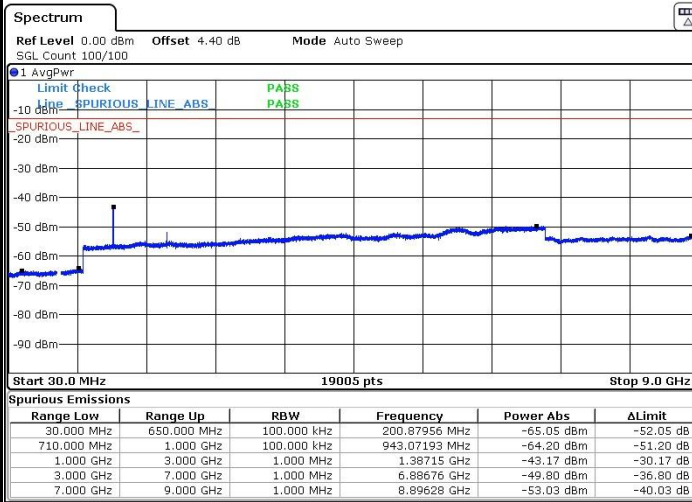




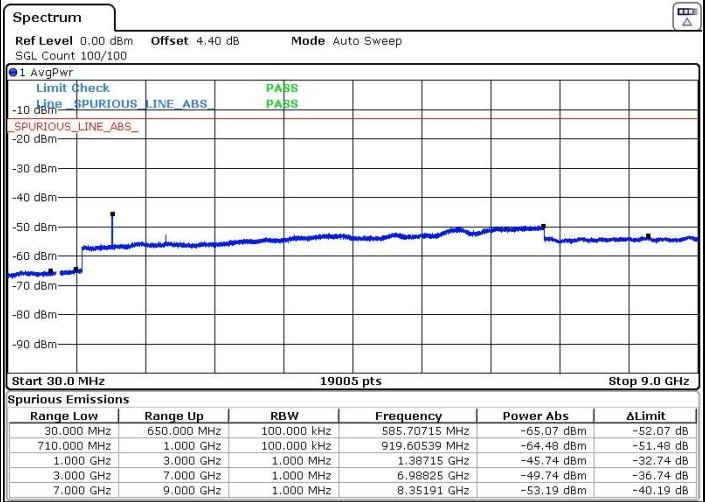
## LTE Band 71 / 5MHz

## Highest Channel / QPSK



Date: 10.SEP.2018 16:26:40

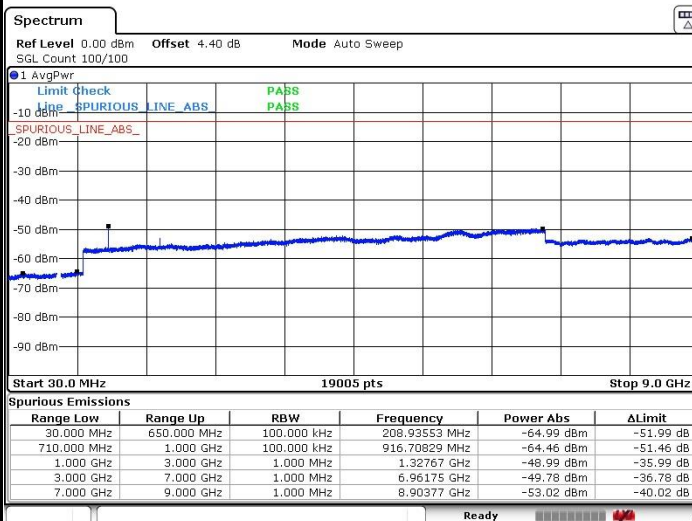
## Highest Channel / 16QAM



Date: 10.SEP.2018 16:27:07

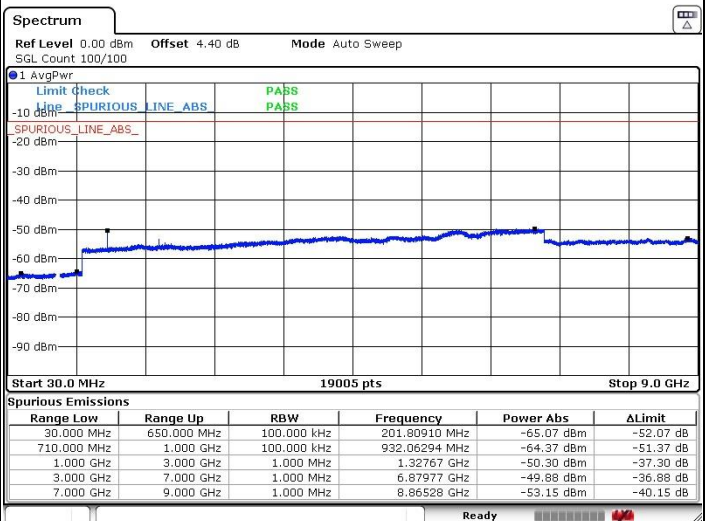
## LTE Band 71 / 10MHz

## Lowest Channel / QPSK



Date: 10.SEP.2018 16:30:58

## Lowest Channel / 16QAM

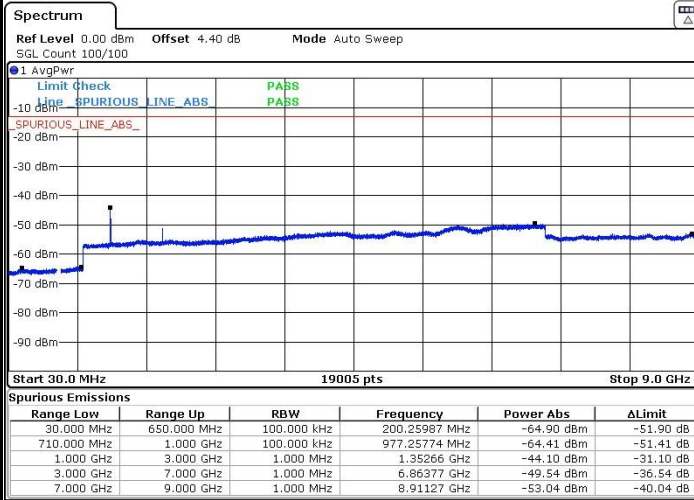


Date: 10.SEP.2018 16:30:22



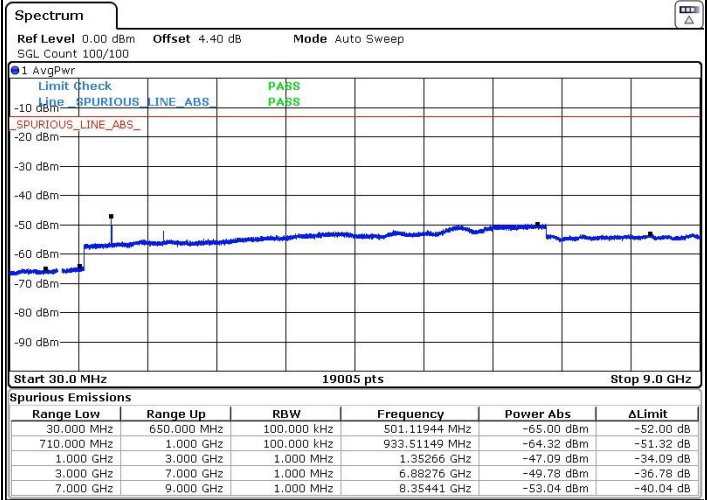
## LTE Band 71 / 10MHz

## Middle Channel / QPSK



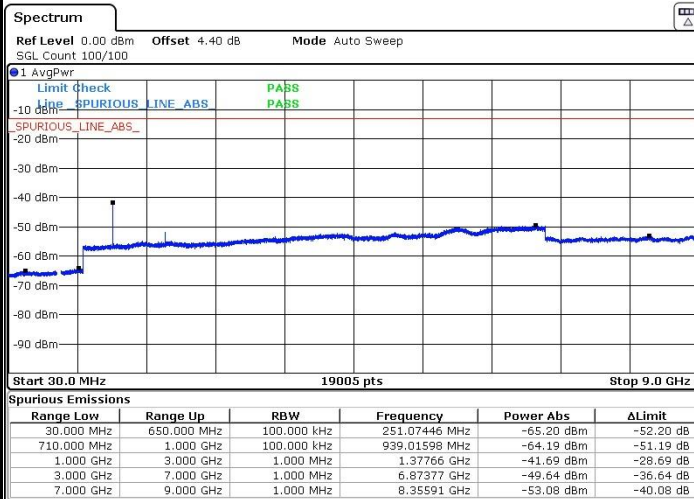
Date: 10.SEP.2018 16:31:55

## Middle Channel / 16QAM



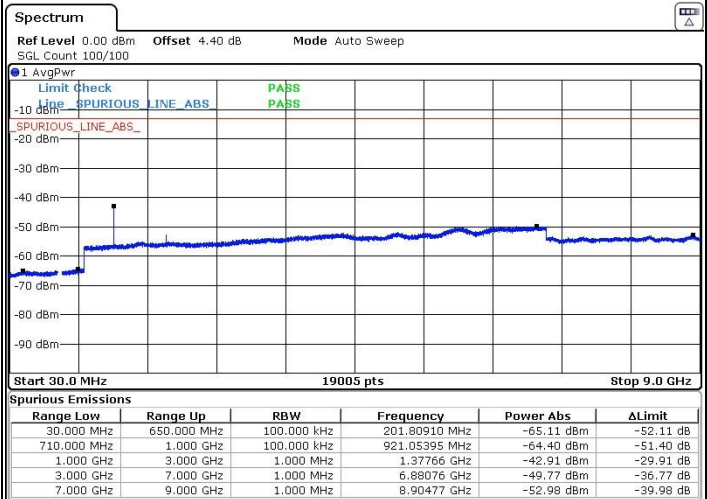
Date: 10.SEP.2018 16:32:25

## Highest Channel / QPSK



Date: 10.SEP.2018 16:34:33

## Highest Channel / 16QAM

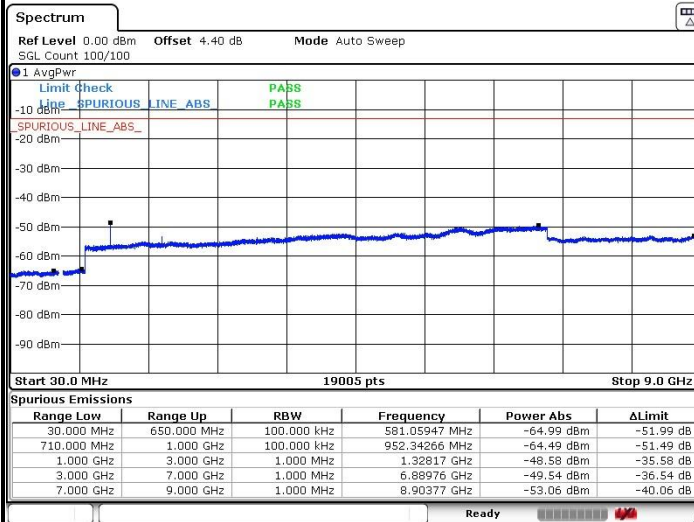


Date: 10.SEP.2018 16:34:06



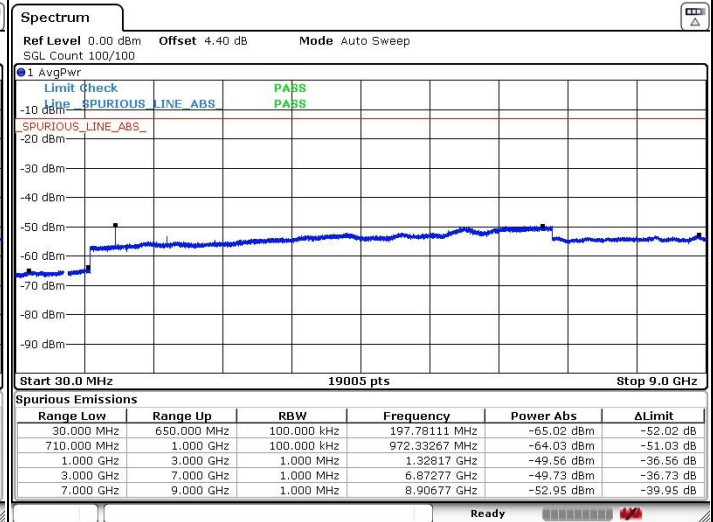
## LTE Band 71 / 15MHz

## Lowest Channel / QPSK



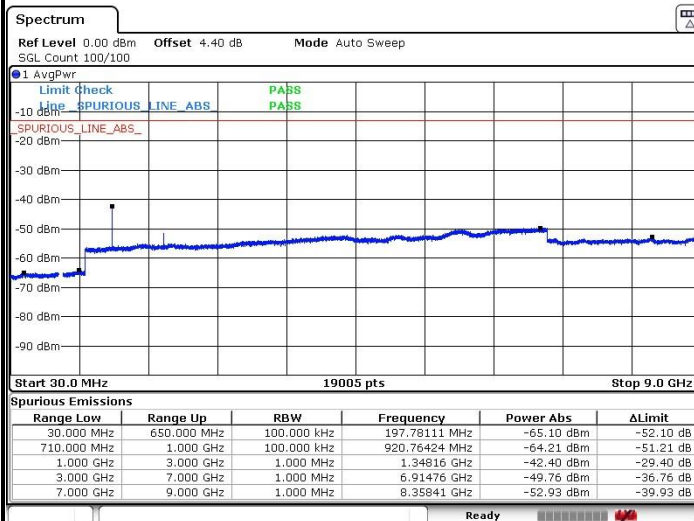
Date: 10.SEP.2018 16:36:43

## Lowest Channel / 16QAM



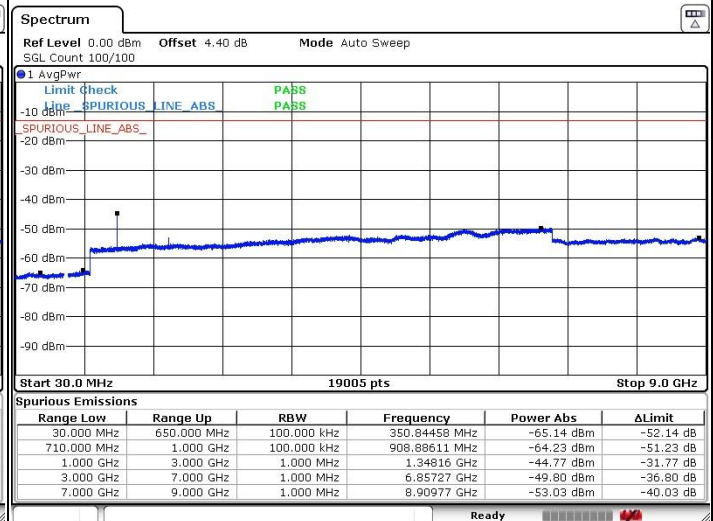
Date: 10.SEP.2018 16:37:13

## Middle Channel / QPSK



Date: 10.SEP.2018 16:39:35

## Middle Channel / 16QAM

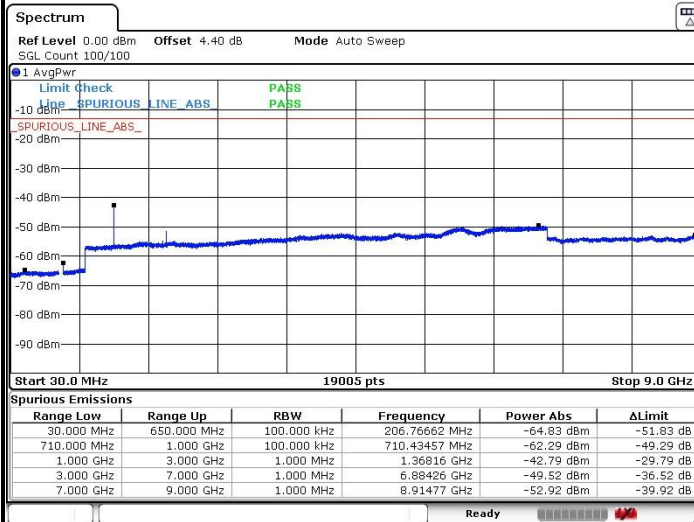


Date: 10.SEP.2018 16:39:01



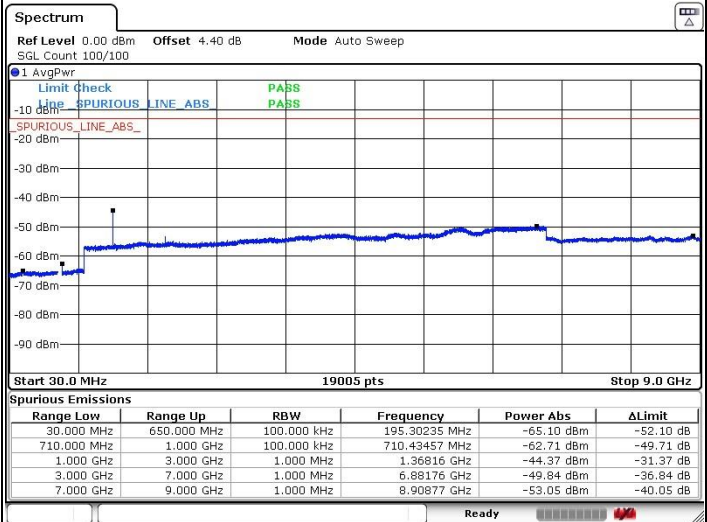
## LTE Band71 / 15MHz

## Highest Channel / QPSK



Date: 10.SEP.2018 16:40:08

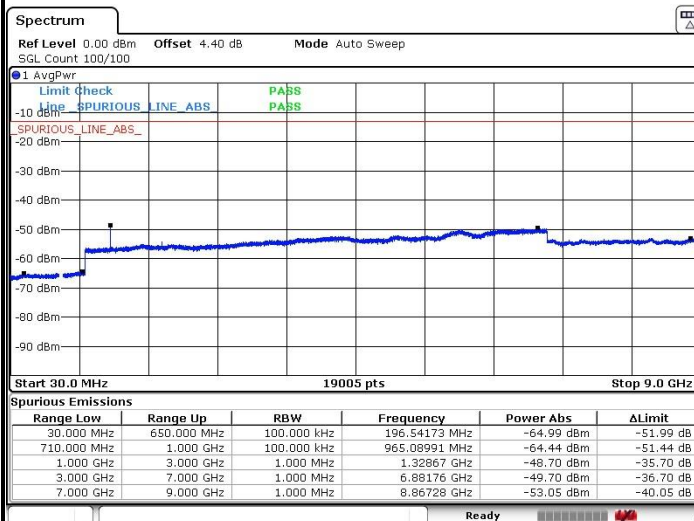
## Highest Channel / 16QAM



Date: 10.SEP.2018 16:40:45

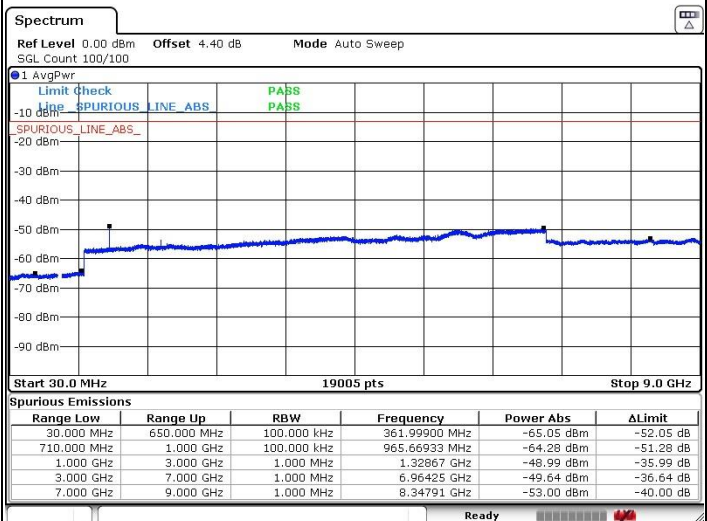
## LTE Band 71 / 20MHz

## Lowest Channel / QPSK



Date: 10.SEP.2018 16:44:56

## Lowest Channel / 16QAM

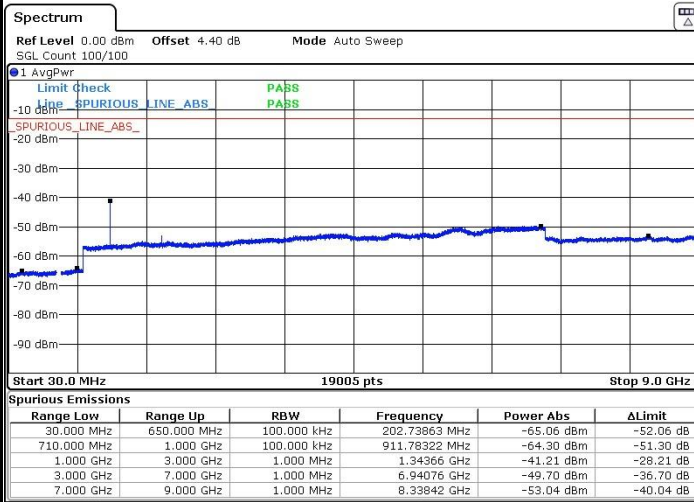


Date: 10.SEP.2018 16:44:30



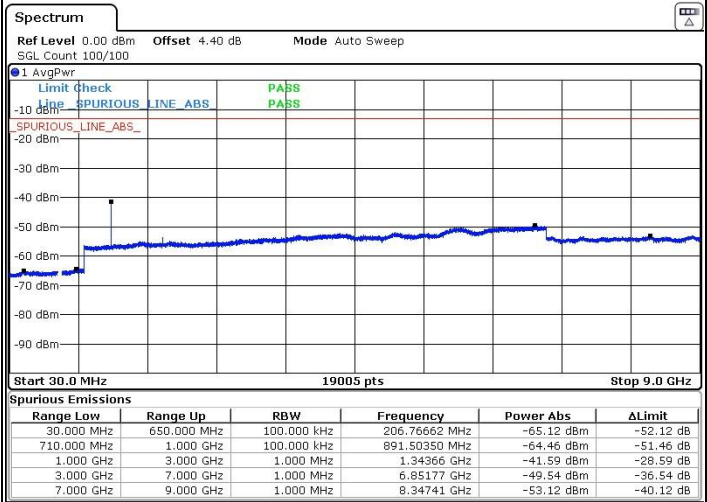
## LTE Band 71 / 20MHz

## Middle Channel / QPSK



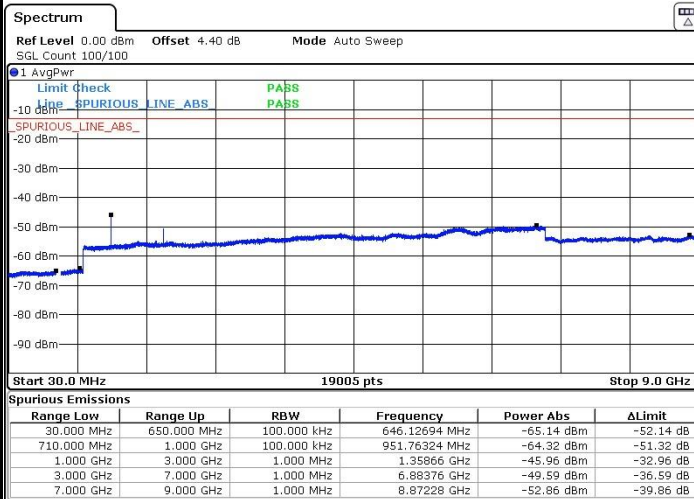
Date: 10.SEP.2018 16:46:00

## Middle Channel / 16QAM



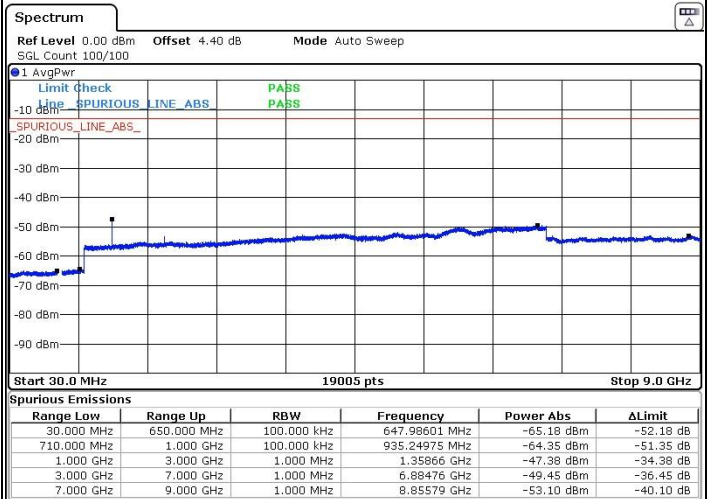
Date: 10.SEP.2018 16:46:35

## Highest Channel / QPSK



Date: 10.SEP.2018 16:48:35

## Highest Channel / 16QAM



Date: 10.SEP.2018 16:48:07

## Frequency Stability

| Test Conditions  |                   | LTE Band 2 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                           | Note 2. |
|                  |                   | Deviation (ppm)                    | Result  |
| 50               | Normal Voltage    | 0.0028                             | PASS    |
| 40               | Normal Voltage    | 0.0003                             |         |
| 30               | Normal Voltage    | 0.0026                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0002                             |         |
| 0                | Normal Voltage    | 0.0020                             |         |
| -10              | Normal Voltage    | 0.0021                             |         |
| -20              | Normal Voltage    | 0.0008                             |         |
| -30              | Normal Voltage    | 0.0024                             |         |
| 20               | Maximum Voltage   | 0.0005                             |         |
| 20               | Normal Voltage    | 0.0015                             |         |
| 20               | Battery End Point | 0.0014                             |         |

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



| Test Conditions  |                   | LTE Band 5 (QPSK) / Middle Channel | Limit  |
|------------------|-------------------|------------------------------------|--------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                           | 2.5ppm |
|                  |                   | Deviation (ppm)                    | Result |
| 50               | Normal Voltage    | 0.0022                             | PASS   |
| 40               | Normal Voltage    | 0.0036                             |        |
| 30               | Normal Voltage    | 0.0051                             |        |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |        |
| 10               | Normal Voltage    | 0.0011                             |        |
| 0                | Normal Voltage    | 0.0042                             |        |
| -10              | Normal Voltage    | 0.0049                             |        |
| -20              | Normal Voltage    | 0.0005                             |        |
| -30              | Normal Voltage    | 0.0054                             |        |
| 20               | Maximum Voltage   | 0.0006                             |        |
| 20               | Normal Voltage    | 0.0002                             |        |
| 20               | Battery End Point | 0.0027                             |        |

**Note:** Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 V.



| Test Conditions     |                   | LTE Band 12 (QPSK) / Middle Channel | Limit   |
|---------------------|-------------------|-------------------------------------|---------|
| Temperature<br>(°C) | Voltage<br>(Volt) | BW 10MHz                            | Note 2. |
|                     |                   | Deviation<br>(ppm)                  | Result  |
| 50                  | Normal Voltage    | 0.0011                              | PASS    |
| 40                  | Normal Voltage    | 0.0024                              |         |
| 30                  | Normal Voltage    | 0.0090                              |         |
| 20(Ref.)            | Normal Voltage    | 0.0000                              |         |
| 10                  | Normal Voltage    | 0.0102                              |         |
| 0                   | Normal Voltage    | 0.0006                              |         |
| -10                 | Normal Voltage    | 0.0023                              |         |
| -20                 | Normal Voltage    | 0.0076                              |         |
| -30                 | Normal Voltage    | 0.0068                              |         |
| 20                  | Maximum Voltage   | 0.0011                              |         |
| 20                  | Normal Voltage    | 0.0007                              |         |
| 20                  | Battery End Point | 0.0106                              |         |

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



| Test Conditions     |                   | LTE Band 13 (QPSK) / Middle Channel | Limit   |
|---------------------|-------------------|-------------------------------------|---------|
| Temperature<br>(°C) | Voltage<br>(Volt) | BW 10MHz                            | Note 2. |
|                     |                   | Deviation<br>(ppm)                  | Result  |
| 50                  | Normal Voltage    | 0.0014                              | PASS    |
| 40                  | Normal Voltage    | 0.0004                              |         |
| 30                  | Normal Voltage    | 0.0047                              |         |
| 20(Ref.)            | Normal Voltage    | 0.0000                              |         |
| 10                  | Normal Voltage    | 0.0054                              |         |
| 0                   | Normal Voltage    | 0.0063                              |         |
| -10                 | Normal Voltage    | 0.0010                              |         |
| -20                 | Normal Voltage    | 0.0058                              |         |
| -30                 | Normal Voltage    | 0.0066                              |         |
| 20                  | Maximum Voltage   | 0.0006                              |         |
| 20                  | Normal Voltage    | 0.0009                              |         |
| 20                  | Battery End Point | 0.0046                              |         |

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



| Test Conditions  |                   | LTE Band 66 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                            | Note 2. |
|                  |                   | Deviation (ppm)                     | Result  |
| 50               | Normal Voltage    | 0.0009                              | PASS    |
| 40               | Normal Voltage    | 0.0025                              |         |
| 30               | Normal Voltage    | 0.0002                              |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                              |         |
| 10               | Normal Voltage    | 0.0033                              |         |
| 0                | Normal Voltage    | 0.0009                              |         |
| -10              | Normal Voltage    | 0.0002                              |         |
| -20              | Normal Voltage    | 0.0020                              |         |
| -30              | Normal Voltage    | 0.0004                              |         |
| 20               | Maximum Voltage   | 0.0029                              |         |
| 20               | Normal Voltage    | 0.0005                              |         |
| 20               | Battery End Point | 0.0007                              |         |

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



| Test Conditions     |                   | LTE Band 71 (QPSK) / Middle Channel | Limit   |
|---------------------|-------------------|-------------------------------------|---------|
| Temperature<br>(°C) | Voltage<br>(Volt) | BW 10MHz                            | Note 2. |
|                     |                   | Deviation<br>(ppm)                  | Result  |
| 50                  | Normal Voltage    | 0.0050                              | PASS    |
| 40                  | Normal Voltage    | 0.0029                              |         |
| 30                  | Normal Voltage    | 0.0009                              |         |
| 20(Ref.)            | Normal Voltage    | 0.0000                              |         |
| 10                  | Normal Voltage    | 0.0031                              |         |
| 0                   | Normal Voltage    | 0.0021                              |         |
| -10                 | Normal Voltage    | 0.0004                              |         |
| -20                 | Normal Voltage    | 0.0043                              |         |
| -30                 | Normal Voltage    | 0.0022                              |         |
| 20                  | Maximum Voltage   | 0.0038                              |         |
| 20                  | Normal Voltage    | 0.0018                              |         |
| 20                  | Battery End Point | 0.0004                              |         |

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## Appendix B. Test Results of Radiated Test

### Radiated Spurious Emission

| LTE Band 2 / 20MHz / QPSK |                   |              |               |                   |                    |                      |                       |                    |
|---------------------------|-------------------|--------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                   | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle                    | 3741              | -53.28       | -13           | -40.28            | -55.00             | 5.08                 | 6.80                  | H                  |
|                           | 5613              | -55.64       | -13           | -42.64            | -57.31             | 8.03                 | 9.70                  | H                  |
|                           | 7485              | -50.51       | -13           | -37.51            | -52.89             | 9.43                 | 11.81                 | H                  |
|                           | 3741              | -52.17       | -13           | -39.17            | -53.89             | 5.08                 | 6.80                  | V                  |
|                           | 5613              | -55.44       | -13           | -42.44            | -57.11             | 8.03                 | 9.70                  | V                  |
|                           | 7485              | -50.63       | -13           | -37.63            | -53.01             | 9.43                 | 11.81                 | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| LTE Band 5 / 10MHz / QPSK |                   |             |               |                   |                    |                      |                       |                    |
|---------------------------|-------------------|-------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                   | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle                    | 1664              | -61.34      | -13           | -48.34            | -63.25             | 1.14                 | 5.20                  | H                  |
|                           | 2496              | -60.30      | -13           | -47.30            | -62.93             | 1.12                 | 5.90                  | H                  |
|                           | 3327              | -59.28      | -13           | -46.28            | -62.49             | 1.34                 | 6.70                  | H                  |
|                           | 1664              | -61.71      | -13           | -48.71            | -63.62             | 1.14                 | 5.20                  | V                  |
|                           | 2496              | -59.88      | -13           | -46.88            | -62.51             | 1.12                 | 5.90                  | V                  |
|                           | 3327              | -59.29      | -13           | -46.29            | -62.50             | 1.34                 | 6.70                  | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| LTE Band 12 / 10MHz / QPSK |                   |             |               |                   |                    |                      |                       |                    |
|----------------------------|-------------------|-------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                    | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle                     | 1406              | -66.02      | -13           | -53.02            | -68.00             | 1.00                 | 5.12                  | H                  |
|                            | 2109              | -60.69      | -13           | -47.69            | -63.92             | 1.24                 | 6.62                  | H                  |
|                            | 2812              | -59.65      | -13           | -46.65            | -63.54             | 1.42                 | 7.46                  | H                  |
|                            | 1406              | -65.50      | -13           | -52.50            | -67.48             | 1.00                 | 5.12                  | V                  |
|                            | 2108              | -57.75      | -13           | -44.75            | -60.98             | 1.24                 | 6.62                  | V                  |
|                            | 2812              | -58.86      | -13           | -45.86            | -62.75             | 1.42                 | 7.46                  | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 13 / 5MHz / QPSK |                      |                |                  |                         |                          |                            |                             |                       |
|---------------------------|----------------------|----------------|------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                   | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Middle                    | 1560                 | -62.30         | -40              | -22.30                  | -66.43                   | 1.00                       | 5.12                        | H                     |
|                           | 2340                 | -60.36         | -13              | -47.36                  | -63.59                   | 1.24                       | 6.62                        | H                     |
|                           | 3120                 | -58.80         | -13              | -45.80                  | -62.69                   | 1.42                       | 7.46                        | H                     |
|                           | 1560                 | -61.46         | -40              | -21.46                  | -65.59                   | 1.00                       | 5.12                        | V                     |
|                           | 2340                 | -59.98         | -13              | -46.98                  | -63.21                   | 1.24                       | 6.62                        | V                     |
|                           | 3120                 | -56.58         | -13              | -43.58                  | -60.47                   | 1.42                       | 7.46                        | V                     |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| LTE Band 13 / 10MHz / QPSK |                      |                |                  |                         |                          |                            |                             |                       |
|----------------------------|----------------------|----------------|------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                    | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Middle                     | 1555                 | -64.57         | -13              | -51.57                  | -66.55                   | 1.00                       | 5.12                        | H                     |
|                            | 2332                 | -60.61         | -13              | -47.61                  | -63.84                   | 1.24                       | 6.62                        | H                     |
|                            | 3111                 | -58.95         | -13              | -45.95                  | -62.84                   | 1.42                       | 7.46                        | H                     |
|                            | 1556                 | -63.93         | -13              | -50.93                  | -65.91                   | 1.00                       | 5.12                        | V                     |
|                            | 2332                 | -60.21         | -13              | -47.21                  | -63.44                   | 1.24                       | 6.62                        | V                     |
|                            | 3111                 | -56.92         | -13              | -43.92                  | -60.81                   | 1.42                       | 7.46                        | V                     |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 66 / 20MHz / QPSK |                      |                 |                  |                         |                          |                            |                             |                       |
|----------------------------|----------------------|-----------------|------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                    | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Middle                     | 3471                 | -38.37          | -13              | -25.37                  | -42.34                   | 4.87                       | 8.84                        | H                     |
|                            | 5208                 | -55.29          | -13              | -42.29                  | -56.73                   | 7.70                       | 9.14                        | H                     |
|                            | 6945                 | -51.62          | -13              | -38.62                  | -53.31                   | 8.98                       | 10.66                       | H                     |
|                            | 3471                 | -44.75          | -13              | -31.75                  | -48.72                   | 4.87                       | 8.84                        | V                     |
|                            | 5208                 | -54.17          | -13              | -41.17                  | -55.61                   | 7.70                       | 9.14                        | V                     |
|                            | 6945                 | -51.17          | -13              | -38.17                  | -52.86                   | 8.98                       | 10.66                       | V                     |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| LTE Band 71 / 20MHz / QPSK |                      |                 |                  |                         |                          |                            |                             |                       |
|----------------------------|----------------------|-----------------|------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                    | Frequency<br>( MHz ) | EIRP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Middle                     | 1348                 | -67.63          | -13              | -54.63                  | -68.56                   | 2.06                       | 5.14                        | H                     |
|                            | 2022                 | -67.46          | -13              | -54.46                  | -67.68                   | 2.57                       | 4.94                        | H                     |
|                            | 2696                 | -65.39          | -13              | -52.39                  | -66.47                   | 3.04                       | 6.27                        | H                     |
|                            | 1348                 | -67.73          | -13              | -54.73                  | -68.66                   | 2.06                       | 5.14                        | V                     |
|                            | 2022                 | -67.68          | -13              | -54.68                  | -67.90                   | 2.57                       | 4.94                        | V                     |
|                            | 2696                 | -65.61          | -13              | -52.61                  | -66.69                   | 3.04                       | 6.27                        | V                     |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.