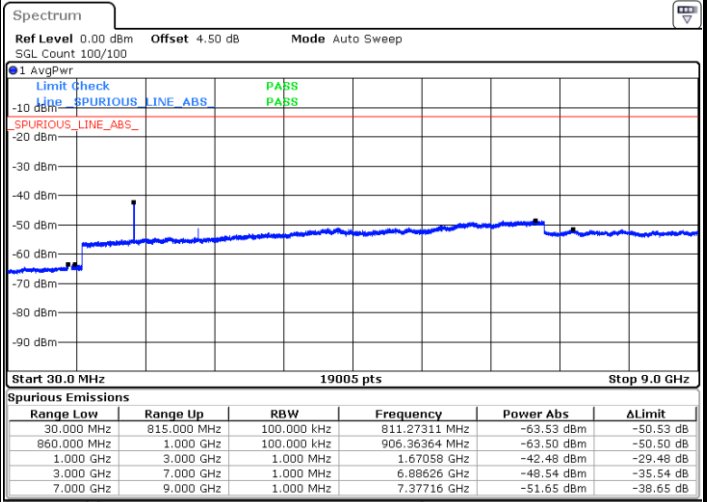
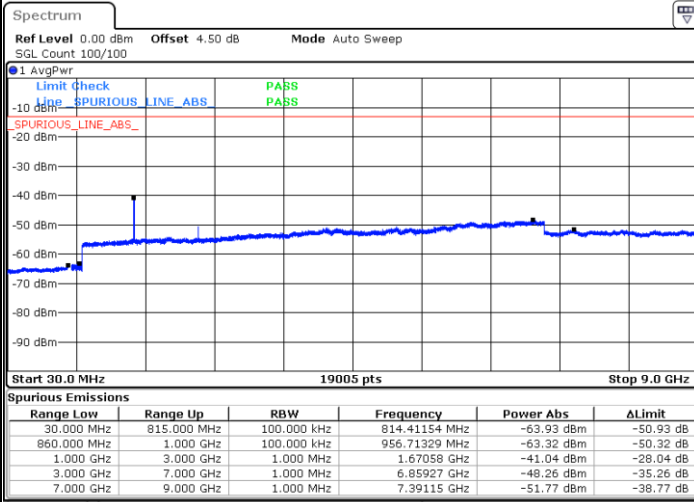




LTE Band 5 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

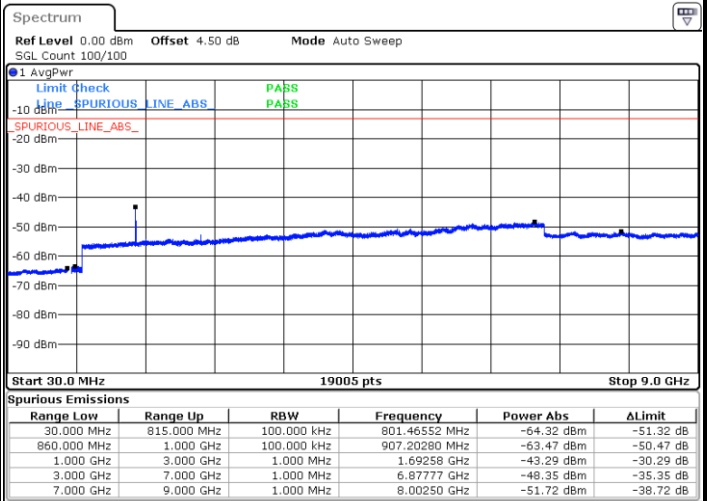
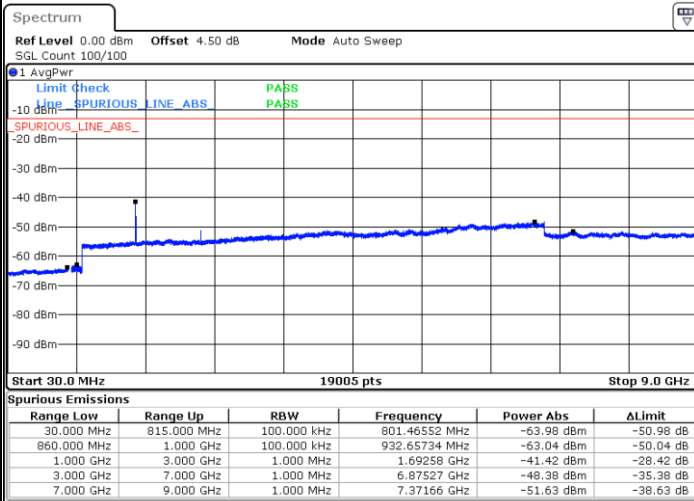


Date: 16 JAN 2020 07:33:15

Date: 16 JAN 2020 07:34:09

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 16 JAN 2020 07:42:29

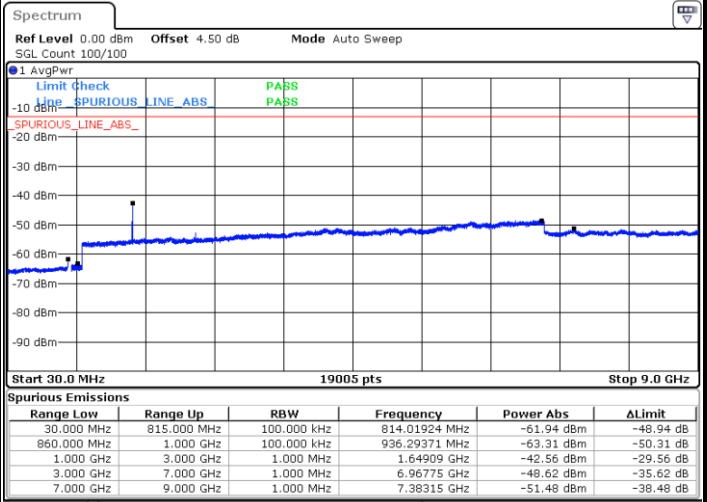
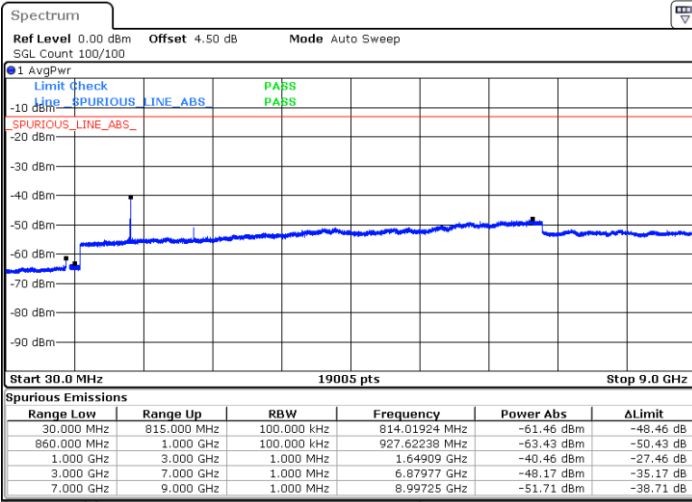
Date: 16 JAN 2020 07:43:23



LTE Band 5 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

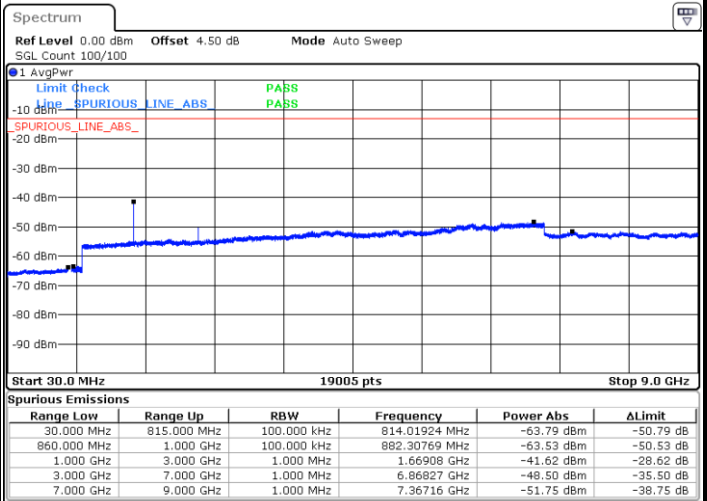
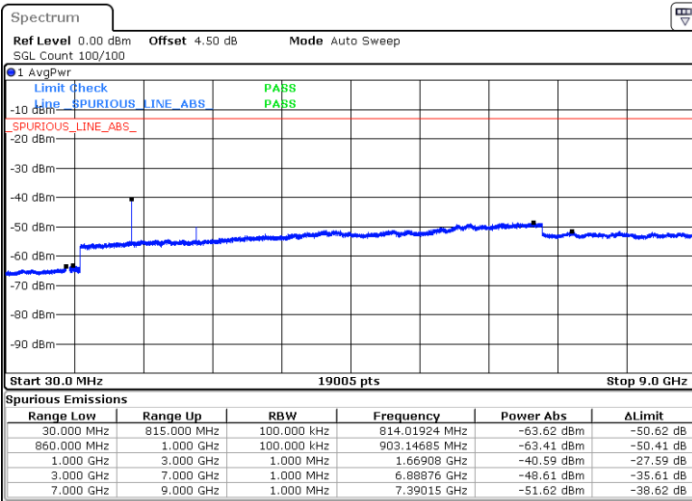


Date: 16 JAN 2020 07:53:15

Date: 16 JAN 2020 07:54:09

Middle Channel / QPSK

Middle Channel / 16QAM



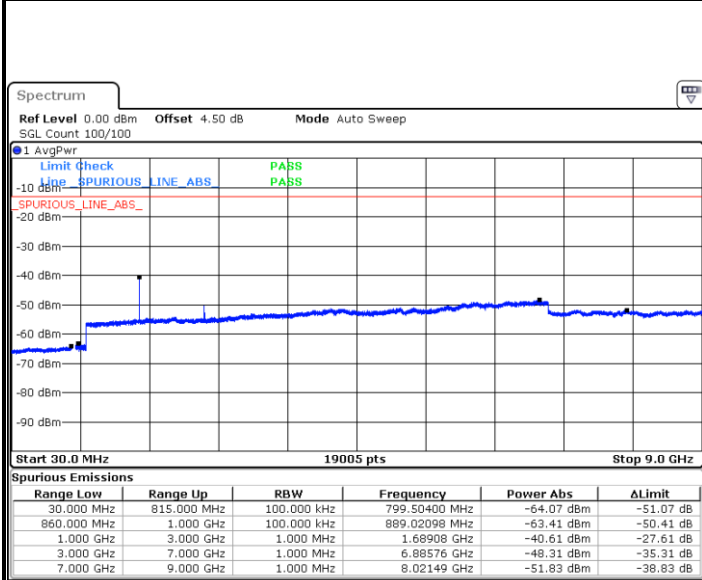
Date: 16 JAN 2020 02:56:53

Date: 16 JAN 2020 02:57:47



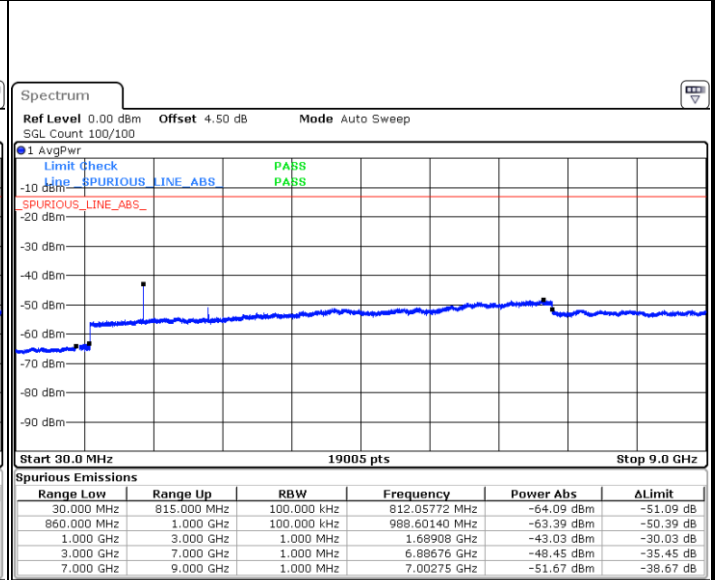
LTE Band 5 / 5MHz

Highest Channel / QPSK



Date: 16 JAN 2020 03:05:51

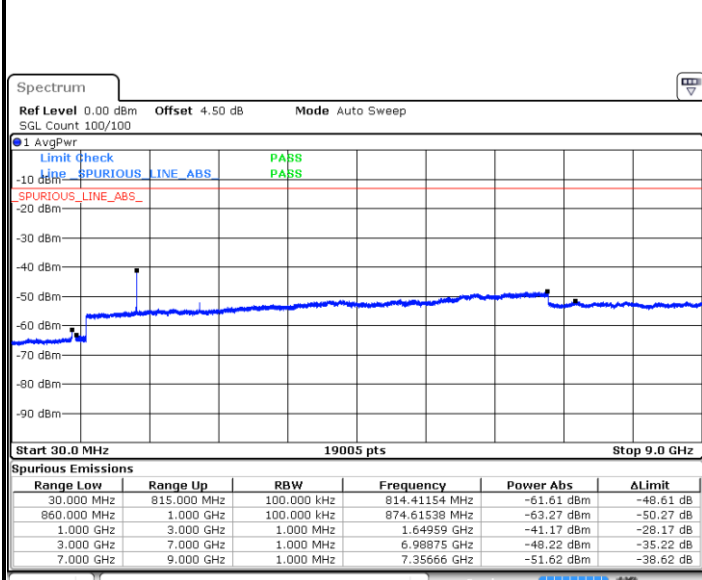
Highest Channel / 16QAM



Date: 16 JAN 2020 03:06:45

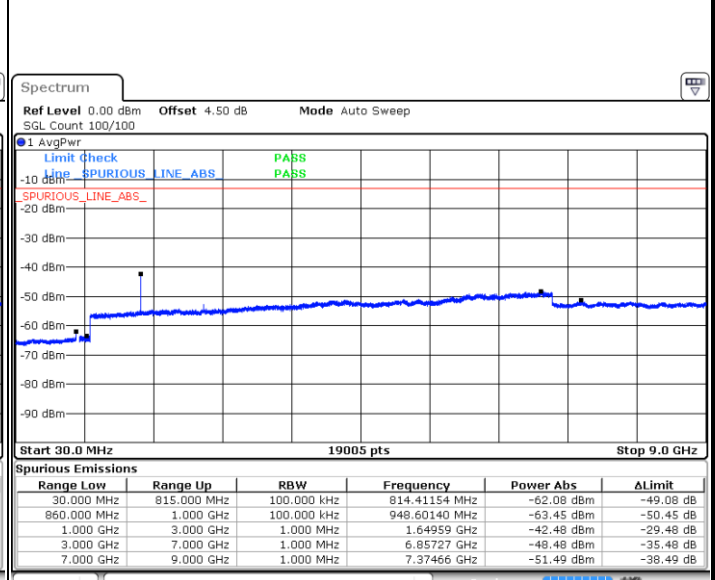
LTE Band 5 / 10MHz

Lowest Channel / QPSK



Date: 16 JAN 2020 03:14:48

Lowest Channel / 16QAM

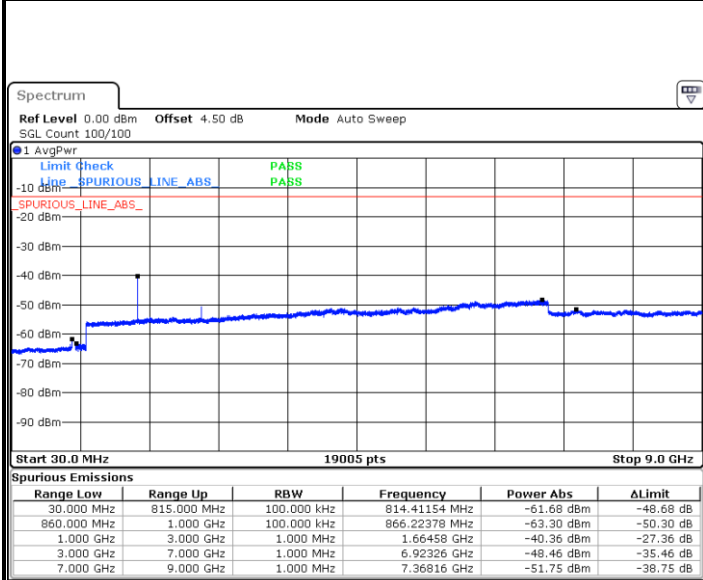


Date: 16 JAN 2020 03:15:43



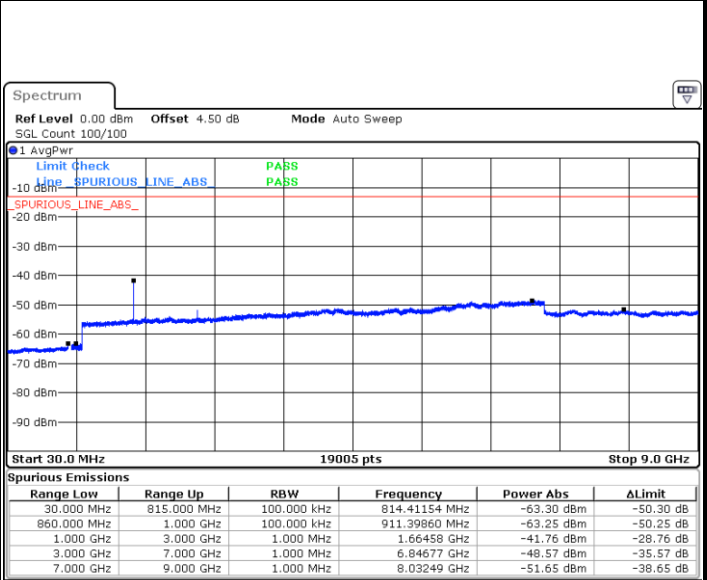
LTE Band 5 / 10MHz

Middle Channel / QPSK



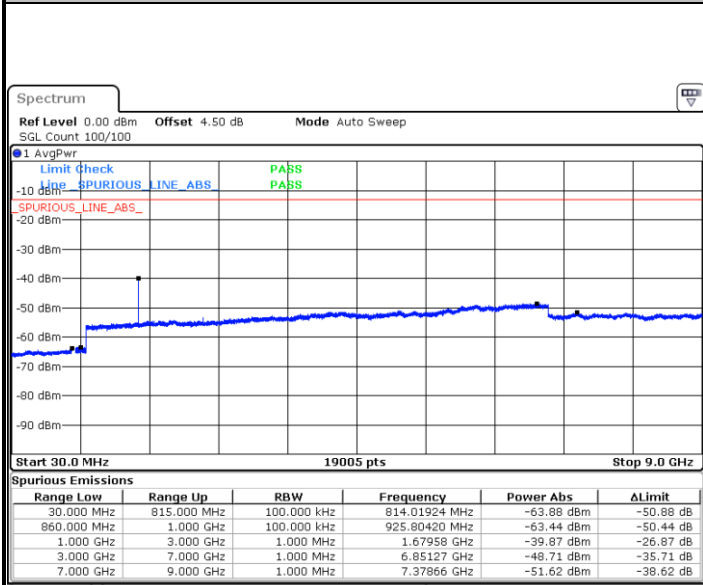
Date: 16 JAN 2020 03:17:17

Middle Channel / 16QAM



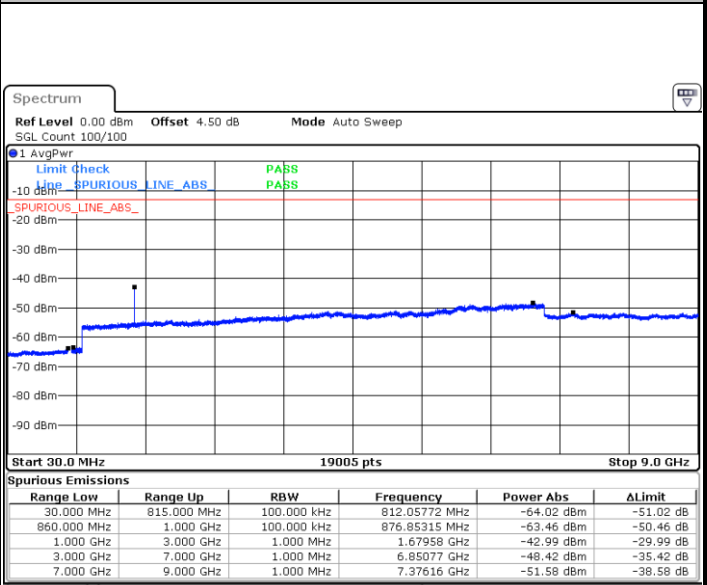
Date: 16 JAN 2020 03:18:11

Highest Channel / QPSK



Date: 16 JAN 2020 03:26:14

Highest Channel / 16QAM



Date: 16 JAN 2020 03:27:09



Frequency Stability

| Test Conditions | | LTE Band 5 (QPSK) / Middle Channel | Limit |
|------------------|-------------------|------------------------------------|--------|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | 2.5ppm |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0004 | PASS |
| 40 | Normal Voltage | 0.0012 | |
| 30 | Normal Voltage | 0.0046 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0056 | |
| 0 | Normal Voltage | 0.0059 | |
| -10 | Normal Voltage | 0.0051 | |
| -20 | Normal Voltage | 0.0022 | |
| -30 | Normal Voltage | 0.0012 | |
| 20 | Maximum Voltage | 0.0060 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0008 | |

Note:

1. Normal Voltage =7.2V. ; Battery End Point (BEP) =7 V. ; Maximum Voltage =8.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 7

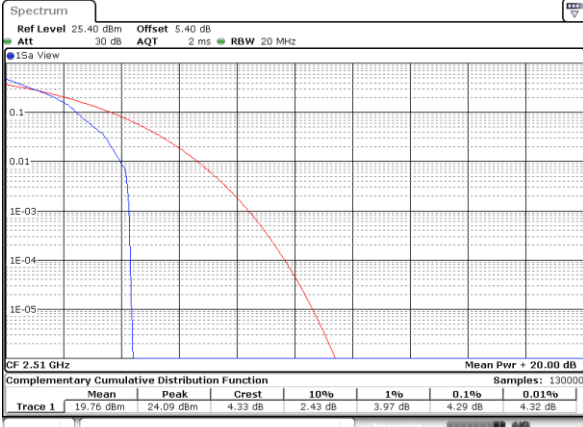
Peak-to-Average Ratio

| Mode | LTE Band 7 / 20MHz | | | | |
|------------|--------------------|---------|-------|---------|-------------|
| Mod. | QPSK | | 16QAM | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | 4.29 | 4.70 | 5.36 | 5.80 | PASS |
| Middle CH | 4.41 | 5.28 | 5.30 | 6.23 | |
| Highest CH | 4.12 | 5.01 | 5.13 | 5.88 | |

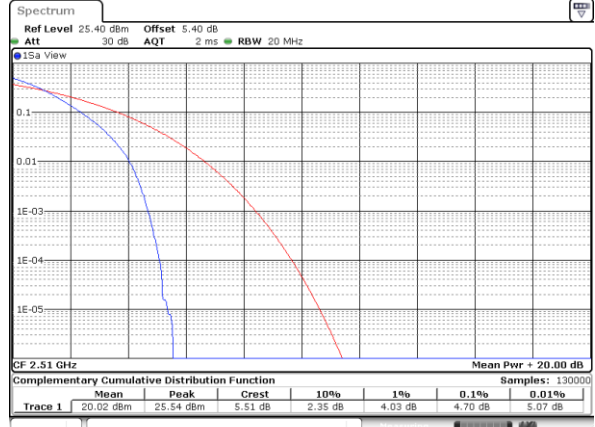


LTE Band 7 / 20MHz / QPSK

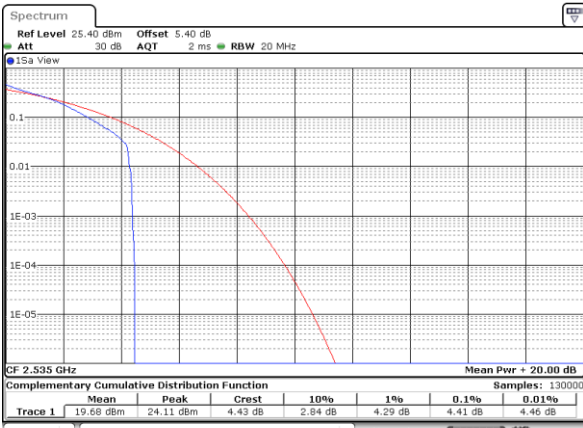
Lowest Channel / 1RB



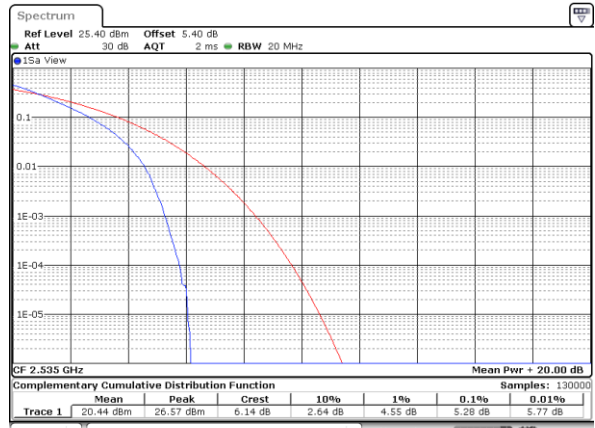
Lowest Channel / Full RB



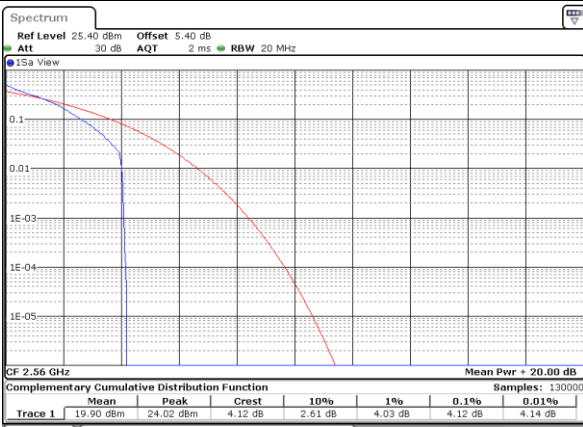
Middle Channel / 1RB



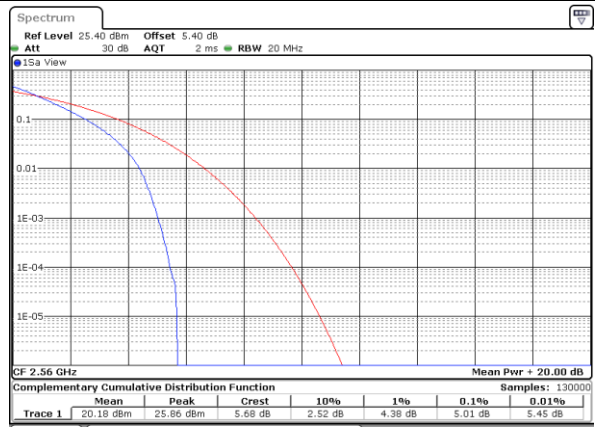
Middle Channel / Full RB



Highest Channel / 1RB



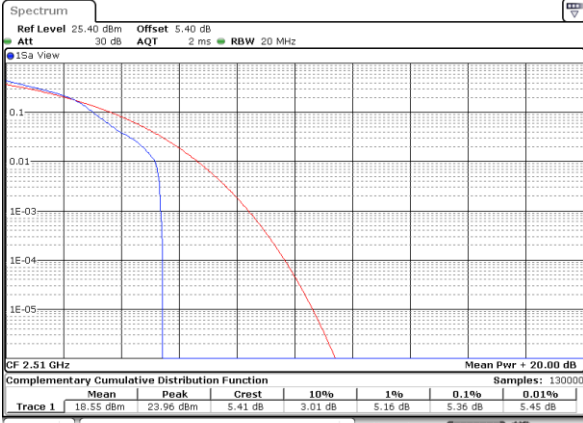
Highest Channel / Full RB



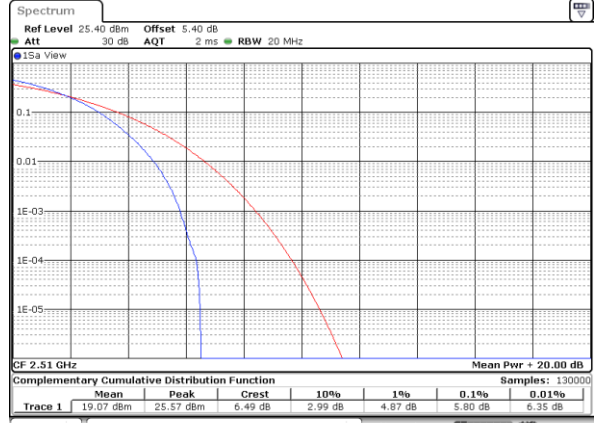


LTE Band 7 / 20MHz / 16QAM

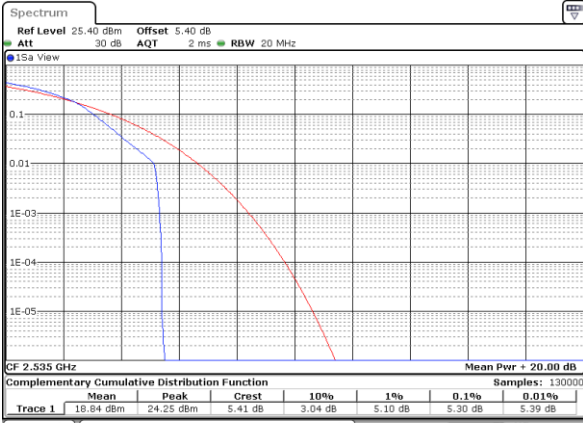
Lowest Channel / 1RB



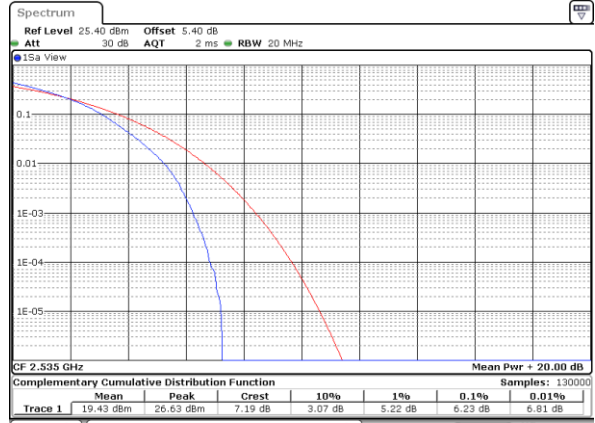
Lowest Channel / Full RB



Middle Channel / 1RB



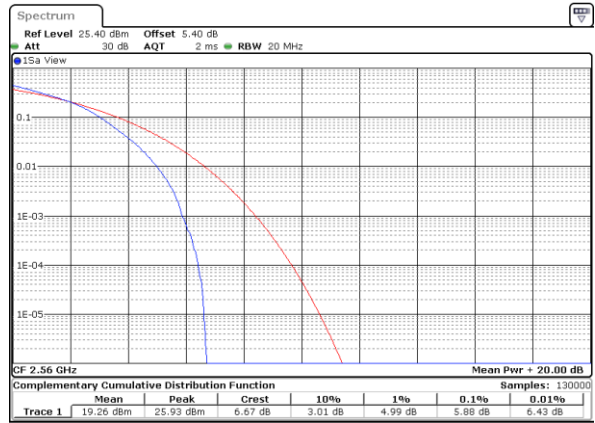
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB





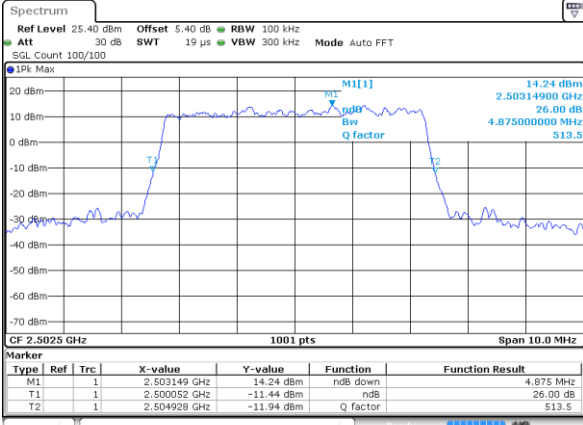
26dB Bandwidth

| Mode | LTE Band 7 : 26dB BW(MHz) | | | | | | | |
|------------|---------------------------|-------|-------|-------|--------|--------|--------|--------|
| | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| BW | | | | | | | | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | 4.875 | 4.895 | 9.810 | 9.690 | 14.266 | 14.236 | 20.100 | 19.940 |
| Middle CH | 4.935 | 4.855 | 9.750 | 9.850 | 14.416 | 14.505 | 20.220 | 20.020 |
| Highest CH | 4.955 | 4.965 | 9.930 | 9.950 | 14.505 | 14.476 | 20.100 | 20.100 |

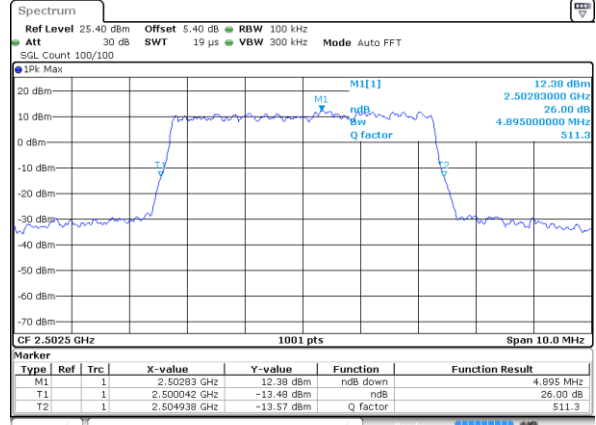


LTE Band 7

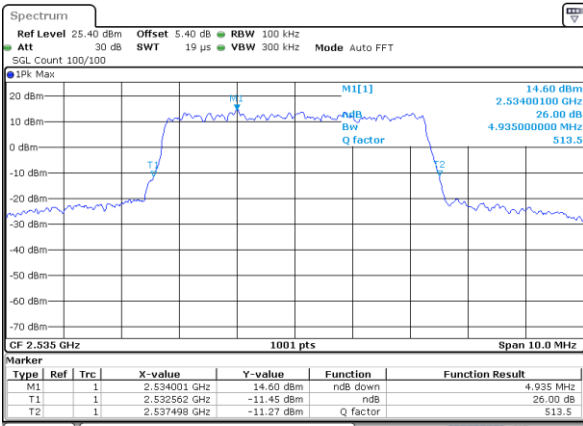
Lowest Channel / 5MHz / QPSK



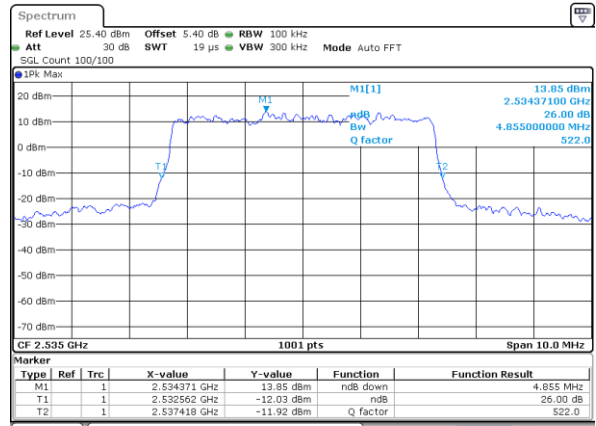
Lowest Channel / 5MHz / 16QAM



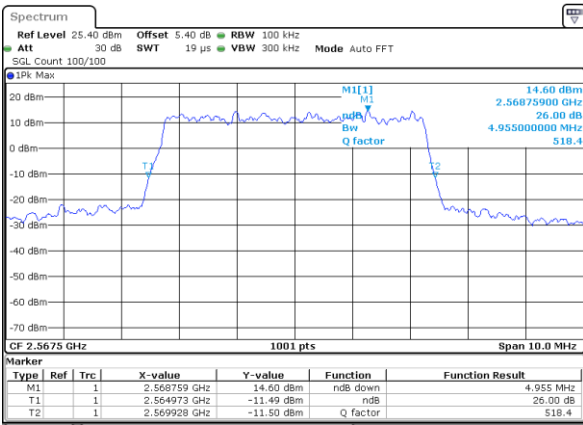
Middle Channel / 5MHz / QPSK



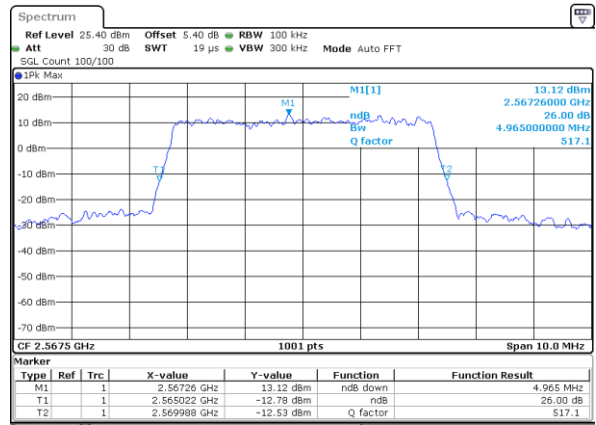
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



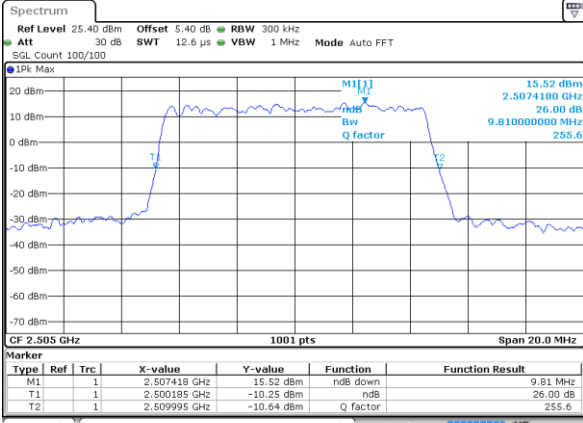
Highest Channel / 5MHz / 16QAM



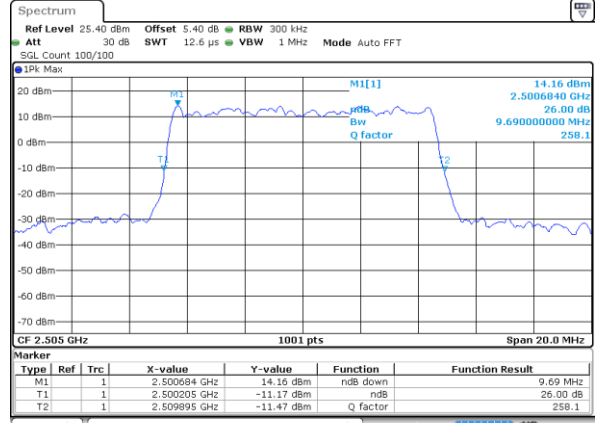


LTE Band 7

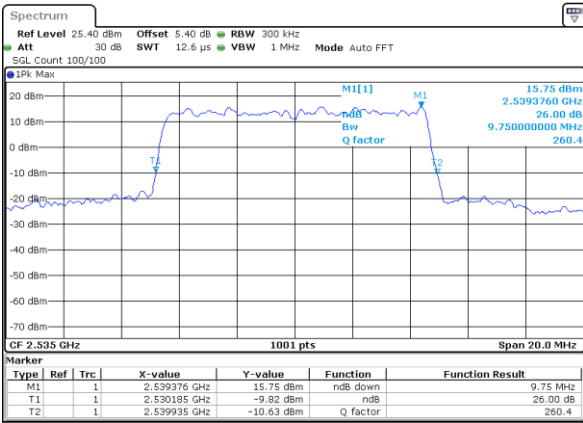
Lowest Channel / 10MHz / QPSK



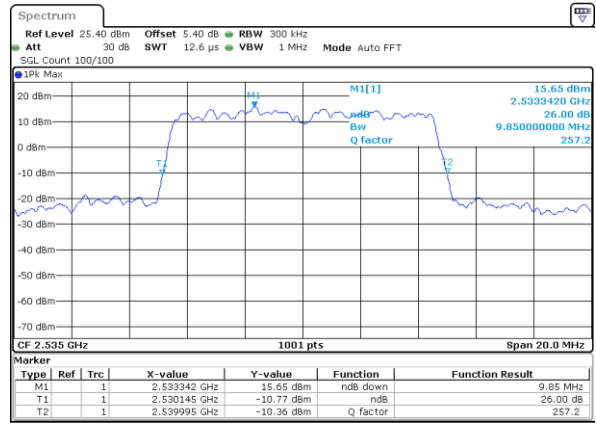
Lowest Channel / 10MHz / 16QAM



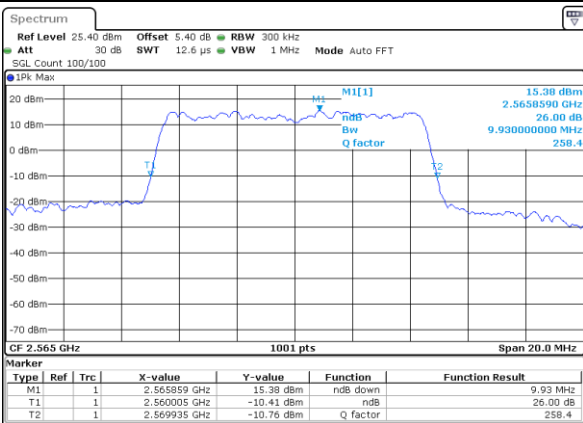
Middle Channel / 10MHz / QPSK



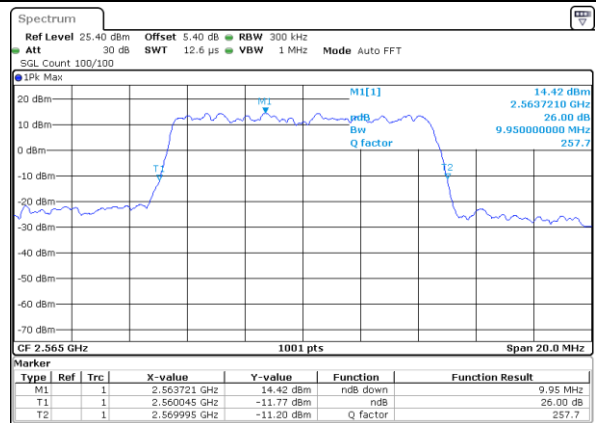
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



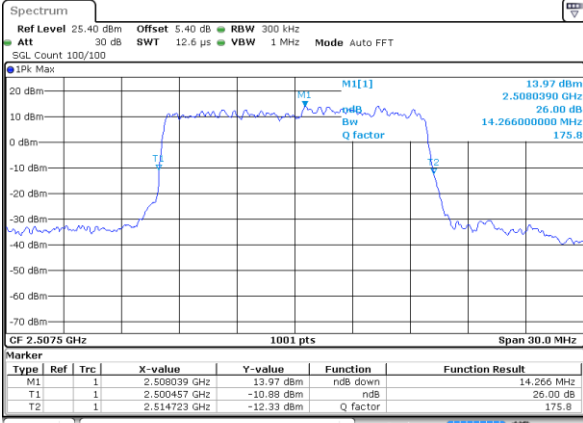
Highest Channel / 10MHz / 16QAM



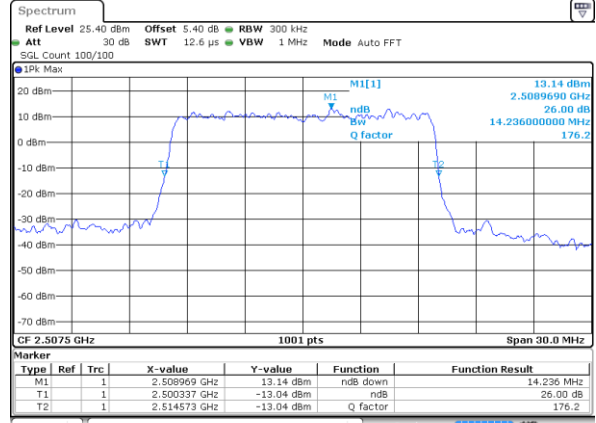


LTE Band 7

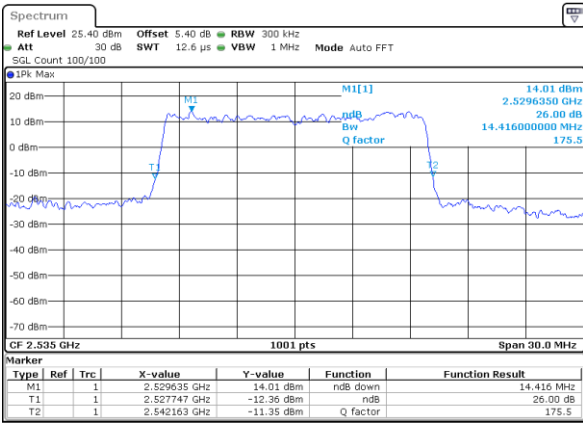
Lowest Channel / 15MHz / QPSK



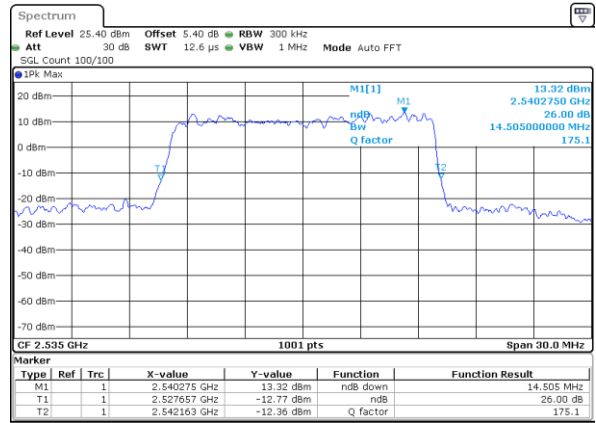
Lowest Channel / 15MHz / 16QAM



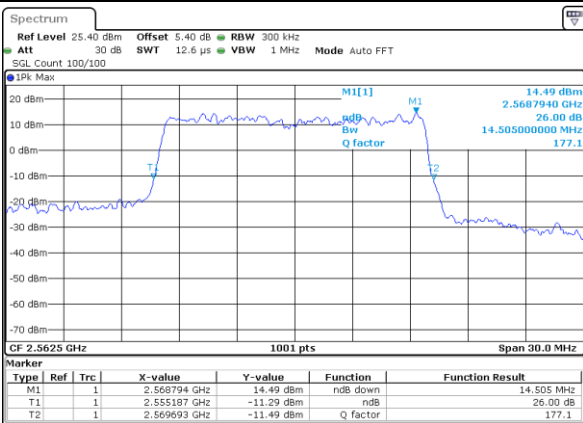
Middle Channel / 15MHz / QPSK



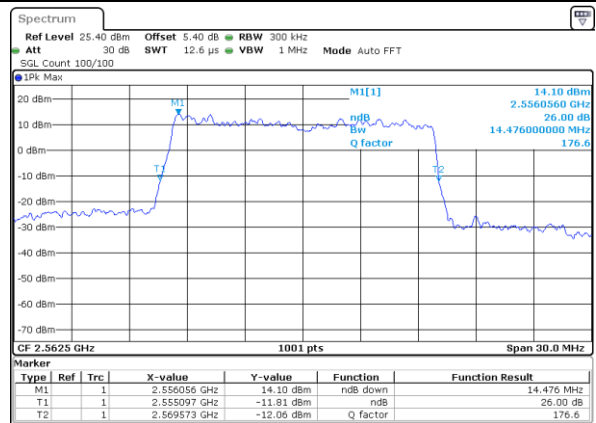
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



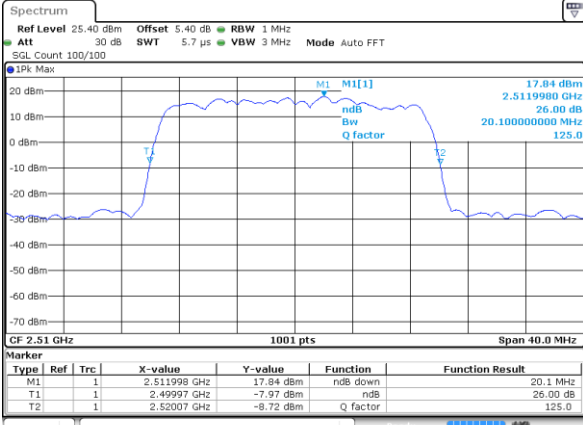
Highest Channel / 15MHz / 16QAM



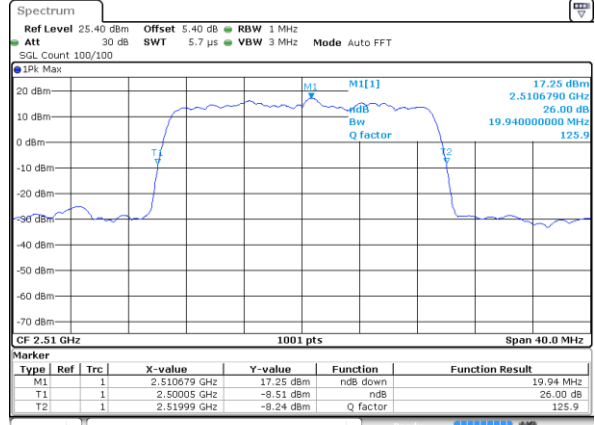


LTE Band 7

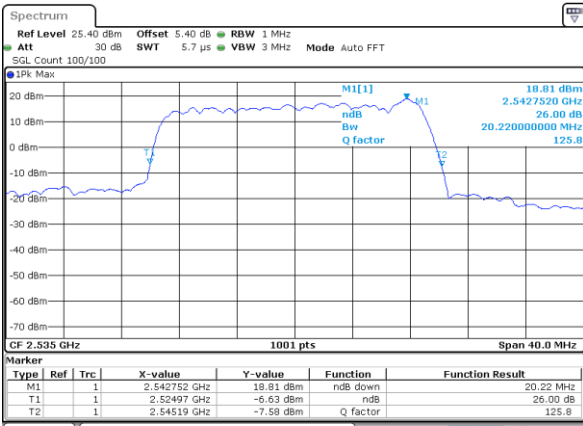
Lowest Channel / 20MHz / QPSK



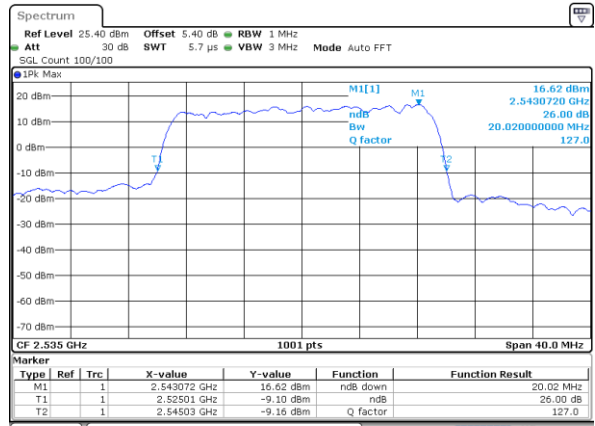
Lowest Channel / 20MHz / 16QAM



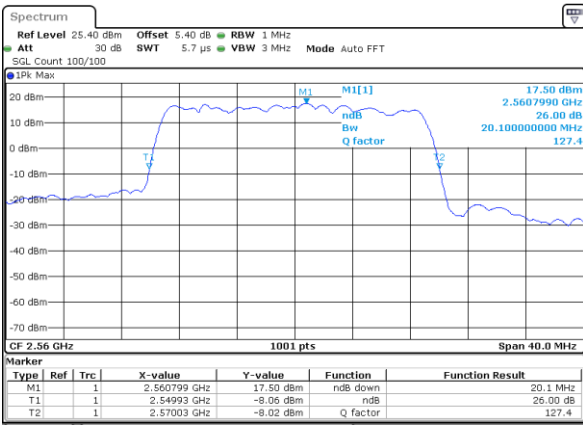
Middle Channel / 20MHz / QPSK



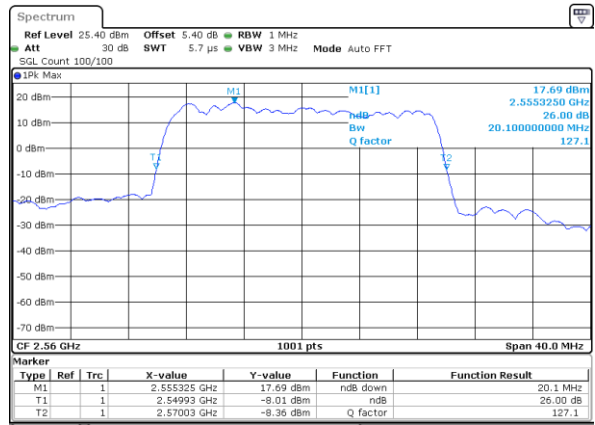
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM





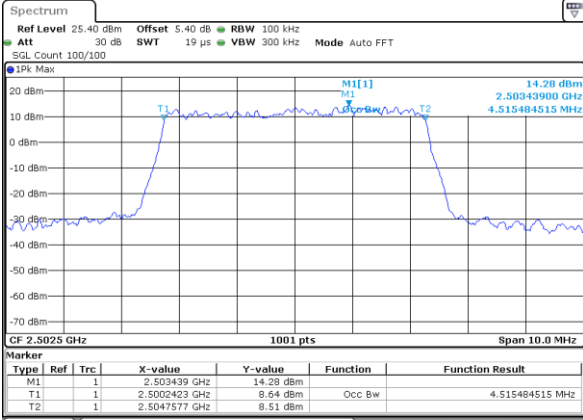
Occupied Bandwidth

| Mode | LTE Band 7 : 99%OBW(MHz) | | | | | | | |
|------------|--------------------------|-------|-------|-------|--------|--------|--------|--------|
| | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| BW | | | | | | | | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | 4.515 | 4.486 | 9.011 | 9.031 | 13.427 | 13.457 | 18.262 | 18.142 |
| Middle CH | 4.496 | 4.496 | 9.031 | 8.991 | 13.457 | 13.487 | 18.382 | 18.501 |
| Highest CH | 4.505 | 4.496 | 8.971 | 9.111 | 13.457 | 13.457 | 18.462 | 18.302 |

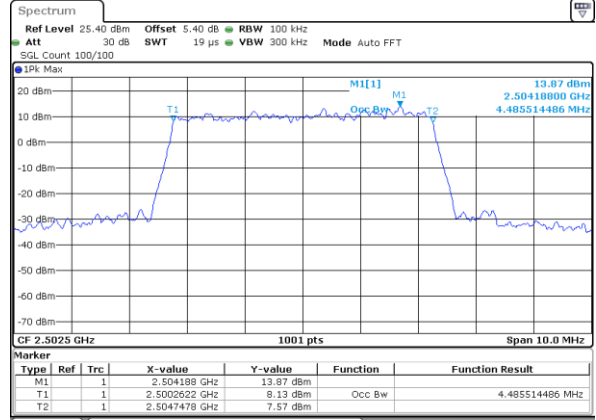


LTE Band 7

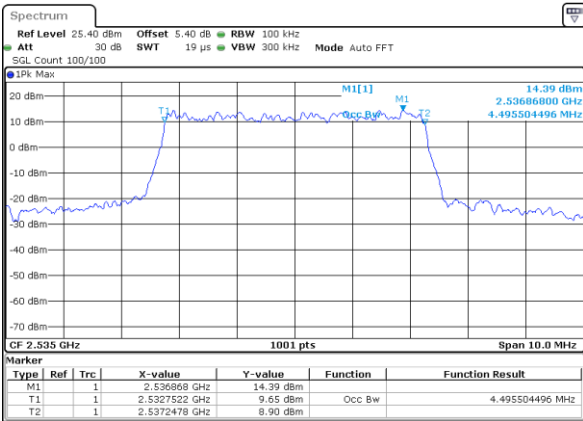
Lowest Channel / 5MHz / QPSK



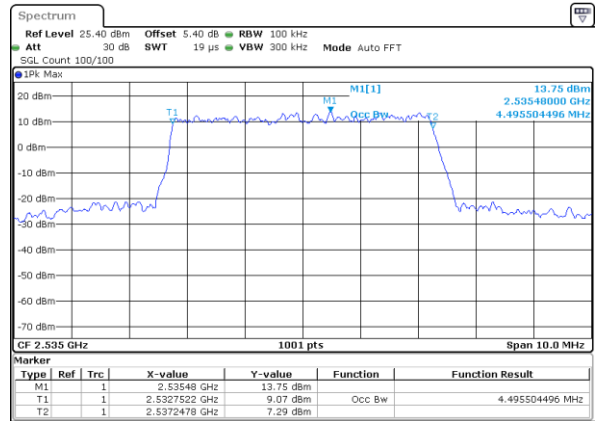
Lowest Channel / 5MHz / 16QAM



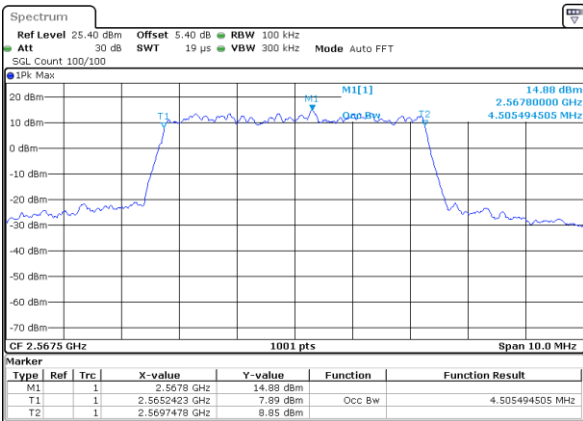
Middle Channel / 5MHz / QPSK



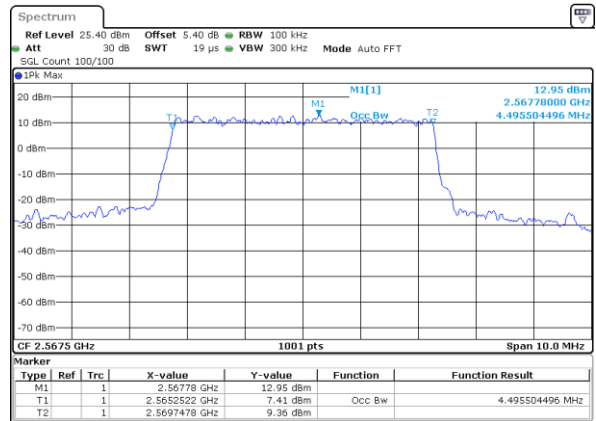
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



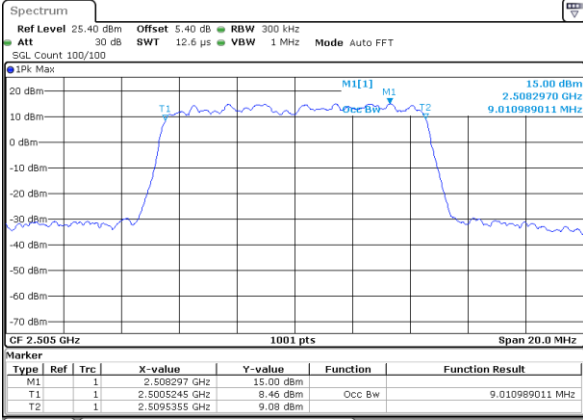
Highest Channel / 5MHz / 16QAM



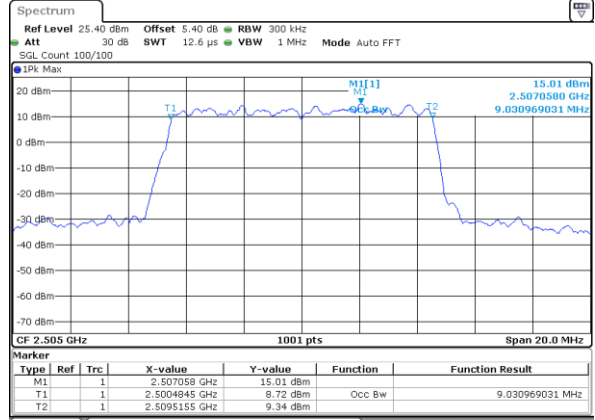


LTE Band 7

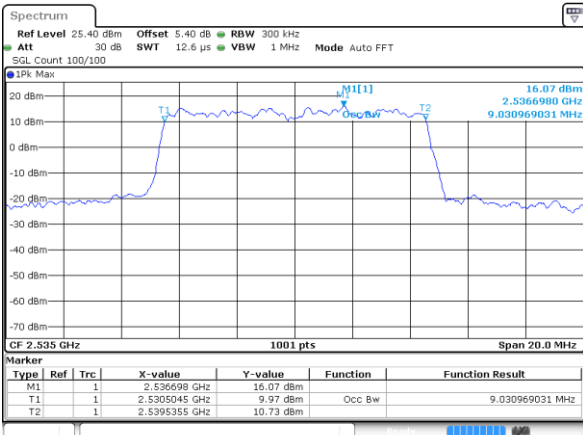
Lowest Channel / 10MHz / QPSK



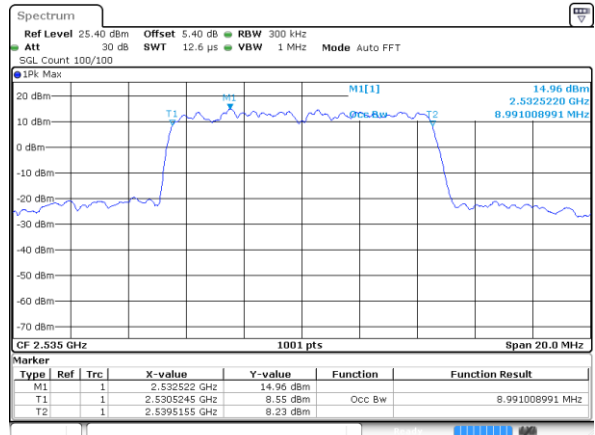
Lowest Channel / 10MHz / 16QAM



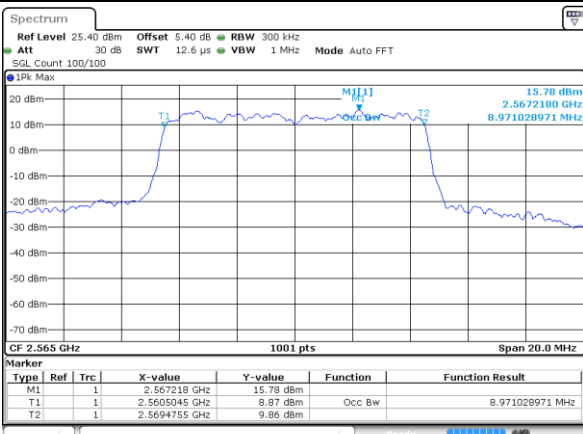
Middle Channel / 10MHz / QPSK



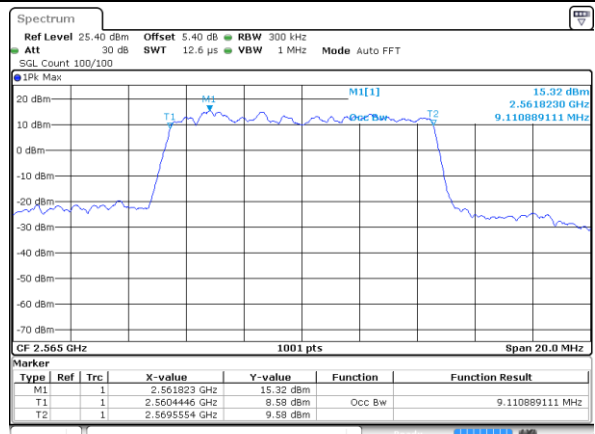
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



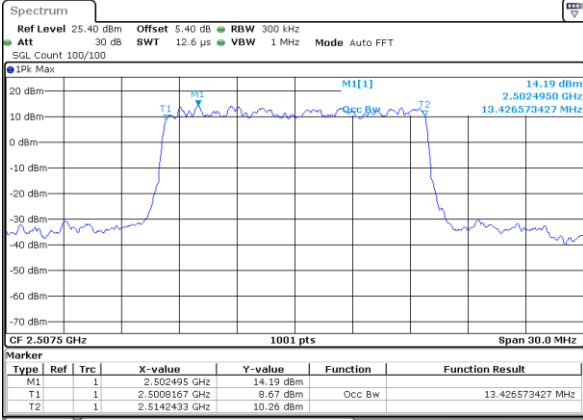
Highest Channel / 10MHz / 16QAM



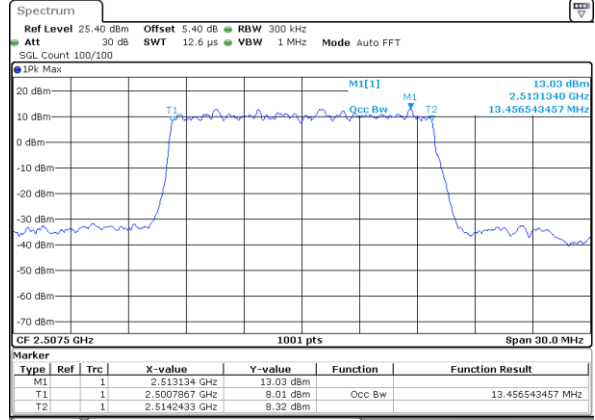


LTE Band 7

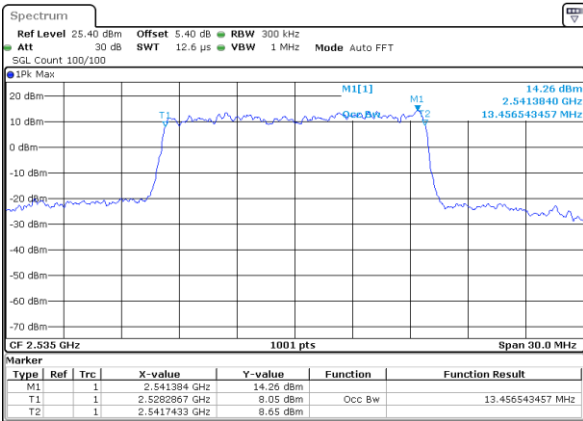
Lowest Channel / 15MHz / QPSK



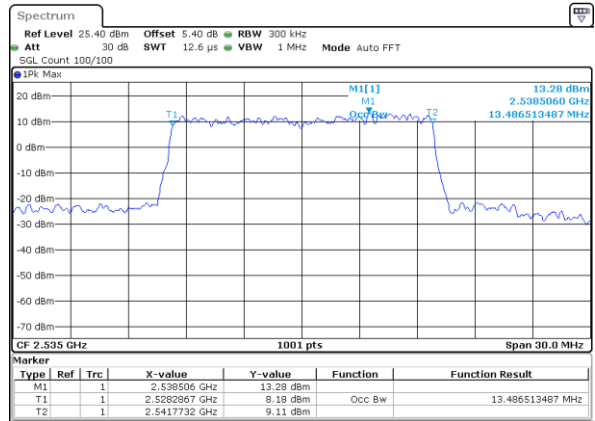
Lowest Channel / 15MHz / 16QAM



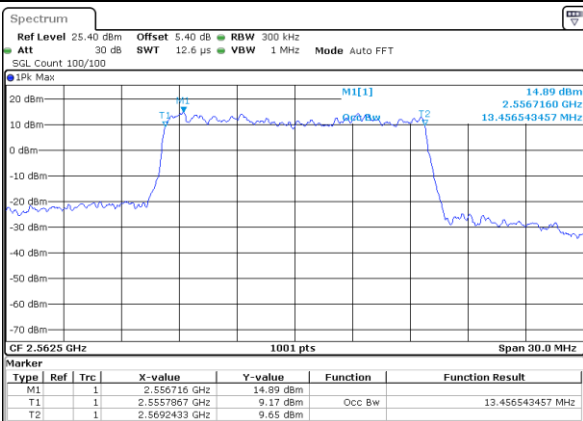
Middle Channel / 15MHz / QPSK



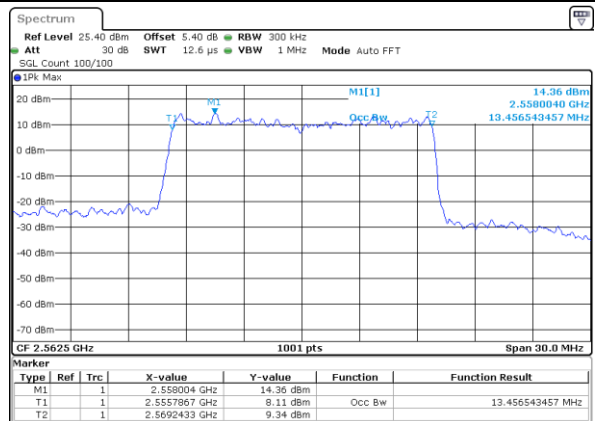
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



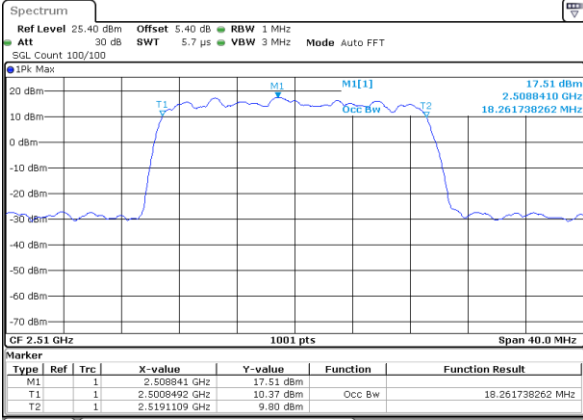
Highest Channel / 15MHz / 16QAM



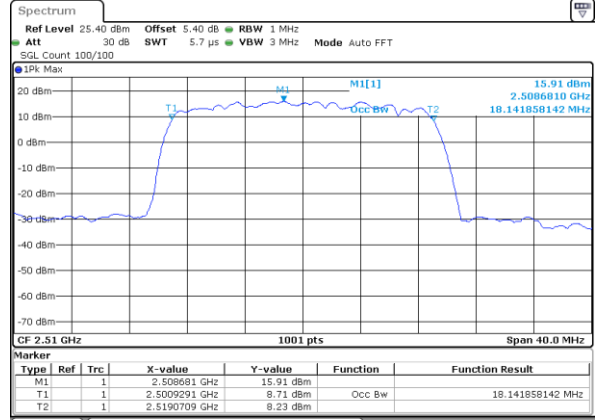


LTE Band 7

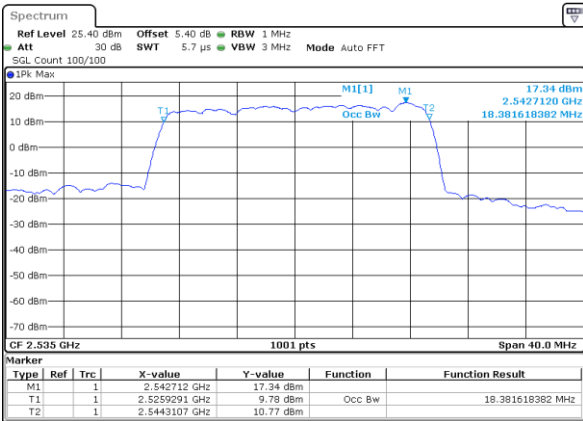
Lowest Channel / 20MHz / QPSK



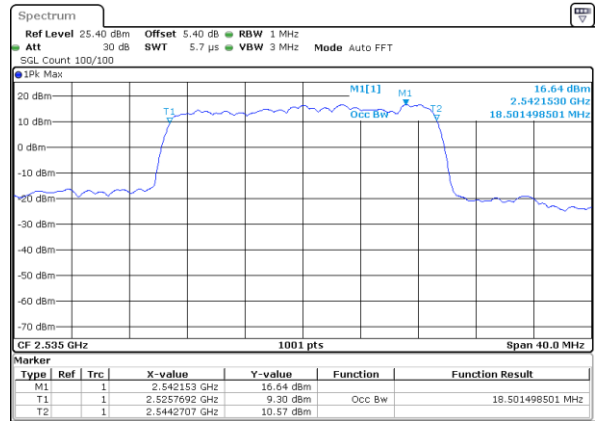
Lowest Channel / 20MHz / 16QAM



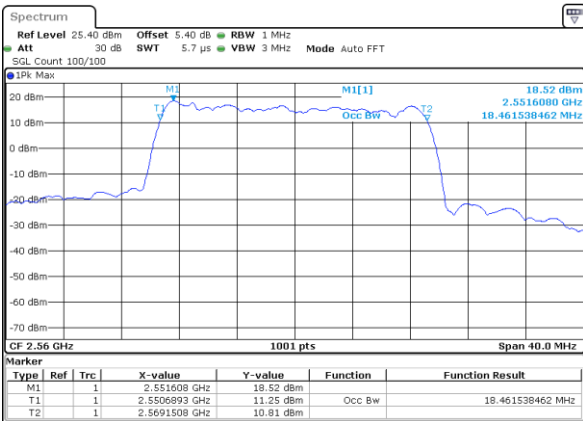
Middle Channel / 20MHz / QPSK



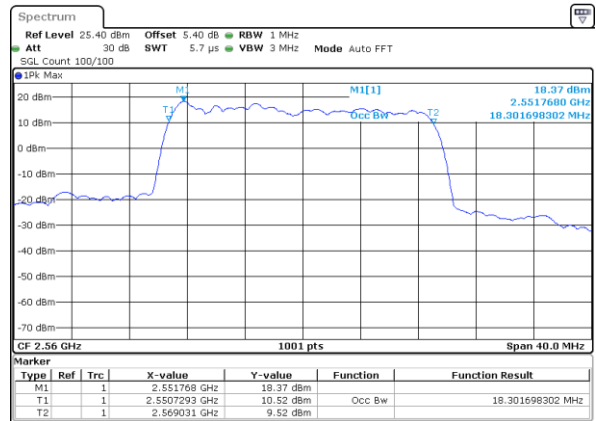
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK

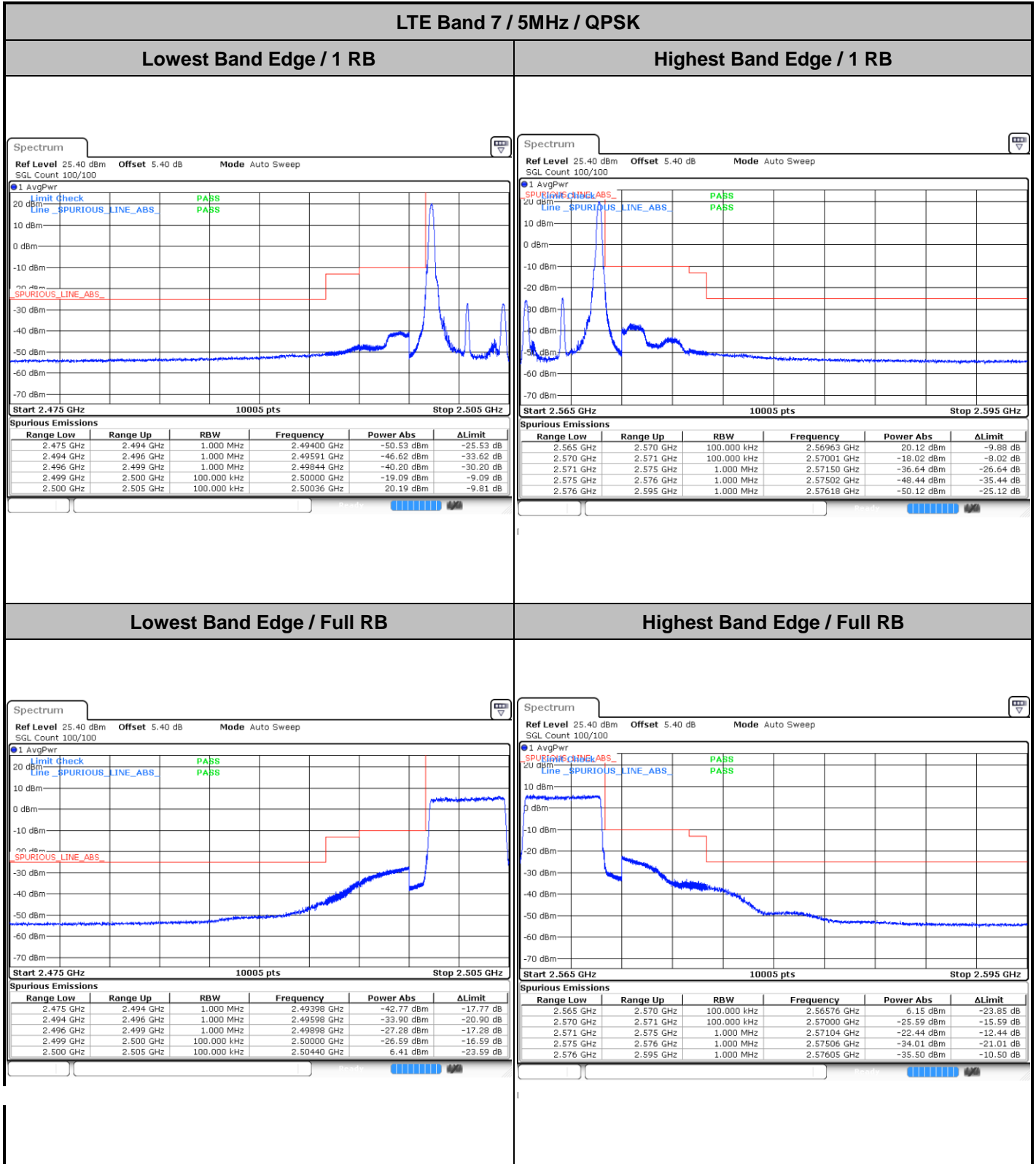


Highest Channel / 20MHz / 16QAM





Conducted Band Edge

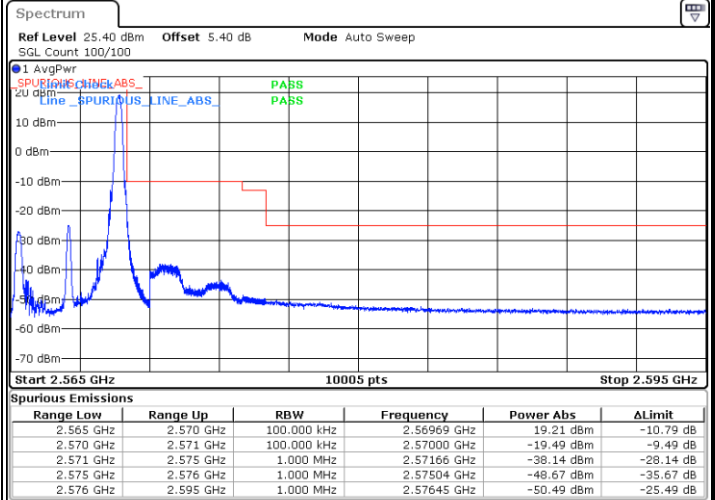
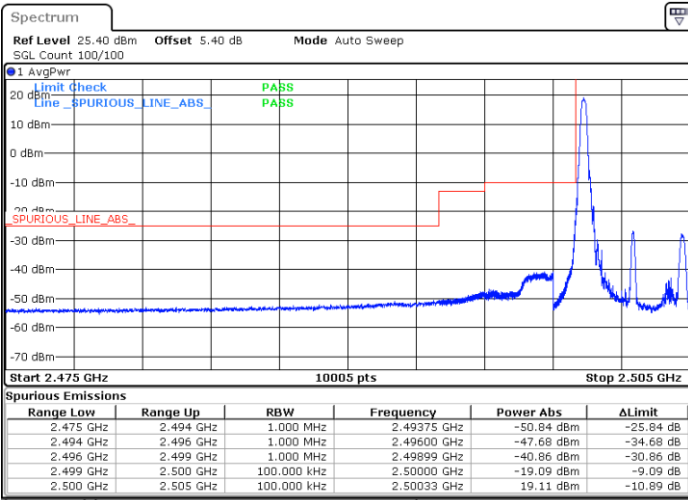




LTE Band 7 / 5MHz / 16QAM

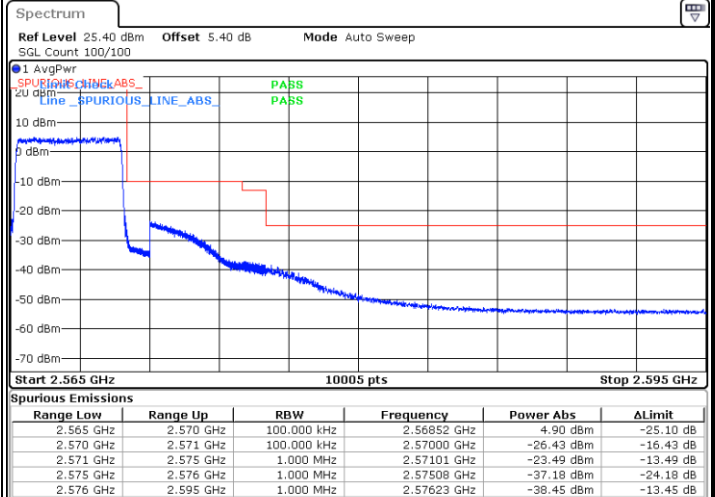
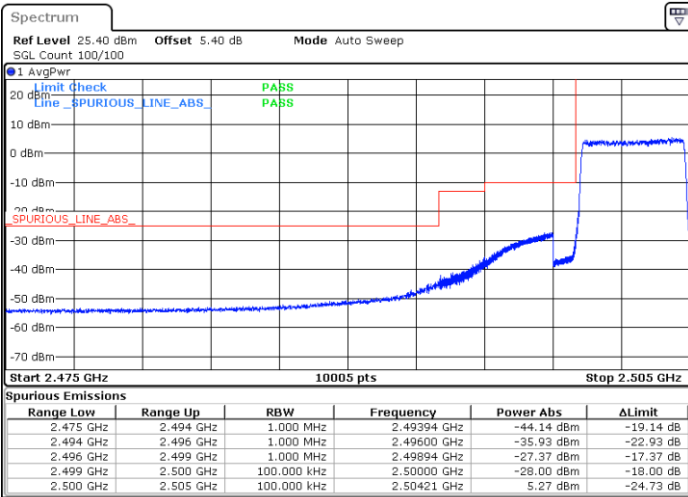
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

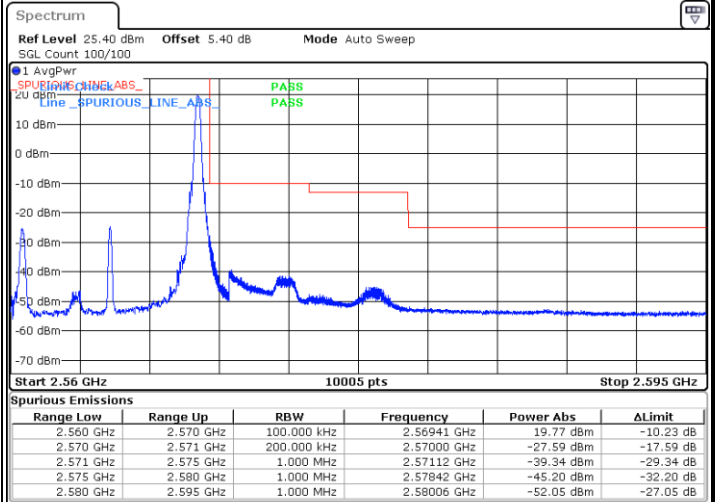
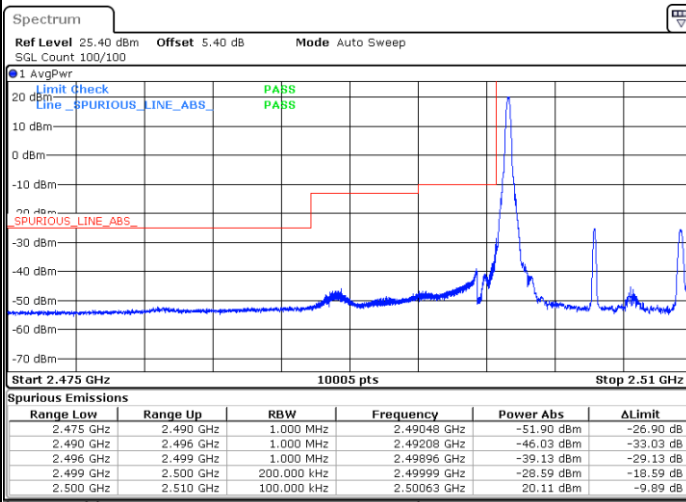




LTE Band 7 / 10MHz / QPSK

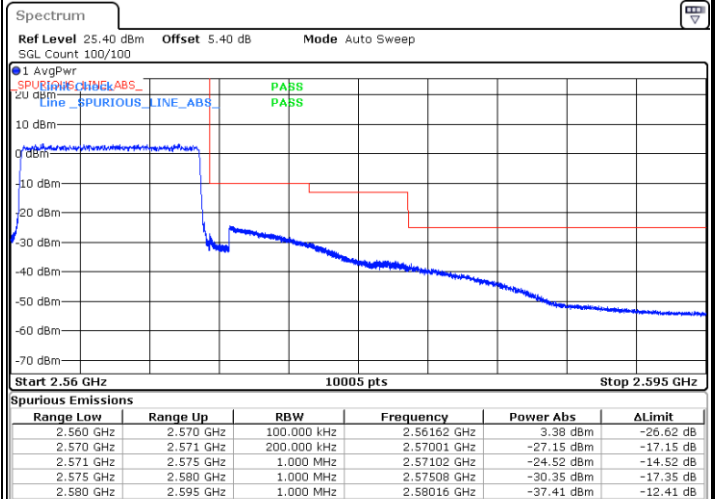
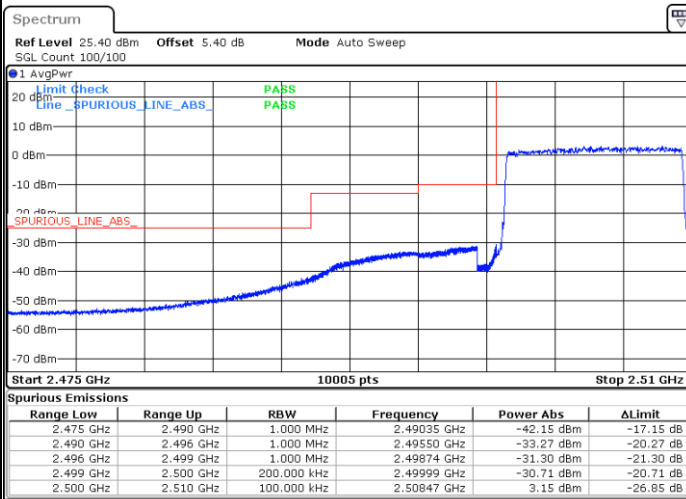
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

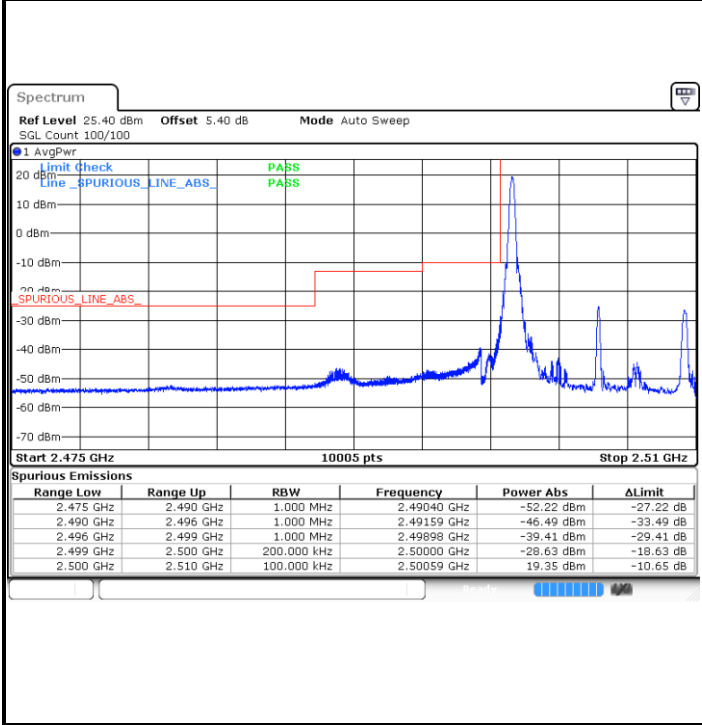
Highest Band Edge / Full RB



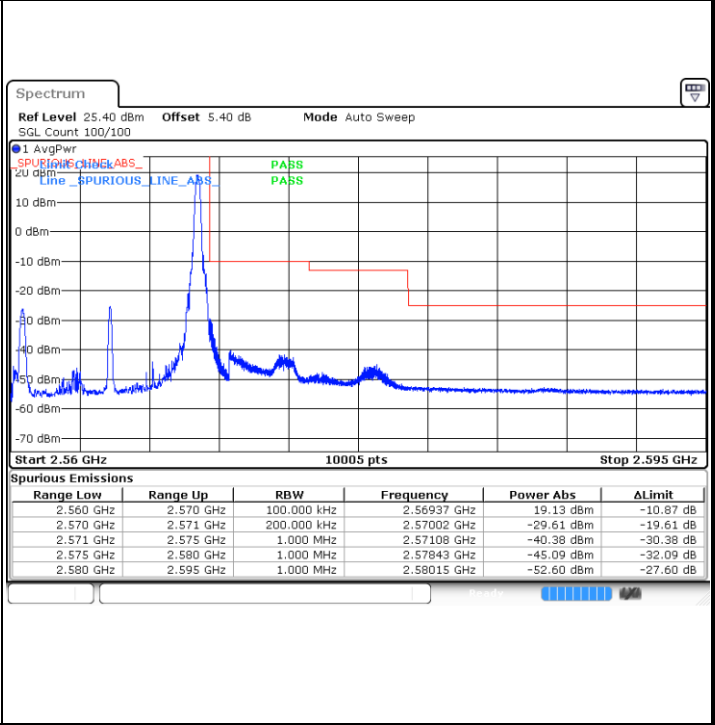


LTE Band 7 / 10MHz / 16QAM

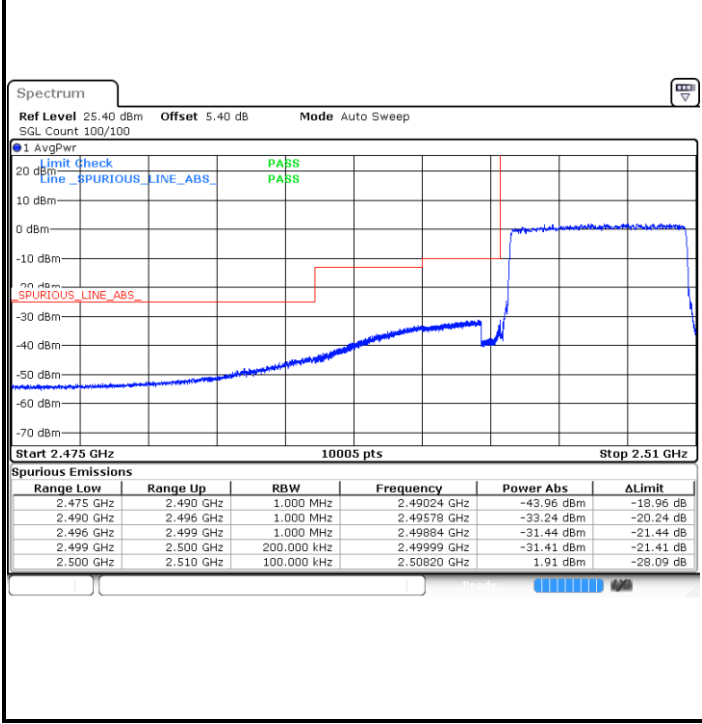
Lowest Band Edge / 1 RB



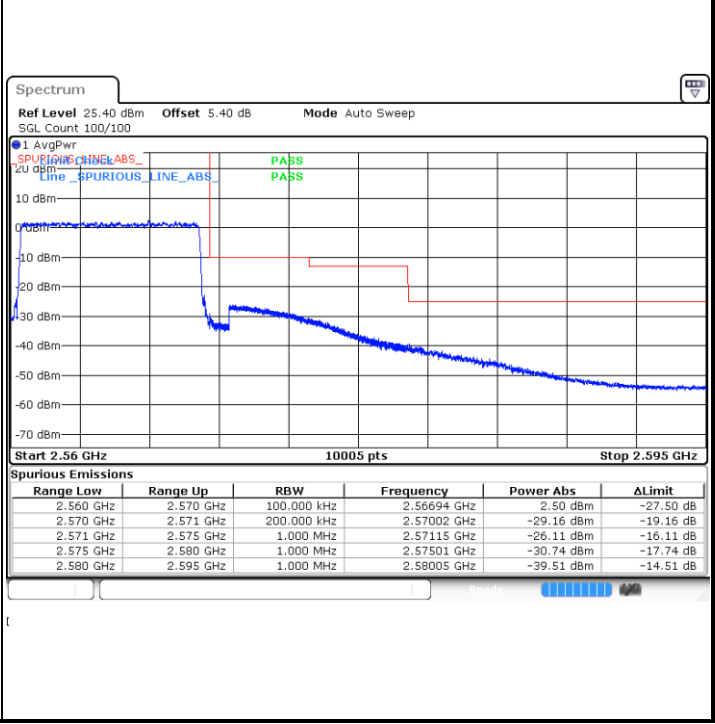
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

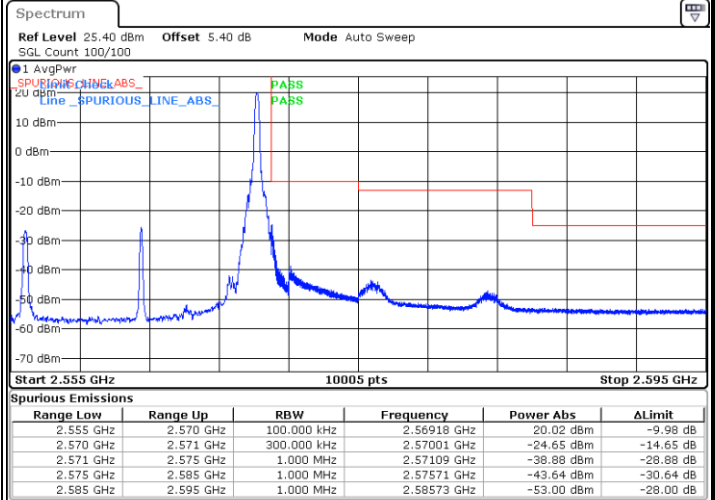
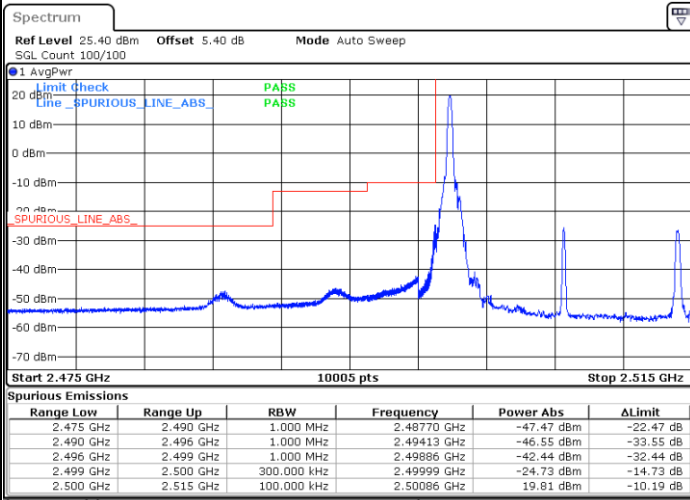




LTE Band 7 / 15MHz / QPSK

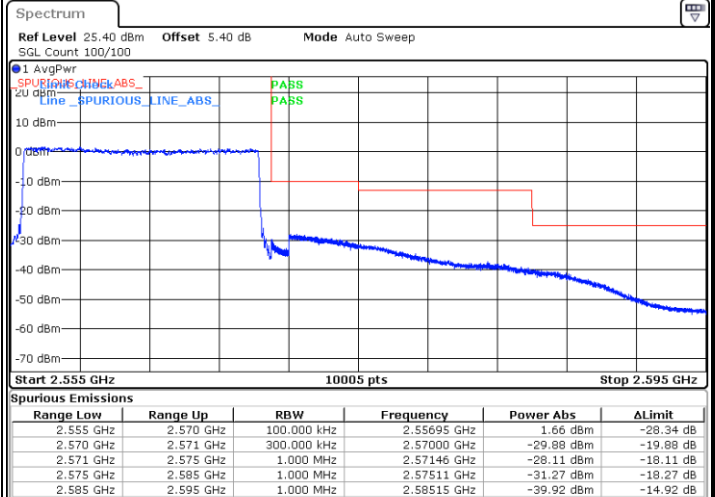
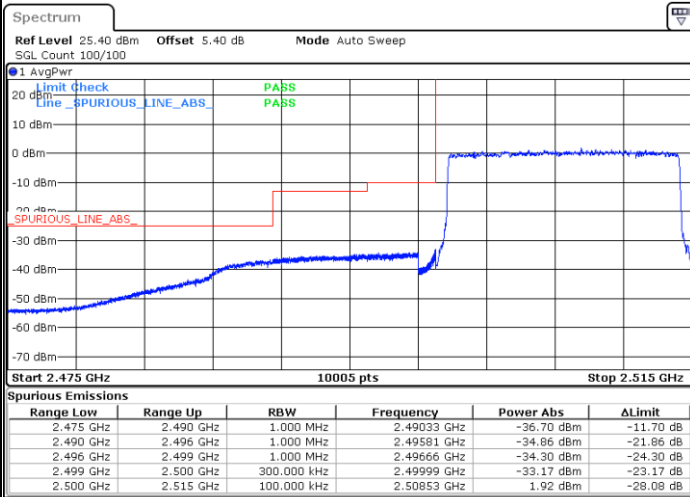
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

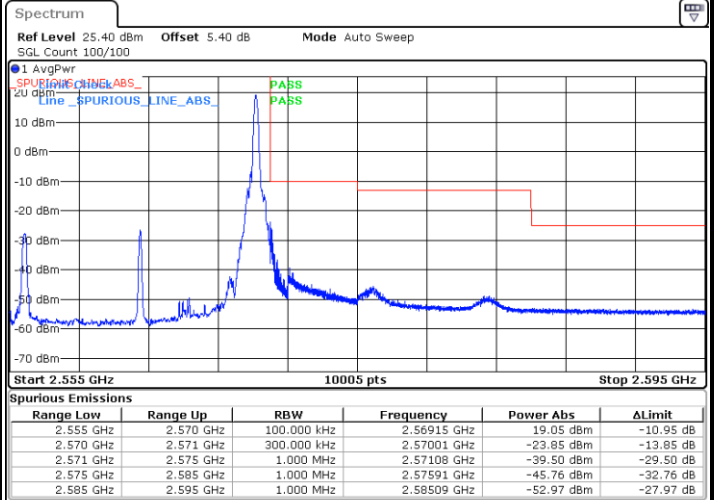
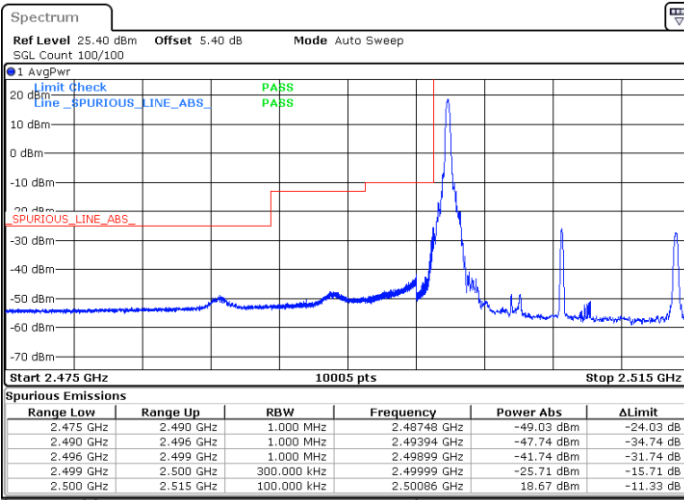




LTE Band 7 / 15MHz / 16QAM

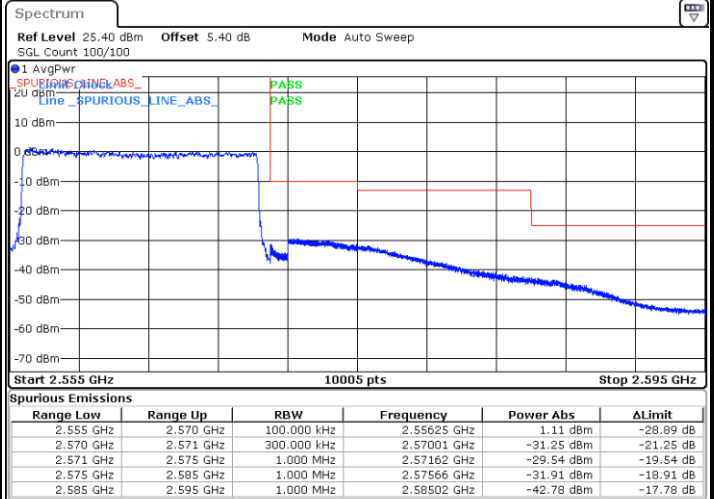
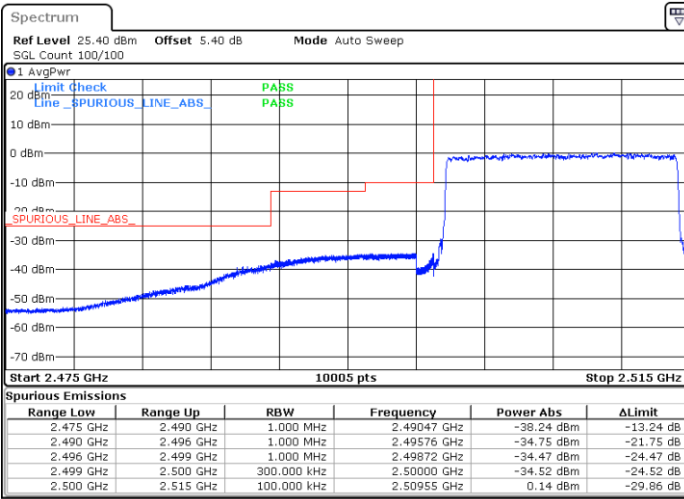
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

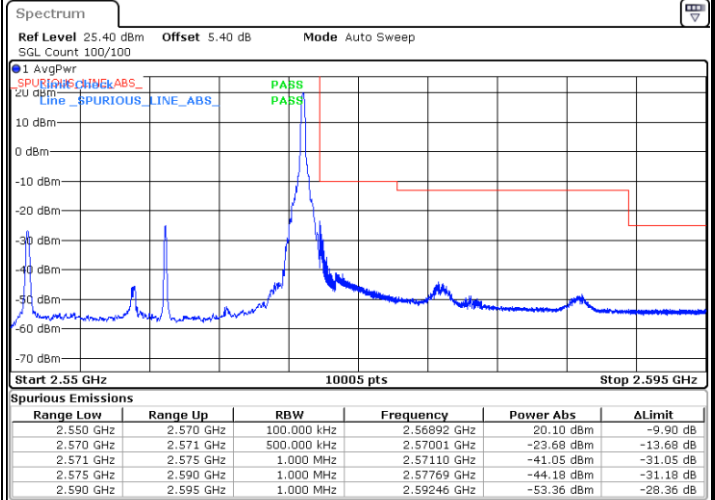
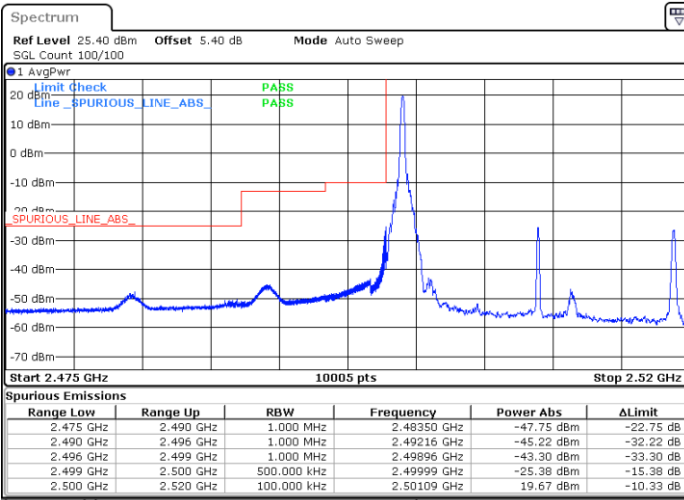




LTE Band 7 / 20MHz / QPSK

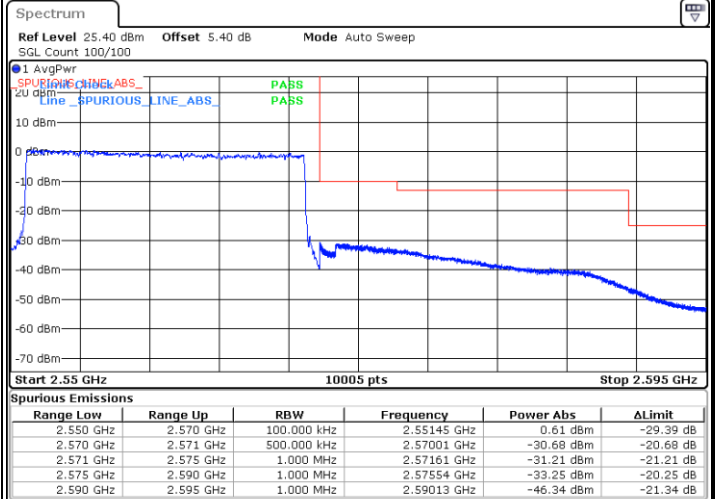
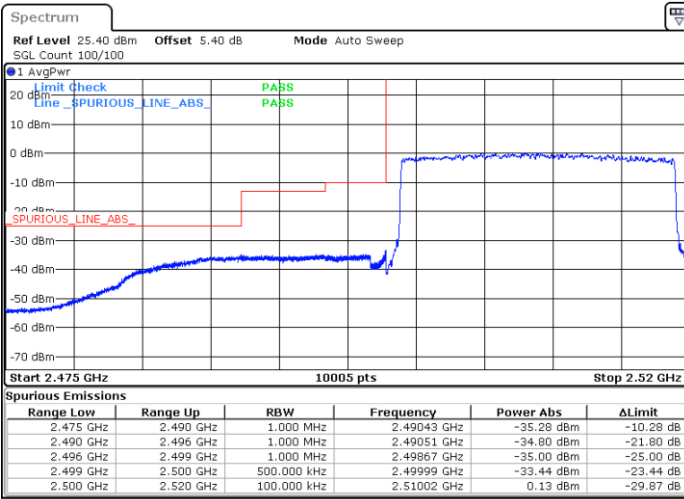
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

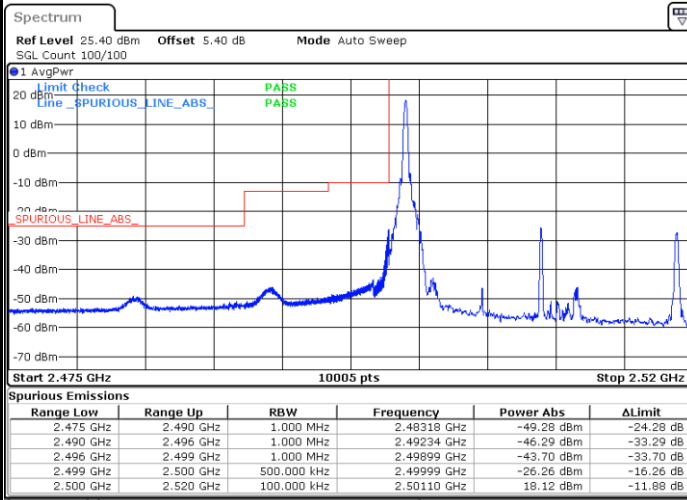
Highest Band Edge / Full RB



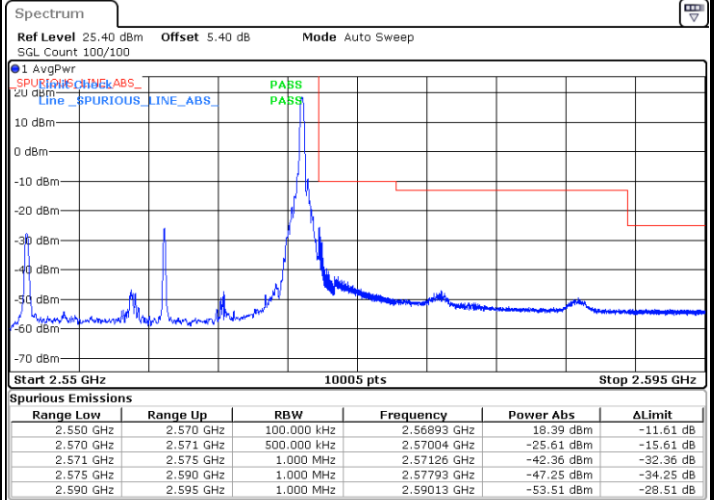


LTE Band 7 / 20MHz / 16QAM

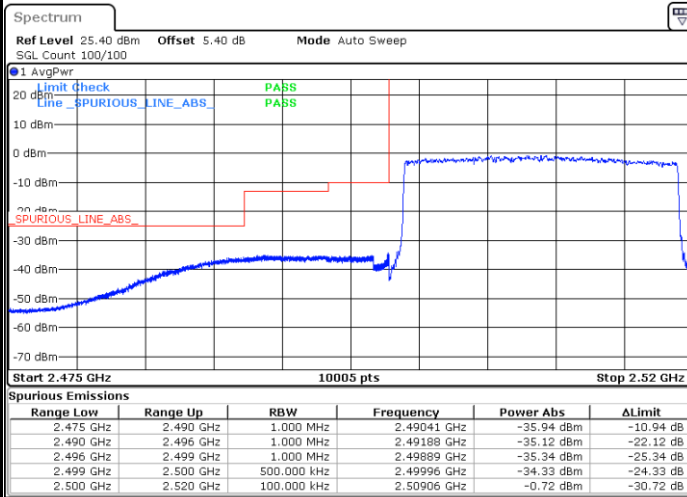
Lowest Band Edge / 1 RB



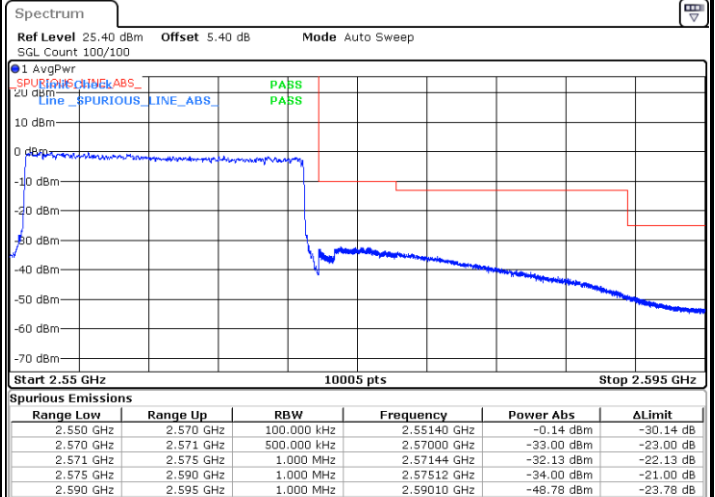
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB





Conducted Spurious Emission

