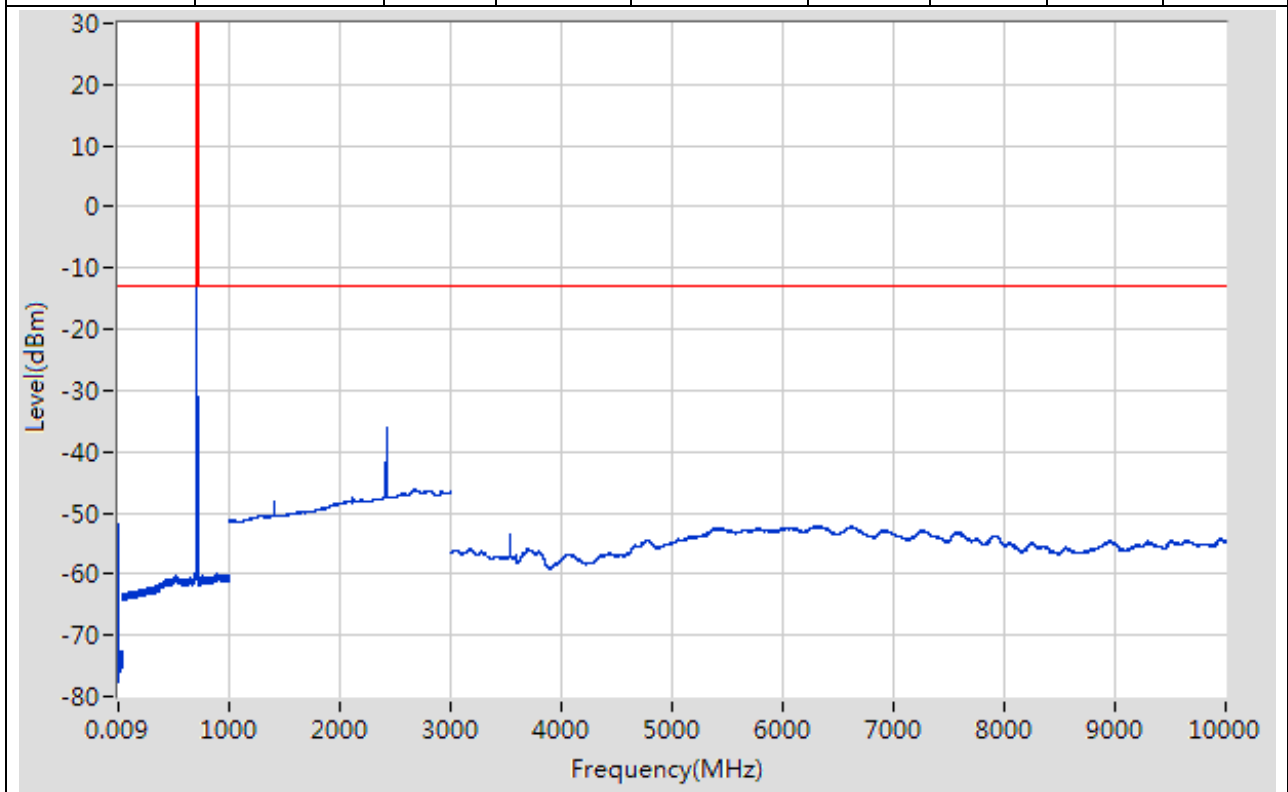| Start Frequency (MHz) | Stop Frequency (MHz) | RBW (MHz) | Detector | Frequency (MHz) | Power (dBm) | Limit (dBm) | Verdict | Sweep Point |
|---|---|---|---|---|---|---|---|---|
| 0.009 | 0.15 | 0.001 | RMS | 0.009 | -53.79 | -13 | Pass | 601 |
| 0.15 | 30 | 0.01 | RMS | 0.15 | -52.1 | -13 | Pass | 2985 |
| 30 | 695 | 0.1 | RMS | 695 | -59.63 | -13 | Pass | 6650 |
| 695 | 725 | 0.1 | RMS | 704.6 | 20.5 | 60 | Pass | 601 |
| 725 | 1000 | 0.1 | RMS | 889.86 | -60.03 | -13 | Pass | 2750 |
| 1000 | 3000 | 1 | RMS | 2419.71 | -37.19 | -13 | Pass | 2000 |
| 3000 | 10000 | 1 | RMS | 6326.475 | -52.17 | -13 | Pass | 7000 |

## 1.12. LTE Transmitter Spurious Emissions(NTNV)(Subtest:18, Channel:23780, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

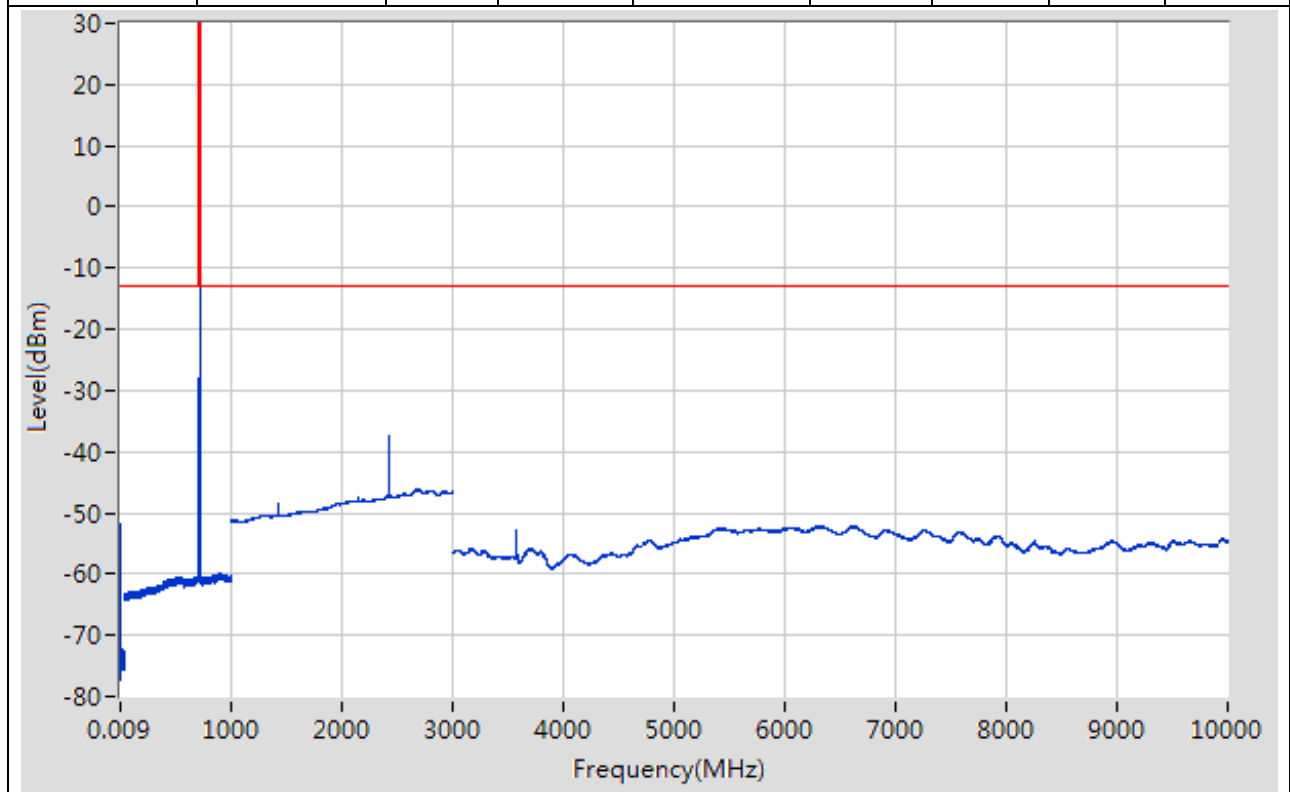| Start Frequency (MHz) | Stop Frequency (MHz) | RBW (MHz) | Detector | Frequency (MHz) | Power (dBm) | Limit (dBm) | Verdict | Sweep Point |
|---|---|---|---|---|---|---|---|---|
| 0.009 | 0.15 | 0.001 | RMS | 0.01 | -53.75 | -13 | Pass | 601 |
| 0.15 | 30 | 0.01 | RMS | 0.16 | -52.91 | -13 | Pass | 2985 |
| 30 | 695 | 0.1 | RMS | 694.3 | -59.28 | -13 | Pass | 6650 |
| 695 | 725 | 0.1 | RMS | 713.4 | 19.52 | 60 | Pass | 601 |
| 725 | 1000 | 0.1 | RMS | 881.857 | -60.16 | -13 | Pass | 2750 |
| 1000 | 3000 | 1 | RMS | 2414.707 | -36.07 | -13 | Pass | 2000 |
| 3000 | 10000 | 1 | RMS | 6326.475 | -52.17 | -13 | Pass | 7000 |

## 1.13. LTE Transmitter Spurious Emissions(NTNV)(Subtest:24, Channel:23800, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)

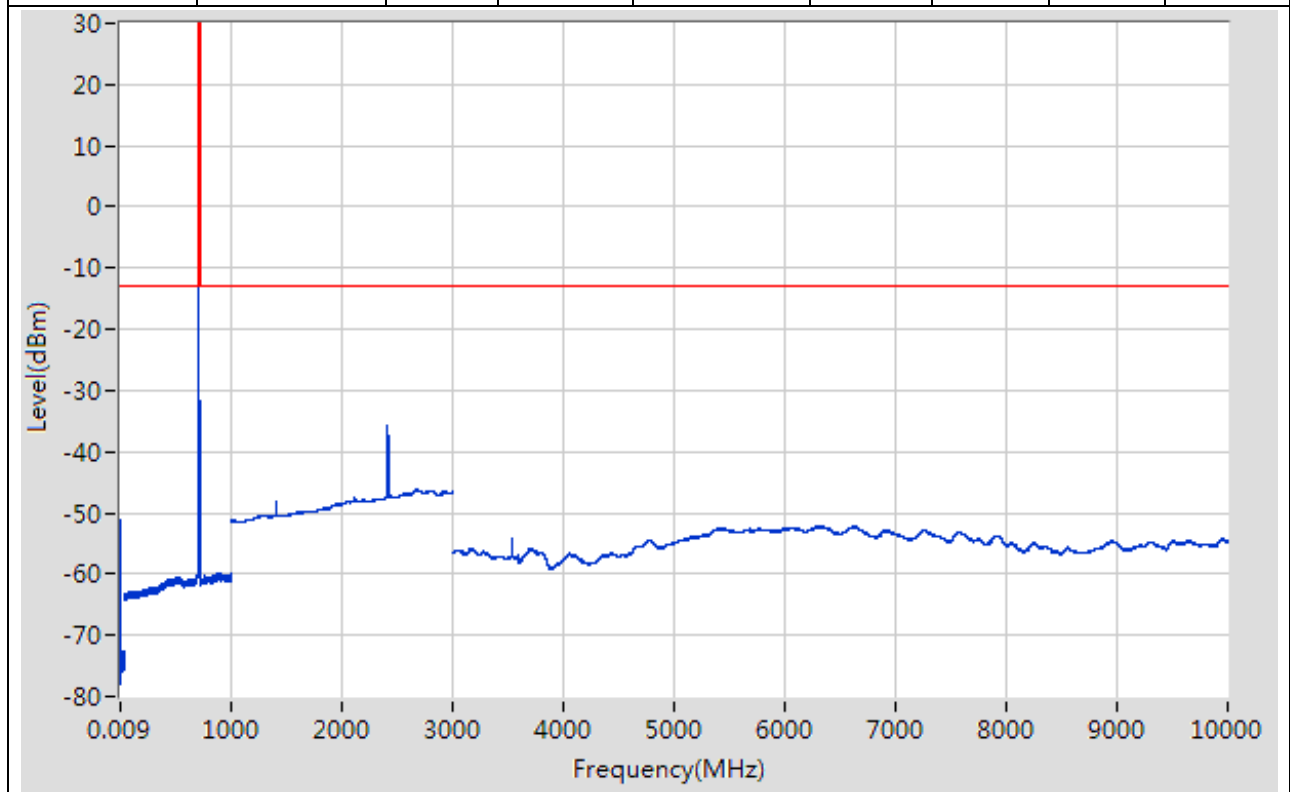| Start Frequency (MHz) | Stop Frequency (MHz) | RBW (MHz) | Detector | Frequency (MHz) | Power (dBm) | Limit (dBm) | Verdict | Sweep Point |
|---|---|---|---|---|---|---|---|---|
| 0.009 | 0.15 | 0.001 | RMS | 0.009 | -53.45 | -13 | Pass | 601 |
| 0.15 | 30 | 0.01 | RMS | 0.15 | -51.83 | -13 | Pass | 2985 |
| 30 | 695 | 0.1 | RMS | 694.3 | -59.79 | -13 | Pass | 6650 |
| 695 | 725 | 0.1 | RMS | 706.6 | 21.08 | 60 | Pass | 601 |
| 725 | 1000 | 0.1 | RMS | 883.858 | -59.94 | -13 | Pass | 2750 |
| 1000 | 3000 | 1 | RMS | 2416.708 | -36.13 | -13 | Pass | 2000 |
| 3000 | 10000 | 1 | RMS | 6317.474 | -52.16 | -13 | Pass | 7000 |

## 1.14. LTE Transmitter Spurious Emissions(NTNV)(Subtest:25, Channel:23800, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

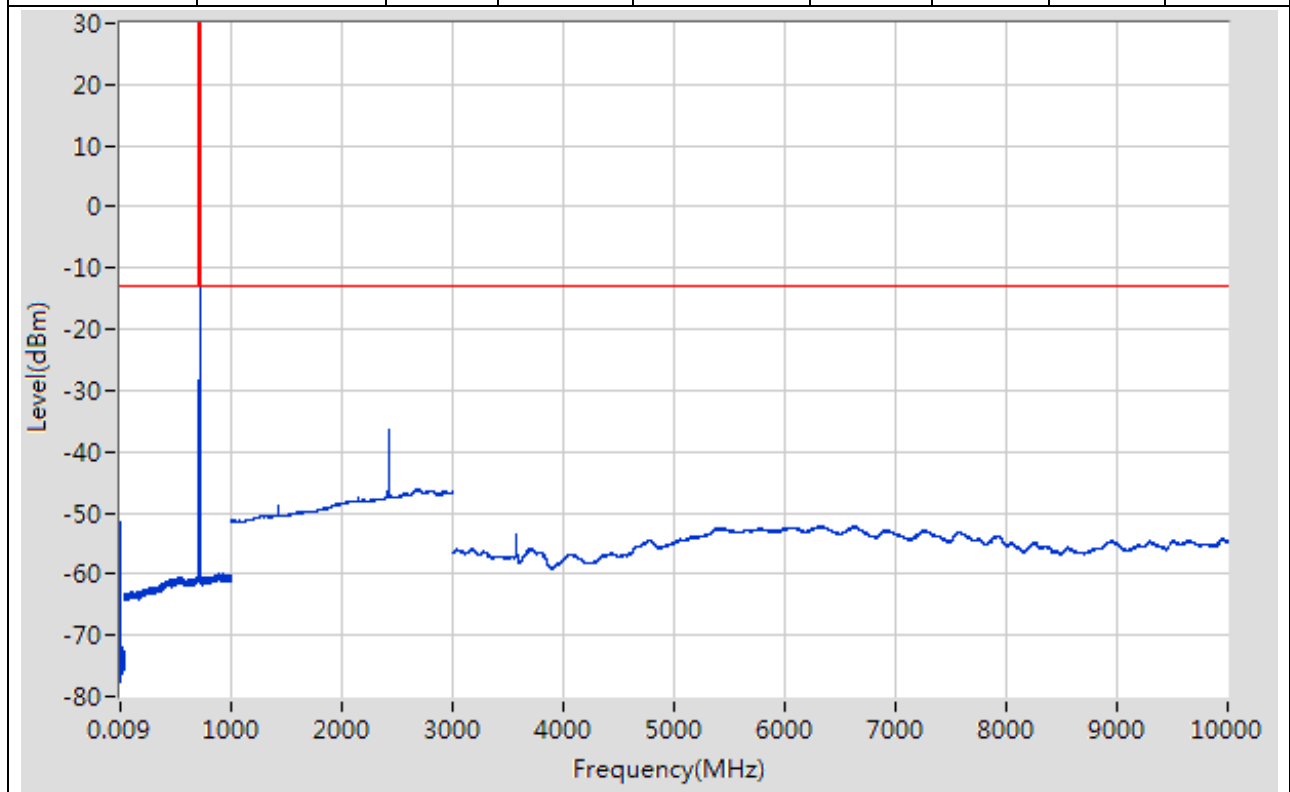| Start Frequency (MHz) | Stop Frequency (MHz) | RBW (MHz) | Detector | Frequency (MHz) | Power (dBm) | Limit (dBm) | Verdict | Sweep Point |
|---|---|---|---|---|---|---|---|---|
| 0.009 | 0.15 | 0.001 | RMS | 0.012 | -54.11 | -13 | Pass | 601 |
| 0.15 | 30 | 0.01 | RMS | 0.15 | -51.79 | -13 | Pass | 2985 |
| 30 | 695 | 0.1 | RMS | 694.6 | -60.29 | -13 | Pass | 6650 |
| 695 | 725 | 0.1 | RMS | 715.4 | 21.07 | 60 | Pass | 601 |
| 725 | 1000 | 0.1 | RMS | 885.258 | -59.98 | -13 | Pass | 2750 |
| 1000 | 3000 | 1 | RMS | 2417.709 | -37.39 | -13 | Pass | 2000 |
| 3000 | 10000 | 1 | RMS | 6298.471 | -52.16 | -13 | Pass | 7000 |

## 1.15. LTE Transmitter Spurious Emissions(NTNV)(Subtest:26, Channel:23800, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:LOW)

| Start Frequency (MHz) | Stop Frequency (MHz) | RBW (MHz) | Detector | Frequency (MHz) | Power (dBm) | Limit (dBm) | Verdict | Sweep Point |
|---|---|---|---|---|---|---|---|---|
| 0.009 | 0.15 | 0.001 | RMS | 0.01 | -53.58 | -13 | Pass | 601 |
| 0.15 | 30 | 0.01 | RMS | 0.15 | -51.3 | -13 | Pass | 2985 |
| 30 | 695 | 0.1 | RMS | 693.9 | -60.08 | -13 | Pass | 6650 |
| 695 | 725 | 0.1 | RMS | 706.6 | 20.72 | 60 | Pass | 601 |
| 725 | 1000 | 0.1 | RMS | 897.463 | -59.89 | -13 | Pass | 2750 |
| 1000 | 3000 | 1 | RMS | 2414.707 | -35.79 | -13 | Pass | 2000 |
| 3000 | 10000 | 1 | RMS | 6350.479 | -52.15 | -13 | Pass | 7000 |

## 1.16. LTE Transmitter Spurious Emissions(NTNV)(Subtest:27, Channel:23800, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

| Start Frequency (MHz) | Stop Frequency (MHz) | RBW (MHz) | Detector | Frequency (MHz) | Power (dBm) | Limit (dBm) | Verdict | Sweep Point |
|---|---|---|---|---|---|---|---|---|
| 0.009 | 0.15 | 0.001 | RMS | 0.01 | -52.55 | -13 | Pass | 601 |
| 0.15 | 30 | 0.01 | RMS | 0.15 | -51.66 | -13 | Pass | 2985 |
| 30 | 695 | 0.1 | RMS | 694.9 | -60.36 | -13 | Pass | 6650 |
| 695 | 725 | 0.1 | RMS | 715.4 | 20.47 | 60 | Pass | 601 |
| 725 | 1000 | 0.1 | RMS | 923.972 | -59.99 | -13 | Pass | 2750 |
| 1000 | 3000 | 1 | RMS | 2419.71 | -36.27 | -13 | Pass | 2000 |
| 3000 | 10000 | 1 | RMS | 6625.518 | -52.17 | -13 | Pass | 7000 |

END