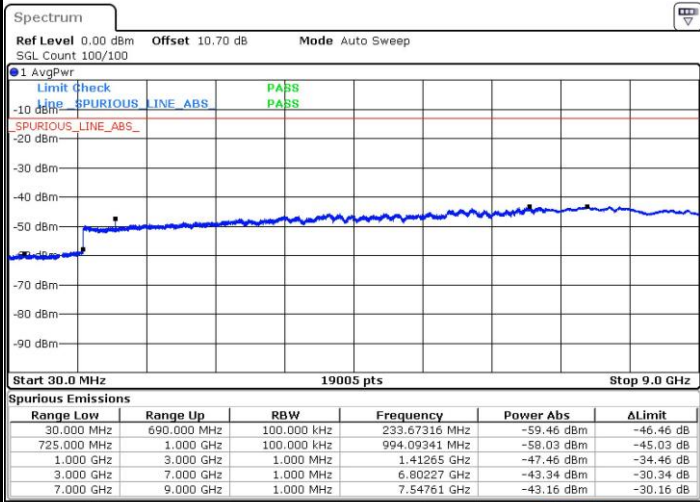




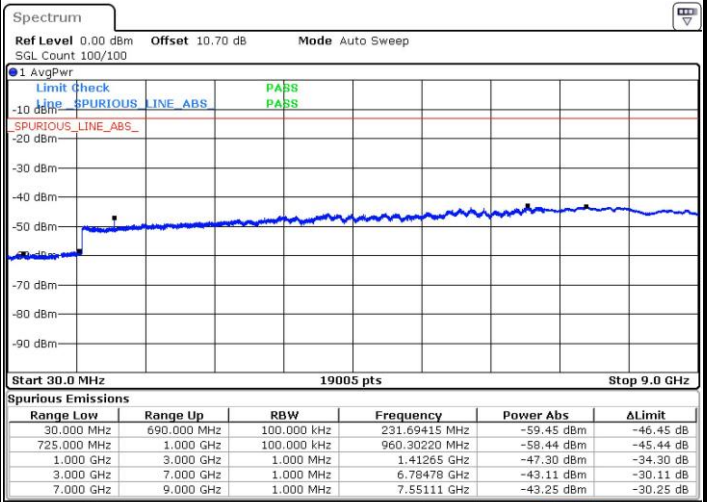
LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM



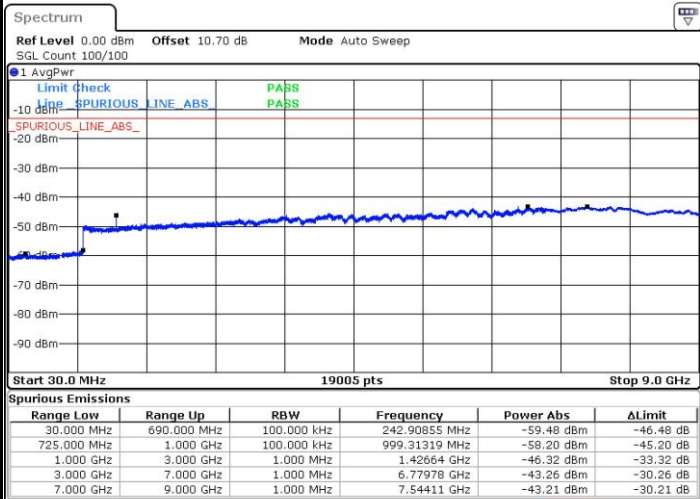
Date: 11.MAY.2019 06:35:14



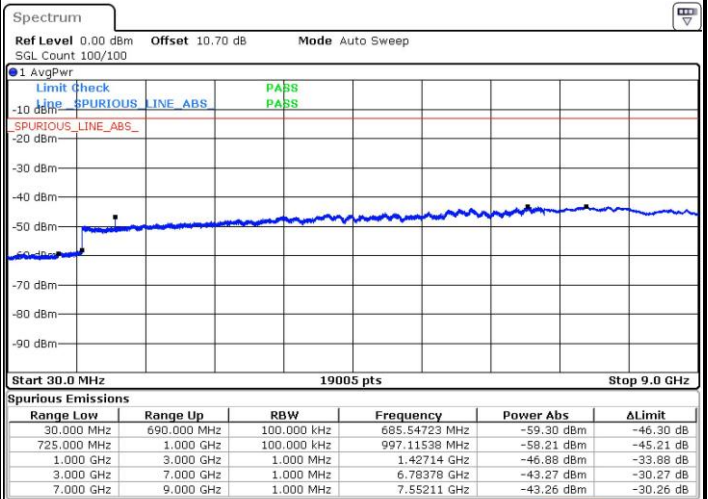
Date: 11.MAY.2019 06:34:33

Highest Channel / QPSK

Highest Channel / 16QAM



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



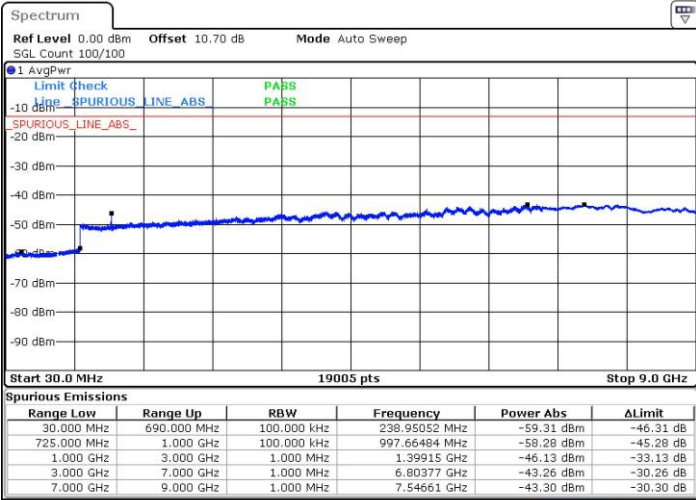
Date: 11.MAY.2019 06:41:30



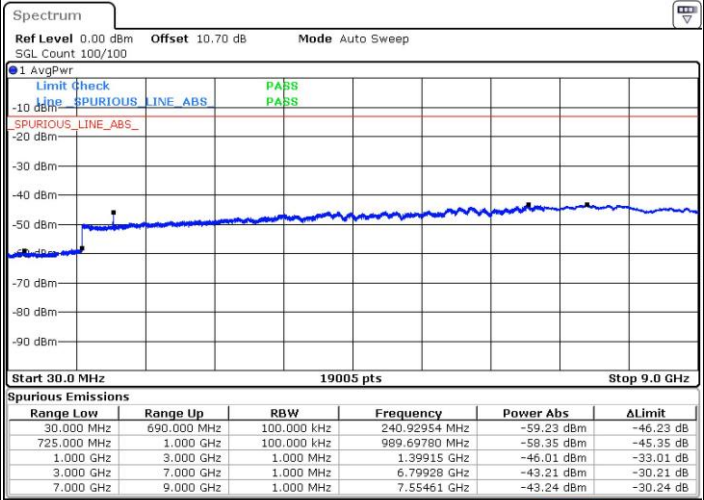
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



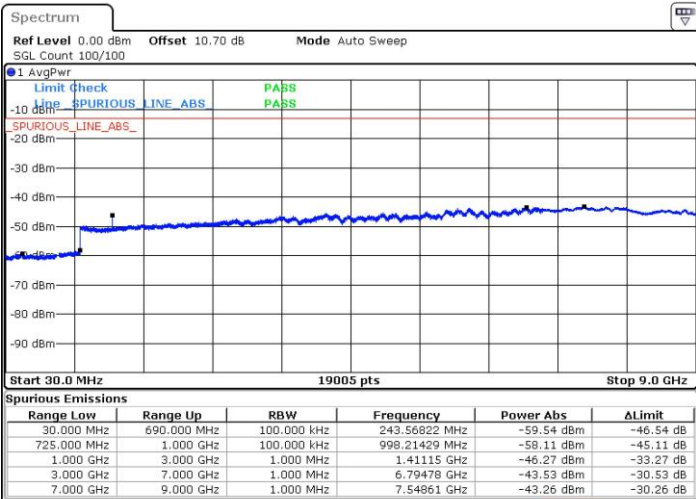
Date: 11.MAY.2019 07:01:46



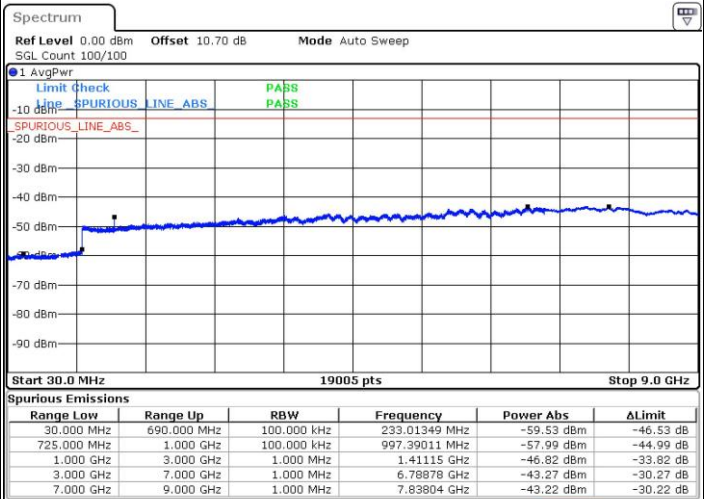
Date: 11.MAY.2019 07:02:27

Middle Channel / QPSK

Middle Channel / 16QAM



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

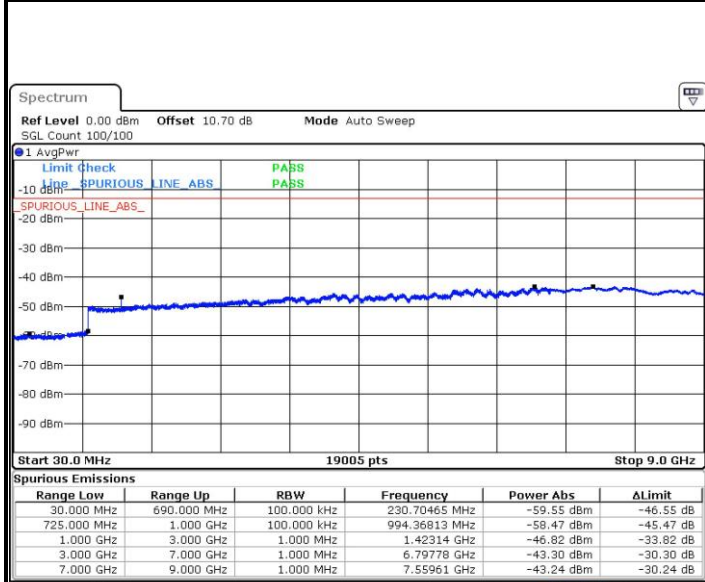


Date: 11.MAY.2019 07:03:55



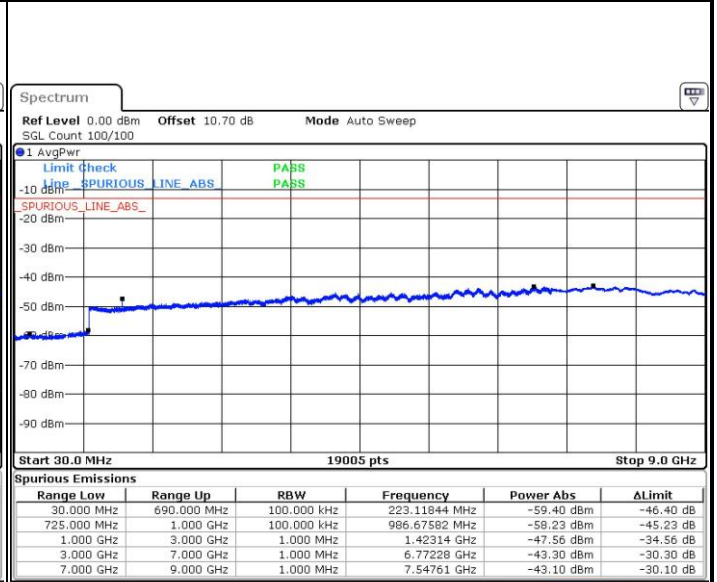
LTE Band 12 / 5MHz

Highest Channel / QPSK



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

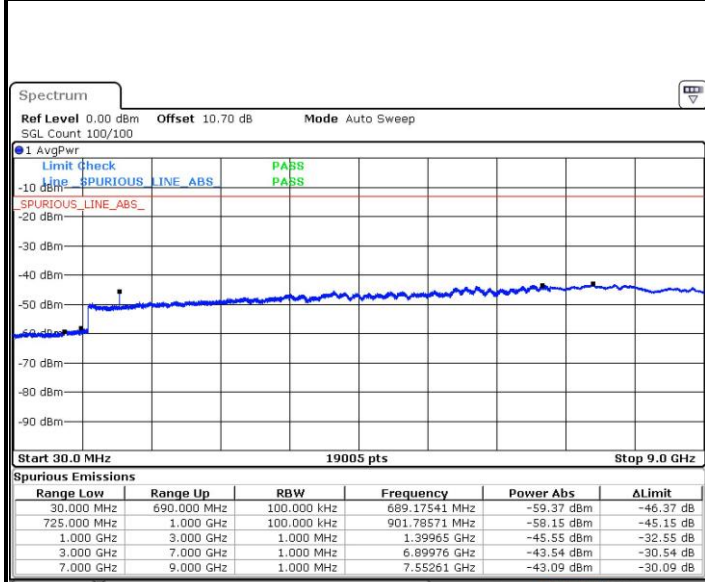
Highest Channel / 16QAM



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

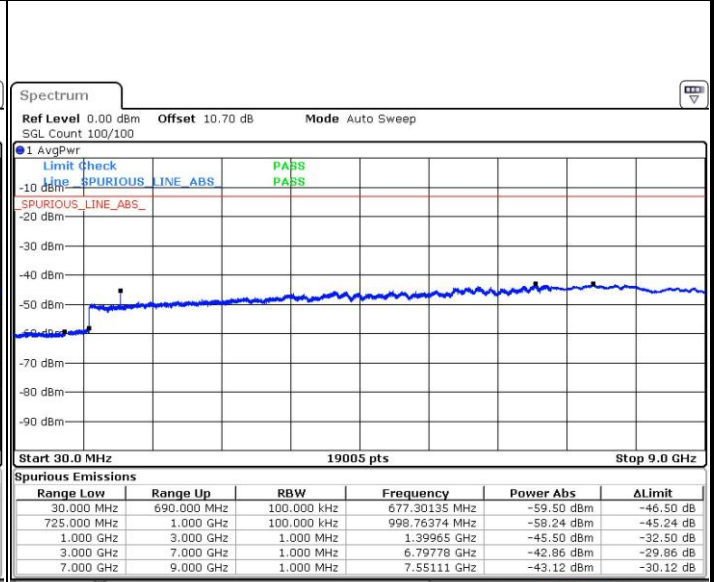
LTE Band 12 / 10MHz

Lowest Channel / QPSK



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

Lowest Channel / 16QAM



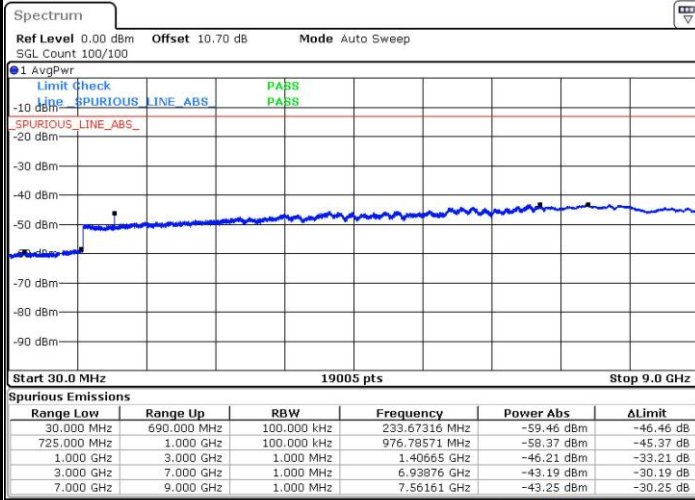
Date: 11.MAY.2019 07:23:15



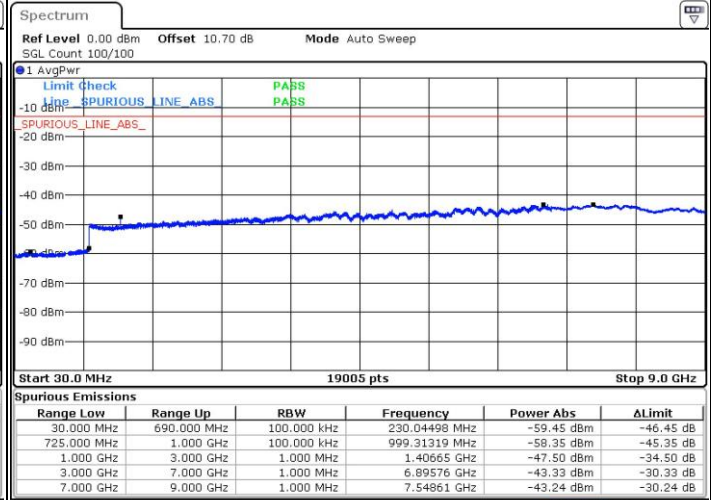
LTE Band 12 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM



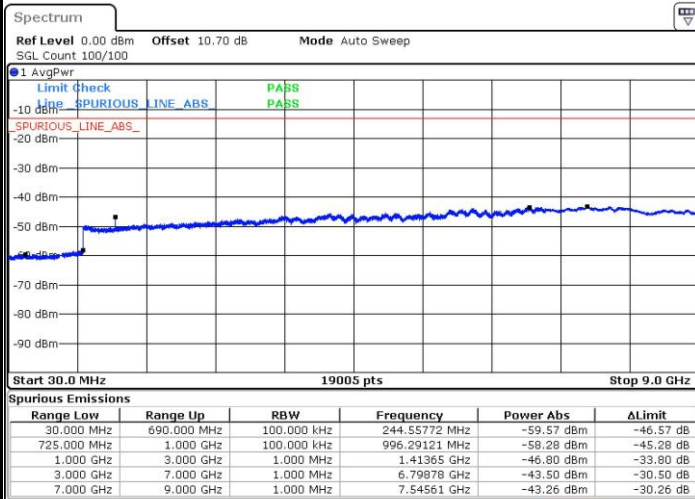
Date: 11.MAY.2019 07:25:23



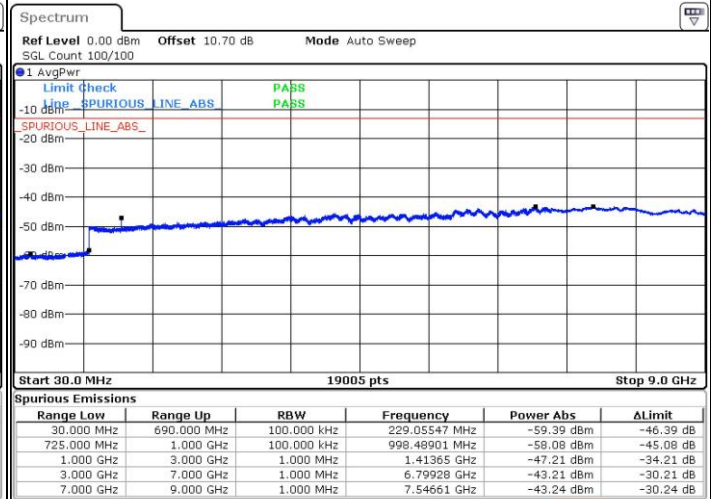
Date: 11.MAY.2019 07:24:43

Highest Channel / QPSK

Highest Channel / 16QAM



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



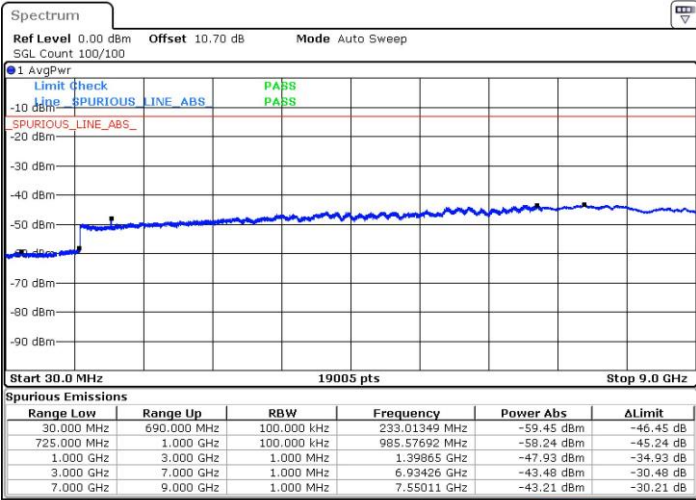
Date: 11.MAY.2019 07:31:39



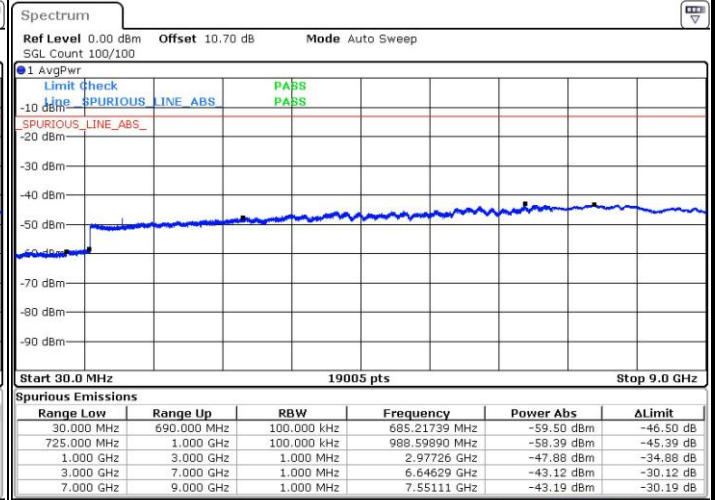
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

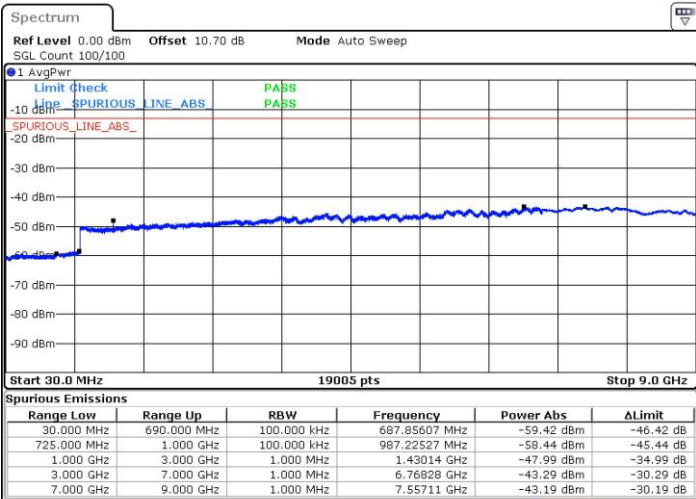


Date: 11.MAY.2019 08:03:28



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

Highest Channel / 64QAM



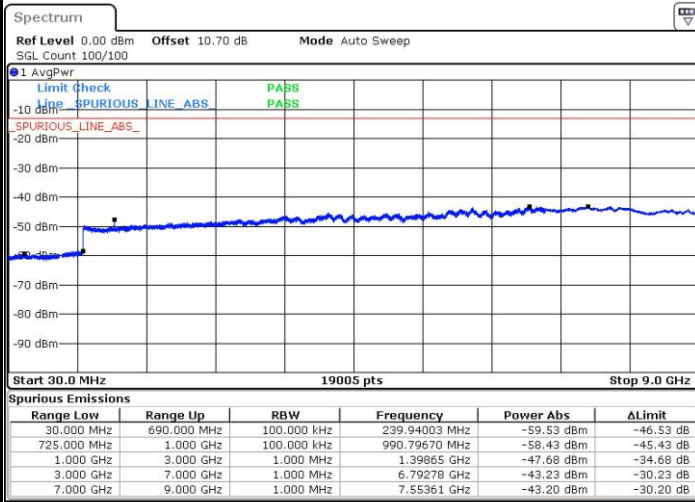
Date: 11.MAY.2019 08:07:40



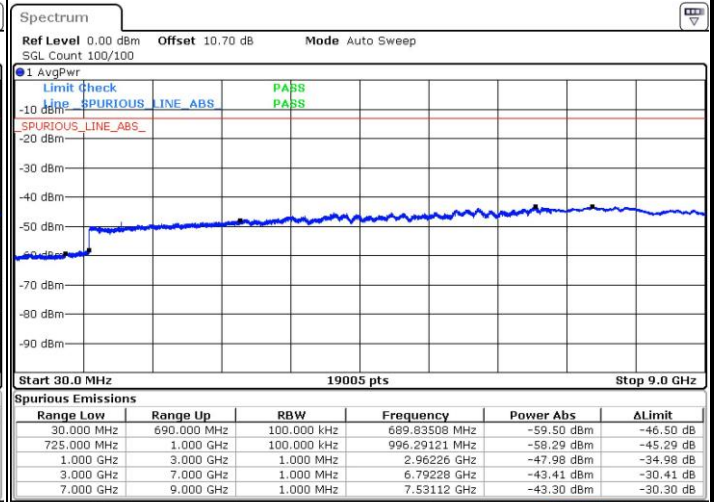
LTE Band 12 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

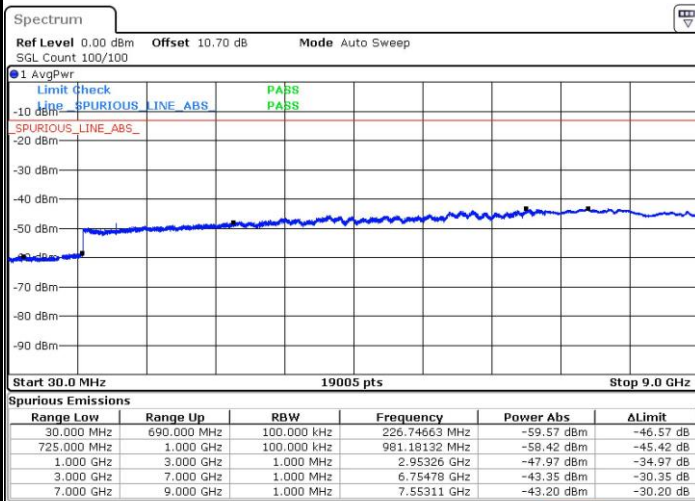


Date: 11.MAY.2019 06:44:37



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

Highest Channel / 64QAM



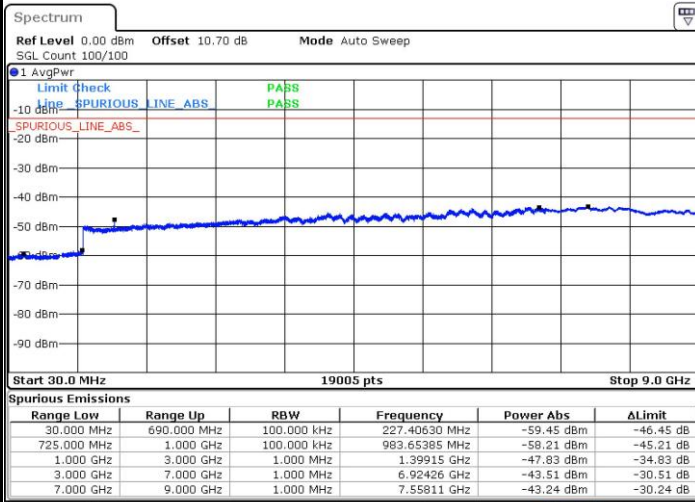
Date: 11.MAY.2019 06:48:49



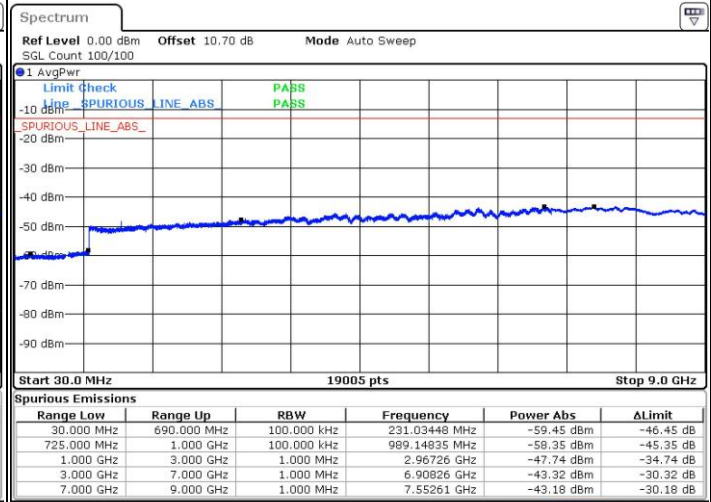
LTE Band 12 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

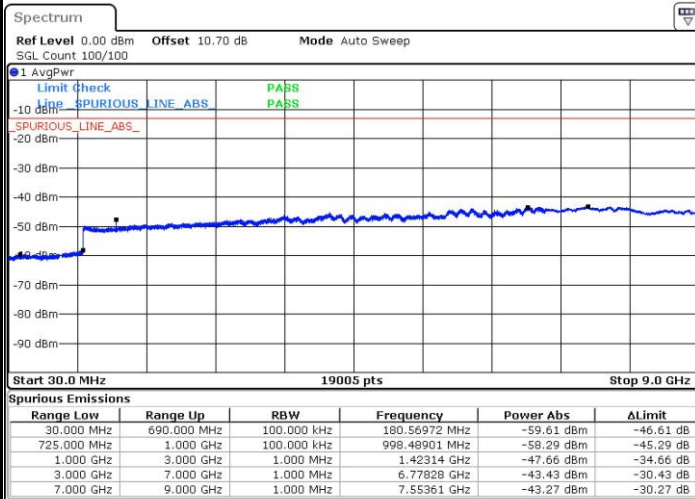


Date: 11.MAY.2019 06:51:58



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

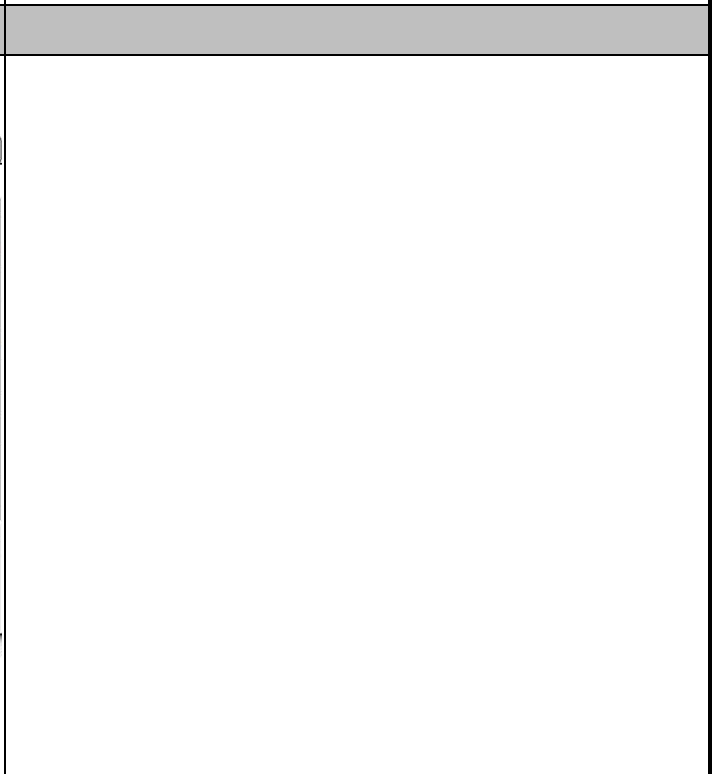
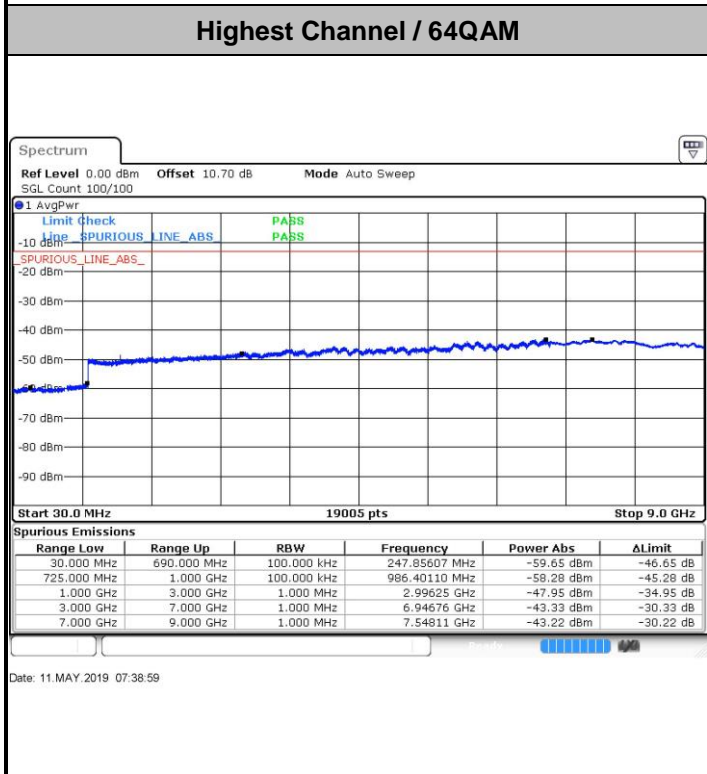
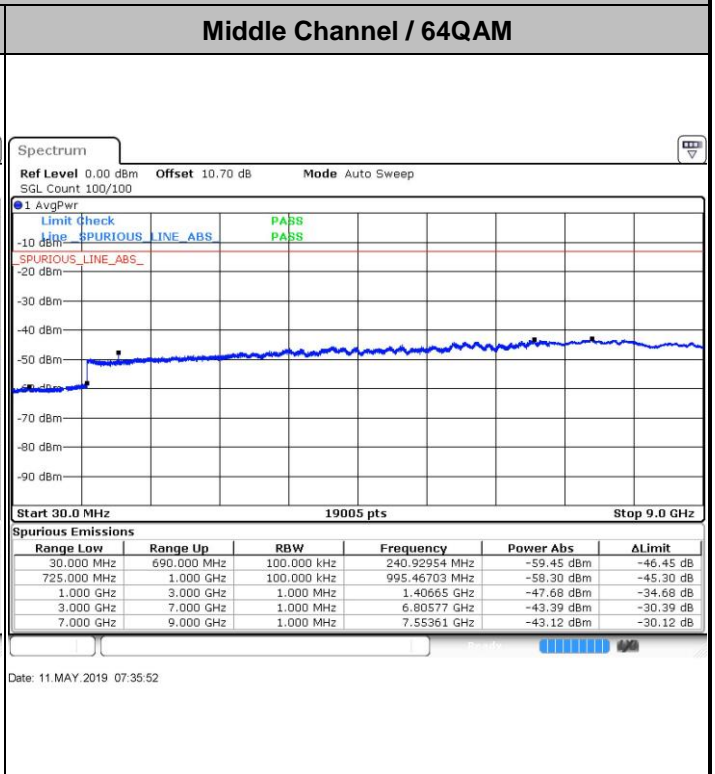
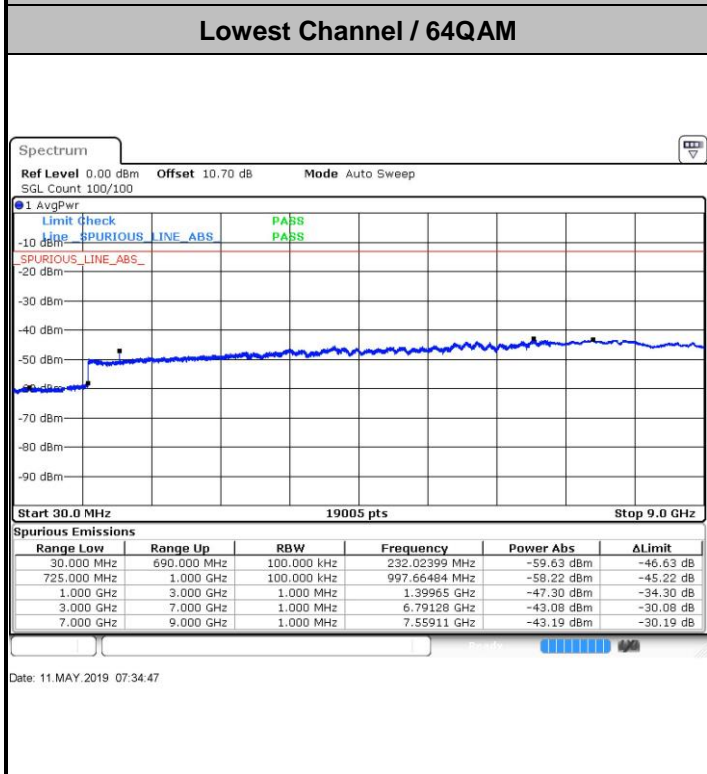
Highest Channel / 64QAM



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



LTE Band 12 / 10MHz





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	PASS
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	-	-	PASS
Middle CH	5.39	5.91	-	-	
Highest CH	5.13	5.88	-	-	



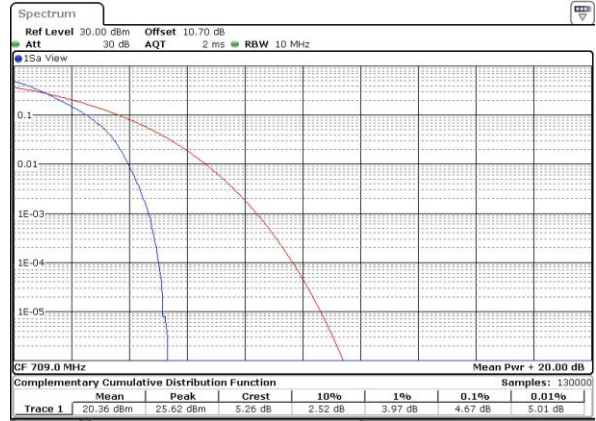
LTE Band 17 / 10MHz / QPSK

Lowest Channel / 1RB



Date: 13 MAY 2019 18:55:14

Lowest Channel / Full RB



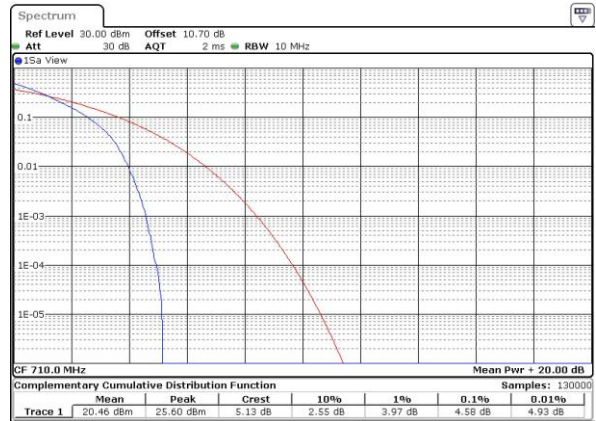
Date: 13 MAY 2019 18:55:26

Middle Channel / 1RB



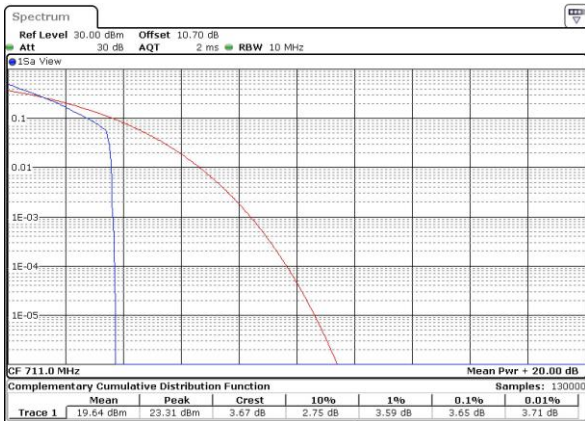
Date: 13 MAY 2019 18:56:11

Middle Channel / Full RB



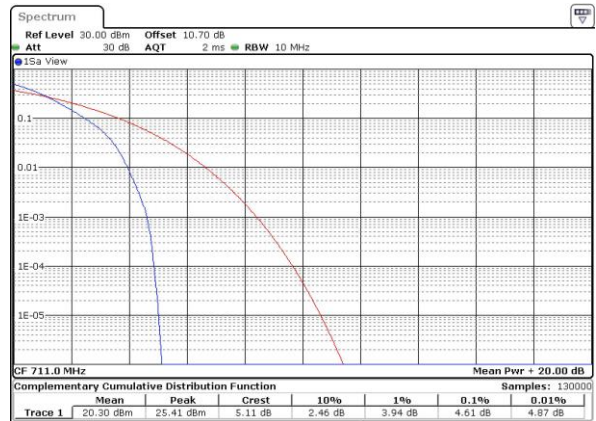
Date: 13 MAY 2019 18:56:36

Highest Channel / 1RB



Date: 13 MAY 2019 18:56:47

Highest Channel / Full RB



Date: 13 MAY 2019 18:56:59



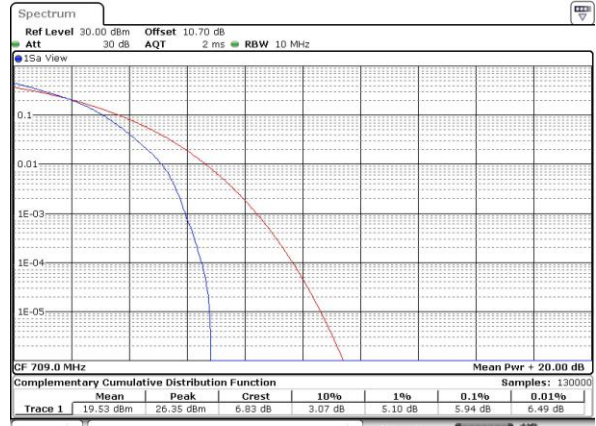
LTE Band 17 / 10MHz / 16QAM

Lowest Channel / 1RB



Date: 13 MAY 2019 18:53:49

Lowest Channel / Full RB



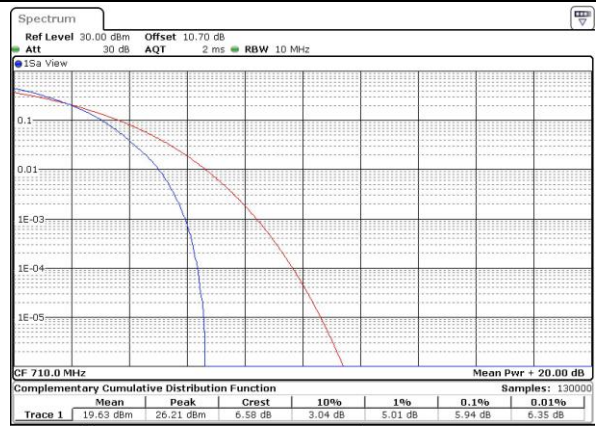
Date: 13 MAY 2019 18:54:00

Middle Channel / 1RB



Date: 13 MAY 2019 18:54:12

Middle Channel / Full RB



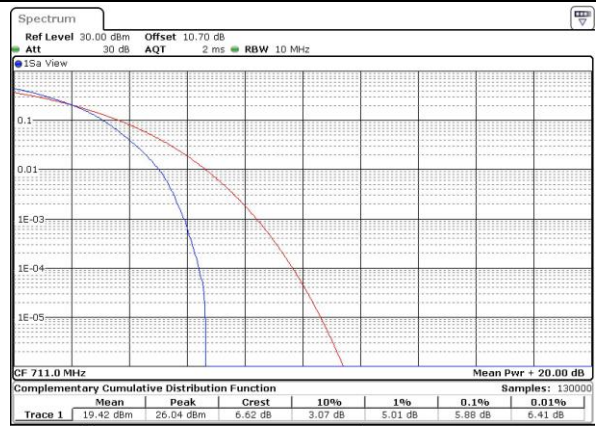
Date: 13 MAY 2019 18:54:24

Highest Channel / 1RB



Date: 13 MAY 2019 18:54:35

Highest Channel / Full RB



Date: 13 MAY 2019 18:54:49



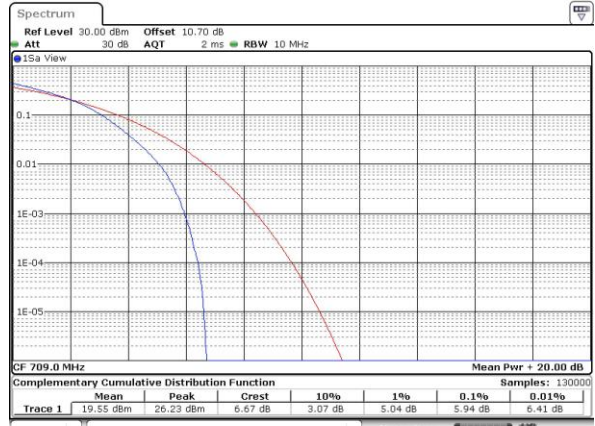
LTE Band 17 / 10MHz / 64QAM

Lowest Channel / 1RB



Date: 13 MAY 2019 18:59:37

Lowest Channel / Full RB



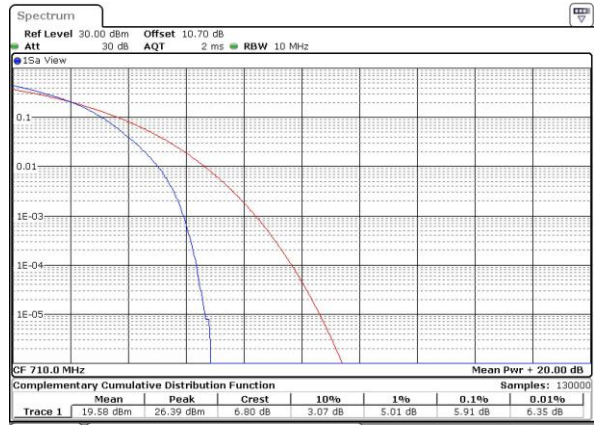
Date: 13 MAY 2019 18:59:48

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



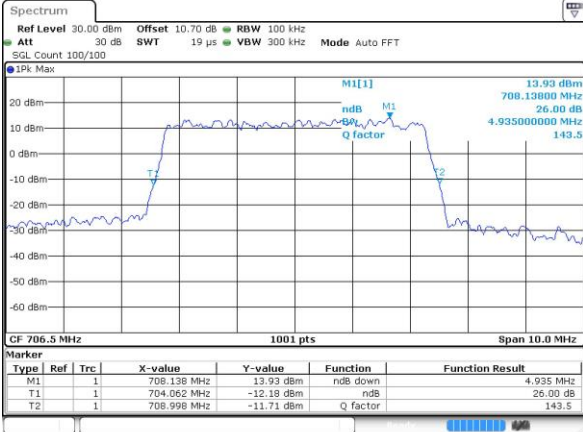
26dB Bandwidth

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	-	-	-	-	-



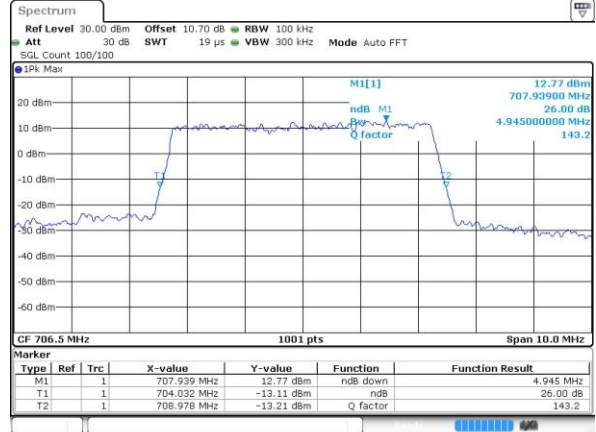
LTE Band 17

Lowest Channel / 5MHz / QPSK



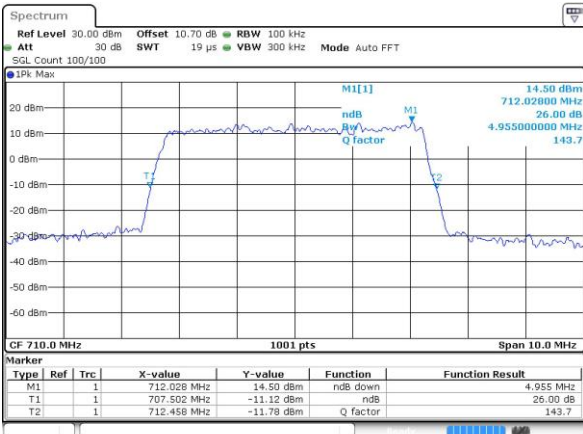
Date: 13 MAY 2019 17:53:04

Lowest Channel / 5MHz / 16QAM



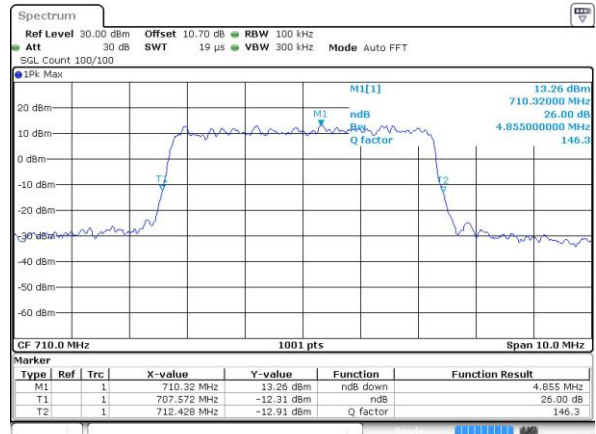
Date: 13 MAY 2019 17:53:15

Middle Channel / 5MHz / QPSK



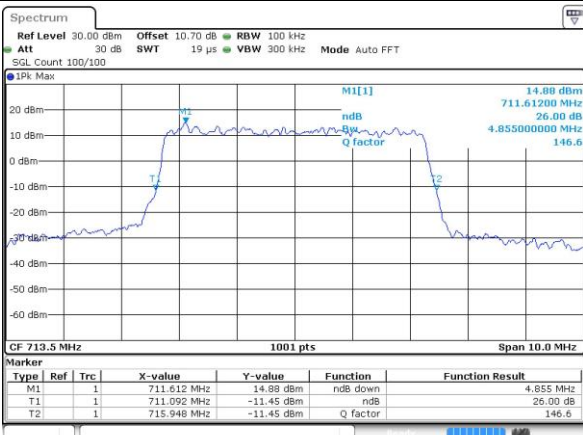
Date: 13 MAY 2019 17:58:11

Middle Channel / 5MHz / 16QAM



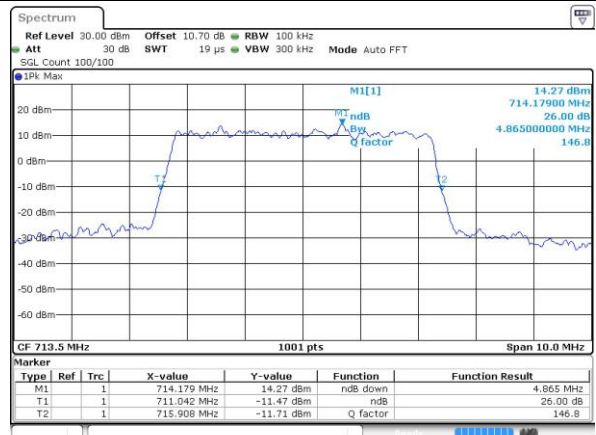
Date: 13 MAY 2019 17:58:22

Highest Channel / 5MHz / QPSK



Date: 13 MAY 2019 18:01:17

Highest Channel / 5MHz / 16QAM

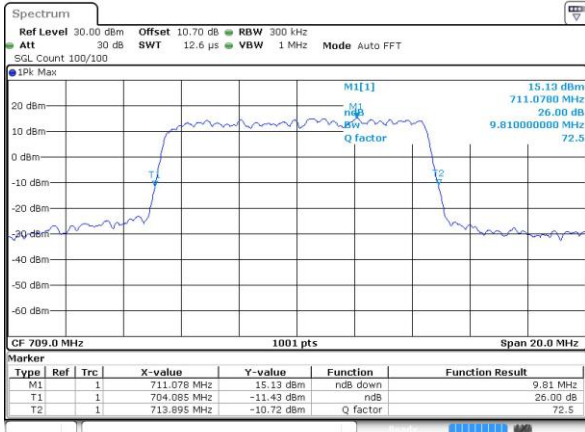


Date: 13 MAY 2019 18:01:29



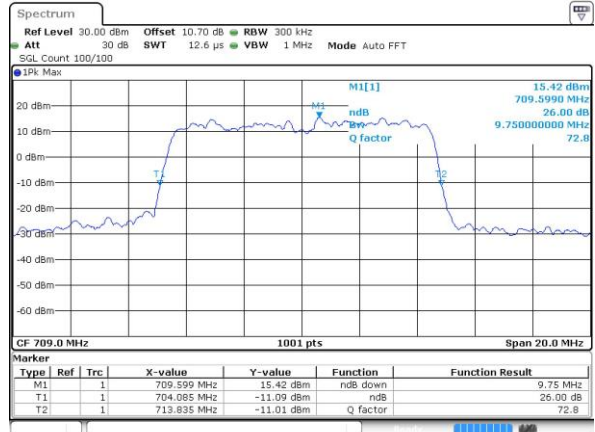
LTE Band 17

Lowest Channel / 10MHz / QPSK



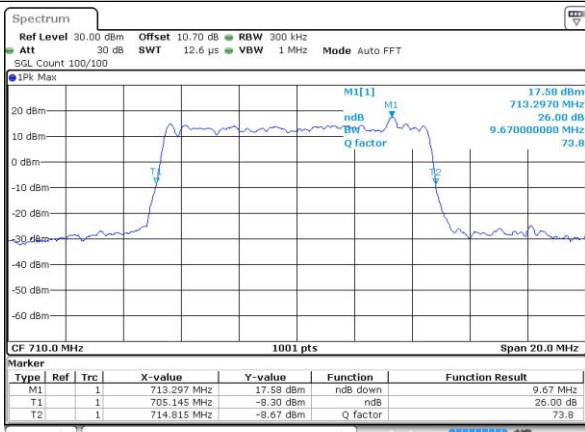
Date: 13 MAY 2019 18:07:24

Lowest Channel / 10MHz / 16QAM



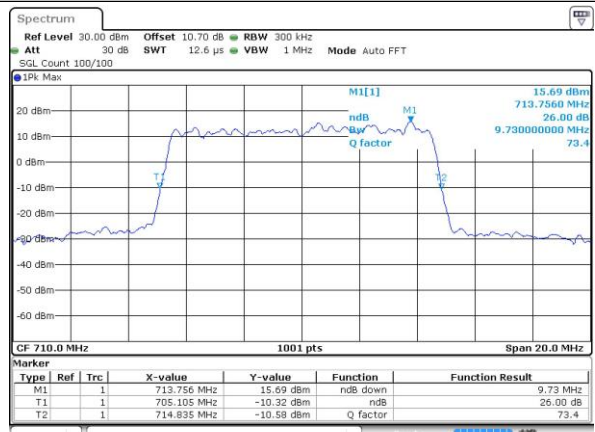
Date: 13 MAY 2019 18:07:35

Middle Channel / 10MHz / QPSK



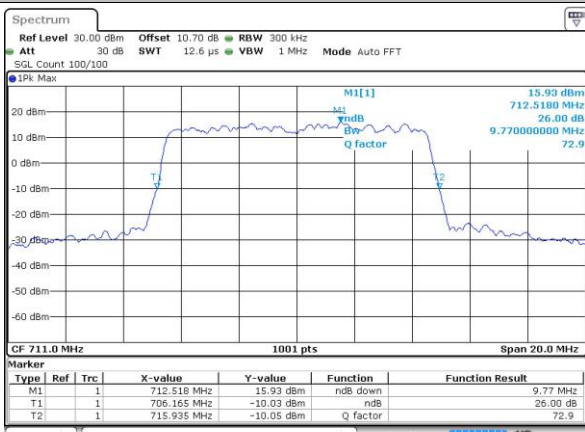
Date: 13 MAY 2019 18:13:31

Middle Channel / 10MHz / 16QAM



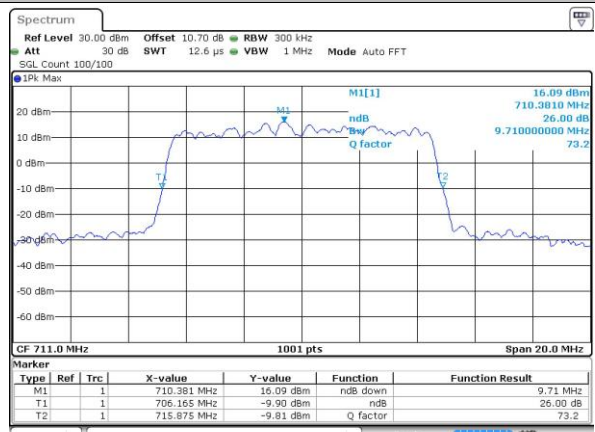
Date: 13 MAY 2019 18:13:42

Highest Channel / 10MHz / QPSK



Date: 13 MAY 2019 18:15:37

Highest Channel / 10MHz / 16QAM

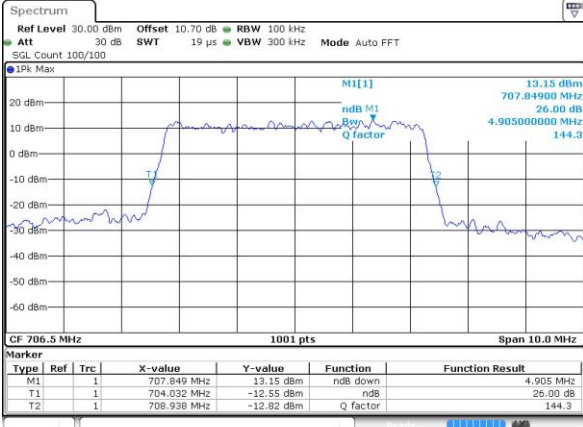


Date: 13 MAY 2019 18:15:49



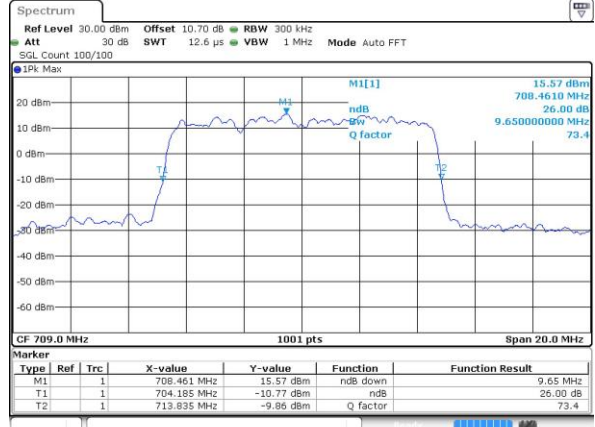
LTE Band 17

Lowest Channel / 5MHz / 64QAM



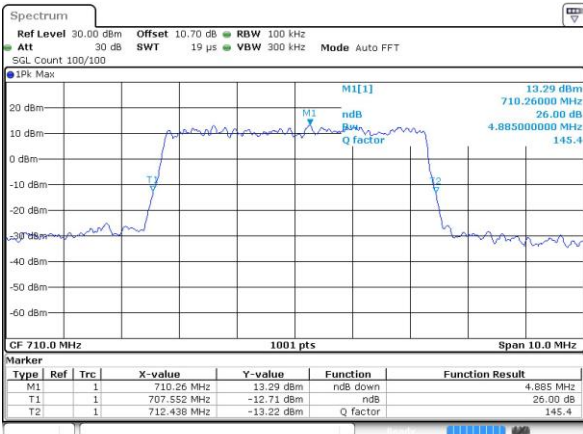
Date: 13 MAY 2019 18:21:32

Lowest Channel / 10MHz / 64QAM



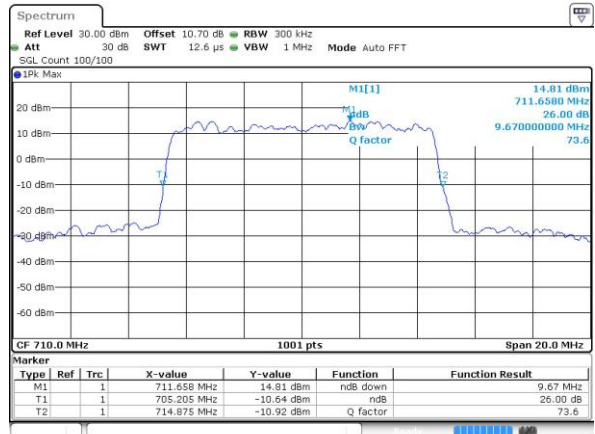
Date: 13 MAY 2019 18:28:42

Middle Channel / 5MHz / 64QAM



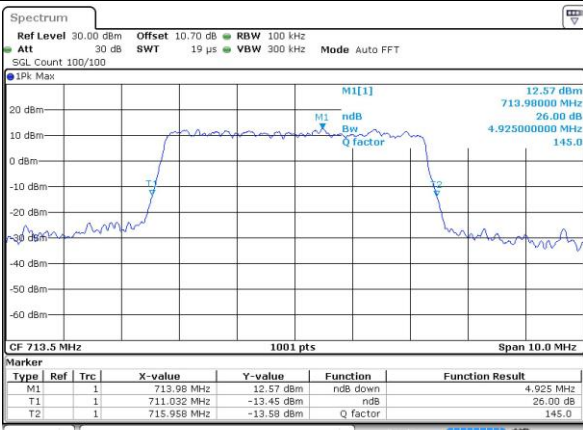
Date: 13 MAY 2019 18:24:38

Middle Channel / 10MHz / 64QAM



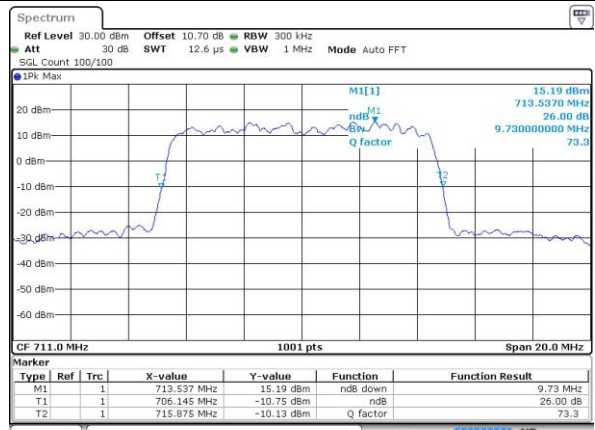
Date: 13 MAY 2019 18:31:48

Highest Channel / 5MHz / 64QAM



Date: 13 MAY 2019 18:25:39

Highest Channel / 10MHz / 64QAM



Date: 13 MAY 2019 18:32:49



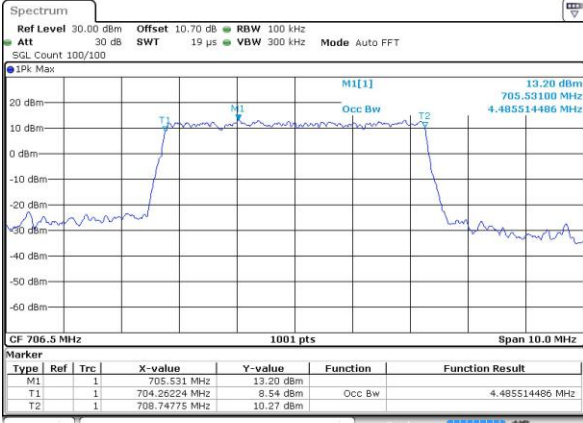
Occupied Bandwidth

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	-	-	-	-	-



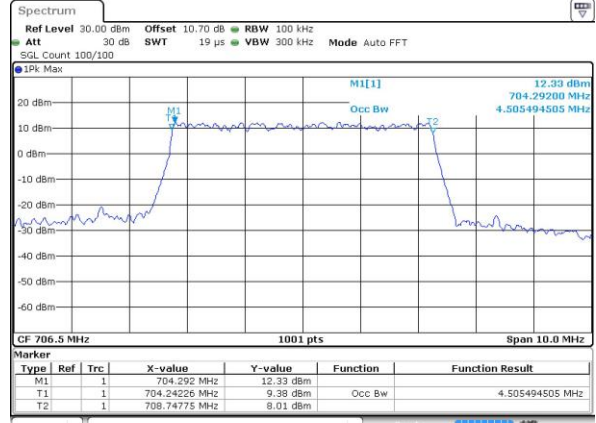
LTE Band 17

Lowest Channel / 5MHz / QPSK



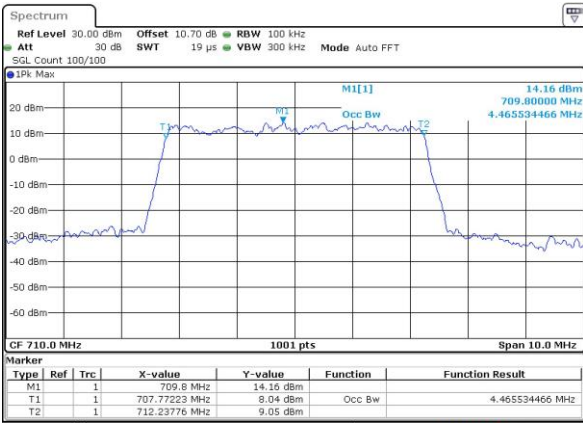
Date: 13 MAY 2019 17:52:41

Lowest Channel / 5MHz / 16QAM



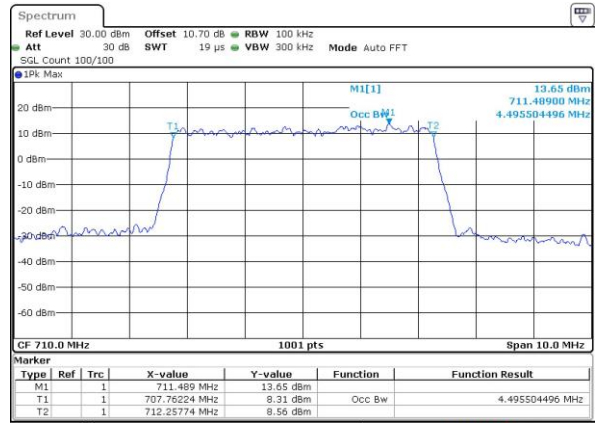
Date: 13 MAY 2019 17:52:53

Middle Channel / 5MHz / QPSK



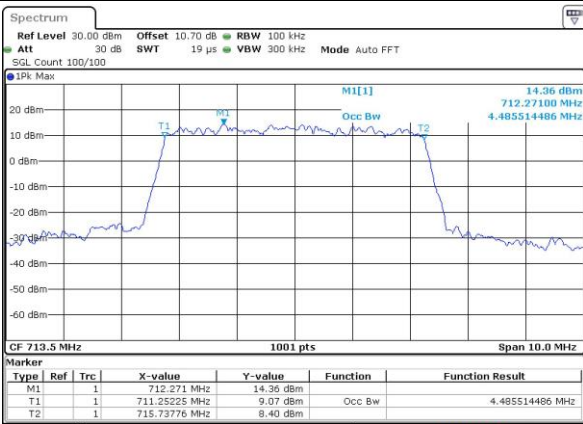
Date: 13 MAY 2019 17:58:48

Middle Channel / 5MHz / 16QAM



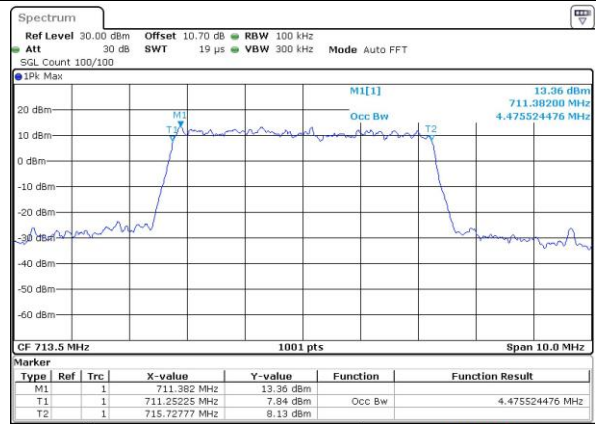
Date: 13 MAY 2019 17:58:59

Highest Channel / 5MHz / QPSK



Date: 13 MAY 2019 18:00:54

Highest Channel / 5MHz / 16QAM

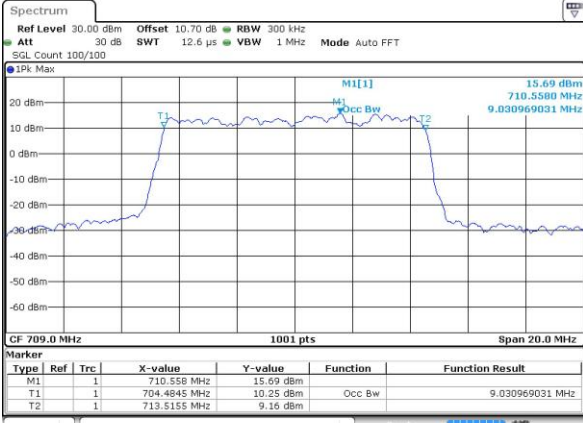


Date: 13 MAY 2019 18:01:06



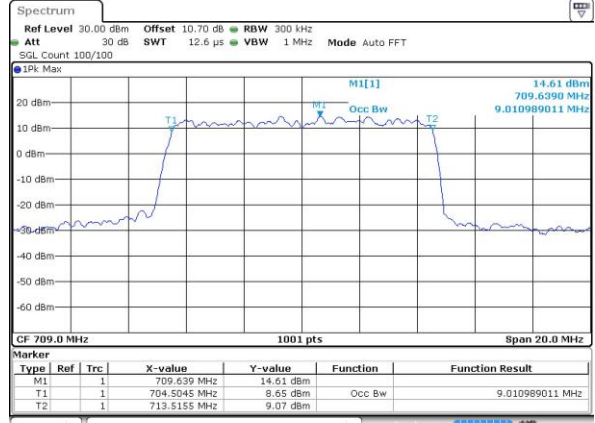
LTE Band 17

Lowest Channel / 10MHz / QPSK



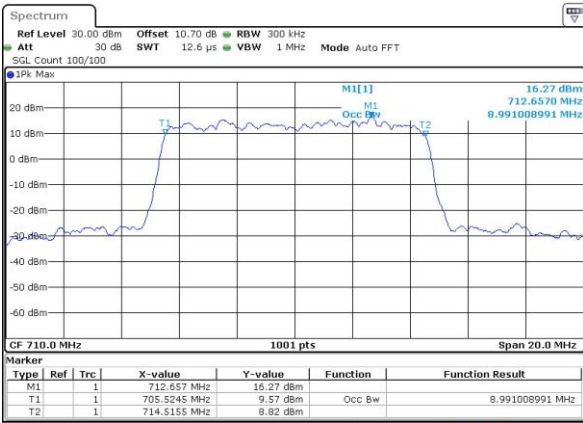
Date: 13 MAY 2019 18:07:01

Lowest Channel / 10MHz / 16QAM



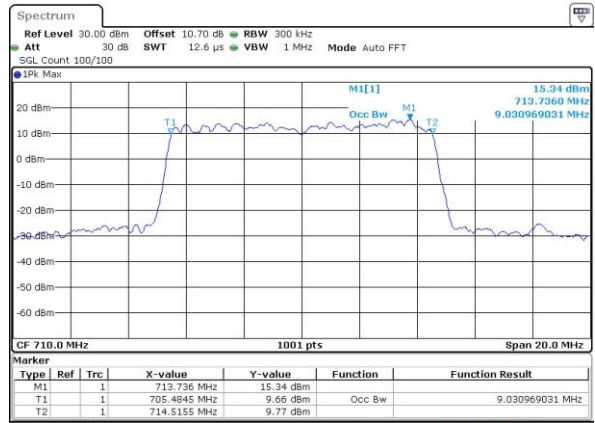
Date: 13 MAY 2019 18:07:13

Middle Channel / 10MHz / QPSK



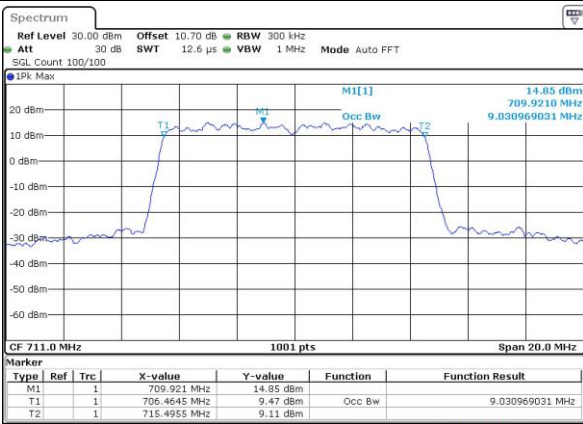
Date: 13 MAY 2019 18:13:08

Middle Channel / 10MHz / 16QAM



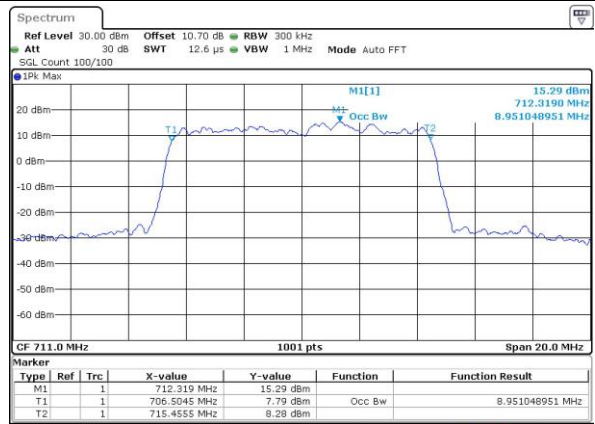
Date: 13 MAY 2019 18:13:19

Highest Channel / 10MHz / QPSK



Date: 13 MAY 2019 18:15:14

Highest Channel / 10MHz / 16QAM

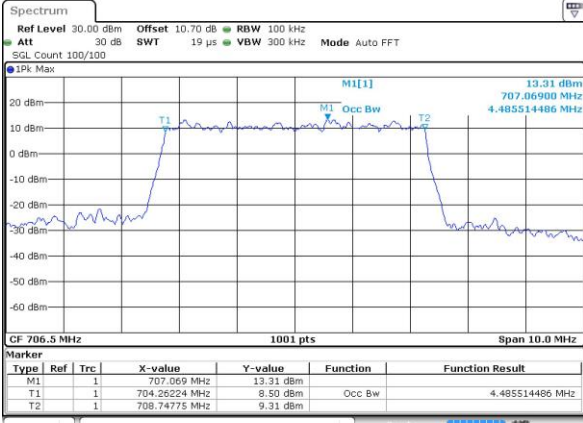


Date: 13 MAY 2019 18:15:26



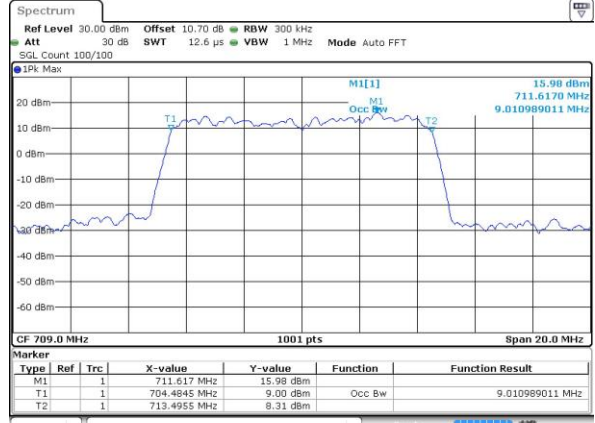
LTE Band 17

Lowest Channel / 5MHz / 64QAM



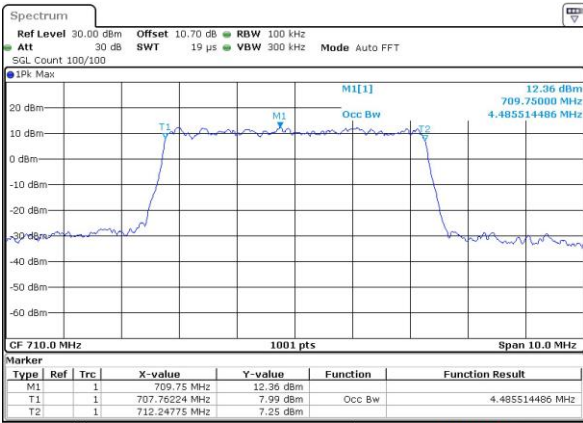
Date: 13 MAY 2019 18:21:21

Lowest Channel / 10MHz / 64QAM



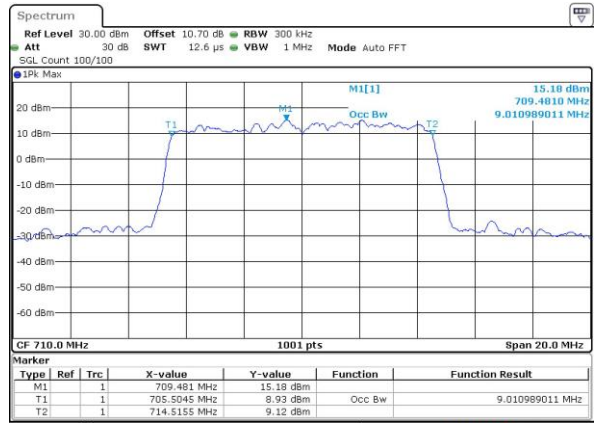
Date: 13 MAY 2019 18:28:31

Middle Channel / 5MHz / 64QAM



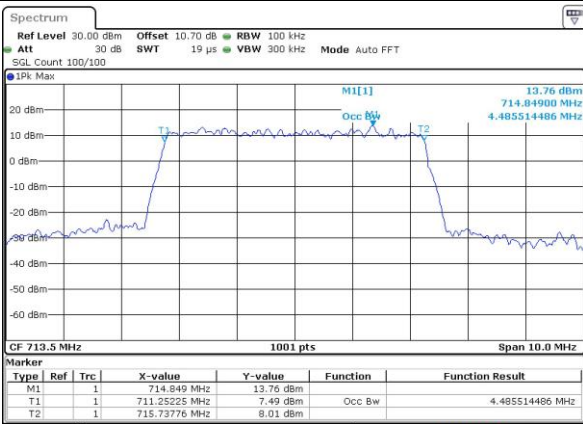
Date: 13 MAY 2019 18:24:24

Middle Channel / 10MHz / 64QAM



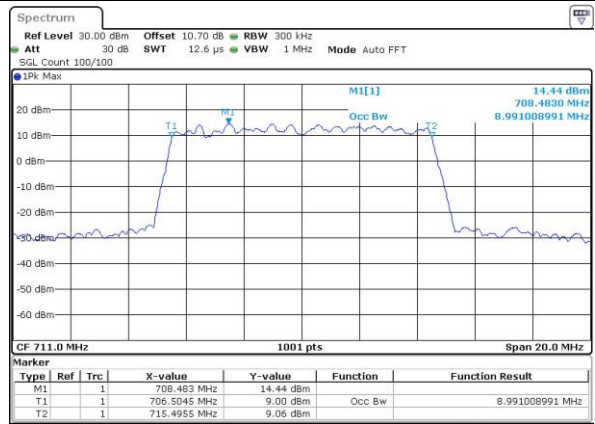
Date: 13 MAY 2019 18:31:34

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

