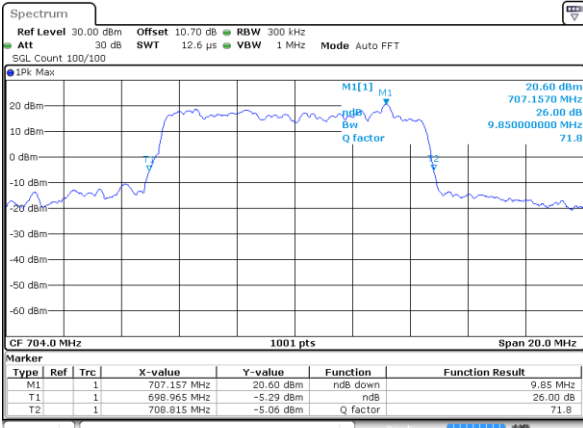




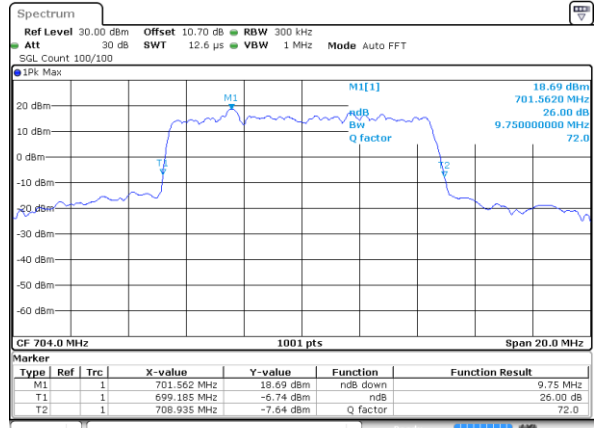
LTE Band 12

Lowest Channel / 10MHz / QPSK



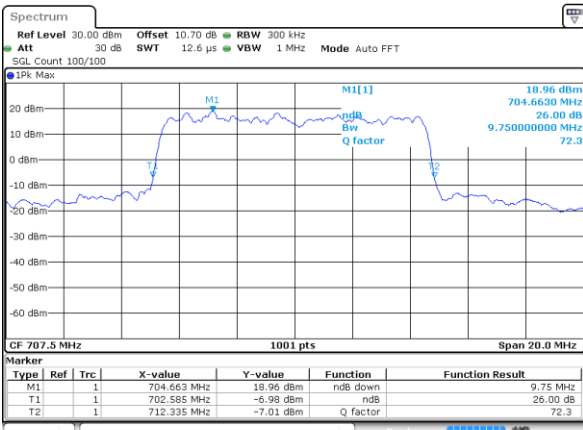
Date: 1 SEP 2017 21:34:28

Lowest Channel / 10MHz / 16QAM



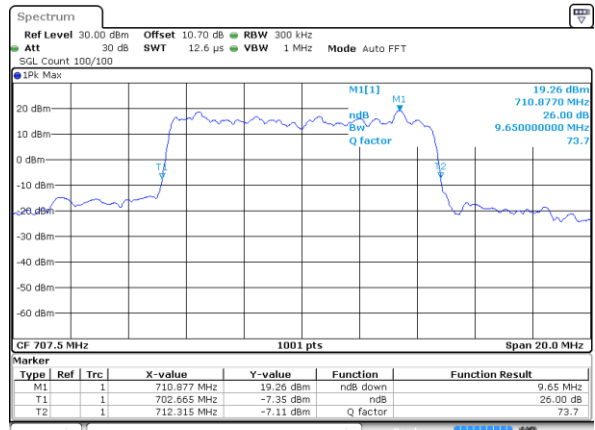
Date: 1 SEP 2017 21:34:18

Middle Channel / 10MHz / QPSK



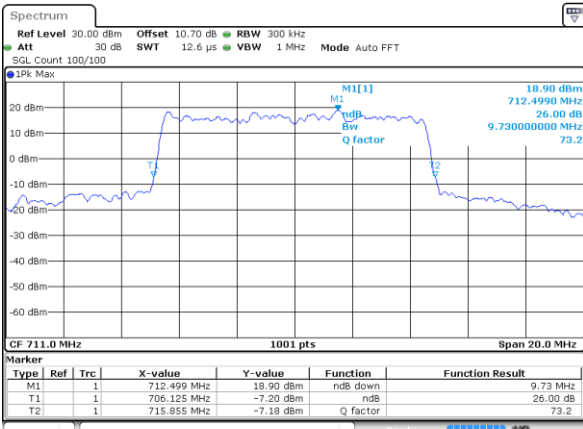
Date: 1 SEP 2017 21:41:21

Middle Channel / 10MHz / 16QAM



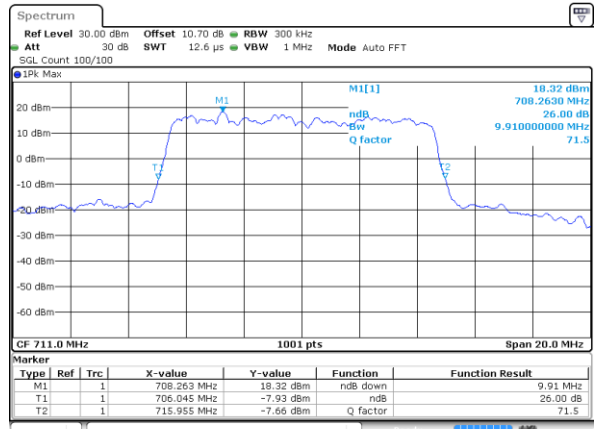
Date: 1 SEP 2017 21:41:31

Highest Channel / 10MHz / QPSK



Date: 1 SEP 2017 21:43:58

Highest Channel / 10MHz / 16QAM



Date: 1 SEP 2017 21:43:48



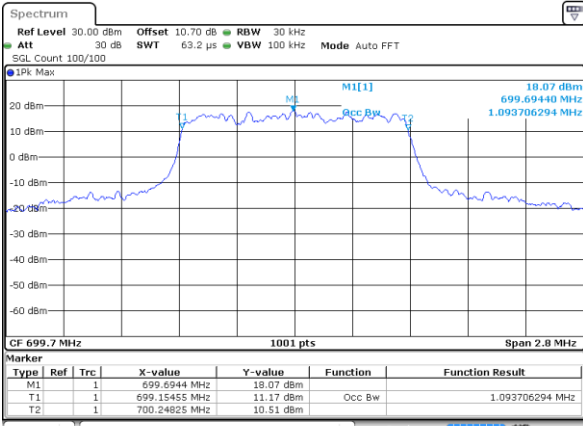
Occupied Bandwidth

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	1.09	1.09	2.72	2.72	4.52	4.52	9.03	9.05	-	-	-	-
Middle CH	1.09	1.09	2.72	2.7	4.52	4.5	9.07	9.03	-	-	-	-
Highest CH	1.09	1.09	2.72	2.72	4.5	4.51	9.01	9.05	-	-	-	-



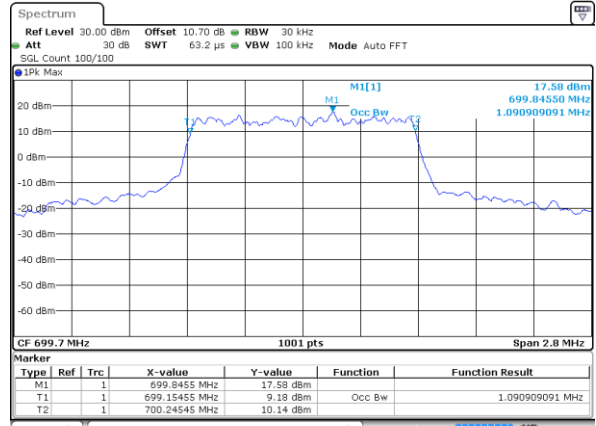
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



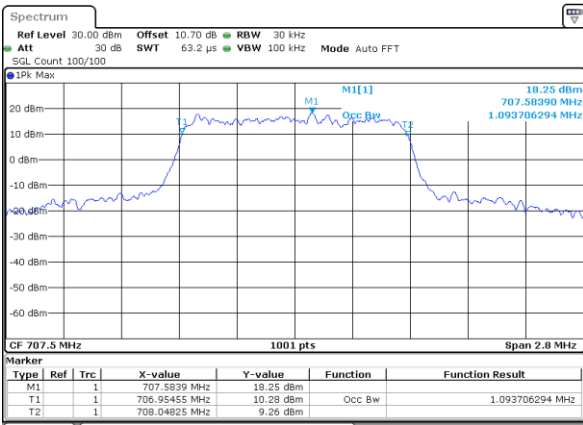
Date: 1 SEP 2017 22:21:47

Lowest Channel / 1.4MHz / 16QAM



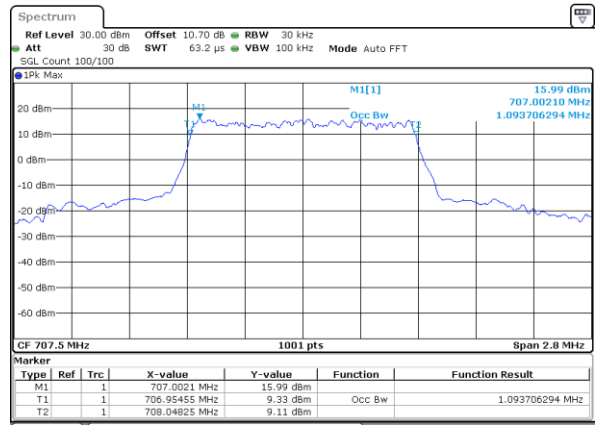
Date: 1 SEP 2017 22:21:57

Middle Channel / 1.4MHz / QPSK



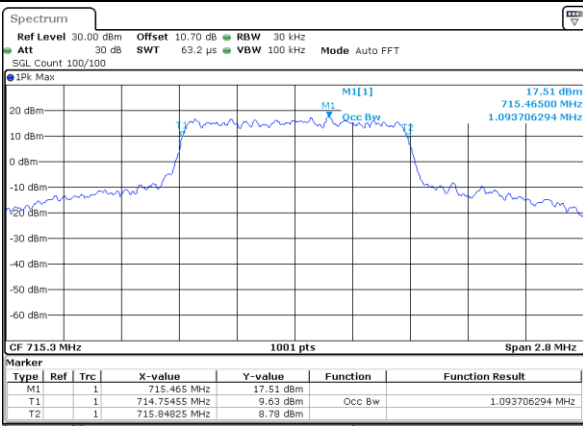
Date: 1 SEP 2017 22:29:00

Middle Channel / 1.4MHz / 16QAM



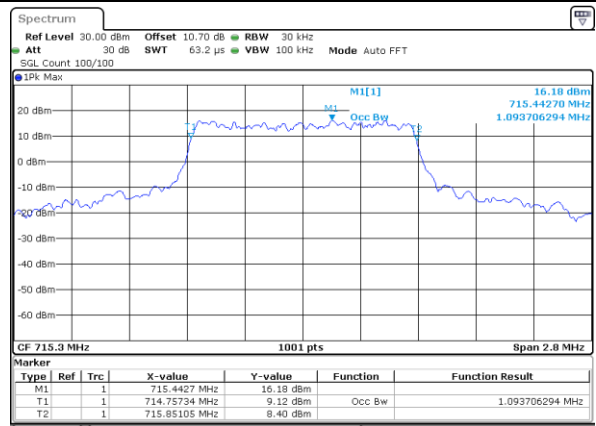
Date: 1 SEP 2017 22:28:49

Highest Channel / 1.4MHz / QPSK



Date: 1 SEP 2017 22:31:17

Highest Channel / 1.4MHz / 16QAM

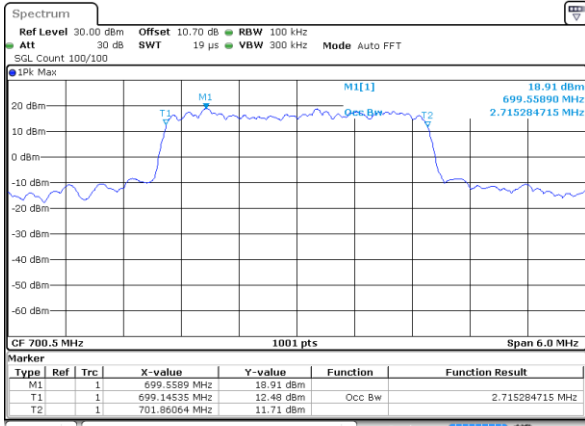


Date: 1 SEP 2017 22:31:27



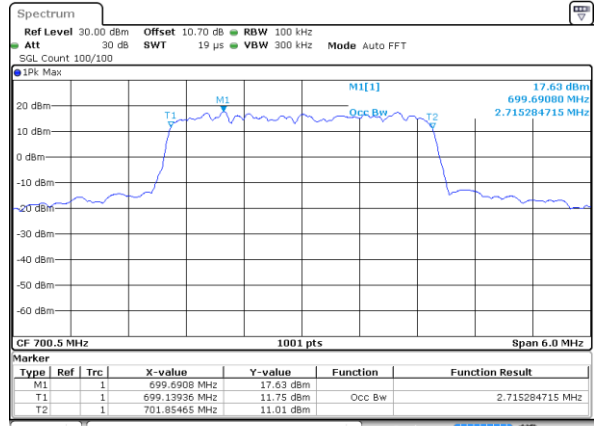
LTE Band 12

Lowest Channel / 3MHz / QPSK



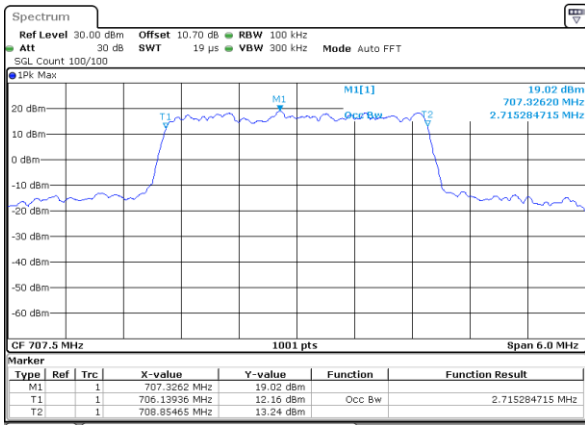
Date: 1 SEP 2017 21:00:54

Lowest Channel / 3MHz / 16QAM



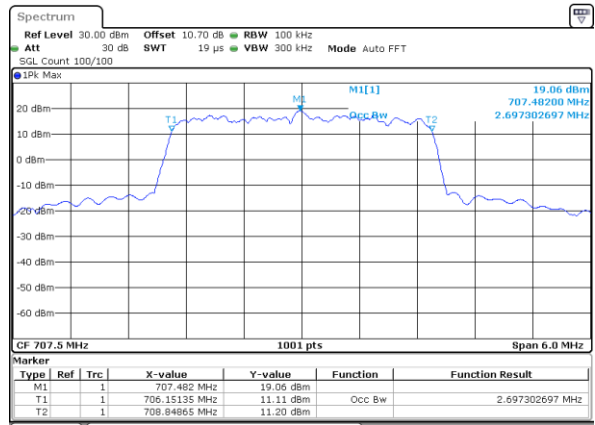
Date: 1 SEP 2017 21:01:04

Middle Channel / 3MHz / QPSK



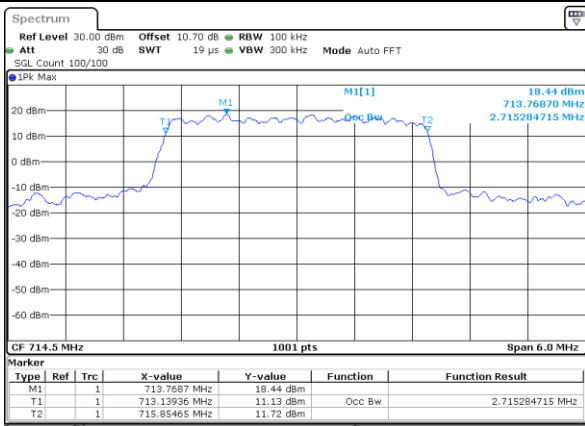
Date: 1 SEP 2017 21:08:06

Middle Channel / 3MHz / 16QAM



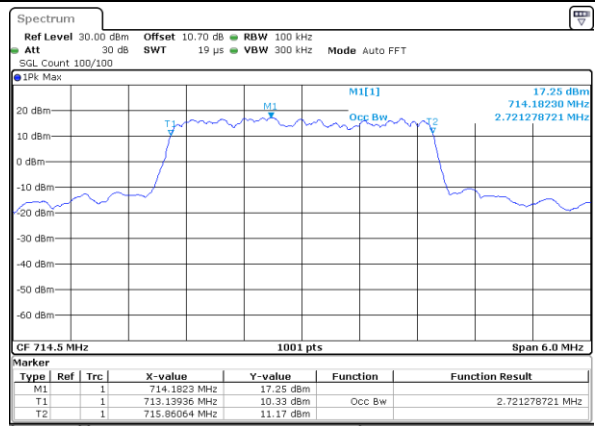
Date: 1 SEP 2017 21:07:56

Highest Channel / 3MHz / QPSK



Date: 1 SEP 2017 21:10:24

Highest Channel / 3MHz / 16QAM

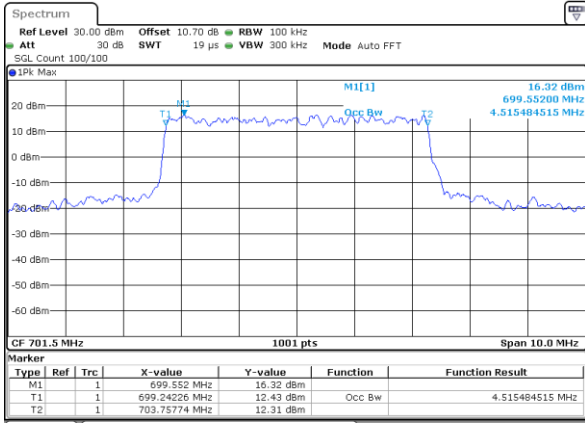


Date: 1 SEP 2017 21:10:34



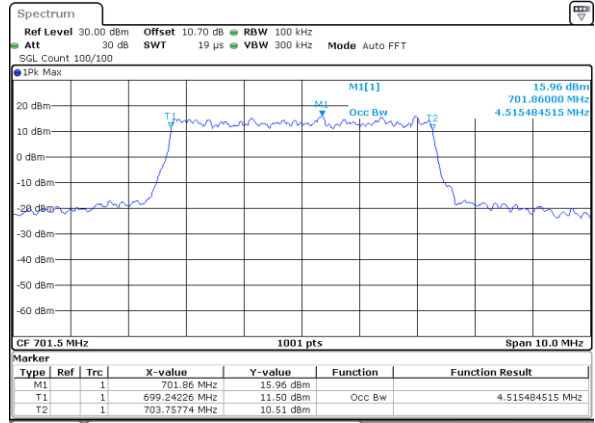
LTE Band 12

Lowest Channel / 5MHz / QPSK



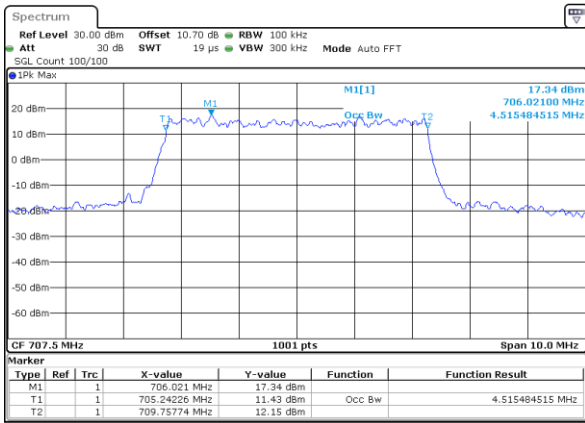
Date: 1 SEP.2017 21:17:26

Lowest Channel / 5MHz / 16QAM



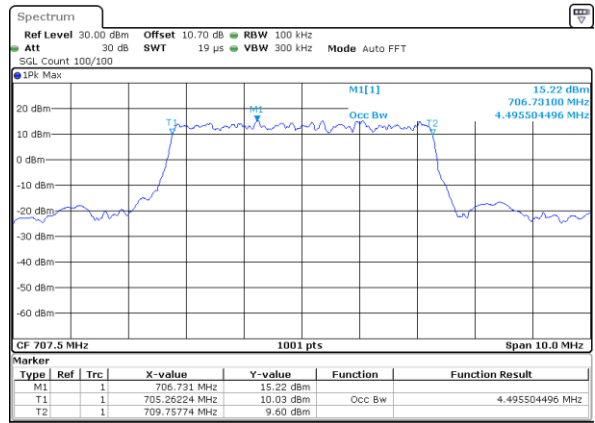
Date: 1 SEP.2017 21:17:36

Middle Channel / 5MHz / QPSK



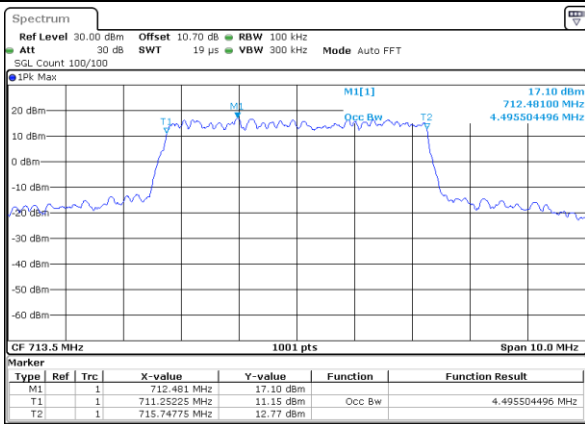
Date: 1 SEP.2017 21:24:38

Middle Channel / 5MHz / 16QAM



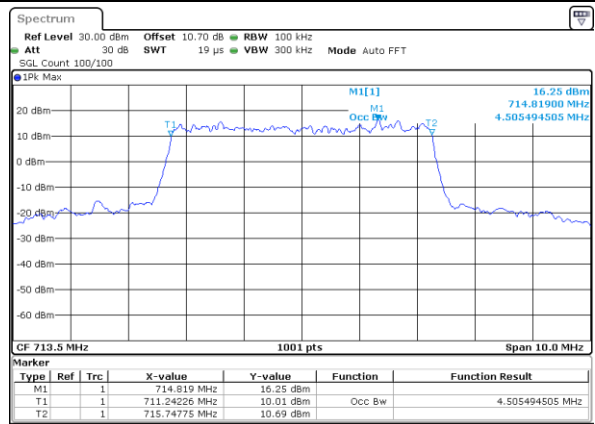
Date: 1 SEP.2017 21:24:28

Highest Channel / 5MHz / QPSK



Date: 1 SEP.2017 21:26:56

Highest Channel / 5MHz / 16QAM

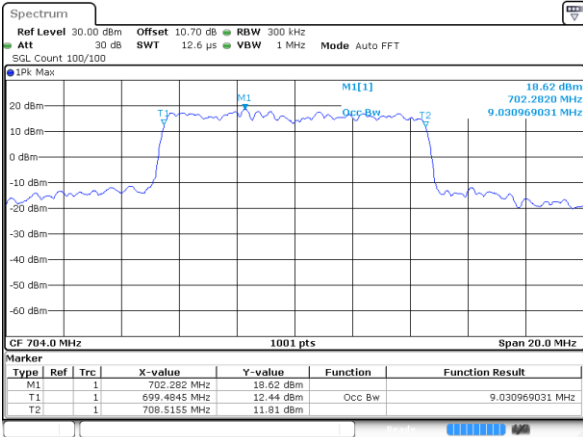


Date: 1 SEP.2017 21:27:06



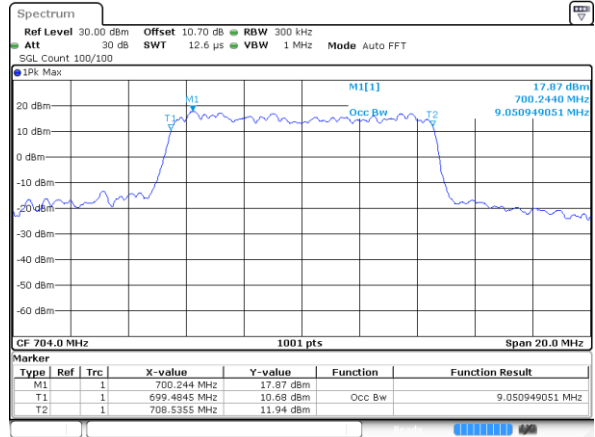
LTE Band 12

Lowest Channel / 10MHz / QPSK



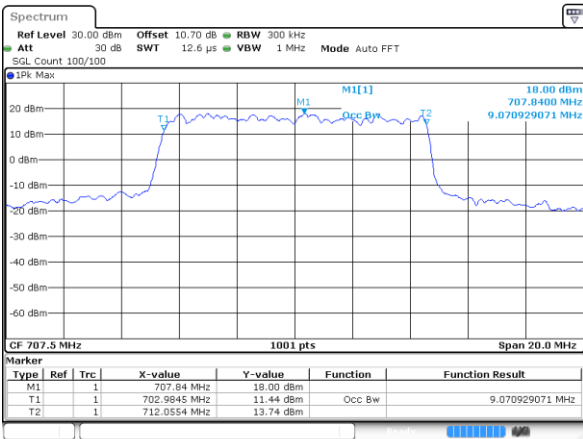
Date: 1 SEP 2017 21:33:58

Lowest Channel / 10MHz / 16QAM



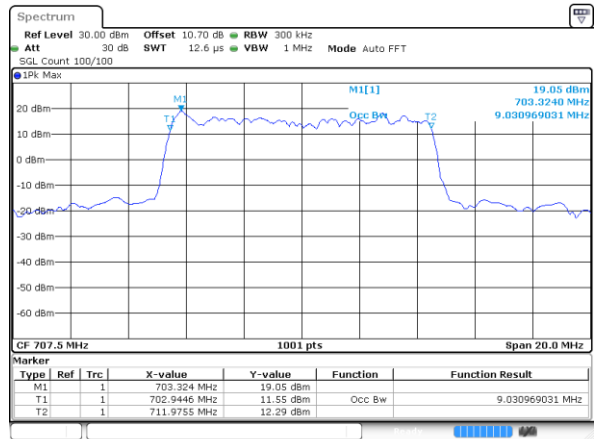
Date: 1 SEP 2017 21:34:08

Middle Channel / 10MHz / QPSK



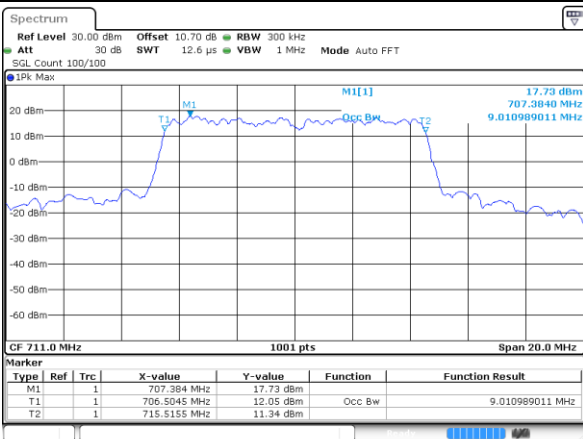
Date: 1 SEP 2017 21:41:11

Middle Channel / 10MHz / 16QAM



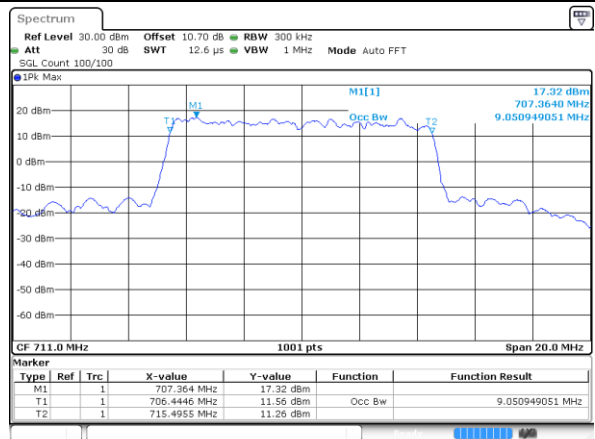
Date: 1 SEP 2017 21:41:01

Highest Channel / 10MHz / QPSK



Date: 1 SEP 2017 21:43:28

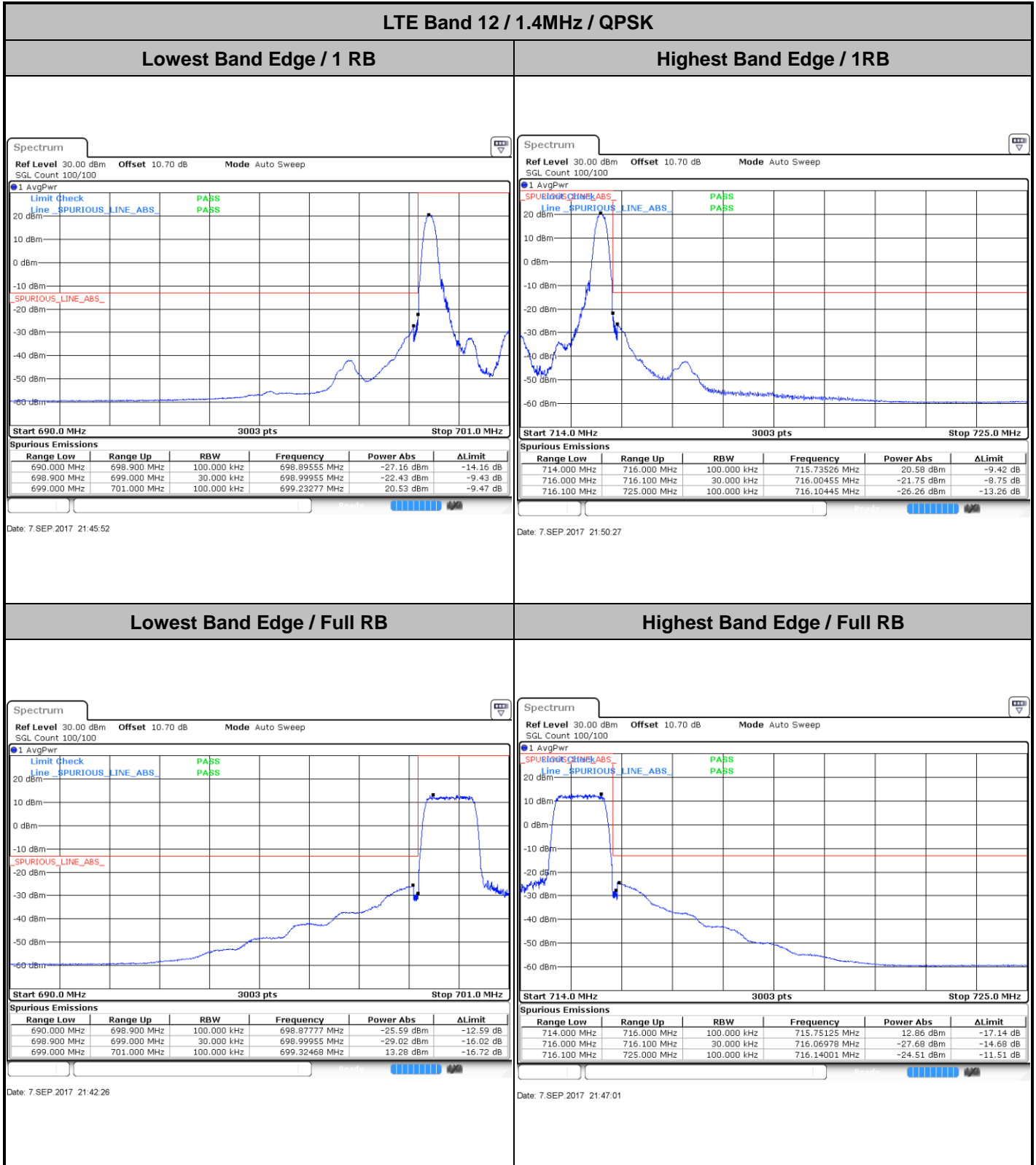
Highest Channel / 10MHz / 16QAM



Date: 1 SEP 2017 21:43:38



Conducted Band Edge

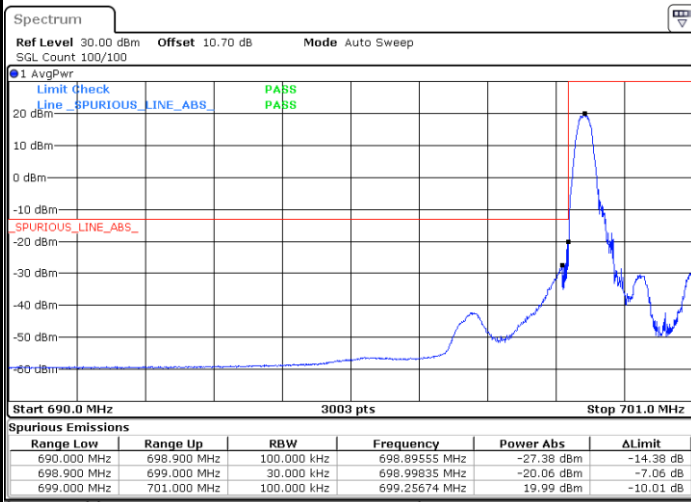




LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

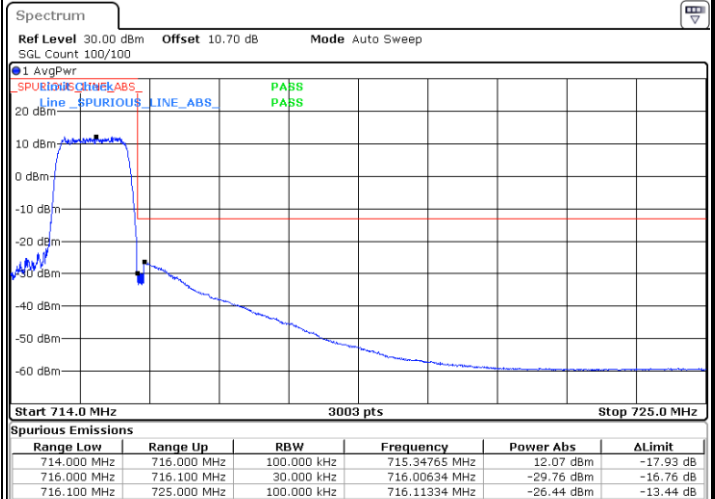
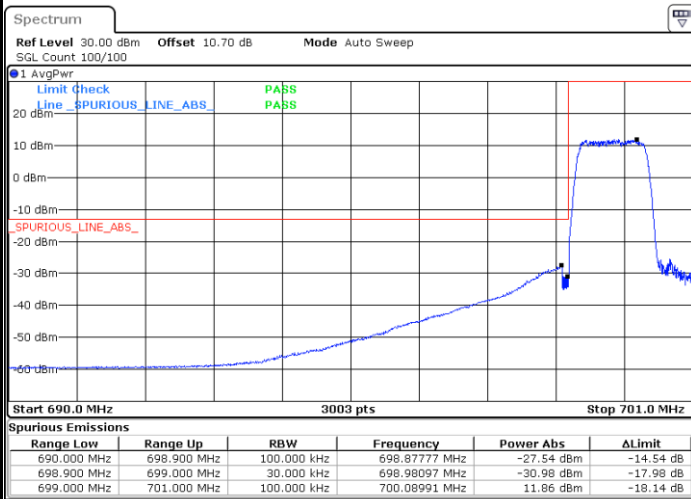


Date: 7 SEP.2017 21:44:44

Date: 7 SEP.2017 21:49:18

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



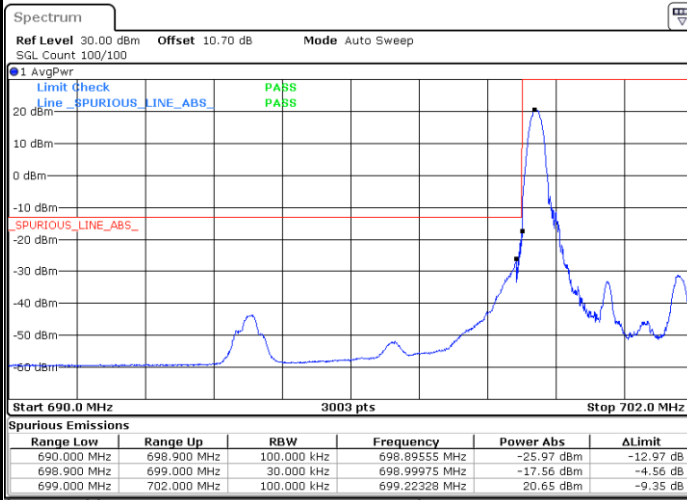
Date: 7 SEP.2017 21:43:35

Date: 7 SEP.2017 21:48:10



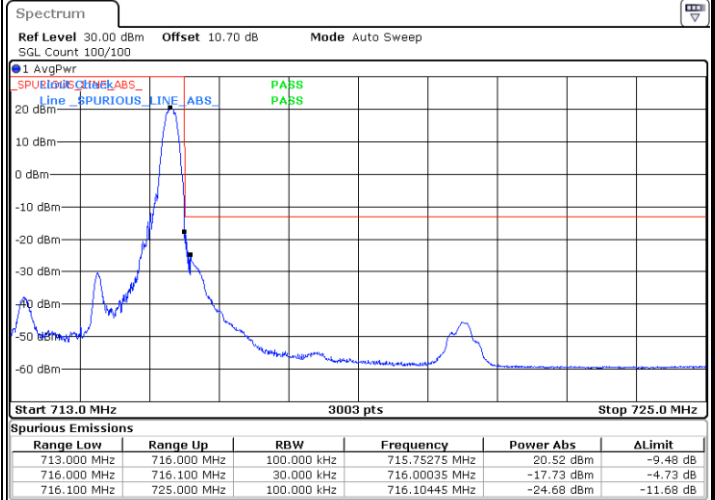
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



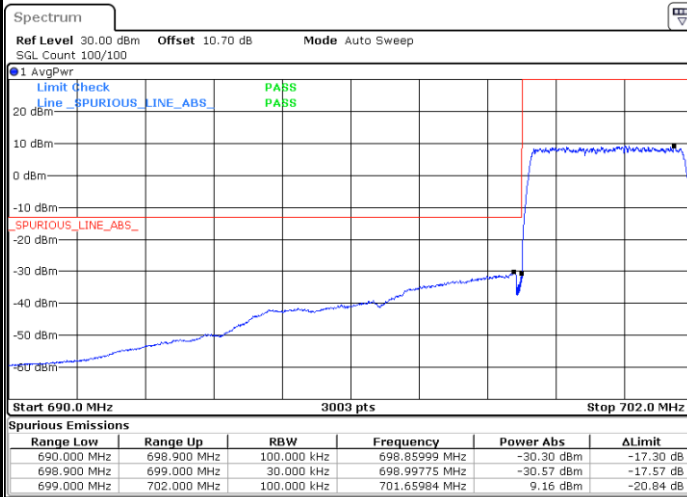
Date: 7 SEP.2017 21:55:02

Highest Band Edge / 1 RB



Date: 7 SEP.2017 21:59:37

Lowest Band Edge / Full RB



Date: 7 SEP.2017 21:51:36

Highest Band Edge / Full RB

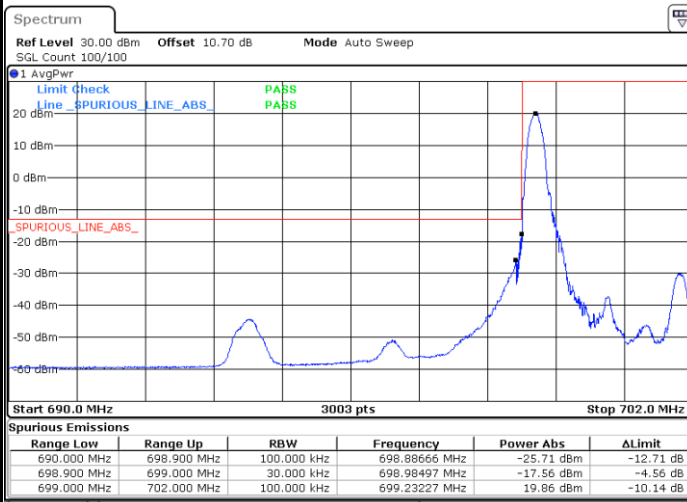


Date: 7 SEP.2017 21:56:11



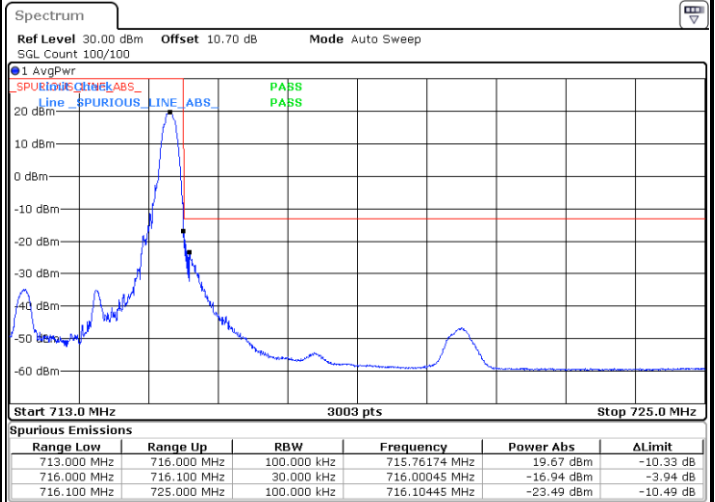
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



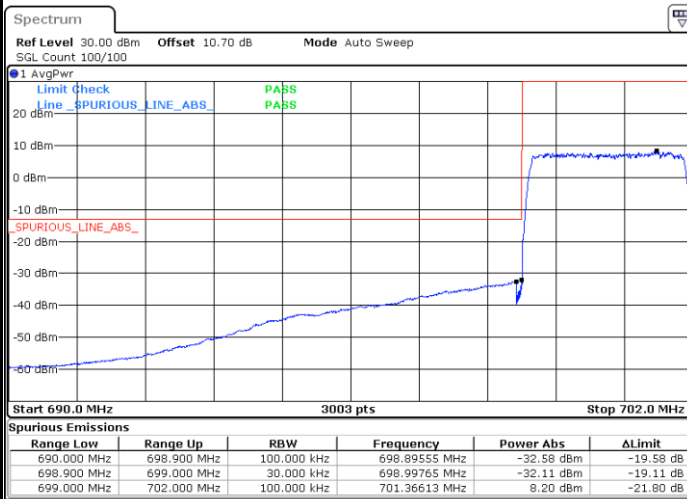
Date: 7 SEP.2017 21:53:53

Highest Band Edge / 1 RB



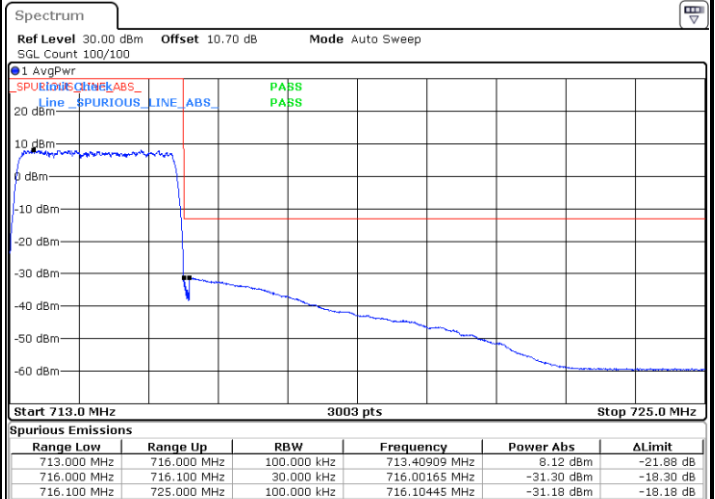
Date: 7 SEP.2017 21:58:28

Lowest Band Edge / Full RB



Date: 7 SEP.2017 21:52:45

Highest Band Edge / Full RB

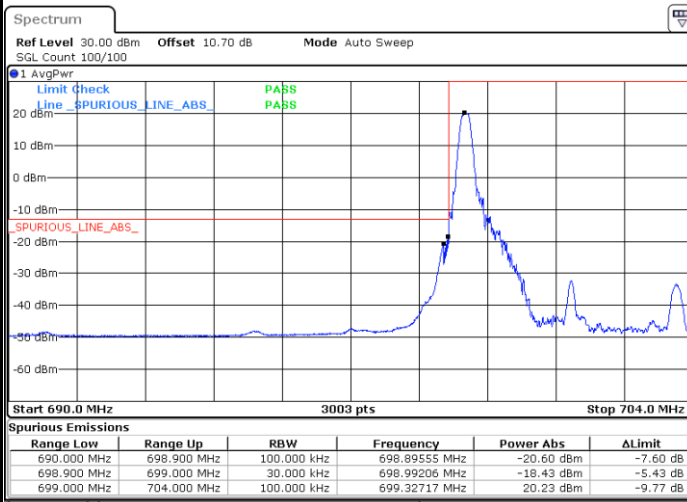


Date: 7 SEP.2017 21:57:19



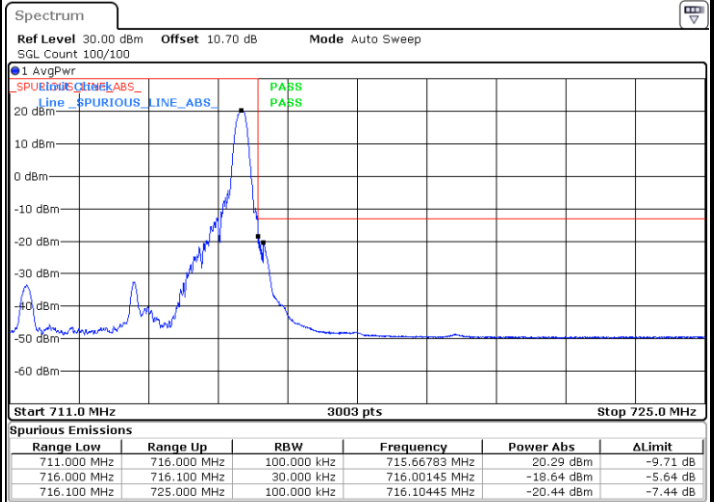
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



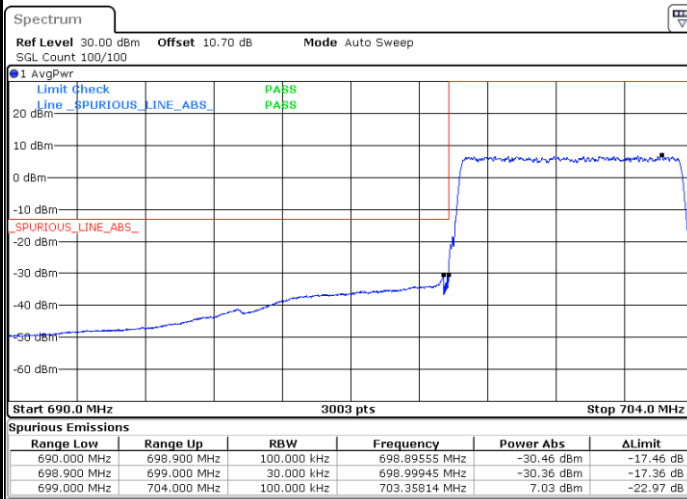
Date: 7 SEP.2017 22:04:12

Highest Band Edge / 1 RB



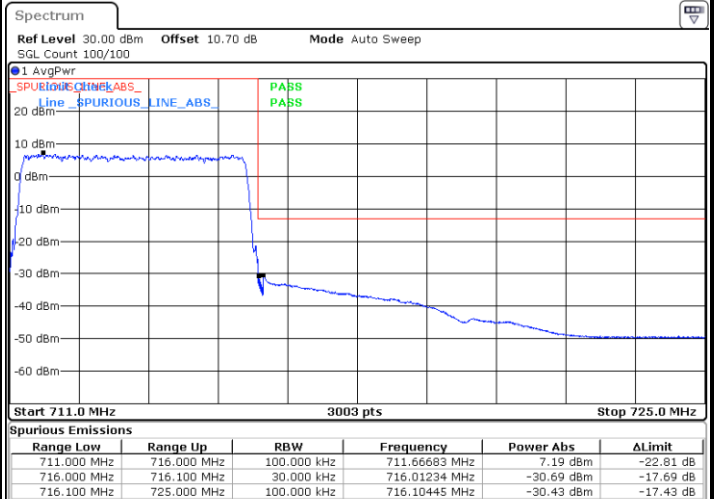
Date: 7 SEP.2017 22:07:38

Lowest Band Edge / Full RB



Date: 7 SEP.2017 22:00:45

Highest Band Edge / Full RB

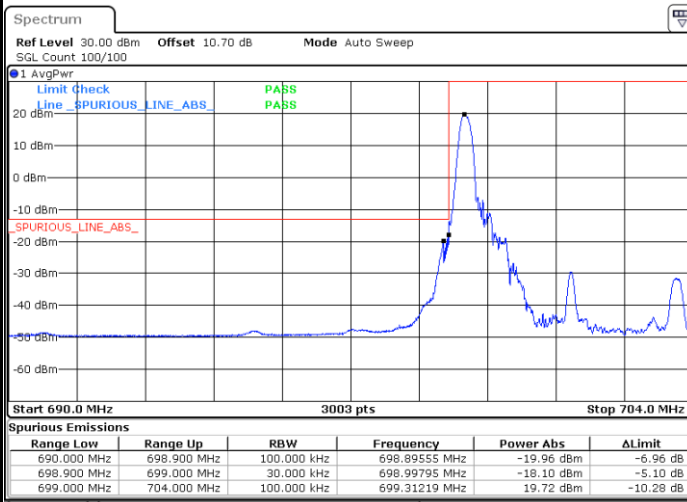


Date: 7 SEP.2017 22:05:20



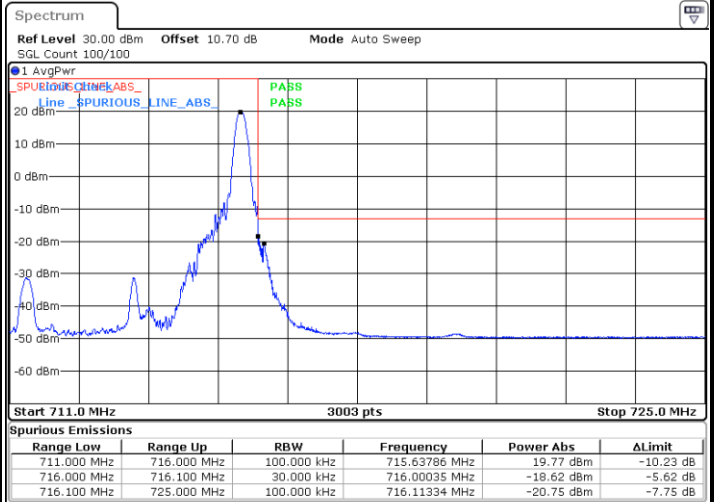
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



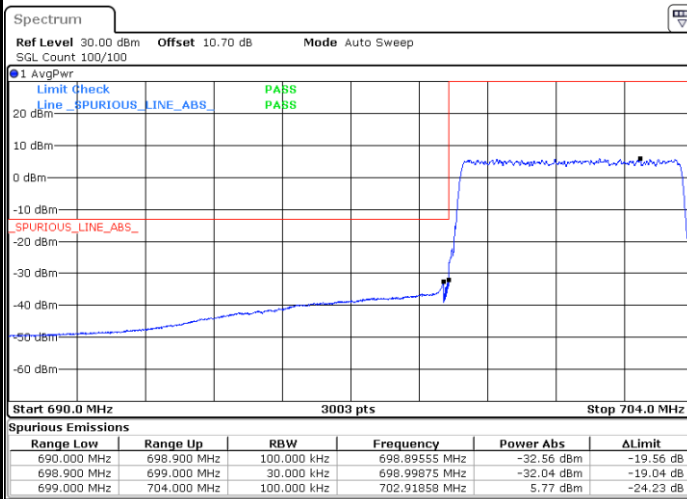
Date: 7 SEP.2017 22:03:03

Highest Band Edge / 1 RB



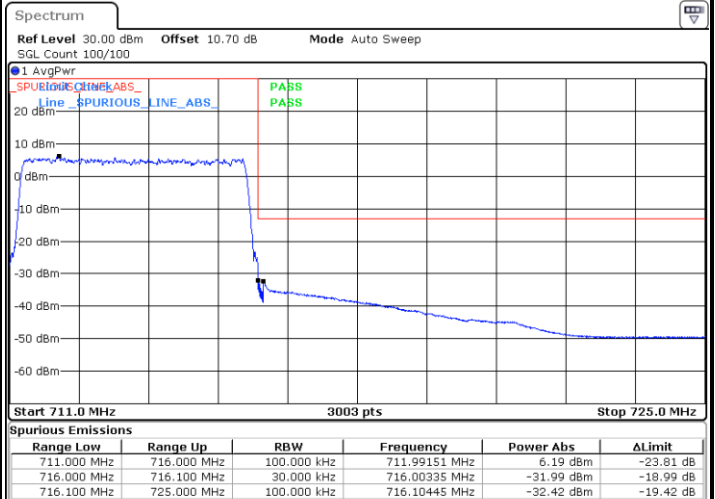
Date: 7 SEP.2017 22:08:46

Lowest Band Edge / Full RB



Date: 7 SEP.2017 22:01:54

Highest Band Edge / Full RB

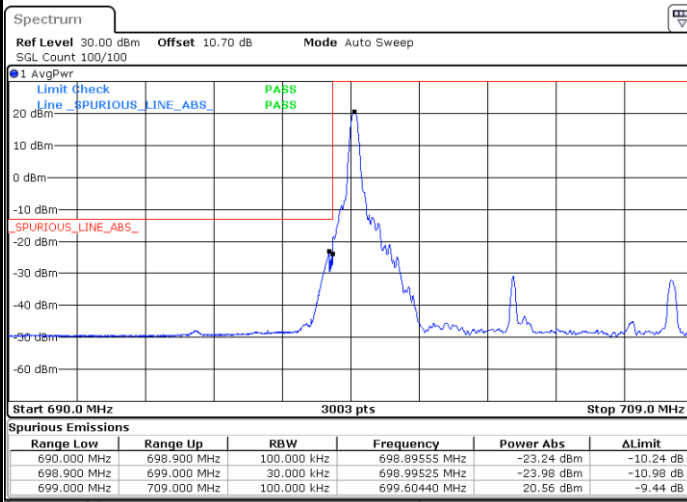


Date: 7 SEP.2017 22:06:29



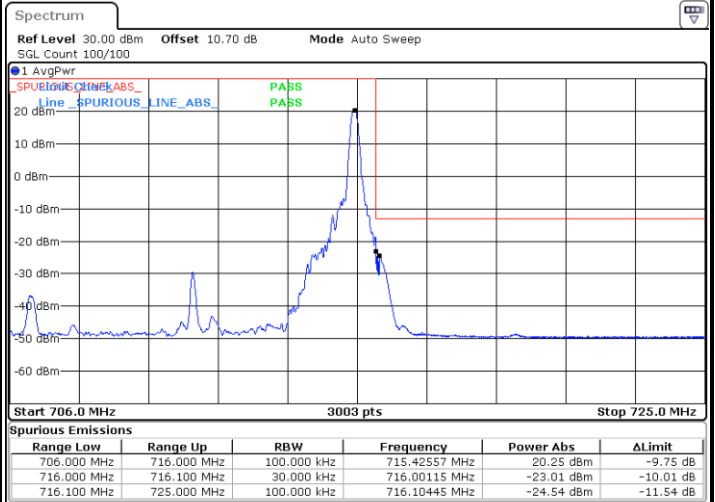
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



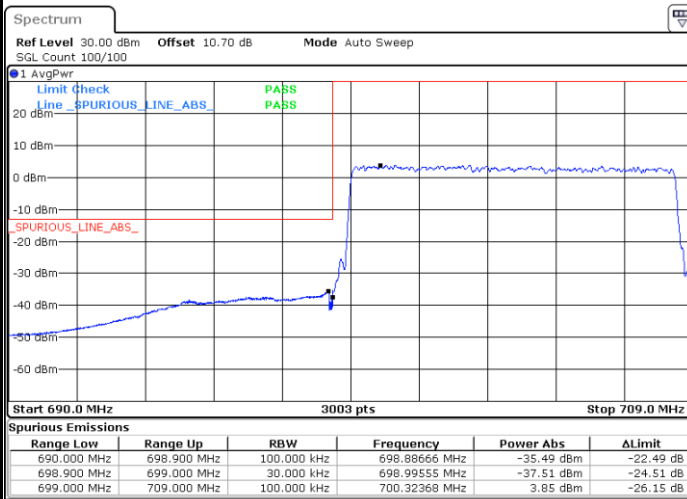
Date: 7 SEP. 2017 22:13:21

Highest Band Edge / 1 RB



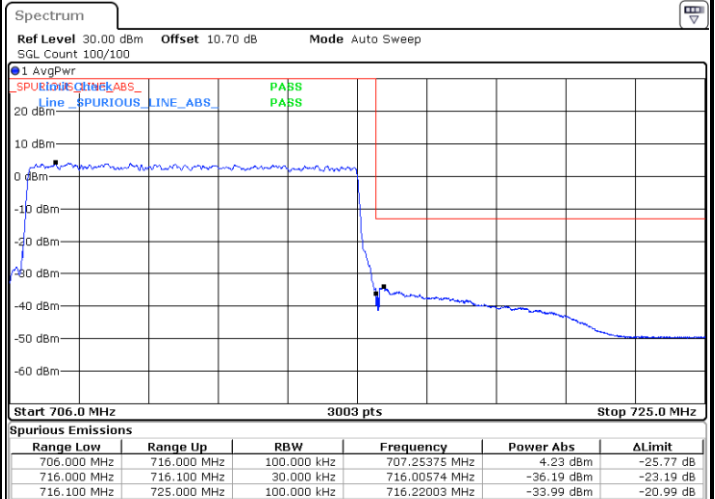
Date: 7 SEP. 2017 22:17:56

Lowest Band Edge / Full RB



Date: 7 SEP. 2017 22:09:55

Highest Band Edge / Full RB

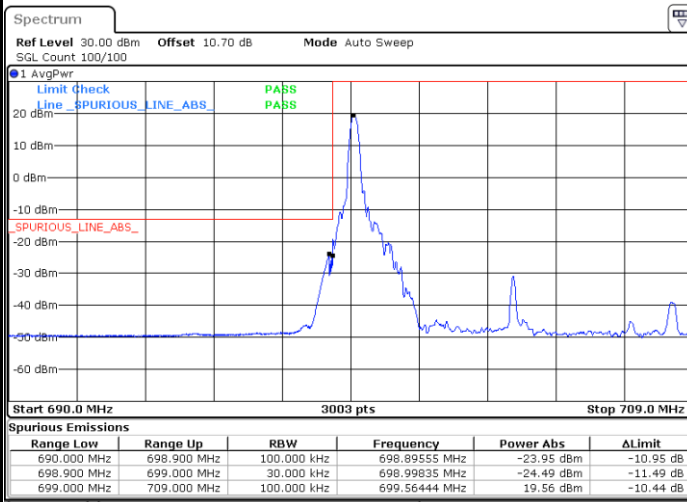


Date: 7 SEP. 2017 22:14:30



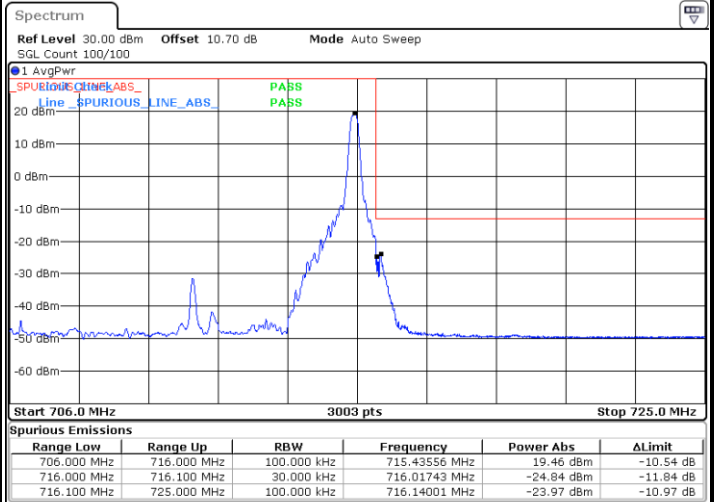
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



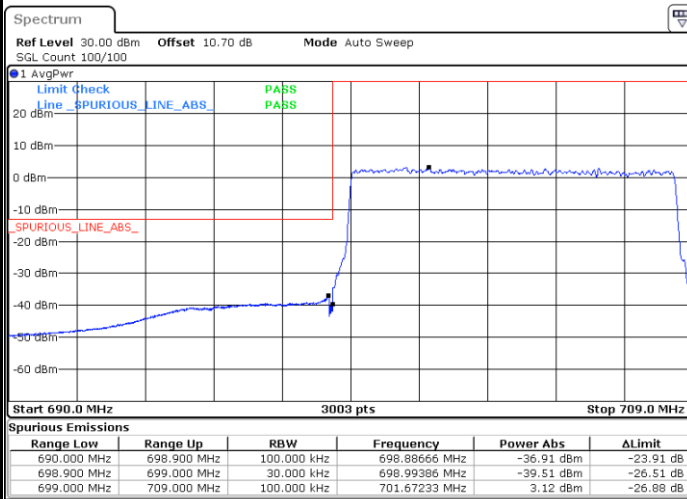
Date: 7 SEP.2017 22:12:13

Highest Band Edge / 1 RB



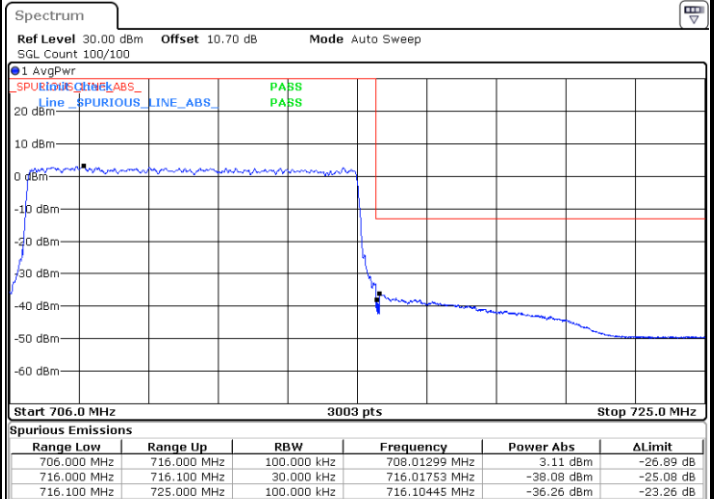
Date: 7 SEP.2017 22:16:47

Lowest Band Edge / Full RB



Date: 7 SEP.2017 22:11:04

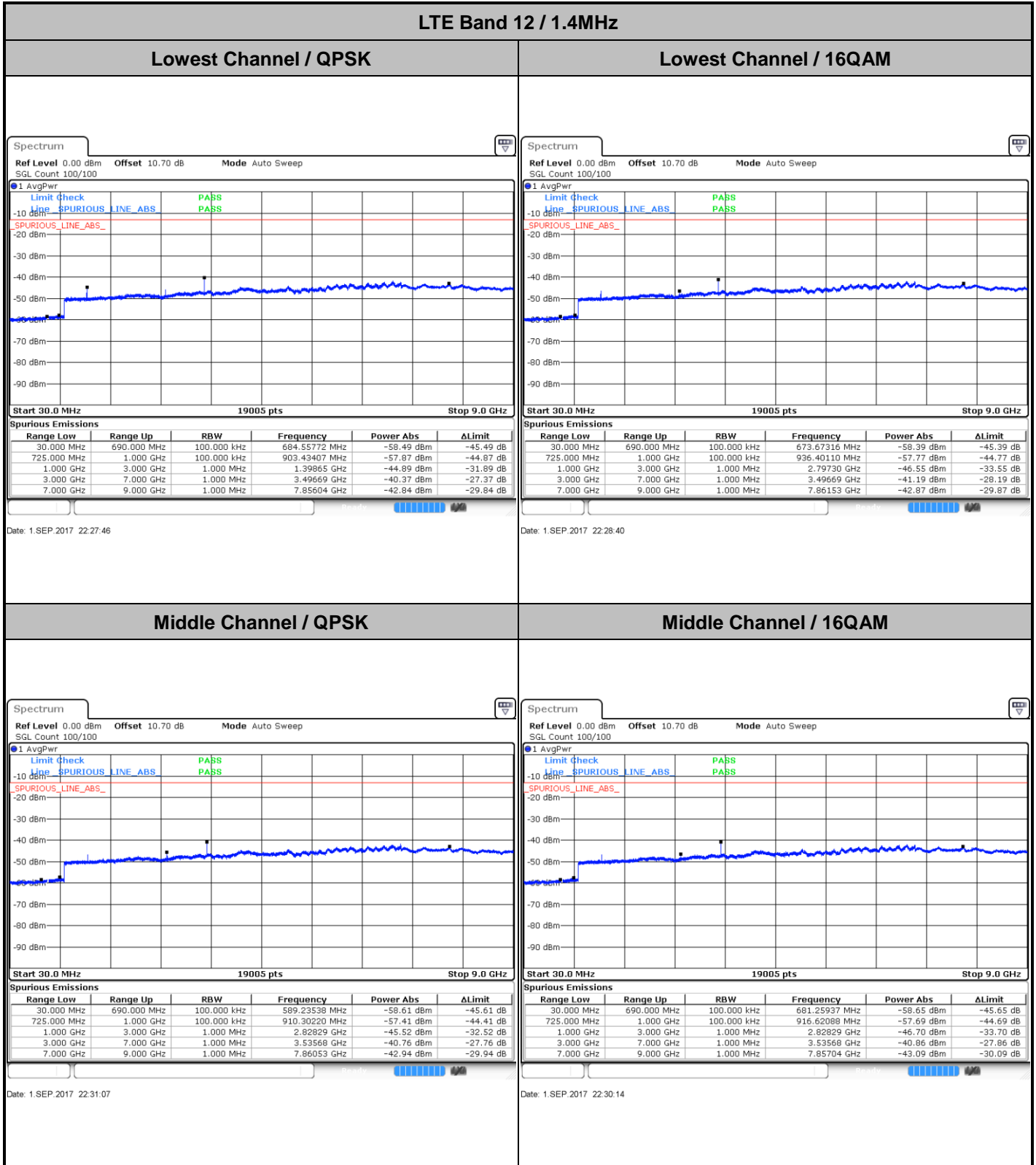
Highest Band Edge / Full RB



Date: 7 SEP.2017 22:15:39



Conducted Spurious Emission

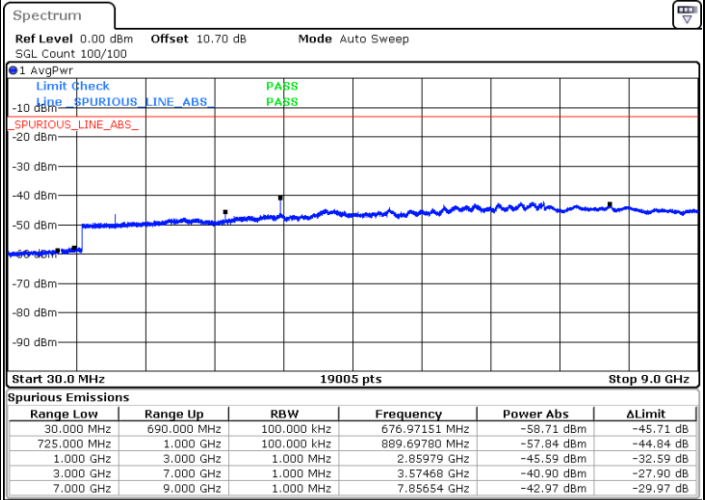
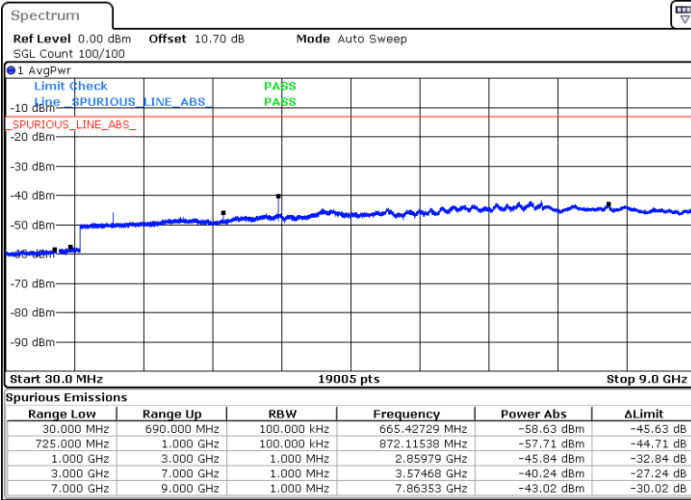




LTE Band 12 / 1.4MHz

Highest Channel / QPSK

Highest Channel / 16QAM



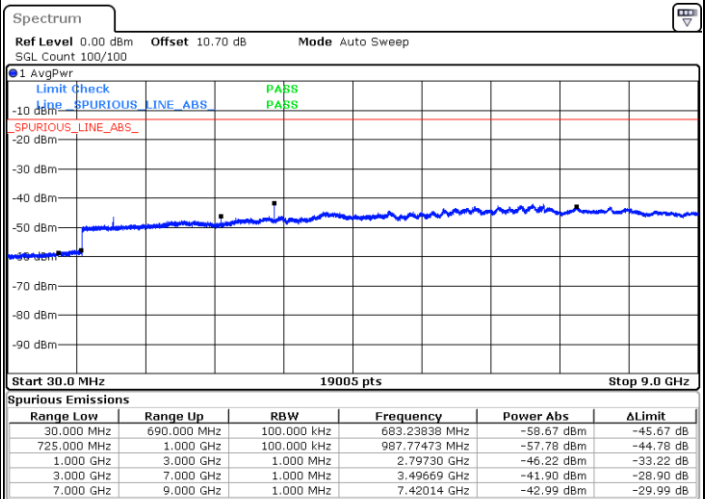
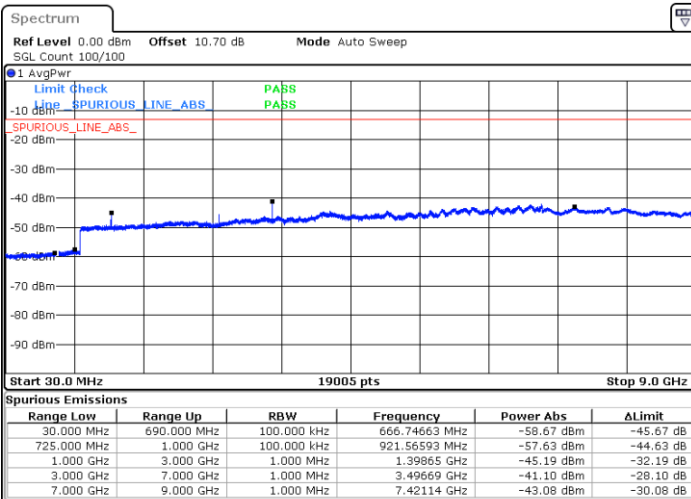
Date: 1.SEP.2017 22:37:16

Date: 1.SEP.2017 22:38:10

LTE Band 12 / 3MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 1.SEP.2017 21:06:53

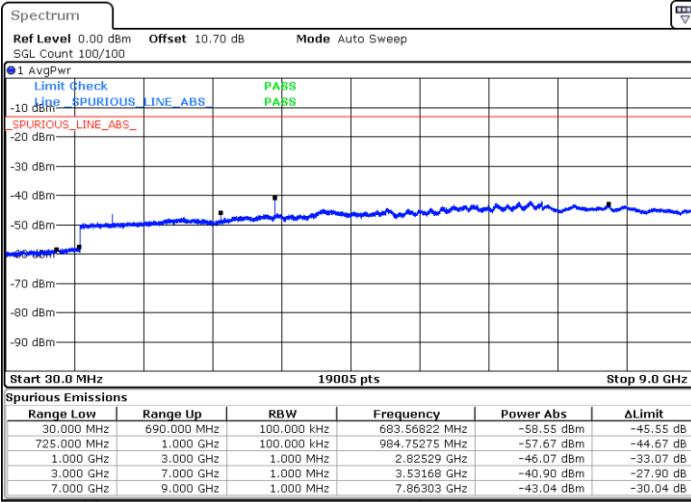
Date: 1.SEP.2017 21:07:46



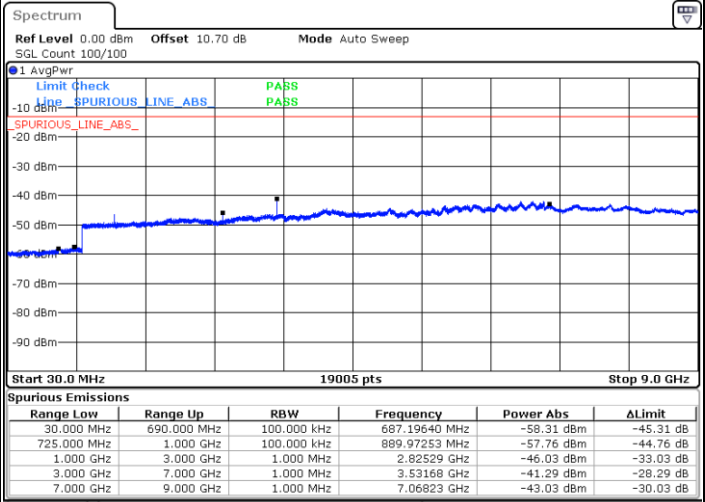
LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM



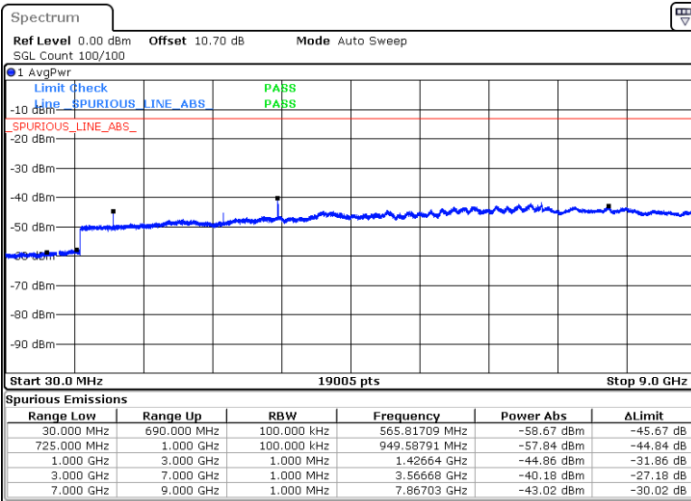
Date: 1.SEP.2017 21:10:14



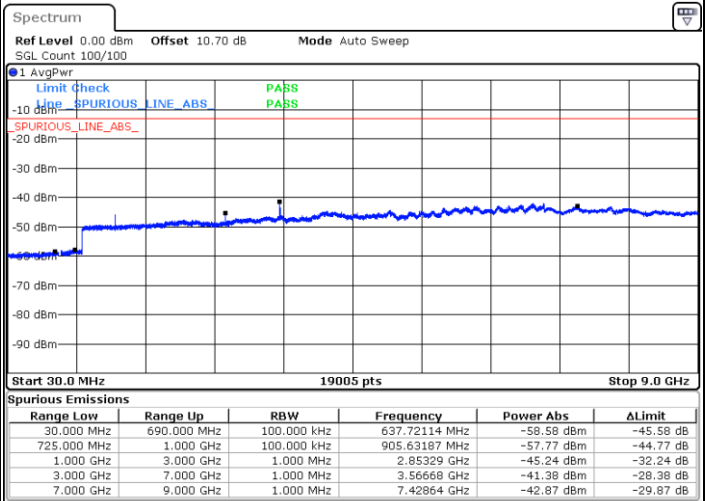
Date: 1.SEP.2017 21:09:20

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 1.SEP.2017 21:16:23



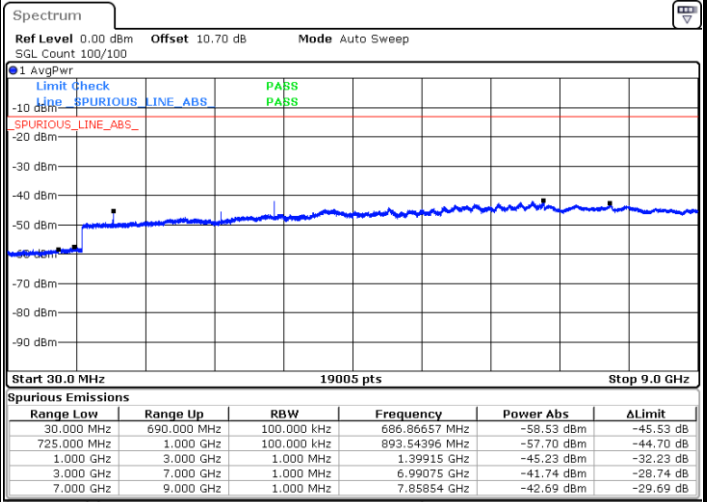
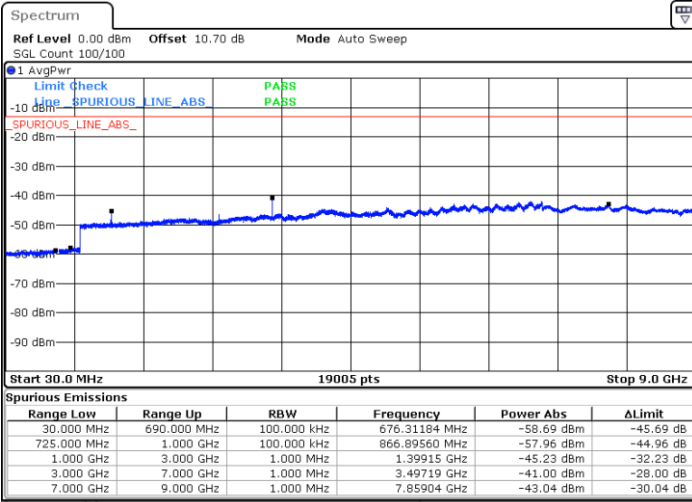
Date: 1.SEP.2017 21:17:16



LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

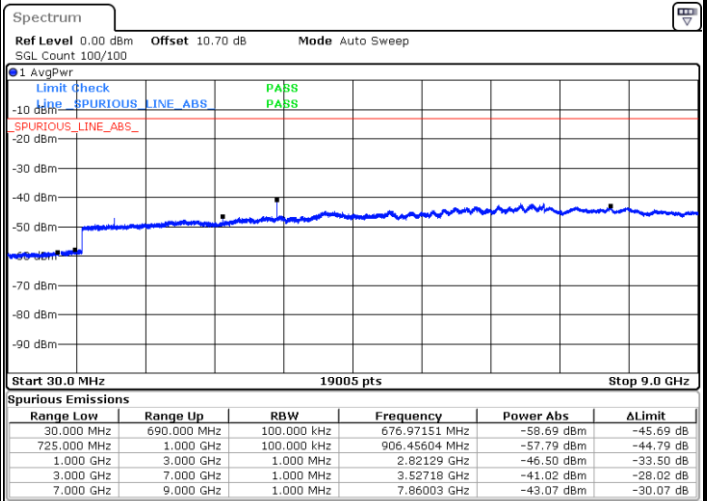
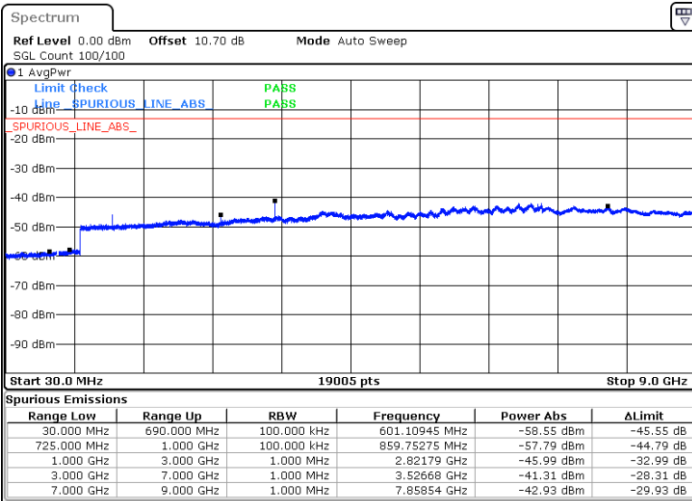


Date: 1.SEP.2017 21:23:25

Date: 1.SEP.2017 21:24:19

Middle Channel / QPSK

Middle Channel / 16QAM



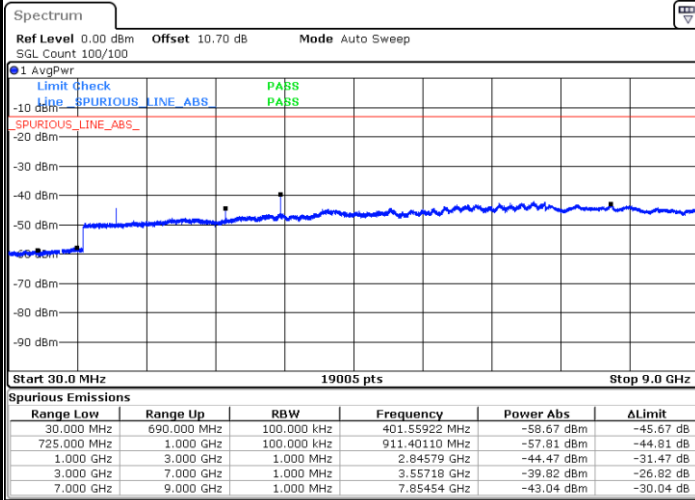
Date: 1.SEP.2017 21:26:46

Date: 1.SEP.2017 21:25:52



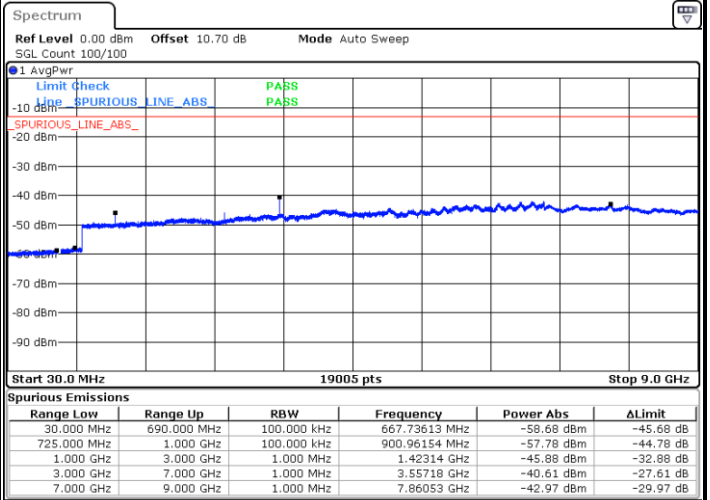
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 1.SEP.2017 21:33:48

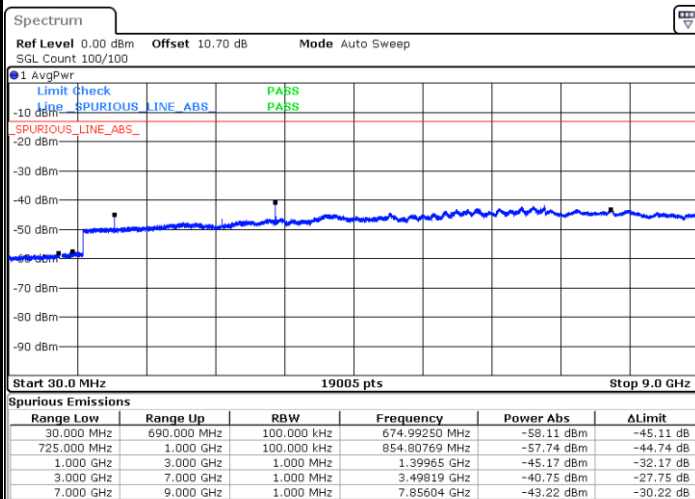
Highest Channel / 16QAM



Date: 1.SEP.2017 21:32:55

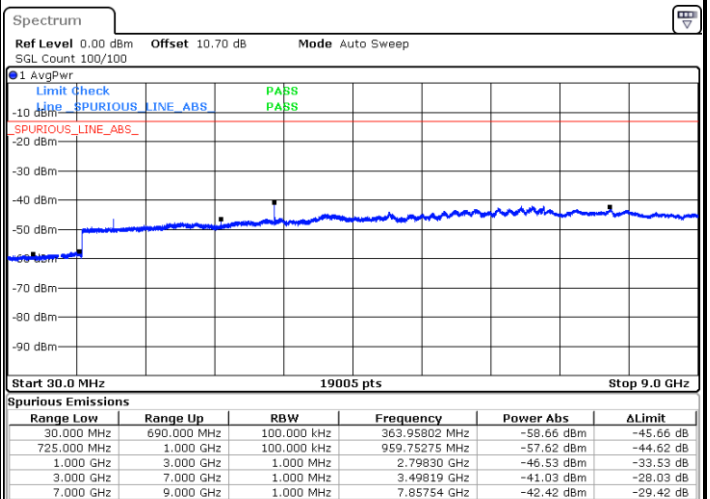
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 1.SEP.2017 21:39:57

Lowest Channel / 16QAM



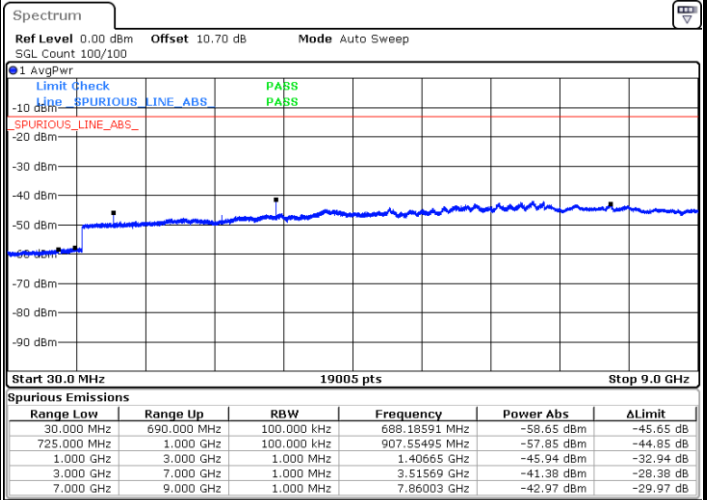
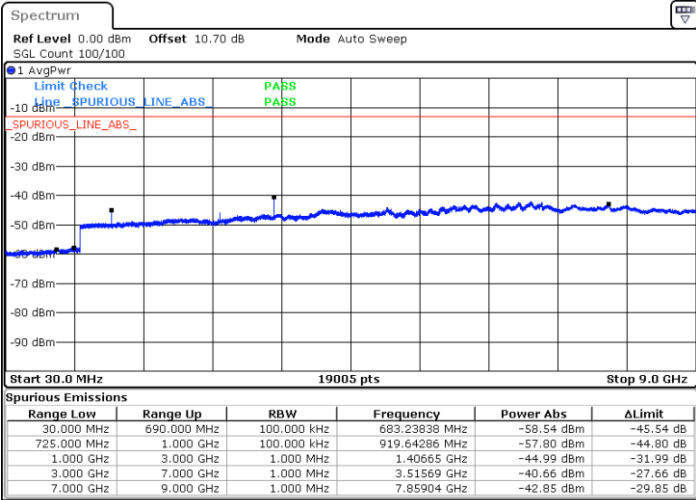
Date: 1.SEP.2017 21:40:51



LTE Band 12 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

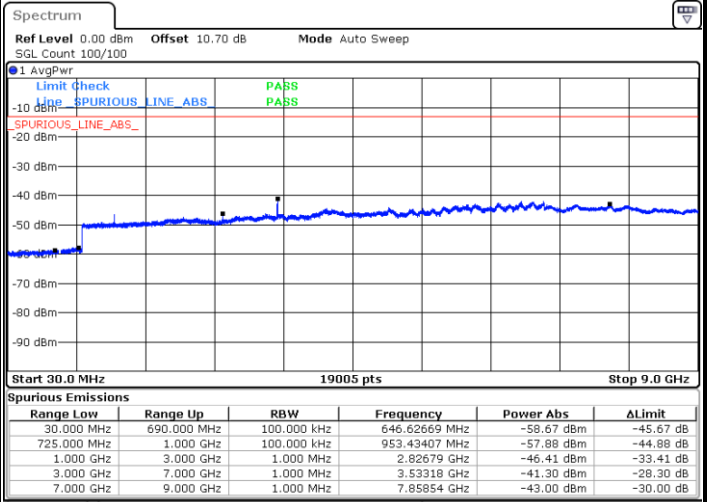
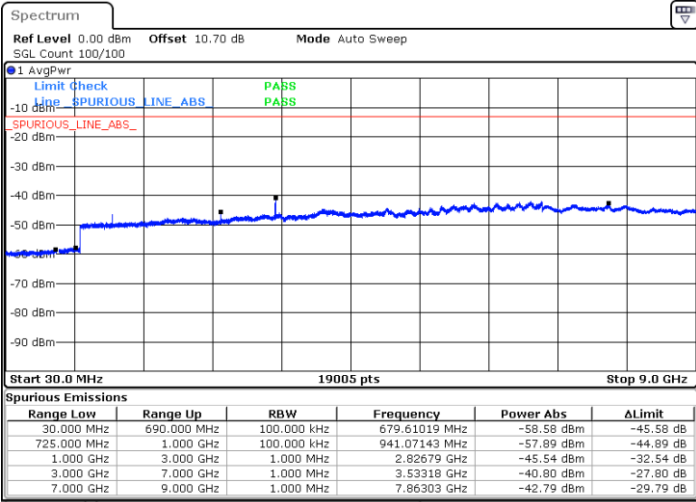


Date: 1.SEP.2017 21:43:18

Date: 1.SEP.2017 21:42:25

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 1.SEP.2017 21:49:27

Date: 1.SEP.2017 21:50:20



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	0.0076	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0085	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0010	
-30	Normal Voltage	0.0003	
20	Maximum Voltage	0.0078	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0024	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

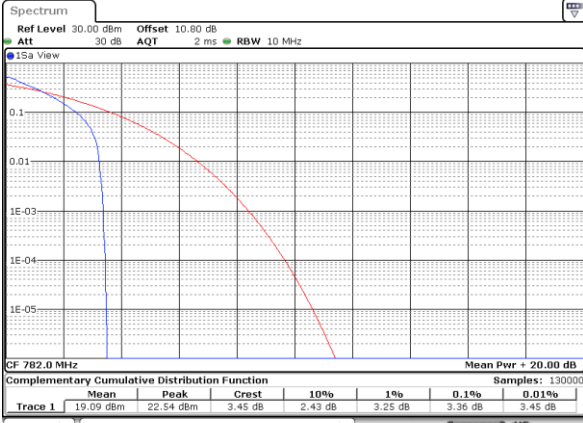
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.36	4.2	3.86	4.61	
Highest CH	-	-	-	-	



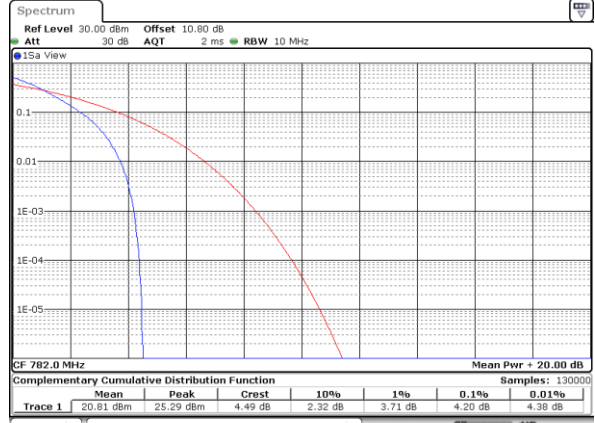
LTE Band 13 / 10MHz / QPSK

Middle Channel/ 1RB



Date: 2 SEP 2017 00:20:13

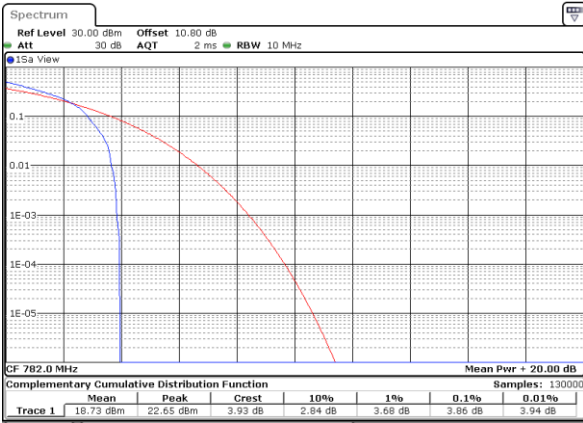
Middle Channel / Full RB



Date: 2 SEP 2017 00:20:32

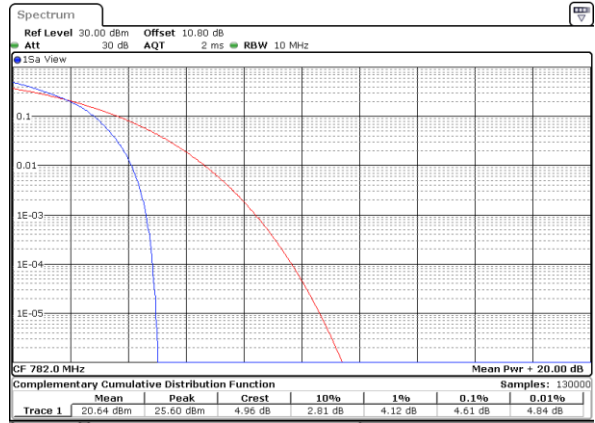
LTE Band 13 / 10MHz / 16QAM

Middle Channel/ 1RB



Date: 2 SEP 2017 00:19:41

Middle Channel / Full RB



Date: 2 SEP 2017 00:19:57



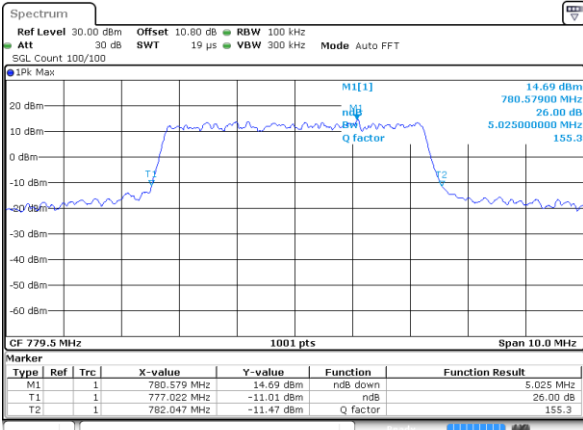
26dB Bandwidth

Mode	LTE Band 13 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	5.03	4.99	-	-	-	-	-	-
Middle CH	-	-	-	-	5.04	5.02	9.89	10.09	-	-	-	-
Highest CH	-	-	-	-	5.05	4.97	-	-	-	-	-	-



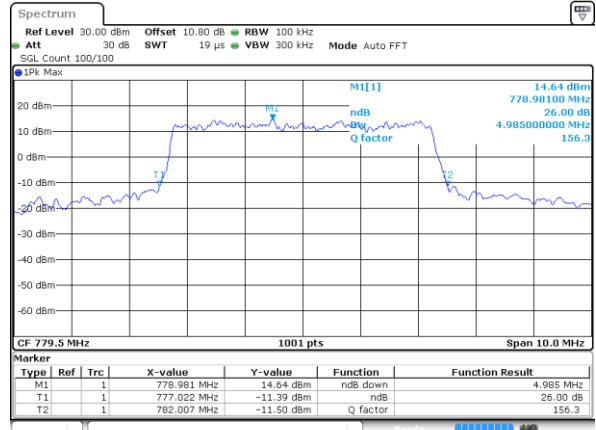
LTE Band 13

Lowest Channel / 5MHz / QPSK



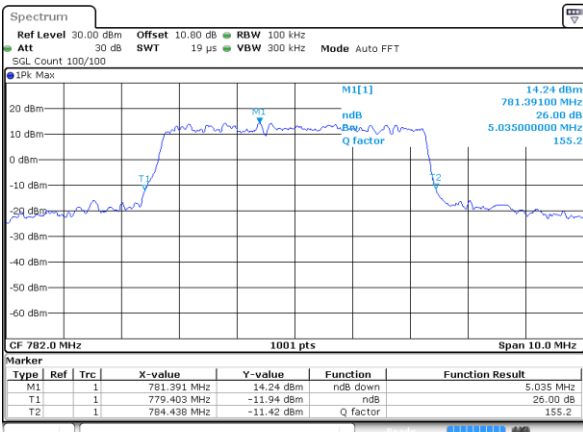
Date: 1 SEP 2017 23:42:41

Lowest Channel / 5MHz / 16QAM



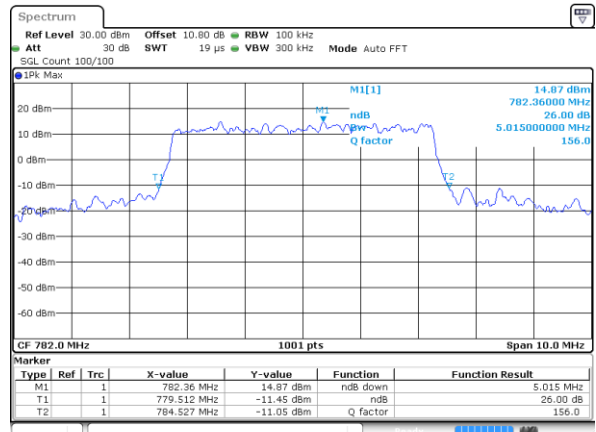
Date: 1 SEP 2017 23:42:31

Middle Channel / 5MHz / QPSK



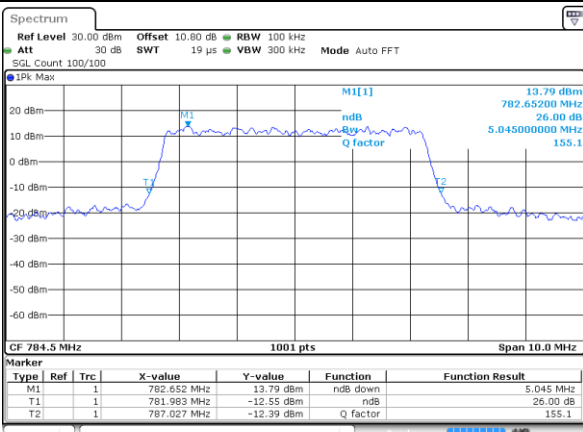
Date: 1 SEP 2017 23:53:01

Middle Channel / 5MHz / 16QAM



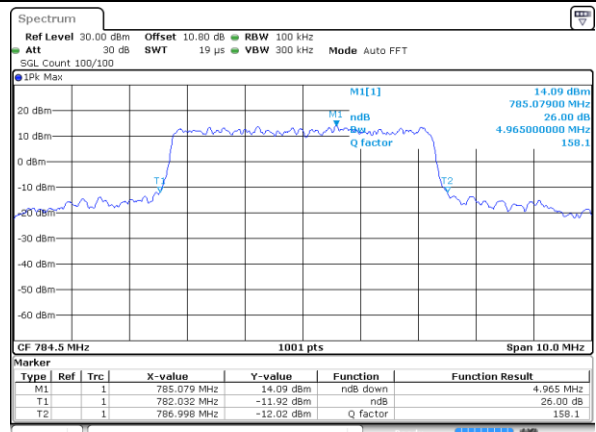
Date: 1 SEP 2017 23:53:11

Highest Channel / 5MHz / QPSK



Date: 1 SEP 2017 23:54:11

Highest Channel / 5MHz / 16QAM

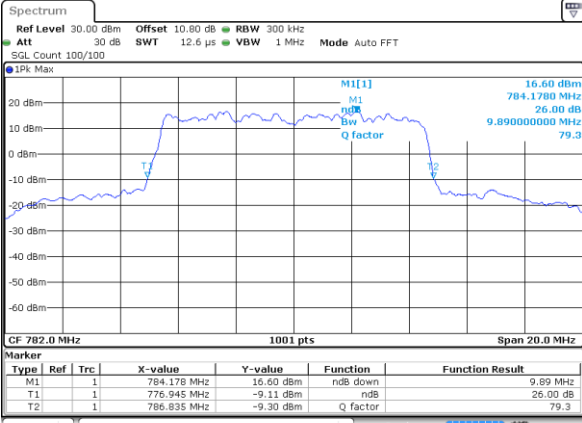


Date: 1 SEP 2017 23:54:01



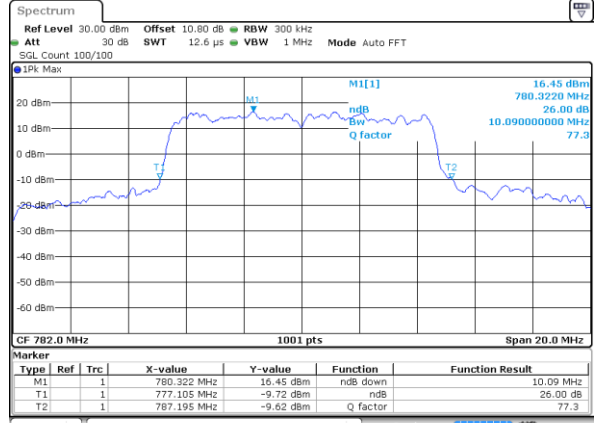
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 2 SEP 2017 00:03:13

Middle Channel / 10MHz / 16QAM



Date: 2 SEP 2017 00:03:03



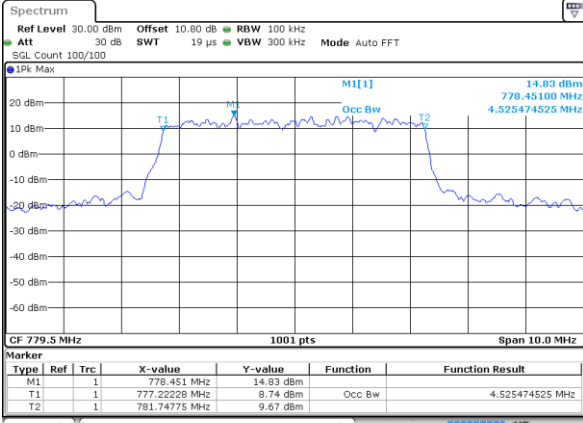
Occupied Bandwidth

Mode	LTE Band 13 : 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	-	-	-	-	4.53	4.52	-	-	-	-	-	-
Middle CH	-	-	-	-	4.51	4.52	9.03	9.05	-	-	-	-
Highest CH	-	-	-	-	4.5	4.51	-	-	-	-	-	-



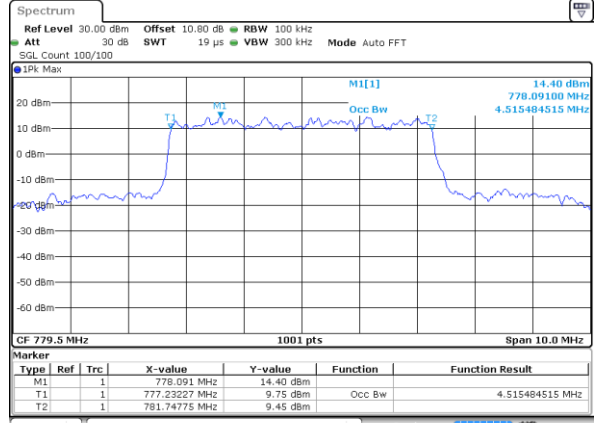
LTE Band 13

Lowest Channel / 5MHz / QPSK



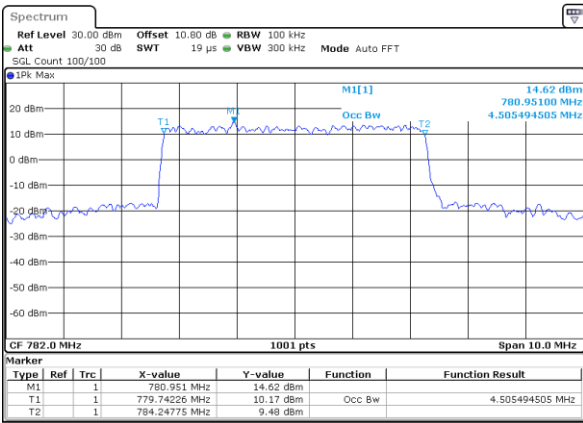
Date: 1 SEP 2017 23:42:11

Lowest Channel / 5MHz / 16QAM



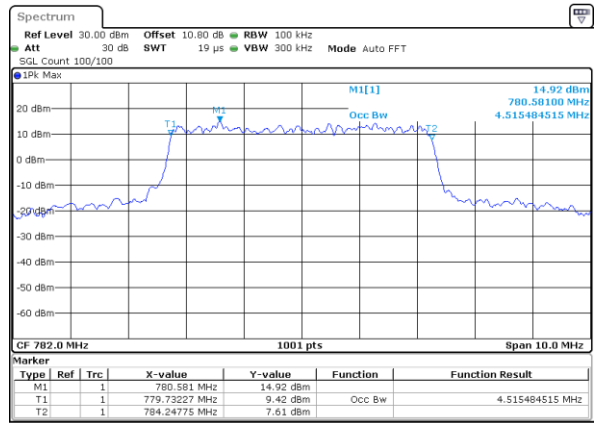
Date: 1 SEP 2017 23:42:21

Middle Channel / 5MHz / QPSK



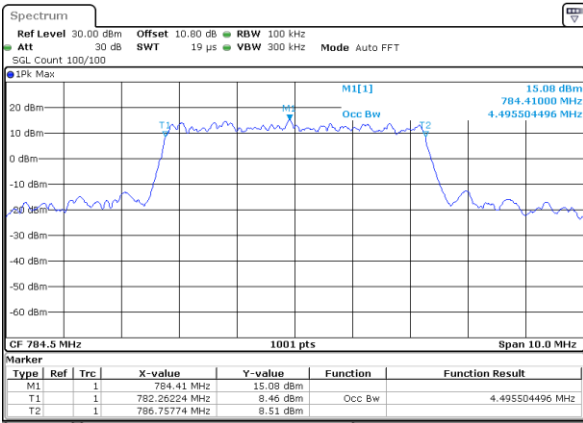
Date: 1 SEP 2017 23:53:31

Middle Channel / 5MHz / 16QAM



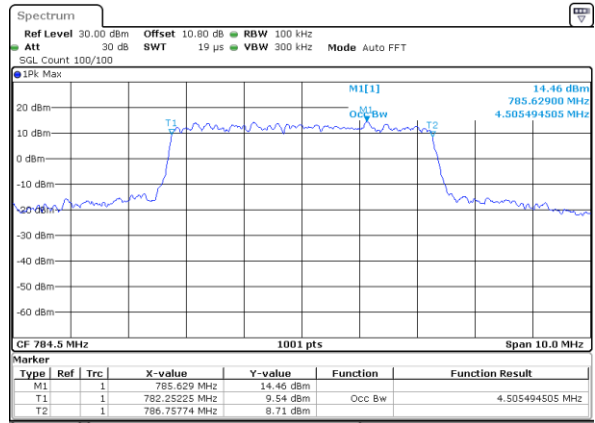
Date: 1 SEP 2017 23:53:21

Highest Channel / 5MHz / QPSK



Date: 1 SEP 2017 23:53:41

Highest Channel / 5MHz / 16QAM



Date: 1 SEP 2017 23:53:51