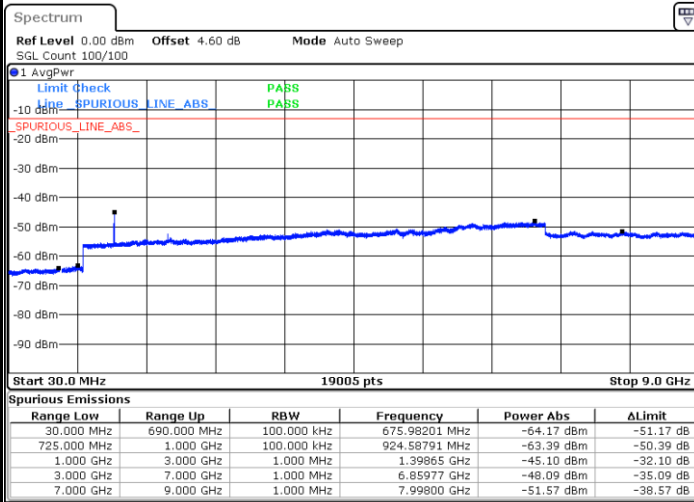




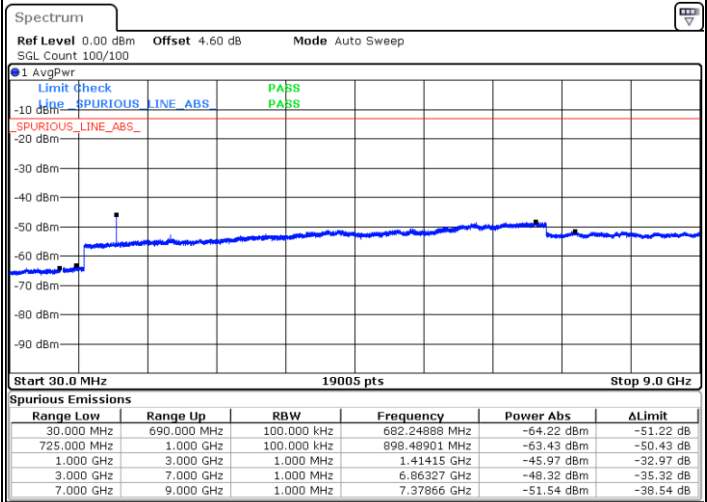
## LTE Band 12 / 1.4MHz

## Lowest Channel / 64QAM



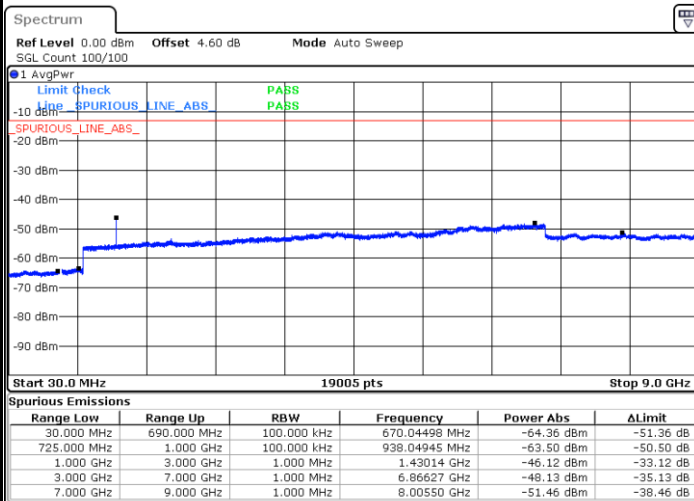
Date: 28 OCT 2019 10:22:54

## Middle Channel / 64QAM



Date: 28 OCT 2019 10:23:49

## Highest Channel / 64QAM

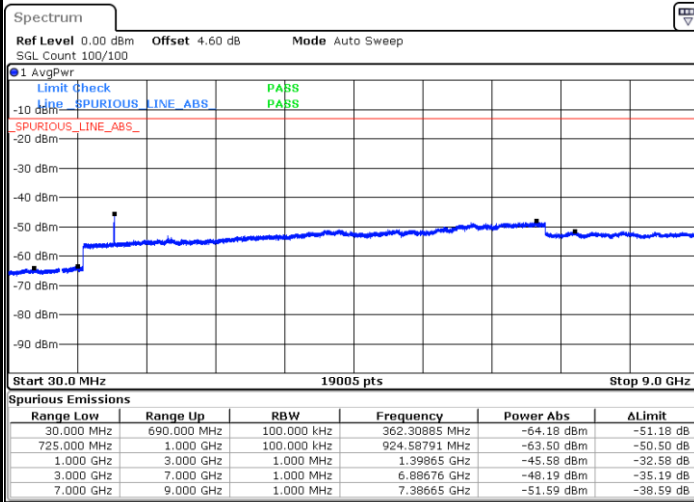


Date: 28 OCT 2019 10:24:43



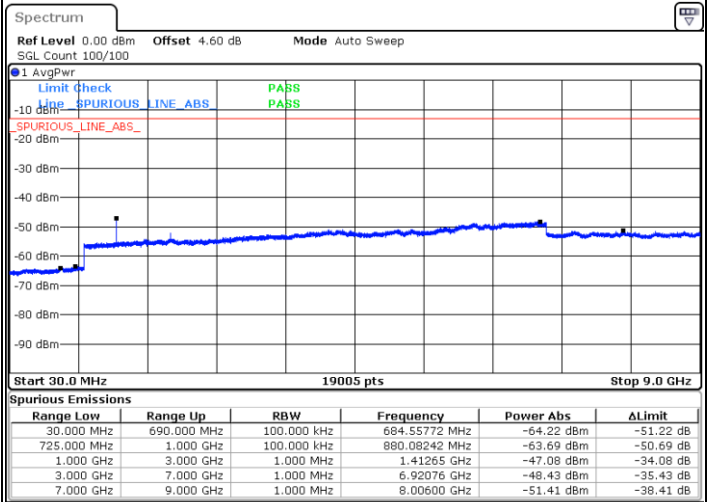
## LTE Band 12 / 3MHz

## Lowest Channel / 64QAM



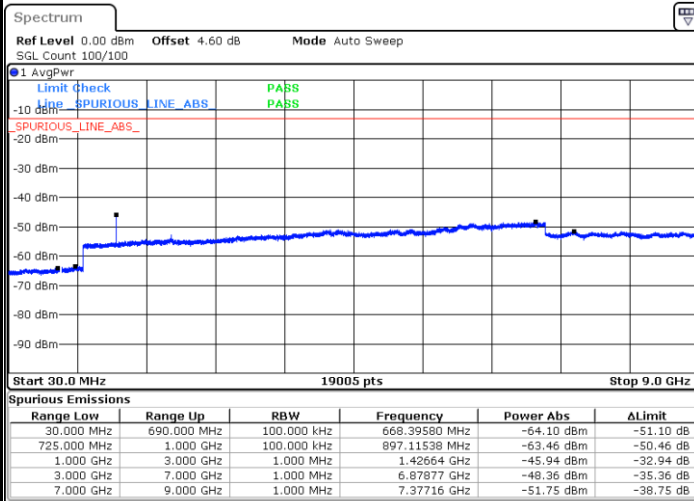
Date: 28 OCT 2019 10:25:37

## Middle Channel / 64QAM



Date: 28 OCT 2019 10:26:31

## Highest Channel / 64QAM

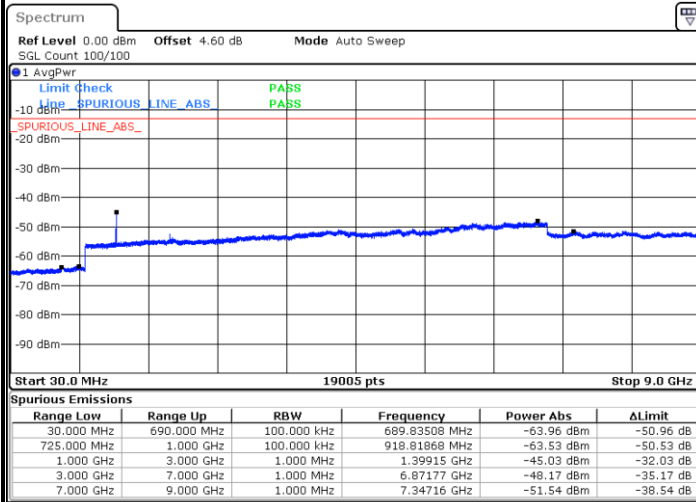


Date: 28 OCT 2019 10:27:25



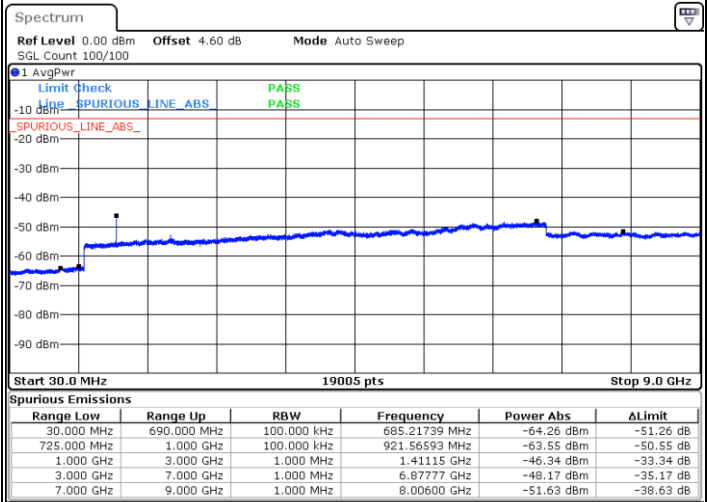
## LTE Band 12 / 5MHz

## Lowest Channel / 64QAM



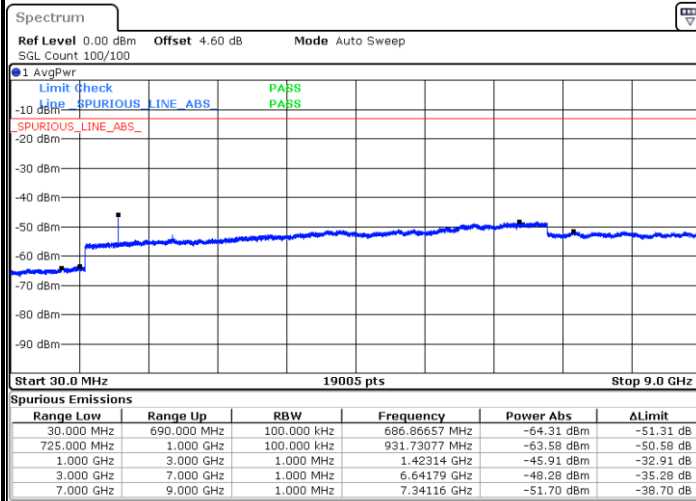
Date: 28 OCT.2019 10:39:17

## Middle Channel / 64QAM



Date: 28 OCT.2019 10:40:11

## Highest Channel / 64QAM

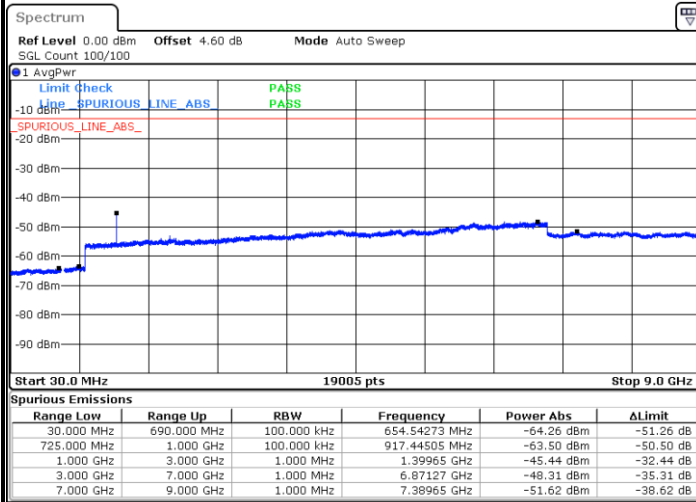


Date: 28 OCT.2019 10:41:06



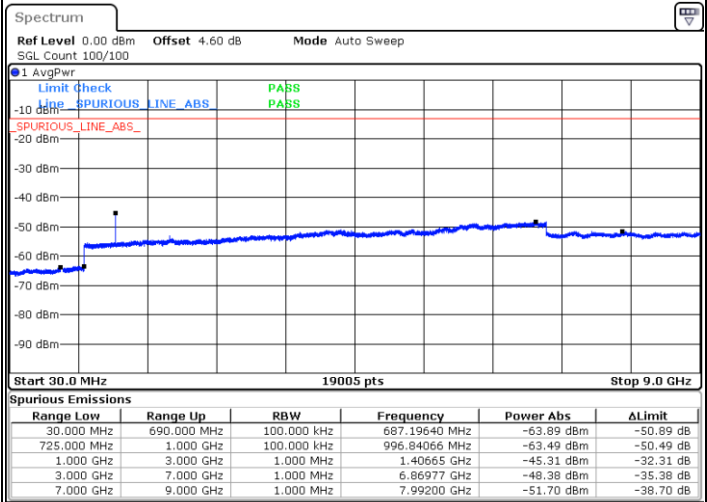
## LTE Band 12 / 10MHz

## Lowest Channel / 64QAM



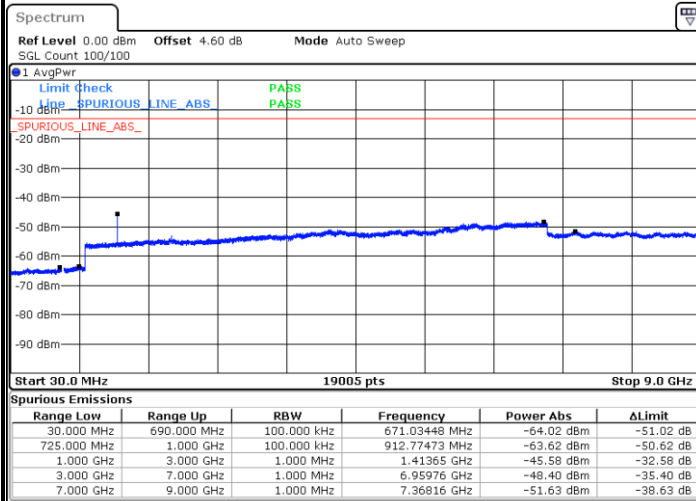
Date: 28 OCT 2019 10:42:00

## Middle Channel / 64QAM



Date: 28 OCT 2019 10:42:54

## Highest Channel / 64QAM



Date: 28 OCT 2019 10:43:48

## 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    | 0.0001                              | PASS    |
| 40               | Normal Voltage    | 0.0017                              |         |
| 30               | Normal Voltage    | 0.0086                              |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                              |         |
| 10               | Normal Voltage    | 0.0088                              |         |
| 0                | Normal Voltage    | 0.0066                              |         |
| -10              | Normal Voltage    | 0.0013                              |         |
| -20              | Normal Voltage    | 0.0067                              |         |
| -30              | Normal Voltage    | 0.0059                              |         |
| 20               | Maximum Voltage   | 0.0015                              |         |
| 20               | Normal Voltage    | 0.0008                              |         |
| 20               | Battery End Point | 0.0095                              |         |

**Note:**

1. Normal Voltage =3.8 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 66

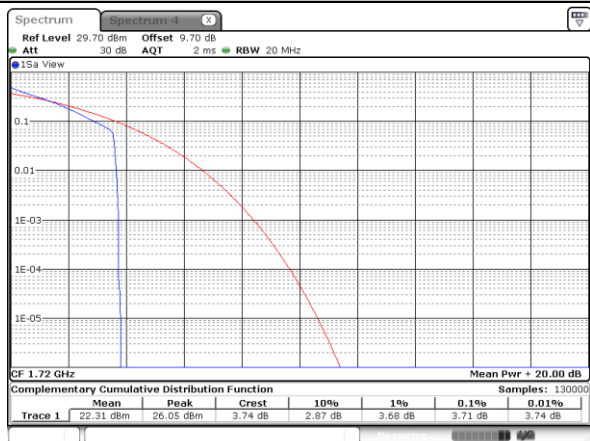
## Peak-to-Average Ratio

| Mode       | LTE Band 66 / 20MHz |         |       |         |             |
|------------|---------------------|---------|-------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 3.71                | 4.70    | 5.51  | 6.06    | PASS        |
| Middle CH  | 3.68                | 4.72    | 5.48  | 6.17    |             |
| Highest CH | 3.48                | 4.58    | 5.22  | 5.91    |             |
| Mode       | LTE Band 66 / 20MHz |         |       |         |             |
| Mod.       | 64QAM               |         |       |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB |       |         | Result      |
| Lowest CH  | 6.64                | 6.70    |       |         | PASS        |
| Middle CH  | 6.41                | 6.70    |       |         |             |
| Highest CH | 5.86                | 6.46    |       |         |             |



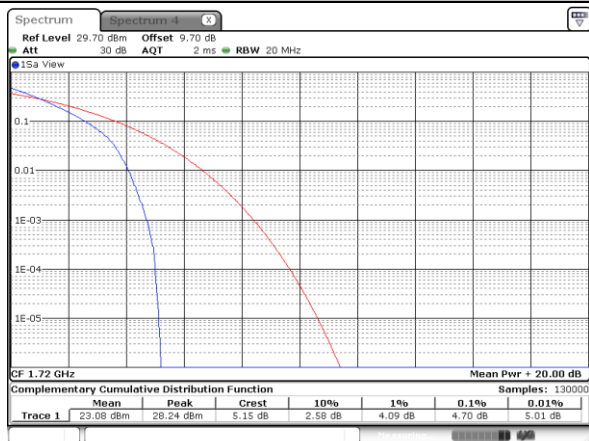
## LTE Band 66 / 20MHz / QPSK

## Lowest Channel / 1RB



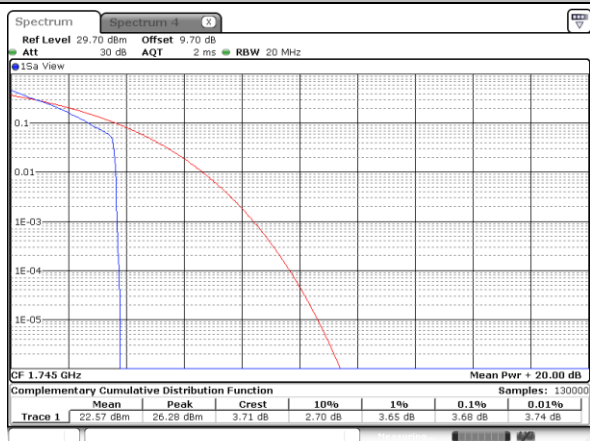
Date: 29 OCT.2019 15:18:24

## Lowest Channel / Full RB



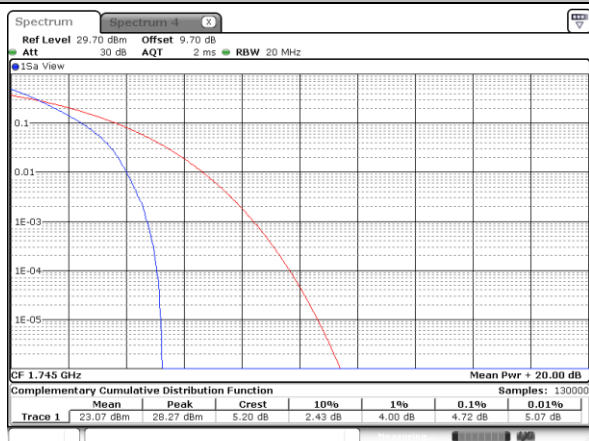
Date: 29 OCT.2019 15:17:15

## Middle Channel / 1RB



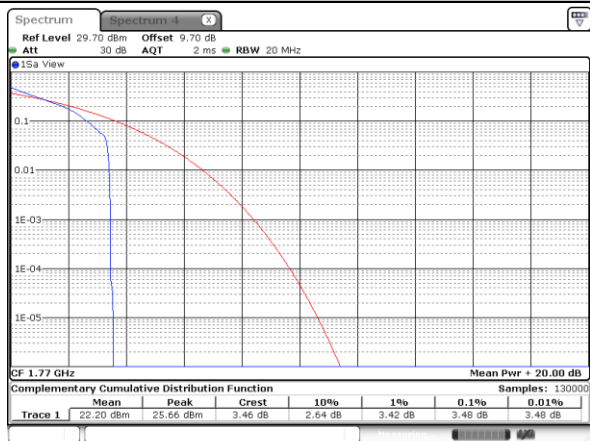
Date: 29 OCT.2019 15:15:29

## Middle Channel / Full RB



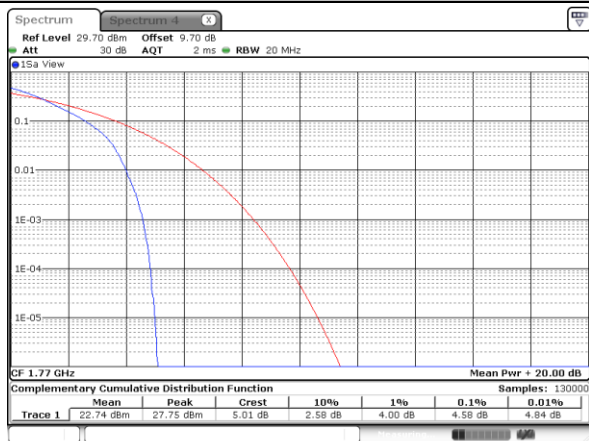
Date: 29 OCT.2019 15:16:42

## Highest Channel / 1RB



Date: 29 OCT.2019 15:14:26

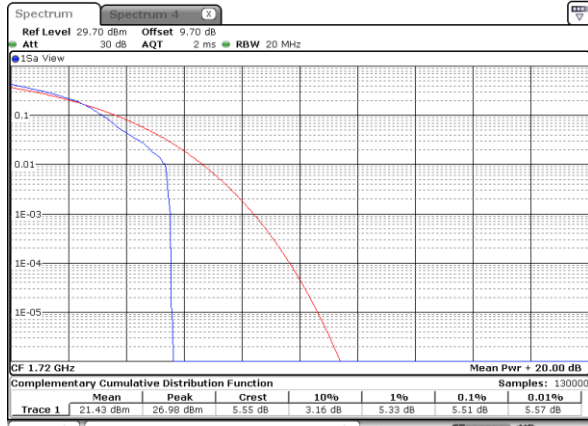
## Highest Channel / Full RB



Date: 29 OCT.2019 15:14:09

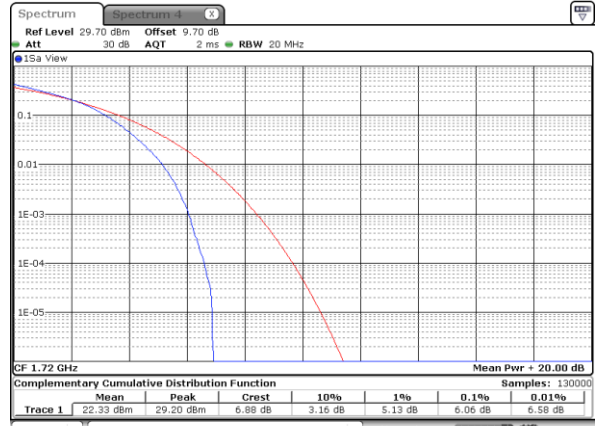
LTE Band 66 / 20MHz / 16QAM

Lowest Channel / 1RB



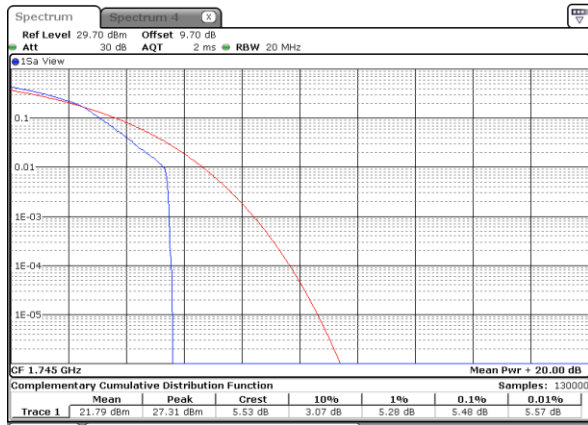
Date: 29 OCT.2019 15:18:11

Lowest Channel / Full RB



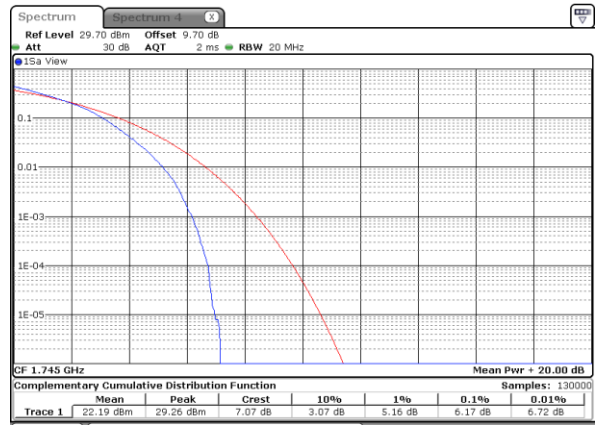
Date: 29 OCT.2019 15:17:29

Middle Channel / 1RB



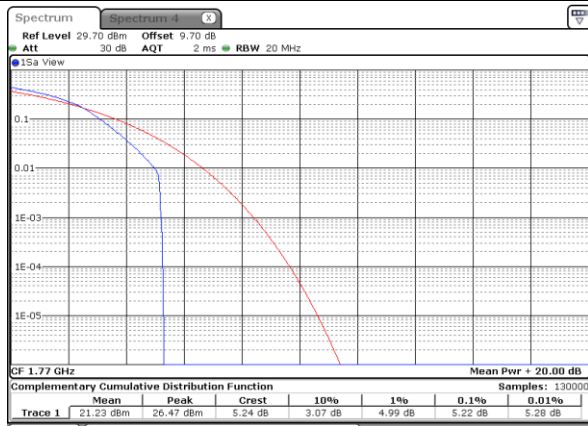
Date: 29 OCT.2019 15:15:42

Middle Channel / Full RB



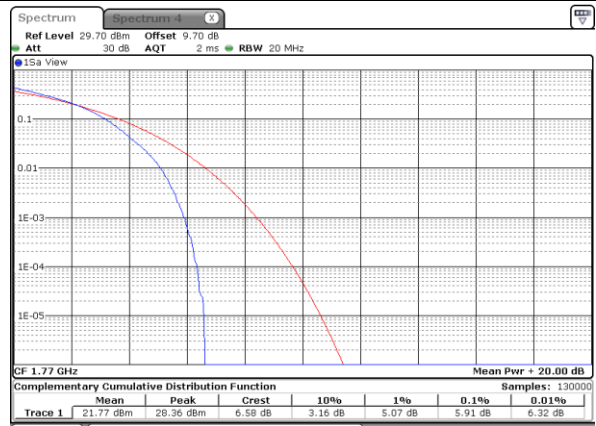
Date: 29 OCT.2019 15:16:29

Highest Channel / 1RB

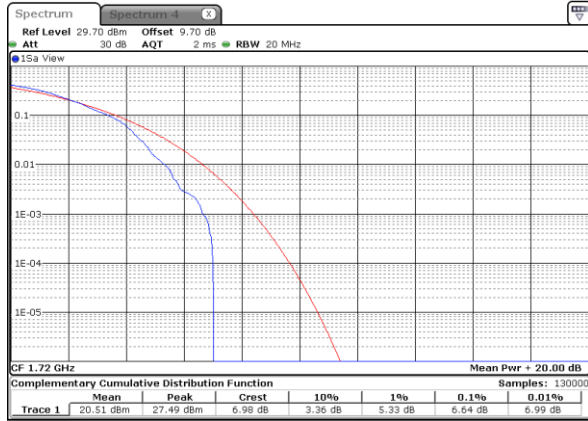


Date: 29 OCT.2019 15:14:40

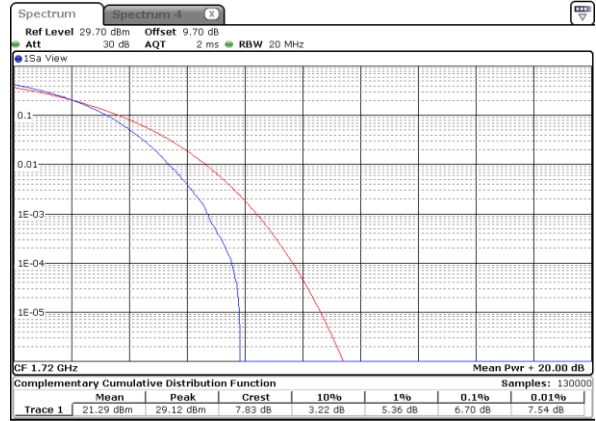
Highest Channel / Full RB



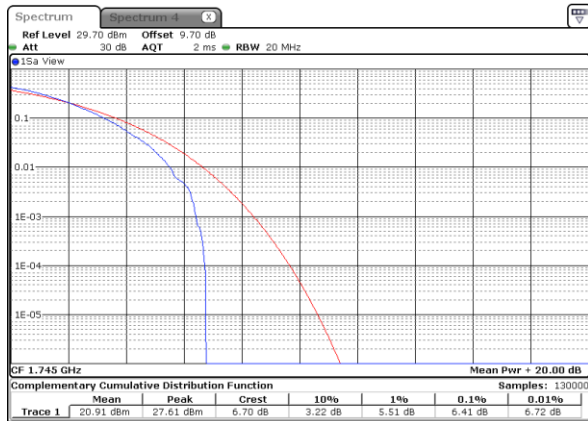
Date: 29 OCT.2019 15:13:57

**LTE Band 66 / 20MHz / 64QAM**
**Lowest Channel / 1RB**


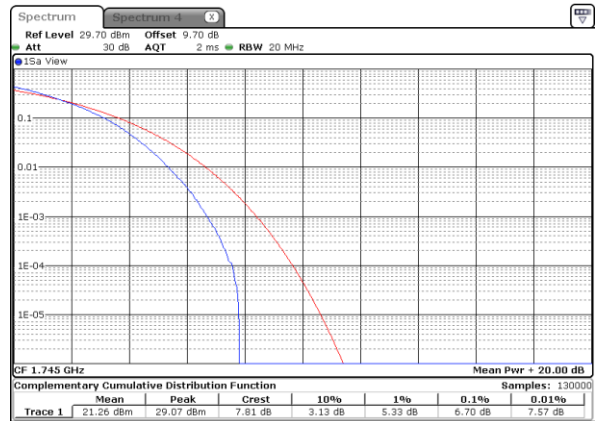
Date: 29 OCT.2019 15:17:56

**Lowest Channel / Full RB**


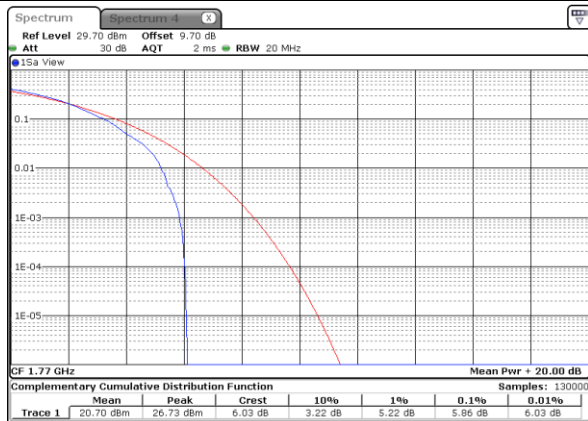
Date: 29 OCT.2019 15:17:42

**Middle Channel / 1RB**


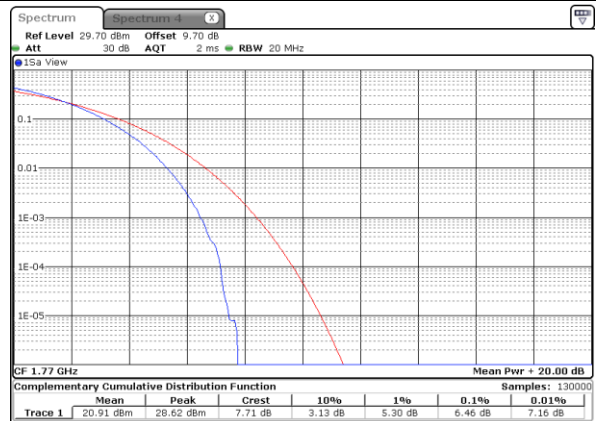
Date: 29 OCT.2019 15:15:59

**Middle Channel / Full RB**


Date: 29 OCT.2019 15:16:18

**Highest Channel / 1RB**


Date: 29 OCT.2019 15:14:52

**Highest Channel / Full RB**


Date: 29 OCT.2019 15:19:39

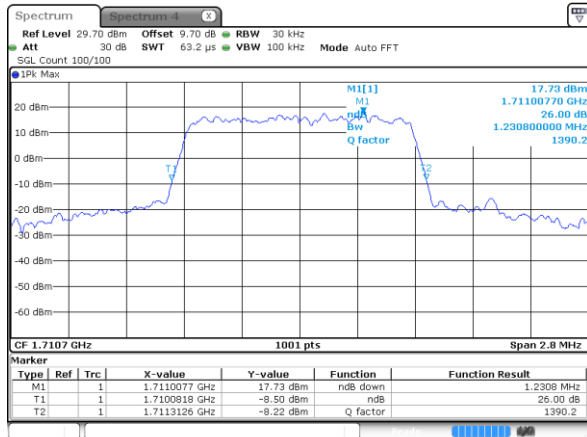
**26dB Bandwidth**

| 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  | 1.231                      | 1.222 | 2.997 | 3.021 | 4.845 | 4.875 | 9.87  | 9.67  | 14.266 | 14.505 | 20.3  | 20.3  |
| Middle CH  | 1.211                      | 1.222 | 3.009 | 2.991 | 4.885 | 4.885 | 9.67  | 9.75  | 14.326 | 14.386 | 20.1  | 20.14 |
| Highest CH | 1.228                      | 1.234 | 3.009 | 2.985 | 4.945 | 4.875 | 9.85  | 9.81  | 14.416 | 14.326 | 20.14 | 20.14 |
| Mode       | LTE Band 66 : 26dB BW(MHz) |       |       |       |       |       |       |       |        |        |       |       |
| BW         | 1.4MHz                     |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz  |        | 20MHz |       |
| Mod.       | 64QAM                      |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM  |        | 64QAM |       |
| Lowest CH  | 1.231                      |       | 2.973 |       | 4.965 |       | 9.85  |       | 14.535 |        | 20.14 |       |
| Middle CH  | 1.239                      |       | 3.021 |       | 4.855 |       | 9.73  |       | 14.565 |        | 20.26 |       |
| Highest CH | 1.219                      |       | 3.039 |       | 4.925 |       | 9.69  |       | 14.356 |        | 20.22 |       |



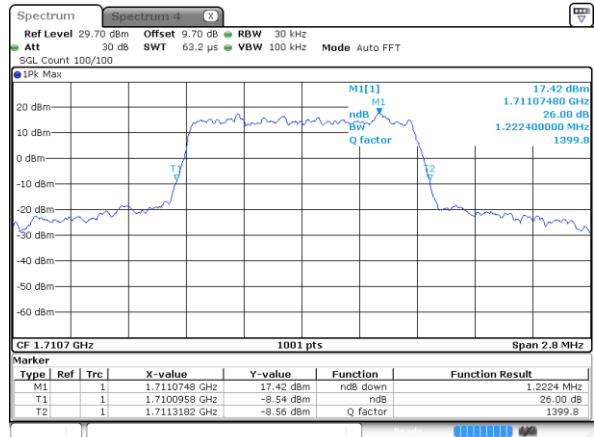
## LTE Band 66

## Lowest Channel / 1.4MHz / QPSK



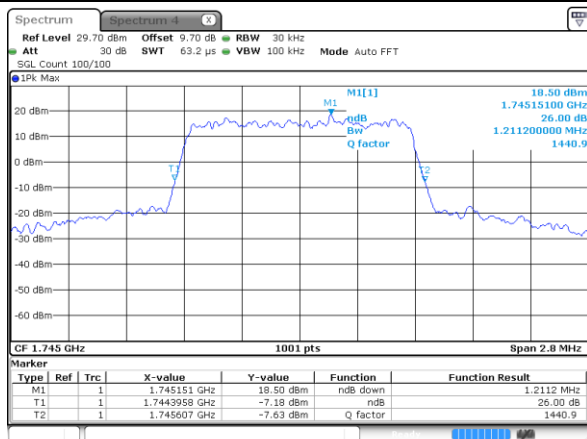
Date: 29 OCT 2019 11:01:33

## Lowest Channel / 1.4MHz / 16QAM



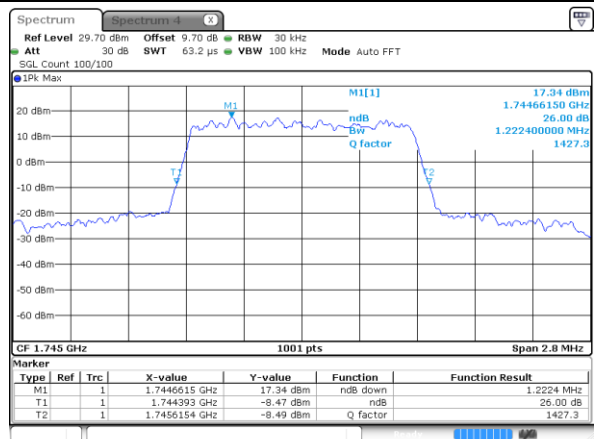
Date: 29 OCT 2019 11:02:22

## Middle Channel / 1.4MHz / QPSK



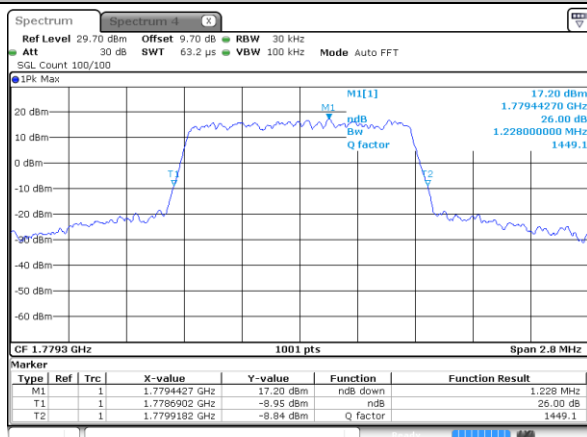
Date: 29 OCT 2019 11:03:52

## Middle Channel / 1.4MHz / 16QAM



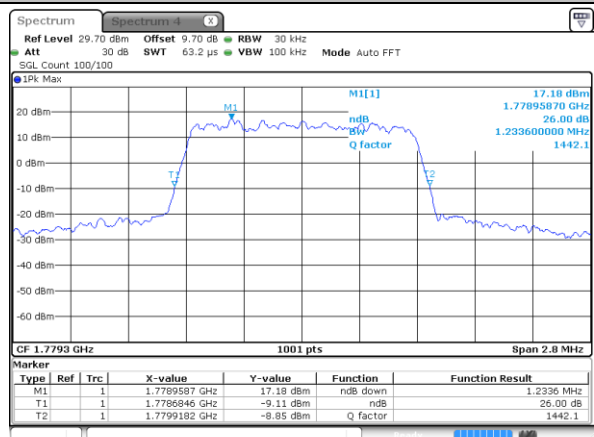
Date: 29 OCT 2019 11:03:39

## Highest Channel / 1.4MHz / QPSK



Date: 29 OCT 2019 11:04:13

## Highest Channel / 1.4MHz / 16QAM

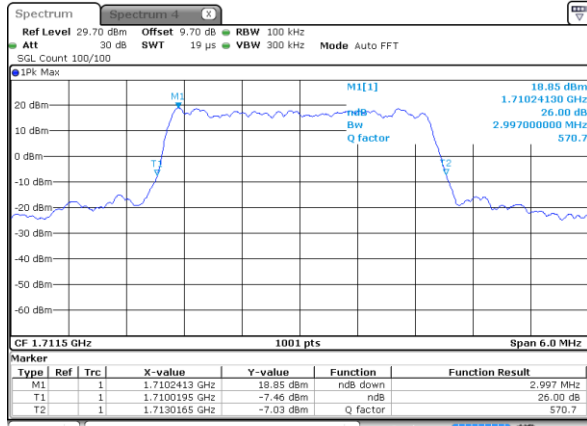


Date: 29 OCT 2019 11:04:30



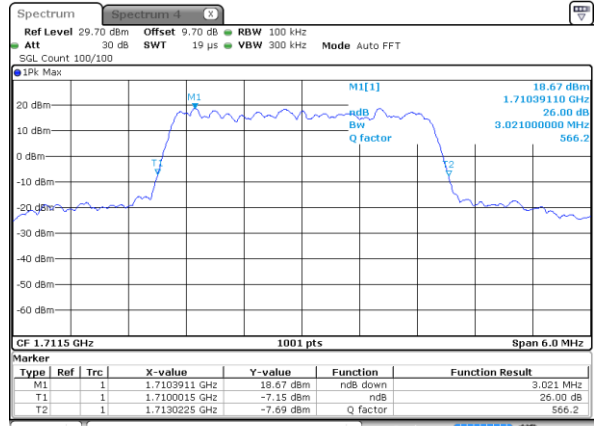
## LTE Band 66

## Lowest Channel / 3MHz / QPSK



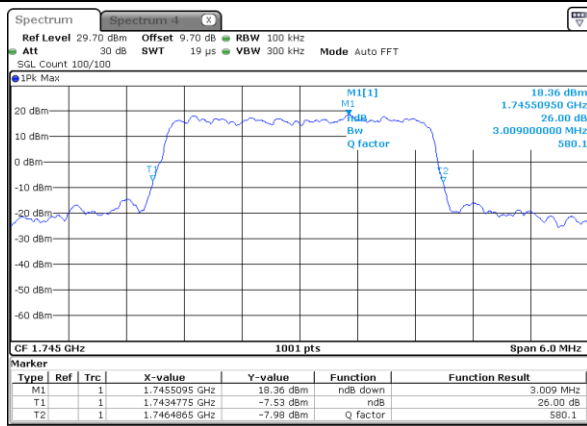
Date: 29 OCT.2019 11:43:08

## Lowest Channel / 3MHz / 16QAM



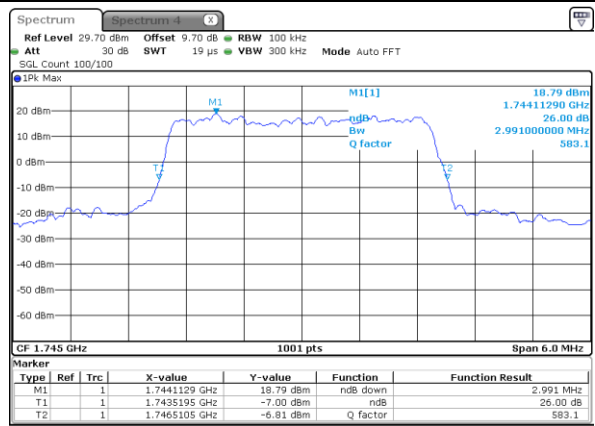
Date: 29 OCT.2019 11:42:08

## Middle Channel / 3MHz / QPSK



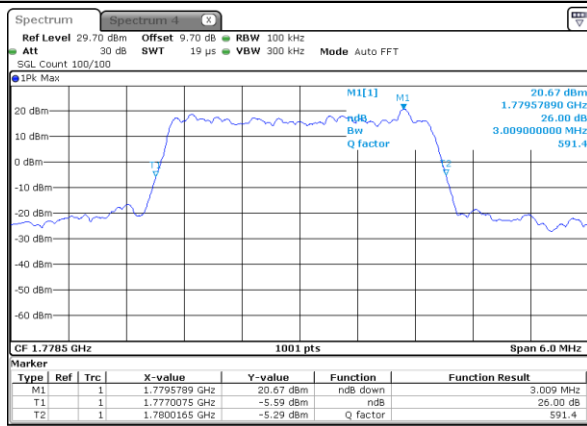
Date: 29 OCT.2019 11:51:27

## Middle Channel / 3MHz / 16QAM



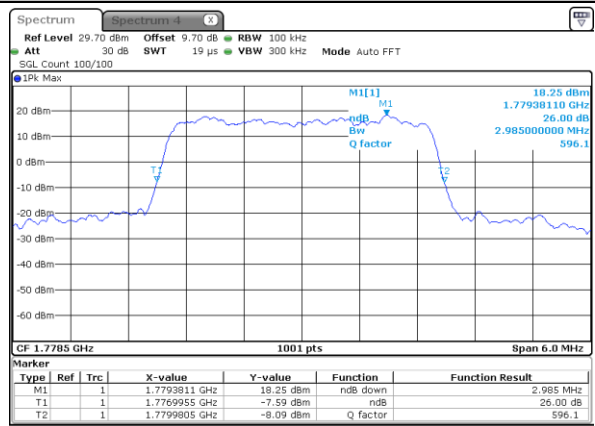
Date: 29 OCT.2019 11:51:48

## Highest Channel / 3MHz / QPSK



Date: 29 OCT.2019 11:57:53

## Highest Channel / 3MHz / 16QAM

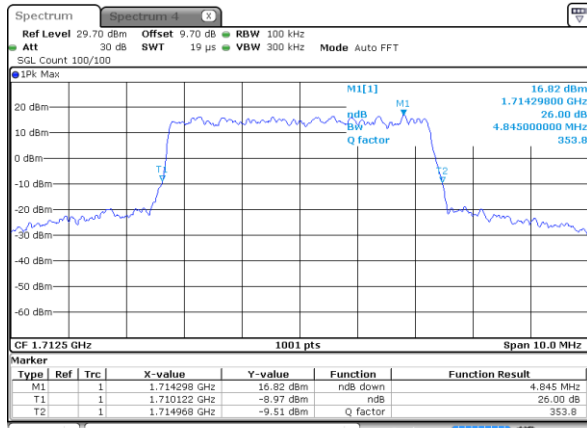


Date: 29 OCT.2019 11:54:40

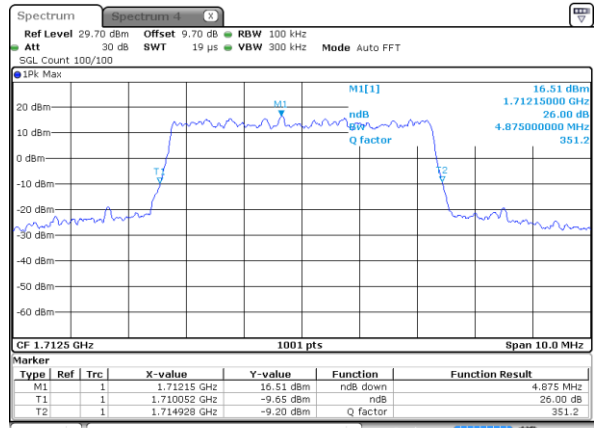


## LTE Band 66

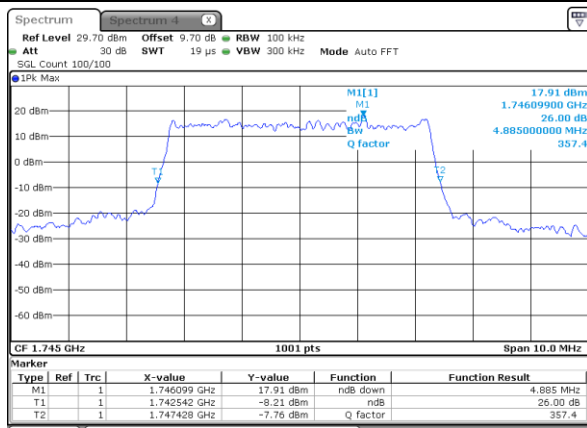
## Lowest Channel / 5MHz / QPSK



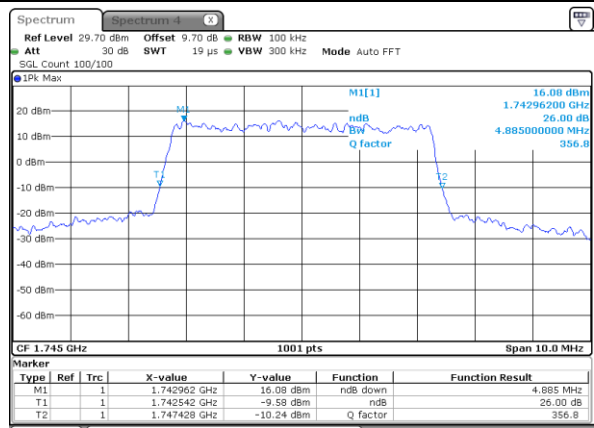
## Lowest Channel / 5MHz / 16QAM



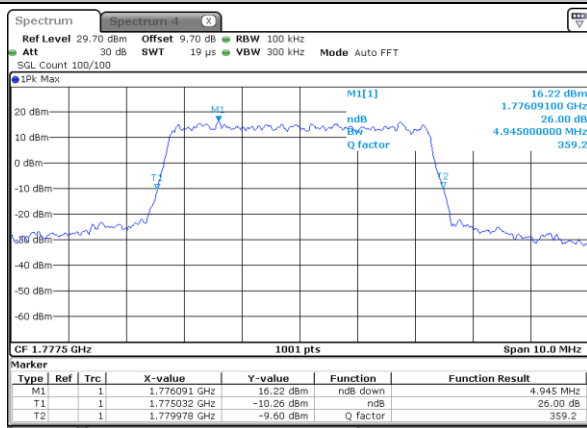
## Middle Channel / 5MHz / QPSK



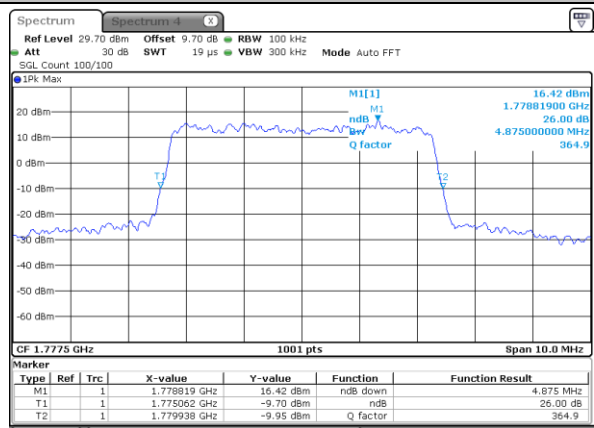
## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



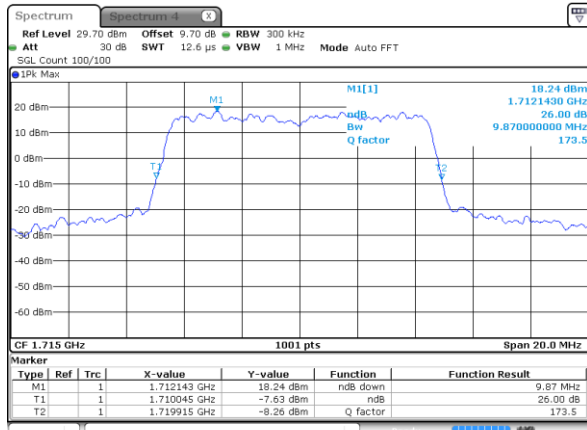
## Highest Channel / 5MHz / 16QAM



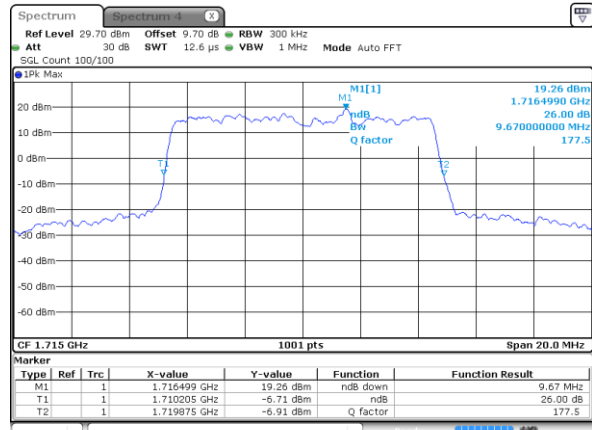


## LTE Band 66

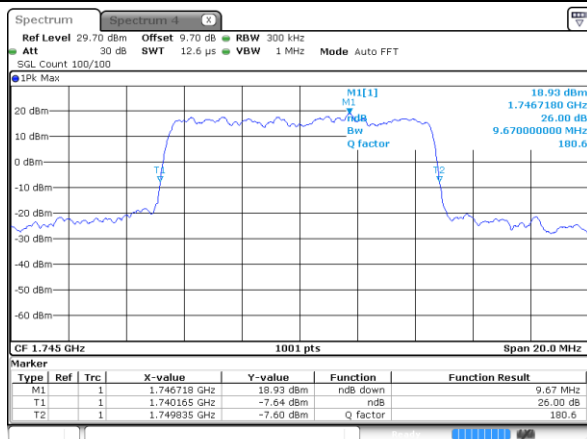
## Lowest Channel / 10MHz / QPSK



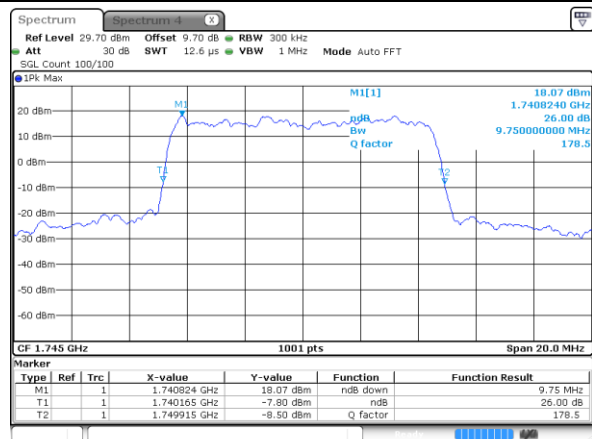
## Lowest Channel / 10MHz / 16QAM



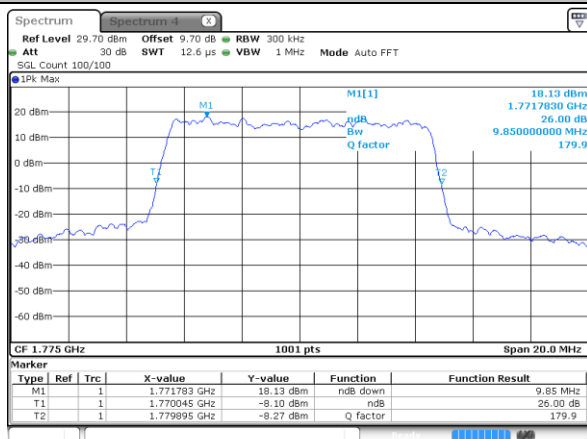
## Middle Channel / 10MHz / QPSK



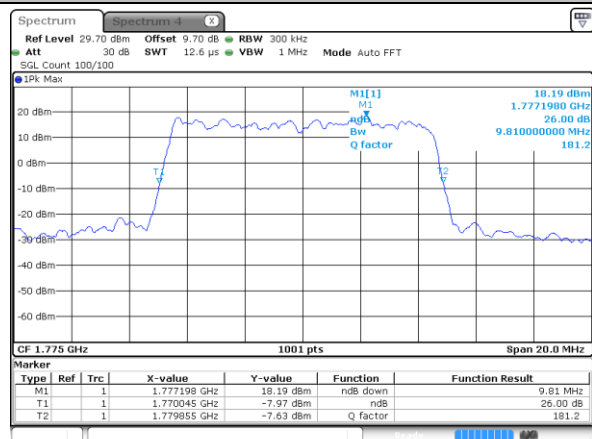
## Middle Channel / 10MHz / 16QAM



## Highest Channel / 10MHz / QPSK



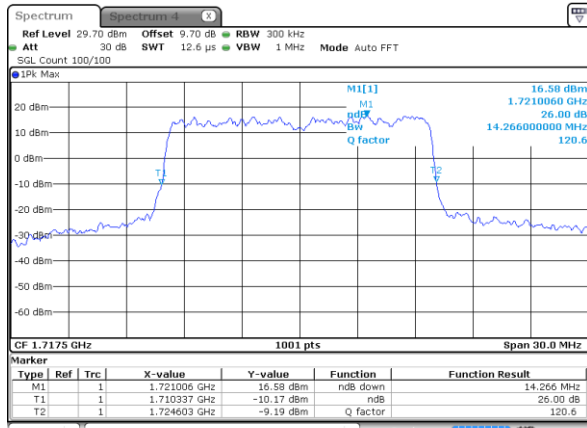
## Highest Channel / 10MHz / 16QAM





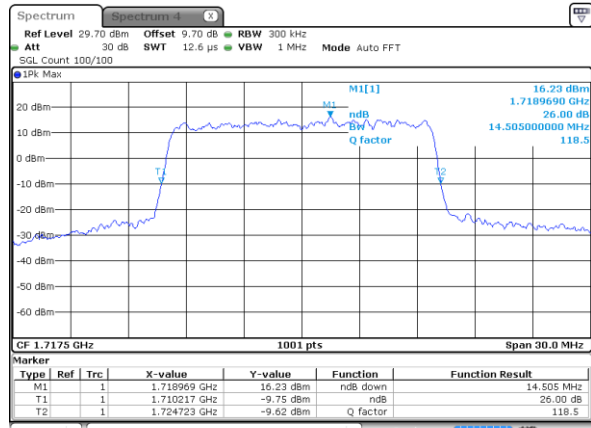
## LTE Band 66

## Lowest Channel / 15MHz / QPSK



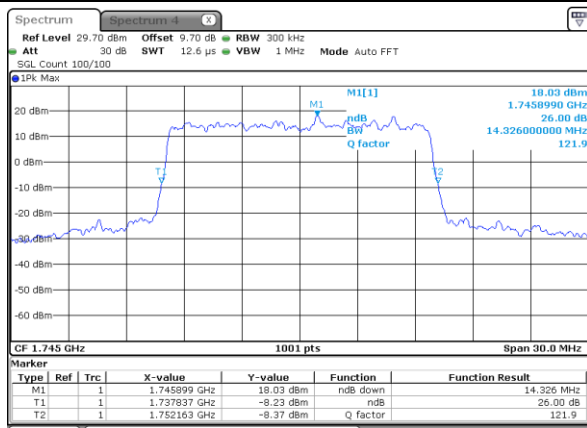
Date: 29 OCT 2019 14:26:37

## Lowest Channel / 15MHz / 16QAM



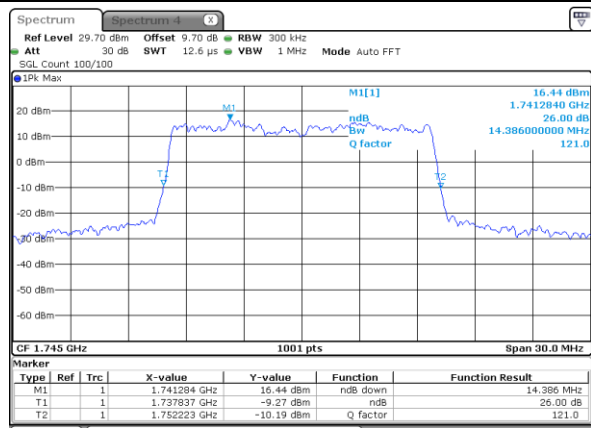
Date: 29 OCT 2019 14:27:18

## Middle Channel / 15MHz / QPSK



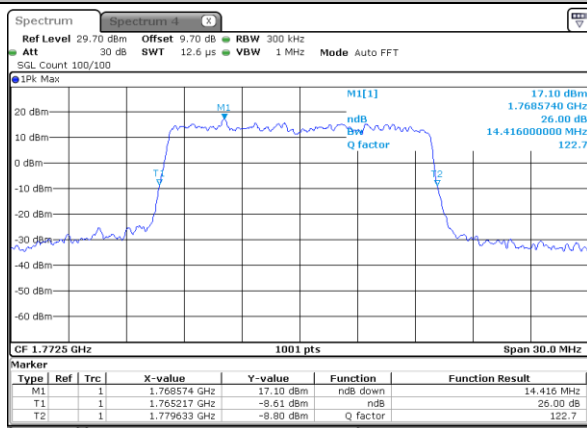
Date: 29 OCT 2019 14:32:04

## Middle Channel / 15MHz / 16QAM



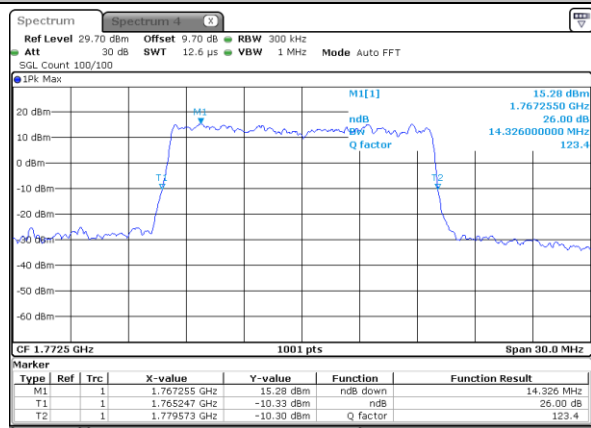
Date: 29 OCT 2019 14:32:23

## Highest Channel / 15MHz / QPSK



Date: 29 OCT 2019 14:36:21

## Highest Channel / 15MHz / 16QAM

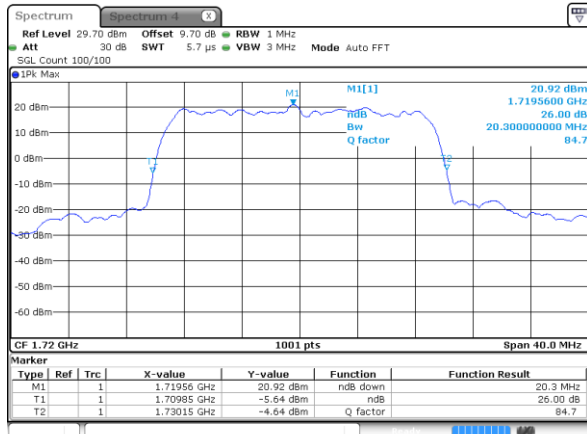


Date: 29 OCT 2019 14:37:05

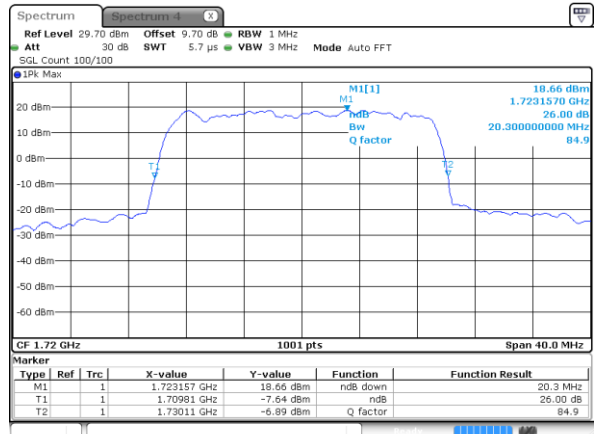


## LTE Band 66

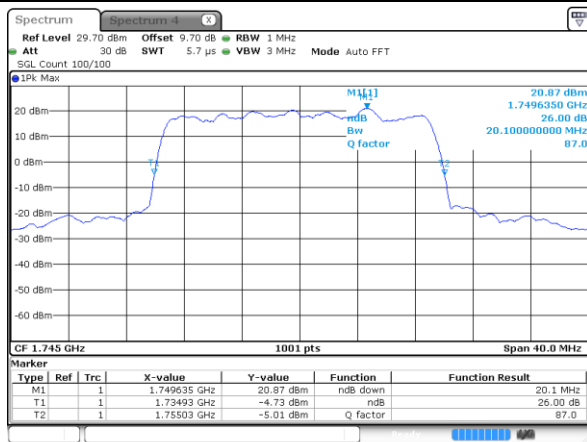
## Lowest Channel / 20MHz / QPSK



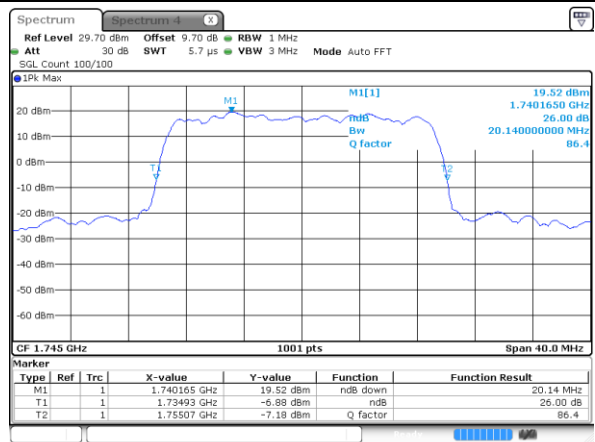
## Lowest Channel / 20MHz / 16QAM



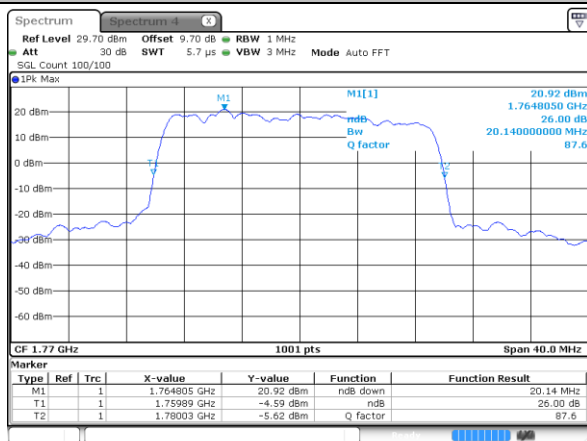
## Middle Channel / 20MHz / QPSK



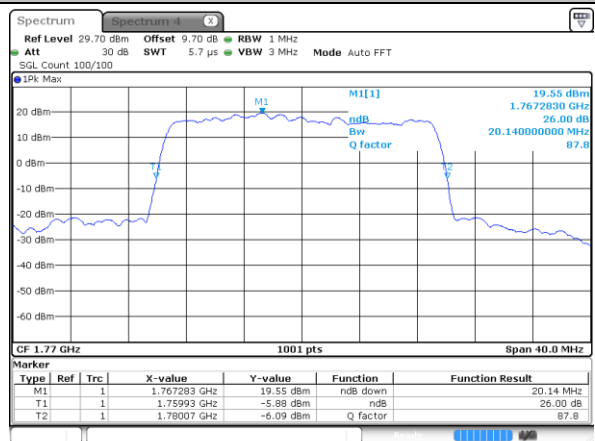
## Middle Channel / 20MHz / 16QAM



## Highest Channel / 20MHz / QPSK



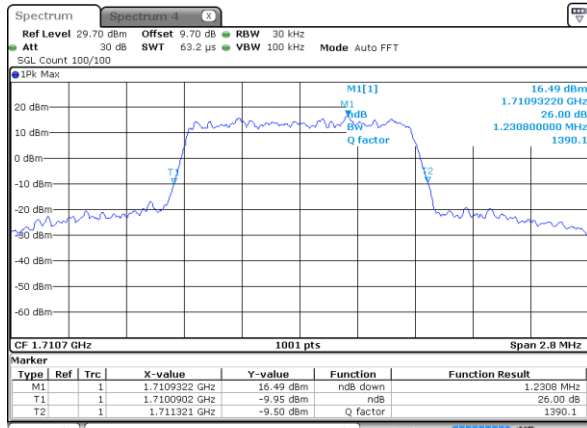
## Highest Channel / 20MHz / 16QAM





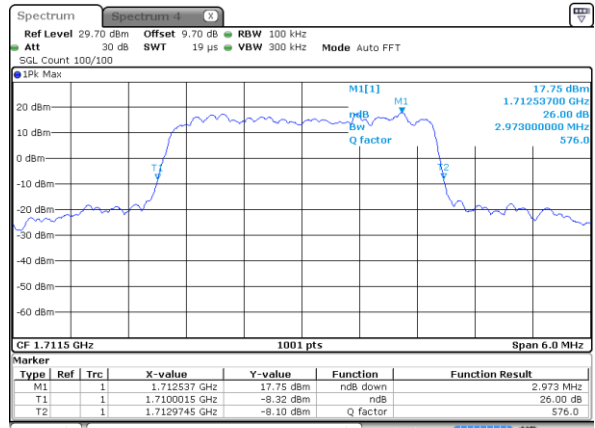
## LTE Band 66

## Lowest Channel / 1.4MHz / 64QAM



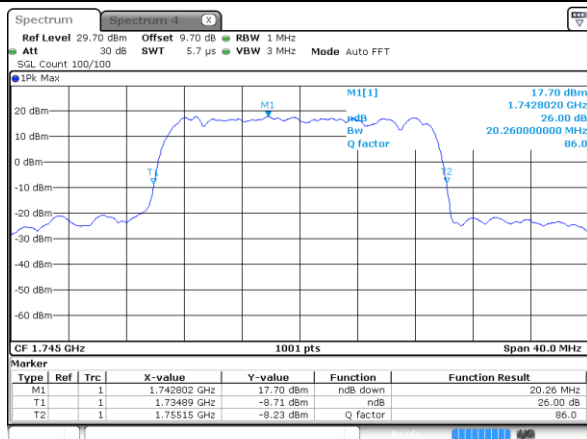
Date: 29 OCT 2019 11:02:38

## Lowest Channel / 3MHz / 64QAM



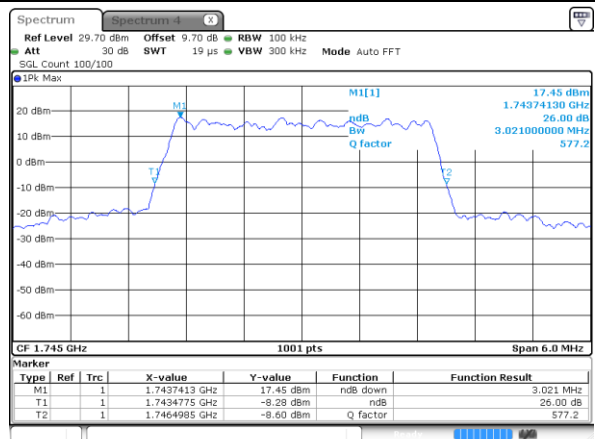
Date: 29 OCT 2019 11:40:45

## Middle Channel / 20MHz / 64QAM



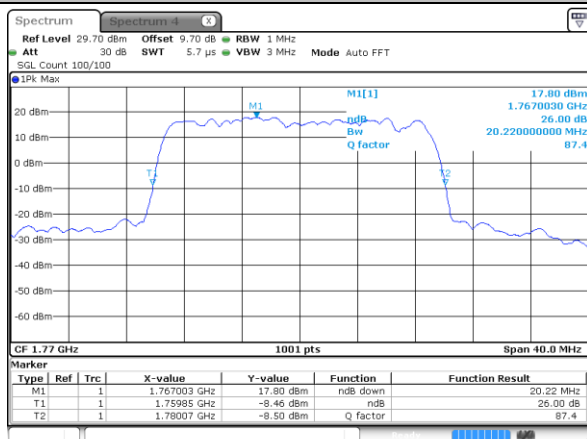
Date: 29 OCT 2019 14:55:20

## Middle Channel / 3MHz / 64QAM



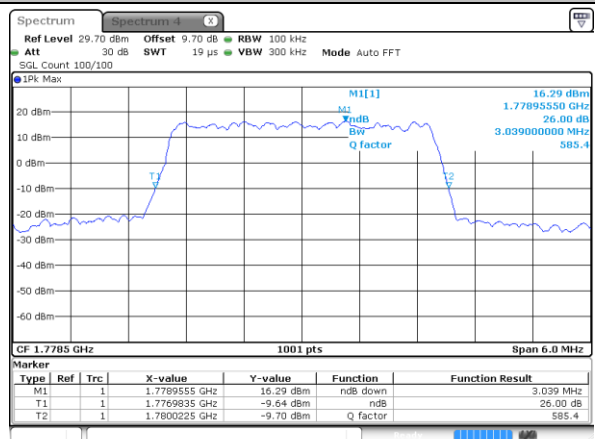
Date: 29 OCT 2019 11:52:05

## Highest Channel / 20MHz / 64QAM



Date: 29 OCT 2019 15:02:44

## Highest Channel / 3MHz / 64QAM

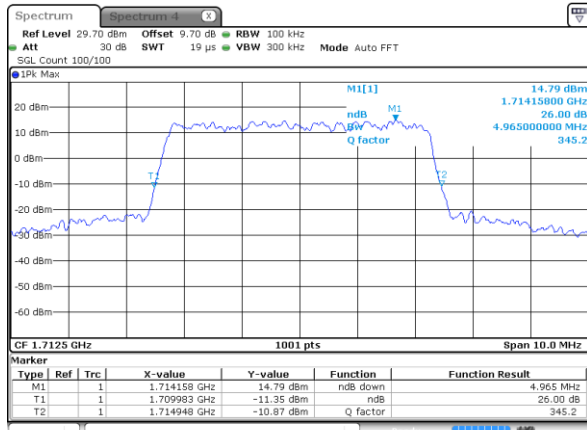


Date: 29 OCT 2019 11:56:15

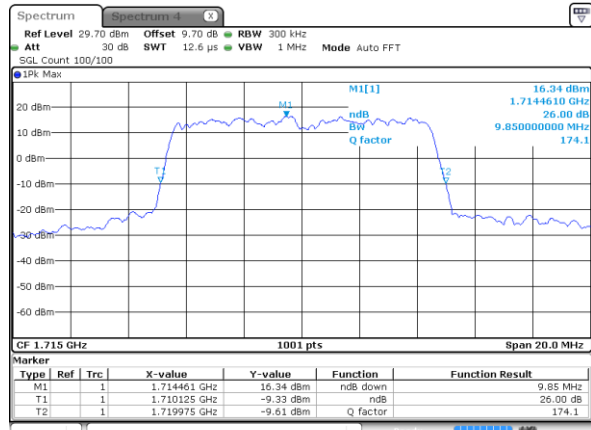


## LTE Band 66

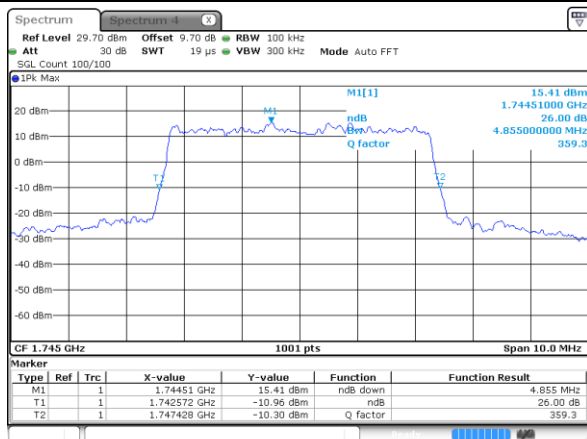
## Lowest Channel / 5MHz / 64QAM



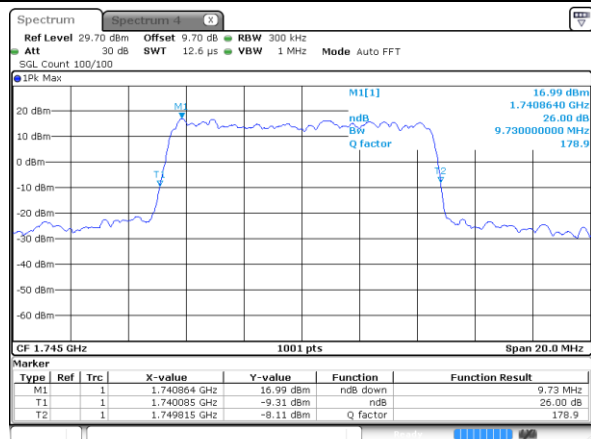
## Lowest Channel / 10MHz / 64QAM



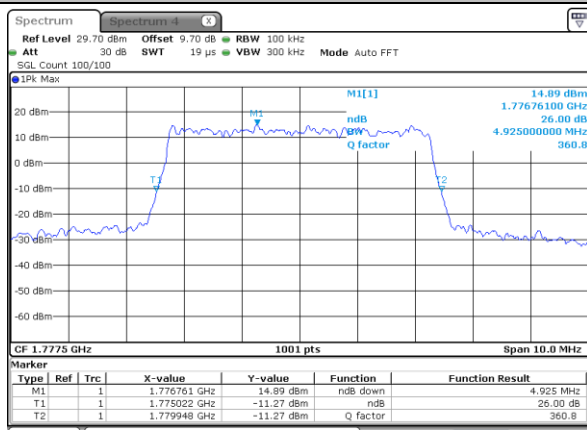
## Middle Channel / 5MHz / 64QAM



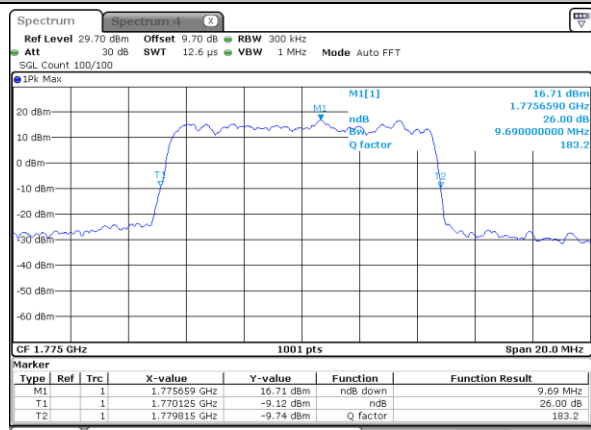
## Middle Channel / 10MHz / 64QAM



## Highest Channel / 5MHz / 64QAM



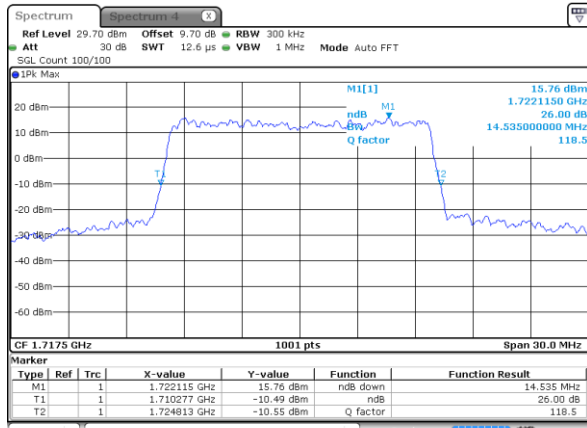
## Highest Channel / 10MHz / 64QAM



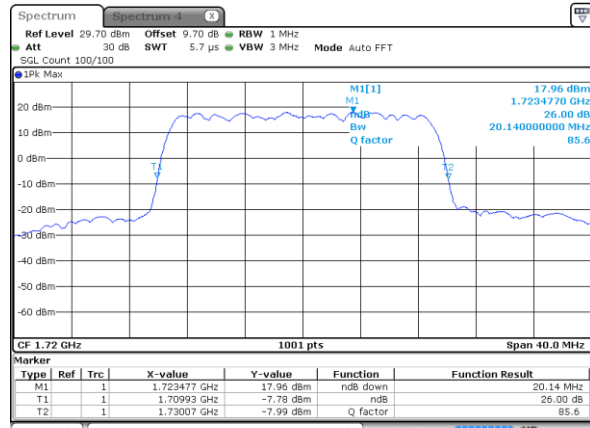


## LTE Band 66

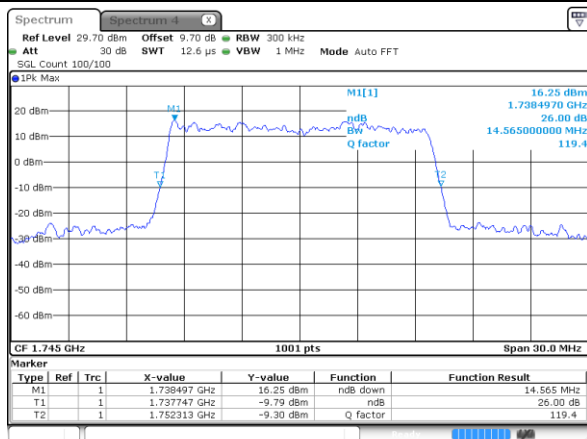
## Lowest Channel / 15MHz / 64QAM



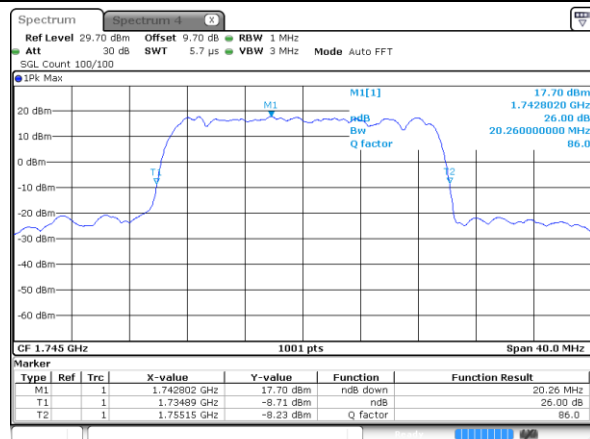
## Lowest Channel / 20MHz / 64QAM



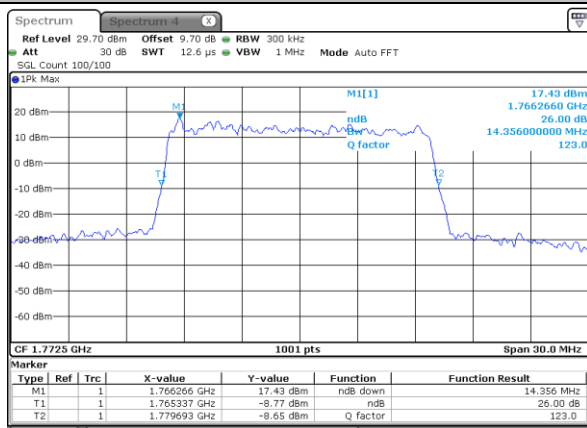
## Middle Channel / 15MHz / 64QAM



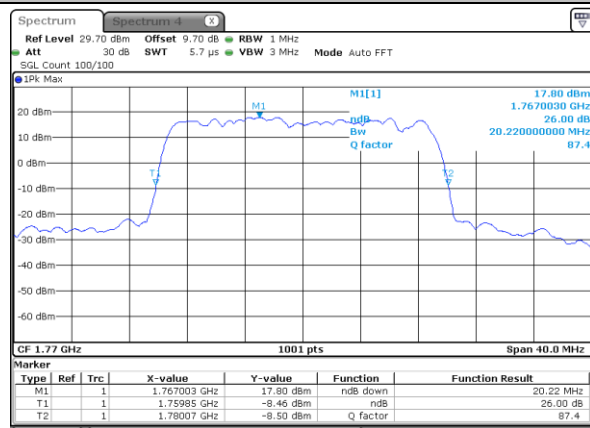
## Middle Channel / 20MHz / 64QAM



## Highest Channel / 15MHz / 64QAM



## Highest Channel / 20MHz / 64QAM



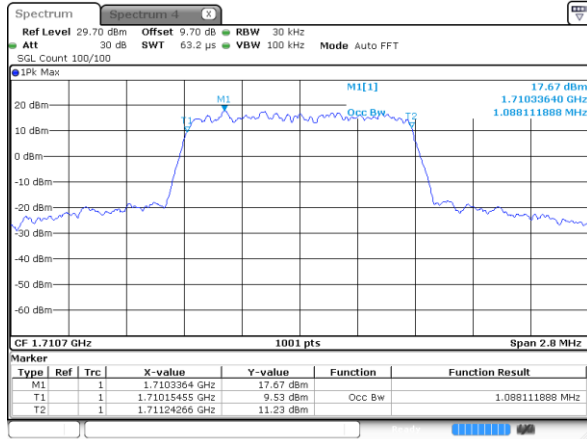
**Occupied Bandwidth**

| 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                      | 1.09  | 2.72  | 2.72  | 4.51  | 4.50  | 9.01  | 9.03  | 13.34 | 13.43 | 18.30 | 18.50 |
| Middle CH  | 1.09                      | 1.09  | 2.72  | 2.73  | 4.51  | 4.50  | 8.99  | 9.01  | 13.37 | 13.43 | 18.42 | 18.34 |
| Highest CH | 1.09                      | 1.10  | 2.72  | 2.72  | 4.49  | 4.50  | 9.01  | 9.07  | 13.40 | 13.40 | 18.22 | 18.46 |
| 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                      |       | 2.73  |       | 4.48  |       | 8.99  |       | 13.46 |       | 18.26 |       |
| Middle CH  | 1.09                      |       | 2.73  |       | 4.49  |       | 8.97  |       | 13.40 |       | 18.38 |       |
| Highest CH | 1.09                      |       | 2.72  |       | 4.51  |       | 9.01  |       | 13.43 |       | 18.26 |       |

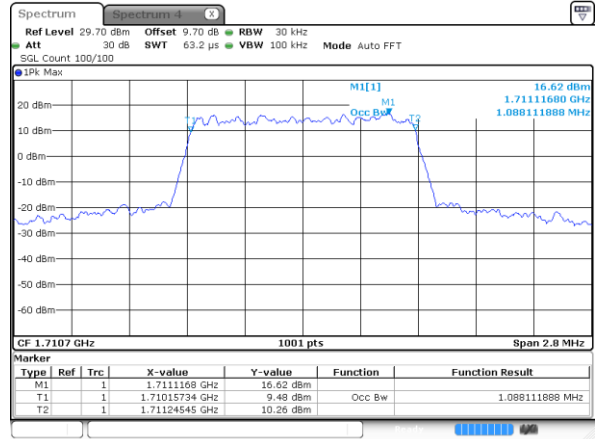


## LTE Band 66

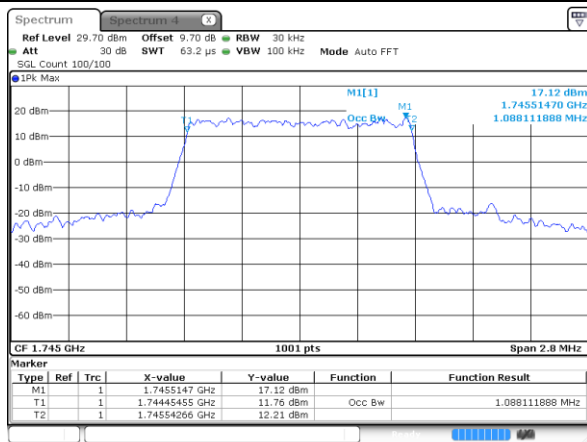
## Lowest Channel / 1.4MHz / QPSK



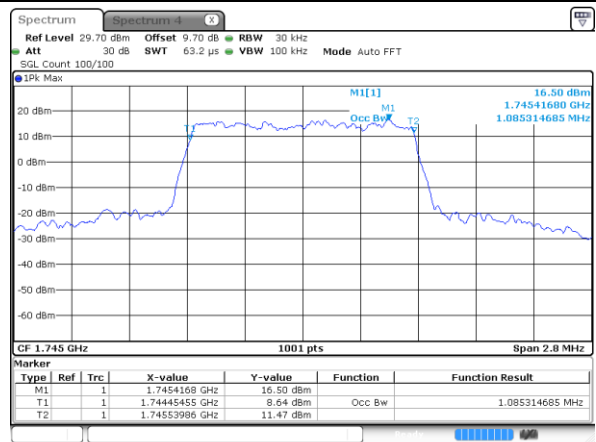
## Lowest Channel / 1.4MHz / 16QAM



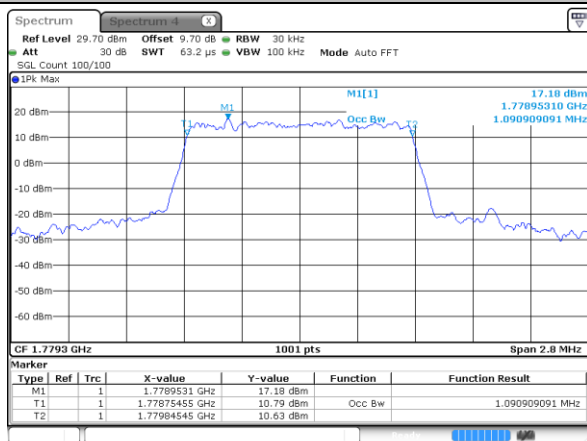
## Middle Channel / 1.4MHz / QPSK



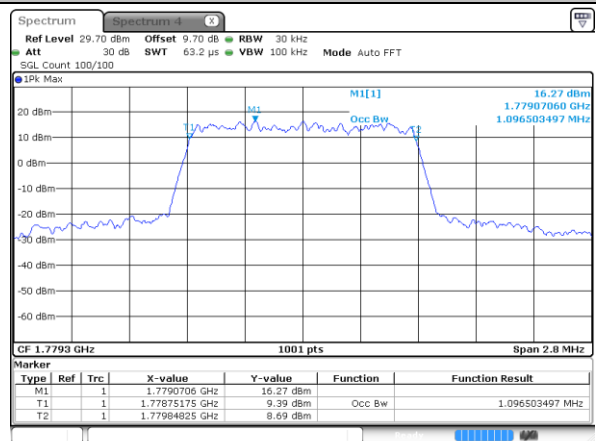
## Middle Channel / 1.4MHz / 16QAM



## Highest Channel / 1.4MHz / QPSK



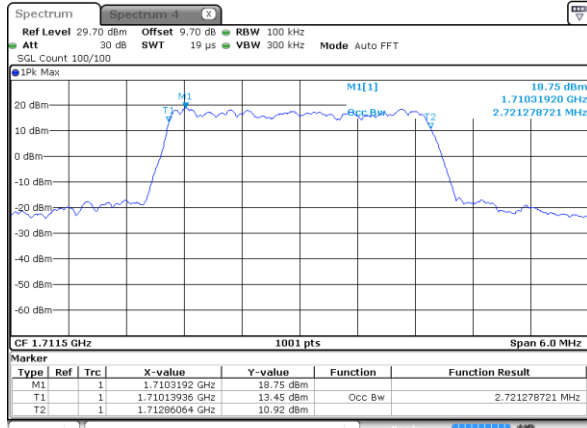
## Highest Channel / 1.4MHz / 16QAM





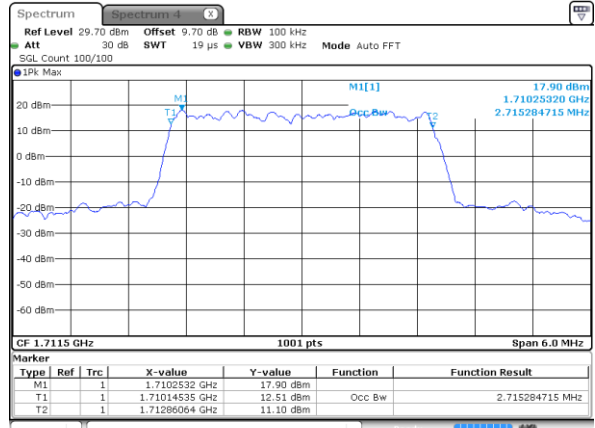
## LTE Band 66

## Lowest Channel / 3MHz / QPSK



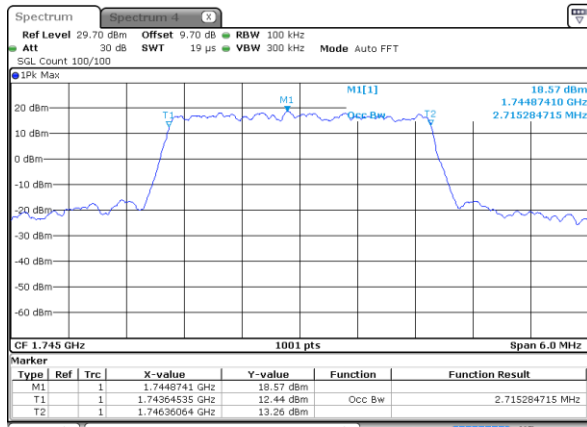
Date: 29 OCT 2019 11:43:01

## Lowest Channel / 3MHz / 16QAM



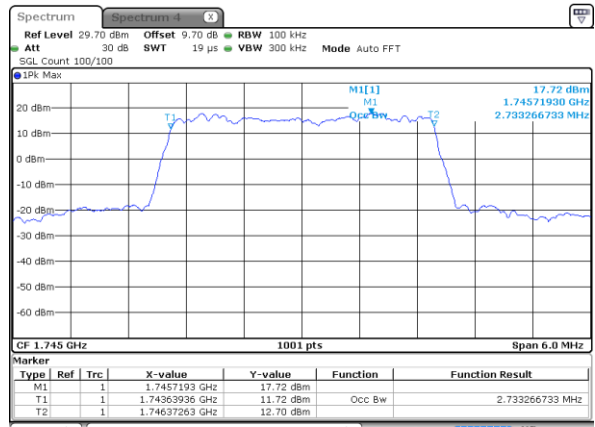
Date: 29 OCT 2019 11:42:01

## Middle Channel / 3MHz / QPSK



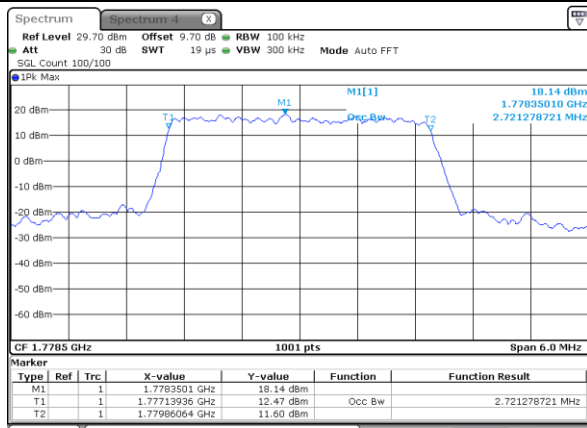
Date: 29 OCT 2019 11:51:20

## Middle Channel / 3MHz / 16QAM



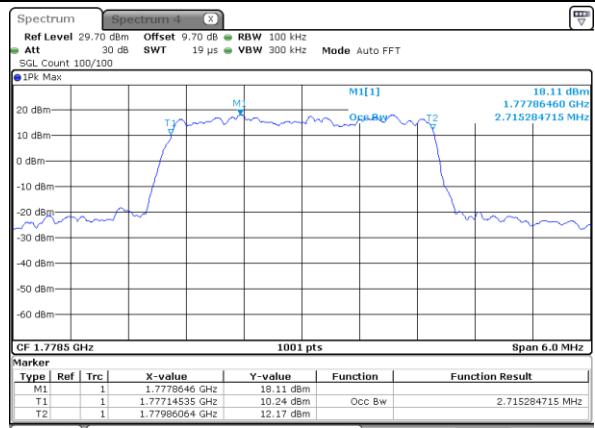
Date: 29 OCT 2019 11:51:41

## Highest Channel / 3MHz / QPSK



Date: 29 OCT 2019 11:57:47

## Highest Channel / 3MHz / 16QAM

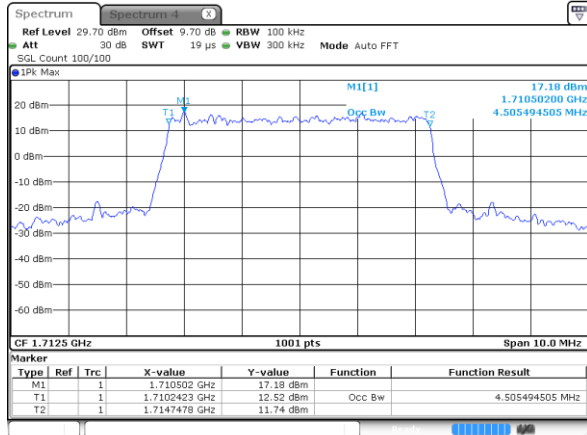


Date: 29 OCT 2019 11:54:34

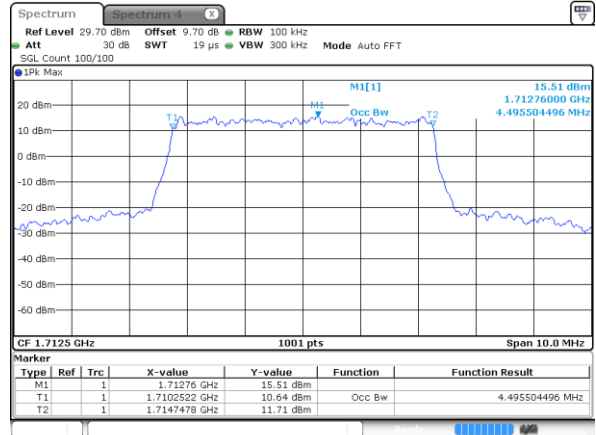


## LTE Band 66

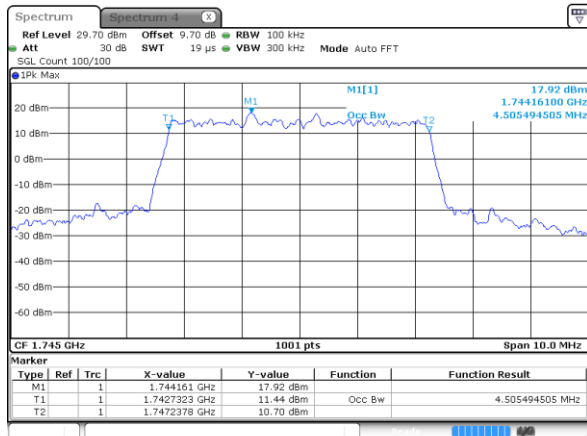
## Lowest Channel / 5MHz / QPSK



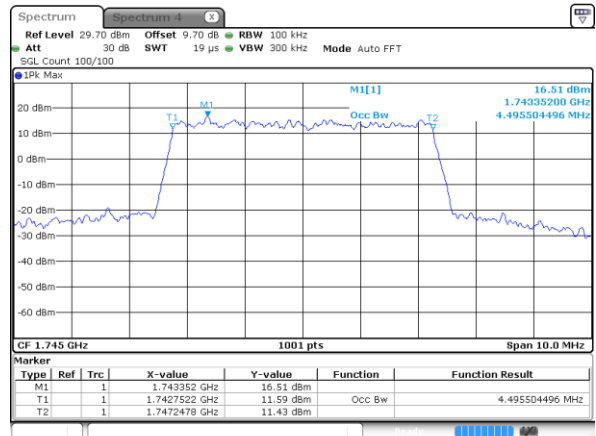
## Lowest Channel / 5MHz / 16QAM



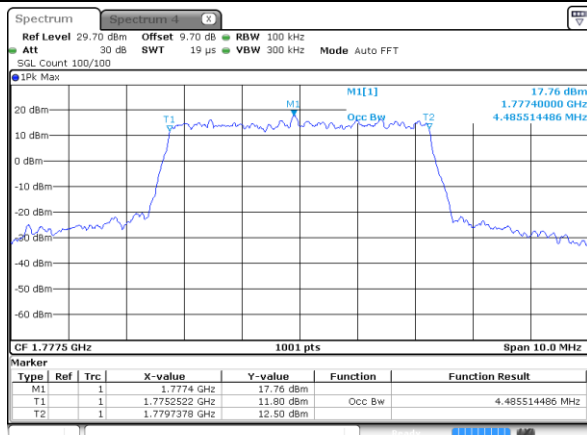
## Middle Channel / 5MHz / QPSK



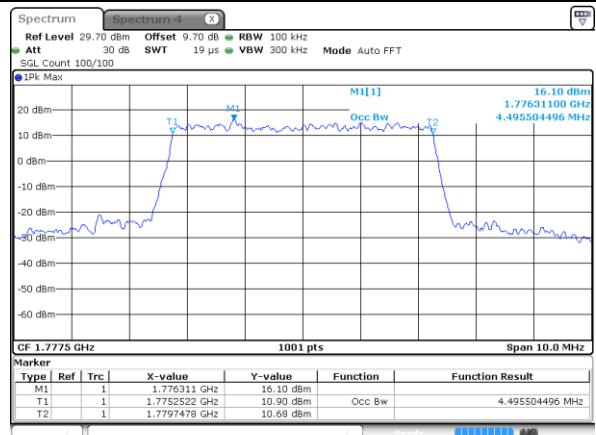
## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



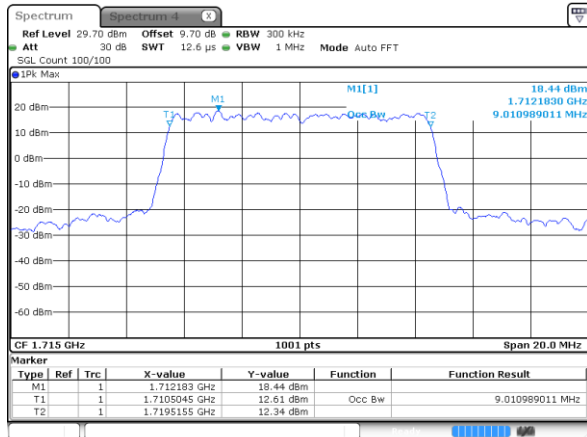
## Highest Channel / 5MHz / 16QAM





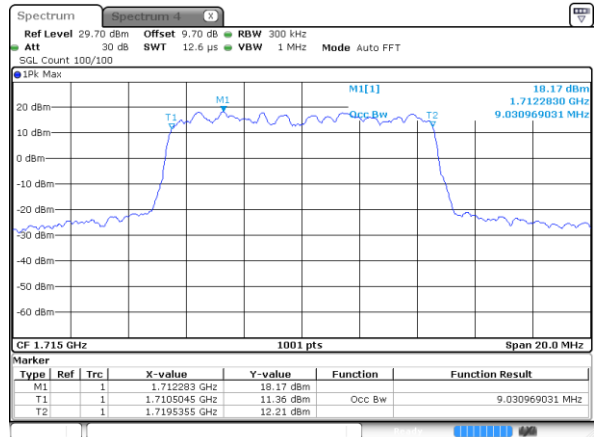
## LTE Band 66

## Lowest Channel / 10MHz / QPSK



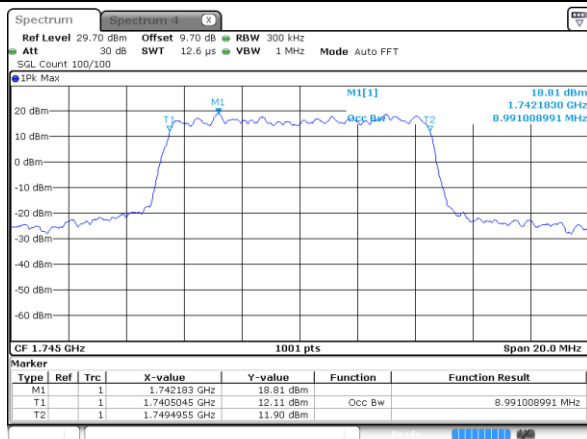
Date: 29.OCT.2019 14:01:28

## Lowest Channel / 10MHz / 16QAM



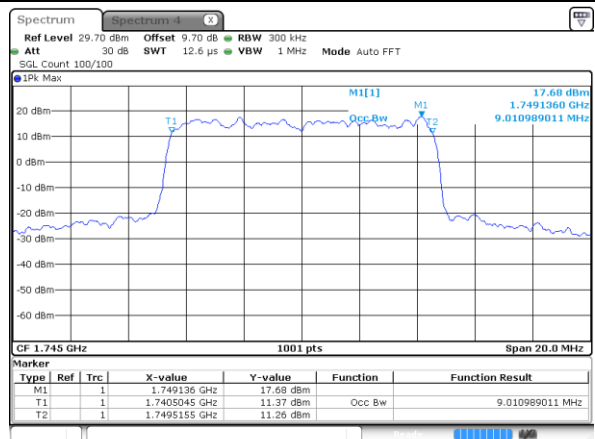
Date: 29.OCT.2019 14:02:01

## Middle Channel / 10MHz / QPSK



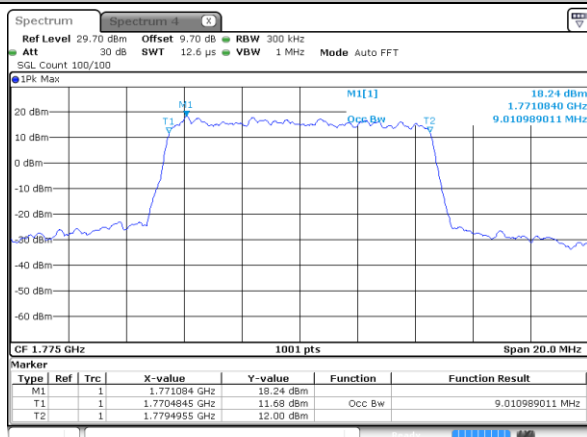
Date: 29.OCT.2019 14:13:36

## Middle Channel / 10MHz / 16QAM



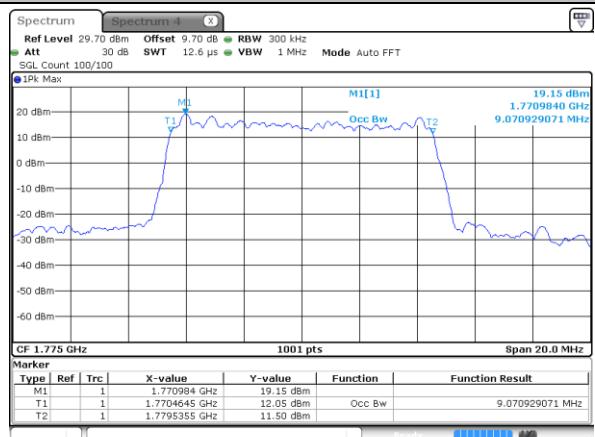
Date: 29.OCT.2019 14:13:55

## Highest Channel / 10MHz / QPSK



Date: 29.OCT.2019 14:17:27

## Highest Channel / 10MHz / 16QAM

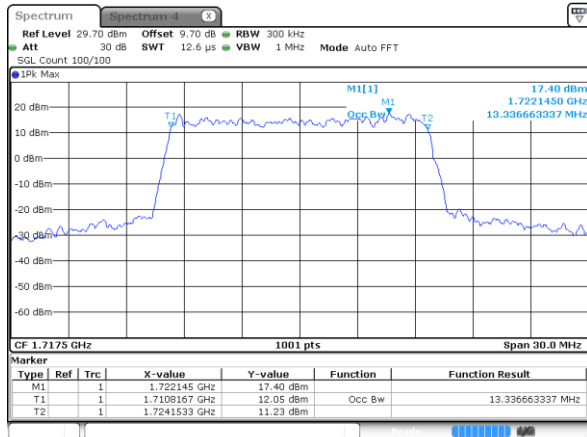


Date: 29.OCT.2019 14:18:02

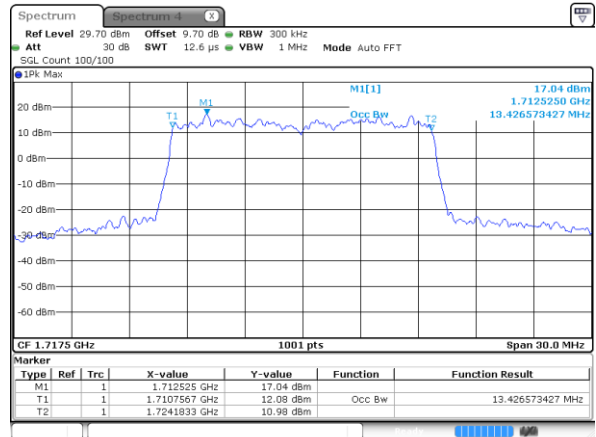


## LTE Band 66

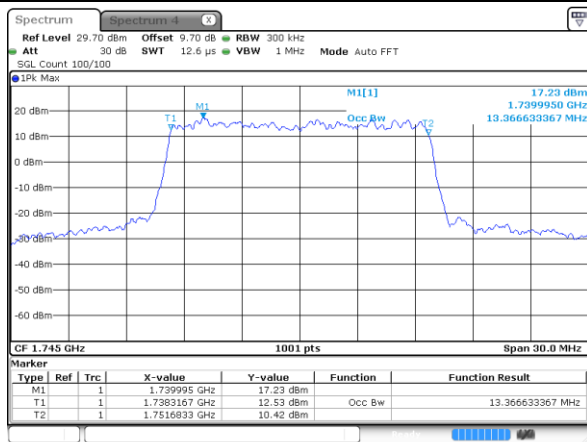
## Lowest Channel / 15MHz / QPSK



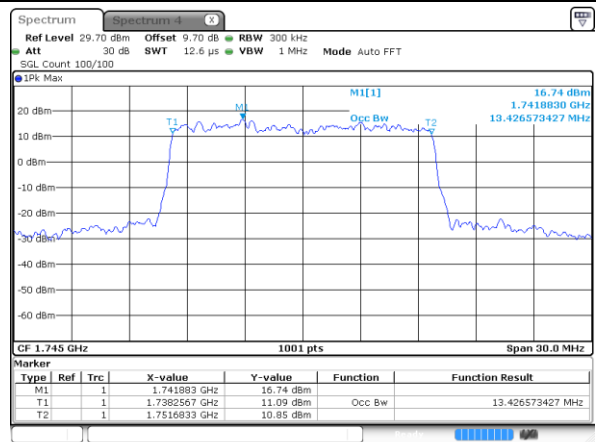
## Lowest Channel / 15MHz / 16QAM



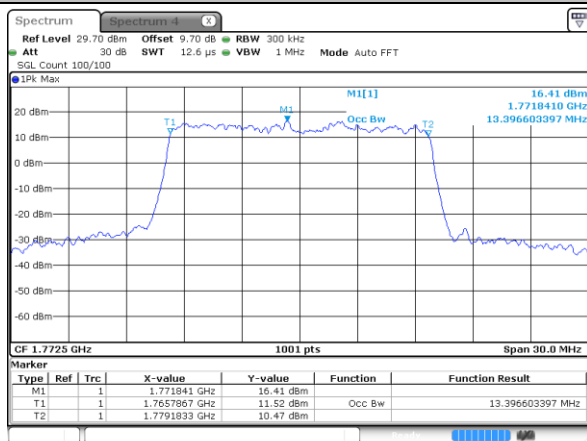
## Middle Channel / 15MHz / QPSK



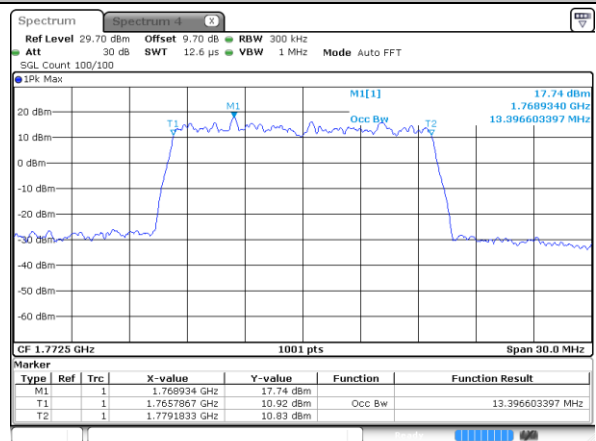
## Middle Channel / 15MHz / 16QAM



## Highest Channel / 15MHz / QPSK



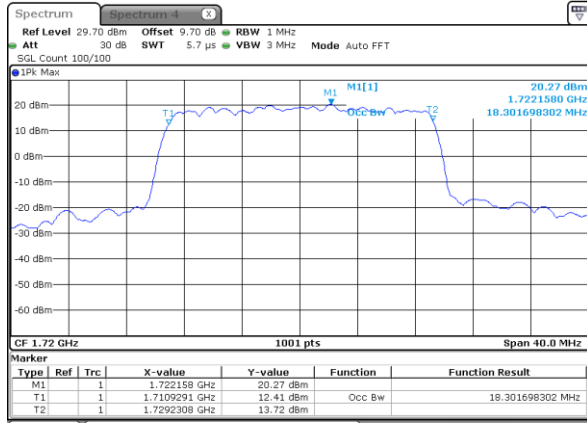
## Highest Channel / 15MHz / 16QAM



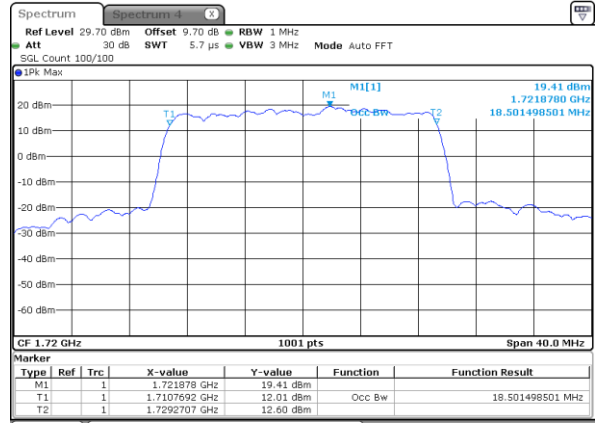


## LTE Band 66

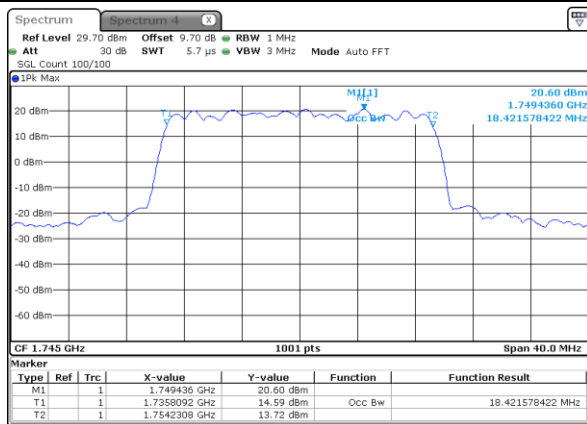
## Lowest Channel / 20MHz / QPSK



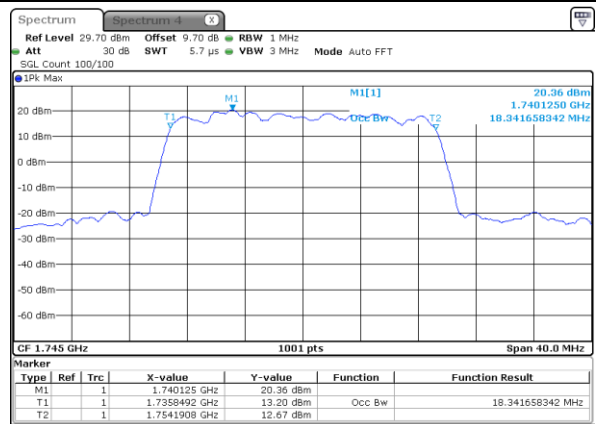
## Lowest Channel / 20MHz / 16QAM



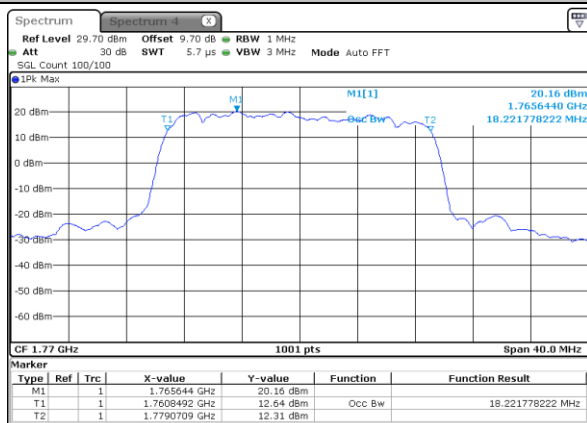
## Middle Channel / 20MHz / QPSK



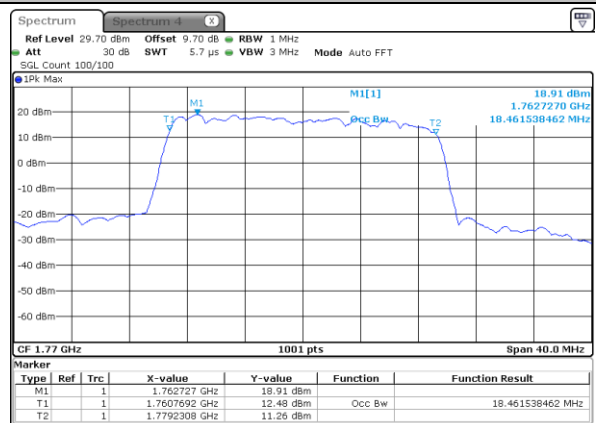
## Middle Channel / 20MHz / 16QAM



## Highest Channel / 20MHz / QPSK



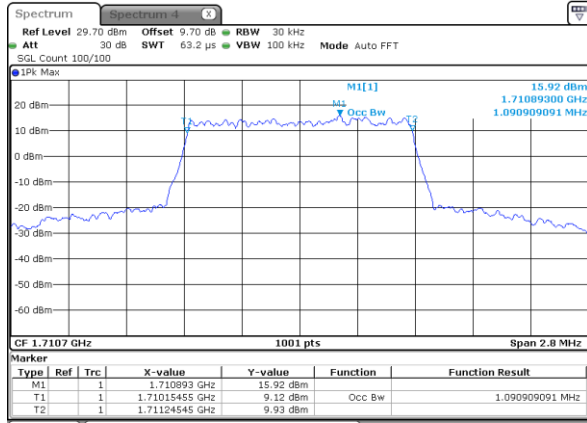
## Highest Channel / 20MHz / 16QAM





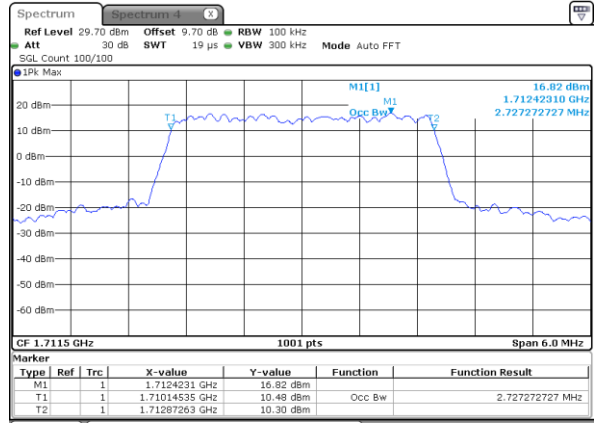
## LTE Band 66

## Lowest Channel / 1.4MHz / 64QAM



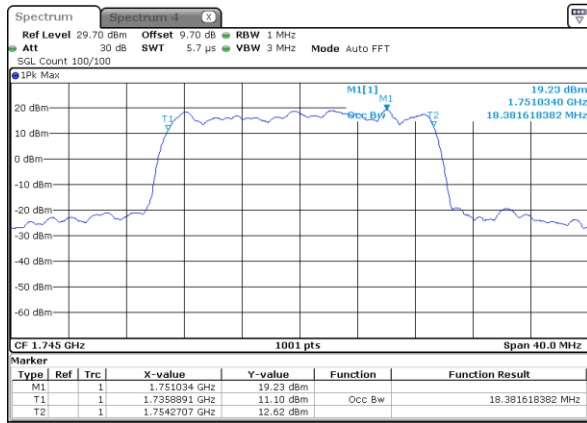
Date: 29 OCT 2019 11:38:00

## Lowest Channel / 3MHz / 64QAM



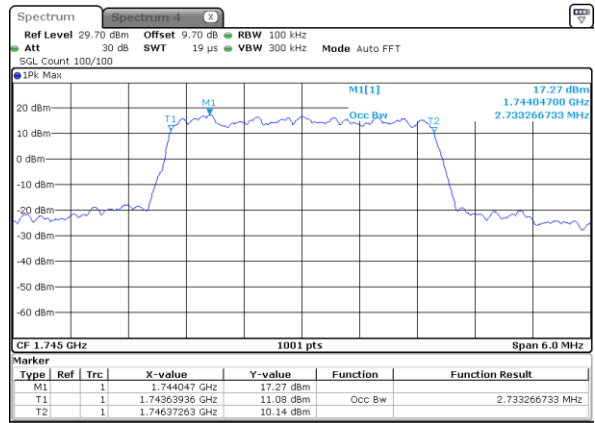
Date: 29 OCT 2019 11:40:36

## Middle Channel / 20MHz / 64QAM



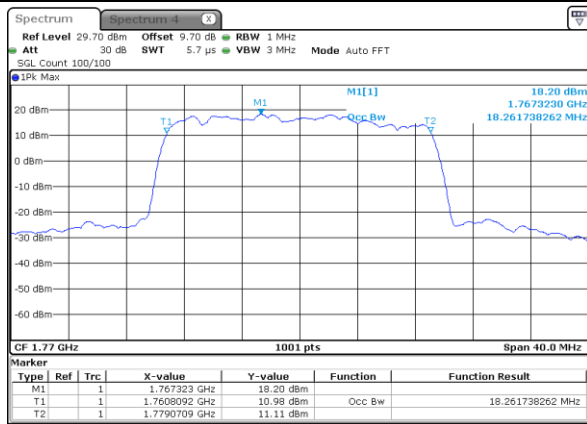
Date: 29 OCT 2019 14:55:13

## Middle Channel / 3MHz / 64QAM



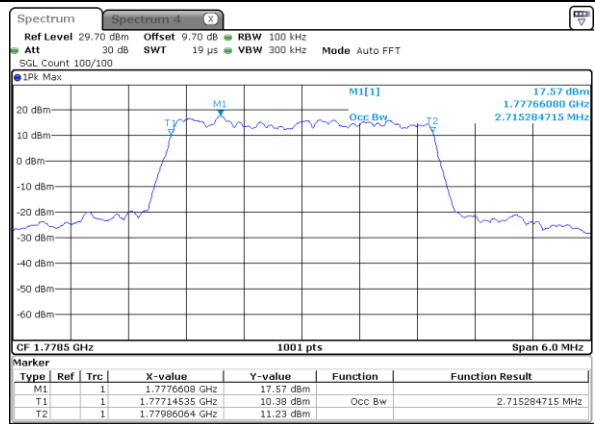
Date: 29 OCT 2019 11:51:58

## Highest Channel / 20MHz / 64QAM



Date: 29 OCT 2019 15:02:37

## Highest Channel / 3MHz / 64QAM



Date: 29 OCT 2019 11:56:09