



LTE Band 5

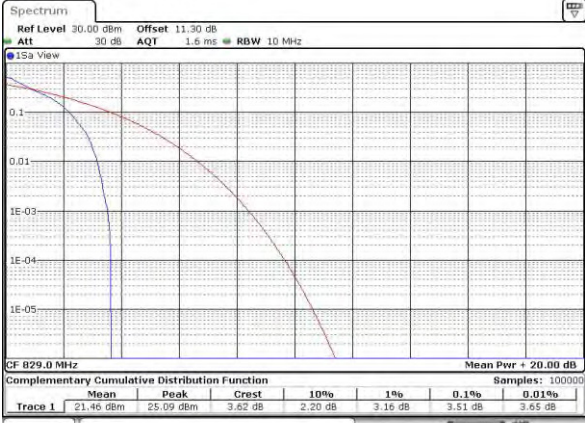
Peak-to-Average Ratio

| Mode | LTE Band 5 / 10MHz | | | | |
|------------|--------------------|---------|-------|---------|-------------|
| Mod. | QPSK | | 16QAM | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | 3.51 | 5.07 | 4.41 | 5.88 | PASS |
| Middle CH | 4.58 | 5.48 | 5.54 | 6.23 | |
| Highest CH | 4.2 | 5.22 | 5.33 | 5.88 | |



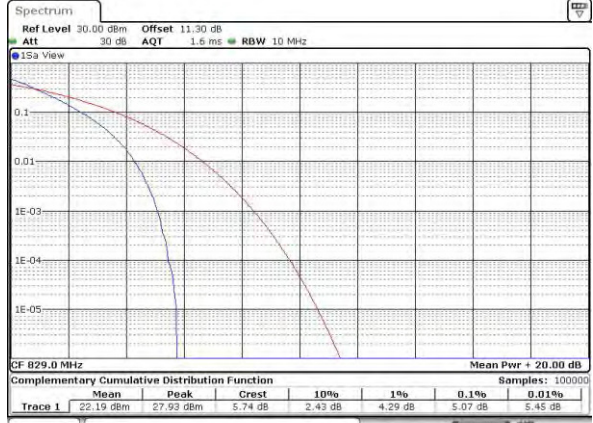
LTE Band 5 / 10MHz / QPSK

Lowest Channel / 1RB



Date: 2 NOV 2015 10:58:59

Lowest Channel / Full RB



Date: 2 NOV 2015 10:59:12

Middle Channel / 1RB



Date: 2 NOV 2015 10:59:22

Middle Channel / Full RB



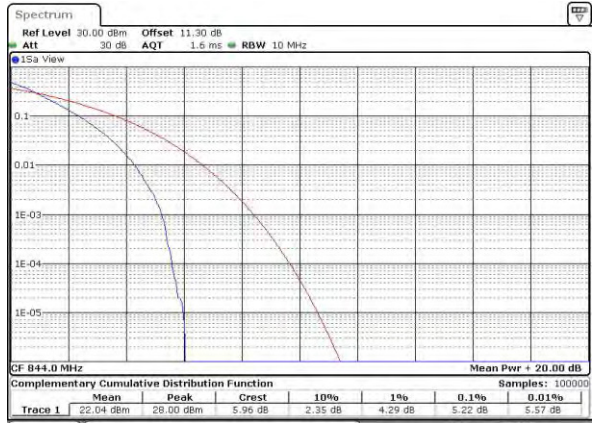
Date: 2 NOV 2015 10:59:33

Highest Channel / 1RB



Date: 2 NOV 2015 10:59:44

Highest Channel / Full RB

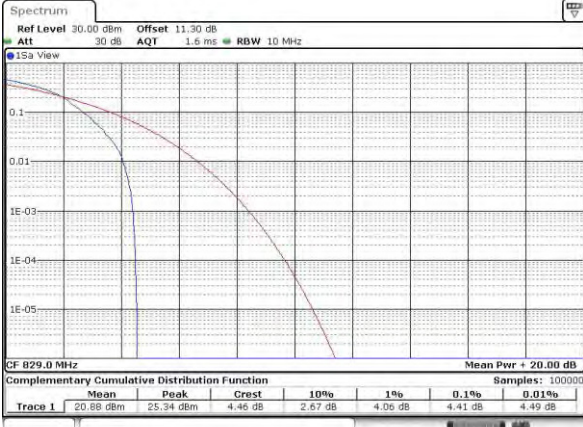


Date: 2 NOV 2015 10:59:54



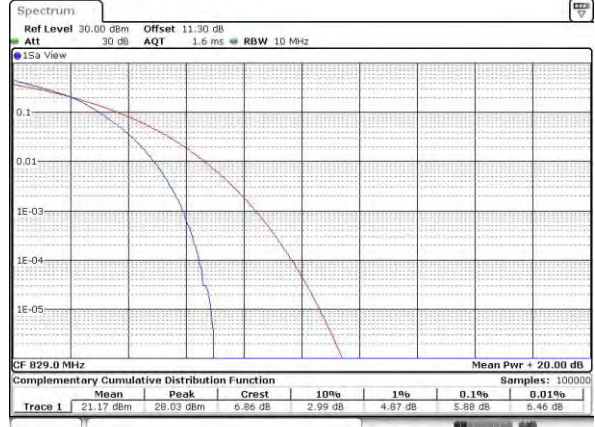
LTE Band 5 / 10MHz / 16QAM

Lowest Channel / 1RB



Date: 2 NOV 2015 10:57:35

Lowest Channel / Full RB



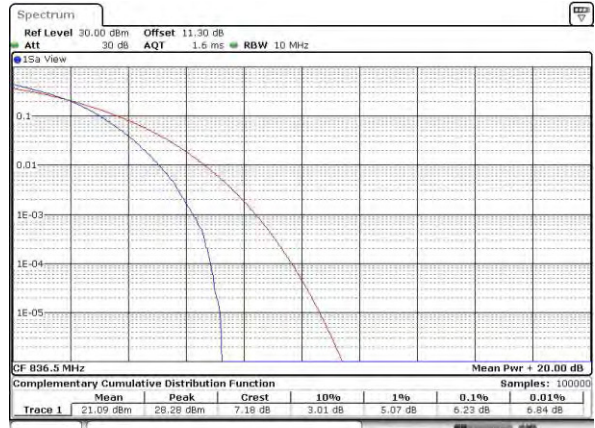
Date: 2 NOV 2015 10:57:45

Middle Channel / 1RB



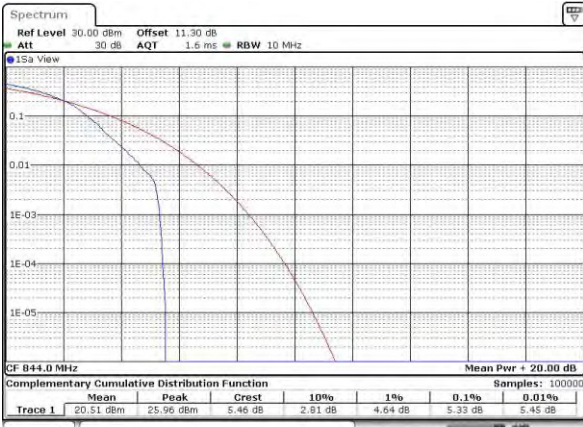
Date: 2 NOV 2015 10:58:00

Middle Channel / Full RB



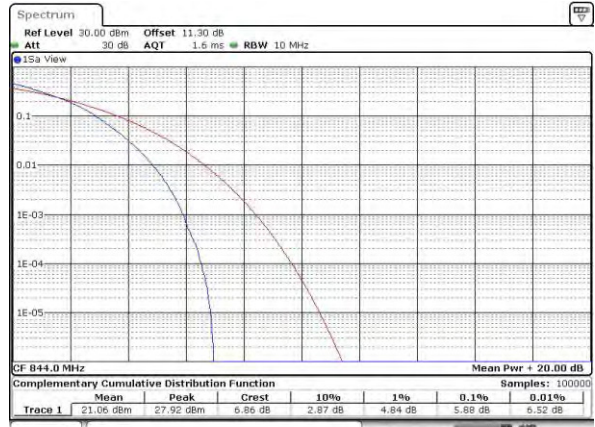
Date: 2 NOV 2015 10:58:12

Highest Channel / 1RB



Date: 2 NOV 2015 10:58:29

Highest Channel / Full RB



Date: 2 NOV 2015 10:58:43



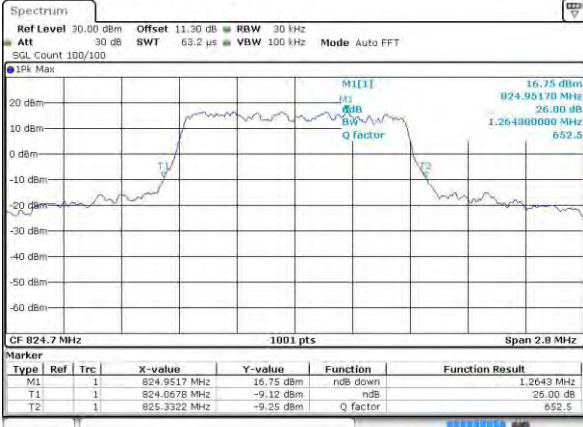
26dB Bandwidth

| 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 | 1.26 | 1.26 | 3 | 2.97 | 4.96 | 4.96 | 10.05 | 9.85 | - | - | - | - |
| Middle CH | 1.25 | 1.27 | 3 | 2.97 | 4.94 | 4.95 | 9.83 | 9.75 | - | - | - | - |
| Highest CH | 1.26 | 1.25 | 2.99 | 3.02 | 4.84 | 4.91 | 9.81 | 9.89 | - | - | - | - |



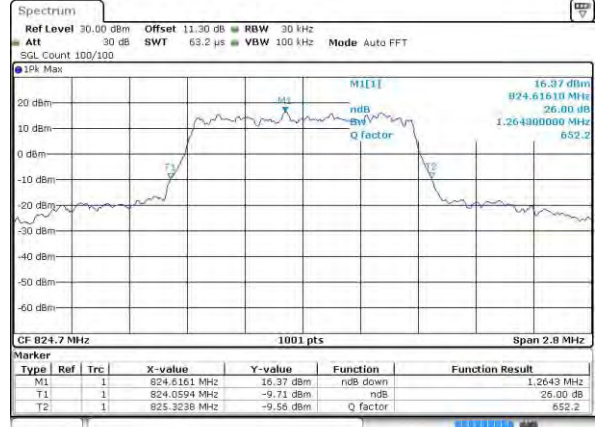
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



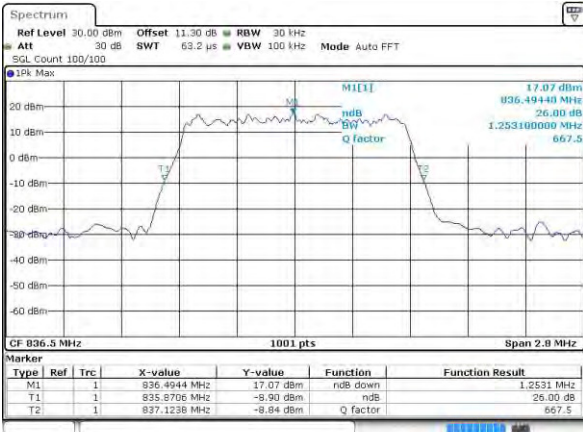
Date: 2 NOV 2015 10:31:25

Lowest Channel / 1.4MHz / 16QAM



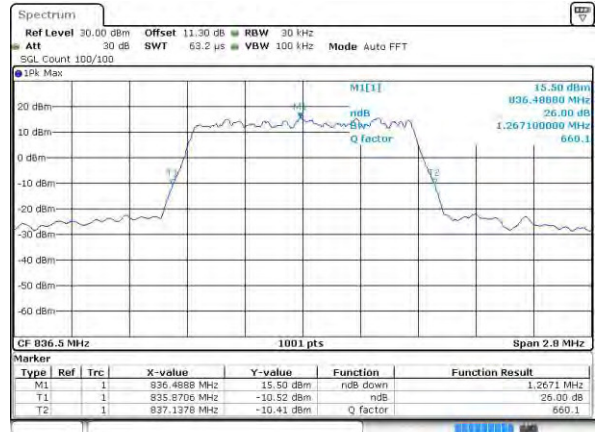
Date: 2 NOV 2015 10:31:14

Middle Channel / 1.4MHz / QPSK



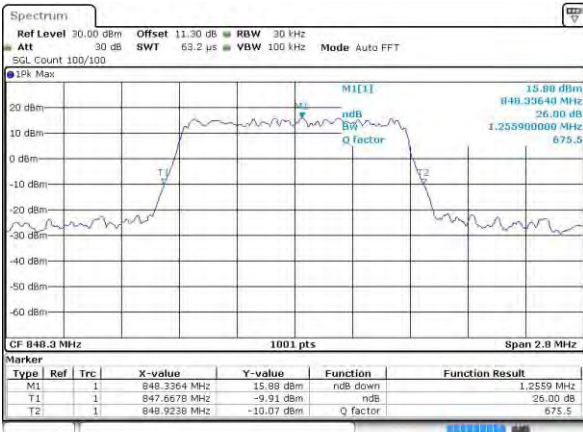
Date: 2 NOV 2015 10:41:23

Middle Channel / 1.4MHz / 16QAM



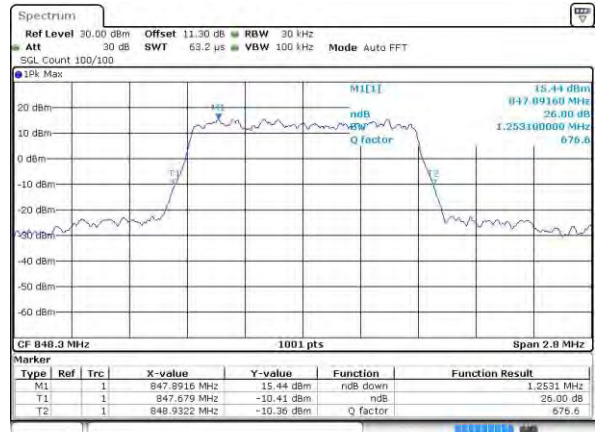
Date: 2 NOV 2015 10:41:33

Highest Channel / 1.4MHz / QPSK



Date: 2 NOV 2015 10:43:53

Highest Channel / 1.4MHz / 16QAM

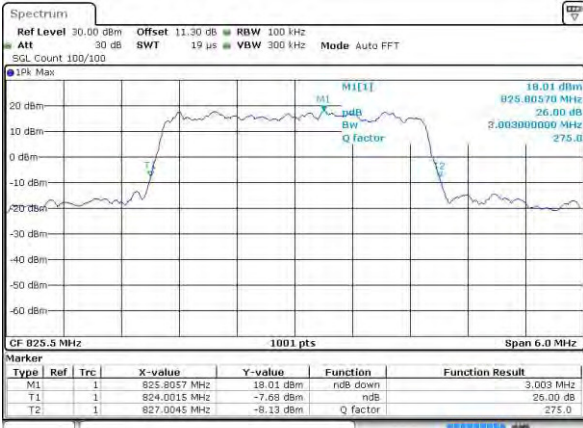


Date: 2 NOV 2015 10:44:03



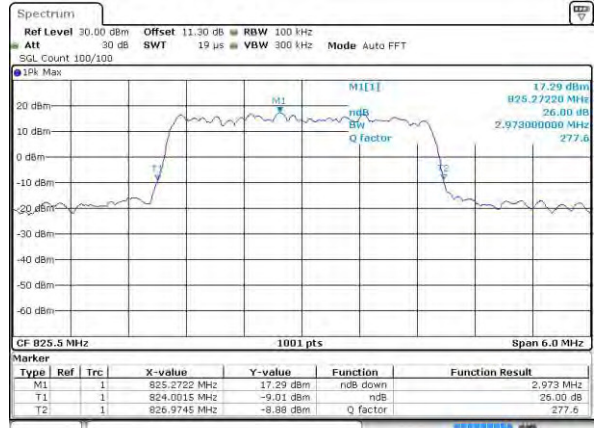
LTE Band 5

Lowest Channel / 3MHz / QPSK



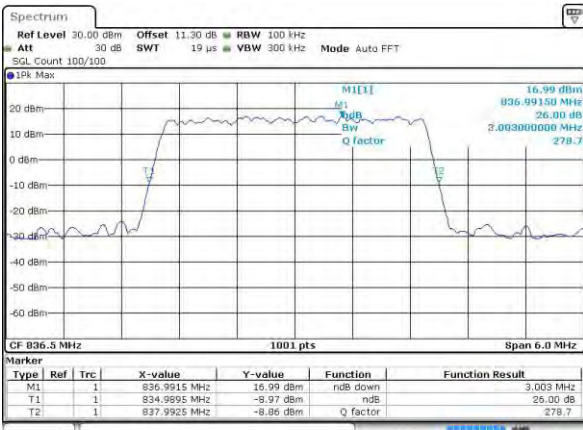
Date: 2 NOV 2015 09:22:53

Lowest Channel / 3MHz / 16QAM



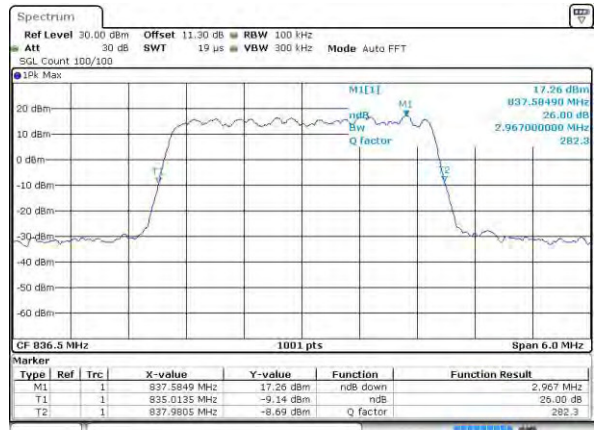
Date: 2 NOV 2015 09:23:03

Middle Channel / 3MHz / QPSK



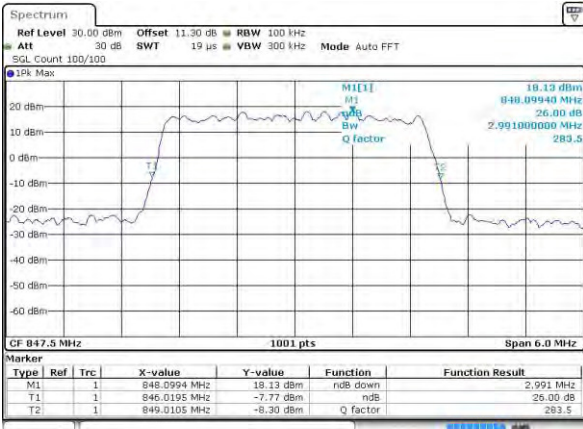
Date: 2 NOV 2015 09:33:01

Middle Channel / 3MHz / 16QAM



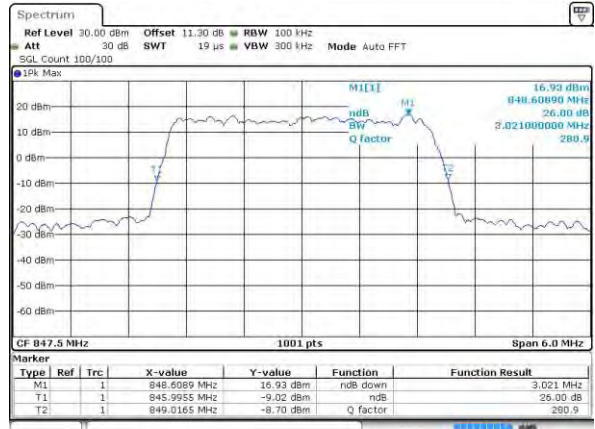
Date: 2 NOV 2015 09:33:12

Highest Channel / 3MHz / QPSK



Date: 2 NOV 2015 09:35:32

Highest Channel / 3MHz / 16QAM

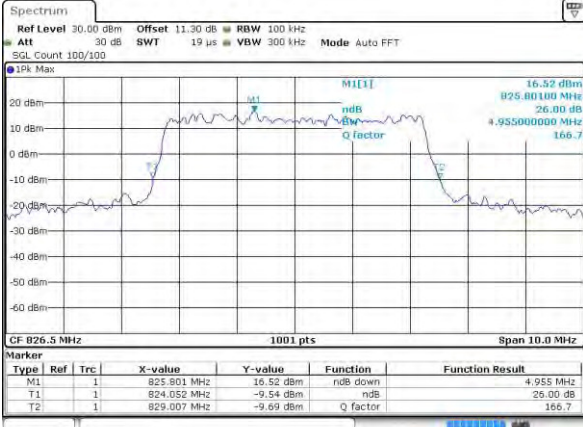


Date: 2 NOV 2015 09:35:43



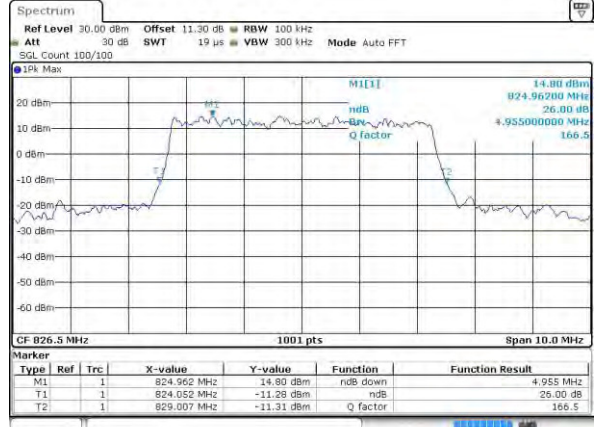
LTE Band 5

Lowest Channel / 5MHz / QPSK



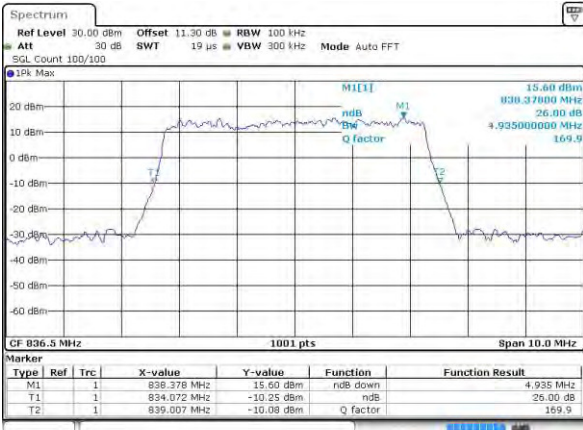
Date: 2 NOV 2015 09:45:41

Lowest Channel / 5MHz / 16QAM



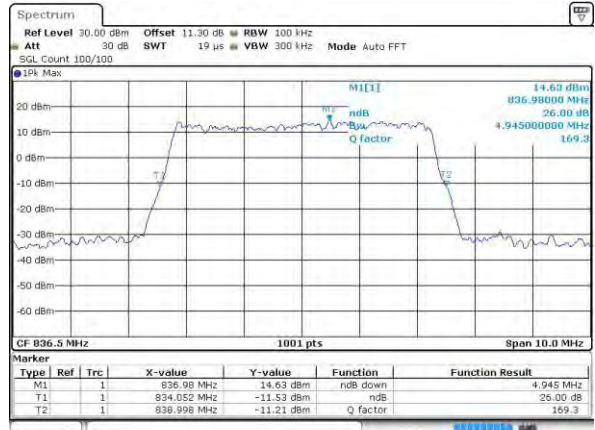
Date: 2 NOV 2015 09:45:51

Middle Channel / 5MHz / QPSK



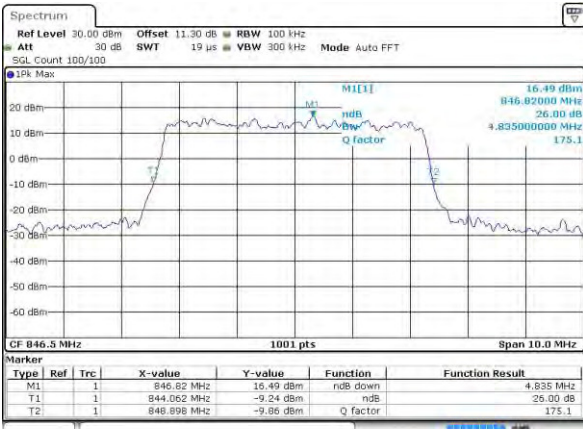
Date: 2 NOV 2015 09:55:49

Middle Channel / 5MHz / 16QAM



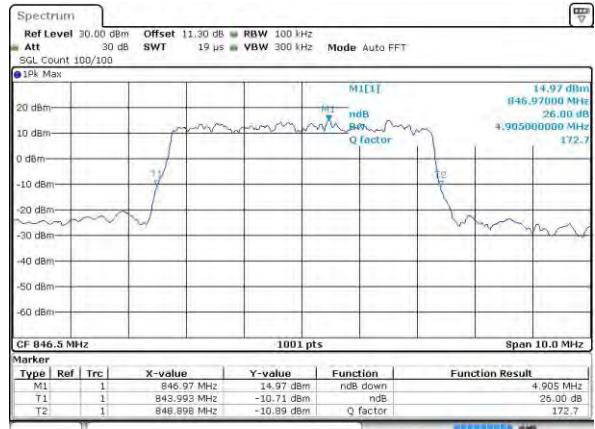
Date: 2 NOV 2015 09:56:00

Highest Channel / 5MHz / QPSK



Date: 2 NOV 2015 09:58:20

Highest Channel / 5MHz / 16QAM

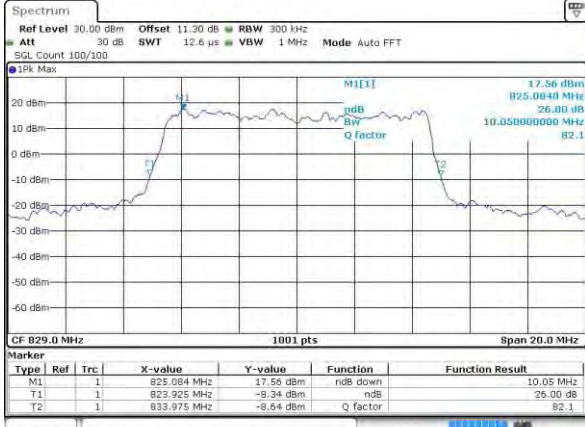


Date: 2 NOV 2015 09:58:30



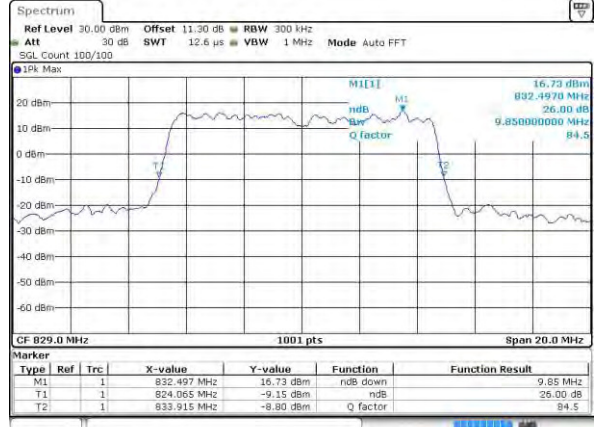
LTE Band 5

Lowest Channel / 10MHz / QPSK



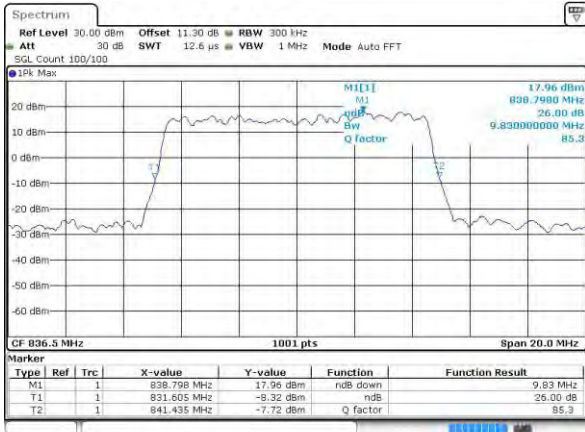
Date: 2 NOV 2015 10:08:28

Lowest Channel / 10MHz / 16QAM



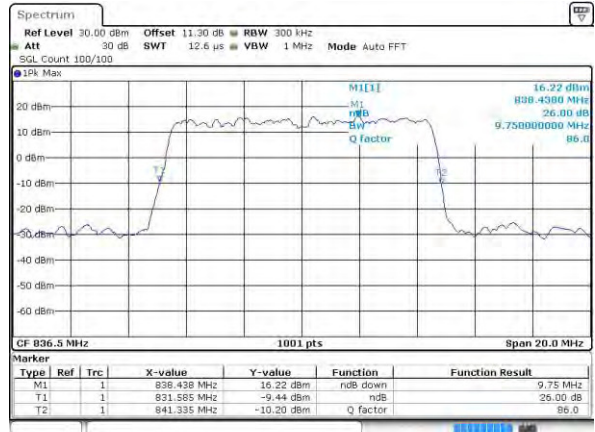
Date: 2 NOV 2015 10:08:38

Middle Channel / 10MHz / QPSK



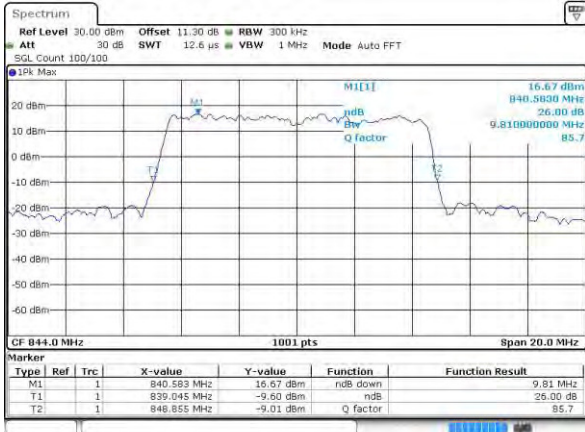
Date: 2 NOV 2015 10:18:35

Middle Channel / 10MHz / 16QAM



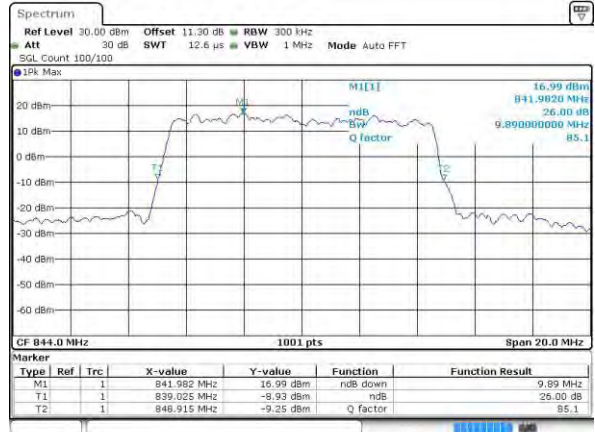
Date: 2 NOV 2015 10:18:46

Highest Channel / 10MHz / QPSK



Date: 2 NOV 2015 10:21:06

Highest Channel / 10MHz / 16QAM



Date: 2 NOV 2015 10:21:16



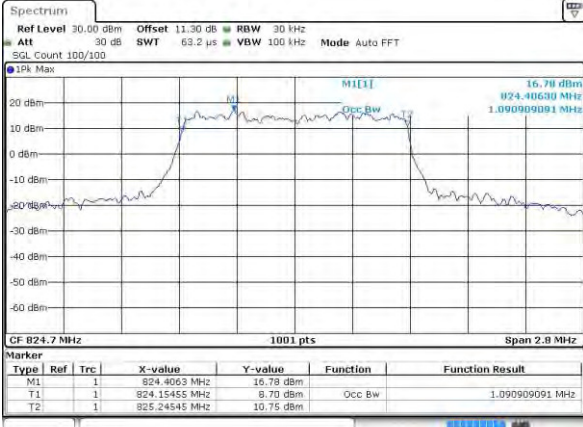
Occupied Bandwidth

| 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 |
| Lowest CH | 1.09 | 1.09 | 2.73 | 2.72 | 4.5 | 4.5 | 9.05 | 9.01 | - | - | - | - |
| Middle CH | 1.08 | 1.09 | 2.71 | 2.73 | 4.5 | 4.49 | 9.11 | 9.03 | - | - | - | - |
| Highest CH | 1.1 | 1.09 | 2.73 | 2.73 | 4.51 | 4.47 | 9.05 | 9.01 | - | - | - | - |



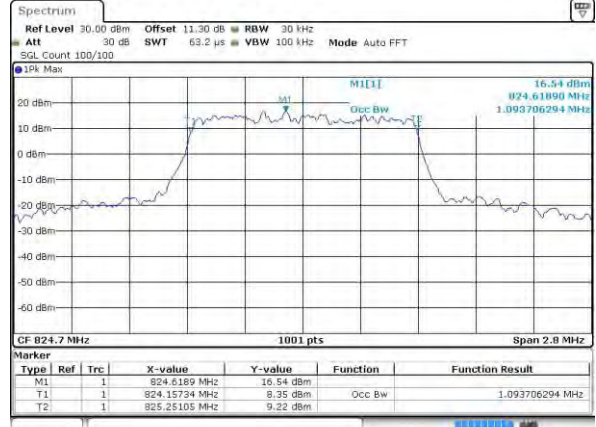
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



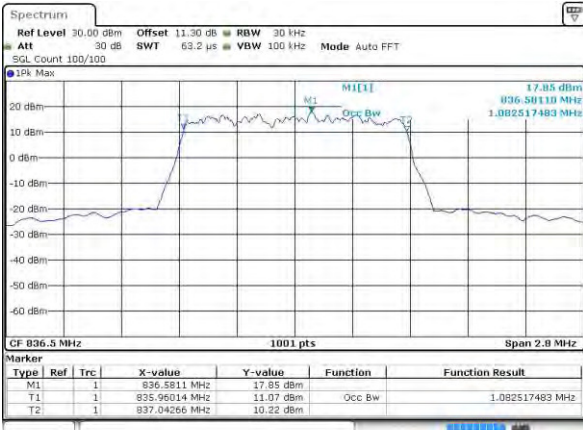
Date: 2 NOV 2015 10:30:53

Lowest Channel / 1.4MHz / 16QAM



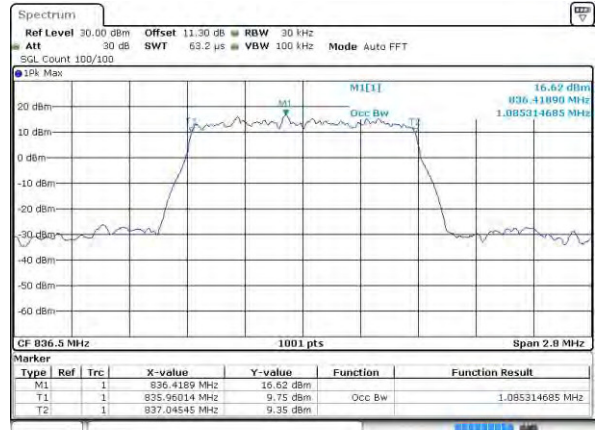
Date: 2 NOV 2015 10:31:04

Middle Channel / 1.4MHz / QPSK



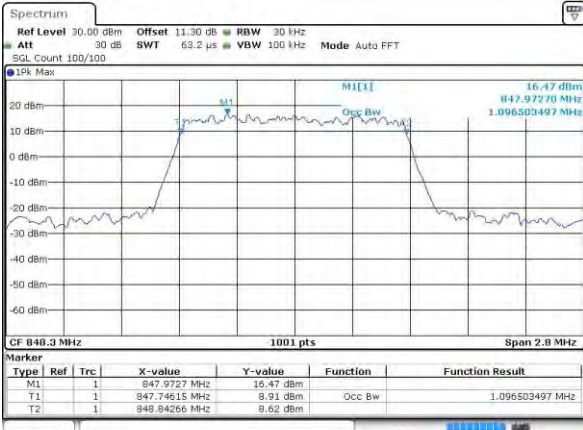
Date: 2 NOV 2015 10:41:02

Middle Channel / 1.4MHz / 16QAM



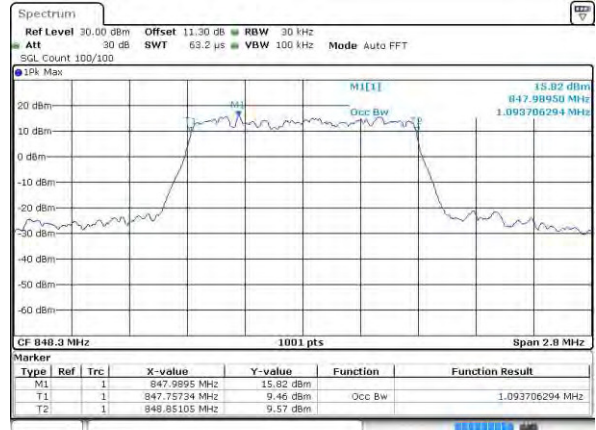
Date: 2 NOV 2015 10:41:12

Highest Channel / 1.4MHz / QPSK



Date: 2 NOV 2015 10:43:32

Highest Channel / 1.4MHz / 16QAM

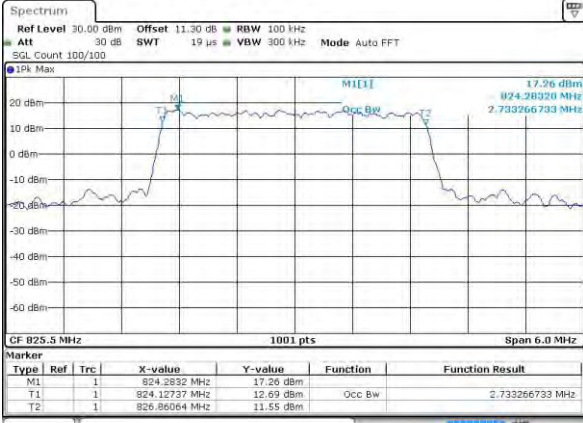


Date: 2 NOV 2015 10:43:43



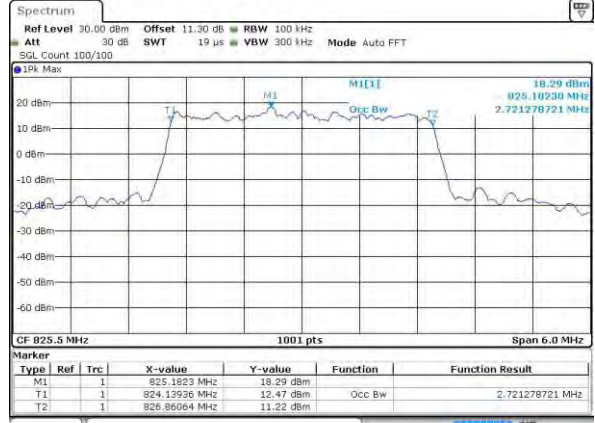
LTE Band 5

Lowest Channel / 3MHz / QPSK



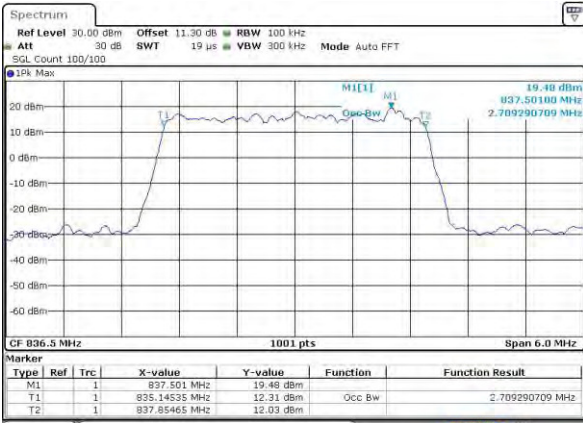
Date: 2 NOV 2015 09:22:31

Lowest Channel / 3MHz / 16QAM



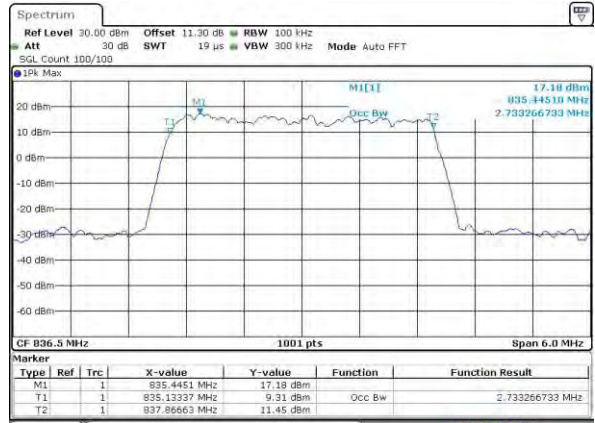
Date: 2 NOV 2015 09:22:42

Middle Channel / 3MHz / QPSK



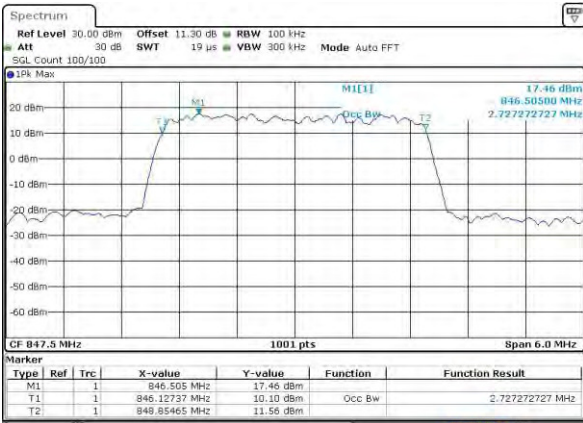
Date: 2 NOV 2015 09:32:40

Middle Channel / 3MHz / 16QAM



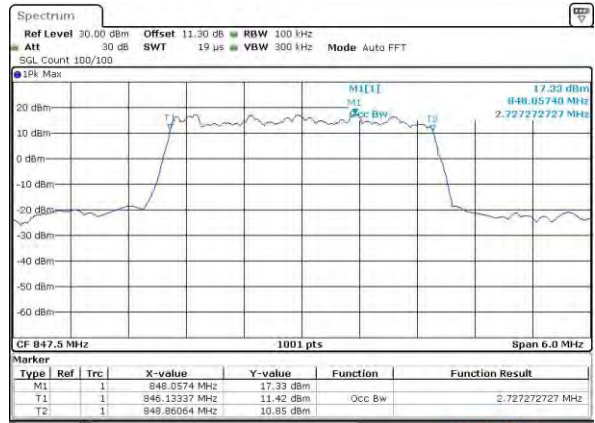
Date: 2 NOV 2015 09:32:51

Highest Channel / 3MHz / QPSK



Date: 2 NOV 2015 09:35:11

Highest Channel / 3MHz / 16QAM

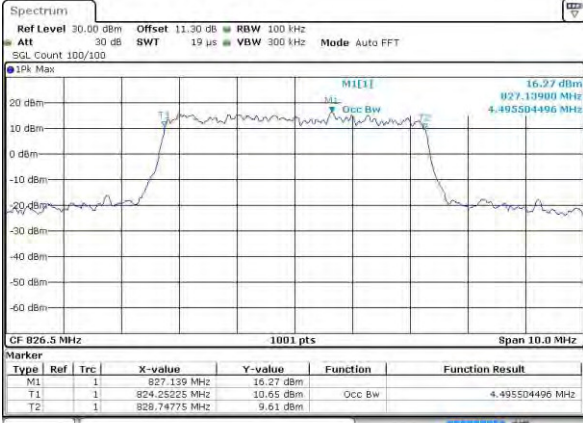


Date: 2 NOV 2015 09:35:22



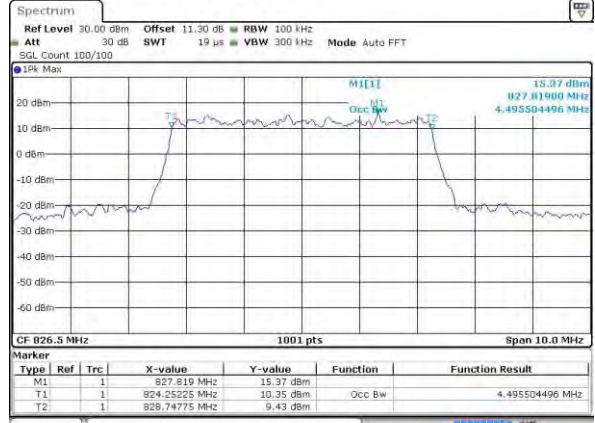
LTE Band 5

Lowest Channel / 5MHz / QPSK



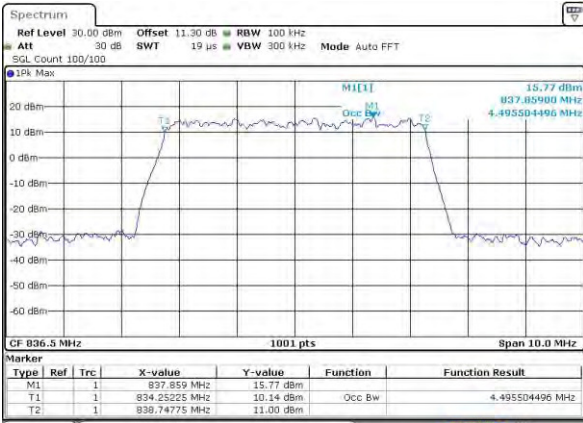
Date: 2 NOV 2015 09:45:20

Lowest Channel / 5MHz / 16QAM



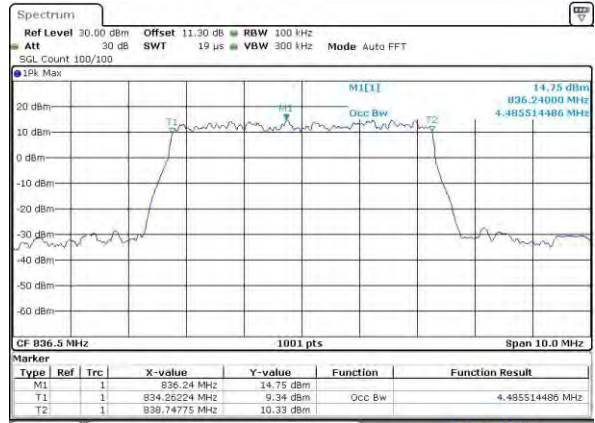
Date: 2 NOV 2015 09:45:30

Middle Channel / 5MHz / QPSK



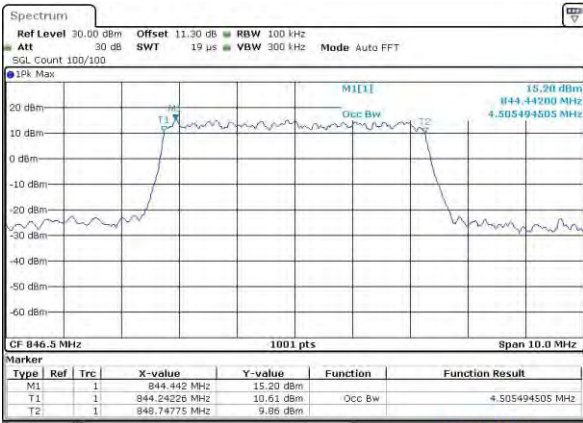
Date: 2 NOV 2015 09:55:28

Middle Channel / 5MHz / 16QAM



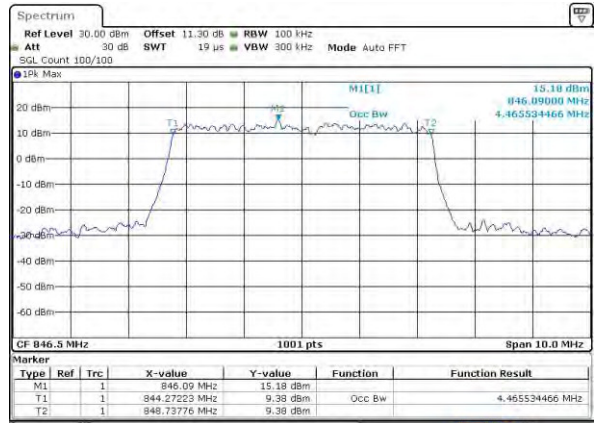
Date: 2 NOV 2015 09:55:39

Highest Channel / 5MHz / QPSK



Date: 2 NOV 2015 09:57:59

Highest Channel / 5MHz / 16QAM

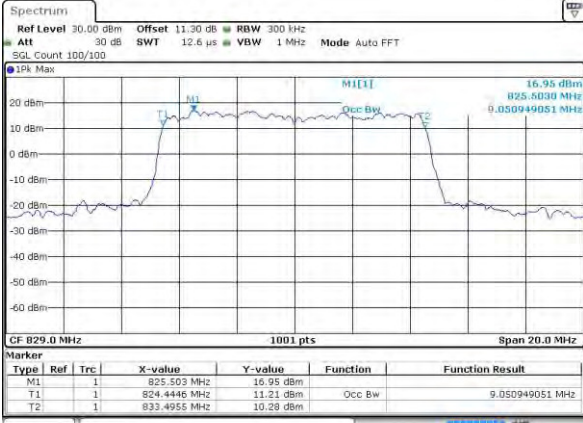


Date: 2 NOV 2015 09:58:09



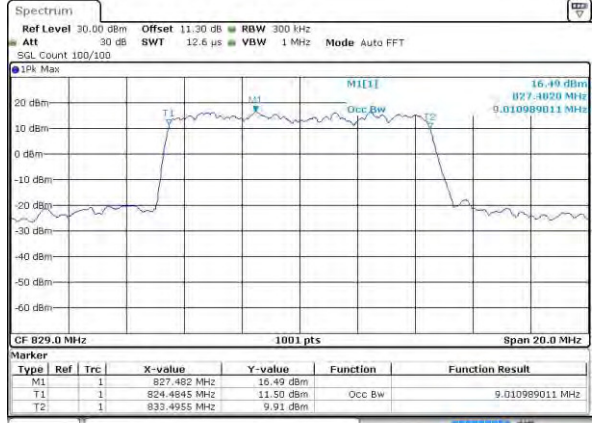
LTE Band 5

Lowest Channel / 10MHz / QPSK



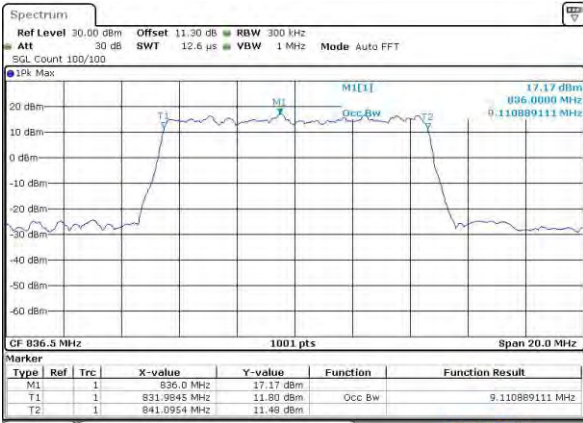
Date: 2 NOV 2015 10:08:07

Lowest Channel / 10MHz / 16QAM



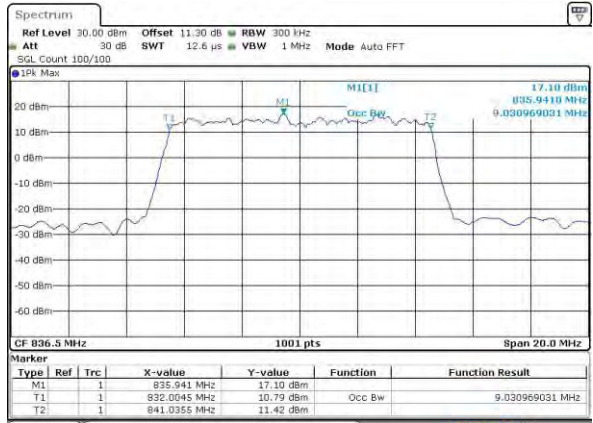
Date: 2 NOV 2015 10:08:18

Middle Channel / 10MHz / QPSK



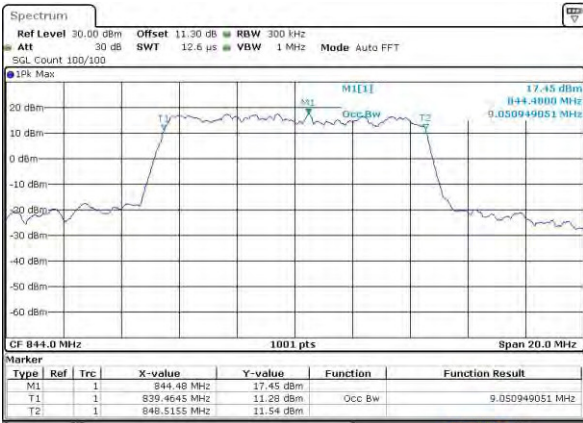
Date: 2 NOV 2015 10:18:15

Middle Channel / 10MHz / 16QAM



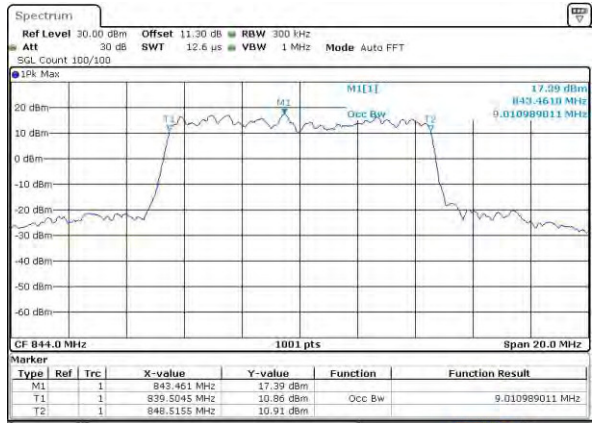
Date: 2 NOV 2015 10:18:25

Highest Channel / 10MHz / QPSK



Date: 2 NOV 2015 10:20:45

Highest Channel / 10MHz / 16QAM



Date: 2 NOV 2015 10:20:55

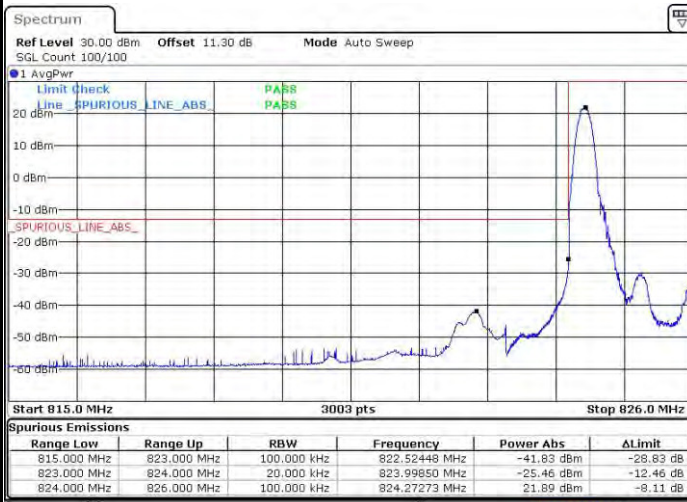


Conducted Band Edge



LTE Band 5 / 1.4MHz / QPSK

Lowest Band Edge / 1RB



Date: 2 NOV 2015 10:33:19

Highest Band Edge / 1RB



Date: 2 NOV 2015 10:49:46

Lowest Band Edge / Full RB



Date: 2 NOV 2015 10:37:07

Highest Band Edge / Full RB

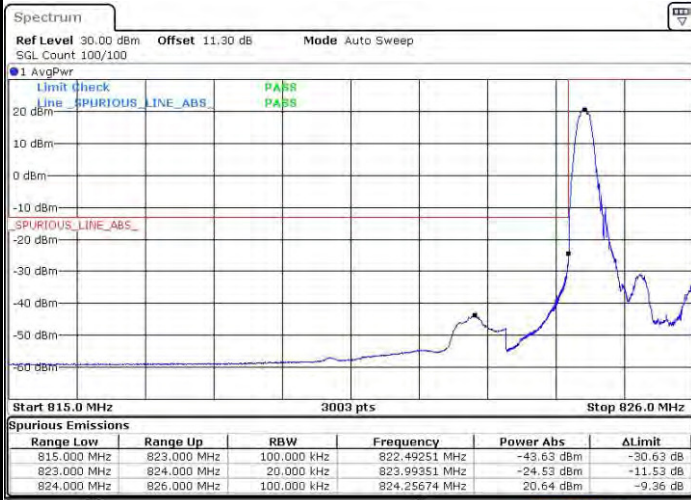


Date: 2 NOV 2015 10:45:57



LTE Band 5 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 2 NOV 2015 10:35:13

Highest Band Edge / 1 RB



Date: 2 NOV 2015 10:51:40

Lowest Band Edge / Full RB



Date: 2 NOV 2015 10:39:02

Highest Band Edge / Full RB

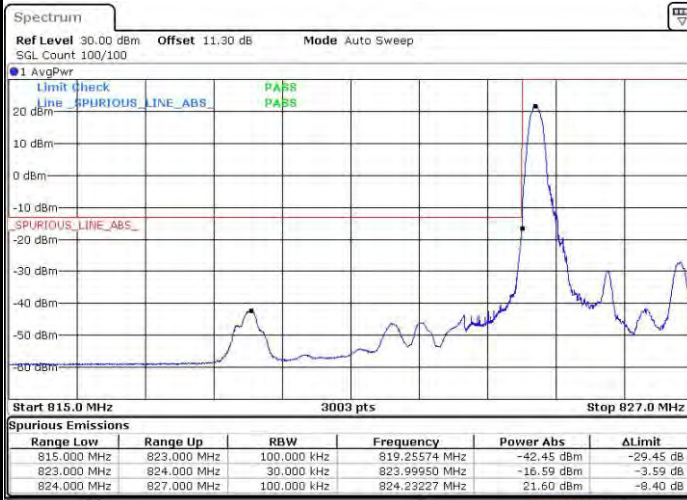


Date: 2 NOV 2015 10:47:51



LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



Date: 2 NOV 2015 09:24:57

Highest Band Edge / 1 RB



Date: 2 NOV 2015 09:37:37

Lowest Band Edge / Full RB



Date: 2 NOV 2015 09:28:46

Highest Band Edge / Full RB

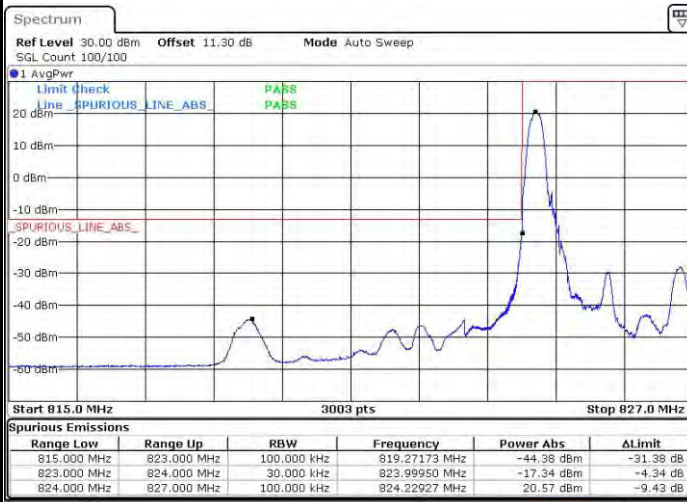


Date: 2 NOV 2015 09:41:26



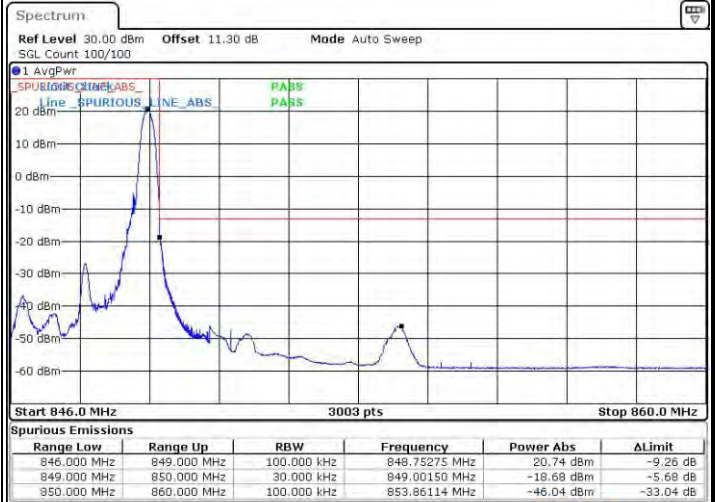
LTE Band 5 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



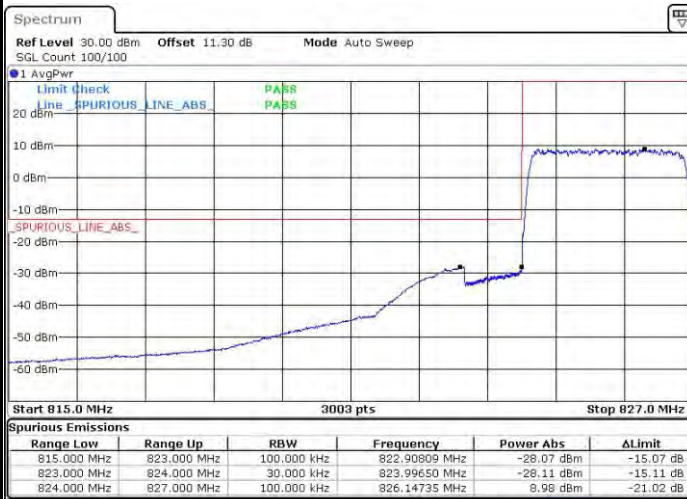
Date: 2 NOV 2015 09:26:52

Highest Band Edge / 1 RB



Date: 2 NOV 2015 09:39:31

Lowest Band Edge / Full RB



Date: 2 NOV 2015 09:30:40

Highest Band Edge / Full RB

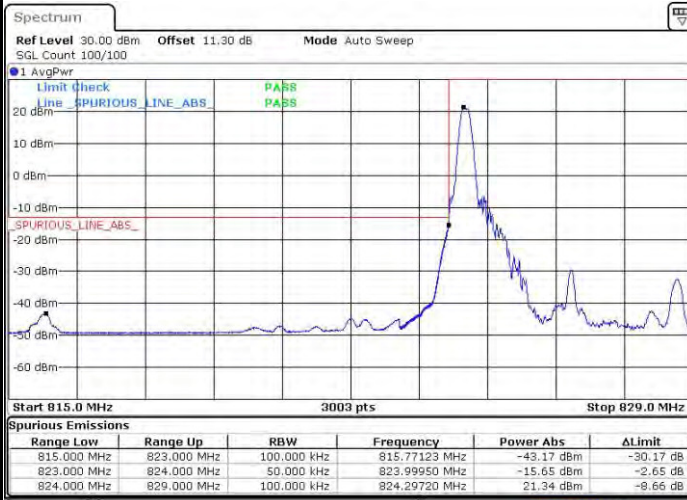


Date: 2 NOV 2015 09:43:20



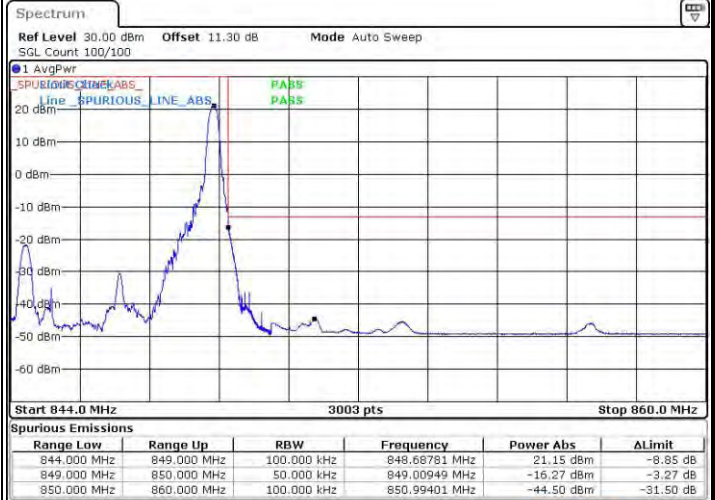
LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



Date: 2 NOV 2015 09:47:45

Highest Band Edge / 1 RB



Date: 2 NOV 2015 10:00:24

Lowest Band Edge / Full RB



Date: 2 NOV 2015 09:51:34

Highest Band Edge / Full RB

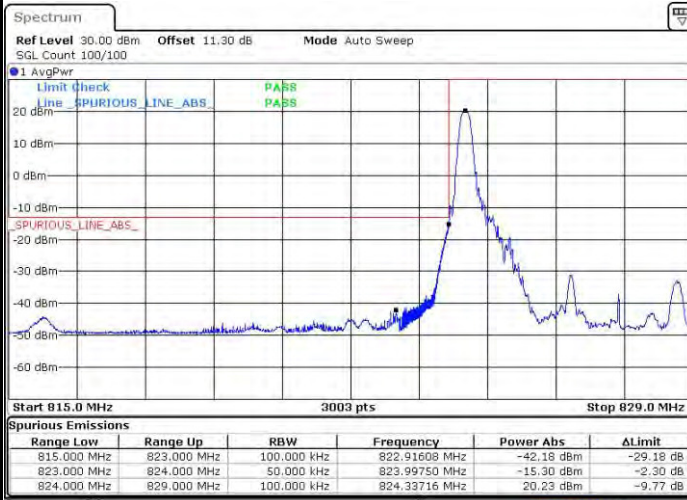


Date: 2 NOV 2015 10:04:13



LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / 1RB



Date: 2 NOV 2015 09:49:39

Highest Band Edge / 1 RB



Date: 2 NOV 2015 10:02:19

Lowest Band Edge / Full RB



Date: 2 NOV 2015 09:53:28

Highest Band Edge / Full RB

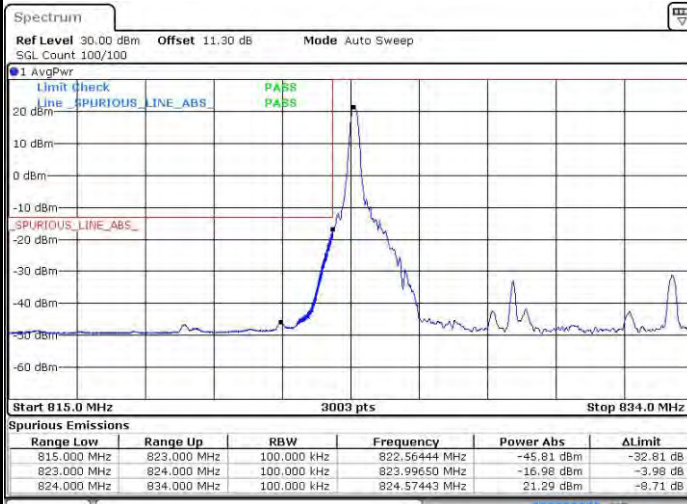


Date: 2 NOV 2015 10:06:07



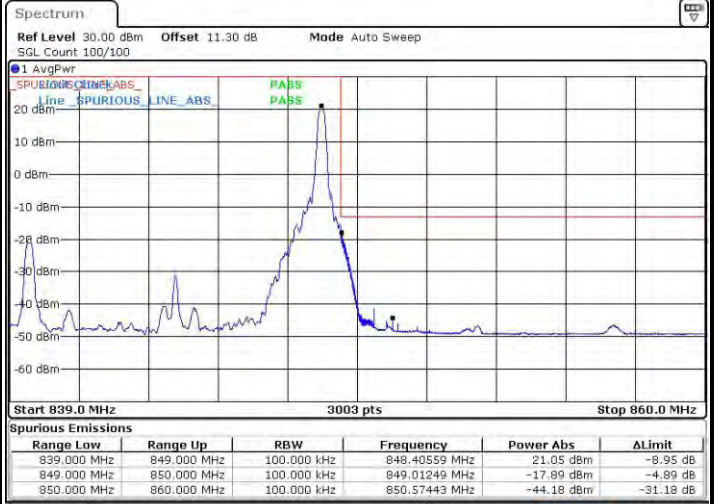
LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / 1 RB



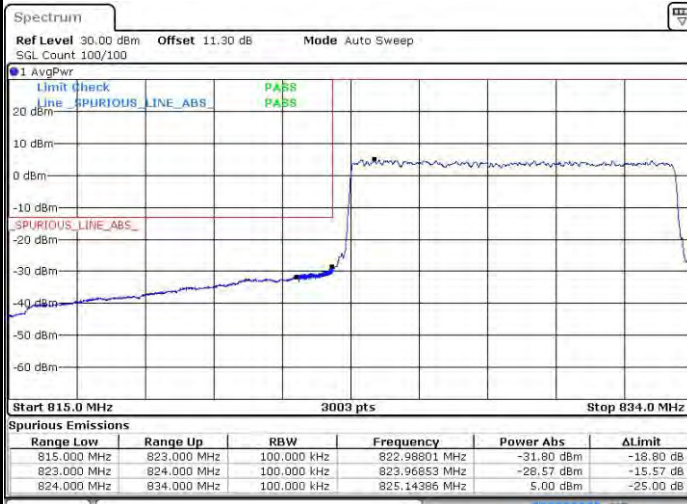
Date: 2 NOV 2015 10:10:32

Highest Band Edge / 1 RB



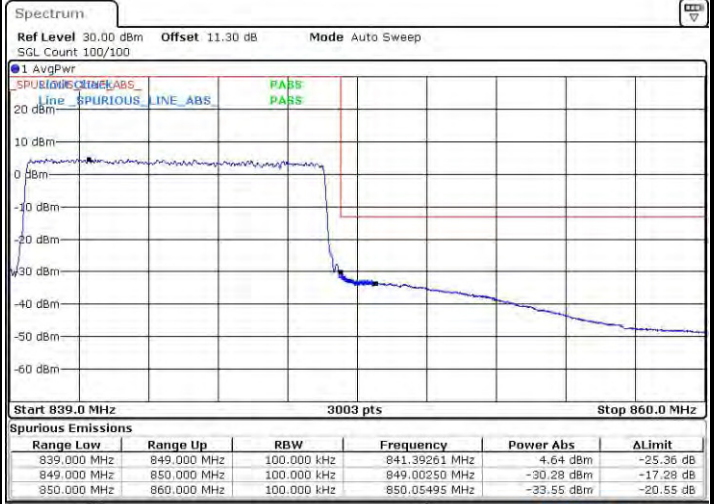
Date: 2 NOV 2015 10:23:10

Lowest Band Edge / Full RB



Date: 2 NOV 2015 10:14:21

Highest Band Edge / Full RB

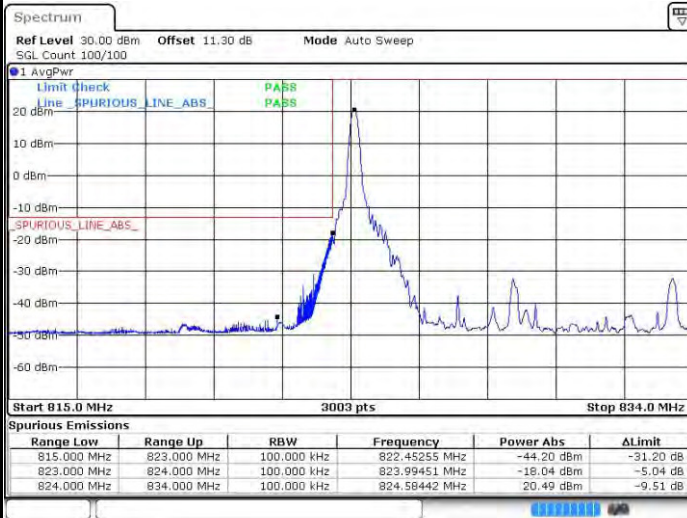


Date: 2 NOV 2015 10:26:59



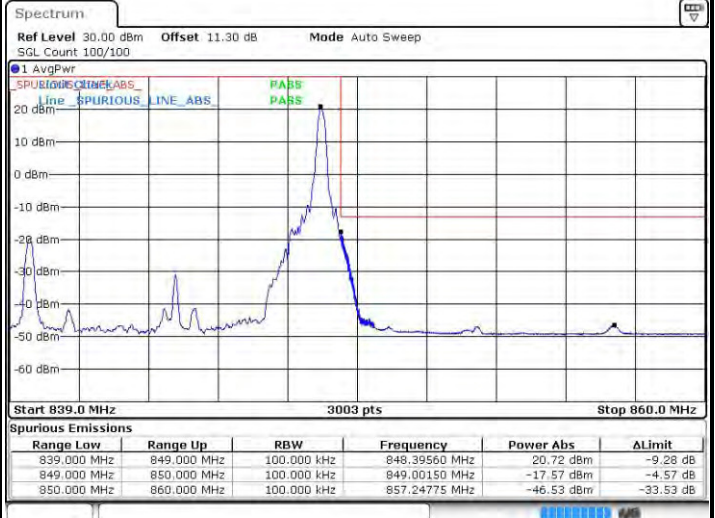
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



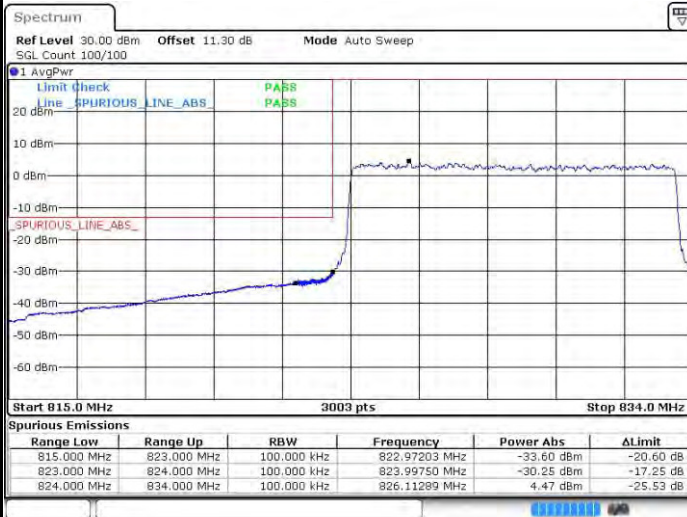
Date: 2 NOV 2015 10:12:26

Highest Band Edge / 1 RB



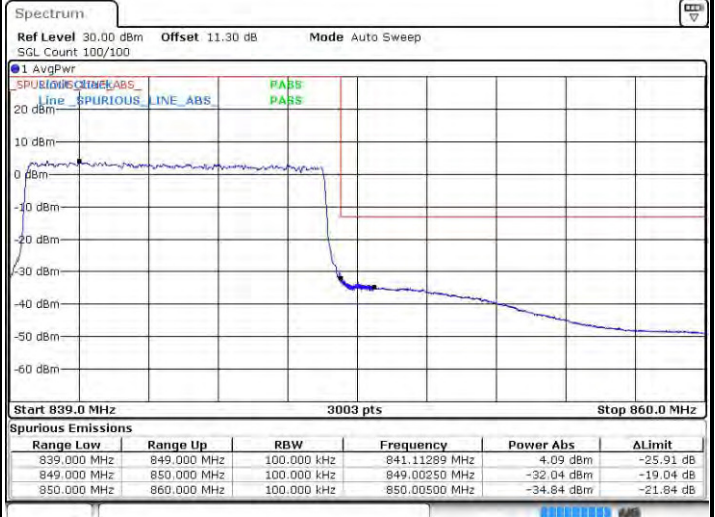
Date: 2 NOV 2015 10:25:04

Lowest Band Edge / Full RB



Date: 2 NOV 2015 10:16:15

Highest Band Edge / Full RB



Date: 2 NOV 2015 10:28:53



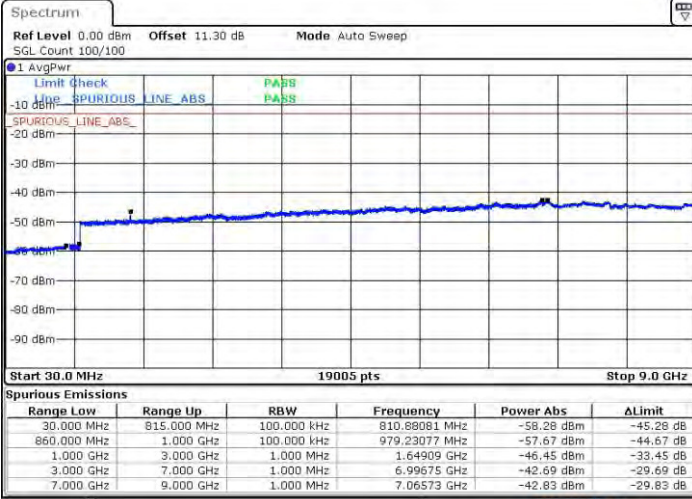
Conducted Spurious Emission



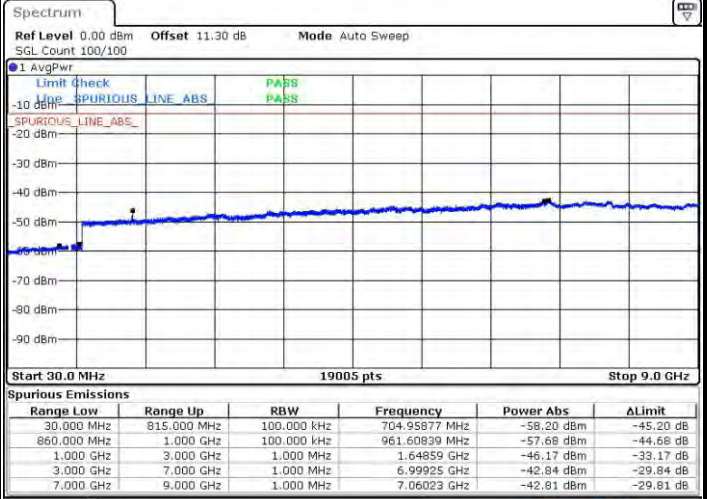
LTE Band 5 / 1.4MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



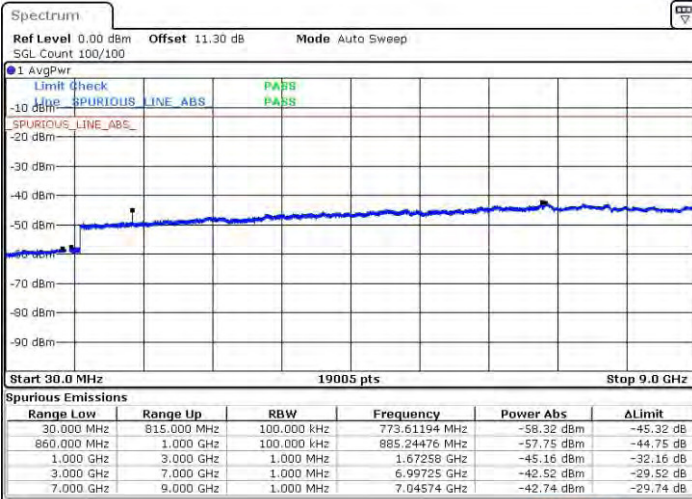
Date: 2 NOV 2015 10:39:57



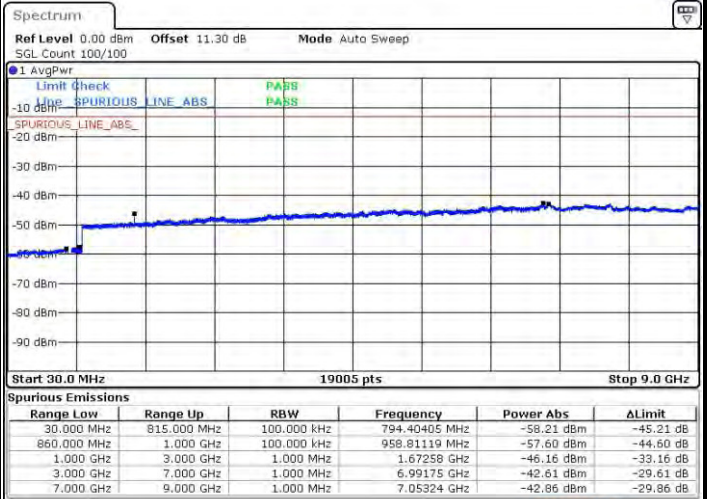
Date: 2 NOV 2015 10:40:51

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 2 NOV 2015 10:42:27

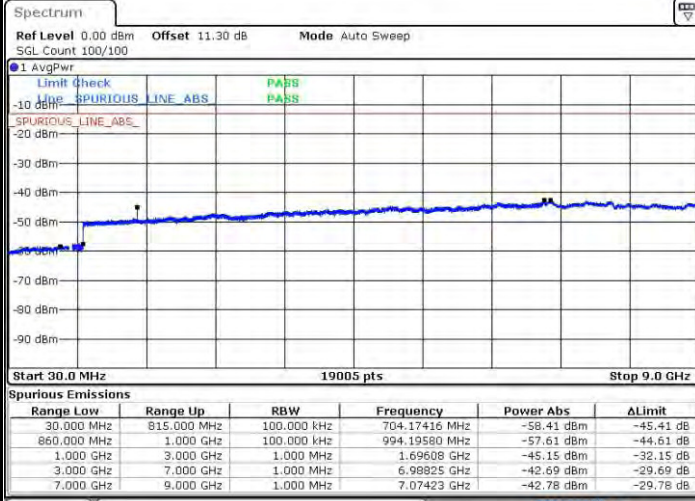


Date: 2 NOV 2015 10:43:22



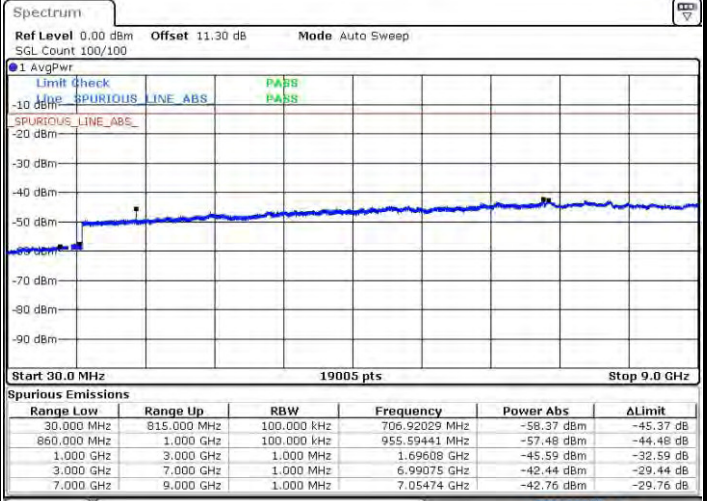
LTE Band 5 / 1.4MHz

Highest Channel / QPSK



Date: 2 NOV 2015 10:52:35

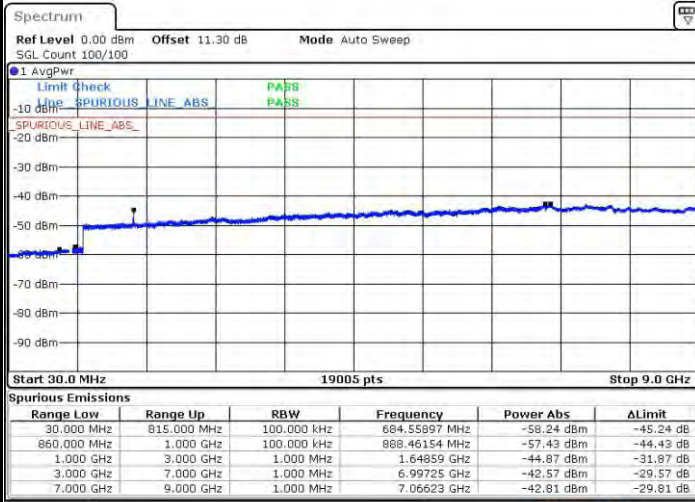
Highest Channel / 16QAM



Date: 2 NOV 2015 10:53:29

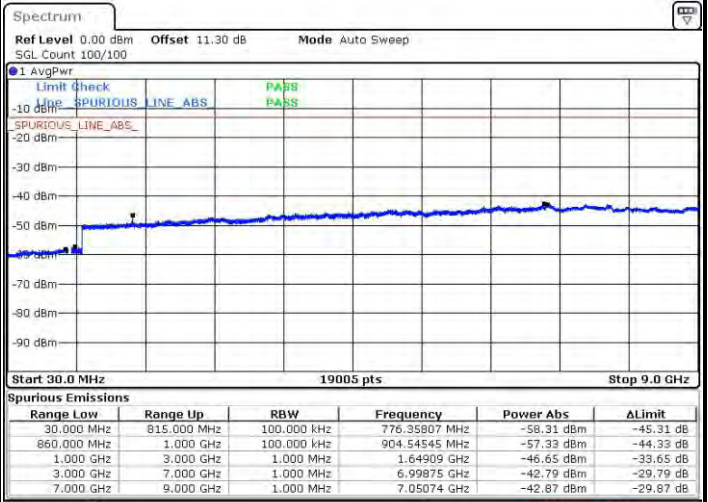
LTE Band 5 / 3MHz

Lowest Channel / QPSK



Date: 2 NOV 2015 09:31:35

Lowest Channel / 16QAM



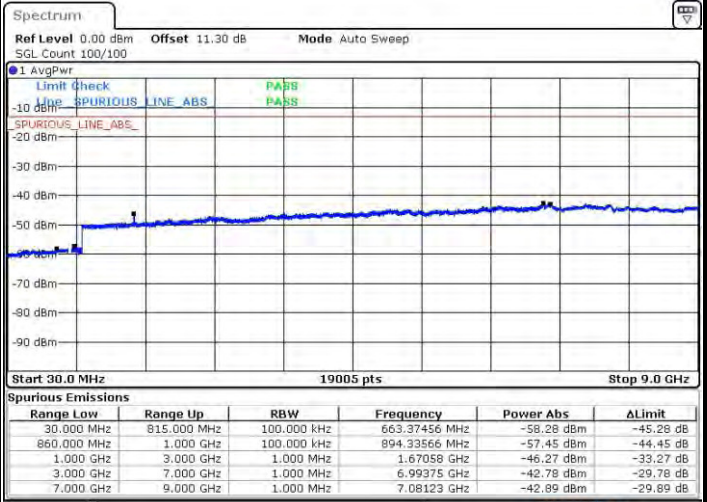
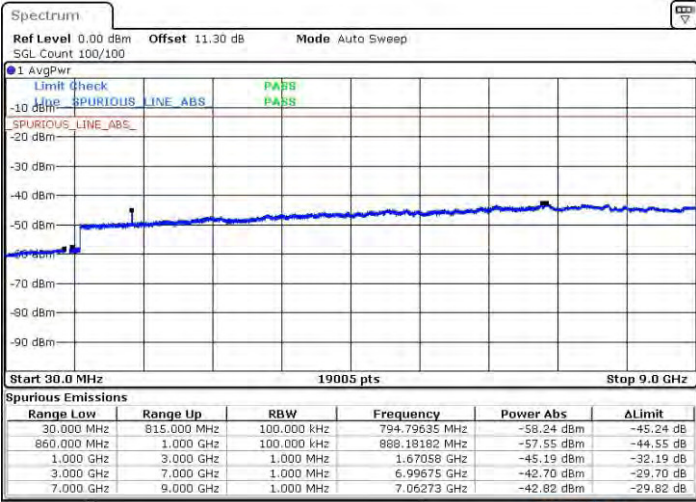
Date: 2 NOV 2015 09:32:30



LTE Band 5 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

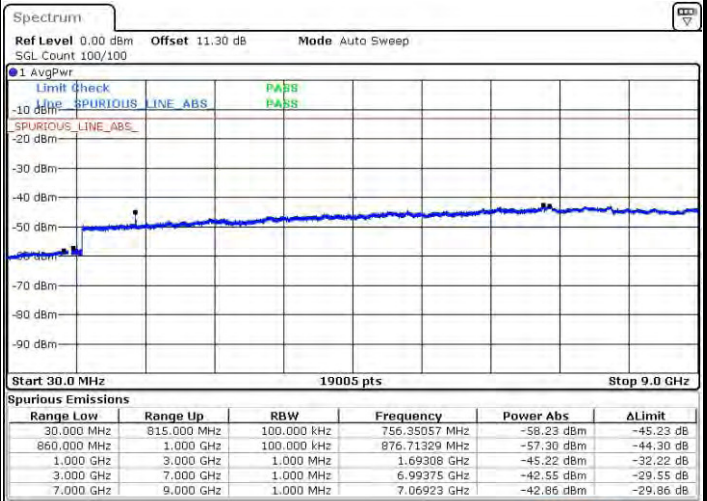
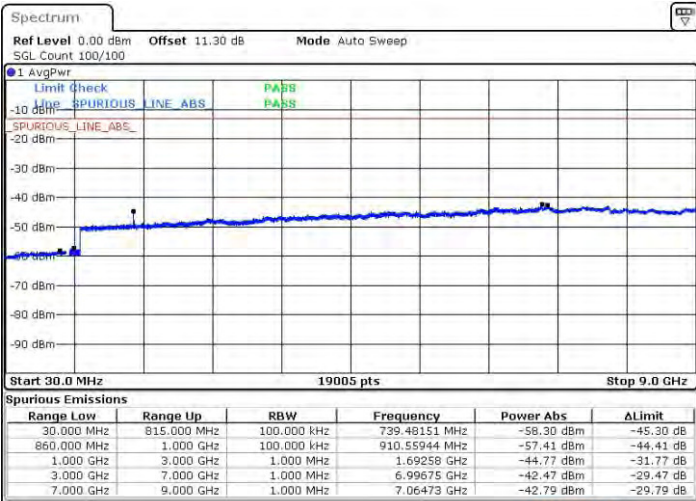


Date: 2 NOV 2015 09:34:06

Date: 2 NOV 2015 09:35:01

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 2 NOV 2015 09:44:15

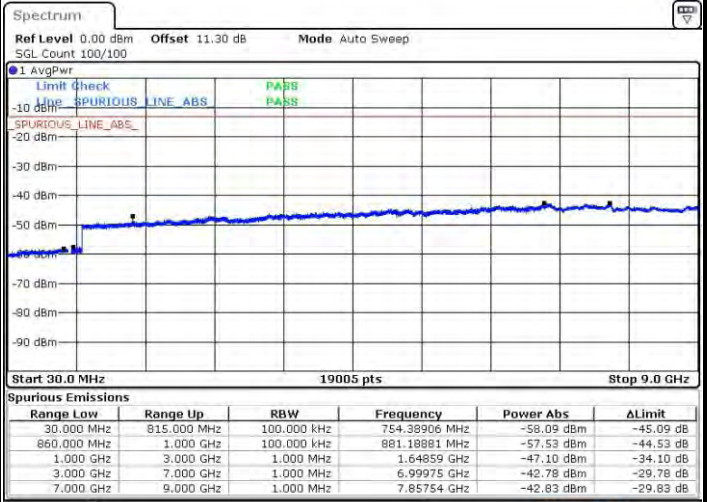
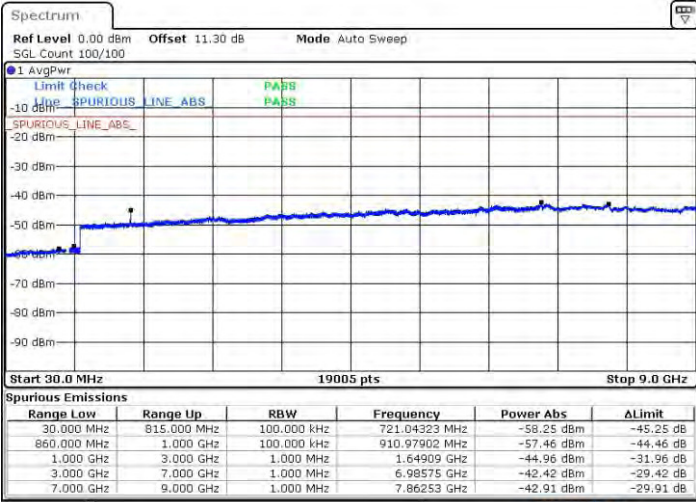
Date: 2 NOV 2015 09:45:09



LTE Band 5 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

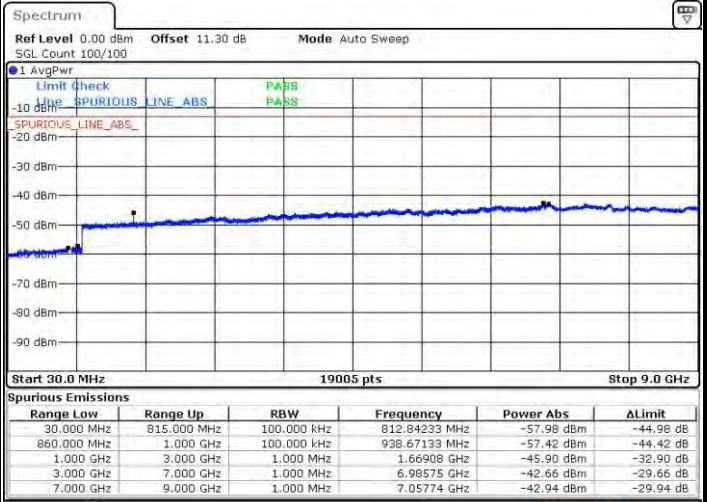
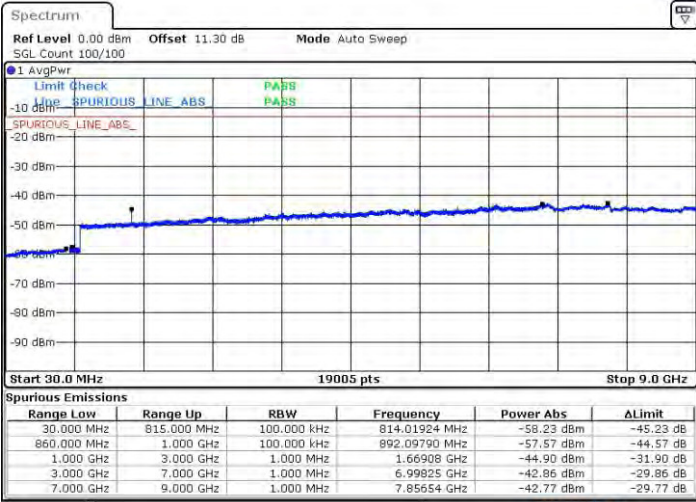


Date: 2 NOV 2015 09:54:23

Date: 2 NOV 2015 09:55:18

Middle Channel / QPSK

Middle Channel / 16QAM



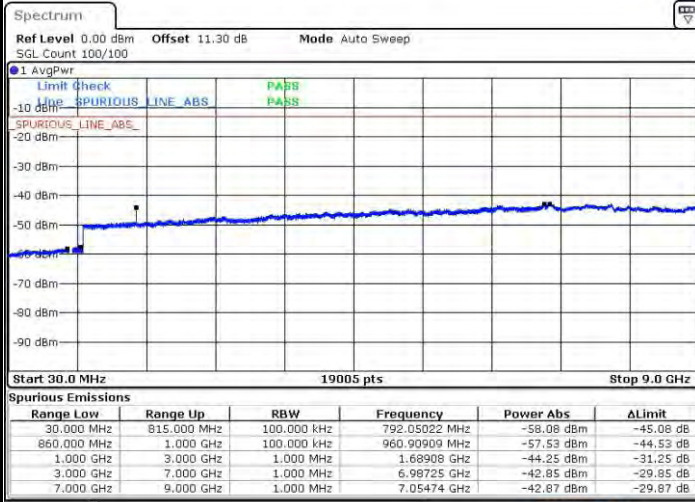
Date: 2 NOV 2015 09:56:54

Date: 2 NOV 2015 09:57:48



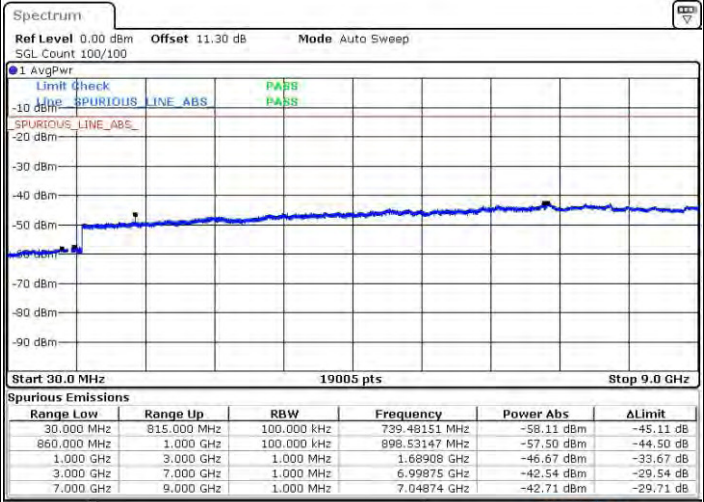
LTE Band 5 / 5MHz

Highest Channel / QPSK



Date: 2 NOV 2015 10:07:02

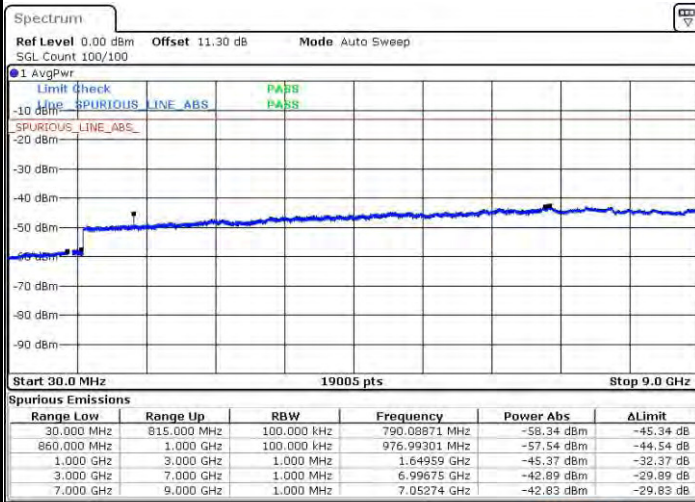
Highest Channel / 16QAM



Date: 2 NOV 2015 10:07:57

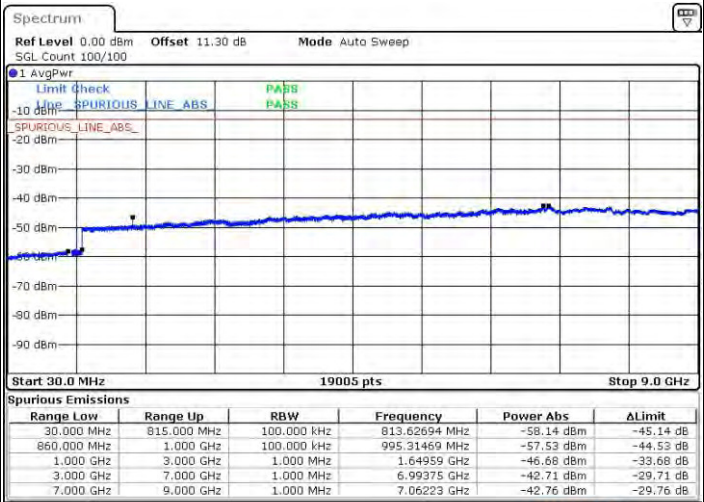
LTE Band 5 / 10MHz

Lowest Channel / QPSK



Date: 2 NOV 2015 10:17:10

Lowest Channel / 16QAM



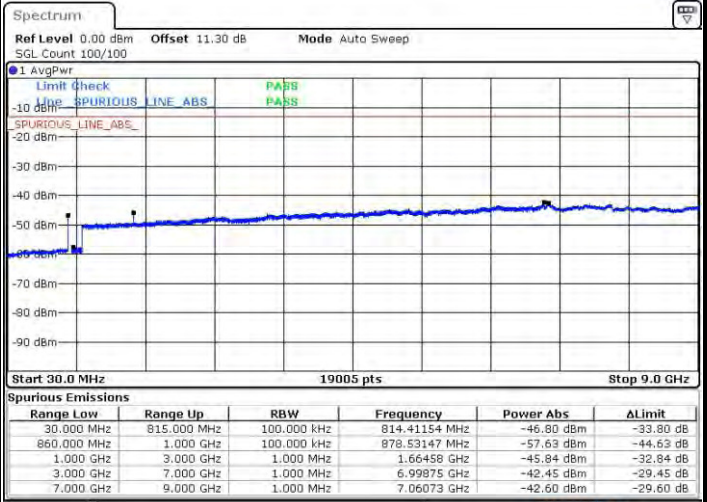
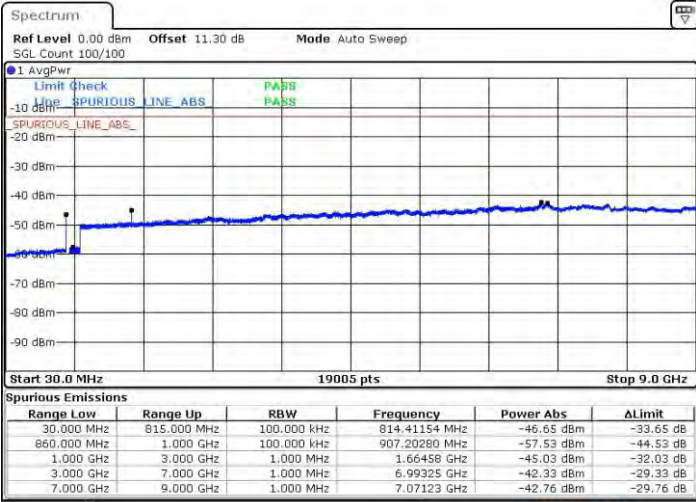
Date: 2 NOV 2015 10:18:04



LTE Band 5 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

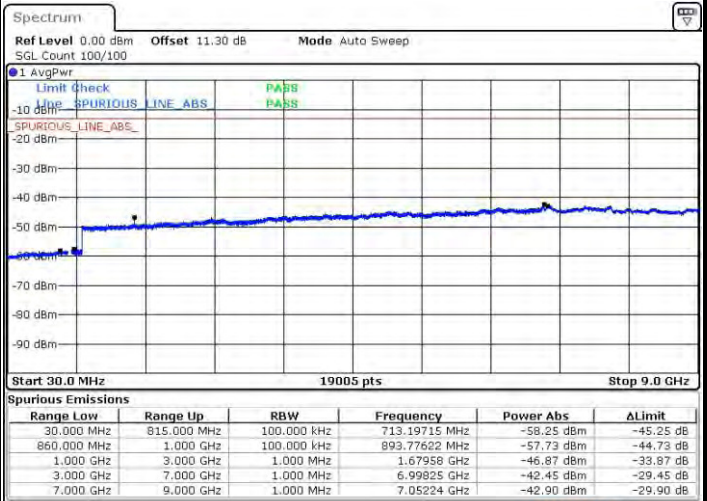
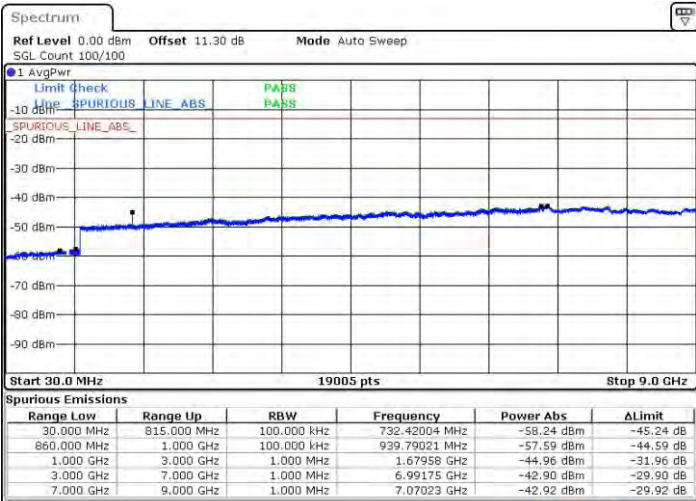


Date: 2 NOV 2015 10:19:40

Date: 2 NOV 2015 10:20:35

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 2 NOV 2015 10:29:48

Date: 2 NOV 2015 10:30:43



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 | 0.0022 | PASS |
| 40 | Normal Voltage | 0.0031 | |
| 30 | Normal Voltage | 0.0012 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0001 | |
| 0 | Normal Voltage | 0.0017 | |
| -10 | Normal Voltage | 0.0006 | |
| -20 | Normal Voltage | 0.0020 | |
| -30 | Normal Voltage | 0.0014 | |
| 20 | Maximum Voltage | 0.0030 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0041 | |

Note: Normal Voltage = 3.8 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage =4.35 V