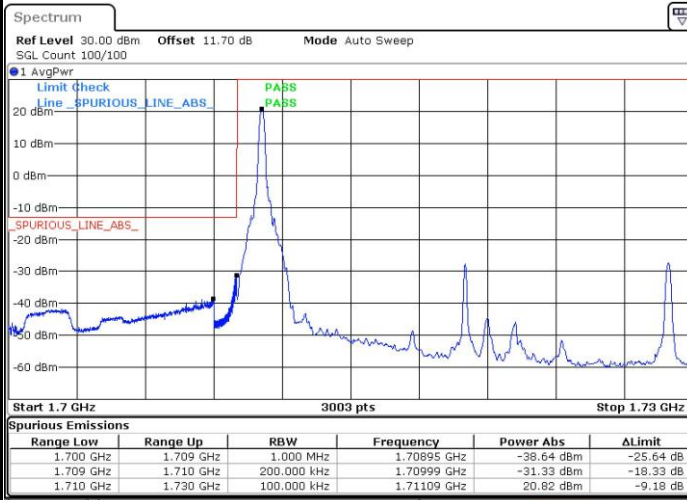




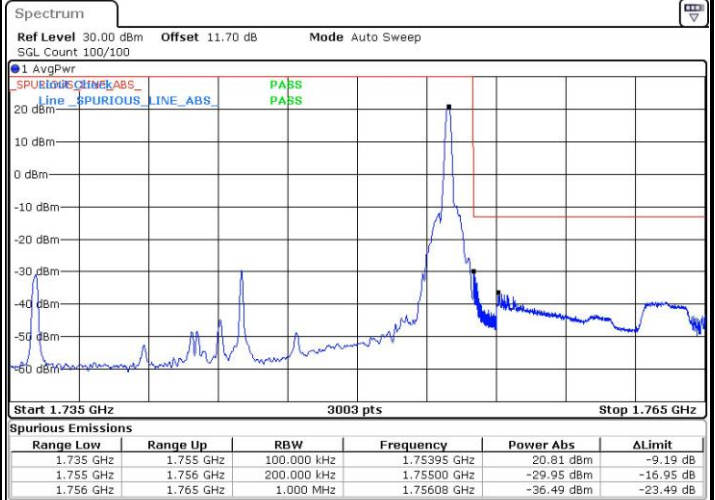
LTE Band 4 / 20MHz / QPSK

Lowest Band Edge / 1 RB



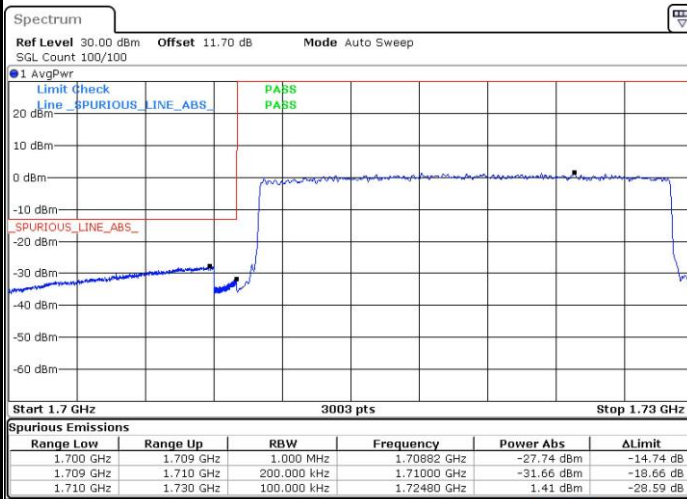
Date: 15 JUL 2018 18:00:07

Highest Band Edge / 1 RB



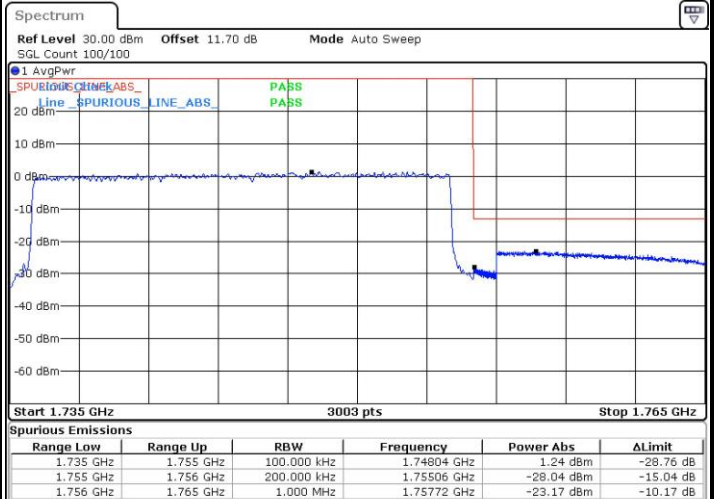
Date: 15 JUL 2018 18:11:00

Lowest Band Edge / Full RB



Date: 15 JUL 2018 18:02:27

Highest Band Edge / Full RB



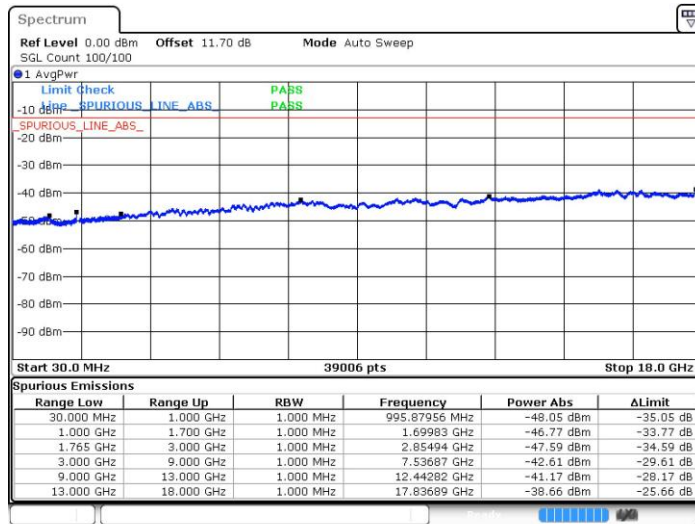
Date: 15 JUL 2018 18:13:20



Conducted Spurious Emission

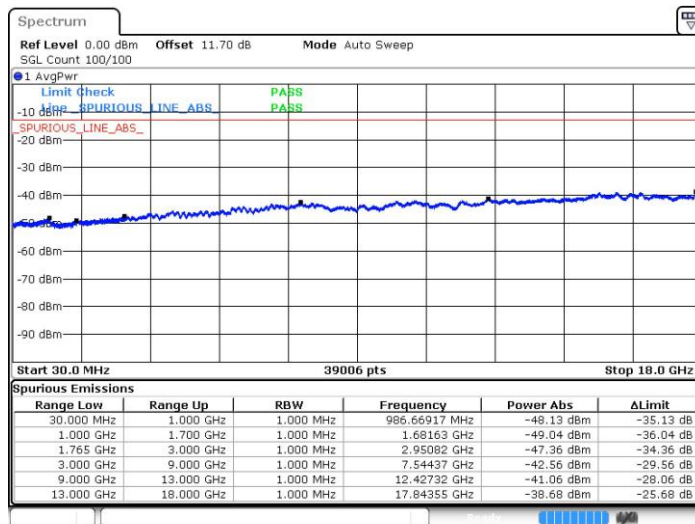
LTE Band 4 / 1.4MHz

Lowest Channel / QPSK



Date: 15 JUL 2018 17:42:36

Middle Channel / QPSK

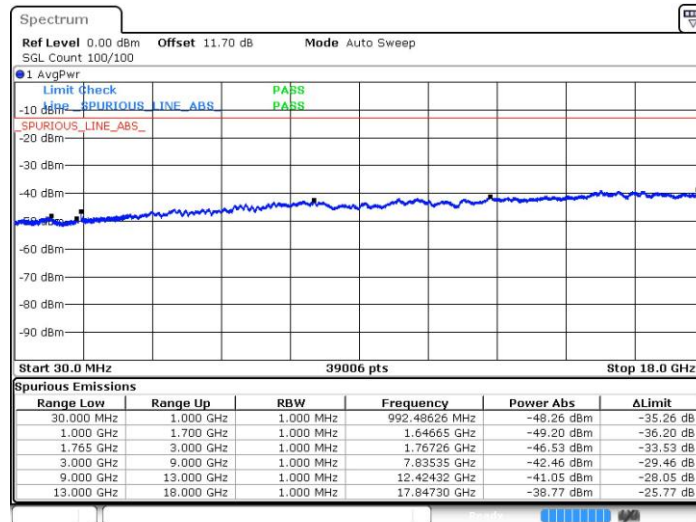


Date: 15 JUL 2018 17:45:43



LTE Band 4 / 1.4MHz

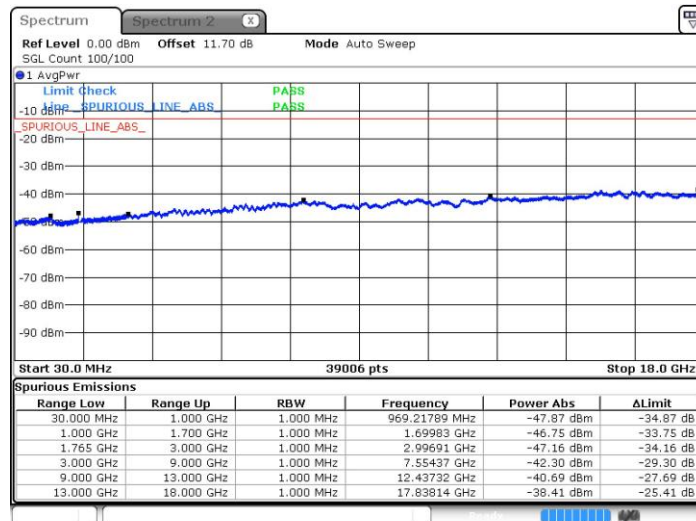
Highest Channel / QPSK



Date: 15 JUL 2018 17:53:31

LTE Band 4 / 3MHz

Lowest Channel / QPSK

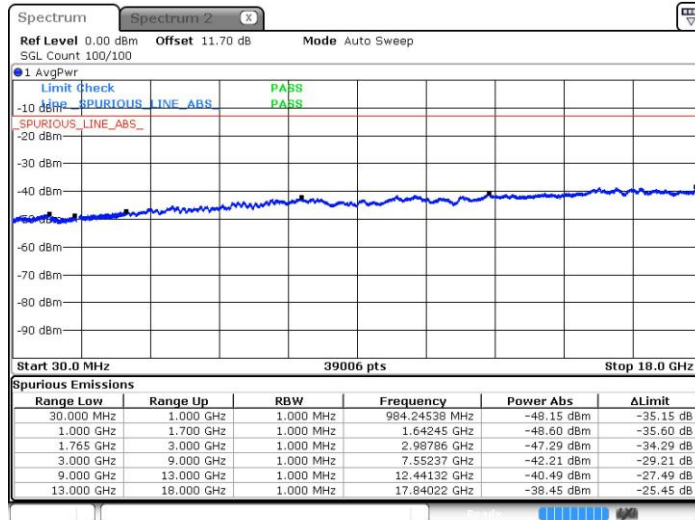


Date: 10 JUL 2018 16:49:48



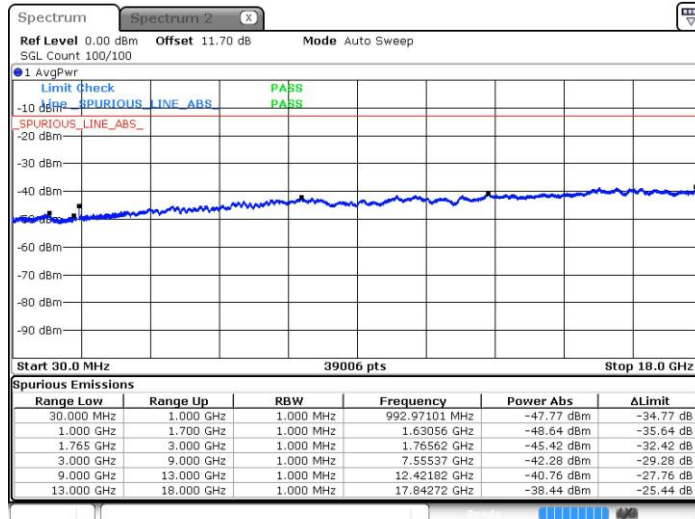
LTE Band 4 / 3MHz

Middle Channel / QPSK



Date: 10 JUL 2018 16:52:25

Highest Channel / QPSK

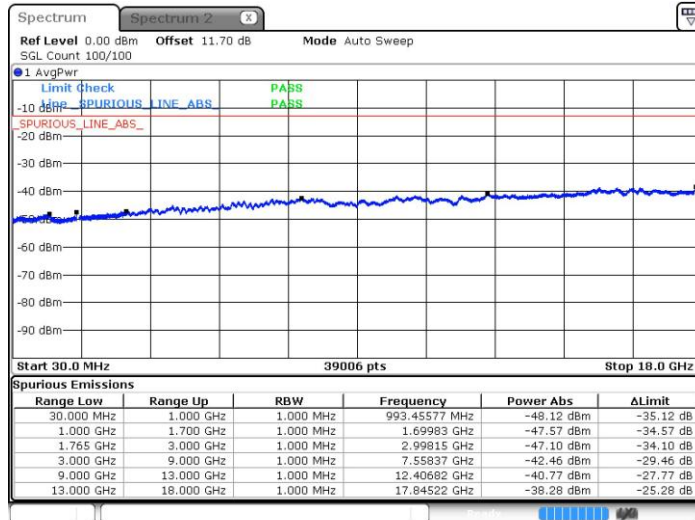


Date: 10 JUL 2018 16:59:43



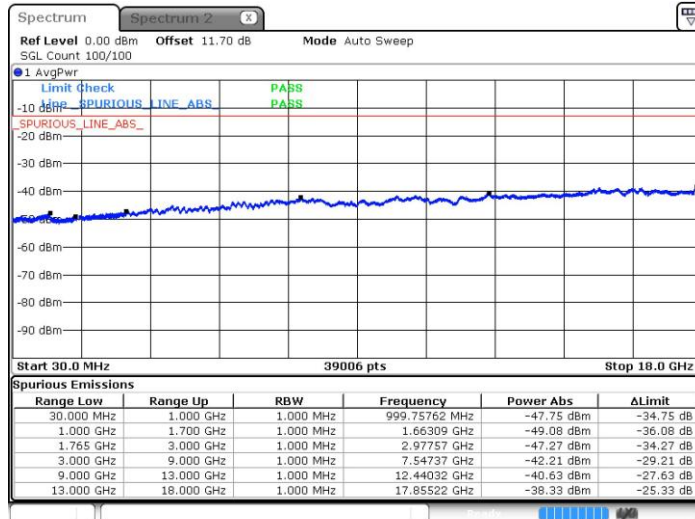
LTE Band 4 / 5MHz

Lowest Channel / QPSK



Date: 10 JUL 2018 17:07:02

Middle Channel / QPSK

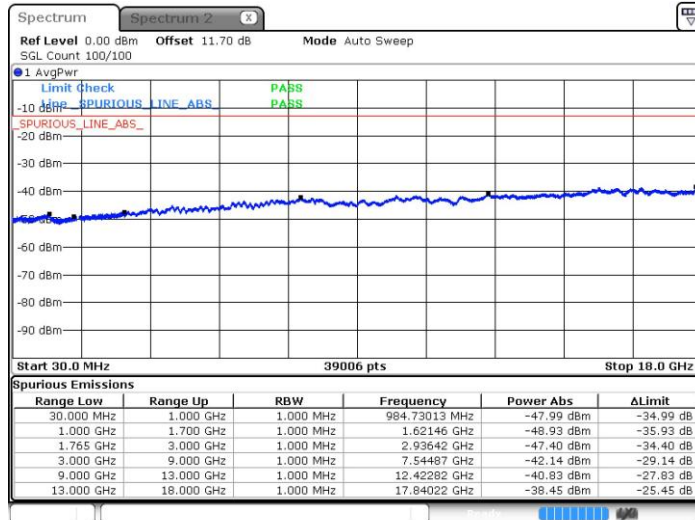


Date: 10 JUL 2018 17:09:39



LTE Band 4 / 5MHz

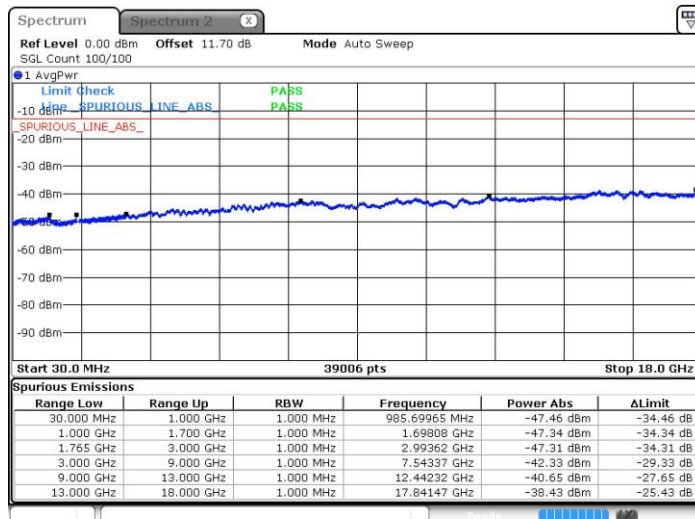
Highest Channel / QPSK



Date: 10 JUL 2018 17:16:57

LTE Band 4 / 10MHz

Lowest Channel / QPSK

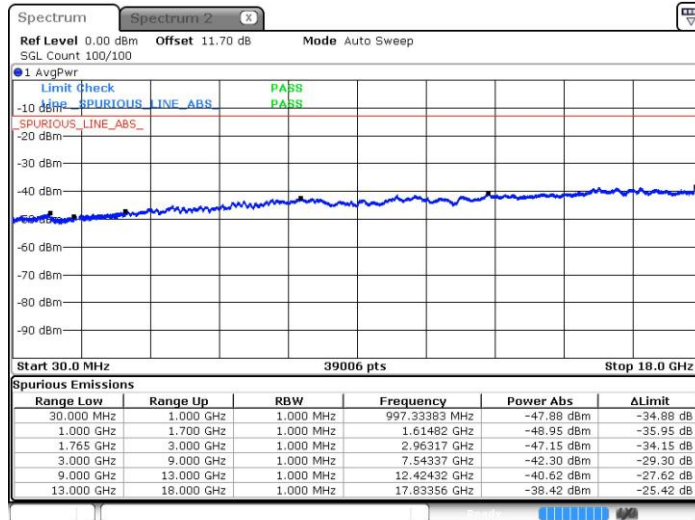


Date: 10 JUL 2018 17:24:15



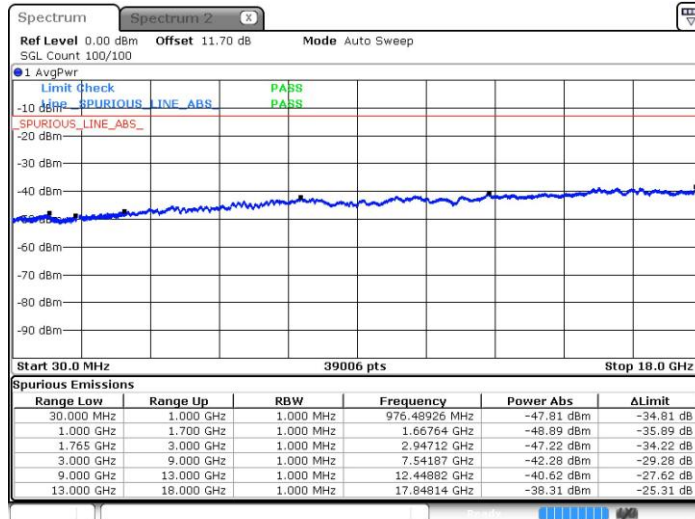
LTE Band 4 / 10MHz

Middle Channel / QPSK



Date: 10 JUL 2018 17:26:53

Highest Channel / QPSK

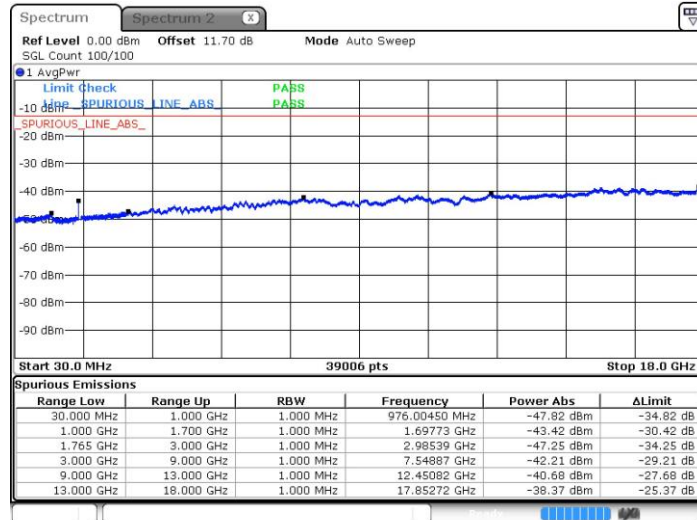


Date: 10 JUL 2018 17:34:12



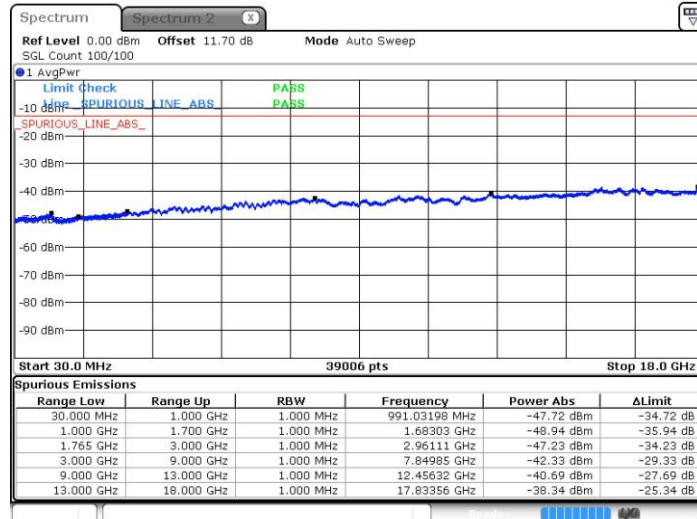
LTE Band 4 / 15MHz

Lowest Channel / QPSK



Date: 10 JUL 2018 17:41:30

Middle Channel / QPSK

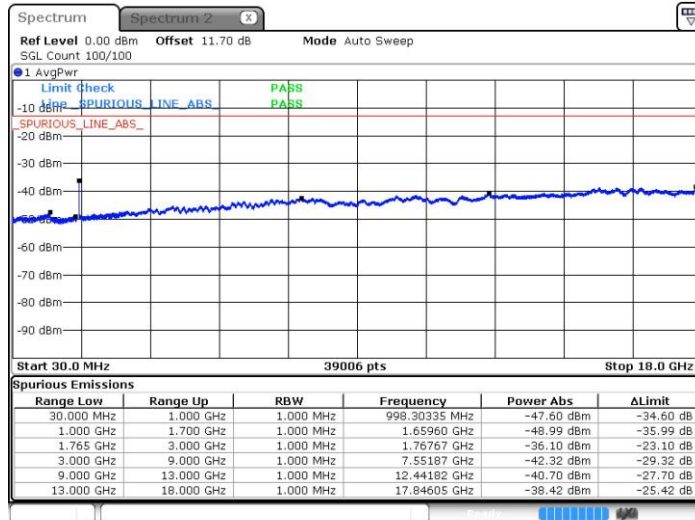


Date: 10 JUL 2018 17:44:08



LTE Band 4 / 15MHz

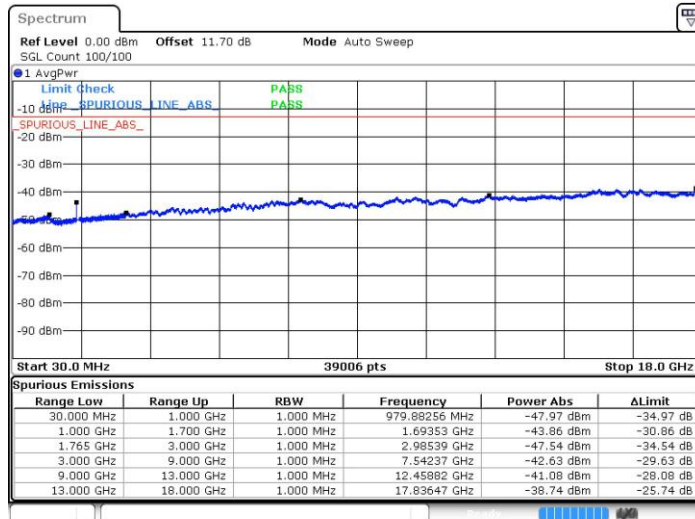
Highest Channel / QPSK



Date: 10 JUL 2018 17:51:26

LTE Band 4 / 20MHz

Lowest Channel / QPSK

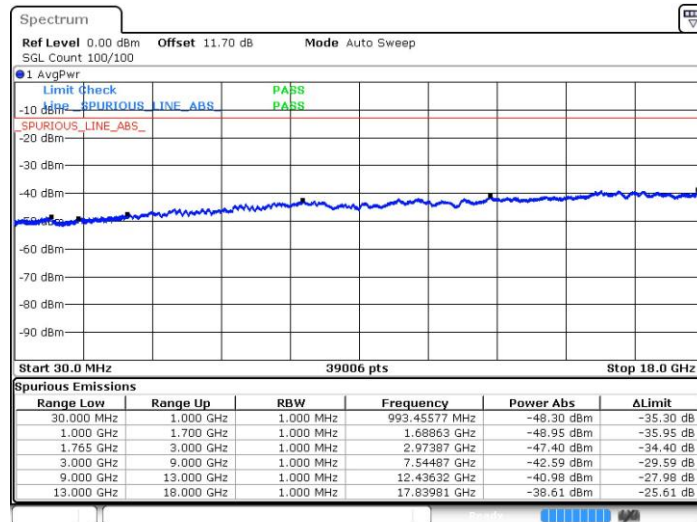


Date: 15 JUL 2018 18:04:48



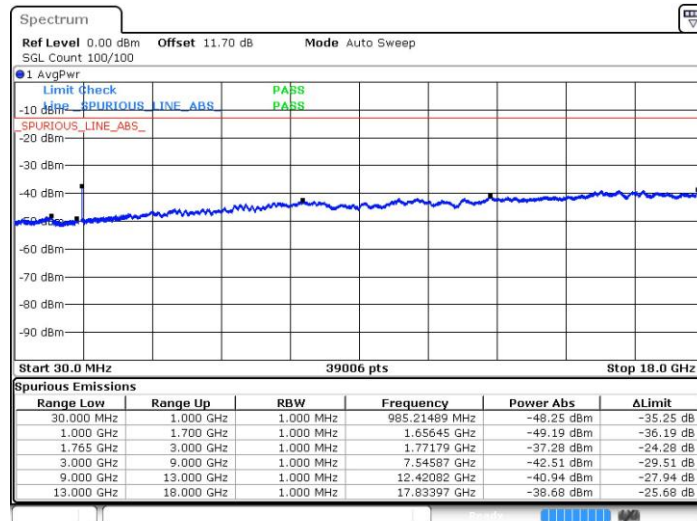
LTE Band 4 / 20MHz

Middle Channel / QPSK



Date: 15 JUL 2018 18:07:54

Highest Channel / QPSK



Date: 15 JUL 2018 18:15:41



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 | 0.0014 | PASS |
| 40 | Normal Voltage | 0.0010 | |
| 30 | Normal Voltage | 0.0004 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0027 | |
| 0 | Normal Voltage | 0.0009 | |
| -10 | Normal Voltage | 0.0008 | |
| -20 | Normal Voltage | 0.0001 | |
| -30 | Normal Voltage | 0.0003 | |
| 20 | Maximum Voltage | 0.0011 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0024 | |

Note:

1. Normal Voltage =12.0 V. ; Battery End Point (BEP) =10.8 V. ; Maximum Voltage =13.2 V.
2. Note: 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 | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | 4.20 | 4.72 | - | - | PASS |
| Middle CH | 4.12 | 4.72 | - | - | |
| Highest CH | 4.03 | 4.61 | - | - | |



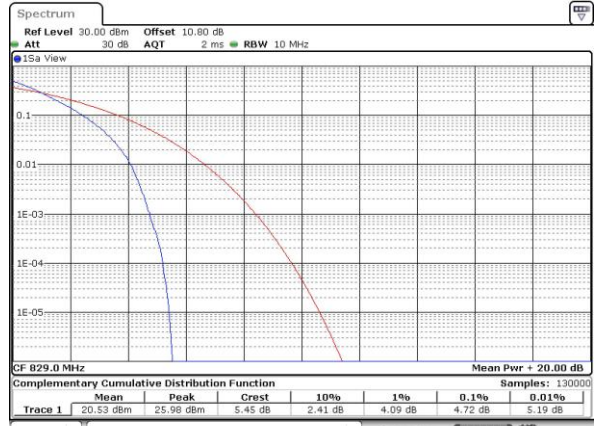
LTE Band 5 / 10MHz / QPSK

Lowest Channel / 1RB



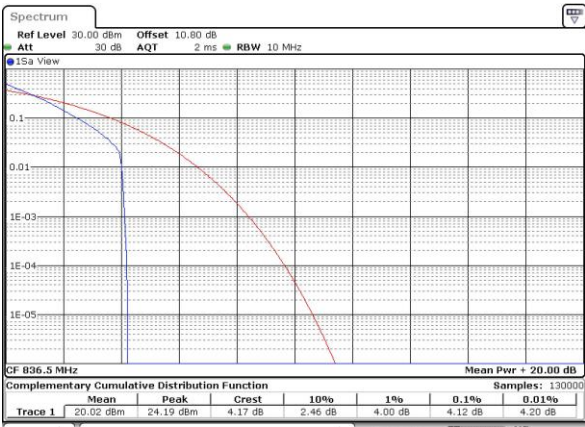
Date: 15 JUL 2018 20:04:54

Lowest Channel / Full RB



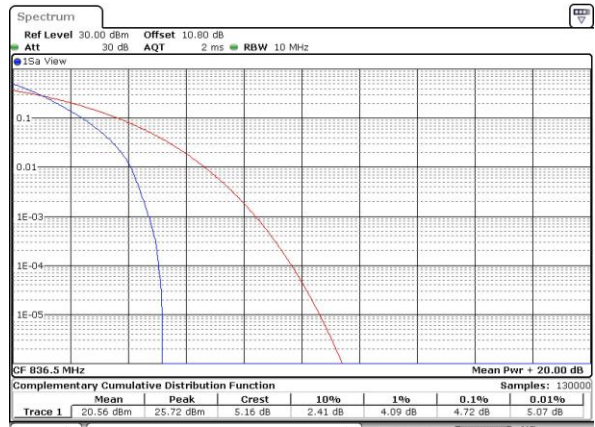
Date: 15 JUL 2018 20:05:04

Middle Channel / 1RB



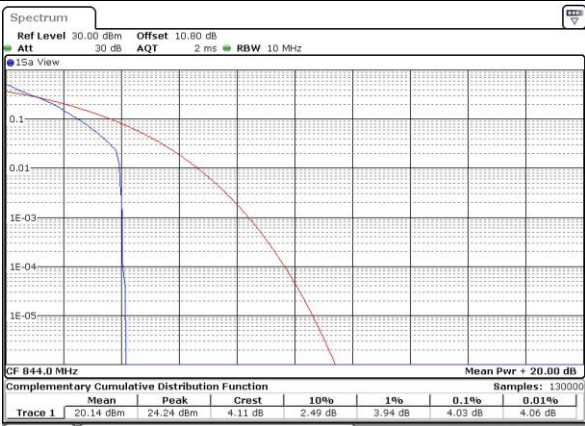
Date: 15 JUL 2018 20:05:14

Middle Channel / Full RB



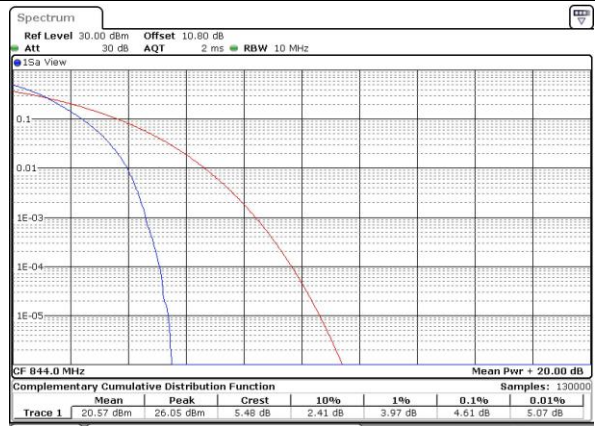
Date: 15 JUL 2018 20:05:24

Highest Channel / 1RB



Date: 15 JUL 2018 20:05:33

Highest Channel / Full RB



Date: 15 JUL 2018 20:05:43



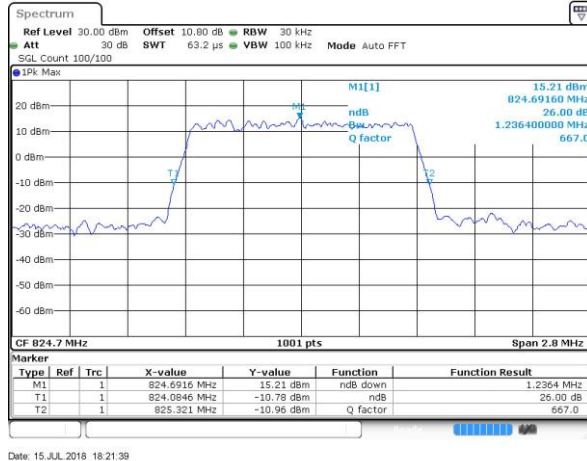
26dB Bandwidth

| Mode | LTE Band 5 : 26dB BW(MHz) | | | | | | | | | | | |
|------------|---------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| BW | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | 1.24 | - | 3.03 | - | 4.92 | - | 9.77 | - | - | - | - | - |
| Middle CH | 1.23 | - | 3.01 | - | 4.87 | - | 9.95 | - | - | - | - | - |
| Highest CH | 1.23 | - | 3.06 | - | 4.89 | - | 9.89 | - | - | - | - | - |



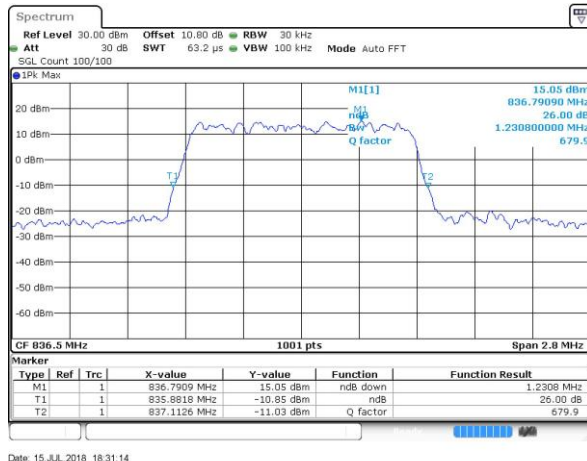
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



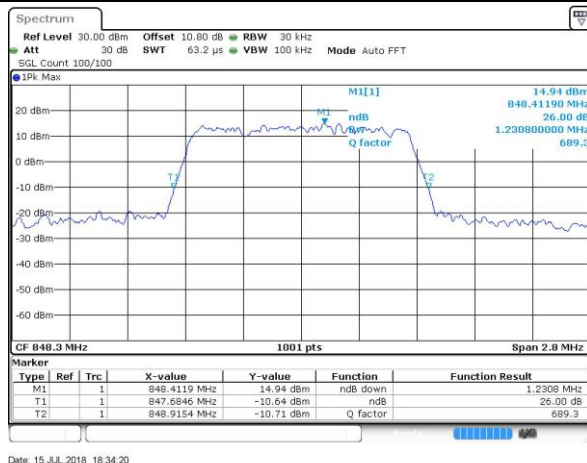
Date: 15 JUL 2018 18:21:39

Middle Channel / 1.4MHz / QPSK



Date: 15 JUL 2018 18:31:14

Highest Channel / 1.4MHz / QPSK

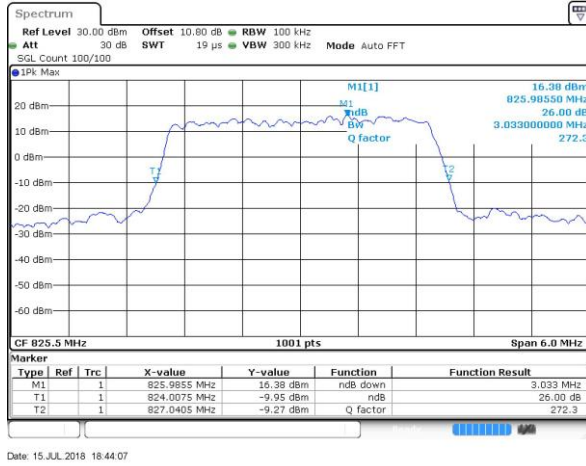


Date: 15 JUL 2018 18:34:20

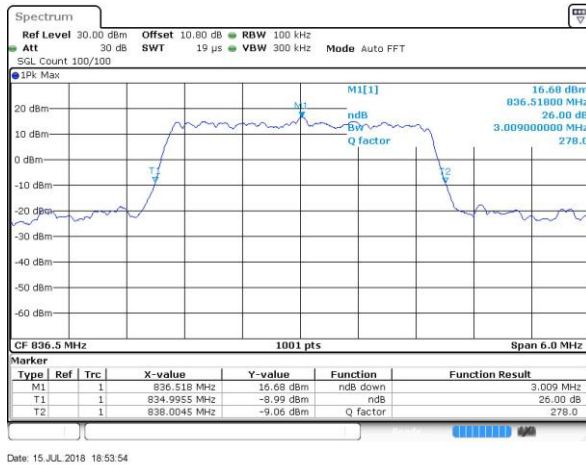


LTE Band 5

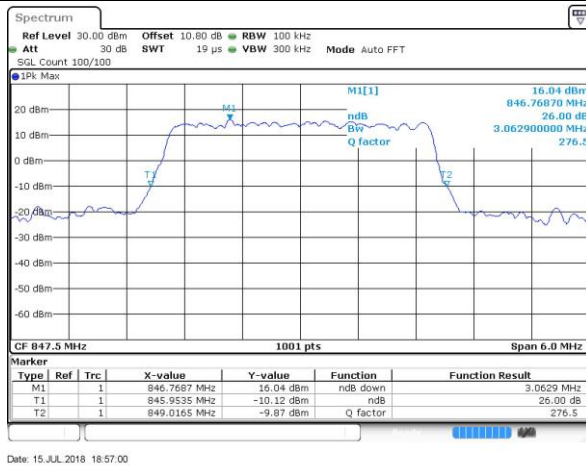
Lowest Channel / 3MHz / QPSK



Middle Channel / 3MHz / QPSK



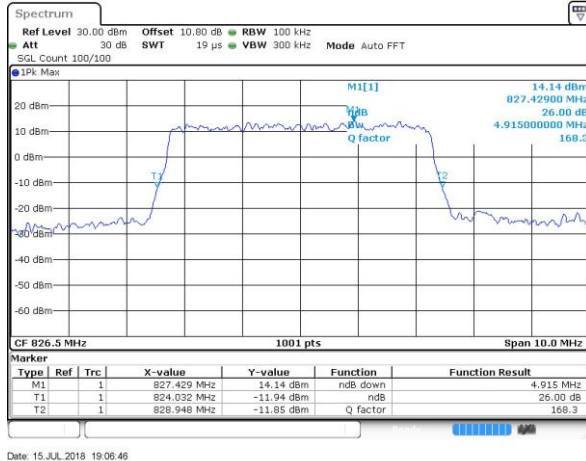
Highest Channel / 3MHz / QPSK





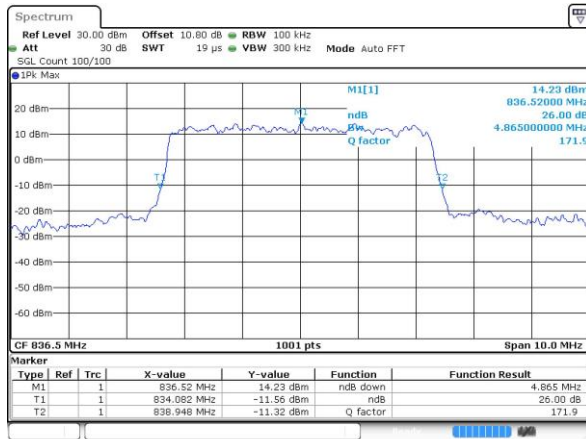
LTE Band 5

Lowest Channel / 5MHz / QPSK



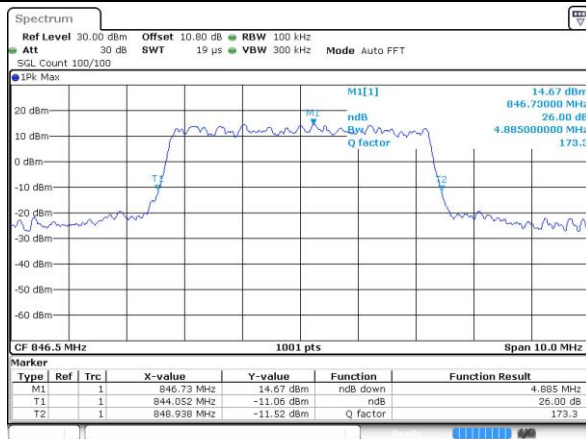
Date: 15 JUL 2018 19:06:46

Middle Channel / 5MHz / QPSK



Date: 15 JUL 2018 19:18:33

Highest Channel / 5MHz / QPSK

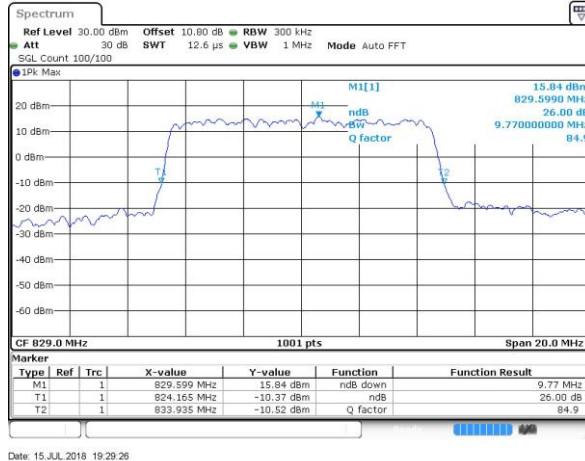


Date: 15 JUL 2018 19:19:39



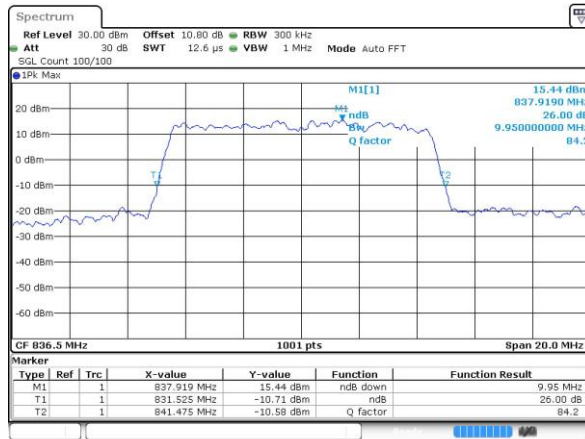
LTE Band 5

Lowest Channel / 10MHz / QPSK



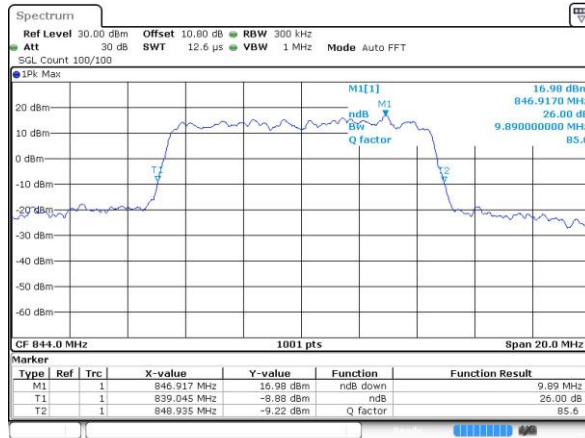
Date: 15 JUL 2018 19:29:26

Middle Channel / 10MHz / QPSK



Date: 15 JUL 2018 19:39:13

Highest Channel / 10MHz / QPSK



Date: 15 JUL 2018 19:42:19



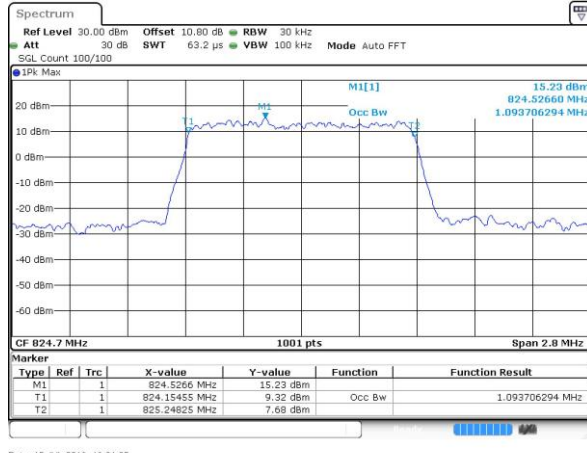
Occupied Bandwidth

| Mode | LTE Band 5 : 99%OBW(MHz) | | | | | | | | | | | |
|------------|--------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| BW | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | 1.09 | - | 2.70 | - | 4.49 | - | 9.05 | - | - | - | - | - |
| Middle CH | 1.09 | - | 2.72 | - | 4.48 | - | 9.01 | - | - | - | - | - |
| Highest CH | 1.10 | - | 2.72 | - | 4.47 | - | 9.05 | - | - | - | - | - |



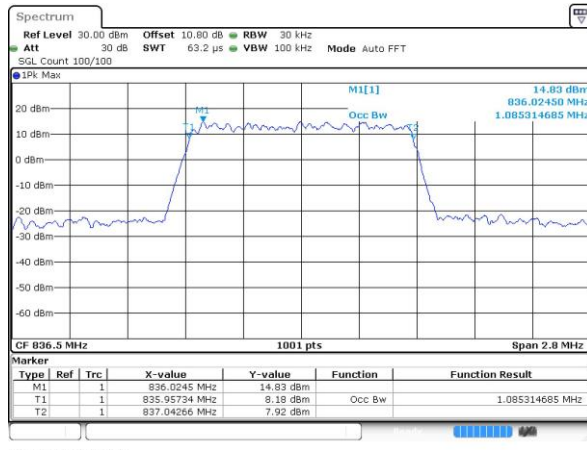
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



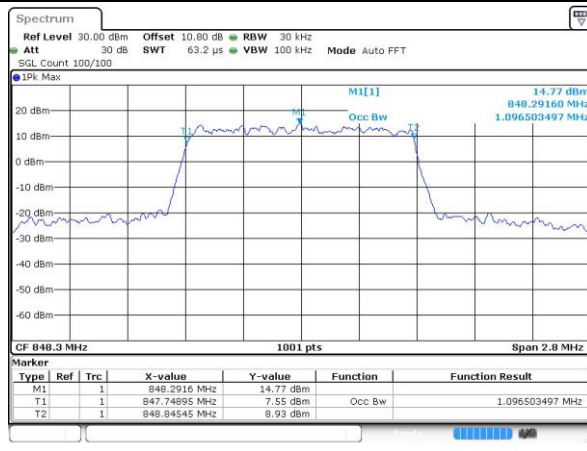
Date: 15 JUL 2018 18:21:05

Middle Channel / 1.4MHz / QPSK



Date: 15 JUL 2018 18:30:51

Highest Channel / 1.4MHz / QPSK

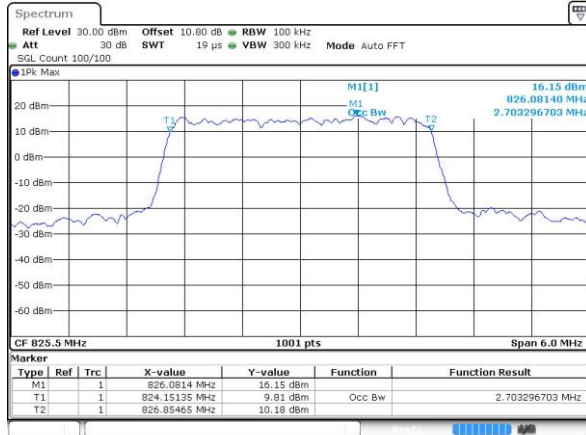


Date: 15 JUL 2018 18:33:57



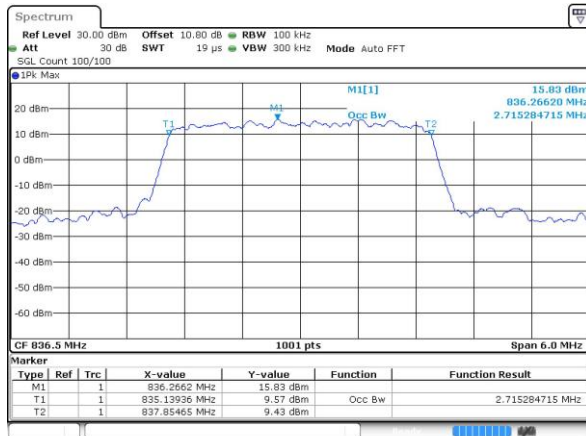
LTE Band 5

Lowest Channel / 3MHz / QPSK



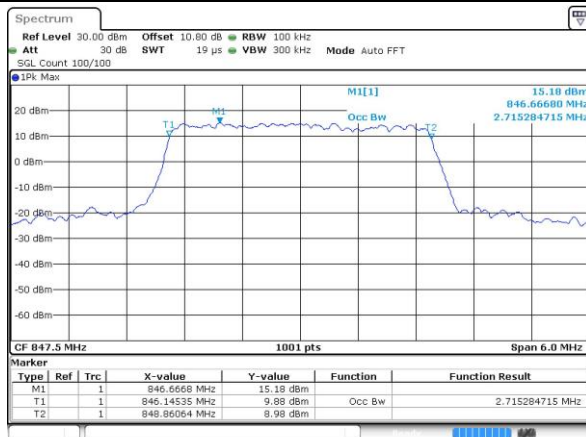
Date: 15 JUL 2018 18:43:44

Middle Channel / 3MHz / QPSK



Date: 15 JUL 2018 18:53:31

Highest Channel / 3MHz / QPSK

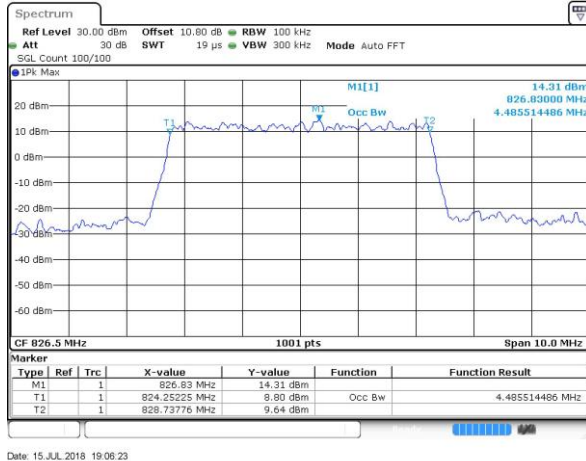


Date: 15 JUL 2018 18:56:37

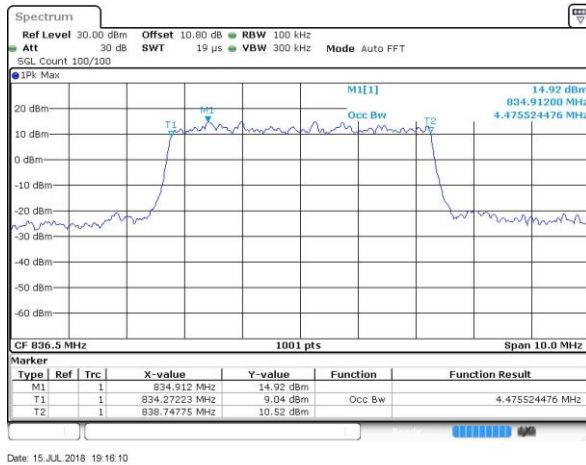


LTE Band 5

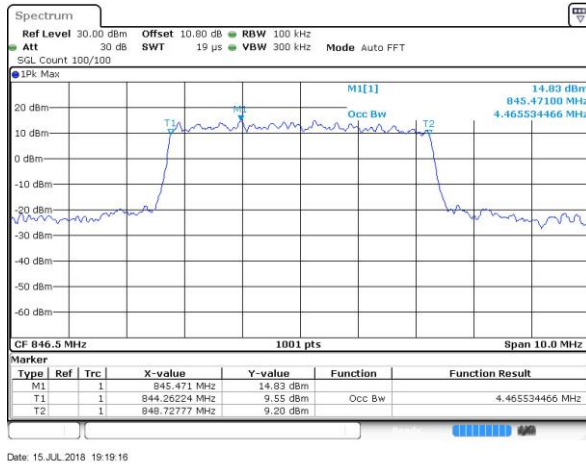
Lowest Channel / 5MHz / QPSK



Middle Channel / 5MHz / QPSK



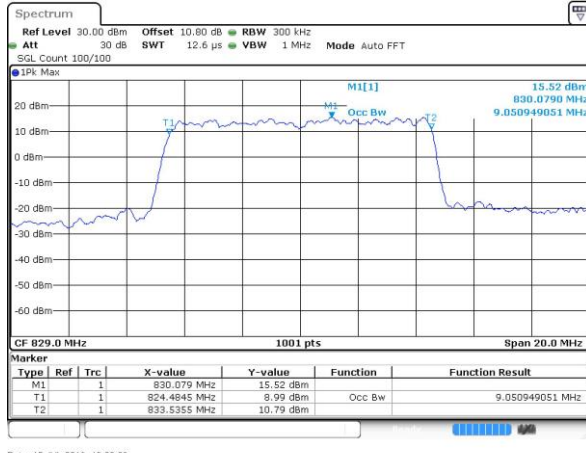
Highest Channel / 5MHz / QPSK





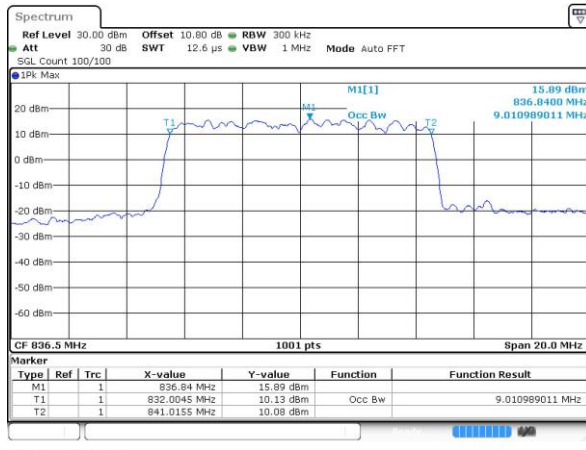
LTE Band 5

Lowest Channel / 10MHz / QPSK



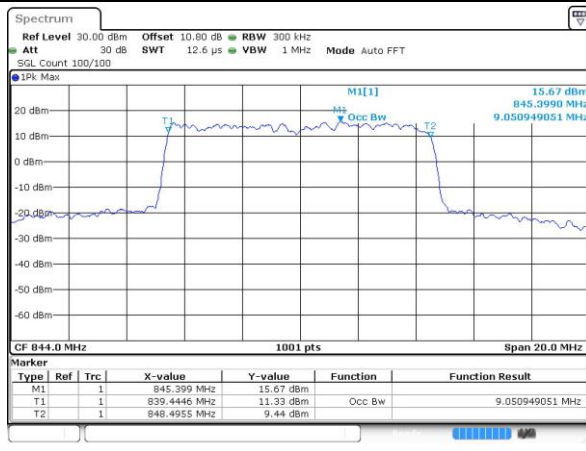
Date: 15 JUL 2018 19:29:03

Middle Channel / 10MHz / QPSK



Date: 15 JUL 2018 19:38:50

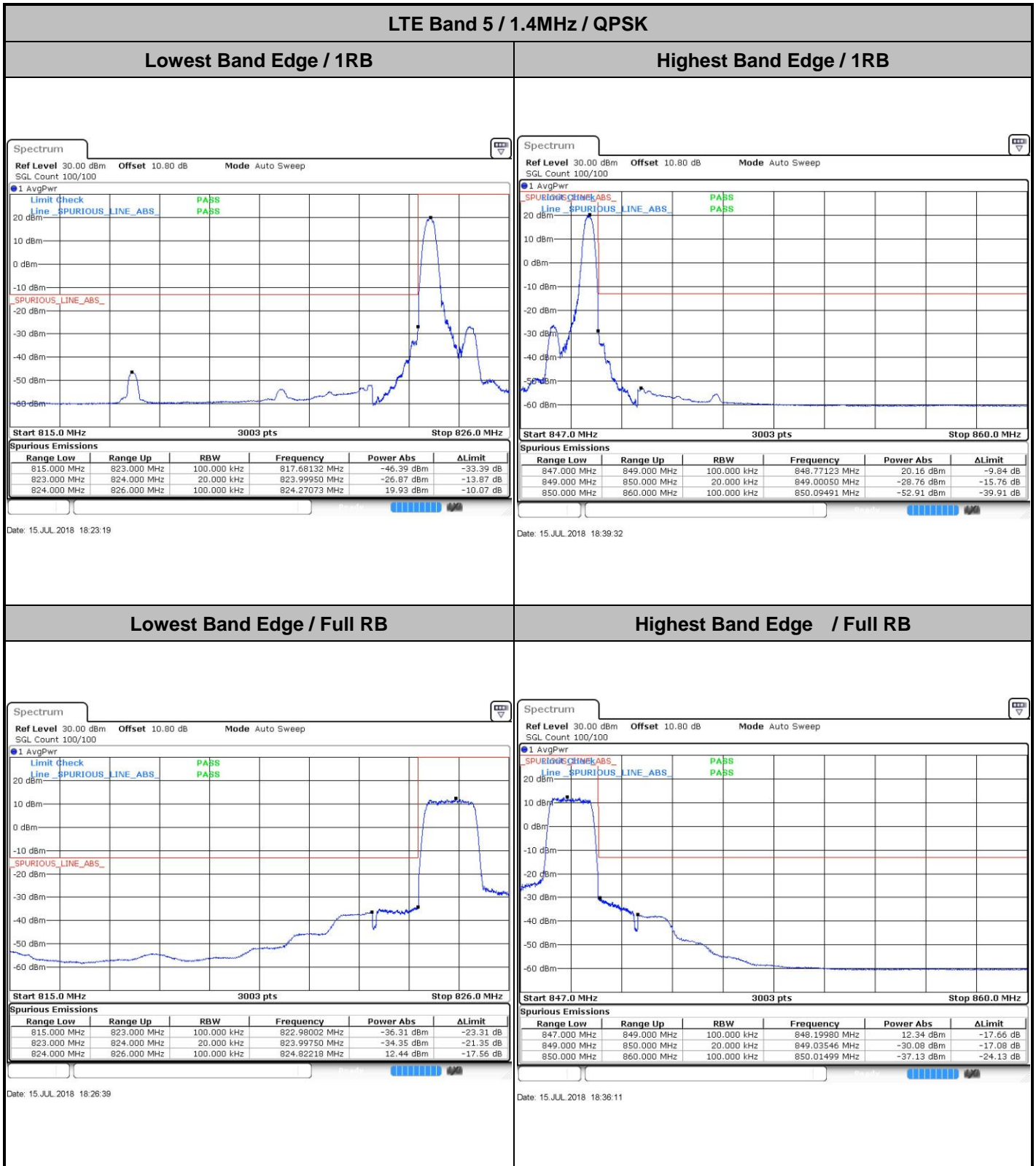
Highest Channel / 10MHz / QPSK



Date: 15 JUL 2018 19:41:56



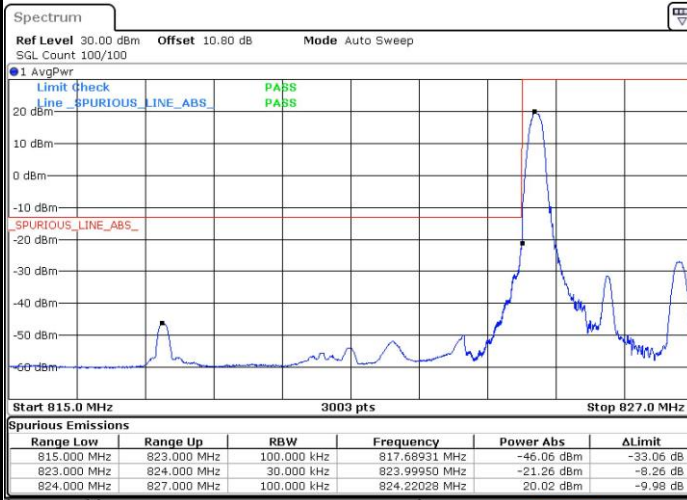
Conducted Band Edge





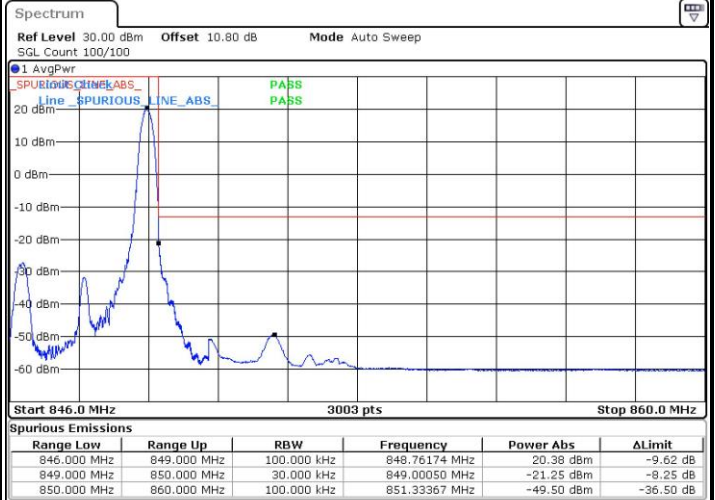
LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



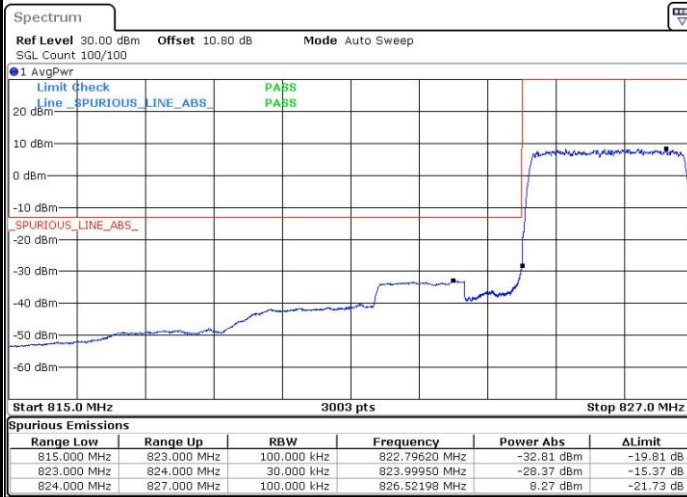
Date: 15 JUL 2018 18:45:58

Highest Band Edge / 1 RB



Date: 15 JUL 2018 18:58:51

Lowest Band Edge / Full RB



Date: 15 JUL 2018 18:49:18

Highest Band Edge / Full RB

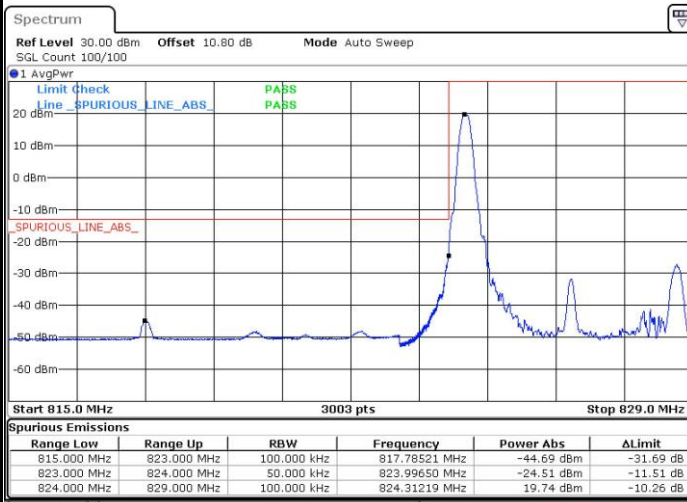


Date: 15 JUL 2018 19:02:11



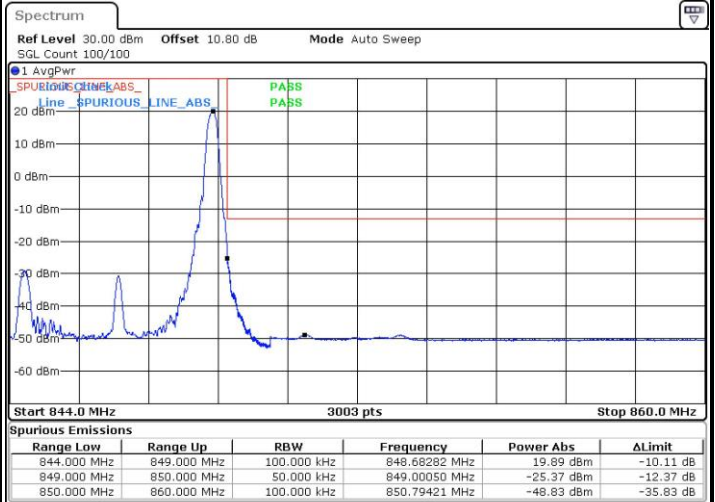
LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



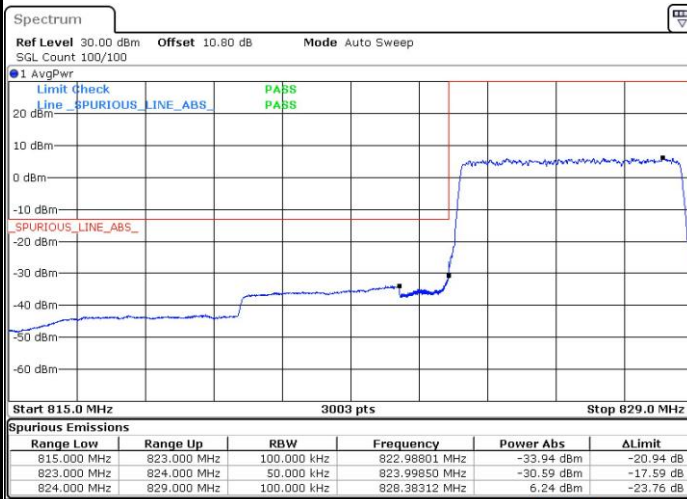
Date: 15 JUL 2018 19:08:38

Highest Band Edge / 1 RB



Date: 15 JUL 2018 19:21:30

Lowest Band Edge / Full RB



Date: 15 JUL 2018 19:11:58

Highest Band Edge / Full RB

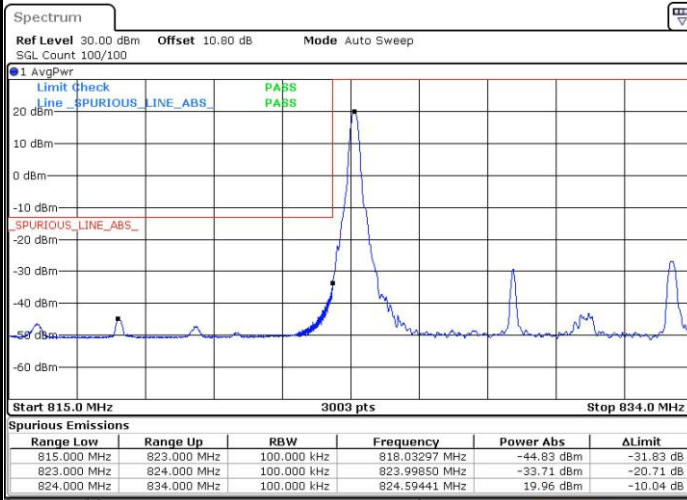


Date: 15 JUL 2018 19:24:51



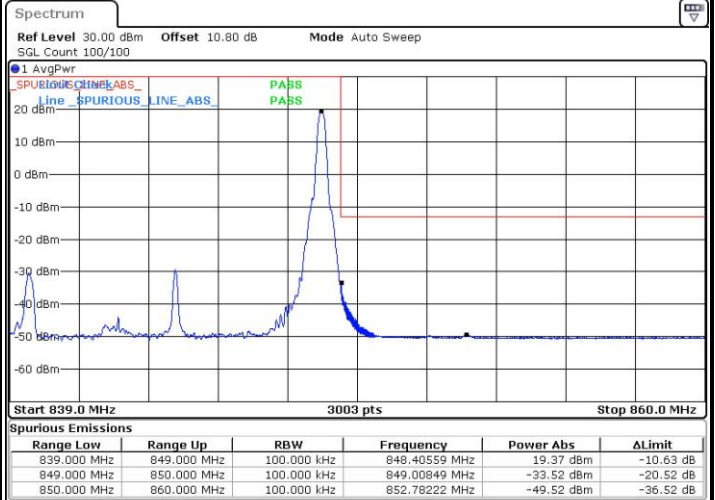
LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / 1 RB



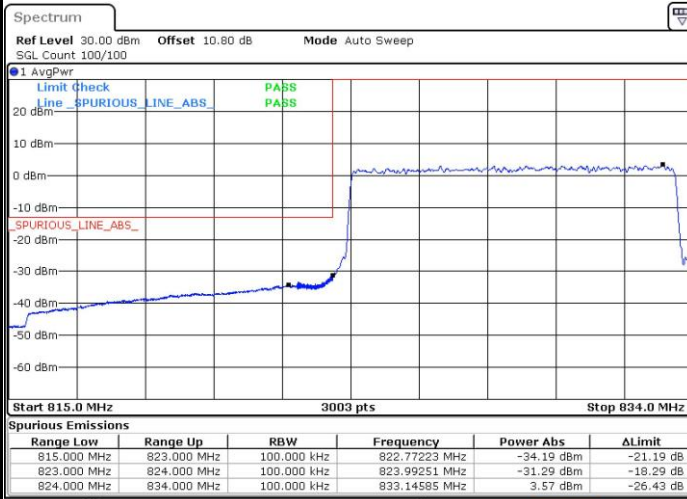
Date: 15 JUL 2018 19:31:17

Highest Band Edge / 1 RB



Date: 15 JUL 2018 19:44:10

Lowest Band Edge / Full RB



Date: 15 JUL 2018 19:34:37

Highest Band Edge / Full RB



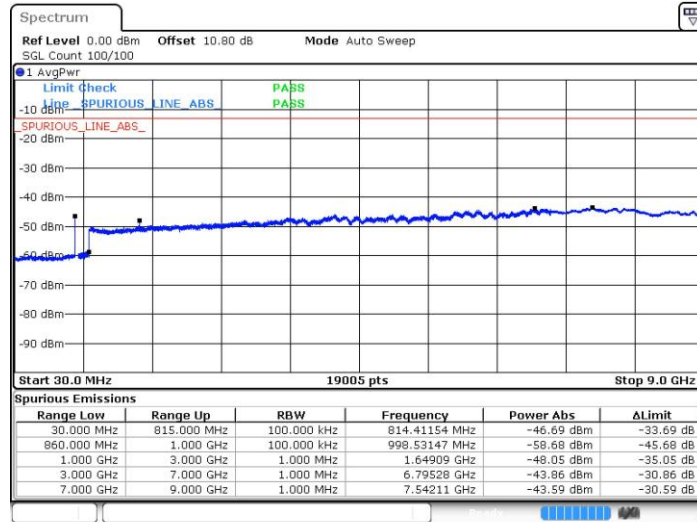
Date: 15 JUL 2018 19:47:30



Conducted Spurious Emission

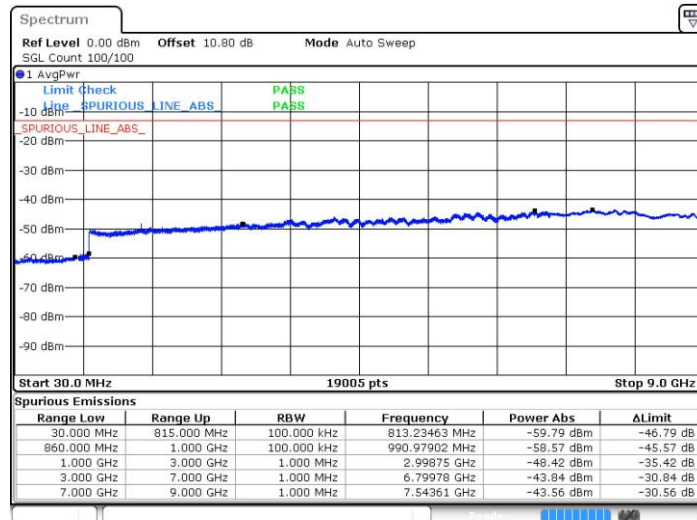
LTE Band 5 / 1.4MHz

Lowest Channel / QPSK



Date: 15 JUL 2018 18:29:30

Middle Channel / QPSK

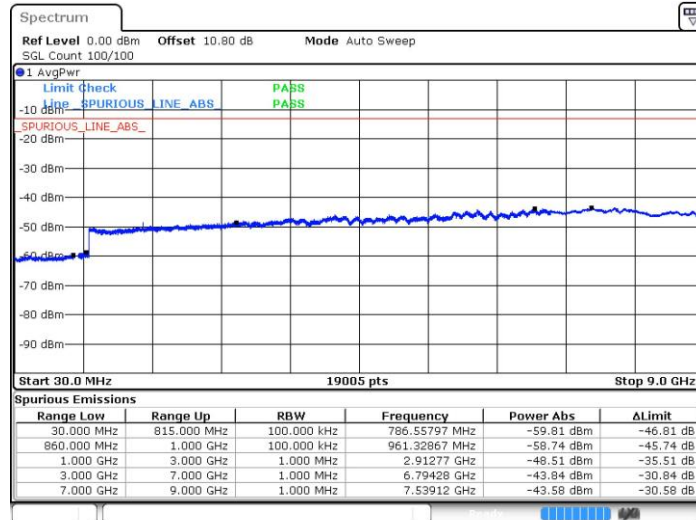


Date: 15 JUL 2018 18:32:36



LTE Band 5 / 1.4MHz

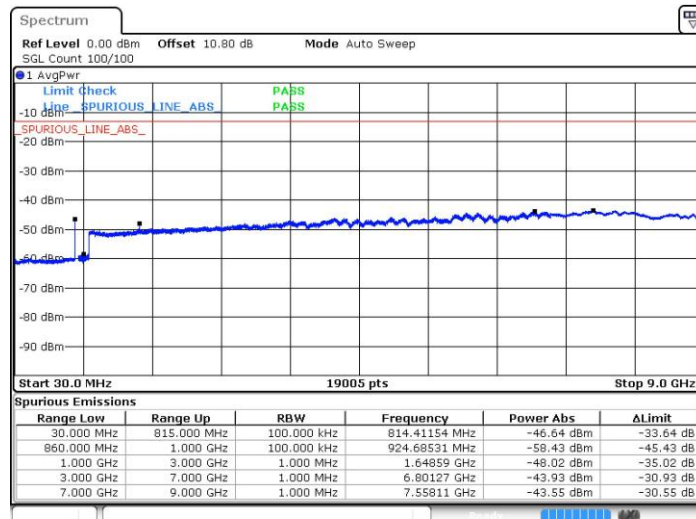
Highest Channel / QPSK



Date: 15 JUL 2018 18:42:23

LTE Band 5 / 3MHz

Lowest Channel / QPSK

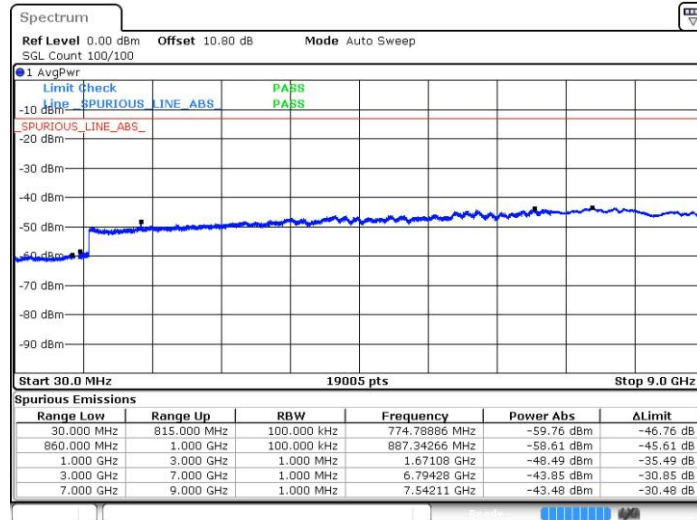


Date: 15 JUL 2018 18:52:09



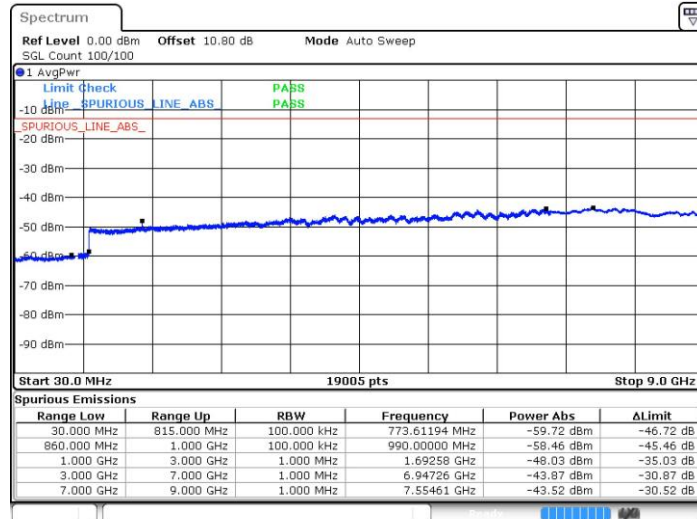
LTE Band 5 / 3MHz

Middle Channel / QPSK



Date: 15 JUL 2018 18:55:15

Highest Channel / QPSK



Date: 15 JUL 2018 19:05:02