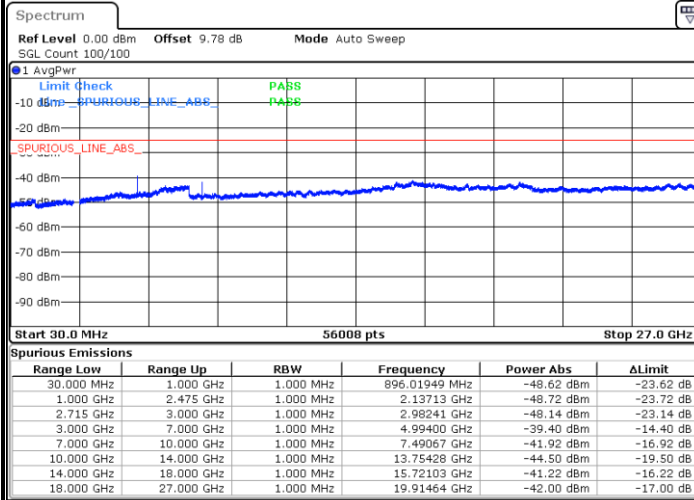




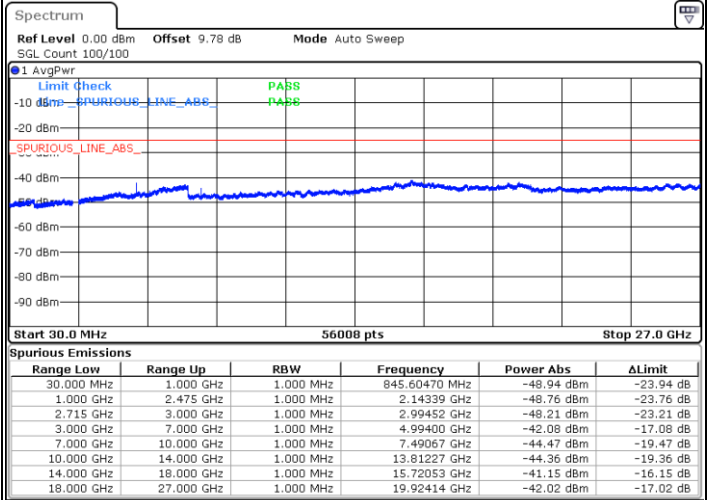
## LTE Band 41 / 15MHz

## Lowest Channel / QPSK



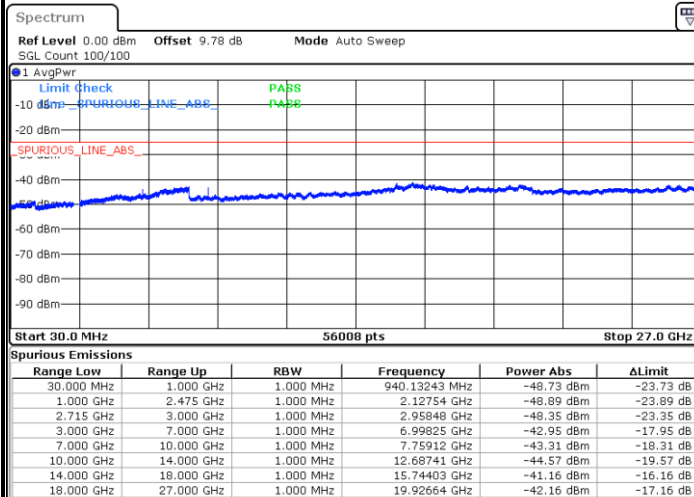
Date: 17.OCT.2018 15:36:47

## Lowest Channel / 16QAM



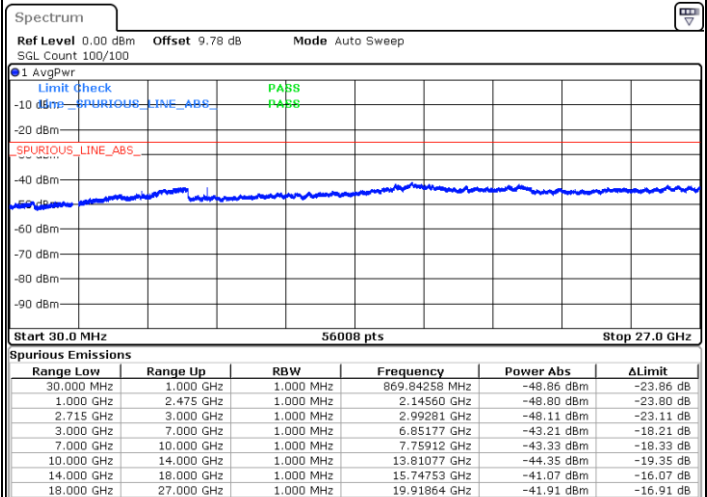
Date: 17.OCT.2018 15:37:41

## Middle Channel / QPSK



Date: 17.OCT.2018 15:38:36

## Middle Channel / 16QAM

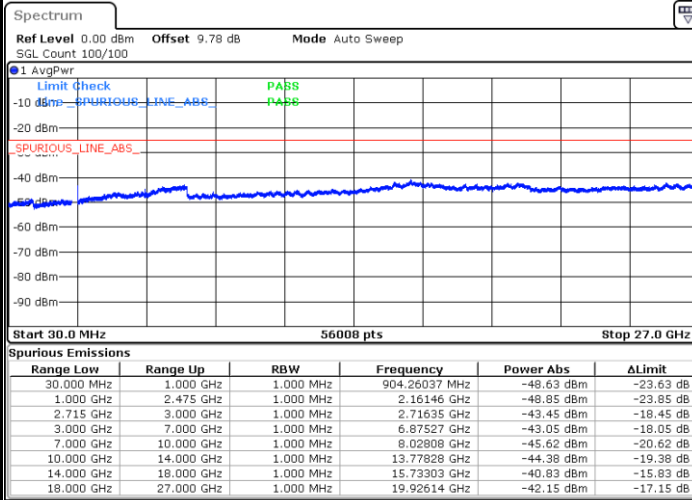


Date: 17.OCT.2018 15:39:30



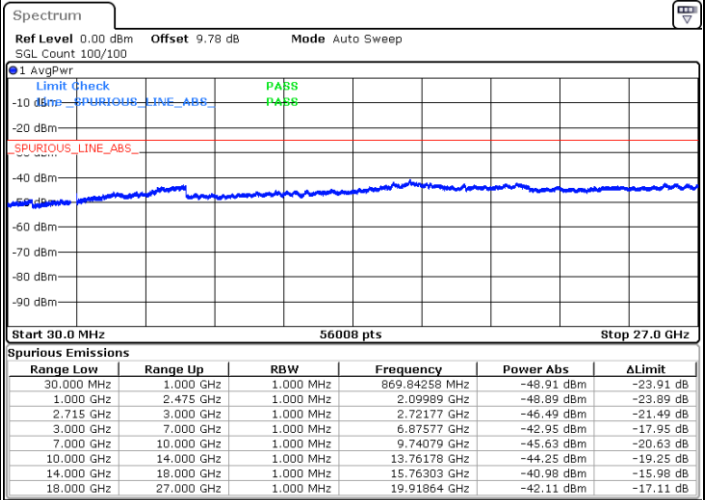
## LTE Band 41 / 15MHz

## Highest Channel / QPSK



Date: 17.OCT.2018 15:40:25

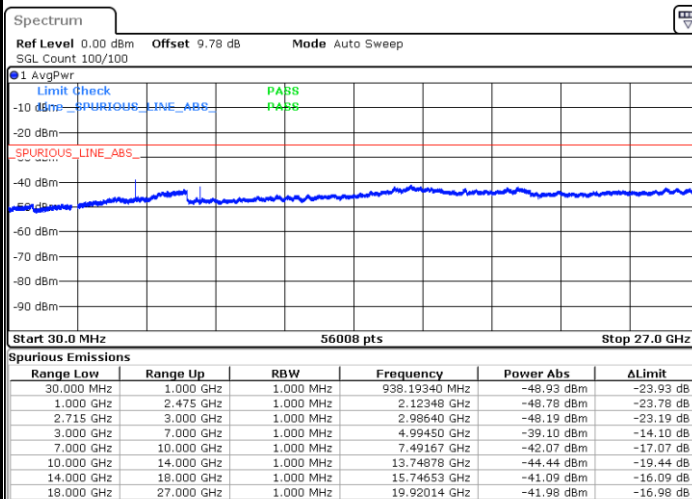
## Highest Channel / 16QAM



Date: 17.OCT.2018 15:41:19

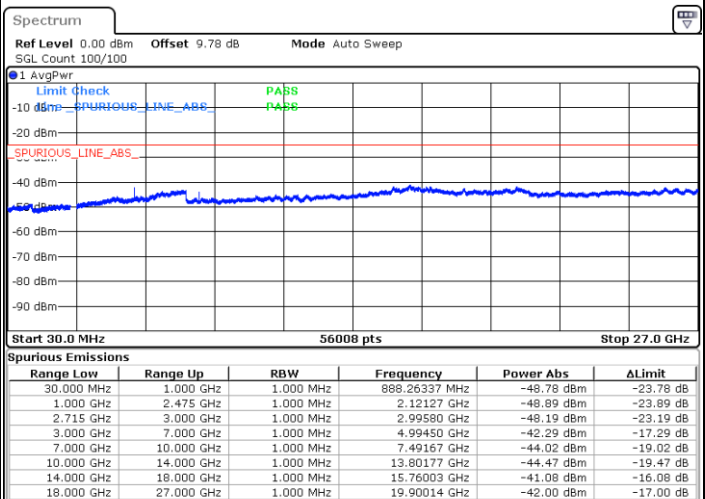
## LTE Band 41 / 20MHz

## Lowest Channel / QPSK



Date: 17.OCT.2018 15:42:14

## Lowest Channel / 16QAM

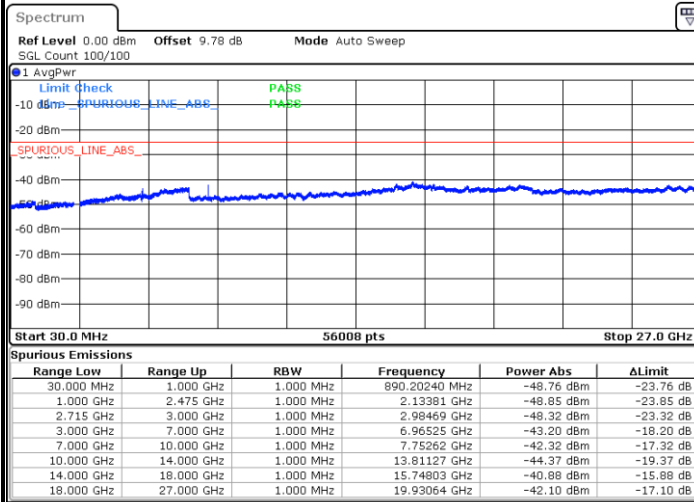


Date: 17.OCT.2018 15:43:09



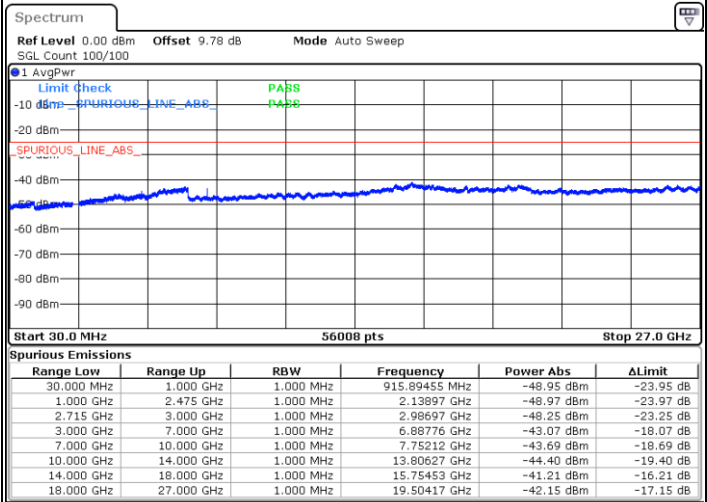
## LTE Band 41 / 20MHz

## Middle Channel / QPSK



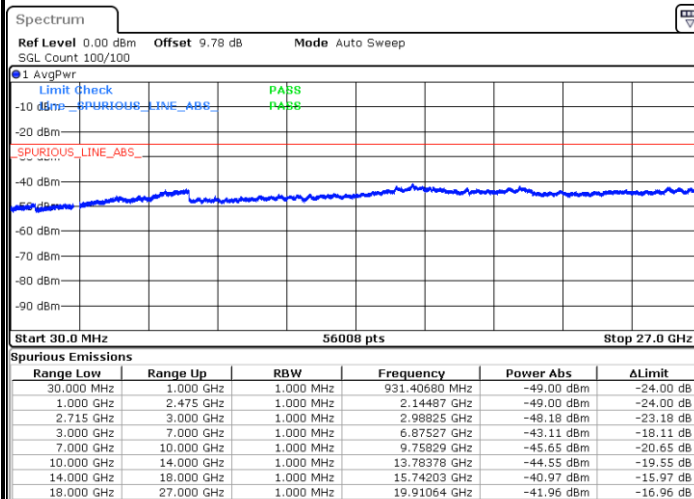
Date: 17.OCT.2018 15:44:03

## Middle Channel / 16QAM



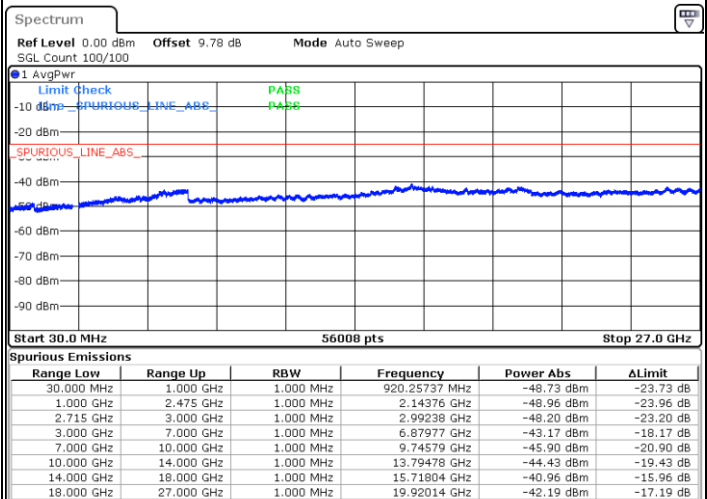
Date: 17.OCT.2018 15:44:58

## Highest Channel / QPSK



Date: 17.OCT.2018 15:45:52

## Highest Channel / 16QAM

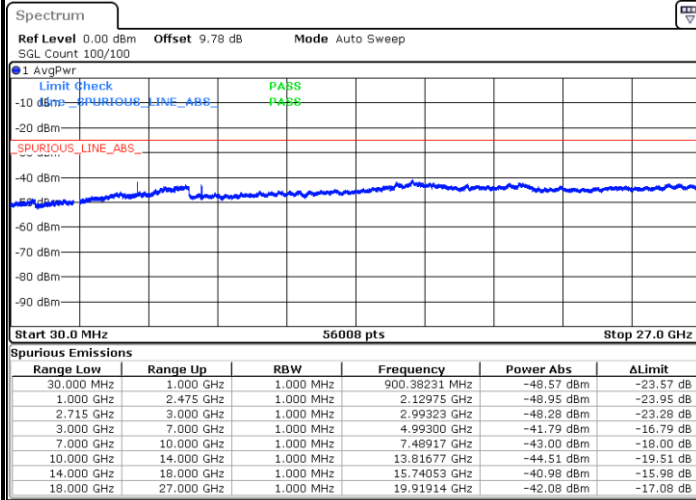


Date: 17.OCT.2018 15:46:47



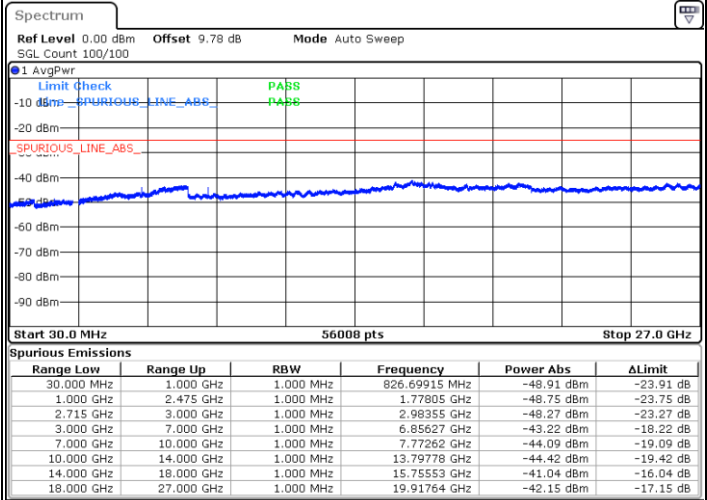
## LTE Band 41 / 5MHz

## Lowest Channel / 64QAM



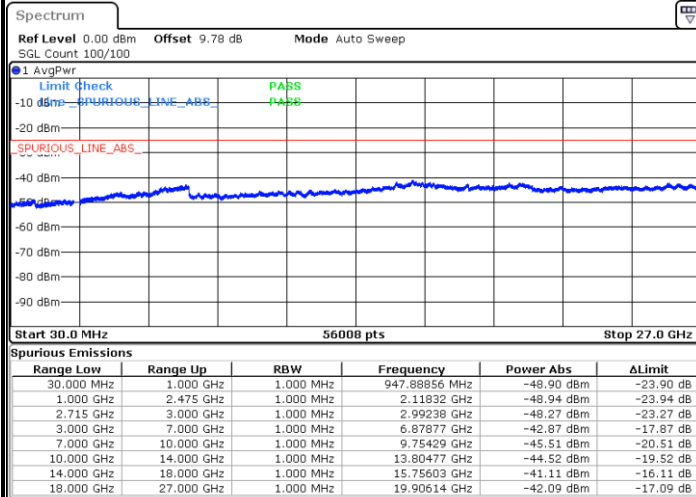
Date: 17.OCT.2018 15:20:30

## Middle Channel / 64QAM



Date: 17.OCT.2018 15:21:32

## Highest Channel / 64QAM

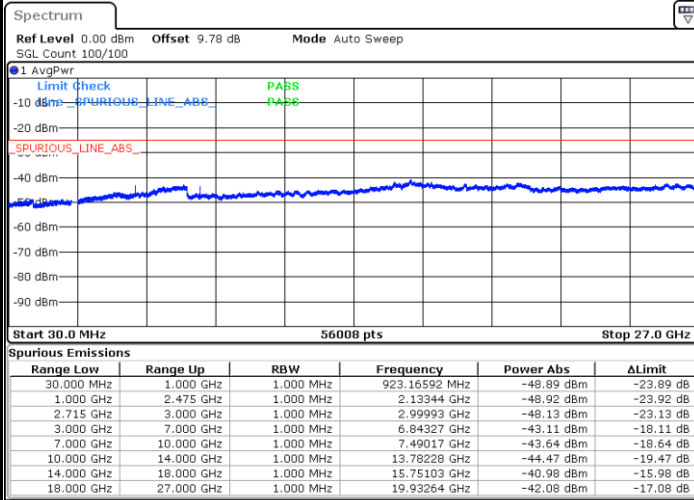


Date: 17.OCT.2018 15:25:32



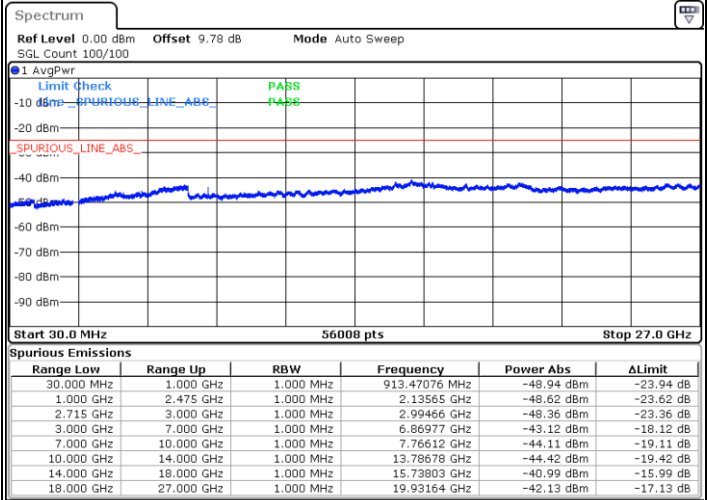
## LTE Band 41 / 10MHz

## Lowest Channel / 64QAM



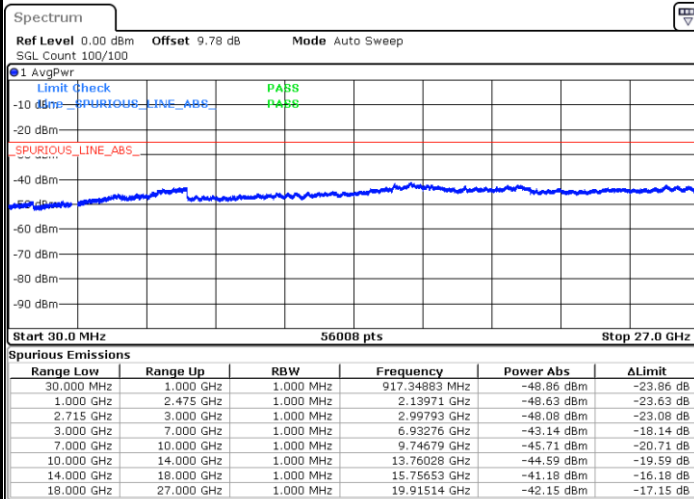
Date: 17.OCT.2018 15:26:22

## Middle Channel / 64QAM



Date: 17.OCT.2018 15:30:22

## Highest Channel / 64QAM

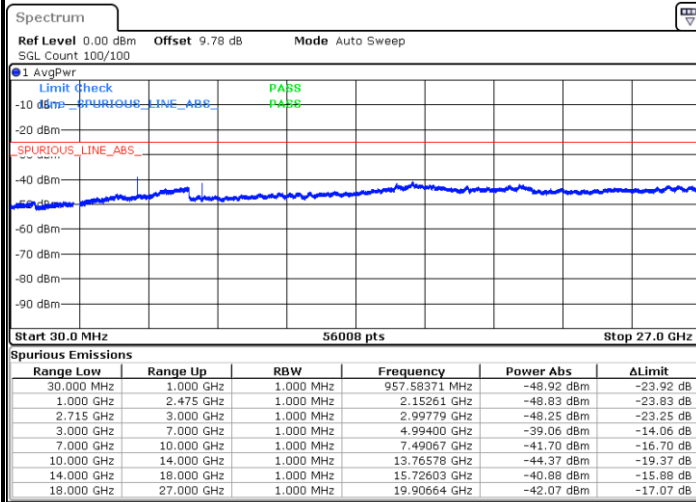


Date: 17.OCT.2018 15:31:10



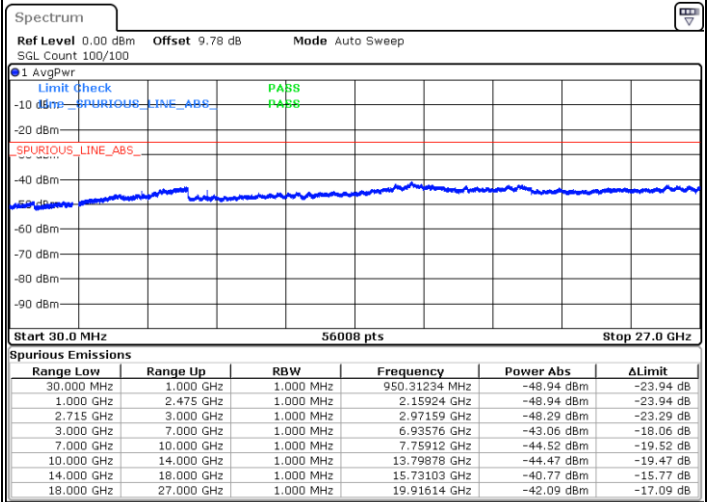
## LTE Band 41 / 15MHz

## Lowest Channel / 64QAM



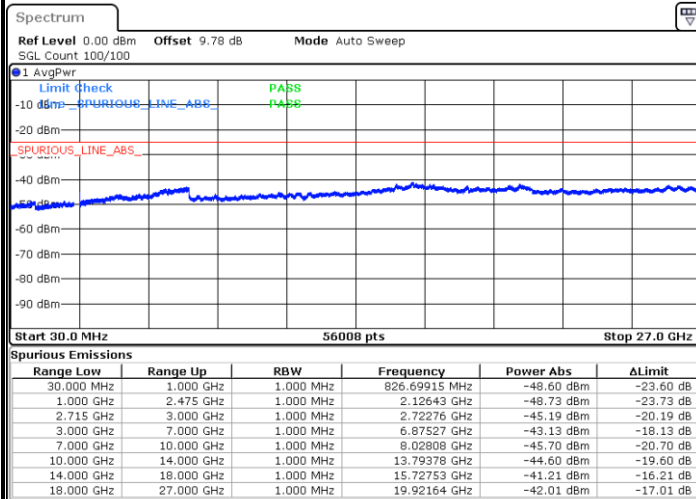
Date: 17.OCT.2018 15:47:42

## Middle Channel / 64QAM



Date: 17.OCT.2018 15:48:36

## Highest Channel / 64QAM

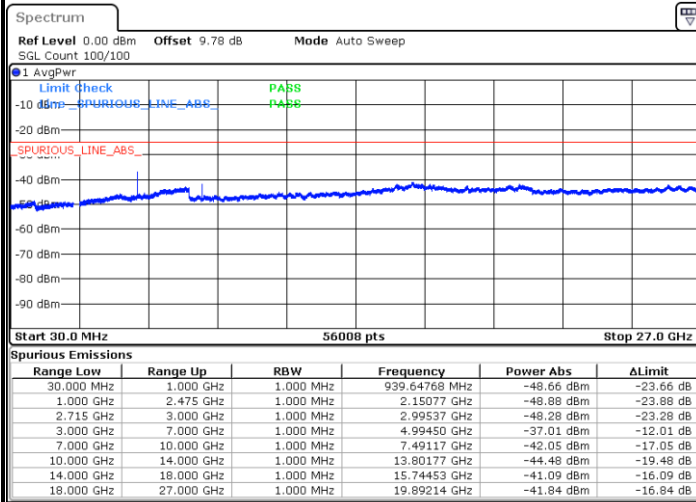


Date: 17.OCT.2018 15:49:31



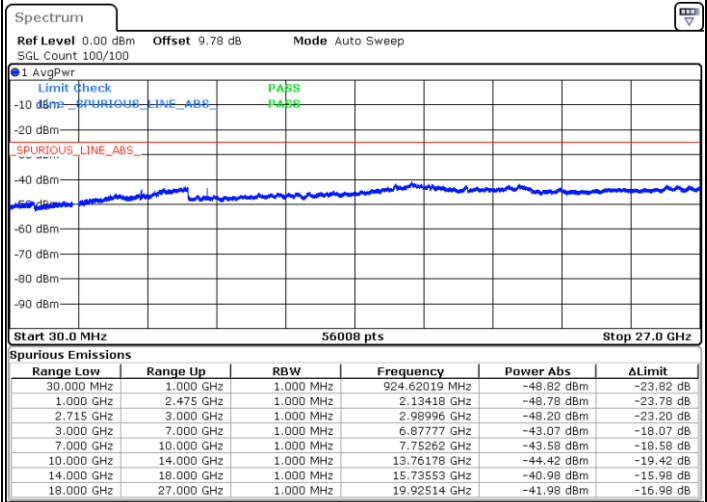
## LTE Band 41 / 20MHz

## Lowest Channel / 64QAM



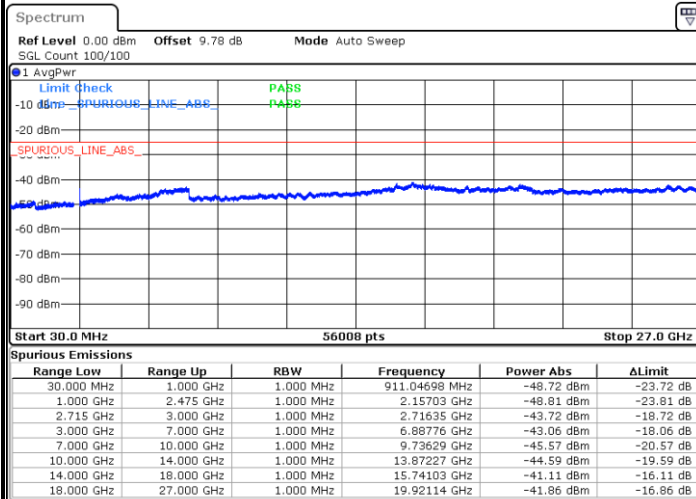
Date: 17.OCT.2018 15:50:25

## Middle Channel / 64QAM



Date: 17.OCT.2018 15:51:20

## Highest Channel / 64QAM



Date: 17.OCT.2018 15:52:15

## Frequency Stability

| Test Conditions  |                   | LTE Band 41 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                            | Note 2. |
|                  |                   | Deviation (ppm)                     | Result  |
| 50               | Normal Voltage    | 0.0030                              | PASS    |
| 40               | Normal Voltage    | 0.0051                              |         |
| 30               | Normal Voltage    | 0.0037                              |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                              |         |
| 10               | Normal Voltage    | 0.0041                              |         |
| 0                | Normal Voltage    | 0.0030                              |         |
| -10              | Normal Voltage    | 0.0059                              |         |
| -20              | Normal Voltage    | 0.0023                              |         |
| -30              | Normal Voltage    | 0.0018                              |         |
| 20               | Maximum Voltage   | 0.0063                              |         |
| 20               | Normal Voltage    | 0.0044                              |         |
| 20               | Battery End Point | 0.0031                              |         |

**Note:**

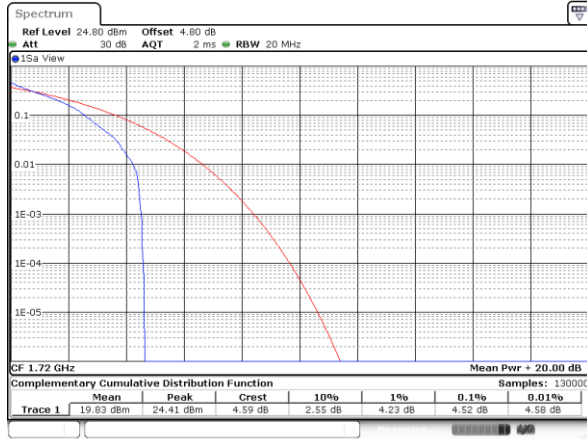
1. Normal Voltage =4.0 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



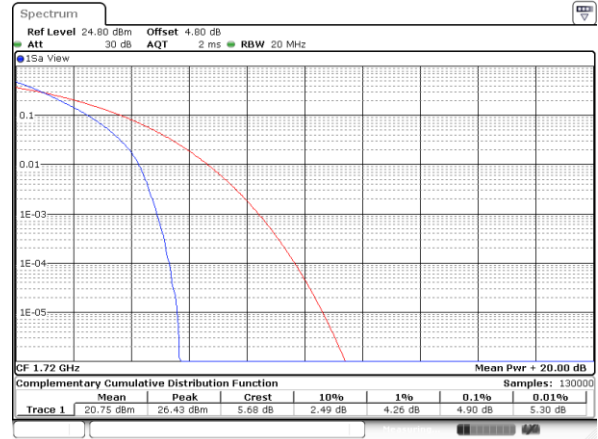
## LTE Band 66

## Peak-to-Average Ratio

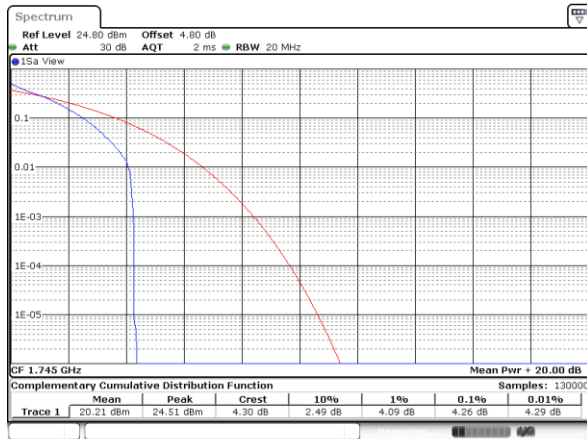
| Mode       | LTE Band 66 / 20MHz |         |       |         |             |
|------------|---------------------|---------|-------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 4.52                | 4.9     | 5.42  | 5.88    | PASS        |
| Middle CH  | 4.26                | 4.72    | 4.78  | 5.74    |             |
| Highest CH | 4.84                | 4.9     | 5.28  | 5.83    |             |
| Mode       | LTE Band 66 / 20MHz |         |       |         |             |
| Mod.       | 64QAM               |         |       |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB |       |         | Result      |
| Lowest CH  | 6.2                 | 6.41    |       |         | PASS        |
| Middle CH  | 6.23                | 6.2     |       |         |             |
| Highest CH | 6.52                | 6.38    |       |         |             |

**LTE Band 66 / 20MHz / QPSK**
**Lowest Channel / 1RB**


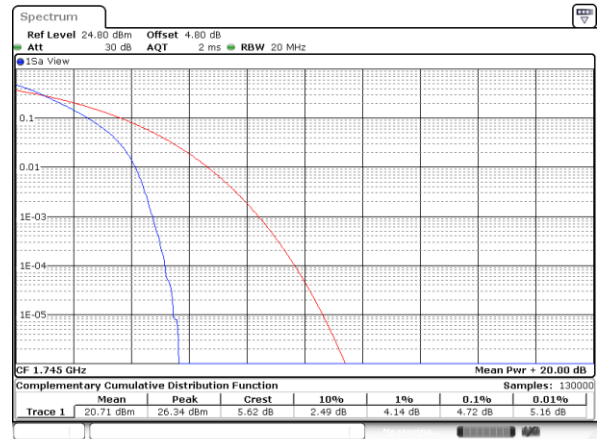
Date: 2.OCT.2018 21:53:44

**Lowest Channel / Full RB**


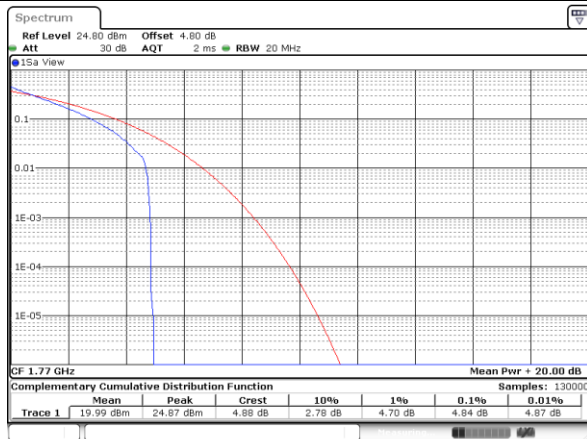
Date: 2.OCT.2018 21:48:26

**Middle Channel / 1RB**


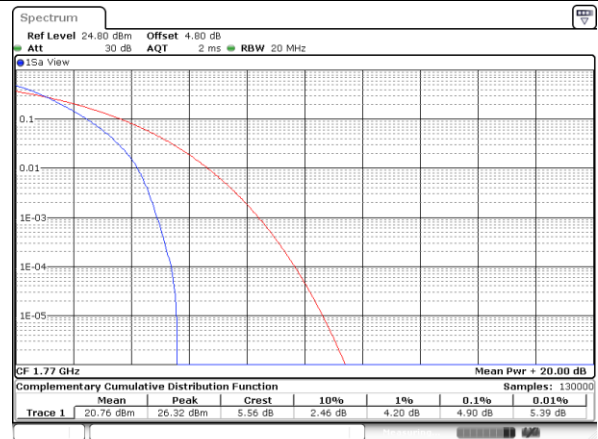
Date: 2.OCT.2018 21:54:50

**Middle Channel / Full RB**


Date: 2.OCT.2018 21:56:57

**Highest Channel / 1RB**


Date: 2.OCT.2018 22:02:45

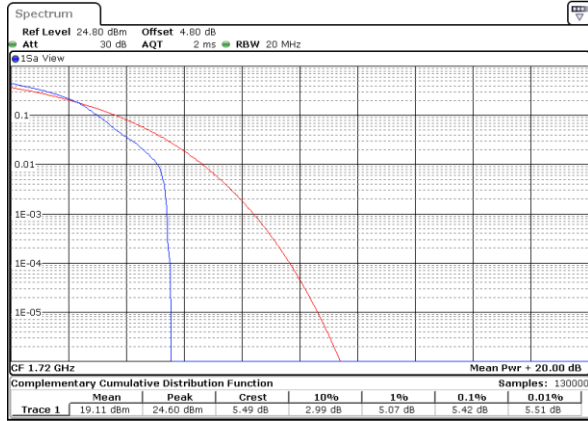
**Highest Channel / Full RB**


Date: 2.OCT.2018 21:59:04



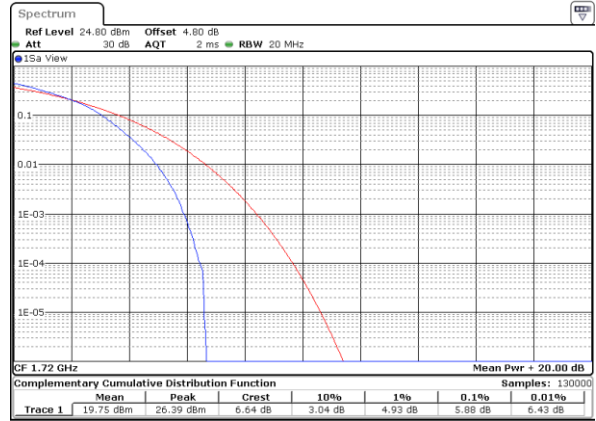
## LTE Band 66 / 20MHz / 16QAM

## Lowest Channel / 1RB



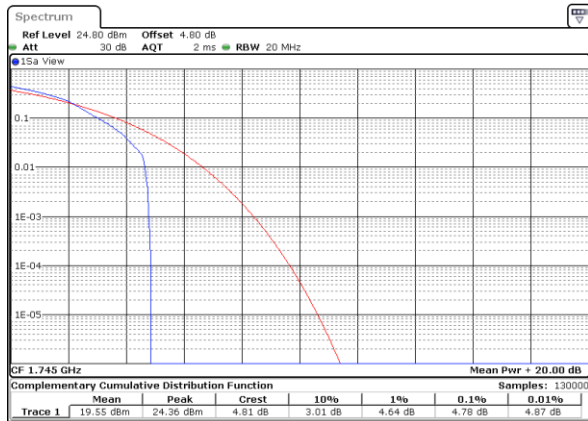
Date: 2.OCT.2018 21:53:32

## Lowest Channel / Full RB



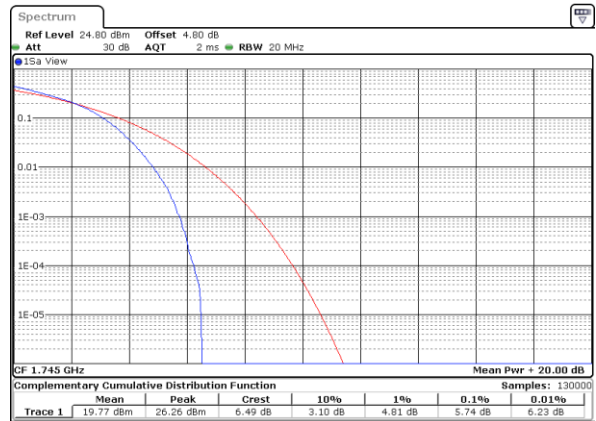
Date: 2.OCT.2018 21:46:52

## Middle Channel / 1RB



Date: 2.OCT.2018 21:55:41

## Middle Channel / Full RB



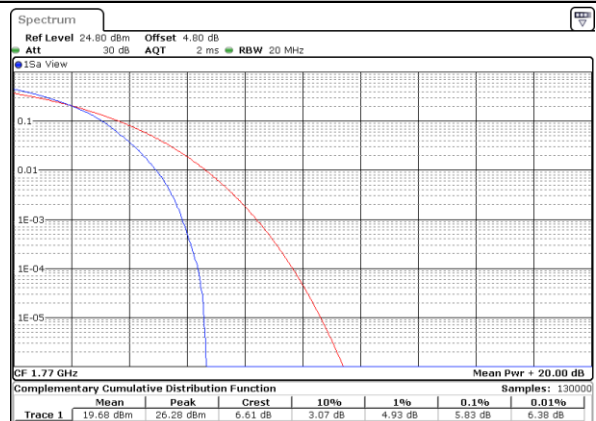
Date: 2.OCT.2018 21:56:46

## Highest Channel / 1RB



Date: 2.OCT.2018 22:02:56

## Highest Channel / Full RB

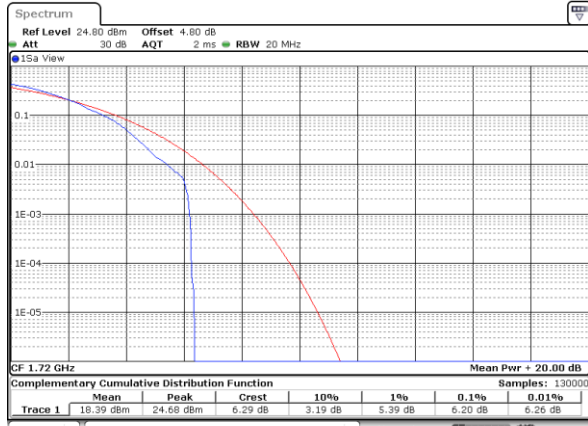


Date: 2.OCT.2018 21:59:36

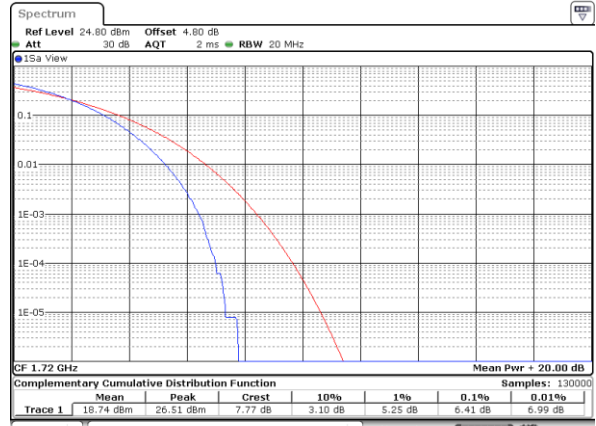


## LTE Band 66 / 20MHz / 64QAM

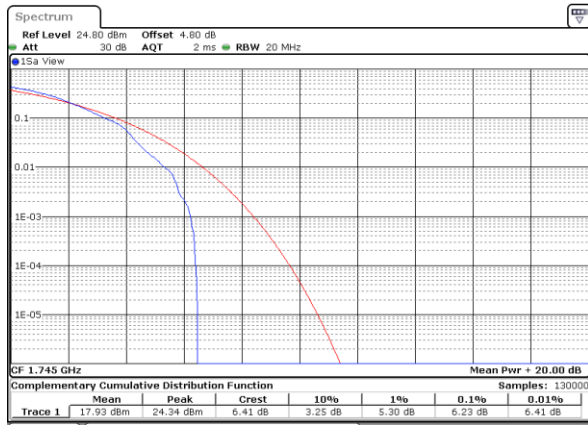
## Lowest Channel / 1RB



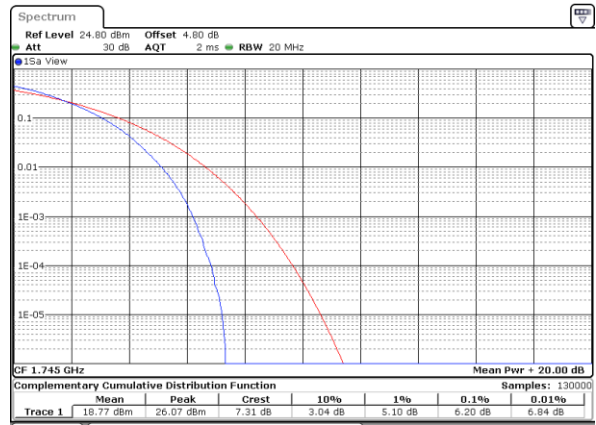
## Lowest Channel / Full RB



## Middle Channel / 1RB



## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB



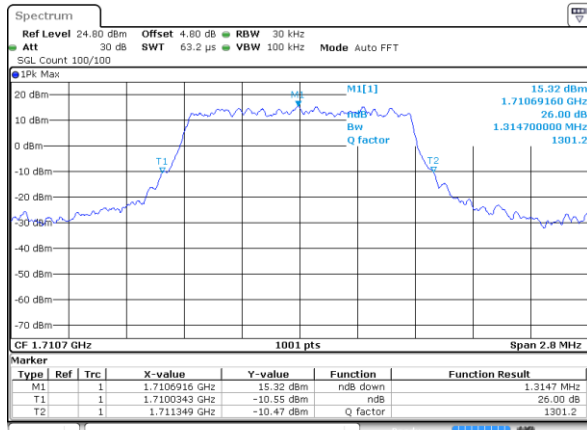
**26dB Bandwidth**

| Mode       | LTE Band 66 : 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  | 1.315                      | 1.284 | 3.015 | 3.021 | 4.985 | 4.975 | 9.93  | 9.95  | 14.416 | 14.266 | 20.1  | 20.26 |
| Middle CH  | 1.29                       | 1.278 | 3.021 | 3.021 | 5.005 | 4.895 | 9.85  | 9.79  | 14.266 | 14.565 | 20.22 | 20.1  |
| Highest CH | 1.284                      | 1.248 | 3.015 | 3.021 | 4.865 | 4.905 | 9.83  | 9.77  | 14.266 | 14.356 | 20.06 | 20.34 |
| Mode       | LTE Band 66 : 26dB BW(MHz) |       |       |       |       |       |       |       |        |        |       |       |
| BW         | 1.4MHz                     |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz  |        | 20MHz |       |
| Mod.       | 64QAM                      |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM  |        | 64QAM |       |
| Lowest CH  | 1.292                      |       | 3.027 |       | 4.915 |       | 9.85  |       | 14.416 |        | 20.14 |       |
| Middle CH  | 1.25                       |       | 3.057 |       | 4.885 |       | 9.63  |       | 14.146 |        | 20.14 |       |
| Highest CH | 1.3                        |       | 3.003 |       | 4.935 |       | 9.71  |       | 14.535 |        | 20.06 |       |



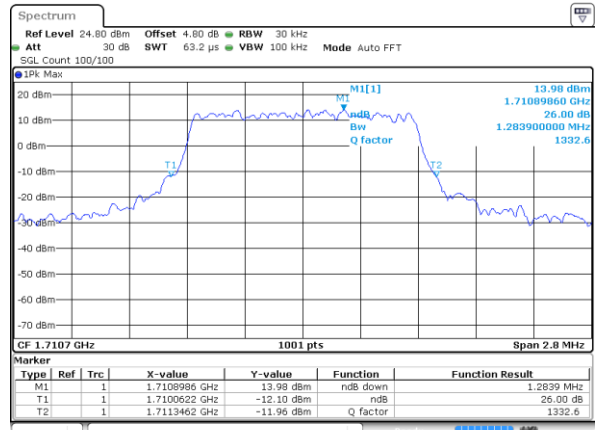
## LTE Band 66

## Lowest Channel / 1.4MHz / QPSK



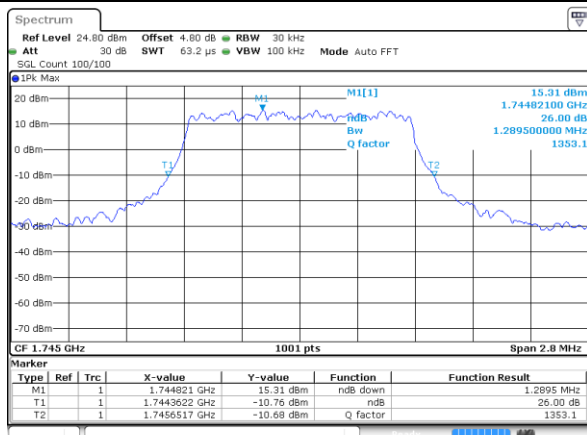
Date: 2.OCT.2018 20:15:57

## Lowest Channel / 1.4MHz / 16QAM



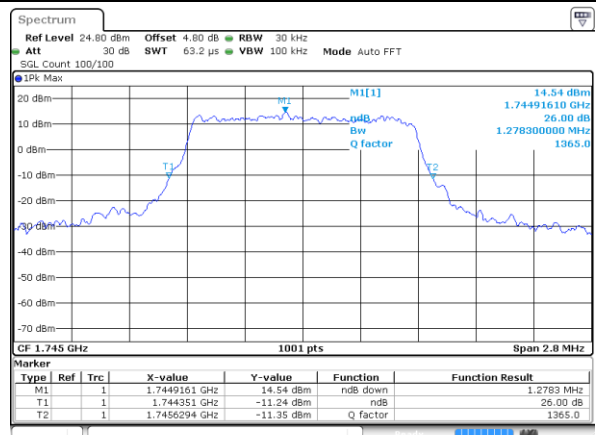
Date: 2.OCT.2018 20:16:20

## Middle Channel / 1.4MHz / QPSK



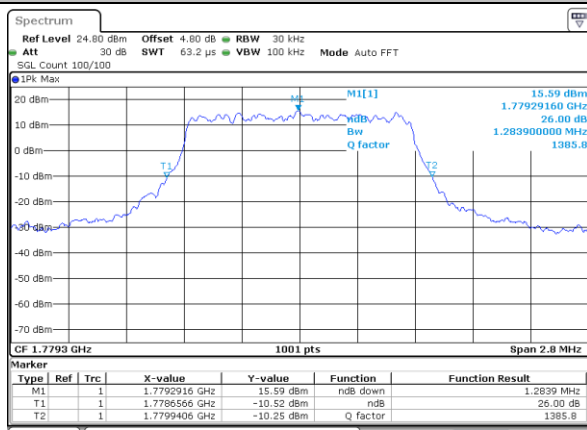
Date: 2.OCT.2018 20:23:23

## Middle Channel / 1.4MHz / 16QAM



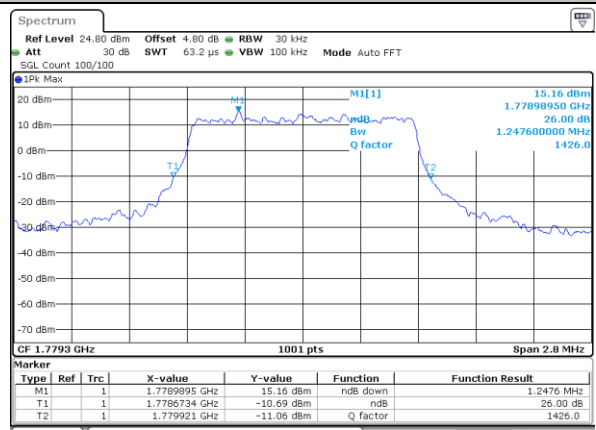
Date: 2.OCT.2018 20:23:48

## Highest Channel / 1.4MHz / QPSK



Date: 2.OCT.2018 20:28:31

## Highest Channel / 1.4MHz / 16QAM

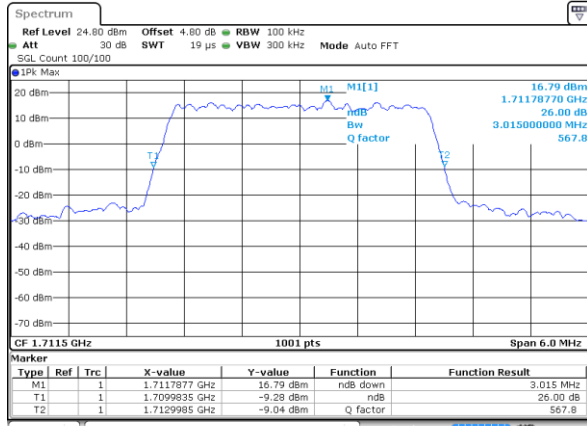


Date: 2.OCT.2018 20:28:49

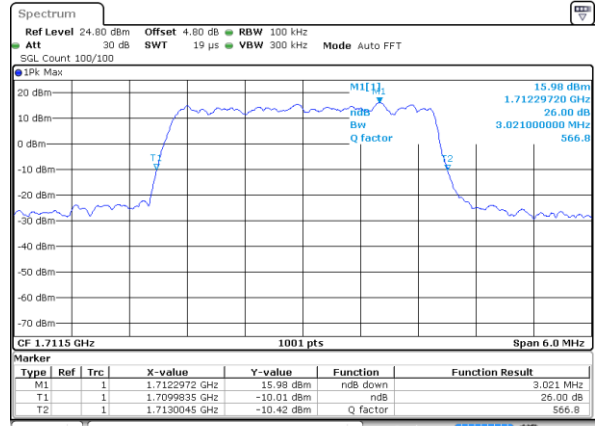


## LTE Band 66

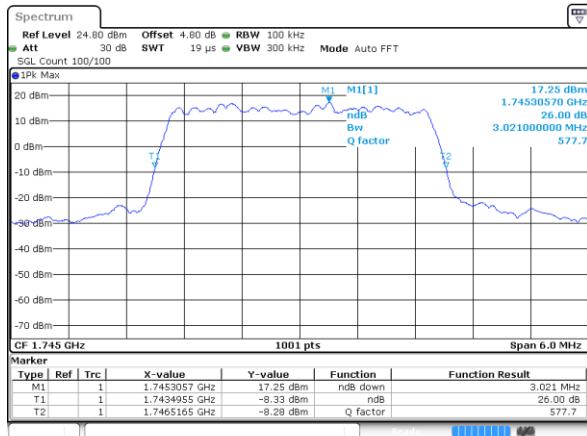
## Lowest Channel / 3MHz / QPSK



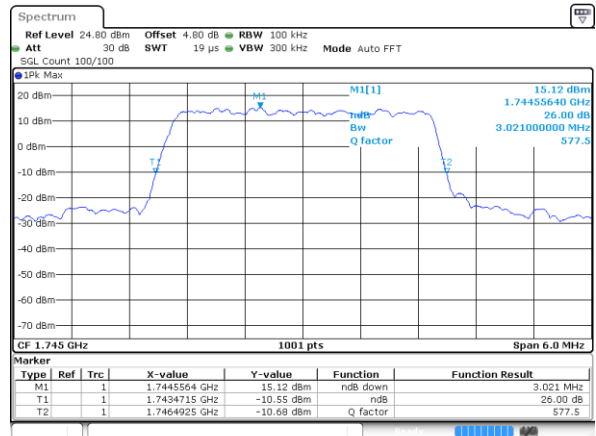
## Lowest Channel / 3MHz / 16QAM



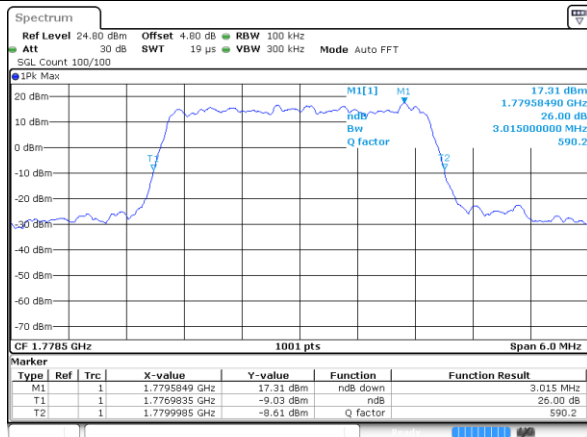
## Middle Channel / 3MHz / QPSK



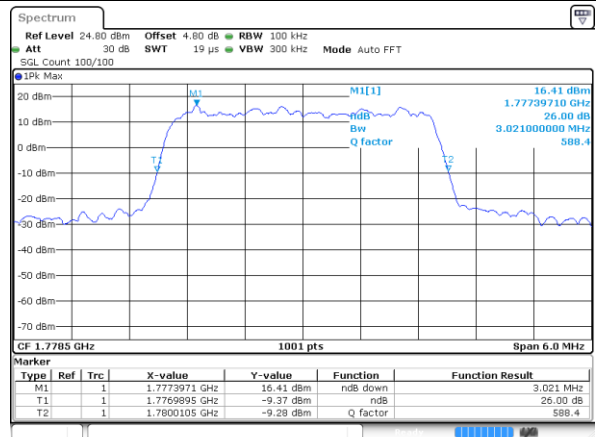
## Middle Channel / 3MHz / 16QAM



## Highest Channel / 3MHz / QPSK



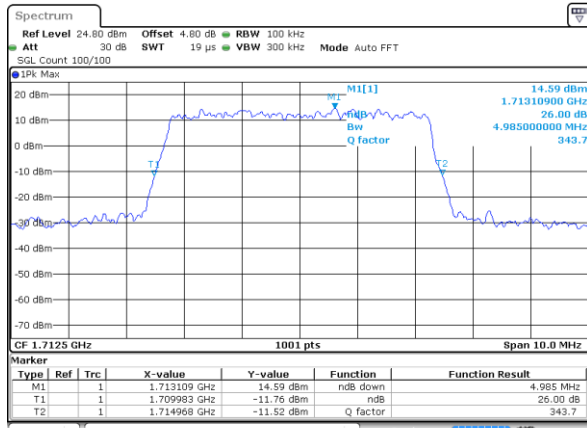
## Highest Channel / 3MHz / 16QAM



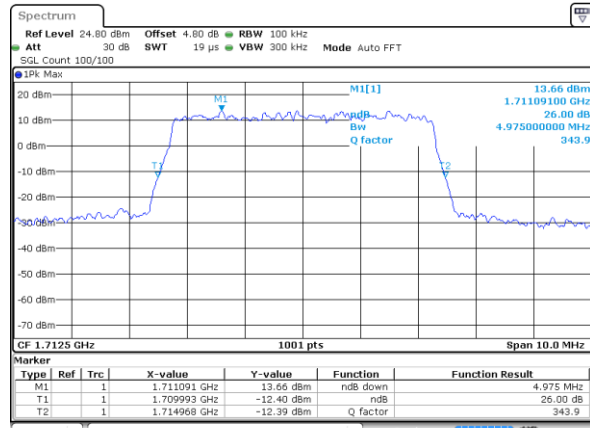


## LTE Band 66

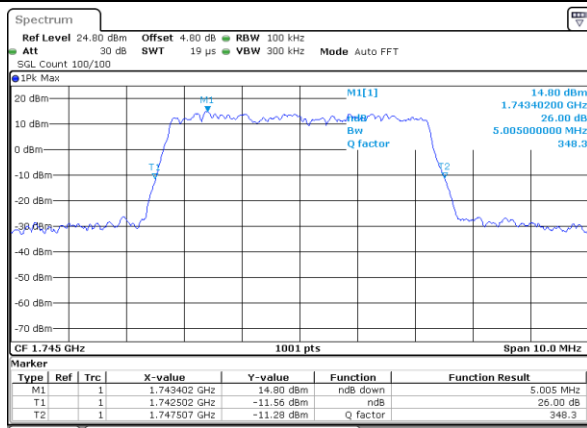
## Lowest Channel / 5MHz / QPSK



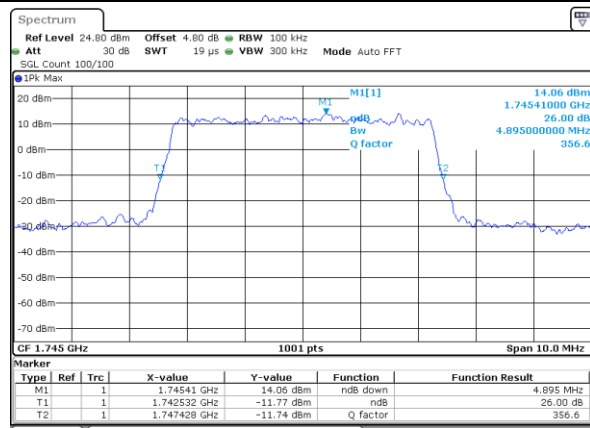
## Lowest Channel / 5MHz / 16QAM



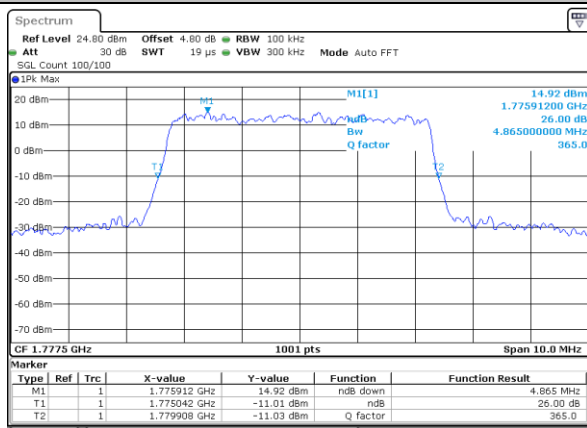
## Middle Channel / 5MHz / QPSK



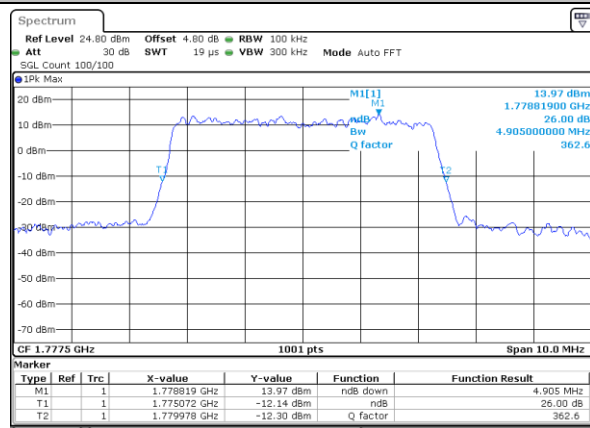
## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



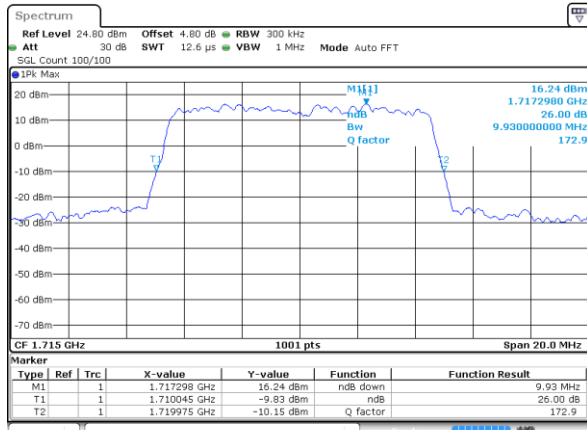
## Highest Channel / 5MHz / 16QAM



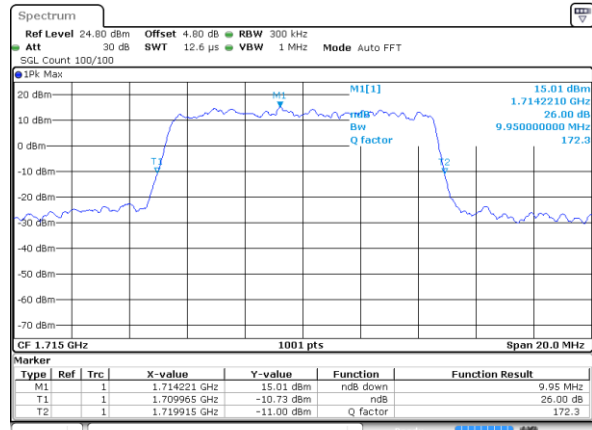


## LTE Band 66

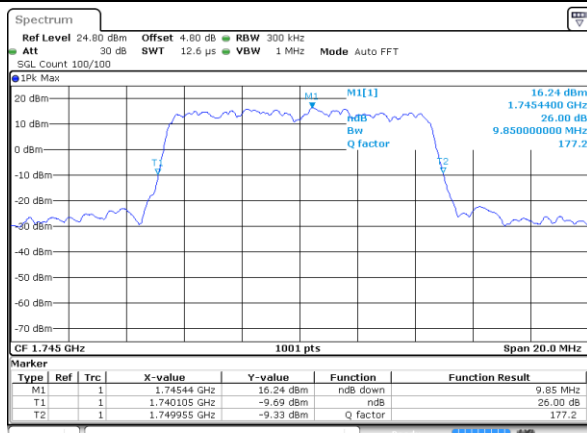
## Lowest Channel / 10MHz / QPSK



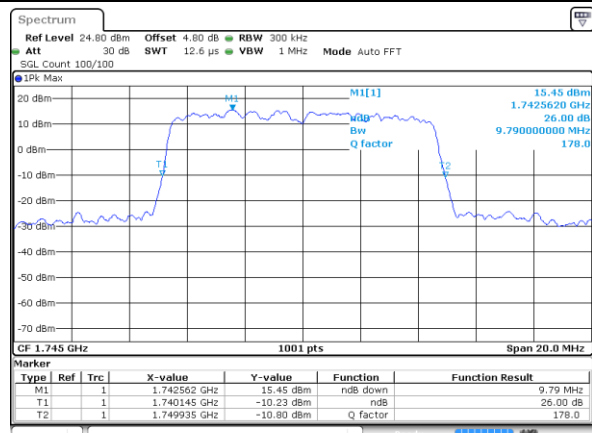
## Lowest Channel / 10MHz / 16QAM



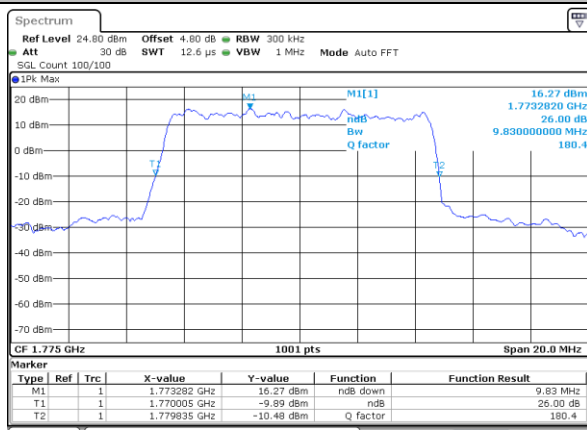
## Middle Channel / 10MHz / QPSK



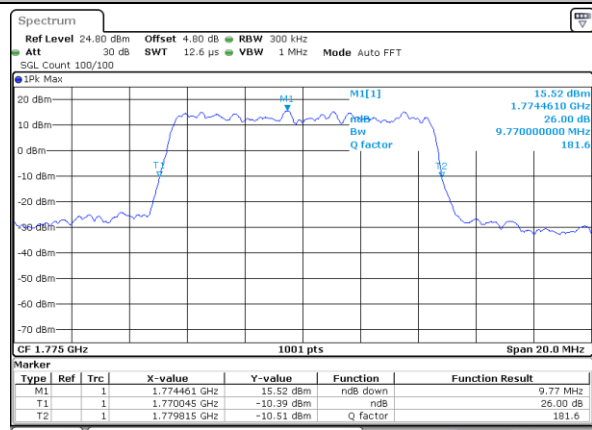
## Middle Channel / 10MHz / 16QAM



## Highest Channel / 10MHz / QPSK



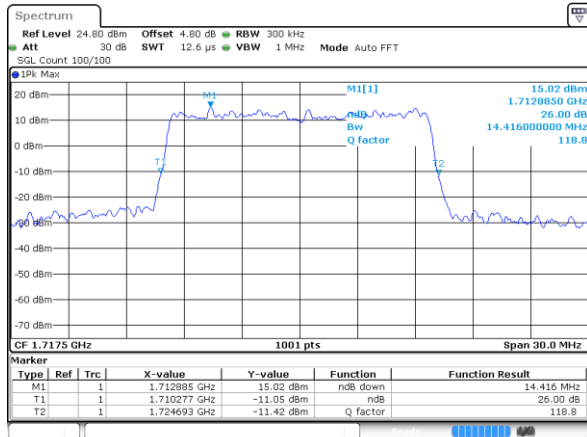
## Highest Channel / 10MHz / 16QAM





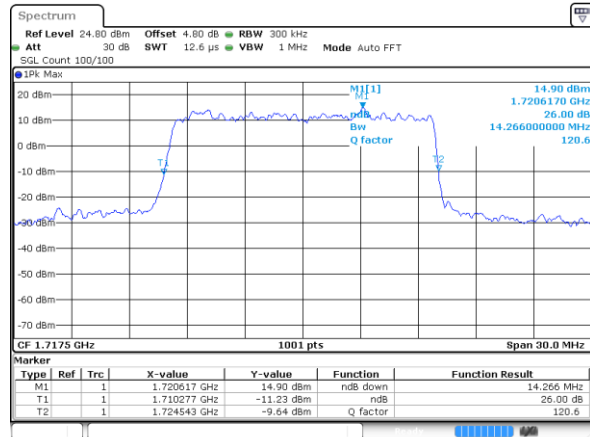
## LTE Band 66

## Lowest Channel / 15MHz / QPSK



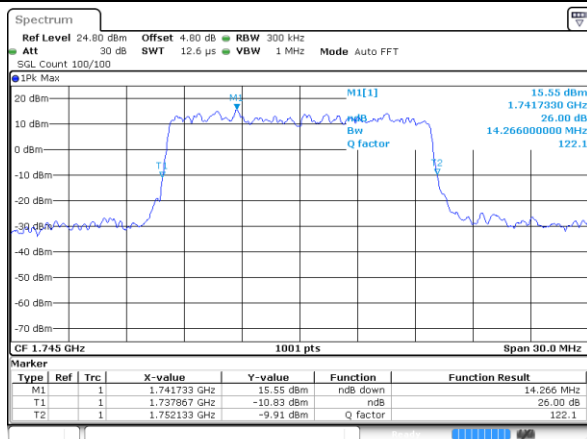
Date: 2.OCT.2018 21:34:59

## Lowest Channel / 15MHz / 16QAM



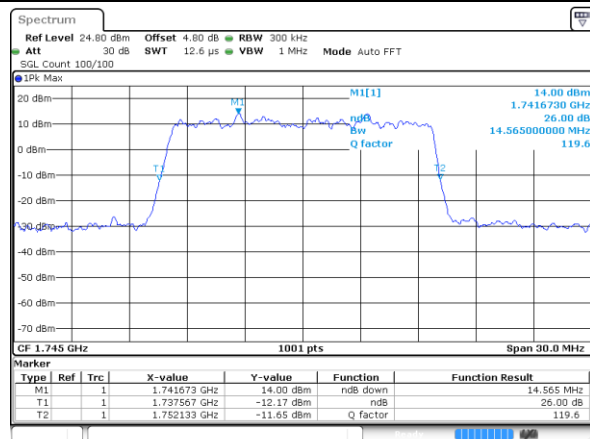
Date: 2.OCT.2018 21:35:13

## Middle Channel / 15MHz / QPSK



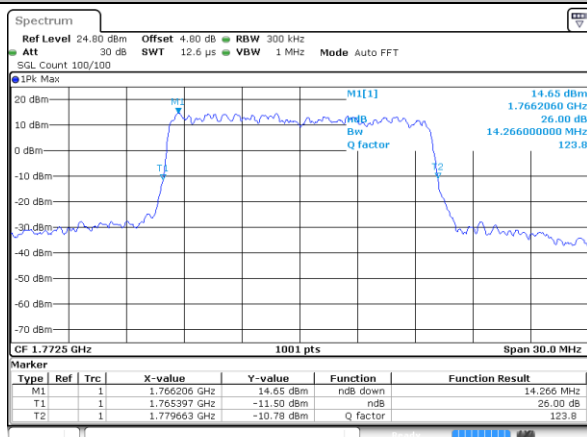
Date: 2.OCT.2018 21:41:29

## Middle Channel / 15MHz / 16QAM



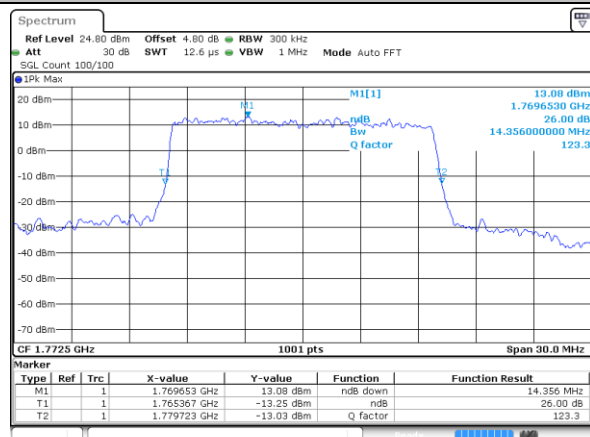
Date: 2.OCT.2018 21:41:15

## Highest Channel / 15MHz / QPSK



Date: 2.OCT.2018 21:42:13

## Highest Channel / 15MHz / 16QAM

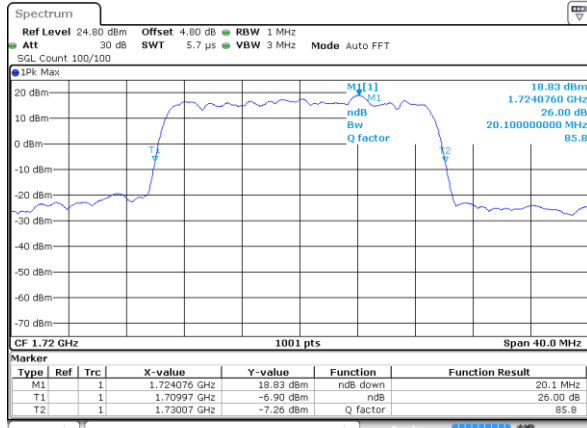


Date: 2.OCT.2018 21:42:40

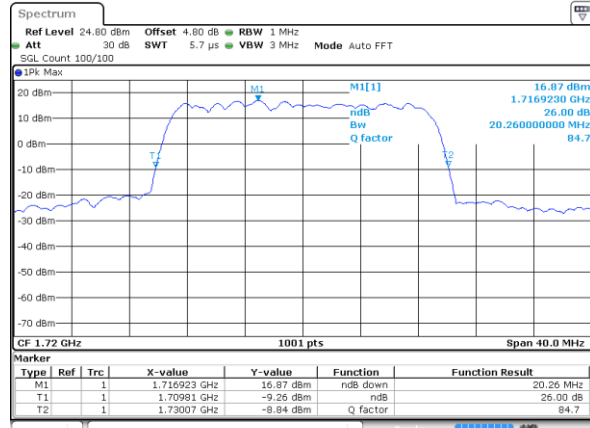


## LTE Band 66

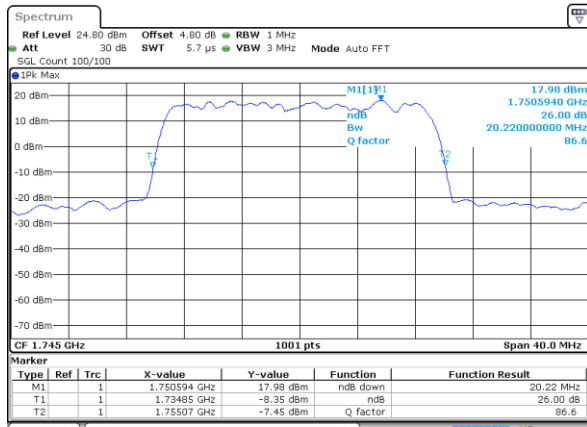
## Lowest Channel / 20MHz / QPSK



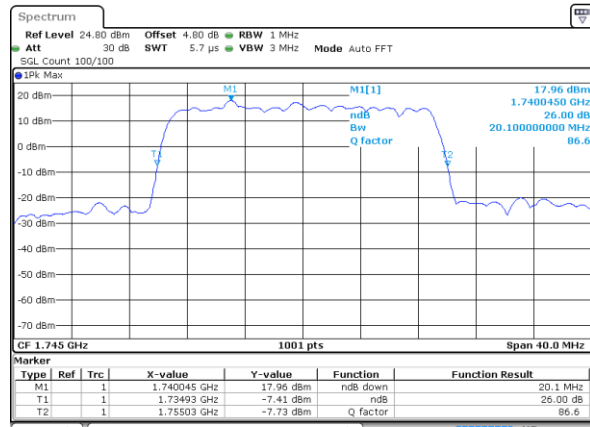
## Lowest Channel / 20MHz / 16QAM



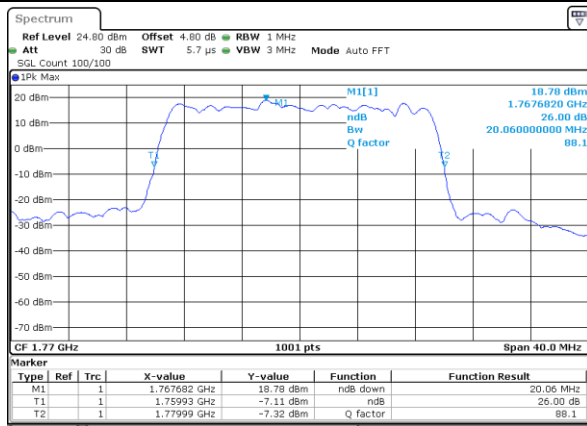
## Middle Channel / 20MHz / QPSK



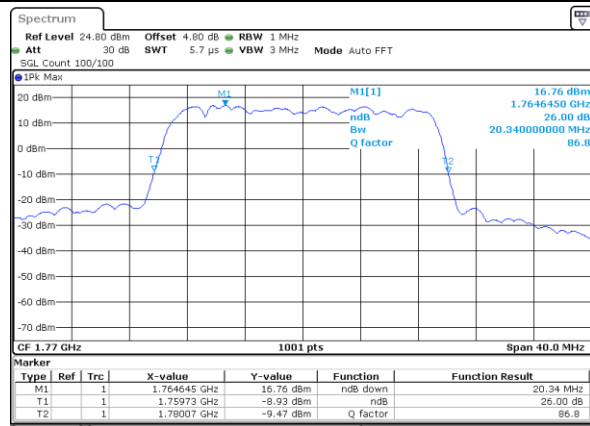
## Middle Channel / 20MHz / 16QAM



## Highest Channel / 20MHz / QPSK



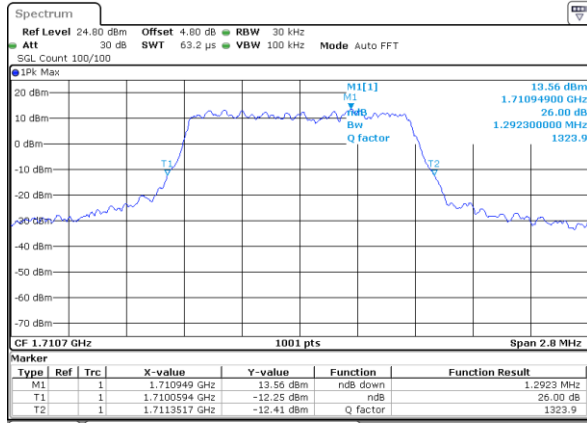
## Highest Channel / 20MHz / 16QAM





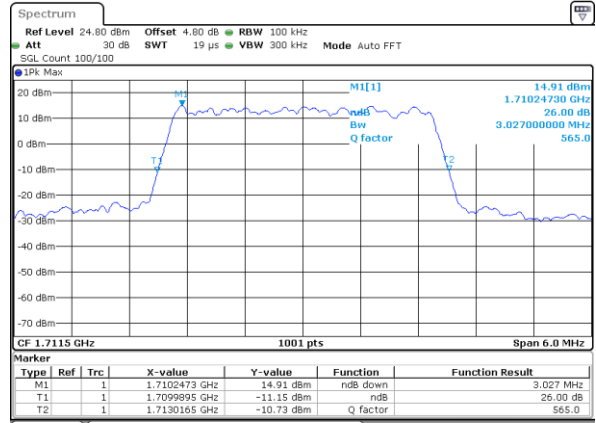
## LTE Band 66

## Lowest Channel / 1.4MHz / 64QAM



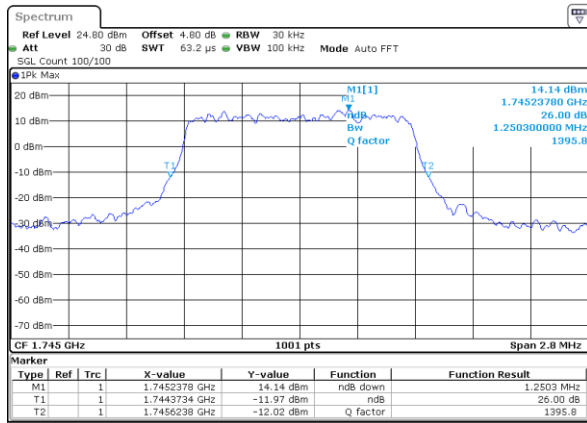
Date: 2.OCT.2018 20:16:40

## Lowest Channel / 3MHz / 64QAM



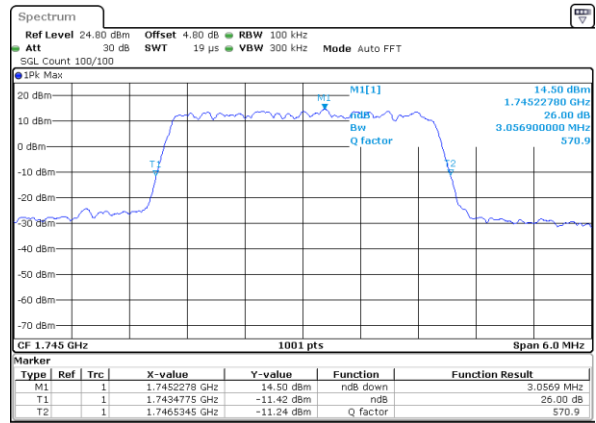
Date: 2.OCT.2018 20:46:41

## Middle Channel / 1.4MHz / 64QAM



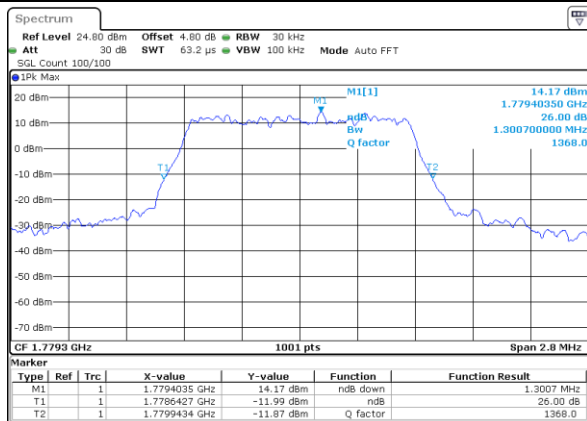
Date: 2.OCT.2018 20:24:14

## Middle Channel /3MHz / 64QAM



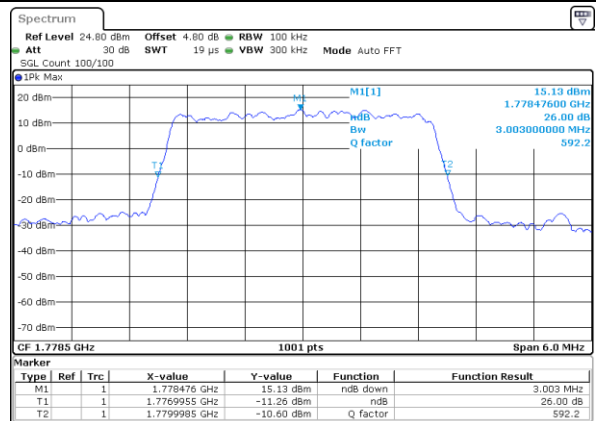
Date: 2.OCT.2018 20:55:44

## Highest Channel / 1.4MHz / 64QAM



Date: 2.OCT.2018 20:29:06

## Highest Channel /3MHz / 64QAM

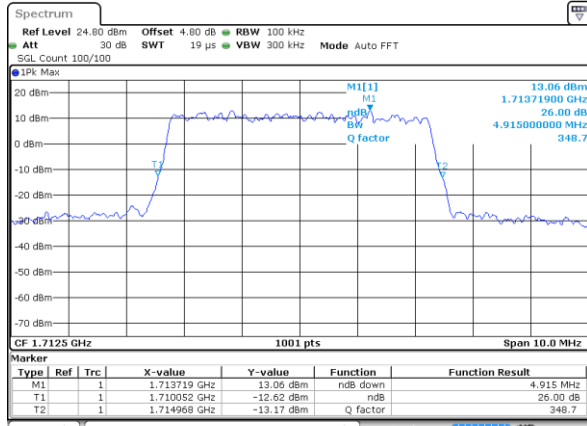


Date: 2.OCT.2018 20:57:33

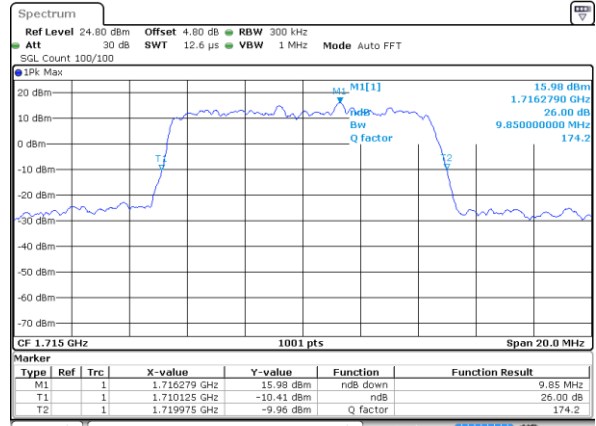


## LTE Band 66

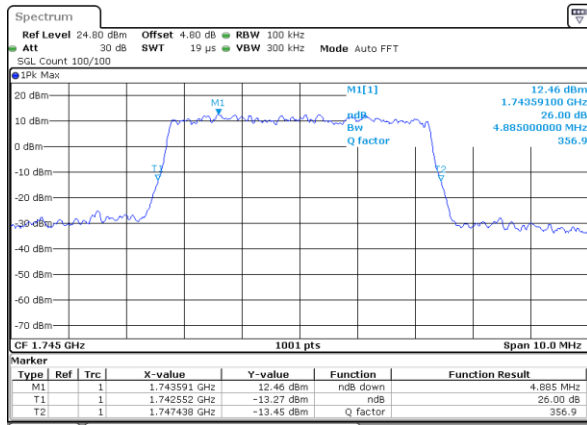
## Lowest Channel / 5MHz / 64QAM



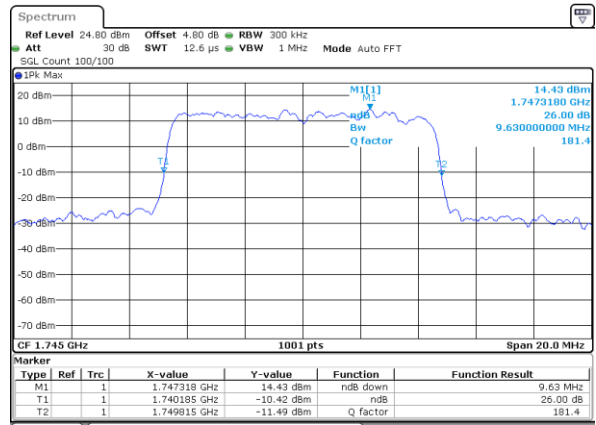
## Lowest Channel / 10MHz / 64QAM



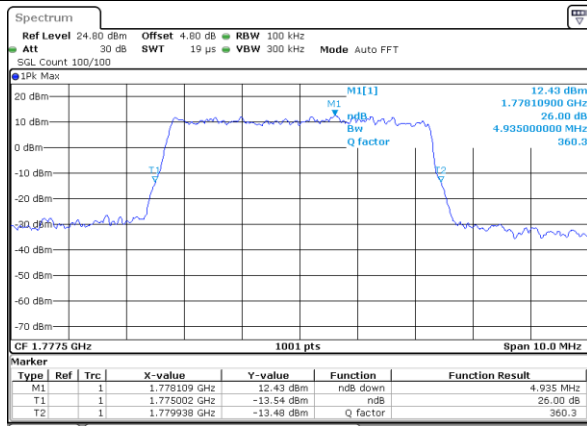
## Middle Channel / 5MHz / 64QAM



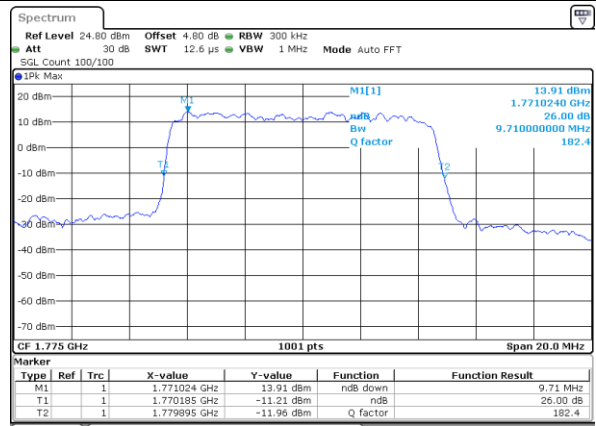
## Middle Channel / 10MHz / 64QAM



## Highest Channel / 5MHz / 64QAM



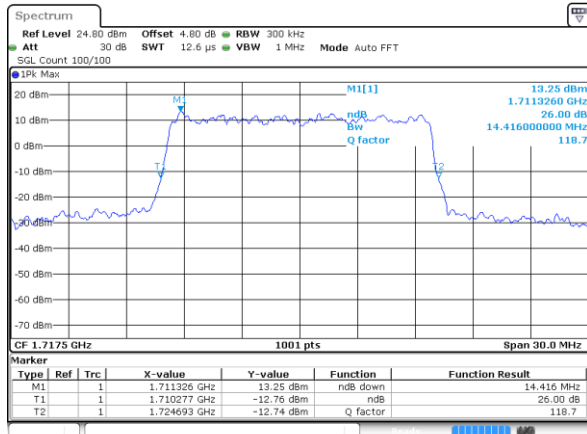
## Highest Channel / 10MHz / 64QAM





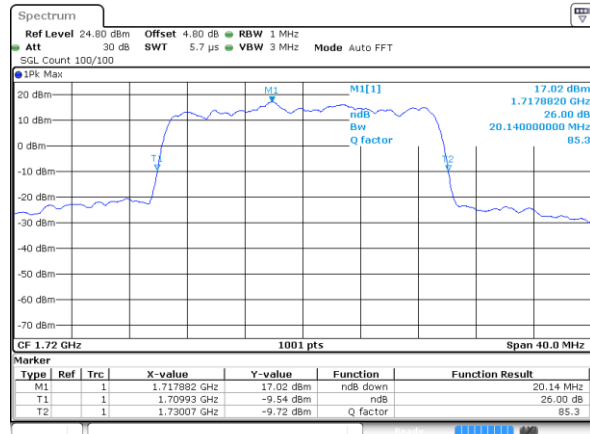
## LTE Band 66

## Lowest Channel / 15MHz / 64QAM



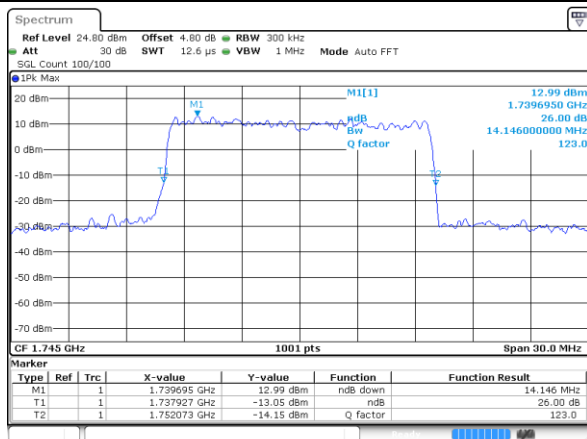
Date: 2.OCT.2018 21:35:30

## Lowest Channel / 20MHz / 64QAM



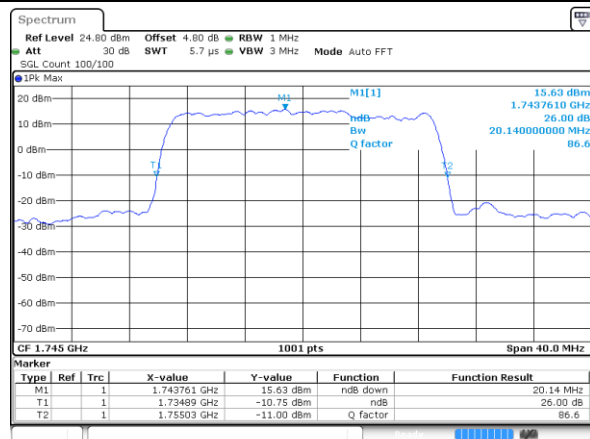
Date: 2.OCT.2018 21:49:35

## Middle Channel / 15MHz / 64QAM



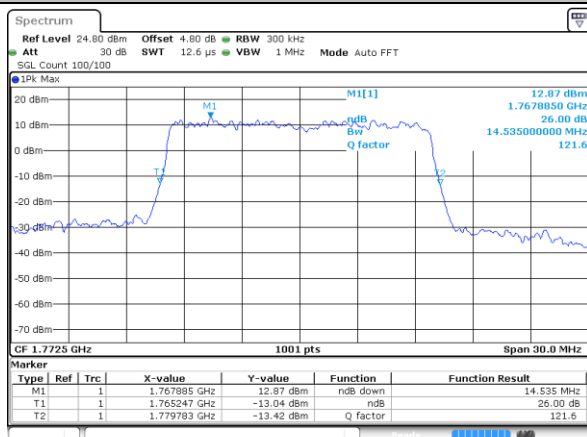
Date: 2.OCT.2018 21:40:56

## Middle Channel / 20MHz / 64QAM



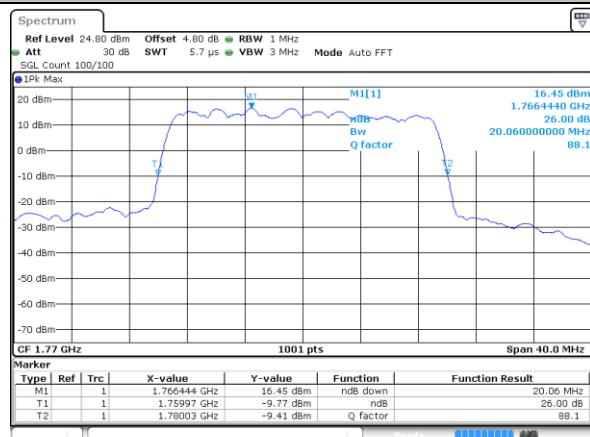
Date: 2.OCT.2018 21:58:09

## Highest Channel / 15MHz / 64QAM



Date: 2.OCT.2018 21:43:05

## Highest Channel / 20MHz / 64QAM



Date: 2.OCT.2018 22:00:52

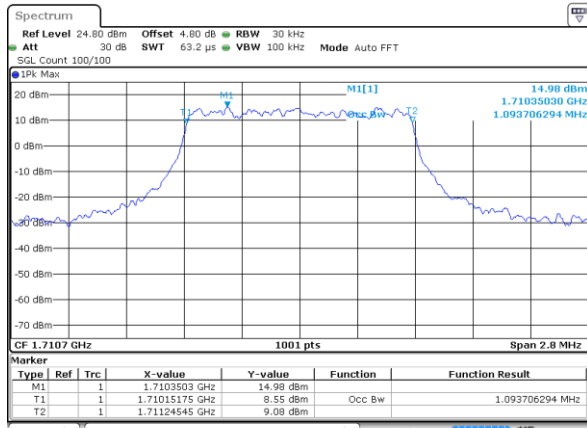
**Occupied Bandwidth**

| Mode       | LTE Band 66 : 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                      | 1.1   | 2.7   | 2.72  | 4.46  | 4.49  | 9.03  | 8.99  | 13.4  | 13.46 | 18.34 | 18.5  |
| Middle CH  | 1.1                       | 1.09  | 2.71  | 2.74  | 4.52  | 4.5   | 9.07  | 8.99  | 13.43 | 13.46 | 18.42 | 18.42 |
| Highest CH | 1.08                      | 1.09  | 2.71  | 2.71  | 4.51  | 4.5   | 9.03  | 9.01  | 13.49 | 13.4  | 18.18 | 18.26 |
| Mode       | LTE Band 66 : 99%OBW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                     |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.09                      |       | 2.72  |       | 4.55  |       | 9.01  |       | 13.46 |       | 18.38 |       |
| Middle CH  | 1.09                      |       | 2.71  |       | 4.5   |       | 8.99  |       | 13.43 |       | 18.42 |       |
| Highest CH | 1.1                       |       | 2.71  |       | 4.5   |       | 8.99  |       | 13.43 |       | 18.34 |       |

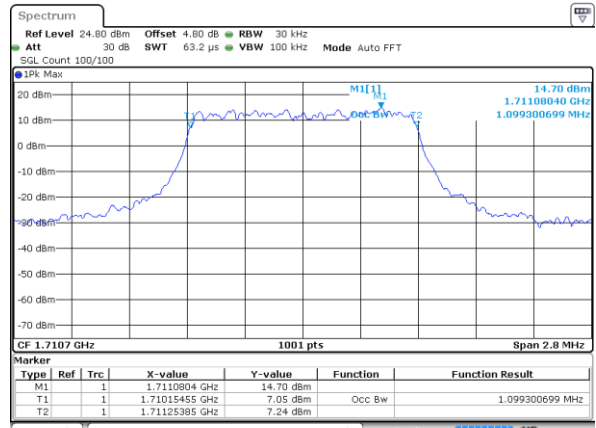


## LTE Band 66

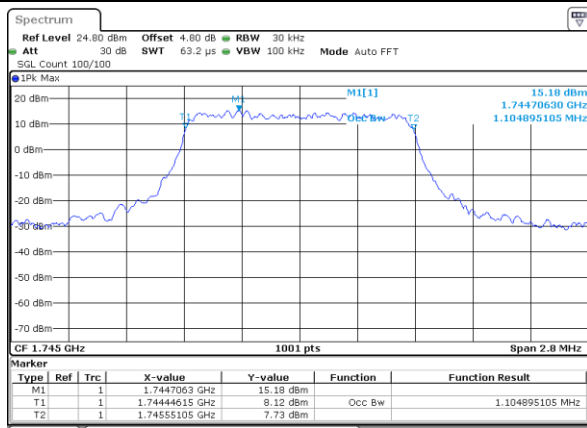
## Lowest Channel / 1.4MHz / QPSK



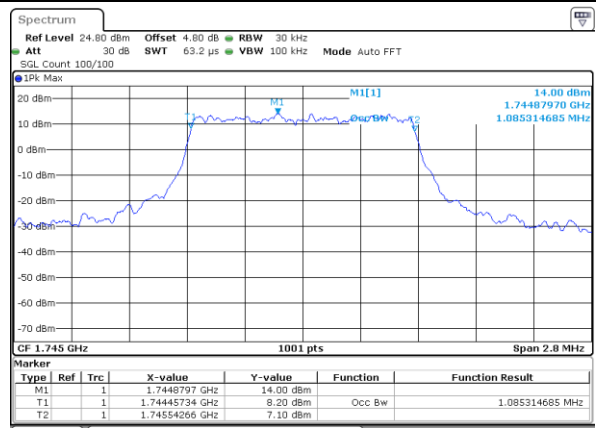
## Lowest Channel / 1.4MHz / 16QAM



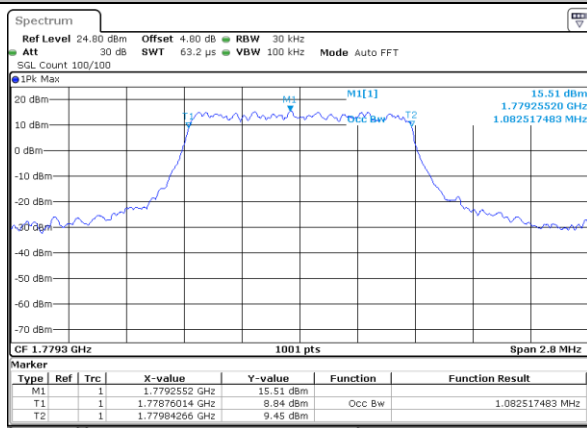
## Middle Channel / 1.4MHz / QPSK



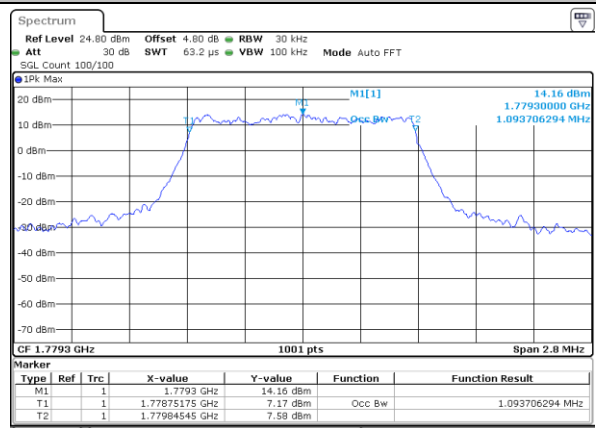
## Middle Channel / 1.4MHz / 16QAM



## Highest Channel / 1.4MHz / QPSK



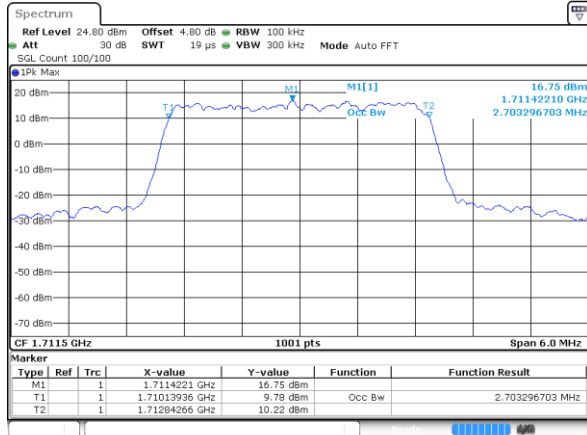
## Highest Channel / 1.4MHz / 16QAM





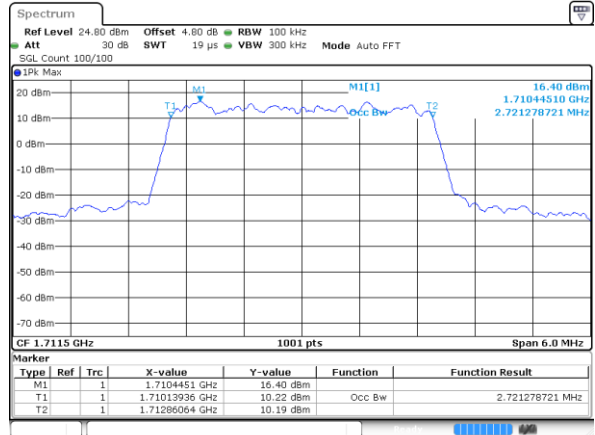
## LTE Band 66

## Lowest Channel / 3MHz / QPSK



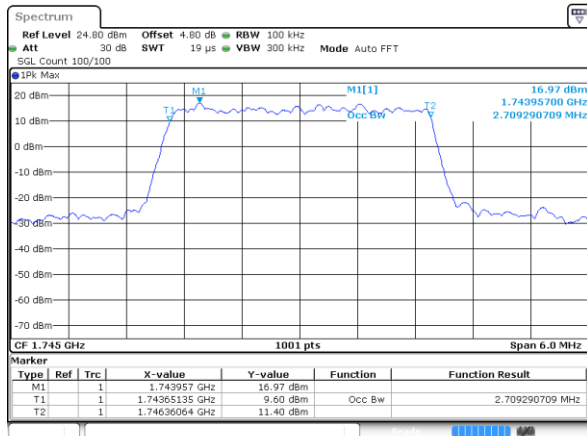
Date: 2.OCT.2018 20:46:08

## Lowest Channel / 3MHz / 16QAM



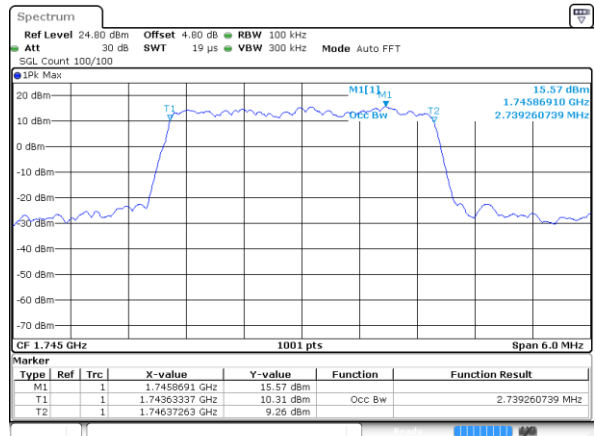
Date: 2.OCT.2018 20:46:21

## Middle Channel / 3MHz / QPSK



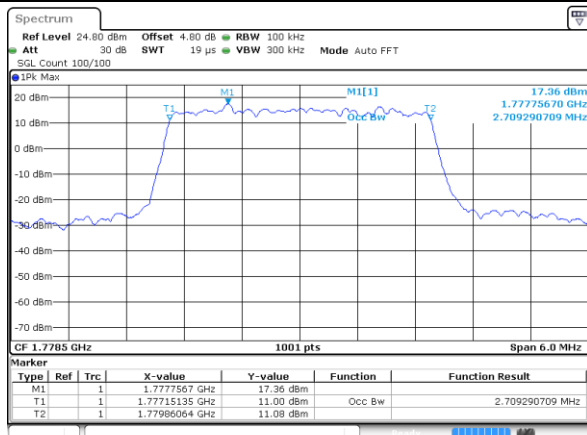
Date: 2.OCT.2018 20:56:17

## Middle Channel / 3MHz / 16QAM



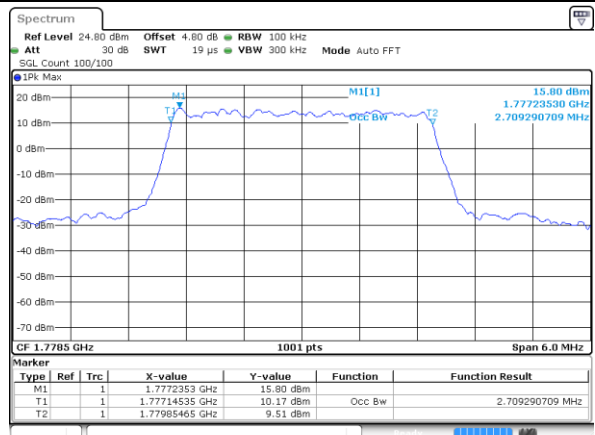
Date: 2.OCT.2018 20:56:03

## Highest Channel / 3MHz / QPSK



Date: 2.OCT.2018 20:56:47

## Highest Channel / 3MHz / 16QAM

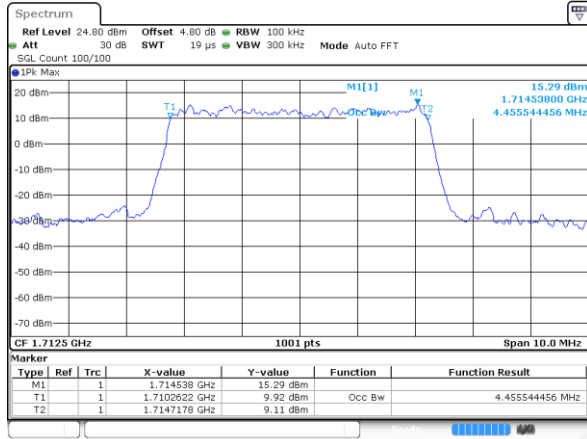


Date: 2.OCT.2018 20:57:03

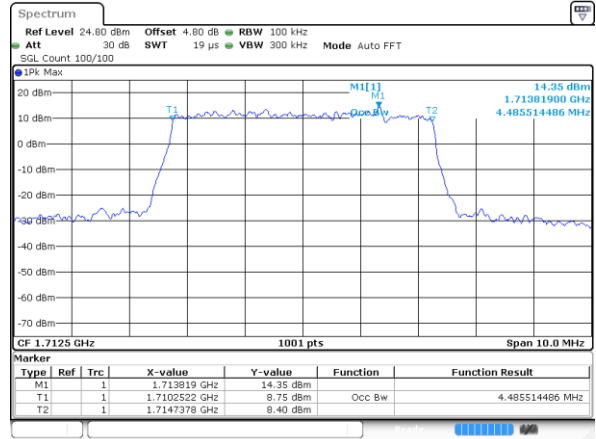


## LTE Band 66

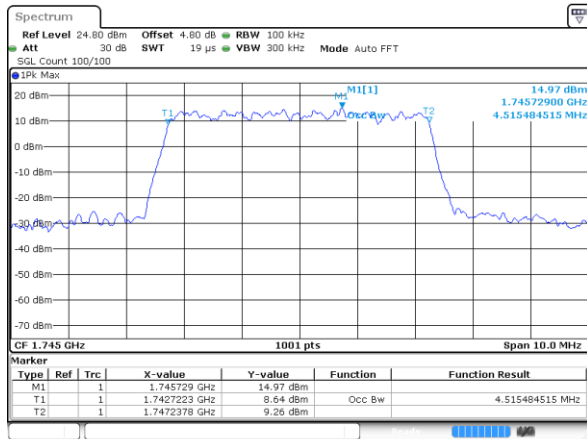
## Lowest Channel / 5MHz / QPSK



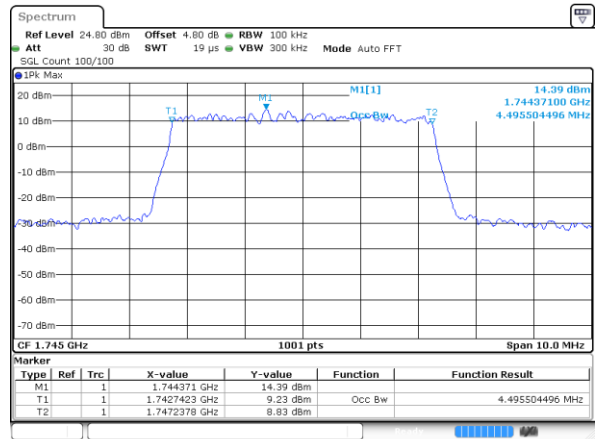
## Lowest Channel / 5MHz / 16QAM



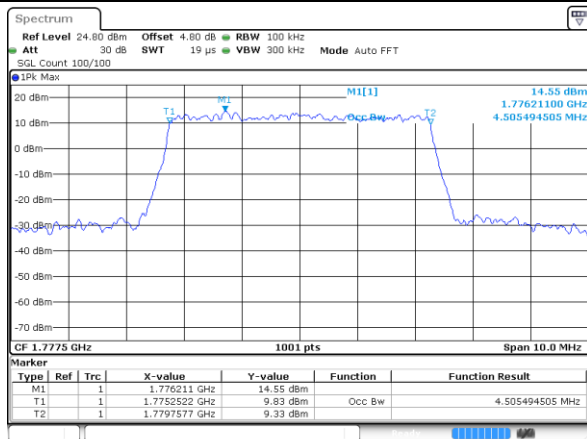
## Middle Channel / 5MHz / QPSK



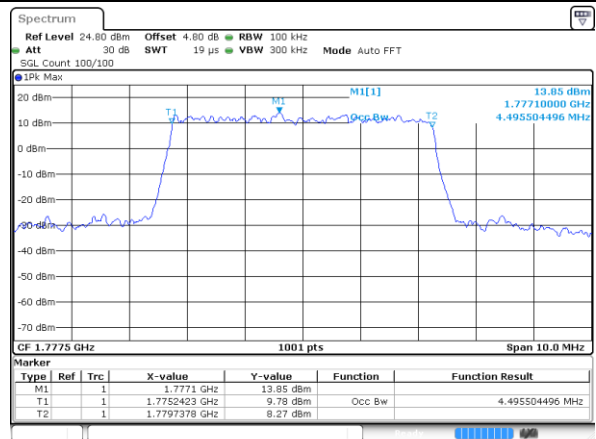
## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



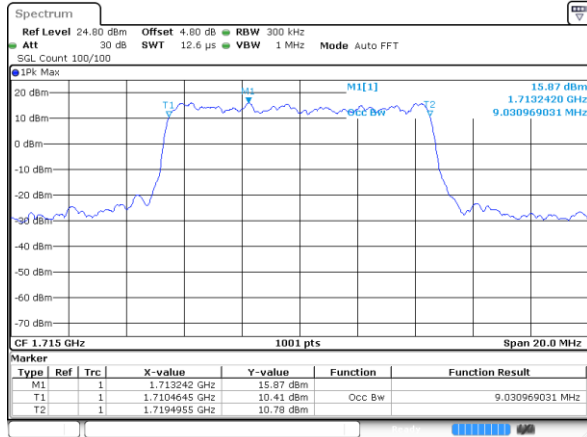
## Highest Channel / 5MHz / 16QAM



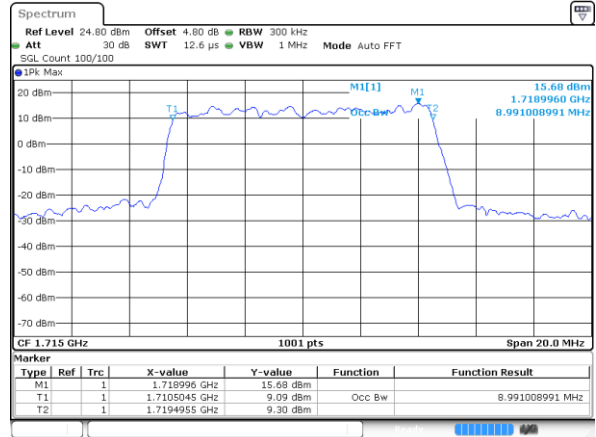


## LTE Band 66

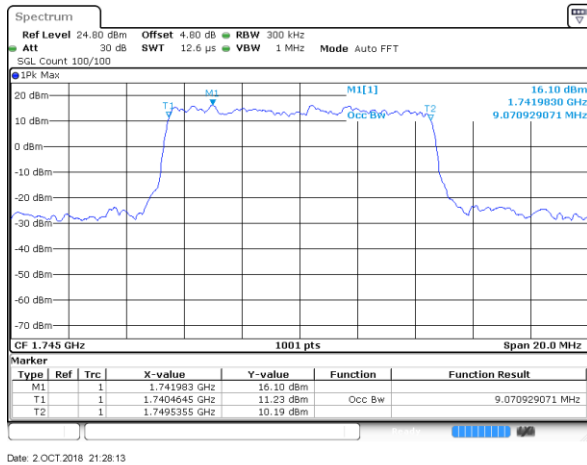
## Lowest Channel / 10MHz / QPSK



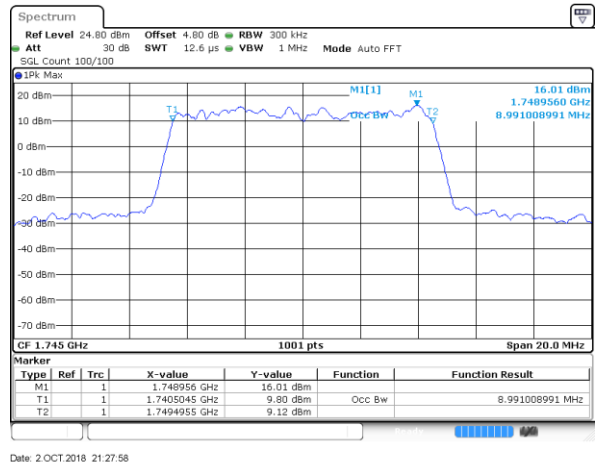
## Lowest Channel / 10MHz / 16QAM



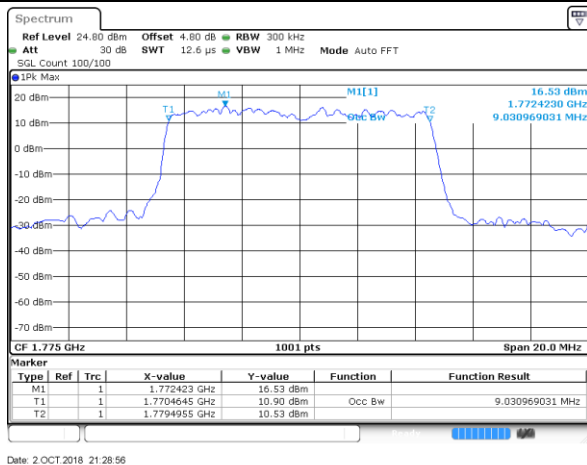
## Middle Channel / 10MHz / QPSK



## Middle Channel / 10MHz / 16QAM



## Highest Channel / 10MHz / QPSK



## Highest Channel / 10MHz / 16QAM

