

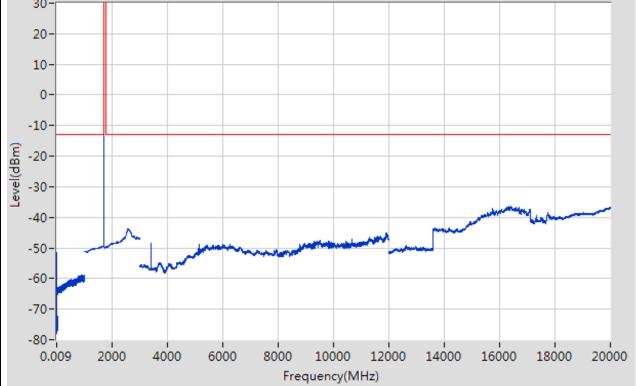
#### **Annex C. LTE Transmitter Spurious Emissions**



#### 1. LTE\_Band4

# 1.1. LTE Transmitter Spurious Emissions(NTNV)(Subtest:1, Channel:19957, Bandwidth:1.4, 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 (dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|-------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.009              | -53.84      | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -51.49      | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 926.692            | -58.76      | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1700               | -49.37      | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1710.292           | 22.71       | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2594.672           | -43.66      | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11904.989          | -44.99      | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16318.54           | -36.48      | -13            | Pass    | 8000           |
| 30 -<br>20 -<br>10 -<br>0 - |                            |              |          |                    |             |                |         |                |





## 1.2. LTE Transmitter Spurious Emissions(NTNV)(Subtest:2, Channel:19957, Bandwidth:1.4, 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      | 0.01               | -54.24         | -13            | Pass    | 601            |
| 0.15                            | 30                         | 0.01         | RMS      | 0.15               | -51.14         | -13            | Pass    | 2985           |
| 30                              | 1000                       | 0.1          | RMS      | 937.494            | -58.54         | -13            | Pass    | 9700           |
| 1000                            | 1700                       | 1            | RMS      | 1700               | -49.32         | -13            | Pass    | 700            |
| 1700                            | 1765                       | 1            | RMS      | 1711.158           | 22.71          | 60             | Pass    | 601            |
| 1765                            | 3000                       | 1            | RMS      | 2574.656           | -43.7          | -13            | Pass    | 1235           |
| 3000                            | 12000                      | 1            | RMS      | 11906.99           | -44.91         | -13            | Pass    | 9000           |
| 12000                           | 20000                      | 1            | RMS      | 16419.552          | -36.52         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10- |                            |              |          |                    |                |                |         |                |





-60-

-70-

-80-

0.009

4000

2000

6000

8000

10000 12000

Frequency(MHz)

16000

14000

18000

#### 1.3. LTE Transmitter Spurious Emissions(NTNV)(Subtest:3, Channel:19957, Bandwidth:1.4, Modulation:16QAM, RB Number: 1, RB Position:LOW)

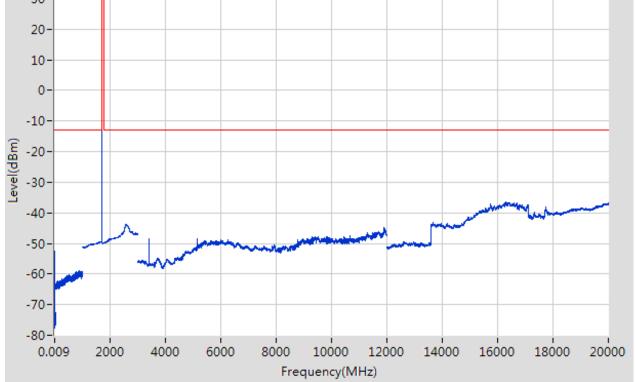
| 0.15         30         0.01         RMS         0.15         -52.23         -13         Pass         2           30         1000         0.1         RMS         925.892         -58.67         -13         Pass         9           1000         1700         1         RMS         1700         -49.36         -13         Pass           1700         1765         1         RMS         1710.292         21.74         60         Pass           1765         3000         1         RMS         2581.661         -43.7         -13         Pass         1           3000         12000         1         RMS         11906.99         -44.94         -13         Pass         8           12000         20000         1         RMS         16313.539         -36.6         -13         Pass         8 | 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 |
|--|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 30   | 0.009                       | 0.15                       | 0.001        | RMS      | 0.012              | -54.64         | -13            | Pass    | 60             |
| 1000 1700 1 RMS 1700 -49.36 -13 Pass 1700 1765 1 RMS 1710.292 21.74 60 Pass 1765 3000 1 RMS 2581.661 -43.7 -13 Pass 1 3000 12000 1 RMS 11906.99 -44.94 -13 Pass 9 12000 20000 1 RMS 16313.539 -36.6 -13 Pass 8   | 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.23         | -13            | Pass    | 298            |
| 1700 1765 1 RMS 1710.292 21.74 60 Pass 1765 3000 1 RMS 2581.661 -43.7 -13 Pass 1 3000 12000 1 RMS 11906.99 -44.94 -13 Pass 9 12000 20000 1 RMS 16313.539 -36.6 -13 Pass 8  | 30                          | 1000                       | 0.1          | RMS      | 925.892            | -58.67         | -13            | Pass    | 970            |
| 1765 3000 1 RMS 2581.661 -43.7 -13 Pass 1 3000 12000 1 RMS 11906.99 -44.94 -13 Pass 9 12000 20000 1 RMS 16313.539 -36.6 -13 Pass 8 30 - 20 - 10 - 0 - 10 - 0 - 10 - 10 - 10  | 1000                        | 1700                       | 1            | RMS      | 1700               | -49.36         | -13            | Pass    | 70             |
| 3000 12000 1 RMS 11906.99 -44.94 -13 Pass 9 12000 20000 1 RMS 16313.539 -36.6 -13 Pass 8 30- 20- 10- 010-  | 1700                        | 1765                       | 1            | RMS      | 1710.292           | 21.74          | 60             | Pass    | 60             |
| 12000 20000 1 RMS 16313.539 -36.6 -13 Pass 8   | 1765                        | 3000                       | 1            | RMS      | 2581.661           | -43.7          | -13            | Pass    | 123            |
| 30-<br>20-<br>10-<br>0-<br>-10-  | 3000                        | 12000                      | 1            | RMS      | 11906.99           | -44.94         | -13            | Pass    | 900            |
| 20-<br>10-<br>0-<br>-10-   | 12000                       | 20000                      | 1            | RMS      | 16313.539          | -36.6          | -13            | Pass    | 800            |
| -30-<br>-40-   | 20-<br>10-<br>0-<br>-10-    |                            |              |          |                    |                |                |         |                |

20000



## 1.4. LTE Transmitter Spurious Emissions(NTNV)(Subtest:4, Channel:19957, Bandwidth:1.4, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

|                             |                            |              |          |                    |             |                | -       |                |
|-----------------------------|----------------------------|--------------|----------|--------------------|-------------|----------------|---------|----------------|
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power (dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.009              | -54.74      | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.35      | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 894.189            | -58.83      | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1698.999           | -49.45      | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1711.158           | 21.7        | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2573.655           | -43.65      | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11905.99           | -44.91      | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16314.539          | -36.54      | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |             |                |         |                |





-40

-50-

-60-

-70-

-80-

0.009

4000

2000

6000

8000

10000

Frequency(MHz)

12000

14000

16000

18000

20000

## 1.5. LTE Transmitter Spurious Emissions(NTNV)(Subtest:5, Channel:20175, Bandwidth:1.4, 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              | -53.88         | -13            | Pass    | 601            |
| 0.15   | 30                         | 0.01         | RMS      | 0.15               | -52.37         | -13            | Pass    | 2985           |
| 30   | 1000                       | 0.1          | RMS      | 910.791            | -58.92         | -13            | Pass    | 9700           |
| 1000   | 1700                       | 1            | RMS      | 1680.973           | -49.44         | -13            | Pass    | 700            |
| 1700   | 1765                       | 1            | RMS      | 1732.067           | 22.28          | 60             | Pass    | 601            |
| 1765   | 3000                       | 1            | RMS      | 2580.66            | -43.63         | -13            | Pass    | 1235           |
| 3000   | 12000                      | 1            | RMS      | 11907.99           | -44.96         | -13            | Pass    | 9000           |
| 12000  | 20000                      | 1            | RMS      | 19996              | -36.74         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10-<br>(Eg) -20- |                            |              |          |                    |                |                |         |                |



#### 1.6. LTE Transmitter Spurious Emissions(NTNV)(Subtest:6, Channel:20175, Bandwidth:1.4, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

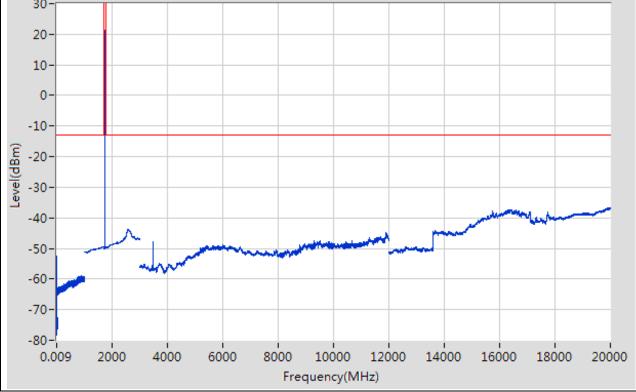
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.009              | -54.46         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.89         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 964.596            | -58.88         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1621.888           | -49.45         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1732.933           | 22.23          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2594.672           | -43.72         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11898.989          | -44.89         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 19905.988          | -36.87         | -13            | Pass    | 8000           |
| 30 -<br>20 -<br>10 -<br>0 - |                            |              |          |                    |                |                |         |                |





# 1.7. LTE Transmitter Spurious Emissions(NTNV)(Subtest:7, Channel:20175, Bandwidth:1.4, Modulation:16QAM, RB Number: 1, RB Position:LOW)

| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power (dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|-------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.009              | -53.03      | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.66      | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 893.889            | -58.75      | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1667.954           | -49.48      | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1732.067           | 21.22       | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2576.657           | -43.65      | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11902.989          | -44.92      | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 19997              | -36.76      | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-           |                            |              |          |                    |             |                |         |                |





-30

-40

-50-

-60-

-70-

-80-

0.009

4000

2000

6000

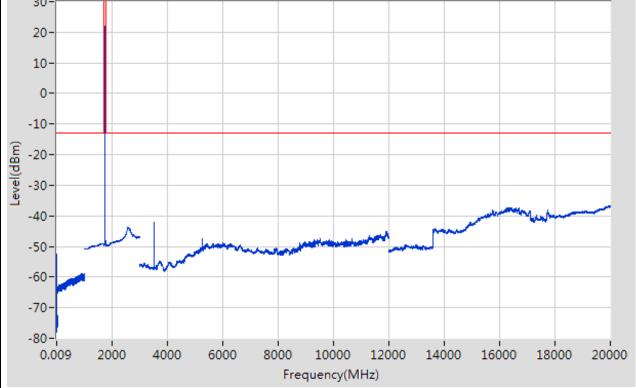
## 1.8. LTE Transmitter Spurious Emissions(NTNV)(Subtest:8, Channel:20175, Bandwidth:1.4, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

| Stop<br>Frequency<br>(MHz) | RBW<br>(MHz)  | Detector  | Frequency<br>(MHz)  | Power<br>(dBm)   | Limit<br>(dBm)   | Verdict   | Sweep<br>Point   |
|----------------------------|---|---|---|--|--|---|--|
| 0.15                       | 0.001   | RMS   | 0.009   | -52.92   | -13  | Pass  | 601  |
| 30                         | 0.01  | RMS   | 0.15  | -52.61   | -13  | Pass  | 2985   |
| 1000                       | 0.1   | RMS   | 938.094   | -58.95   | -13  | Pass  | 9700   |
| 1700                       | 1   | RMS   | 1680.973  | -49.47   | -13  | Pass  | 700  |
| 1765                       | 1   | RMS   | 1732.933  | 21.25  | 60   | Pass  | 601  |
| 3000                       | 1   | RMS   | 2571.653  | -43.69   | -13  | Pass  | 1235   |
| 12000                      | 1   | RMS   | 11909.99  | -44.93   | -13  | Pass  | 9000   |
| 20000                      | 1   | RMS   | 19884.986   | -36.85   | -13  | Pass  | 8000   |
|                            |   |   |   |  |  |   |  |
|                            | Frequency<br>(MHz)<br>0.15<br>30<br>1000<br>1700<br>1765<br>3000<br>12000 | Frequency (MHz)         RBW (MHz)           0.15         0.001           30         0.01           1000         0.1           1700         1           3000         1           12000         1 | Frequency (MHz)         RBW (MHz)         Detector           0.15         0.001         RMS           30         0.01         RMS           1000         0.1         RMS           1700         1         RMS           1765         1         RMS           3000         1         RMS           12000         1         RMS | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)           0.15         0.001         RMS         0.009           30         0.01         RMS         0.15           1000         0.1         RMS         938.094           1700         1         RMS         1680.973           1765         1         RMS         1732.933           3000         1         RMS         2571.653           12000         1         RMS         11909.99 | Frequency (MHz)         RBW (MHz)         Detector         Frequency (MHz)         Power (dBm)           0.15         0.001         RMS         0.009         -52.92           30         0.01         RMS         0.15         -52.61           1000         0.1         RMS         938.094         -58.95           1700         1         RMS         1680.973         -49.47           1765         1         RMS         1732.933         21.25           3000         1         RMS         2571.653         -43.69           12000         1         RMS         11909.99         -44.93 | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)         Power (dBm)         Limit (dBm)           0.15         0.001         RMS         0.009         -52.92         -13           30         0.01         RMS         0.15         -52.61         -13           1000         0.1         RMS         938.094         -58.95         -13           1700         1         RMS         1680.973         -49.47         -13           1765         1         RMS         1732.933         21.25         60           3000         1         RMS         2571.653         -43.69         -13           12000         1         RMS         11909.99         -44.93         -13 | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)         Power (dBm)         Limit (dBm)         Verdict           0.15         0.001         RMS         0.009         -52.92         -13         Pass           30         0.01         RMS         0.15         -52.61         -13         Pass           1000         0.1         RMS         938.094         -58.95         -13         Pass           1700         1         RMS         1680.973         -49.47         -13         Pass           1765         1         RMS         1732.933         21.25         60         Pass           3000         1         RMS         2571.653         -43.69         -13         Pass           12000         1         RMS         11909.99         -44.93         -13         Pass |



# 1.9. LTE Transmitter Spurious Emissions(NTNV)(Subtest:9, Channel:20393, Bandwidth:1.4, Modulation:QPSK, RB Number: 1, RB Position:LOW)

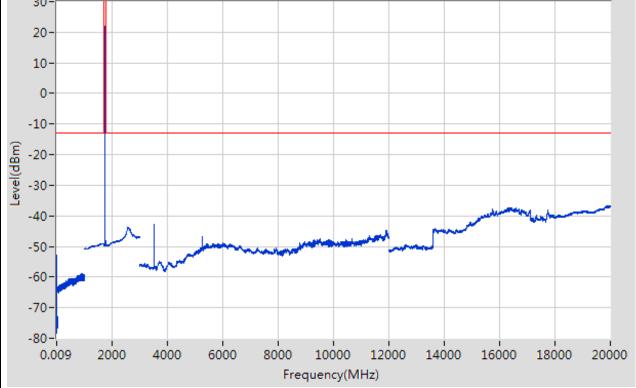
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.009              | -53.07         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.63         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 917.291            | -58.72         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1680.973           | -49.04         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1753.842           | 21.89          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2570.652           | -43.79         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 3508.056           | -42.09         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 19984.998          | -36.84         | -13            | Pass    | 8000           |
| 30 -<br>20 -<br>10 -<br>0 - |                            |              |          |                    |                |                |         |                |





# 1.10. LTE Transmitter Spurious Emissions(NTNV)(Subtest:10, Channel:20393, Bandwidth:1.4, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

| Stop<br>Frequency<br>(MHz) | RBW<br>(MHz)  | Detector   | Frequency<br>(MHz)  | Power<br>(dBm)   | Limit<br>(dBm)   | Verdict   | Sweep<br>Point   |
|----------------------------|---|--|---|--|--|---|--|
| 0.15                       | 0.001   | RMS  | 0.01  | -54.34   | -13  | Pass  | 601  |
| 30                         | 0.01  | RMS  | 0.15  | -52.91   | -13  | Pass  | 2985   |
| 1000                       | 0.1   | RMS  | 905.49  | -58.85   | -13  | Pass  | 9700   |
| 1700                       | 1   | RMS  | 1668.956  | -49.05   | -13  | Pass  | 700  |
| 1765                       | 1   | RMS  | 1754.708  | 21.86  | 60   | Pass  | 601  |
| 3000                       | 1   | RMS  | 2576.657  | -43.81   | -13  | Pass  | 1235   |
| 12000                      | 1   | RMS  | 3509.057  | -42.77   | -13  | Pass  | 9000   |
| 20000                      | 1   | RMS  | 19985.998   | -36.76   | -13  | Pass  | 8000   |
|                            |   |  |   |  |  |   |  |
|                            | Frequency<br>(MHz)<br>0.15<br>30<br>1000<br>1700<br>1765<br>3000<br>12000 | Frequency (MHz)         RBW (MHz)           0.15         0.001           30         0.01           1000         0.1           1700         1           1765         1           3000         1           12000         1 | Frequency (MHz)         RBW (MHz)         Detector           0.15         0.001         RMS           30         0.01         RMS           1000         0.1         RMS           1700         1         RMS           1765         1         RMS           3000         1         RMS           12000         1         RMS | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)           0.15         0.001         RMS         0.01           30         0.01         RMS         0.15           1000         0.1         RMS         905.49           1700         1         RMS         1668.956           1765         1         RMS         1754.708           3000         1         RMS         2576.657           12000         1         RMS         3509.057 | Frequency (MHz)         RBW (MHz)         Detector         Frequency (MHz)         Power (dBm)           0.15         0.001         RMS         0.01         -54.34           30         0.01         RMS         0.15         -52.91           1000         0.1         RMS         905.49         -58.85           1700         1         RMS         1668.956         -49.05           1765         1         RMS         1754.708         21.86           3000         1         RMS         2576.657         -43.81           12000         1         RMS         3509.057         -42.77 | Frequency (MHz)         RBW (MHz)         Detector         Frequency (MHz)         Power (dBm)         Limit (dBm)           0.15         0.001         RMS         0.01         -54.34         -13           30         0.01         RMS         0.15         -52.91         -13           1000         0.1         RMS         905.49         -58.85         -13           1700         1         RMS         1668.956         -49.05         -13           1765         1         RMS         1754.708         21.86         60           3000         1         RMS         2576.657         -43.81         -13           12000         1         RMS         3509.057         -42.77         -13 | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)         Power (dBm)         Limit (dBm)         Verdict           0.15         0.001         RMS         0.01         -54.34         -13         Pass           30         0.01         RMS         0.15         -52.91         -13         Pass           1000         0.1         RMS         905.49         -58.85         -13         Pass           1700         1         RMS         1668.956         -49.05         -13         Pass           1765         1         RMS         1754.708         21.86         60         Pass           3000         1         RMS         2576.657         -43.81         -13         Pass           12000         1         RMS         3509.057         -42.77         -13         Pass |





# 1.11. LTE Transmitter Spurious Emissions(NTNV)(Subtest:11, Channel:20393, Bandwidth:1.4, Modulation:16QAM, 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              | -54.99         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.16               | -52.78         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 914.491            | -58.67         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1666.953           | -49.05         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1753.842           | 20.88          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2573.655           | -43.8          | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 3508.056           | -43.09         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 19904.988          | -36.8          | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





## 1.12. LTE Transmitter Spurious Emissions(NTNV)(Subtest:12, Channel:20393, Bandwidth:1.4, Modulation:16QAM, 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              | -54.18         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.25         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 904.79             | -58.95         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1678.97            | -48.99         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1754.708           | 20.91          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2578.659           | -43.81         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 3509.057           | -43.73         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 19990.999          | -36.72         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





-40

-50-

-60-

-70-

-80-

0.009

4000

2000

6000

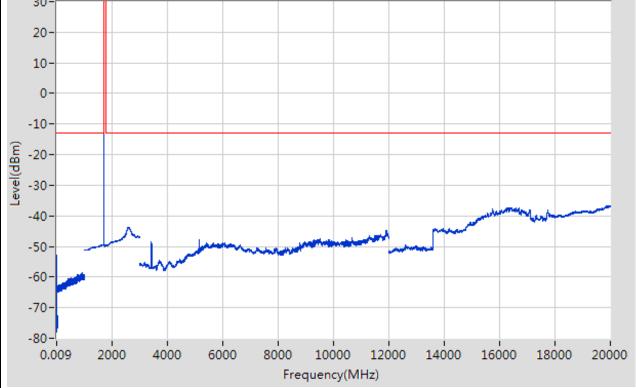
#### 1.13. LTE Transmitter Spurious Emissions(NTNV)(Subtest:13, Channel:19965, Bandwidth:3, Modulation:QPSK, RB Number: 1, RB Position:LOW)

| 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               | -54.83         | -13            | Pass    | 601            |
| 0.15  | 30                         | 0.01         | RMS      | 0.15               | -52.52         | -13            | Pass    | 2985           |
| 30  | 1000                       | 0.1          | RMS      | 948.895            | -58.86         | -13            | Pass    | 9700           |
| 1000  | 1700                       | 1            | RMS      | 1698.999           | -48.54         | -13            | Pass    | 700            |
| 1700  | 1765                       | 1            | RMS      | 1710.292           | 22.47          | 60             | Pass    | 601            |
| 1765  | 3000                       | 1            | RMS      | 2585.665           | -43.82         | -13            | Pass    | 1235           |
| 3000  | 12000                      | 1            | RMS      | 11910.99           | -45.01         | -13            | Pass    | 9000           |
| 12000   | 20000                      | 1            | RMS      | 19994.999          | -36.76         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10-<br>(\(\hat{B}\)) -30- |                            |              |          |                    |                |                |         |                |



#### 1.14. LTE Transmitter Spurious Emissions(NTNV)(Subtest:14, Channel:19965, Bandwidth:3, 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              | -53.49         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.71         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 939.894            | -58.45         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1698.999           | -49.37         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1712.783           | 22.63          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2577.658           | -43.62         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11908.99           | -44.8          | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 19991.999          | -36.7          | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





#### 1.15. LTE Transmitter Spurious Emissions(NTNV)(Subtest:15, Channel:19965, Bandwidth:3, Modulation:16QAM, 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              | -53.09         | -13            | Pass    | 601            |
| 0.15                            | 30                         | 0.01         | RMS      | 0.15               | -51.64         | -13            | Pass    | 2985           |
| 30                              | 1000                       | 0.1          | RMS      | 872.587            | -58.89         | -13            | Pass    | 9700           |
| 1000                            | 1700                       | 1            | RMS      | 1700               | -49.27         | -13            | Pass    | 700            |
| 1700                            | 1765                       | 1            | RMS      | 1710.183           | 21.77          | 60             | Pass    | 601            |
| 1765                            | 3000                       | 1            | RMS      | 2569.652           | -43.65         | -13            | Pass    | 1235           |
| 3000                            | 12000                      | 1            | RMS      | 11909.99           | -44.91         | -13            | Pass    | 9000           |
| 12000                           | 20000                      | 1            | RMS      | 19917.99           | -36.68         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10- |                            |              |          |                    |                |                |         |                |



-40

-50-

-60-

-70-

-80-

0.009

4000

2000

6000

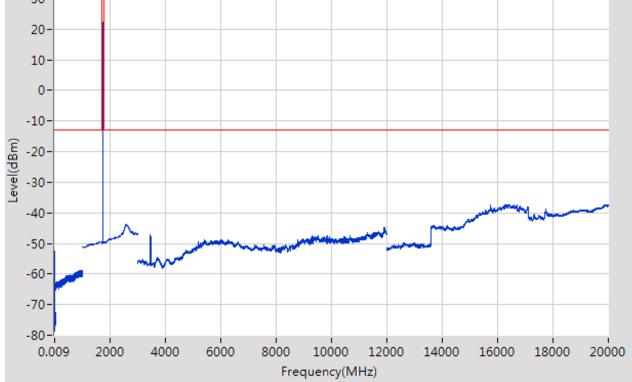
#### 1.16. LTE Transmitter Spurious Emissions(NTNV)(Subtest:16, Channel:19965, Bandwidth:3, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

| 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              | -53.12         | -13            | Pass    | 601            |
| 0.15   | 30                         | 0.01         | RMS      | 0.15               | -52.19         | -13            | Pass    | 2985           |
| 30   | 1000                       | 0.1          | RMS      | 898.99             | -58.74         | -13            | Pass    | 9700           |
| 1000   | 1700                       | 1            | RMS      | 1700               | -49.43         | -13            | Pass    | 700            |
| 1700   | 1765                       | 1            | RMS      | 1712.783           | 21.73          | 60             | Pass    | 601            |
| 1765   | 3000                       | 1            | RMS      | 2582.662           | -43.63         | -13            | Pass    | 1235           |
| 3000   | 12000                      | 1            | RMS      | 11904.989          | -44.87         | -13            | Pass    | 9000           |
| 12000  | 20000                      | 1            | RMS      | 19994.999          | -36.72         | -13            | Pass    | 8000           |
| 30 -<br>20 -<br>10 -<br>0 -<br>-10 -<br>(\(\text{\text{\$M\$}}\) -20 - |                            |              |          |                    |                |                |         |                |



## 1.17. LTE Transmitter Spurious Emissions(NTNV)(Subtest:17, Channel:20175, Bandwidth:3, Modulation:QPSK, RB Number: 1, RB Position:LOW)

| Stop<br>Frequency<br>(MHz) | RBW<br>(MHz)  | Detector  | Frequency<br>(MHz)  | Power<br>(dBm)  | Limit<br>(dBm)  | Verdict  | Sweep<br>Point  |
|----------------------------|---|---|---|---|---|--|---|
| 0.15                       | 0.001   | RMS   | 0.009   | -53.49  | -13   | Pass   | 601   |
| 30                         | 0.01  | RMS   | 0.15  | -52.49  | -13   | Pass   | 2985  |
| 1000                       | 0.1   | RMS   | 929.093   | -58.79  | -13   | Pass   | 9700  |
| 1700                       | 1   | RMS   | 1665.951  | -49.43  | -13   | Pass   | 700   |
| 1765                       | 1   | RMS   | 1731.2  | 22.23   | 60  | Pass   | 601   |
| 3000                       | 1   | RMS   | 2581.661  | -43.63  | -13   | Pass   | 1235  |
| 12000                      | 1   | RMS   | 11900.989   | -44.82  | -13   | Pass   | 9000  |
| 20000                      | 1   | RMS   | 16321.54  | -37.26  | -13   | Pass   | 8000  |
|                            |   |   |   |   |   |  |   |
|                            | Frequency<br>(MHz)<br>0.15<br>30<br>1000<br>1700<br>1765<br>3000<br>12000 | Frequency (MHz)  0.15 0.001  30 0.01  1000 0.1  1700 1  1765 1  3000 1  12000 1 | Frequency (MHz)         RBW (MHz)         Detector           0.15         0.001         RMS           30         0.01         RMS           1000         0.1         RMS           1700         1         RMS           1765         1         RMS           3000         1         RMS           12000         1         RMS | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)           0.15         0.001         RMS         0.009           30         0.01         RMS         0.15           1000         0.1         RMS         929.093           1700         1         RMS         1665.951           1765         1         RMS         1731.2           3000         1         RMS         2581.661           12000         1         RMS         11900.989 | Frequency (MHz)         RBW (MHz)         Detector         Frequency (MHz)         Power (dBm)           0.15         0.001         RMS         0.009         -53.49           30         0.01         RMS         0.15         -52.49           1000         0.1         RMS         929.093         -58.79           1700         1         RMS         1665.951         -49.43           1765         1         RMS         1731.2         22.23           3000         1         RMS         2581.661         -43.63           12000         1         RMS         11900.989         -44.82 | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)         Power (dBm)         Limit (dBm)           0.15         0.001         RMS         0.009         -53.49         -13           30         0.01         RMS         0.15         -52.49         -13           1000         0.1         RMS         929.093         -58.79         -13           1700         1         RMS         1665.951         -49.43         -13           1765         1         RMS         1731.2         22.23         60           3000         1         RMS         2581.661         -43.63         -13           12000         1         RMS         11900.989         -44.82         -13 | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)         Power (dBm)         Limit (dBm)         Verdict           0.15         0.001         RMS         0.009         -53.49         -13         Pass           30         0.01         RMS         0.15         -52.49         -13         Pass           1000         0.1         RMS         929.093         -58.79         -13         Pass           1700         1         RMS         1665.951         -49.43         -13         Pass           1765         1         RMS         1731.2         22.23         60         Pass           3000         1         RMS         2581.661         -43.63         -13         Pass           12000         1         RMS         11900.989         -44.82         -13         Pass |





#### 1.18. LTE Transmitter Spurious Emissions(NTNV)(Subtest:18, Channel:20175, Bandwidth:3, 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              | -53.41         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -51.93         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 994.499            | -59.06         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1669.957           | -49.43         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1733.8             | 22.12          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2584.664           | -43.56         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11908.99           | -44.86         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16310.539          | -37.19         | -13            | Pass    | 8000           |
| 20-                         |                            |              |          |                    |                |                |         |                |





#### 1.19. LTE Transmitter Spurious Emissions(NTNV)(Subtest:19, Channel:20175, Bandwidth:3, Modulation:16QAM, RB Number: 1, RB Position:LOW)

| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power (dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|-------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.01               | -54.36      | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -53.12      | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 987.299            | -58.64      | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1666.953           | -49.45      | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1731.2             | 21.19       | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2578.659           | -43.64      | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11910.99           | -44.89      | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16315.539          | -37.12      | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-           |                            |              |          |                    |             |                |         |                |





#### 1.20. LTE Transmitter Spurious Emissions(NTNV)(Subtest:20, Channel:20175, Bandwidth:3, Modulation:16QAM, 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              | -53.01         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.08         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 900.59             | -58.97         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1672.961           | -49.45         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1733.8             | 21.11          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2567.65            | -43.65         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11902.989          | -44.89         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16319.54           | -37.2          | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





## 1.21. LTE Transmitter Spurious Emissions(NTNV)(Subtest:21, Channel:20385, Bandwidth:3, Modulation:QPSK, RB Number: 1, RB Position:LOW)

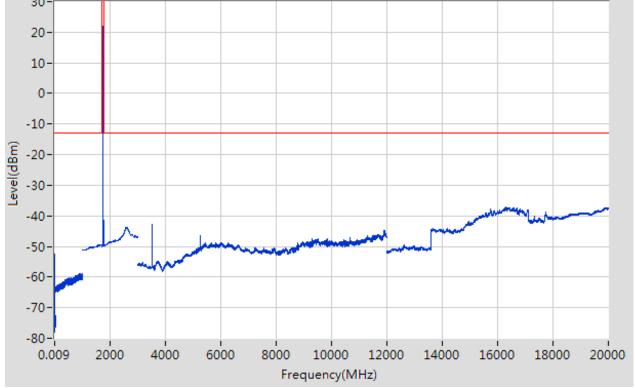
| Stop<br>Frequency<br>(MHz) | RBW<br>(MHz)  | Detector   | Frequency<br>(MHz)  | Power<br>(dBm)   | Limit<br>(dBm)   | Verdict   | Sweep<br>Point   |
|----------------------------|---|--|---|--|--|---|--|
| 0.15                       | 0.001   | RMS  | 0.01  | -52.72   | -13  | Pass  | 601  |
| 30                         | 0.01  | RMS  | 0.15  | -51.96   | -13  | Pass  | 2985   |
| 1000                       | 0.1   | RMS  | 945.094   | -58.78   | -13  | Pass  | 9700   |
| 1700                       | 1   | RMS  | 1684.979  | -49.43   | -13  | Pass  | 700  |
| 1765                       | 1   | RMS  | 1752.217  | 21.96  | 60   | Pass  | 601  |
| 3000                       | 1   | RMS  | 2579.66   | -43.61   | -13  | Pass  | 1235   |
| 12000                      | 1   | RMS  | 3504.056  | -42.48   | -13  | Pass  | 9000   |
| 20000                      | 1   | RMS  | 16311.539   | -37.15   | -13  | Pass  | 8000   |
|                            |   |  |   |  |  |   |  |
|                            | Frequency<br>(MHz)<br>0.15<br>30<br>1000<br>1700<br>1765<br>3000<br>12000 | Frequency (MHz)         RBW (MHz)           0.15         0.001           30         0.01           1000         0.1           1700         1           1765         1           3000         1           12000         1 | Frequency (MHz)         RBW (MHz)         Detector           0.15         0.001         RMS           30         0.01         RMS           1000         0.1         RMS           1700         1         RMS           1765         1         RMS           3000         1         RMS           12000         1         RMS | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)           0.15         0.001         RMS         0.01           30         0.01         RMS         0.15           1000         0.1         RMS         945.094           1700         1         RMS         1684.979           1765         1         RMS         1752.217           3000         1         RMS         2579.66           12000         1         RMS         3504.056 | Frequency (MHz)         RBW (MHz)         Detector         Frequency (MHz)         Power (dBm)           0.15         0.001         RMS         0.01         -52.72           30         0.01         RMS         0.15         -51.96           1000         0.1         RMS         945.094         -58.78           1700         1         RMS         1684.979         -49.43           1765         1         RMS         1752.217         21.96           3000         1         RMS         2579.66         -43.61           12000         1         RMS         3504.056         -42.48 | Frequency (MHz)         RBW (MHz)         Detector         Frequency (MHz)         Power (dBm)         Limit (dBm)           0.15         0.001         RMS         0.01         -52.72         -13           30         0.01         RMS         0.15         -51.96         -13           1000         0.1         RMS         945.094         -58.78         -13           1700         1         RMS         1684.979         -49.43         -13           1765         1         RMS         1752.217         21.96         60           3000         1         RMS         2579.66         -43.61         -13           12000         1         RMS         3504.056         -42.48         -13 | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)         Power (dBm)         Limit (dBm)         Verdict           0.15         0.001         RMS         0.01         -52.72         -13         Pass           30         0.01         RMS         0.15         -51.96         -13         Pass           1000         0.1         RMS         945.094         -58.78         -13         Pass           1700         1         RMS         1684.979         -49.43         -13         Pass           1765         1         RMS         1752.217         21.96         60         Pass           3000         1         RMS         2579.66         -43.61         -13         Pass           12000         1         RMS         3504.056         -42.48         -13         Pass |





## 1.22. LTE Transmitter Spurious Emissions(NTNV)(Subtest:22, Channel:20385, Bandwidth:3, 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      | 0.01               | -53.84         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.63         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 892.089            | -58.87         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1672.961           | -49.41         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1754.817           | 21.97          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2571.653           | -43.64         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 3509.057           | -42.63         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16308.539          | -37.22         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





#### 1.23. LTE Transmitter Spurious Emissions(NTNV)(Subtest:23, Channel:20385, Bandwidth:3, Modulation:16QAM, RB Number: 1, RB Position:LOW)

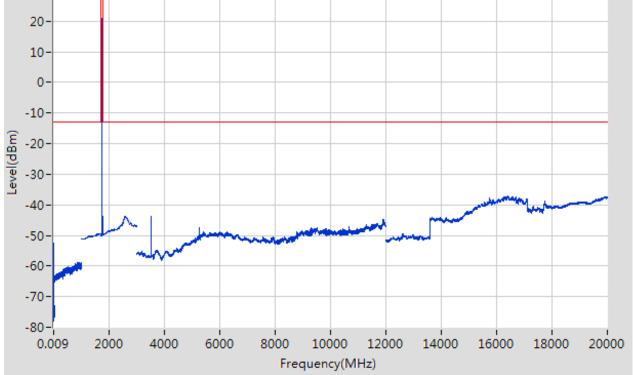
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.01               | -53.65         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.17         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 875.387            | -58.72         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1686.981           | -49.4          | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1752.217           | 21.01          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2598.675           | -43.62         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 3504.056           | -43.46         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16314.539          | -37.19         | -13            | Pass    | 8000           |
| 30 -<br>20 -<br>10 -        |                            |              |          |                    |                |                |         |                |





## 1.24. LTE Transmitter Spurious Emissions(NTNV)(Subtest:24, Channel:20385, Bandwidth:3, Modulation:16QAM, 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              | -53.45         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.41         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 914.091            | -58.79         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1680.973           | -49.43         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1754.708           | 21.03          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2597.674           | -43.67         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 3509.057           | -43.71         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16415.552          | -37.23         | -13            | Pass    | 8000           |
| 30 -<br>20 -<br>10 -<br>0 - |                            |              |          |                    |                |                |         |                |





## 1.25. LTE Transmitter Spurious Emissions(NTNV)(Subtest:25, Channel:19975, 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      | 0.01               | -53.67         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.73         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 898.39             | -58.81         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1700               | -48.95         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1710.292           | 22.75          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2586.665           | -43.59         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11903.989          | -44.87         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16408.551          | -37.14         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





## 1.26. LTE Transmitter Spurious Emissions(NTNV)(Subtest:26, Channel:19975, 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              | -53.84         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.51         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 907.49             | -58.47         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1696.996           | -48.88         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1714.625           | 22.63          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2574.656           | -43.57         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11908.99           | -44.69         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16313.539          | -37.21         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





## 1.27. LTE Transmitter Spurious Emissions(NTNV)(Subtest:27, Channel:19975, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:LOW)

| Stop<br>Frequency<br>(MHz) | RBW<br>(MHz)                                   | Detector   | Frequency<br>(MHz)  | Power<br>(dBm)   | Limit<br>(dBm)  | Verdict  | Sweep<br>Point  |
|----------------------------|--|--|---|--|---|--|---|
| 0.15                       | 0.001  | RMS  | 0.009   | -52.31   | -13   | Pass   | 601   |
| 30                         | 0.01   | RMS  | 0.15  | -52.02   | -13   | Pass   | 2985  |
| 1000                       | 0.1  | RMS  | 917.892   | -58.83   | -13   | Pass   | 9700  |
| 1700                       | 1  | RMS  | 1700  | -49.1  | -13   | Pass   | 700   |
| 1765                       | 1  | RMS  | 1710.292  | 21.84  | 60  | Pass   | 601   |
| 3000                       | 1  | RMS  | 2580.66   | -43.61   | -13   | Pass   | 1235  |
| 12000                      | 1  | RMS  | 11901.989   | -44.85   | -13   | Pass   | 9000  |
| 20000                      | 1  | RMS  | 16316.54  | -37.16   | -13   | Pass   | 8000  |
|                            |  |  |   |  |   |  |   |
|                            | (MHz)  0.15  30  1000  1700  1765  3000  12000 | Frequency (MHz)         (MHz)           0.15         0.001           30         0.01           1000         0.1           1700         1           1765         1           3000         1           12000         1 | Frequency (MHz)         (MHz)         Detector           0.15         0.001         RMS           30         0.01         RMS           1000         0.1         RMS           1700         1         RMS           1765         1         RMS           3000         1         RMS           12000         1         RMS | Frequency (MHz)         (MHz)         Detector (MHz)         1           0.15         0.001         RMS         0.009           30         0.01         RMS         0.15           1000         0.1         RMS         917.892           1700         1         RMS         1700           1765         1         RMS         1710.292           3000         1         RMS         2580.66           12000         1         RMS         11901.989 | Frequency (MHz)         (MHz)         Detector (MHz)         (MHz)         (dBm)           0.15         0.001         RMS         0.009         -52.31           30         0.01         RMS         0.15         -52.02           1000         0.1         RMS         917.892         -58.83           1700         1         RMS         1700         -49.1           1765         1         RMS         1710.292         21.84           3000         1         RMS         2580.66         -43.61           12000         1         RMS         11901.989         -44.85 | Frequency (MHz)         (MHz)         Detector (MHz)         (dBm)         (dBm)           0.15         0.001         RMS         0.009         -52.31         -13           30         0.01         RMS         0.15         -52.02         -13           1000         0.1         RMS         917.892         -58.83         -13           1700         1         RMS         1700         -49.1         -13           1765         1         RMS         1710.292         21.84         60           3000         1         RMS         2580.66         -43.61         -13           12000         1         RMS         11901.989         -44.85         -13 | Frequency (MHz)         (MHz)         Detector (MHz)         (MHz)         (dBm)         Verdict           0.15         0.001         RMS         0.009         -52.31         -13         Pass           30         0.01         RMS         0.15         -52.02         -13         Pass           1000         0.1         RMS         917.892         -58.83         -13         Pass           1700         1         RMS         1700         -49.1         -13         Pass           1765         1         RMS         1710.292         21.84         60         Pass           3000         1         RMS         2580.66         -43.61         -13         Pass           12000         1         RMS         11901.989         -44.85         -13         Pass |



# 1.28. LTE Transmitter Spurious Emissions(NTNV)(Subtest:28, Channel:19975, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

| Start<br>Frequency              | Stop<br>Frequency | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power (dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|---------------------------------|-------------------|--------------|----------|--------------------|-------------|----------------|---------|----------------|
| (MHz)                           | (MHz)             | , ,          |          |                    | , ,         | , ,            |         |                |
| 0.009                           | 0.15              | 0.001        | RMS      | 0.01               | -53.43      | -13            | Pass    | 601            |
| 0.15                            | 30                | 0.01         | RMS      | 0.15               | -52.41      | -13            | Pass    | 2985           |
| 30                              | 1000              | 0.1          | RMS      | 853.985            | -58.81      | -13            | Pass    | 9700           |
| 1000                            | 1700              | 1            | RMS      | 1696.996           | -49.07      | -13            | Pass    | 700            |
| 1700                            | 1765              | 1            | RMS      | 1714.625           | 21.68       | 60             | Pass    | 601            |
| 1765                            | 3000              | 1            | RMS      | 2580.66            | -43.63      | -13            | Pass    | 1235           |
| 3000                            | 12000             | 1            | RMS      | 11901.989          | -44.78      | -13            | Pass    | 9000           |
| 12000                           | 20000             | 1            | RMS      | 16320.54           | -37.09      | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10- |                   |              |          |                    |             |                |         |                |



# 1.29. LTE Transmitter Spurious Emissions(NTNV)(Subtest:29, Channel:20175, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:LOW)

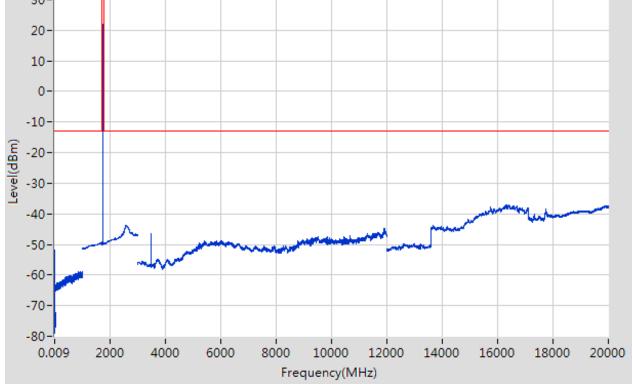
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.01               | -54.7          | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.16               | -51.79         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 901.09             | -58.72         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1668.956           | -49.5          | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1730.333           | 22.19          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2576.657           | -43.69         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11906.99           | -44.84         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16317.54           | -37.19         | -13            | Pass    | 8000           |
| 30 -<br>20 -<br>10 -        |                            |              |          |                    |                |                |         |                |





#### 1.30. LTE Transmitter Spurious Emissions(NTNV)(Subtest:30, Channel:20175, 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              | -54.59         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -51.82         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 844.184            | -58.95         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1677.969           | -49.5          | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1734.667           | 21.98          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2579.66            | -43.67         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11910.99           | -44.82         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16313.539          | -37.18         | -13            | Pass    | 8000           |
| 30 -<br>20 -<br>10 -        |                            |              |          |                    |                |                |         |                |





## 1.31. LTE Transmitter Spurious Emissions(NTNV)(Subtest:31, Channel:20175, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:LOW)

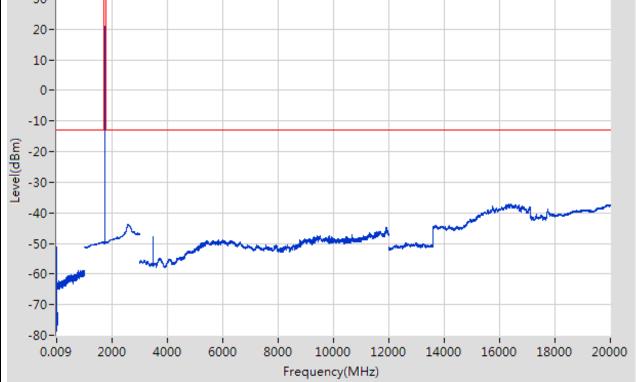
| Start<br>Frequency<br>(MHz)     | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|---------------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                           | 0.15                       | 0.001        | RMS      | 0.009              | -53.99         | -13            | Pass    | 601            |
| 0.15                            | 30                         | 0.01         | RMS      | 0.15               | -52.4          | -13            | Pass    | 2985           |
| 30                              | 1000                       | 0.1          | RMS      | 879.488            | -58.75         | -13            | Pass    | 9700           |
| 1000                            | 1700                       | 1            | RMS      | 1676.967           | -49.5          | -13            | Pass    | 700            |
| 1700                            | 1765                       | 1            | RMS      | 1730.333           | 21.12          | 60             | Pass    | 601            |
| 1765                            | 3000                       | 1            | RMS      | 2573.655           | -43.72         | -13            | Pass    | 1235           |
| 3000                            | 12000                      | 1            | RMS      | 11909.99           | -44.79         | -13            | Pass    | 9000           |
| 12000                           | 20000                      | 1            | RMS      | 16319.54           | -37.22         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10- |                            |              |          |                    |                |                |         |                |





#### 1.32. LTE Transmitter Spurious Emissions(NTNV)(Subtest:32, Channel:20175, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

|                             |                            |              | ı        |                    |                |                |         |                |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 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              | -53.68         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -51.29         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 842.484            | -58.76         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1670.959           | -49.54         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1734.667           | 20.92          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2571.653           | -43.73         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11902.989          | -44.8          | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16417.552          | -37.21         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





#### 1.33. LTE Transmitter Spurious Emissions(NTNV)(Subtest:33, Channel:20375, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:LOW)

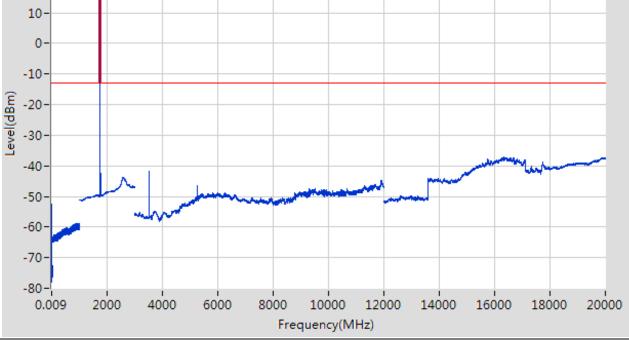
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.009              | -53.89         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.2          | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 937.794            | -58.86         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1677.969           | -49.48         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1750.375           | 21.85          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2582.662           | -43.7          | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 3501.056           | -42.62         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16311.539          | -37.17         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





#### 1.34. LTE Transmitter Spurious Emissions(NTNV)(Subtest:34, Channel:20375, 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              | -53.95         | -13            | Pass    | 601            |
| 0.15                            | 30                         | 0.01         | RMS      | 0.15               | -52.47         | -13            | Pass    | 2985           |
| 30                              | 1000                       | 0.1          | RMS      | 995.4              | -58.83         | -13            | Pass    | 9700           |
| 1000                            | 1700                       | 1            | RMS      | 1683.977           | -49.49         | -13            | Pass    | 700            |
| 1700                            | 1765                       | 1            | RMS      | 1754.708           | 21.86          | 60             | Pass    | 601            |
| 1765                            | 3000                       | 1            | RMS      | 2571.653           | -43.73         | -13            | Pass    | 1235           |
| 3000                            | 12000                      | 1            | RMS      | 3509.057           | -41.69         | -13            | Pass    | 9000           |
| 12000                           | 20000                      | 1            | RMS      | 16318.54           | -37.11         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10- |                            |              |          |                    |                |                |         |                |





# 1.35. LTE Transmitter Spurious Emissions(NTNV)(Subtest:35, Channel:20375, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:LOW)

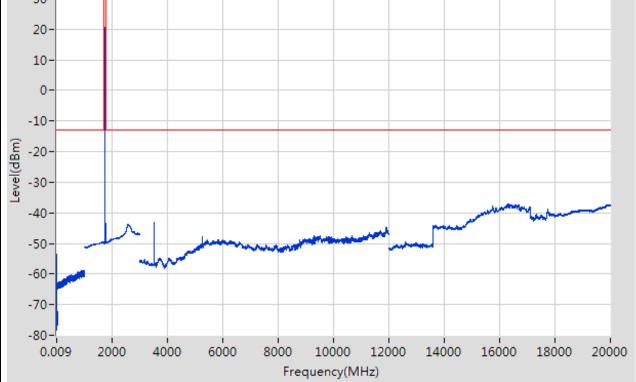
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.009              | -52.73         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.55         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 908.891            | -58.68         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1683.977           | -49.52         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1750.375           | 20.8           | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2574.656           | -43.73         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 3501.056           | -43.7          | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16319.54           | -37.1          | -13            | Pass    | 8000           |
| 30 -<br>20 -<br>10 -        |                            |              |          |                    |                |                |         |                |





# 1.36. LTE Transmitter Spurious Emissions(NTNV)(Subtest:36, Channel:20375, Bandwidth:5, Modulation:16QAM, 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              | -53.94         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -53.43         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 919.192            | -58.76         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1678.97            | -49.53         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1754.708           | 20.75          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2581.661           | -43.73         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 3509.057           | -43.05         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16315.539          | -37.21         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





## 1.37. LTE Transmitter Spurious Emissions(NTNV)(Subtest:37, Channel:20000, 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      | 0.009              | -54.75         | -13            | Pass    | 601            |
| 0.15   | 30                         | 0.01         | RMS      | 0.15               | -51.06         | -13            | Pass    | 2985           |
| 30   | 1000                       | 0.1          | RMS      | 910.491            | -58.78         | -13            | Pass    | 9700           |
| 1000   | 1700                       | 1            | RMS      | 1692.99            | -39.08         | -13            | Pass    | 700            |
| 1700   | 1765                       | 1            | RMS      | 1710.617           | 22.58          | 60             | Pass    | 601            |
| 1765   | 3000                       | 1            | RMS      | 2577.658           | -43.69         | -13            | Pass    | 1235           |
| 3000   | 12000                      | 1            | RMS      | 11904.989          | -44.82         | -13            | Pass    | 9000           |
| 12000  | 20000                      | 1            | RMS      | 16313.539          | -37.18         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10-<br>(\overline{\mathbb{E}}{9}) -20- |                            |              |          |                    |                |                |         |                |



# 1.38. LTE Transmitter Spurious Emissions(NTNV)(Subtest:38, Channel:20000, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

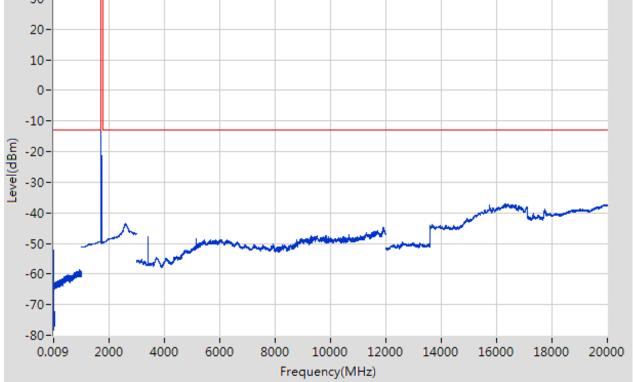
| Start<br>Frequency<br>(MHz)     | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|---------------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                           | 0.15                       | 0.001        | RMS      | 0.01               | -53.07         | -13            | Pass    | 601            |
| 0.15                            | 30                         | 0.01         | RMS      | 0.15               | -51.81         | -13            | Pass    | 2985           |
| 30                              | 1000                       | 0.1          | RMS      | 921.892            | -58.86         | -13            | Pass    | 9700           |
| 1000                            | 1700                       | 1            | RMS      | 1700               | -48.21         | -13            | Pass    | 700            |
| 1700                            | 1765                       | 1            | RMS      | 1719.392           | 22.33          | 60             | Pass    | 601            |
| 1765                            | 3000                       | 1            | RMS      | 2580.66            | -43.7          | -13            | Pass    | 1235           |
| 3000                            | 12000                      | 1            | RMS      | 11904.989          | -44.76         | -13            | Pass    | 9000           |
| 12000                           | 20000                      | 1            | RMS      | 16319.54           | -37.07         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10- |                            |              |          |                    |                |                |         |                |





### 1.39. LTE Transmitter Spurious Emissions(NTNV)(Subtest:39, Channel:20000, Bandwidth:10, Modulation:16QAM, 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              | -53.98         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.03         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 928.393            | -58.69         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1692.99            | -39.73         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1710.617           | 21.9           | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2574.656           | -43.59         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11905.99           | -44.67         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16310.539          | -37.13         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





-50-

-60-

-70-

-80-

0.009

4000

2000

6000

8000

10000

Frequency(MHz)

12000

14000

16000

18000

20000

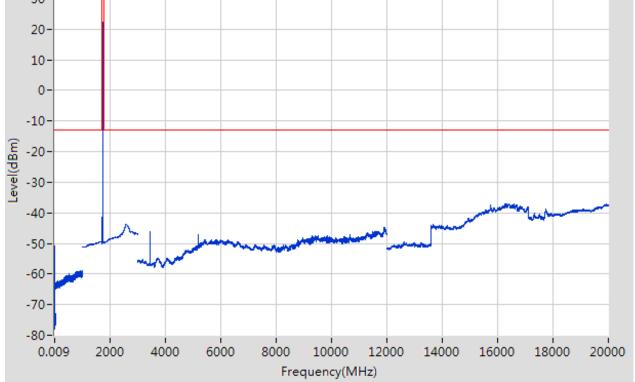
## 1.40. LTE Transmitter Spurious Emissions(NTNV)(Subtest:40, Channel:20000, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

| 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               | -53.44         | -13            | Pass    | 601            |
| 0.15  | 30                         | 0.01         | RMS      | 0.15               | -52.88         | -13            | Pass    | 2985           |
| 30  | 1000                       | 0.1          | RMS      | 889.289            | -58.65         | -13            | Pass    | 9700           |
| 1000  | 1700                       | 1            | RMS      | 1700               | -48.03         | -13            | Pass    | 700            |
| 1700  | 1765                       | 1            | RMS      | 1719.392           | 21.66          | 60             | Pass    | 601            |
| 1765  | 3000                       | 1            | RMS      | 2576.657           | -43.57         | -13            | Pass    | 1235           |
| 3000  | 12000                      | 1            | RMS      | 11906.99           | -44.7          | -13            | Pass    | 9000           |
| 12000   | 20000                      | 1            | RMS      | 16321.54           | -37.06         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10-<br>-20-<br>-30-<br>-40- |                            |              |          |                    |                |                | M       |                |



## 1.41. LTE Transmitter Spurious Emissions(NTNV)(Subtest:41, Channel:20175, 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      | 0.009              | -53.75         | -13            | Pass    | 601            |
| 0.15                            | 30                         | 0.01         | RMS      | 0.15               | -50.88         | -13            | Pass    | 2985           |
| 30                              | 1000                       | 0.1          | RMS      | 995.5              | -58.93         | -13            | Pass    | 9700           |
| 1000                            | 1700                       | 1            | RMS      | 1626.896           | -49.4          | -13            | Pass    | 700            |
| 1700                            | 1765                       | 1            | RMS      | 1728.058           | 22.21          | 60             | Pass    | 601            |
| 1765                            | 3000                       | 1            | RMS      | 2594.672           | -43.61         | -13            | Pass    | 1235           |
| 3000                            | 12000                      | 1            | RMS      | 11905.99           | -44.73         | -13            | Pass    | 9000           |
| 12000                           | 20000                      | 1            | RMS      | 16318.54           | -37.05         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10- |                            |              |          |                    |                |                |         |                |





#### 1.42. LTE Transmitter Spurious Emissions(NTNV)(Subtest:42, Channel:20175, 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 (dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|-------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.01               | -54.32      | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.62      | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 933.893            | -58.78      | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1672.961           | -49.42      | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1736.942           | 21.87       | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2575.656           | -43.55      | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11907.99           | -44.7       | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16320.54           | -37.07      | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |             |                |         |                |





## 1.43. LTE Transmitter Spurious Emissions(NTNV)(Subtest:43, Channel:20175, Bandwidth:10, Modulation:16QAM, 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               | -53.42         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.16               | -52.54         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 996.7              | -58.89         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1679.971           | -49.43         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1728.058           | 21.16          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2569.652           | -43.59         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11905.99           | -44.71         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16417.552          | -37.13         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





## 1.44. LTE Transmitter Spurious Emissions(NTNV)(Subtest:44, Channel:20175, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

|                            |   |   | ·   |  |   | •  |   |
|----------------------------|---|---|---|--|---|--|---|
| Stop<br>Frequency<br>(MHz) | RBW<br>(MHz)  | Detector  | Frequency<br>(MHz)  | Power<br>(dBm)   | Limit<br>(dBm)  | Verdict  | Sweep<br>Point  |
| 0.15                       | 0.001   | RMS   | 0.01  | -53.57   | -13   | Pass   | 601   |
| 30                         | 0.01  | RMS   | 0.15  | -52.37   | -13   | Pass   | 2985  |
| 1000                       | 0.1   | RMS   | 915.791   | -58.7  | -13   | Pass   | 9700  |
| 1700                       | 1   | RMS   | 1673.963  | -49.43   | -13   | Pass   | 700   |
| 1765                       | 1   | RMS   | 1736.942  | 20.86  | 60  | Pass   | 601   |
| 3000                       | 1   | RMS   | 2579.66   | -43.62   | -13   | Pass   | 1235  |
| 12000                      | 1   | RMS   | 11909.99  | -44.75   | -13   | Pass   | 9000  |
| 20000                      | 1   | RMS   | 16320.54  | -37.02   | -13   | Pass   | 8000  |
|                            |   |   |   |  |   |  |   |
|                            | Frequency<br>(MHz)<br>0.15<br>30<br>1000<br>1700<br>1765<br>3000<br>12000 | Frequency (MHz)  0.15 0.001  30 0.01  1000 0.1  1700 1  1765 1  3000 1  12000 1 | Frequency (MHz)         RBW (MHz)         Detector           0.15         0.001         RMS           30         0.01         RMS           1000         0.1         RMS           1700         1         RMS           1765         1         RMS           3000         1         RMS           12000         1         RMS | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)           0.15         0.001         RMS         0.01           30         0.01         RMS         0.15           1000         0.1         RMS         915.791           1700         1         RMS         1673.963           1765         1         RMS         1736.942           3000         1         RMS         2579.66           12000         1         RMS         11909.99 | Frequency (MHz)         RBW (MHz)         Detector         Frequency (MHz)         Power (dBm)           0.15         0.001         RMS         0.01         -53.57           30         0.01         RMS         0.15         -52.37           1000         0.1         RMS         915.791         -58.7           1700         1         RMS         1673.963         -49.43           1765         1         RMS         1736.942         20.86           3000         1         RMS         2579.66         -43.62           12000         1         RMS         11909.99         -44.75 | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)         Power (dBm)         Limit (dBm)           0.15         0.001         RMS         0.01         -53.57         -13           30         0.01         RMS         0.15         -52.37         -13           1000         0.1         RMS         915.791         -58.7         -13           1700         1         RMS         1673.963         -49.43         -13           1765         1         RMS         1736.942         20.86         60           3000         1         RMS         2579.66         -43.62         -13           12000         1         RMS         11909.99         -44.75         -13 | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)         Power (dBm)         Limit (dBm)         Verdict           0.15         0.001         RMS         0.01         -53.57         -13         Pass           30         0.01         RMS         0.15         -52.37         -13         Pass           1000         0.1         RMS         915.791         -58.7         -13         Pass           1700         1         RMS         1673.963         -49.43         -13         Pass           1765         1         RMS         1736.942         20.86         60         Pass           3000         1         RMS         2579.66         -43.62         -13         Pass           12000         1         RMS         11909.99         -44.75         -13         Pass |





## 1.45. LTE Transmitter Spurious Emissions(NTNV)(Subtest:45, Channel:20350, 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      | 0.009              | -52.7          | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -51.53         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 963.996            | -58.89         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1672.961           | -49.38         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1745.608           | 21.86          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2572.654           | -43.6          | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 3491.055           | -43.43         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16319.54           | -37.04         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





# 1.46. LTE Transmitter Spurious Emissions(NTNV)(Subtest:46, Channel:20350, 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      | 0.01               | -53.68         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.16               | -52.76         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 987.499            | -58.7          | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1675.966           | -49.41         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1754.383           | 22             | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2575.656           | -43.6          | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 3509.057           | -41.45         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16317.54           | -37.09         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-           |                            |              |          |                    |                |                |         |                |





### 1.47. LTE Transmitter Spurious Emissions(NTNV)(Subtest:47, Channel:20350, Bandwidth:10, Modulation:16QAM, 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              | -54.03         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -53.47         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 933.693            | -58.81         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1691.989           | -49.42         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1745.608           | 20.91          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2581.661           | -43.62         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 3491.055           | -44.24         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16320.54           | -37.01         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





## 1.48. LTE Transmitter Spurious Emissions(NTNV)(Subtest:48, Channel:20350, Bandwidth:10, Modulation:16QAM, 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              | -53.66         | -13            | Pass    | 601            |
| 0.15                            | 30                         | 0.01         | RMS      | 0.15               | -52.19         | -13            | Pass    | 2985           |
| 30                              | 1000                       | 0.1          | RMS      | 938.194            | -58.64         | -13            | Pass    | 9700           |
| 1000                            | 1700                       | 1            | RMS      | 1673.963           | -49.42         | -13            | Pass    | 700            |
| 1700                            | 1765                       | 1            | RMS      | 1754.383           | 21.04          | 60             | Pass    | 601            |
| 1765                            | 3000                       | 1            | RMS      | 2577.658           | -43.6          | -13            | Pass    | 1235           |
| 3000                            | 12000                      | 1            | RMS      | 3509.057           | -42.36         | -13            | Pass    | 9000           |
| 12000                           | 20000                      | 1            | RMS      | 16321.54           | -37.05         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10- |                            |              |          |                    |                |                |         |                |



## 1.49. LTE Transmitter Spurious Emissions(NTNV)(Subtest:49, Channel:20025, Bandwidth:15, 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              | -53.86         | -13            | Pass    | 601            |
| 0.15                            | 30                         | 0.01         | RMS      | 0.15               | -52.41         | -13            | Pass    | 2985           |
| 30                              | 1000                       | 0.1          | RMS      | 913.891            | -58.72         | -13            | Pass    | 9700           |
| 1000                            | 1700                       | 1            | RMS      | 1697.997           | -43.99         | -13            | Pass    | 700            |
| 1700                            | 1765                       | 1            | RMS      | 1710.833           | 22.76          | 60             | Pass    | 601            |
| 1765                            | 3000                       | 1            | RMS      | 2586.665           | -43.61         | -13            | Pass    | 1235           |
| 3000                            | 12000                      | 1            | RMS      | 11908.99           | -44.68         | -13            | Pass    | 9000           |
| 12000                           | 20000                      | 1            | RMS      | 16311.539          | -37.04         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10- |                            |              |          |                    |                |                |         |                |
| ~                               |                            |              |          |                    |                |                |         |                |





# 1.50. LTE Transmitter Spurious Emissions(NTNV)(Subtest:50, Channel:20025, Bandwidth:15, 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      | 0.01               | -53.59         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.39         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 933.093            | -58.79         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1697.997           | -28.22         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1724.158           | 22.38          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2578.659           | -43.59         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11905.99           | -44.64         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16318.54           | -37            | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





## 1.51. LTE Transmitter Spurious Emissions(NTNV)(Subtest:51, Channel:20025, Bandwidth:15, Modulation:16QAM, RB Number: 1, RB Position:LOW)

| Stop<br>Frequency<br>(MHz) | RBW<br>(MHz)  | Detector  | Frequency<br>(MHz)  | Power<br>(dBm)   | Limit<br>(dBm)   | Verdict   | Sweep<br>Point   |
|----------------------------|---|---|---|--|--|---|--|
| 0.15                       | 0.001   | RMS   | 0.01  | -53.22   | -13  | Pass  | 601  |
| 30                         | 0.01  | RMS   | 0.16  | -52.74   | -13  | Pass  | 2985   |
| 1000                       | 0.1   | RMS   | 900.19  | -58.43   | -13  | Pass  | 9700   |
| 1700                       | 1   | RMS   | 1697.997  | -44.81   | -13  | Pass  | 700  |
| 1765                       | 1   | RMS   | 1710.833  | 21.91  | 60   | Pass  | 601  |
| 3000                       | 1   | RMS   | 2576.657  | -43.63   | -13  | Pass  | 1235   |
| 12000                      | 1   | RMS   | 11905.99  | -44.82   | -13  | Pass  | 9000   |
| 20000                      | 1   | RMS   | 16423.553   | -37.12   | -13  | Pass  | 8000   |
|                            |   |   |   |  |  |   |  |
|                            | Frequency<br>(MHz)  0.15  30  1000  1700  1765  3000  12000 | Frequency (MHz)  0.15 0.001  30 0.01  1000 0.1  1700 1  1765 1 3000 1 12000 1 | Frequency (MHz)         RBW (MHz)         Detector           0.15         0.001         RMS           30         0.01         RMS           1000         0.1         RMS           1700         1         RMS           1765         1         RMS           3000         1         RMS           12000         1         RMS | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)           0.15         0.001         RMS         0.01           30         0.01         RMS         0.16           1000         0.1         RMS         900.19           1700         1         RMS         1697.997           1765         1         RMS         1710.833           3000         1         RMS         2576.657           12000         1         RMS         11905.99 | Frequency (MHz)         RBW (MHz)         Detector         Frequency (MHz)         Power (dBm)           0.15         0.001         RMS         0.01         -53.22           30         0.01         RMS         0.16         -52.74           1000         0.1         RMS         900.19         -58.43           1700         1         RMS         1697.997         -44.81           1765         1         RMS         1710.833         21.91           3000         1         RMS         2576.657         -43.63           12000         1         RMS         11905.99         -44.82 | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)         Power (dBm)         Limit (dBm)           0.15         0.001         RMS         0.01         -53.22         -13           30         0.01         RMS         0.16         -52.74         -13           1000         0.1         RMS         900.19         -58.43         -13           1700         1         RMS         1697.997         -44.81         -13           1765         1         RMS         1710.833         21.91         60           3000         1         RMS         2576.657         -43.63         -13           12000         1         RMS         11905.99         -44.82         -13 | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)         Power (dBm)         Limit (dBm)         Verdict           0.15         0.001         RMS         0.01         -53.22         -13         Pass           30         0.01         RMS         0.16         -52.74         -13         Pass           1000         0.1         RMS         900.19         -58.43         -13         Pass           1700         1         RMS         1697.997         -44.81         -13         Pass           1765         1         RMS         1710.833         21.91         60         Pass           3000         1         RMS         2576.657         -43.63         -13         Pass           12000         1         RMS         11905.99         -44.82         -13         Pass |





## 1.52. LTE Transmitter Spurious Emissions(NTNV)(Subtest:52, Channel:20025, Bandwidth:15, Modulation:16QAM, 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              | -53.85         | -13            | Pass    | 601            |
| 0.15                            | 30                         | 0.01         | RMS      | 0.15               | -53.07         | -13            | Pass    | 2985           |
| 30                              | 1000                       | 0.1          | RMS      | 927.192            | -58.82         | -13            | Pass    | 9700           |
| 1000                            | 1700                       | 1            | RMS      | 1697.997           | -27.97         | -13            | Pass    | 700            |
| 1700                            | 1765                       | 1            | RMS      | 1724.158           | 21.47          | 60             | Pass    | 601            |
| 1765                            | 3000                       | 1            | RMS      | 2578.659           | -43.6          | -13            | Pass    | 1235           |
| 3000                            | 12000                      | 1            | RMS      | 11906.99           | -44.47         | -13            | Pass    | 9000           |
| 12000                           | 20000                      | 1            | RMS      | 16311.539          | -37.02         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10- |                            |              |          |                    |                |                |         |                |





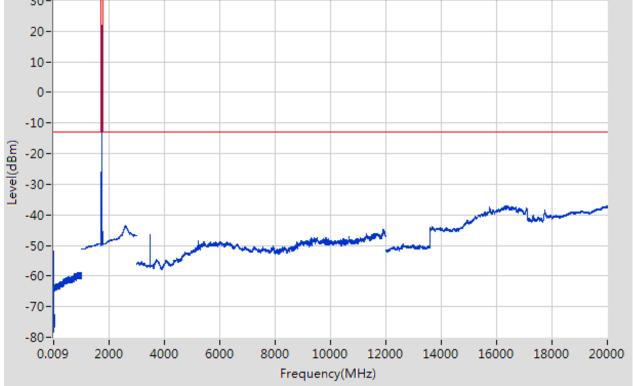
## 1.53. LTE Transmitter Spurious Emissions(NTNV)(Subtest:53, Channel:20175, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:LOW)

| 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              | -53.68         | -13            | Pass    | 601            |
| 0.15                            | 30                         | 0.01         | RMS      | 0.16               | -52.68         | -13            | Pass    | 2985           |
| 30                              | 1000                       | 0.1          | RMS      | 921.592            | -58.8          | -13            | Pass    | 9700           |
| 1000                            | 1700                       | 1            | RMS      | 1698.999           | -40.01         | -13            | Pass    | 700            |
| 1700                            | 1765                       | 1            | RMS      | 1725.892           | 22.27          | 60             | Pass    | 601            |
| 1765                            | 3000                       | 1            | RMS      | 2571.653           | -43.61         | -13            | Pass    | 1235           |
| 3000                            | 12000                      | 1            | RMS      | 11904.989          | -44.67         | -13            | Pass    | 9000           |
| 12000                           | 20000                      | 1            | RMS      | 16320.54           | -37.06         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10- |                            |              |          |                    |                |                |         |                |



## 1.54. LTE Transmitter Spurious Emissions(NTNV)(Subtest:54, Channel:20175, Bandwidth:15, 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              | -53.61         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -51.89         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 930.093            | -58.77         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1665.951           | -49.35         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1739.217           | 21.85          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2585.665           | -43.57         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11910.99           | -44.68         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16317.54           | -36.98         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





### 1.55. LTE Transmitter Spurious Emissions(NTNV)(Subtest:55, Channel:20175, Bandwidth:15, Modulation:16QAM, 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               | -54.23         | -13            | Pass    | 601            |
| 0.15                            | 30                         | 0.01         | RMS      | 0.15               | -52.11         | -13            | Pass    | 2985           |
| 30                              | 1000                       | 0.1          | RMS      | 926.392            | -58.81         | -13            | Pass    | 9700           |
| 1000                            | 1700                       | 1            | RMS      | 1698.999           | -42.56         | -13            | Pass    | 700            |
| 1700                            | 1765                       | 1            | RMS      | 1725.783           | 21.28          | 60             | Pass    | 601            |
| 1765                            | 3000                       | 1            | RMS      | 2573.655           | -43.6          | -13            | Pass    | 1235           |
| 3000                            | 12000                      | 1            | RMS      | 11911.99           | -44.69         | -13            | Pass    | 9000           |
| 12000                           | 20000                      | 1            | RMS      | 16318.54           | -37.06         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10- |                            |              |          |                    |                |                |         |                |





## 1.56. LTE Transmitter Spurious Emissions(NTNV)(Subtest:56, Channel:20175, Bandwidth:15, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

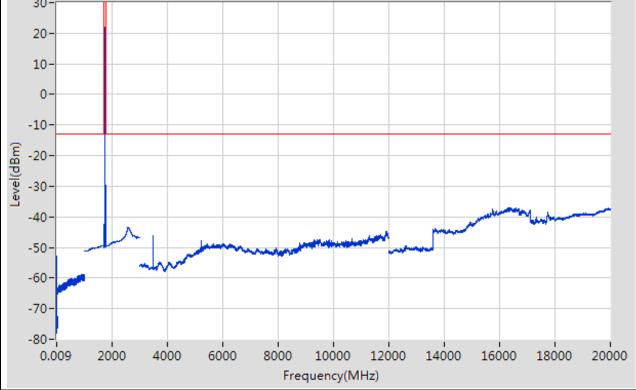
| Start<br>Frequency<br>(MHz)     | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|---------------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                           | 0.15                       | 0.001        | RMS      | 0.009              | -54            | -13            | Pass    | 601            |
| 0.15                            | 30                         | 0.01         | RMS      | 0.15               | -52.43         | -13            | Pass    | 2985           |
| 30                              | 1000                       | 0.1          | RMS      | 951.695            | -58.71         | -13            | Pass    | 9700           |
| 1000                            | 1700                       | 1            | RMS      | 1669.957           | -49.4          | -13            | Pass    | 700            |
| 1700                            | 1765                       | 1            | RMS      | 1739.108           | 20.86          | 60             | Pass    | 601            |
| 1765                            | 3000                       | 1            | RMS      | 2580.66            | -43.58         | -13            | Pass    | 1235           |
| 3000                            | 12000                      | 1            | RMS      | 11905.99           | -44.65         | -13            | Pass    | 9000           |
| 12000                           | 20000                      | 1            | RMS      | 16316.54           | -37            | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10- |                            |              |          |                    |                |                |         |                |





## 1.57. LTE Transmitter Spurious Emissions(NTNV)(Subtest:57, Channel:20325, Bandwidth:15, 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               | -54.44         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.78         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 880.188            | -58.7          | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1666.953           | -49.35         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1740.842           | 21.88          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 1767.002           | -29.57         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11907.99           | -44.77         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16384.548          | -37.13         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-           |                            |              |          |                    |                |                |         |                |





# 1.58. LTE Transmitter Spurious Emissions(NTNV)(Subtest:58, Channel:20325, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

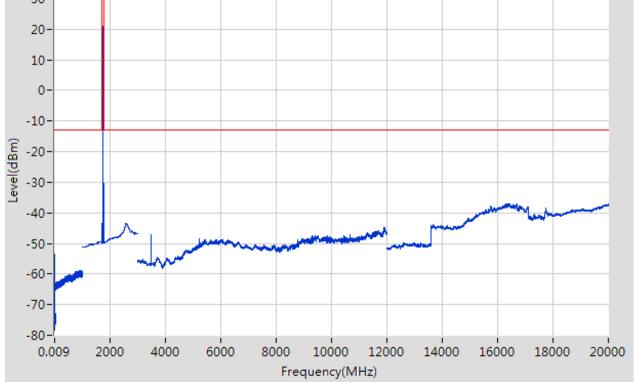
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.01               | -53.9          | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.16         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 903.59             | -58.79         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1679.971           | -49.36         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1754.167           | 22.04          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2572.654           | -43.59         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 3508.056           | -41.49         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 19996              | -37.12         | -13            | Pass    | 8000           |
| 30 -<br>20 -<br>10 -        |                            |              |          |                    |                |                |         |                |





### 1.59. LTE Transmitter Spurious Emissions(NTNV)(Subtest:59, Channel:20325, Bandwidth:15, Modulation:16QAM, 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               | -53.99         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.16               | -53.56         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 936.093            | -58.76         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1682.976           | -49.4          | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1740.842           | 21.03          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 1767.002           | -30.29         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11900.989          | -44.64         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16320.54           | -37.04         | -13            | Pass    | 8000           |
| 30 -<br>20 -<br>10 -<br>0 - |                            |              |          |                    |                |                |         |                |





-60-

-70-

-80-

0.009

4000

2000

6000

8000

10000 12000

Frequency(MHz)

16000

14000

18000

20000

### 1.60. LTE Transmitter Spurious Emissions(NTNV)(Subtest:60, Channel:20325, Bandwidth:15, Modulation:16QAM, 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              | -53.75         | -13  | Pass    | 601            |
| 0.15                                    | 30                         | 0.01         | RMS      | 0.15               | -51.92         | -13  | Pass    | 298            |
| 30                                      | 1000                       | 0.1          | RMS      | 896.589            | -58.77         | -13  | Pass    | 9700           |
| 1000                                    | 1700                       | 1            | RMS      | 1672.961           | -49.39         | -13  | Pass    | 700            |
| 1700                                    | 1765                       | 1            | RMS      | 1754.167           | 21.14          | 60   | Pass    | 601            |
| 1765                                    | 3000                       | 1            | RMS      | 2593.671           | -43.57         | -13  | Pass    | 1235           |
| 3000                                    | 12000                      | 1            | RMS      | 3508.056           | -42.36         | -13  | Pass    | 9000           |
| 12000                                   | 20000                      | 1            | RMS      | 16318.54           | -37.02         | -13  | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10-<br>-20- |                            |              |          |                    |                |  |         |                |
| -40-                                    |                            |              |          |                    |                | The state of the s | Munde   |                |



-30

-40

-50-

-60-

-70-

-80-

0.009

4000

2000

6000

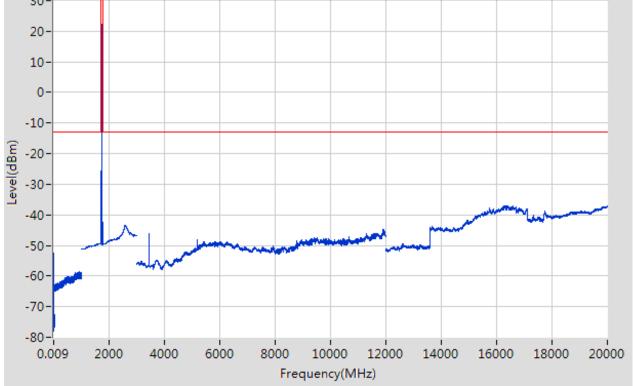
## 1.61. LTE Transmitter Spurious Emissions(NTNV)(Subtest:61, Channel:20050, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)

| Stop<br>Frequency<br>(MHz) | RBW<br>(MHz)  | Detector  | Frequency<br>(MHz)  | Power<br>(dBm)   | Limit<br>(dBm)   | Verdict   | Sweep<br>Point   |
|----------------------------|---|---|---|--|--|---|--|
| 0.15                       | 0.001   | RMS   | 0.01  | -53.73   | -13  | Pass  | 601  |
| 30                         | 0.01  | RMS   | 0.16  | -53.16   | -13  | Pass  | 2985   |
| 1000                       | 0.1   | RMS   | 873.987   | -58.91   | -13  | Pass  | 9700   |
| 1700                       | 1   | RMS   | 1692.99   | -42.15   | -13  | Pass  | 700  |
| 1765                       | 1   | RMS   | 1711.05   | 22.8   | 60   | Pass  | 601  |
| 3000                       | 1   | RMS   | 2582.662  | -43.6  | -13  | Pass  | 1235   |
| 12000                      | 1   | RMS   | 11901.989   | -44.72   | -13  | Pass  | 9000   |
| 20000                      | 1   | RMS   | 16317.54  | -36.98   | -13  | Pass  | 8000   |
|                            |   |   |   |  |  |   |  |
|                            | Frequency<br>(MHz)<br>0.15<br>30<br>1000<br>1700<br>1765<br>3000<br>12000 | Frequency (MHz)         RBW (MHz)           0.15         0.001           30         0.01           1000         0.1           1700         1           3000         1           12000         1 | Frequency (MHz)         RBW (MHz)         Detector           0.15         0.001         RMS           30         0.01         RMS           1000         0.1         RMS           1700         1         RMS           1765         1         RMS           3000         1         RMS           12000         1         RMS | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)           0.15         0.001         RMS         0.01           30         0.01         RMS         0.16           1000         0.1         RMS         873.987           1700         1         RMS         1692.99           1765         1         RMS         1711.05           3000         1         RMS         2582.662           12000         1         RMS         11901.989 | Frequency (MHz)         RBW (MHz)         Detector         Frequency (MHz)         Power (dBm)           0.15         0.001         RMS         0.01         -53.73           30         0.01         RMS         0.16         -53.16           1000         0.1         RMS         873.987         -58.91           1700         1         RMS         1692.99         -42.15           1765         1         RMS         1711.05         22.8           3000         1         RMS         2582.662         -43.6           12000         1         RMS         11901.989         -44.72 | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)         Power (dBm)         Limit (dBm)           0.15         0.001         RMS         0.01         -53.73         -13           30         0.01         RMS         0.16         -53.16         -13           1000         0.1         RMS         873.987         -58.91         -13           1700         1         RMS         1692.99         -42.15         -13           1765         1         RMS         1711.05         22.8         60           3000         1         RMS         2582.662         -43.6         -13           12000         1         RMS         11901.989         -44.72         -13 | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)         Power (dBm)         Limit (dBm)         Verdict           0.15         0.001         RMS         0.01         -53.73         -13         Pass           30         0.01         RMS         0.16         -53.16         -13         Pass           1000         0.1         RMS         873.987         -58.91         -13         Pass           1700         1         RMS         1692.99         -42.15         -13         Pass           1765         1         RMS         1711.05         22.8         60         Pass           3000         1         RMS         2582.662         -43.6         -13         Pass           12000         1         RMS         11901.989         -44.72         -13         Pass |



## 1.62. LTE Transmitter Spurious Emissions(NTNV)(Subtest:62, Channel:20050, Bandwidth:20, 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              | -52.43         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.77         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 928.093            | -58.58         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1692.99            | -29.26         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1728.925           | 22.27          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2573.655           | -43.58         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11901.989          | -44.81         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16322.54           | -37.14         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





-50

-60-

-70-

-80-

0.009

4000

2000

6000

8000

10000

Frequency(MHz)

12000

14000

16000

18000

20000

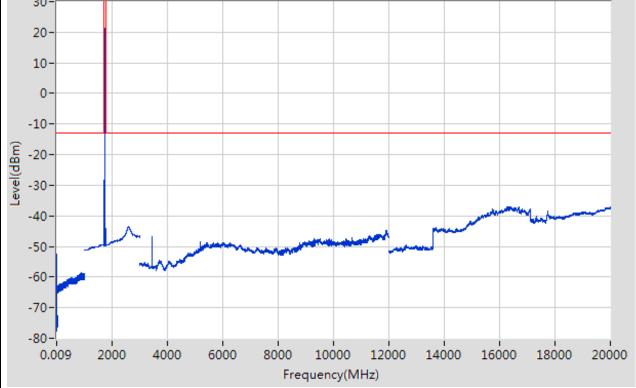
## 1.63. LTE Transmitter Spurious Emissions(NTNV)(Subtest:63, Channel:20050, Bandwidth:20, Modulation:16QAM, RB Number: 1, RB Position:LOW)

| 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              | -52.79         | -13            | Pass    | 601            |
| 0.15  | 30                         | 0.01         | RMS      | 0.15               | -52.26         | -13            | Pass    | 2985           |
| 30  | 1000                       | 0.1          | RMS      | 914.591            | -58.84         | -13            | Pass    | 9700           |
| 1000  | 1700                       | 1            | RMS      | 1692.99            | -43.59         | -13            | Pass    | 700            |
| 1700  | 1765                       | 1            | RMS      | 1711.05            | 21.94          | 60             | Pass    | 601            |
| 1765  | 3000                       | 1            | RMS      | 2573.655           | -43.56         | -13            | Pass    | 1235           |
| 3000  | 12000                      | 1            | RMS      | 11904.989          | -44.76         | -13            | Pass    | 9000           |
| 12000   | 20000                      | 1            | RMS      | 16320.54           | -36.91         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10-<br>( <u>MB</u> ) -20-<br>-40- |                            |              |          |                    |                |                |         |                |



## 1.64. LTE Transmitter Spurious Emissions(NTNV)(Subtest:64, Channel:20050, Bandwidth:20, Modulation:16QAM, 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              | -53.53         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.6          | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 904.49             | -58.7          | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1692.99            | -29.03         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1728.925           | 21.37          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2579.66            | -43.57         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11900.989          | -44.67         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16314.539          | -36.91         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





### 1.65. LTE Transmitter Spurious Emissions(NTNV)(Subtest:65, Channel:20175, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)

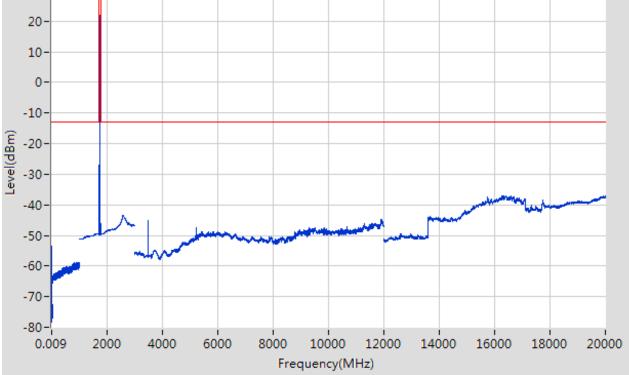
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.01               | -53.98         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.74         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 962.896            | -58.81         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1687.983           | -45.41         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1723.617           | 22.42          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2582.662           | -43.61         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11900.989          | -44.68         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16314.539          | -36.99         | -13            | Pass    | 8000           |
| 20-                         |                            |              |          |                    |                |                |         |                |





## 1.66. LTE Transmitter Spurious Emissions(NTNV)(Subtest:66, Channel:20175, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

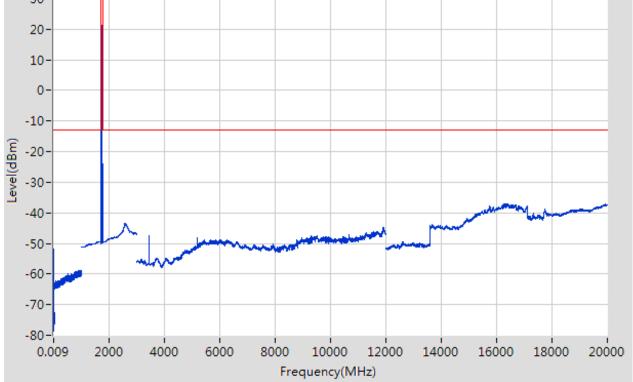
| Stop<br>Frequency<br>(MHz) | RBW<br>(MHz)  | Detector  | Frequency<br>(MHz)  | Power<br>(dBm)   | Limit<br>(dBm)   | Verdict   | Sweep<br>Point   |
|----------------------------|---|---|---|--|--|---|--|
| 0.15                       | 0.001   | RMS   | 0.009   | -53.37   | -13  | Pass  | 601  |
| 30                         | 0.01  | RMS   | 0.16  | -53.65   | -13  | Pass  | 2985   |
| 1000                       | 0.1   | RMS   | 877.587   | -58.85   | -13  | Pass  | 9700   |
| 1700                       | 1   | RMS   | 1696.996  | -49.34   | -13  | Pass  | 700  |
| 1765                       | 1   | RMS   | 1741.383  | 21.84  | 60   | Pass  | 601  |
| 3000                       | 1   | RMS   | 2573.655  | -43.56   | -13  | Pass  | 1235   |
| 12000                      | 1   | RMS   | 11907.99  | -44.63   | -13  | Pass  | 9000   |
| 20000                      | 1   | RMS   | 19993.999   | -37.05   | -13  | Pass  | 8000   |
|                            |   |   |   |  |  |   |  |
|                            | Frequency<br>(MHz)<br>0.15<br>30<br>1000<br>1700<br>1765<br>3000<br>12000 | Frequency (MHz)  0.15 0.001  30 0.01  1000 0.1  1700 1  1765 1  3000 1  12000 1 | Frequency (MHz)         RBW (MHz)         Detector           0.15         0.001         RMS           30         0.01         RMS           1000         0.1         RMS           1700         1         RMS           1765         1         RMS           3000         1         RMS           12000         1         RMS | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)           0.15         0.001         RMS         0.009           30         0.01         RMS         0.16           1000         0.1         RMS         877.587           1700         1         RMS         1696.996           1765         1         RMS         1741.383           3000         1         RMS         2573.655           12000         1         RMS         11907.99 | Frequency (MHz)         RBW (MHz)         Detector         Frequency (MHz)         Power (dBm)           0.15         0.001         RMS         0.009         -53.37           30         0.01         RMS         0.16         -53.65           1000         0.1         RMS         877.587         -58.85           1700         1         RMS         1696.996         -49.34           1765         1         RMS         1741.383         21.84           3000         1         RMS         2573.655         -43.56           12000         1         RMS         11907.99         -44.63 | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)         Power (dBm)         Limit (dBm)           0.15         0.001         RMS         0.009         -53.37         -13           30         0.01         RMS         0.16         -53.65         -13           1000         0.1         RMS         877.587         -58.85         -13           1700         1         RMS         1696.996         -49.34         -13           1765         1         RMS         1741.383         21.84         60           3000         1         RMS         2573.655         -43.56         -13           12000         1         RMS         11907.99         -44.63         -13 | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)         Power (dBm)         Limit (dBm)         Verdict           0.15         0.001         RMS         0.009         -53.37         -13         Pass           30         0.01         RMS         0.16         -53.65         -13         Pass           1000         0.1         RMS         877.587         -58.85         -13         Pass           1700         1         RMS         1696.996         -49.34         -13         Pass           1765         1         RMS         1741.383         21.84         60         Pass           3000         1         RMS         2573.655         -43.56         -13         Pass           12000         1         RMS         11907.99         -44.63         -13         Pass |





### 1.67. LTE Transmitter Spurious Emissions(NTNV)(Subtest:67, Channel:20175, Bandwidth:20, Modulation:16QAM, 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              | -54.18         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -51.9          | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 881.388            | -58.73         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1687.983           | -46.86         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1723.617           | 21.39          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 2577.658           | -43.57         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11908.99           | -44.78         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16316.54           | -37.04         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





-40

-50-

-60-

-70-

-80-

0.009

4000

2000

6000

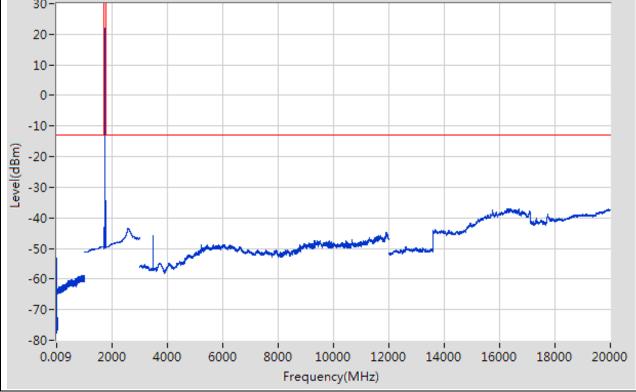
## 1.68. LTE Transmitter Spurious Emissions(NTNV)(Subtest:68, Channel:20175, Bandwidth:20, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

| 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              | -53.54         | -13            | Pass    | 601            |
| 0.15                                    | 30                         | 0.01         | RMS      | 0.15               | -52.22         | -13            | Pass    | 2985           |
| 30                                      | 1000                       | 0.1          | RMS      | 994.199            | -58.85         | -13            | Pass    | 9700           |
| 1000                                    | 1700                       | 1            | RMS      | 1679.971           | -49.41         | -13            | Pass    | 700            |
| 1700                                    | 1765                       | 1            | RMS      | 1741.383           | 20.8           | 60             | Pass    | 601            |
| 1765                                    | 3000                       | 1            | RMS      | 2576.657           | -43.57         | -13            | Pass    | 1235           |
| 3000                                    | 12000                      | 1            | RMS      | 11903.989          | -44.64         | -13            | Pass    | 9000           |
| 12000                                   | 20000                      | 1            | RMS      | 16313.539          | -37.09         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-<br>-10-<br>-20- |                            |              |          |                    |                |                |         |                |



### 1.69. LTE Transmitter Spurious Emissions(NTNV)(Subtest:69, Channel:20300, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)

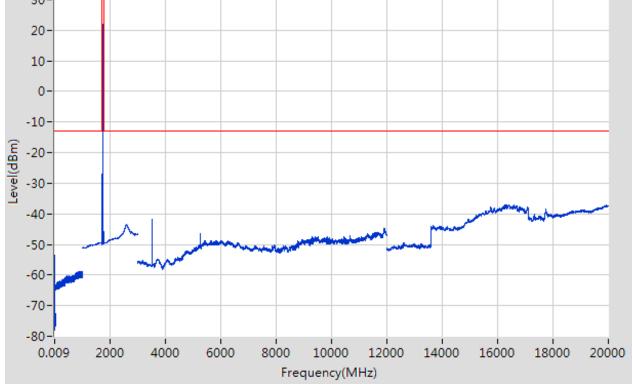
| Start<br>Frequency<br>(MHz) | Stop<br>Frequency<br>(MHz) | RBW<br>(MHz) | Detector | Frequency<br>(MHz) | Power<br>(dBm) | Limit<br>(dBm) | Verdict | Sweep<br>Point |
|-----------------------------|----------------------------|--------------|----------|--------------------|----------------|----------------|---------|----------------|
| 0.009                       | 0.15                       | 0.001        | RMS      | 0.01               | -53.24         | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.16               | -53.6          | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 880.588            | -58.75         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1700               | -44.67         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1736.075           | 22.03          | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 1772.006           | -34.39         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11899.989          | -44.76         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16318.54           | -37.12         | -13            | Pass    | 8000           |
| 20-                         |                            |              |          |                    |                |                |         |                |





## 1.70. LTE Transmitter Spurious Emissions(NTNV)(Subtest:70, Channel:20300, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

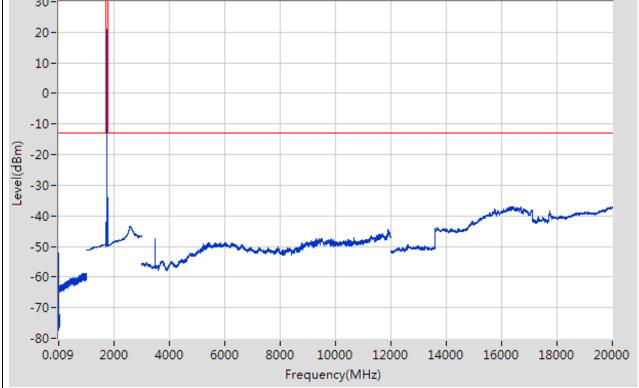
| Stop<br>Frequency<br>(MHz) | RBW<br>(MHz)  | Detector   | Frequency<br>(MHz)  | Power<br>(dBm)   | Limit<br>(dBm)  | Verdict  | Sweep<br>Point  |
|----------------------------|---|--|---|--|---|--|---|
| 0.15                       | 0.001   | RMS  | 0.009   | -54.11   | -13   | Pass   | 601   |
| 30                         | 0.01  | RMS  | 0.16  | -53.36   | -13   | Pass   | 2985  |
| 1000                       | 0.1   | RMS  | 899.89  | -58.72   | -13   | Pass   | 9700  |
| 1700                       | 1   | RMS  | 1669.957  | -49.37   | -13   | Pass   | 700   |
| 1765                       | 1   | RMS  | 1753.95   | 22.05  | 60  | Pass   | 601   |
| 3000                       | 1   | RMS  | 2577.658  | -43.57   | -13   | Pass   | 1235  |
| 12000                      | 1   | RMS  | 3508.056  | -41.8  | -13   | Pass   | 9000  |
| 20000                      | 1   | RMS  | 16419.552   | -37.01   | -13   | Pass   | 8000  |
|                            |   |  |   |  |   |  |   |
|                            | Frequency<br>(MHz)<br>0.15<br>30<br>1000<br>1700<br>1765<br>3000<br>12000 | Frequency (MHz)         RBW (MHz)           0.15         0.001           30         0.01           1000         0.1           1700         1           1765         1           3000         1           12000         1 | Frequency (MHz)         RBW (MHz)         Detector           0.15         0.001         RMS           30         0.01         RMS           1000         0.1         RMS           1700         1         RMS           1765         1         RMS           3000         1         RMS           12000         1         RMS | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)           0.15         0.001         RMS         0.009           30         0.01         RMS         0.16           1000         0.1         RMS         899.89           1700         1         RMS         1669.957           1765         1         RMS         1753.95           3000         1         RMS         2577.658           12000         1         RMS         3508.056 | Frequency (MHz)         RBW (MHz)         Detector         Frequency (MHz)         Power (dBm)           0.15         0.001         RMS         0.009         -54.11           30         0.01         RMS         0.16         -53.36           1000         0.1         RMS         899.89         -58.72           1700         1         RMS         1669.957         -49.37           1765         1         RMS         1753.95         22.05           3000         1         RMS         2577.658         -43.57           12000         1         RMS         3508.056         -41.8 | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)         Power (dBm)         Limit (dBm)           0.15         0.001         RMS         0.009         -54.11         -13           30         0.01         RMS         0.16         -53.36         -13           1000         0.1         RMS         899.89         -58.72         -13           1700         1         RMS         1669.957         -49.37         -13           1765         1         RMS         1753.95         22.05         60           3000         1         RMS         2577.658         -43.57         -13           12000         1         RMS         3508.056         -41.8         -13 | Frequency (MHz)         RBW (MHz)         Detector (MHz)         Frequency (MHz)         Power (dBm)         Limit (dBm)         Verdict           0.15         0.001         RMS         0.009         -54.11         -13         Pass           30         0.01         RMS         0.16         -53.36         -13         Pass           1000         0.1         RMS         899.89         -58.72         -13         Pass           1700         1         RMS         1669.957         -49.37         -13         Pass           1765         1         RMS         1753.95         22.05         60         Pass           3000         1         RMS         2577.658         -43.57         -13         Pass           12000         1         RMS         3508.056         -41.8         -13         Pass |





## 1.71. LTE Transmitter Spurious Emissions(NTNV)(Subtest:71, Channel:20300, Bandwidth:20, Modulation:16QAM, 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              | -53.8          | -13            | Pass    | 601            |
| 0.15                        | 30                         | 0.01         | RMS      | 0.15               | -52.05         | -13            | Pass    | 2985           |
| 30                          | 1000                       | 0.1          | RMS      | 871.587            | -58.74         | -13            | Pass    | 9700           |
| 1000                        | 1700                       | 1            | RMS      | 1700               | -44.25         | -13            | Pass    | 700            |
| 1700                        | 1765                       | 1            | RMS      | 1736.075           | 21             | 60             | Pass    | 601            |
| 1765                        | 3000                       | 1            | RMS      | 1772.006           | -34.07         | -13            | Pass    | 1235           |
| 3000                        | 12000                      | 1            | RMS      | 11906.99           | -44.59         | -13            | Pass    | 9000           |
| 12000                       | 20000                      | 1            | RMS      | 16414.552          | -37.01         | -13            | Pass    | 8000           |
| 30-<br>20-<br>10-<br>0-     |                            |              |          |                    |                |                |         |                |





END