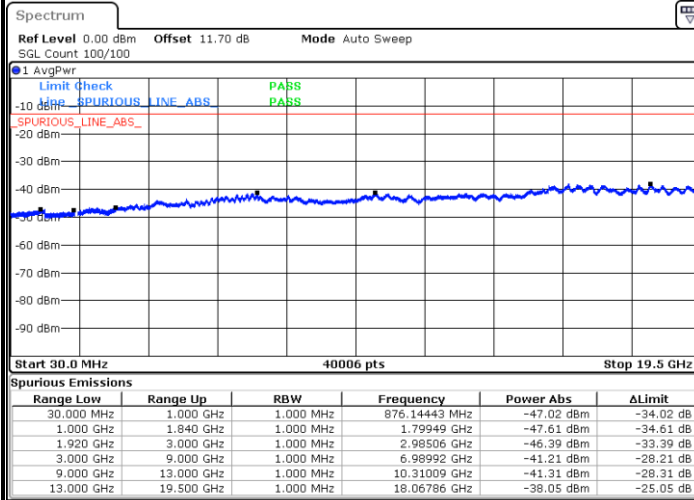




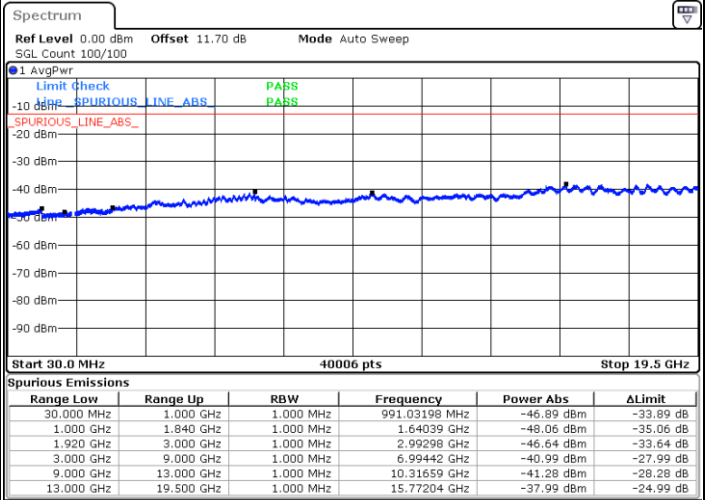
## LTE Band 2 / 15MHz

## Highest Channel / QPSK



Date: 25 AUG 2017 11:08:51

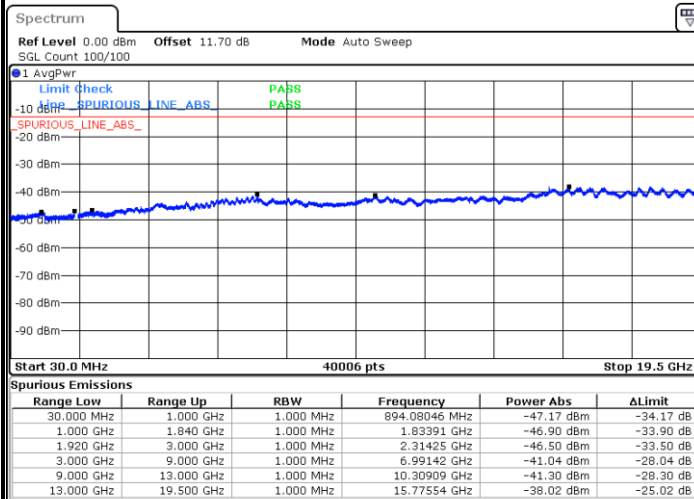
## Highest Channel / 16QAM



Date: 25 AUG 2017 11:09:45

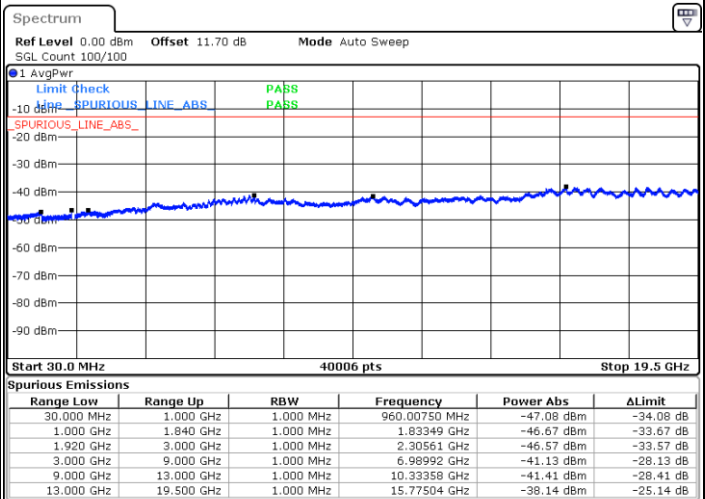
## LTE Band 2 / 20MHz

## Lowest Channel / QPSK



Date: 25 AUG 2017 11:17:17

## Lowest Channel / 16QAM

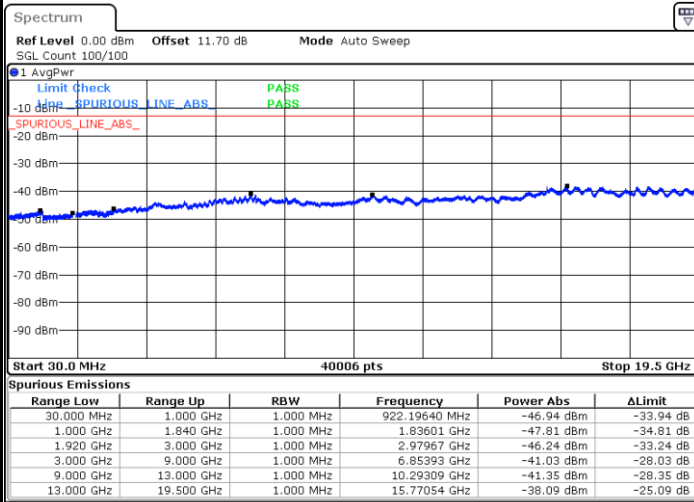


Date: 25 AUG 2017 11:18:11



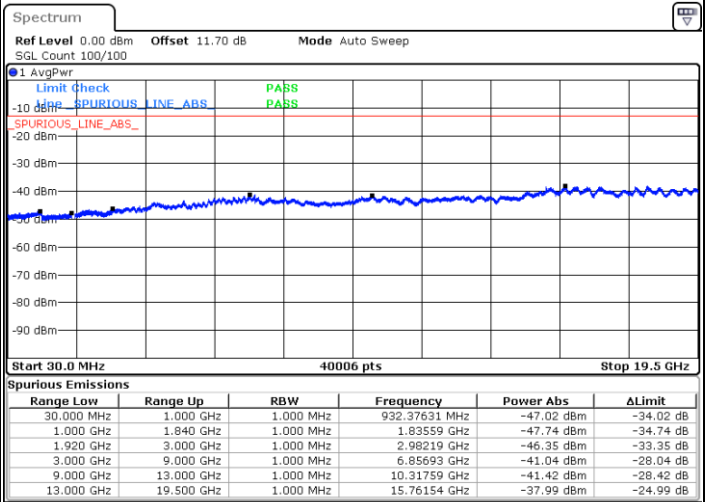
## LTE Band 2 / 20MHz

## Middle Channel / QPSK



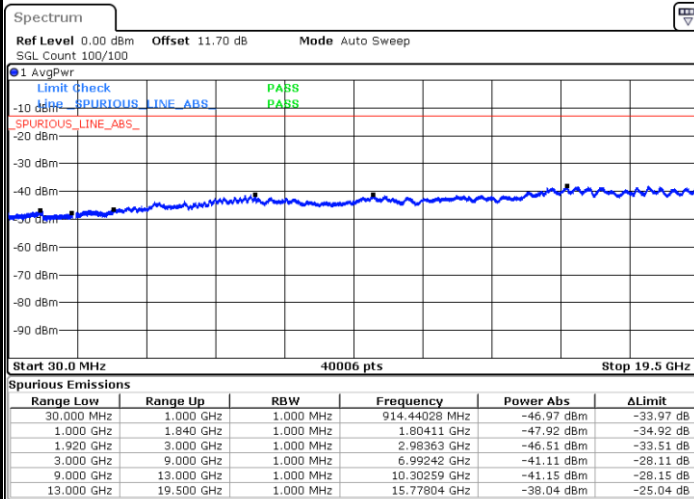
Date: 25 AUG 2017 11:19:45

## Middle Channel / 16QAM



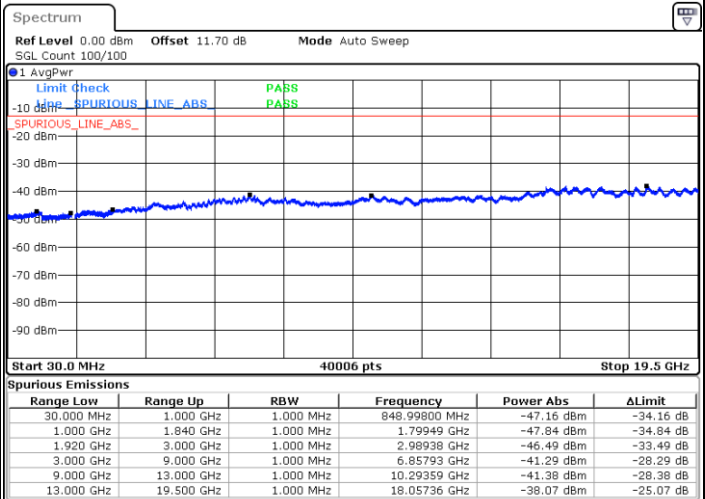
Date: 25 AUG 2017 11:20:39

## Highest Channel / QPSK



Date: 25 AUG 2017 11:26:48

## Highest Channel / 16QAM

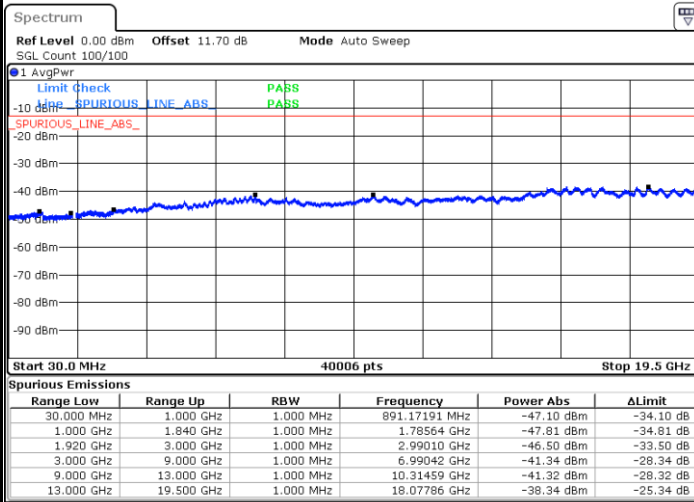


Date: 25 AUG 2017 11:27:42



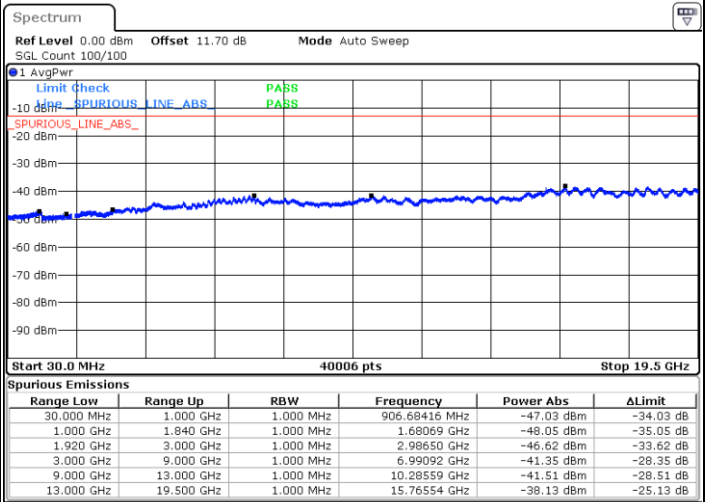
## LTE Band 2 / 1.4MHz

## Lowest Channel / 64QAM



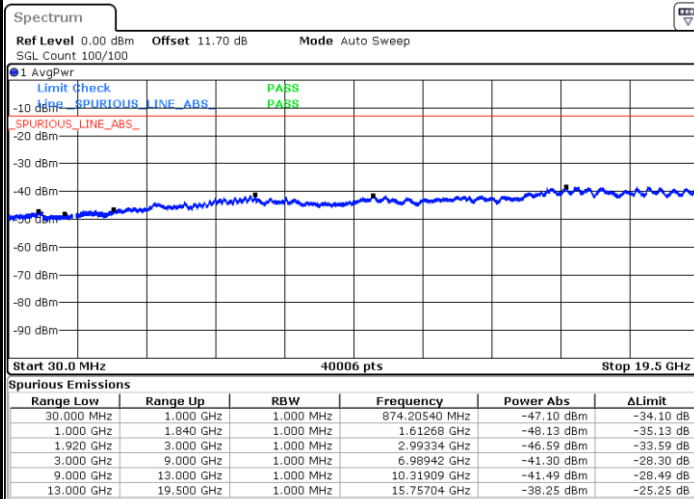
Date: 5.OCT.2017 11:56:58

## Middle Channel / 64QAM



Date: 5.OCT.2017 11:58:12

## Highest Channel / 64QAM

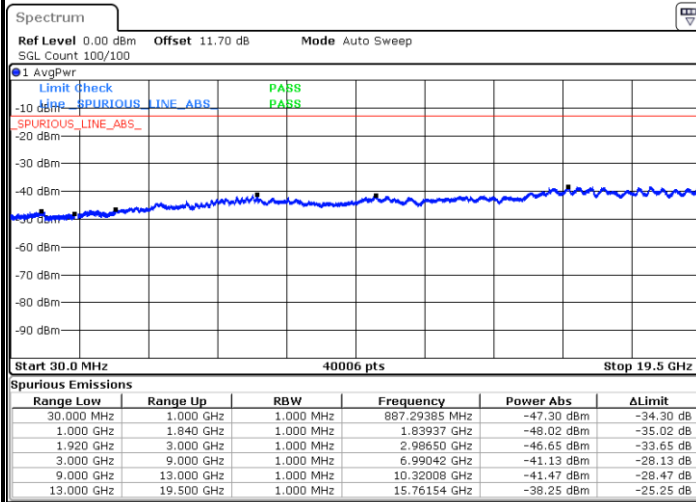


Date: 5.OCT.2017 12:01:44



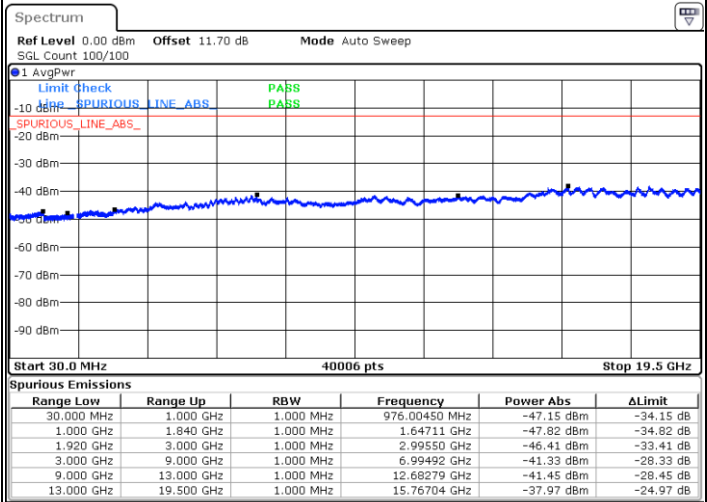
## LTE Band 2 / 3MHz

## Lowest Channel / 64QAM



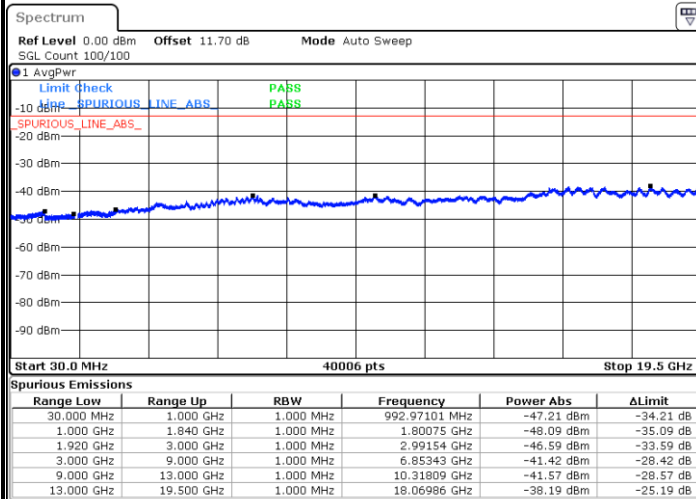
Date: 5.OCT.2017 11:12:03

## Middle Channel / 64QAM



Date: 5.OCT.2017 11:13:17

## Highest Channel / 64QAM

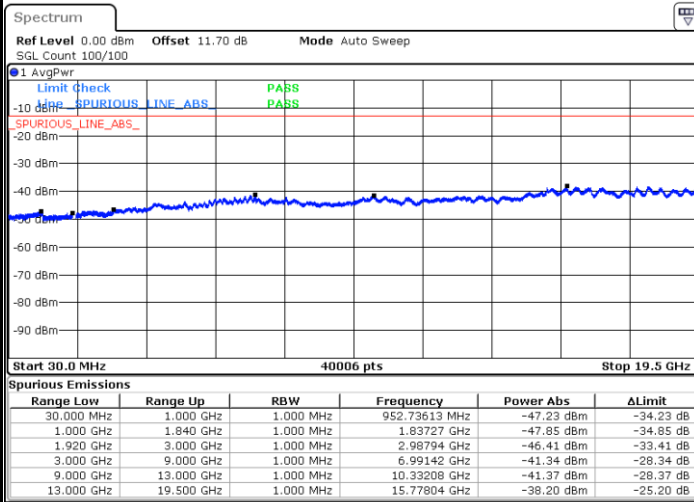


Date: 5.OCT.2017 11:16:48



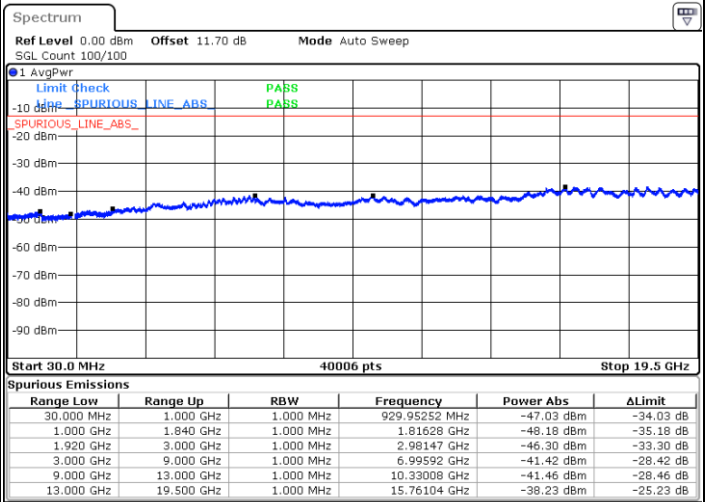
## LTE Band 2 / 5MHz

## Lowest Channel / 64QAM



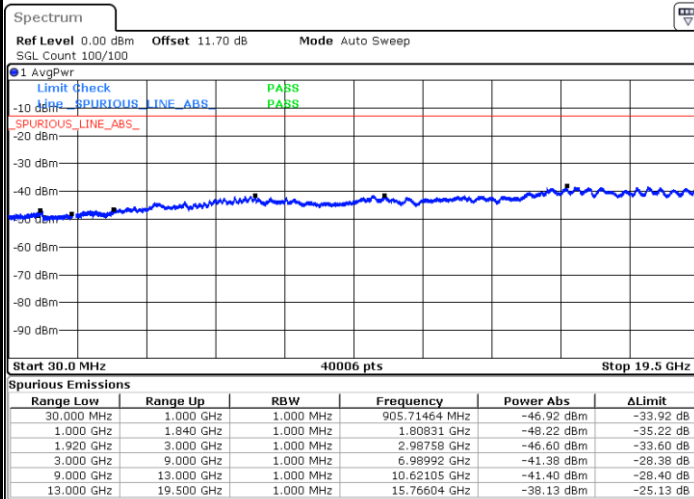
Date: 5.OCT.2017 11:20:19

## Middle Channel / 64QAM



Date: 5.OCT.2017 11:21:34

## Highest Channel / 64QAM

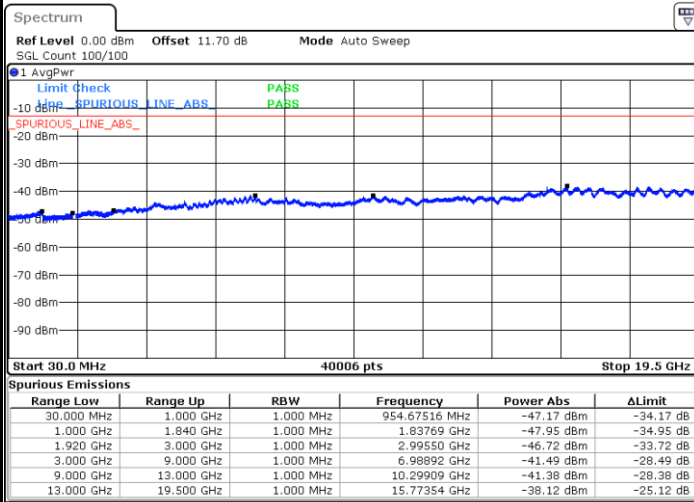


Date: 5.OCT.2017 11:25:05



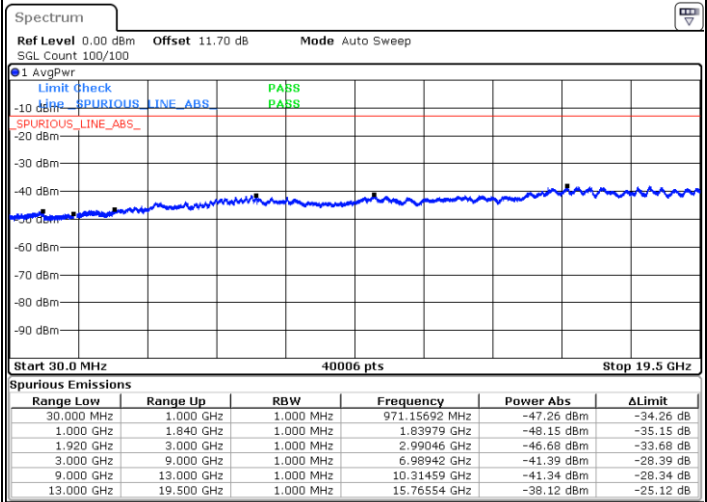
## LTE Band 2 / 10MHz

## Lowest Channel / 64QAM



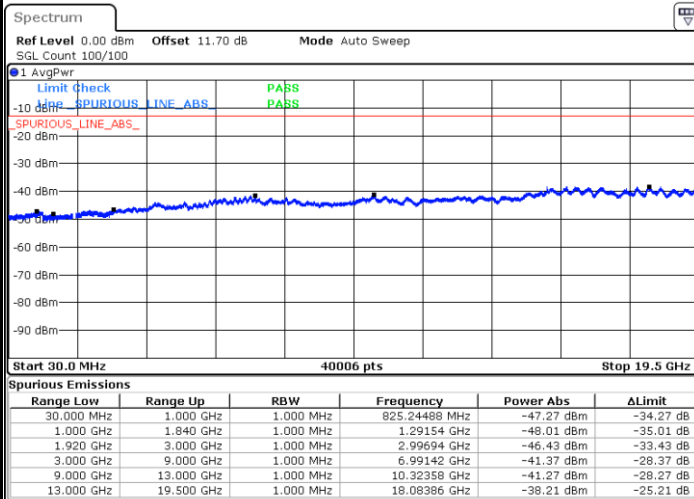
Date: 5.OCT.2017 11:28:36

## Middle Channel / 64QAM



Date: 5.OCT.2017 11:29:50

## Highest Channel / 64QAM

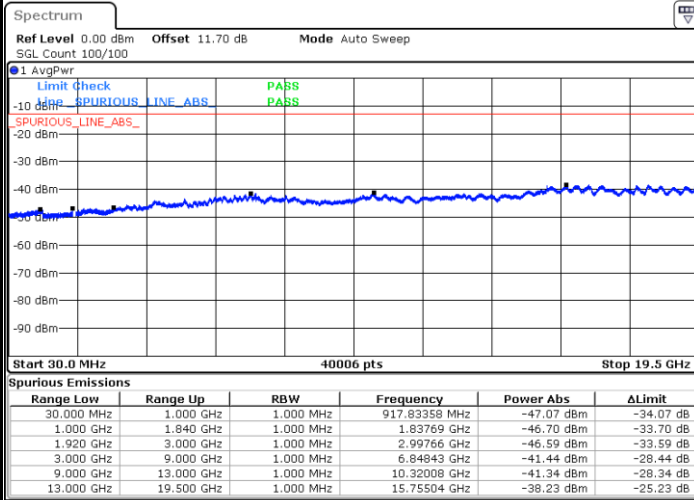


Date: 5.OCT.2017 11:33:22



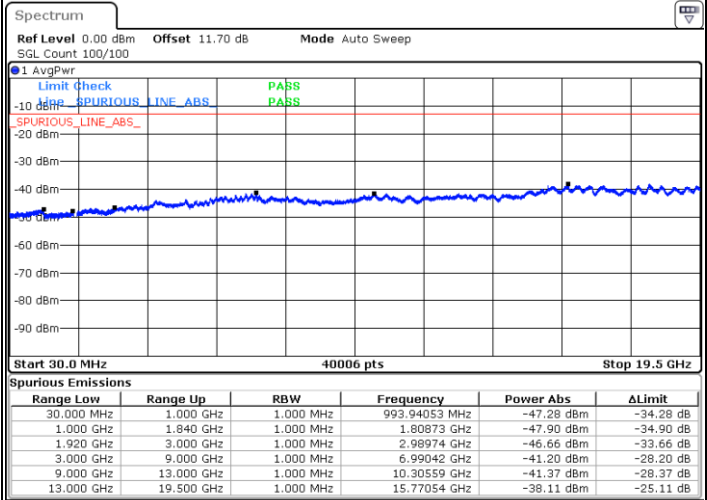
## LTE Band 2 / 15MHz

## Lowest Channel / 64QAM



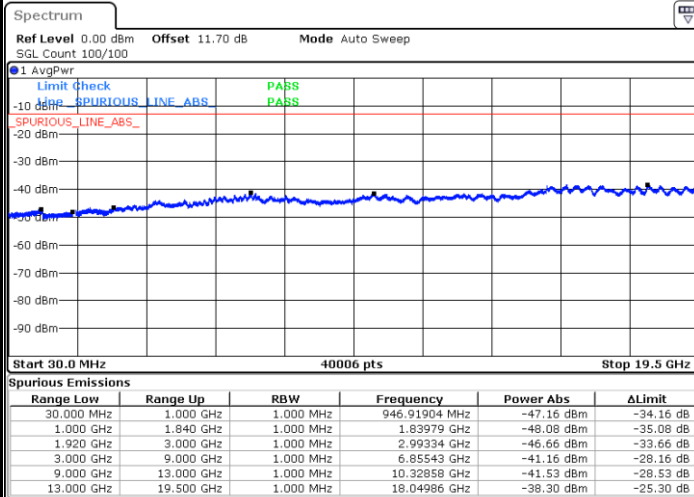
Date: 5.OCT.2017 11:36:53

## Middle Channel / 64QAM



Date: 5.OCT.2017 11:38:07

## Highest Channel / 64QAM

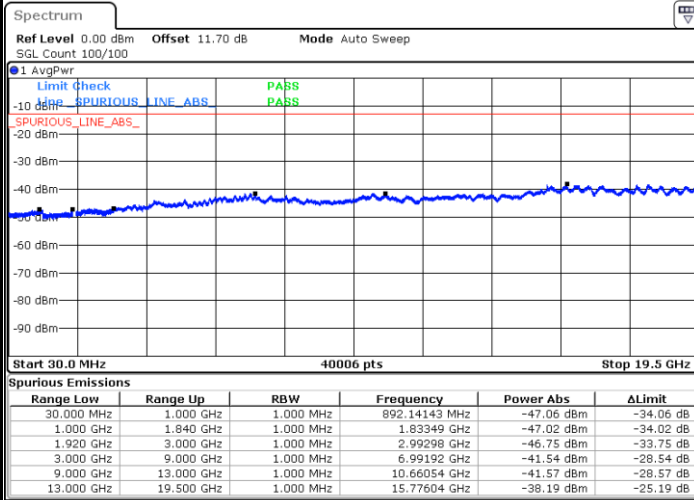


Date: 5.OCT.2017 11:41:38



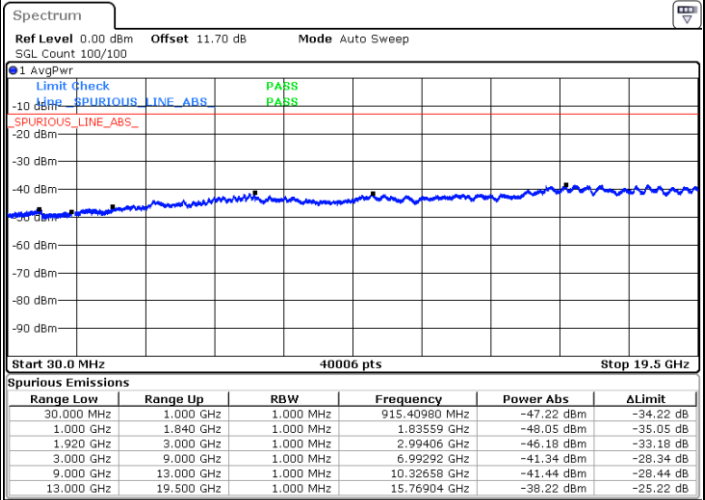
## LTE Band 2 / 20MHz

## Lowest Channel / 64QAM



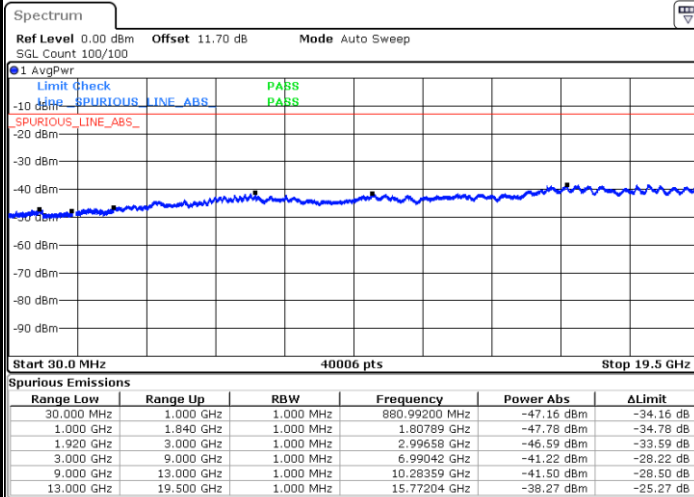
Date: 5.OCT.2017 11:45:10

## Middle Channel / 64QAM



Date: 5.OCT.2017 11:46:24

## Highest Channel / 64QAM



Date: 5.OCT.2017 11:49:55

## Frequency Stability

| Test Conditions  |                   | LTE Band 2 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                           | Note 2. |
|                  |                   | Deviation (ppm)                    | Result  |
| 50               | Normal Voltage    | 0.0003                             | PASS    |
| 40               | Normal Voltage    | 0.0001                             |         |
| 30               | Normal Voltage    | 0.0004                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0079                             |         |
| 0                | Normal Voltage    | 0.0079                             |         |
| -10              | Normal Voltage    | 0.0071                             |         |
| -20              | Normal Voltage    | 0.0072                             |         |
| -30              | Normal Voltage    | 0.0082                             |         |
| 20               | Maximum Voltage   | 0.0079                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0078                             |         |

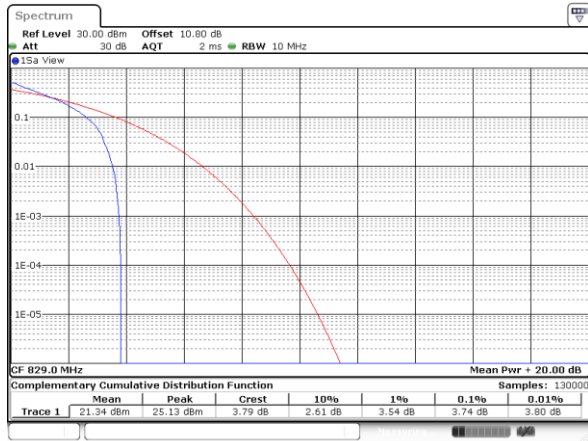
**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

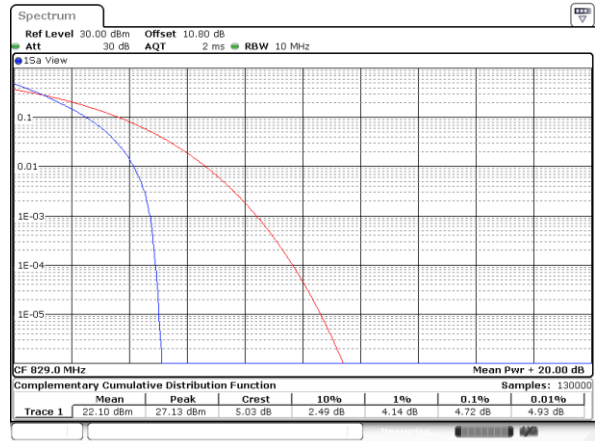
## LTE Band 5

### Peak-to-Average Ratio

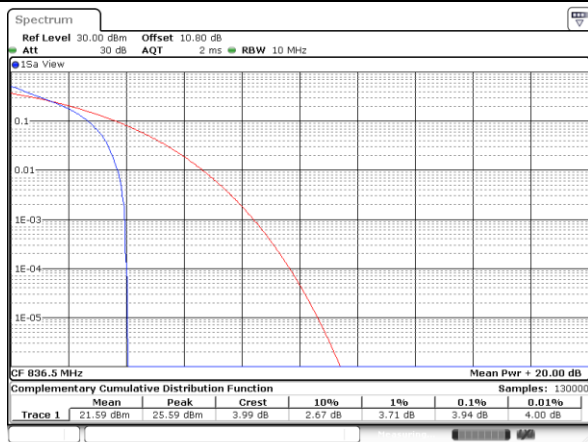
| Mode       | LTE Band 5 / 10MHz |         |       |         |             |
|------------|--------------------|---------|-------|---------|-------------|
| Mod.       | QPSK               |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 3.74               | 4.72    | 4.52  | 5.74    | PASS        |
| Middle CH  | 3.94               | 4.67    | 4.67  | 5.59    |             |
| Highest CH | 3.45               | 4.12    | 4.41  | 5.07    |             |
| Mode       | LTE Band 5 / 10MHz |         |       |         |             |
| Mod.       | 64QAM              |         |       |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB |       |         | Result      |
| Lowest CH  | 5.45               | 6.29    | -     | -       | PASS        |
| Middle CH  | 5.83               | 6.29    | -     | -       |             |
| Highest CH | 5.04               | 5.74    | -     | -       |             |

**LTE Band 5 / 10MHz / QPSK**
**Lowest Channel / 1RB**


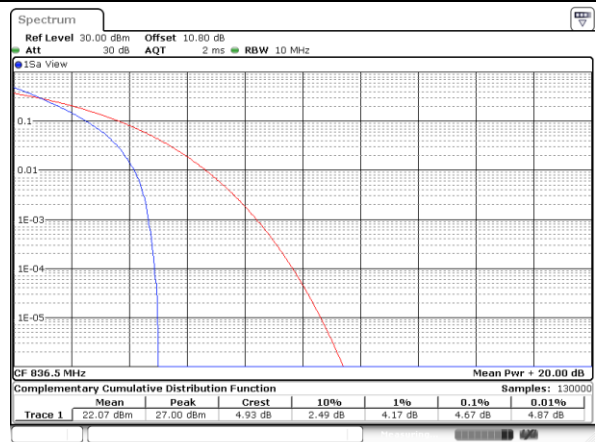
Date: 25 AUG 2017 16:36:00

**Lowest Channel / Full RB**


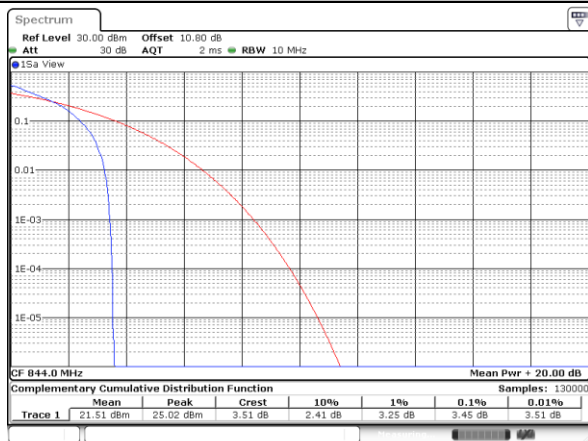
Date: 25 AUG 2017 16:36:11

**Middle Channel / 1RB**


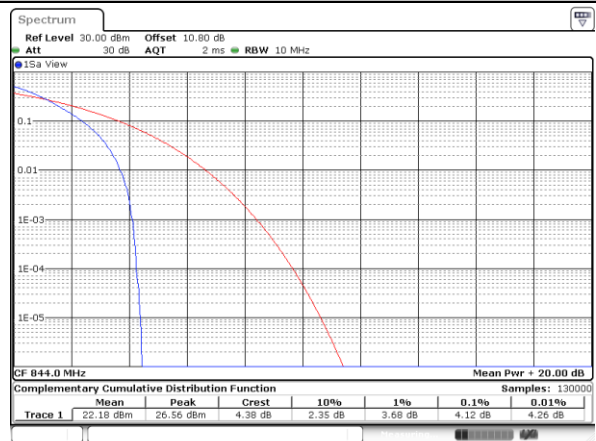
Date: 25 AUG 2017 16:36:20

**Middle Channel / Full RB**


Date: 25 AUG 2017 16:36:29

**Highest Channel / 1RB**


Date: 25 AUG 2017 16:36:42

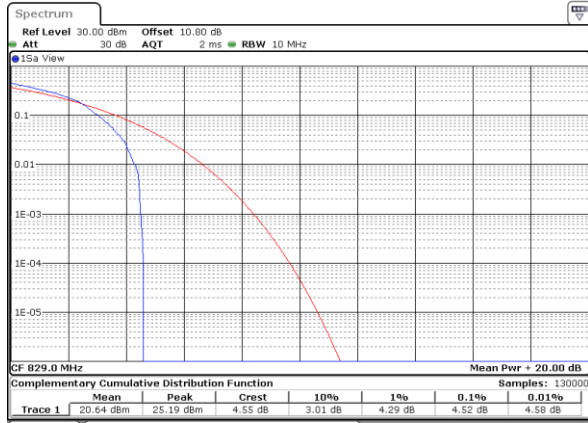
**Highest Channel / Full RB**


Date: 25 AUG 2017 16:36:51

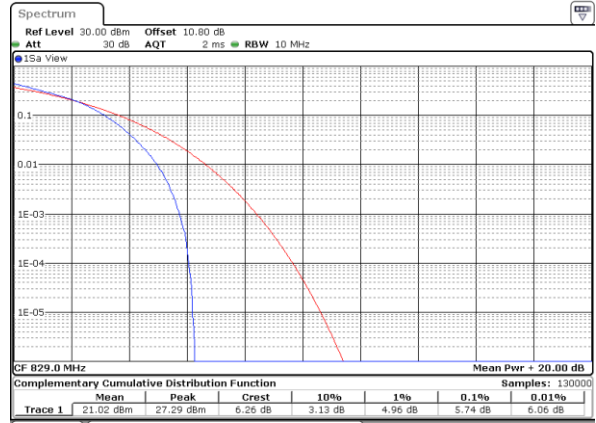


## LTE Band 5 / 10MHz / 16QAM

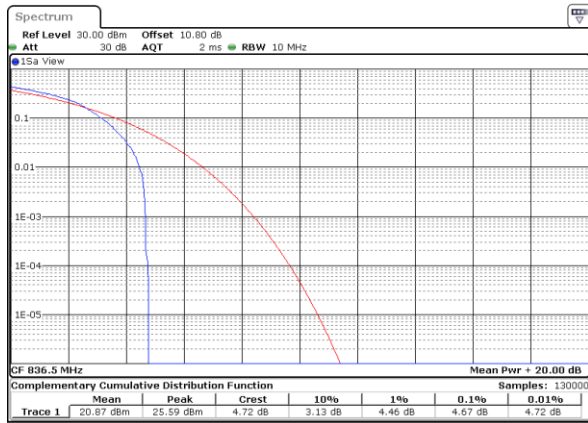
## Lowest Channel / 1RB



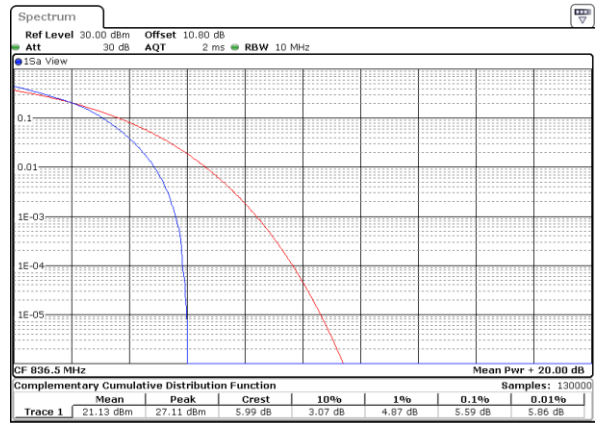
## Lowest Channel / Full RB



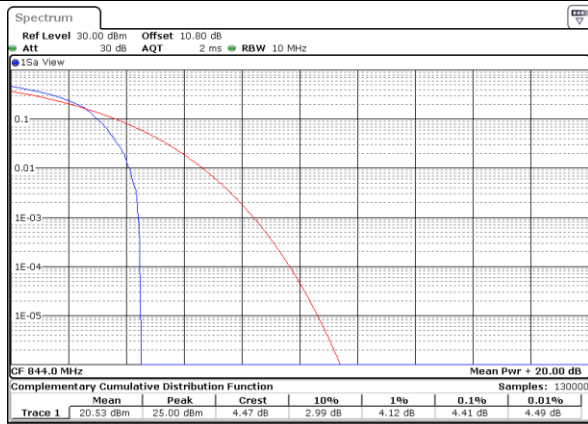
## Middle Channel / 1RB



## Middle Channel / Full RB



## Highest Channel / 1RB



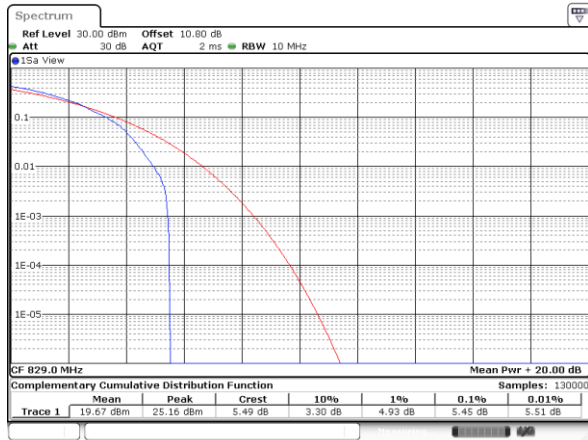
## Highest Channel / Full RB



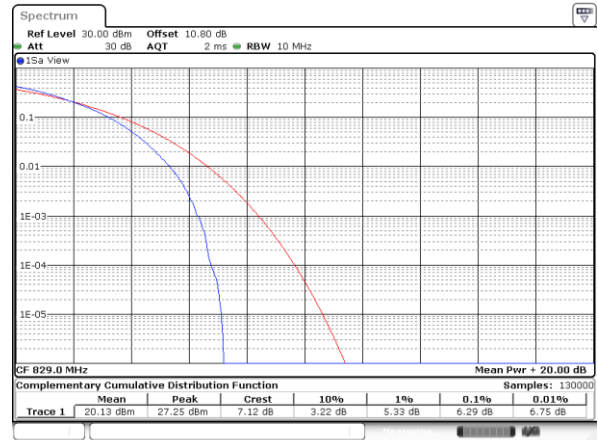


## LTE Band 5 / 10MHz / 64QAM

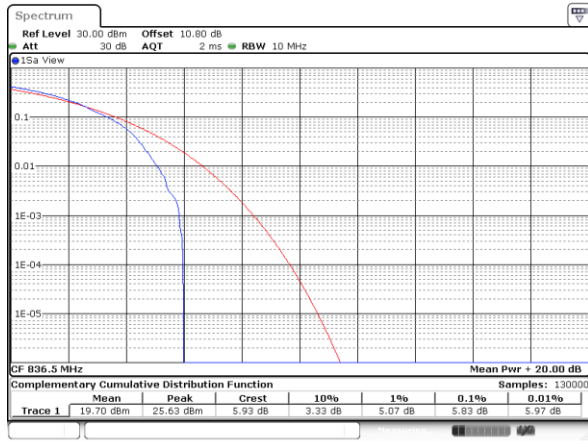
## Lowest Channel / 1RB



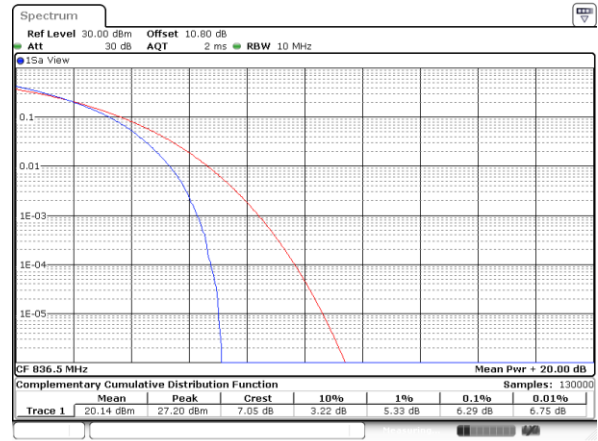
## Lowest Channel / Full RB



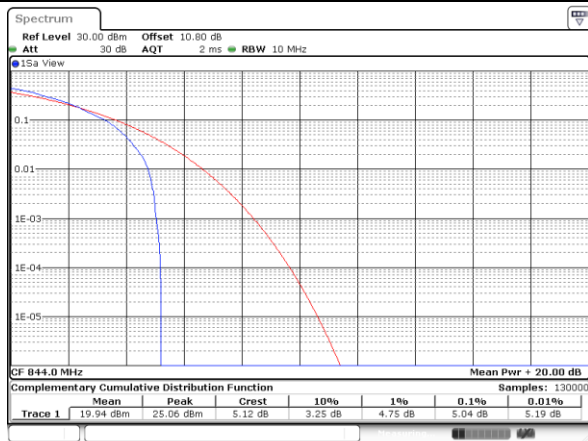
## Middle Channel / 1RB



## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB



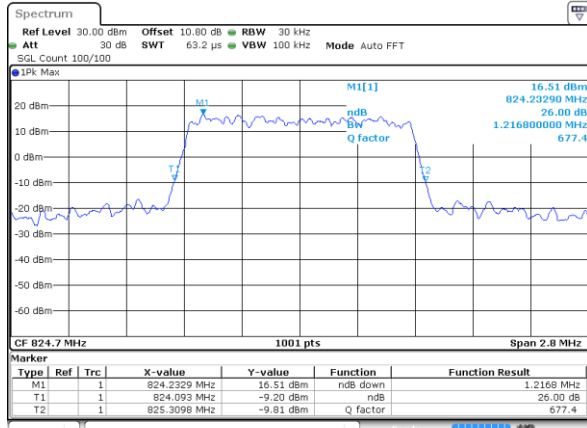
**26dB Bandwidth**

| Mode       | LTE Band 5 : 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  | 1.22                      | 1.22  | 3.03  | 3.03  | 4.86  | 4.91  | 9.69  | 9.71  | -     | -     | -     | -     |
| Middle CH  | 1.22                      | 1.24  | 3.06  | 3.05  | 4.91  | 4.96  | 9.71  | 9.77  | -     | -     | -     | -     |
| Highest CH | 1.24                      | 1.23  | 3.06  | 3.02  | 4.90  | 5.05  | 9.75  | 9.73  | -     | -     | -     | -     |
| Mode       | LTE Band 5 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                     |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.219                     | -     | 3.015 | -     | 4.865 | -     | 9.73  | -     | -     | -     | -     | -     |
| Middle CH  | 1.228                     | -     | 3.021 | -     | 4.935 | -     | 9.75  | -     | -     | -     | -     | -     |
| Highest CH | 1.211                     | -     | 3.027 | -     | 4.845 | -     | 9.85  | -     | -     | -     | -     | -     |



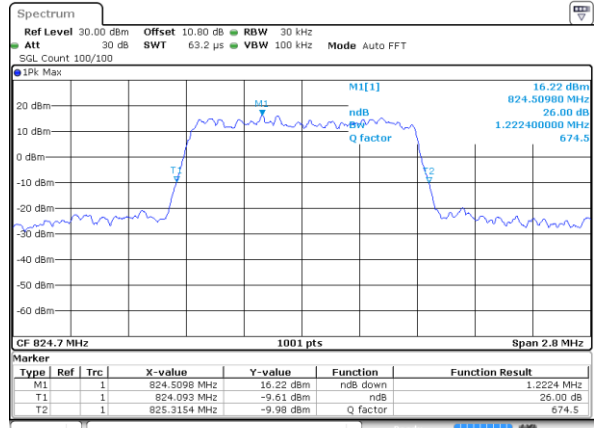
## LTE Band 5

## Lowest Channel / 1.4MHz / QPSK



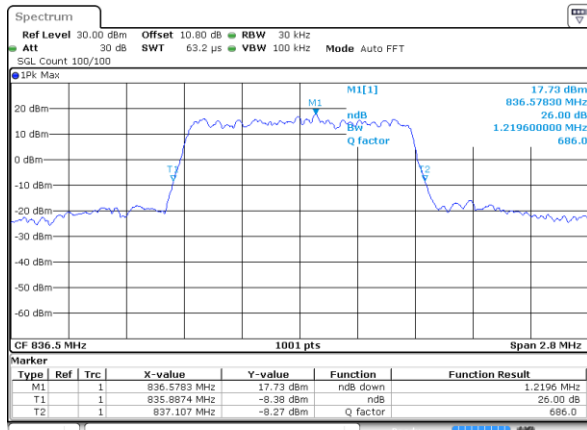
Date: 25 AUG 2017 15:12:57

## Lowest Channel / 1.4MHz / 16QAM



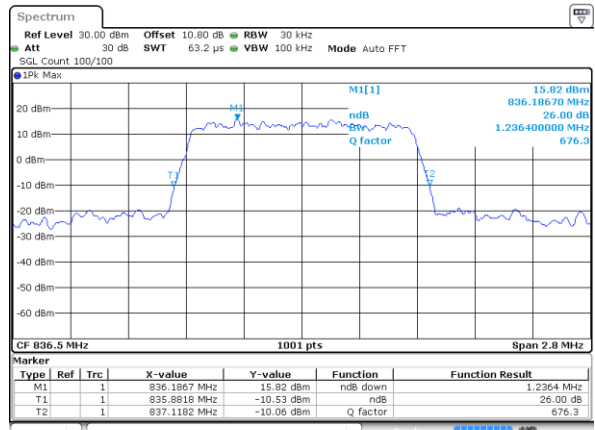
Date: 25 AUG 2017 15:12:47

## Middle Channel / 1.4MHz / QPSK



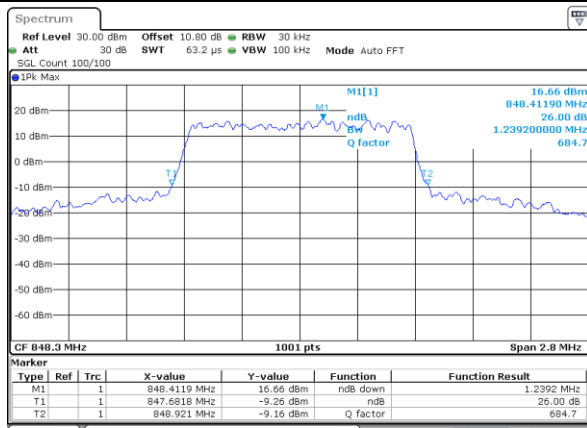
Date: 25 AUG 2017 15:21:49

## Middle Channel / 1.4MHz / 16QAM



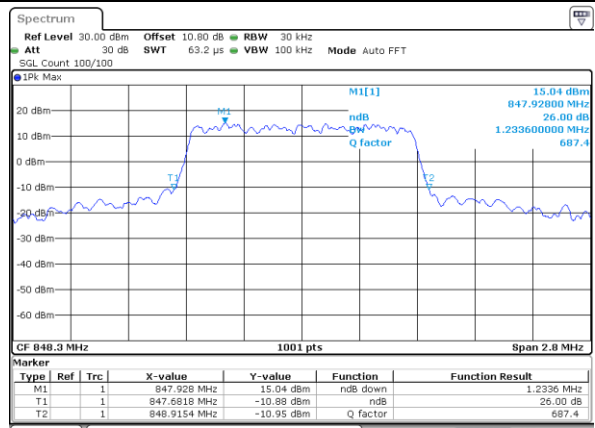
Date: 25 AUG 2017 15:21:59

## Highest Channel / 1.4MHz / QPSK



Date: 25 AUG 2017 15:24:17

## Highest Channel / 1.4MHz / 16QAM

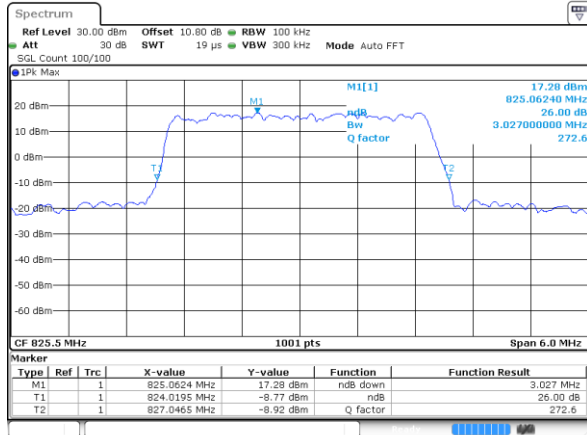


Date: 25 AUG 2017 15:24:27



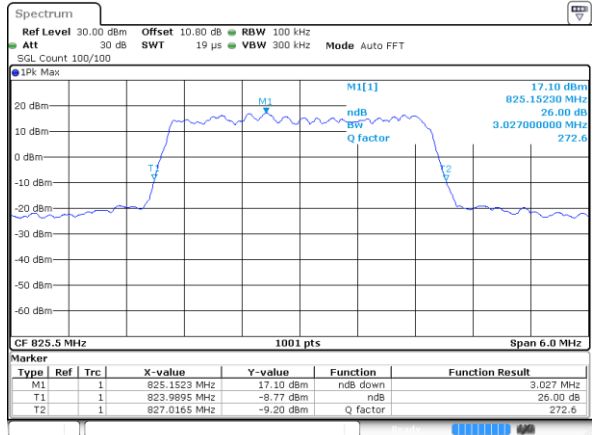
## LTE Band 5

## Lowest Channel / 3MHz / QPSK



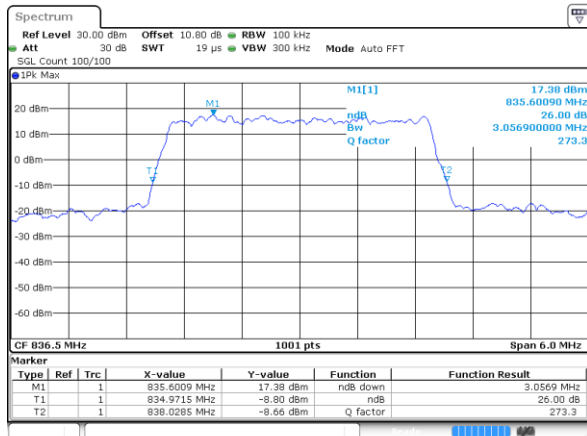
Date: 25 AUG 2017 15:33:19

## Lowest Channel / 3MHz / 16QAM



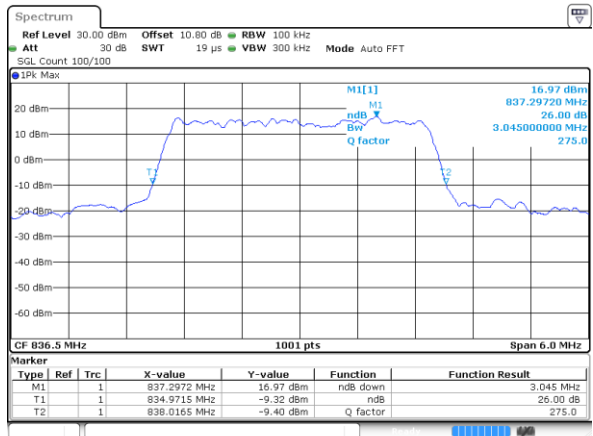
Date: 25 AUG 2017 15:33:29

## Middle Channel / 3MHz / QPSK



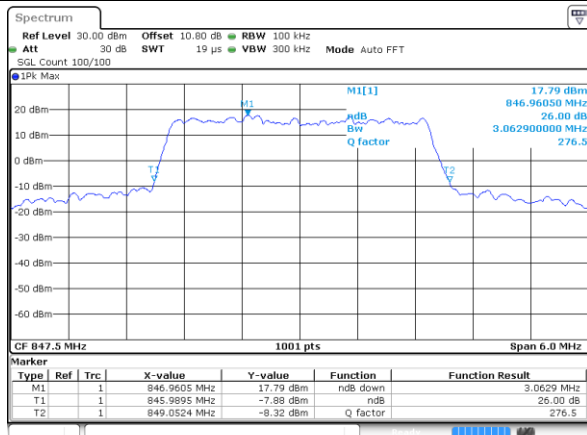
Date: 25 AUG 2017 15:42:21

## Middle Channel / 3MHz / 16QAM



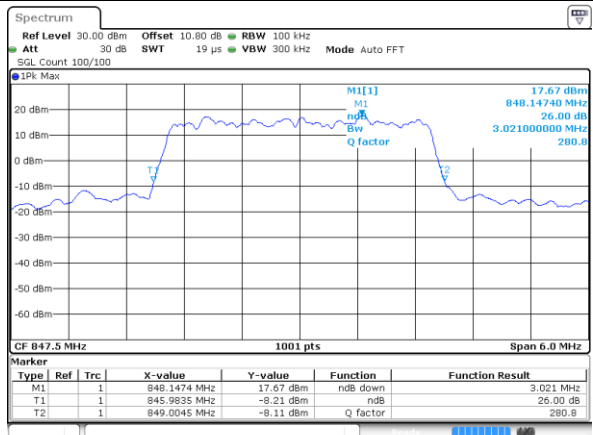
Date: 25 AUG 2017 15:42:31

## Highest Channel / 3MHz / QPSK



Date: 25 AUG 2017 15:44:49

## Highest Channel / 3MHz / 16QAM

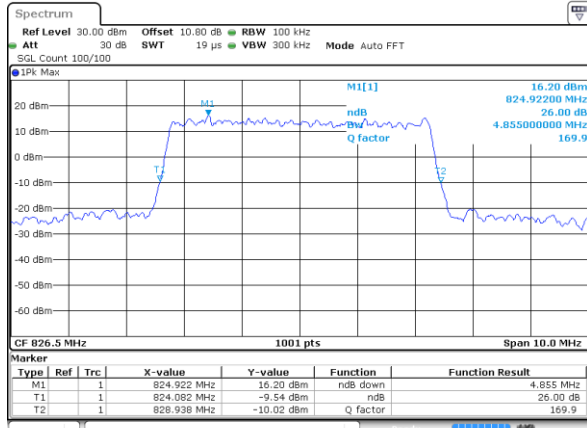


Date: 25 AUG 2017 15:44:59



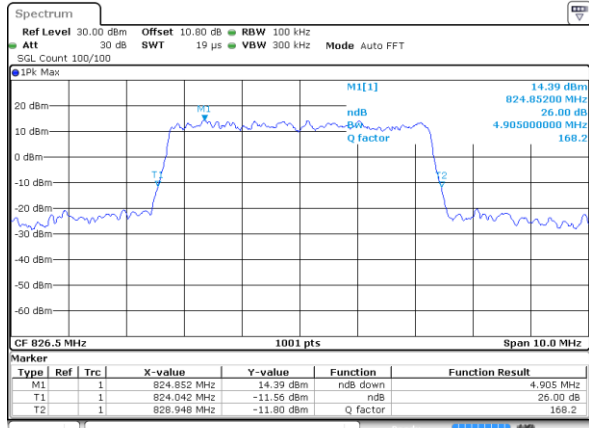
## LTE Band 5

## Lowest Channel / 5MHz / QPSK



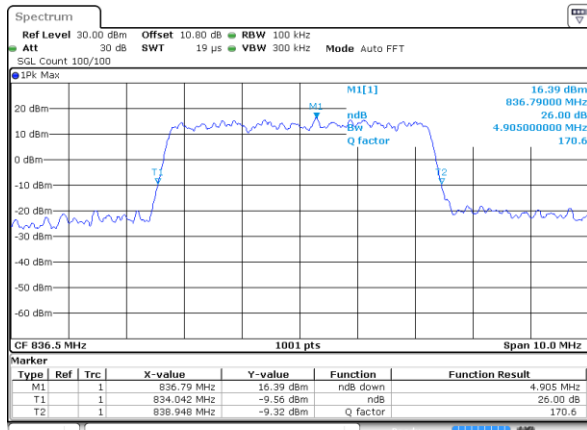
Date: 25 AUG 2017 15:53:51

## Lowest Channel / 5MHz / 16QAM



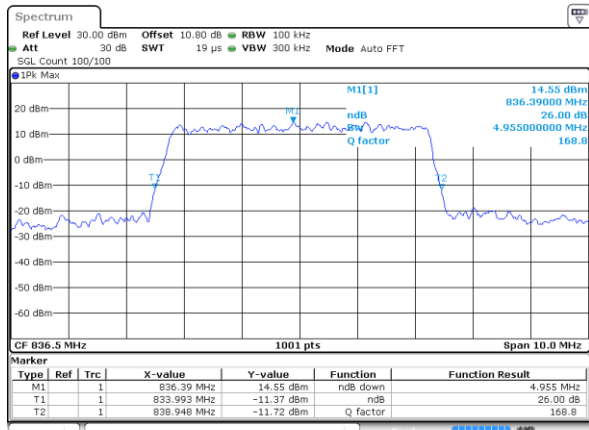
Date: 25 AUG 2017 15:54:01

## Middle Channel / 5MHz / QPSK



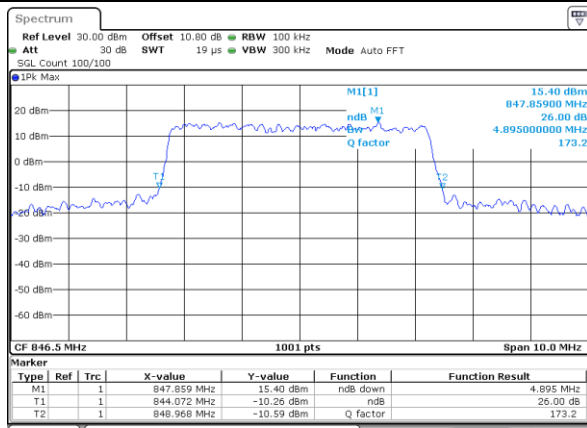
Date: 25 AUG 2017 16:02:53

## Middle Channel / 5MHz / 16QAM



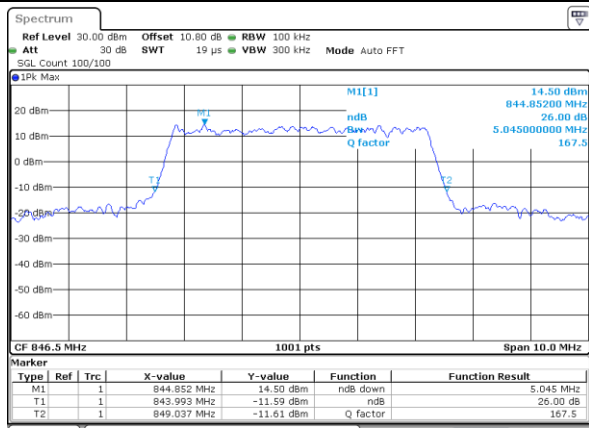
Date: 25 AUG 2017 16:03:03

## Highest Channel / 5MHz / QPSK



Date: 25 AUG 2017 16:05:21

## Highest Channel / 5MHz / 16QAM

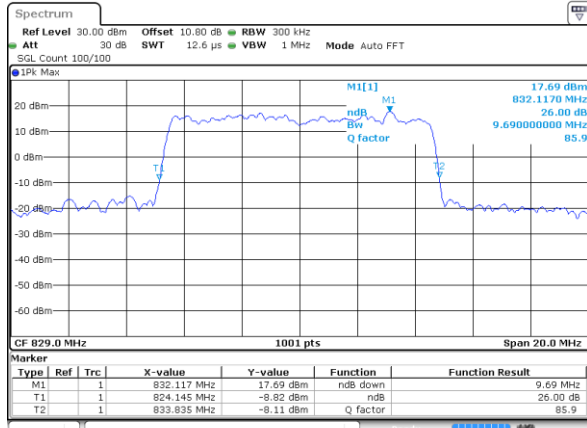


Date: 25 AUG 2017 16:05:31



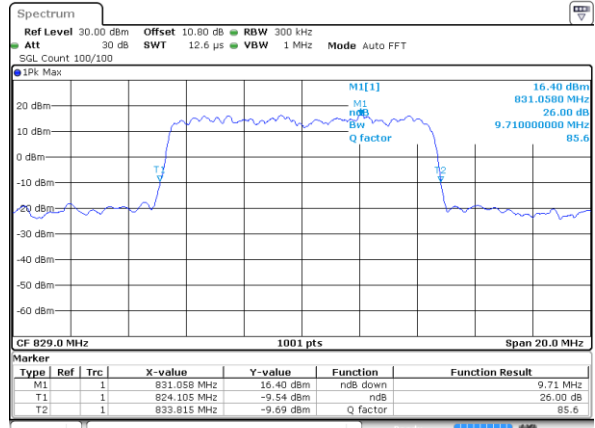
## LTE Band 5

## Lowest Channel / 10MHz / QPSK



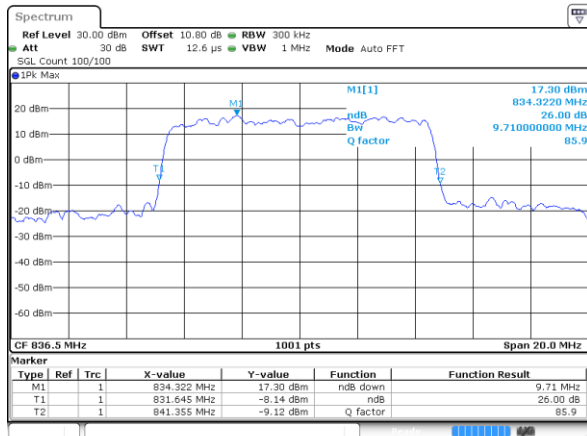
Date: 25 AUG 2017 16:14:23

## Lowest Channel / 10MHz / 16QAM



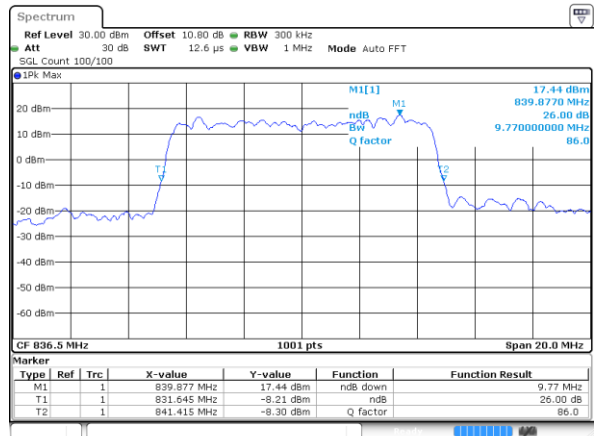
Date: 25 AUG 2017 16:14:33

## Middle Channel / 10MHz / QPSK



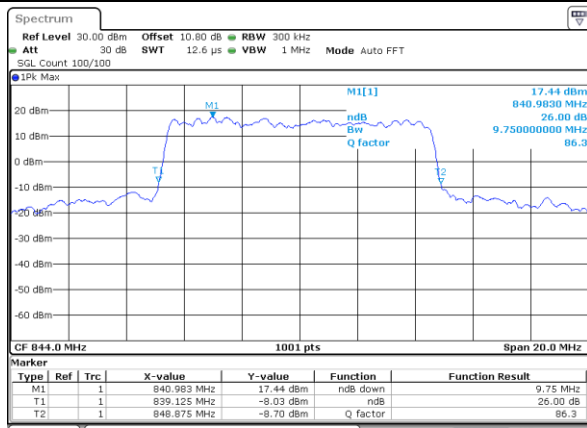
Date: 25 AUG 2017 16:23:25

## Middle Channel / 10MHz / 16QAM



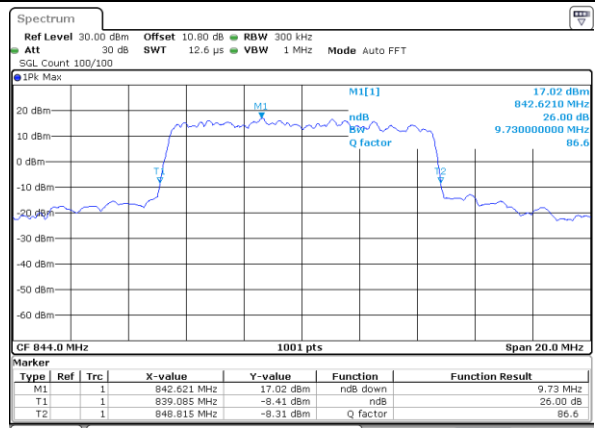
Date: 25 AUG 2017 16:23:35

## Highest Channel / 10MHz / QPSK



Date: 25 AUG 2017 16:25:53

## Highest Channel / 10MHz / 16QAM

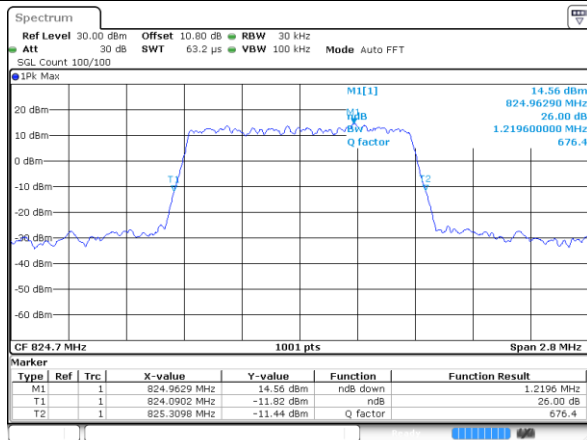


Date: 25 AUG 2017 16:26:03



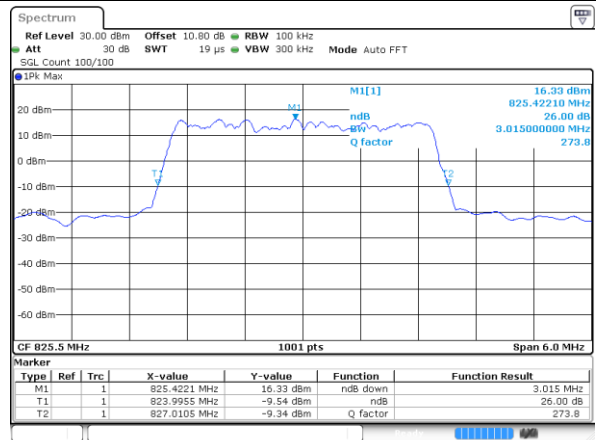
## LTE Band 5

## Lowest Channel / 1.4MHz / 64QAM



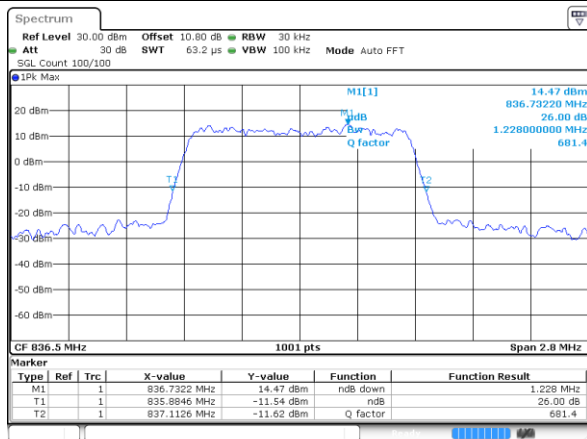
Date: 5.OCT.2017 15:07:32

## Lowest Channel / 3MHz / 64QAM



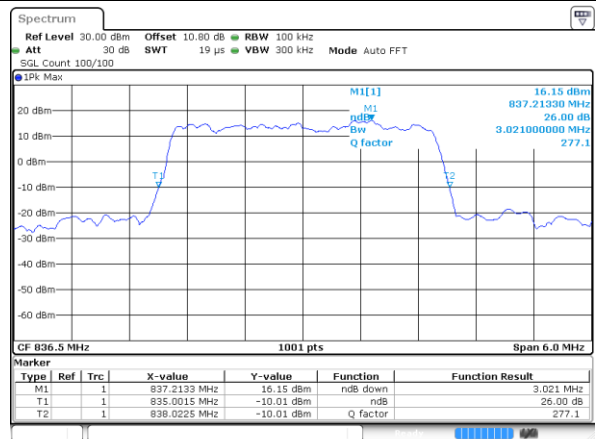
Date: 5.OCT.2017 12:11:24

## Middle Channel / 1.4MHz / 64QAM



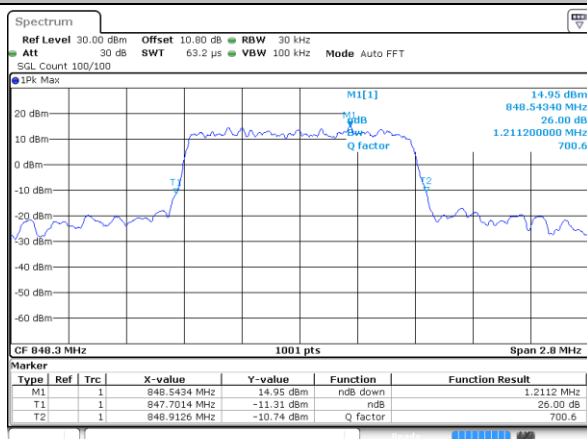
Date: 5.OCT.2017 15:12:04

## Middle Channel / 3MHz / 64QAM



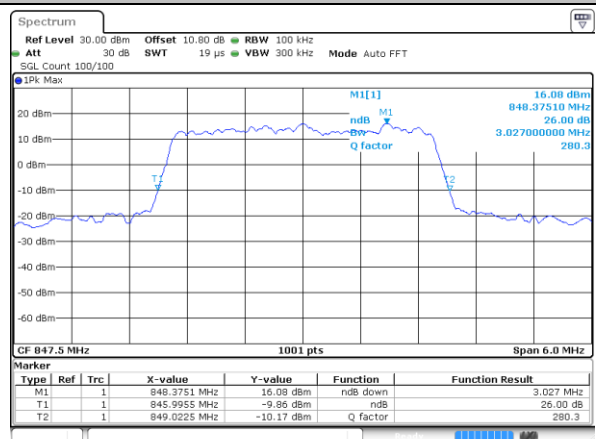
Date: 5.OCT.2017 12:15:55

## Highest Channel / 1.4MHz / 64QAM



Date: 5.OCT.2017 15:13:18

## Highest Channel / 3MHz / 64QAM

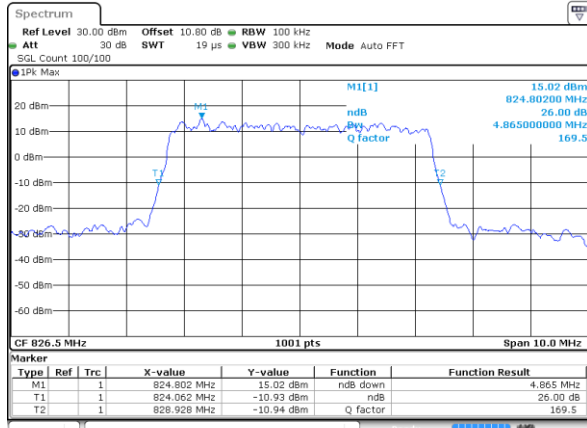


Date: 5.OCT.2017 12:17:09



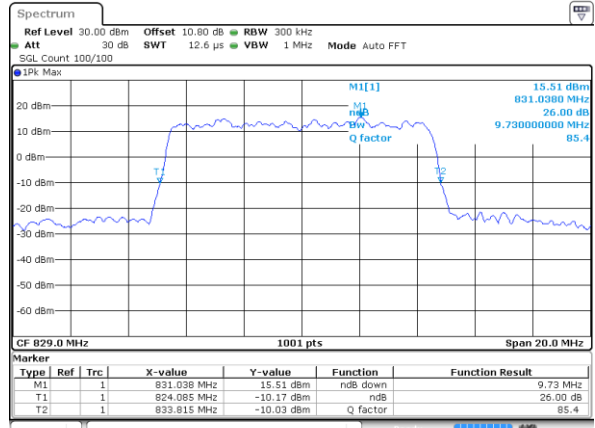
## LTE Band 5

## Lowest Channel / 5MHz / 64QAM



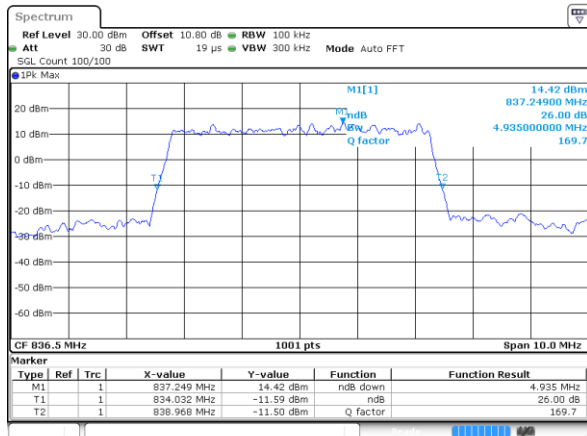
Date: 5.OCT.2017 12:21:40

## Lowest Channel / 10MHz / 64QAM



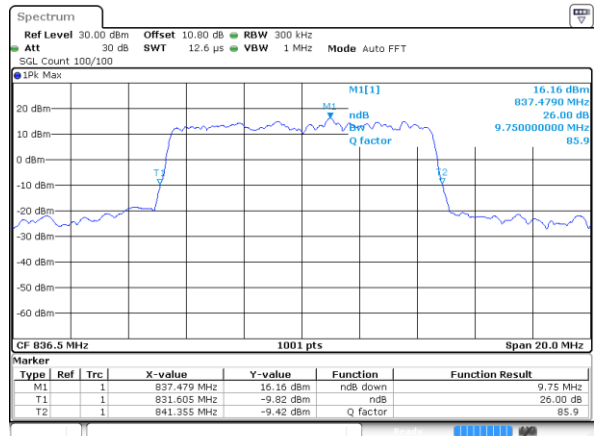
Date: 5.OCT.2017 14:44:48

## Middle Channel / 5MHz / 64QAM



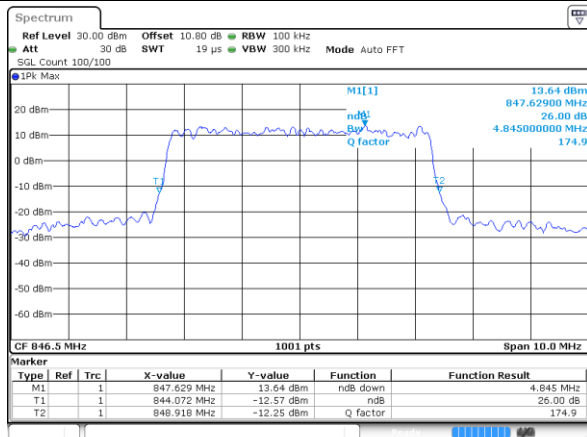
Date: 5.OCT.2017 14:39:02

## Middle Channel / 10MHz / 64QAM



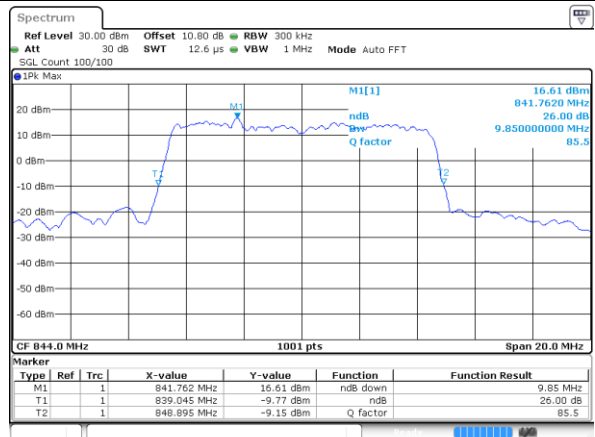
Date: 5.OCT.2017 14:49:19

## Highest Channel / 5MHz / 64QAM



Date: 5.OCT.2017 14:40:16

## Highest Channel / 10MHz / 64QAM



Date: 5.OCT.2017 14:50:33

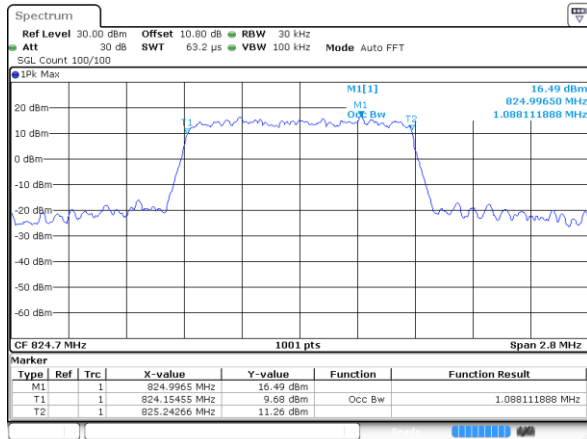
**Occupied Bandwidth**

| Mode       | LTE Band 5 : 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  | 1.09                     | 1.09  | 2.72  | 2.74  | 4.5   | 4.48  | 9.07  | 8.99  | -     | -     | -     | -     |
| Middle CH  | 1.09                     | 1.09  | 2.72  | 2.73  | 4.49  | 4.5   | 9.03  | 9.09  | -     | -     | -     | -     |
| Highest CH | 1.1                      | 1.1   | 2.72  | 2.73  | 4.49  | 4.49  | 9.03  | 9.03  | -     | -     | -     | -     |
| Mode       | LTE Band 5 : 99%OBW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                   |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                    |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.09                     | -     | 2.71  | -     | 4.52  | -     | 9.05  | -     | -     | -     | -     | -     |
| Middle CH  | 1.09                     | -     | 2.74  | -     | 4.51  | -     | 9.05  | -     | -     | -     | -     | -     |
| Highest CH | 1.1                      | -     | 2.75  | -     | 4.49  | -     | 9.01  | -     | -     | -     | -     | -     |

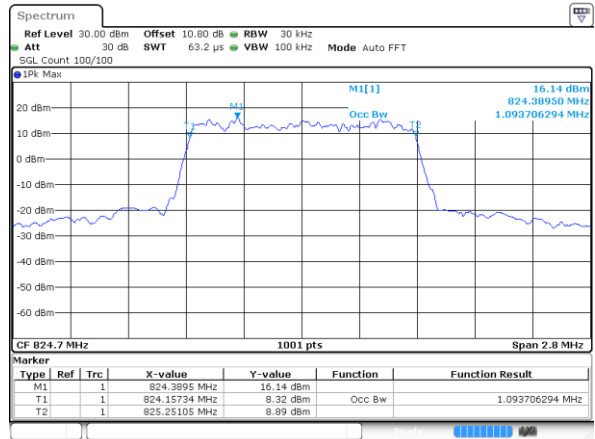


## LTE Band 5

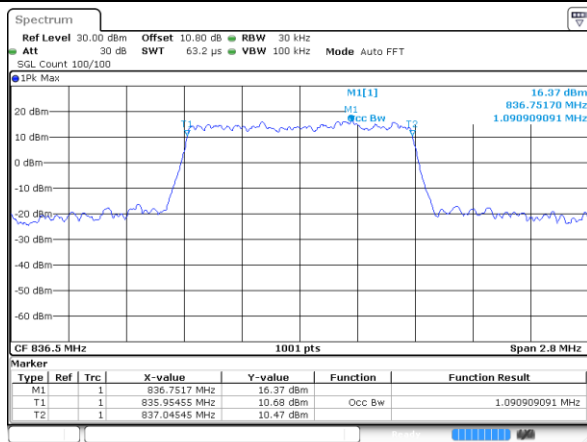
## Lowest Channel / 1.4MHz / QPSK



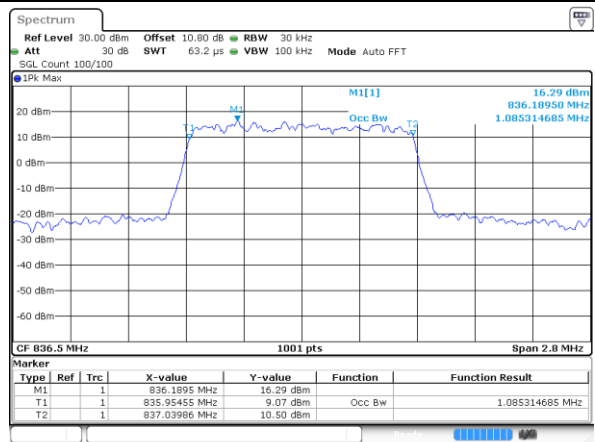
## Lowest Channel / 1.4MHz / 16QAM



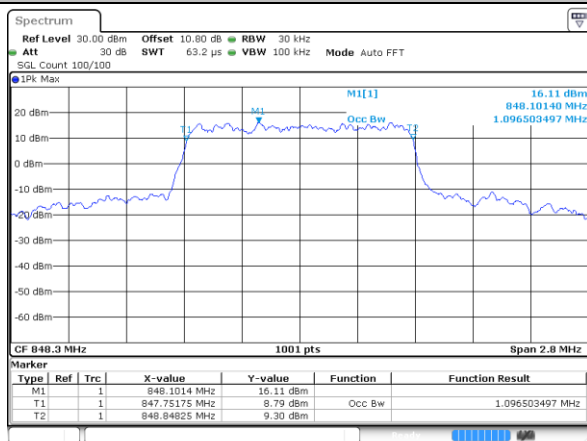
## Middle Channel / 1.4MHz / QPSK



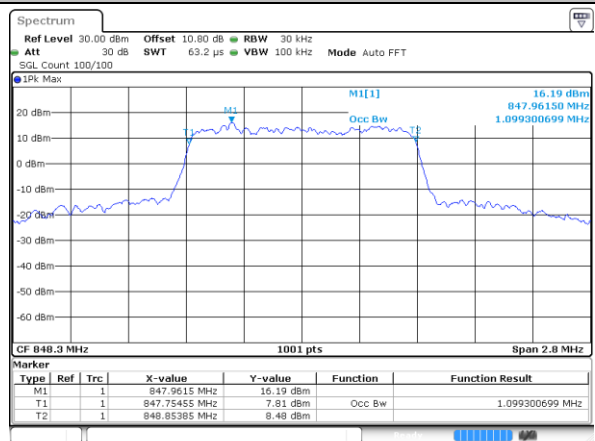
## Middle Channel / 1.4MHz / 16QAM



## Highest Channel / 1.4MHz / QPSK



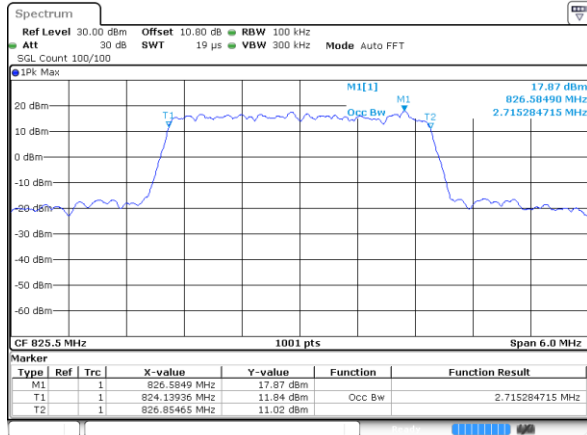
## Highest Channel / 1.4MHz / 16QAM



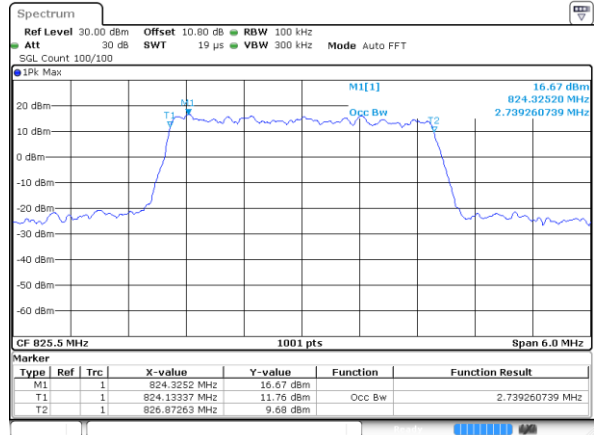


## LTE Band 5

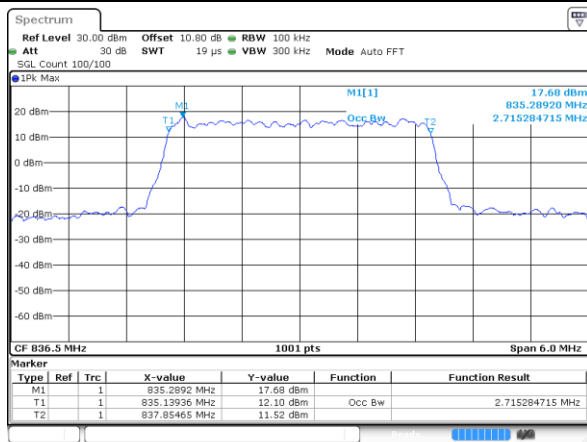
## Lowest Channel / 3MHz / QPSK



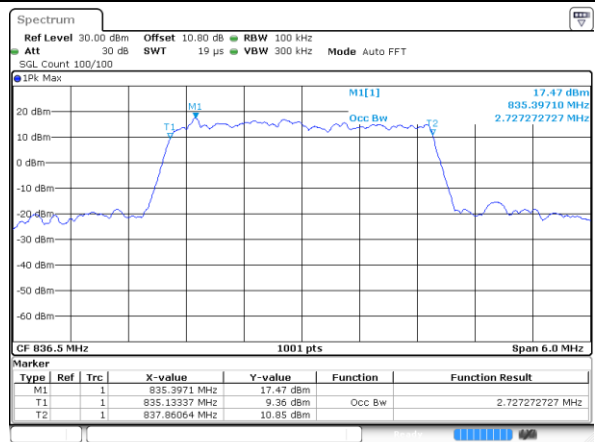
## Lowest Channel / 3MHz / 16QAM



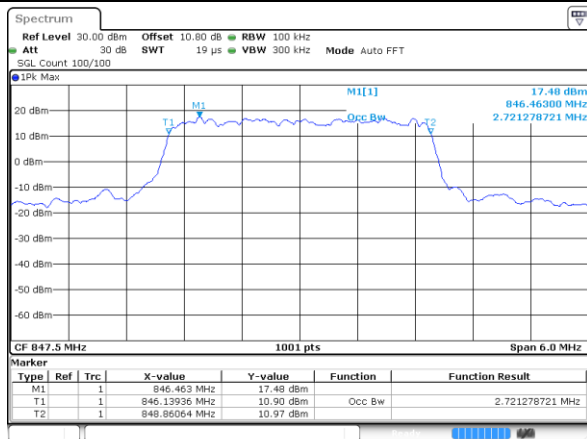
## Middle Channel / 3MHz / QPSK



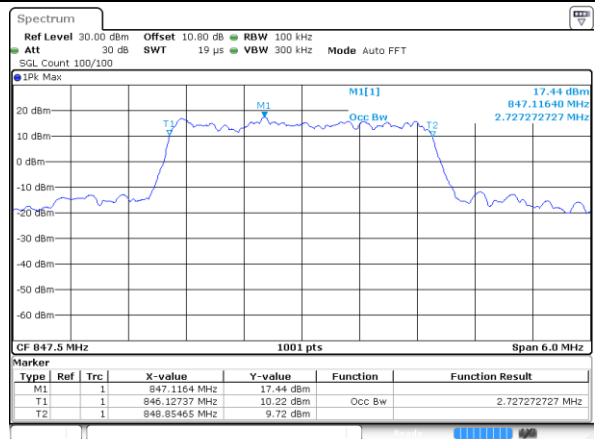
## Middle Channel / 3MHz / 16QAM



## Highest Channel / 3MHz / QPSK



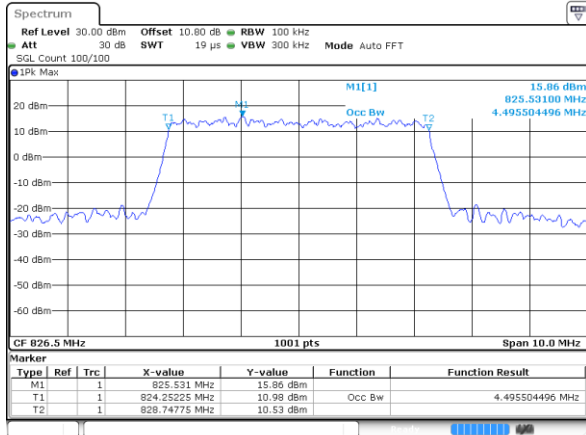
## Highest Channel / 3MHz / 16QAM





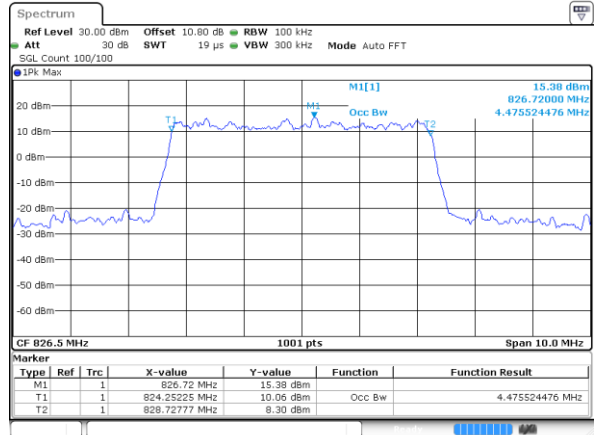
## LTE Band 5

## Lowest Channel / 5MHz / QPSK



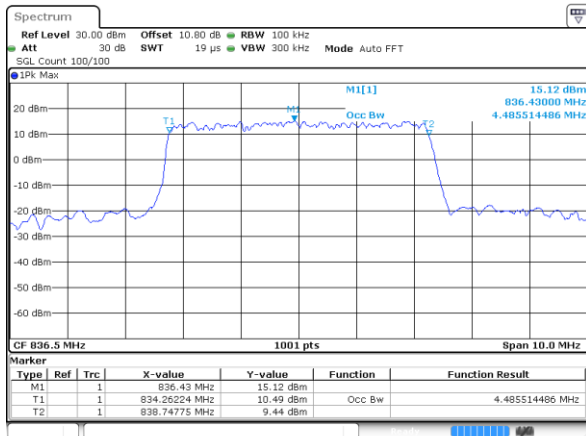
Date: 25 AUG 2017 15:53:31

## Lowest Channel / 5MHz / 16QAM



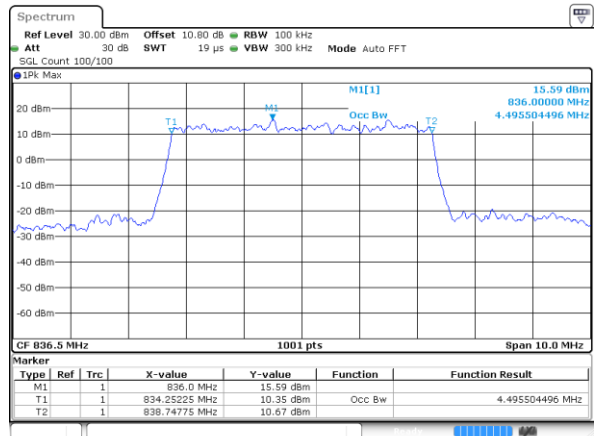
Date: 25 AUG 2017 15:53:41

## Middle Channel / 5MHz / QPSK



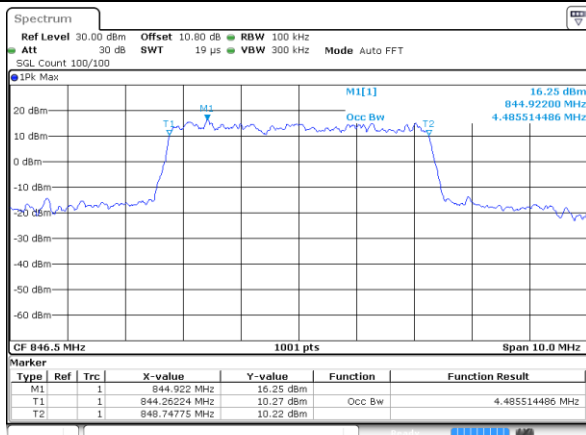
Date: 25 AUG 2017 16:02:33

## Middle Channel / 5MHz / 16QAM



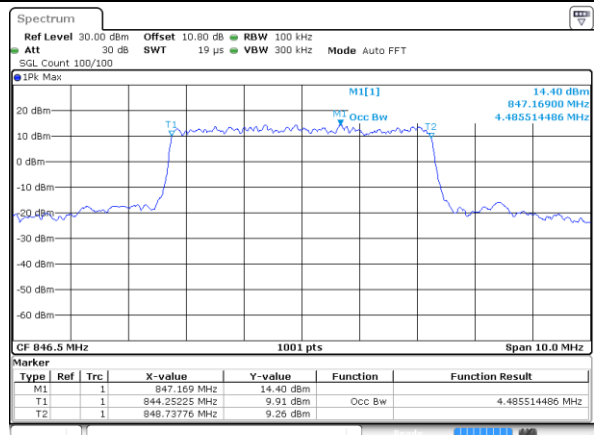
Date: 25 AUG 2017 16:02:43

## Highest Channel / 5MHz / QPSK



Date: 25 AUG 2017 16:05:01

## Highest Channel / 5MHz / 16QAM

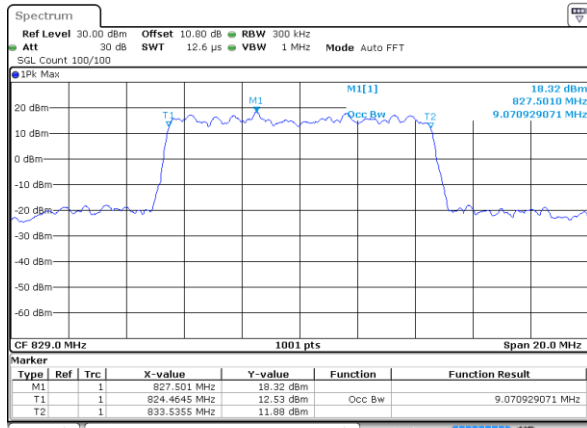


Date: 25 AUG 2017 16:05:11



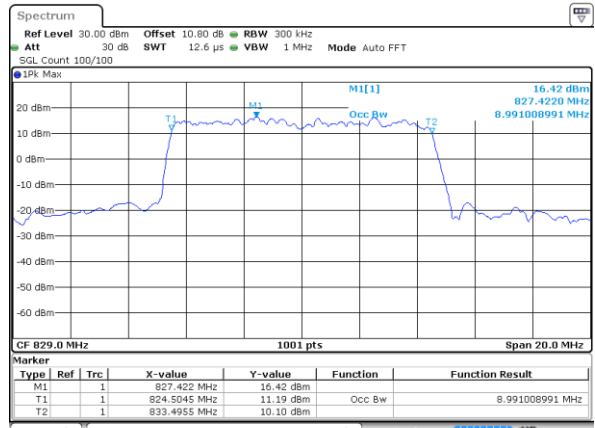
## LTE Band 5

## Lowest Channel / 10MHz / QPSK



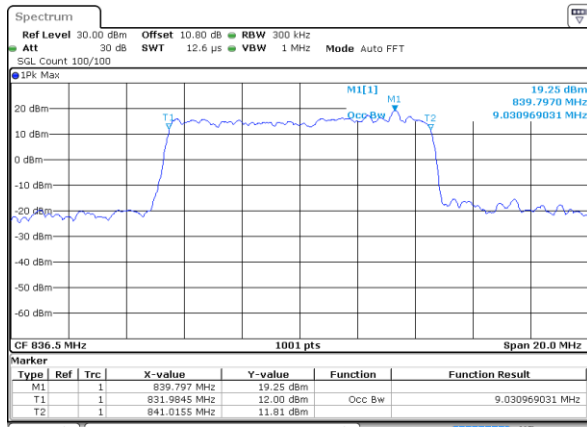
Date: 25 AUG 2017 16:14:03

## Lowest Channel / 10MHz / 16QAM



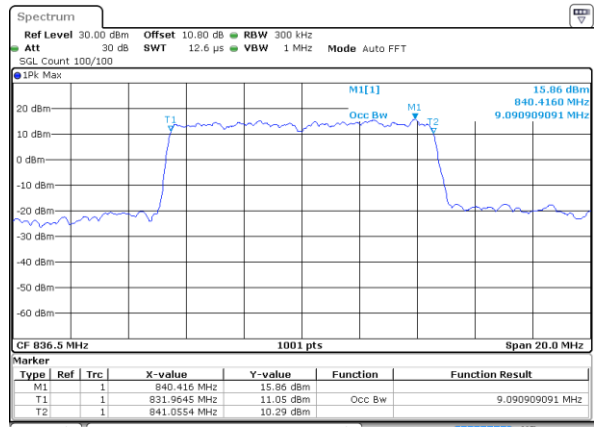
Date: 25 AUG 2017 16:14:13

## Middle Channel / 10MHz / QPSK



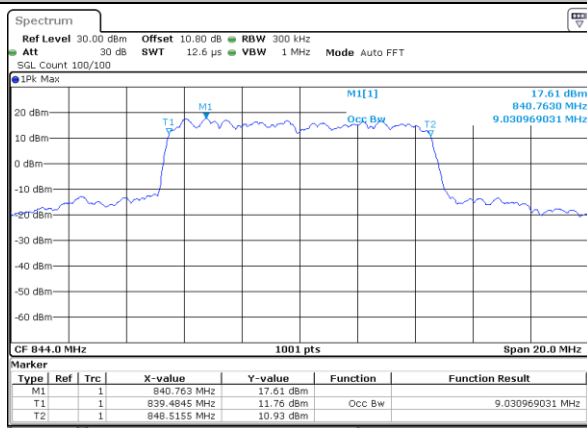
Date: 25 AUG 2017 16:23:05

## Middle Channel / 10MHz / 16QAM



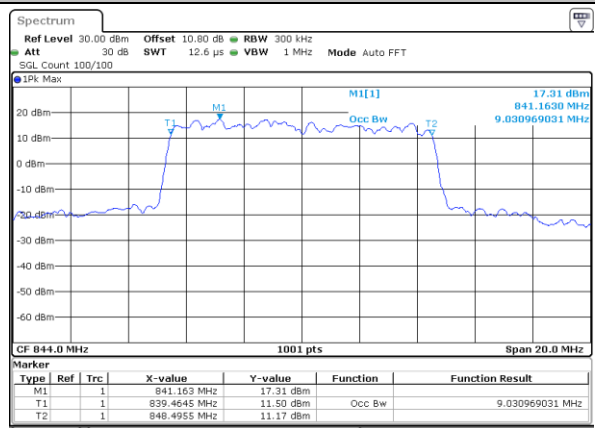
Date: 25 AUG 2017 16:23:15

## Highest Channel / 10MHz / QPSK



Date: 25 AUG 2017 16:25:33

## Highest Channel / 10MHz / 16QAM

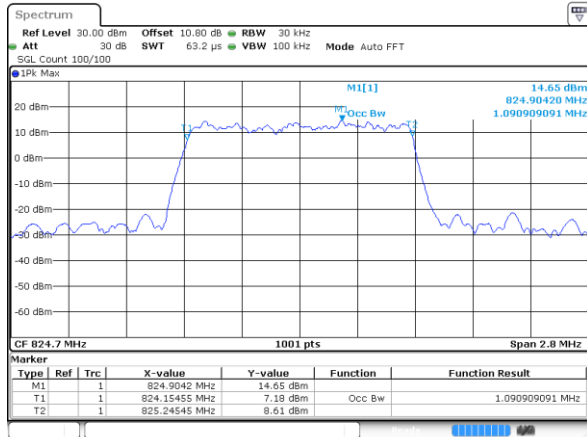


Date: 25 AUG 2017 16:25:43

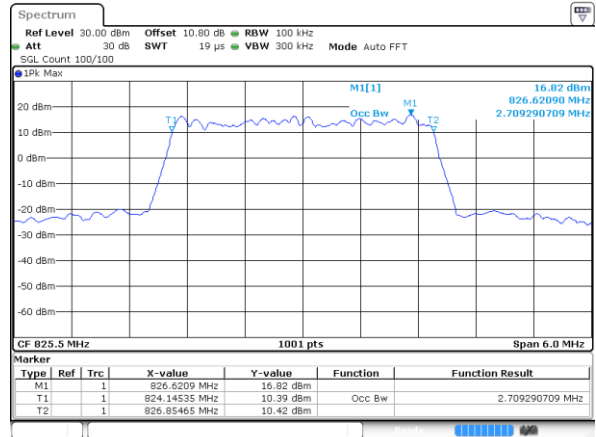


## LTE Band 5

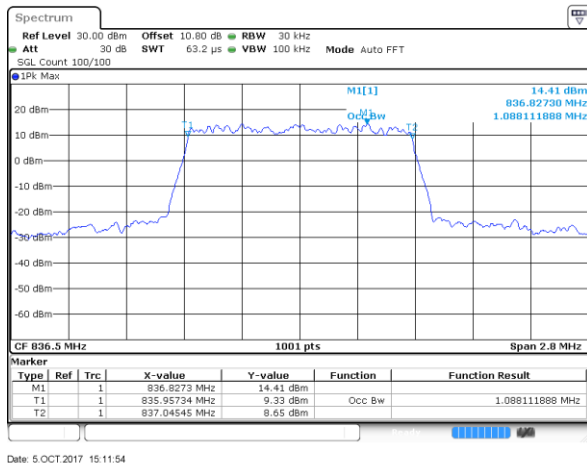
## Lowest Channel / 1.4MHz / 64QAM



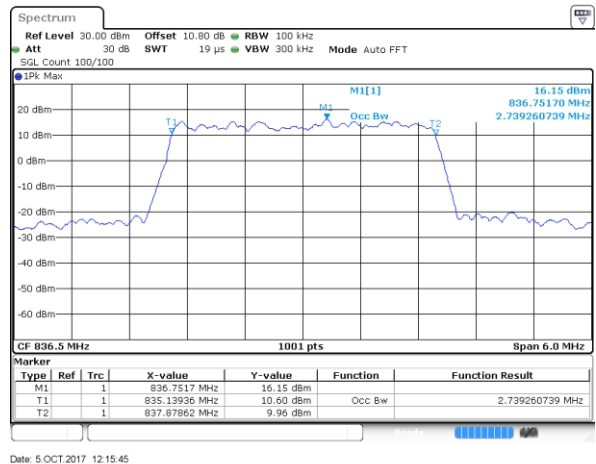
## Lowest Channel / 3MHz / 64QAM



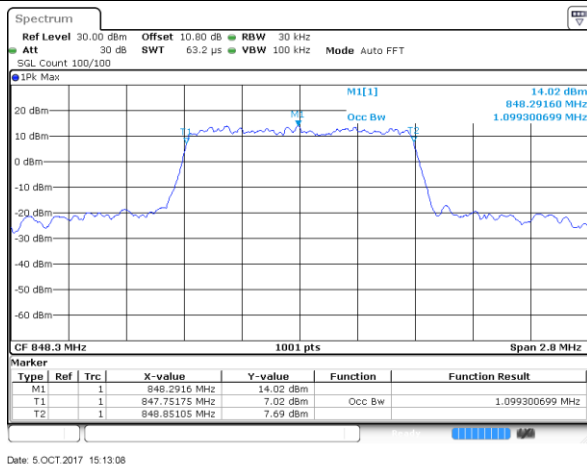
## Middle Channel / 1.4MHz / 64QAM



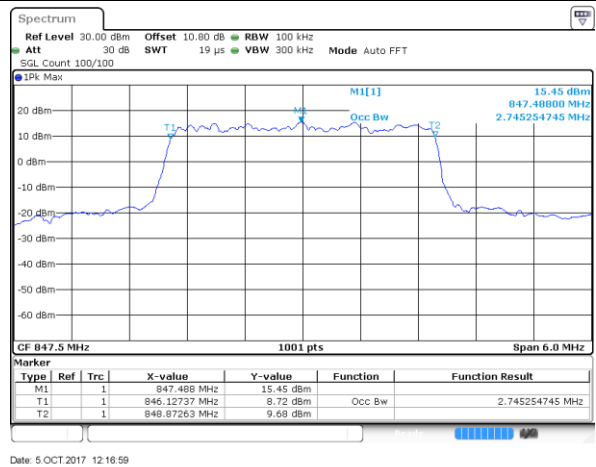
## Middle Channel / 3MHz / 64QAM



## Highest Channel / 1.4MHz / 64QAM



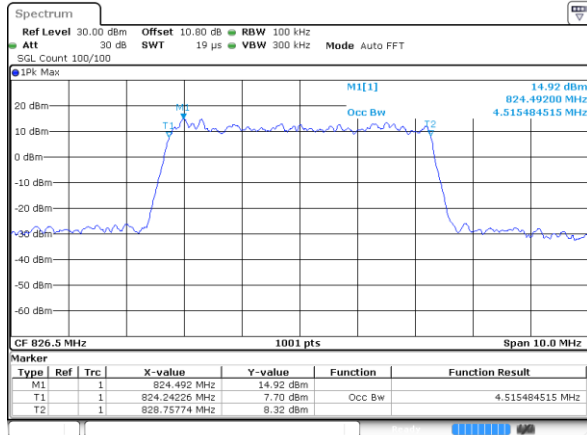
## Highest Channel / 3MHz / 64QAM





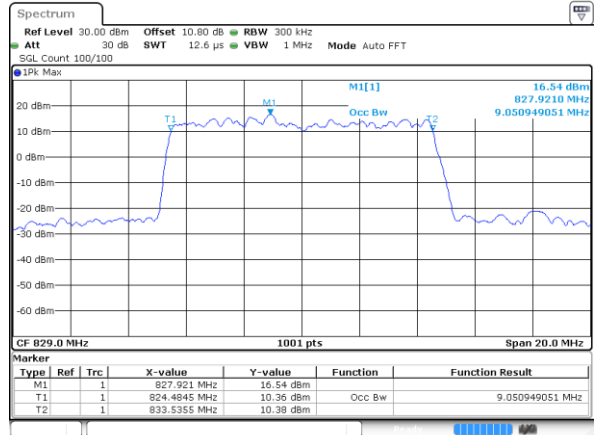
## LTE Band 5

## Lowest Channel / 5MHz / 64QAM



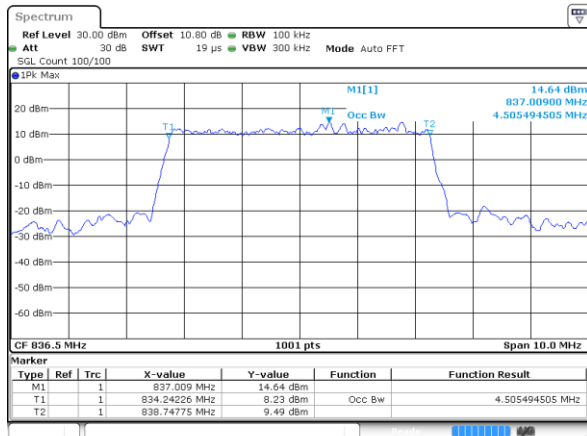
Date: 5 OCT 2017 12:21:30

## Lowest Channel / 10MHz / 64QAM



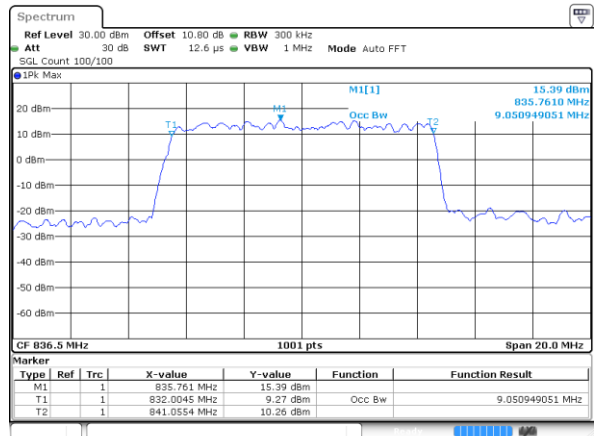
Date: 5 OCT 2017 14:44:37

## Middle Channel / 5MHz / 64QAM



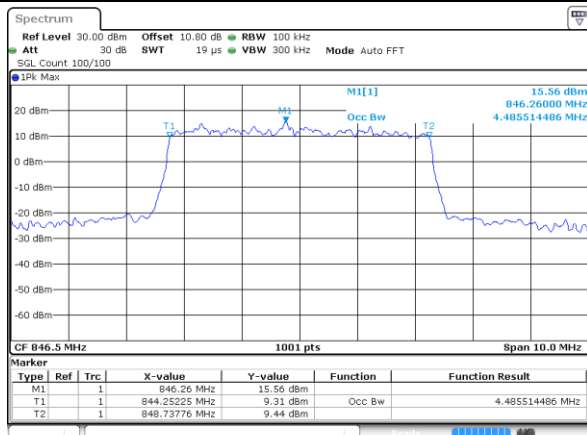
Date: 5 OCT 2017 14:38:52

## Middle Channel / 10MHz / 64QAM



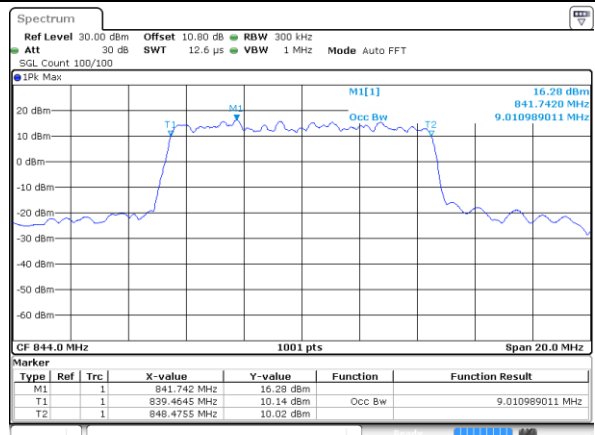
Date: 5 OCT 2017 14:49:09

## Highest Channel / 5MHz / 64QAM



Date: 5 OCT 2017 14:40:06

## Highest Channel / 10MHz / 64QAM



Date: 5 OCT 2017 14:50:23