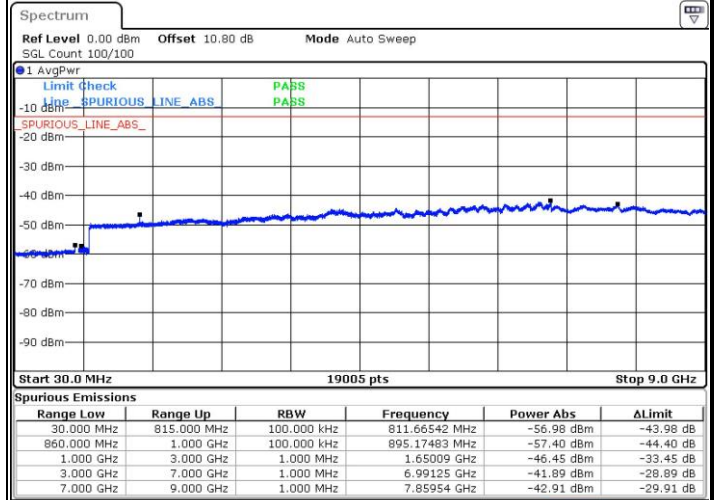




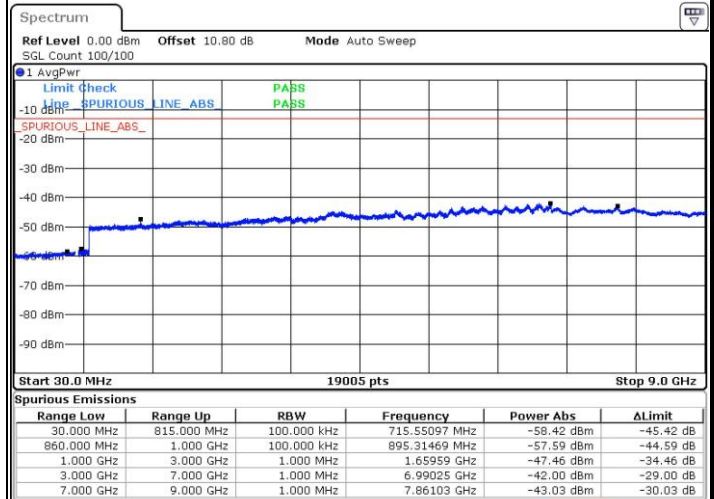
LTE Band 26 / 15MHz

Lowest Channel / 64QAM



Date: 13.MAY.2017 23:11:14

Middle Channel / 64QAM



Date: 13.MAY.2017 23:12:29



Frequency Stability

| Test Conditions | | LTE Band 26 (QPSK) / Middle Channel | Limit |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | Note 2. |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0022 | PASS |
| 40 | Normal Voltage | 0.0011 | |
| 30 | Normal Voltage | 0.0011 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0065 | |
| 0 | Normal Voltage | 0.0090 | |
| -10 | Normal Voltage | 0.0072 | |
| -20 | Normal Voltage | 0.0088 | |
| -30 | Normal Voltage | 0.0086 | |
| 20 | Maximum Voltage | 0.0024 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0004 | |

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 38

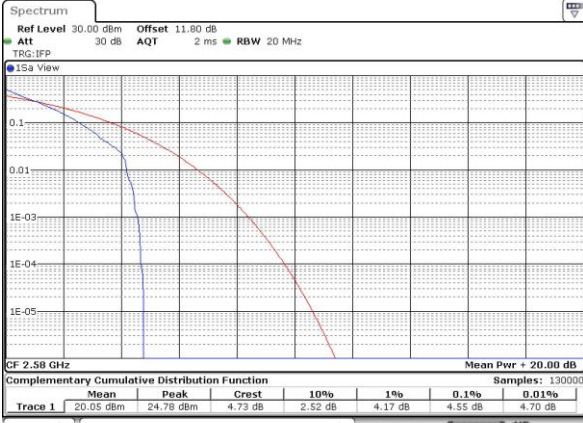
Peak-to-Average Ratio

| Mode | LTE Band 38 / 20MHz | | | | |
|------------|---------------------|---------|-------|---------|-------------|
| Mod. | QPSK | | 16QAM | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | 4.55 | 4.99 | 5.57 | 6 | PASS |
| Middle CH | 4.7 | 4.99 | 5.3 | 5.97 | |
| Highest CH | 4.72 | 4.99 | 5.33 | 5.97 | |
| Mod. | - | | 64QAM | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | - | - | 5.1 | 5.86 | PASS |
| Middle CH | - | - | 5.33 | 5.86 | |
| Highest CH | - | - | 5.3 | 5.83 | |



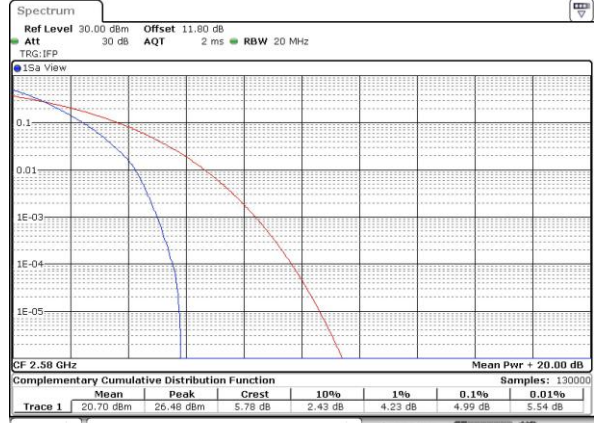
LTE Band 38 / 20MHz / QPSK

Lowest Channel / 1RB



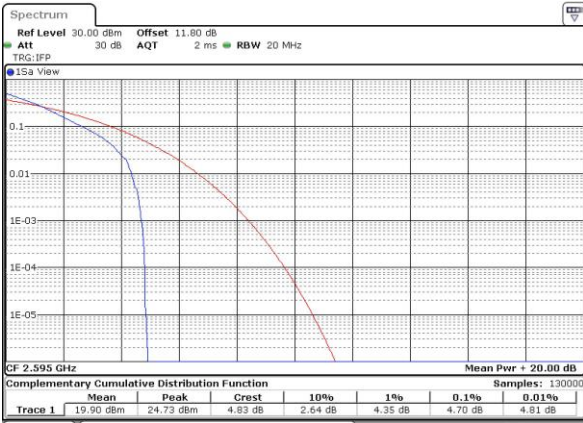
Date: 12.MAY.2017 10:11:05

Lowest Channel / Full RB



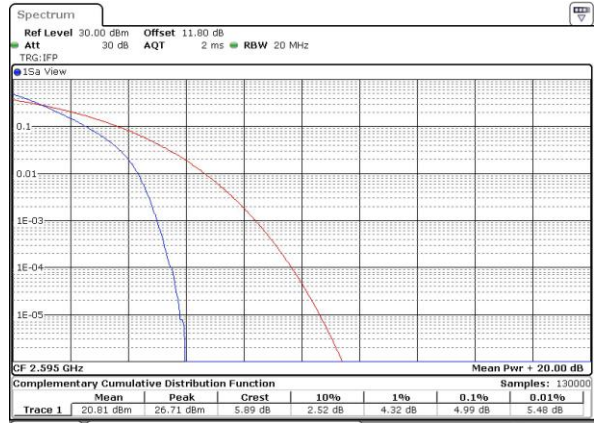
Date: 12.MAY.2017 10:11:20

Middle Channel / 1RB



Date: 12.MAY.2017 10:11:34

Middle Channel / Full RB



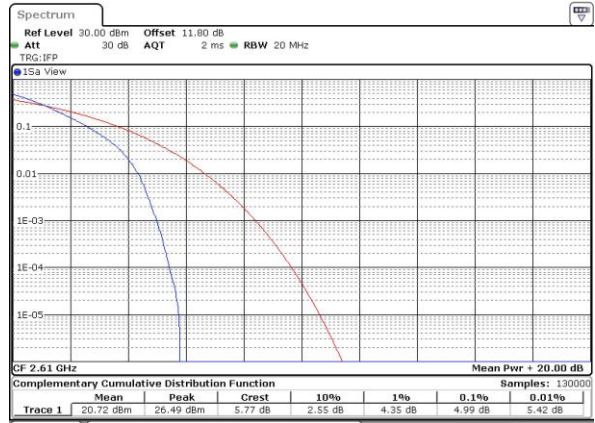
Date: 12.MAY.2017 10:11:47

Highest Channel / 1RB



Date: 12.MAY.2017 10:12:02

Highest Channel / Full RB

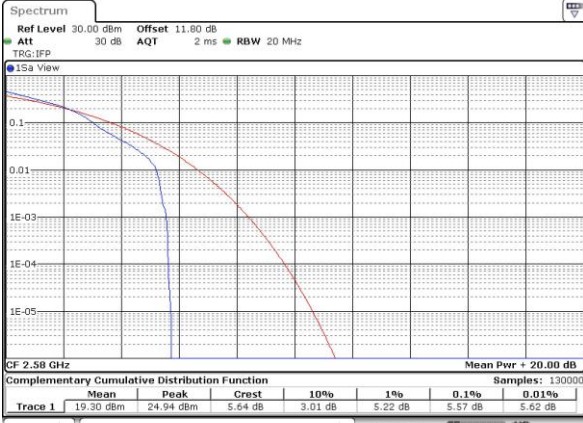


Date: 12.MAY.2017 10:12:16



LTE Band 38 / 20MHz / 16QAM

Lowest Channel / 1RB



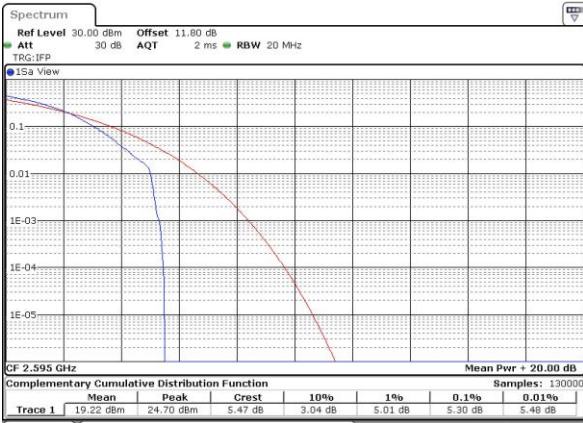
Date: 12.MAY.2017 10:03:14

Lowest Channel / Full RB



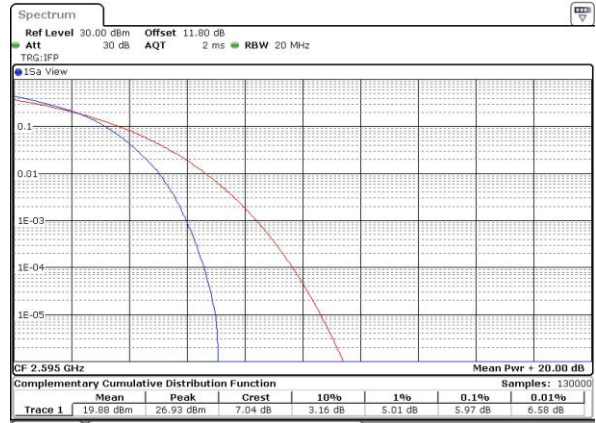
Date: 12.MAY.2017 10:09:05

Middle Channel / 1RB



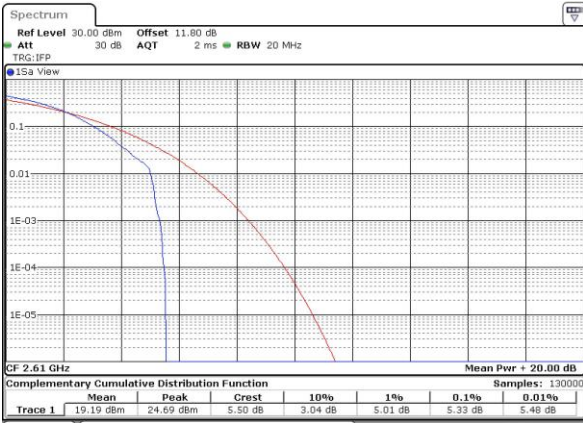
Date: 12.MAY.2017 10:09:52

Middle Channel / Full RB



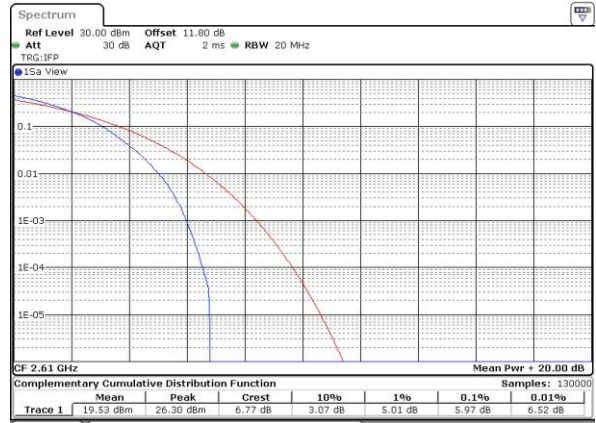
Date: 12.MAY.2017 10:10:05

Highest Channel / 1RB



Date: 12.MAY.2017 10:10:19

Highest Channel / Full RB

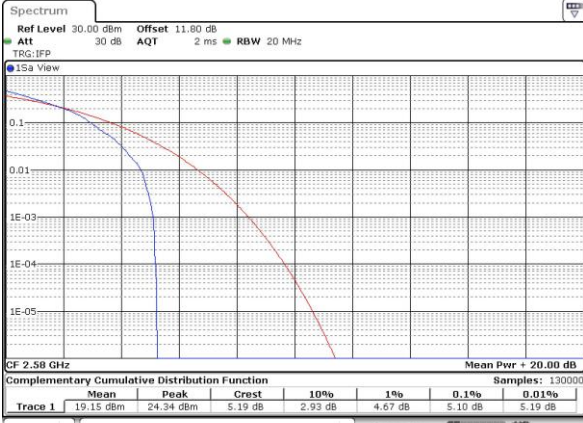


Date: 12.MAY.2017 10:10:49



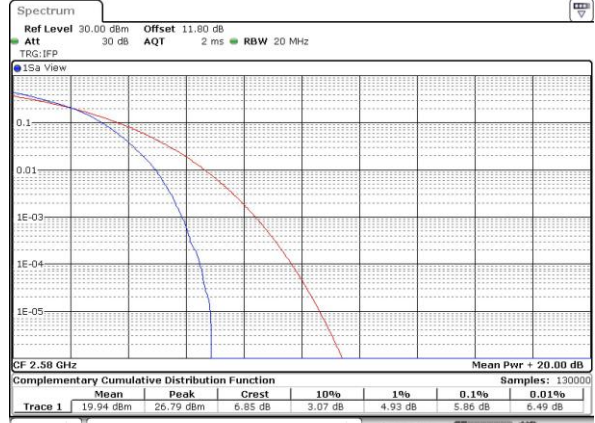
LTE Band 38 / 20MHz / 64QAM

Lowest Channel / 1RB



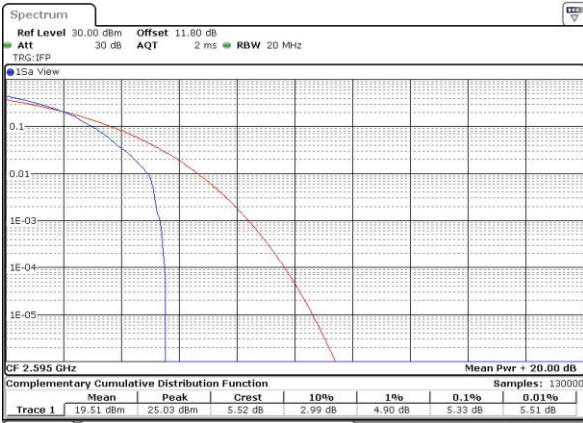
Date: 13 MAY 2017 22:19:52

Lowest Channel / Full RB



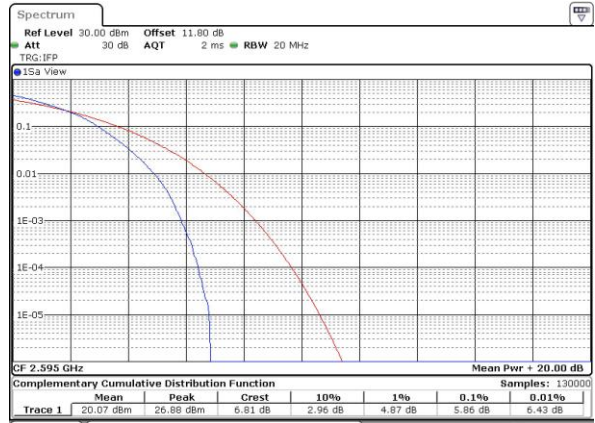
Date: 13 MAY 2017 22:20:10

Middle Channel / 1RB



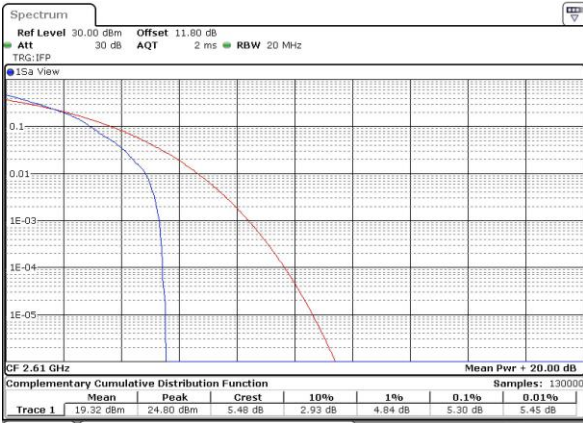
Date: 13 MAY 2017 22:21:01

Middle Channel / Full RB



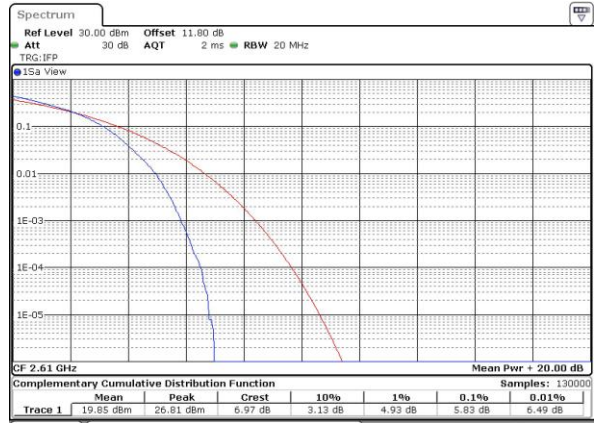
Date: 13 MAY 2017 22:21:29

Highest Channel / 1RB



Date: 13 MAY 2017 22:21:51

Highest Channel / Full RB



Date: 13 MAY 2017 22:22:08



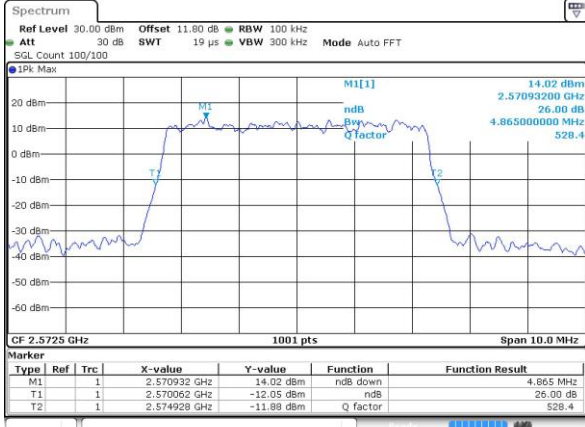
26dB Bandwidth

| Mode | LTE Band 38 : 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 | - | - | - | - | 4.87 | 4.88 | 9.89 | 9.61 | 14.30 | 14.15 | 20.42 | 20.10 |
| Middle CH | - | - | - | - | 4.94 | 4.83 | 9.63 | 9.61 | 14.54 | 14.27 | 20.14 | 20.02 |
| Highest CH | - | - | - | - | 4.92 | 4.80 | 9.71 | 9.73 | 14.18 | 14.33 | 19.90 | 20.10 |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | - | 64QAM | - | 64QAM | - | 64QAM | - | 64QAM | - | 64QAM | - | 64QAM |
| Lowest CH | - | - | - | - | - | 4.92 | - | 9.71 | - | 14.66 | - | 20.10 |
| Middle CH | - | - | - | - | - | 4.88 | - | 9.63 | - | 14.36 | - | 20.34 |
| Highest CH | - | - | - | - | - | 4.85 | - | 9.63 | - | 14.51 | - | 20.06 |



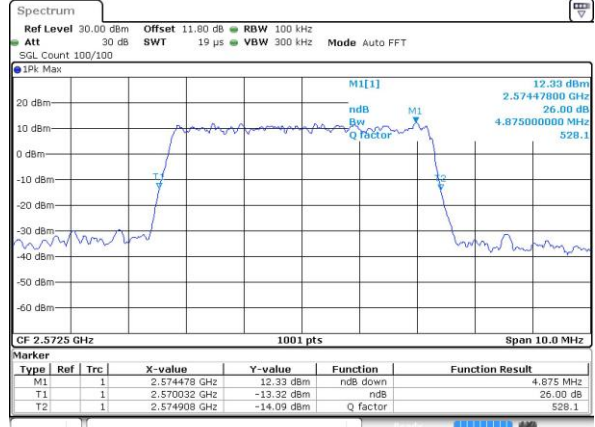
LTE Band 38

Lowest Channel / 5MHz / QPSK



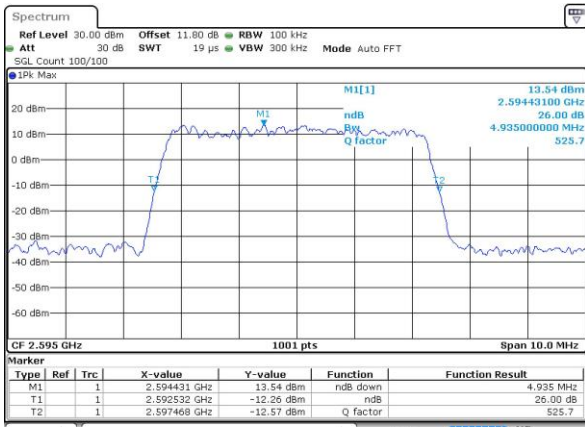
Date: 12 MAY 2017 09:53:19

Lowest Channel / 5MHz / 16QAM



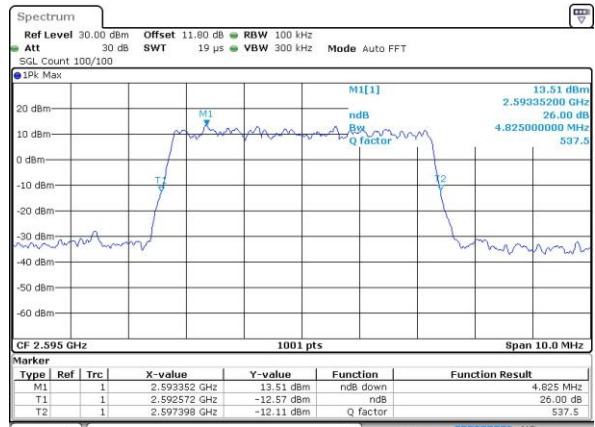
Date: 12 MAY 2017 09:53:30

Middle Channel / 5MHz / QPSK



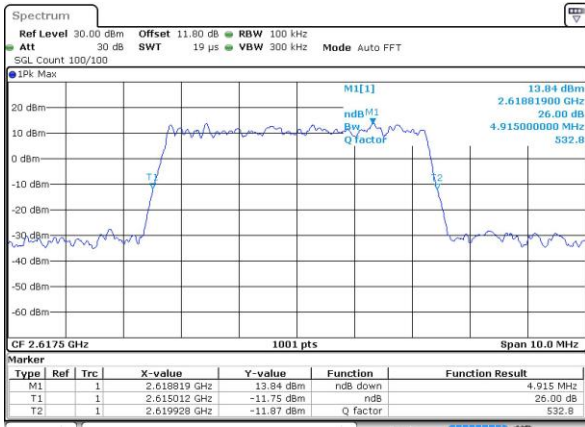
Date: 12 MAY 2017 09:54:01

Middle Channel / 5MHz / 16QAM



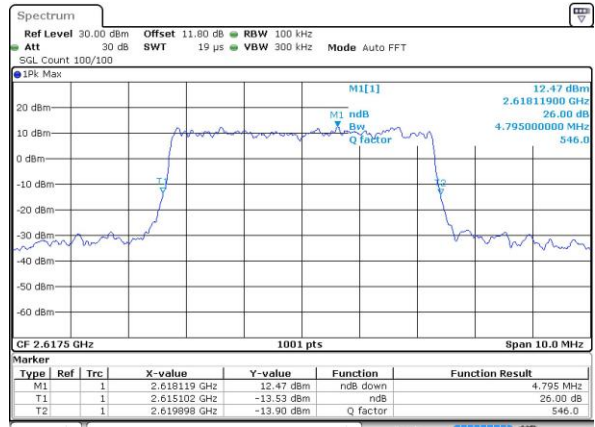
Date: 12 MAY 2017 09:54:11

Highest Channel / 5MHz / QPSK



Date: 12 MAY 2017 09:54:42

Highest Channel / 5MHz / 16QAM

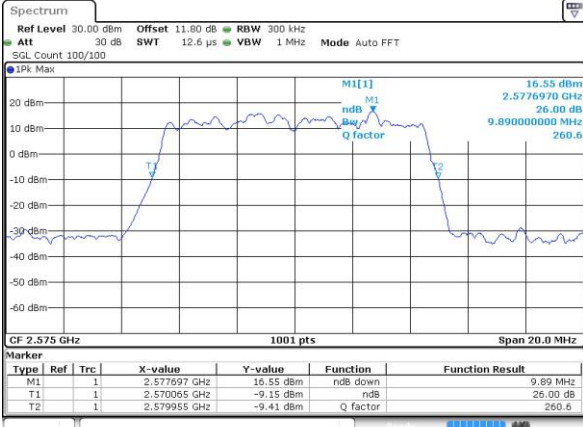


Date: 12 MAY 2017 09:54:53



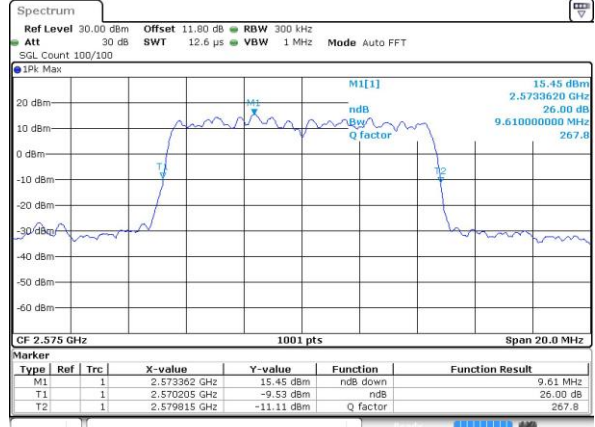
LTE Band 38

Lowest Channel / 10MHz / QPSK



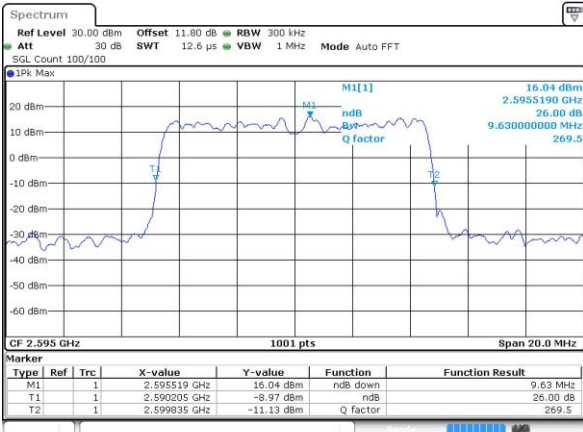
Date: 12 MAY 2017 09:55:24

Lowest Channel / 10MHz / 16QAM



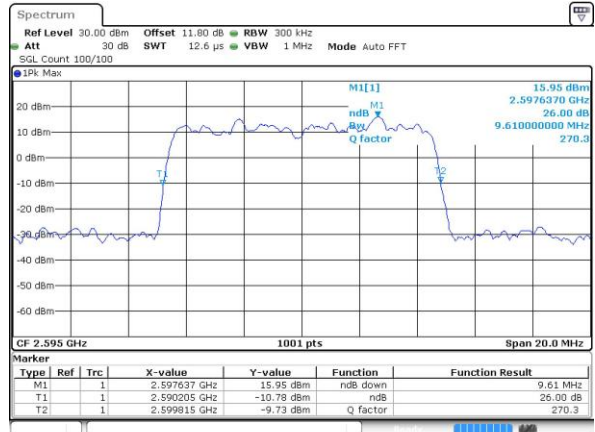
Date: 12 MAY 2017 09:55:34

Middle Channel / 10MHz / QPSK



Date: 12 MAY 2017 09:56:05

Middle Channel / 10MHz / 16QAM



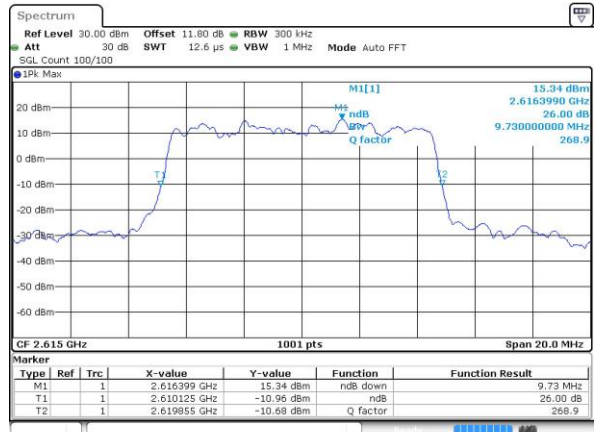
Date: 12 MAY 2017 09:56:16

Highest Channel / 10MHz / QPSK



Date: 12 MAY 2017 09:56:47

Highest Channel / 10MHz / 16QAM

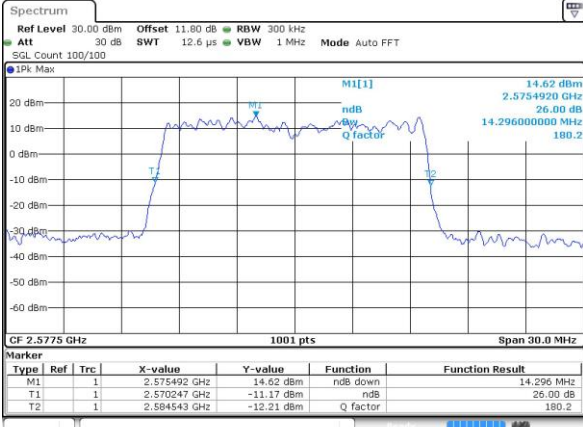


Date: 12 MAY 2017 09:56:57

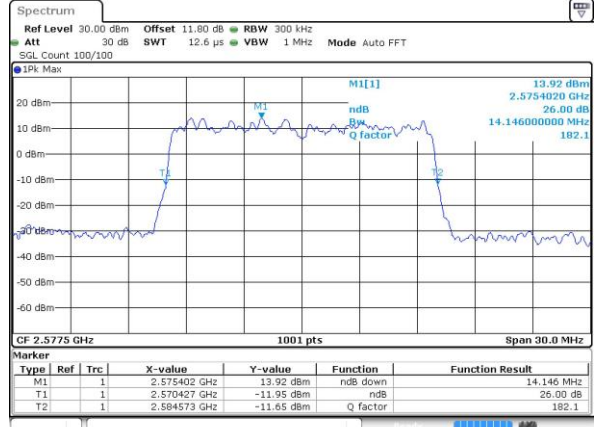


LTE Band 38

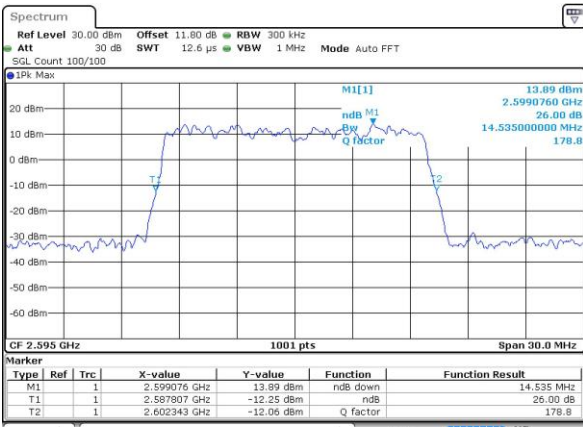
Lowest Channel / 15MHz / QPSK



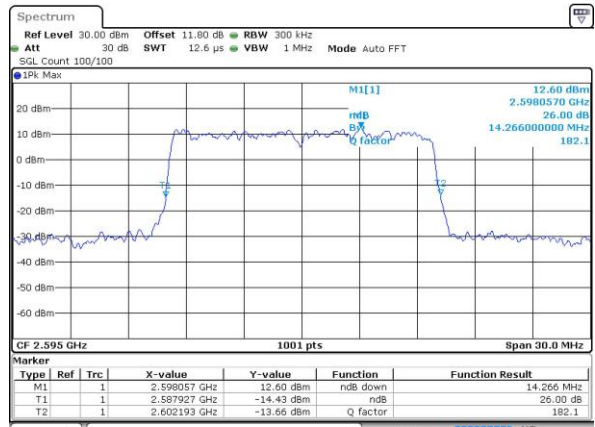
Lowest Channel / 15MHz / 16QAM



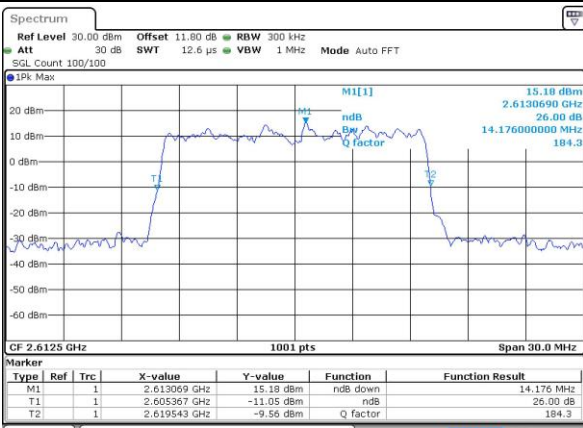
Middle Channel / 15MHz / QPSK



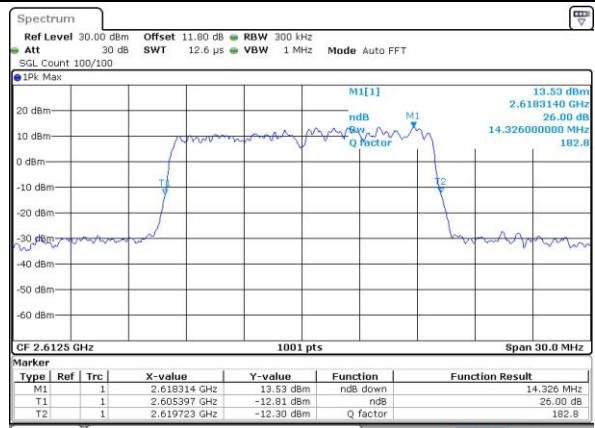
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



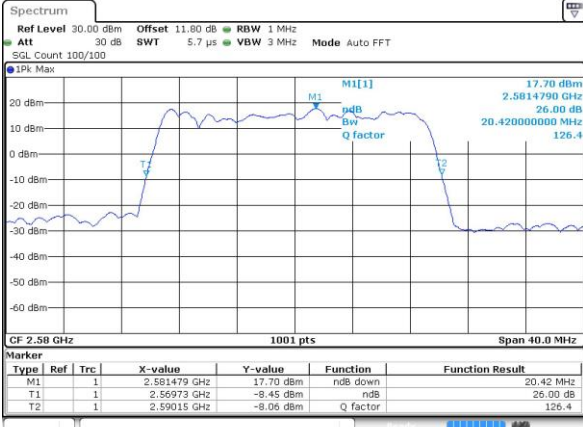
Highest Channel / 15MHz / 16QAM





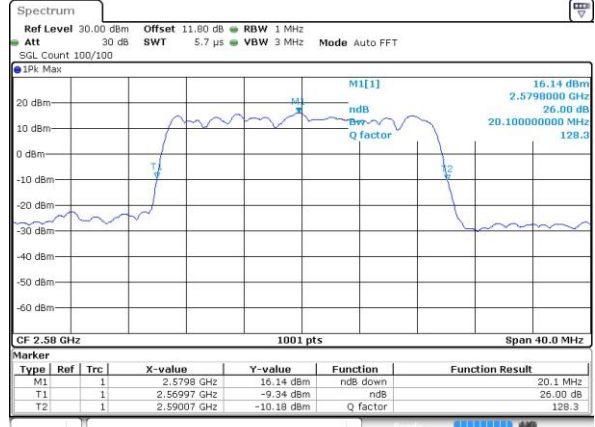
LTE Band 38

Lowest Channel / 20MHz / QPSK



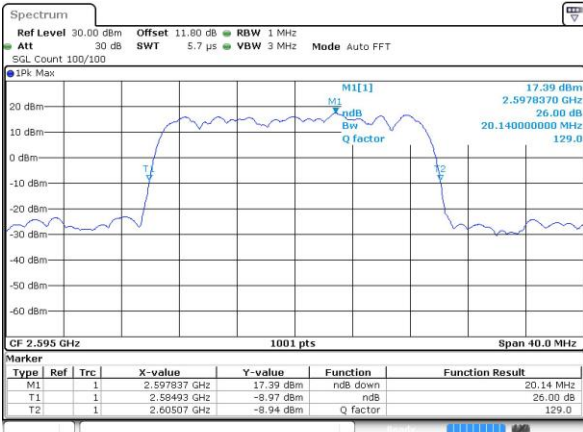
Date: 12 MAY 2017 09:59:33

Lowest Channel / 20MHz / 16QAM



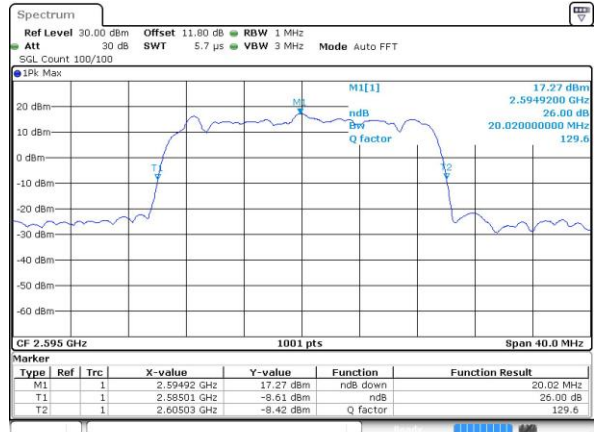
Date: 12 MAY 2017 09:59:43

Middle Channel / 20MHz / QPSK



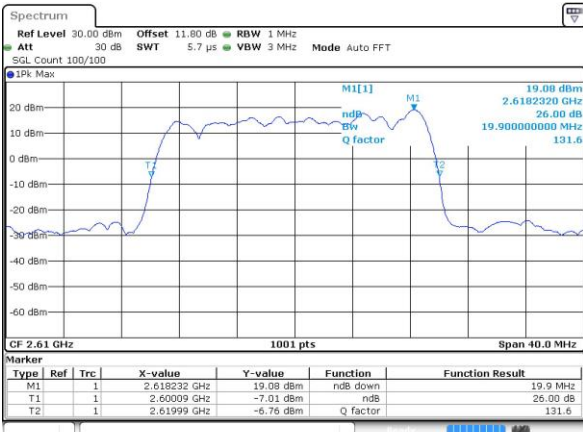
Date: 12 MAY 2017 10:00:14

Middle Channel / 20MHz / 16QAM



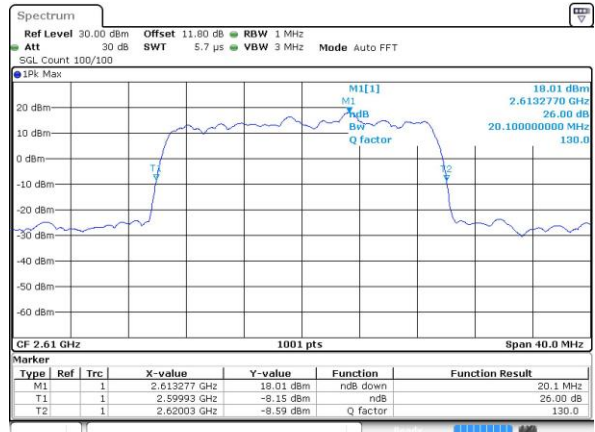
Date: 12 MAY 2017 10:00:25

Highest Channel / 20MHz / QPSK



Date: 12 MAY 2017 10:00:56

Highest Channel / 20MHz / 16QAM

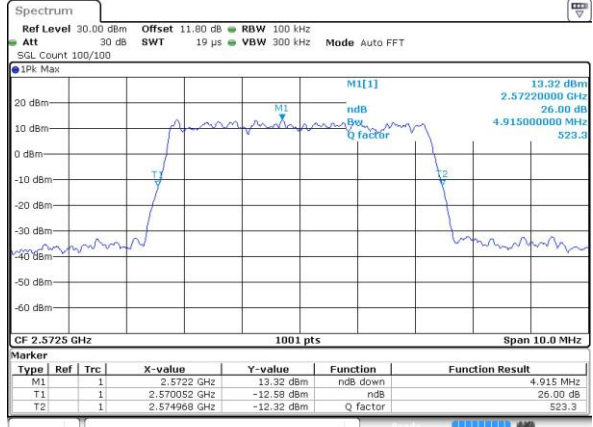


Date: 12 MAY 2017 10:01:06

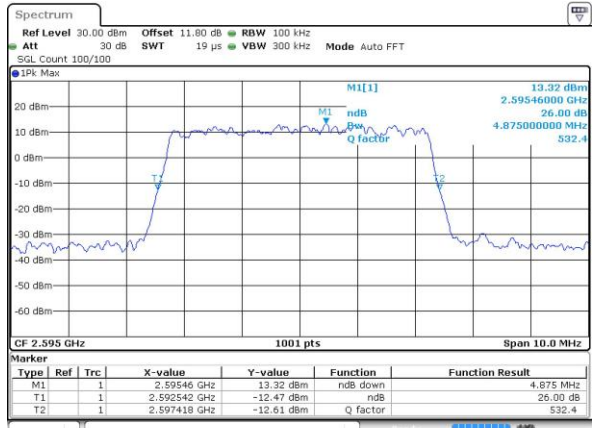


LTE Band 38

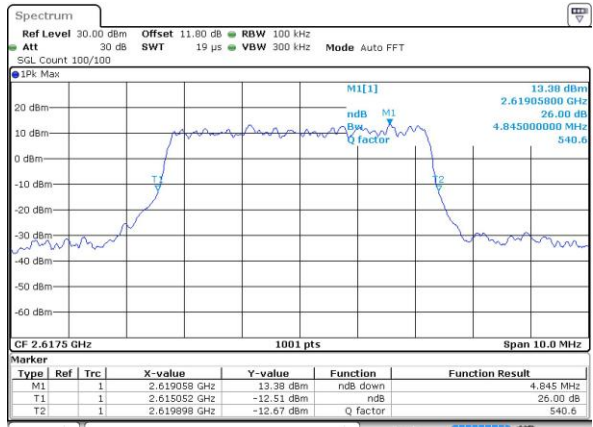
Lowest Channel / 5MHz / 64QAM



Middle Channel / 5MHz / 64QAM



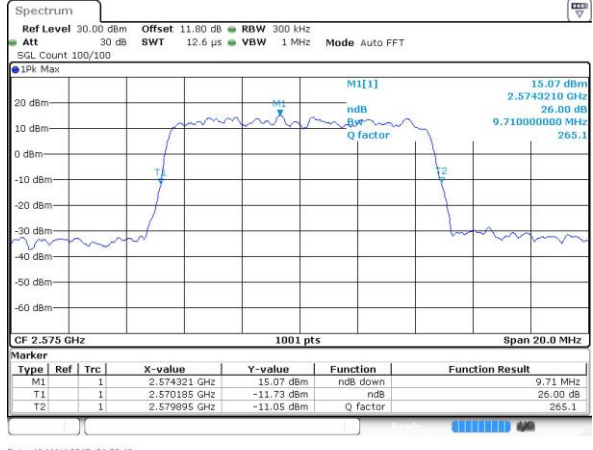
Highest Channel / 5MHz / 64QAM



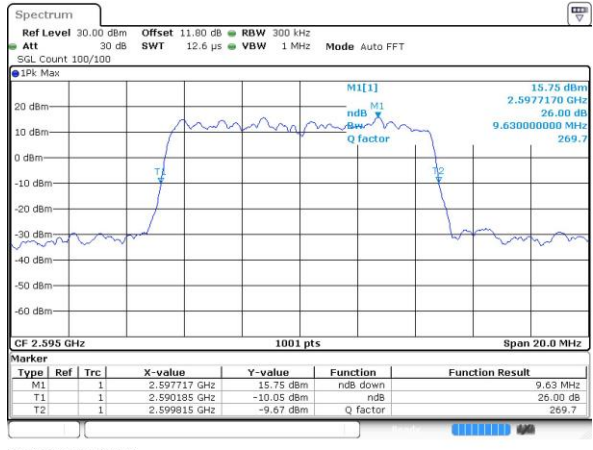


LTE Band 38

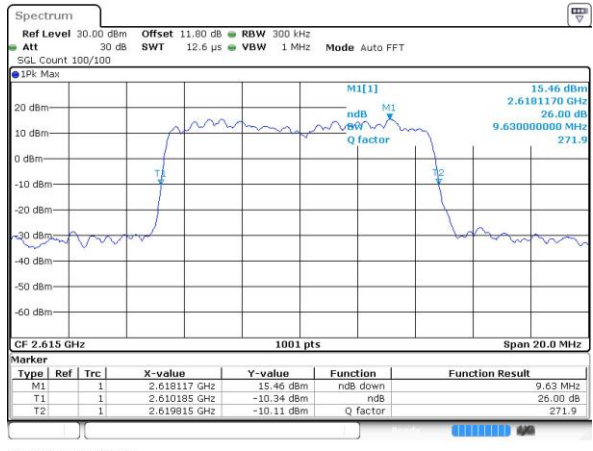
Lowest Channel / 10MHz / 64QAM



Middle Channel / 10MHz / 64QAM



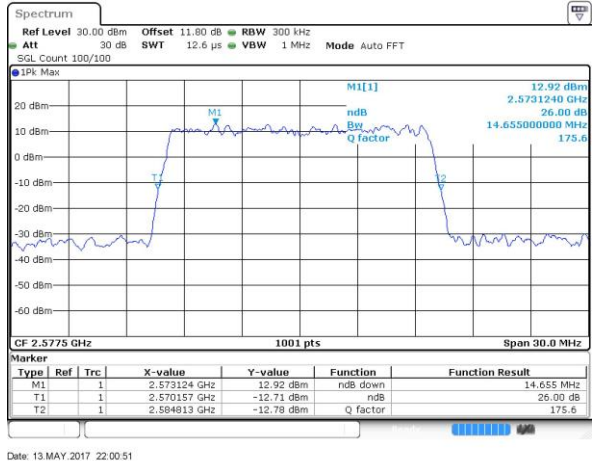
Highest Channel / 10MHz / 64QAM



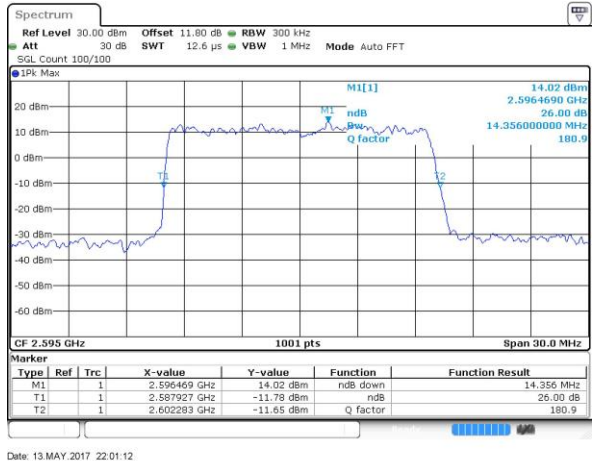


LTE Band 38

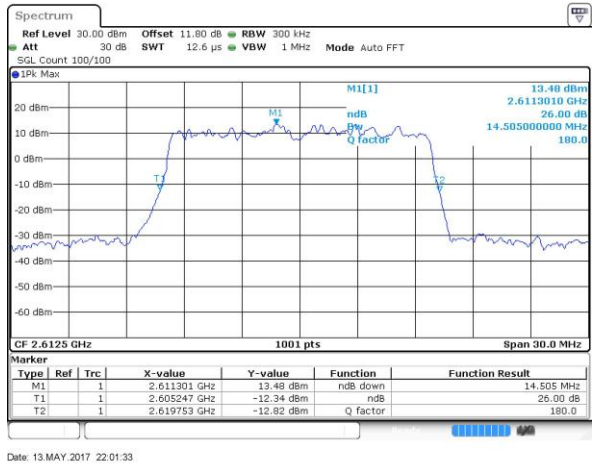
Lowest Channel / 15MHz / 64QAM



Middle Channel / 15MHz / 64QAM



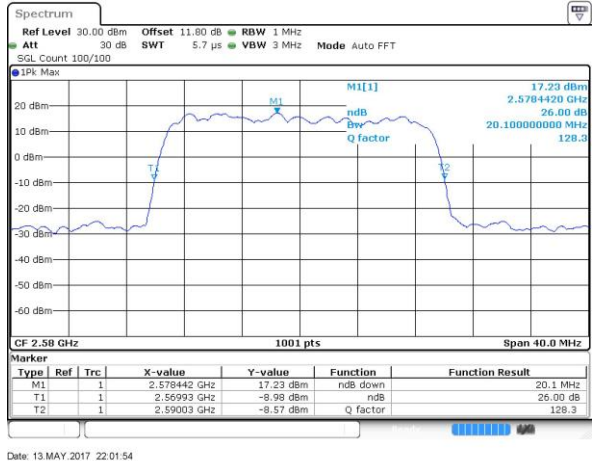
Highest Channel / 15MHz / 64QAM





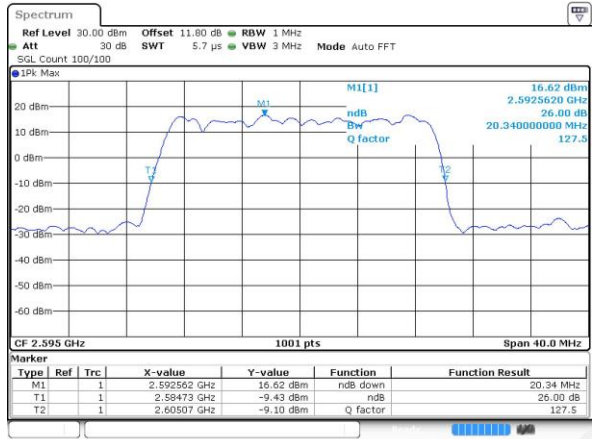
LTE Band 38

Lowest Channel / 20MHz / 64QAM



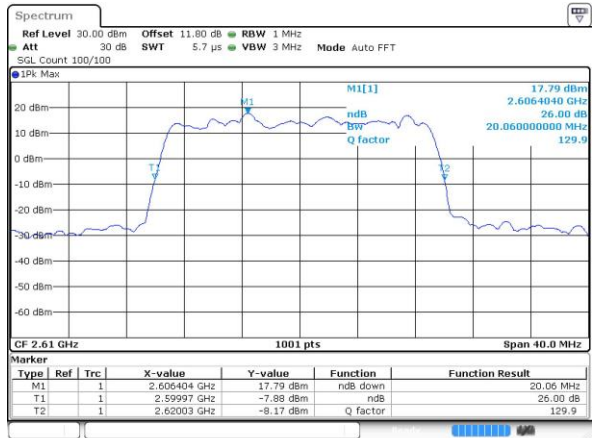
Date: 13 MAY 2017 22:01:54

Middle Channel / 20MHz / 64QAM



Date: 13 MAY 2017 22:02:14

Highest Channel / 20MHz / 64QAM



Date: 13 MAY 2017 22:19:36



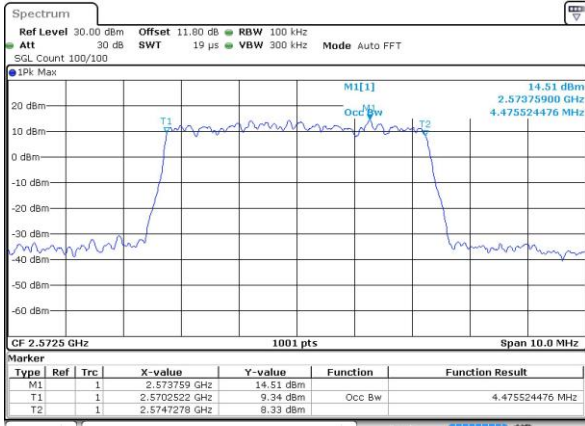
Occupied Bandwidth

| Mode | LTE Band 38 : 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 | - | - | - | - | 4.48 | 4.5 | 8.95 | 9.03 | 13.34 | 13.4 | 18.42 | 18.38 |
| Middle CH | - | - | - | - | 4.47 | 4.49 | 8.99 | 8.99 | 13.43 | 13.43 | 18.34 | 18.1 |
| Highest CH | - | - | - | - | 4.5 | 4.47 | 9.03 | 9.03 | 13.4 | 13.49 | 18.3 | 18.38 |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | - | 64QAM | - | 64QAM | - | 64QAM | - | 64QAM | - | 64QAM | - | 64QAM |
| Lowest CH | - | - | - | - | - | 4.48 | - | 9.01 | - | 13.43 | - | 18.26 |
| Middle CH | - | - | - | - | - | 4.5 | - | 8.99 | - | 13.43 | - | 18.18 |
| Highest CH | - | - | - | - | - | 4.5 | - | 9.01 | - | 13.34 | - | 18.18 |



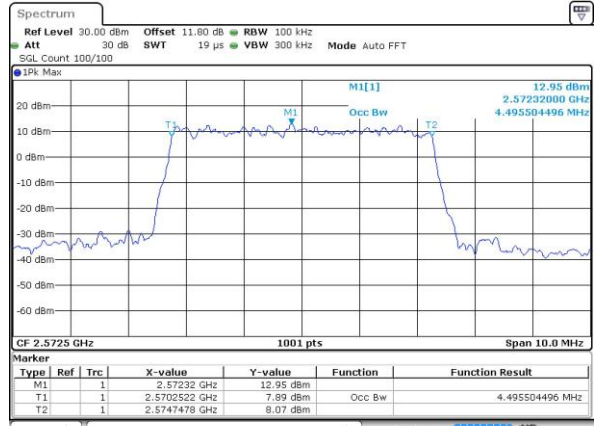
LTE Band 38

Lowest Channel / 5MHz / QPSK



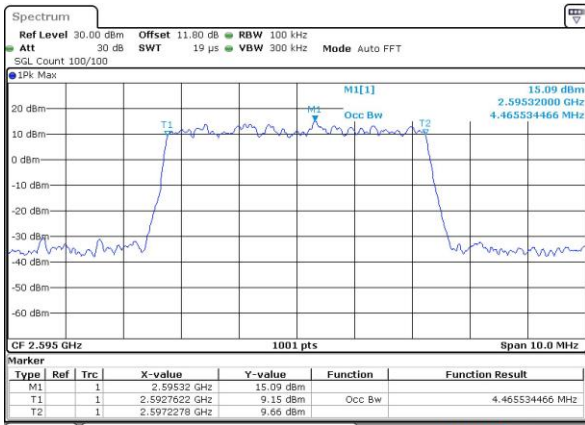
Date: 12 MAY 2017 09:52:59

Lowest Channel / 5MHz / 16QAM



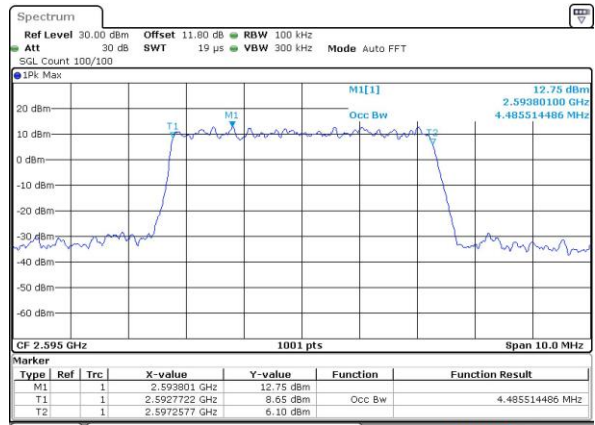
Date: 12 MAY 2017 09:53:09

Middle Channel / 5MHz / QPSK



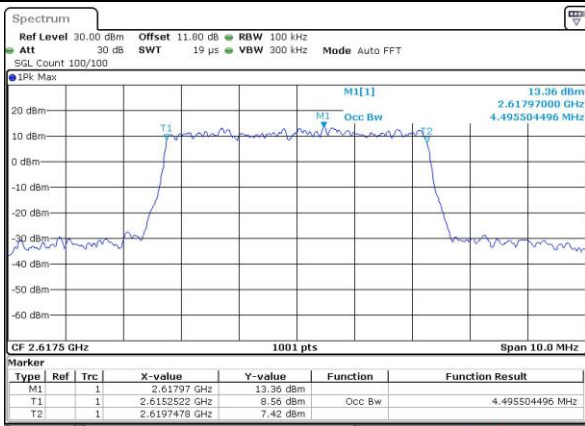
Date: 12 MAY 2017 09:53:40

Middle Channel / 5MHz / 16QAM



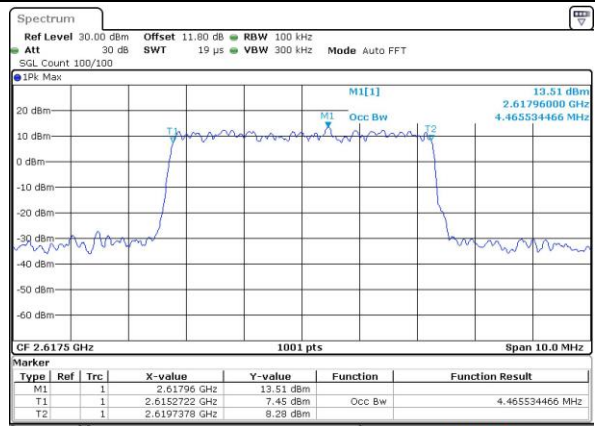
Date: 12 MAY 2017 09:53:50

Highest Channel / 5MHz / QPSK



Date: 12 MAY 2017 09:54:21

Highest Channel / 5MHz / 16QAM

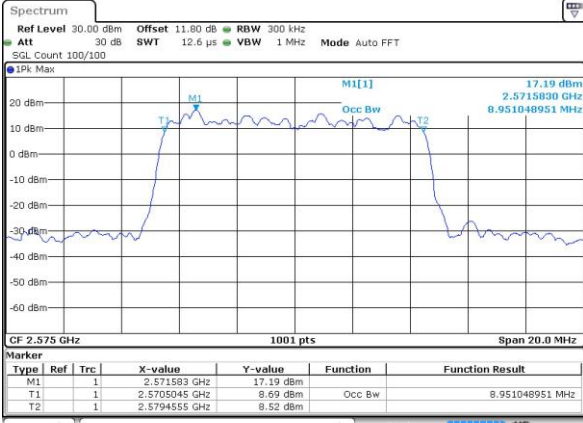


Date: 12 MAY 2017 09:54:32



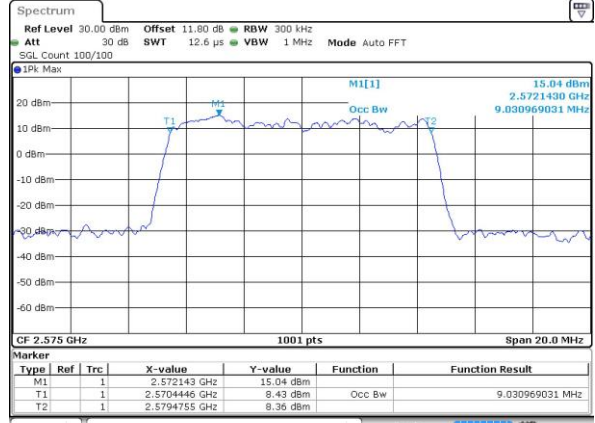
LTE Band 38

Lowest Channel / 10MHz / QPSK



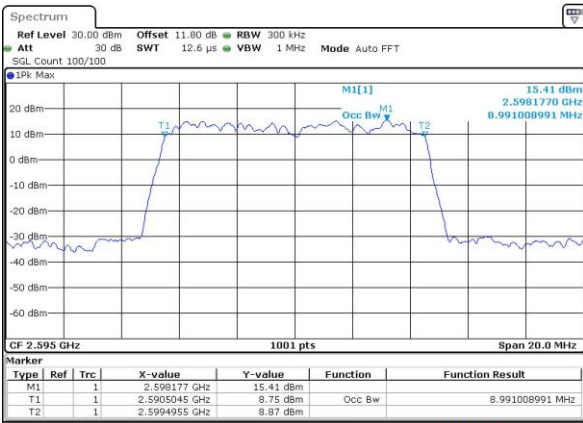
Date: 12 MAY 2017 09:55:03

Lowest Channel / 10MHz / 16QAM



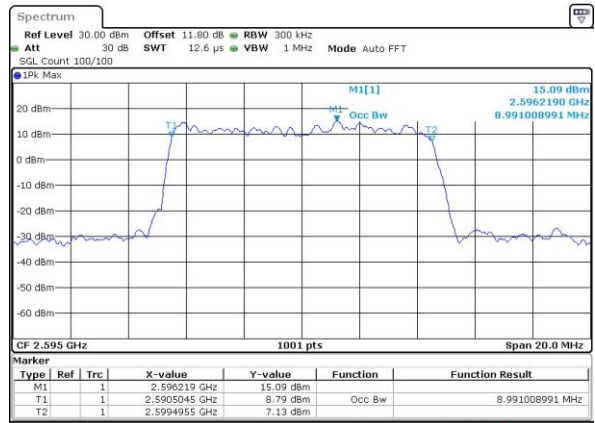
Date: 12 MAY 2017 09:55:14

Middle Channel / 10MHz / QPSK



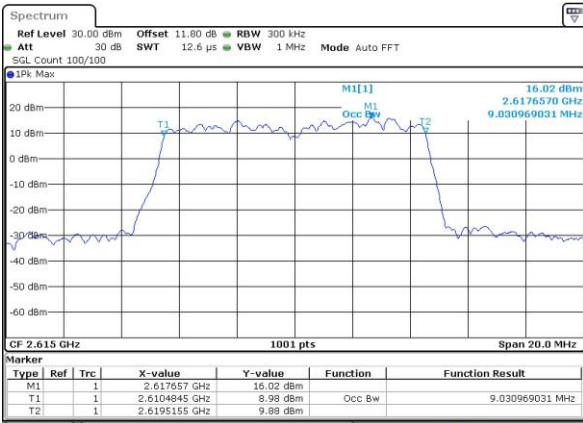
Date: 12 MAY 2017 09:55:45

Middle Channel / 10MHz / 16QAM



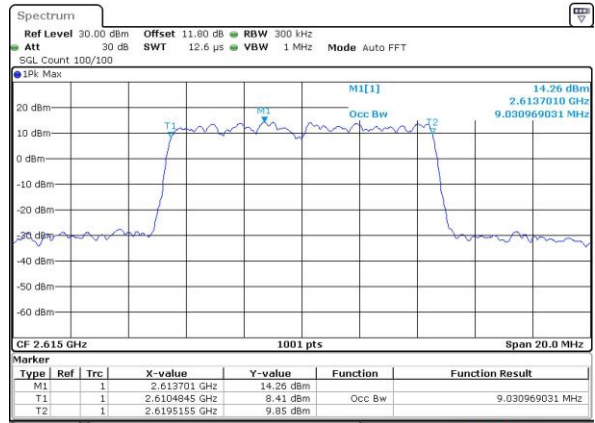
Date: 12 MAY 2017 09:55:55

Highest Channel / 10MHz / QPSK



Date: 12 MAY 2017 09:56:26

Highest Channel / 10MHz / 16QAM

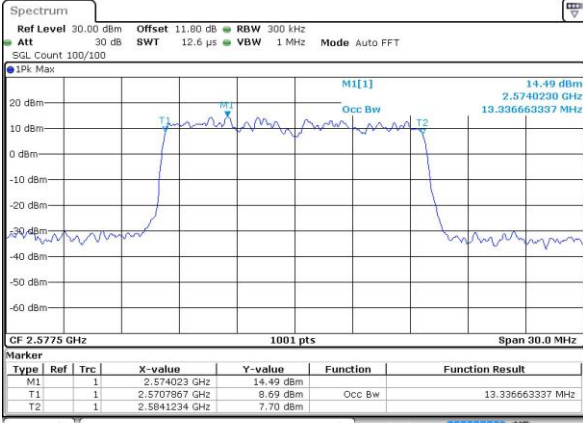


Date: 12 MAY 2017 09:56:37



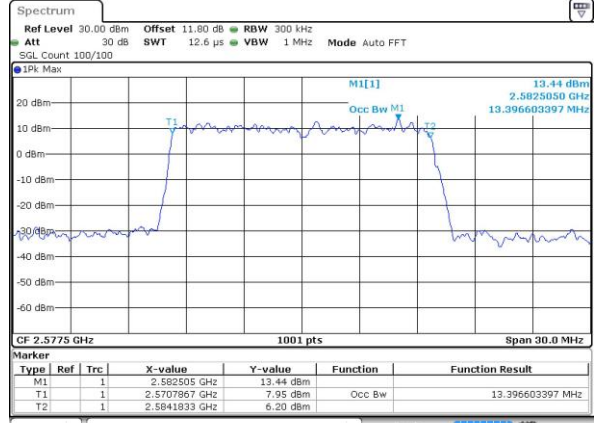
LTE Band 38

Lowest Channel / 15MHz / QPSK



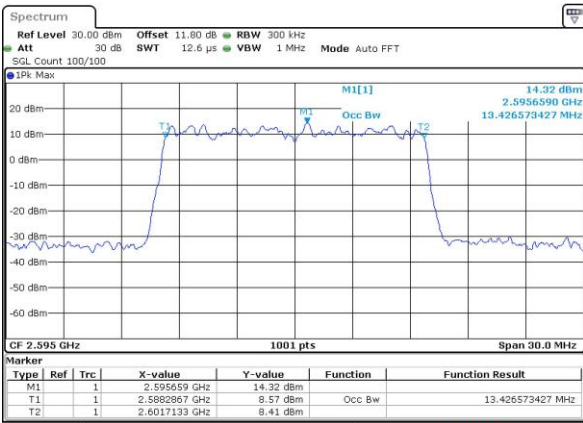
Date: 12.MAY.2017 09:57:08

Lowest Channel / 15MHz / 16QAM



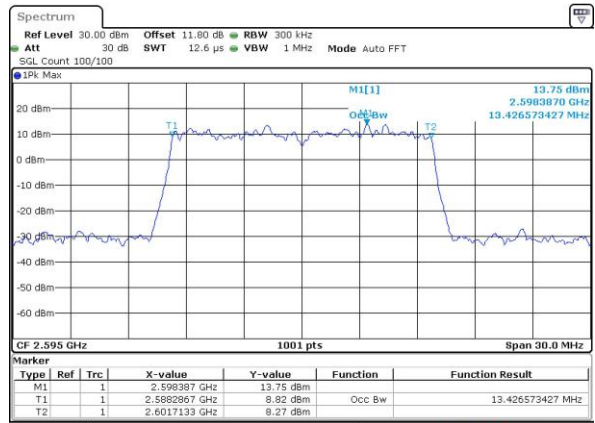
Date: 12.MAY.2017 09:57:18

Middle Channel / 15MHz / QPSK



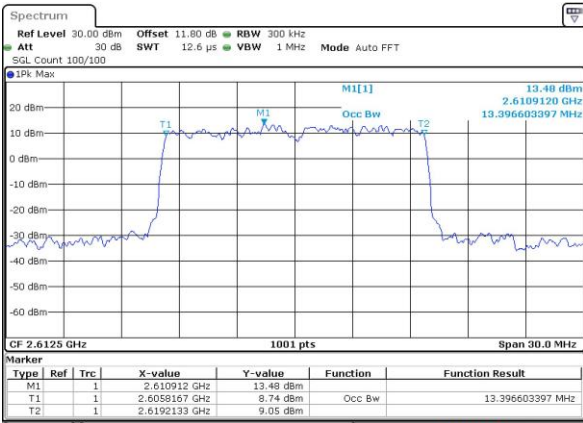
Date: 12.MAY.2017 09:57:49

Middle Channel / 15MHz / 16QAM



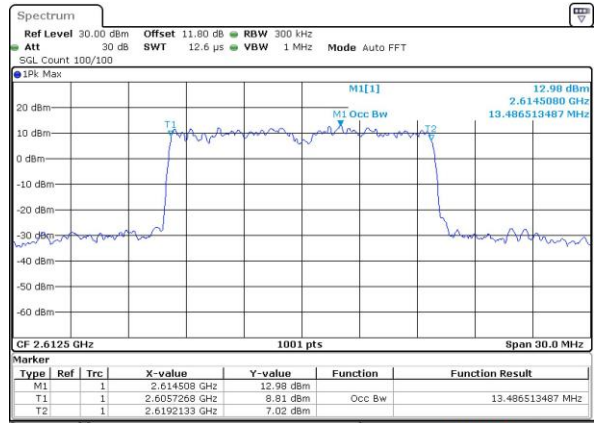
Date: 12.MAY.2017 09:57:59

Highest Channel / 15MHz / QPSK



Date: 12.MAY.2017 09:58:31

Highest Channel / 15MHz / 16QAM

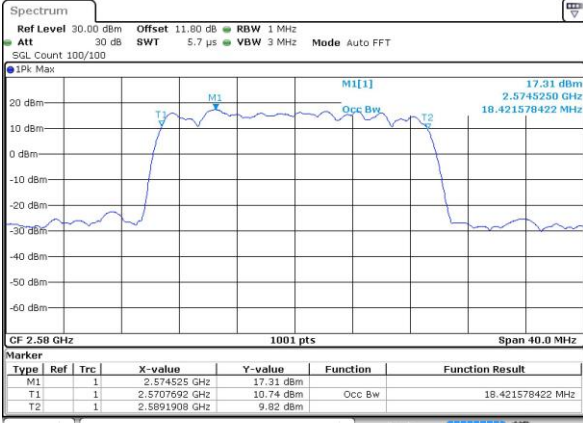


Date: 12.MAY.2017 09:58:41



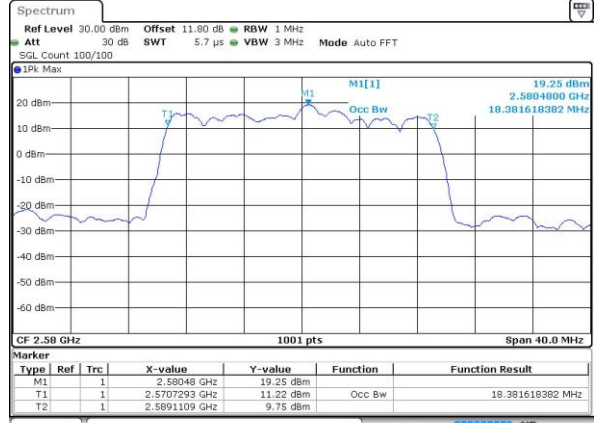
LTE Band 38

Lowest Channel / 20MHz / QPSK



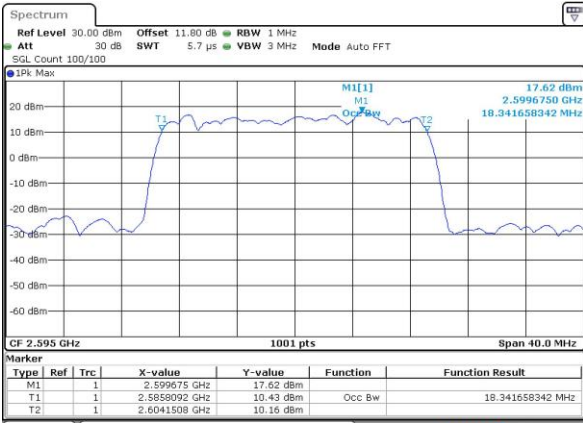
Date: 12 MAY 2017 09:59:12

Lowest Channel / 20MHz / 16QAM



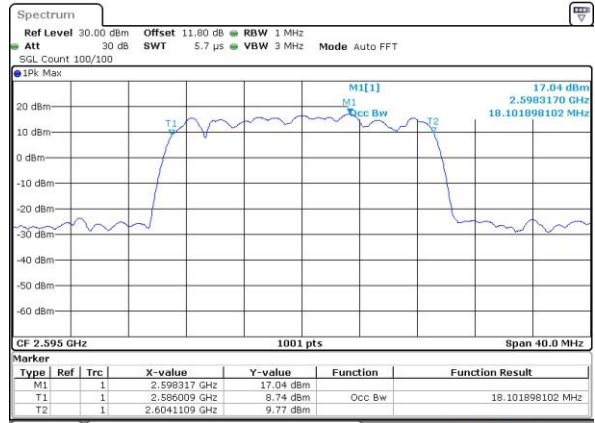
Date: 12 MAY 2017 09:59:23

Middle Channel / 20MHz / QPSK



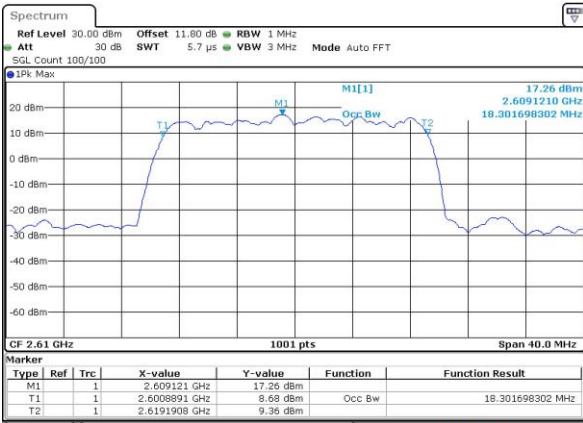
Date: 12 MAY 2017 09:59:54

Middle Channel / 20MHz / 16QAM



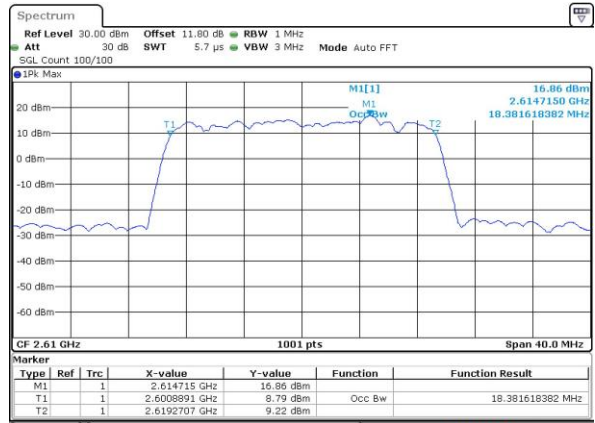
Date: 12 MAY 2017 10:00:04

Highest Channel / 20MHz / QPSK



Date: 12 MAY 2017 10:00:35

Highest Channel / 20MHz / 16QAM

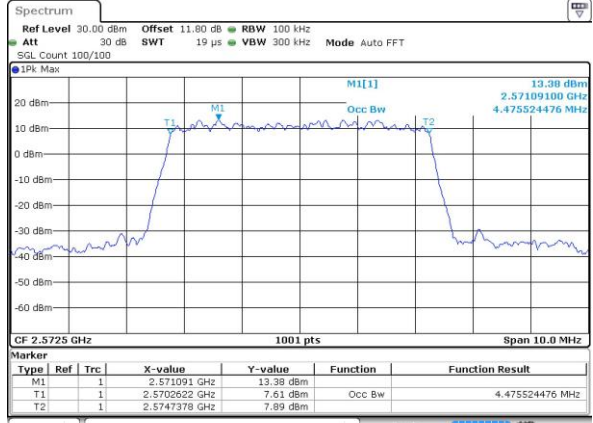


Date: 12 MAY 2017 10:00:46



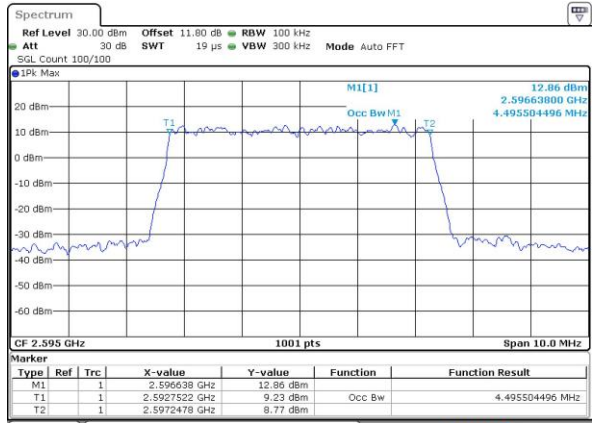
LTE Band 38

Lowest Channel / 5MHz / 64QAM



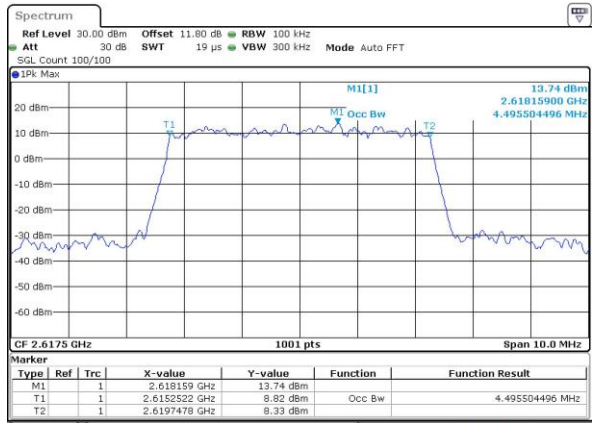
Date: 13 MAY 2017 21:58:37

Middle Channel / 5MHz / 64QAM



Date: 13 MAY 2017 21:58:58

Highest Channel / 5MHz / 64QAM

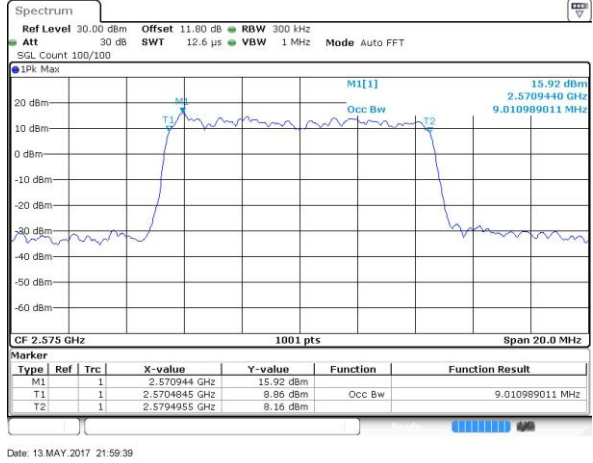


Date: 13 MAY 2017 21:59:18

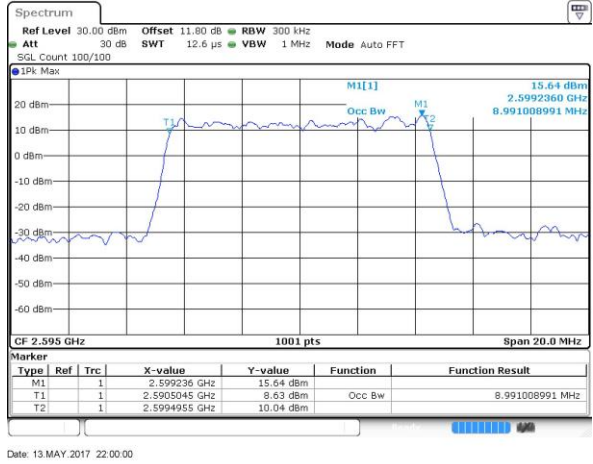


LTE Band 38

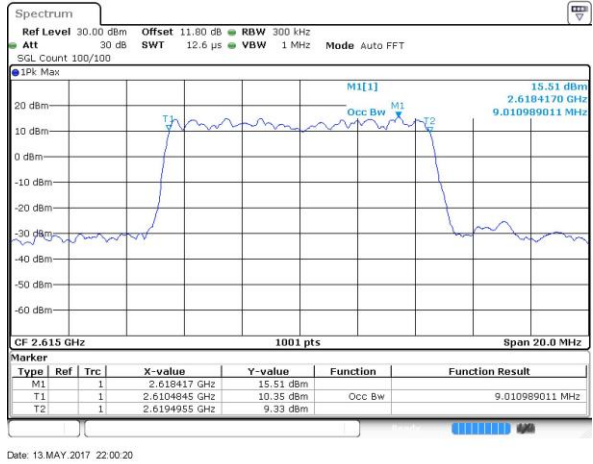
Lowest Channel / 10MHz / 64QAM



Middle Channel / 10MHz / 64QAM



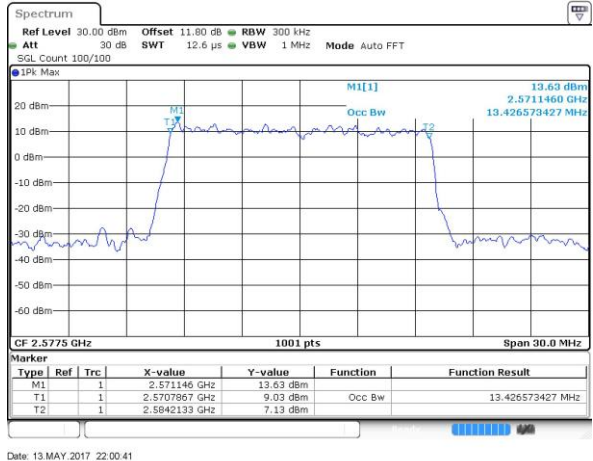
Highest Channel / 10MHz / 64QAM





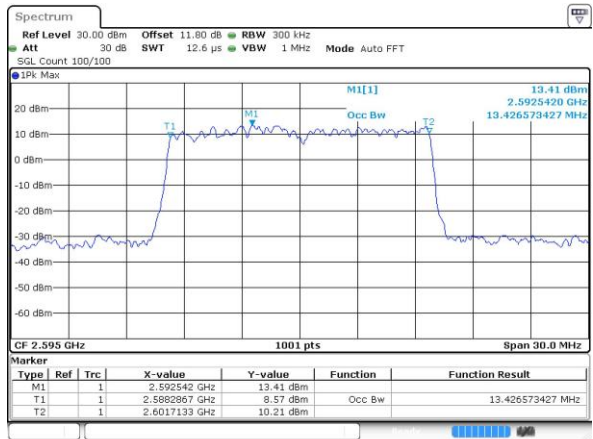
LTE Band 38

Lowest Channel / 15MHz / 64QAM



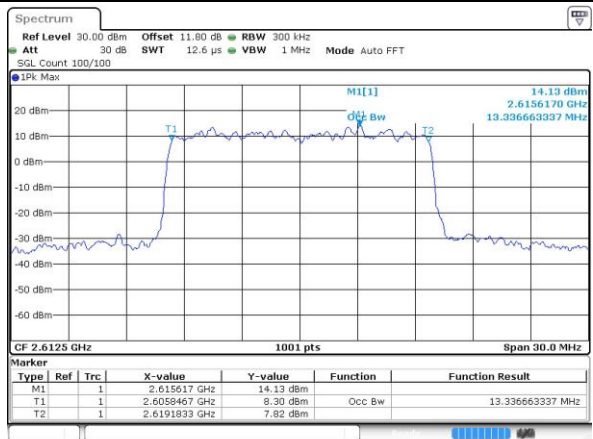
Date: 13 MAY 2017 22:00:41

Middle Channel / 15MHz / 64QAM



Date: 13 MAY 2017 22:01:02

Highest Channel / 15MHz / 64QAM

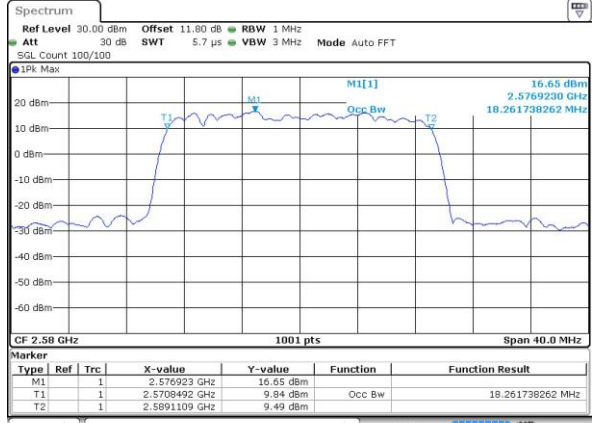


Date: 13 MAY 2017 22:01:23



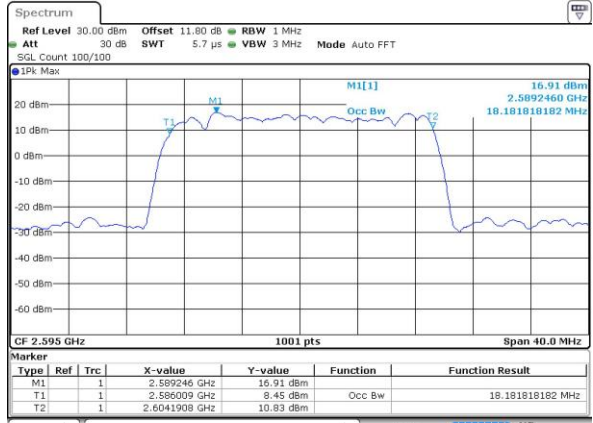
LTE Band 38

Lowest Channel / 20MHz / 64QAM



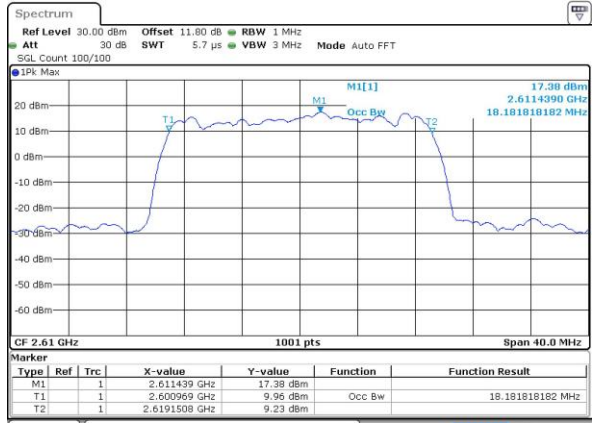
Date: 13 MAY 2017 22:01:43

Middle Channel / 20MHz / 64QAM



Date: 13 MAY 2017 22:02:04

Highest Channel / 20MHz / 64QAM



Date: 13 MAY 2017 22:02:25



Conducted Band Edge

