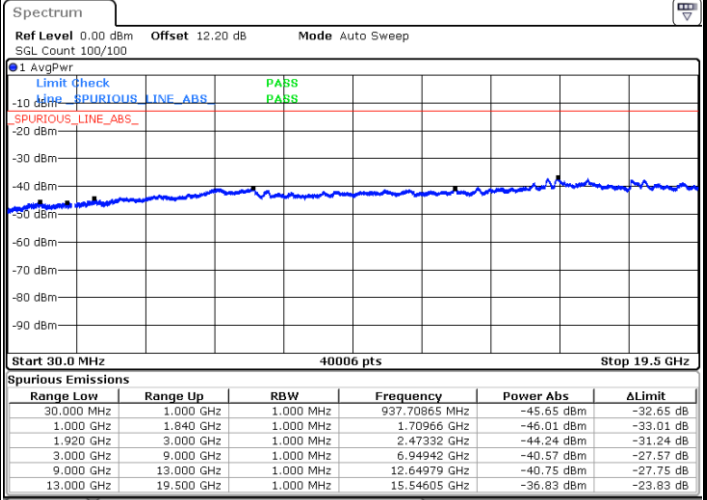
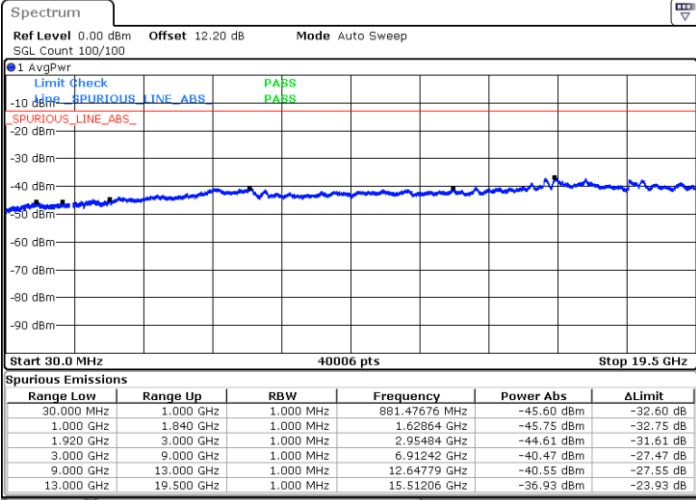




LTE Band 2 / 10MHz

Lowest Channel / QPSK

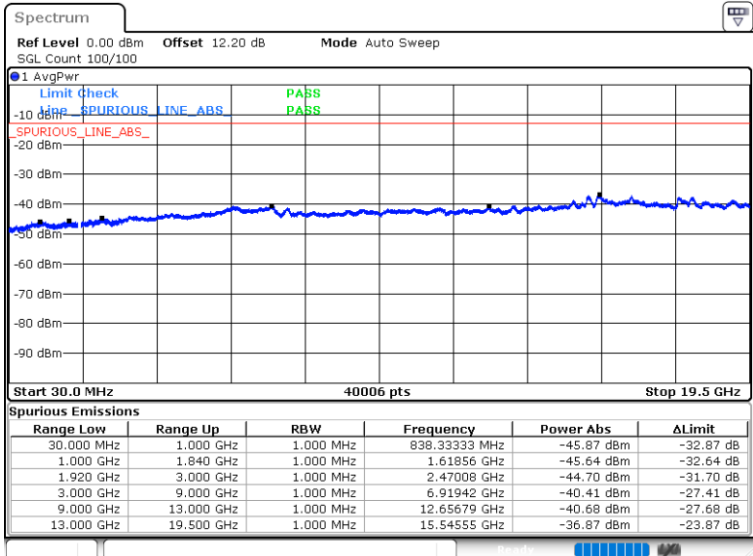
Middle Channel / QPSK



Date: 12.NOV.2021 19:36:42

Date: 12.NOV.2021 19:38:17

Highest Channel / QPSK



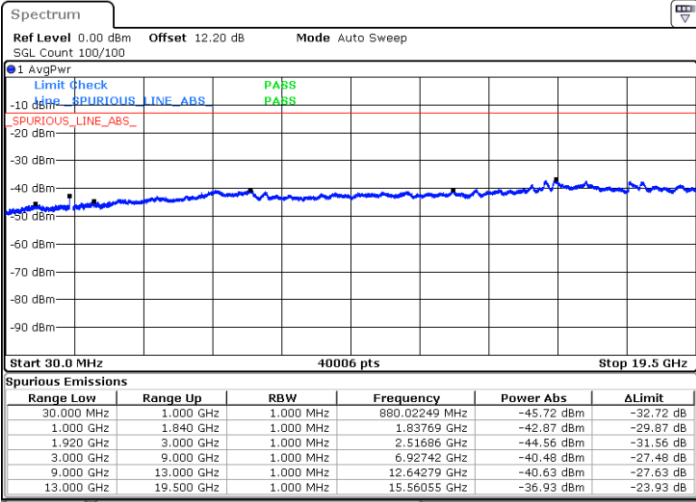
Date: 12.NOV.2021 19:40:52



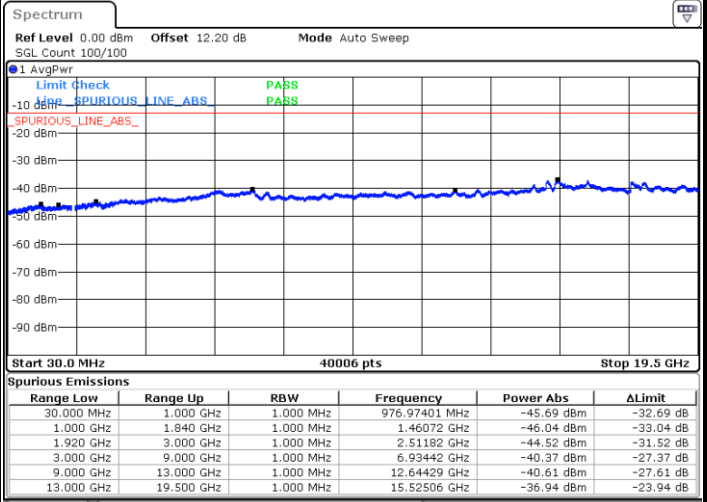
LTE Band 2 / 15MHz

Lowest Channel / QPSK

Middle Channel / QPSK

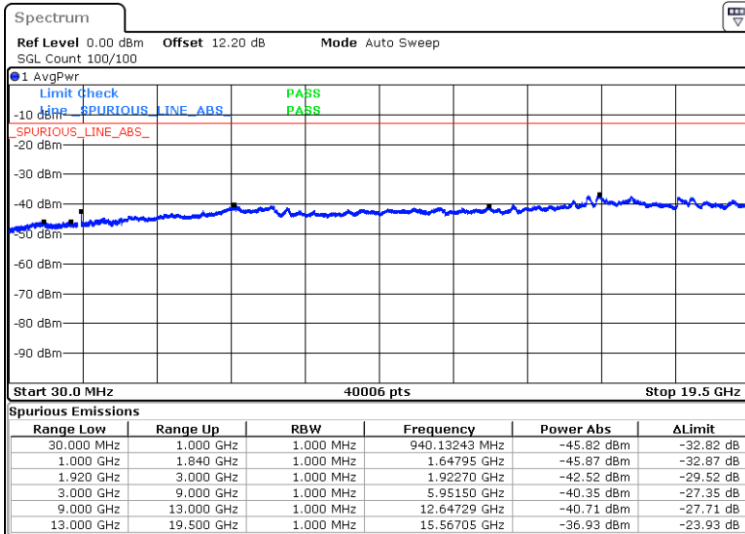


Date: 12.NOV.2021 19:43:28



Date: 12.NOV.2021 19:45:03

Highest Channel / QPSK



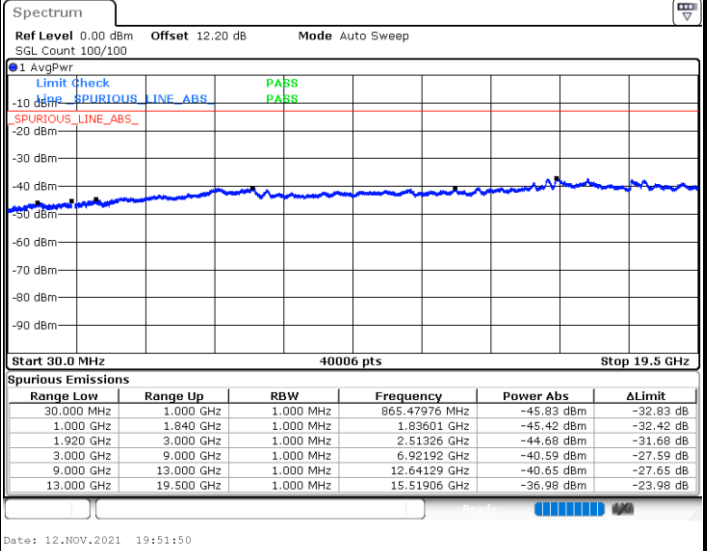
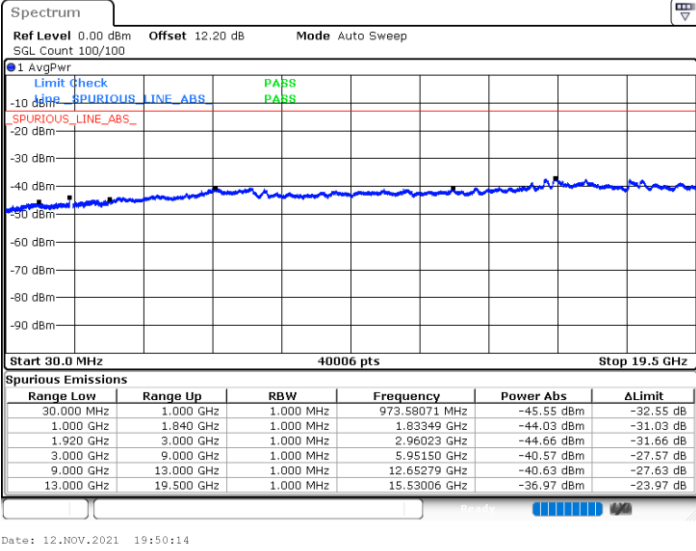
Date: 12.NOV.2021 19:47:38



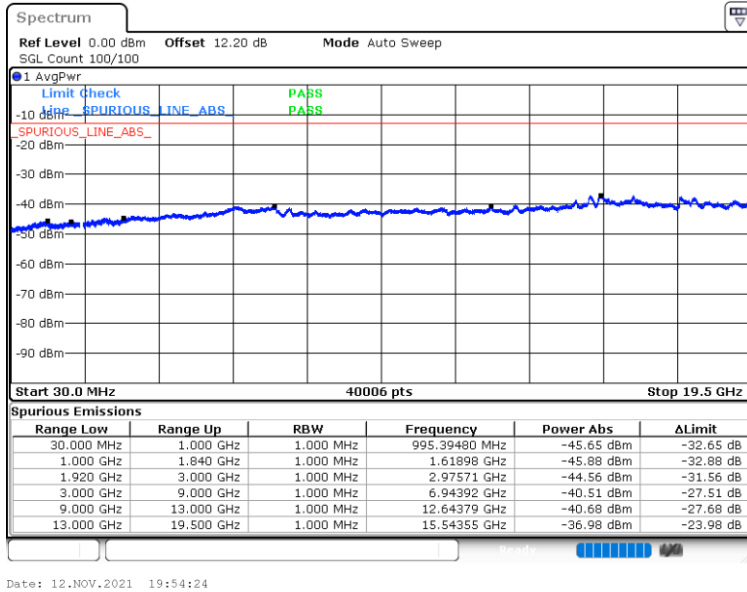
LTE Band 2 / 20MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK





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 | 0.0028 | PASS |
| 40 | Normal Voltage | 0.0019 | |
| 30 | Normal Voltage | 0.0054 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0093 | |
| 0 | Normal Voltage | 0.0008 | |
| -10 | Normal Voltage | 0.0074 | |
| -20 | Normal Voltage | 0.0007 | |
| -30 | Normal Voltage | 0.0004 | |
| 20 | Maximum Voltage | 0.0019 | |
| 20 | Normal Voltage | 0.0092 | |
| 20 | Battery End Point | 0.0074 | |

Note:

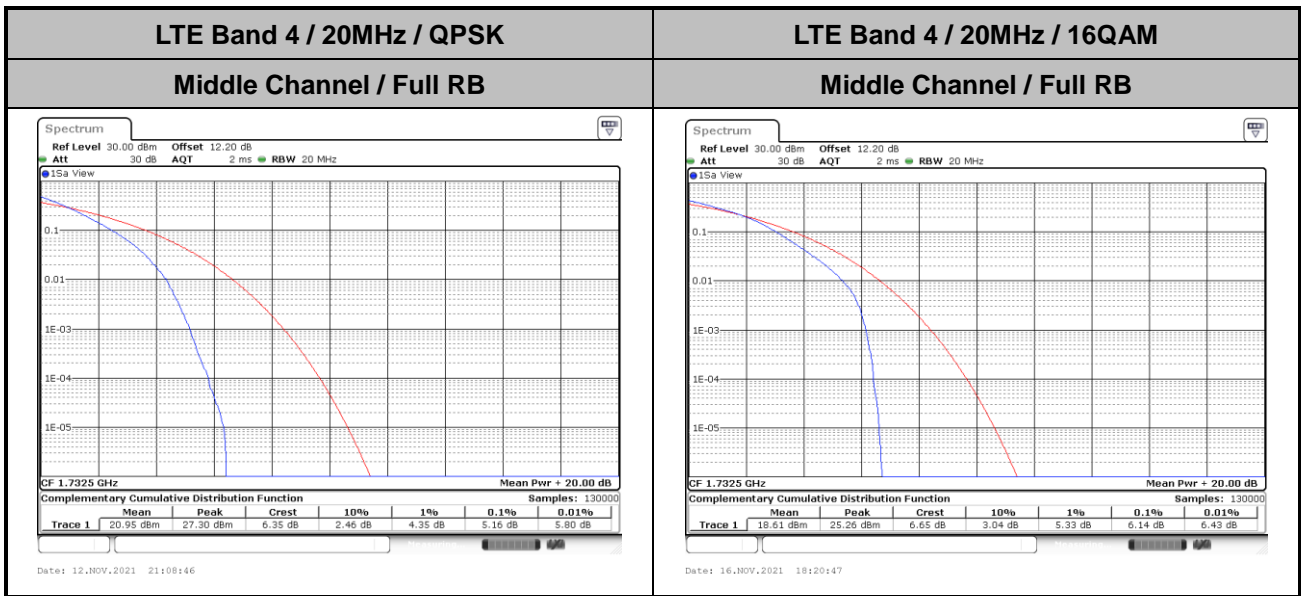
1. Normal Voltage =12 V. ; Battery End Point (BEP) =11.4 V. ; Maximum Voltage =12.6 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 4

Peak-to-Average Ratio

| Mode | LTE Band 4 / 20MHz | | | | |
|-----------|--------------------|---------|---------|---------|-------------|
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | Limit: 13dB |
| RB Size | Full RB | Full RB | Full RB | Full RB | Result |
| Middle CH | 5.16 | 6.14 | - | - | PASS |





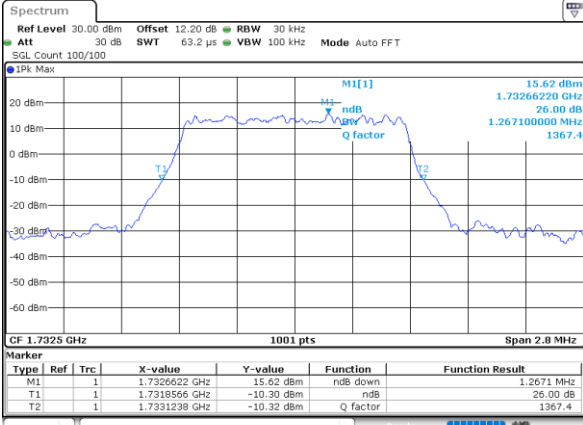
26dB Bandwidth

| Mode | LTE Band 4 : 26dB BW(MHz) | | | | | | | | | | | |
|-----------|---------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| BW | | | | | | | | | | | | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Middle CH | 1.27 | 1.24 | 3.05 | 3.02 | 4.93 | 4.88 | 9.93 | 5.81 | 14.27 | 6.17 | 19.06 | 6.19 |



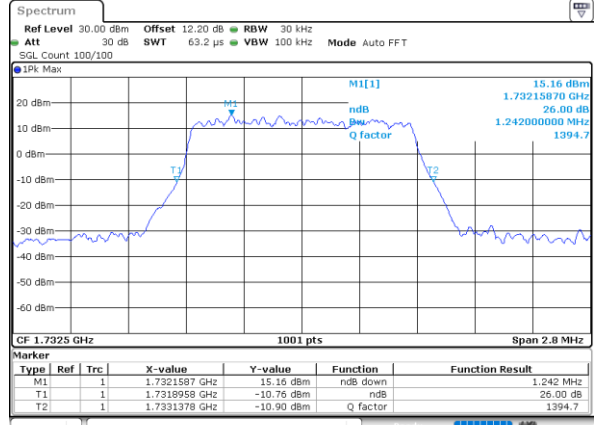
LTE Band 4

Middle Channel / 1.4MHz / QPSK



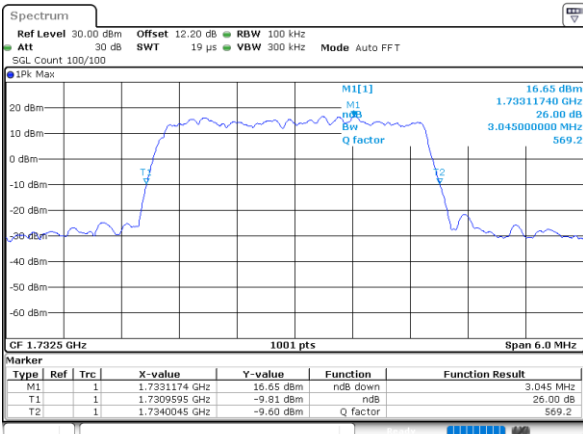
Date: 12.NOV.2021 20:07:55

Middle Channel / 1.4MHz / 16QAM



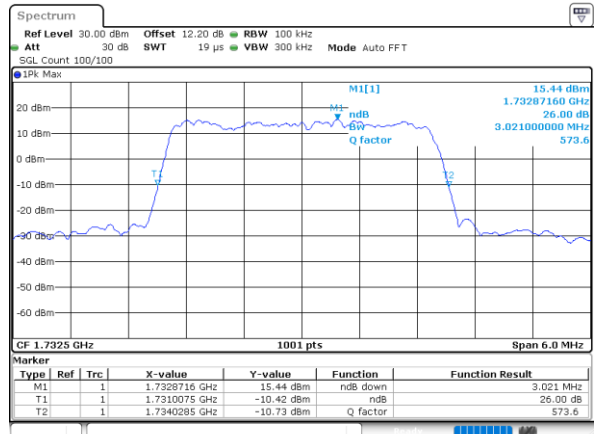
Date: 12.NOV.2021 20:08:18

Middle Channel / 3MHz / QPSK



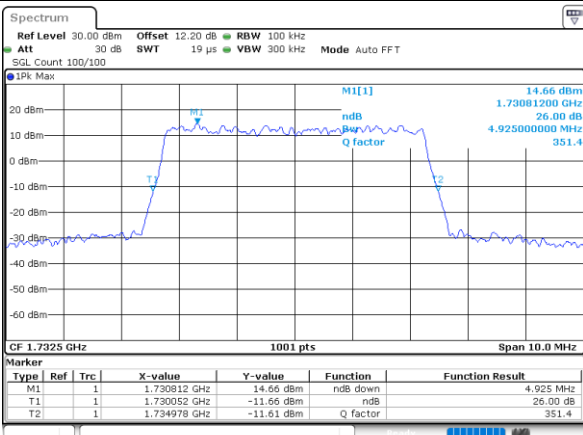
Date: 12.NOV.2021 20:17:27

Middle Channel / 3MHz / 16QAM



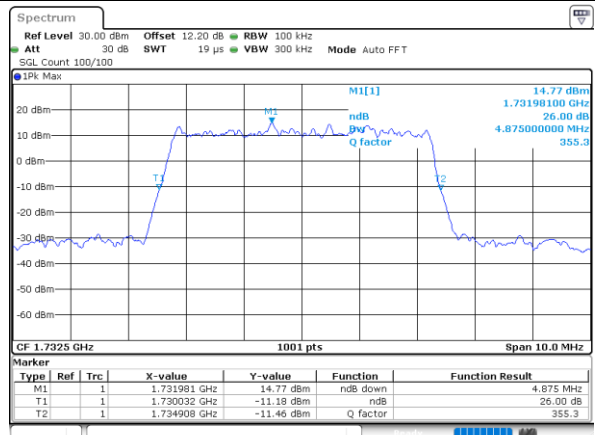
Date: 12.NOV.2021 20:17:50

Middle Channel / 5MHz / QPSK



Date: 12.NOV.2021 20:27:00

Middle Channel / 5MHz / 16QAM

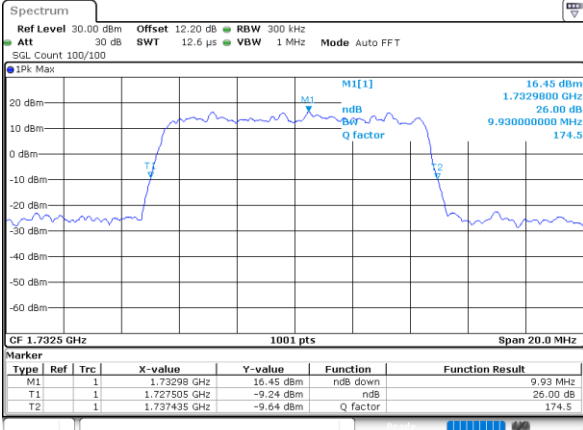


Date: 12.NOV.2021 20:27:23



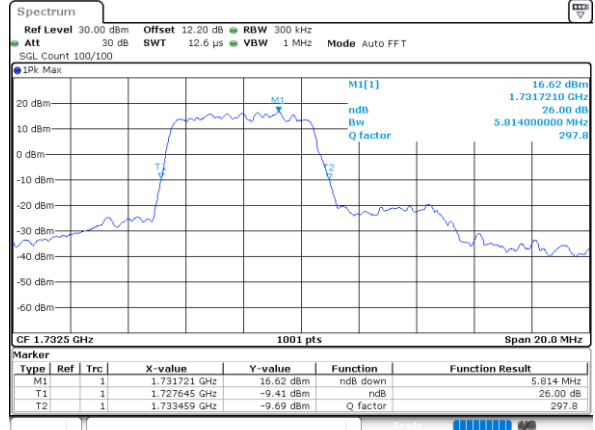
LTE Band 4

Middle Channel / 10MHz / QPSK



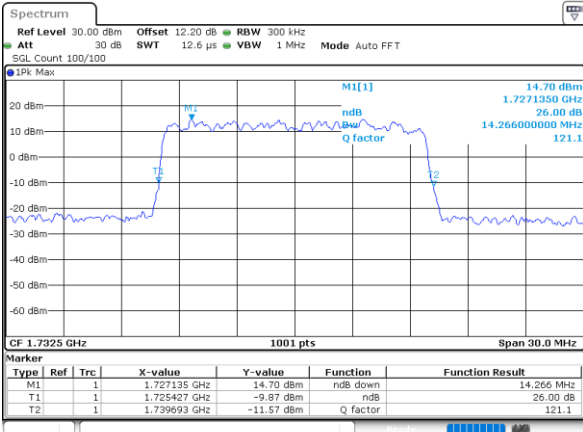
Date: 12.NOV.2021 20:34:45

Middle Channel / 10MHz / 16QAM



Date: 16.NOV.2021 18:12:19

Middle Channel / 15MHz / QPSK



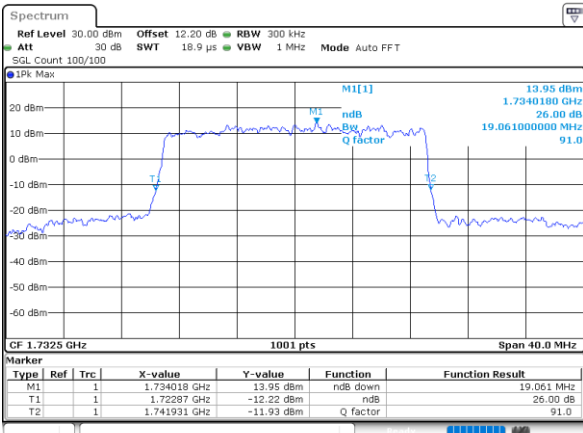
Date: 12.NOV.2021 20:40:50

Middle Channel / 15MHz / 16QAM



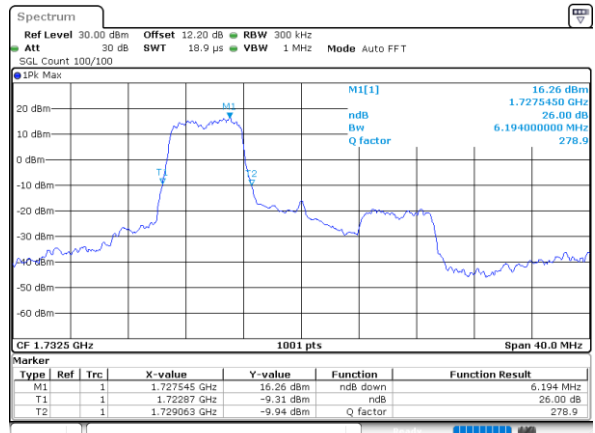
Date: 16.NOV.2021 18:16:26

Middle Channel / 20MHz / QPSK



Date: 12.NOV.2021 20:46:56

Middle Channel / 20MHz / 16QAM



Date: 16.NOV.2021 18:19:50



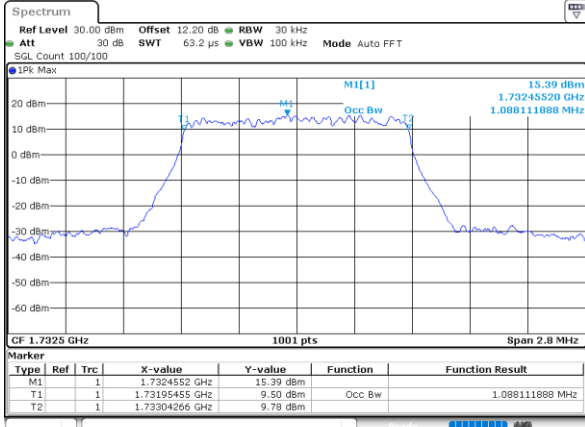
Occupied Bandwidth

| Mode | LTE Band 4 : 99%OBW(MHz) | | | | | | | | | | | |
|-----------|--------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| BW | | | | | | | | | | | | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Middle CH | 1.09 | 1.09 | 2.73 | 2.72 | 4.48 | 4.50 | 8.97 | 5.00 | 13.37 | 5.00 | 17.86 | 5.11 |



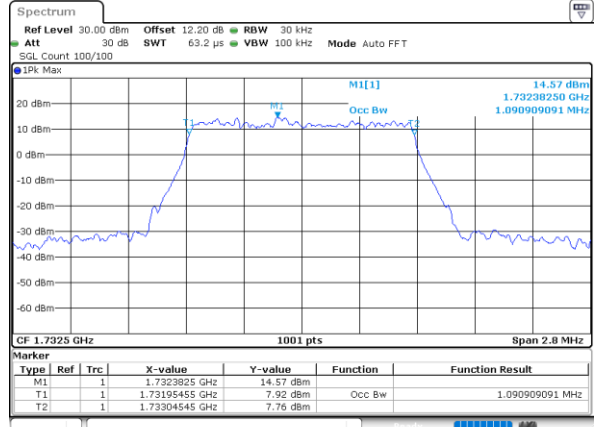
LTE Band 4

Middle Channel / 1.4MHz / QPSK



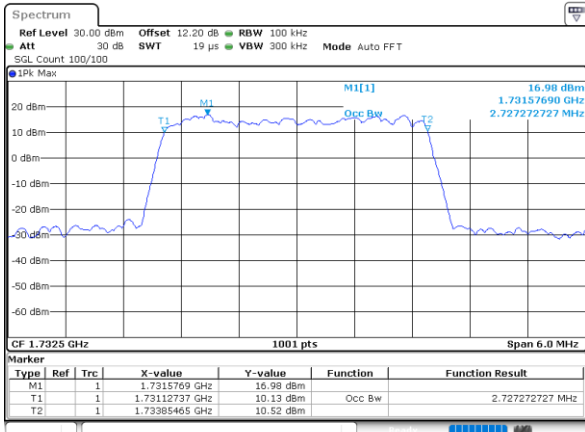
Date: 12.NOV.2021 20:07:09

Middle Channel / 1.4MHz / 16QAM



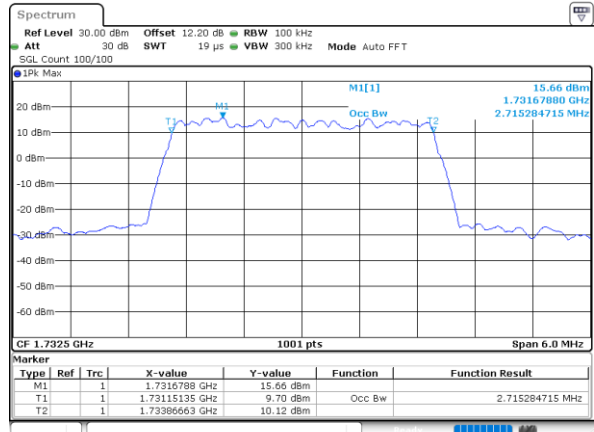
Date: 12.NOV.2021 20:07:13Z

Middle Channel / 3MHz / QPSK



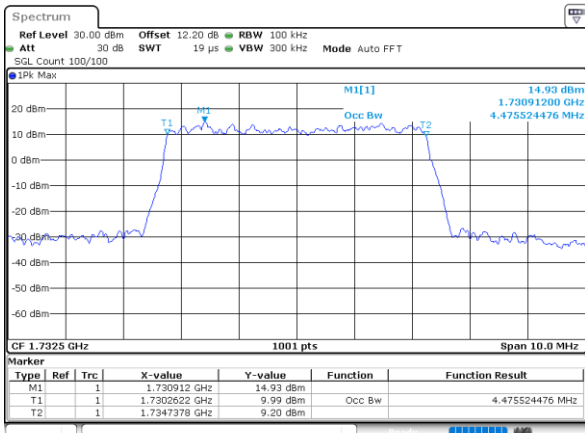
Date: 12.NOV.2021 20:16:41

Middle Channel / 3MHz / 16QAM



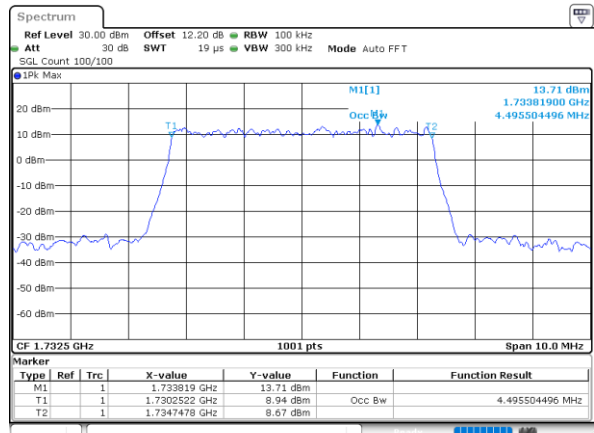
Date: 12.NOV.2021 20:17:04

Middle Channel / 5MHz / QPSK



Date: 12.NOV.2021 20:26:14

Middle Channel / 5MHz / 16QAM

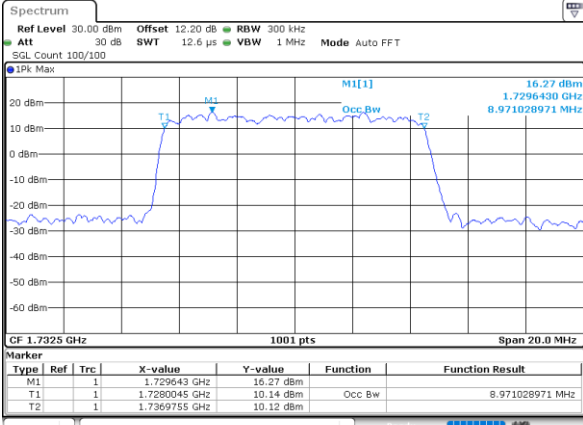


Date: 12.NOV.2021 20:26:17



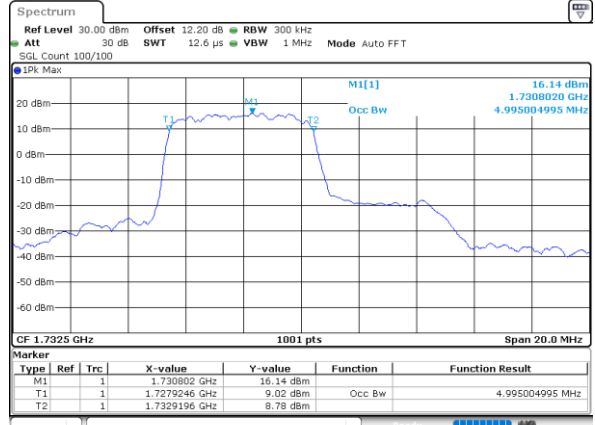
LTE Band 4

Middle Channel / 10MHz / QPSK



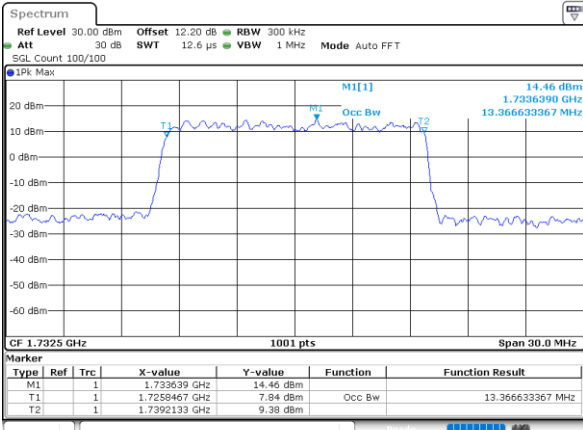
Date: 12.NOV.2021 20:34:31

Middle Channel / 10MHz / 16QAM



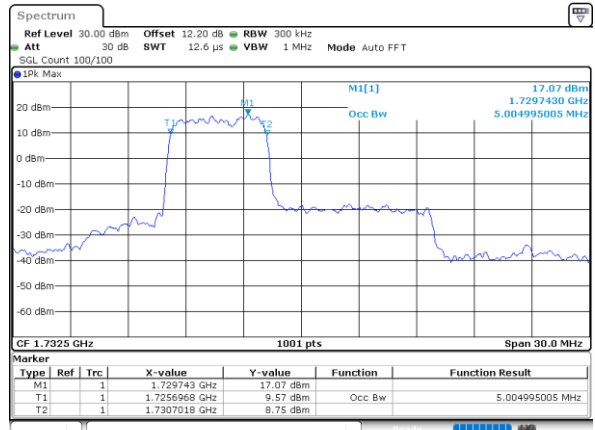
Date: 16.NOV.2021 18:10:59

Middle Channel / 15MHz / QPSK



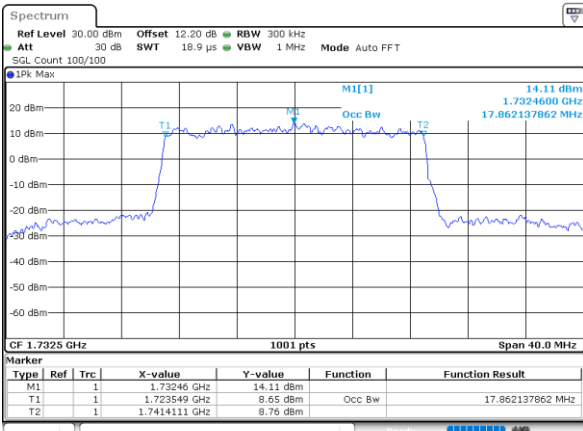
Date: 12.NOV.2021 20:40:36

Middle Channel / 15MHz / 16QAM



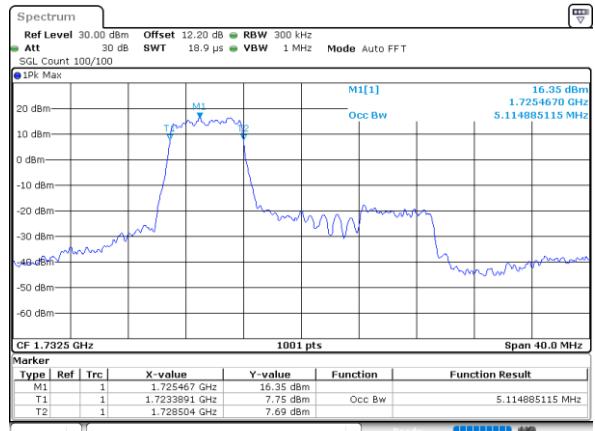
Date: 16.NOV.2021 18:15:17

Middle Channel / 20MHz / QPSK



Date: 12.NOV.2021 20:46:42

Middle Channel / 20MHz / 16QAM



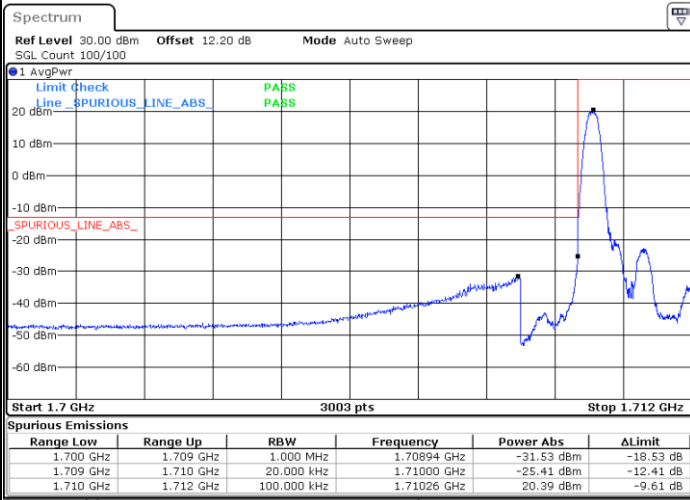
Date: 16.NOV.2021 18:19:12



Conducted Band Edge

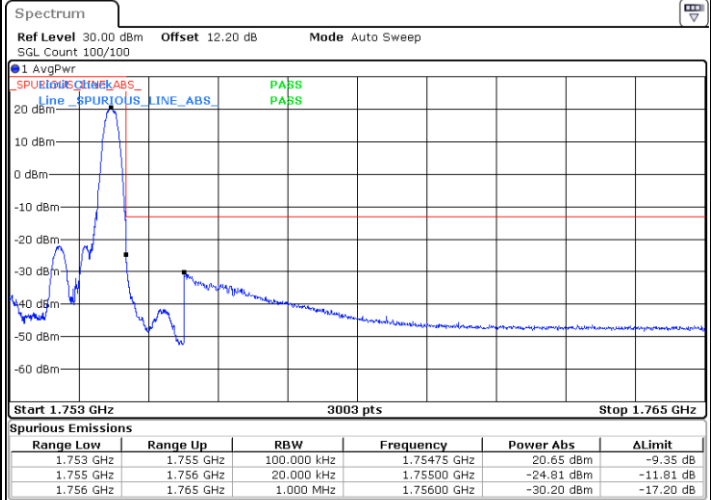
LTE Band 4 / 1.4MHz / QPSK

Lowest Band Edge / 1RB



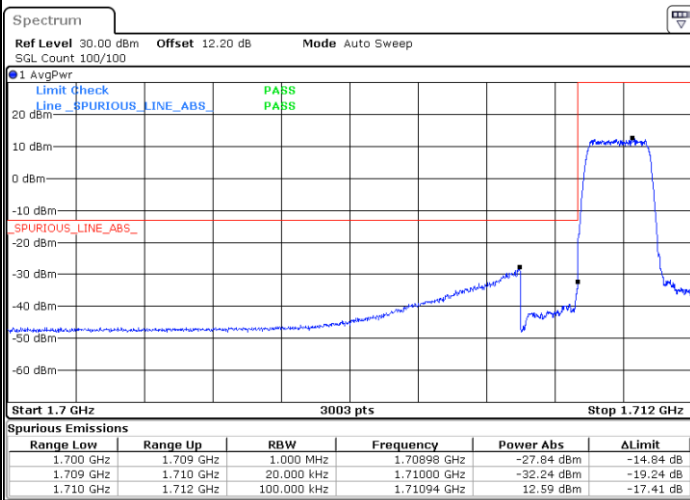
Date: 12.NOV.2021 20:03:51

Highest Band Edge / 1RB



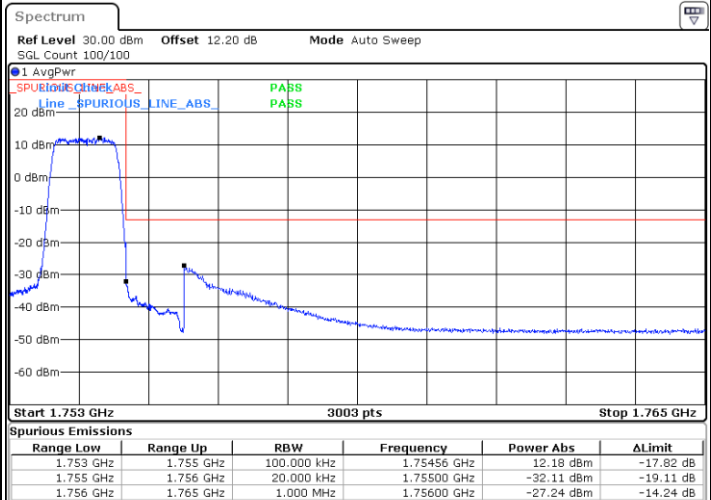
Date: 12.NOV.2021 20:09:54

Lowest Band Edge / Full RB



Date: 12.NOV.2021 20:05:08

Highest Band Edge / Full RB

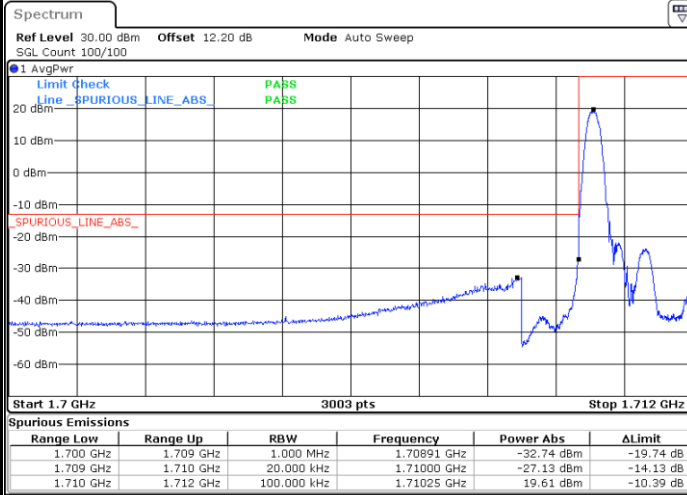


Date: 12.NOV.2021 20:11:10



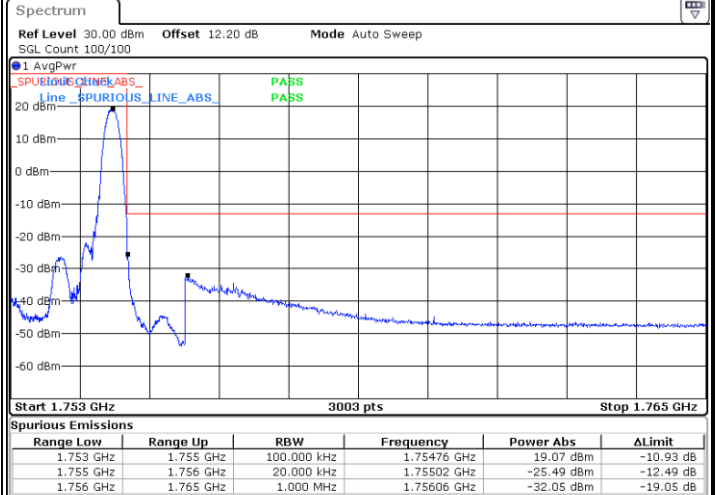
LTE Band 4 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



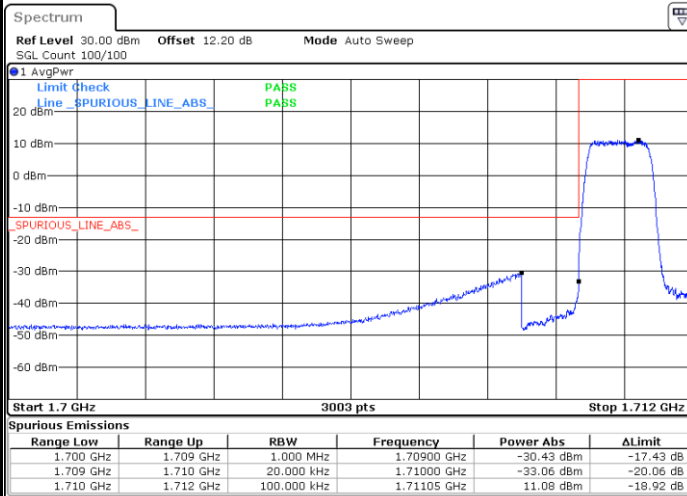
Date: 12.NOV.2021 20:04:30

Highest Band Edge / 1 RB



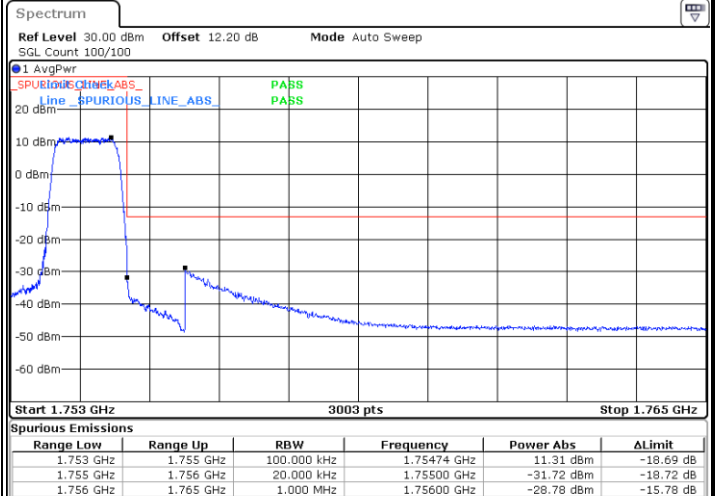
Date: 12.NOV.2021 20:10:32

Lowest Band Edge / Full RB



Date: 12.NOV.2021 20:05:46

Highest Band Edge / Full RB

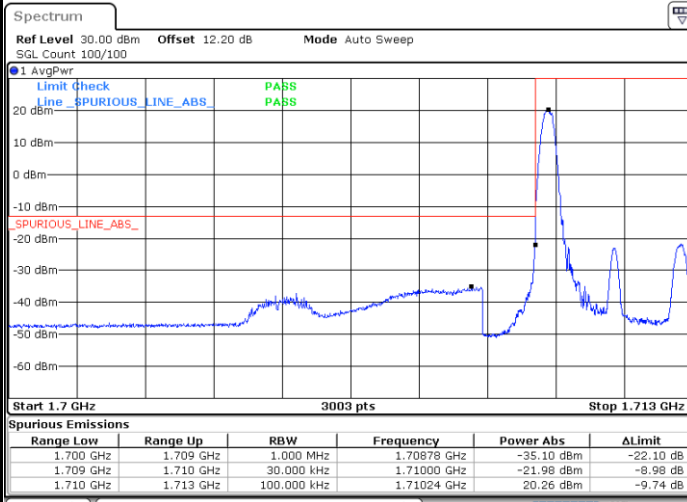


Date: 12.NOV.2021 20:11:48



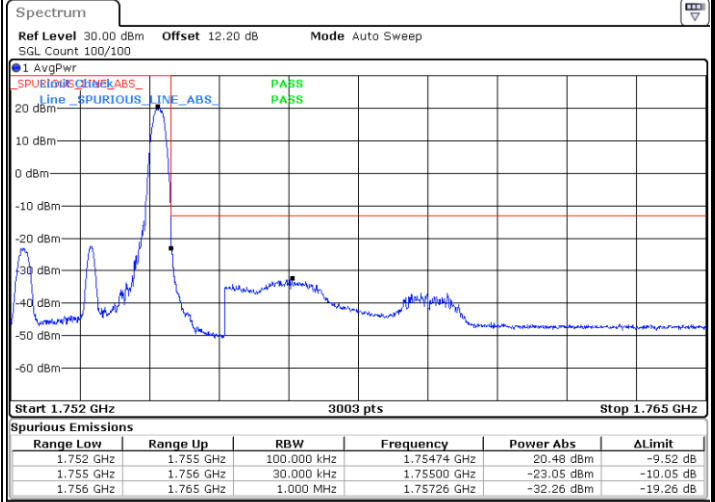
LTE Band 4 / 3MHz / QPSK

Lowest Band Edge / 1RB



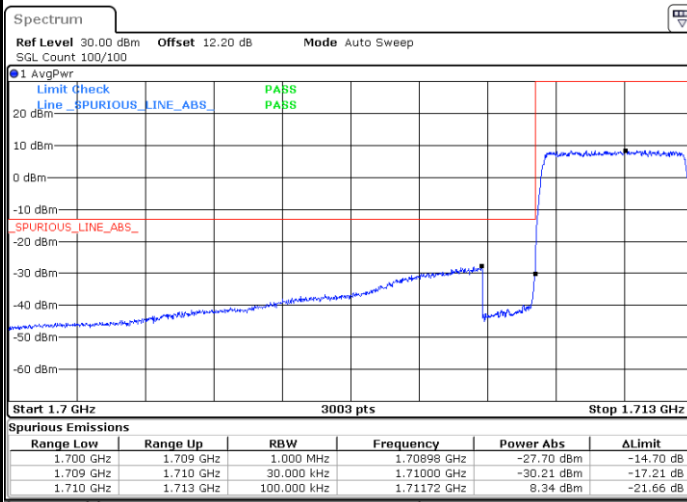
Date: 12.NOV.2021 20:13:25

Highest Band Edge / 1 RB



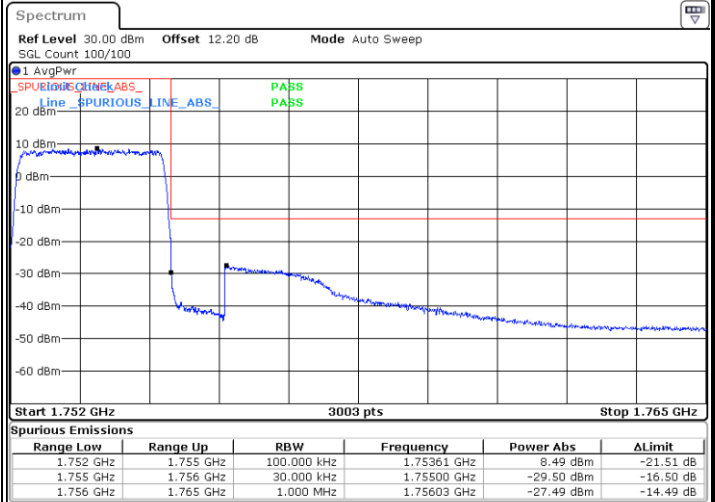
Date: 12.NOV.2021 20:19:26

Lowest Band Edge / Full RB



Date: 12.NOV.2021 20:14:41

Highest Band Edge / Full RB

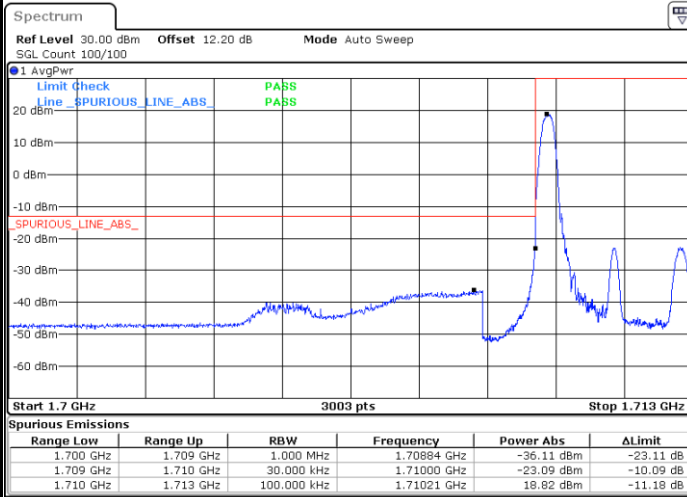


Date: 12.NOV.2021 20:20:42

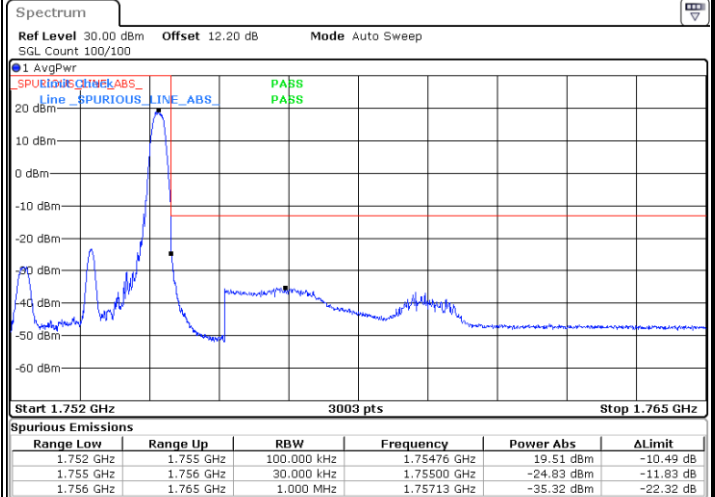


LTE Band 4 / 3MHz / 16QAM

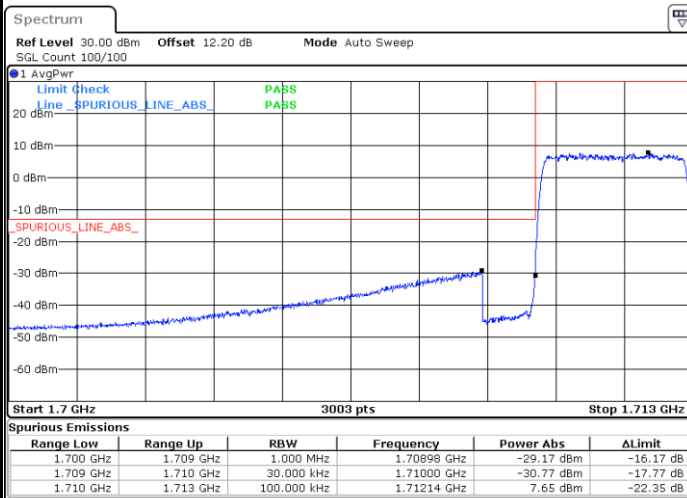
Lowest Band Edge / 1 RB



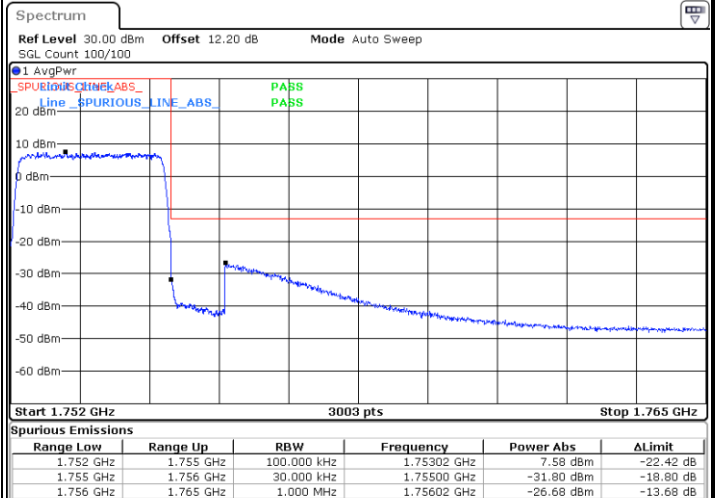
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



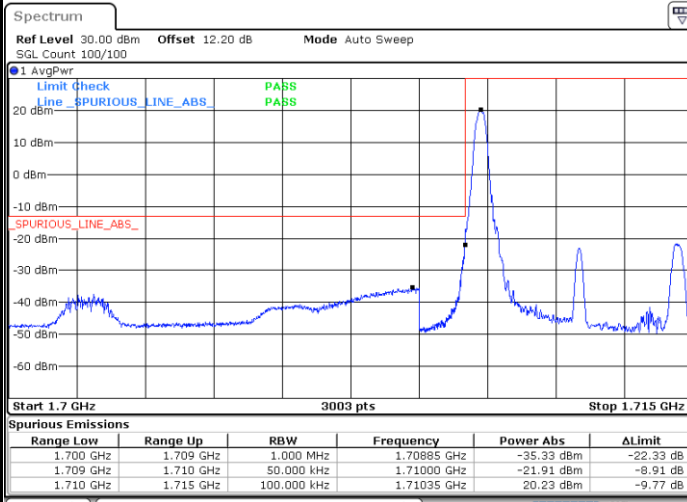
Highest Band Edge / Full RB





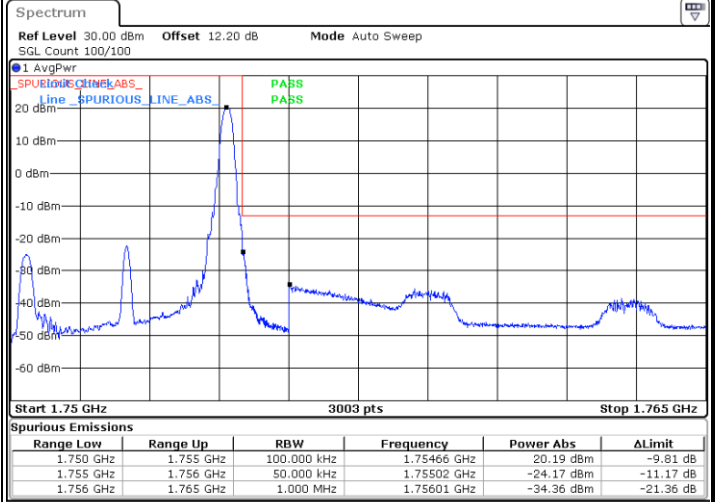
LTE Band 4 / 5MHz / QPSK

Lowest Band Edge / 1 RB



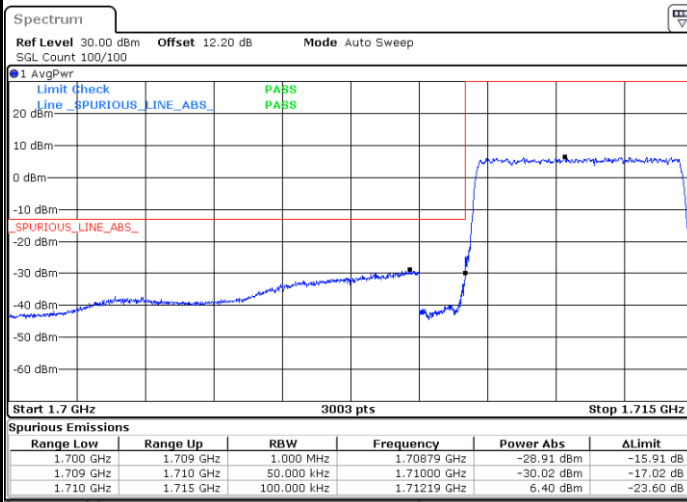
Date: 12.NOV.2021 20:22:57

Highest Band Edge / 1 RB



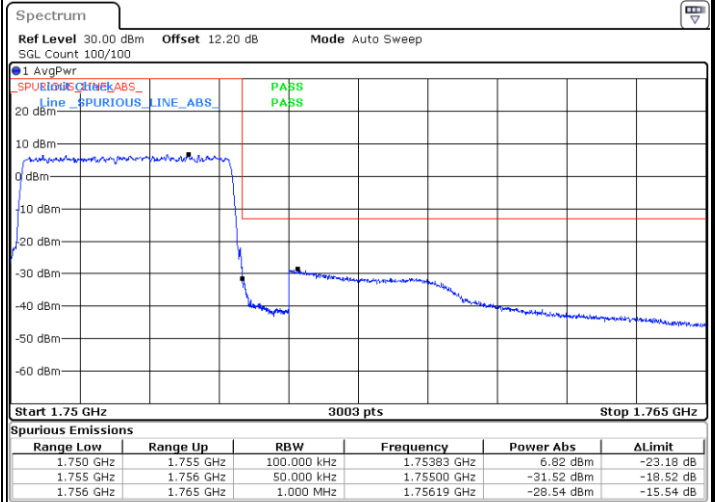
Date: 12.NOV.2021 20:28:59

Lowest Band Edge / Full RB



Date: 12.NOV.2021 20:24:14

Highest Band Edge / Full RB

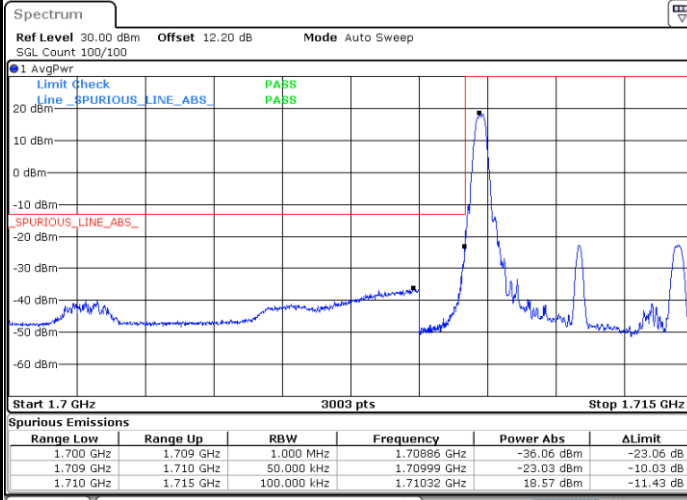


Date: 12.NOV.2021 20:30:15



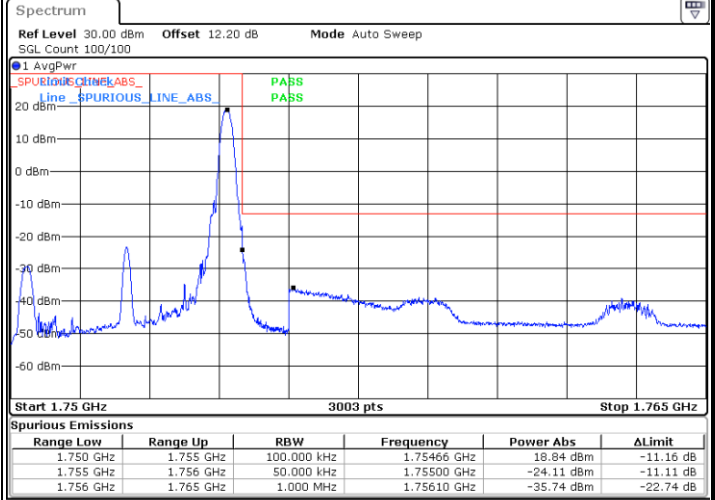
LTE Band 4 / 5MHz / 16QAM

Lowest Band Edge / 1RB



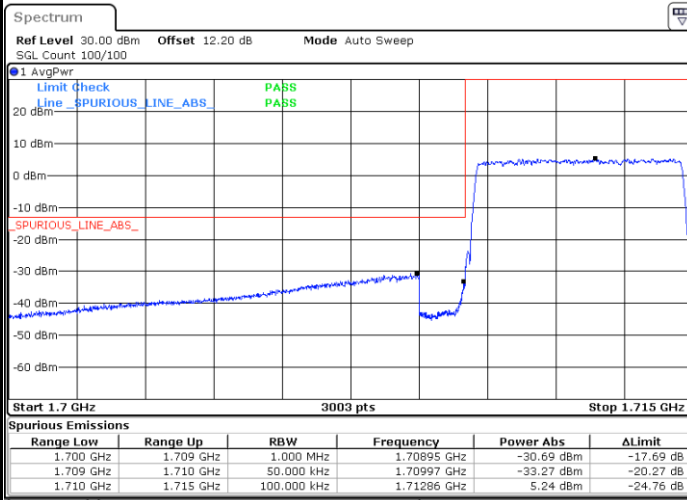
Date: 12.NOV.2021 20:23:35

Highest Band Edge / 1 RB



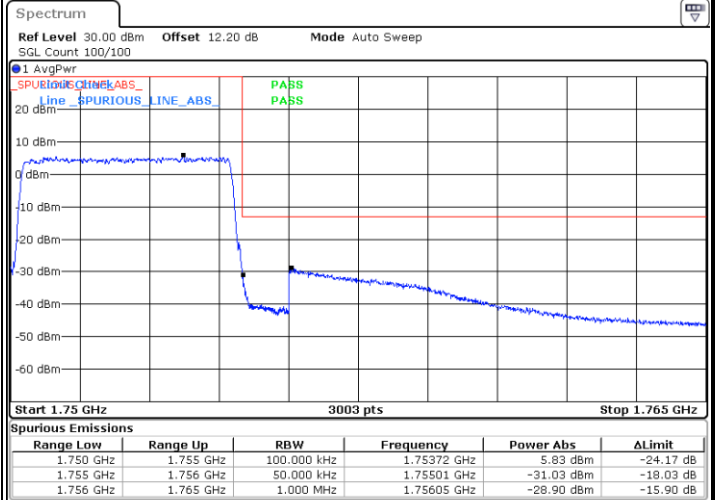
Date: 12.NOV.2021 20:29:37

Lowest Band Edge / Full RB



Date: 12.NOV.2021 20:24:52

Highest Band Edge / Full RB

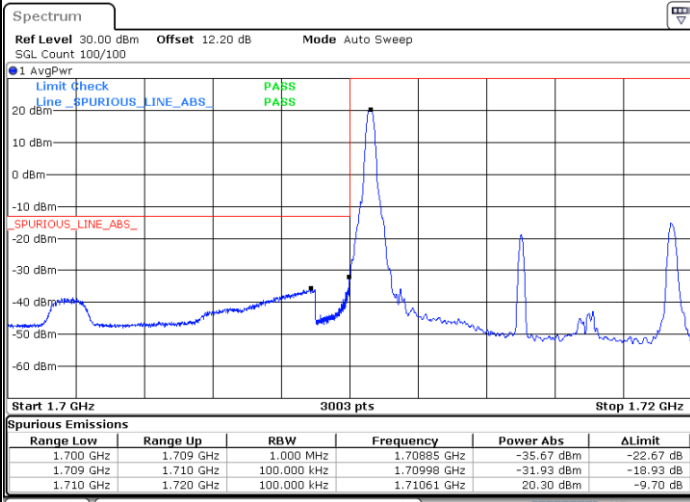


Date: 12.NOV.2021 20:30:53



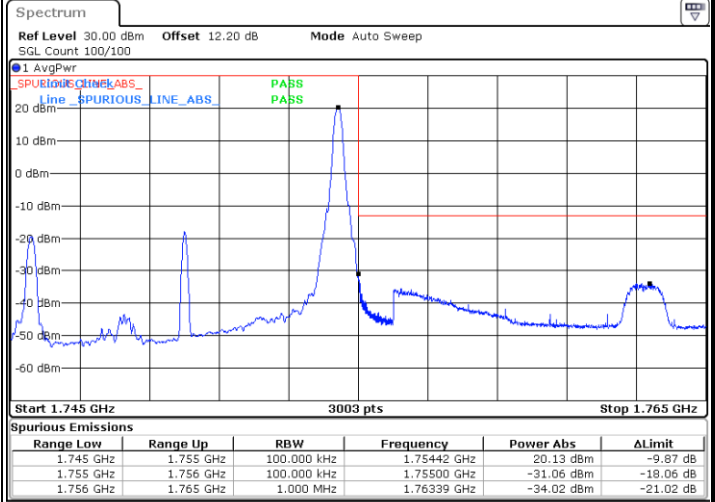
LTE Band 4 / 10MHz / QPSK

Lowest Band Edge / 1 RB



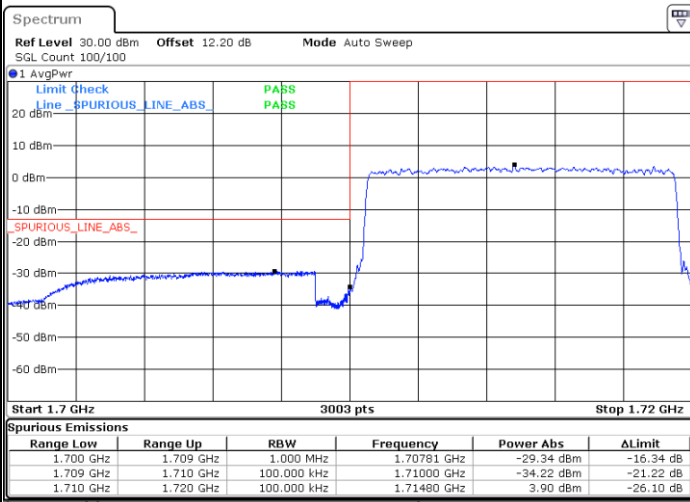
Date: 12.NOV.2021 20:32:30

Highest Band Edge / 1 RB



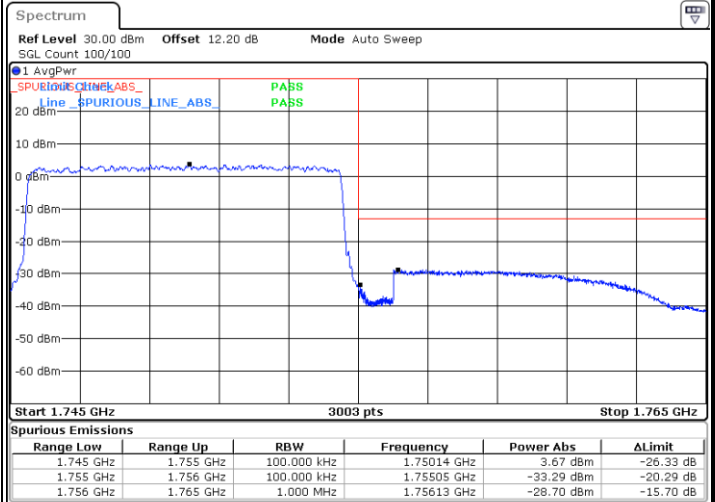
Date: 12.NOV.2021 20:36:21

Lowest Band Edge / Full RB



Date: 12.NOV.2021 20:33:08

Highest Band Edge / Full RB

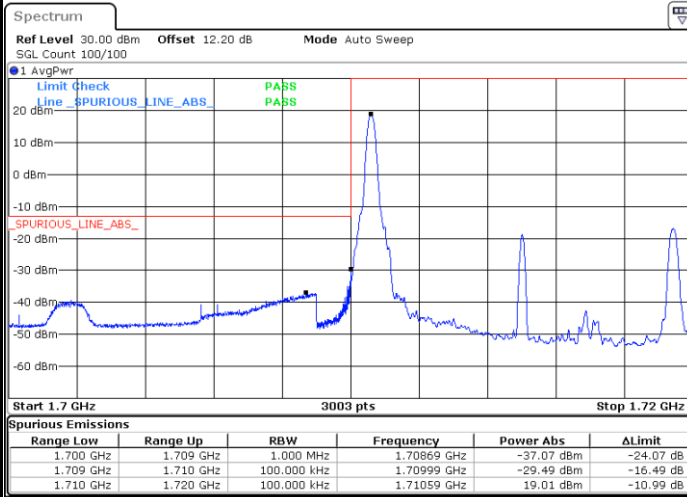


Date: 12.NOV.2021 20:36:59



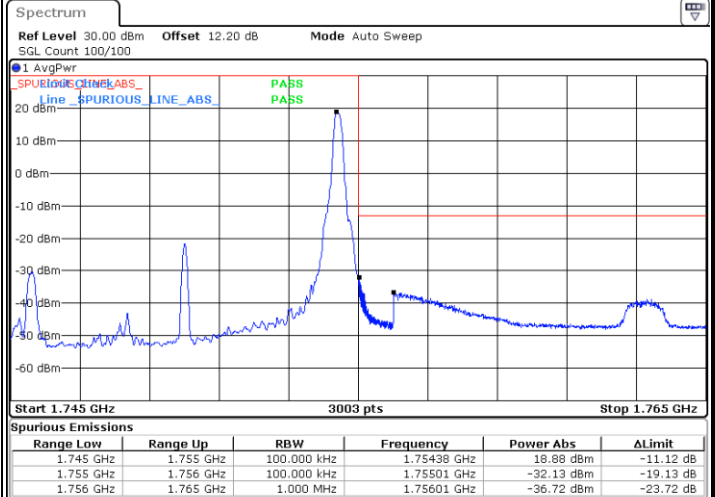
LTE Band 4 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



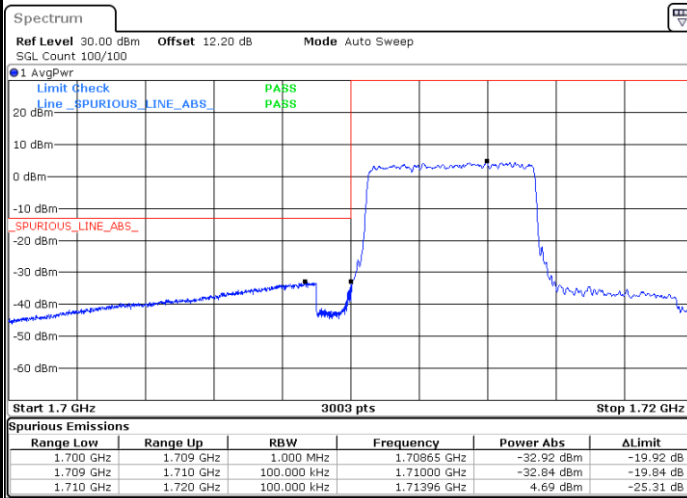
Date: 12.NOV.2021 21:04:16

Highest Band Edge / 1 RB



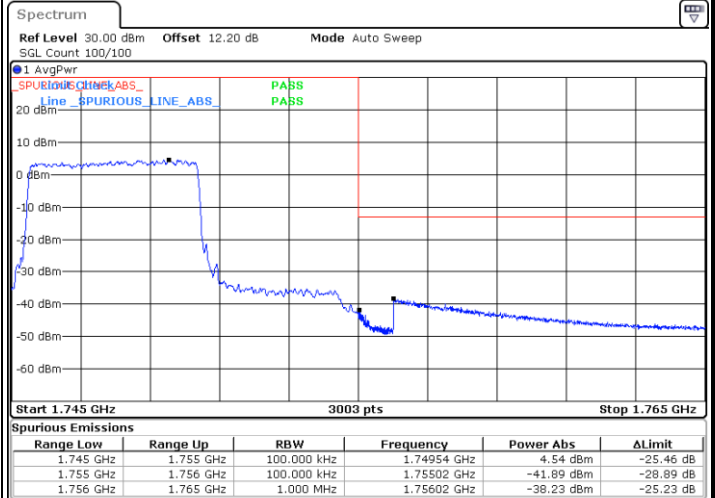
Date: 12.NOV.2021 21:04:54

Lowest Band Edge / Full RB



Date: 16.NOV.2021 18:09:26

Highest Band Edge / Full RB

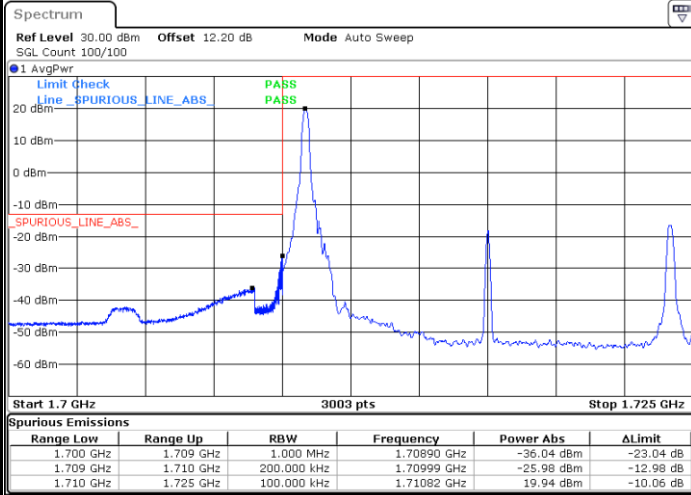


Date: 16.NOV.2021 18:10:08



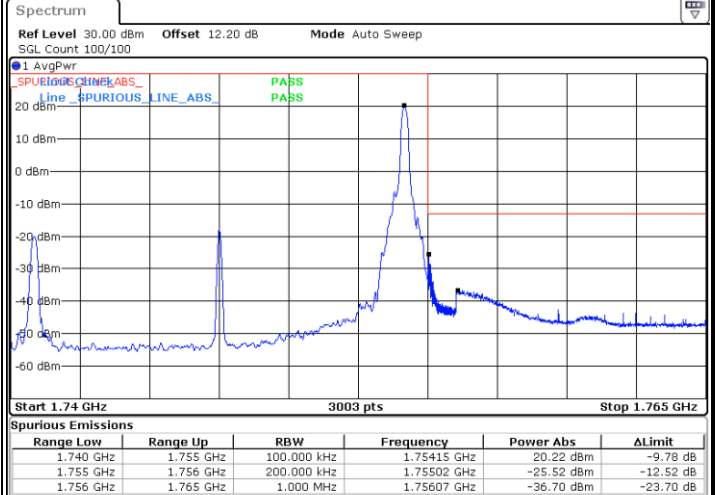
LTE Band 4 / 15MHz / QPSK

Lowest Band Edge / 1 RB



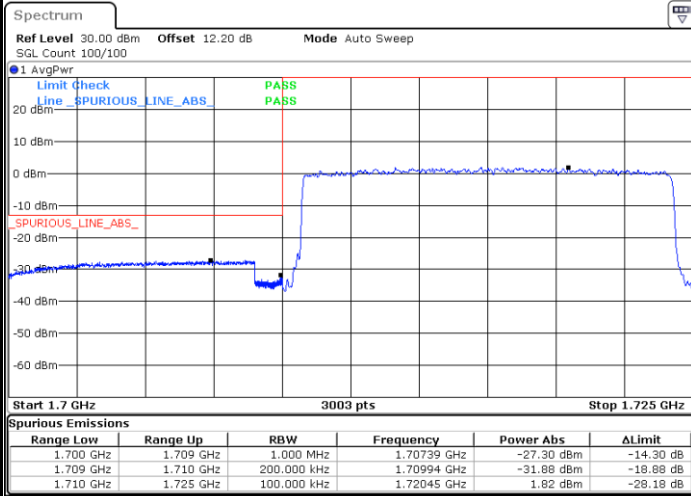
Date: 12.NOV.2021 20:38:35

Highest Band Edge / 1 RB



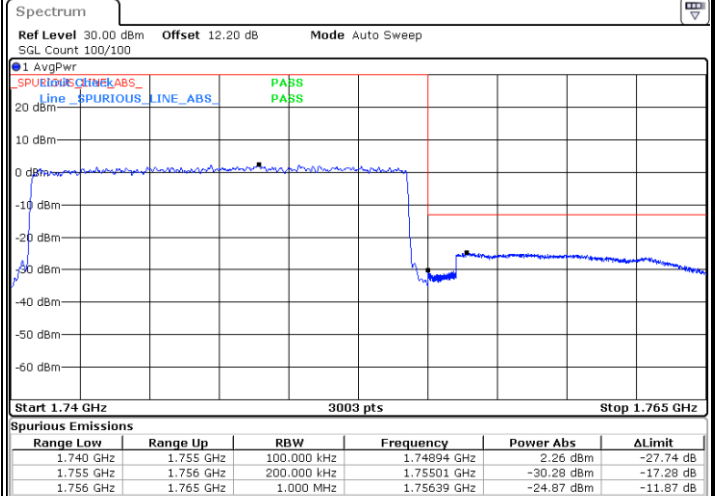
Date: 12.NOV.2021 20:42:26

Lowest Band Edge / Full RB



Date: 12.NOV.2021 20:39:14

Highest Band Edge / Full RB

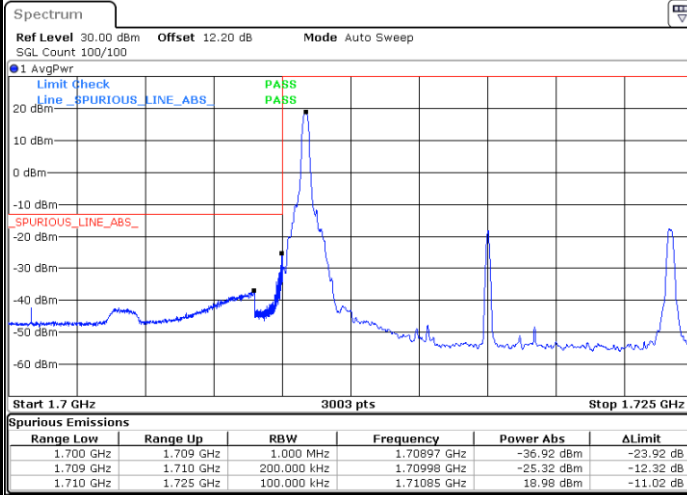


Date: 12.NOV.2021 20:43:04



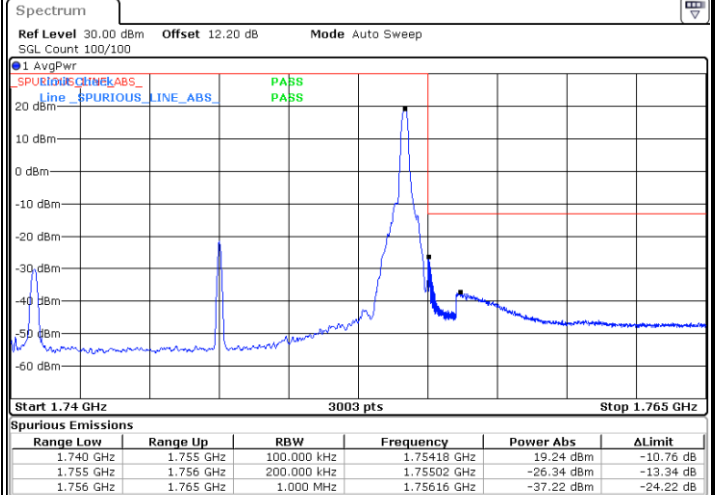
LTE Band 4 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



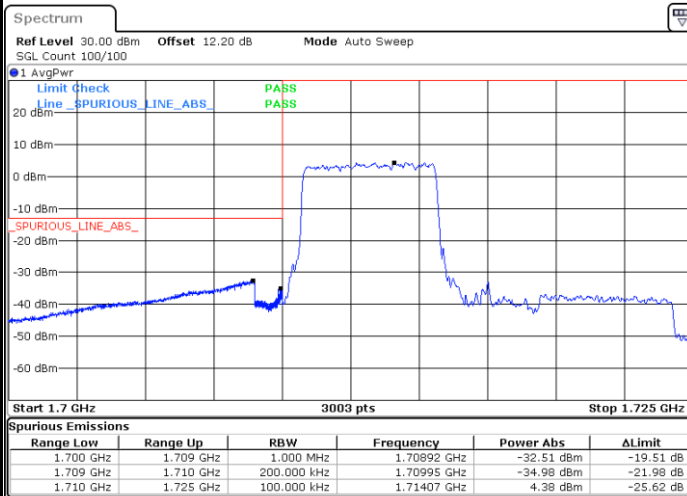
Date: 12.NOV.2021 21:05:32

Highest Band Edge / 1 RB



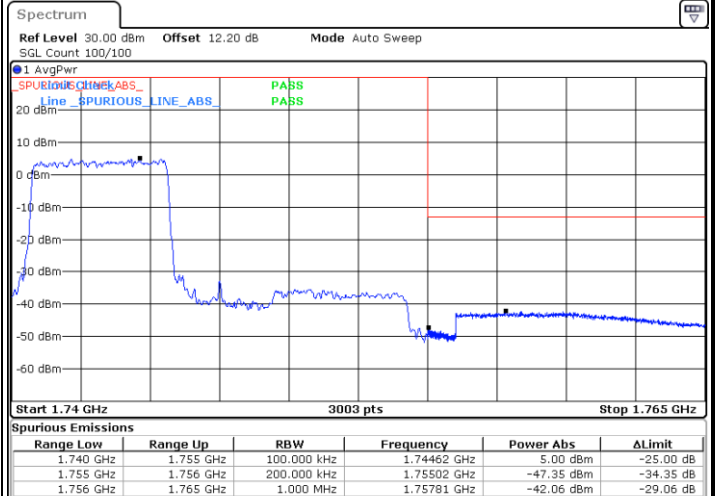
Date: 12.NOV.2021 21:06:10

Lowest Band Edge / Full RB



Date: 16.NOV.2021 18:13:10

Highest Band Edge / Full RB

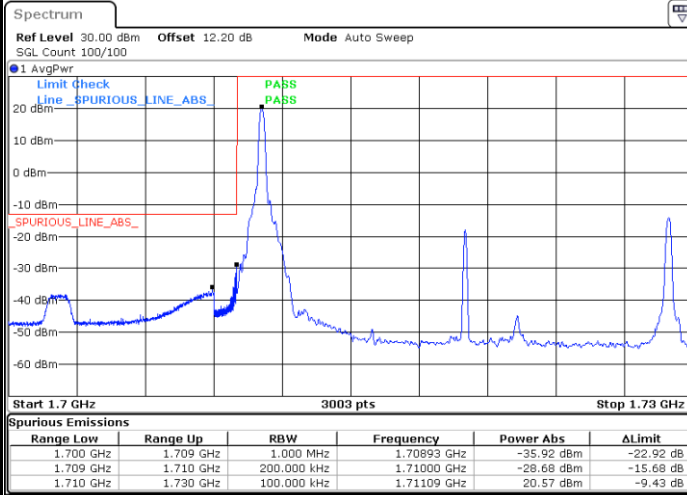


Date: 16.NOV.2021 18:13:53



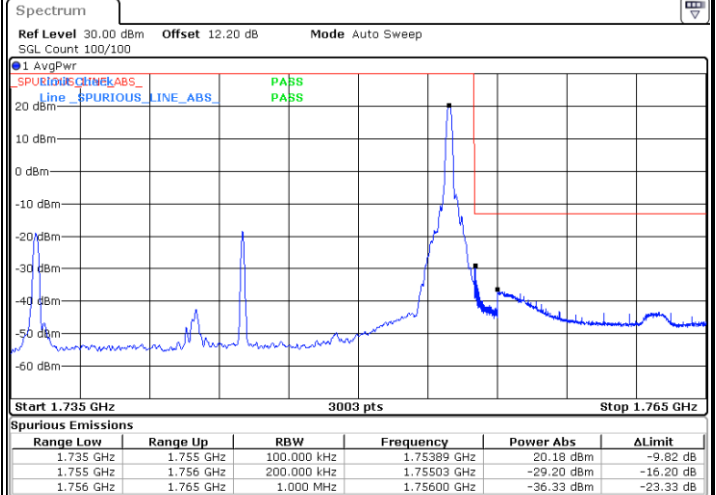
LTE Band 4 / 20MHz / QPSK

Lowest Band Edge / 1 RB



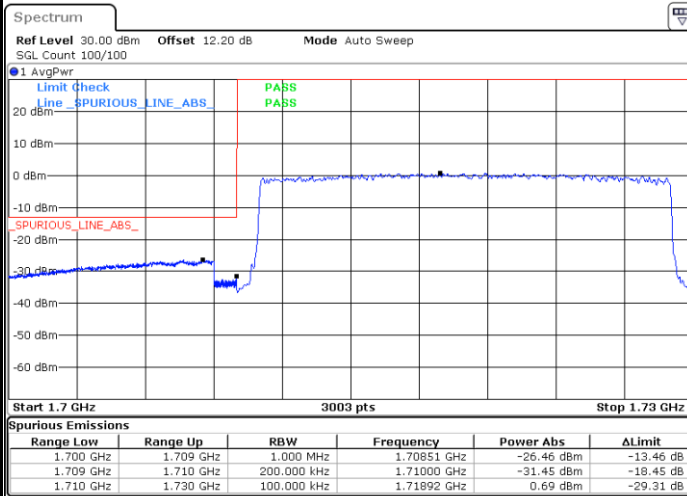
Date: 12.NOV.2021 20:44:41

Highest Band Edge / 1 RB



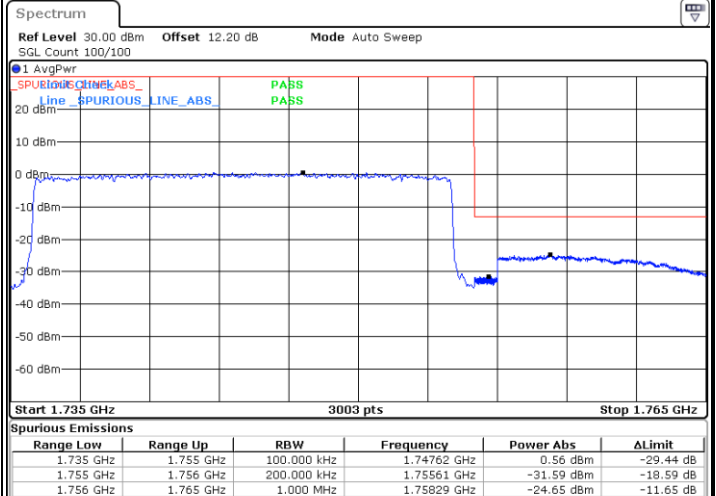
Date: 12.NOV.2021 20:48:32

Lowest Band Edge / Full RB



Date: 12.NOV.2021 20:45:20

Highest Band Edge / Full RB

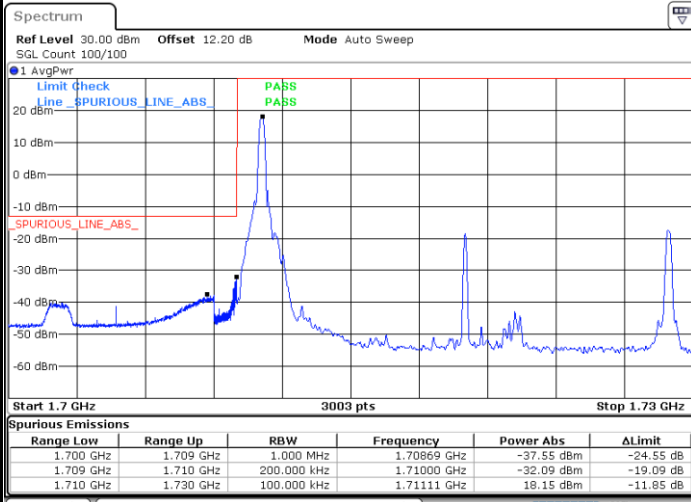


Date: 12.NOV.2021 20:49:10



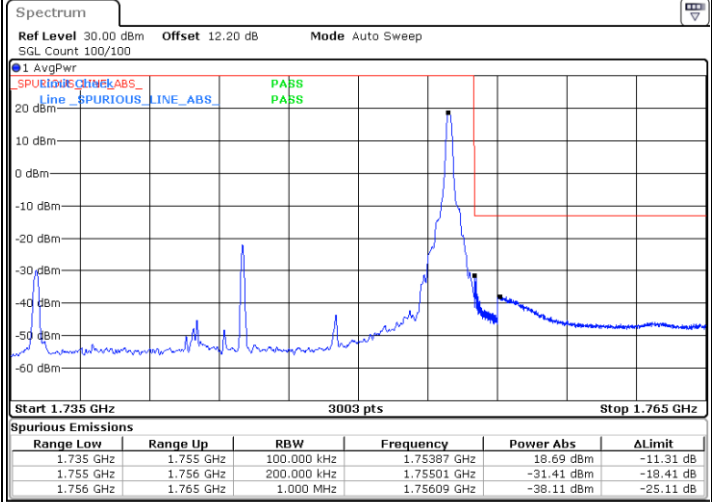
LTE Band 4 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



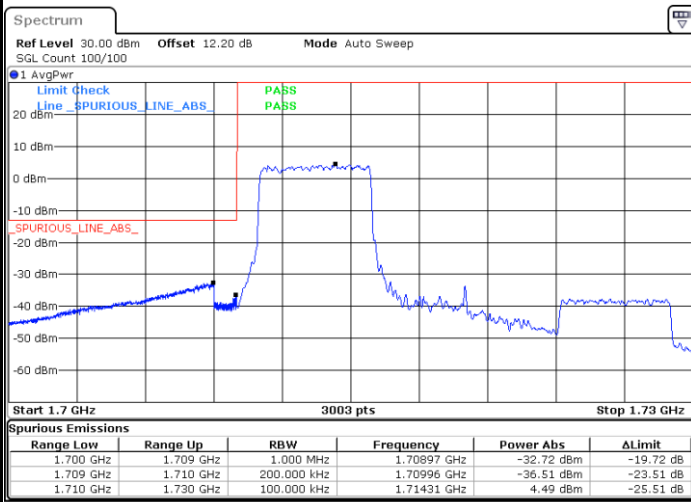
Date: 12.NOV.2021 21:06:49

Highest Band Edge / 1 RB



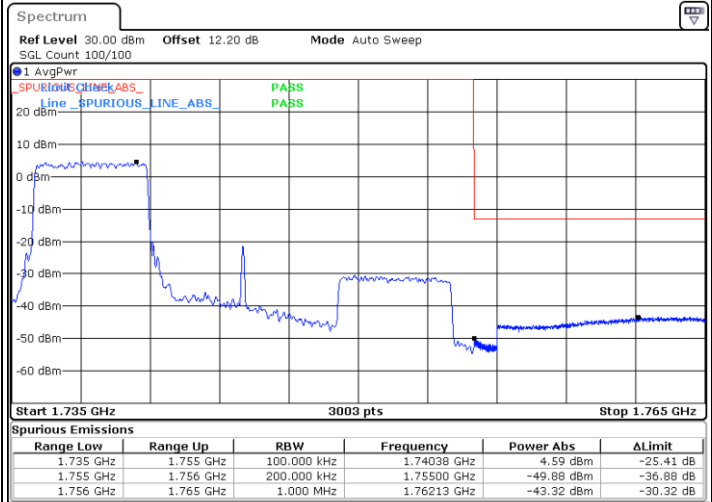
Date: 12.NOV.2021 21:07:27

Lowest Band Edge / Full RB



Date: 16.NOV.2021 18:17:44

Highest Band Edge / Full RB



Date: 16.NOV.2021 18:18:27



Conducted Spurious Emission

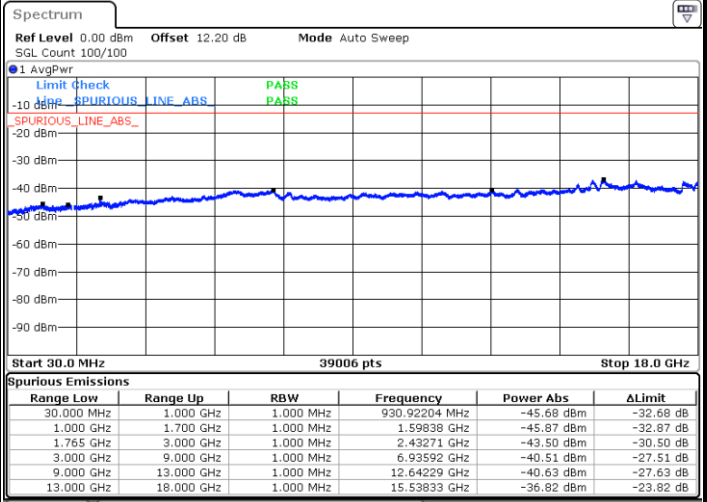
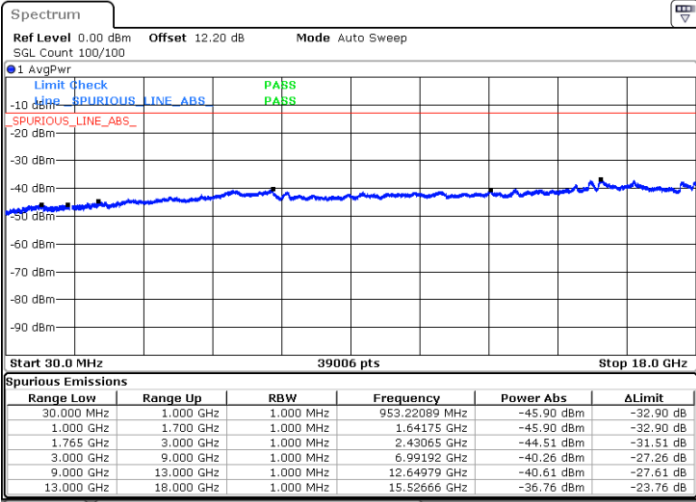




LTE Band 4 / 3MHz

Lowest Channel / QPSK

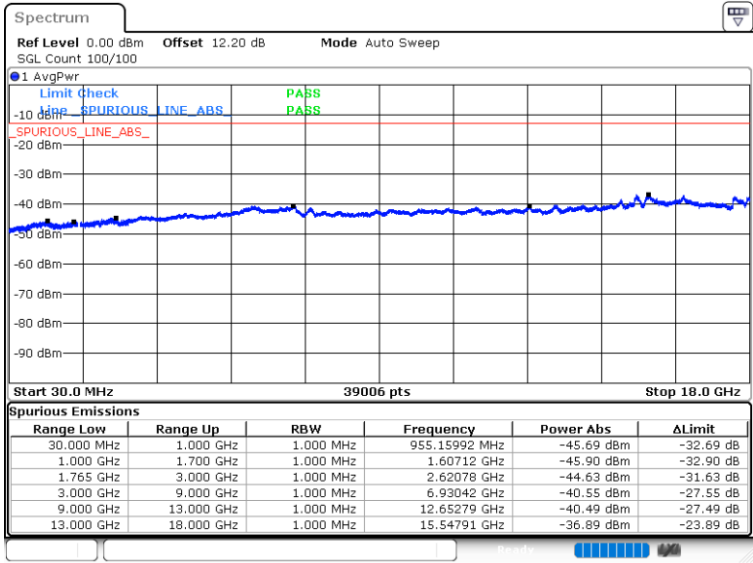
Middle Channel / QPSK



Date: 12.NOV.2021 20:16:16

Date: 12.NOV.2021 20:18:47

Highest Channel / QPSK



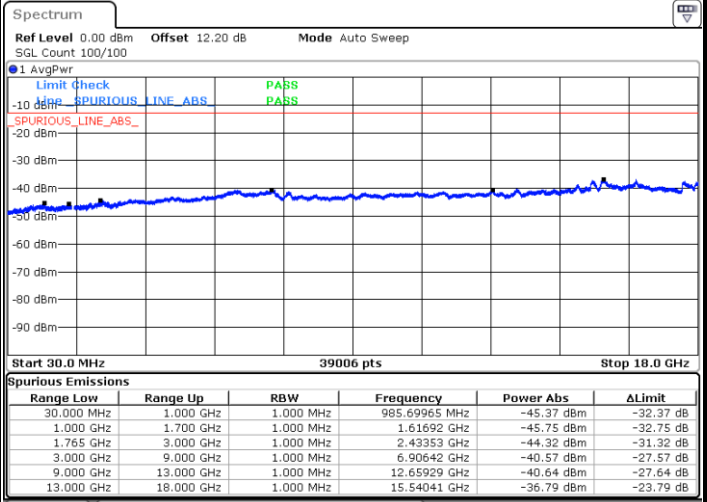
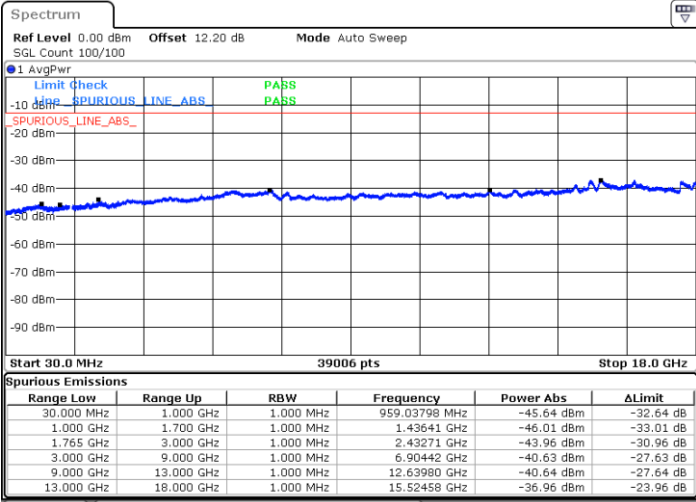
Date: 12.NOV.2021 20:22:18



LTE Band 4 / 5MHz

Lowest Channel / QPSK

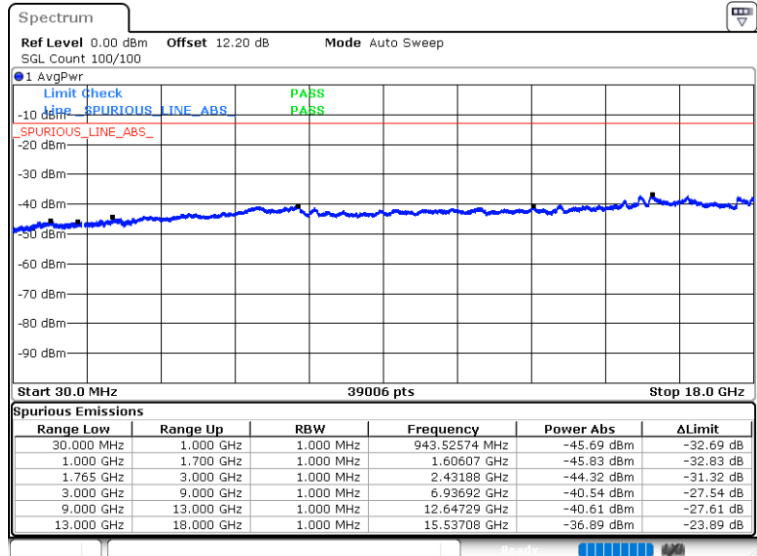
Middle Channel / QPSK



Date: 12.NOV.2021 20:25:49

Date: 12.NOV.2021 20:28:20

Highest Channel / QPSK



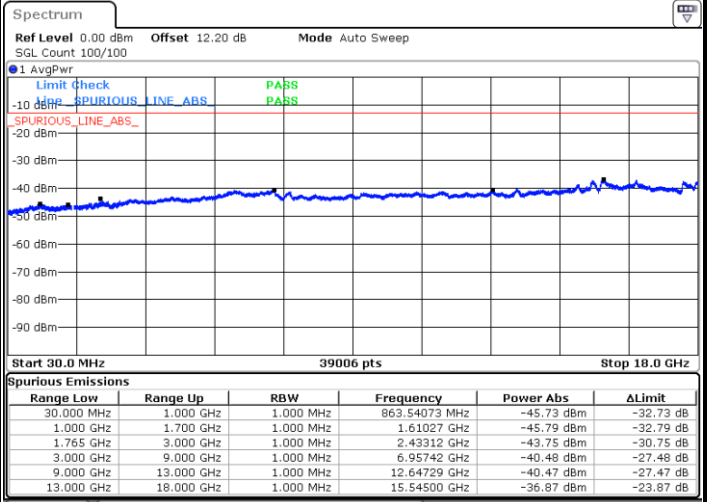
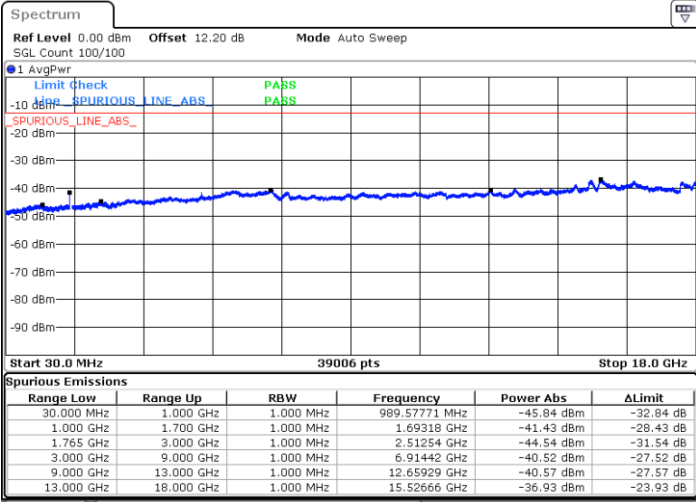
Date: 12.NOV.2021 20:31:51



LTE Band 4 / 10MHz

Lowest Channel / QPSK

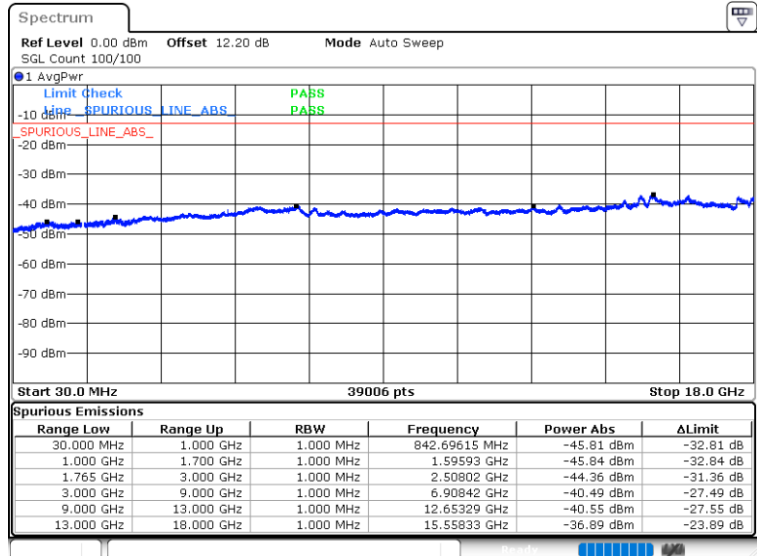
Middle Channel / QPSK



Date: 12.NOV.2021 20:34:06

Date: 12.NOV.2021 20:35:42

Highest Channel / QPSK



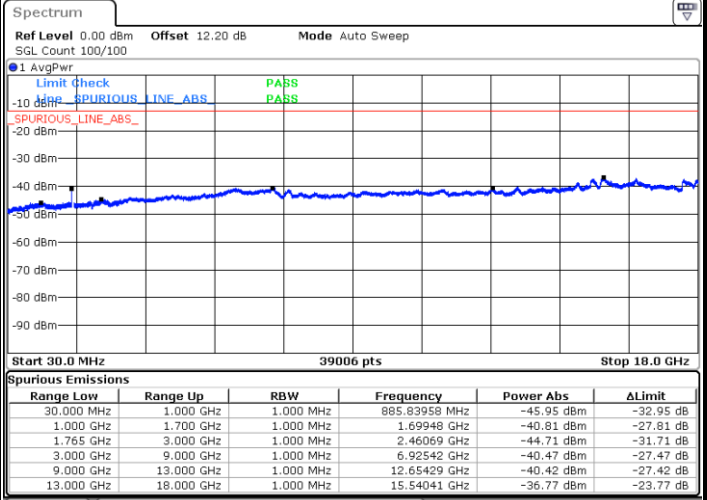
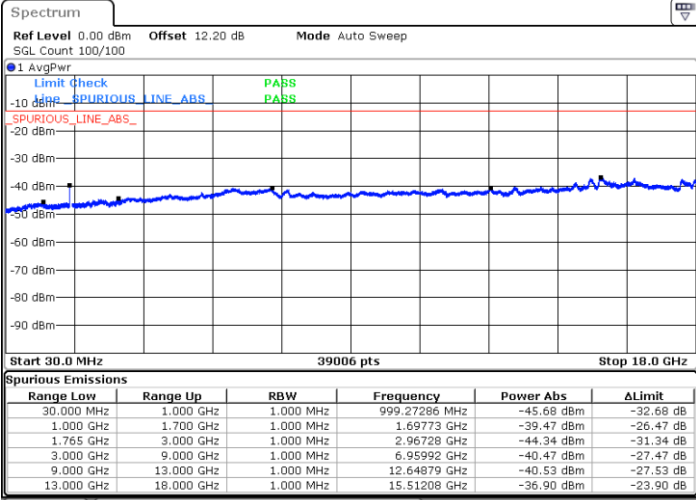
Date: 12.NOV.2021 20:37:56



LTE Band 4 / 15MHz

Lowest Channel / QPSK

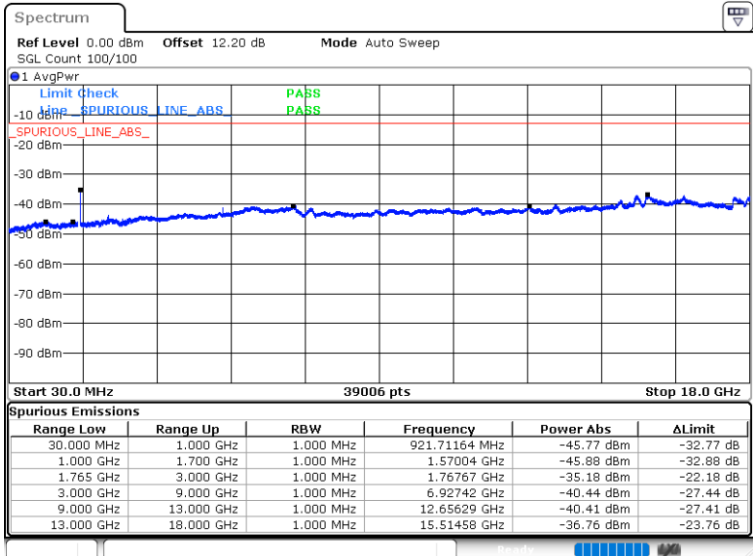
Middle Channel / QPSK



Date: 12.NOV.2021 20:40:11

Date: 12.NOV.2021 20:41:47

Highest Channel / QPSK



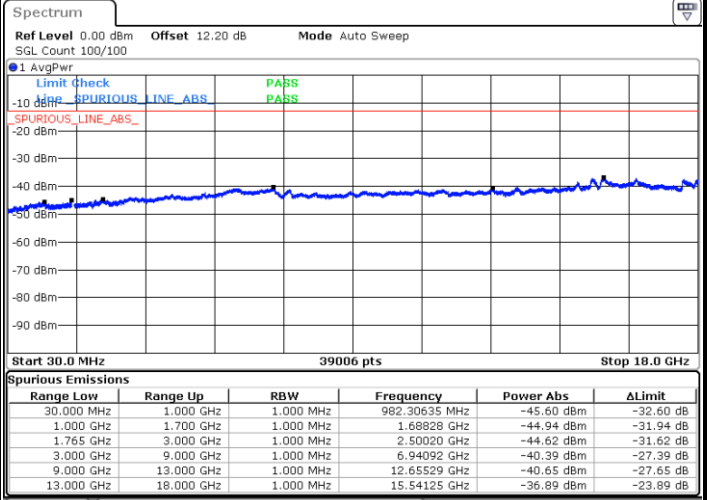
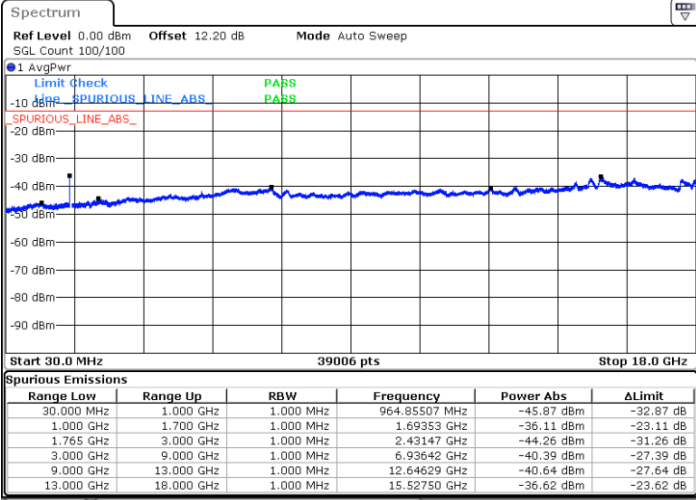
Date: 12.NOV.2021 20:44:01



LTE Band 4 / 20MHz

Lowest Channel / QPSK

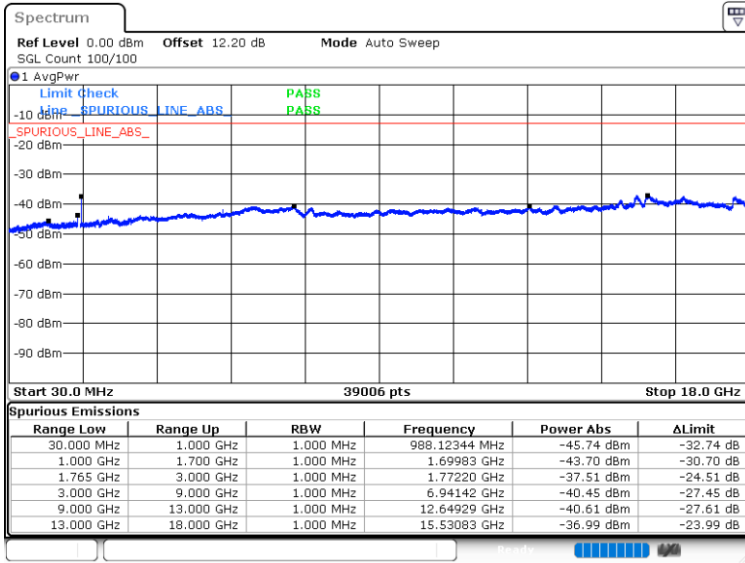
Middle Channel / QPSK



Date: 12.NOV.2021 20:46:17

Date: 12.NOV.2021 20:47:53

Highest Channel / QPSK



Date: 12.NOV.2021 20:50:08



Frequency Stability

| Test Conditions | | LTE Band 4 (QPSK) / Middle Channel | Limit |
|------------------|-------------------|------------------------------------|---------|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | Note 2. |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0003 | PASS |
| 40 | Normal Voltage | 0.0006 | |
| 30 | Normal Voltage | 0.0063 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0096 | |
| 0 | Normal Voltage | 0.0094 | |
| -10 | Normal Voltage | 0.0076 | |
| -20 | Normal Voltage | 0.0039 | |
| -30 | Normal Voltage | 0.0042 | |
| 20 | Maximum Voltage | 0.0080 | |
| 20 | Normal Voltage | 0.0034 | |
| 20 | Battery End Point | 0.0074 | |

Note:

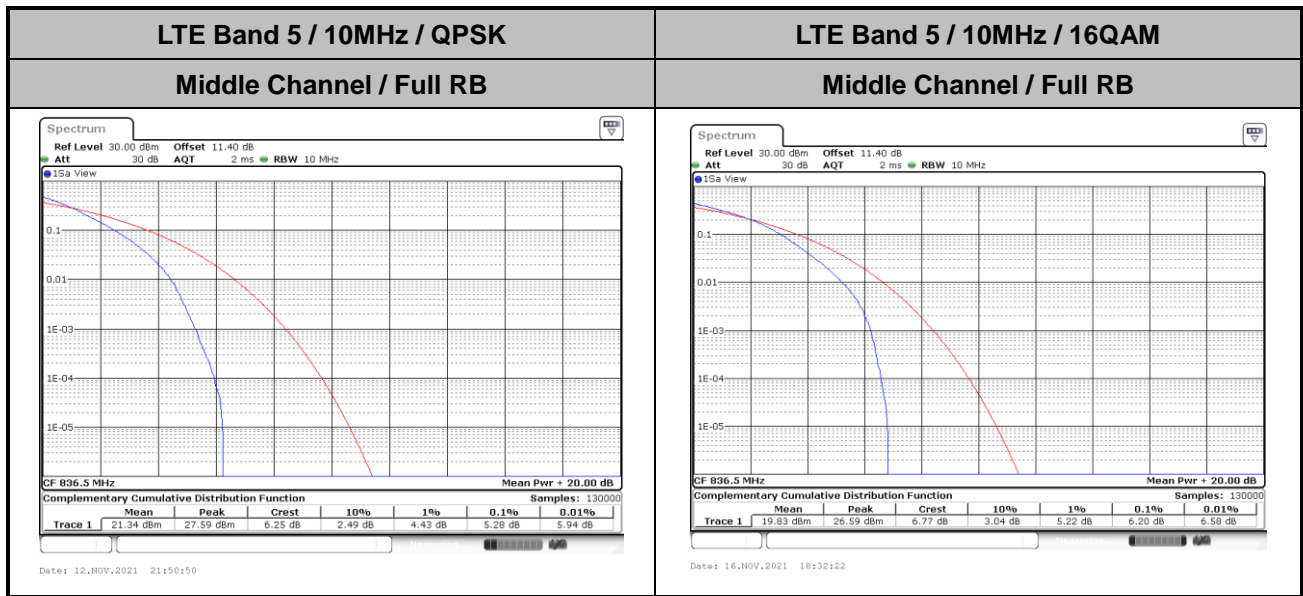
1. Normal Voltage =12 V. ; Battery End Point (BEP) =11.4 V. ; Maximum Voltage =12.6 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 5

Peak-to-Average Ratio

| Mode | LTE Band 5 / 10MHz | | | | |
|-----------|--------------------|---------|---------|---------|-------------|
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | Limit: 13dB |
| RB Size | Full RB | Full RB | Full RB | Full RB | Result |
| Middle CH | 5.28 | 6.20 | - | - | PASS |





26dB Bandwidth

| Mode | LTE Band 5 : 26dB BW(MHz) | | | | | | | | | | | |
|-----------|---------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| BW | | | | | | | | | | | | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Middle CH | 1.26 | 1.28 | 3.03 | 2.98 | 4.83 | 4.89 | 9.93 | 5.75 | - | - | - | - |