

#### **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)

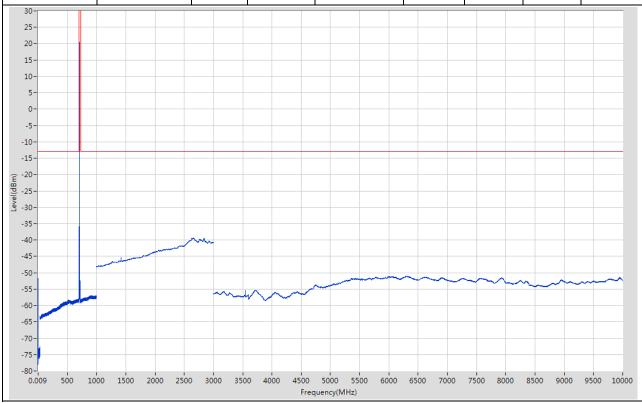
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detecto<br>r | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdic<br>t | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|--------------|--------------------|----------------|----------------|-------------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS          | 0.009              | -53.1          | -13            | Pass        | 601            |
| 0.15                        | 30                         | 0.01         | RMS          | 0.15               | -52.54         | -13            | Pass        | 2985           |
| 30                          | 695                        | 0.1          | RMS          | 685.399            | -58.01         | -13            | Pass        | 6650           |
| 695                         | 725                        | 0.1          | RMS          | 704.35             | 20.44          | 60             | Pass        | 601            |
| 725                         | 1000                       | 0.1          | RMS          | 907.566            | -52.53         | -13            | Pass        | 2750           |
| 1000                        | 3000                       | 1            | RMS          | 2658.829           | -39.49         | -13            | Pass        | 2000           |
| 3000                        | 10000                      | 1            | RMS          | 6296.471           | -51.13         | -13            | Pass        | 7000           |





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

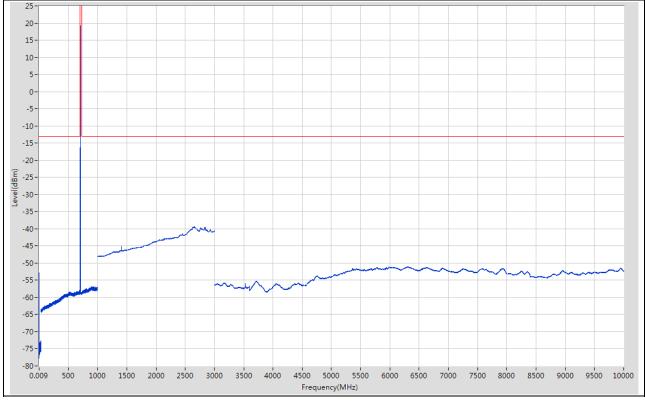
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.009              | -52.87         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -51.81         | -13            | Pass    | 2985           |
| 30                          | 695                        | 0.1          | RMS      | 686.799            | -57.91         | -13            | Pass    | 6650           |
| 695                         | 725                        | 0.1          | RMS      | 708.65             | 20.52          | 60             | Pass    | 601            |
| 725                         | 1000                       | 0.1          | RMS      | 910.367            | -56.97         | -13            | Pass    | 2750           |
| 1000                        | 3000                       | 1            | RMS      | 2658.829           | -39.43         | -13            | Pass    | 2000           |
| 3000                        | 10000                      | 1            | RMS      | 6309.473           | -51.06         | -13            | Pass    | 7000           |





### 1.3. LTE Transmitter Spurious Emissions(NTNV)(Subtest:3, Channel:23755, Bandwidth:5, Modulation:Q16, RB Number: 1, RB Position:LOW)

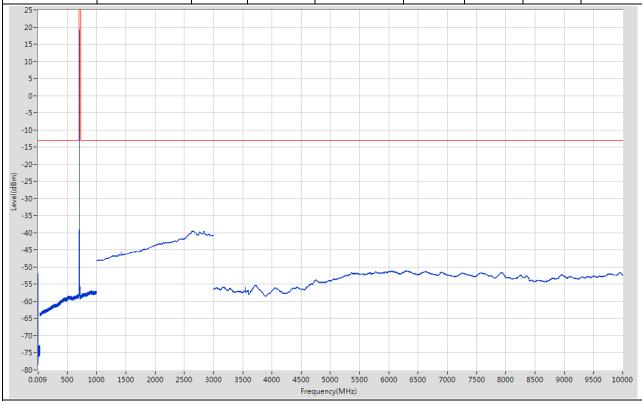
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detecto<br>r | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdic<br>t | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|--------------|--------------------|----------------|----------------|-------------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS          | 0.009              | -53.76         | -13            | Pass        | 601            |
| 0.15                        | 30                         | 0.01         | RMS          | 0.15               | -52.83         | -13            | Pass        | 2985           |
| 30                          | 695                        | 0.1          | RMS          | 692.2              | -57.94         | -13            | Pass        | 6650           |
| 695                         | 725                        | 0.1          | RMS          | 704.35             | 19.29          | 60             | Pass        | 601            |
| 725                         | 1000                       | 0.1          | RMS          | 894.462            | -56.82         | -13            | Pass        | 2750           |
| 1000                        | 3000                       | 1            | RMS          | 2658.829           | -39.4          | -13            | Pass        | 2000           |
| 3000                        | 10000                      | 1            | RMS          | 6292.47            | -51.1          | -13            | Pass        | 7000           |





## 1.4. LTE Transmitter Spurious Emissions(NTNV)(Subtest:4, Channel:23755, Bandwidth:5, Modulation:Q16, RB Number: 1, RB Position:HIGH)

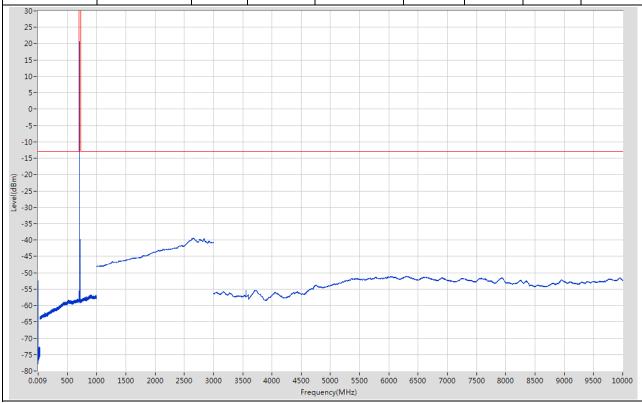
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.009              | -54.13         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -51.99         | -13            | Pass    | 2985           |
| 30                          | 695                        | 0.1          | RMS      | 676.397            | -57.93         | -13            | Pass    | 6650           |
| 695                         | 725                        | 0.1          | RMS      | 708.65             | 19.27          | 60             | Pass    | 601            |
| 725                         | 1000                       | 0.1          | RMS      | 914.169            | -56.82         | -13            | Pass    | 2750           |
| 1000                        | 3000                       | 1            | RMS      | 2659.83            | -39.44         | -13            | Pass    | 2000           |
| 3000                        | 10000                      | 1            | RMS      | 6295.471           | -51.08         | -13            | Pass    | 7000           |





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

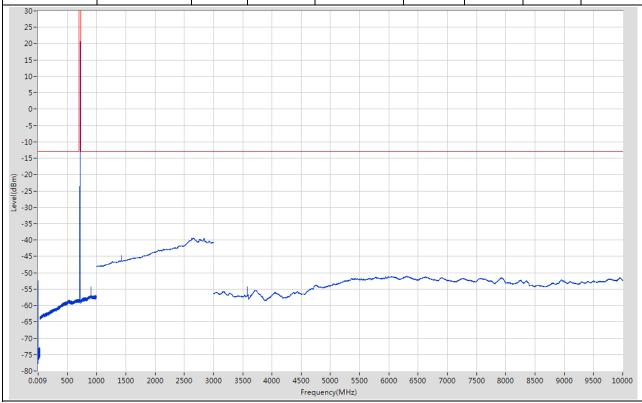
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.009              | -52.87         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.38         | -13            | Pass    | 2985           |
| 30                          | 695                        | 0.1          | RMS      | 671.997            | -57.98         | -13            | Pass    | 6650           |
| 695                         | 725                        | 0.1          | RMS      | 711.35             | 20.64          | 60             | Pass    | 601            |
| 725                         | 1000                       | 0.1          | RMS      | 900.564            | -56.63         | -13            | Pass    | 2750           |
| 1000                        | 3000                       | 1            | RMS      | 2657.829           | -39.4          | -13            | Pass    | 2000           |
| 3000                        | 10000                      | 1            | RMS      | 6302.472           | -51.03         | -13            | Pass    | 7000           |





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

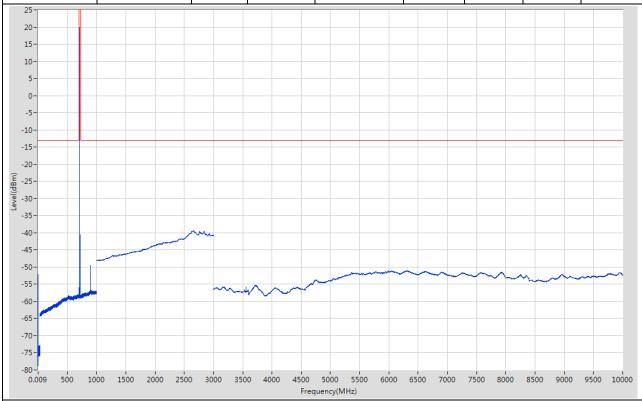
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.012              | -53.91         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.46         | -13            | Pass    | 2985           |
| 30                          | 695                        | 0.1          | RMS      | 692.8              | -58.06         | -13            | Pass    | 6650           |
| 695                         | 725                        | 0.1          | RMS      | 715.65             | 20.68          | 60             | Pass    | 601            |
| 725                         | 1000                       | 0.1          | RMS      | 899.764            | -54.31         | -13            | Pass    | 2750           |
| 1000                        | 3000                       | 1            | RMS      | 2660.83            | -39.4          | -13            | Pass    | 2000           |
| 3000                        | 10000                      | 1            | RMS      | 6302.472           | -51.05         | -13            | Pass    | 7000           |





### 1.7. LTE Transmitter Spurious Emissions(NTNV)(Subtest:13, Channel:23825, Bandwidth:5, Modulation:Q16, RB Number: 1, RB Position:LOW)

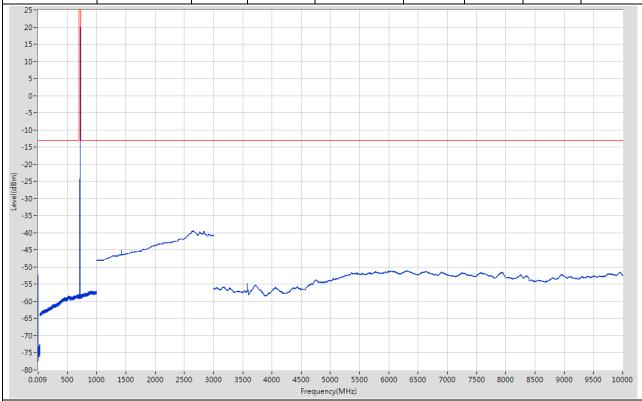
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.009              | -53.87         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.05         | -13            | Pass    | 2985           |
| 30                          | 695                        | 0.1          | RMS      | 693.5              | -58.07         | -13            | Pass    | 6650           |
| 695                         | 725                        | 0.1          | RMS      | 711.35             | 19.94          | 60             | Pass    | 601            |
| 725                         | 1000                       | 0.1          | RMS      | 896.862            | -49.44         | -13            | Pass    | 2750           |
| 1000                        | 3000                       | 1            | RMS      | 2659.83            | -39.39         | -13            | Pass    | 2000           |
| 3000                        | 10000                      | 1            | RMS      | 6304.472           | -51            | -13            | Pass    | 7000           |





### 1.8. LTE Transmitter Spurious Emissions(NTNV)(Subtest:14, Channel:23825, Bandwidth:5, Modulation:Q16, RB Number: 1, RB Position:HIGH)

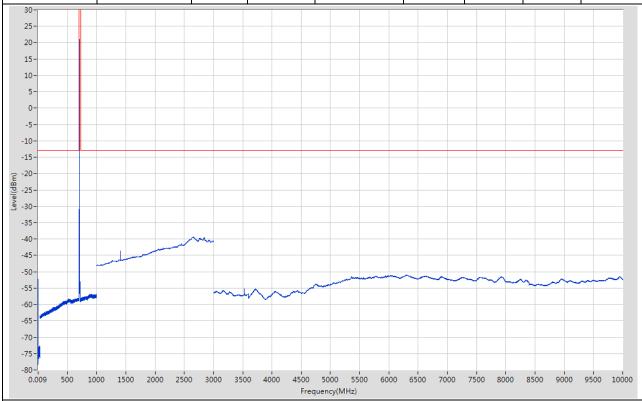
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.009              | -53.71         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.31         | -13            | Pass    | 2985           |
| 30                          | 695                        | 0.1          | RMS      | 694.1              | -57.96         | -13            | Pass    | 6650           |
| 695                         | 725                        | 0.1          | RMS      | 715.65             | 19.89          | 60             | Pass    | 601            |
| 725                         | 1000                       | 0.1          | RMS      | 987.796            | -56.95         | -13            | Pass    | 2750           |
| 1000                        | 3000                       | 1            | RMS      | 2659.83            | -39.38         | -13            | Pass    | 2000           |
| 3000                        | 10000                      | 1            | RMS      | 6308.473           | -51.03         | -13            | Pass    | 7000           |





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

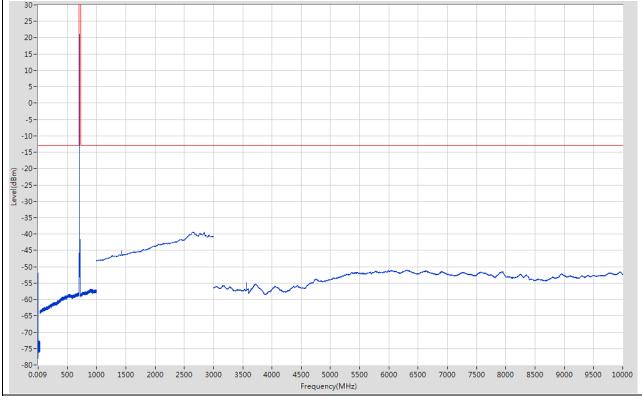
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.01               | -54.47         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.3          | -13            | Pass    | 2985           |
| 30                          | 695                        | 0.1          | RMS      | 694.7              | -57.99         | -13            | Pass    | 6650           |
| 695                         | 725                        | 0.1          | RMS      | 704.6              | 20.97          | 60             | Pass    | 601            |
| 725                         | 1000                       | 0.1          | RMS      | 886.359            | -56.8          | -13            | Pass    | 2750           |
| 1000                        | 3000                       | 1            | RMS      | 2658.829           | -39.37         | -13            | Pass    | 2000           |
| 3000                        | 10000                      | 1            | RMS      | 6307.472           | -51.02         | -13            | Pass    | 7000           |





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

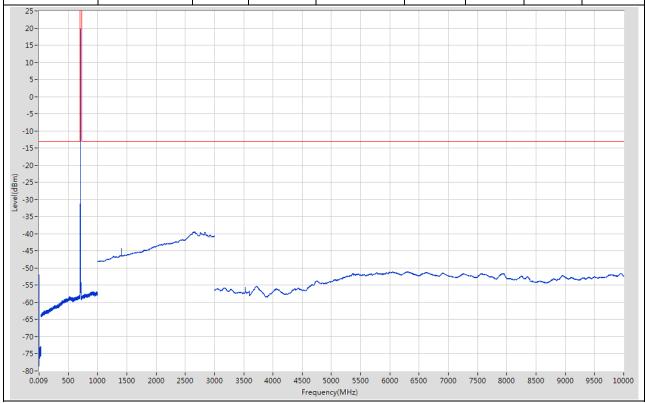
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.009              | -54.14         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -51.93         | -13            | Pass    | 2985           |
| 30                          | 695                        | 0.1          | RMS      | 693.5              | -57.96         | -13            | Pass    | 6650           |
| 695                         | 725                        | 0.1          | RMS      | 713.4              | 21.01          | 60             | Pass    | 601            |
| 725                         | 1000                       | 0.1          | RMS      | 910.467            | -56.81         | -13            | Pass    | 2750           |
| 1000                        | 3000                       | 1            | RMS      | 2657.829           | -39.39         | -13            | Pass    | 2000           |
| 3000                        | 10000                      | 1            | RMS      | 6301.472           | -51.02         | -13            | Pass    | 7000           |
| 30-                         |                            |              |          |                    |                |                |         |                |





### 1.11. LTE Transmitter Spurious Emissions(NTNV)(Subtest:17, Channel:23780, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)

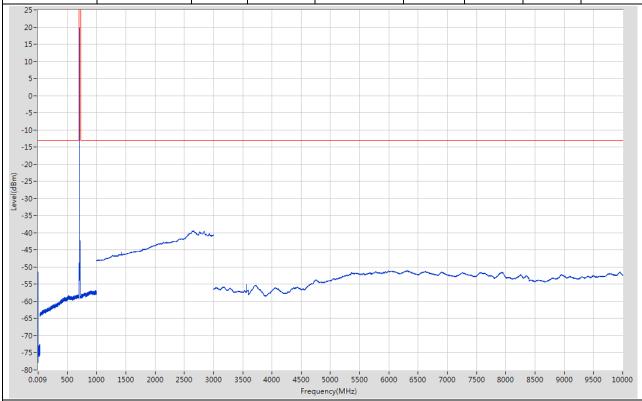
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.011              | -53.63         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.01         | -13            | Pass    | 2985           |
| 30                          | 695                        | 0.1          | RMS      | 687.399            | -57.91         | -13            | Pass    | 6650           |
| 695                         | 725                        | 0.1          | RMS      | 704.6              | 19.75          | 60             | Pass    | 601            |
| 725                         | 1000                       | 0.1          | RMS      | 929.474            | -56.86         | -13            | Pass    | 2750           |
| 1000                        | 3000                       | 1            | RMS      | 2658.829           | -39.36         | -13            | Pass    | 2000           |
| 3000                        | 10000                      | 1            | RMS      | 6305.472           | -51.06         | -13            | Pass    | 7000           |





# 1.12. LTE Transmitter Spurious Emissions(NTNV)(Subtest:18, Channel:23780, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:HIGH)

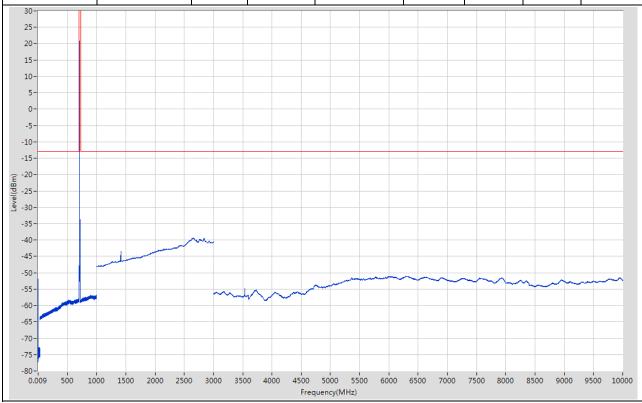
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.011              | -53.05         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -51.44         | -13            | Pass    | 2985           |
| 30                          | 695                        | 0.1          | RMS      | 671.396            | -58.09         | -13            | Pass    | 6650           |
| 695                         | 725                        | 0.1          | RMS      | 713.4              | 19.75          | 60             | Pass    | 601            |
| 725                         | 1000                       | 0.1          | RMS      | 904.065            | -56.86         | -13            | Pass    | 2750           |
| 1000                        | 3000                       | 1            | RMS      | 2659.83            | -39.39         | -13            | Pass    | 2000           |
| 3000                        | 10000                      | 1            | RMS      | 6310.473           | -51.02         | -13            | Pass    | 7000           |





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

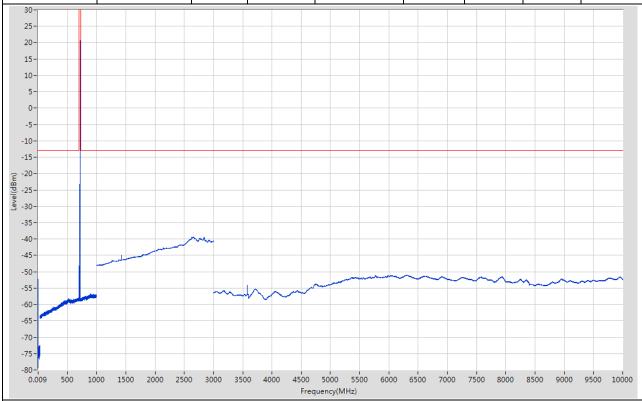
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.01               | -53.89         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -51.94         | -13            | Pass    | 2985           |
| 30                          | 695                        | 0.1          | RMS      | 692.7              | -57.99         | -13            | Pass    | 6650           |
| 695                         | 725                        | 0.1          | RMS      | 706.6              | 20.86          | 60             | Pass    | 601            |
| 725                         | 1000                       | 0.1          | RMS      | 895.062            | -56.91         | -13            | Pass    | 2750           |
| 1000                        | 3000                       | 1            | RMS      | 2657.829           | -39.37         | -13            | Pass    | 2000           |
| 3000                        | 10000                      | 1            | RMS      | 6294.471           | -51.03         | -13            | Pass    | 7000           |





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

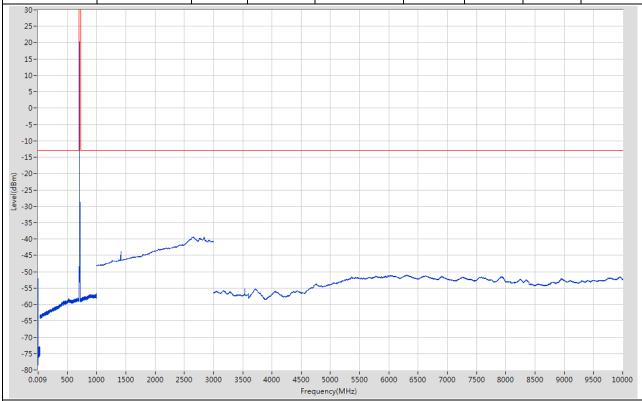
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.011              | -53.79         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.28         | -13            | Pass    | 2985           |
| 30                          | 695                        | 0.1          | RMS      | 685.299            | -58.04         | -13            | Pass    | 6650           |
| 695                         | 725                        | 0.1          | RMS      | 715.4              | 20.69          | 60             | Pass    | 601            |
| 725                         | 1000                       | 0.1          | RMS      | 897.763            | -56.73         | -13            | Pass    | 2750           |
| 1000                        | 3000                       | 1            | RMS      | 2658.829           | -39.39         | -13            | Pass    | 2000           |
| 3000                        | 10000                      | 1            | RMS      | 6307.472           | -51.05         | -13            | Pass    | 7000           |





# 1.15. LTE Transmitter Spurious Emissions(NTNV)(Subtest:26, Channel:23800, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)

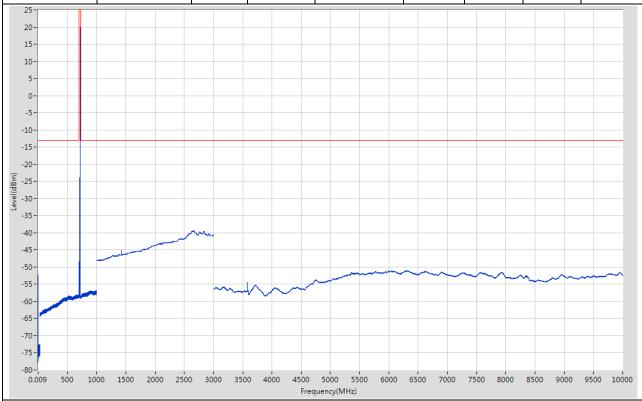
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.011              | -54.45         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.04         | -13            | Pass    | 2985           |
| 30                          | 695                        | 0.1          | RMS      | 673.297            | -58.03         | -13            | Pass    | 6650           |
| 695                         | 725                        | 0.1          | RMS      | 706.6              | 20.2           | 60             | Pass    | 601            |
| 725                         | 1000                       | 0.1          | RMS      | 993.898            | -56.74         | -13            | Pass    | 2750           |
| 1000                        | 3000                       | 1            | RMS      | 2656.828           | -39.39         | -13            | Pass    | 2000           |
| 3000                        | 10000                      | 1            | RMS      | 6301.472           | -51.03         | -13            | Pass    | 7000           |





### 1.16. LTE Transmitter Spurious Emissions(NTNV)(Subtest:27, Channel:23800, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:HIGH)

| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.01               | -54.31         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.29         | -13            | Pass    | 2985           |
| 30                          | 695                        | 0.1          | RMS      | 655.994            | -58.05         | -13            | Pass    | 6650           |
| 695                         | 725                        | 0.1          | RMS      | 715.4              | 19.97          | 60             | Pass    | 601            |
| 725                         | 1000                       | 0.1          | RMS      | 896.562            | -56.9          | -13            | Pass    | 2750           |
| 1000                        | 3000                       | 1            | RMS      | 2661.831           | -39.37         | -13            | Pass    | 2000           |
| 3000                        | 10000                      | 1            | RMS      | 6303.472           | -51.07         | -13            | Pass    | 7000           |





**END**