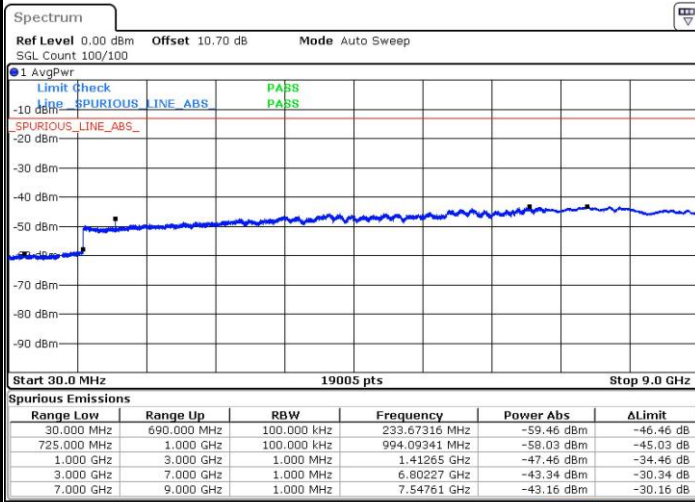




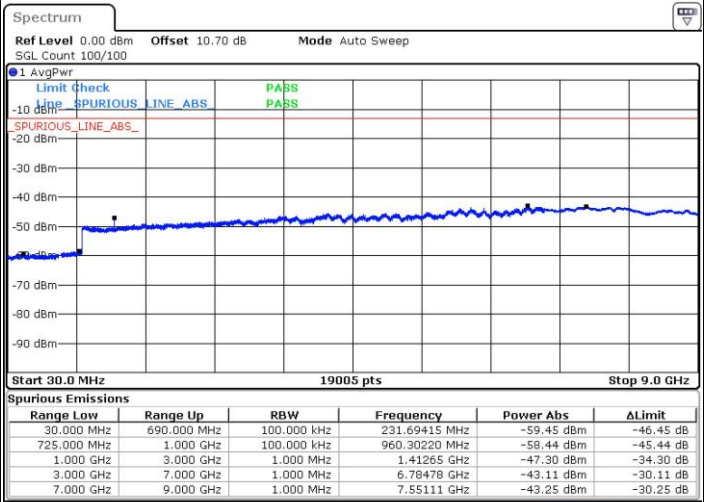
LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM



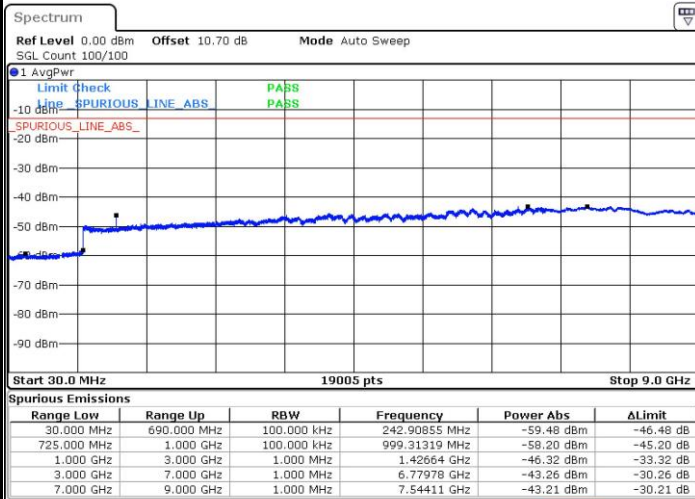
Date: 11.MAY.2019 06:35:14



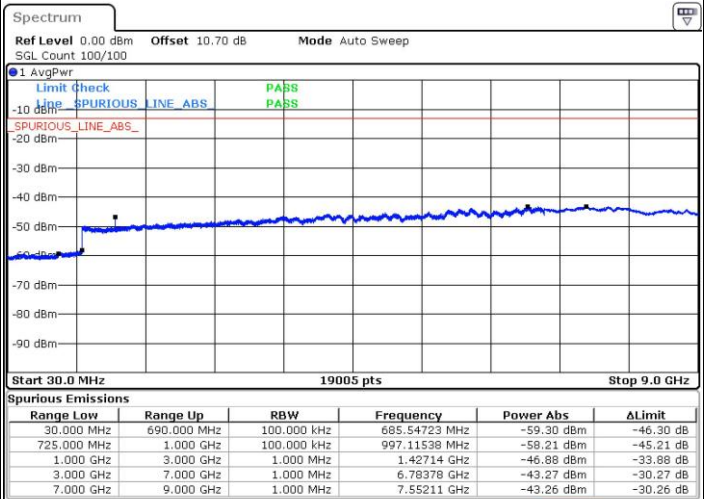
Date: 11.MAY.2019 06:34:33

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 11.MAY.2019 06:40:48



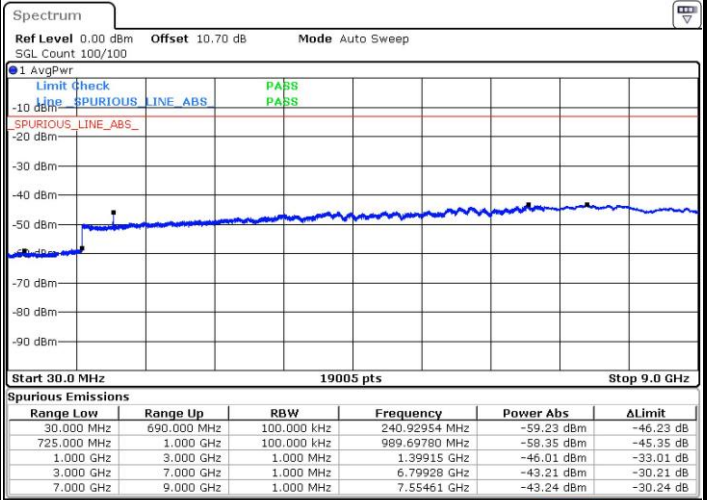
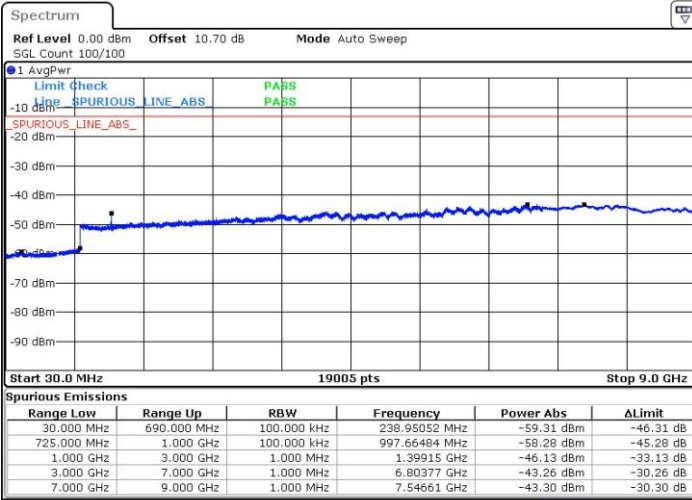
Date: 11.MAY.2019 06:41:30



LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

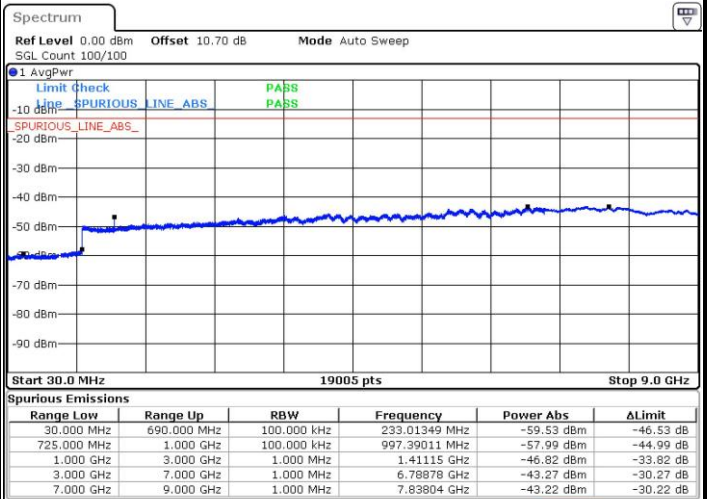
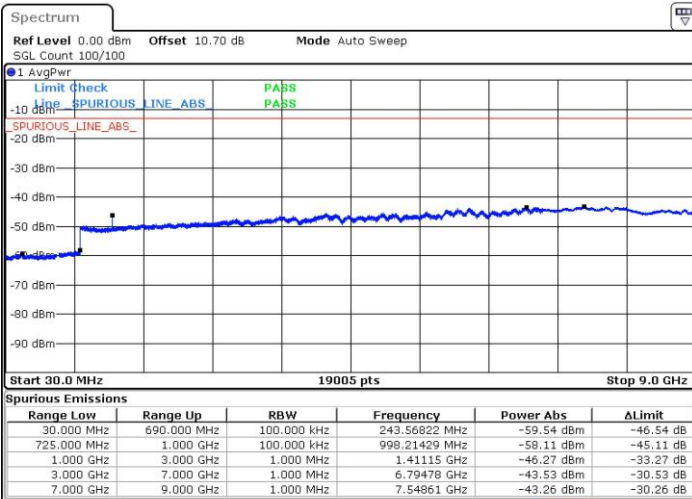


Date: 11.MAY.2019 07:01:46

Date: 11.MAY.2019 07:02:27

Middle Channel / QPSK

Middle Channel / 16QAM



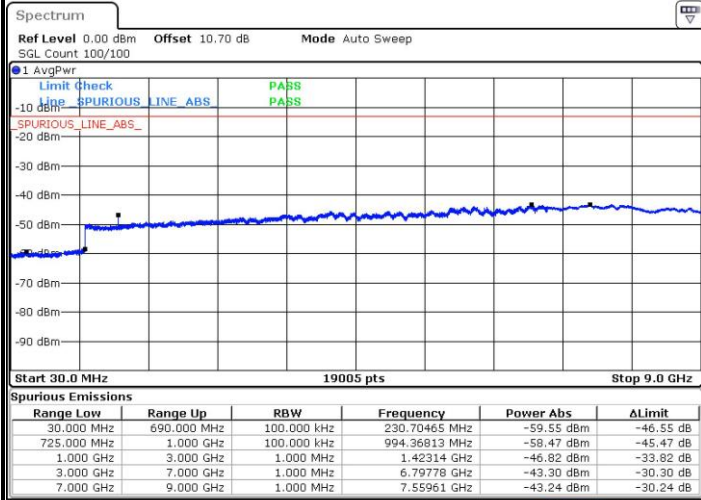
Date: 11.MAY.2019 07:04:36

Date: 11.MAY.2019 07:03:55



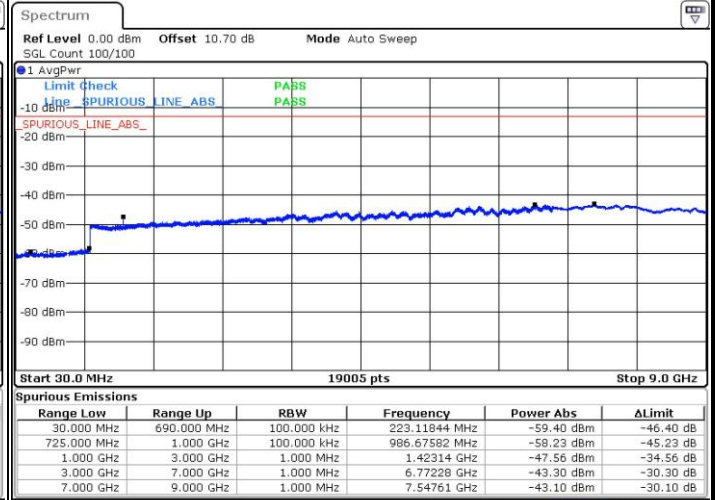
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 11.MAY.2019 07:16:58

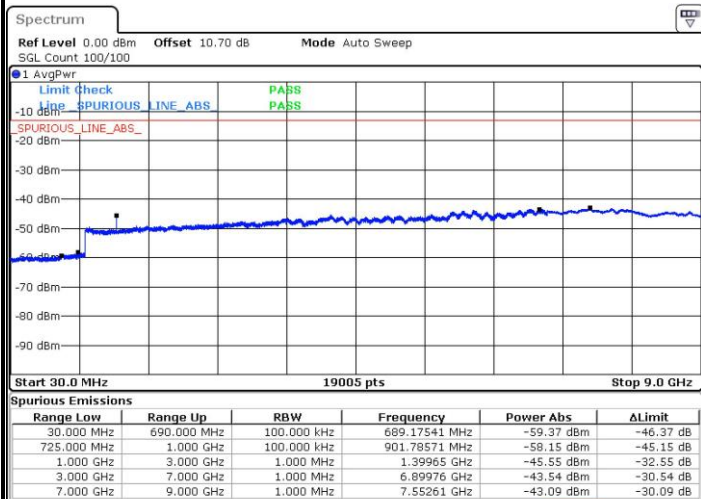
Highest Channel / 16QAM



Date: 11.MAY.2019 07:16:17

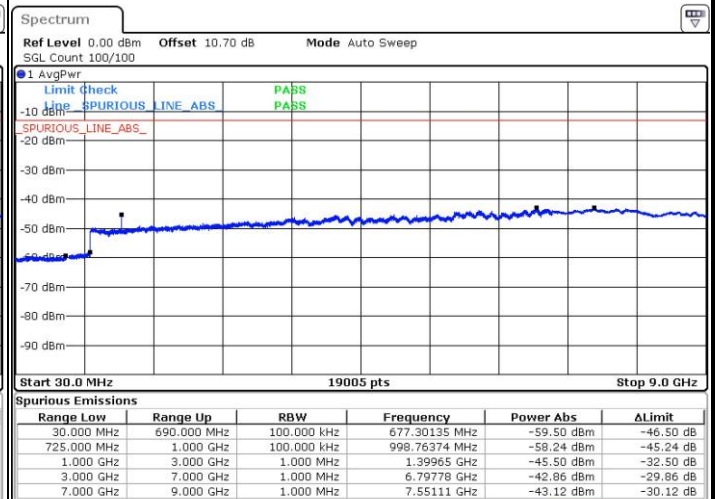
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 11.MAY.2019 07:22:34

Lowest Channel / 16QAM



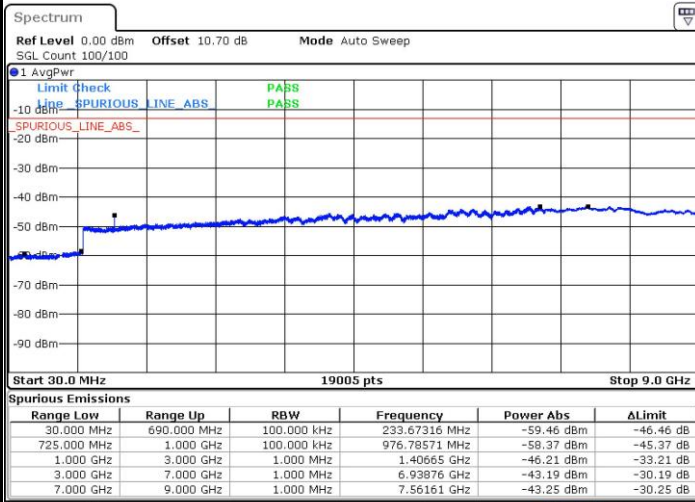
Date: 11.MAY.2019 07:23:15



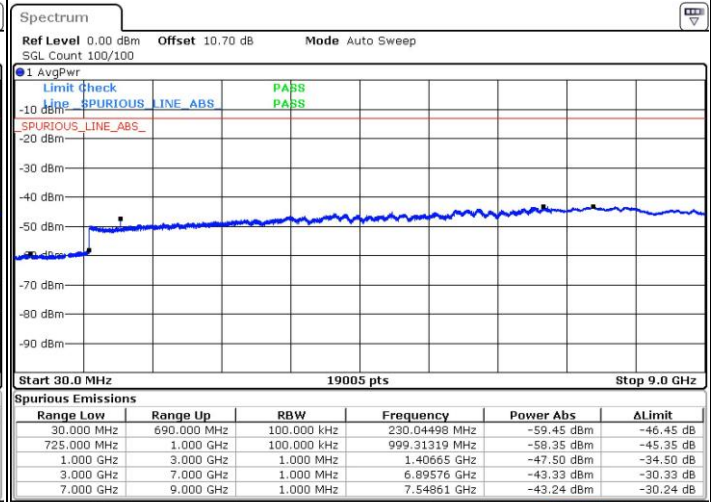
LTE Band 12 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM



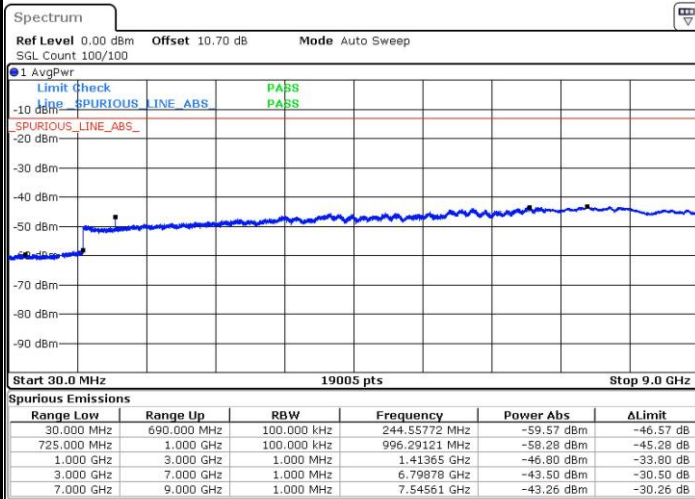
Date: 11.MAY.2019 07:25:23



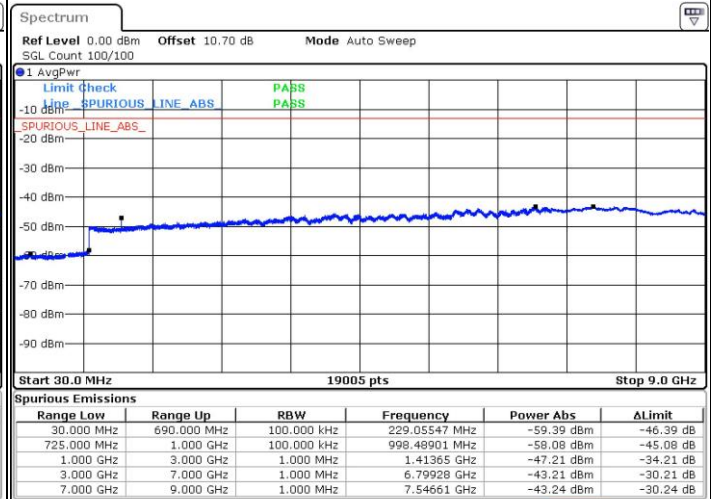
Date: 11.MAY.2019 07:24:43

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 11.MAY.2019 07:30:58



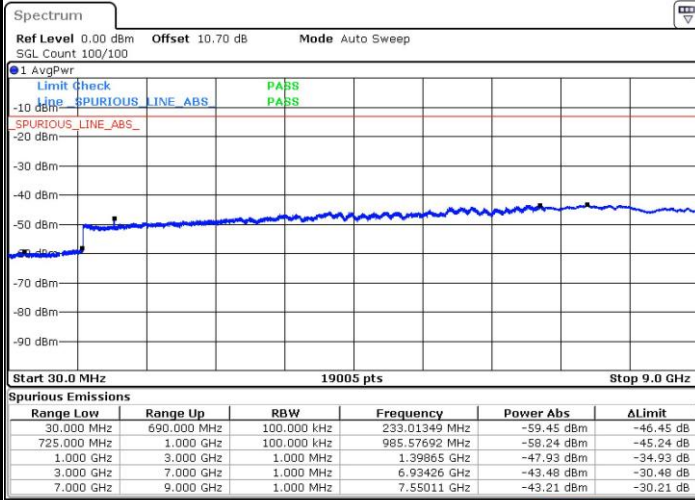
Date: 11.MAY.2019 07:31:39



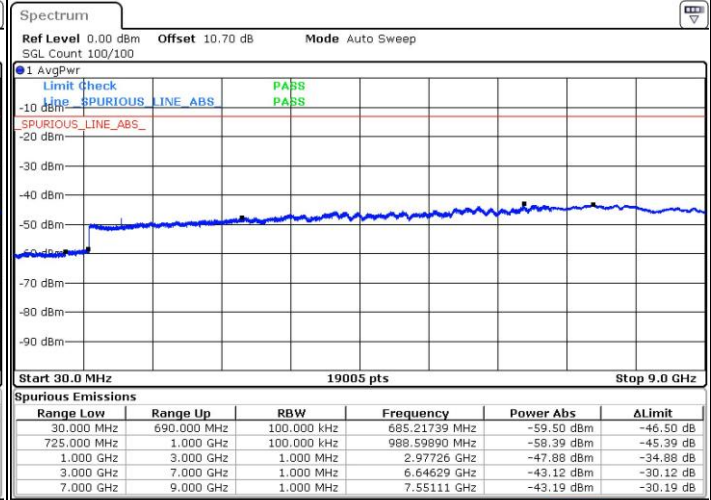
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

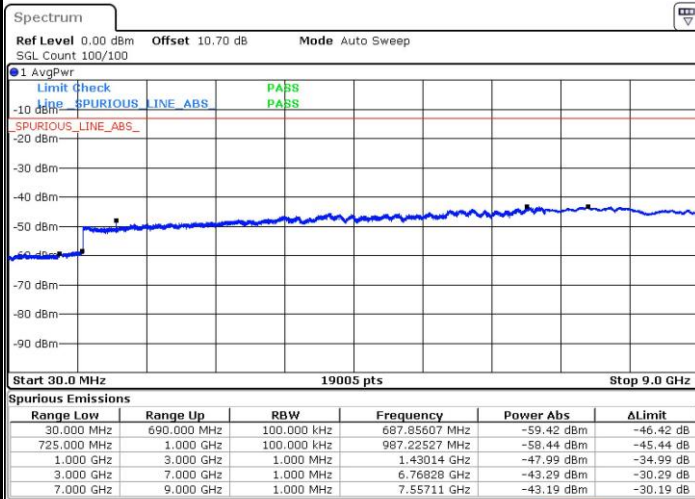


Date: 11.MAY.2019 08:03:28



Date: 11.MAY.2019 08:04:32

Highest Channel / 64QAM



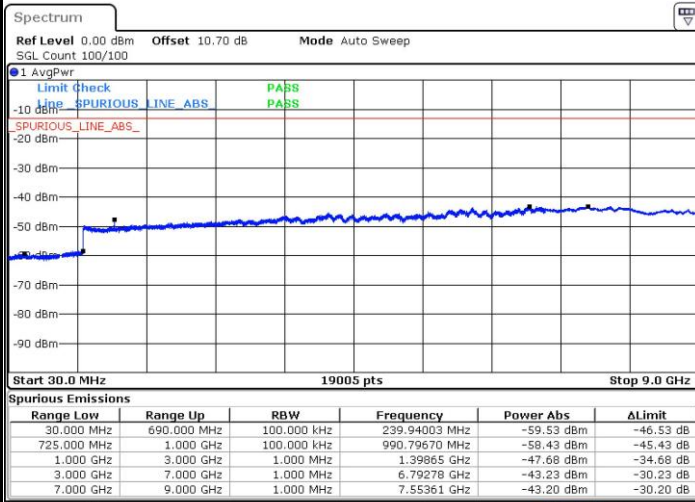
Date: 11.MAY.2019 08:07:40



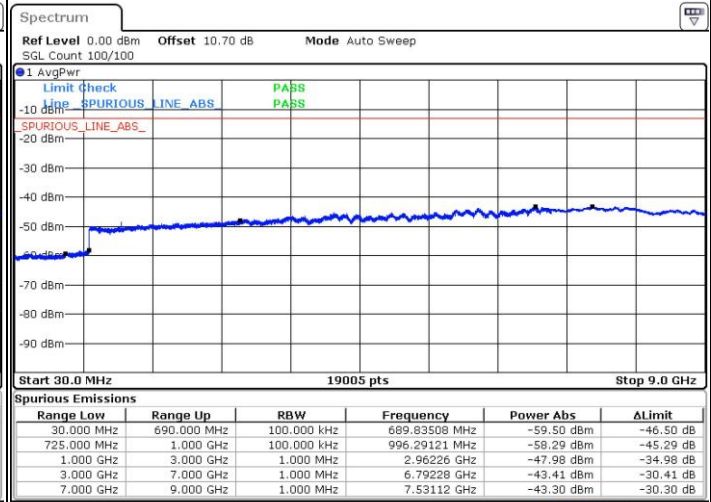
LTE Band 12 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

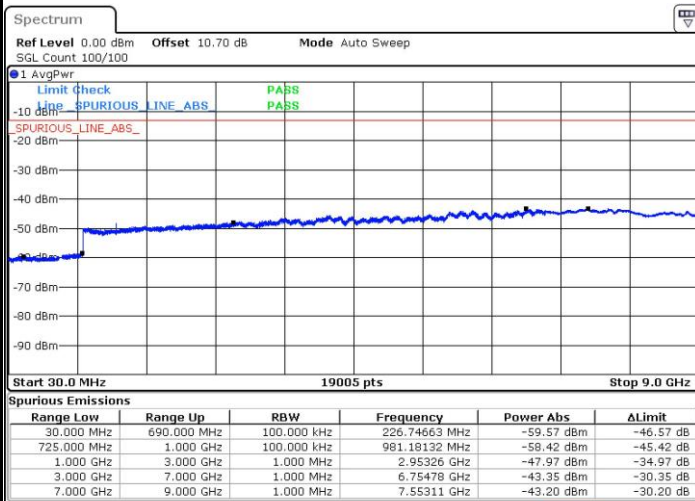


Date: 11.MAY.2019 06:44:37



Date: 11.MAY.2019 06:45:42

Highest Channel / 64QAM



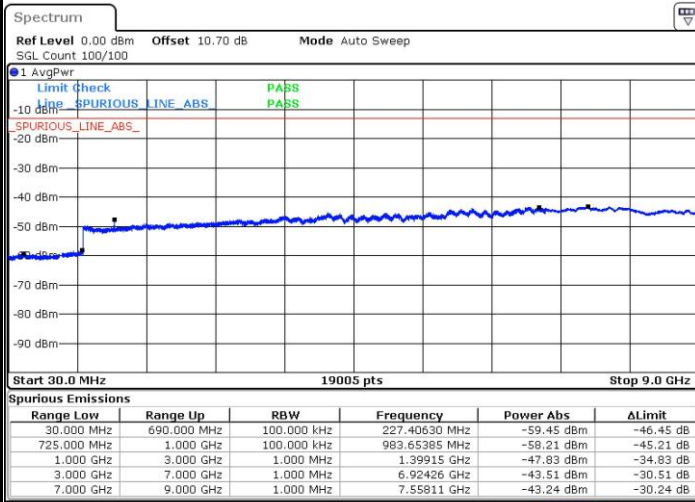
Date: 11.MAY.2019 06:48:49



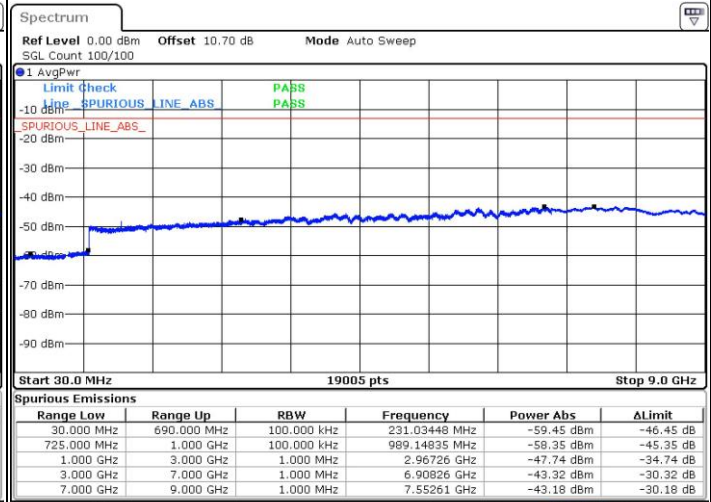
LTE Band 12 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

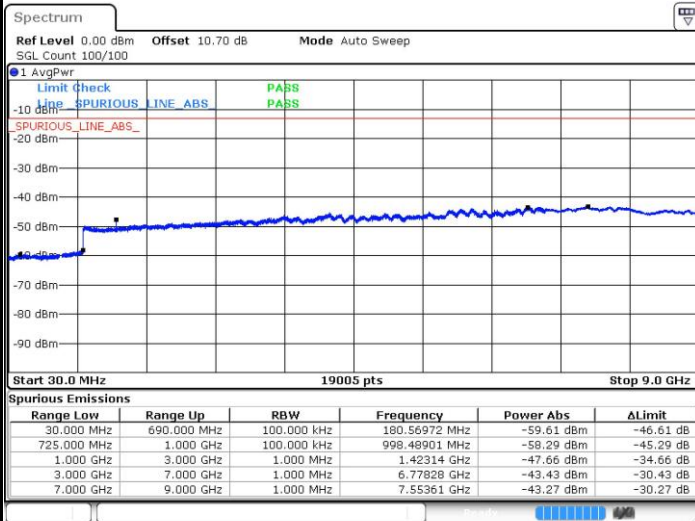


Date: 11.MAY.2019 06:51:58



Date: 11.MAY.2019 06:53:03

Highest Channel / 64QAM



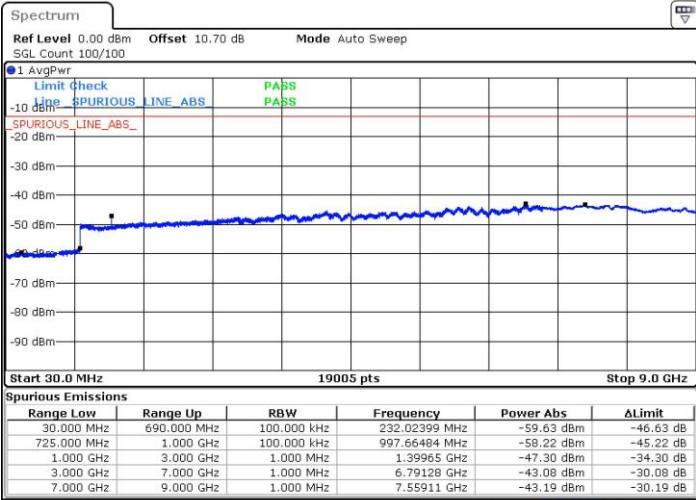
Date: 11.MAY.2019 06:56:10



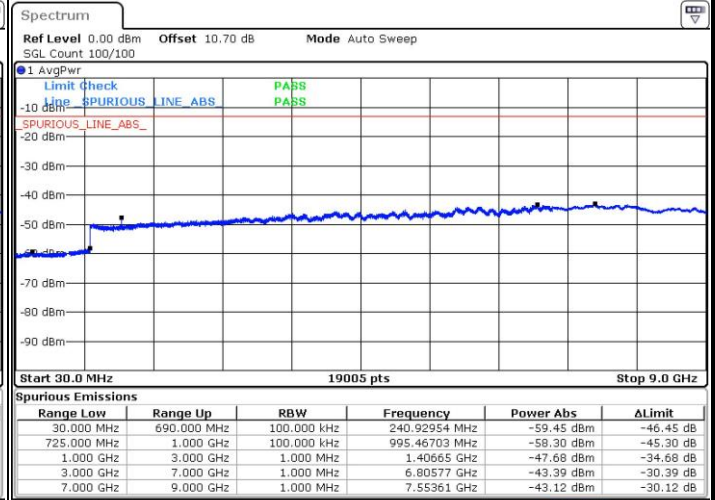
LTE Band 12 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

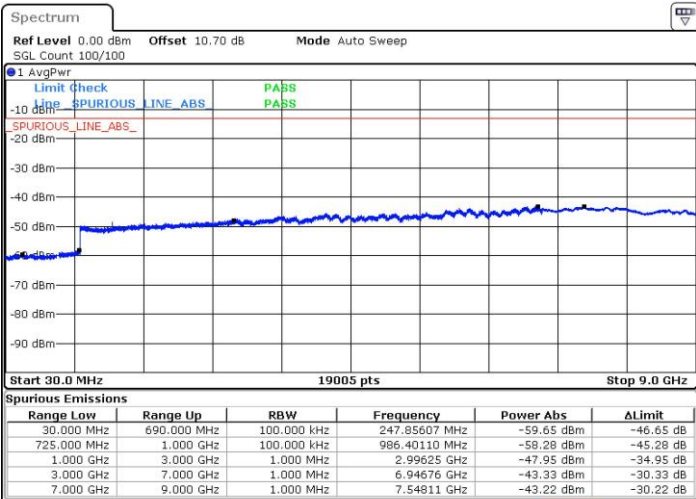


Date: 11.MAY.2019 07:34:47



Date: 11.MAY.2019 07:35:52

Highest Channel / 64QAM



Date: 11.MAY.2019 07:38:59





### Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0195	PASS
40	Normal Voltage	0.0202	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0188	
-10	Normal Voltage	0.0031	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0204	
20	Maximum Voltage	0.0031	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0189	

**Note:**

- 1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 17

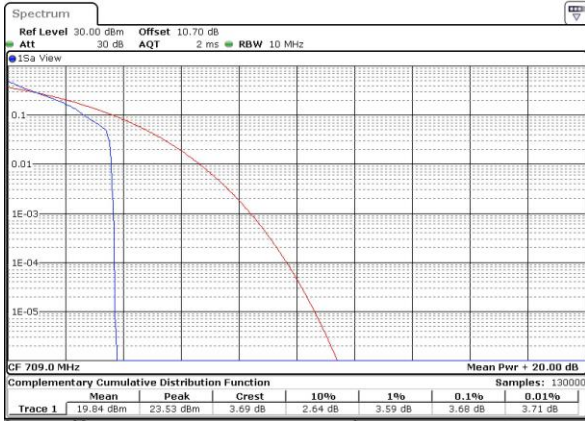
## Peak-to-Average Ratio

Mode	LTE Band 17 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.68	4.67	5.22	5.94	<b>PASS</b>
Middle CH	3.65	4.58	5.36	5.94	
Highest CH	3.65	4.61	5.48	5.88	
Mode	LTE Band 17 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.57	5.94	-	-	<b>PASS</b>
Middle CH	5.39	5.91	-	-	
Highest CH	5.13	5.88	-	-	



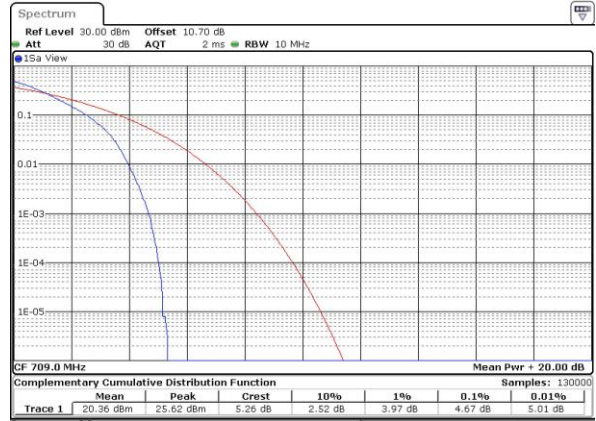
LTE Band 17 / 10MHz / QPSK

Lowest Channel / 1RB



Date: 13 MAY 2019 18:55:14

Lowest Channel / Full RB



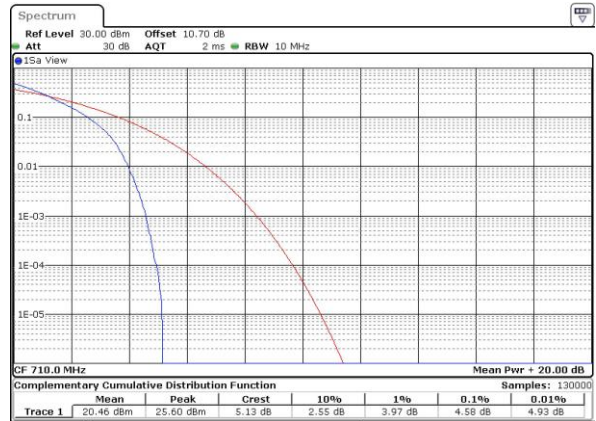
Date: 13 MAY 2019 18:55:26

Middle Channel / 1RB



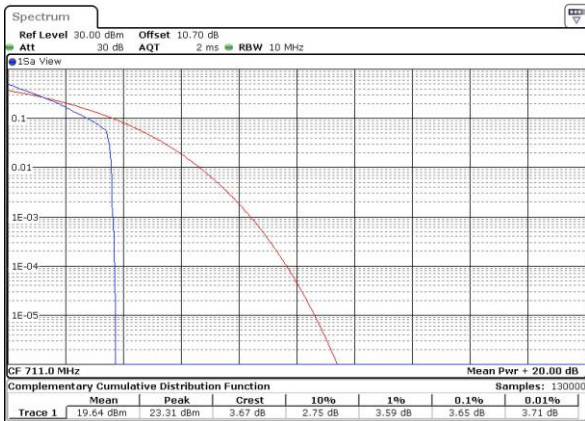
Date: 13 MAY 2019 18:56:11

Middle Channel / Full RB



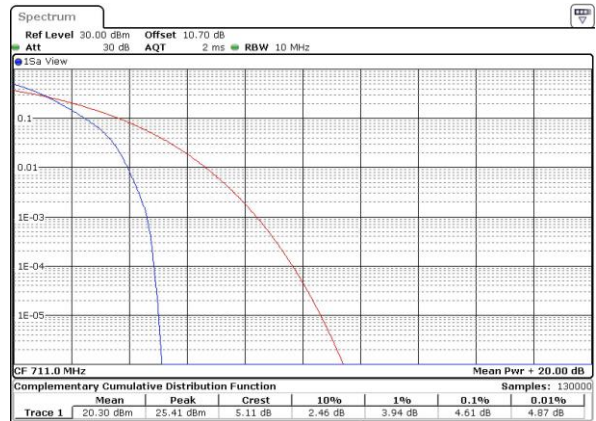
Date: 13 MAY 2019 18:56:36

Highest Channel / 1RB



Date: 13 MAY 2019 18:56:47

Highest Channel / Full RB



Date: 13 MAY 2019 18:56:59



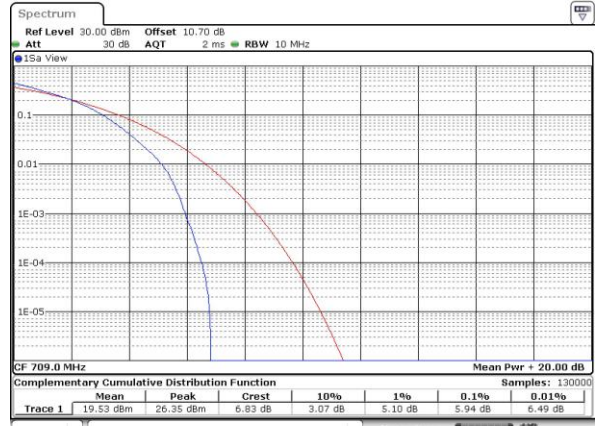
LTE Band 17 / 10MHz / 16QAM

Lowest Channel / 1RB



Date: 13 MAY 2019 18:53:49

Lowest Channel / Full RB



Date: 13 MAY 2019 18:54:00

Middle Channel / 1RB



Date: 13 MAY 2019 18:54:12

Middle Channel / Full RB



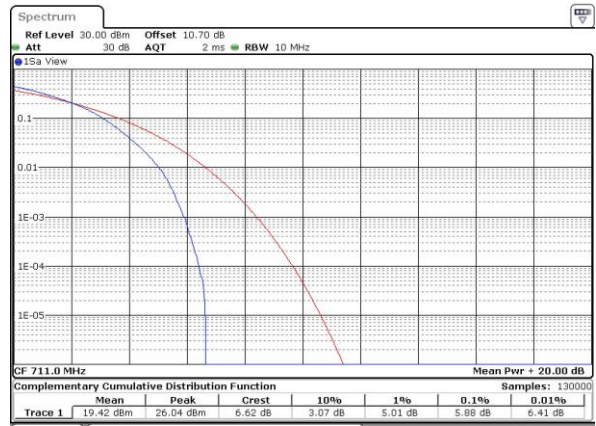
Date: 13 MAY 2019 18:54:24

Highest Channel / 1RB



Date: 13 MAY 2019 18:54:35

Highest Channel / Full RB

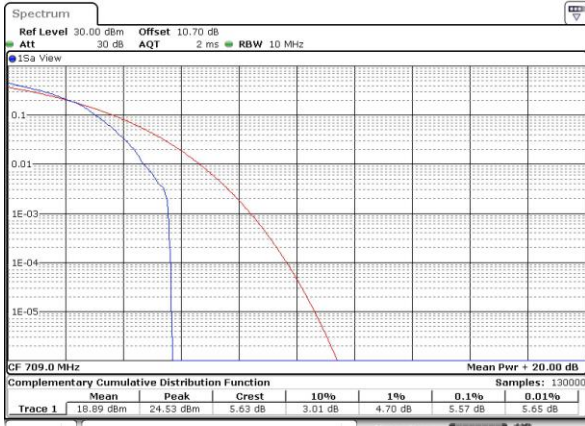


Date: 13 MAY 2019 18:54:49



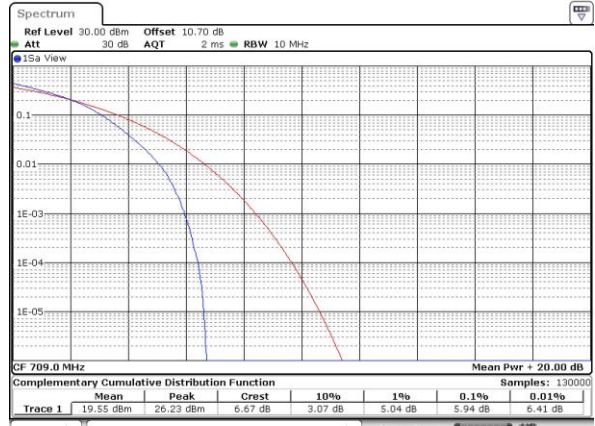
LTE Band 17 / 10MHz / 64QAM

Lowest Channel / 1RB



Date: 13 MAY 2019 18:59:37

Lowest Channel / Full RB



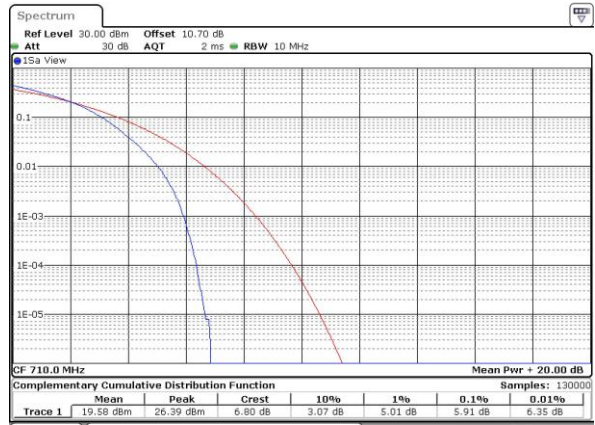
Date: 13 MAY 2019 18:59:48

Middle Channel / 1RB



Date: 13 MAY 2019 19:00:05

Middle Channel / Full RB



Date: 13 MAY 2019 19:00:18

Highest Channel / 1RB



Date: 13 MAY 2019 19:00:29

Highest Channel / Full RB



Date: 13 MAY 2019 19:00:40



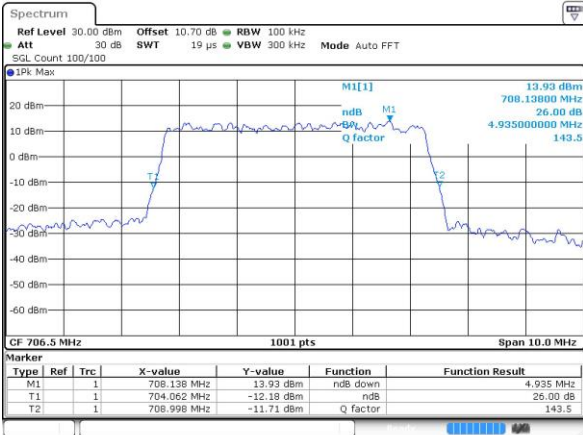
**26dB Bandwidth**

Mode	LTE Band 17 : 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	-	-	-	-	4.94	4.95	9.81	9.75	-	-	-	-
Middle CH	-	-	-	-	4.96	4.86	9.67	9.73	-	-	-	-
Highest CH	-	-	-	-	4.86	4.87	9.77	9.71	-	-	-	-
Mode	LTE Band 17 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.91	-	9.65	-	-	-	-	-
Middle CH	-	-	-	-	4.88	-	9.67	-	-	-	-	-
Highest CH	-	-	-	-	4.92	-	9.73	-	-	-	-	-



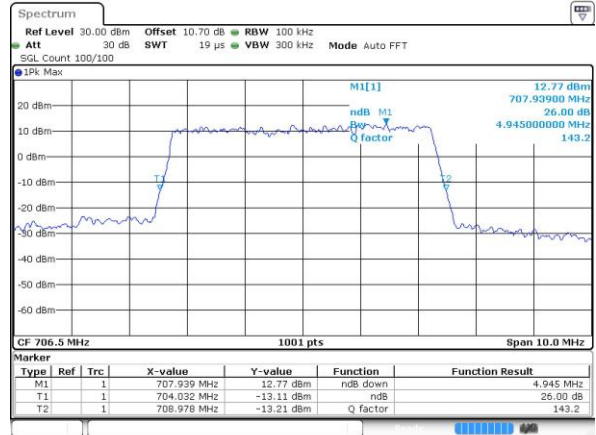
LTE Band 17

Lowest Channel / 5MHz / QPSK



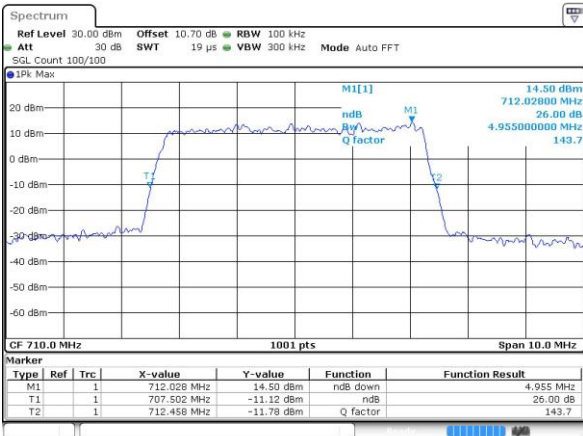
Date: 13 MAY 2019 17:53:04

Lowest Channel / 5MHz / 16QAM



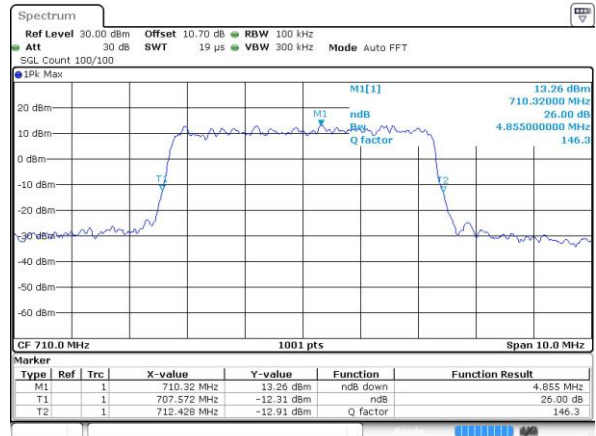
Date: 13 MAY 2019 17:53:15

Middle Channel / 5MHz / QPSK



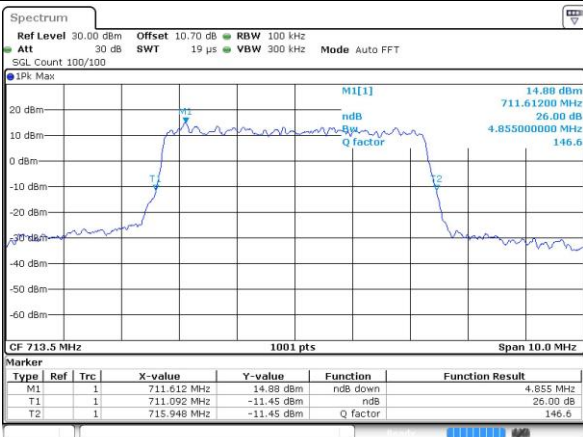
Date: 13 MAY 2019 17:58:11

Middle Channel / 5MHz / 16QAM



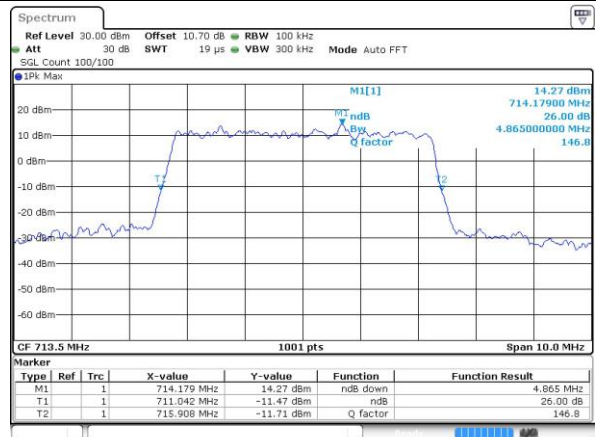
Date: 13 MAY 2019 17:58:22

Highest Channel / 5MHz / QPSK



Date: 13 MAY 2019 18:01:17

Highest Channel / 5MHz / 16QAM

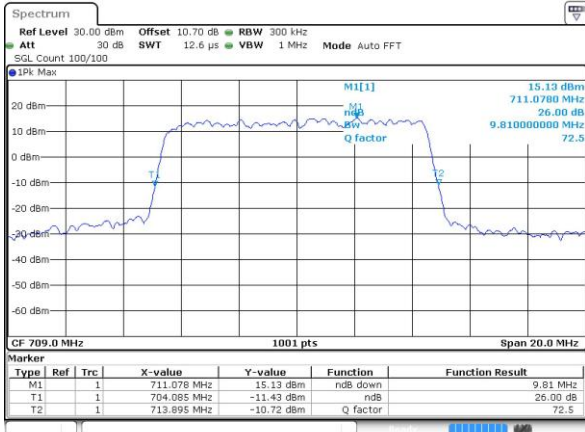


Date: 13 MAY 2019 18:01:29

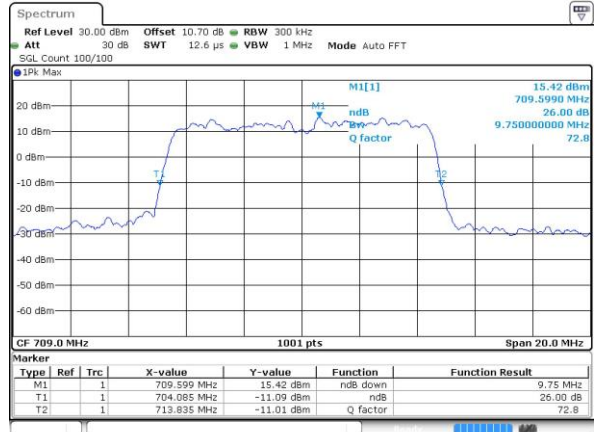


LTE Band 17

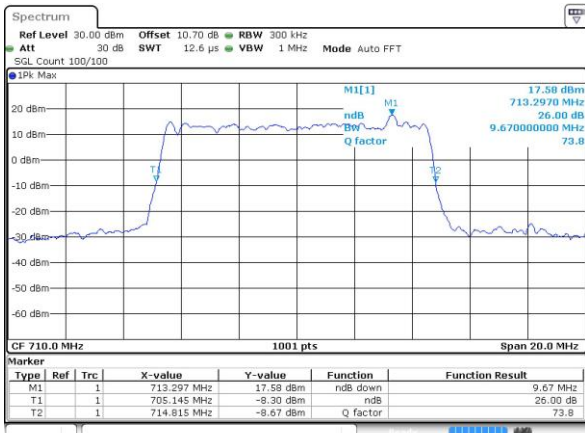
Lowest Channel / 10MHz / QPSK



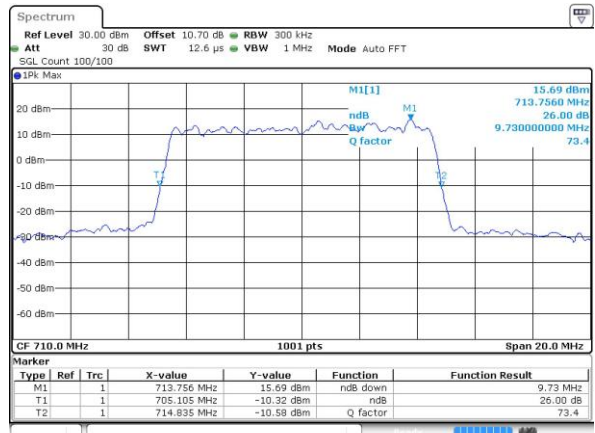
Lowest Channel / 10MHz / 16QAM



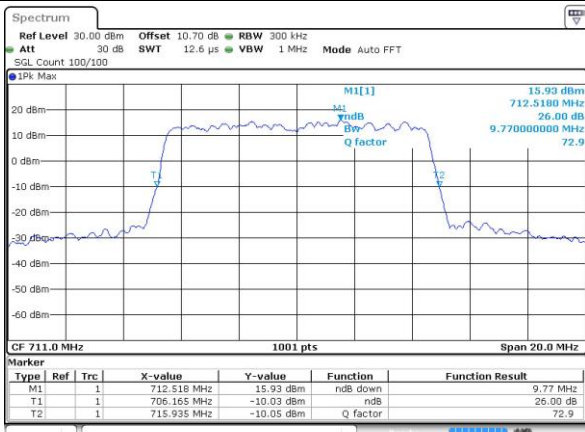
Middle Channel / 10MHz / QPSK



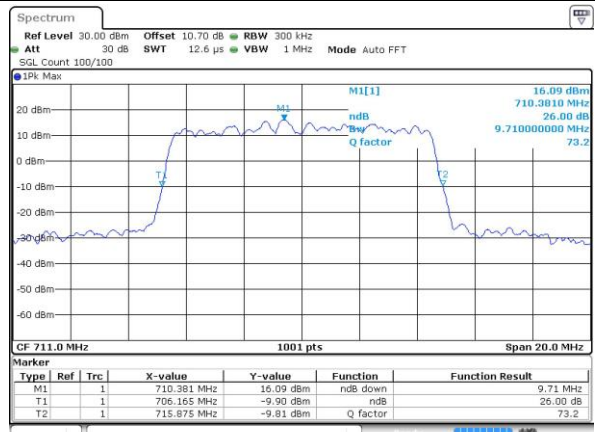
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM

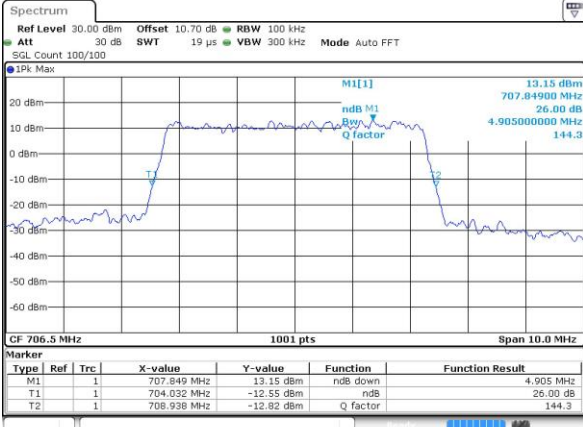






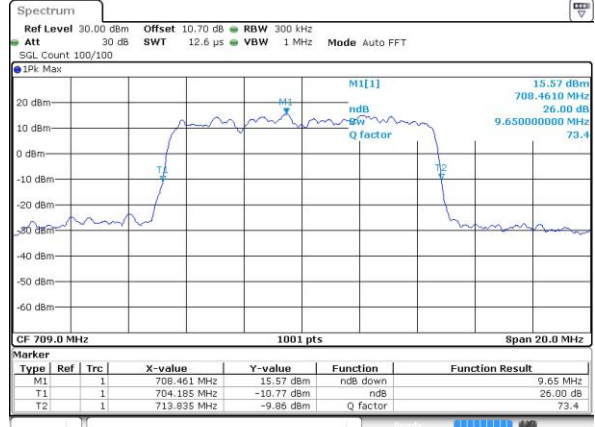
LTE Band 17

Lowest Channel / 5MHz / 64QAM



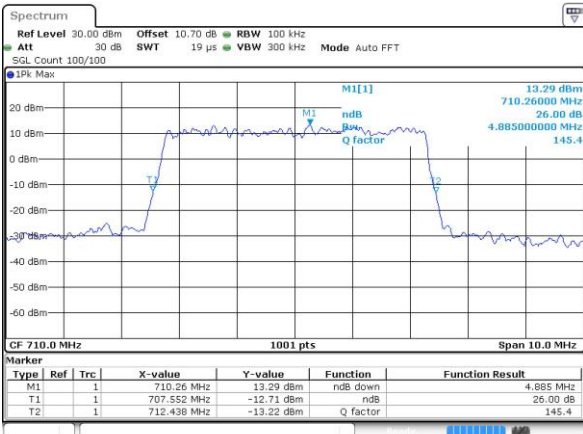
Date: 13 MAY 2019 18:21:32

Lowest Channel / 10MHz / 64QAM



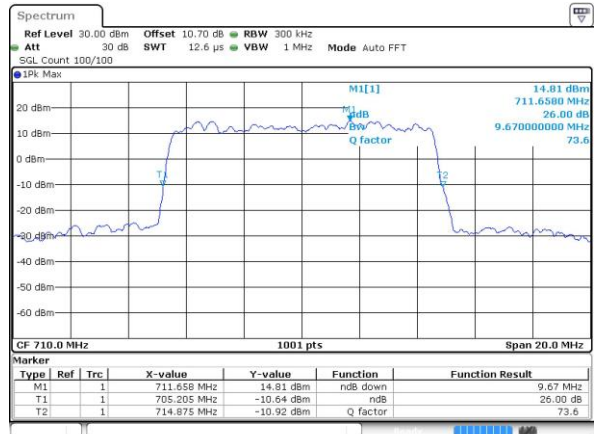
Date: 13 MAY 2019 18:28:42

Middle Channel / 5MHz / 64QAM



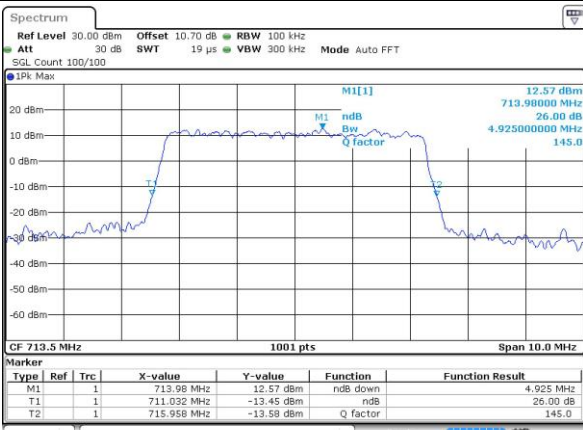
Date: 13 MAY 2019 18:24:38

Middle Channel / 10MHz / 64QAM



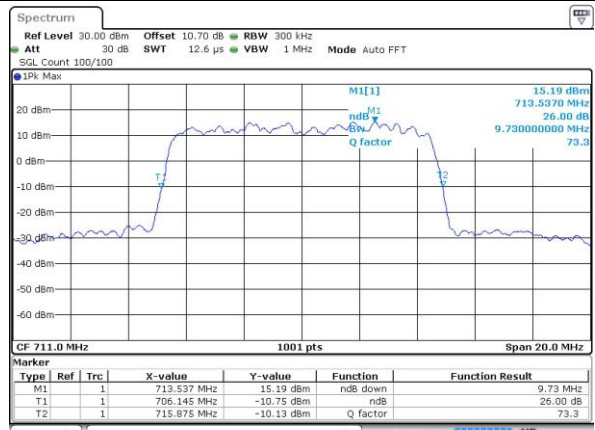
Date: 13 MAY 2019 18:31:48

Highest Channel / 5MHz / 64QAM



Date: 13 MAY 2019 18:25:39

Highest Channel / 10MHz / 64QAM



Date: 13 MAY 2019 18:32:49



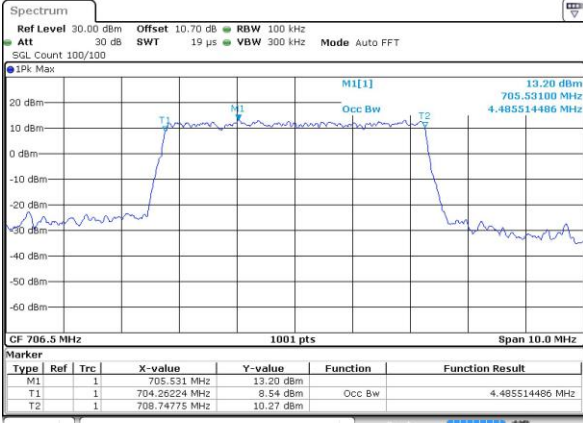
Occupied Bandwidth

Mode	LTE Band 17 : 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	-	-	-	-	4.49	4.51	9.03	9.01	-	-	-	-
Middle CH	-	-	-	-	4.47	4.5	8.99	9.03	-	-	-	-
Highest CH	-	-	-	-	4.49	4.48	9.03	8.95	-	-	-	-
Mode	LTE Band 17 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.49	-	9.01	-	-	-	-	-
Middle CH	-	-	-	-	4.49	-	9.01	-	-	-	-	-
Highest CH	-	-	-	-	4.49	-	8.99	-	-	-	-	-



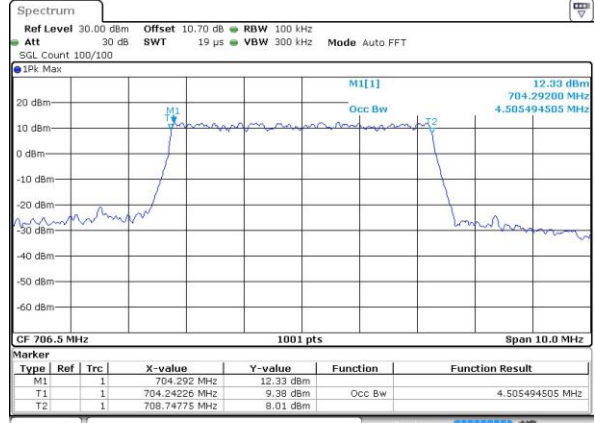
LTE Band 17

Lowest Channel / 5MHz / QPSK



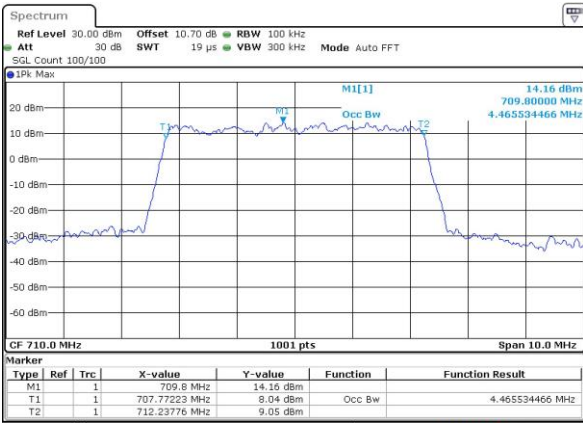
Date: 13 MAY 2019 17:52:41

Lowest Channel / 5MHz / 16QAM



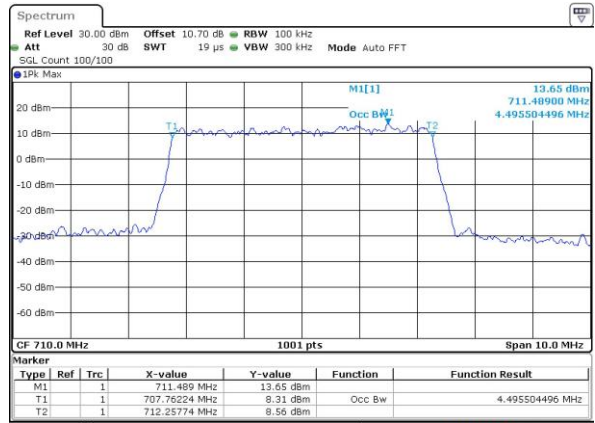
Date: 13 MAY 2019 17:52:53

Middle Channel / 5MHz / QPSK



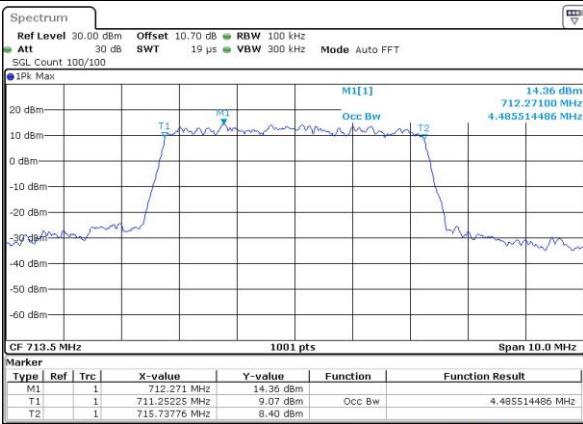
Date: 13 MAY 2019 17:58:48

Middle Channel / 5MHz / 16QAM



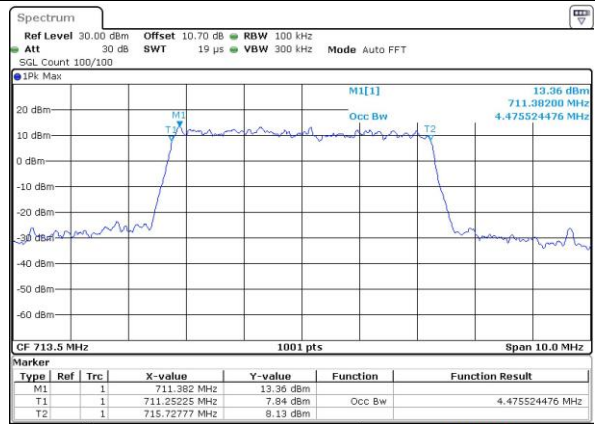
Date: 13 MAY 2019 17:58:59

Highest Channel / 5MHz / QPSK



Date: 13 MAY 2019 18:00:54

Highest Channel / 5MHz / 16QAM

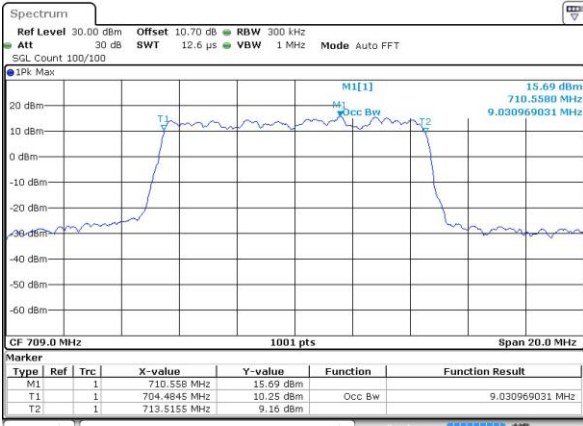


Date: 13 MAY 2019 18:01:06



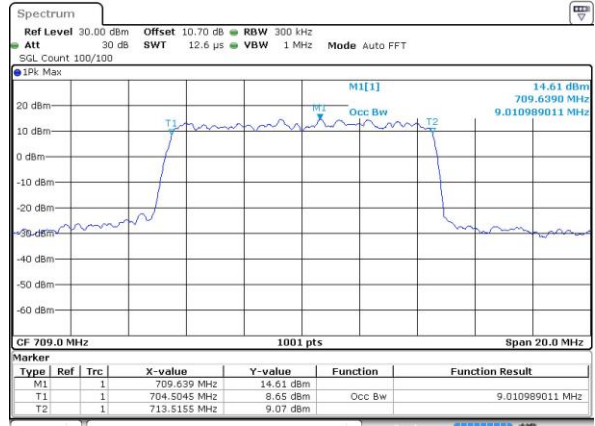
LTE Band 17

Lowest Channel / 10MHz / QPSK



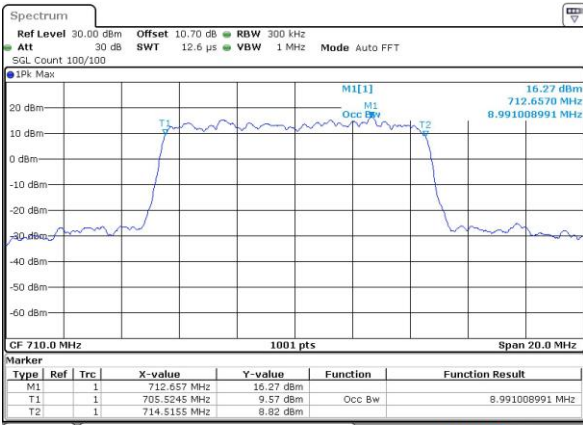
Date: 13 MAY 2019 18:07:01

Lowest Channel / 10MHz / 16QAM



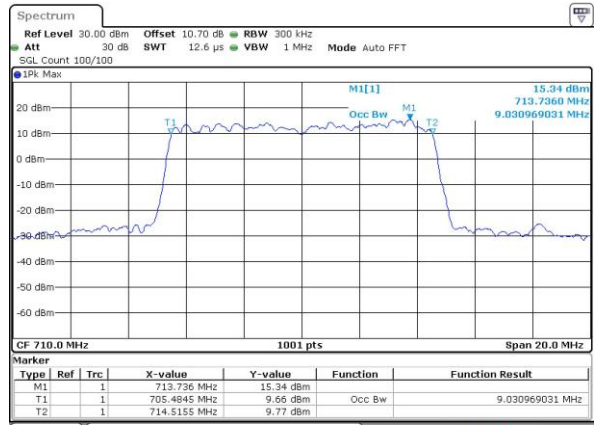
Date: 13 MAY 2019 18:07:13

Middle Channel / 10MHz / QPSK



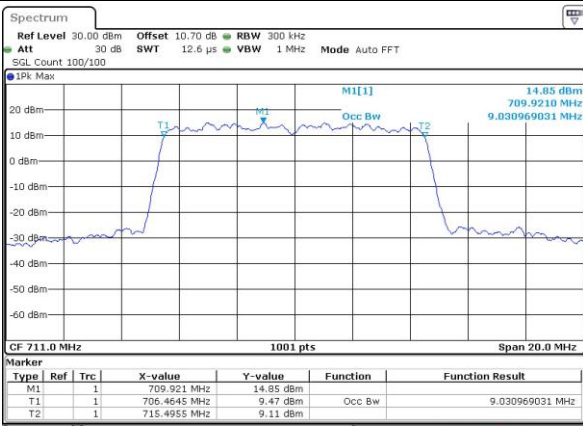
Date: 13 MAY 2019 18:13:08

Middle Channel / 10MHz / 16QAM



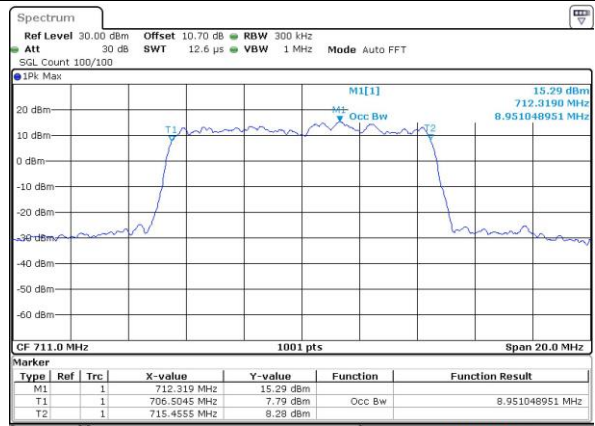
Date: 13 MAY 2019 18:13:19

Highest Channel / 10MHz / QPSK



Date: 13 MAY 2019 18:15:14

Highest Channel / 10MHz / 16QAM

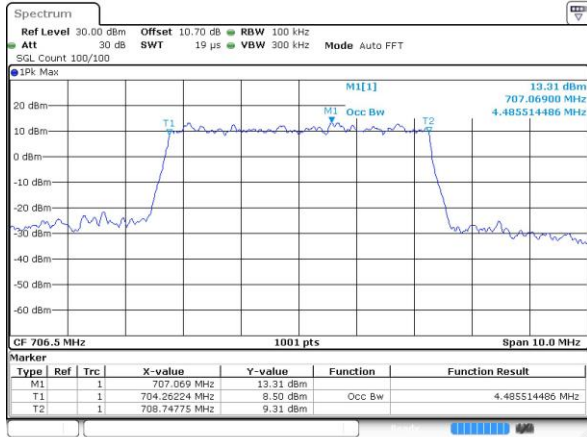


Date: 13 MAY 2019 18:15:26



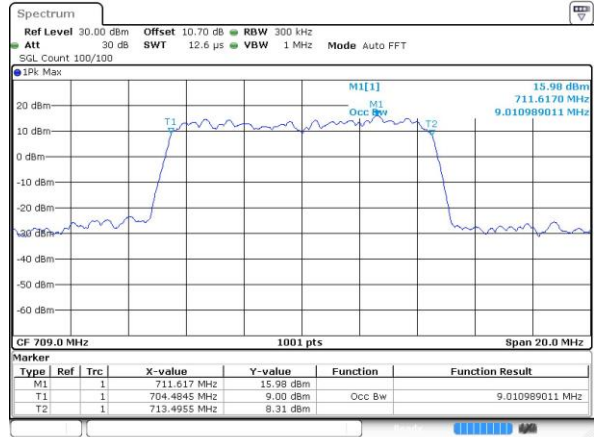
LTE Band 17

Lowest Channel / 5MHz / 64QAM



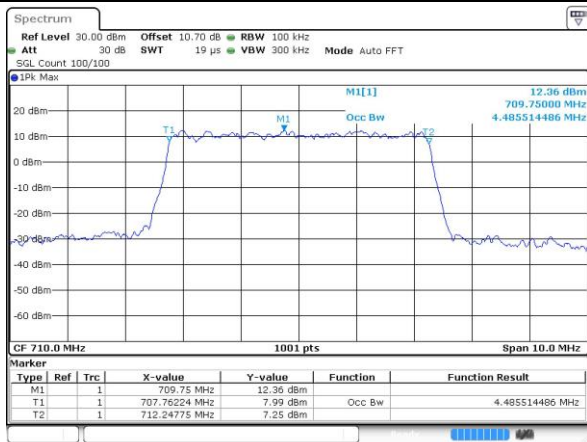
Date: 13 MAY 2019 18:21:21

Lowest Channel / 10MHz / 64QAM



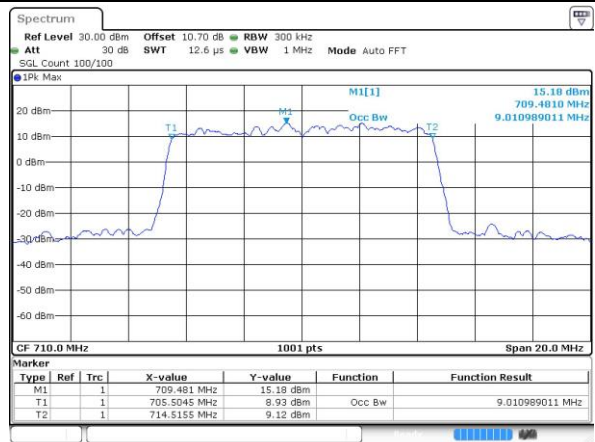
Date: 13 MAY 2019 18:28:31

Middle Channel / 5MHz / 64QAM



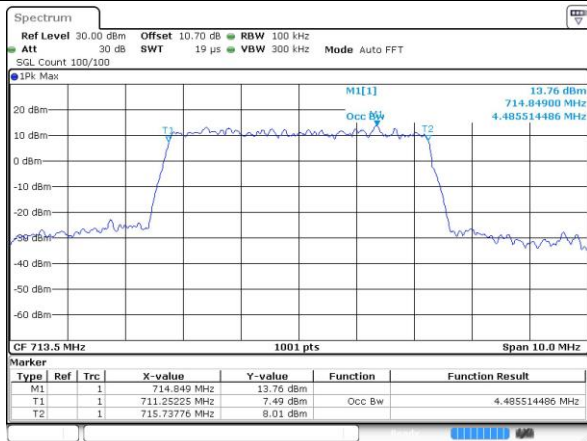
Date: 13 MAY 2019 18:24:24

Middle Channel / 10MHz / 64QAM



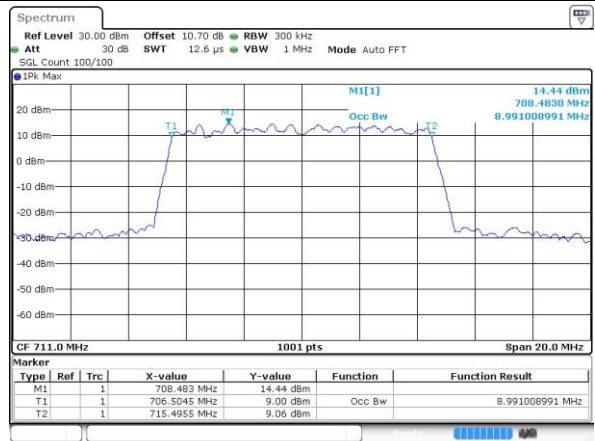
Date: 13 MAY 2019 18:31:34

Highest Channel / 5MHz / 64QAM



Date: 13 MAY 2019 18:25:27

Highest Channel / 10MHz / 64QAM



Date: 13 MAY 2019 18:32:38



# Conducted Band Edge

