

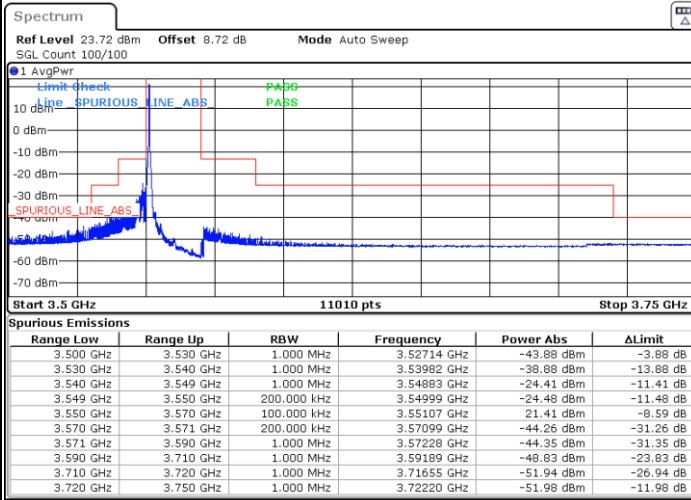


## LTE Band 48 / 20MHz

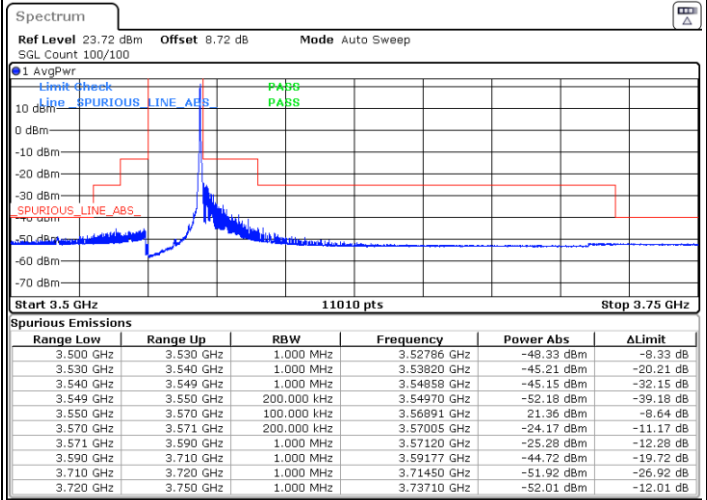
## QPSK

## Lowest Channel / 1RB0

## Lowest Channel / 1RBmax



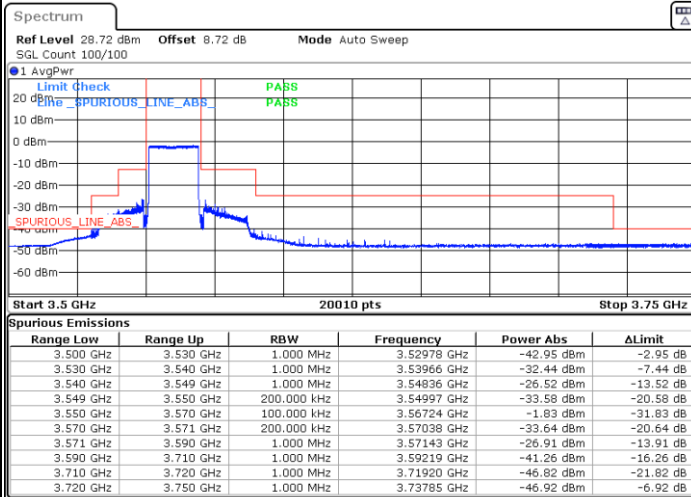
Date: 15.SEP.2024 01:50:37



Date: 15.SEP.2024 01:57:21

## Lowest Channel / FullIRB

## N/A



Date: 24.SEP.2024 02:32:21

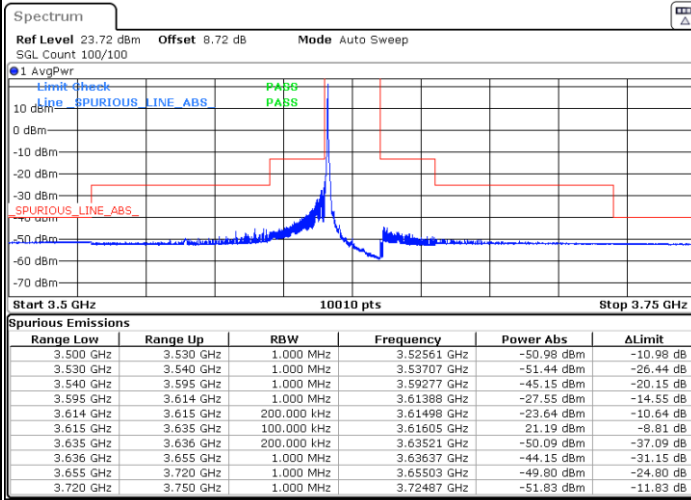


## LTE Band 48 / 20MHz

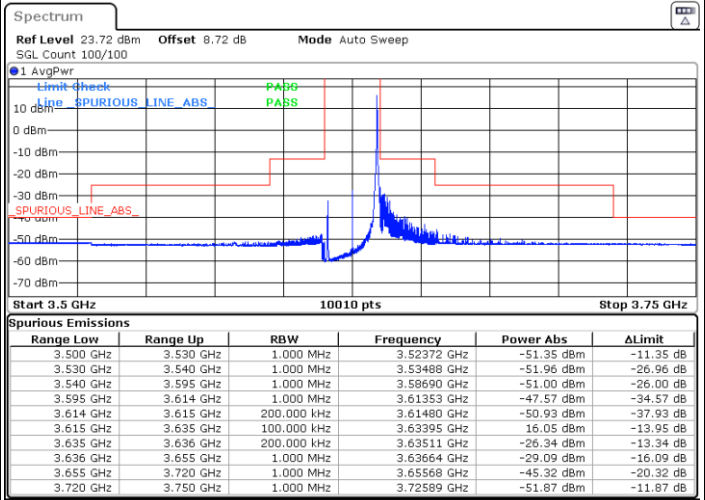
## QPSK

## Middle Channel / 1RB0

## Middle Channel / 1RBmax



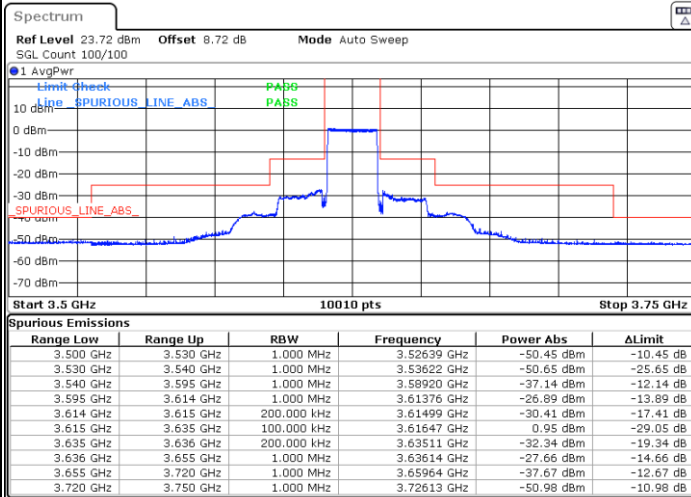
Date: 15.SEP.2024 02:10:51



Date: 15.SEP.2024 02:22:34

## Middle Channel / Full

## N/A



Date: 15.SEP.2024 02:24:15

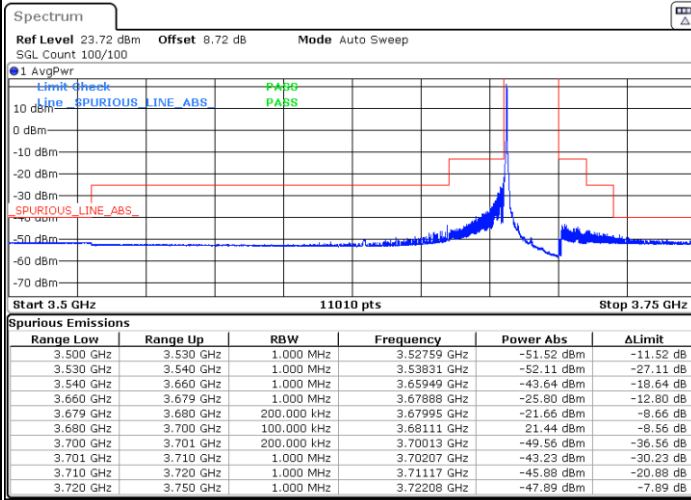


## LTE Band 48 / 20MHz

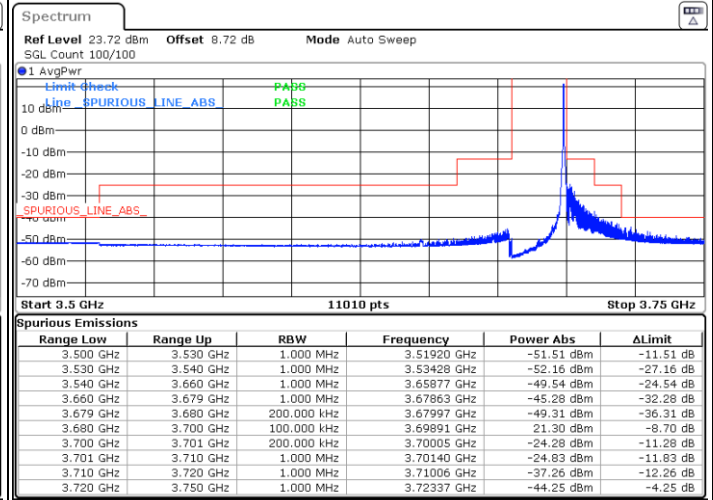
## QPSK

## Highest Channel / 1RB0

## Highest Channel / 1RBmax



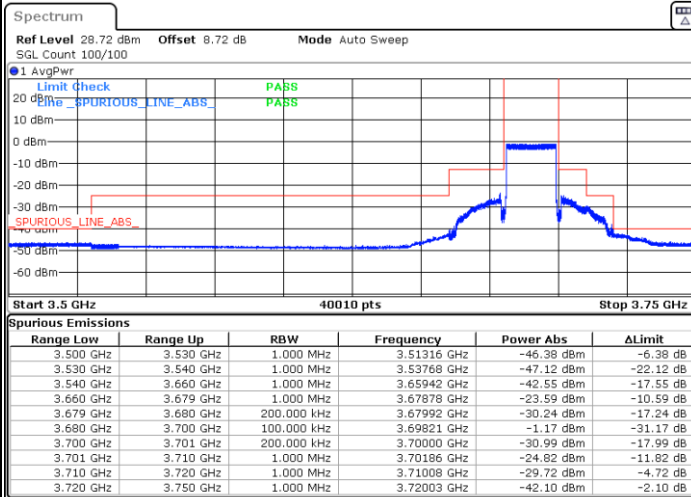
Date: 15.SEP.2024 02:30:58



Date: 15.SEP.2024 02:37:45

## Highest Channel / FullIRB

## N/A



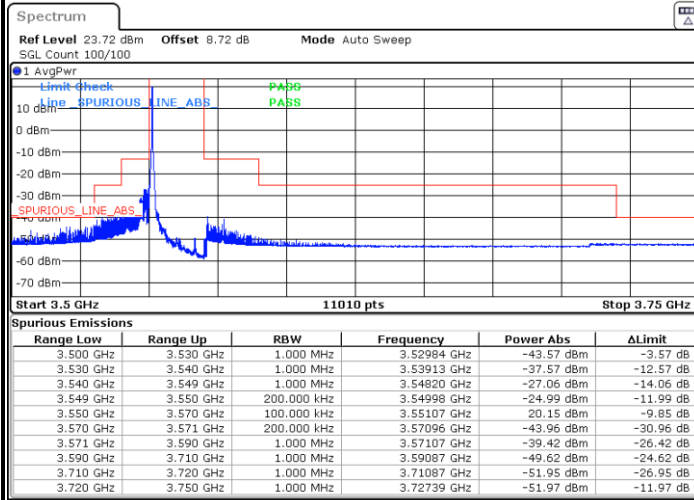
Date: 24.SEP.2024 02:39:16



## LTE Band 48 / 20MHz

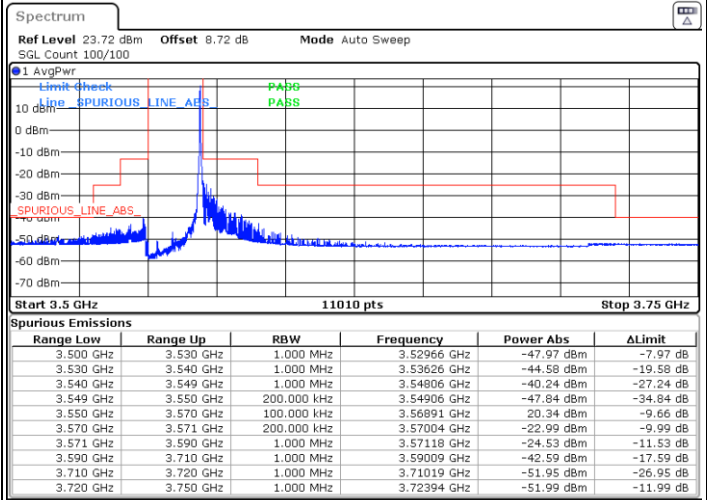
## 16QAM

## Lowest Channel / 1RB0



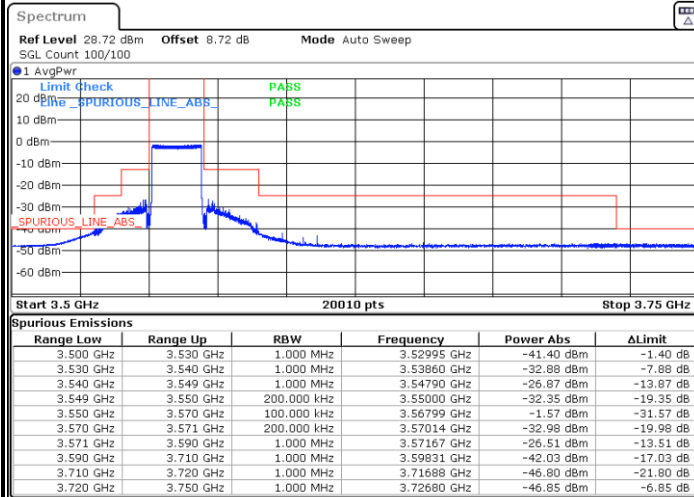
Date: 15.SEP.2024 01:52:18

## Lowest Channel / 1RBmax



Date: 15.SEP.2024 01:59:02

## Lowest Channel / FullIRB



Date: 24.SEP.2024 02:34:10

N/A

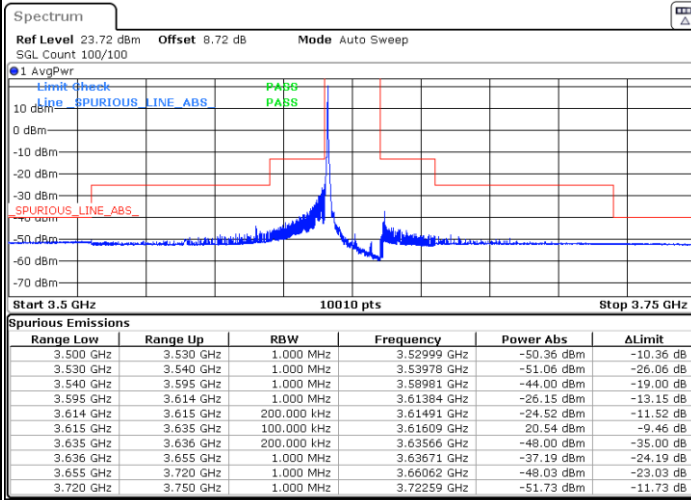


## LTE Band 48 / 20MHz

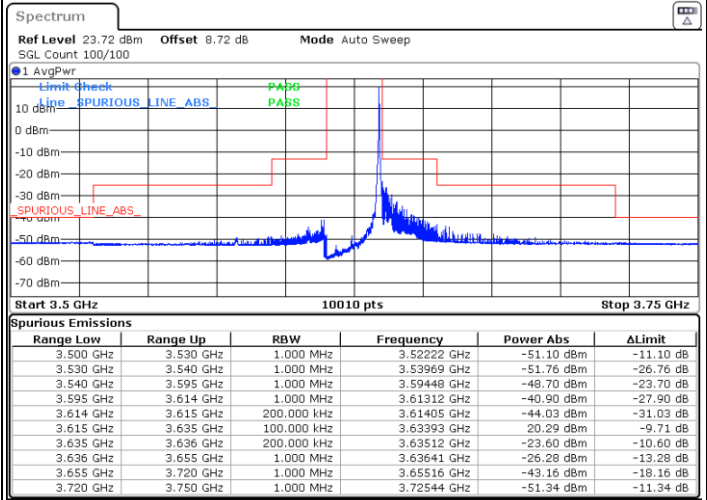
## 16QAM

## Middle Channel / 1RB0

## Middle Channel / 1RBmax



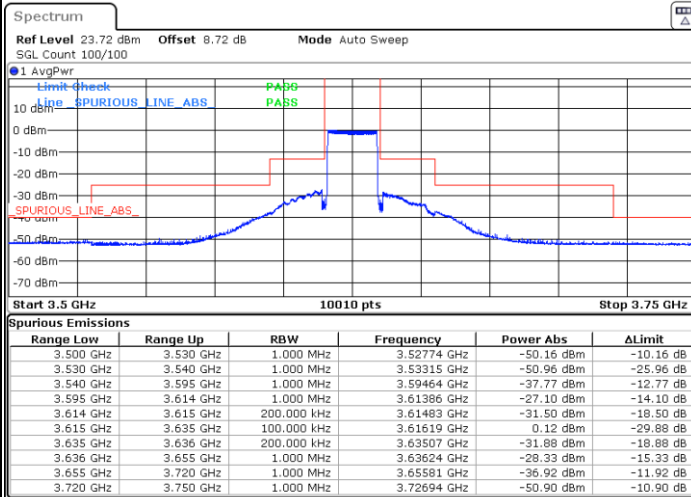
Date: 15.SEP.2024 02:12:31



Date: 15.SEP.2024 02:19:13

## Middle Channel / Full

## N/A



Date: 15.SEP.2024 02:25:56

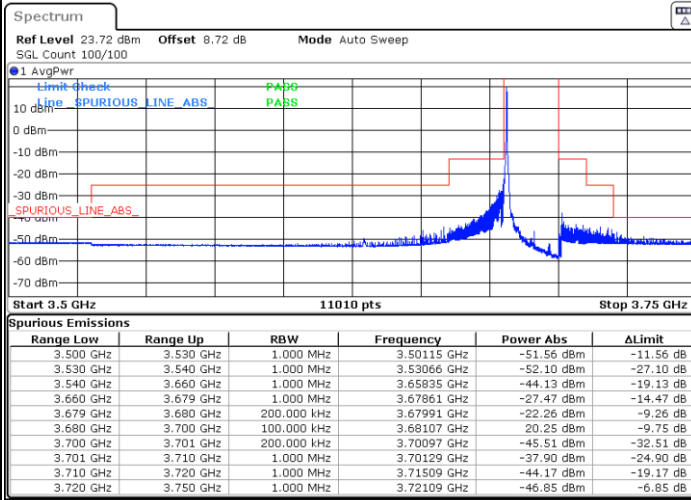


## LTE Band 48 / 20MHz

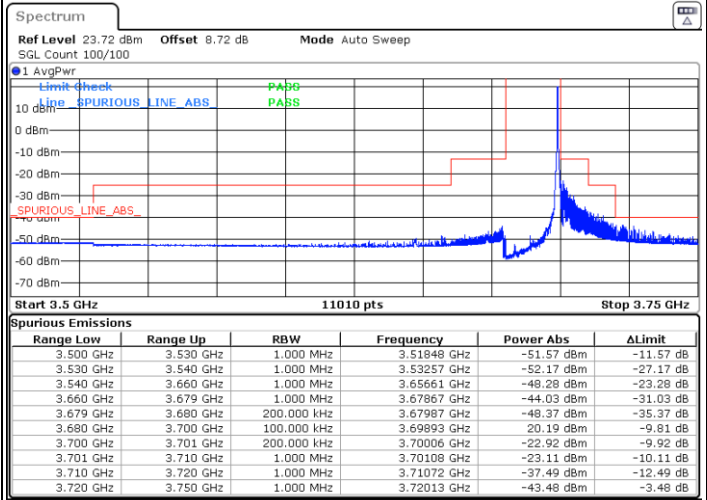
## 16QAM

## Highest Channel / 1RB0

## Highest Channel / 1RBmax



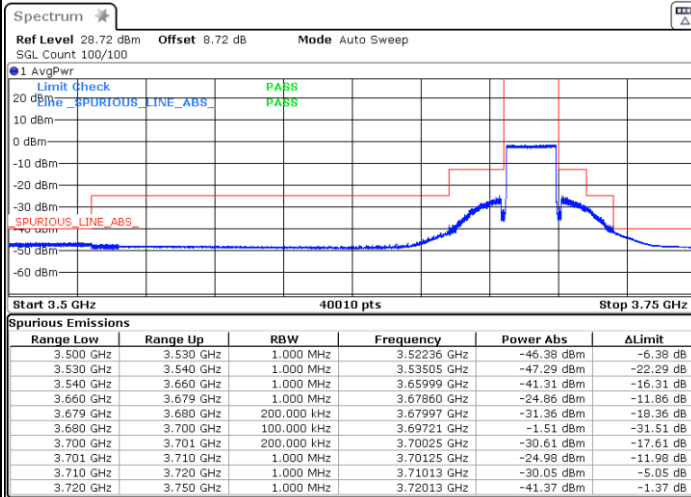
Date: 15.SEP.2024 02:32:39



Date: 15.SEP.2024 02:39:26

## Highest Channel / FullIRB

## N/A



Date: 24.SEP.2024 02:43:06

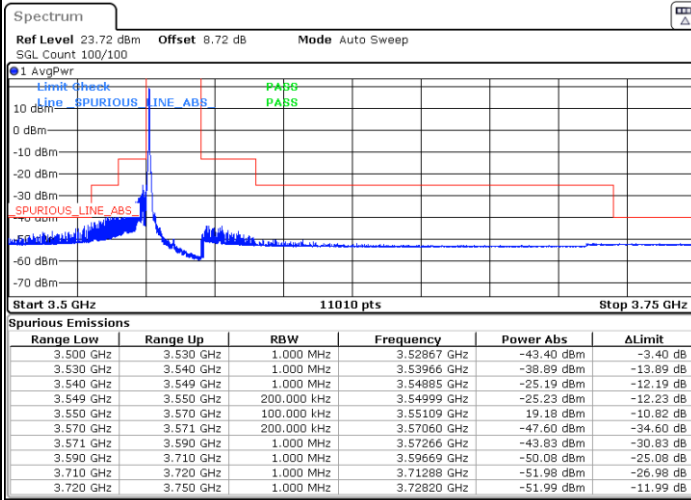


## LTE Band 48 / 20MHz

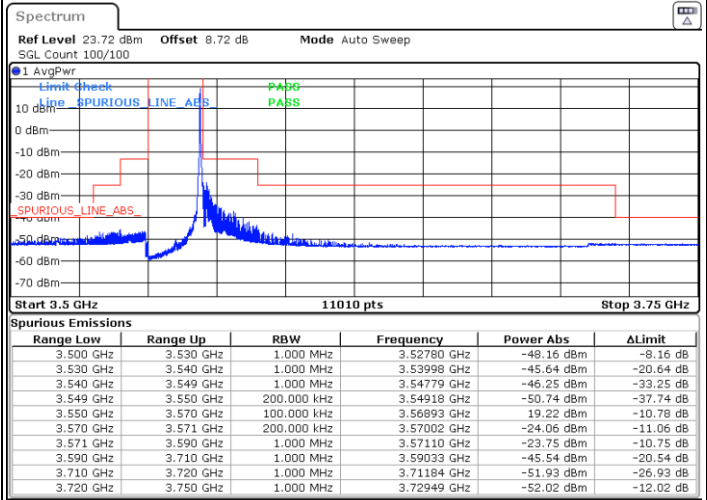
## 64QAM

## Lowest Channel / 1RB0

## Lowest Channel / 1RBmax



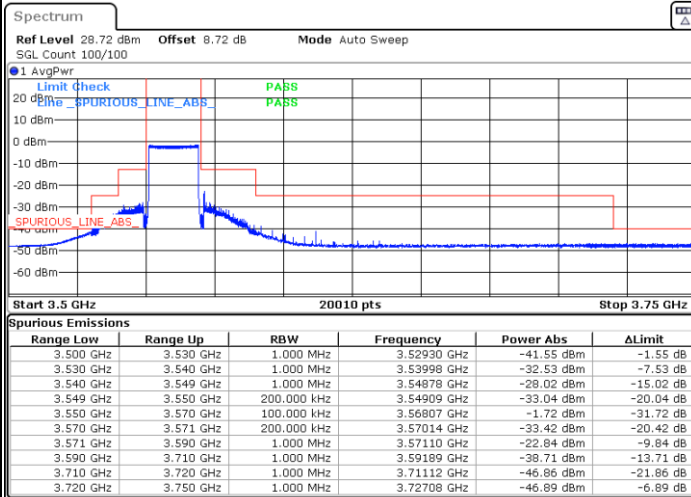
Date: 15.SEP.2024 01:53:59



Date: 15.SEP.2024 02:00:44

## Lowest Channel / FullIRB

## N/A



Date: 24.SEP.2024 02:36:26

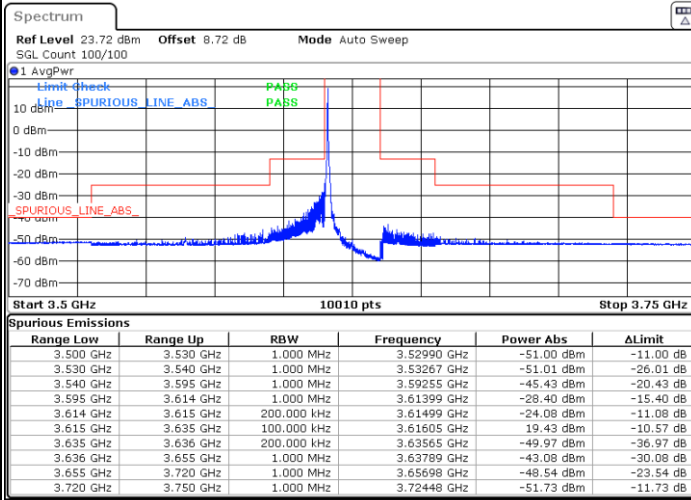


## LTE Band 48 / 20MHz

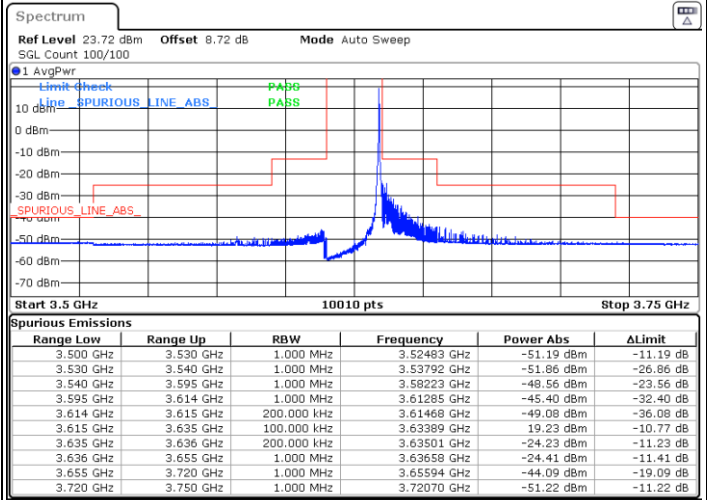
## 64QAM

## Middle Channel / 1RB0

## Middle Channel / 1RBmax



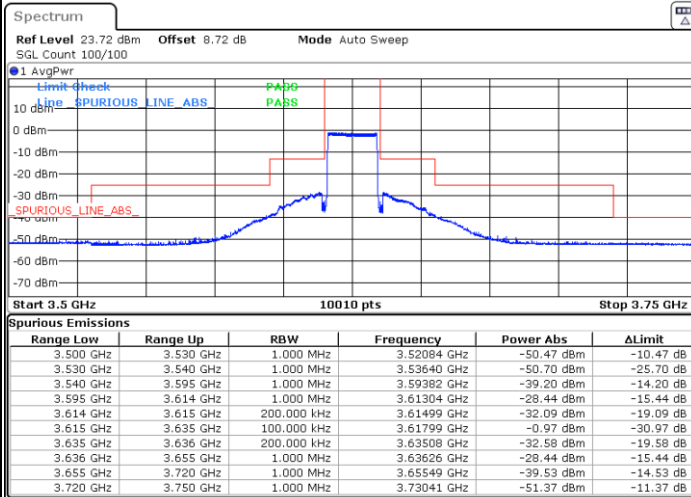
Date: 15.SEP.2024 02:14:12



Date: 15.SEP.2024 02:20:54

## Middle Channel / Full

## N/A



Date: 15.SEP.2024 02:27:37

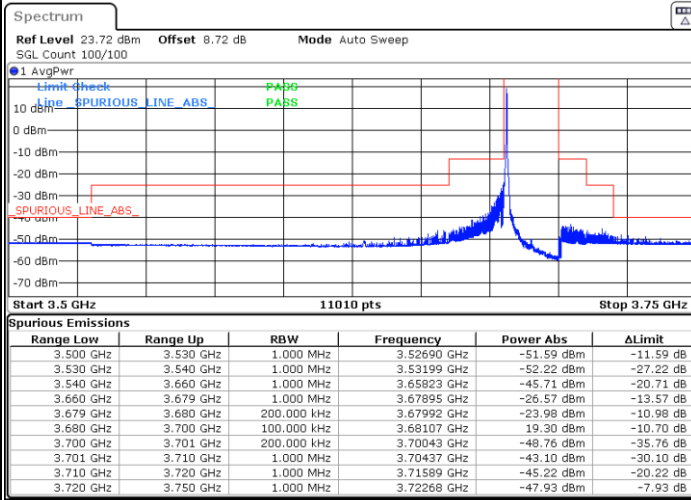


## LTE Band 48 / 20MHz

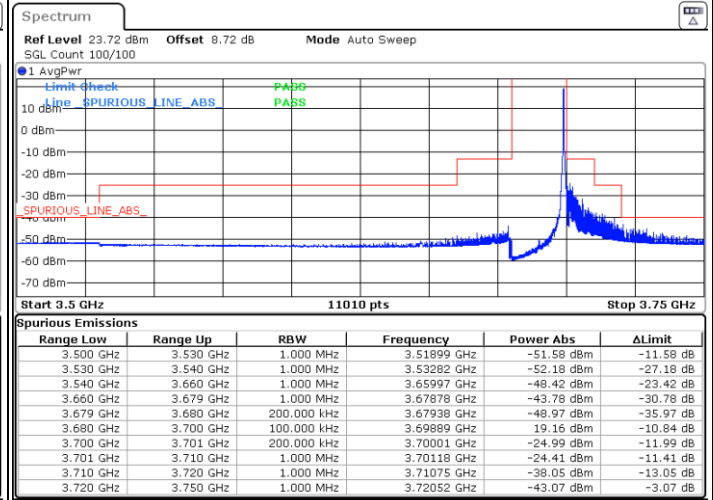
## 64QAM

## Highest Channel / 1RB0

## Highest Channel / 1RBmax



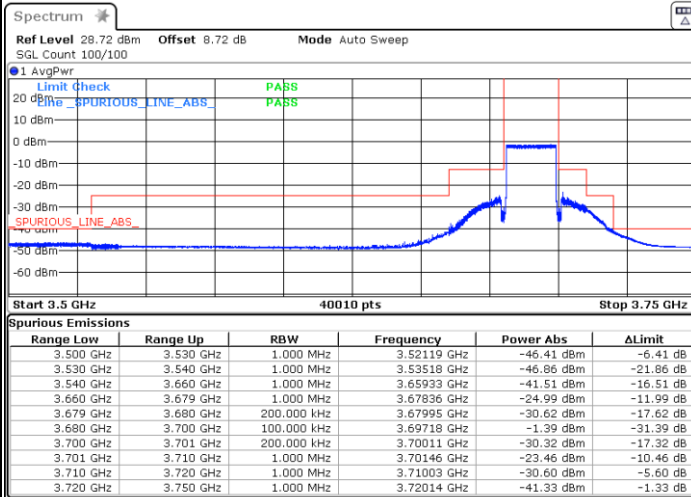
Date: 15.SEP.2024 02:34:20



Date: 15.SEP.2024 02:41:07

## Highest Channel / FullIRB

## N/A



Date: 24.SEP.2024 02:52:02

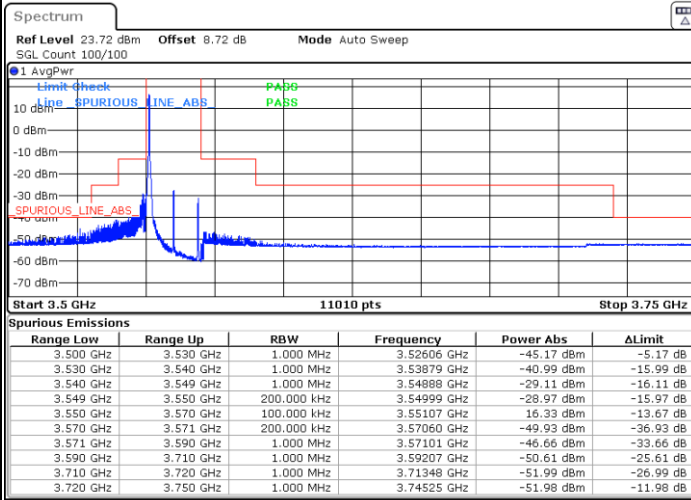


## LTE Band 48 / 20MHz

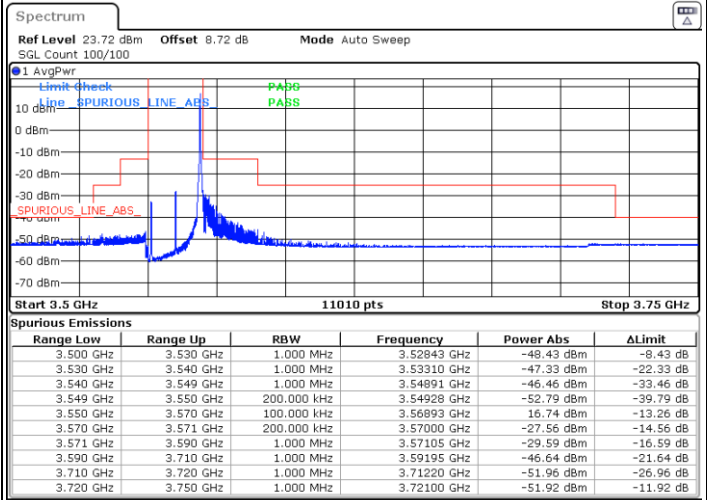
## 256QAM

## Lowest Channel / 1RB0

## Lowest Channel / 1RBmax



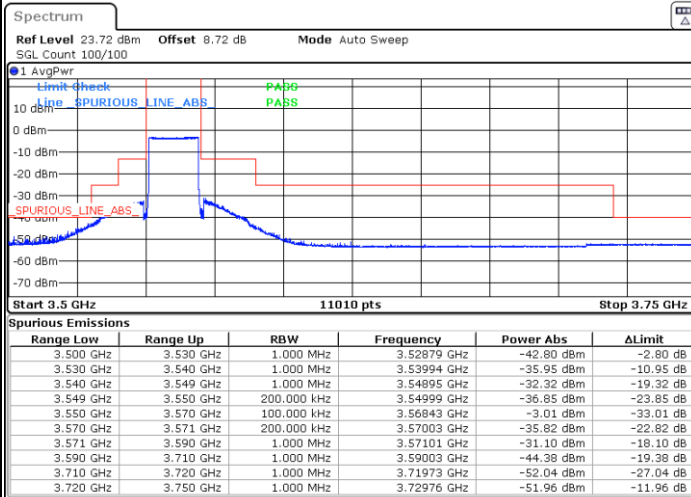
Date: 15.SEP.2024 01:55:40



Date: 15.SEP.2024 02:02:25

## Lowest Channel / FullIRB

## N/A



Date: 15.SEP.2024 02:09:10

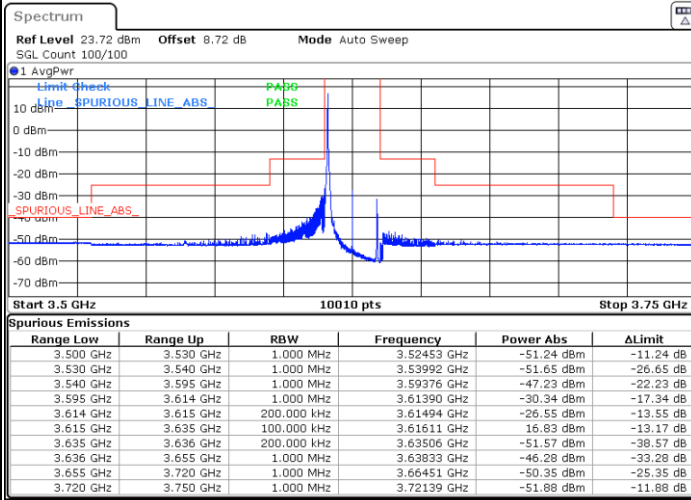


## LTE Band 48 / 20MHz

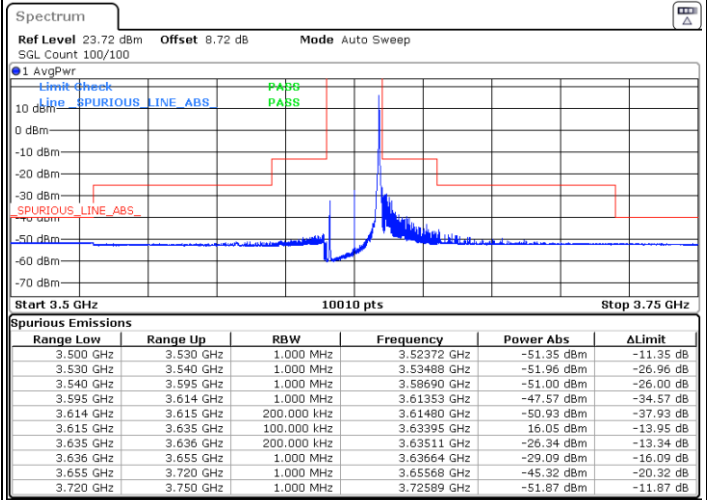
## 256QAM

## Middle Channel / 1RB0

## Middle Channel / 1RBmax



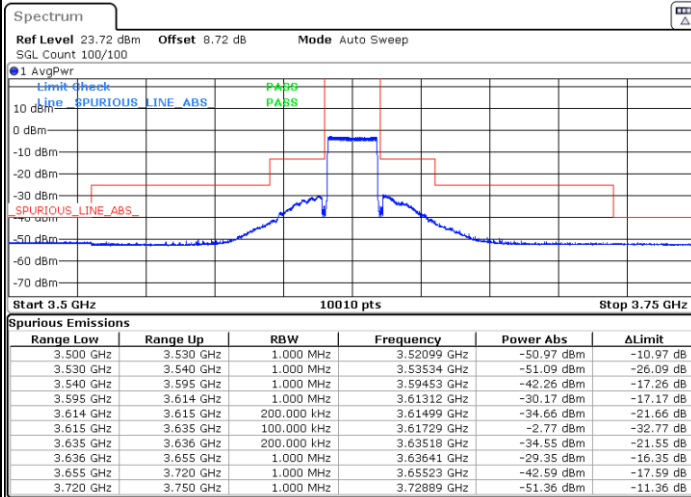
Date: 15.SEP.2024 02:15:52



Date: 15.SEP.2024 02:22:34

## Middle Channel / Full

## N/A



Date: 15.SEP.2024 02:29:17

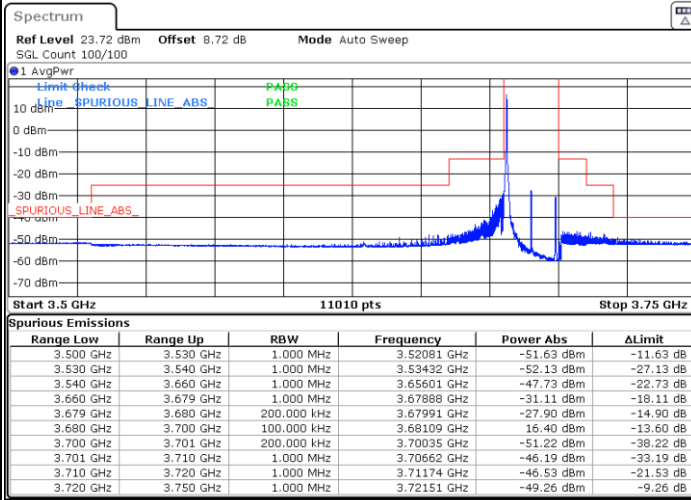


## LTE Band 48 / 20MHz

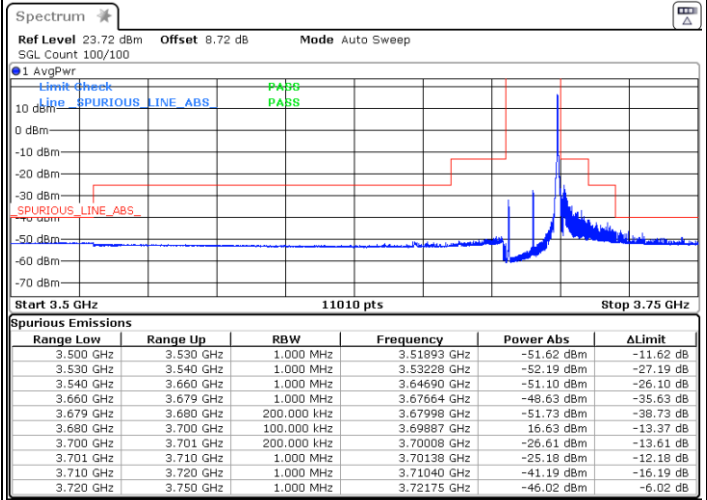
## 256QAM

## Highest Channel / 1RB0

## Highest Channel / 1RBmax



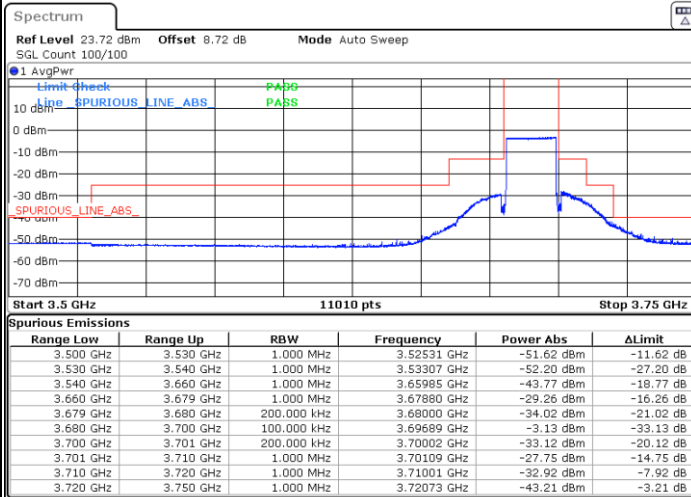
Date: 15.SEP.2024 02:36:01



Date: 15.SEP.2024 02:58:05

## Highest Channel / FullIRB

## N/A



Date: 15.SEP.2024 02:49:35



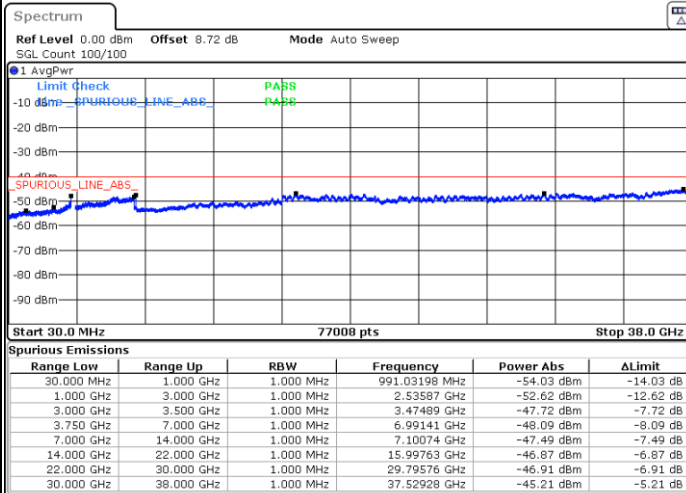
# Conducted Spurious Emission

LTE Band 48 / 5MHz

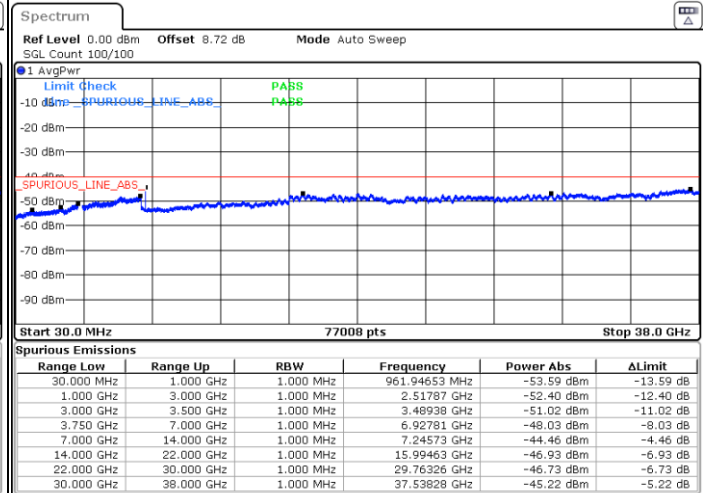
QPSK / 1RB0

Lowest Channel

Middle Channel

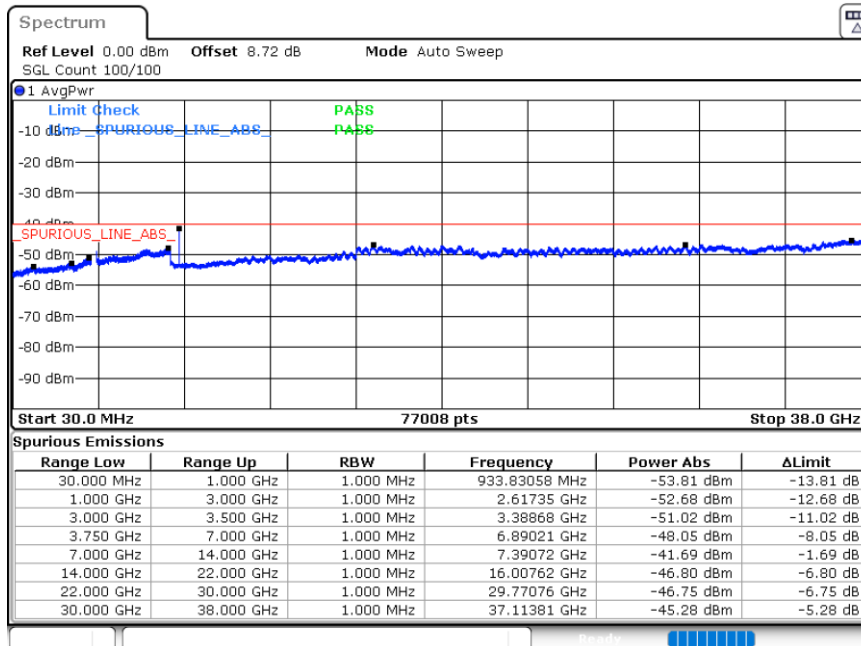


Date: 19.OCT.2024 03:43:02



Date: 19.OCT.2024 03:44:30

Highest Channel



Date: 19.OCT.2024 03:45:57

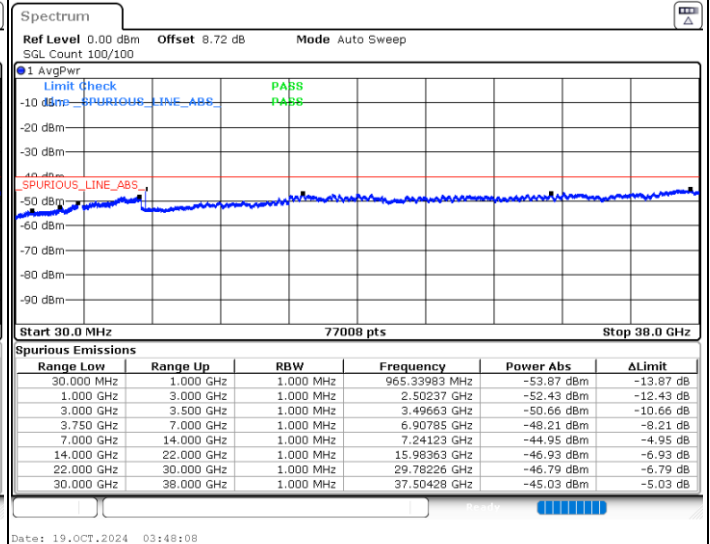
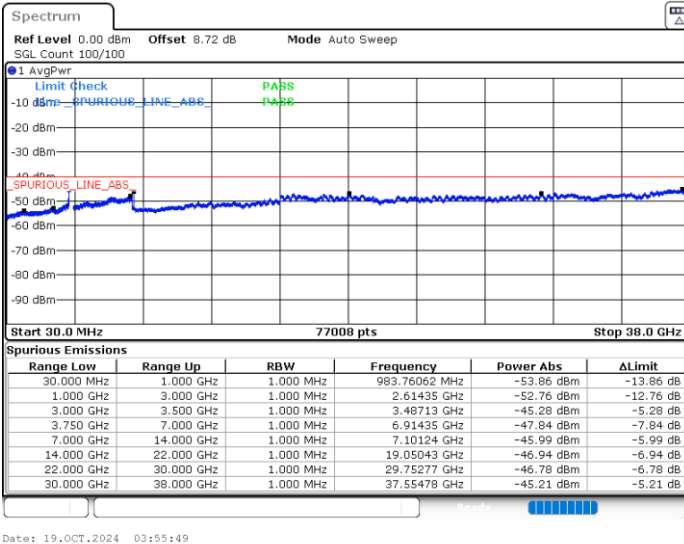


## LTE Band 48 / 10MHz

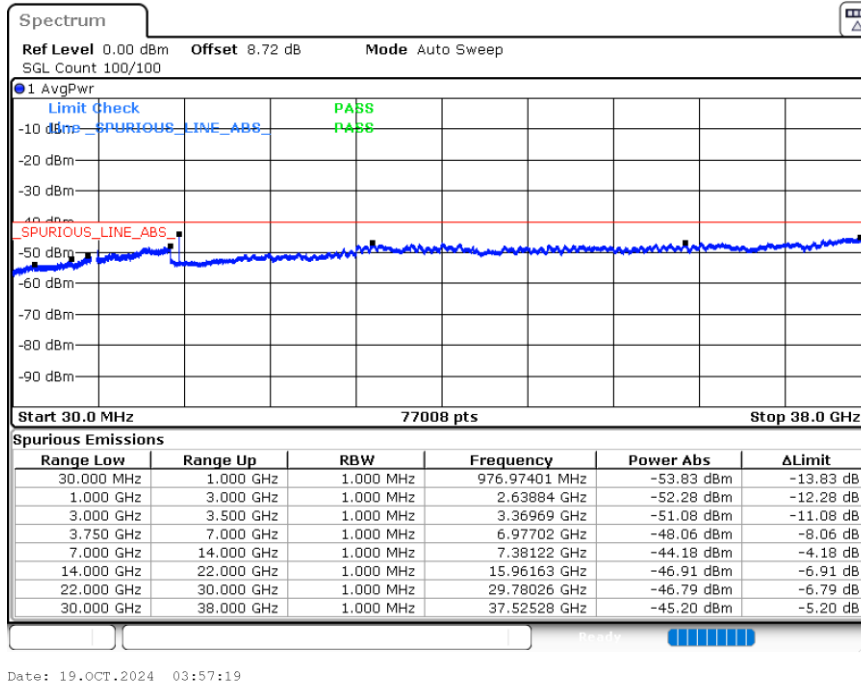
## QPSK / 1RB0

## Lowest Channel

## Middle Channel



## Highest Channel



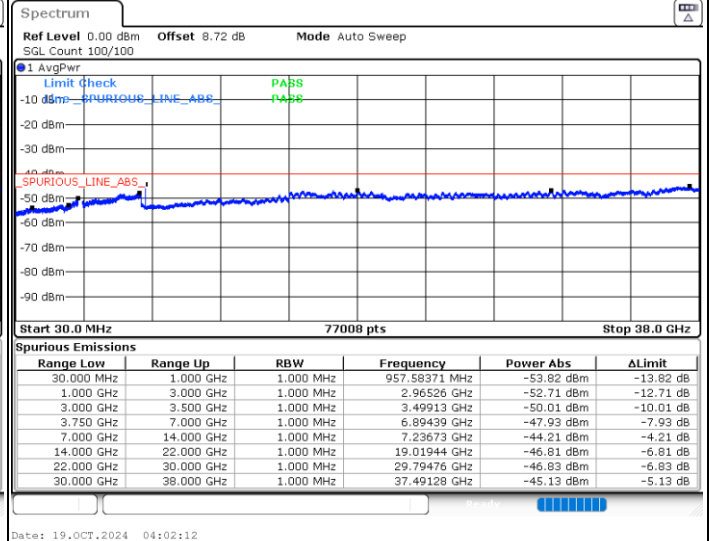
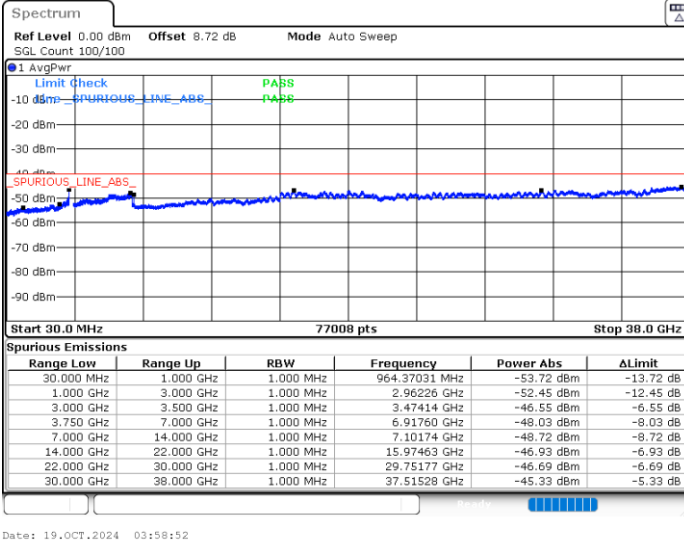


## LTE Band 48 / 15MHz

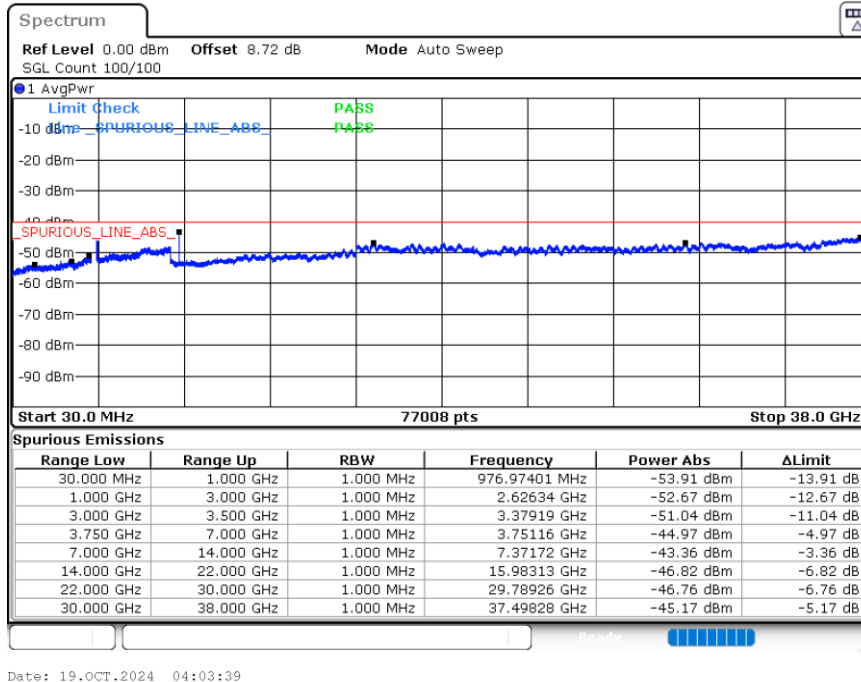
## QPSK / 1RB0

## Lowest Channel

## Middle Channel



## Highest Channel



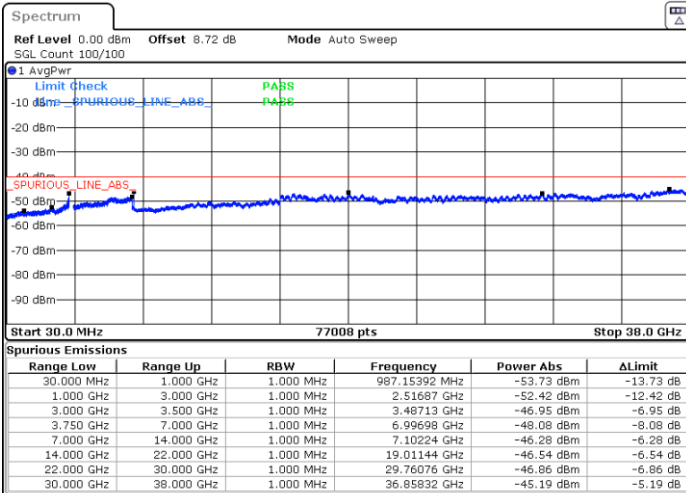


## LTE Band 48 / 20MHz

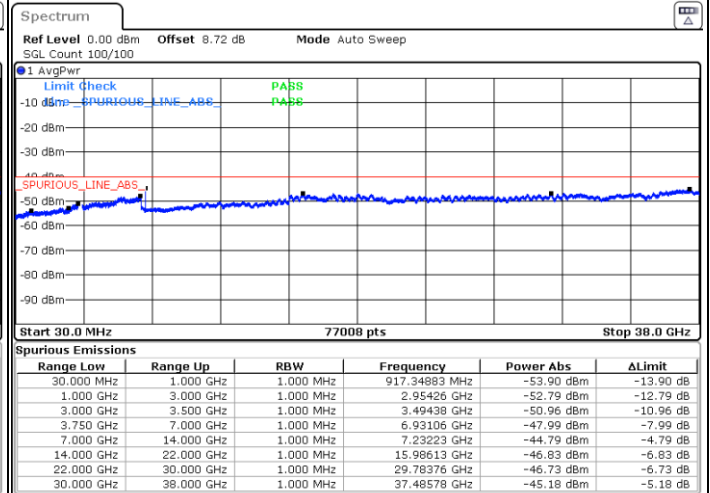
## QPSK / 1RB0

## Lowest Channel

## Middle Channel

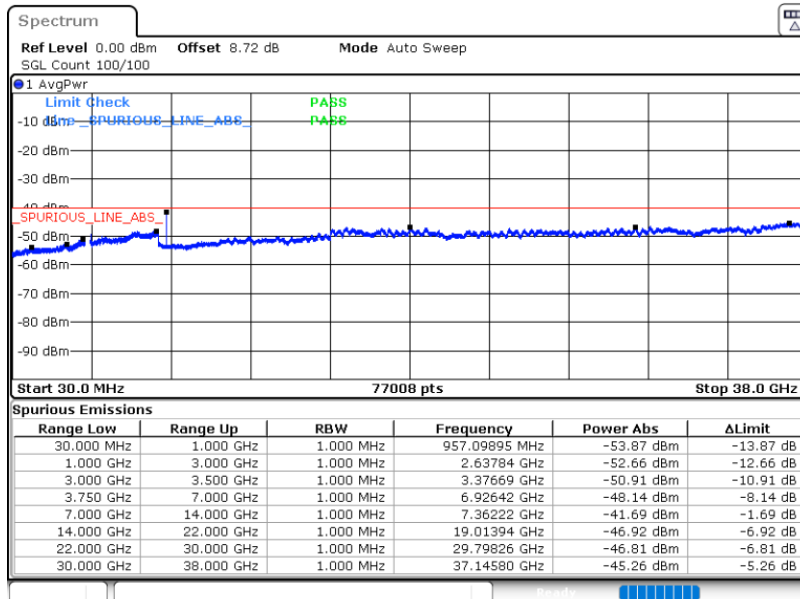


Date: 19.OCT.2024 04:10:43



Date: 19.OCT.2024 04:09:15

## Highest Channel



Date: 19.OCT.2024 04:12:10

## Frequency Stability

| Test Conditions  |                   | LTE Band 48 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 5MHz                             | Note 2. |
|                  |                   | Deviation (ppm)                     | Result  |
| 50               | Normal Voltage    | 0.0035                              | PASS    |
| 40               | Normal Voltage    | 0.0016                              |         |
| 30               | Normal Voltage    | 0.0028                              |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                              |         |
| 10               | Normal Voltage    | 0.0044                              |         |
| 0                | Normal Voltage    | 0.0046                              |         |
| -10              | Normal Voltage    | 0.0023                              |         |
| -20              | Normal Voltage    | 0.0015                              |         |
| -30              | Normal Voltage    | 0.0012                              |         |
| 20               | Maximum Voltage   | 0.0036                              |         |
| 20               | Normal Voltage    | 0.0059                              |         |
| 20               | Battery End Point | 0.0007                              |         |

**Note:**

1. Normal Voltage =3.87 V. ; Minimum Voltage =3.5V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

## LTE Band 48C

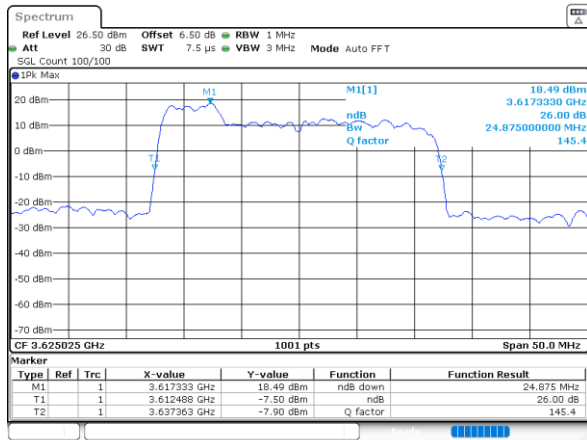
### 26dB Bandwidth

| Mode      | LTE Band 48C : 26dB BW(MHz) |             |
|-----------|-----------------------------|-------------|
| QPSK      | QPSK                        | 16QAM       |
| BW        | 5MHz+20MHz                  | 5MHz+20MHz  |
| Middle CH | 24.88                       | 24.73       |
| QPSK      | QPSK                        | 16QAM       |
| BW        | 10MHz+20MHz                 | 10MHz+20MHz |
| Middle CH | 29.85                       | 29.91       |
| QPSK      | QPSK                        | 16QAM       |
| BW        | 15MHz+20MHz                 | 15MHz+20MHz |
| Middle CH | 34.90                       | 34.90       |
| QPSK      | QPSK                        | 16QAM       |
| BW        | 20MHz+5MHz                  | 20MHz+5MHz  |
| Middle CH | 25.03                       | 24.83       |
| QPSK      | QPSK                        | 16QAM       |
| BW        | 20MHz+10MHz                 | 20MHz+10MHz |
| Middle CH | 30.03                       | 30.09       |
| QPSK      | QPSK                        | 16QAM       |
| BW        | 20MHz+15MHz                 | 20MHz+15MHz |
| Middle CH | 35.04                       | 34.90       |
| QPSK      | QPSK                        | 16QAM       |
| BW        | 20MHz+20MHz                 | 20MHz+20MHz |
| Middle CH | 39.88                       | 39.80       |



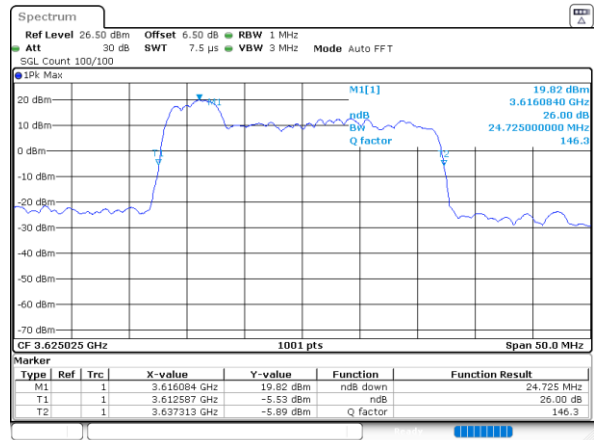
## LTE Band 48C

## Middle Channel / 5MHz+20MHz/QPSK



Date: 18.OCT.2024 07:45:45

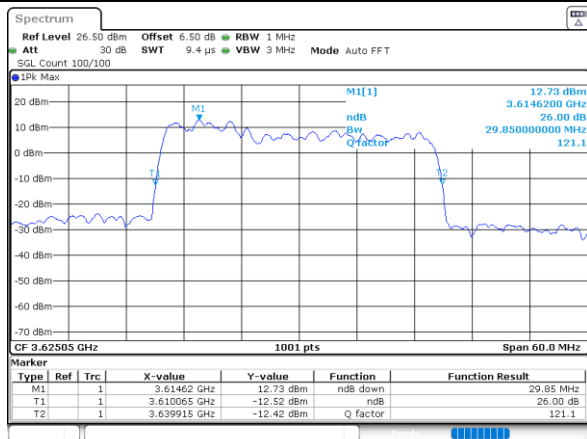
## Middle Channel / 5MHz+20MHz/16QAM



Date: 18.OCT.2024 07:47:14

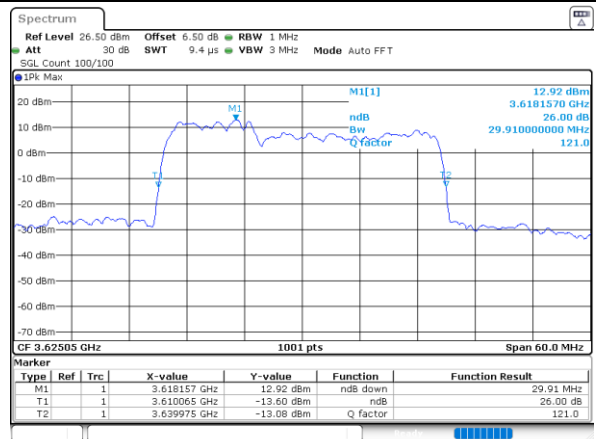
## LTE Band 48C

## Middle Channel / 10MHz+20MHz/QPSK



Date: 18.OCT.2024 08:09:47

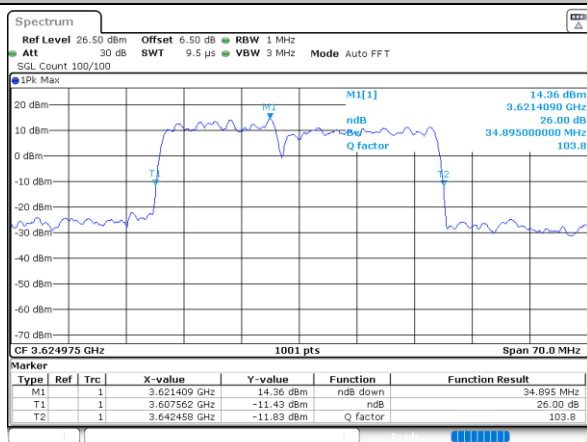
## Middle Channel / 10MHz+20MHz/16QAM



Date: 18.OCT.2024 08:11:16

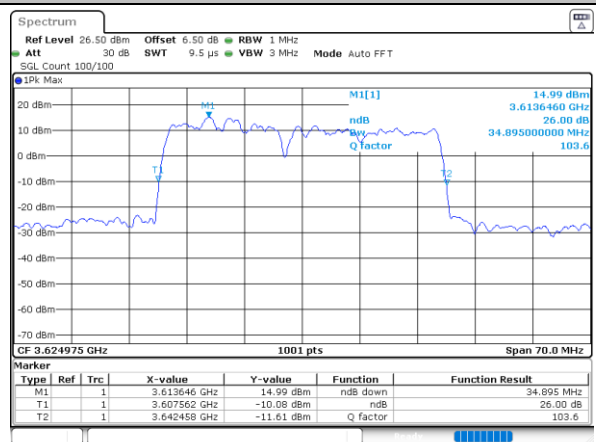
## LTE Band 48C

## Middle Channel / 15MHz+20MHz/QPSK

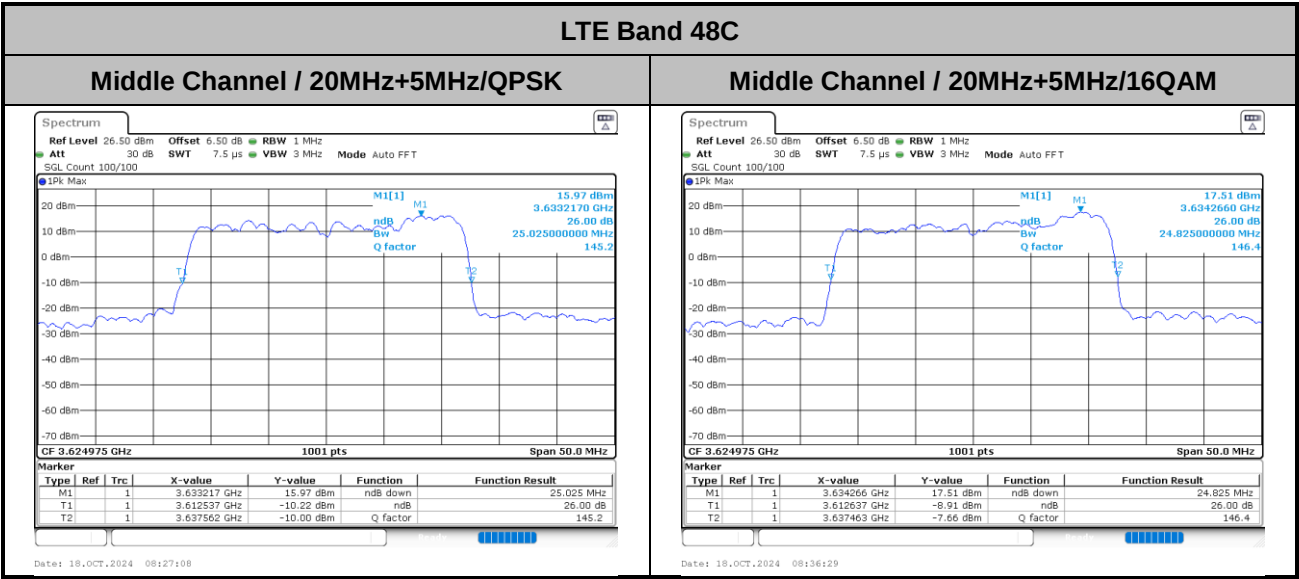


Date: 18.OCT.2024 08:18:34

## Middle Channel / 15MHz+20MHz/16QAM



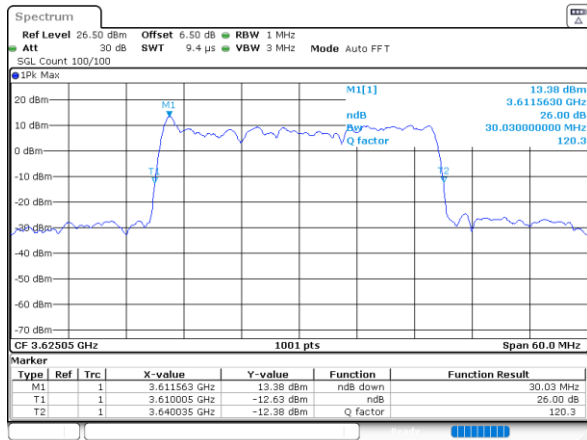
Date: 18.OCT.2024 08:20:04





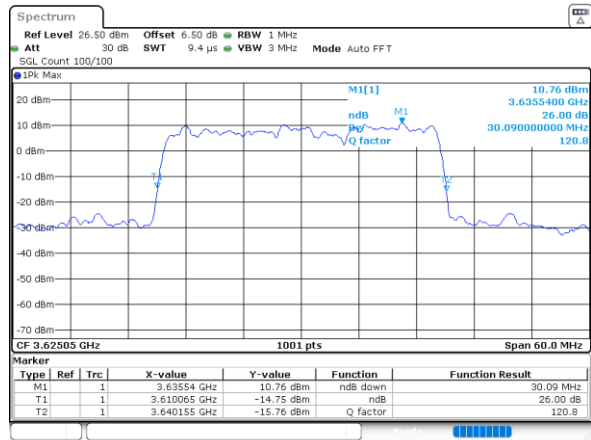
## LTE Band 48C

## Middle Channel / 20MHz+10MHz/QPSK



Date: 18.OCT.2024 08:41:53

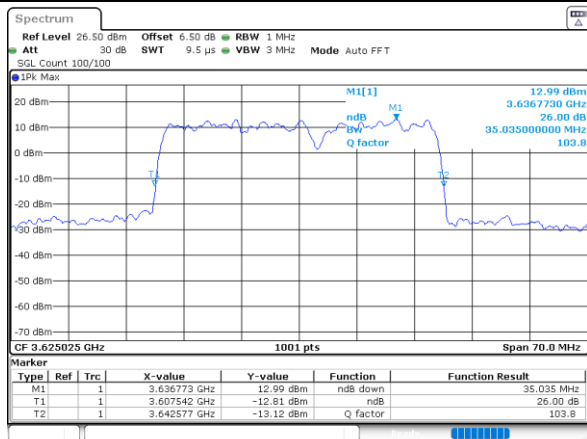
## Middle Channel / 20MHz+10MHz/16QAM



Date: 18.OCT.2024 08:43:38

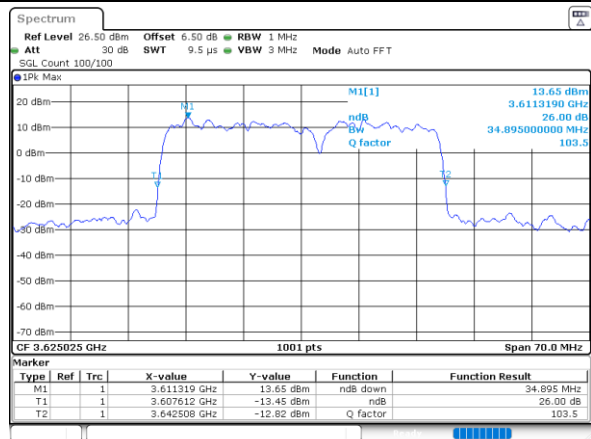
## LTE Band 48C

## Middle Channel / 20MHz+15MHz/QPSK



Date: 18.OCT.2024 08:49:30

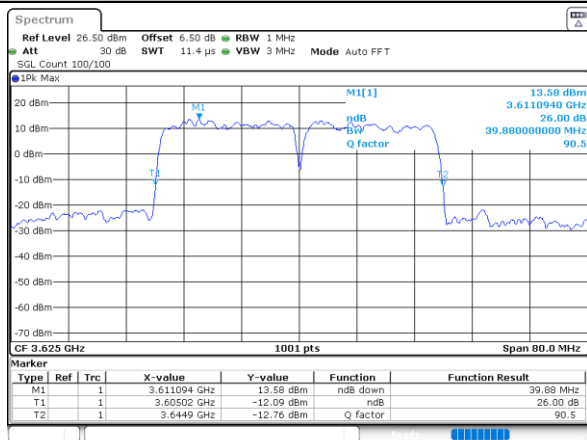
## Middle Channel / 20MHz+15MHz/16QAM



Date: 18.OCT.2024 08:50:59

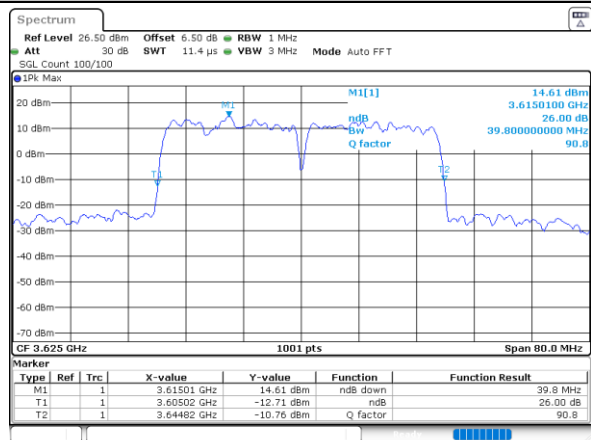
## LTE Band 48C

## Middle Channel / 20MHz+20MHz/QPSK



Date: 18.OCT.2024 09:06:37

## Middle Channel / 20MHz+20MHz/16QAM

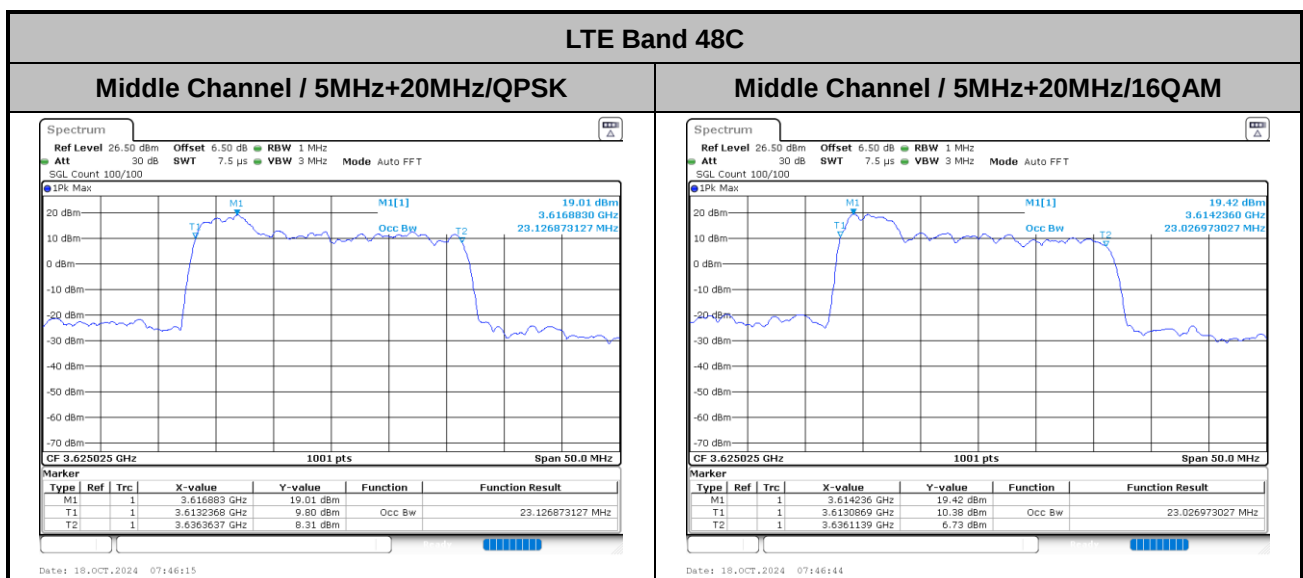


Date: 18.OCT.2024 09:08:00



## Occupied Bandwidth

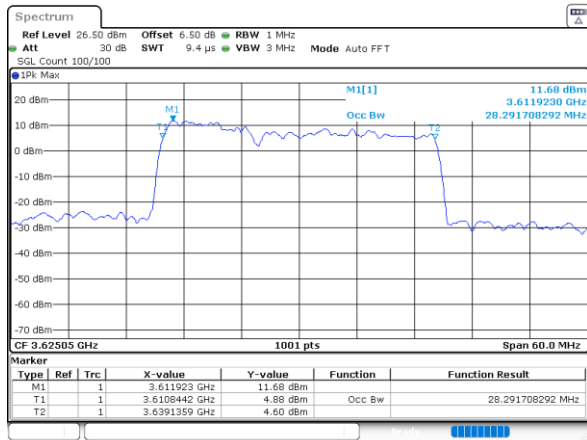
| Mode      | LTE Band 48C : OBW(MHz) |             |
|-----------|-------------------------|-------------|
| QPSK      | QPSK                    | 16QAM       |
| BW        | 5MHz+20MHz              | 5MHz+20MHz  |
| Middle CH | 23.13                   | 23.03       |
| QPSK      | QPSK                    | 16QAM       |
| BW        | 10MHz+20MHz             | 10MHz+20MHz |
| Middle CH | 28.29                   | 27.99       |
| QPSK      | QPSK                    | 16QAM       |
| BW        | 15MHz+20MHz             | 15MHz+20MHz |
| Middle CH | 33.01                   | 32.87       |
| QPSK      | QPSK                    | 16QAM       |
| BW        | 20MHz+5MHz              | 20MHz+5MHz  |
| Middle CH | 23.28                   | 23.43       |
| QPSK      | QPSK                    | 16QAM       |
| BW        | 20MHz+10MHz             | 20MHz+10MHz |
| Middle CH | 28.05                   | 27.99       |
| QPSK      | QPSK                    | 16QAM       |
| BW        | 20MHz+15MHz             | 20MHz+15MHz |
| Middle CH | 32.73                   | 32.94       |
| QPSK      | QPSK                    | 16QAM       |
| BW        | 20MHz+20MHz             | 20MHz+20MHz |
| Middle CH | 37.56                   | 37.80       |



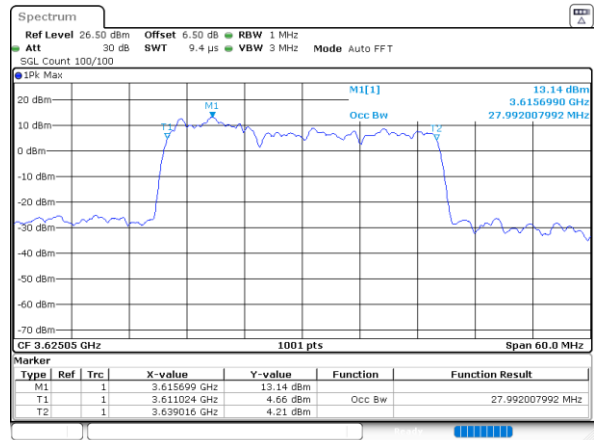


## LTE Band 48C

## Middle Channel / 10MHz+20MHz/QPSK

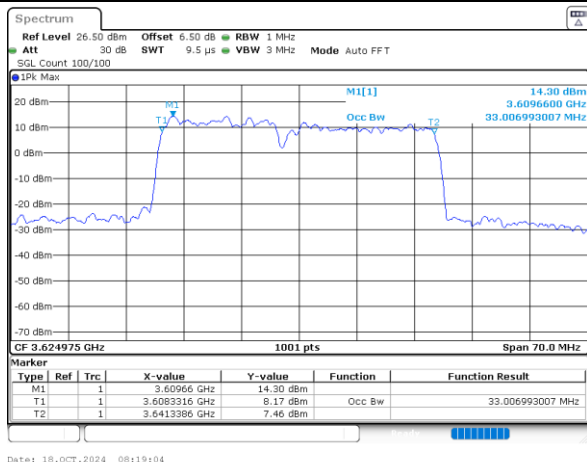


## Middle Channel / 10MHz+20MHz/16QAM

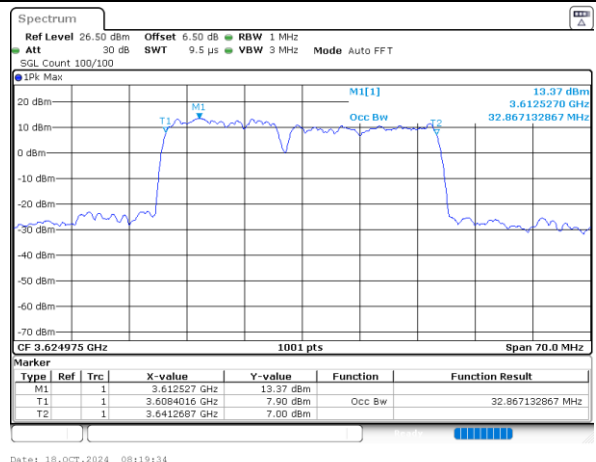


## LTE Band 48C

## Middle Channel / 15MHz+20MHz/QPSK

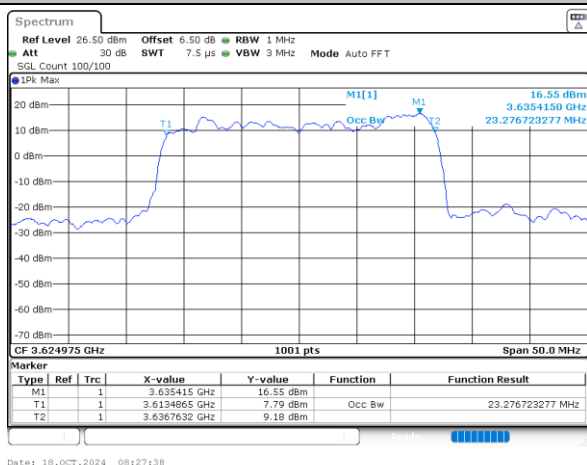


## Middle Channel / 15MHz+20MHz/16QAM

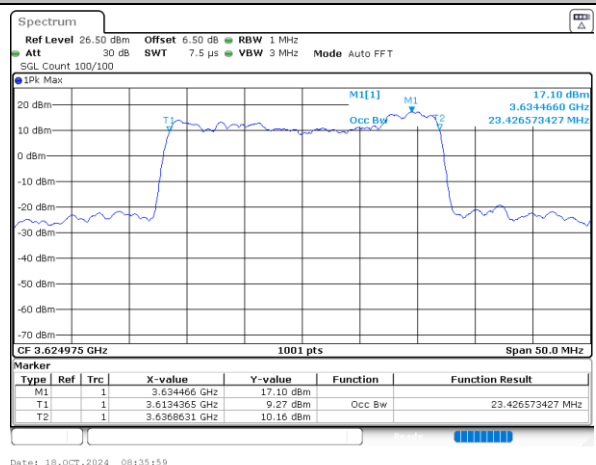


## LTE Band 48C

## Middle Channel / 20MHz+5MHz/QPSK



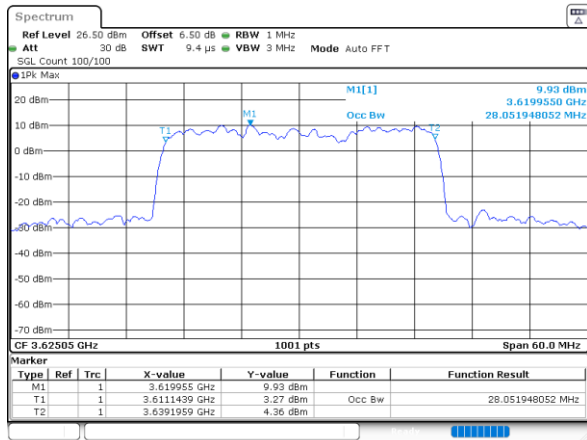
## Middle Channel / 20MHz+5MHz/16QAM



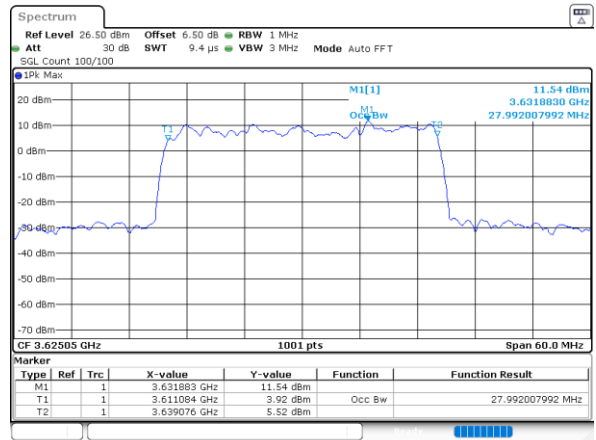


## LTE Band 48C

## Middle Channel / 20MHz+10MHz/QPSK

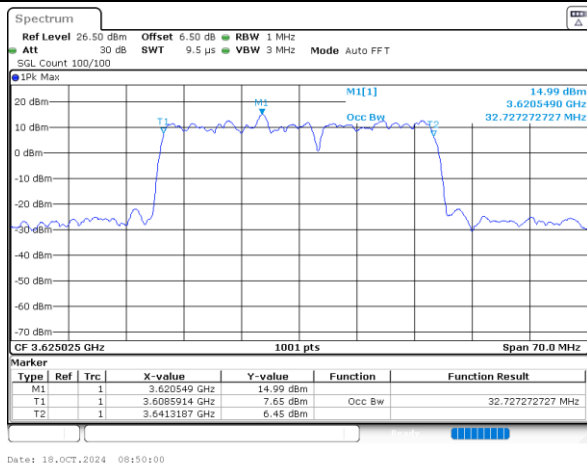


## Middle Channel / 20MHz+10MHz/16QAM

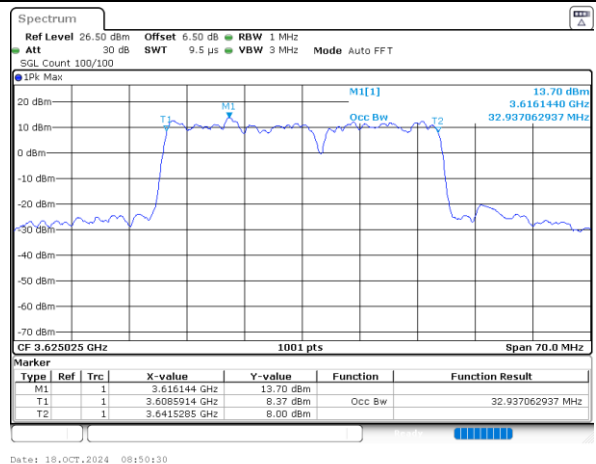


## LTE Band 48C

## Middle Channel / 20MHz+15MHz/QPSK

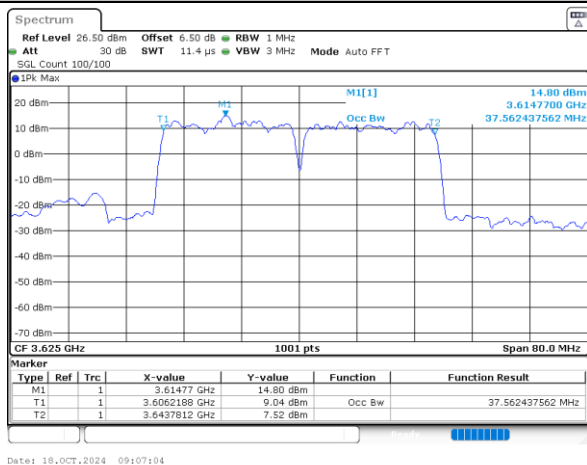


## Middle Channel / 20MHz+15MHz/16QAM

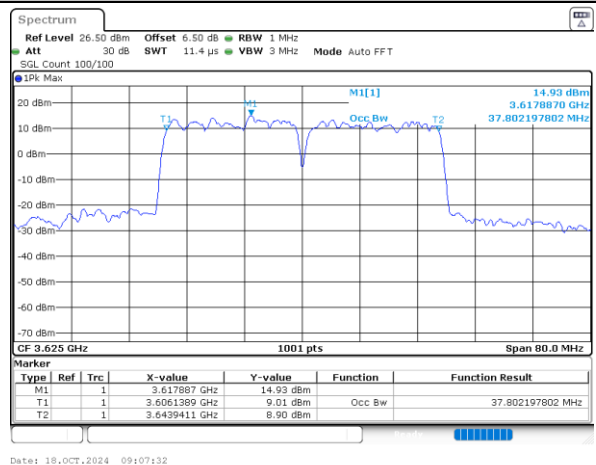


## LTE Band 48C

## Middle Channel / 20MHz+20MHz/QPSK



## Middle Channel / 20MHz+20MHz/16QAM



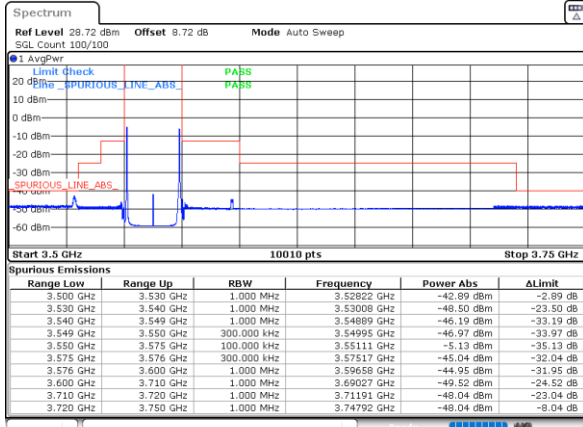


# Conducted Band Edge

LTE Band 48C / 5MHz+20MHz

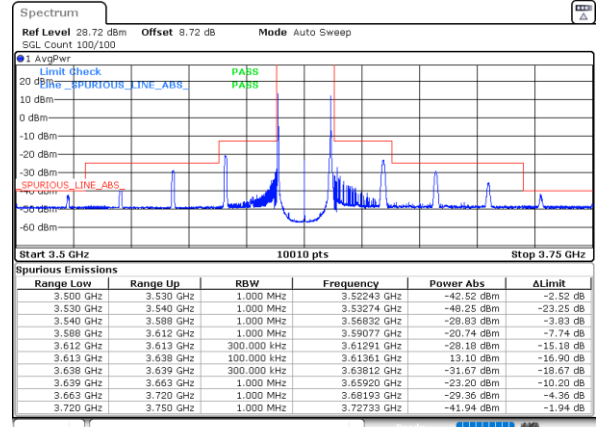
QPSK

Lowest Band Edge / 1RB0 and 1RB99



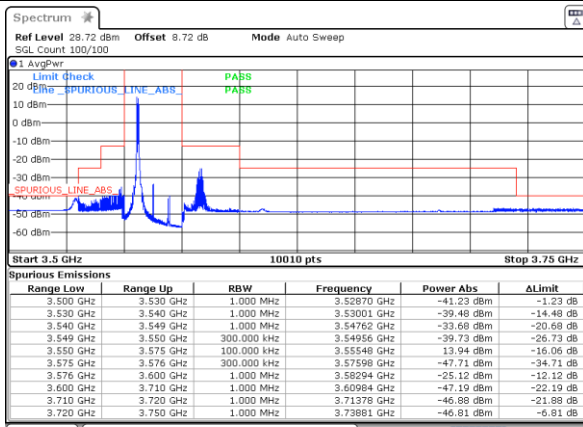
Date: 10.OCT.2024 09:10:11

Middle Band Edge / 1RB0 and 1RB99



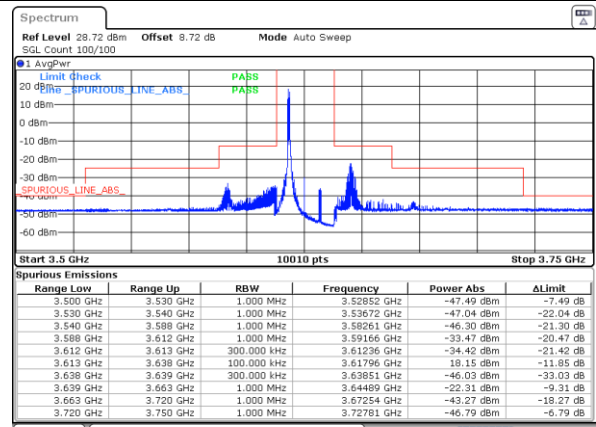
Date: 10.OCT.2024 09:28:03

Lowest Band Edge / 1RB24 and 1RB0



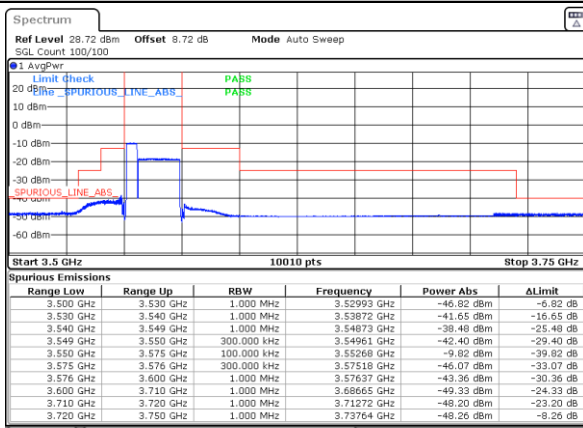
Date: 17.OCT.2024 22:52:45

Middle Band Edge / 1RB24 and 1RB0



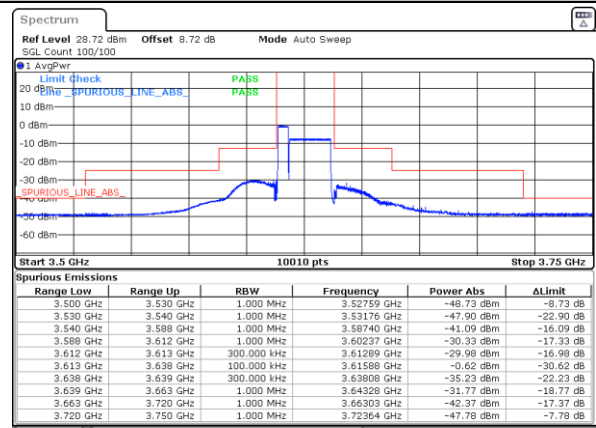
Date: 17.OCT.2024 05:12:41

Lowest Band Edge / Full RB



Date: 10.OCT.2024 08:56:49

Middle Band Edge / Full RB



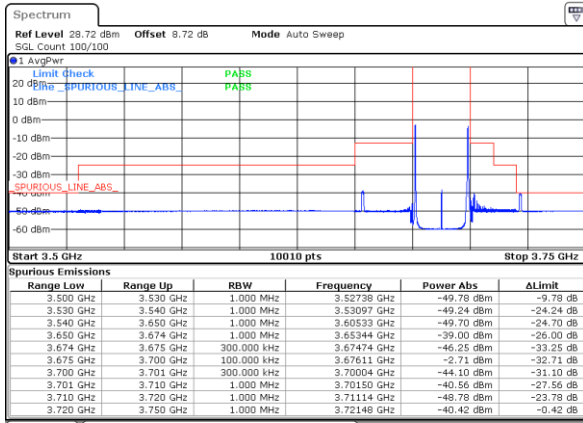
Date: 10.OCT.2024 09:13:31



## LTE Band 48C / 5MHz+20MHz

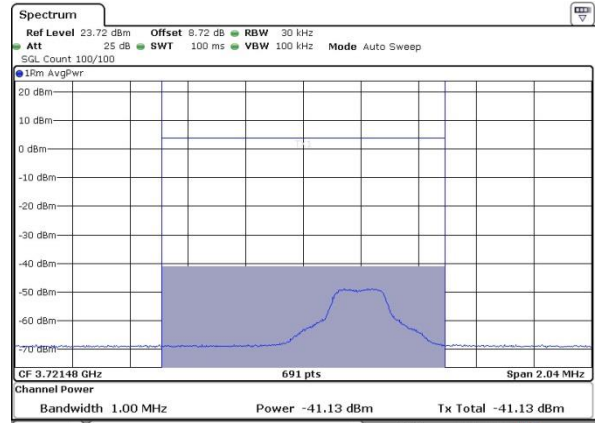
## QPSK

## Highest Band Edge / 1RB0 and 1RB99



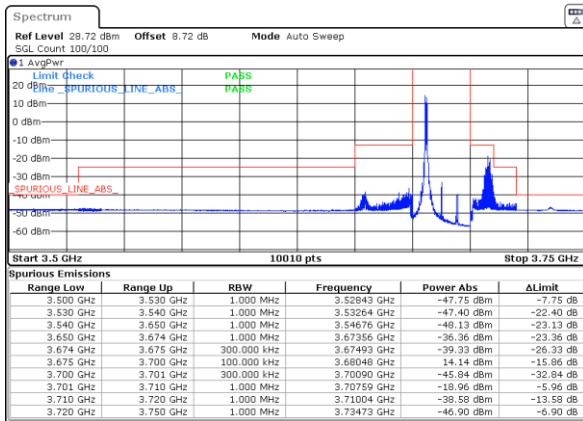
Date: 10.OCT.2024 23:51:00

## Highest Band Edge / 1RB0 and 1RB99 Channel Power



Date: 11.OCT.2024 07:15:05

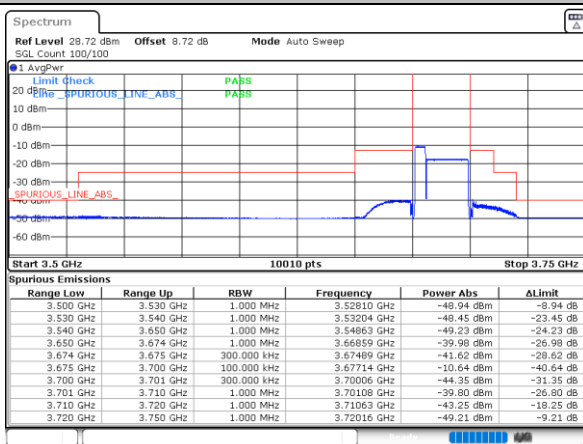
## Highest Band Edge / 1RB24 and 1RB0



Date: 17.OCT.2024 05:24:40

N/A

## Highest Band Edge / Full RB



Date: 10.OCT.2024 09:31:23

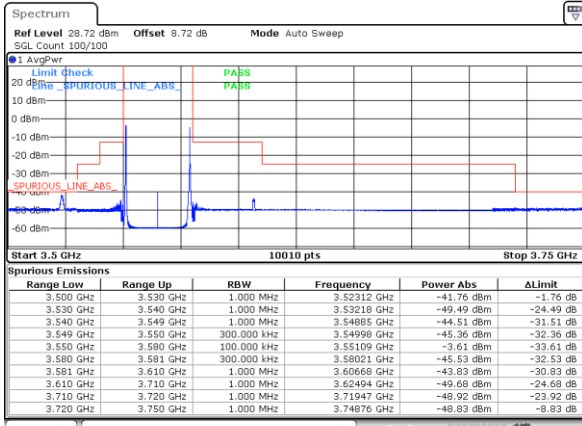
N/A



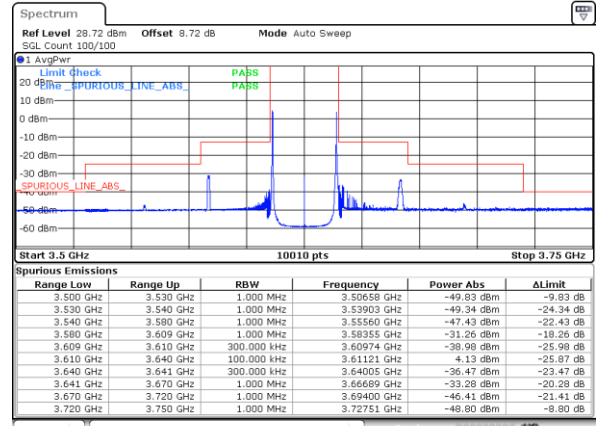
## LTE Band 48C / 10MHz+20MHz

## QPSK

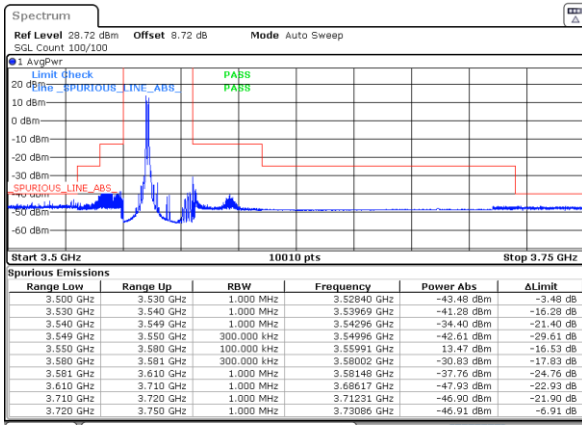
## Lowest Band Edge / 1RB0 and 1RB99



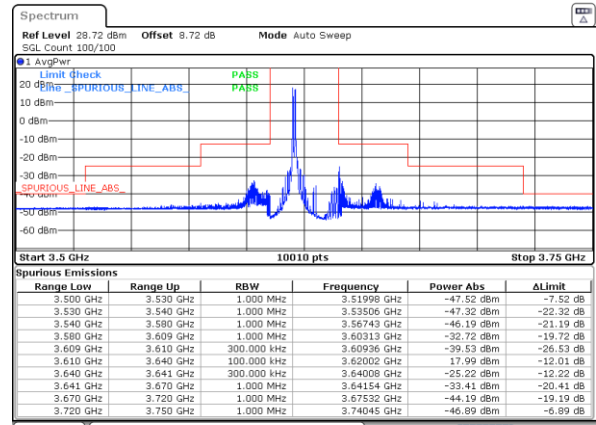
## Middle Band Edge / 1RB0 and 1RB99



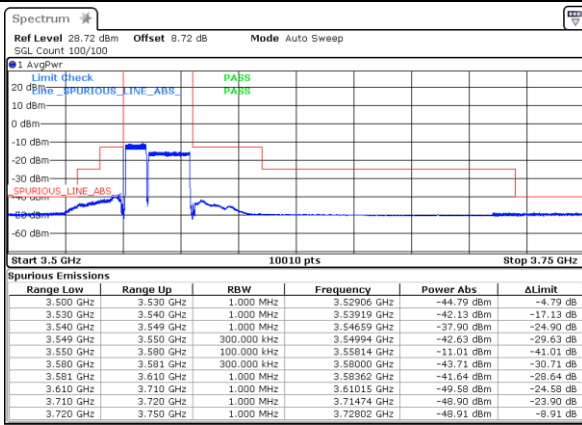
## Lowest Band Edge / 1RB49 and 1RB0



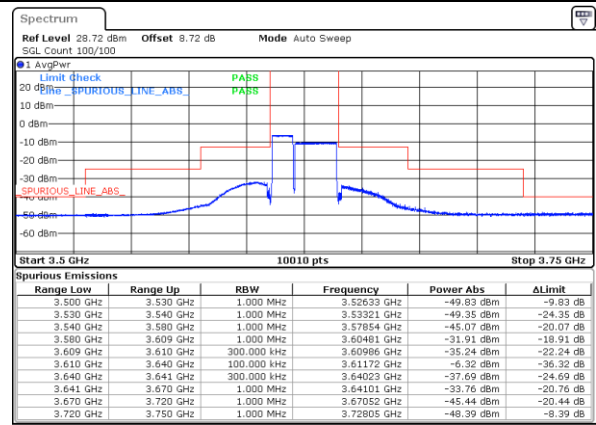
## Middle Band Edge / 1RB49 and 1RB0



## Lowest Band Edge / Full RB



## Middle Band Edge / Full RB

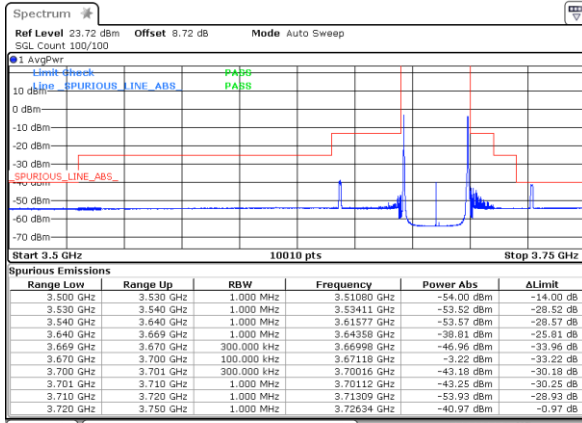




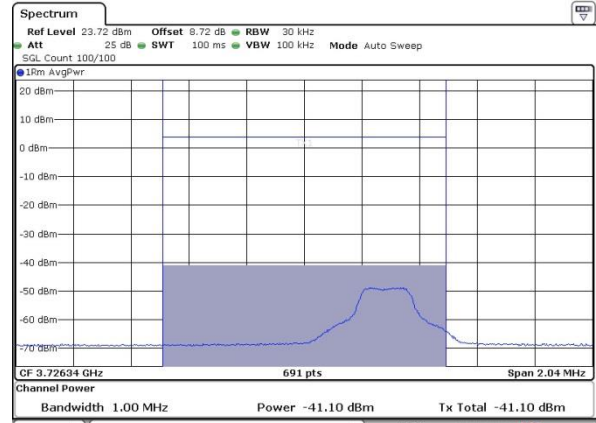
## LTE Band 48C / 10MHz+20MHz

## QPSK

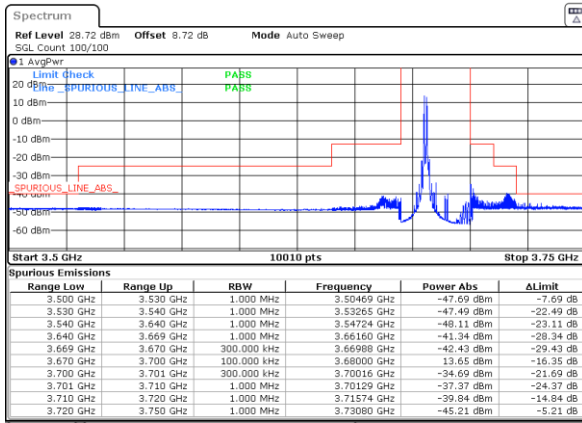
## Highest Band Edge / 1RB0 and 1RB99



## Highest Band Edge / 1RB0 and 1RB99 Channel Power

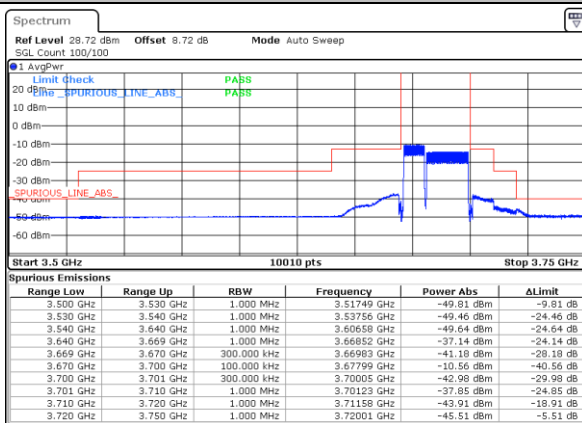


## Highest Band Edge / 1RB49 and 1RB0



N/A

## Highest Band Edge / Full RB



N/A