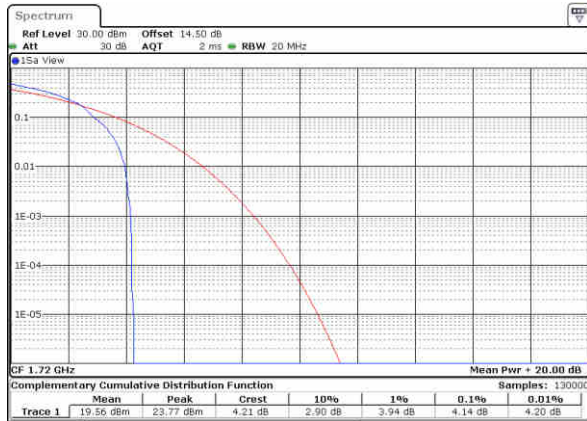


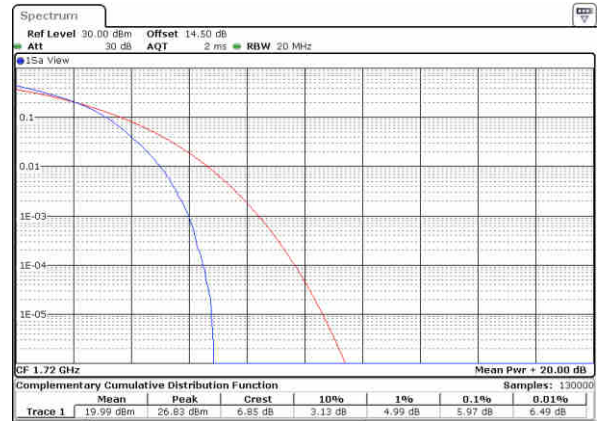


## LTE Band 4 / 20MHz / 16QAM

## Lowest Channel / 1RB



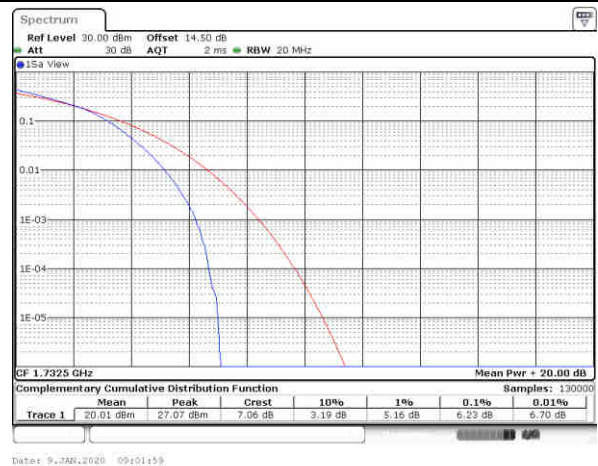
## Lowest Channel / Full RB



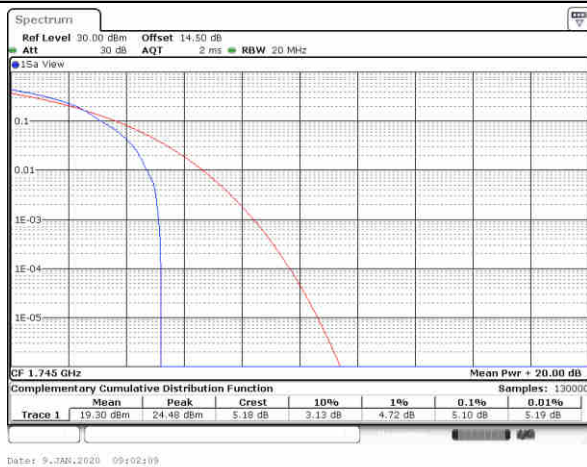
## Middle Channel / 1RB



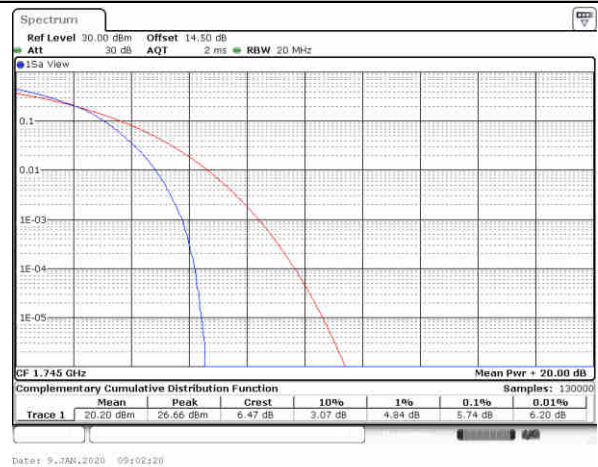
## Middle Channel / Full RB



## Highest Channel / 1RB



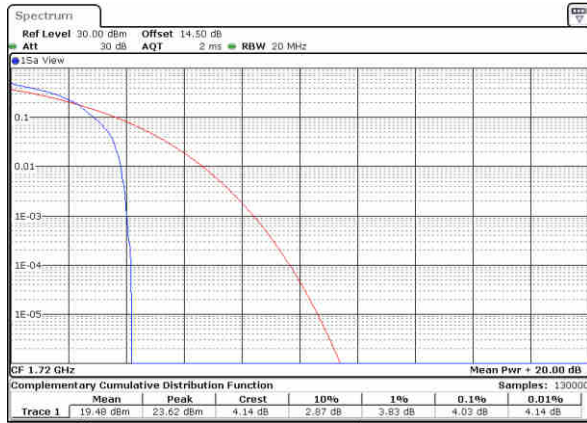
## Highest Channel / Full RB





## LTE Band 4 / 20MHz / 64QAM

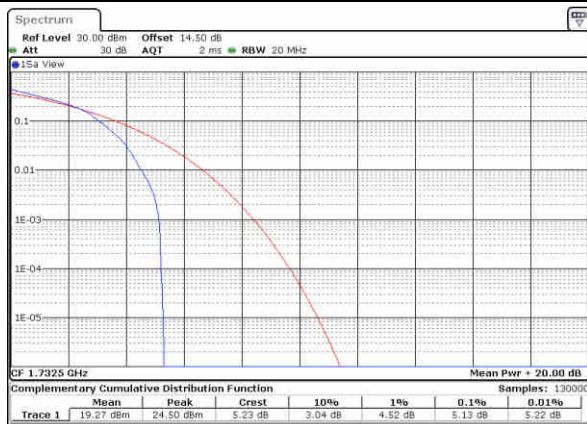
## Lowest Channel / 1RB



## Lowest Channel / Full RB



## Middle Channel / 1RB



## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB



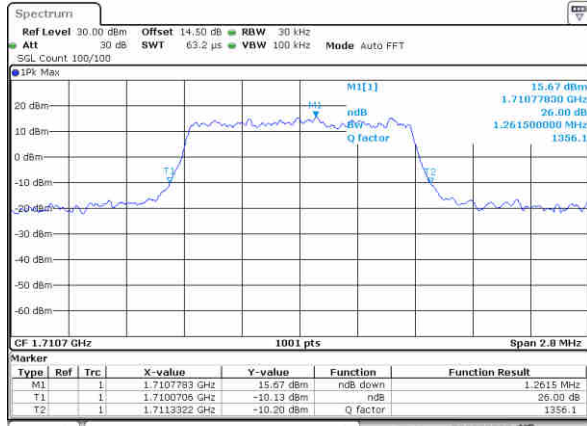
**26dB Bandwidth**

| 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                      | 1.30  | 2.93  | 2.96  | 4.84  | 4.87  | 9.79  | 9.67  | 14.18 | 14.15 | 18.94 | 19.02 |
| Middle CH  | 1.27                      | 1.28  | 2.94  | 2.95  | 4.81  | 4.87  | 9.77  | 9.73  | 14.27 | 14.18 | 18.86 | 18.86 |
| Highest CH | 1.27                      | 1.29  | 2.96  | 2.96  | 4.89  | 4.89  | 9.85  | 9.83  | 14.21 | 14.33 | 18.74 | 18.94 |
| Mode       | LTE Band 4 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                     |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.26                      | -     | 2.96  | -     | 4.82  | -     | 9.67  | -     | 14.57 | -     | 19.22 | -     |
| Middle CH  | 1.27                      | -     | 2.95  | -     | 4.86  | -     | 9.81  | -     | 14.30 | -     | 18.82 | -     |
| Highest CH | 1.28                      | -     | 2.94  | -     | 4.84  | -     | 9.75  | -     | 14.27 | -     | 18.90 | -     |

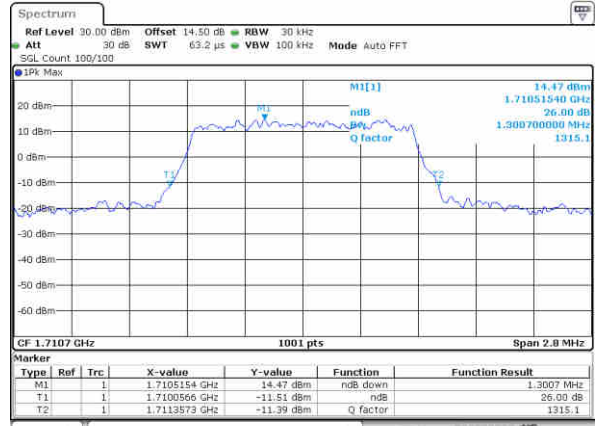


## LTE Band 4

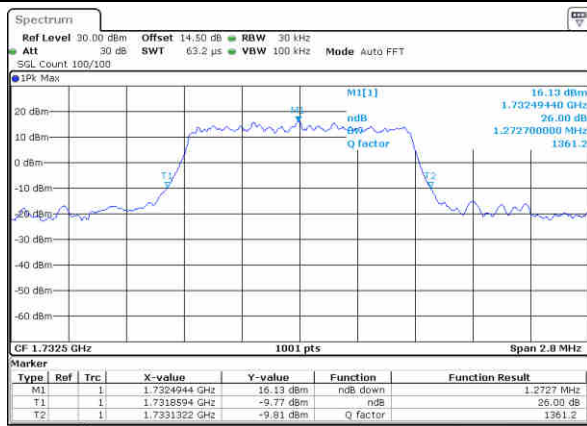
## Lowest Channel / 1.4MHz / QPSK



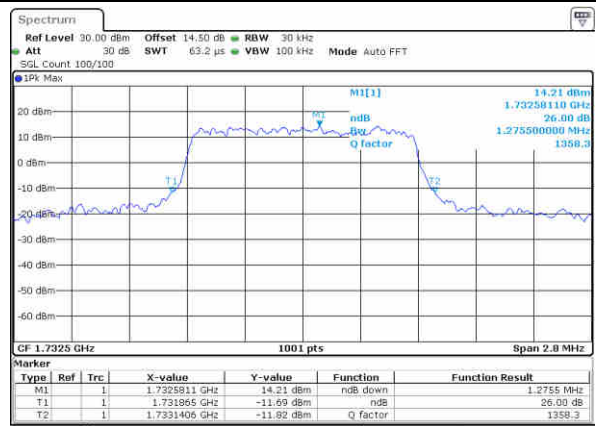
## Lowest Channel / 1.4MHz / 16QAM



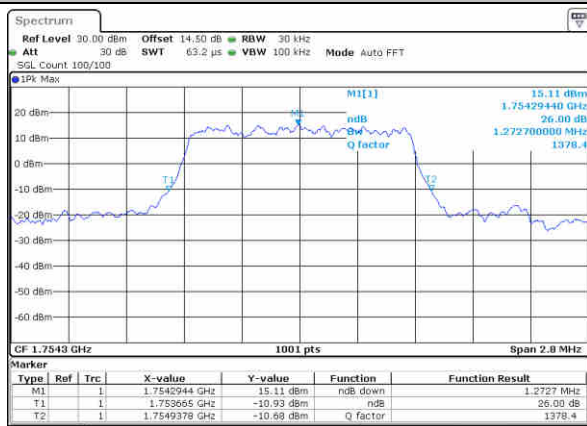
## Middle Channel / 1.4MHz / QPSK



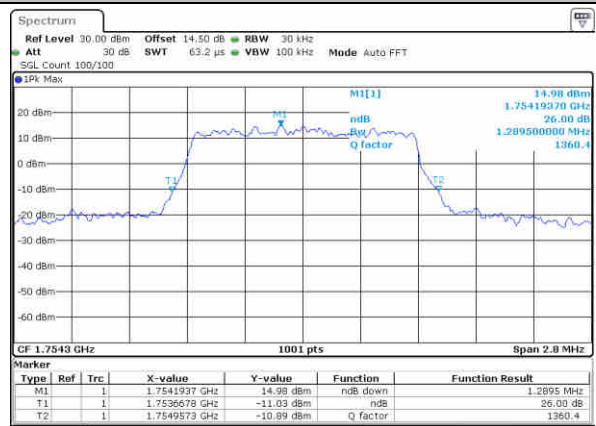
## Middle Channel / 1.4MHz / 16QAM



## Highest Channel / 1.4MHz / QPSK



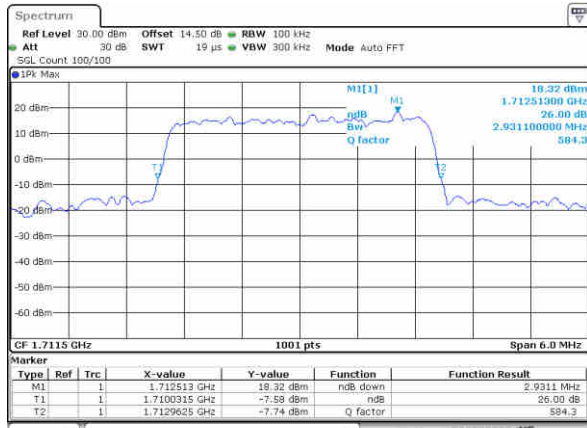
## Highest Channel / 1.4MHz / 16QAM



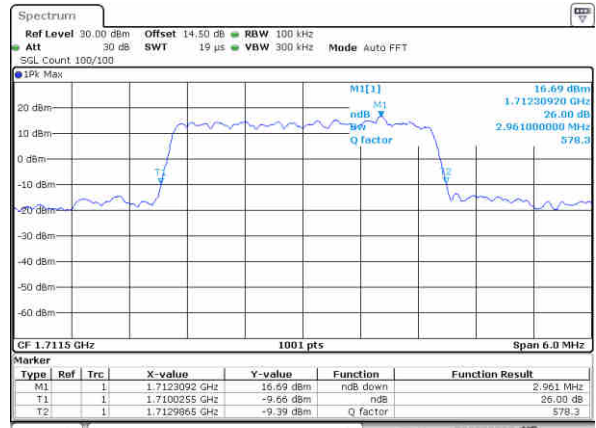


## LTE Band 4

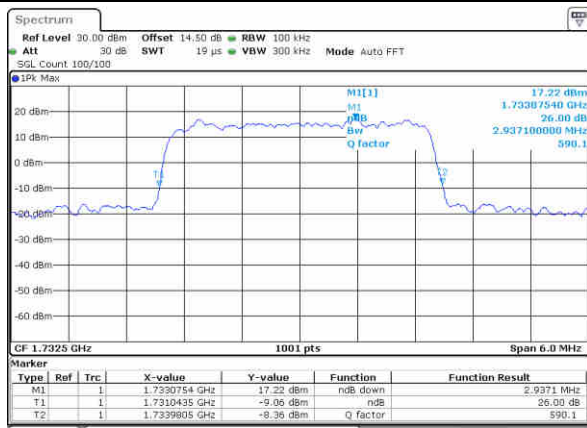
## Lowest Channel / 3MHz / QPSK



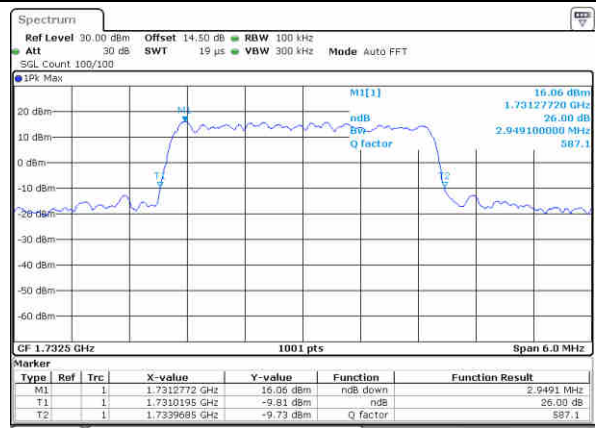
## Lowest Channel / 3MHz / 16QAM



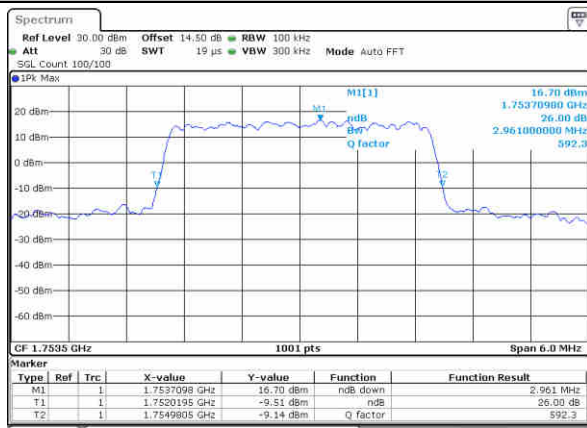
## Middle Channel / 3MHz / QPSK



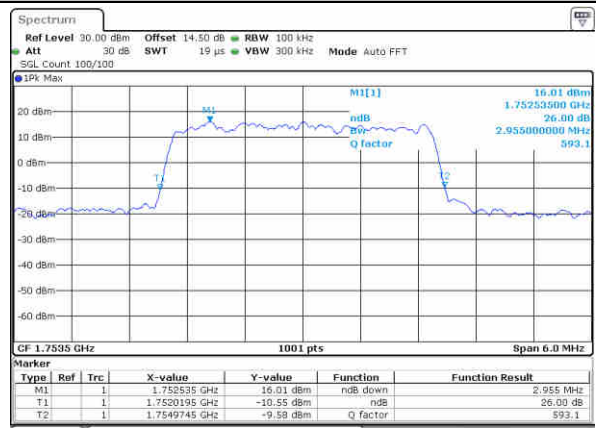
## Middle Channel / 3MHz / 16QAM



## Highest Channel / 3MHz / QPSK



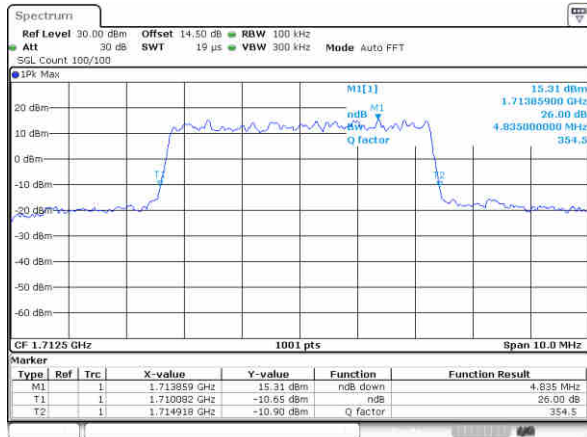
## Highest Channel / 3MHz / 16QAM



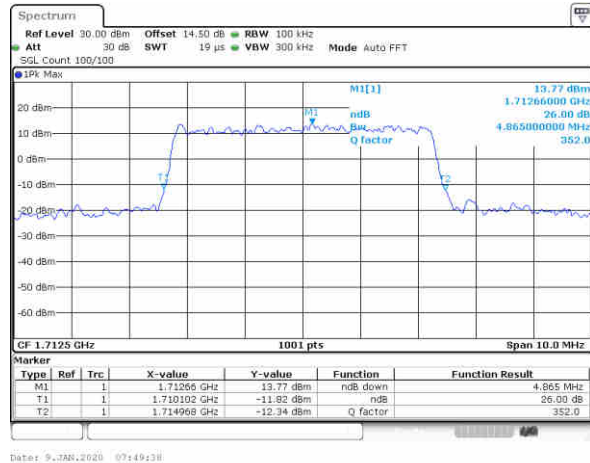


## LTE Band 4

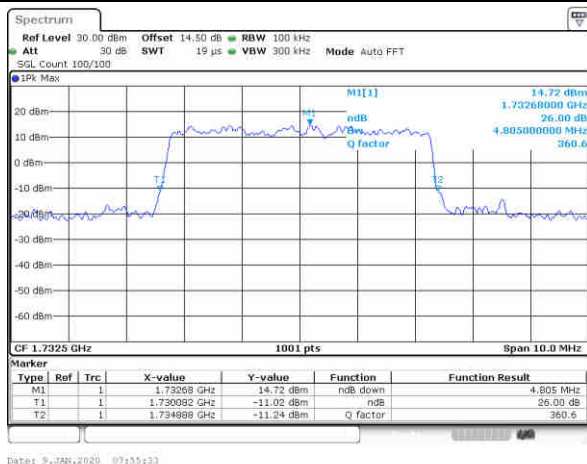
## Lowest Channel / 5MHz / QPSK



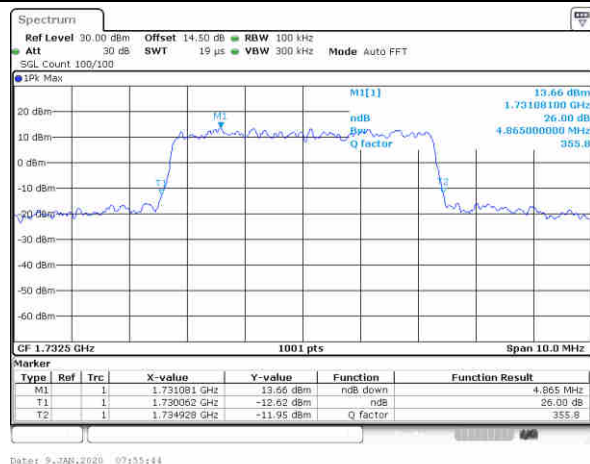
## Lowest Channel / 5MHz / 16QAM



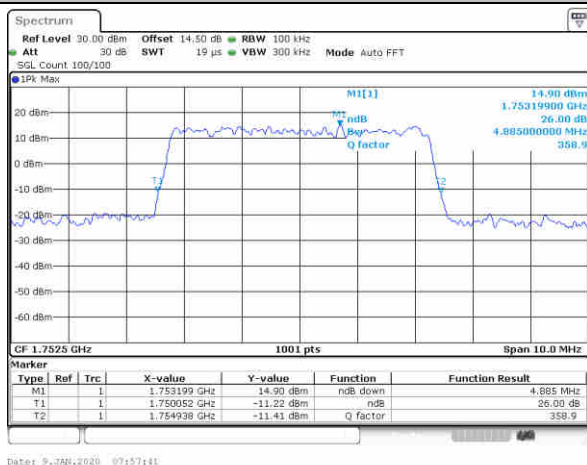
## Middle Channel / 5MHz / QPSK



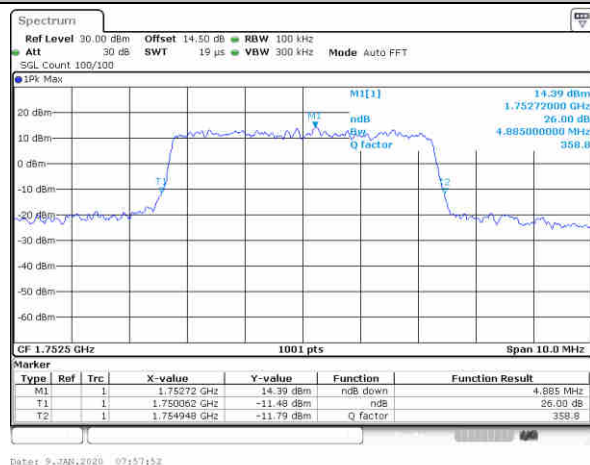
## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



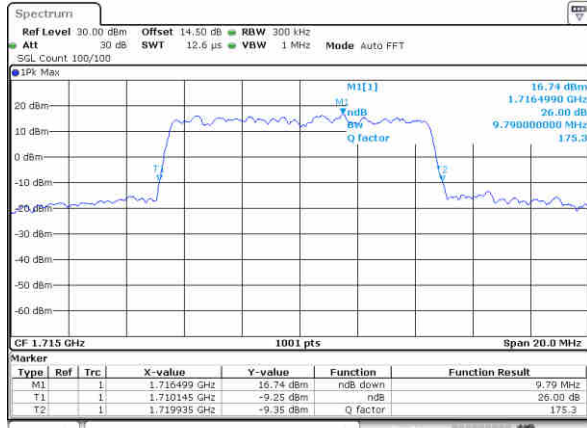
## Highest Channel / 5MHz / 16QAM





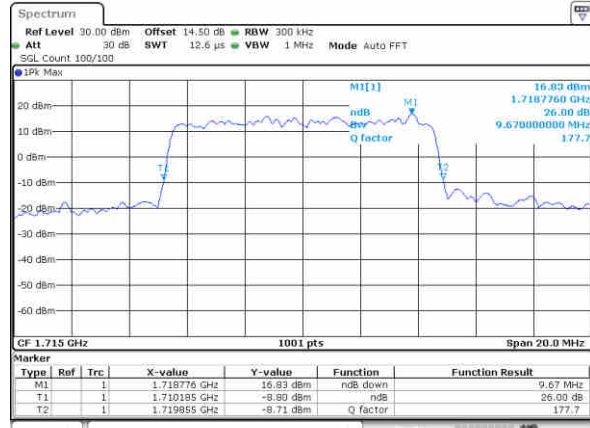
## LTE Band 4

## Lowest Channel / 10MHz / QPSK



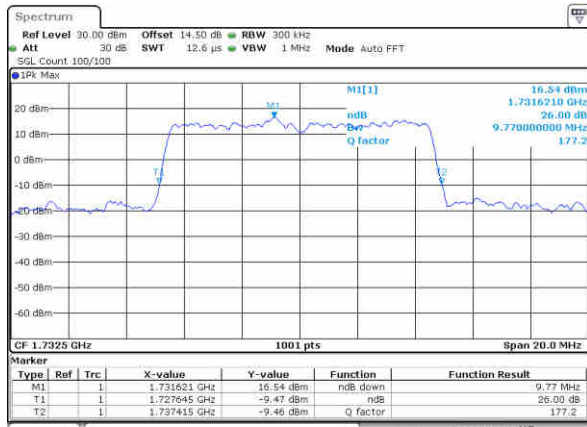
Date: 9-JAN-2020 08:10:47

## Lowest Channel / 10MHz / 16QAM



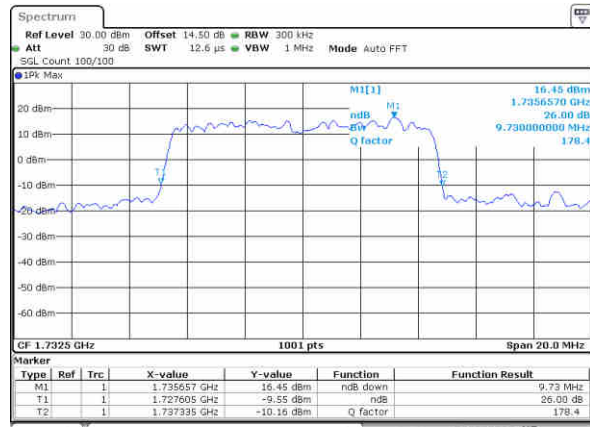
Date: 9-JAN-2020 08:10:58

## Middle Channel / 10MHz / QPSK



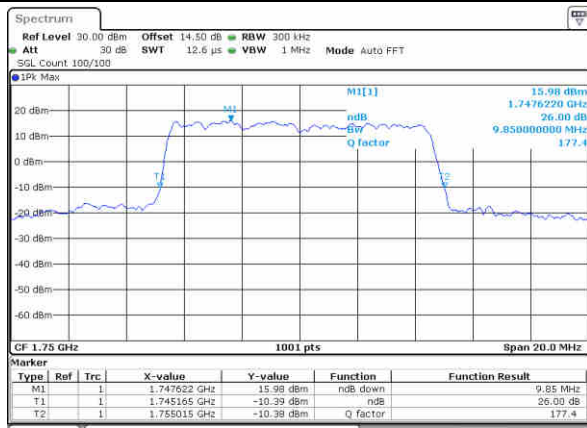
Date: 9-JAN-2020 08:10:53

## Middle Channel / 10MHz / 16QAM



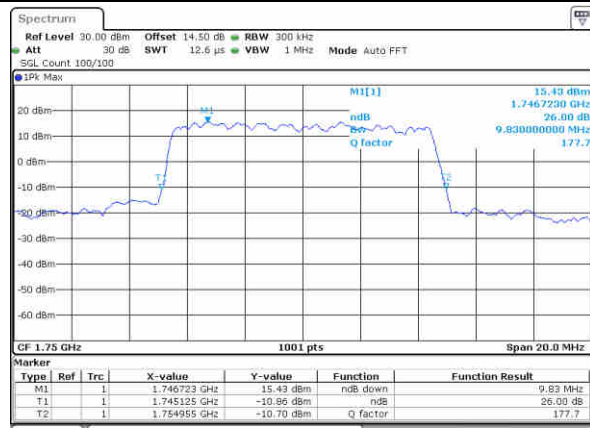
Date: 9-JAN-2020 08:10:54

## Highest Channel / 10MHz / QPSK



Date: 9-JAN-2020 08:12:00

## Highest Channel / 10MHz / 16QAM

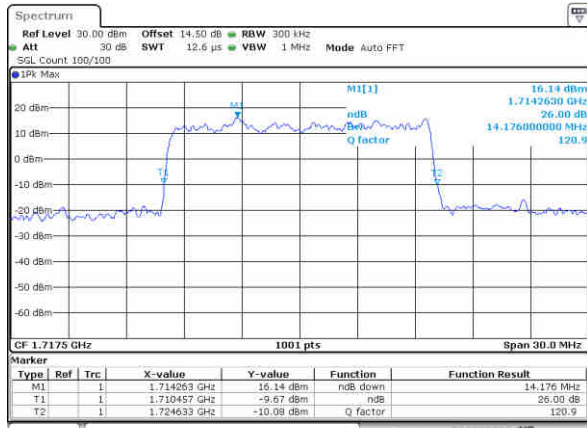


Date: 9-JAN-2020 08:12:11



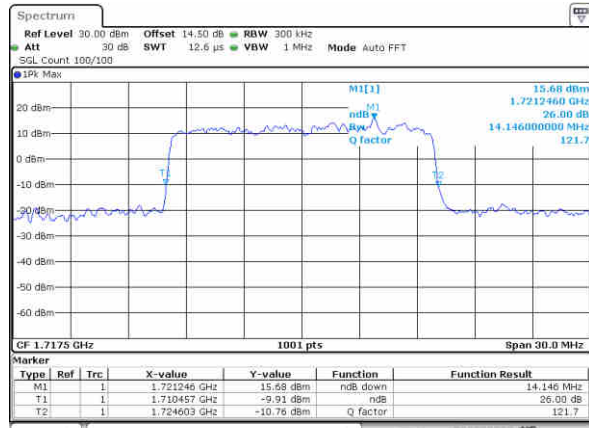
## LTE Band 4

## Lowest Channel / 15MHz / QPSK



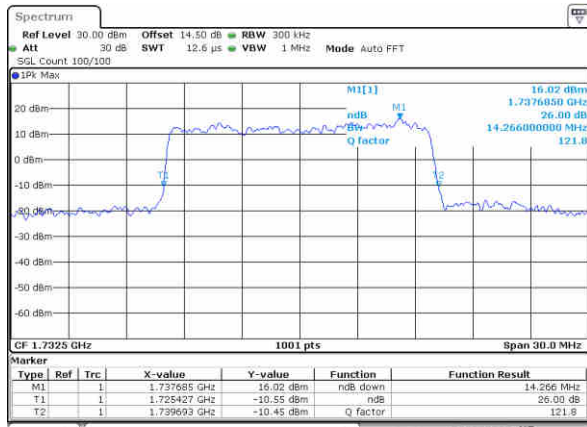
Date: 9-JAN-2020 08:18:17

## Lowest Channel / 15MHz / 16QAM



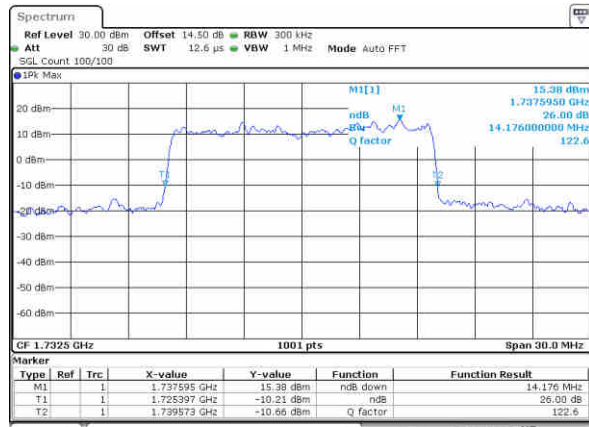
Date: 9-JAN-2020 08:18:18

## Middle Channel / 15MHz / QPSK



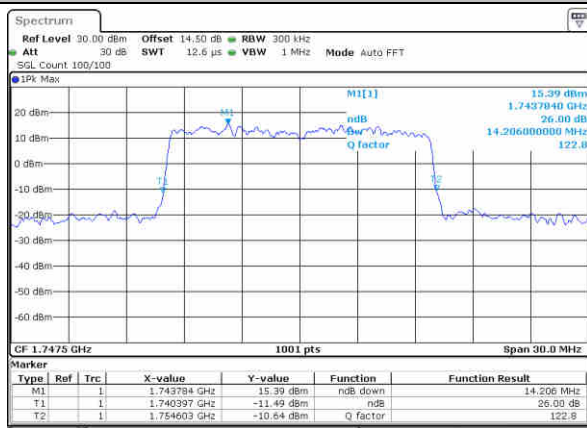
Date: 9-JAN-2020 08:24:13

## Middle Channel / 15MHz / 16QAM



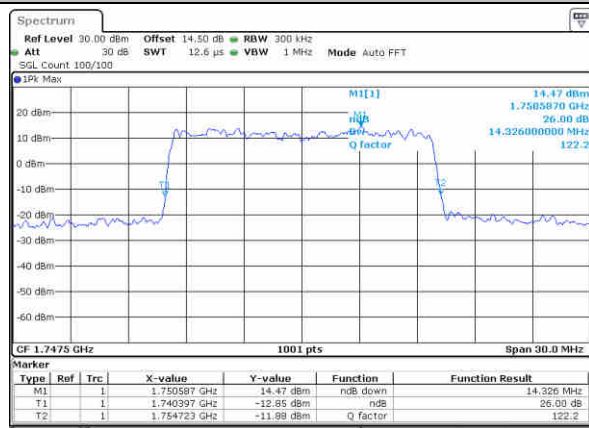
Date: 9-JAN-2020 08:24:14

## Highest Channel / 15MHz / QPSK



Date: 9-JAN-2020 08:26:21

## Highest Channel / 15MHz / 16QAM

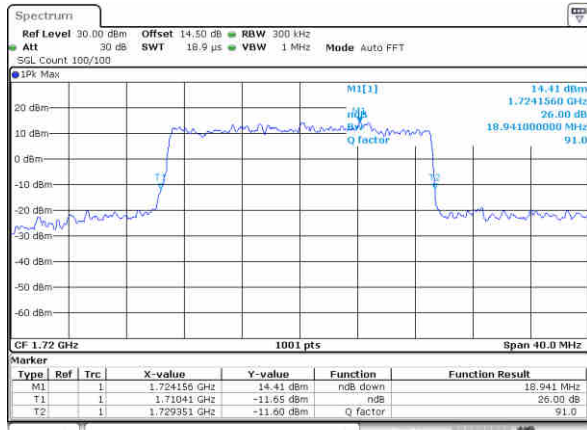


Date: 9-JAN-2020 08:26:31

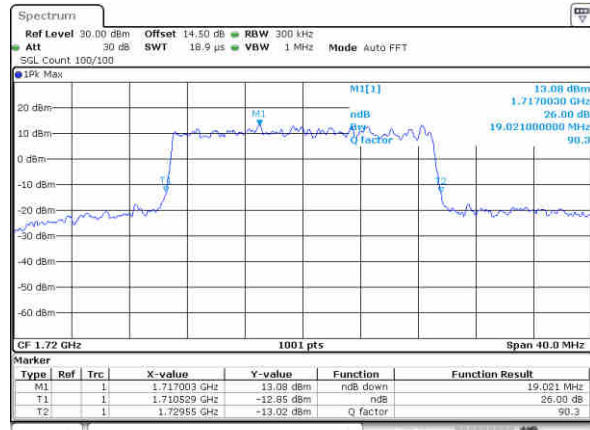


## LTE Band 4

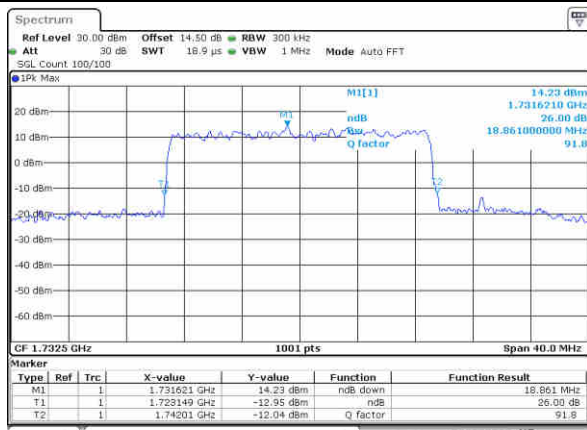
## Lowest Channel / 20MHz / QPSK



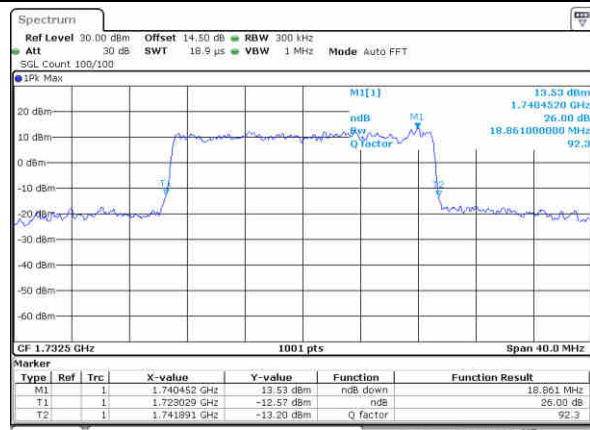
## Lowest Channel / 20MHz / 16QAM



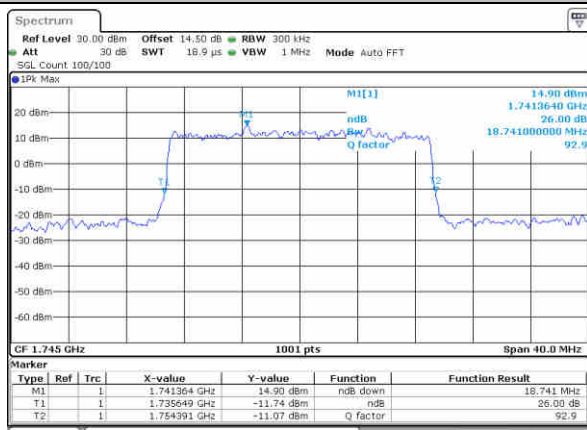
## Middle Channel / 20MHz / QPSK



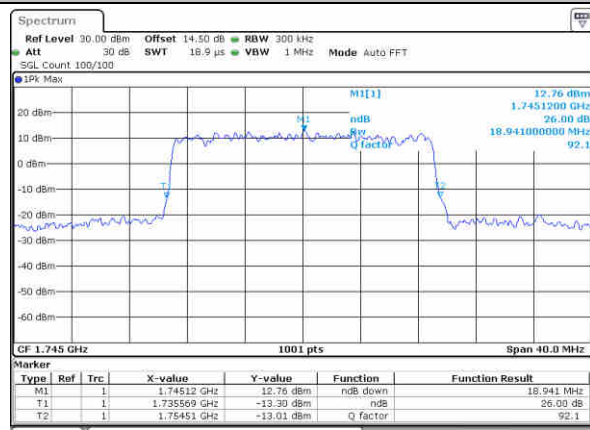
## Middle Channel / 20MHz / 16QAM



## Highest Channel / 20MHz / QPSK



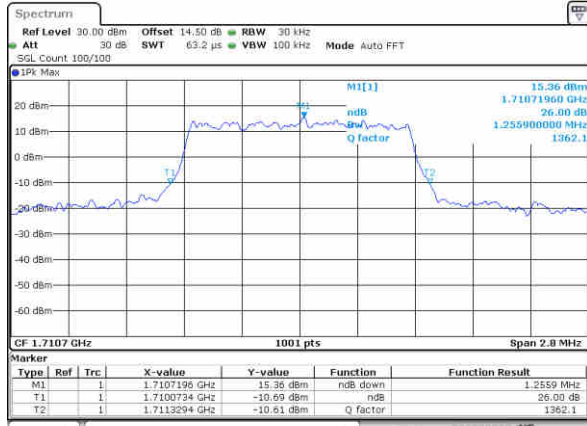
## Highest Channel / 20MHz / 16QAM





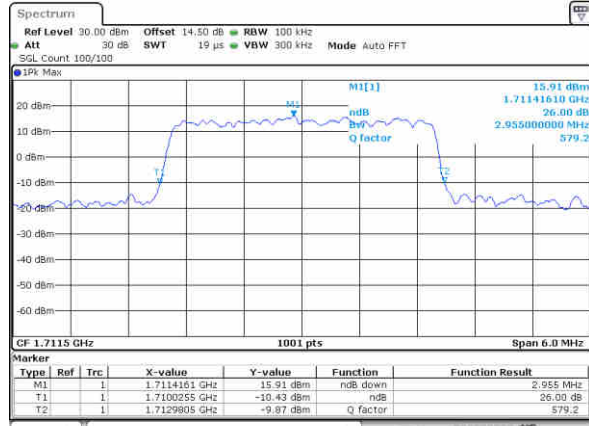
## LTE Band 4

## Lowest Channel / 1.4MHz / 64QAM



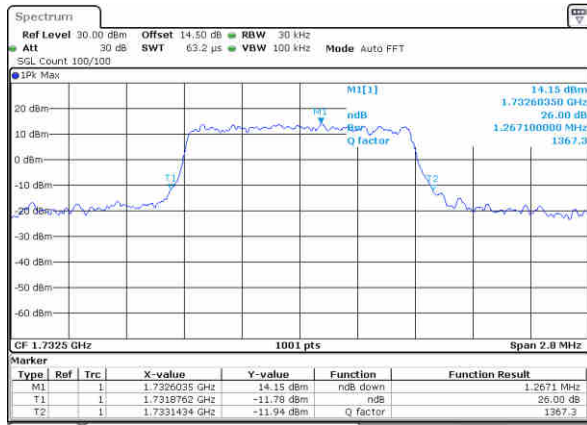
Date: 9-JAN-2020 10:32:19

## Lowest Channel / 3MHz / 64QAM



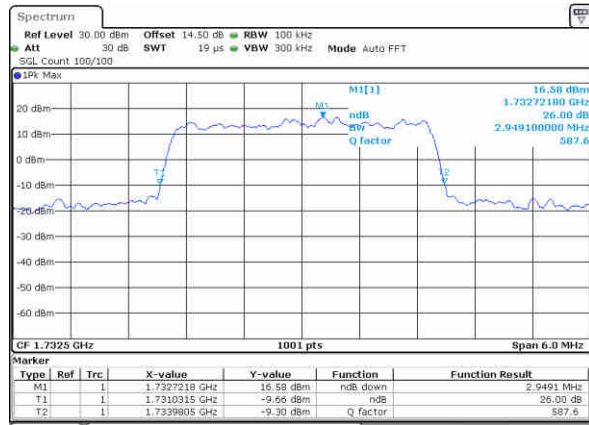
Date: 9-JAN-2020 09:56:32

## Middle Channel / 1.4MHz / 64QAM



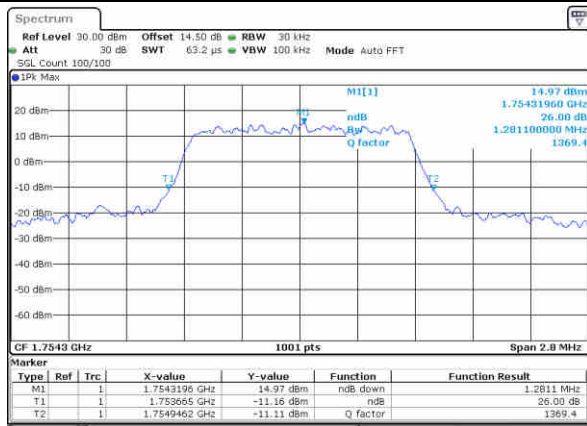
Date: 9-JAN-2020 10:35:28

## Middle Channel / 3MHz / 64QAM



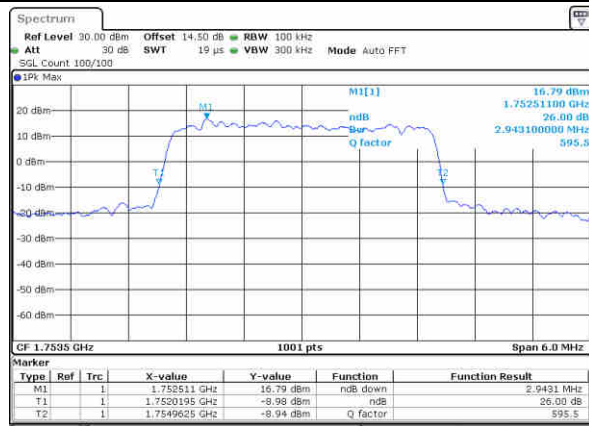
Date: 9-JAN-2020 09:59:35

## Highest Channel / 1.4MHz / 64QAM



Date: 9-JAN-2020 10:36:32

## Highest Channel / 3MHz / 64QAM

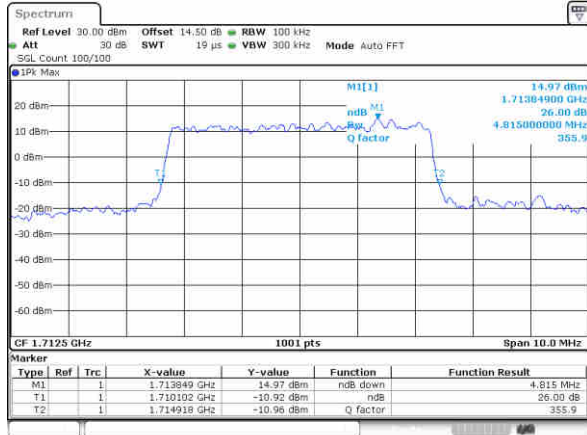


Date: 9-JAN-2020 10:00:39

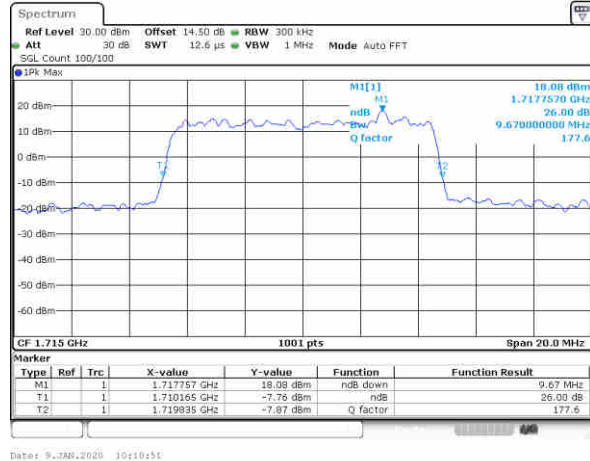


## LTE Band 4

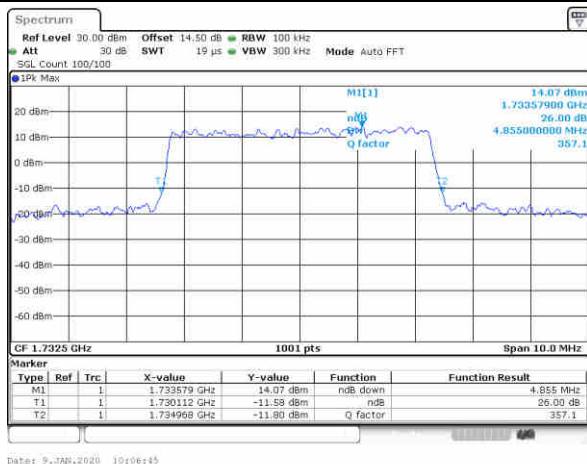
## Lowest Channel / 5MHz / 64QAM



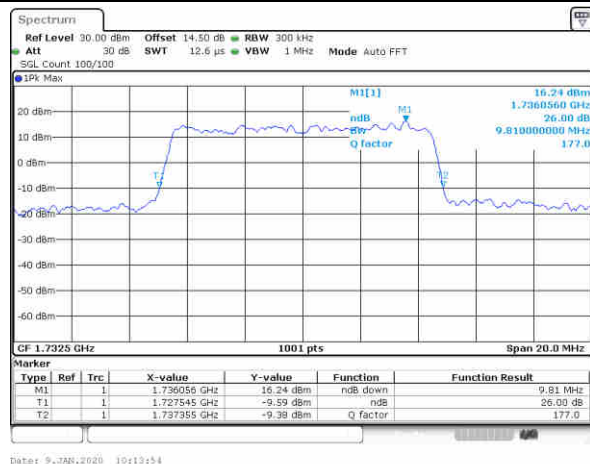
## Lowest Channel / 10MHz / 64QAM



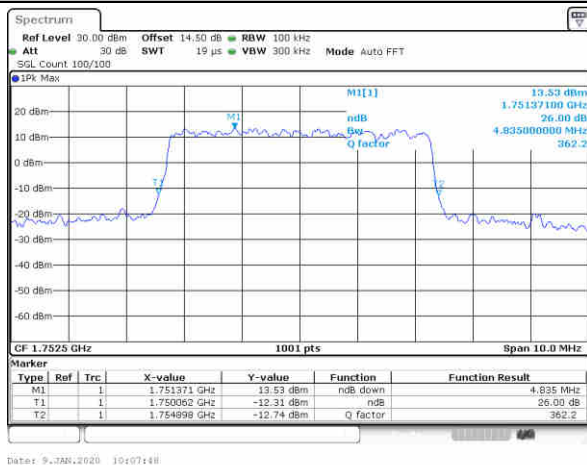
## Middle Channel / 5MHz / 64QAM



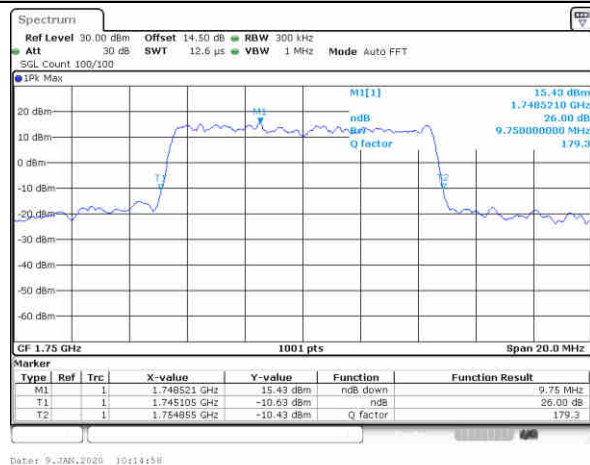
## Middle Channel / 10MHz / 64QAM



## Highest Channel / 5MHz / 64QAM



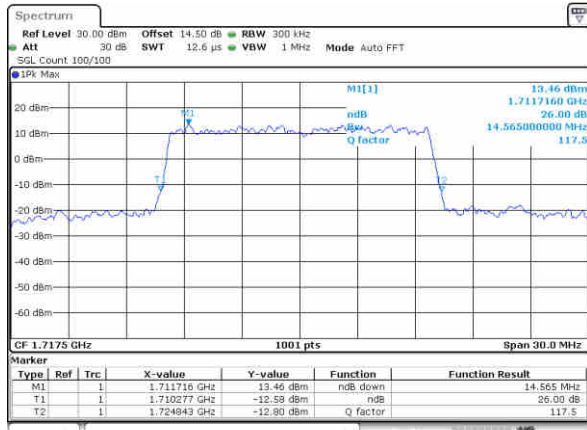
## Highest Channel / 10MHz / 64QAM



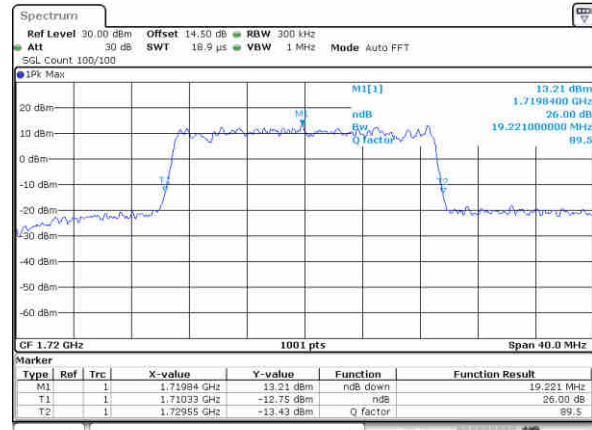


## LTE Band 4

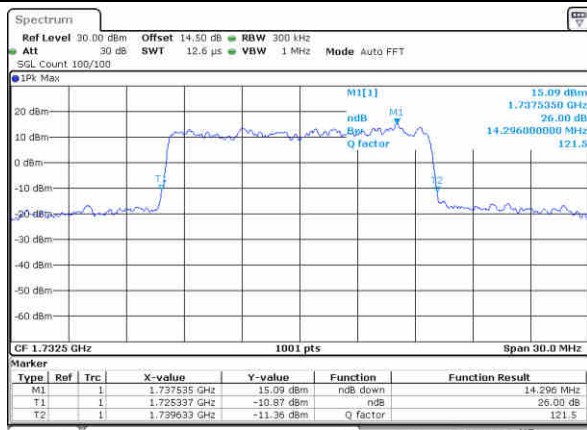
## Lowest Channel / 15MHz / 64QAM



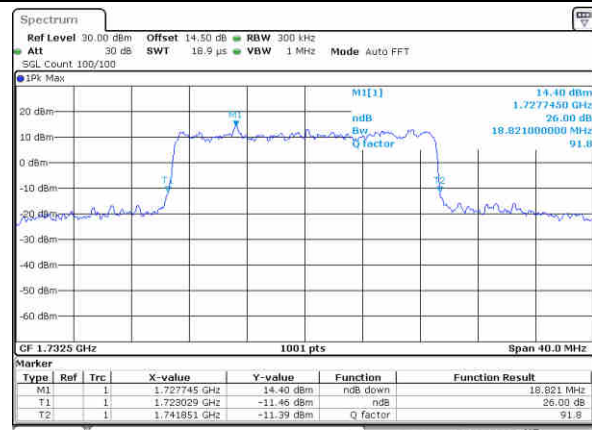
## Lowest Channel / 20MHz / 64QAM



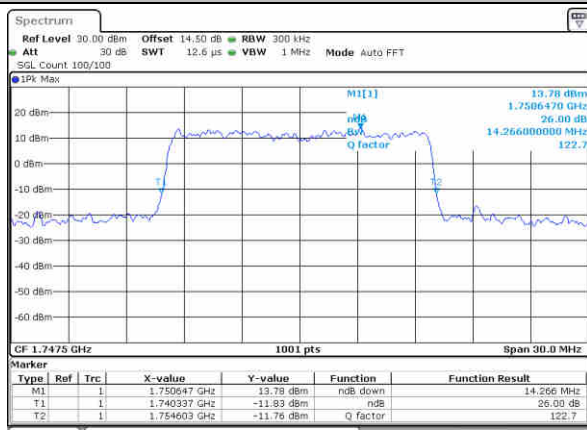
## Middle Channel / 15MHz / 64QAM



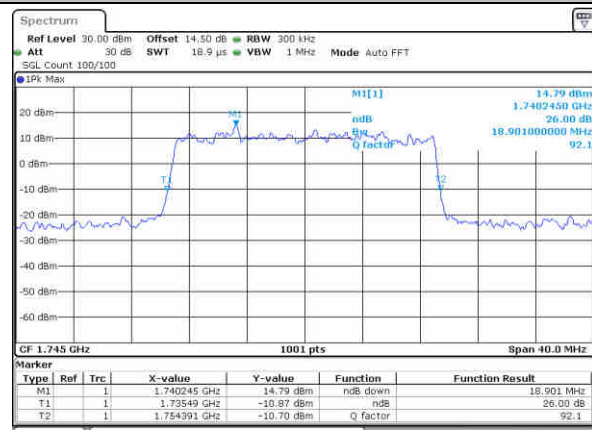
## Middle Channel / 20MHz / 64QAM



## Highest Channel / 15MHz / 64QAM



## Highest Channel / 20MHz / 64QAM



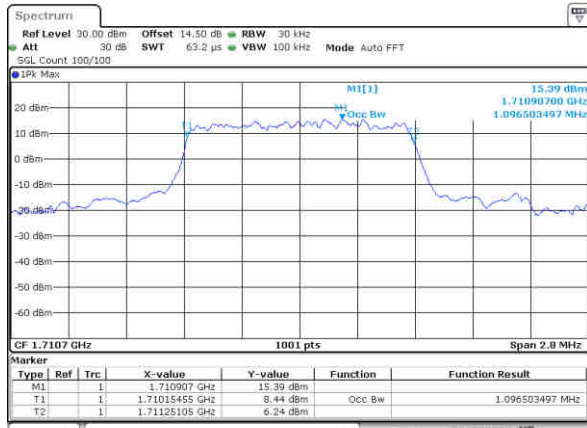
**Occupied Bandwidth**

| 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  | 1.10                     | 1.09  | 2.72  | 2.73  | 4.51  | 4.49  | 9.03  | 9.03  | 13.40 | 13.46 | 17.86 | 17.90 |
| Middle CH  | 1.09                     | 1.09  | 2.70  | 2.72  | 4.49  | 4.48  | 9.07  | 9.05  | 13.46 | 13.52 | 17.98 | 17.94 |
| Highest CH | 1.09                     | 1.09  | 2.71  | 2.70  | 4.50  | 4.50  | 9.01  | 9.01  | 13.49 | 13.49 | 17.86 | 17.74 |
| Mode       | LTE Band 4 : 99%OBW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                   |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                    |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.10                     | -     | 2.73  | -     | 4.48  | -     | 9.01  | -     | 13.43 | -     | 17.82 | -     |
| Middle CH  | 1.09                     | -     | 2.73  | -     | 4.49  | -     | 9.03  | -     | 13.52 | -     | 18.02 | -     |
| Highest CH | 1.09                     | -     | 2.73  | -     | 4.49  | -     | 9.05  | -     | 13.46 | -     | 17.82 | -     |



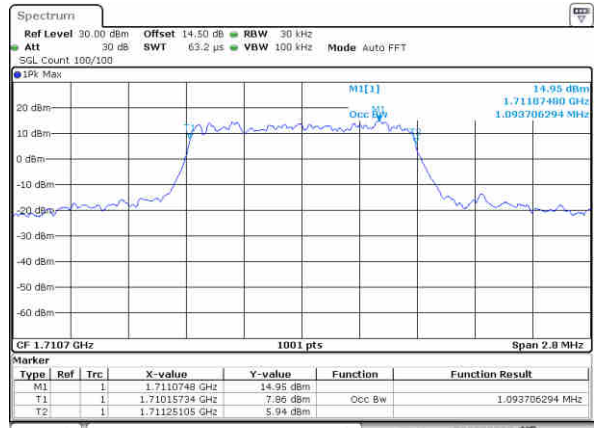
## LTE Band 4

## Lowest Channel / 1.4MHz / QPSK



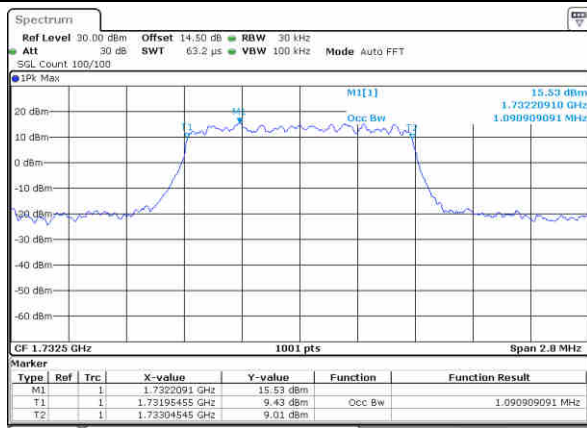
Date: 9-JAN-2020 08:46:25

## Lowest Channel / 1.4MHz / 16QAM



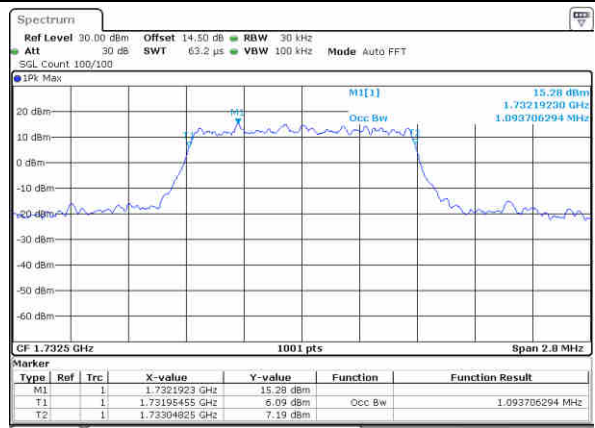
Date: 9-JAN-2020 08:46:36

## Middle Channel / 1.4MHz / QPSK



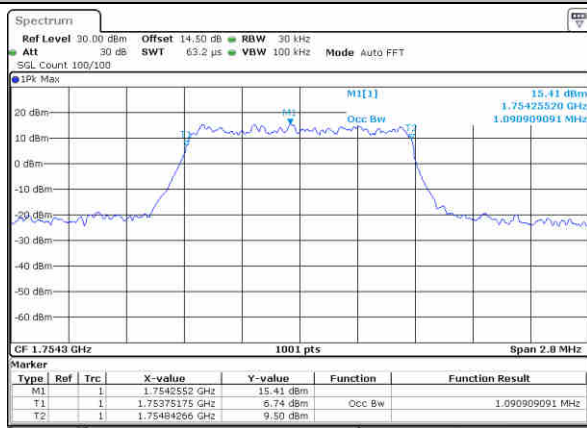
Date: 9-JAN-2020 08:52:45

## Middle Channel / 1.4MHz / 16QAM



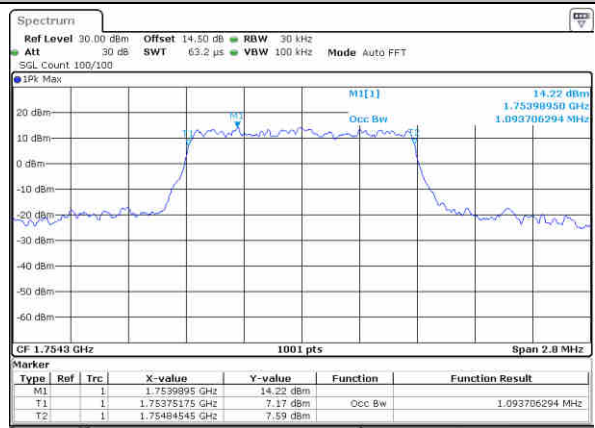
Date: 9-JAN-2020 08:52:56

## Highest Channel / 1.4MHz / QPSK



Date: 9-JAN-2020 08:54:52

## Highest Channel / 1.4MHz / 16QAM

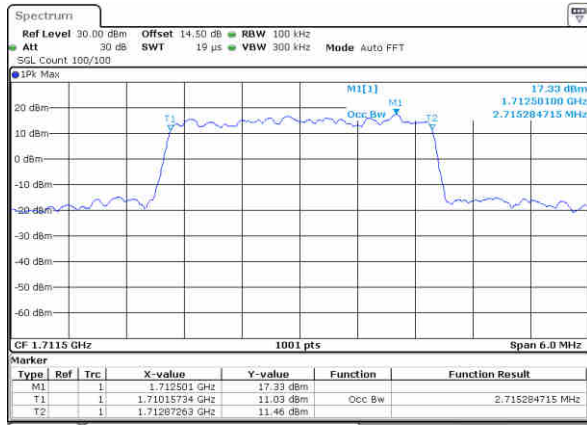


Date: 9-JAN-2020 08:55:03



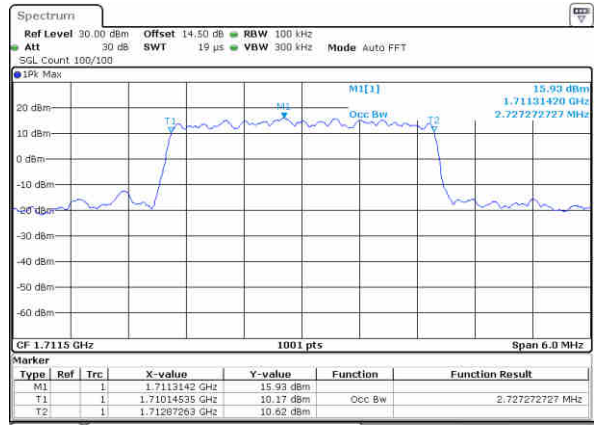
## LTE Band 4

## Lowest Channel / 3MHz / QPSK



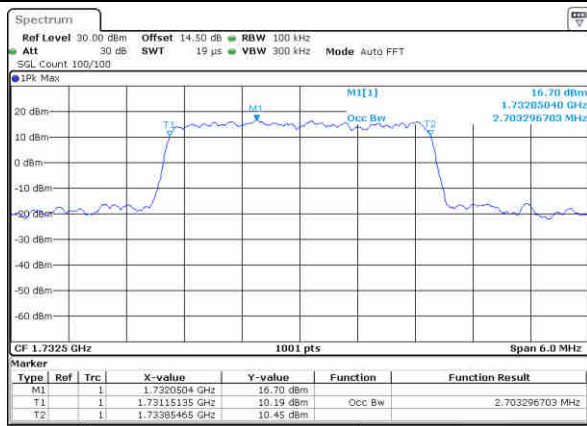
Date: 9\_JAN.2020 07:34:44

## Lowest Channel / 3MHz / 16QAM



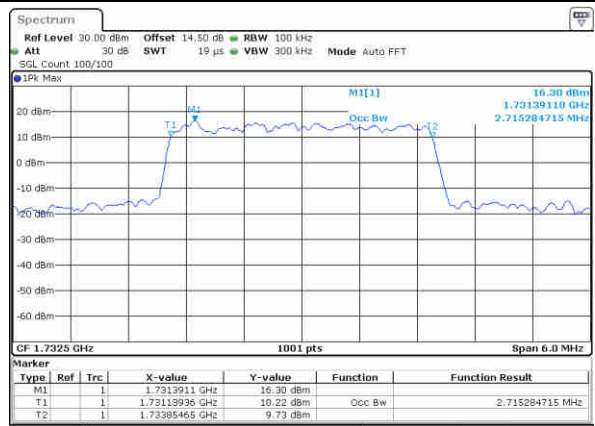
Date: 9\_JAN.2020 07:34:55

## Middle Channel / 3MHz / QPSK



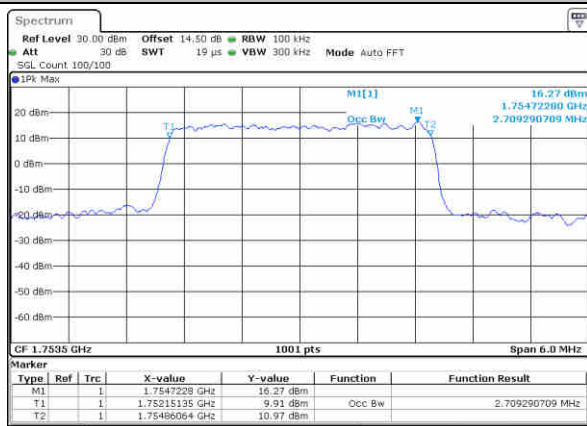
Date: 9\_JAN.2020 07:40:51

## Middle Channel / 3MHz / 16QAM



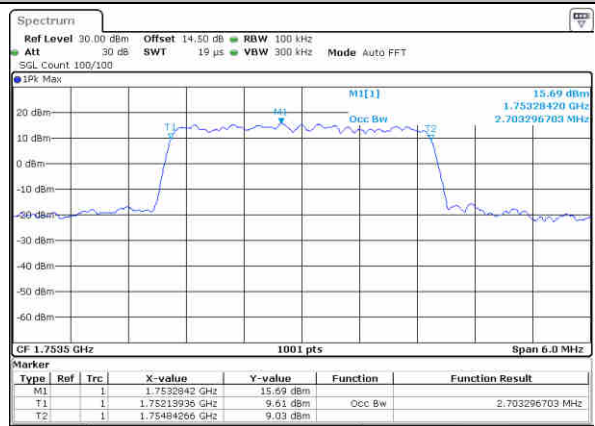
Date: 9\_JAN.2020 07:41:02

## Highest Channel / 3MHz / QPSK



Date: 9\_JAN.2020 07:42:58

## Highest Channel / 3MHz / 16QAM

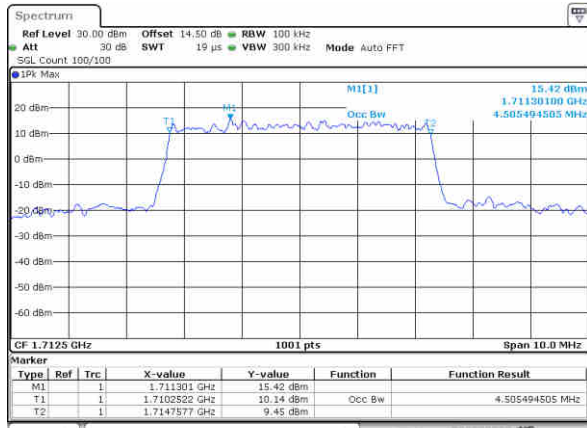


Date: 9\_JAN.2020 07:43:00

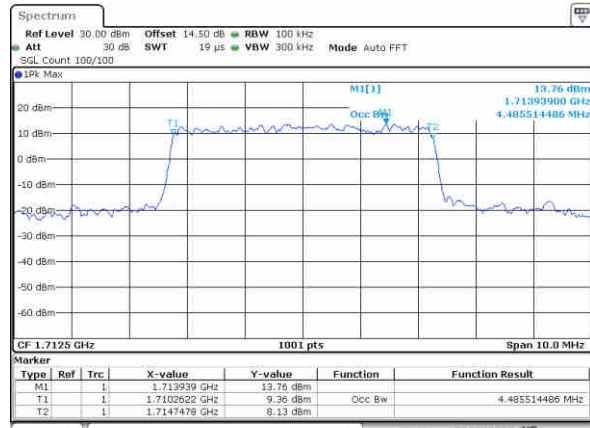


## LTE Band 4

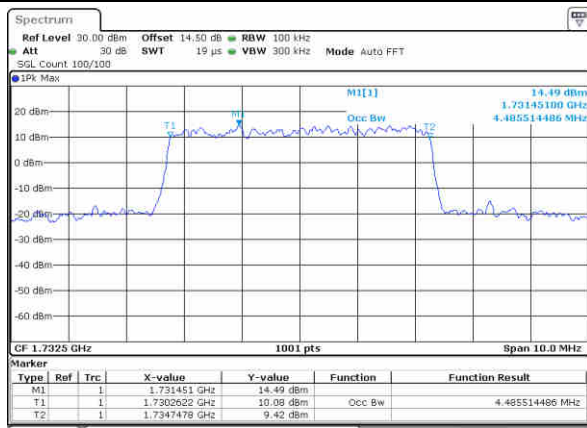
## Lowest Channel / 5MHz / QPSK



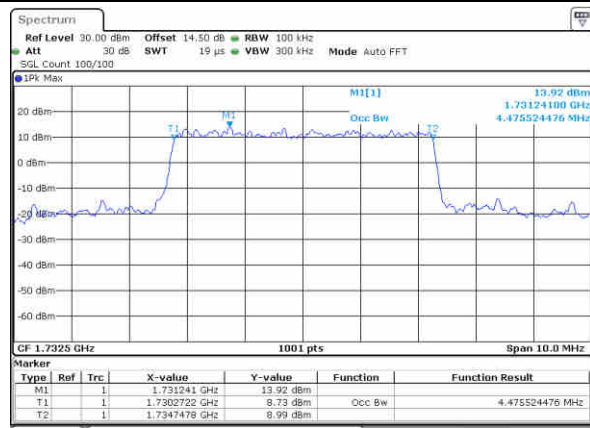
## Lowest Channel / 5MHz / 16QAM



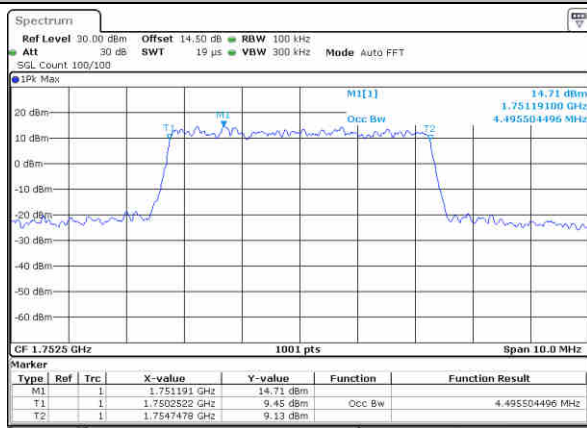
## Middle Channel / 5MHz / QPSK



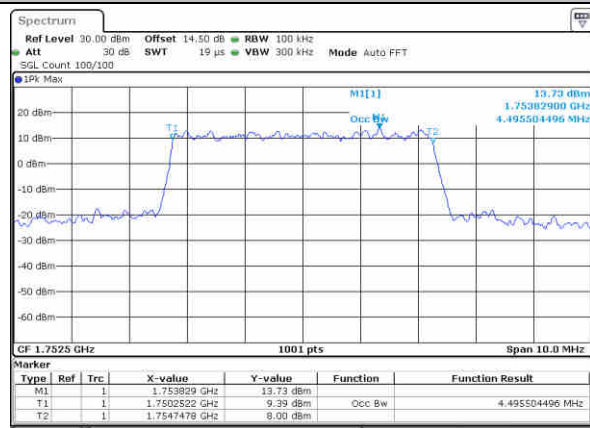
## Middle Channel / 5MHz / 16QAM



## Highest Channel / 5MHz / QPSK



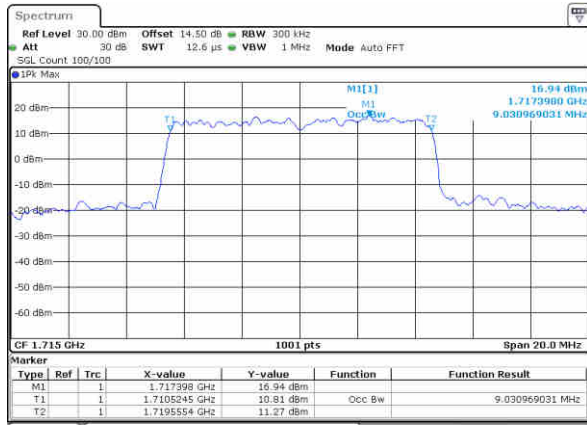
## Highest Channel / 5MHz / 16QAM



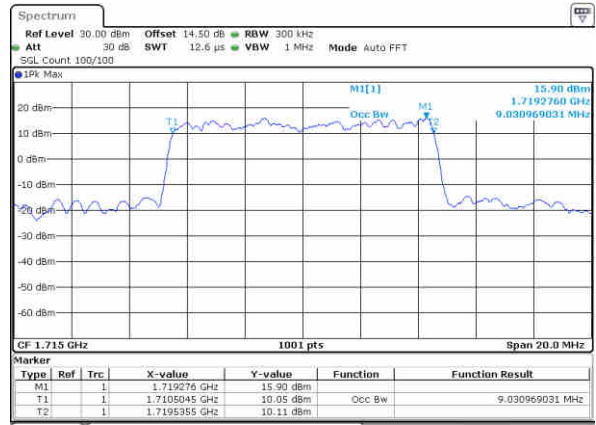


## LTE Band 4

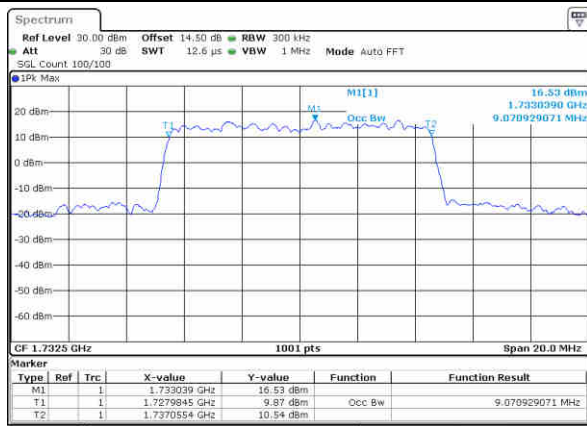
## Lowest Channel / 10MHz / QPSK



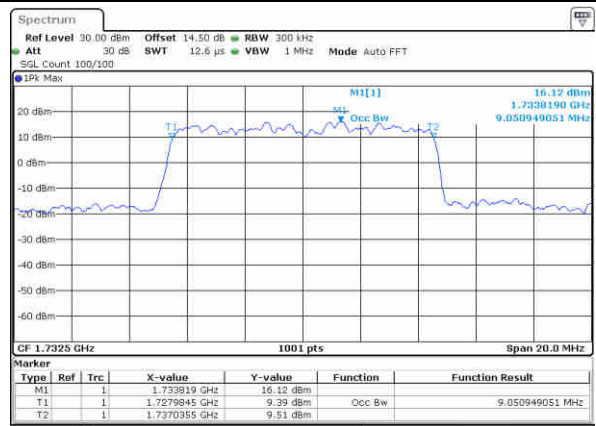
## Lowest Channel / 10MHz / 16QAM



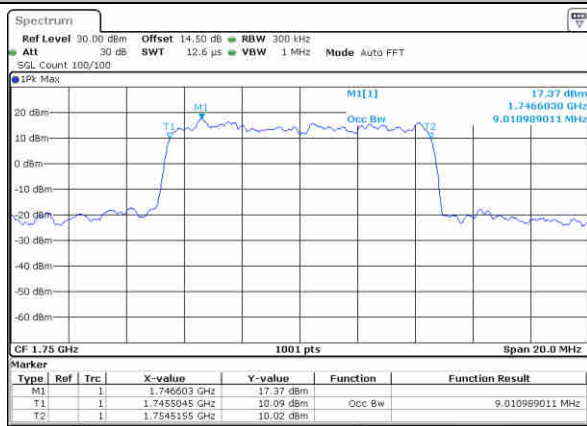
## Middle Channel / 10MHz / QPSK



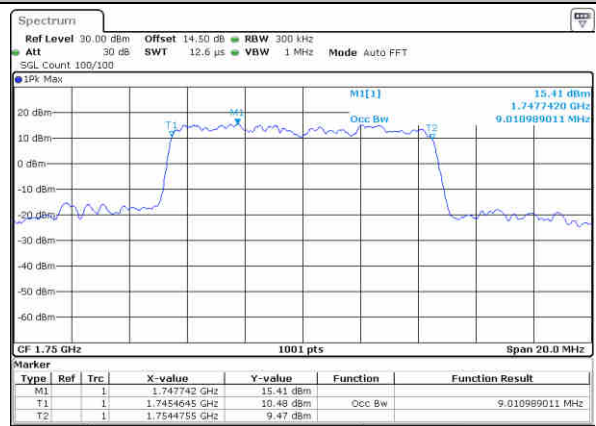
## Middle Channel / 10MHz / 16QAM



## Highest Channel / 10MHz / QPSK



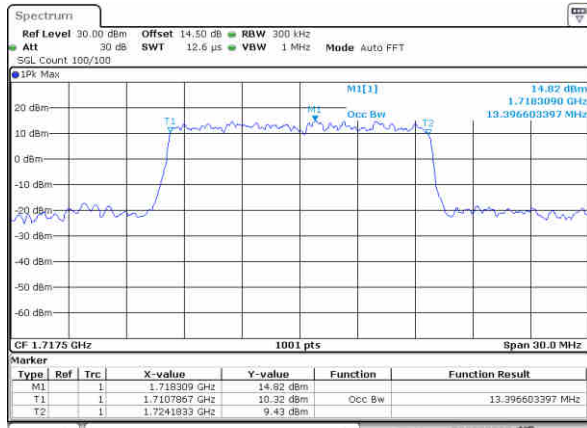
## Highest Channel / 10MHz / 16QAM





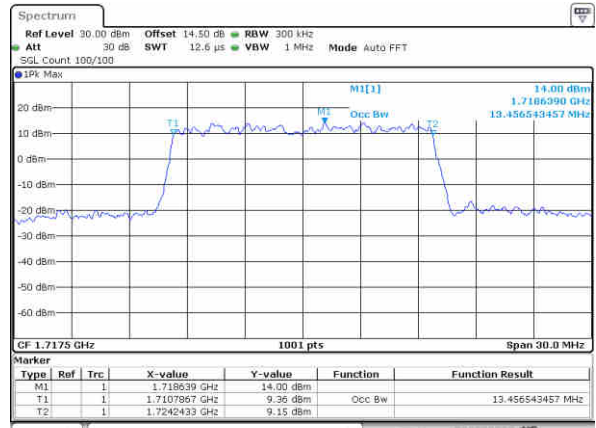
## LTE Band 4

## Lowest Channel / 15MHz / QPSK



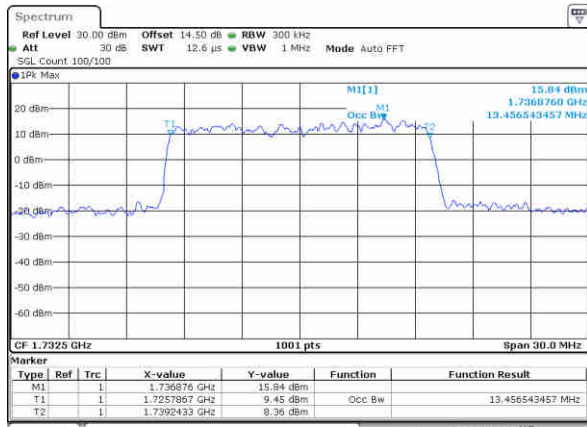
Date: 9, JAN, 2020 08:17:44

## Lowest Channel / 15MHz / 16QAM



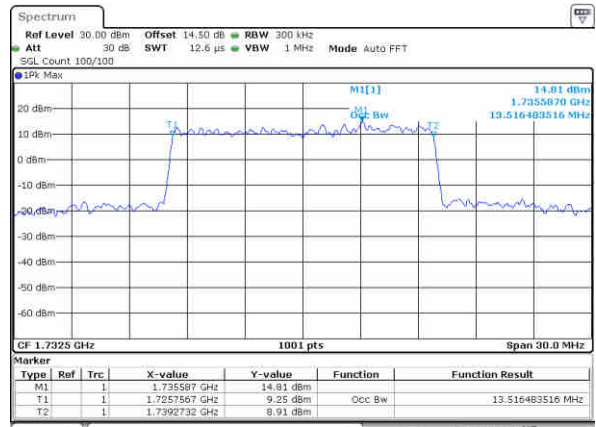
Date: 9, JAN, 2020 08:17:56

## Middle Channel / 15MHz / QPSK



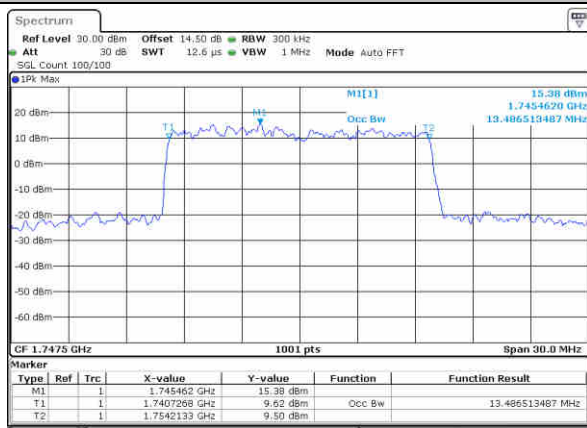
Date: 9, JAN, 2020 08:23:51

## Middle Channel / 15MHz / 16QAM



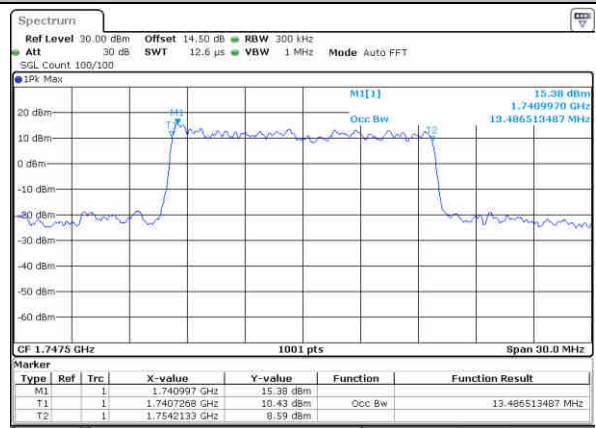
Date: 9, JAN, 2020 08:24:02

## Highest Channel / 15MHz / QPSK



Date: 9, JAN, 2020 08:25:58

## Highest Channel / 15MHz / 16QAM

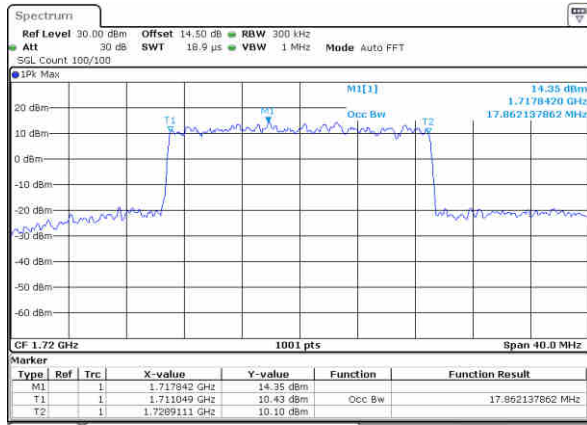


Date: 9, JAN, 2020 08:26:09



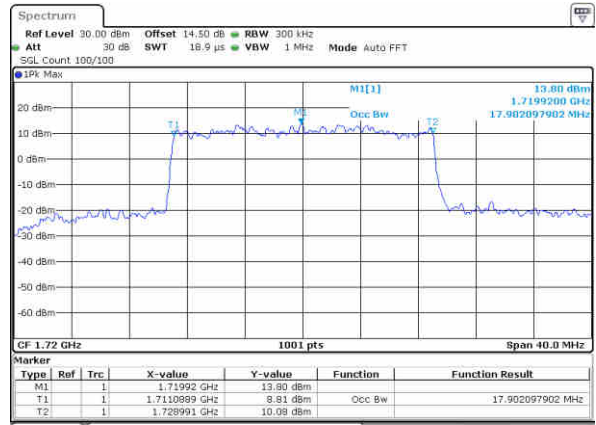
## LTE Band 4

## Lowest Channel / 20MHz / QPSK



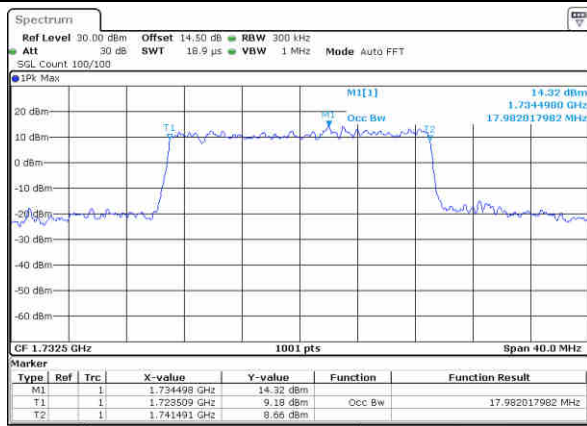
Date: 9, JAN, 2020 08:13:21

## Lowest Channel / 20MHz / 16QAM



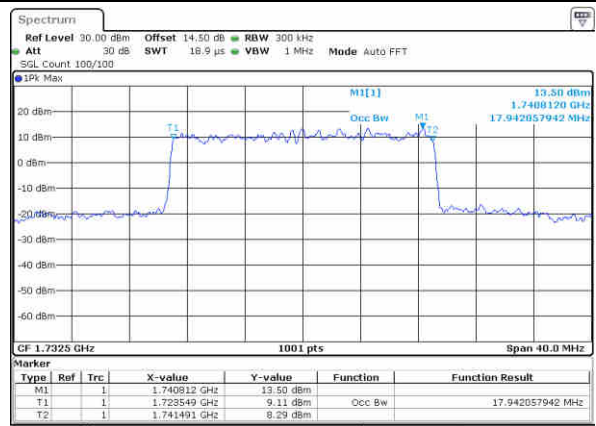
Date: 9, JAN, 2020 08:13:21

## Middle Channel / 20MHz / QPSK



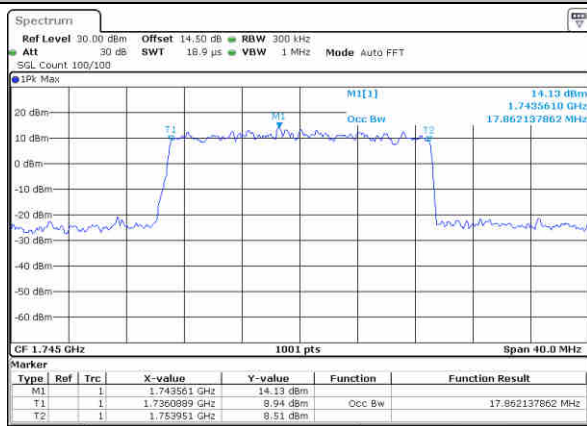
Date: 9, JAN, 2020 08:13:21

## Middle Channel / 20MHz / 16QAM



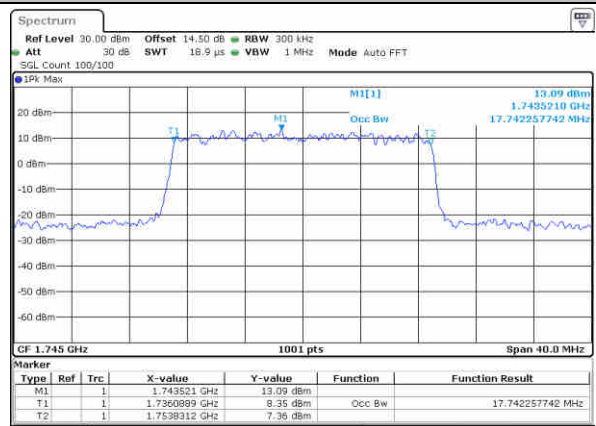
Date: 9, JAN, 2020 08:13:21

## Highest Channel / 20MHz / QPSK



Date: 9, JAN, 2020 08:14:01

## Highest Channel / 20MHz / 16QAM

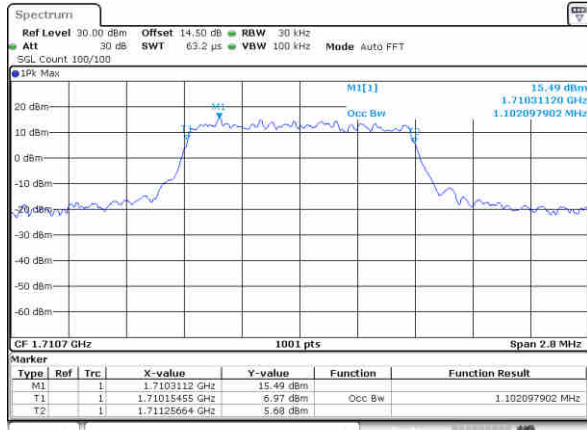


Date: 9, JAN, 2020 08:14:01

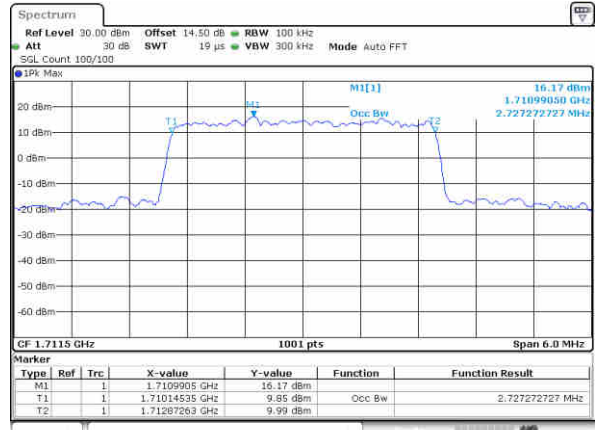


## LTE Band 4

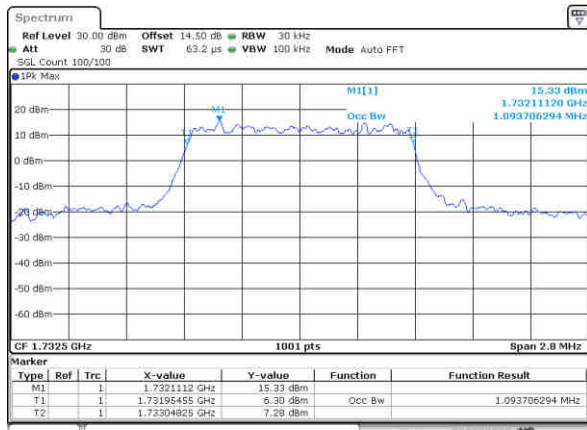
## Lowest Channel / 1.4MHz / 64QAM



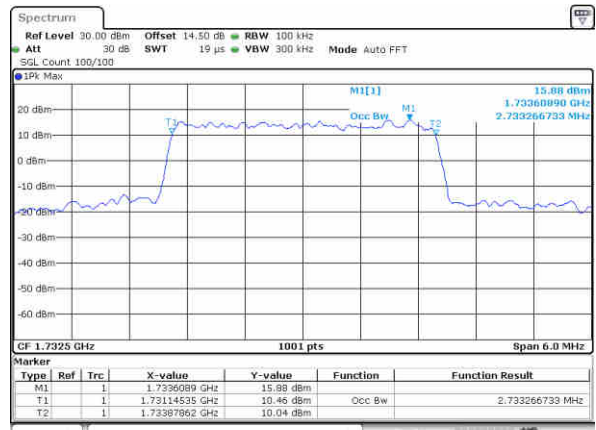
## Lowest Channel / 3MHz / 64QAM



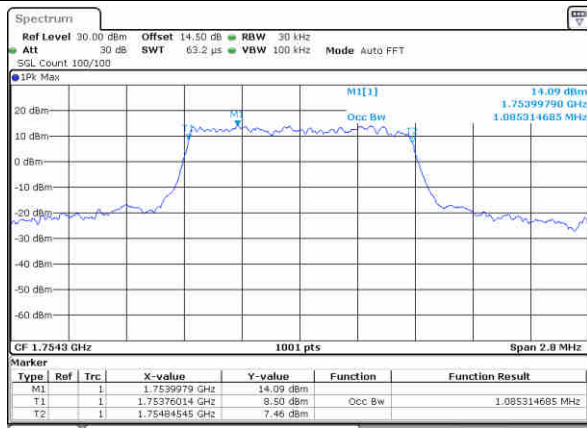
## Middle Channel / 1.4MHz / 64QAM



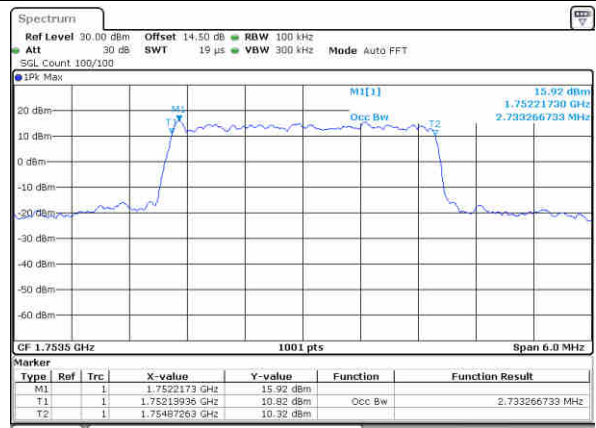
## Middle Channel / 3MHz / 64QAM



## Highest Channel / 1.4MHz / 64QAM



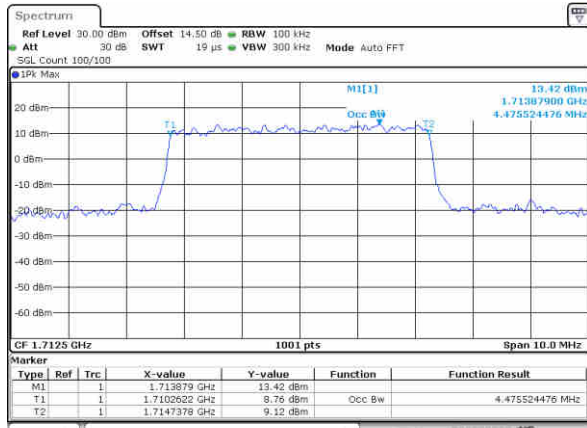
## Highest Channel / 3MHz / 64QAM



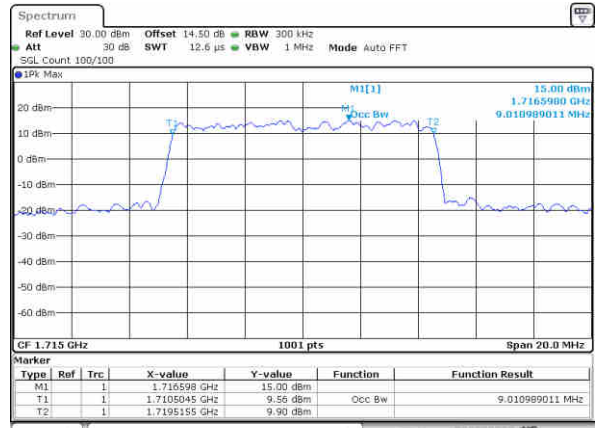


## LTE Band 4

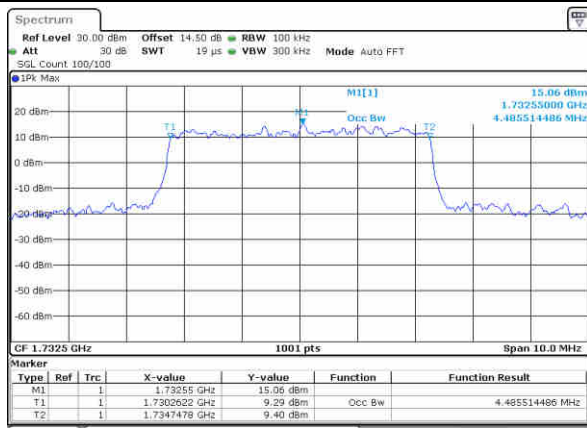
## Lowest Channel / 5MHz / 64QAM



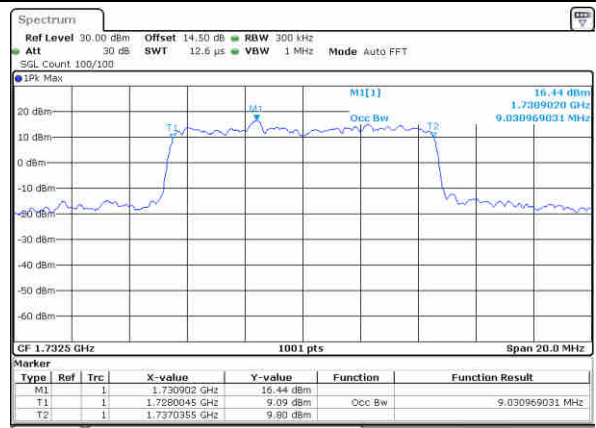
## Lowest Channel / 10MHz / 64QAM



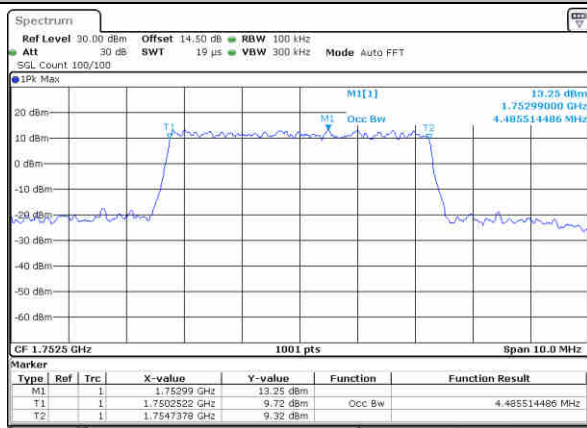
## Middle Channel / 5MHz / 64QAM



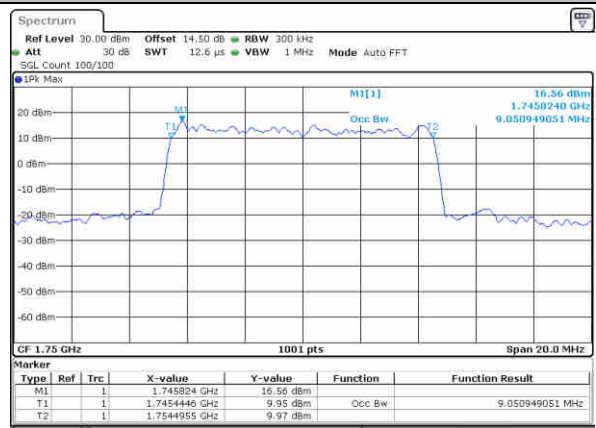
## Middle Channel / 10MHz / 64QAM



## Highest Channel / 5MHz / 64QAM



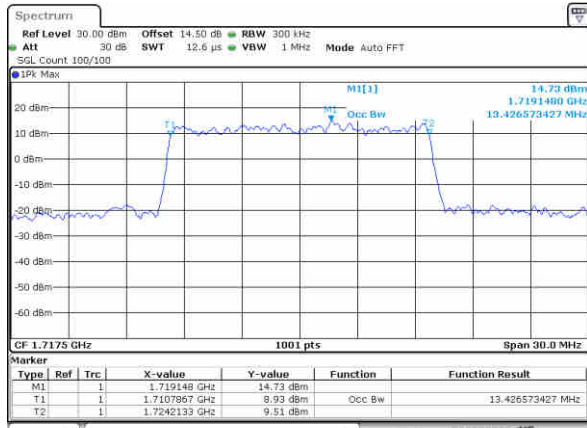
## Highest Channel / 10MHz / 64QAM



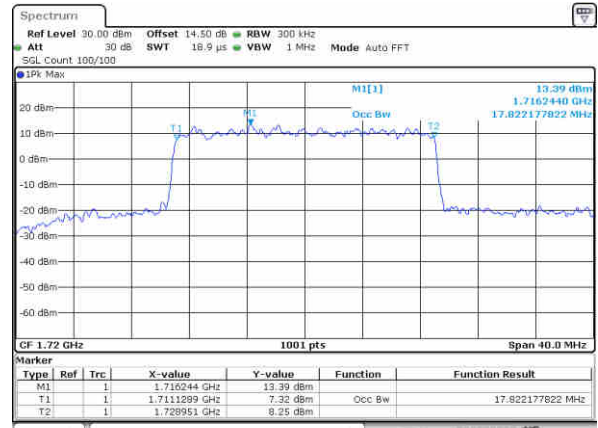


## LTE Band 4

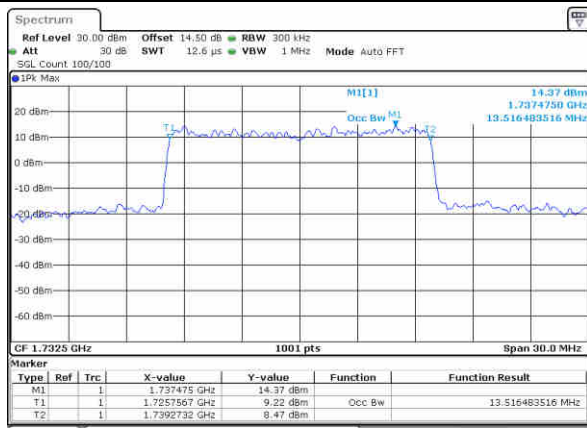
## Lowest Channel / 15MHz / 64QAM



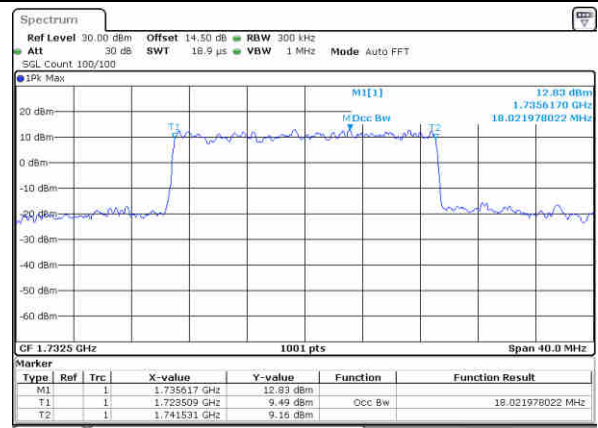
## Lowest Channel / 20MHz / 64QAM



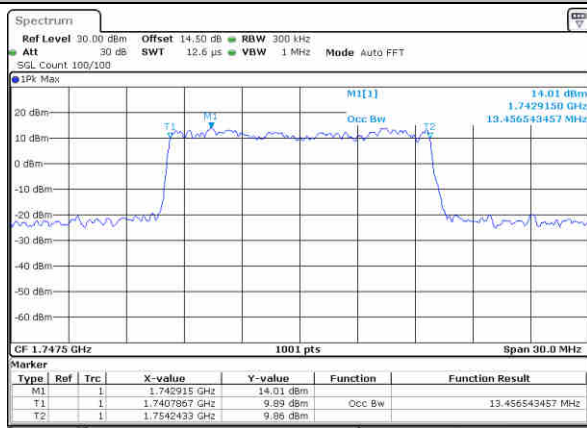
## Middle Channel / 15MHz / 64QAM



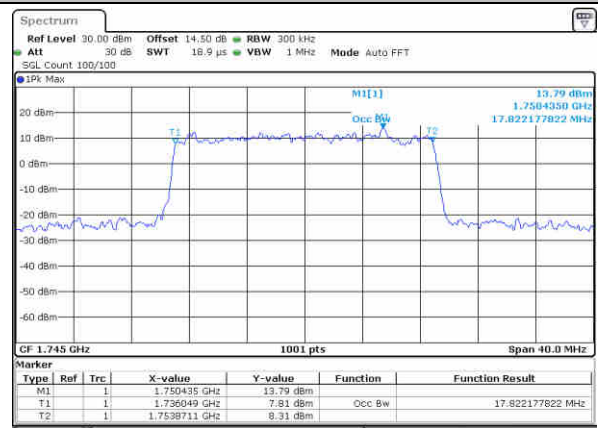
## Middle Channel / 20MHz / 64QAM



## Highest Channel / 15MHz / 64QAM



## Highest Channel / 20MHz / 64QAM



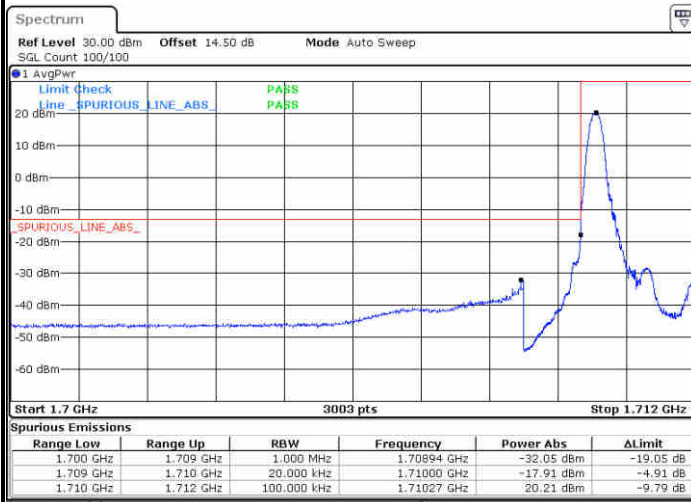


## **Conducted Band Edge**

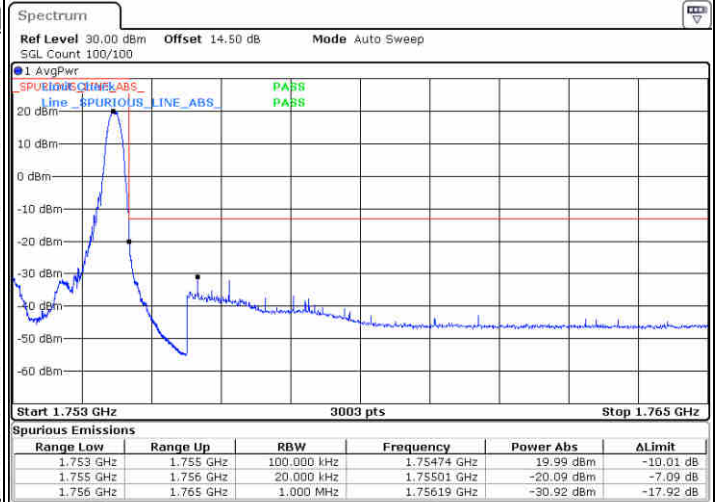


## LTE Band 4 / 1.4MHz / QPSK

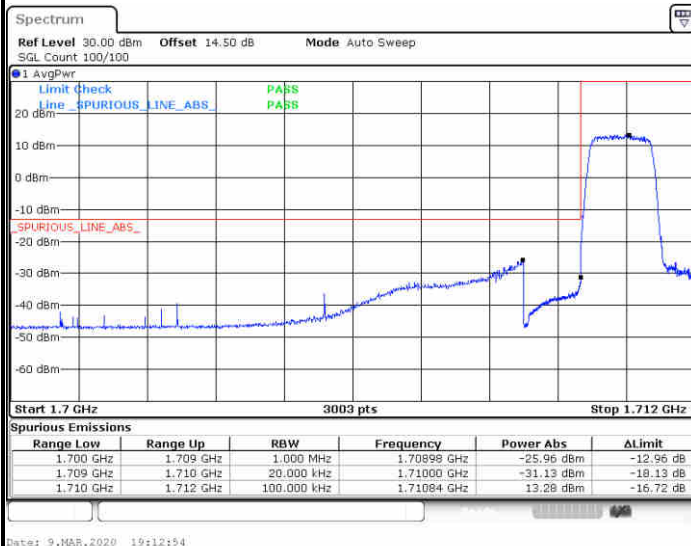
## Lowest Band Edge / 1RB



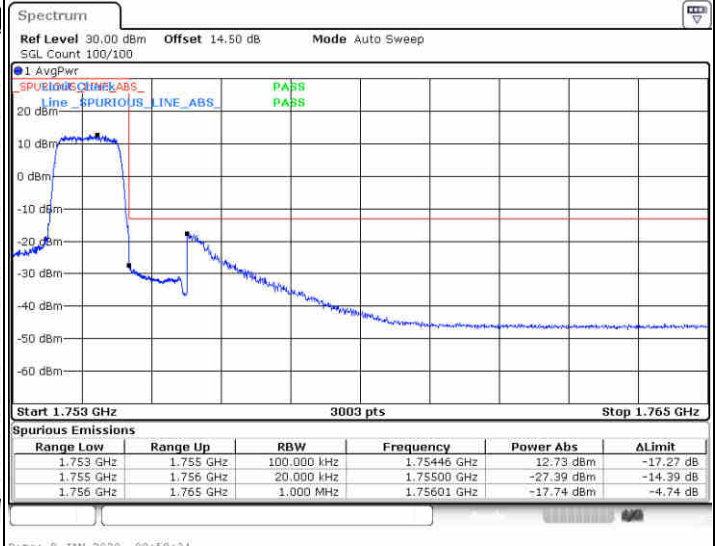
## Highest Band Edge / 1RB



## Lowest Band Edge / Full RB



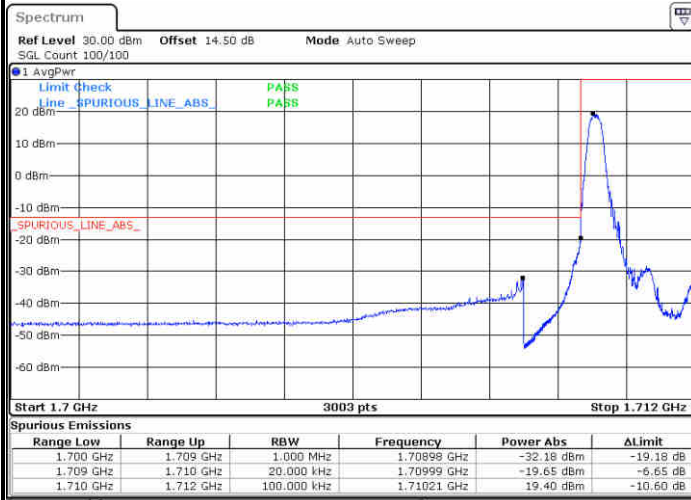
## Highest Band Edge / Full RB





## LTE Band 4 / 1.4MHz / 16QAM

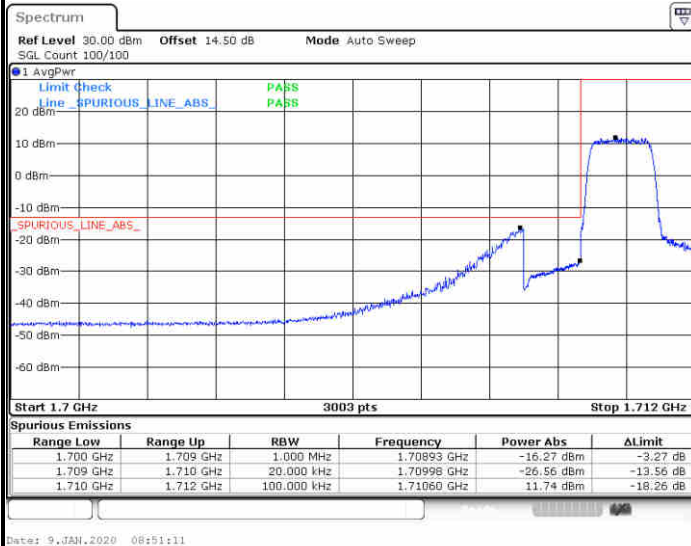
## Lowest Band Edge / 1 RB



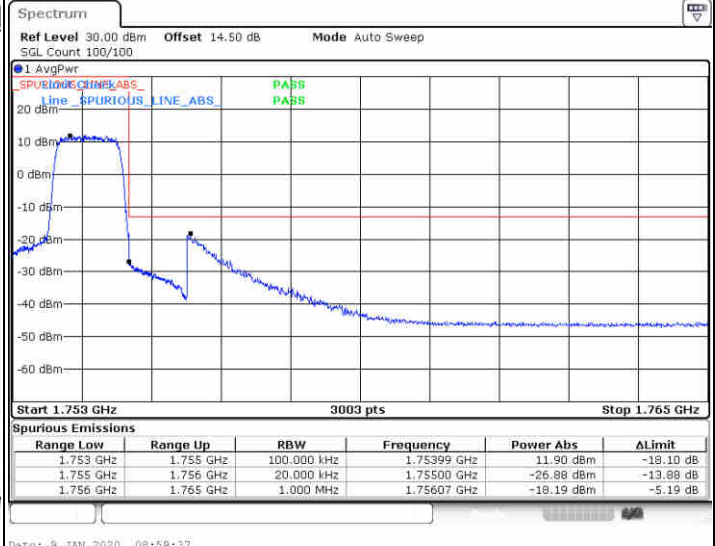
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



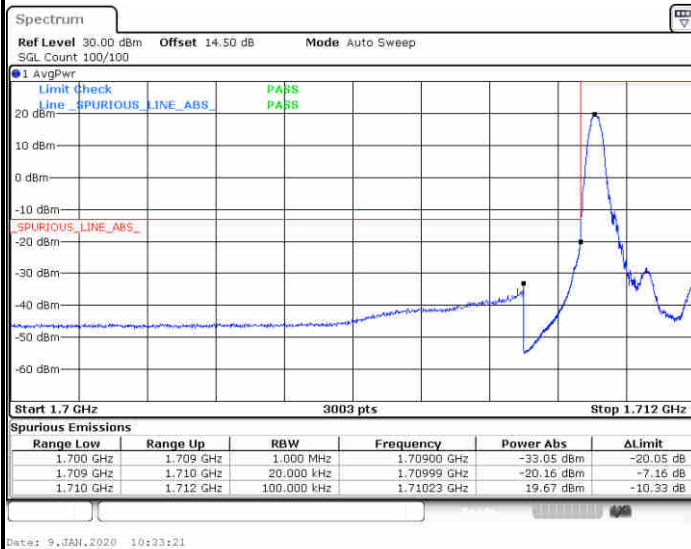
## Highest Band Edge / Full RB



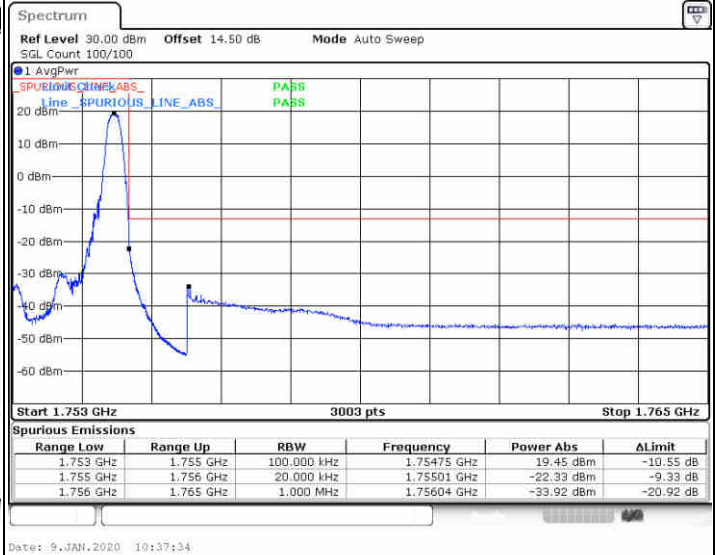


## LTE Band 4 / 1.4MHz / 64QAM

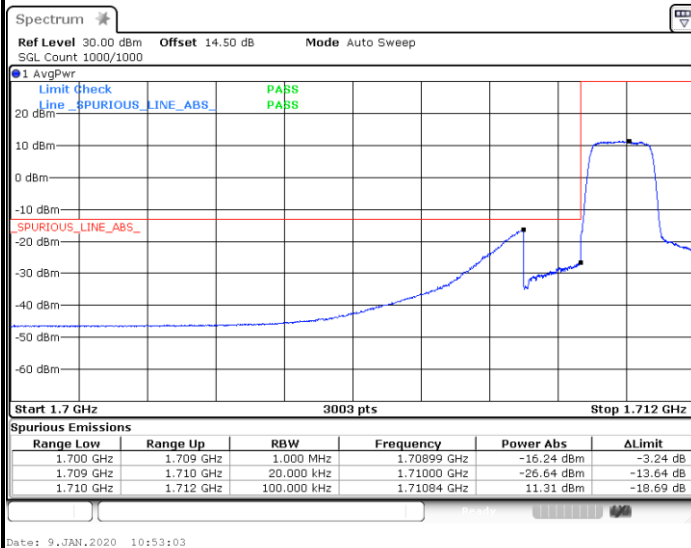
## Lowest Band Edge / 1 RB



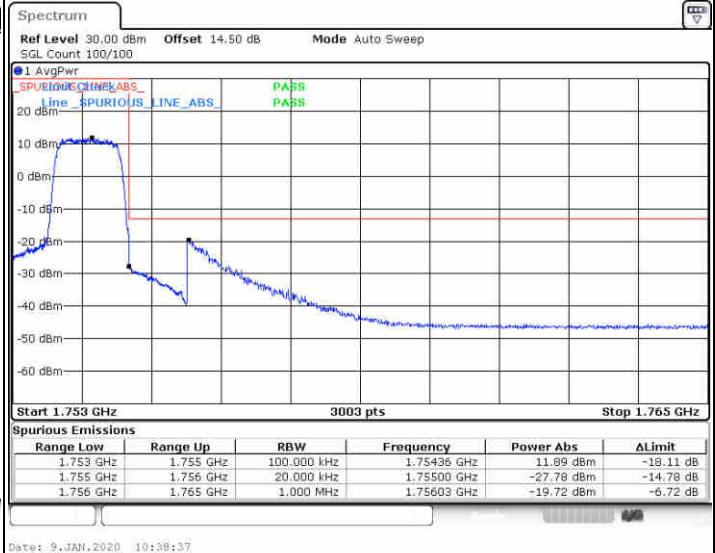
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



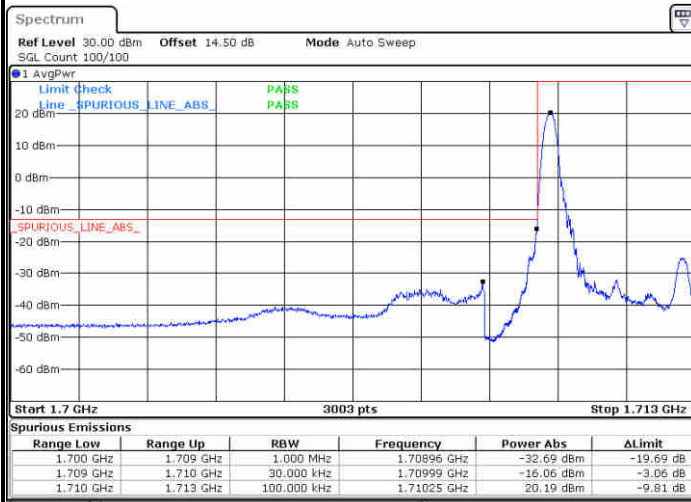
## Highest Band Edge / Full RB



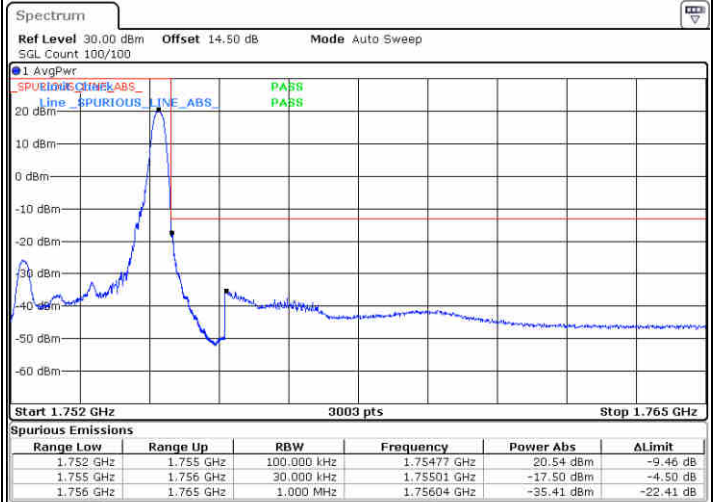


## LTE Band 4 / 3MHz / QPSK

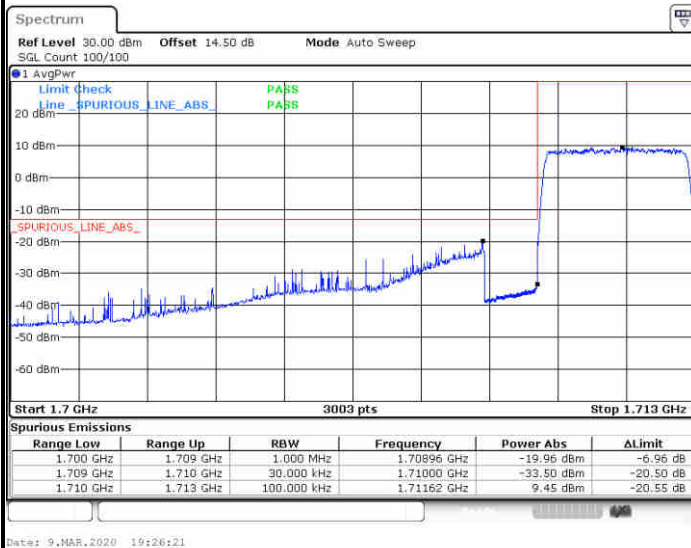
## Lowest Band Edge / 1RB



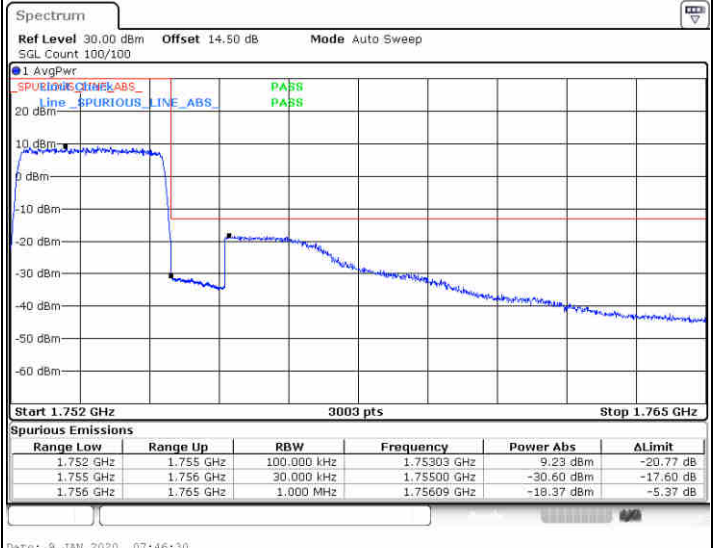
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



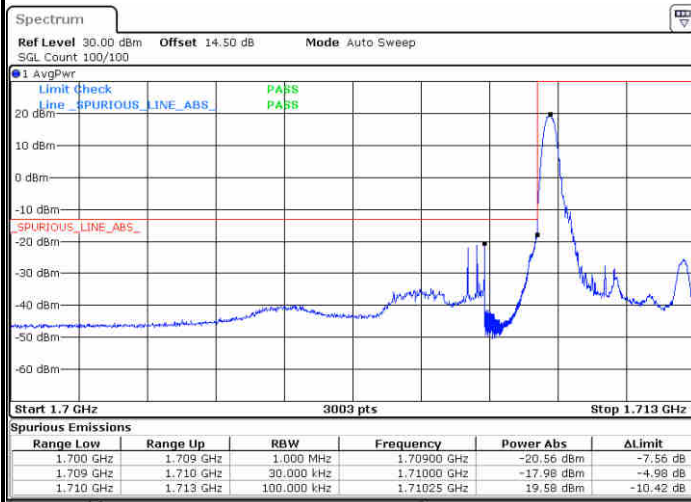
## Highest Band Edge / Full RB



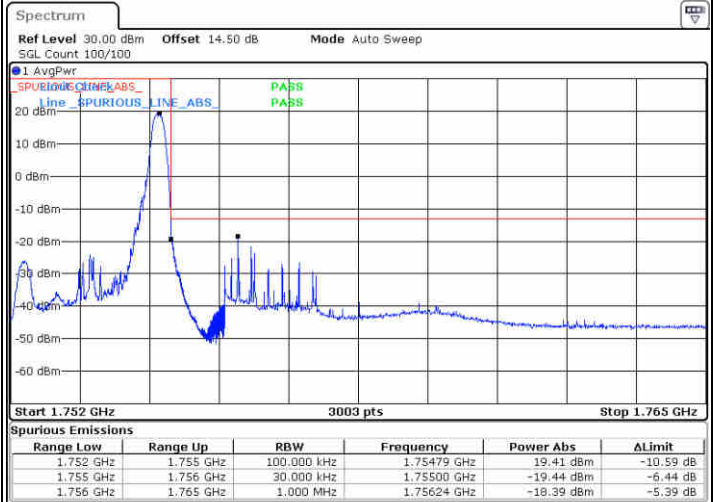


## LTE Band 4 / 3MHz / 16QAM

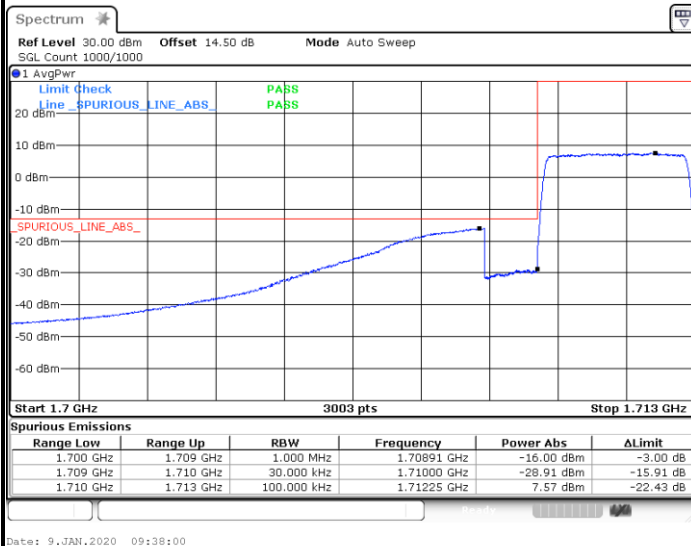
## Lowest Band Edge / 1 RB



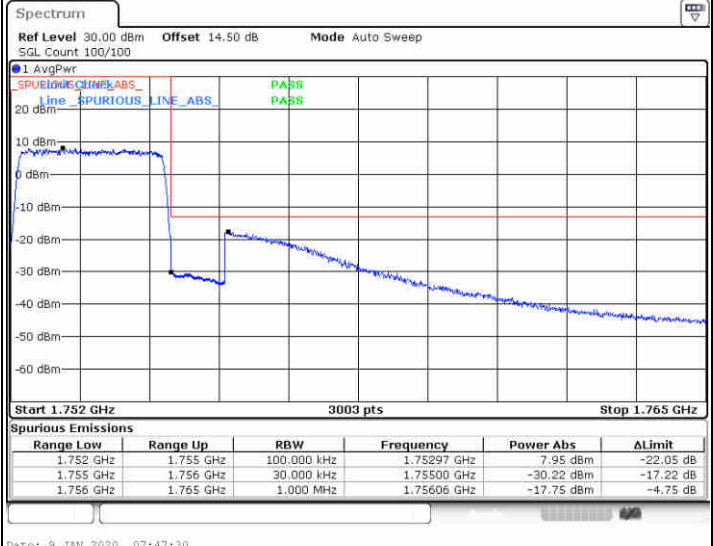
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



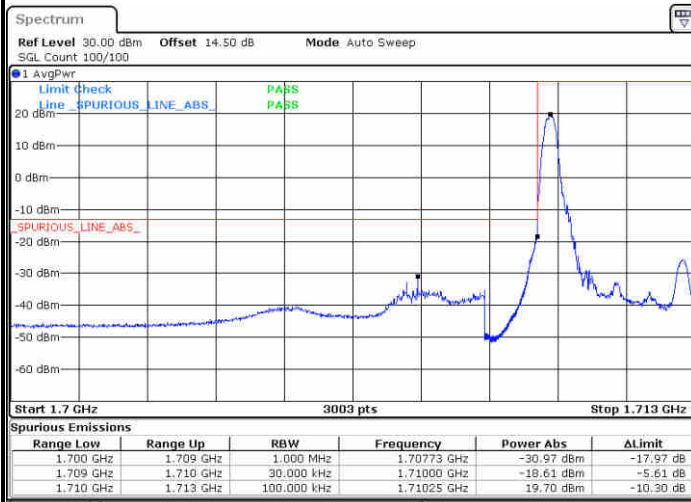
## Highest Band Edge / Full RB



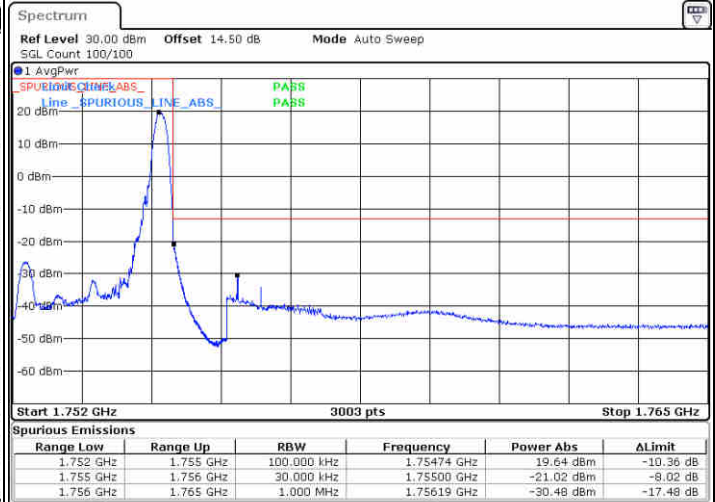


## LTE Band 4 / 3MHz / 64QAM

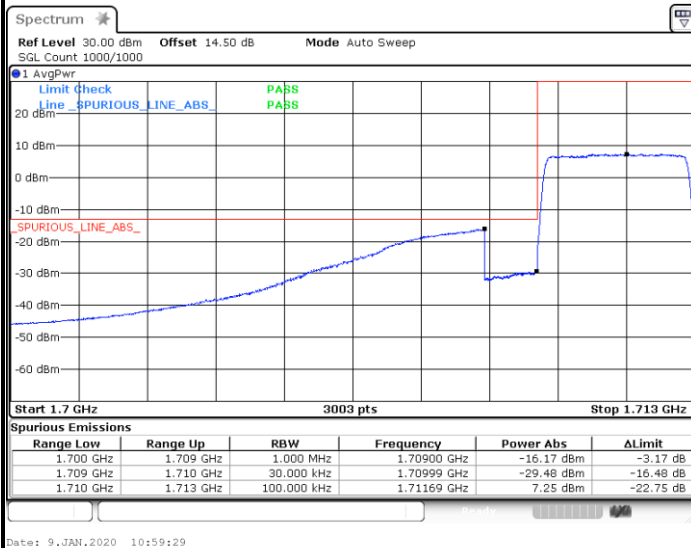
## Lowest Band Edge / 1 RB



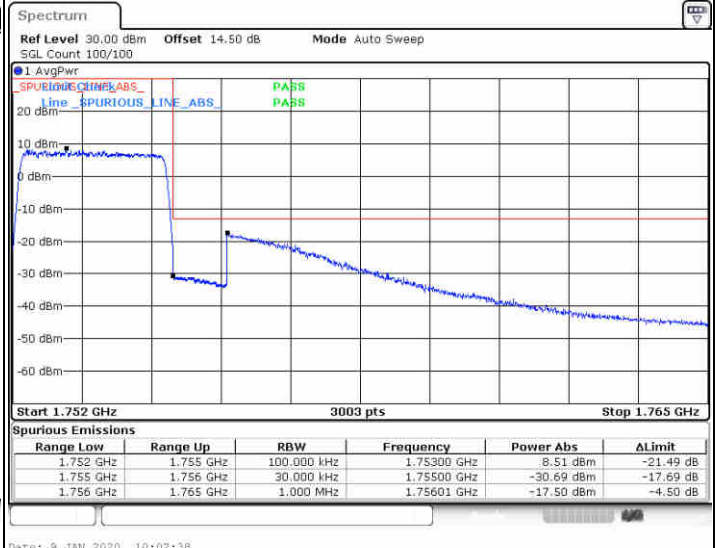
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



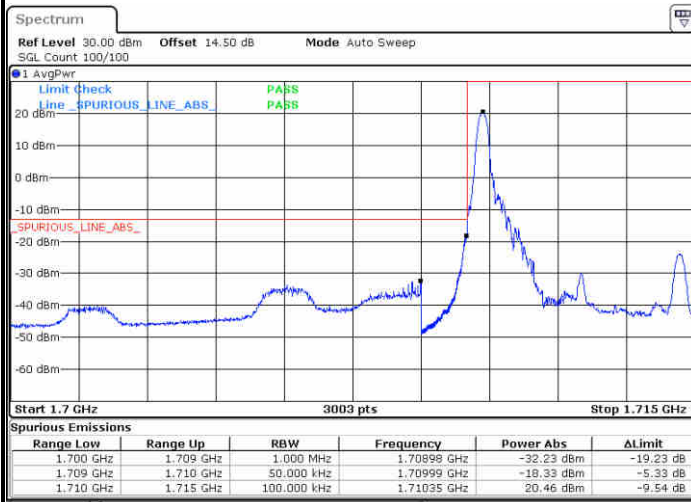
## Highest Band Edge / Full RB





## LTE Band 4 / 5MHz / QPSK

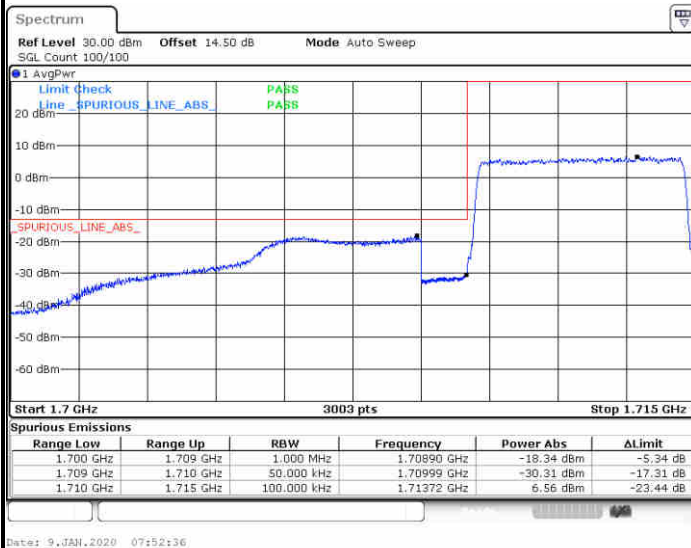
## Lowest Band Edge / 1 RB



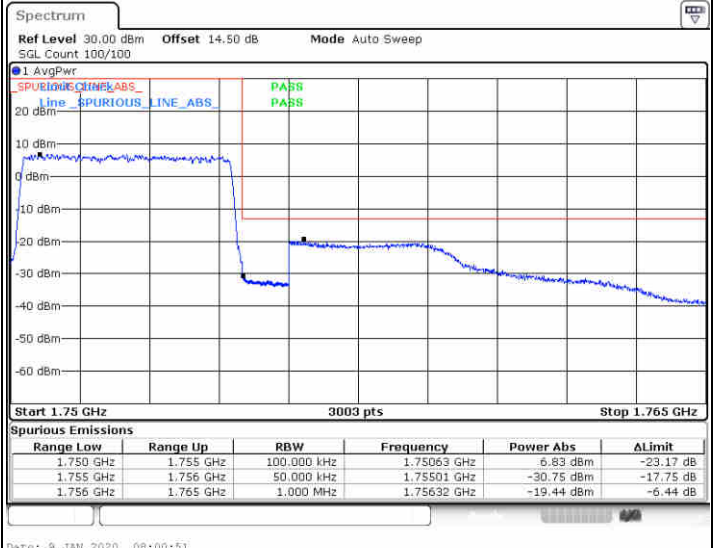
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



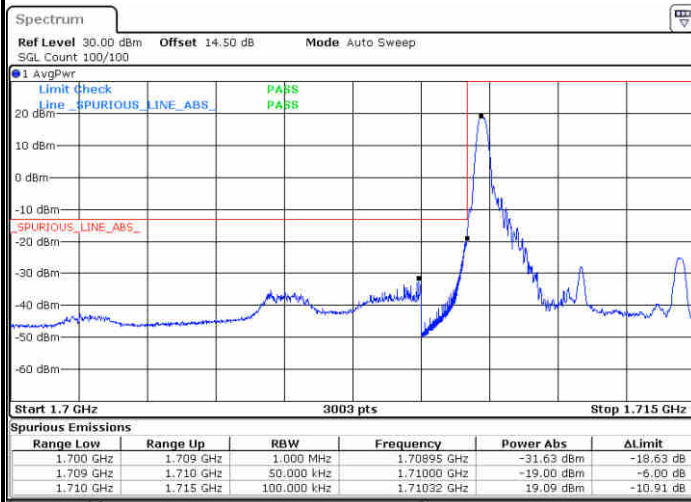
## Highest Band Edge / Full RB



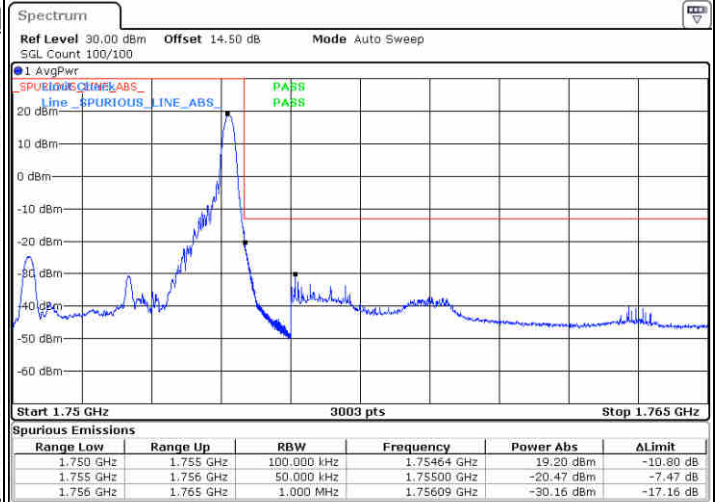


## LTE Band 4 / 5MHz / 16QAM

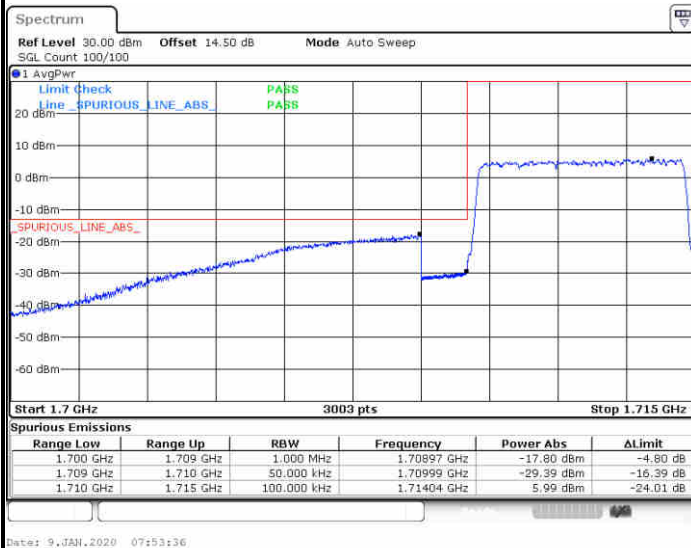
## Lowest Band Edge / 1RB



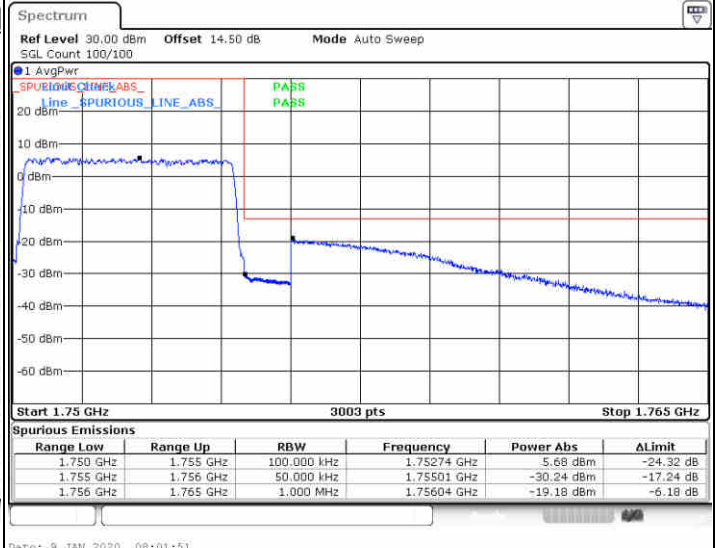
## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



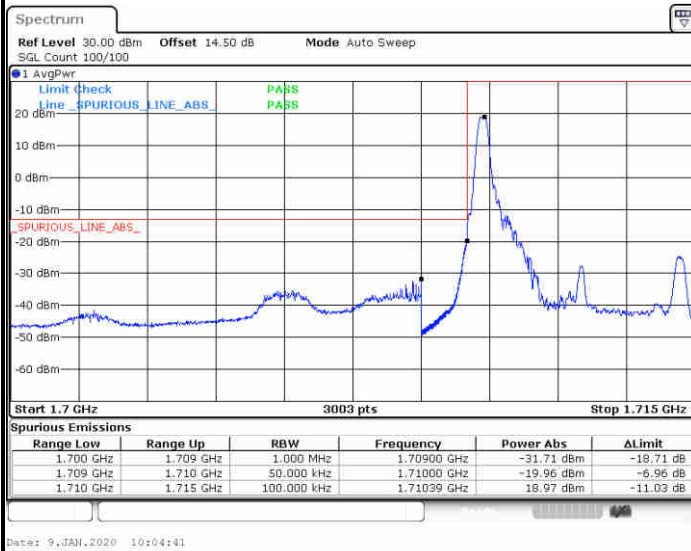
## Highest Band Edge / Full RB



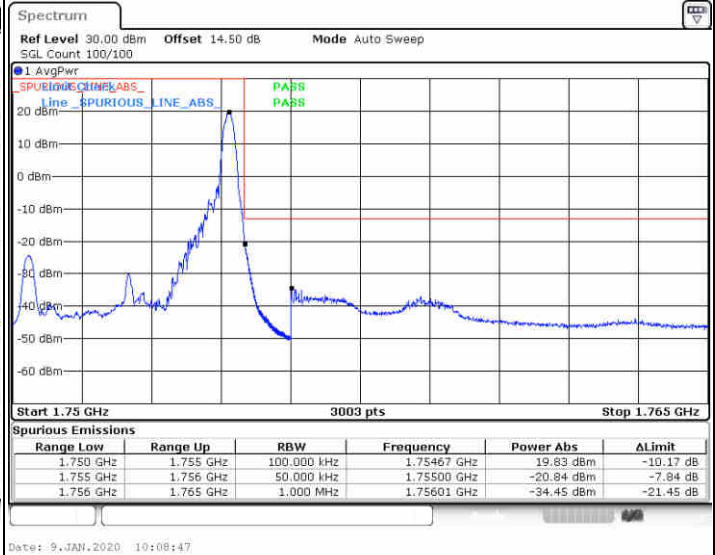


## LTE Band 4 / 5MHz / 64QAM

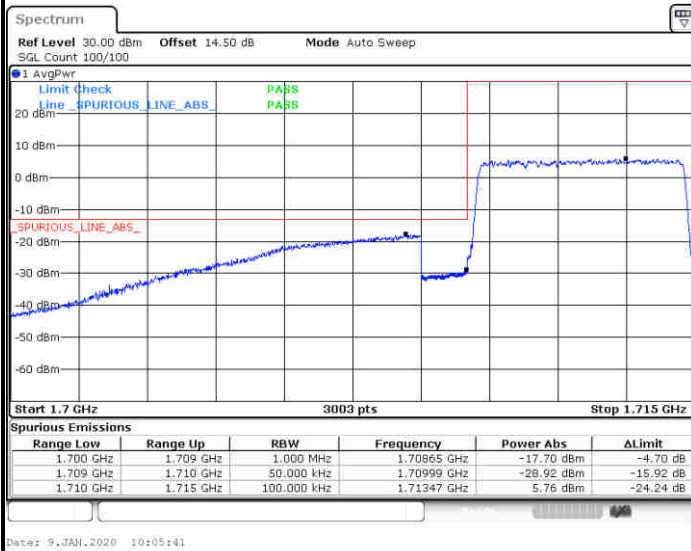
## Lowest Band Edge / 1RB



## Highest Band Edge / 1 RB



## Lowest Band Edge / Full RB



## Highest Band Edge / Full RB

