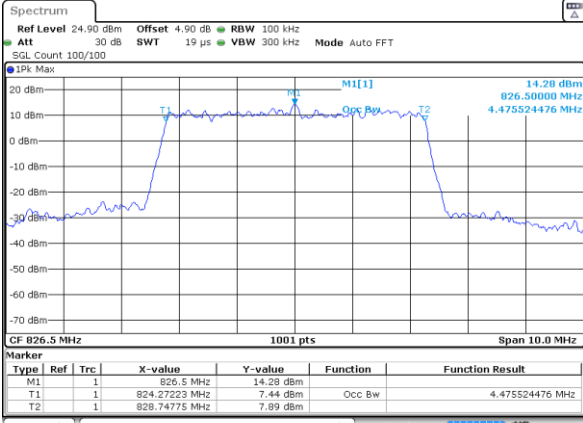




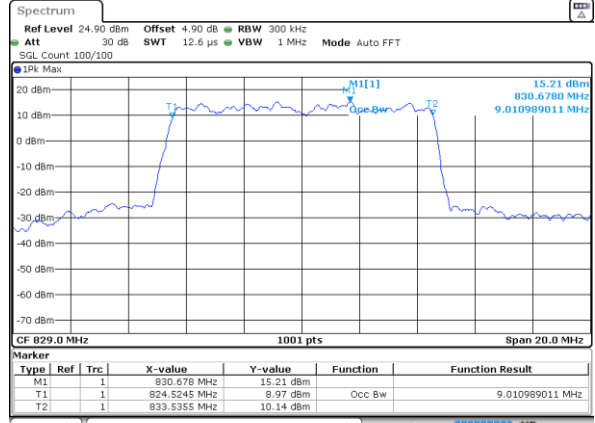
LTE Band 5

Lowest Channel / 5MHz / 64QAM



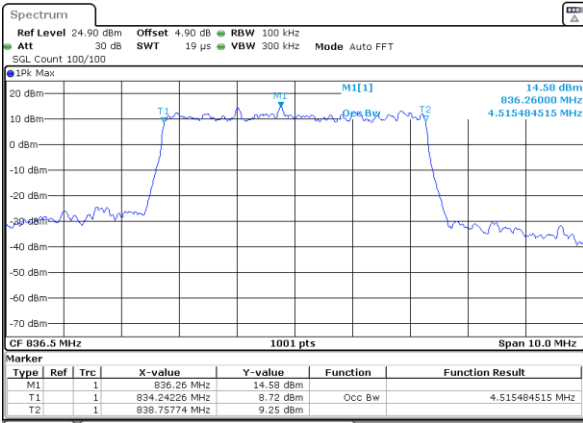
Date: 8 NOV 2019 13:27:53

Lowest Channel / 10MHz / 64QAM



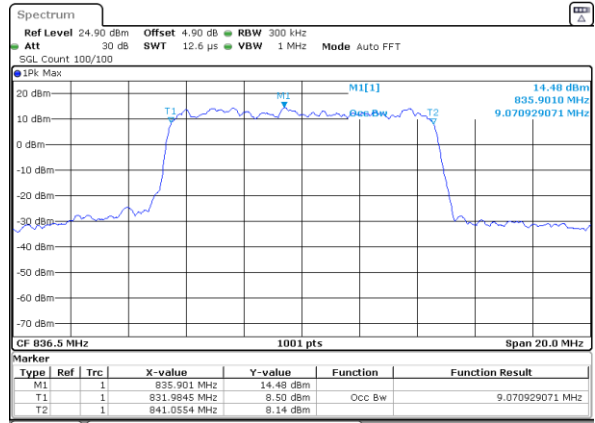
Date: 8 NOV 2019 13:38:06

Middle Channel / 5MHz / 64QAM



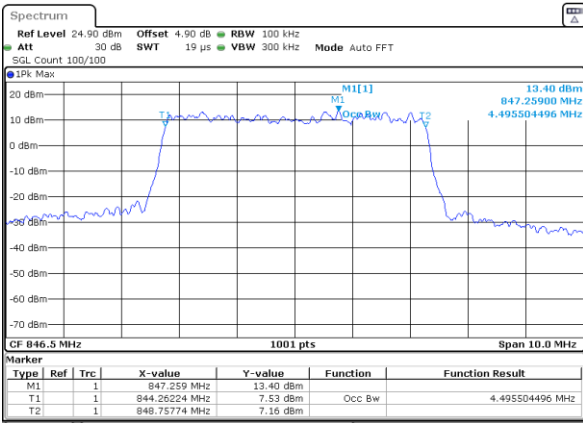
Date: 8 NOV 2019 13:33:16

Middle Channel / 10MHz / 64QAM



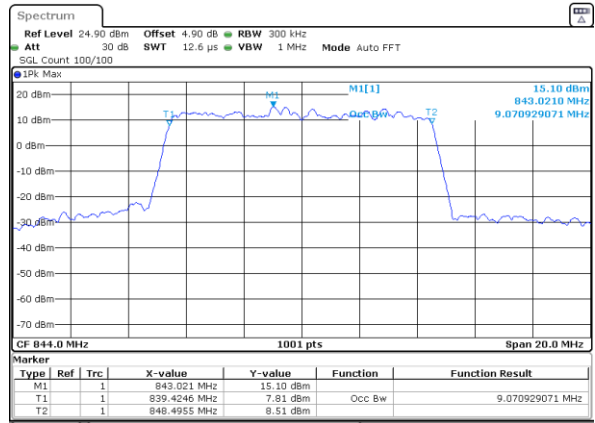
Date: 8 NOV 2019 13:43:29

Highest Channel / 5MHz / 64QAM



Date: 8 NOV 2019 13:33:37

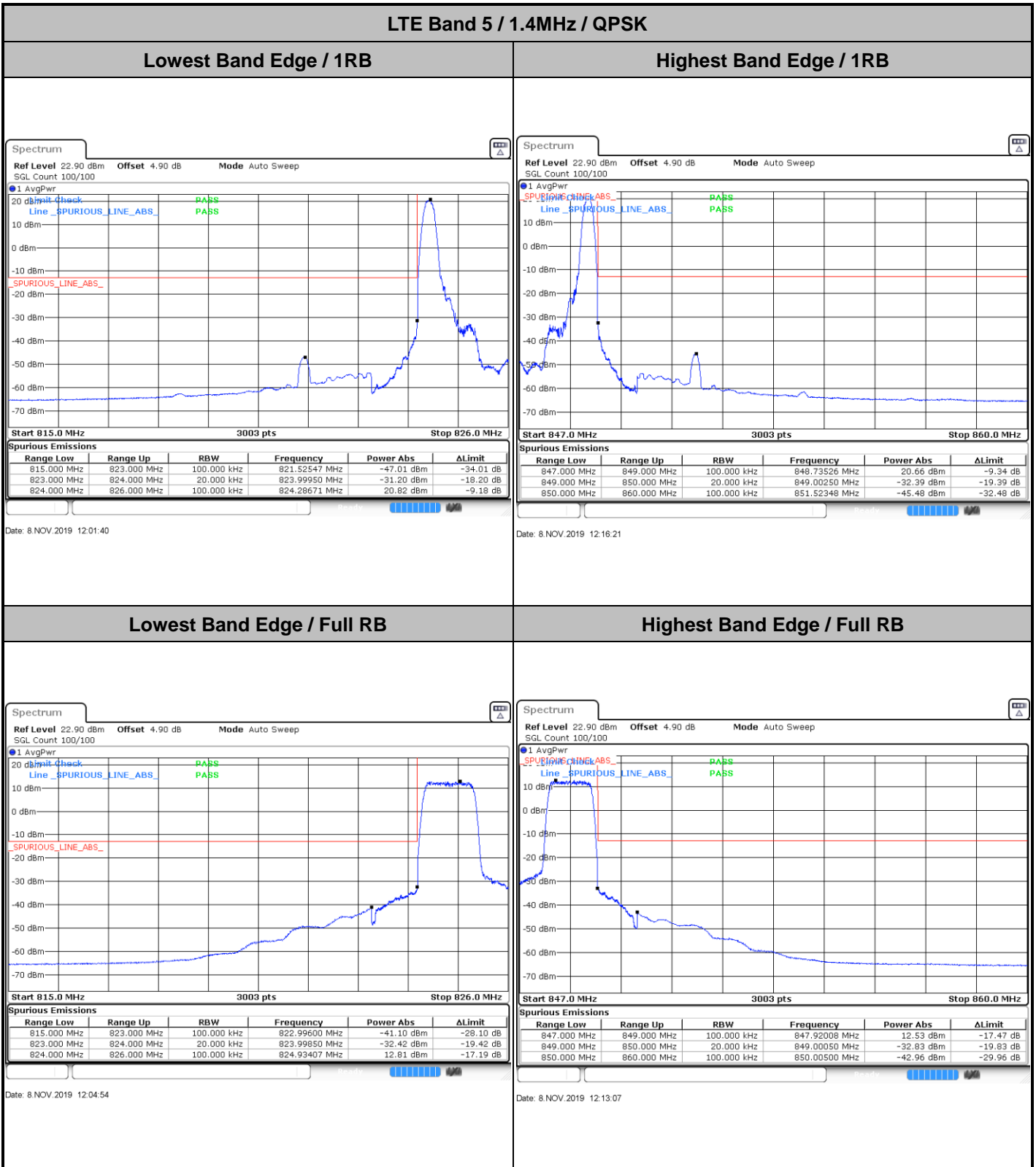
Highest Channel / 10MHz / 64QAM



Date: 8 NOV 2019 13:43:50



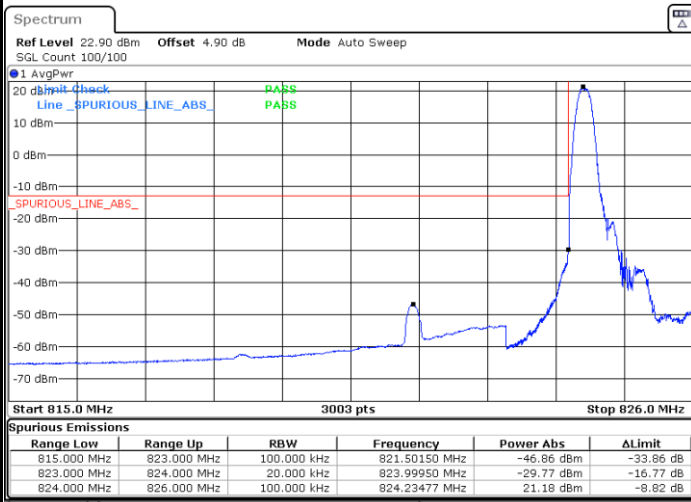
Conducted Band Edge





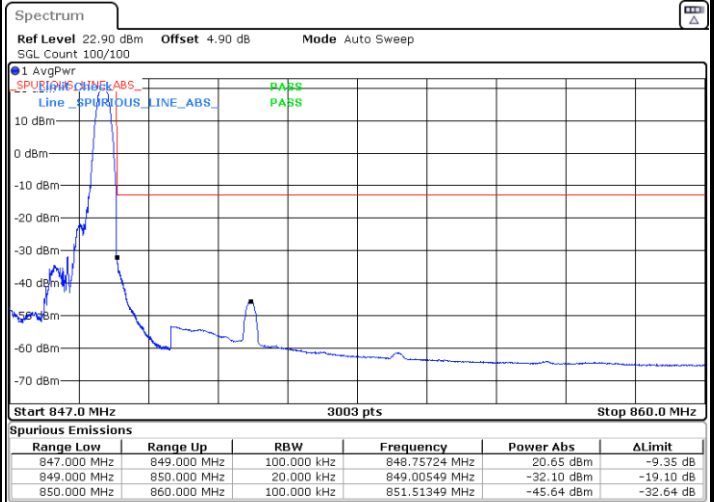
LTE Band 5 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



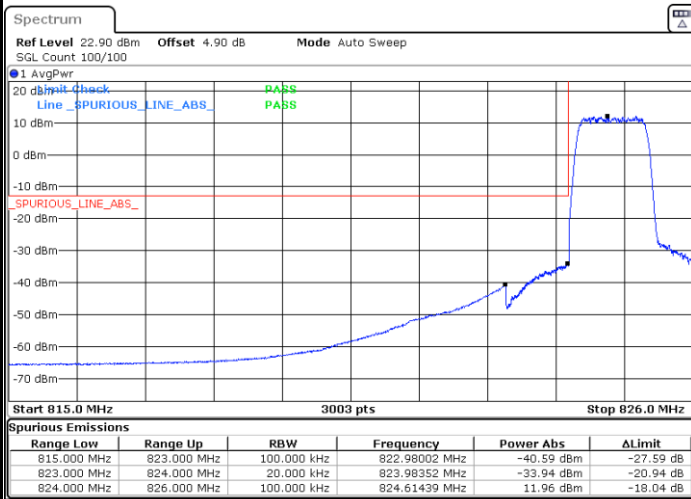
Date: 8 NOV 2019 12:03:17

Highest Band Edge / 1 RB



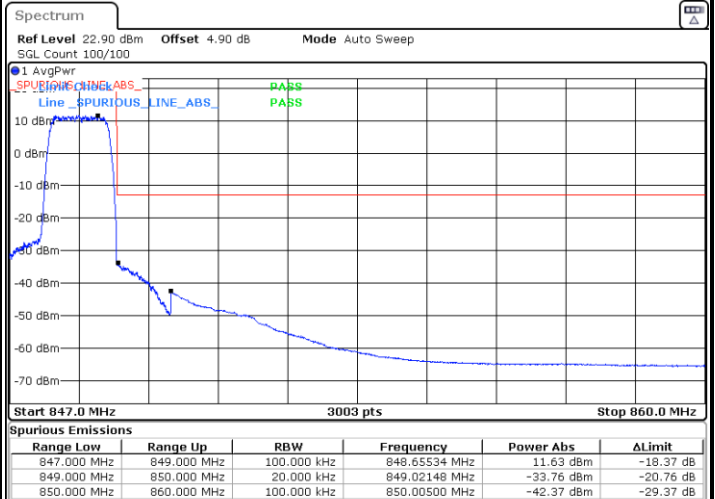
Date: 8 NOV 2019 12:17:59

Lowest Band Edge / Full RB



Date: 8 NOV 2019 12:06:32

Highest Band Edge / Full RB



Date: 8 NOV 2019 12:14:44



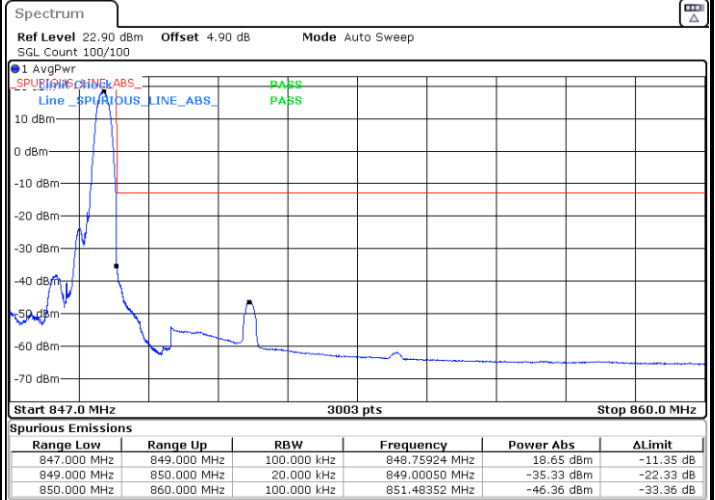
LTE Band 5 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



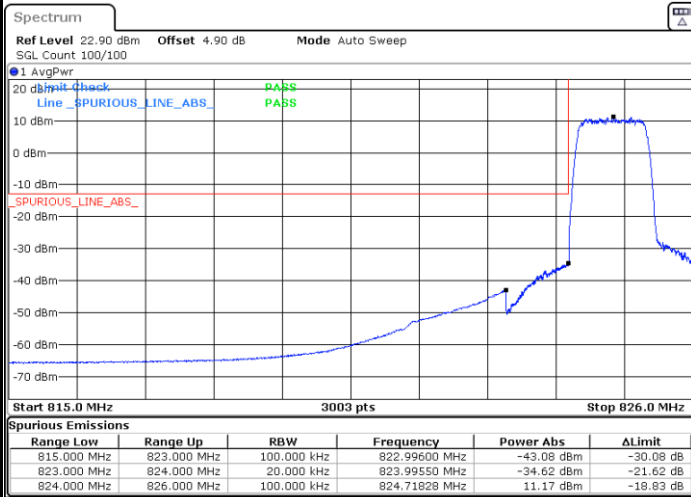
Date: 8 NOV. 2019 13:10:52

Highest Band Edge / 1 RB



Date: 8 NOV. 2019 13:16:36

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 13:09:14

Highest Band Edge / Full RB

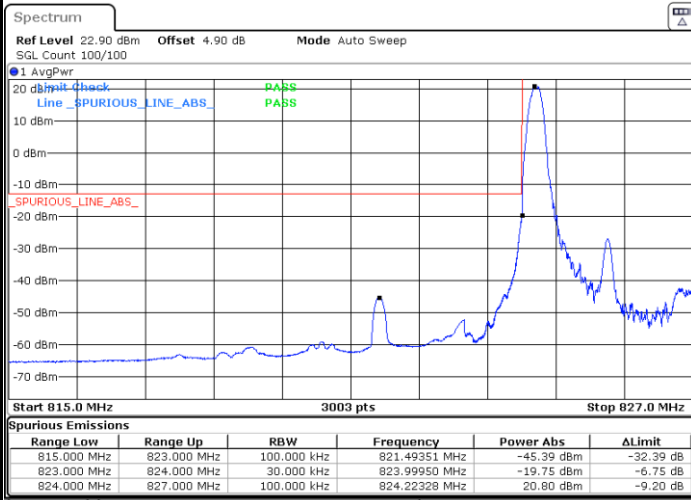


Date: 8 NOV. 2019 13:14:58



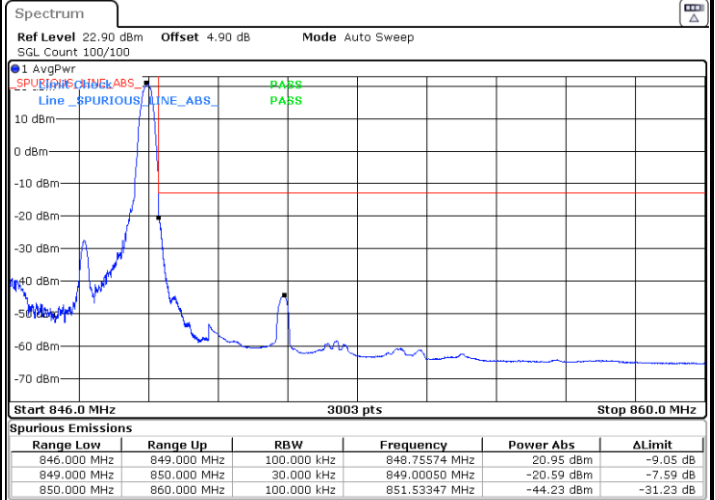
LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



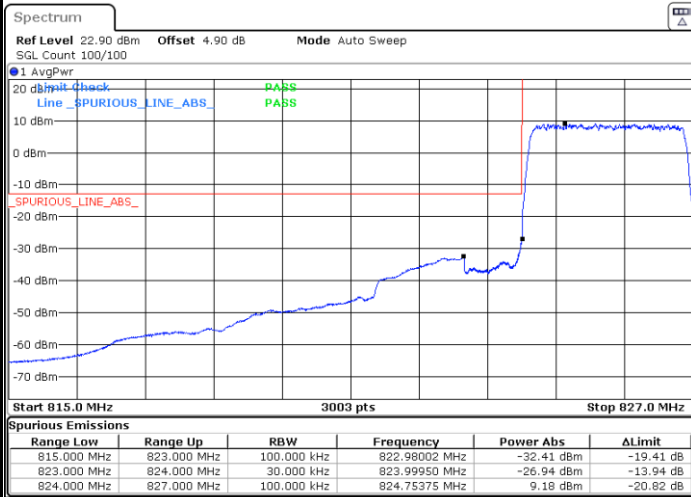
Date: 8 NOV 2019 14:17:44

Highest Band Edge / 1 RB



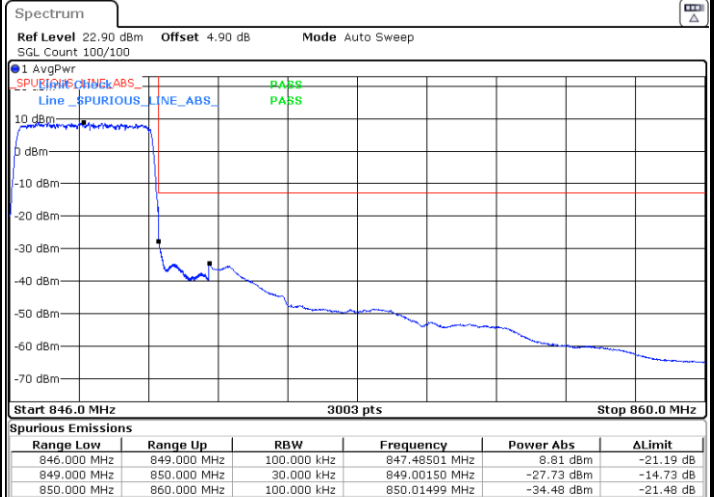
Date: 8 NOV 2019 14:26:43

Lowest Band Edge / Full RB



Date: 8 NOV 2019 14:20:34

Highest Band Edge / Full RB

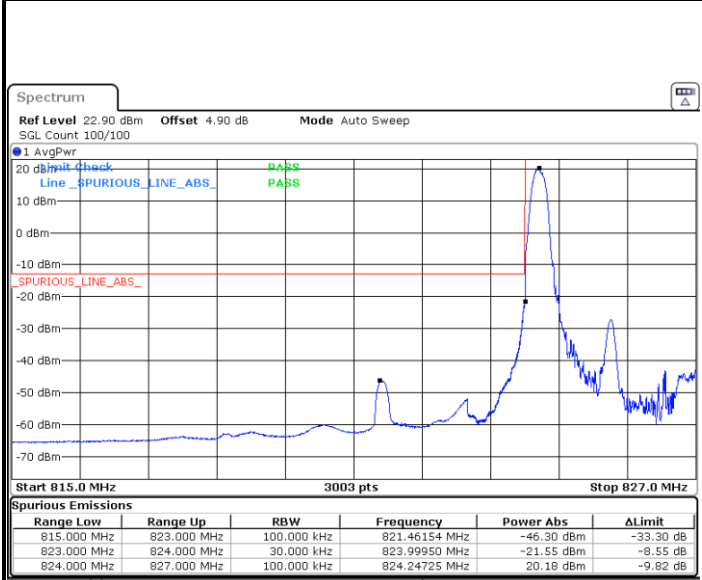


Date: 8 NOV 2019 14:23:46

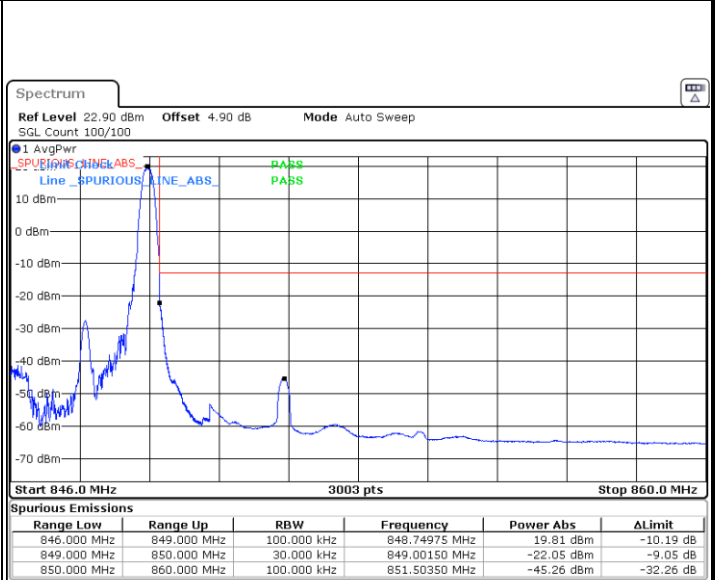


LTE Band 5 / 3MHz / 16QAM

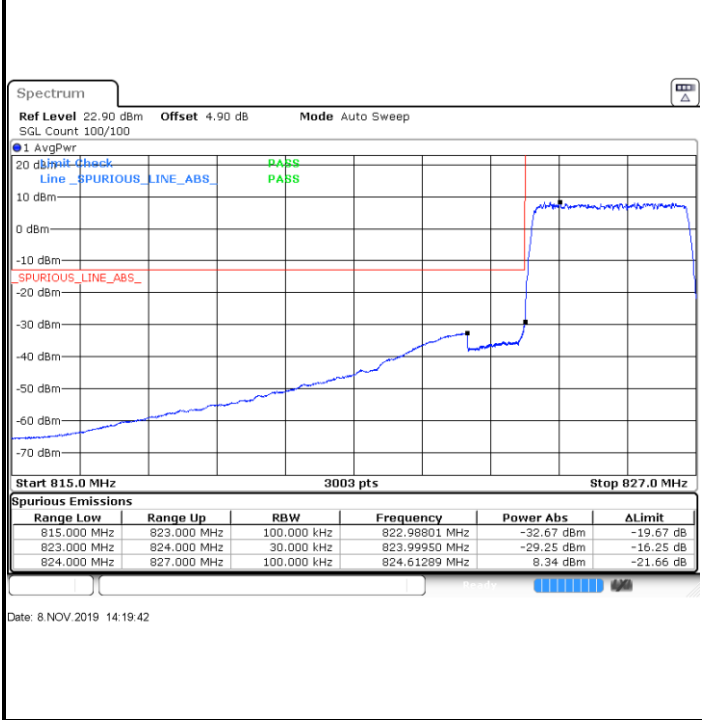
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



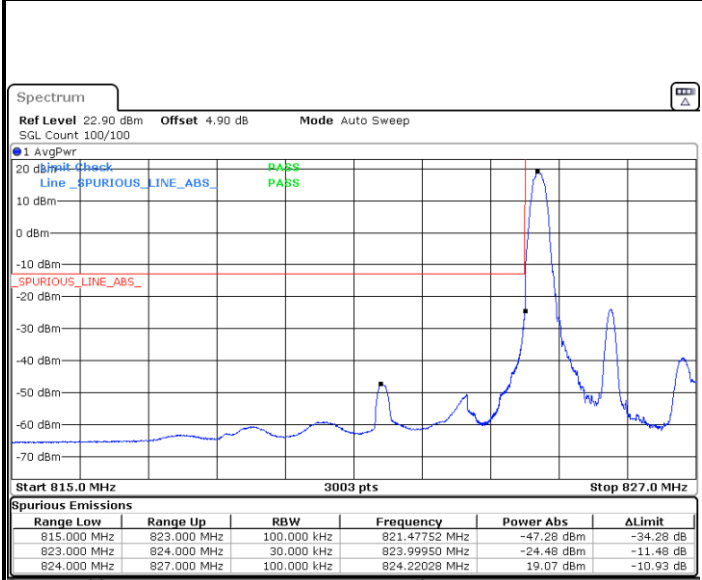
Highest Band Edge / Full RB





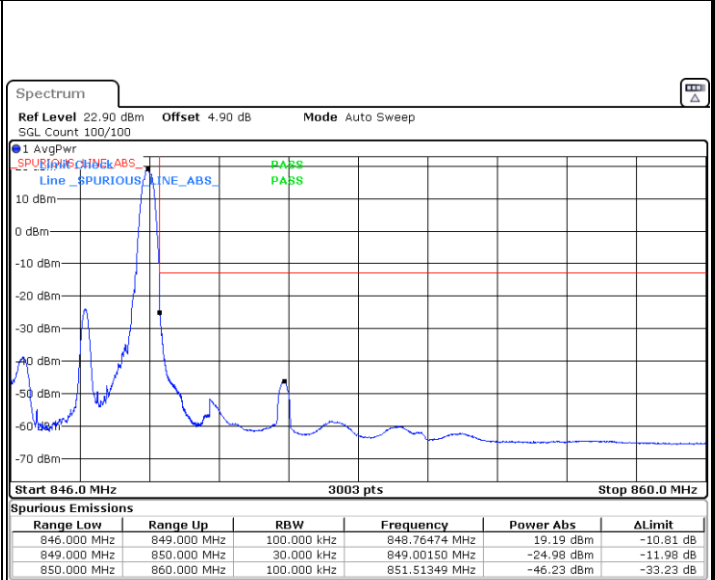
LTE Band 5 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



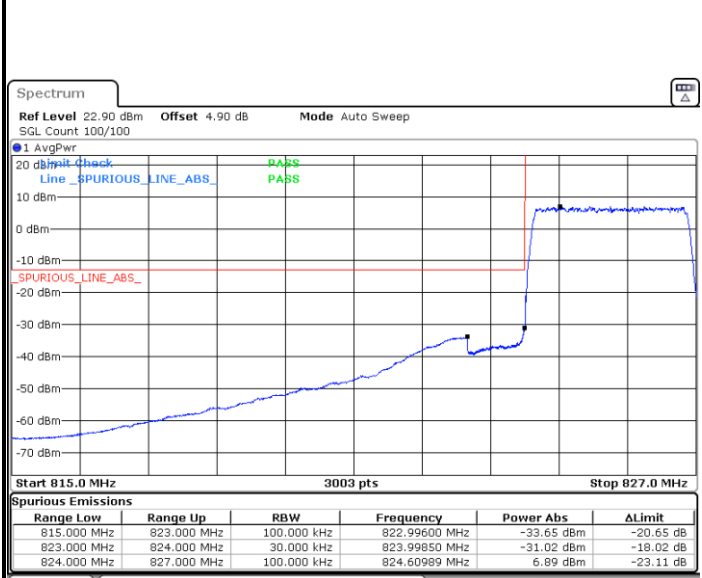
Date: 8 NOV. 2019 13:21:06

Highest Band Edge / 1 RB



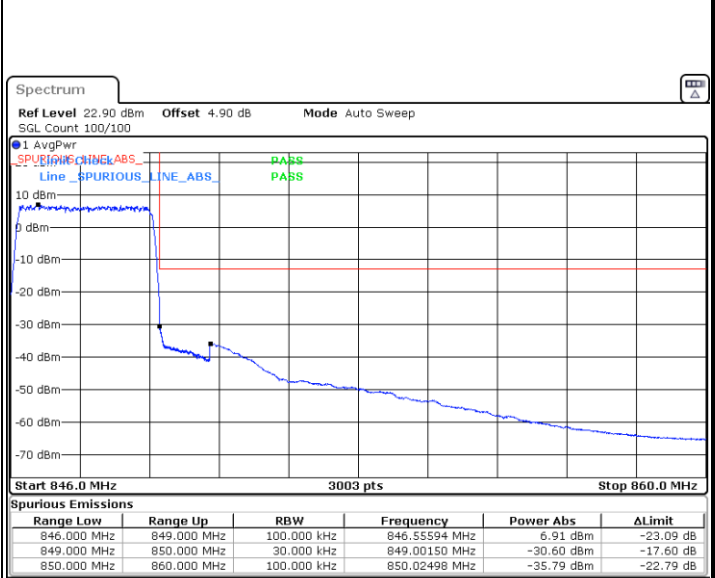
Date: 8 NOV. 2019 13:26:49

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 13:19:28

Highest Band Edge / Full RB

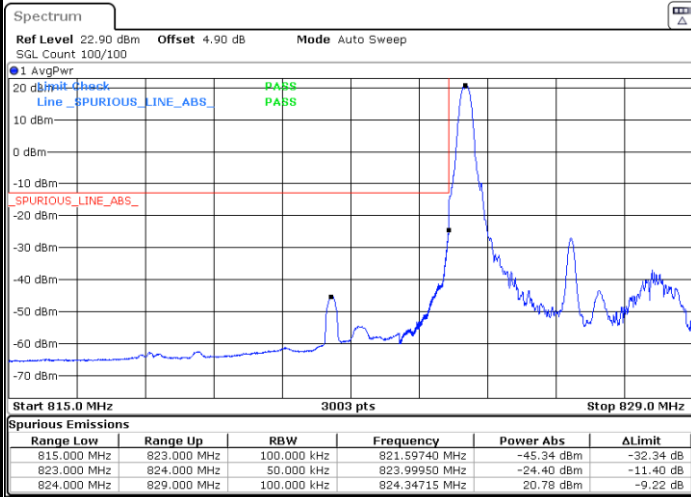


Date: 8 NOV. 2019 13:25:12



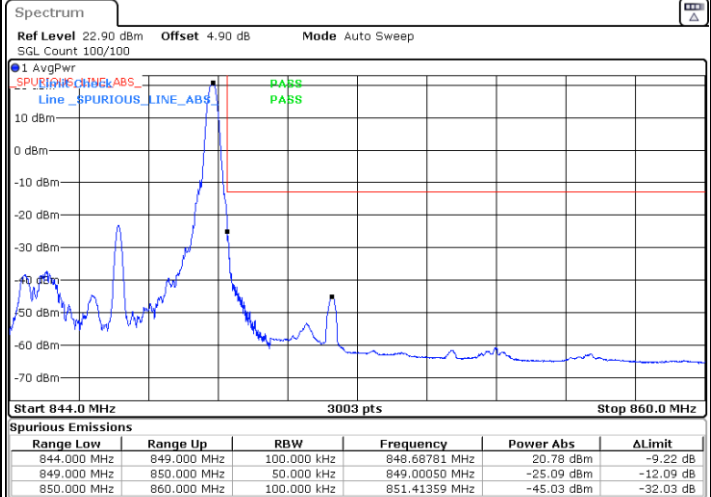
LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



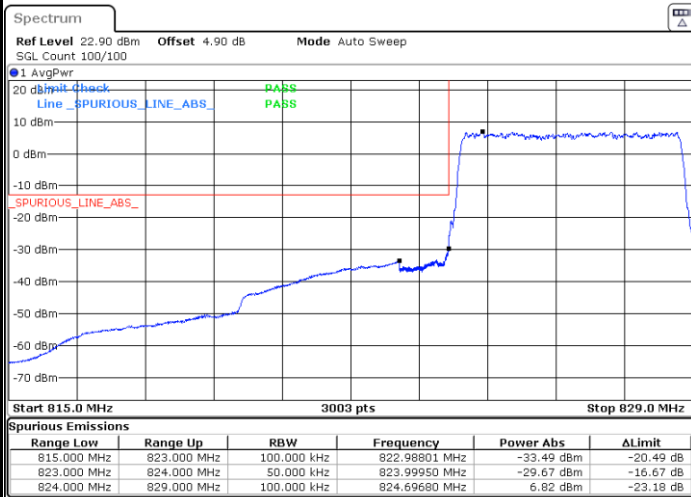
Date: 8 NOV. 2019 14:37:01

Highest Band Edge / 1 RB



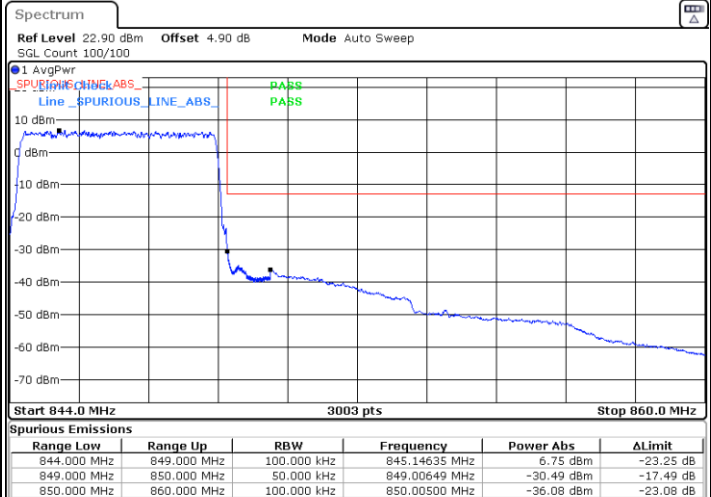
Date: 8 NOV. 2019 12:26:08

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 14:34:51

Highest Band Edge / Full RB

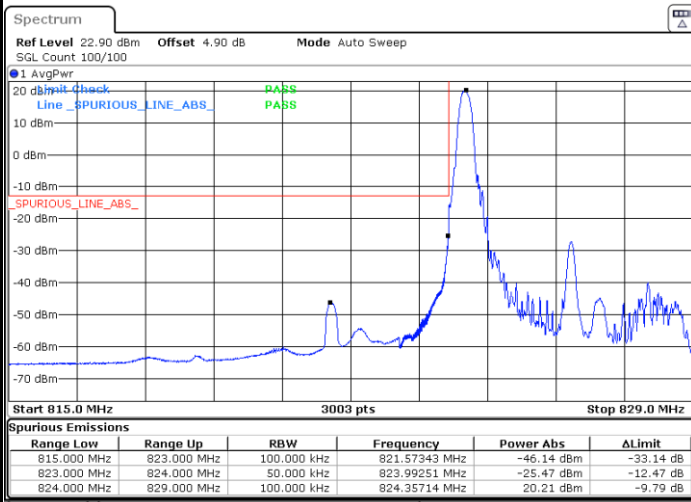


Date: 8 NOV. 2019 12:29:23



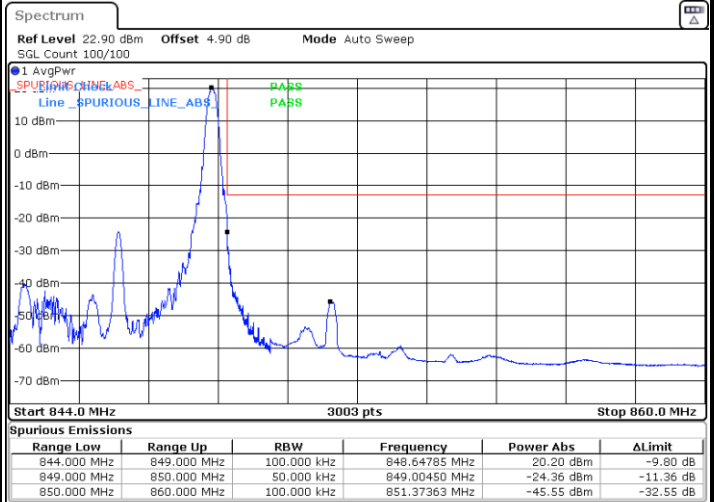
LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / 1RB



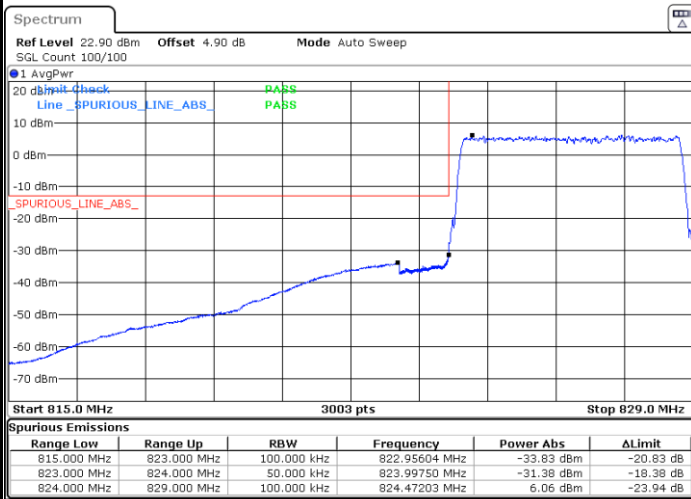
Date: 8 NOV. 2019 14:36:22

Highest Band Edge / 1 RB



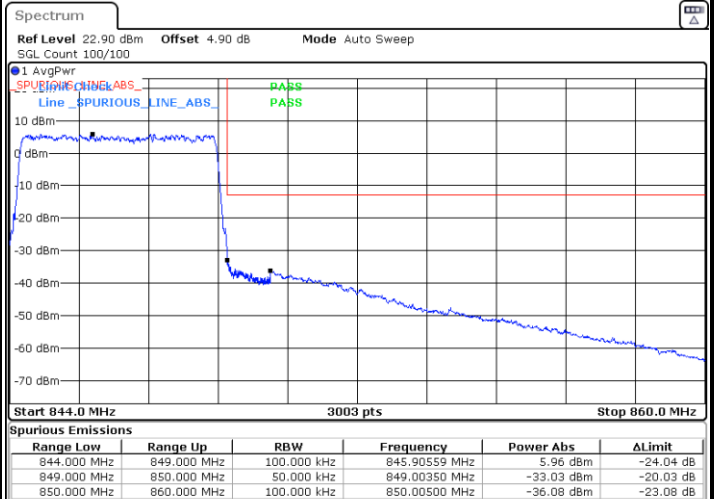
Date: 8 NOV. 2019 12:27:46

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 14:35:39

Highest Band Edge / Full RB

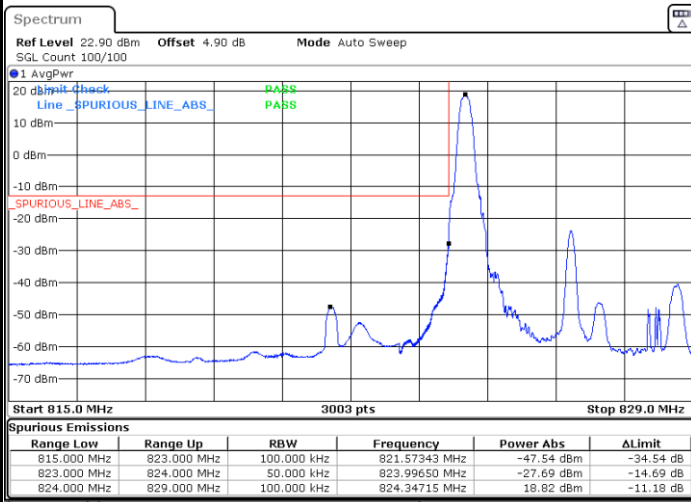


Date: 8 NOV. 2019 12:31:00



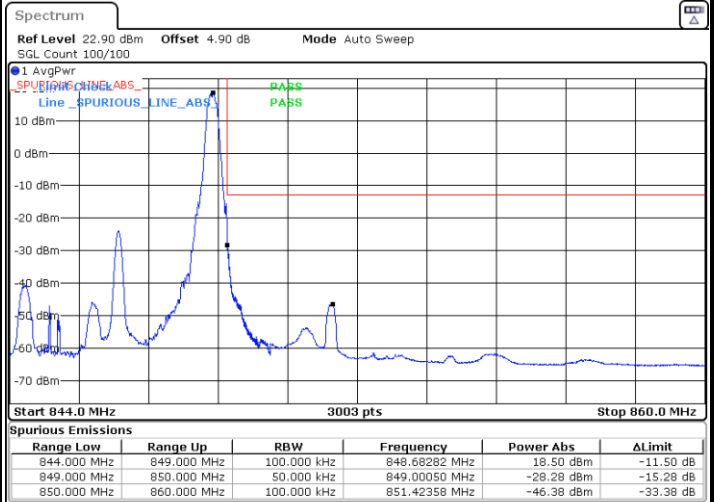
LTE Band 5 / 5MHz / 64QAM

Lowest Band Edge / 1RB



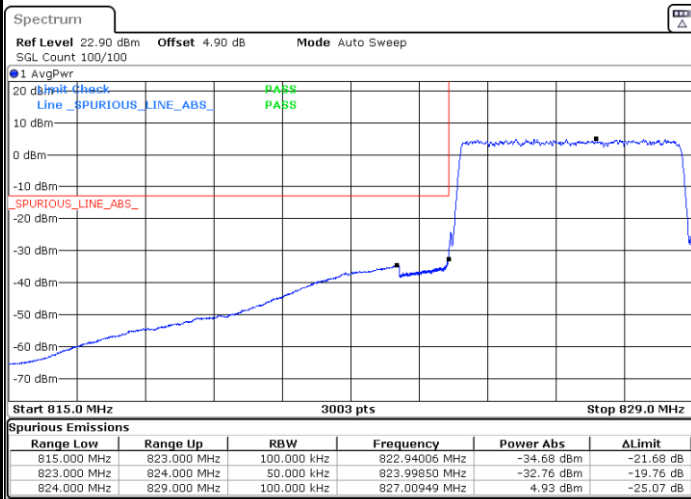
Date: 8 NOV. 2019 13:31:19

Highest Band Edge / 1 RB



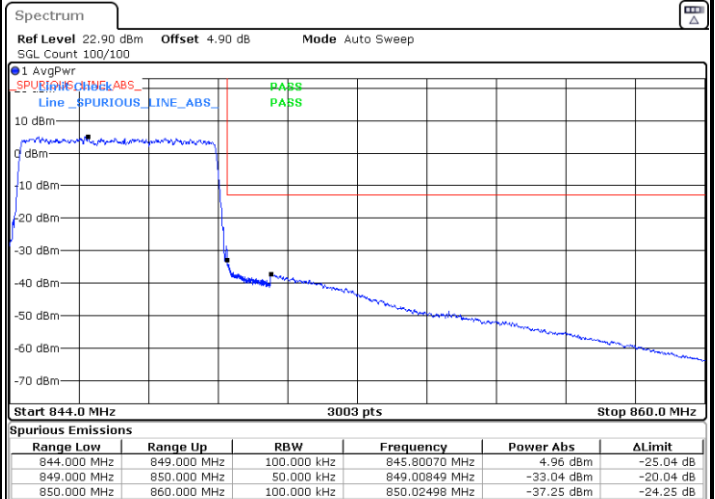
Date: 8 NOV. 2019 13:37:02

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 13:29:41

Highest Band Edge / Full RB

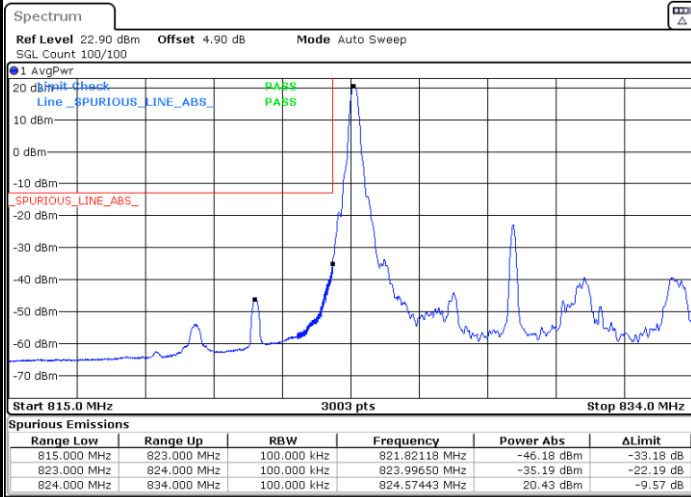


Date: 8 NOV. 2019 13:35:25



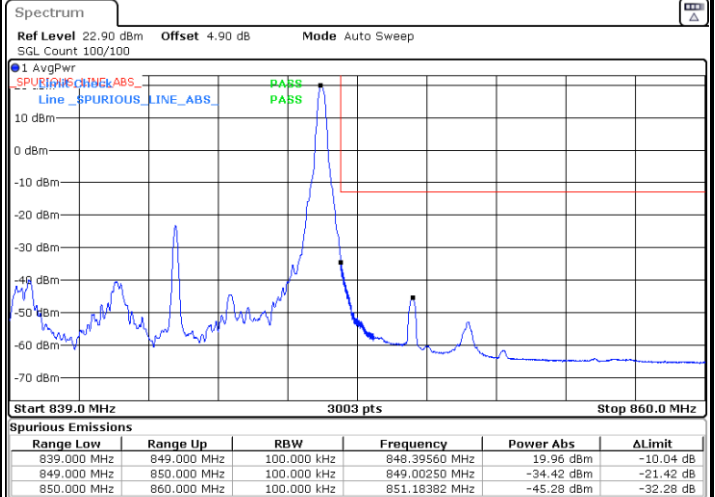
LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / 1 RB



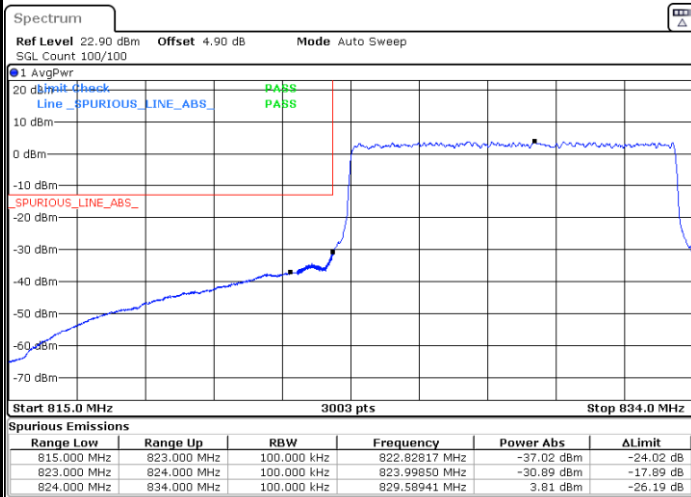
Date: 8 NOV. 2019 12:35:06

Highest Band Edge / 1 RB



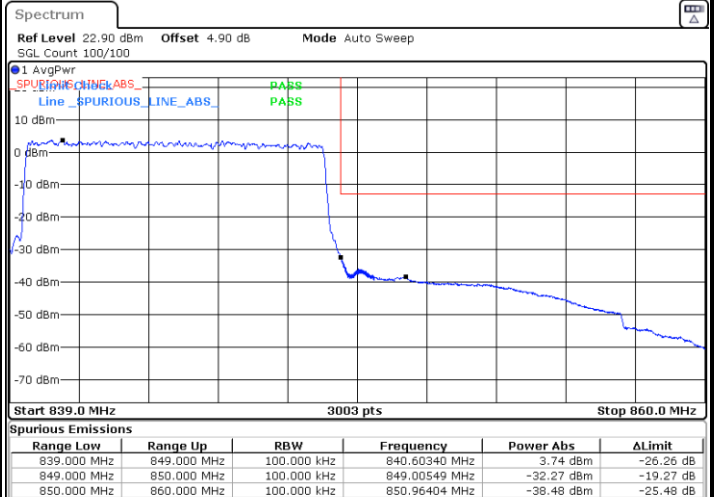
Date: 8 NOV. 2019 12:46:33

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 12:38:21

Highest Band Edge / Full RB

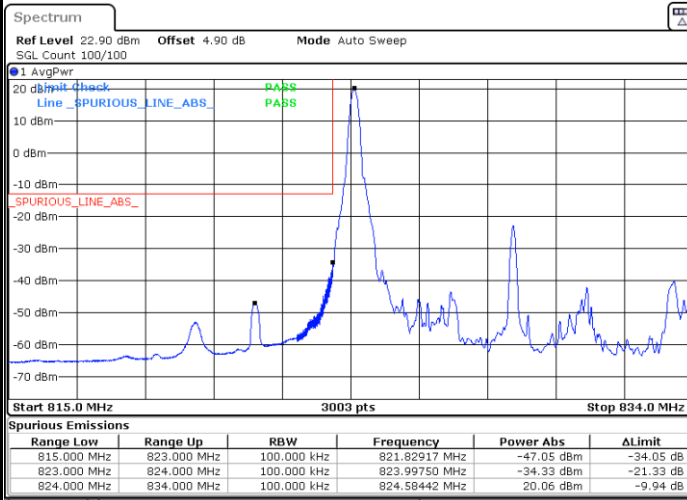


Date: 8 NOV. 2019 12:49:48



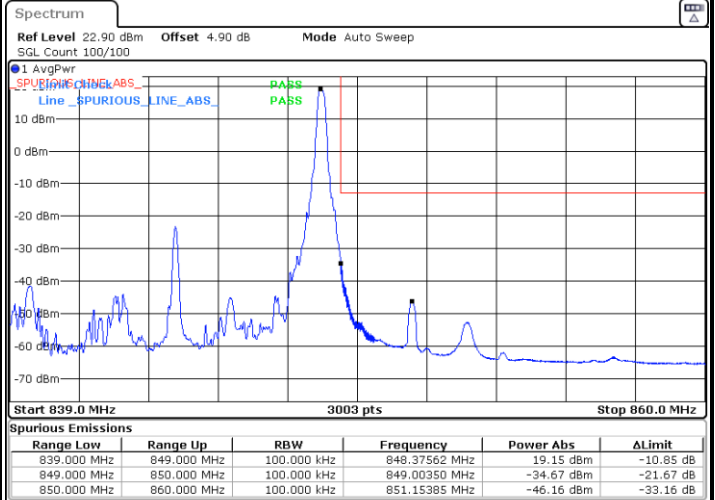
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



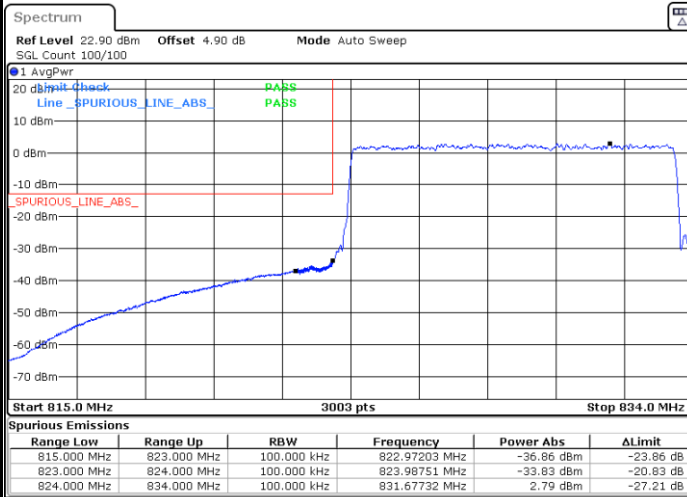
Date: 8 NOV 2019 12:36:44

Highest Band Edge / 1 RB



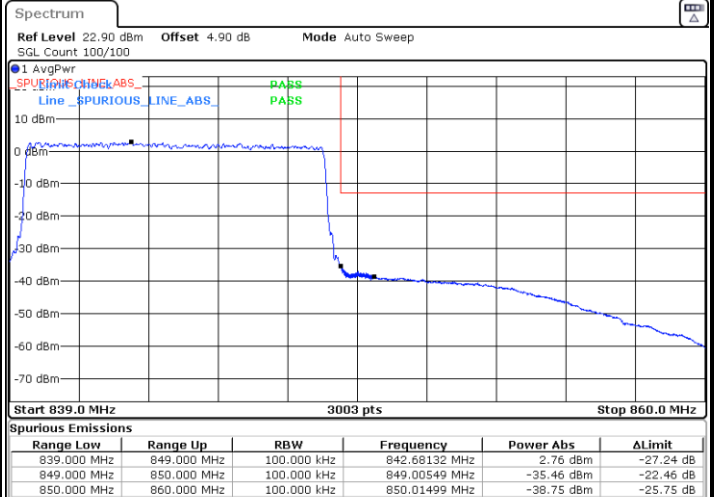
Date: 8 NOV 2019 12:48:10

Lowest Band Edge / Full RB



Date: 8 NOV 2019 12:39:58

Highest Band Edge / Full RB

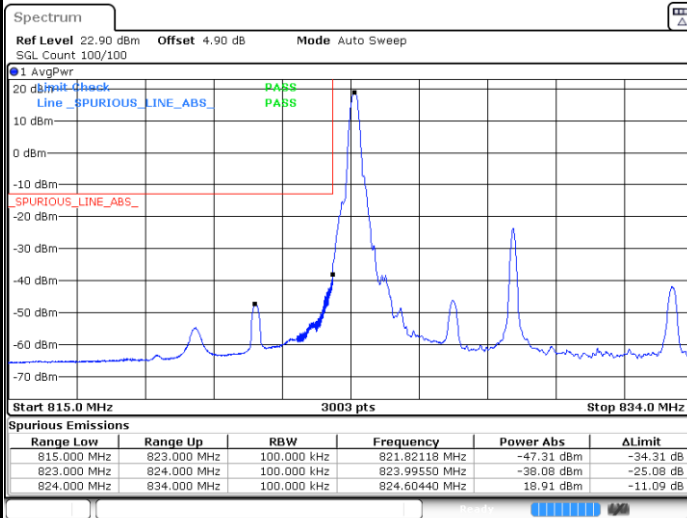


Date: 8 NOV 2019 12:51:25



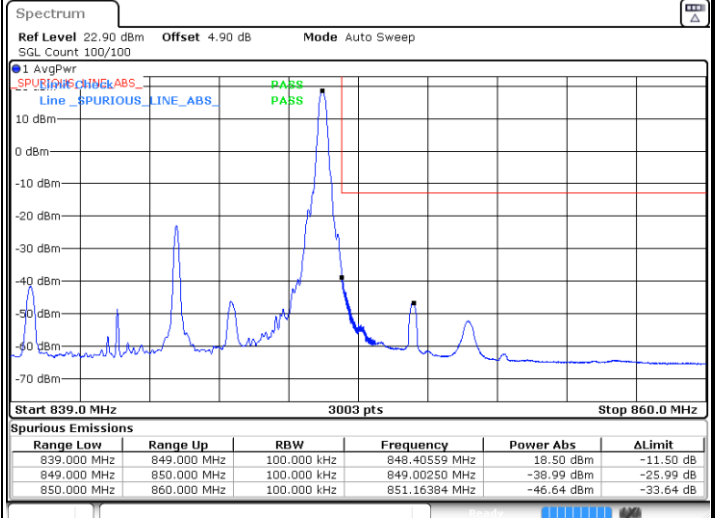
LTE Band 5 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



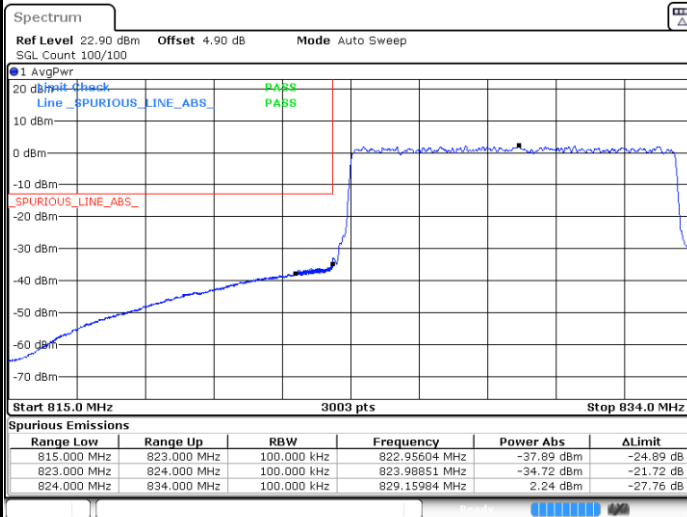
Date: 8 NOV. 2019 13:41:32

Highest Band Edge / 1 RB



Date: 8 NOV. 2019 13:47:15

Lowest Band Edge / Full RB



Date: 8 NOV. 2019 13:39:54

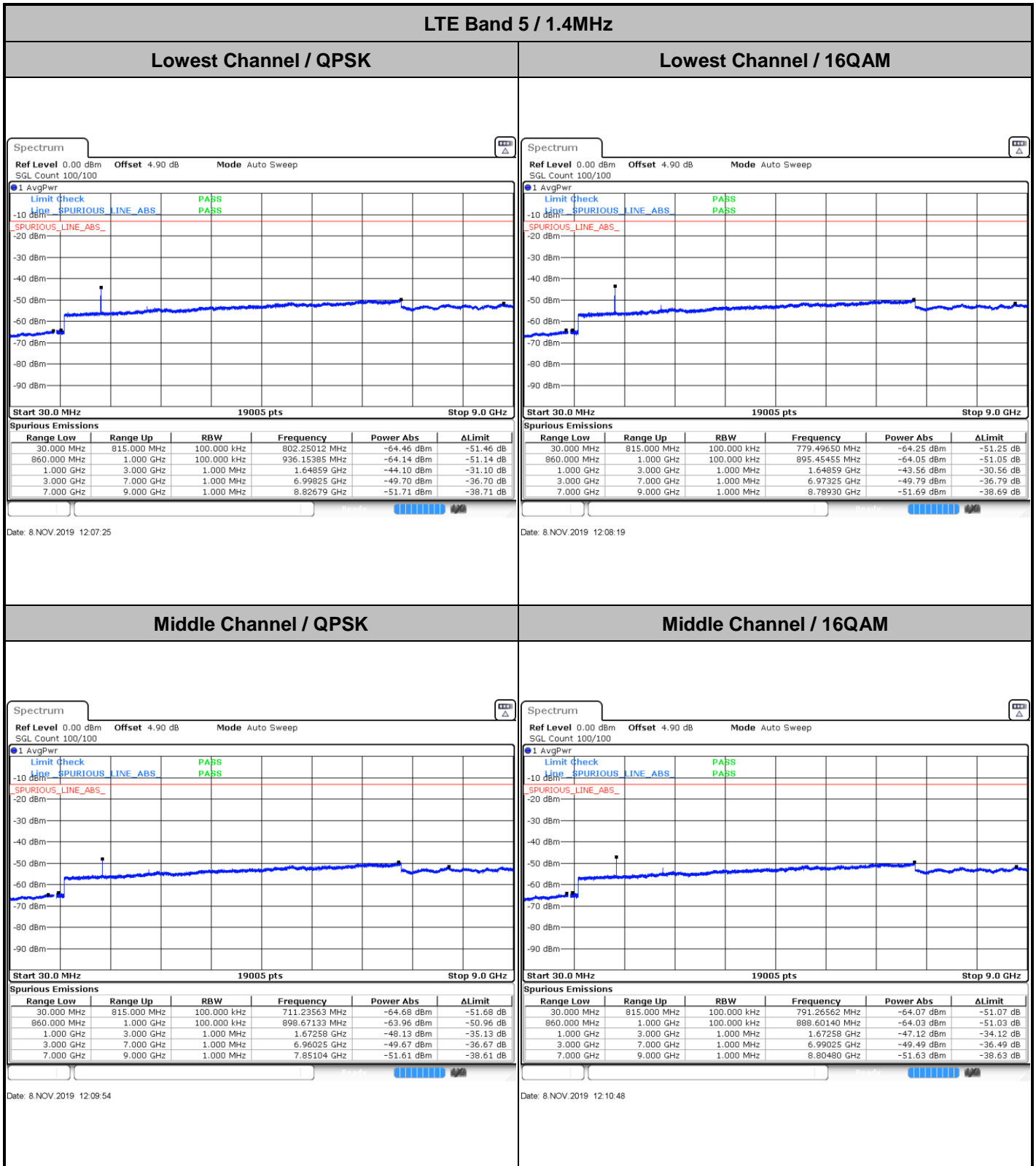
Highest Band Edge / Full RB



Date: 8 NOV. 2019 13:45:38



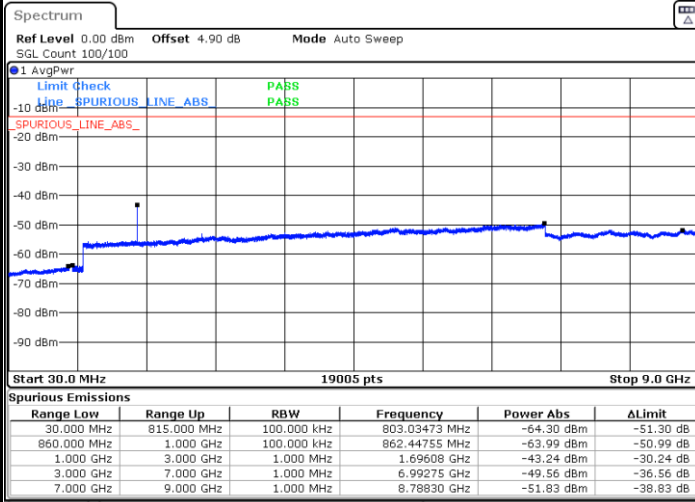
Conducted Spurious Emission





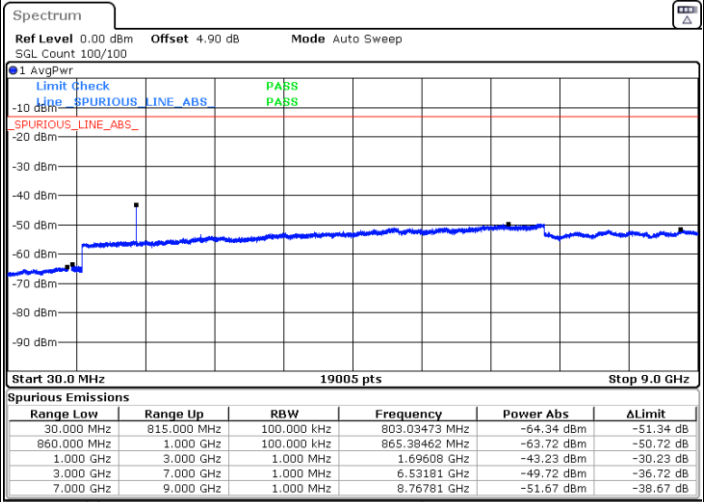
LTE Band 5 / 1.4MHz

Highest Channel / QPSK



Date: 8 NOV. 2019 12:18:52

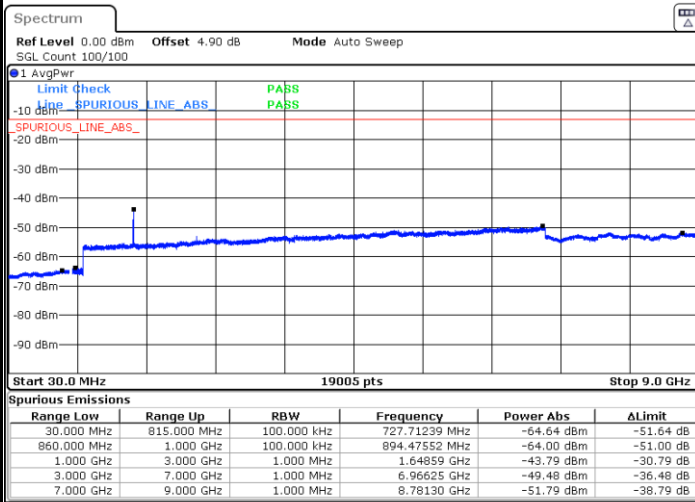
Highest Channel / 16QAM



Date: 8 NOV. 2019 12:19:46

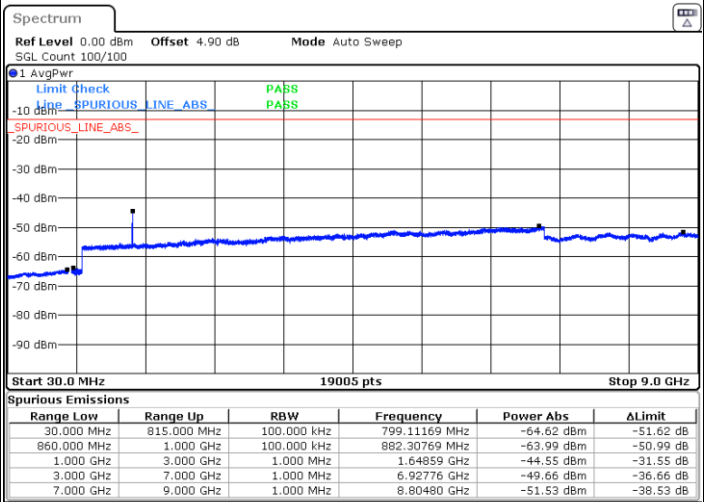
LTE Band 5 / 3MHz

Lowest Channel / QPSK



Date: 8 NOV. 2019 14:28:29

Lowest Channel / 16QAM



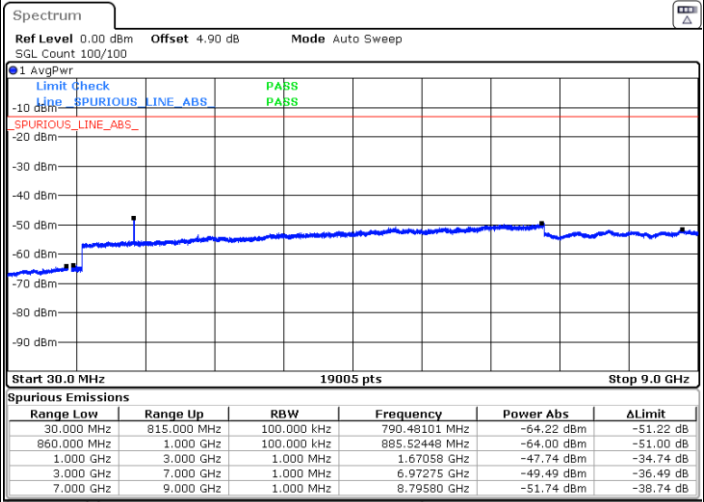
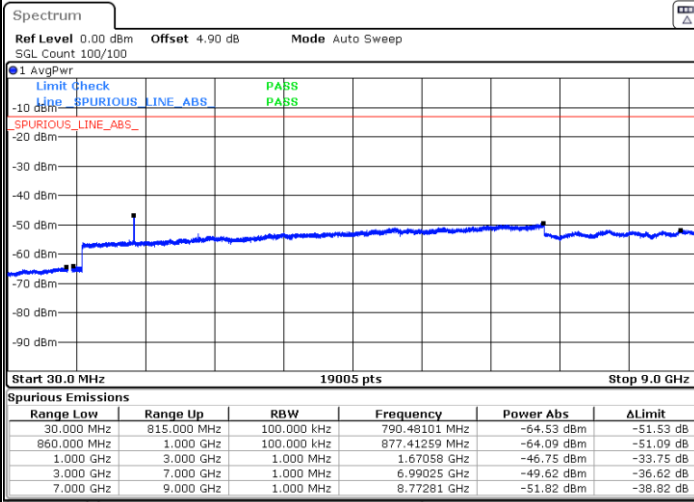
Date: 8 NOV. 2019 14:30:03



LTE Band 5 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

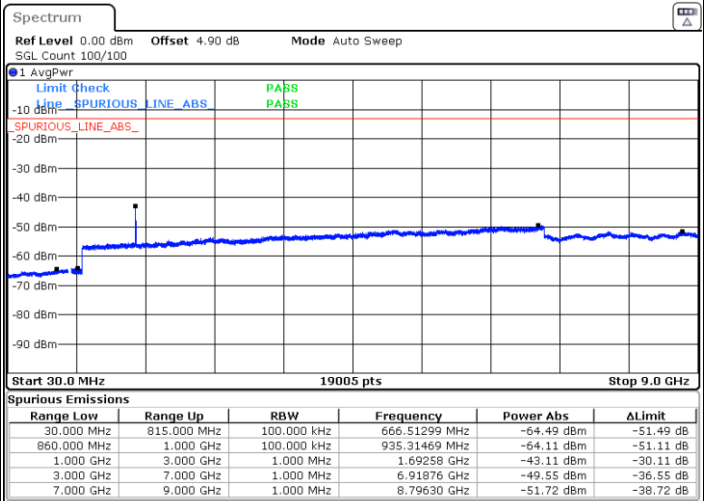
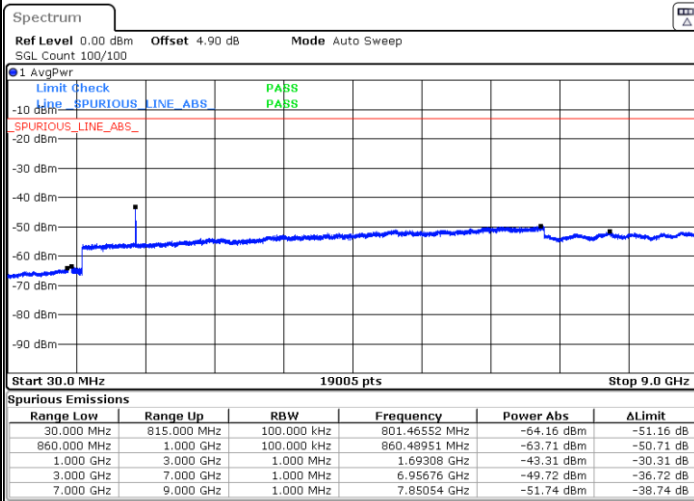


Date: 8 NOV.2019 14:31:00

Date: 8 NOV.2019 14:30:36

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 8 NOV.2019 14:31:27

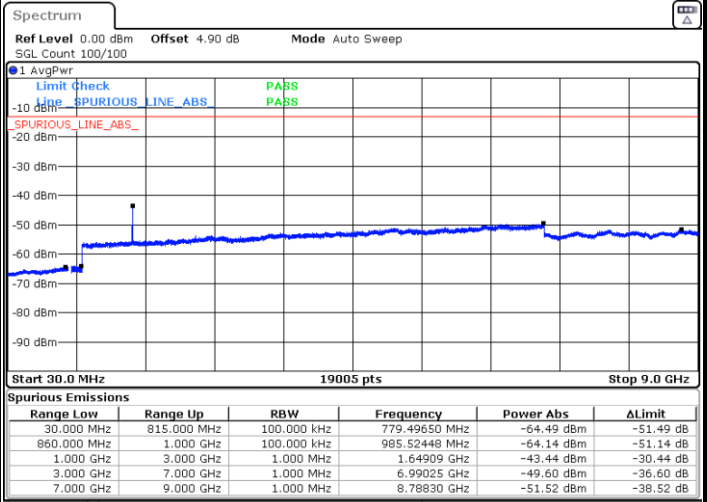
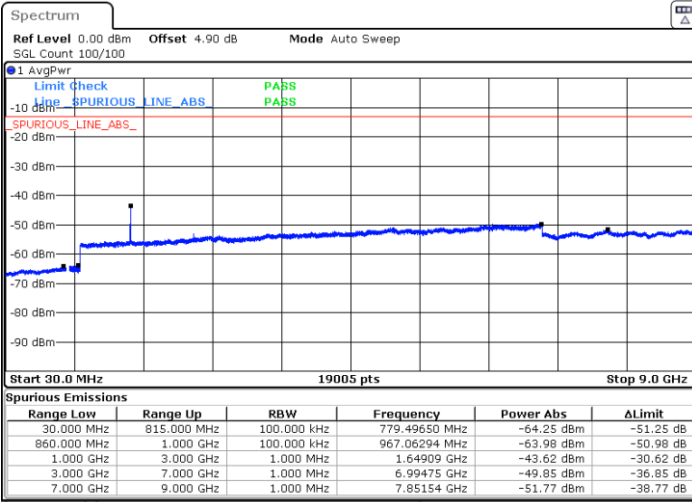
Date: 8 NOV.2019 14:32:05



LTE Band 5 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

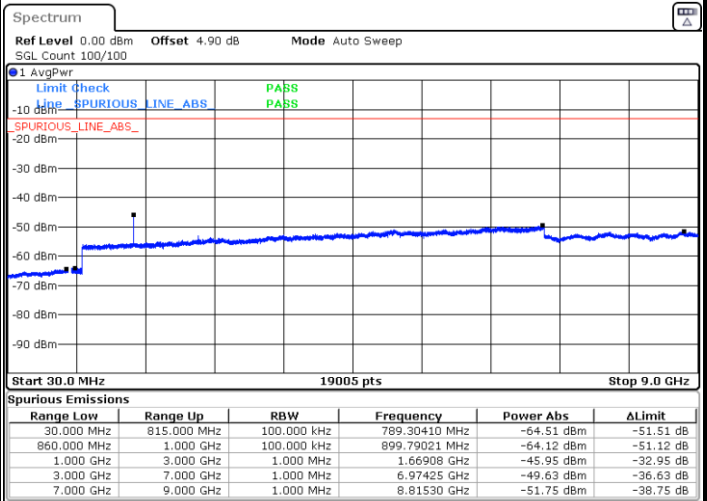
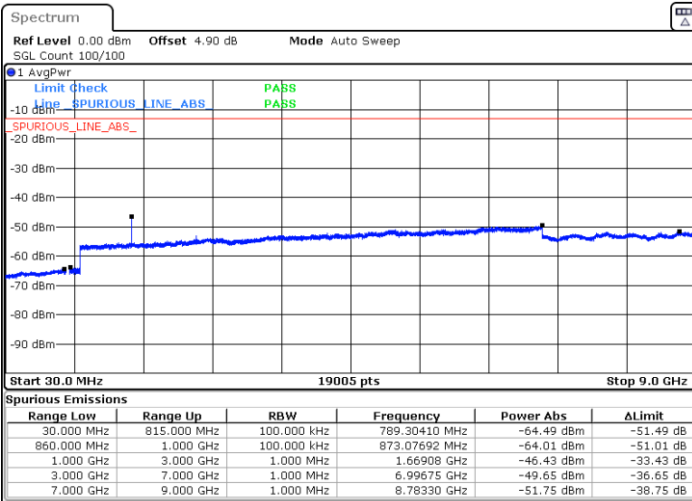


Date: 8 NOV.2019 14:37:25

Date: 8 NOV.2019 12:21:21

Middle Channel / QPSK

Middle Channel / 16QAM



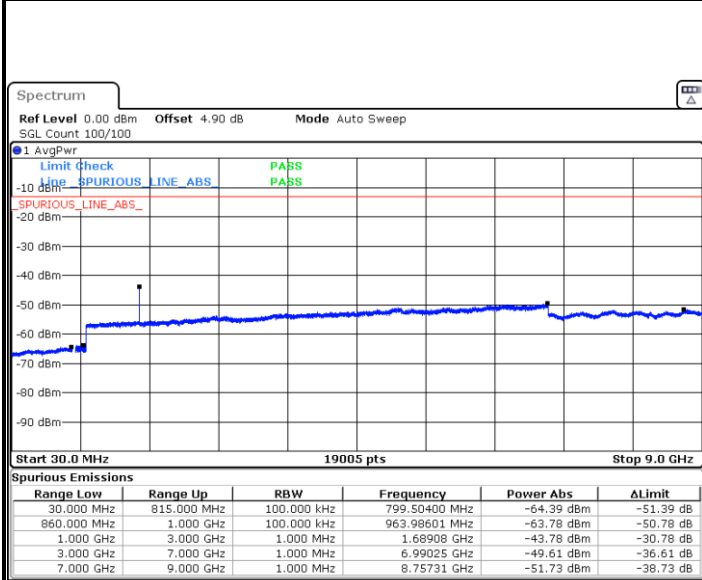
Date: 8 NOV.2019 12:22:56

Date: 8 NOV.2019 12:23:50



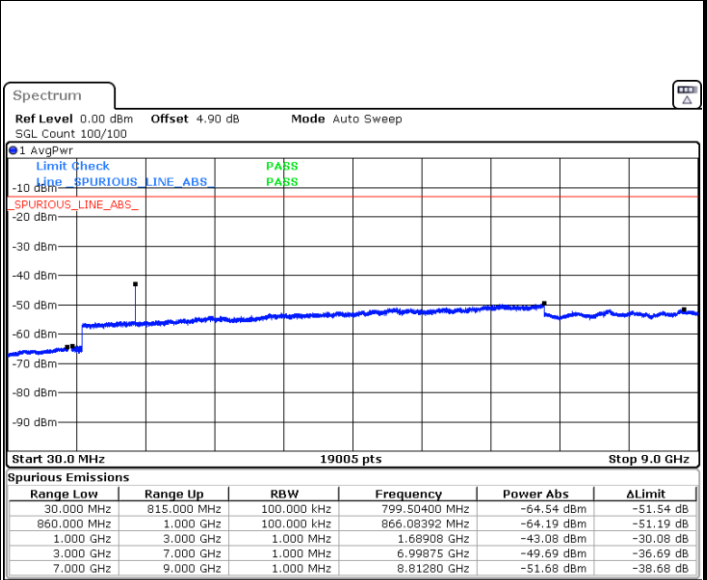
LTE Band 5 / 5MHz

Highest Channel / QPSK



Date: 8 NOV.2019 12:31:54

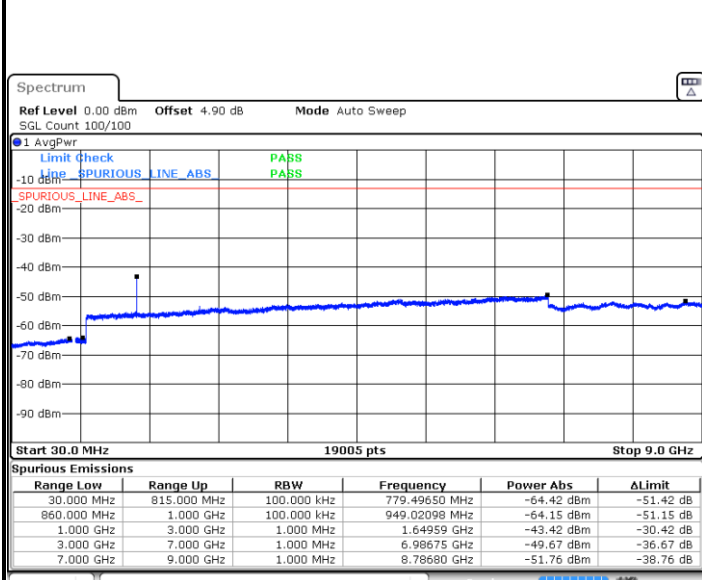
Highest Channel / 16QAM



Date: 8 NOV.2019 12:32:48

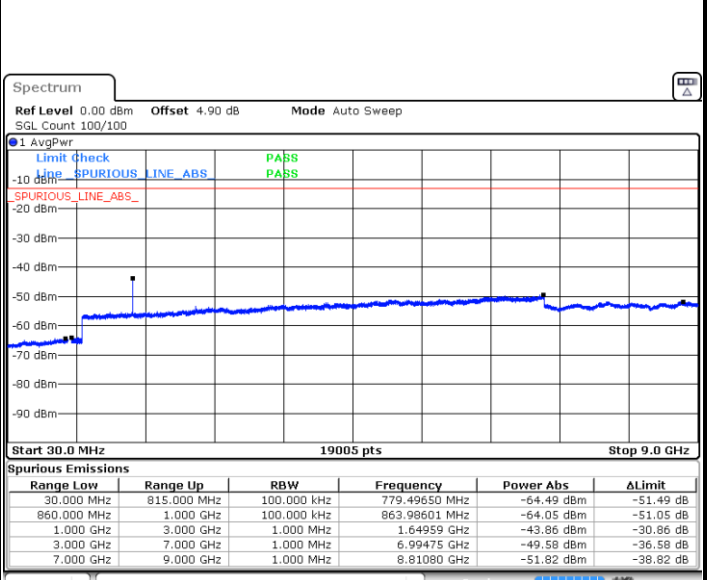
LTE Band 5 / 10MHz

Lowest Channel / QPSK



Date: 8 NOV.2019 12:40:52

Lowest Channel / 16QAM



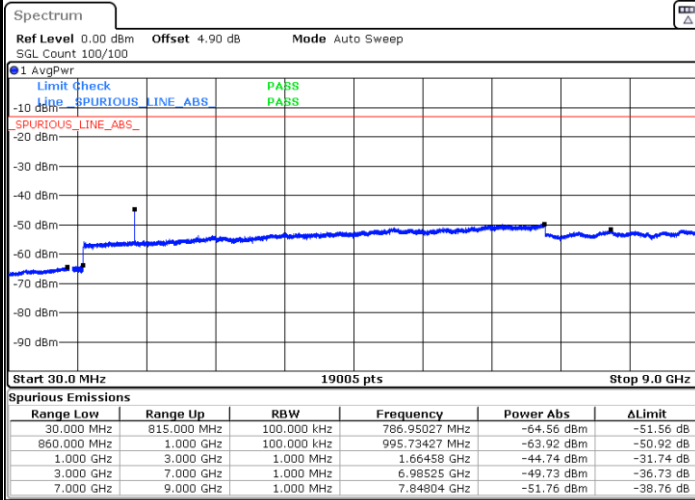
Date: 8 NOV.2019 12:41:46



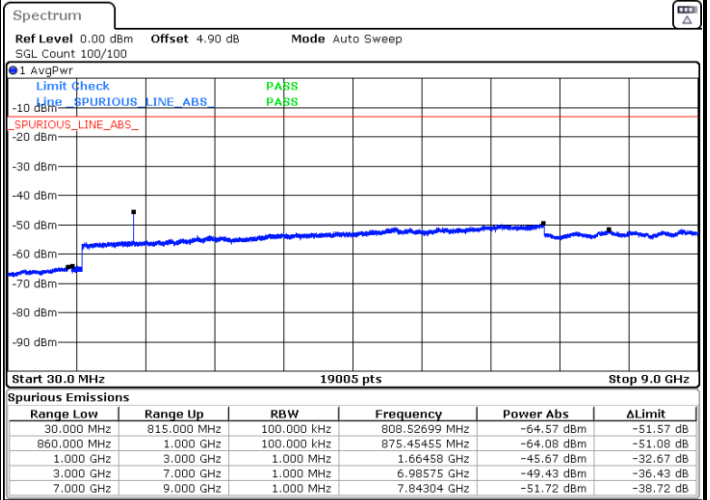
LTE Band 5 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM



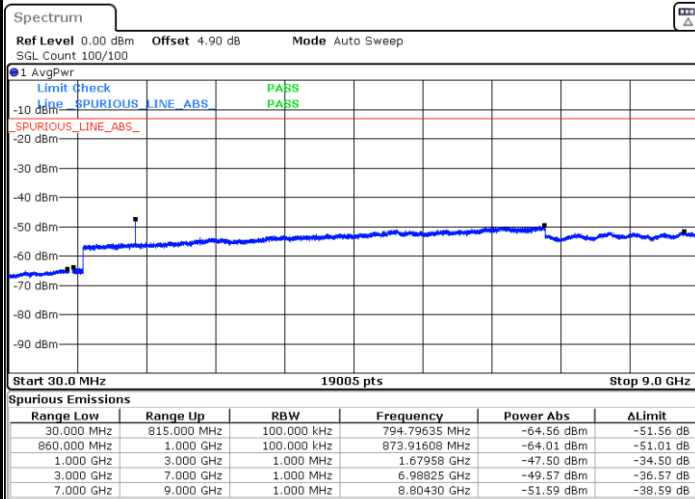
Date: 8 NOV.2019 12:43:20



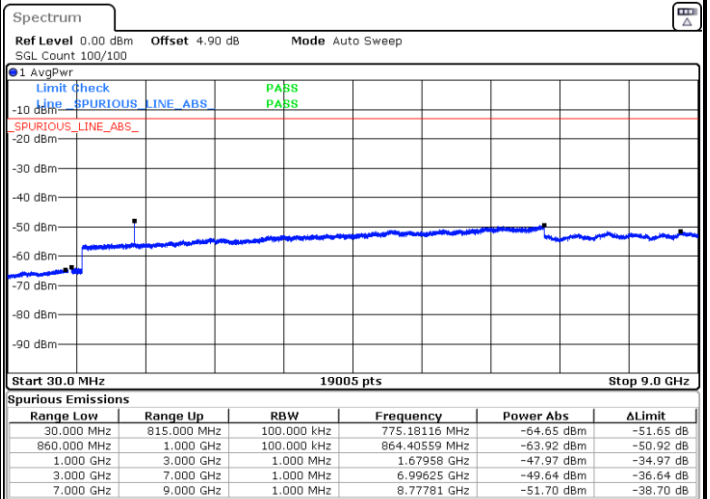
Date: 8 NOV.2019 12:44:14

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 8 NOV.2019 12:52:18

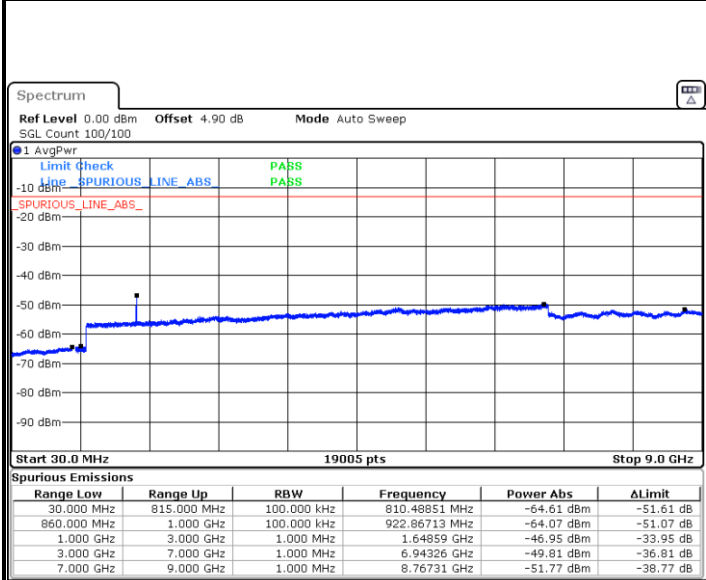


Date: 8 NOV.2019 12:53:12



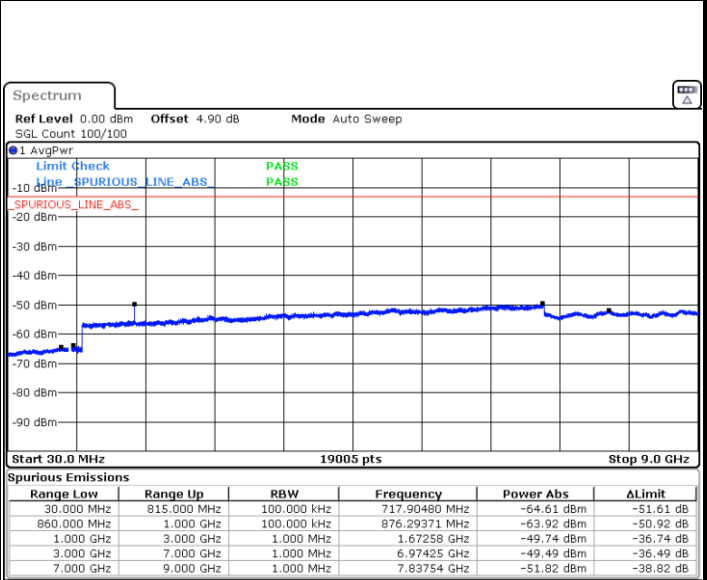
LTE Band 5 / 1.4MHz

Lowest Channel / 64QAM



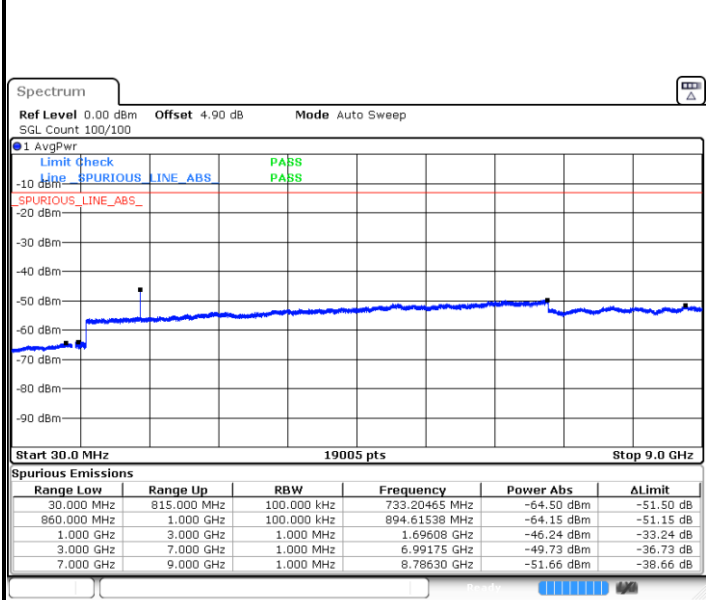
Date: 8.NOV.2019 13:11:45

Middle Channel / 64QAM



Date: 8.NOV.2019 13:12:39

Highest Channel / 64QAM



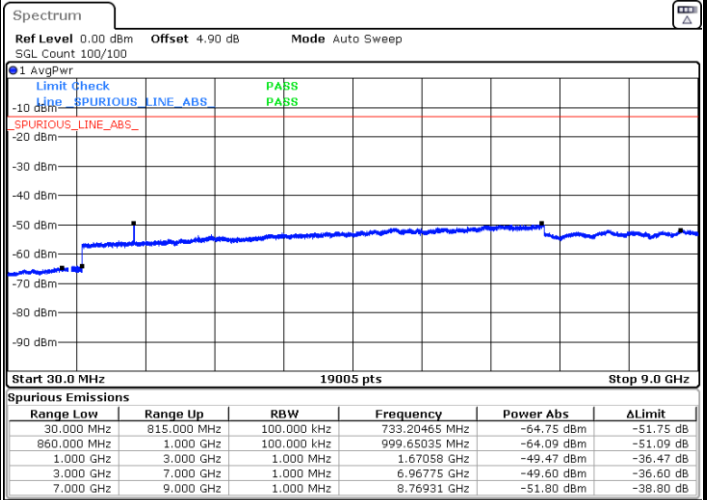
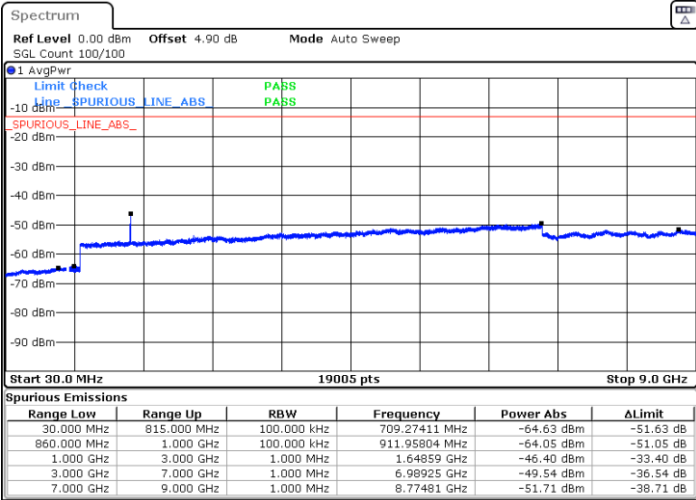
Date: 8.NOV.2019 13:17:29



LTE Band 5 / 3MHz

Lowest Channel / 64QAM

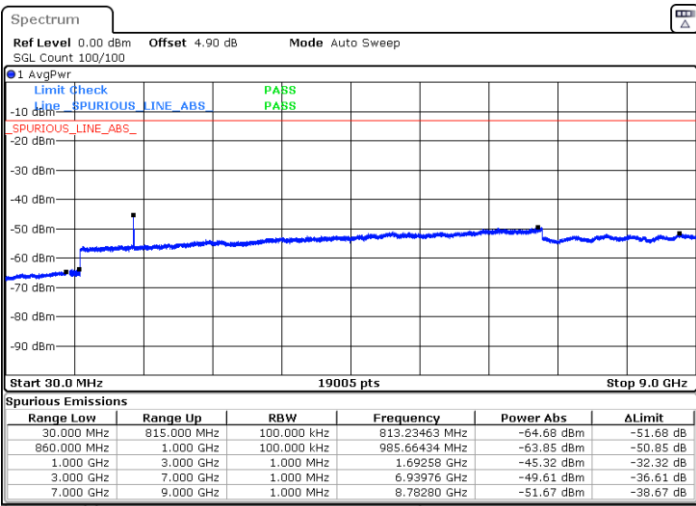
Middle Channel / 64QAM



Date: 8.NOV.2019 13:21:59

Date: 8.NOV.2019 13:22:53

Highest Channel / 64QAM



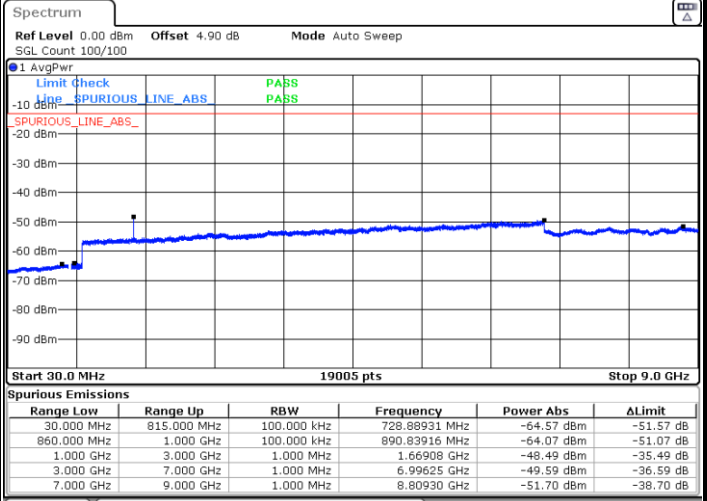
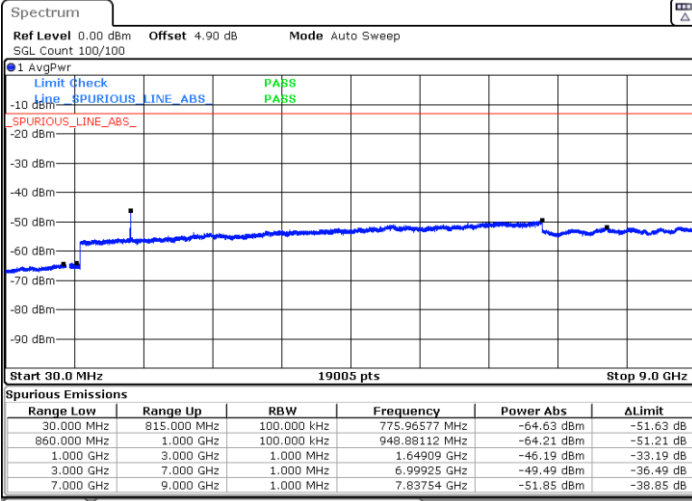
Date: 8.NOV.2019 13:27:43



LTE Band 5 / 5MHz

Lowest Channel / 64QAM

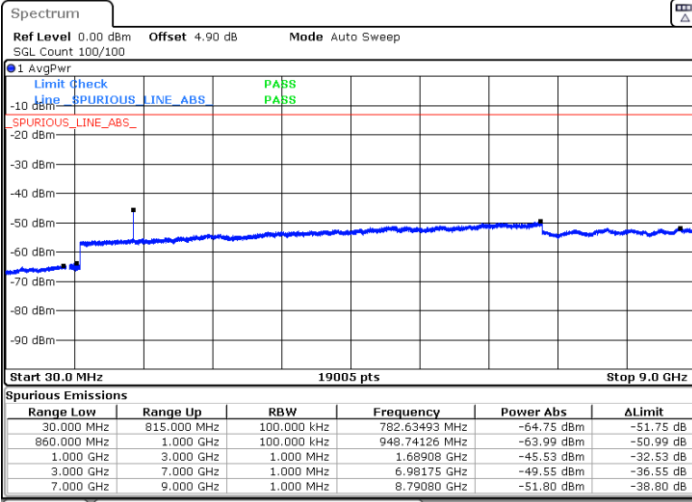
Middle Channel / 64QAM



Date: 8.NOV.2019 13:32:12

Date: 8.NOV.2019 13:33:06

Highest Channel / 64QAM



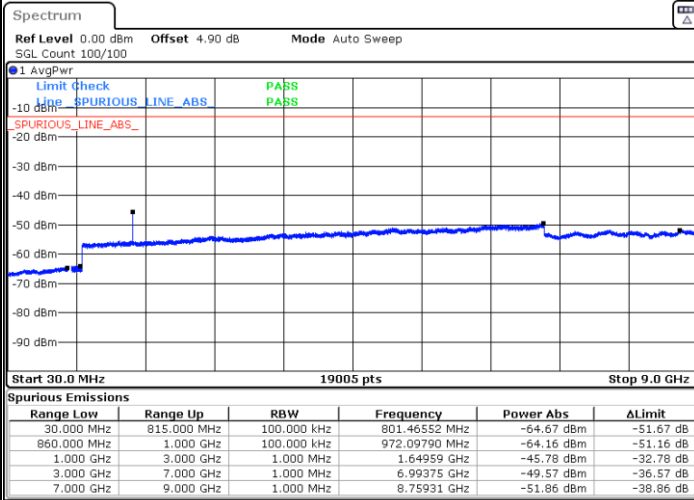
Date: 8.NOV.2019 13:37:56



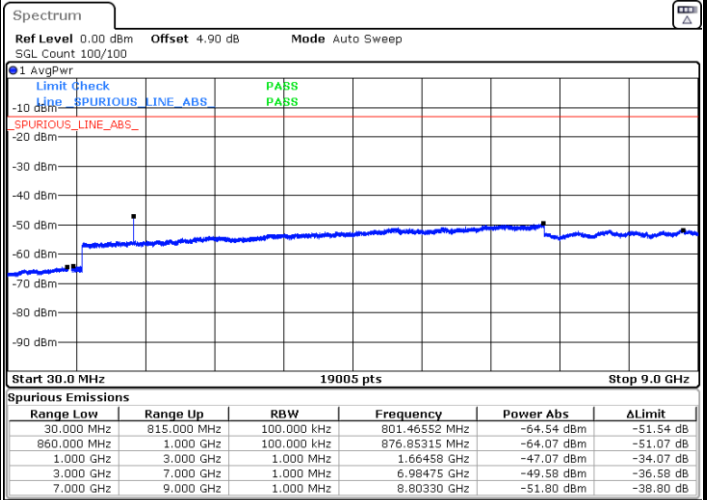
LTE Band 5 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

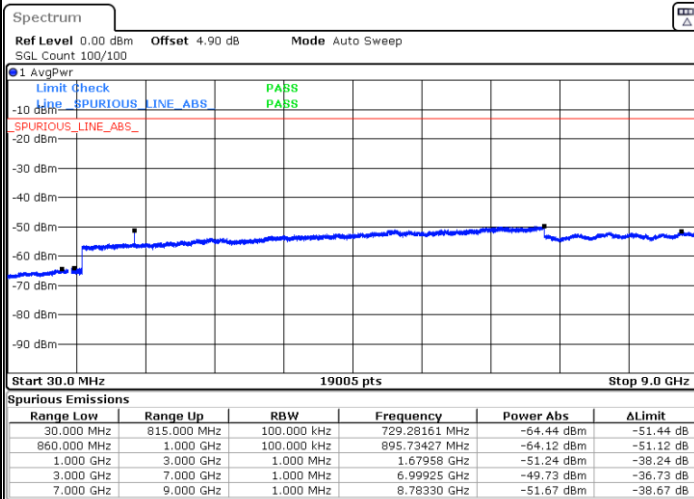


Date: 8.NOV.2019 13:42:25



Date: 8.NOV.2019 13:43:19

Highest Channel / 64QAM



Date: 8.NOV.2019 13:48:08



Frequency Stability

| Test Conditions | | LTE Band 5 (QPSK) / Middle Channel | Limit |
|------------------|-------------------|------------------------------------|--------|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | 2.5ppm |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0012 | PASS |
| 40 | Normal Voltage | 0.0014 | |
| 30 | Normal Voltage | 0.0033 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0056 | |
| 0 | Normal Voltage | 0.0059 | |
| -10 | Normal Voltage | 0.0051 | |
| -20 | Normal Voltage | 0.0023 | |
| -30 | Normal Voltage | 0.0010 | |
| 20 | Maximum Voltage | 0.0045 | |
| 20 | Normal Voltage | 0.0050 | |
| 20 | Battery End Point | 0.0012 | |

Note: Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.



LTE Band 7

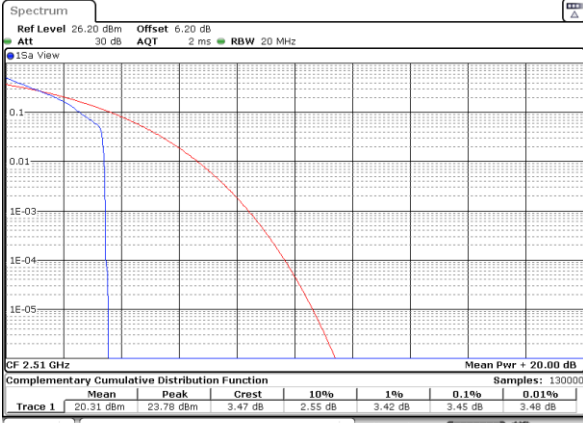
Peak-to-Average Ratio

| Mode | LTE Band 7 / 20MHz | | | | |
|------------|--------------------|---------|-------|---------|-------------|
| Mod. | QPSK | | 16QAM | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | 3.45 | 4.52 | 5.25 | 5.86 | PASS |
| Middle CH | 3.51 | 4.49 | 5.33 | 5.86 | |
| Highest CH | 3.36 | 4.49 | 4.87 | 5.77 | |
| Mod. | 64QAM | | | | Limit: 13dB |
| RB Size | 1RB | Full RB | | | Result |
| Lowest CH | 5.88 | 6.41 | | | PASS |
| Middle CH | 6.49 | 6.46 | | | |
| Highest CH | 6.17 | 6.52 | | | |



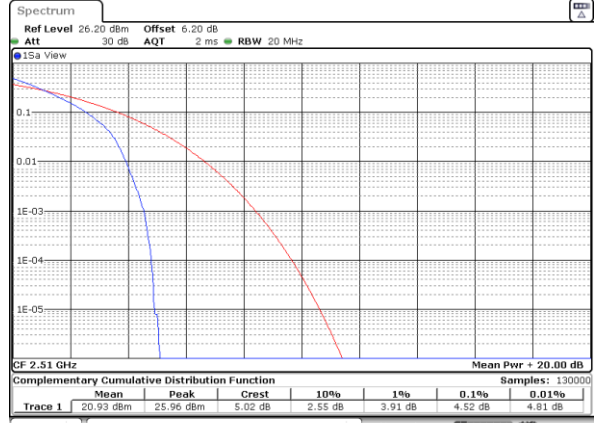
LTE Band 7 / 20MHz / QPSK

Lowest Channel / 1RB



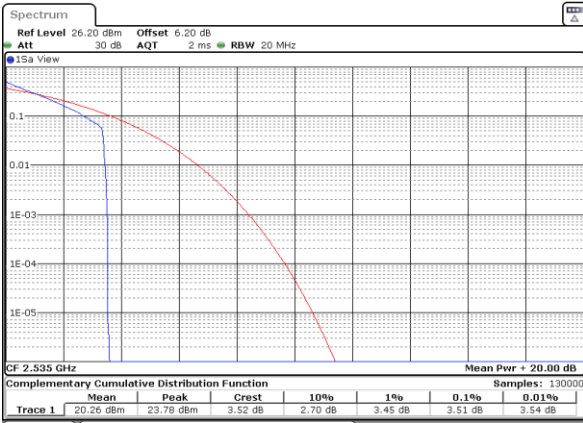
Date: 8 NOV 2019 11:19:56

Lowest Channel / Full RB



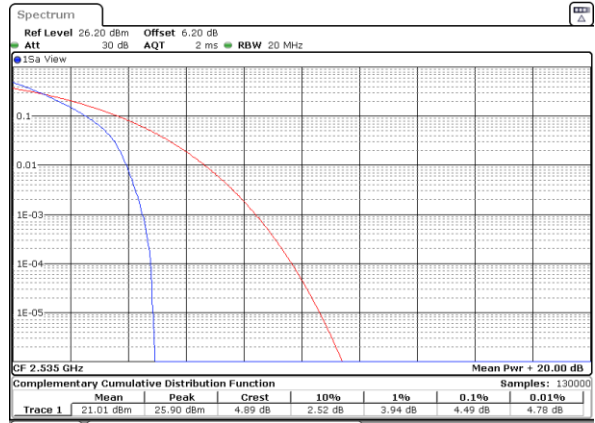
Date: 8 NOV 2019 11:20:05

Middle Channel / 1RB



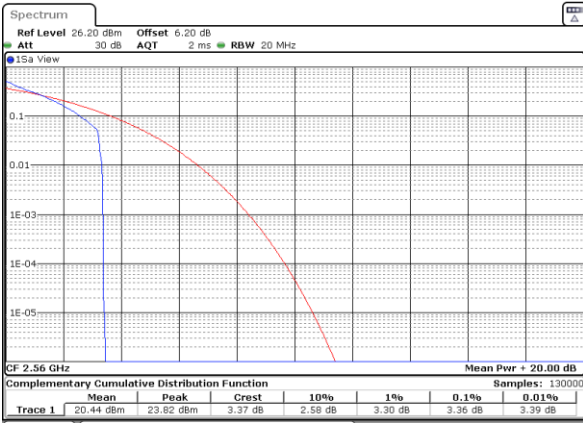
Date: 8 NOV 2019 11:20:43

Middle Channel / Full RB



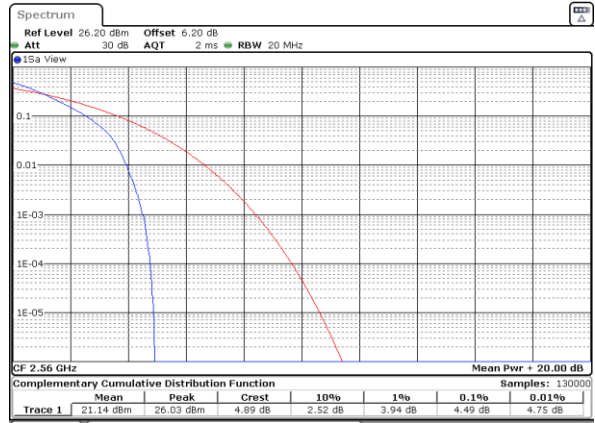
Date: 8 NOV 2019 11:20:34

Highest Channel / 1RB



Date: 8 NOV 2019 11:21:10

Highest Channel / Full RB

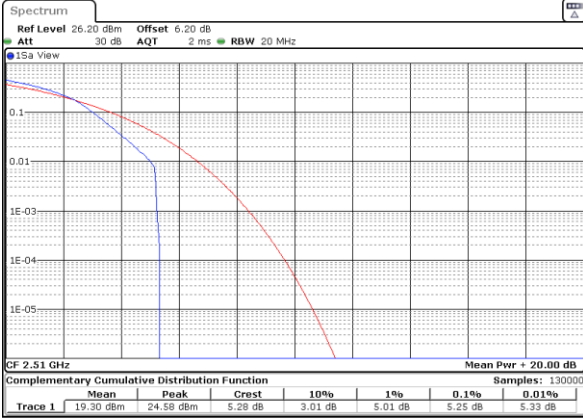


Date: 8 NOV 2019 11:21:19



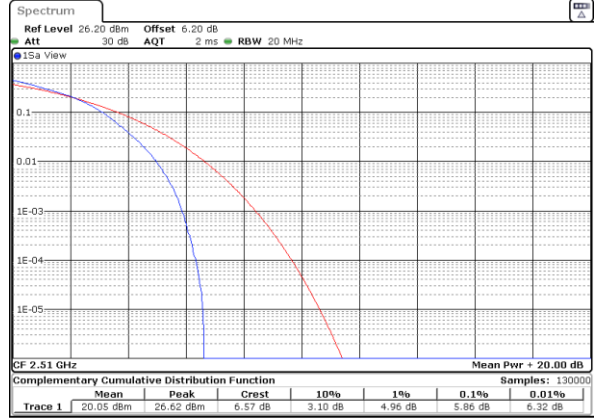
LTE Band 7 / 20MHz / 16QAM

Lowest Channel / 1RB



Date: 8 NOV 2019 11:19:46

Lowest Channel / Full RB



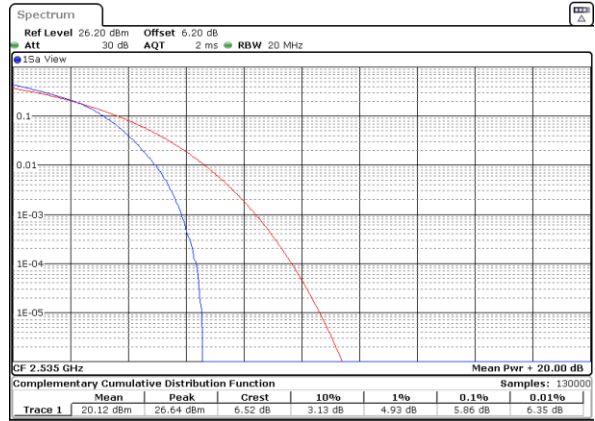
Date: 8 NOV 2019 11:20:14

Middle Channel / 1RB



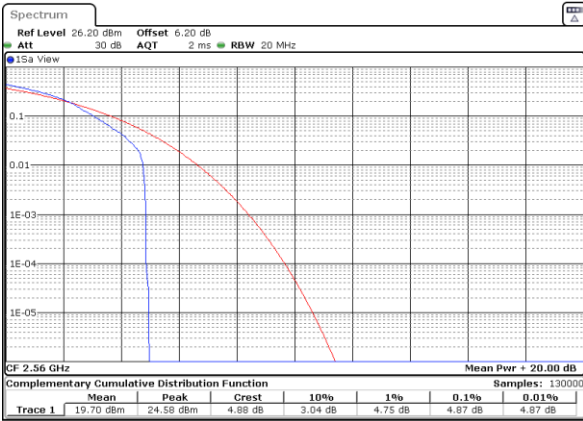
Date: 8 NOV 2019 11:20:52

Middle Channel / Full RB



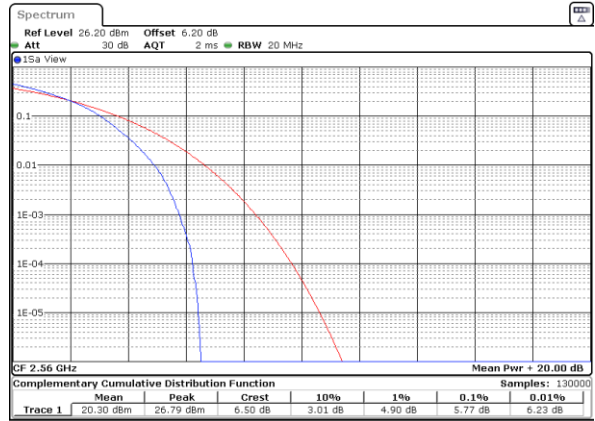
Date: 8 NOV 2019 11:20:25

Highest Channel / 1RB



Date: 8 NOV 2019 11:21:01

Highest Channel / Full RB

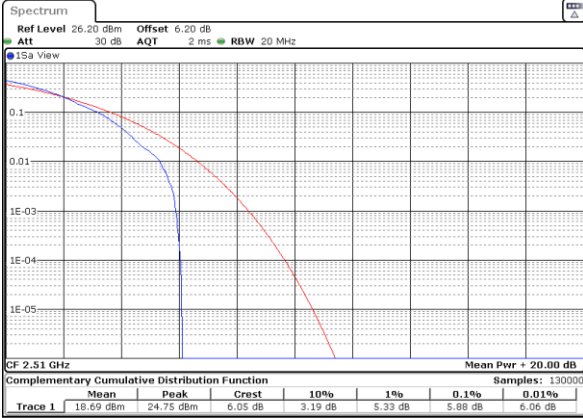


Date: 8 NOV 2019 11:21:28



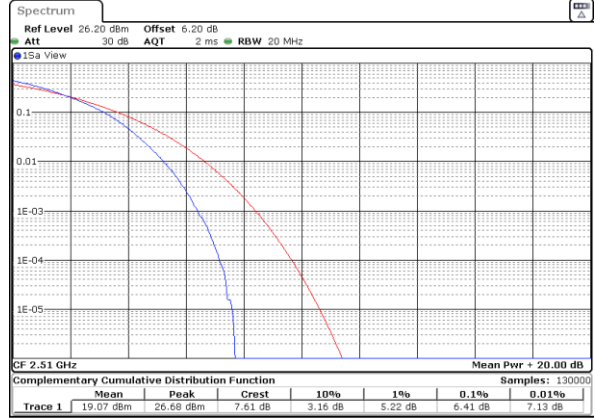
LTE Band 7 / 20MHz / 64QAM

Lowest Channel / 1RB



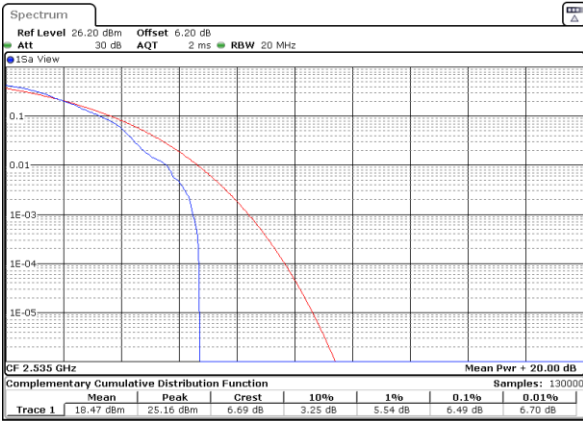
Date: 8 NOV 2019 11:46:20

Lowest Channel / Full RB



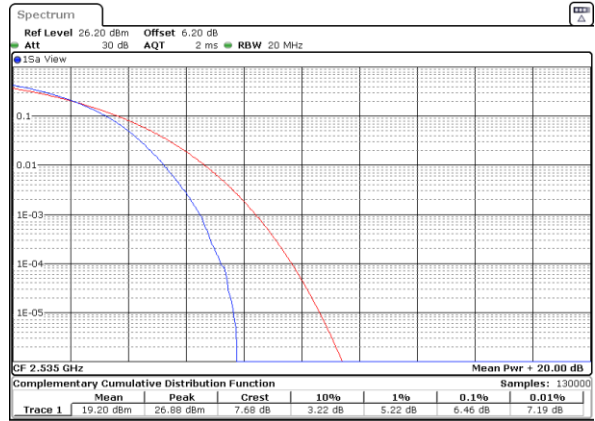
Date: 8 NOV 2019 11:46:44

Middle Channel / 1RB



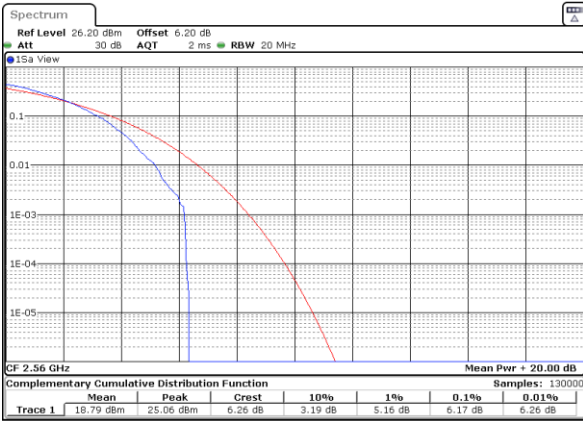
Date: 8 NOV 2019 11:47:07

Middle Channel / Full RB



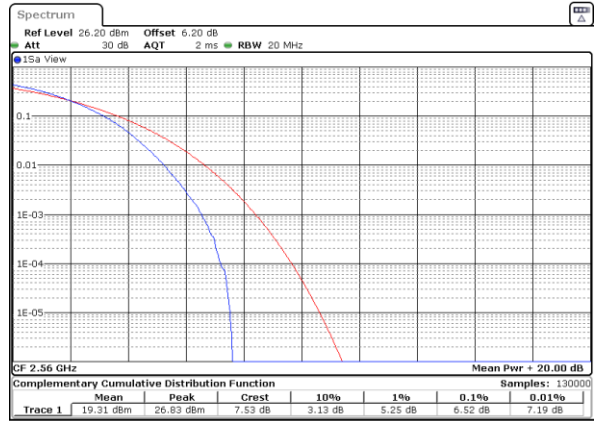
Date: 8 NOV 2019 11:46:54

Highest Channel / 1RB



Date: 8 NOV 2019 11:47:20

Highest Channel / Full RB



Date: 8 NOV 2019 11:47:28



26dB Bandwidth

| Mode | LTE Band 7 : 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 | | | | | 4.935 | 4.915 | 9.87 | 9.61 | 14.505 | 14.326 | 20.18 | 20.18 |
| Middle CH | | | | | 4.915 | 4.865 | 9.79 | 9.91 | 14.416 | 14.565 | 20.18 | 20.18 |
| Highest CH | | | | | 4.985 | 4.855 | 9.91 | 9.85 | 14.416 | 14.206 | 20.30 | 20.18 |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | | | | | 64QAM | | 64QAM | | 64QAM | | 64QAM | |
| Lowest CH | | | | | 4.885 | | 9.77 | | 14.296 | | 20.22 | |
| Middle CH | | | | | 4.855 | | 9.89 | | 14.565 | | 20.22 | |
| Highest CH | | | | | 4.895 | | 9.69 | | 14.505 | | 20.22 | |