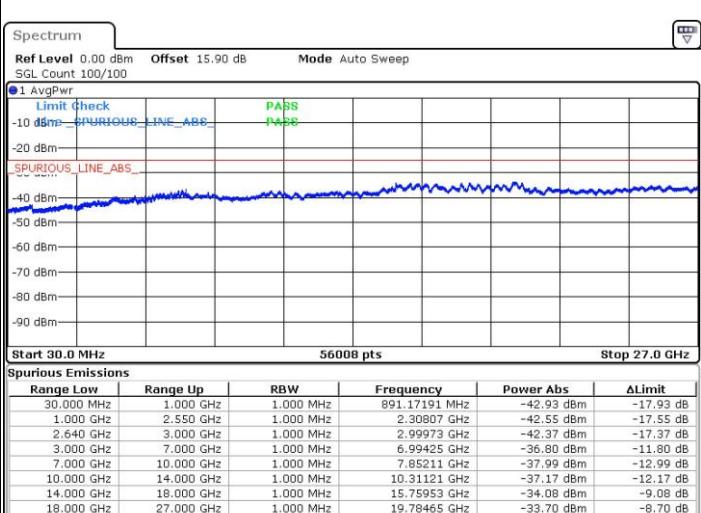
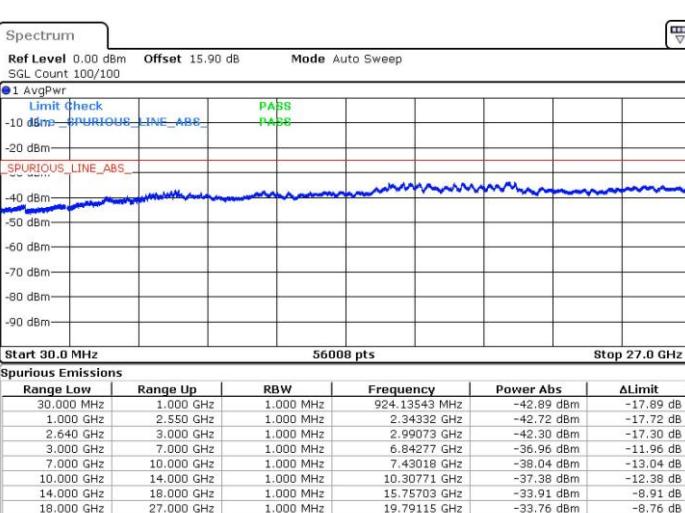




## LTE Band 38 / 20MHz

## Middle Channel / QPSK

## Middle Channel / 16QAM

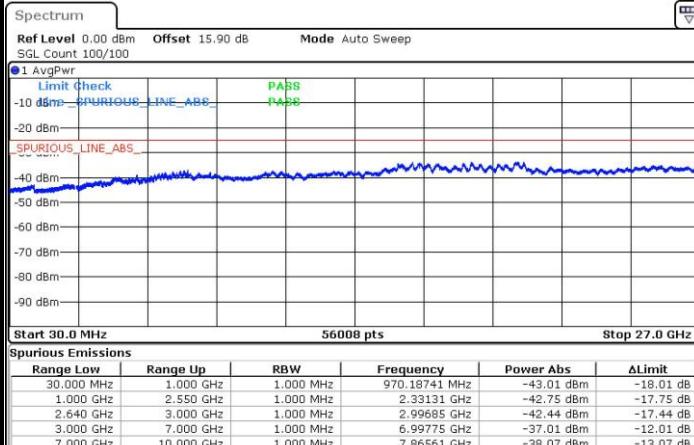


Date: 22.MAR.2017 22:06:47

Date: 22.MAR.2017 22:07:42

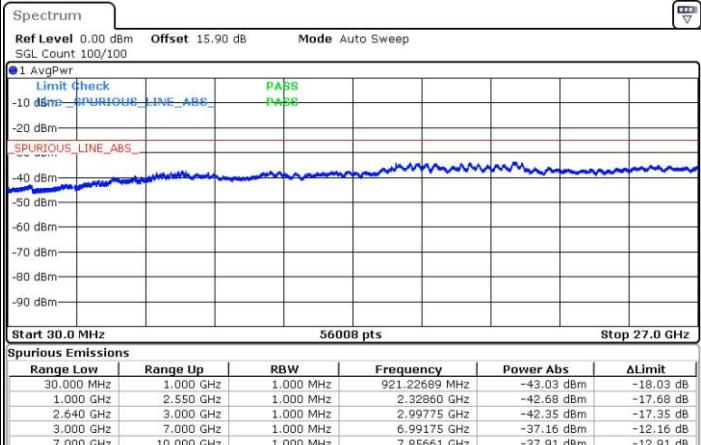
## Highest Channel / QPSK

## Highest Channel / 16QAM



Date: 22.MAR.2017 22:08:36

Date: 22.MAR.2017 22:09:31





## Frequency Stability

| Test Conditions     |                   | LTE Band 38 (QPSK) / Middle Channel | Limit   |
|---------------------|-------------------|-------------------------------------|---------|
| Temperature<br>(°C) | Voltage<br>(Volt) | BW 10MHz                            | Note 2. |
|                     |                   | Deviation<br>(ppm)                  | Result  |
| 50                  | Normal Voltage    | 0.0001                              | PASS    |
| 40                  | Normal Voltage    | 0.0002                              |         |
| 30                  | Normal Voltage    | 0.0117                              |         |
| 20(Ref.)            | Normal Voltage    | 0.0000                              |         |
| 10                  | Normal Voltage    | 0.0008                              |         |
| 0                   | Normal Voltage    | 0.0123                              |         |
| -10                 | Normal Voltage    | 0.0123                              |         |
| -20                 | Normal Voltage    | 0.0003                              |         |
| -30                 | Normal Voltage    | 0.0004                              |         |
| 20                  | Maximum Voltage   | 0.0002                              |         |
| 20                  | Normal Voltage    | 0.0000                              |         |
| 20                  | Battery End Point | 0.0006                              |         |

**Note:**

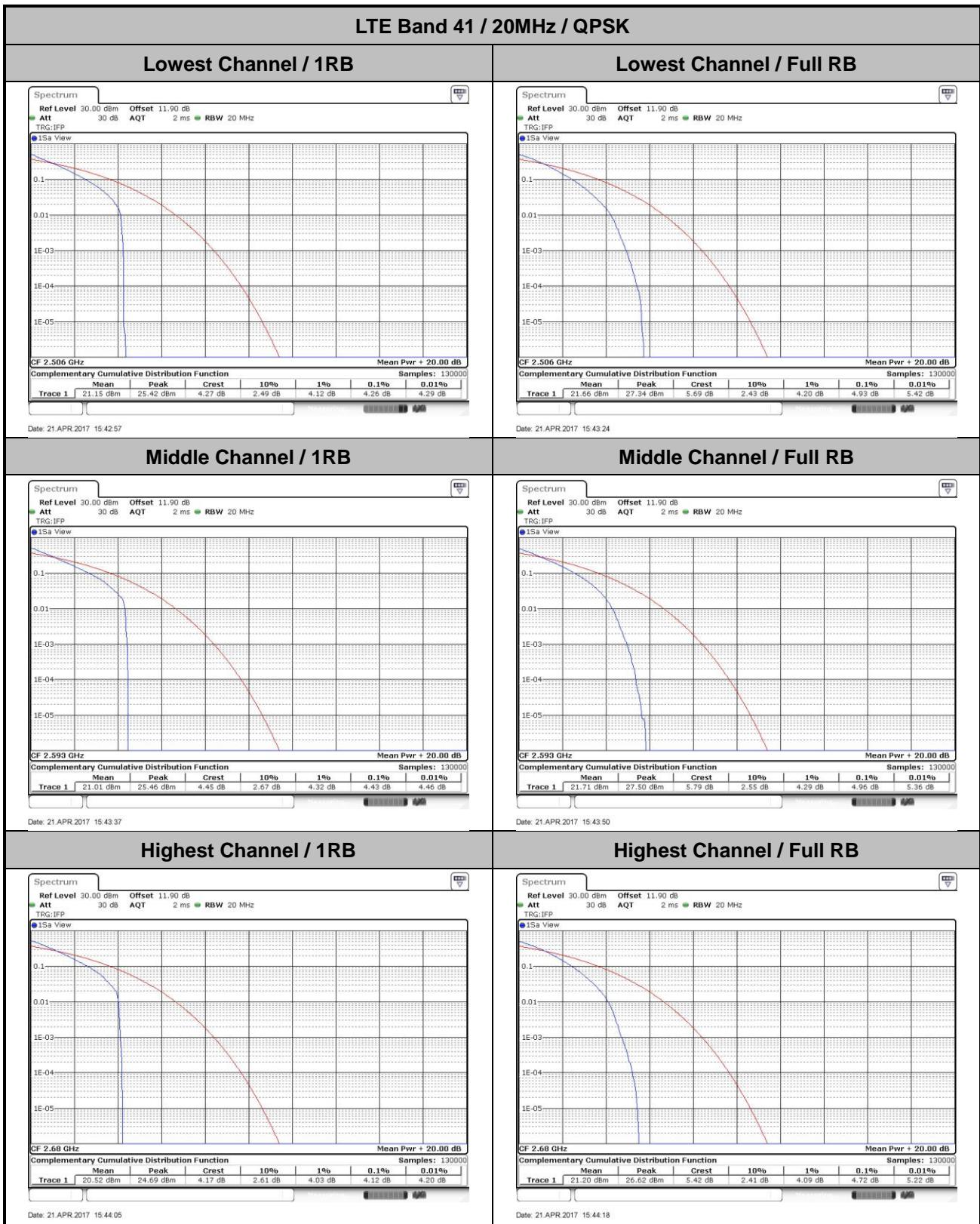
1. Normal Voltage =3.9 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.3 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

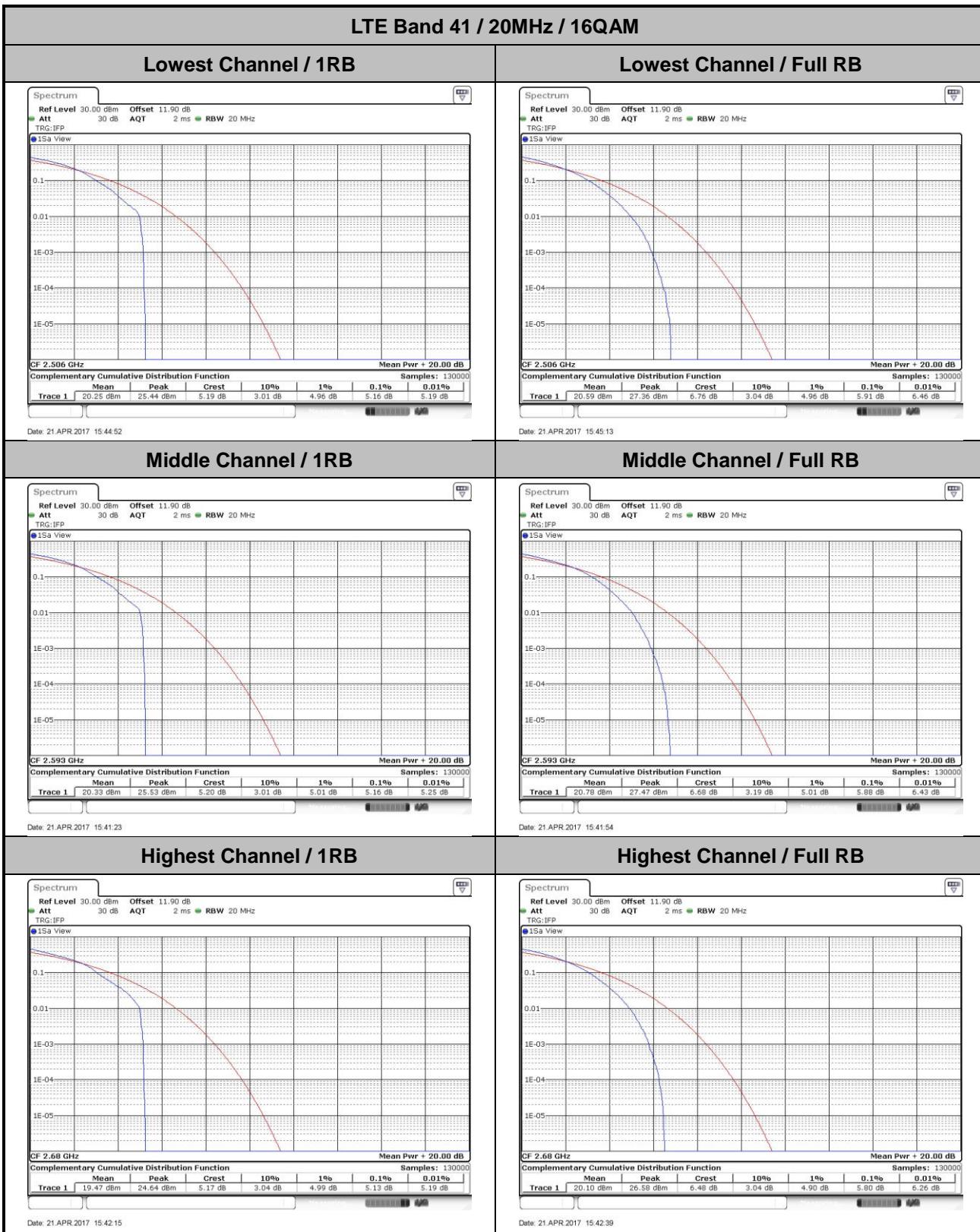


## LTE Band 41

### Peak-to-Average Ratio

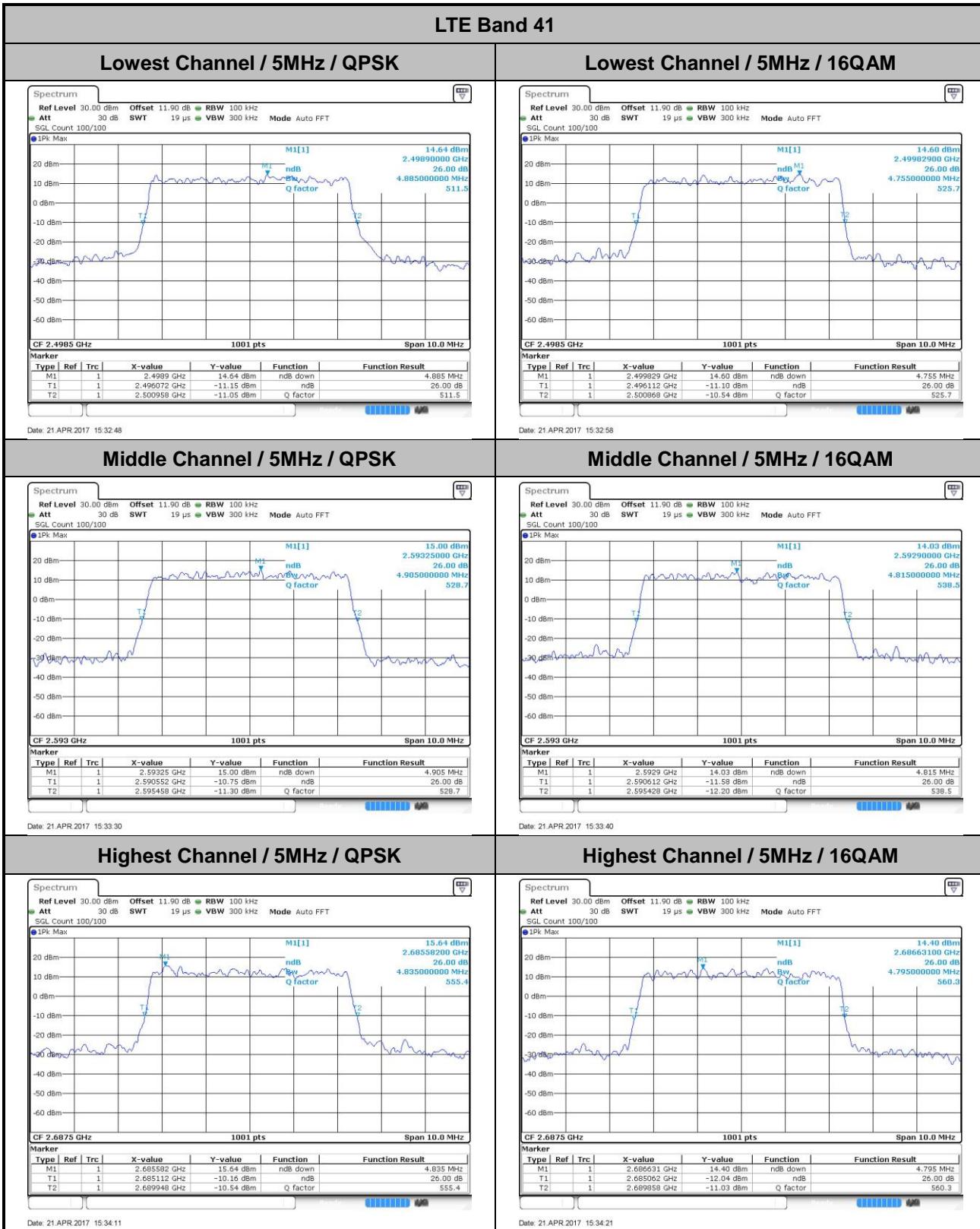
| Mode       | LTE Band 41 / 20MHz |         |       |         |             |
|------------|---------------------|---------|-------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 4.26                | 4.93    | 5.16  | 5.91    |             |
| Middle CH  | 4.43                | 4.96    | 5.16  | 5.88    | PASS        |
| Highest CH | 4.12                | 4.72    | 5.13  | 5.8     |             |

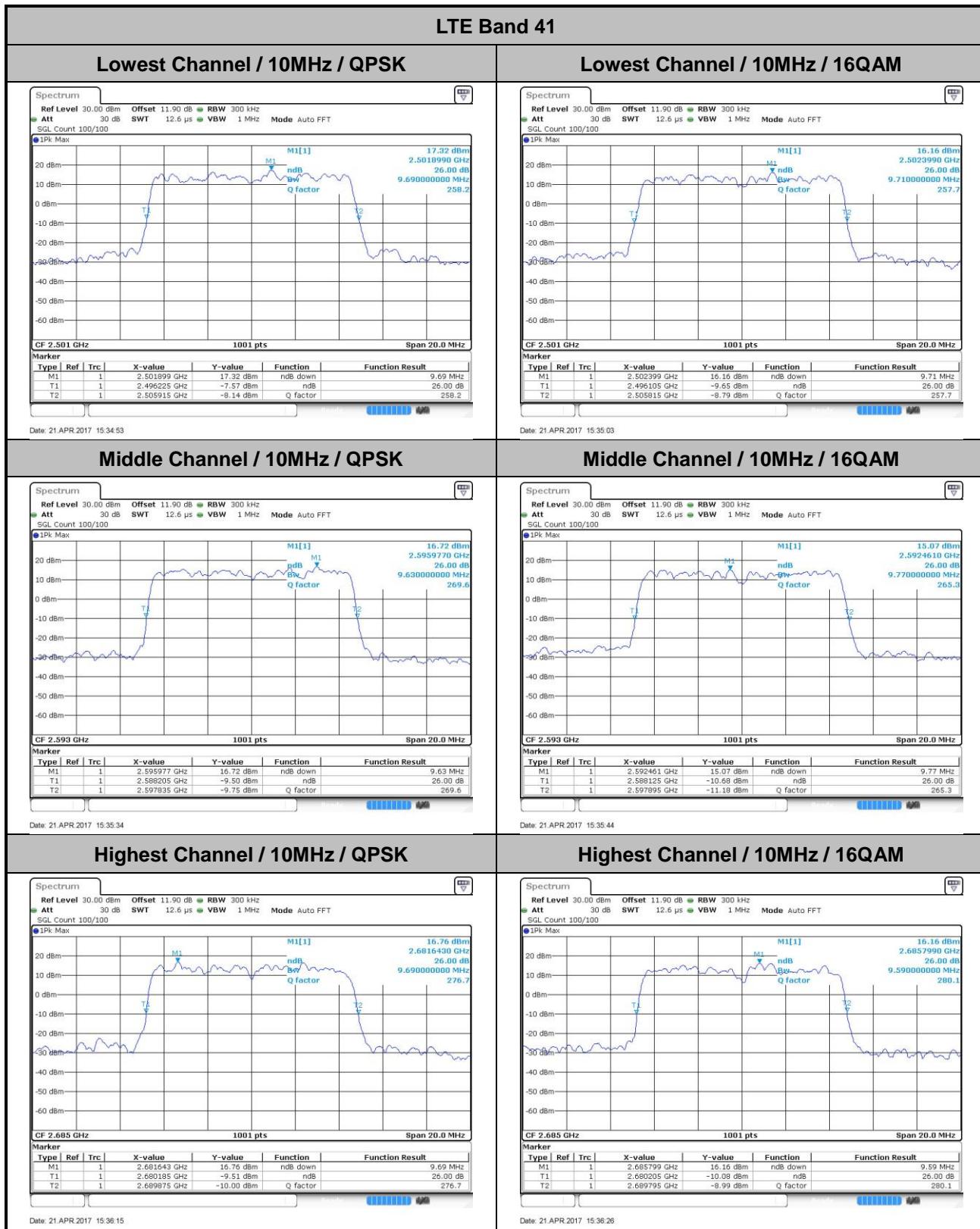


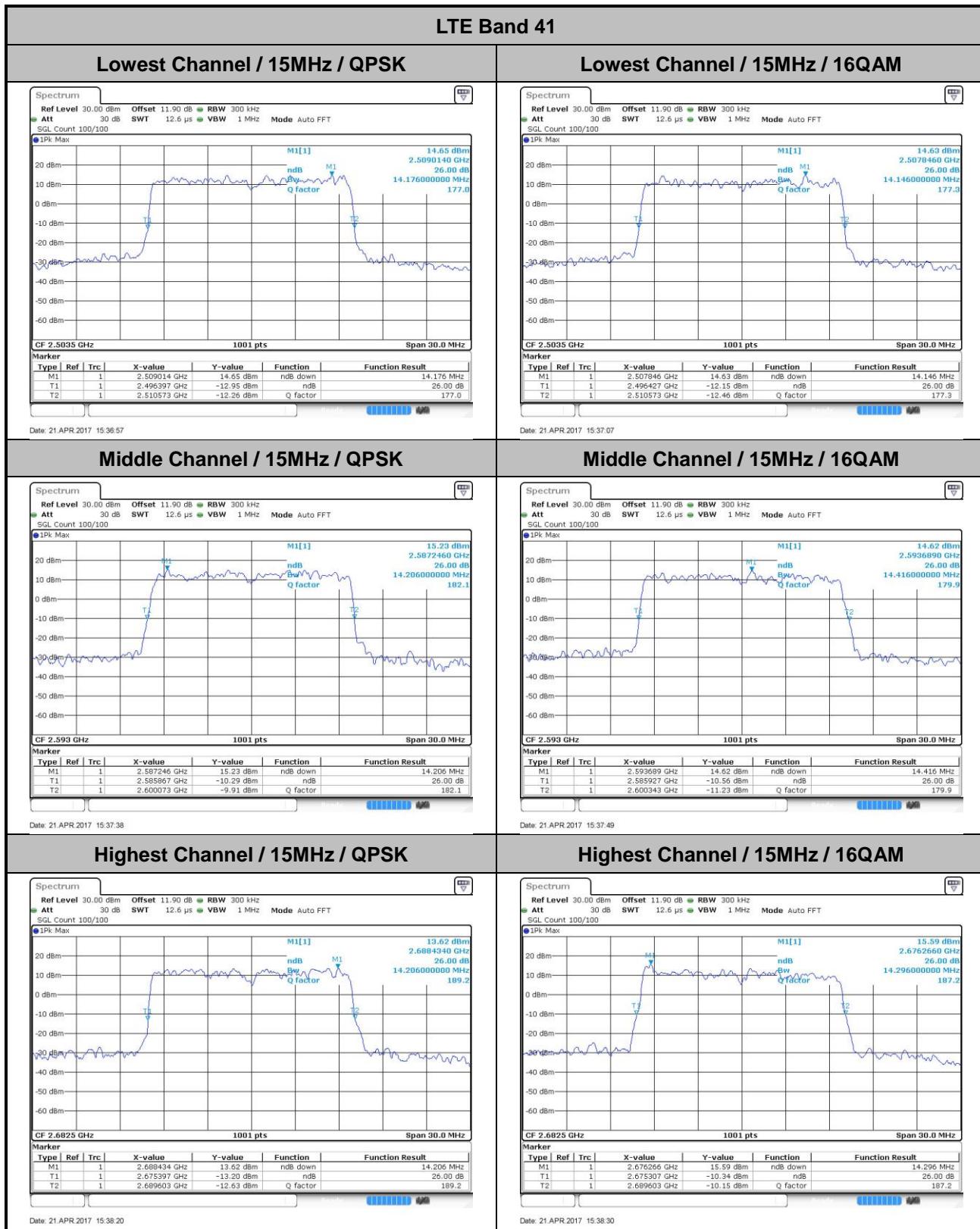


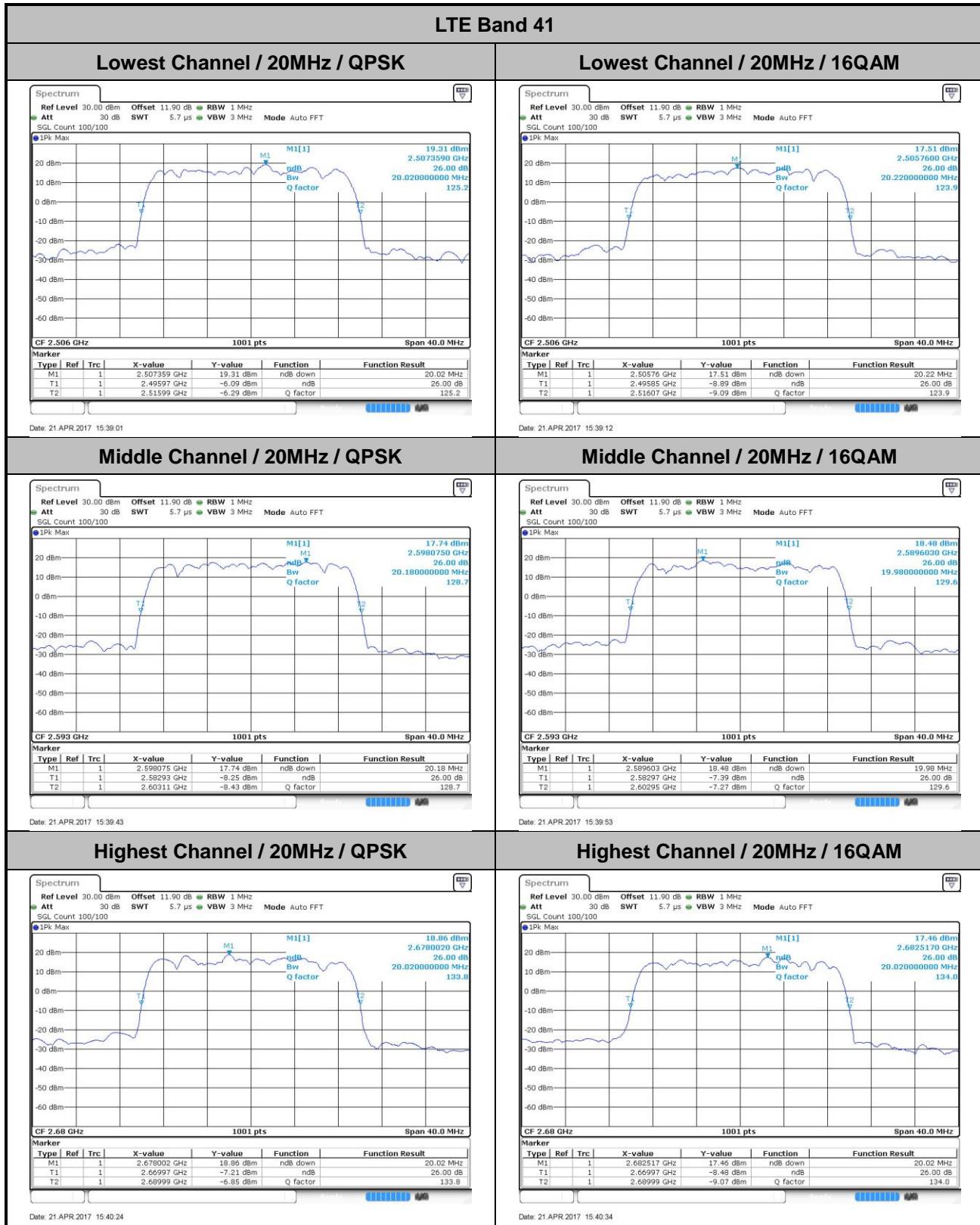
**26dB Bandwidth**

| Mode       | LTE Band 41 : 26dB BW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
|------------|----------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
|            | 1.4MHz                     |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | QPSK                       | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | -                          | -     | -    | -     | 4.89 | 4.76  | 9.69  | 9.71  | 14.18 | 14.15 | 20.02 | 20.22 |
| Middle CH  | -                          | -     | -    | -     | 4.91 | 4.82  | 9.63  | 9.77  | 14.21 | 14.42 | 20.18 | 19.98 |
| Highest CH | -                          | -     | -    | -     | 4.84 | 4.80  | 9.69  | 9.59  | 14.21 | 14.30 | 20.02 | 20.02 |



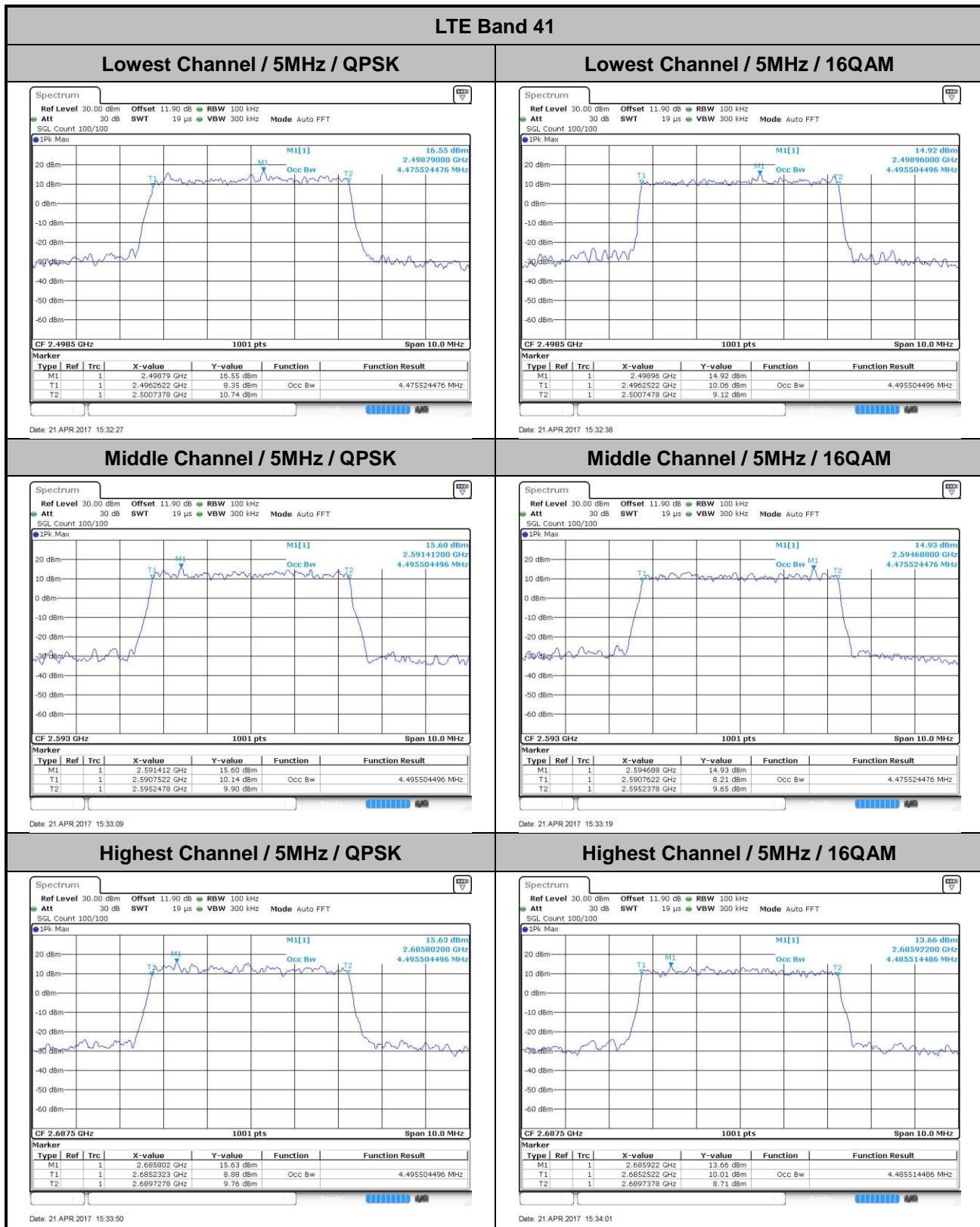


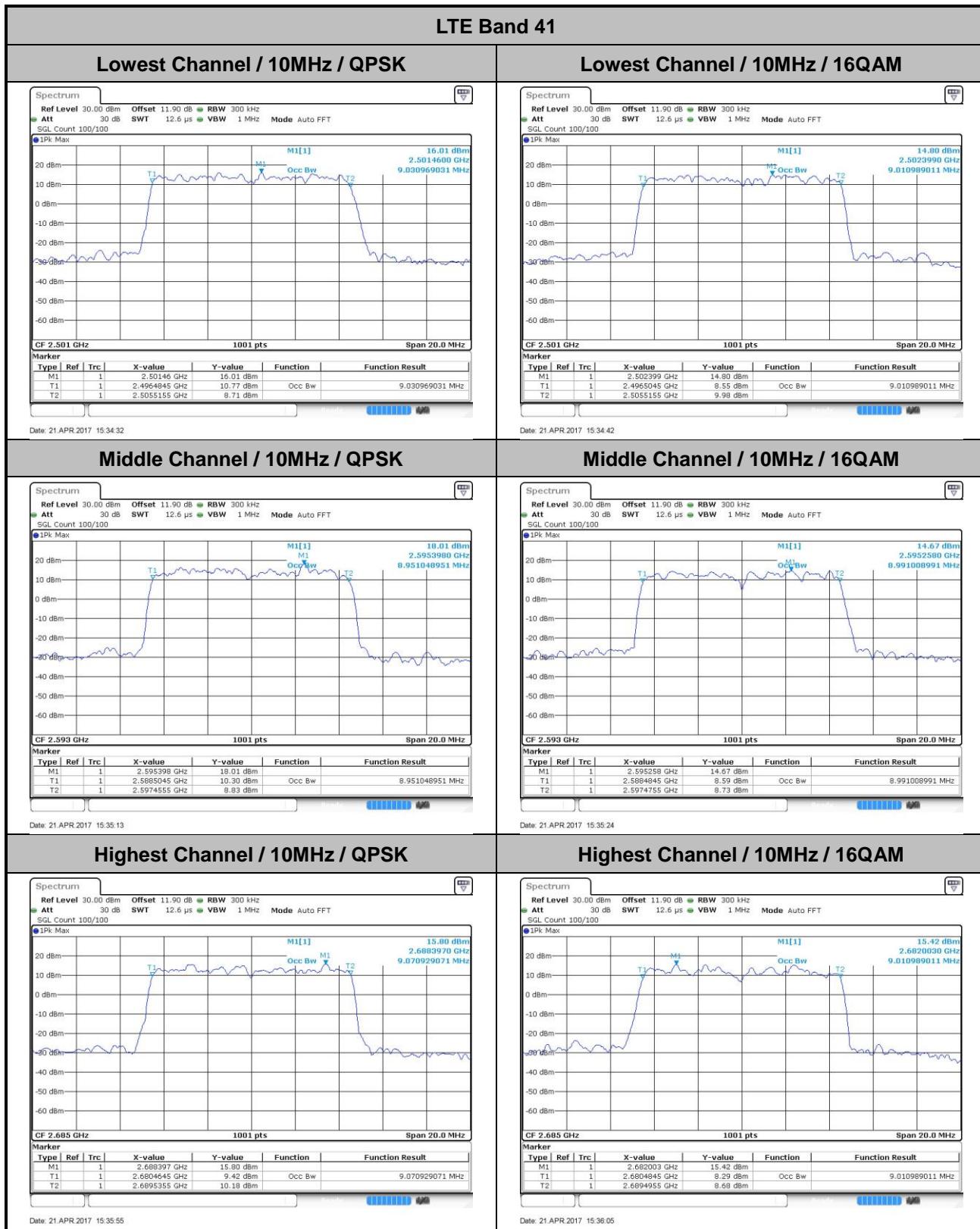


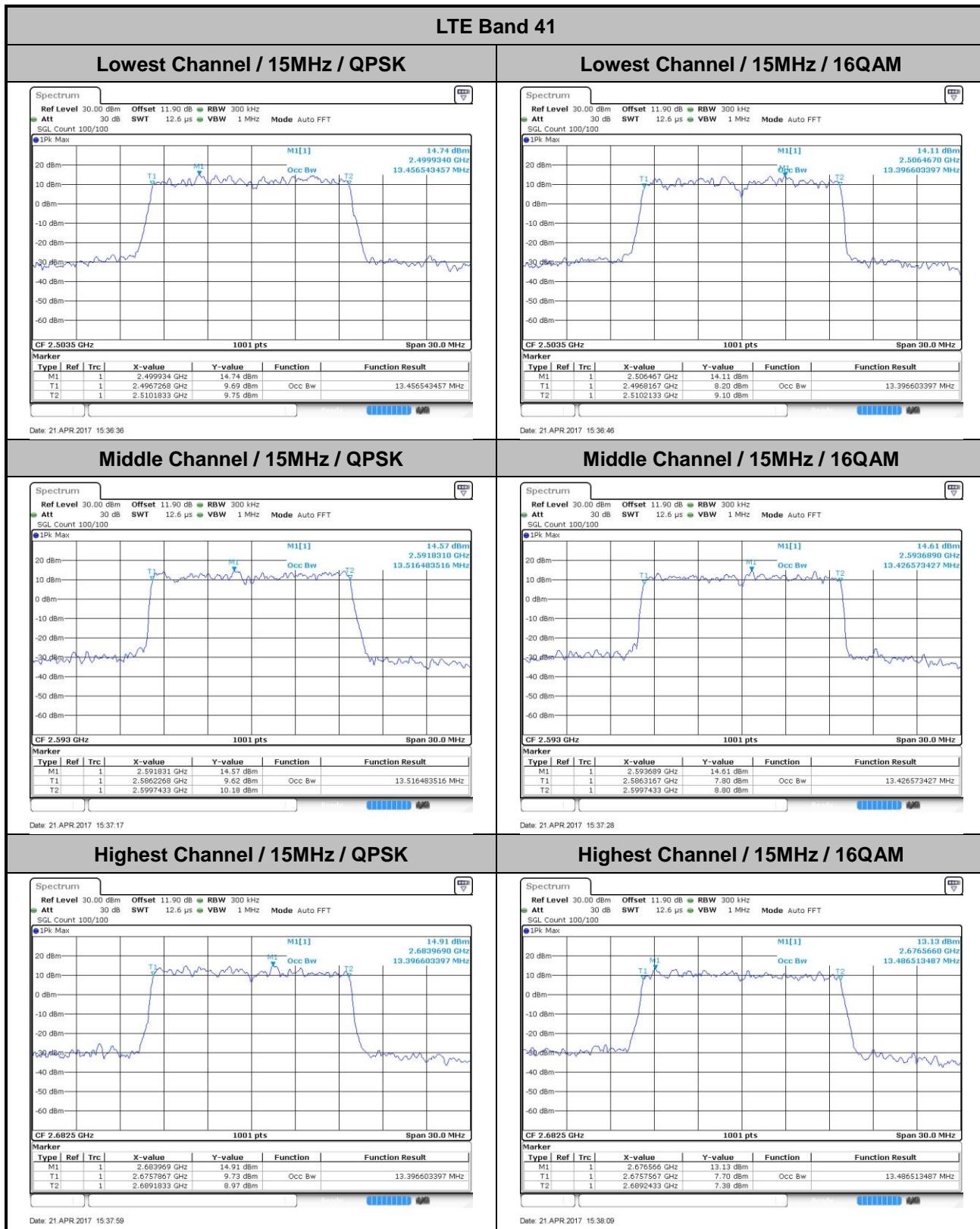


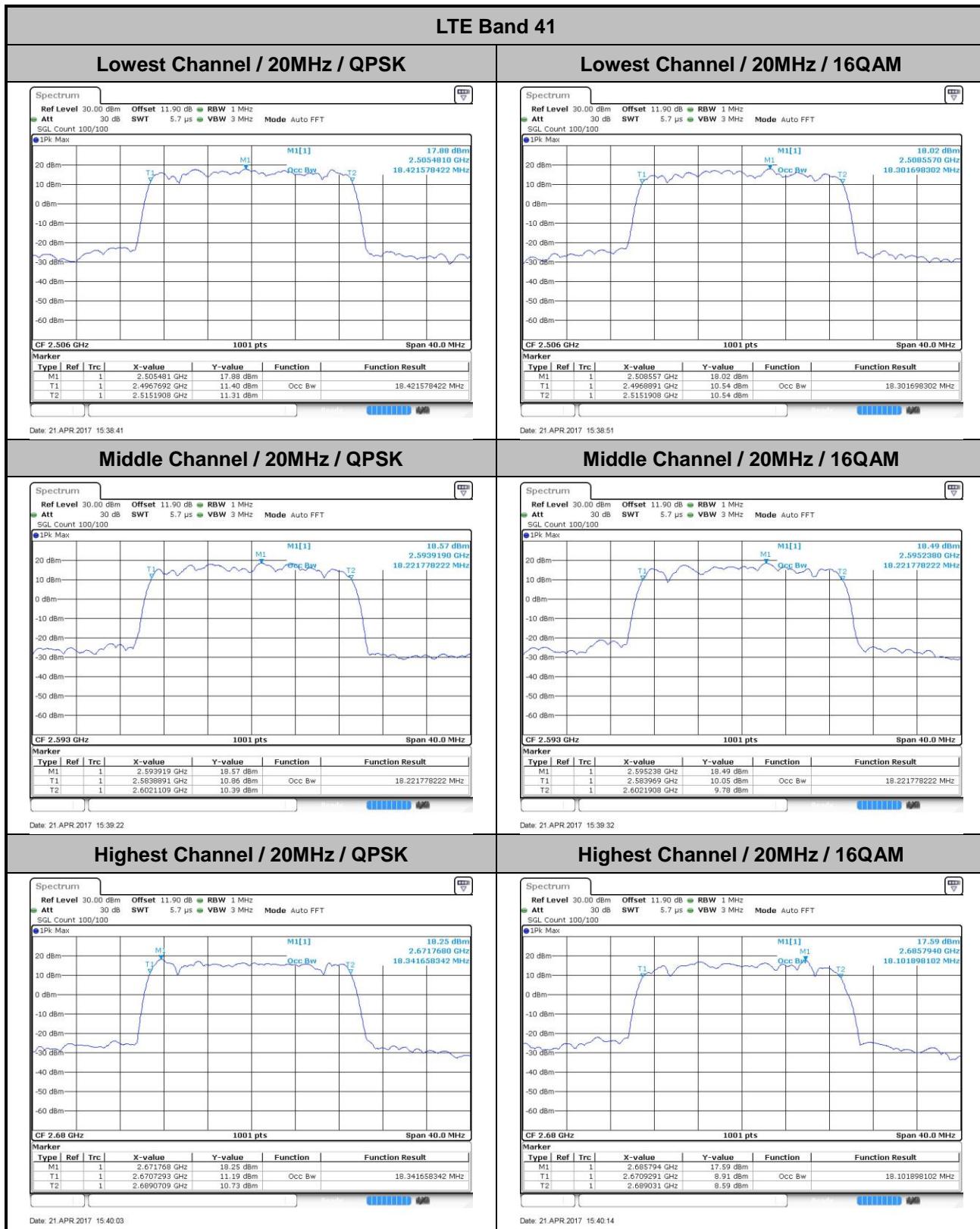
**Occupied Bandwidth**

| Mode       | LTE Band 41 : 99%OBW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
|------------|---------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
|            | 1.4MHz                    |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | QPSK                      | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | -                         | -     | -    | -     | 4.48 | 4.5   | 9.03  | 9.01  | 13.46 | 13.4  | 18.42 | 18.3  |
| Middle CH  | -                         | -     | -    | -     | 4.5  | 4.48  | 8.95  | 8.99  | 13.52 | 13.43 | 18.22 | 18.22 |
| Highest CH | -                         | -     | -    | -     | 4.5  | 4.49  | 9.07  | 9.01  | 13.4  | 13.49 | 18.34 | 18.1  |











## Conducted Band Edge

