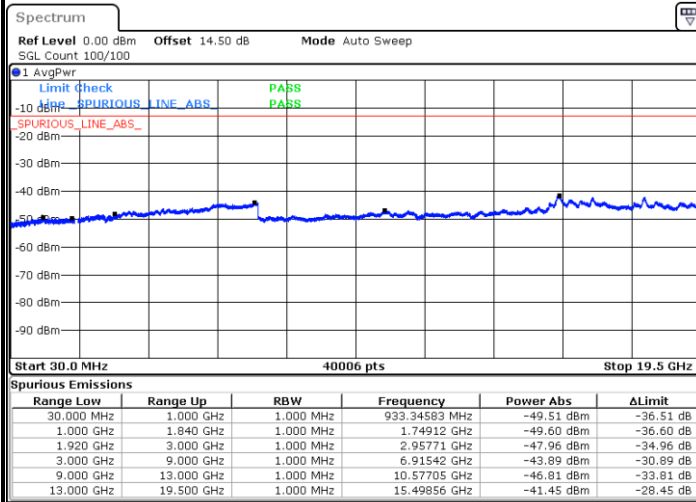




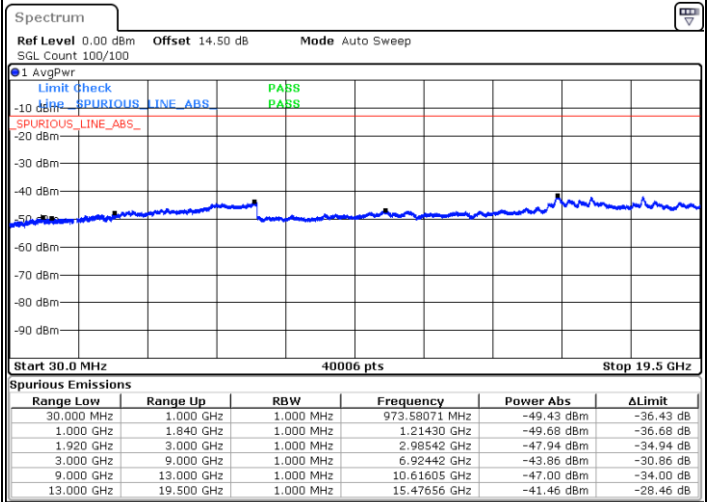
## LTE Band 2 / 10MHz

## Middle Channel / QPSK



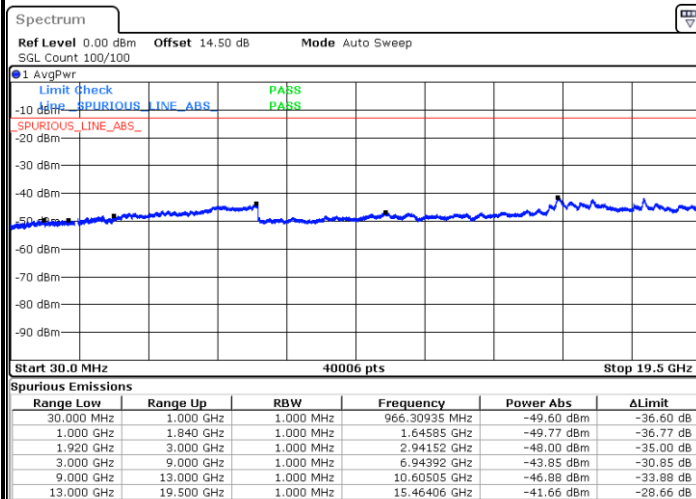
Date: 13.JAN.2022 03:14:03

## Middle Channel / 16QAM



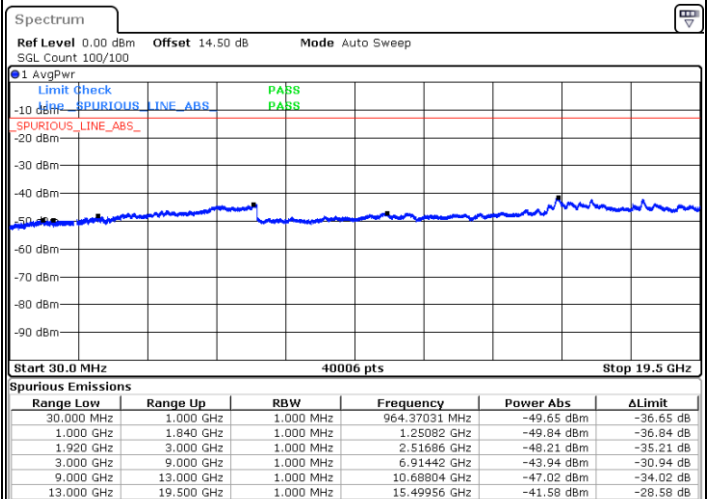
Date: 13.JAN.2022 03:15:17

## Highest Channel / QPSK



Date: 13.JAN.2022 03:25:05

## Highest Channel / 16QAM

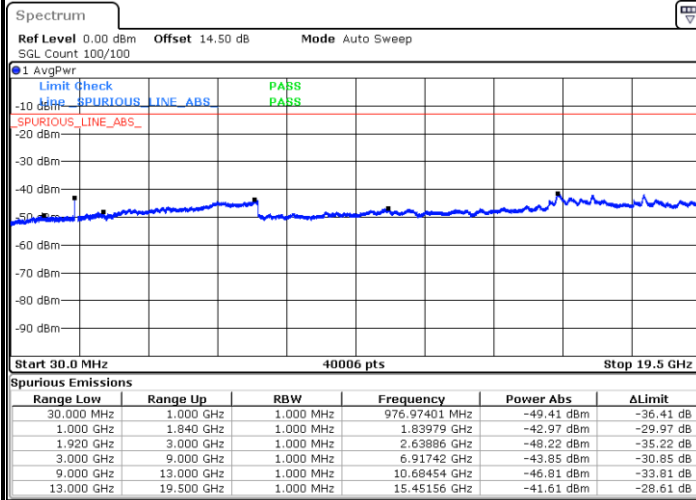


Date: 13.JAN.2022 03:26:19



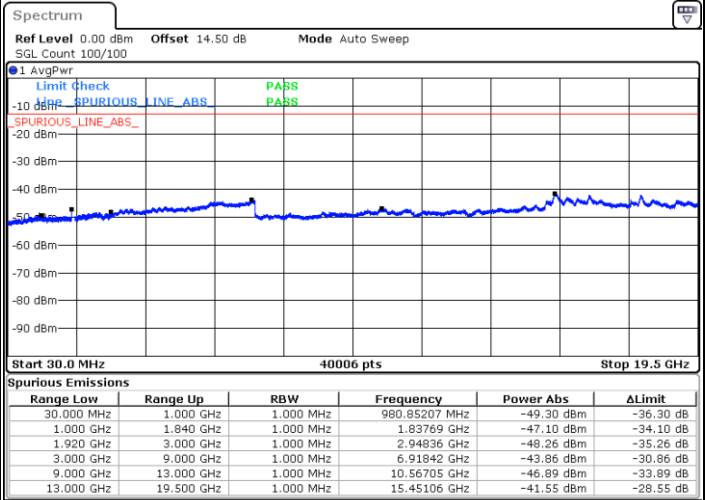
## LTE Band 2 / 15MHz

## Lowest Channel / QPSK



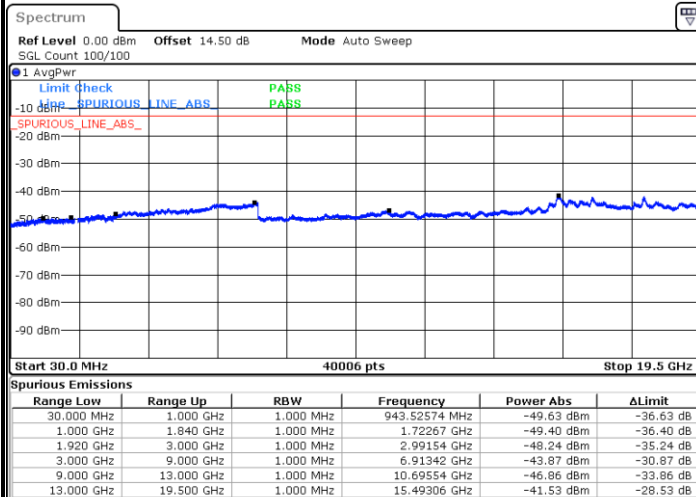
Date: 13.JAN.2022 03:36:08

## Lowest Channel / 16QAM



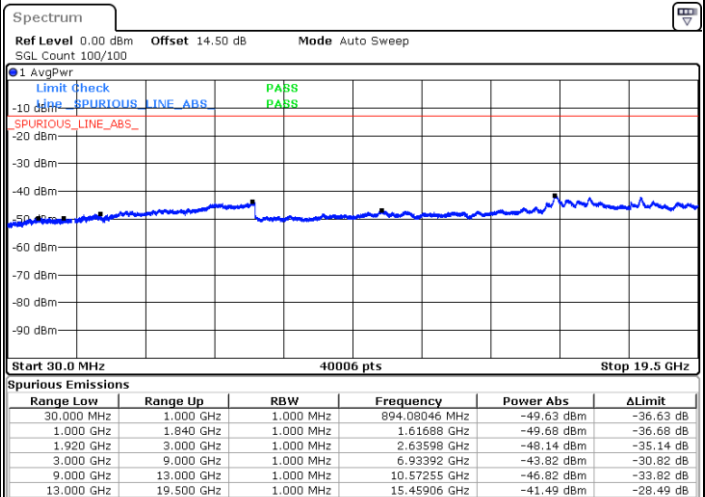
Date: 13.JAN.2022 03:37:22

## Middle Channel / QPSK



Date: 13.JAN.2022 03:40:14

## Middle Channel / 16QAM

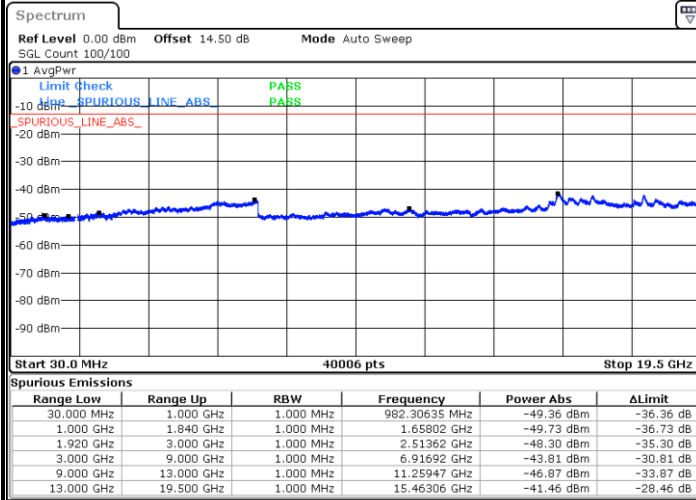


Date: 13.JAN.2022 03:41:28



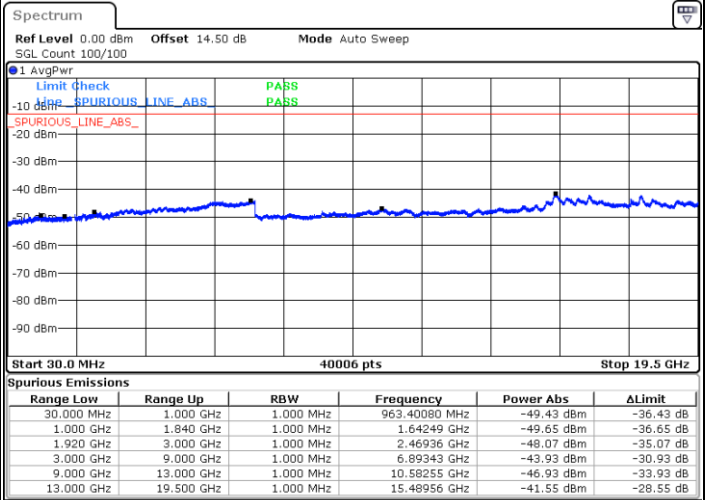
## LTE Band 2 / 15MHz

## Highest Channel / QPSK



Date: 13.JAN.2022 03:51:16

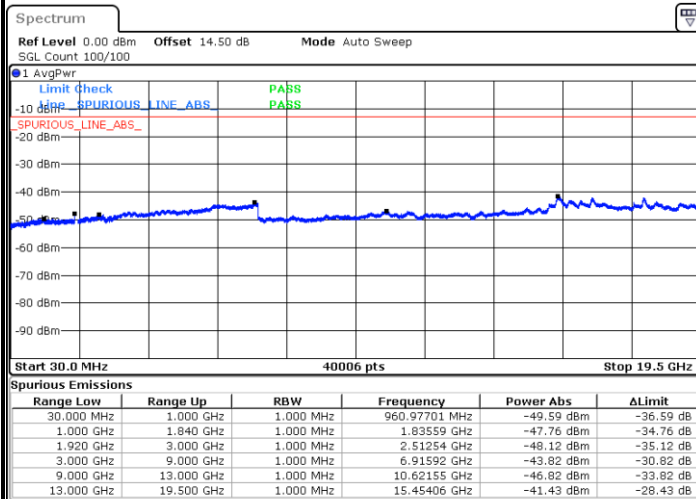
## Highest Channel / 16QAM



Date: 13.JAN.2022 03:52:30

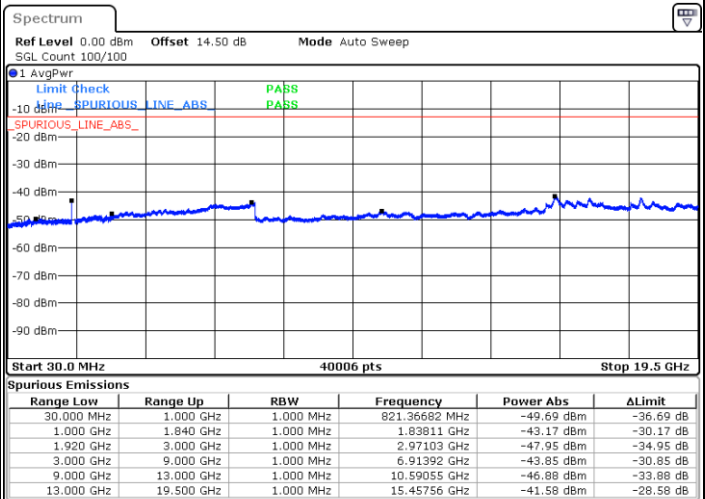
## LTE Band 2 / 20MHz

## Lowest Channel / QPSK



Date: 13.JAN.2022 04:02:20

## Lowest Channel / 16QAM

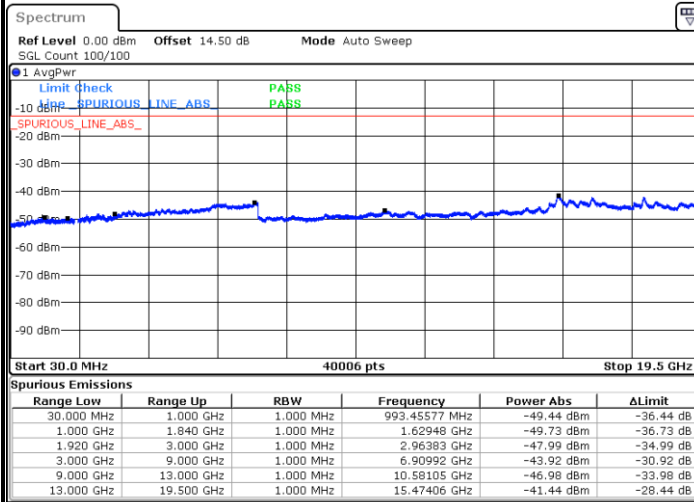


Date: 13.JAN.2022 04:03:33



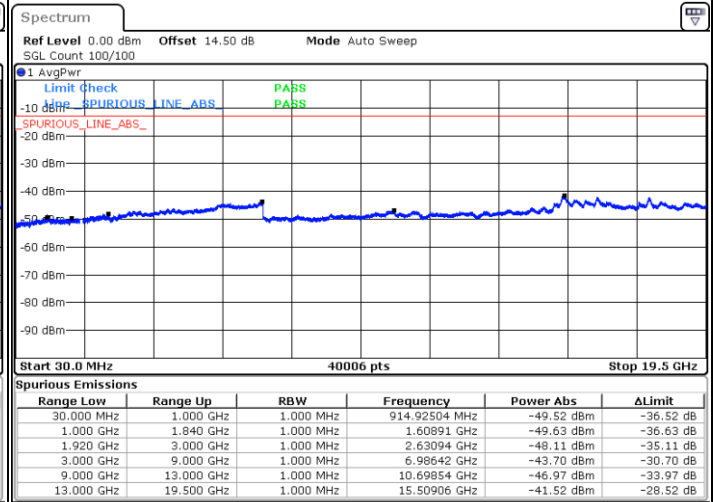
## LTE Band 2 / 20MHz

## Middle Channel / QPSK



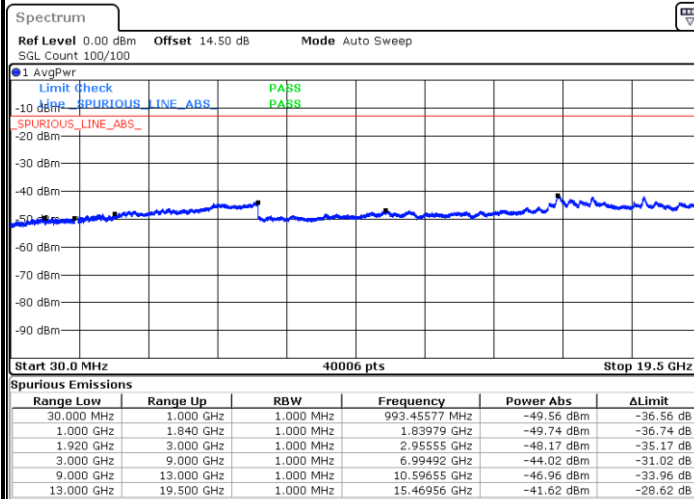
Date: 13.JAN.2022 04:06:26

## Middle Channel / 16QAM



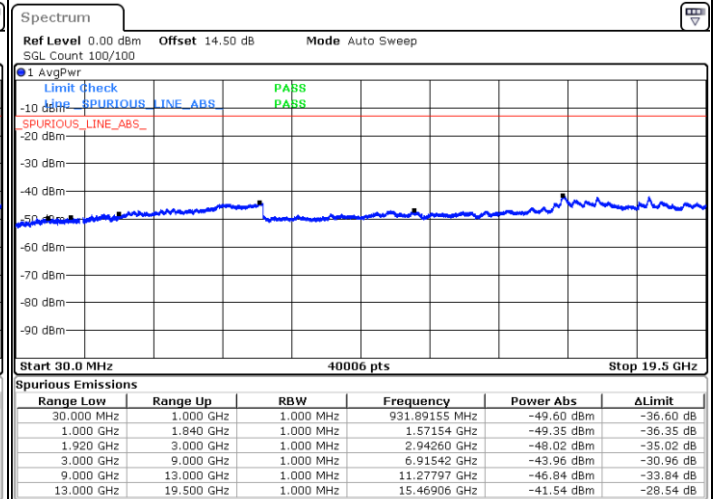
Date: 13.JAN.2022 04:07:39

## Highest Channel / QPSK



Date: 13.JAN.2022 04:17:28

## Highest Channel / 16QAM

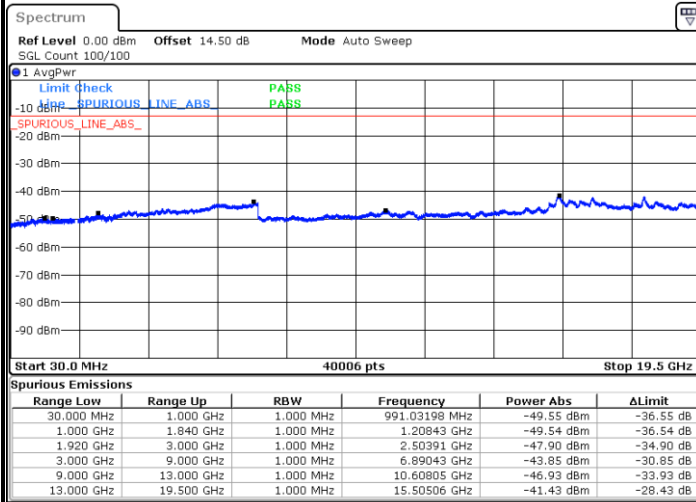


Date: 13.JAN.2022 04:18:42



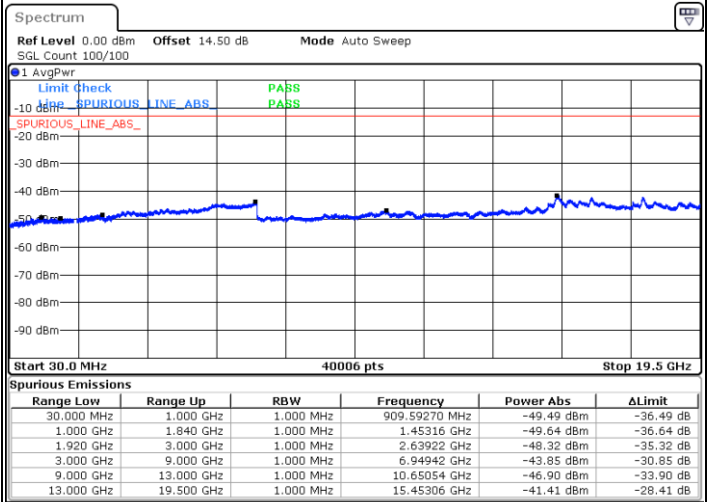
## LTE Band 2 / 1.4MHz

## Lowest Channel / 64QAM



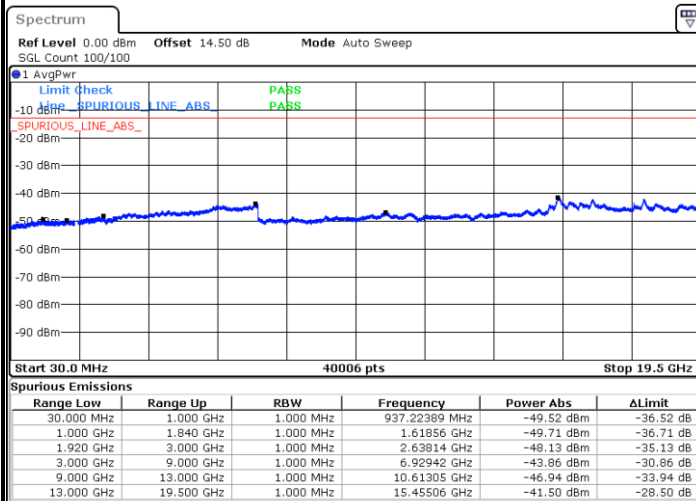
Date: 13.JAN.2022 00:56:41

## Middle Channel / 64QAM



Date: 13.JAN.2022 00:58:22

## Highest Channel / 64QAM

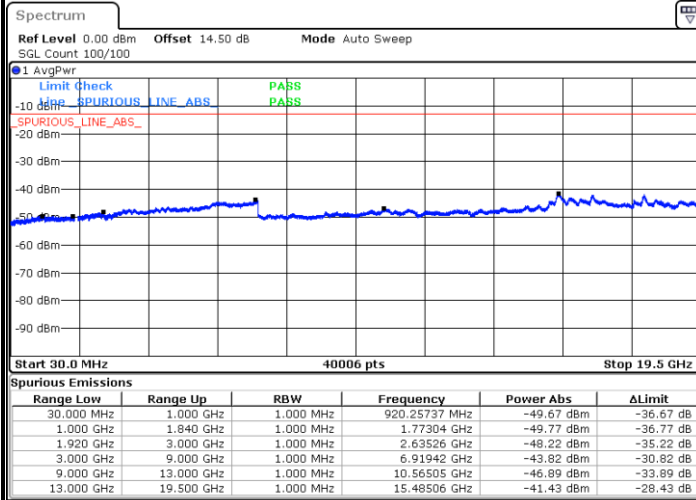


Date: 13.JAN.2022 01:03:32



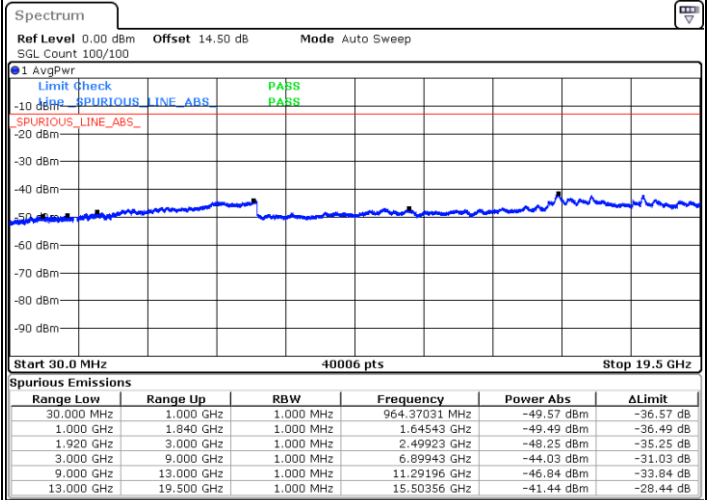
## LTE Band 2 / 3MHz

## Lowest Channel / 64QAM



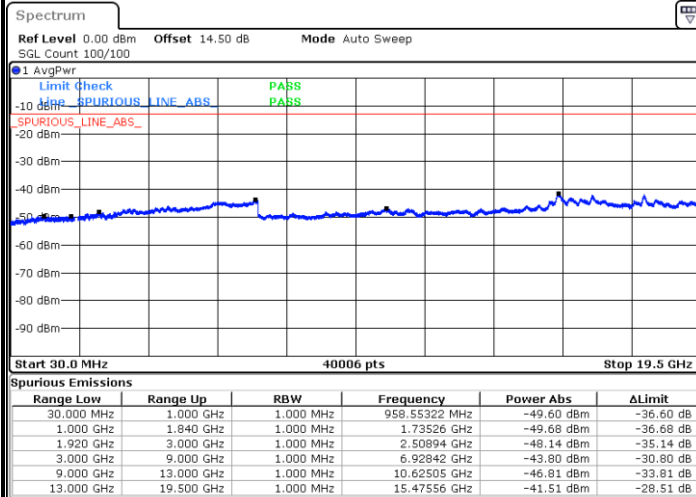
Date: 13.JAN.2022 04:24:03

## Middle Channel / 64QAM



Date: 13.JAN.2022 04:25:56

## Highest Channel / 64QAM

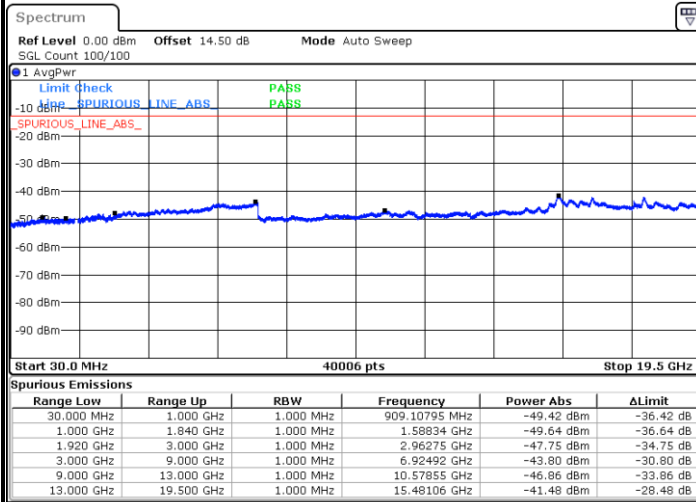


Date: 13.JAN.2022 04:31:17



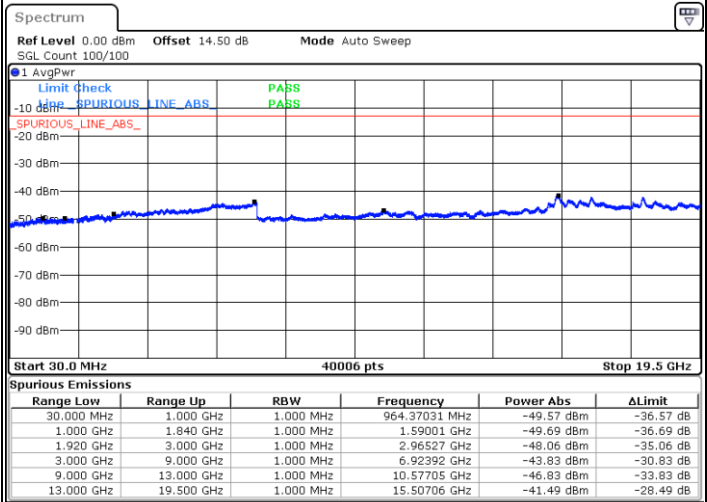
## LTE Band 2 / 5MHz

## Lowest Channel / 64QAM



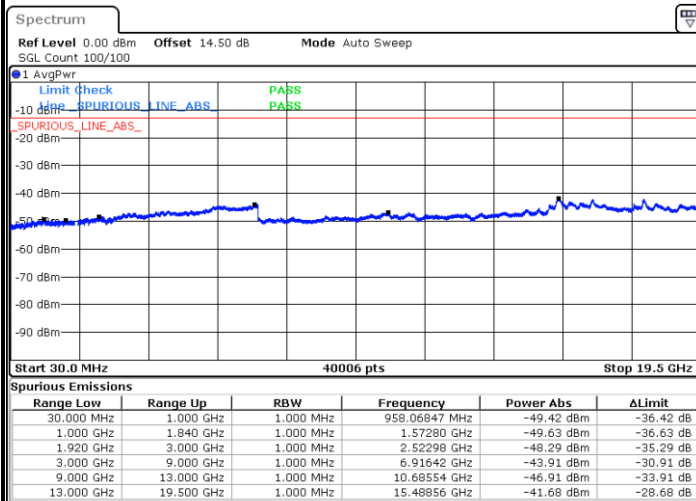
Date: 13.JAN.2022 04:36:38

## Middle Channel / 64QAM



Date: 13.JAN.2022 04:38:31

## Highest Channel / 64QAM

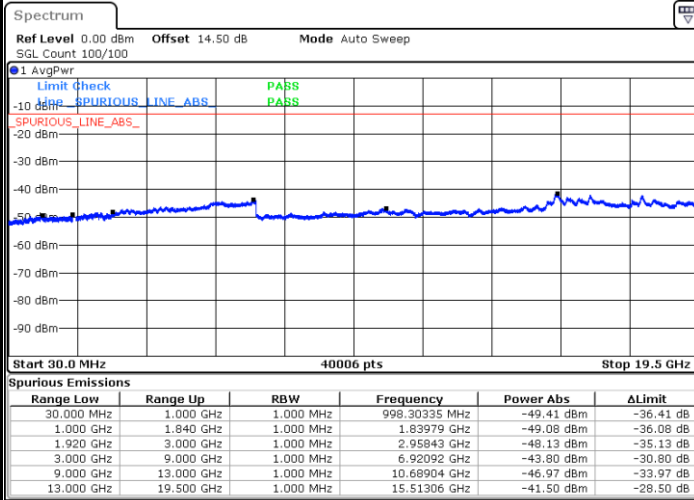


Date: 13.JAN.2022 04:43:51



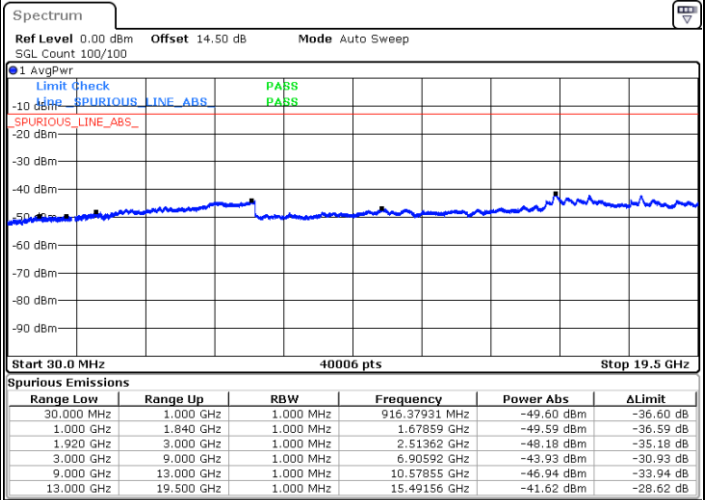
## LTE Band 2 / 10MHz

## Lowest Channel / 64QAM



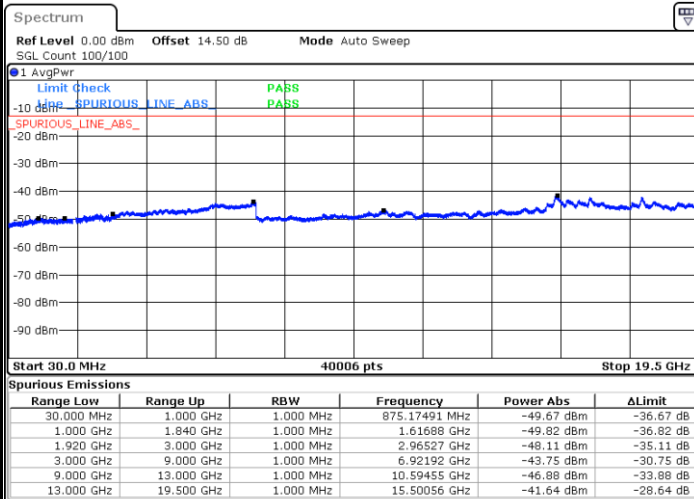
Date: 13.JAN.2022 04:49:12

## Middle Channel / 64QAM



Date: 13.JAN.2022 04:51:05

## Highest Channel / 64QAM

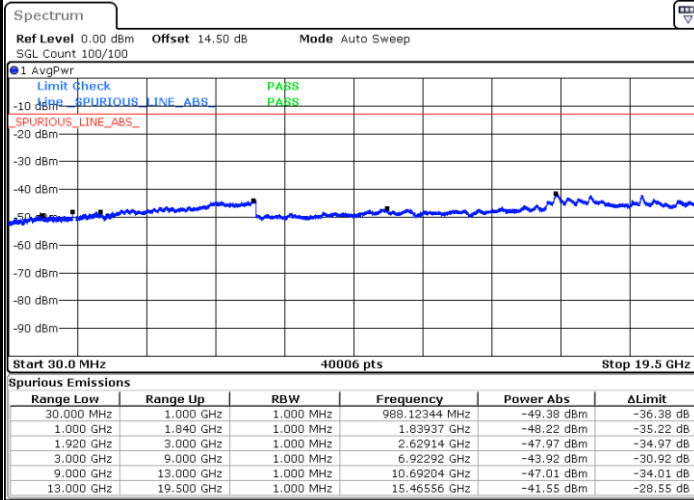


Date: 13.JAN.2022 04:56:26



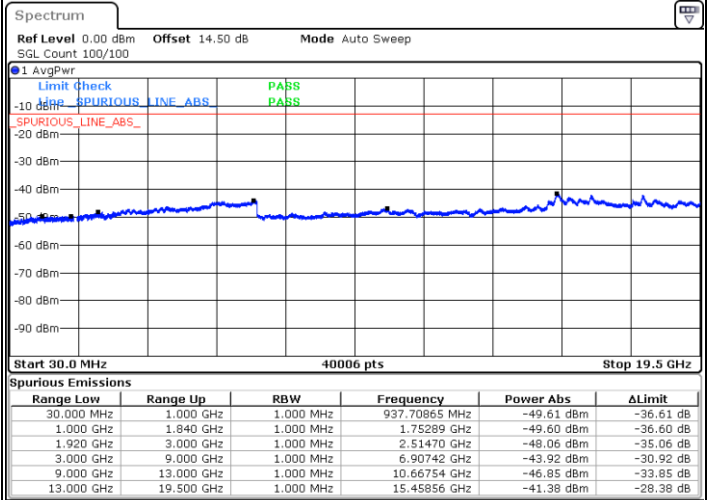
## LTE Band 2 / 15MHz

## Lowest Channel / 64QAM



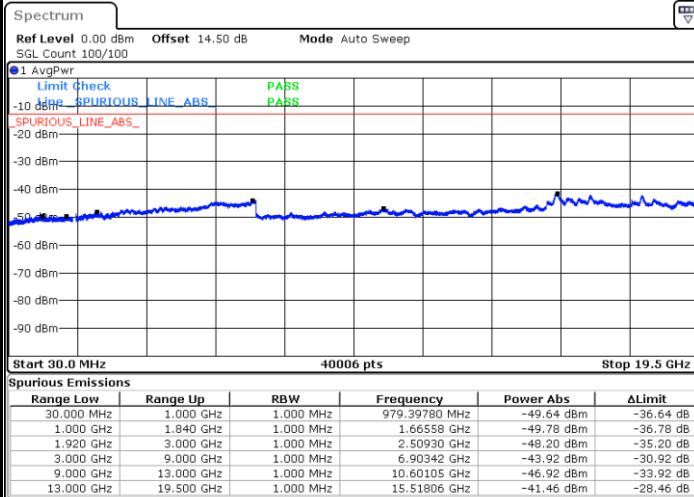
Date: 13.JAN.2022 05:01:47

## Middle Channel / 64QAM



Date: 13.JAN.2022 05:03:40

## Highest Channel / 64QAM

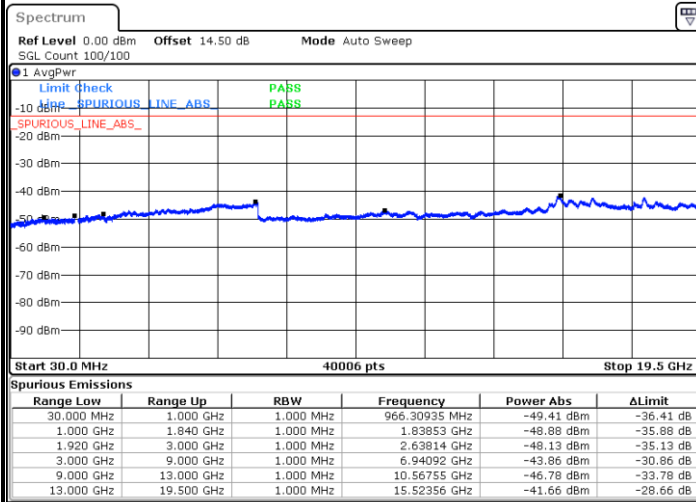


Date: 13.JAN.2022 05:09:00



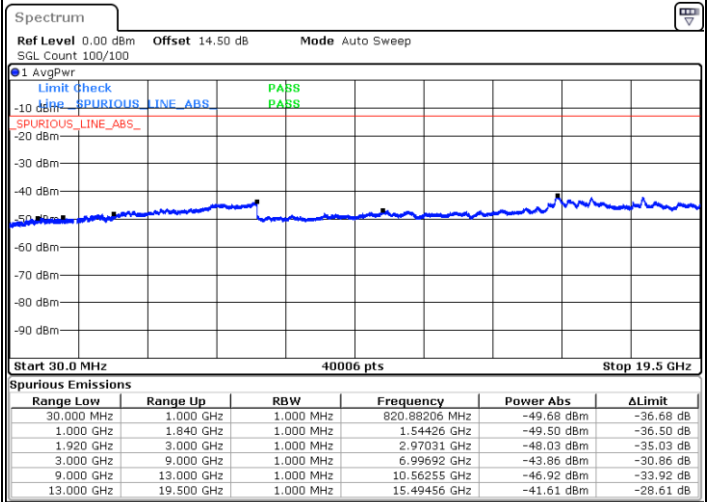
## LTE Band 2 / 20MHz

## Lowest Channel / 64QAM



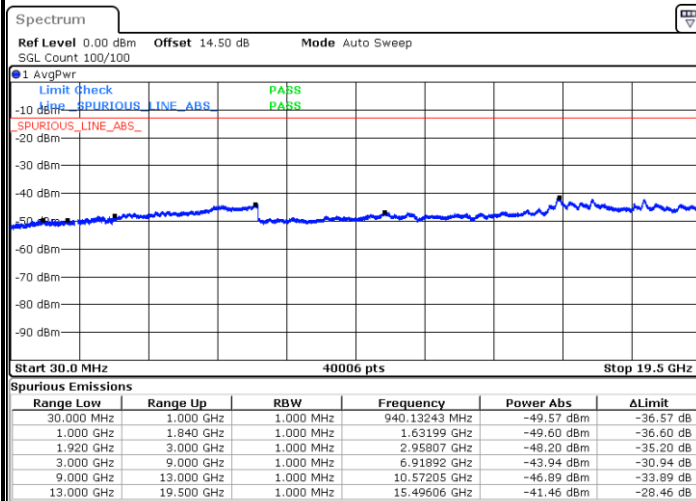
Date: 13.JAN.2022 05:14:21

## Middle Channel / 64QAM



Date: 13.JAN.2022 05:16:14

## Highest Channel / 64QAM



Date: 13.JAN.2022 05:21:35

**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    | 0.0013                             | PASS    |
| 40               | Normal Voltage    | 0.0006                             |         |
| 30               | Normal Voltage    | 0.0005                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0013                             |         |
| 0                | Normal Voltage    | 0.0007                             |         |
| -10              | Normal Voltage    | 0.0011                             |         |
| -20              | Normal Voltage    | 0.0004                             |         |
| -30              | Normal Voltage    | 0.0011                             |         |
| 20               | Maximum Voltage   | 0.0002                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0001                             |         |

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.25 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 4

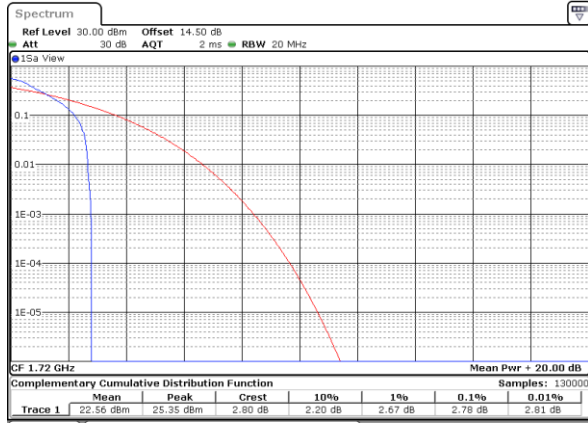
## Peak-to-Average Ratio

| Mode       | LTE Band 4 / 20MHz |         |       |         |             |
|------------|--------------------|---------|-------|---------|-------------|
| Mod.       | QPSK               |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 2.78               | 4.58    | 3.80  | 5.59    | PASS        |
| Middle CH  | 2.90               | 4.72    | 3.80  | 5.71    |             |
| Highest CH | 3.57               | 4.72    | 4.38  | 5.68    |             |
| Mode       | LTE Band 4 / 20MHz |         |       |         |             |
| Mod.       | 64QAM              |         |       |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB |       |         | Result      |
| Lowest CH  | 4.55               | 6.09    | -     | -       | PASS        |
| Middle CH  | 4.55               | 6.17    | -     | -       |             |
| Highest CH | 5.28               | 6.06    | -     | -       |             |

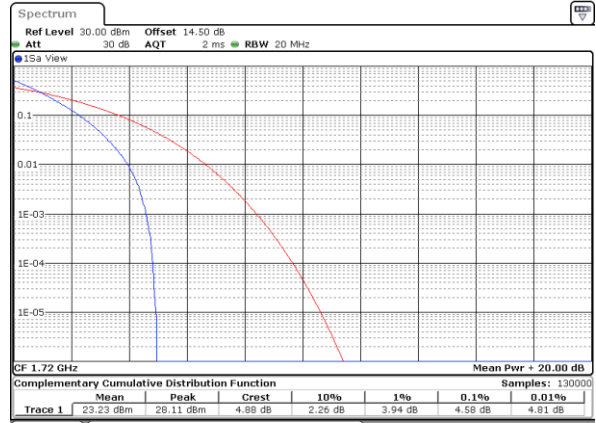


## LTE Band 4 / 20MHz / QPSK

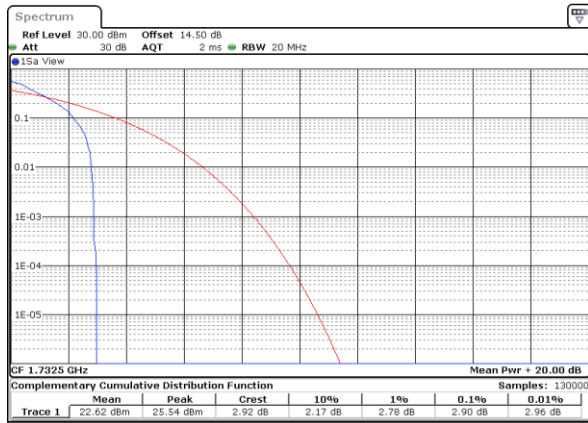
## Lowest Channel / 1RB



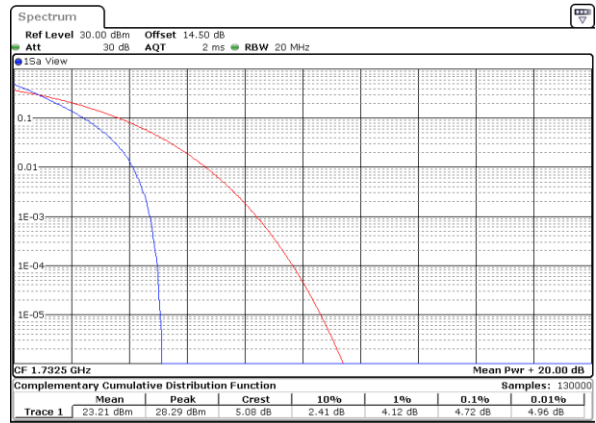
## Lowest Channel / Full RB



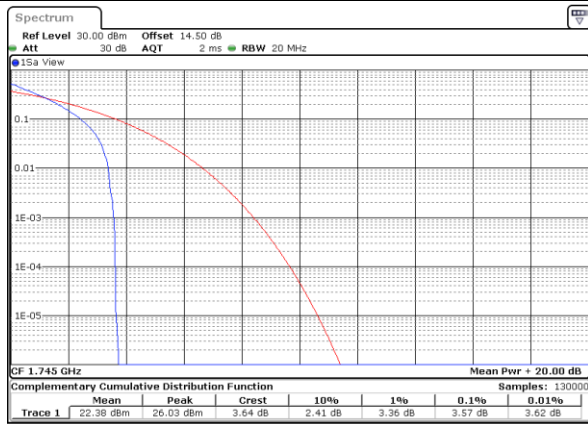
## Middle Channel / 1RB



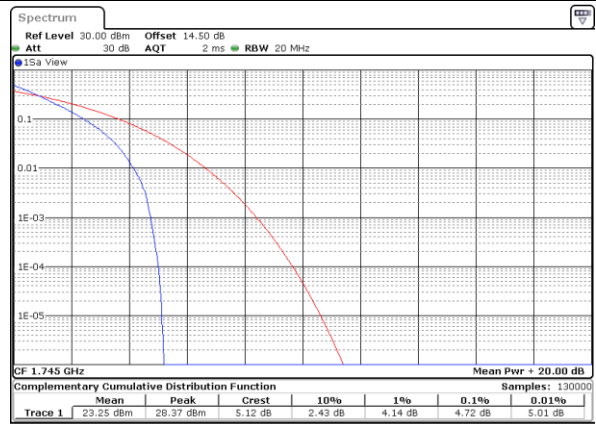
## Middle Channel / Full RB



## Highest Channel / 1RB



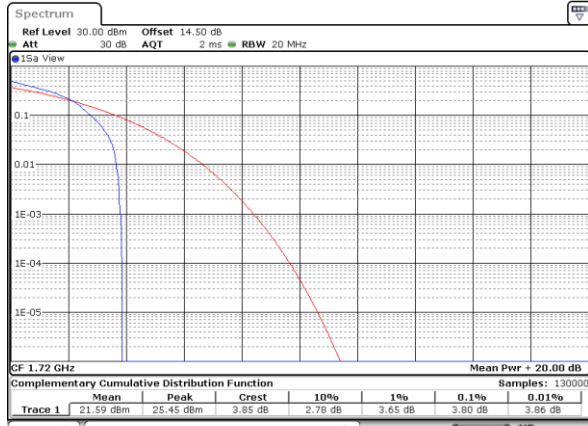
## Highest Channel / Full RB



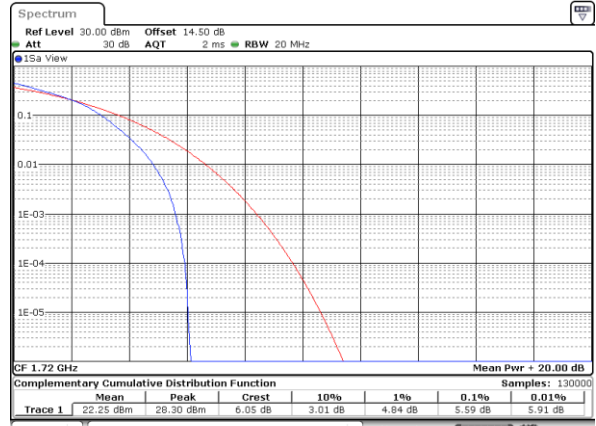


## LTE Band 4 / 20MHz / 16QAM

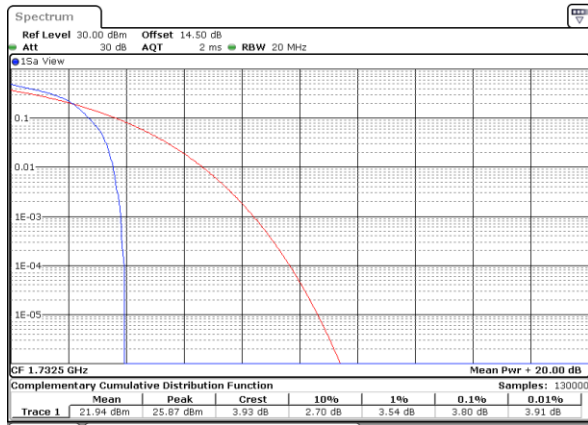
## Lowest Channel / 1RB



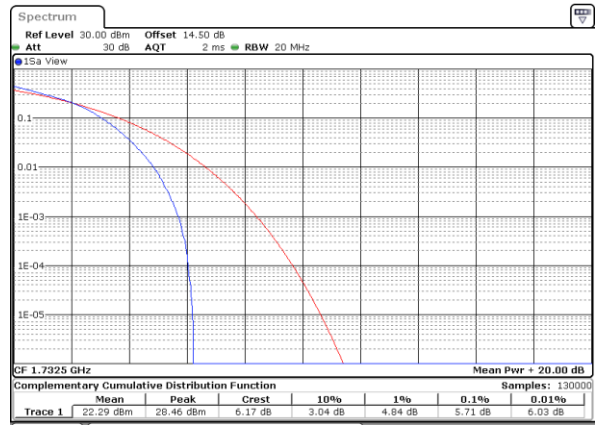
## Lowest Channel / Full RB



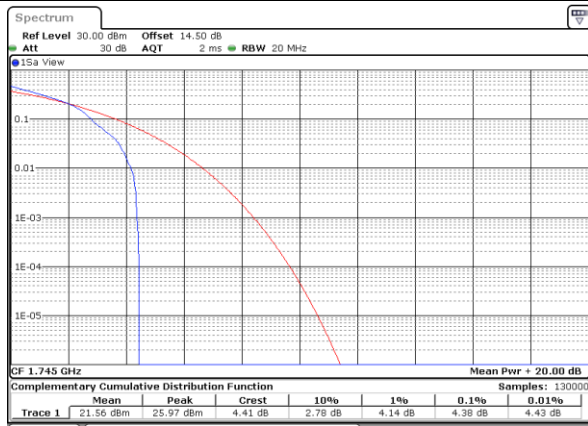
## Middle Channel / 1RB



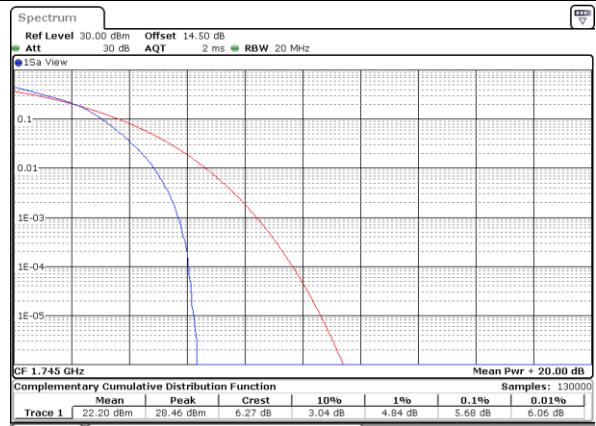
## Middle Channel / Full RB



## Highest Channel / 1RB



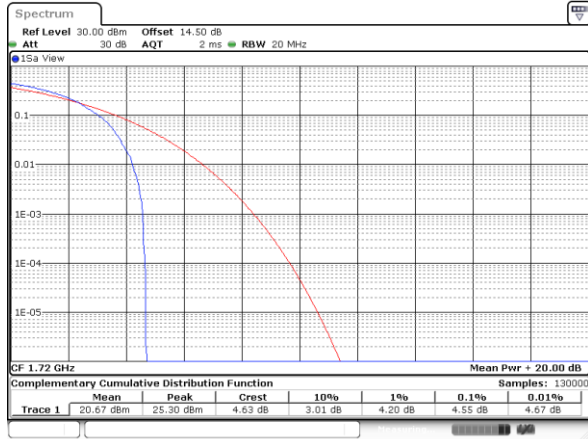
## Highest Channel / Full RB



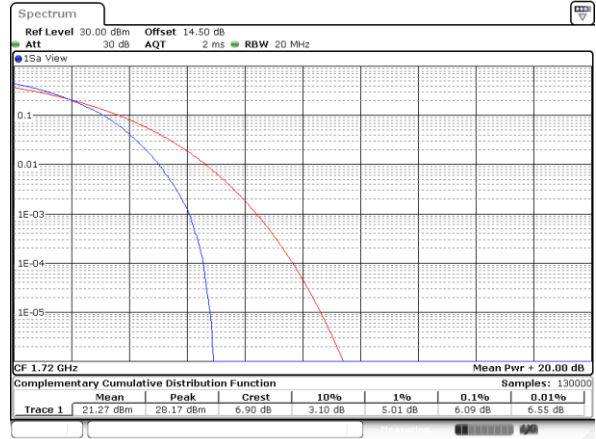


## LTE Band 4 / 20MHz / 64QAM

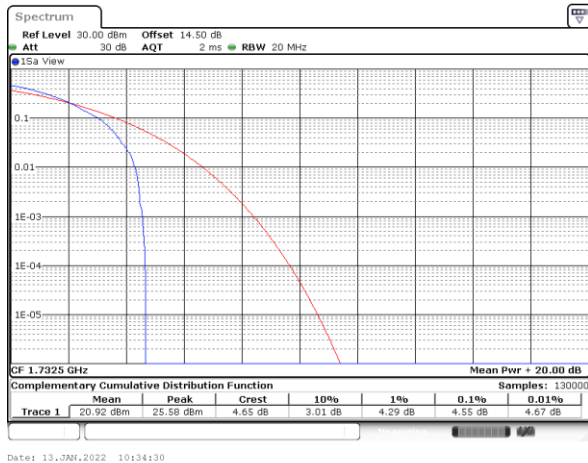
## Lowest Channel / 1RB



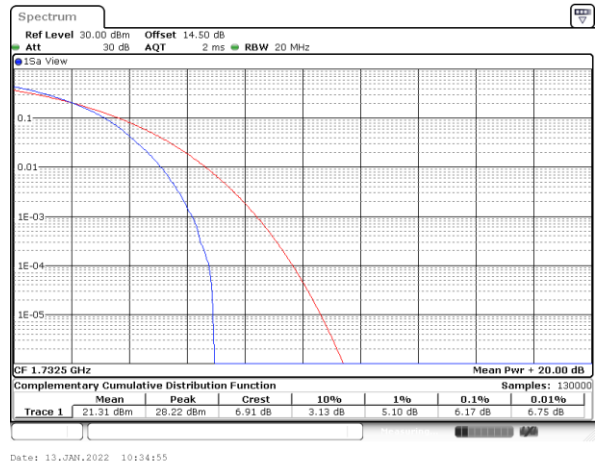
## Lowest Channel / Full RB



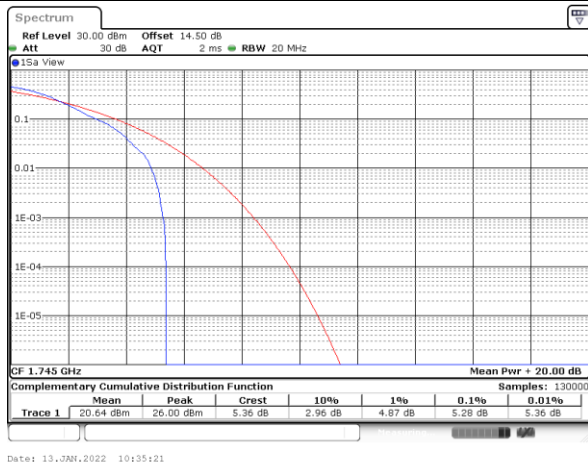
## Middle Channel / 1RB



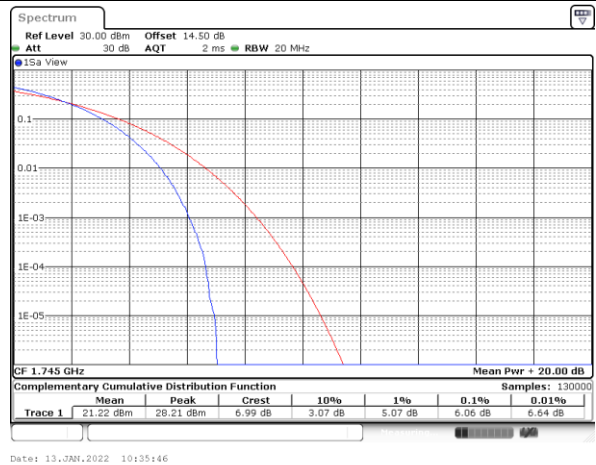
## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB



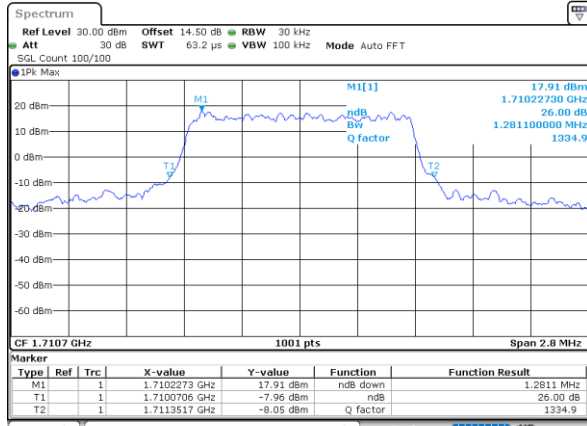
**26dB Bandwidth**

| Mode       | LTE Band 4 : 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  | 1.28                      | 1.28  | 2.99  | 2.98  | 4.92  | 4.88  | 9.65  | 9.77  | 14.39 | 14.48 | 18.78 | 19.14 |
| Middle CH  | 1.28                      | 1.26  | 2.97  | 2.98  | 4.90  | 4.89  | 9.77  | 9.85  | 14.42 | 14.33 | 18.82 | 18.82 |
| Highest CH | 1.28                      | 1.27  | 3.00  | 2.94  | 4.91  | 4.90  | 9.63  | 9.93  | 14.24 | 14.21 | 19.10 | 19.06 |
| Mode       | LTE Band 4 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                     |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.30                      | -     | 3.01  | -     | 4.87  | -     | 9.79  | -     | 14.48 | -     | 18.82 | -     |
| Middle CH  | 1.25                      | -     | 2.98  | -     | 4.88  | -     | 9.67  | -     | 14.24 | -     | 19.02 | -     |
| Highest CH | 1.30                      | -     | 3.01  | -     | 4.88  | -     | 9.93  | -     | 14.27 | -     | 18.86 | -     |



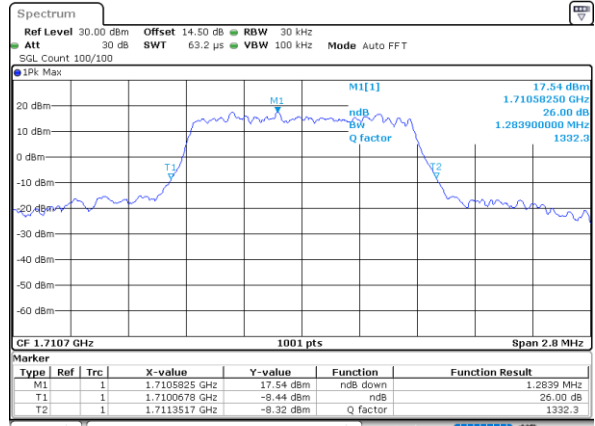
## LTE Band 4

## Lowest Channel / 1.4MHz / QPSK



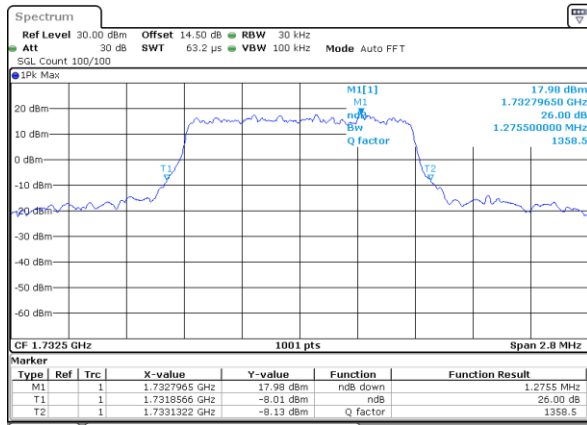
Date: 13.JAN.2022 10:03:23

## Lowest Channel / 1.4MHz / 16QAM



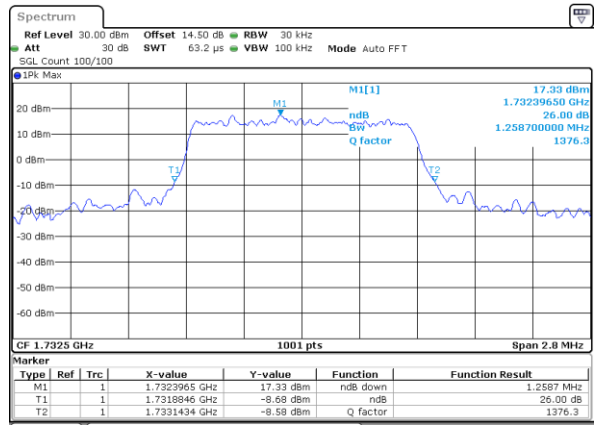
Date: 13.JAN.2022 10:03:47

## Middle Channel / 1.4MHz / QPSK



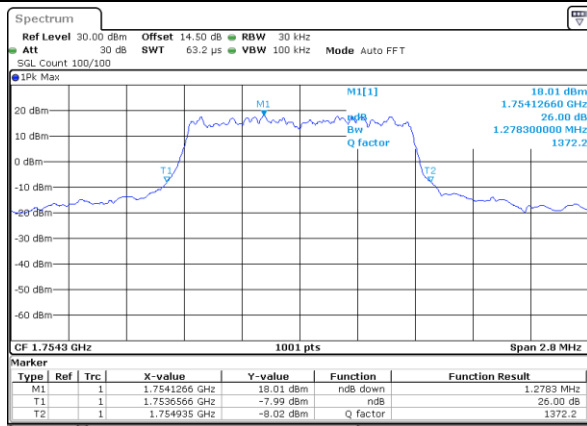
Date: 13.JAN.2022 10:14:18

## Middle Channel / 1.4MHz / 16QAM



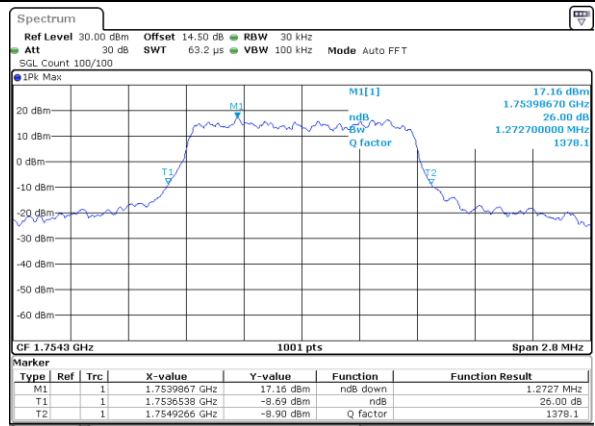
Date: 13.JAN.2022 10:14:42

## Highest Channel / 1.4MHz / QPSK



Date: 13.JAN.2022 10:18:19

## Highest Channel / 1.4MHz / 16QAM

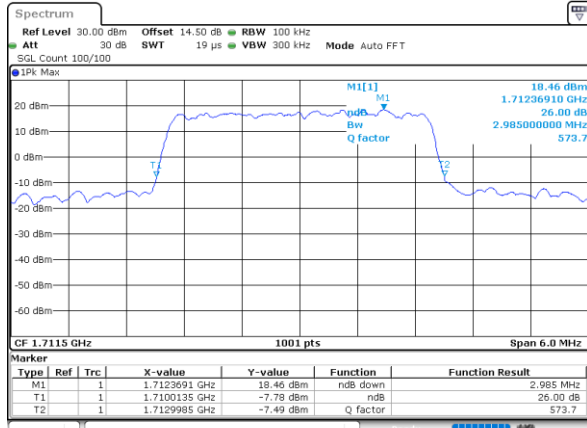


Date: 13.JAN.2022 10:18:43



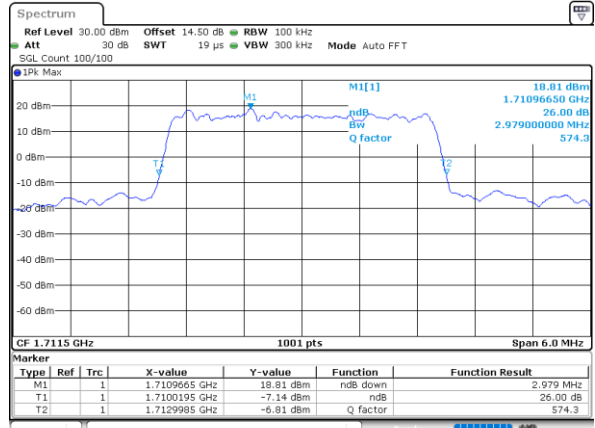
## LTE Band 4

## Lowest Channel / 3MHz / QPSK



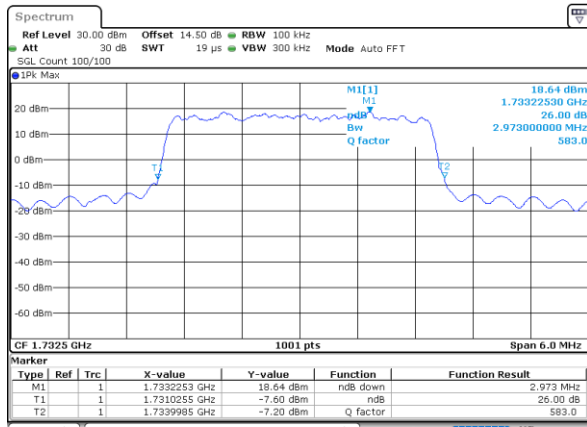
Date: 13.JAN.2022 05:10:40

## Lowest Channel / 3MHz / 16QAM



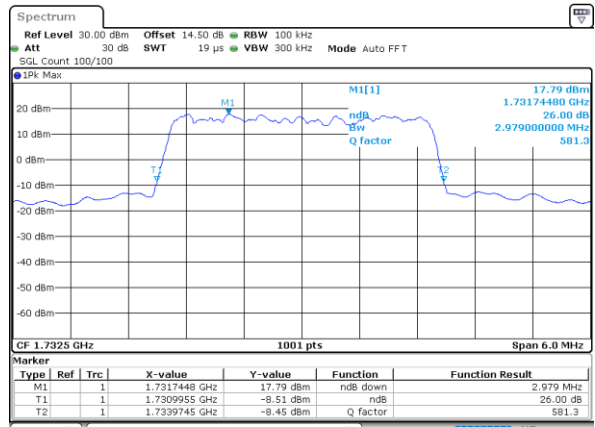
Date: 13.JAN.2022 05:11:13

## Middle Channel / 3MHz / QPSK



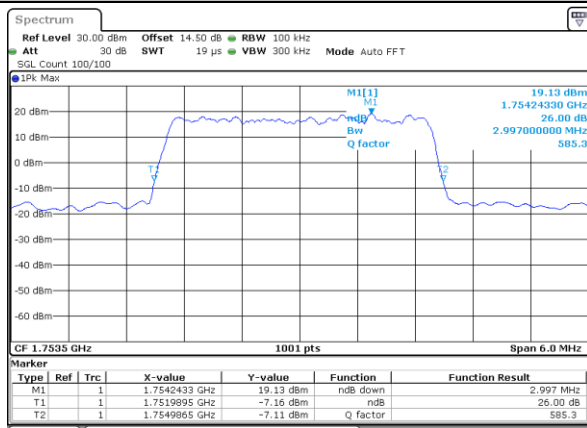
Date: 13.JAN.2022 05:41:49

## Middle Channel / 3MHz / 16QAM



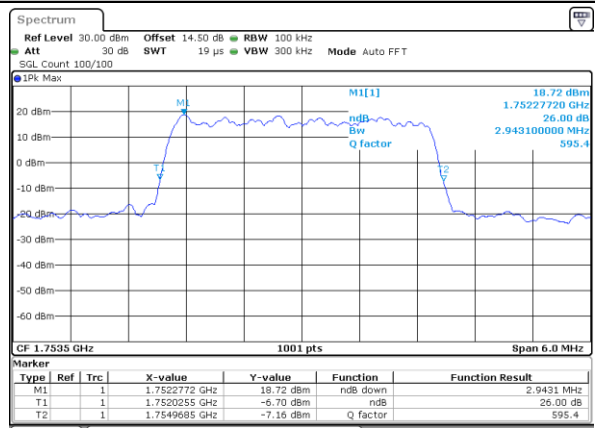
Date: 13.JAN.2022 05:42:14

## Highest Channel / 3MHz / QPSK



Date: 13.JAN.2022 05:45:57

## Highest Channel / 3MHz / 16QAM

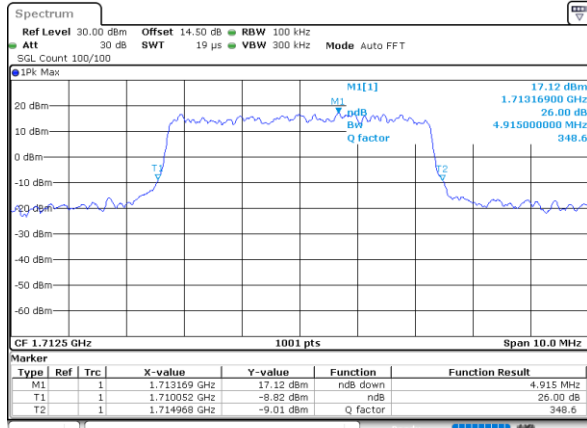


Date: 13.JAN.2022 05:46:22



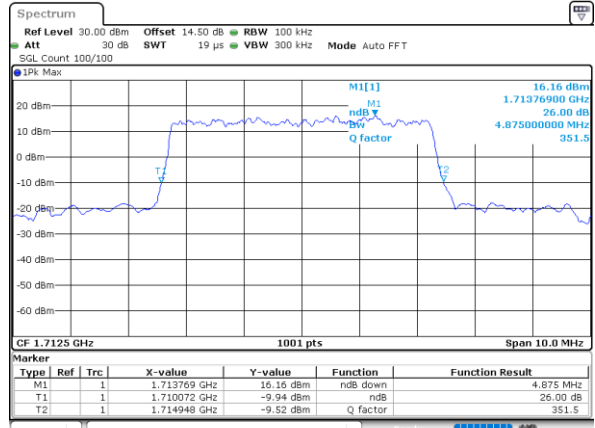
## LTE Band 4

## Lowest Channel / 5MHz / QPSK



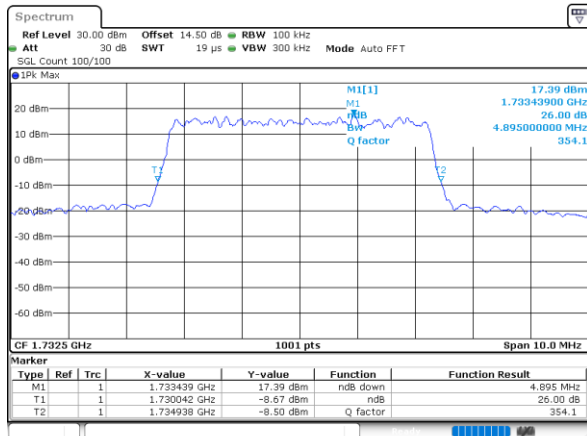
Date: 13.JAN.2022 05:56:59

## Lowest Channel / 5MHz / 16QAM



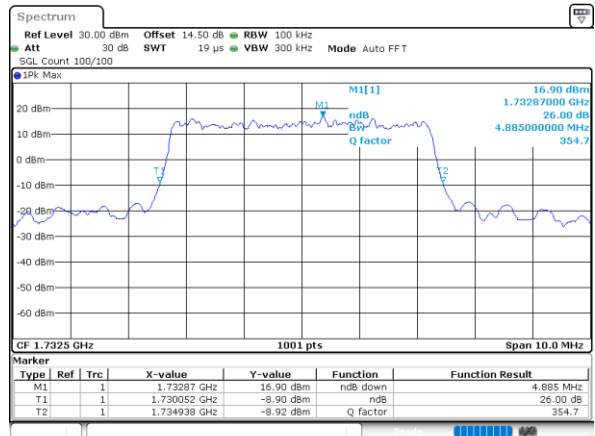
Date: 13.JAN.2022 05:57:25

## Middle Channel / 5MHz / QPSK



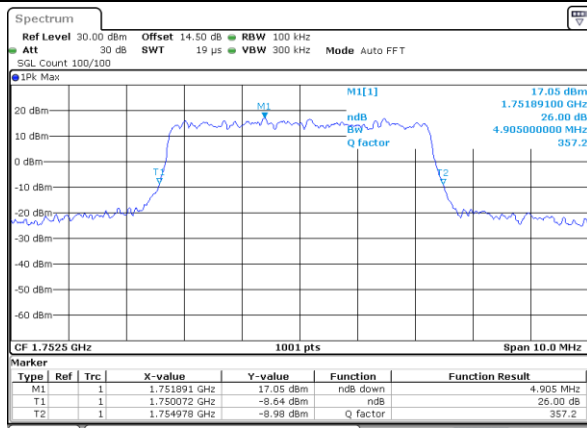
Date: 13.JAN.2022 06:08:01

## Middle Channel / 5MHz / 16QAM



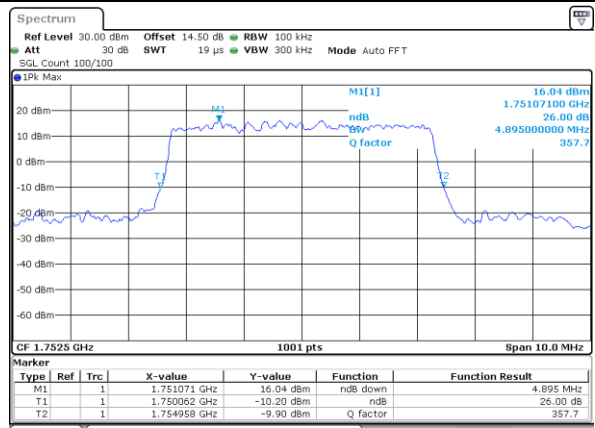
Date: 13.JAN.2022 06:08:26

## Highest Channel / 5MHz / QPSK



Date: 13.JAN.2022 06:12:09

## Highest Channel / 5MHz / 16QAM

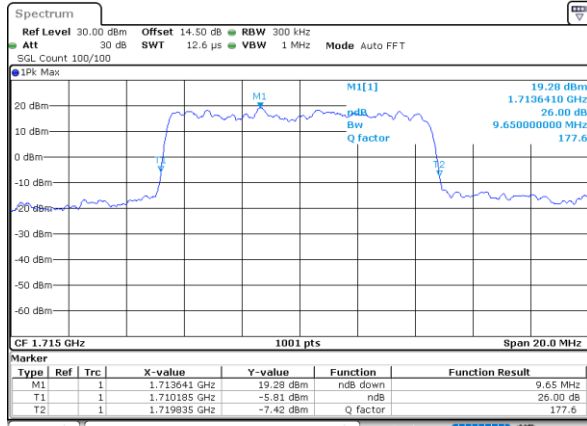


Date: 13.JAN.2022 06:12:34

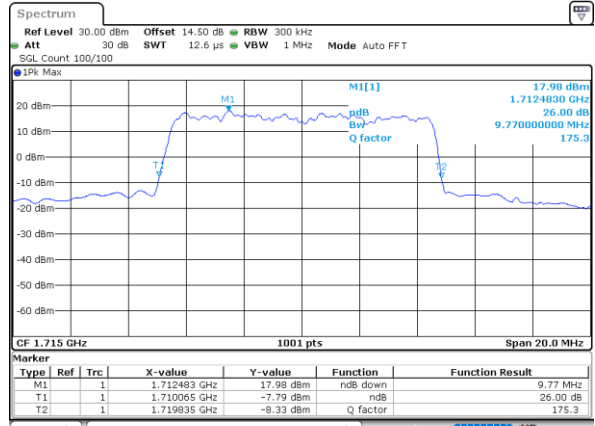


## LTE Band 4

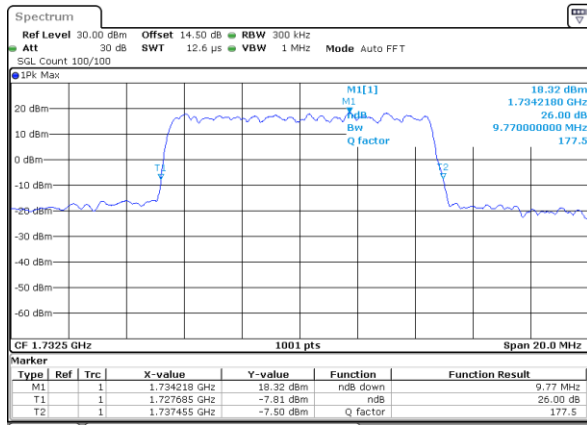
## Lowest Channel / 10MHz / QPSK



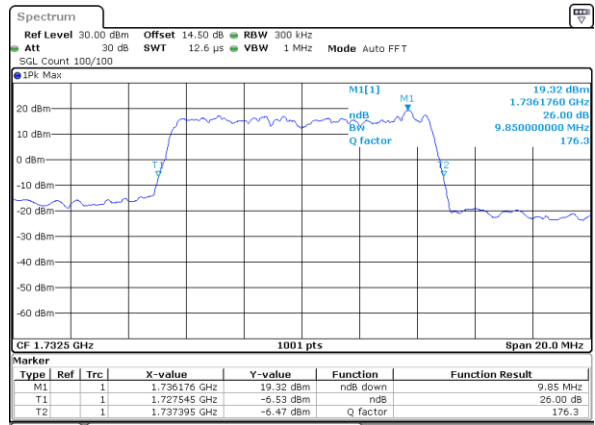
## Lowest Channel / 10MHz / 16QAM



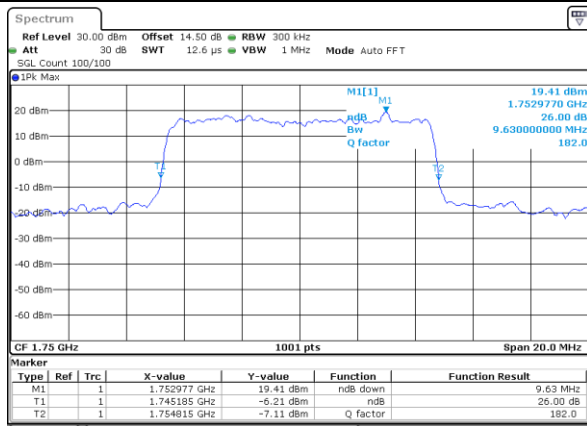
## Middle Channel / 10MHz / QPSK



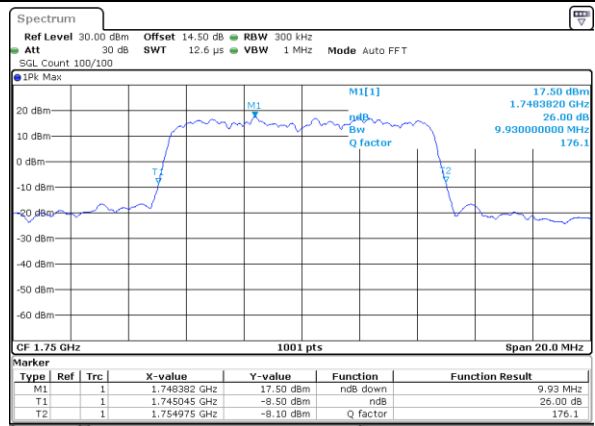
## Middle Channel / 10MHz / 16QAM



## Highest Channel / 10MHz / QPSK



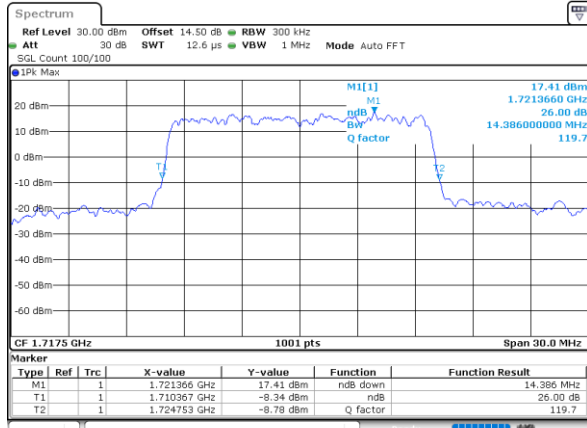
## Highest Channel / 10MHz / 16QAM



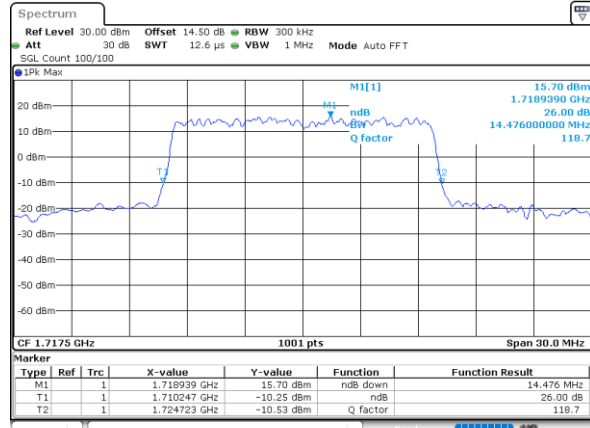


## LTE Band 4

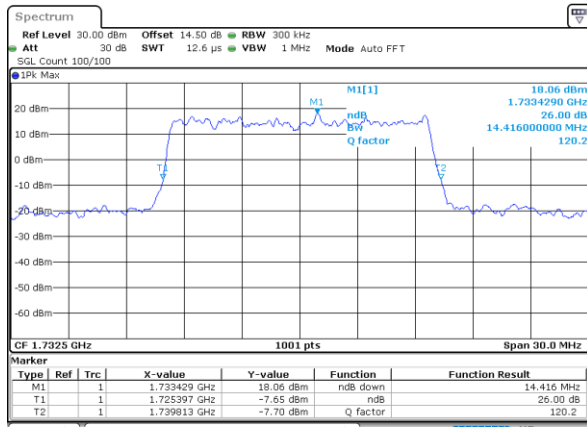
## Lowest Channel / 15MHz / QPSK



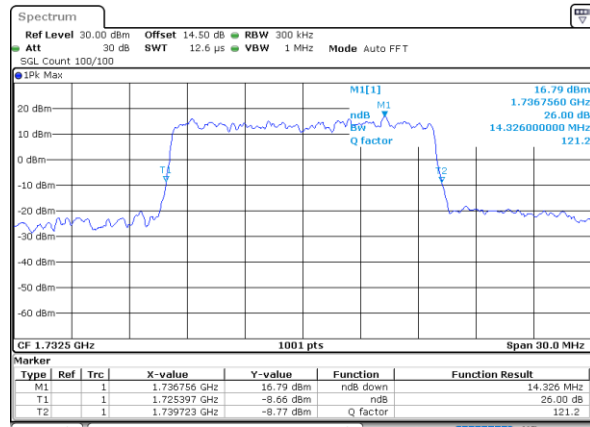
## Lowest Channel / 15MHz / 16QAM



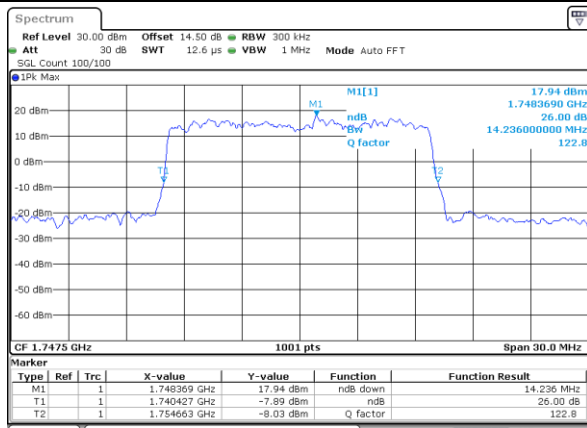
## Middle Channel / 15MHz / QPSK



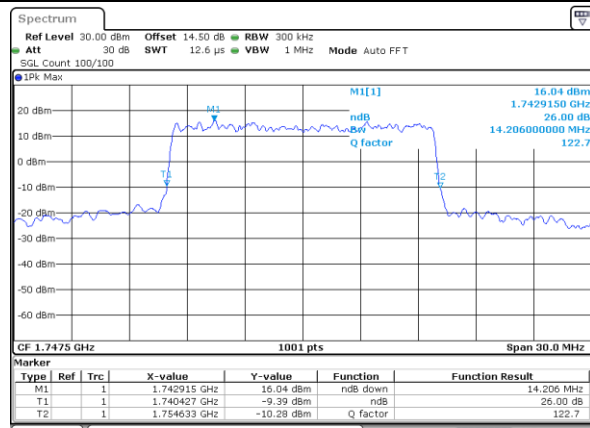
## Middle Channel / 15MHz / 16QAM



## Highest Channel / 15MHz / QPSK



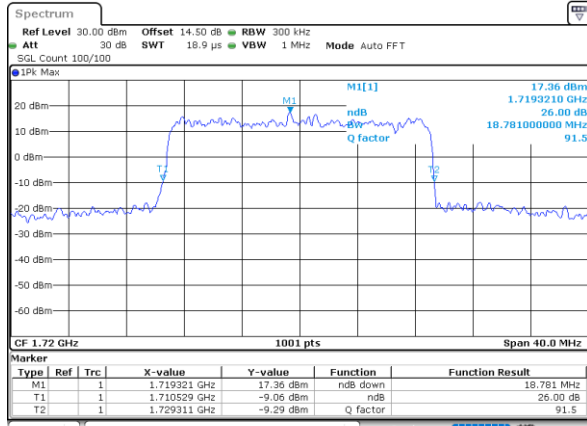
## Highest Channel / 15MHz / 16QAM





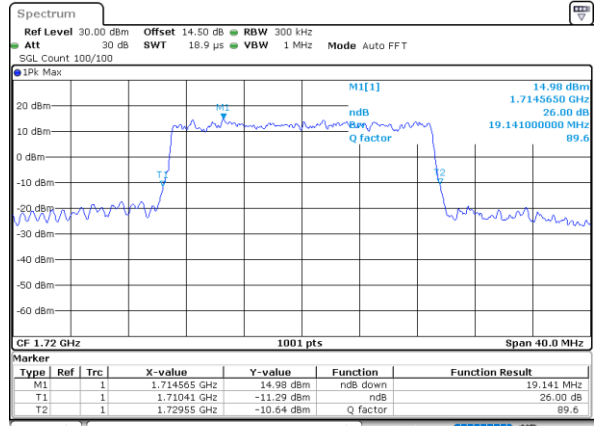
## LTE Band 4

## Lowest Channel / 20MHz / QPSK



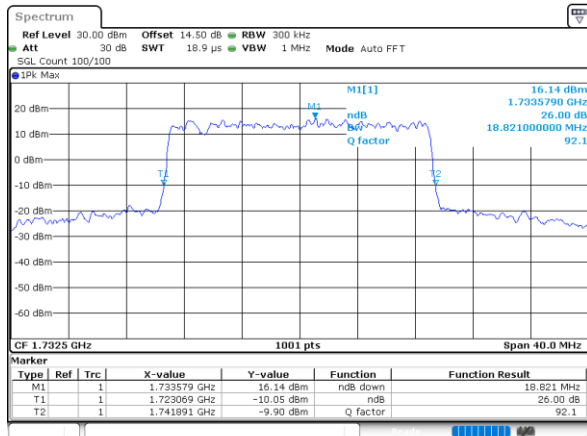
Date: 13.JAN.2022 07:15:35

## Lowest Channel / 20MHz / 16QAM



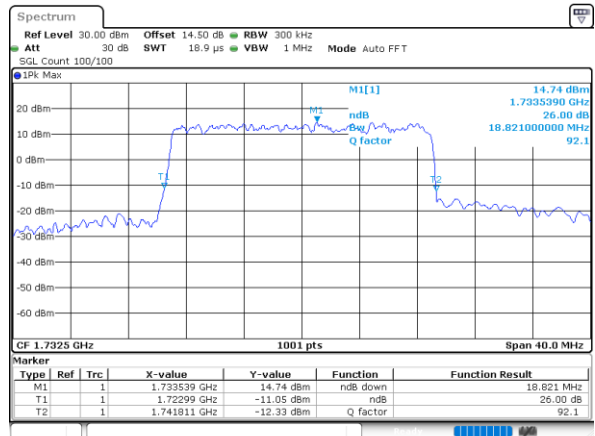
Date: 13.JAN.2022 07:16:00

## Middle Channel / 20MHz / QPSK



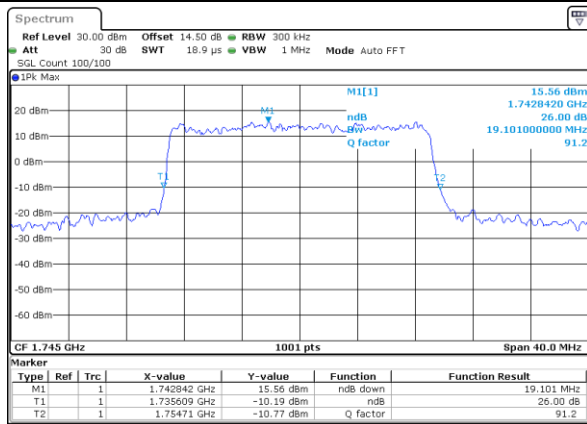
Date: 13.JAN.2022 07:26:37

## Middle Channel / 20MHz / 16QAM



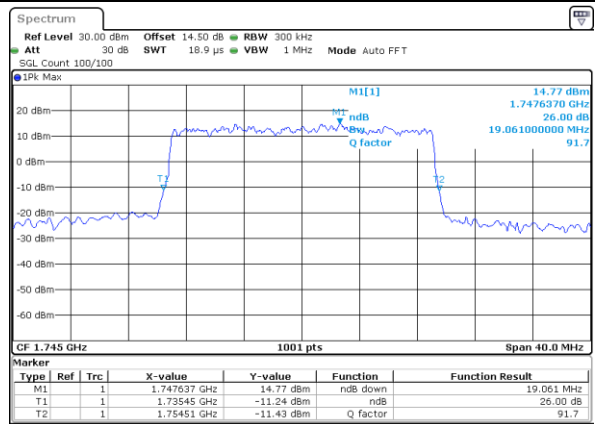
Date: 13.JAN.2022 07:27:02

## Highest Channel / 20MHz / QPSK



Date: 13.JAN.2022 07:30:44

## Highest Channel / 20MHz / 16QAM

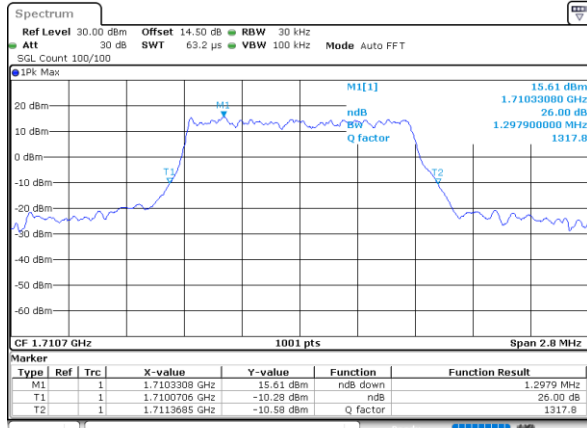


Date: 13.JAN.2022 07:31:09



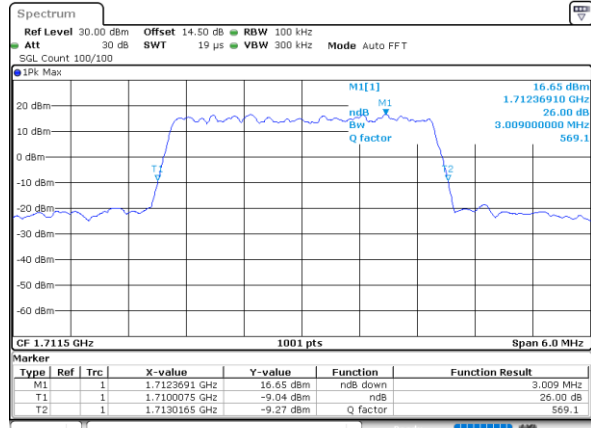
## LTE Band 4

## Lowest Channel / 1.4MHz / 64QAM



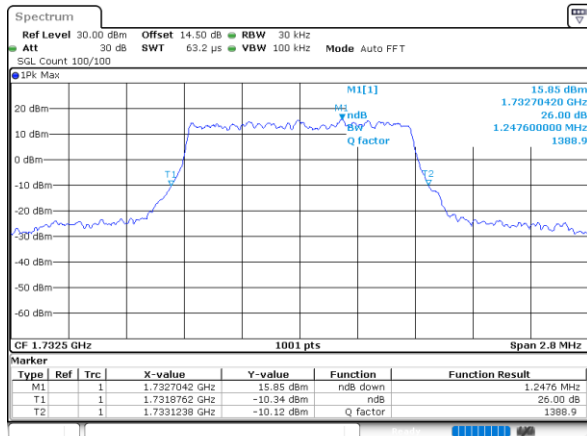
Date: 13.JAN.2022 09:50:25

## Lowest Channel / 3MHz / 64QAM



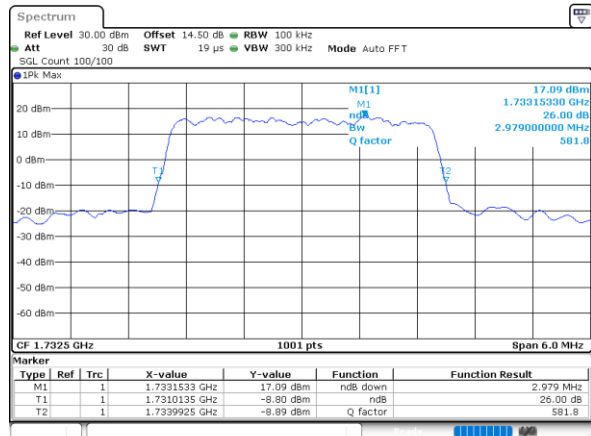
Date: 13.JAN.2022 07:41:11

## Middle Channel / 1.4MHz / 64QAM



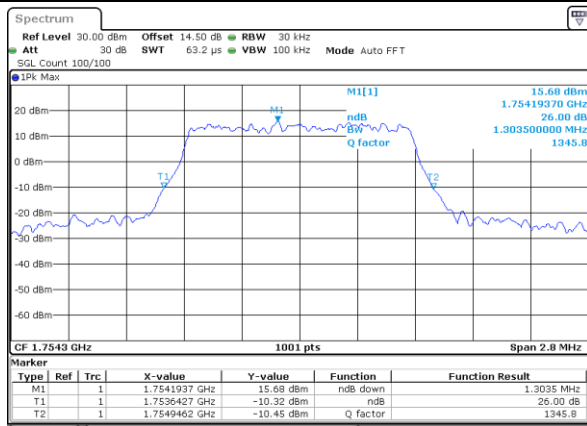
Date: 13.JAN.2022 09:55:41

## Middle Channel / 3MHz / 64QAM



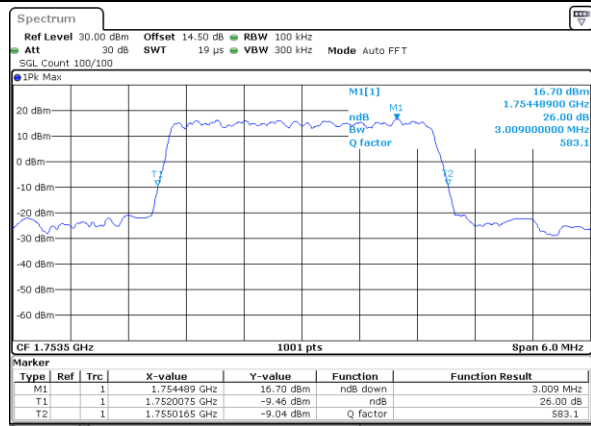
Date: 13.JAN.2022 08:52:55

## Highest Channel / 1.4MHz / 64QAM



Date: 13.JAN.2022 09:57:32

## Highest Channel / 3MHz / 64QAM

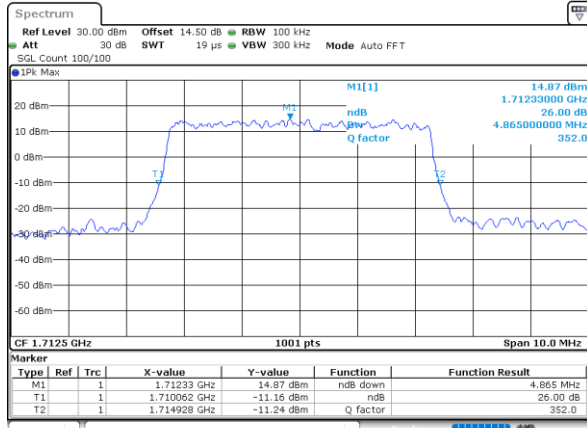


Date: 13.JAN.2022 08:54:46



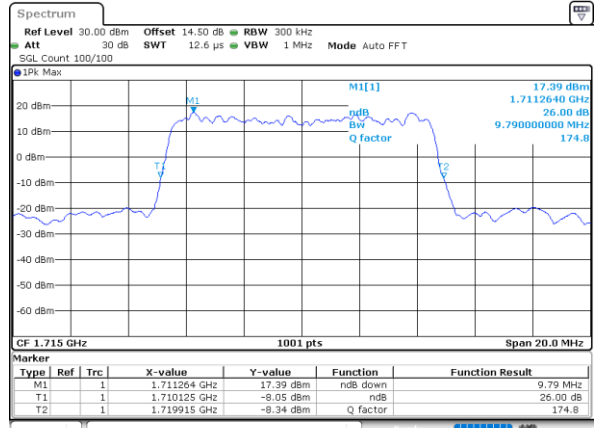
## LTE Band 4

## Lowest Channel / 5MHz / 64QAM



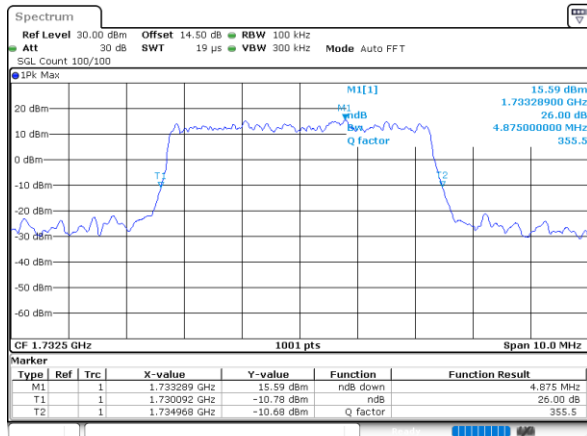
Date: 13.JAN.2022 09:00:02

## Lowest Channel / 10MHz / 64QAM



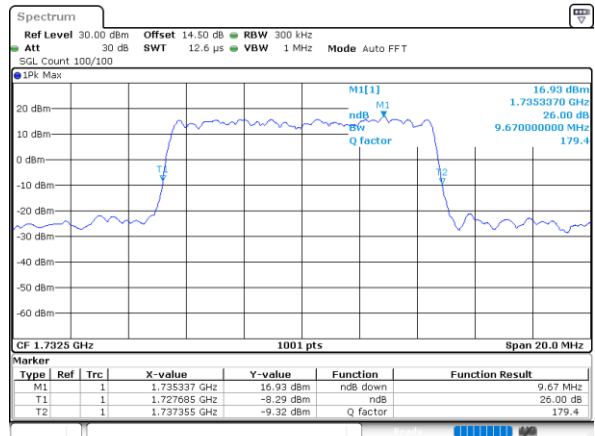
Date: 13.JAN.2022 09:12:27

## Middle Channel / 5MHz / 64QAM



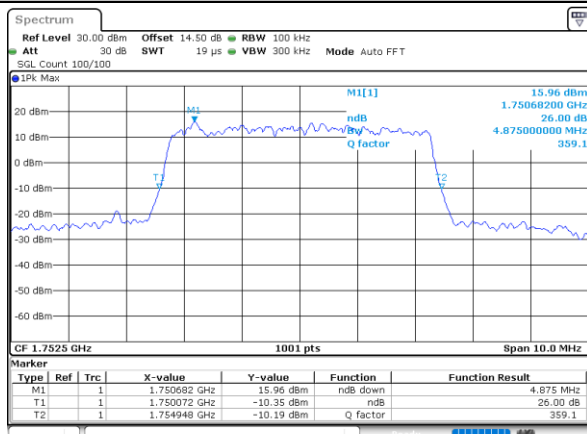
Date: 13.JAN.2022 09:05:19

## Middle Channel / 10MHz / 64QAM



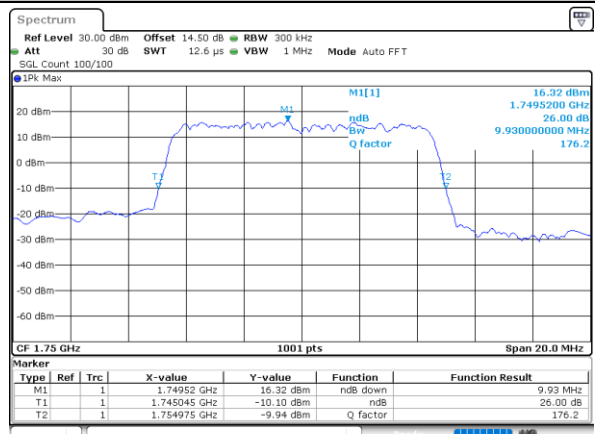
Date: 13.JAN.2022 09:17:44

## Highest Channel / 5MHz / 64QAM



Date: 13.JAN.2022 09:07:09

## Highest Channel / 10MHz / 64QAM

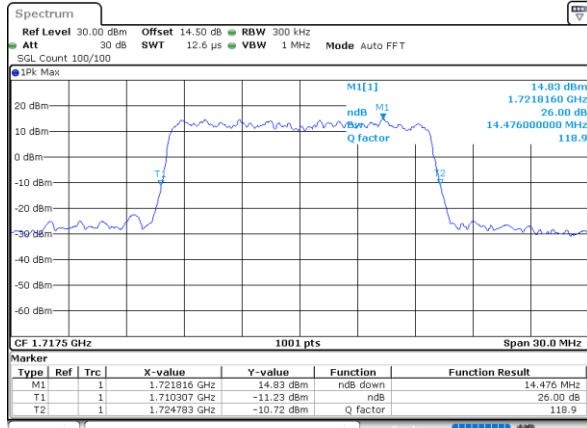


Date: 13.JAN.2022 09:19:35



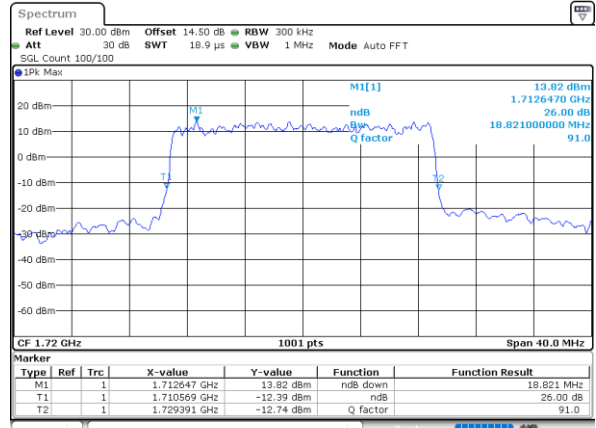
## LTE Band 4

## Lowest Channel / 15MHz / 64QAM



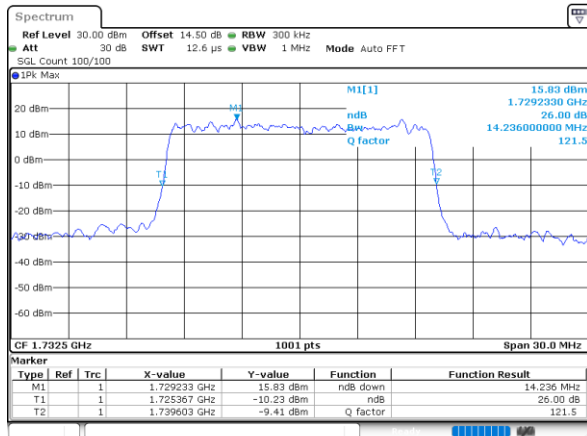
Date: 13.JAN.2022 09:24:52

## Lowest Channel / 20MHz / 64QAM



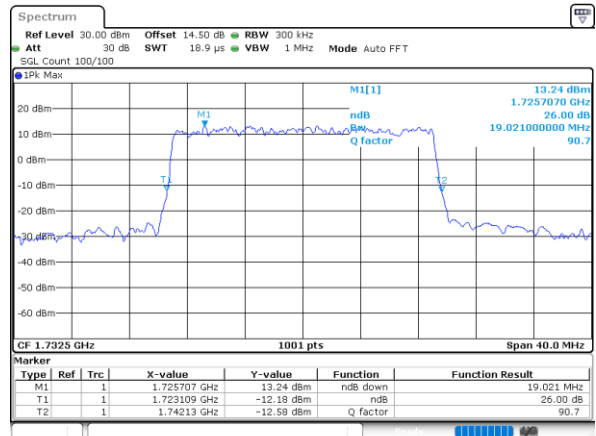
Date: 13.JAN.2022 09:37:18

## Middle Channel / 15MHz / 64QAM



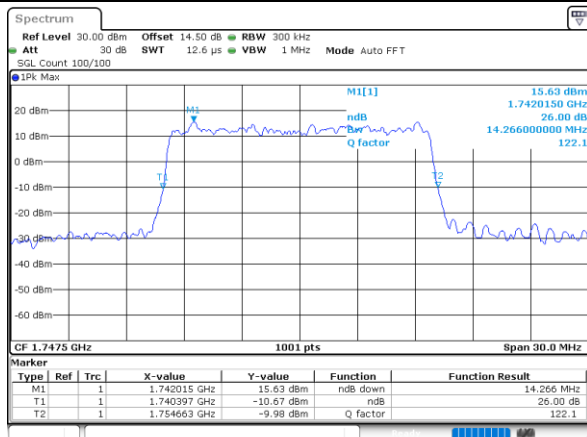
Date: 13.JAN.2022 09:38:09

## Middle Channel / 20MHz / 64QAM



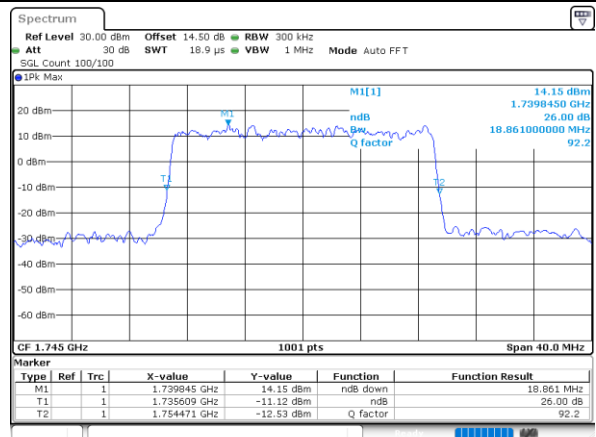
Date: 13.JAN.2022 09:42:34

## Highest Channel / 15MHz / 64QAM



Date: 13.JAN.2022 09:32:00

## Highest Channel / 20MHz / 64QAM



Date: 13.JAN.2022 09:44:25

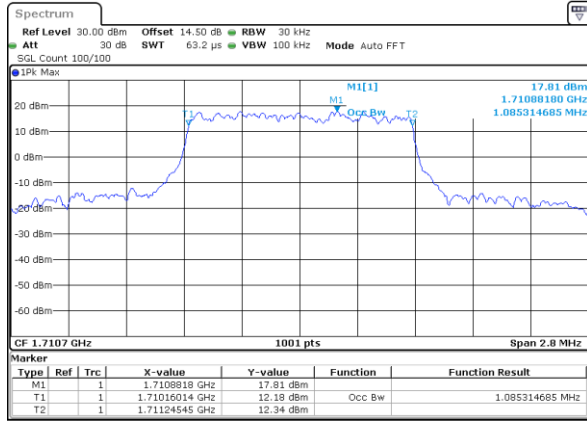
**Occupied Bandwidth**

| Mode       | LTE Band 4 : 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  | 2.74  | 2.72  | 4.50  | 4.49  | 9.07  | 9.03  | 13.52 | 13.49 | 17.90 | 17.90 |
| Middle CH  | 1.09                     | 1.10  | 2.72  | 2.70  | 4.49  | 4.49  | 9.13  | 9.05  | 13.46 | 13.43 | 17.86 | 17.86 |
| Highest CH | 1.10                     | 1.09  | 2.73  | 2.72  | 4.50  | 4.50  | 9.05  | 9.03  | 13.46 | 13.43 | 17.86 | 17.90 |
| Mode       | LTE Band 4 : 99%OBW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                   |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                    |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.09                     | -     | 2.73  | -     | 4.50  | -     | 8.99  | -     | 13.43 | -     | 17.86 | -     |
| Middle CH  | 1.09                     | -     | 2.73  | -     | 4.50  | -     | 8.99  | -     | 13.43 | -     | 17.90 | -     |
| Highest CH | 1.10                     | -     | 2.73  | -     | 4.50  | -     | 9.01  | -     | 13.43 | -     | 17.94 | -     |

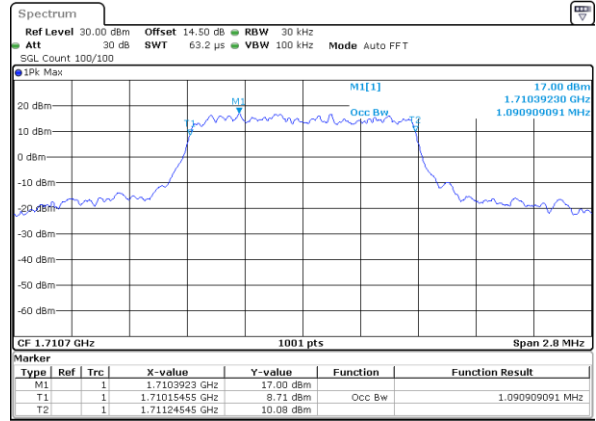


## LTE Band 4

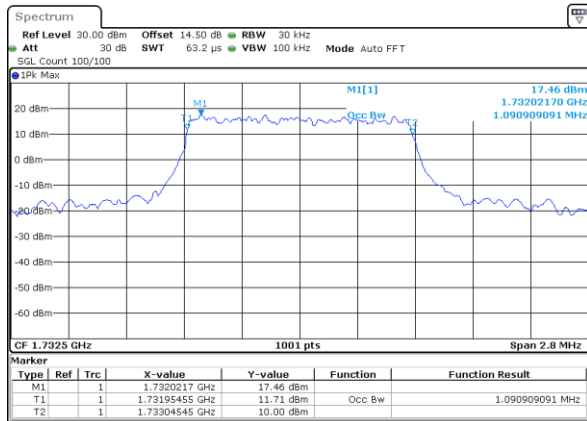
## Lowest Channel / 1.4MHz / QPSK



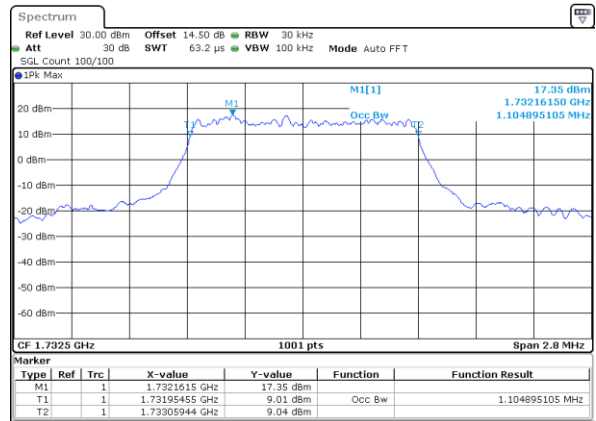
## Lowest Channel / 1.4MHz / 16QAM



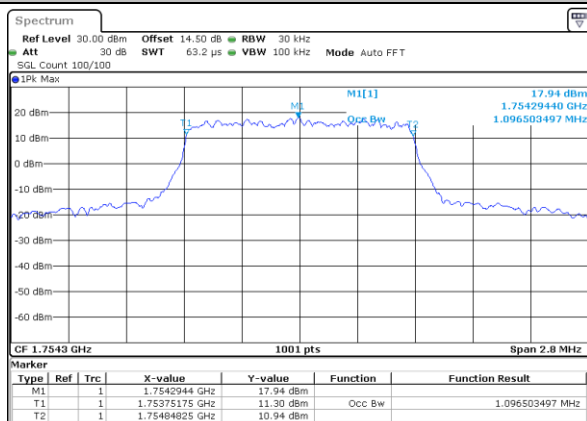
## Middle Channel / 1.4MHz / QPSK



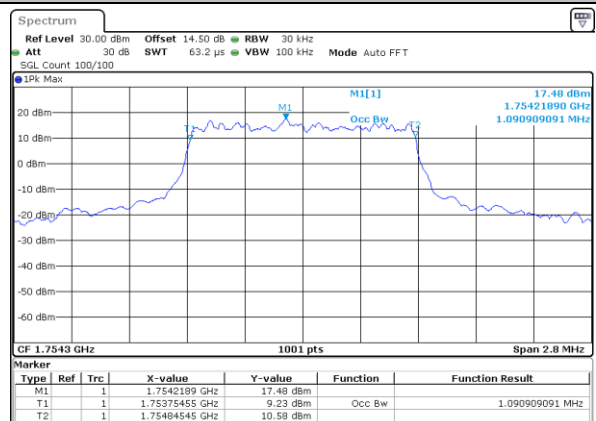
## Middle Channel / 1.4MHz / 16QAM



## Highest Channel / 1.4MHz / QPSK



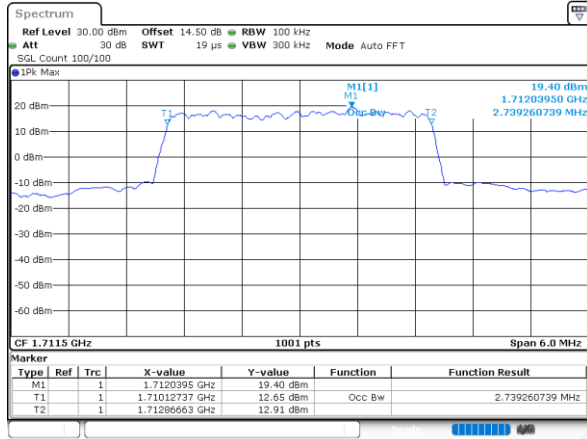
## Highest Channel / 1.4MHz / 16QAM



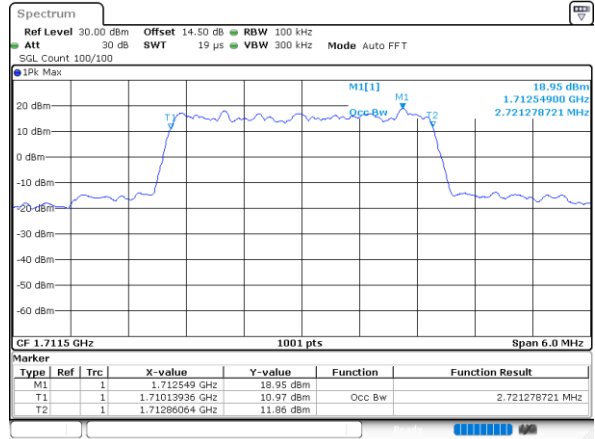


## LTE Band 4

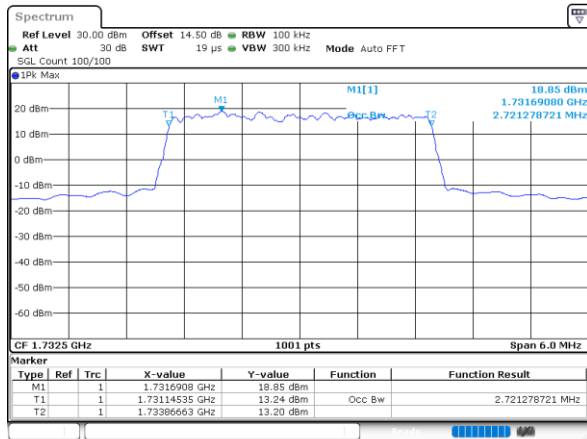
## Lowest Channel / 3MHz / QPSK



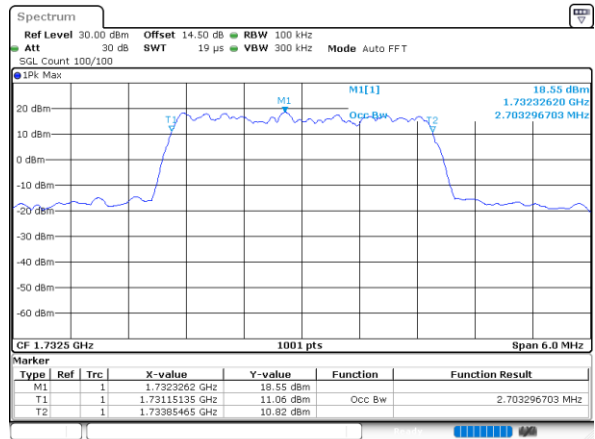
## Lowest Channel / 3MHz / 16QAM



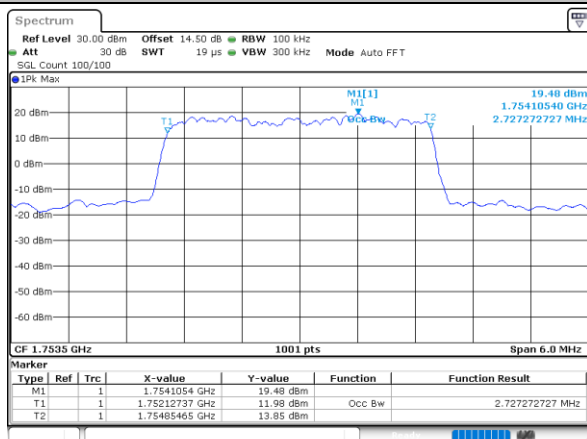
## Middle Channel / 3MHz / QPSK



## Middle Channel / 3MHz / 16QAM



## Highest Channel / 3MHz / QPSK



## Highest Channel / 3MHz / 16QAM

