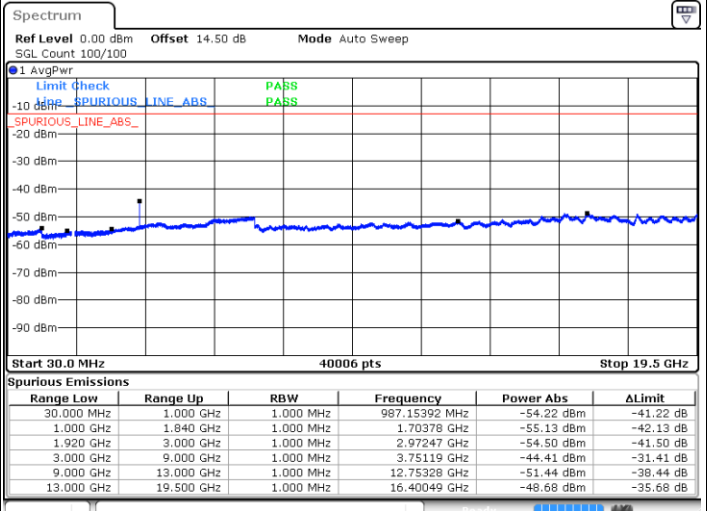
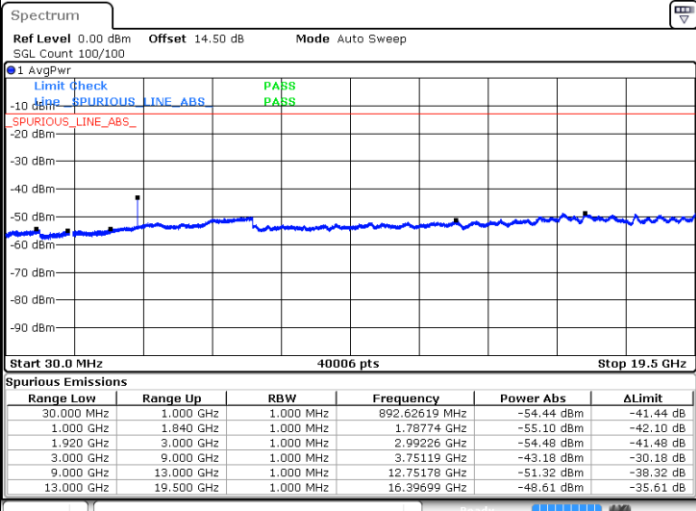




LTE Band 2 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

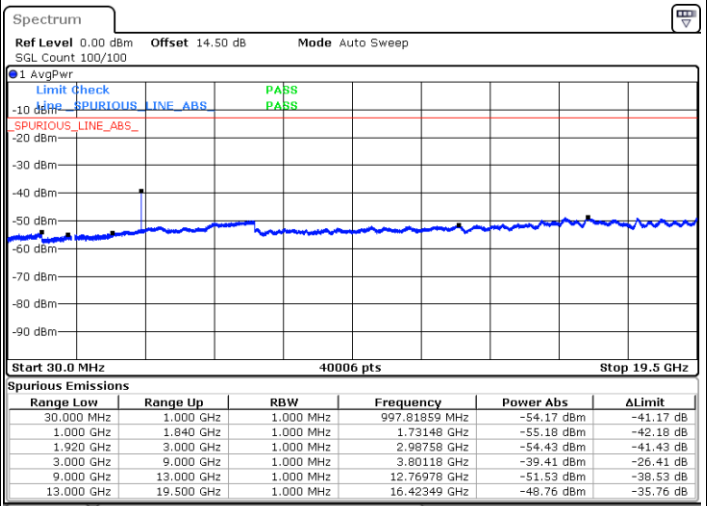
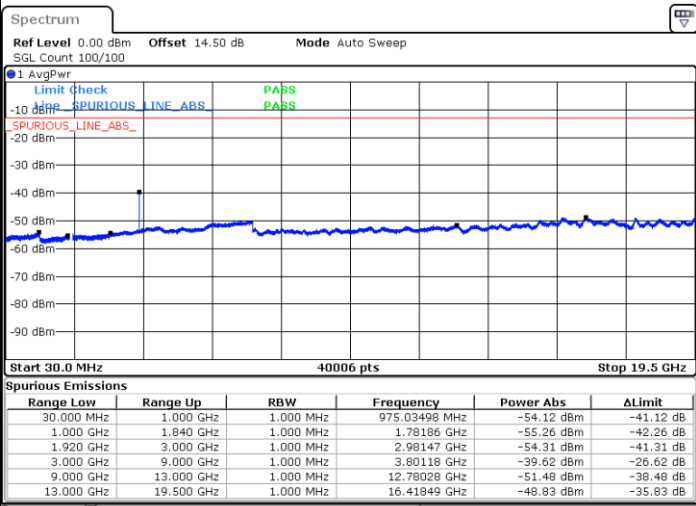


Date: 30 JUL 2021 16:10:03

Date: 30 JUL 2021 16:11:02

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 30 JUL 2021 16:19:22

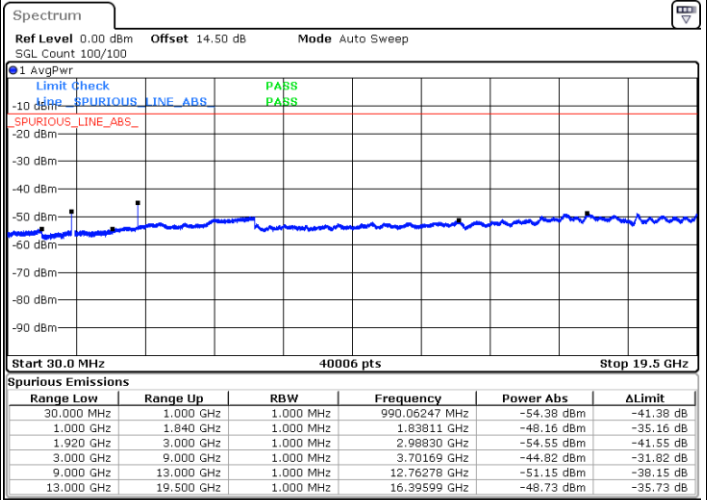
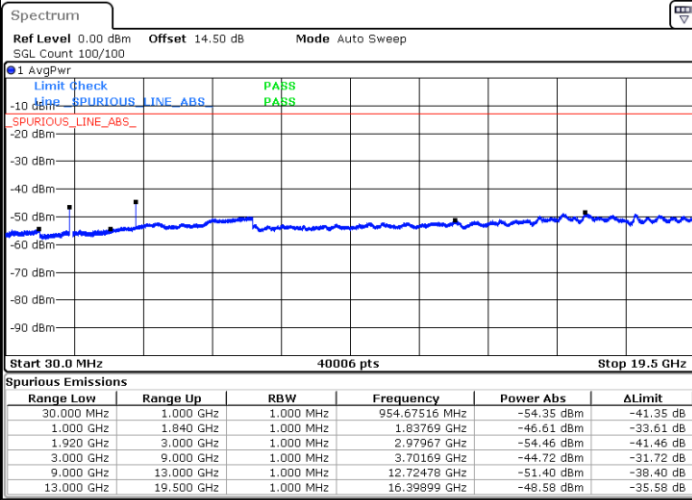
Date: 30 JUL 2021 16:20:21



LTE Band 2 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

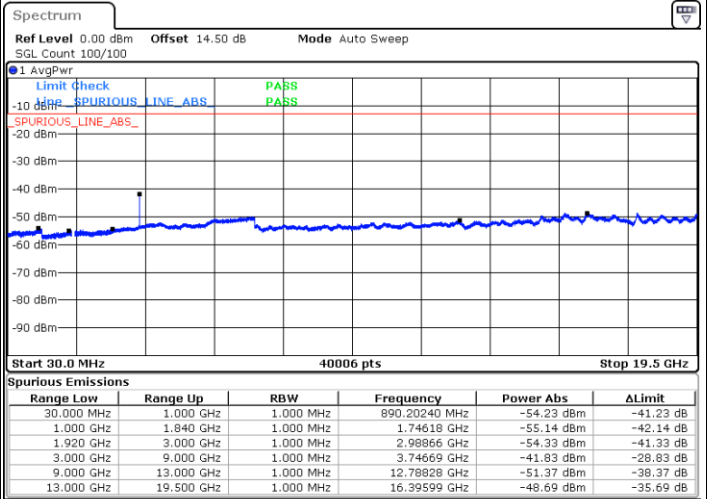
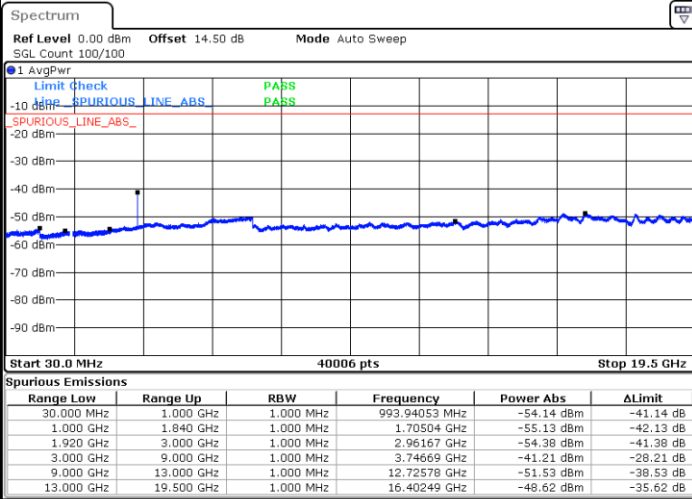


Date: 30 JUL 2021 16:28:39

Date: 30 JUL 2021 16:29:39

Middle Channel / QPSK

Middle Channel / 16QAM



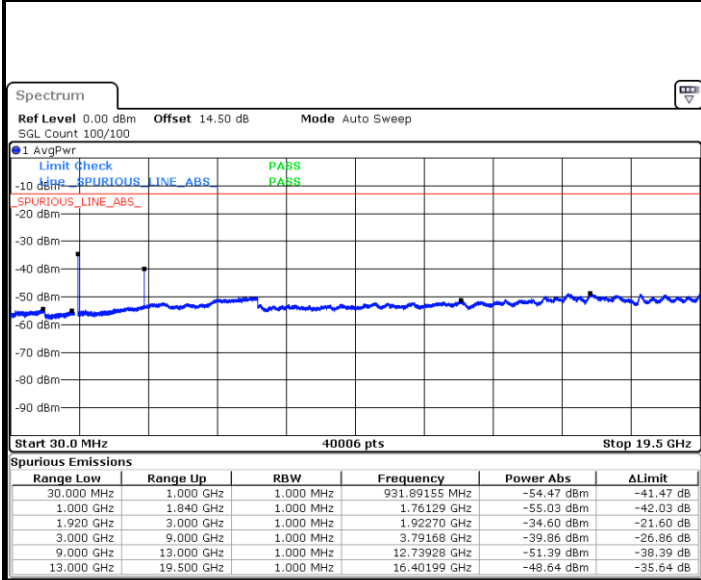
Date: 30 JUL 2021 16:31:21

Date: 30 JUL 2021 16:32:21



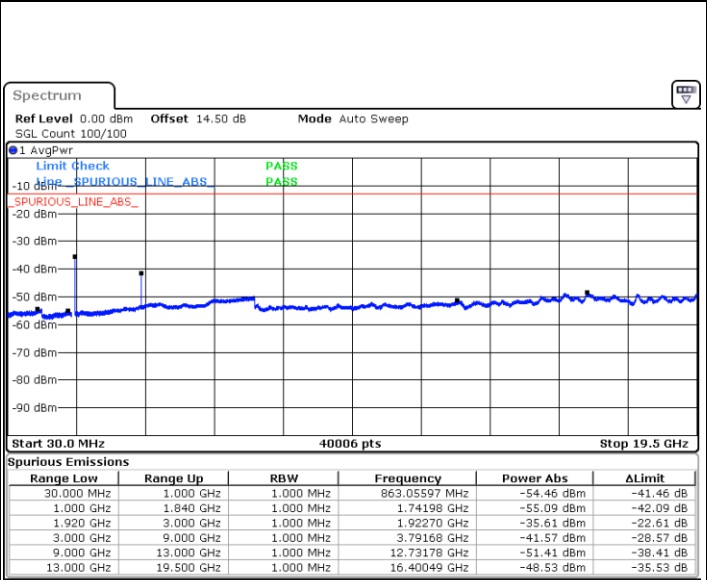
LTE Band 2 / 15MHz

Highest Channel / QPSK



Date: 30 JUL 2021 16:40:39

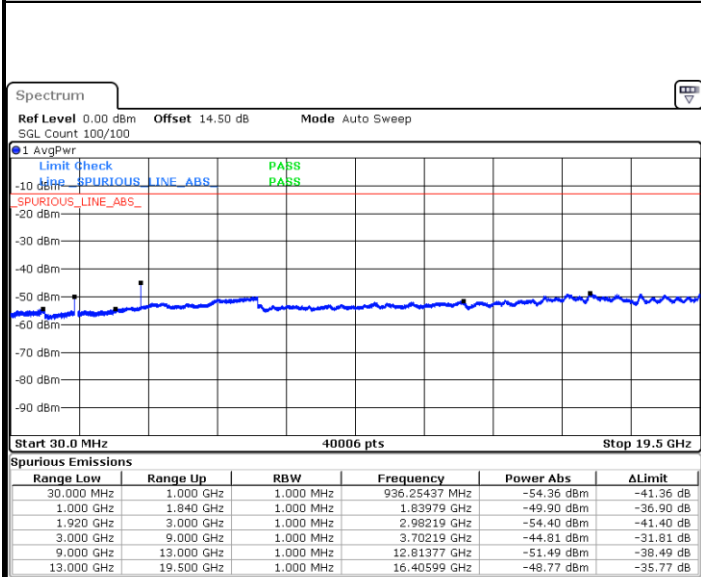
Highest Channel / 16QAM



Date: 30 JUL 2021 16:41:38

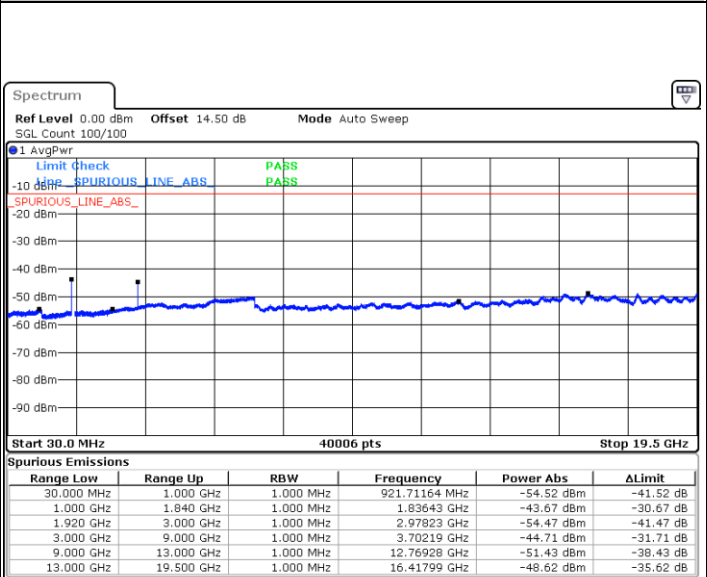
LTE Band 2 / 20MHz

Lowest Channel / QPSK



Date: 30 JUL 2021 16:49:57

Lowest Channel / 16QAM



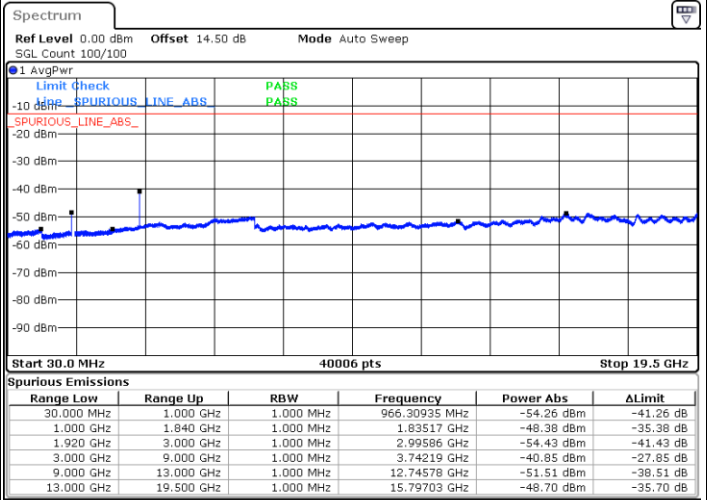
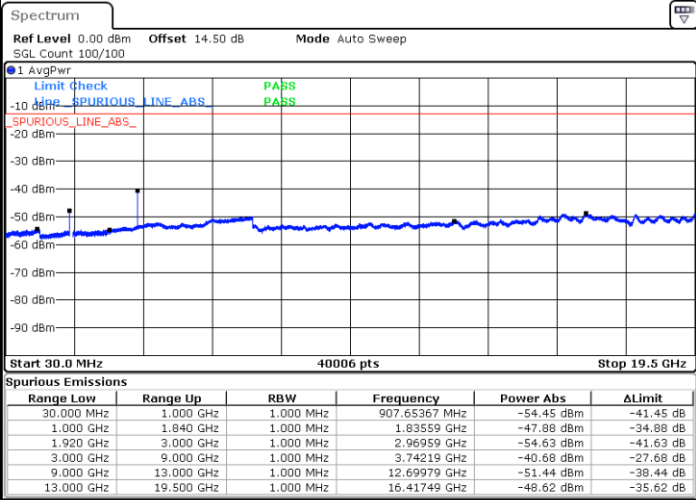
Date: 30 JUL 2021 16:50:56



LTE Band 2 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

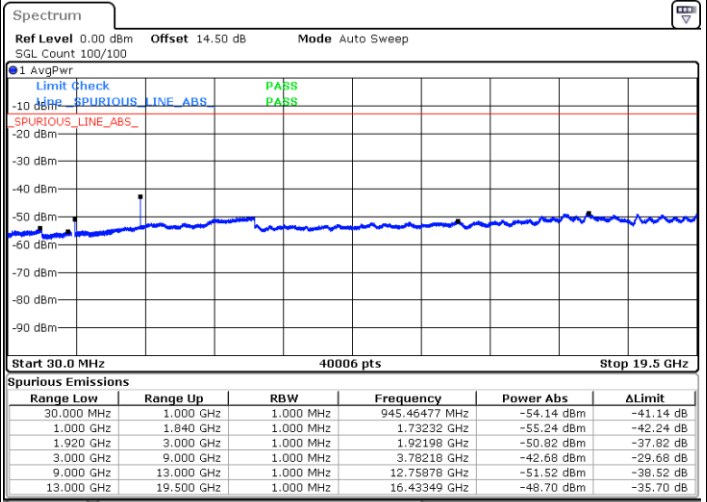
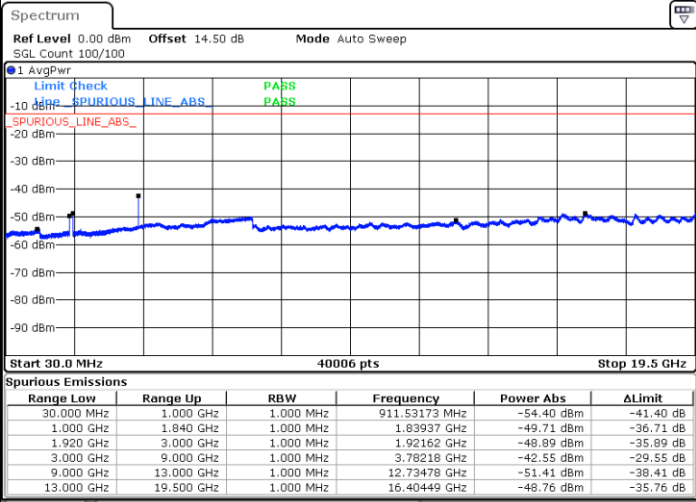


Date: 30 JUL 2021 16:52:39

Date: 30 JUL 2021 16:53:38

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 30 JUL 2021 17:01:56

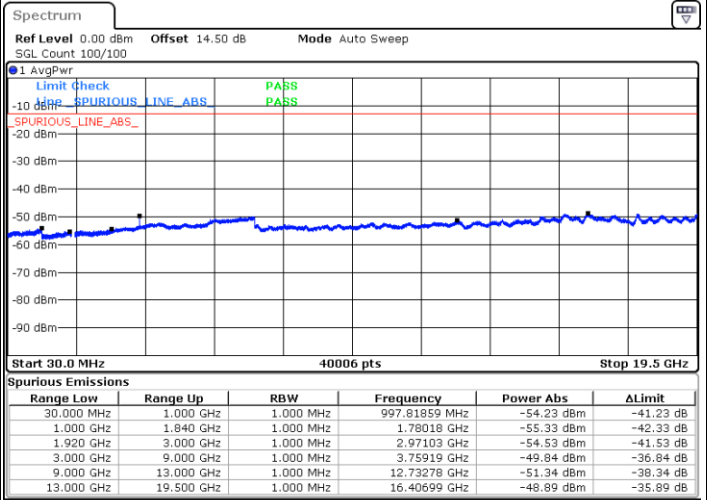
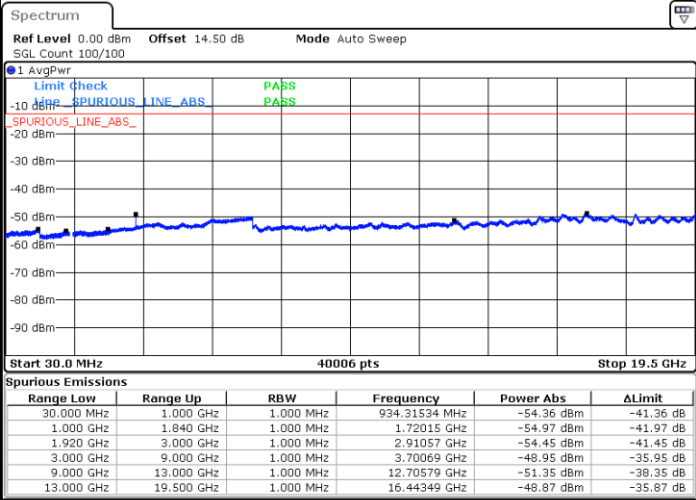
Date: 30 JUL 2021 17:02:56



LTE Band 2 / 1.4MHz

Lowest Channel / 64QAM

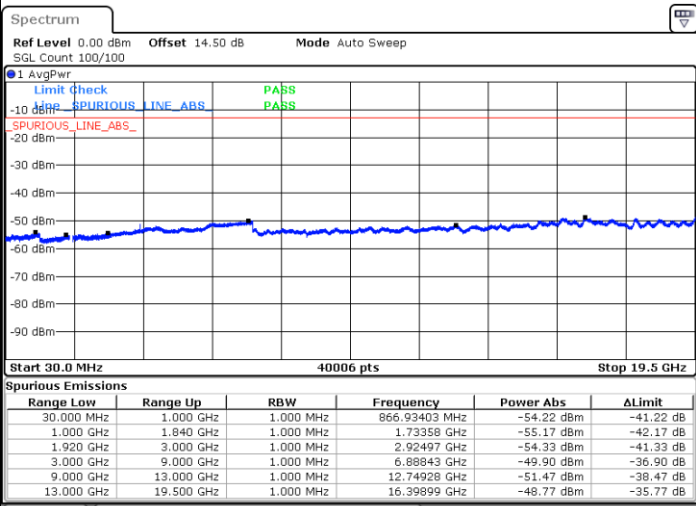
Middle Channel / 64QAM



Date: 30 JUL 2021 14:49:07

Date: 30 JUL 2021 14:50:28

Highest Channel / 64QAM

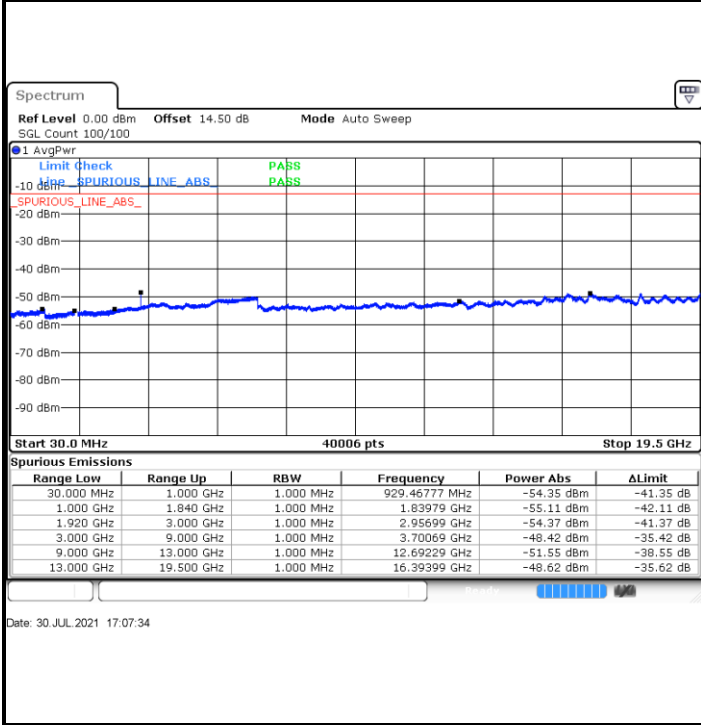


Date: 30 JUL 2021 14:55:07

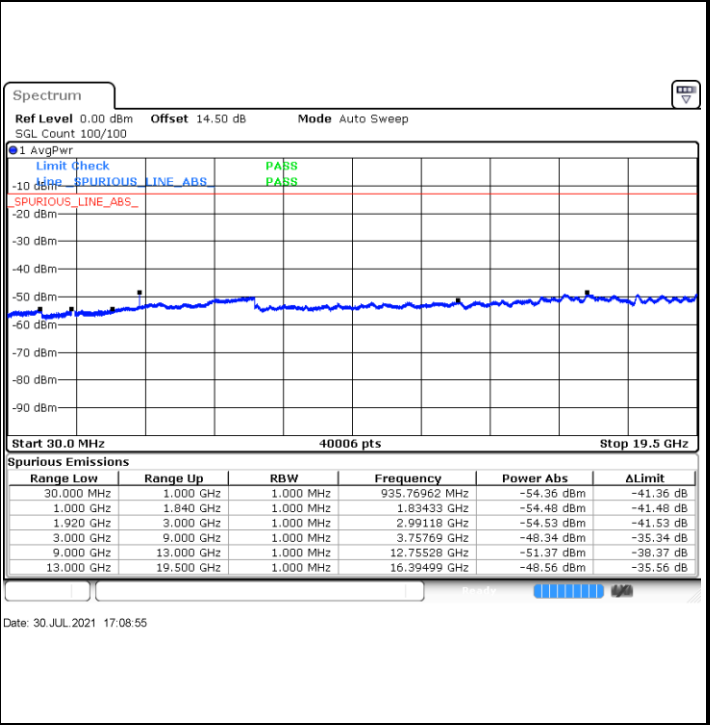


LTE Band 2 / 3MHz

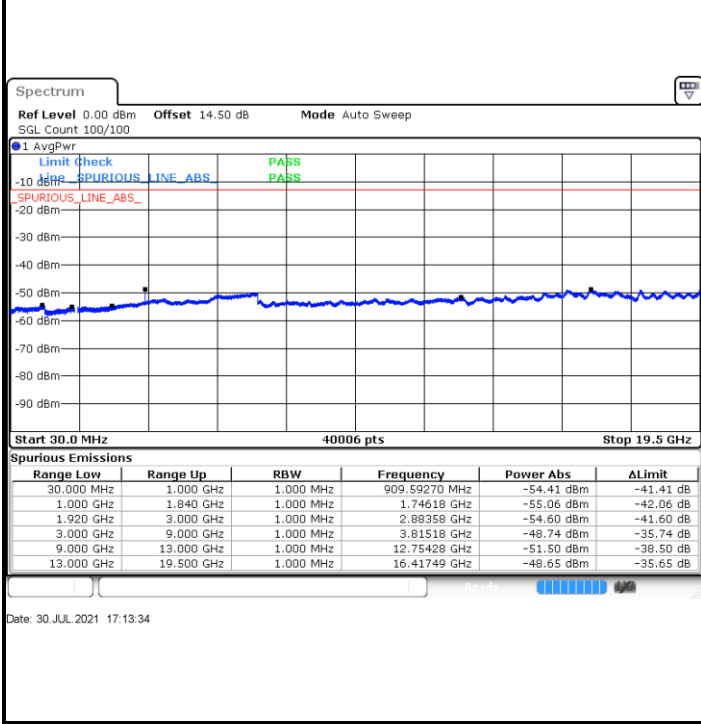
Lowest Channel / 64QAM



Middle Channel / 64QAM



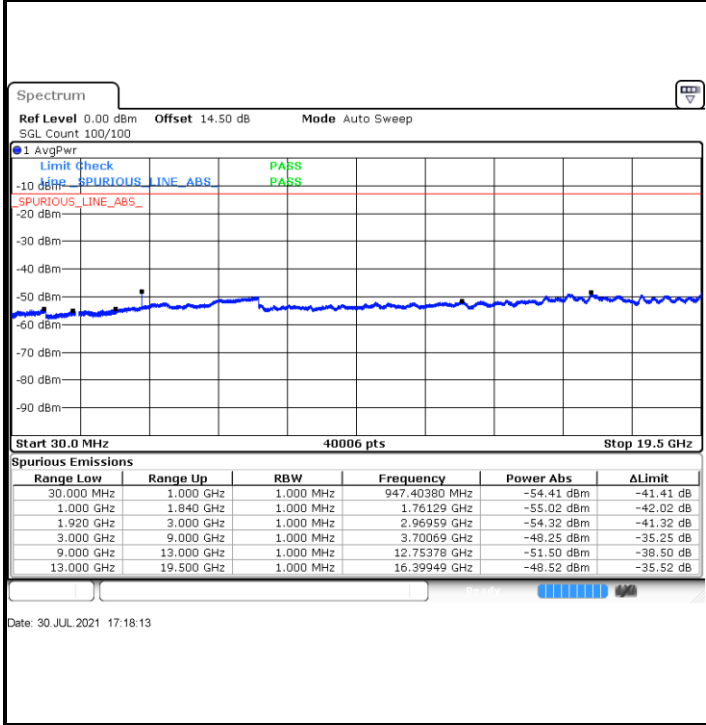
Highest Channel / 64QAM



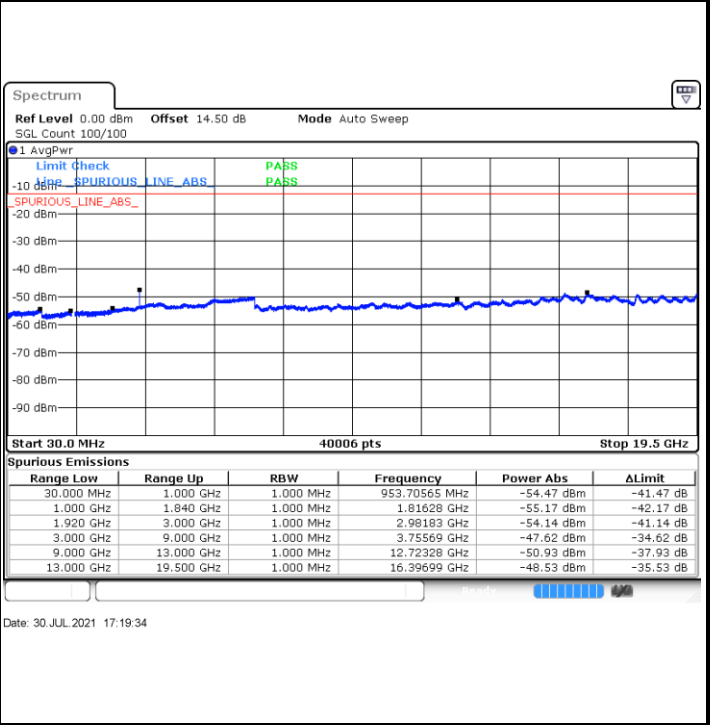


LTE Band 2 / 5MHz

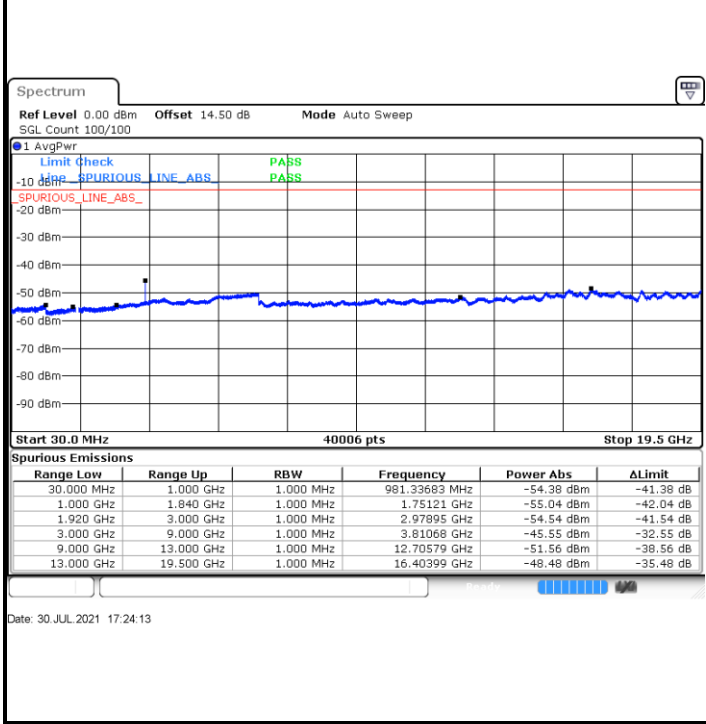
Lowest Channel / 64QAM



Middle Channel / 64QAM



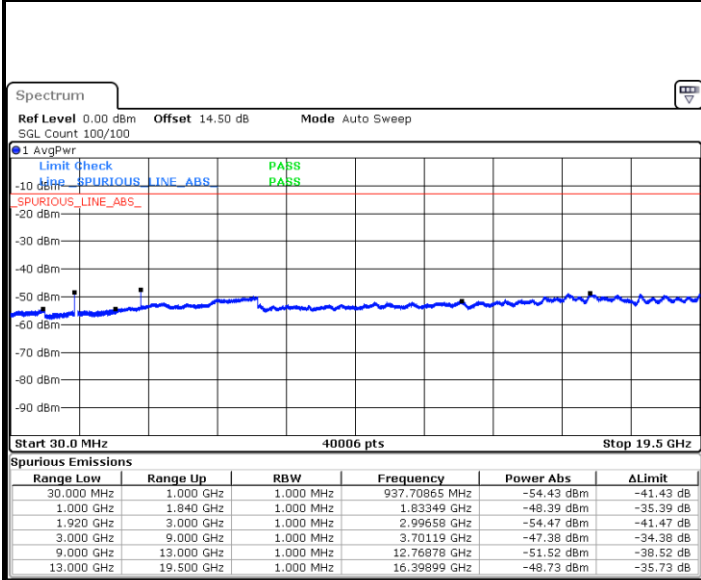
Highest Channel / 64QAM





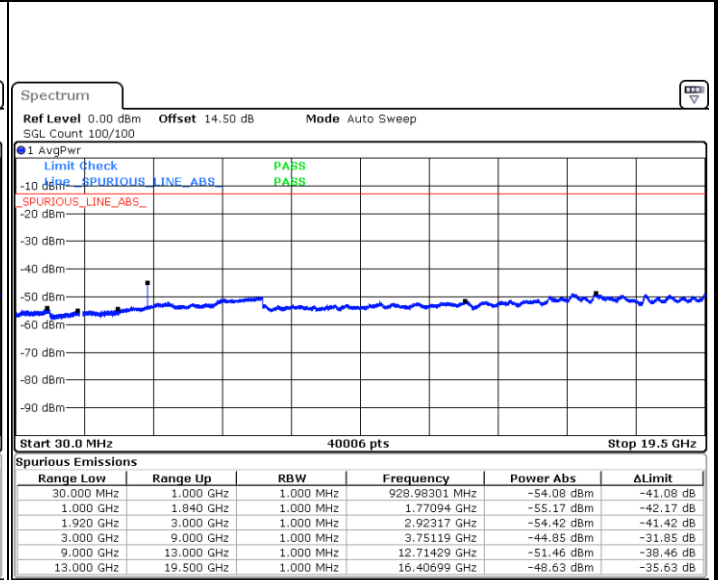
LTE Band 2 / 10MHz

Lowest Channel / 64QAM



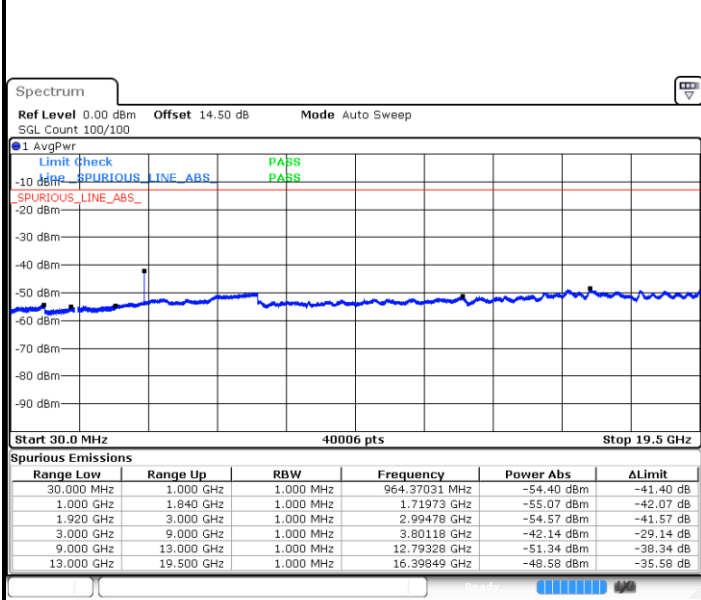
Date: 30 JUL 2021 17:28:52

Middle Channel / 64QAM



Date: 30 JUL 2021 17:30:14

Highest Channel / 64QAM



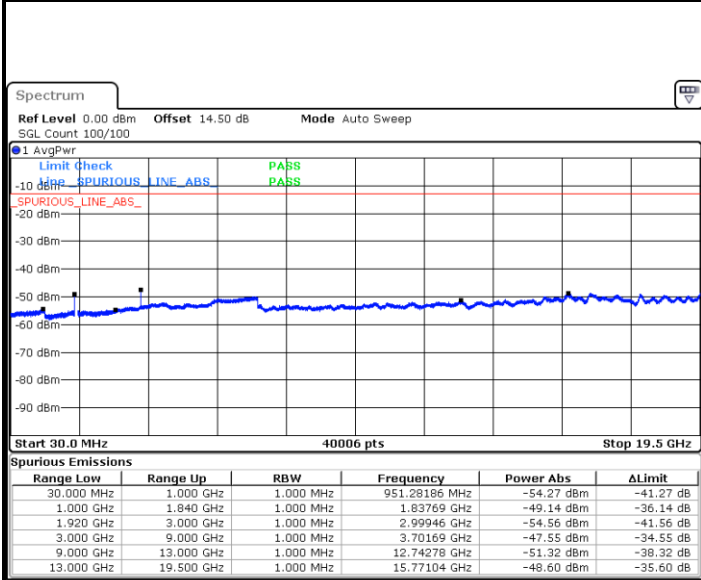
Date: 30 JUL 2021 17:34:53





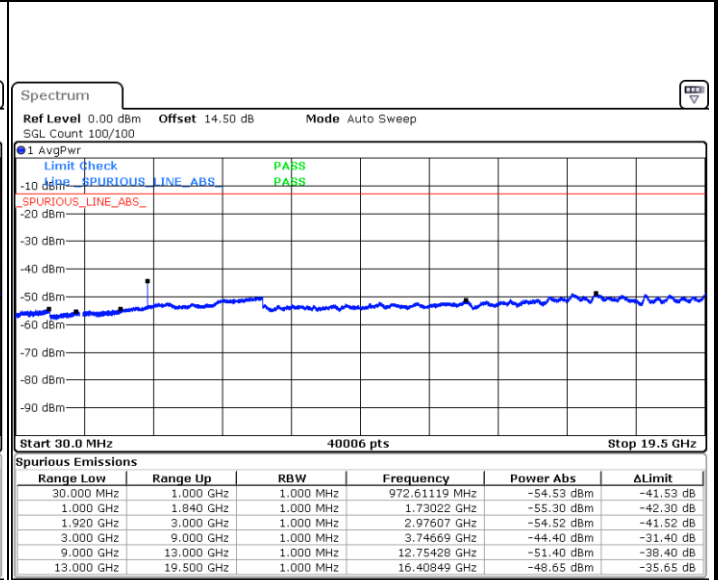
LTE Band 2 / 15MHz

Lowest Channel / 64QAM



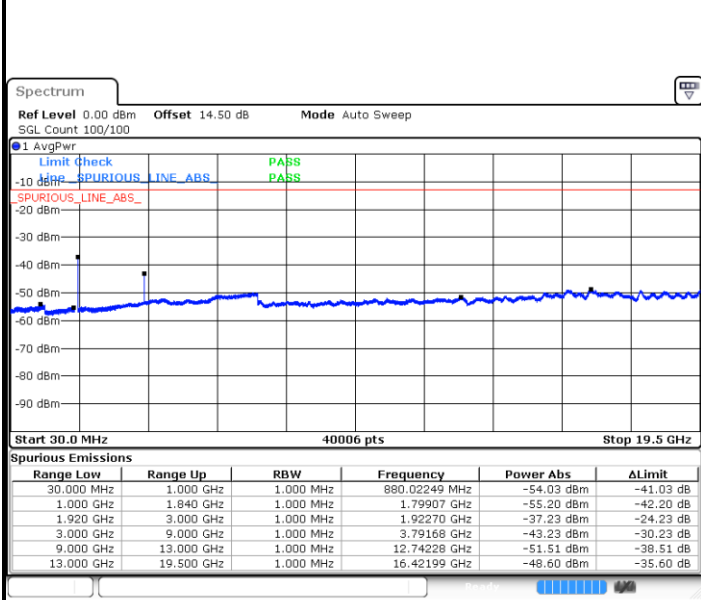
Date: 30 JUL 2021 17:39:33

Middle Channel / 64QAM



Date: 30 JUL 2021 17:40:54

Highest Channel / 64QAM



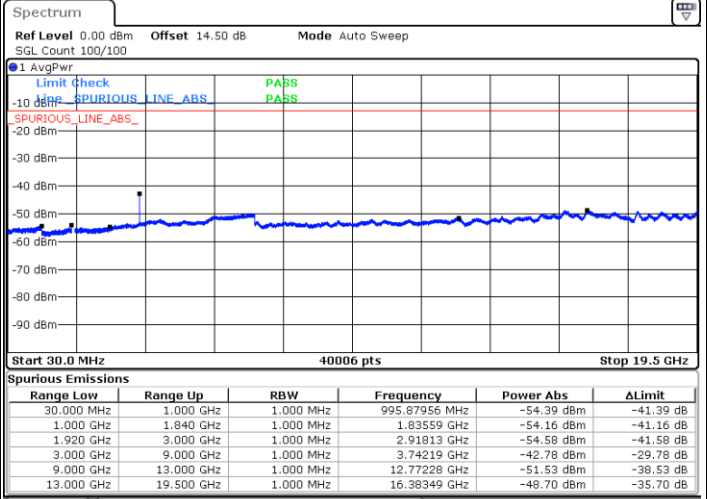
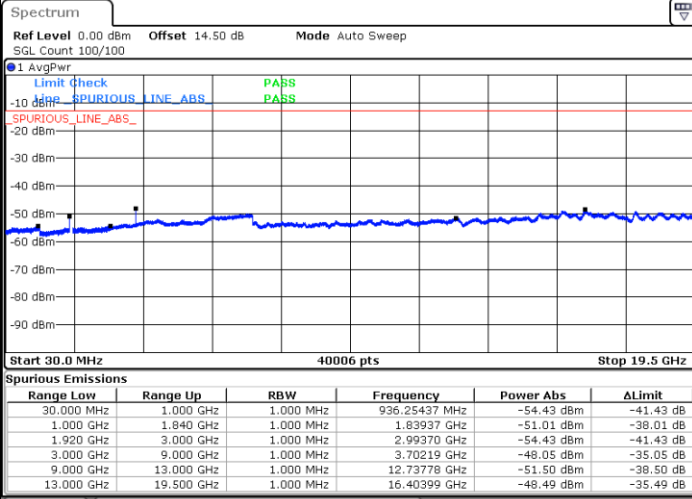
Date: 30 JUL 2021 17:45:32



LTE Band 2 / 20MHz

Lowest Channel / 64QAM

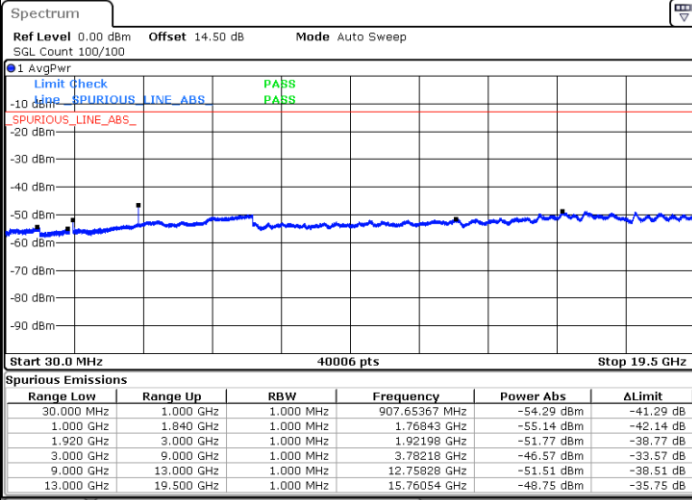
Middle Channel / 64QAM



Date: 30 JUL 2021 17:50:11

Date: 30 JUL 2021 17:51:33

Highest Channel / 64QAM



Date: 30 JUL 2021 17:56:11



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    | 0.0007                             | PASS    |
| 40               | Normal Voltage    | 0.0002                             |         |
| 30               | Normal Voltage    | 0.0019                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0007                             |         |
| 0                | Normal Voltage    | 0.0002                             |         |
| -10              | Normal Voltage    | 0.0008                             |         |
| -20              | Normal Voltage    | 0.0001                             |         |
| -30              | Normal Voltage    | 0.0004                             |         |
| 20               | Maximum Voltage   | 0.0005                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0001                             |         |

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.65 V. ; Maximum Voltage =4.4 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  | 5.30               | 5.28    | 6.35  | 6.23    | <b>PASS</b> |
| Middle CH  | 5.33               | 5.33    | 6.58  | 6.29    |             |
| Highest CH | 5.36               | 5.28    | 6.17  | 6.20    |             |
| Mode       | LTE Band 4 / 20MHz |         |       |         |             |
| Mod.       | 64QAM              |         |       |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB |       |         | Result      |
| Lowest CH  | 6.03               | 6.49    | -     | -       | <b>PASS</b> |
| Middle CH  | 6.09               | 6.43    | -     | -       |             |
| Highest CH | 6.52               | 6.35    | -     | -       |             |



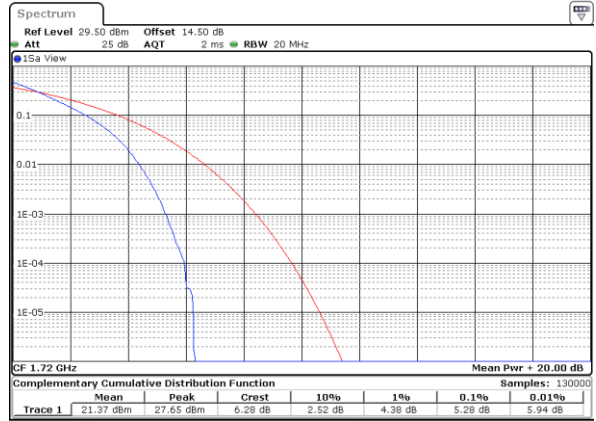
LTE Band 4 / 20MHz / QPSK

Lowest Channel / 1RB



Date: 3.AUG.2021 16:57:02

Lowest Channel / Full RB



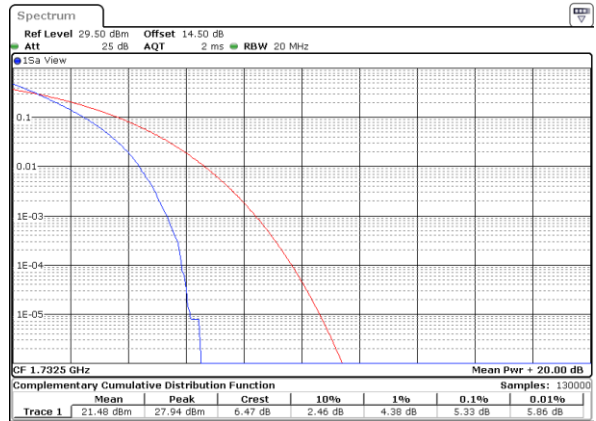
Date: 3.AUG.2021 16:57:14

Middle Channel / 1RB



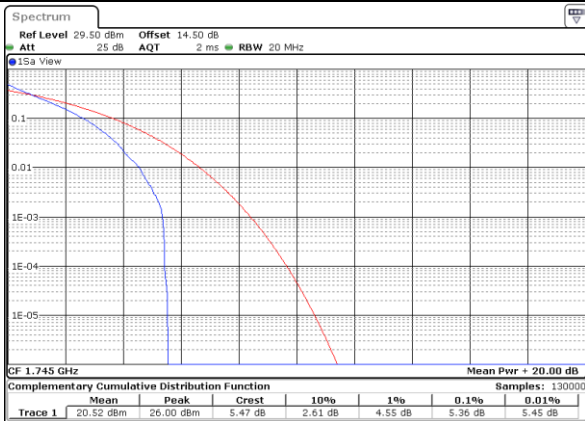
Date: 3.AUG.2021 16:57:24

Middle Channel / Full RB



Date: 3.AUG.2021 17:05:50

Highest Channel / 1RB



Date: 3.AUG.2021 16:57:48

Highest Channel / Full RB

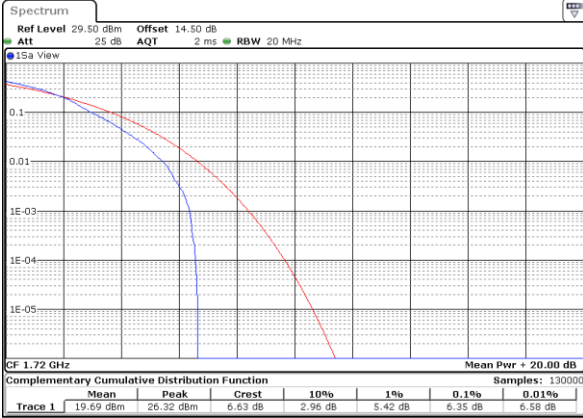


Date: 3.AUG.2021 16:58:00



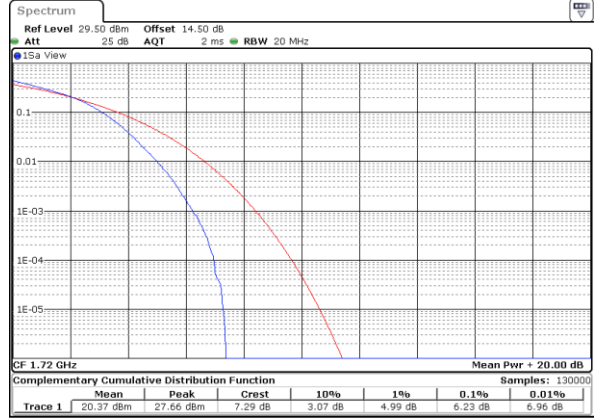
LTE Band 4 / 20MHz / 16QAM

Lowest Channel / 1RB



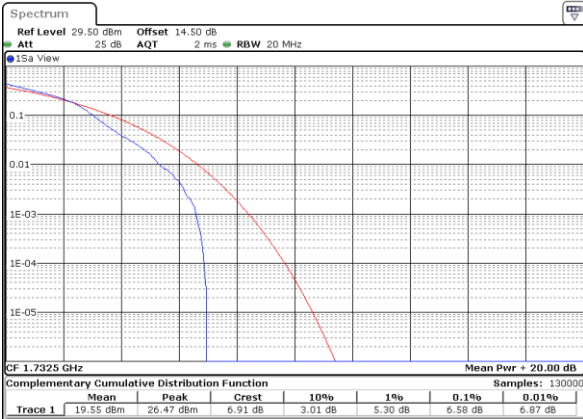
Date: 3.AUG.2021 16:55:54

Lowest Channel / Full RB



Date: 3.AUG.2021 16:56:10

Middle Channel / 1RB



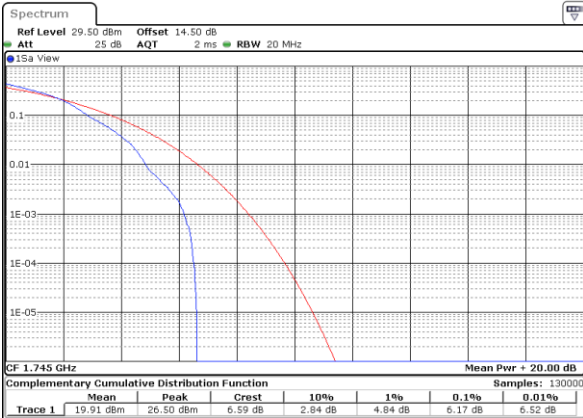
Date: 3.AUG.2021 16:56:21

Middle Channel / Full RB



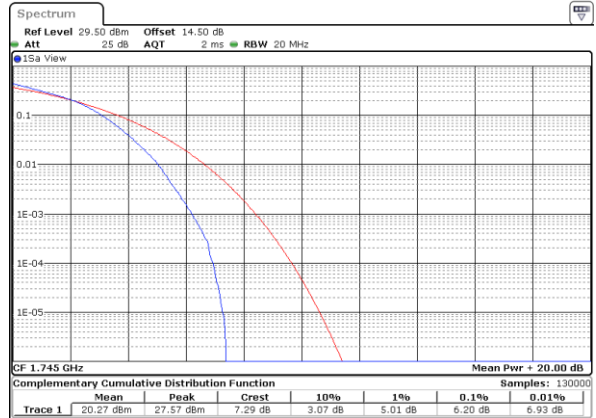
Date: 3.AUG.2021 16:56:32

Highest Channel / 1RB



Date: 3.AUG.2021 16:56:43

Highest Channel / Full RB

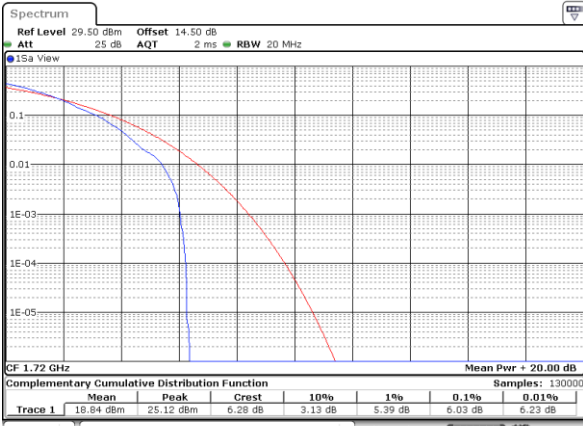


Date: 3.AUG.2021 16:56:52



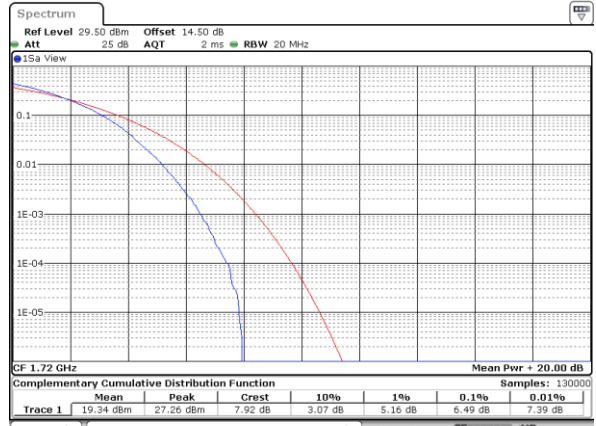
LTE Band 4 / 20MHz / 64QAM

Lowest Channel / 1RB



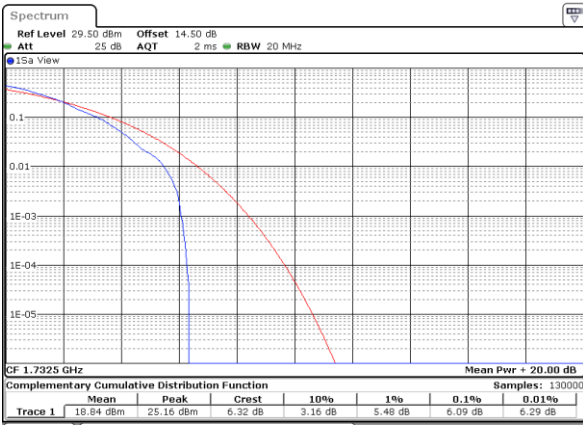
Date: 3.AUG.2021 16:58:12

Lowest Channel / Full RB



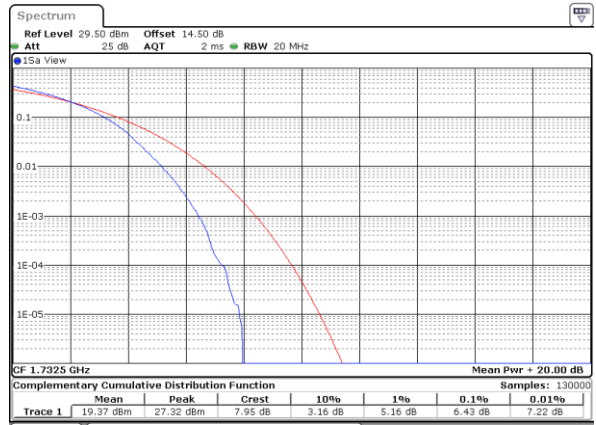
Date: 3.AUG.2021 16:58:26

Middle Channel / 1RB



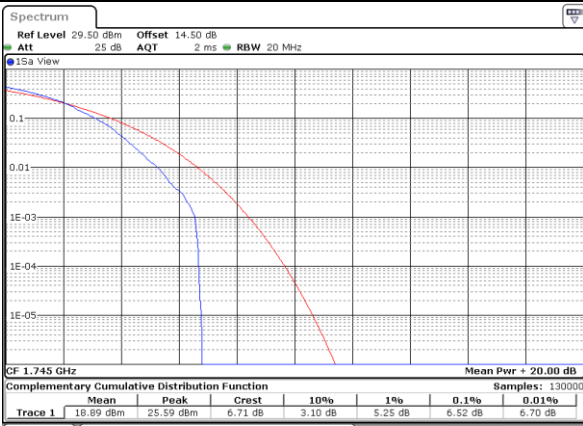
Date: 3.AUG.2021 16:58:40

Middle Channel / Full RB



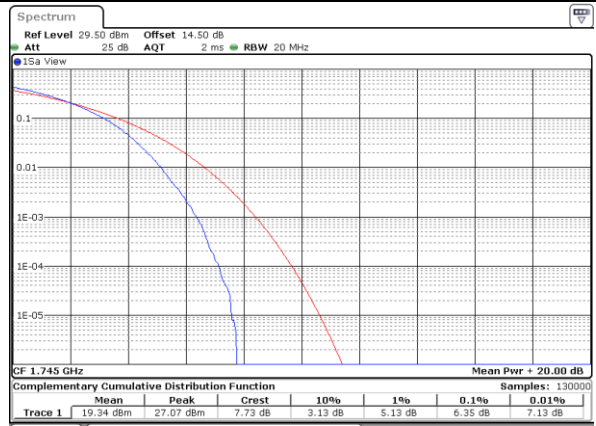
Date: 3.AUG.2021 16:58:56

Highest Channel / 1RB



Date: 3.AUG.2021 16:59:17

Highest Channel / Full RB



Date: 3.AUG.2021 16:59:29



26dB Bandwidth

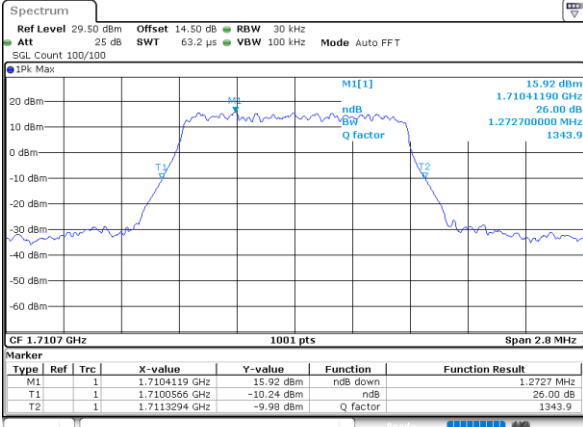
| Mode       | LTE Band 4 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
|------------|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | QPSK                      | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | 1.27                      | 1.28  | 2.97  | 2.97  | 4.86  | 4.88  | 9.95  | 9.73  | 14.33 | 14.39 | 18.66 | 18.70 |
| Middle CH  | 1.25                      | 1.28  | 2.96  | 2.95  | 4.83  | 4.80  | 9.77  | 9.65  | 14.45 | 14.36 | 18.94 | 19.02 |
| Highest CH | 1.27                      | 1.27  | 2.96  | 2.94  | 4.83  | 4.86  | 9.71  | 9.73  | 14.21 | 14.30 | 19.06 | 19.02 |
| Mode       | LTE Band 4 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                     |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.29                      | -     | 2.91  | -     | 4.84  | -     | 9.85  | -     | 14.27 | -     | 18.86 | -     |
| Middle CH  | 1.31                      | -     | 2.95  | -     | 4.84  | -     | 9.65  | -     | 14.21 | -     | 18.86 | -     |
| Highest CH | 1.28                      | -     | 2.97  | -     | 4.85  | -     | 9.91  | -     | 14.60 | -     | 18.82 | -     |





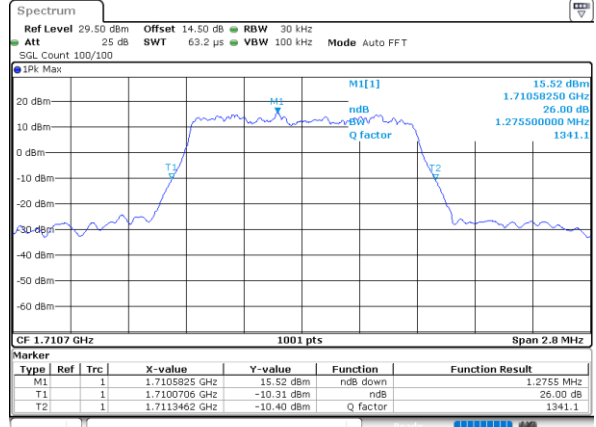
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



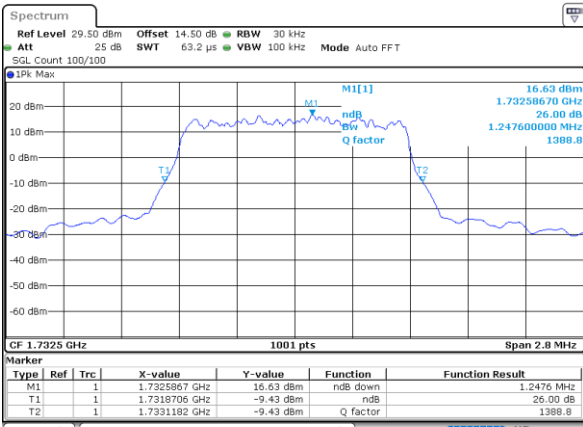
Date: 3,AUG,2021 16:29:46

Lowest Channel / 1.4MHz / 16QAM



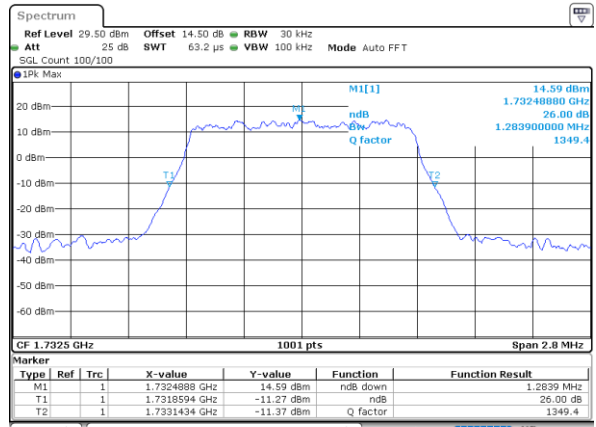
Date: 3,AUG,2021 16:29:56

Middle Channel / 1.4MHz / QPSK



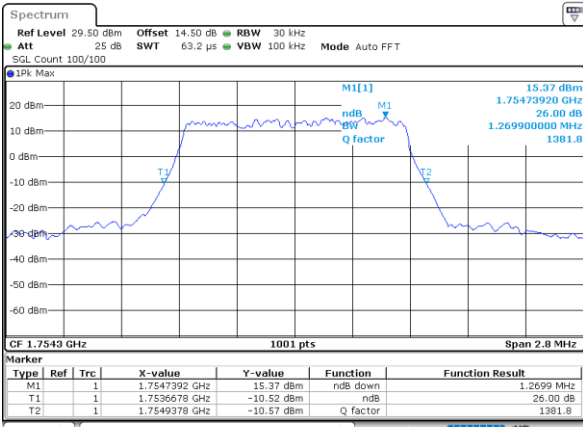
Date: 3,AUG,2021 16:39:44

Middle Channel / 1.4MHz / 16QAM



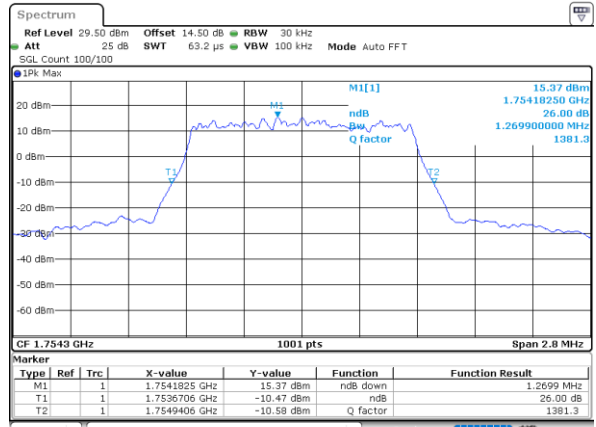
Date: 3,AUG,2021 16:39:55

Highest Channel / 1.4MHz / QPSK



Date: 3,AUG,2021 16:42:47

Highest Channel / 1.4MHz / 16QAM

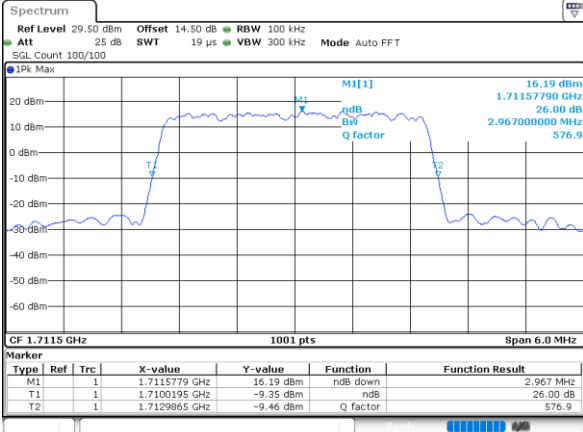


Date: 3,AUG,2021 16:42:58



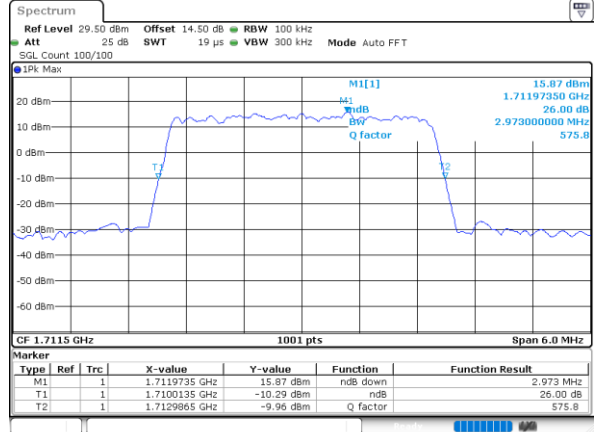
LTE Band 4

Lowest Channel / 3MHz / QPSK



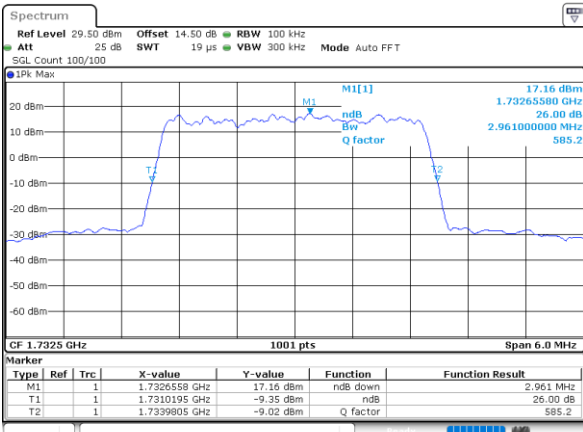
Date: 3,AUG,2021 11:21:57

Lowest Channel / 3MHz / 16QAM



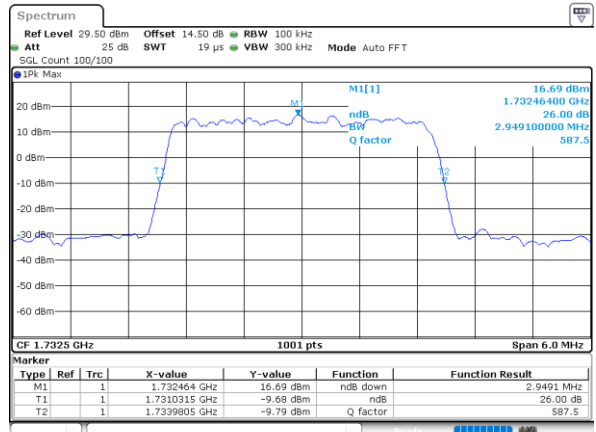
Date: 3,AUG,2021 11:22:08

Middle Channel / 3MHz / QPSK



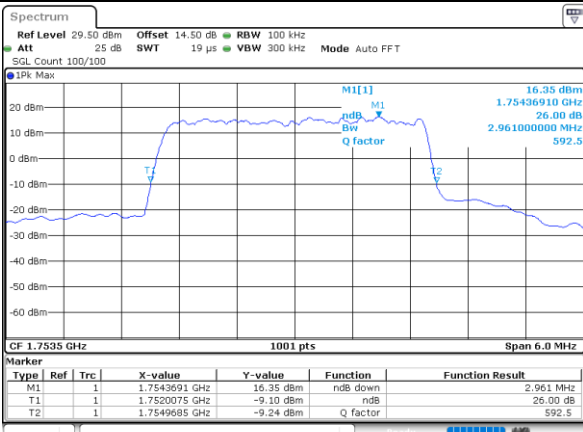
Date: 3,AUG,2021 11:31:56

Middle Channel / 3MHz / 16QAM



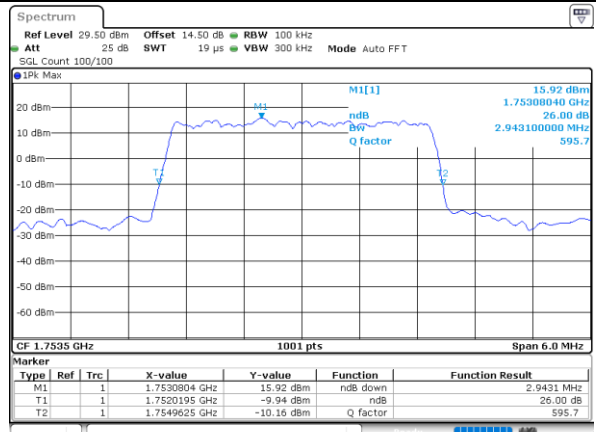
Date: 3,AUG,2021 11:32:07

Highest Channel / 3MHz / QPSK



Date: 3,AUG,2021 11:35:00

Highest Channel / 3MHz / 16QAM

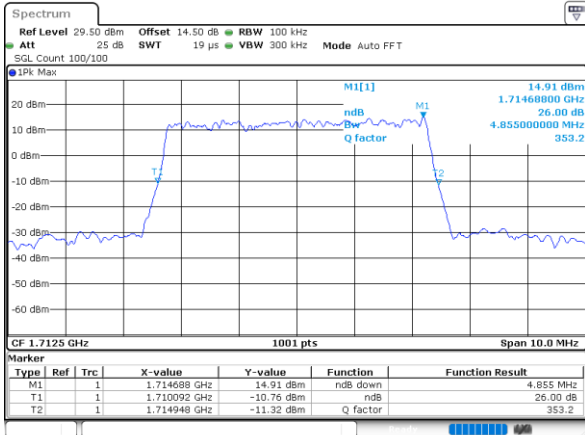


Date: 3,AUG,2021 11:35:11



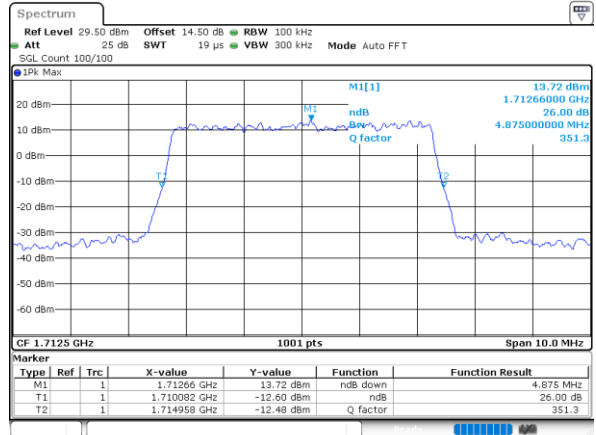
LTE Band 4

Lowest Channel / 5MHz / QPSK



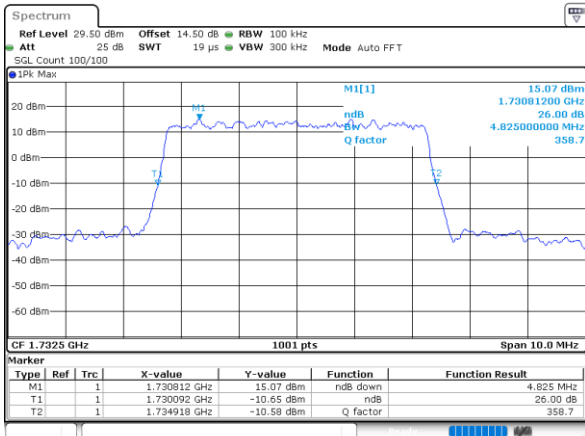
Date: 3,AUG,2021 11:44:58

Lowest Channel / 5MHz / 16QAM



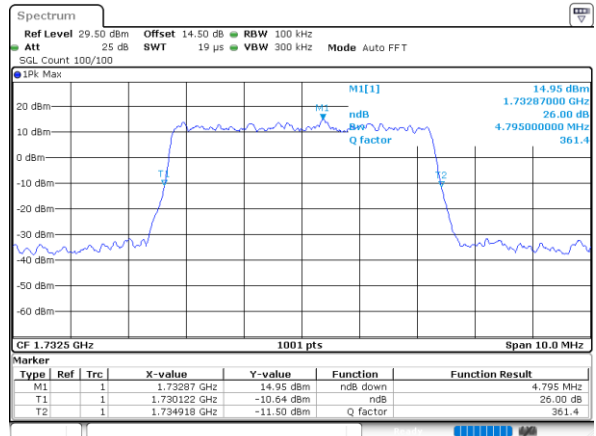
Date: 3,AUG,2021 11:45:10

Middle Channel / 5MHz / QPSK



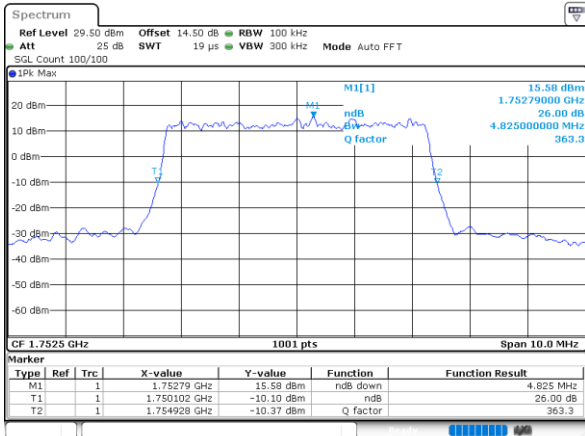
Date: 3,AUG,2021 11:54:58

Middle Channel / 5MHz / 16QAM



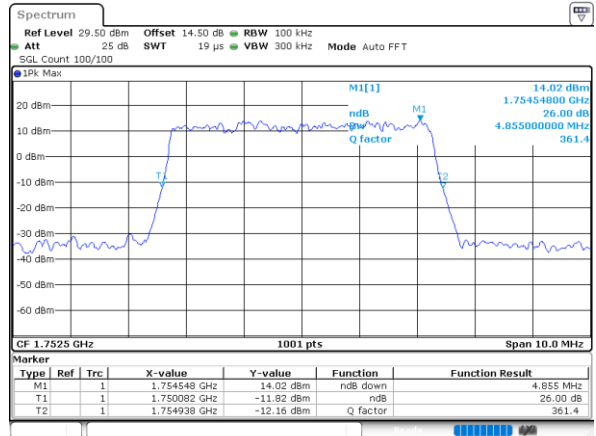
Date: 3,AUG,2021 11:55:09

Highest Channel / 5MHz / QPSK



Date: 3,AUG,2021 11:58:01

Highest Channel / 5MHz / 16QAM

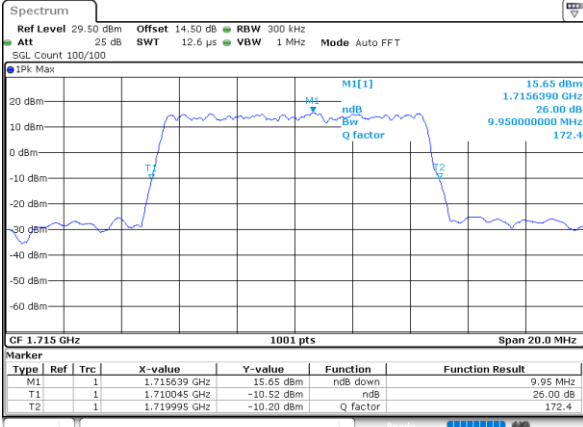


Date: 3,AUG,2021 11:58:12



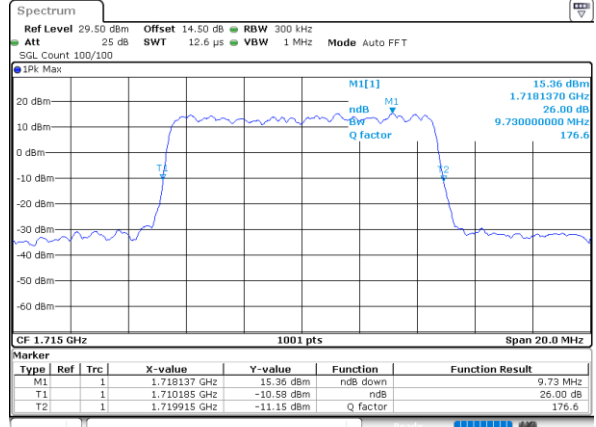
LTE Band 4

Lowest Channel / 10MHz / QPSK



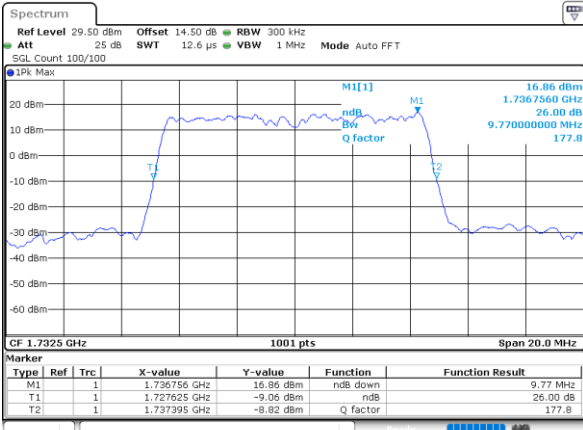
Date: 3.AUG.2021 12:08:24

Lowest Channel / 10MHz / 16QAM



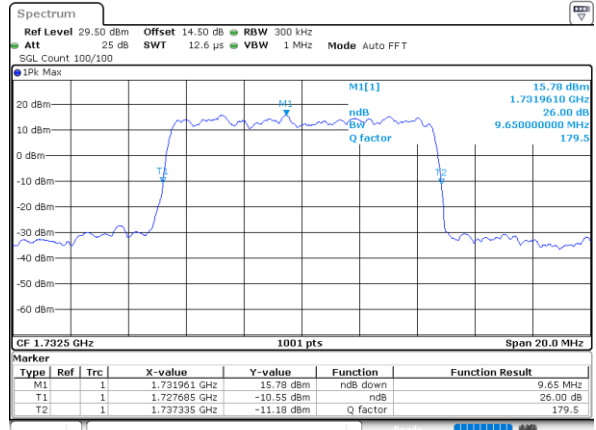
Date: 3.AUG.2021 12:08:35

Middle Channel / 10MHz / QPSK



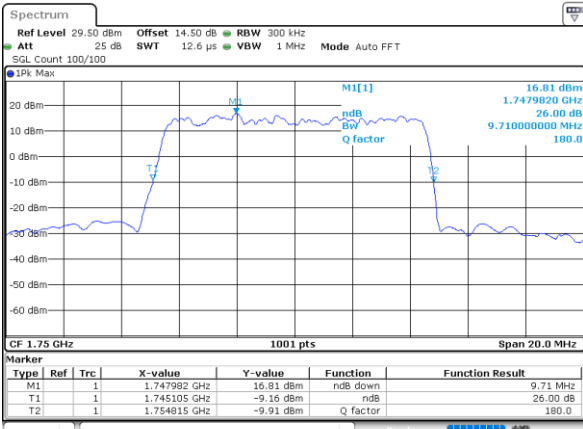
Date: 3.AUG.2021 12:18:55

Middle Channel / 10MHz / 16QAM



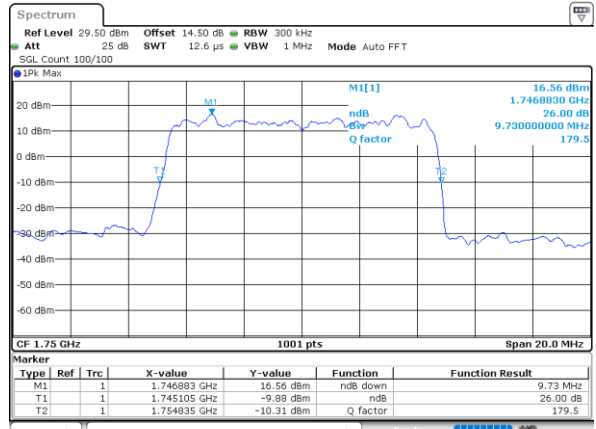
Date: 3.AUG.2021 12:19:06

Highest Channel / 10MHz / QPSK



Date: 3.AUG.2021 12:22:10

Highest Channel / 10MHz / 16QAM

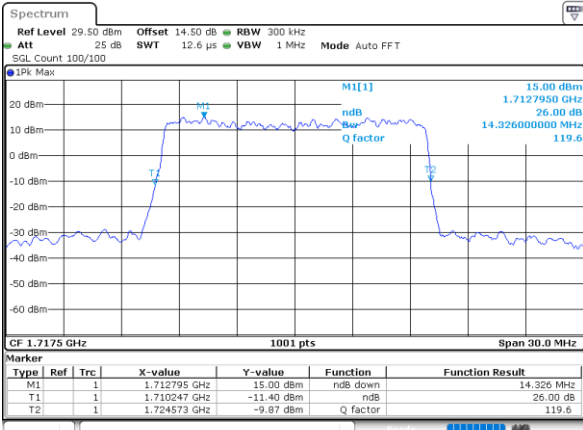


Date: 3.AUG.2021 12:22:21



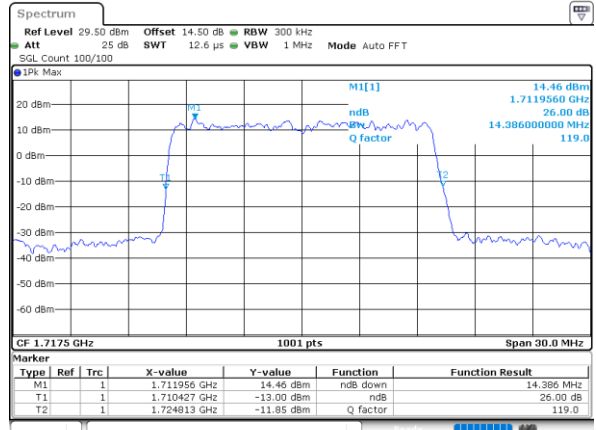
LTE Band 4

Lowest Channel / 15MHz / QPSK



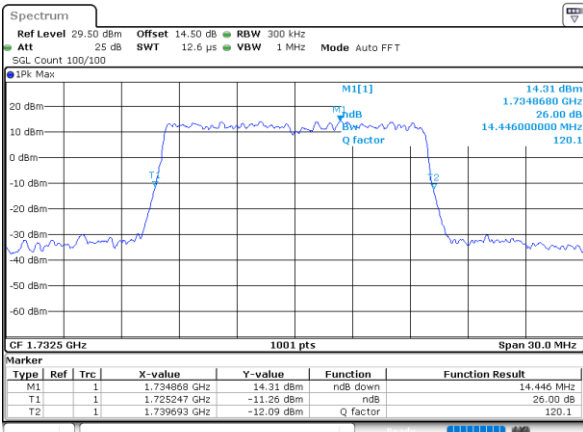
Date: 3.AUG.2021 12:32:22

Lowest Channel / 15MHz / 16QAM



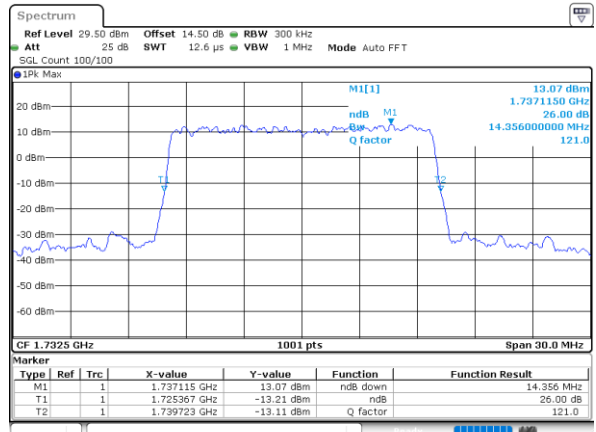
Date: 3.AUG.2021 12:32:33

Middle Channel / 15MHz / QPSK



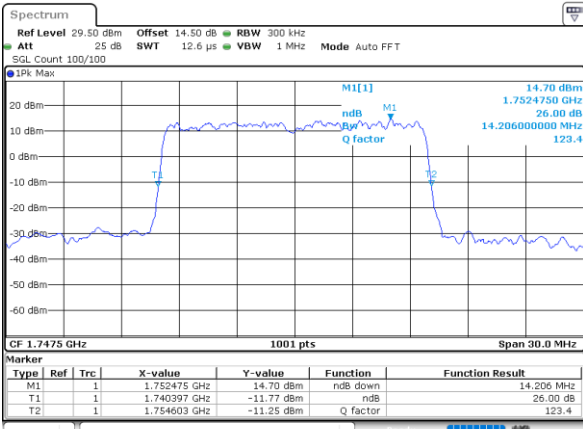
Date: 3.AUG.2021 14:39:58

Middle Channel / 15MHz / 16QAM



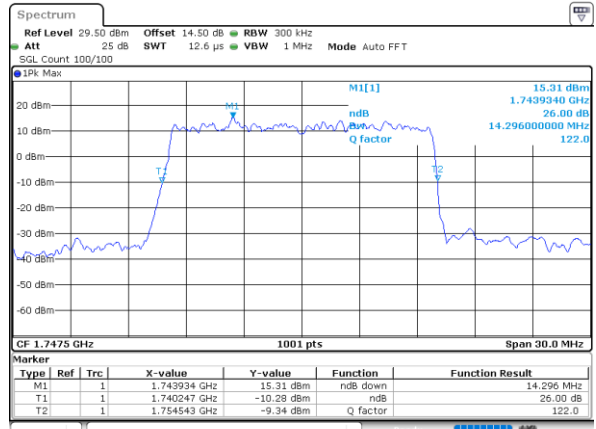
Date: 3.AUG.2021 14:40:09

Highest Channel / 15MHz / QPSK



Date: 3.AUG.2021 14:43:01

Highest Channel / 15MHz / 16QAM

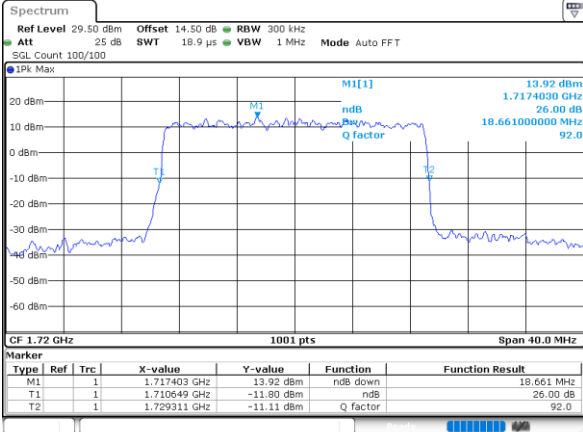


Date: 3.AUG.2021 14:43:12



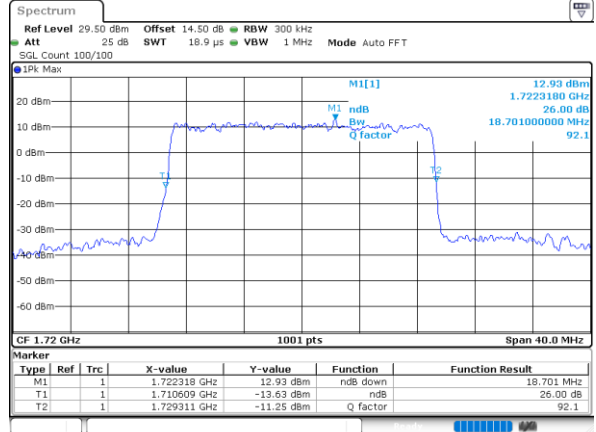
LTE Band 4

Lowest Channel / 20MHz / QPSK



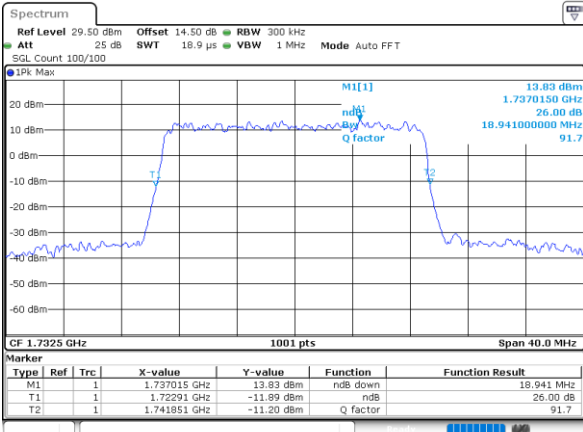
Date: 3.AUG.2021 14:53:01

Lowest Channel / 20MHz / 16QAM



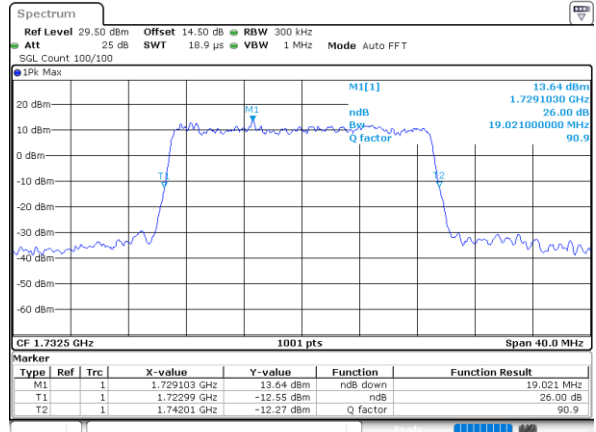
Date: 3.AUG.2021 14:53:12

Middle Channel / 20MHz / QPSK



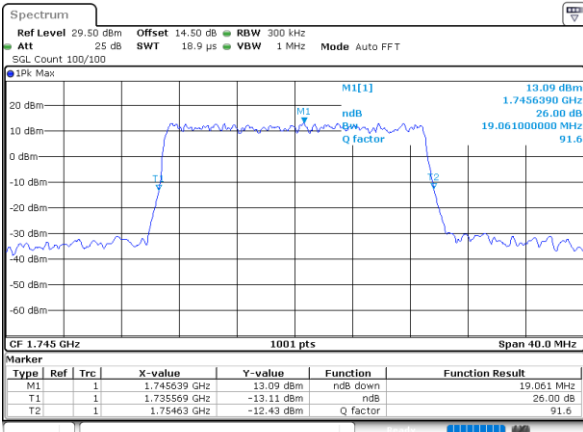
Date: 3.AUG.2021 15:03:01

Middle Channel / 20MHz / 16QAM



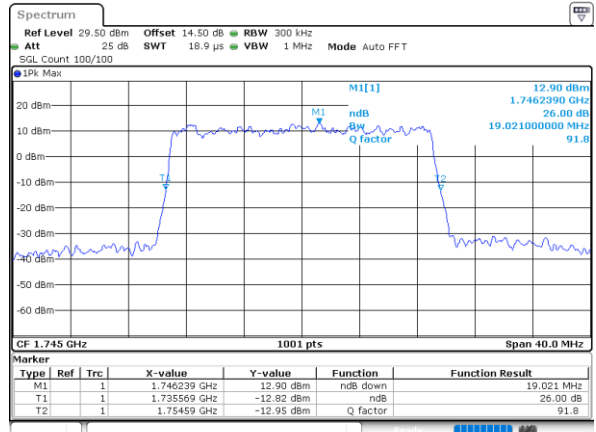
Date: 3.AUG.2021 15:03:13

Highest Channel / 20MHz / QPSK



Date: 3.AUG.2021 15:06:05

Highest Channel / 20MHz / 16QAM

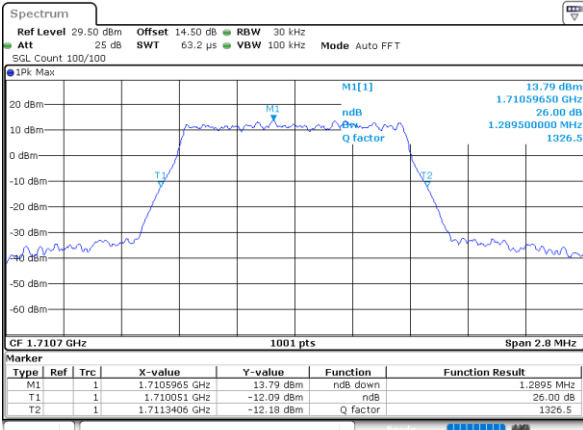


Date: 3.AUG.2021 15:06:16



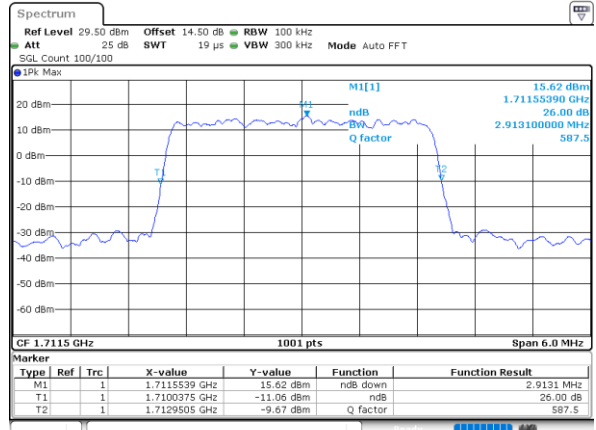
LTE Band 4

Lowest Channel / 1.4MHz / 64QAM



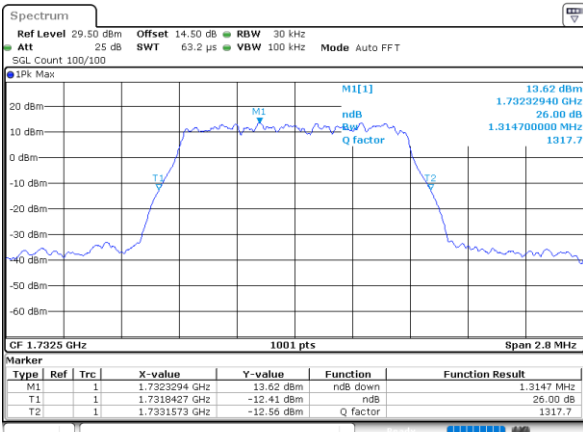
Date: 3.AUG.2021 16:13:29

Lowest Channel / 3MHz / 64QAM



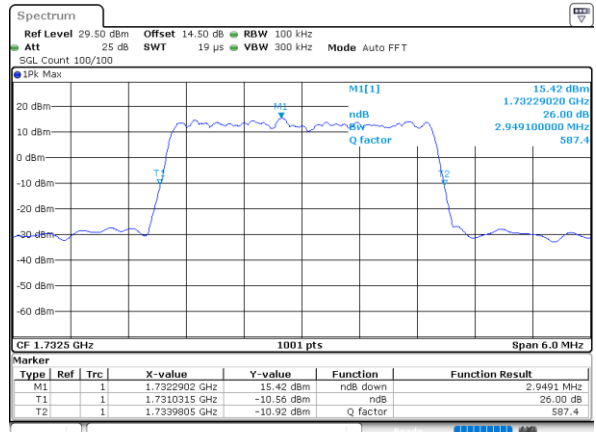
Date: 3.AUG.2021 15:15:54

Middle Channel / 1.4MHz / 64QAM



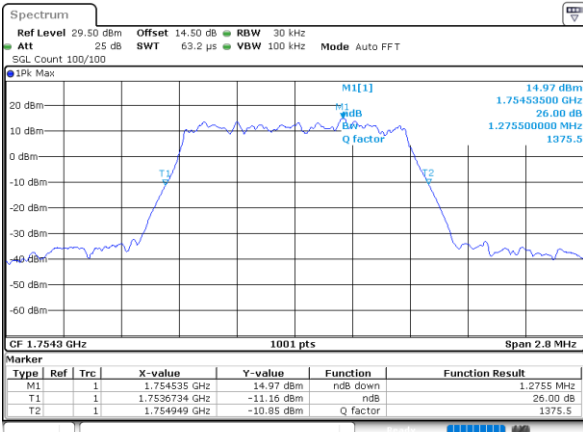
Date: 3.AUG.2021 16:23:03

Middle Channel / 3MHz / 64QAM



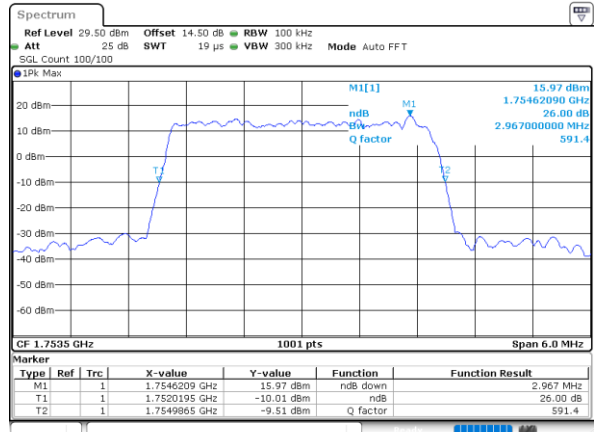
Date: 3.AUG.2021 15:20:54

Highest Channel / 1.4MHz / 64QAM



Date: 3.AUG.2021 16:24:34

Highest Channel / 3MHz / 64QAM

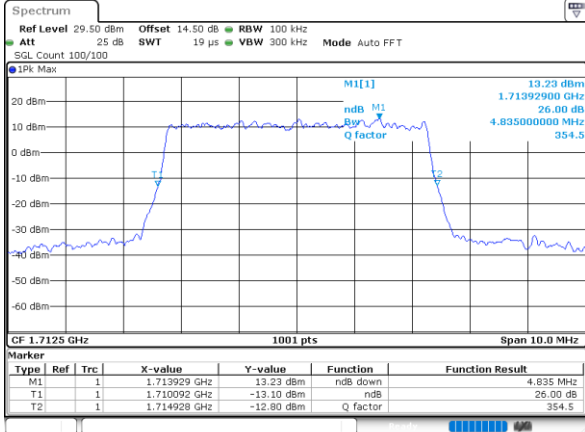


Date: 3.AUG.2021 15:22:26



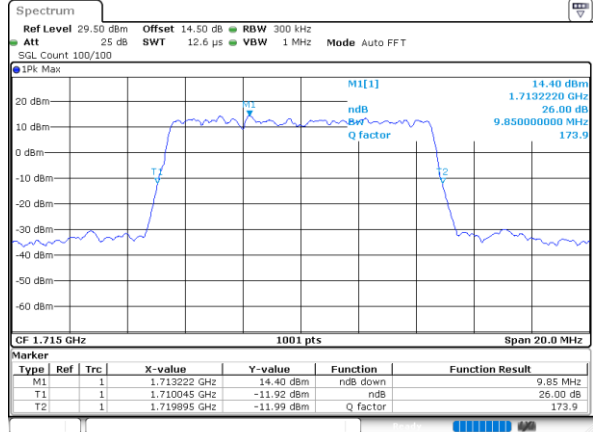
LTE Band 4

Lowest Channel / 5MHz / 64QAM



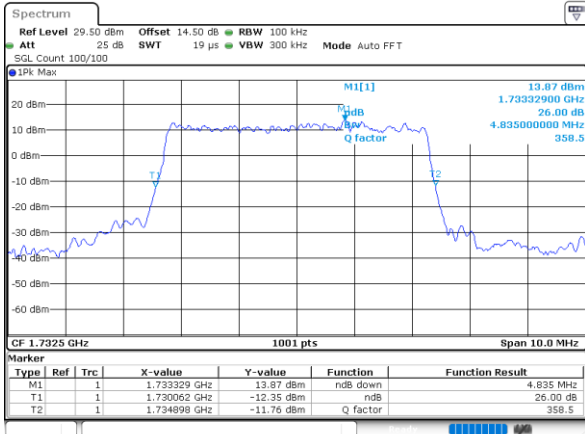
Date: 3,AUG,2021 15:27:25

Lowest Channel / 10MHz / 64QAM



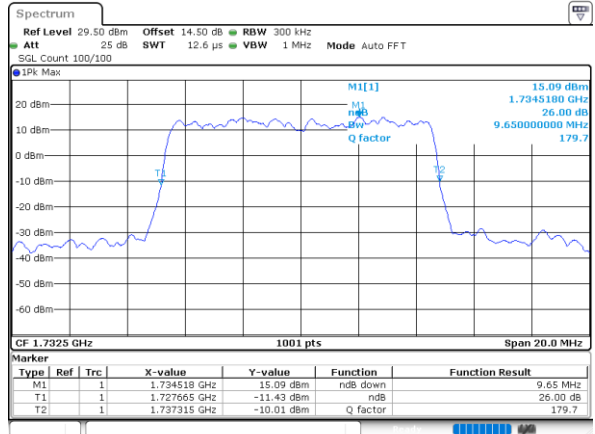
Date: 3,AUG,2021 15:38:57

Middle Channel / 5MHz / 64QAM



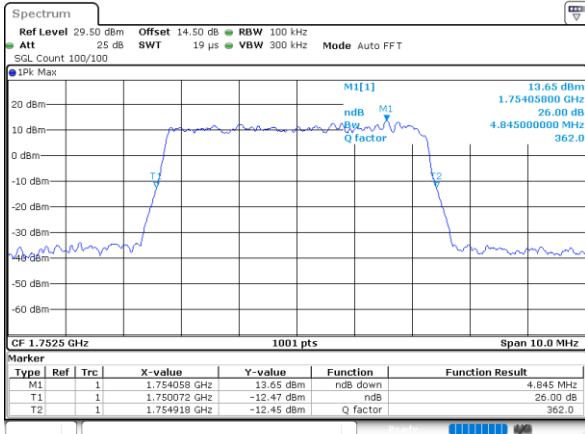
Date: 3,AUG,2021 15:32:25

Middle Channel / 10MHz / 64QAM



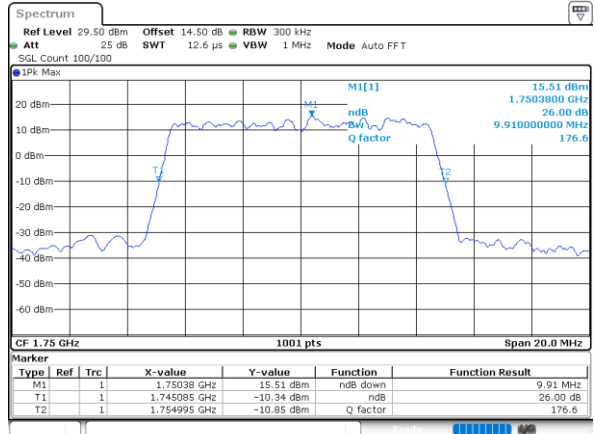
Date: 3,AUG,2021 15:43:56

Highest Channel / 5MHz / 64QAM



Date: 3,AUG,2021 15:33:57

Highest Channel / 10MHz / 64QAM



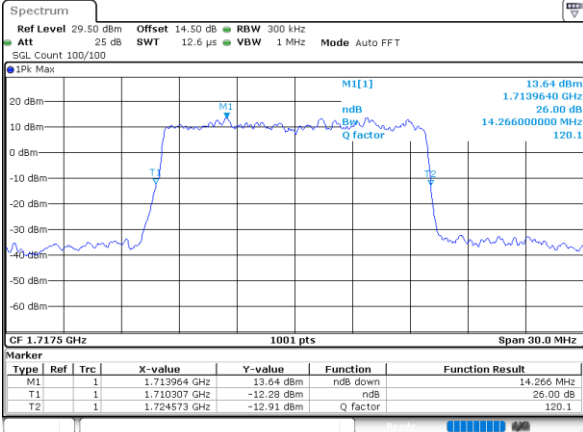
Date: 3,AUG,2021 15:45:27





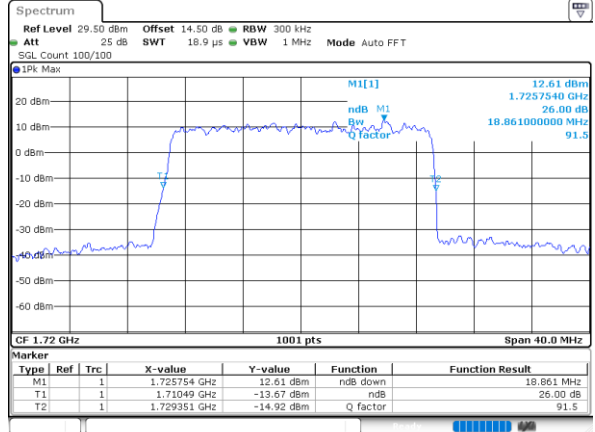
LTE Band 4

Lowest Channel / 15MHz / 64QAM



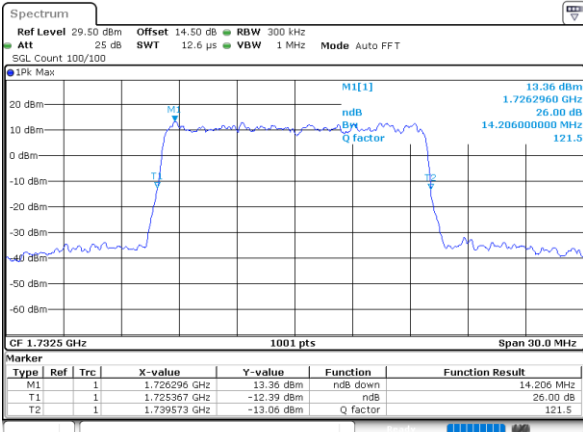
Date: 3.AUG.2021 15:50:27

Lowest Channel / 20MHz / 64QAM



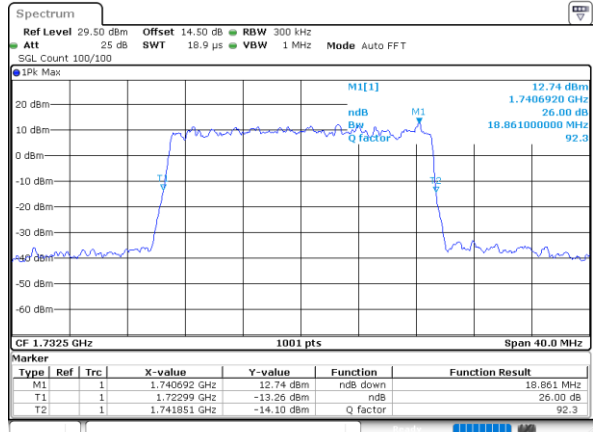
Date: 3.AUG.2021 16:01:57

Middle Channel / 15MHz / 64QAM



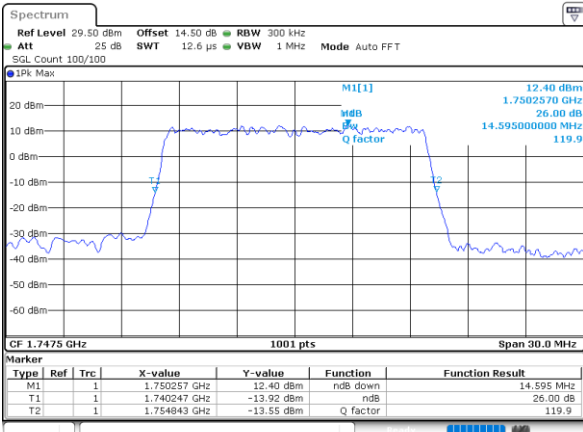
Date: 3.AUG.2021 15:55:26

Middle Channel / 20MHz / 64QAM



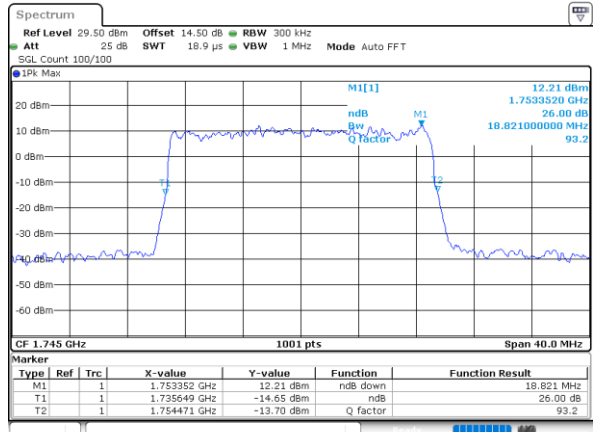
Date: 3.AUG.2021 16:06:57

Highest Channel / 15MHz / 64QAM



Date: 3.AUG.2021 15:56:58

Highest Channel / 20MHz / 64QAM



Date: 3.AUG.2021 16:08:29



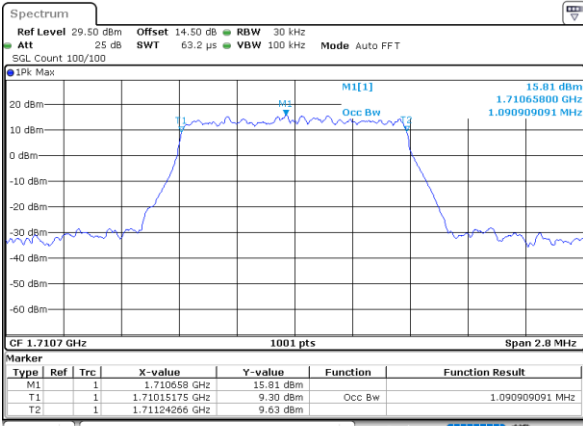
Occupied Bandwidth

| 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                     | 1.08  | 2.71  | 2.71  | 4.49  | 4.48  | 9.01  | 9.03  | 13.46 | 13.43 | 17.86 | 17.90 |
| Middle CH  | 1.09                     | 1.09  | 2.72  | 2.70  | 4.49  | 4.48  | 8.97  | 9.01  | 13.43 | 13.46 | 17.94 | 17.90 |
| Highest CH | 1.09                     | 1.09  | 2.70  | 2.70  | 4.50  | 4.48  | 9.09  | 9.03  | 13.43 | 13.43 | 17.86 | 17.82 |
| Mode       | LTE Band 4 : 99%OBW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                   |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                    |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.10                     | -     | 2.69  | -     | 4.48  | -     | 9.01  | -     | 13.43 | -     | 17.90 | -     |
| Middle CH  | 1.10                     | -     | 2.70  | -     | 4.50  | -     | 9.09  | -     | 13.46 | -     | 17.90 | -     |
| Highest CH | 1.09                     | -     | 2.69  | -     | 4.50  | -     | 9.07  | -     | 13.46 | -     | 17.86 | -     |



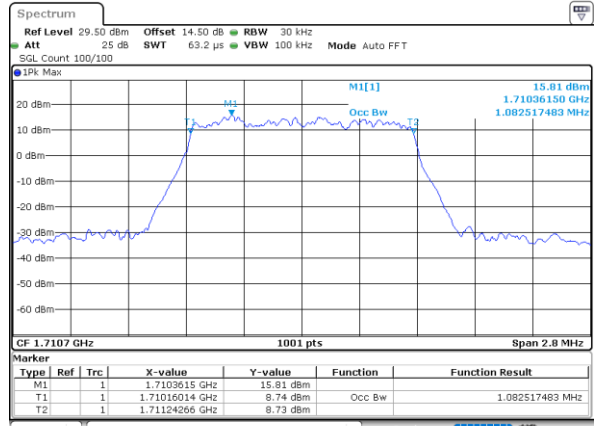
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



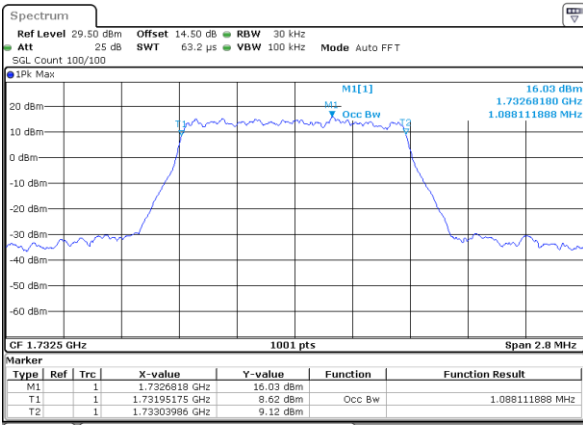
Date: 3.AUG.2021 16:29:23

Lowest Channel / 1.4MHz / 16QAM



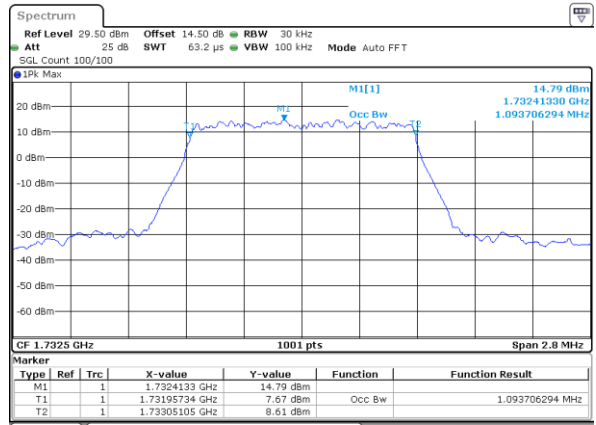
Date: 3.AUG.2021 16:29:34

Middle Channel / 1.4MHz / QPSK



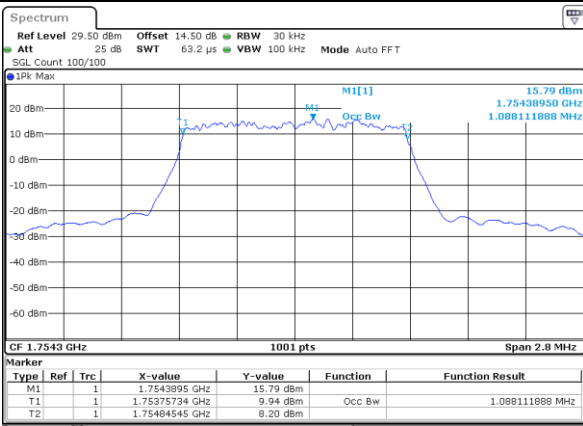
Date: 3.AUG.2021 16:39:22

Middle Channel / 1.4MHz / 16QAM



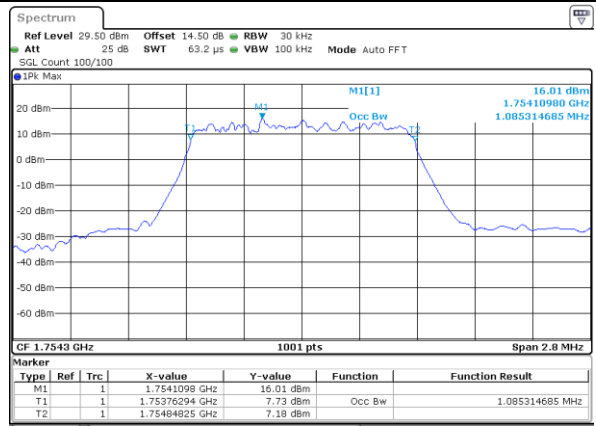
Date: 3.AUG.2021 16:39:33

Highest Channel / 1.4MHz / QPSK



Date: 3.AUG.2021 16:42:25

Highest Channel / 1.4MHz / 16QAM

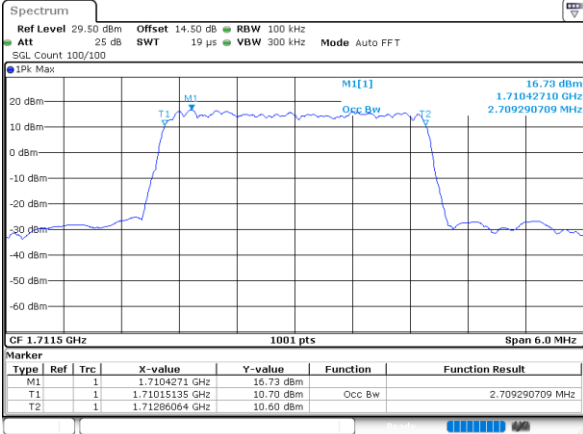


Date: 3.AUG.2021 16:42:36



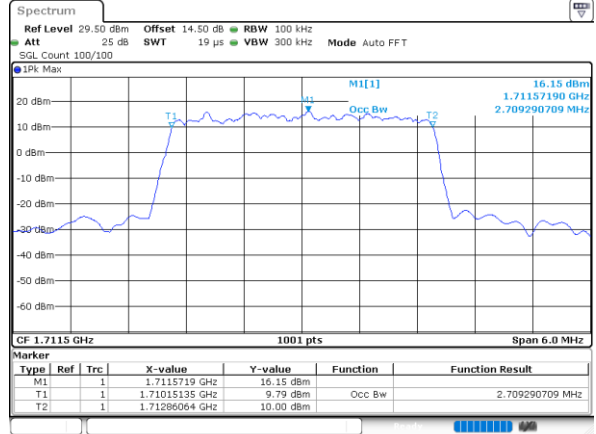
LTE Band 4

Lowest Channel / 3MHz / QPSK



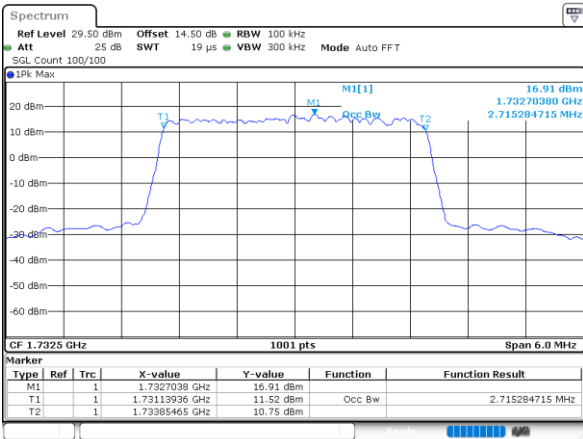
Date: 3.AUG.2021 11:21:17

Lowest Channel / 3MHz / 16QAM



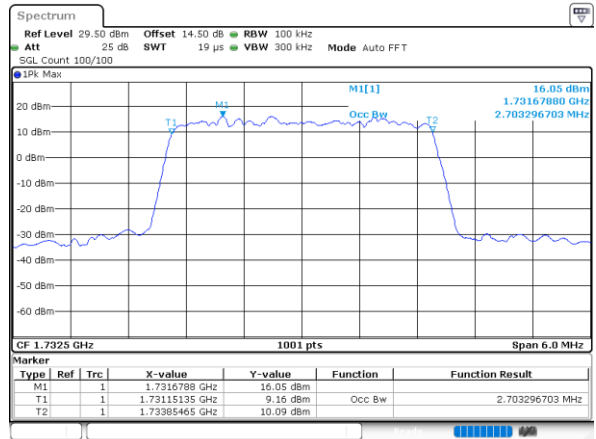
Date: 3.AUG.2021 11:21:45

Middle Channel / 3MHz / QPSK



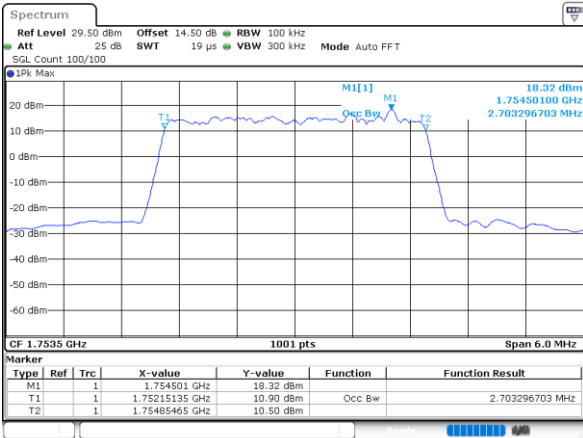
Date: 3.AUG.2021 11:31:34

Middle Channel / 3MHz / 16QAM



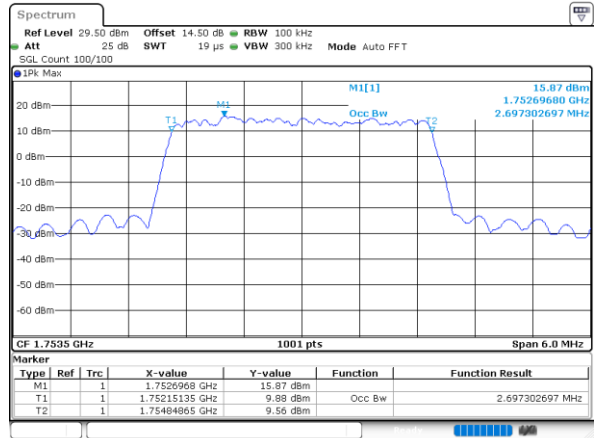
Date: 3.AUG.2021 11:31:45

Highest Channel / 3MHz / QPSK



Date: 3.AUG.2021 11:34:37

Highest Channel / 3MHz / 16QAM



Date: 3.AUG.2021 11:34:49