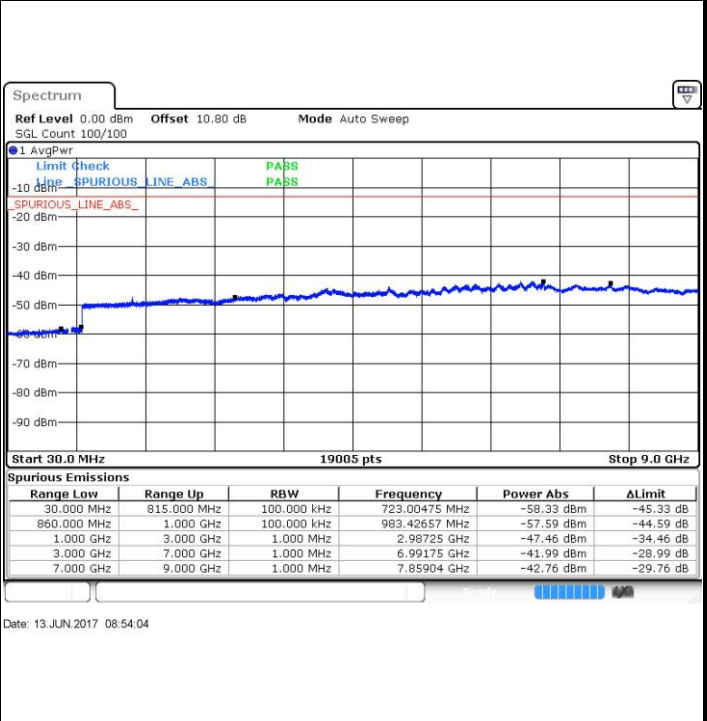




LTE Band 5 / 1.4MHz

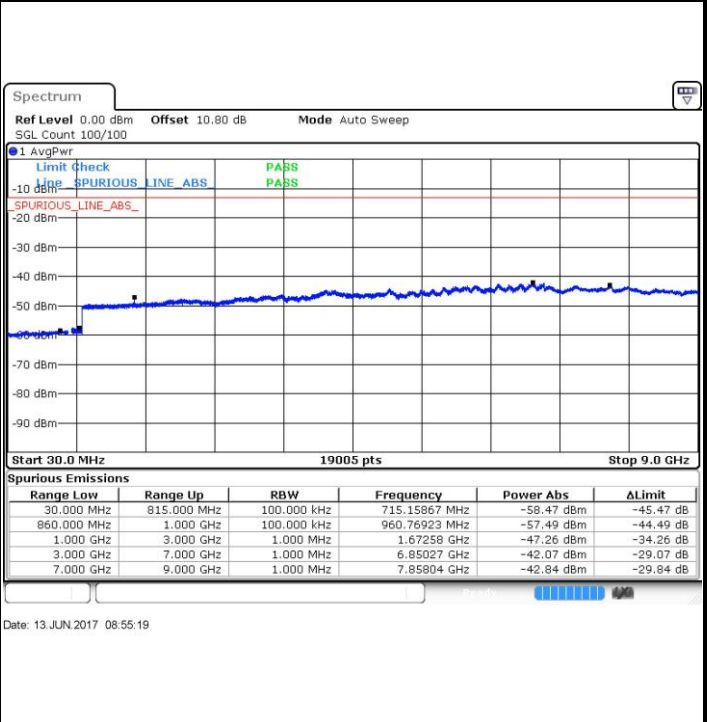
-

Lowest Channel / 64QAM



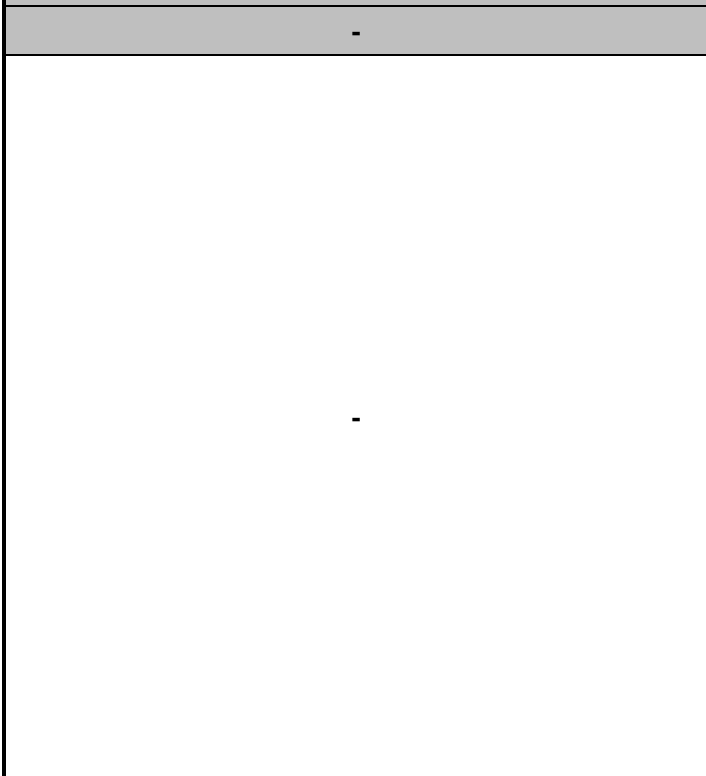
-

Middle Channel / 64QAM

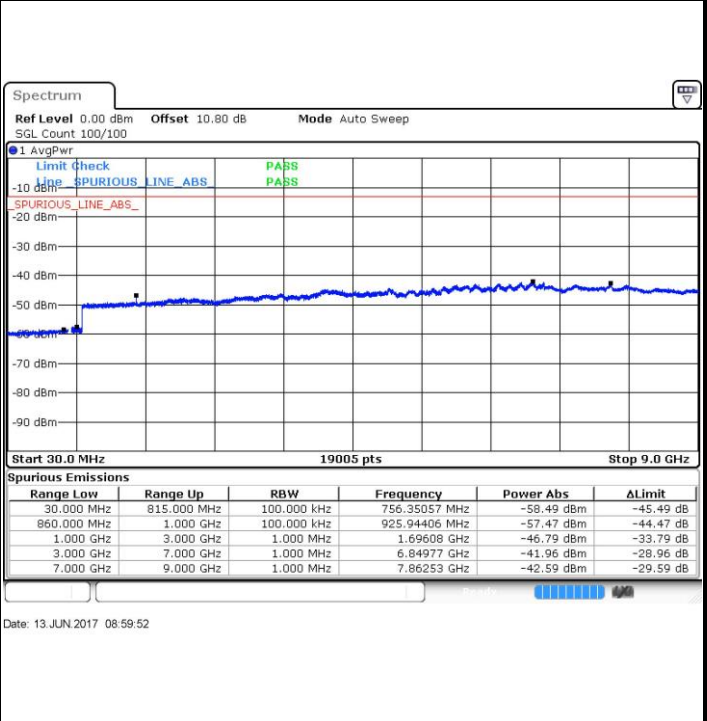




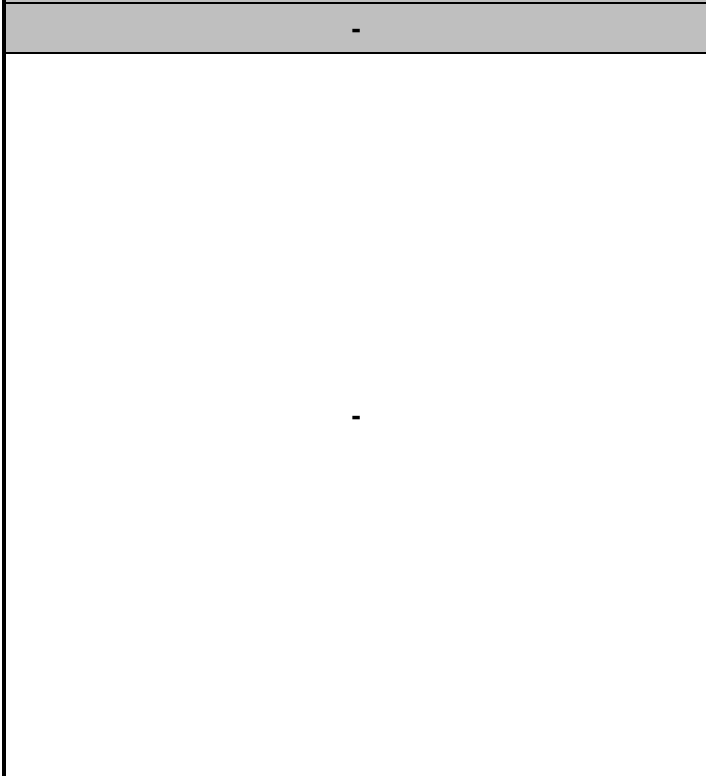
LTE Band 5 / 1.4MHz



Highest Channel / 64QAM



LTE Band 5 / 3MHz



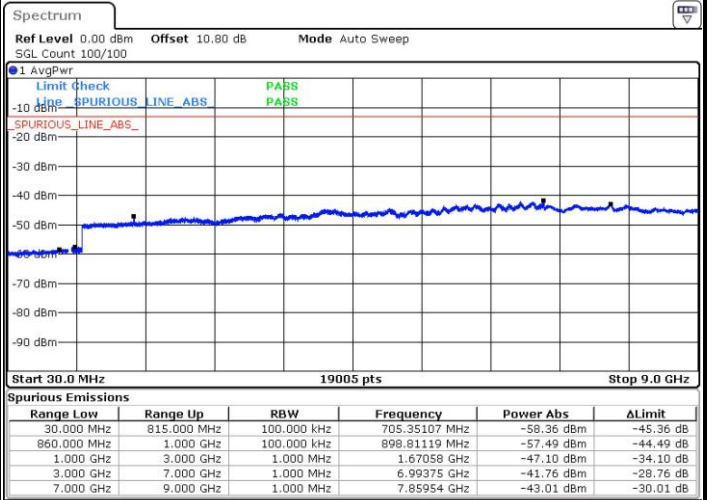
Lowest Channel / 64QAM





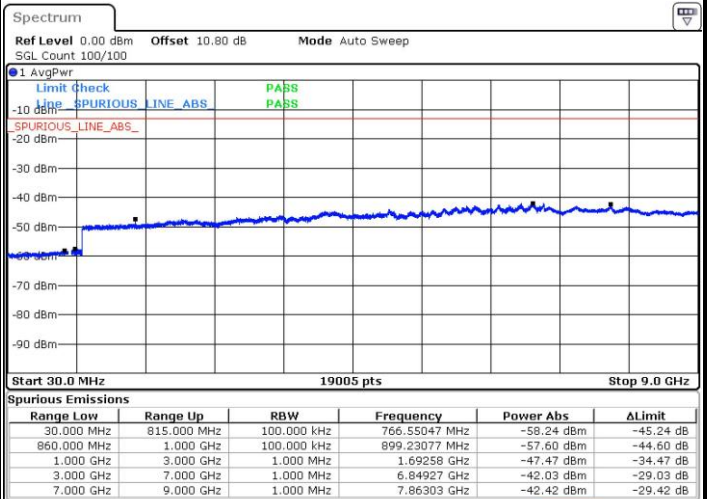
LTE Band 5 / 3MHz

Middle Channel / 64QAM



Date: 13 JUN 2017 01:34:14

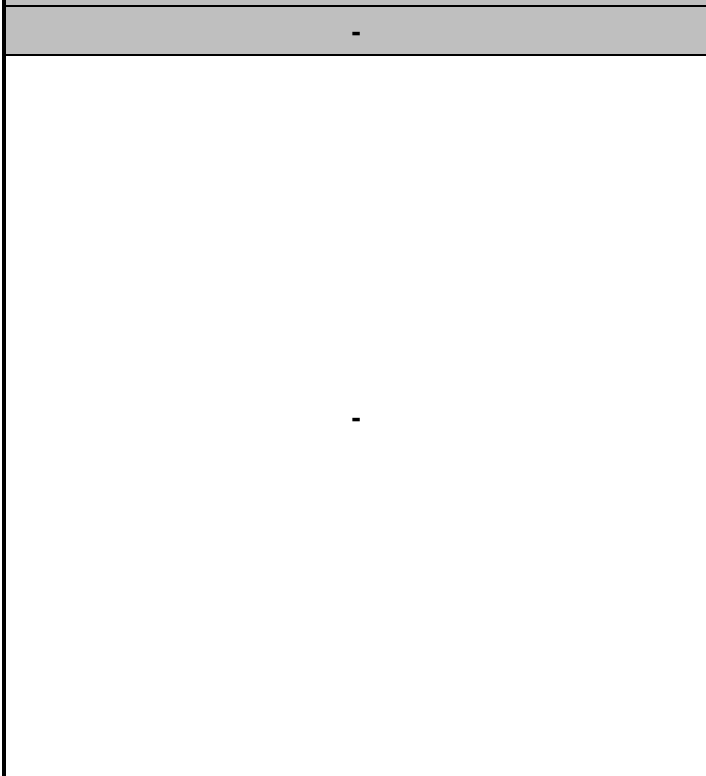
Highest Channel / 64QAM



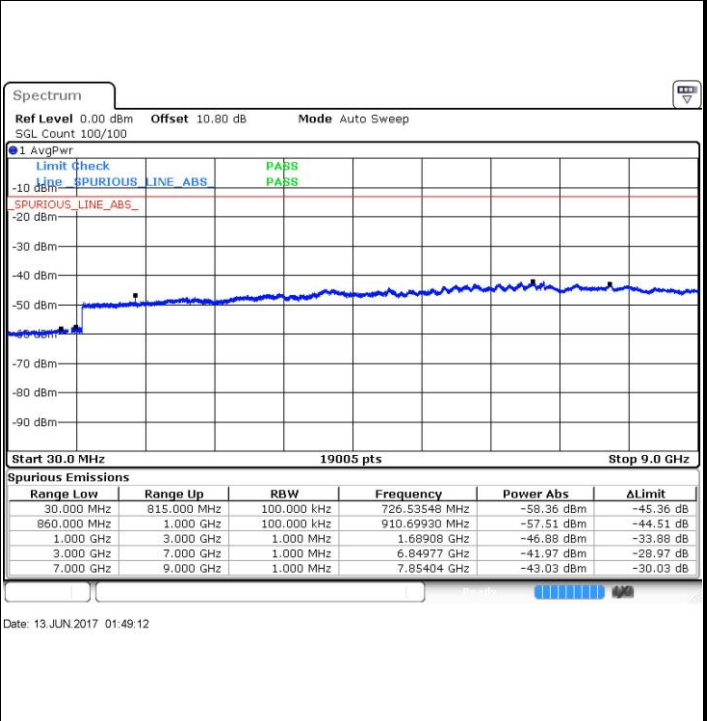
Date: 13 JUN 2017 01:38:48



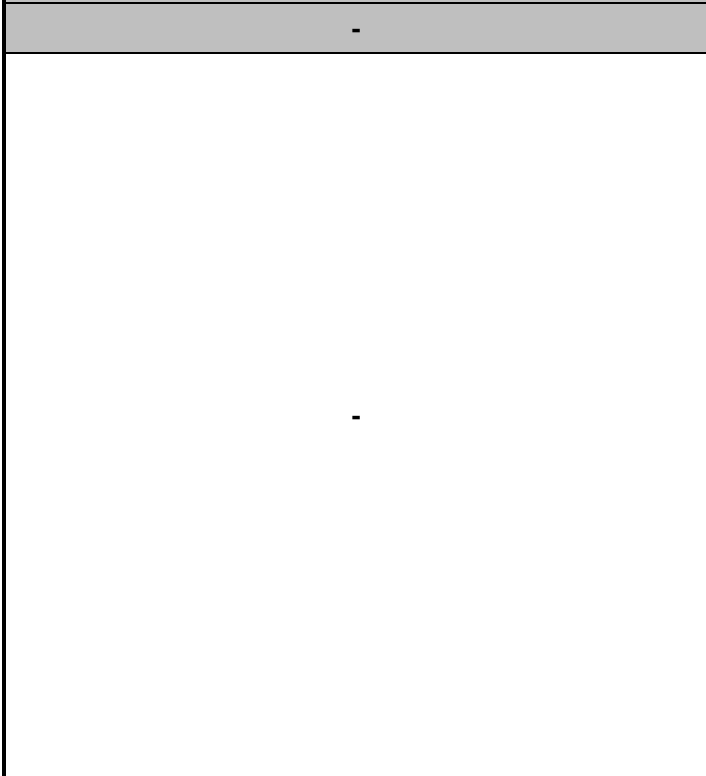
LTE Band 5 / 5MHz



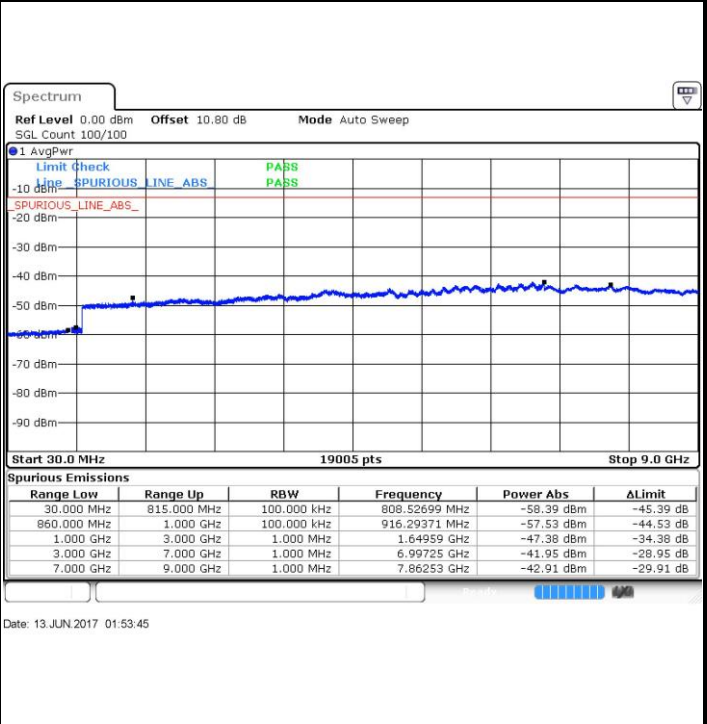
Highest Channel / 64QAM



LTE Band 5 / 10MHz



Lowest Channel / 64QAM

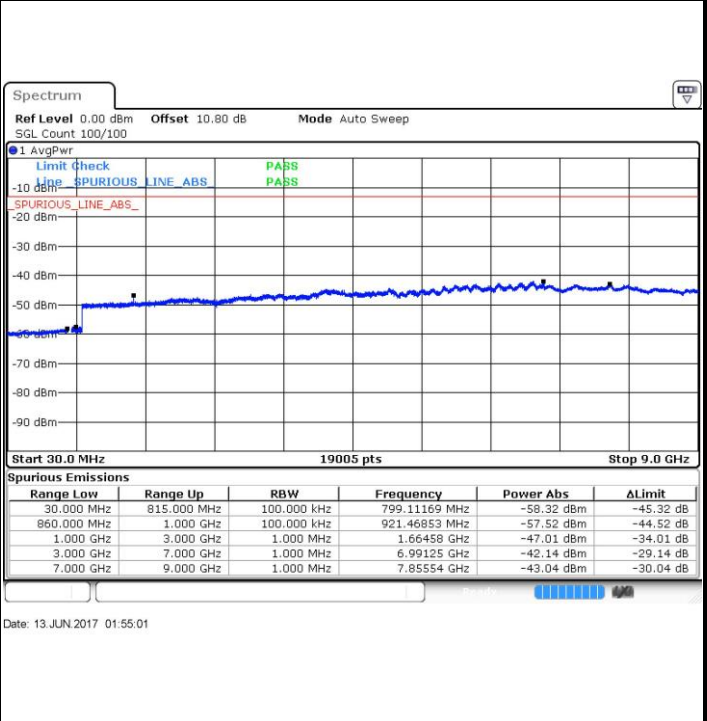




LTE Band 5 / 10MHz

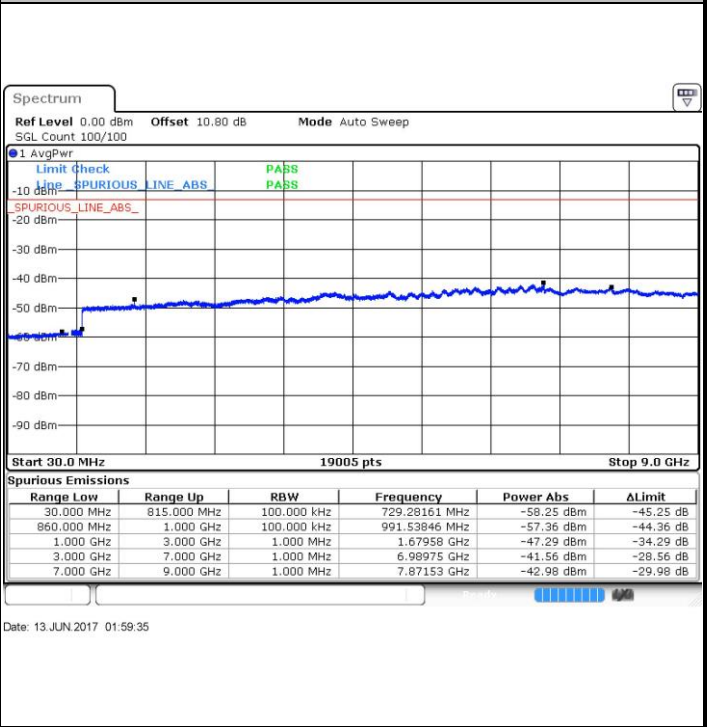
-

Middle Channel / 64QAM



-

Highest Channel / 64QAM





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 | 0.0019 | PASS |
| 40 | Normal Voltage | 0.0027 | |
| 30 | Normal Voltage | 0.0029 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0027 | |
| 0 | Normal Voltage | 0.0024 | |
| -10 | Normal Voltage | 0.0036 | |
| -20 | Normal Voltage | 0.0011 | |
| -30 | Normal Voltage | 0.0031 | |
| 20 | Maximum Voltage | 0.0047 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0044 | |

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 7

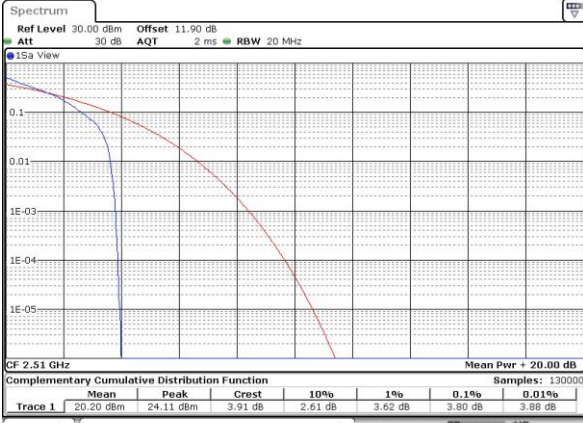
Peak-to-Average Ratio

| Mode | LTE Band 7 / 20MHz | | | | |
|------------|--------------------|---------|-------|---------|-------------|
| Mod. | QPSK | | 16QAM | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | 3.8 | 4.81 | 4.49 | 5.91 | PASS |
| Middle CH | 3.86 | 4.99 | 4.58 | 6.12 | |
| Highest CH | 3.8 | 4.67 | 4.49 | 5.8 | |
| Mode | LTE Band 7 / 20MHz | | | | |
| Mod. | QPSK | | 64QAM | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | - | - | 4.41 | 5.91 | PASS |
| Middle CH | - | - | 4.96 | 6.03 | |
| Highest CH | - | - | 4.64 | 5.83 | |



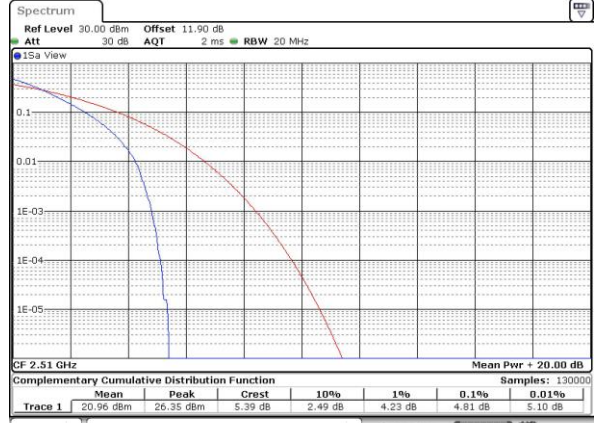
LTE Band 7 / 20MHz / QPSK

Lowest Channel / 1RB



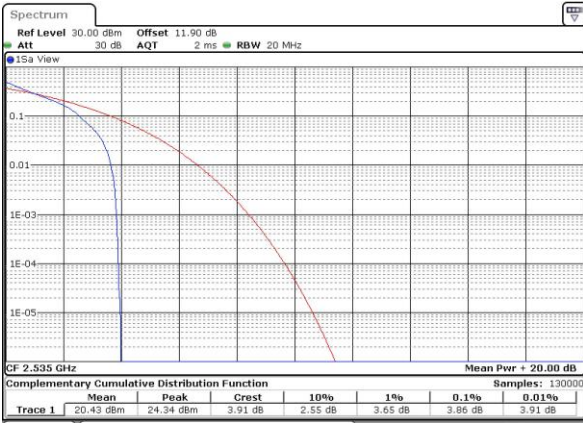
Date: 14 JUN 2017 10:02:54

Lowest Channel / Full RB



Date: 14 JUN 2017 10:03:13

Middle Channel / 1RB



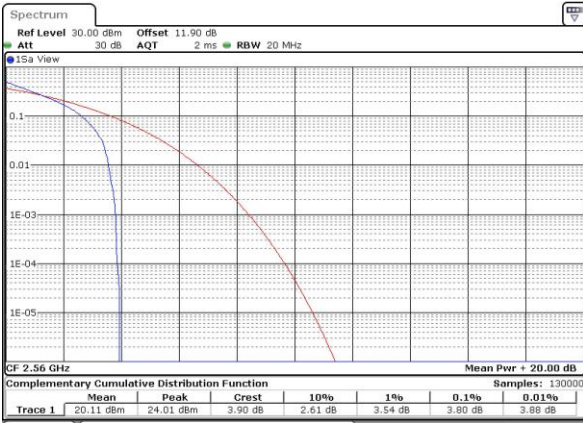
Date: 14 JUN 2017 10:03:36

Middle Channel / Full RB



Date: 14 JUN 2017 10:03:47

Highest Channel / 1RB



Date: 14 JUN 2017 10:03:57

Highest Channel / Full RB

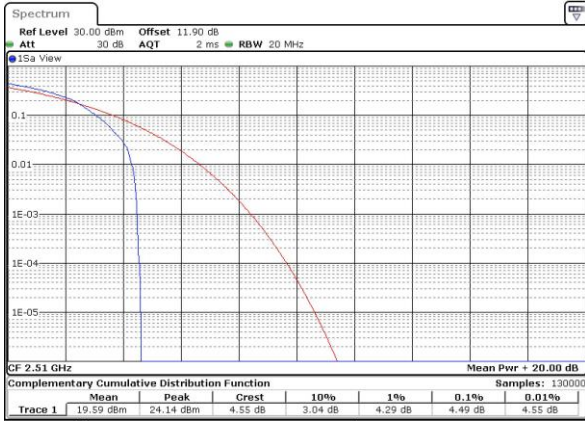


Date: 14 JUN 2017 10:04:07



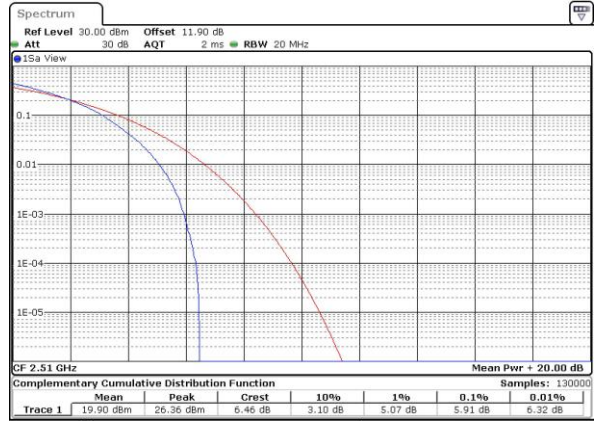
LTE Band 7 / 20MHz / 16QAM

Lowest Channel / 1RB



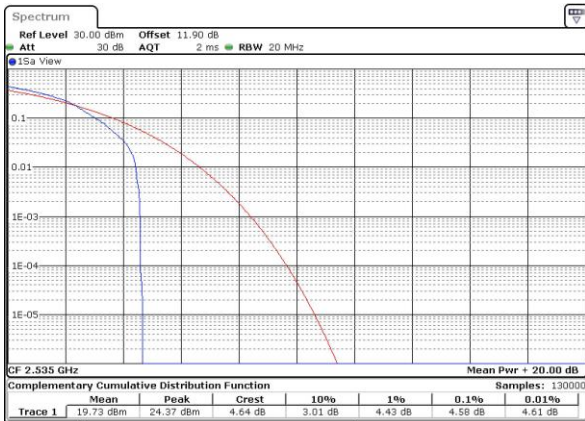
Date: 14 JUN 2017 10:01:55

Lowest Channel / Full RB



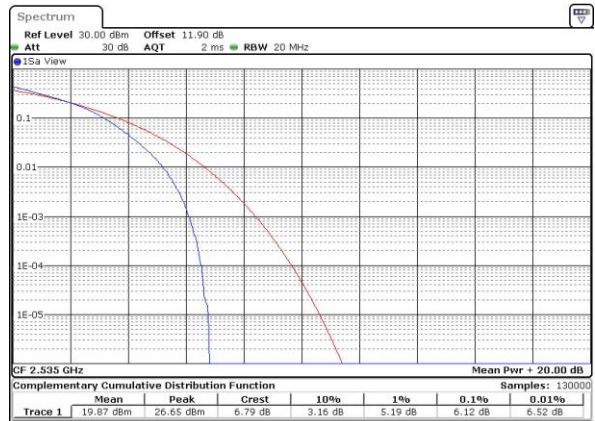
Date: 14 JUN 2017 10:02:04

Middle Channel / 1RB



Date: 14 JUN 2017 10:02:14

Middle Channel / Full RB



Date: 14 JUN 2017 10:02:23

Highest Channel / 1RB



Date: 14 JUN 2017 10:02:33

Highest Channel / Full RB



Date: 14 JUN 2017 10:02:42



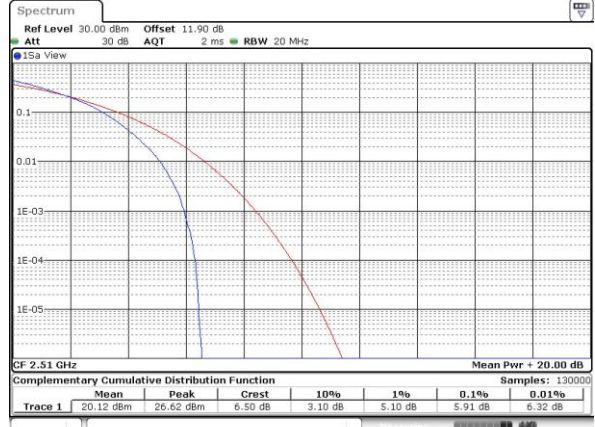
LTE Band 7 / 20MHz / 64QAM

Lowest Channel / 1RB



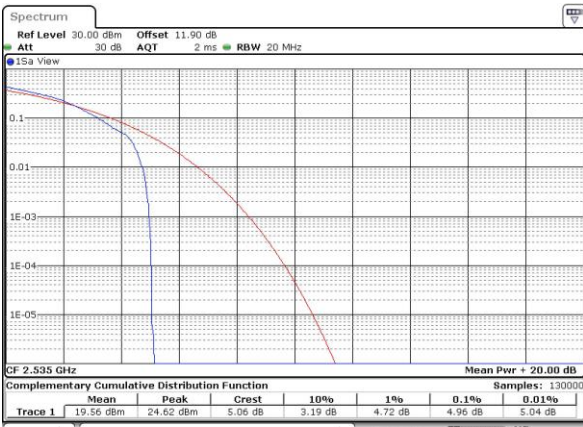
Date: 15 JUN 2017 16 02 49

Lowest Channel / Full RB



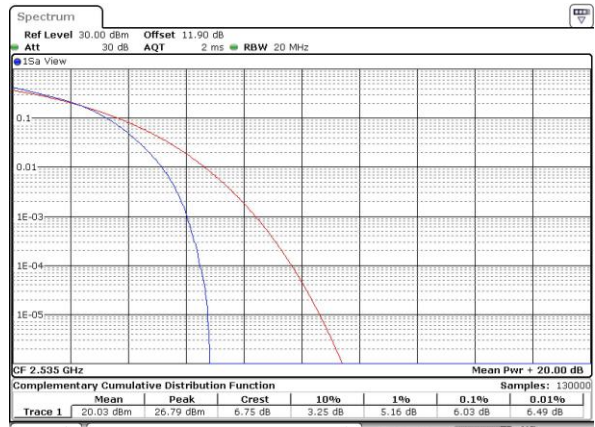
Date: 15 JUN 2017 16 02 59

Middle Channel / 1RB



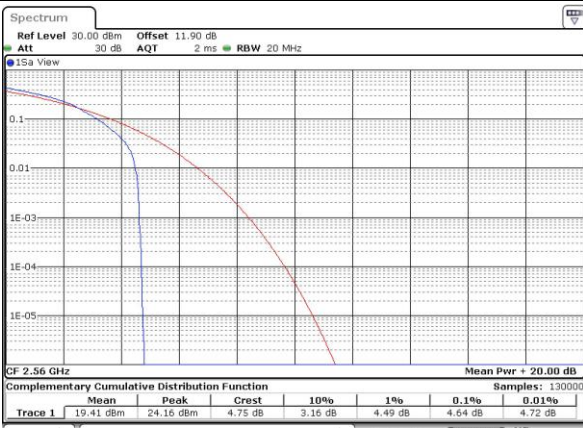
Date: 15 JUN 2017 16 03 09

Middle Channel / Full RB



Date: 15 JUN 2017 16 03 19

Highest Channel / 1RB



Date: 15 JUN 2017 16 03 28

Highest Channel / Full RB



Date: 15 JUN 2017 16 03 37



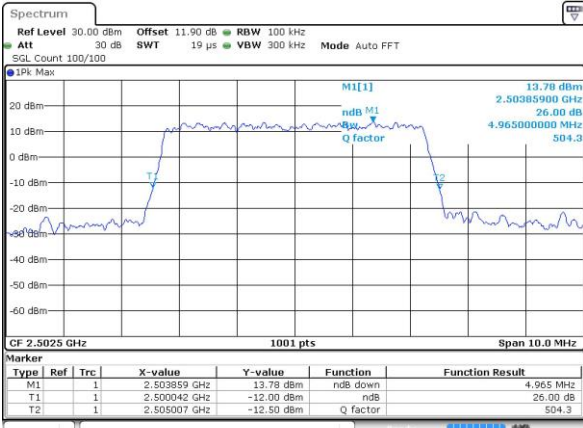
26dB Bandwidth

| Mode | LTE Band 7 : 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 | - | - | - | - | 4.965 | 4.875 | 9.87 | 9.77 | 14.595 | 14.416 | 20.26 | 20.18 |
| Middle CH | - | - | - | - | 4.925 | 4.945 | 9.75 | 9.87 | 14.266 | 14.595 | 20.26 | 20.22 |
| Highest CH | - | - | - | - | 4.845 | 4.855 | 9.75 | 9.83 | 14.386 | 14.655 | 20.22 | 20.14 |
| Mode | LTE Band 7 : 26dB BW(MHz) | | | | | | | | | | | |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 64QAM | QPSK | 64QAM | QPSK | 64QAM | QPSK | 64QAM | QPSK | 64QAM | QPSK | 64QAM |
| Lowest CH | - | - | - | - | - | 4.875 | - | 9.81 | - | 14.386 | - | 20.14 |
| Middle CH | - | - | - | - | - | 4.945 | - | 9.65 | - | 14.176 | - | 20.14 |
| Highest CH | - | - | - | - | - | 4.795 | - | 9.83 | - | 14.476 | - | 20.14 |



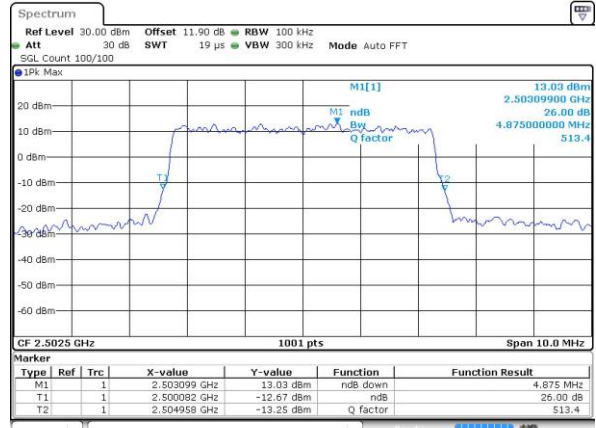
LTE Band 7

Lowest Channel / 5MHz / QPSK



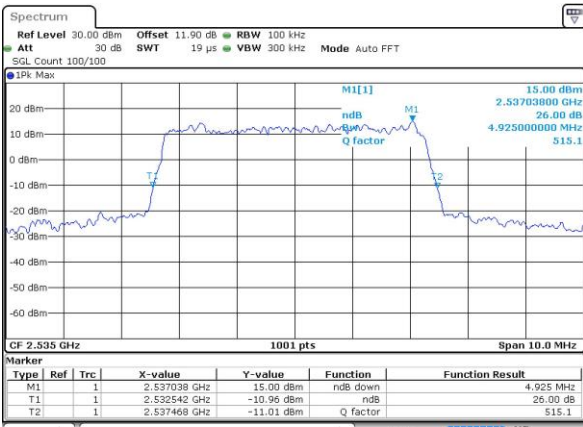
Date: 14 JUN 2017 08:54:46

Lowest Channel / 5MHz / 16QAM



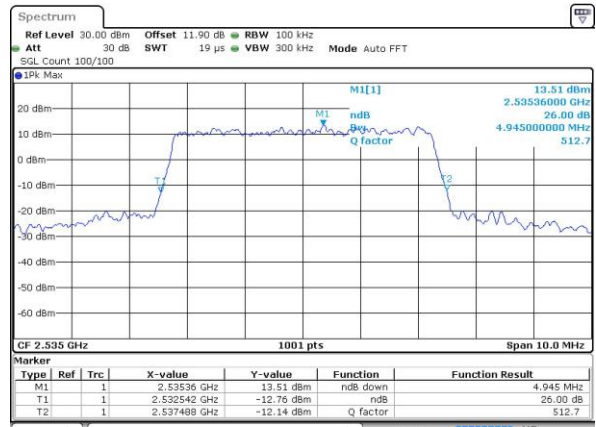
Date: 14 JUN 2017 08:54:57

Middle Channel / 5MHz / QPSK



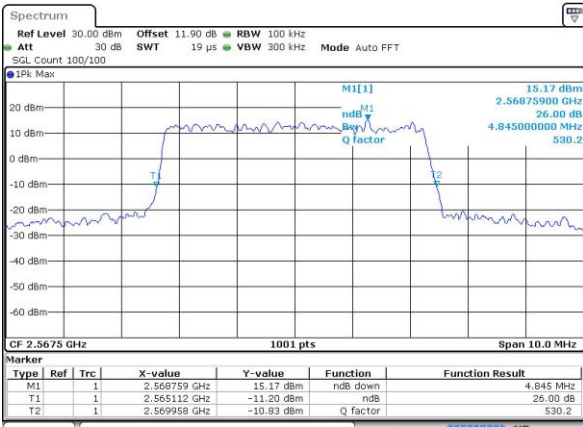
Date: 14 JUN 2017 09:01:55

Middle Channel / 5MHz / 16QAM



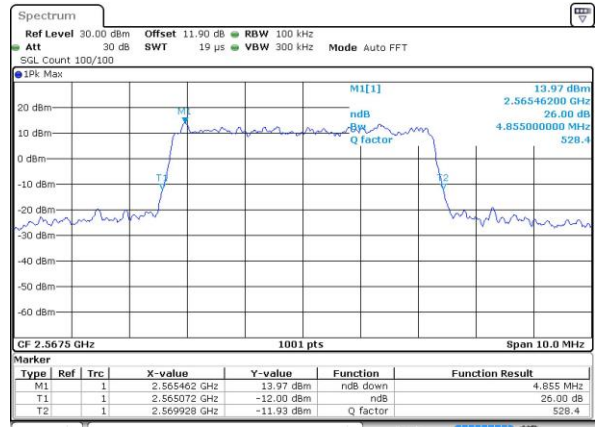
Date: 14 JUN 2017 09:02:05

Highest Channel / 5MHz / QPSK



Date: 14 JUN 2017 09:04:24

Highest Channel / 5MHz / 16QAM

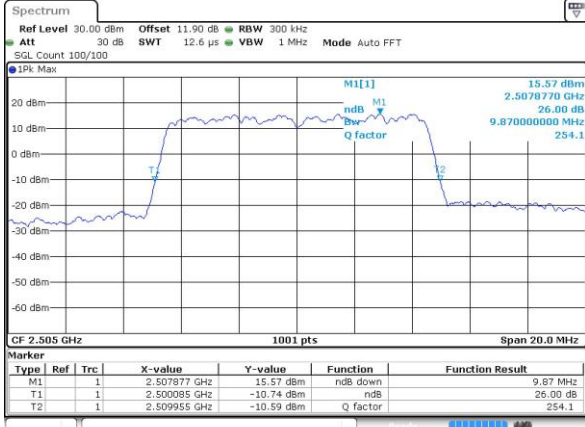


Date: 14 JUN 2017 09:04:34



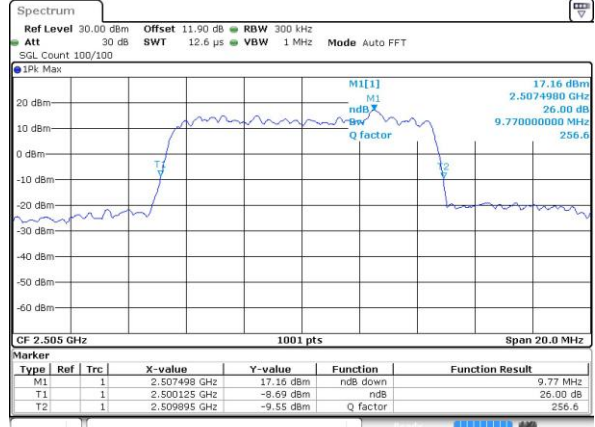
LTE Band 7

Lowest Channel / 10MHz / QPSK



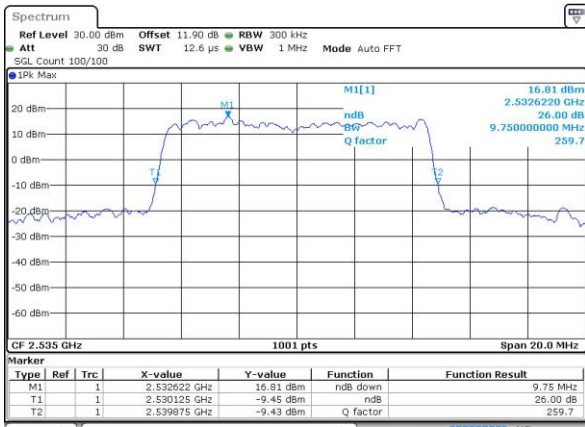
Date: 14 JUN 2017 09:11:31

Lowest Channel / 10MHz / 16QAM



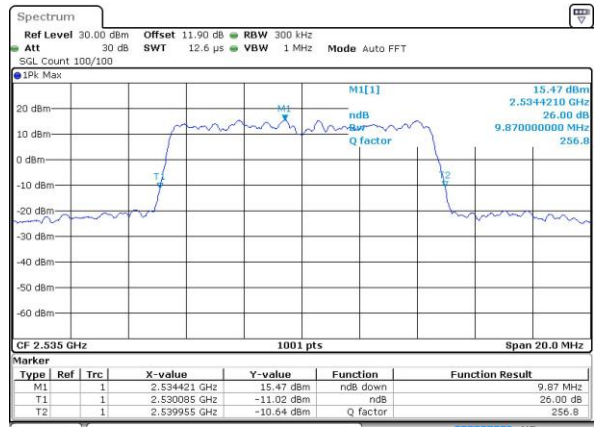
Date: 14 JUN 2017 09:11:42

Middle Channel / 10MHz / QPSK



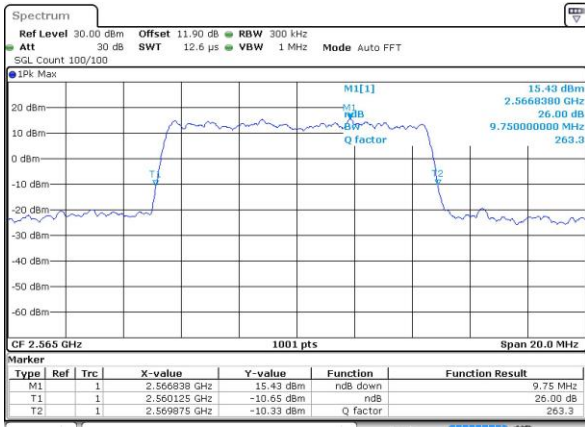
Date: 14 JUN 2017 09:18:39

Middle Channel / 10MHz / 16QAM



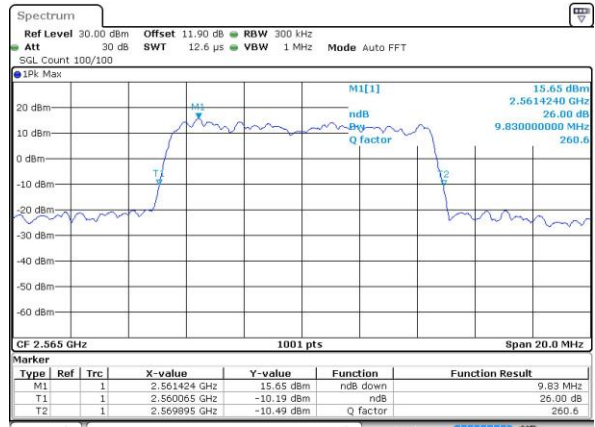
Date: 14 JUN 2017 09:18:50

Highest Channel / 10MHz / QPSK



Date: 14 JUN 2017 09:21:08

Highest Channel / 10MHz / 16QAM

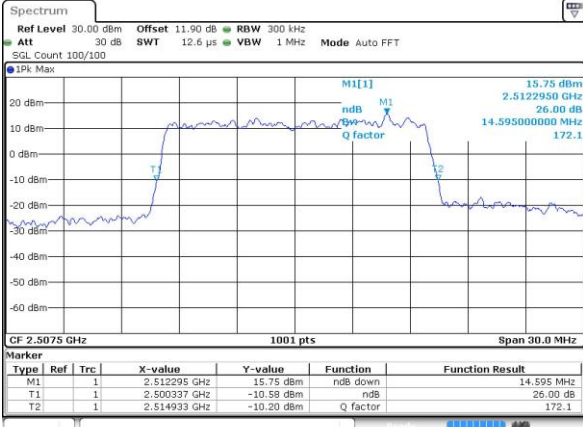


Date: 14 JUN 2017 09:21:19



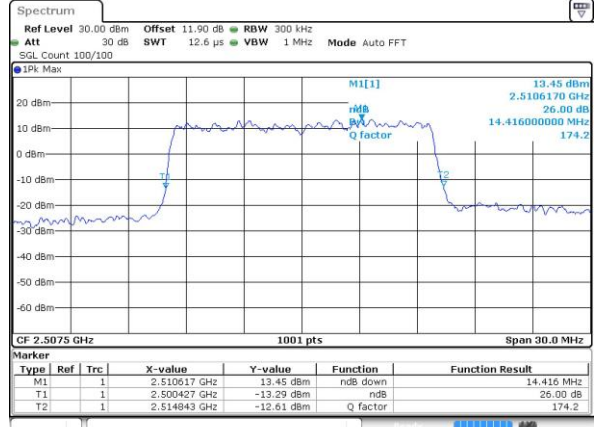
LTE Band 7

Lowest Channel / 15MHz / QPSK



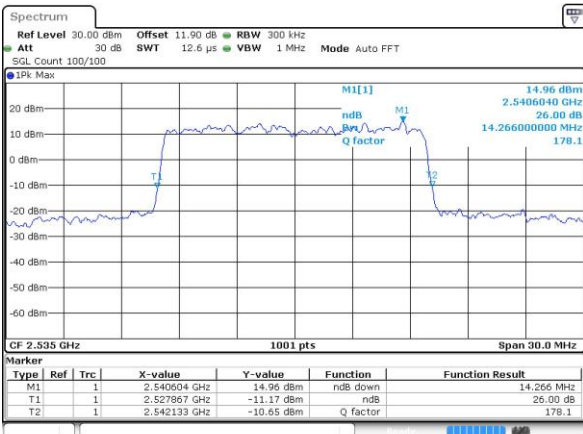
Date: 14 JUN 2017 09:28:16

Lowest Channel / 15MHz / 16QAM



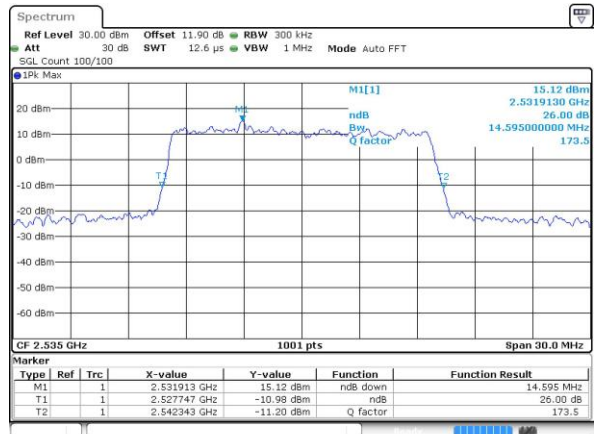
Date: 14 JUN 2017 09:28:27

Middle Channel / 15MHz / QPSK



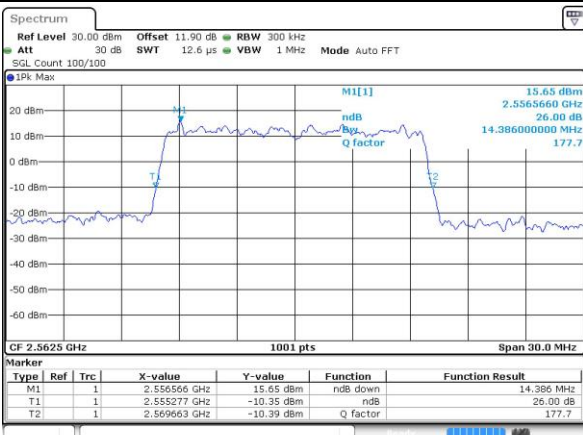
Date: 14 JUN 2017 09:35:24

Middle Channel / 15MHz / 16QAM



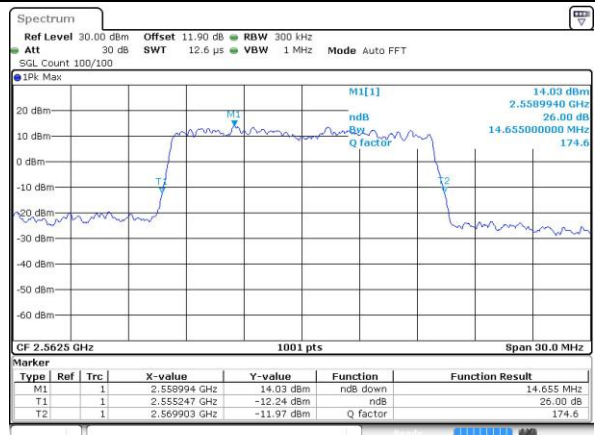
Date: 14 JUN 2017 09:35:35

Highest Channel / 15MHz / QPSK



Date: 14 JUN 2017 09:37:54

Highest Channel / 15MHz / 16QAM

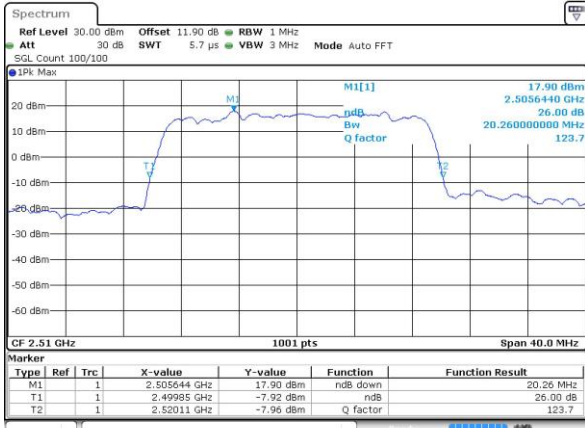


Date: 14 JUN 2017 09:38:04



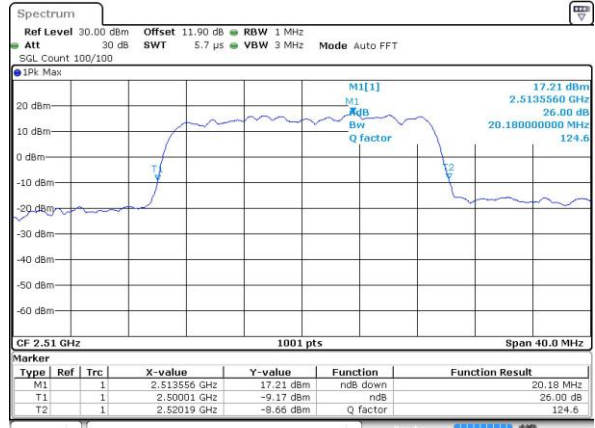
LTE Band 7

Lowest Channel / 20MHz / QPSK



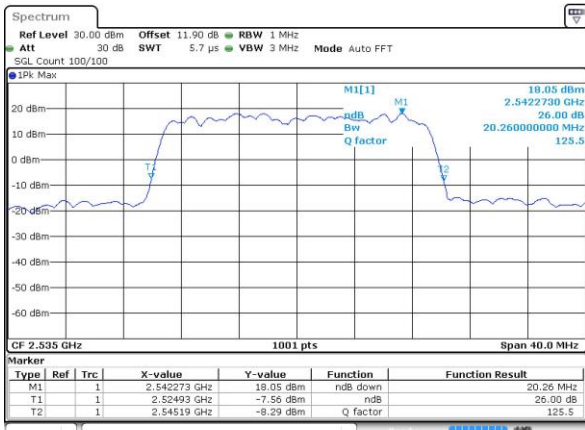
Date: 14 JUN 2017 09:45:02

Lowest Channel / 20MHz / 16QAM



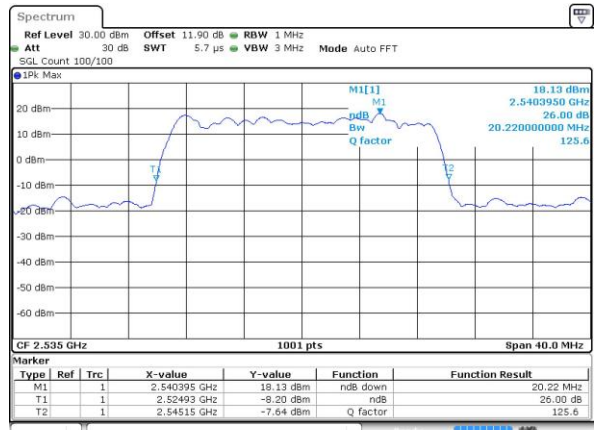
Date: 14 JUN 2017 09:45:12

Middle Channel / 20MHz / QPSK



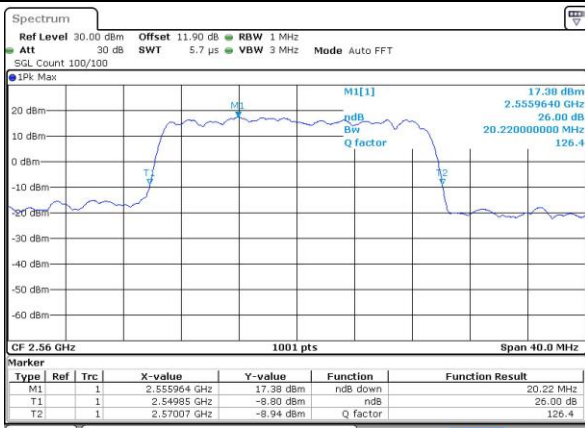
Date: 14 JUN 2017 09:52:09

Middle Channel / 20MHz / 16QAM



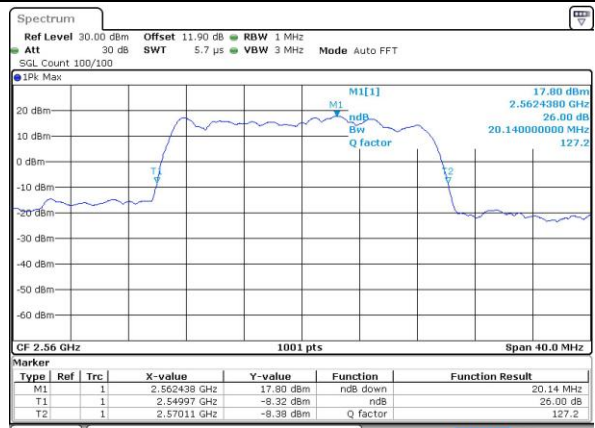
Date: 14 JUN 2017 09:52:19

Highest Channel / 20MHz / QPSK



Date: 14 JUN 2017 09:54:38

Highest Channel / 20MHz / 16QAM

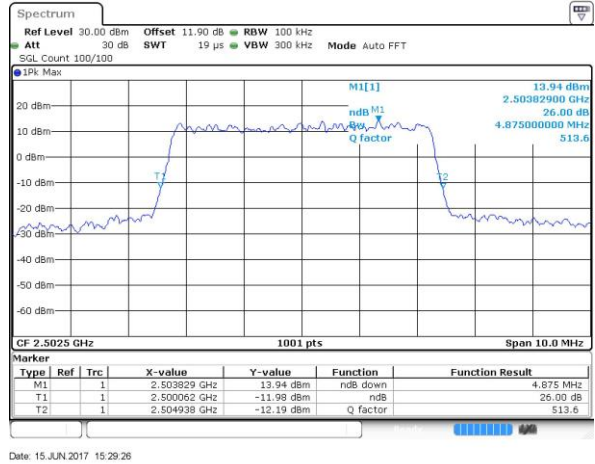


Date: 14 JUN 2017 09:54:48

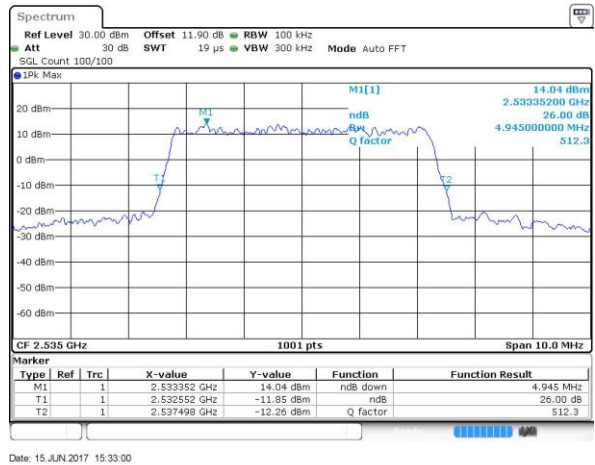


LTE Band 7

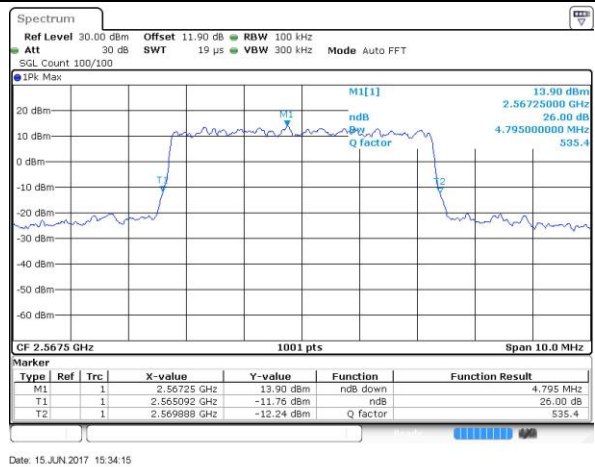
Lowest Channel / 5MHz / 64QAM



Middle Channel / 5MHz / 64QAM



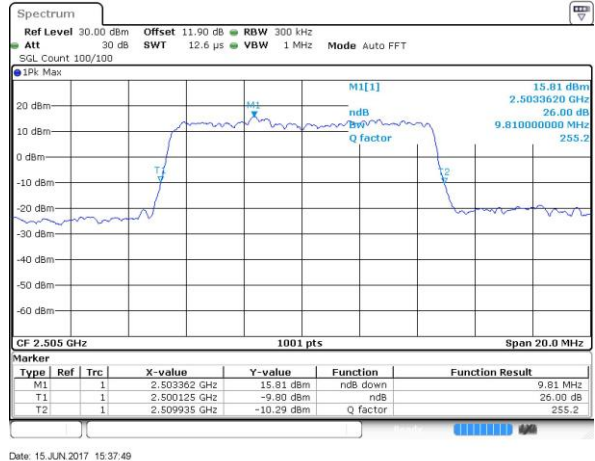
Highest Channel / 5MHz / 64QAM



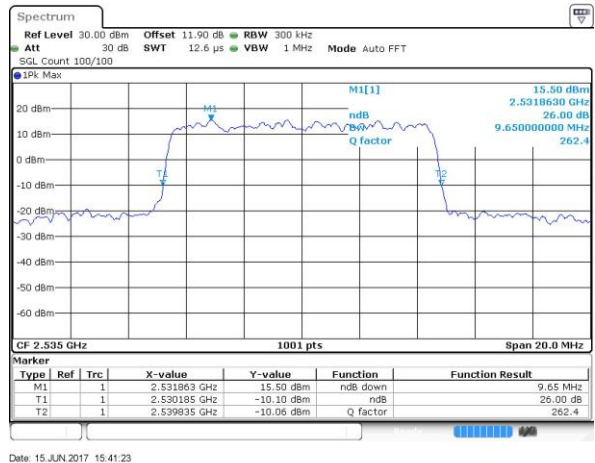


LTE Band 7

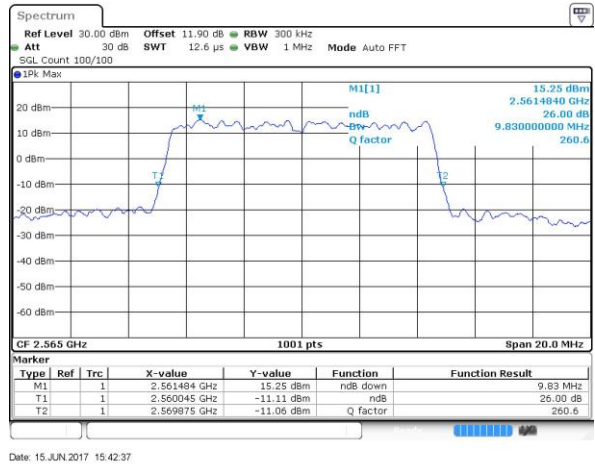
Lowest Channel / 10MHz / 64QAM



Middle Channel / 10MHz / 64QAM



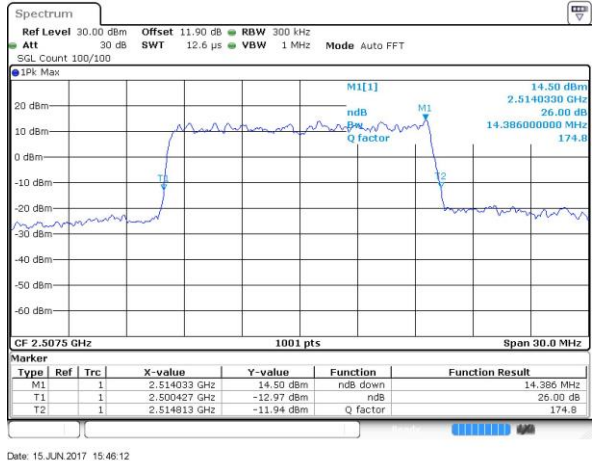
Highest Channel / 10MHz / 64QAM





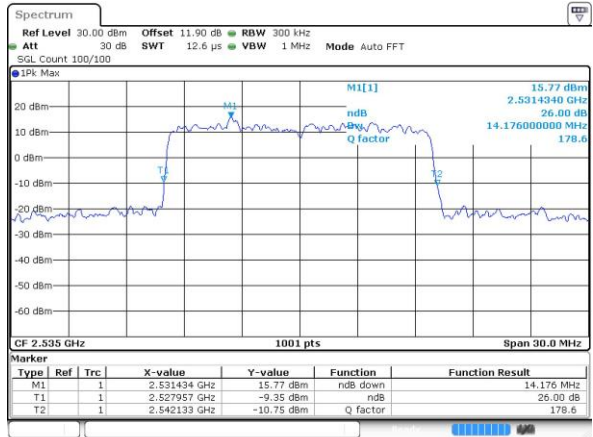
LTE Band 7

Lowest Channel / 15MHz / 64QAM



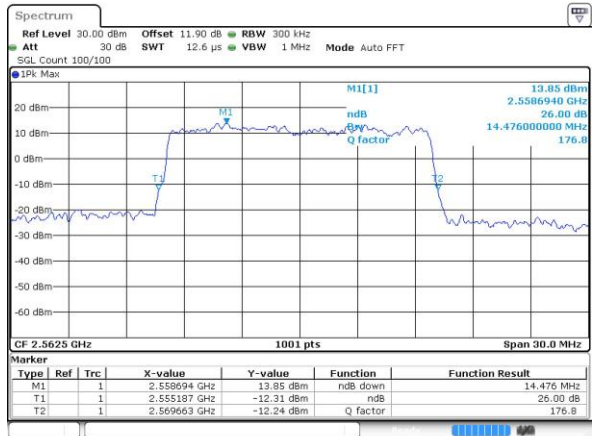
Date: 15 JUN 2017 15:46:12

Middle Channel / 15MHz / 64QAM



Date: 15 JUN 2017 15:49:47

Highest Channel / 15MHz / 64QAM

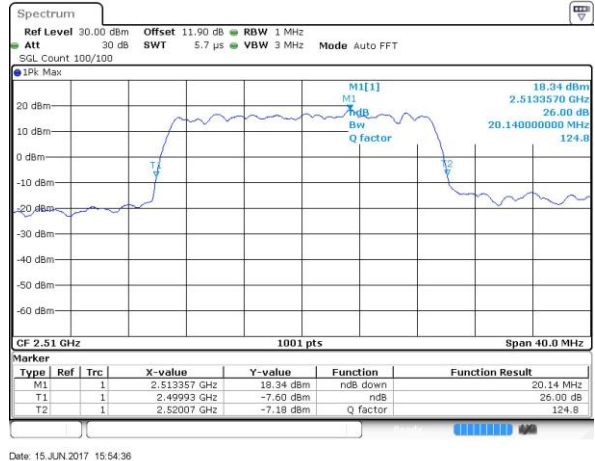


Date: 15 JUN 2017 15:51:01



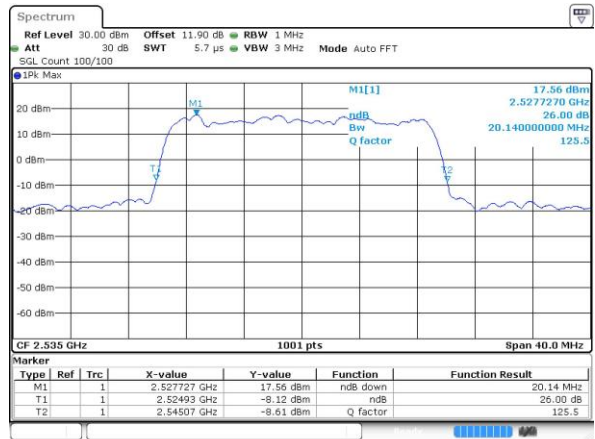
LTE Band 7

Lowest Channel / 20MHz / 64QAM



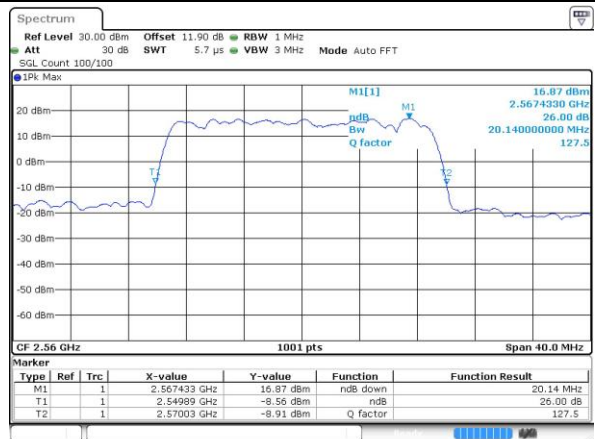
Date: 15 JUN 2017 15:54:36

Middle Channel / 20MHz / 64QAM



Date: 15 JUN 2017 15:58:10

Highest Channel / 20MHz / 64QAM



Date: 15 JUN 2017 15:59:24



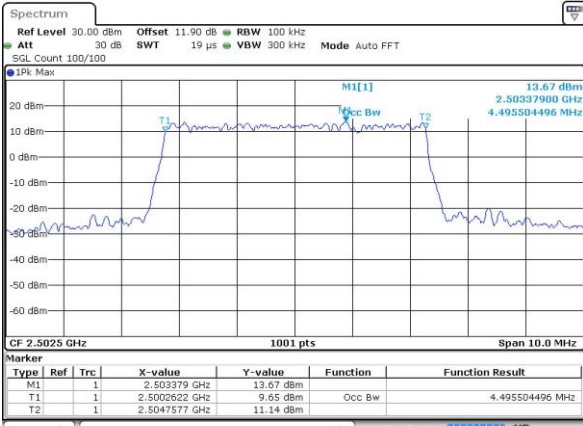
Occupied Bandwidth

| Mode | LTE Band 7 : 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 | - | - | - | - | 4.5 | 4.52 | 9.07 | 8.99 | 13.4 | 13.43 | 18.26 | 18.46 |
| Middle CH | - | - | - | - | 4.5 | 4.5 | 9.03 | 9.01 | 13.43 | 13.52 | 18.42 | 18.5 |
| Highest CH | - | - | - | - | 4.49 | 4.48 | 9.03 | 9.01 | 13.52 | 13.43 | 18.38 | 18.3 |
| Mode | LTE Band 7 : 99%OBW(MHz) | | | | | | | | | | | |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 64QAM | QPSK | 64QAM | QPSK | 64QAM | QPSK | 64QAM | QPSK | 64QAM | QPSK | 64QAM |
| Lowest CH | - | - | - | - | - | 4.51 | - | 9.01 | - | 13.4 | - | 18.38 |
| Middle CH | - | - | - | - | - | 4.49 | - | 9.03 | - | 13.49 | - | 18.42 |
| Highest CH | - | - | - | - | - | 4.47 | - | 8.99 | - | 13.43 | - | 18.42 |



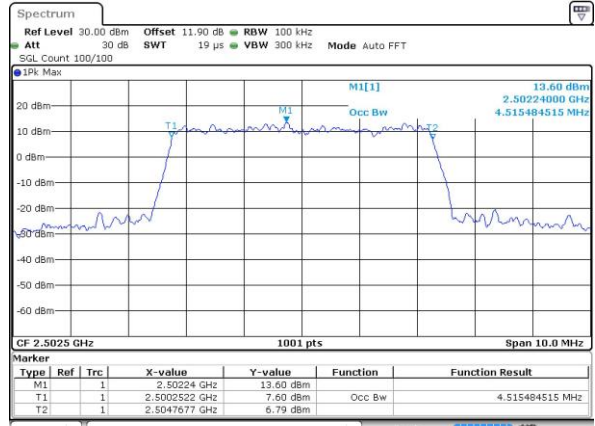
LTE Band 7

Lowest Channel / 5MHz / QPSK



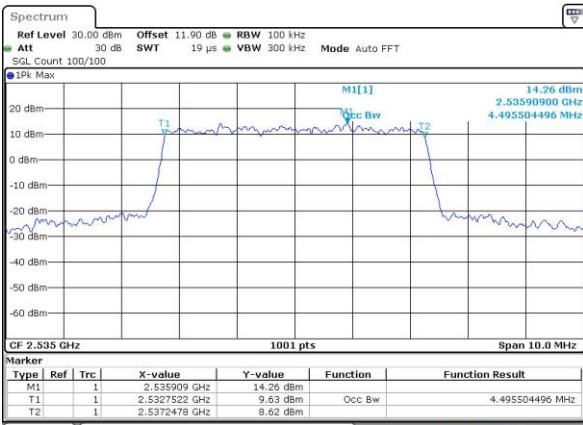
Date: 14 JUN 2017 08:54:26

Lowest Channel / 5MHz / 16QAM



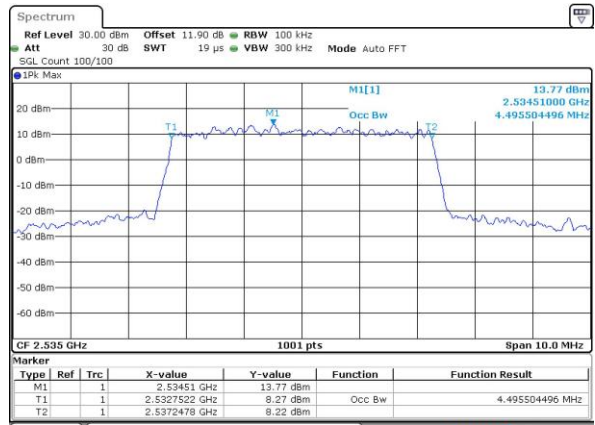
Date: 14 JUN 2017 08:54:36

Middle Channel / 5MHz / QPSK



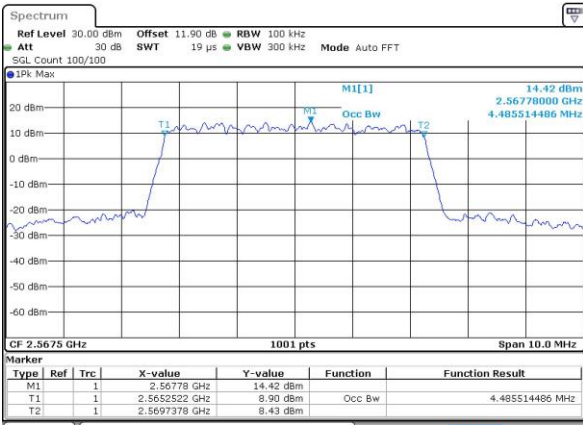
Date: 14 JUN 2017 09:01:34

Middle Channel / 5MHz / 16QAM



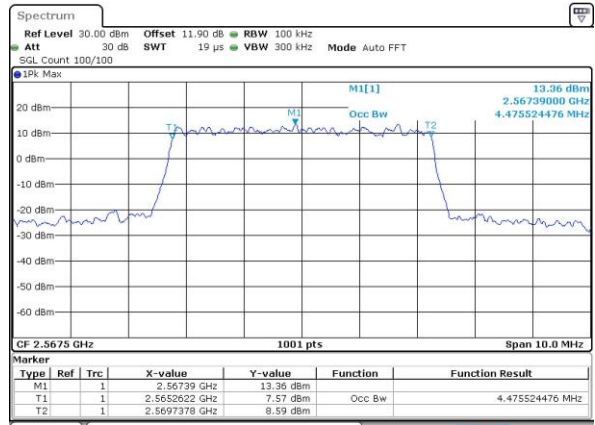
Date: 14 JUN 2017 09:01:45

Highest Channel / 5MHz / QPSK



Date: 14 JUN 2017 09:04:03

Highest Channel / 5MHz / 16QAM

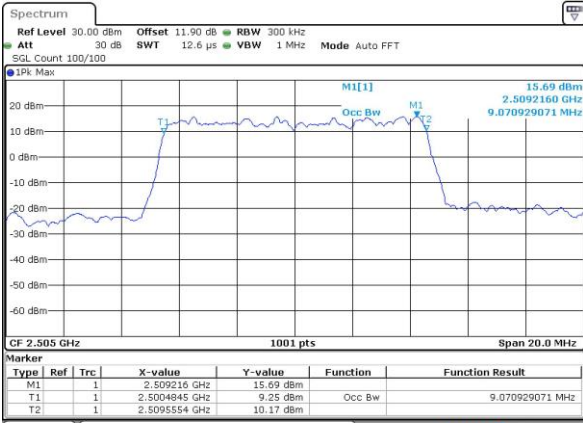


Date: 14 JUN 2017 09:04:13



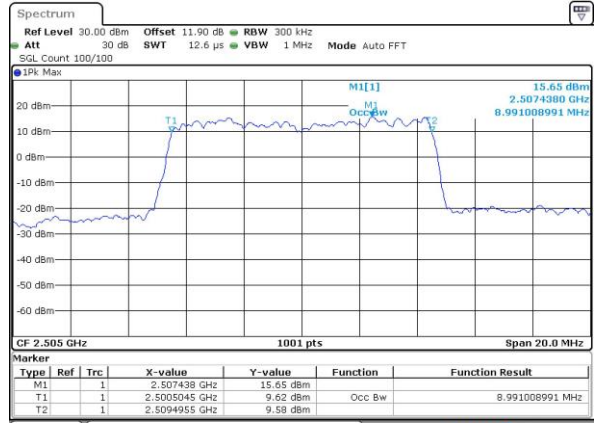
LTE Band 7

Lowest Channel / 10MHz / QPSK



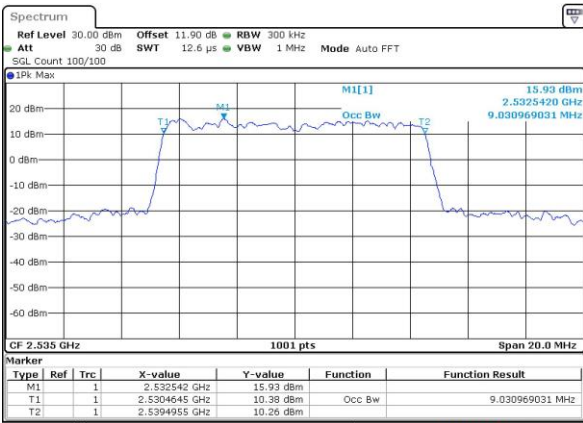
Date: 14 JUN 2017 09:11:11

Lowest Channel / 10MHz / 16QAM



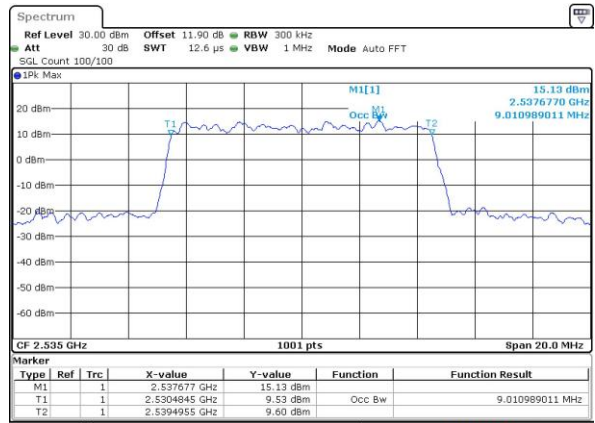
Date: 14 JUN 2017 09:11:21

Middle Channel / 10MHz / QPSK



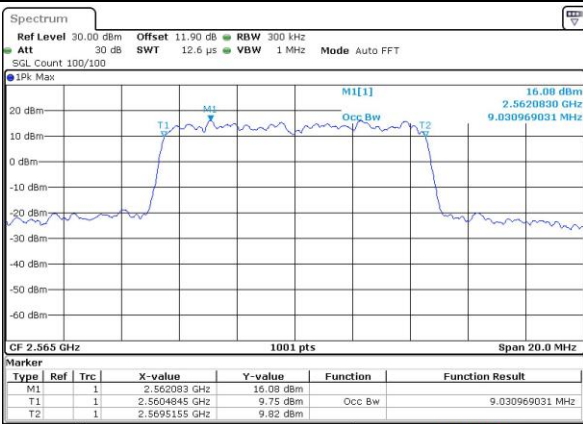
Date: 14 JUN 2017 09:18:19

Middle Channel / 10MHz / 16QAM



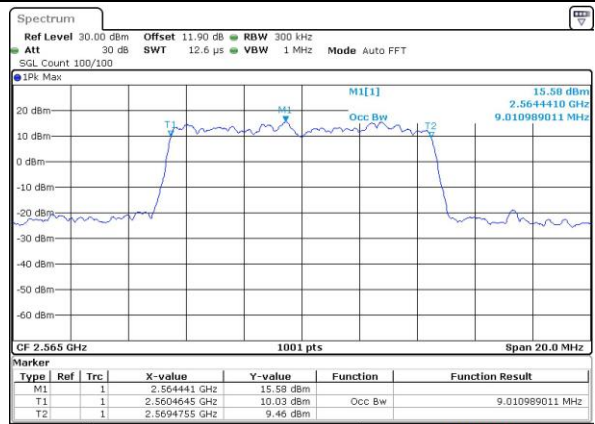
Date: 14 JUN 2017 09:18:29

Highest Channel / 10MHz / QPSK



Date: 14 JUN 2017 09:20:48

Highest Channel / 10MHz / 16QAM

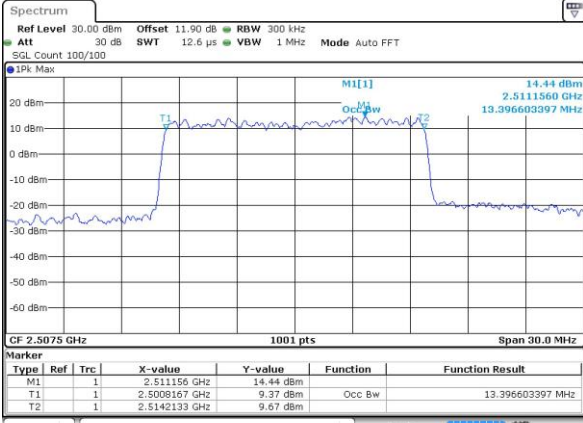


Date: 14 JUN 2017 09:20:58



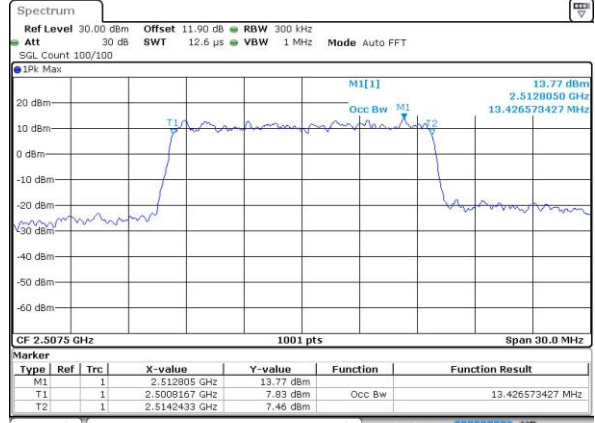
LTE Band 7

Lowest Channel / 15MHz / QPSK



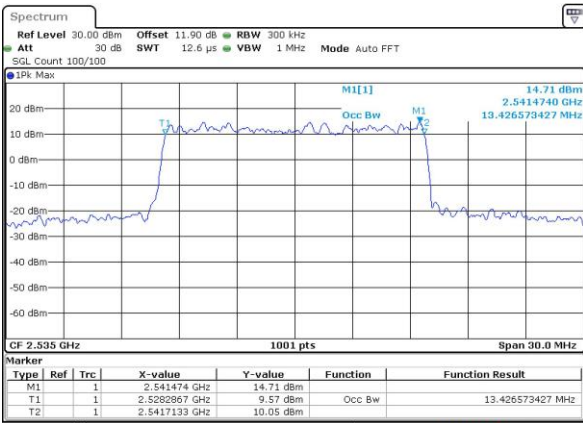
Date: 14 JUN 2017 09:27:56

Lowest Channel / 15MHz / 16QAM



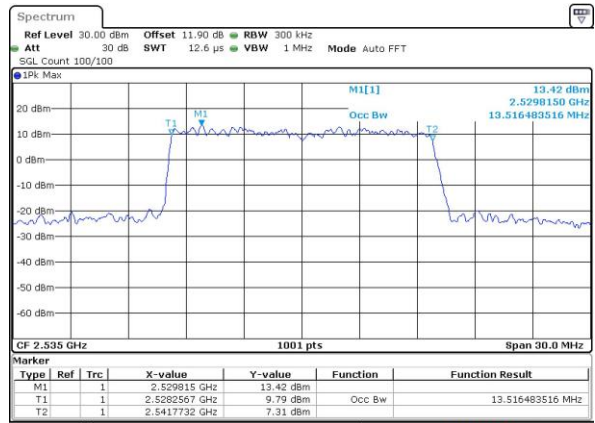
Date: 14 JUN 2017 09:28:06

Middle Channel / 15MHz / QPSK



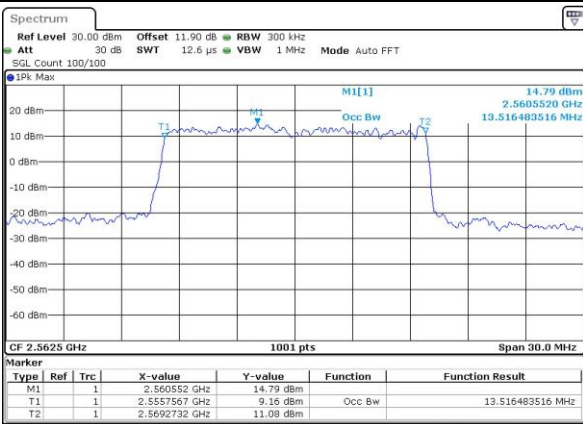
Date: 14 JUN 2017 09:35:04

Middle Channel / 15MHz / 16QAM



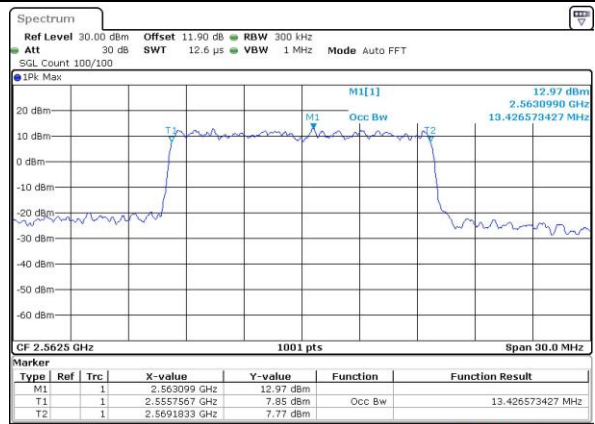
Date: 14 JUN 2017 09:35:14

Highest Channel / 15MHz / QPSK



Date: 14 JUN 2017 09:37:33

Highest Channel / 15MHz / 16QAM

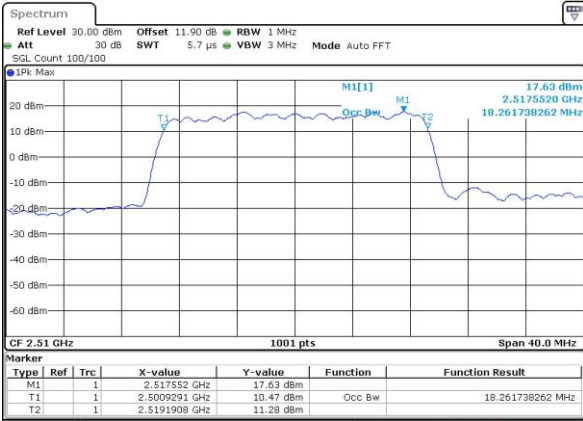


Date: 14 JUN 2017 09:37:43



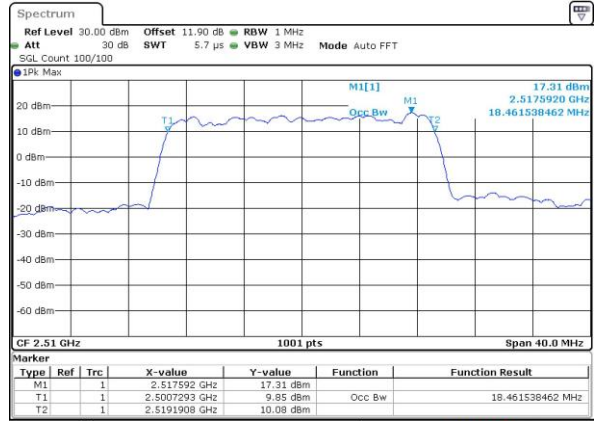
LTE Band 7

Lowest Channel / 20MHz / QPSK



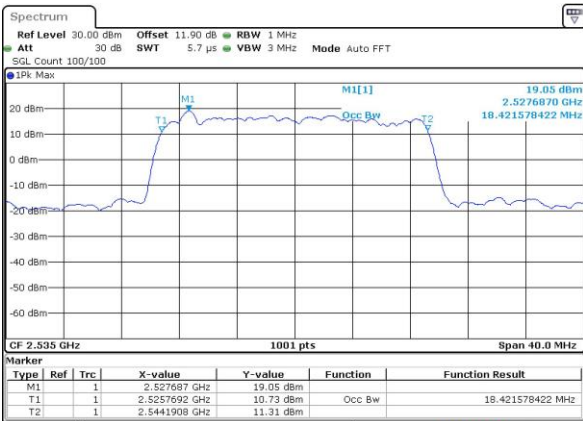
Date: 14 JUN 2017 09:44:41

Lowest Channel / 20MHz / 16QAM



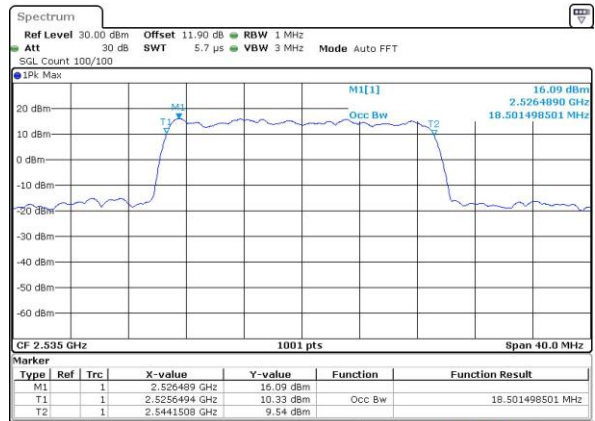
Date: 14 JUN 2017 09:44:51

Middle Channel / 20MHz / QPSK



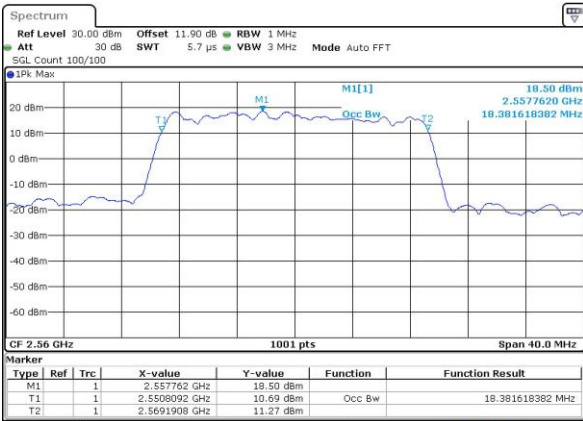
Date: 14 JUN 2017 09:51:48

Middle Channel / 20MHz / 16QAM



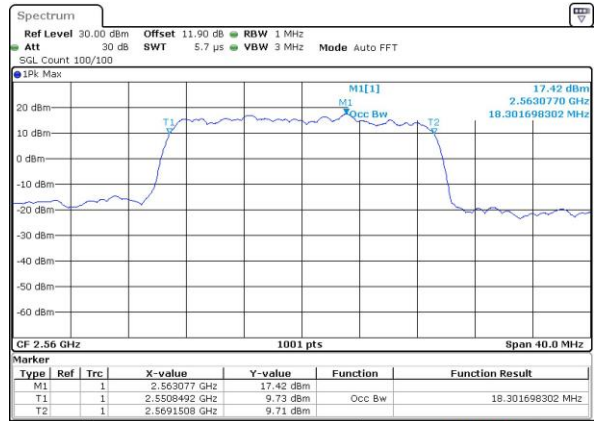
Date: 14 JUN 2017 09:51:59

Highest Channel / 20MHz / QPSK



Date: 14 JUN 2017 09:54:17

Highest Channel / 20MHz / 16QAM

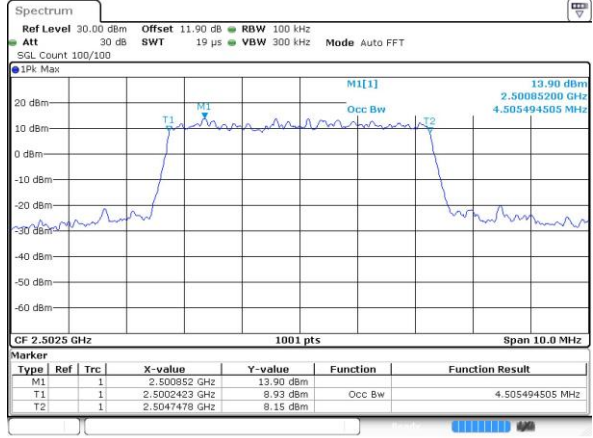


Date: 14 JUN 2017 09:54:28



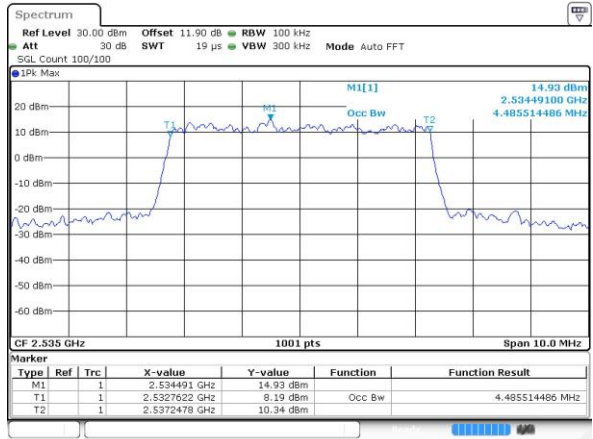
LTE Band 7

Lowest Channel / 5MHz / 64QAM



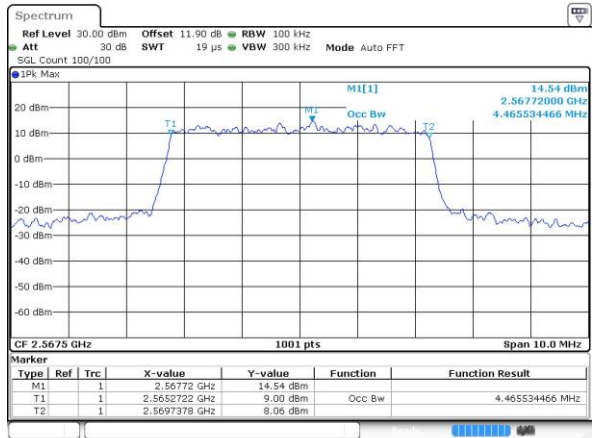
Date: 15 JUN 2017 15:29:16

Middle Channel / 5MHz / 64QAM



Date: 15 JUN 2017 15:32:50

Highest Channel / 5MHz / 64QAM



Date: 15 JUN 2017 15:34:04