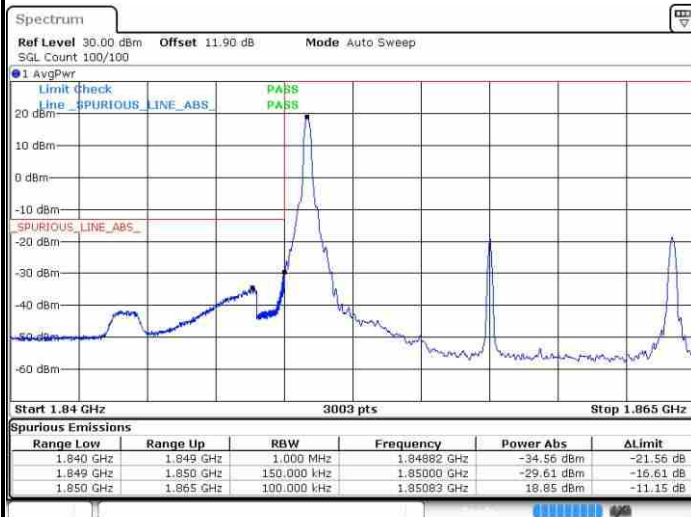


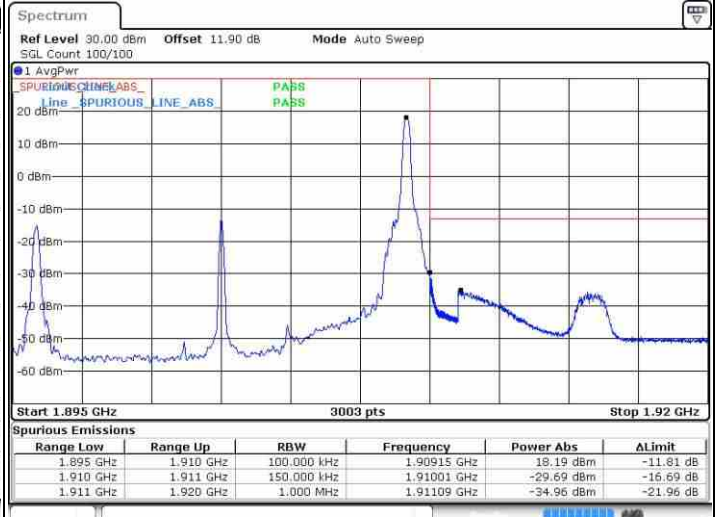


## LTE Band 2 / 15MHz / 16QAM

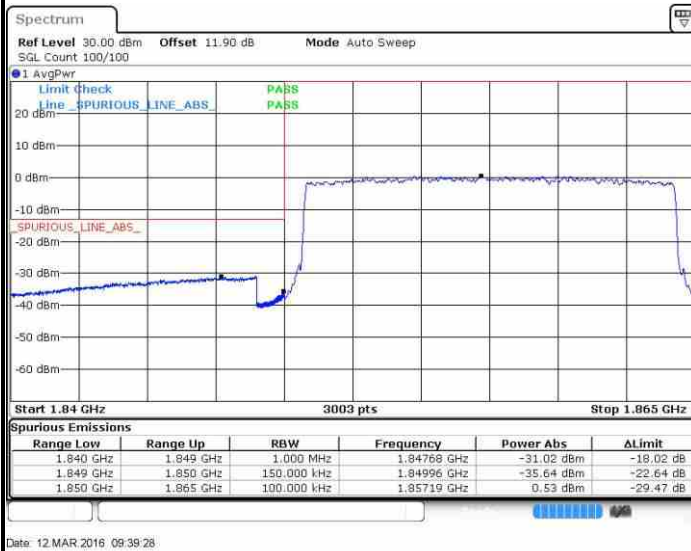
## Lowest Band Edge / 1 RB



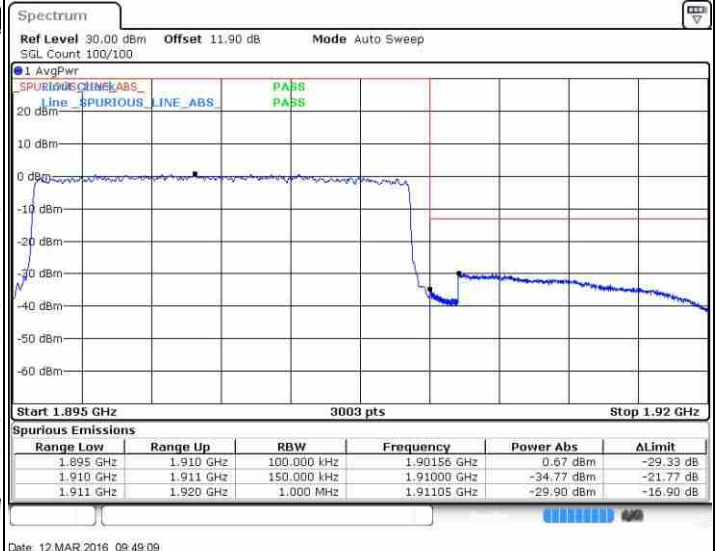
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



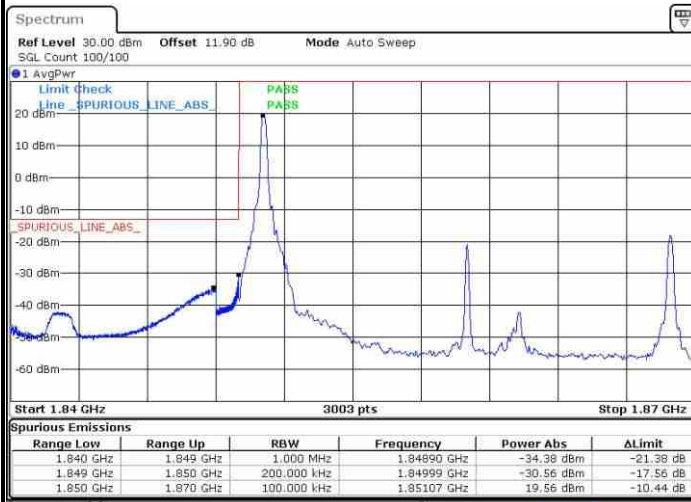
## Highest Band Edge / Full RB



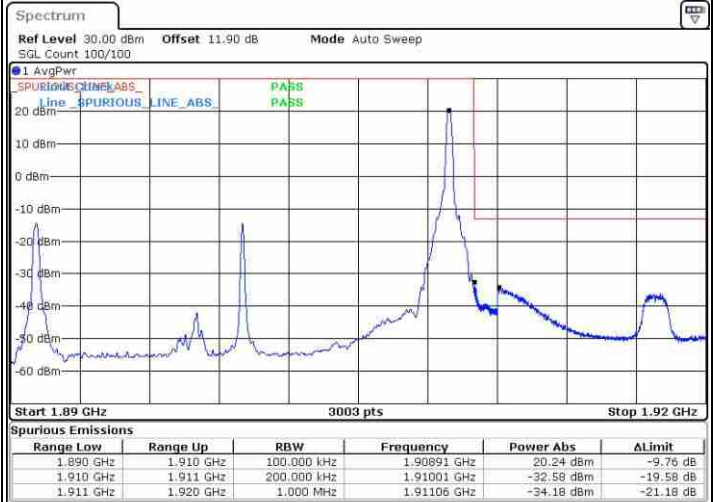


## LTE Band 2 / 20MHz / QPSK

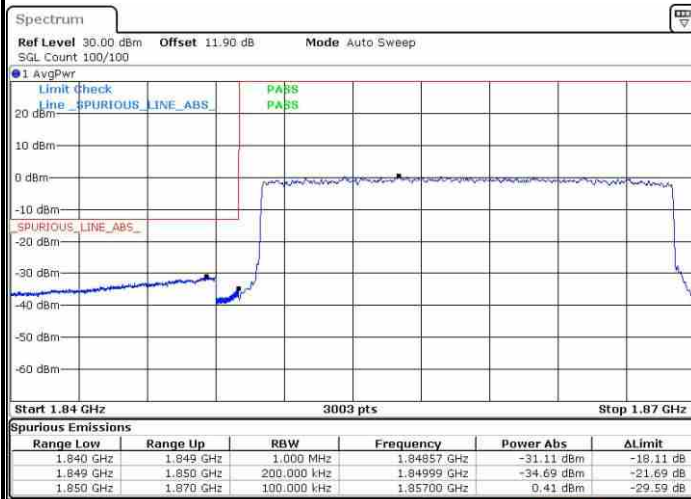
## Lowest Band Edge / 1 RB



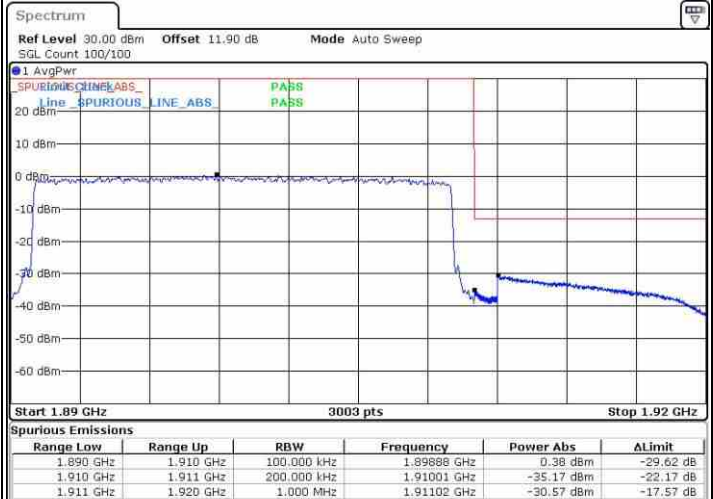
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



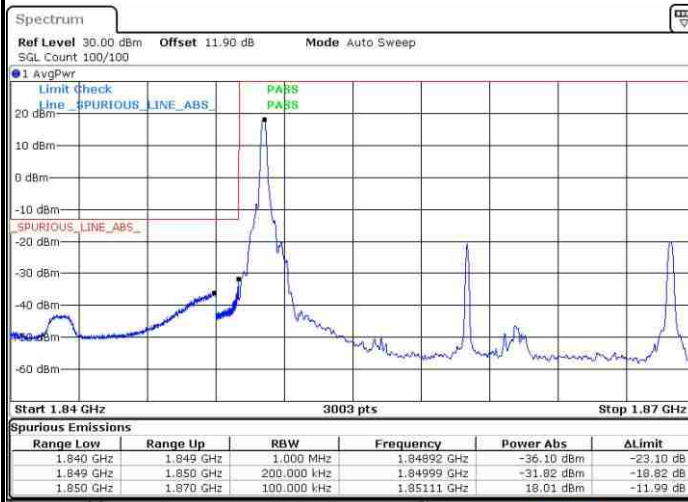
## Highest Band Edge / Full RB



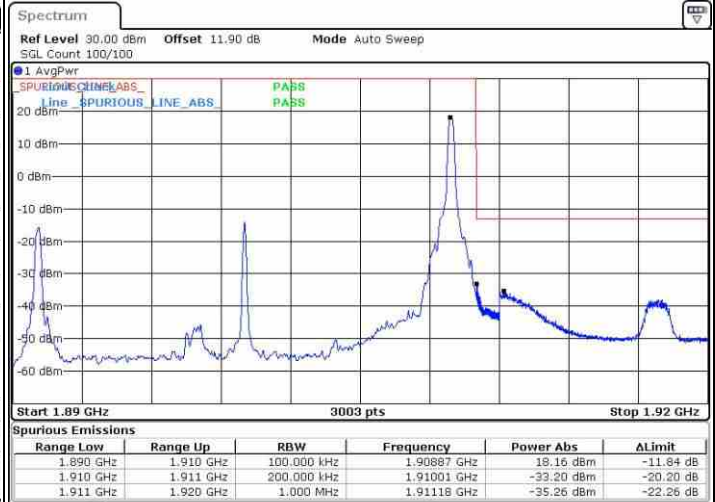


## LTE Band 2 / 20MHz / 16QAM

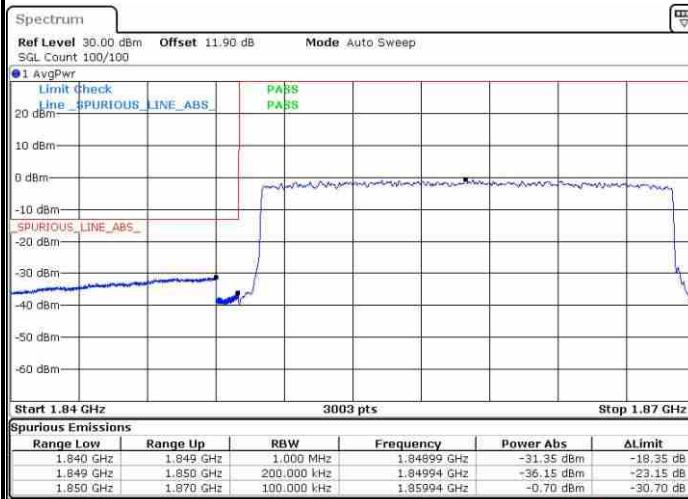
## Lowest Band Edge / 1 RB



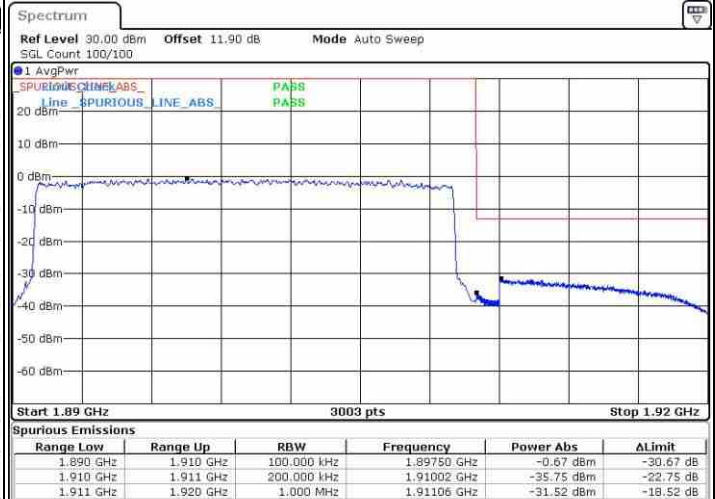
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

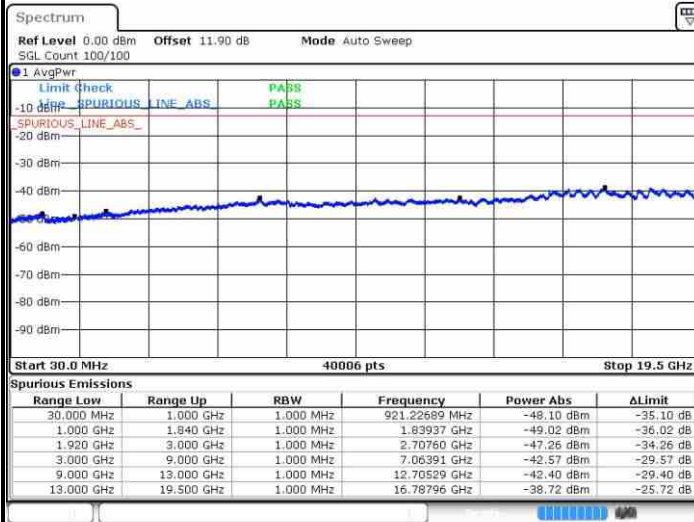




# Conducted Spurious Emission

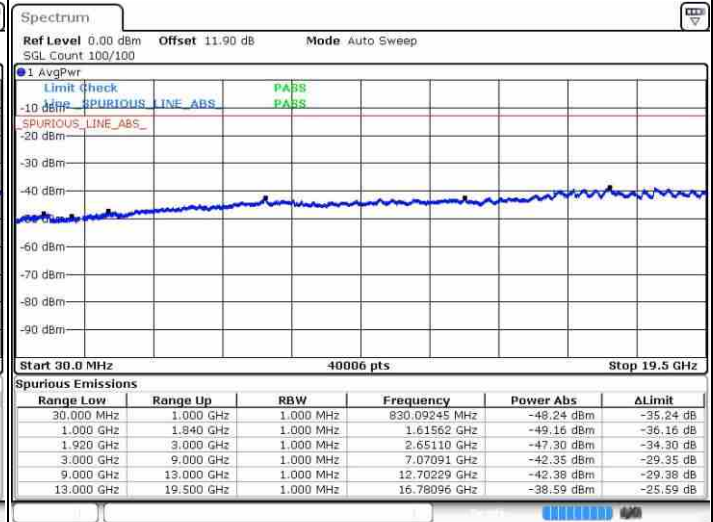
## LTE Band 2 / 1.4MHz

### Lowest Channel / QPSK



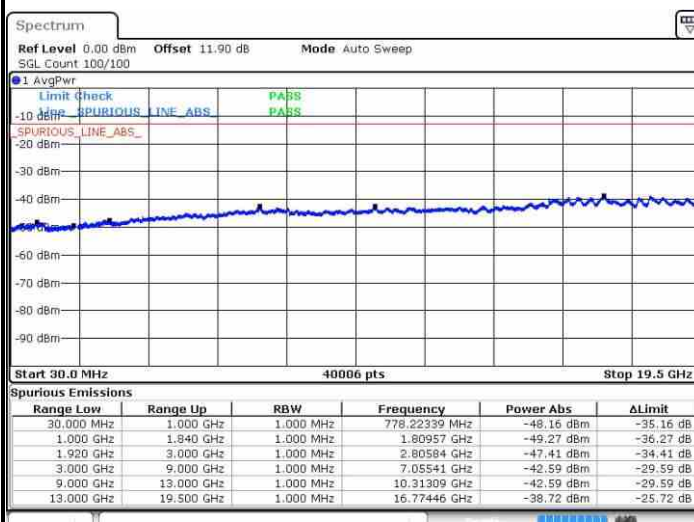
Date: 12.MAR.2016 10:14:44

### Lowest Channel / 16QAM



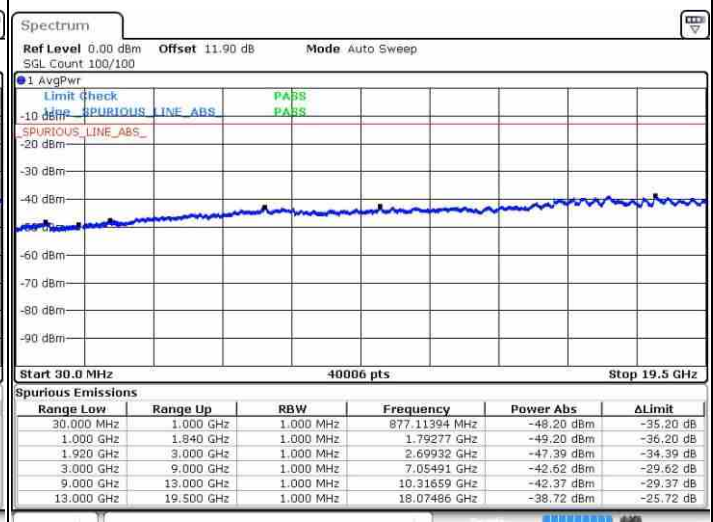
Date: 12.MAR.2016 10:15:39

### Middle Channel / QPSK



Date: 12.MAR.2016 10:17:16

### Middle Channel / 16QAM

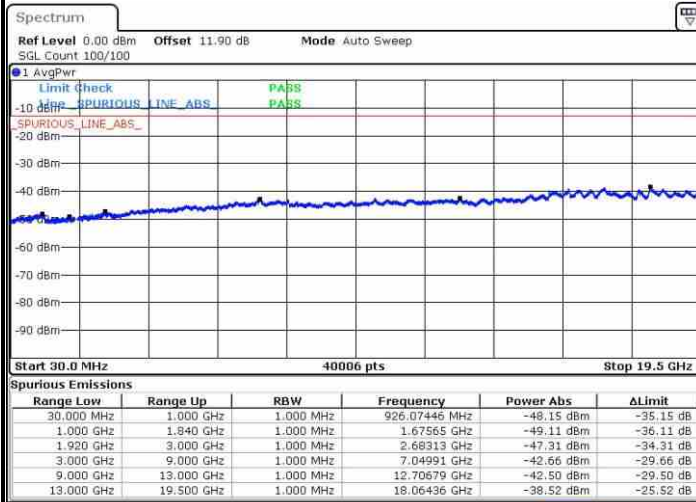


Date: 12.MAR.2016 10:18:10



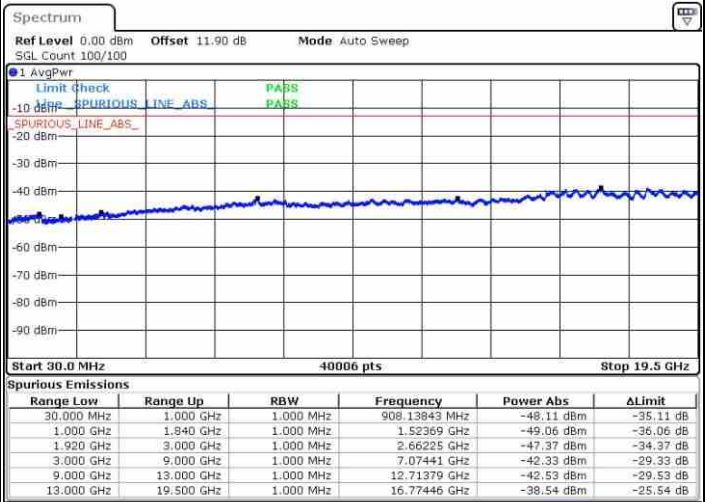
## LTE Band 2 / 1.4MHz

## Highest Channel / QPSK



Date: 12 MAR 2016 10:24:24

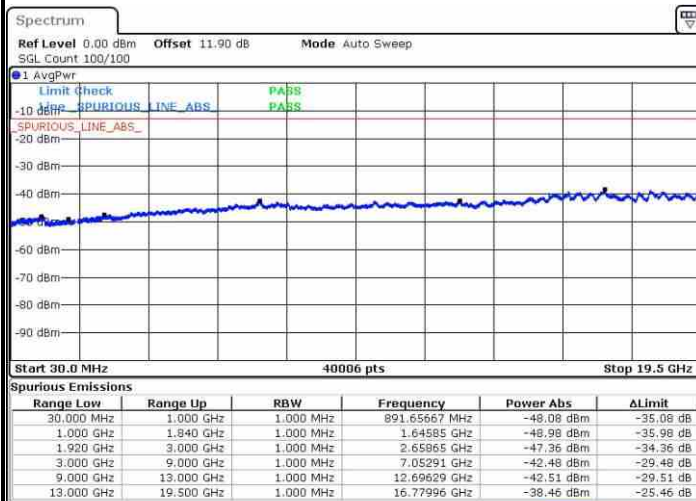
## Highest Channel / 16QAM



Date: 12 MAR 2016 10:25:19

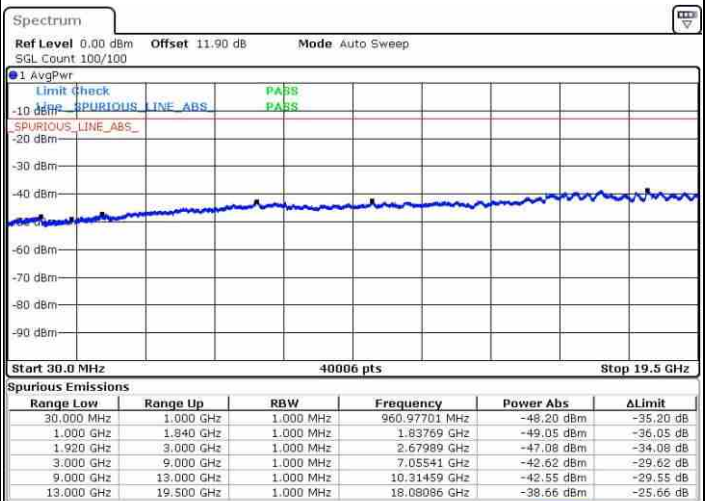
## LTE Band 2 / 3MHz

## Lowest Channel / QPSK



Date: 12 MAR 2016 08:49:55

## Lowest Channel / 16QAM



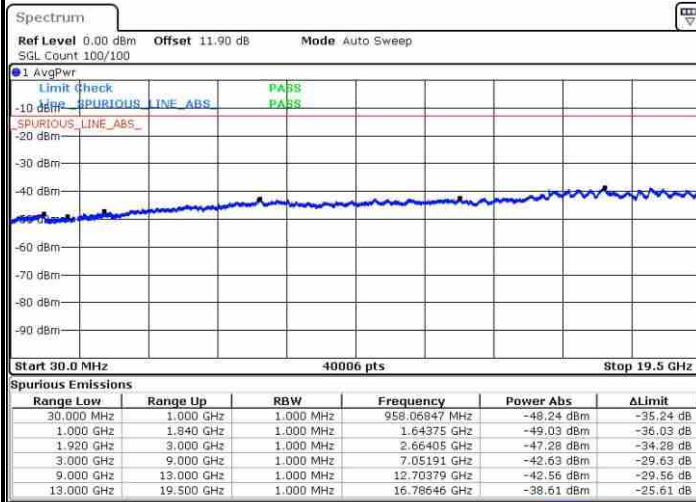
Date: 12 MAR 2016 08:50:50





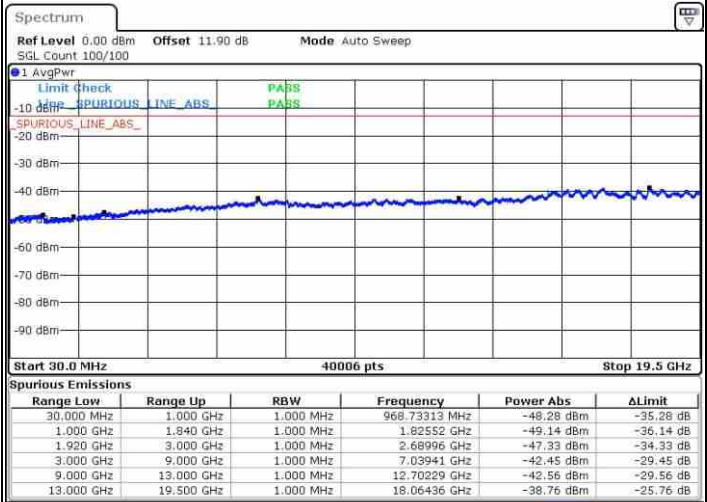
## LTE Band 2 / 3MHz

## Middle Channel / QPSK



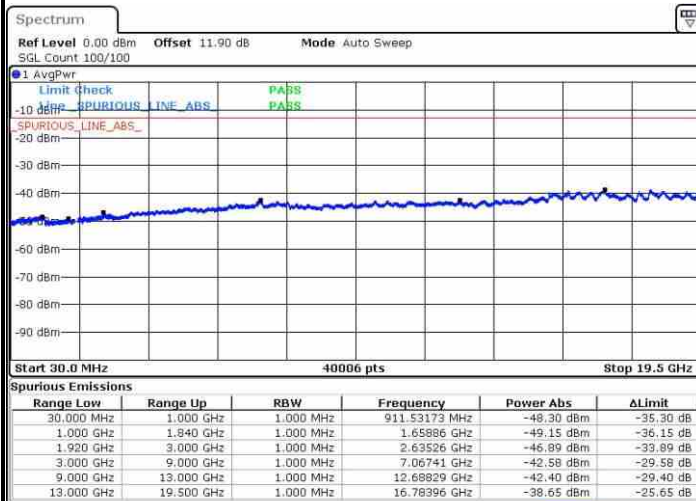
Date: 12 MAR 2016 08:52:26

## Middle Channel / 16QAM



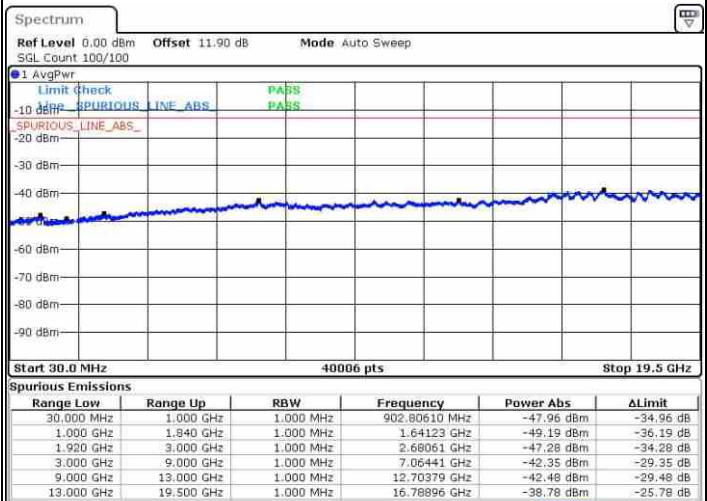
Date: 12 MAR 2016 08:53:21

## Highest Channel / QPSK



Date: 12 MAR 2016 08:59:35

## Highest Channel / 16QAM

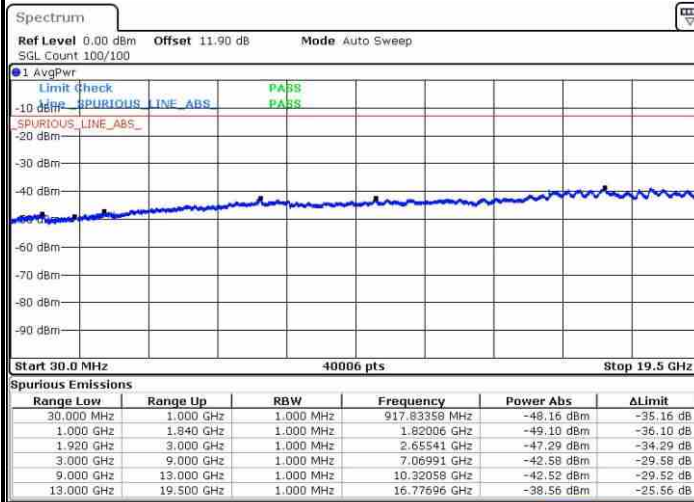


Date: 12 MAR 2016 09:00:29



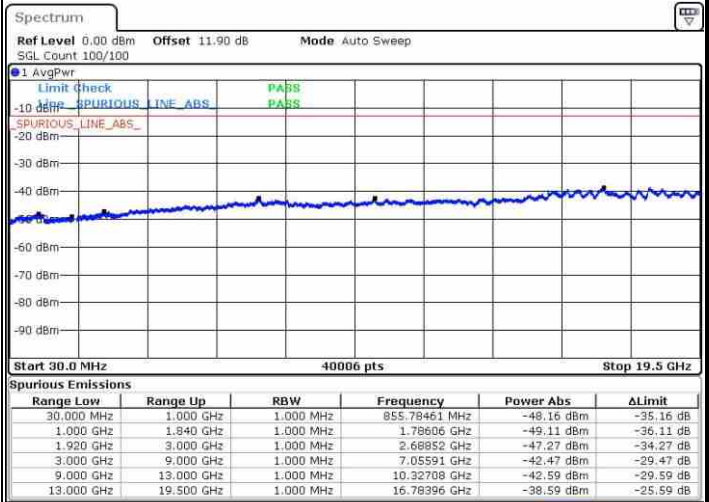
## LTE Band 2 / 5MHz

## Lowest Channel / QPSK



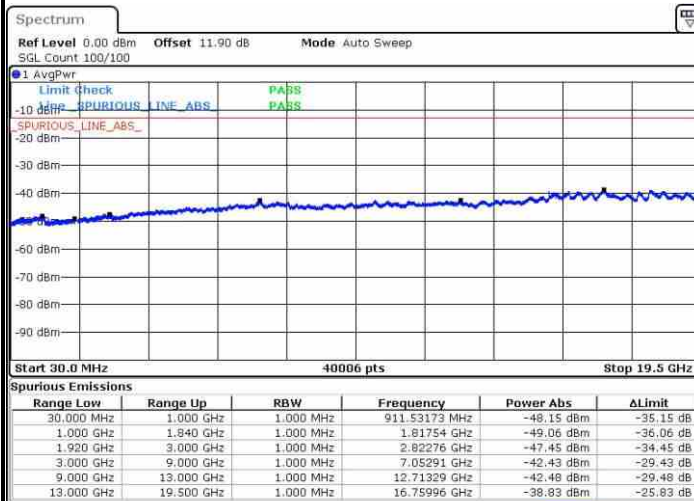
Date: 12 MAR 2016 09:06:43

## Lowest Channel / 16QAM



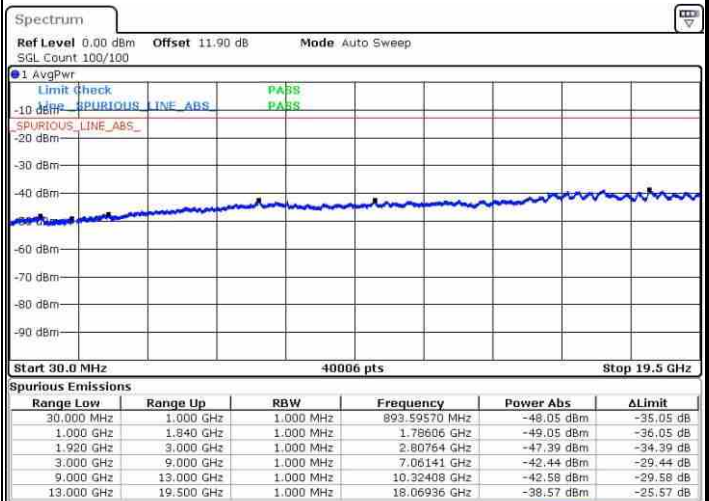
Date: 12 MAR 2016 09:07:38

## Middle Channel / QPSK



Date: 12 MAR 2016 09:09:15

## Middle Channel / 16QAM

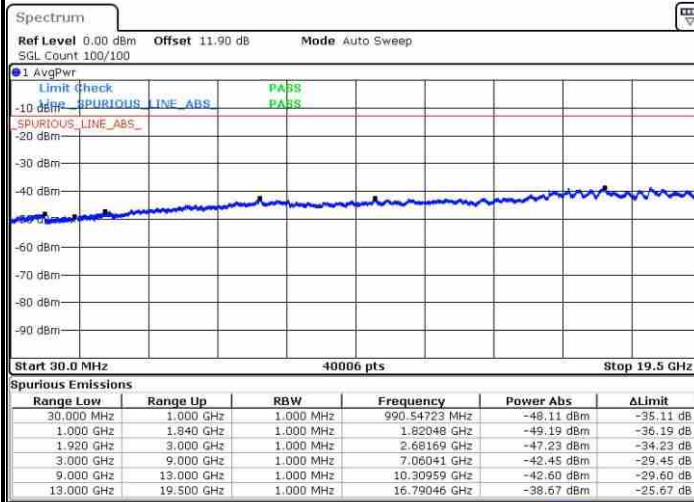


Date: 12 MAR 2016 09:10:10



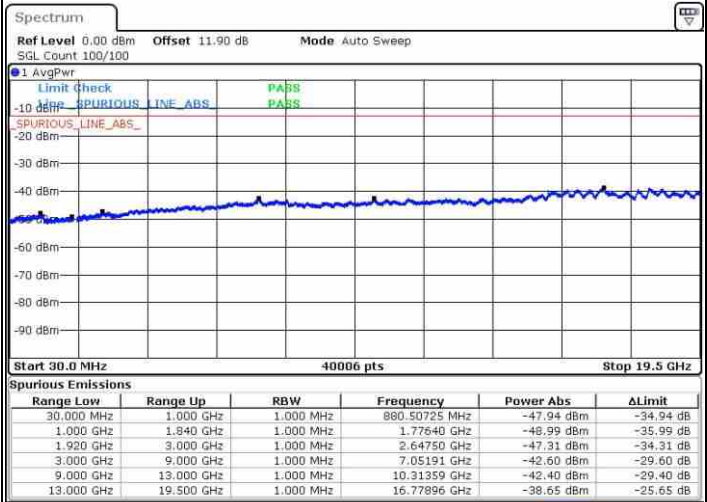
## LTE Band 2 / 5MHz

## Highest Channel / QPSK



Date: 12 MAR 2016 09:16:24

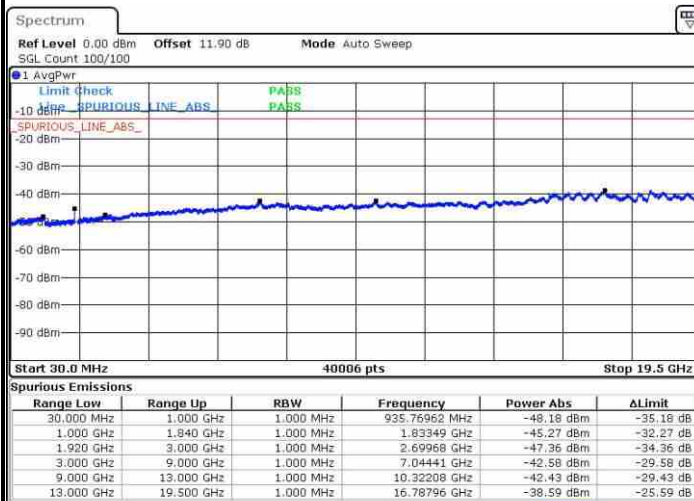
## Highest Channel / 16QAM



Date: 12 MAR 2016 09:17:19

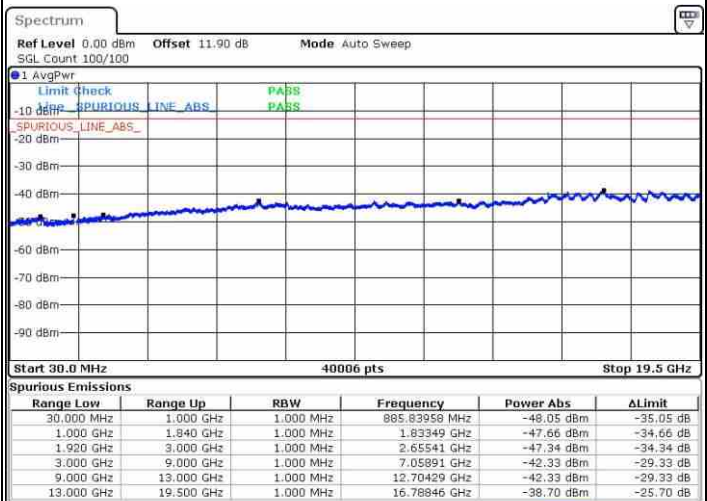
## LTE Band 2 / 10MHz

## Lowest Channel / QPSK



Date: 12 MAR 2016 09:23:33

## Lowest Channel / 16QAM



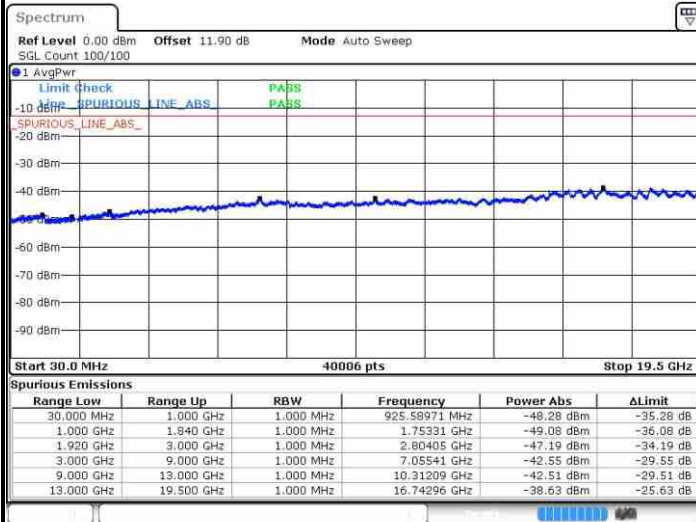
Date: 12 MAR 2016 09:24:28





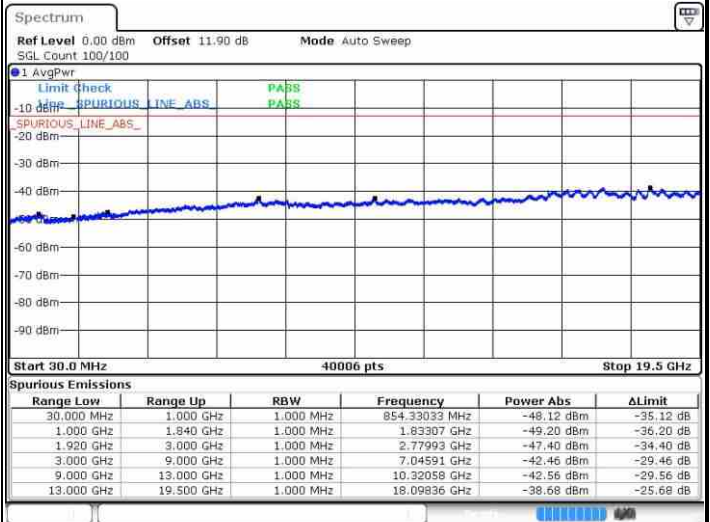
## LTE Band 2 / 10MHz

## Middle Channel / QPSK



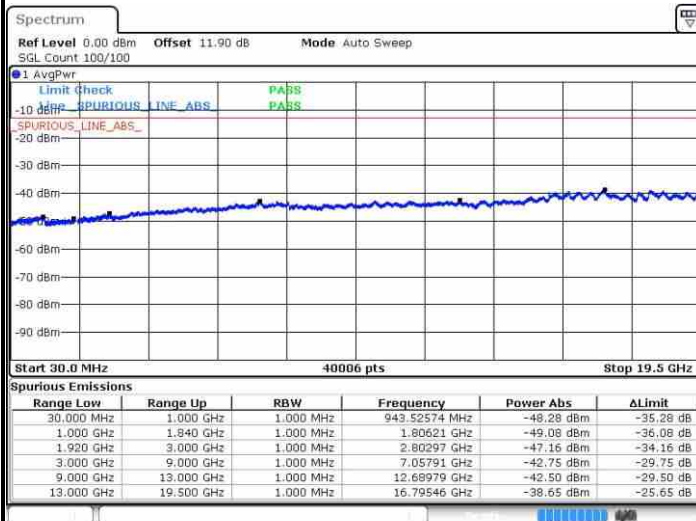
Date: 12 MAR 2016 09:26:05

## Middle Channel / 16QAM



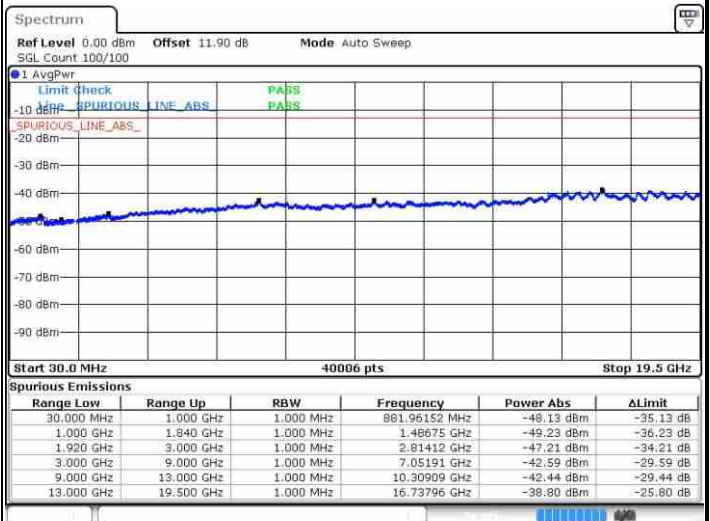
Date: 12 MAR 2016 09:27:00

## Highest Channel / QPSK



Date: 12 MAR 2016 09:33:14

## Highest Channel / 16QAM

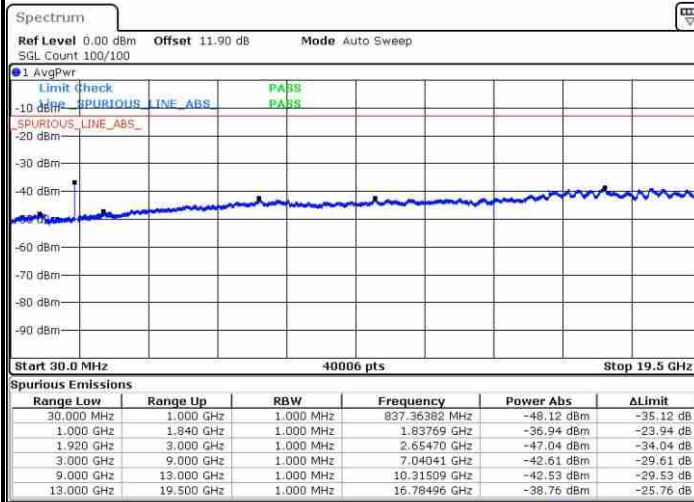


Date: 12 MAR 2016 09:34:09



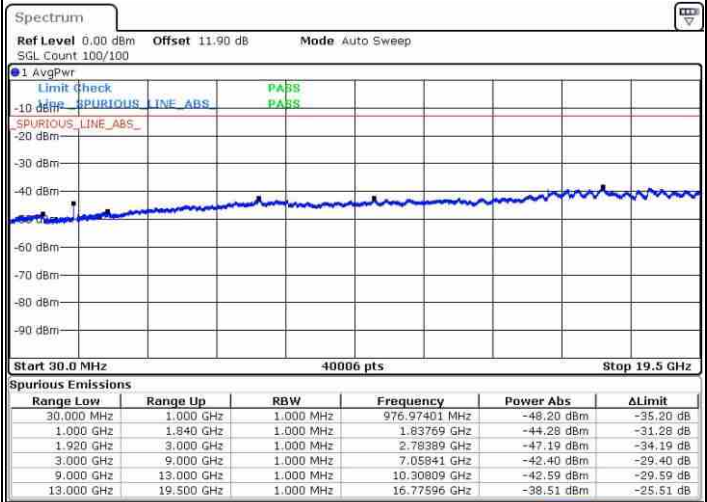
## LTE Band 2 / 15MHz

## Lowest Channel / QPSK



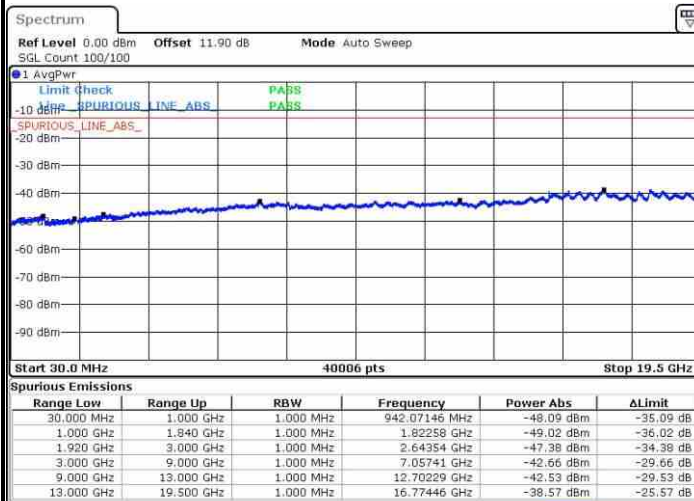
Date: 12 MAR 2016 09:40:24

## Lowest Channel / 16QAM



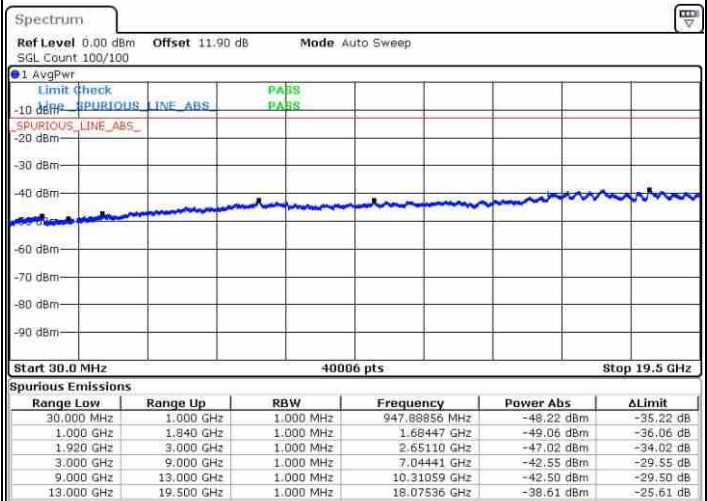
Date: 12 MAR 2016 09:41:18

## Middle Channel / QPSK



Date: 12 MAR 2016 09:42:55

## Middle Channel / 16QAM

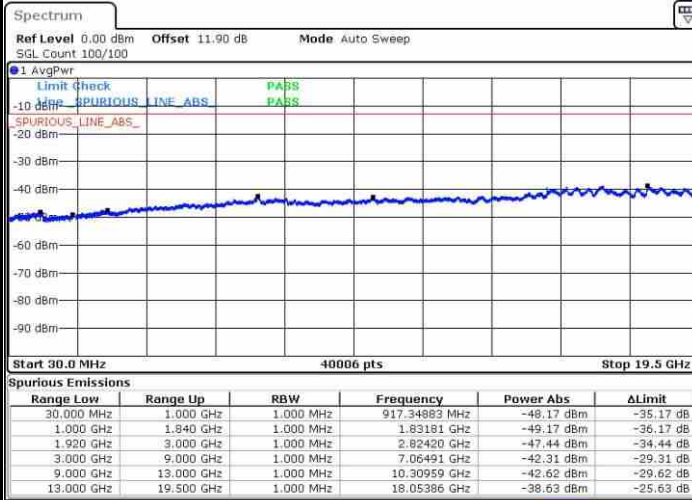


Date: 12 MAR 2016 09:43:50



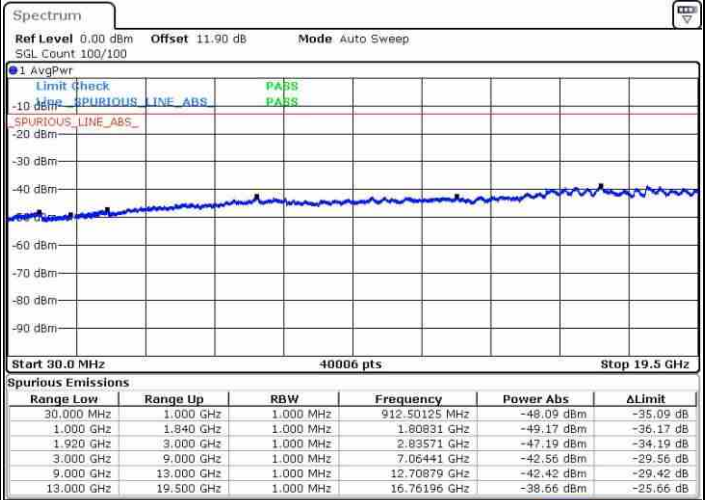
## LTE Band 2 / 15MHz

## Highest Channel / QPSK



Date: 12 MAR 2016 09:50:04

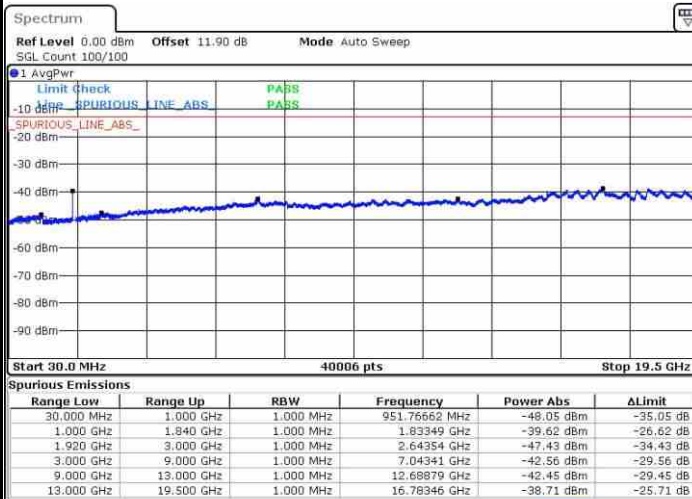
## Highest Channel / 16QAM



Date: 12 MAR 2016 09:50:59

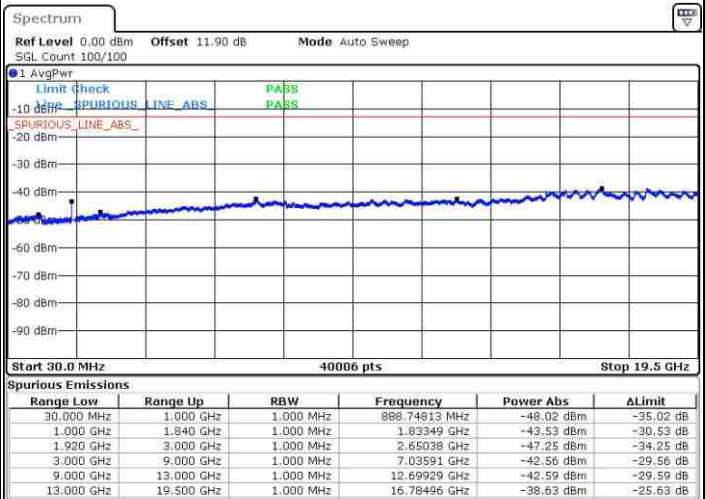
## LTE Band 2 / 20MHz

## Lowest Channel / QPSK



Date: 12 MAR 2016 09:57:13

## Lowest Channel / 16QAM

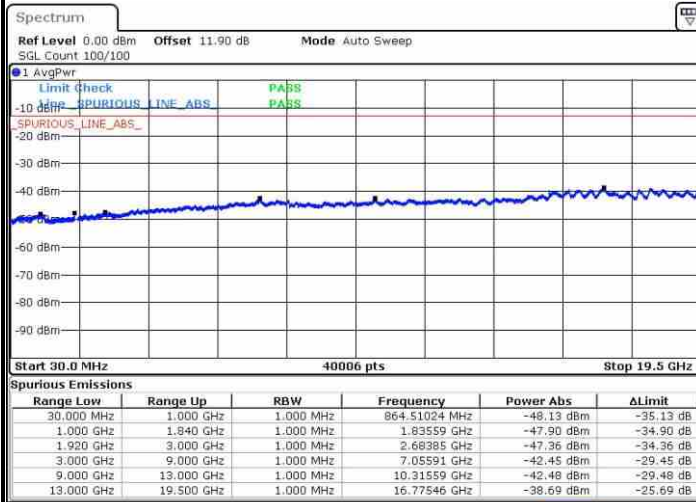


Date: 12 MAR 2016 09:58:08



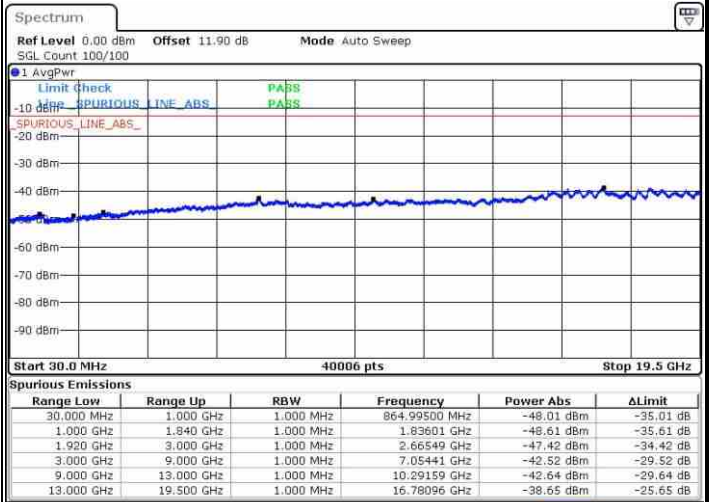
## LTE Band 2 / 20MHz

## Middle Channel / QPSK



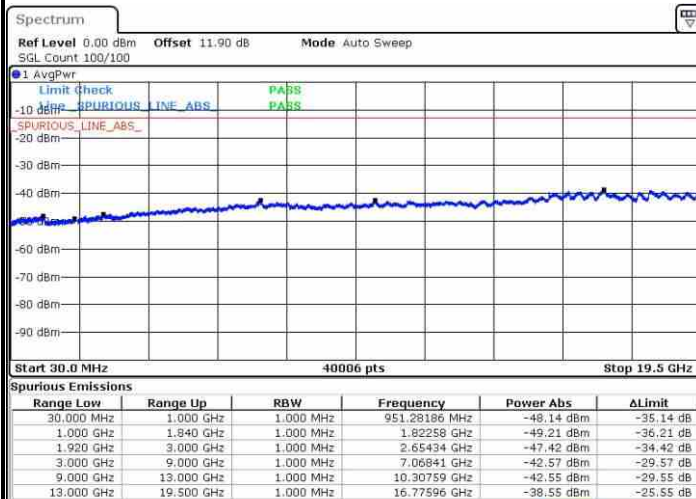
Date: 12 MAR 2016 09:59:45

## Middle Channel / 16QAM



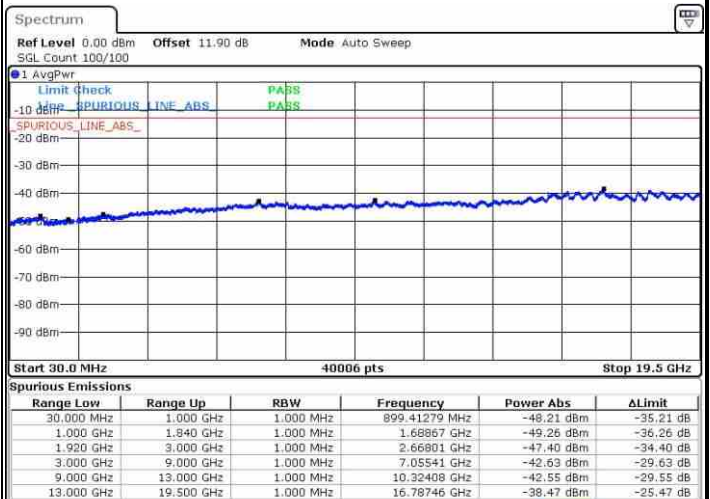
Date: 12 MAR 2016 10:00:39

## Highest Channel / QPSK



Date: 12 MAR 2016 10:08:54

## Highest Channel / 16QAM



Date: 12 MAR 2016 10:07:49

## 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    | 0.0004                             | PASS    |
| 40               | Normal Voltage    | 0.0065                             |         |
| 30               | Normal Voltage    | 0.0005                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0005                             |         |
| 0                | Normal Voltage    | 0.0065                             |         |
| -10              | Normal Voltage    | 0.0065                             |         |
| -20              | Normal Voltage    | 0.0004                             |         |
| -30              | Normal Voltage    | 0.0071                             |         |
| 20               | Maximum Voltage   | 0.0057                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0066                             |         |

**Note:**

1. Normal Voltage = 3.8 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.2 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block.





## LTE Band 4

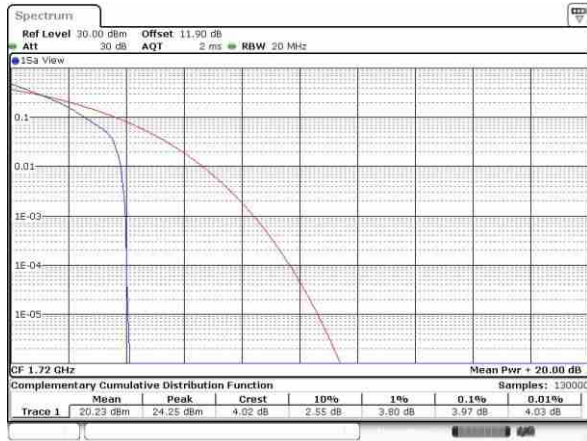
**Peak-to-Average Ratio**

| Mode       | LTE Band 4 / 20MHz |         |       |         |             |
|------------|--------------------|---------|-------|---------|-------------|
| Mod.       | QPSK               |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 3.97               | 4.41    | 4.81  | 5.51    | PASS        |
| Middle CH  | 3.83               | 4.55    | 4.84  | 5.57    |             |
| Highest CH | 3.94               | 4.64    | 4.96  | 5.48    |             |

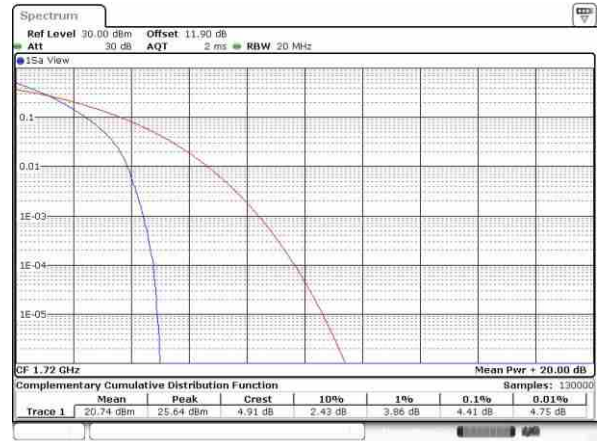


## LTE Band 4 / 20MHz / QPSK

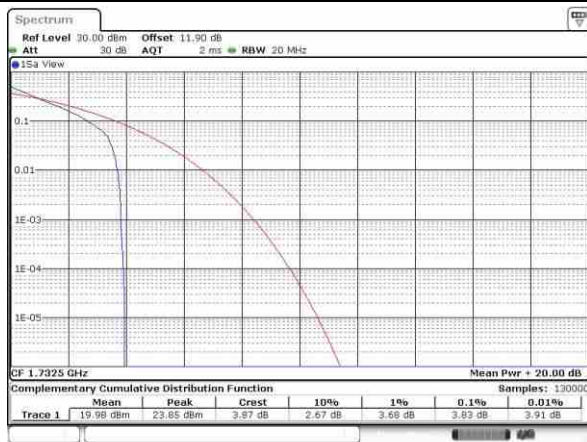
## Lowest Channel / 1RB



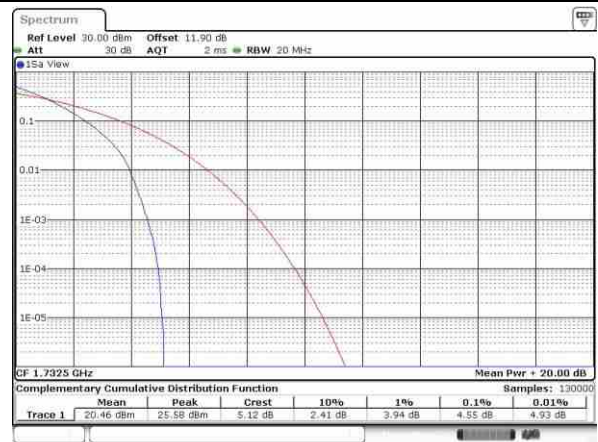
## Lowest Channel / Full RB



## Middle Channel / 1RB



## Middle Channel / Full RB

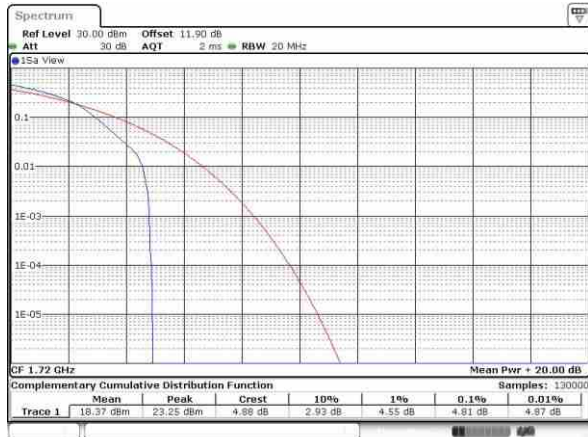


## Highest Channel / 1RB

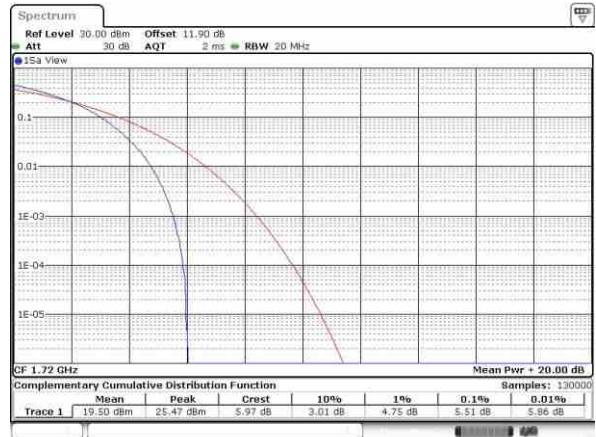


## Highest Channel / Full RB

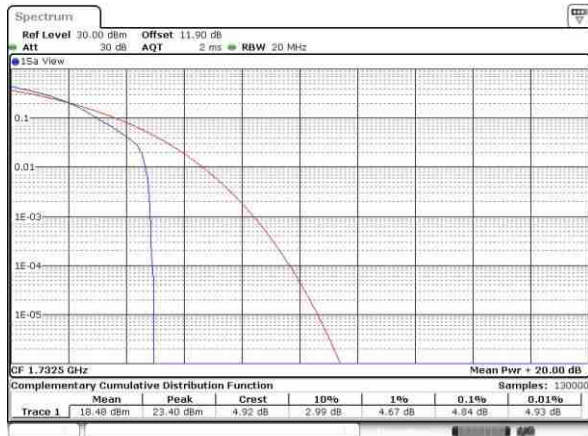


**LTE Band 4 / 20MHz / 16QAM**
**Lowest Channel / 1RB**


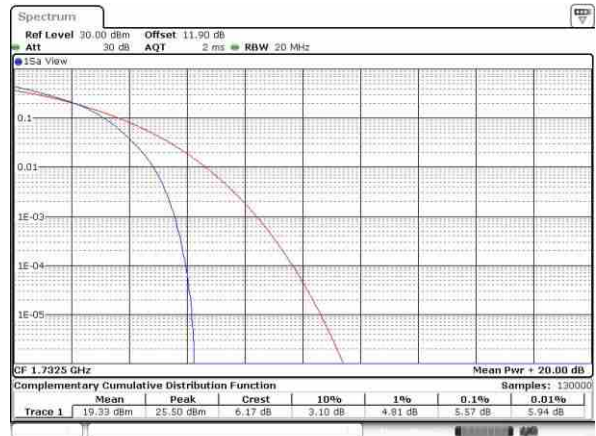
Date: 13.MAR.2016 10:41:08

**Lowest Channel / Full RB**


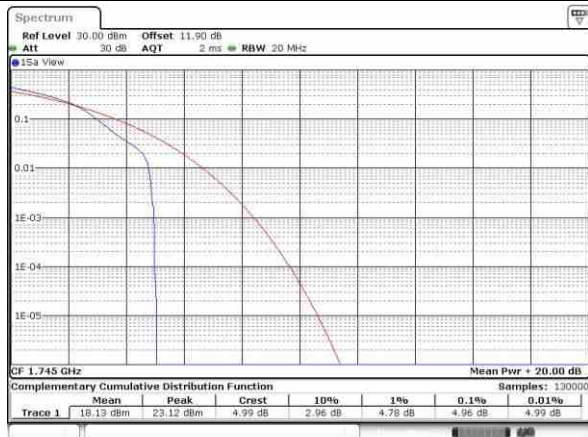
Date: 13.MAR.2016 10:41:25

**Middle Channel / 1RB**


Date: 13.MAR.2016 10:41:42

**Middle Channel / Full RB**


Date: 13.MAR.2016 10:41:59

**Highest Channel / 1RB**


Date: 13.MAR.2016 10:42:18

**Highest Channel / Full RB**


Date: 13.MAR.2016 10:43:19



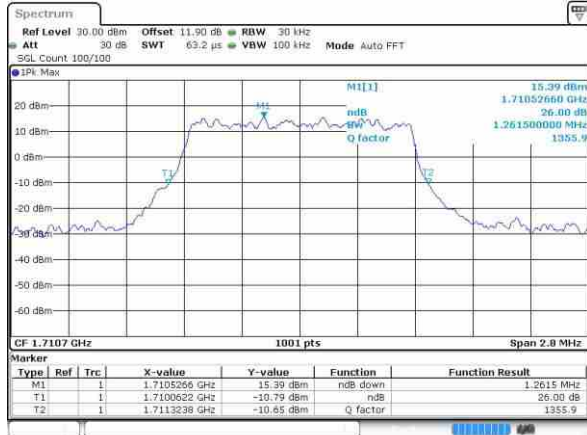
**26dB Bandwidth**

| Mode       | LTE Band 4 : 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  | 1.26                      | 1.31  | 3.02 | 3.03  | 4.89 | 4.98  | 9.75  | 9.97  | 14.33 | 14.42 | 20.42 | 20.1  |
| Middle CH  | 1.26                      | 1.28  | 3.01 | 3     | 4.96 | 4.91  | 9.73  | 9.95  | 14.39 | 14.51 | 20.1  | 20.14 |
| Highest CH | 1.25                      | 1.27  | 2.95 | 3     | 4.9  | 4.94  | 9.81  | 9.85  | 14.18 | 14.33 | 20.14 | 20.06 |

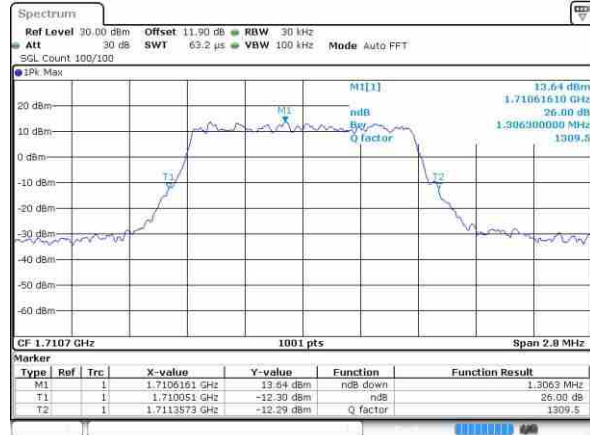


## LTE Band 4

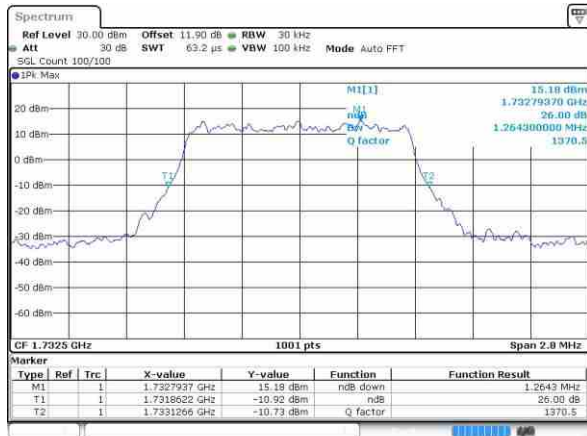
## Lowest Channel / 1.4MHz / QPSK



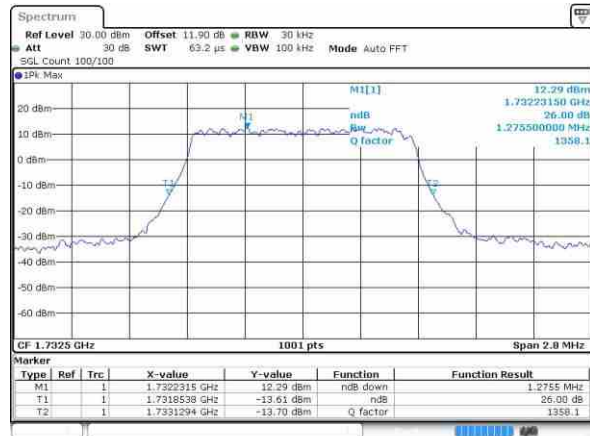
## Lowest Channel / 1.4MHz / 16QAM



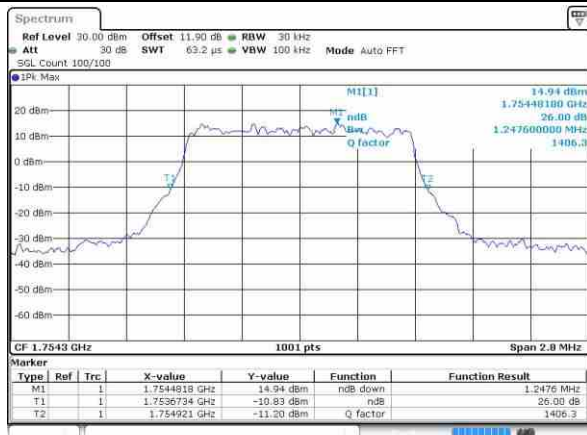
## Middle Channel / 1.4MHz / QPSK



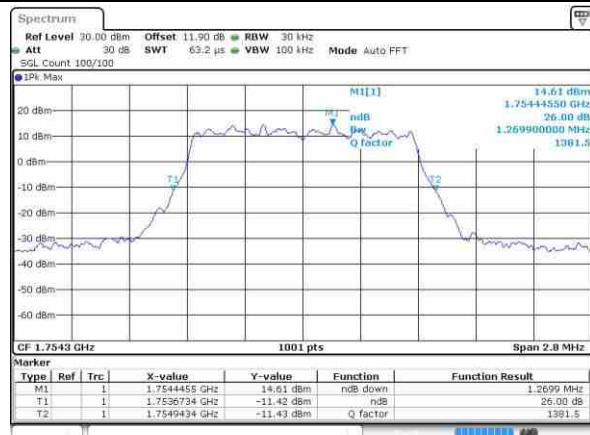
## Middle Channel / 1.4MHz / 16QAM



## Highest Channel / 1.4MHz / QPSK



## Highest Channel / 1.4MHz / 16QAM

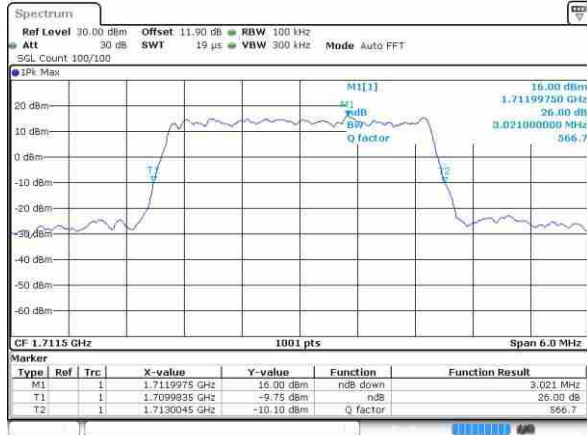




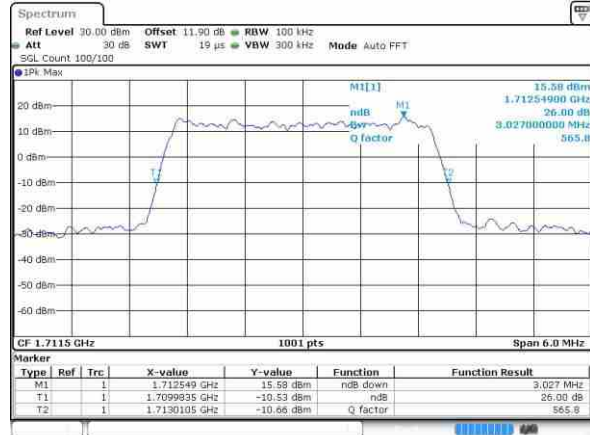


## LTE Band 4

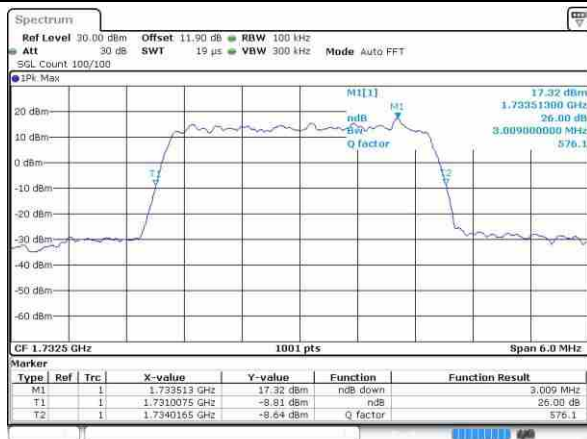
## Lowest Channel / 3MHz / QPSK



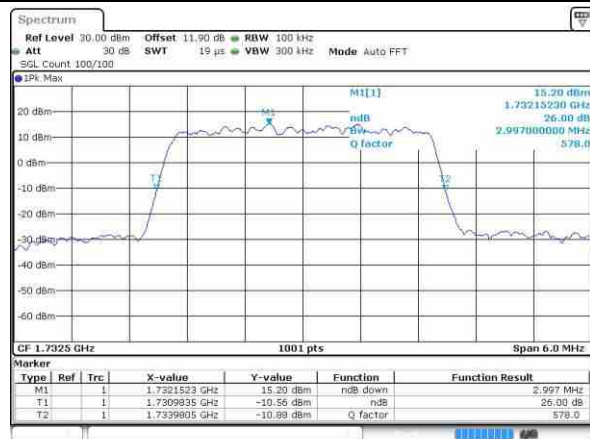
## Lowest Channel / 3MHz / 16QAM



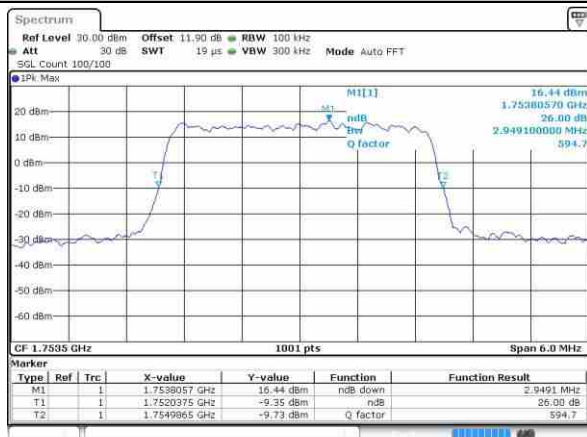
## Middle Channel / 3MHz / QPSK



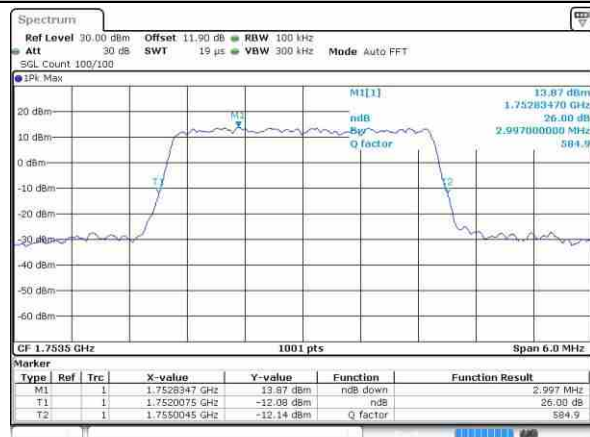
## Middle Channel / 3MHz / 16QAM



## Highest Channel / 3MHz / QPSK



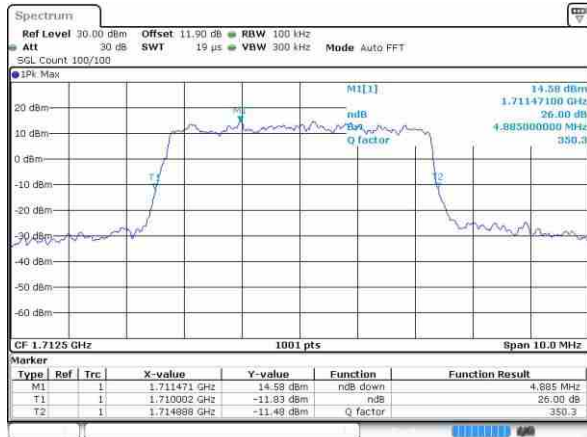
## Highest Channel / 3MHz / 16QAM



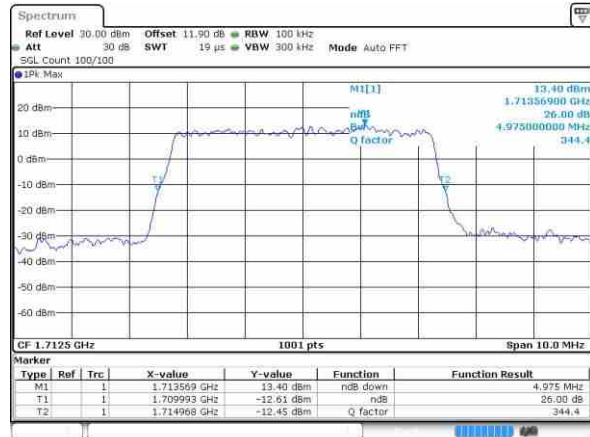


## LTE Band 4

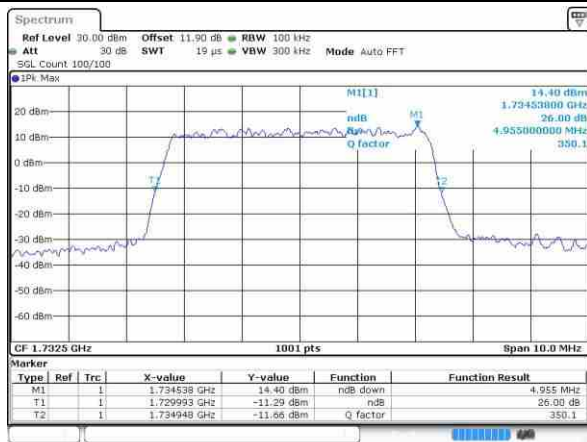
## Lowest Channel / 5MHz / QPSK



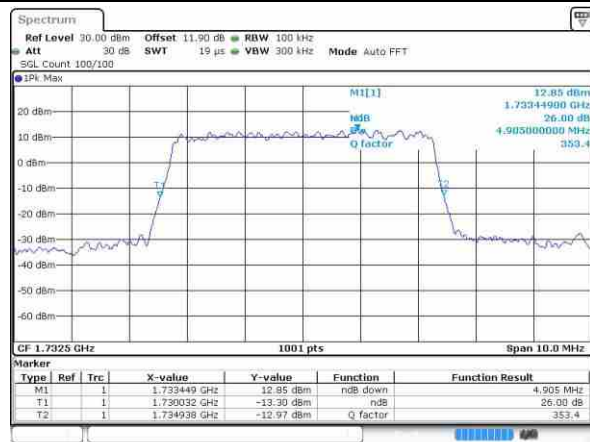
## Lowest Channel / 5MHz / 16QAM



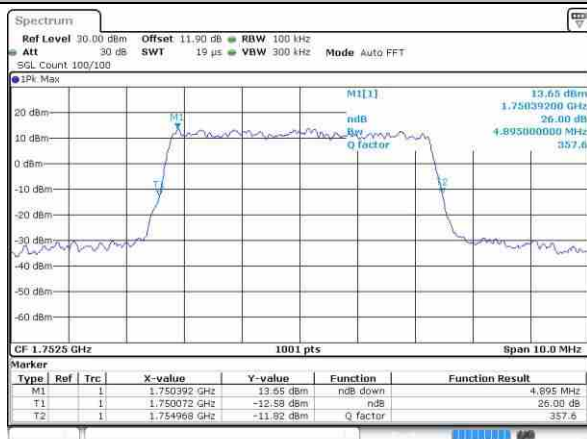
## Middle Channel / 5MHz / QPSK



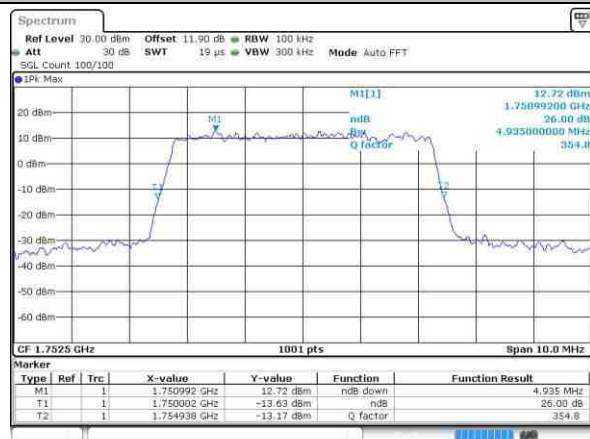
## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



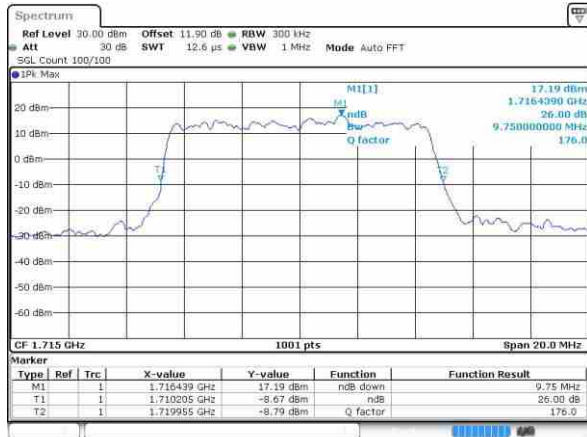
## Highest Channel / 5MHz / 16QAM





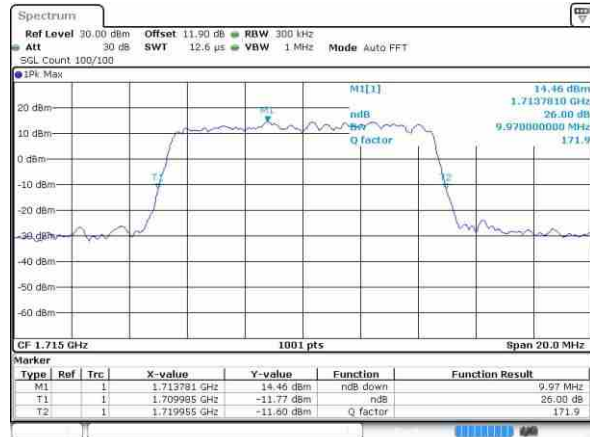
## LTE Band 4

## Lowest Channel / 10MHz / QPSK



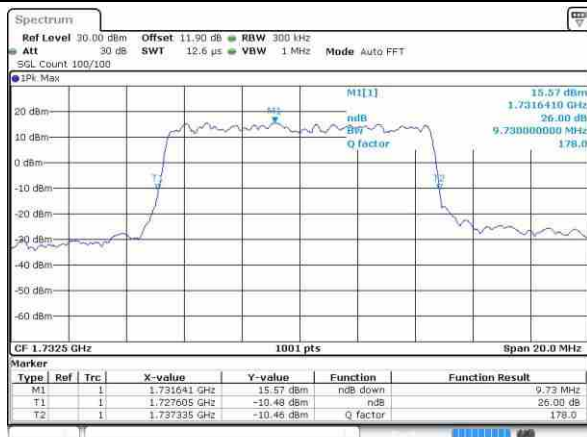
Date: 13 MAR 2016 09:28:20

## Lowest Channel / 10MHz / 16QAM



Date: 13 MAR 2016 09:28:30

## Middle Channel / 10MHz / QPSK



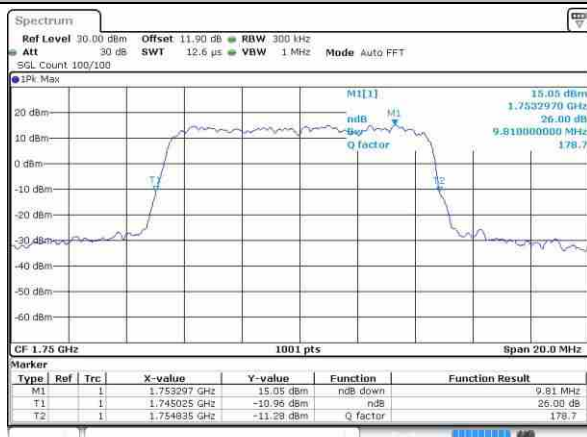
Date: 13 MAR 2016 09:35:28

## Middle Channel / 10MHz / 16QAM



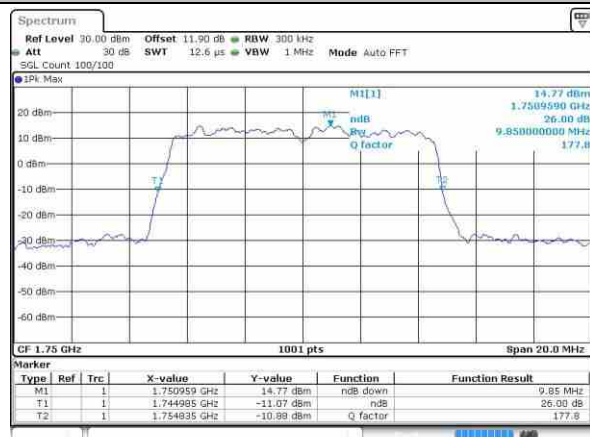
Date: 13 MAR 2016 09:35:39

## Highest Channel / 10MHz / QPSK



Date: 13 MAR 2016 09:38:00

## Highest Channel / 10MHz / 16QAM

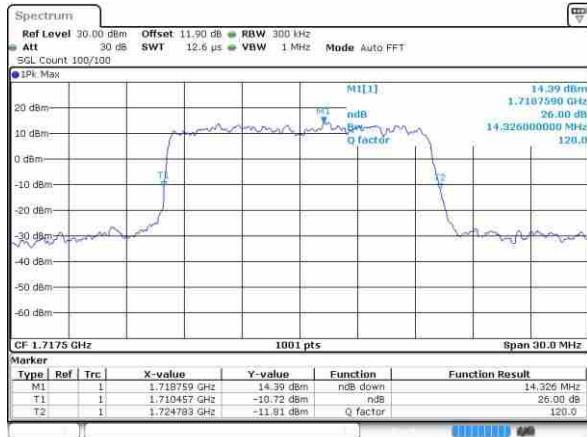


Date: 13 MAR 2016 09:38:11

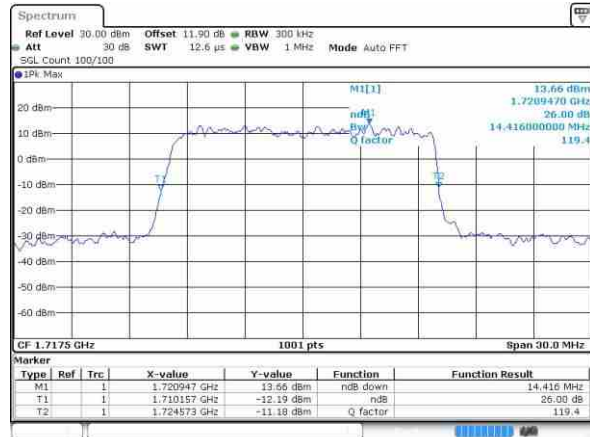


## LTE Band 4

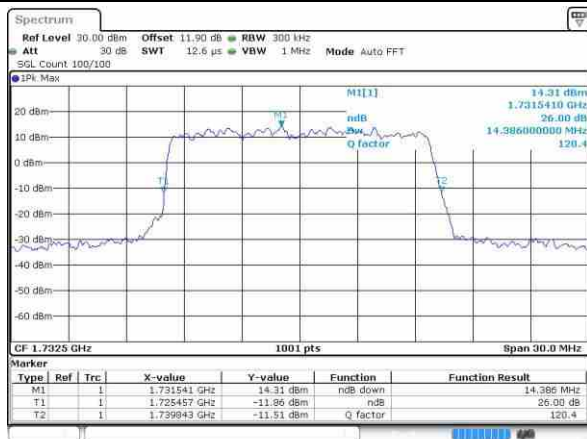
## Lowest Channel / 15MHz / QPSK



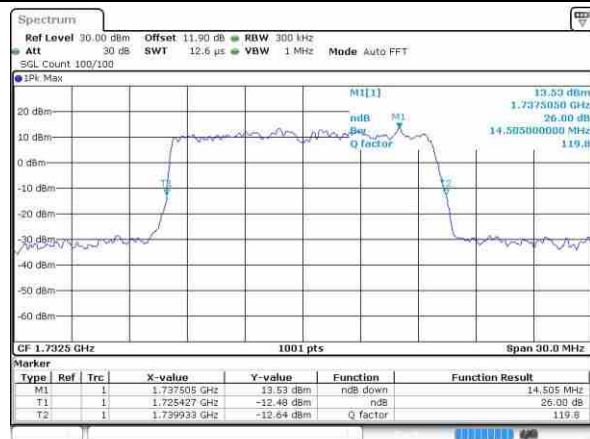
## Lowest Channel / 15MHz / 16QAM



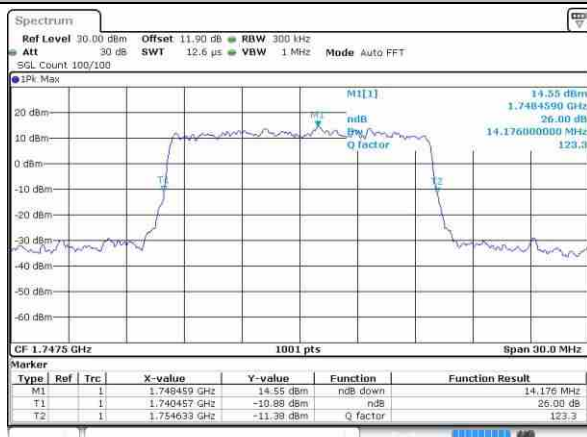
## Middle Channel / 15MHz / QPSK



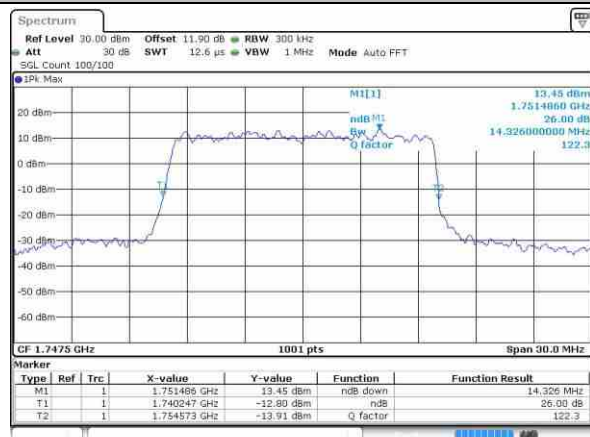
## Middle Channel / 15MHz / 16QAM



## Highest Channel / 15MHz / QPSK



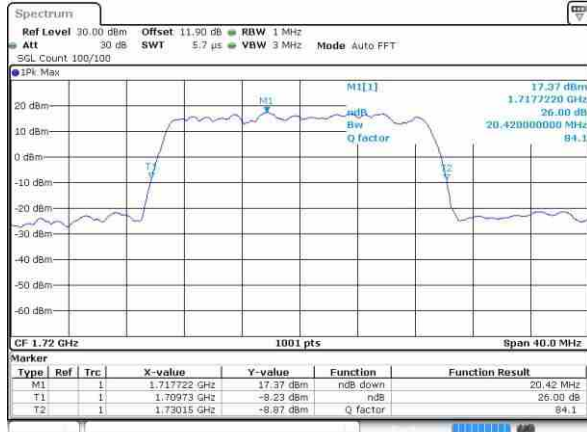
## Highest Channel / 15MHz / 16QAM





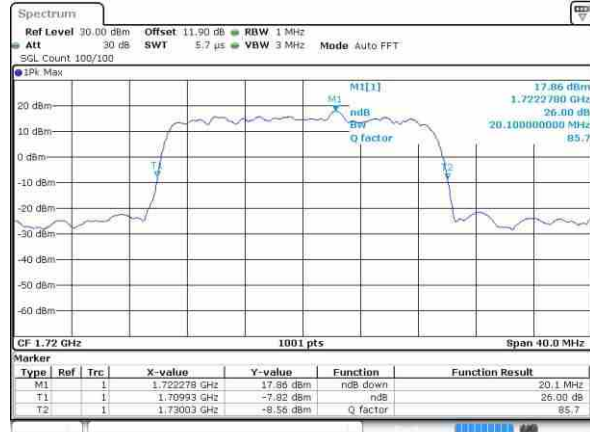
## LTE Band 4

## Lowest Channel / 20MHz / QPSK



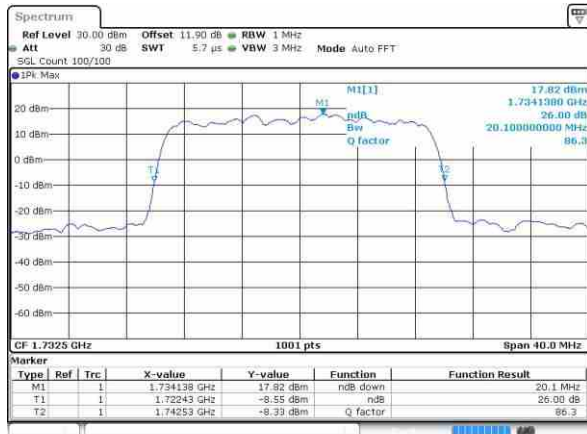
Date: 13 MAR 2016 10:01:58

## Lowest Channel / 20MHz / 16QAM



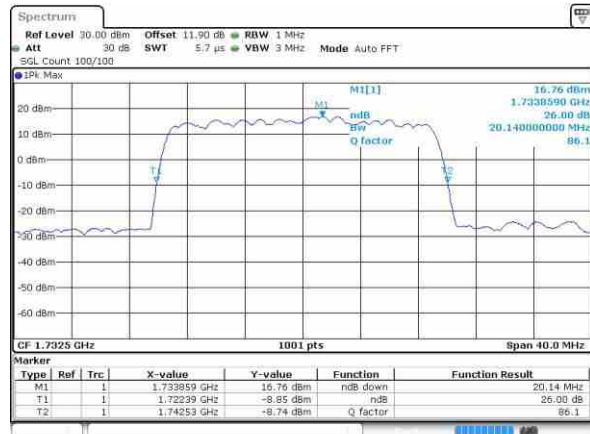
Date: 13 MAR 2016 10:02:09

## Middle Channel / 20MHz / QPSK



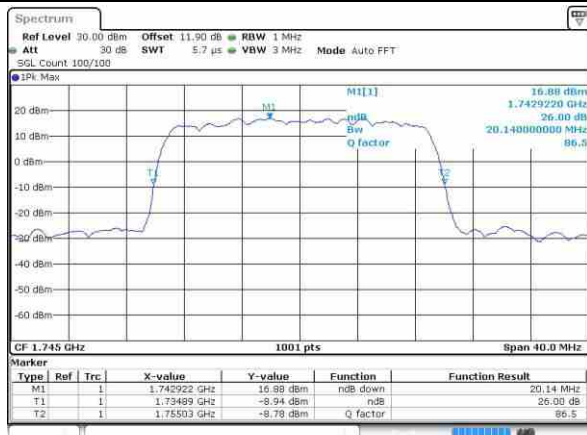
Date: 13 MAR 2016 10:08:07

## Middle Channel / 20MHz / 16QAM



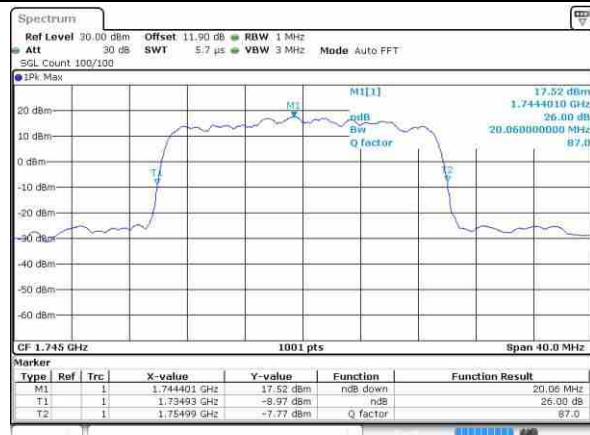
Date: 13 MAR 2016 10:08:17

## Highest Channel / 20MHz / QPSK



Date: 13 MAR 2016 10:11:38

## Highest Channel / 20MHz / 16QAM



Date: 13 MAR 2016 10:11:48



## Occupied Bandwidth

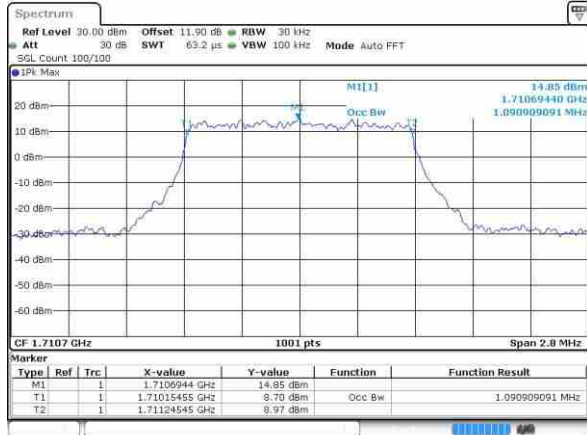
| Mode       | LTE Band 4 : 99%OBW(MHz) |       |      |       |      |       |       |       |       |       |       |       |
|------------|--------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| BW         | 1.4MHz                   |       | 3MHz |       | 5MHz |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | QPSK                     | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM | QPSK  | 16QAM |
| Lowest CH  | 1.09                     | 1.09  | 2.75 | 2.71  | 4.49 | 4.48  | 8.99  | 9.01  | 13.46 | 13.46 | 18.34 | 18.26 |
| Middle CH  | 1.1                      | 1.1   | 2.72 | 2.7   | 4.48 | 4.49  | 8.99  | 8.97  | 13.31 | 13.43 | 18.18 | 18.26 |
| Highest CH | 1.09                     | 1.09  | 2.71 | 2.7   | 4.49 | 4.49  | 8.99  | 9.03  | 13.43 | 13.37 | 18.14 | 18.3  |



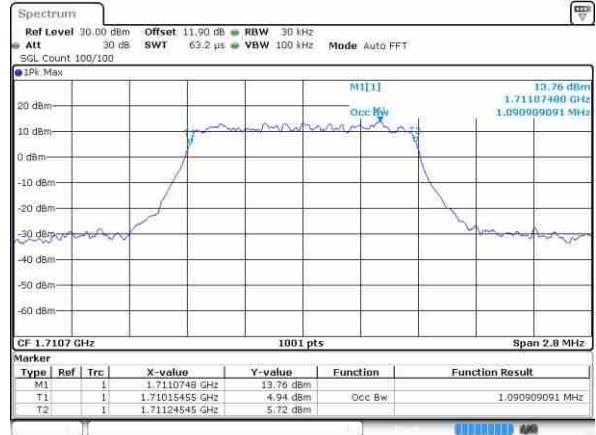


## LTE Band 4

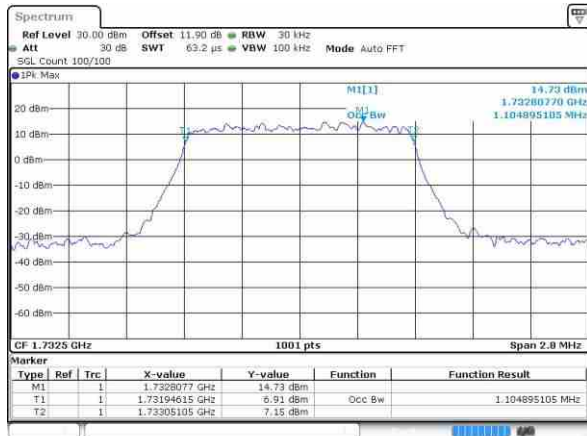
## Lowest Channel / 1.4MHz / QPSK



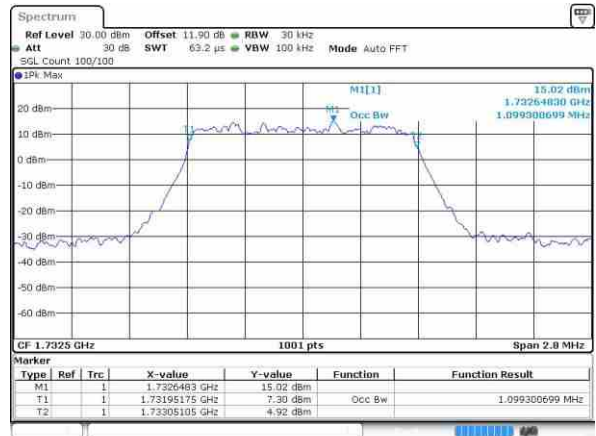
## Lowest Channel / 1.4MHz / 16QAM



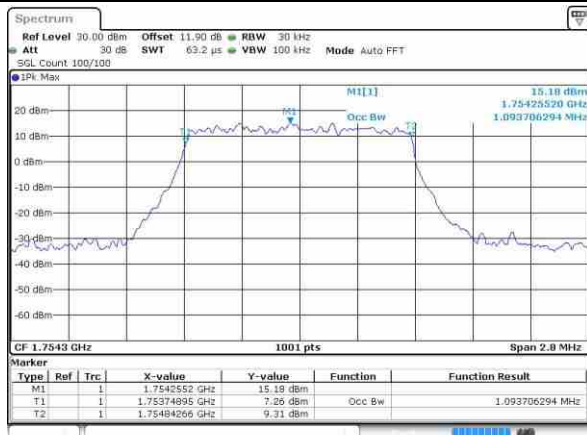
## Middle Channel / 1.4MHz / QPSK



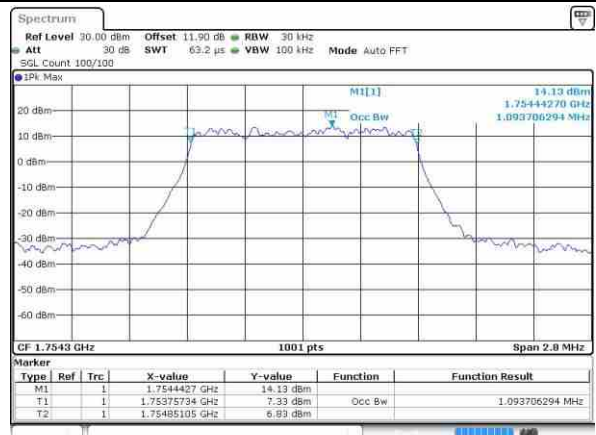
## Middle Channel / 1.4MHz / 16QAM



## Highest Channel / 1.4MHz / QPSK



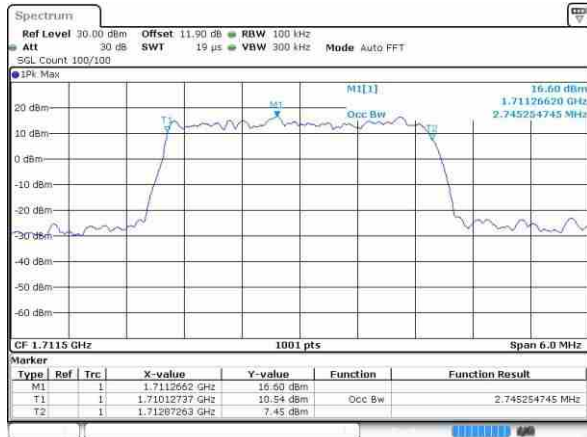
## Highest Channel / 1.4MHz / 16QAM



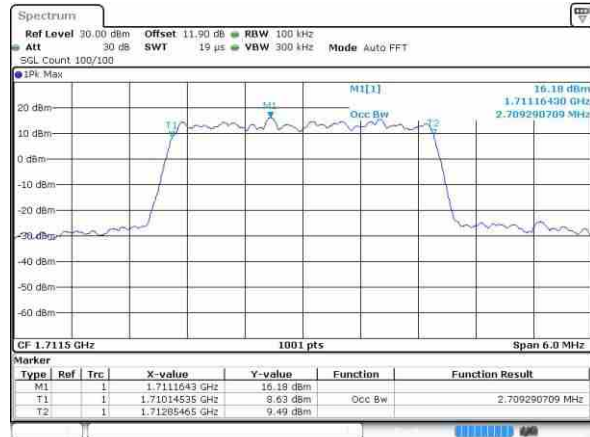


## LTE Band 4

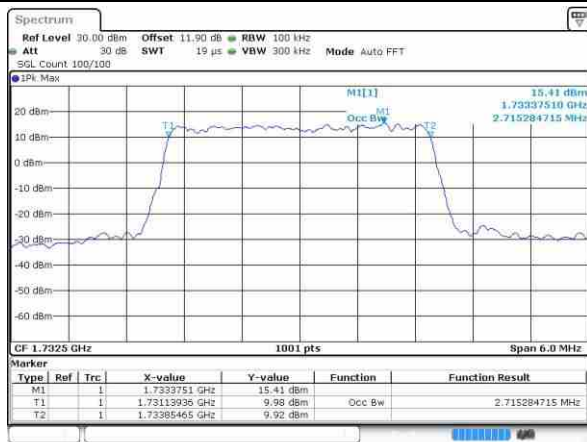
## Lowest Channel / 3MHz / QPSK



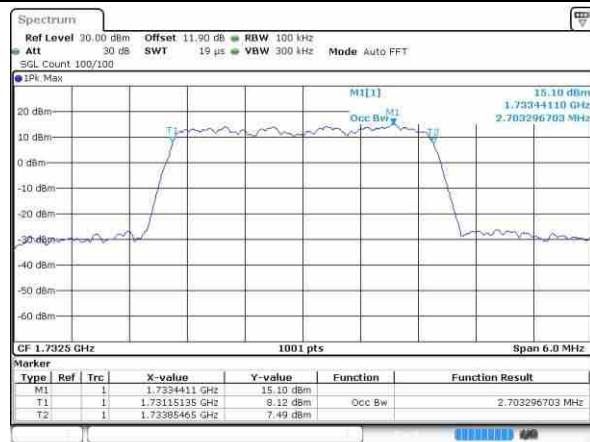
## Lowest Channel / 3MHz / 16QAM



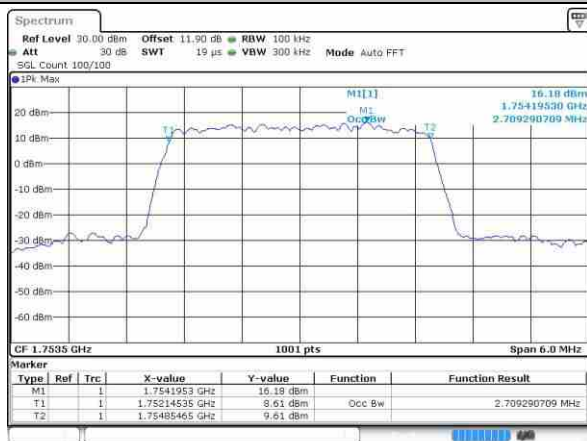
## Middle Channel / 3MHz / QPSK



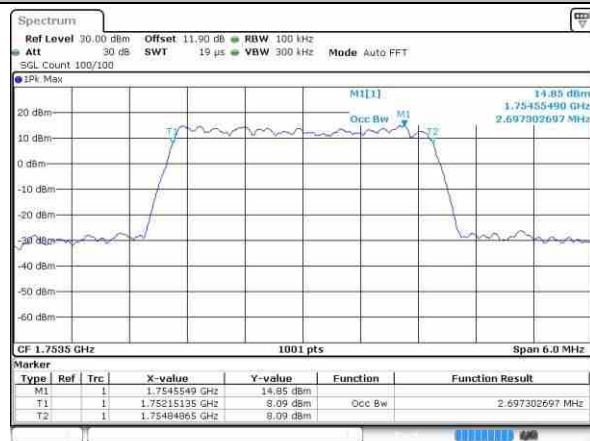
## Middle Channel / 3MHz / 16QAM



## Highest Channel / 3MHz / QPSK



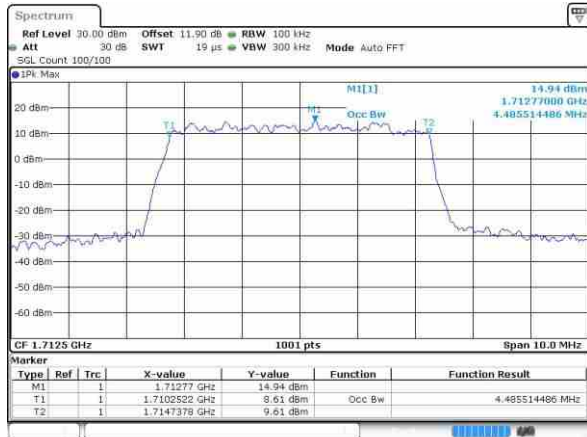
## Highest Channel / 3MHz / 16QAM



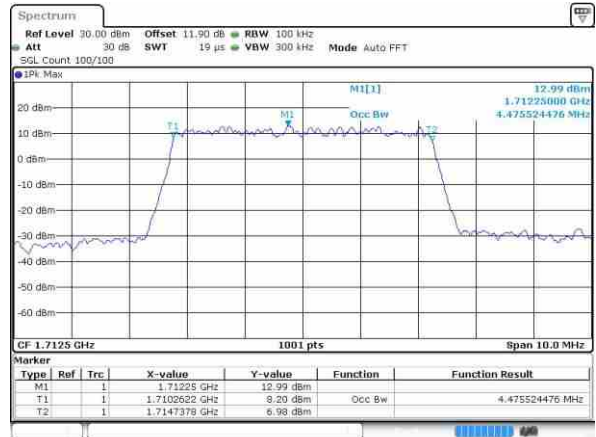


## LTE Band 4

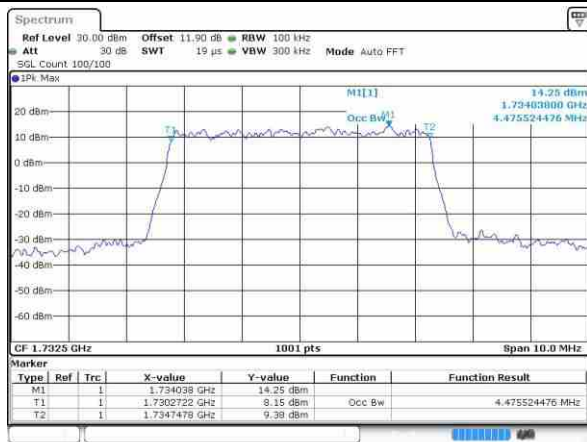
## Lowest Channel / 5MHz / QPSK



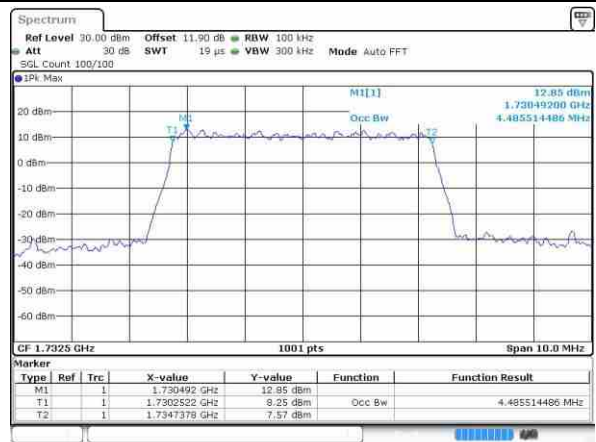
## Lowest Channel / 5MHz / 16QAM



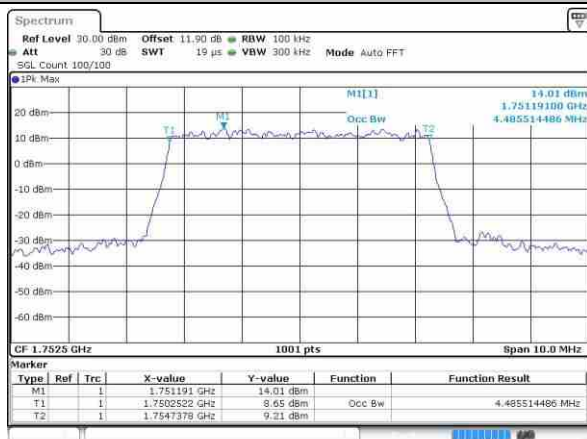
## Middle Channel / 5MHz / QPSK



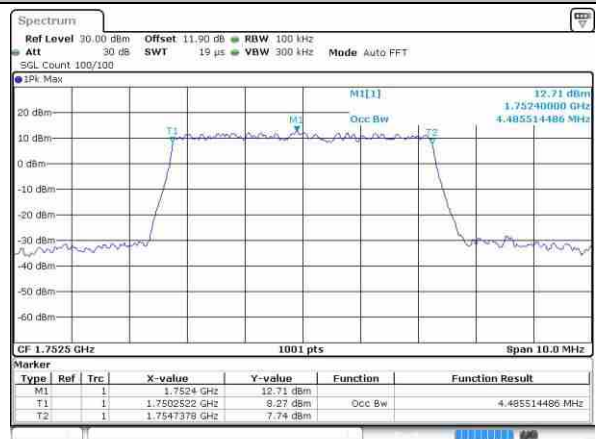
## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



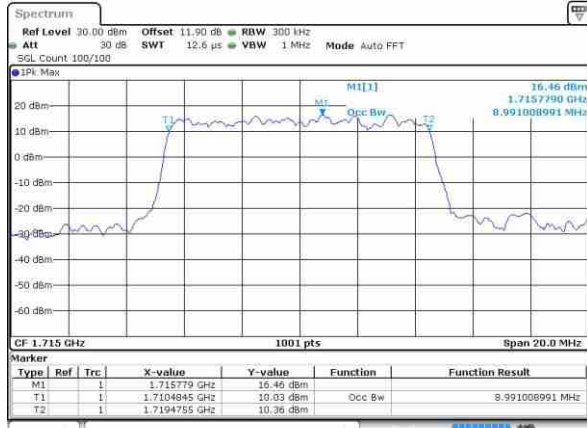
## Highest Channel / 5MHz / 16QAM



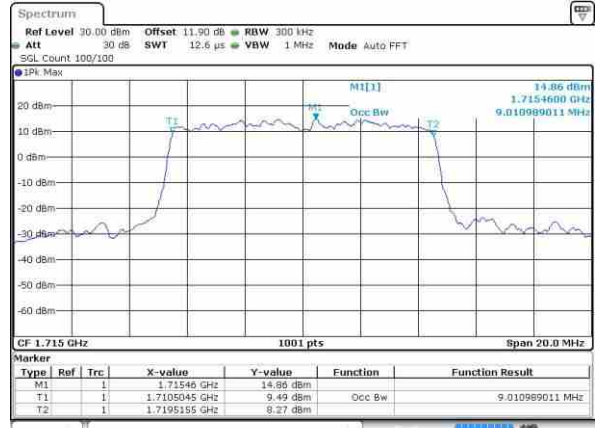


## LTE Band 4

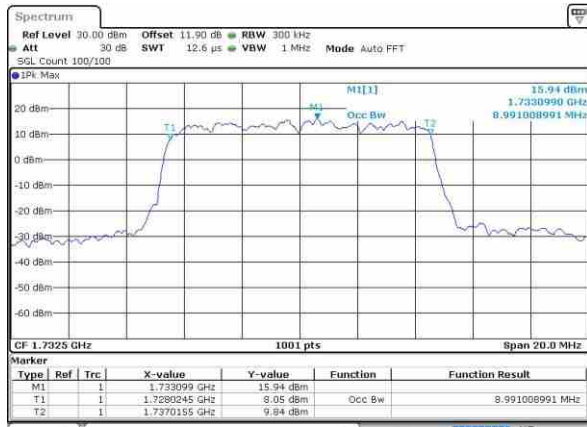
## Lowest Channel / 10MHz / QPSK



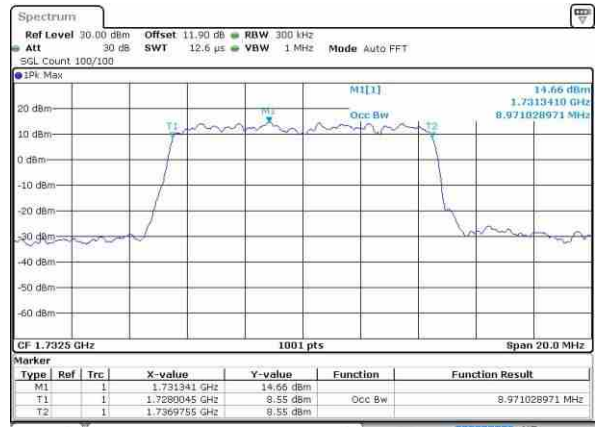
## Lowest Channel / 10MHz / 16QAM



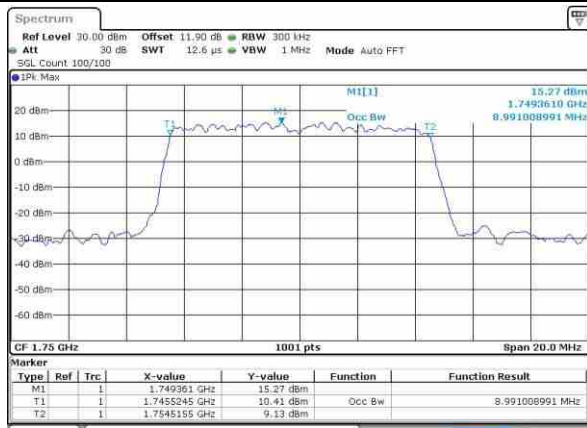
## Middle Channel / 10MHz / QPSK



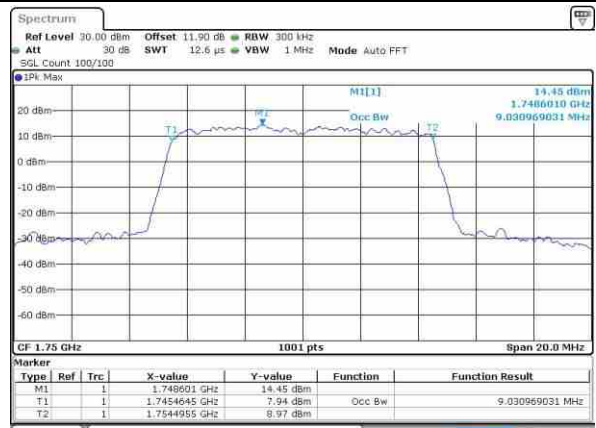
## Middle Channel / 10MHz / 16QAM



## Highest Channel / 10MHz / QPSK



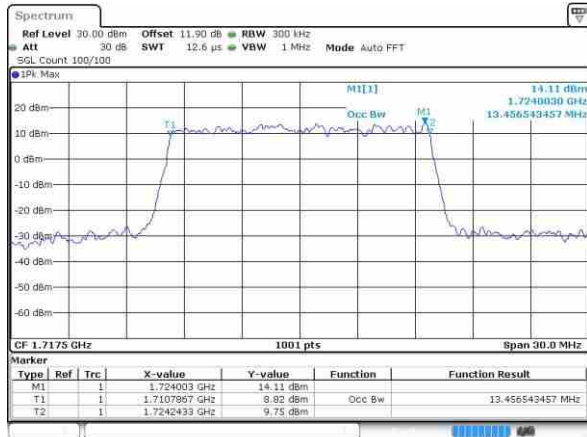
## Highest Channel / 10MHz / 16QAM



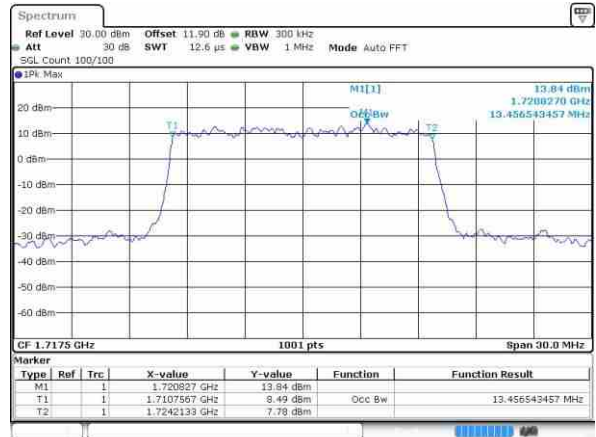


## LTE Band 4

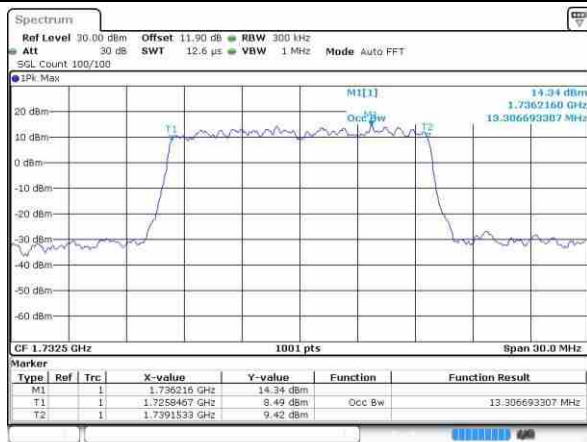
## Lowest Channel / 15MHz / QPSK



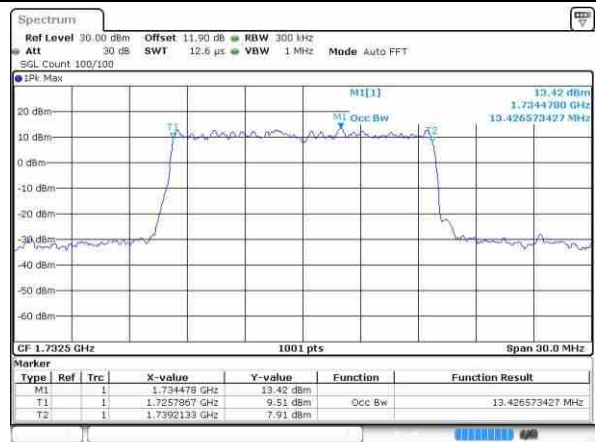
## Lowest Channel / 15MHz / 16QAM



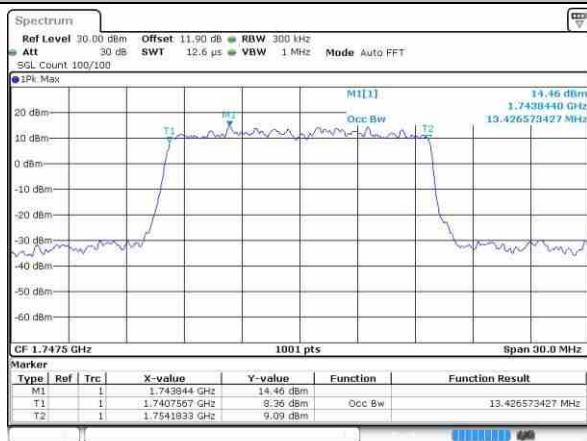
## Middle Channel / 15MHz / QPSK



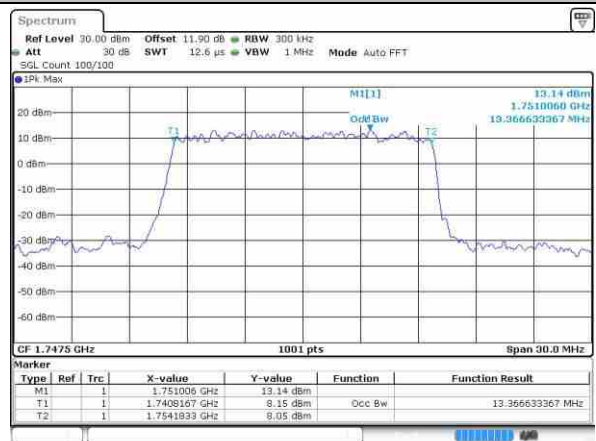
## Middle Channel / 15MHz / 16QAM



## Highest Channel / 15MHz / QPSK



## Highest Channel / 15MHz / 16QAM





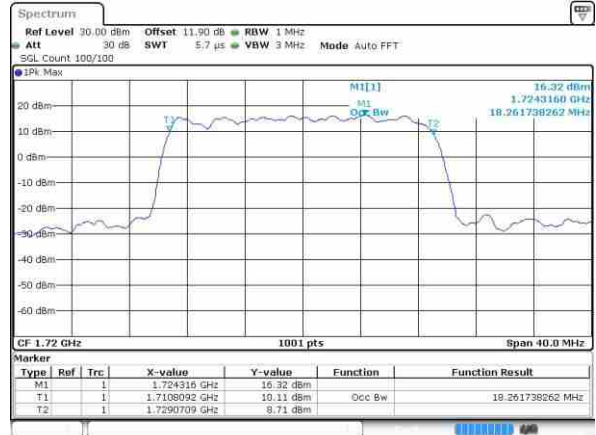
## LTE Band 4

## Lowest Channel / 20MHz / QPSK



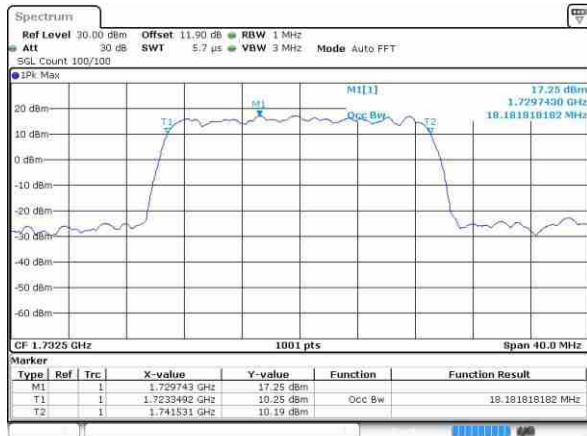
Date: 13 MAR 2016 10:01:37

## Lowest Channel / 20MHz / 16QAM



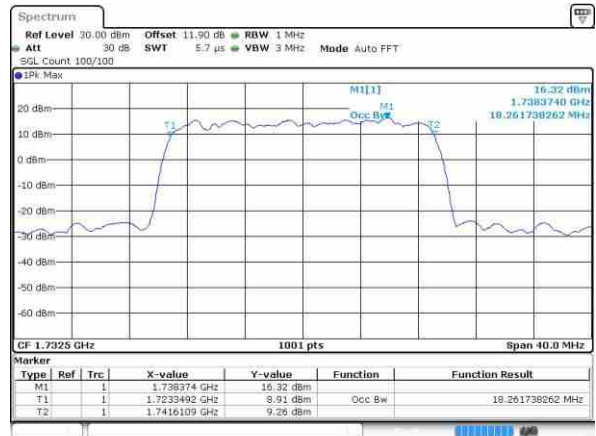
Date: 13 MAR 2016 10:01:48

## Middle Channel / 20MHz / QPSK



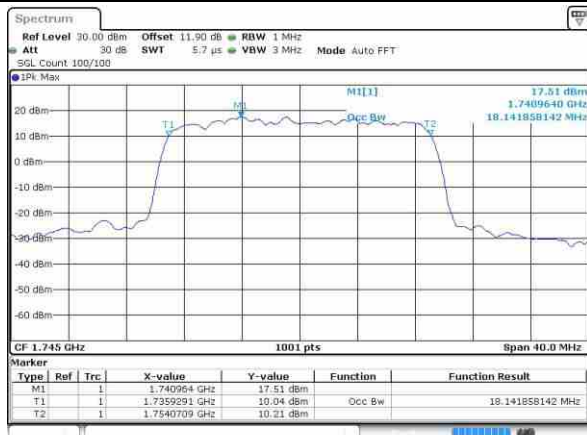
Date: 13 MAR 2016 10:08:46

## Middle Channel / 20MHz / 16QAM



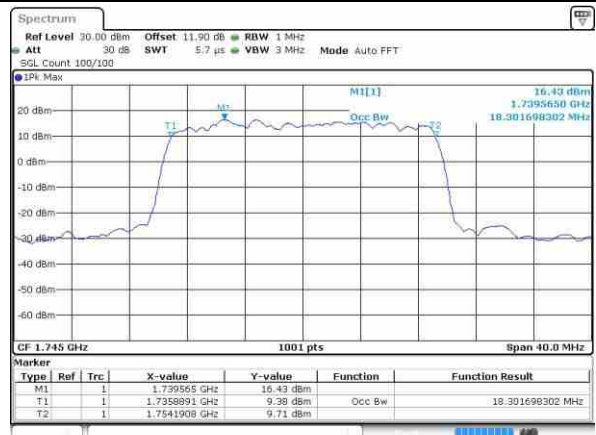
Date: 13 MAR 2016 10:08:56

## Highest Channel / 20MHz / QPSK



Date: 13 MAR 2016 10:11:17

## Highest Channel / 20MHz / 16QAM



Date: 13 MAR 2016 10:11:27





## Conducted Band Edge

### LTE Band 4 / 1.4MHz / QPSK

#### Lowest Band Edge / 1RB



#### Highest Band Edge / 1RB



#### Lowest Band Edge / Full RB



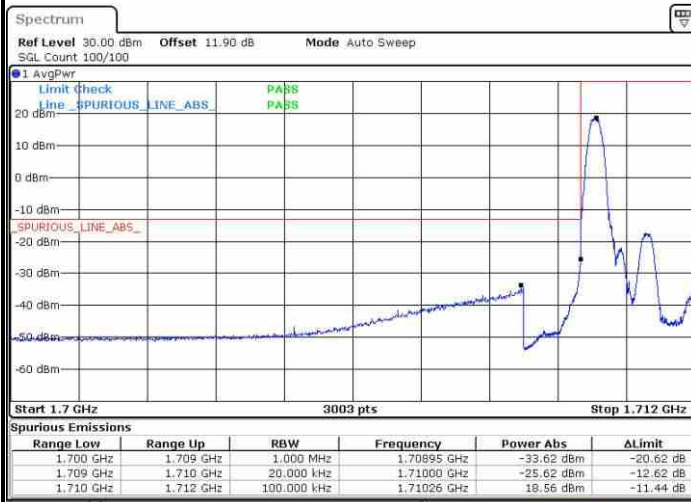
#### Highest Band Edge / Full RB





## LTE Band 4 / 1.4MHz / 16QAM

## Lowest Band Edge / 1 RB



## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

