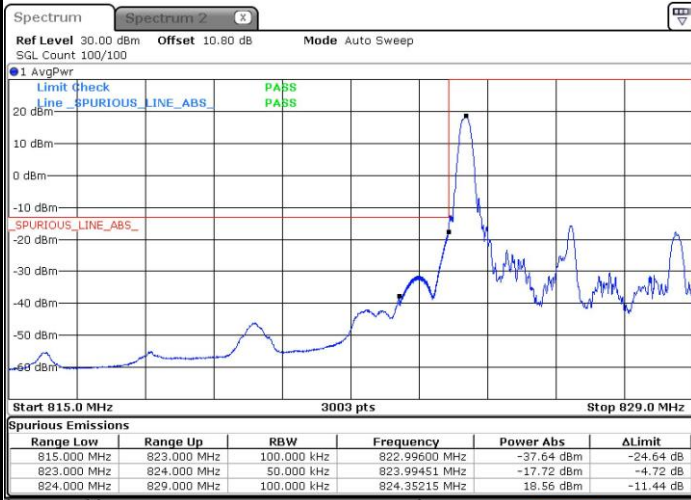




LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



Date: 27.APR.2018 00:21:24

Highest Band Edge / 1 RB



Date: 27.APR.2018 00:33:02

Lowest Band Edge / Full RB



Date: 27.APR.2018 00:24:43

Highest Band Edge / Full RB

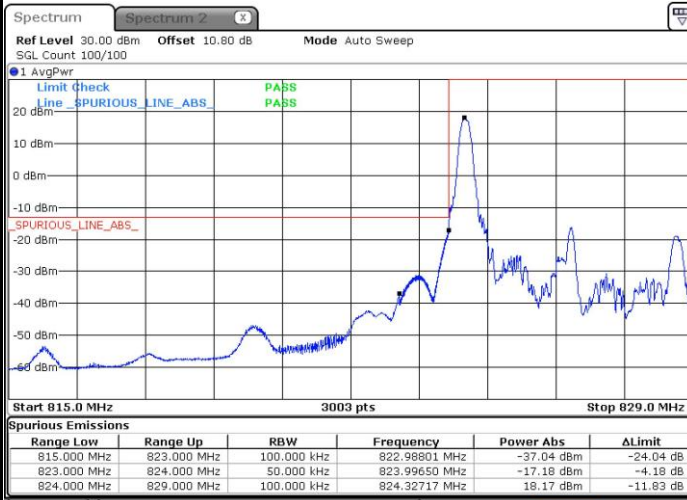


Date: 27.APR.2018 00:36:20



LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / 1RB



Date: 27.APR.2018 00:23:03

Highest Band Edge / 1 RB



Date: 27.APR.2018 00:34:41

Lowest Band Edge / Full RB



Date: 27.APR.2018 00:26:22

Highest Band Edge / Full RB



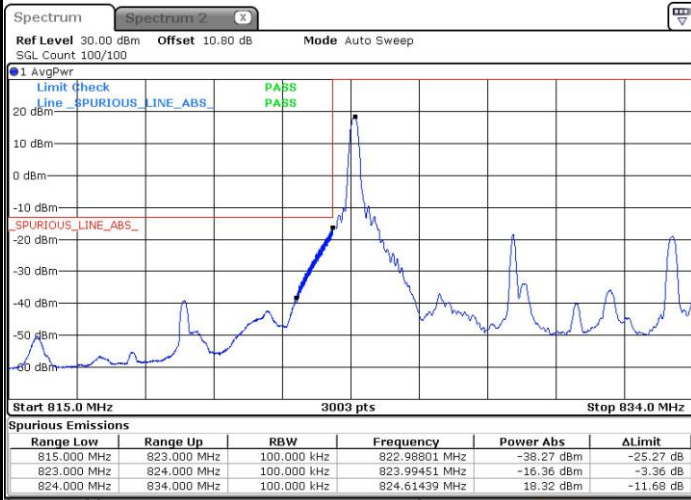
Date: 27.APR.2018 00:37:59



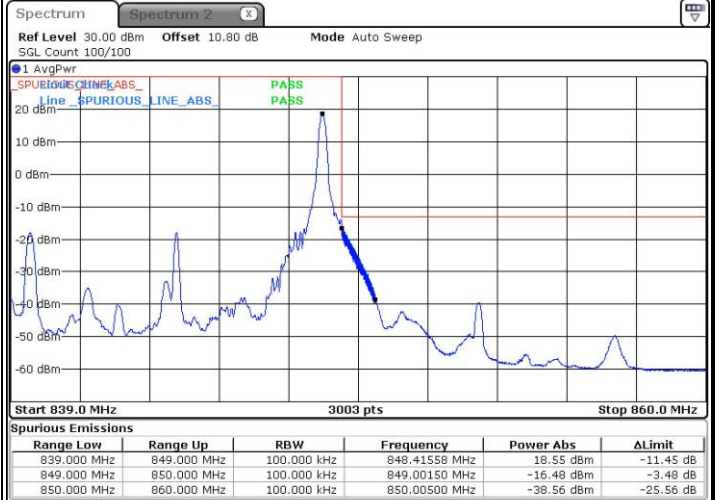
LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



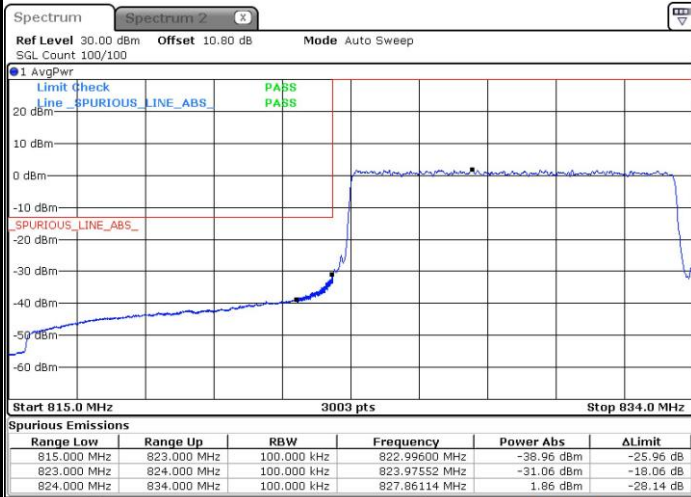
Date: 27.APR.2018 00:42:09



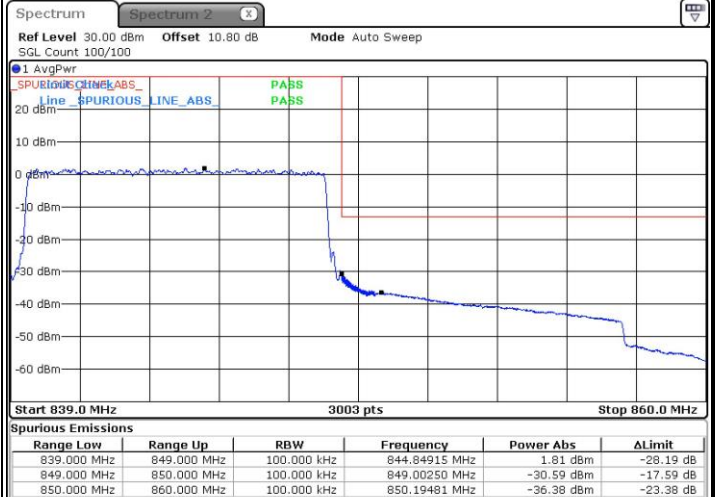
Date: 27.APR.2018 00:53:47

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 27.APR.2018 00:45:27

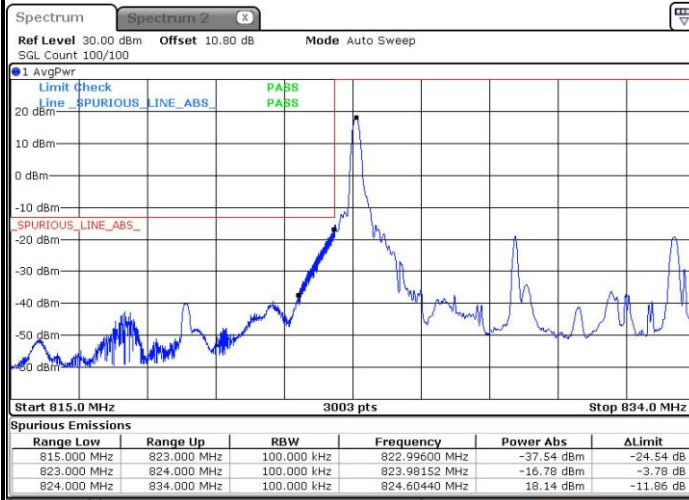


Date: 27.APR.2018 00:57:05



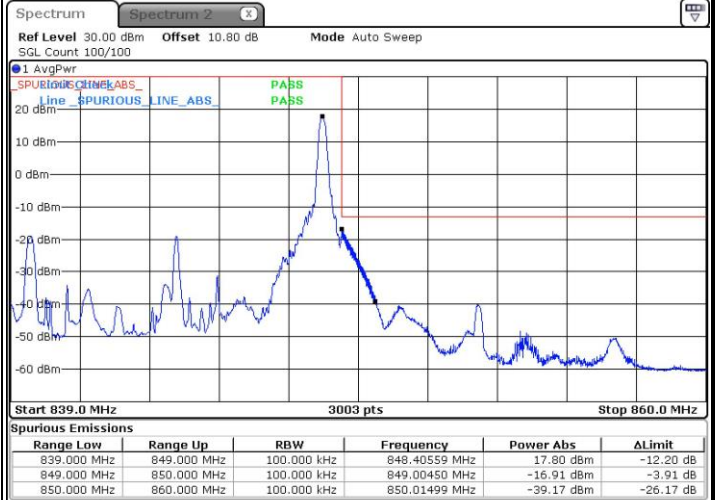
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



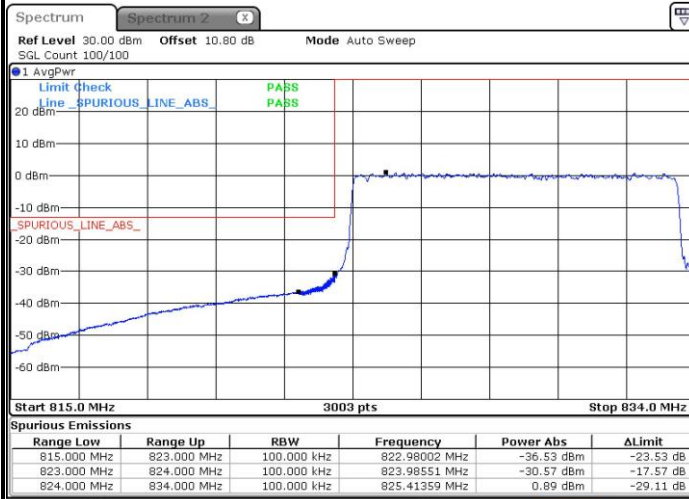
Date: 27.APR.2018 00:43:48

Highest Band Edge / 1 RB



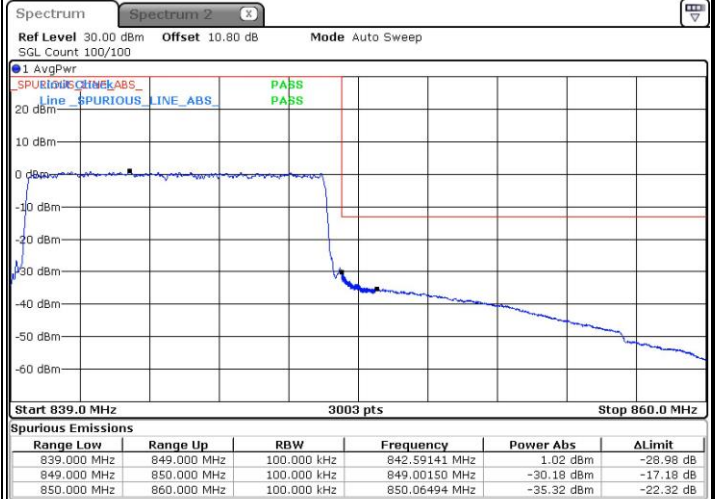
Date: 27.APR.2018 00:55:26

Lowest Band Edge / Full RB



Date: 27.APR.2018 00:47:06

Highest Band Edge / Full RB



Date: 27.APR.2018 00:58:44

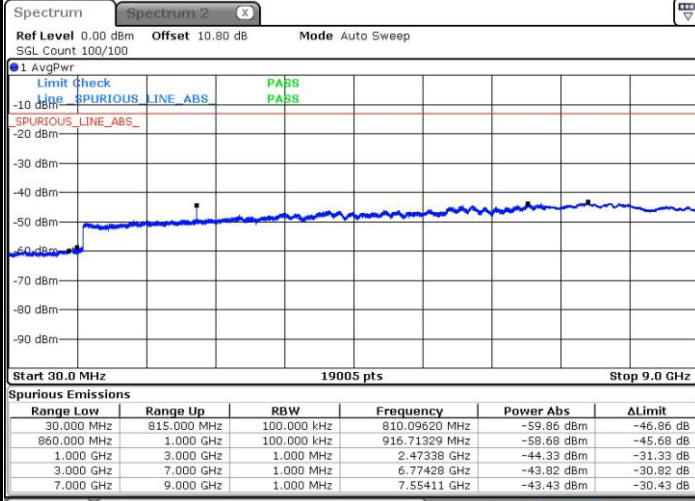


**Conducted Spurious Emission**



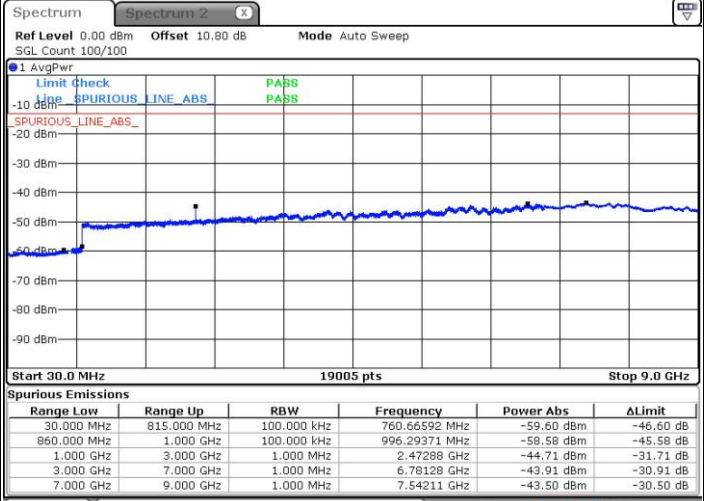
LTE Band 5 / 1.4MHz

Lowest Channel / QPSK



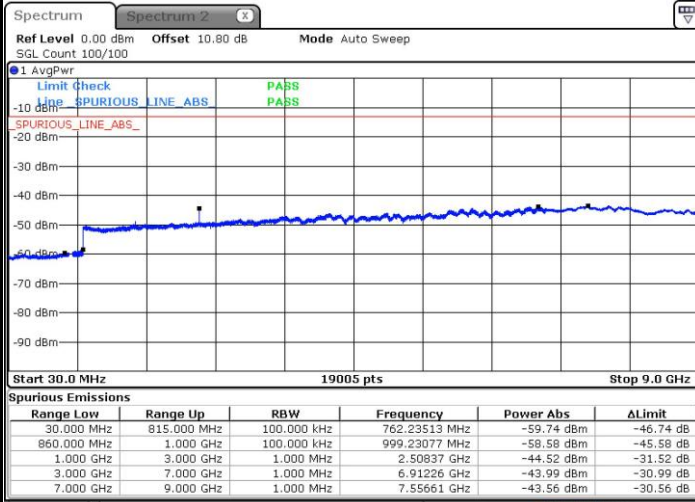
Date: 27.APR.2018 01:17:45

Lowest Channel / 16QAM



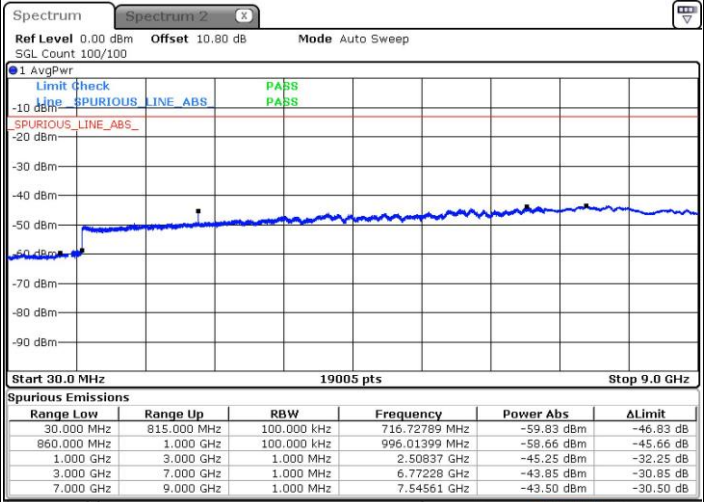
Date: 27.APR.2018 01:18:40

Middle Channel / QPSK



Date: 27.APR.2018 01:20:16

Middle Channel / 16QAM

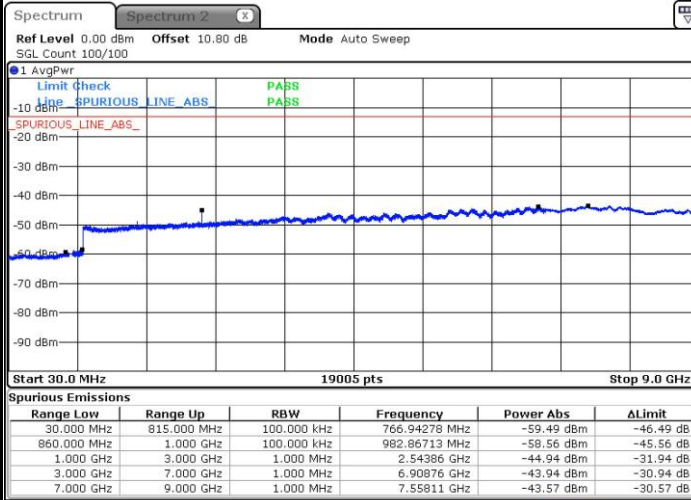


Date: 27.APR.2018 01:21:10



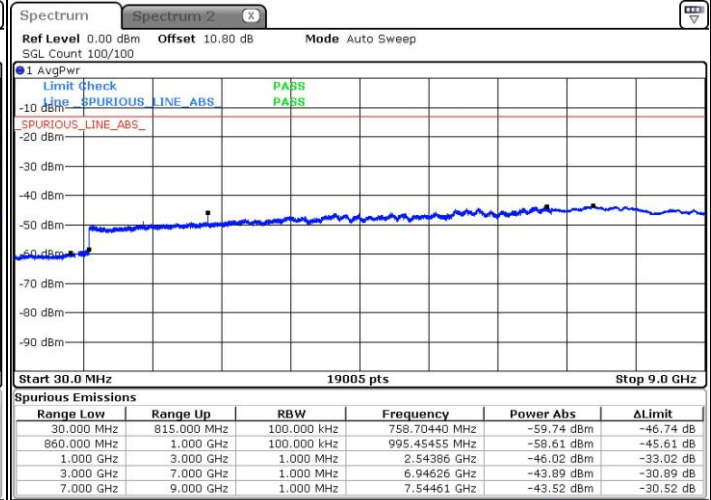
LTE Band 5 / 1.4MHz

Highest Channel / QPSK



Date: 27 APR 2018 01:29:23

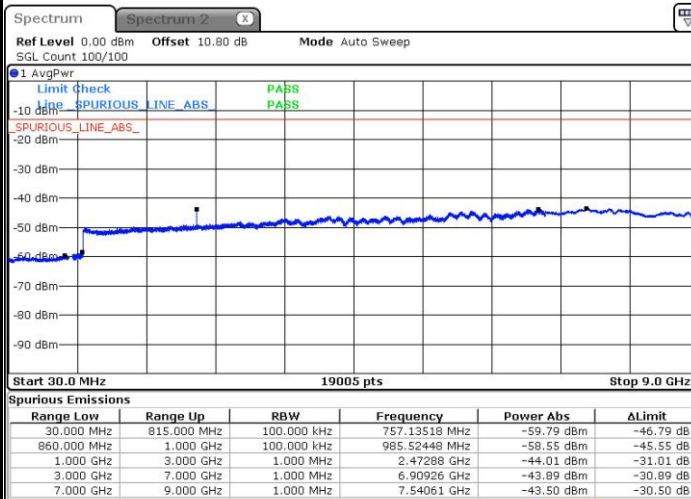
Highest Channel / 16QAM



Date: 27 APR 2018 01:30:17

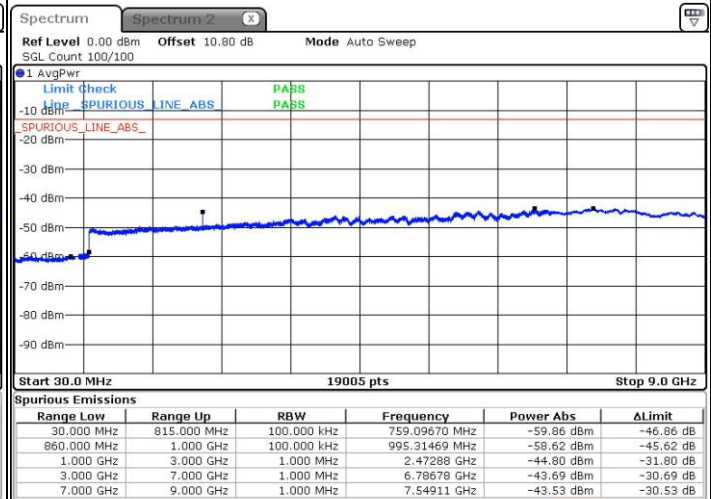
LTE Band 5 / 3MHz

Lowest Channel / QPSK



Date: 27 APR 2018 00:06:32

Lowest Channel / 16QAM



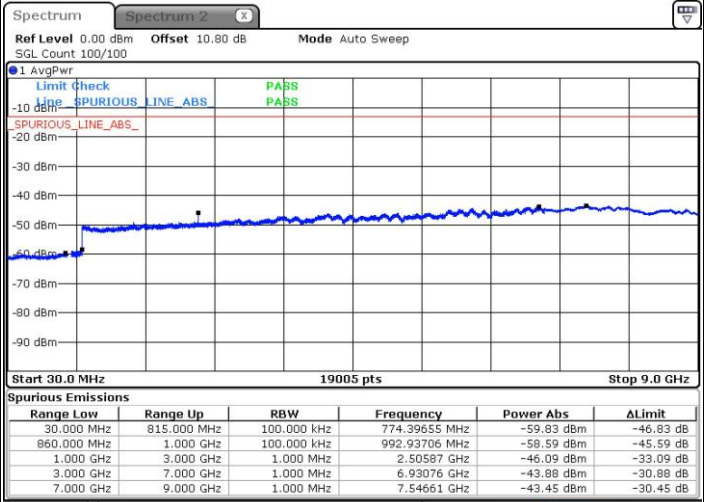
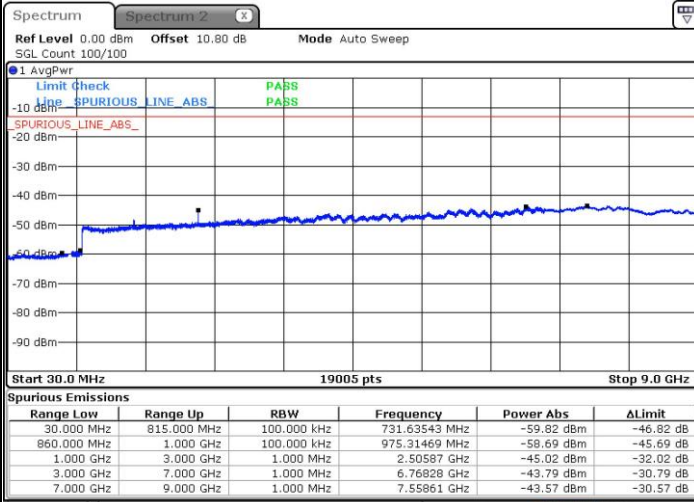
Date: 27 APR 2018 00:07:26



LTE Band 5 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

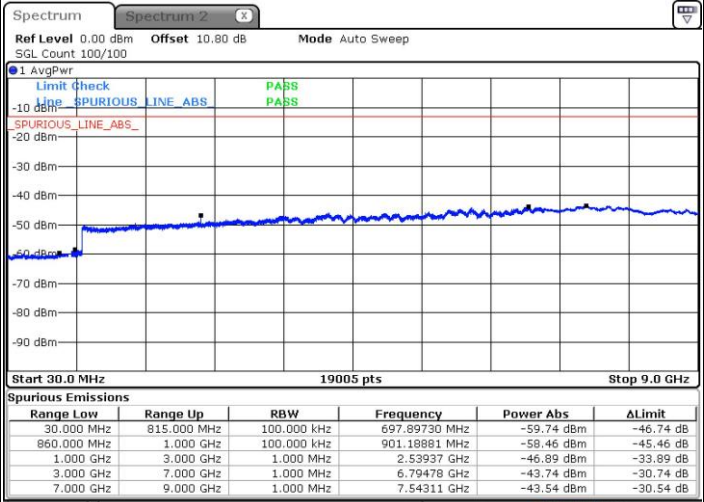
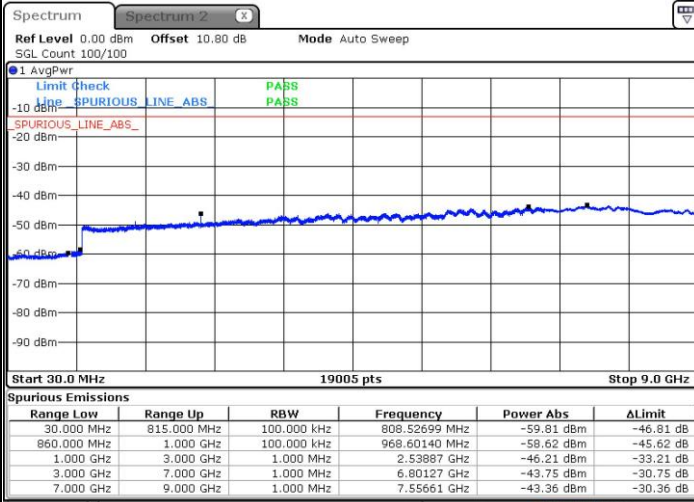


Date: 27 APR 2016 00:09:02

Date: 27 APR 2016 00:09:56

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 27 APR 2016 00:18:09

Date: 27 APR 2016 00:19:04

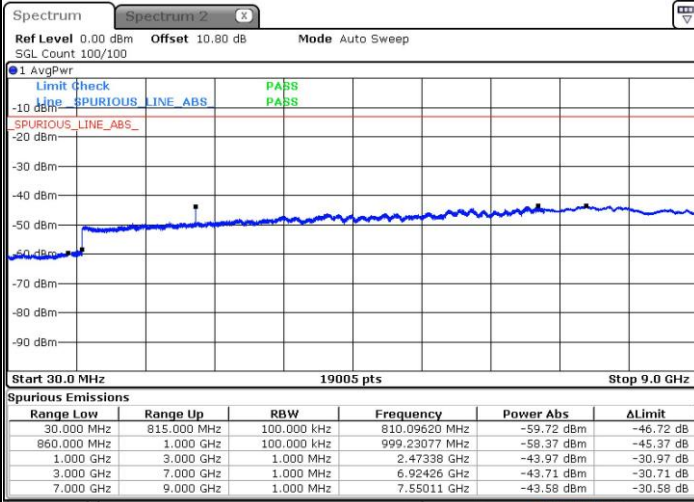




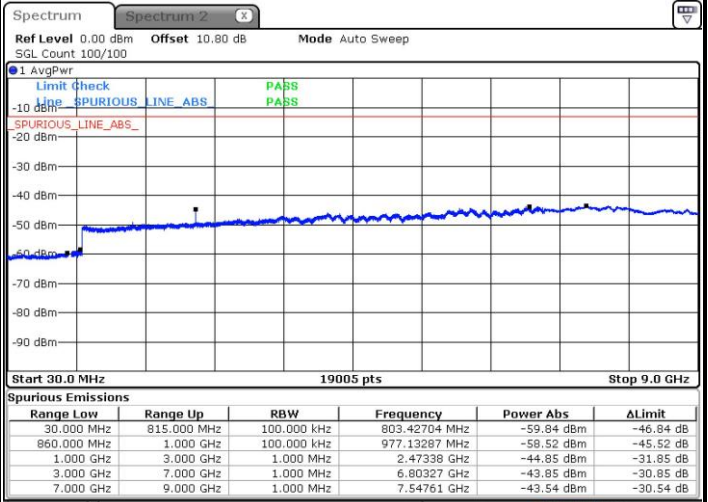
LTE Band 5 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



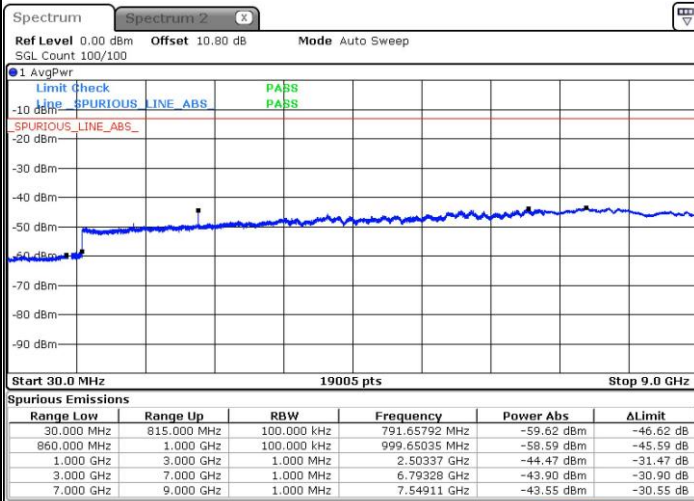
Date: 27 APR 2018 00:27:17



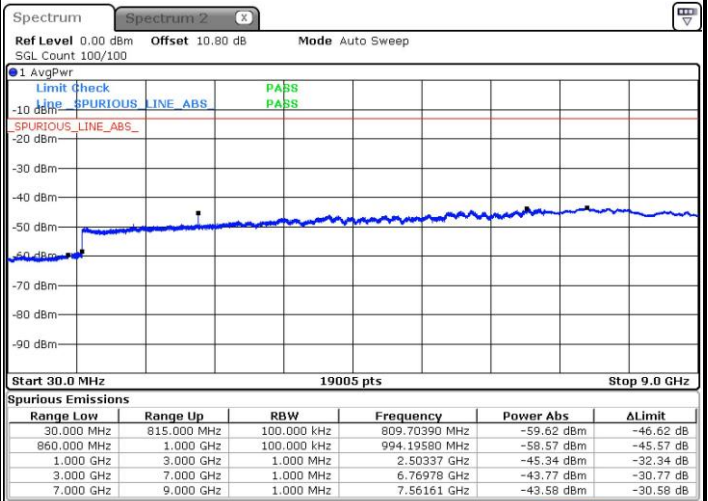
Date: 27 APR 2018 00:28:11

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 27 APR 2018 00:29:47

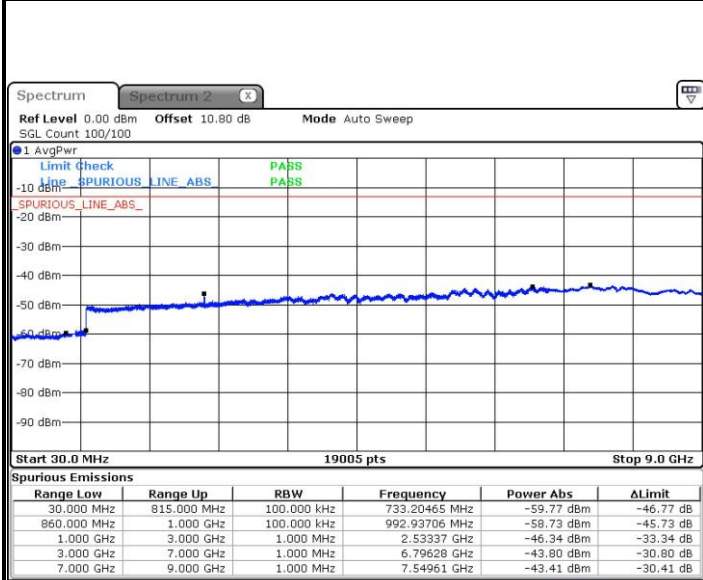


Date: 27 APR 2018 00:30:41



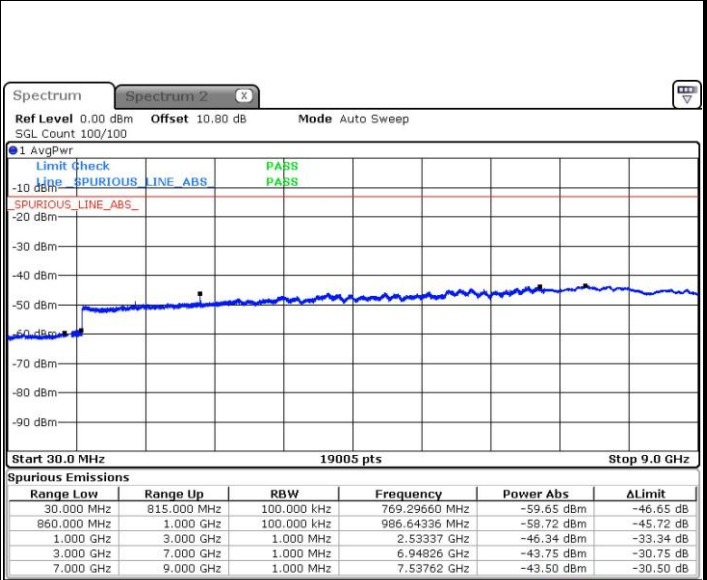
LTE Band 5 / 5MHz

Highest Channel / QPSK



Date: 27 APR 2018 00:38:54

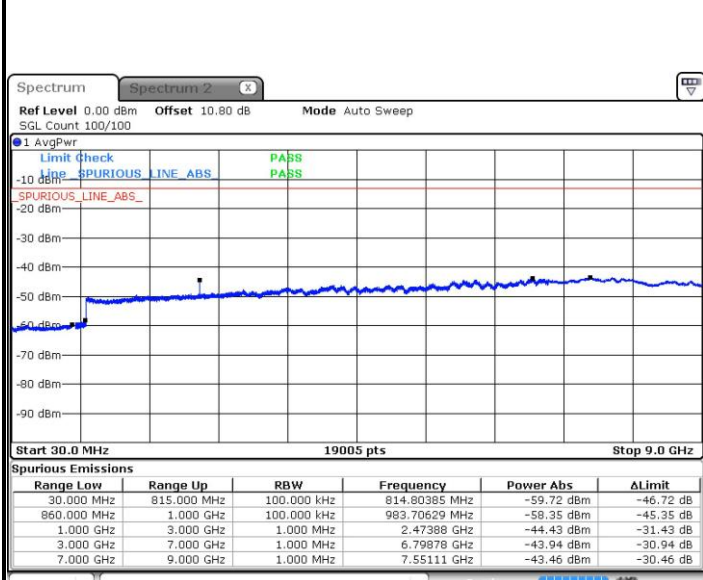
Highest Channel / 16QAM



Date: 27 APR 2018 00:39:48

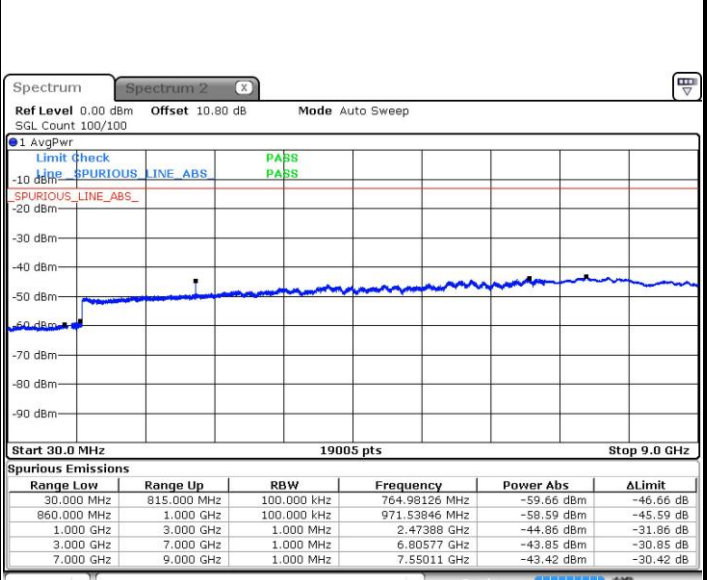
LTE Band 5 / 10MHz

Lowest Channel / QPSK



Date: 27 APR 2018 00:48:01

Lowest Channel / 16QAM

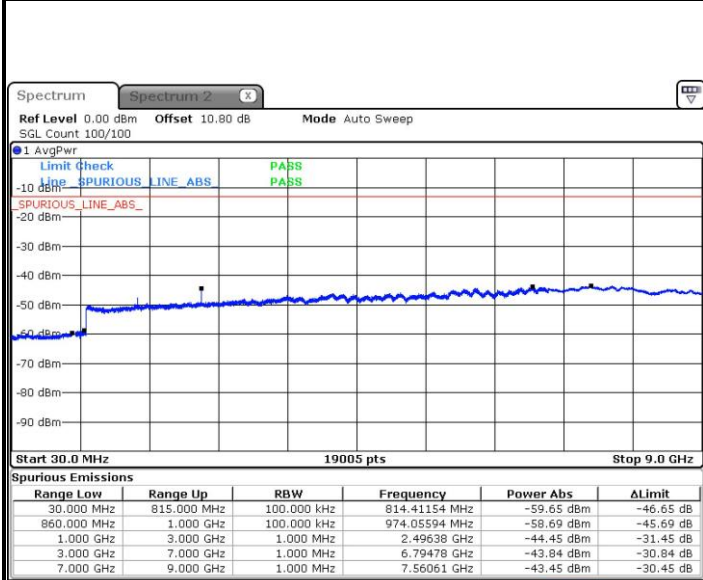


Date: 27 APR 2018 00:48:56



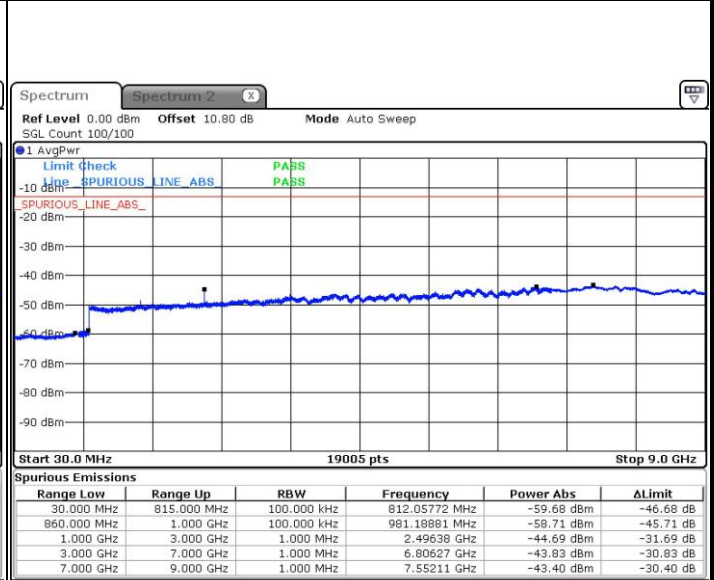
LTE Band 5 / 10MHz

Middle Channel / QPSK



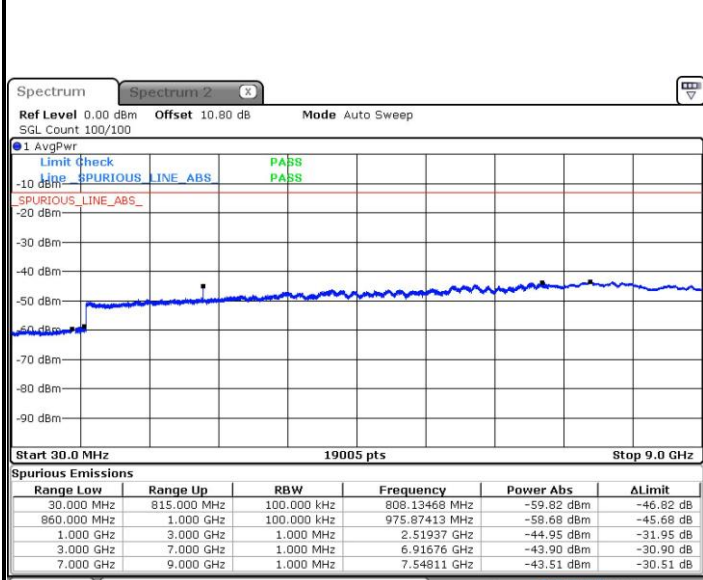
Date: 27 APR 2018 00:50:32

Middle Channel / 16QAM



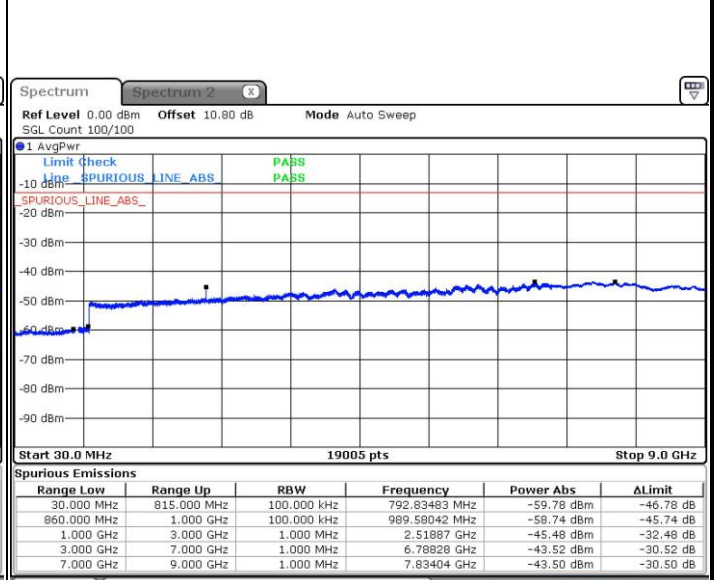
Date: 27 APR 2018 00:51:26

Highest Channel / QPSK



Date: 27 APR 2018 00:59:39

Highest Channel / 16QAM



Date: 27 APR 2018 01:00:33



**Frequency Stability**

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0004	PASS
40	Normal Voltage	0.0006	
30	Normal Voltage	0.0044	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0047	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0071	
-20	Normal Voltage	0.0005	
-30	Normal Voltage	0.0065	
20	Maximum Voltage	0.0059	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0002	

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## 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	6.38	5.39	6.2	6.09	<b>PASS</b>
Middle CH	5.45	5.39	6.55	6.03	
Highest CH	5.77	5.01	6.38	5.83	



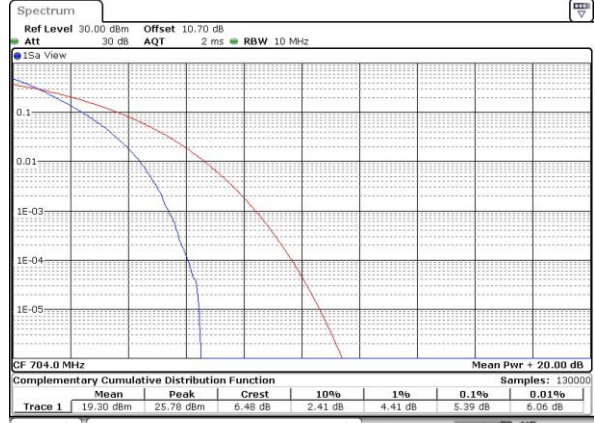
LTE Band 12 / 10MHz / QPSK

Lowest Channel / 1RB



Date: 27 APR 2018 10:23:38

Lowest Channel / Full RB



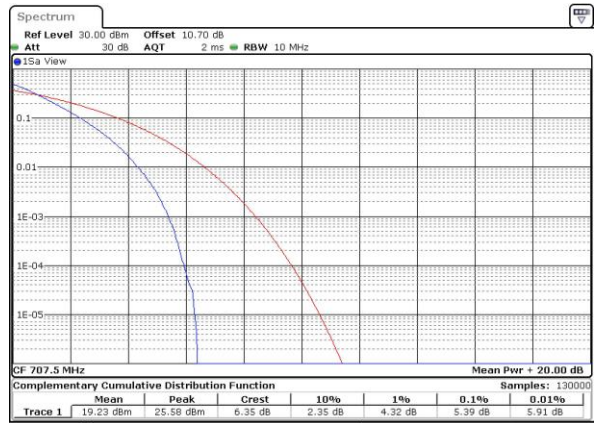
Date: 27 APR 2018 10:22:34

Middle Channel / 1RB



Date: 27 APR 2018 10:23:52

Middle Channel / Full RB



Date: 27 APR 2018 10:24:08

Highest Channel / 1RB



Date: 27 APR 2018 10:24:30

Highest Channel / Full RB

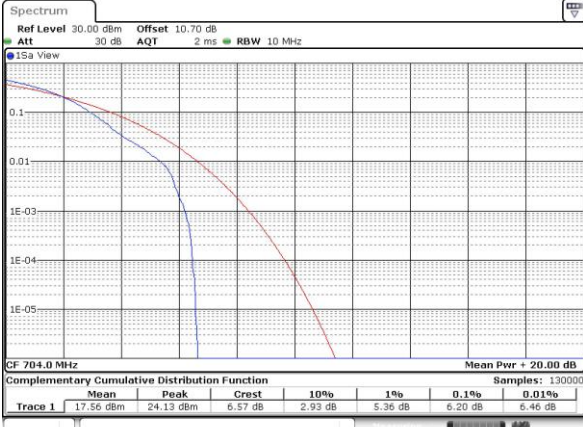


Date: 27 APR 2018 10:24:20



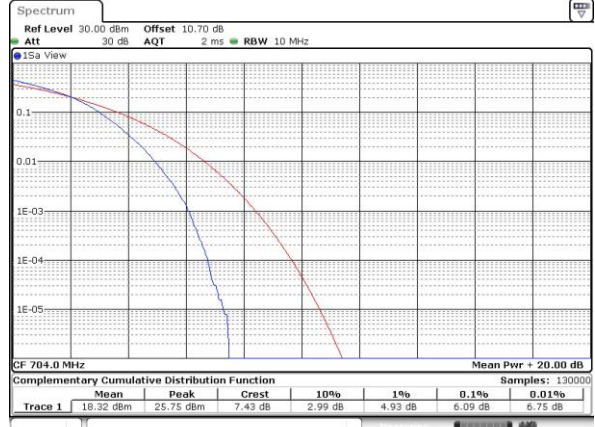
LTE Band 12 / 10MHz / 16QAM

Lowest Channel / 1RB



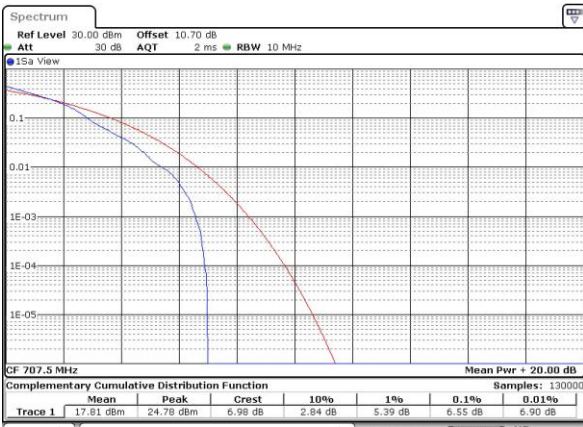
Date: 27 APR 2018 10:21:17

Lowest Channel / Full RB



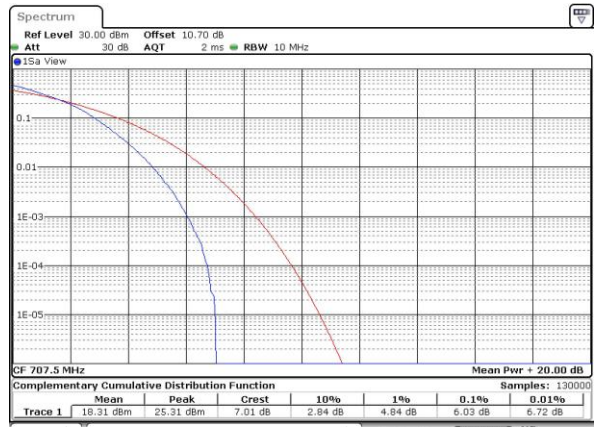
Date: 27 APR 2018 10:20:58

Middle Channel / 1RB



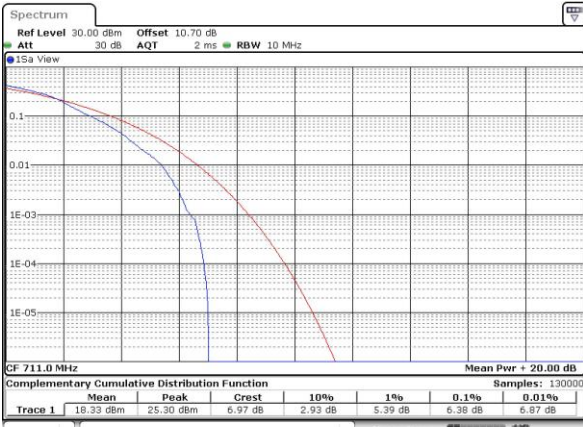
Date: 27 APR 2018 10:21:27

Middle Channel / Full RB



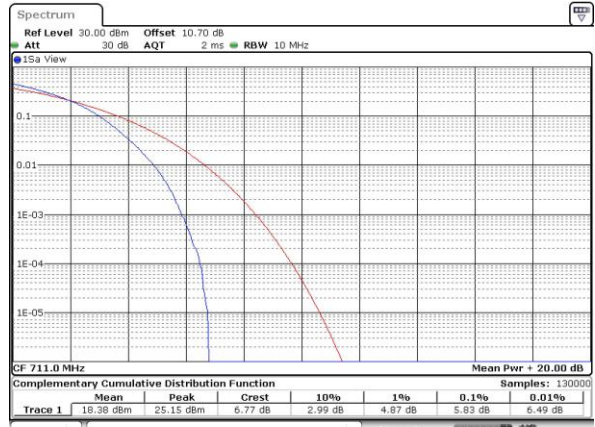
Date: 27 APR 2018 10:21:52

Highest Channel / 1RB



Date: 27 APR 2018 10:22:15

Highest Channel / Full RB



Date: 27 APR 2018 10:22:05



**26dB Bandwidth**

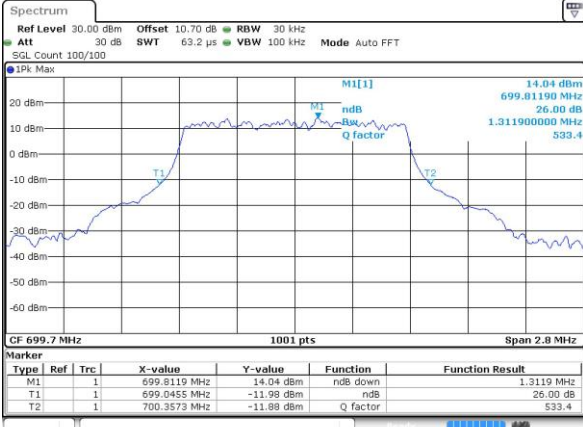
Mode	LTE Band 12 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.31	1.30	3.00	3.06	5.02	4.94	9.73	10.01	-	-	-	-
Middle CH	1.30	1.31	2.97	3.06	4.97	4.91	10.23	9.97	-	-	-	-
Highest CH	1.32	1.32	3.02	3.00	4.96	5.04	10.03	10.31	-	-	-	-





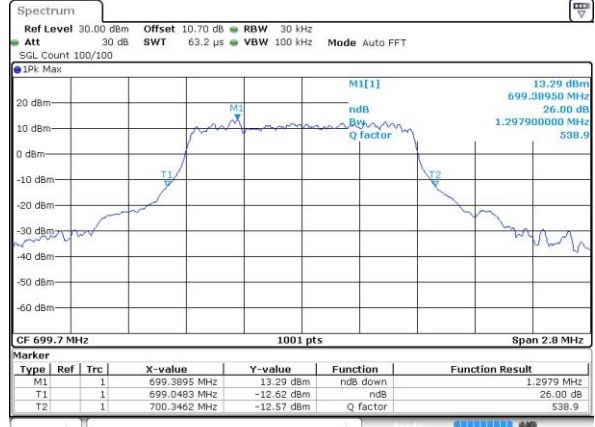
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



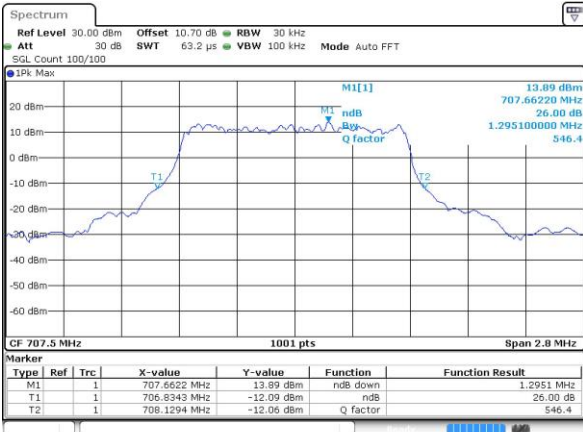
Date: 27 APR 2018 10:02:26

Lowest Channel / 1.4MHz / 16QAM



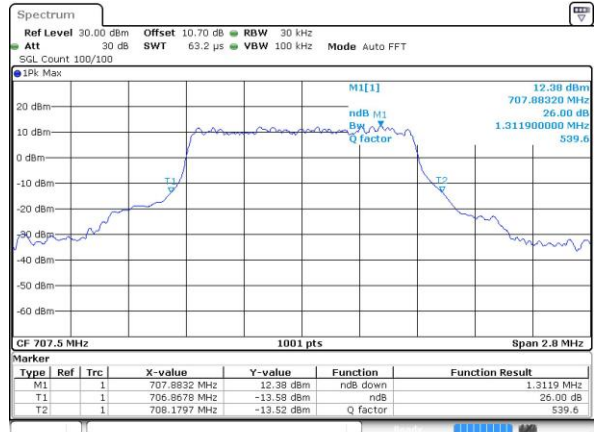
Date: 27 APR 2018 10:02:15

Middle Channel / 1.4MHz / QPSK



Date: 27 APR 2018 10:09:23

Middle Channel / 1.4MHz / 16QAM



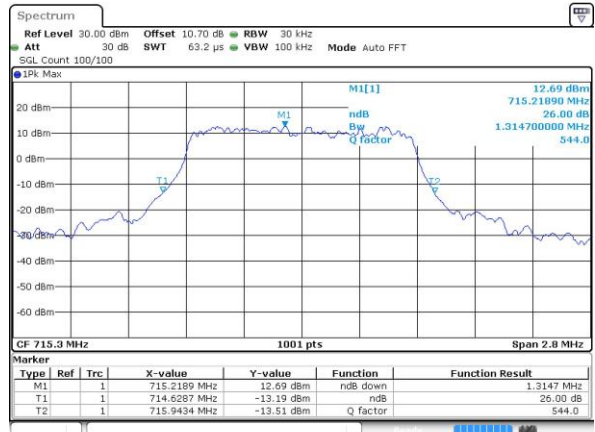
Date: 27 APR 2018 10:09:33

Highest Channel / 1.4MHz / QPSK



Date: 27 APR 2018 10:12:03

Highest Channel / 1.4MHz / 16QAM

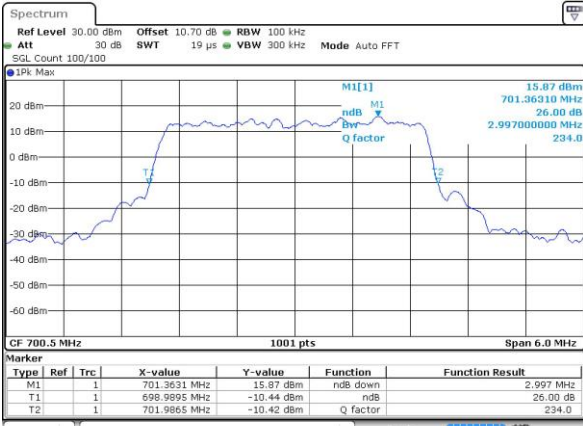


Date: 27 APR 2018 10:11:53



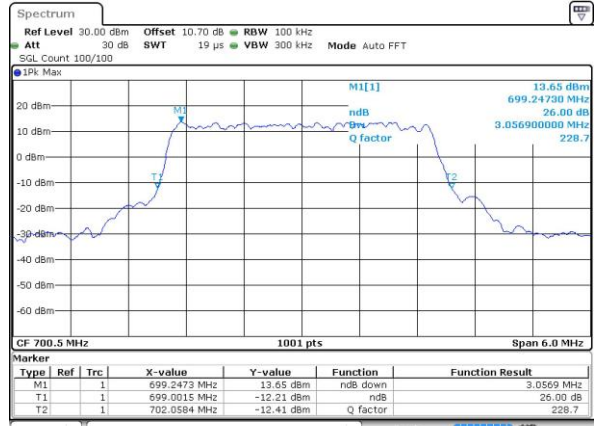
LTE Band 12

Lowest Channel / 3MHz / QPSK



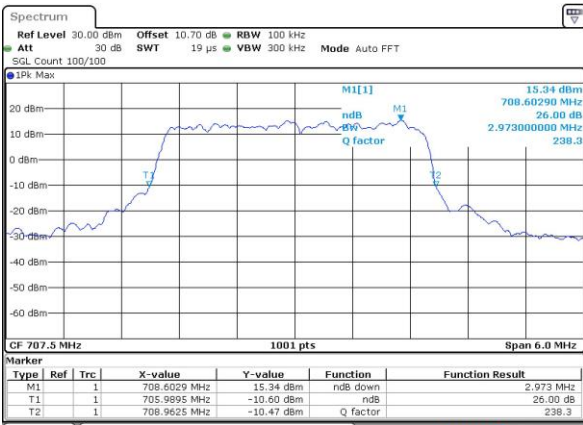
Date: 27 APR 2018 09:12:10

Lowest Channel / 3MHz / 16QAM



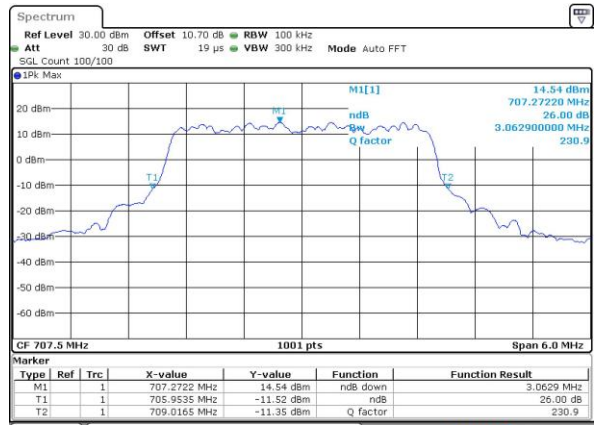
Date: 27 APR 2018 09:12:00

Middle Channel / 3MHz / QPSK



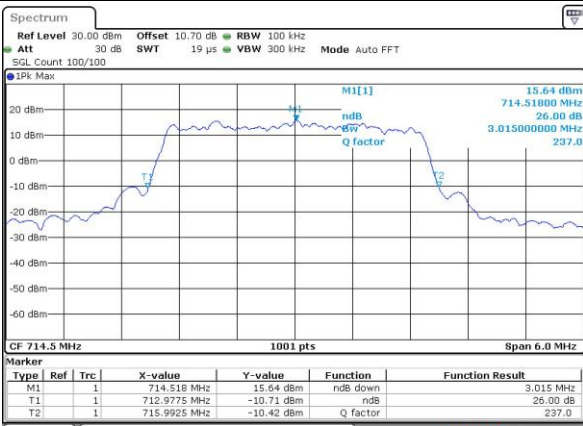
Date: 27 APR 2018 09:19:08

Middle Channel / 3MHz / 16QAM



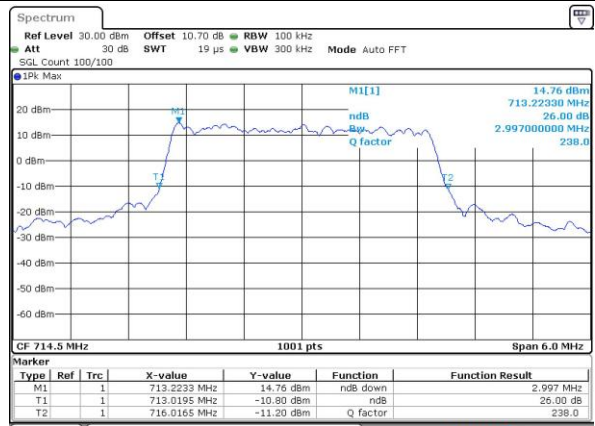
Date: 27 APR 2018 09:19:18

Highest Channel / 3MHz / QPSK



Date: 27 APR 2018 09:21:48

Highest Channel / 3MHz / 16QAM

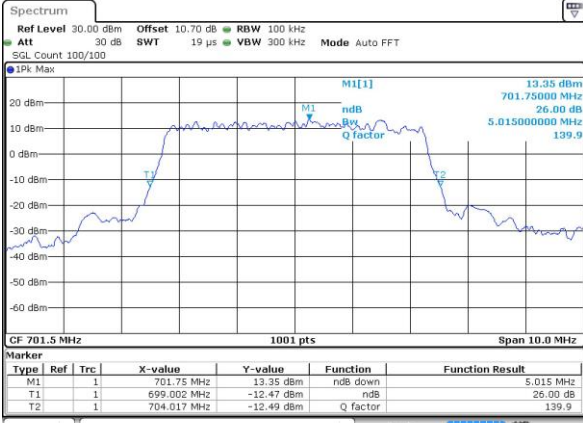


Date: 27 APR 2018 09:21:38



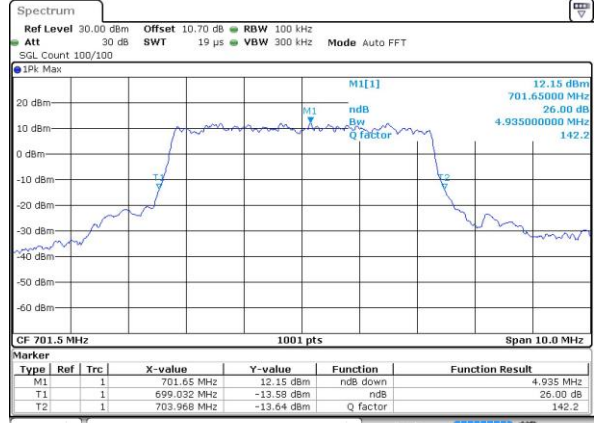
LTE Band 12

Lowest Channel / 5MHz / QPSK



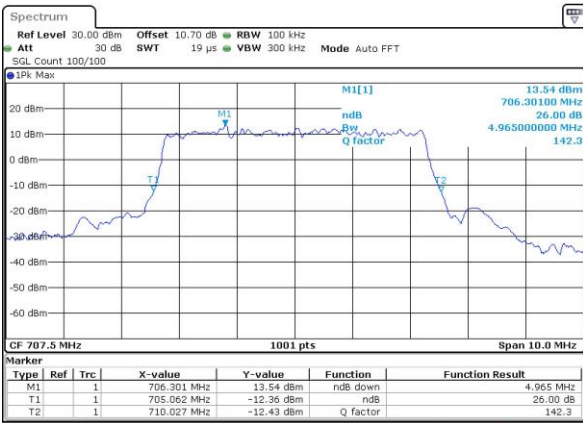
Date: 27 APR 2018 10:26:45

Lowest Channel / 5MHz / 16QAM



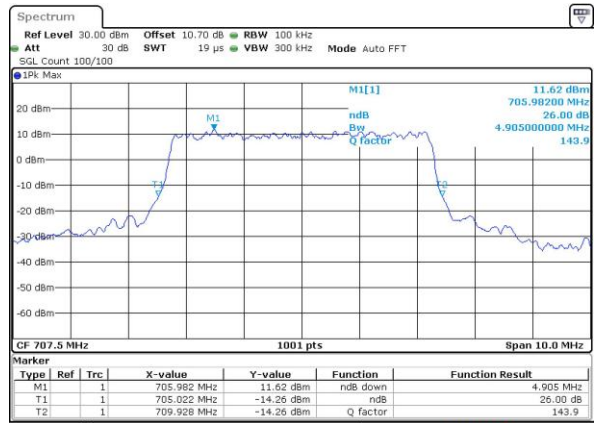
Date: 27 APR 2018 10:26:35

Middle Channel / 5MHz / QPSK



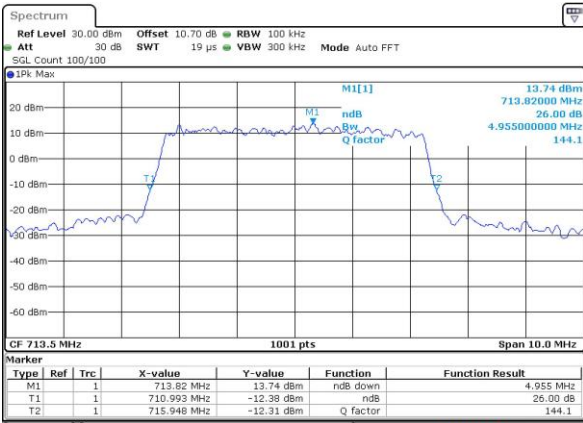
Date: 27 APR 2018 10:33:42

Middle Channel / 5MHz / 16QAM



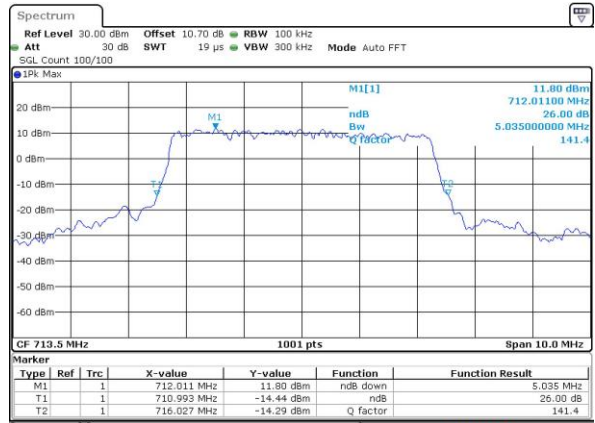
Date: 27 APR 2018 10:33:52

Highest Channel / 5MHz / QPSK



Date: 27 APR 2018 10:36:22

Highest Channel / 5MHz / 16QAM

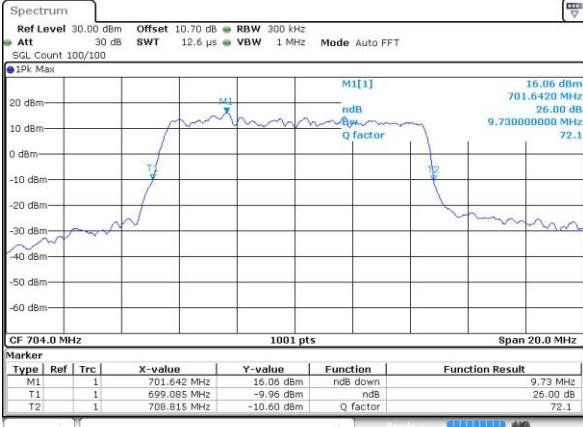


Date: 27 APR 2018 10:36:12



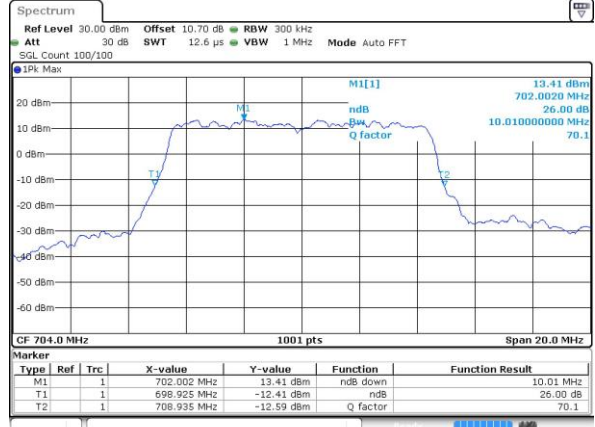
LTE Band 12

Lowest Channel / 10MHz / QPSK



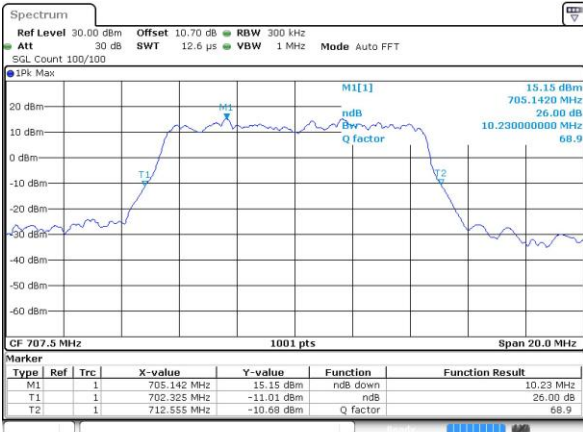
Date: 27 APR 2018 09:45:41

Lowest Channel / 10MHz / 16QAM



Date: 27 APR 2018 09:45:30

Middle Channel / 10MHz / QPSK



Date: 27 APR 2018 09:52:38

Middle Channel / 10MHz / 16QAM



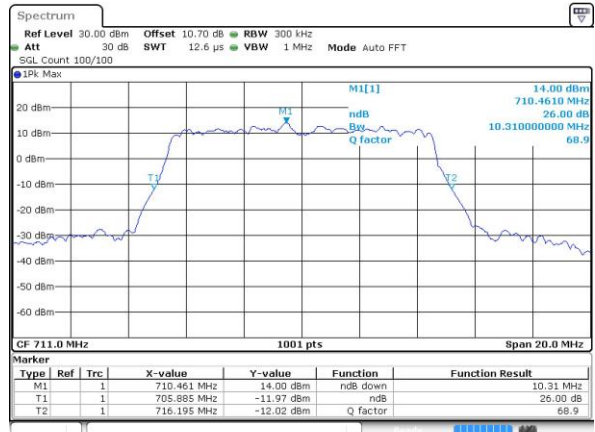
Date: 27 APR 2018 09:52:48

Highest Channel / 10MHz / QPSK



Date: 27 APR 2018 09:55:19

Highest Channel / 10MHz / 16QAM



Date: 27 APR 2018 09:55:08



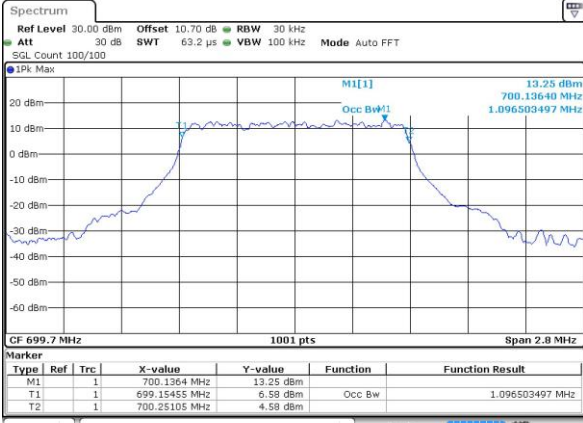
### Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.1	1.1	2.73	2.72	4.49	4.49	9.01	9.05	-	-	-	-
Middle CH	1.11	1.1	2.72	2.71	4.52	4.5	9.07	9.01	-	-	-	-
Highest CH	1.09	1.1	2.73	2.72	4.48	4.47	8.97	9.05	-	-	-	-



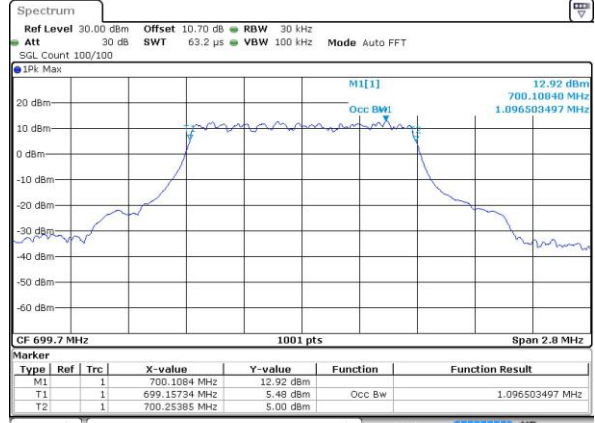
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



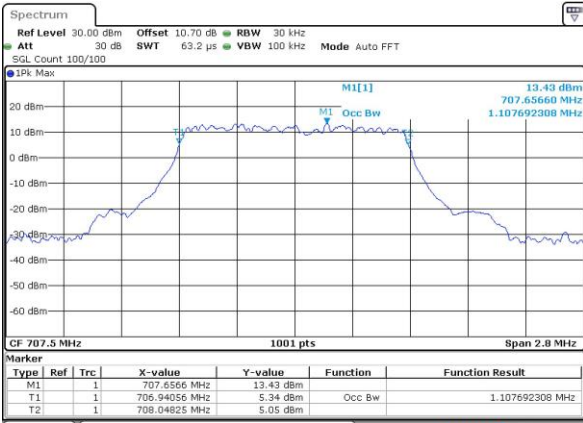
Date: 27 APR 2018 10:01:54

Lowest Channel / 1.4MHz / 16QAM



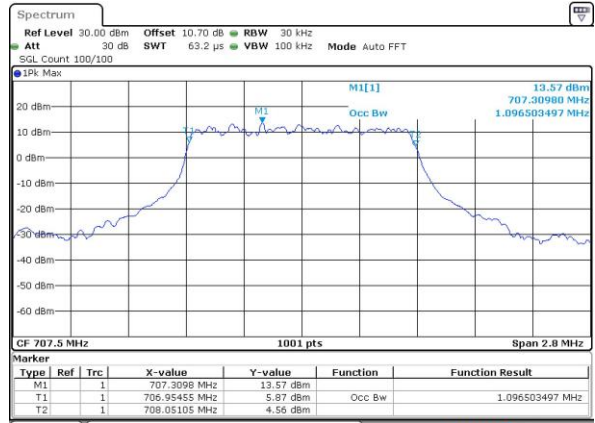
Date: 27 APR 2018 10:02:05

Middle Channel / 1.4MHz / QPSK



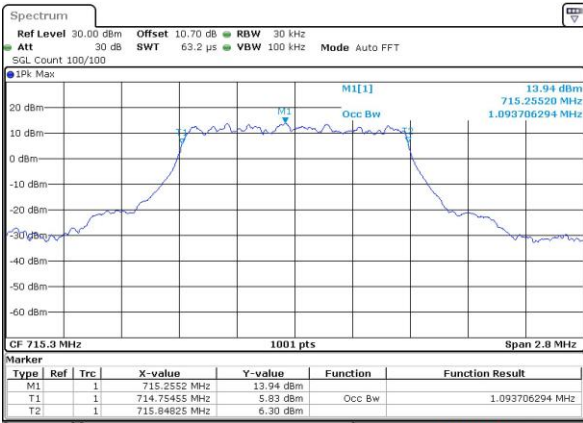
Date: 27 APR 2018 10:09:12

Middle Channel / 1.4MHz / 16QAM



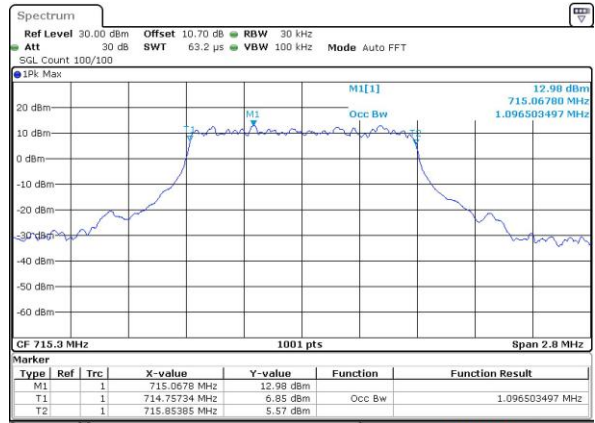
Date: 27 APR 2018 10:09:02

Highest Channel / 1.4MHz / QPSK



Date: 27 APR 2018 10:11:32

Highest Channel / 1.4MHz / 16QAM



Date: 27 APR 2018 10:11:42