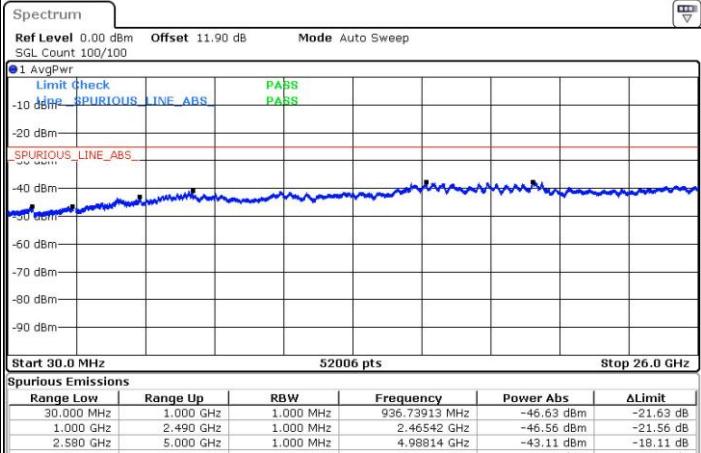
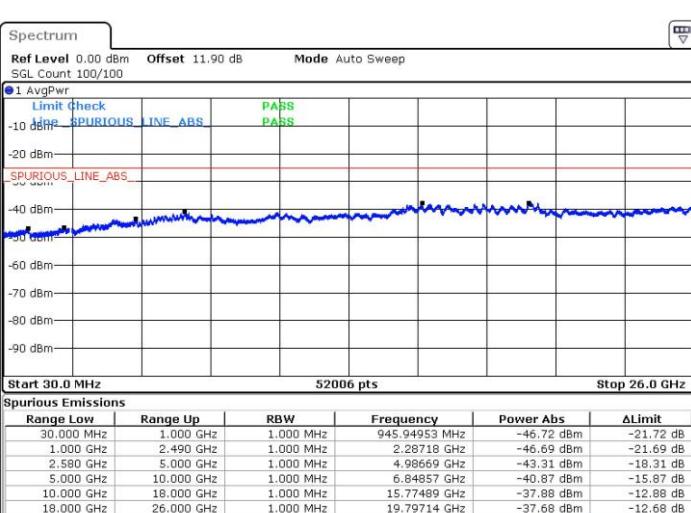




## LTE Band 7 / 15MHz

## Highest Channel / QPSK

## Highest Channel / 16QAM

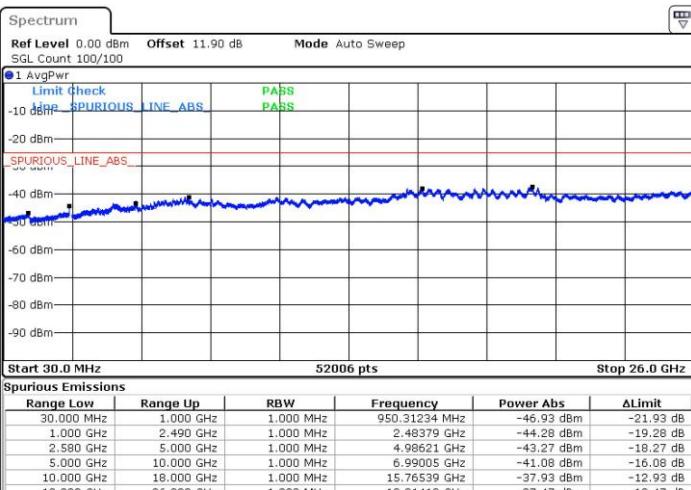


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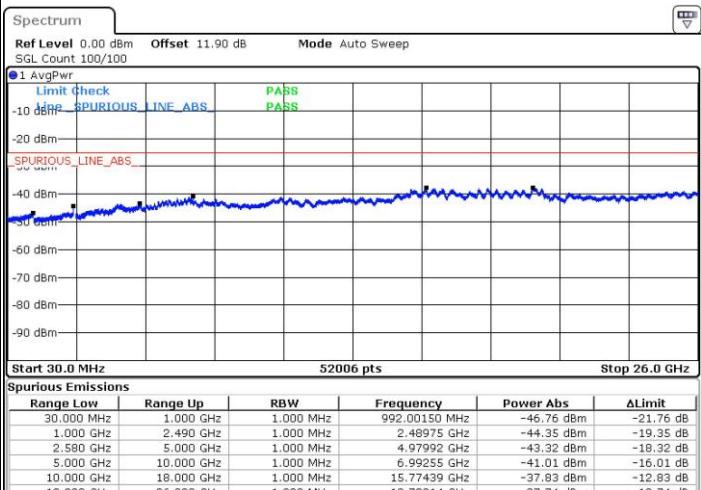
## LTE Band 7 / 20MHz

## Lowest Channel / QPSK

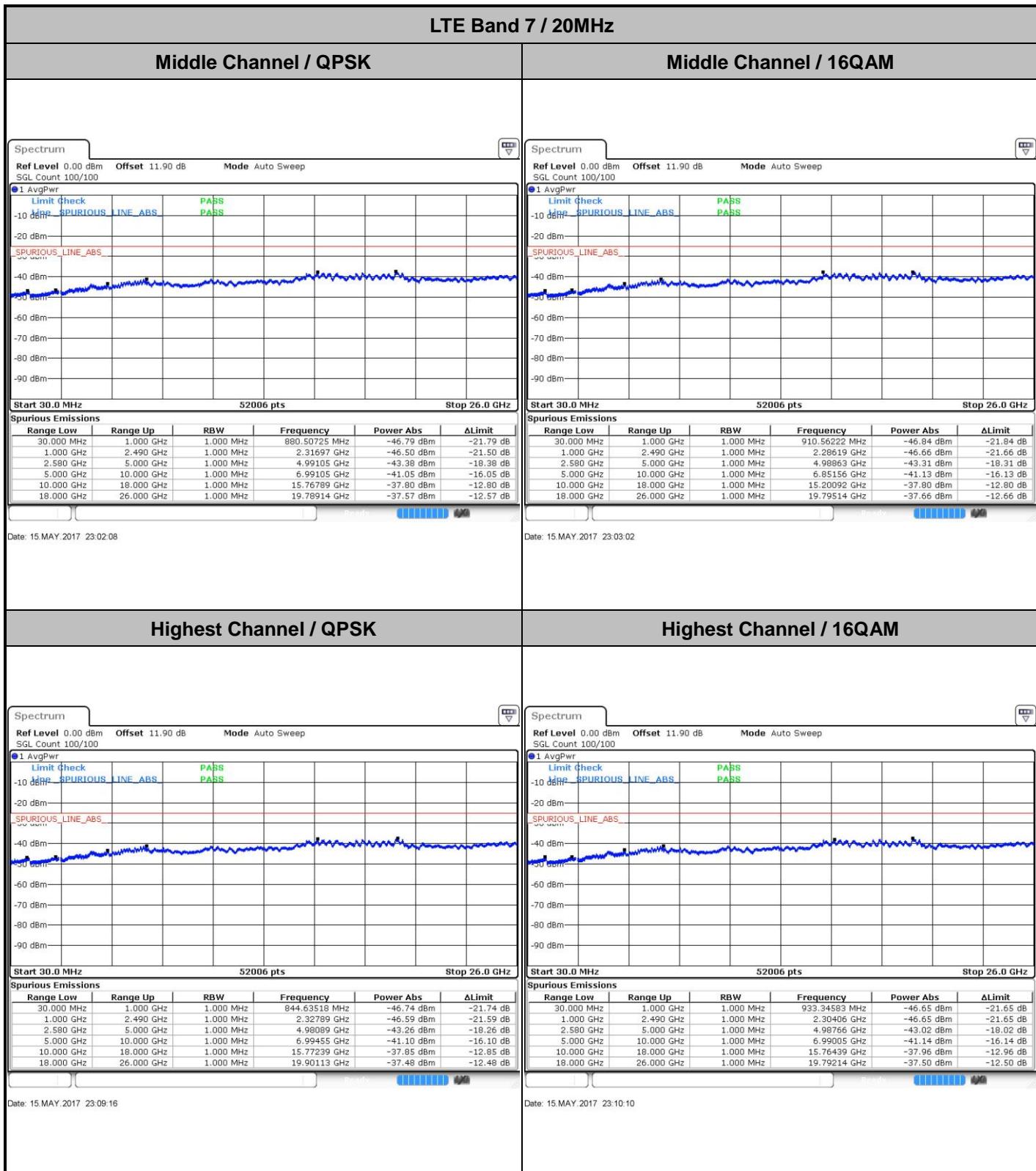
## Lowest Channel / 16QAM



Date: 15.MAY.2017 22:59:40



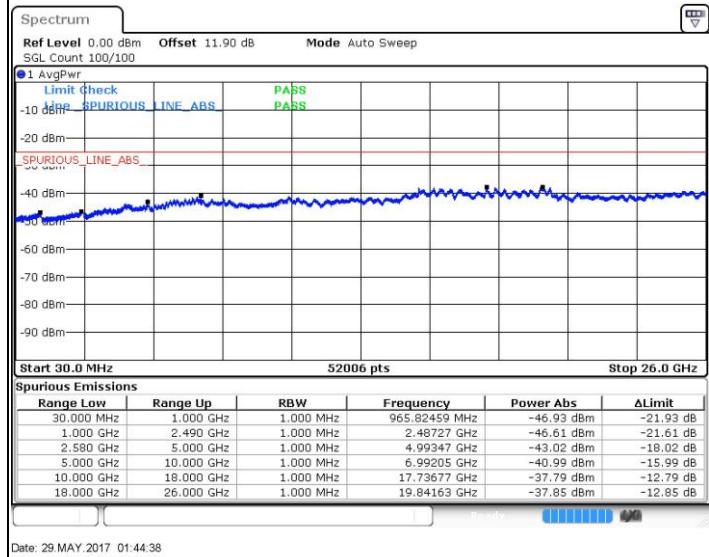
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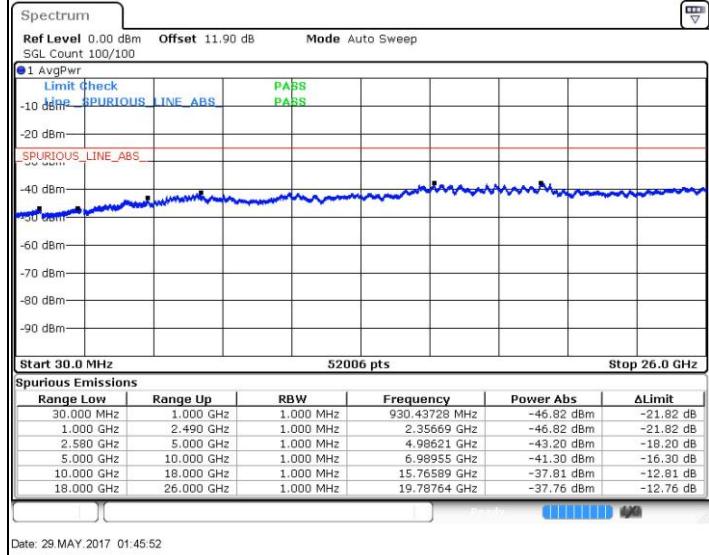


## LTE Band 7 / 5MHz

## Lowest Channel / 64QAM



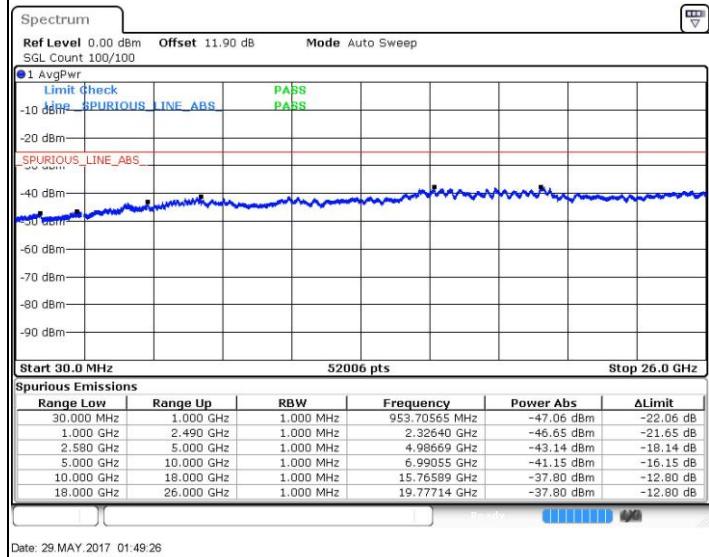
## Middle Channel / 64QAM





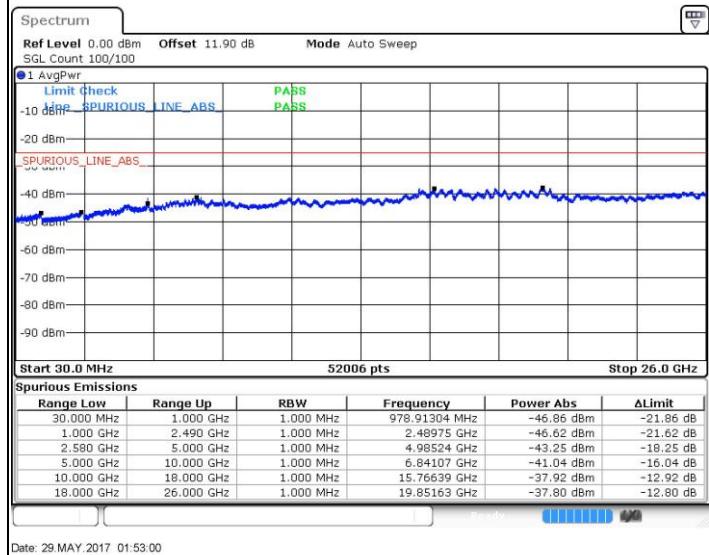
## LTE Band 7 / 5MHz

## Highest Channel / 64QAM



## LTE Band 7 / 10MHz

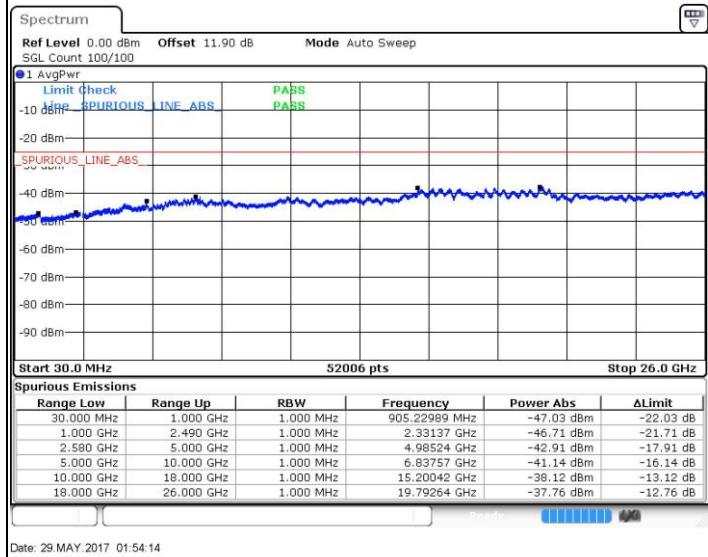
## Lowest Channel / 64QAM



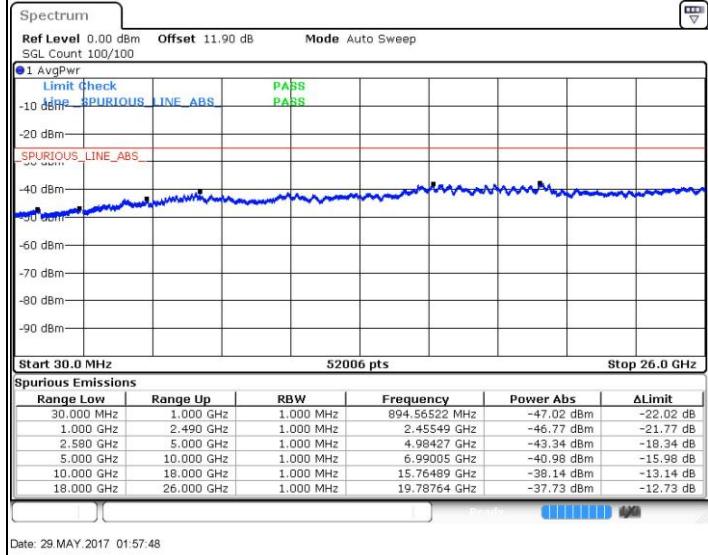


## LTE Band 7 / 10MHz

## Middle Channel / 64QAM



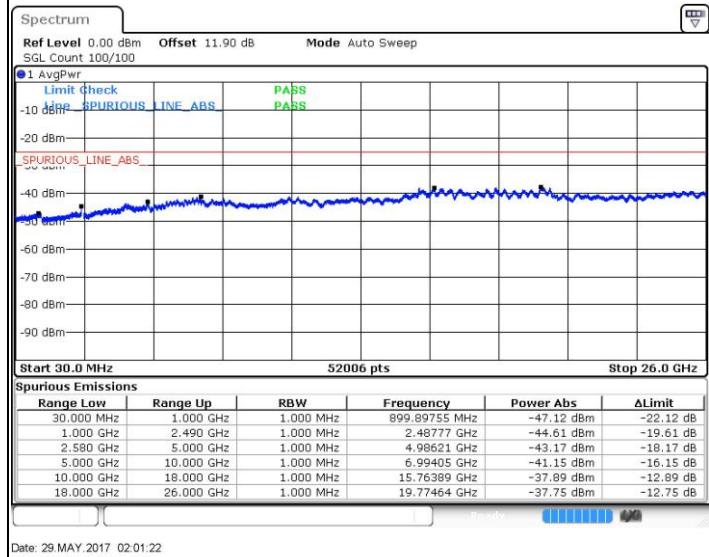
## Highest Channel / 64QAM



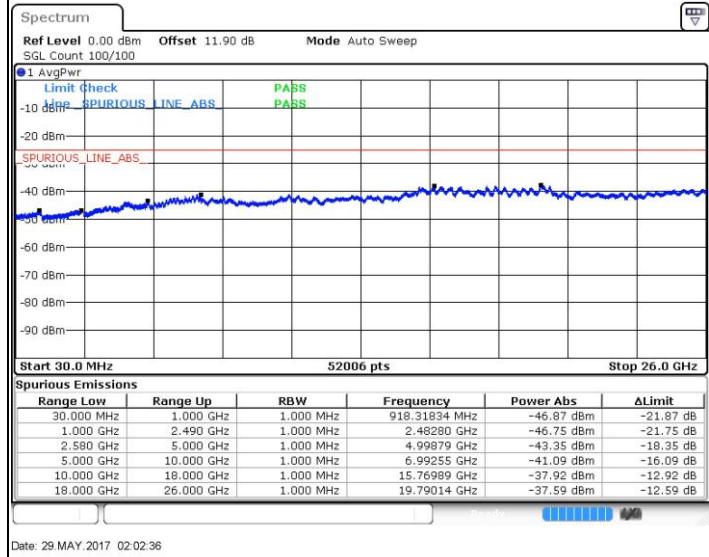


## LTE Band 7 / 15MHz

## Lowest Channel / 64QAM



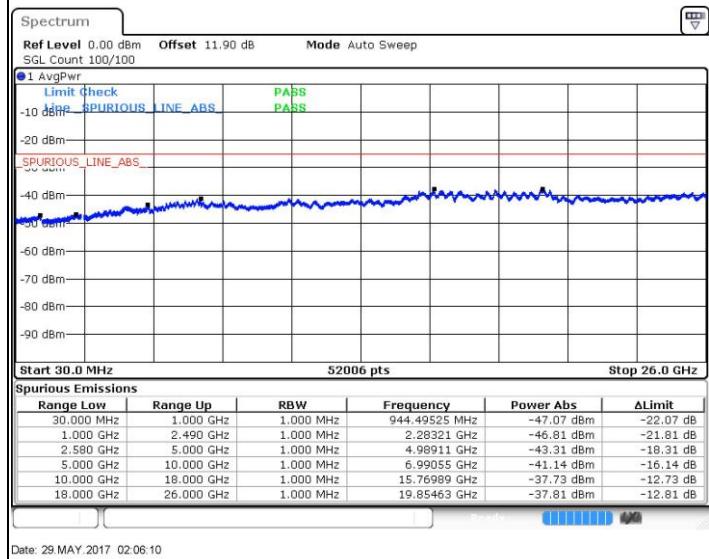
## Middle Channel / 64QAM





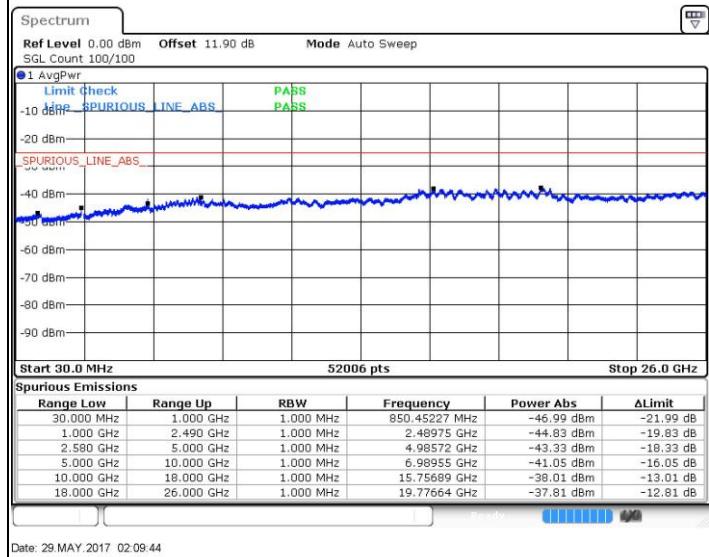
## LTE Band 7 / 15MHz

## Highest Channel / 64QAM



## LTE Band 7 / 20MHz

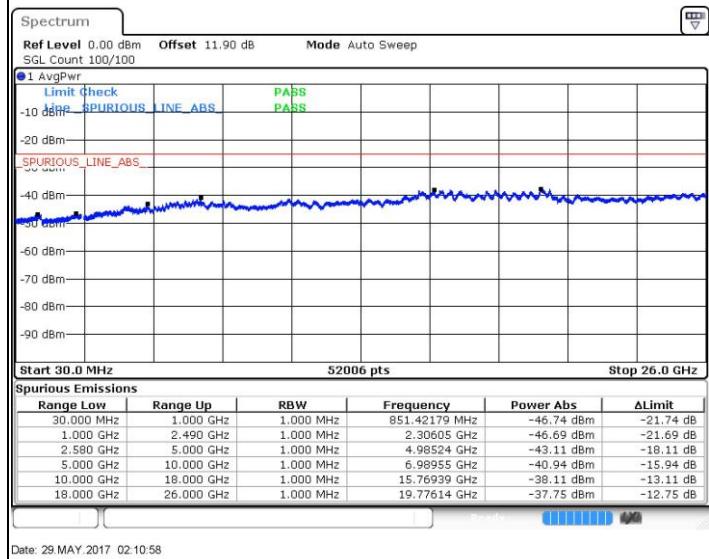
## Lowest Channel / 64QAM



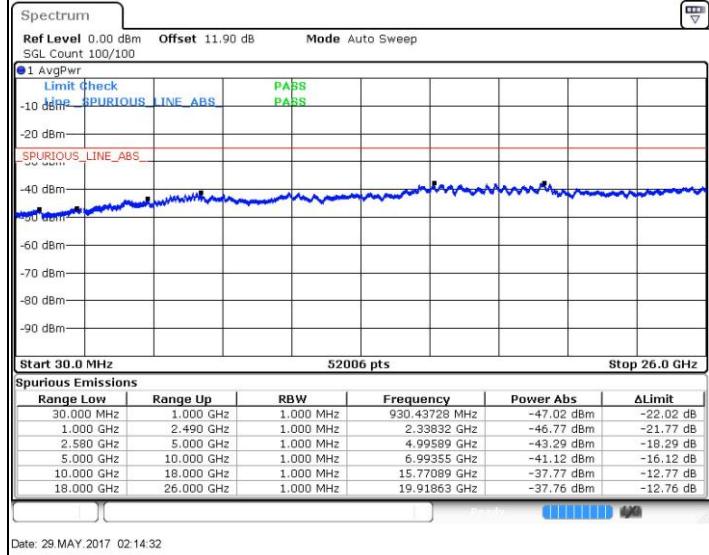


## LTE Band 7 / 20MHz

## Middle Channel / 64QAM



## Highest Channel / 64QAM





## Frequency Stability

| Test Conditions     |                   | LTE Band 7 (QPSK) / Middle Channel | Limit   |
|---------------------|-------------------|------------------------------------|---------|
| Temperature<br>(°C) | Voltage<br>(Volt) | BW 10MHz                           | Note 2. |
|                     |                   | Deviation<br>(ppm)                 | Result  |
| 50                  | Normal Voltage    | 0.0063                             | PASS    |
| 40                  | Normal Voltage    | 0.0057                             |         |
| 30                  | Normal Voltage    | 0.0010                             |         |
| 20(Ref.)            | Normal Voltage    | 0.0000                             |         |
| 10                  | Normal Voltage    | 0.0012                             |         |
| 0                   | Normal Voltage    | 0.0061                             |         |
| -10                 | Normal Voltage    | 0.0009                             |         |
| -20                 | Normal Voltage    | 0.0005                             |         |
| -30                 | Normal Voltage    | 0.0000                             |         |
| 20                  | Maximum Voltage   | 0.0059                             |         |
| 20                  | Normal Voltage    | 0.0000                             |         |
| 20                  | Battery End Point | 0.0057                             |         |

**Note:**

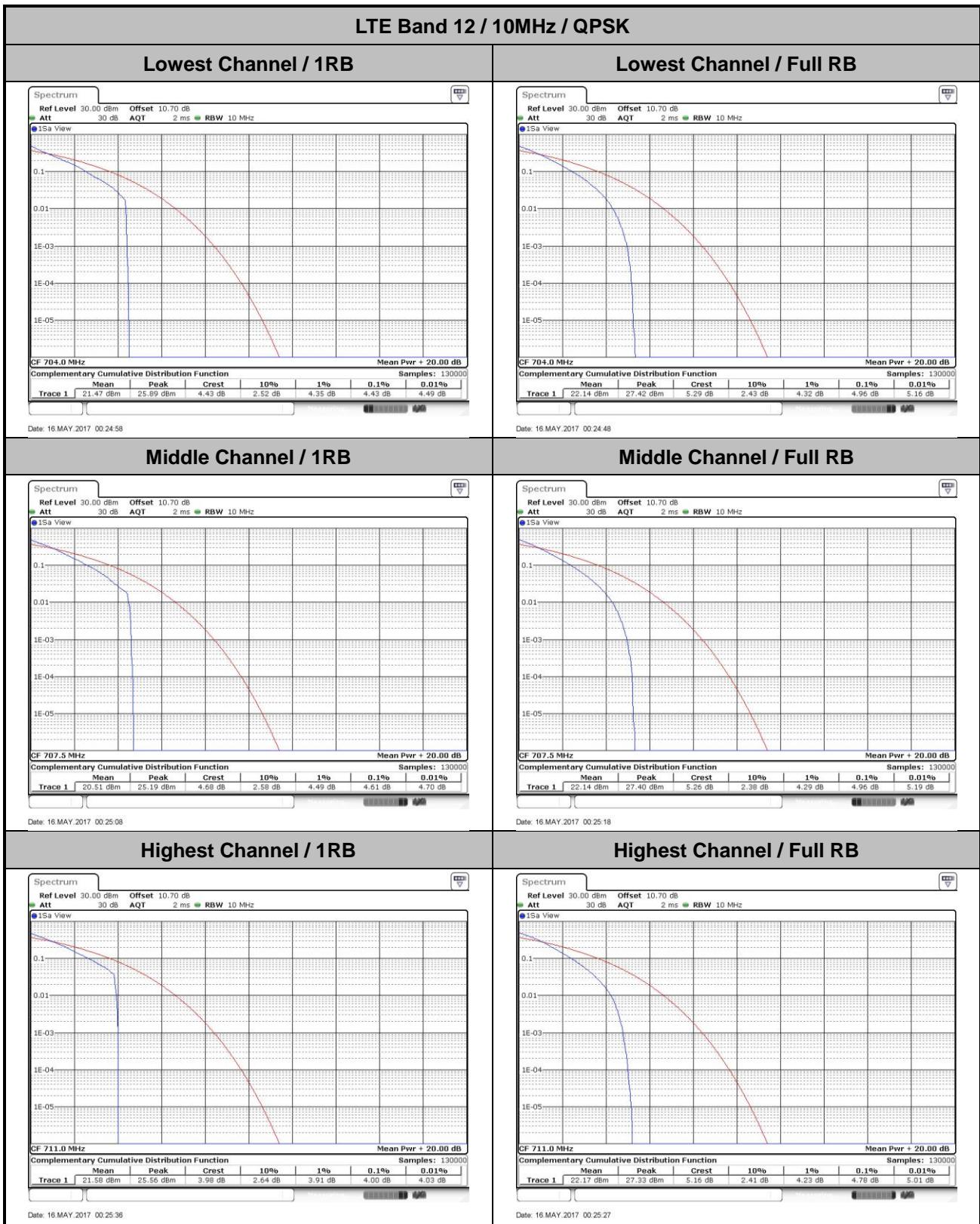
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

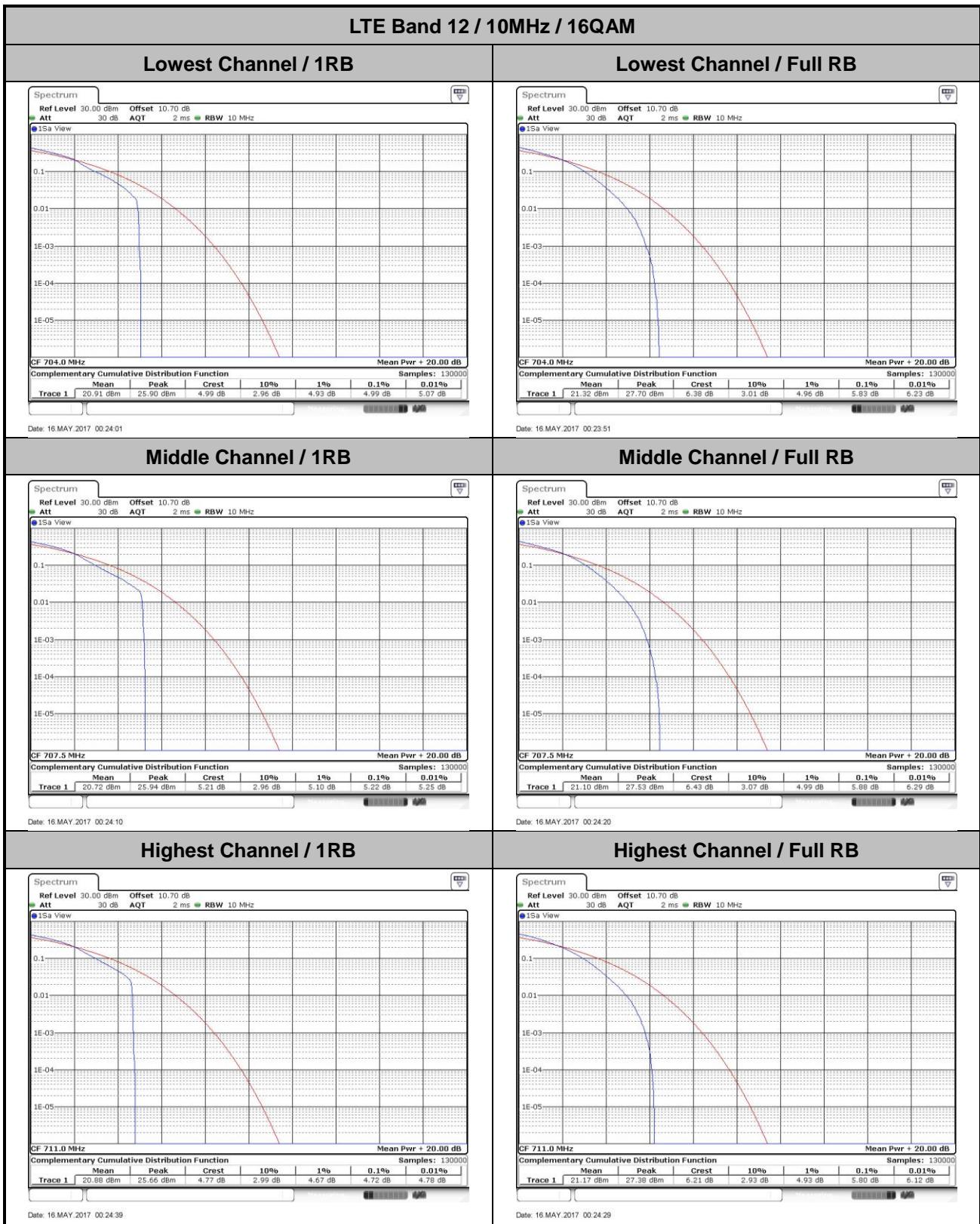


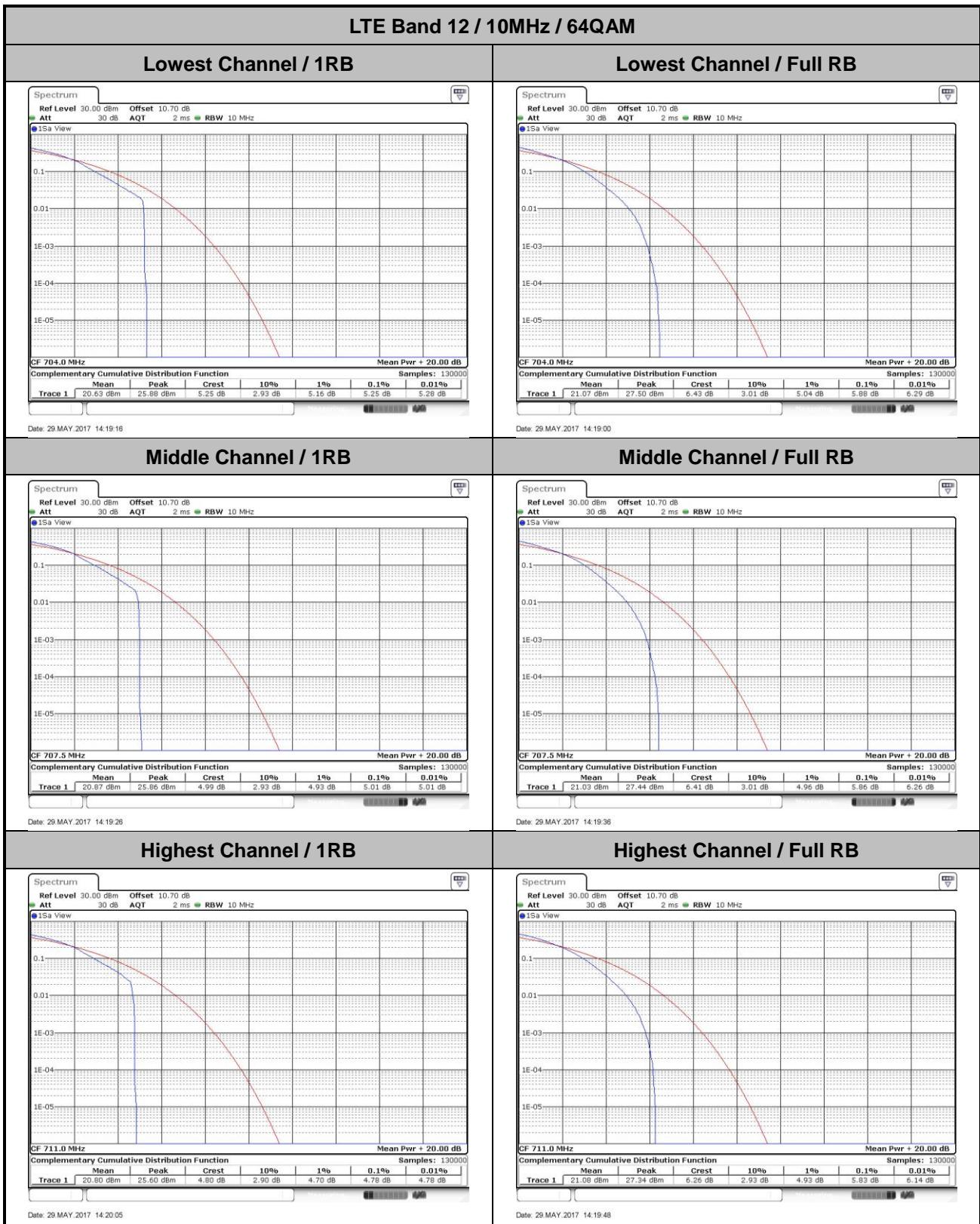
## LTE Band 12

### Peak-to-Average Ratio

| Mode       | LTE Band 12 / 10MHz |         |       |         |             |
|------------|---------------------|---------|-------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 4.43                | 4.96    | 4.99  | 5.83    | PASS        |
| Middle CH  | 4.61                | 4.96    | 5.22  | 5.88    |             |
| Highest CH | 4                   | 4.78    | 4.72  | 5.8     |             |
| Mode       | LTE Band 12 / 10MHz |         |       |         |             |
| Mod.       | -                   |         | 64QAM |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | -                   | -       | 5.25  | 5.88    | PASS        |
| Middle CH  | -                   | -       | 5.01  | 5.86    |             |
| Highest CH | -                   | -       | 4.78  | 5.83    |             |

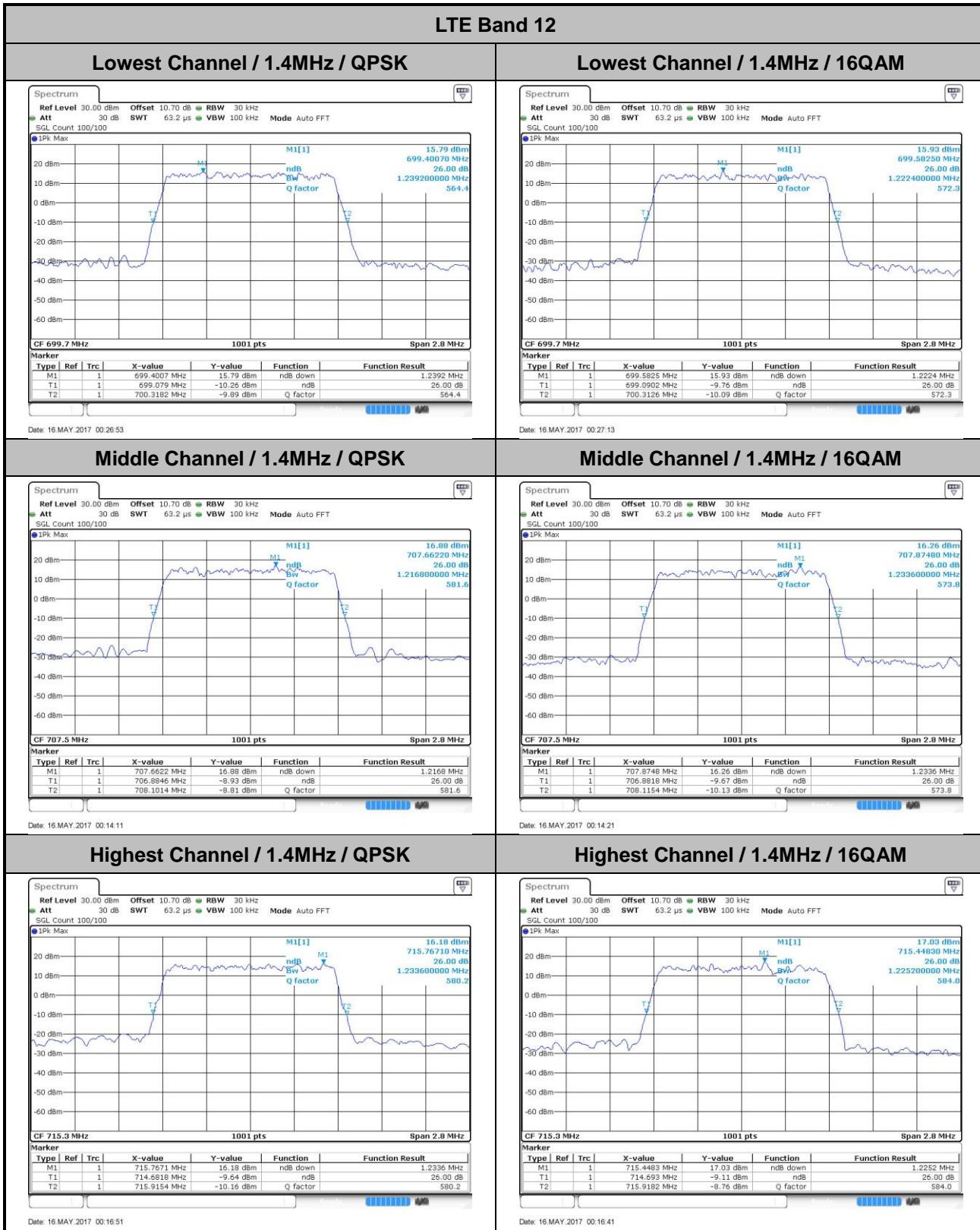


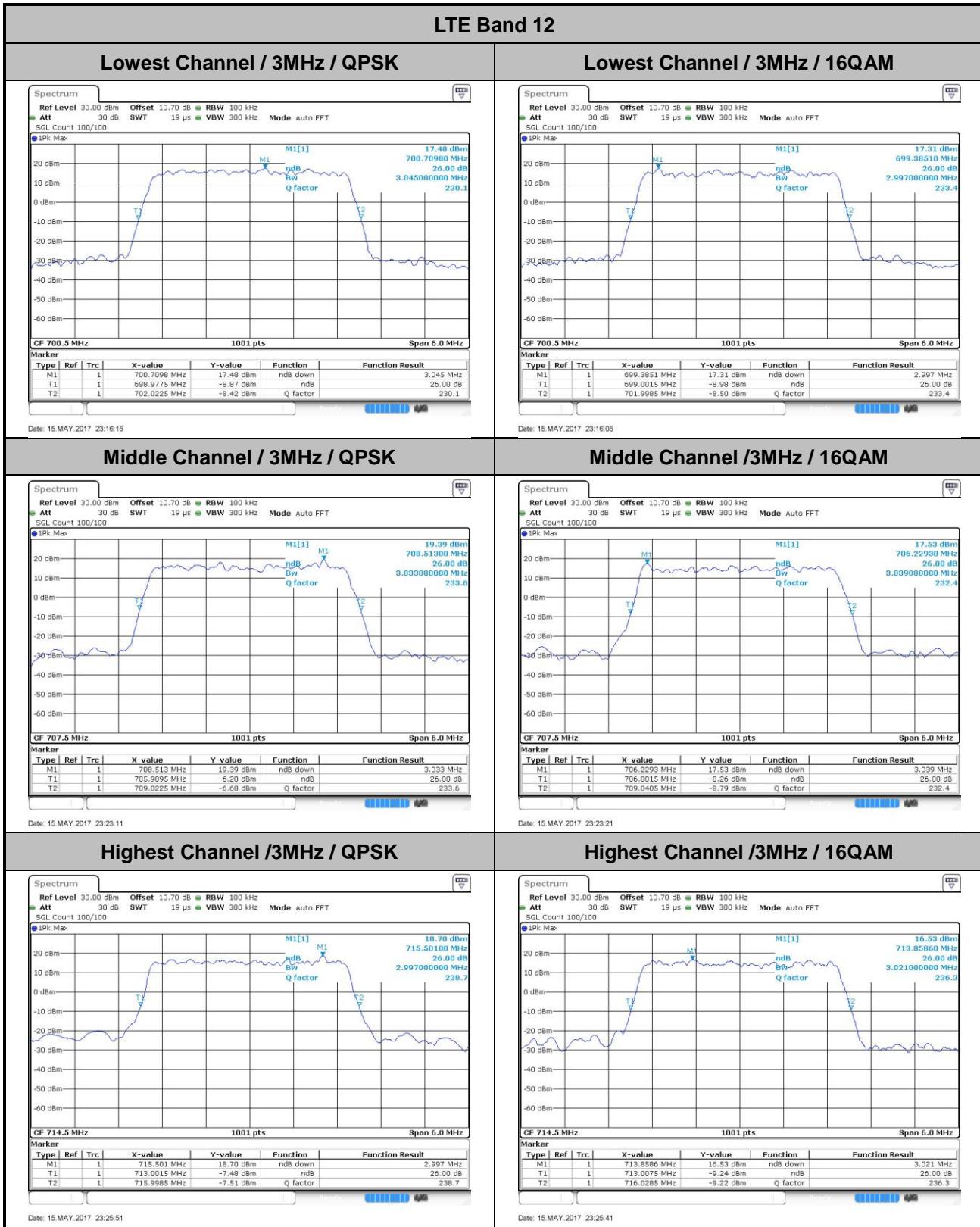


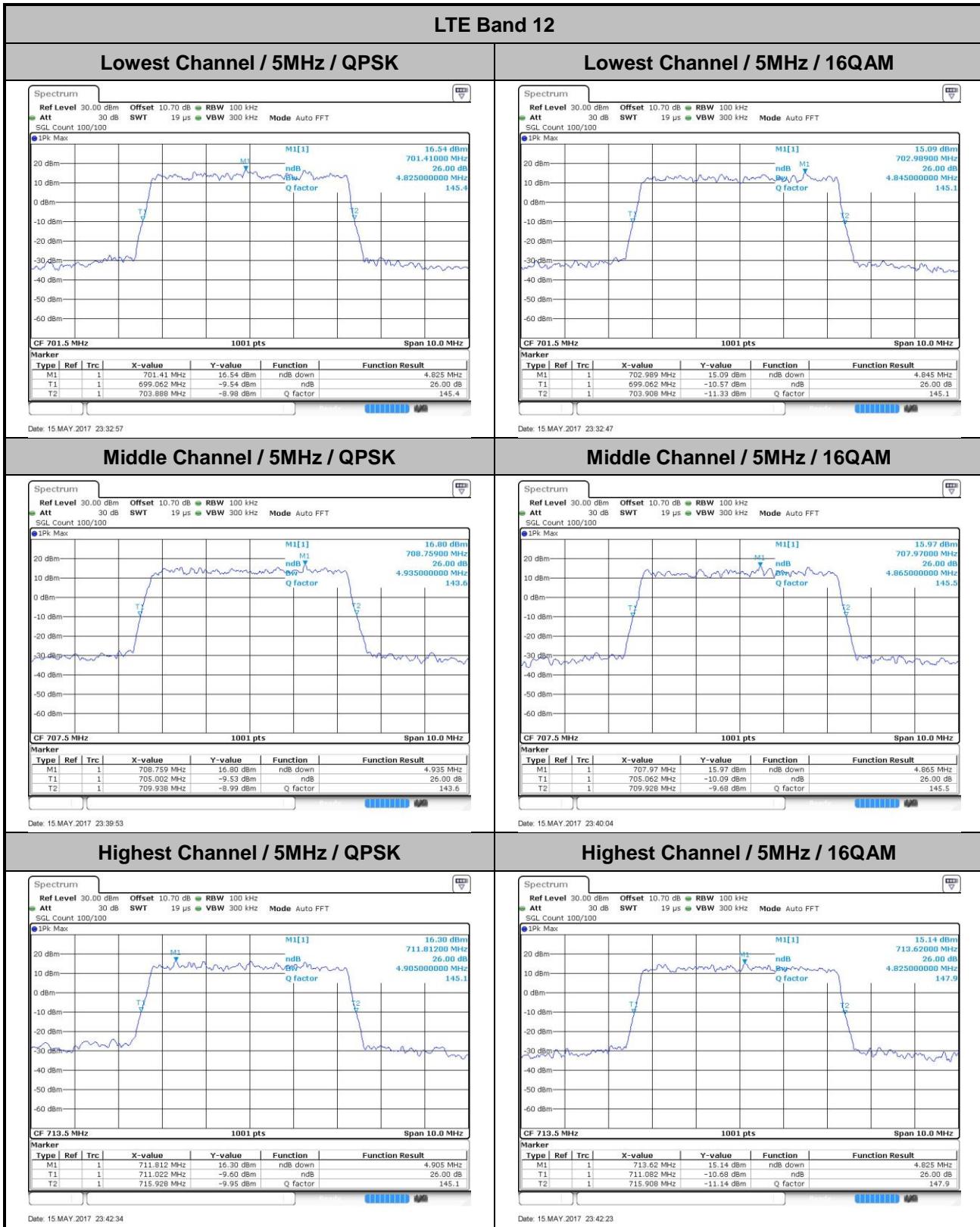


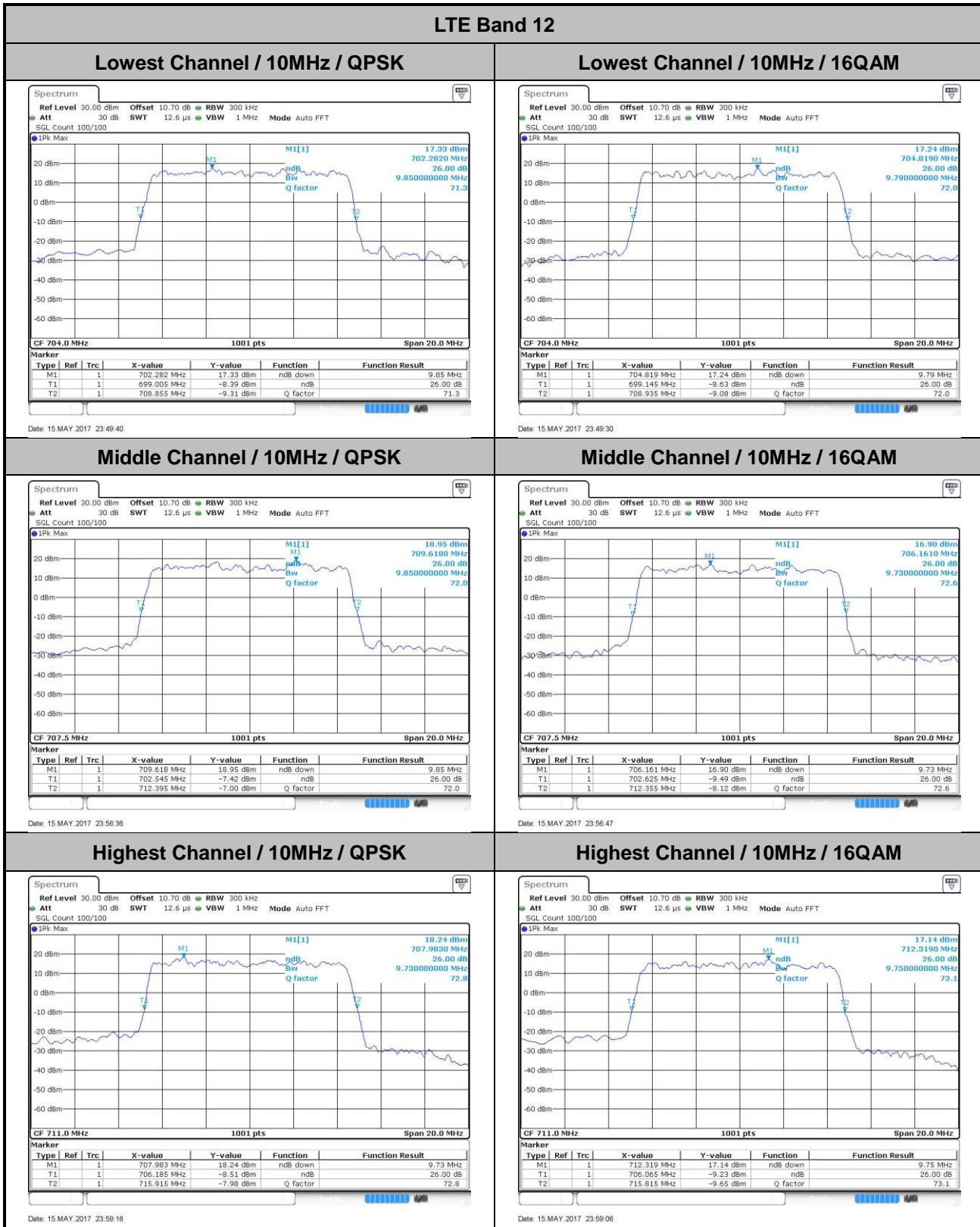
**26dB Bandwidth**

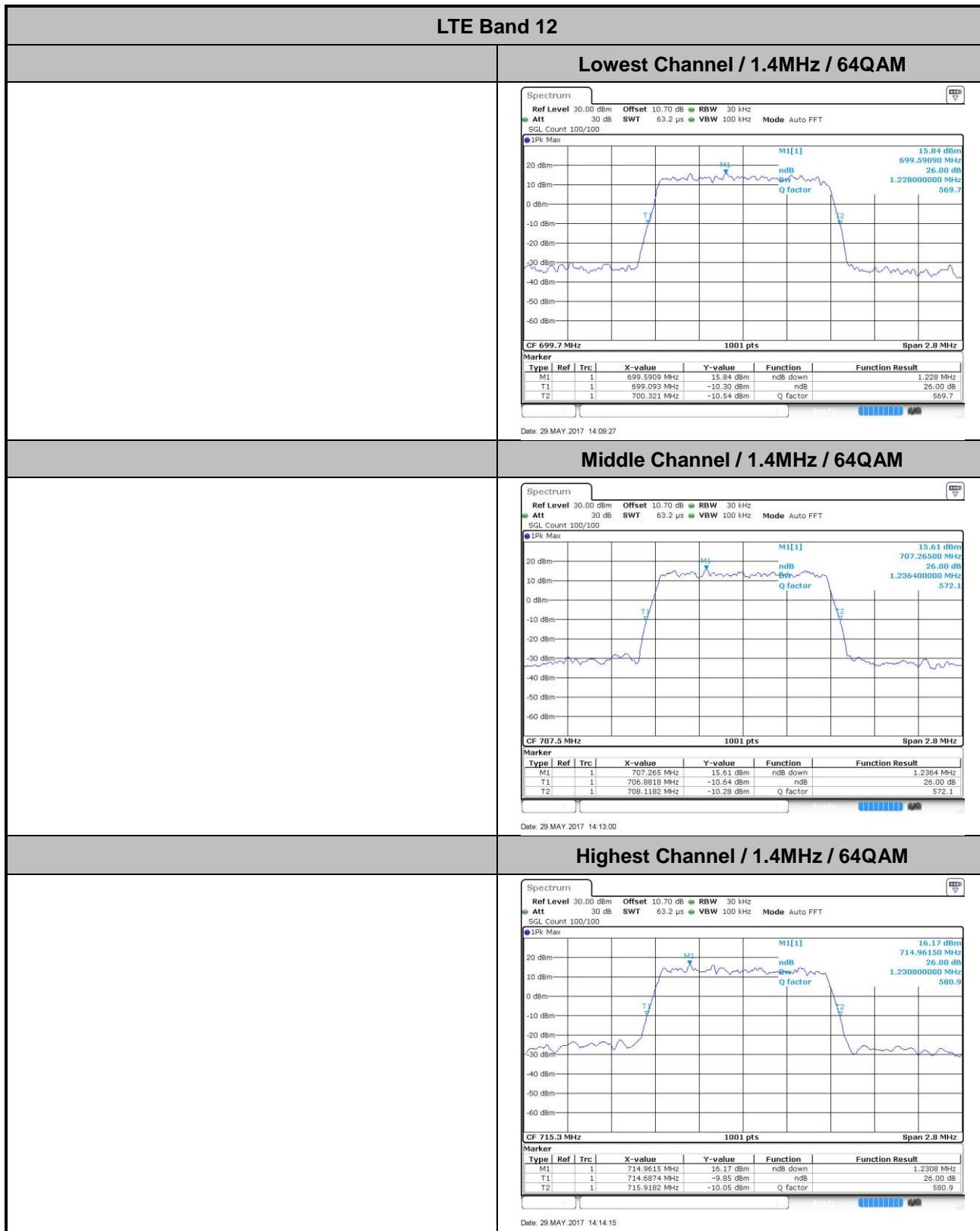
| Mode       | LTE Band 12 : 26dB BW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
|------------|----------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| BW         | 1.4MHz                     |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | QPSK                       | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | 1.24                       | 1.22  | 3.05 | 3.00  | 4.83 | 4.85  | 9.85  | 9.79  | -     | -     | -     | -     |
| Middle CH  | 1.22                       | 1.23  | 3.03 | 3.04  | 4.94 | 4.87  | 9.85  | 9.73  | -     | -     | -     | -     |
| Highest CH | 1.23                       | 1.23  | 3.00 | 3.02  | 4.91 | 4.83  | 9.73  | 9.75  | -     | -     | -     | -     |
| Mode       | LTE Band 12 : 26dB BW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
| BW         | 1.4MHz                     |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | -                          | 64QAM | -    | 64QAM | -    | 64QAM | -     | 64QAM | -     | 64QAM | -     | 64QAM |
| Lowest CH  | -                          | 1.23  | -    | 3.06  | -    | 4.92  | -     | 9.81  | -     | -     | -     | -     |
| Middle CH  | -                          | 1.24  | -    | 3.02  | -    | 4.81  | -     | 9.71  | -     | -     | -     | -     |
| Highest CH | -                          | 1.23  | -    | 2.99  | -    | 4.85  | -     | 9.75  | -     | -     | -     | -     |

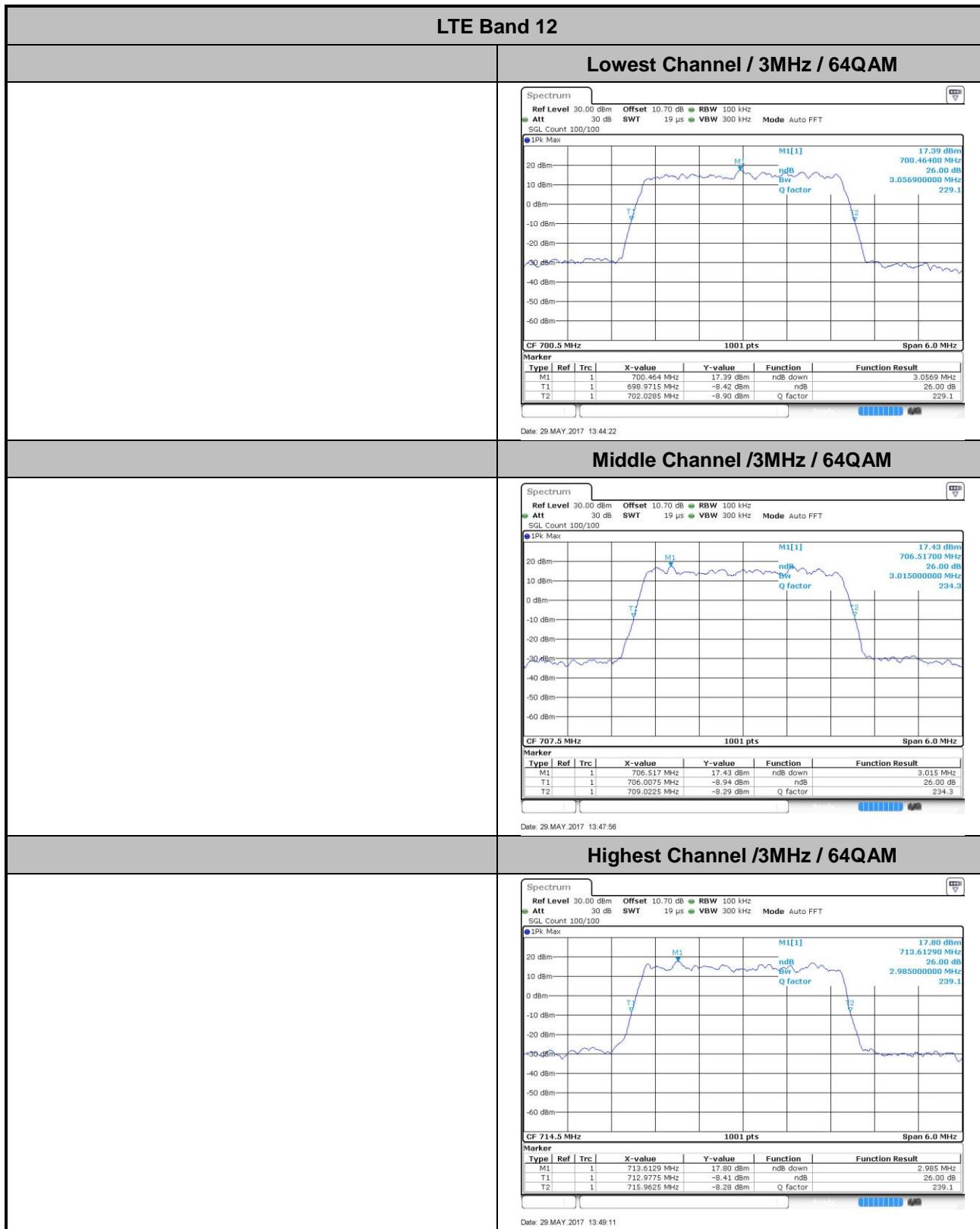


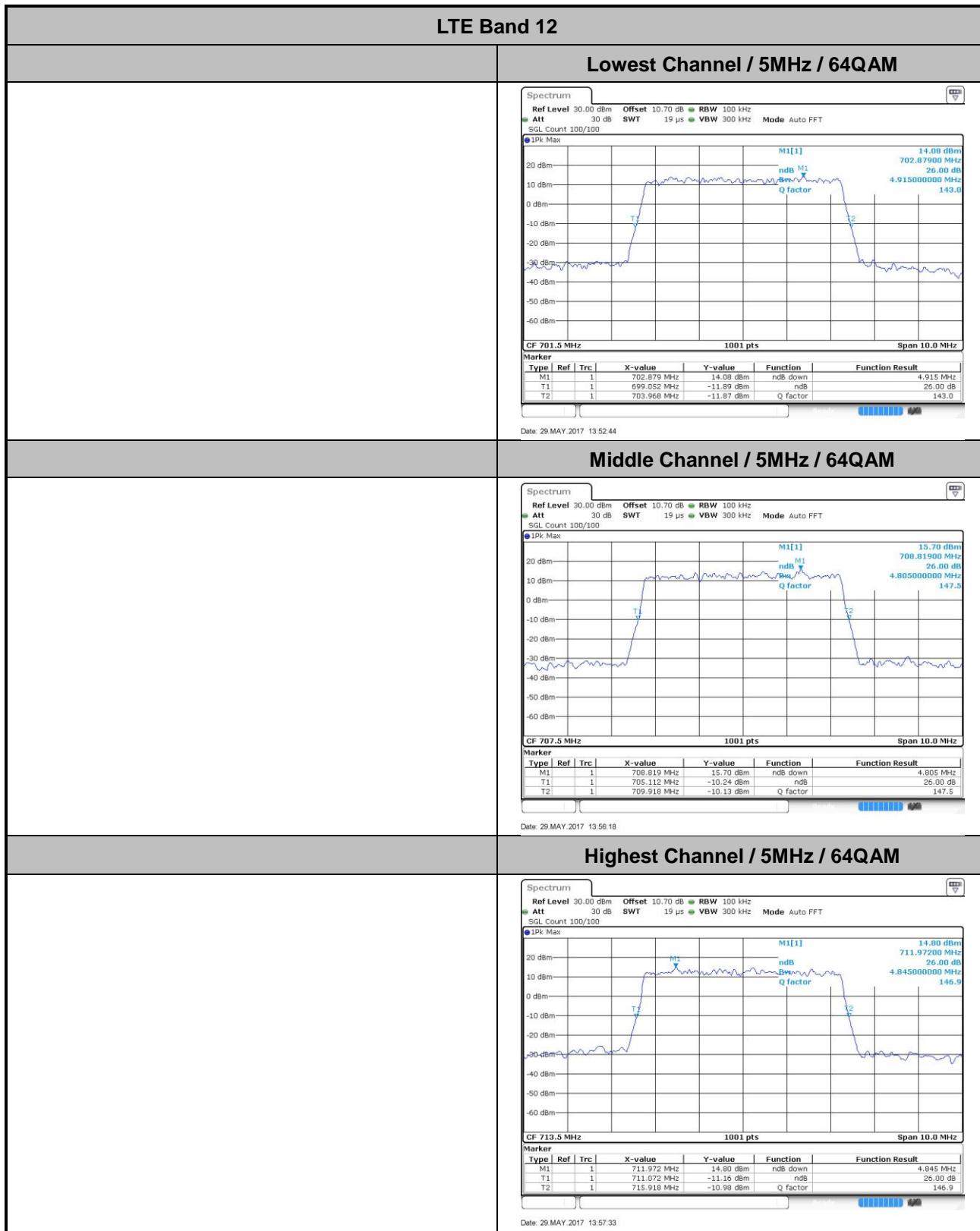


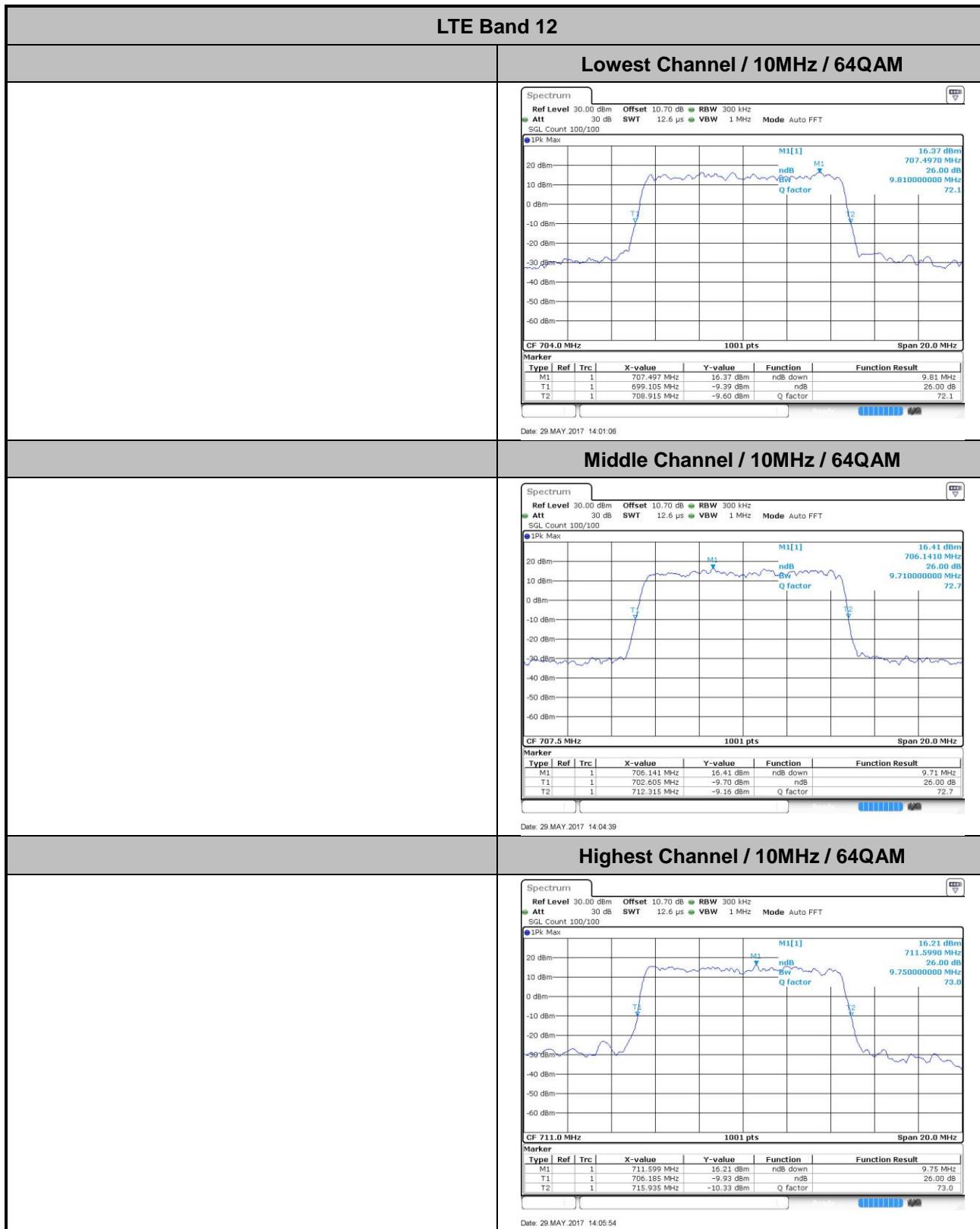












**Occupied Bandwidth**

| Mode       | LTE Band 12 : 99%OBW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
|------------|---------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| BW         | 1.4MHz                    |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | QPSK                      | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | 1.09                      | 1.09  | 2.72 | 2.73  | 4.49 | 4.49  | 9.11  | 9.05  | -     | -     | -     | -     |
| Middle CH  | 1.09                      | 1.08  | 2.73 | 2.7   | 4.5  | 4.5   | 9.03  | 9.05  | -     | -     | -     | -     |
| Highest CH | 1.08                      | 1.09  | 2.7  | 2.73  | 4.51 | 4.49  | 9.03  | 9.03  | -     | -     | -     | -     |
| Mode       | LTE Band 12 : 99%OBW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | -                         | 64QAM | -    | 64QAM | -    | 64QAM | -     | 64QAM | -     | 64QAM | -     | 64QAM |
| Lowest CH  | -                         | 1.09  | -    | 2.7   | -    | 4.5   | -     | 8.99  | -     | -     | -     | -     |
| Middle CH  | -                         | 1.08  | -    | 2.73  | -    | 4.48  | -     | 8.97  | -     | -     | -     | -     |
| Highest CH | -                         | 1.09  | -    | 2.73  | -    | 4.51  | -     | 9.01  | -     | -     | -     | -     |