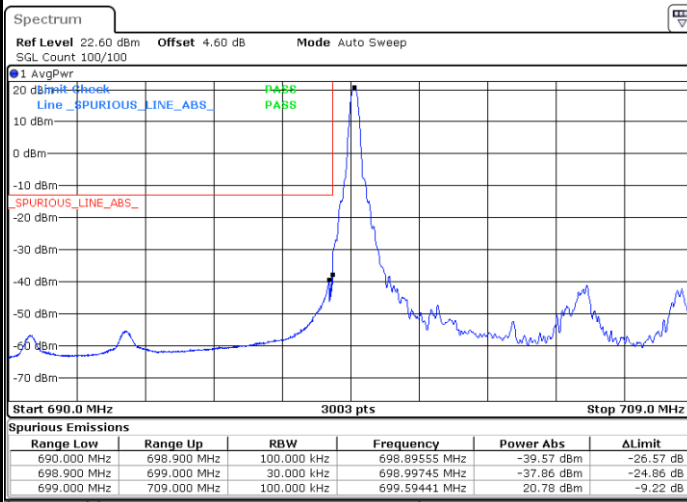




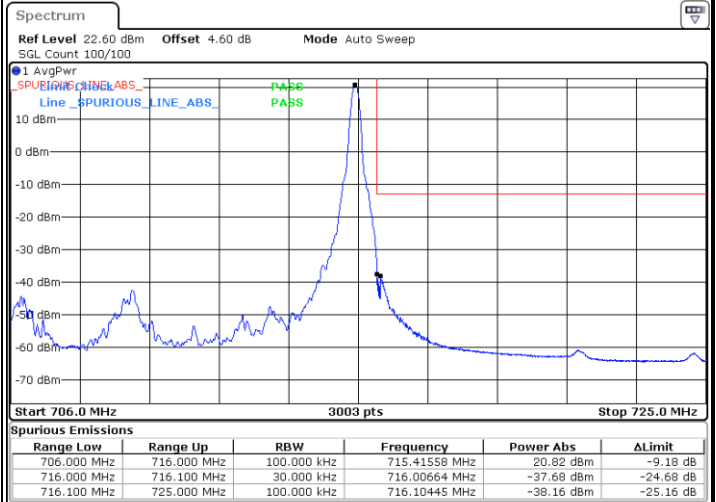
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



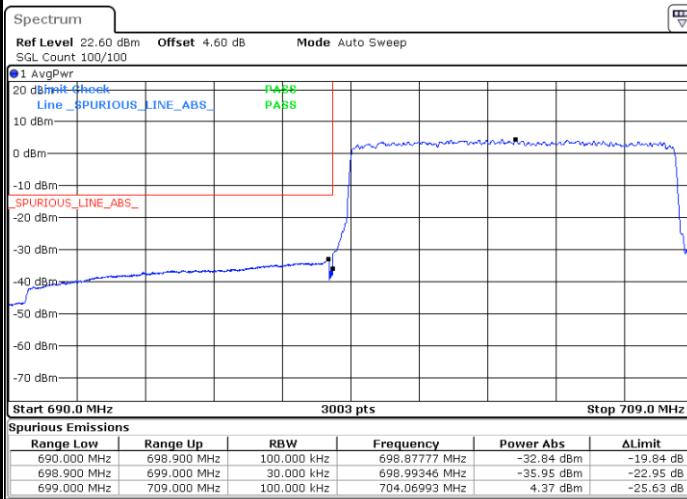
Date: 6 JUN.2020 18:23:14

Highest Band Edge / 1 RB



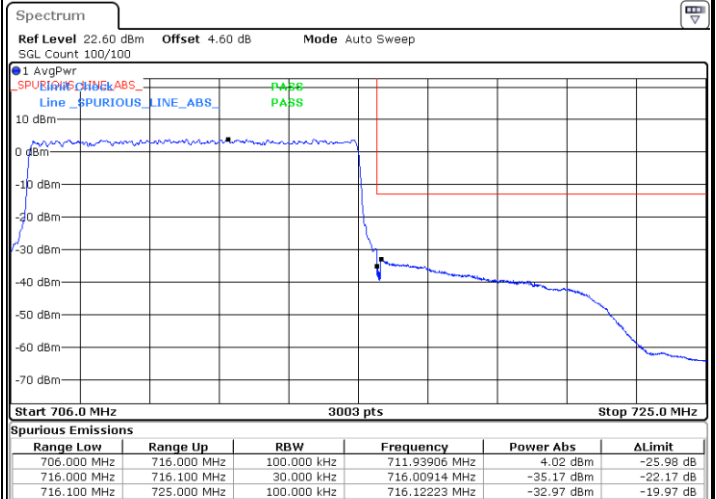
Date: 6 JUN.2020 18:28:52

Lowest Band Edge / Full RB



Date: 6 JUN.2020 18:24:22

Highest Band Edge / Full RB

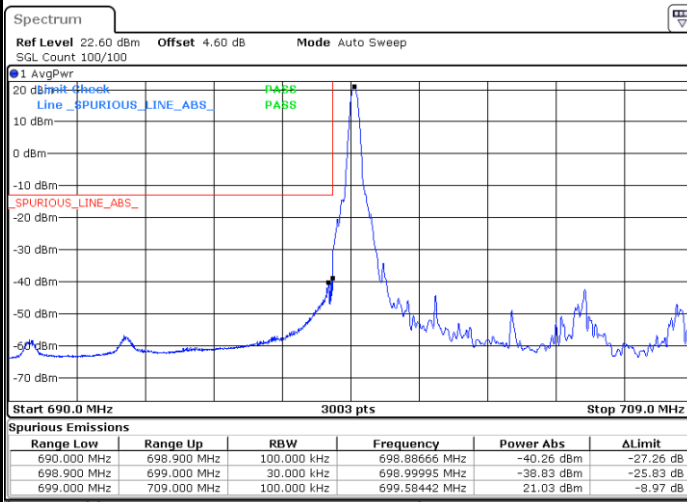


Date: 6 JUN.2020 18:27:45



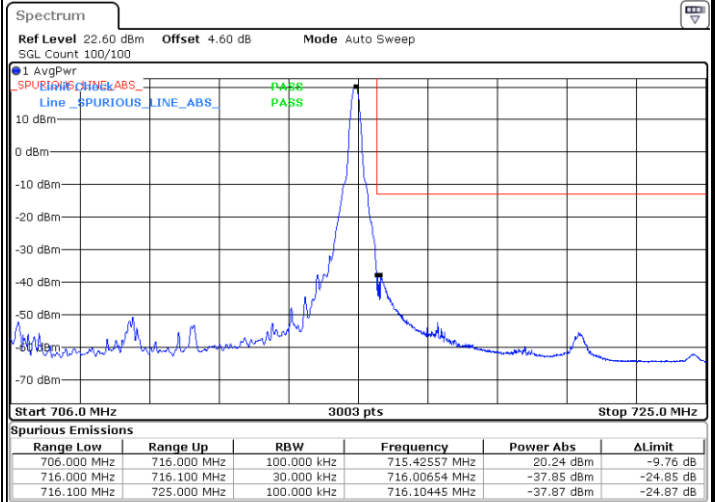
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



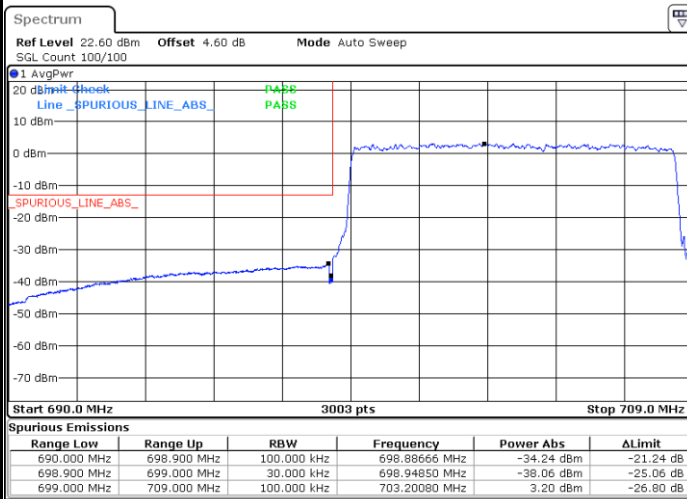
Date: 6 JUN.2020 18:22:06

Highest Band Edge / 1 RB



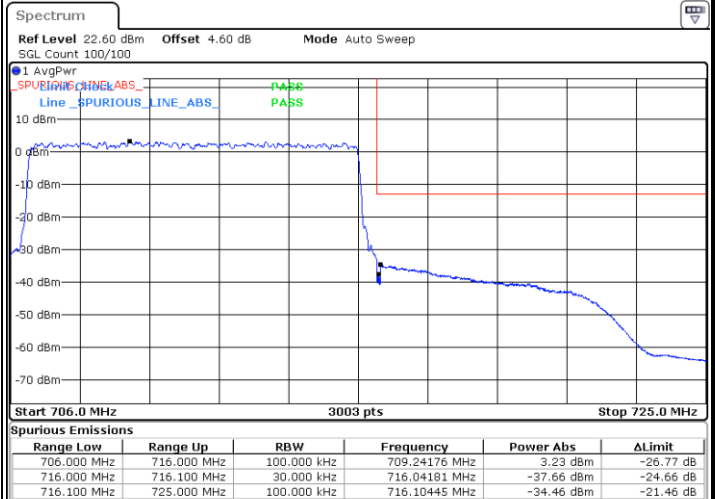
Date: 6 JUN.2020 18:30:00

Lowest Band Edge / Full RB



Date: 6 JUN.2020 18:25:29

Highest Band Edge / Full RB

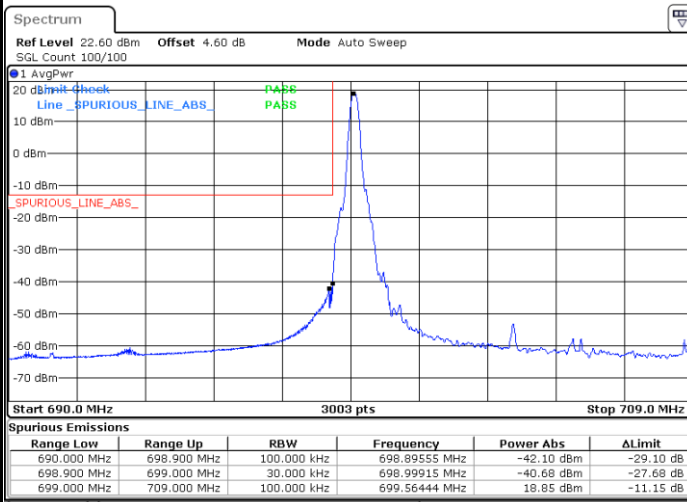


Date: 6 JUN.2020 18:26:37



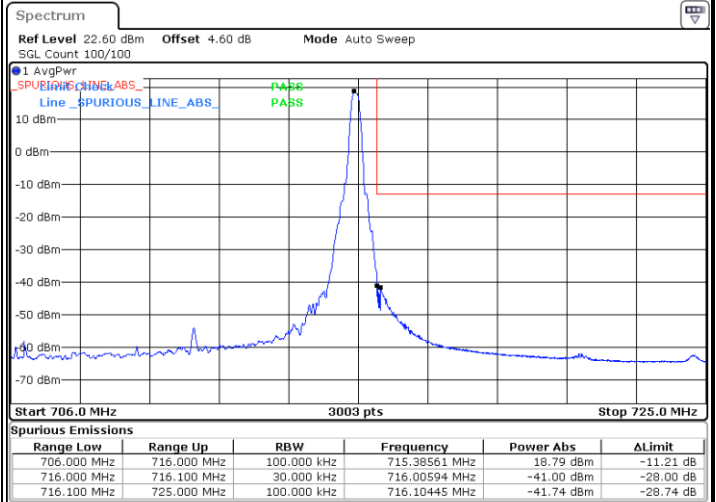
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



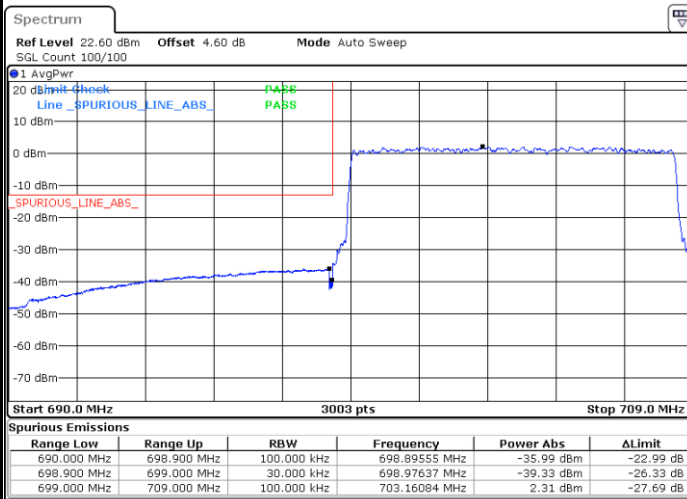
Date: 6.JUN.2020 19:02:19

Highest Band Edge / 1 RB



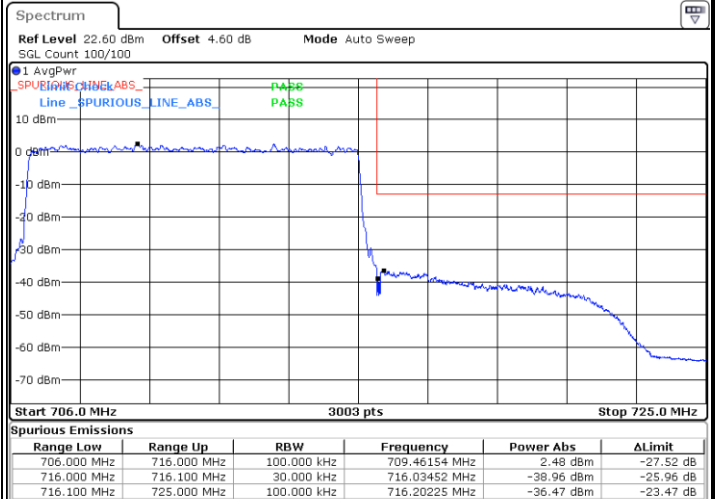
Date: 6.JUN.2020 19:01:12

Lowest Band Edge / Full RB



Date: 6.JUN.2020 19:03:27

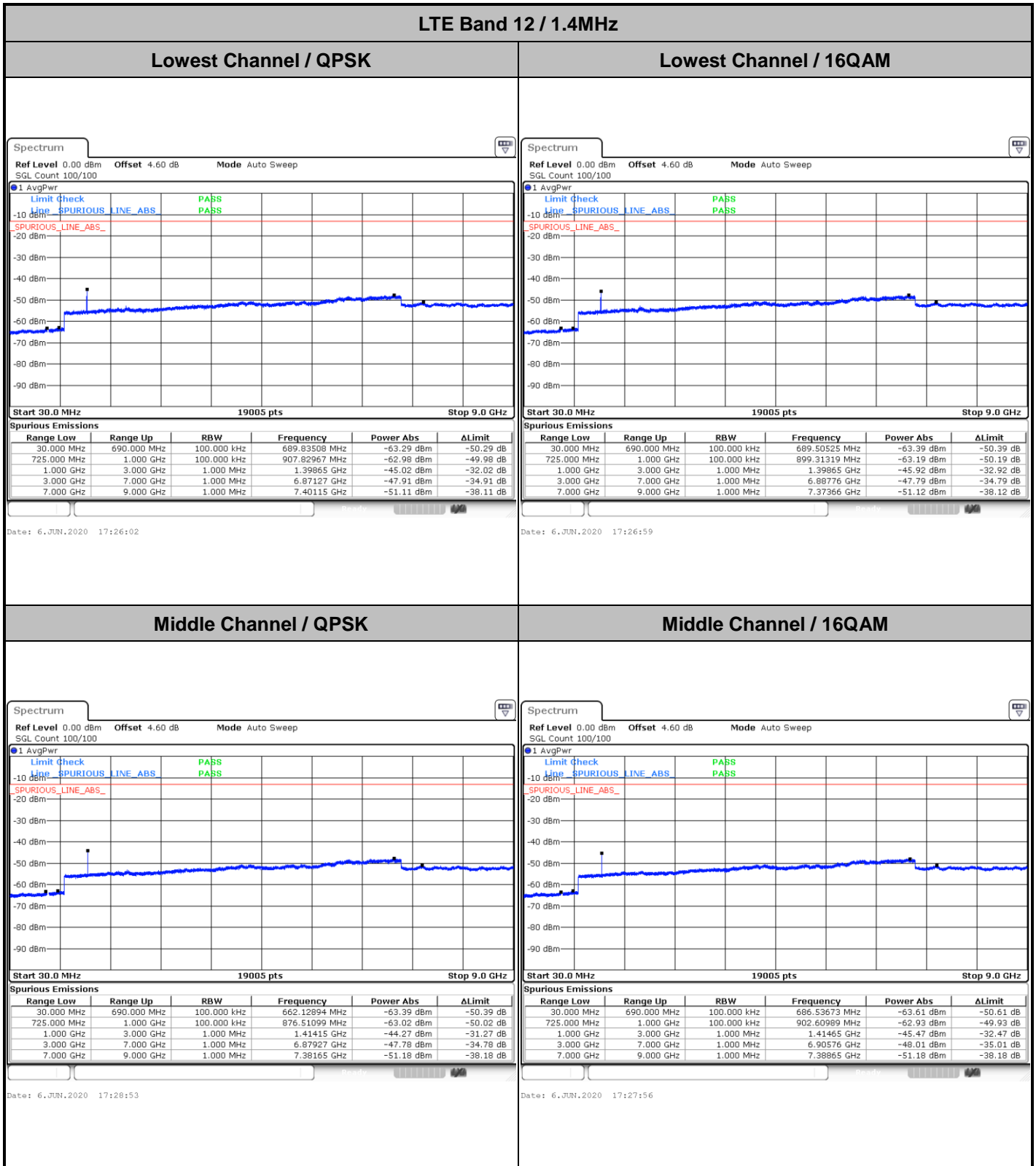
Highest Band Edge / Full RB



Date: 6.JUN.2020 19:00:04



Conducted Spurious Emission

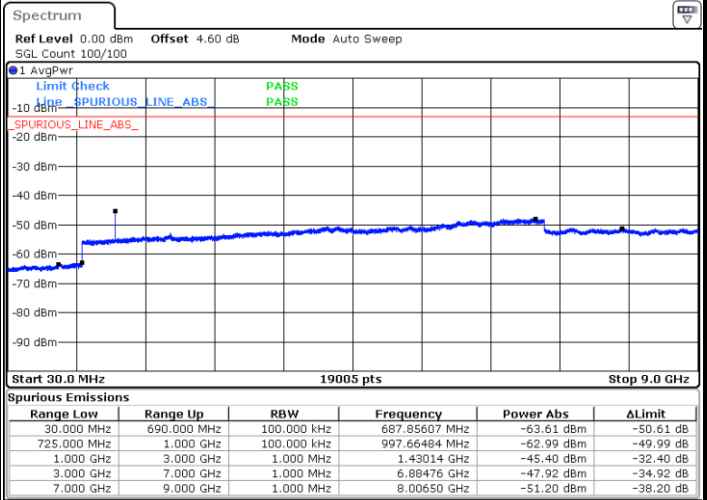
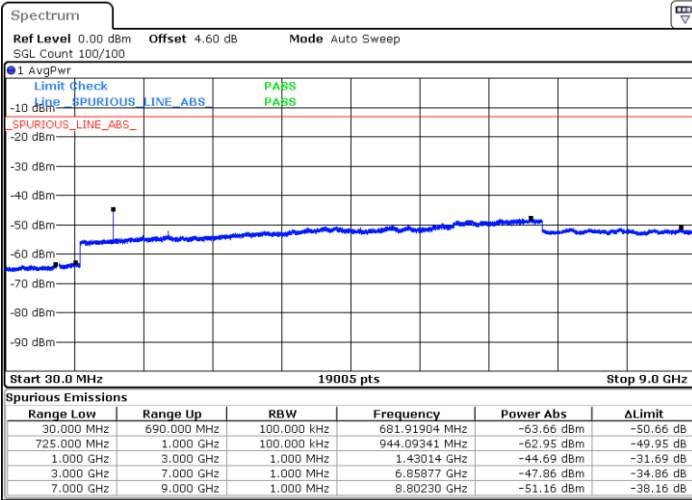




LTE Band 12 / 1.4MHz

Highest Channel / QPSK

Highest Channel / 16QAM



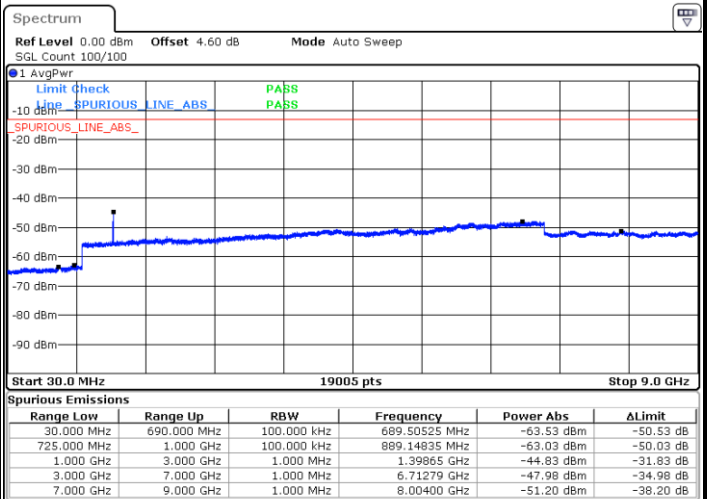
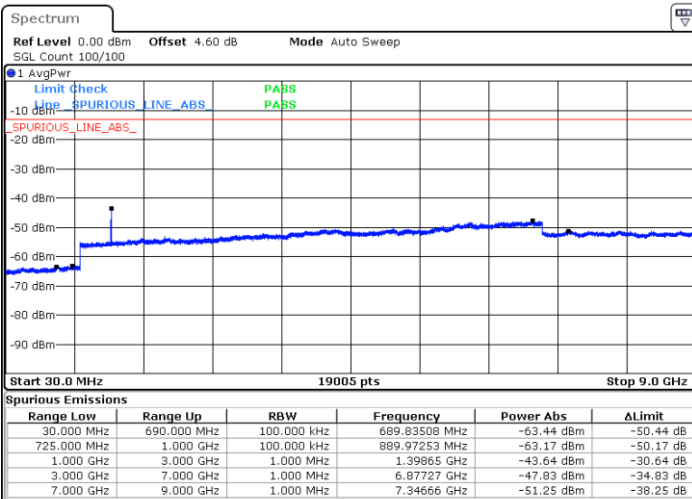
Date: 6 JUN.2020 17:29:49

Date: 6 JUN.2020 17:30:46

LTE Band 12 / 3MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



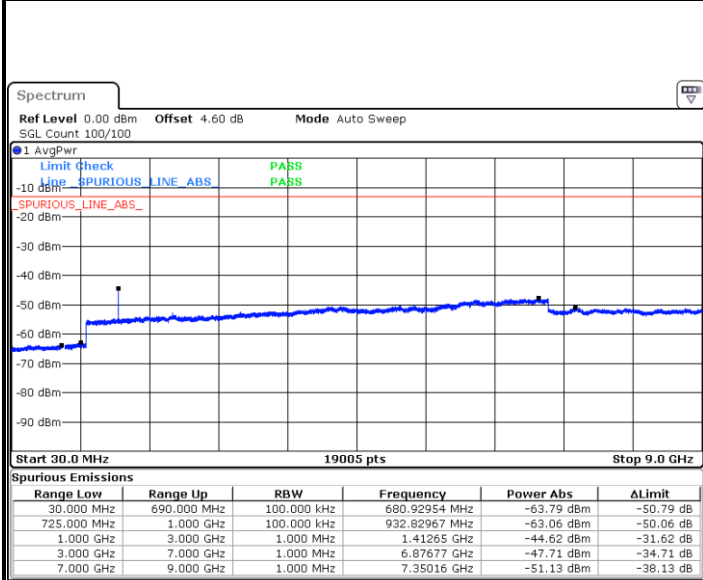
Date: 6 JUN.2020 17:42:46

Date: 6 JUN.2020 17:43:43



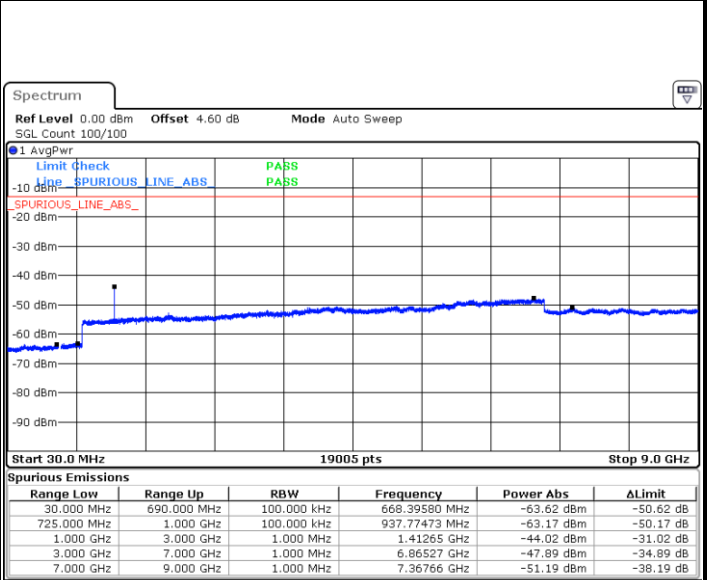
LTE Band 12 / 3MHz

Middle Channel / QPSK



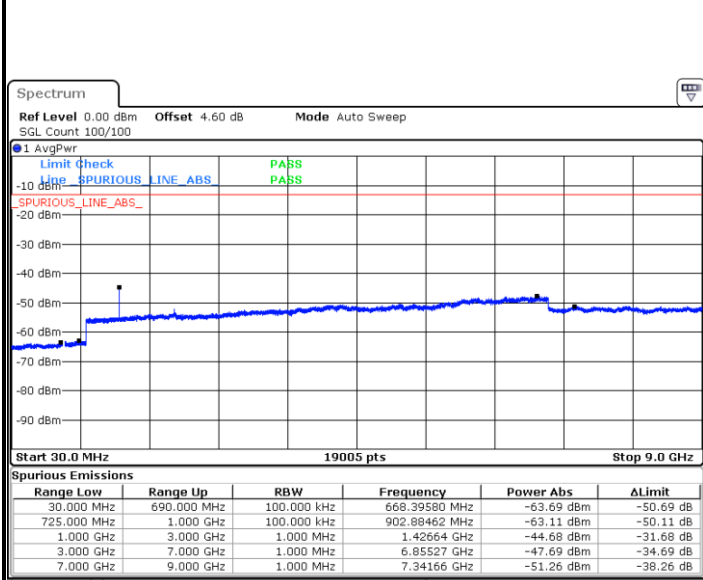
Date: 6 JUN.2020 17:45:37

Middle Channel / 16QAM



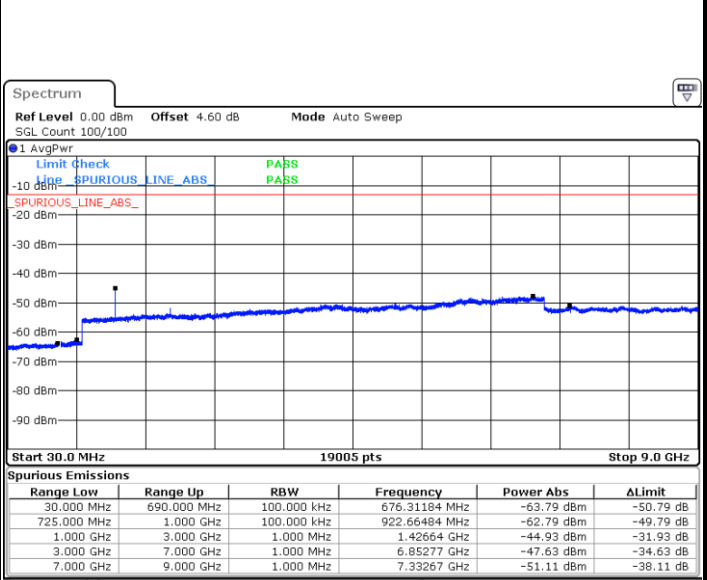
Date: 6 JUN.2020 17:44:40

Highest Channel / QPSK



Date: 6 JUN.2020 17:46:34

Highest Channel / 16QAM

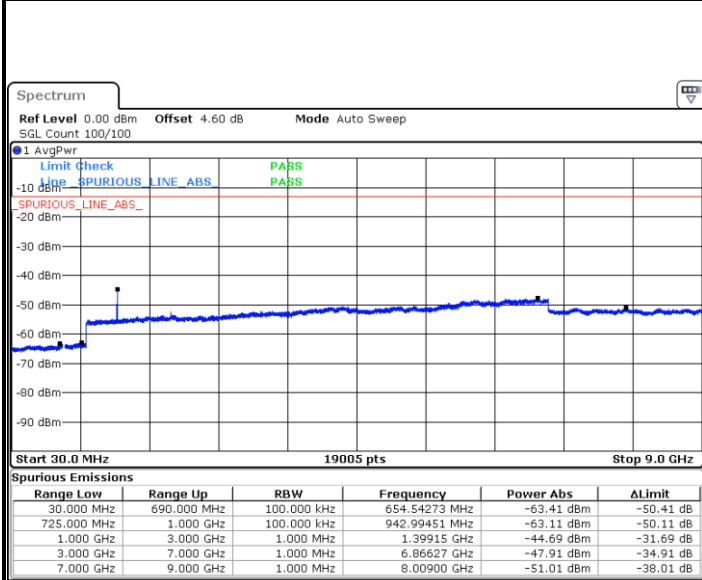


Date: 6 JUN.2020 17:47:30



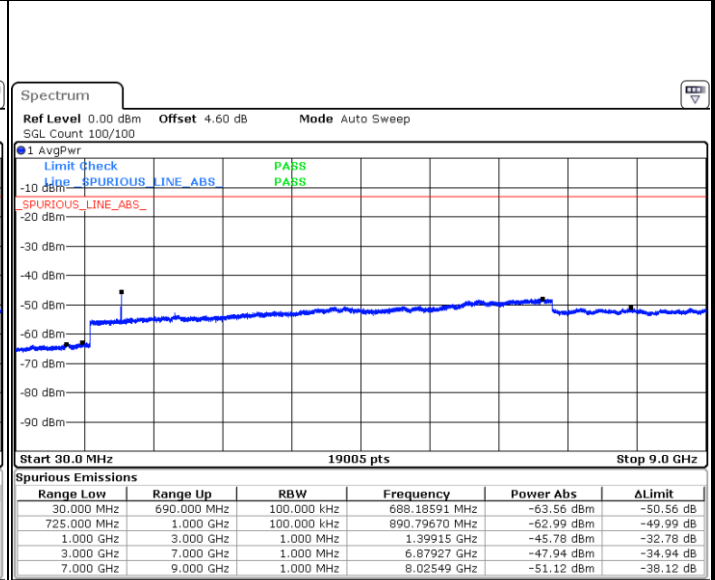
LTE Band 12 / 5MHz

Lowest Channel / QPSK



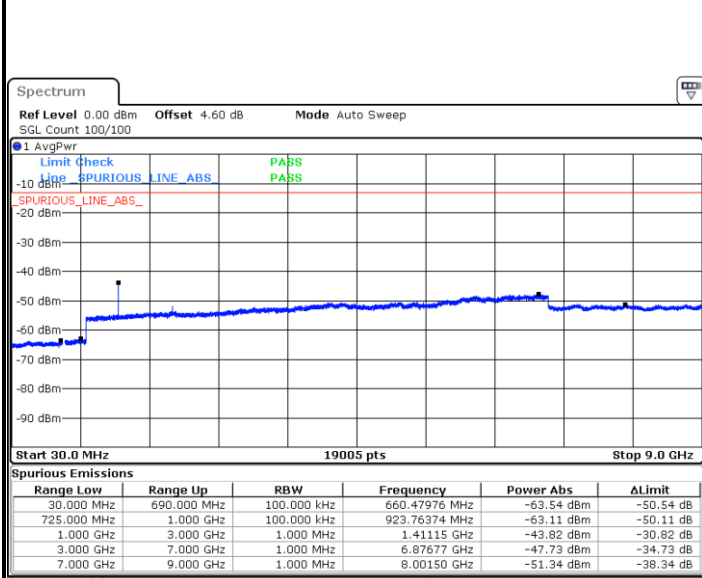
Date: 6 JUN.2020 17:59:31

Lowest Channel / 16QAM



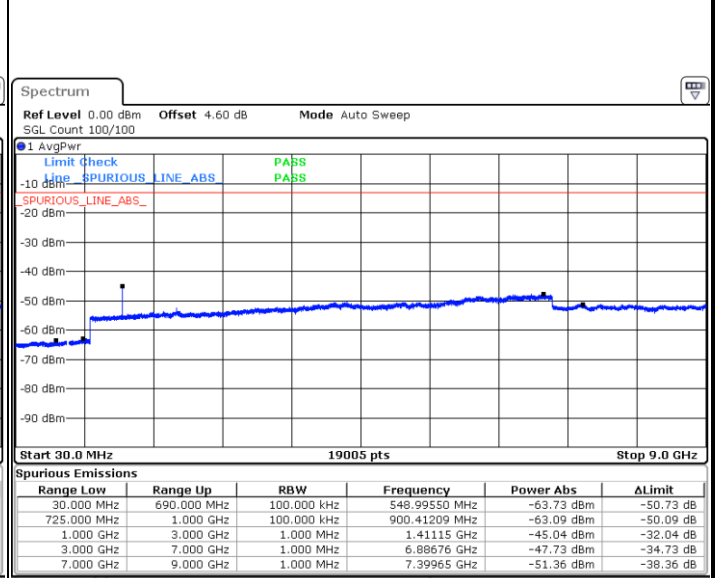
Date: 6 JUN.2020 18:00:28

Middle Channel / QPSK



Date: 6 JUN.2020 18:02:21

Middle Channel / 16QAM

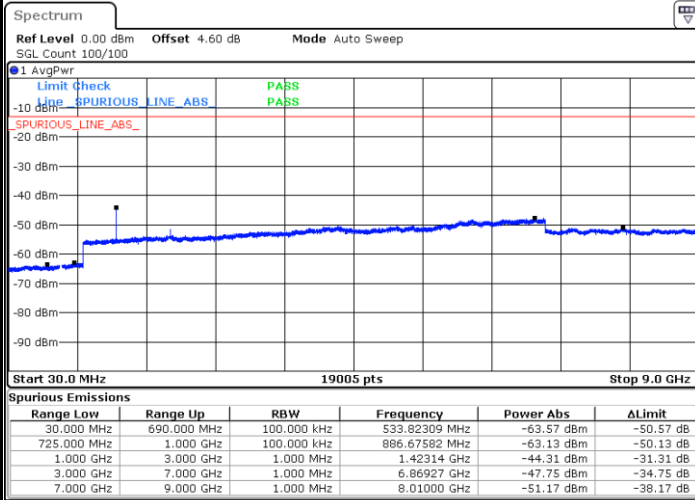


Date: 6 JUN.2020 18:01:24



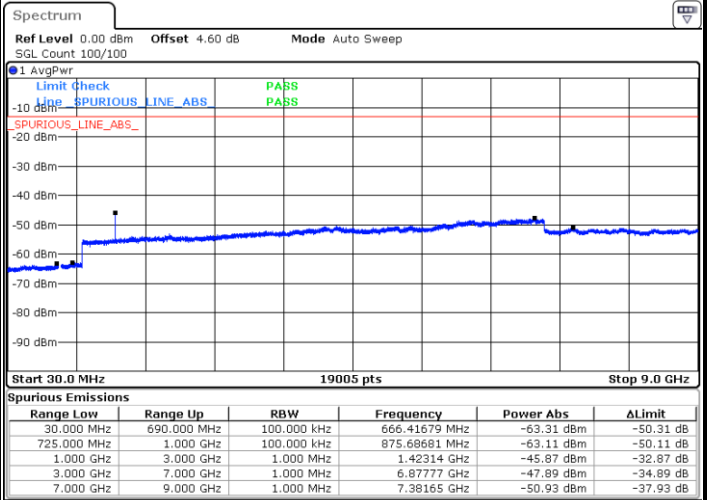
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 6 JUN.2020 18:03:18

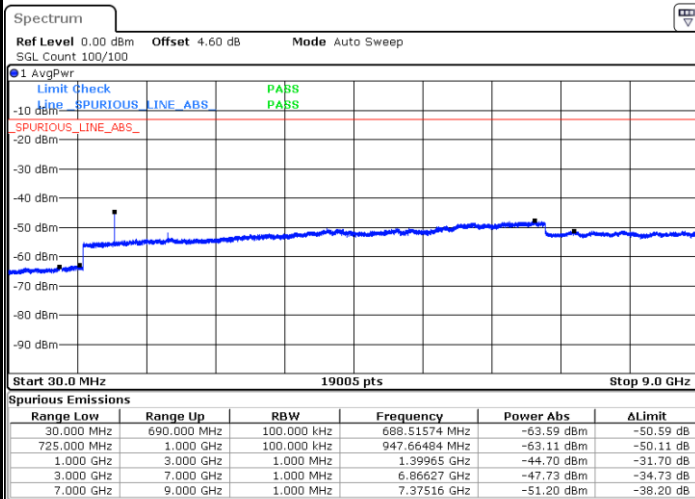
Highest Channel / 16QAM



Date: 6 JUN.2020 18:04:15

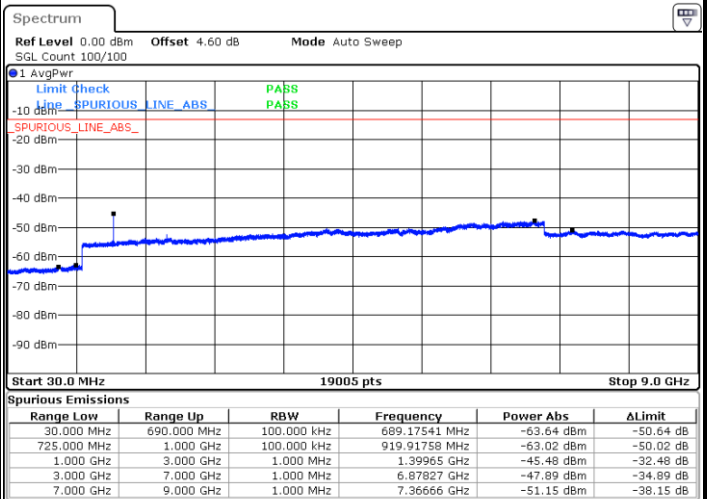
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 6 JUN.2020 18:16:15

Lowest Channel / 16QAM

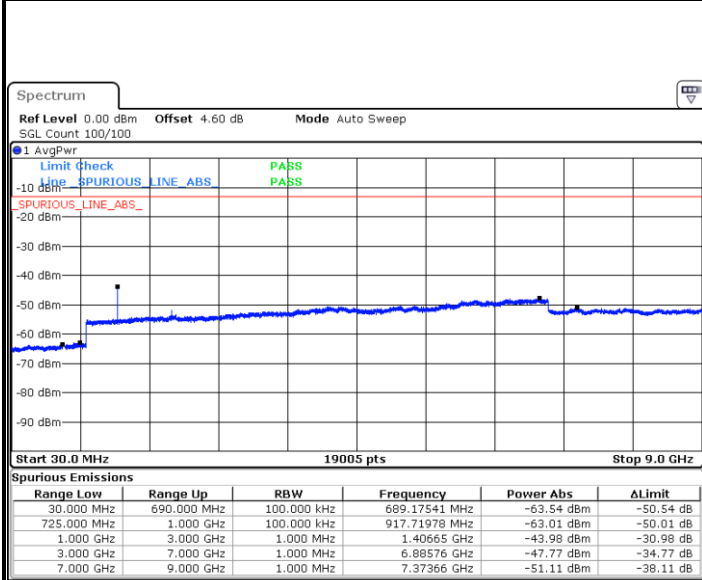


Date: 6 JUN.2020 18:17:12



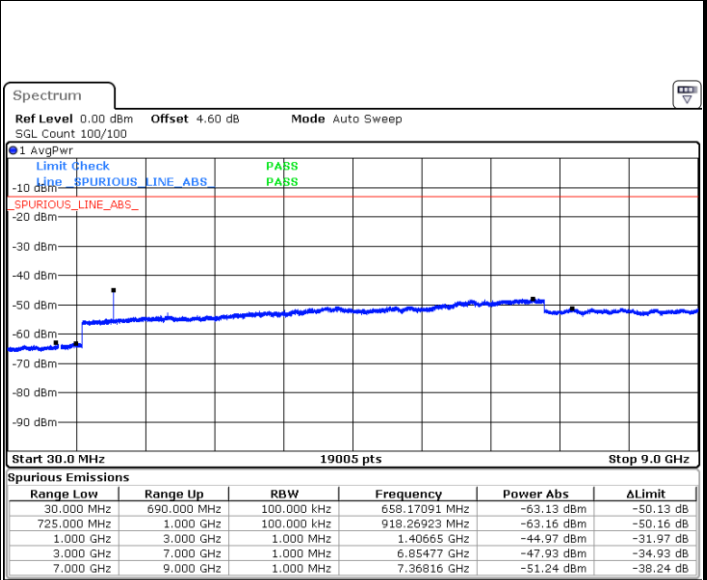
LTE Band 12 / 10MHz

Middle Channel / QPSK



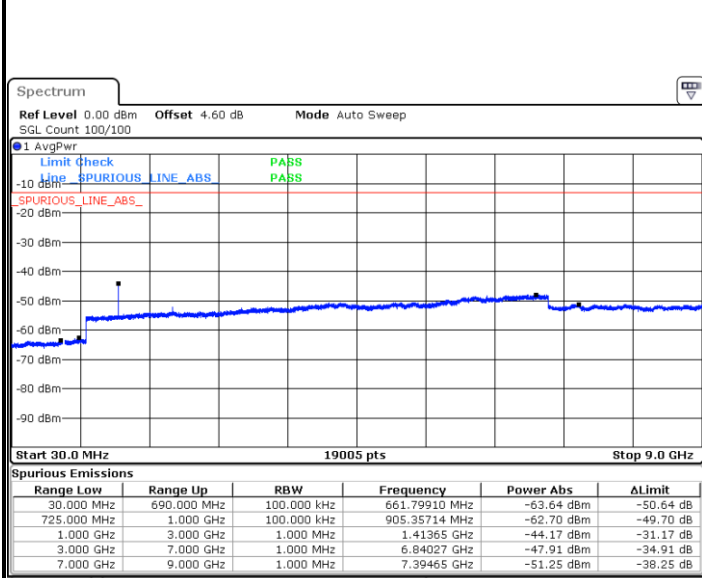
Date: 6 JUN.2020 18:19:05

Middle Channel / 16QAM



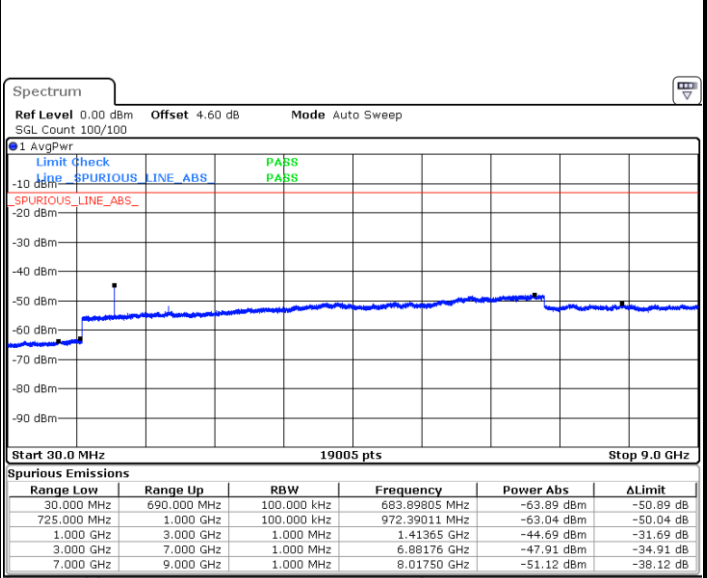
Date: 6 JUN.2020 18:18:09

Highest Channel / QPSK



Date: 6 JUN.2020 18:20:01

Highest Channel / 16QAM



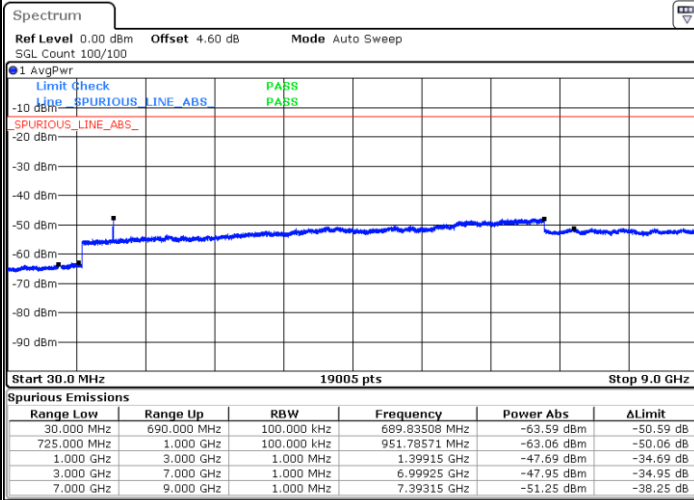
Date: 6 JUN.2020 18:20:58



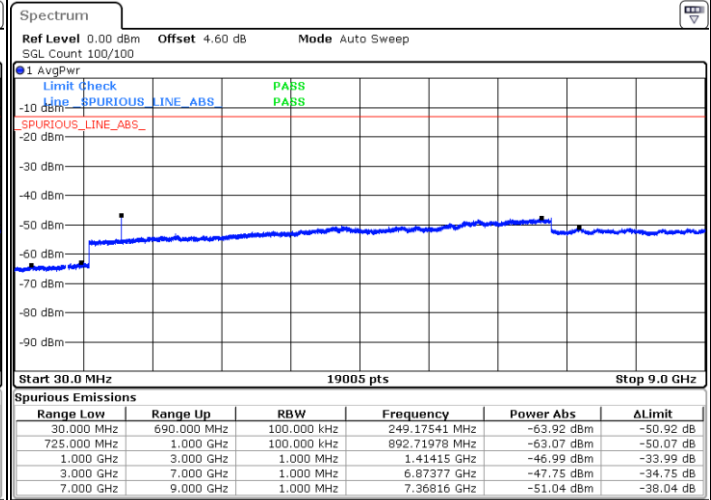
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

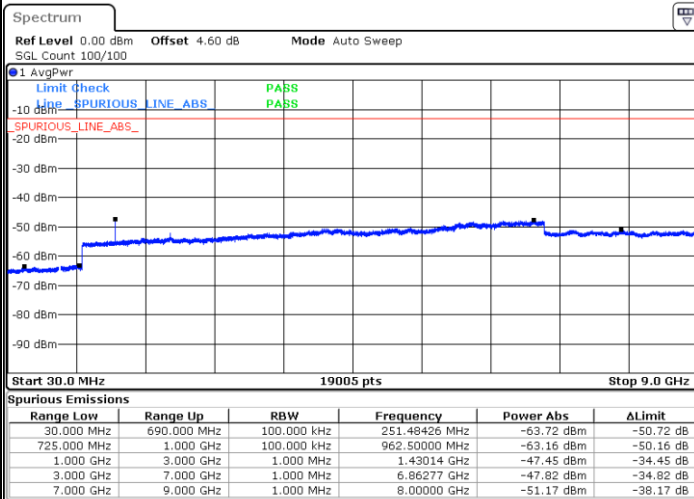


Date: 6 JUN.2020 18:36:28



Date: 6 JUN.2020 18:37:25

Highest Channel / 64QAM



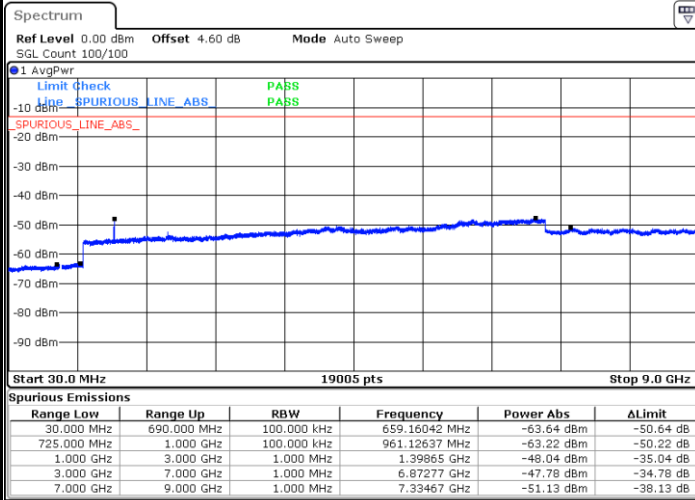
Date: 6 JUN.2020 18:38:22



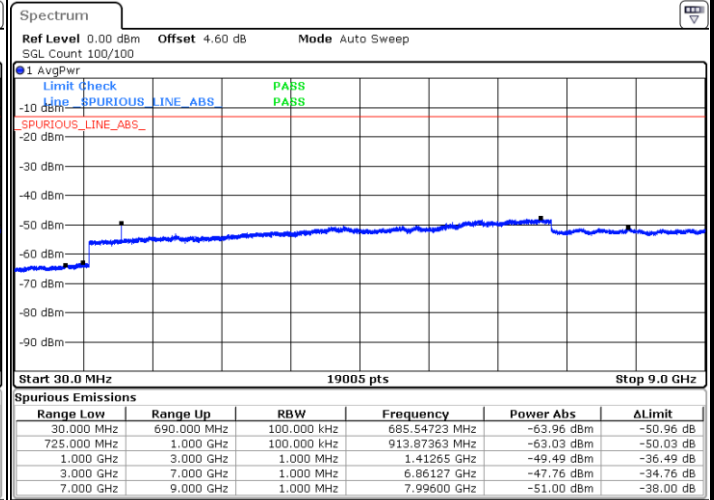
LTE Band 12 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

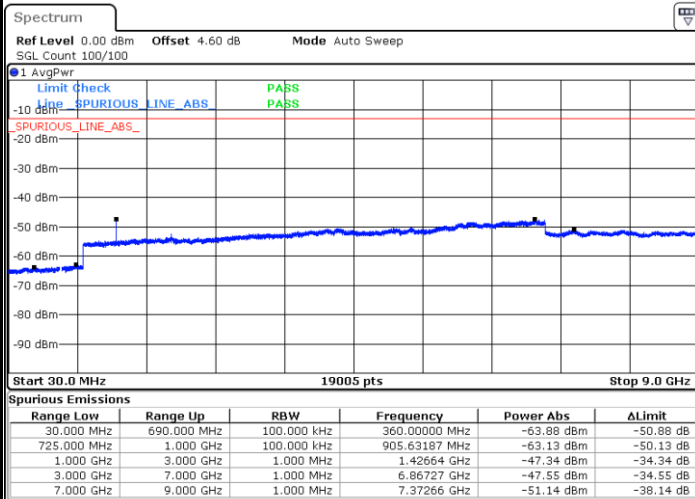


Date: 6 JUN.2020 18:39:19



Date: 6 JUN.2020 18:40:15

Highest Channel / 64QAM



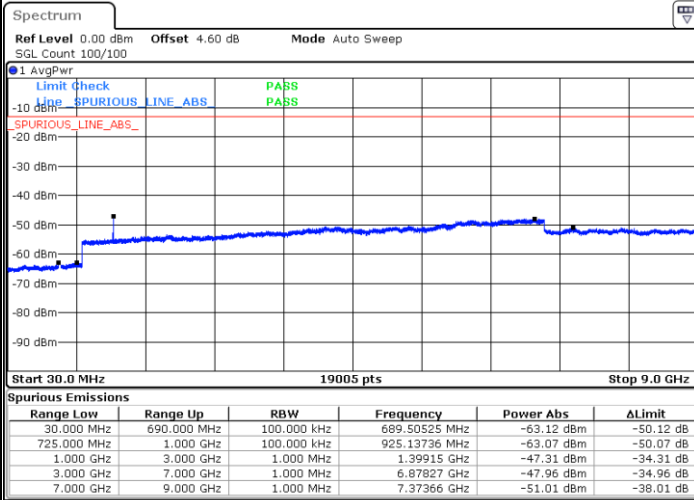
Date: 6 JUN.2020 18:41:12



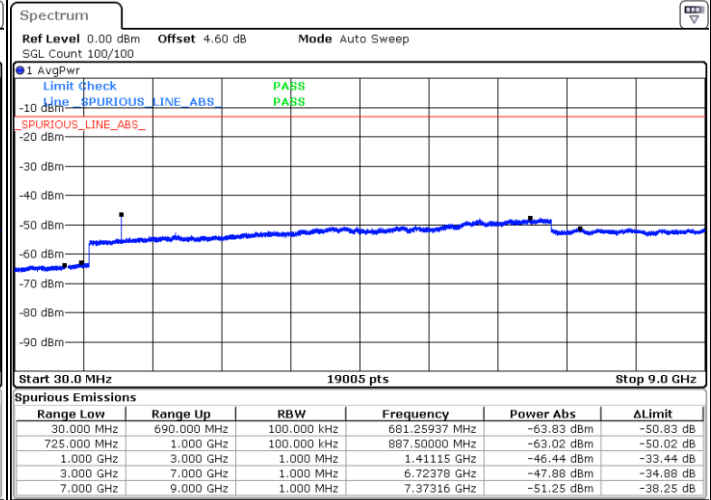
LTE Band 12 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

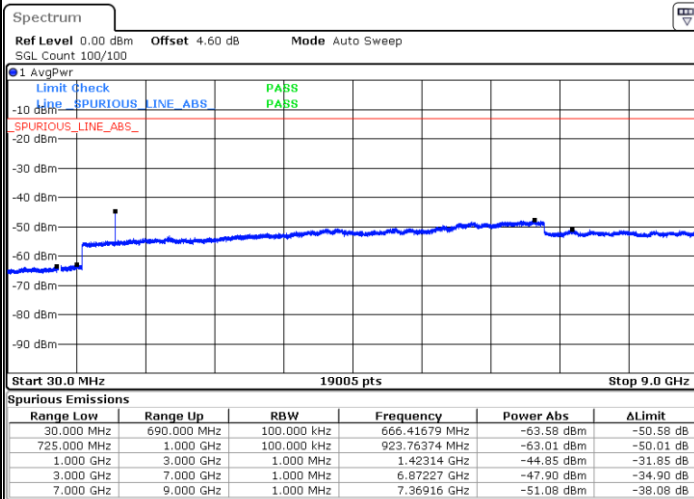


Date: 6 JUN.2020 18:53:12



Date: 6 JUN.2020 18:54:09

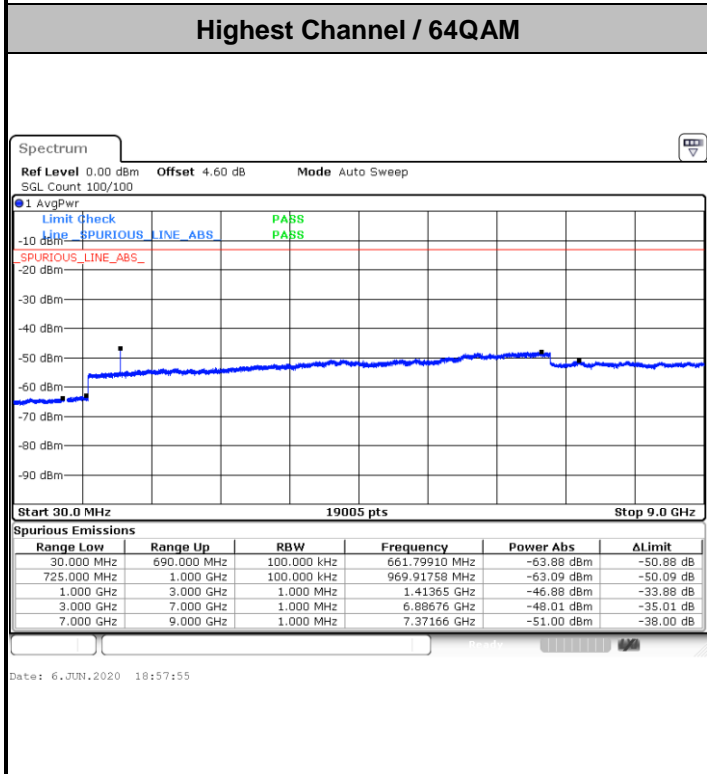
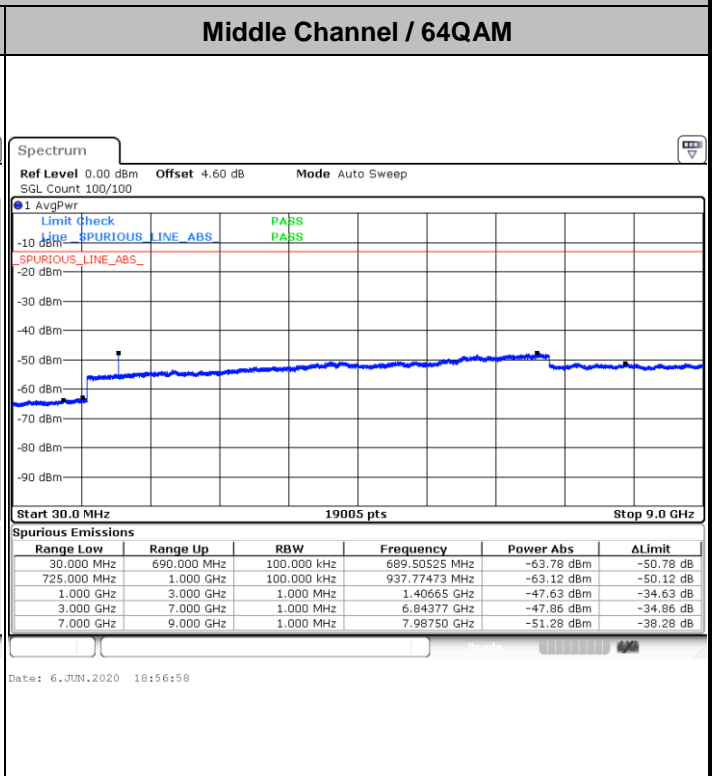
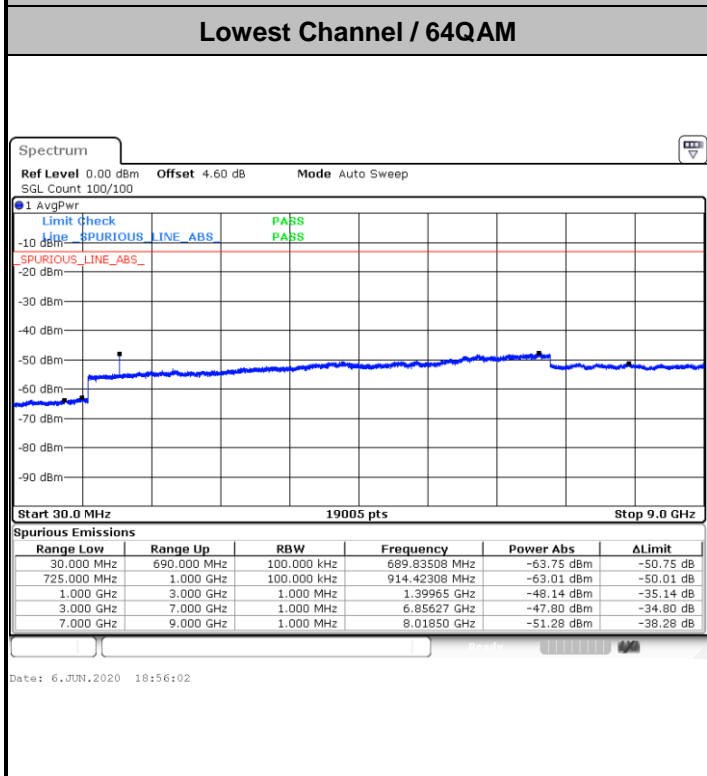
Highest Channel / 64QAM



Date: 6 JUN.2020 18:55:05



LTE Band 12 / 10MHz





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 | 0.0001 | PASS |
| 40 | Normal Voltage | 0.0018 | |
| 30 | Normal Voltage | 0.0001 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0032 | |
| 0 | Normal Voltage | 0.0005 | |
| -10 | Normal Voltage | 0.0002 | |
| -20 | Normal Voltage | 0.0010 | |
| -30 | Normal Voltage | 0.0005 | |
| 20 | Maximum Voltage | 0.0027 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0007 | |

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

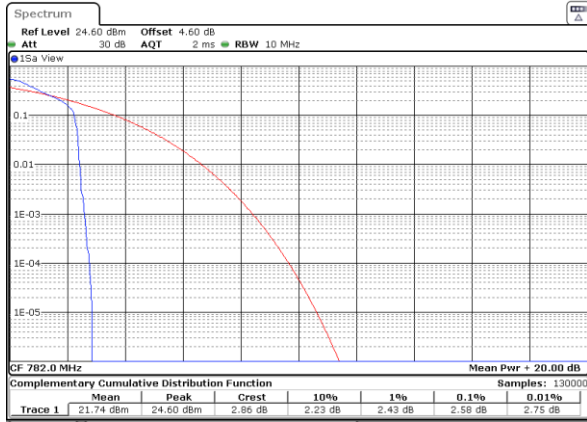
Peak-to-Average Ratio

| Mode | LTE Band 13 / 10MHz | | | | |
|------------|---------------------|---------|-------|---------|-------------|
| Mod. | QPSK | | 16QAM | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | - | - | - | - | PASS |
| Middle CH | 2.58 | 4.72 | 3.16 | 5.65 | |
| Highest CH | - | - | - | - | |
| Mode | LTE Band 13 / 10MHz | | | | |
| Mod. | 64QAM | | | | Limit: 13dB |
| RB Size | 1RB | Full RB | | | Result |
| Lowest CH | - | - | - | - | PASS |
| Middle CH | 4.17 | 6.14 | - | - | |
| Highest CH | - | - | - | - | |



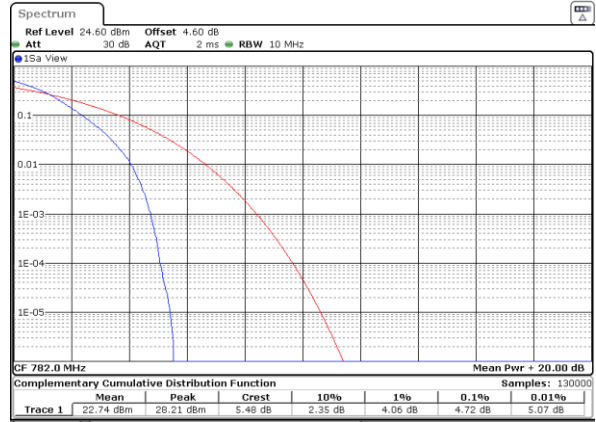
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 7 JUN 2020 12:10:48

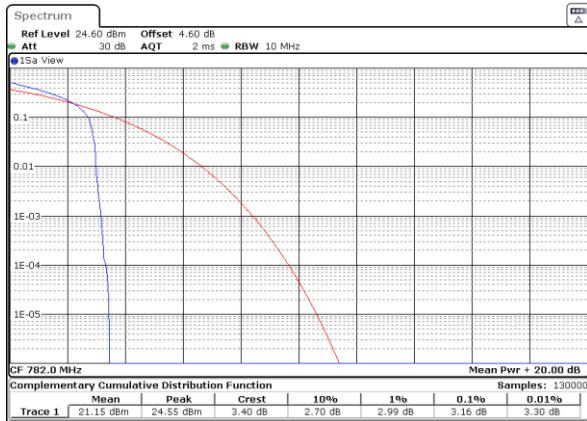
Middle Channel / Full RB



Date: 7 JUN 2020 12:11:17

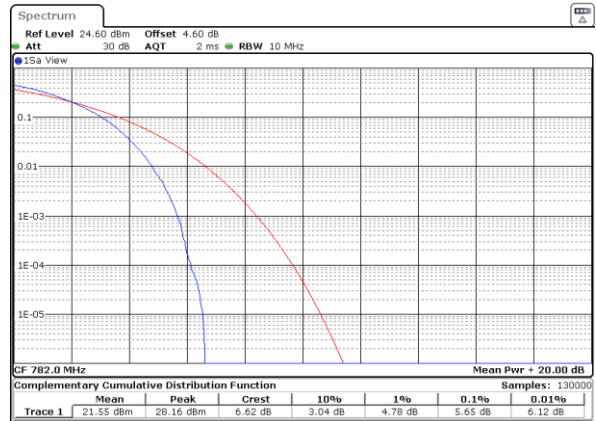
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 7 JUN 2020 12:10:57

Middle Channel / Full RB



Date: 7 JUN 2020 12:11:09

LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 7 JUN 2020 12:33:15

Middle Channel / Full RB



Date: 7 JUN 2020 12:33:26



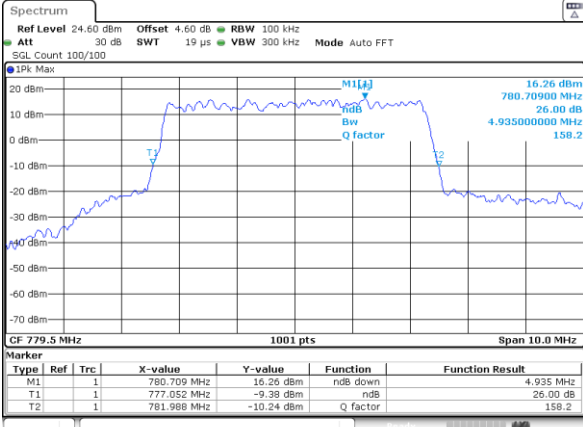
26dB Bandwidth

| Mode | LTE Band 13 : 26dB BW(MHz) | | | | | | | | | | | |
|------------|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | - | - | - | - | 4.94 | 4.86 | - | - | - | - | - | - |
| Middle CH | - | - | - | - | 4.96 | 4.89 | 9.63 | 9.77 | - | - | - | - |
| Highest CH | - | - | - | - | 4.83 | 4.87 | - | - | - | - | - | - |
| Mode | LTE Band 13 : 26dB BW(MHz) | | | | | | | | | | | |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | |
| Lowest CH | - | - | - | - | 4.80 | - | - | - | - | - | - | - |
| Middle CH | - | - | - | - | 4.89 | - | 9.83 | - | - | - | - | - |
| Highest CH | - | - | - | - | 5.00 | - | - | - | - | - | - | - |



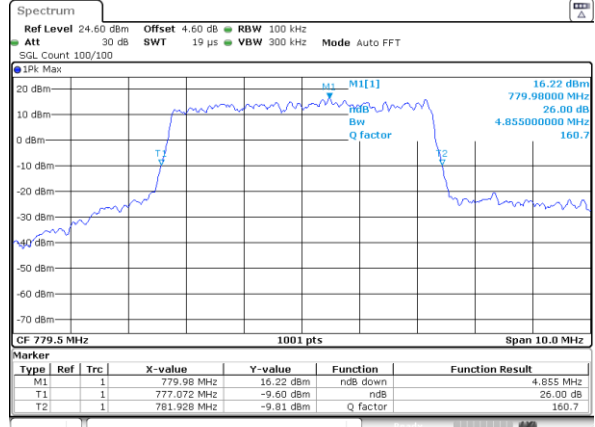
LTE Band 13

Lowest Channel / 5MHz / QPSK



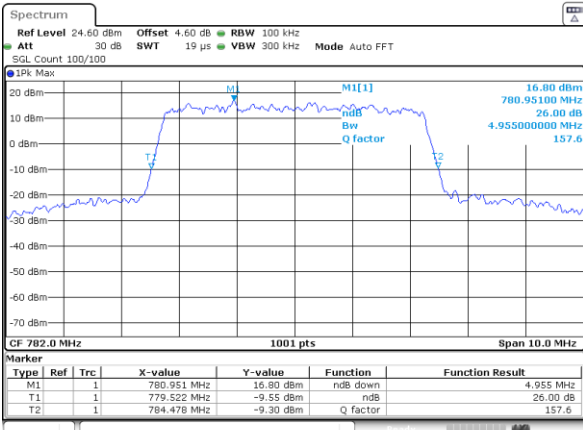
Date: 7, JUN, 2020 11:36:50

Lowest Channel / 5MHz / 16QAM



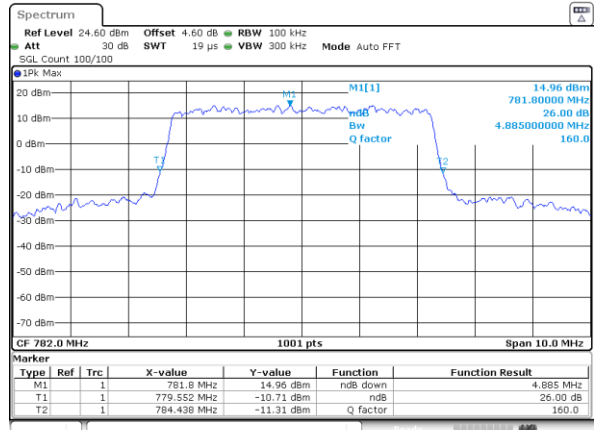
Date: 7, JUN, 2020 11:37:00

Middle Channel / 5MHz / QPSK



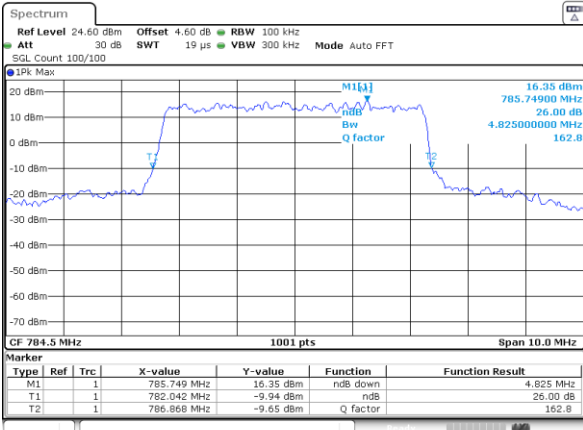
Date: 7, JUN, 2020 11:45:54

Middle Channel / 5MHz / 16QAM



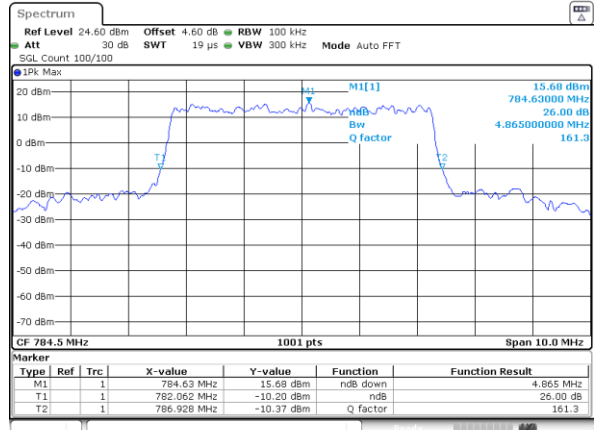
Date: 7, JUN, 2020 11:46:04

Highest Channel / 5MHz / QPSK



Date: 7, JUN, 2020 11:48:34

Highest Channel / 5MHz / 16QAM

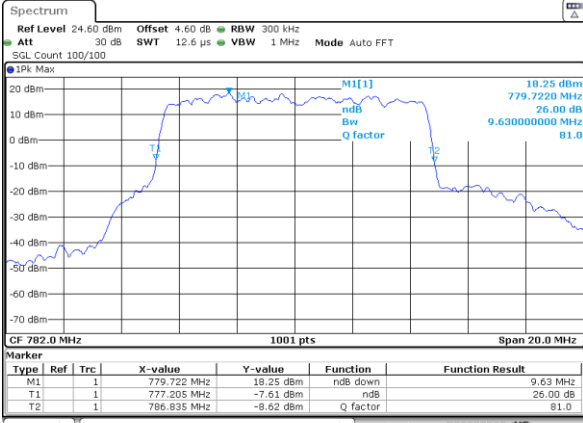


Date: 7, JUN, 2020 11:48:24



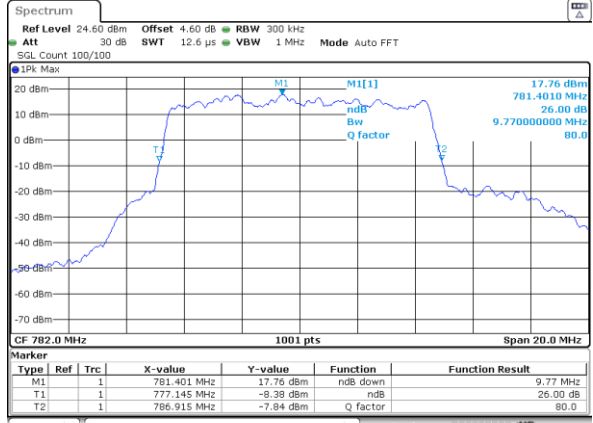
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 7 JUN 2020 11:59:27

Middle Channel / 10MHz / 16QAM

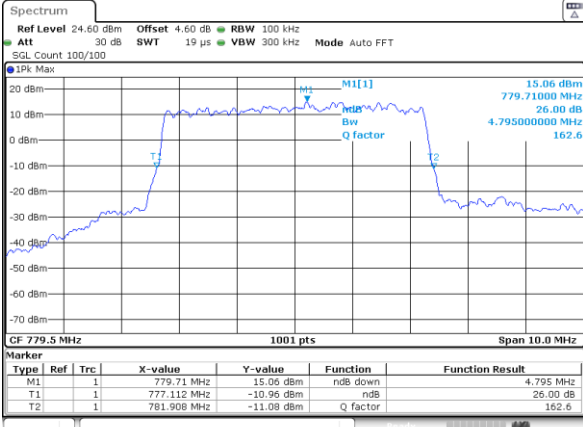


Date: 7 JUN 2020 11:59:17



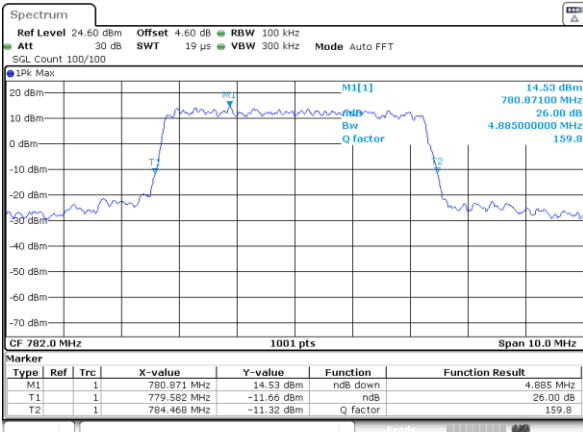
LTE Band 13

Lowest Channel / 5MHz / 64QAM



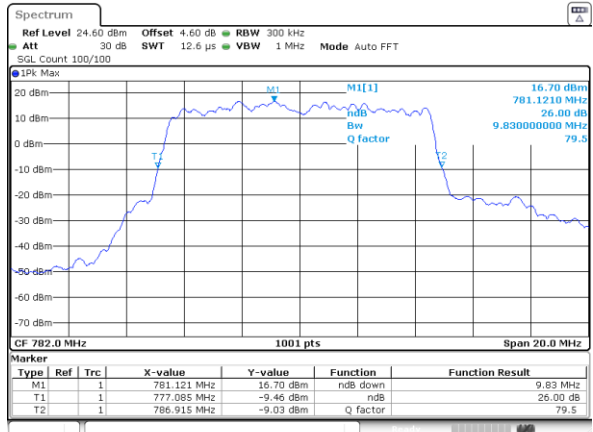
Date: 7, JUN, 2020 12:11:57

Middle Channel / 5MHz / 64QAM



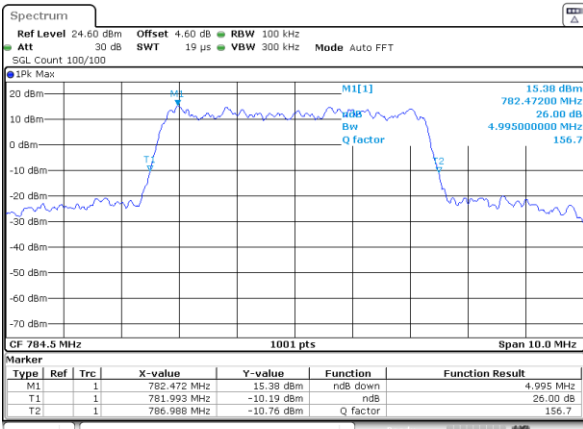
Date: 7, JUN, 2020 12:12:07

Middle Channel / 10MHz / 64QAM



Date: 7, JUN, 2020 12:21:55

Highest Channel / 5MHz / 64QAM



Date: 7, JUN, 2020 12:12:16



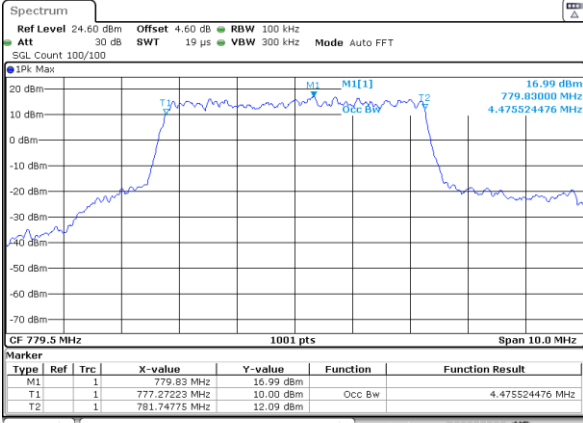
Occupied Bandwidth

| Mode | LTE Band 13 : 99%OBW(MHz) | | | | | | | | | | | |
|------------|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | - | - | - | - | 4.48 | 4.49 | - | - | - | - | - | - |
| Middle CH | - | - | - | - | 4.49 | 4.51 | 9.03 | 9.05 | - | - | - | - |
| Highest CH | - | - | - | - | 4.49 | 4.49 | - | - | - | - | - | - |
| Mode | LTE Band 13 : 99%OBW(MHz) | | | | | | | | | | | |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | |
| Lowest CH | - | - | - | - | 4.46 | - | - | - | - | - | - | - |
| Middle CH | - | - | - | - | 4.48 | - | 8.95 | - | - | - | - | - |
| Highest CH | - | - | - | - | 4.48 | - | - | - | - | - | - | - |



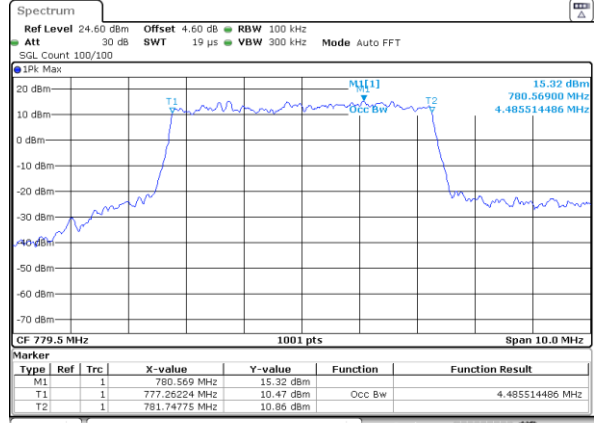
LTE Band 13

Lowest Channel / 5MHz / QPSK



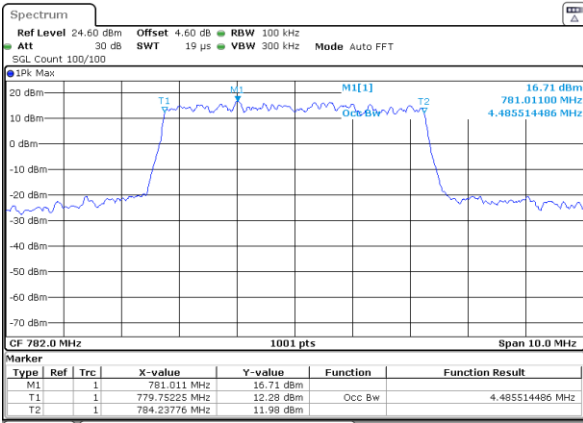
Date: 7 JUN 2020 11:37:20

Lowest Channel / 5MHz / 16QAM



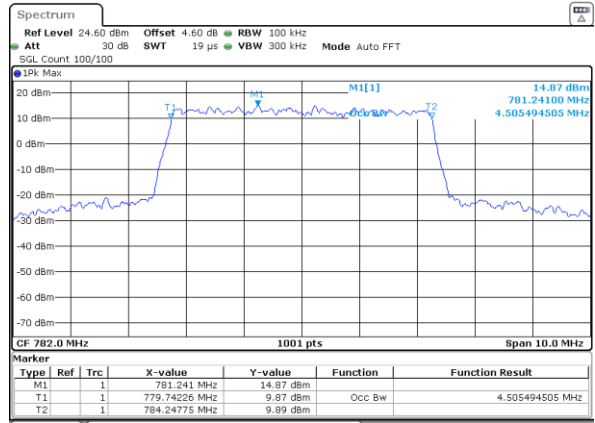
Date: 7 JUN 2020 11:37:10

Middle Channel / 5MHz / QPSK



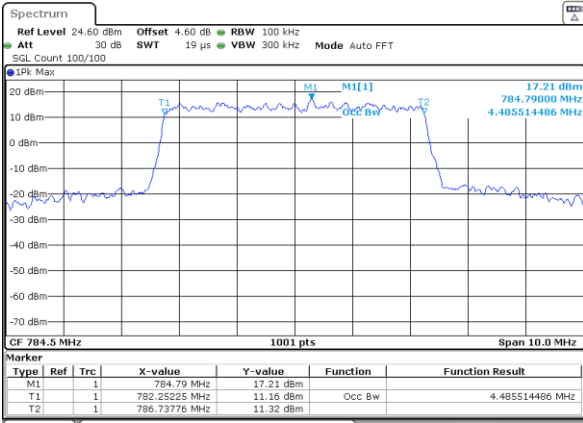
Date: 7 JUN 2020 11:46:14

Middle Channel / 5MHz / 16QAM



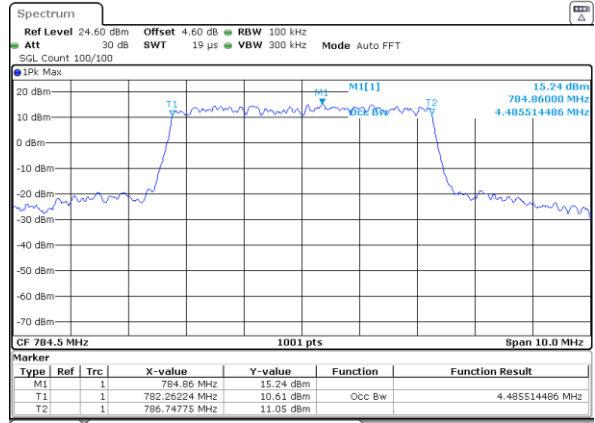
Date: 7 JUN 2020 11:46:24

Highest Channel / 5MHz / QPSK



Date: 7 JUN 2020 11:48:44

Highest Channel / 5MHz / 16QAM

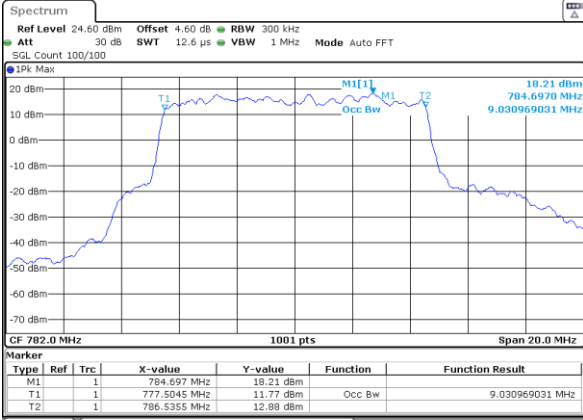


Date: 7 JUN 2020 11:48:54



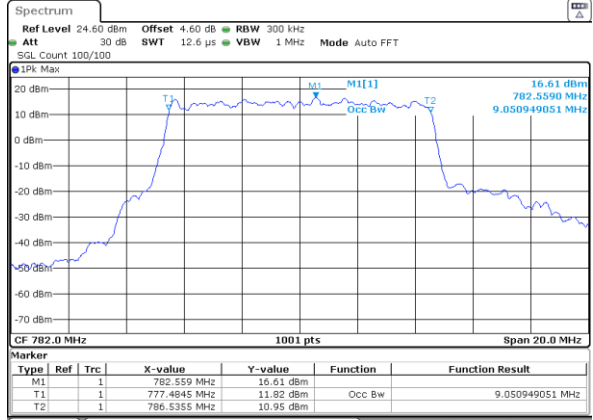
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 7 JUN 2020 11:59:37

Middle Channel / 10MHz / 16QAM

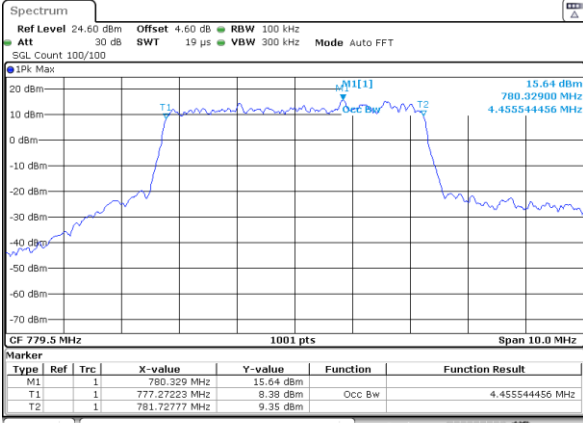


Date: 7 JUN 2020 11:59:47

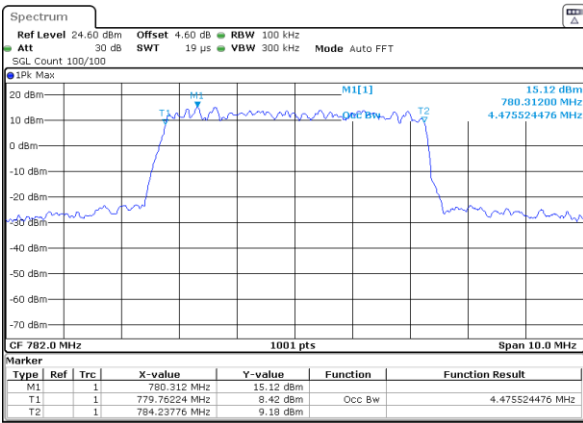


LTE Band 13

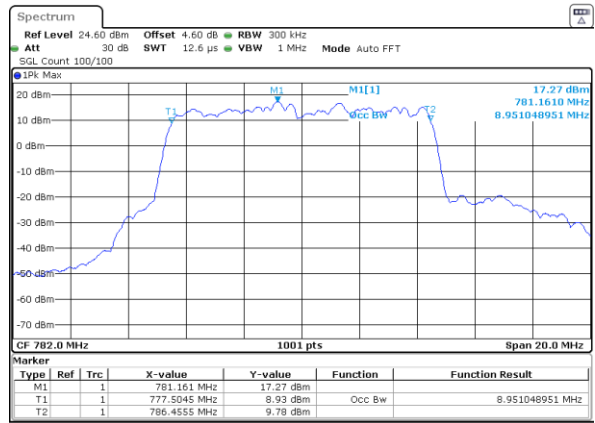
Lowest Channel / 5MHz / 64QAM



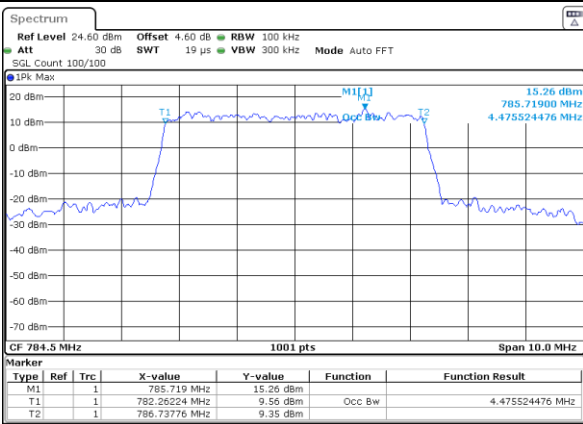
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM

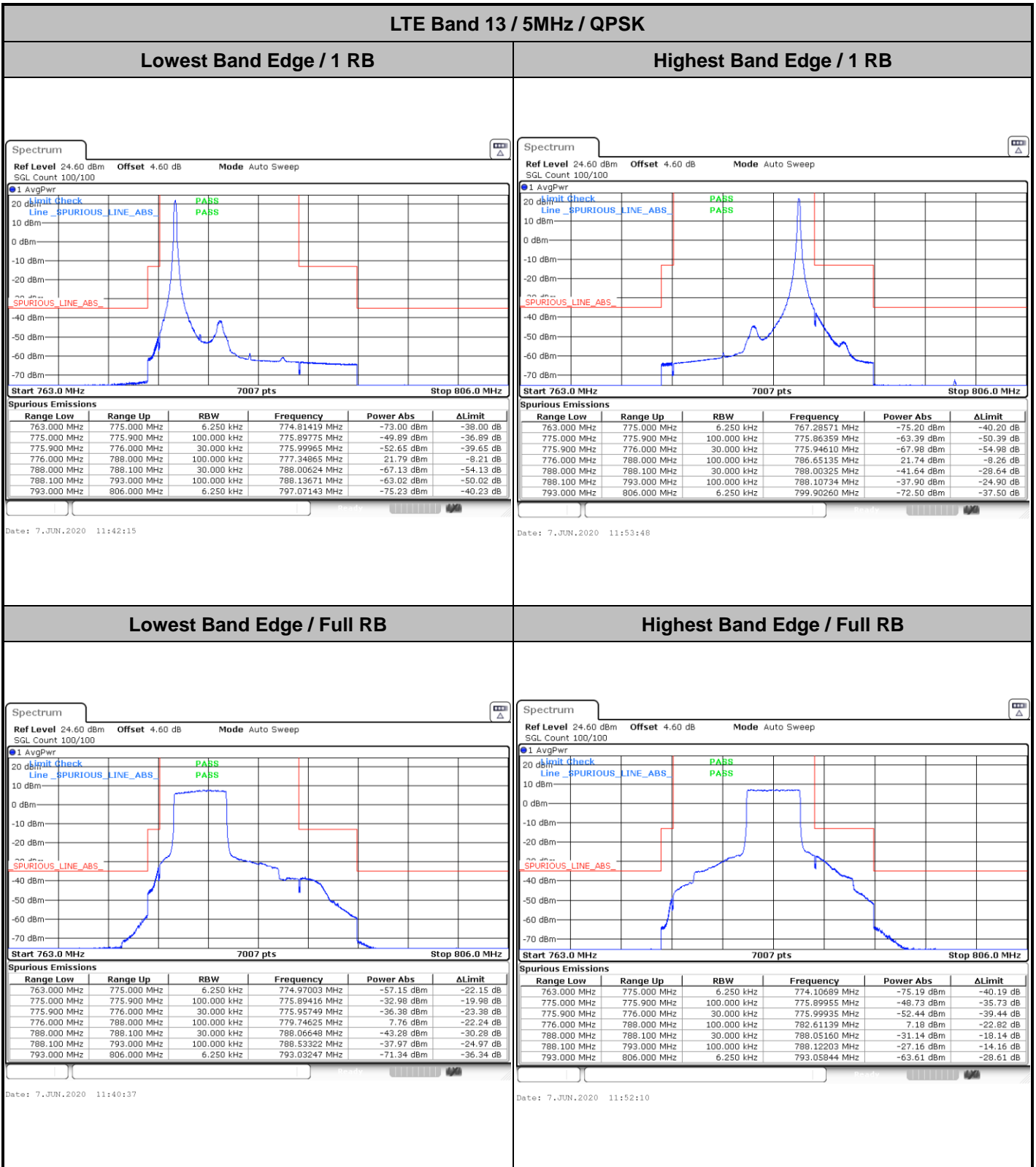


Highest Channel / 5MHz / 64QAM





Conducted Band Edge

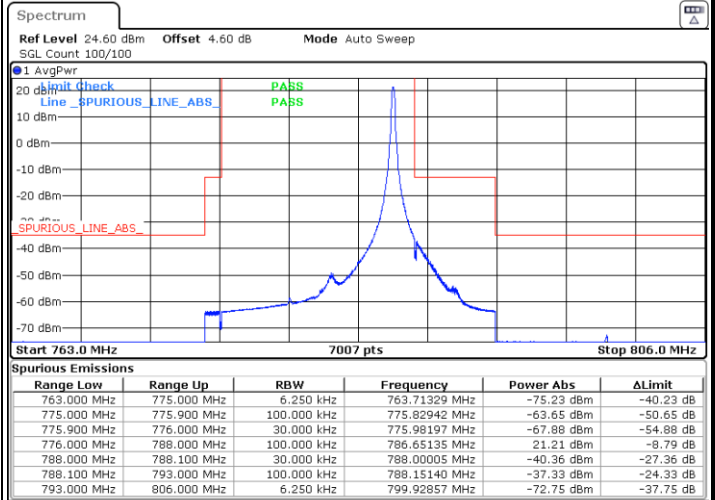
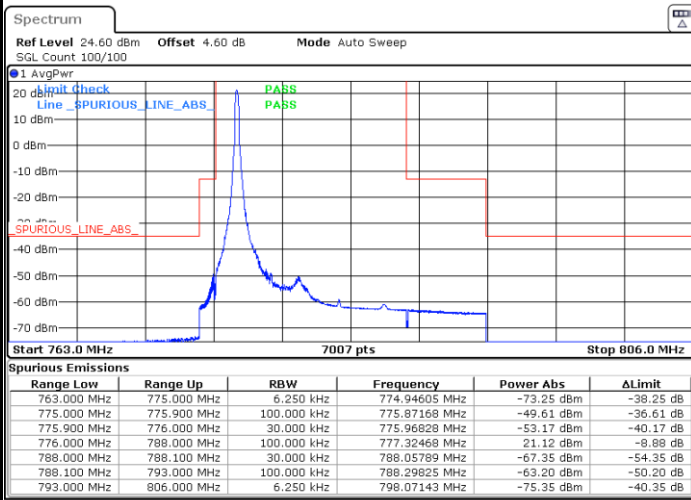




LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

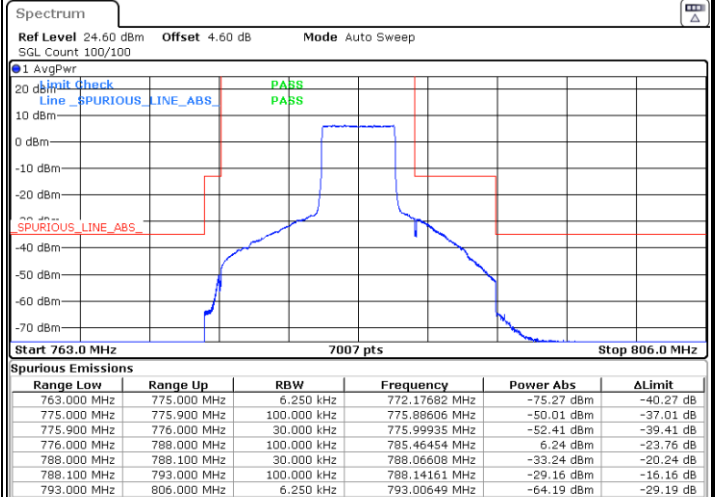
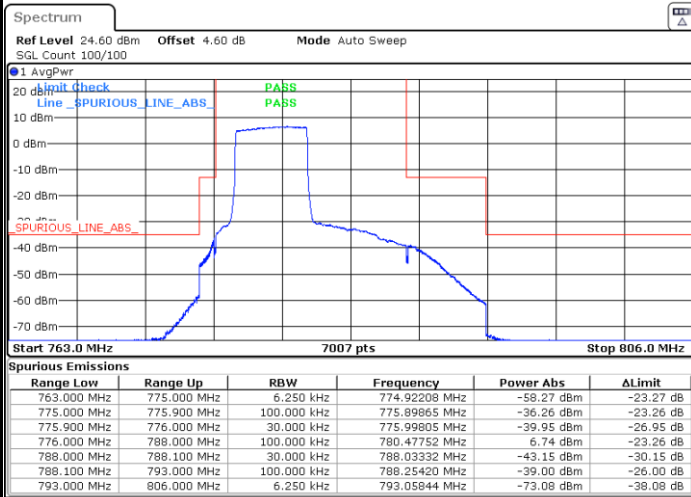


Date: 7.JUN.2020 11:43:54

Date: 7.JUN.2020 11:55:26

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 7.JUN.2020 11:38:58

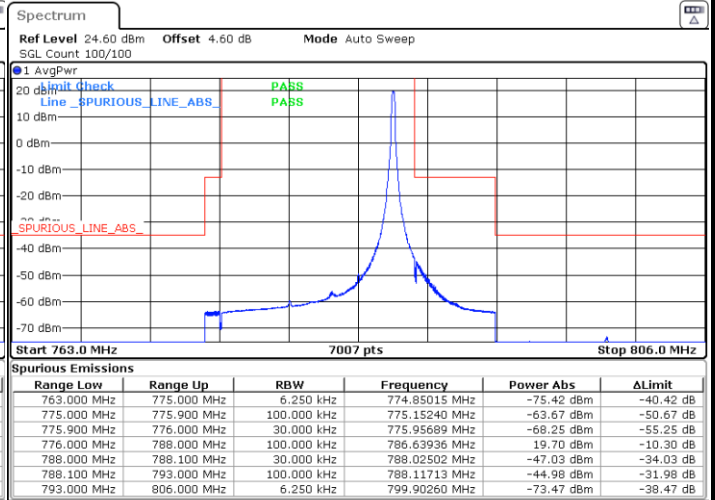
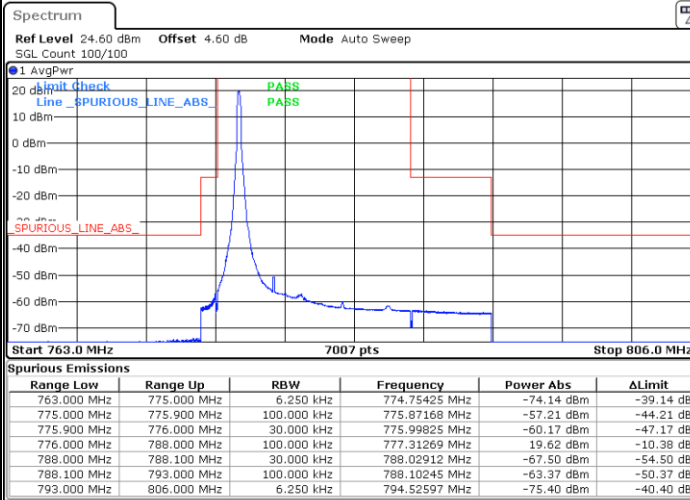
Date: 7.JUN.2020 11:50:32



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

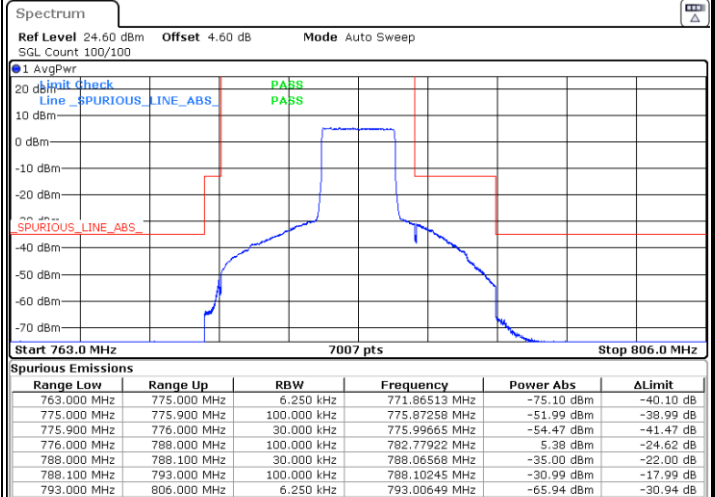
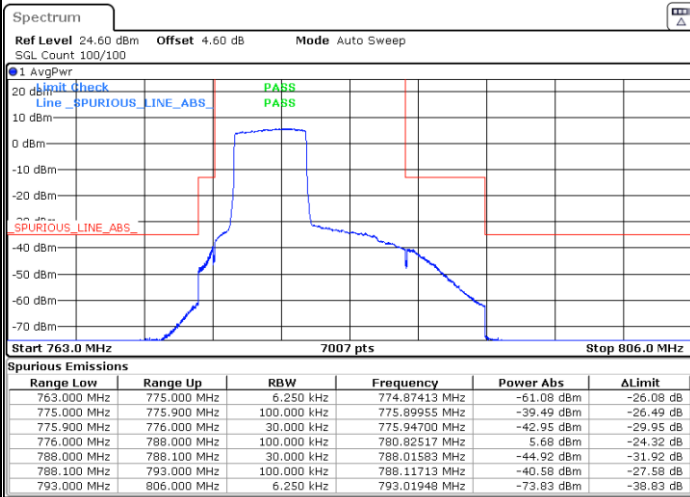


Date: 7 JUN.2020 12:13:55

Date: 7 JUN.2020 12:18:49

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 7 JUN.2020 12:15:33

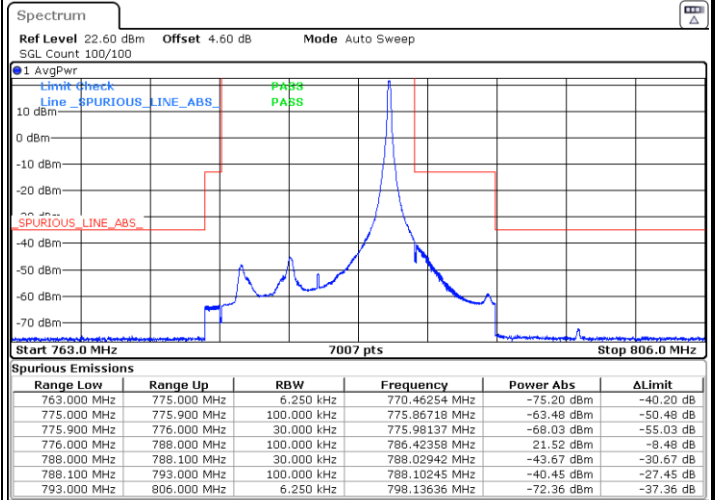
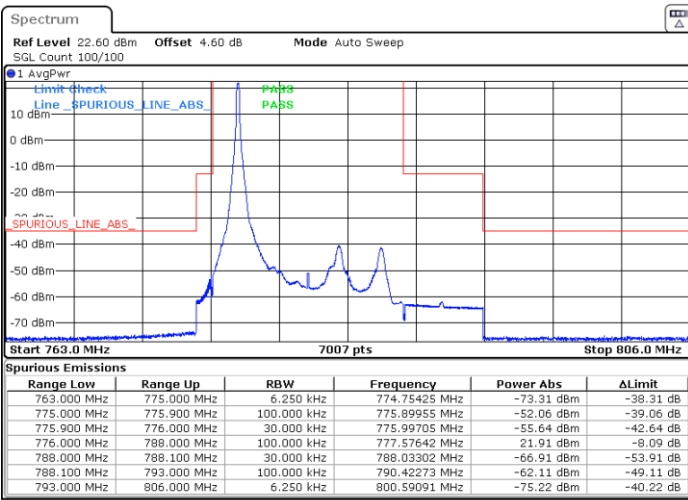
Date: 7 JUN.2020 12:17:11



LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

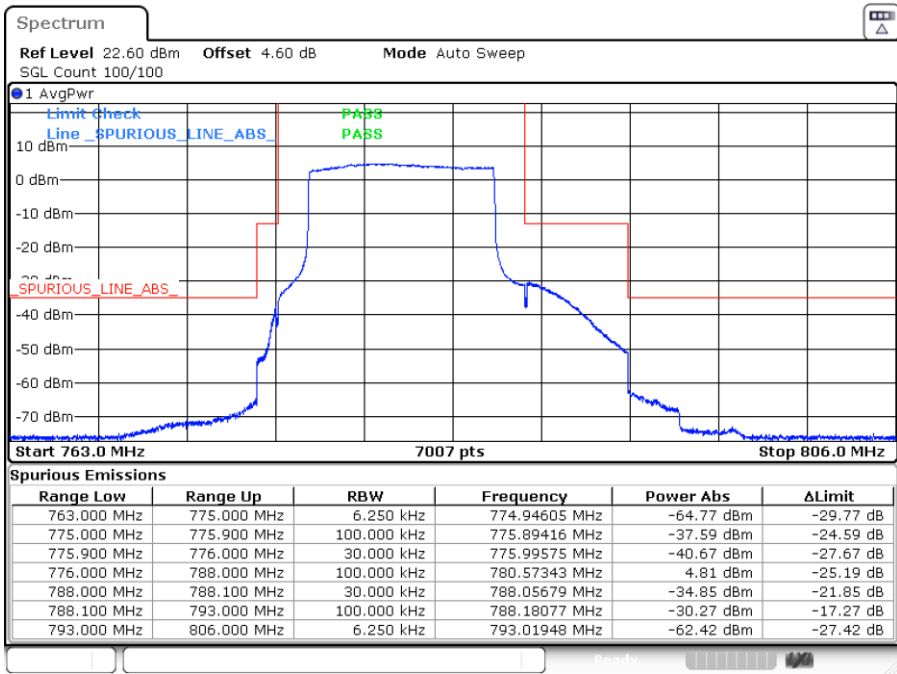
Highest Band Edge / 1 RB



Date: 7 JUN 2020 12:03:02

Date: 7 JUN 2020 12:09:32

Band Edge / Full RB

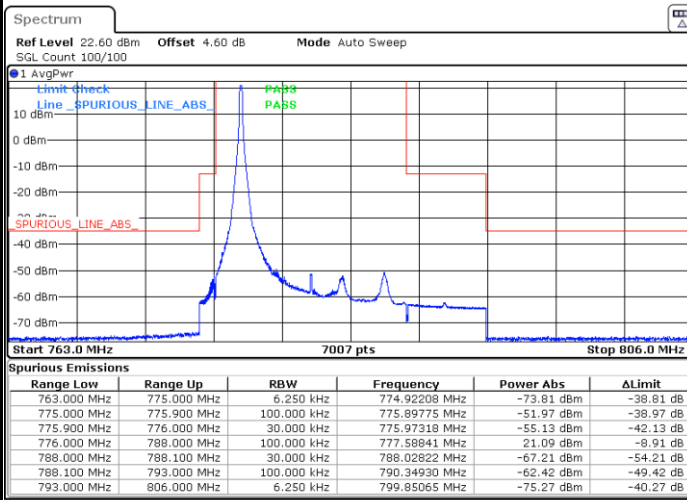


Date: 7 JUN 2020 12:04:40



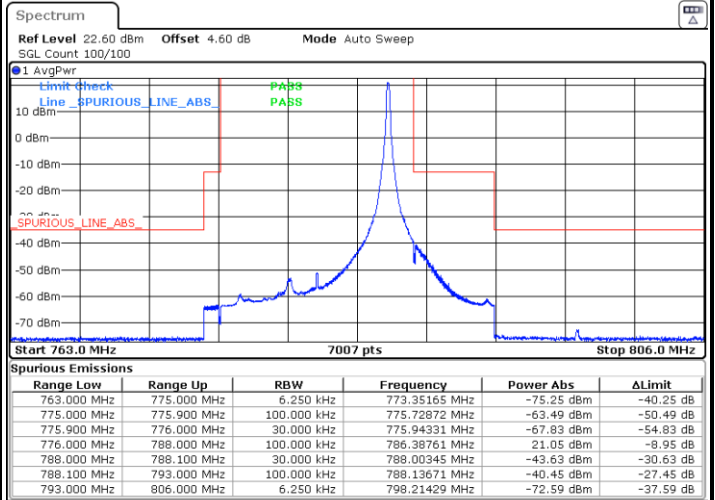
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



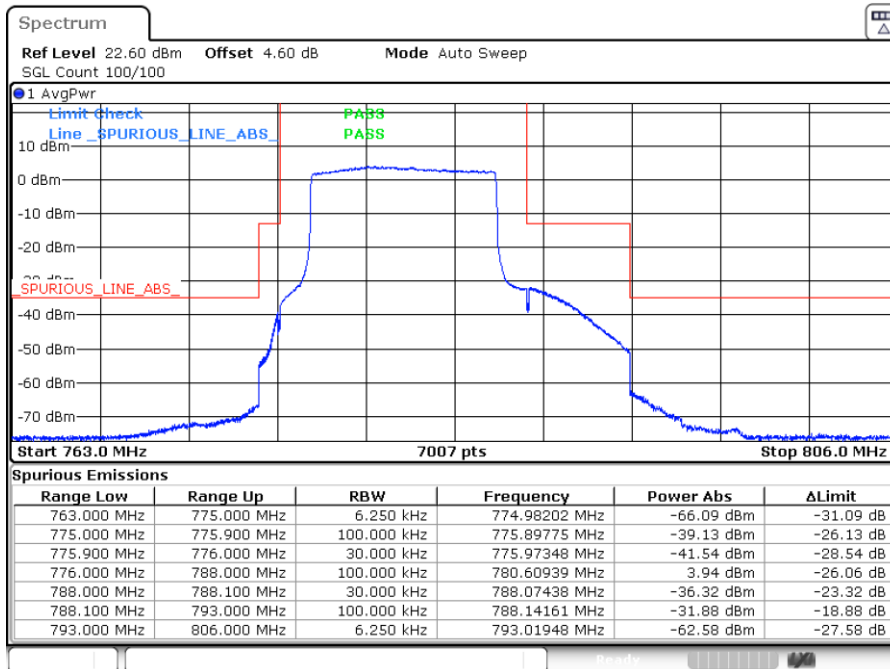
Date: 7 JUN.2020 12:01:24

Highest Band Edge / 1 RB



Date: 7 JUN.2020 12:07:55

Band Edge / Full RB

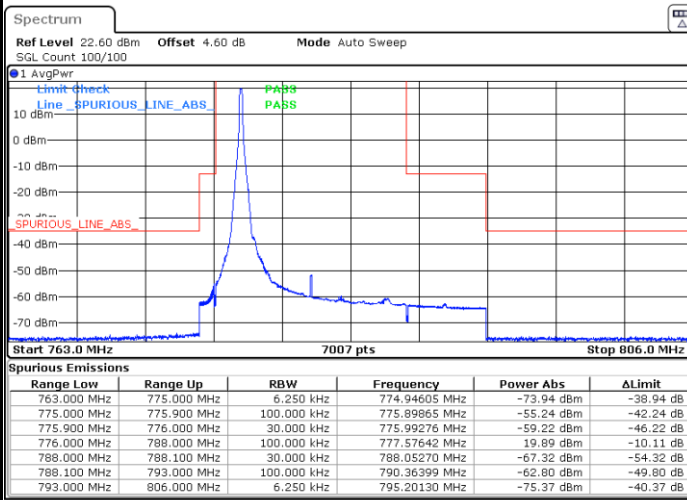


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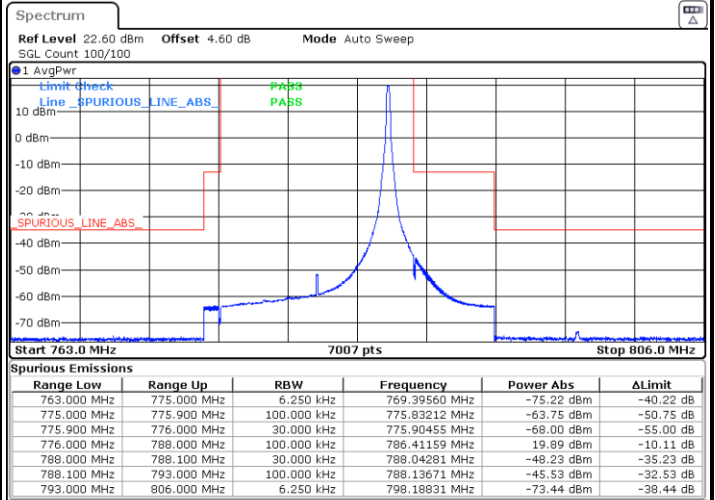
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



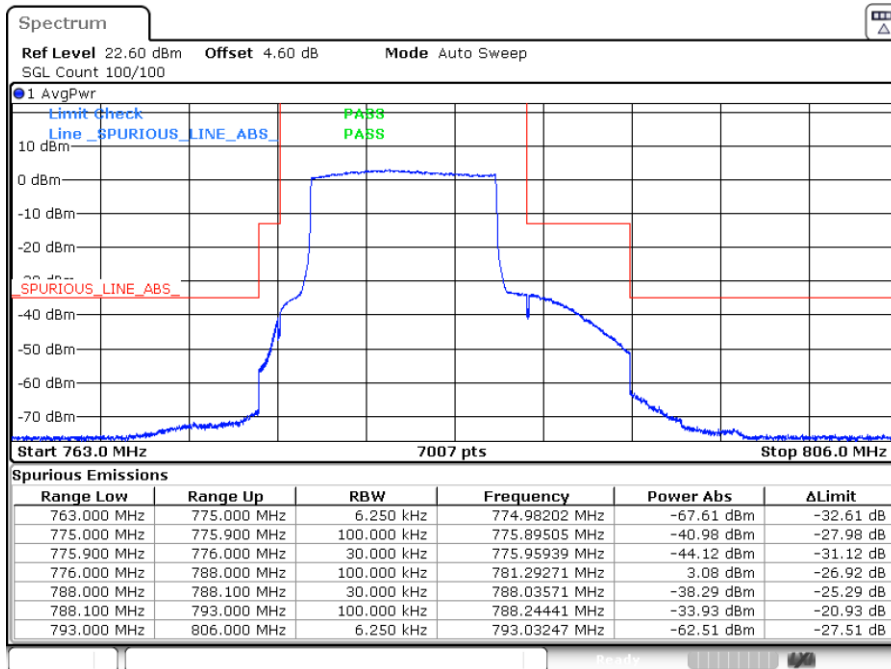
Date: 7 JUN 2020 12:23:32

Highest Band Edge / 1 RB



Date: 7 JUN 2020 12:25:10

Band Edge / Full RB



Date: 7 JUN 2020 12:26:47



Conducted Spurious Emission

