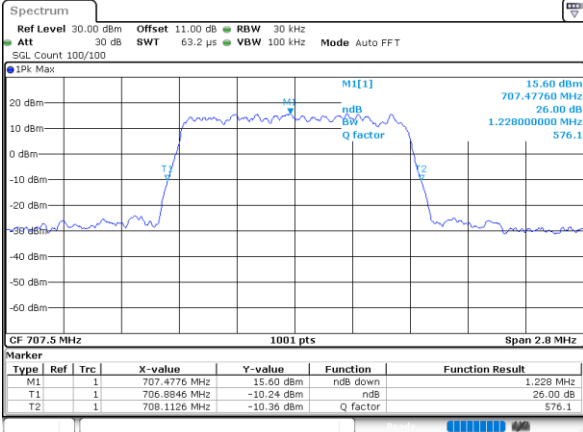




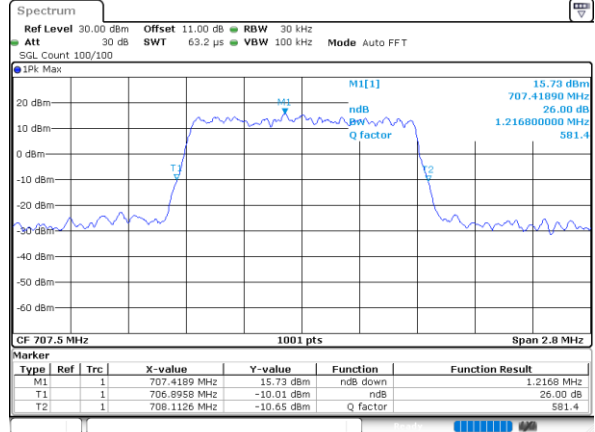
LTE Band 12

Middle Channel / 1.4MHz / QPSK



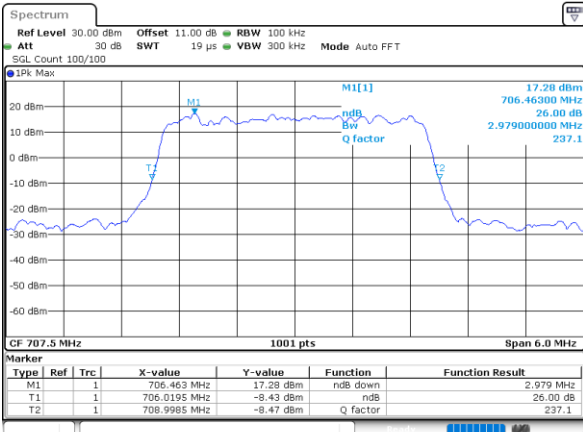
Date: 22_SEP.2021 15:02:06

Middle Channel / 1.4MHz / 16QAM



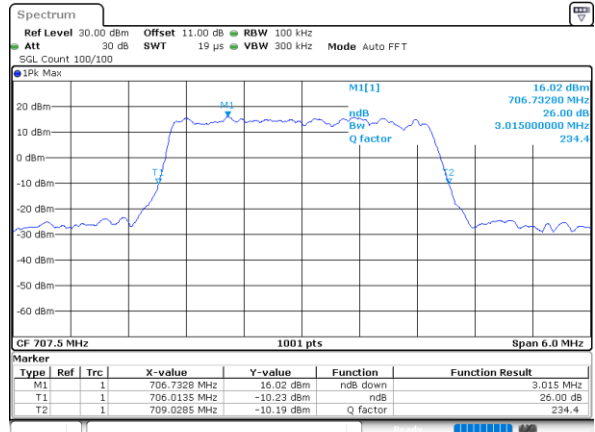
Date: 22_SEP.2021 15:02:27

Middle Channel / 3MHz / QPSK



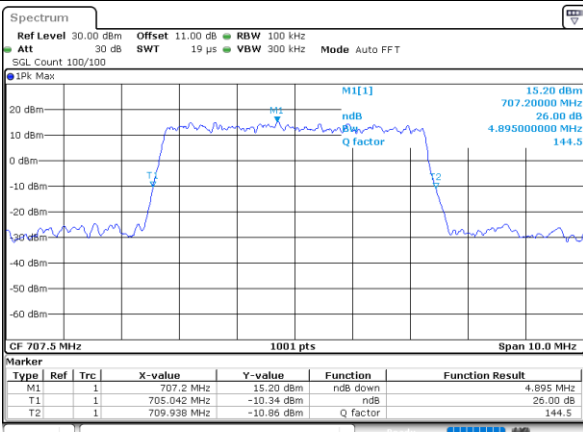
Date: 22_SEP.2021 15:14:40

Middle Channel / 3MHz / 16QAM



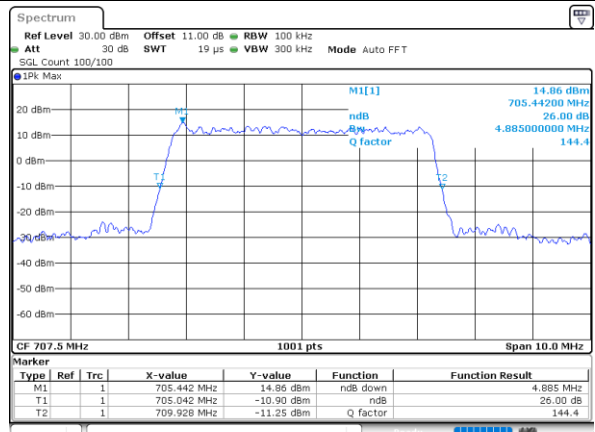
Date: 22_SEP.2021 15:15:01

Middle Channel / 5MHz / QPSK



Date: 22_SEP.2021 15:31:07

Middle Channel / 5MHz / 16QAM

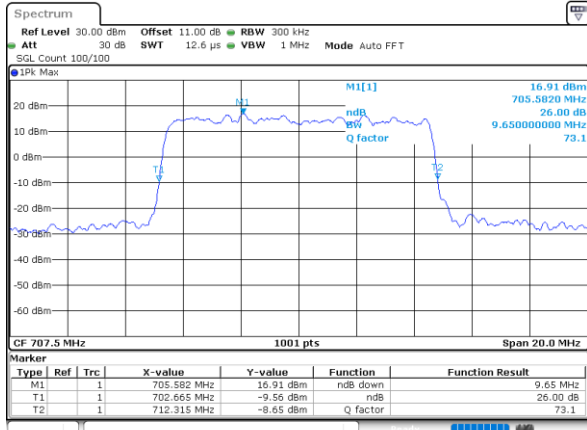


Date: 22_SEP.2021 15:31:27



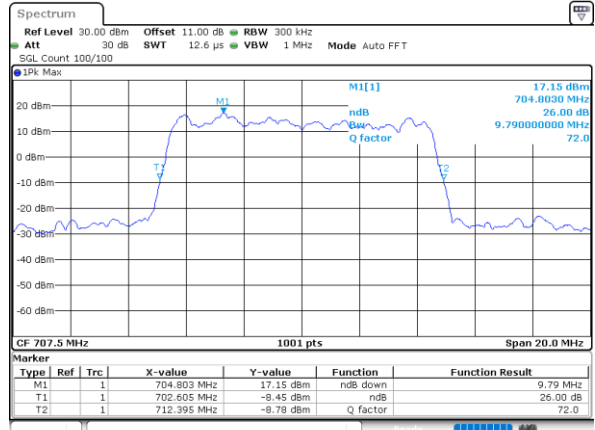
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 22_SEP_2021 15:40:24

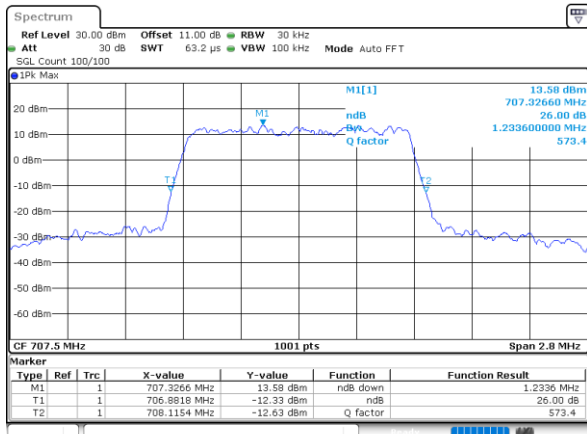
Middle Channel / 10MHz / 16QAM



Date: 22_SEP_2021 15:40:44

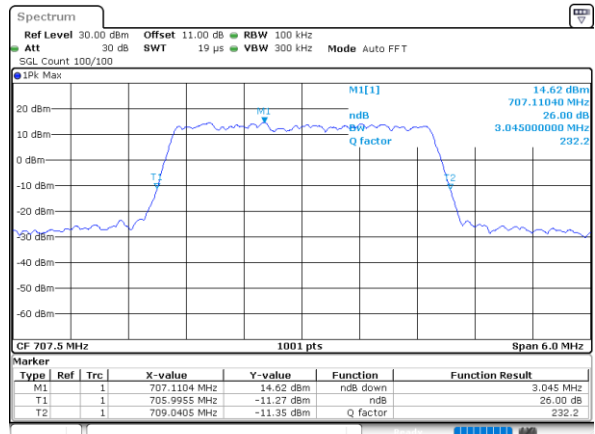
LTE Band 12

Middle Channel / 1.4MHz / 64QAM



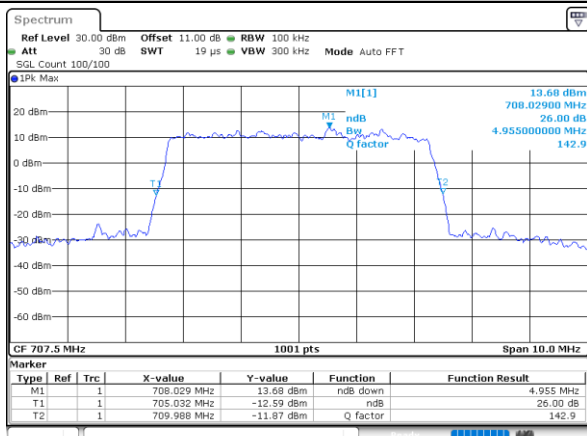
Date: 22_SEP_2021 15:08:47

Middle Channel / 3MHz / 64QAM



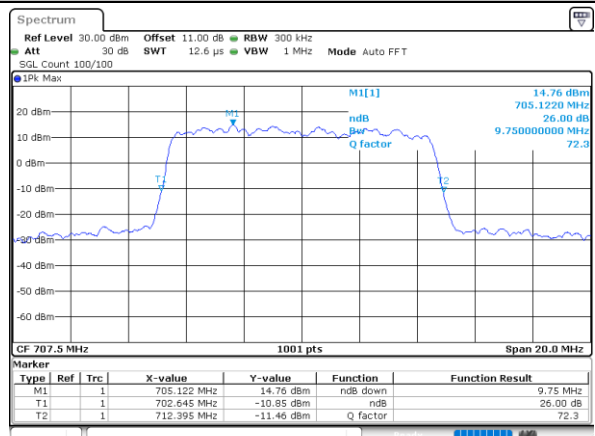
Date: 22_SEP_2021 15:21:43

Middle Channel / 5MHz / 64QAM



Date: 22_SEP_2021 15:25:14

Middle Channel / 10MHz / 64QAM



Date: 22_SEP_2021 16:29:14



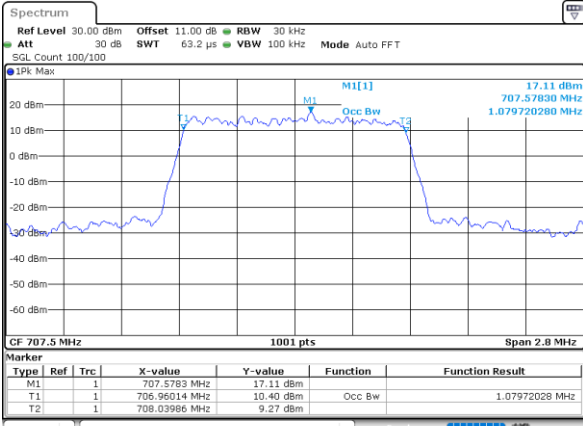
Occupied Bandwidth

| Mode | LTE Band 12 : 99%OBW(MHz) | | | | | | | | | | | |
|-----------|---------------------------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Middle CH | 1.08 | 1.09 | 2.73 | 2.72 | 4.47 | 4.49 | 8.99 | 9.07 | - | - | - | - |
| Mode | LTE Band 12 : 99%OBW(MHz) | | | | | | | | | | | |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM |
| Middle CH | 1.09 | - | 2.72 | - | 4.48 | - | 9.03 | - | - | - | - | - |



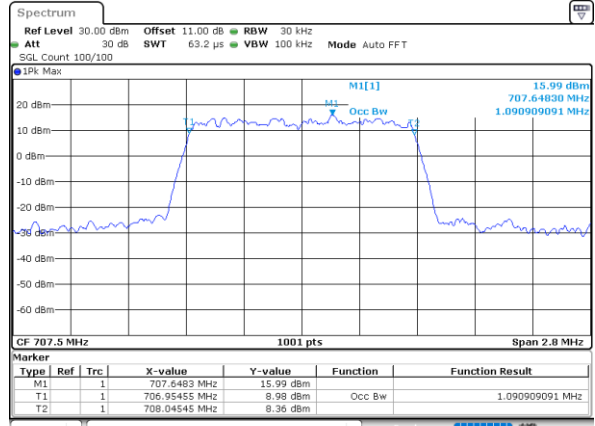
LTE Band 12

Middle Channel / 1.4MHz / QPSK



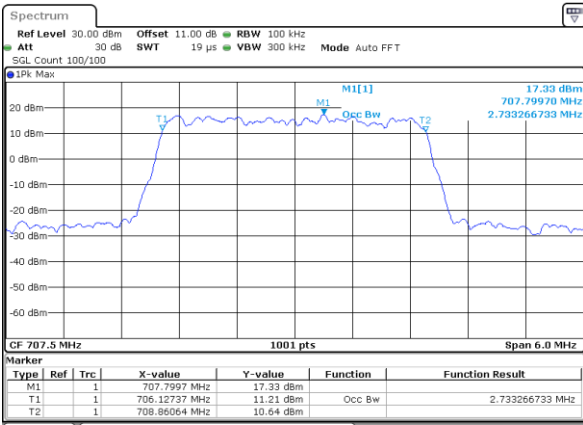
Date: 22_SEP.2021 15:01:44

Middle Channel / 1.4MHz / 16QAM



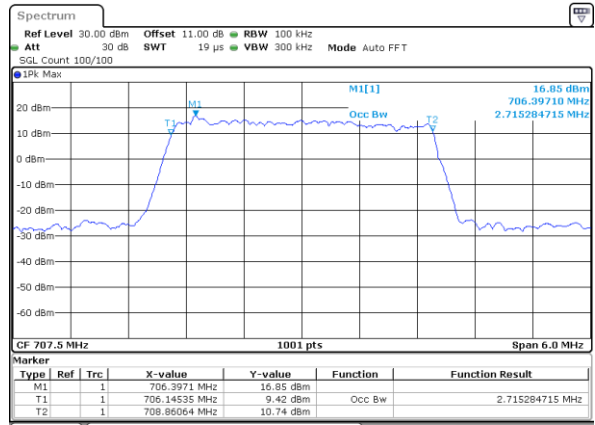
Date: 22_SEP.2021 15:01:21

Middle Channel / 3MHz / QPSK



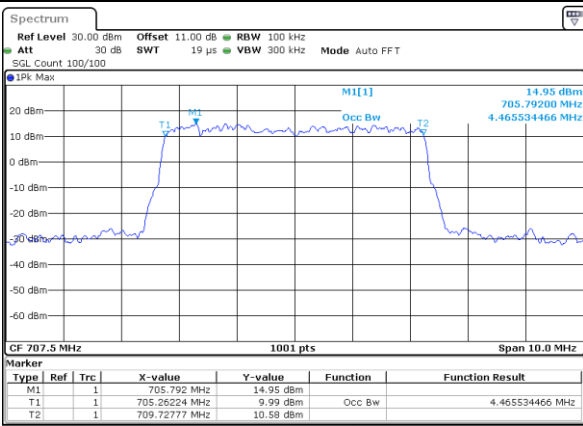
Date: 22_SEP.2021 15:14:18

Middle Channel / 3MHz / 16QAM



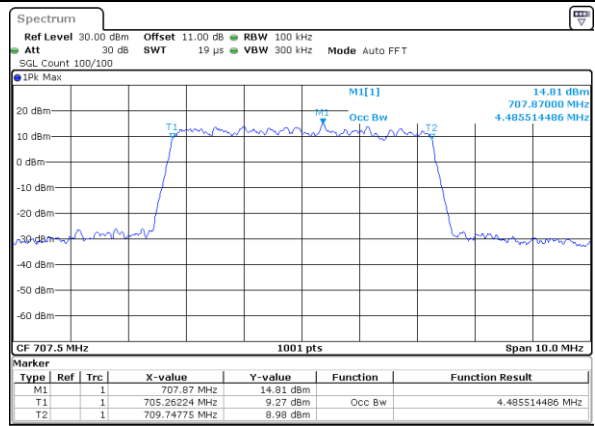
Date: 22_SEP.2021 15:13:55

Middle Channel / 5MHz / QPSK



Date: 22_SEP.2021 15:30:44

Middle Channel / 5MHz / 16QAM

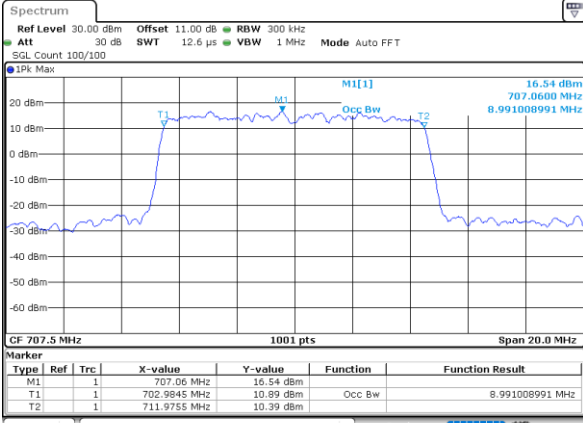


Date: 22_SEP.2021 15:30:22



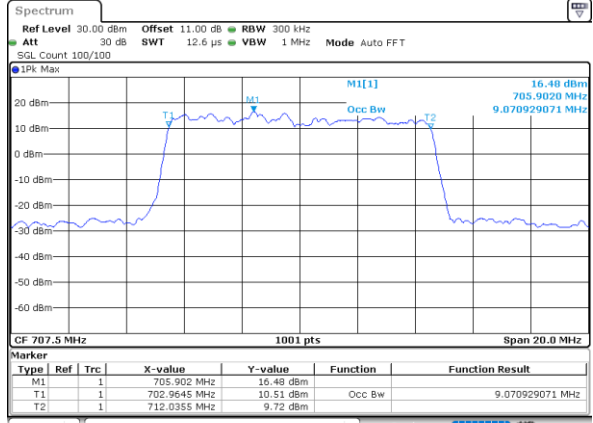
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 22_SEP.2021 15:40:01

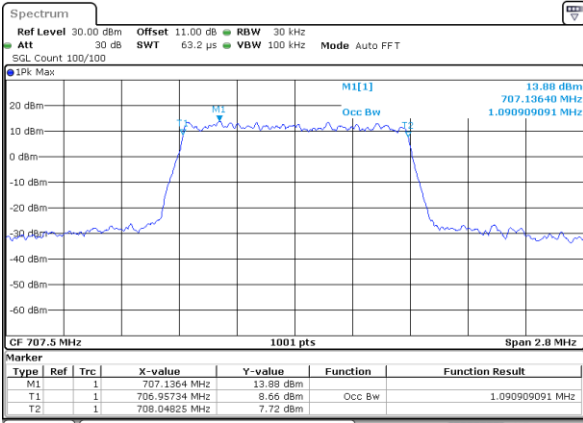
Middle Channel / 10MHz / 16QAM



Date: 22_SEP.2021 15:39:39

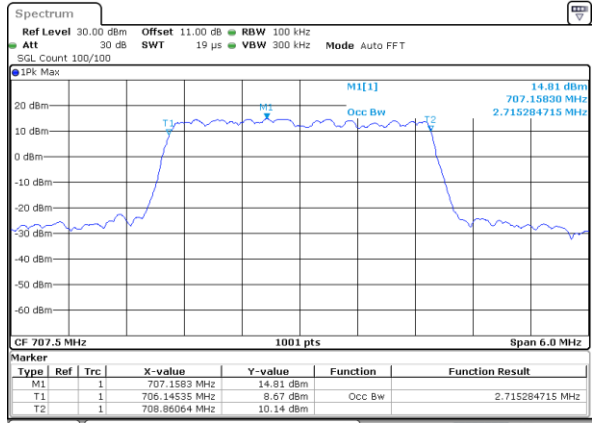
LTE Band 12

Middle Channel / 1.4MHz / 64QAM



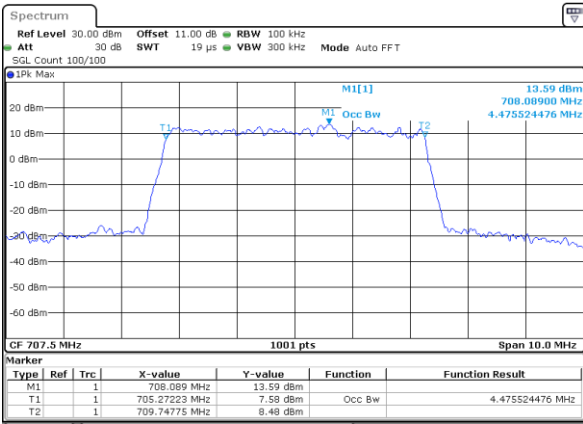
Date: 22_SEP.2021 15:08:24

Middle Channel / 3MHz / 64QAM



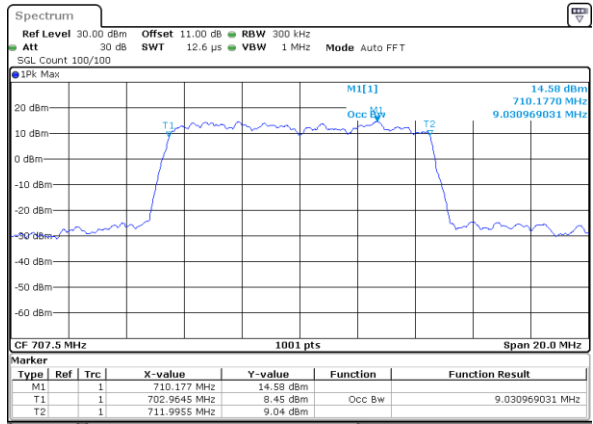
Date: 22_SEP.2021 15:21:21

Middle Channel / 5MHz / 64QAM



Date: 22_SEP.2021 15:24:52

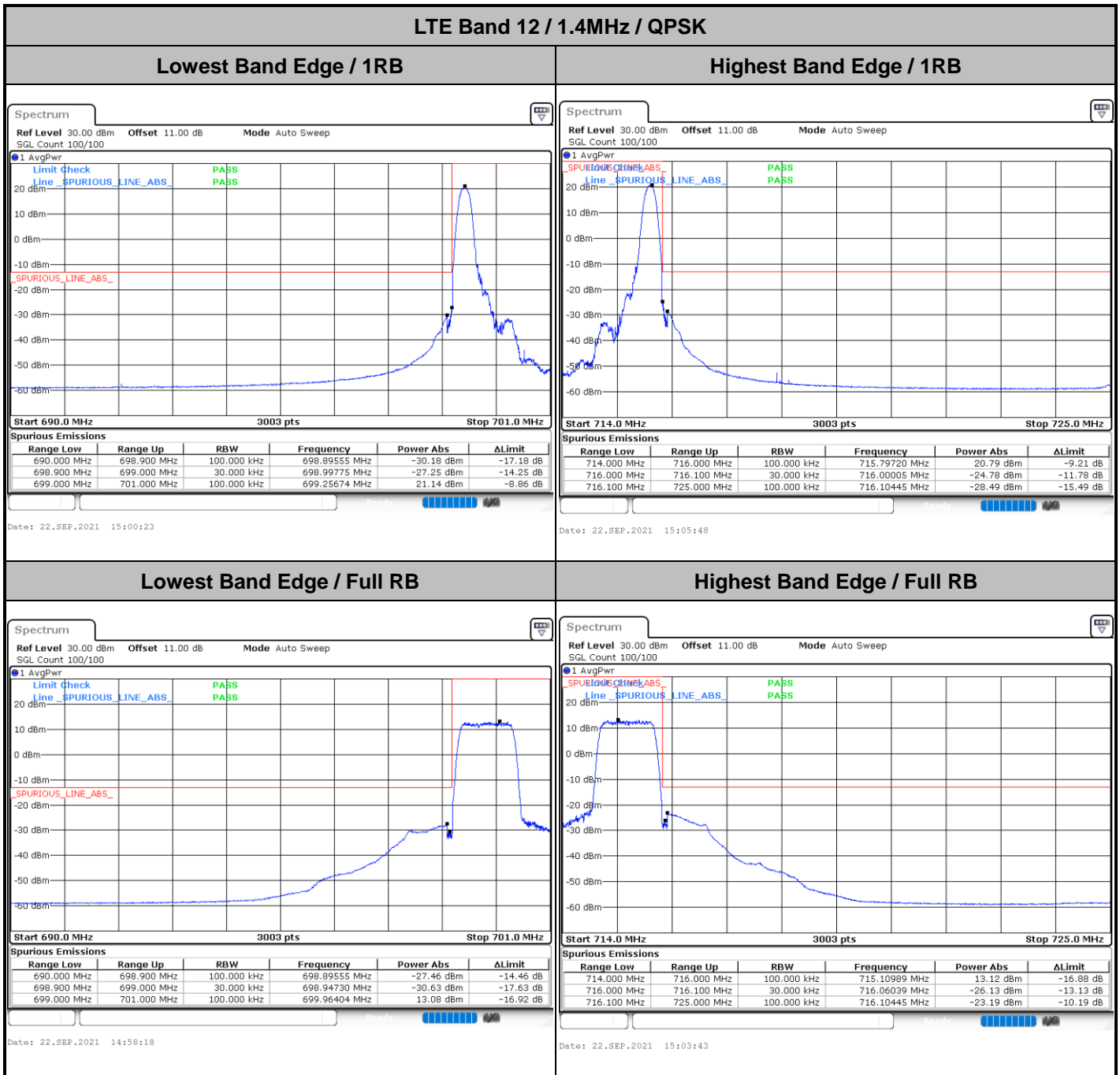
Middle Channel / 10MHz / 64QAM



Date: 22_SEP.2021 16:28:52



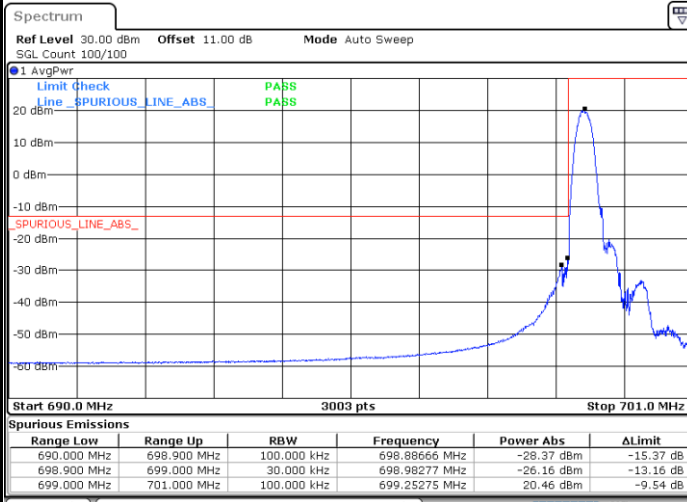
Conducted Band Edge





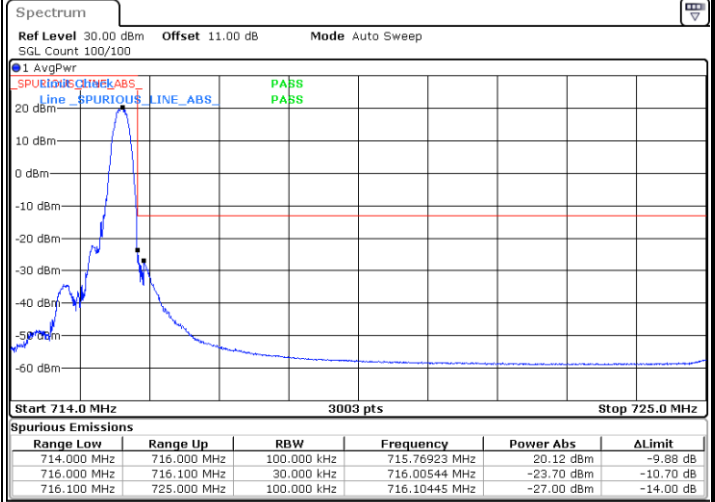
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



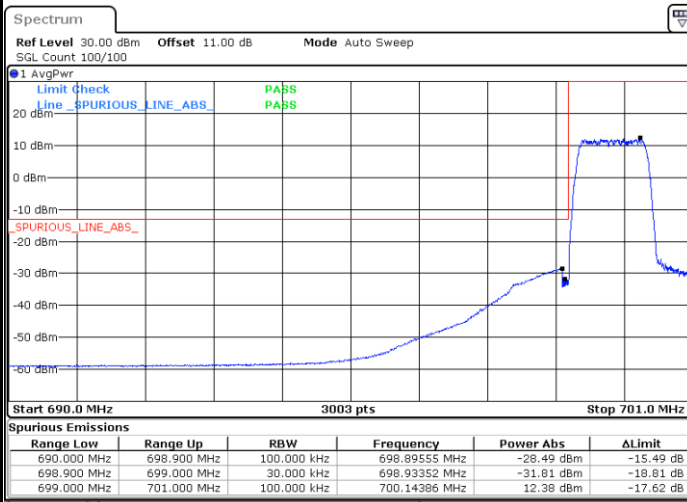
Date: 22.SEP.2021 14:59:41

Highest Band Edge / 1 RB



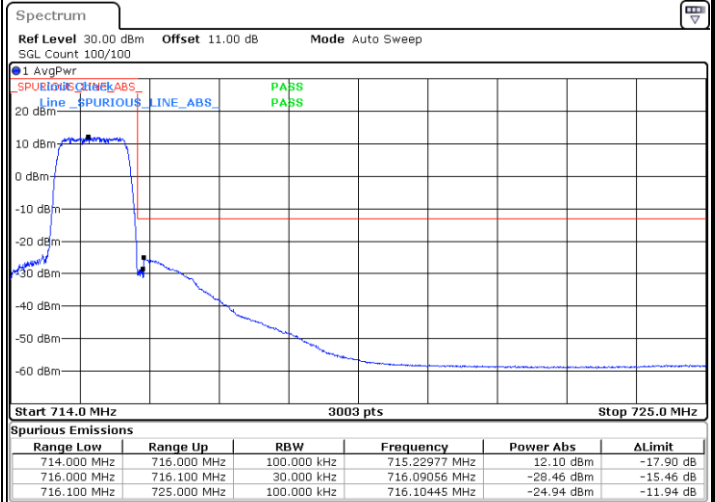
Date: 22.SEP.2021 15:05:06

Lowest Band Edge / Full RB



Date: 22.SEP.2021 14:58:59

Highest Band Edge / Full RB



Date: 22.SEP.2021 15:04:24



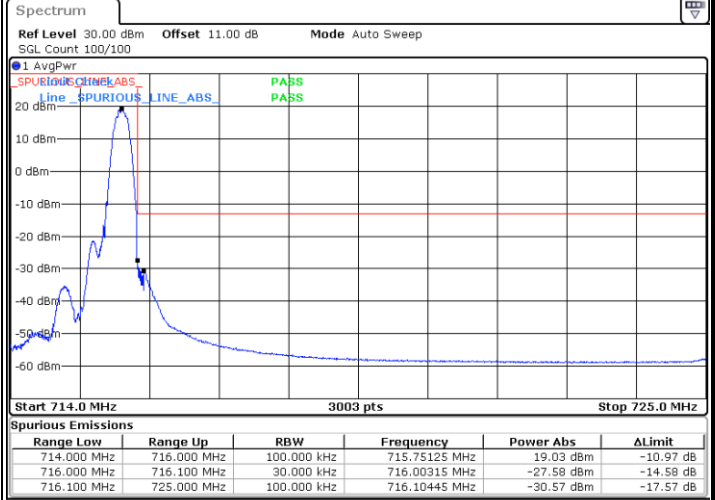
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



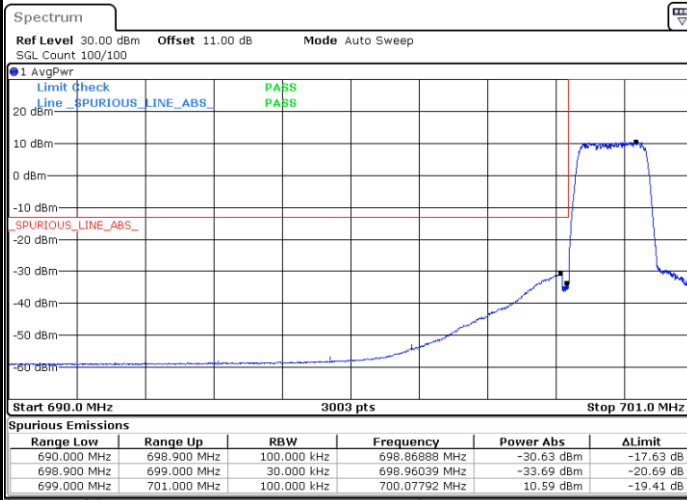
Date: 22.SEP.2021 15:08:02

Highest Band Edge / 1 RB



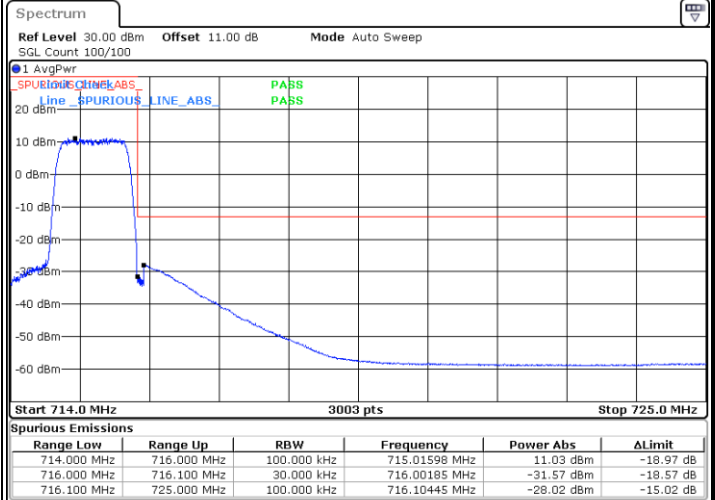
Date: 22.SEP.2021 15:10:09

Lowest Band Edge / Full RB



Date: 22.SEP.2021 15:07:06

Highest Band Edge / Full RB

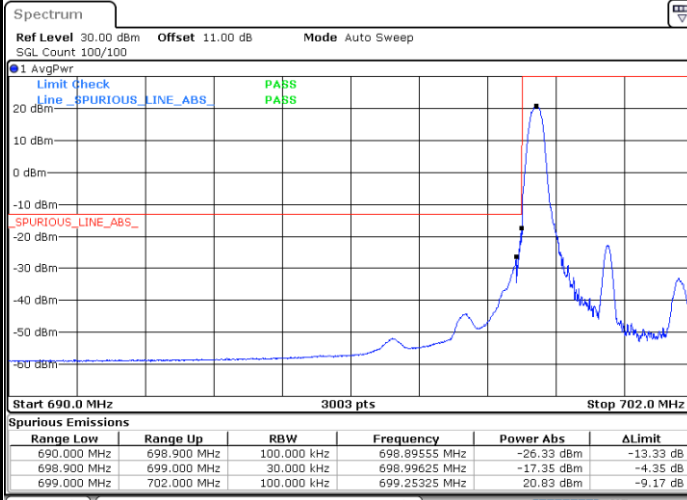


Date: 22.SEP.2021 15:09:27



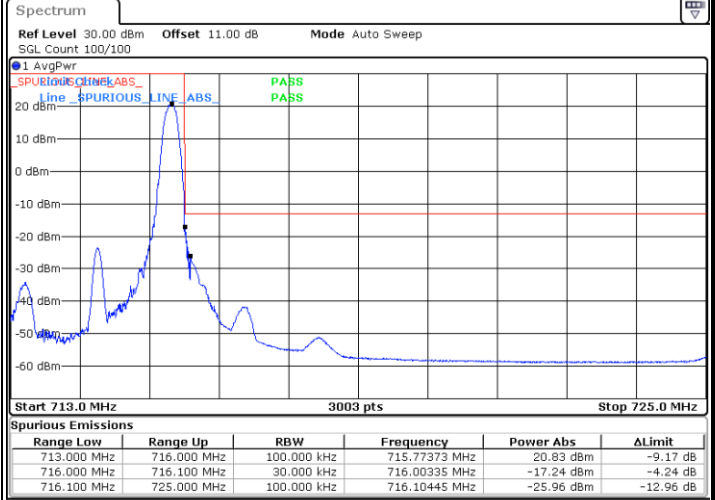
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



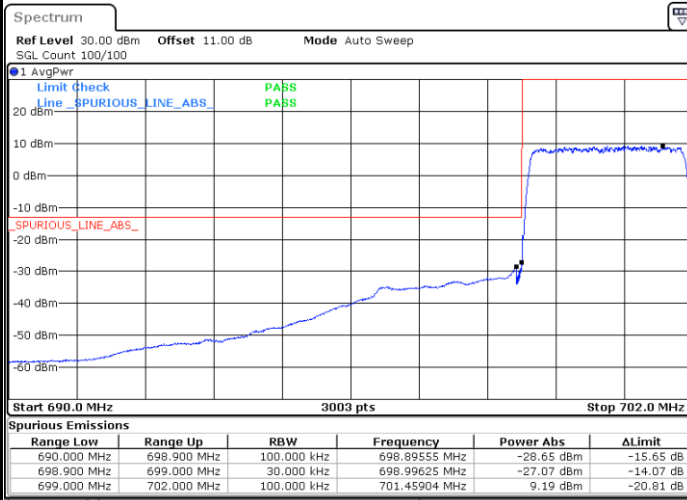
Date: 22.SEP.2021 15:12:57

Highest Band Edge / 1 RB



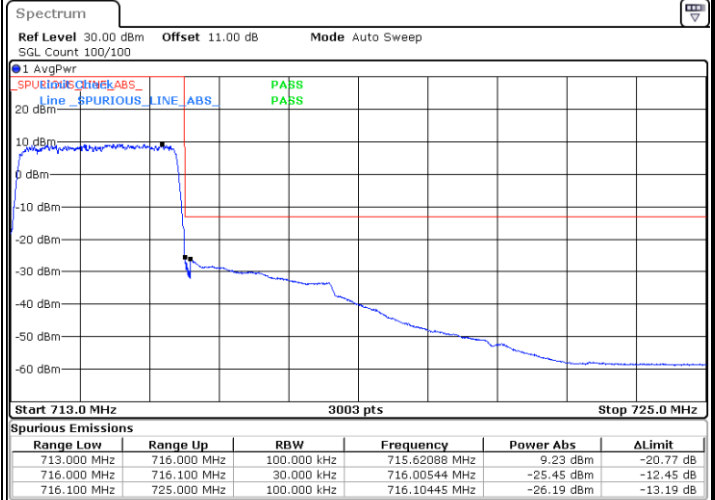
Date: 22.SEP.2021 15:18:59

Lowest Band Edge / Full RB



Date: 22.SEP.2021 15:10:52

Highest Band Edge / Full RB

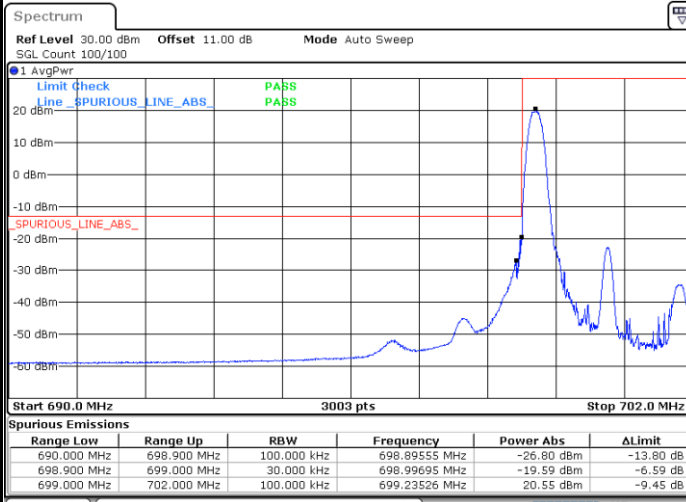


Date: 22.SEP.2021 15:16:17



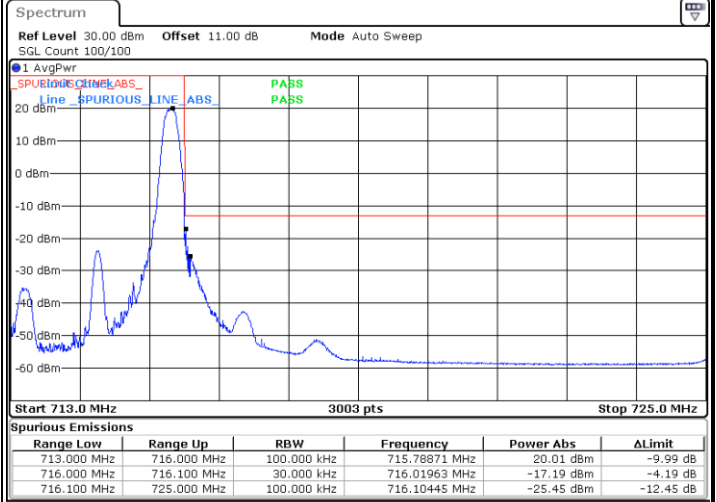
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



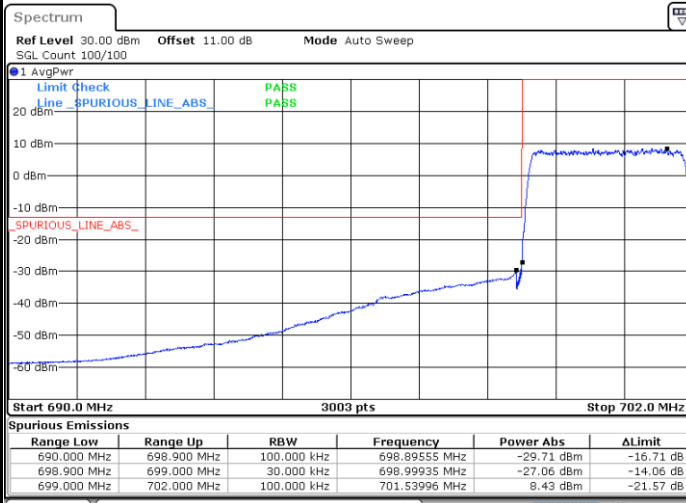
Date: 22.SEP.2021 15:12:15

Highest Band Edge / 1 RB



Date: 22.SEP.2021 15:18:17

Lowest Band Edge / Full RB



Date: 22.SEP.2021 15:11:33

Highest Band Edge / Full RB

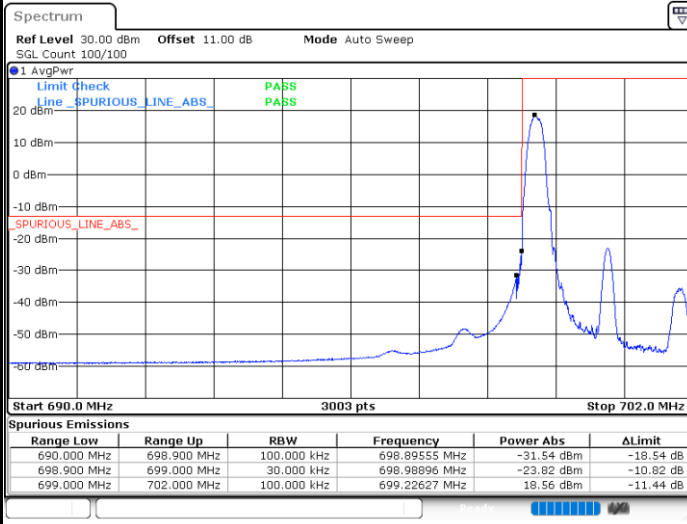


Date: 22.SEP.2021 15:17:36



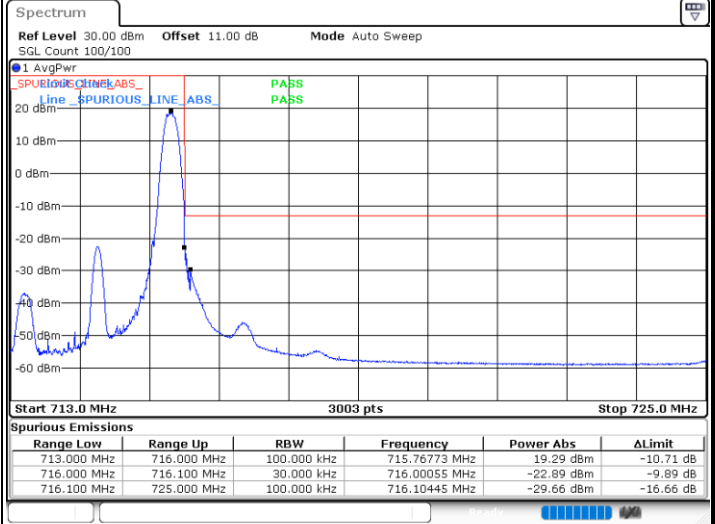
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



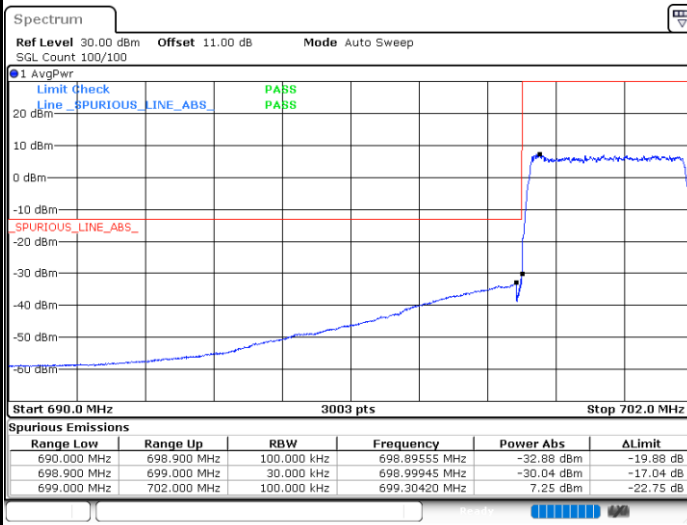
Date: 22.SEP.2021 15:20:59

Highest Band Edge / 1 RB



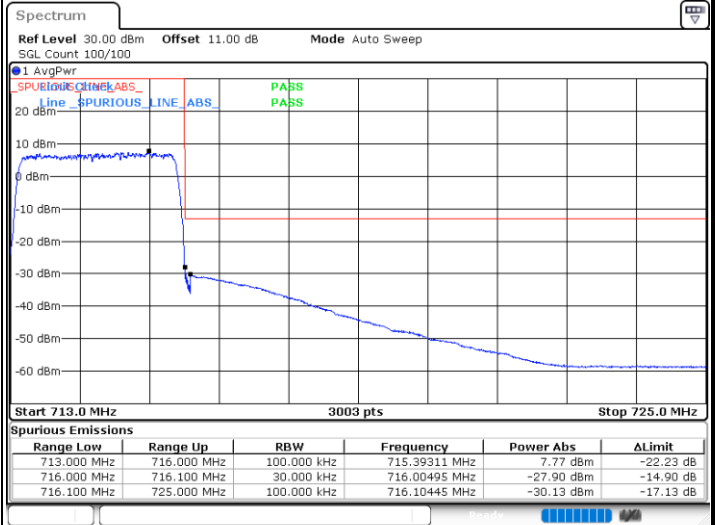
Date: 22.SEP.2021 15:23:05

Lowest Band Edge / Full RB



Date: 22.SEP.2021 15:20:17

Highest Band Edge / Full RB

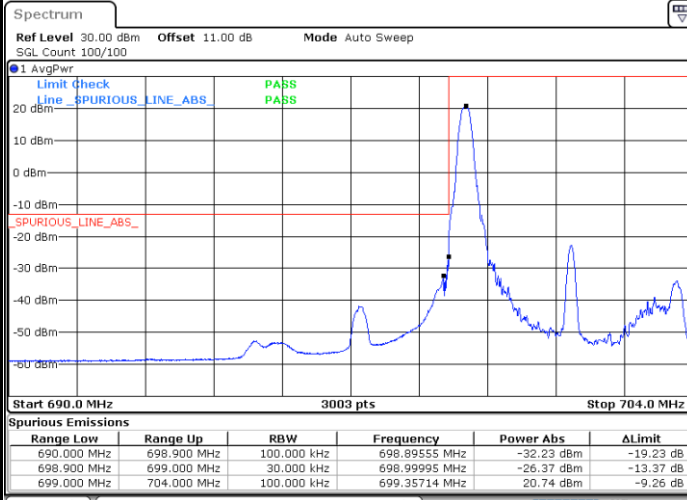


Date: 22.SEP.2021 15:22:24



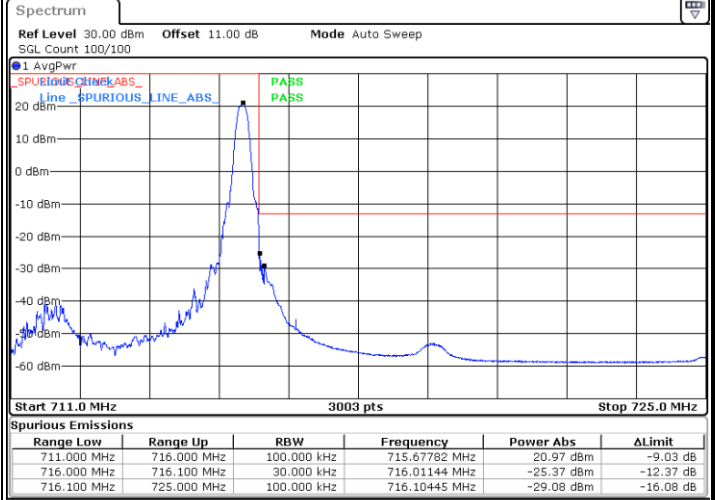
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



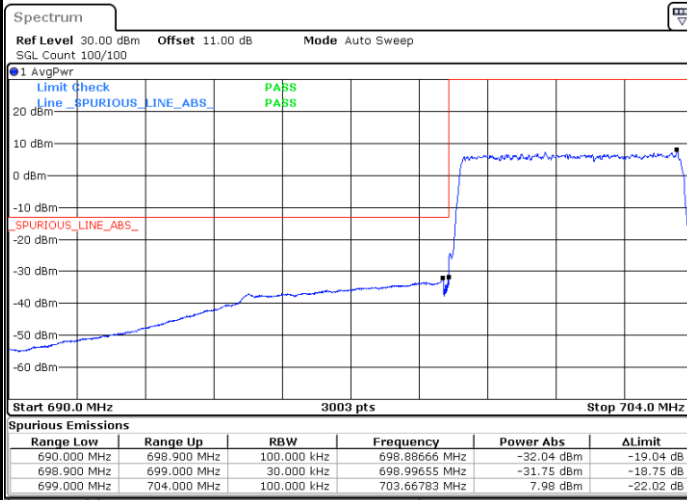
Date: 22.SEP.2021 15:29:23

Highest Band Edge / 1 RB



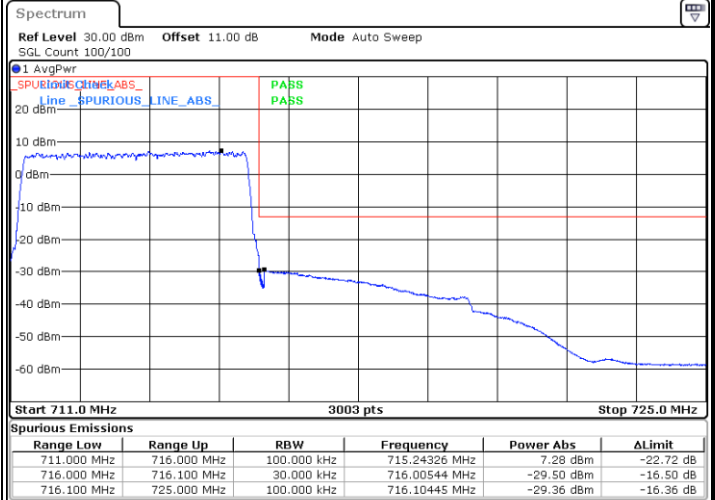
Date: 22.SEP.2021 15:34:06

Lowest Band Edge / Full RB



Date: 22.SEP.2021 15:27:18

Highest Band Edge / Full RB

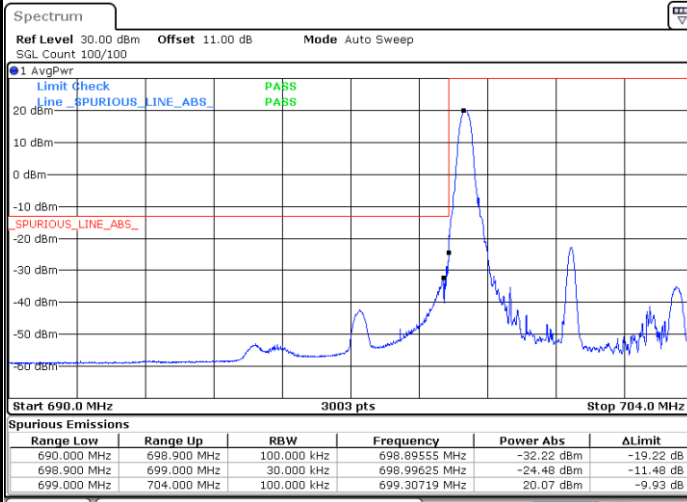


Date: 22.SEP.2021 15:32:43



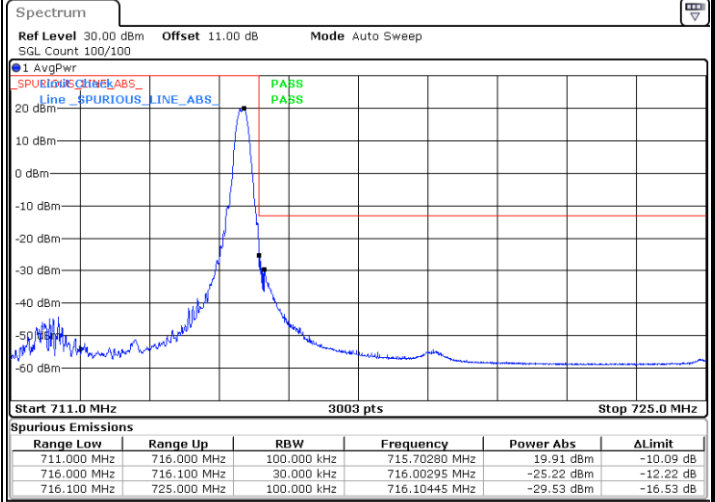
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



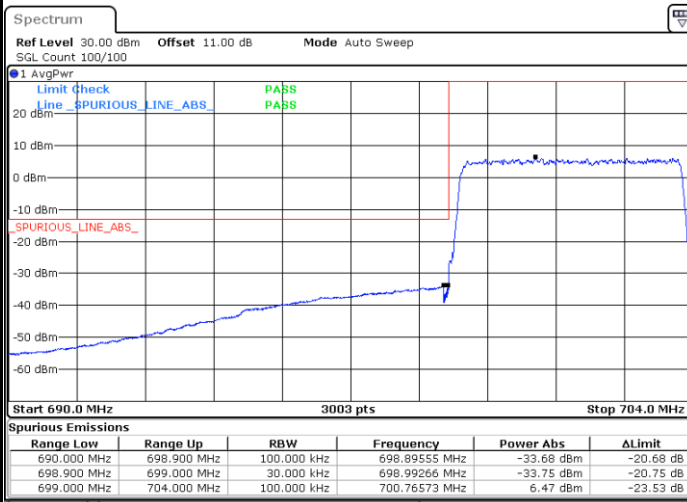
Date: 22.SEP.2021 15:28:42

Highest Band Edge / 1 RB



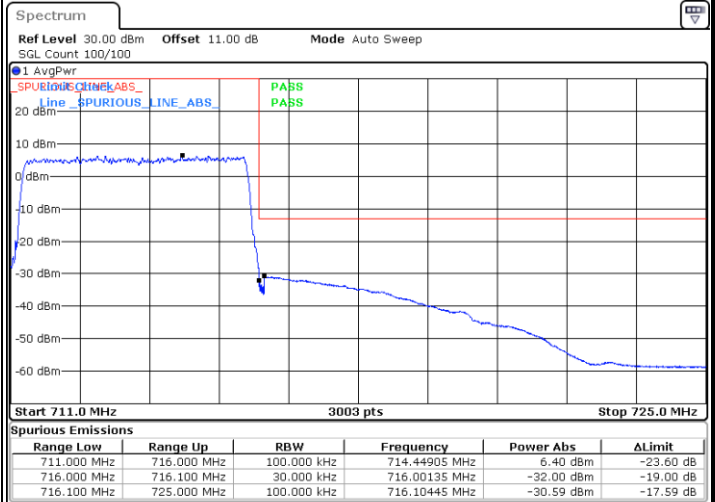
Date: 22.SEP.2021 15:34:48

Lowest Band Edge / Full RB



Date: 22.SEP.2021 15:28:00

Highest Band Edge / Full RB

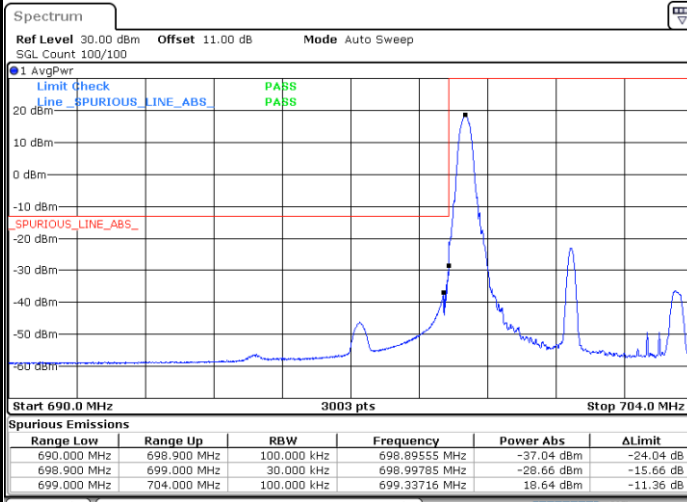


Date: 22.SEP.2021 15:33:24



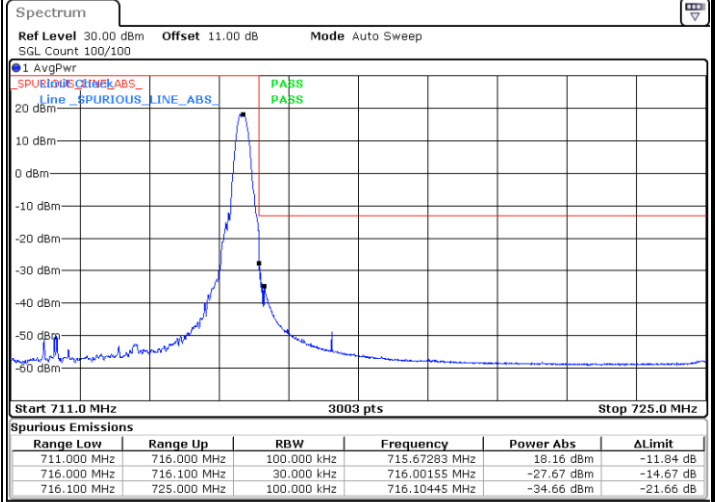
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



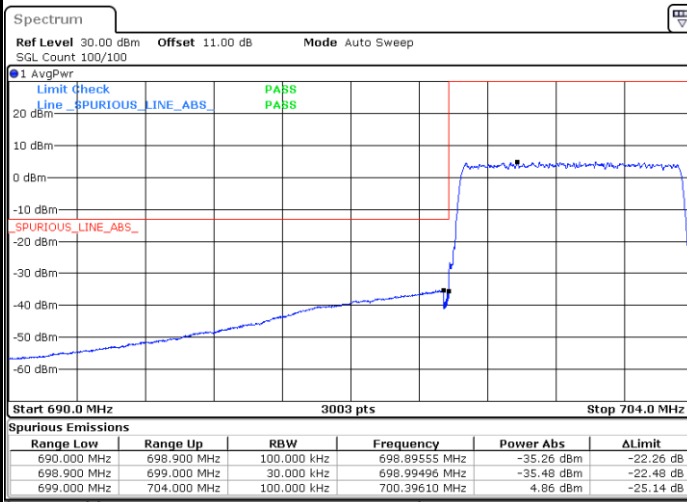
Date: 22.SEP.2021 15:24:30

Highest Band Edge / 1 RB



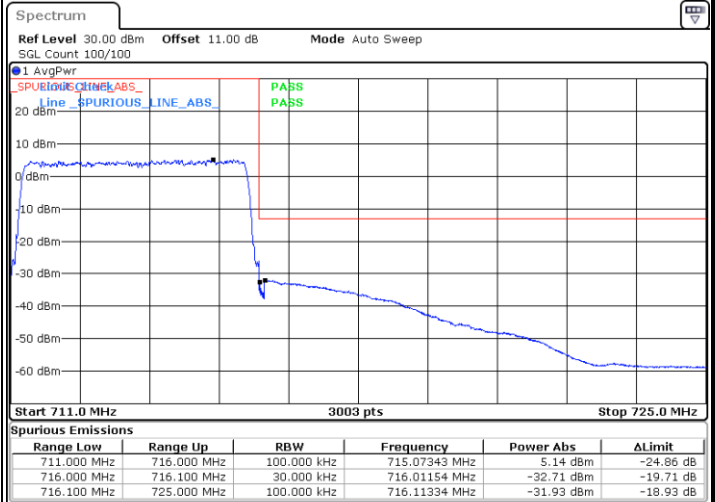
Date: 22.SEP.2021 15:26:37

Lowest Band Edge / Full RB



Date: 22.SEP.2021 15:23:48

Highest Band Edge / Full RB

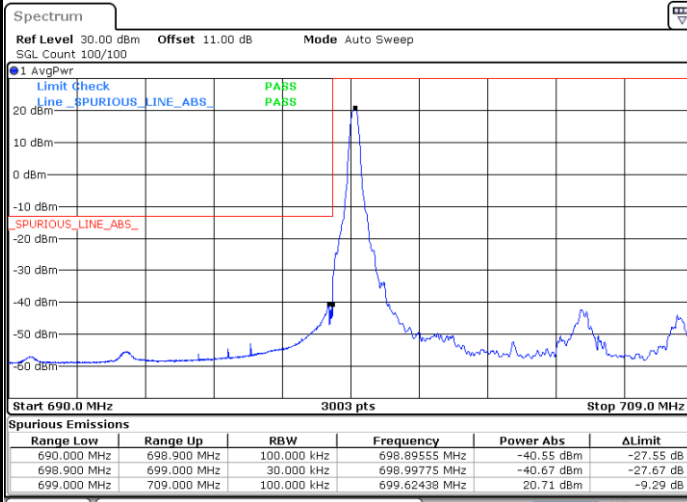


Date: 22.SEP.2021 15:25:55



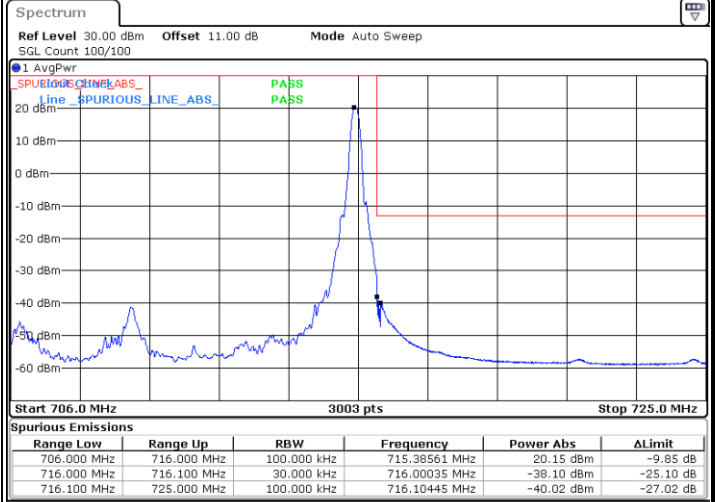
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



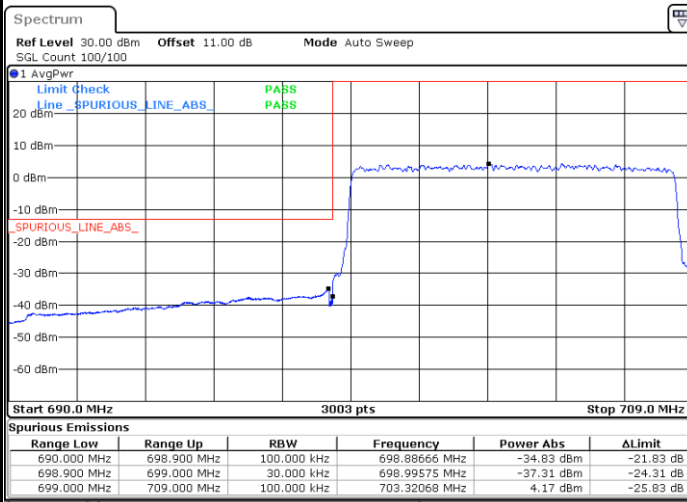
Date: 22.SEP.2021 15:38:40

Highest Band Edge / 1 RB



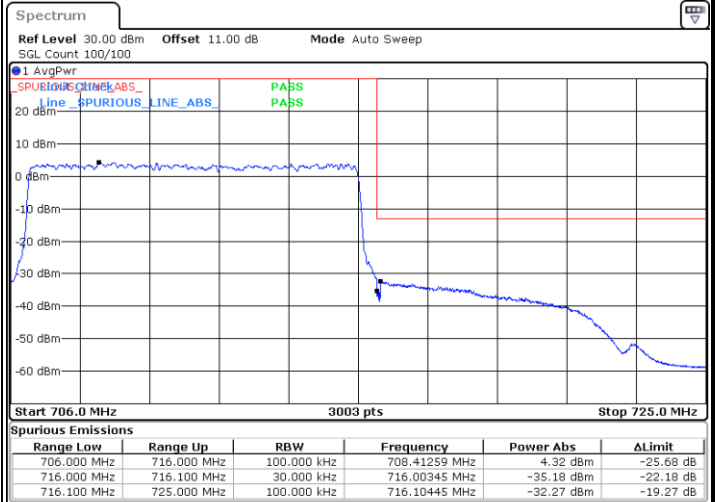
Date: 22.SEP.2021 15:44:07

Lowest Band Edge / Full RB



Date: 22.SEP.2021 15:36:07

Highest Band Edge / Full RB

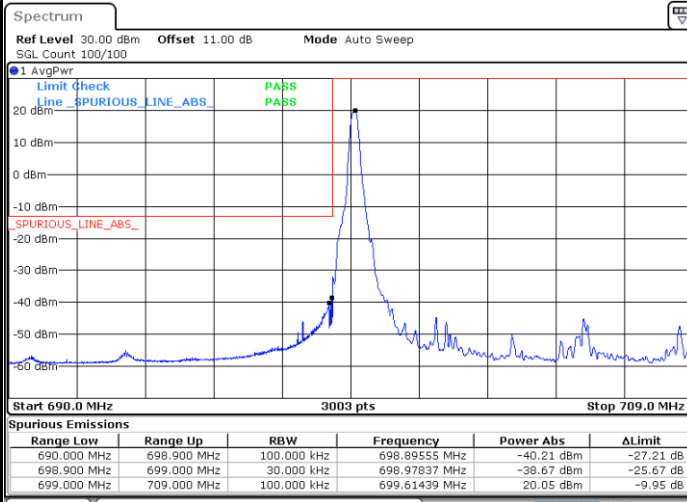


Date: 22.SEP.2021 15:42:01



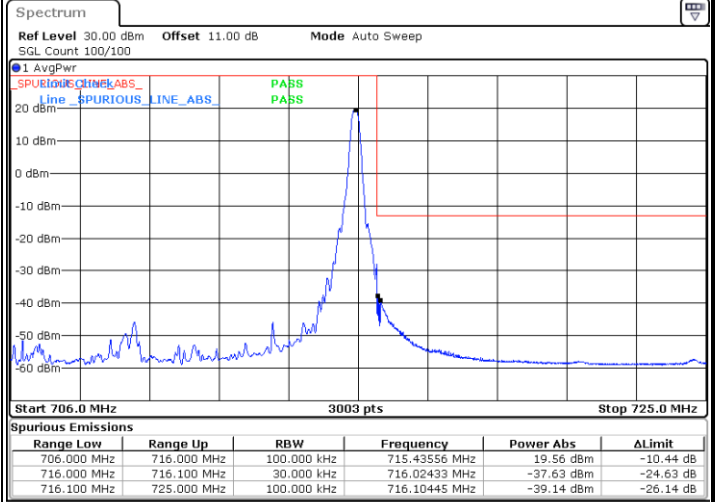
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



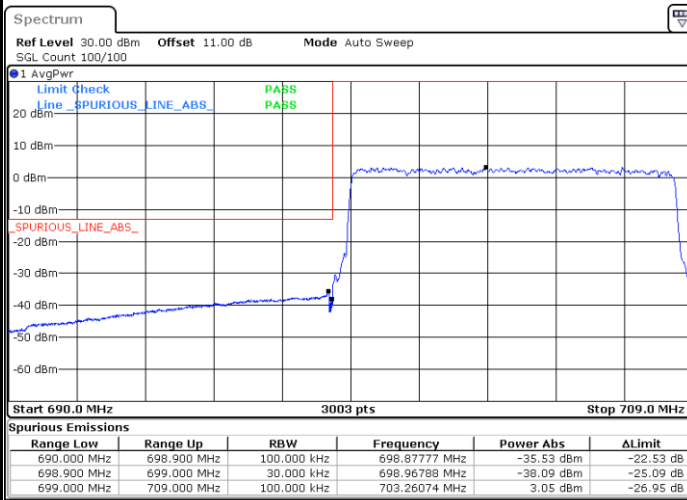
Date: 22.SEP.2021 15:37:58

Highest Band Edge / 1 RB



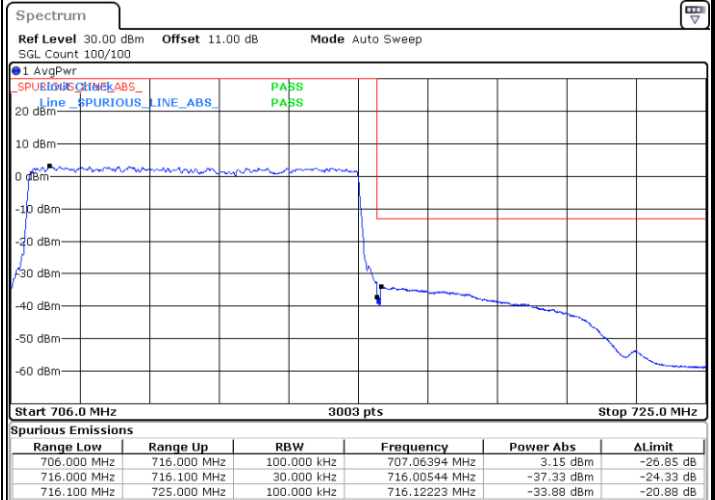
Date: 22.SEP.2021 15:43:25

Lowest Band Edge / Full RB



Date: 22.SEP.2021 15:37:15

Highest Band Edge / Full RB

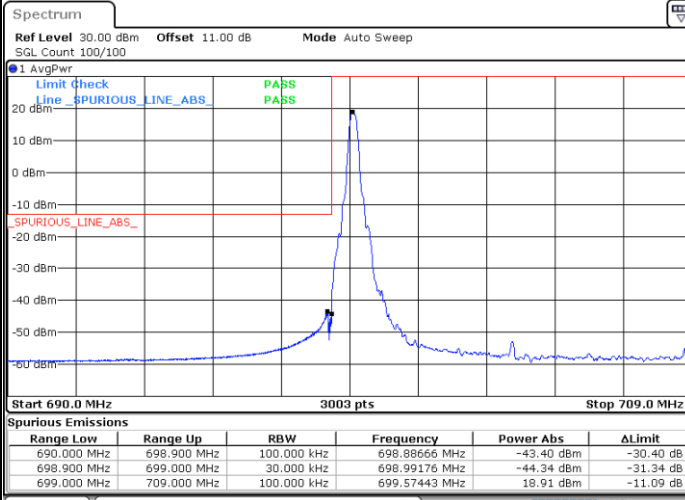


Date: 22.SEP.2021 15:42:43



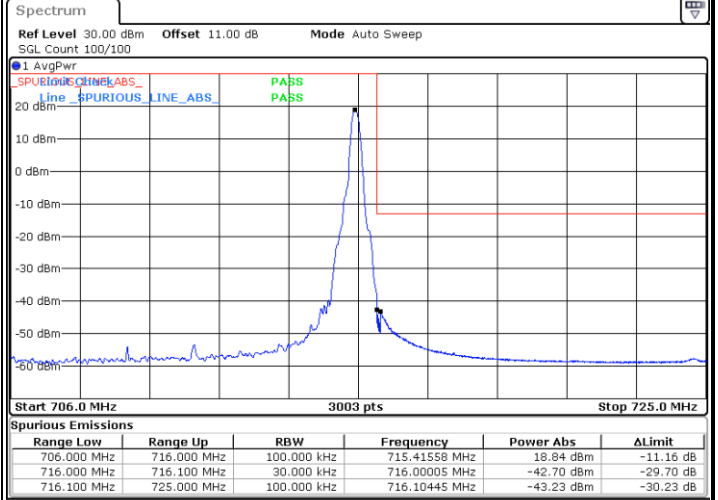
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



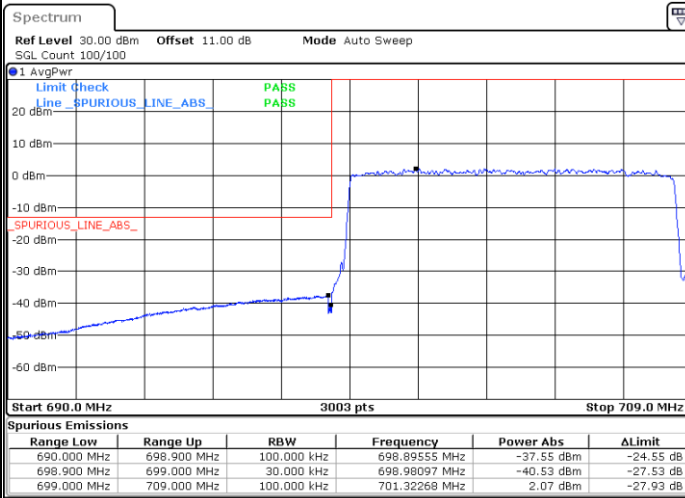
Date: 22.SEP.2021 16:28:30

Highest Band Edge / 1 RB



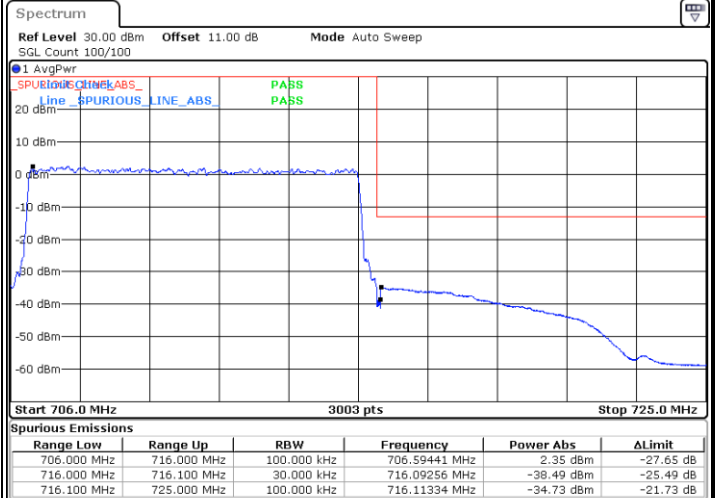
Date: 22.SEP.2021 16:30:37

Lowest Band Edge / Full RB



Date: 22.SEP.2021 16:27:47

Highest Band Edge / Full RB



Date: 22.SEP.2021 16:29:55

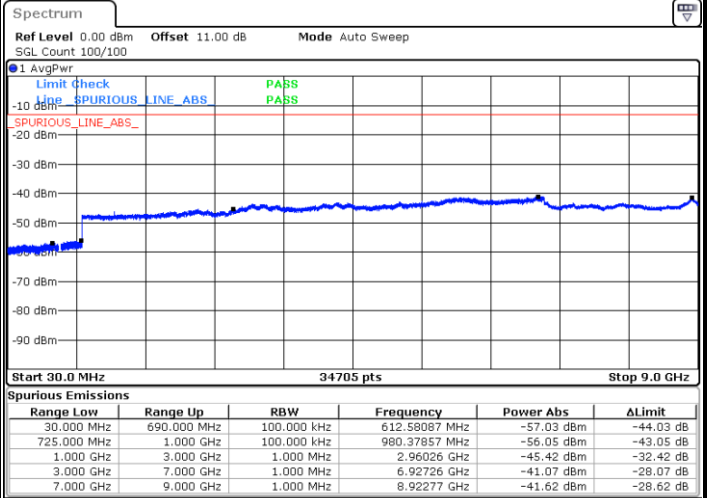
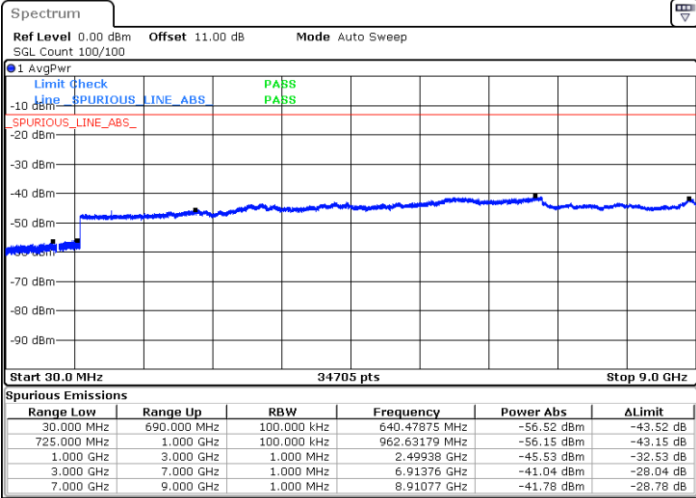


Conducted Spurious Emission

LTE Band 12 / 1.4MHz

Lowest Channel / QPSK

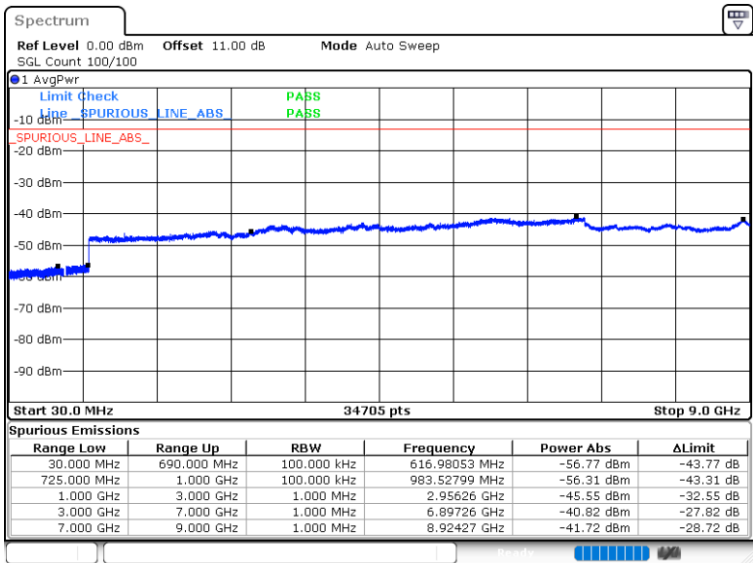
Middle Channel / QPSK



Date: 22.SEP.2021 15:00:59

Date: 22.SEP.2021 15:03:02

Highest Channel / QPSK



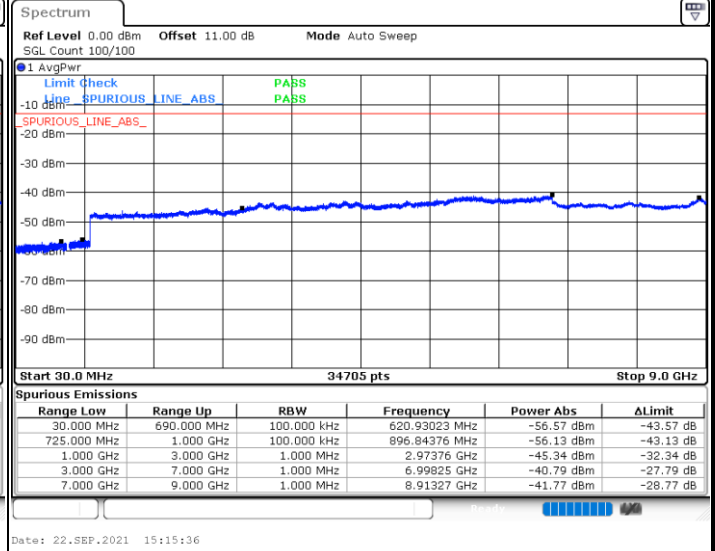
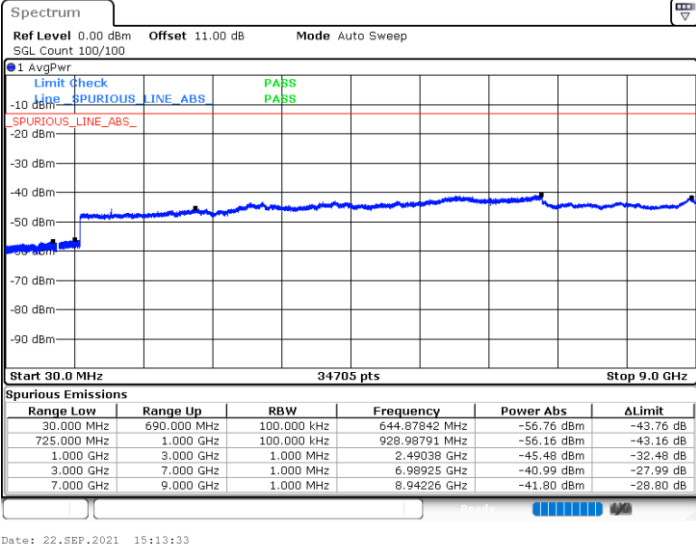
Date: 22.SEP.2021 15:06:24



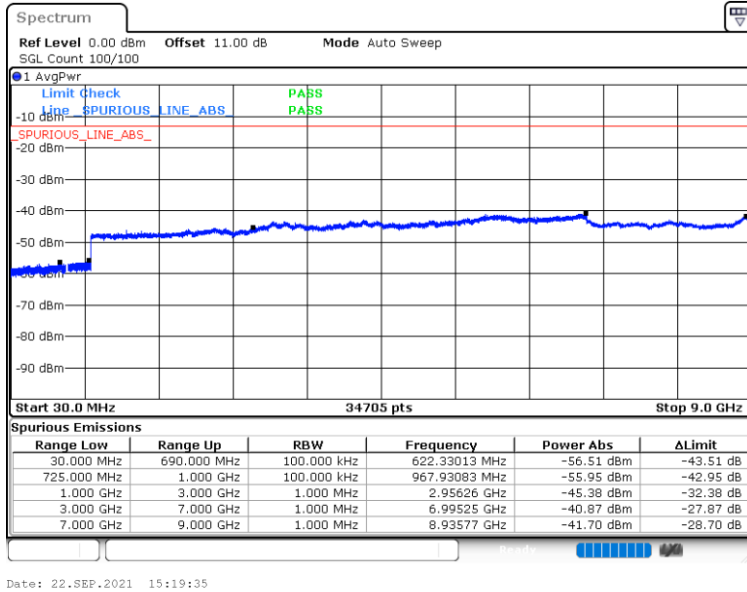
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

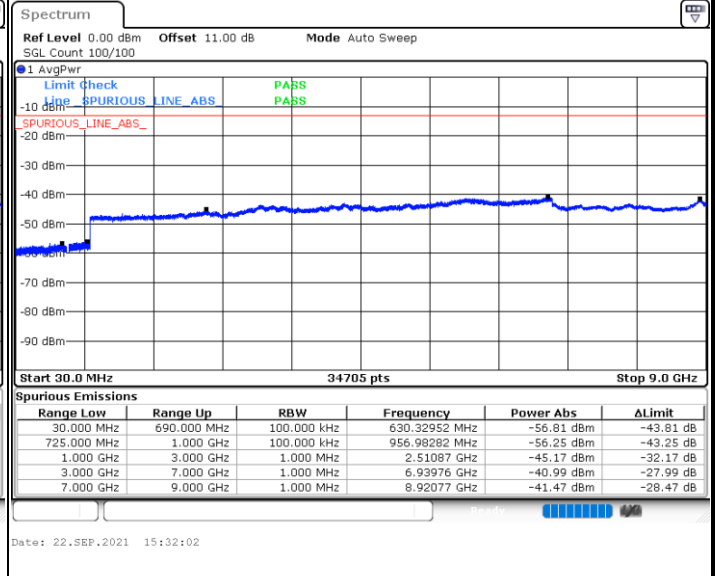
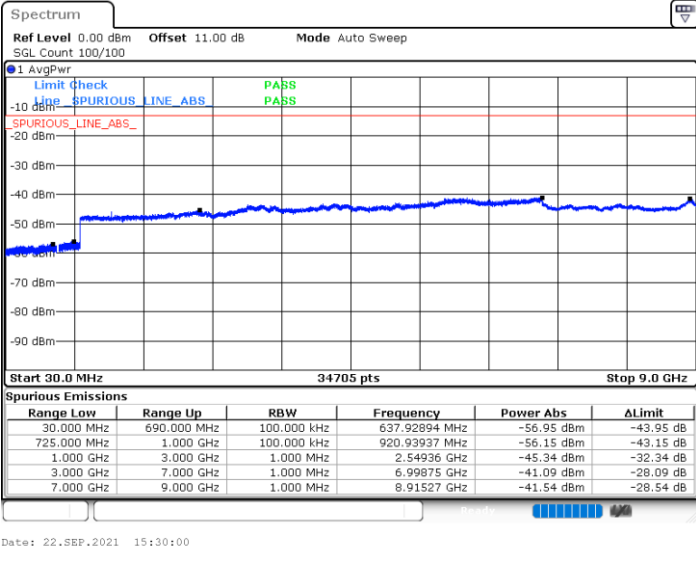




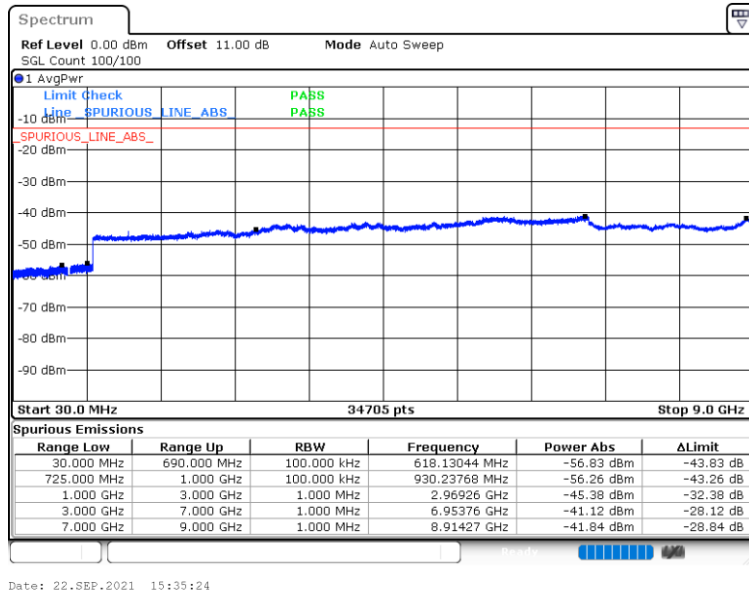
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

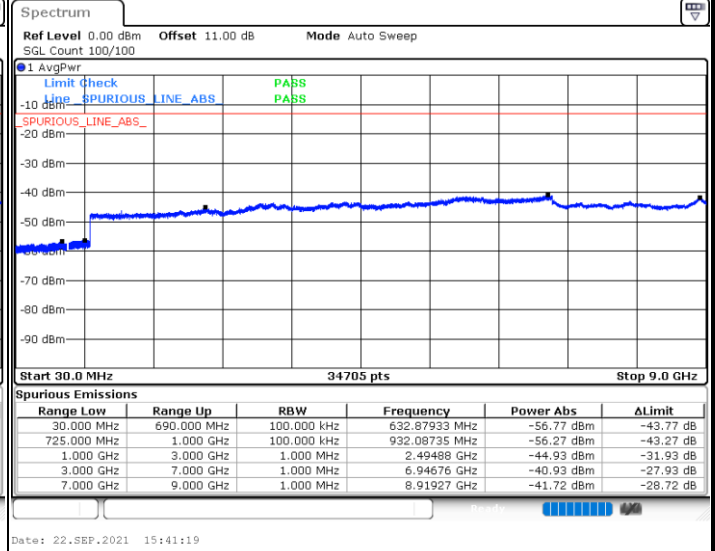
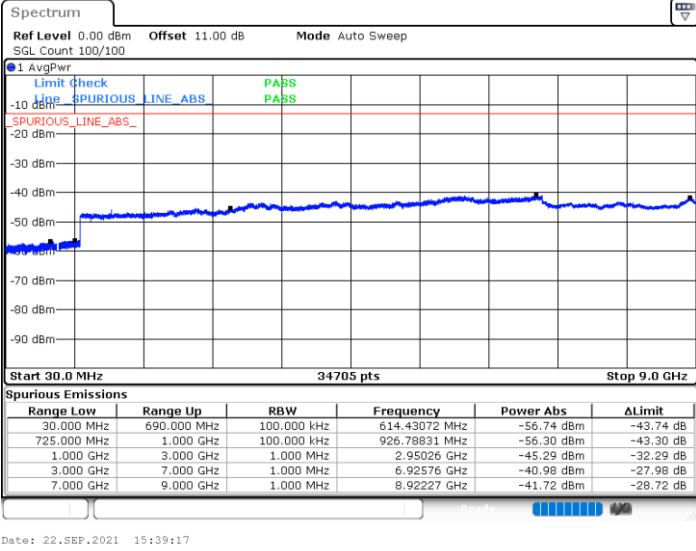




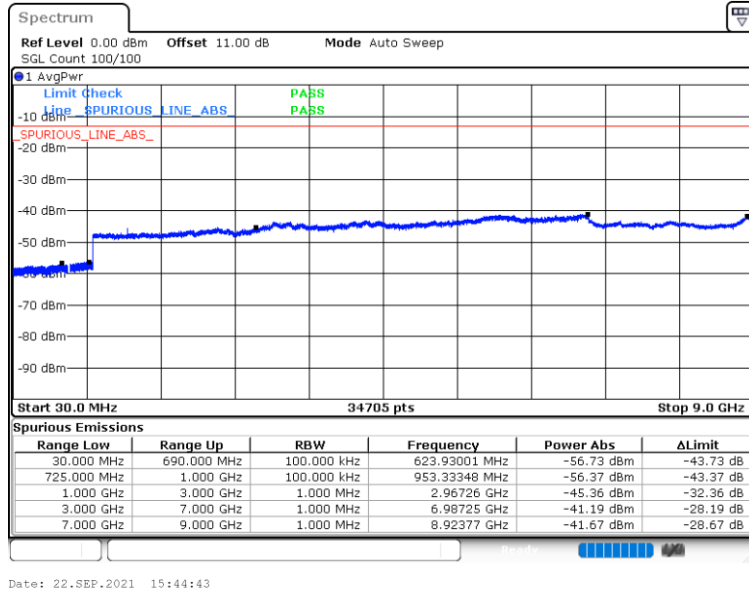
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK





Frequency Stability

| Test Conditions | | LTE Band 12 (QPSK) / Middle Channel | Limit |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | Note 2. |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0028 | PASS |
| 40 | Normal Voltage | 0.0198 | |
| 30 | Normal Voltage | 0.0006 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0137 | |
| 0 | Normal Voltage | 0.0033 | |
| -10 | Normal Voltage | 0.0163 | |
| -20 | Normal Voltage | 0.0182 | |
| -30 | Normal Voltage | 0.0174 | |
| 20 | Maximum Voltage | 0.0229 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0098 | |

Note:

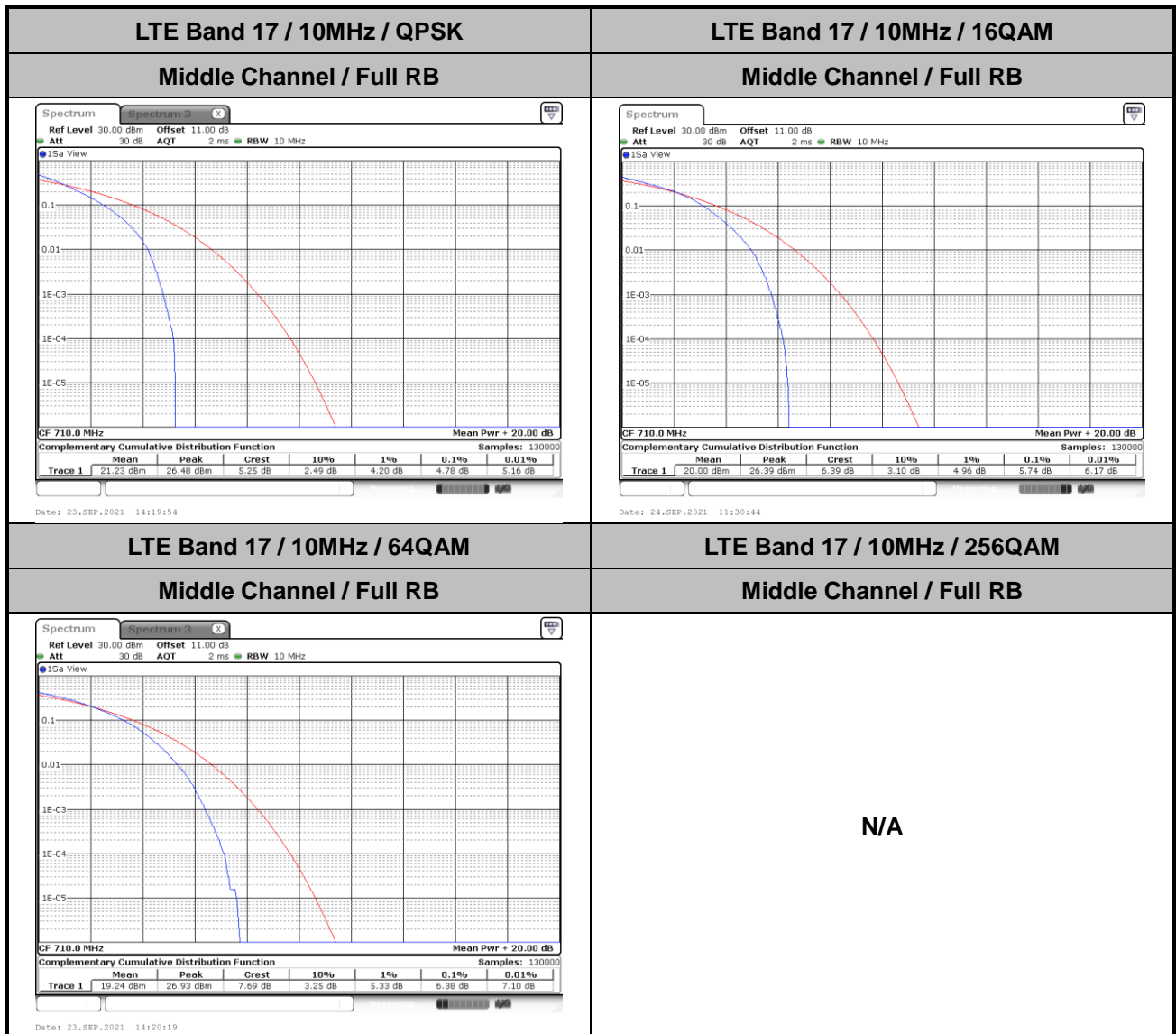
- 1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.2 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 17

Peak-to-Average Ratio

| Mode | LTE Band 17 / 10MHz | | | | |
|-----------|---------------------|---------|---------|---------|-------------|
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | Limit: 13dB |
| RB Size | Full RB | Full RB | Full RB | Full RB | Result |
| Middle CH | 4.78 | 5.74 | 6.38 | - | PASS |





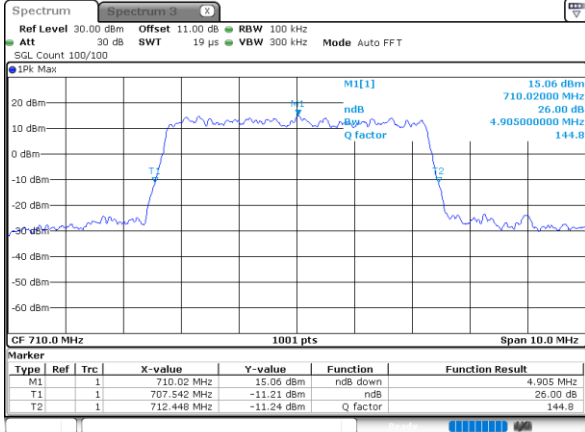
26dB Bandwidth

| Mode | LTE Band 17 : 26dB BW(MHz) | | | | | | | | | | | |
|-----------|----------------------------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Middle CH | - | - | - | - | 4.91 | 4.93 | 9.81 | 9.63 | - | - | - | - |
| Mode | LTE Band 17 : 26dB BW(MHz) | | | | | | | | | | | |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM |
| Middle CH | - | - | - | - | 4.94 | - | 9.99 | - | - | - | - | - |



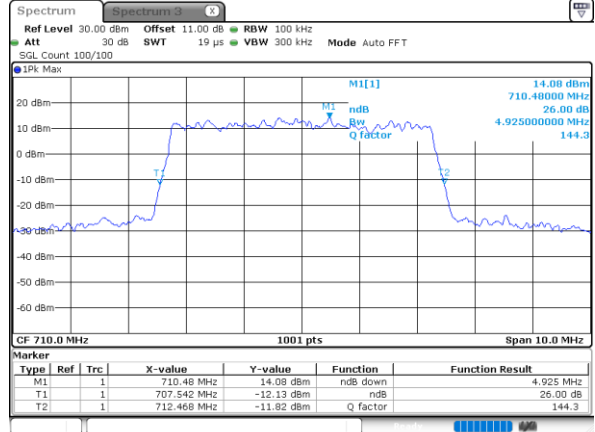
LTE Band 17

Middle Channel / 5MHz / QPSK



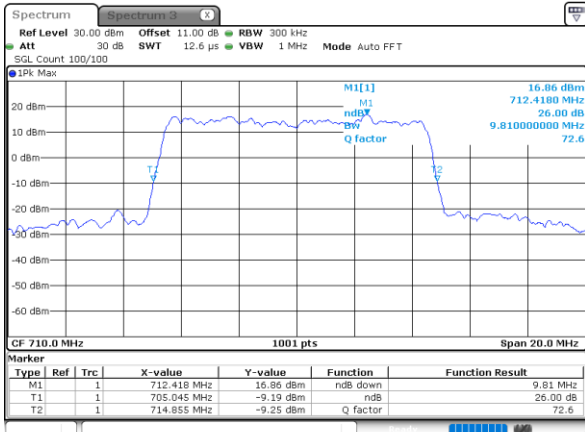
Date: 23_SEP.2021 13:55:26

Middle Channel / 5MHz / 16QAM



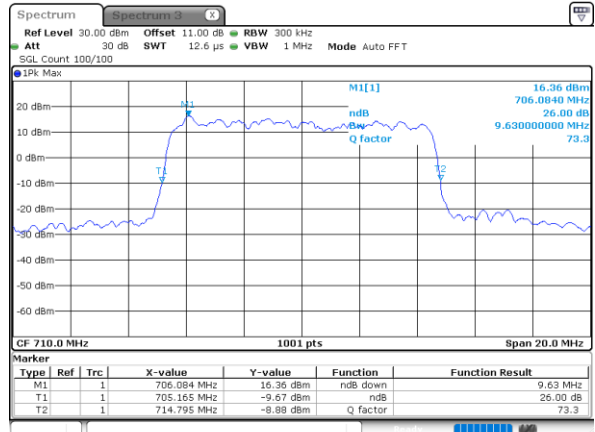
Date: 23_SEP.2021 13:55:47

Middle Channel / 10MHz / QPSK



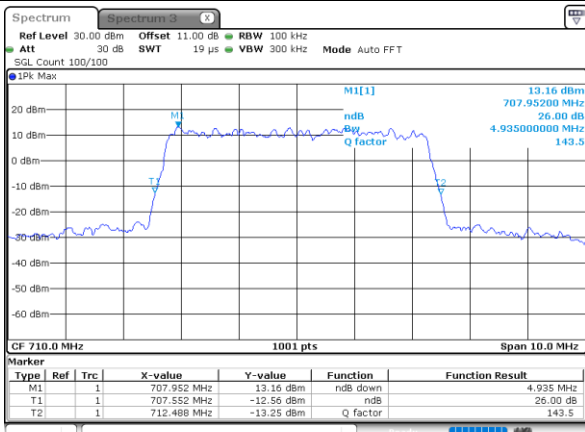
Date: 23_SEP.2021 14:05:40

Middle Channel / 10MHz / 16QAM



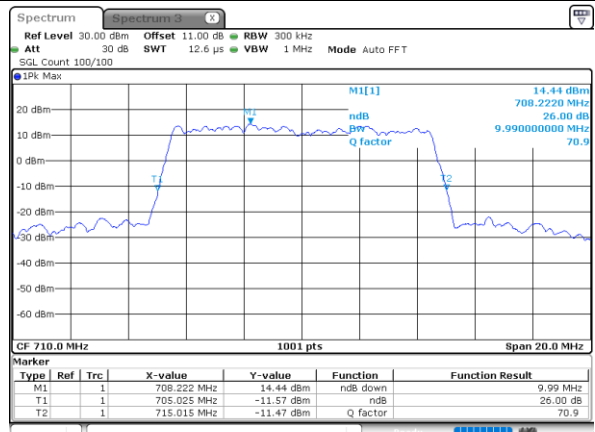
Date: 23_SEP.2021 14:06:00

Middle Channel / 5MHz / 64QAM



Date: 23_SEP.2021 14:13:08

Middle Channel / 10MHz / 64QAM



Date: 23_SEP.2021 14:17:21



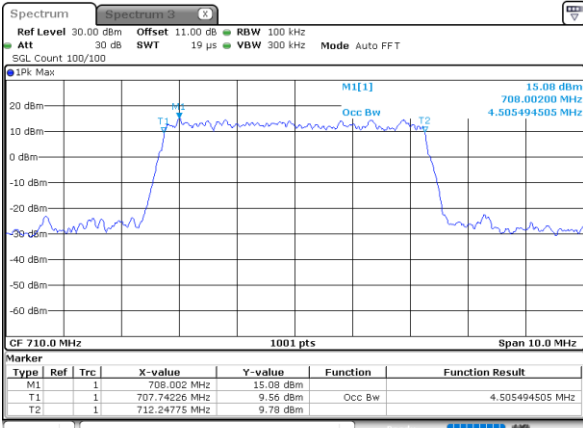
Occupied Bandwidth

| Mode | LTE Band 17 : 99%OBW(MHz) | | | | | | | | | | | |
|-----------|---------------------------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Middle CH | - | - | - | - | 4.51 | 4.49 | 8.99 | 9.05 | - | - | - | - |
| Mode | LTE Band 17 : 99%OBW(MHz) | | | | | | | | | | | |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM | 64QAM | 256 QAM |
| Middle CH | - | - | - | - | 4.53 | - | 9.07 | - | - | - | - | - |



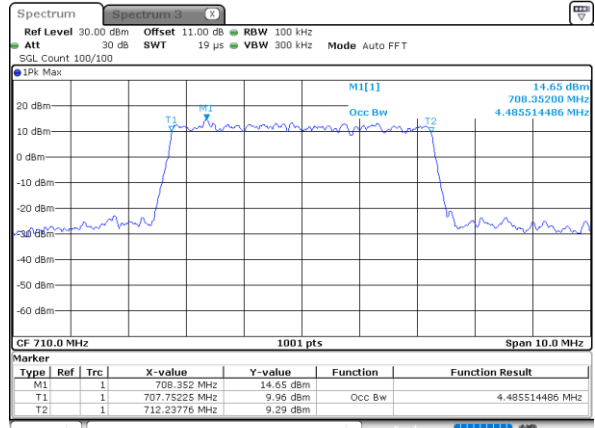
LTE Band 17

Middle Channel / 5MHz / QPSK



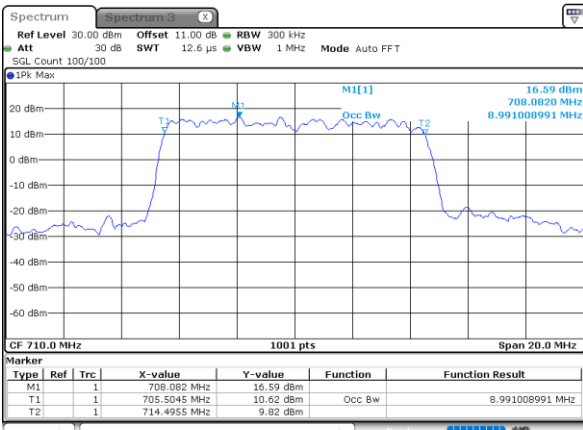
Date: 23_SEP.2021 13:54:41

Middle Channel / 5MHz / 16QAM



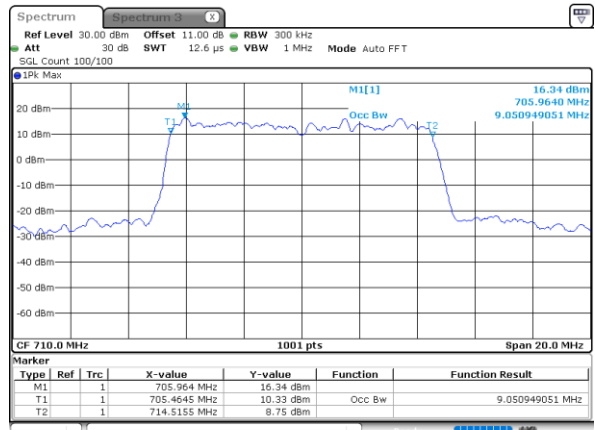
Date: 23_SEP.2021 13:55:04

Middle Channel / 10MHz / QPSK



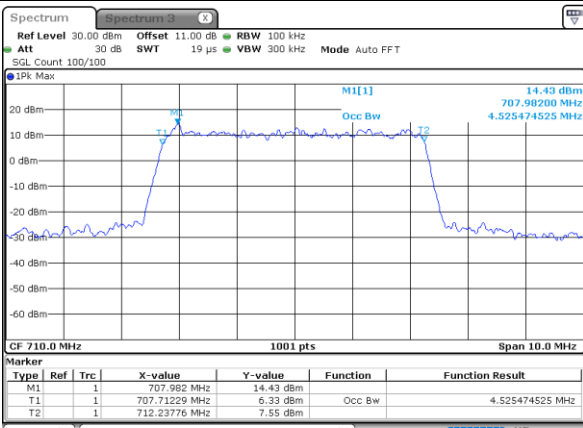
Date: 23_SEP.2021 14:04:55

Middle Channel / 10MHz / 16QAM



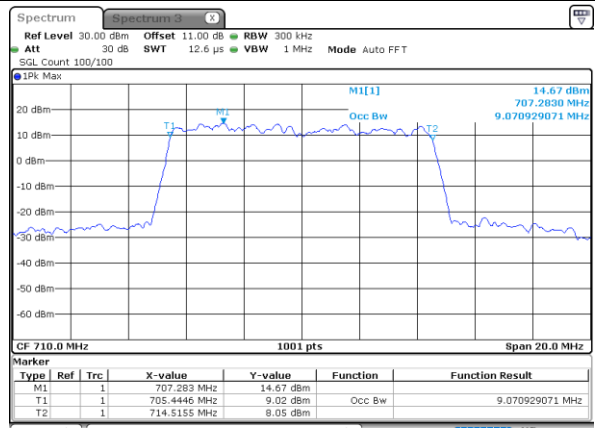
Date: 23_SEP.2021 14:05:17

Middle Channel / 5MHz / 64QAM



Date: 23_SEP.2021 14:12:46

Middle Channel / 10MHz / 64QAM



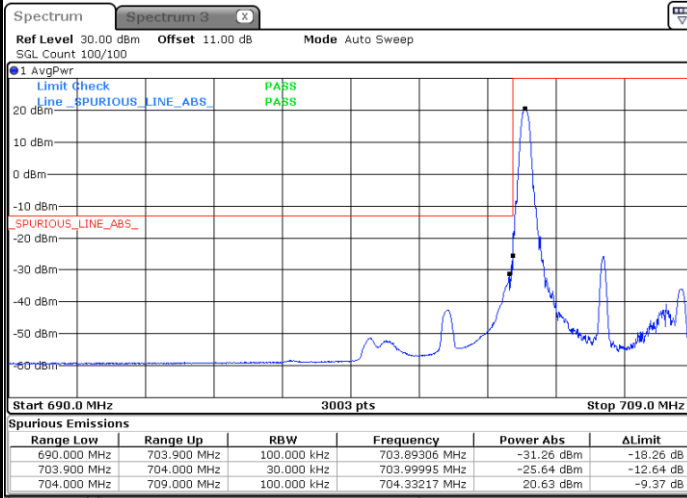
Date: 23_SEP.2021 14:16:58



Conducted Band Edge

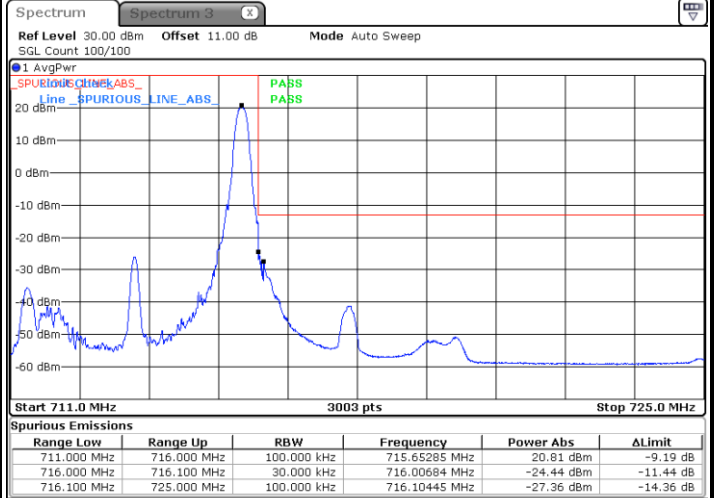
LTE Band 17 / 5MHz / QPSK

Lowest Band Edge / 1 RB



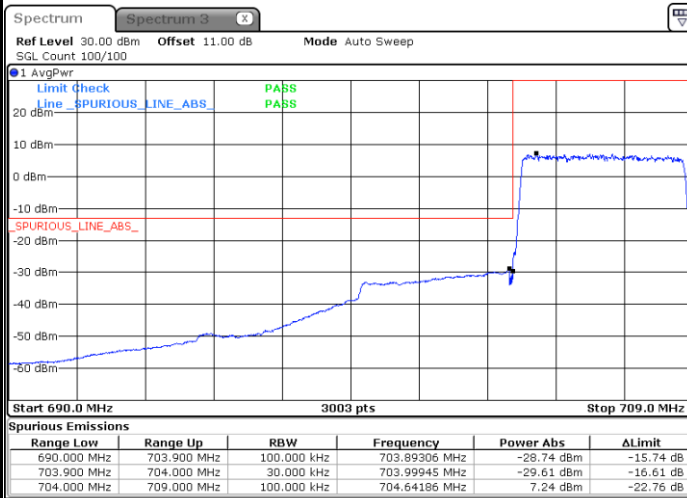
Date: 23.SEP.2021 13:51:04

Highest Band Edge / 1 RB



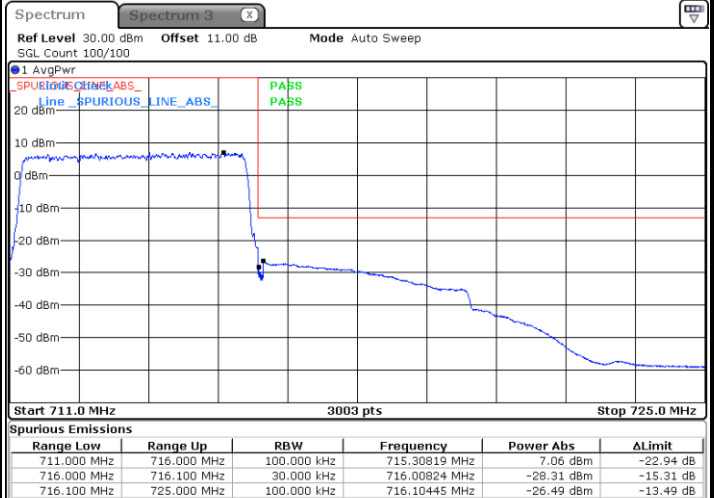
Date: 23.SEP.2021 13:57:13

Lowest Band Edge / Full RB



Date: 23.SEP.2021 13:52:49

Highest Band Edge / Full RB

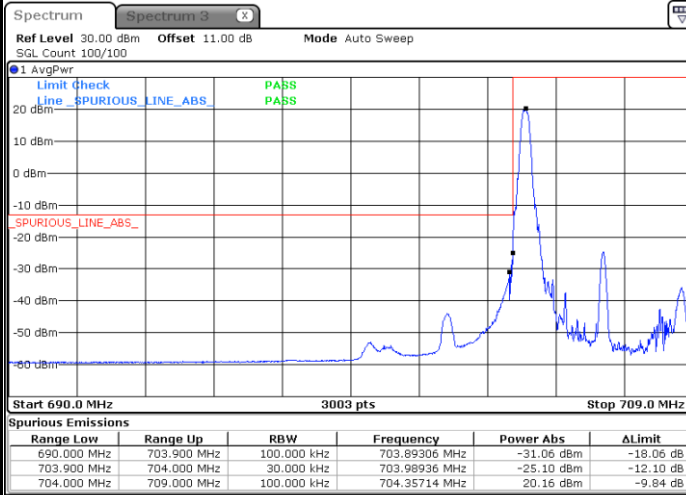


Date: 23.SEP.2021 13:58:56



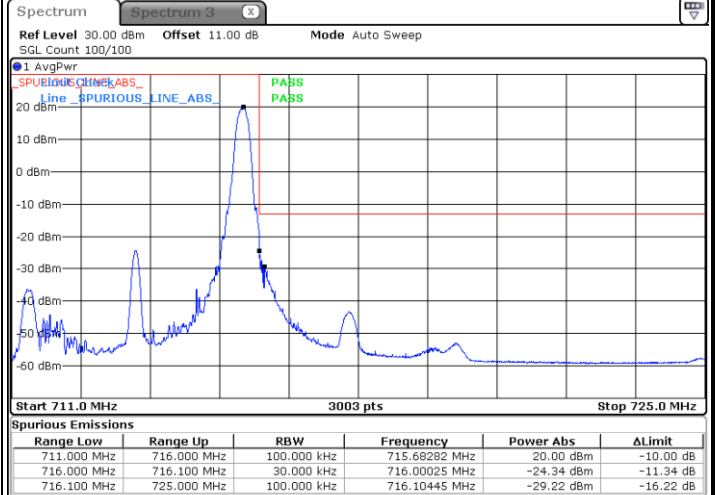
LTE Band 17 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



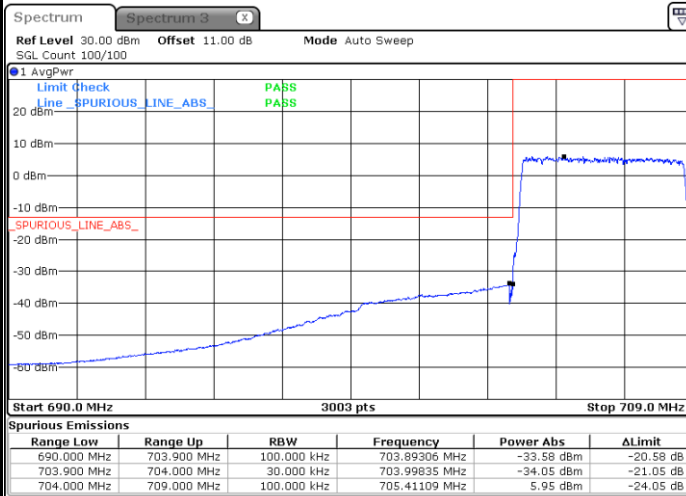
Date: 23.SEP.2021 13:51:56

Highest Band Edge / 1 RB



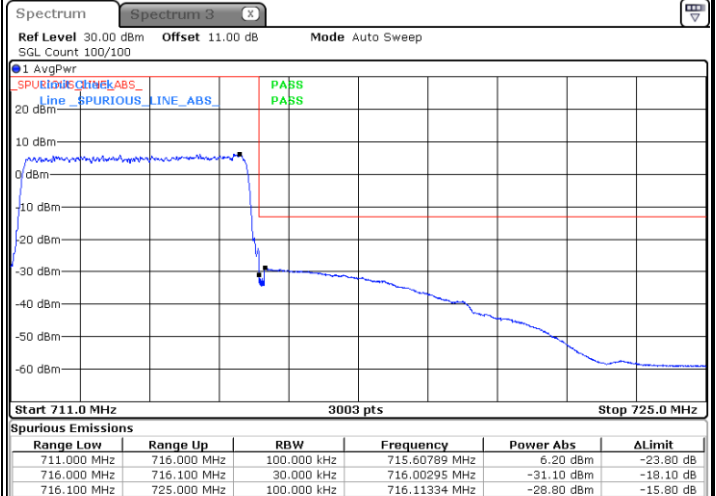
Date: 23.SEP.2021 13:58:04

Lowest Band Edge / Full RB



Date: 23.SEP.2021 13:53:42

Highest Band Edge / Full RB

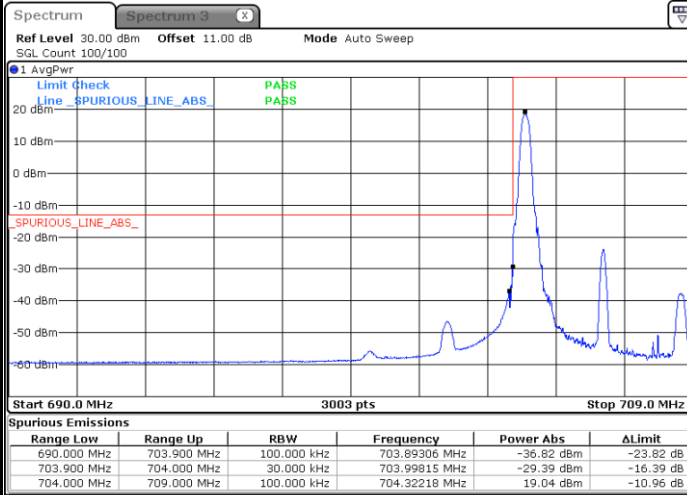


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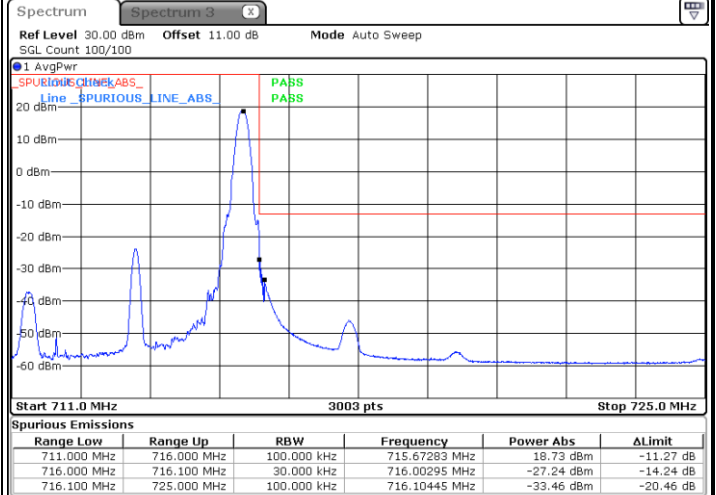
LTE Band 17 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



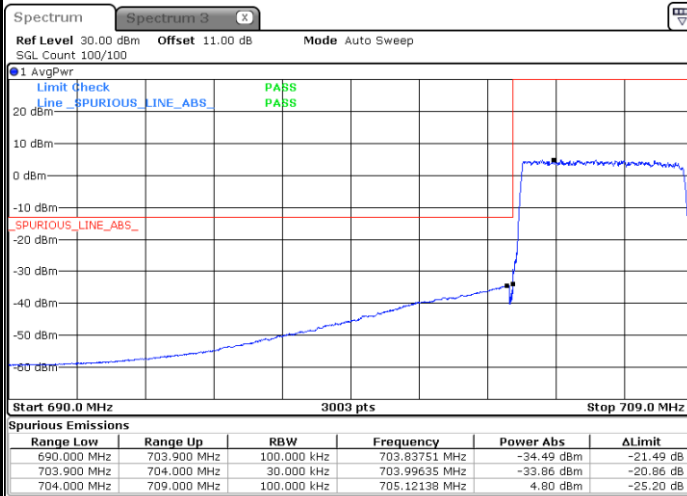
Date: 23.SEP.2021 14:11:31

Highest Band Edge / 1 RB



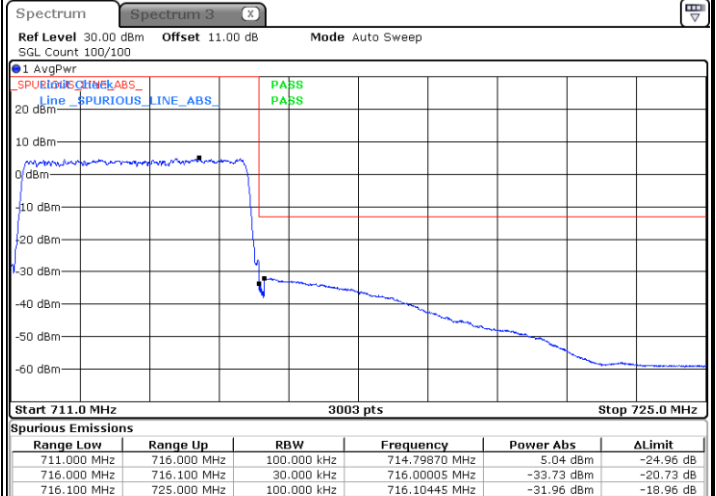
Date: 23.SEP.2021 14:13:59

Lowest Band Edge / Full RB



Date: 23.SEP.2021 14:12:24

Highest Band Edge / Full RB



Date: 23.SEP.2021 14:14:50