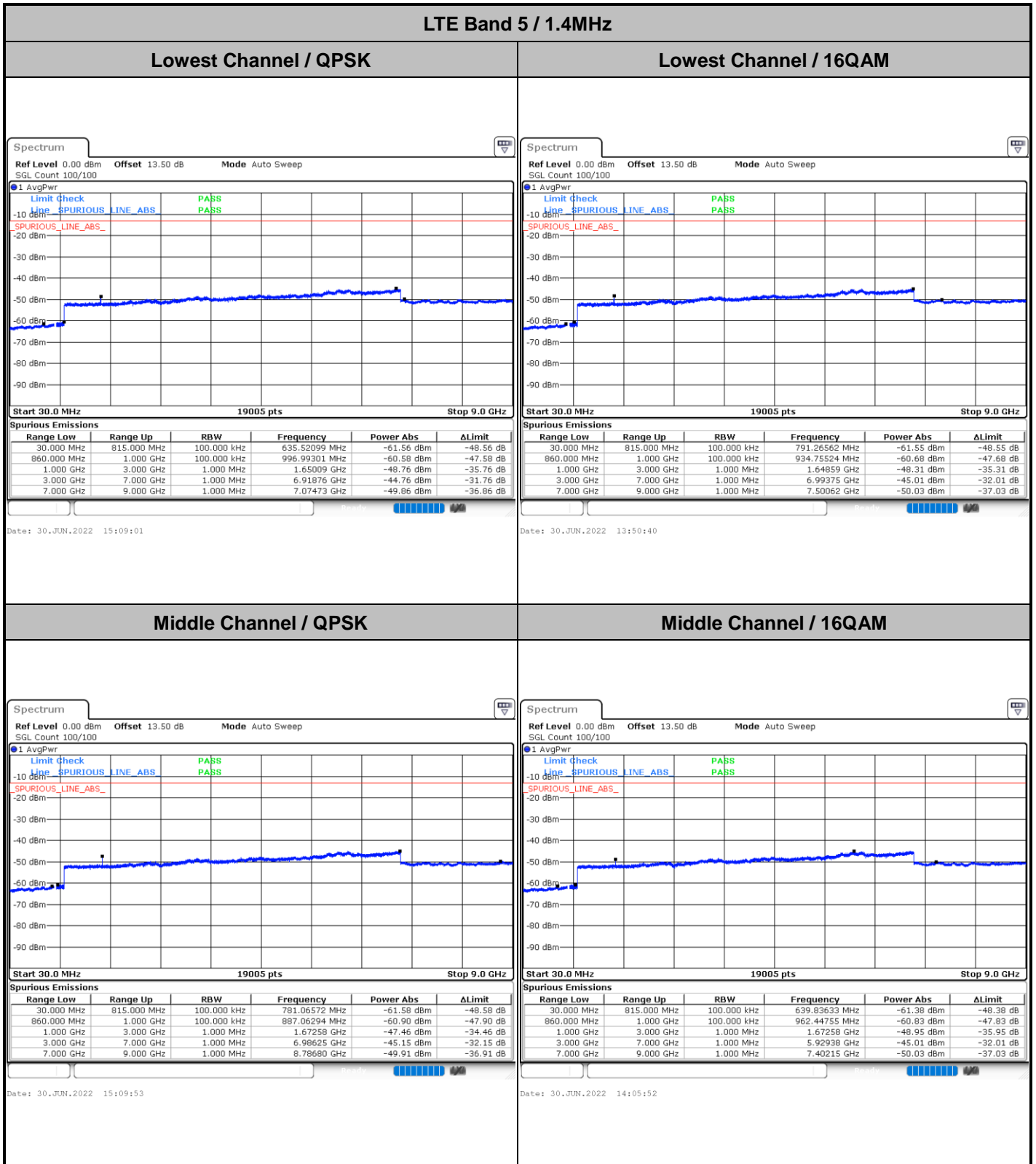




Conducted Spurious Emission

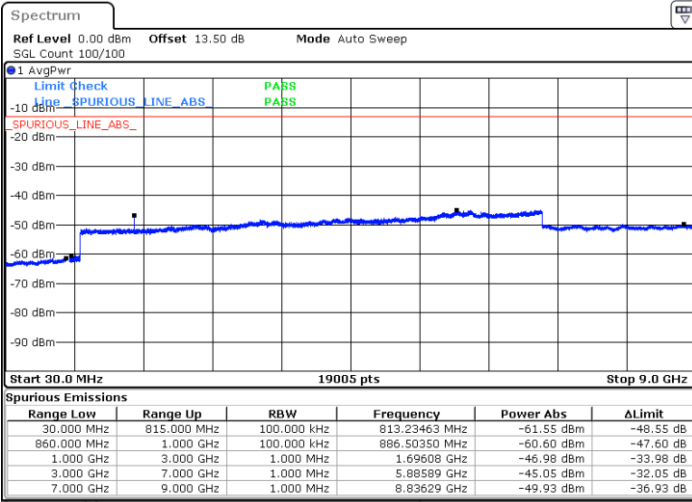




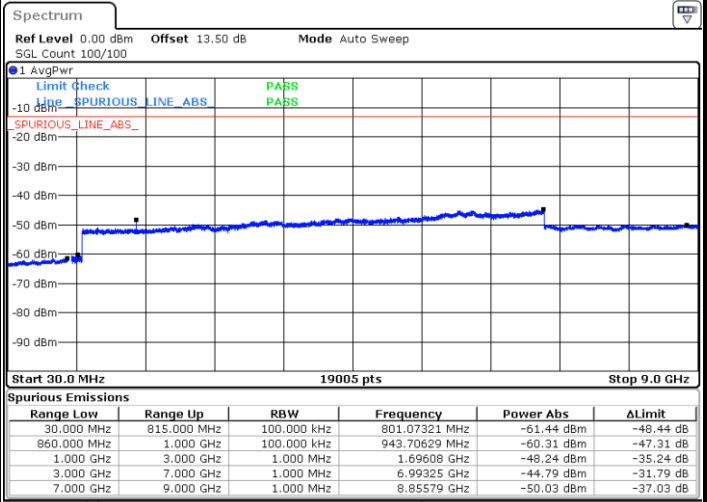
LTE Band 5 / 1.4MHz

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 30 JUN.2022 15:10:46

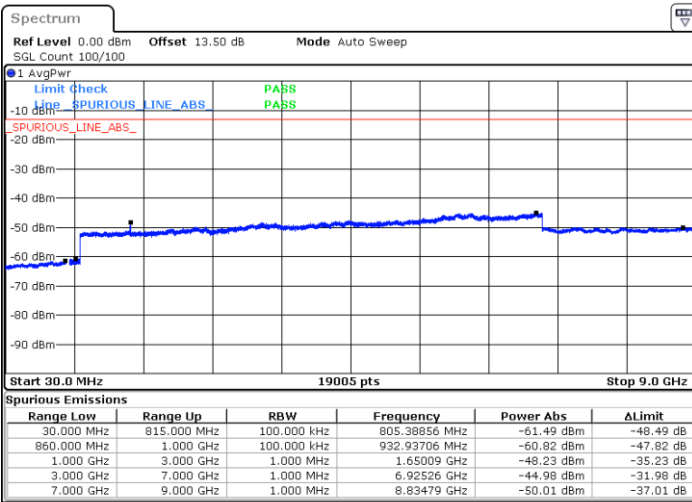


Date: 30 JUN.2022 14:16:44

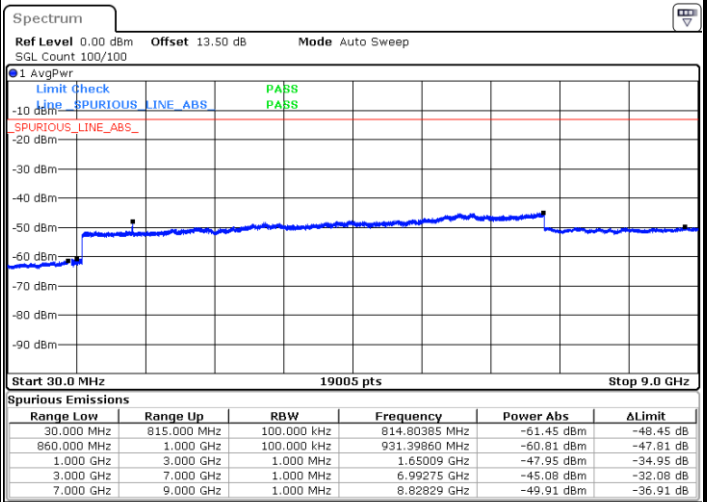
LTE Band 5 / 3MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 30 JUN.2022 14:53:31



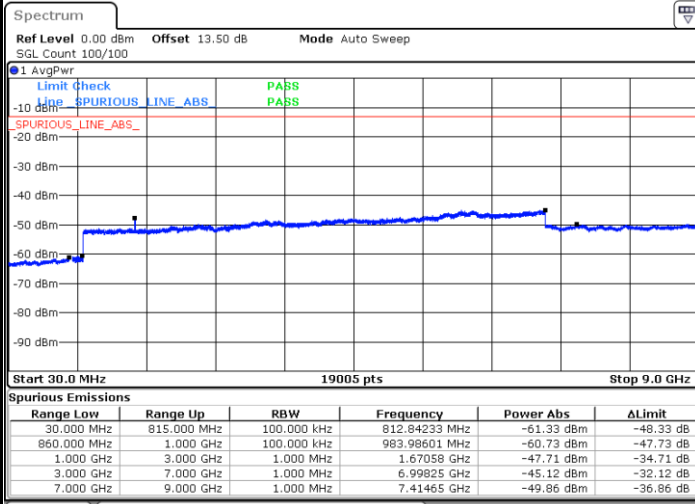
Date: 30 JUN.2022 11:43:22



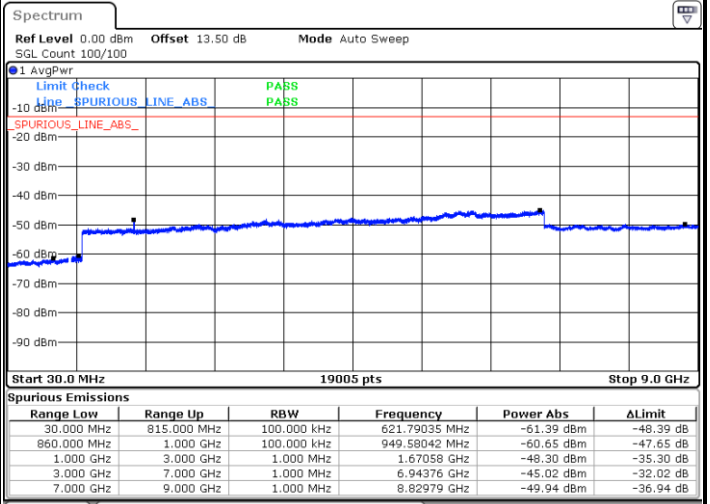
LTE Band 5 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM



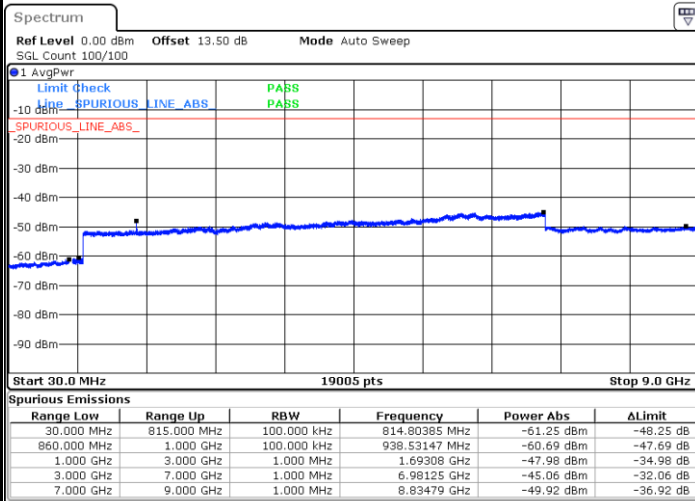
Date: 30.JUN.2022 14:54:23



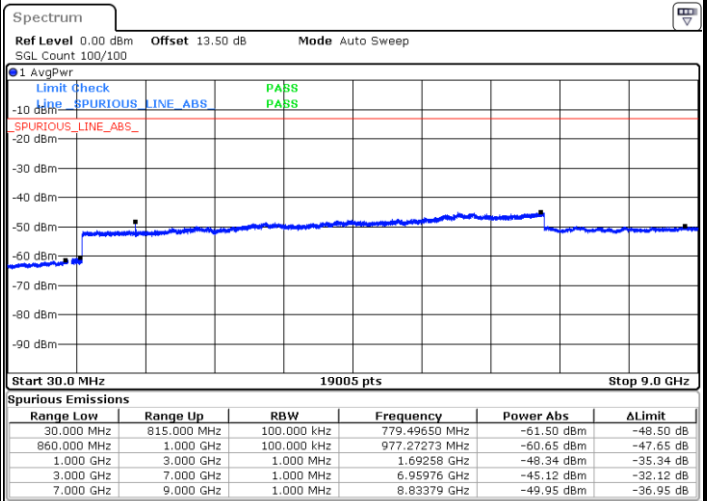
Date: 30.JUN.2022 11:44:53

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 30.JUN.2022 14:55:16



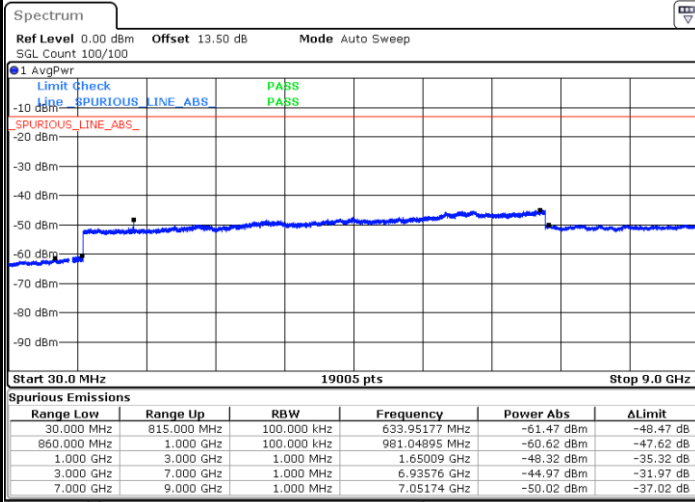
Date: 30.JUN.2022 11:50:10



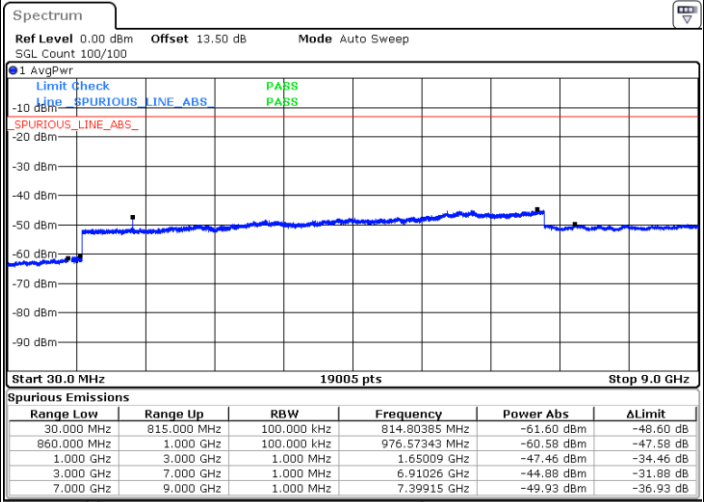
LTE Band 5 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



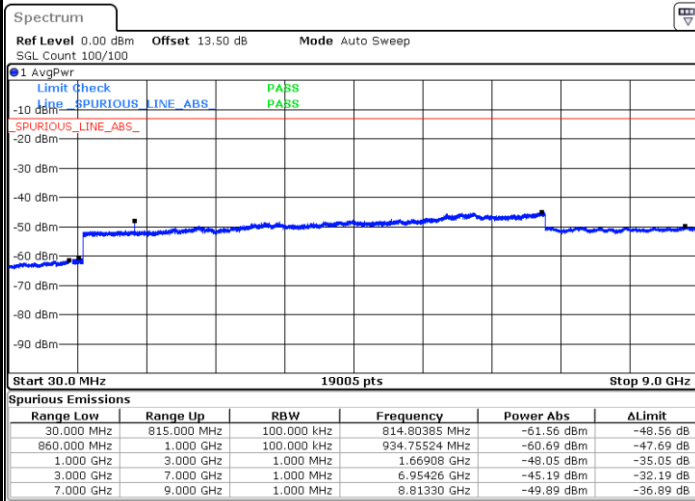
Date: 30.JUN.2022 14:56:09



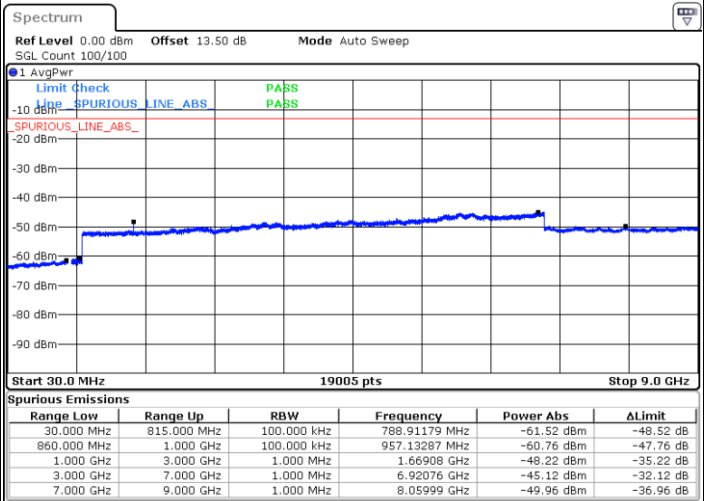
Date: 30.JUN.2022 11:55:27

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 30.JUN.2022 14:57:02

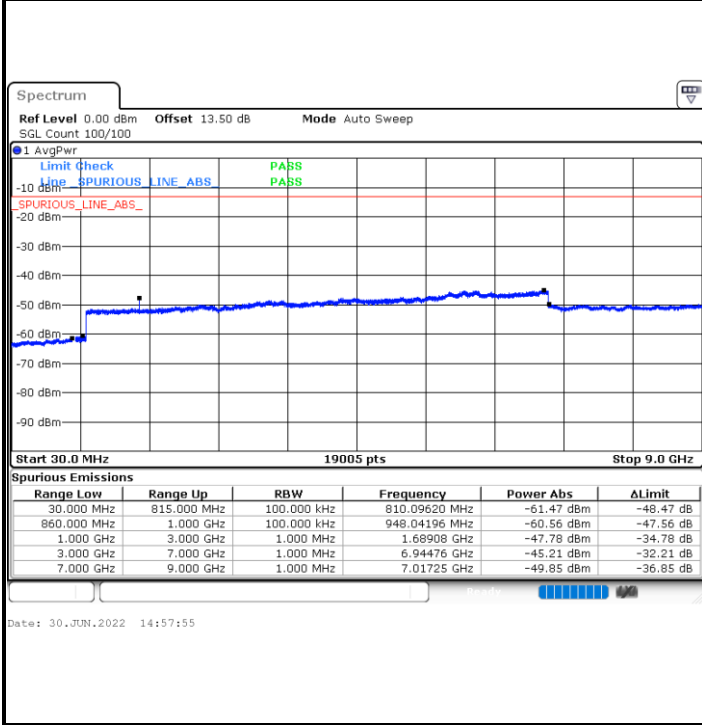


Date: 30.JUN.2022 11:56:58

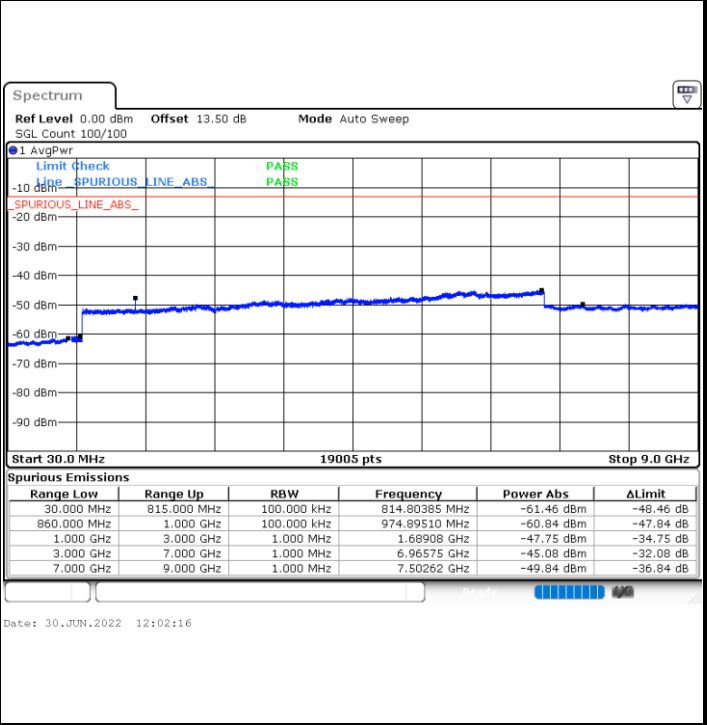


LTE Band 5 / 5MHz

Highest Channel / QPSK

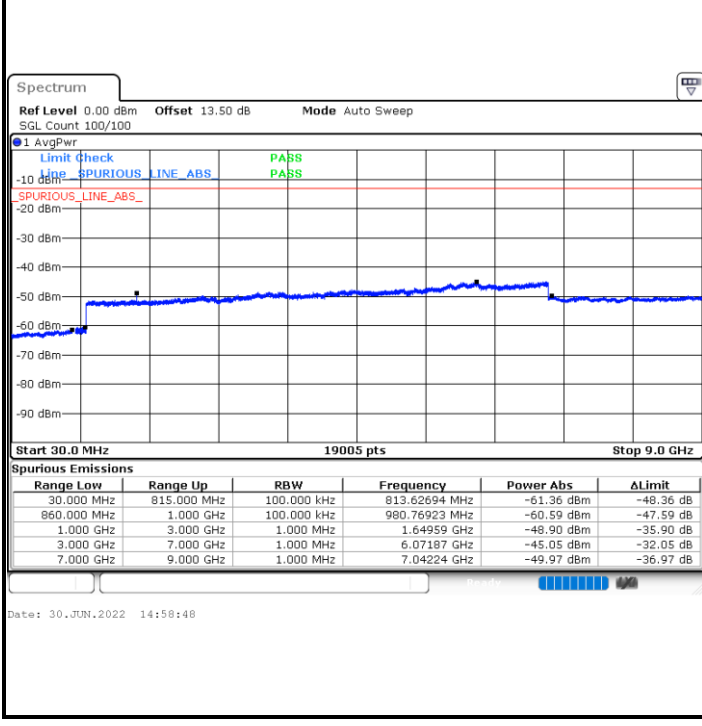


Highest Channel / 16QAM

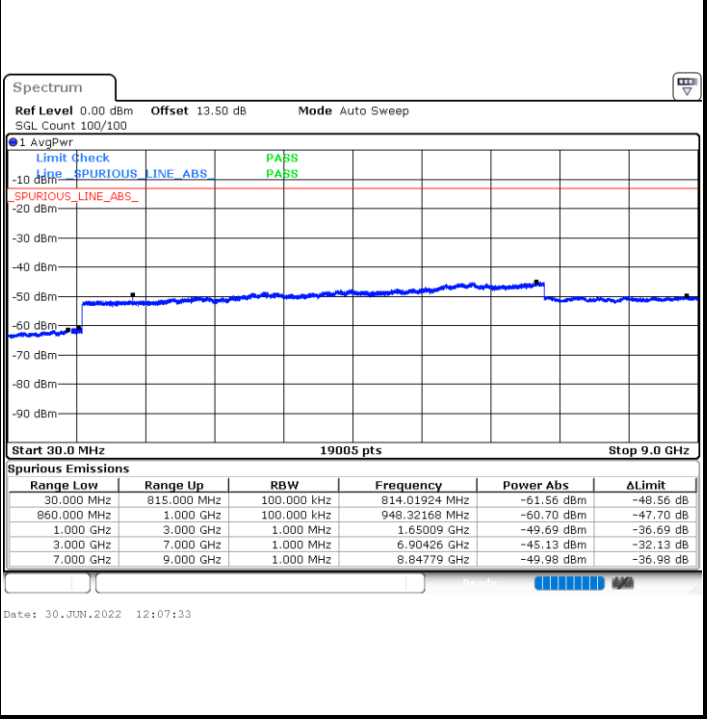


LTE Band 5 / 10MHz

Lowest Channel / QPSK



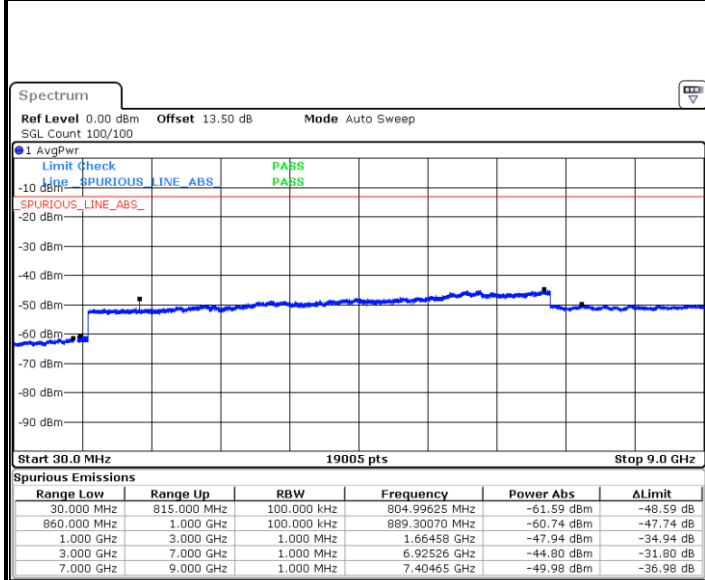
Lowest Channel / 16QAM





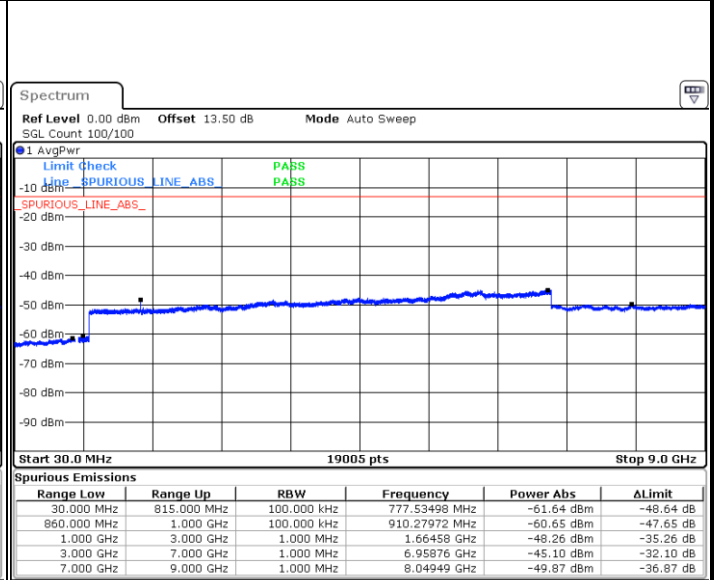
LTE Band 5 / 10MHz

Middle Channel / QPSK



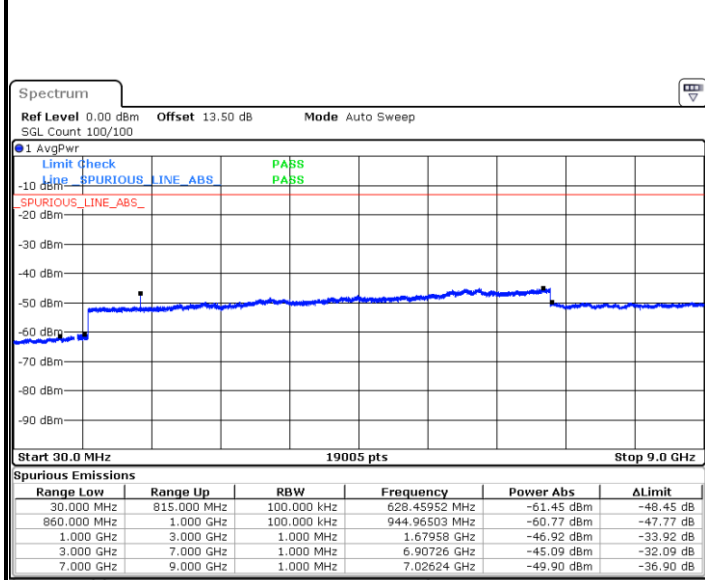
Date: 30 JUN.2022 14:59:41

Middle Channel / 16QAM



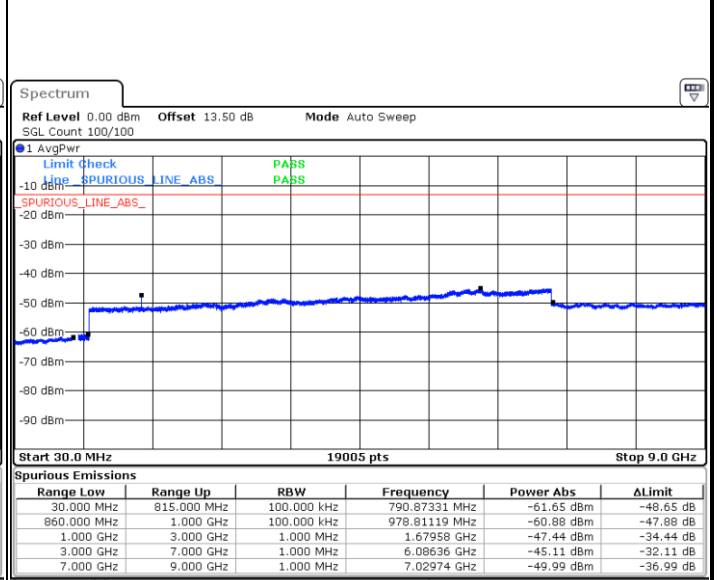
Date: 30 JUN.2022 12:09:04

Highest Channel / QPSK



Date: 30 JUN.2022 15:00:33

Highest Channel / 16QAM



Date: 30 JUN.2022 12:14:21



Frequency Stability

| Test Conditions | | LTE Band 5 (QPSK) / Middle Channel | Limit |
|------------------|-----------------|------------------------------------|--------|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | 2.5ppm |
| | | Deviation (ppm) | Result |
| 70 | Normal Voltage | 0.0022 | PASS |
| 60 | Normal Voltage | 0.0020 | |
| 50 | Normal Voltage | 0.0022 | |
| 40 | Normal Voltage | 0.0020 | |
| 30 | Normal Voltage | 0.0011 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0022 | |
| 0 | Normal Voltage | 0.0007 | |
| -10 | Normal Voltage | 0.0013 | |
| -20 | Normal Voltage | 0.0002 | |
| -30 | Normal Voltage | 0.0011 | |
| 20 | Maximum Voltage | 0.0012 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Minimum Voltage | 0.0013 | |

Note:

1. Normal Voltage =3.7 V. ; Minimum Voltage =3.4 V. ; Maximum Voltage =4.2 V.



LTE Band 12

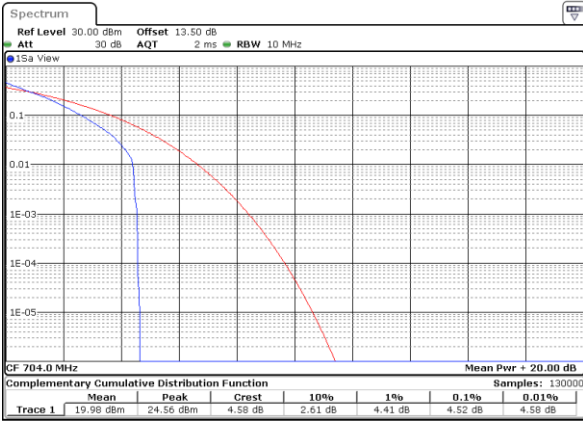
Peak-to-Average Ratio

| Mode | LTE Band 12 / 10MHz | | | | |
|------------|---------------------|---------|-------|---------|-------------|
| Mod. | QPSK | | 16QAM | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | 4.52 | 4.96 | 5.51 | 5.83 | PASS |
| Middle CH | 4.49 | 4.99 | 5.42 | 5.97 | |
| Highest CH | 4.52 | 4.87 | 5.22 | 5.91 | |



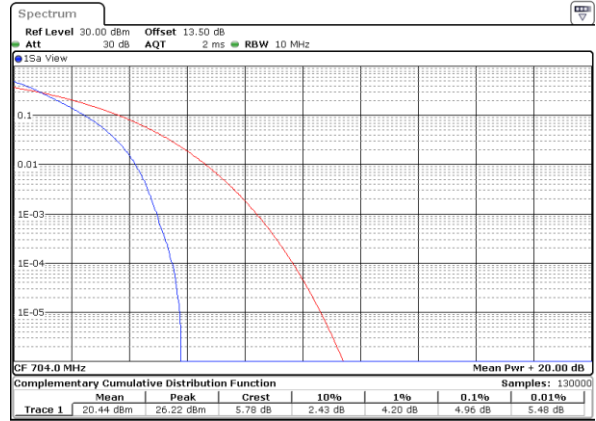
LTE Band 12 / 10MHz / QPSK

Lowest Channel / 1RB



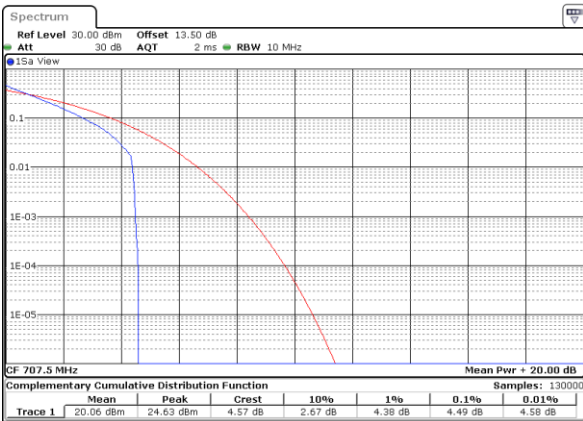
Date: 30 JUN 2022 17:35:12

Lowest Channel / Full RB



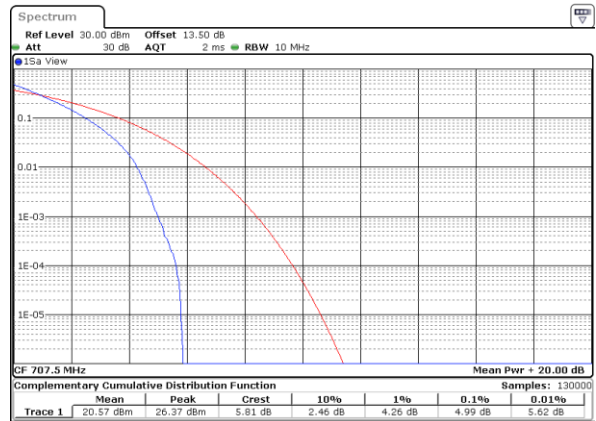
Date: 30 JUN 2022 17:34:46

Middle Channel / 1RB



Date: 30 JUN 2022 17:35:08

Middle Channel / Full RB



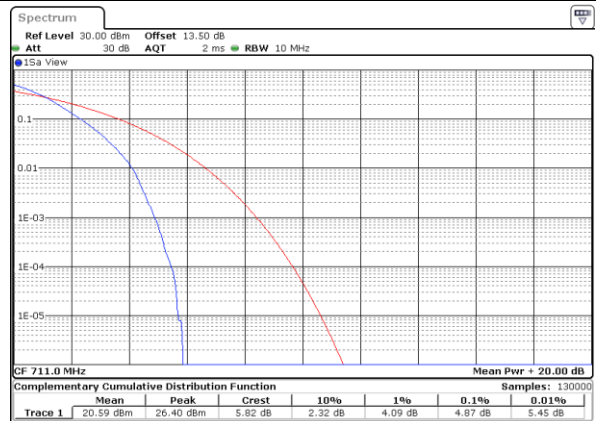
Date: 30 JUN 2022 17:36:03

Highest Channel / 1RB



Date: 30 JUN 2022 17:36:55

Highest Channel / Full RB

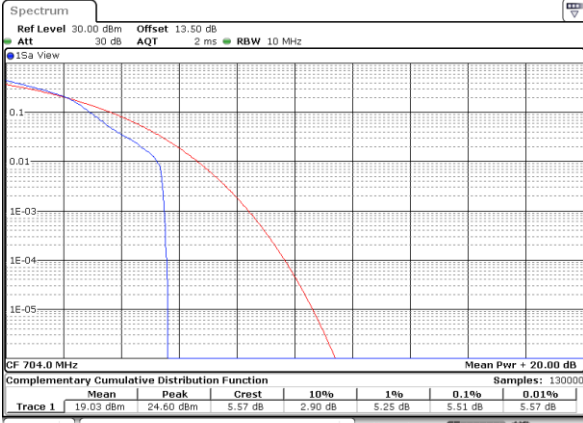


Date: 30 JUN 2022 17:36:29



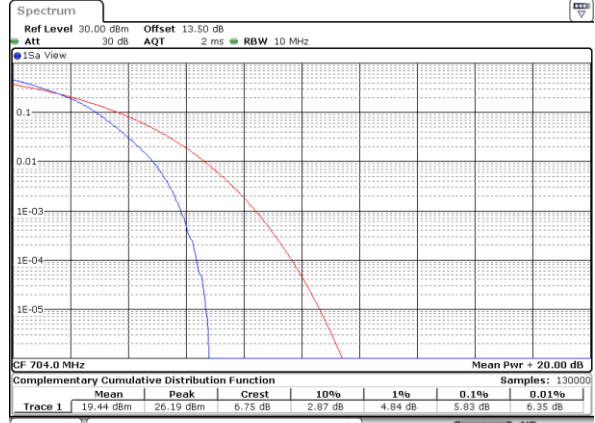
LTE Band 12 / 10MHz / 16QAM

Lowest Channel / 1RB



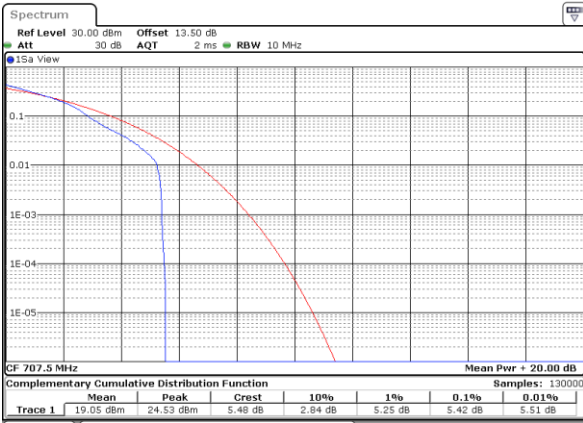
Date: 30 JUN 2022 17:32:10

Lowest Channel / Full RB



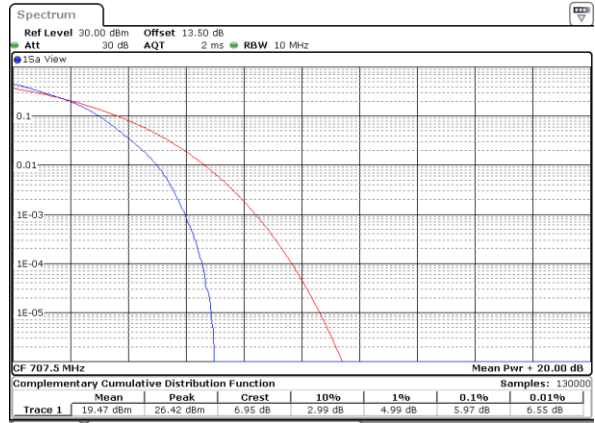
Date: 30 JUN 2022 17:32:12

Middle Channel / 1RB



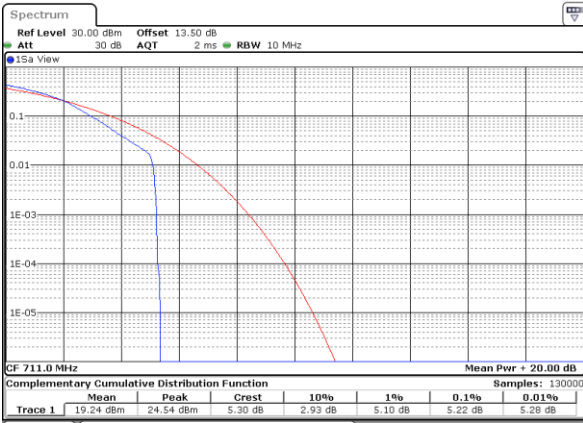
Date: 30 JUN 2022 17:33:03

Middle Channel / Full RB



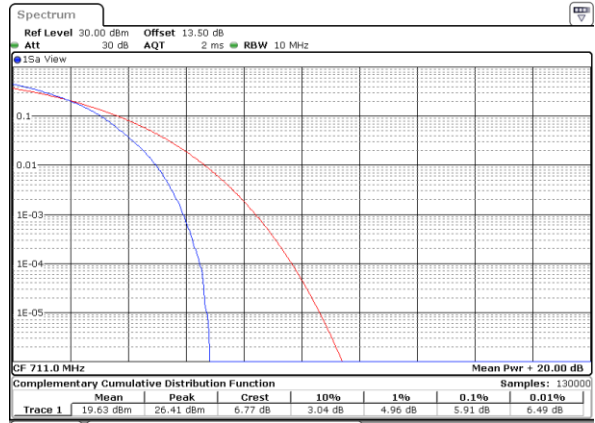
Date: 30 JUN 2022 17:33:29

Highest Channel / 1RB



Date: 30 JUN 2022 17:34:20

Highest Channel / Full RB



Date: 30 JUN 2022 17:33:54



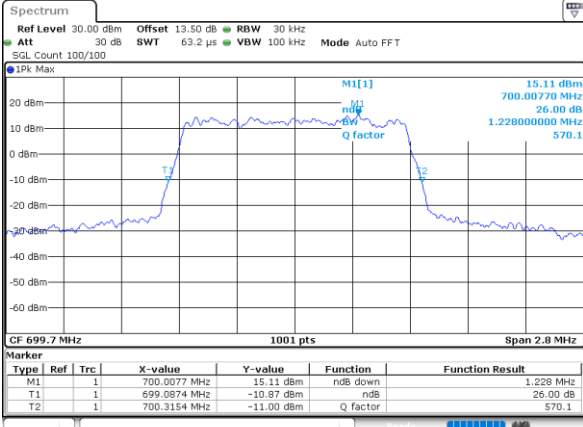
26dB Bandwidth

| Mode | LTE Band 12 : 26dB BW(MHz) | | | | | | | | | | | |
|------------|----------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| BW | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | 1.23 | 1.22 | 3.07 | 3.00 | 4.97 | 4.92 | 9.83 | 9.75 | - | - | - | - |
| Middle CH | 1.23 | 1.23 | 3.02 | 3.03 | 4.91 | 4.94 | 9.79 | 9.95 | - | - | - | - |
| Highest CH | 1.22 | 1.23 | 3.01 | 3.05 | 4.92 | 4.85 | 9.75 | 9.79 | - | - | - | - |



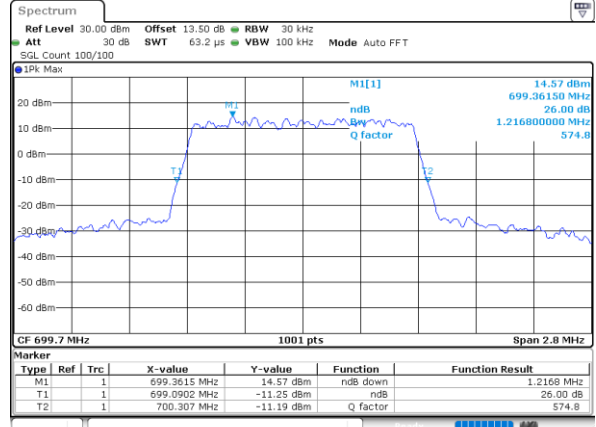
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



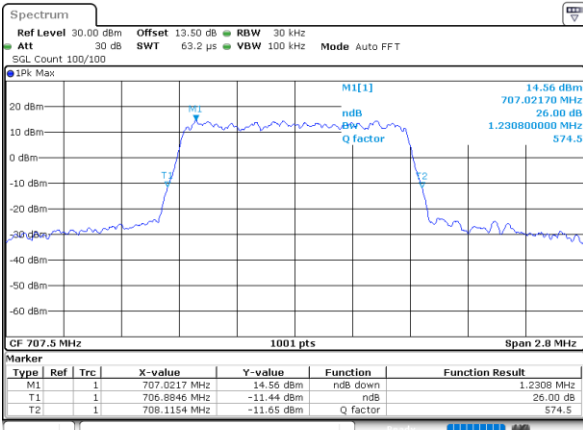
Date: 30 JUN 2022 17:15:42

Lowest Channel / 1.4MHz / 16QAM



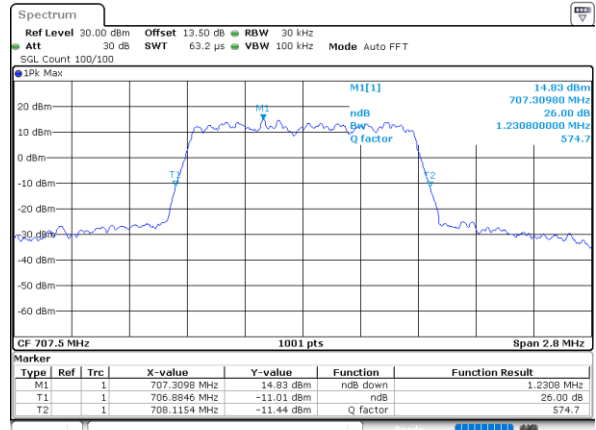
Date: 30 JUN 2022 17:15:18

Middle Channel / 1.4MHz / QPSK



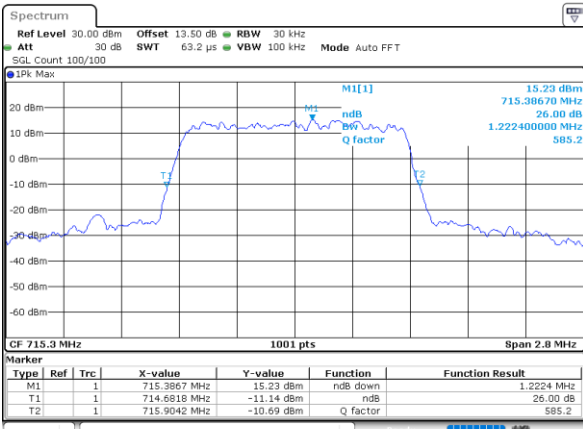
Date: 30 JUN 2022 17:22:23

Middle Channel / 1.4MHz / 16QAM



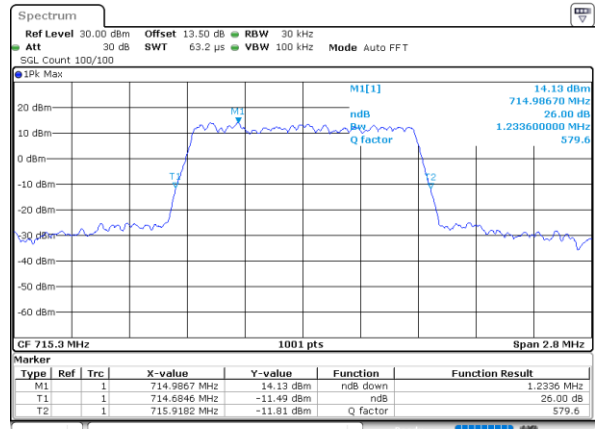
Date: 30 JUN 2022 17:22:46

Highest Channel / 1.4MHz / QPSK



Date: 30 JUN 2022 17:25:58

Highest Channel / 1.4MHz / 16QAM

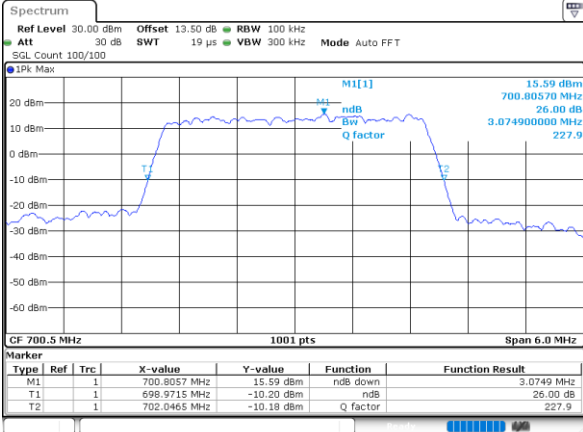


Date: 30 JUN 2022 17:25:34



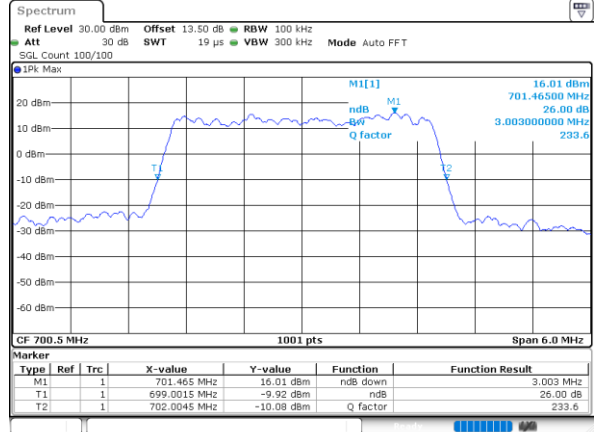
LTE Band 12

Lowest Channel / 3MHz / QPSK



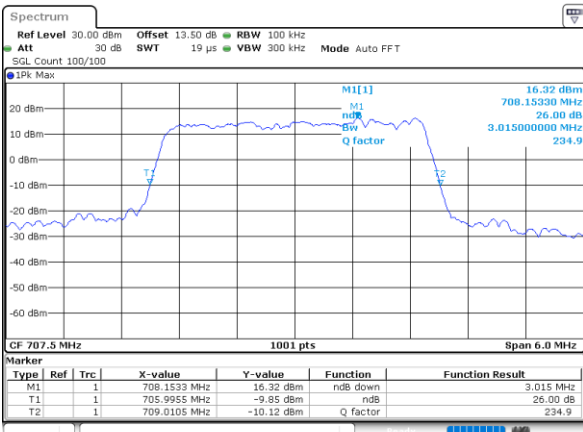
Date: 30 JUN 2022 16:18:50

Lowest Channel / 3MHz / 16QAM



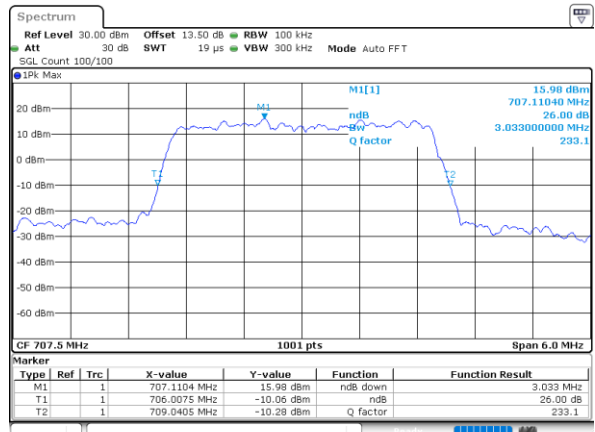
Date: 30 JUN 2022 16:18:26

Middle Channel / 3MHz / QPSK



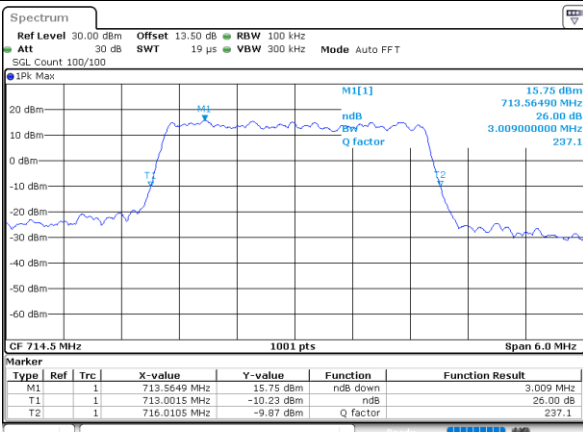
Date: 30 JUN 2022 16:25:01

Middle Channel / 3MHz / 16QAM



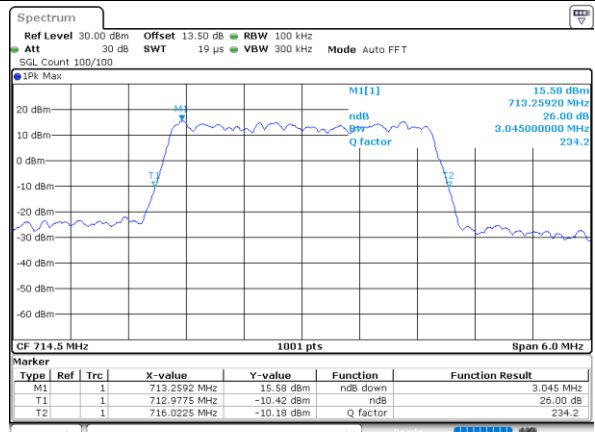
Date: 30 JUN 2022 16:25:54

Highest Channel / 3MHz / QPSK



Date: 30 JUN 2022 16:29:05

Highest Channel / 3MHz / 16QAM

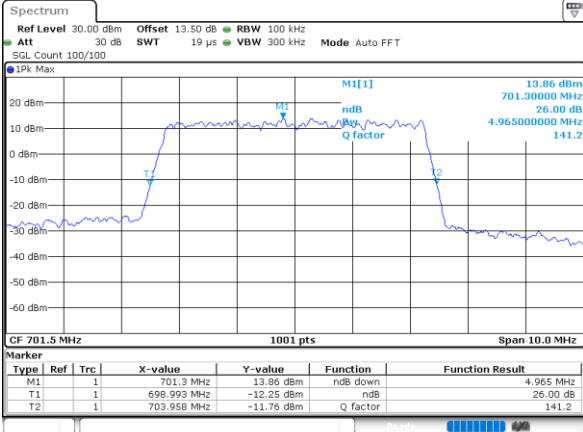


Date: 30 JUN 2022 16:28:41



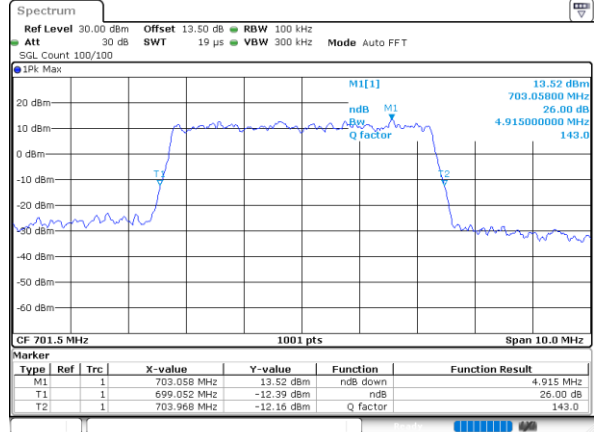
LTE Band 12

Lowest Channel / 5MHz / QPSK



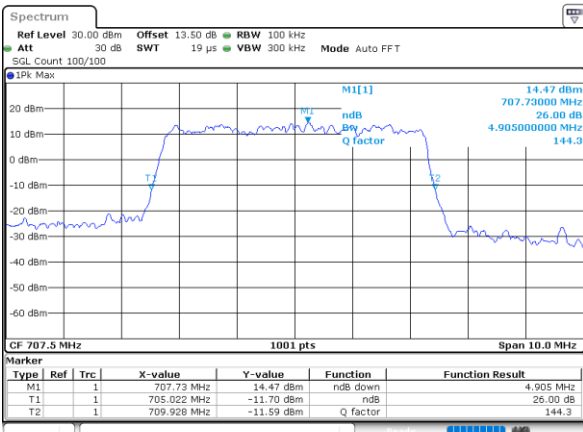
Date: 30 JUN 2022 16:36:20

Lowest Channel / 5MHz / 16QAM



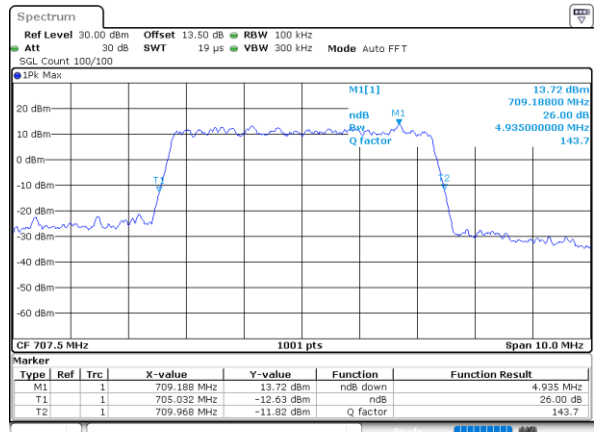
Date: 30 JUN 2022 16:35:57

Middle Channel / 5MHz / QPSK



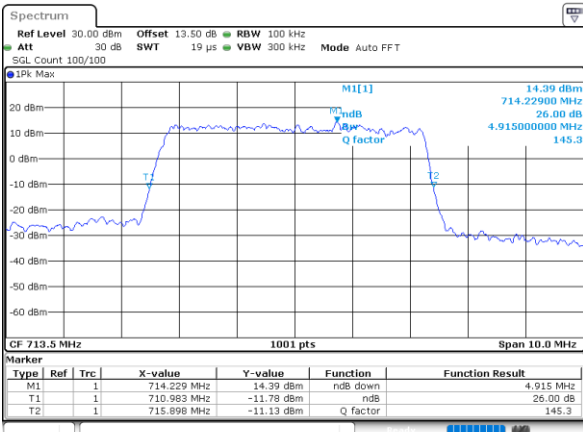
Date: 30 JUN 2022 16:43:01

Middle Channel / 5MHz / 16QAM



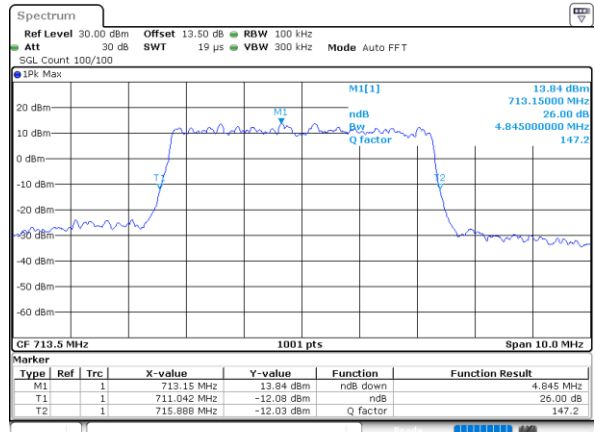
Date: 30 JUN 2022 16:43:25

Highest Channel / 5MHz / QPSK



Date: 30 JUN 2022 16:46:35

Highest Channel / 5MHz / 16QAM

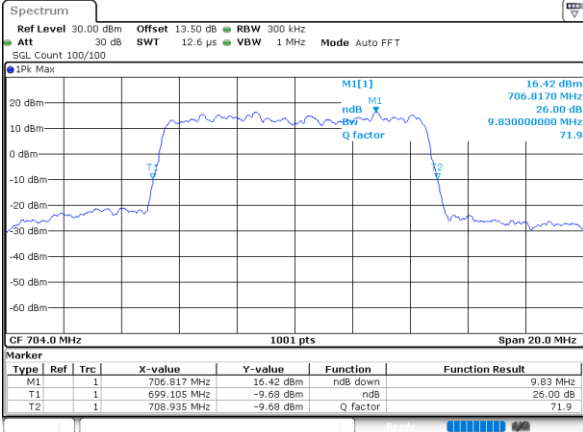


Date: 30 JUN 2022 16:46:12



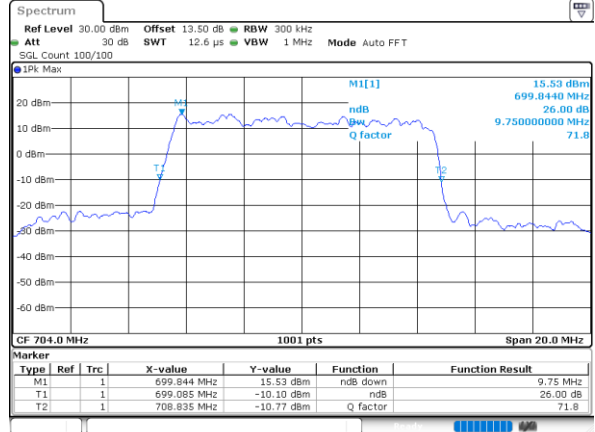
LTE Band 12

Lowest Channel / 10MHz / QPSK



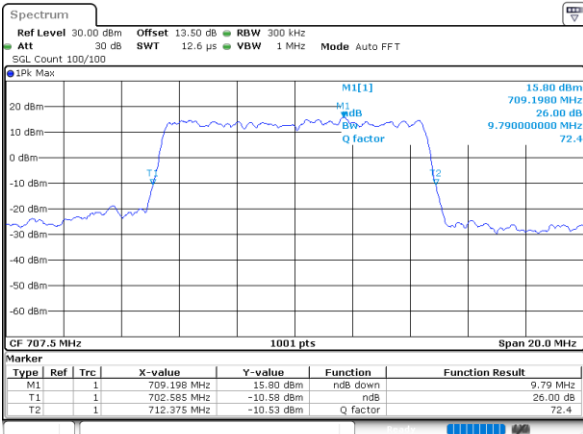
Date: 30 JUN 2022 16:53:51

Lowest Channel / 10MHz / 16QAM



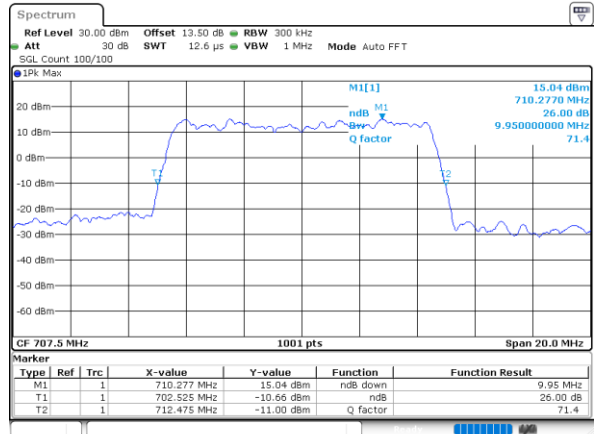
Date: 30 JUN 2022 16:53:27

Middle Channel / 10MHz / QPSK



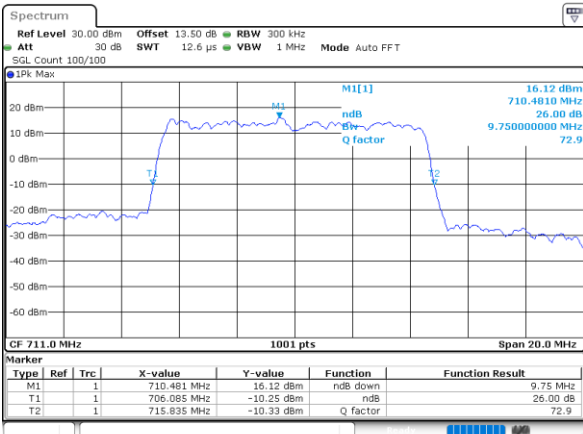
Date: 30 JUN 2022 17:00:32

Middle Channel / 10MHz / 16QAM



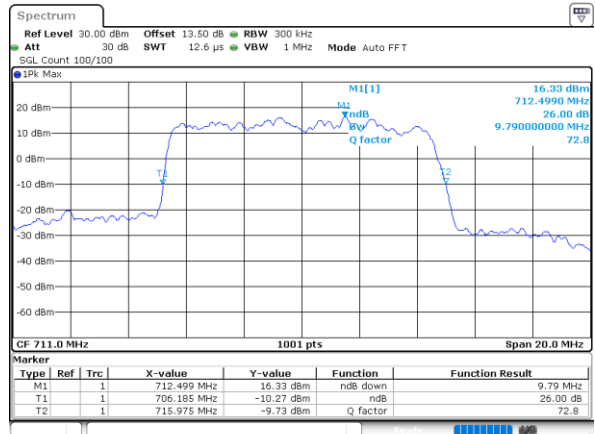
Date: 30 JUN 2022 17:00:55

Highest Channel / 10MHz / QPSK



Date: 30 JUN 2022 17:04:06

Highest Channel / 10MHz / 16QAM



Date: 30 JUN 2022 17:03:42



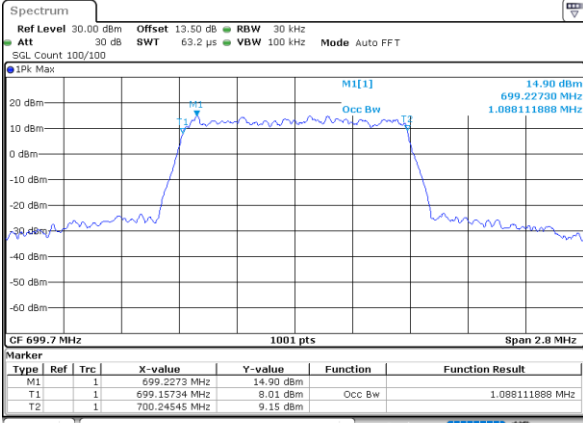
Occupied Bandwidth

| Mode | LTE Band 12 : 99%OBW(MHz) | | | | | | | | | | | |
|------------|---------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| BW | | | | | | | | | | | | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | 1.09 | 1.09 | 2.72 | 2.72 | 4.49 | 4.49 | 9.01 | 8.99 | - | - | - | - |
| Middle CH | 1.09 | 1.09 | 2.72 | 2.72 | 4.50 | 4.50 | 9.09 | 9.05 | - | - | - | - |
| Highest CH | 1.08 | 1.08 | 2.70 | 2.72 | 4.49 | 4.50 | 9.01 | 9.01 | - | - | - | - |



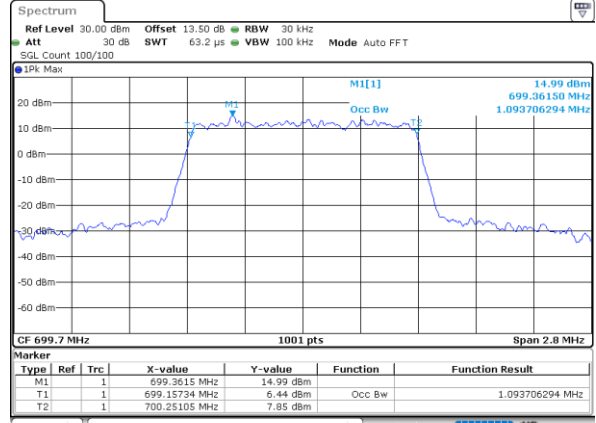
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



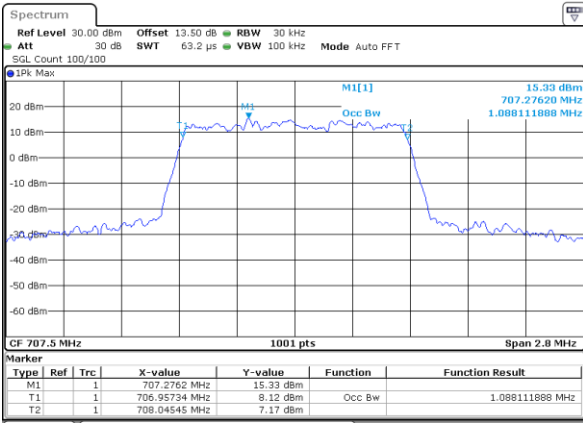
Date: 30 JUN 2022 17:14:36

Lowest Channel / 1.4MHz / 16QAM



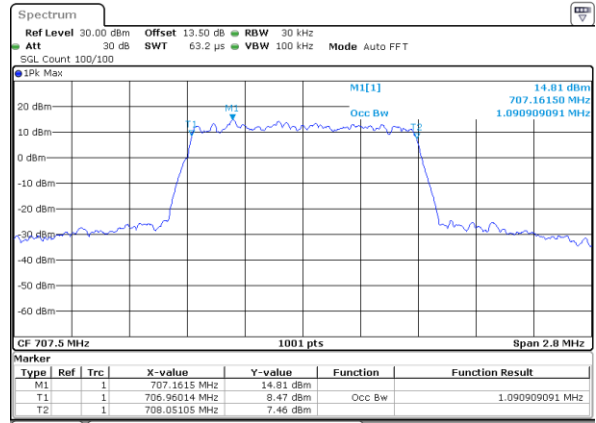
Date: 30 JUN 2022 17:15:03

Middle Channel / 1.4MHz / QPSK



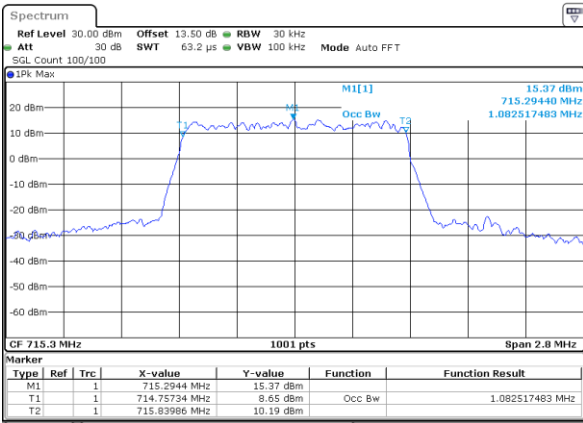
Date: 30 JUN 2022 17:22:08

Middle Channel / 1.4MHz / 16QAM



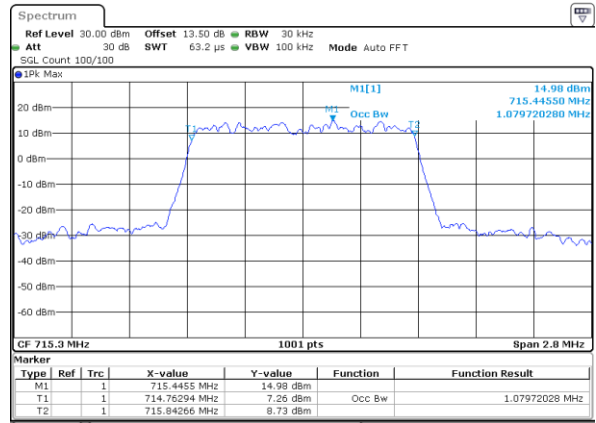
Date: 30 JUN 2022 17:21:45

Highest Channel / 1.4MHz / QPSK



Date: 30 JUN 2022 17:24:55

Highest Channel / 1.4MHz / 16QAM

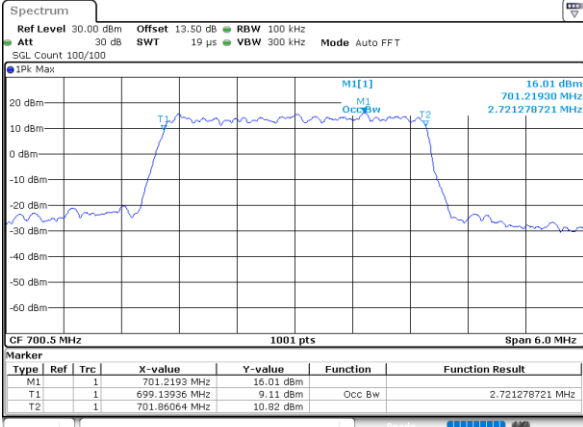


Date: 30 JUN 2022 17:25:19



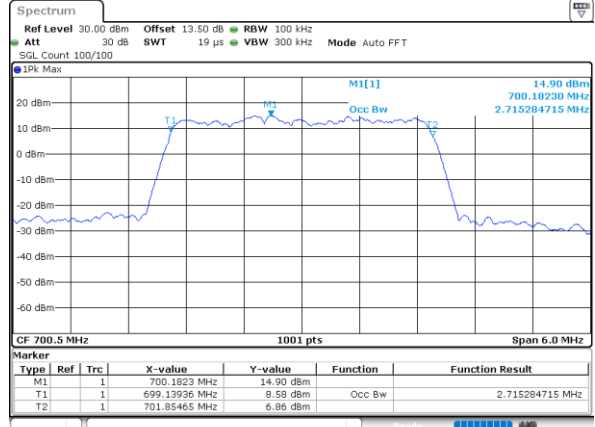
LTE Band 12

Lowest Channel / 3MHz / QPSK



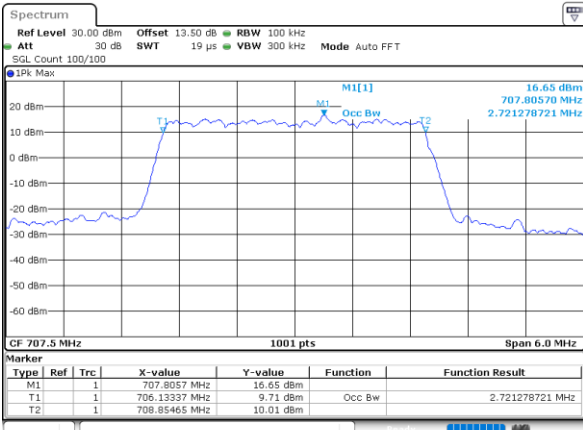
Date: 30 JUN 2022 16:17:47

Lowest Channel / 3MHz / 16QAM



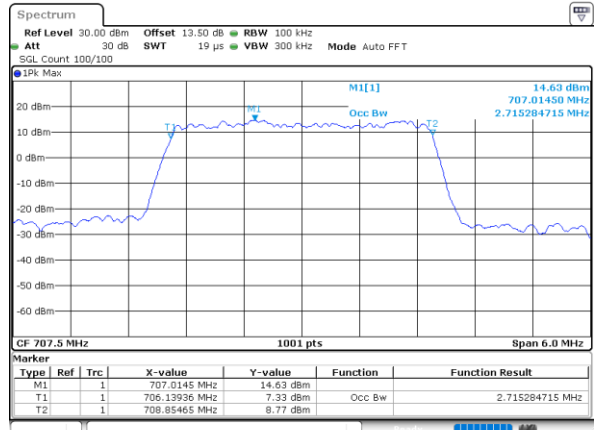
Date: 30 JUN 2022 16:18:11

Middle Channel / 3MHz / QPSK



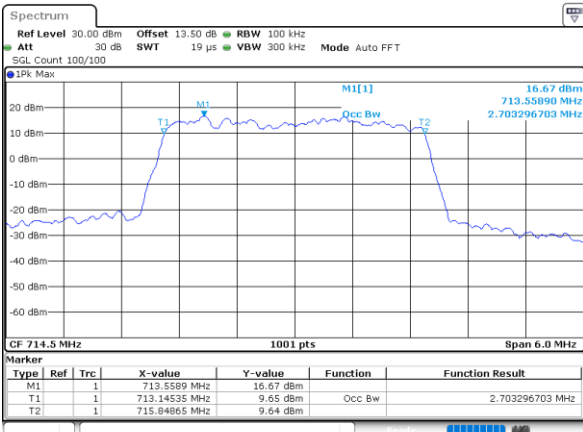
Date: 30 JUN 2022 16:25:16

Middle Channel / 3MHz / 16QAM



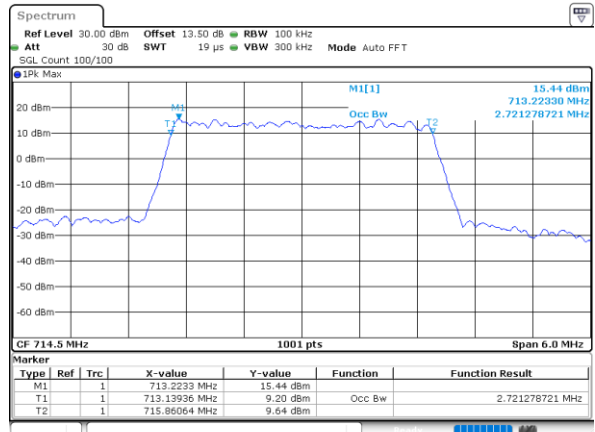
Date: 30 JUN 2022 16:24:53

Highest Channel / 3MHz / QPSK



Date: 30 JUN 2022 16:28:03

Highest Channel / 3MHz / 16QAM

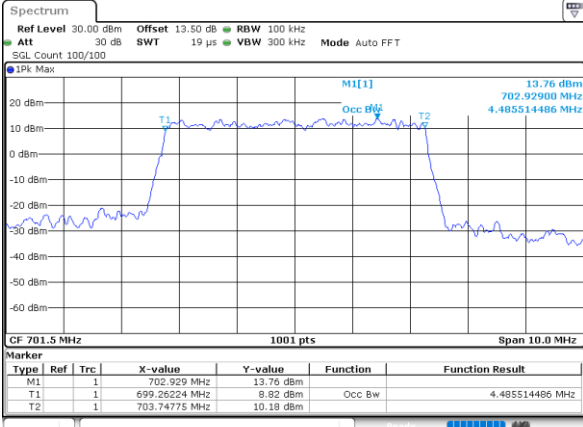


Date: 30 JUN 2022 16:28:26



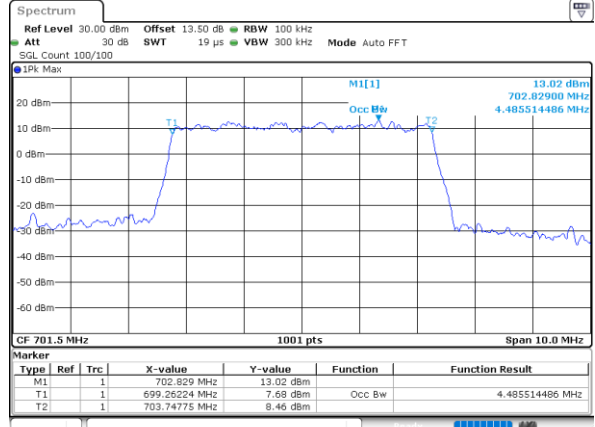
LTE Band 12

Lowest Channel / 5MHz / QPSK



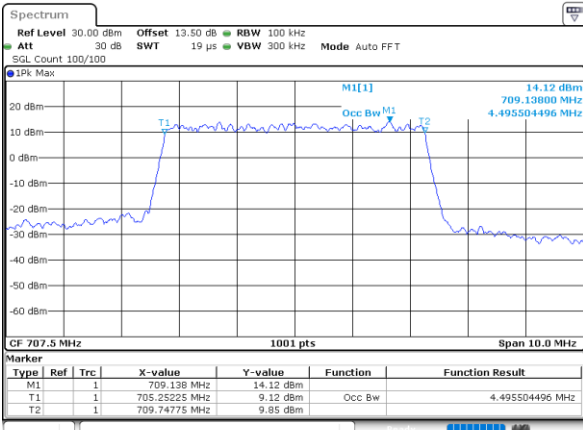
Date: 30 JUN 2022 16:35:18

Lowest Channel / 5MHz / 16QAM



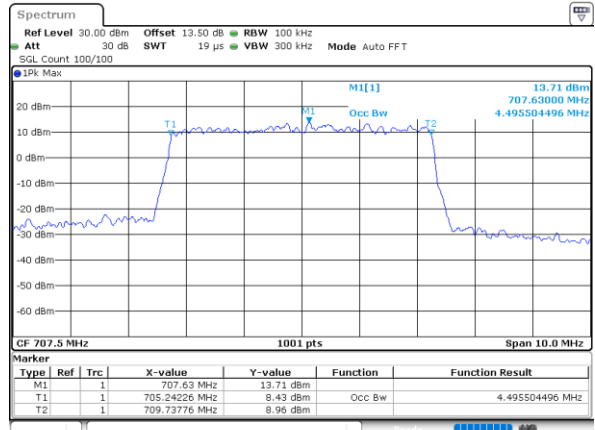
Date: 30 JUN 2022 16:35:42

Middle Channel / 5MHz / QPSK



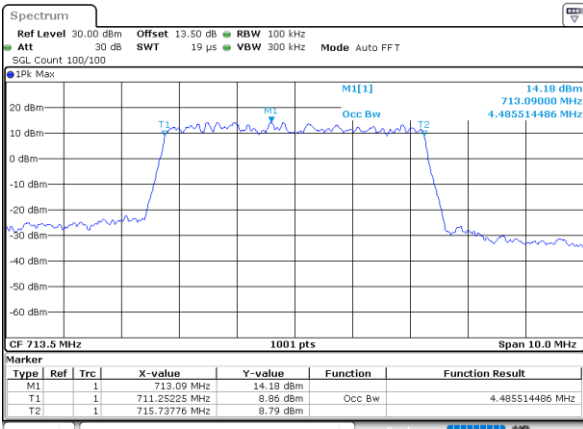
Date: 30 JUN 2022 16:42:47

Middle Channel / 5MHz / 16QAM



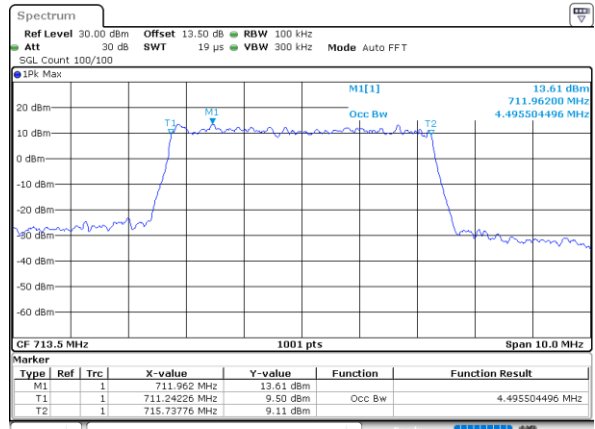
Date: 30 JUN 2022 16:42:23

Highest Channel / 5MHz / QPSK



Date: 30 JUN 2022 16:45:33

Highest Channel / 5MHz / 16QAM

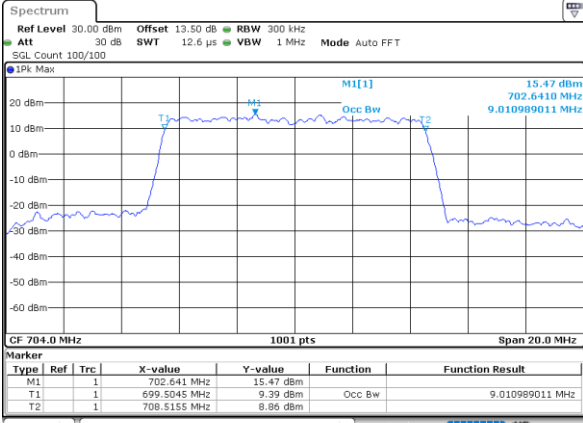


Date: 30 JUN 2022 16:45:57



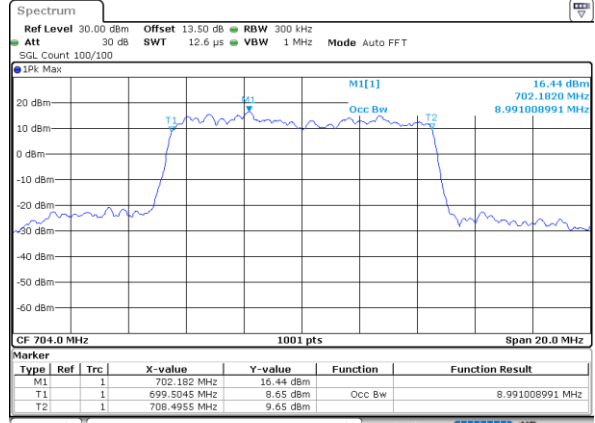
LTE Band 12

Lowest Channel / 10MHz / QPSK



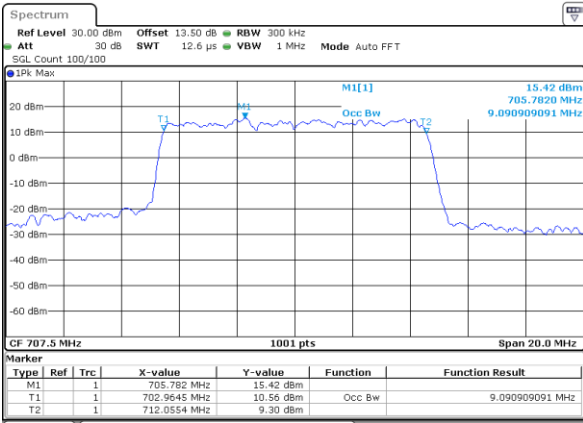
Date: 30 JUN 2022 16:52:48

Lowest Channel / 10MHz / 16QAM



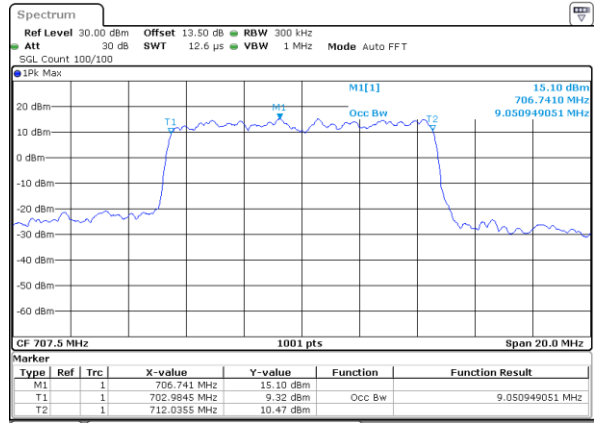
Date: 30 JUN 2022 16:53:12

Middle Channel / 10MHz / QPSK



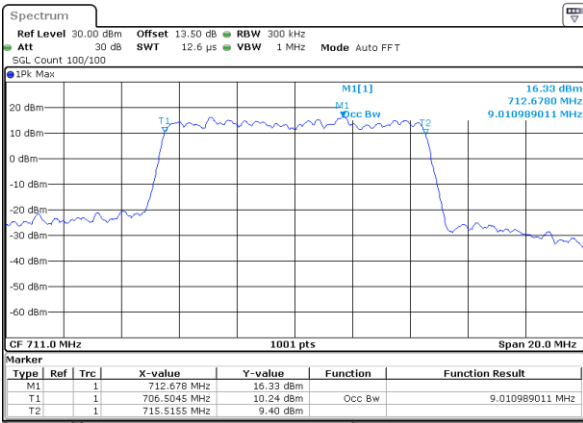
Date: 30 JUN 2022 17:00:17

Middle Channel / 10MHz / 16QAM



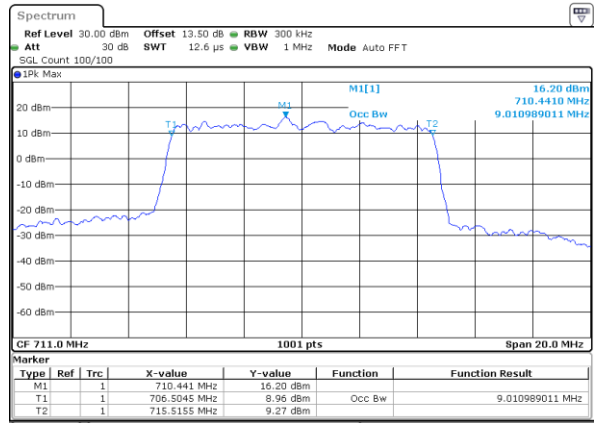
Date: 30 JUN 2022 16:59:54

Highest Channel / 10MHz / QPSK



Date: 30 JUN 2022 17:03:03

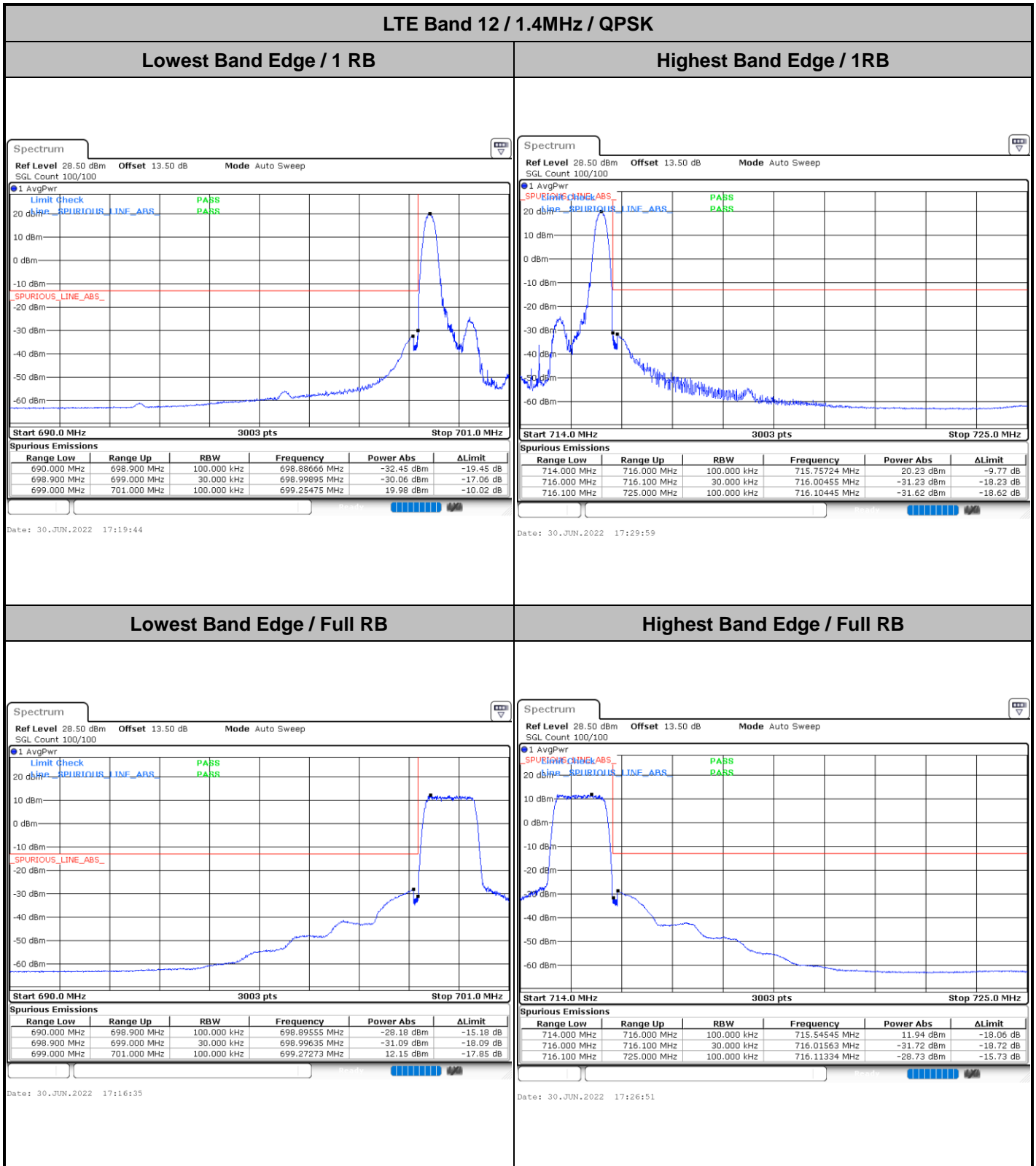
Highest Channel / 10MHz / 16QAM



Date: 30 JUN 2022 17:03:27



Conducted Band Edge





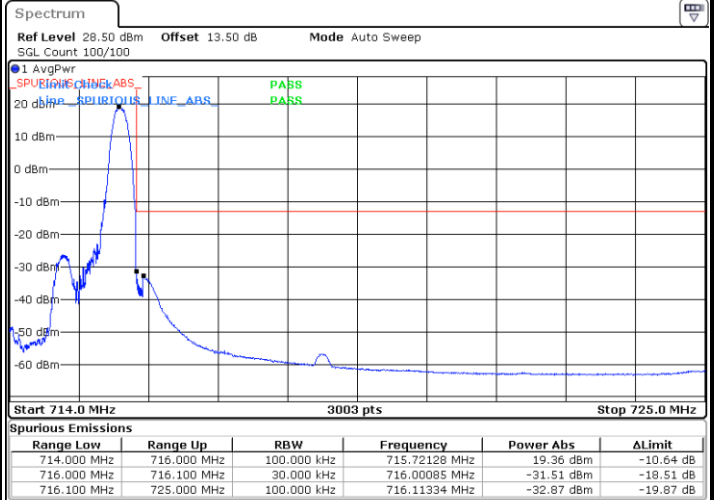
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



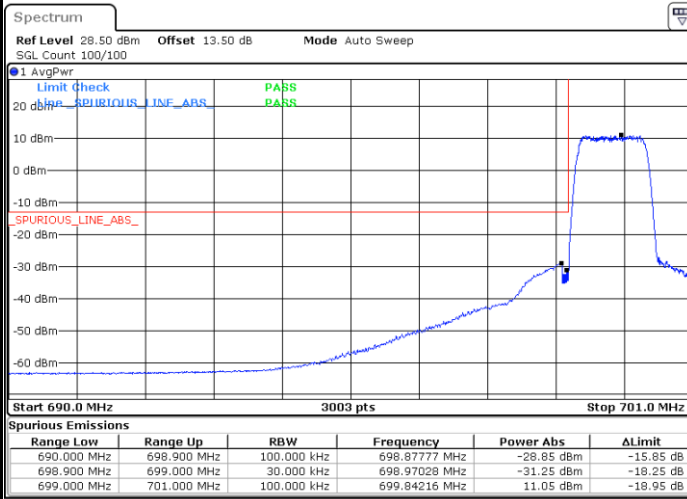
Date: 30 JUN.2022 17:18:41

Highest Band Edge / 1 RB



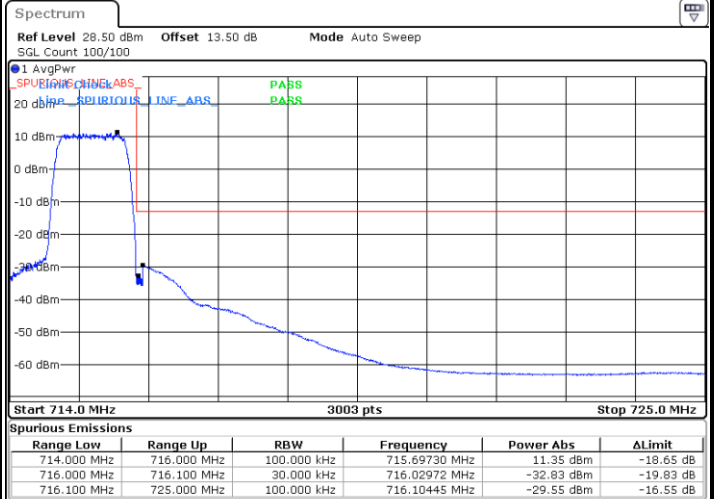
Date: 30 JUN.2022 17:28:56

Lowest Band Edge / Full RB



Date: 30 JUN.2022 17:17:38

Highest Band Edge / Full RB

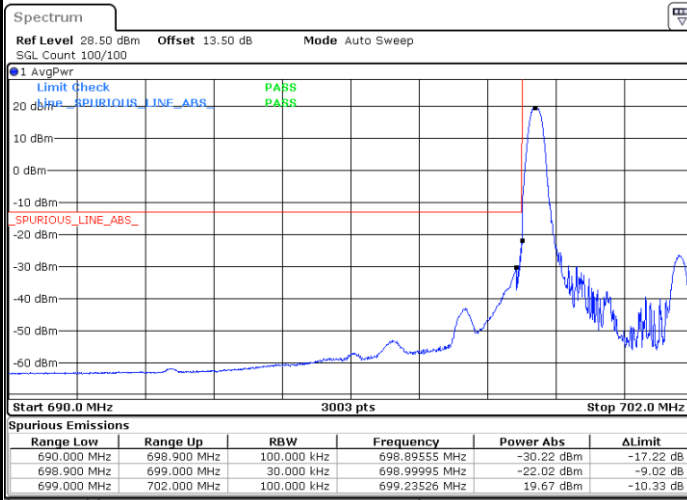


Date: 30 JUN.2022 17:27:54



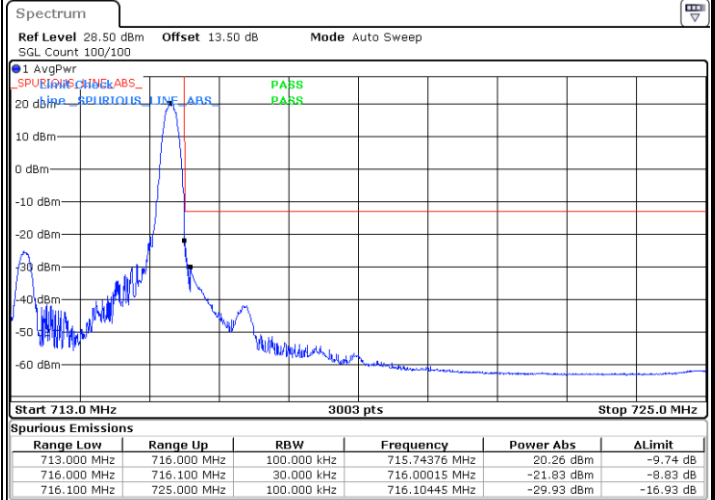
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



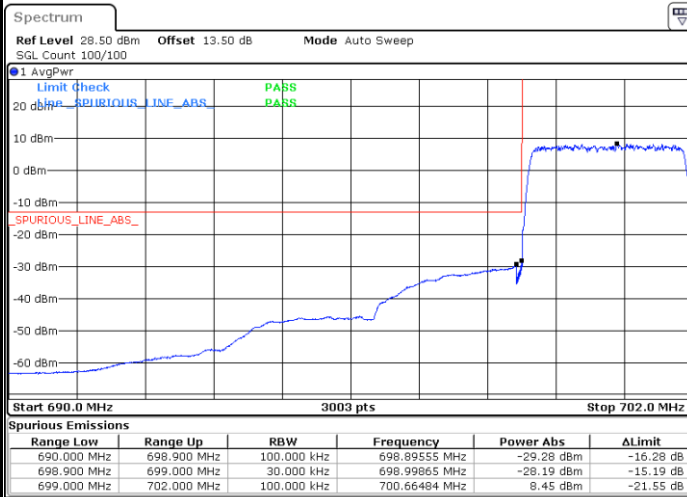
Date: 30 JUN.2022 16:22:52

Highest Band Edge / 1 RB



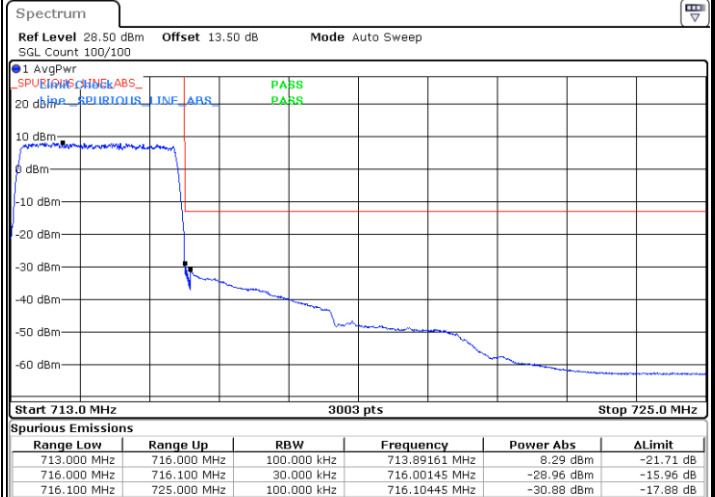
Date: 30 JUN.2022 16:33:07

Lowest Band Edge / Full RB



Date: 30 JUN.2022 16:19:43

Highest Band Edge / Full RB

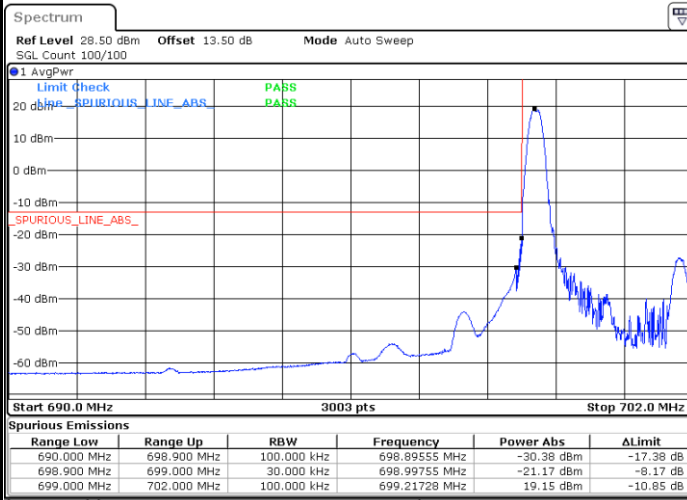


Date: 30 JUN.2022 16:23:58



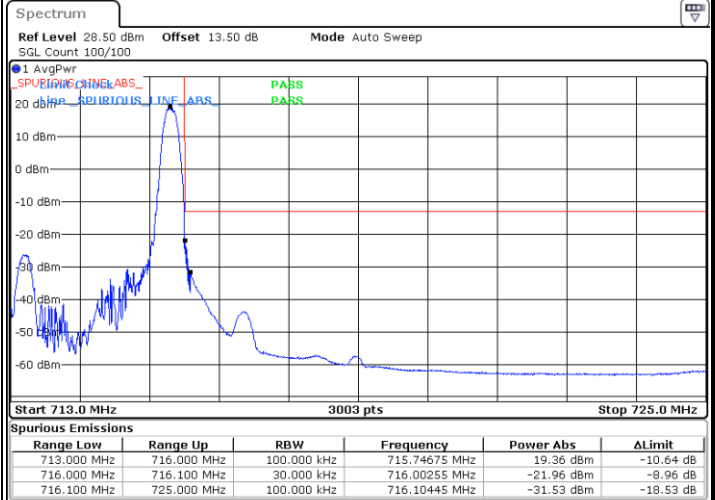
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



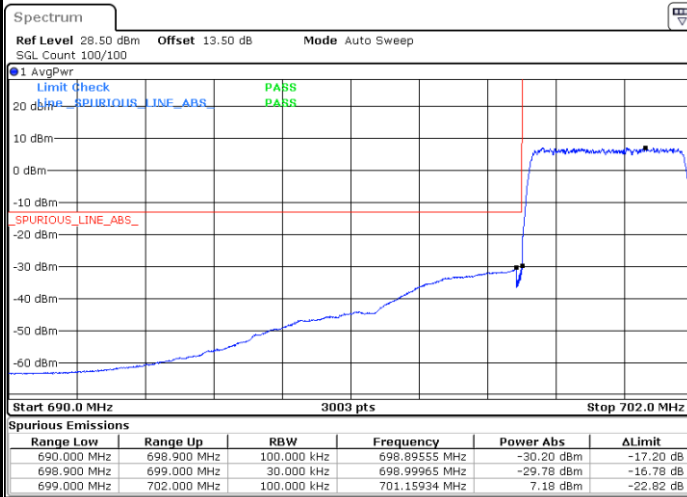
Date: 30 JUN.2022 16:21:49

Highest Band Edge / 1 RB



Date: 30 JUN.2022 16:32:04

Lowest Band Edge / Full RB



Date: 30 JUN.2022 16:20:46

Highest Band Edge / Full RB

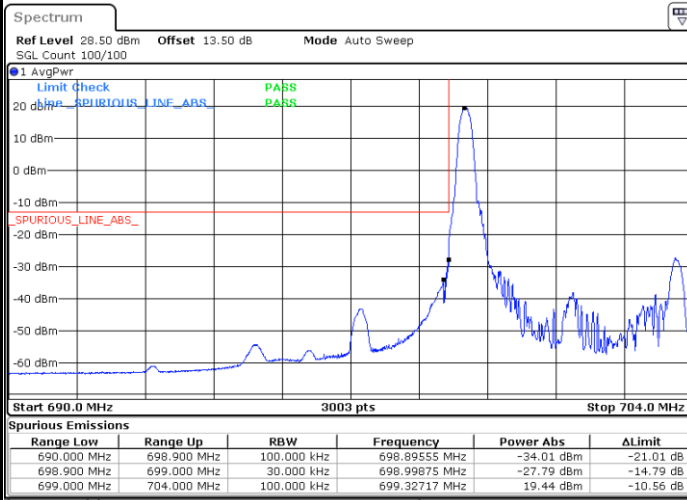


Date: 30 JUN.2022 16:31:01



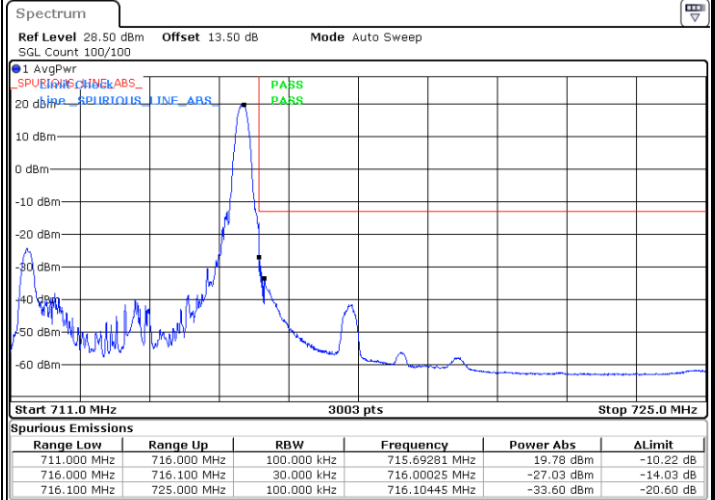
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



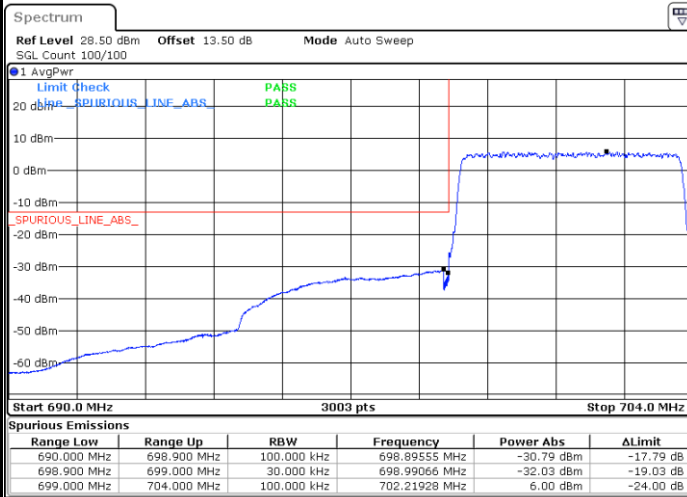
Date: 30 JUN 2022 16:40:22

Highest Band Edge / 1 RB



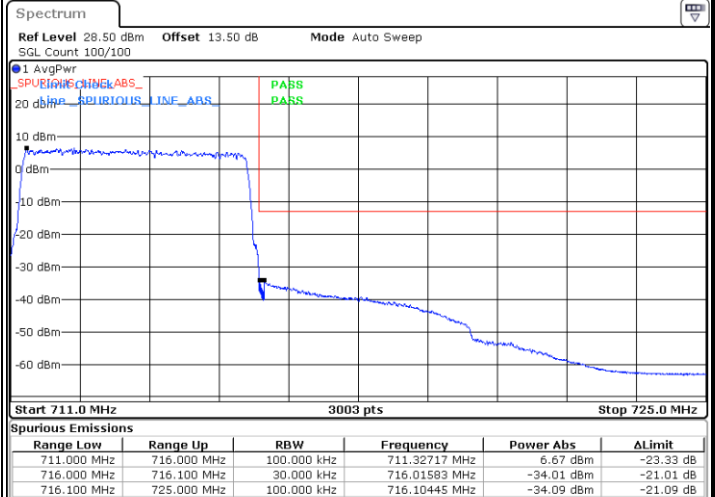
Date: 30 JUN 2022 16:49:34

Lowest Band Edge / Full RB



Date: 30 JUN 2022 16:37:14

Highest Band Edge / Full RB

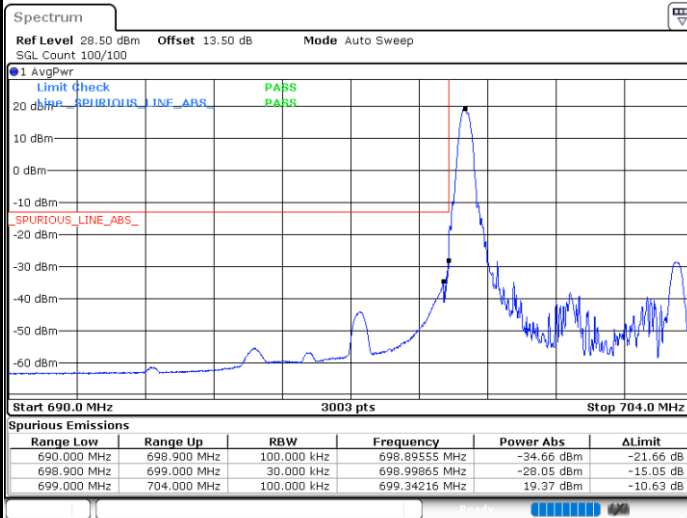


Date: 30 JUN 2022 16:47:28



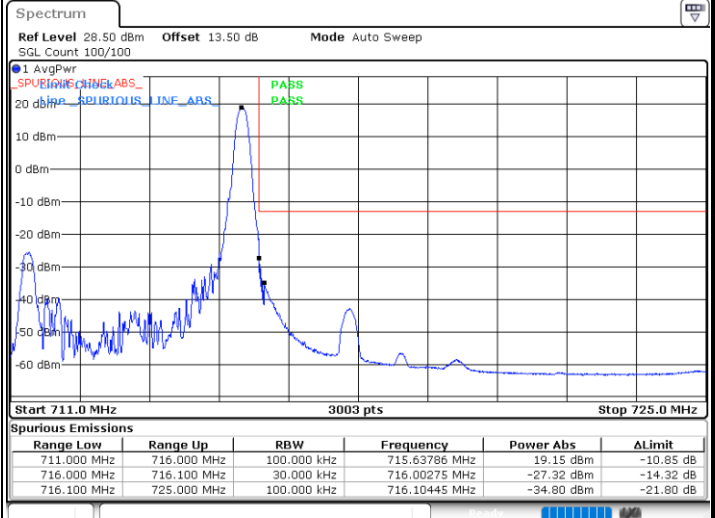
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



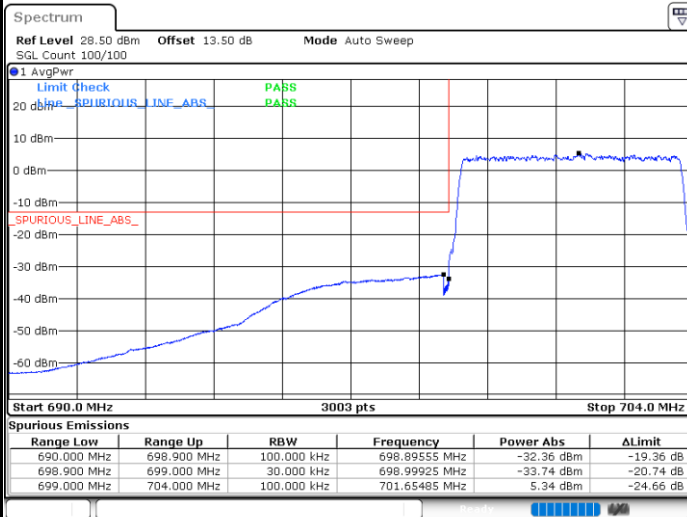
Date: 30 JUN.2022 16:39:19

Highest Band Edge / 1 RB



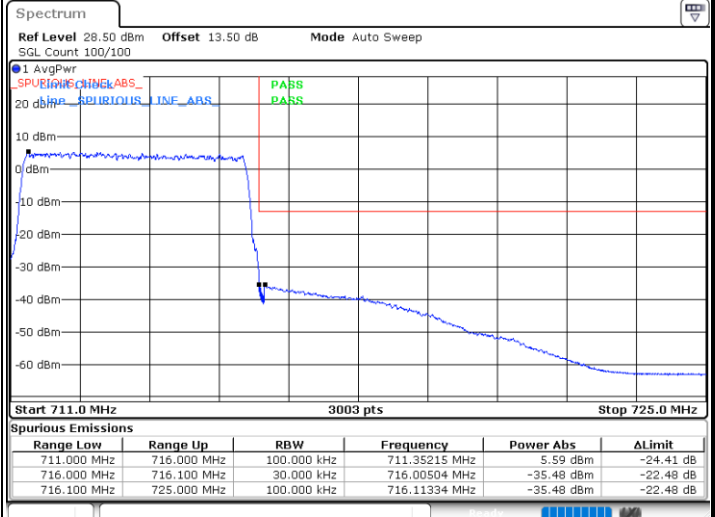
Date: 30 JUN.2022 16:50:37

Lowest Band Edge / Full RB



Date: 30 JUN.2022 16:38:16

Highest Band Edge / Full RB

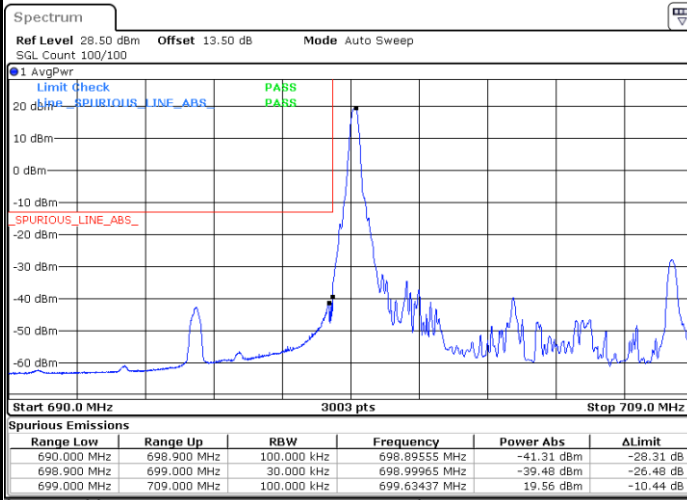


Date: 30 JUN.2022 16:48:31



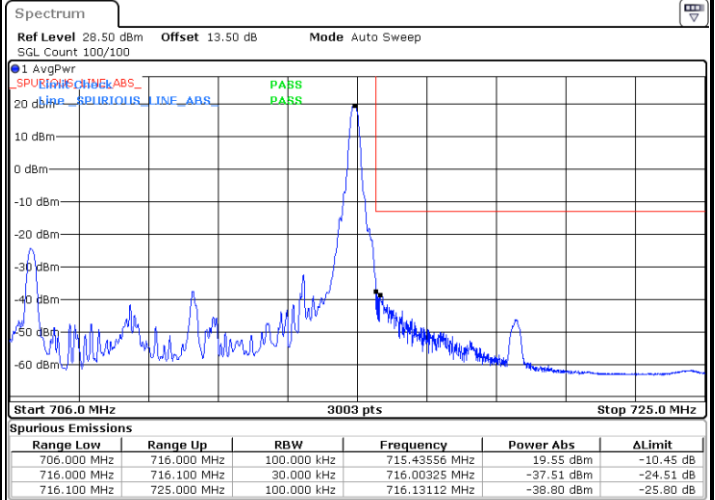
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



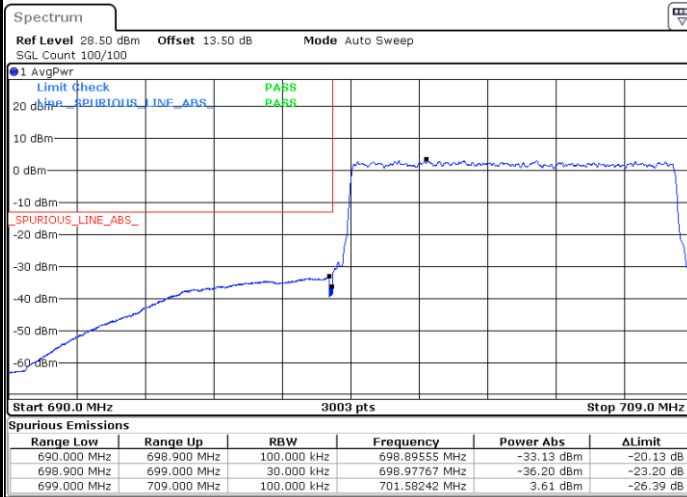
Date: 30 JUN.2022 16:57:52

Highest Band Edge / 1 RB



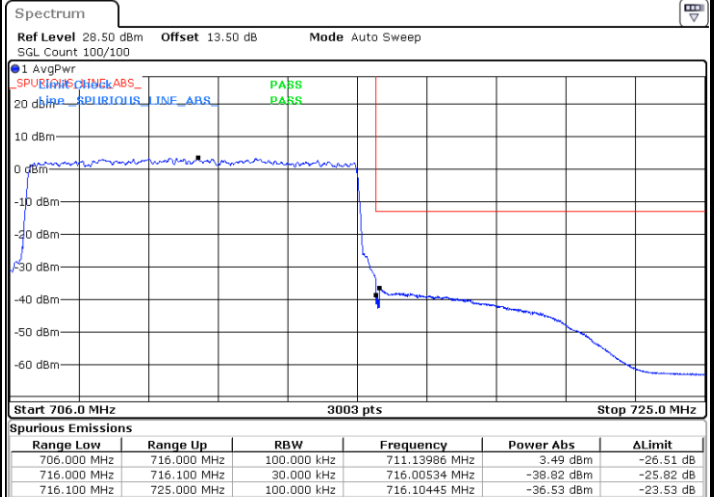
Date: 30 JUN.2022 17:08:07

Lowest Band Edge / Full RB



Date: 30 JUN.2022 16:54:44

Highest Band Edge / Full RB



Date: 30 JUN.2022 17:04:59