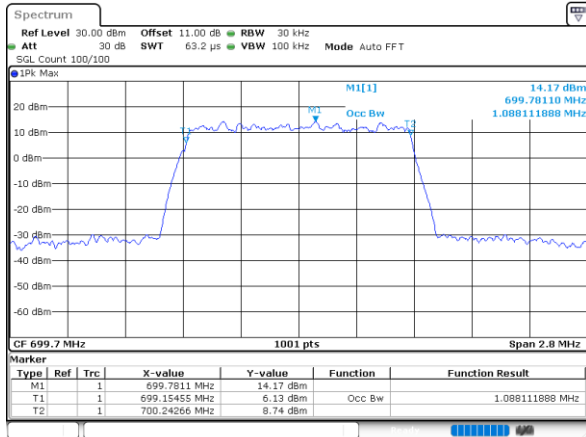




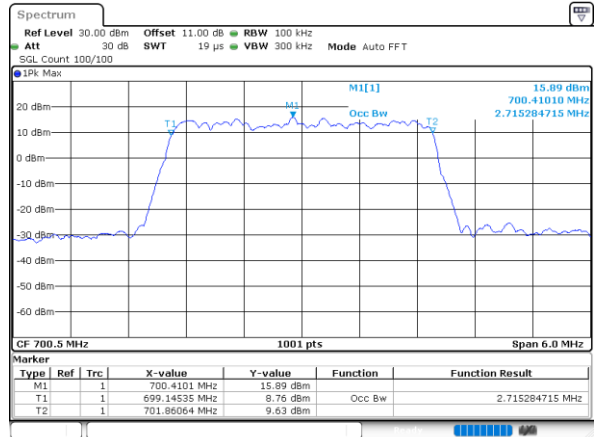
LTE Band 12

Lowest Channel / 1.4MHz / 64QAM



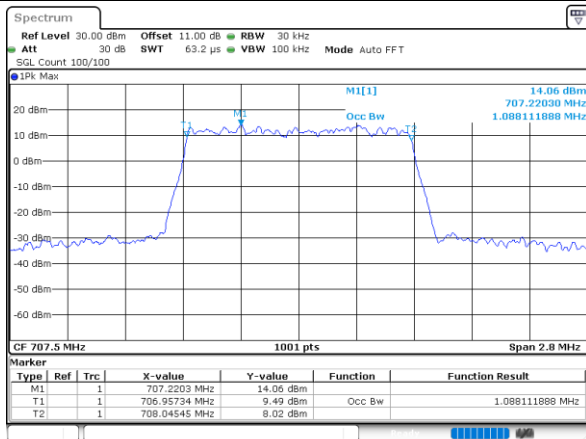
Date: 22.APR.2020 17:35:29

Lowest Channel / 3MHz / 64QAM



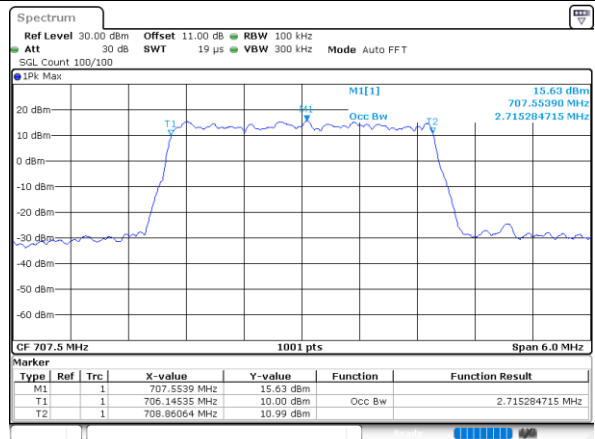
Date: 22.APR.2020 17:42:43

Middle Channel / 1.4MHz / 64QAM



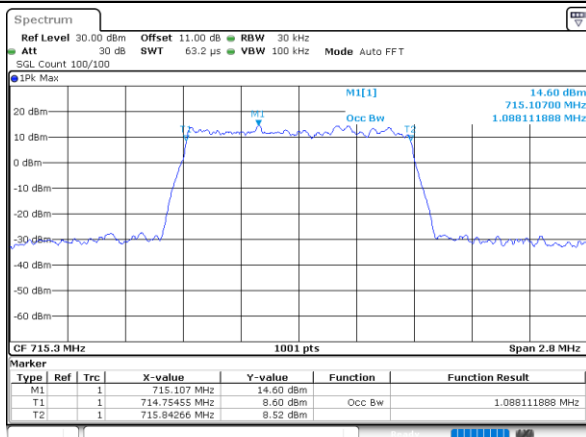
Date: 22.APR.2020 17:38:34

Middle Channel / 3MHz / 64QAM



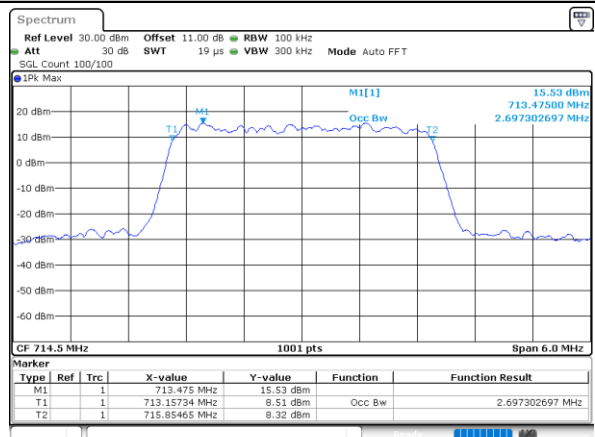
Date: 22.APR.2020 17:45:49

Highest Channel / 1.4MHz / 64QAM



Date: 22.APR.2020 17:39:38

Highest Channel / 3MHz / 64QAM

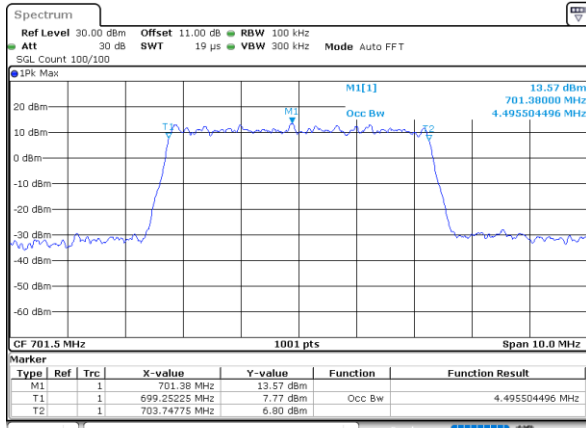


Date: 22.APR.2020 17:46:52

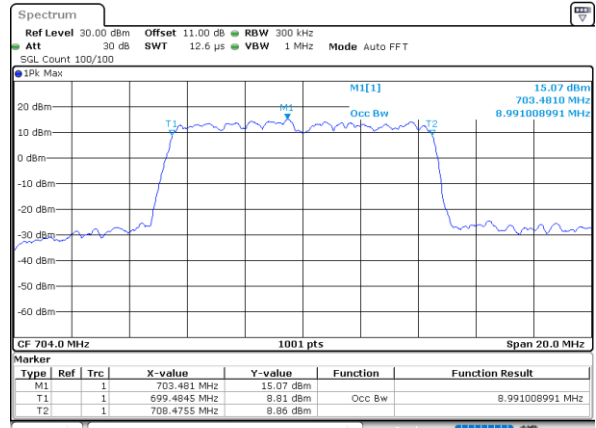


LTE Band 12

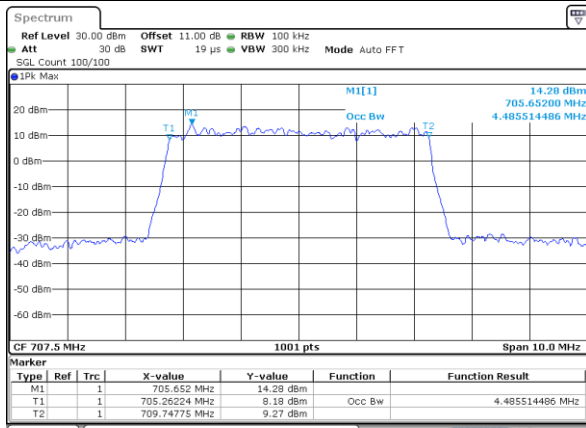
Lowest Channel / 5MHz / 64QAM



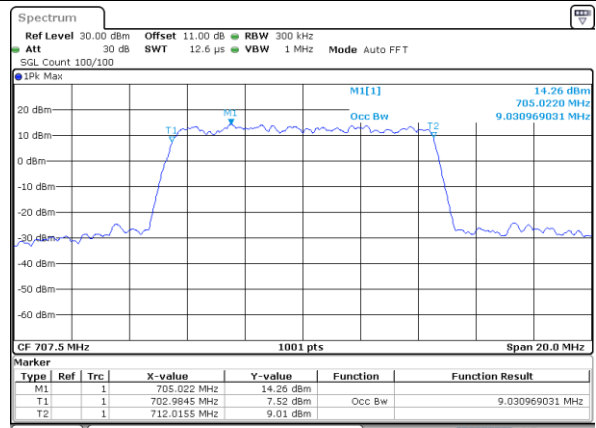
Lowest Channel / 10MHz / 64QAM



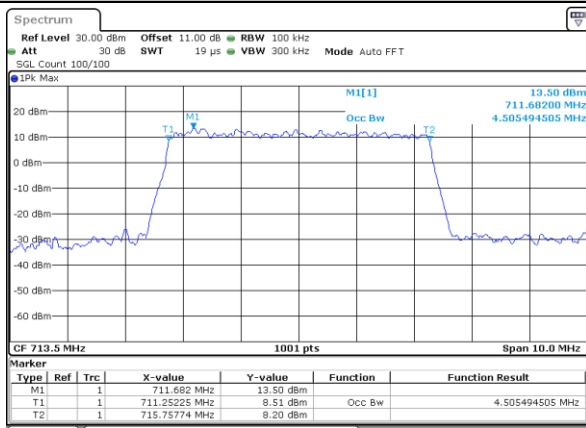
Middle Channel / 5MHz / 64QAM



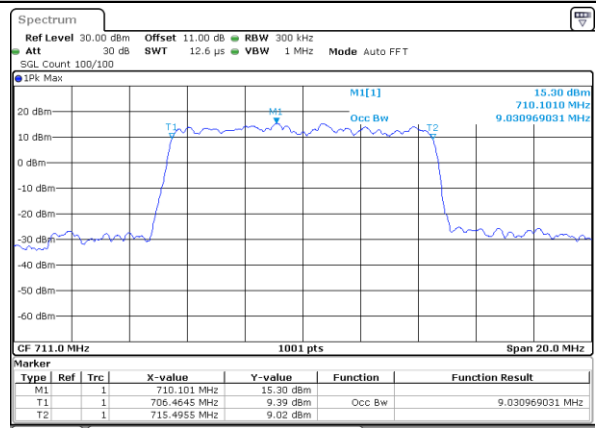
Middle Channel / 10MHz / 64QAM

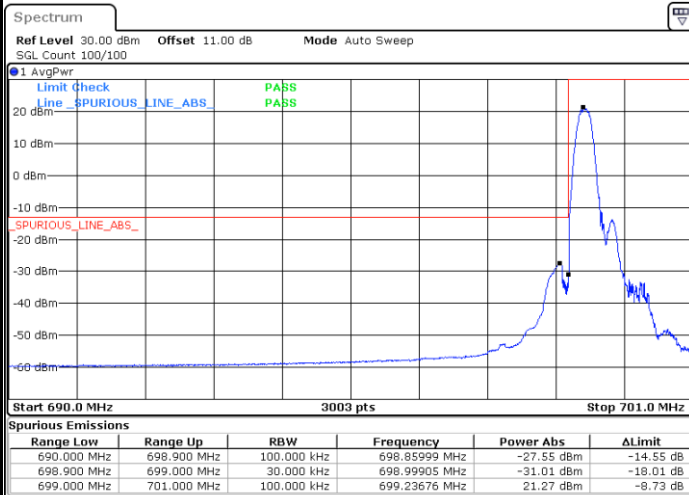
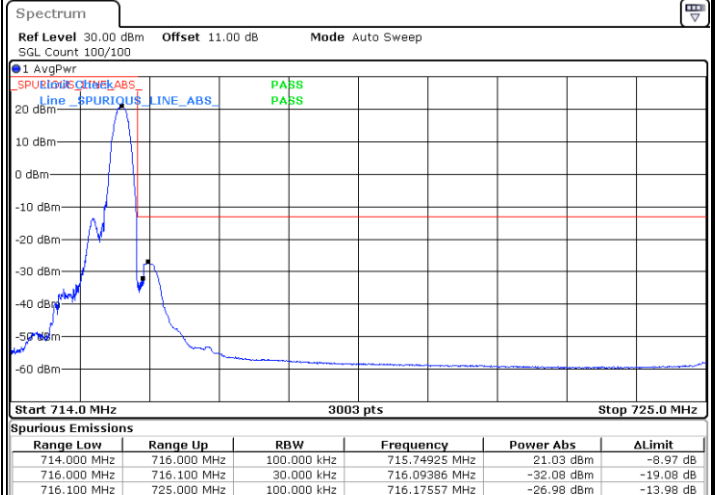
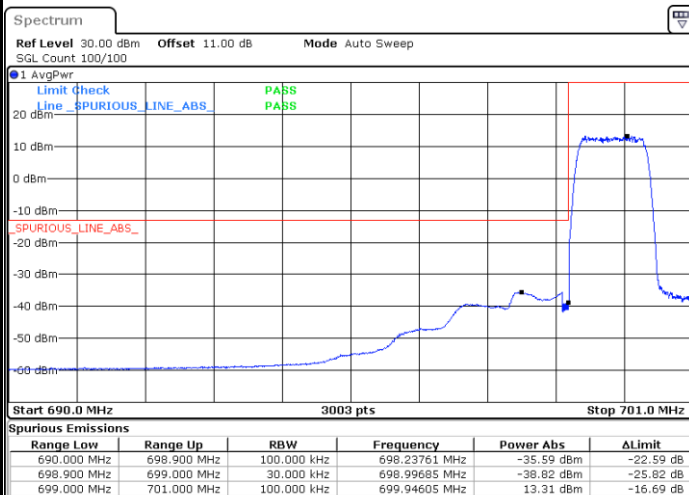
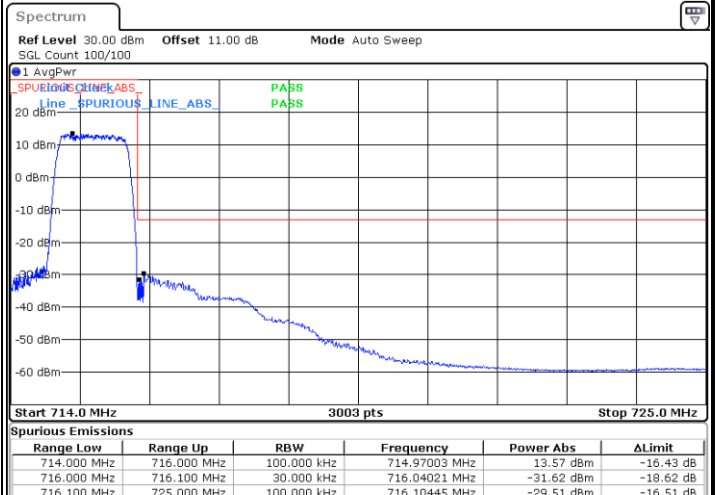


Highest Channel / 5MHz / 64QAM



Highest Channel / 10MHz / 64QAM

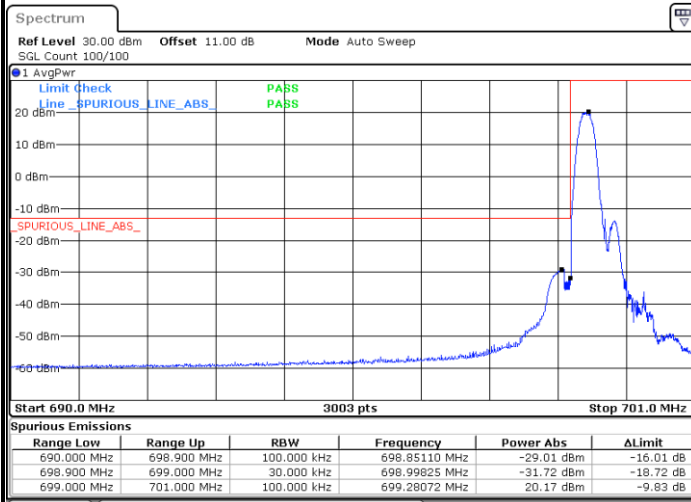


**Conducted Band Edge****LTE Band 12 / 1.4MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

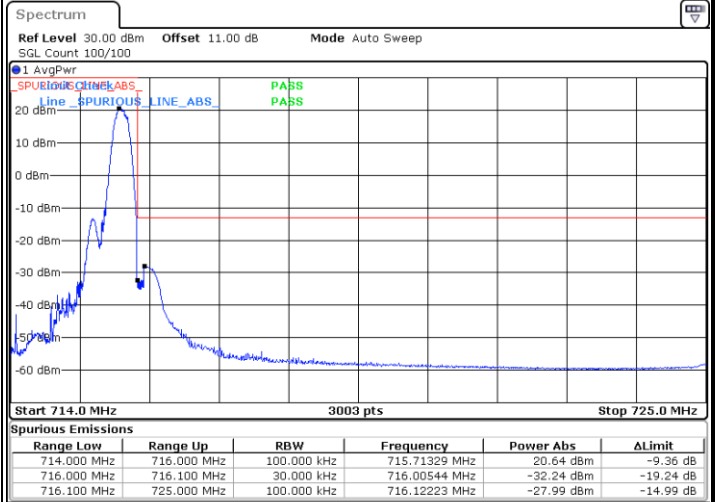


LTE Band 12 / 1.4MHz / 16QAM

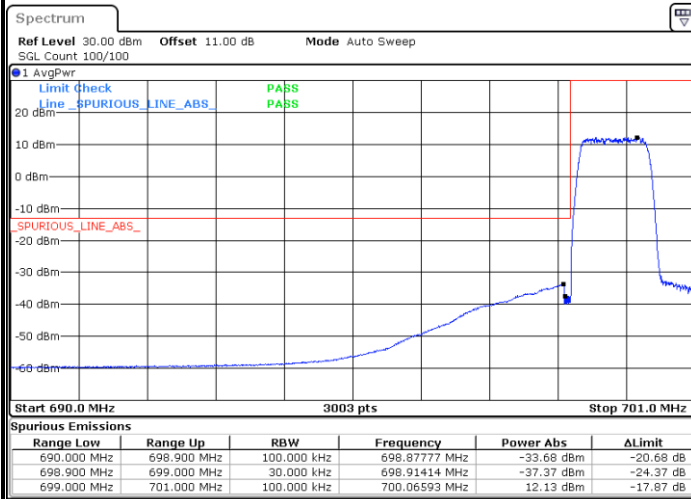
Lowest Band Edge / 1 RB



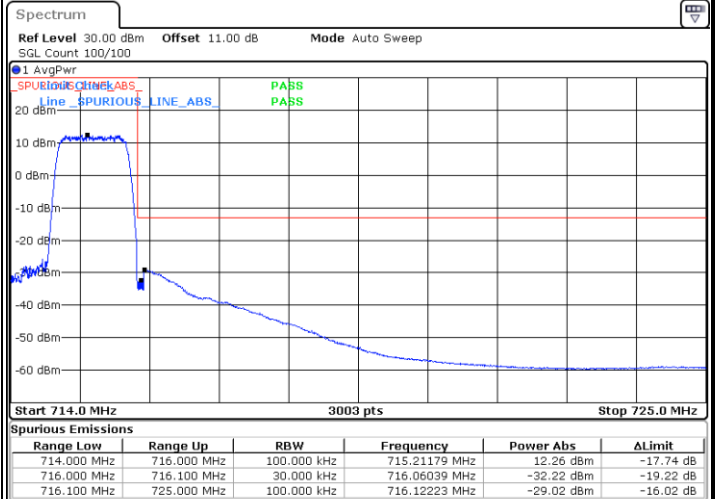
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



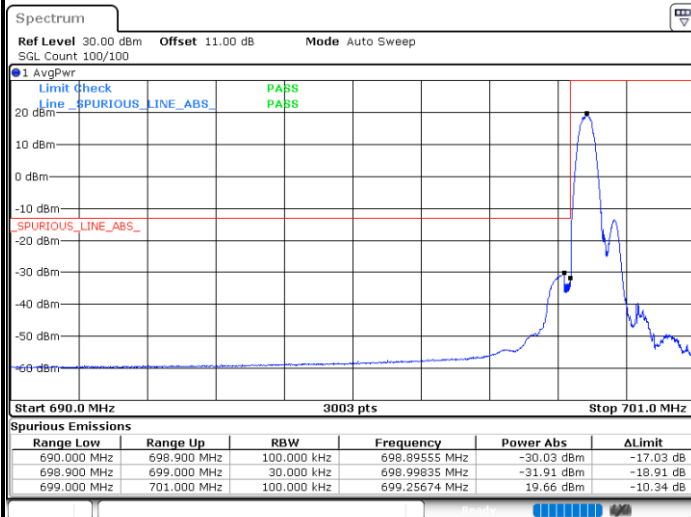
Highest Band Edge / Full RB



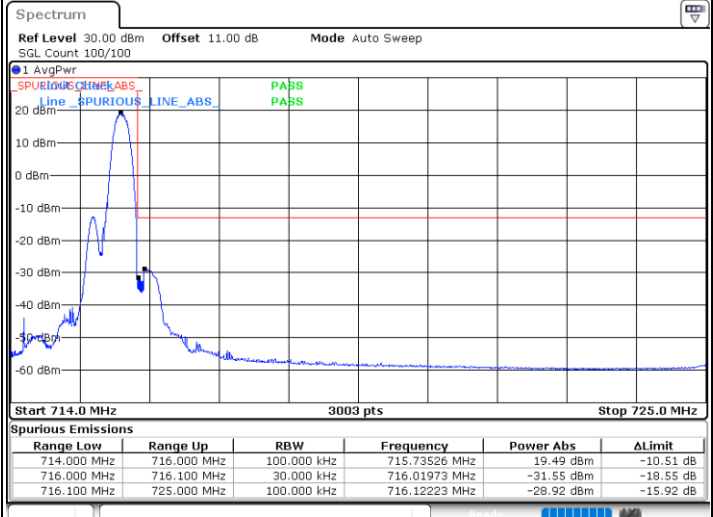


LTE Band 12 / 1.4MHz / 64QAM

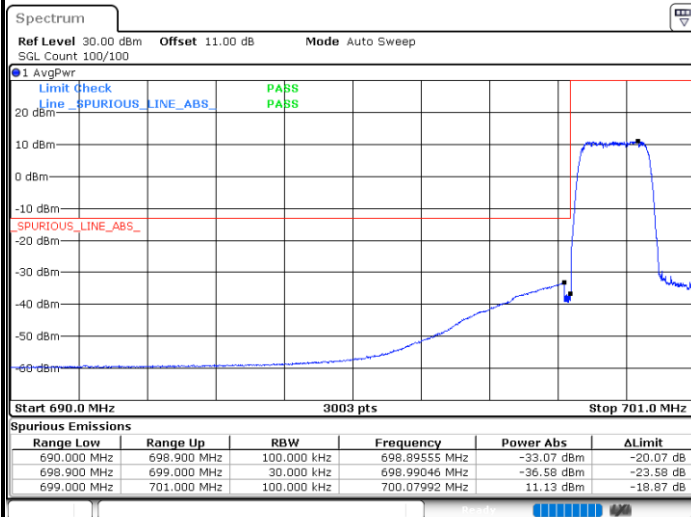
Lowest Band Edge / 1 RB



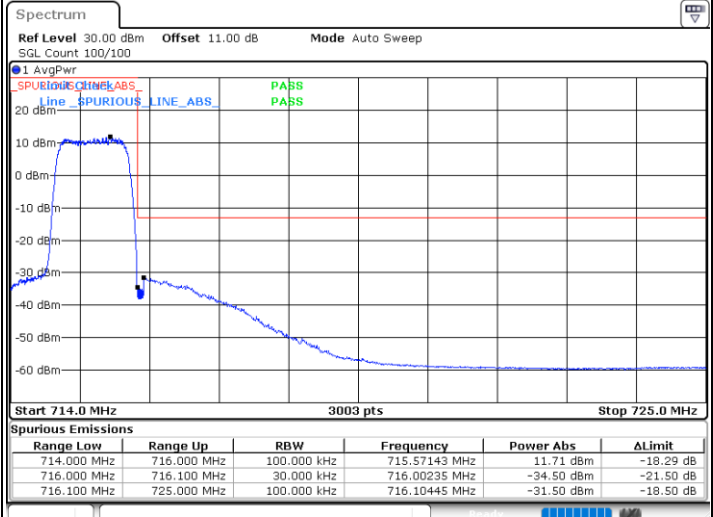
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



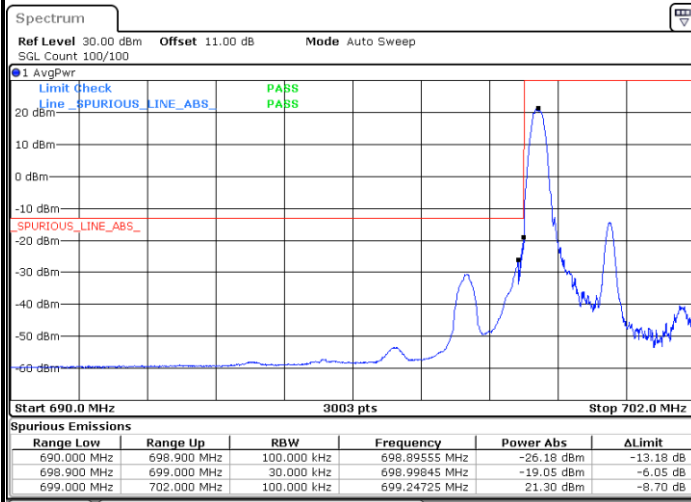
Highest Band Edge / Full RB



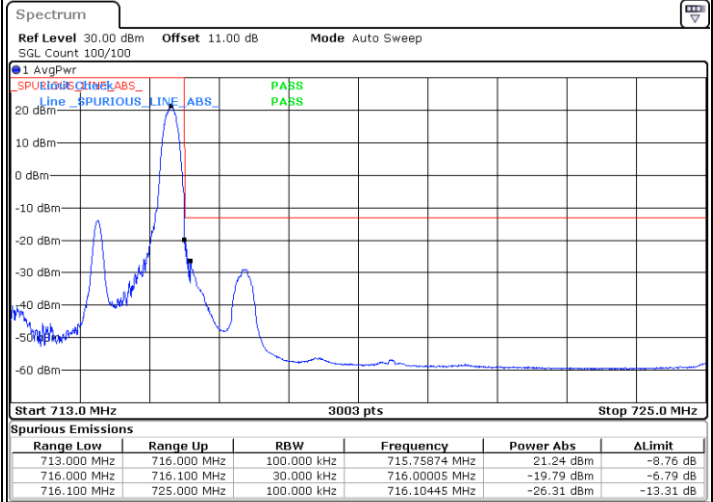


LTE Band 12 / 3MHz / QPSK

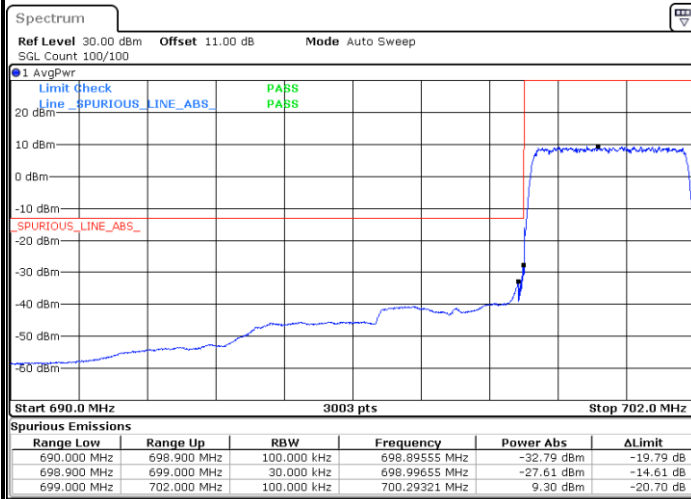
Lowest Band Edge / 1RB



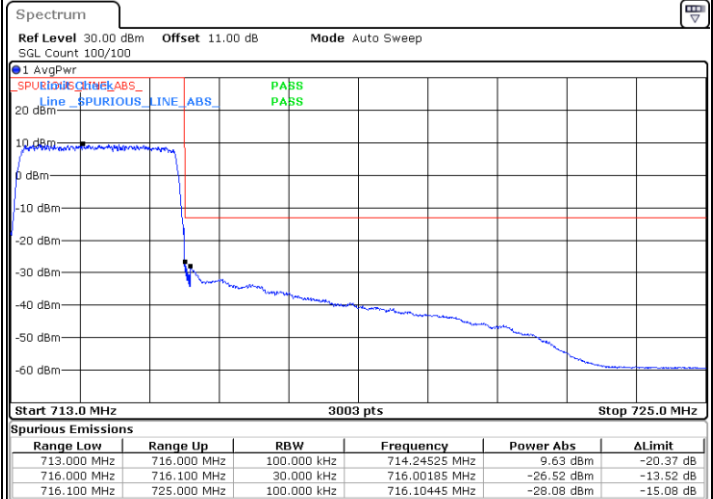
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



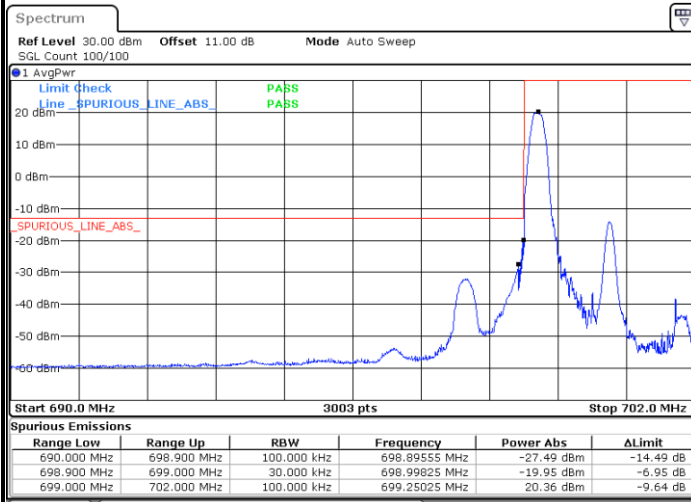
Highest Band Edge / Full RB



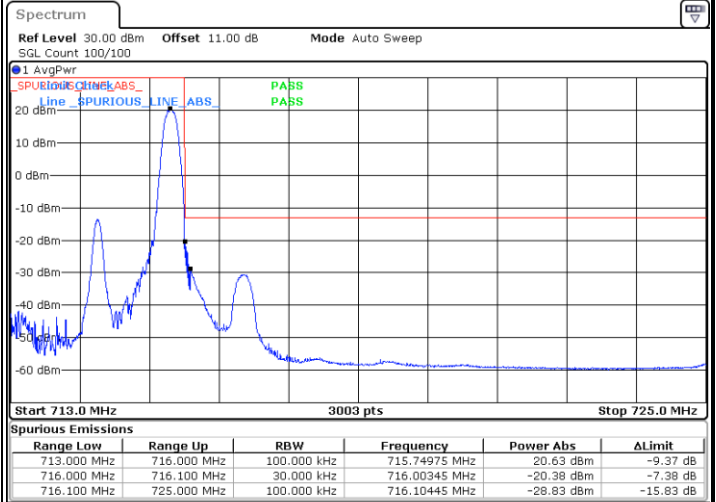


LTE Band 12 / 3MHz / 16QAM

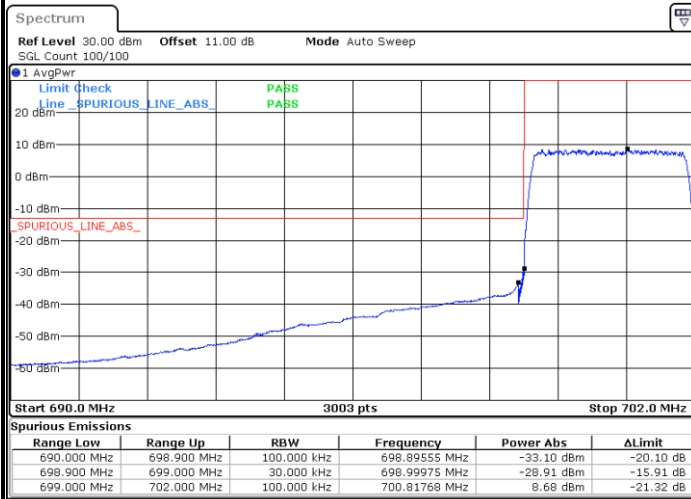
Lowest Band Edge / 1 RB



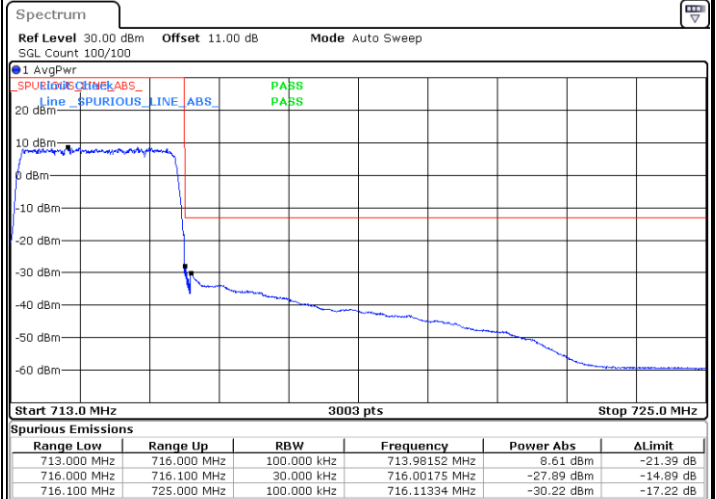
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



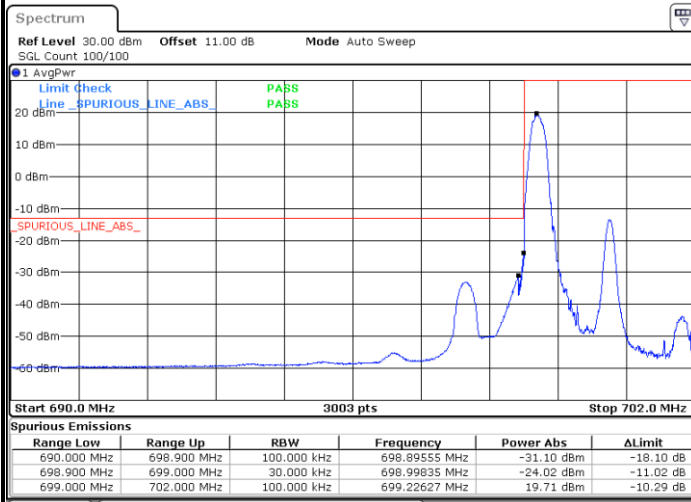
Highest Band Edge / Full RB



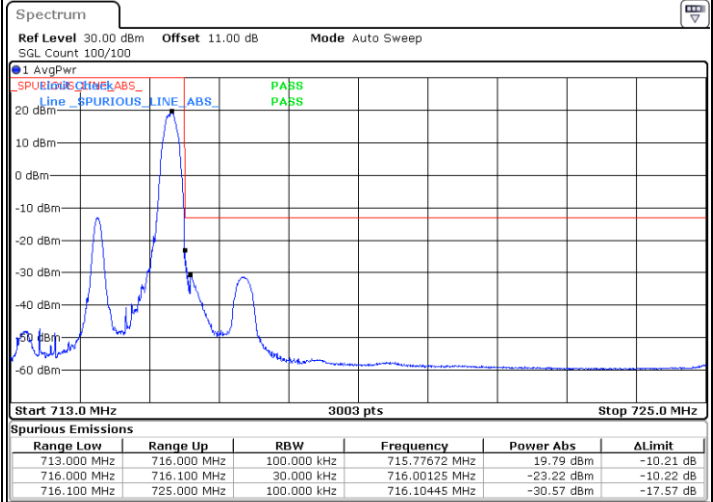


LTE Band 12 / 3MHz / 64QAM

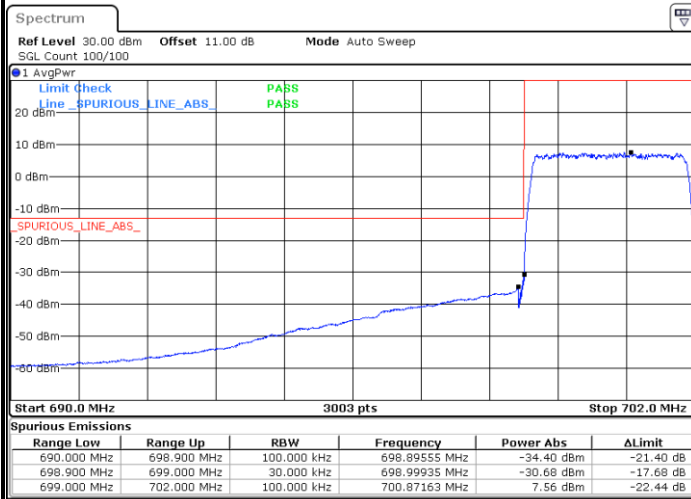
Lowest Band Edge / 1 RB



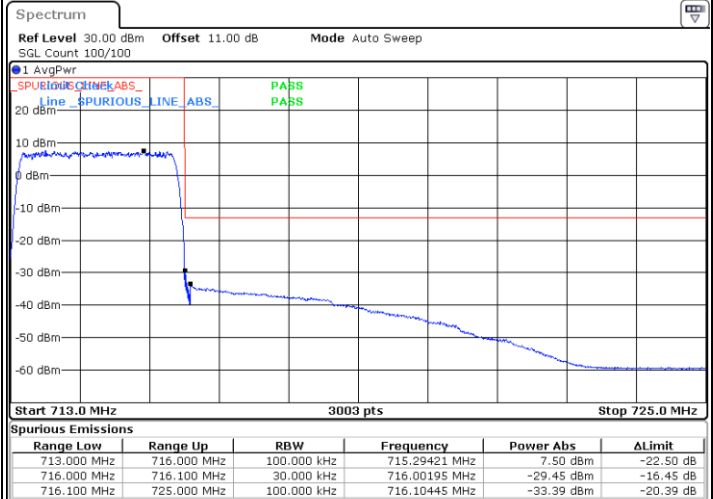
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



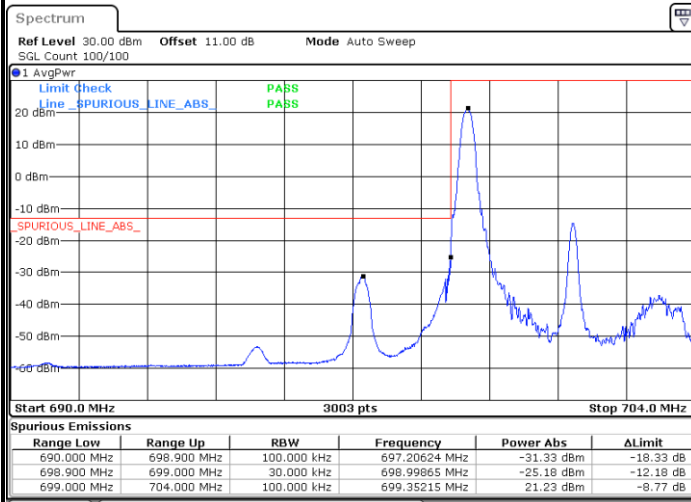
Highest Band Edge / Full RB



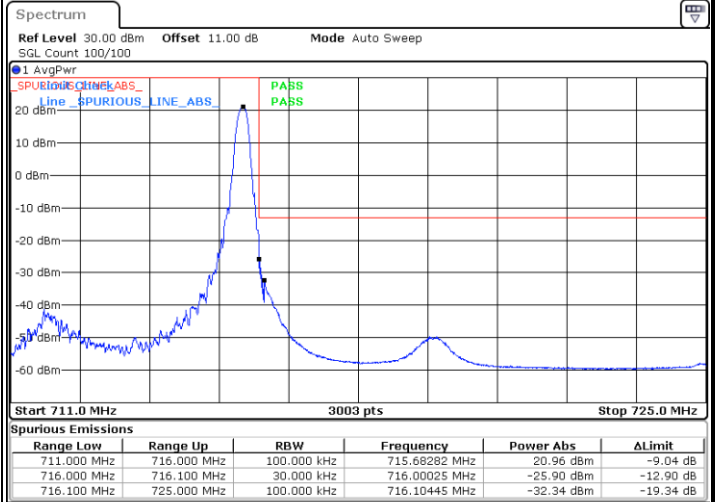


LTE Band 12 / 5MHz / QPSK

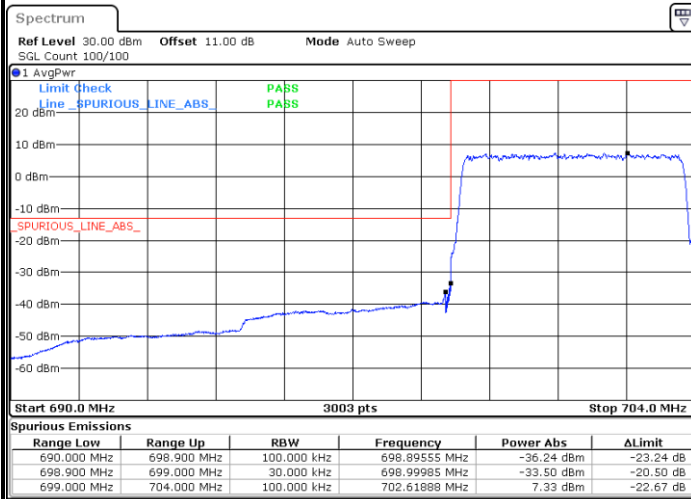
Lowest Band Edge / 1 RB



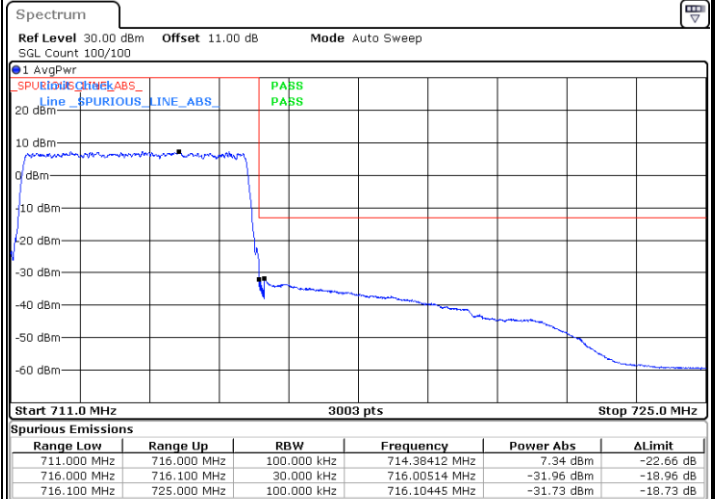
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



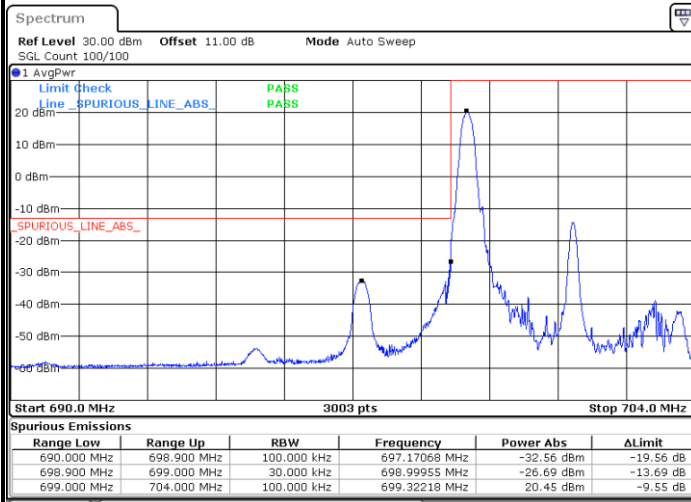
Highest Band Edge / Full RB



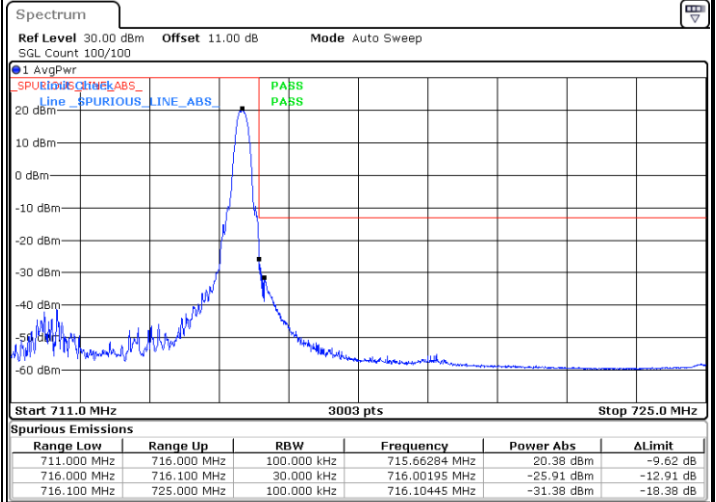


LTE Band 12 / 5MHz / 16QAM

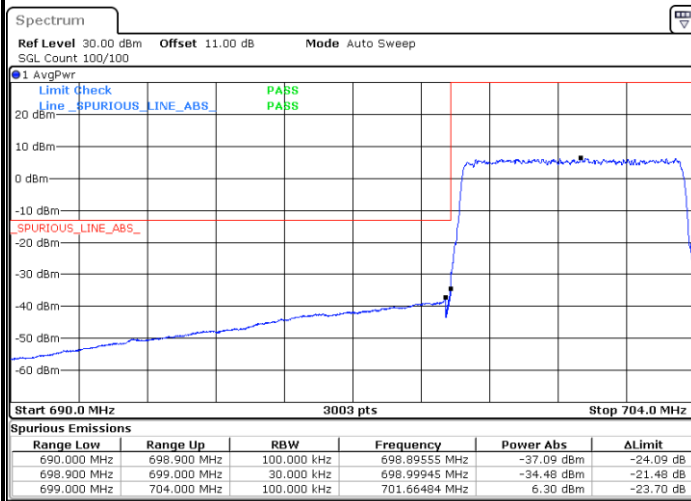
Lowest Band Edge / 1RB



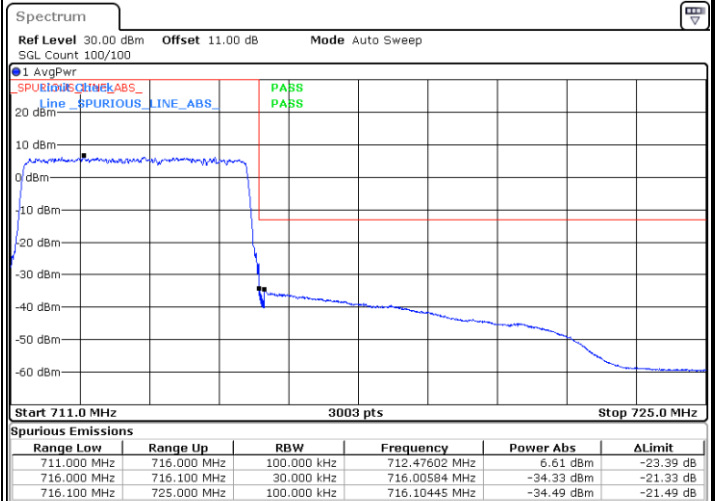
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



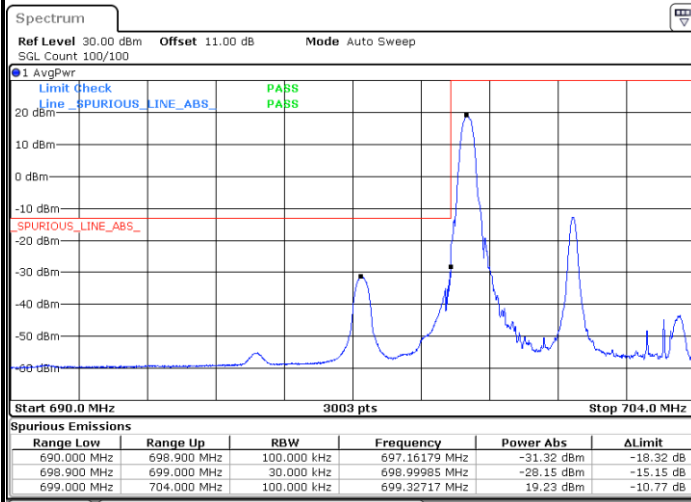
Highest Band Edge / Full RB



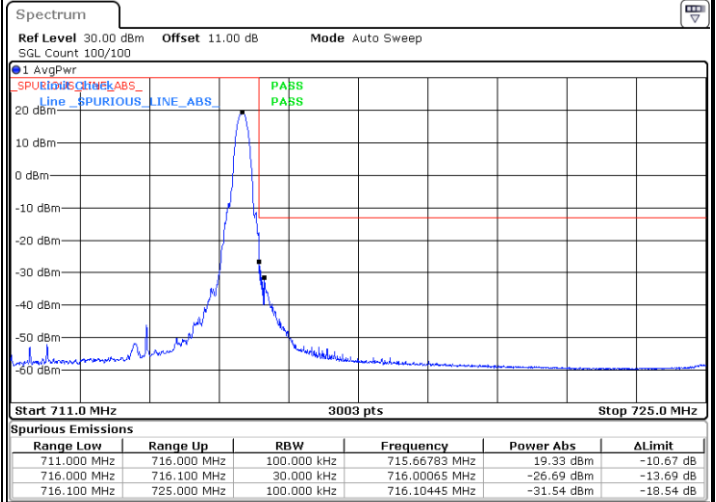


LTE Band 12 / 5MHz / 64QAM

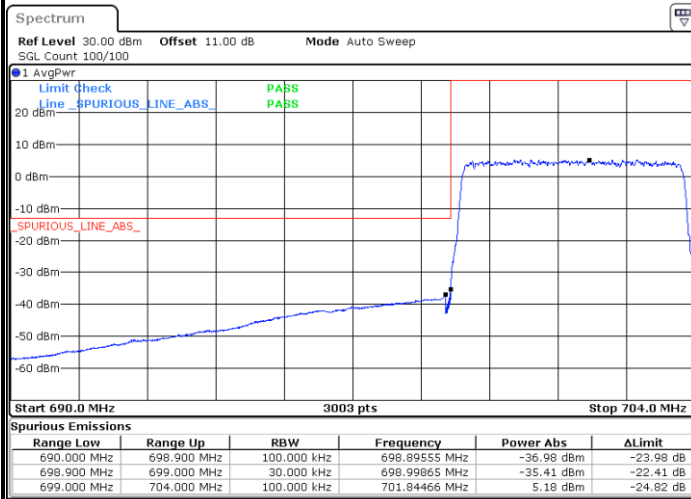
Lowest Band Edge / 1RB



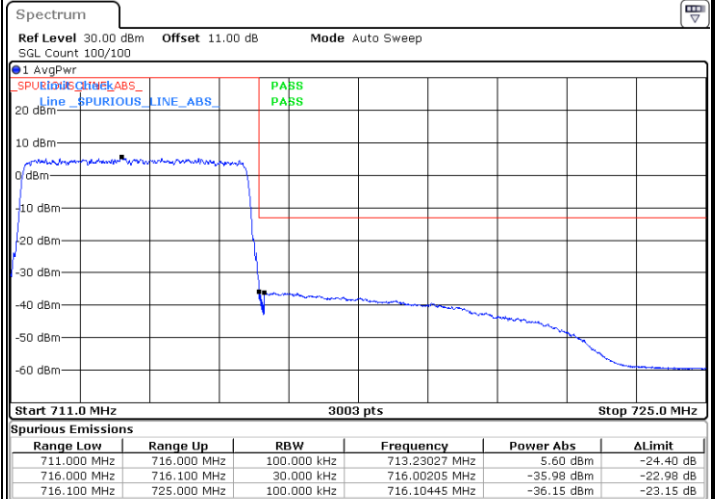
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



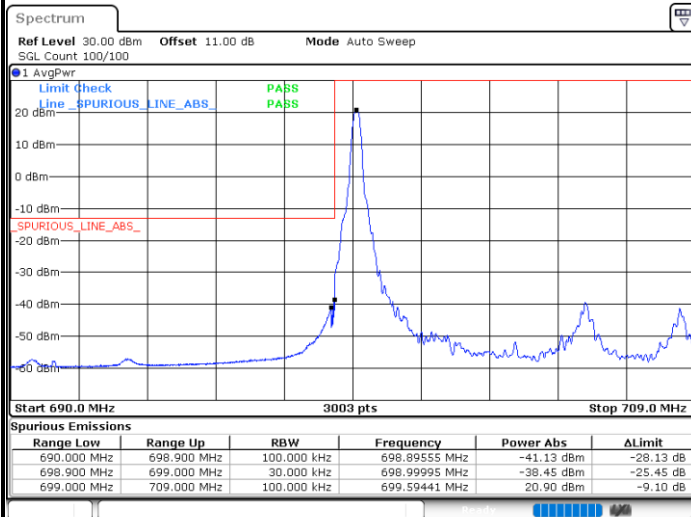
Highest Band Edge / Full RB



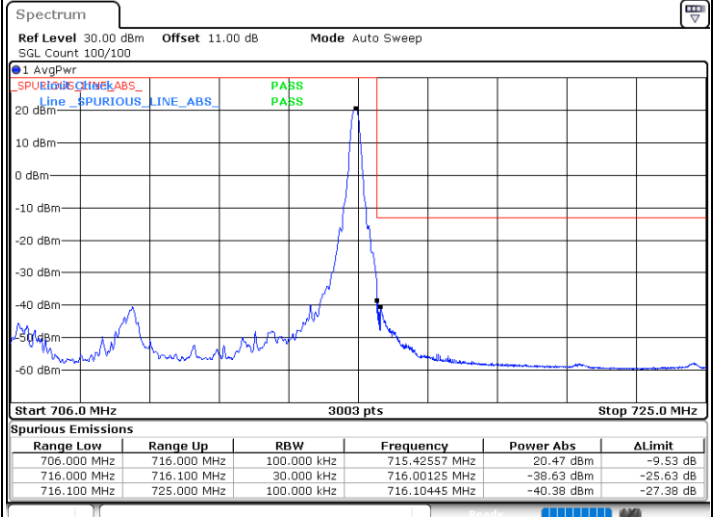


LTE Band 12 / 10MHz / QPSK

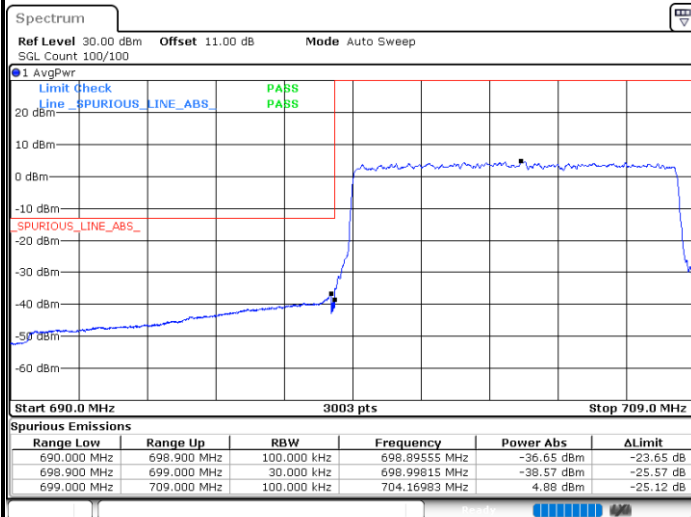
Lowest Band Edge / 1 RB



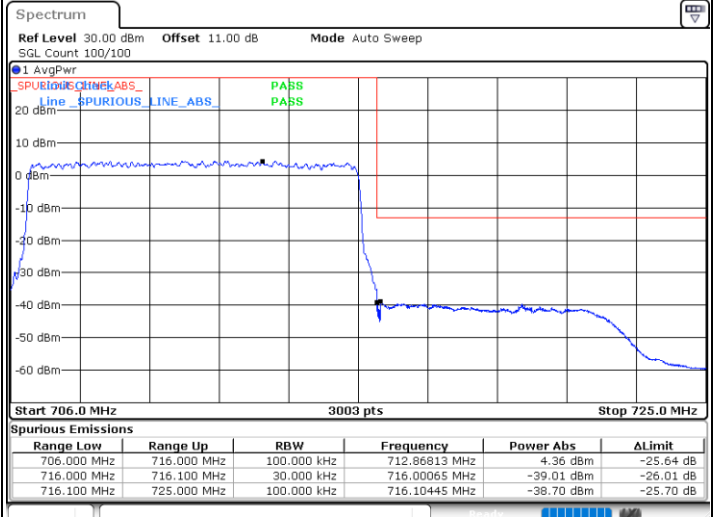
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



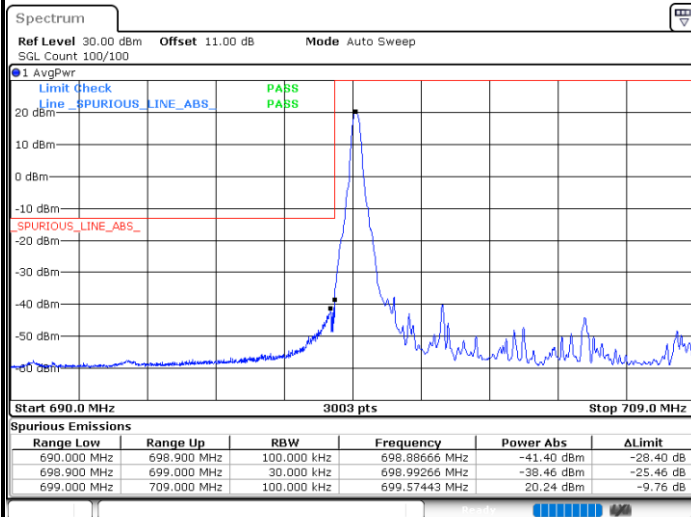
Highest Band Edge / Full RB



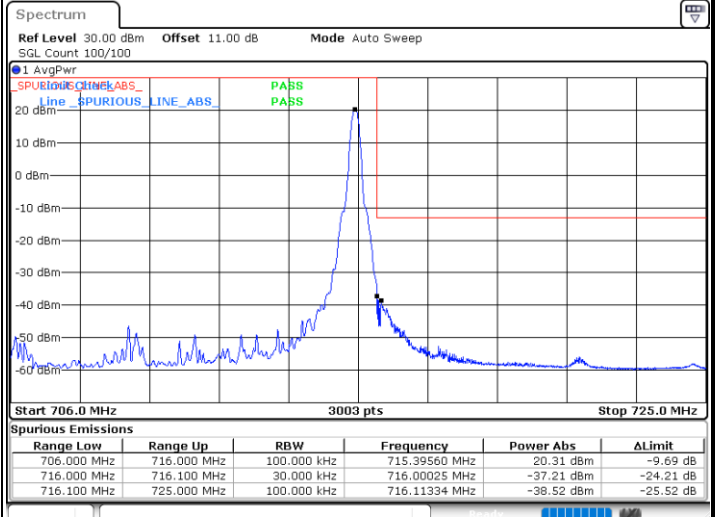


LTE Band 12 / 10MHz / 16QAM

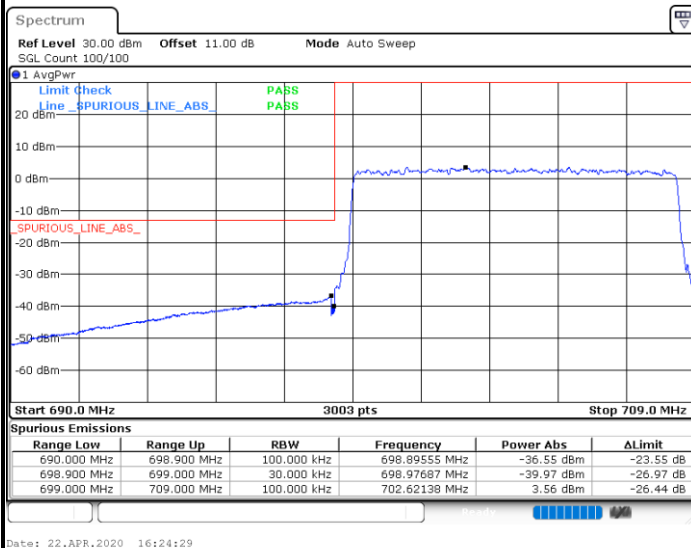
Lowest Band Edge / 1 RB



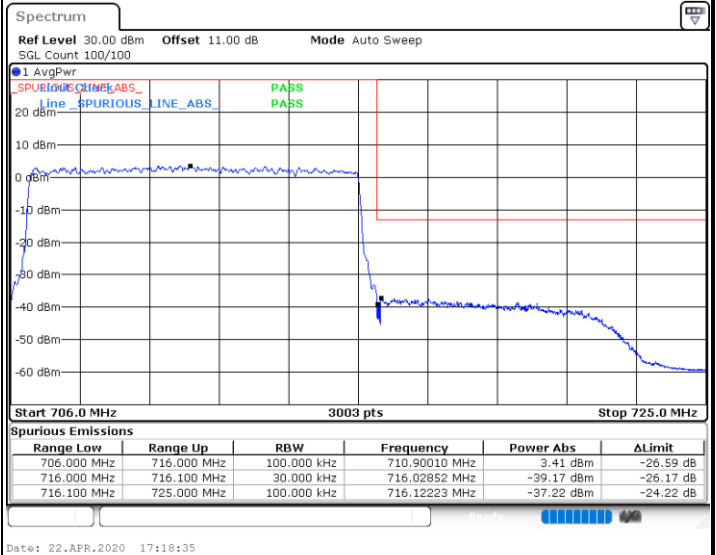
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



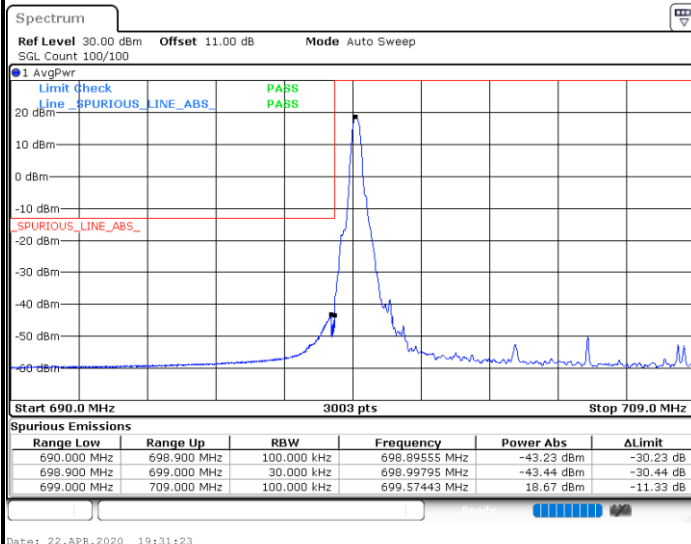
Highest Band Edge / Full RB



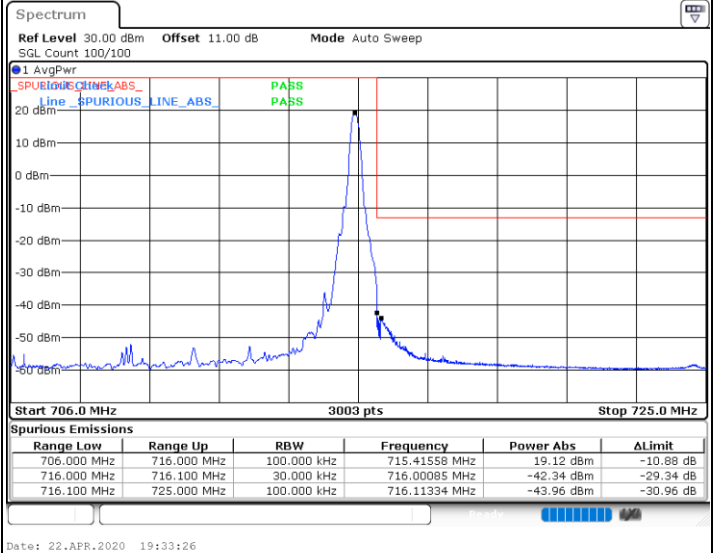


LTE Band 12 / 10MHz / 64QAM

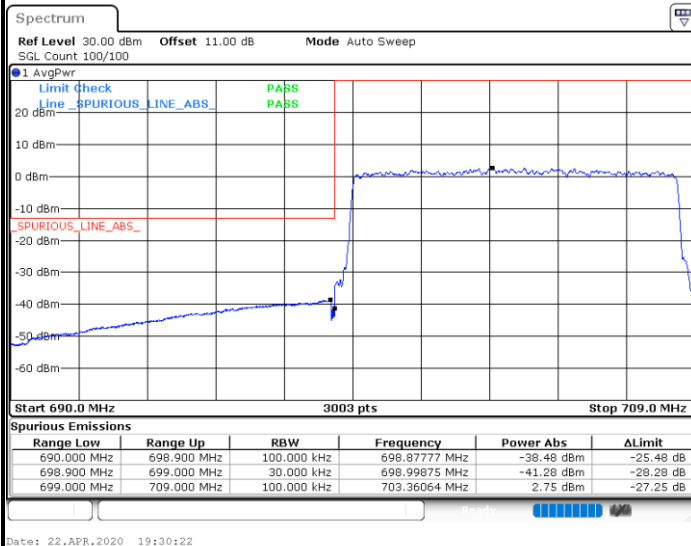
Lowest Band Edge / 1 RB



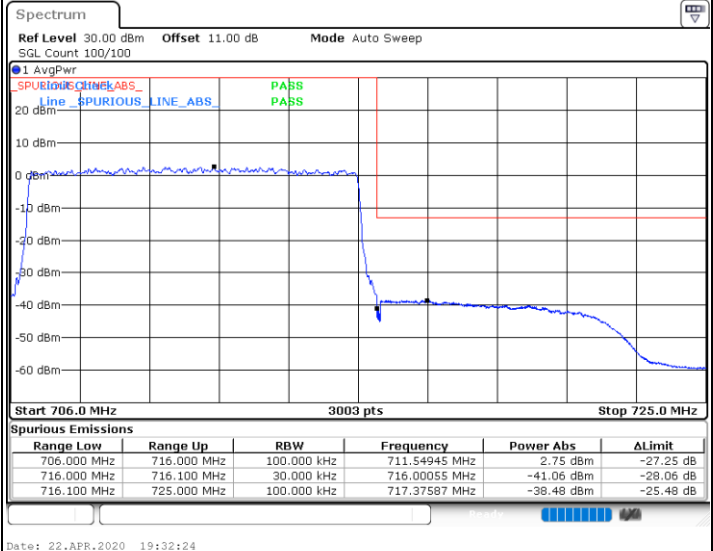
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

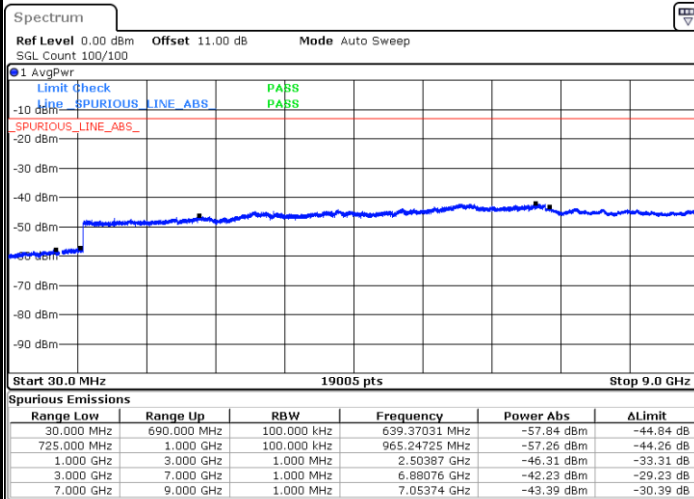




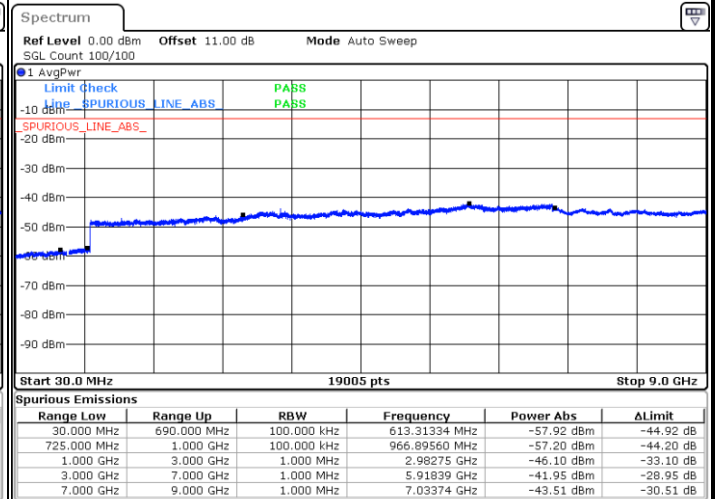
Conducted Spurious Emission

LTE Band 12 / 1.4MHz

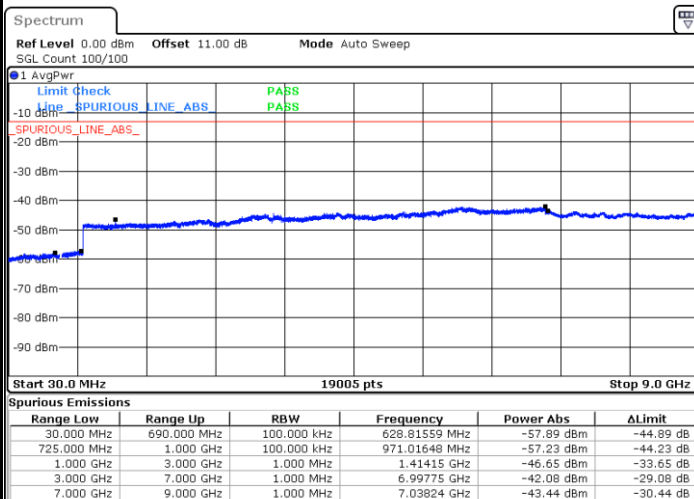
Lowest Channel / QPSK



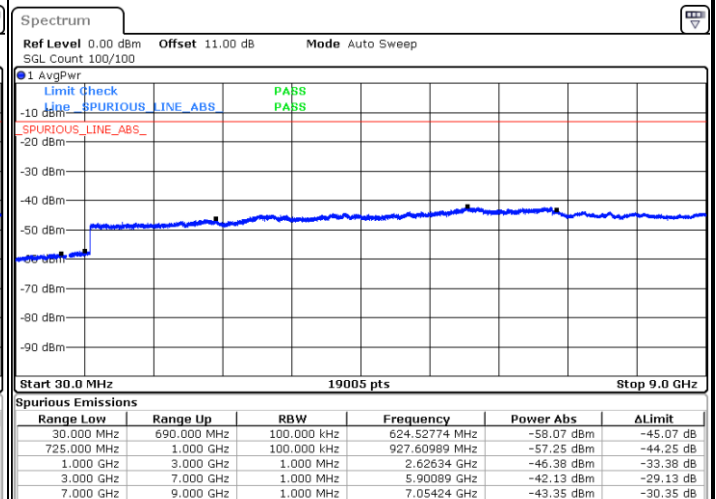
Lowest Channel / 16QAM



Middle Channel / QPSK



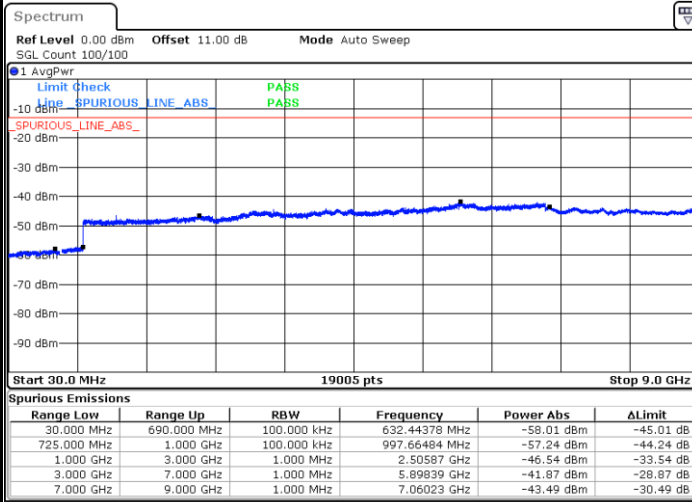
Middle Channel / 16QAM





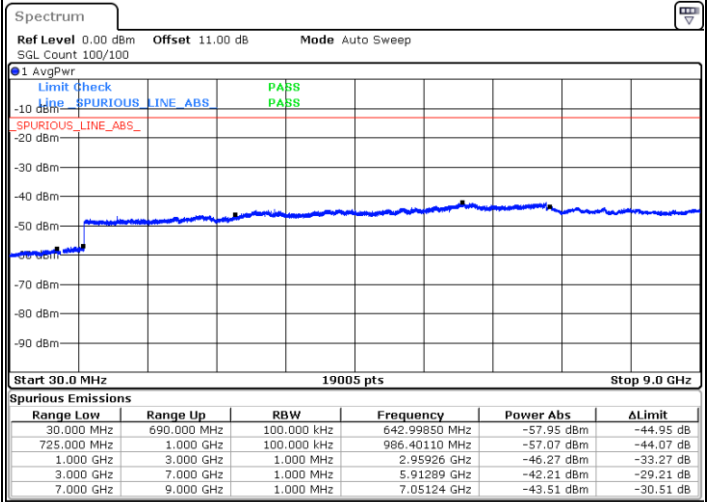
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 22.APR.2020 15:51:54

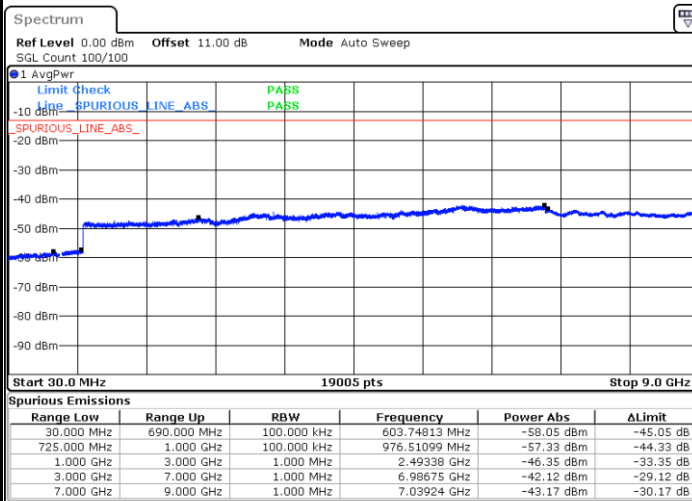
Highest Channel / 16QAM



Date: 22.APR.2020 15:52:35

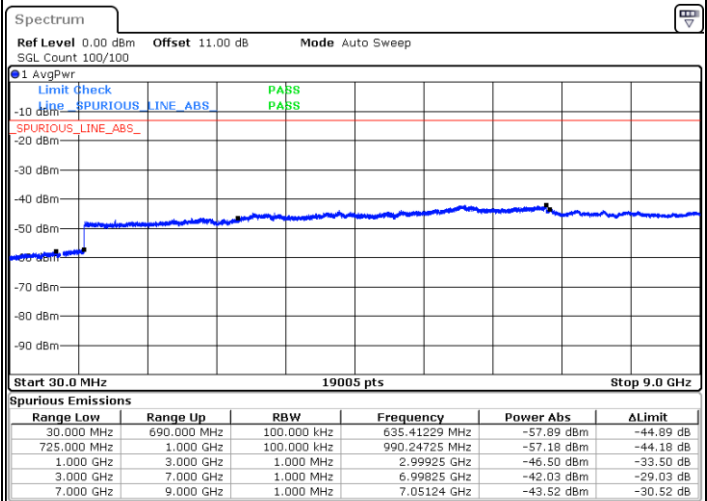
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 22.APR.2020 15:58:06

Lowest Channel / 16QAM

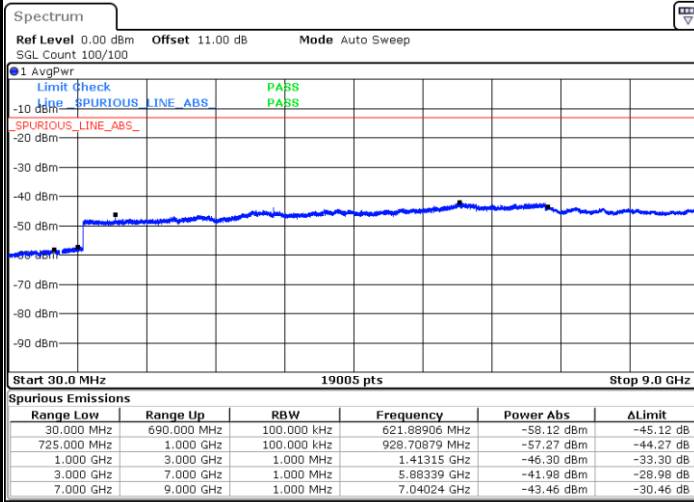


Date: 22.APR.2020 15:58:47



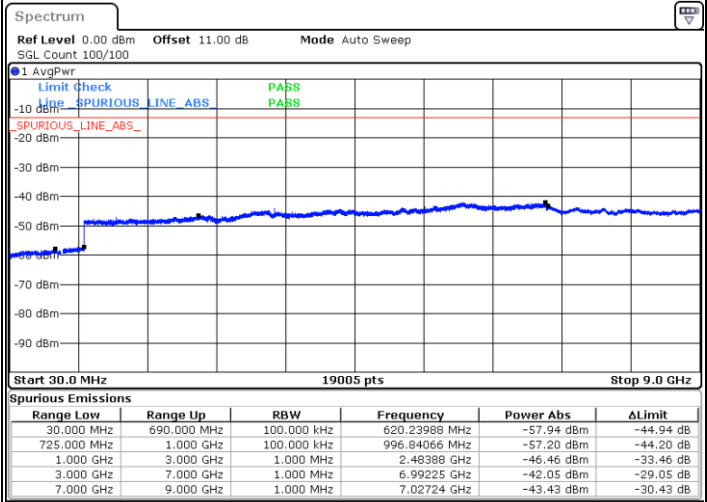
LTE Band 12 / 3MHz

Middle Channel / QPSK



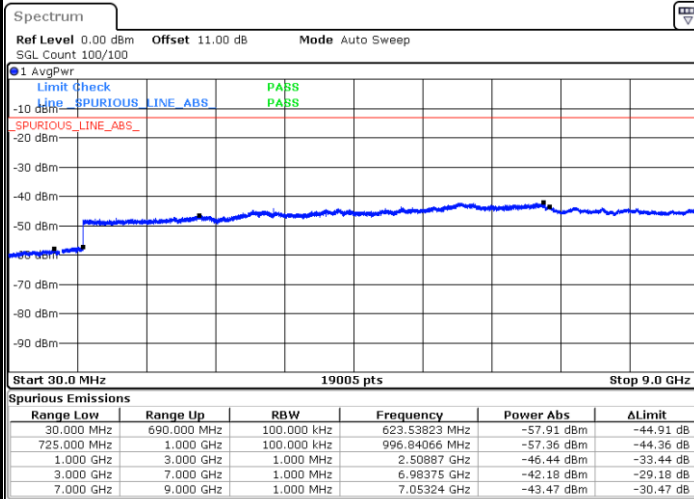
Date: 22.APR.2020 16:00:54

Middle Channel / 16QAM



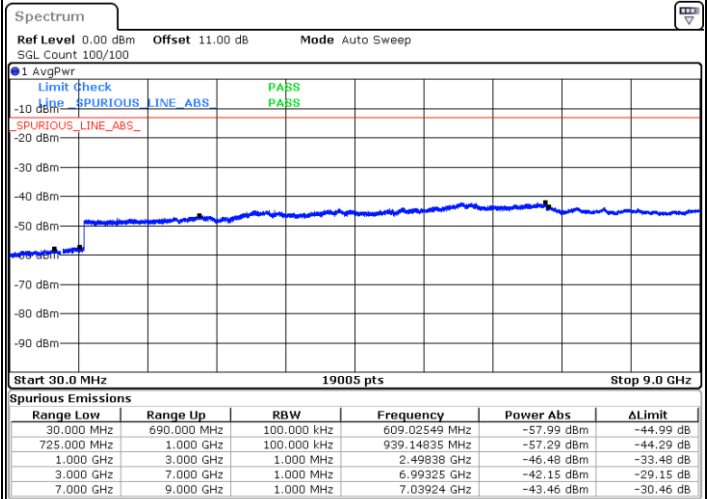
Date: 22.APR.2020 16:00:14

Highest Channel / QPSK



Date: 22.APR.2020 16:06:24

Highest Channel / 16QAM

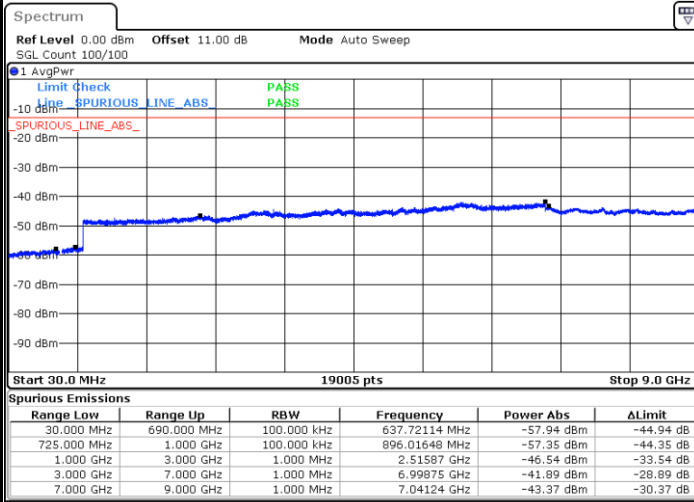


Date: 22.APR.2020 16:07:05



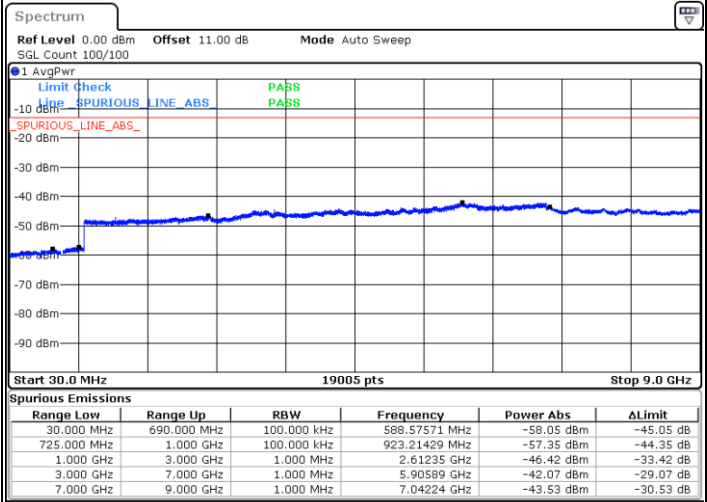
LTE Band 12 / 5MHz

Lowest Channel / QPSK



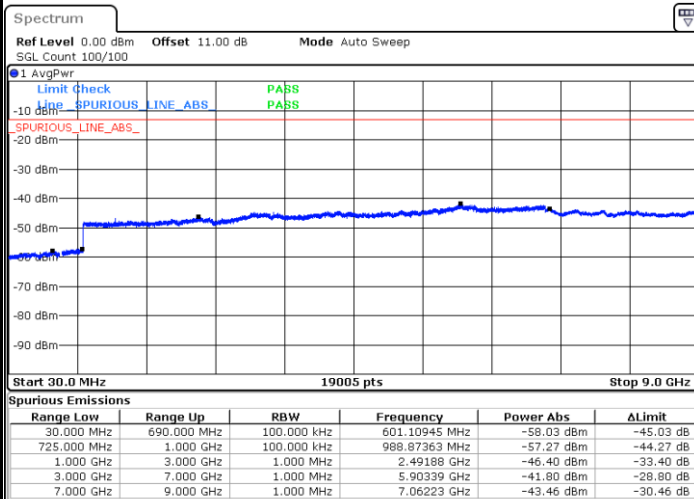
Date: 22.APR.2020 16:12:40

Lowest Channel / 16QAM



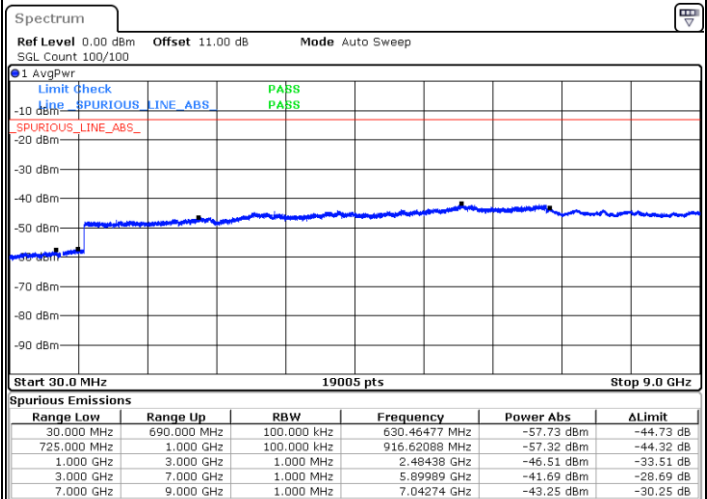
Date: 22.APR.2020 16:13:21

Middle Channel / QPSK



Date: 22.APR.2020 16:15:28

Middle Channel / 16QAM

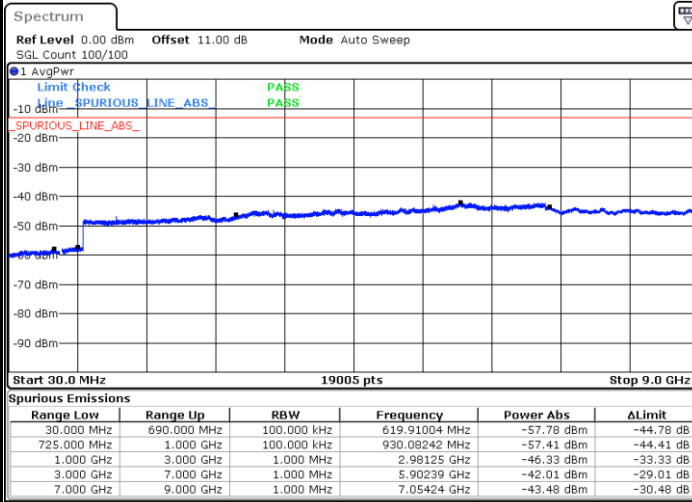


Date: 22.APR.2020 16:14:48



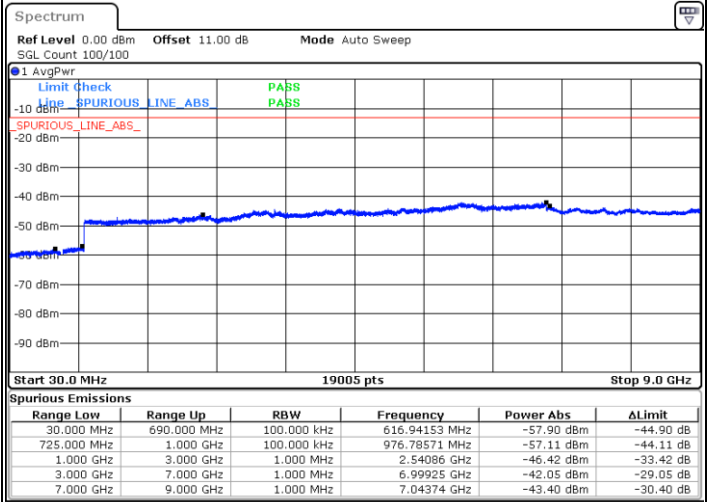
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 22.APR.2020 16:21:39

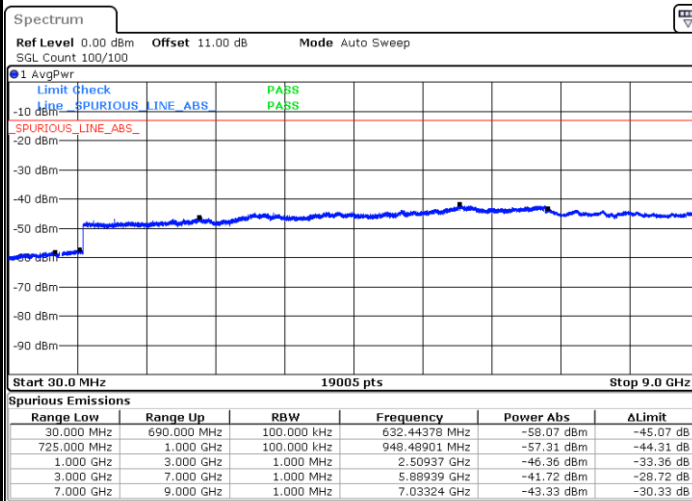
Highest Channel / 16QAM



Date: 22.APR.2020 16:20:58

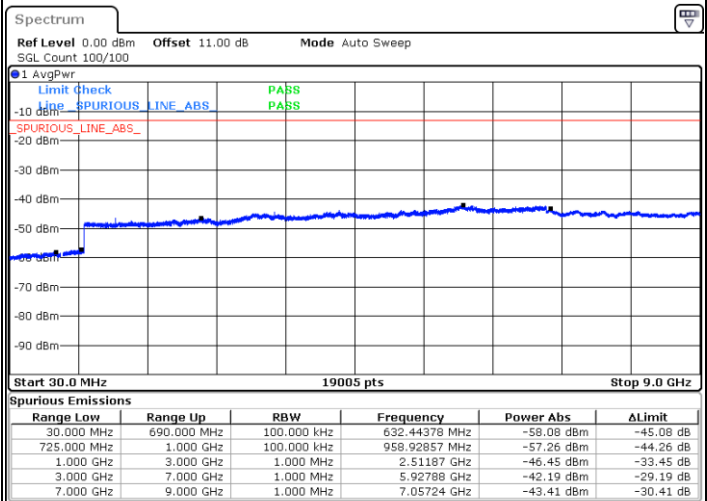
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 22.APR.2020 17:12:58

Lowest Channel / 16QAM

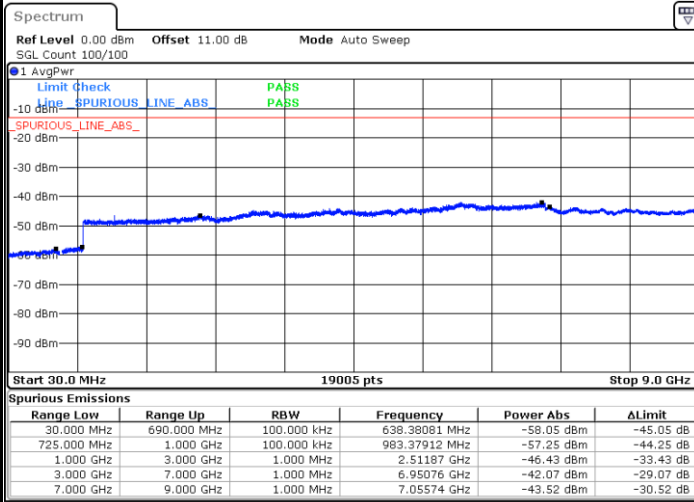


Date: 22.APR.2020 17:13:38



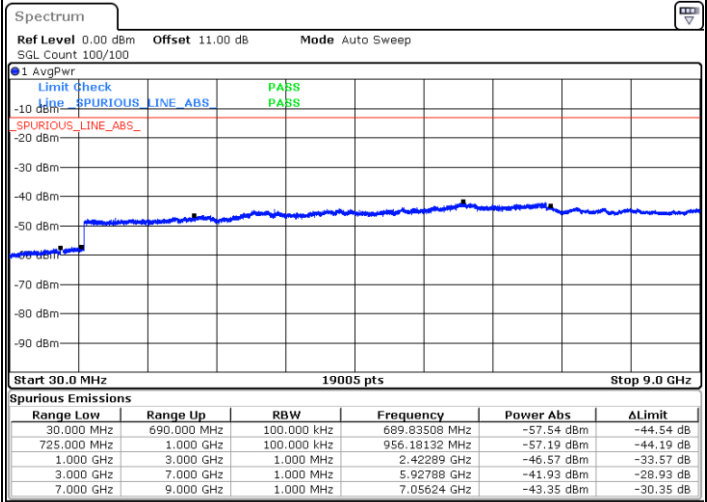
LTE Band 12 / 10MHz

Middle Channel / QPSK



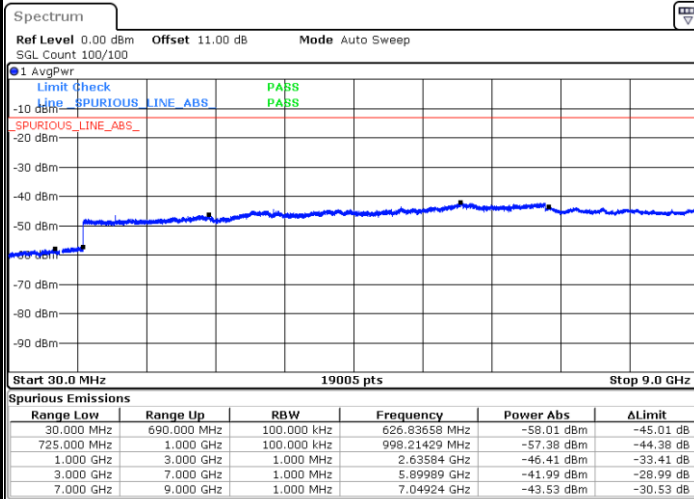
Date: 22.APR.2020 17:15:45

Middle Channel / 16QAM



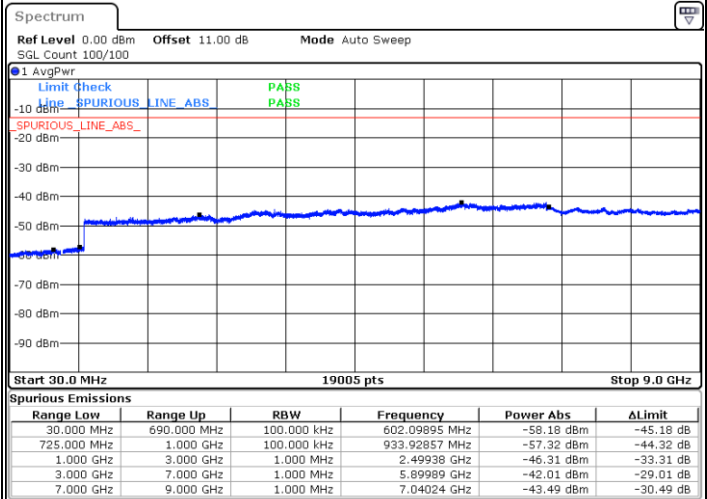
Date: 22.APR.2020 17:15:05

Highest Channel / QPSK



Date: 22.APR.2020 17:21:17

Highest Channel / 16QAM

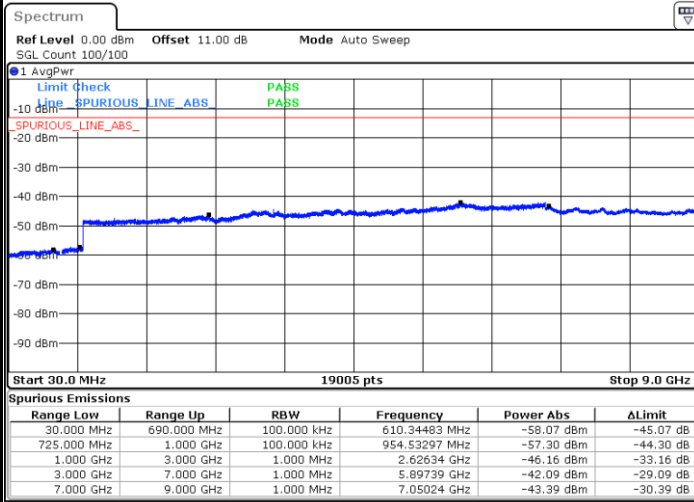


Date: 22.APR.2020 17:21:58



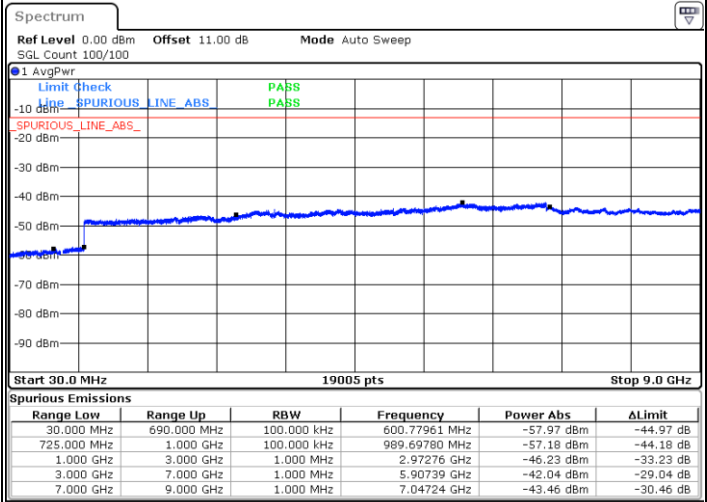
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



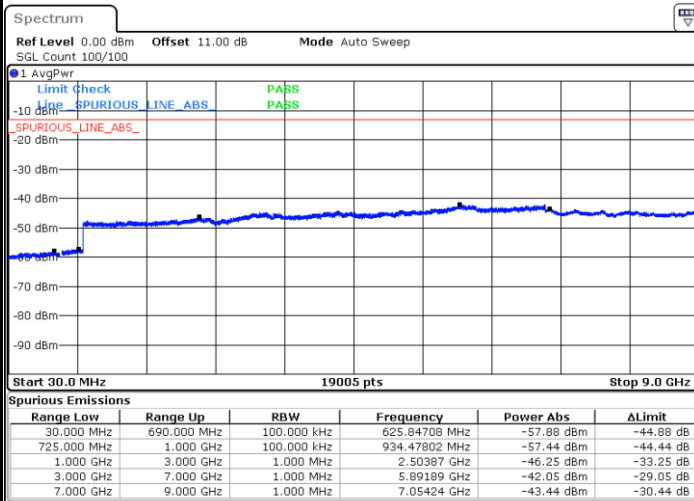
Date: 22.APR.2020 19:13:47

Middle Channel / 64QAM



Date: 22.APR.2020 19:14:29

Highest Channel / 64QAM

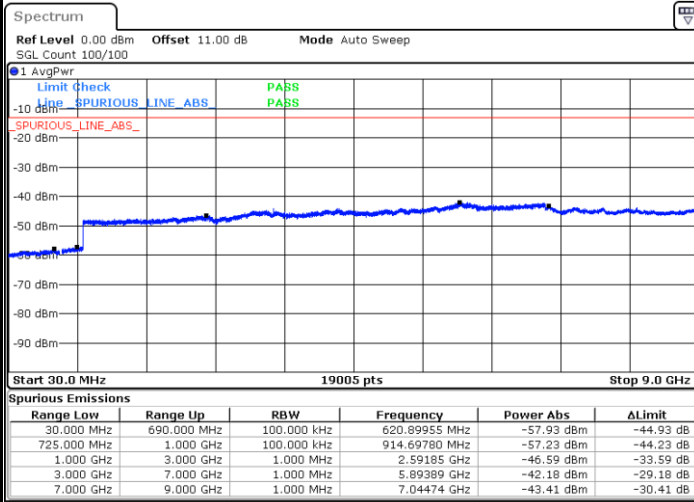


Date: 22.APR.2020 19:17:13



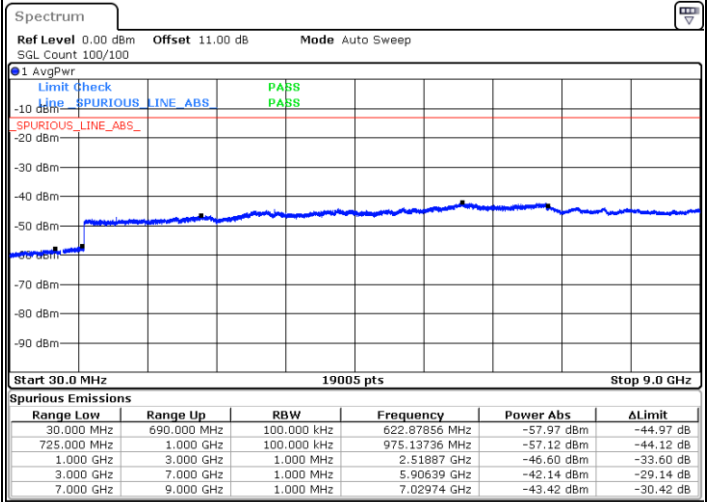
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



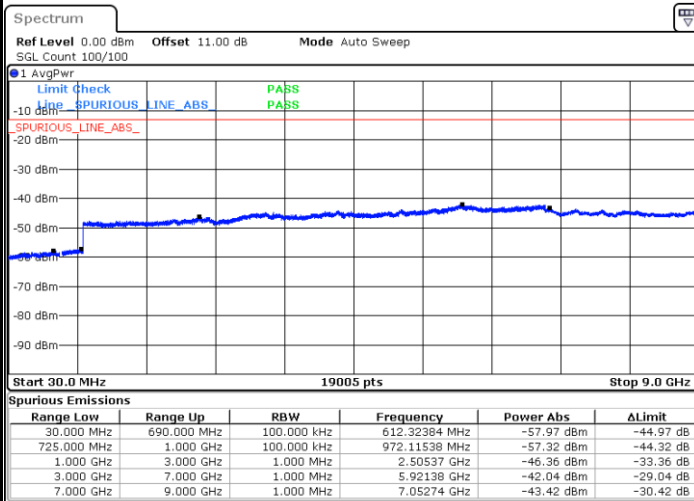
Date: 22.APR.2020 17:45:37

Middle Channel / 64QAM



Date: 22.APR.2020 17:46:40

Highest Channel / 64QAM

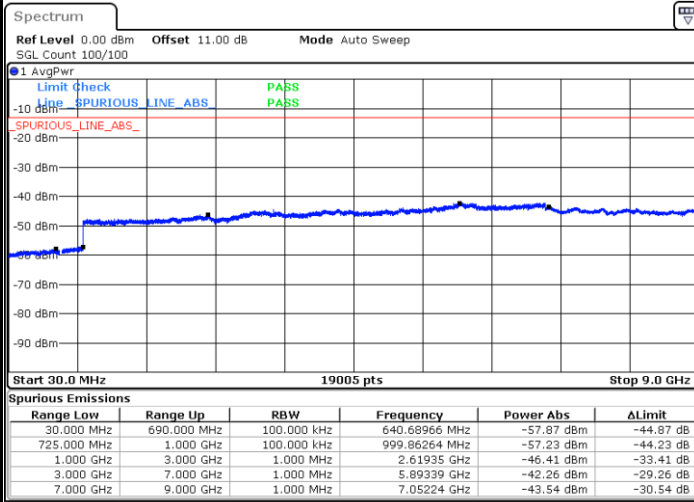


Date: 22.APR.2020 17:49:46



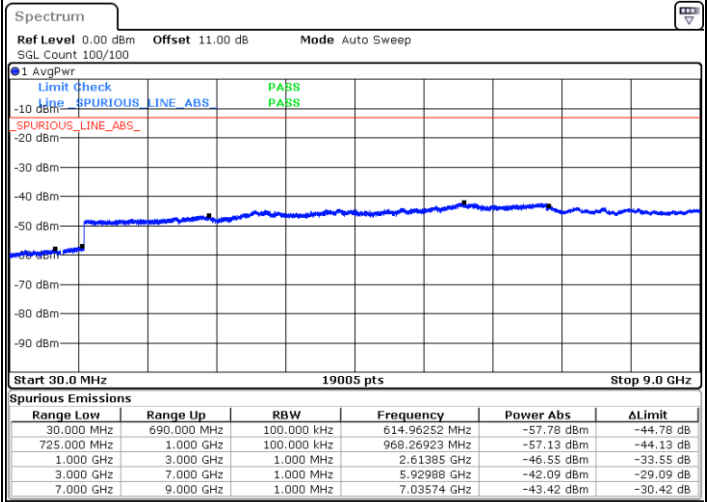
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



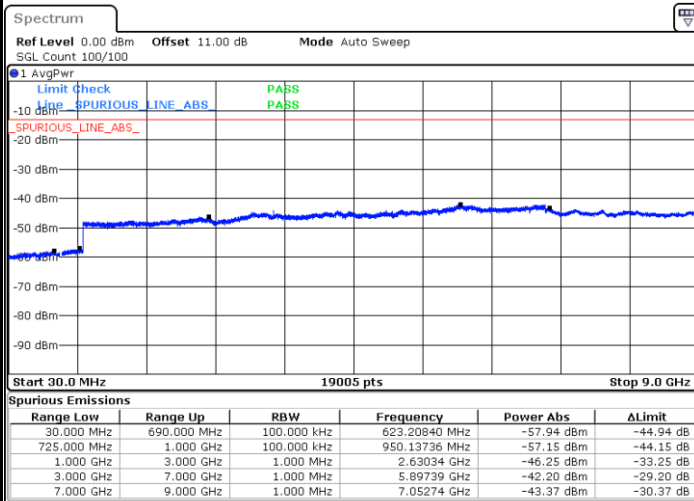
Date: 22.APR.2020 17:52:52

Middle Channel / 64QAM



Date: 22.APR.2020 17:53:56

Highest Channel / 64QAM

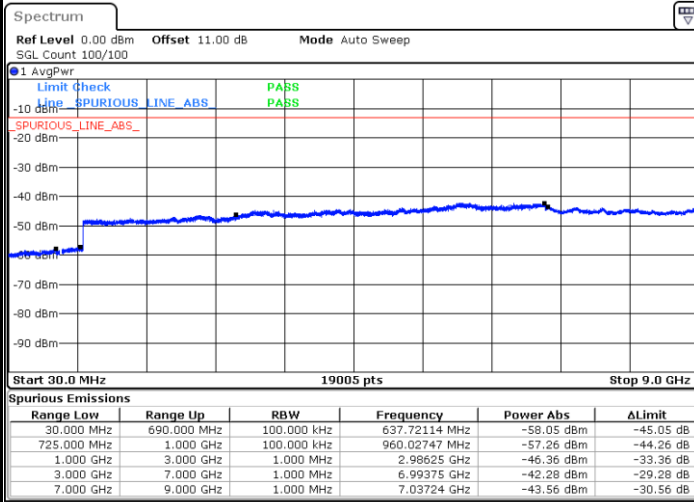


Date: 22.APR.2020 17:57:05



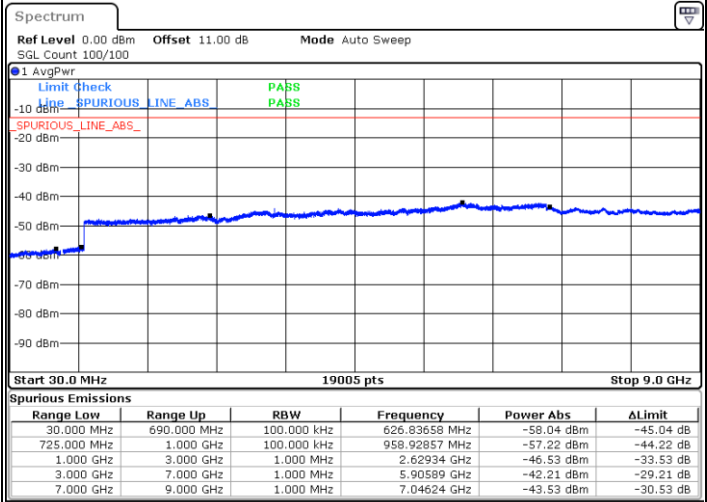
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



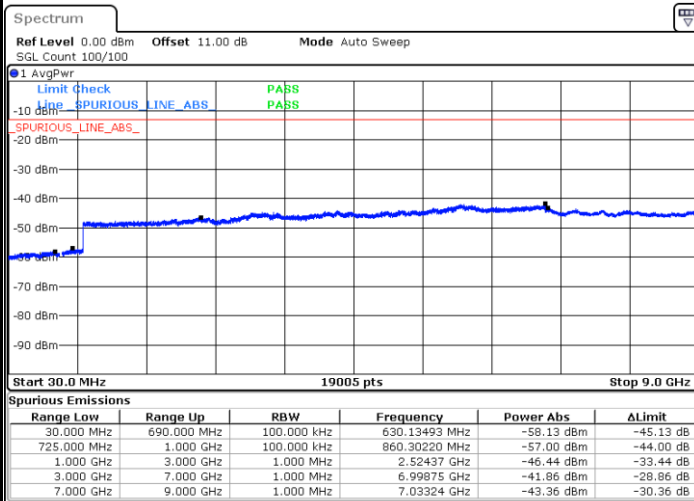
Date: 22.APR.2020 18:55:11

Middle Channel / 64QAM



Date: 22.APR.2020 18:56:16

Highest Channel / 64QAM



Date: 22.APR.2020 18:59:26

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	0.0180	PASS
40	Normal Voltage	0.0201	
30	Normal Voltage	0.0170	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0168	
0	Normal Voltage	0.0177	
-10	Normal Voltage	0.0131	
-20	Normal Voltage	0.0042	
-30	Normal Voltage	0.0213	
20	Maximum Voltage	0.0199	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0025	

Note:

1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.1 V. ; Maximum Voltage =3.6 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

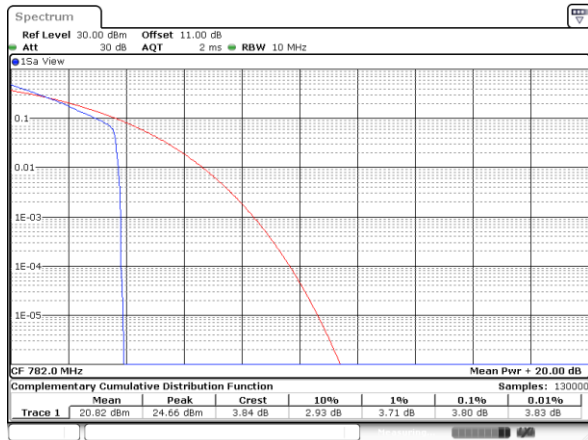
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.80	5.22	5.68	6.26	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.58	6.78	-	-	
Highest CH	-	-	-	-	



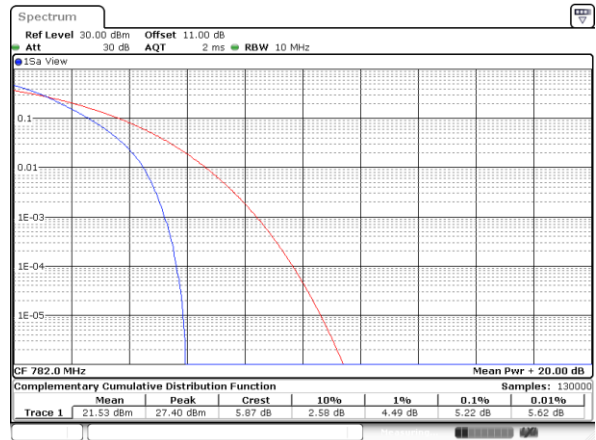
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 22.APR.2020 11:59:36

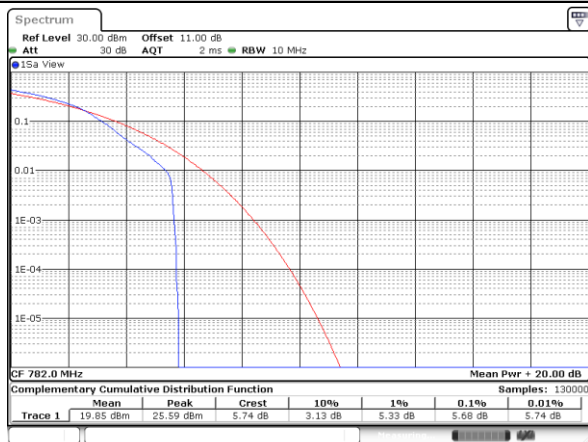
Middle Channel / Full RB



Date: 22.APR.2020 11:59:46

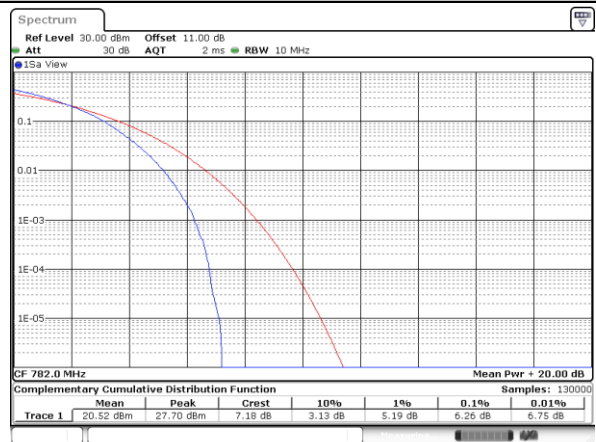
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 22.APR.2020 11:59:16

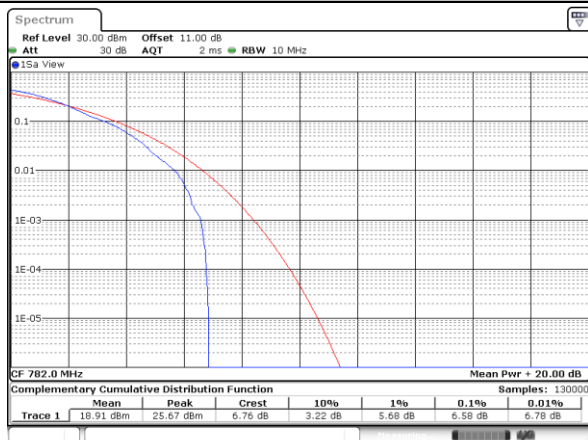
Middle Channel / Full RB



Date: 22.APR.2020 11:59:26

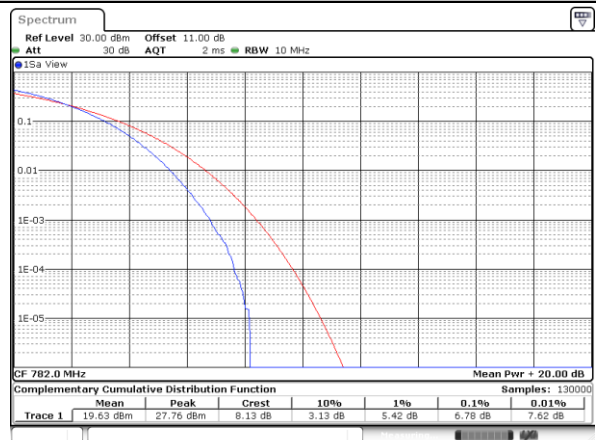
LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 22.APR.2020 11:58:55

Middle Channel / Full RB



Date: 22.APR.2020 11:59:07

**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	-	-	-	-	4.94	4.86	-	-	-	-	-	-
Middle CH	-	-	-	-	4.92	4.95	9.75	9.63	-	-	-	-
Highest CH	-	-	-	-	4.87	4.91	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.83	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.78	-	9.73	-	-	-	-	-
Highest CH	-	-	-	-	4.98	-	-	-	-	-	-	-