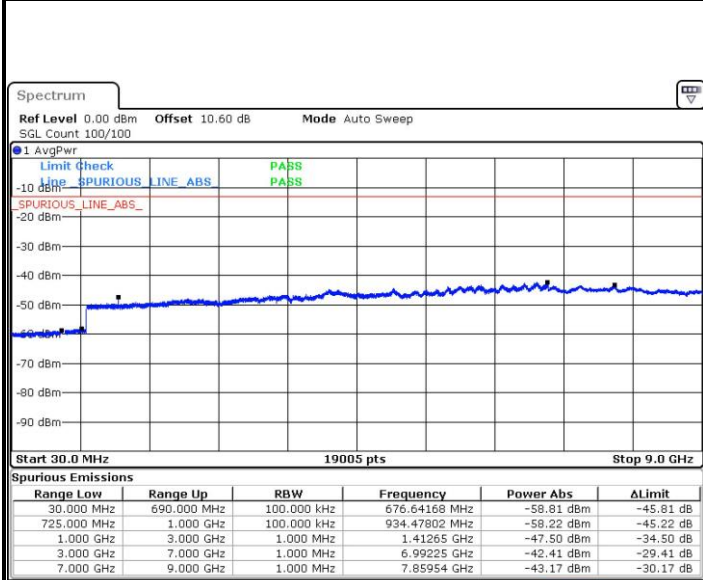




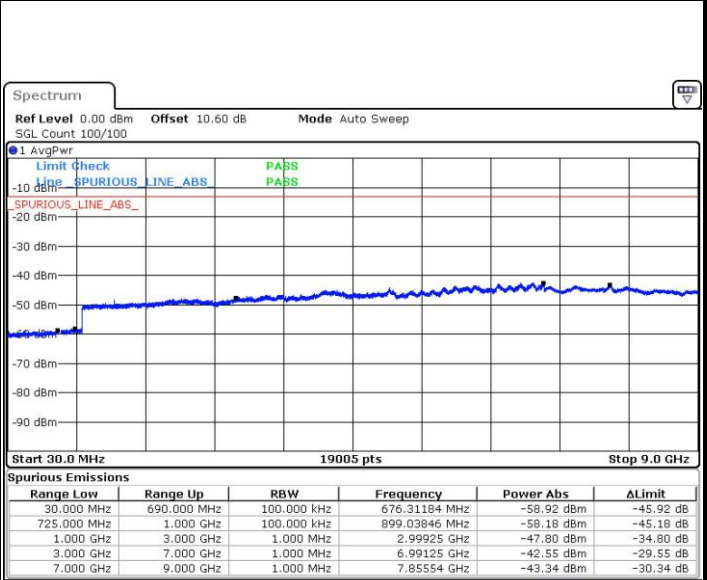
LTE Band 12 / 3MHz

Middle Channel / QPSK



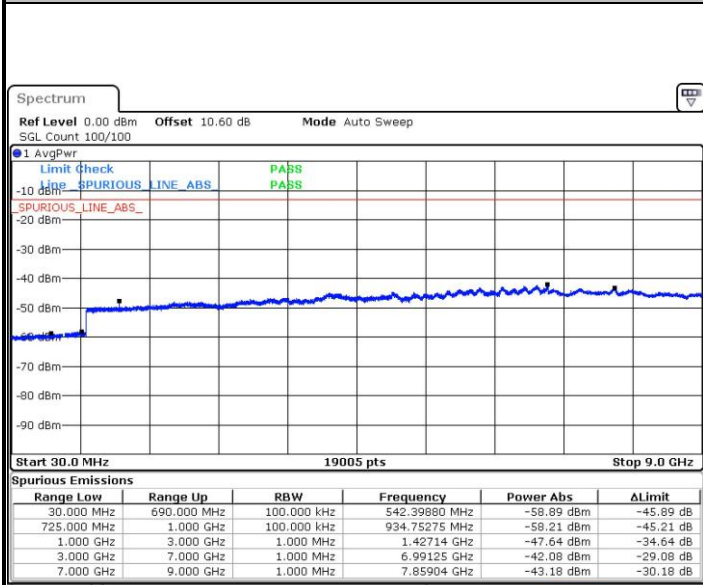
Date: 11.MAY.2017 19:05:59

Middle Channel / 16QAM



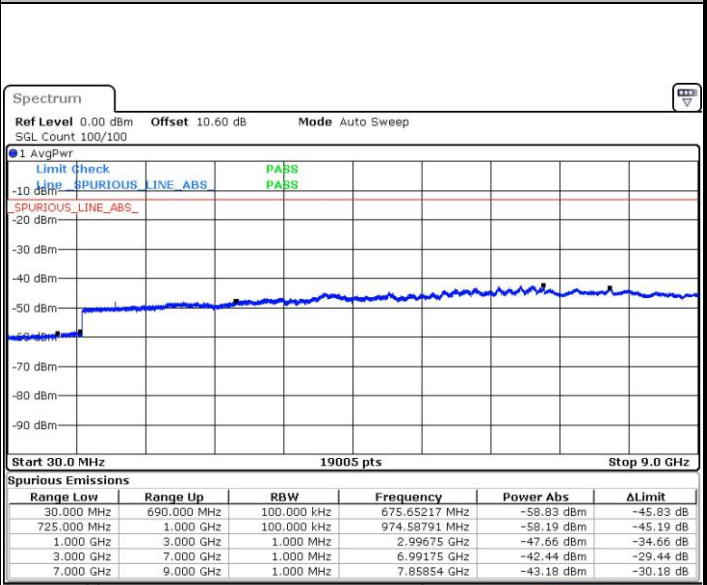
Date: 11.MAY.2017 19:05:05

Highest Channel / QPSK



Date: 11.MAY.2017 19:12:11

Highest Channel / 16QAM

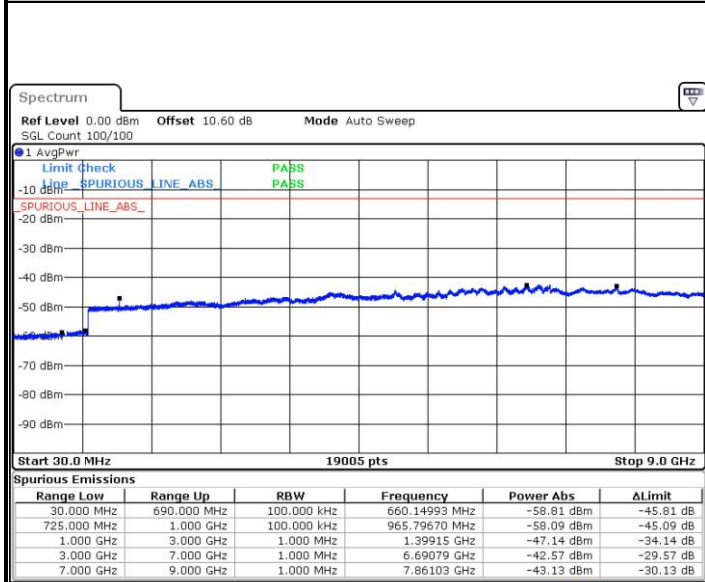


Date: 11.MAY.2017 19:13:05



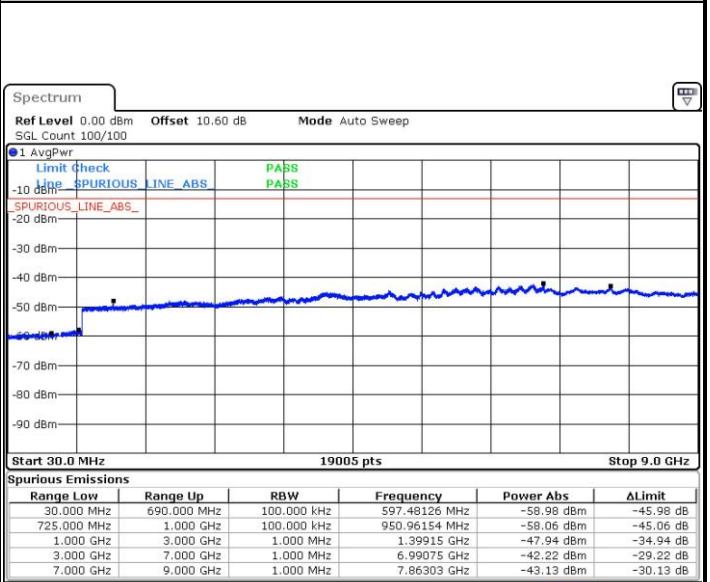
LTE Band 12 / 5MHz

Lowest Channel / QPSK



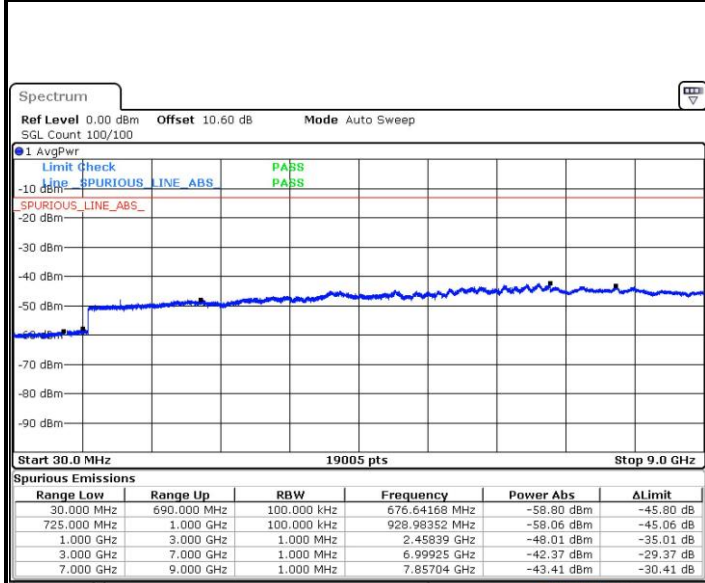
Date: 11.MAY.2017 19:19:17

Lowest Channel / 16QAM



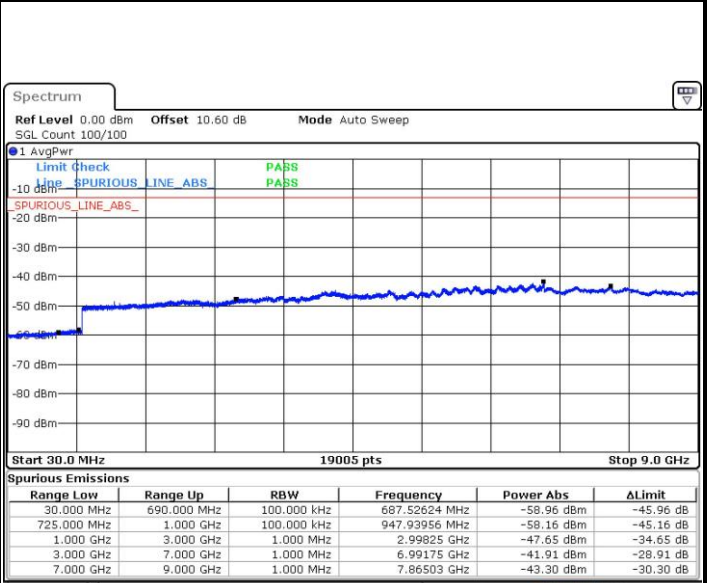
Date: 11.MAY.2017 19:20:12

Middle Channel / QPSK



Date: 11.MAY.2017 19:22:41

Middle Channel / 16QAM

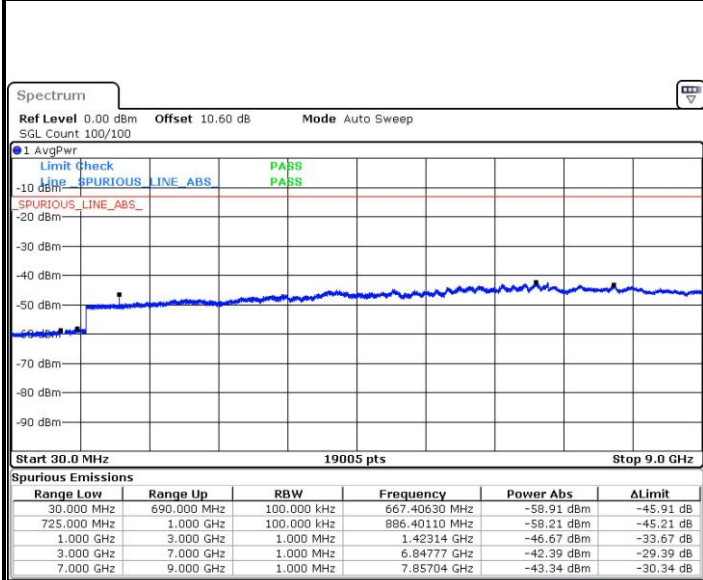


Date: 11.MAY.2017 19:21:47



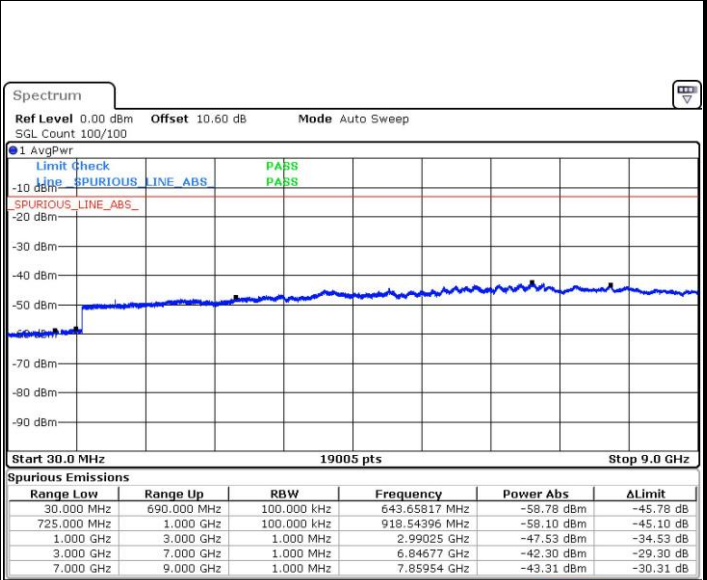
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 11.MAY.2017 19:29:48

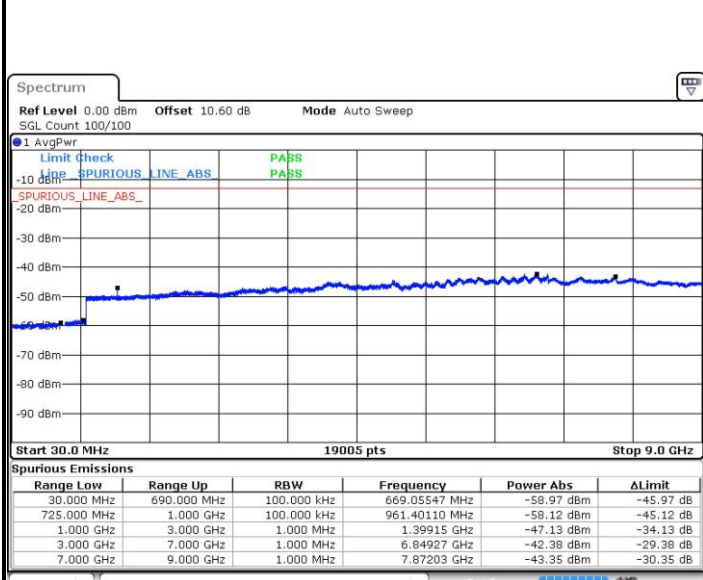
Highest Channel / 16QAM



Date: 11.MAY.2017 19:28:54

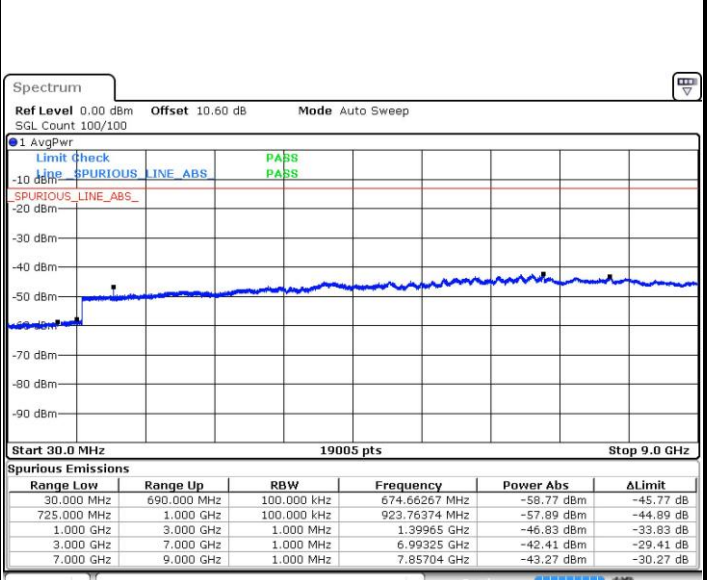
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 11.MAY.2017 19:36:01

Lowest Channel / 16QAM

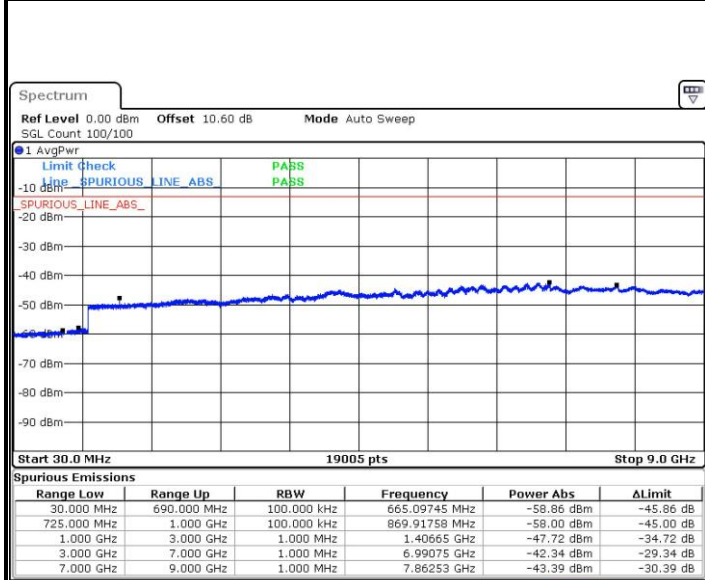


Date: 11.MAY.2017 19:36:55



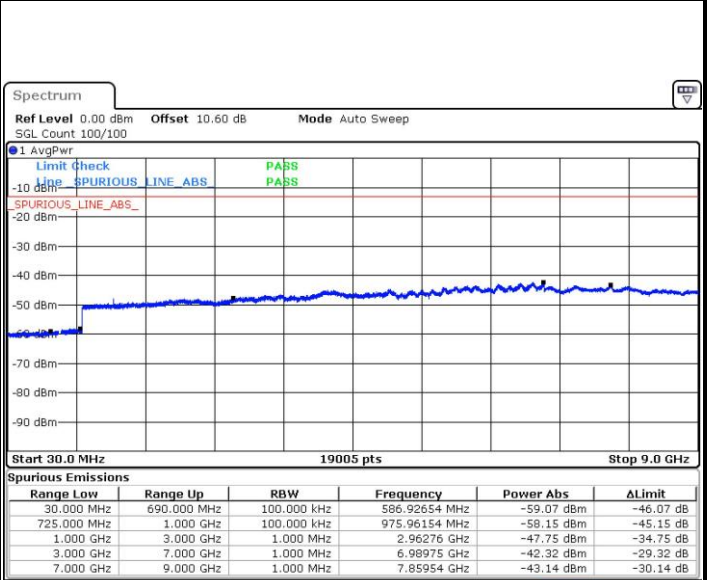
LTE Band 12 / 10MHz

Middle Channel / QPSK



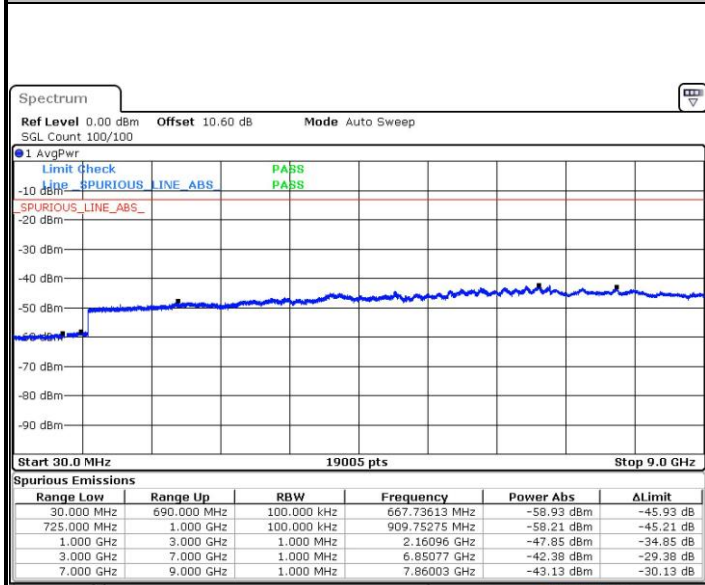
Date: 11.MAY.2017 19:39:25

Middle Channel / 16QAM



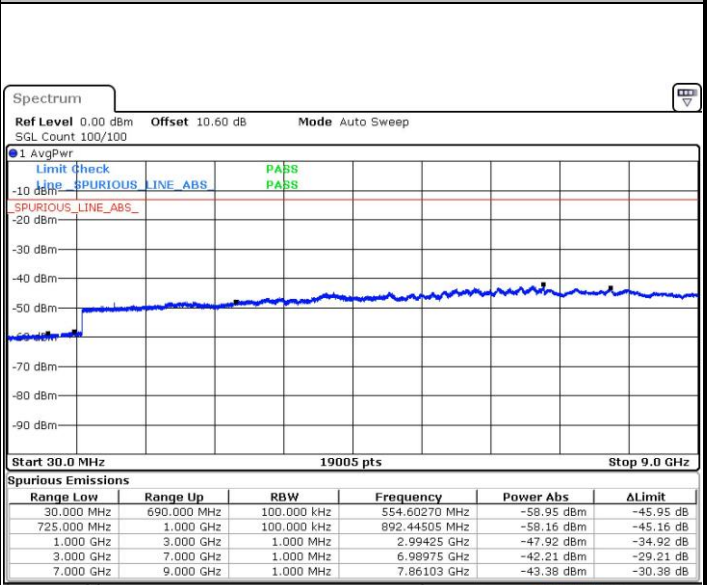
Date: 11.MAY.2017 19:38:31

Highest Channel / QPSK



Date: 11.MAY.2017 19:45:38

Highest Channel / 16QAM

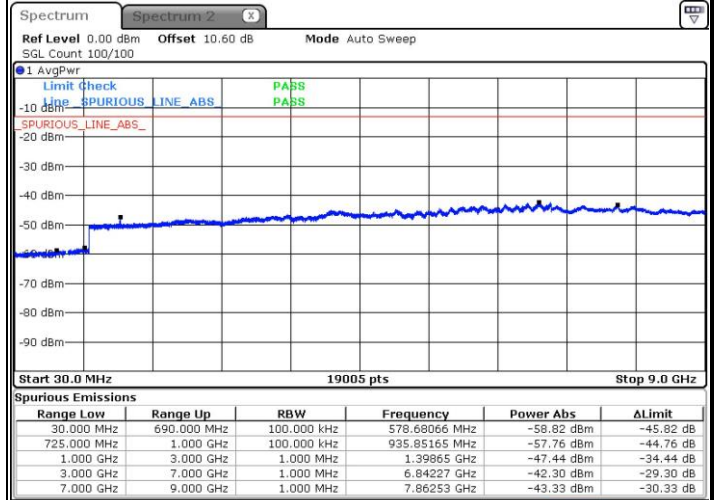


Date: 11.MAY.2017 19:46:32



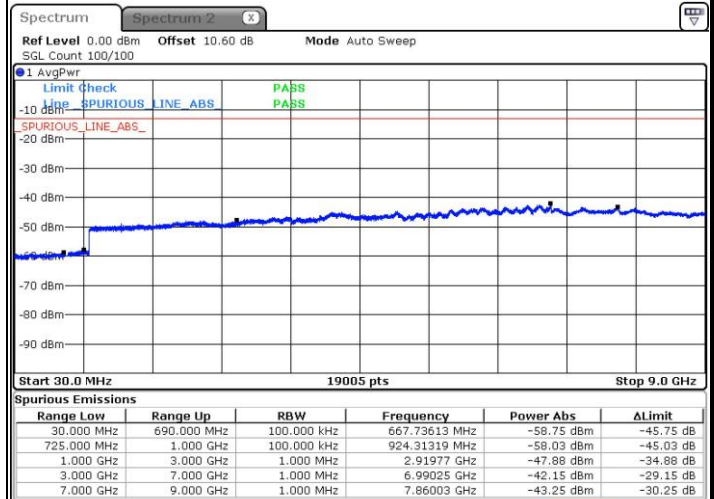
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



Date: 14.MAY.2017 11:24:23

Middle Channel / 64QAM

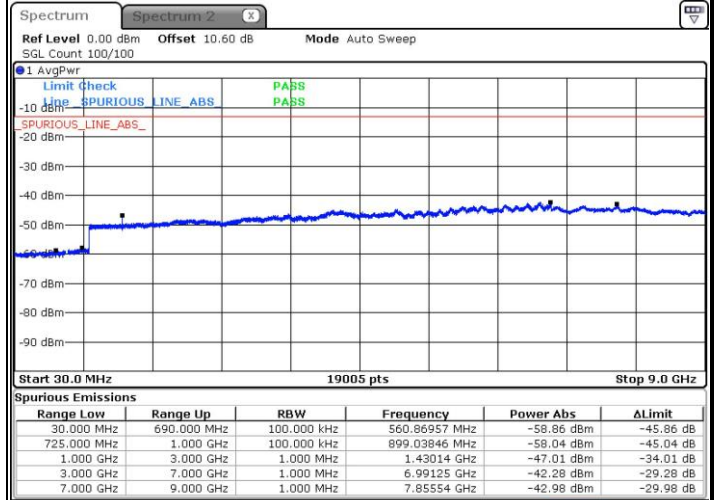


Date: 14.MAY.2017 11:25:38



LTE Band 12 / 1.4MHz

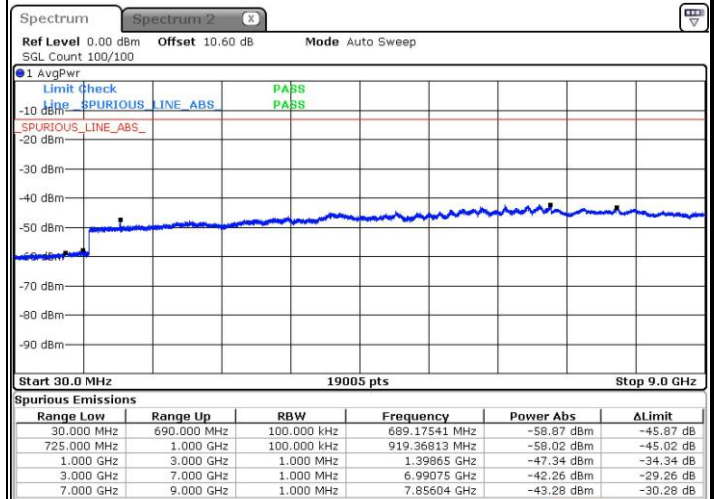
Highest Channel / 64QAM



Date: 14.MAY.2017 11:29:12

LTE Band 12 / 3MHz

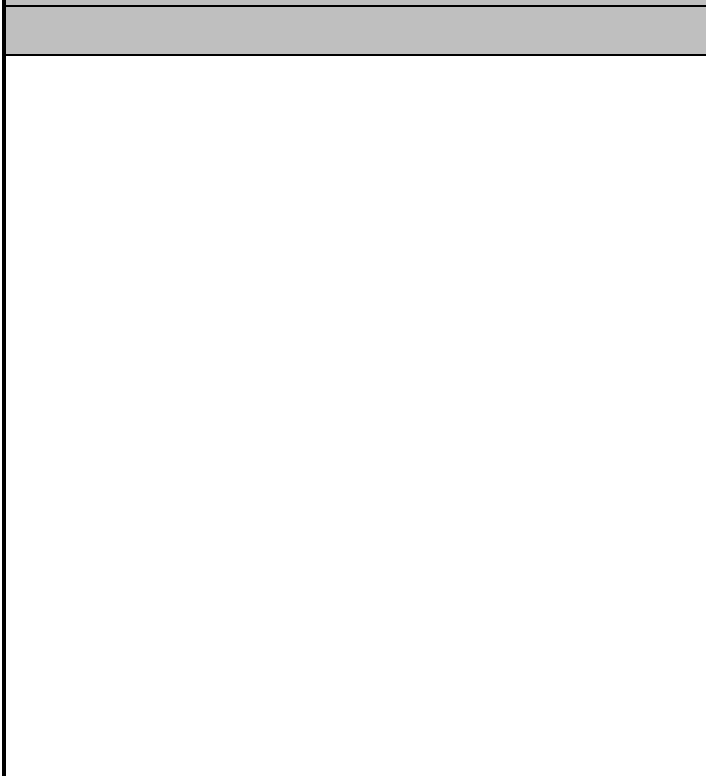
Lowest Channel / 64QAM



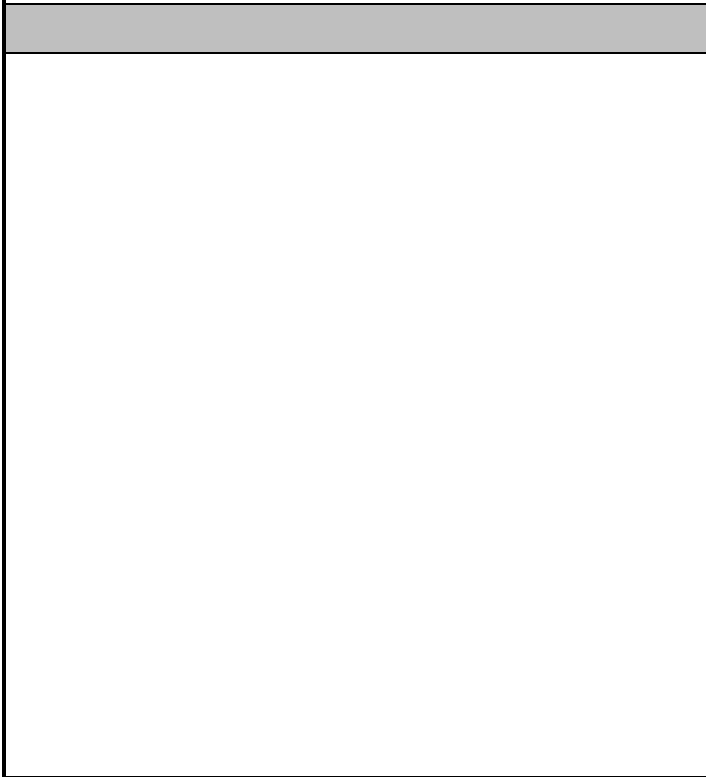
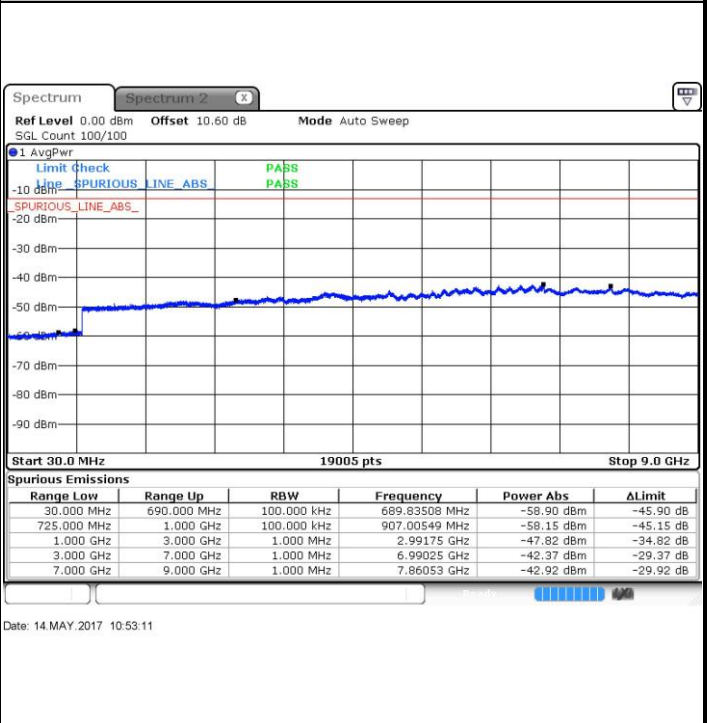
Date: 14.MAY.2017 10:51:56



**LTE Band 12 / 3MHz**



**Middle Channel / 64QAM**



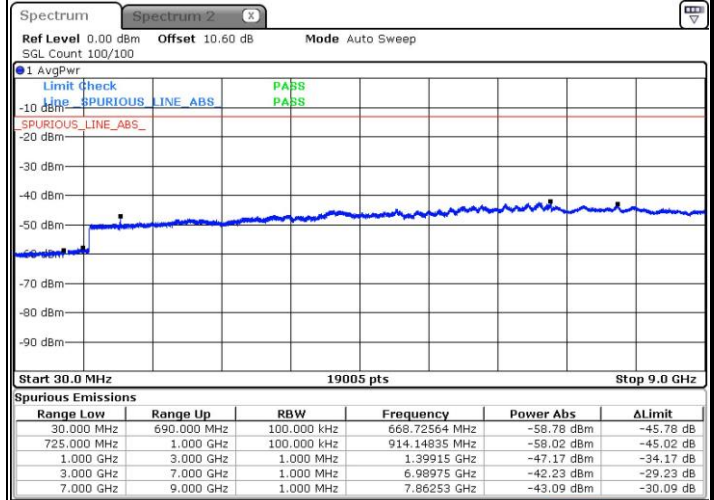
**Highest Channel / 64QAM**





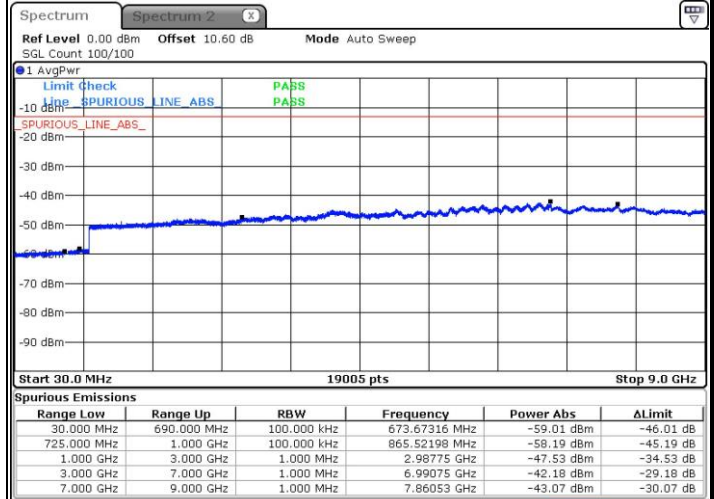
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



Date: 14.MAY.2017 11:00:18

Middle Channel / 64QAM

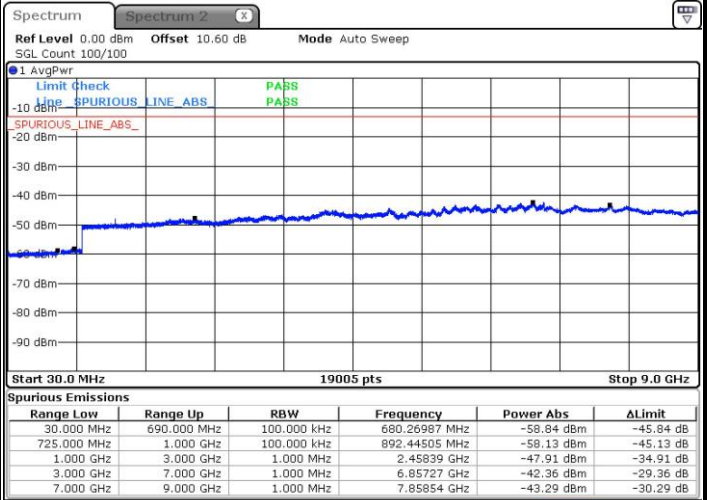


Date: 14.MAY.2017 11:01:33



**LTE Band 12 / 5MHz**

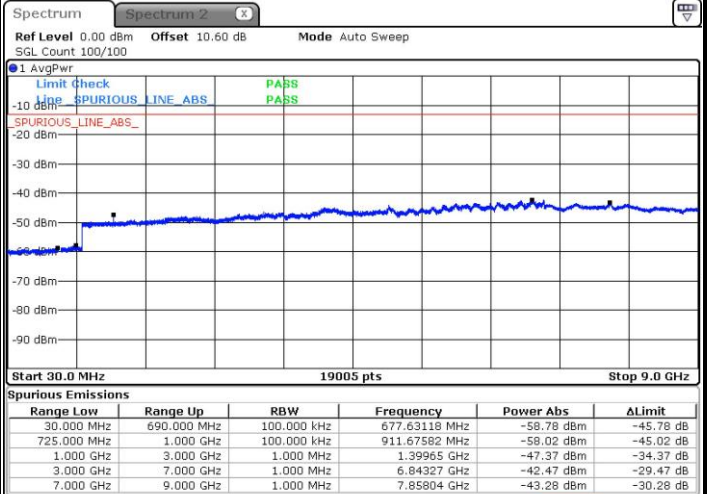
**Highest Channel / 64QAM**



Date: 14.MAY.2017 11:05:06

**LTE Band 12 / 10MHz**

**Lowest Channel / 64QAM**

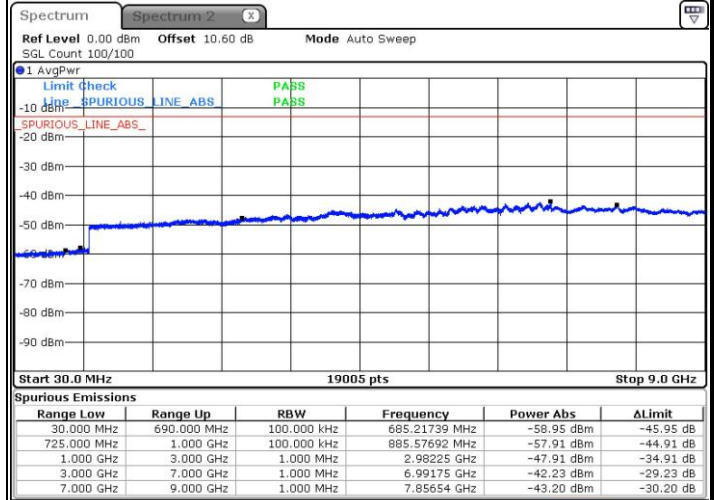


Date: 14.MAY.2017 11:10:57



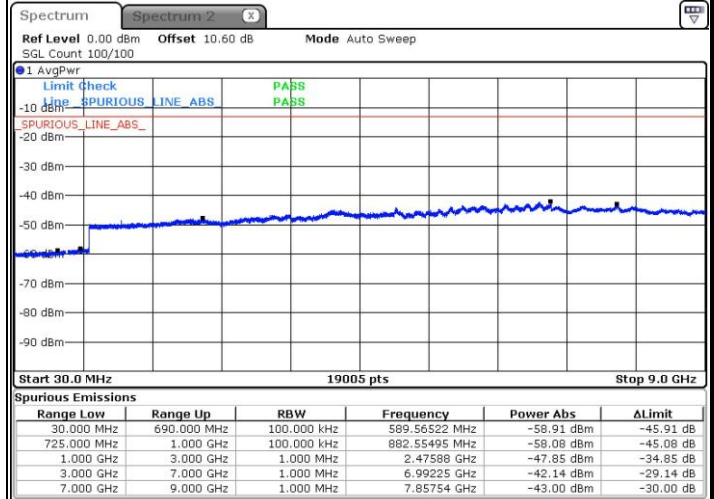
LTE Band 12 / 10MHz

Middle Channel / 64QAM



Date: 14.MAY.2017 11:12:12

Highest Channel / 64QAM



Date: 14.MAY.2017 11:17:58



**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	0.0006	PASS
40	Normal Voltage	0.0082	
30	Normal Voltage	0.0105	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0092	
-10	Normal Voltage	0.0017	
-20	Normal Voltage	0.0081	
-30	Normal Voltage	0.0100	
20	Maximum Voltage	0.0010	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0011	

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 17

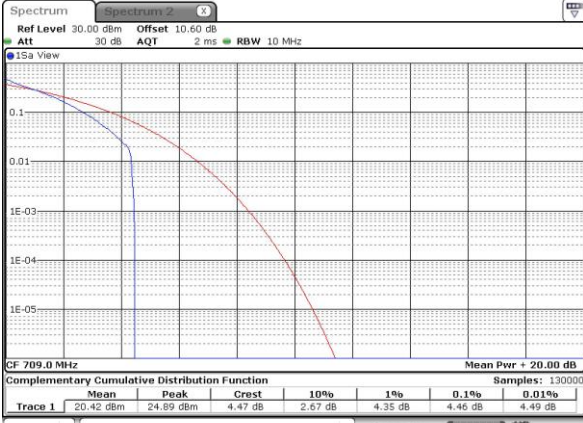
## Peak-to-Average Ratio

Mode	LTE Band 17 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.46	4.78	5.33	5.62	<b>PASS</b>
Middle CH	4.32	4.72	4.61	5.57	
Highest CH	3.88	4.81	4.72	5.59	
Mod.	-		64QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	5.13	5.51	<b>PASS</b>
Middle CH	-	-	4.9	5.77	
Highest CH	-	-	4.72	5.65	



LTE Band 17 / 10MHz / QPSK

Lowest Channel / 1RB



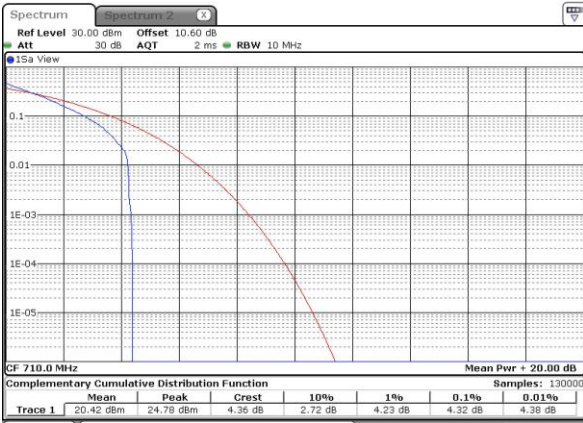
Date: 11 MAY 2017 22:59:27

Lowest Channel / Full RB



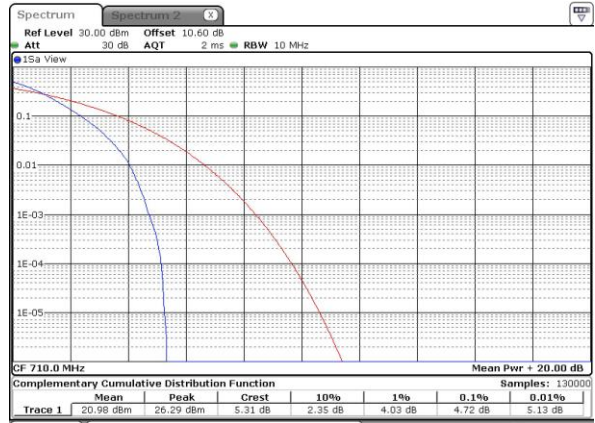
Date: 11 MAY 2017 22:59:47

Middle Channel / 1RB



Date: 11 MAY 2017 23:00:02

Middle Channel / Full RB



Date: 11 MAY 2017 23:00:21

Highest Channel / 1RB



Date: 11 MAY 2017 23:00:51

Highest Channel / Full RB

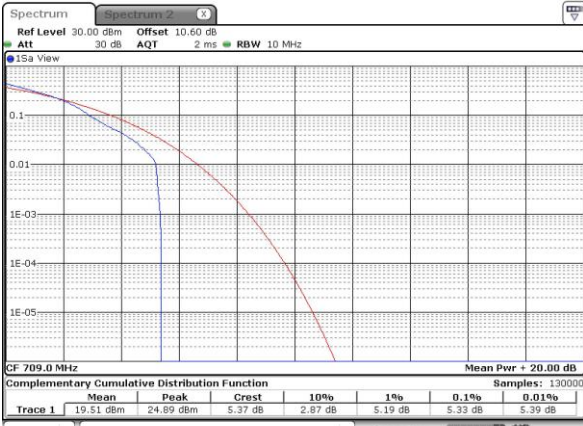


Date: 11 MAY 2017 23:01:01



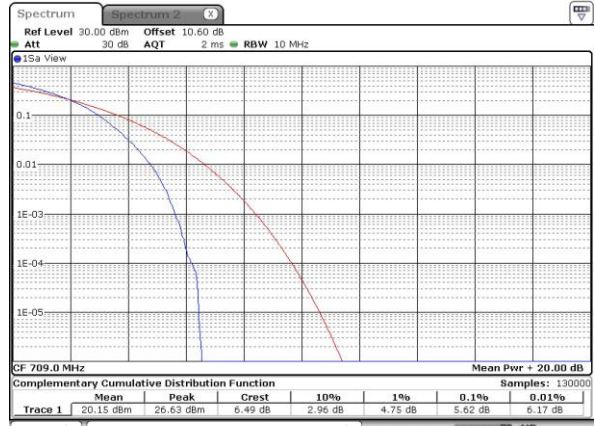
LTE Band 17 / 10MHz / 16QAM

Lowest Channel / 1RB



Date: 11 MAY 2017 22:57:36

Lowest Channel / Full RB



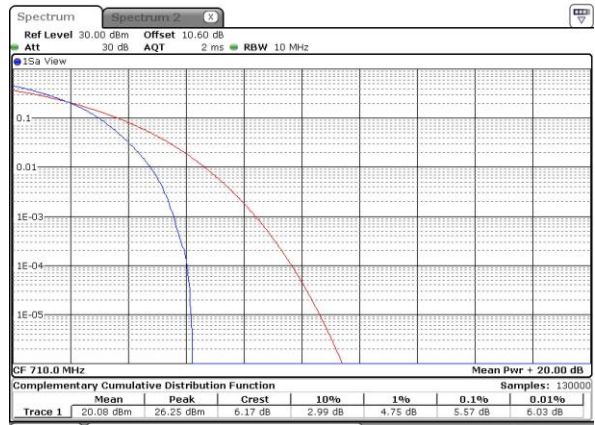
Date: 11 MAY 2017 22:58:06

Middle Channel / 1RB



Date: 11 MAY 2017 22:58:16

Middle Channel / Full RB



Date: 11 MAY 2017 22:58:35

Highest Channel / 1RB



Date: 11 MAY 2017 22:59:00

Highest Channel / Full RB

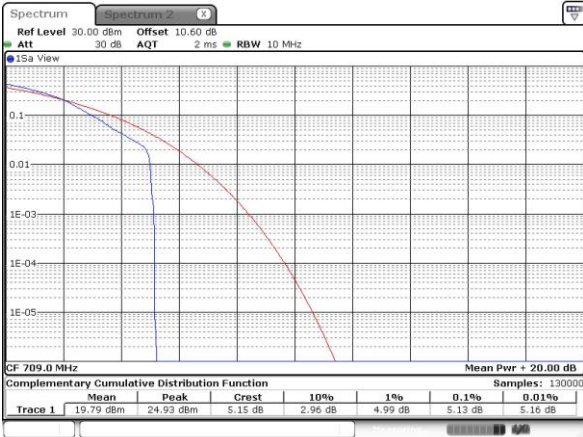


Date: 11 MAY 2017 22:59:12



LTE Band 17 / 10MHz / 64QAM

Lowest Channel / 1RB



Date: 14.MAY.2017 11:49:23

Lowest Channel / Full RB



Date: 14.MAY.2017 11:49:44

Middle Channel / 1RB



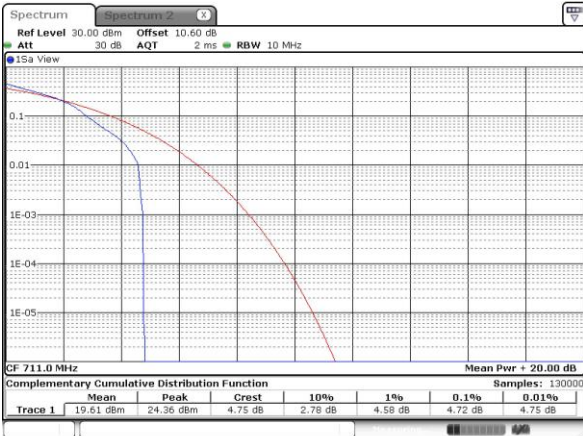
Date: 14.MAY.2017 11:49:53

Middle Channel / Full RB



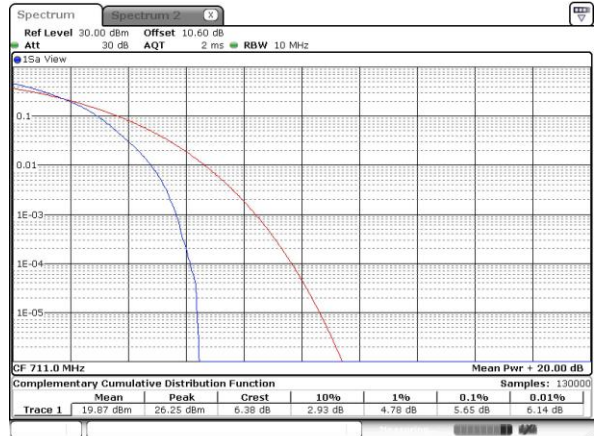
Date: 14.MAY.2017 11:50:03

Highest Channel / 1RB



Date: 14.MAY.2017 11:50:13

Highest Channel / Full RB



Date: 14.MAY.2017 11:50:23



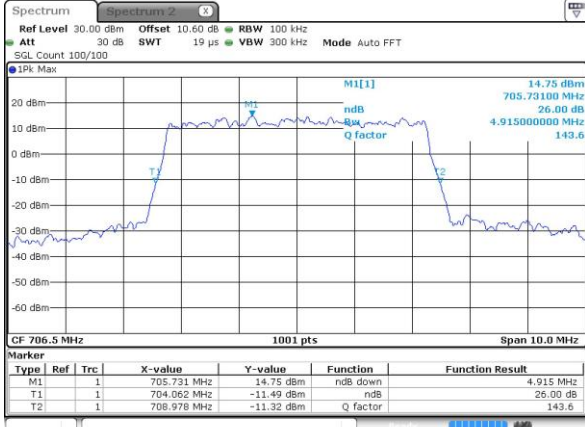
**26dB Bandwidth**

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	-	-	-	-	4.92	4.81	9.73	9.79	-	-	-	-
Middle CH	-	-	-	-	4.86	4.94	9.71	9.75	-	-	-	-
Highest CH	-	-	-	-	4.92	4.83	9.75	9.69	-	-	-	-
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM
Lowest CH	-	-	-	-	-	4.90	-	9.61	-	-	-	-
Middle CH	-	-	-	-	-	4.87	-	9.77	-	-	-	-
Highest CH	-	-	-	-	-	4.97	-	9.69	-	-	-	-



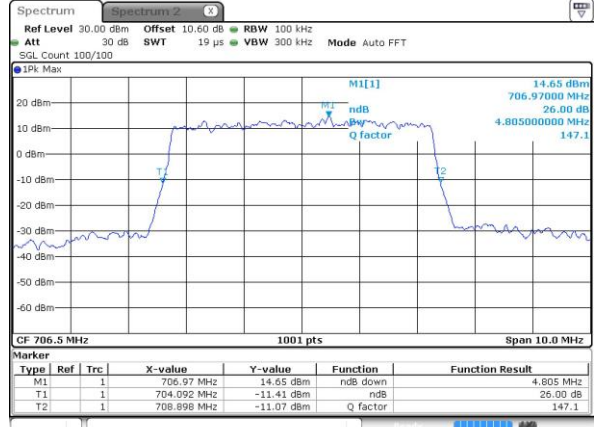
LTE Band 17

Lowest Channel / 5MHz / QPSK



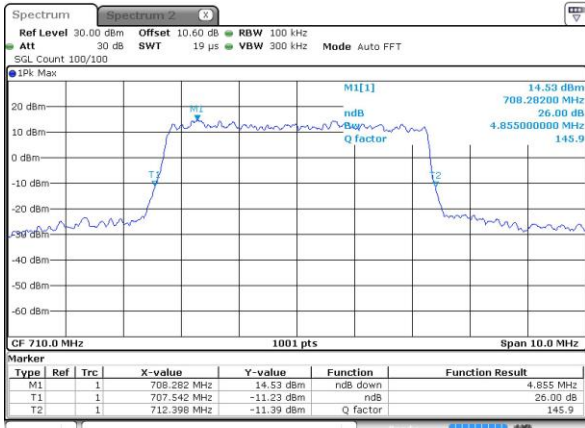
Date: 11 MAY 2017 22:23:40

Lowest Channel / 5MHz / 16QAM



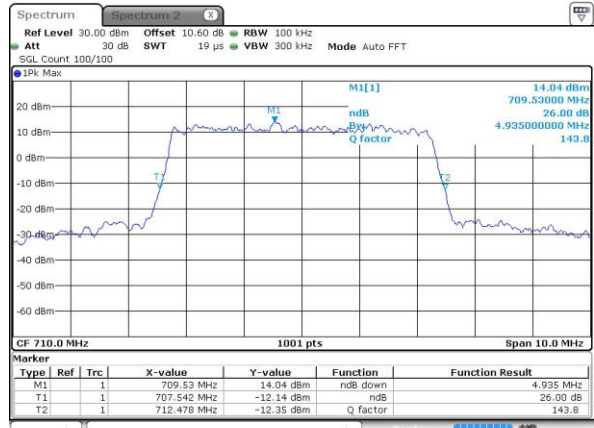
Date: 11 MAY 2017 22:23:50

Middle Channel / 5MHz / QPSK



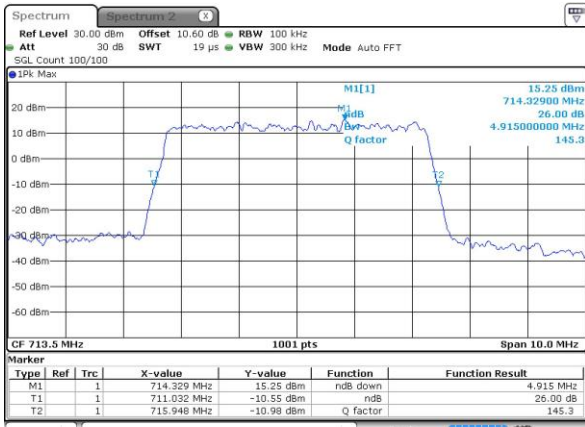
Date: 11 MAY 2017 22:30:48

Middle Channel / 5MHz / 16QAM



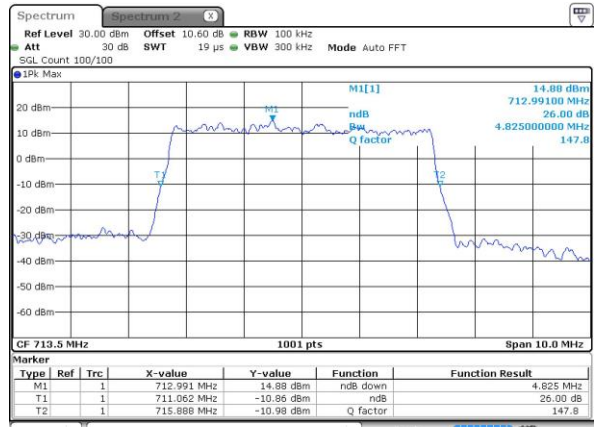
Date: 11 MAY 2017 22:30:57

Highest Channel / 5MHz / QPSK



Date: 11 MAY 2017 22:33:16

Highest Channel / 5MHz / 16QAM

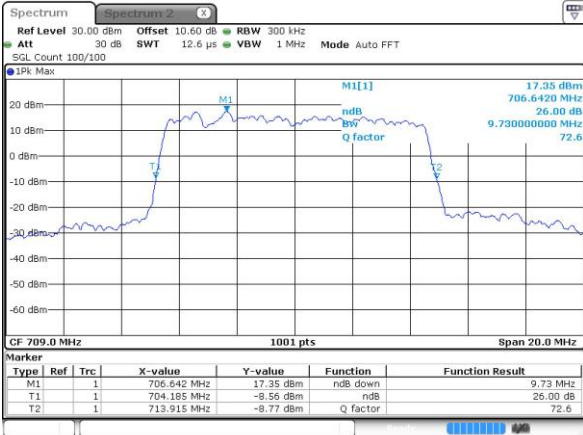


Date: 11 MAY 2017 22:33:27



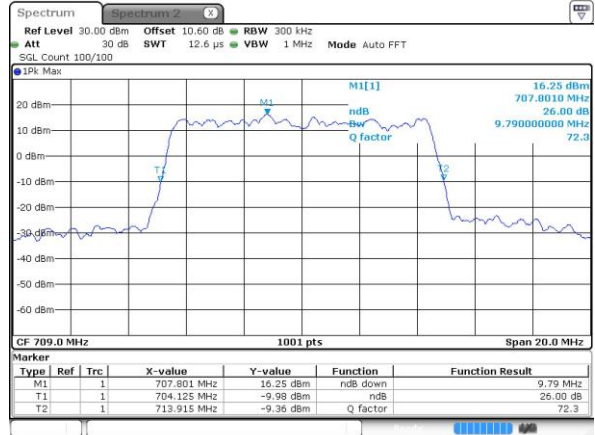
LTE Band 17

Lowest Channel / 10MHz / QPSK



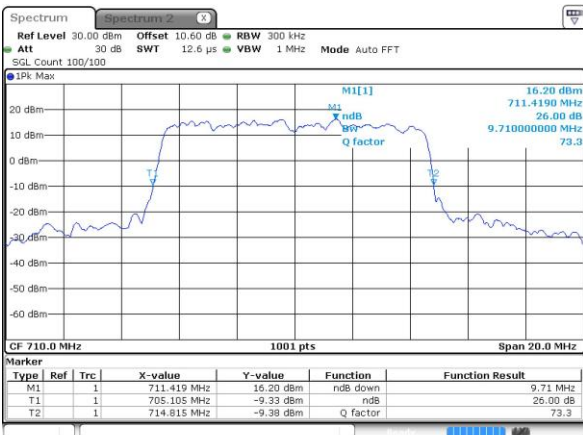
Date: 11 MAY 2017 22:40:23

Lowest Channel / 10MHz / 16QAM



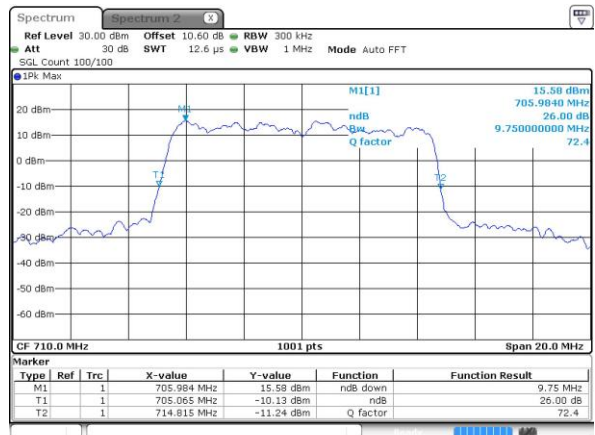
Date: 11 MAY 2017 22:40:33

Middle Channel / 10MHz / QPSK



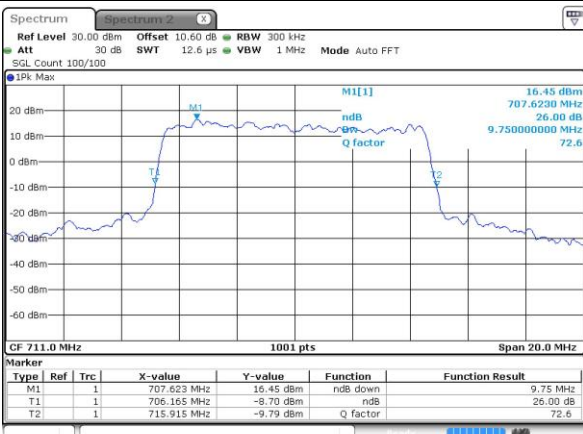
Date: 11 MAY 2017 22:47:29

Middle Channel / 10MHz / 16QAM



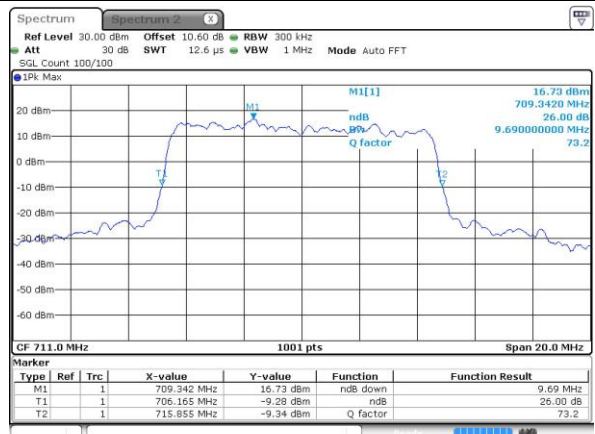
Date: 11 MAY 2017 22:47:40

Highest Channel / 10MHz / QPSK



Date: 11 MAY 2017 22:49:59

Highest Channel / 10MHz / 16QAM

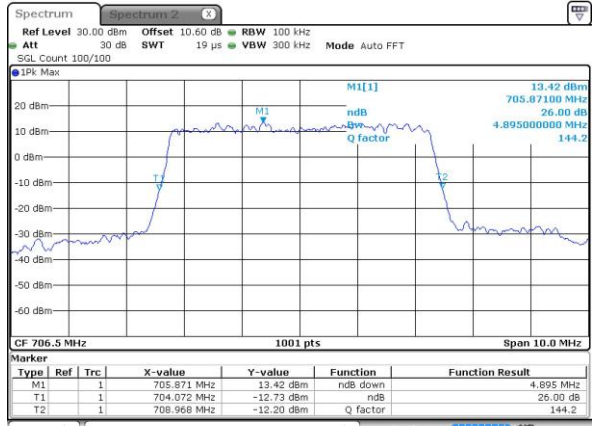


Date: 11 MAY 2017 22:50:10



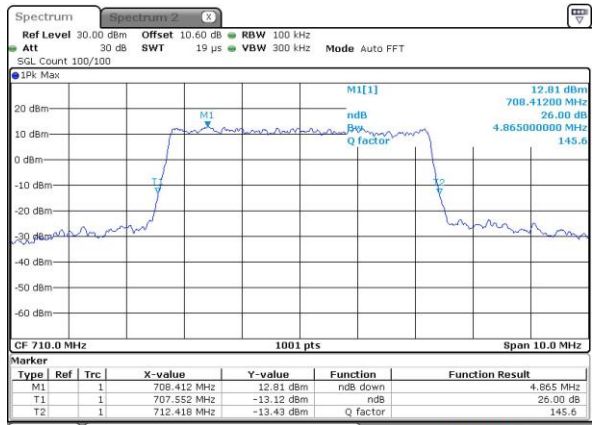
LTE Band 17

Lowest Channel / 5MHz / 64QAM



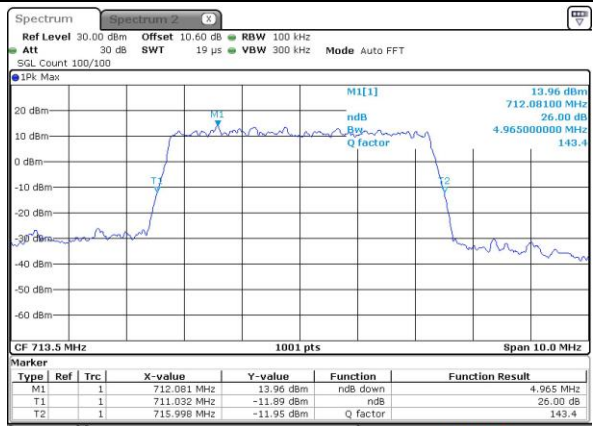
Date: 14.MAY.2017 11:33:25

Middle Channel / 5MHz / 64QAM



Date: 14.MAY.2017 11:36:58

Highest Channel / 5MHz / 64QAM

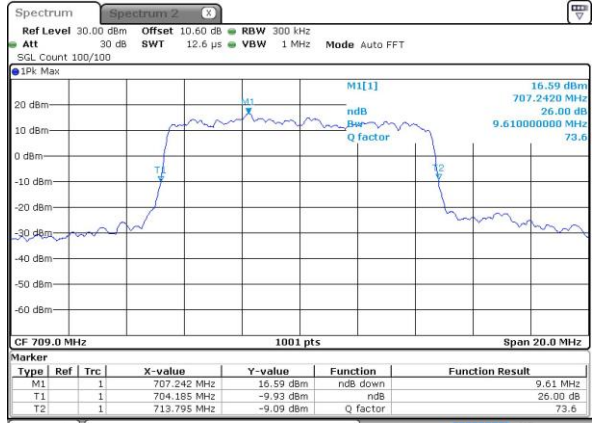


Date: 14.MAY.2017 11:38:13



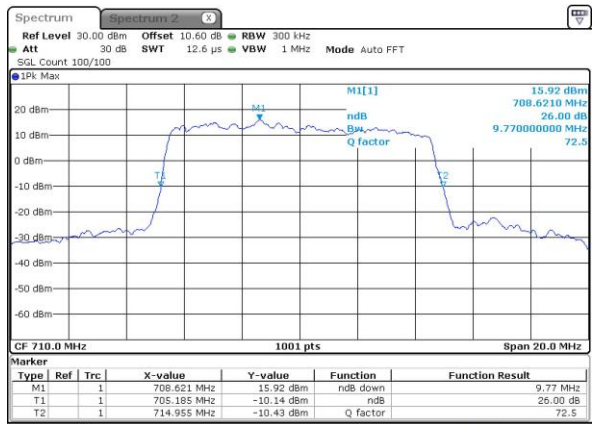
LTE Band 17

Lowest Channel / 10MHz / 64QAM



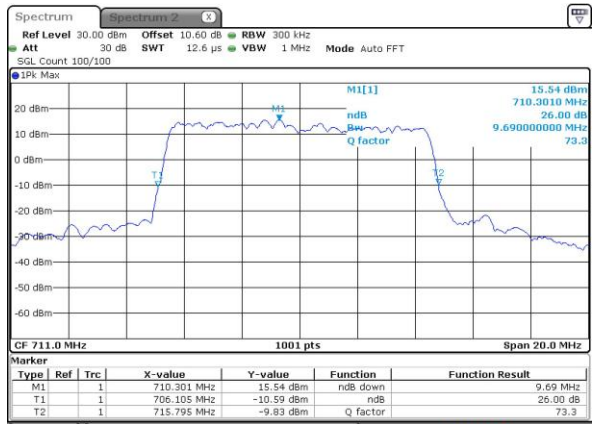
Date: 14 MAY 2017 11:41:46

Middle Channel / 10MHz / 64QAM



Date: 14 MAY 2017 11:44:10

Highest Channel / 10MHz / 64QAM



Date: 14 MAY 2017 11:45:48



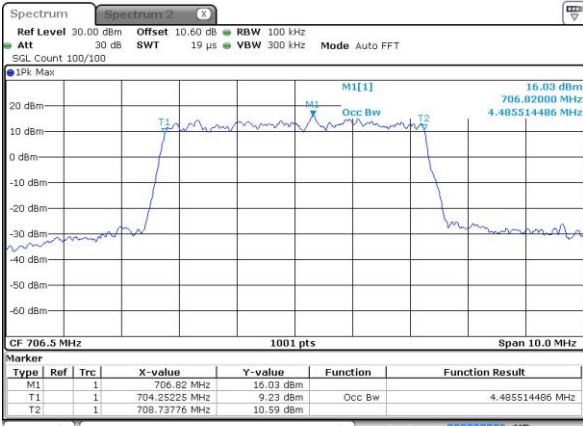
**Occupied Bandwidth**

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	4.48	9.03	8.95	-	-	-	-
Middle CH	-	-	-	-	4.49	4.49	9.01	8.95	-	-	-	-
Highest CH	-	-	-	-	4.48	4.5	9.05	9.01	-	-	-	-
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM
Lowest CH	-	-	-	-	-	4.5	-	8.95	-	-	-	-
Middle CH	-	-	-	-	-	4.49	-	8.97	-	-	-	-
Highest CH	-	-	-	-	-	4.51	-	8.99	-	-	-	-



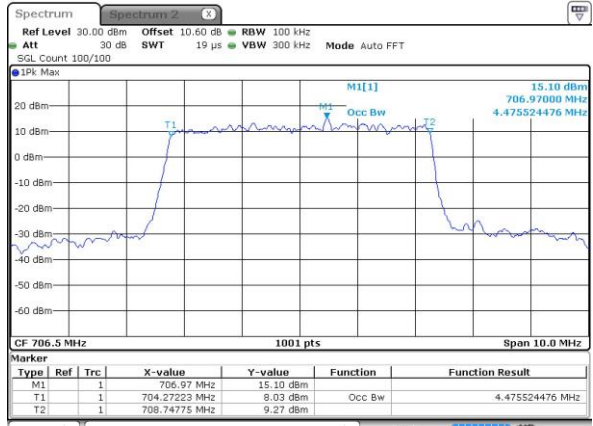
LTE Band 17

Lowest Channel / 5MHz / QPSK



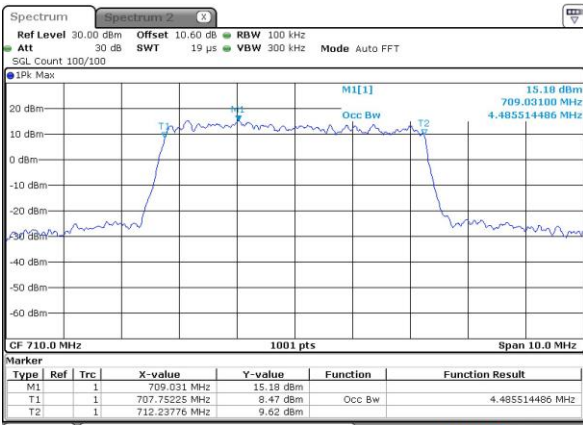
Date: 11 MAY 2017 22:23:19

Lowest Channel / 5MHz / 16QAM



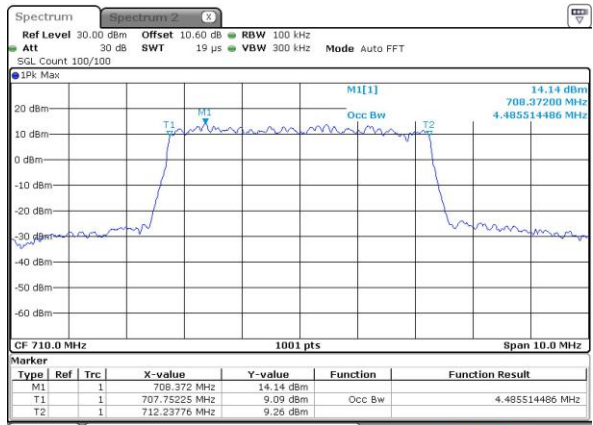
Date: 11 MAY 2017 22:23:30

Middle Channel / 5MHz / QPSK



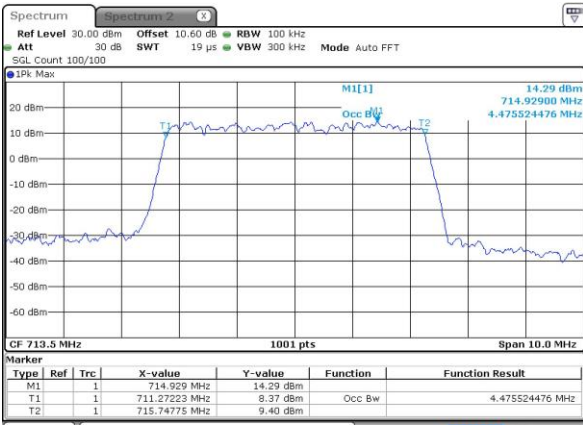
Date: 11 MAY 2017 22:30:26

Middle Channel / 5MHz / 16QAM



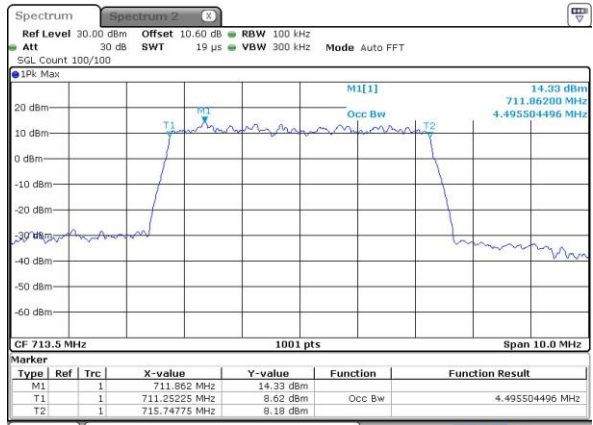
Date: 11 MAY 2017 22:30:36

Highest Channel / 5MHz / QPSK



Date: 11 MAY 2017 22:32:56

Highest Channel / 5MHz / 16QAM

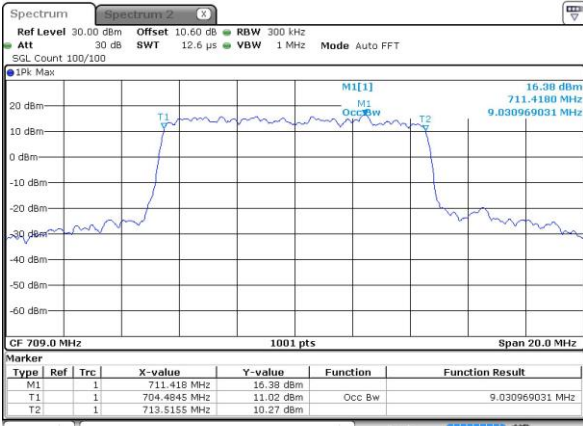


Date: 11 MAY 2017 22:33:06



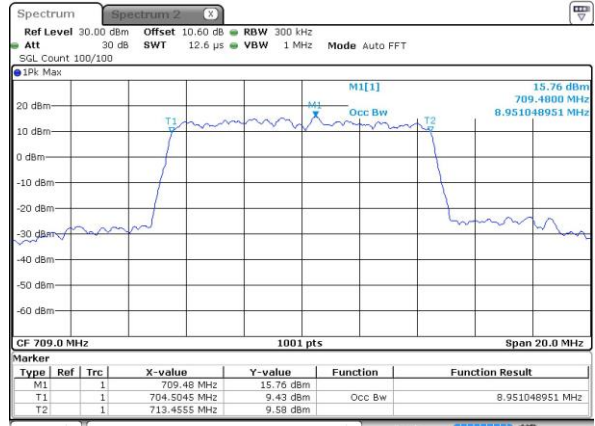
LTE Band 17

Lowest Channel / 10MHz / QPSK



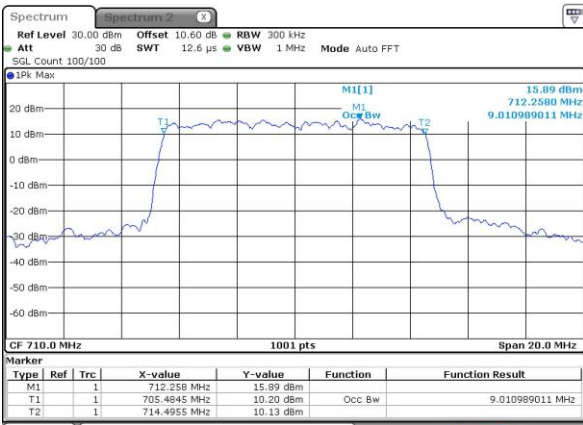
Date: 11 MAY 2017 22:40:02

Lowest Channel / 10MHz / 16QAM



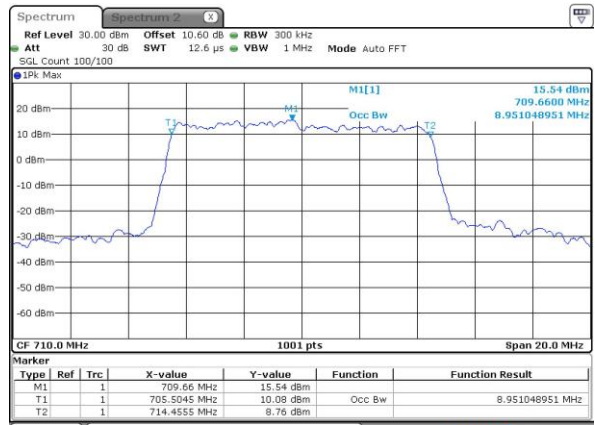
Date: 11 MAY 2017 22:40:13

Middle Channel / 10MHz / QPSK



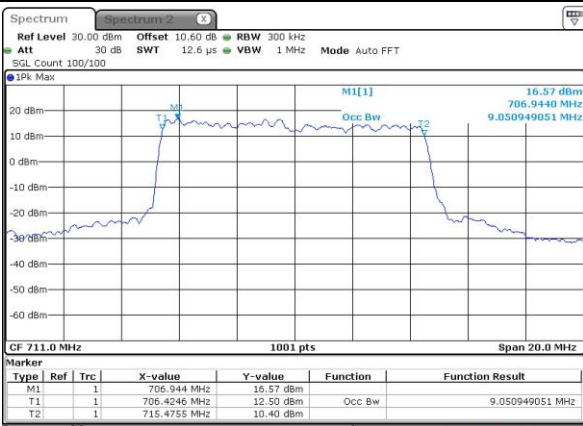
Date: 11 MAY 2017 22:47:08

Middle Channel / 10MHz / 16QAM



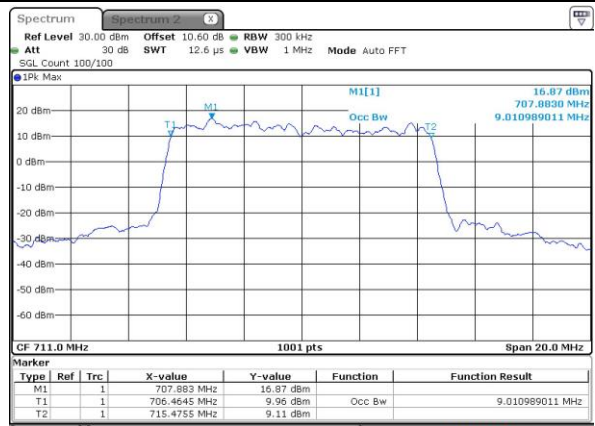
Date: 11 MAY 2017 22:47:19

Highest Channel / 10MHz / QPSK



Date: 11 MAY 2017 22:49:39

Highest Channel / 10MHz / 16QAM

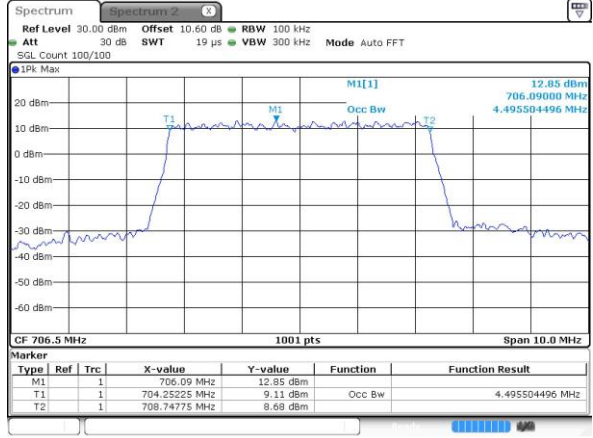


Date: 11 MAY 2017 22:49:49



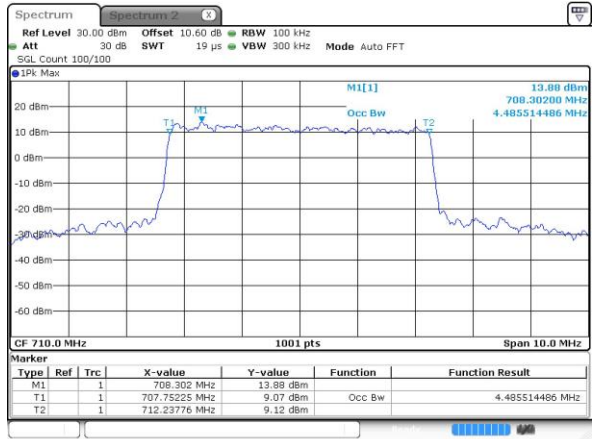
LTE Band 17

Lowest Channel / 5MHz / 64QAM



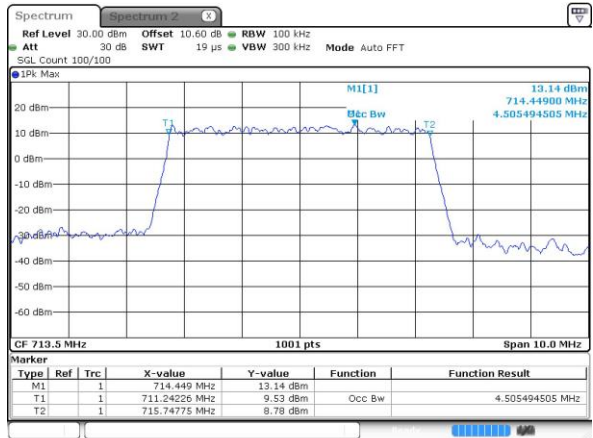
Date: 14.MAY.2017 11:33:14

Middle Channel / 5MHz / 64QAM



Date: 14.MAY.2017 11:36:47

Highest Channel / 5MHz / 64QAM

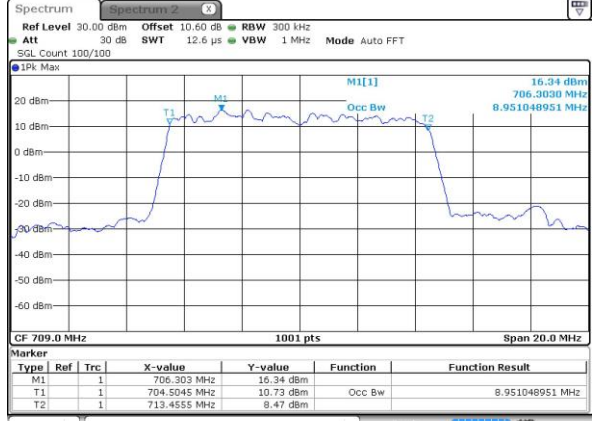


Date: 14.MAY.2017 11:38:03



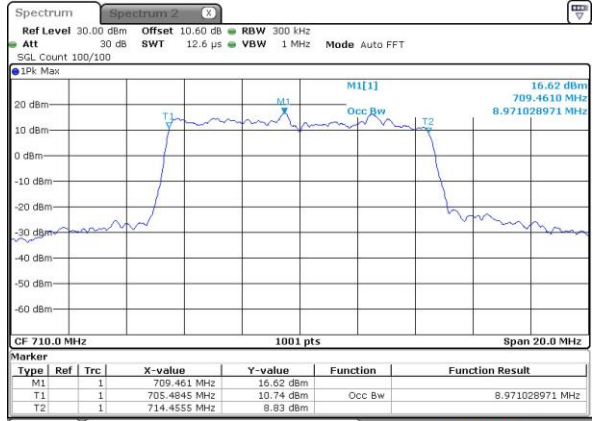
LTE Band 17

Lowest Channel / 10MHz / 64QAM



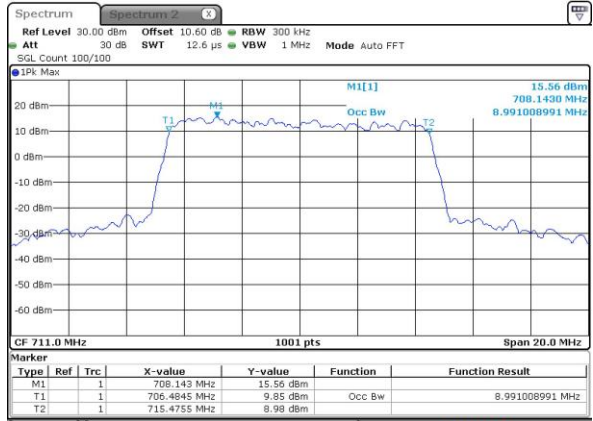
Date: 14.MAY.2017 11:41:36

Middle Channel / 10MHz / 64QAM



Date: 14.MAY.2017 11:44:00

Highest Channel / 10MHz / 64QAM



Date: 14.MAY.2017 11:45:38



# Conducted Band Edge

