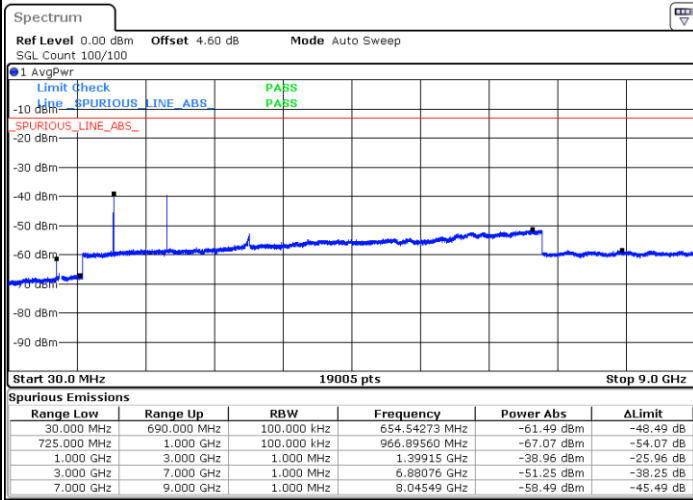




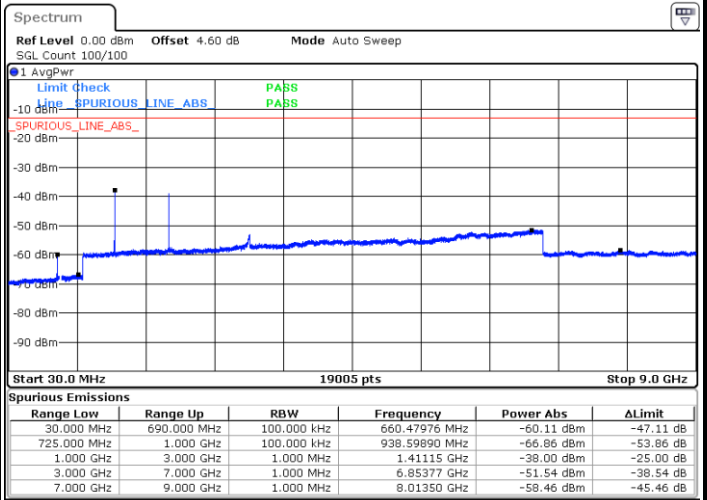
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

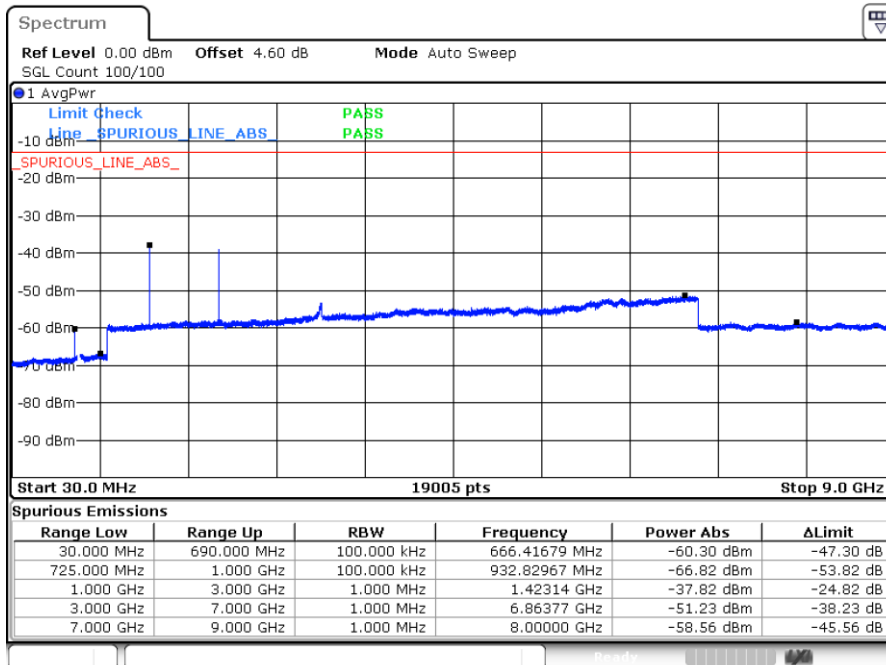


Date: 16.NOV.2024 15:58:09



Date: 16.NOV.2024 16:06:52

Highest Channel / QPSK



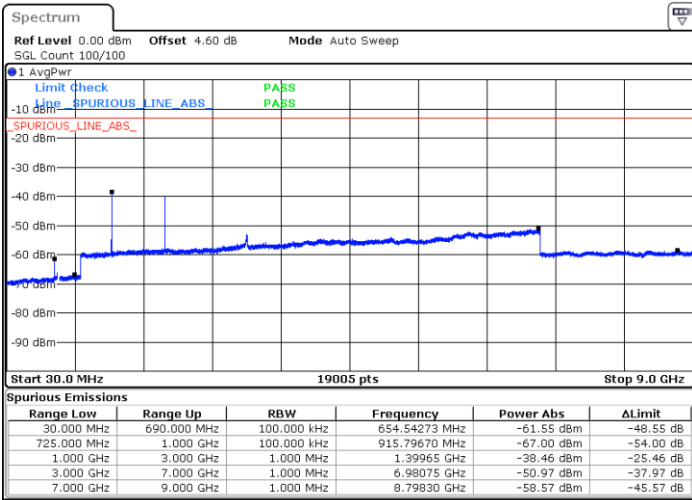
Date: 16.NOV.2024 16:07:35



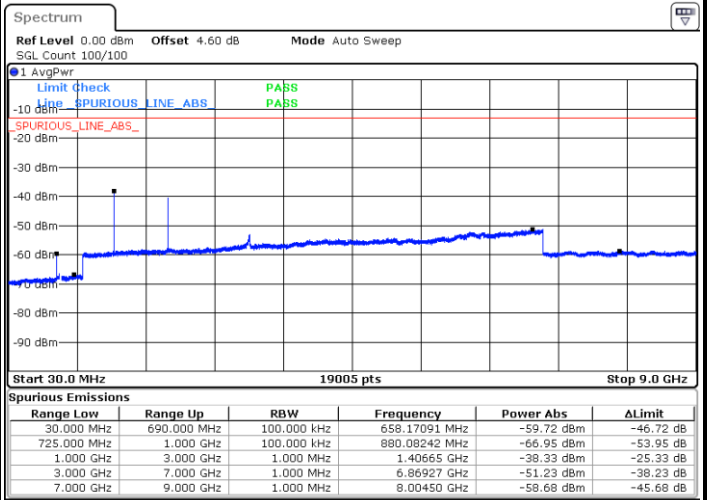
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

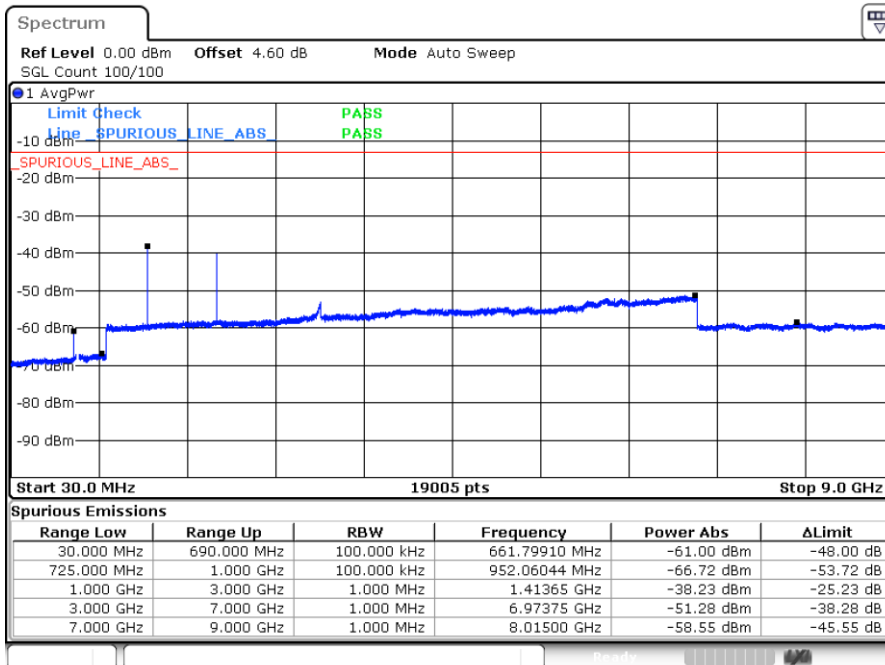


Date: 16.NOV.2024 16:16:19



Date: 16.NOV.2024 17:34:07

Highest Channel / QPSK



Date: 16.NOV.2024 16:25:45



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 | 0.0026 | PASS |
| 40 | Normal Voltage | 0.0015 | |
| 30 | Normal Voltage | 0.0022 | |
| 20(Ref.) | Normal Voltage | 0.0047 | |
| 10 | Normal Voltage | 0.0035 | |
| 0 | Normal Voltage | 0.0012 | |
| -10 | Normal Voltage | 0.0035 | |
| -20 | Normal Voltage | 0.0004 | |
| -30 | Normal Voltage | 0.0015 | |
| 20 | Maximum Voltage | 0.0036 | |
| 20 | Normal Voltage | 0.0018 | |
| 20 | Battery End Point | 0.0037 | |

Note:

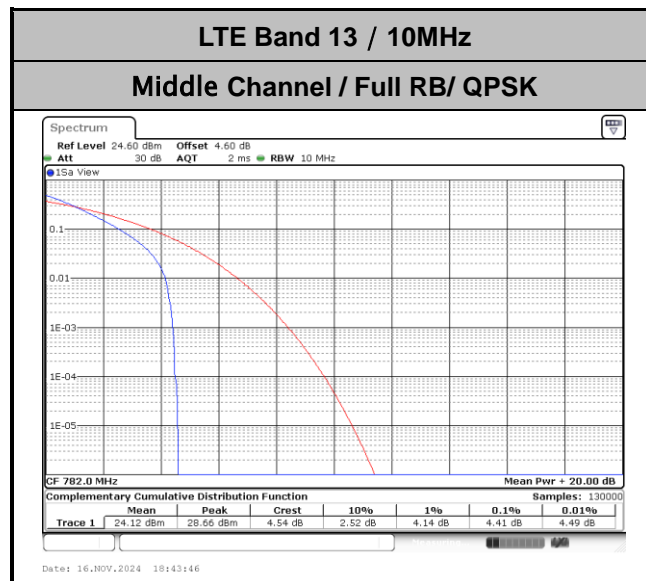
1. Normal Voltage =3.69 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =4.1 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

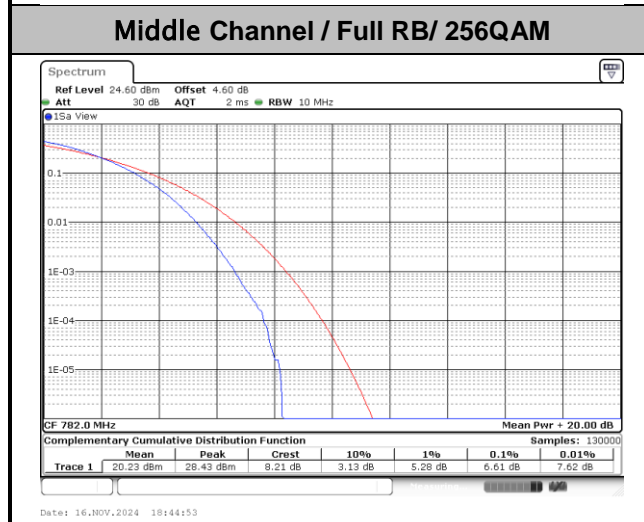
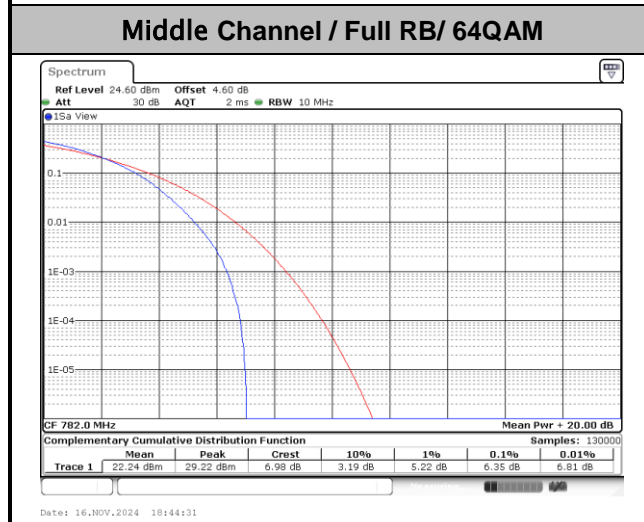
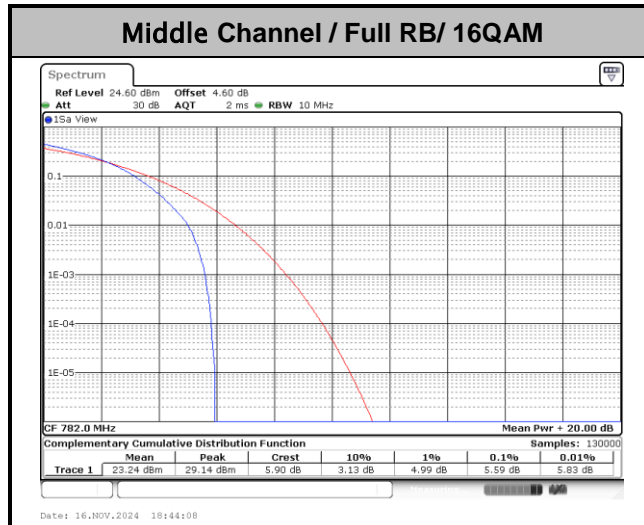


LTE Band 13

Peak-to-Average Ratio

| Mode | LTE Band 13 / 10MHz | | | | |
|-----------|---------------------|---------|---------|---------|-------------|
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | Limit: 13dB |
| RB Size | Full RB | Full RB | Full RB | Full RB | Result |
| Middle CH | 4.41 | 5.59 | 6.35 | 6.61 | PASS |

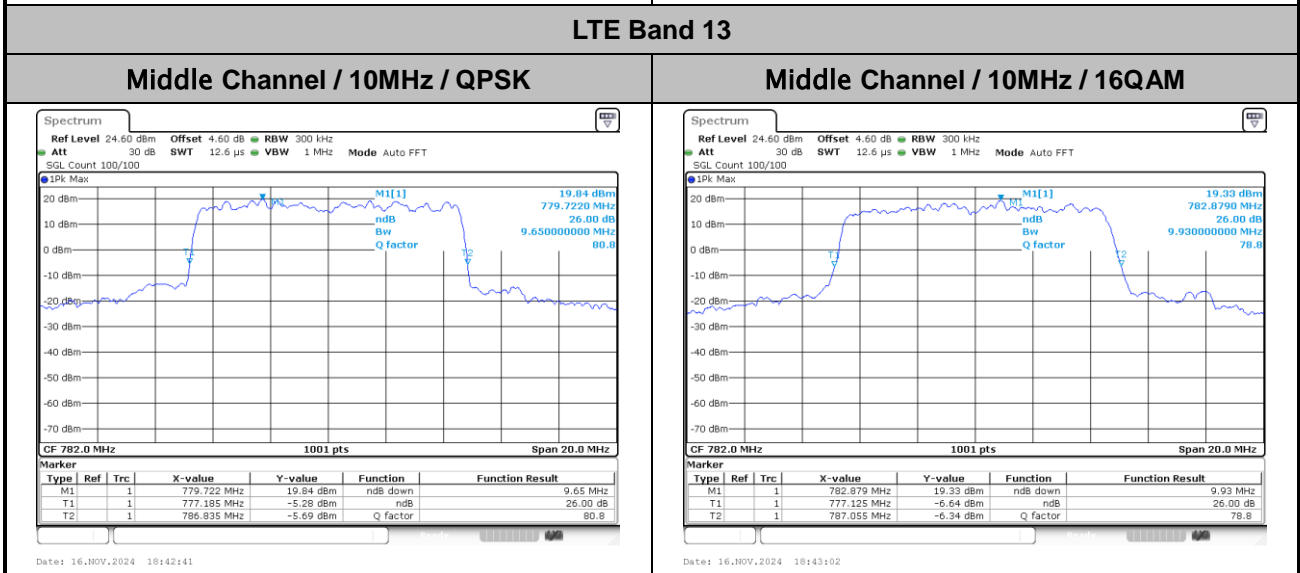
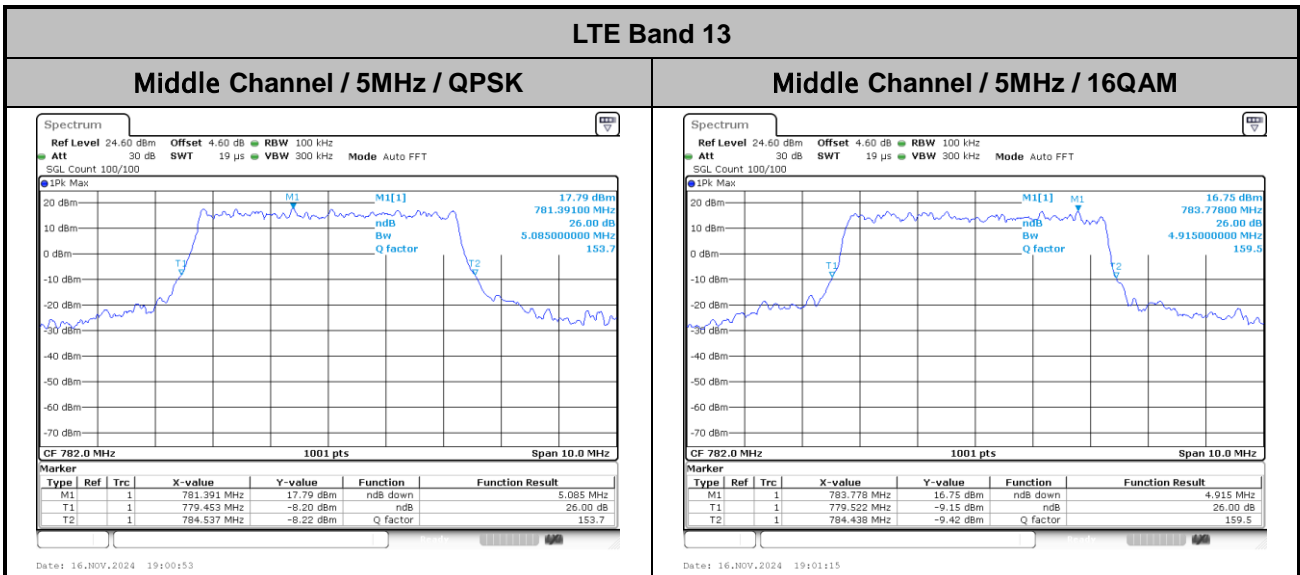






26dB Bandwidth

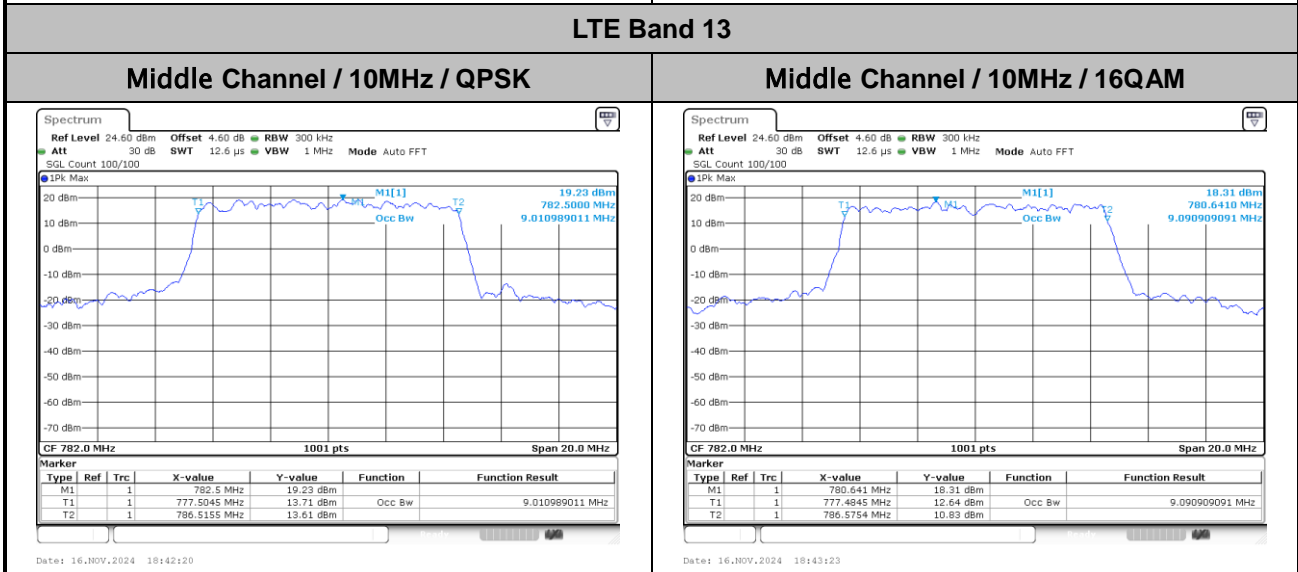
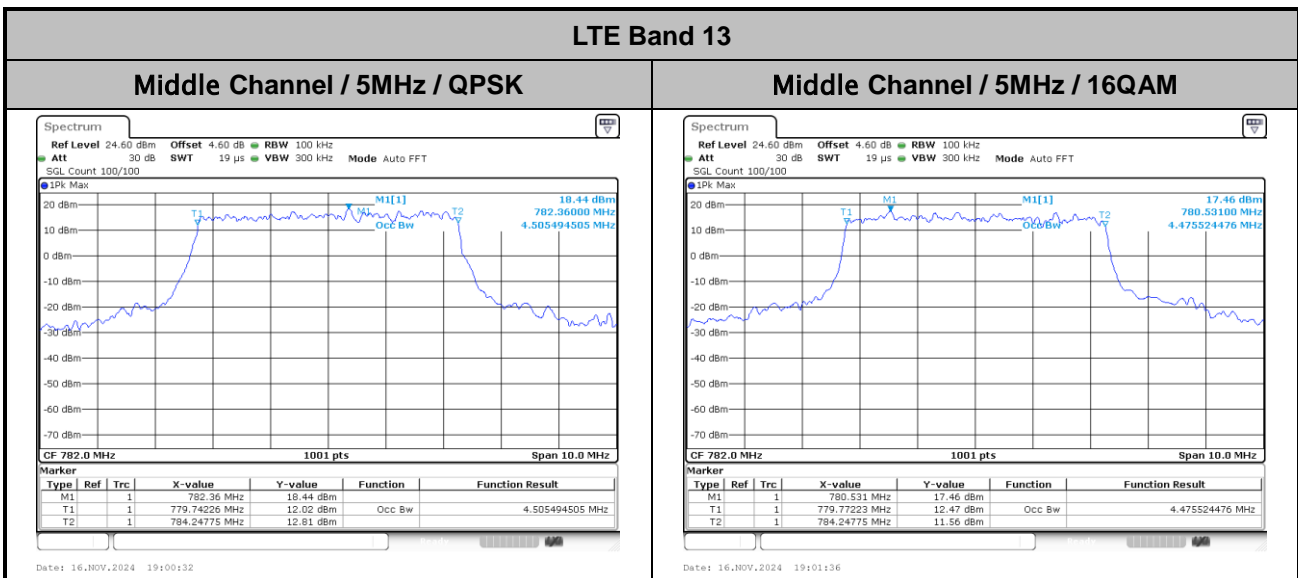
| | | | |
|------------------|-----------------------------------|--------------|--|
| Mode | LTE Band 13 : 26dB BW(MHz) | | |
| BW | 5MHz | | |
| Mod. | QPSK | 16QAM | |
| Middle CH | 5.09 | 4.92 | |
| BW | 10MHz | | |
| Mod. | QPSK | 16QAM | |
| Middle CH | 9.65 | 9.93 | |





Occupied Bandwidth

| | | |
|-----------|---------------------------|-------|
| Mode | LTE Band 13 : 99%OBW(MHz) | |
| BW | 5MHz | |
| Mod. | QPSK | 16QAM |
| Middle CH | 4.51 | 4.48 |
| BW | 10MHz | |
| Mod. | QPSK | 16QAM |
| Middle CH | 9.01 | 9.09 |

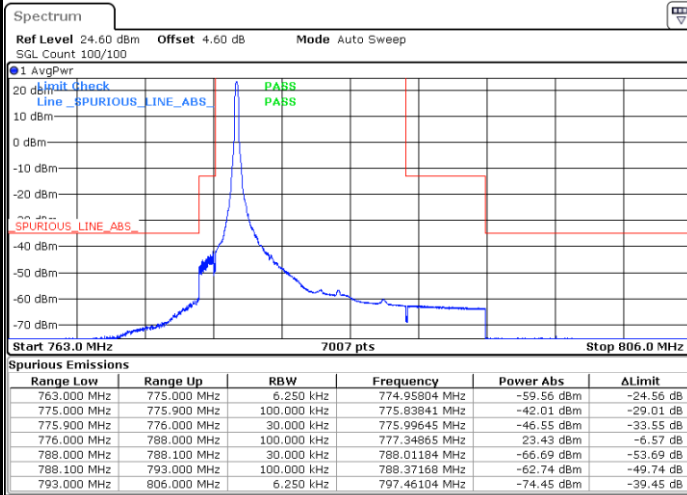




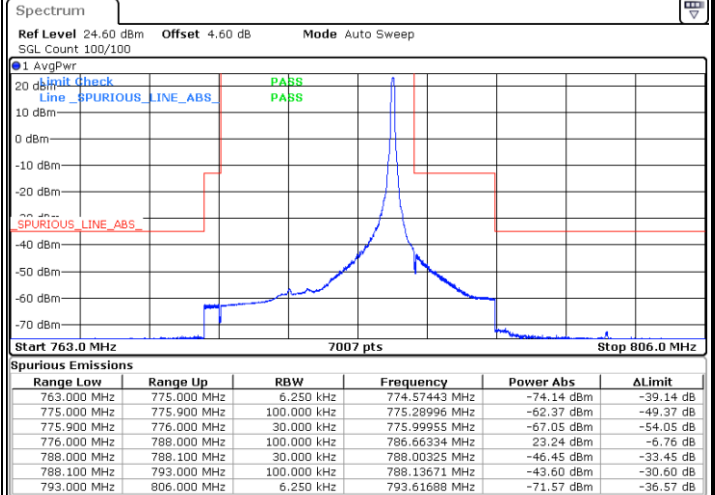
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

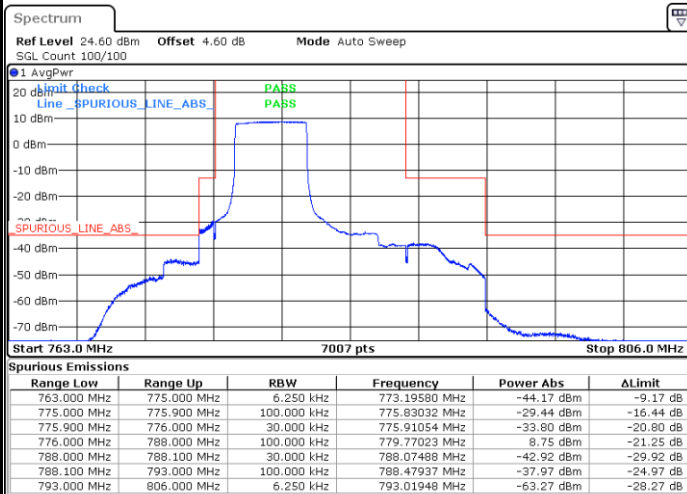
Lowest Band Edge / 1 RB



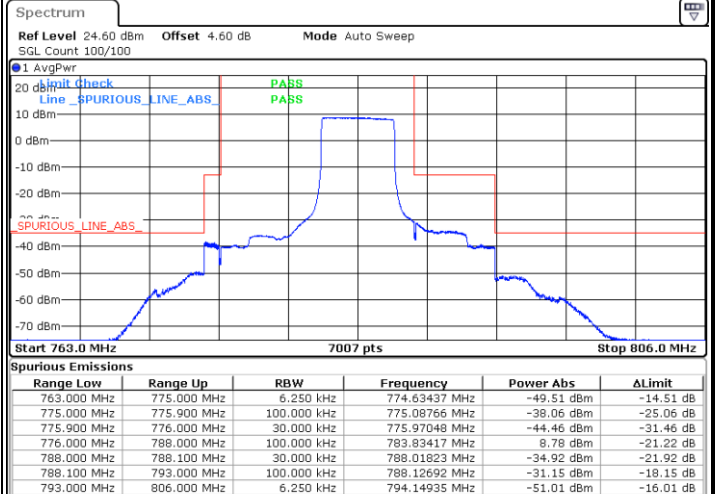
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

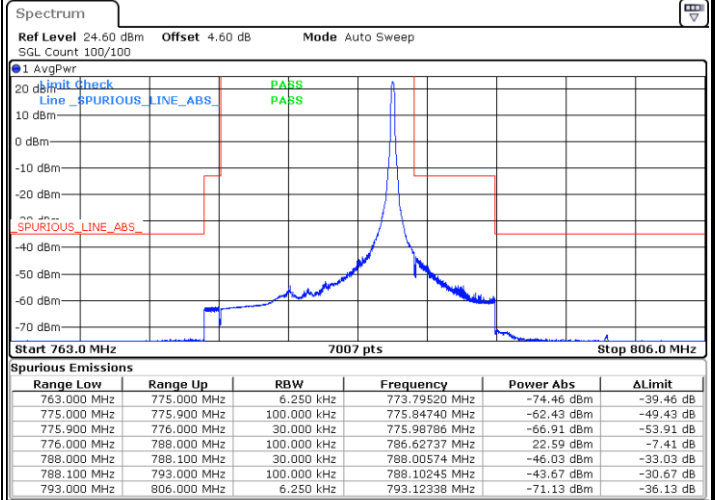
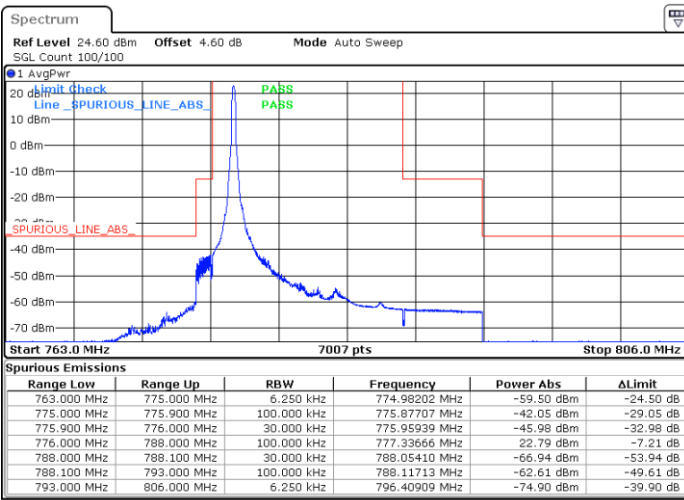




LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

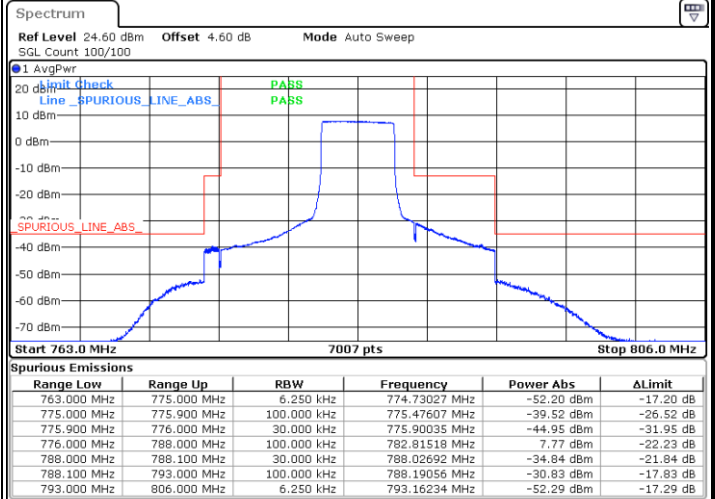
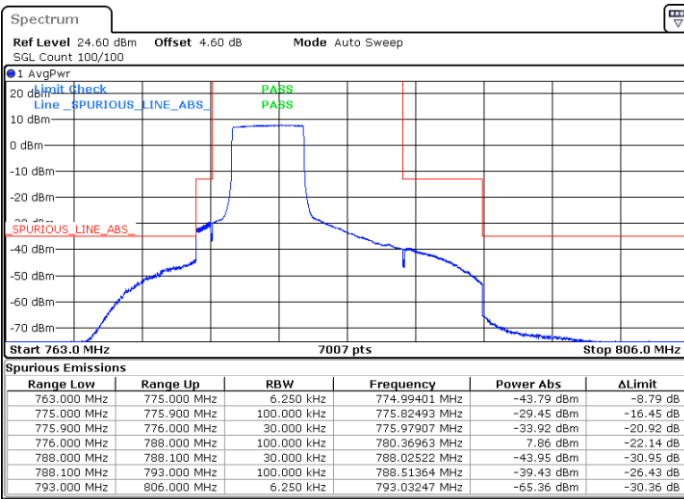


Date: 16.NOV.2024 17:39:15

Date: 16.NOV.2024 17:59:56

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16.NOV.2024 17:51:12

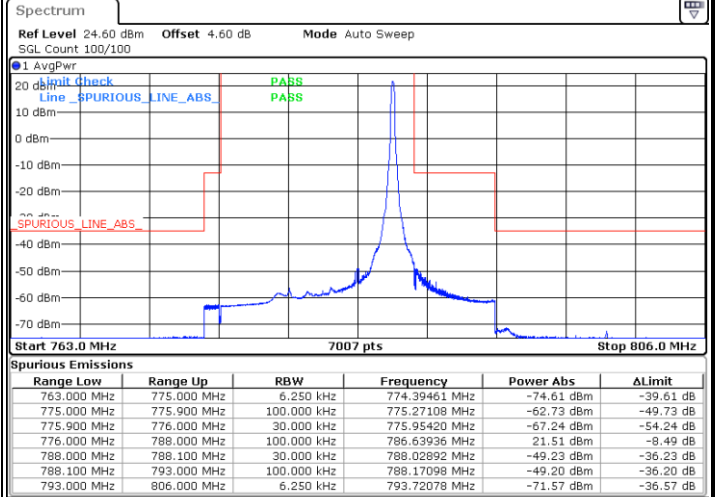
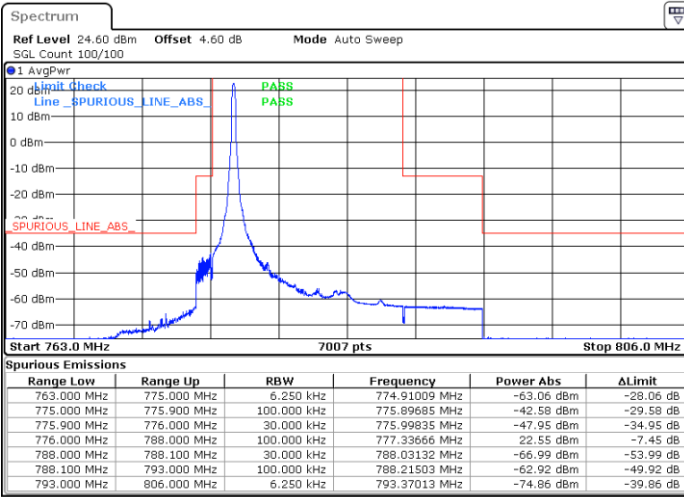
Date: 16.NOV.2024 18:07:18



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

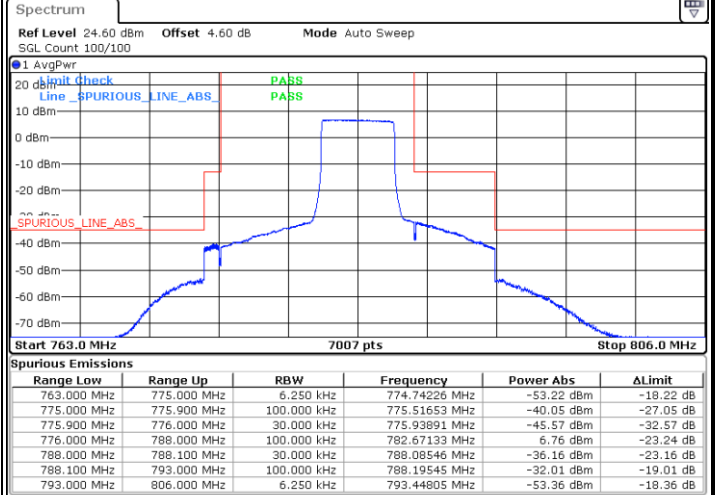
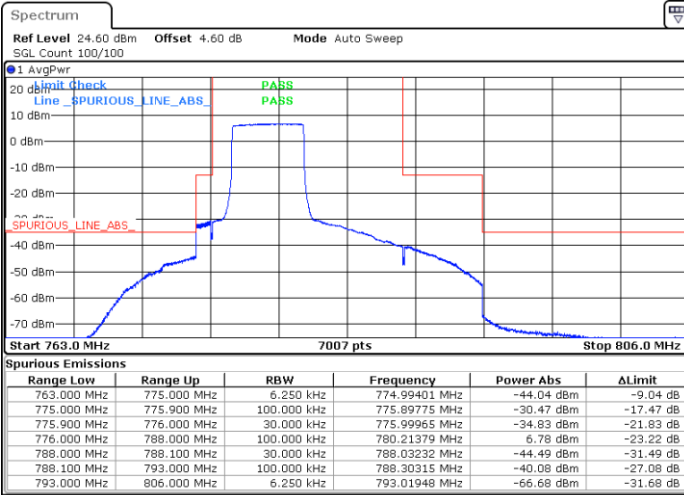


Date: 16.NOV.2024 17:41:05

Date: 16.NOV.2024 18:01:47

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16.NOV.2024 17:53:02

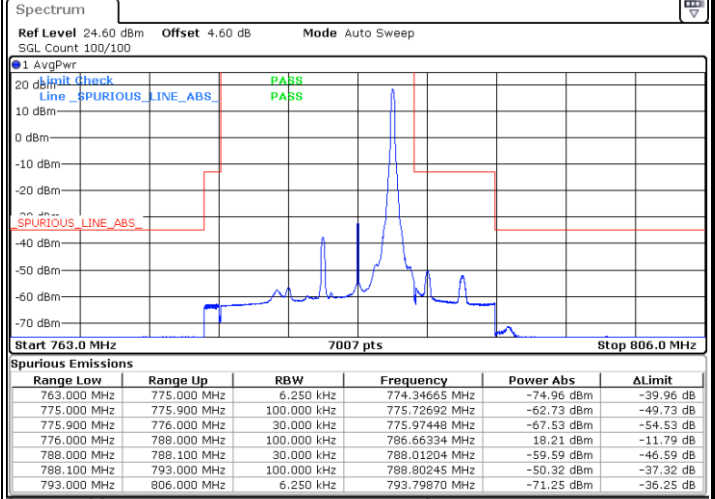
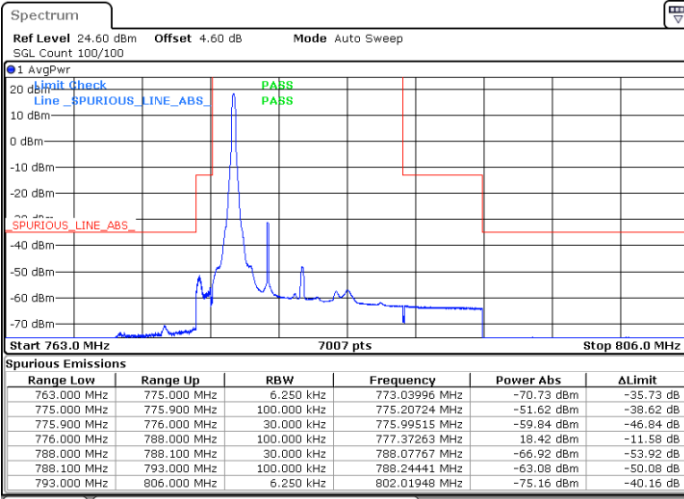
Date: 16.NOV.2024 18:09:09



LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

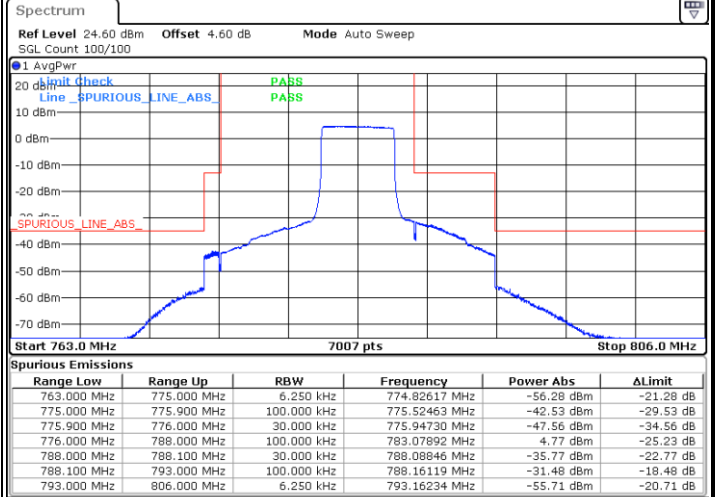
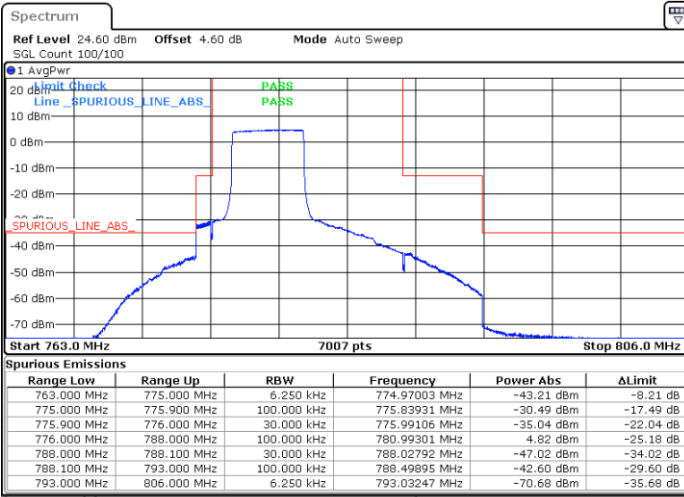


Date: 16.NOV.2024 17:47:30

Date: 16.NOV.2024 18:03:38

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16.NOV.2024 17:54:53

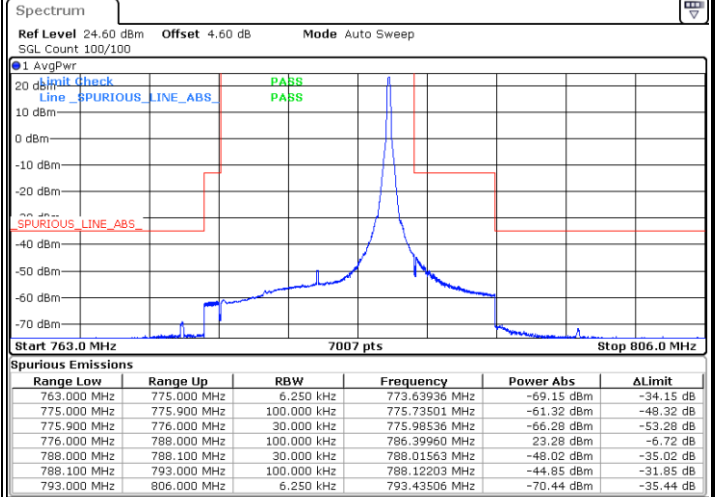
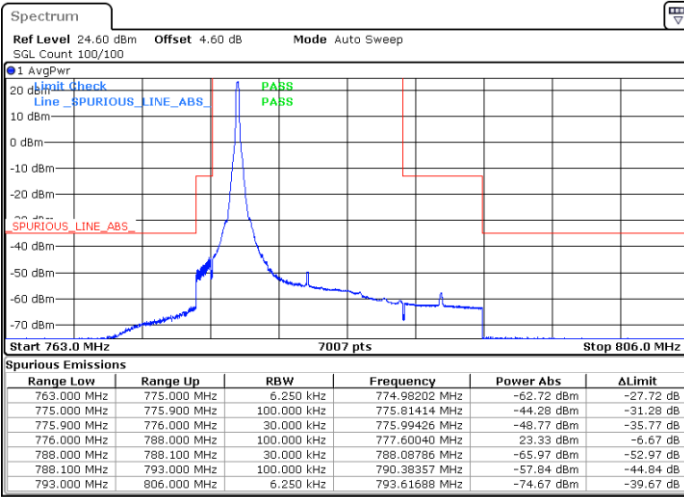
Date: 16.NOV.2024 18:11:00



LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB

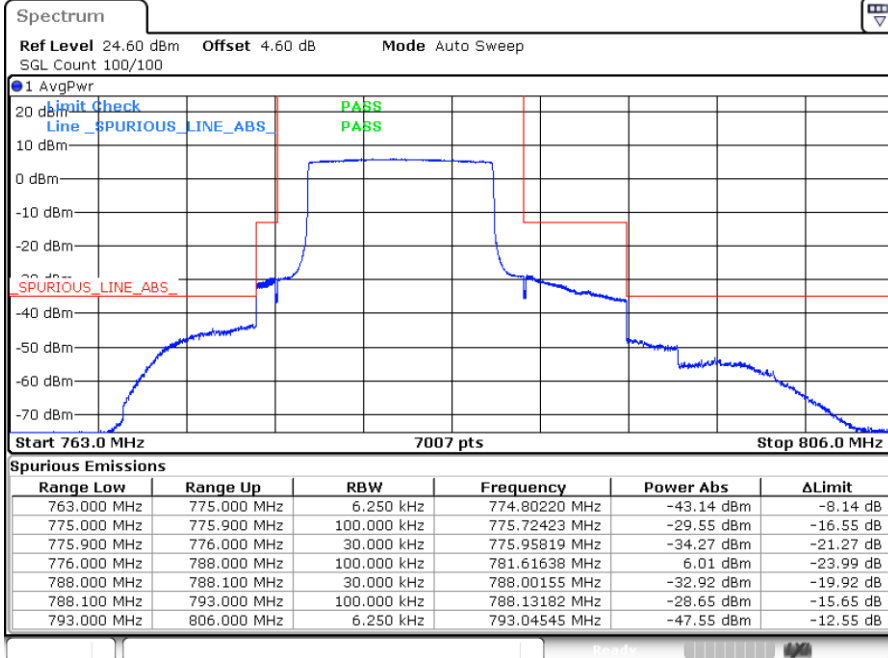
middle Band Edge / 1 RB



Date: 16.NOV.2024 18:21:52

Date: 16.NOV.2024 18:36:29

Middle Band Edge / Full RB



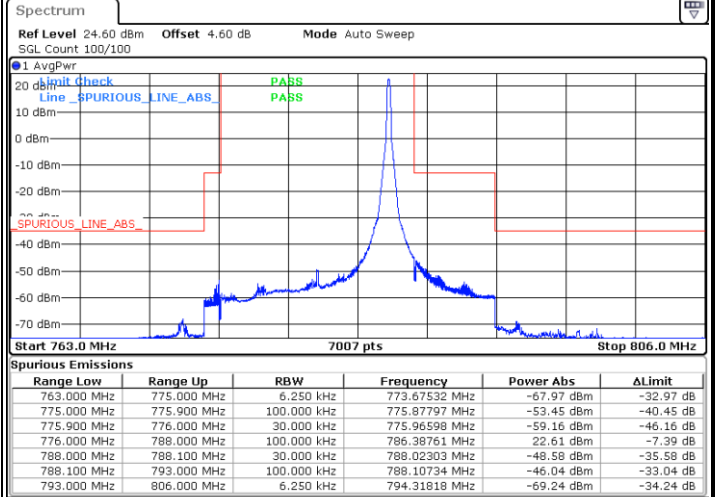
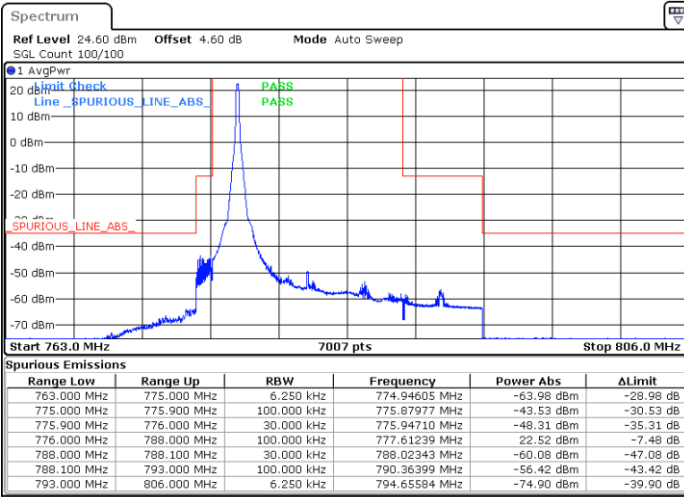
Date: 16.NOV.2024 18:29:10



LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB

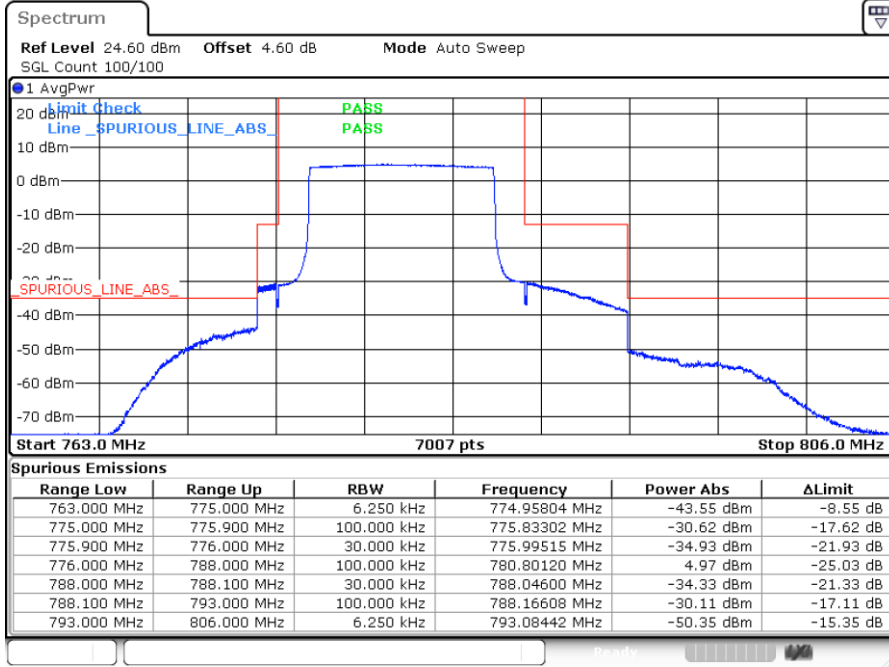
middle Band Edge / 1 RB



Date: 16.NOV.2024 18:23:41

Date: 16.NOV.2024 18:38:19

middle Band Edge / Full RB



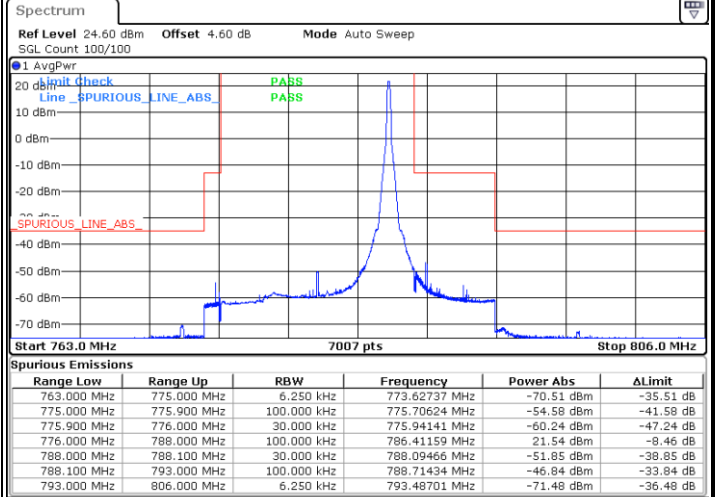
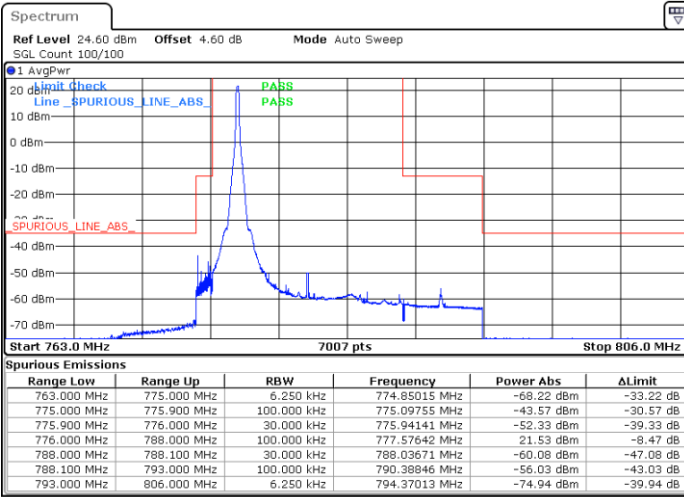
Date: 16.NOV.2024 18:31:00



LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB

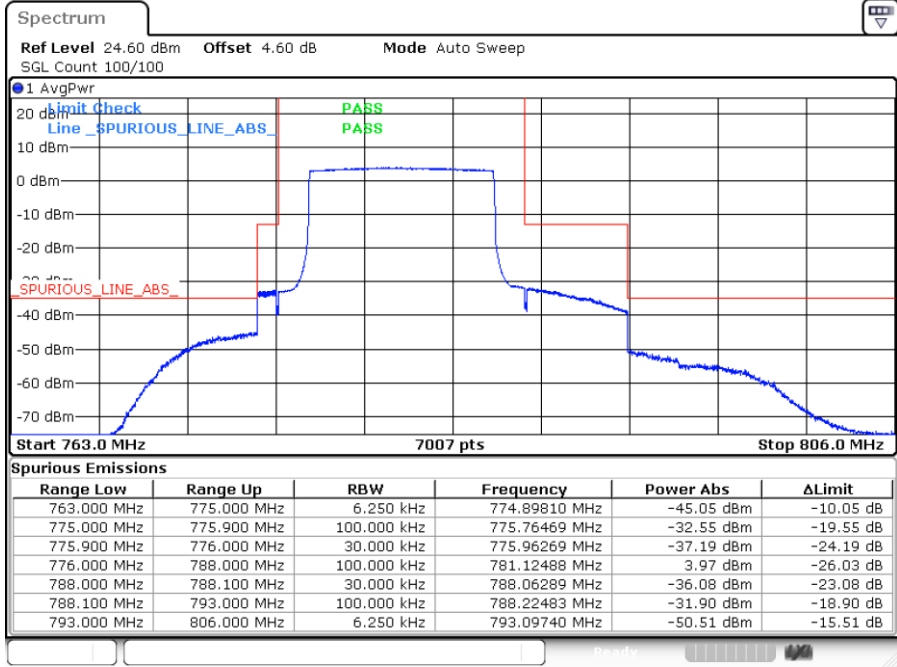
middle Band Edge / 1 RB



Date: 16.NOV.2024 18:25:31

Date: 16.NOV.2024 18:40:09

middle Band Edge / Full RB



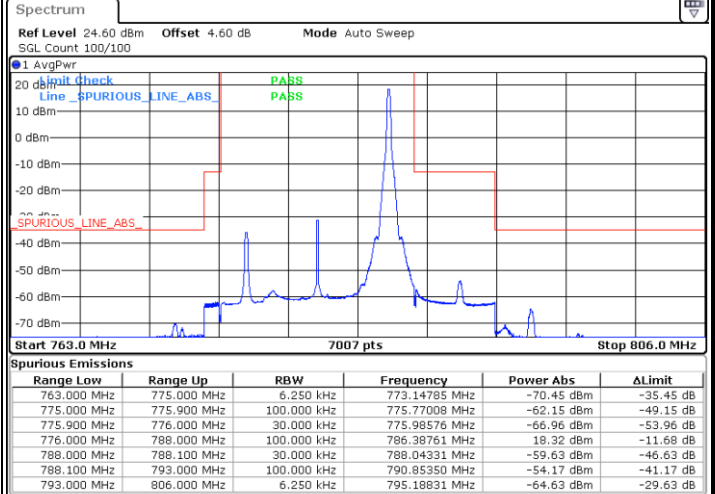
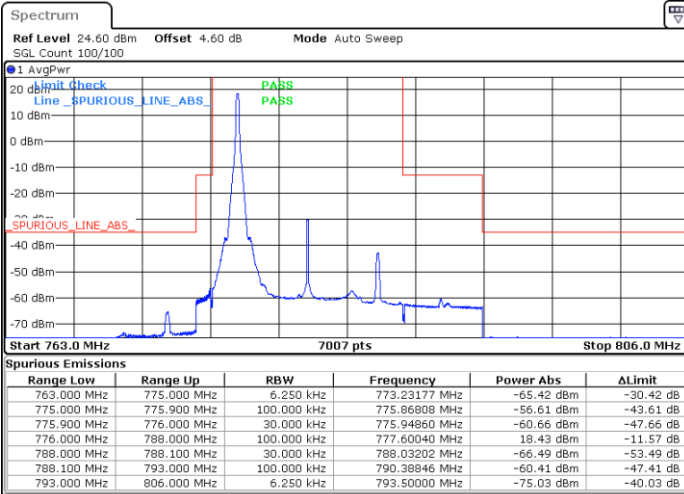
Date: 16.NOV.2024 18:32:50



LTE Band 13 / 10MHz / 256QAM

middle Band Edge / 1 RB

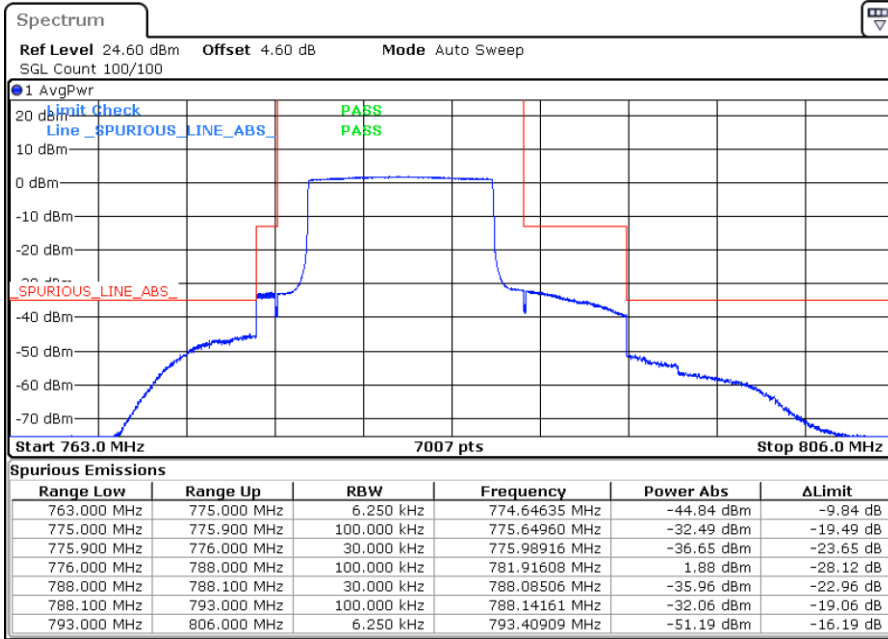
middle Band Edge / 1 RB



Date: 16.NOV.2024 18:27:20

Date: 16.NOV.2024 18:41:59

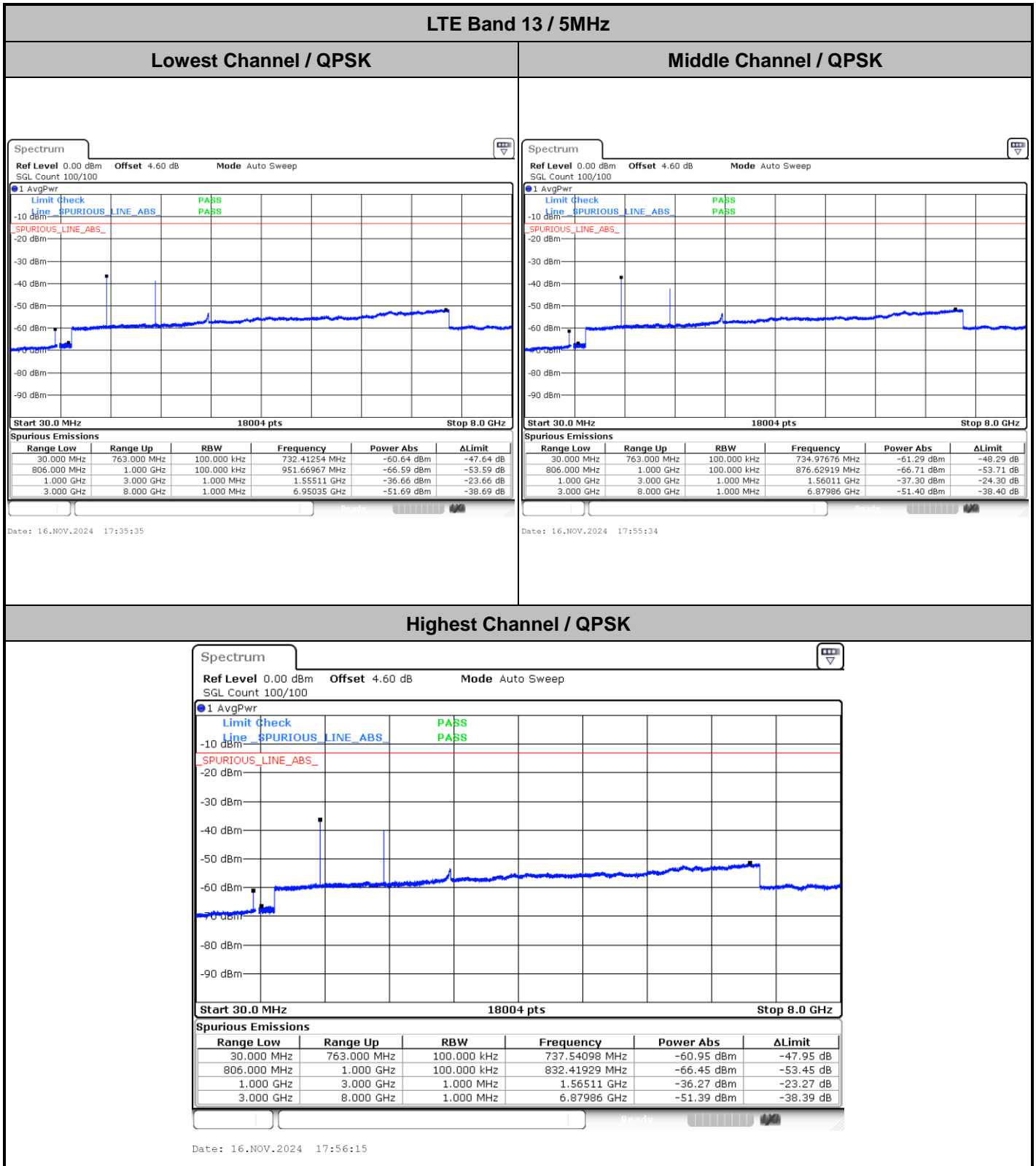
middle Band Edge / Full RB



Date: 16.NOV.2024 18:34:39



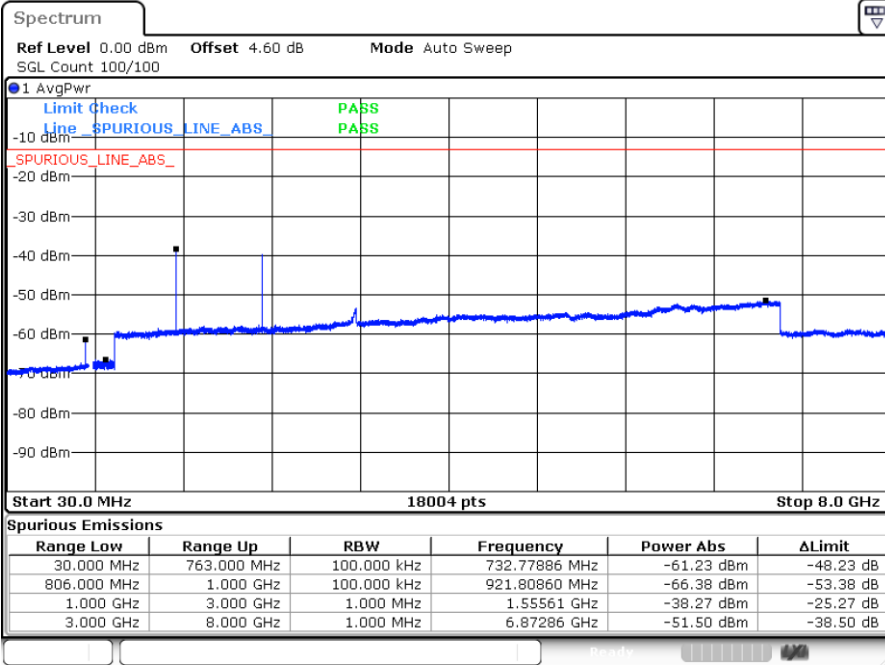
Conducted Spurious Emission





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 16.NOV.2024 18:20:02



Frequency Stability

| Test Conditions | | LTE Band 13 (QPSK) / Middle Channel | Limit |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | Note 2. |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0012 | PASS |
| 40 | Normal Voltage | 0.0026 | |
| 30 | Normal Voltage | 0.0018 | |
| 20(Ref.) | Normal Voltage | 0.0025 | |
| 10 | Normal Voltage | 0.0016 | |
| 0 | Normal Voltage | 0.0018 | |
| -10 | Normal Voltage | 0.0056 | |
| -20 | Normal Voltage | 0.0017 | |
| -30 | Normal Voltage | 0.0029 | |
| 20 | Maximum Voltage | 0.0034 | |
| 20 | Normal Voltage | 0.0018 | |
| 20 | Battery End Point | 0.0027 | |

Note:

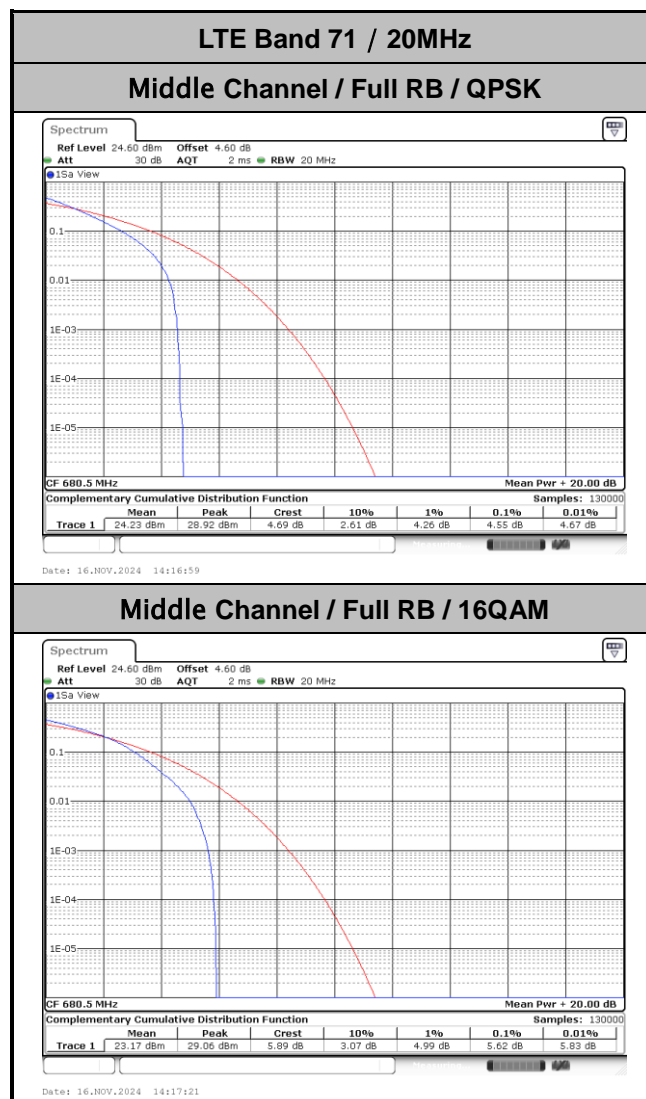
1. Normal Voltage =3.69 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =4.1 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

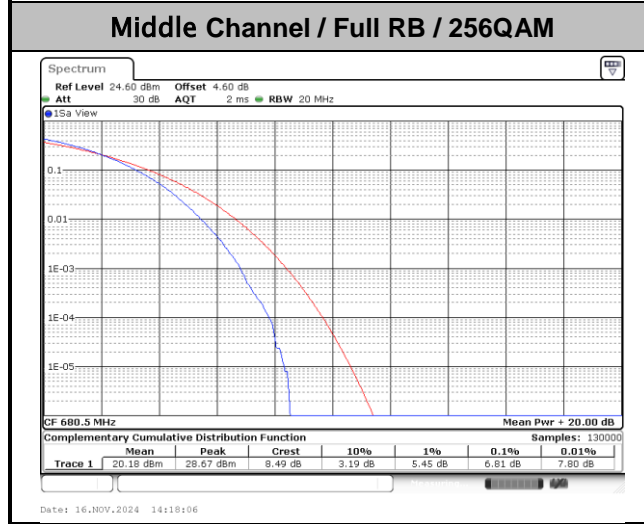
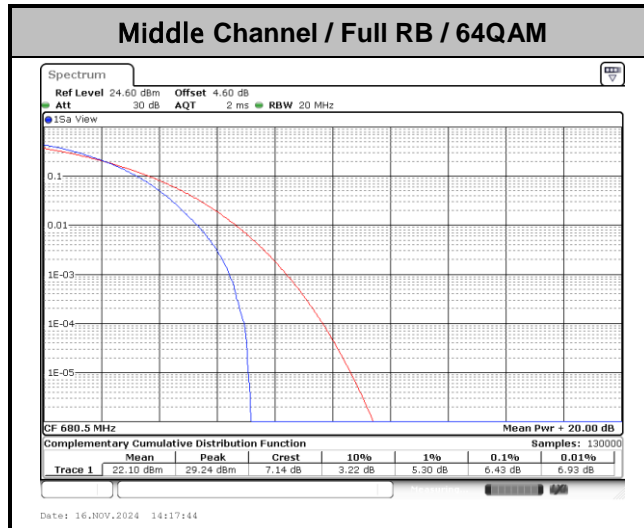


LTE Band 71

Peak-to-Average Ratio

| Mode | LTE Band 71 / 20MHz | | | | |
|-----------|---------------------|---------|---------|---------|-------------|
| Mod. | QPSK | 16QAM | 64QAM | 256QAM | Limit: 13dB |
| RB Size | Full RB | Full RB | Full RB | Full RB | Result |
| Middle CH | 4.55 | 5.62 | 6.43 | 6.81 | PASS |

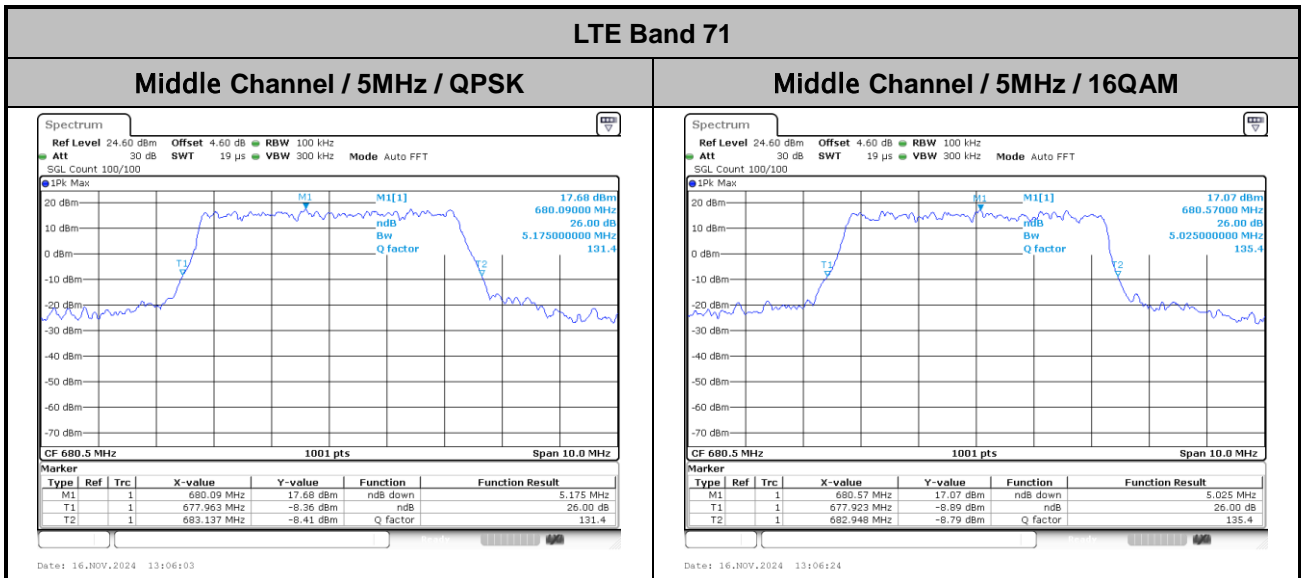






26dB Bandwidth

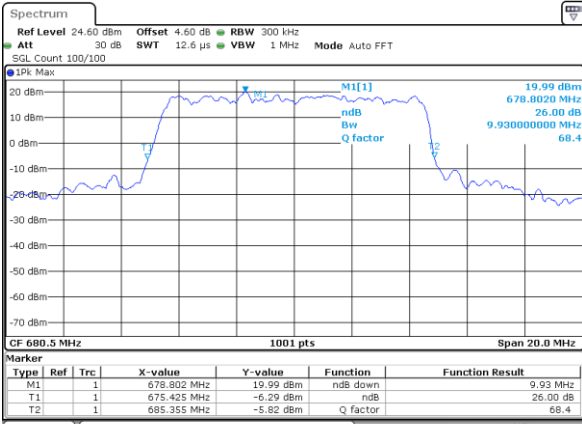
| | | |
|-----------|----------------------------|-------|
| Mode | LTE Band 71 : 26dB BW(MHz) | |
| BW | 5MHz | |
| Mod. | QPSK | 16QAM |
| Middle CH | 5.18 | 5.03 |
| Mode | LTE Band 71 : 26dB BW(MHz) | |
| BW | 10MHz | |
| Mod. | QPSK | 16QAM |
| Middle CH | 9.93 | 9.97 |
| Mode | LTE Band 71 : 26dB BW(MHz) | |
| BW | 15MHz | |
| Mod. | QPSK | 16QAM |
| Middle CH | 14.84 | 14.30 |
| Mode | LTE Band 71 : 26dB BW(MHz) | |
| BW | 20MHz | |
| Mod. | QPSK | 16QAM |
| Middle CH | 19.54 | 19.30 |





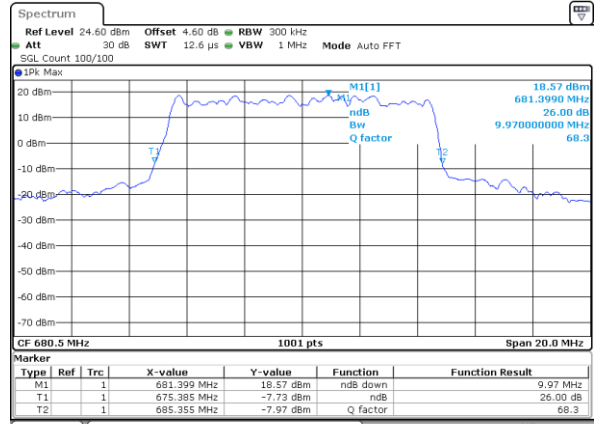
LTE Band 71

Middle Channel / 10MHz / QPSK



Date: 16.NOV.2024 13:26:16

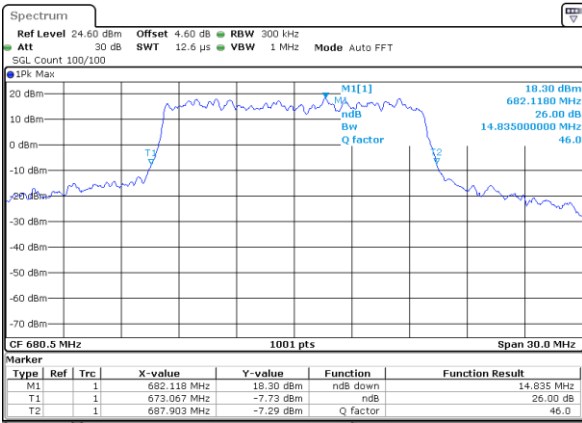
Middle Channel / 10MHz / 16QAM



Date: 16.NOV.2024 13:26:17

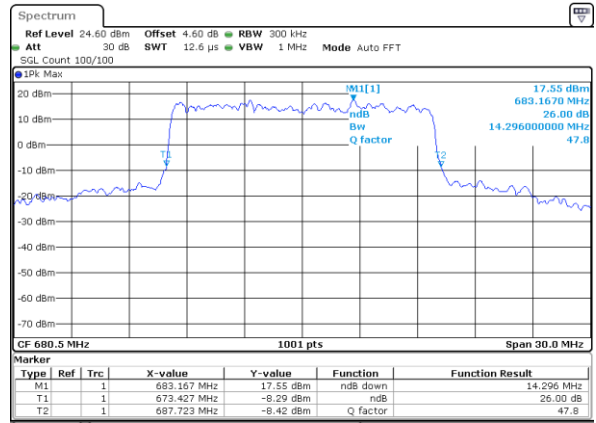
LTE Band 71

Middle Channel / 15MHz / QPSK



Date: 16.NOV.2024 13:46:33

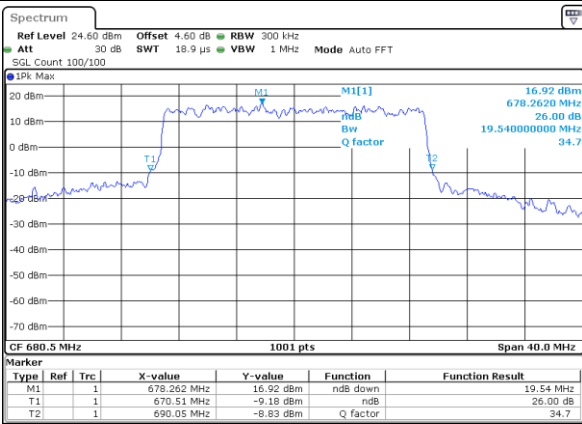
Middle Channel / 15MHz / 16QAM



Date: 16.NOV.2024 13:46:55

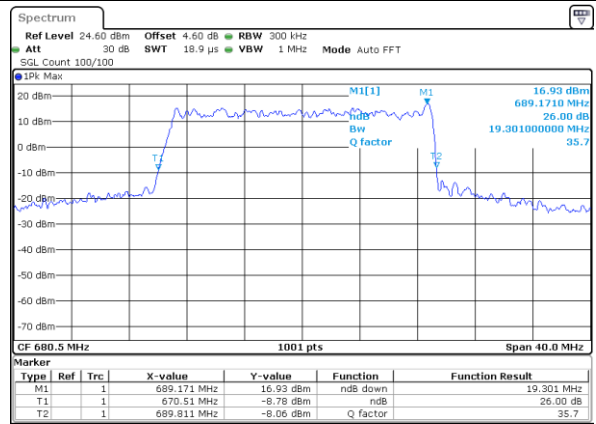
LTE Band 71

Middle Channel / 20MHz / QPSK



Date: 16.NOV.2024 14:06:48

Middle Channel / 20MHz / 16QAM

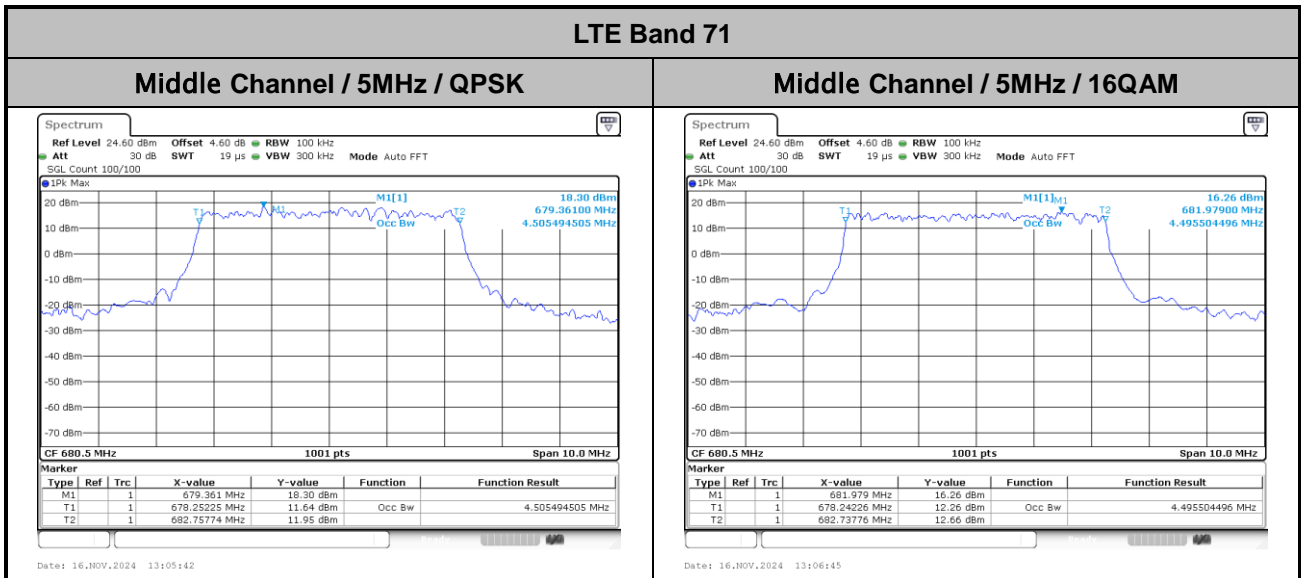


Date: 16.NOV.2024 14:07:09



Occupied Bandwidth

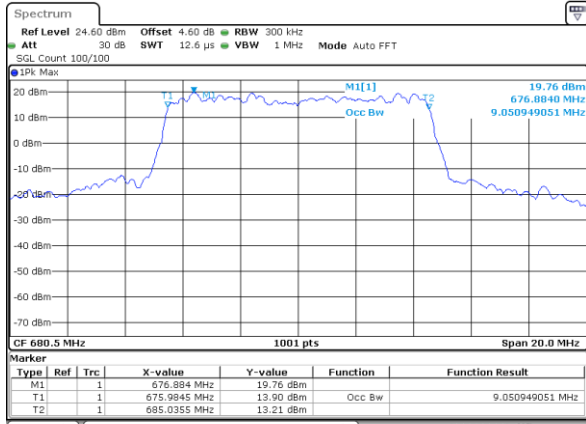
| | | |
|-----------|---------------------------|-------|
| Mode | LTE Band 71 : 99%OBW(MHz) | |
| BW | 5MHz | |
| Mod. | QPSK | 16QAM |
| Middle CH | 4.51 | 4.50 |
| Mode | LTE Band 71 : 99%OBW(MHz) | |
| BW | 10MHz | |
| Mod. | QPSK | 16QAM |
| Middle CH | 9.05 | 9.03 |
| Mode | LTE Band 71 : 99%OBW(MHz) | |
| BW | 15MHz | |
| Mod. | QPSK | 16QAM |
| Middle CH | 13.49 | 13.46 |
| Mode | LTE Band 71 : 99%OBW(MHz) | |
| BW | 20MHz | |
| Mod. | QPSK | 16QAM |
| Middle CH | 17.90 | 17.90 |





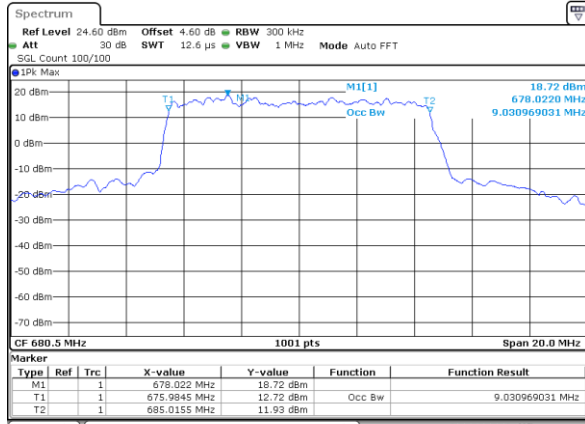
LTE Band 71

Middle Channel / 10MHz / QPSK



Date: 16.NOV.2024 13:25:54

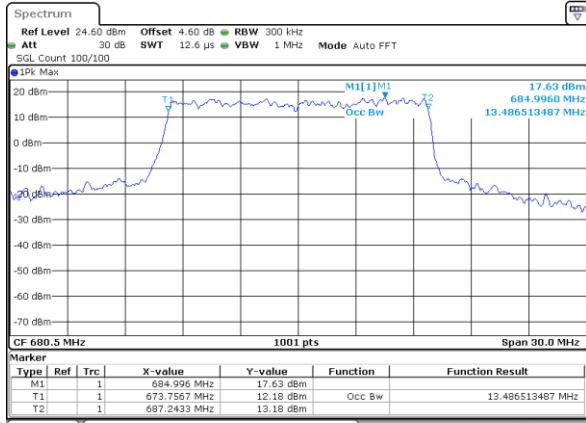
Middle Channel / 10MHz / 16QAM



Date: 16.NOV.2024 13:26:58

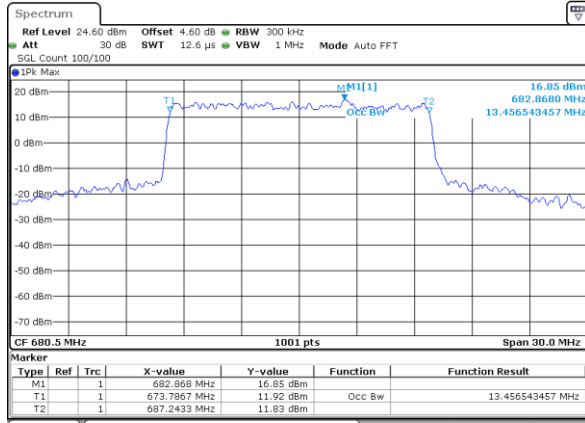
LTE Band 71

Middle Channel / 15MHz / QPSK



Date: 16.NOV.2024 13:46:12

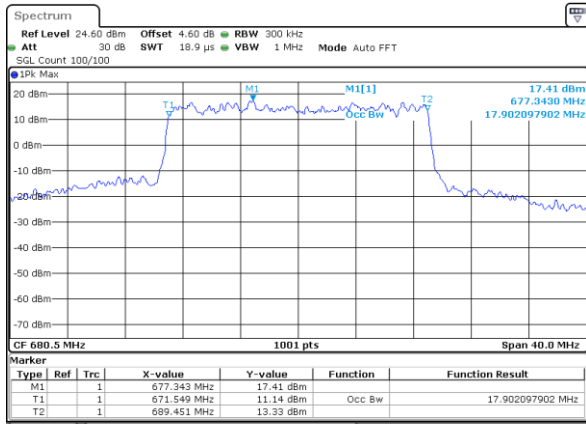
Middle Channel / 15MHz / 16QAM



Date: 16.NOV.2024 13:47:16

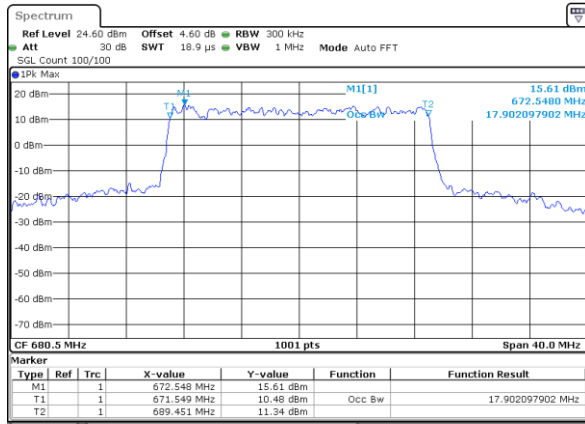
LTE Band 71

Middle Channel / 20MHz / QPSK



Date: 16.NOV.2024 14:06:27

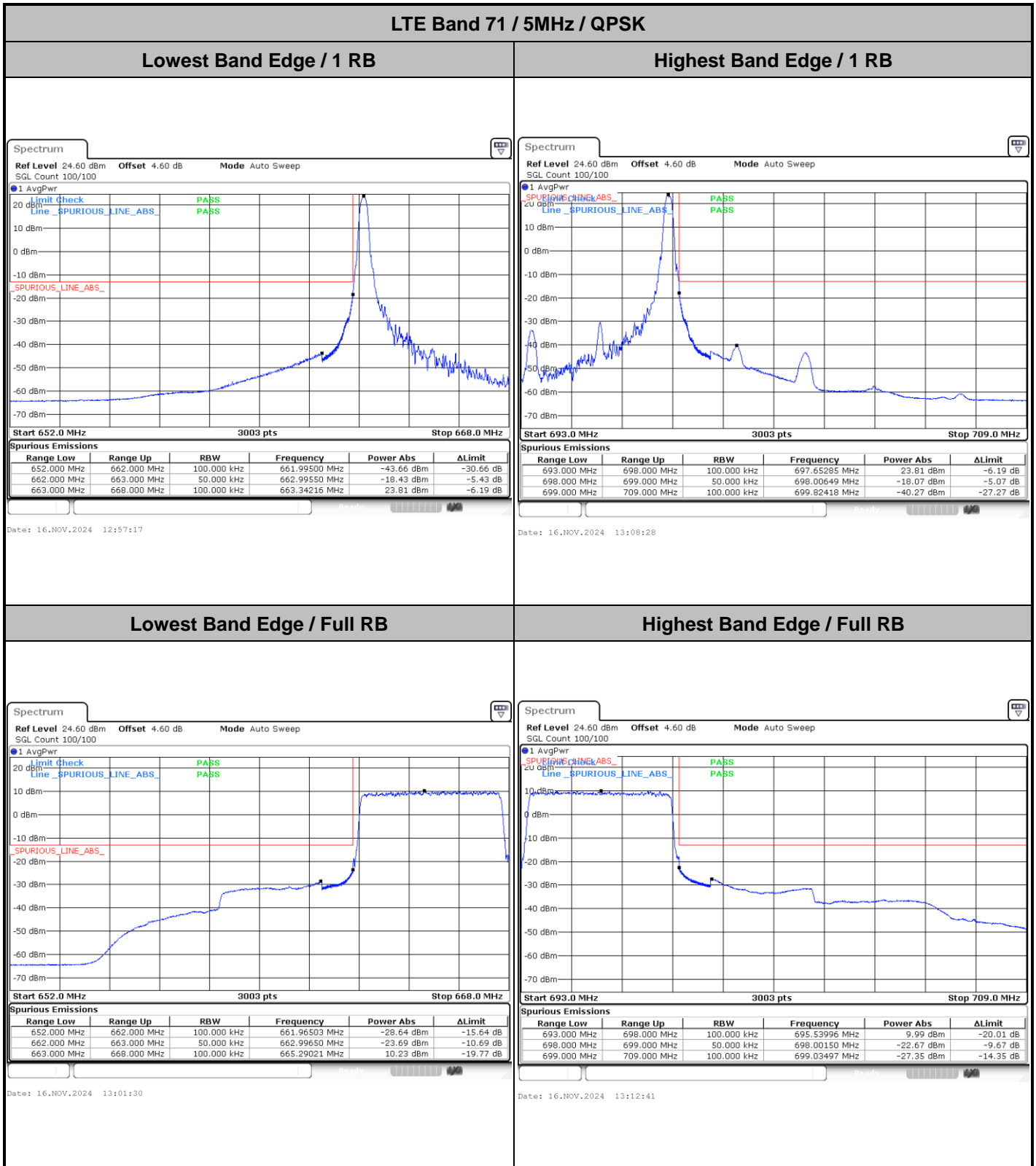
Middle Channel / 20MHz / 16QAM



Date: 16.NOV.2024 14:07:30



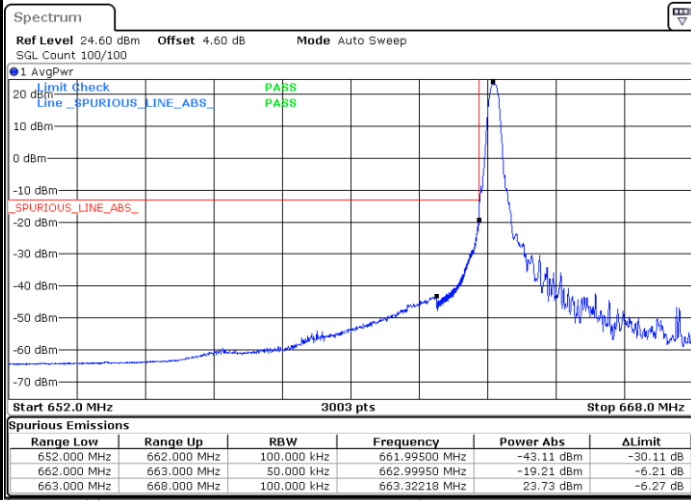
Conducted Band Edge





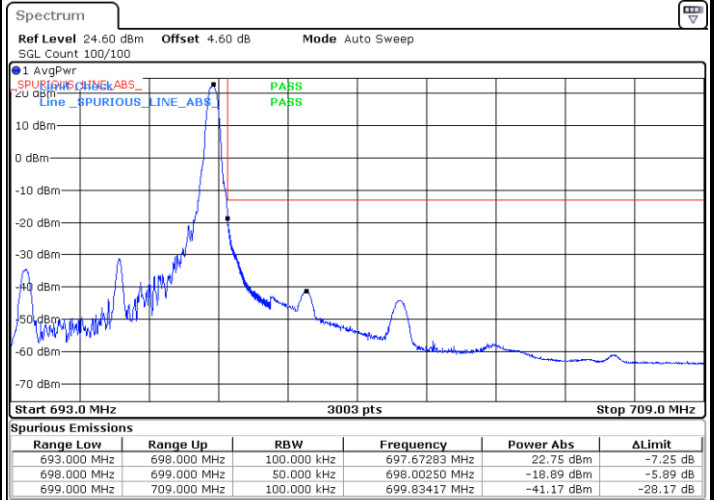
LTE Band 71 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



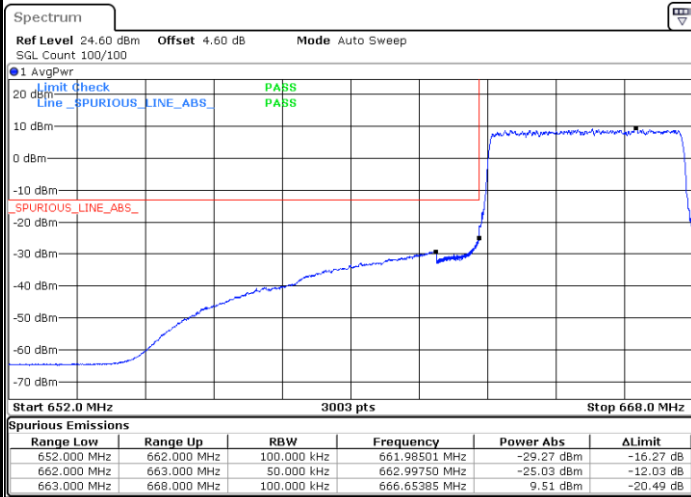
Date: 16.NOV.2024 12:58:20

Highest Band Edge / 1 RB



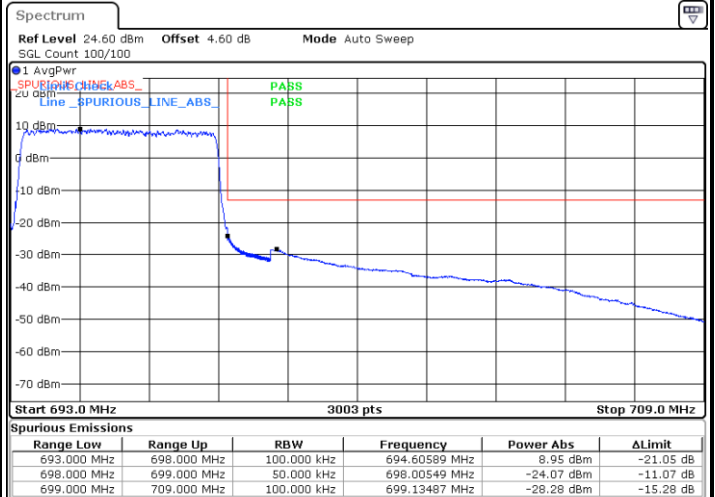
Date: 16.NOV.2024 13:09:31

Lowest Band Edge / Full RB



Date: 16.NOV.2024 13:02:34

Highest Band Edge / Full RB

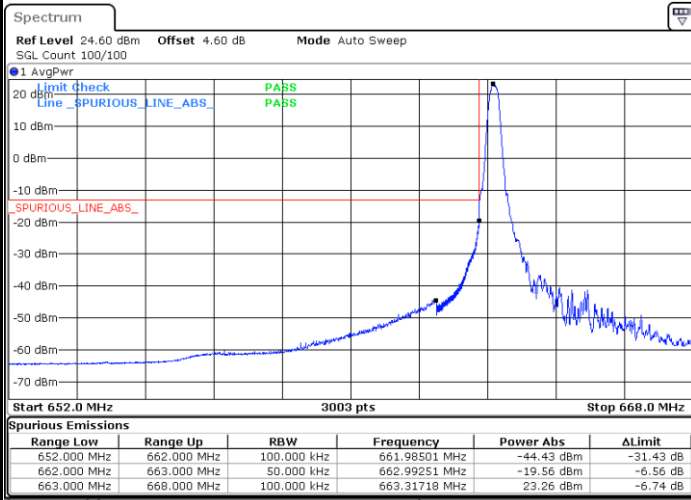


Date: 16.NOV.2024 13:13:44



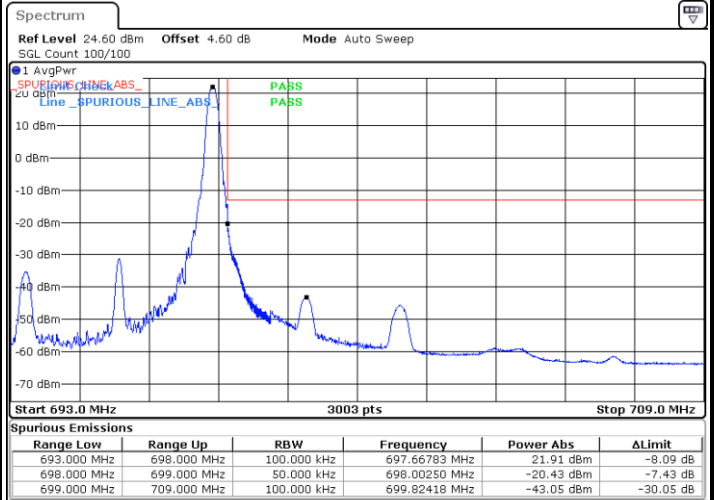
LTE Band 71 / 5MHz / 64QAM

Lowest Band Edge / 1RB



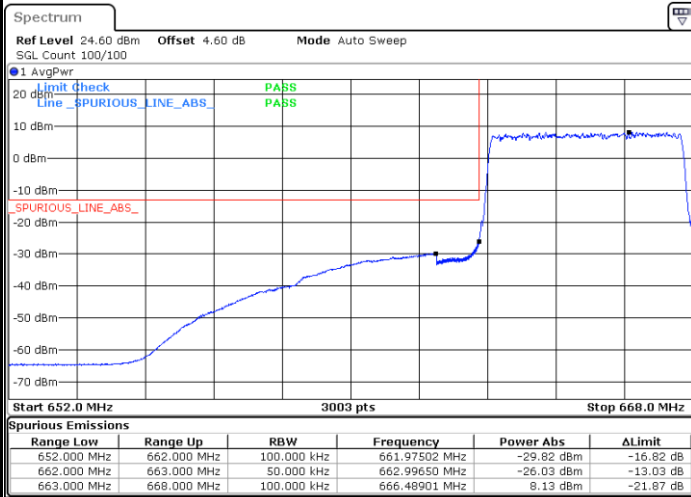
Date: 16.NOV.2024 12:59:23

Highest Band Edge / 1 RB



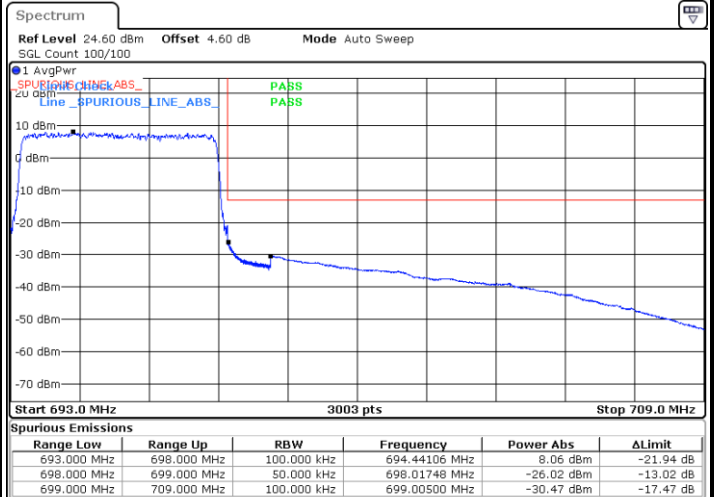
Date: 16.NOV.2024 13:10:34

Lowest Band Edge / Full RB



Date: 16.NOV.2024 13:03:37

Highest Band Edge / Full RB

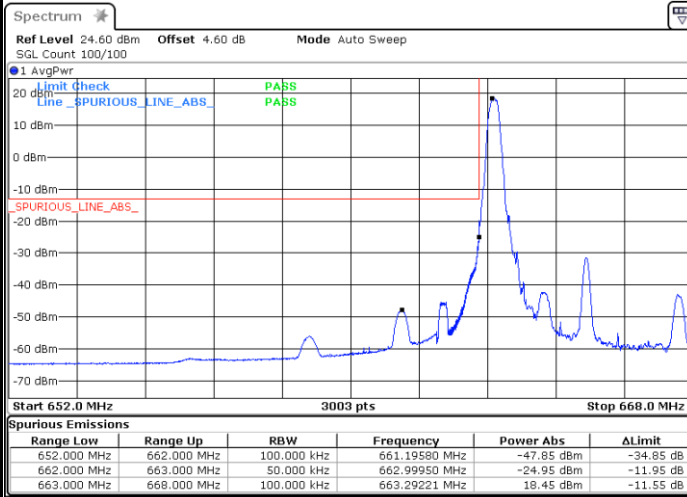


Date: 16.NOV.2024 13:14:48



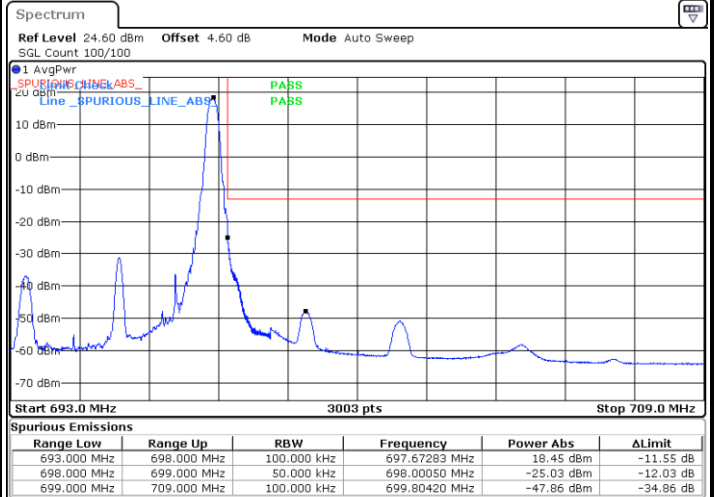
LTE Band 71 / 5MHz / 256QAM

Lowest Band Edge / 1RB



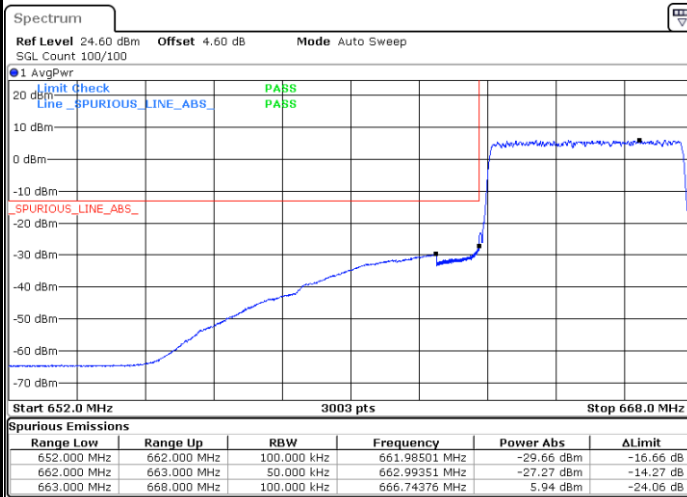
Date: 16.NOV.2024 13:00:27

Highest Band Edge / 1 RB



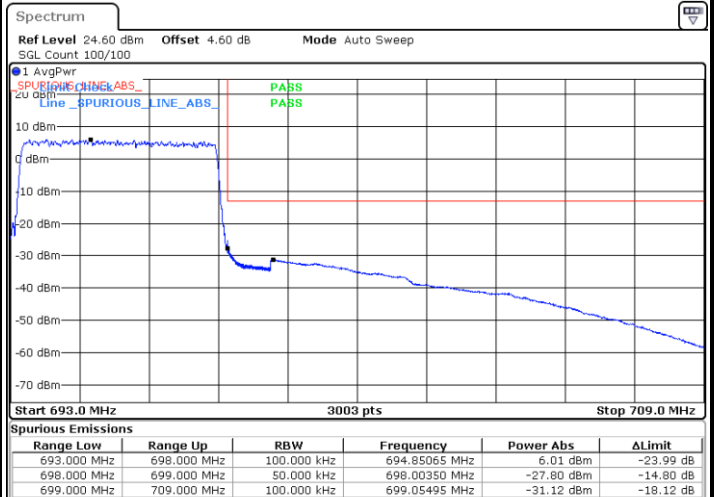
Date: 16.NOV.2024 13:11:37

Lowest Band Edge / Full RB



Date: 16.NOV.2024 13:04:40

Highest Band Edge / Full RB

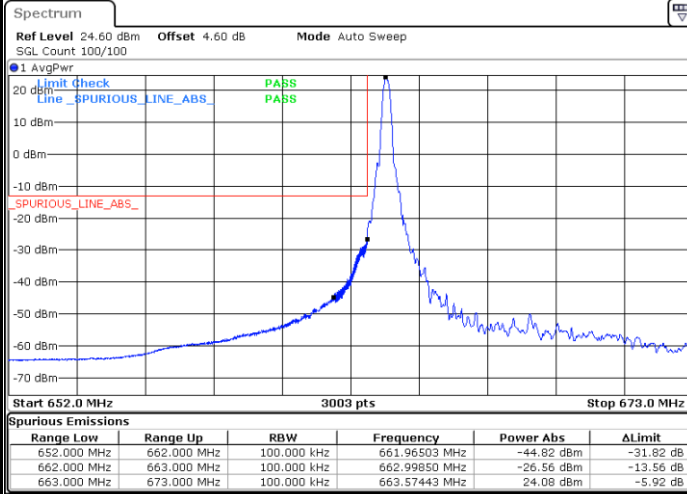


Date: 16.NOV.2024 13:15:51



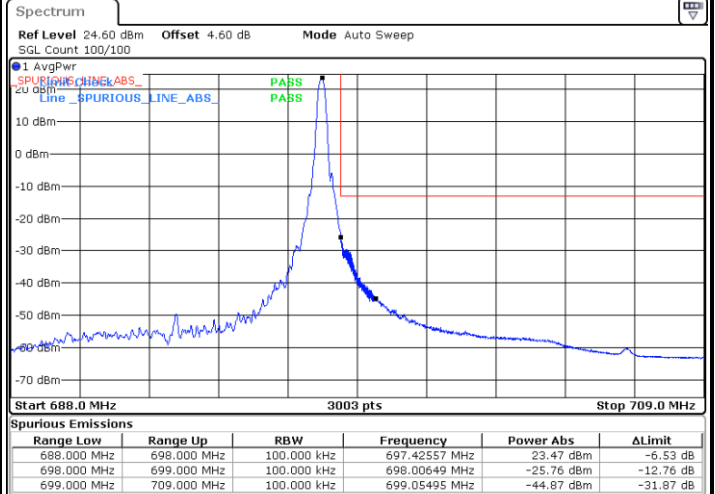
LTE Band 71 / 10MHz / QPSK

Lowest Band Edge / 1 RB



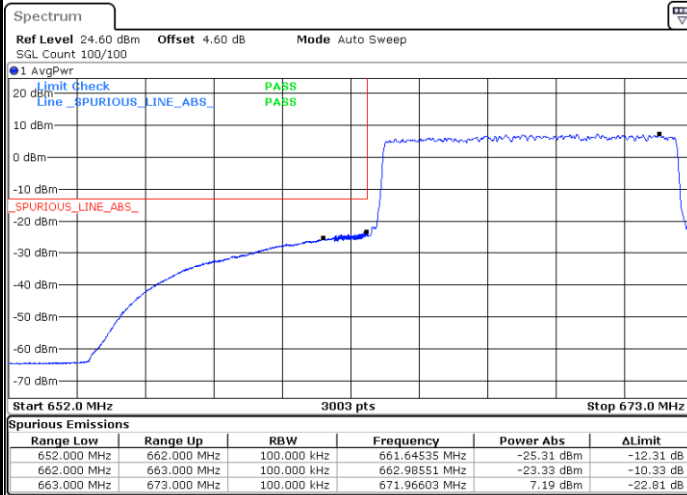
Date: 16.NOV.2024 13:21:06

Highest Band Edge / 1 RB



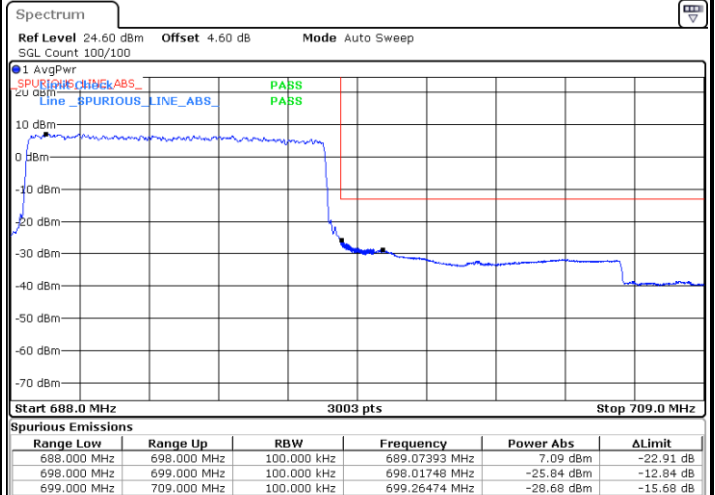
Date: 16.NOV.2024 13:28:41

Lowest Band Edge / Full RB



Date: 16.NOV.2024 13:16:54

Highest Band Edge / Full RB

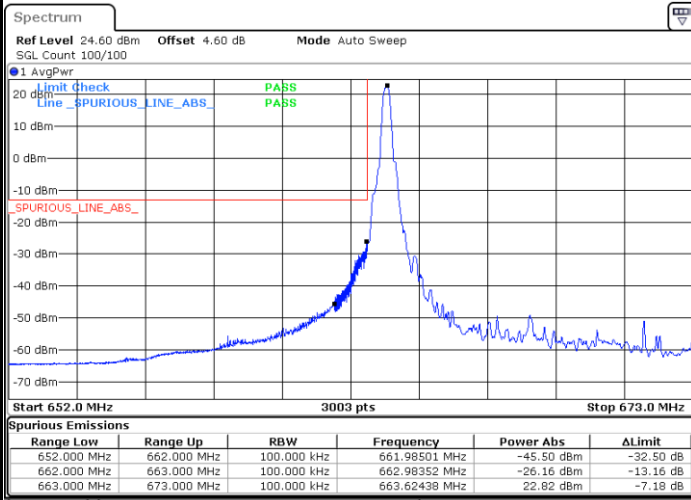


Date: 16.NOV.2024 13:32:55



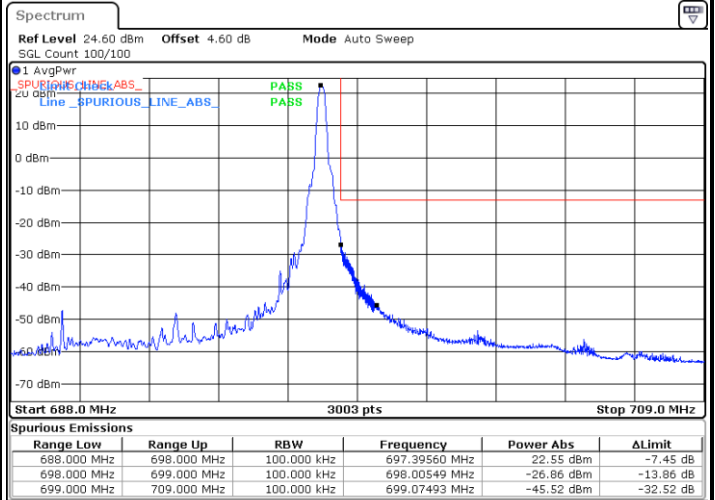
LTE Band 71 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



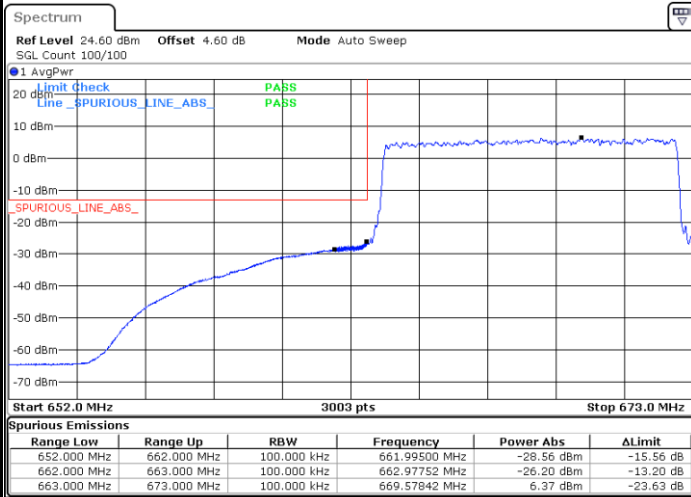
Date: 16.NOV.2024 13:22:09

Highest Band Edge / 1 RB



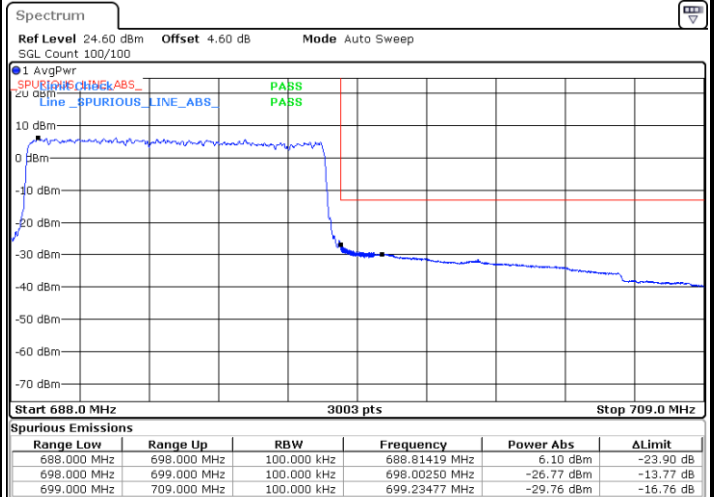
Date: 16.NOV.2024 13:29:44

Lowest Band Edge / Full RB



Date: 16.NOV.2024 13:17:57

Highest Band Edge / Full RB

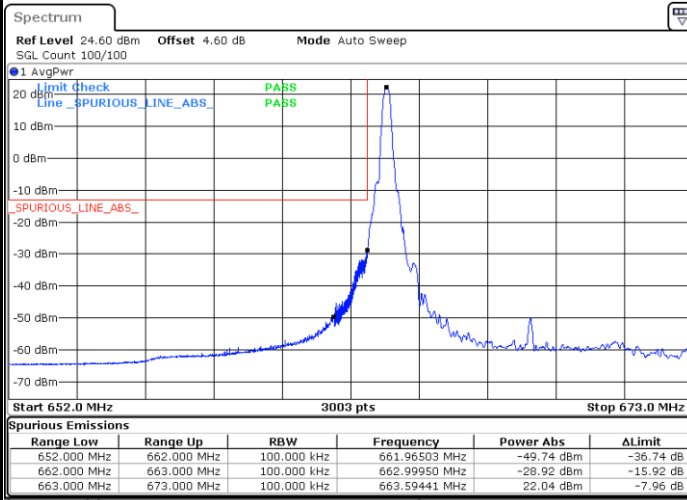


Date: 16.NOV.2024 13:33:58



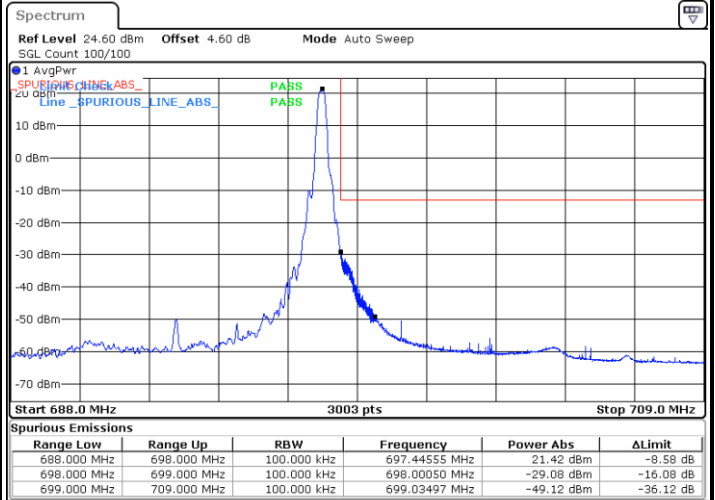
LTE Band 71 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



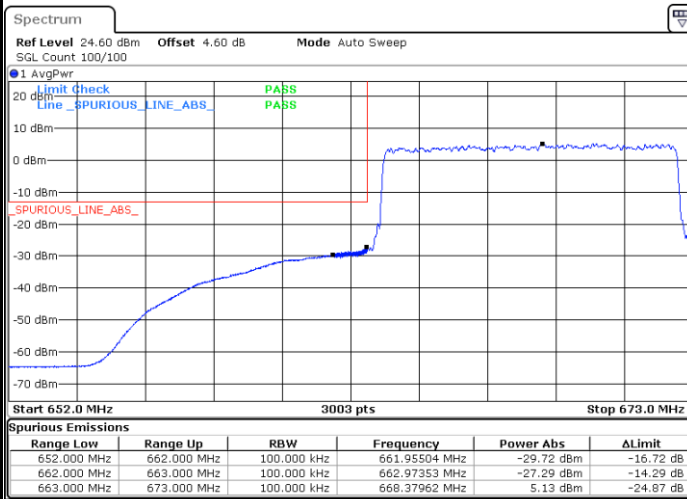
Date: 16.NOV.2024 13:23:12

Highest Band Edge / 1 RB



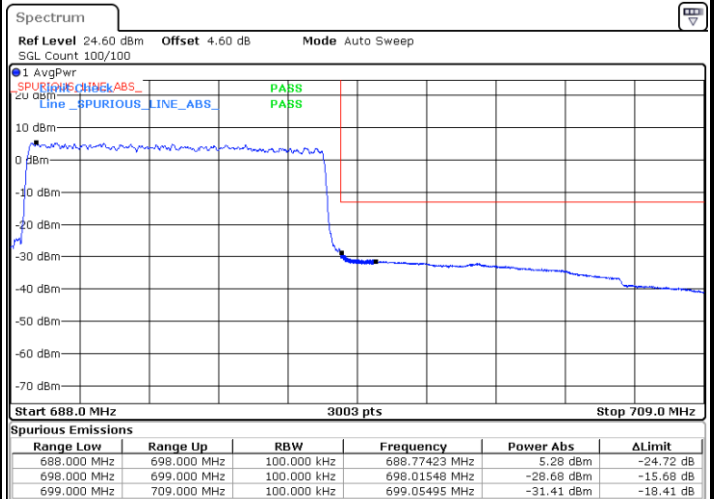
Date: 16.NOV.2024 13:30:48

Lowest Band Edge / Full RB



Date: 16.NOV.2024 13:19:00

Highest Band Edge / Full RB



Date: 16.NOV.2024 13:35:02