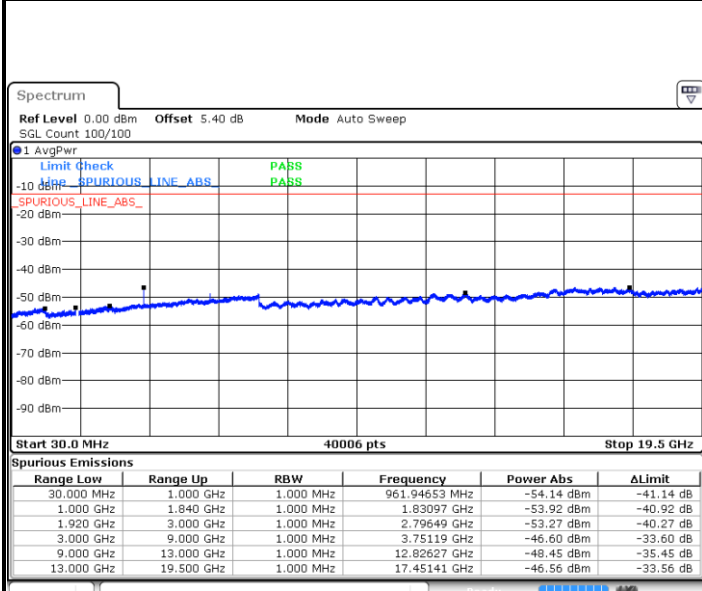




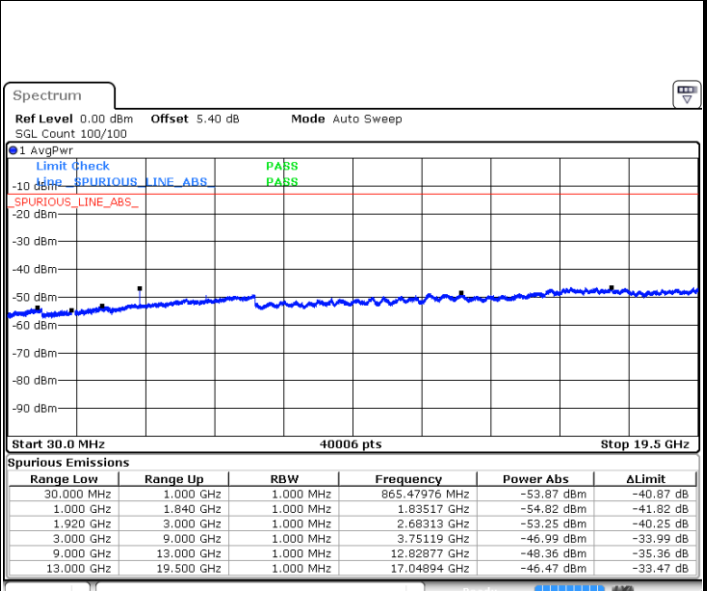
LTE Band 2 / 10MHz

Middle Channel / QPSK



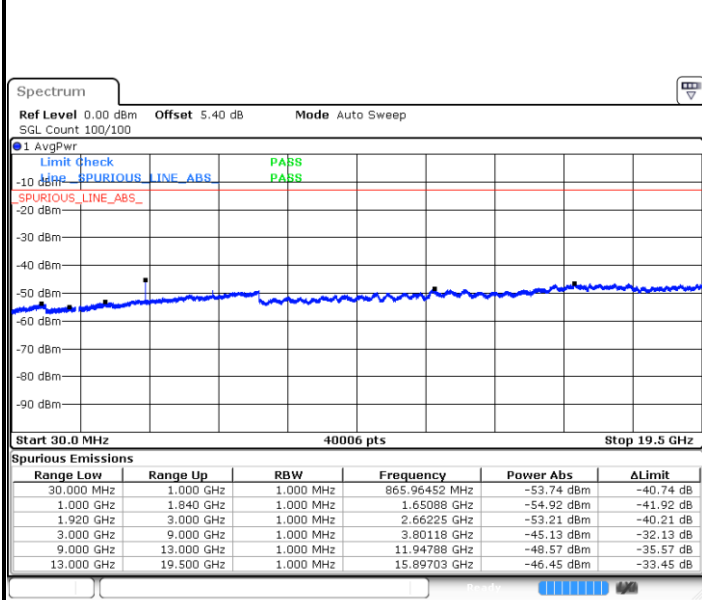
Date: 14.FEB.2020 12:34:45

Middle Channel / 16QAM



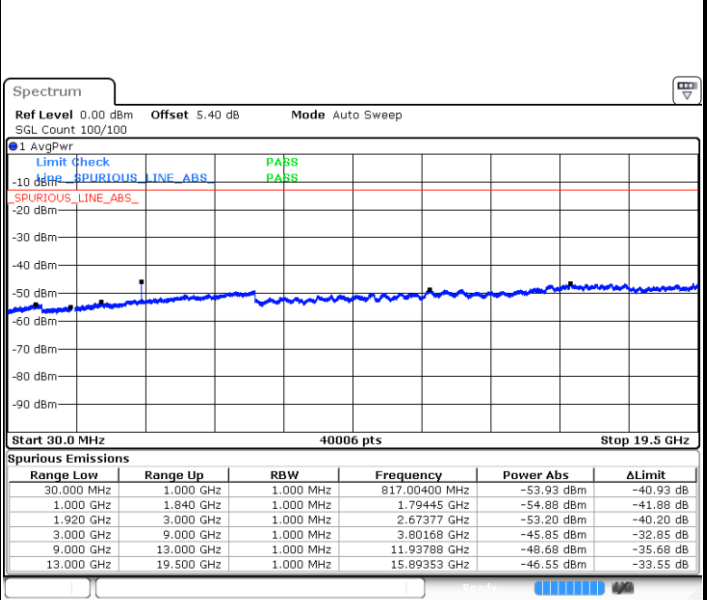
Date: 14.FEB.2020 12:35:39

Highest Channel / QPSK



Date: 14.FEB.2020 12:41:44

Highest Channel / 16QAM



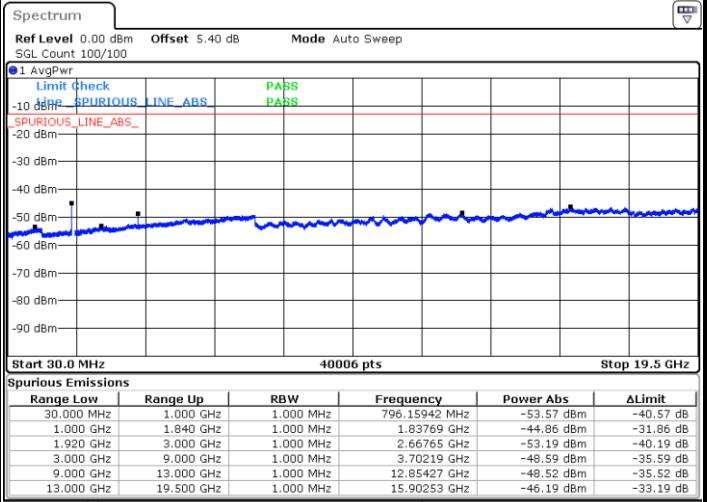
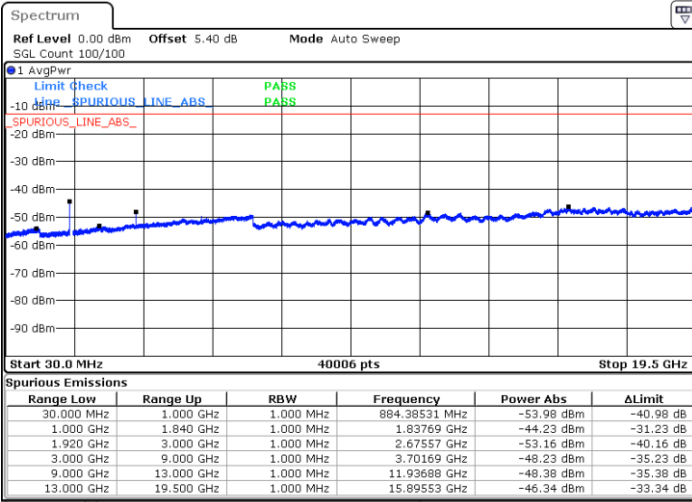
Date: 14.FEB.2020 12:42:39



LTE Band 2 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

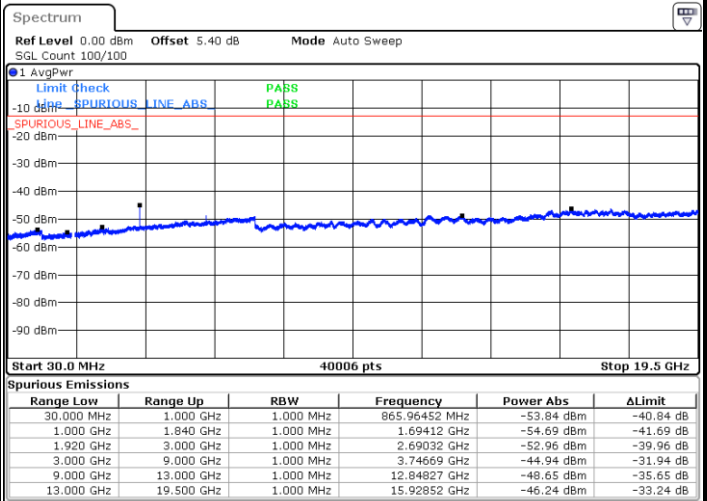
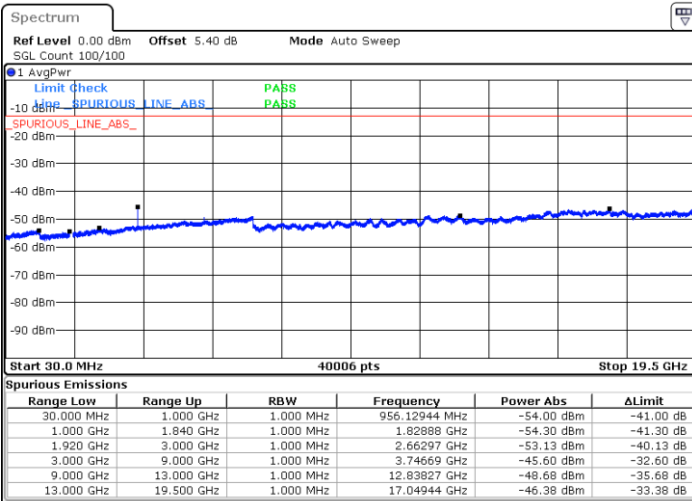


Date: 14.FEB.2020 12:48:43

Date: 14.FEB.2020 12:49:38

Middle Channel / QPSK

Middle Channel / 16QAM



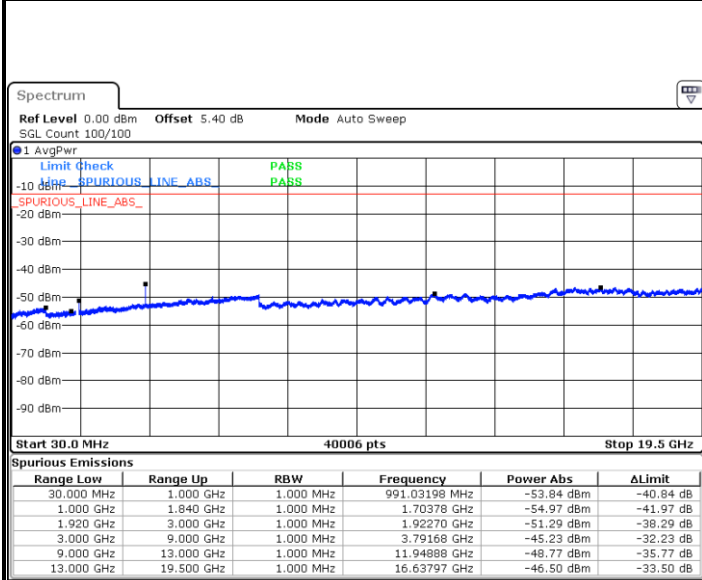
Date: 14.FEB.2020 12:51:12

Date: 14.FEB.2020 12:52:07



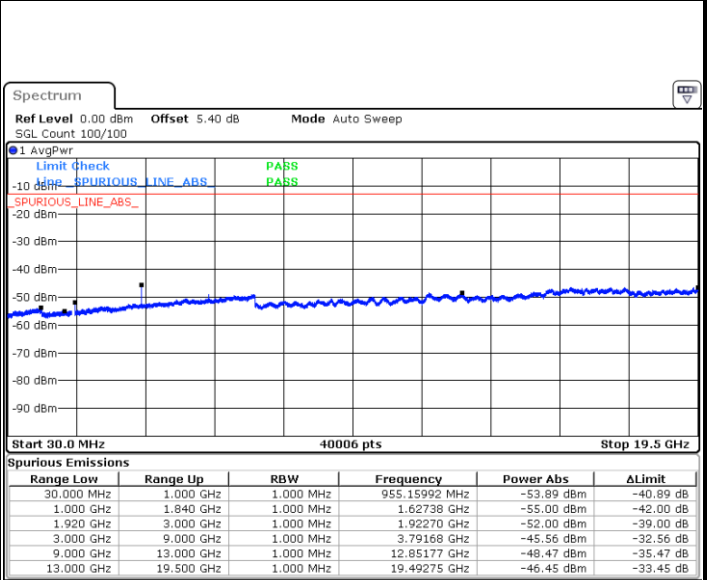
LTE Band 2 / 15MHz

Highest Channel / QPSK



Date: 14.FEB.2020 12:58:11

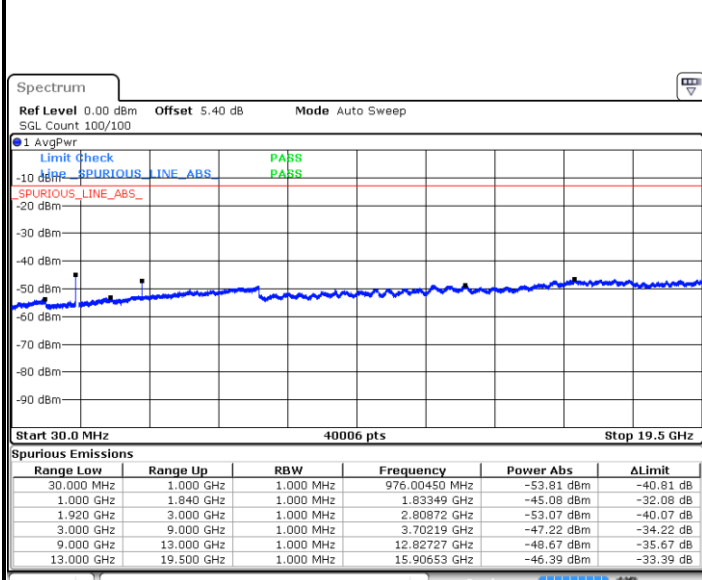
Highest Channel / 16QAM



Date: 14.FEB.2020 12:59:06

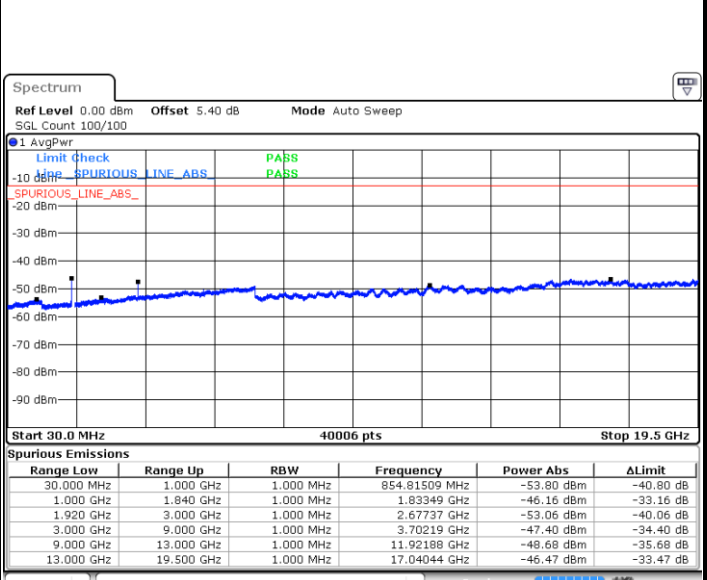
LTE Band 2 / 20MHz

Lowest Channel / QPSK



Date: 14.FEB.2020 13:05:11

Lowest Channel / 16QAM



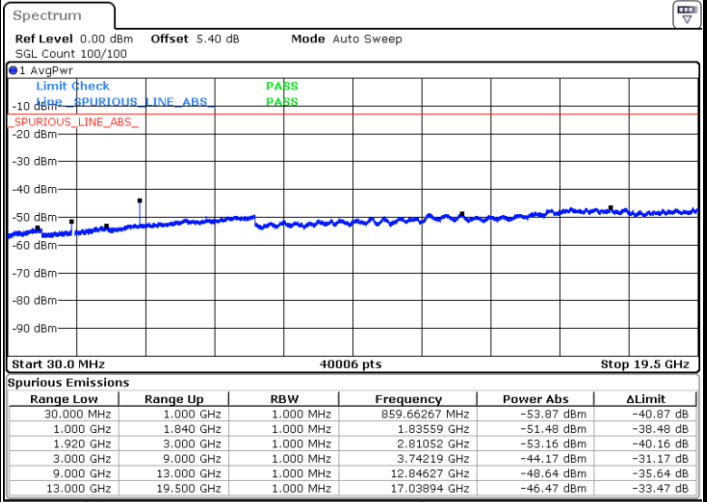
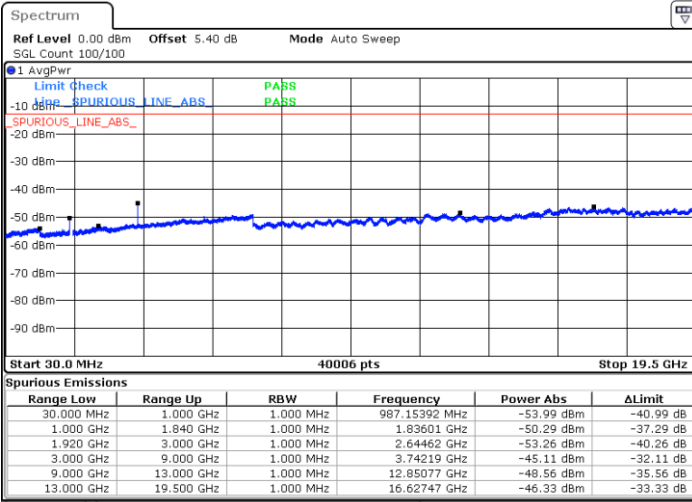
Date: 14.FEB.2020 13:06:06



LTE Band 2 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

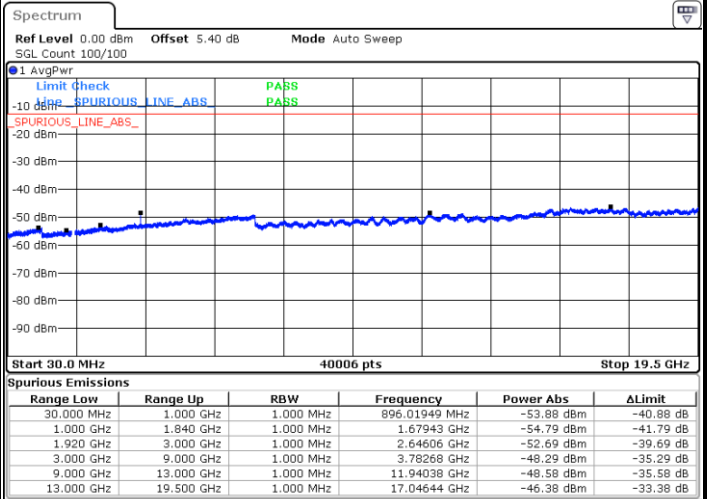
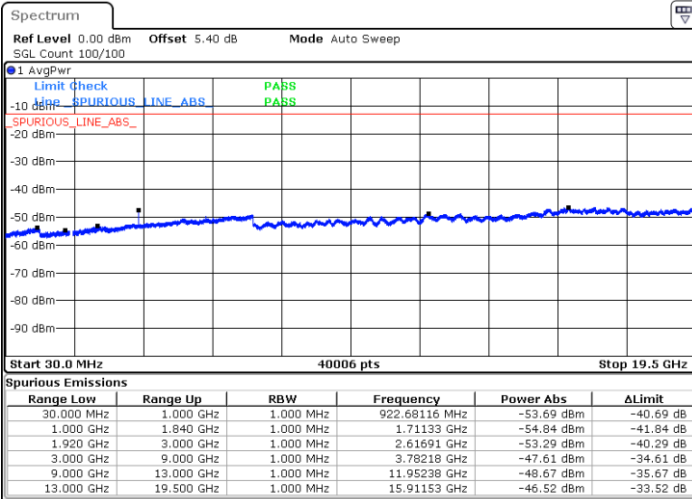


Date: 14.FEB.2020 13:07:40

Date: 14.FEB.2020 13:08:35

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 14.FEB.2020 13:14:39

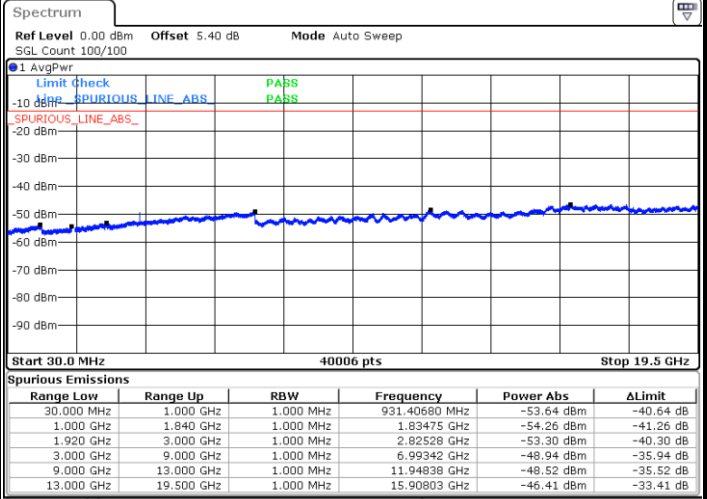
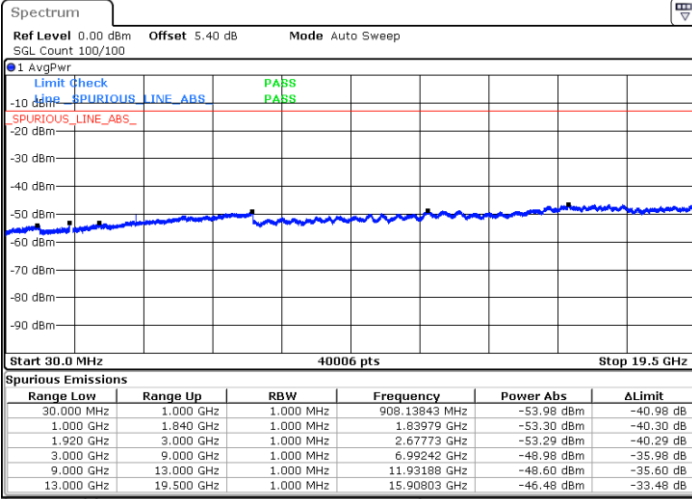
Date: 14.FEB.2020 13:15:34



LTE Band 2 / 1.4MHz

Lowest Channel / 64QAM

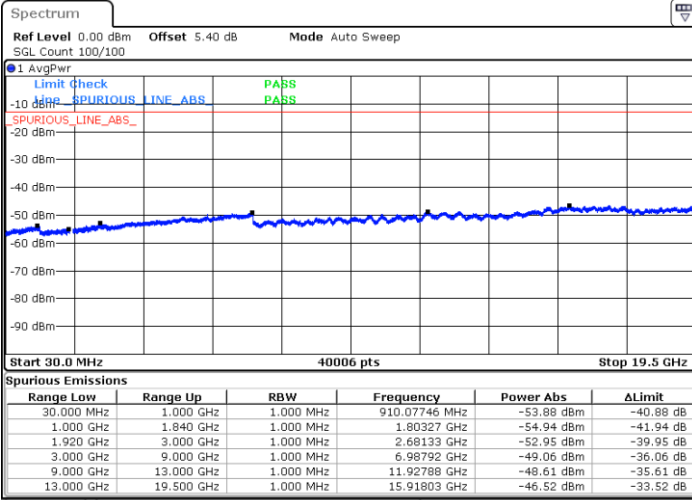
Middle Channel / 64QAM



Date: 14.FEB.2020 14:21:56

Date: 14.FEB.2020 14:22:51

Highest Channel / 64QAM

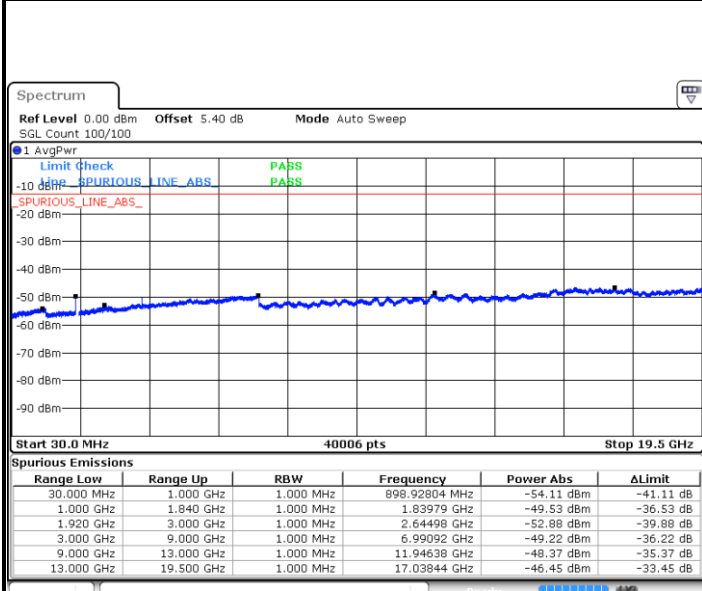


Date: 14.FEB.2020 14:23:46



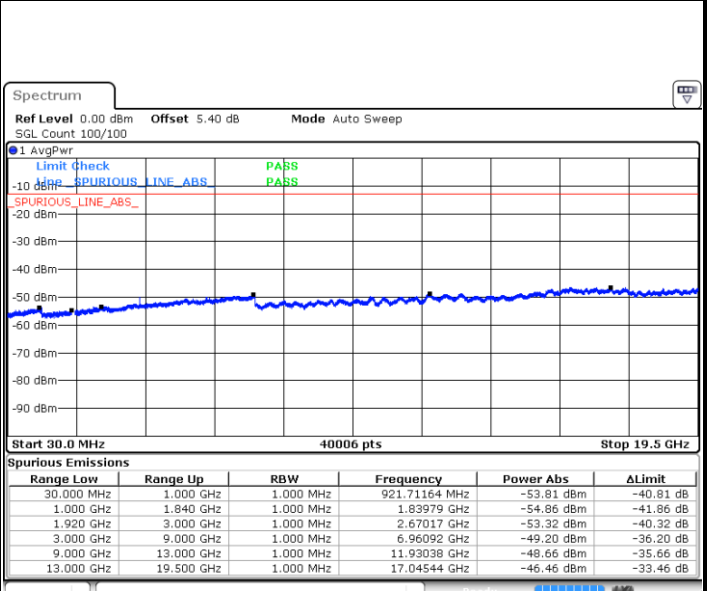
LTE Band 2 / 3MHz

Lowest Channel / 64QAM



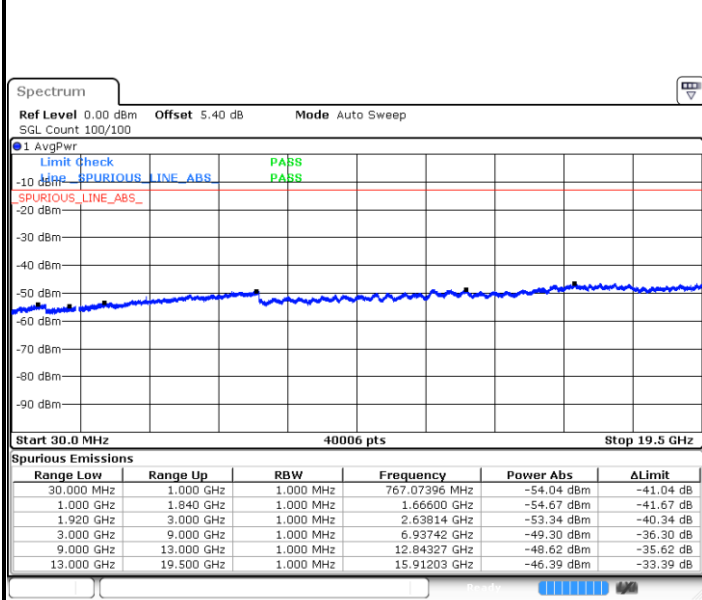
Date: 14.FEB.2020 14:24:40

Middle Channel / 64QAM



Date: 14.FEB.2020 14:25:35

Highest Channel / 64QAM



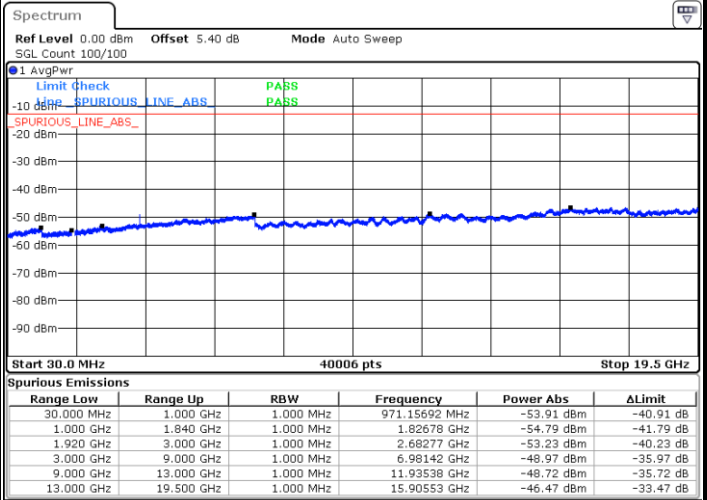
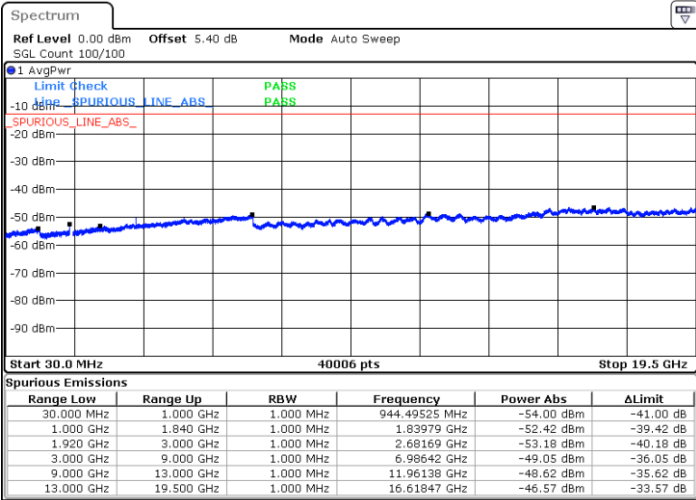
Date: 14.FEB.2020 14:26:29



LTE Band 2 / 5MHz

Lowest Channel / 64QAM

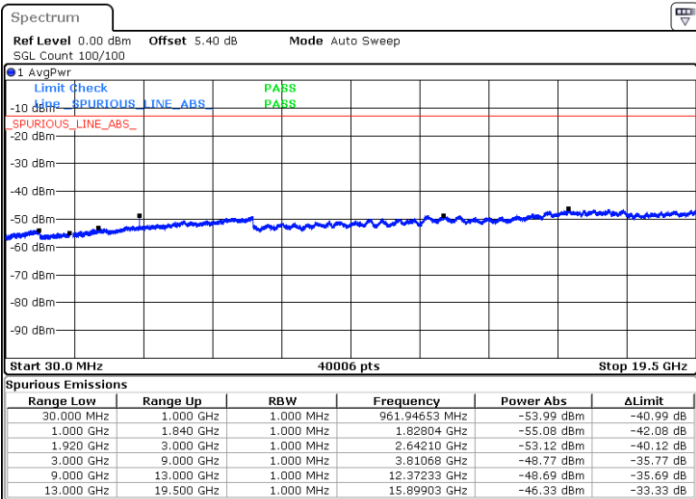
Middle Channel / 64QAM



Date: 14.FEB.2020 14:27:24

Date: 14.FEB.2020 14:28:19

Highest Channel / 64QAM



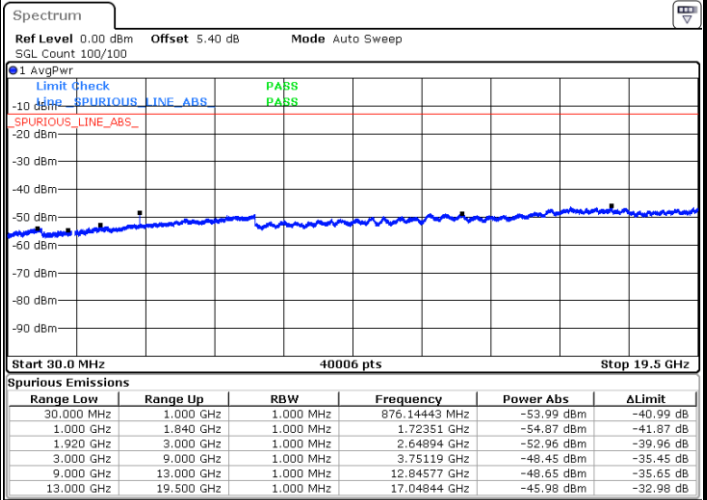
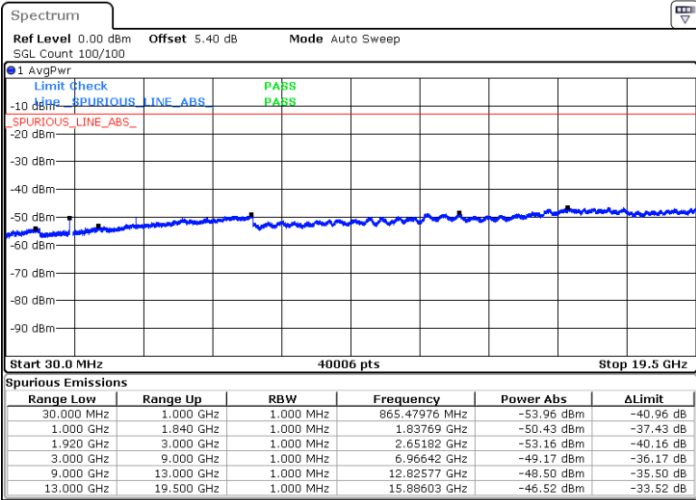
Date: 14.FEB.2020 14:29:13



LTE Band 2 / 10MHz

Lowest Channel / 64QAM

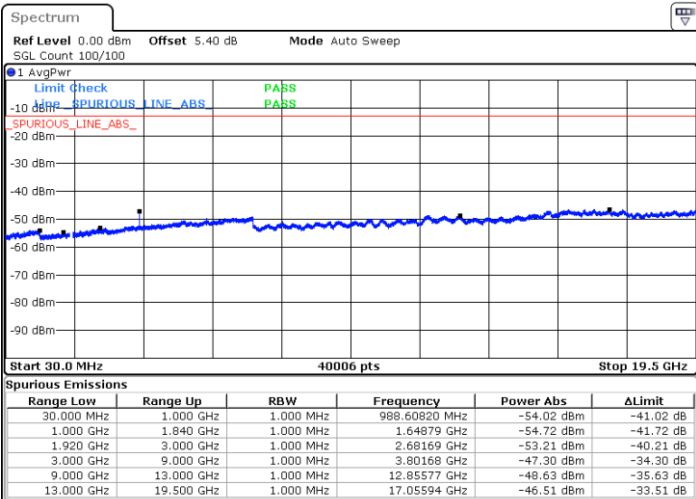
Middle Channel / 64QAM



Date: 14.FEB.2020 14:30:08

Date: 14.FEB.2020 14:31:02

Highest Channel / 64QAM



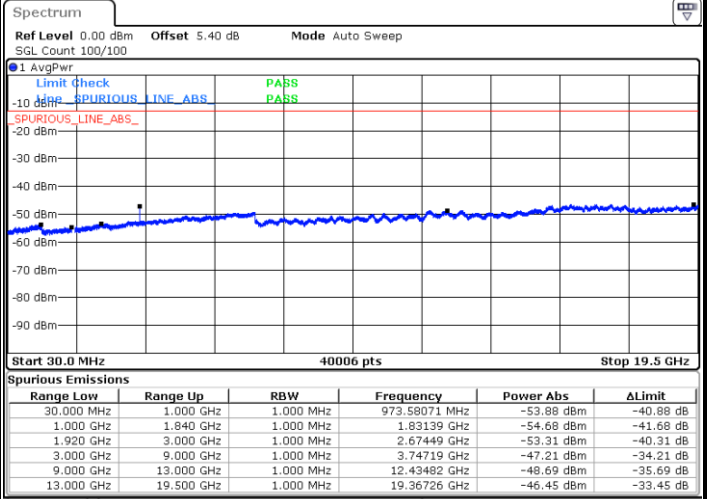
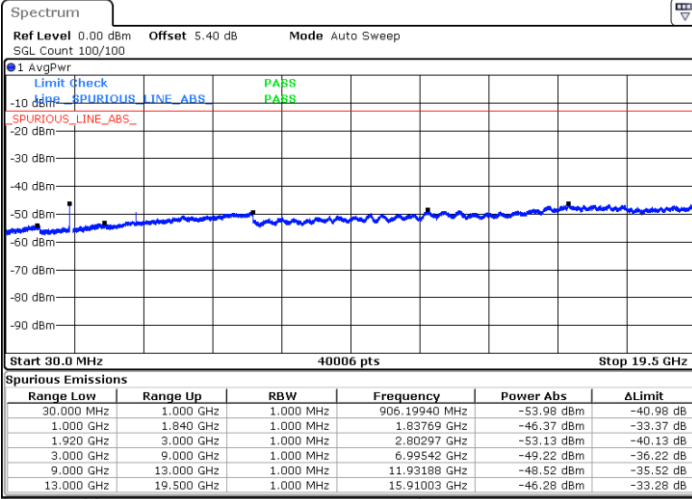
Date: 14.FEB.2020 14:31:57



LTE Band 2 / 15MHz

Lowest Channel / 64QAM

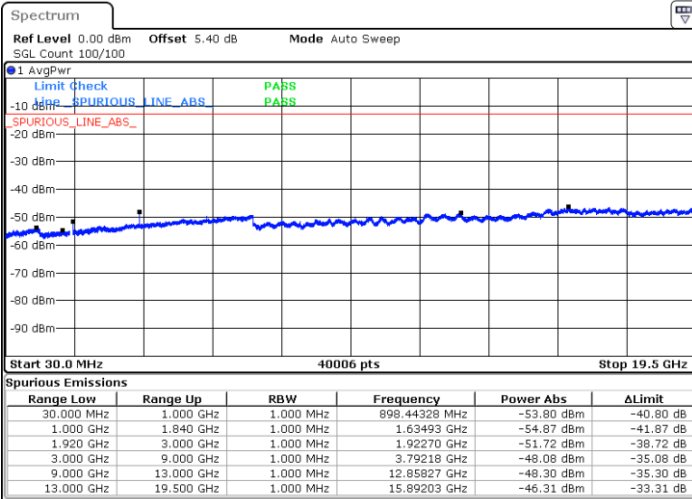
Middle Channel / 64QAM



Date: 14.FEB.2020 14:32:51

Date: 14.FEB.2020 14:33:46

Highest Channel / 64QAM

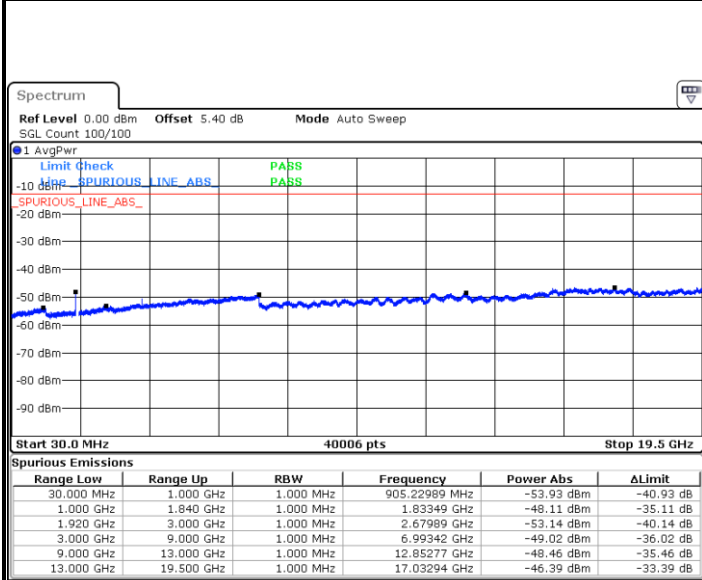


Date: 14.FEB.2020 14:34:41



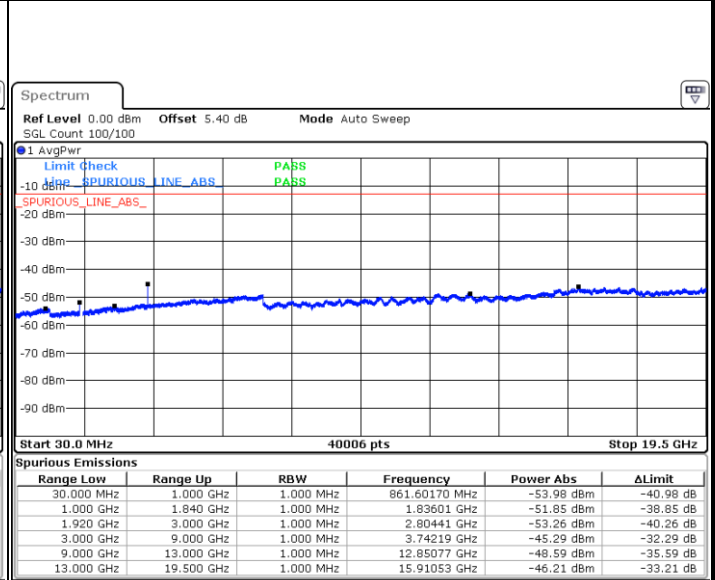
LTE Band 2 / 20MHz

Lowest Channel / 64QAM



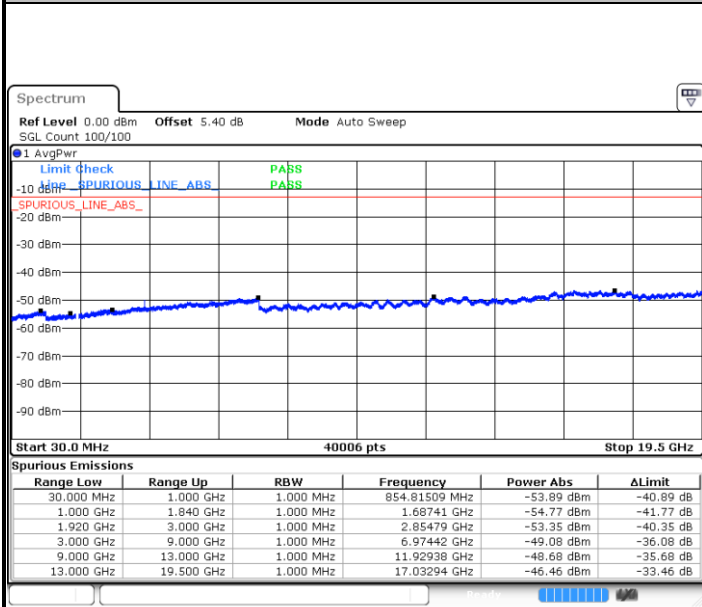
Date: 14.FEB.2020 14:35:35

Middle Channel / 64QAM



Date: 14.FEB.2020 14:36:30

Highest Channel / 64QAM



Date: 14.FEB.2020 14:37:25



Frequency Stability

| Test Conditions | | LTE Band 2 (QPSK) / Middle Channel | Limit |
|------------------|-------------------|------------------------------------|---------|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | Note 2. |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0021 | PASS |
| 40 | Normal Voltage | 0.0020 | |
| 30 | Normal Voltage | 0.0010 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0022 | |
| 0 | Normal Voltage | 0.0019 | |
| -10 | Normal Voltage | 0.0007 | |
| -20 | Normal Voltage | 0.0024 | |
| -30 | Normal Voltage | 0.0024 | |
| 20 | Maximum Voltage | 0.0011 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0004 | |

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 5

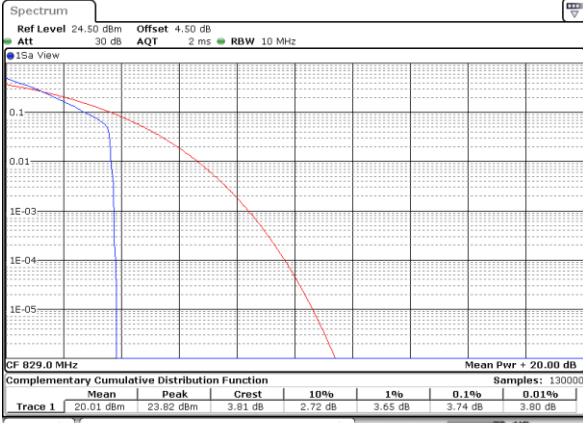
Peak-to-Average Ratio

| Mode | LTE Band 5 / 10MHz | | | | |
|------------|--------------------|---------|-------|---------|-------------|
| Mod. | QPSK | | 16QAM | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | 3.74 | 4.70 | 5.71 | 6.06 | PASS |
| Middle CH | 3.74 | 4.72 | 5.22 | 6.09 | |
| Highest CH | 3.68 | 4.81 | 5.30 | 6.06 | |
| Mode | LTE Band 5 / 10MHz | | | | |
| Mod. | 64QAM | | | | Limit: 13dB |
| RB Size | 1RB | Full RB | | | Result |
| Lowest CH | 5.54 | 6.09 | - | - | PASS |
| Middle CH | 5.33 | 6.06 | - | - | |
| Highest CH | 5.39 | 6.12 | - | - | |



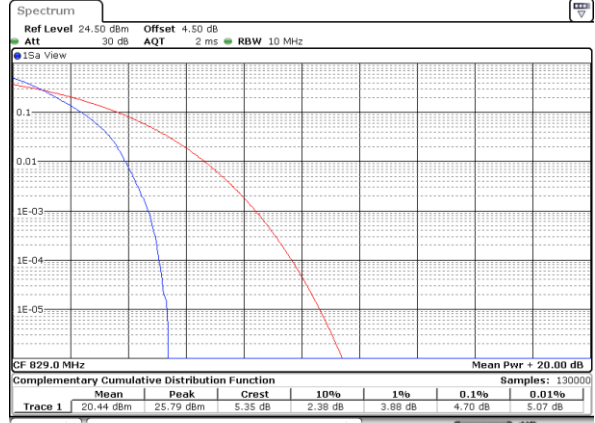
LTE Band 5 / 10MHz / QPSK

Lowest Channel / 1RB



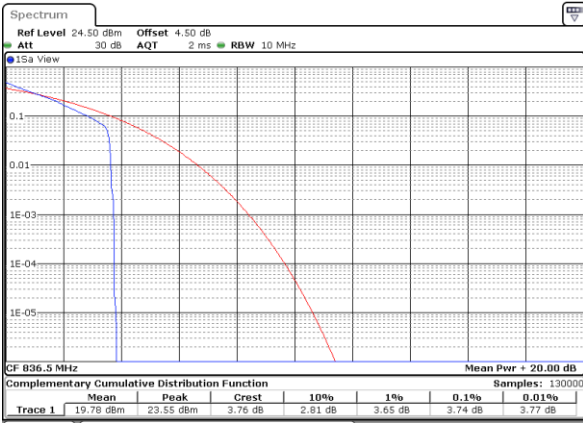
Date: 15 FEB 2020 06:08:24

Lowest Channel / Full RB



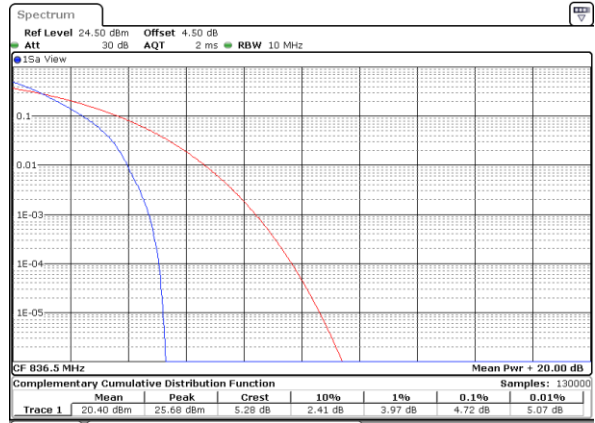
Date: 15 FEB 2020 06:08:14

Middle Channel / 1RB



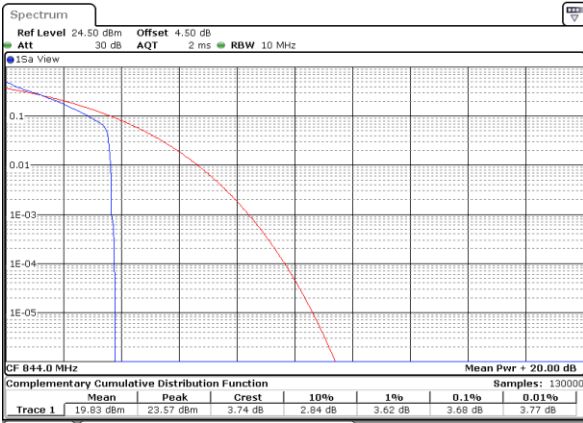
Date: 15 FEB 2020 06:08:35

Middle Channel / Full RB



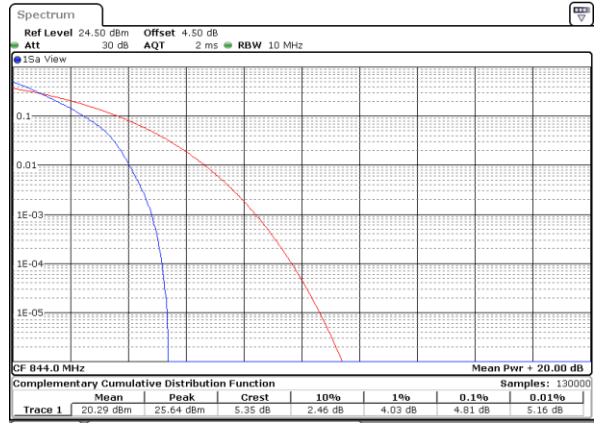
Date: 15 FEB 2020 06:08:46

Highest Channel / 1RB



Date: 15 FEB 2020 06:09:07

Highest Channel / Full RB

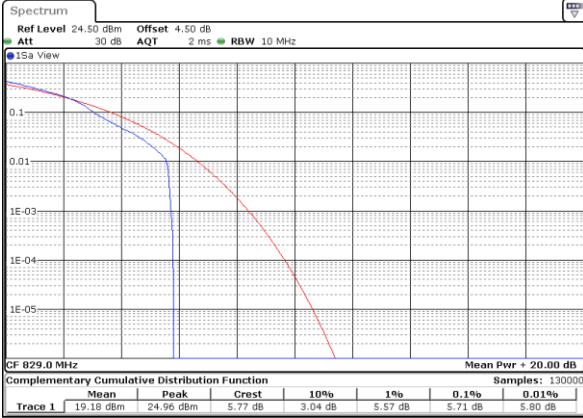


Date: 15 FEB 2020 06:08:57



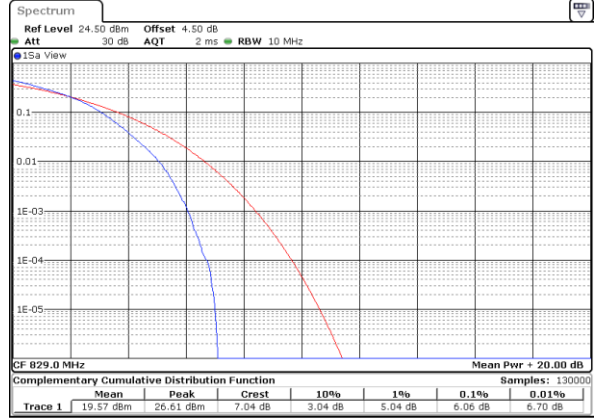
LTE Band 5 / 10MHz / 16QAM

Lowest Channel / 1RB



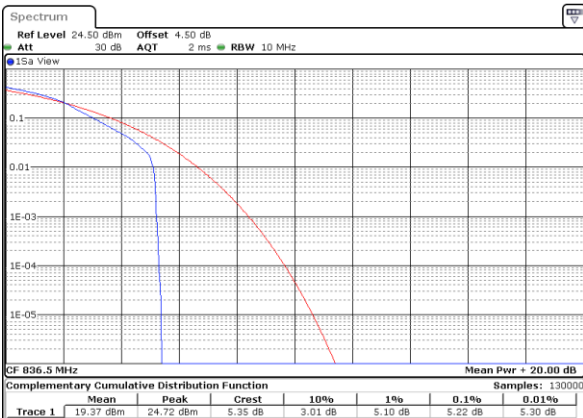
Date: 15 FEB 2020 05:18:36

Lowest Channel / Full RB



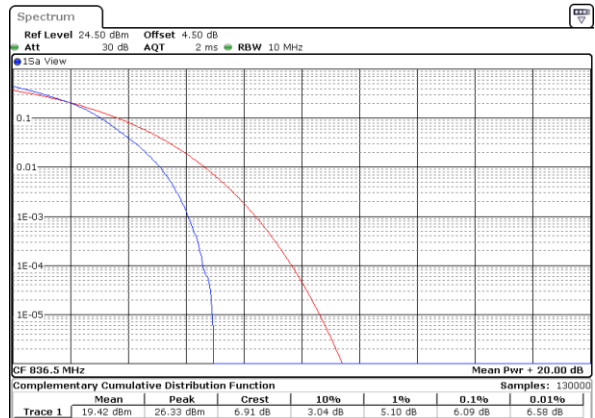
Date: 15 FEB 2020 05:18:45

Middle Channel / 1RB



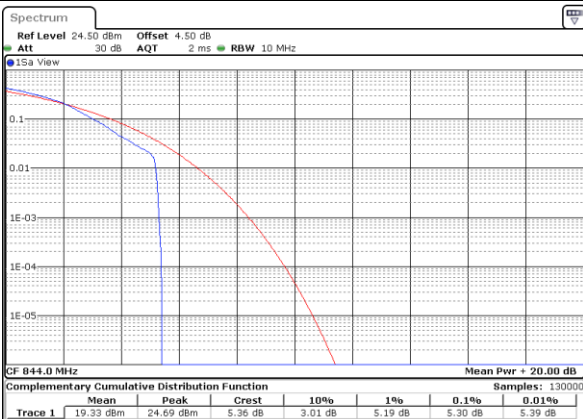
Date: 15 FEB 2020 05:18:54

Middle Channel / Full RB



Date: 15 FEB 2020 05:19:04

Highest Channel / 1RB



Date: 15 FEB 2020 05:19:13

Highest Channel / Full RB

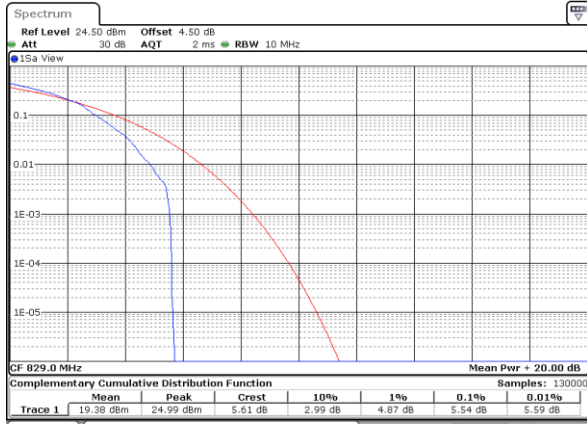


Date: 15 FEB 2020 05:19:22



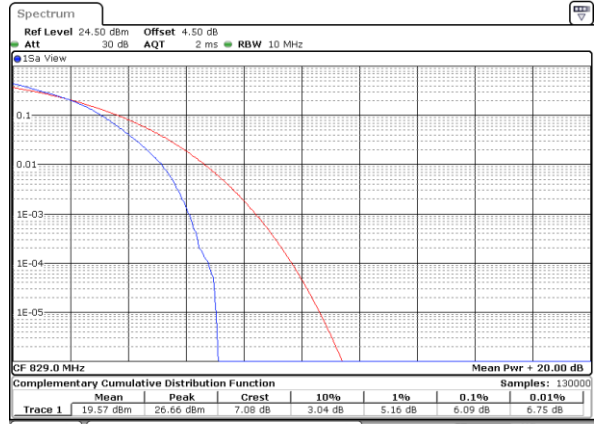
LTE Band 5 / 10MHz / 64QAM

Lowest Channel / 1RB



Date: 15 FEB 2020 06:58:53

Lowest Channel / Full RB



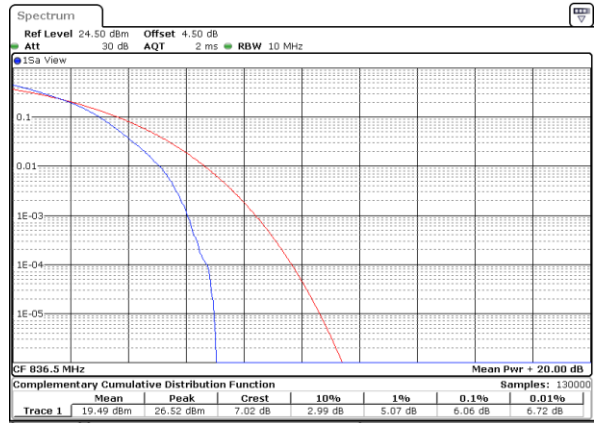
Date: 15 FEB 2020 06:59:02

Middle Channel / 1RB



Date: 15 FEB 2020 06:58:44

Middle Channel / Full RB



Date: 15 FEB 2020 06:58:35

Highest Channel / 1RB



Date: 15 FEB 2020 06:58:15

Highest Channel / Full RB



Date: 15 FEB 2020 06:58:25



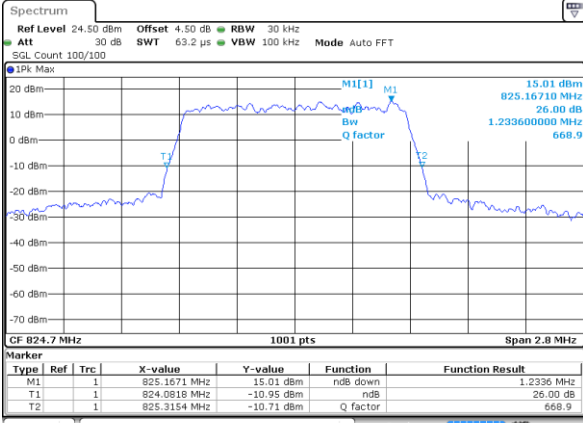
26dB Bandwidth

| Mode | LTE Band 5 : 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 | 1.23 | 1.23 | 3.06 | 3.02 | 4.84 | 4.90 | 9.85 | 9.89 | - | - | - | - |
| Middle CH | 1.23 | 1.23 | 3.05 | 3.03 | 4.90 | 4.86 | 9.83 | 9.67 | - | - | - | - |
| Highest CH | 1.22 | 1.24 | 2.97 | 3.01 | 4.97 | 4.97 | 9.79 | 9.87 | - | - | - | - |
| Mode | LTE Band 5 : 26dB BW(MHz) | | | | | | | | | | | |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | |
| Lowest CH | 1.24 | - | 3.05 | - | 4.87 | - | 9.73 | - | - | - | - | - |
| Middle CH | 1.24 | - | 3.00 | - | 4.91 | - | 9.71 | - | - | - | - | - |
| Highest CH | 1.23 | - | 3.03 | - | 4.88 | - | 9.79 | - | - | - | - | - |



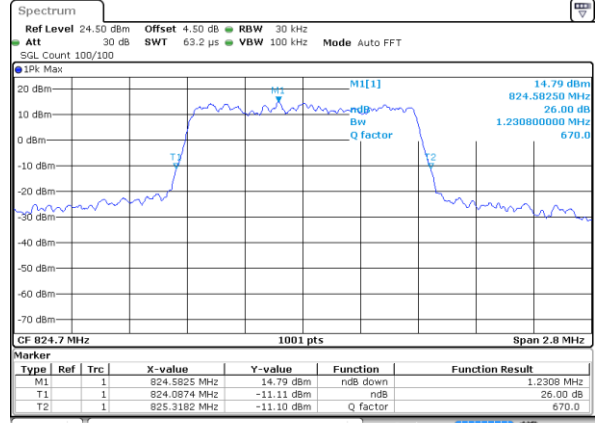
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



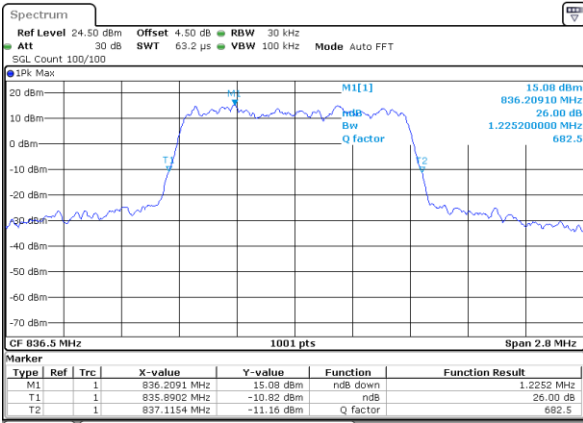
Date: 15 FEB 2020 04:36:38

Lowest Channel / 1.4MHz / 16QAM



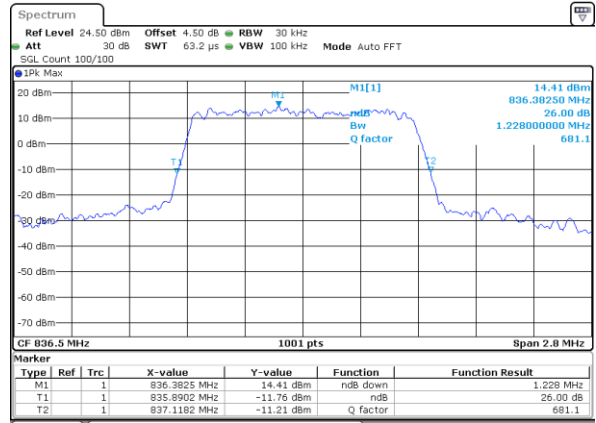
Date: 15 FEB 2020 04:36:28

Middle Channel / 1.4MHz / QPSK



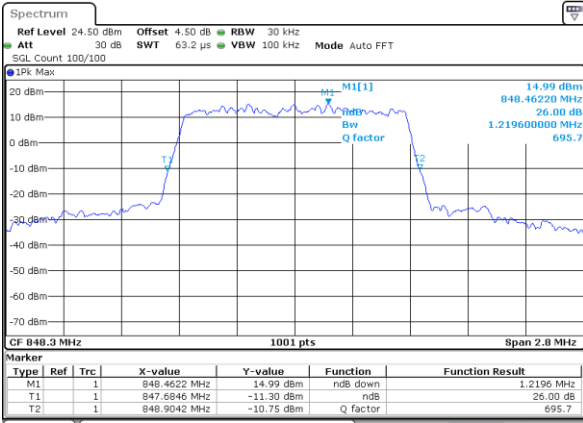
Date: 15 FEB 2020 04:45:26

Middle Channel / 1.4MHz / 16QAM



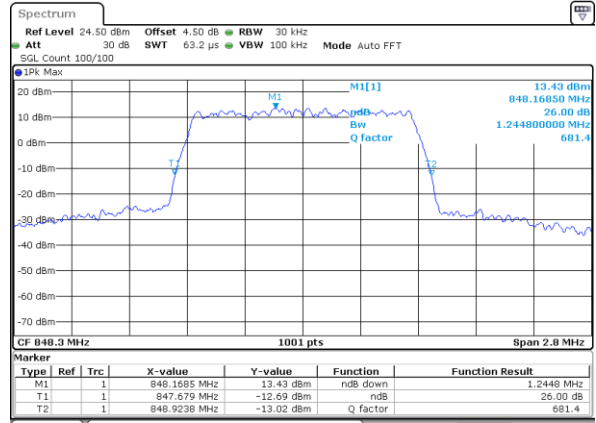
Date: 15 FEB 2020 04:45:36

Highest Channel / 1.4MHz / QPSK



Date: 15 FEB 2020 04:47:55

Highest Channel / 1.4MHz / 16QAM

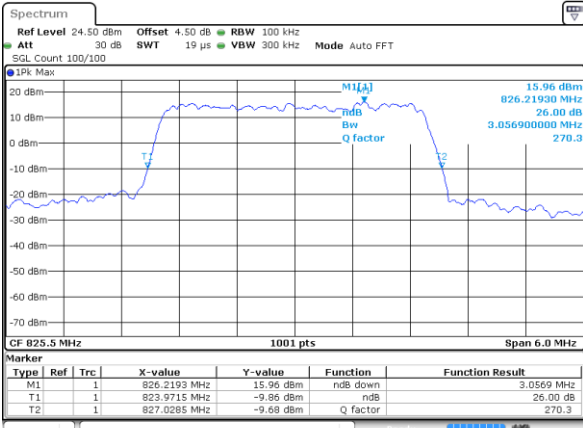


Date: 15 FEB 2020 04:48:05



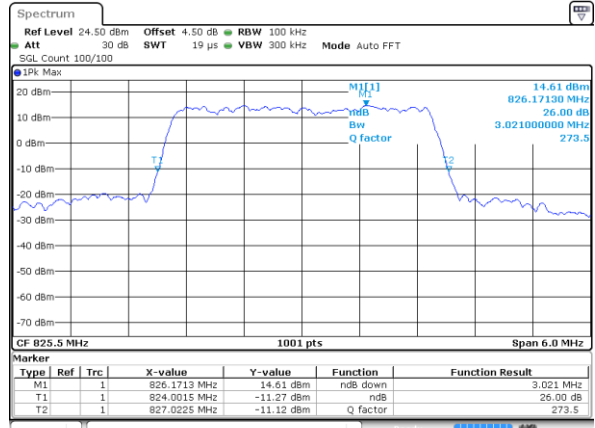
LTE Band 5

Lowest Channel / 3MHz / QPSK



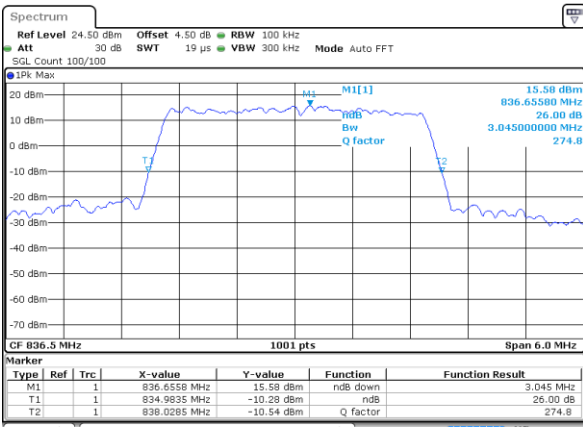
Date: 15 FEB 2020 05:19:41

Lowest Channel / 3MHz / 16QAM



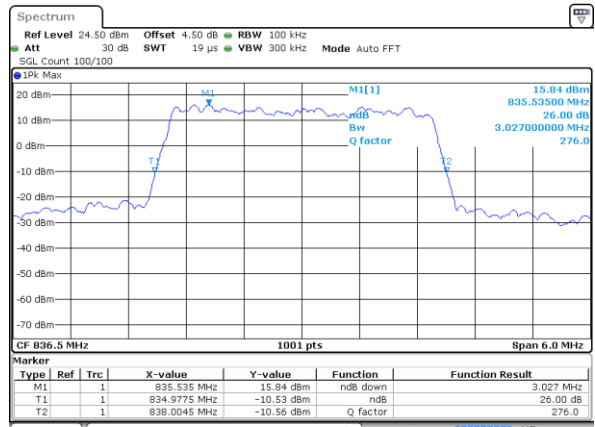
Date: 15 FEB 2020 05:20:01

Middle Channel / 3MHz / QPSK



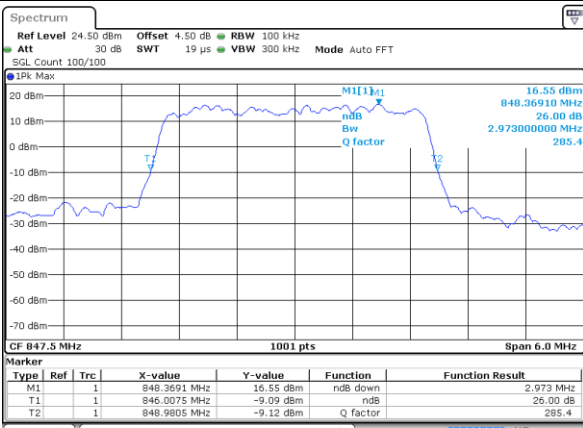
Date: 15 FEB 2020 05:20:41

Middle Channel / 3MHz / 16QAM



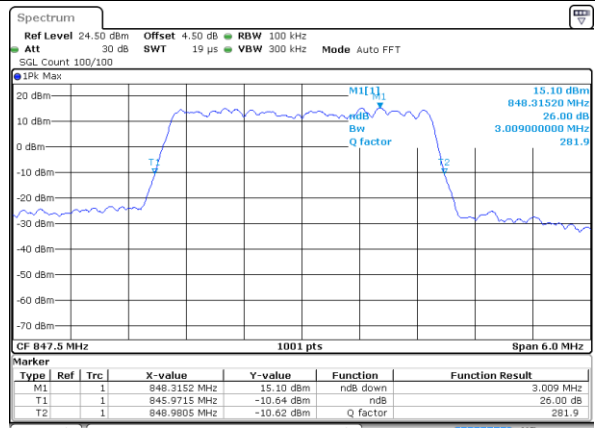
Date: 15 FEB 2020 05:20:21

Highest Channel / 3MHz / QPSK



Date: 15 FEB 2020 05:21:01

Highest Channel / 3MHz / 16QAM

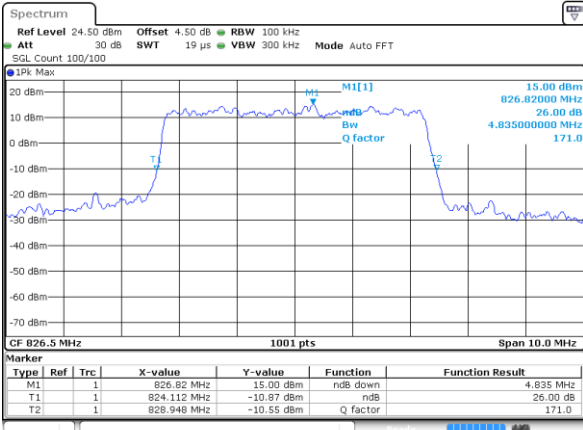


Date: 15 FEB 2020 05:21:21



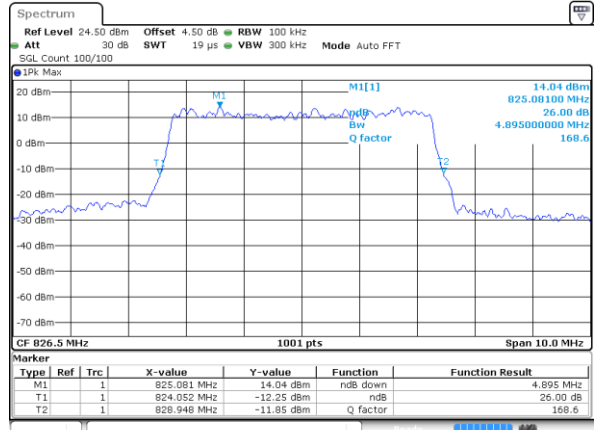
LTE Band 5

Lowest Channel / 5MHz / QPSK



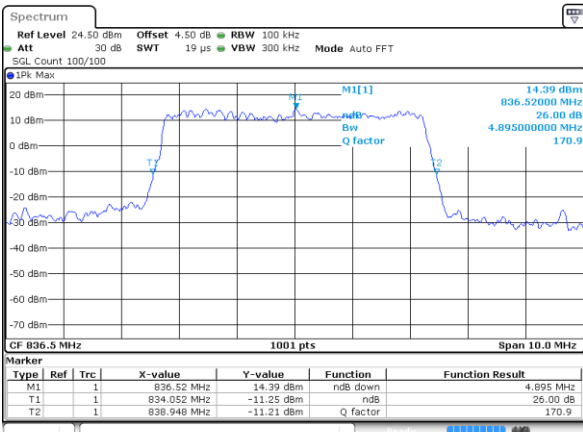
Date: 15 FEB 2020 05:41:08

Lowest Channel / 5MHz / 16QAM



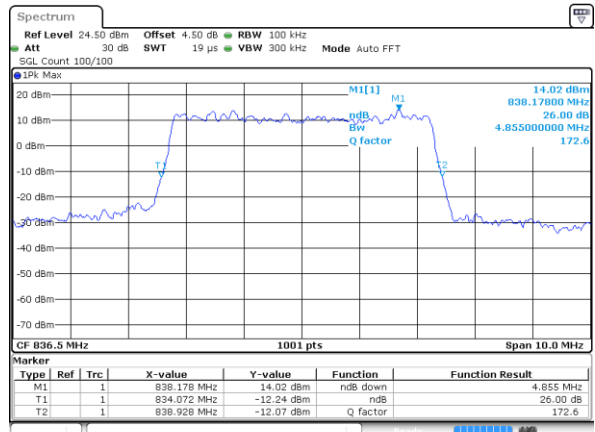
Date: 15 FEB 2020 05:43:05

Middle Channel / 5MHz / QPSK



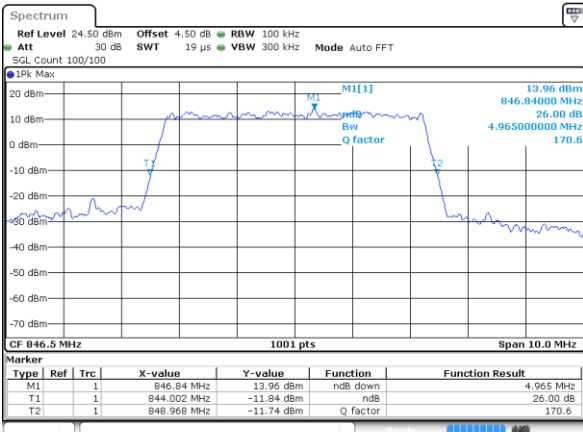
Date: 15 FEB 2020 05:50:06

Middle Channel / 5MHz / 16QAM



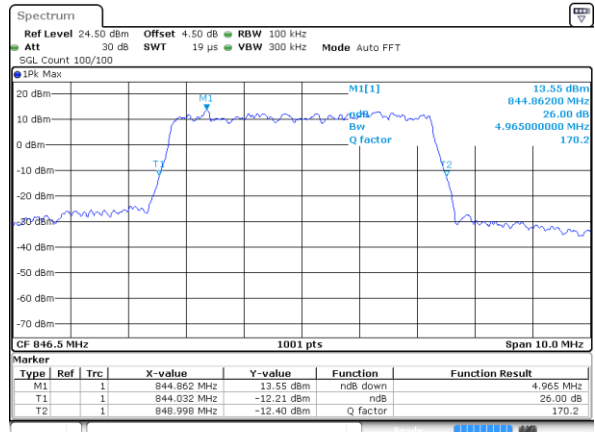
Date: 15 FEB 2020 05:50:26

Highest Channel / 5MHz / QPSK



Date: 15 FEB 2020 05:52:34

Highest Channel / 5MHz / 16QAM

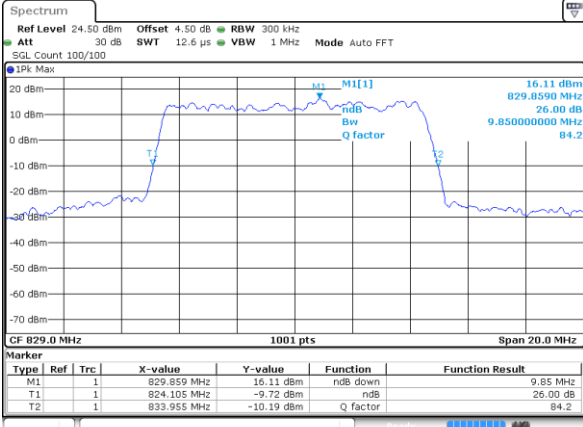


Date: 15 FEB 2020 05:54:31



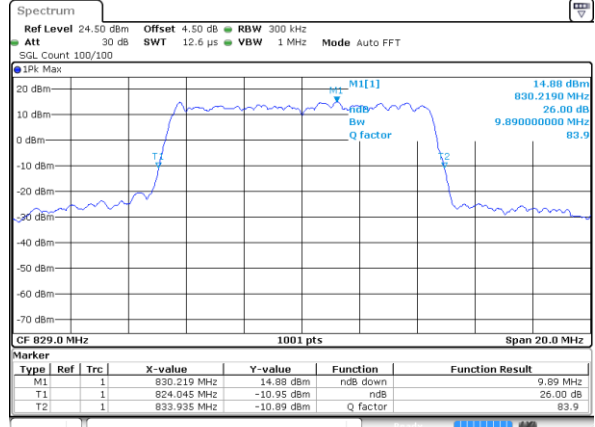
LTE Band 5

Lowest Channel / 10MHz / QPSK



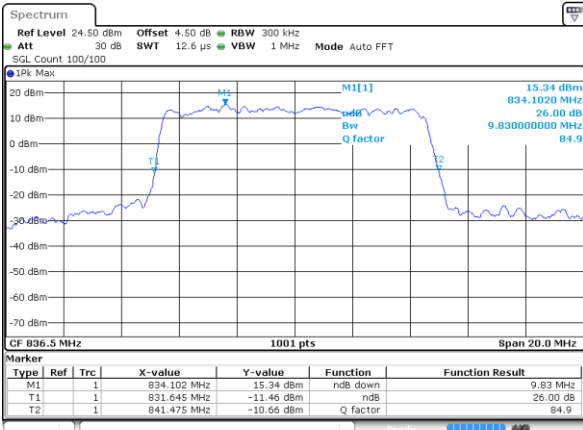
Date: 15 FEB 2020 04:56:53

Lowest Channel / 10MHz / 16QAM



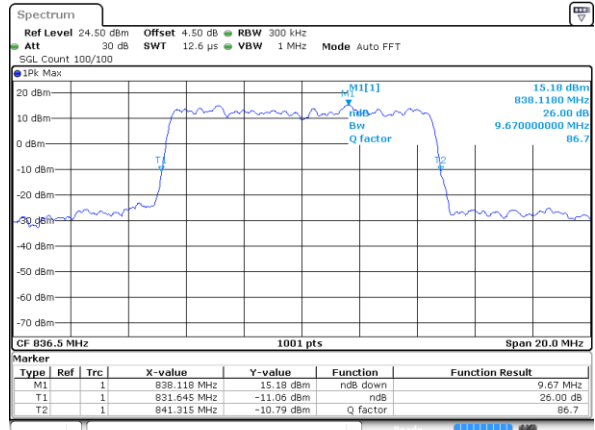
Date: 15 FEB 2020 04:57:02

Middle Channel / 10MHz / QPSK



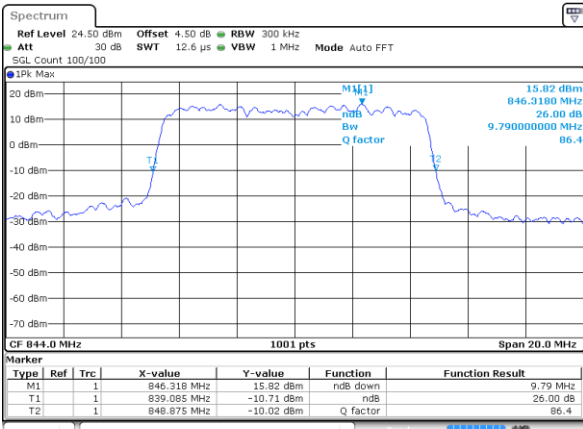
Date: 15 FEB 2020 05:05:50

Middle Channel / 10MHz / 16QAM



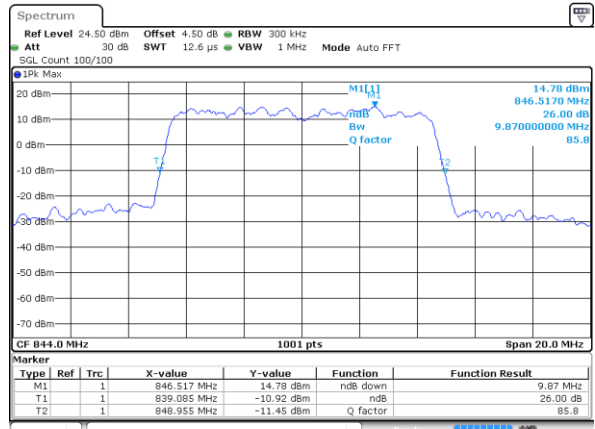
Date: 15 FEB 2020 05:06:00

Highest Channel / 10MHz / QPSK



Date: 15 FEB 2020 05:08:19

Highest Channel / 10MHz / 16QAM

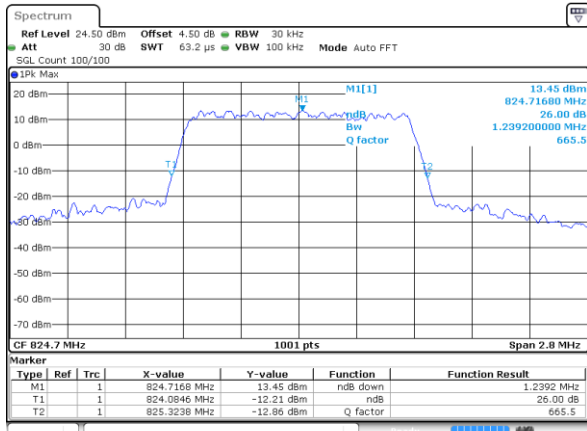


Date: 15 FEB 2020 05:08:29



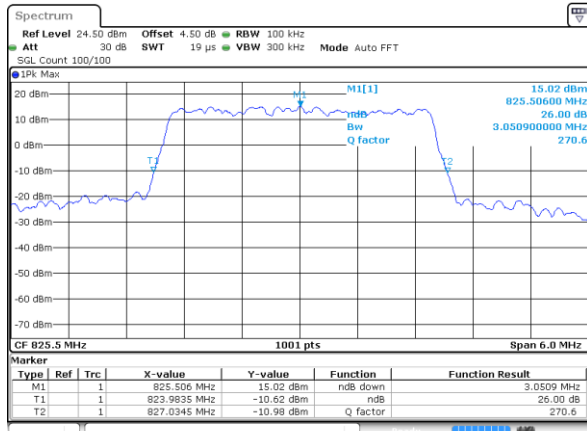
LTE Band 5

Lowest Channel / 1.4MHz / 64QAM



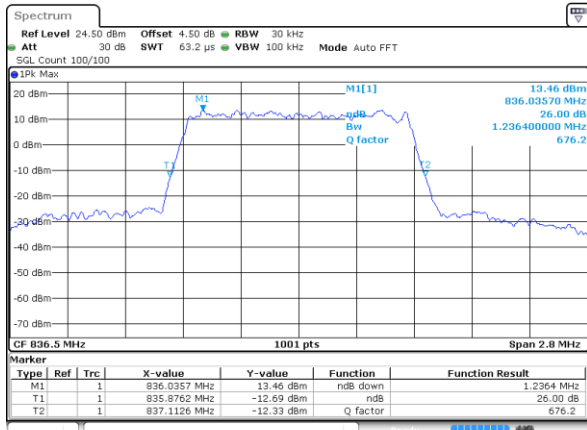
Date: 15 FEB 2020 06:09:36

Lowest Channel / 3MHz / 64QAM



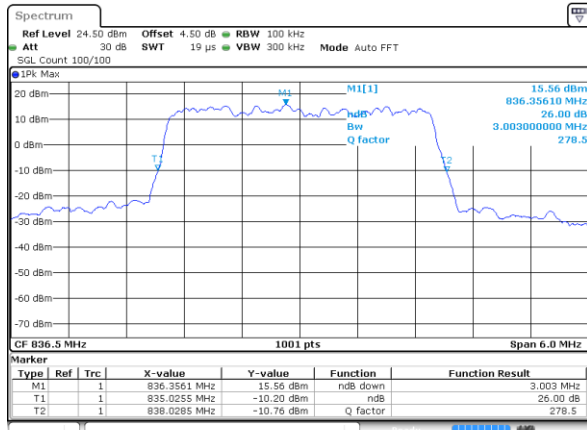
Date: 15 FEB 2020 06:19:47

Middle Channel / 1.4MHz / 64QAM



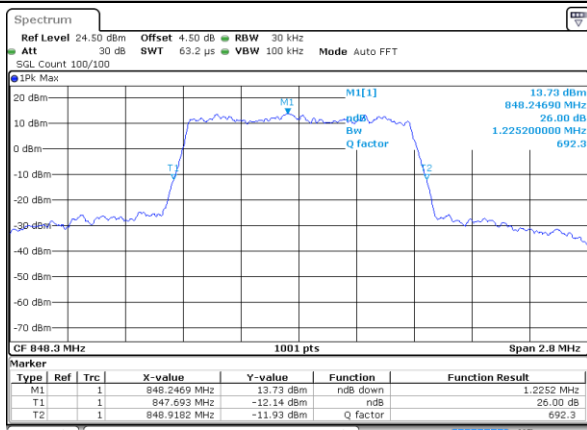
Date: 15 FEB 2020 06:14:59

Middle Channel / 3MHz / 64QAM



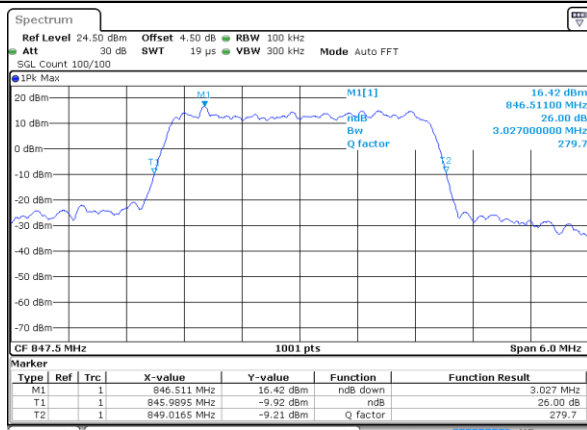
Date: 15 FEB 2020 06:25:10

Highest Channel / 1.4MHz / 64QAM



Date: 15 FEB 2020 06:15:19

Highest Channel / 3MHz / 64QAM

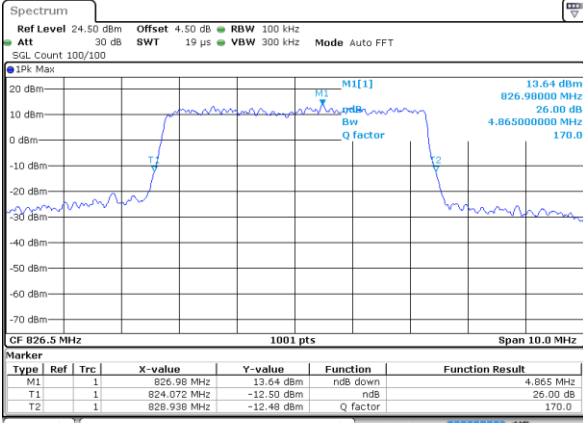


Date: 15 FEB 2020 06:25:30



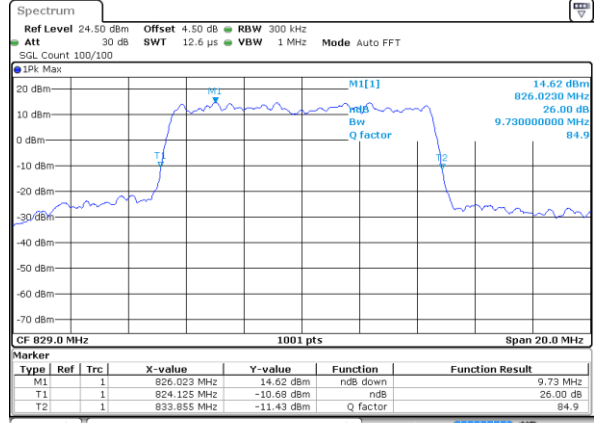
LTE Band 5

Lowest Channel / 5MHz / 64QAM



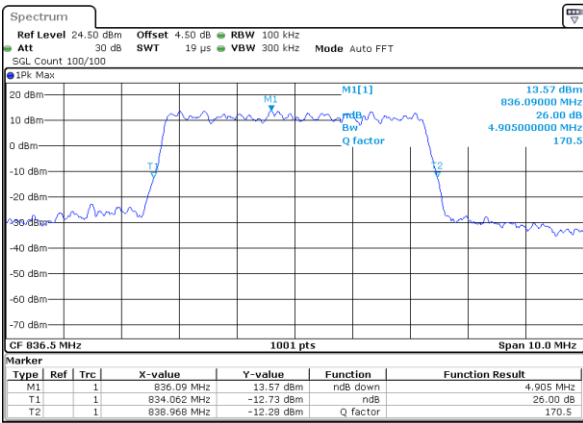
Date: 15 FEB 2020 06:29:59

Lowest Channel / 10MHz / 64QAM



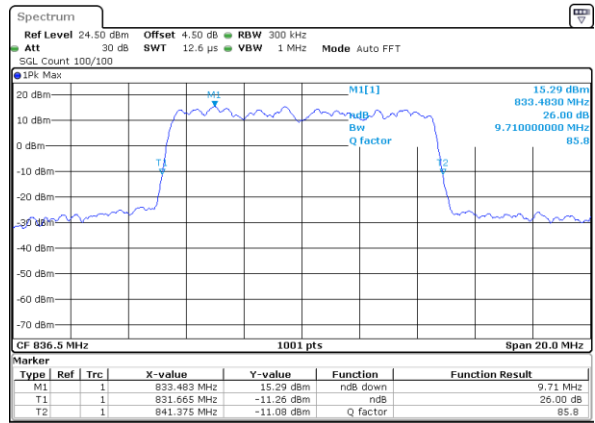
Date: 15 FEB 2020 06:40:11

Middle Channel / 5MHz / 64QAM



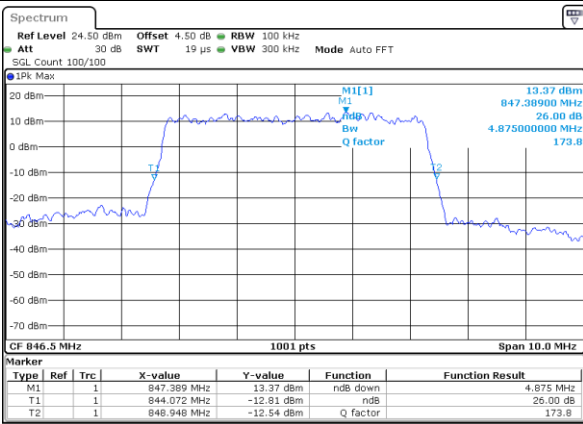
Date: 15 FEB 2020 06:35:22

Middle Channel / 10MHz / 64QAM



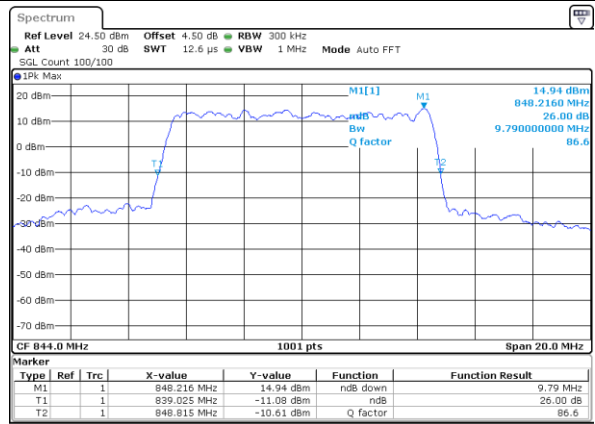
Date: 15 FEB 2020 06:45:35

Highest Channel / 5MHz / 64QAM



Date: 15 FEB 2020 06:35:42

Highest Channel / 10MHz / 64QAM



Date: 15 FEB 2020 06:45:55



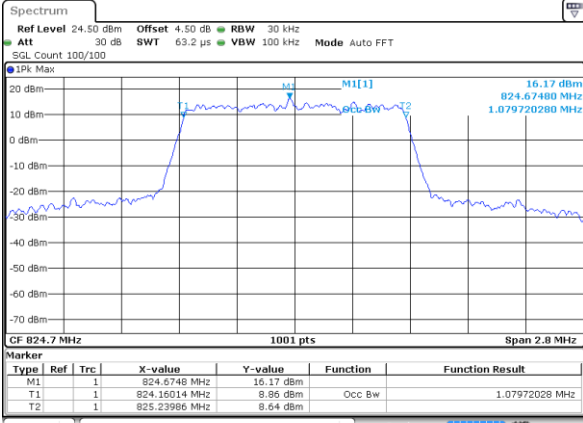
Occupied Bandwidth

| Mode | LTE Band 5 : 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 | 1.08 | 1.10 | 2.71 | 2.72 | 4.48 | 4.50 | 9.09 | 9.01 | - | - | - | - |
| Middle CH | 1.09 | 1.09 | 2.72 | 2.73 | 4.49 | 4.50 | 9.03 | 9.01 | - | - | - | - |
| Highest CH | 1.09 | 1.10 | 2.72 | 2.73 | 4.50 | 4.49 | 9.03 | 9.07 | - | - | - | - |
| Mode | LTE Band 5 : 99%OBW(MHz) | | | | | | | | | | | |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | |
| Lowest CH | 1.08 | - | 2.72 | - | 4.50 | - | 9.03 | - | - | - | - | - |
| Middle CH | 1.08 | - | 2.73 | - | 4.49 | - | 9.05 | - | - | - | - | - |
| Highest CH | 1.09 | - | 2.74 | - | 4.50 | - | 9.01 | - | - | - | - | - |



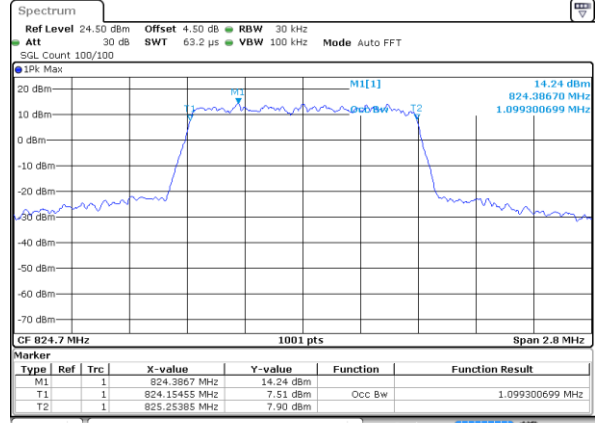
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



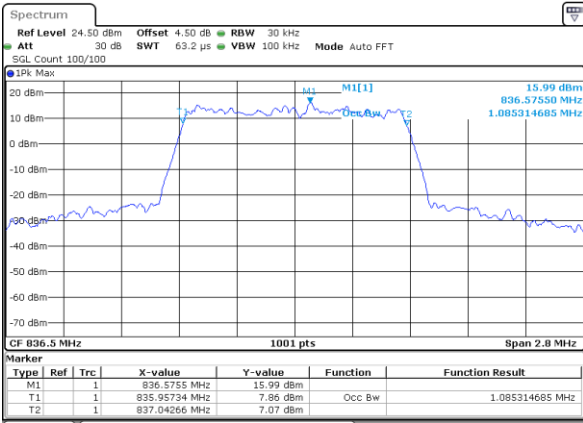
Date: 15 FEB 2020 04:36:07

Lowest Channel / 1.4MHz / 16QAM



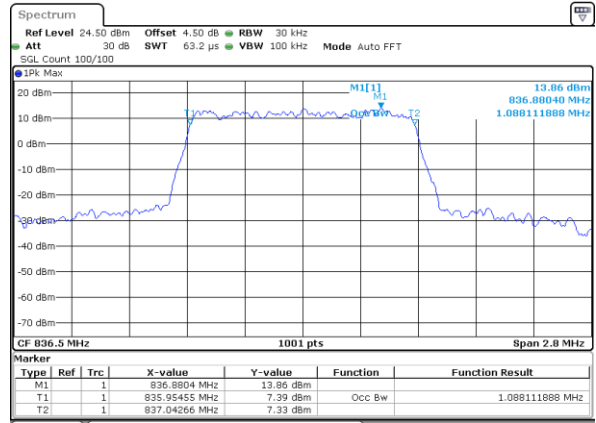
Date: 15 FEB 2020 04:36:17

Middle Channel / 1.4MHz / QPSK



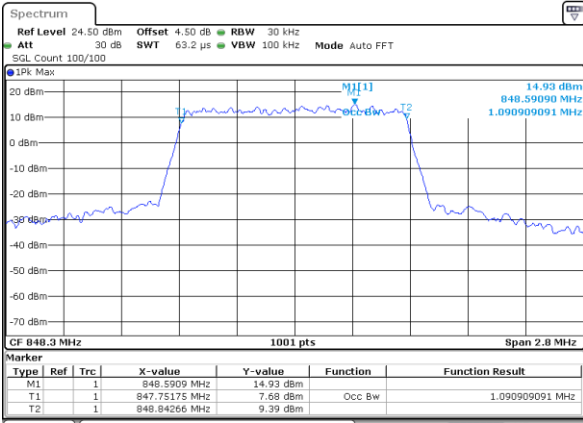
Date: 15 FEB 2020 04:45:07

Middle Channel / 1.4MHz / 16QAM



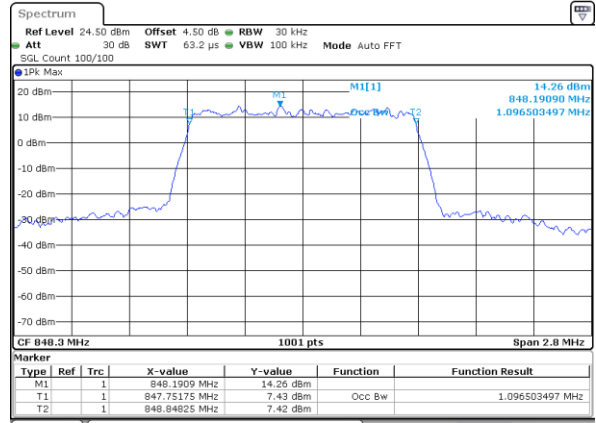
Date: 15 FEB 2020 04:45:17

Highest Channel / 1.4MHz / QPSK



Date: 15 FEB 2020 04:47:35

Highest Channel / 1.4MHz / 16QAM

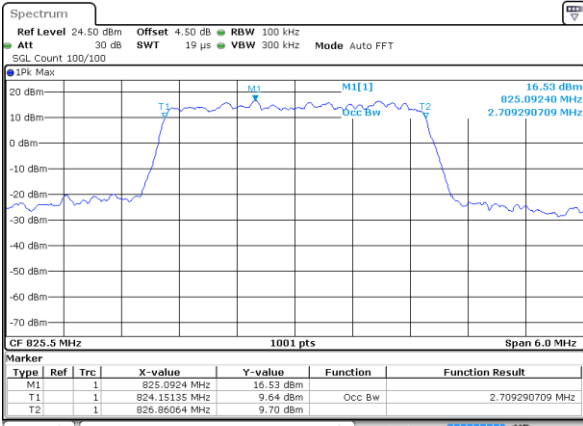


Date: 15 FEB 2020 04:47:45



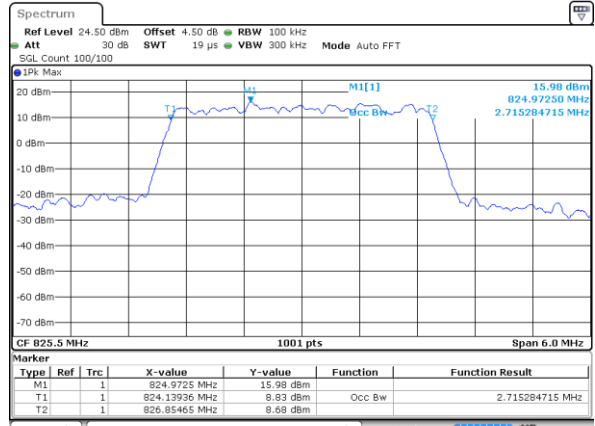
LTE Band 5

Lowest Channel / 3MHz / QPSK



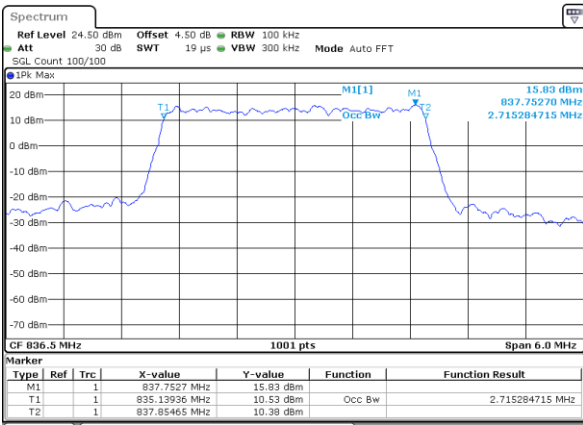
Date: 15 FEB 2020 05:19:32

Lowest Channel / 3MHz / 16QAM



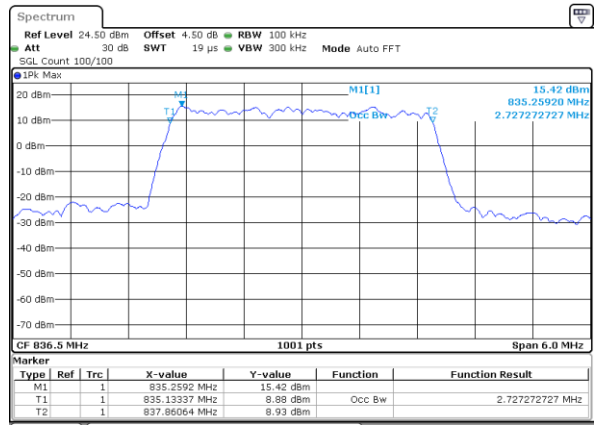
Date: 15 FEB 2020 05:19:51

Middle Channel / 3MHz / QPSK



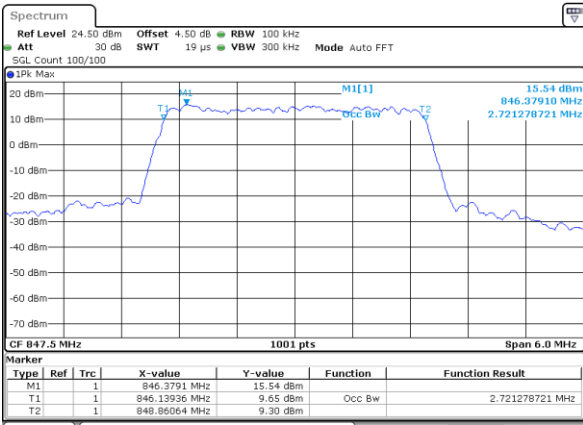
Date: 15 FEB 2020 05:20:31

Middle Channel / 3MHz / 16QAM



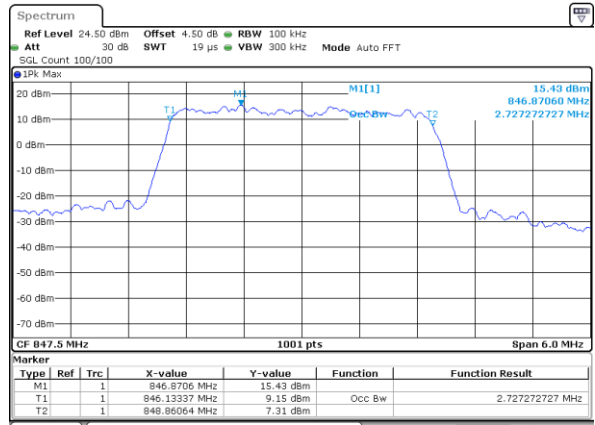
Date: 15 FEB 2020 05:20:11

Highest Channel / 3MHz / QPSK



Date: 15 FEB 2020 05:20:51

Highest Channel / 3MHz / 16QAM

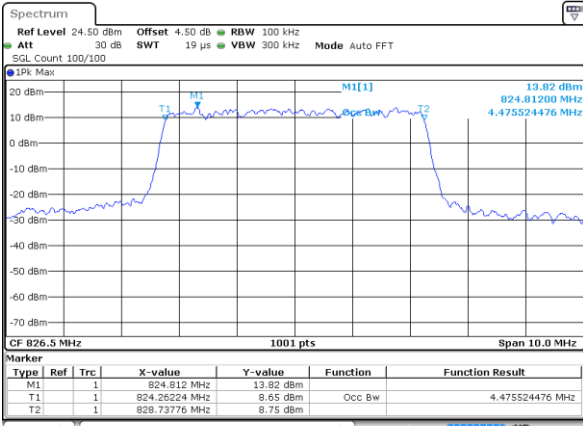


Date: 15 FEB 2020 05:21:11



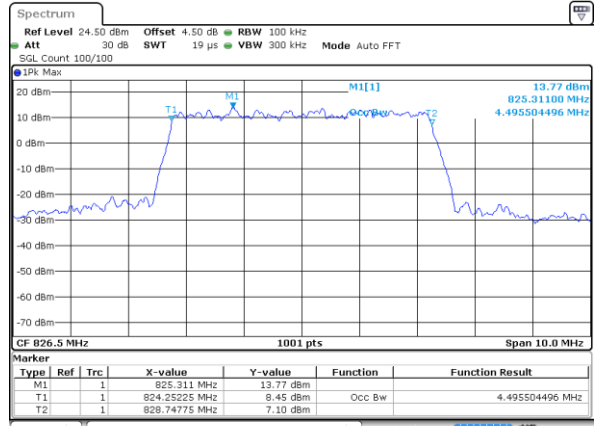
LTE Band 5

Lowest Channel / 5MHz / QPSK



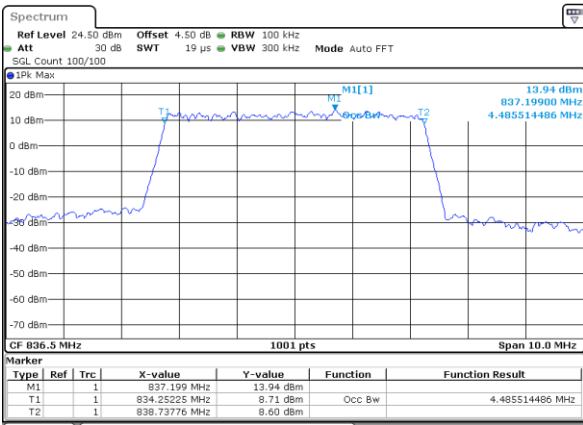
Date: 15 FEB 2020 05:40:58

Lowest Channel / 5MHz / 16QAM



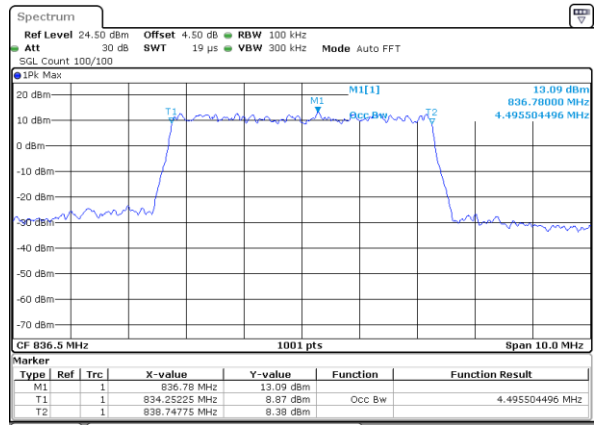
Date: 15 FEB 2020 05:42:55

Middle Channel / 5MHz / QPSK



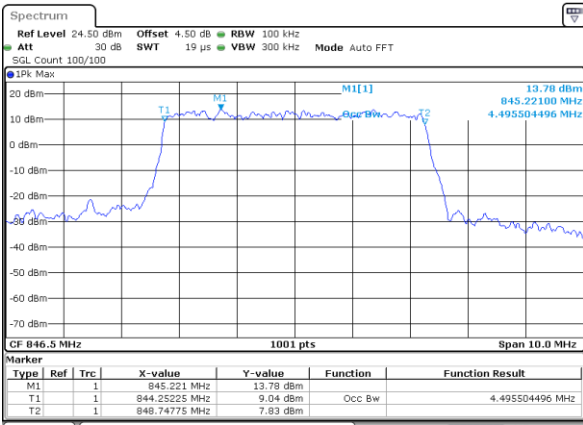
Date: 15 FEB 2020 05:49:56

Middle Channel / 5MHz / 16QAM



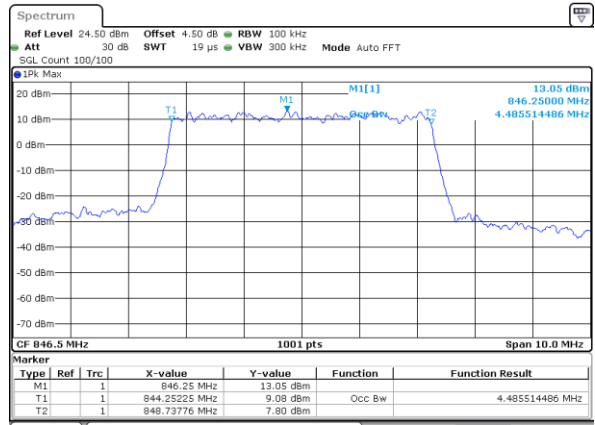
Date: 15 FEB 2020 05:50:16

Highest Channel / 5MHz / QPSK



Date: 15 FEB 2020 05:52:24

Highest Channel / 5MHz / 16QAM

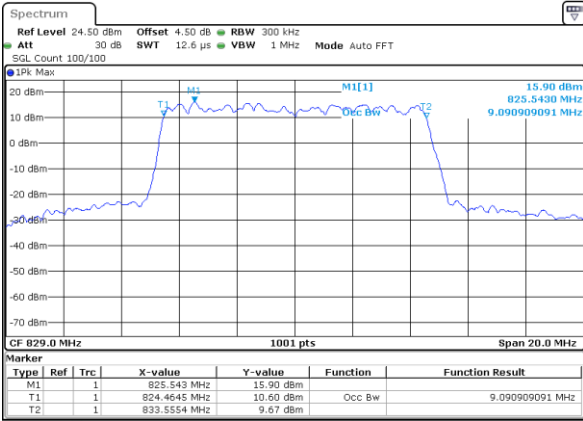


Date: 15 FEB 2020 05:54:21



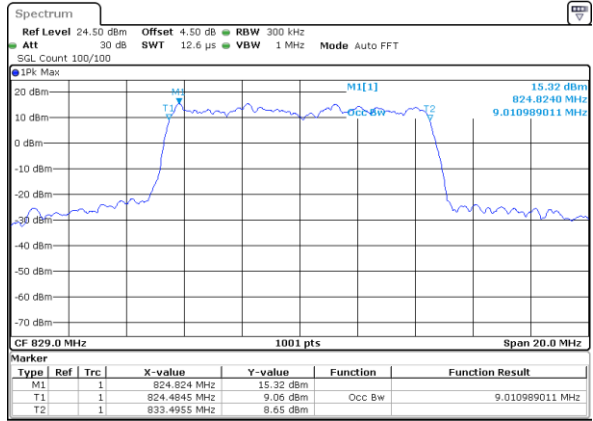
LTE Band 5

Lowest Channel / 10MHz / QPSK



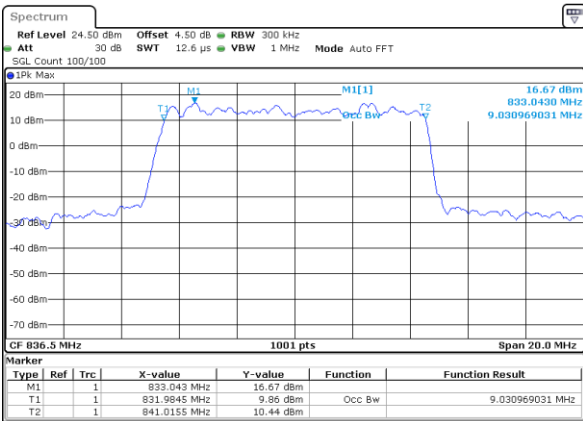
Date: 15 FEB 2020 04:56:33

Lowest Channel / 10MHz / 16QAM



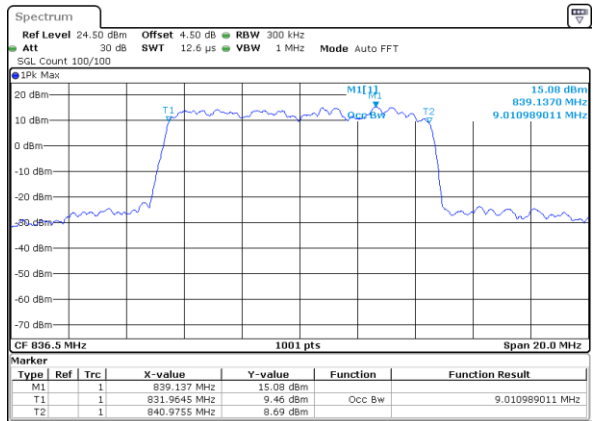
Date: 15 FEB 2020 04:56:43

Middle Channel / 10MHz / QPSK



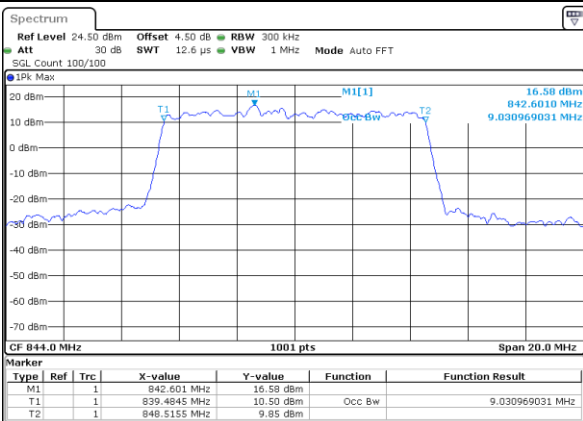
Date: 15 FEB 2020 05:05:30

Middle Channel / 10MHz / 16QAM



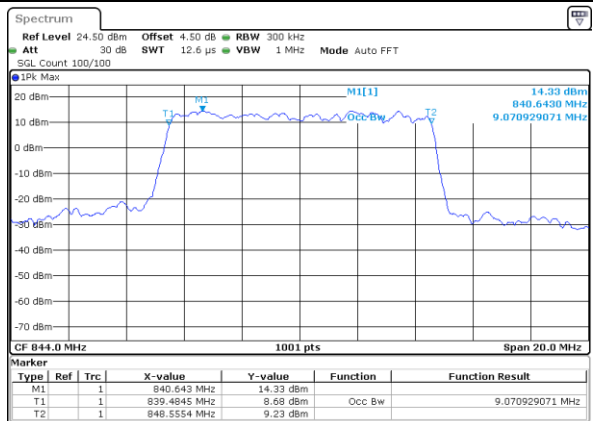
Date: 15 FEB 2020 05:05:40

Highest Channel / 10MHz / QPSK



Date: 15 FEB 2020 05:07:59

Highest Channel / 10MHz / 16QAM

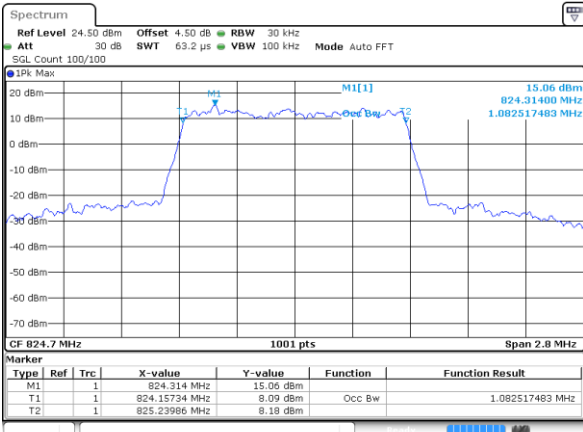


Date: 15 FEB 2020 05:08:09



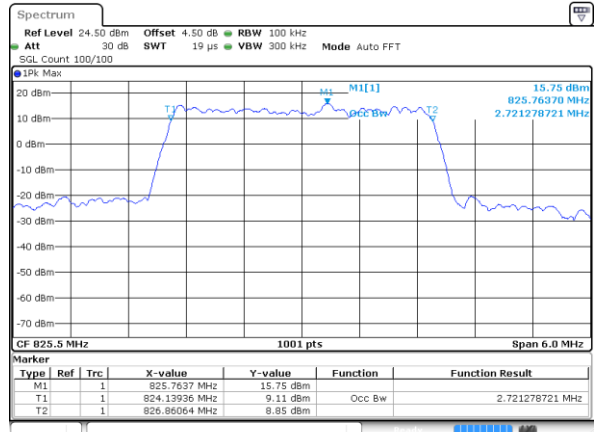
LTE Band 5

Lowest Channel / 1.4MHz / 64QAM



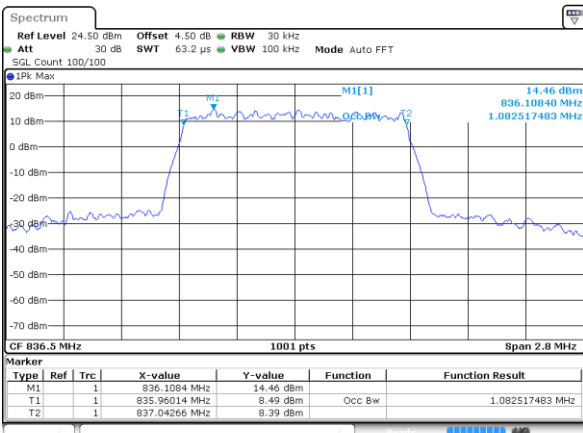
Date: 15 FEB 2020 06:09:26

Lowest Channel / 3MHz / 64QAM



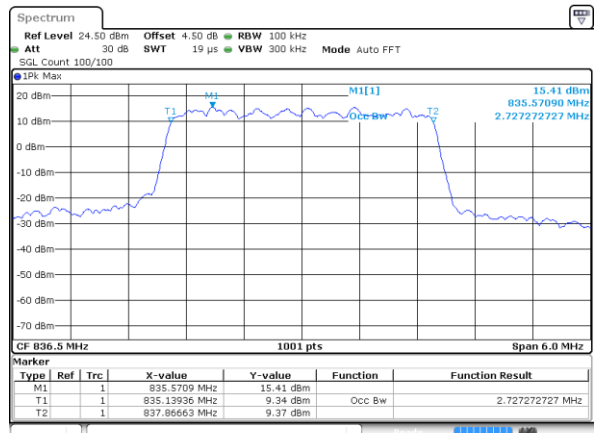
Date: 15 FEB 2020 06:19:37

Middle Channel / 1.4MHz / 64QAM



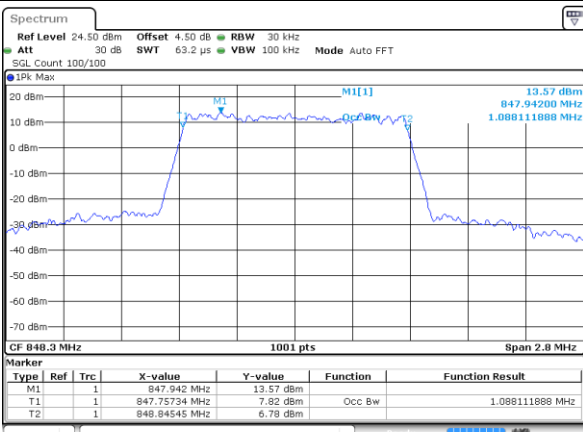
Date: 15 FEB 2020 06:14:49

Middle Channel / 3MHz / 64QAM



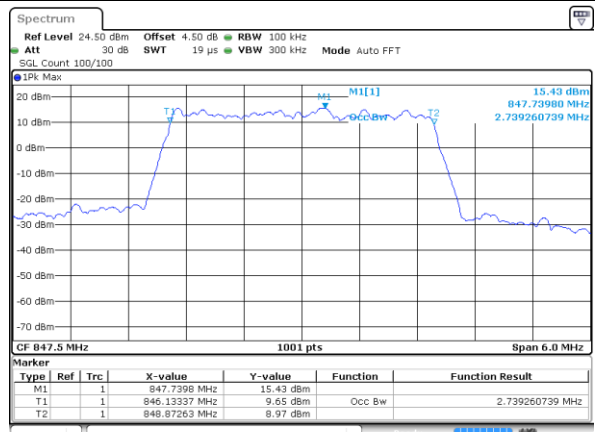
Date: 15 FEB 2020 06:25:01

Highest Channel / 1.4MHz / 64QAM



Date: 15 FEB 2020 06:15:09

Highest Channel / 3MHz / 64QAM



Date: 15 FEB 2020 06:25:20