

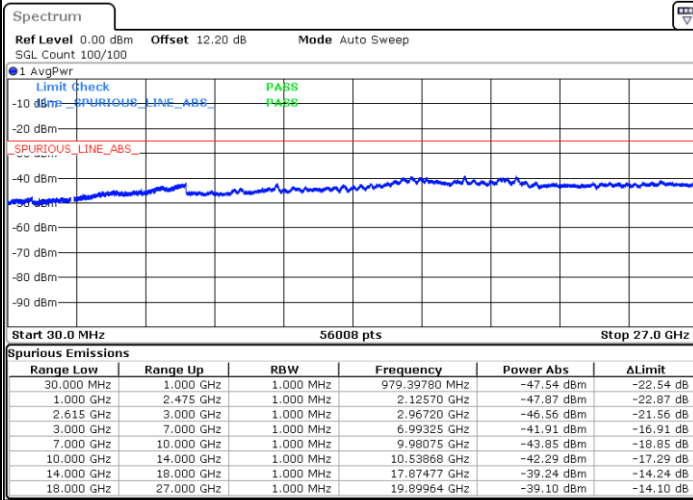


## LTE Band 7C / 15MHz+15MHz

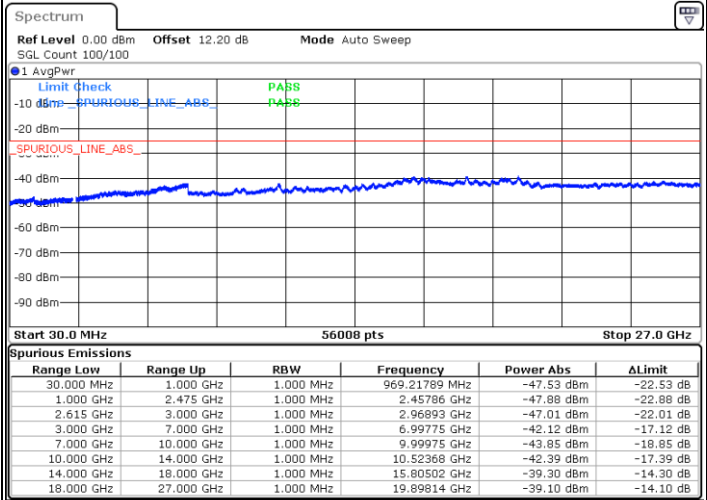
## 64QAM

## Highest Channel / 1RB0 and 1RB74

## Highest Channel / 1RB74 and 1RB0



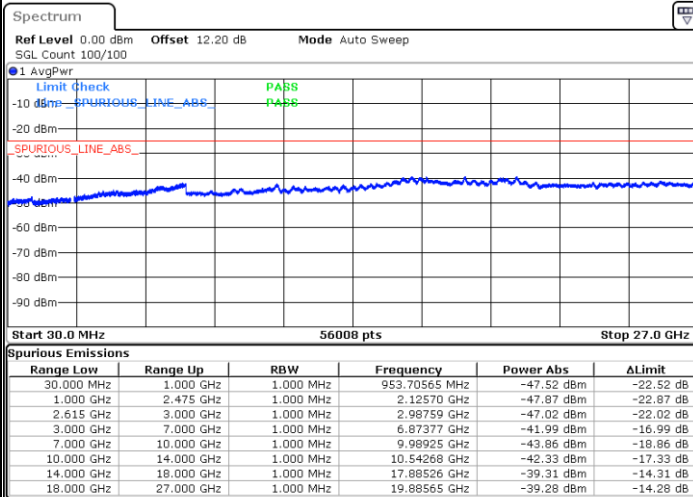
Date: 19 MAY 2020 06:51:57



Date: 19 MAY 2020 06:50:54

## Highest Channel / FullIRB

## N/A



Date: 19 MAY 2020 06:57:13

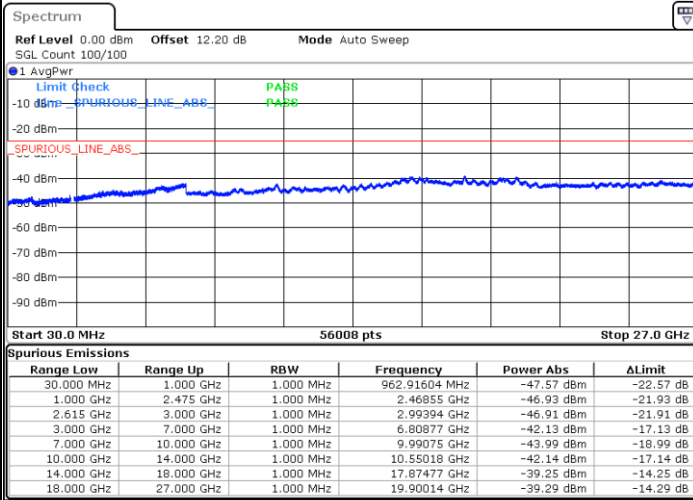


## LTE Band 7C / 15MHz+20MHz

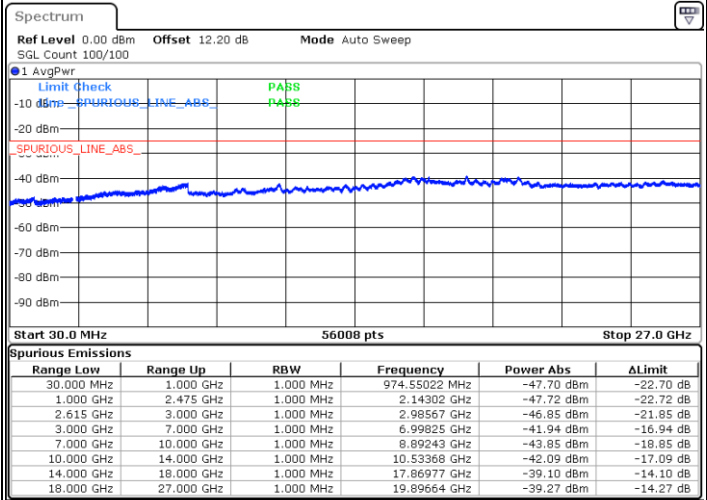
## 64QAM

## Lowest Channel / 1RB0 and 1RB99

## Lowest Channel / 1RB74 and 1RB0



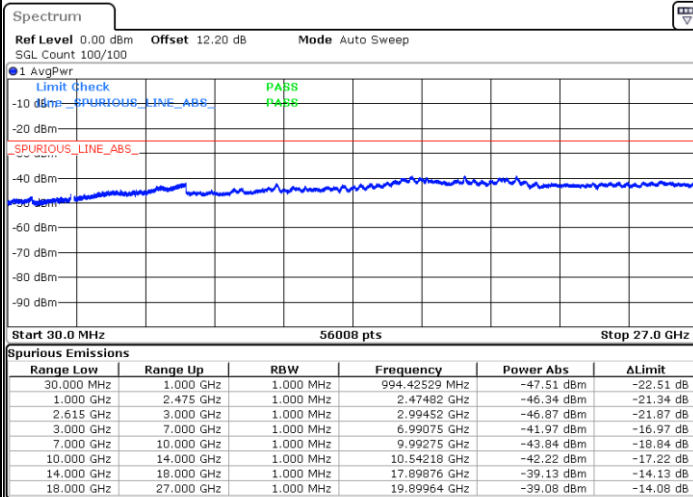
Date: 19 MAY 2020 07:20:05



Date: 19 MAY 2020 07:12:52

## Lowest Channel / FullIRB

## N/A



Date: 19 MAY 2020 07:21:08

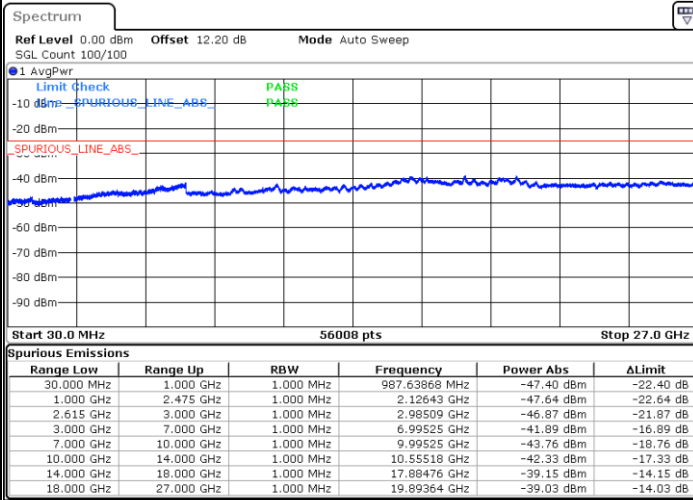


## LTE Band 7C / 15MHz+20MHz

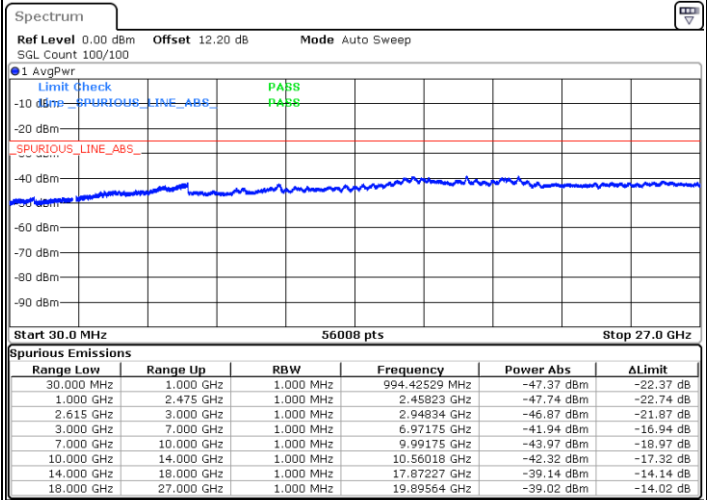
## 64QAM

## Middle Channel / 1RB0 and 1RB99

## Middle Channel / 1RB74 and 1RB0



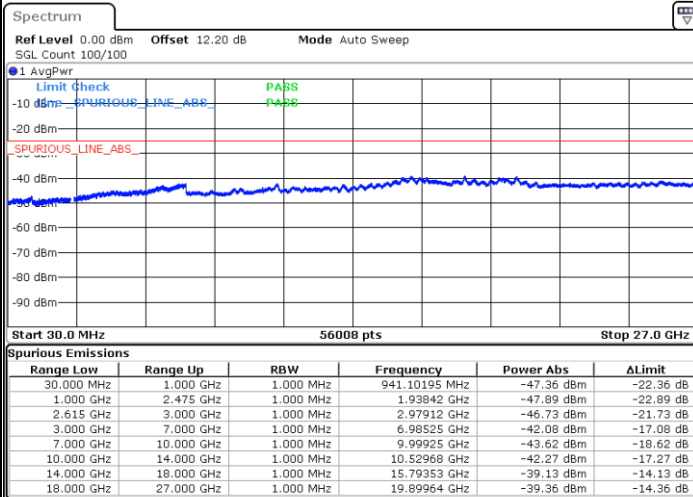
Date: 19 MAY 2020 07:30:25



Date: 19 MAY 2020 07:35:40

## Middle Channel / FullIRB

## N/A



Date: 19 MAY 2020 07:29:21

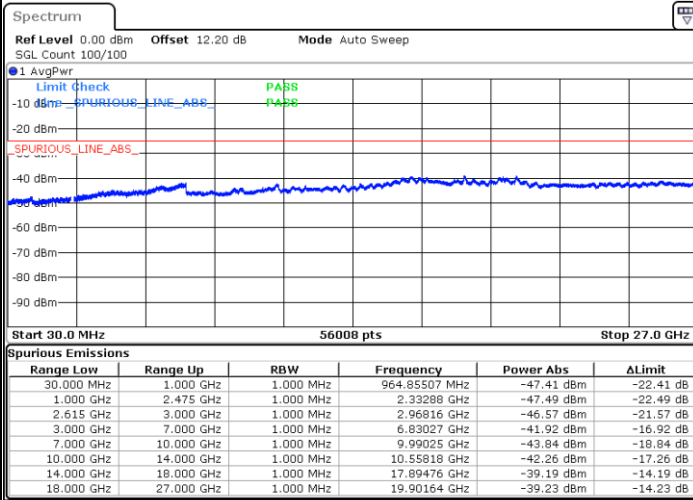


## LTE Band 7C / 15MHz+20MHz

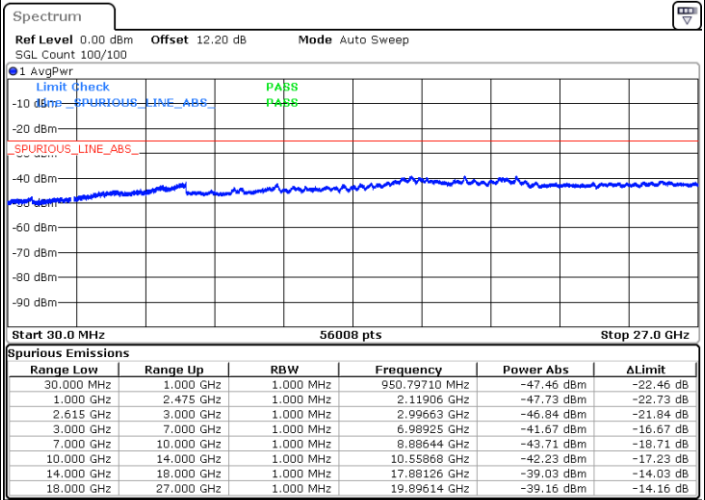
## 64QAM

## Highest Channel / 1RB0 and 1RB99

## Highest Channel / 1RB74 and 1RB0



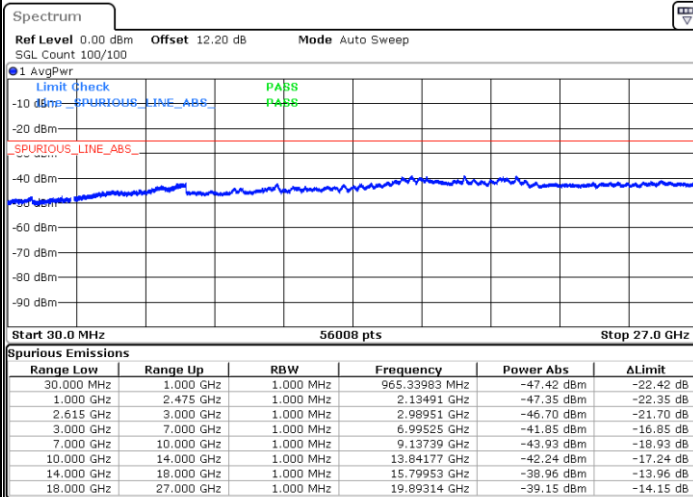
Date: 19 MAY 2020 07:51:01



Date: 19 MAY 2020 07:49:58

## Highest Channel / FullIRB

## N/A



Date: 19 MAY 2020 07:56:17

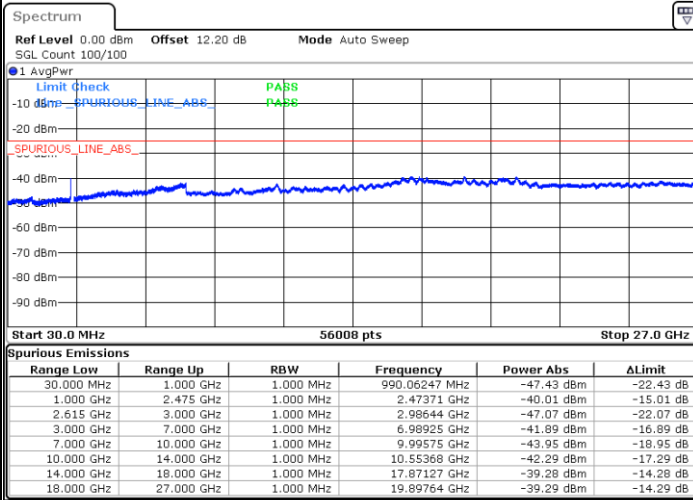


## LTE Band 7C / 20MHz+10MHz

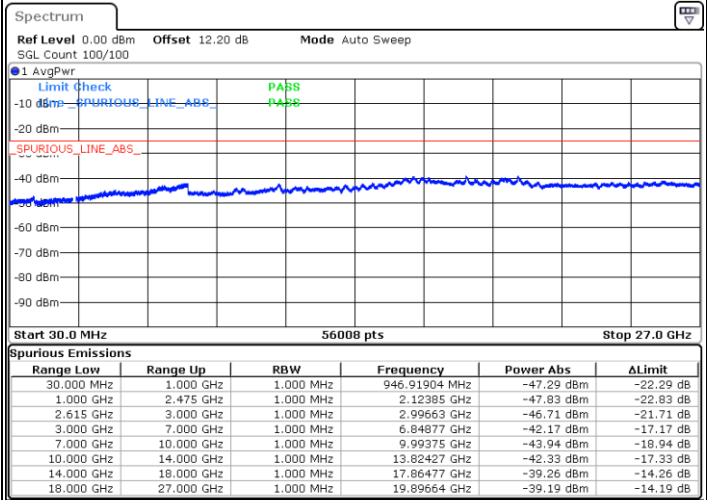
## 64QAM

## Lowest Channel / 1RB0 and 1RB49

## Lowest Channel / 1RB99 and 1RB0



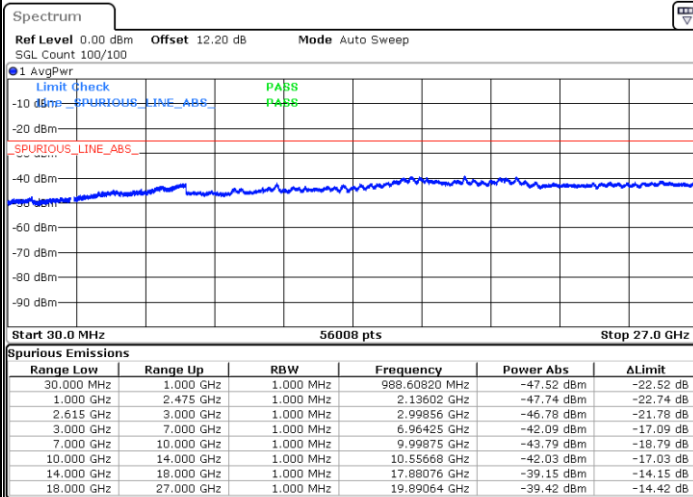
Date: 19 MAY 2020 05:04:58



Date: 19 MAY 2020 04:59:42

## Lowest Channel / FullIRB

## N/A



Date: 19 MAY 2020 05:06:01

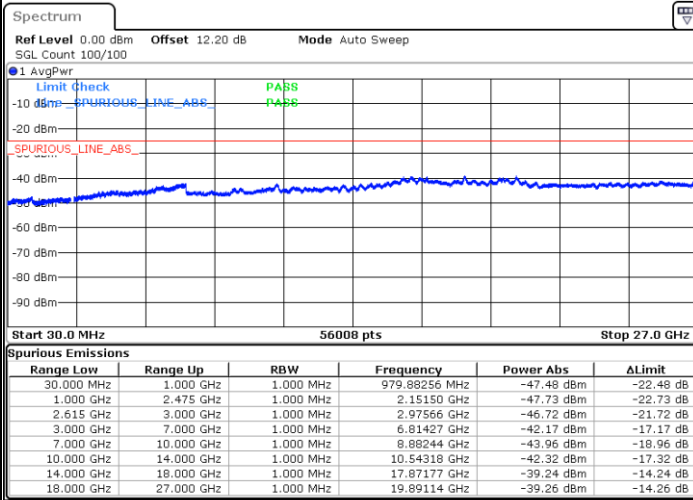


## LTE Band 7C / 20MHz+10MHz

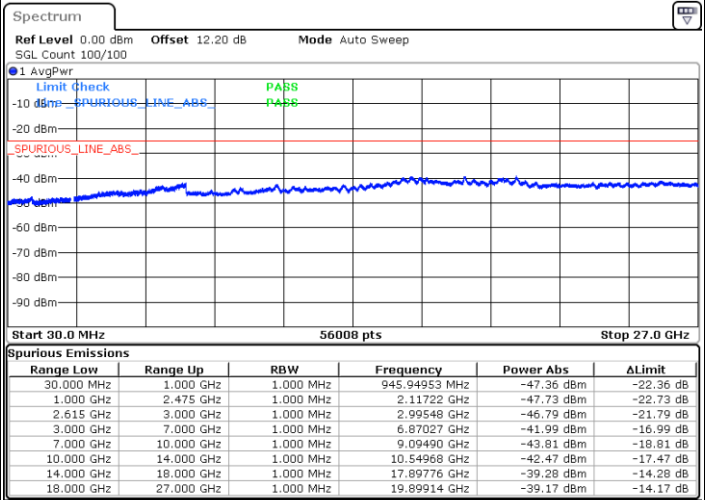
## 64QAM

## Middle Channel / 1RB0 and 1RB49

## Middle Channel / 1RB99 and 1RB0



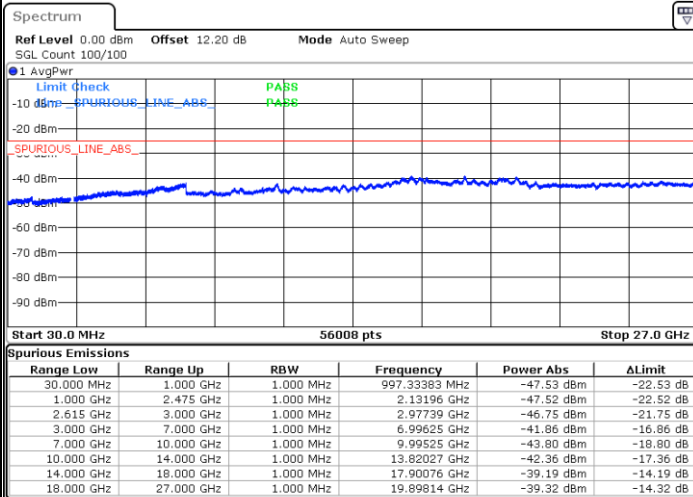
Date: 19 MAY 2020 05:16:03



Date: 19 MAY 2020 05:21:20

## Middle Channel / FullIRB

## N/A



Date: 19 MAY 2020 05:15:00

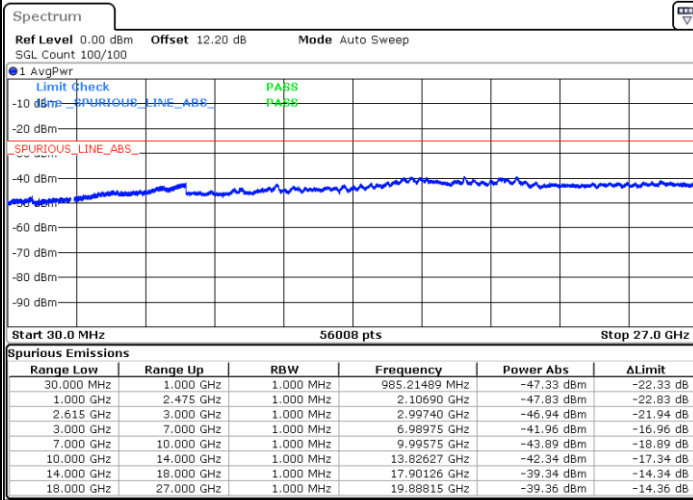


## LTE Band 7C / 20MHz+10MHz

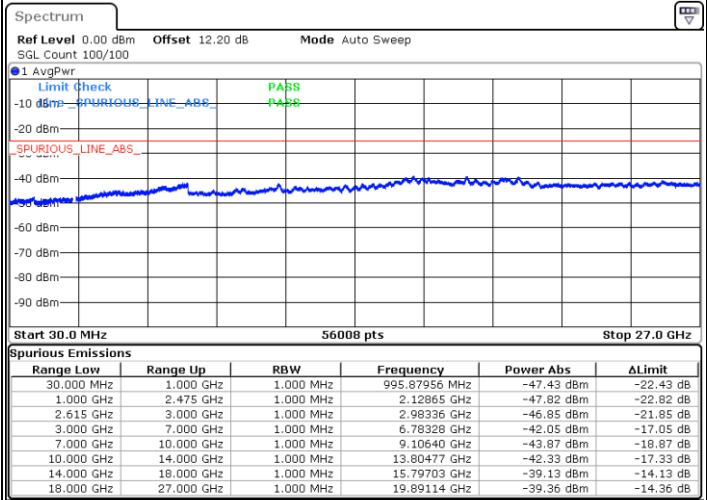
## 64QAM

## Highest Channel / 1RB0 and 1RB49

## Highest Channel / 1RB99 and 1RB0



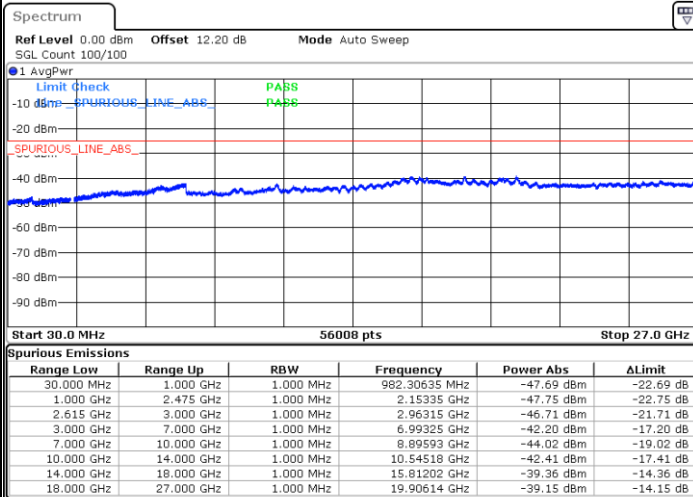
Date: 19 MAY 2020 05:46:32



Date: 19 MAY 2020 05:45:29

## Highest Channel / FullIRB

## N/A



Date: 19 MAY 2020 05:51:49

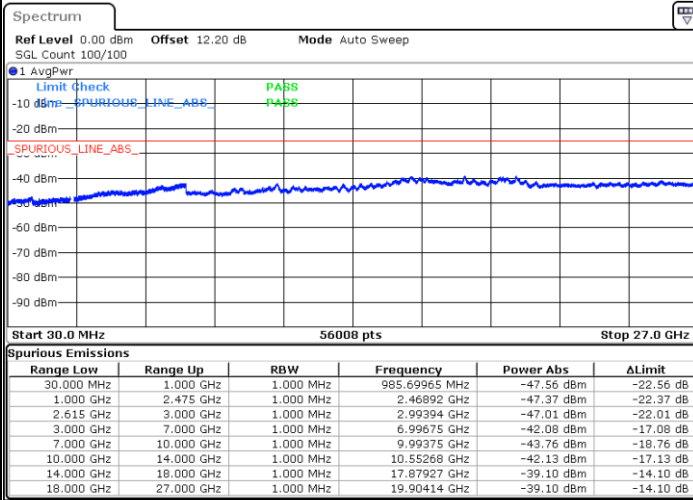


## LTE Band 7C / 20MHz+15MHz

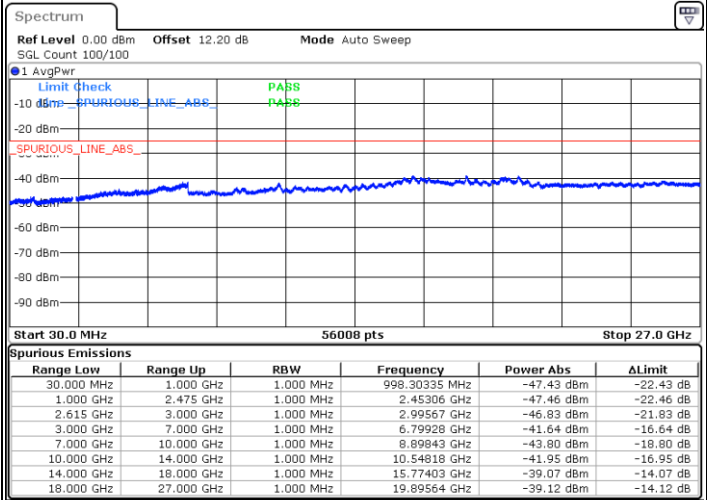
## 64QAM

## Lowest Channel / 1RB0 and 1RB74

## Lowest Channel / 1RB99 and 1RB0



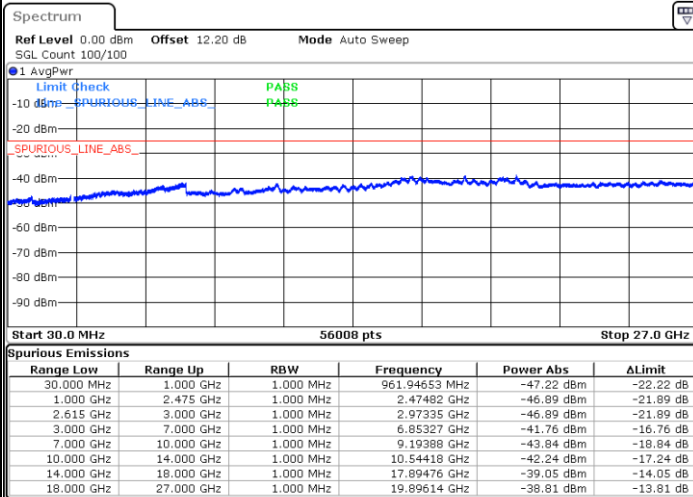
Date: 19 MAY 2020 08:16:43



Date: 19 MAY 2020 08:11:27

## Lowest Channel / FullIRB

## N/A



Date: 19 MAY 2020 08:17:46



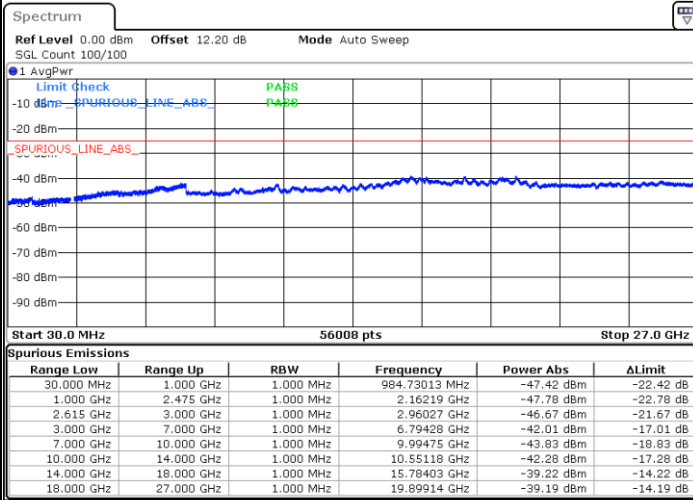


## LTE Band 7C / 20MHz+15MHz

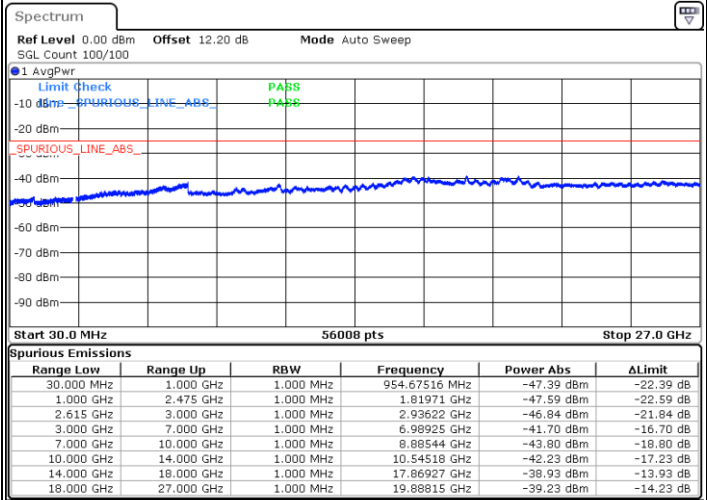
## 64QAM

## MiddleChannel / 1RB0 and 1RB74

## Middle Channel / 1RB99 and 1RB0



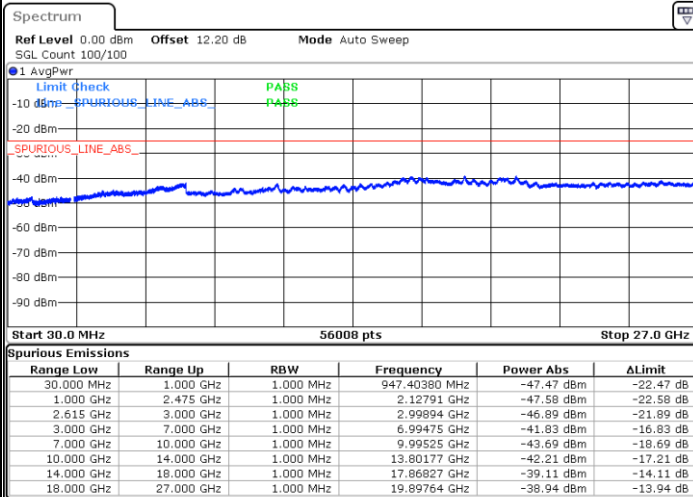
Date: 20 MAY 2020 00:41:13



Date: 20 MAY 2020 00:46:32

## Middle Channel / FullIRB

## N/A



Date: 20 MAY 2020 00:40:09

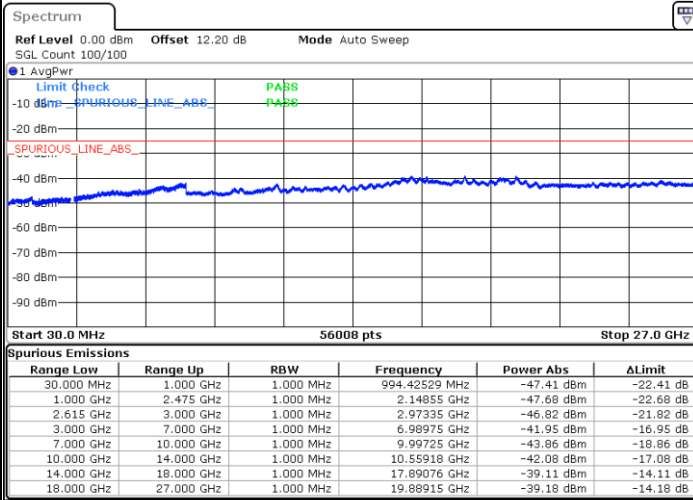


## LTE Band 7C / 20MHz+15MHz

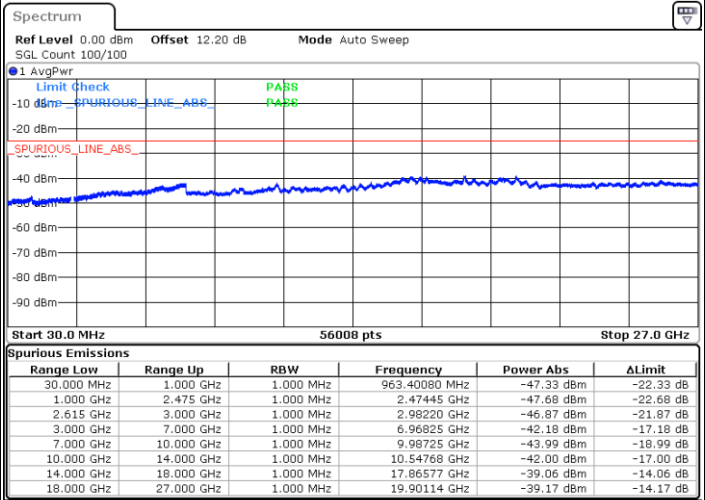
## 64QAM

## Highest Channel / 1RB0 and 1RB74

## Highest Channel / 1RB99 and 1RB0



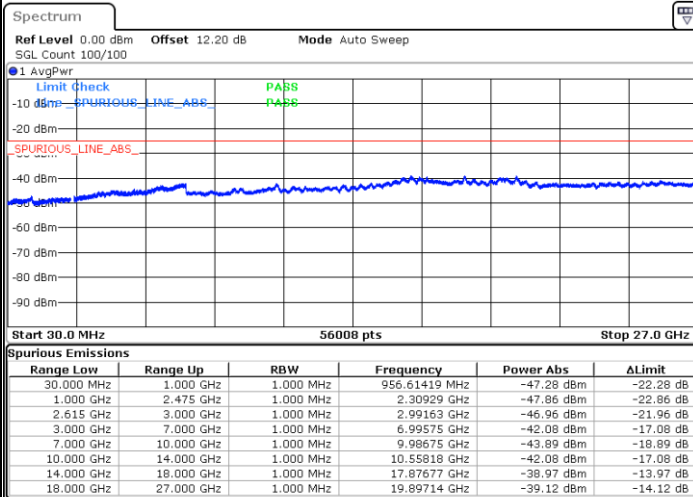
Date: 20 MAY 2020 01:03:20



Date: 20 MAY 2020 01:02:17

## Highest Channel / FullIRB

## N/A



Date: 20 MAY 2020 01:08:41

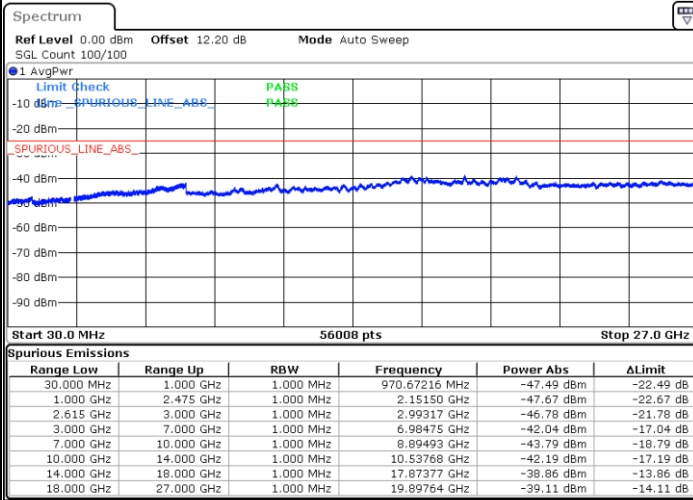


## LTE Band 7C / 20MHz+20MHz

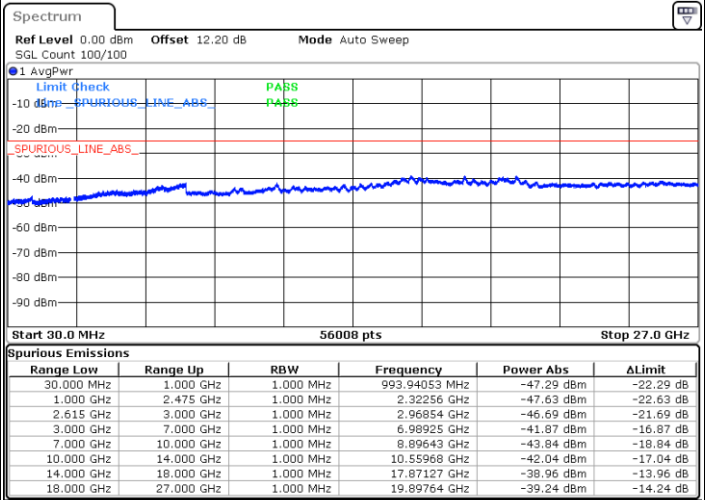
## 64QAM

## Lowest Channel / 1RB0 and 1RB99

## Lowest Channel / 1RB99 and 1RB0



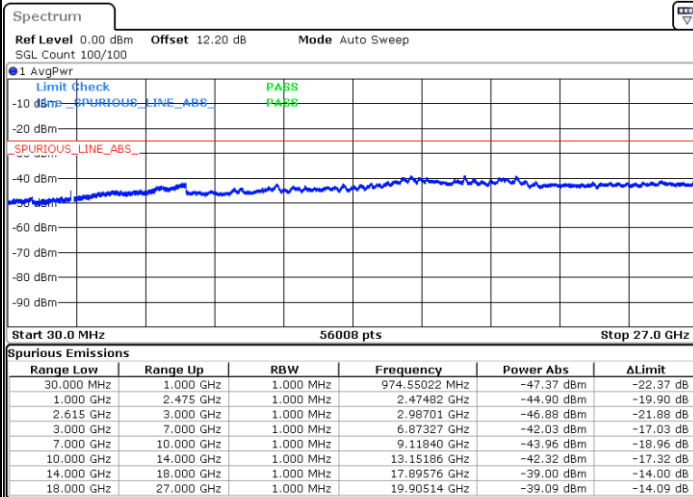
Date: 20 MAY 2020 01:38:57



Date: 20 MAY 2020 01:33:33

## Lowest Channel / FullIRB

## N/A



Date: 20 MAY 2020 01:40:01

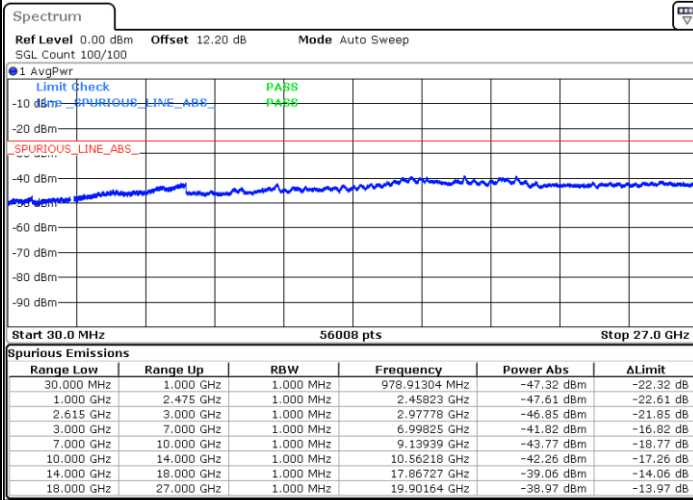


## LTE Band 7C / 20MHz+20MHz

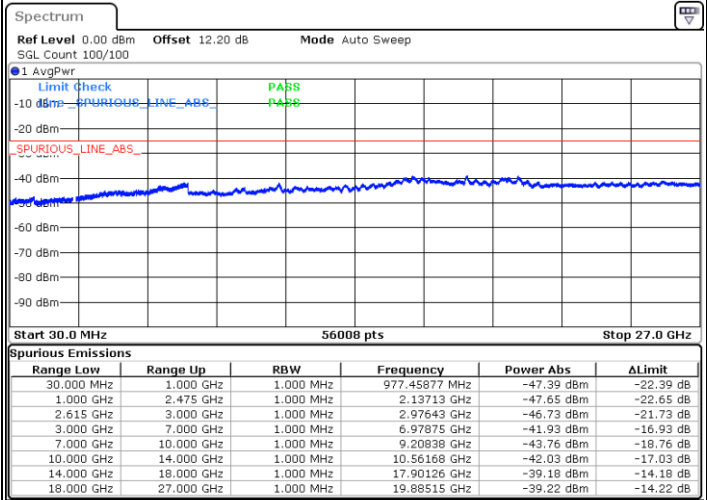
## 64QAM

## Middle Channel / 1RB0 and 1RB99

## Middle Channel / 1RB99 and 1RB0



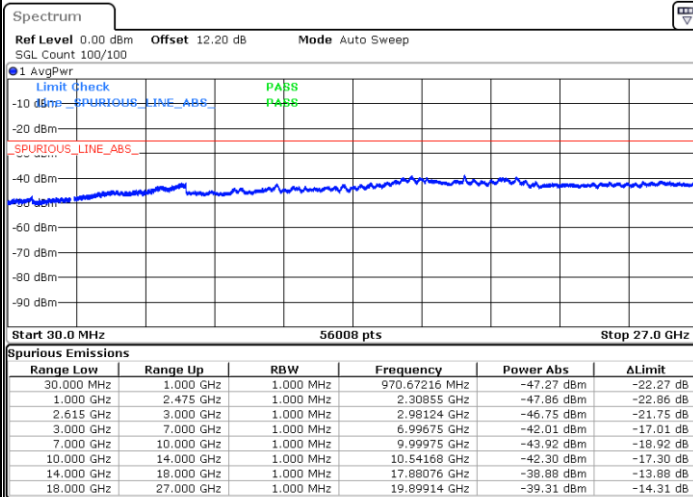
Date: 20 MAY 2020 01:56:24



Date: 20 MAY 2020 02:01:43

## Middle Channel / FullIRB

## N/A



Date: 20 MAY 2020 01:55:20

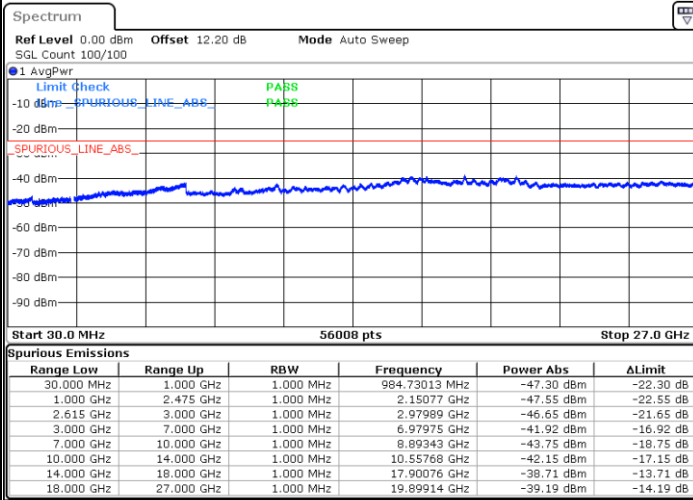


## LTE Band 7C / 20MHz+20MHz

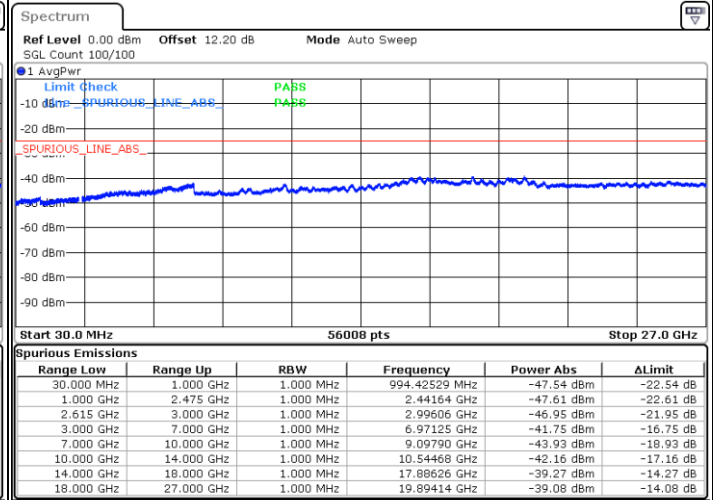
## 64QAM

## Highest Channel / 1RB0 and 1RB99

## Highest Channel / 1RB99 and 1RB0



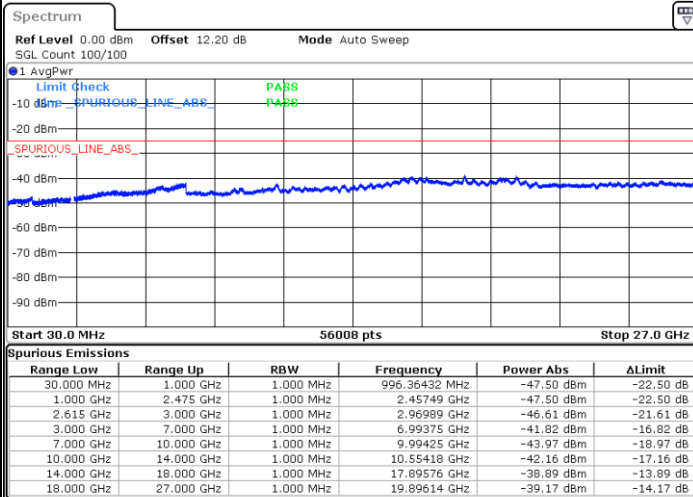
Date: 20 MAY 2020 02:34:24



Date: 20 MAY 2020 02:33:21

## Highest Channel / FullIRB

## N/A



Date: 20 MAY 2020 02:39:45



## LTE Band 12

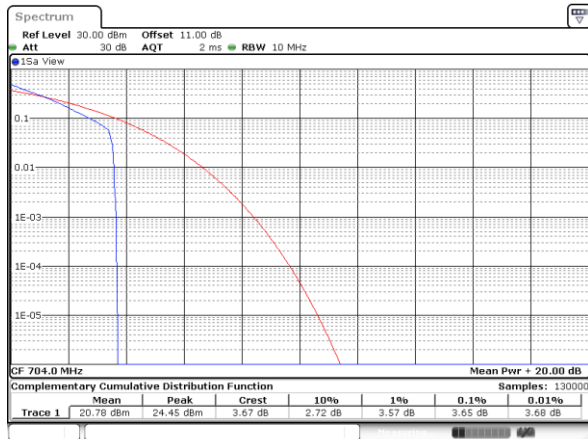
## Peak-to-Average Ratio

| Mode       | LTE Band 12 / 10MHz |         |       |         |             |
|------------|---------------------|---------|-------|---------|-------------|
| Mod.       | QPSK                |         | 16QAM |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB | 1RB   | Full RB | Result      |
| Lowest CH  | 3.65                | 5.01    | 5.51  | 5.77    | PASS        |
| Middle CH  | 3.68                | 4.96    | 5.62  | 5.86    |             |
| Highest CH | 3.45                | 5.01    | 5.36  | 5.86    |             |
| Mode       | LTE Band 12 / 10MHz |         |       |         |             |
| Mod.       | 64QAM               |         |       |         | Limit: 13dB |
| RB Size    | 1RB                 | Full RB |       |         | Result      |
| Lowest CH  | 6.32                | 6.32    | -     | -       | PASS        |
| Middle CH  | 7.36                | 6.20    | -     | -       |             |
| Highest CH | 7.19                | 6.26    | -     | -       |             |

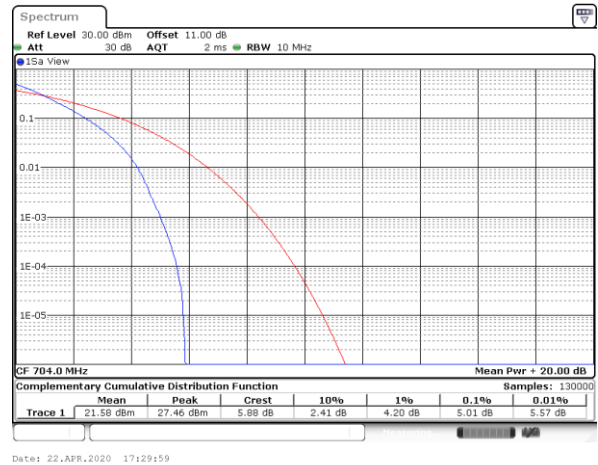


## LTE Band 12 / 10MHz / QPSK

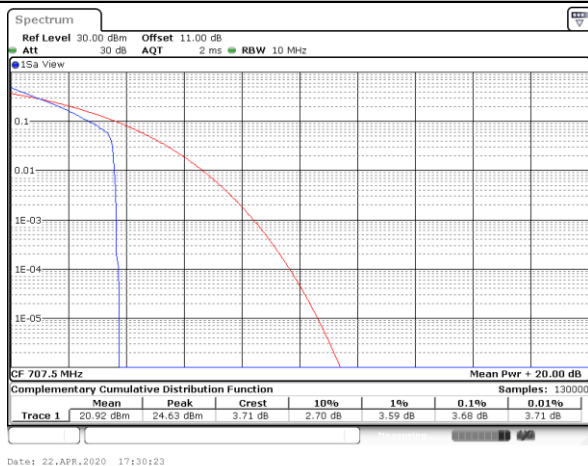
## Lowest Channel / 1RB



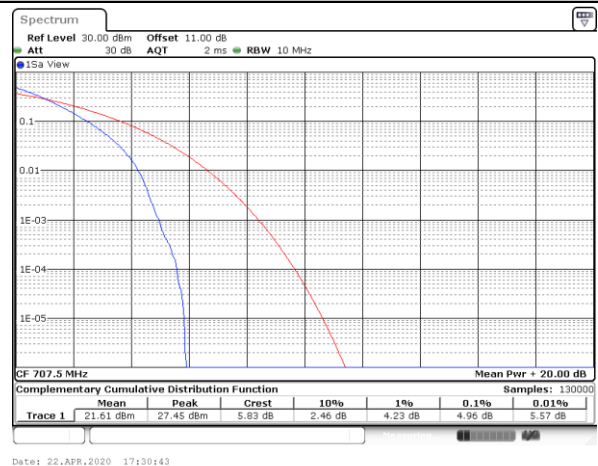
## Lowest Channel / Full RB



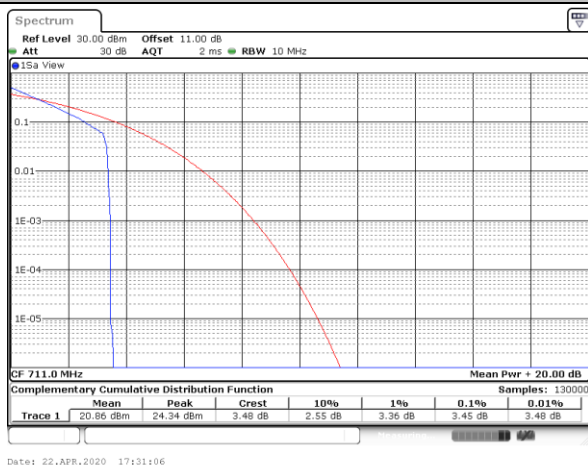
## Middle Channel / 1RB



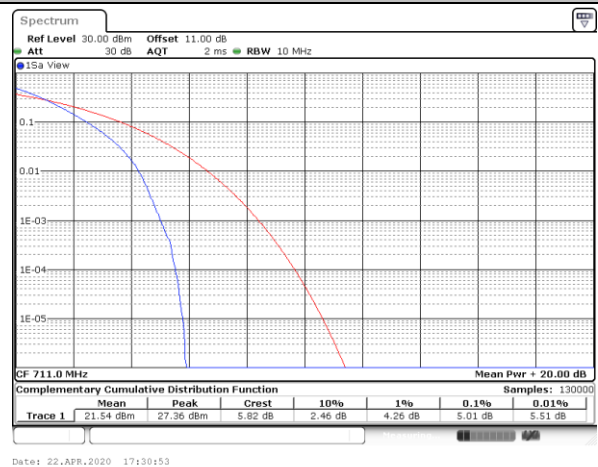
## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB



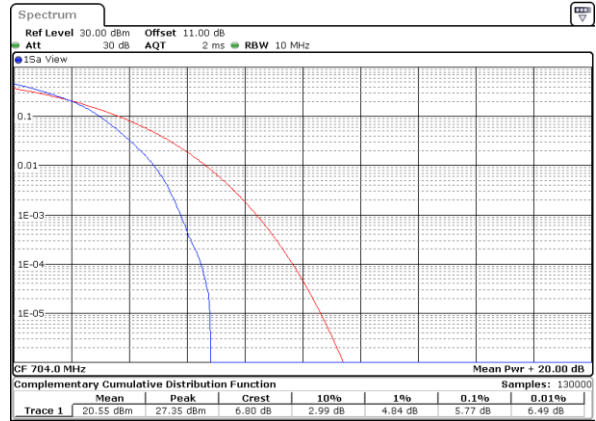


## LTE Band 12 / 10MHz / 16QAM

## Lowest Channel / 1RB



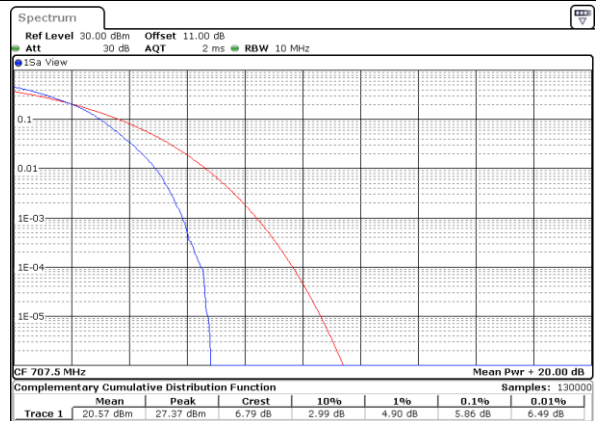
## Lowest Channel / Full RB



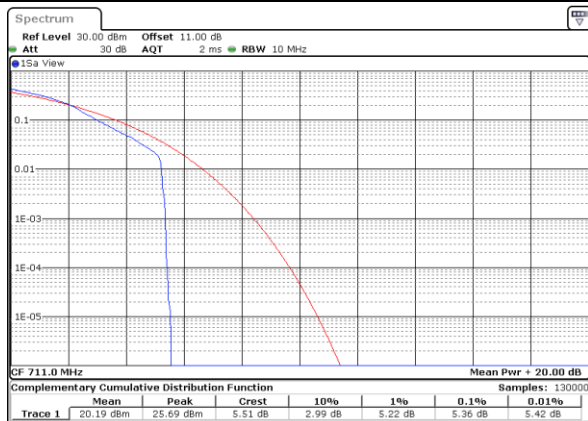
## Middle Channel / 1RB



## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB

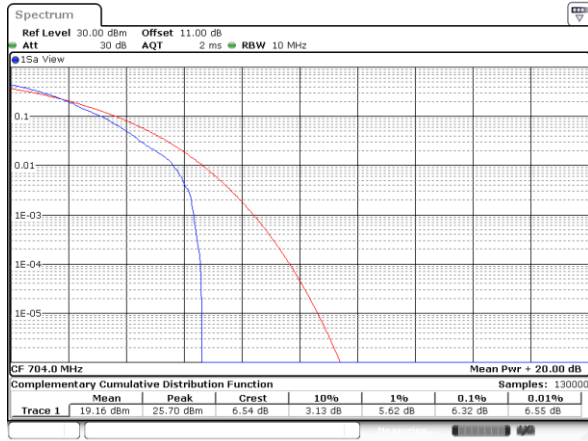




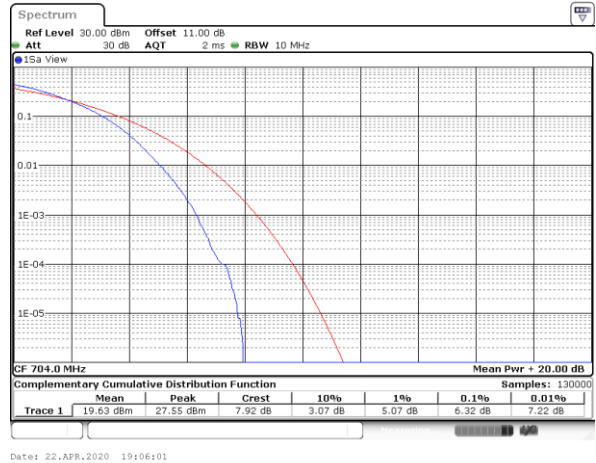


## LTE Band 12 / 10MHz / 64QAM

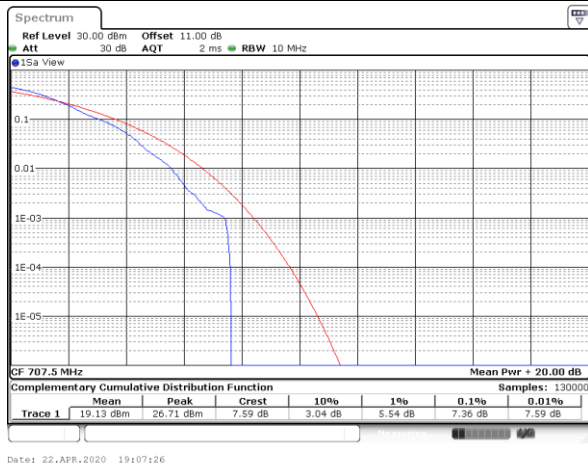
## Lowest Channel / 1RB



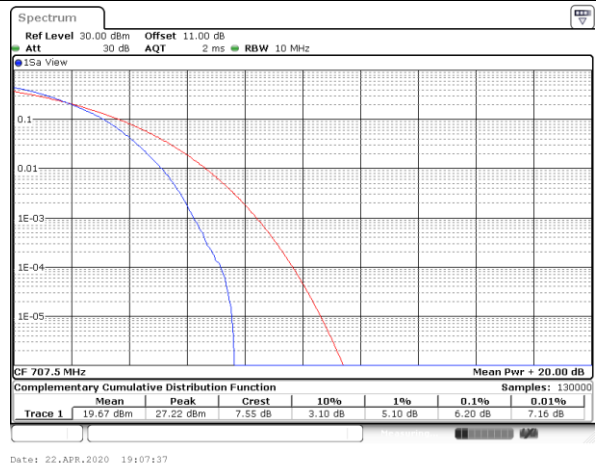
## Lowest Channel / Full RB



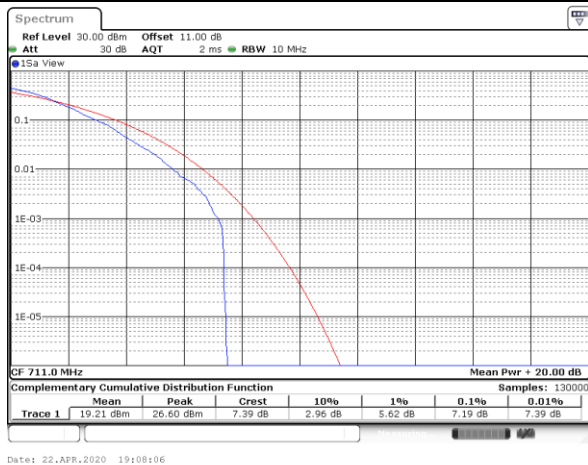
## Middle Channel / 1RB



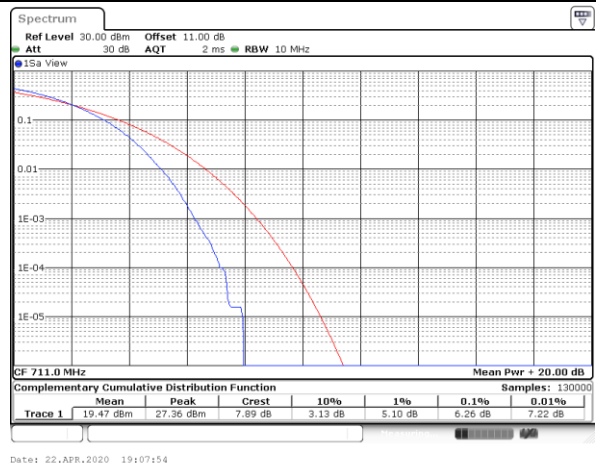
## Middle Channel / Full RB



## Highest Channel / 1RB



## Highest Channel / Full RB



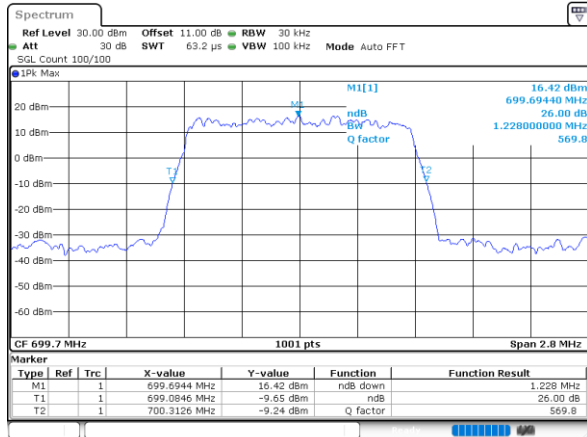
**26dB Bandwidth**

| Mode       | LTE Band 12 : 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                       | 1.22  | 2.96  | 3.03  | 4.92  | 4.93  | 9.65  | 9.77  | -     | -     | -     | -     |
| Middle CH  | 1.23                       | 1.23  | 3.03  | 3.05  | 4.89  | 4.79  | 9.81  | 9.93  | -     | -     | -     | -     |
| Highest CH | 1.23                       | 1.22  | 3.02  | 3.03  | 4.89  | 4.91  | 9.71  | 9.67  | -     | -     | -     | -     |
| Mode       | LTE Band 12 : 26dB BW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                     |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                      |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.23                       | -     | 3.03  | -     | 4.91  | -     | 9.95  | -     | -     | -     | -     | -     |
| Middle CH  | 1.23                       | -     | 2.97  | -     | 4.99  | -     | 9.75  | -     | -     | -     | -     | -     |
| Highest CH | 1.23                       | -     | 3.01  | -     | 4.88  | -     | 9.87  | -     | -     | -     | -     | -     |



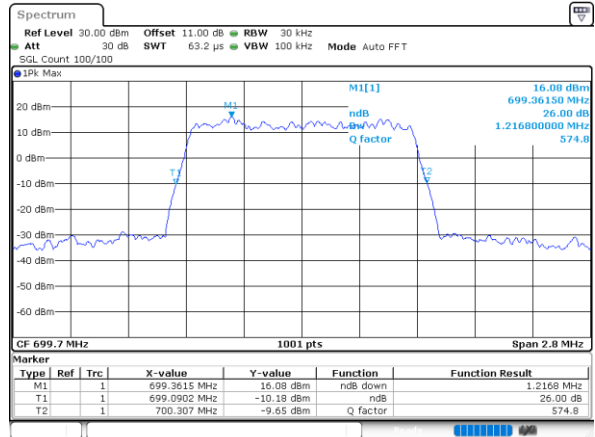
## LTE Band 12

## Lowest Channel / 1.4MHz / QPSK



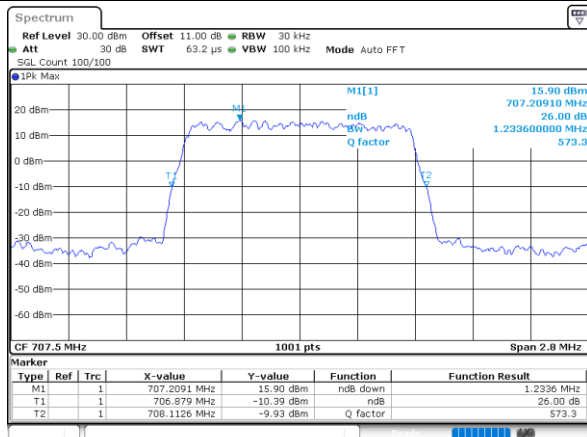
Date: 22.APR.2020 15:38:53

## Lowest Channel / 1.4MHz / 16QAM



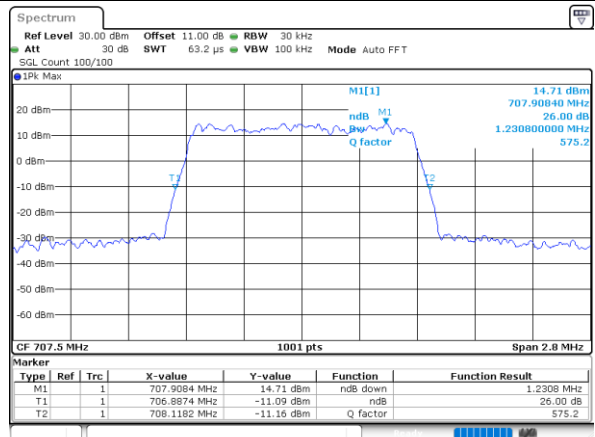
Date: 22.APR.2020 15:38:41

## Middle Channel / 1.4MHz / QPSK



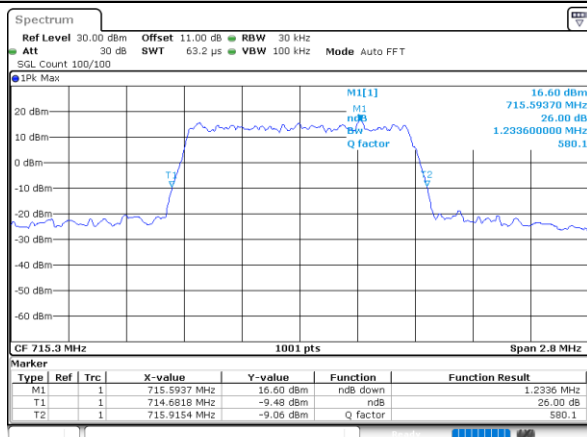
Date: 22.APR.2020 15:44:52

## Middle Channel / 1.4MHz / 16QAM



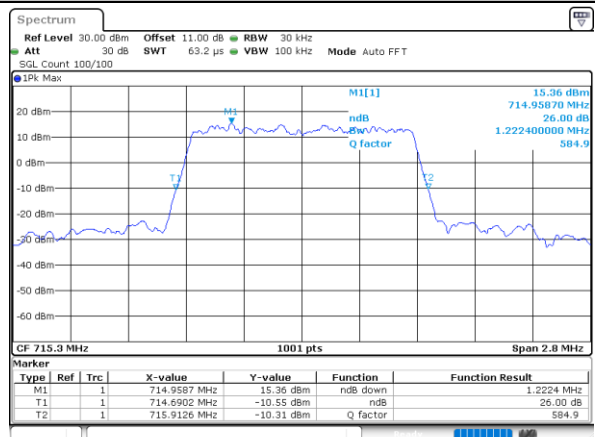
Date: 22.APR.2020 15:45:04

## Highest Channel / 1.4MHz / QPSK



Date: 22.APR.2020 15:47:12

## Highest Channel / 1.4MHz / 16QAM

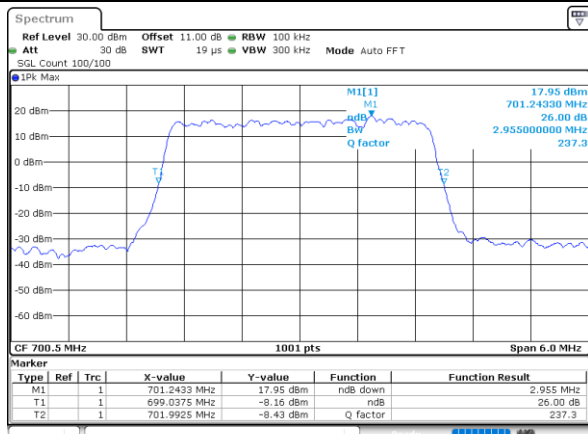


Date: 22.APR.2020 15:47:00

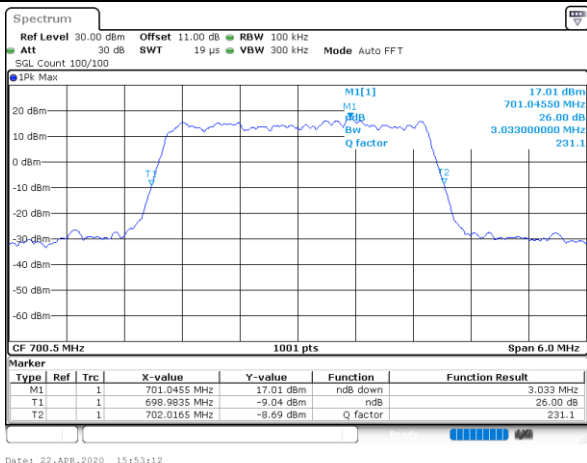


## LTE Band 12

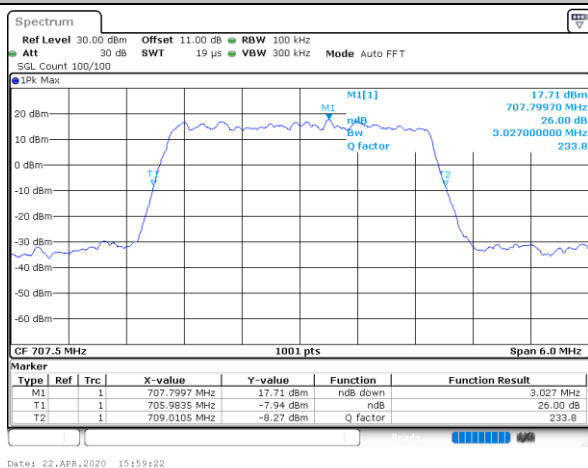
## Lowest Channel / 3MHz / QPSK



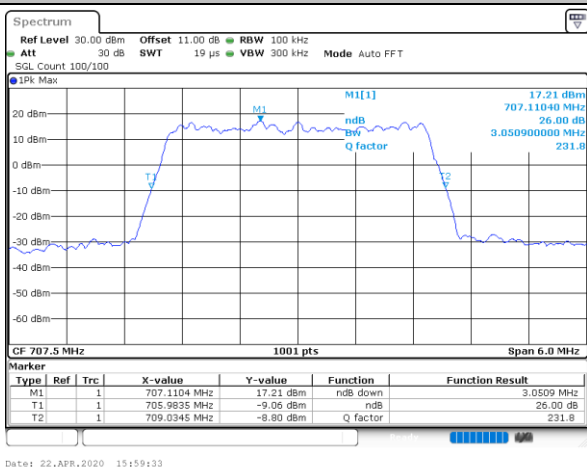
## Lowest Channel / 3MHz / 16QAM



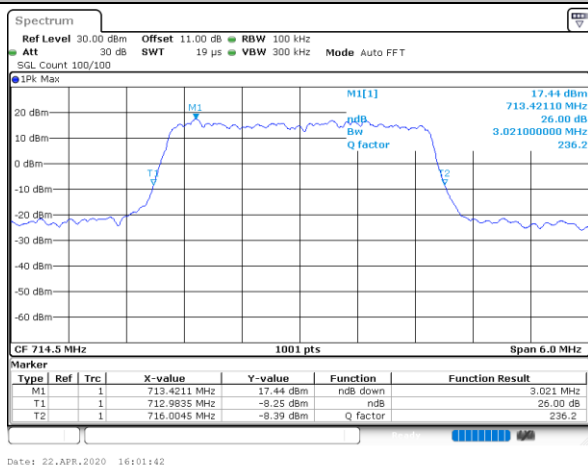
## Middle Channel / 3MHz / QPSK



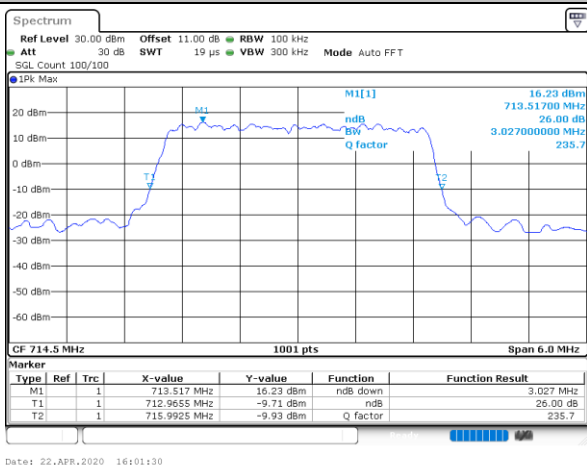
## Middle Channel / 3MHz / 16QAM



## Highest Channel / 3MHz / QPSK



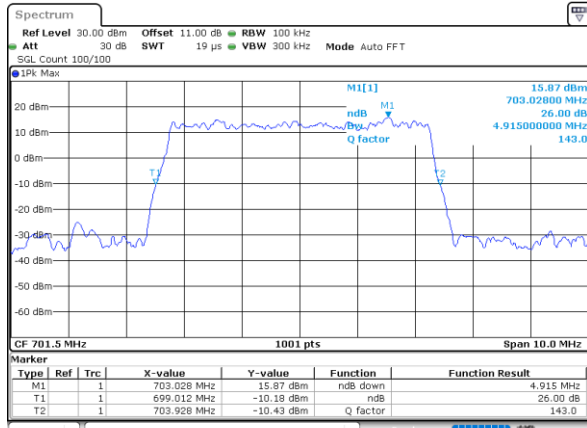
## Highest Channel / 3MHz / 16QAM





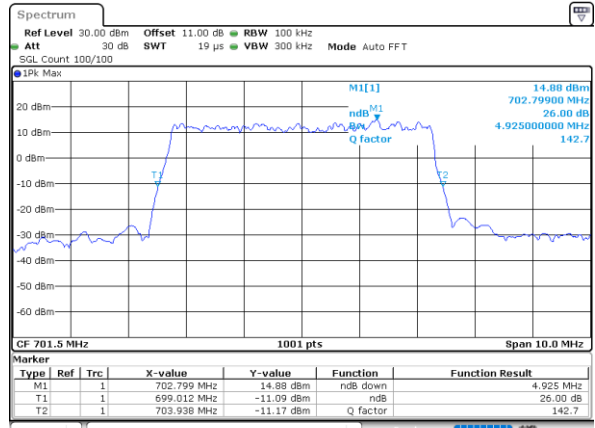
## LTE Band 12

## Lowest Channel / 5MHz / QPSK



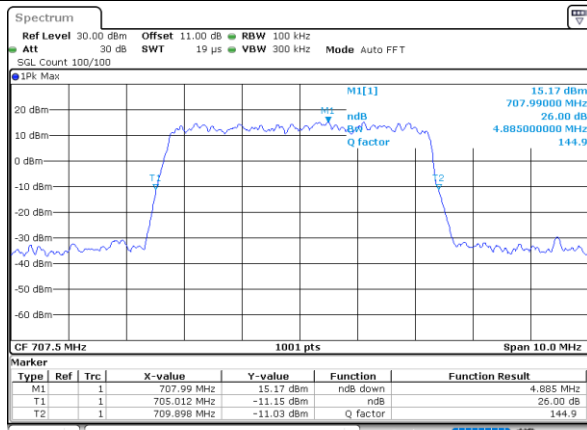
Date: 22.APR.2020 16:07:54

## Lowest Channel / 5MHz / 16QAM



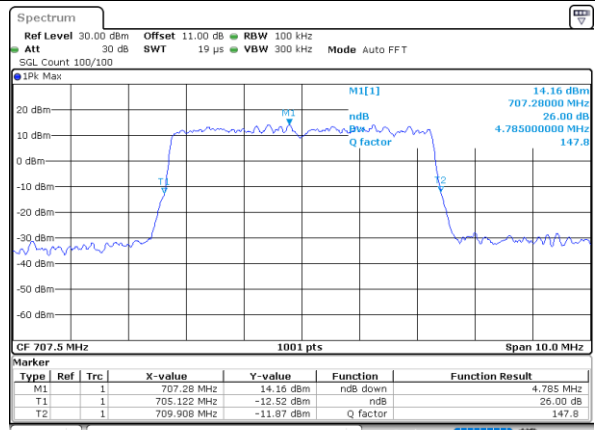
Date: 22.APR.2020 16:07:42

## Middle Channel / 5MHz / QPSK



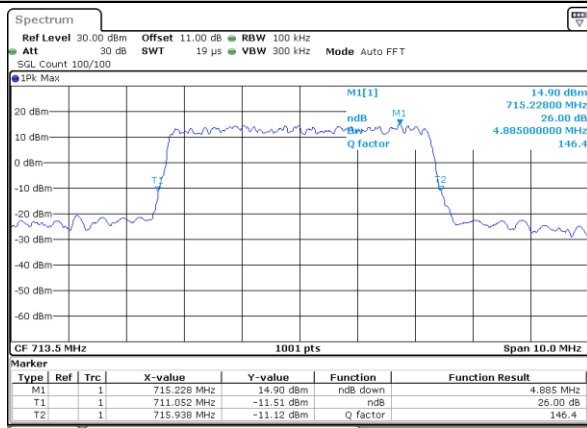
Date: 22.APR.2020 16:13:56

## Middle Channel / 5MHz / 16QAM



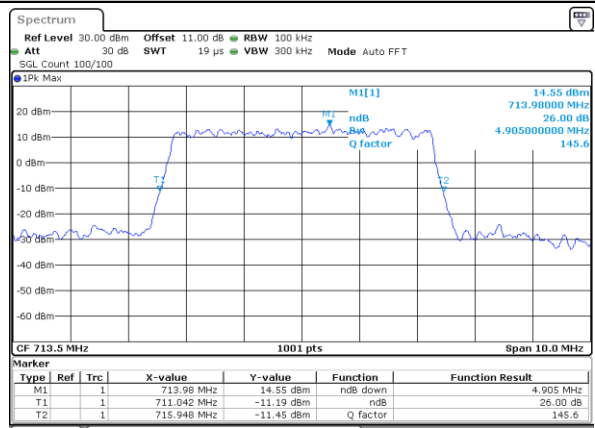
Date: 22.APR.2020 16:14:07

## Highest Channel / 5MHz / QPSK



Date: 22.APR.2020 16:16:16

## Highest Channel / 5MHz / 16QAM

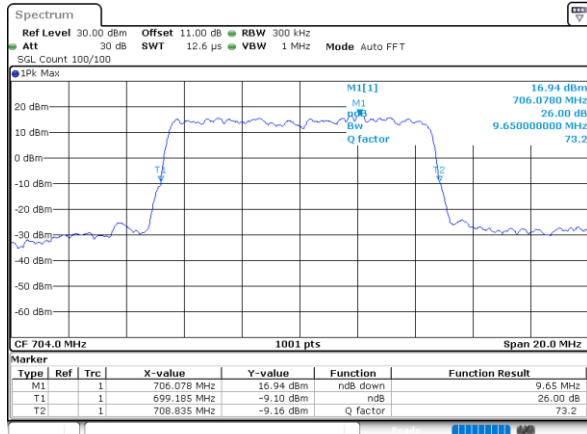


Date: 22.APR.2020 16:16:04



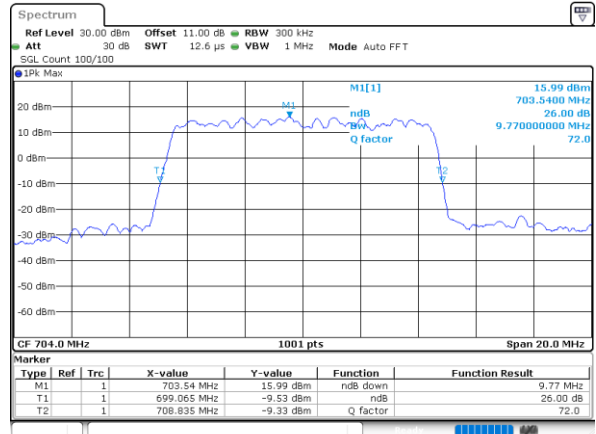
## LTE Band 12

## Lowest Channel / 10MHz / QPSK



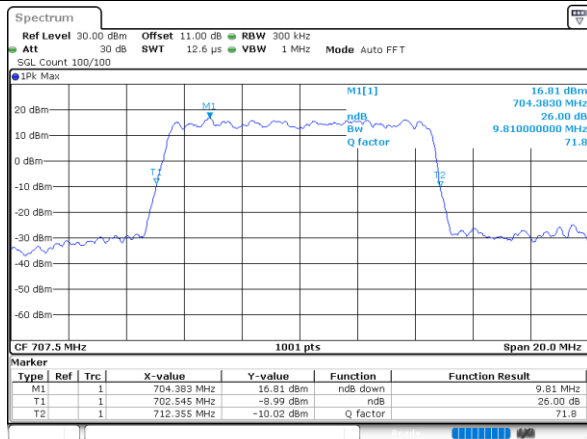
Date: 22.APR.2020 16:22:18

## Lowest Channel / 10MHz / 16QAM



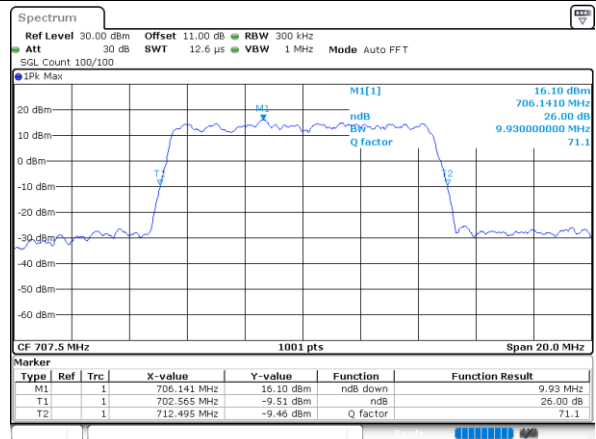
Date: 22.APR.2020 16:22:16

## Middle Channel / 10MHz / QPSK



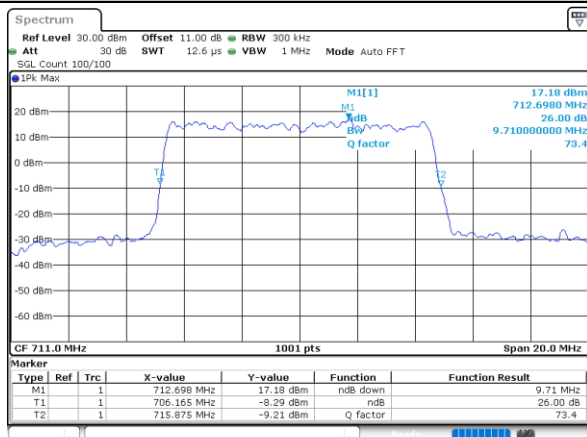
Date: 22.APR.2020 17:14:13

## Middle Channel / 10MHz / 16QAM



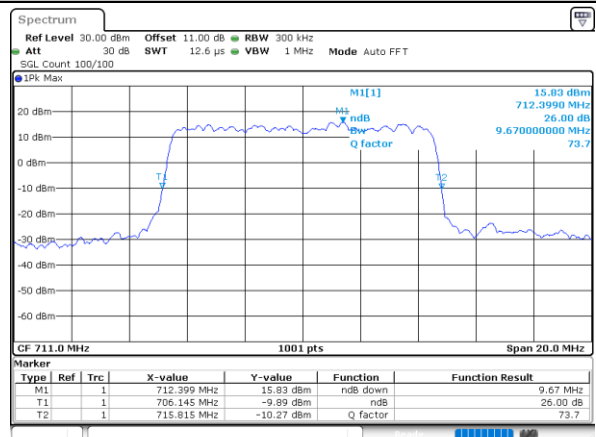
Date: 22.APR.2020 17:14:25

## Highest Channel / 10MHz / QPSK



Date: 22.APR.2020 17:16:34

## Highest Channel / 10MHz / 16QAM

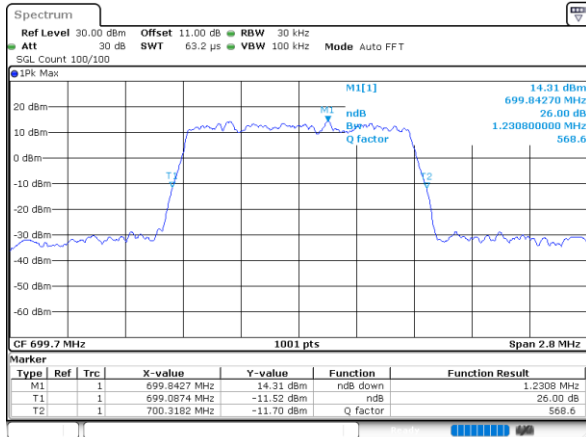


Date: 22.APR.2020 17:16:21



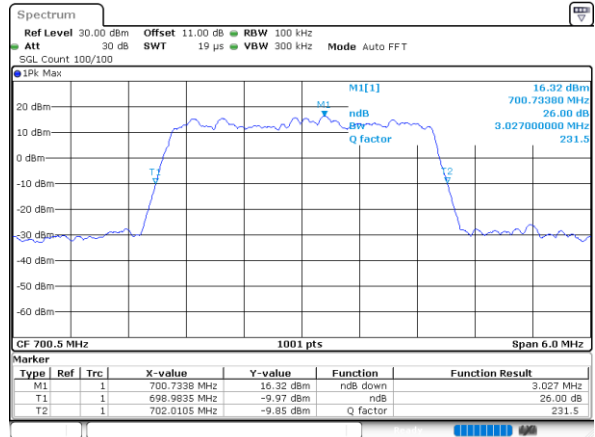
## LTE Band 12

## Lowest Channel / 1.4MHz / 64QAM



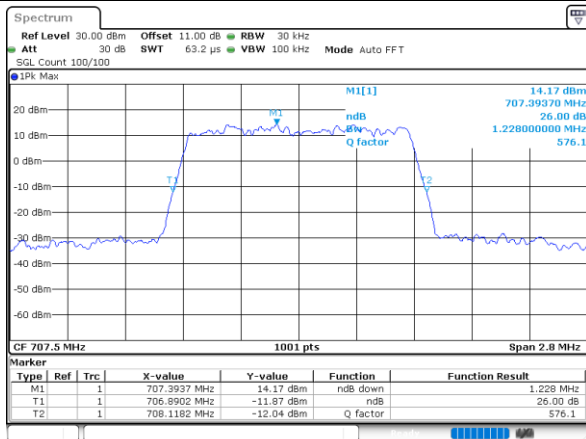
Date: 22.APR.2020 17:35:41

## Lowest Channel / 3MHz / 64QAM



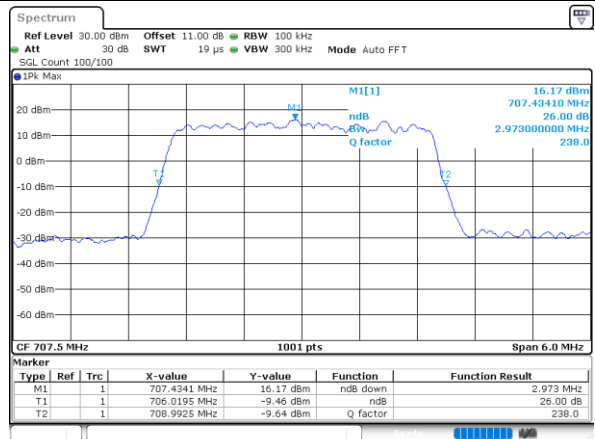
Date: 22.APR.2020 17:42:56

## Middle Channel / 1.4MHz / 64QAM



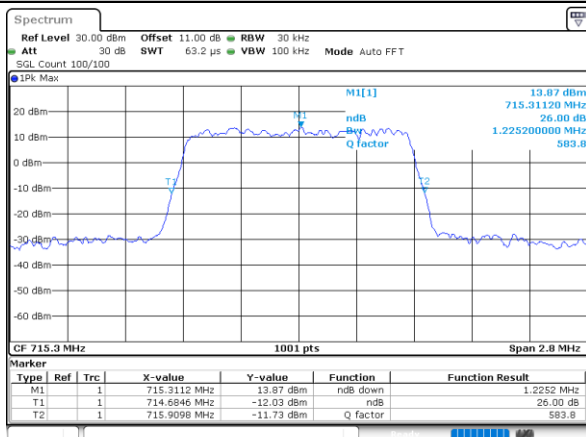
Date: 22.APR.2020 17:38:46

## Middle Channel / 3MHz / 64QAM



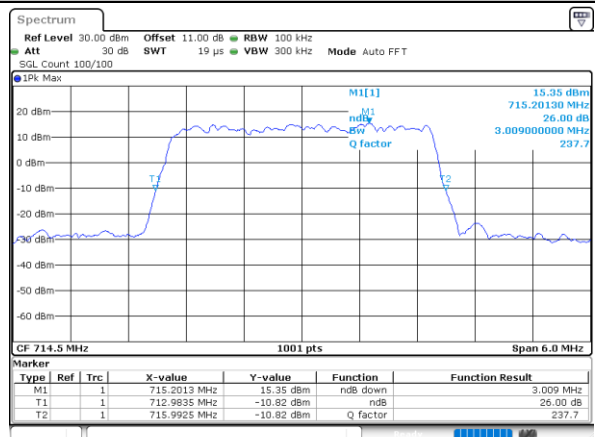
Date: 22.APR.2020 17:46:00

## Highest Channel / 1.4MHz / 64QAM



Date: 22.APR.2020 17:39:50

## Highest Channel / 3MHz / 64QAM

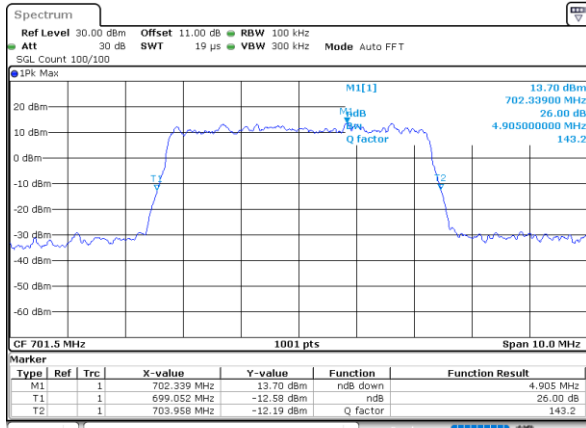


Date: 22.APR.2020 17:47:04

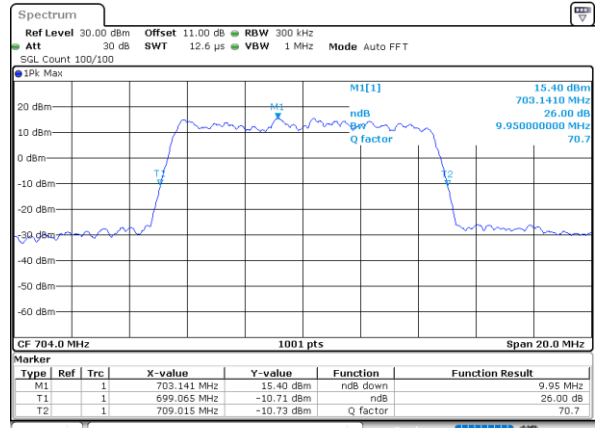


## LTE Band 12

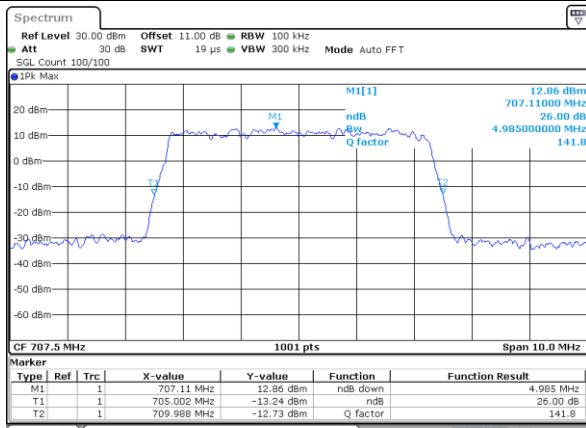
## Lowest Channel / 5MHz / 64QAM



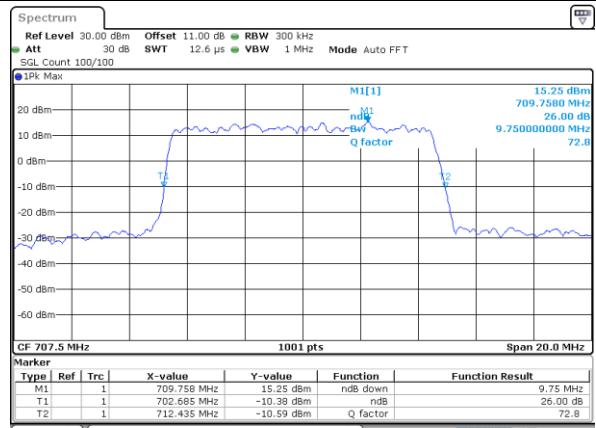
## Lowest Channel / 10MHz / 64QAM



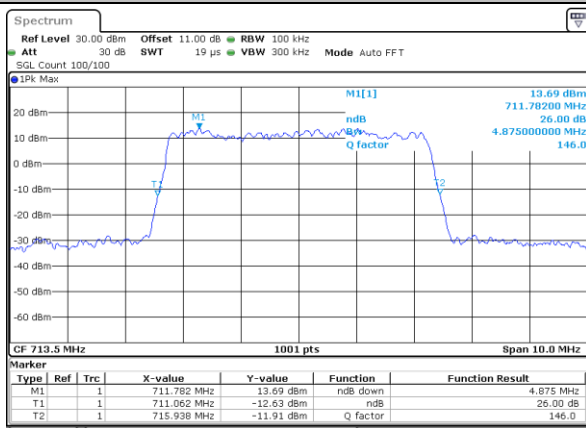
## Middle Channel / 5MHz / 64QAM



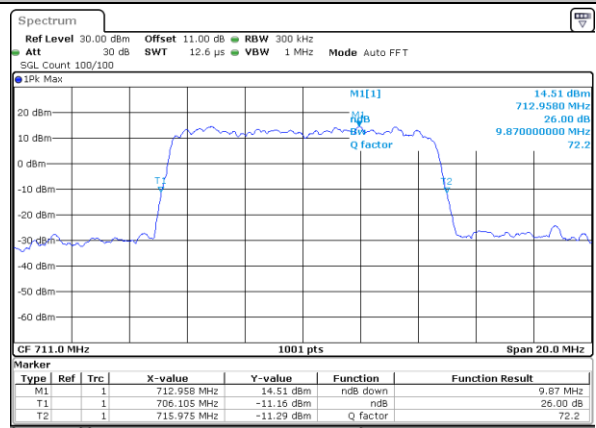
## Middle Channel / 10MHz / 64QAM



## Highest Channel / 5MHz / 64QAM



## Highest Channel / 10MHz / 64QAM





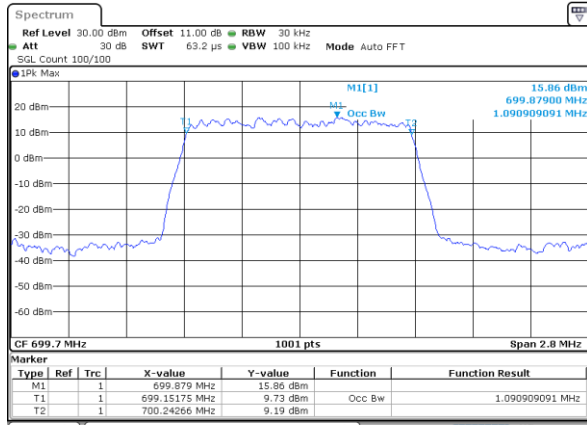
**Occupied Bandwidth**

| Mode       | LTE Band 12 : 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  | 2.73  | 2.73  | 4.48  | 4.49  | 9.03  | 9.01  | -     | -     | -     | -     |
| Middle CH  | 1.09                      | 1.09  | 2.72  | 2.72  | 4.49  | 4.48  | 8.97  | 8.97  | -     | -     | -     | -     |
| Highest CH | 1.08                      | 1.09  | 2.72  | 2.72  | 4.50  | 4.49  | 9.05  | 8.95  | -     | -     | -     | -     |
| Mode       | LTE Band 12 : 99%OBW(MHz) |       |       |       |       |       |       |       |       |       |       |       |
| BW         | 1.4MHz                    |       | 3MHz  |       | 5MHz  |       | 10MHz |       | 15MHz |       | 20MHz |       |
| Mod.       | 64QAM                     |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       | 64QAM |       |
| Lowest CH  | 1.09                      | -     | 2.72  | -     | 4.50  | -     | 8.99  | -     | -     | -     | -     | -     |
| Middle CH  | 1.09                      | -     | 2.72  | -     | 4.49  | -     | 9.03  | -     | -     | -     | -     | -     |
| Highest CH | 1.09                      | -     | 2.70  | -     | 4.51  | -     | 9.03  | -     | -     | -     | -     | -     |

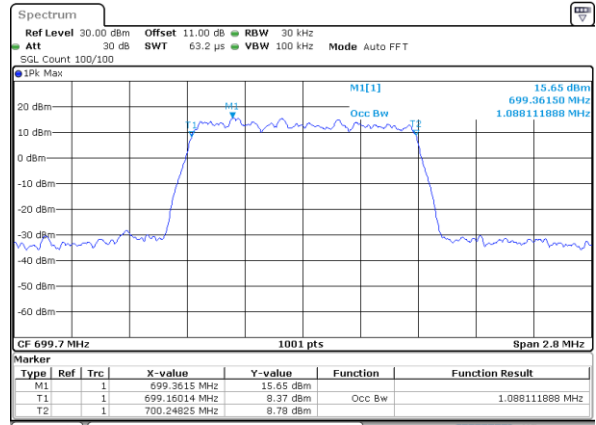


## LTE Band 12

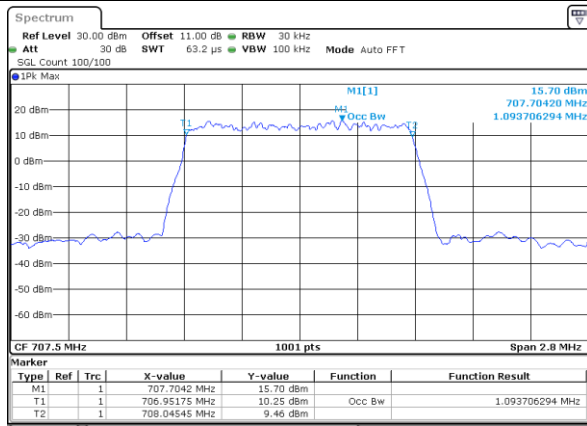
## Lowest Channel / 1.4MHz / QPSK



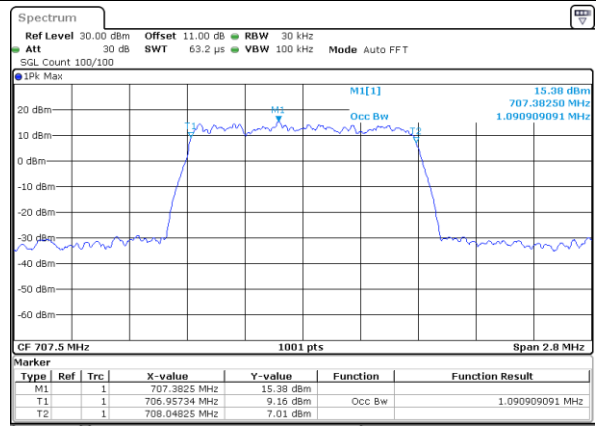
## Lowest Channel / 1.4MHz / 16QAM



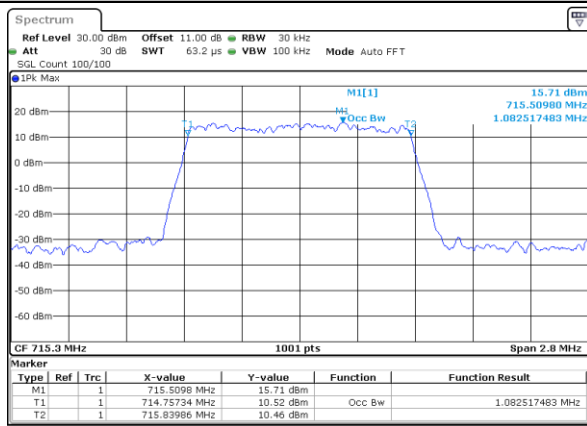
## Middle Channel / 1.4MHz / QPSK



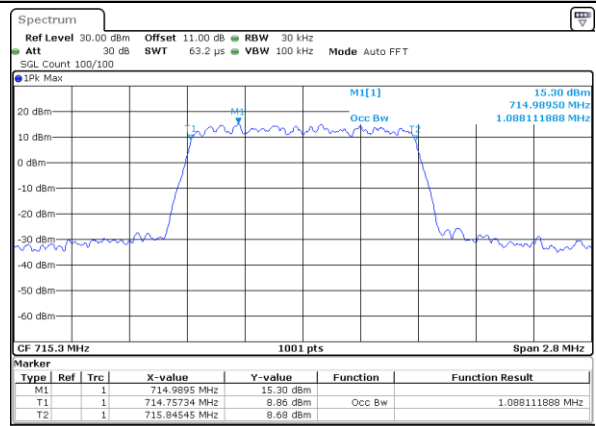
## Middle Channel / 1.4MHz / 16QAM



## Highest Channel / 1.4MHz / QPSK



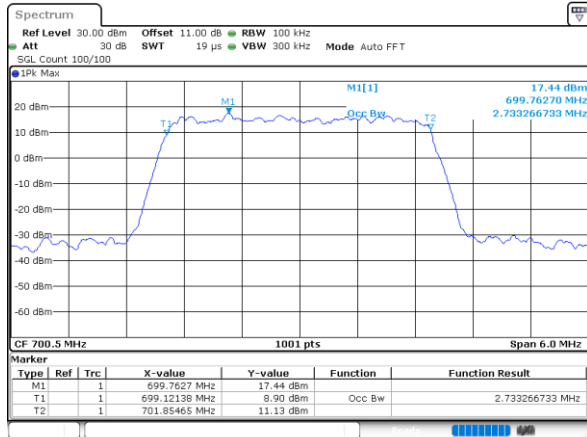
## Highest Channel / 1.4MHz / 16QAM



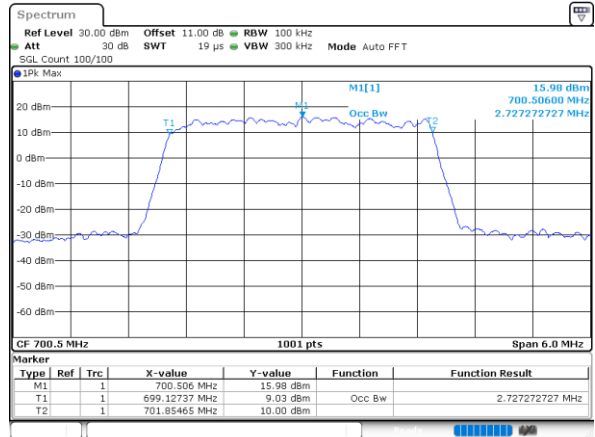


## LTE Band 12

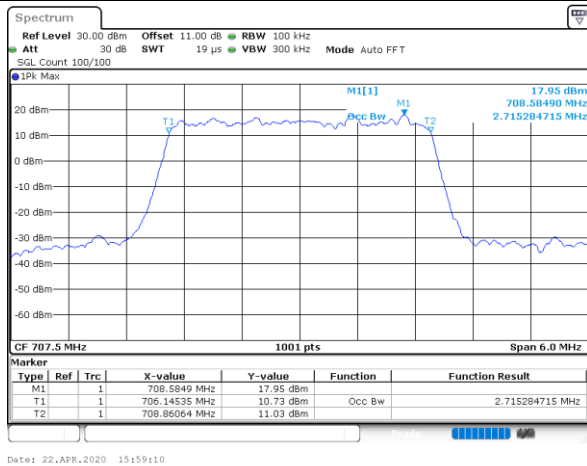
## Lowest Channel / 3MHz / QPSK



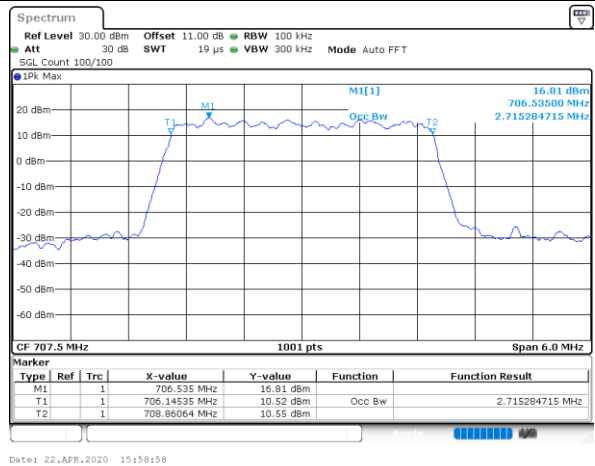
## Lowest Channel / 3MHz / 16QAM



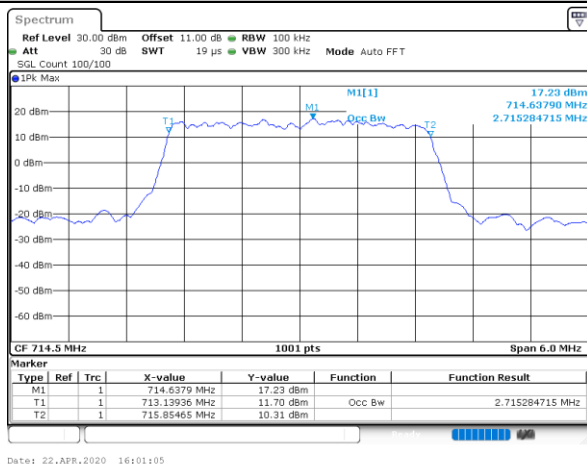
## Middle Channel / 3MHz / QPSK



## Middle Channel / 3MHz / 16QAM



## Highest Channel / 3MHz / QPSK



## Highest Channel / 3MHz / 16QAM

