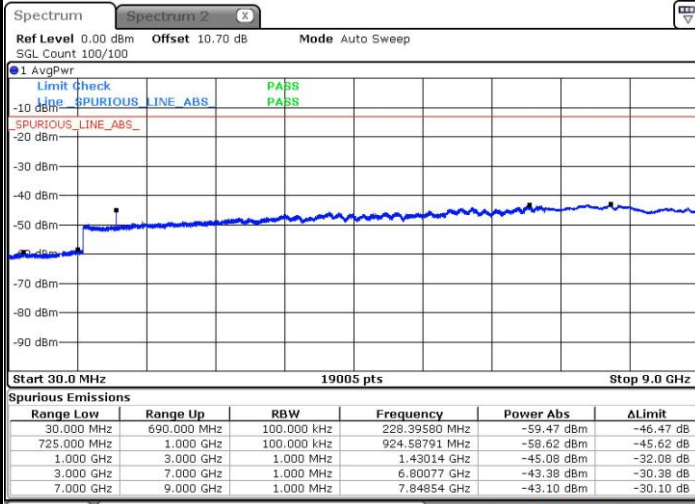




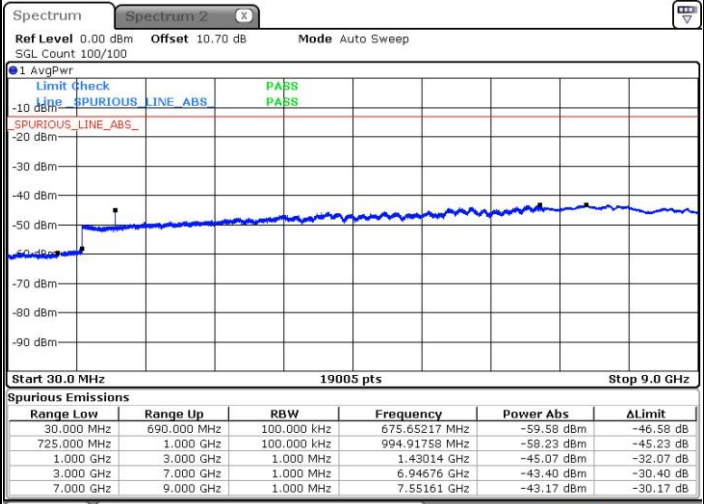
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 2.OCT.2018 01:02:23

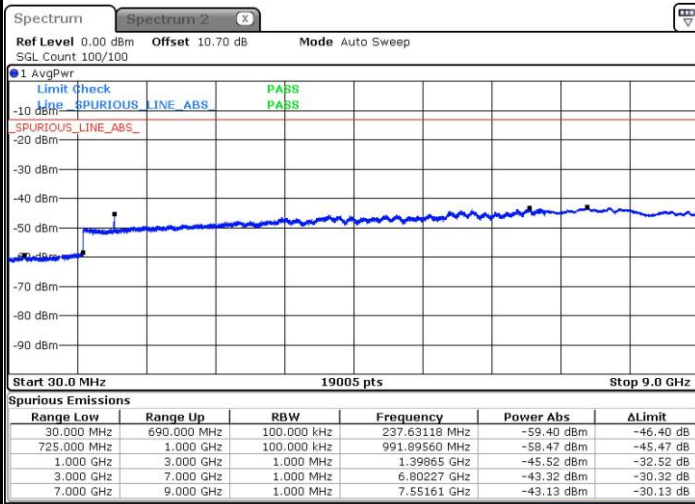
Highest Channel / 16QAM



Date: 2.OCT.2018 01:03:03

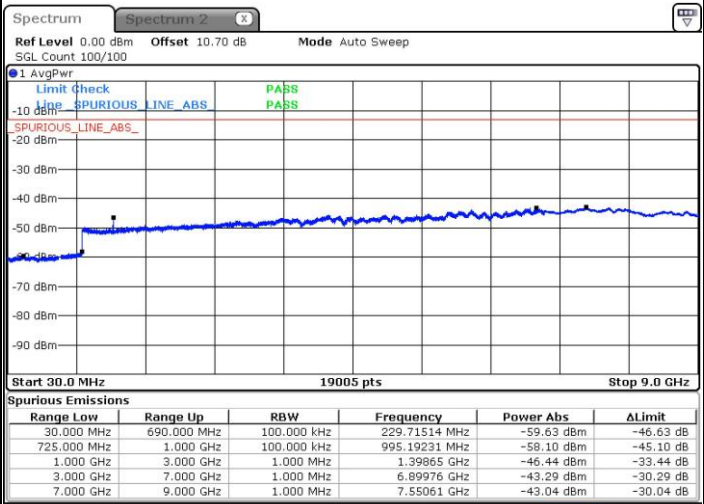
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 1.OCT.2018 22:33:00

Lowest Channel / 16QAM



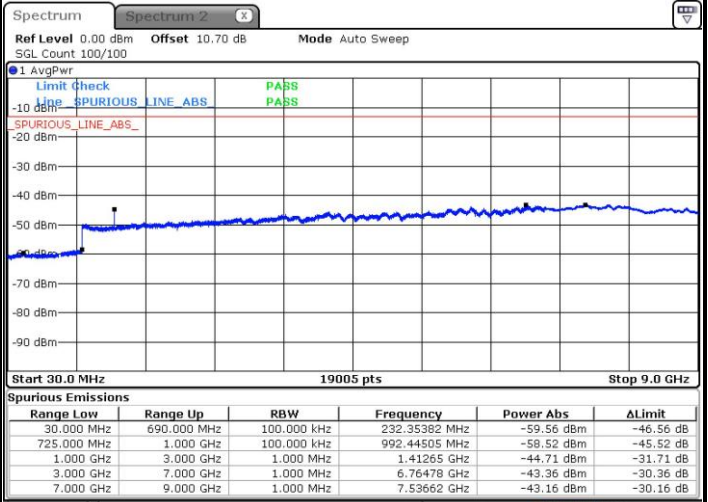
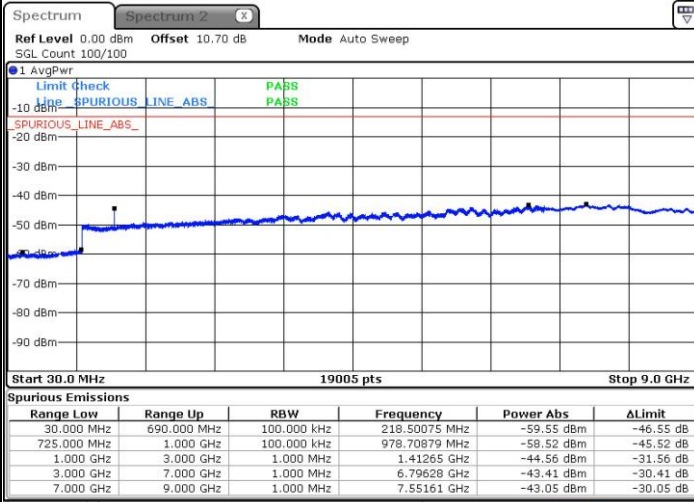
Date: 1.OCT.2018 22:33:40



LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

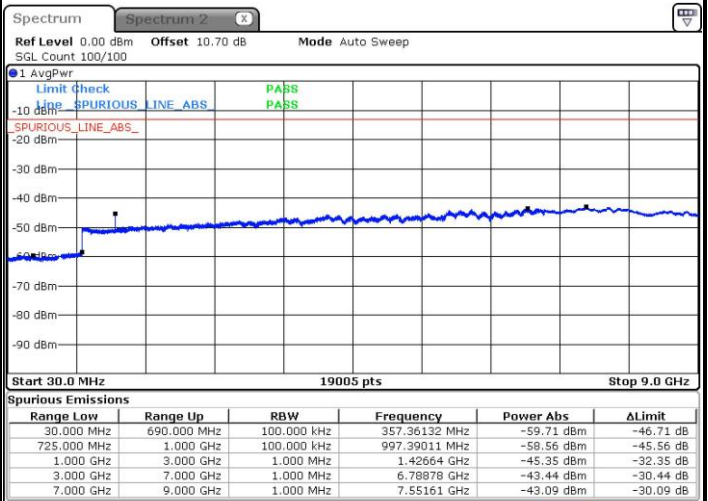
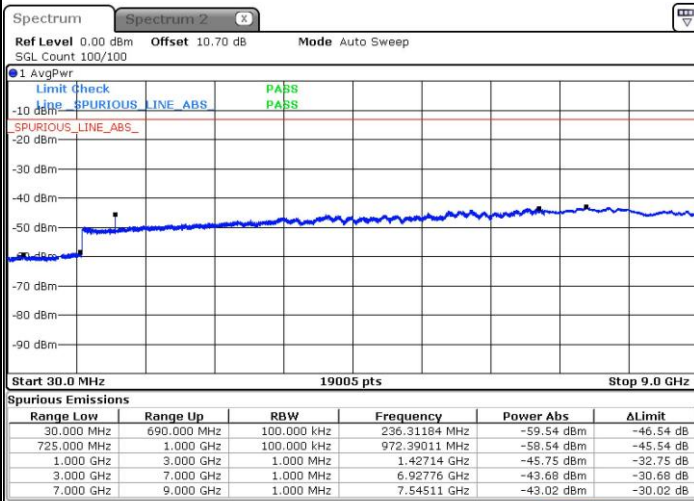


Date: 1.OCT.2018 22:35:46

Date: 1.OCT.2018 22:35:06

Highest Channel / QPSK

Highest Channel / 16QAM



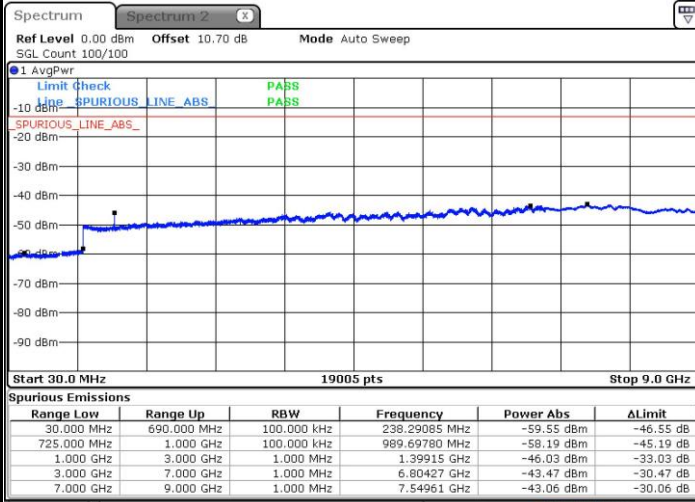
Date: 1.OCT.2018 22:42:33

Date: 1.OCT.2018 22:43:13



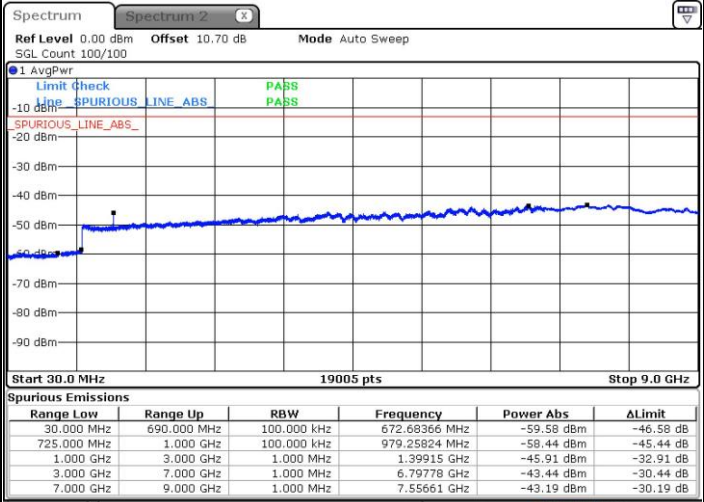
LTE Band 12 / 5MHz

Lowest Channel / QPSK



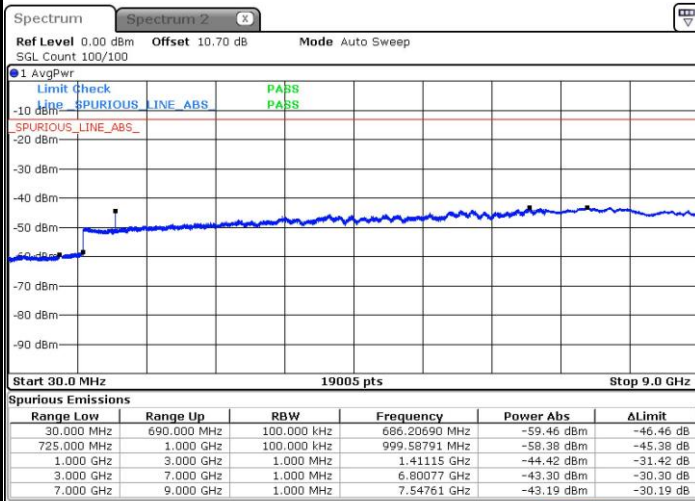
Date: 1.OCT.2018 22:49:59

Lowest Channel / 16QAM



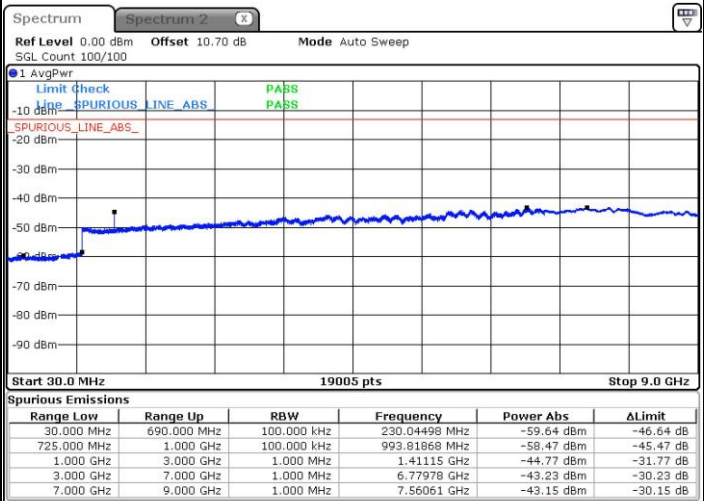
Date: 1.OCT.2018 22:50:39

Middle Channel / QPSK



Date: 1.OCT.2018 22:52:45

Middle Channel / 16QAM

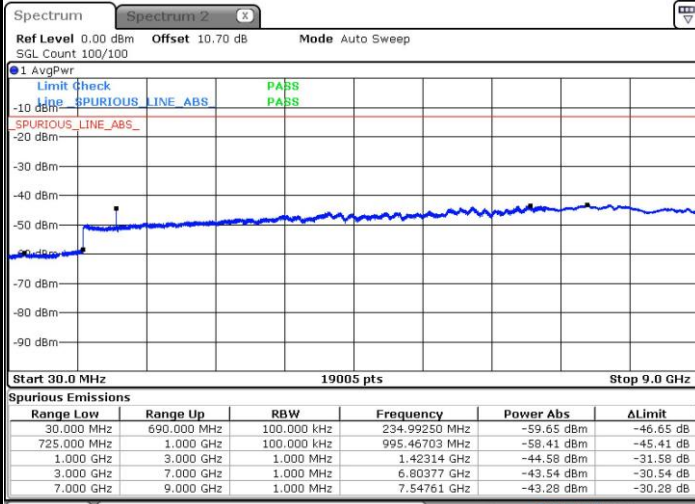


Date: 1.OCT.2018 22:52:05



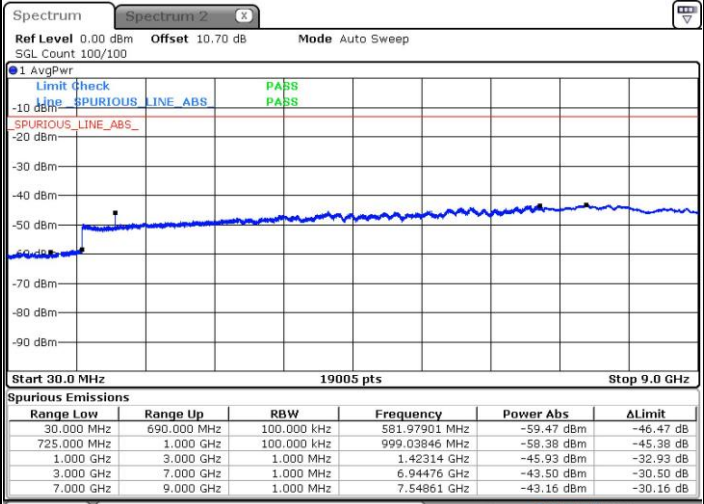
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 1.OCT.2018 23:00:12

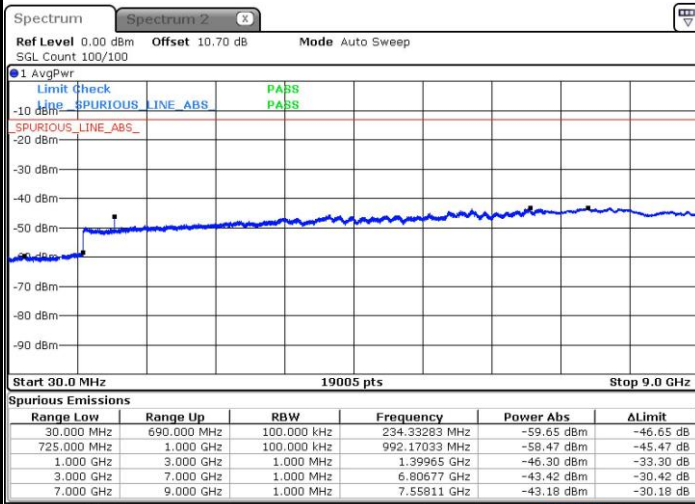
Highest Channel / 16QAM



Date: 1.OCT.2018 22:59:31

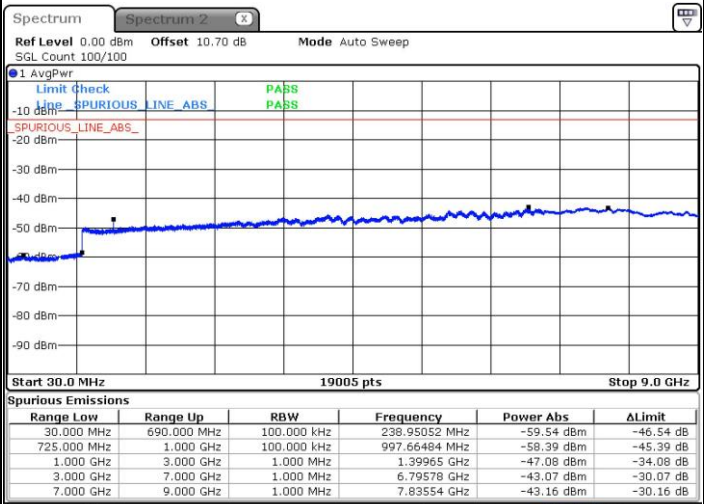
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 1.OCT.2018 23:06:58

Lowest Channel / 16QAM

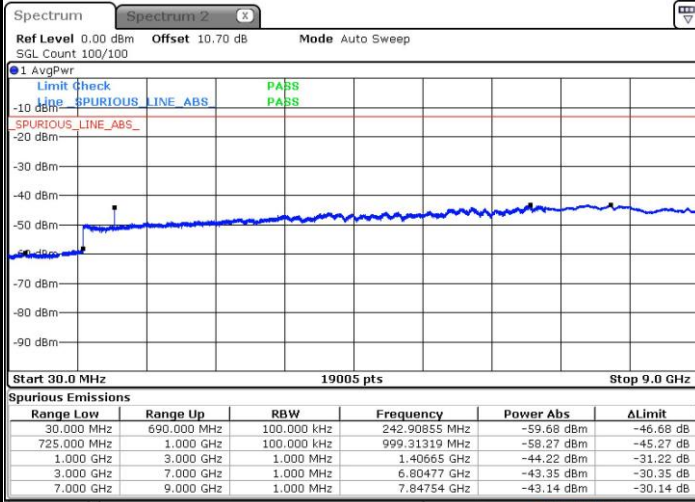


Date: 1.OCT.2018 23:07:38



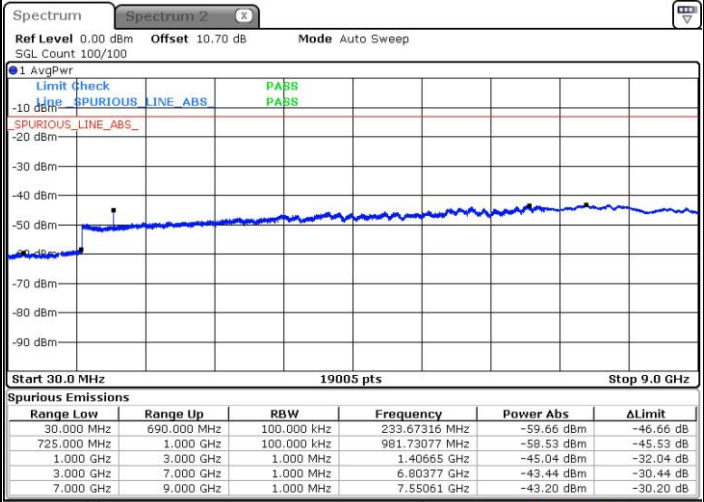
LTE Band 12 / 10MHz

Middle Channel / QPSK



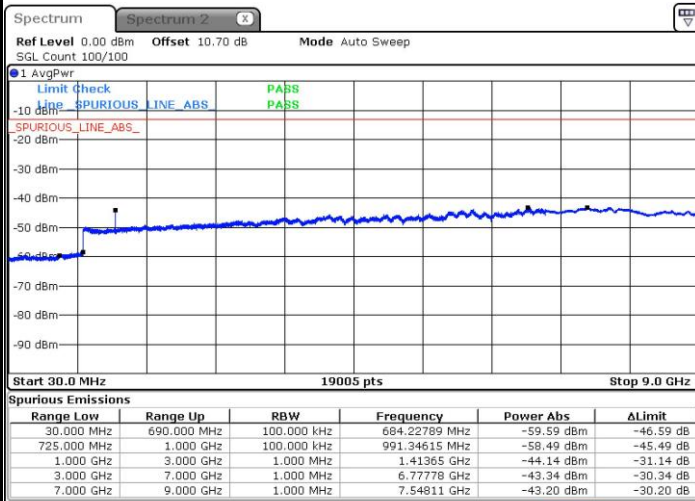
Date: 1.OCT.2018 23:09:44

Middle Channel / 16QAM



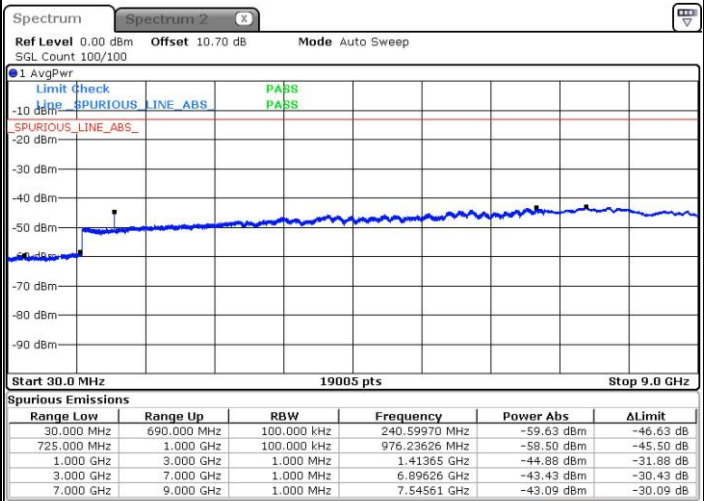
Date: 1.OCT.2018 23:09:04

Highest Channel / QPSK



Date: 1.OCT.2018 23:16:30

Highest Channel / 16QAM



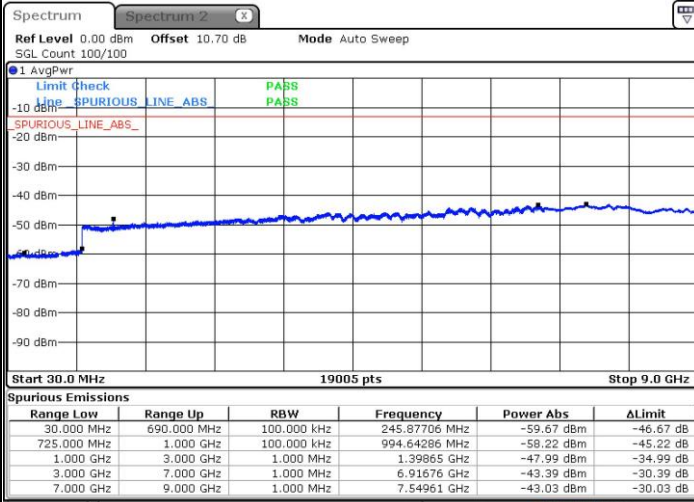
Date: 1.OCT.2018 23:17:10



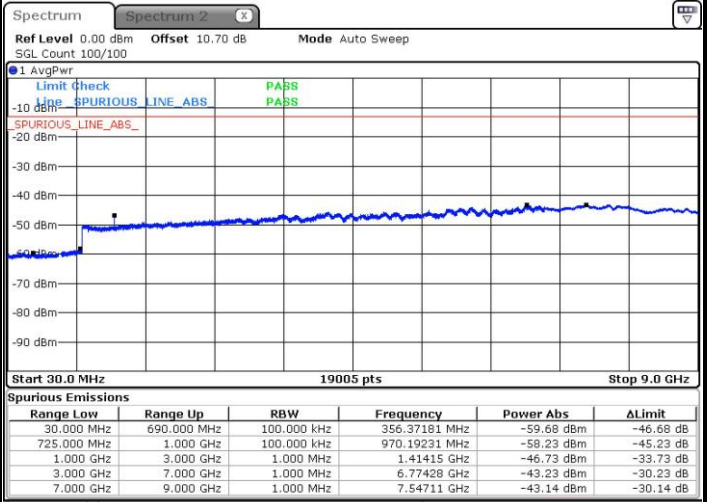
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

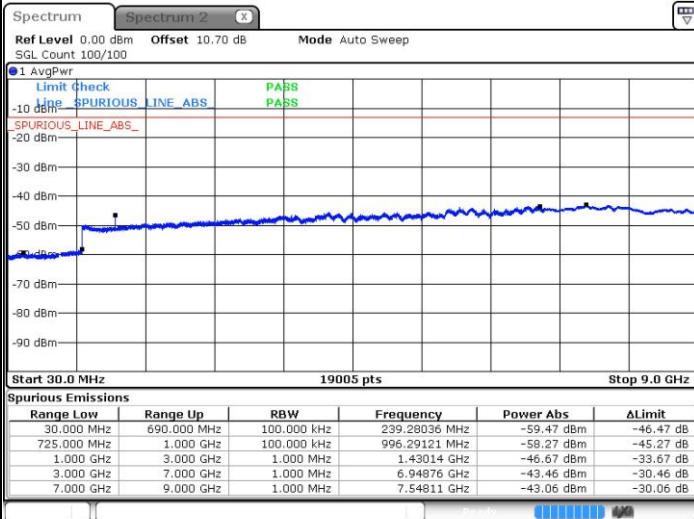


Date: 2.OCT.2018 00:41:18



Date: 2.OCT.2018 00:42:21

Highest Channel / 64QAM

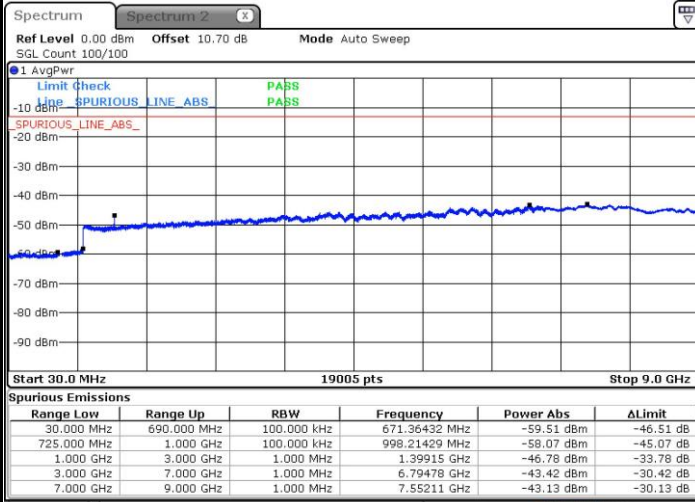


Date: 2.OCT.2018 00:46:04



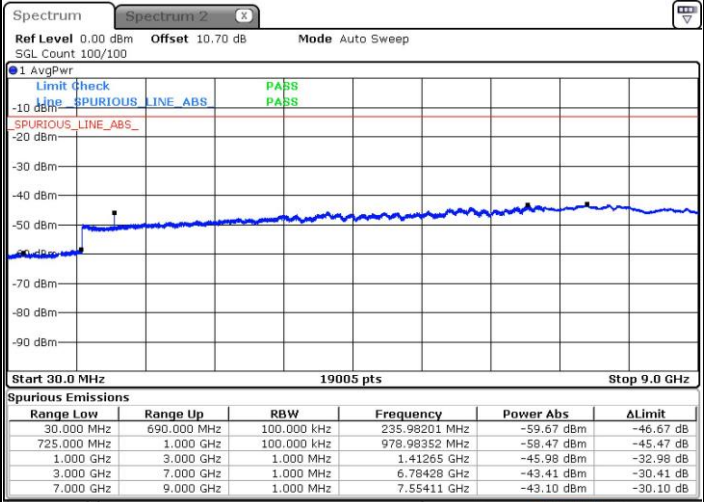
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



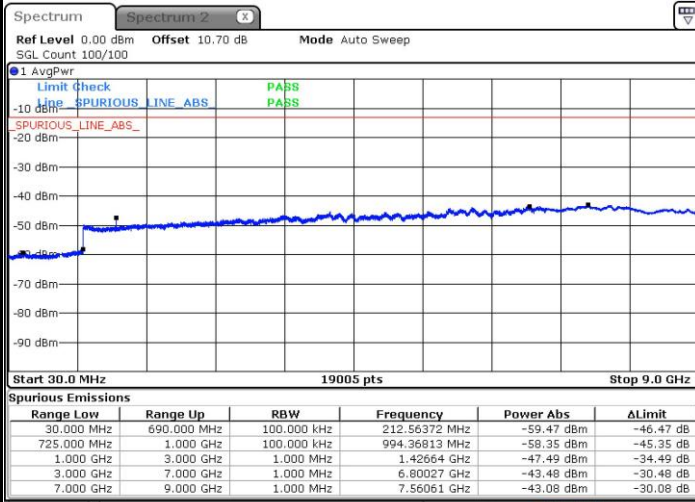
Date: 2.OCT.2018 00:11:49

Middle Channel / 64QAM



Date: 2.OCT.2018 00:12:52

Highest Channel / 64QAM

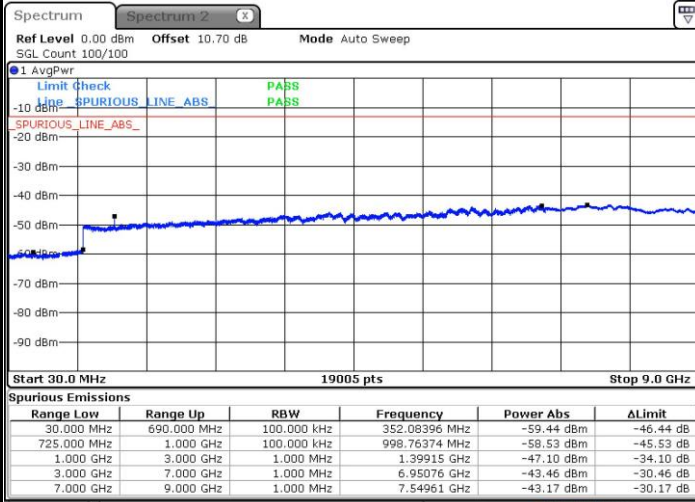


Date: 2.OCT.2018 00:16:36



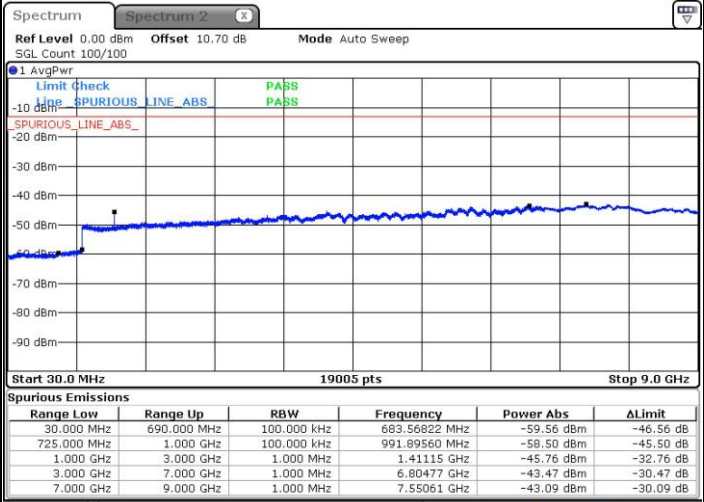
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



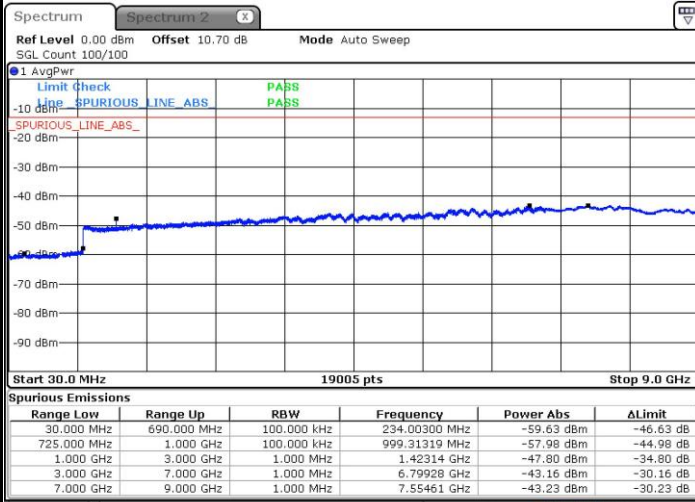
Date: 2.OCT.2018 00:20:19

Middle Channel / 64QAM



Date: 2.OCT.2018 00:21:22

Highest Channel / 64QAM



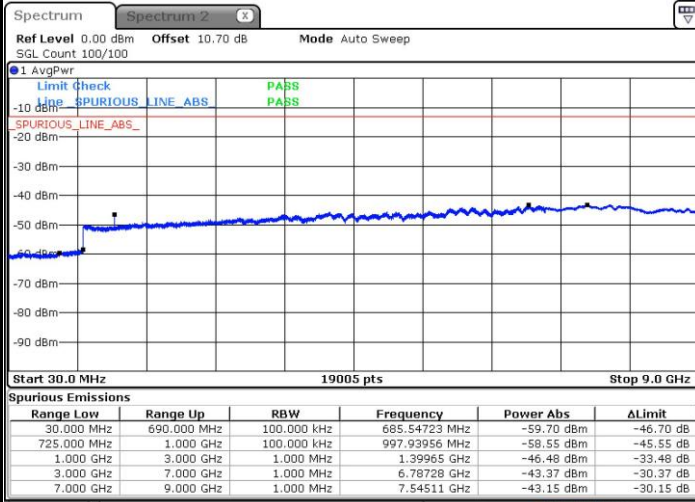
Date: 2.OCT.2018 00:25:05





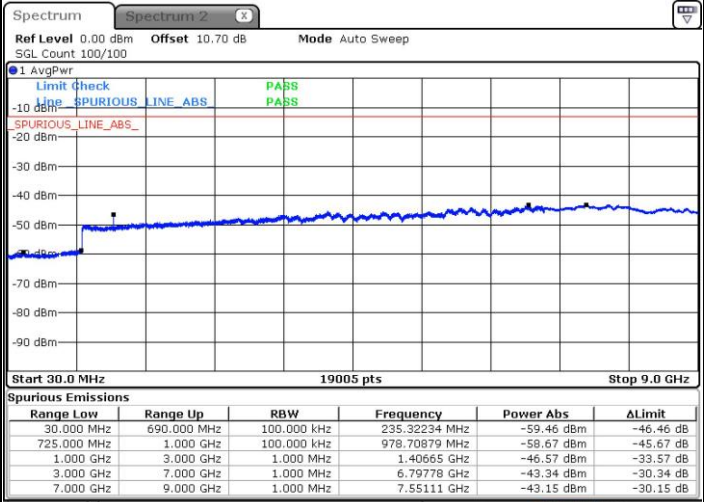
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



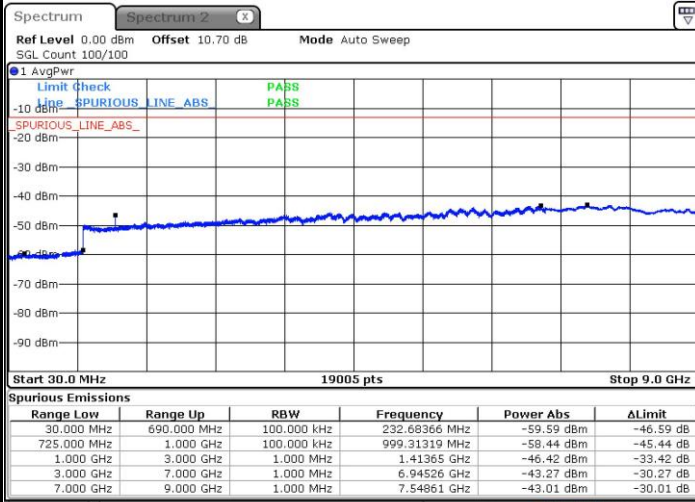
Date: 2.OCT.2018 00:28:49

Middle Channel / 64QAM



Date: 2.OCT.2018 00:29:52

Highest Channel / 64QAM



Date: 2.OCT.2018 00:33:35



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	0.0057	PASS
40	Normal Voltage	0.0096	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0033	
0	Normal Voltage	0.0092	
-10	Normal Voltage	0.0054	
-20	Normal Voltage	0.0016	
-30	Normal Voltage	0.0081	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 13

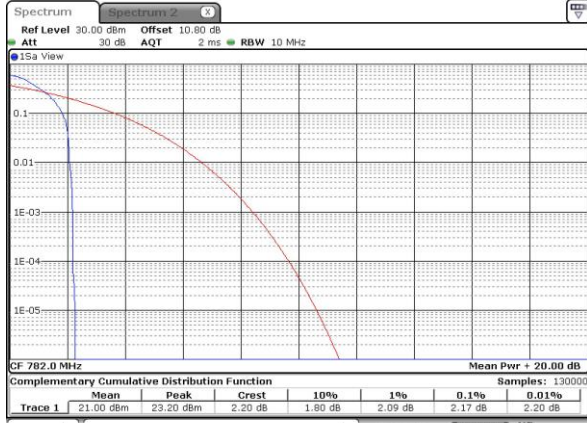
### Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	2.17	4.2	3.28	5.3	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH			-	-	PASS
Middle CH	4.03	5.83	-	-	
Highest CH			-	-	



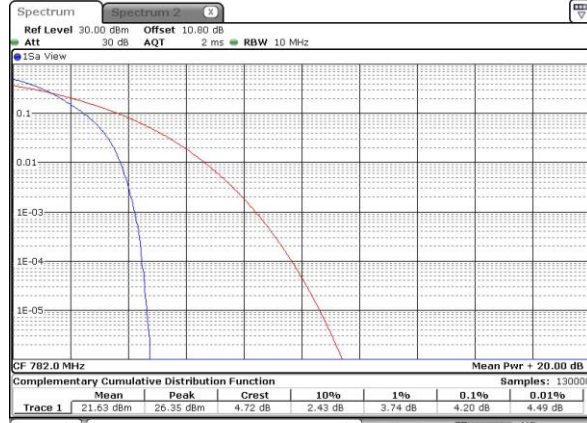
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 2.OCT.2018 06:11:55

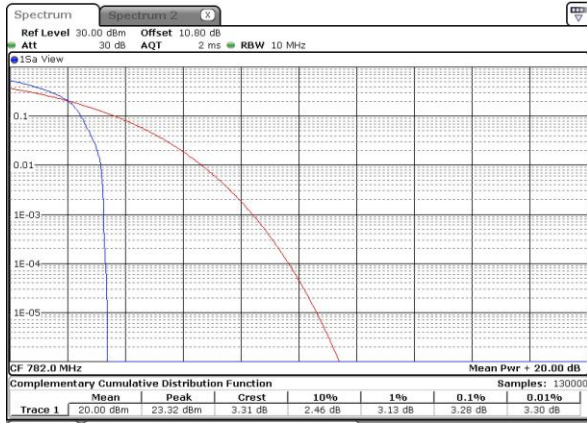
Middle Channel / Full RB



Date: 2.OCT.2018 06:12:05

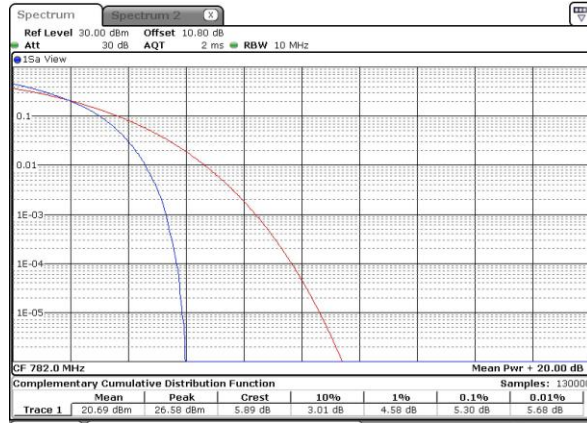
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 2.OCT.2018 06:11:35

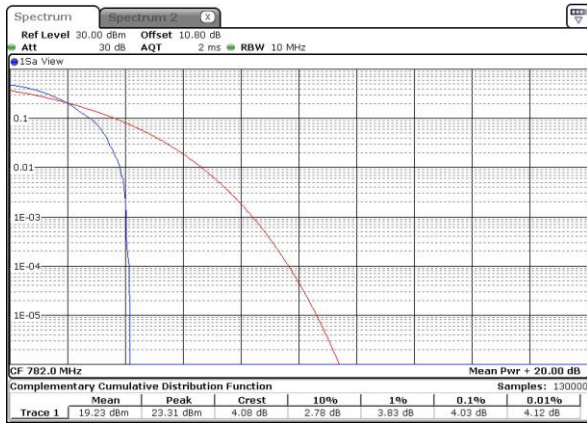
Middle Channel / Full RB



Date: 2.OCT.2018 06:11:45

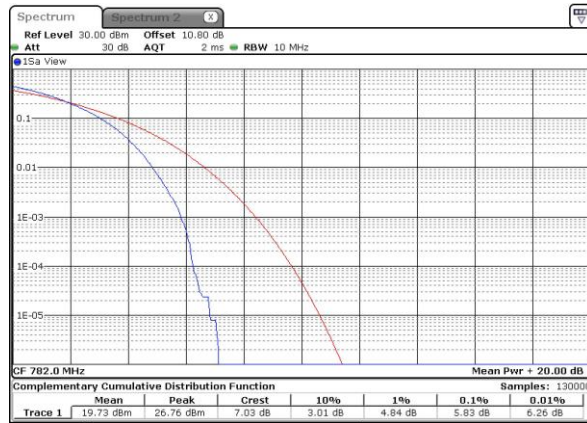
LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 2.OCT.2018 06:11:15

Middle Channel / Full RB



Date: 2.OCT.2018 06:11:25



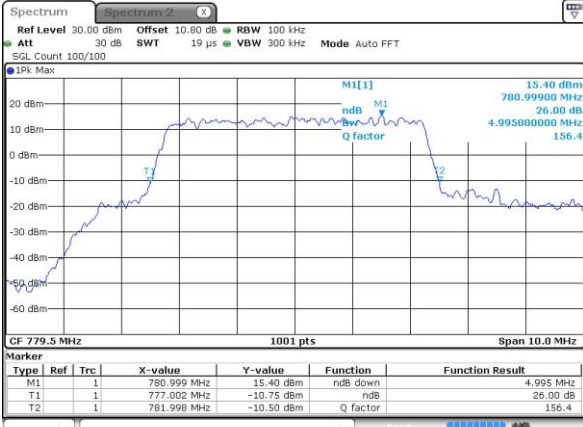
**26dB Bandwidth**

Mode	LTE Band 13 : 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	-	-	-	-	5.00	4.93	-	-	-	-	-	-
Middle CH	-	-	-	-	4.90	5.00	9.73	9.65	-	-	-	-
Highest CH	-	-	-	-	4.93	4.84	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.88	-		-	-	-	-	-
Middle CH	-	-	-	-	4.87	-	9.71	-	-	-	-	-
Highest CH	-	-	-	-	4.90	-		-	-	-	-	-



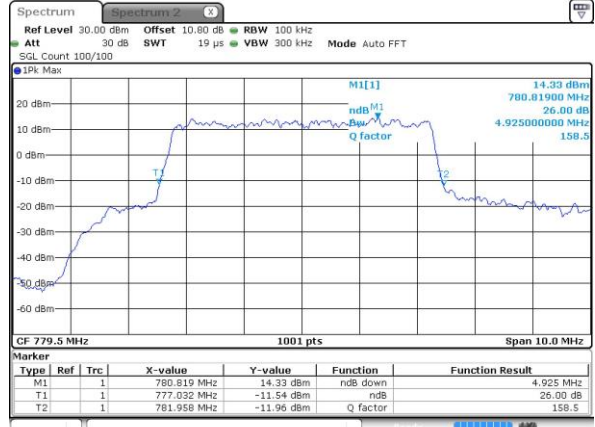
LTE Band 13

Lowest Channel / 5MHz / QPSK



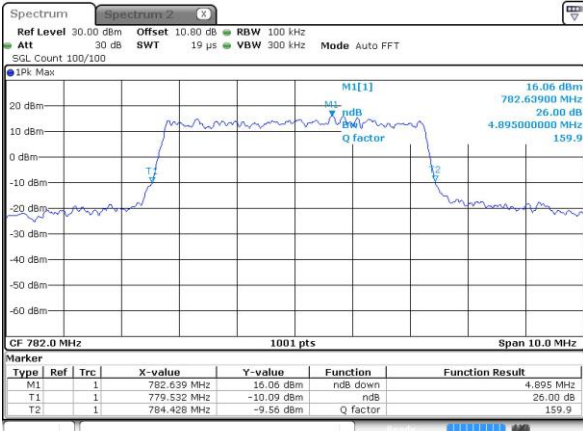
Date: 2.OCT.2018 04:53:52

Lowest Channel / 5MHz / 16QAM



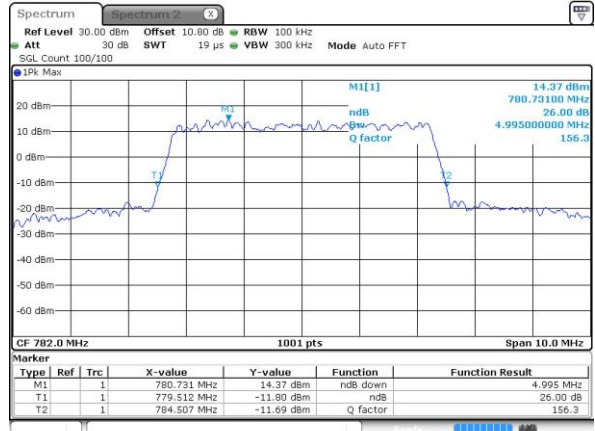
Date: 2.OCT.2018 04:53:40

Middle Channel / 5MHz / QPSK



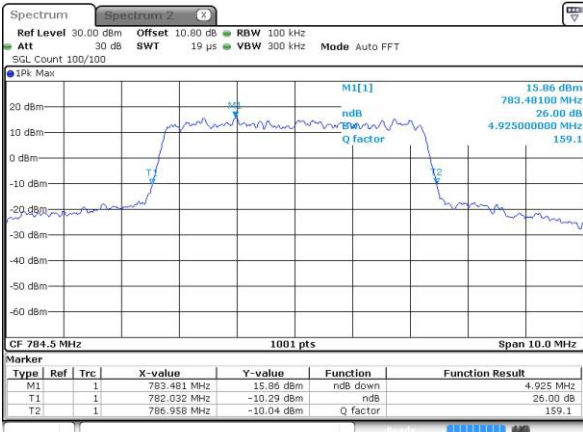
Date: 2.OCT.2018 05:03:25

Middle Channel / 5MHz / 16QAM



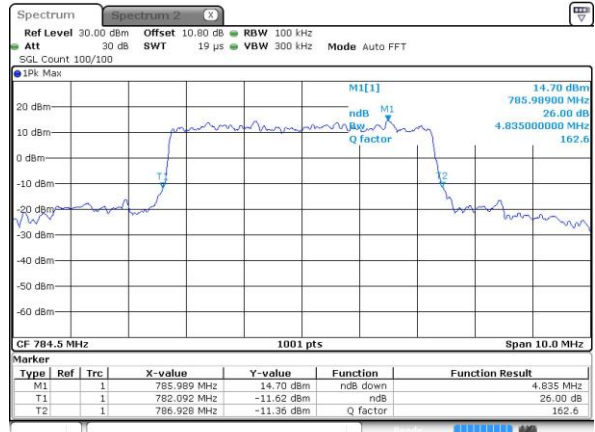
Date: 2.OCT.2018 05:03:36

Highest Channel / 5MHz / QPSK



Date: 2.OCT.2018 05:04:45

Highest Channel / 5MHz / 16QAM

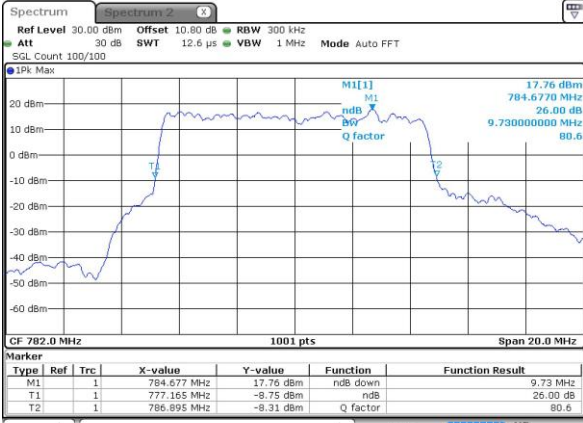


Date: 2.OCT.2018 05:04:33



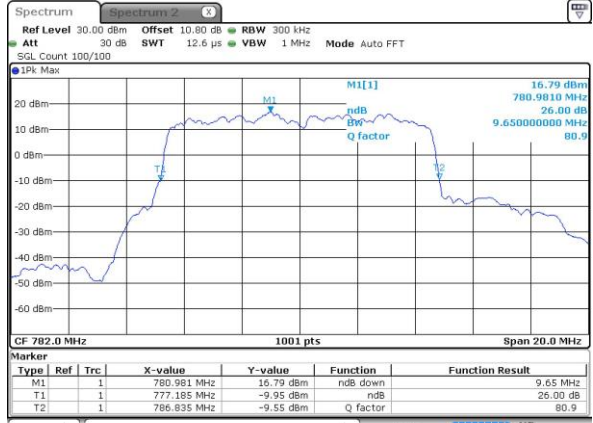
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 2.OCT.2018 05:23:22

Middle Channel / 10MHz / 16QAM

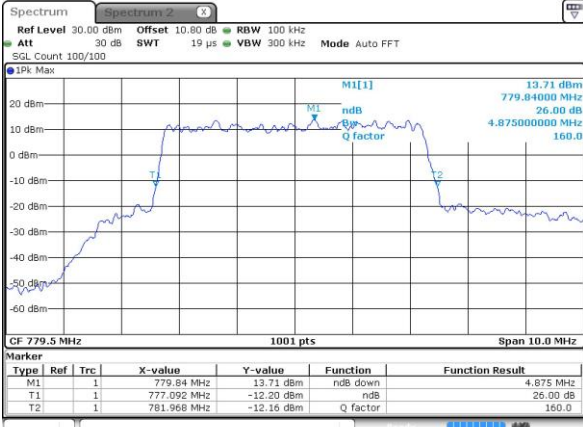


Date: 2.OCT.2018 05:23:11



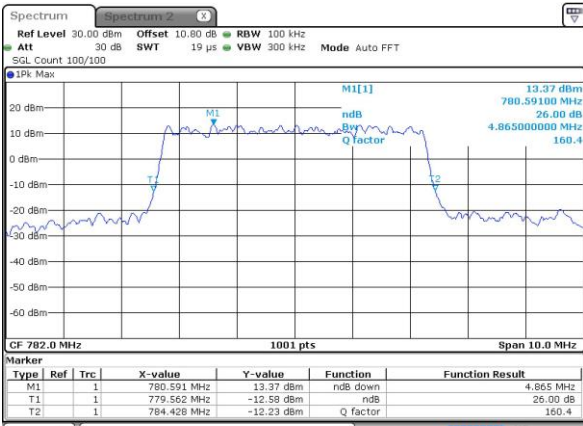
LTE Band 13

Lowest Channel / 5MHz / 64QAM



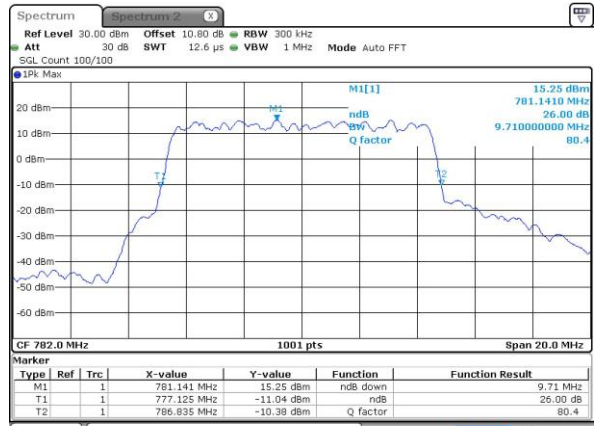
Date: 2.OCT.2018 05:13:09

Middle Channel / 5MHz / 64QAM



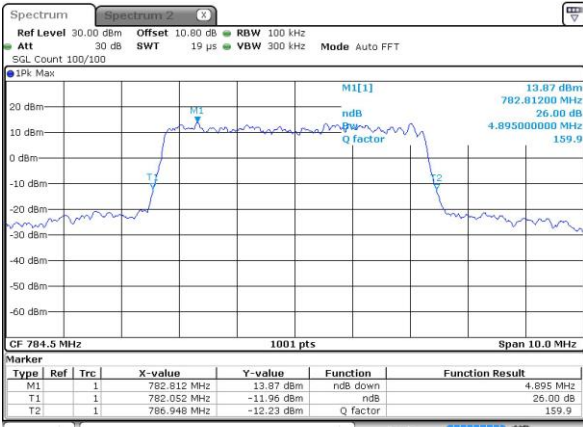
Date: 2.OCT.2018 05:18:01

Middle Channel / 10MHz / 64QAM



Date: 2.OCT.2018 05:35:08

Highest Channel / 5MHz / 64QAM



Date: 2.OCT.2018 05:18:36





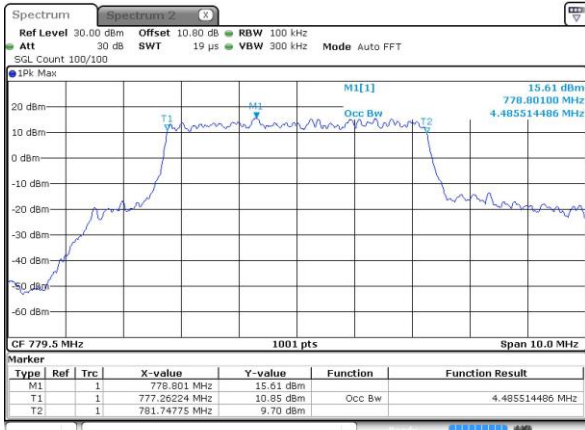
**Occupied Bandwidth**

Mode	LTE Band 13 : 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	4.5	-	-	-	-	-	-
Middle CH	-	-	-	-	4.52	4.5	8.99	9.03	-	-	-	-
Highest CH	-	-	-	-	4.48	4.5	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.51	-		-	-	-	-	-
Middle CH	-	-	-	-	4.50	-	8.95	-	-	-	-	-
Highest CH	-	-	-	-	4.50	-		-	-	-	-	-



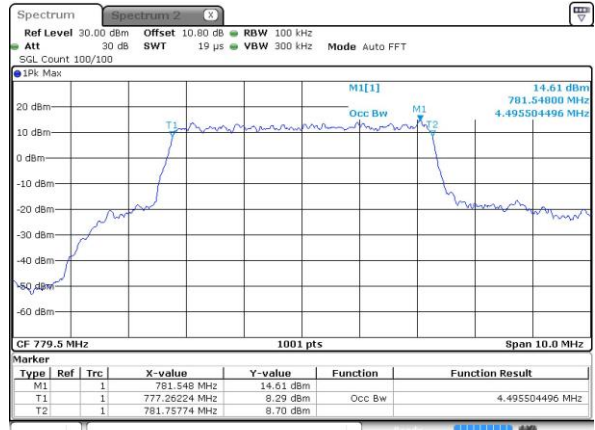
LTE Band 13

Lowest Channel / 5MHz / QPSK



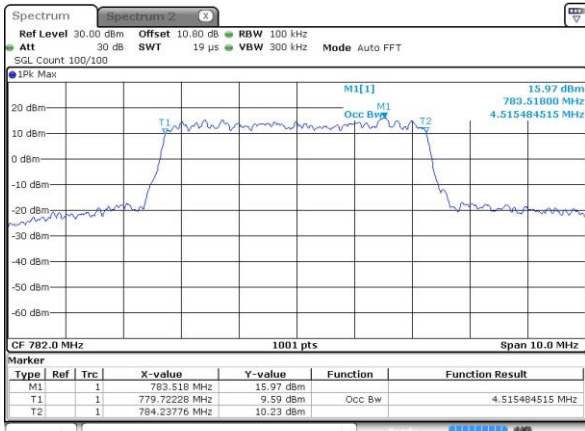
Date: 2.OCT.2018 04:53:18

Lowest Channel / 5MHz / 16QAM



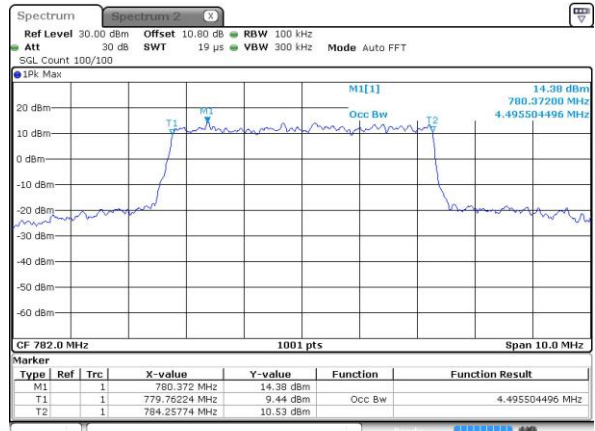
Date: 2.OCT.2018 04:53:29

Middle Channel / 5MHz / QPSK



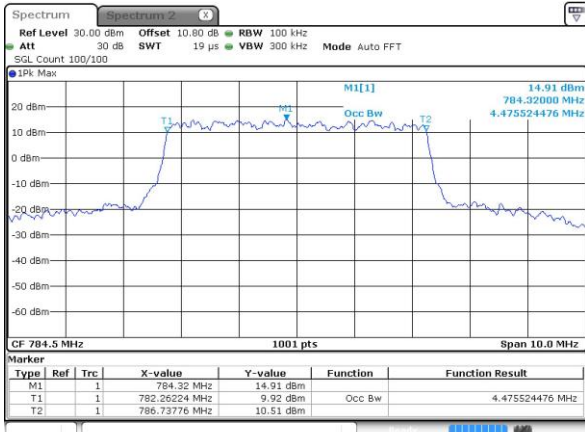
Date: 2.OCT.2018 05:03:59

Middle Channel / 5MHz / 16QAM



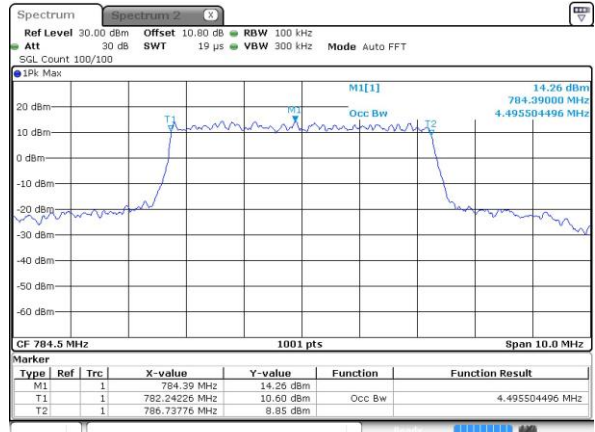
Date: 2.OCT.2018 05:03:48

Highest Channel / 5MHz / QPSK



Date: 2.OCT.2018 05:04:10

Highest Channel / 5MHz / 16QAM

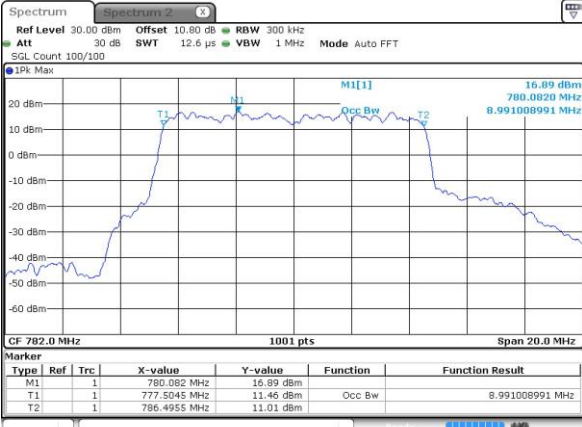


Date: 2.OCT.2018 05:04:22



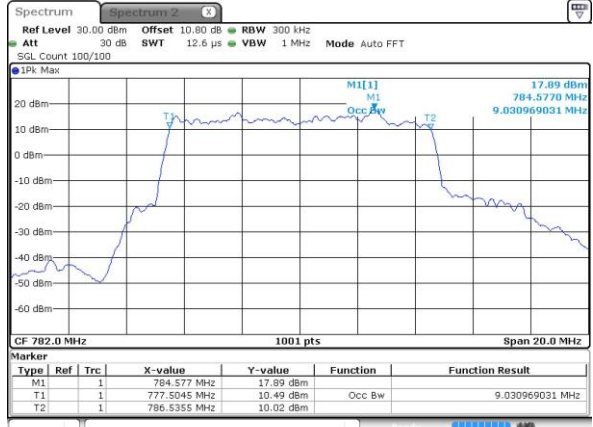
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 2.OCT.2018 05:22:48

Middle Channel / 10MHz / 16QAM

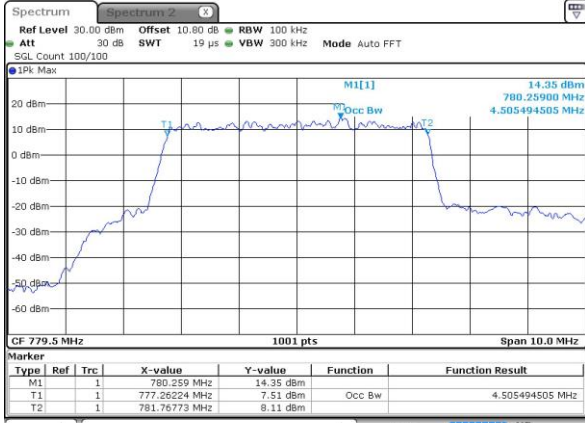


Date: 2.OCT.2018 05:22:59



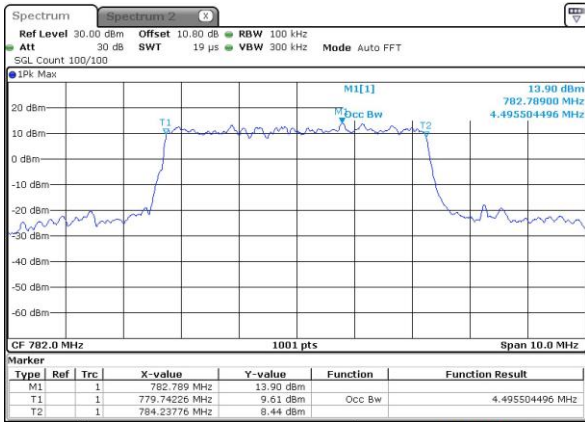
LTE Band 13

Lowest Channel / 5MHz / 64QAM



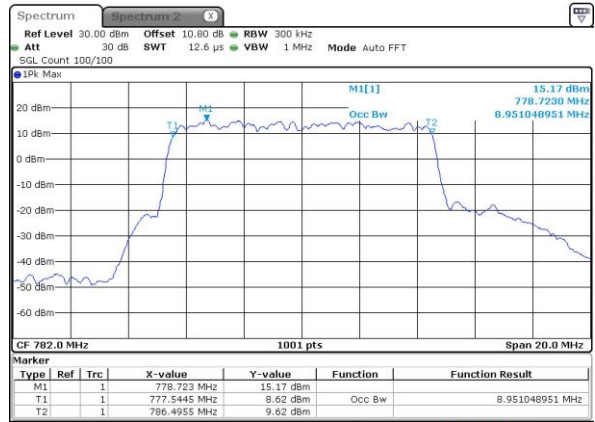
Date: 2.OCT.2018 05:12:58

Middle Channel / 5MHz / 64QAM



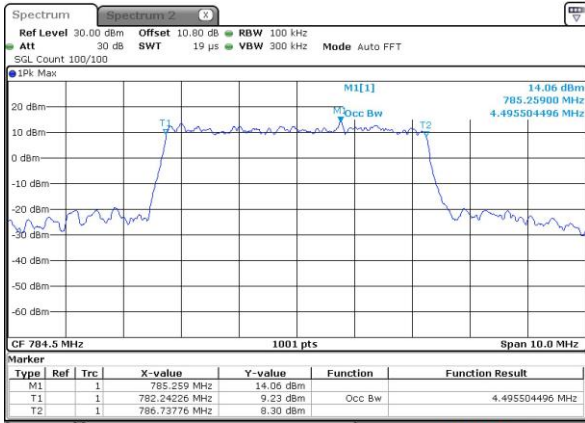
Date: 2.OCT.2018 05:18:13

Middle Channel / 10MHz / 64QAM



Date: 2.OCT.2018 05:34:56

Highest Channel / 5MHz / 64QAM



Date: 2.OCT.2018 05:18:24

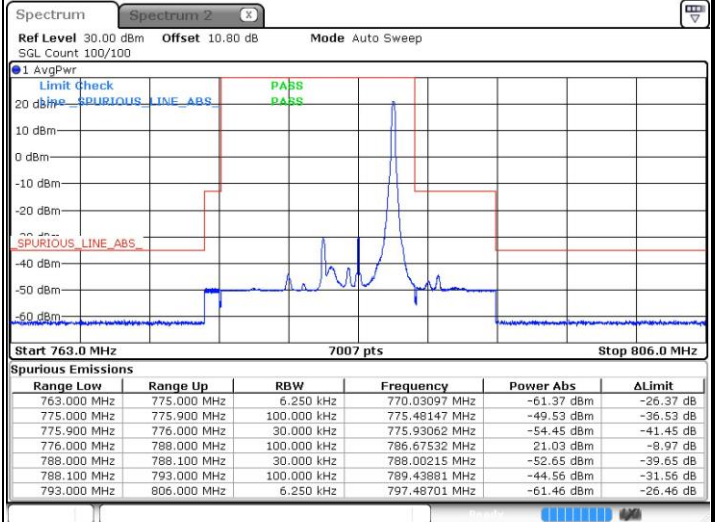
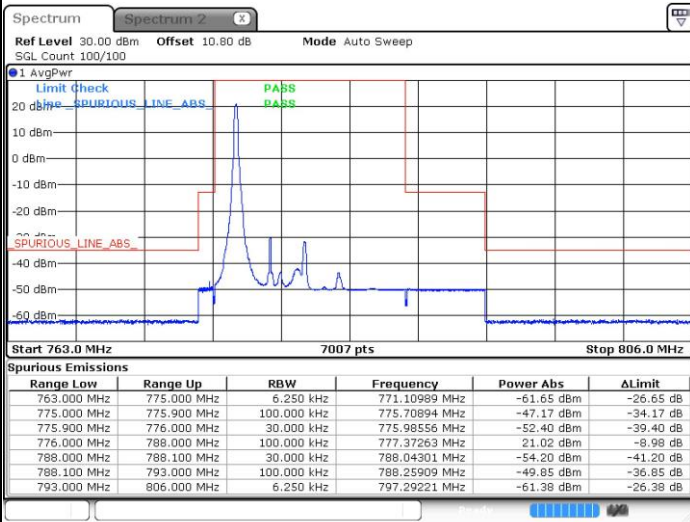


Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

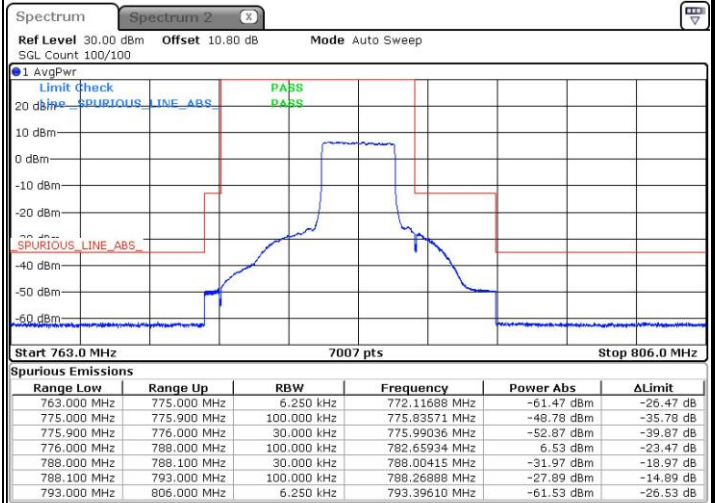
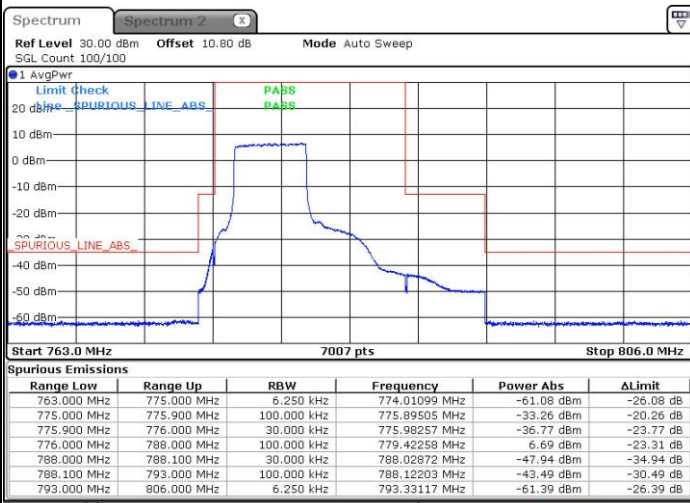


Date: 2.OCT.2018 05:00:33

Date: 2.OCT.2018 05:11:26

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



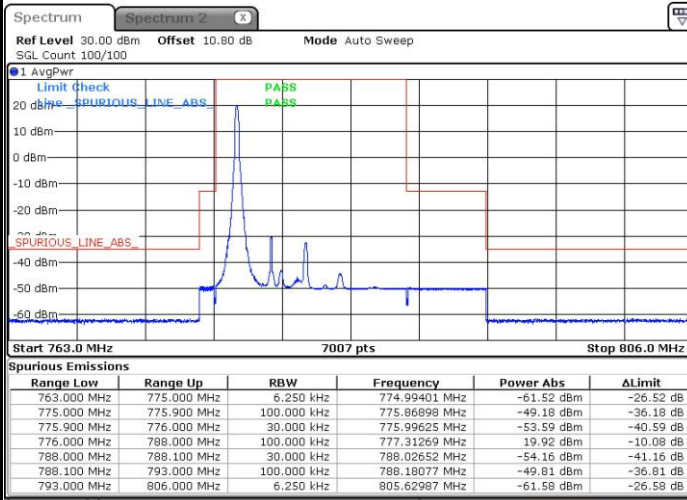
Date: 2.OCT.2018 04:55:32

Date: 2.OCT.2018 05:06:24



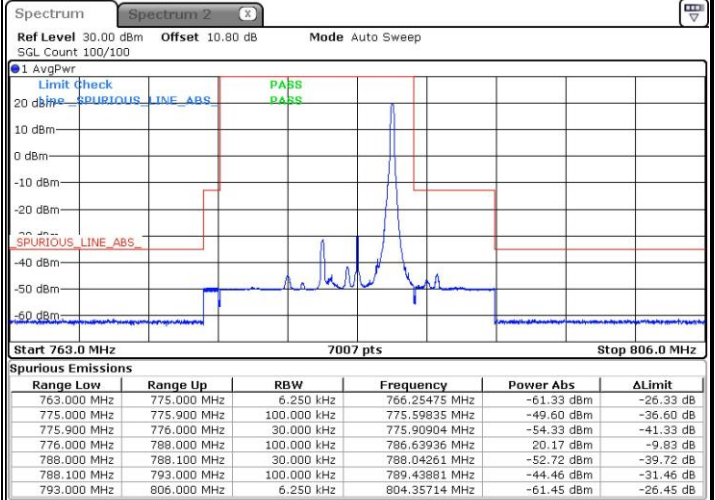
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



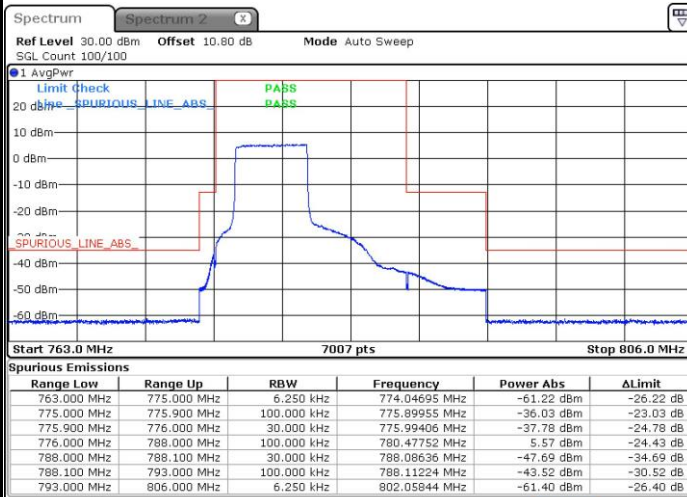
Date: 2.OCT.2018 04:58:52

Highest Band Edge / 1 RB



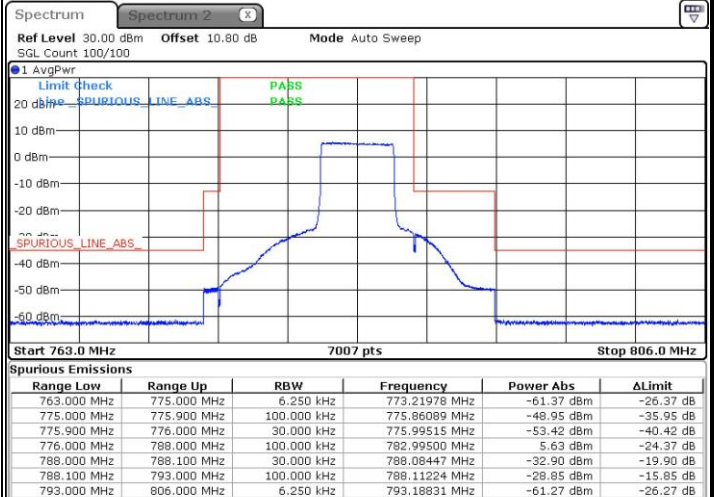
Date: 2.OCT.2018 05:09:45

Lowest Band Edge / Full RB



Date: 2.OCT.2018 04:57:12

Highest Band Edge / Full RB

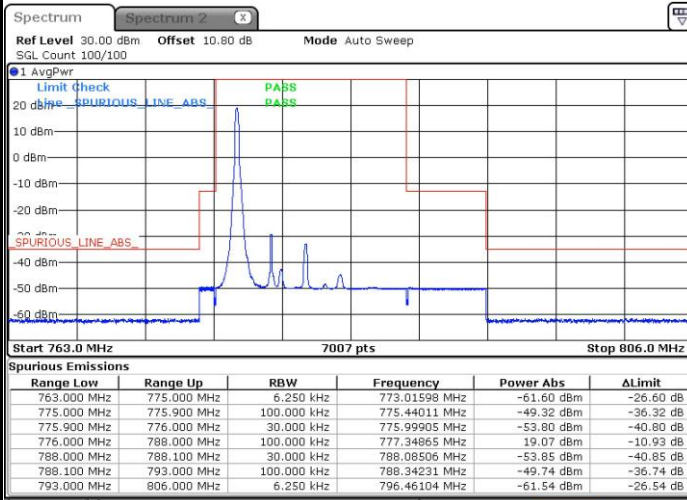


Date: 2.OCT.2018 05:08:05



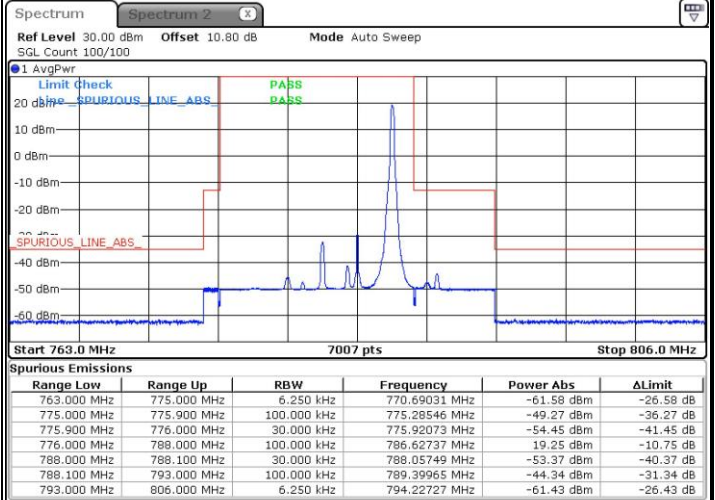
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



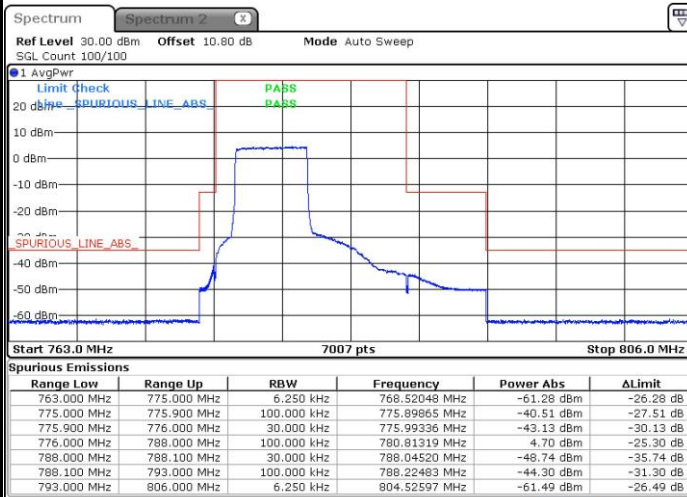
Date: 2.OCT.2018 05:16:29

Highest Band Edge / 1 RB



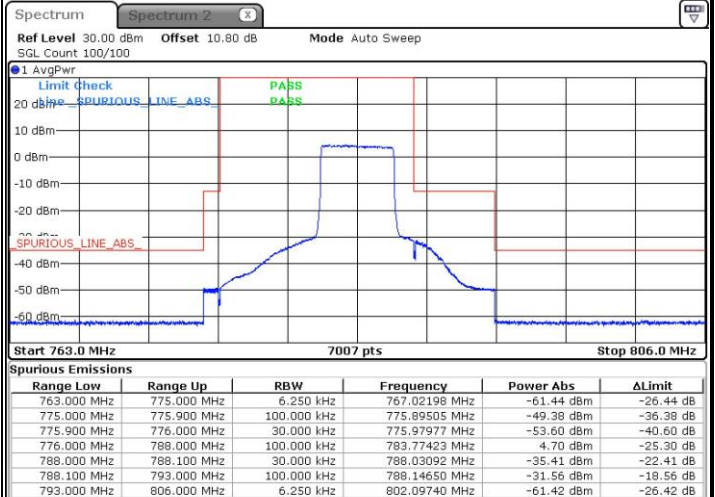
Date: 2.OCT.2018 05:21:56

Lowest Band Edge / Full RB



Date: 2.OCT.2018 05:14:49

Highest Band Edge / Full RB

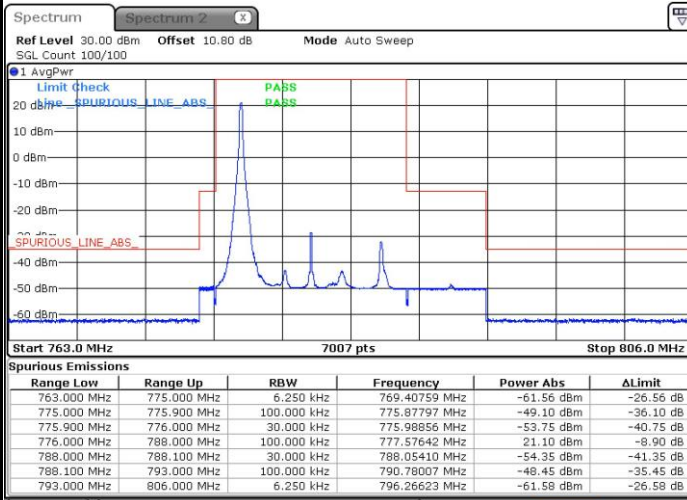


Date: 2.OCT.2018 05:20:16



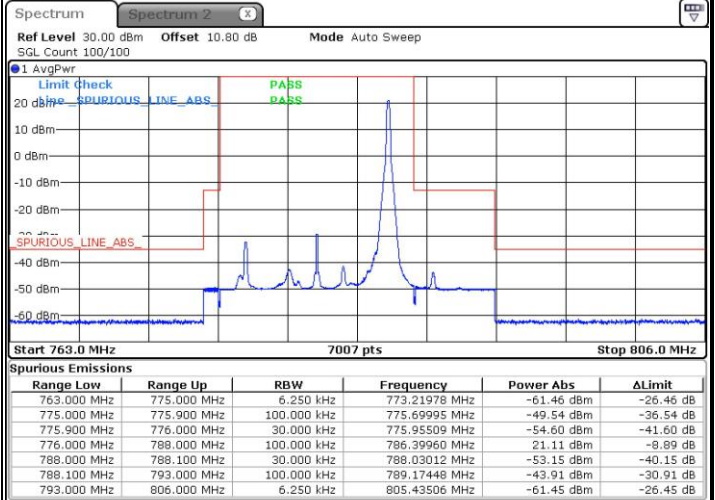
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



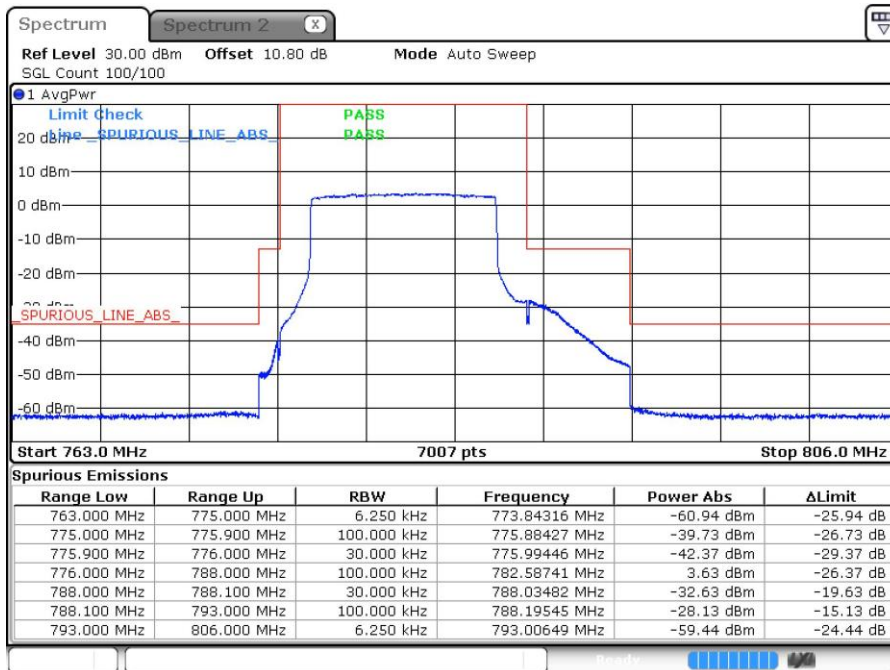
Date: 2.OCT.2018 05:30:03

Highest Band Edge / 1 RB



Date: 2.OCT.2018 05:31:44

Band Edge / Full RB



Date: 2.OCT.2018 05:25:02