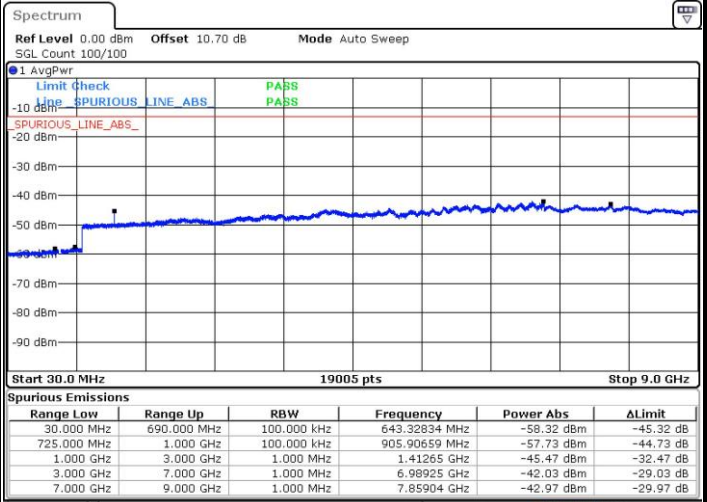
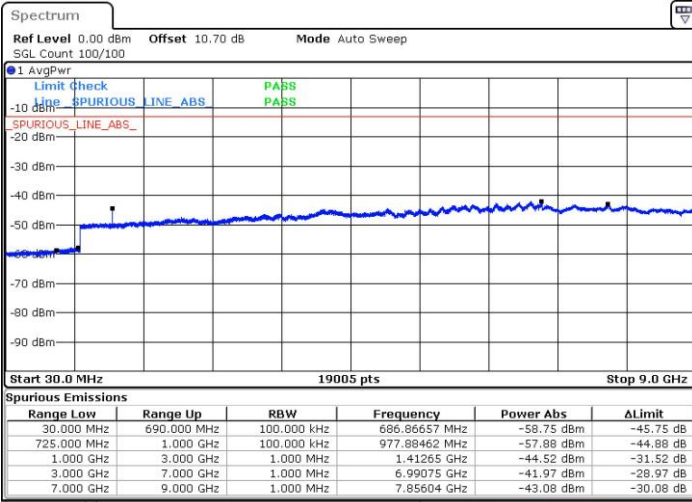




LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

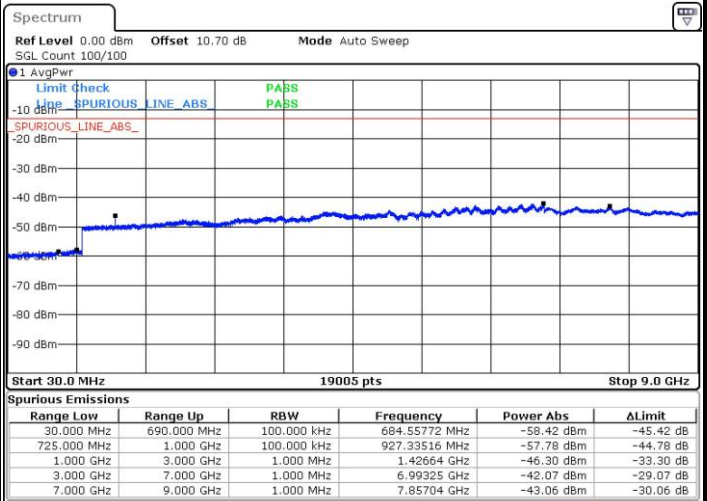
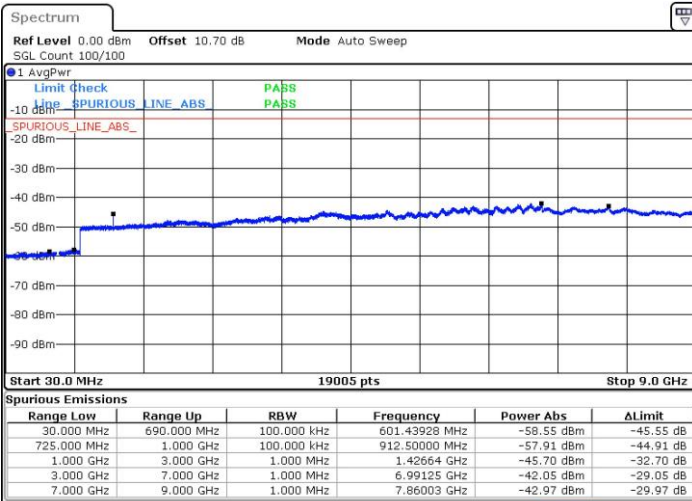


Date: 13 JUN 2017 09:13:02

Date: 13 JUN 2017 09:12:08

Highest Channel / QPSK

Highest Channel / 16QAM



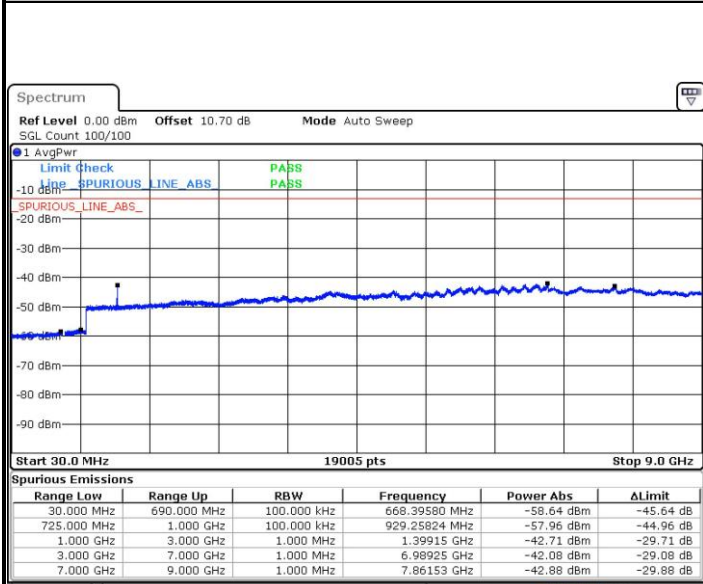
Date: 13 JUN 2017 09:19:14

Date: 13 JUN 2017 09:20:09



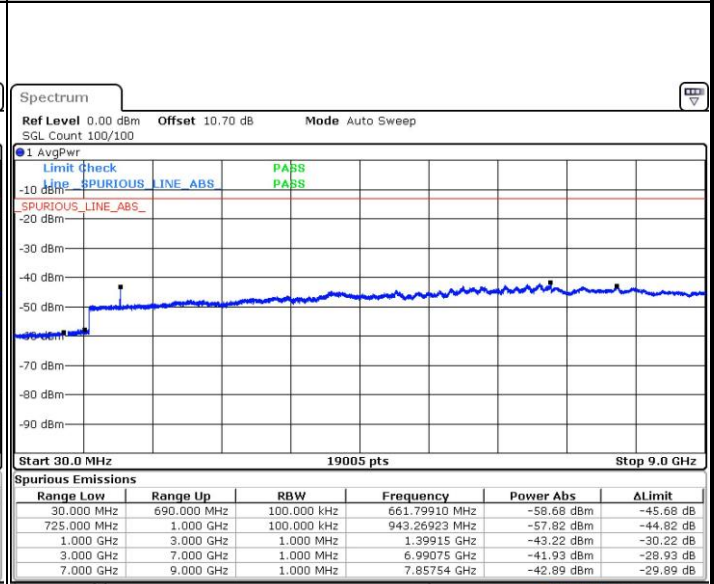
LTE Band 12 / 5MHz

Lowest Channel / QPSK



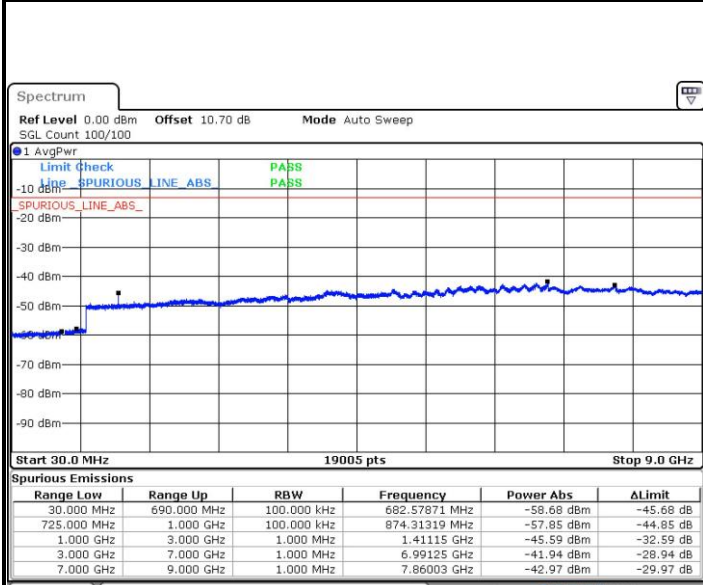
Date: 13 JUN 2017 09:26:21

Lowest Channel / 16QAM



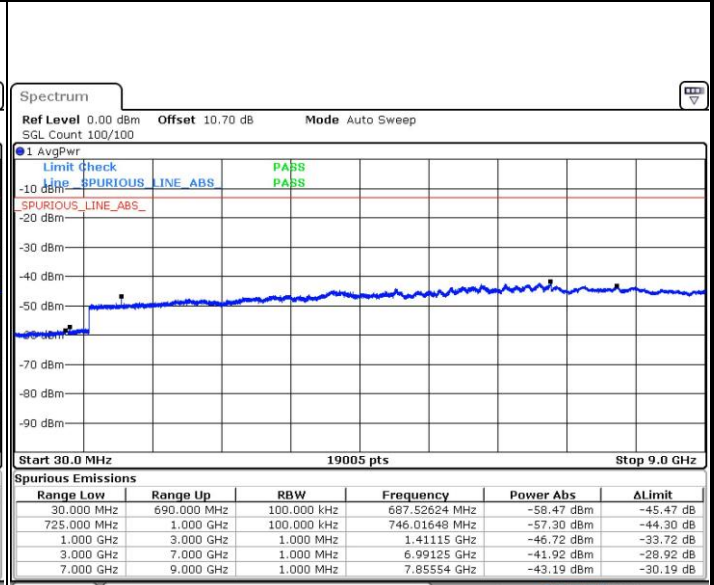
Date: 13 JUN 2017 09:27:15

Middle Channel / QPSK



Date: 13 JUN 2017 09:29:46

Middle Channel / 16QAM

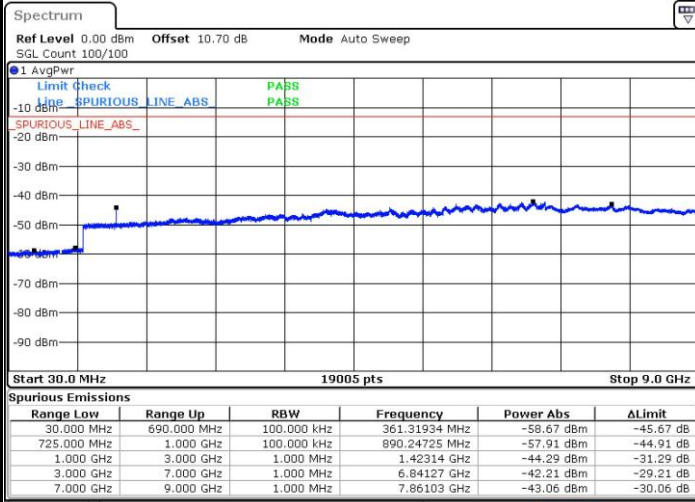


Date: 13 JUN 2017 09:28:51



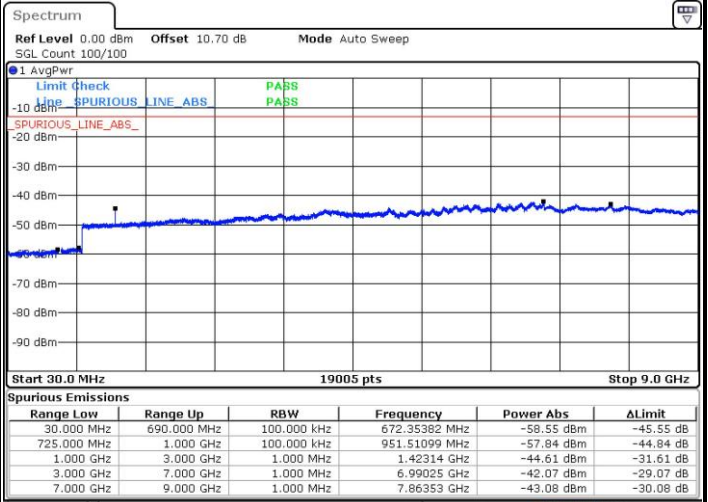
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 13 JUN 2017 09:36:52

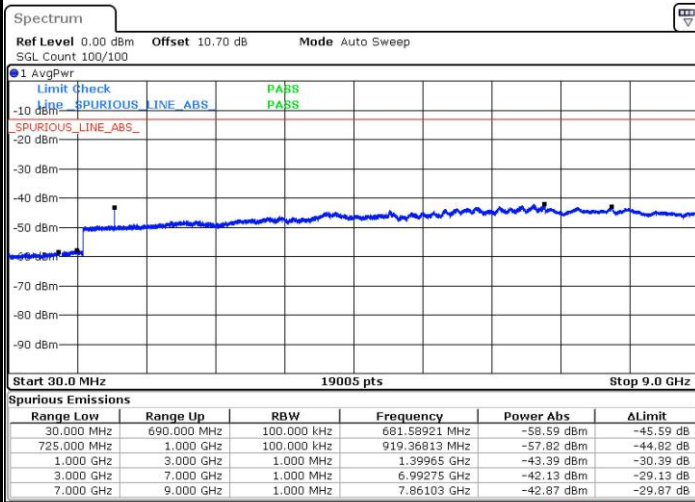
Highest Channel / 16QAM



Date: 13 JUN 2017 09:35:58

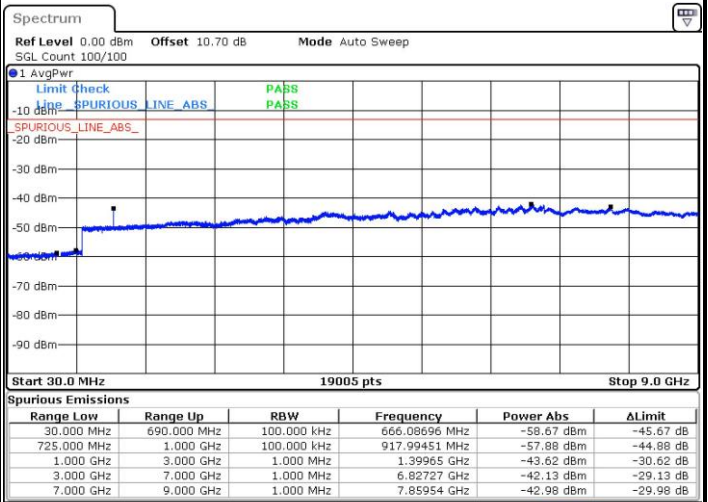
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 13 JUN 2017 09:43:04

Lowest Channel / 16QAM

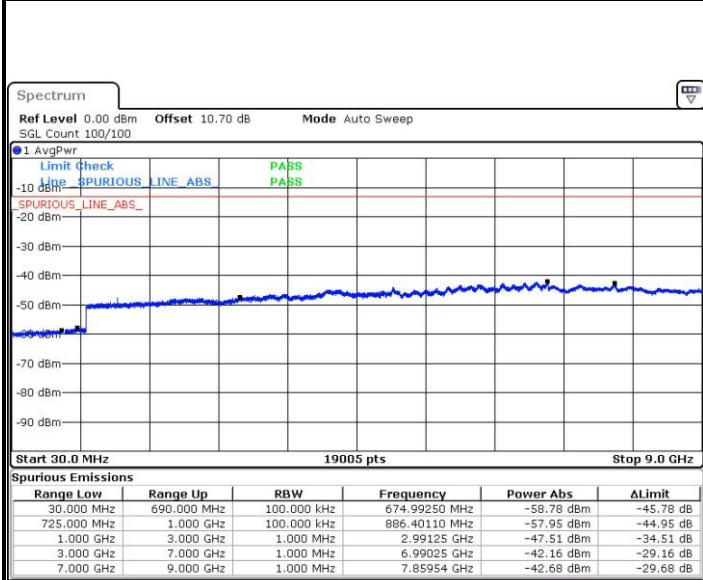


Date: 13 JUN 2017 09:43:59



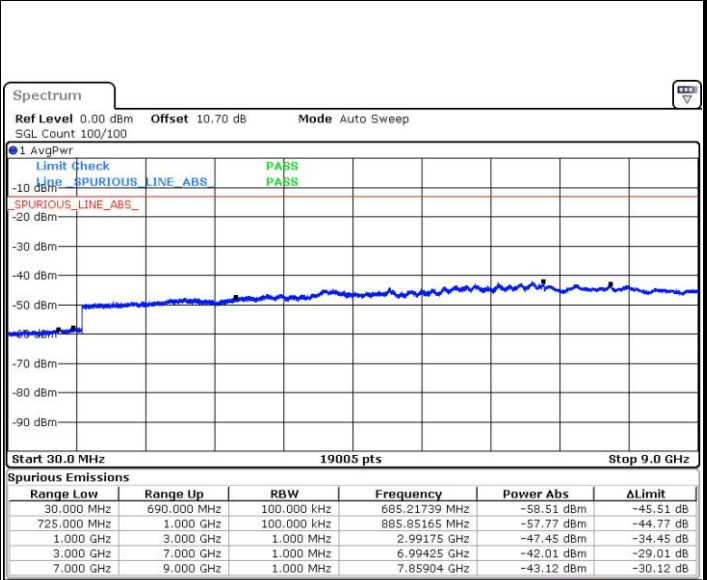
LTE Band 12 / 10MHz

Middle Channel / QPSK



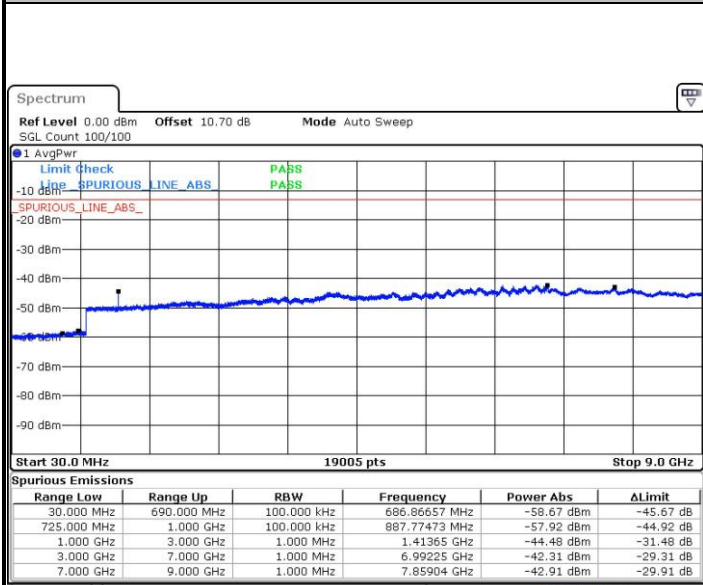
Date: 13 JUN 2017 09:46:28

Middle Channel / 16QAM



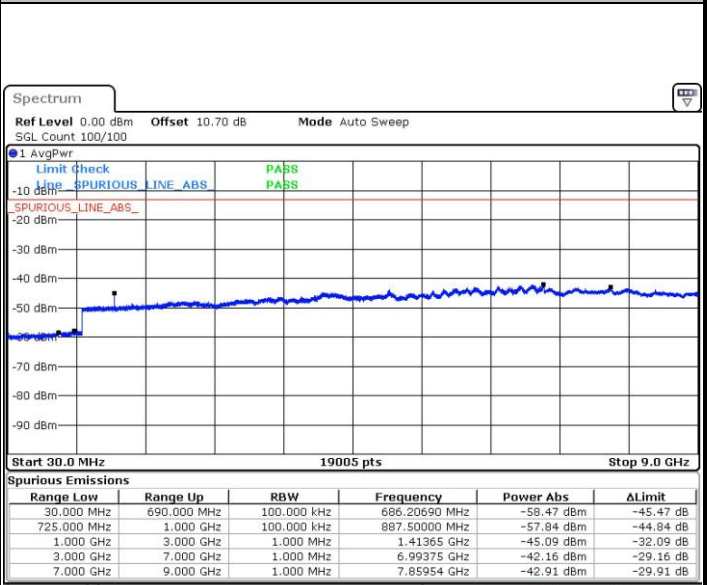
Date: 13 JUN 2017 09:45:34

Highest Channel / QPSK



Date: 13 JUN 2017 09:52:41

Highest Channel / 16QAM



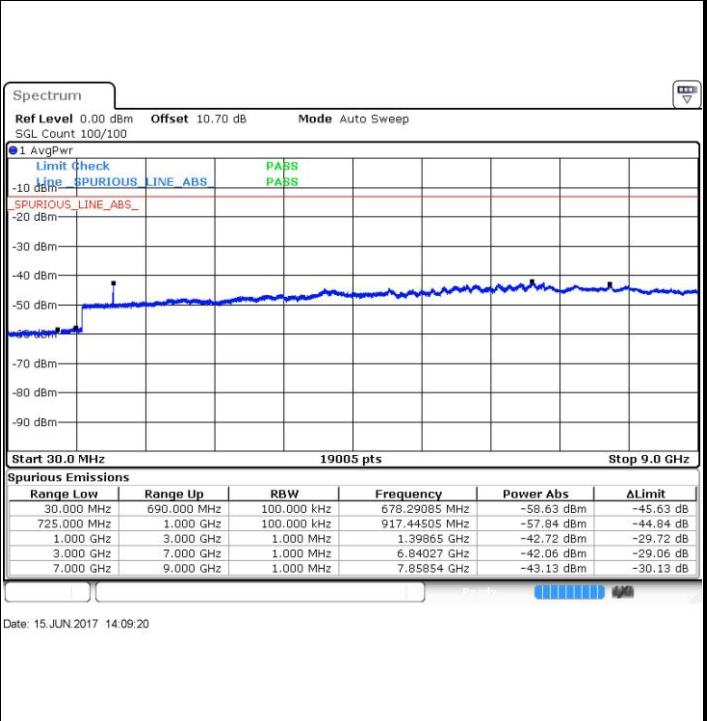
Date: 13 JUN 2017 09:53:35



LTE Band 12 / 1.4MHz

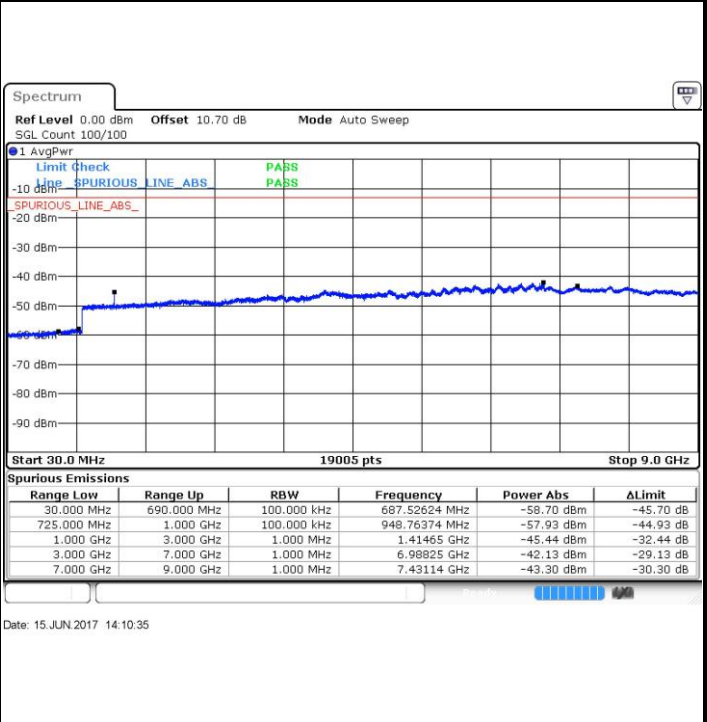
-

Lowest Channel / 64QAM



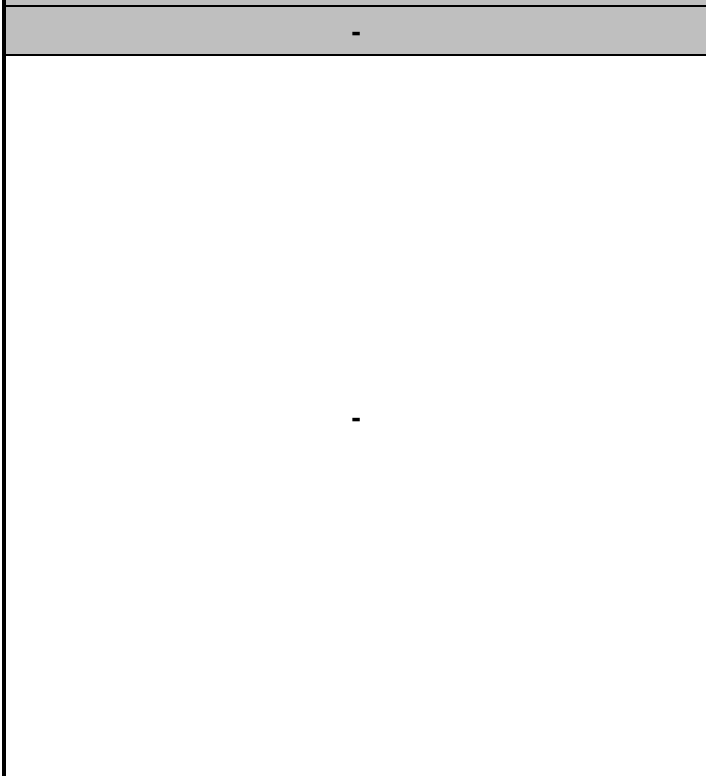
-

Middle Channel / 64QAM

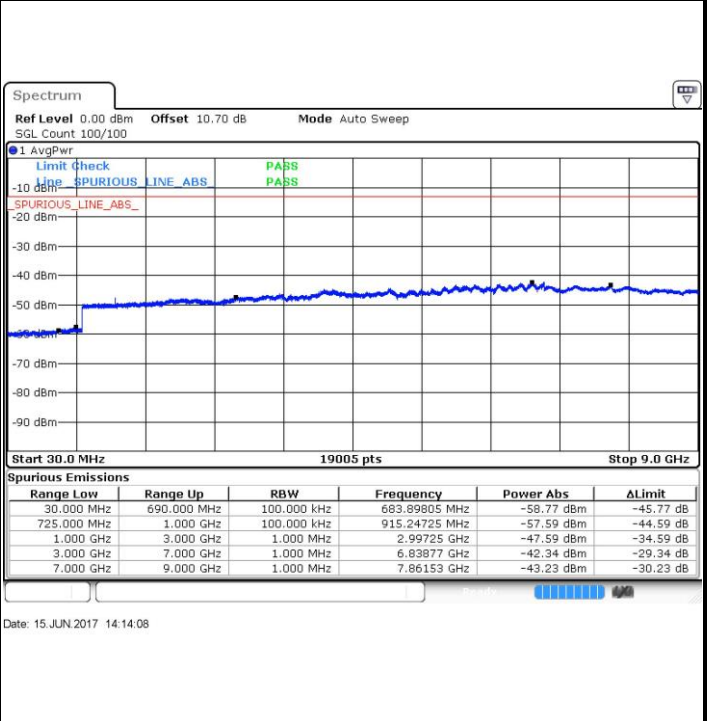




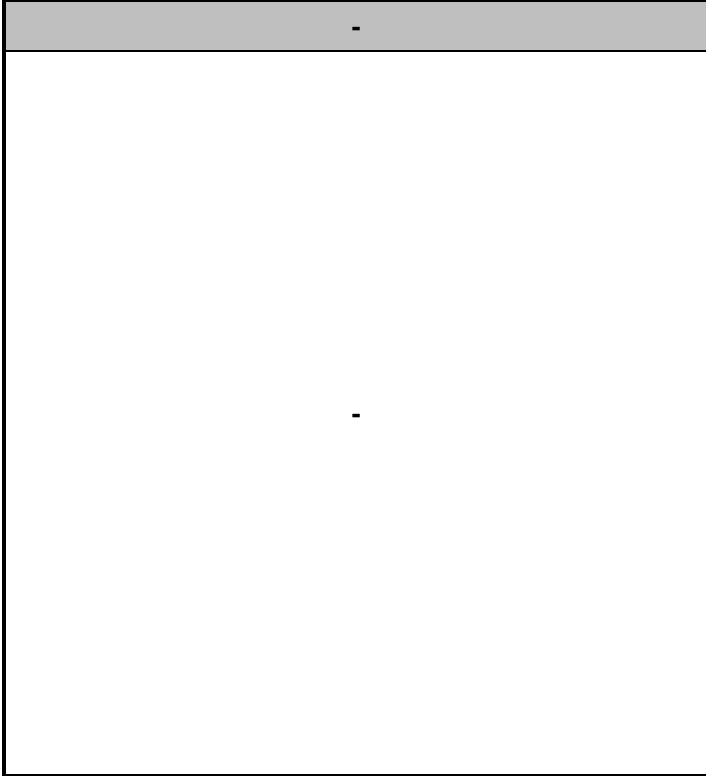
LTE Band 12 / 1.4MHz



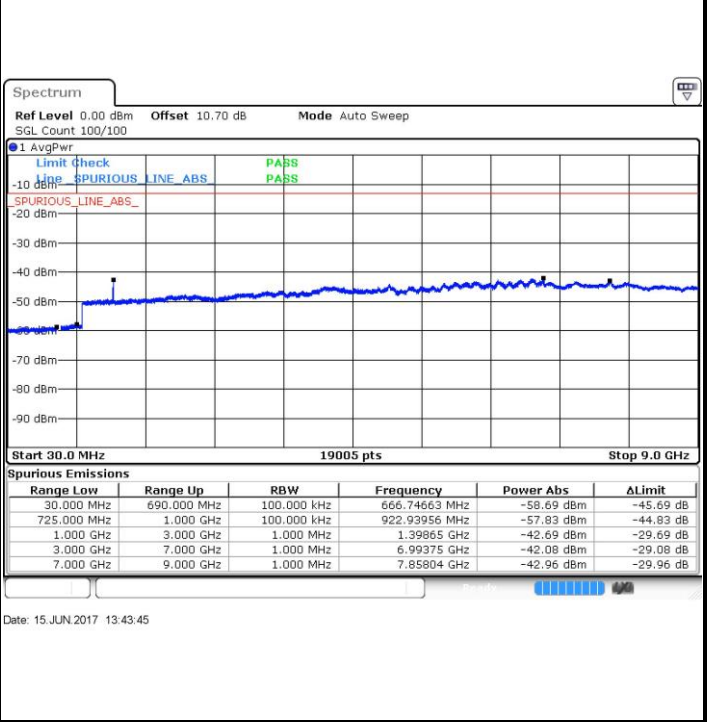
Highest Channel / 64QAM



LTE Band 12 / 3MHz



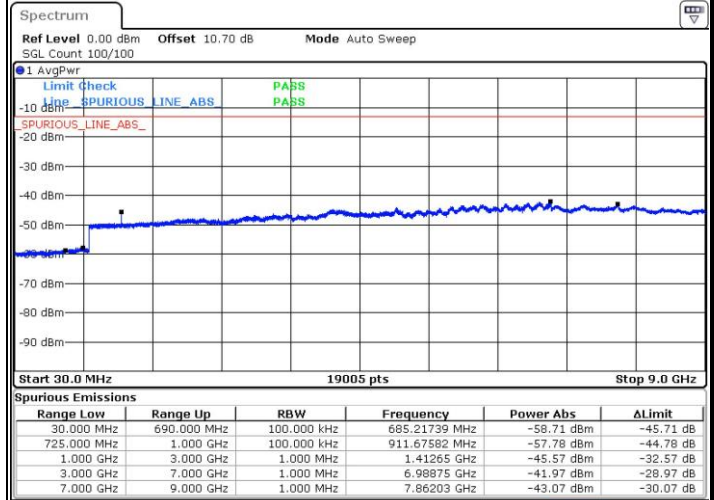
Lowest Channel / 64QAM





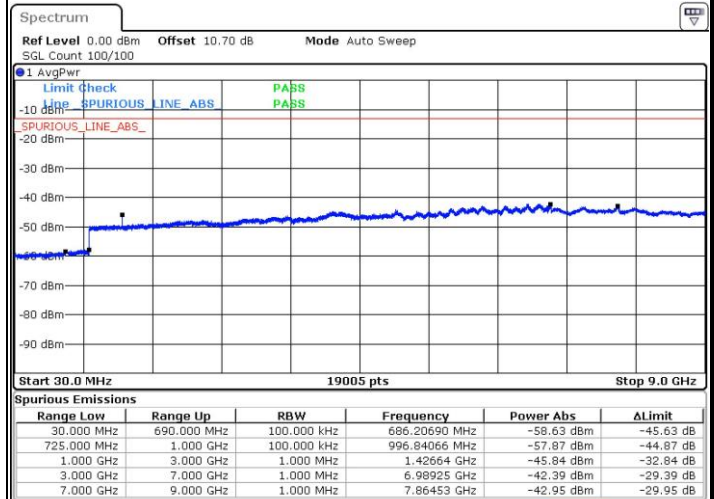
LTE Band 12 / 3MHz

Middle Channel / 64QAM



Date: 15 JUN 2017 13:45:00

Highest Channel / 64QAM



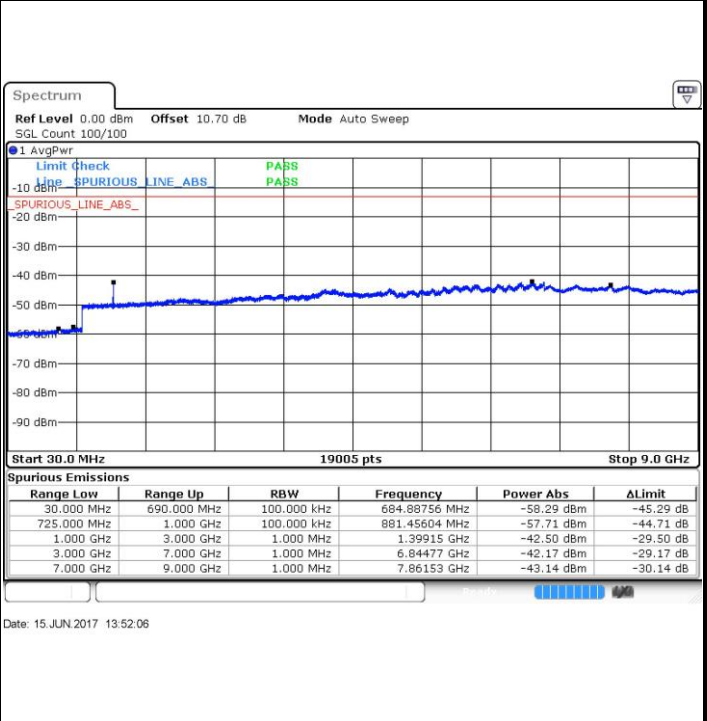
Date: 15 JUN 2017 13:48:33



LTE Band 12 / 5MHz

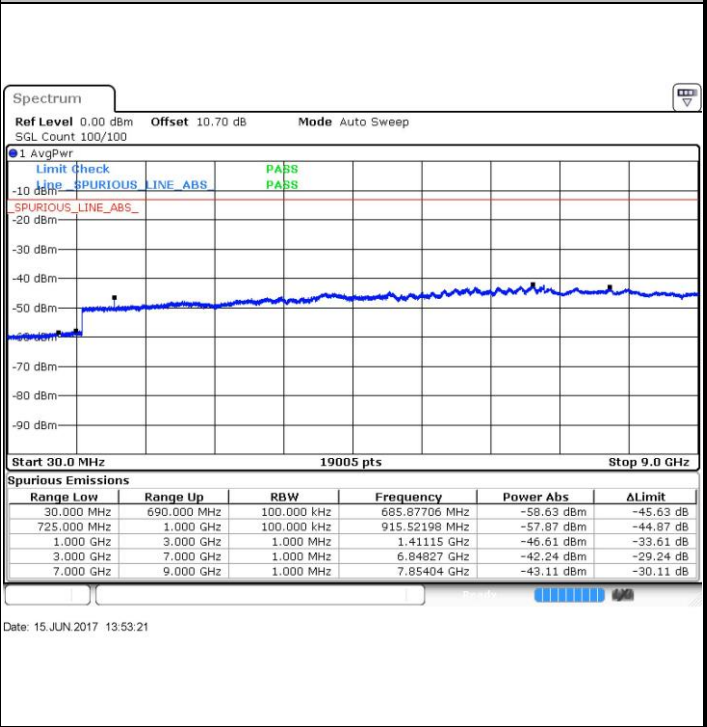
-

Lowest Channel / 64QAM



-

Middle Channel / 64QAM

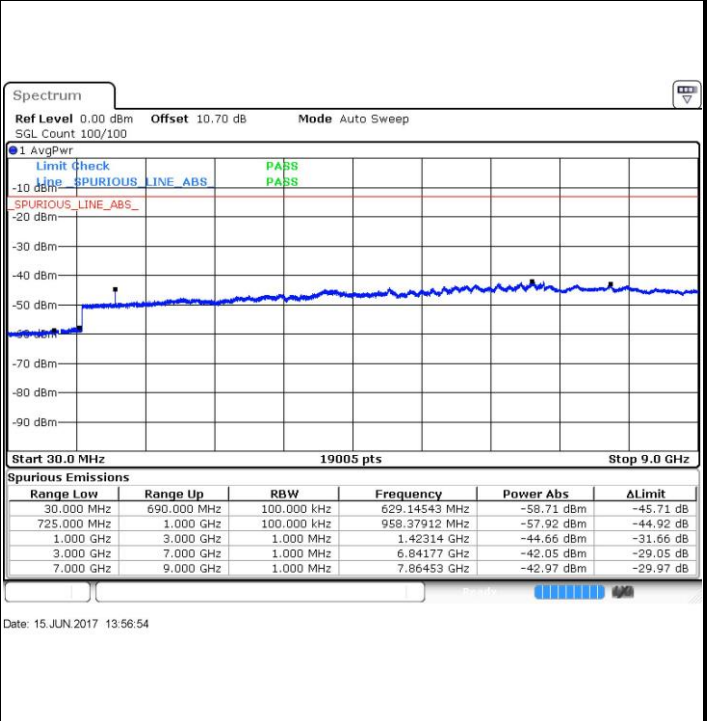




LTE Band 12 / 5MHz

-

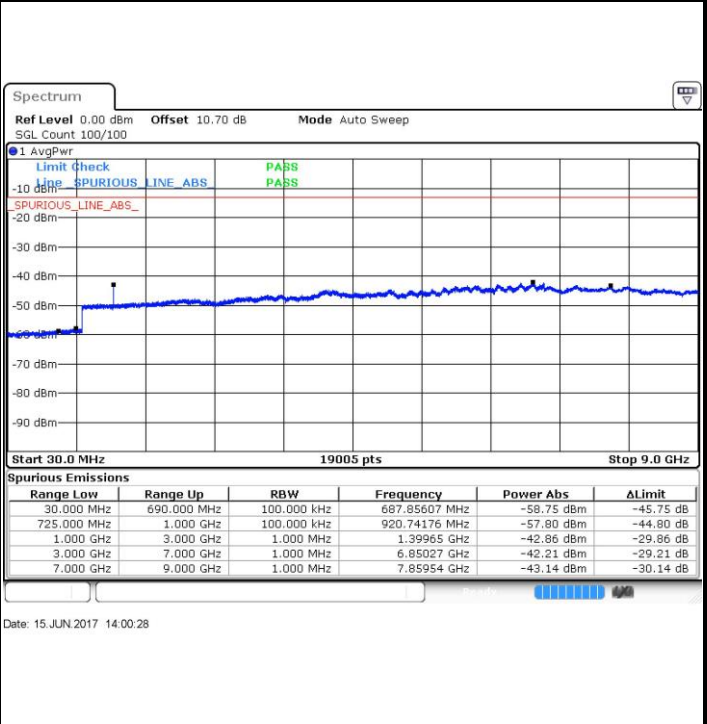
Highest Channel / 64QAM



LTE Band 12 / 10MHz

-

Lowest Channel / 64QAM

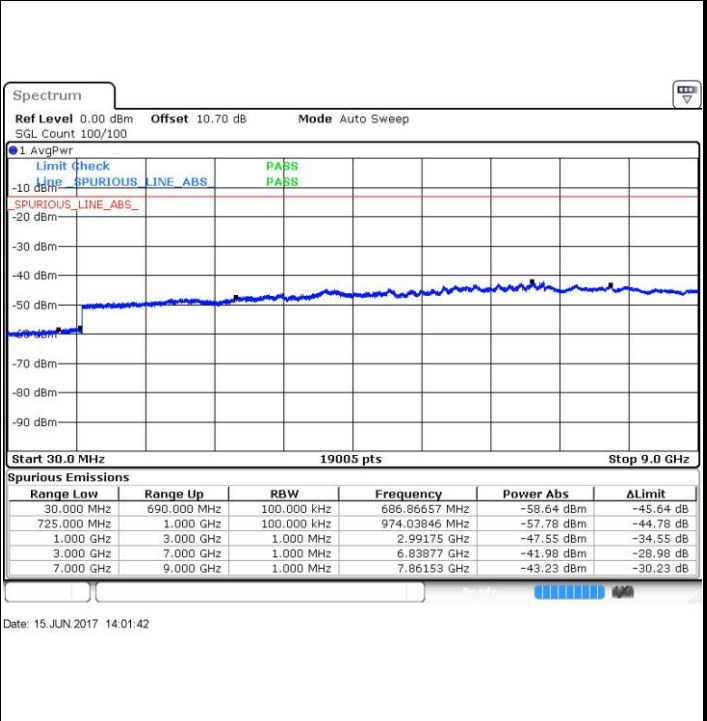




LTE Band 12 / 10MHz

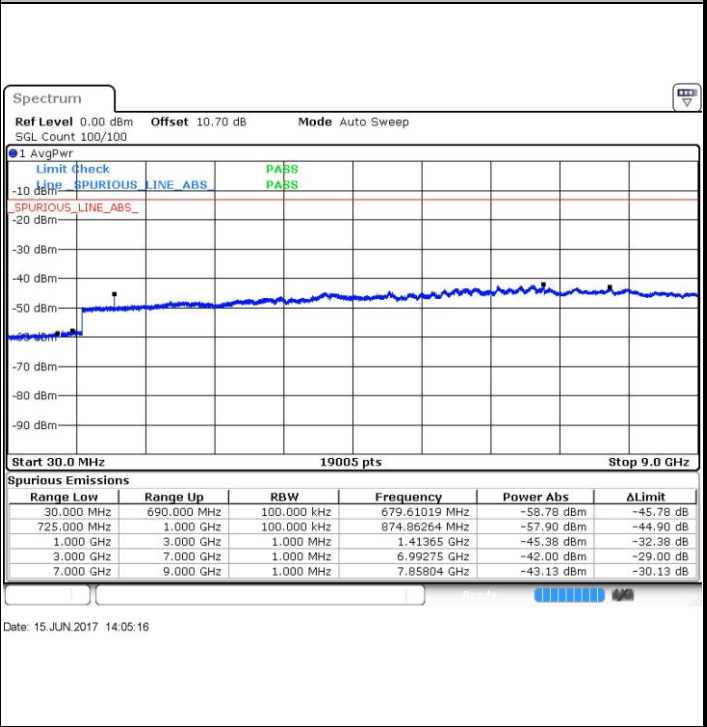
-

Middle Channel / 64QAM



-

Highest Channel / 64QAM





Frequency Stability

| Test Conditions | | LTE Band 12 (QPSK) / Middle Channel | Limit |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | Note 2. |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0014 | PASS |
| 40 | Normal Voltage | 0.0013 | |
| 30 | Normal Voltage | 0.0001 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0064 | |
| 0 | Normal Voltage | 0.0007 | |
| -10 | Normal Voltage | 0.0033 | |
| -20 | Normal Voltage | 0.0035 | |
| -30 | Normal Voltage | 0.0086 | |
| 20 | Maximum Voltage | 0.0147 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0037 | |

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 17

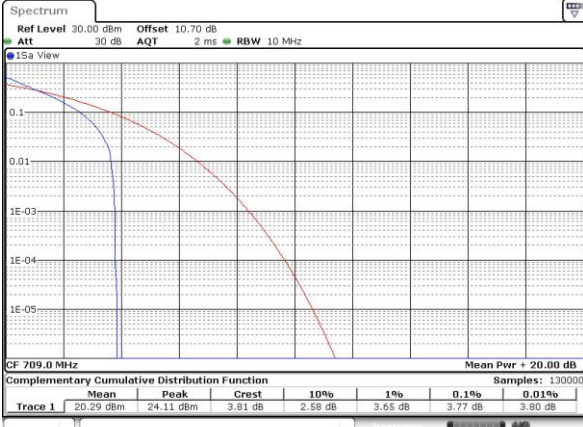
Peak-to-Average Ratio

| Mode | LTE Band 17 / 10MHz | | | | |
|------------|---------------------|---------|-------|---------|-------------|
| Mod. | QPSK | | 16QAM | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | 3.77 | 4.7 | 4.32 | 5.71 | PASS |
| Middle CH | 3.83 | 4.61 | 4.67 | 5.62 | |
| Highest CH | 4.09 | 4.43 | 4.9 | 5.54 | |
| Mode | LTE Band 17 / 10MHz | | | | |
| Mod. | QPSK | | 64QAM | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | - | - | 4.67 | 5.65 | PASS |
| Middle CH | - | - | 5.25 | 5.57 | |
| Highest CH | - | - | 4.7 | 5.45 | |



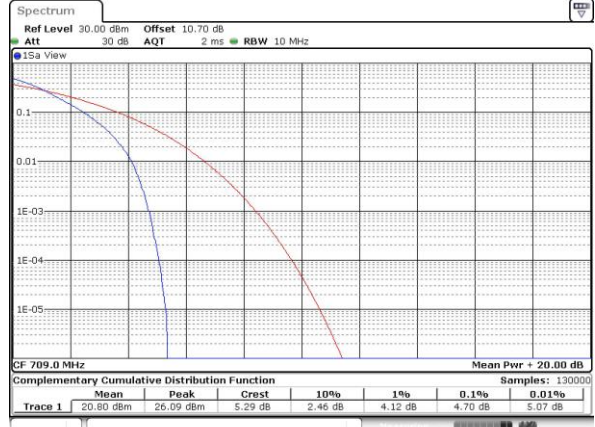
LTE Band 17 / 10MHz / QPSK

Lowest Channel / 1RB



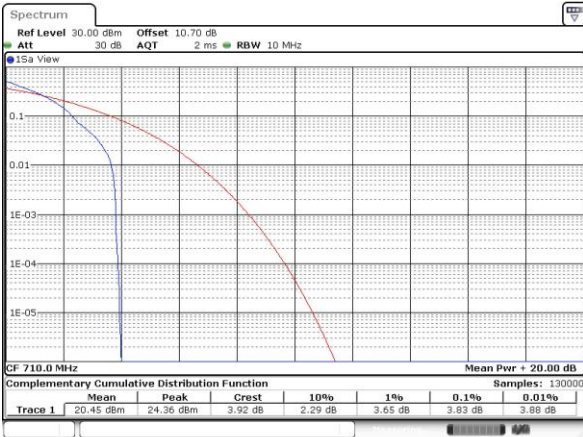
Date: 13 JUN 2017 10:48:21

Lowest Channel / Full RB



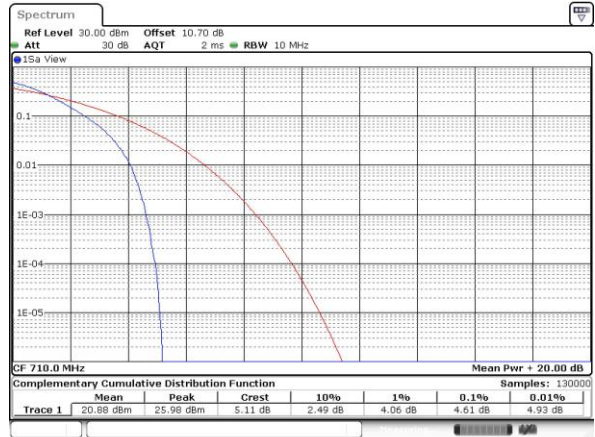
Date: 13 JUN 2017 10:48:32

Middle Channel/ 1RB



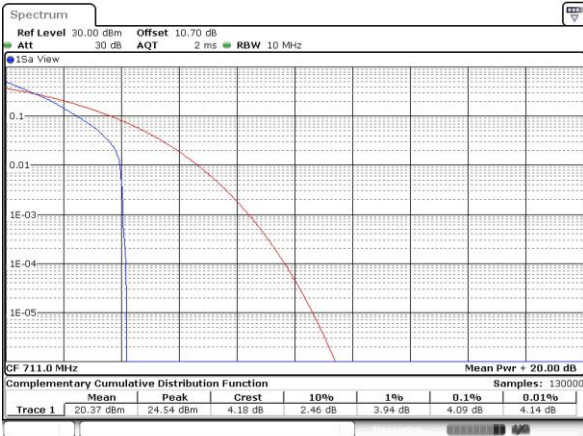
Date: 13 JUN 2017 10:48:59

Middle Channel / Full RB



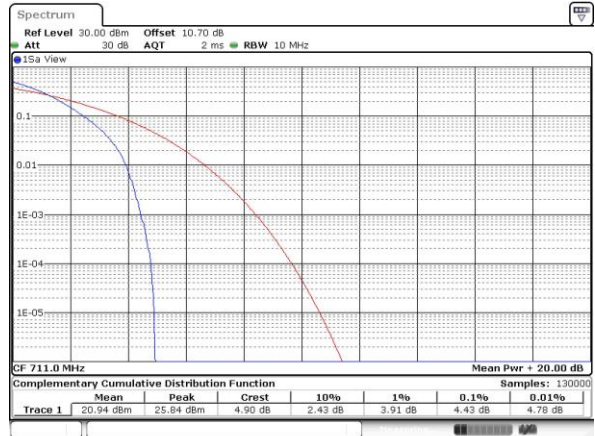
Date: 13 JUN 2017 10:49:09

Highest Channel/ 1RB



Date: 13 JUN 2017 10:49:22

Highest Channel / Full RB



Date: 13 JUN 2017 10:49:32



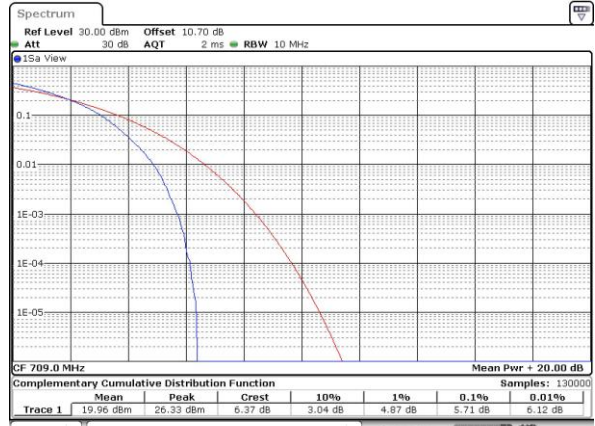
LTE Band 17 / 10MHz / 16QAM

Lowest Channel / 1RB



Date: 13 JUN 2017 10:44:49

Lowest Channel / Full RB



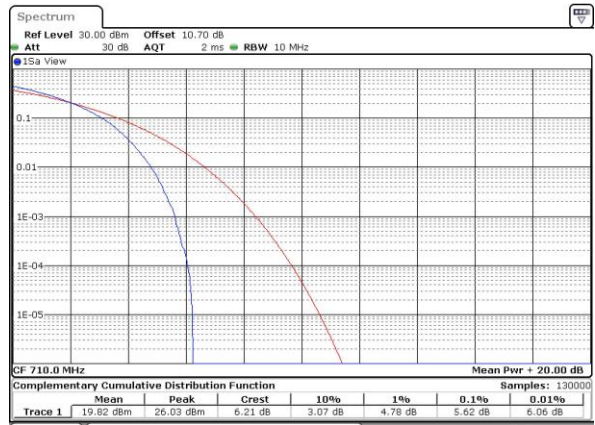
Date: 13 JUN 2017 10:45:04

Middle Channel / 1RB



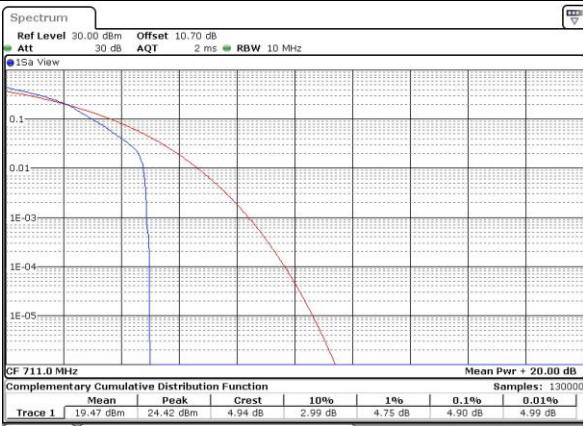
Date: 13 JUN 2017 10:46:27

Middle Channel / Full RB



Date: 13 JUN 2017 10:47:47

Highest Channel / 1RB



Date: 13 JUN 2017 10:47:57

Highest Channel / Full RB

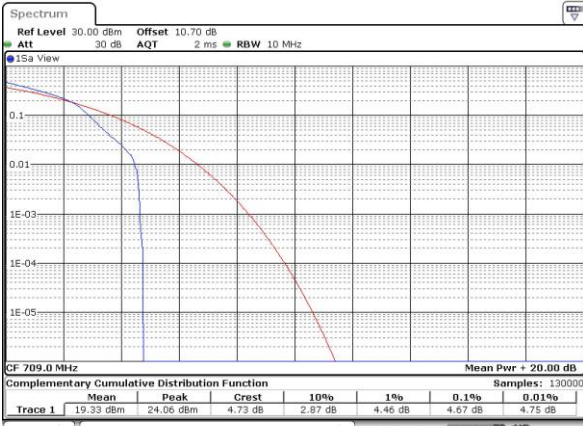


Date: 13 JUN 2017 10:48:10



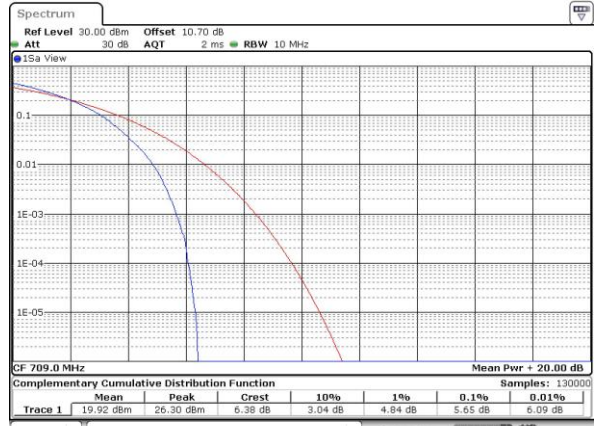
LTE Band 17 / 10MHz / 64QAM

Lowest Channel / 1RB



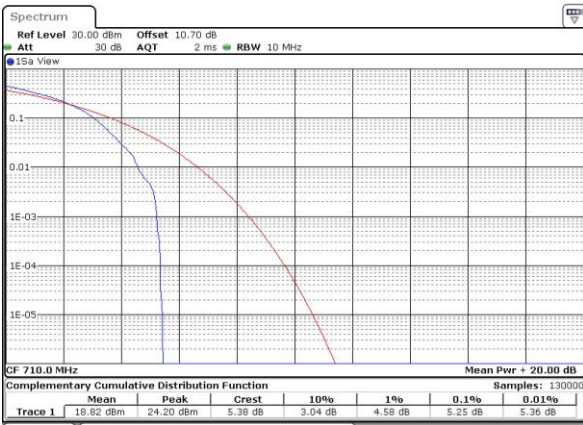
Date: 15 JUN 2017 14:34:28

Lowest Channel / Full RB



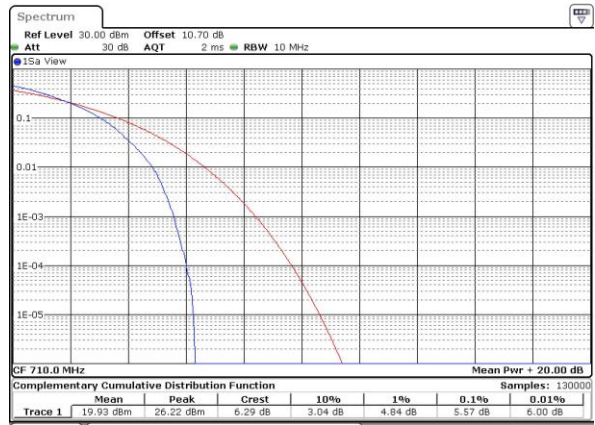
Date: 15 JUN 2017 14:34:40

Middle Channel / 1RB



Date: 15 JUN 2017 14:34:49

Middle Channel / Full RB



Date: 15 JUN 2017 14:35:09

Highest Channel / 1RB



Date: 15 JUN 2017 14:35:25

Highest Channel / Full RB



Date: 15 JUN 2017 14:35:36



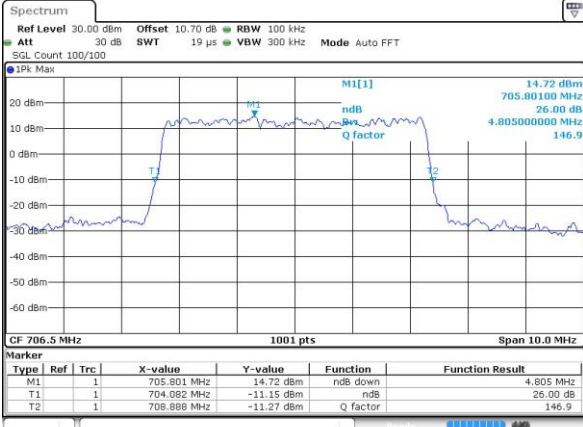
26dB Bandwidth

| Mode | LTE Band 17 : 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 | - | - | - | - | 4.805 | 4.955 | 9.91 | 9.85 | - | - | - | - |
| Middle CH | - | - | - | - | 4.985 | 4.895 | 9.67 | 9.81 | - | - | - | - |
| Highest CH | - | - | - | - | 4.925 | 4.875 | 9.73 | 9.63 | - | - | - | - |
| Mode | LTE Band 17 : 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 | - | - | - | - | - | 4.965 | - | 9.73 | - | - | - | - |
| Middle CH | - | - | - | - | - | 4.895 | - | 9.75 | - | - | - | - |
| Highest CH | - | - | - | - | - | 4.835 | - | 9.73 | - | - | - | - |



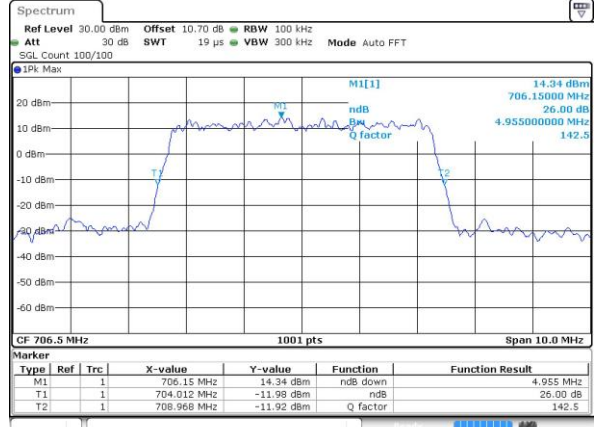
LTE Band 17

Lowest Channel / 5MHz / QPSK



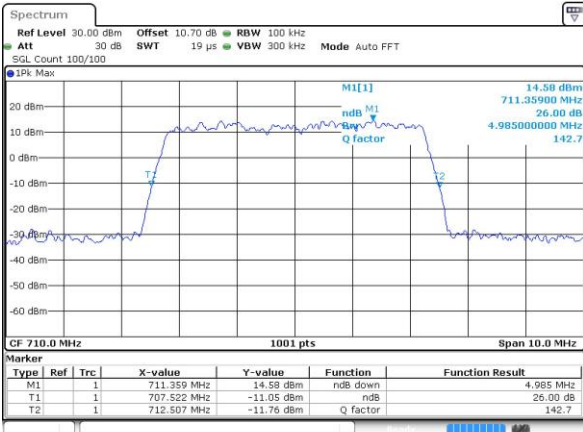
Date: 13 JUN 2017 09:54:06

Lowest Channel / 5MHz / 16QAM



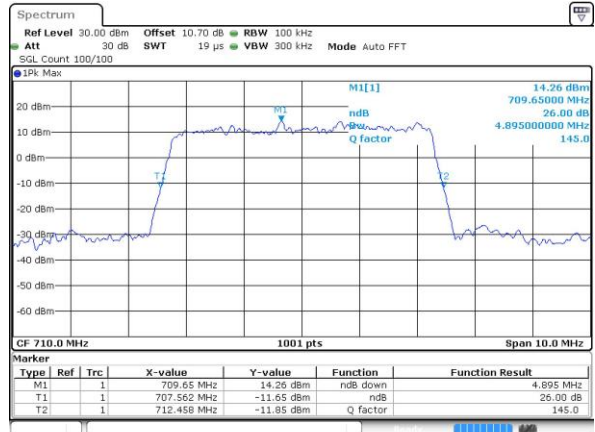
Date: 13 JUN 2017 09:54:16

Middle Channel / 5MHz / QPSK



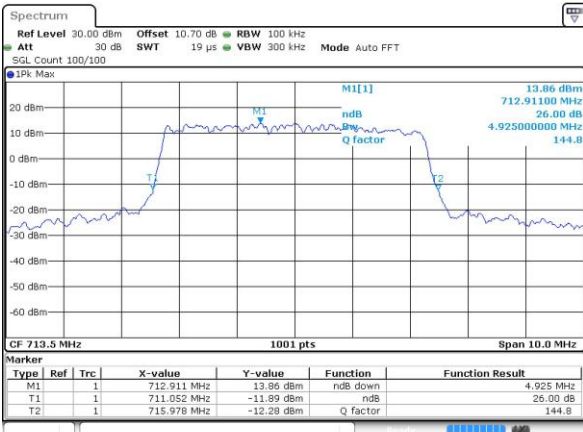
Date: 13 JUN 2017 10:01:12

Middle Channel / 5MHz / 16QAM



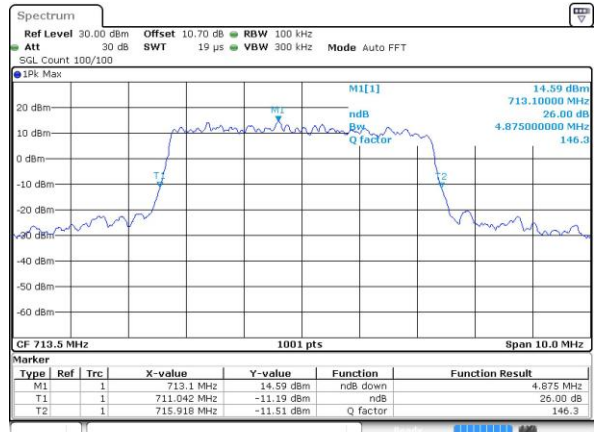
Date: 13 JUN 2017 10:01:23

Highest Channel / 5MHz / QPSK



Date: 13 JUN 2017 10:03:42

Highest Channel / 5MHz / 16QAM

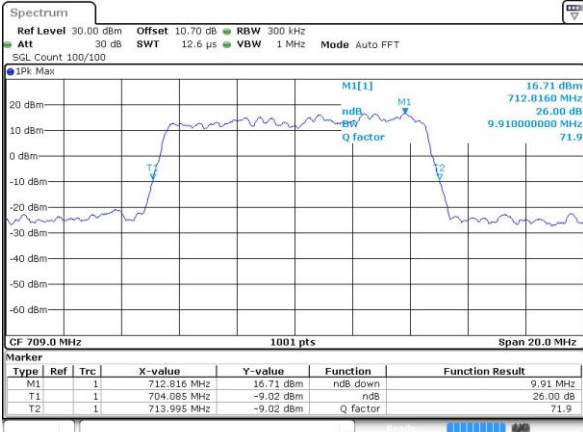


Date: 13 JUN 2017 10:03:53

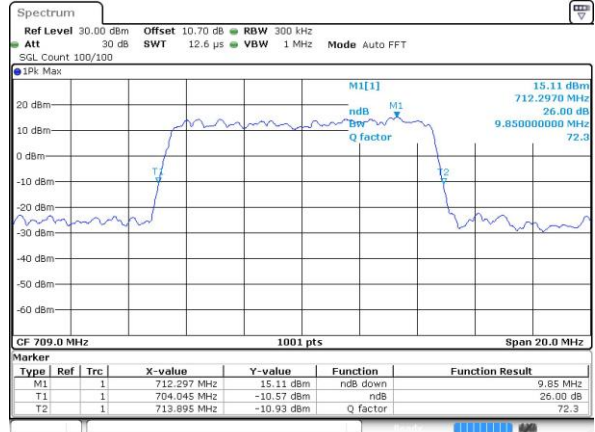


LTE Band 17

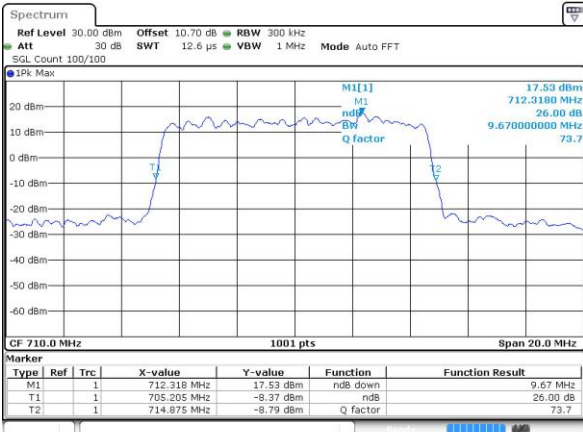
Lowest Channel / 10MHz / QPSK



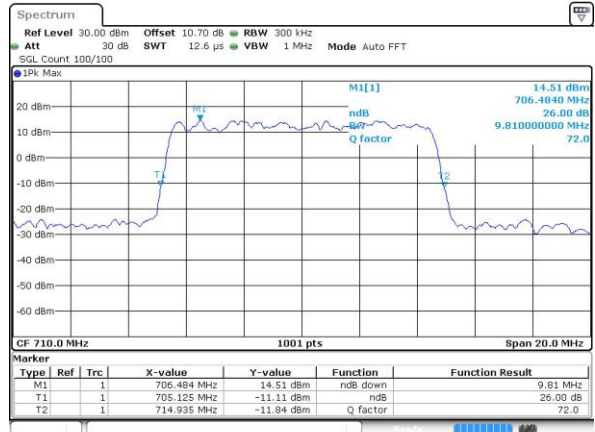
Lowest Channel / 10MHz / 16QAM



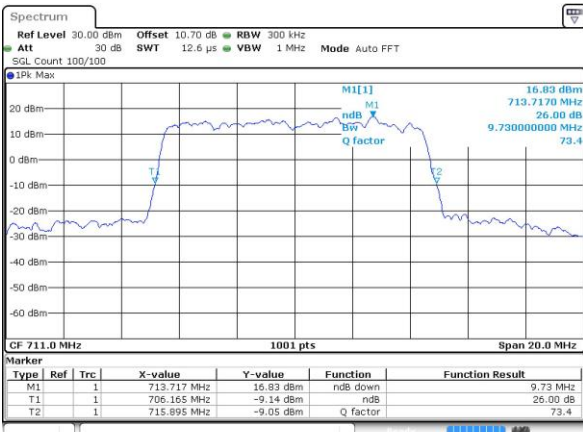
Middle Channel / 10MHz / QPSK



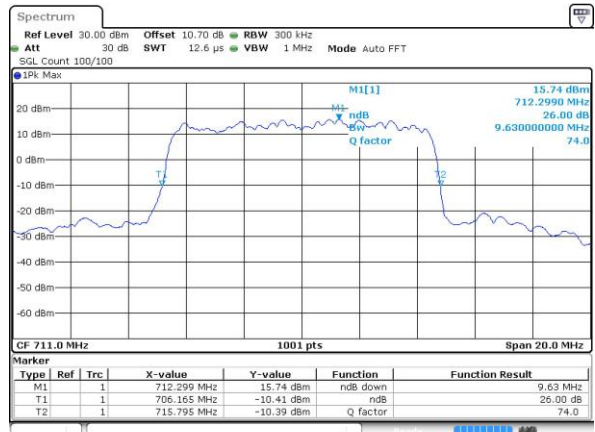
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



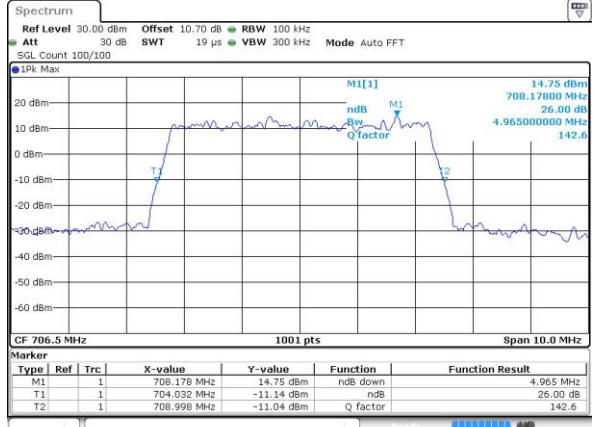
Highest Channel / 10MHz / 16QAM





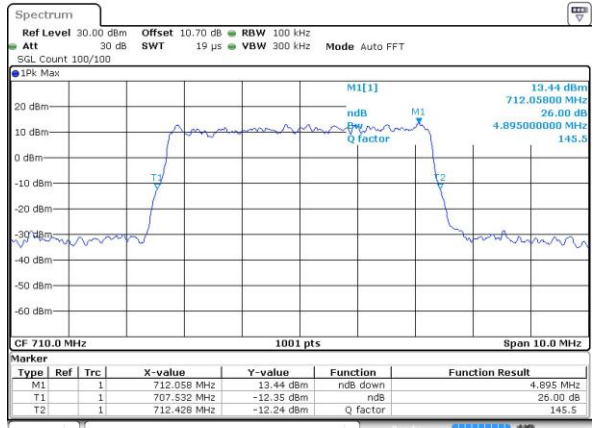
LTE Band 17

Lowest Channel / 5MHz / 64QAM



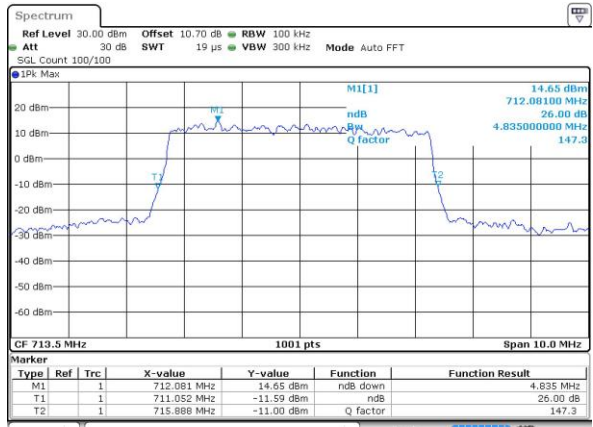
Date: 15 JUN 2017 14:18:57

Middle Channel / 5MHz / 64QAM



Date: 15 JUN 2017 14:22:30

Highest Channel / 5MHz / 64QAM

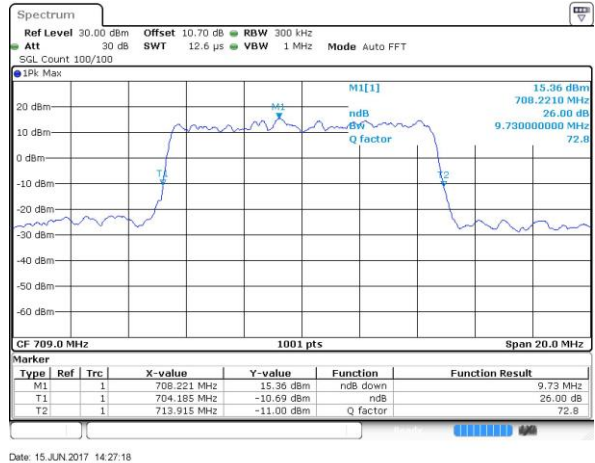


Date: 15 JUN 2017 14:23:45



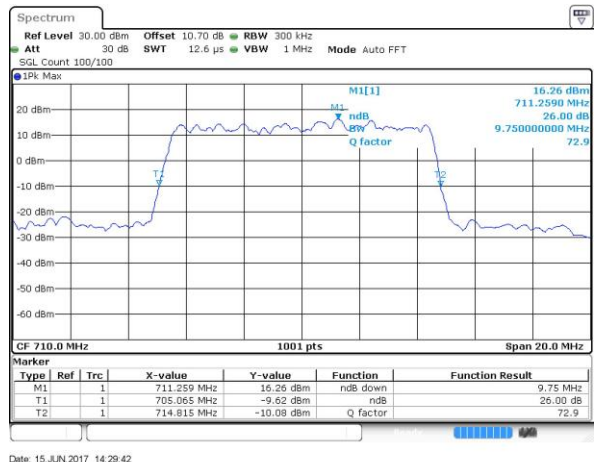
LTE Band 17

Lowest Channel / 10MHz / 64QAM



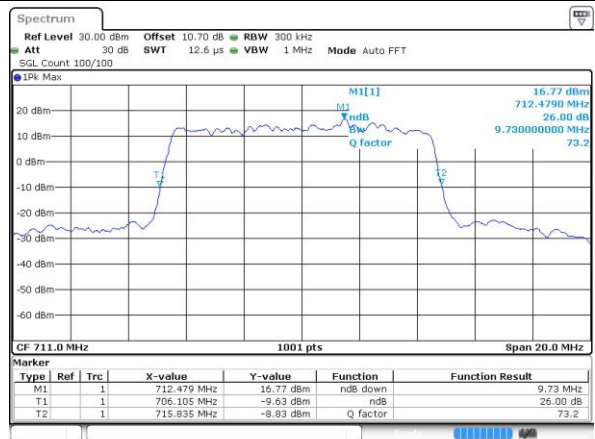
Date: 15 JUN 2017 14:27:18

Middle Channel / 10MHz / 64QAM



Date: 15 JUN 2017 14:29:42

Highest Channel / 10MHz / 64QAM



Date: 15 JUN 2017 14:30:57



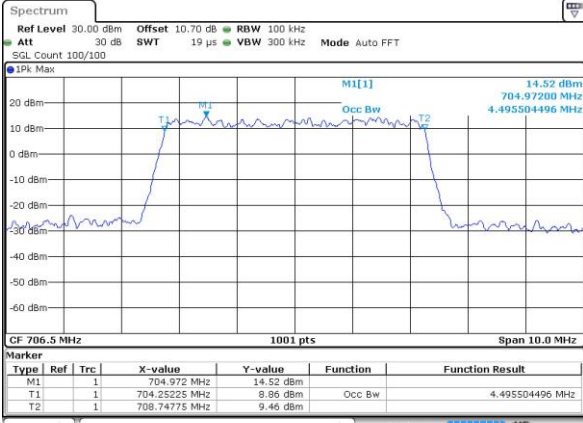
Occupied Bandwidth

| Mode | LTE Band 17 : 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 | 4.48 | 9.03 | 9.03 | - | - | - | - |
| Middle CH | - | - | - | - | 4.49 | 4.48 | 8.99 | 9.01 | - | - | - | - |
| Highest CH | - | - | - | - | 4.5 | 4.48 | 8.95 | 9.01 | - | - | - | - |
| Mode | LTE Band 17 : 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 | - | - | - | - | - | 4.5 | - | 9.07 | - | - | - | - |
| Middle CH | - | - | - | - | - | 4.49 | - | 8.97 | - | - | - | - |
| Highest CH | - | - | - | - | - | 4.49 | - | 8.97 | - | - | - | - |



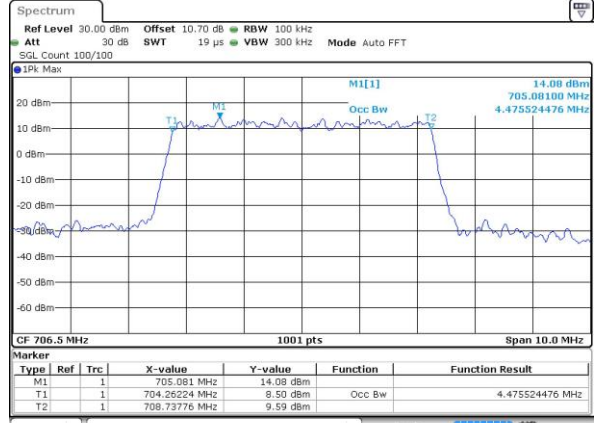
LTE Band 17

Lowest Channel / 5MHz / QPSK



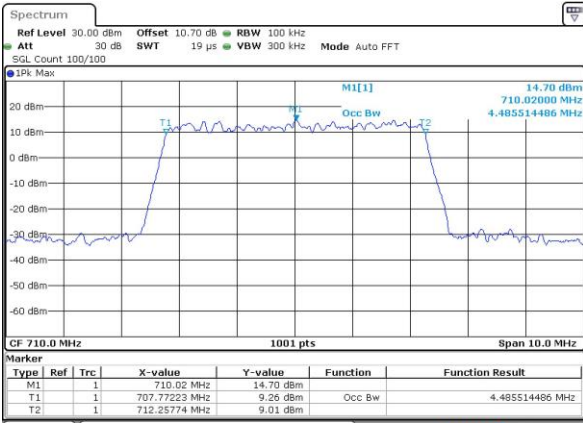
Date: 13 JUN 2017 09:53:45

Lowest Channel / 5MHz / 16QAM



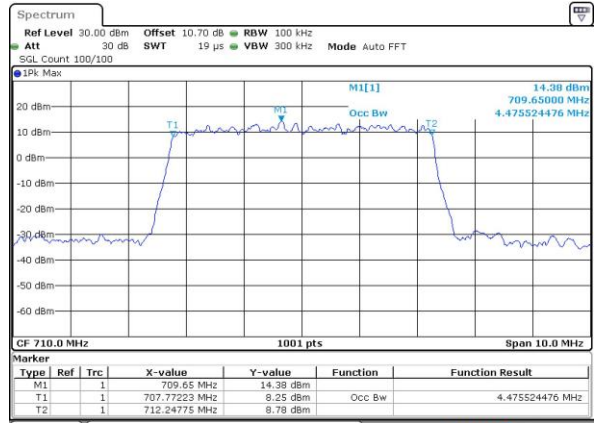
Date: 13 JUN 2017 09:53:55

Middle Channel / 5MHz / QPSK



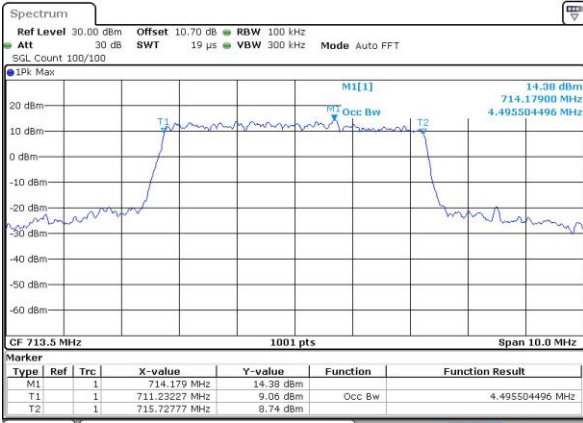
Date: 13 JUN 2017 10:00:52

Middle Channel / 5MHz / 16QAM



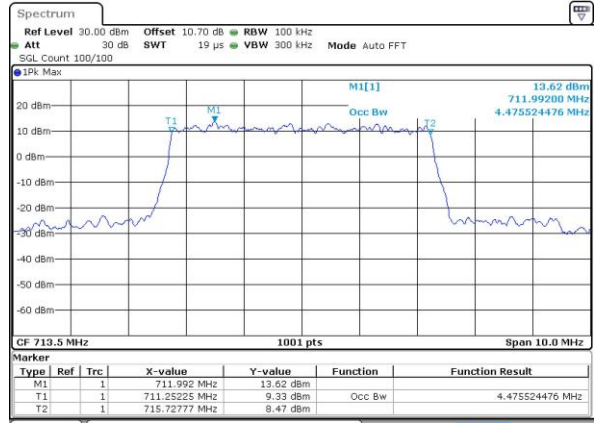
Date: 13 JUN 2017 10:01:02

Highest Channel / 5MHz / QPSK



Date: 13 JUN 2017 10:03:22

Highest Channel / 5MHz / 16QAM

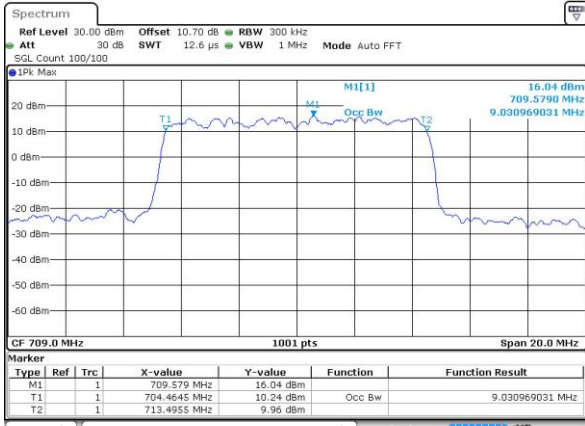


Date: 13 JUN 2017 10:03:32



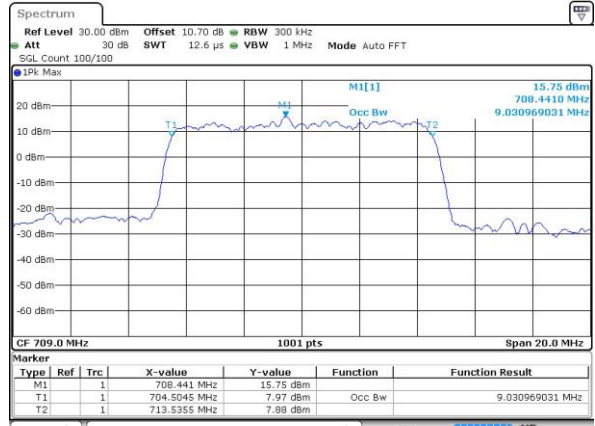
LTE Band 17

Lowest Channel / 10MHz / QPSK



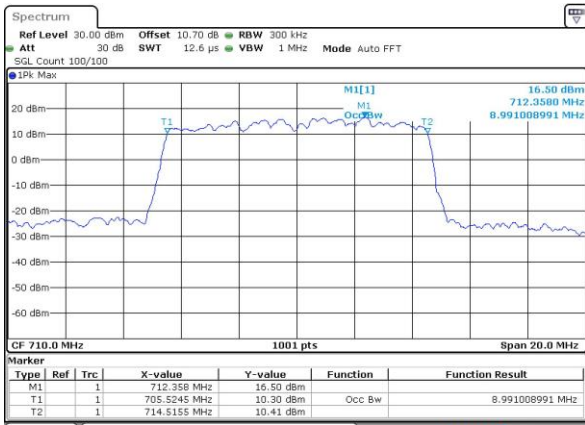
Date: 13 JUN 2017 10:10:28

Lowest Channel / 10MHz / 16QAM



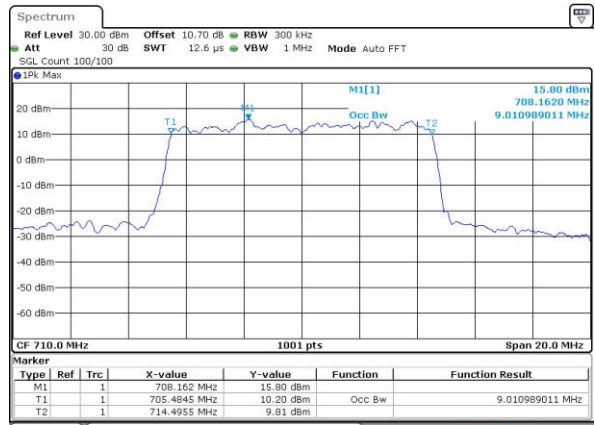
Date: 13 JUN 2017 10:10:39

Middle Channel / 10MHz / QPSK



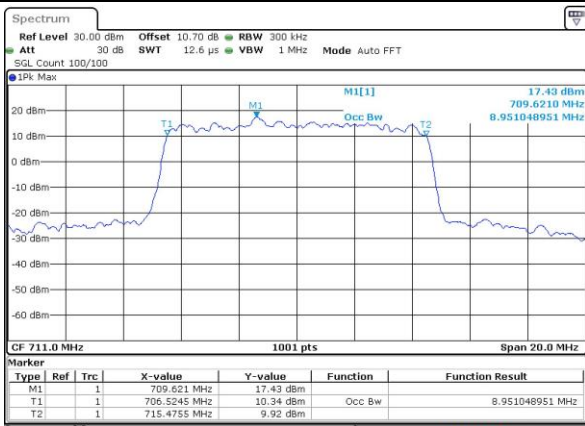
Date: 13 JUN 2017 10:17:35

Middle Channel / 10MHz / 16QAM



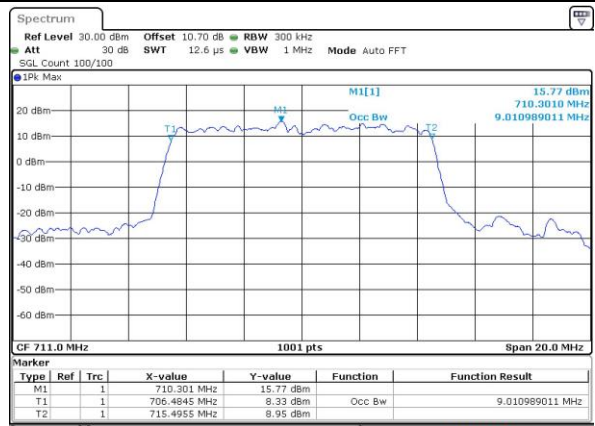
Date: 13 JUN 2017 10:17:45

Highest Channel / 10MHz / QPSK



Date: 13 JUN 2017 10:20:05

Highest Channel / 10MHz / 16QAM

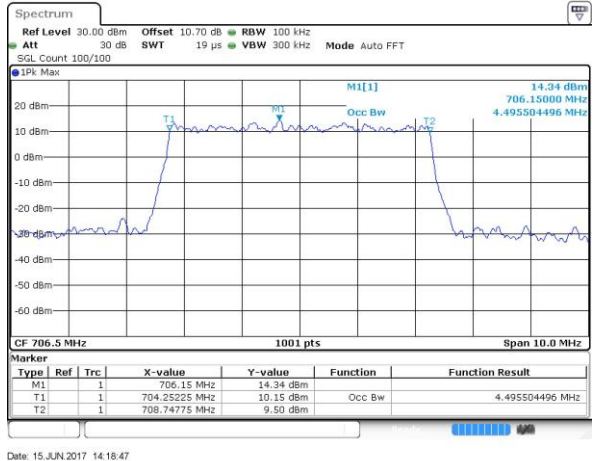


Date: 13 JUN 2017 10:20:15



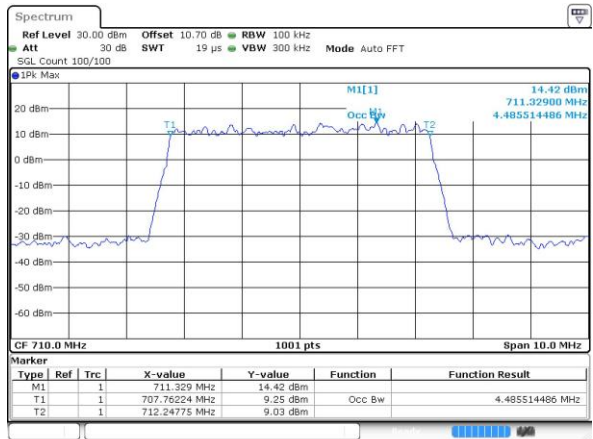
LTE Band 17

Lowest Channel / 5MHz / 64QAM



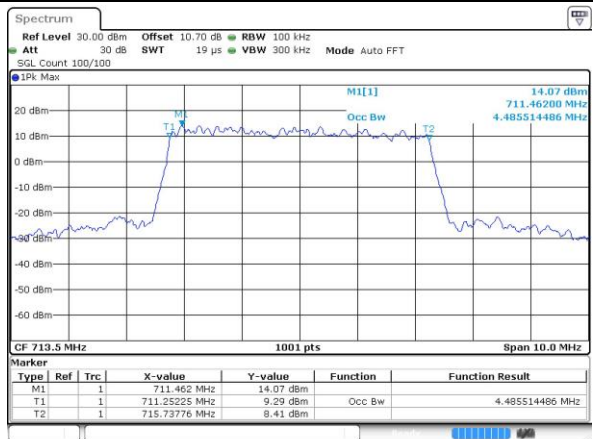
Date: 15 JUN 2017 14:18:47

Middle Channel / 5MHz / 64QAM



Date: 15 JUN 2017 14:22:20

Highest Channel / 5MHz / 64QAM

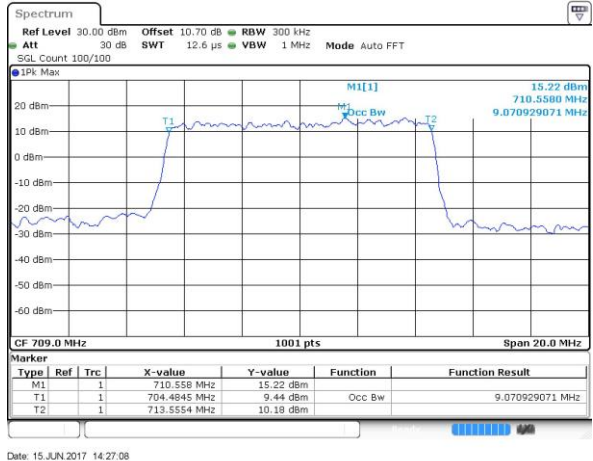


Date: 15 JUN 2017 14:23:35



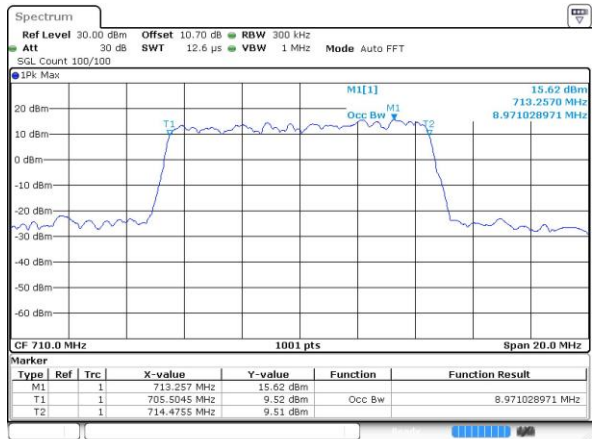
LTE Band 17

Lowest Channel / 10MHz / 64QAM



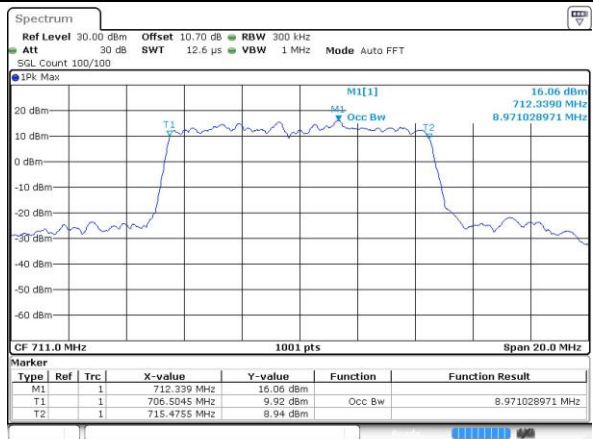
Date: 15 JUN 2017 14:27:08

Middle Channel / 10MHz / 64QAM



Date: 15 JUN 2017 14:29:32

Highest Channel / 10MHz / 64QAM



Date: 15 JUN 2017 14:30:47



Conducted Band Edge