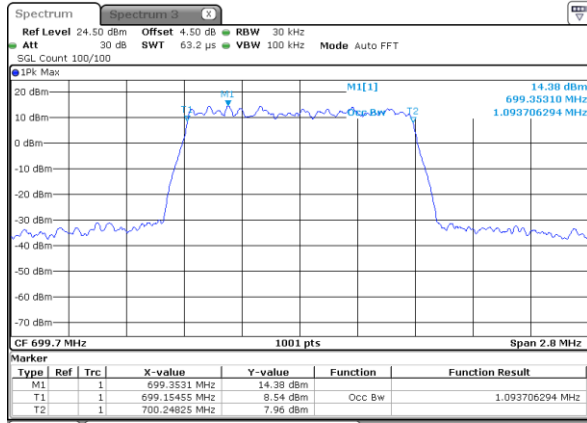


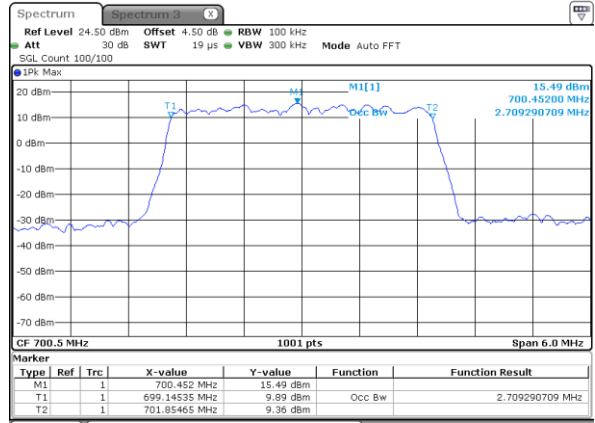


LTE Band 12

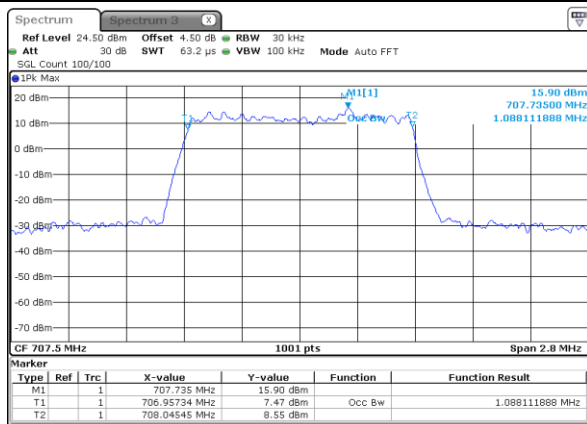
Lowest Channel / 1.4MHz / 64QAM



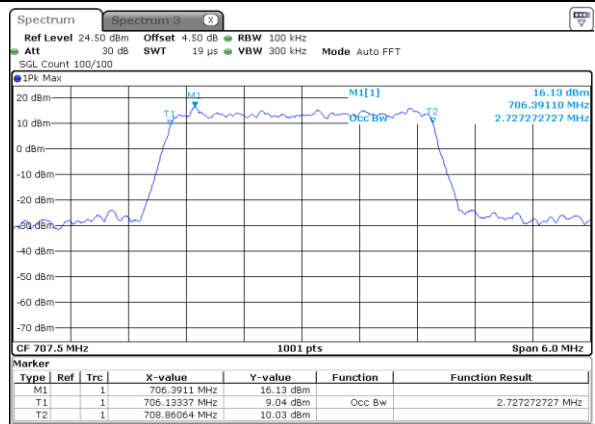
Lowest Channel / 3MHz / 64QAM



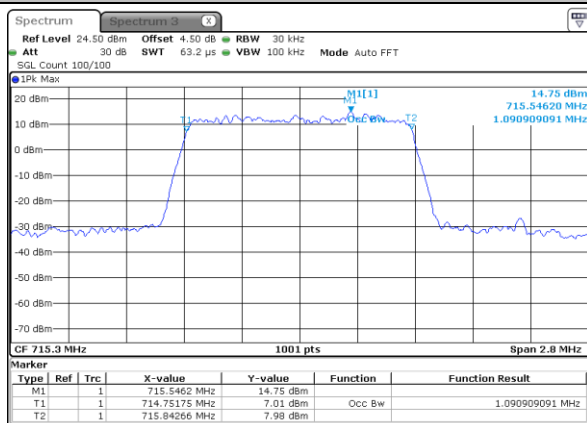
Middle Channel / 1.4MHz / 64QAM



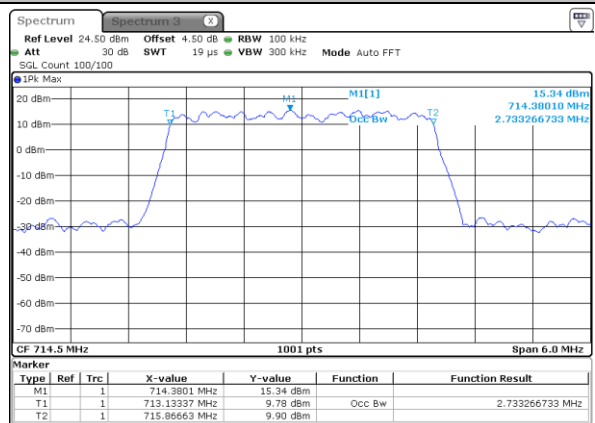
Middle Channel / 3MHz / 64QAM



Highest Channel / 1.4MHz / 64QAM



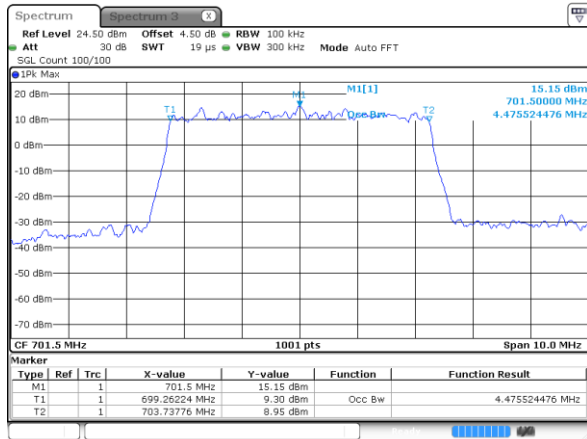
Highest Channel / 3MHz / 64QAM



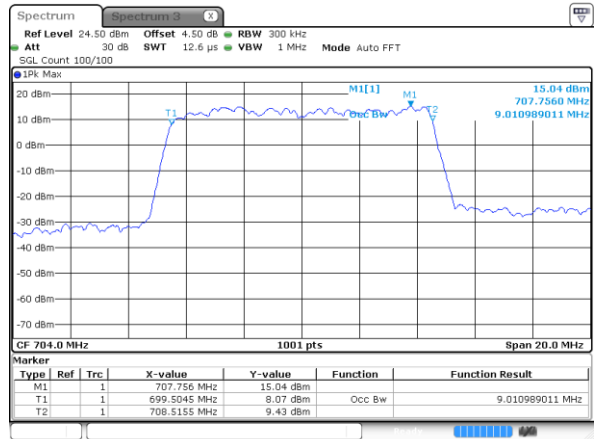


LTE Band 12

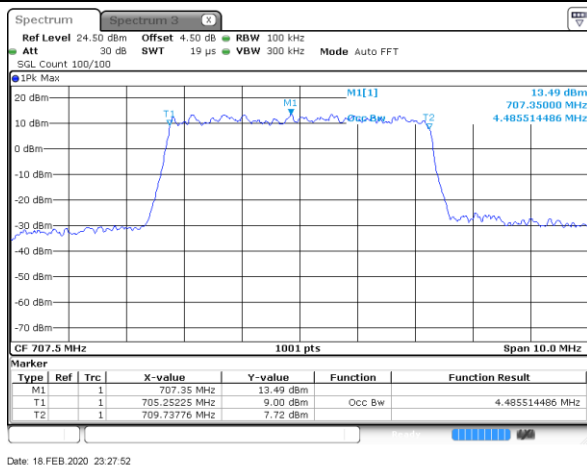
Lowest Channel / 5MHz / 64QAM



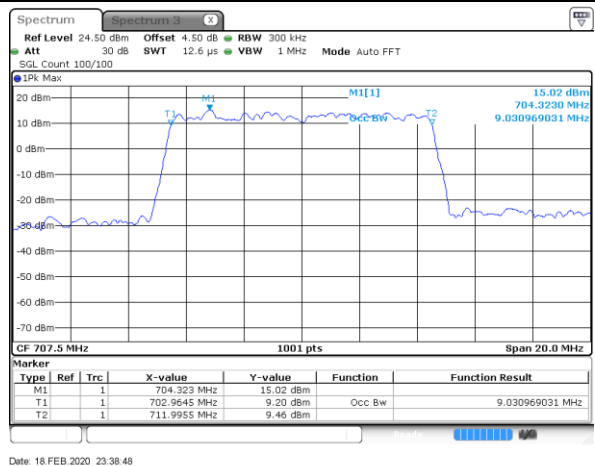
Lowest Channel / 10MHz / 64QAM



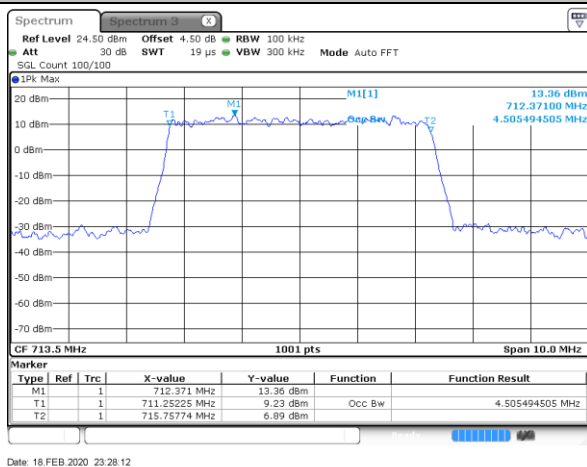
Middle Channel / 5MHz / 64QAM



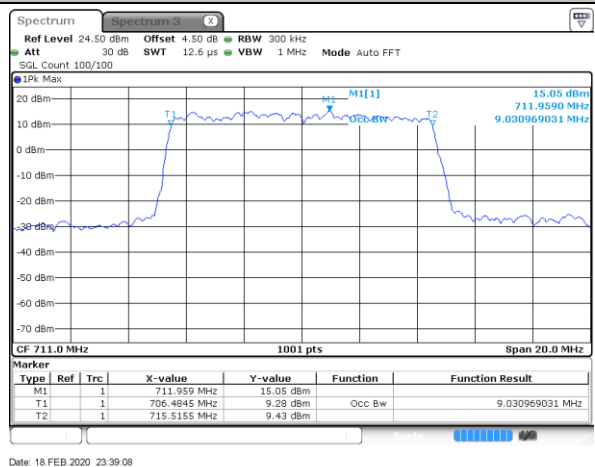
Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



Highest Channel / 10MHz / 64QAM

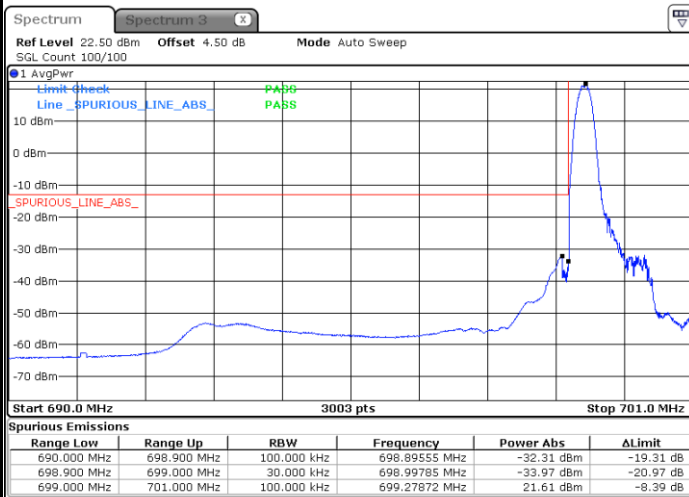




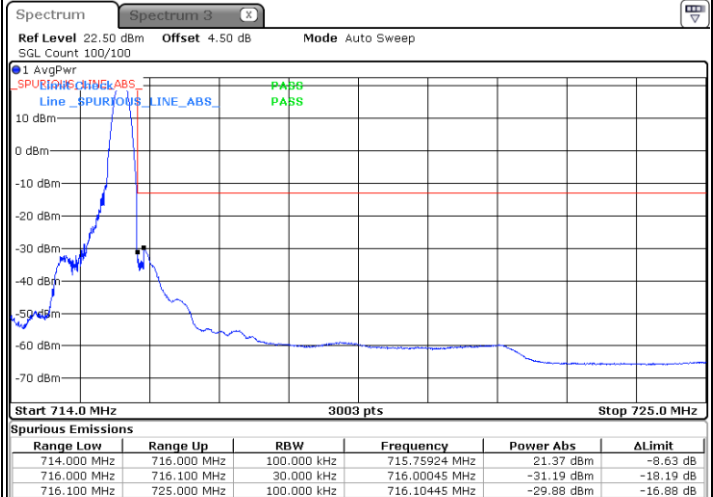
Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

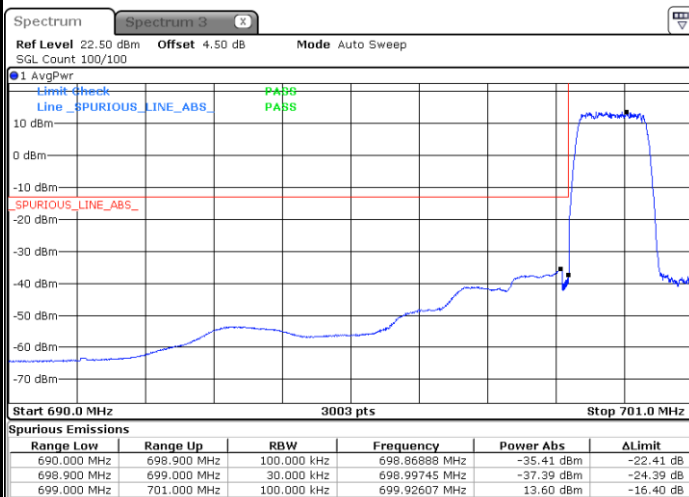
Lowest Band Edge / 1 RB



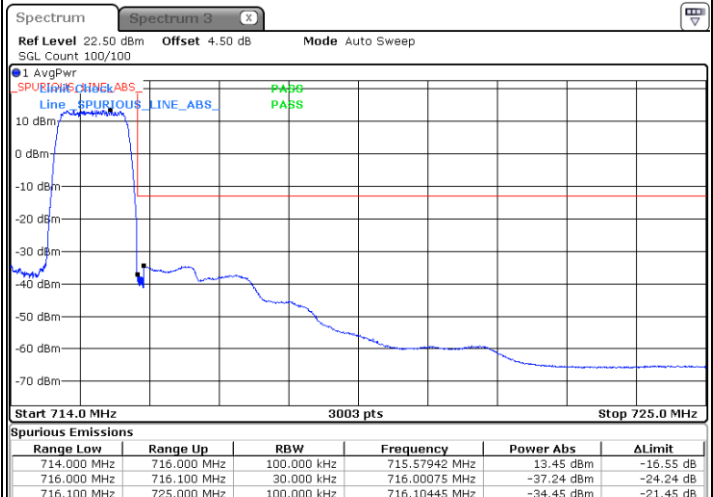
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



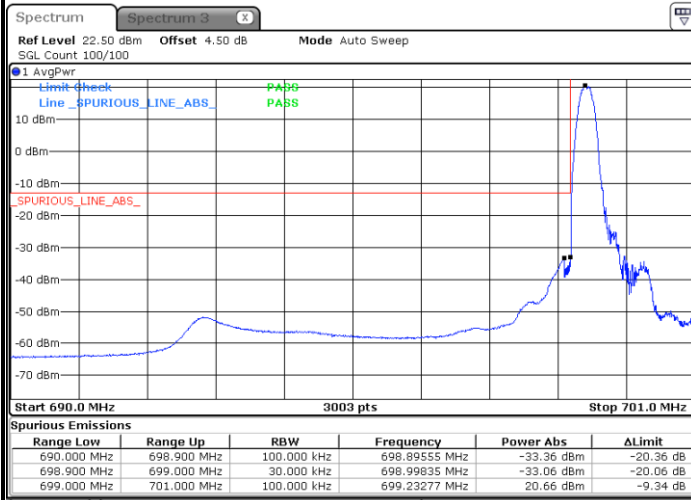
Highest Band Edge / Full RB



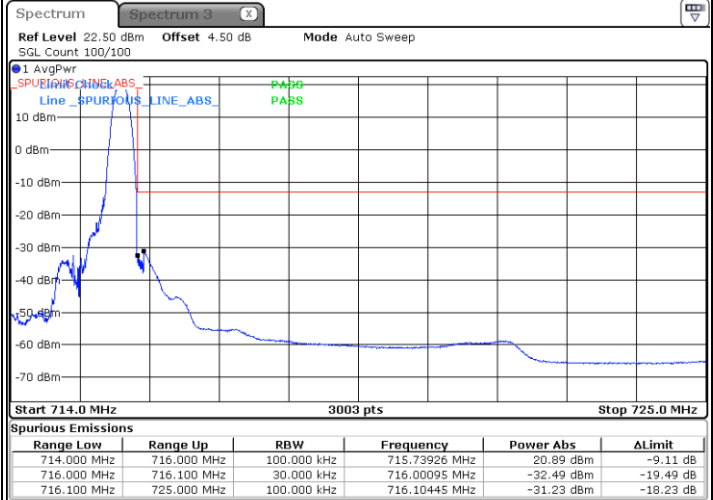


LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



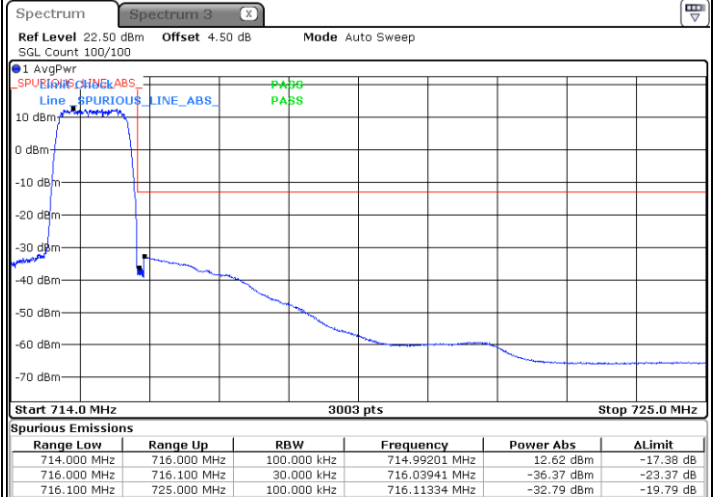
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



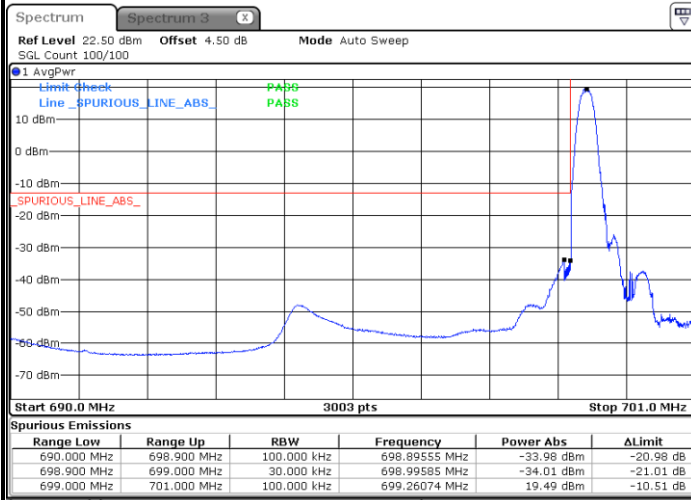
Highest Band Edge / Full RB



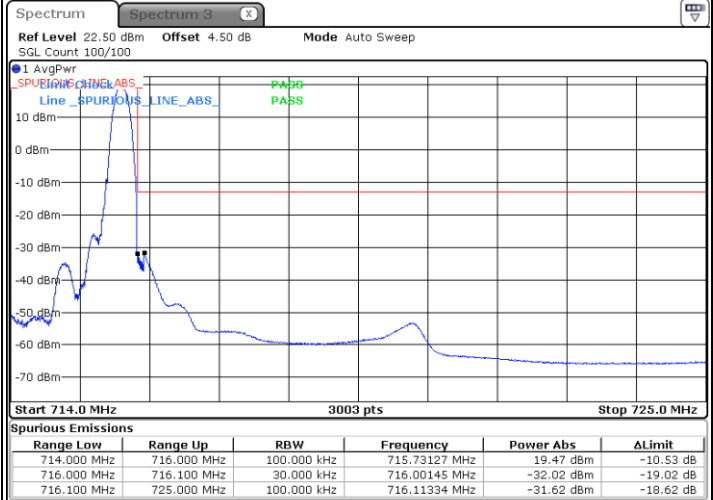


LTE Band 12 / 1.4MHz / 64QAM

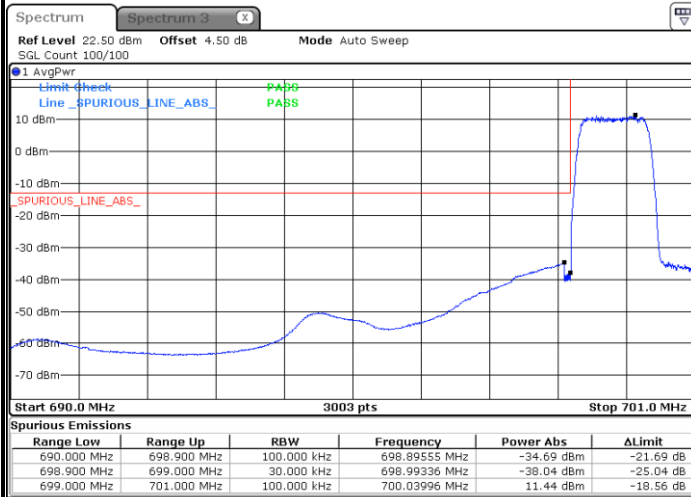
Lowest Band Edge / 1 RB



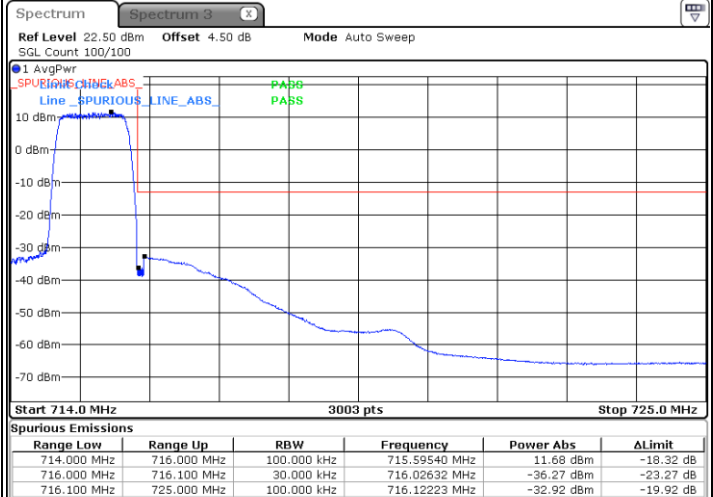
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



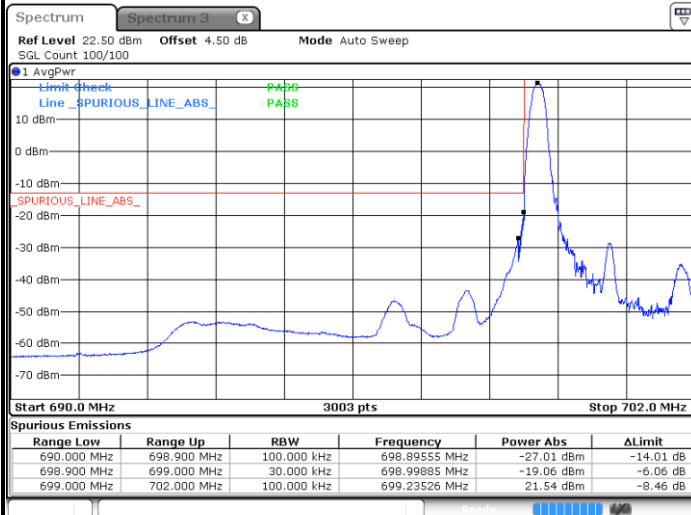
Highest Band Edge / Full RB



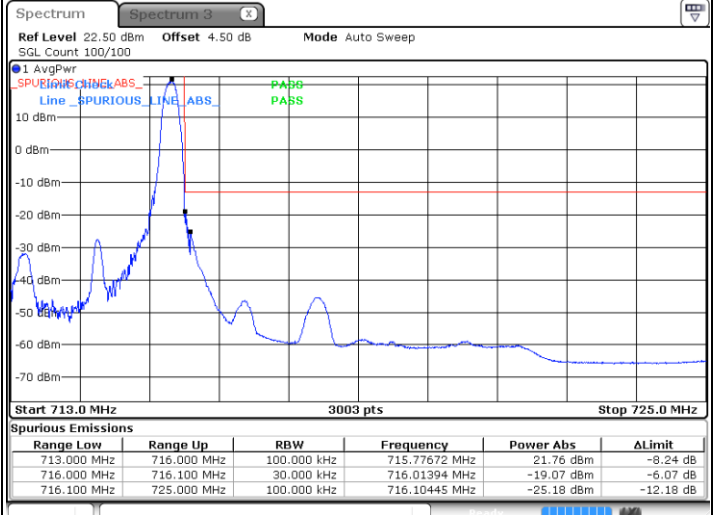


LTE Band 12 / 3MHz / QPSK

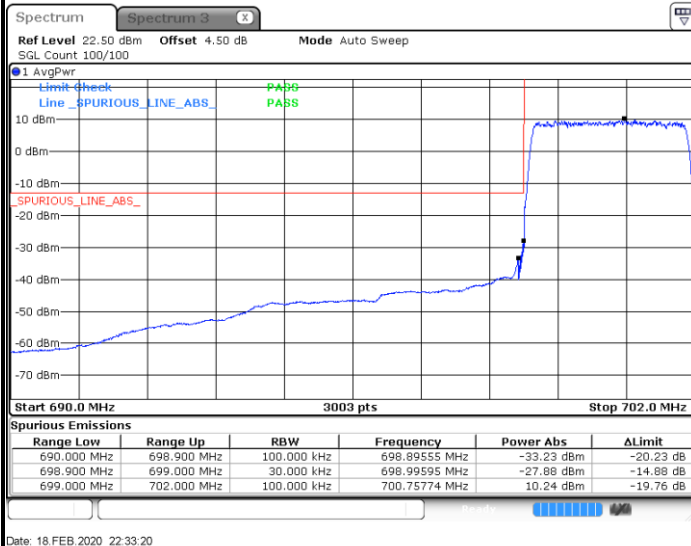
Lowest Band Edge / 1RB



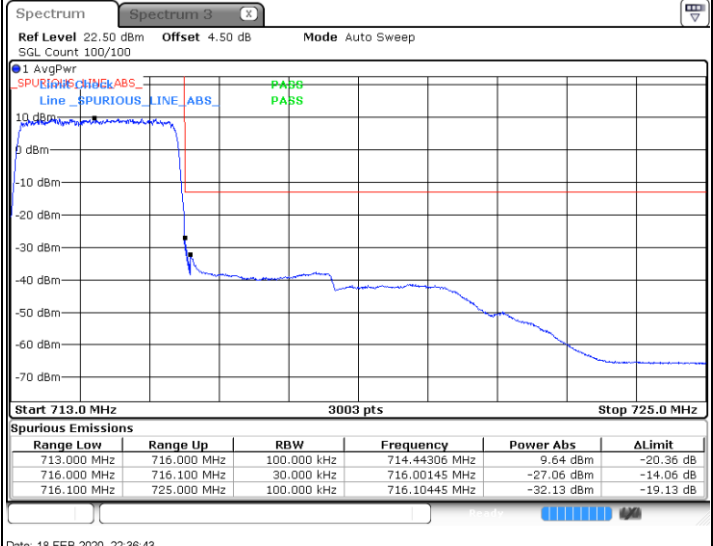
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



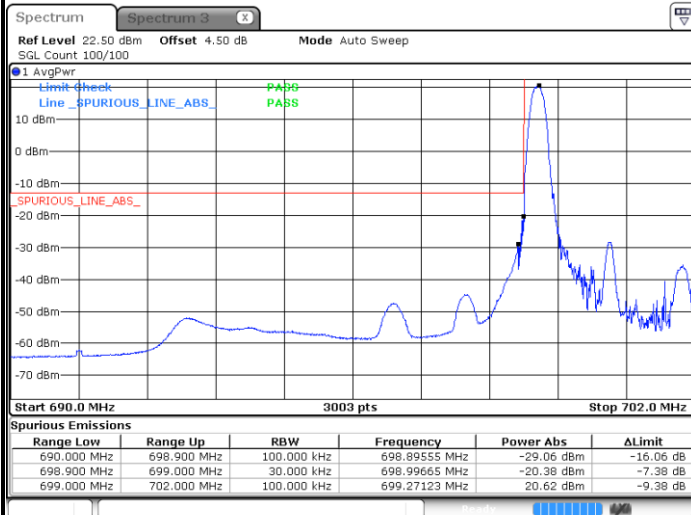
Highest Band Edge / Full RB



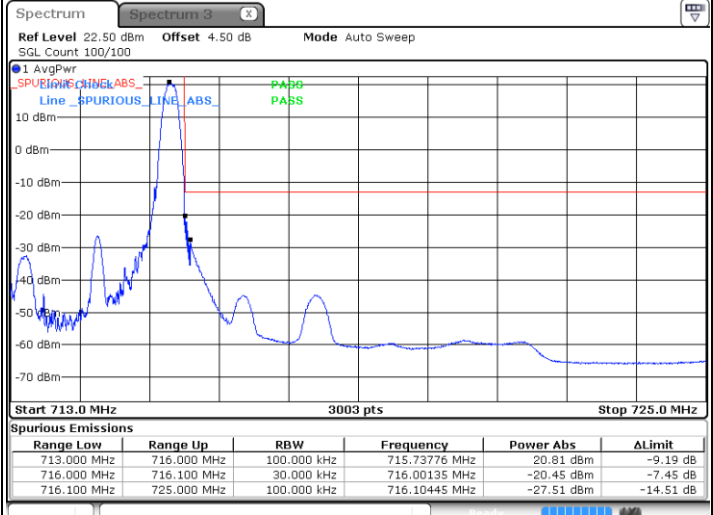


LTE Band 12 / 3MHz / 16QAM

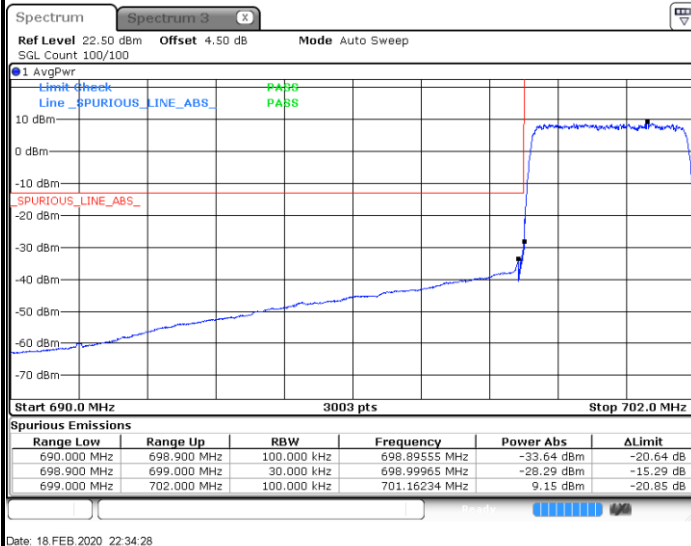
Lowest Band Edge / 1 RB



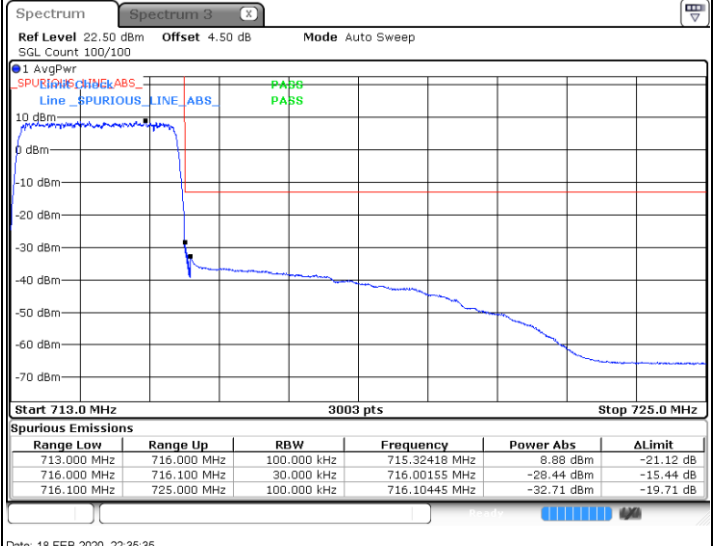
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



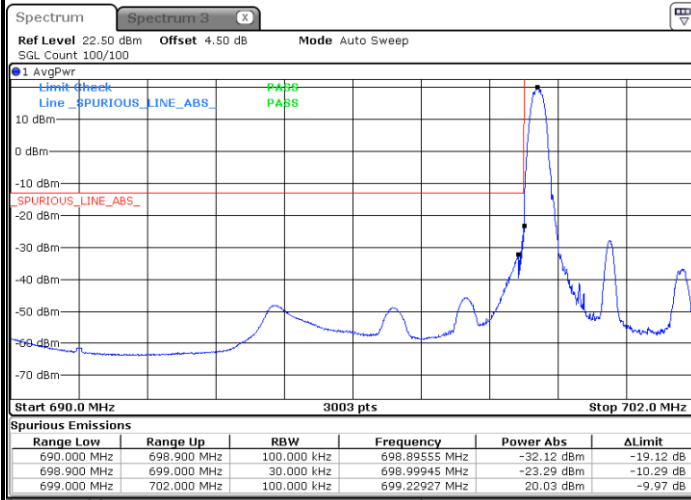
Highest Band Edge / Full RB



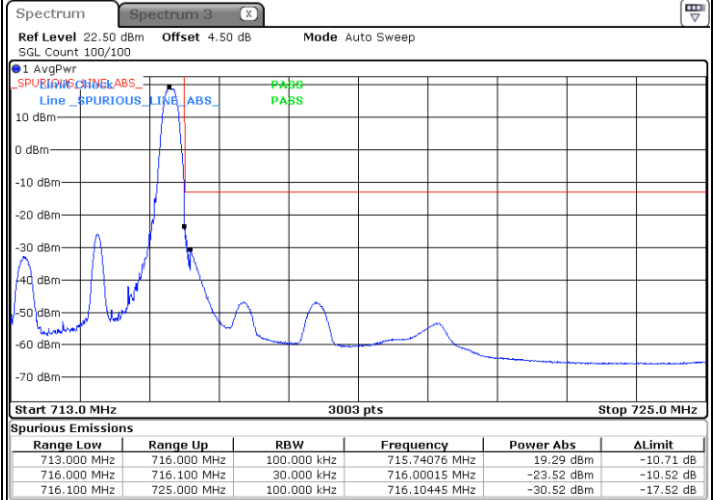


LTE Band 12 / 3MHz / 64QAM

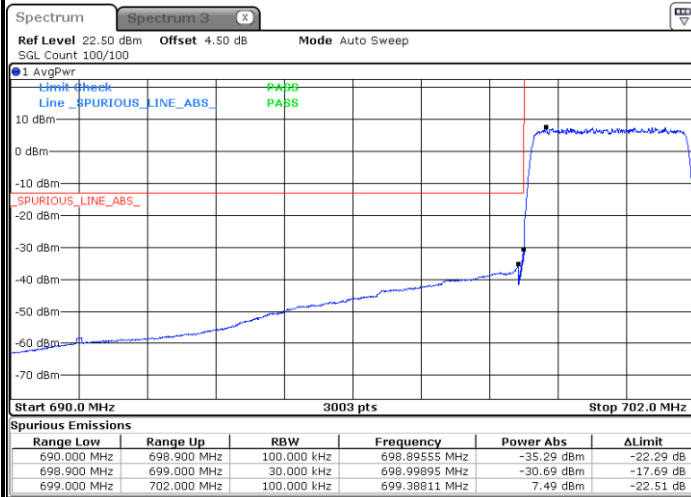
Lowest Band Edge / 1 RB



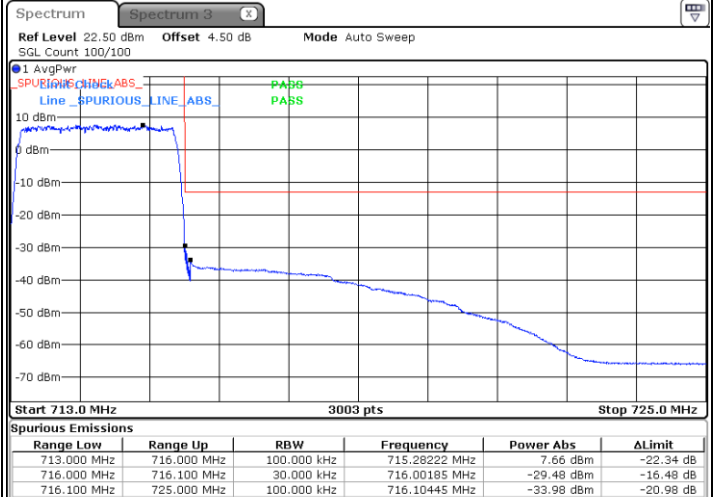
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



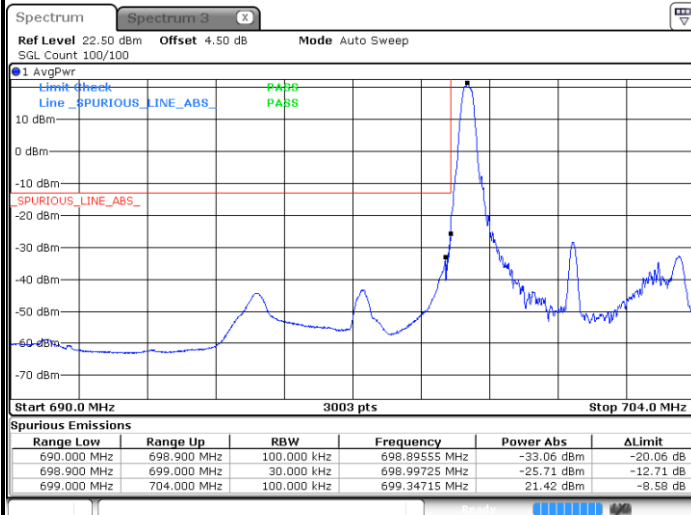
Highest Band Edge / Full RB



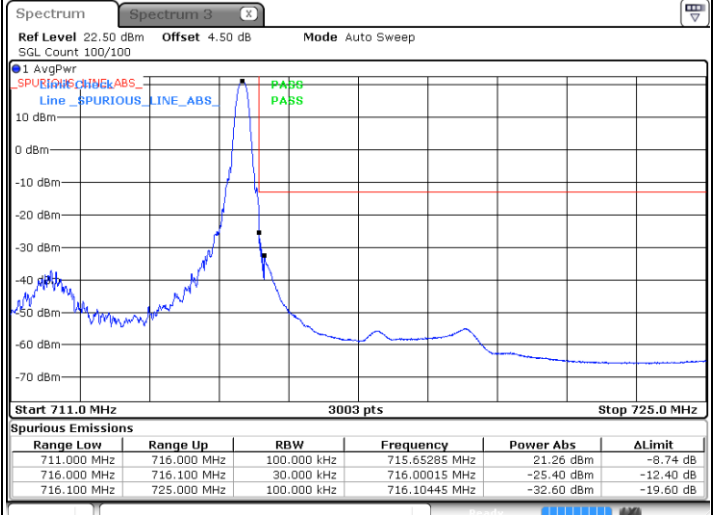


LTE Band 12 / 5MHz / QPSK

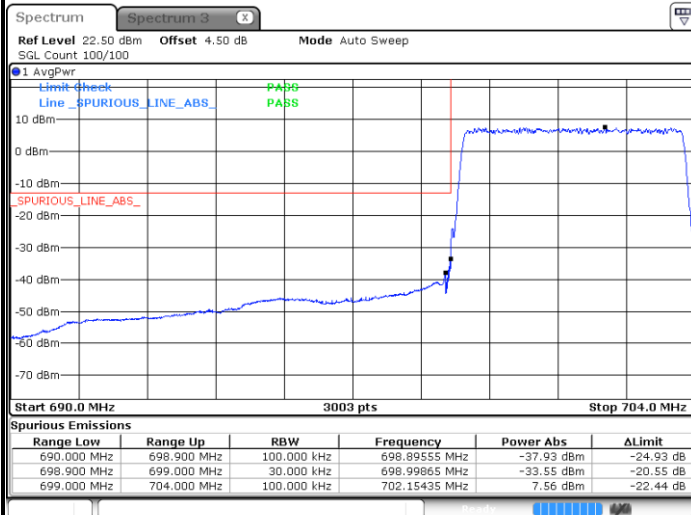
Lowest Band Edge / 1 RB



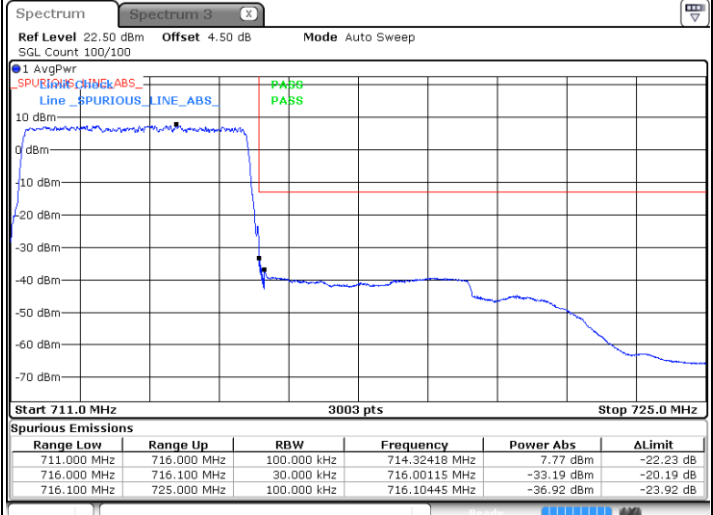
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



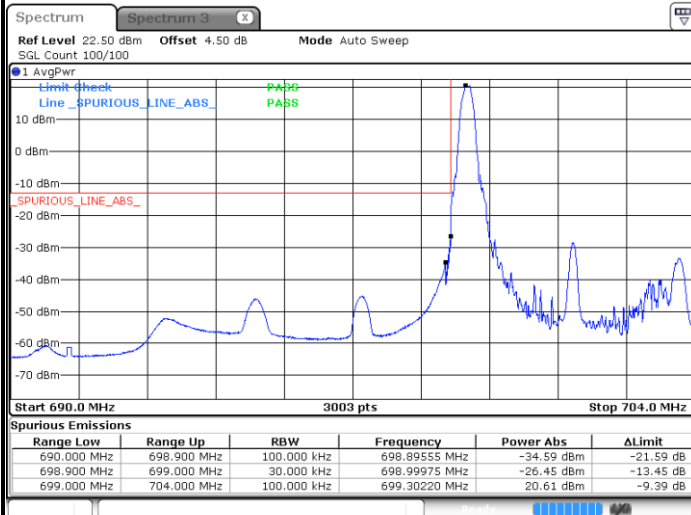
Highest Band Edge / Full RB



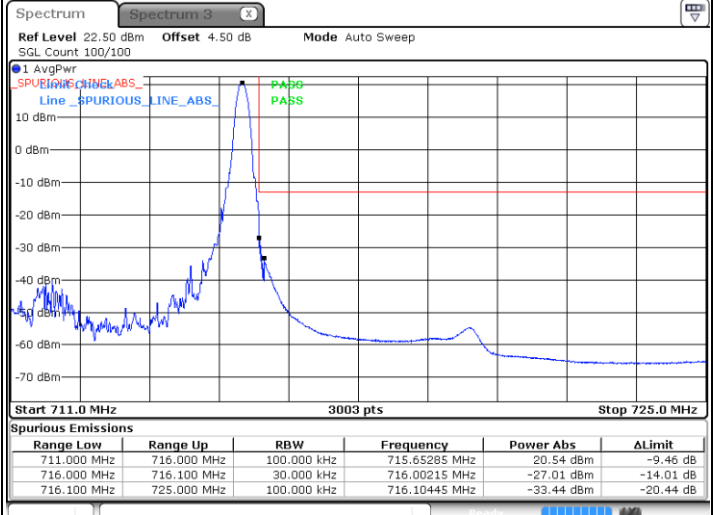


LTE Band 12 / 5MHz / 16QAM

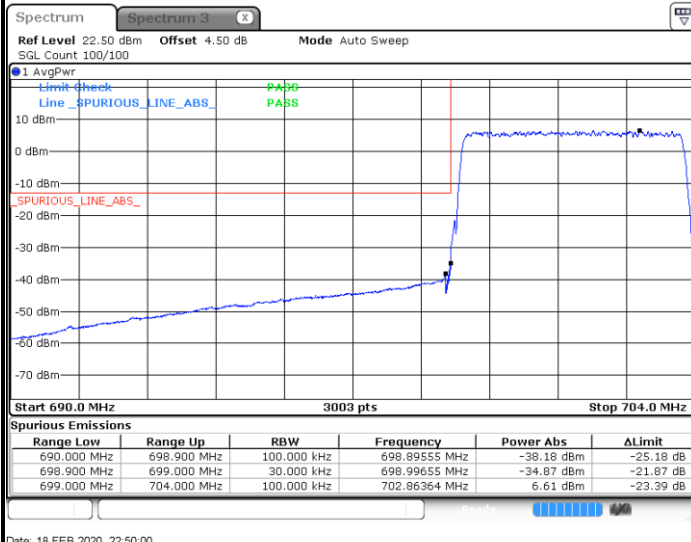
Lowest Band Edge / 1RB



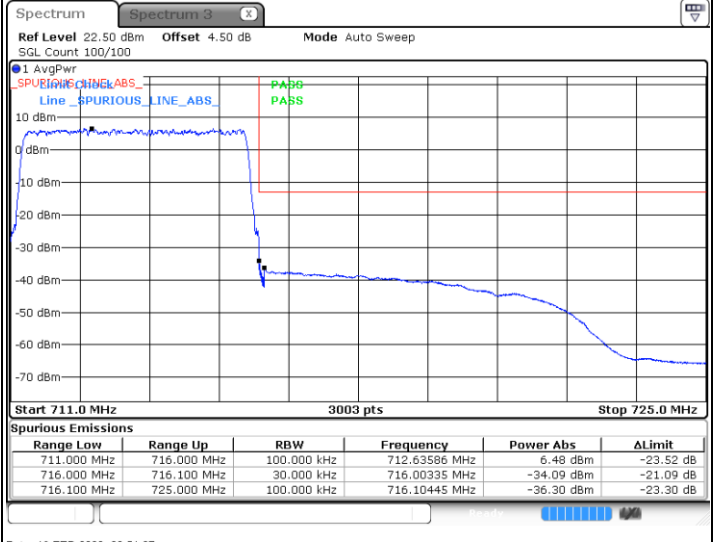
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



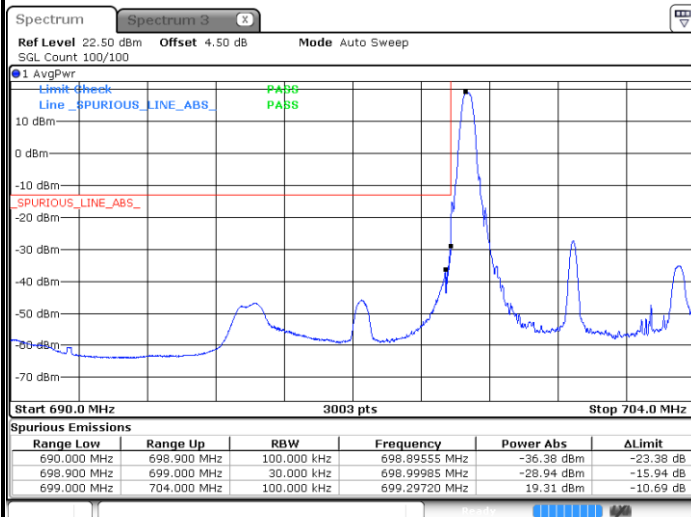
Highest Band Edge / Full RB



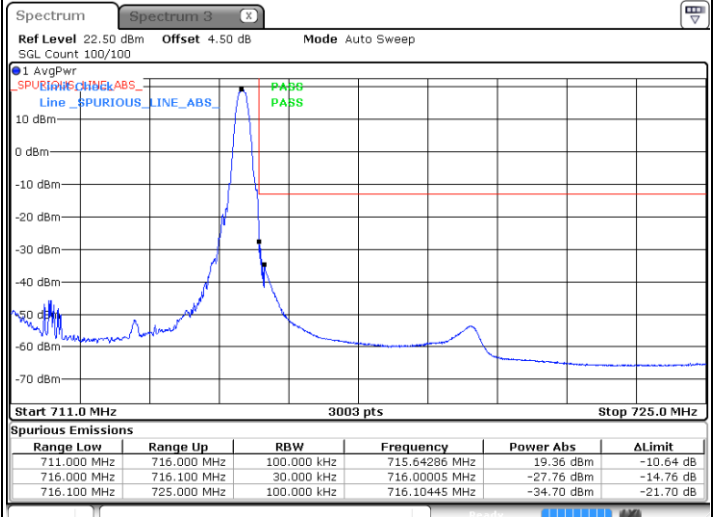


LTE Band 12 / 5MHz / 64QAM

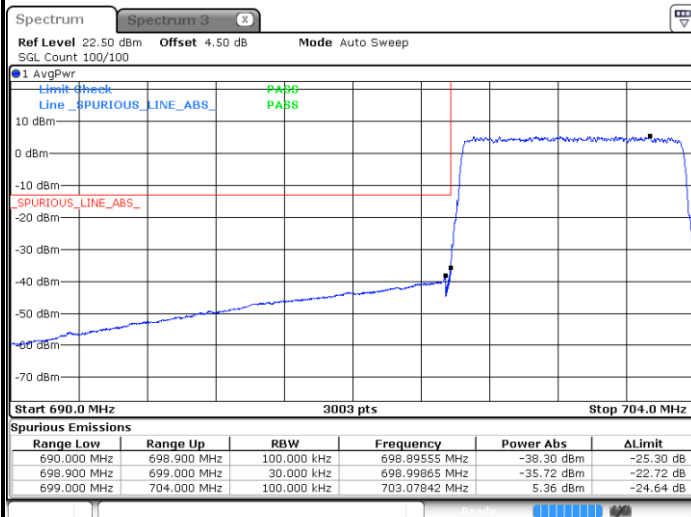
Lowest Band Edge / 1RB



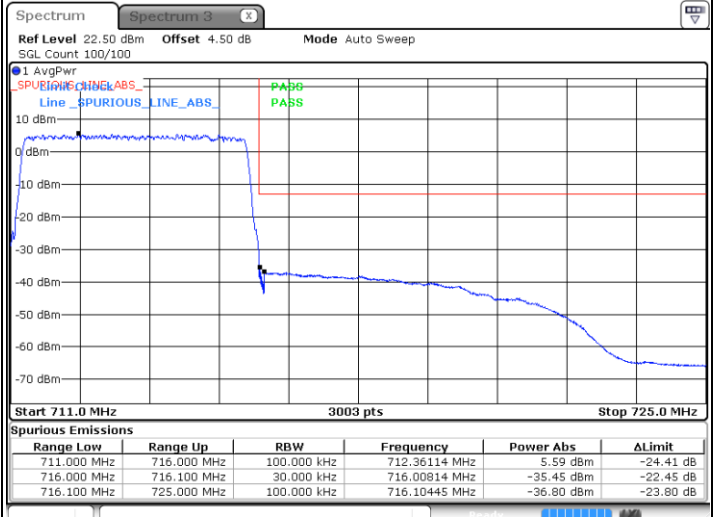
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



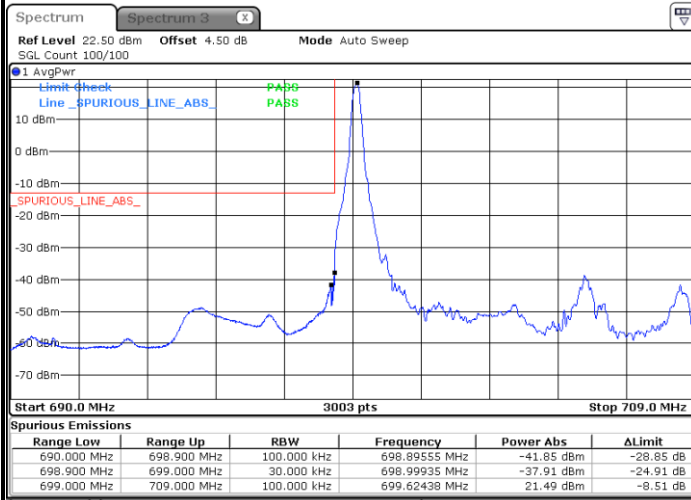
Highest Band Edge / Full RB



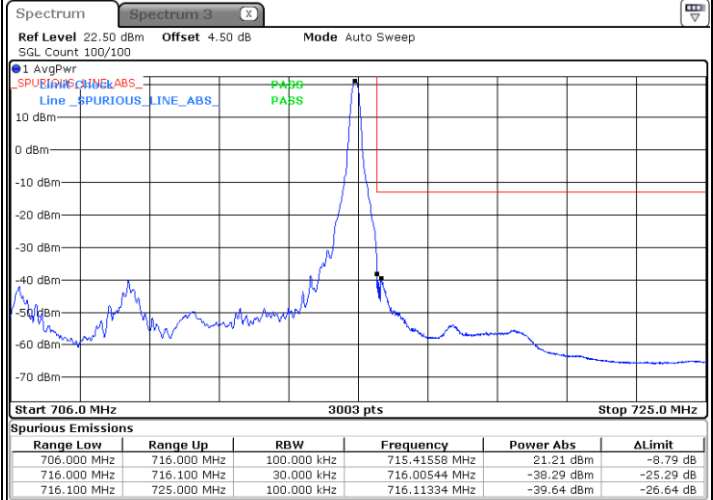


LTE Band 12 / 10MHz / QPSK

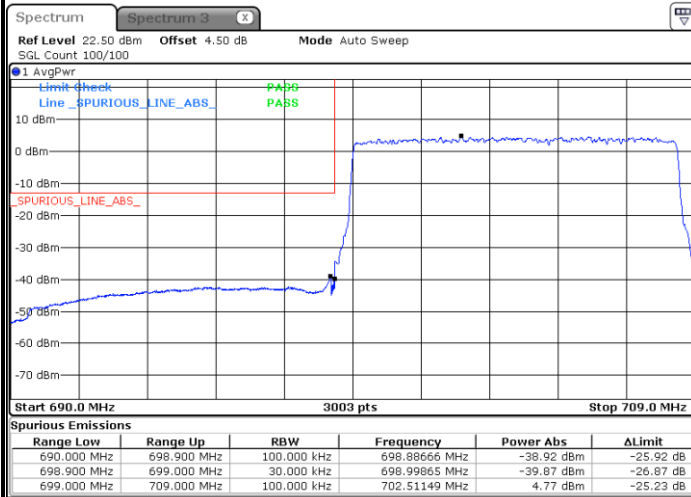
Lowest Band Edge / 1 RB



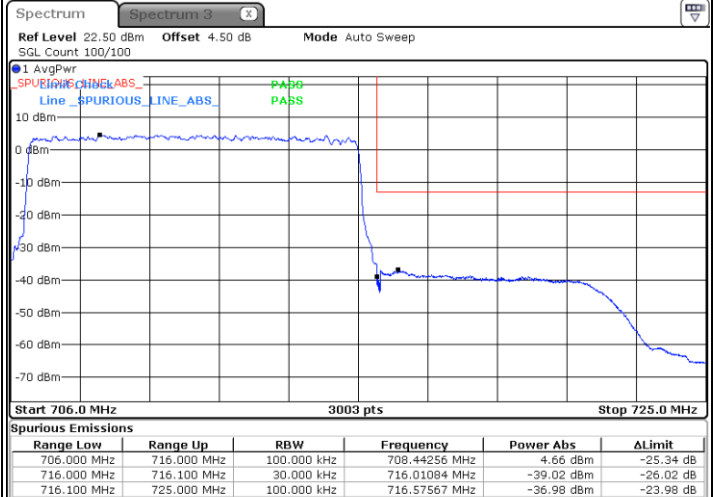
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



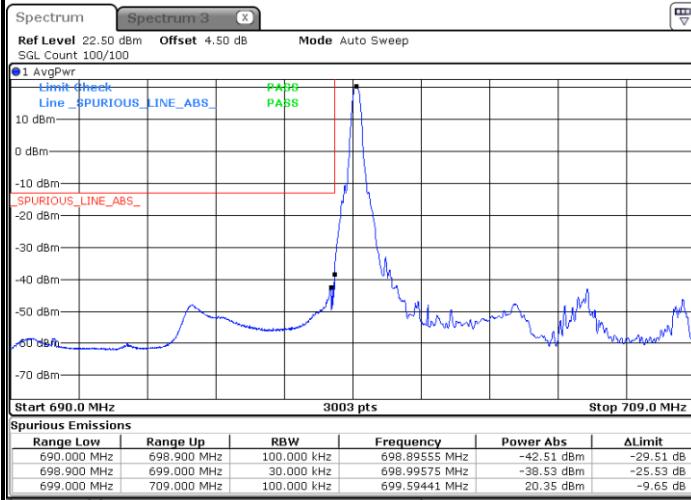
Highest Band Edge / Full RB



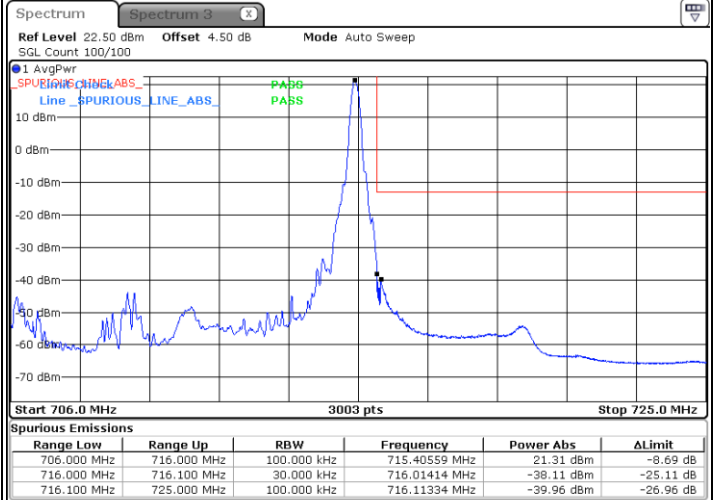


LTE Band 12 / 10MHz / 16QAM

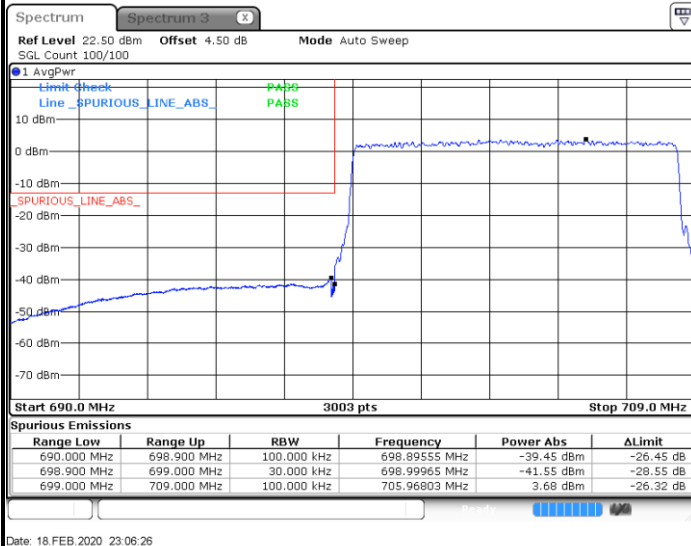
Lowest Band Edge / 1 RB



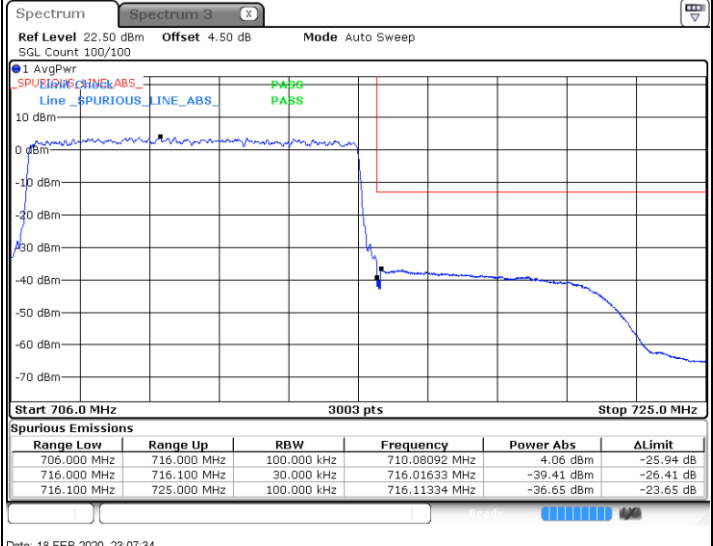
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



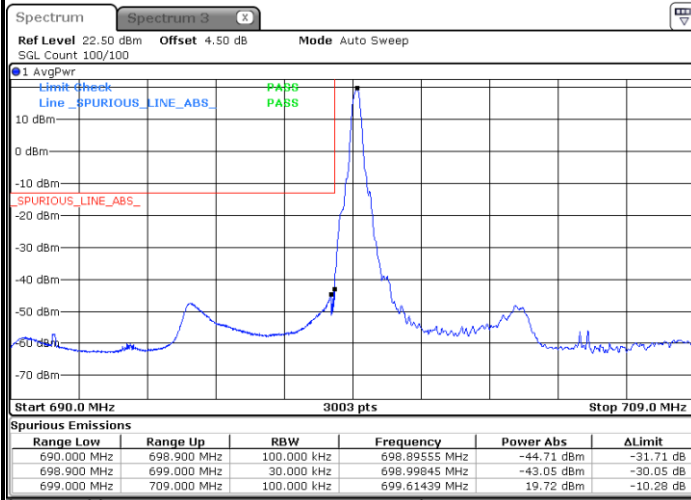
Highest Band Edge / Full RB



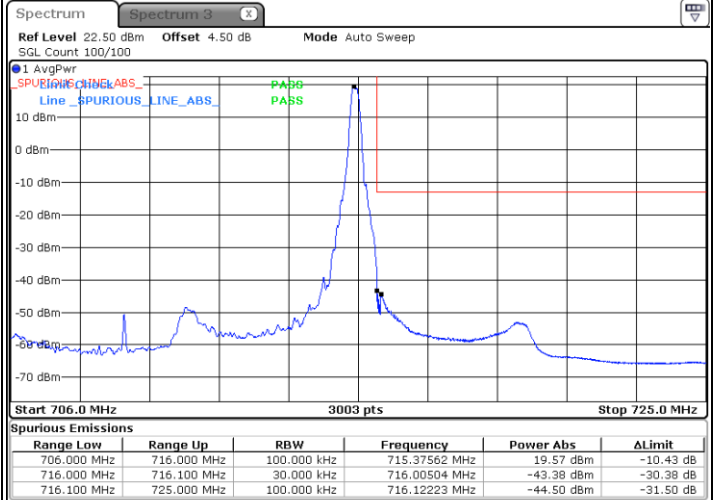


LTE Band 12 / 10MHz / 64QAM

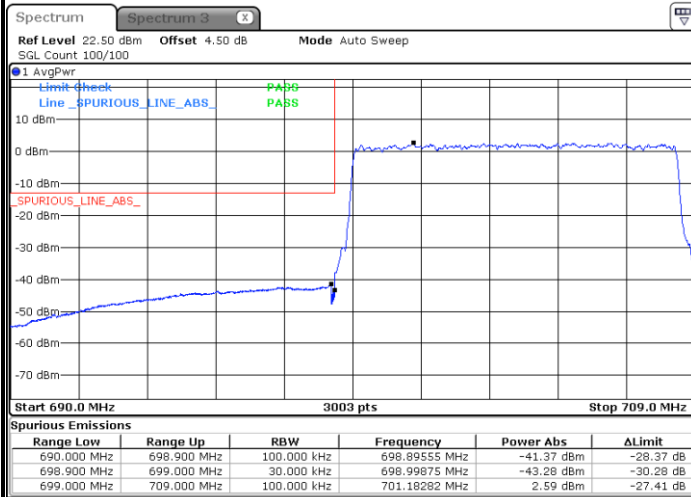
Lowest Band Edge / 1 RB



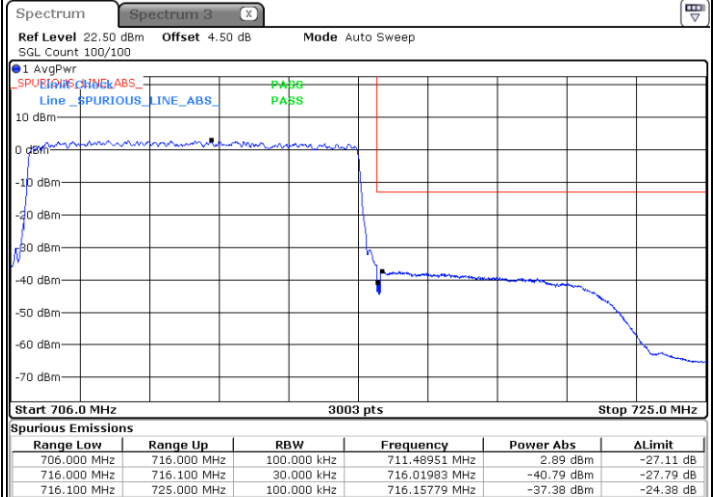
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

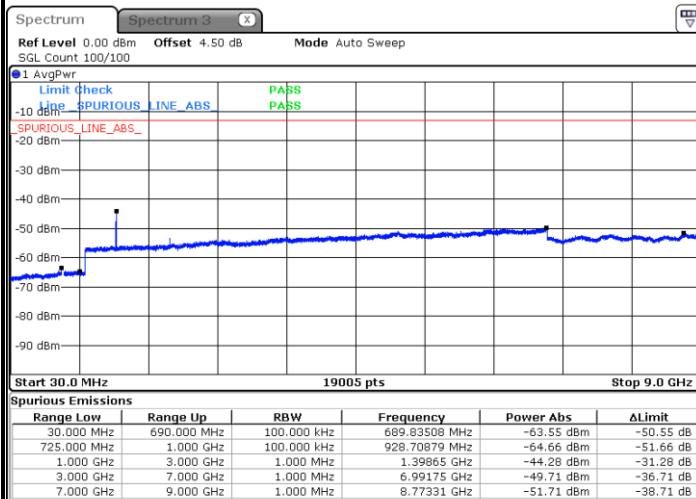




Conducted Spurious Emission

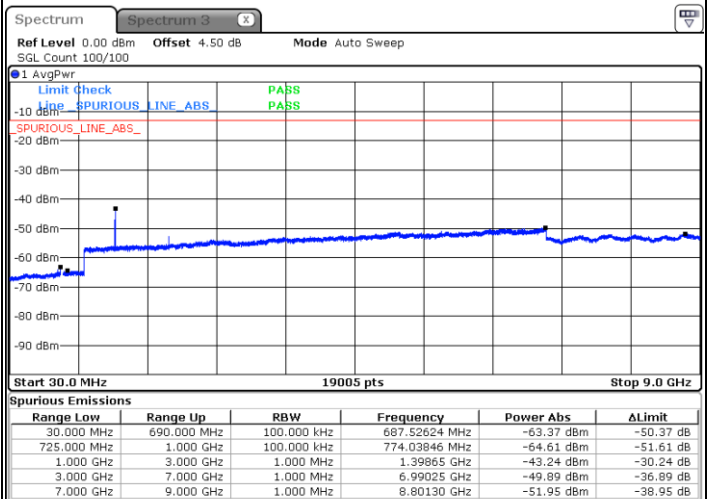
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



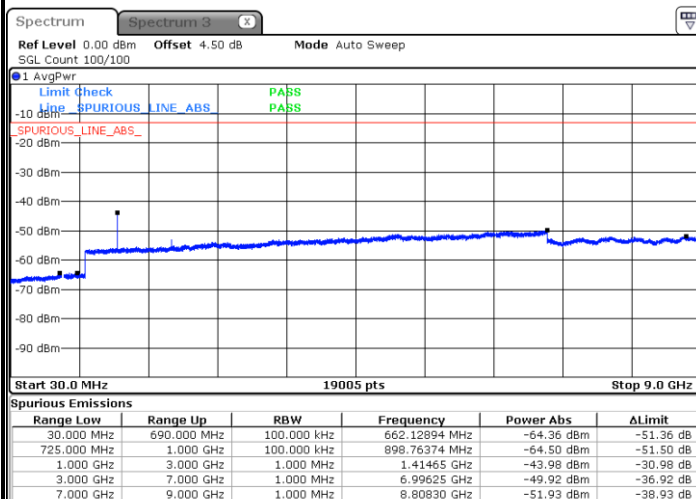
Date: 18 FEB 2020 22:08:59

Lowest Channel / 16QAM



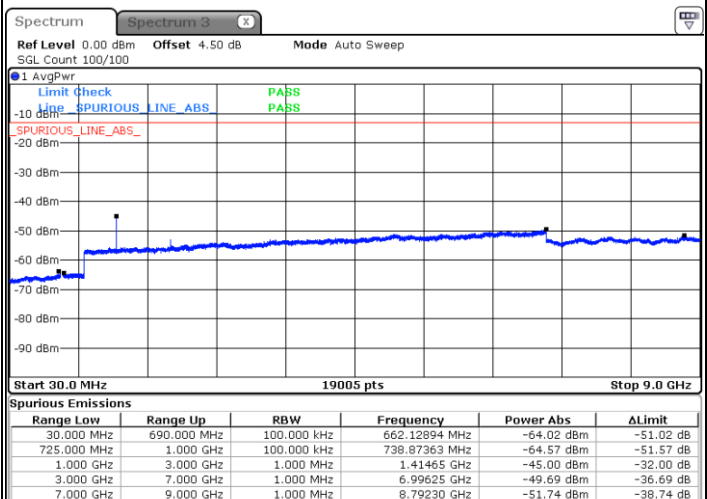
Date: 18 FEB 2020 22:09:53

Middle Channel / QPSK



Date: 18 FEB 2020 22:11:42

Middle Channel / 16QAM

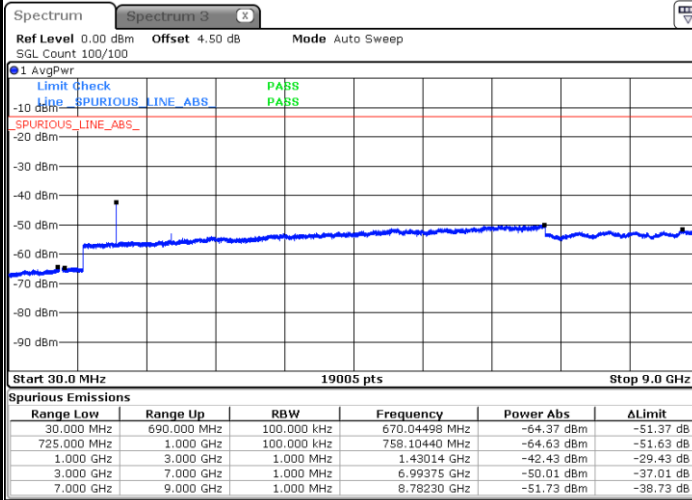


Date: 18 FEB 2020 22:10:47



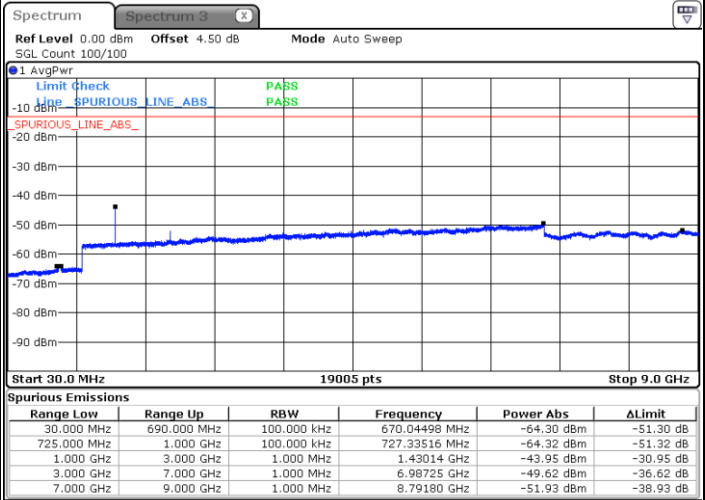
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 18 FEB 2020 22:12:36

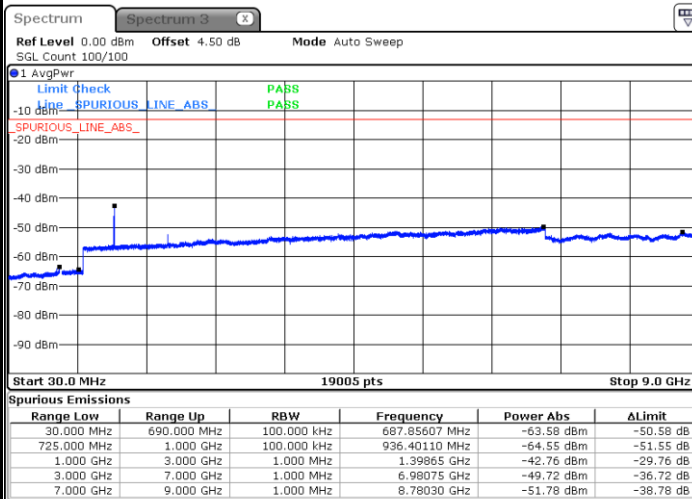
Highest Channel / 16QAM



Date: 18 FEB 2020 22:13:30

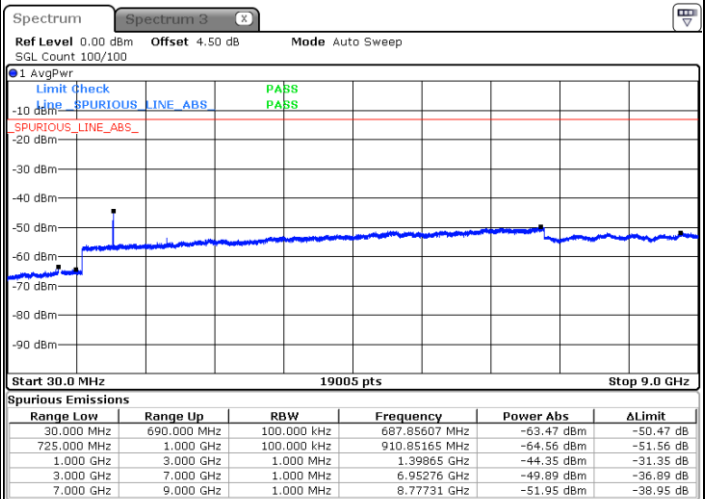
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 18 FEB 2020 22:25:26

Lowest Channel / 16QAM

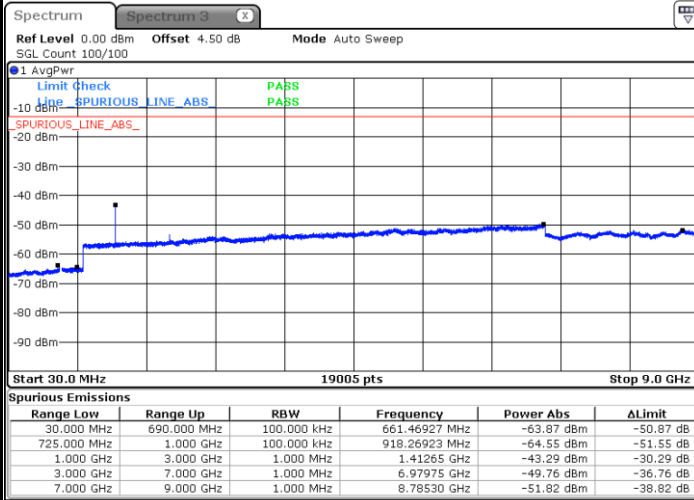


Date: 18 FEB 2020 22:26:20



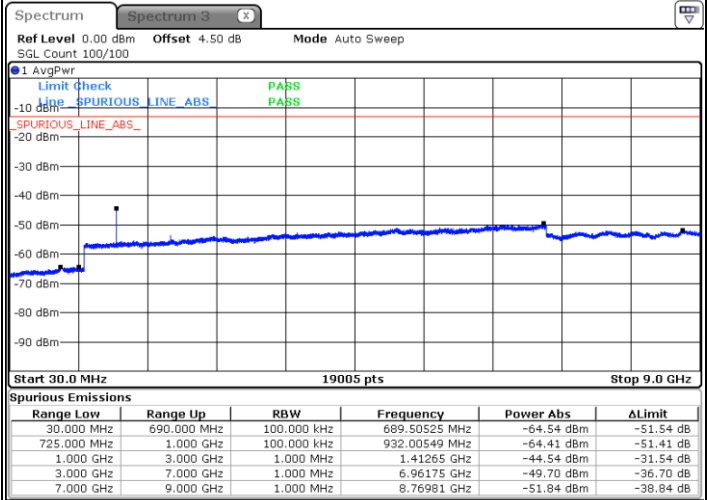
LTE Band 12 / 3MHz

Middle Channel / QPSK



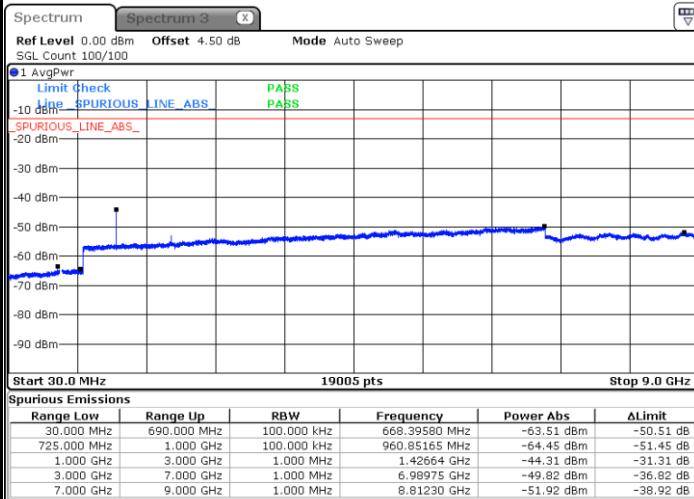
Date: 18 FEB 2020 22:28:08

Middle Channel / 16QAM



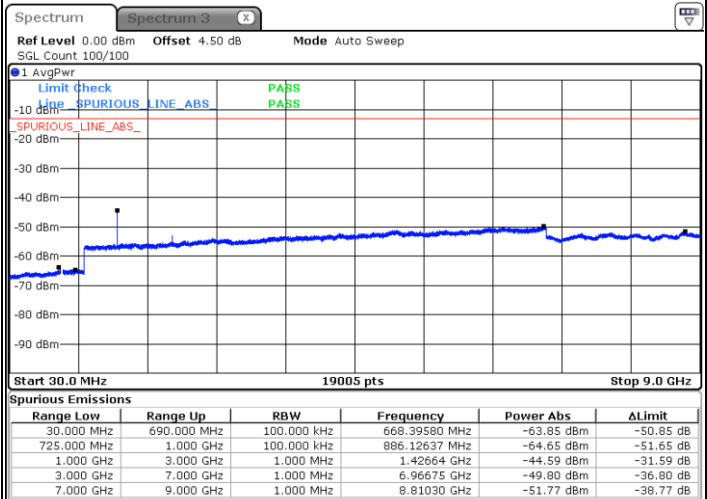
Date: 18 FEB 2020 22:27:14

Highest Channel / QPSK



Date: 18 FEB 2020 22:29:03

Highest Channel / 16QAM

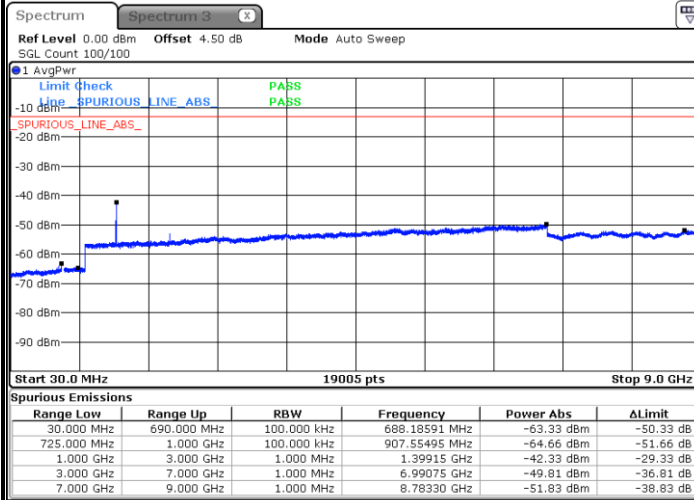


Date: 18 FEB 2020 22:29:57



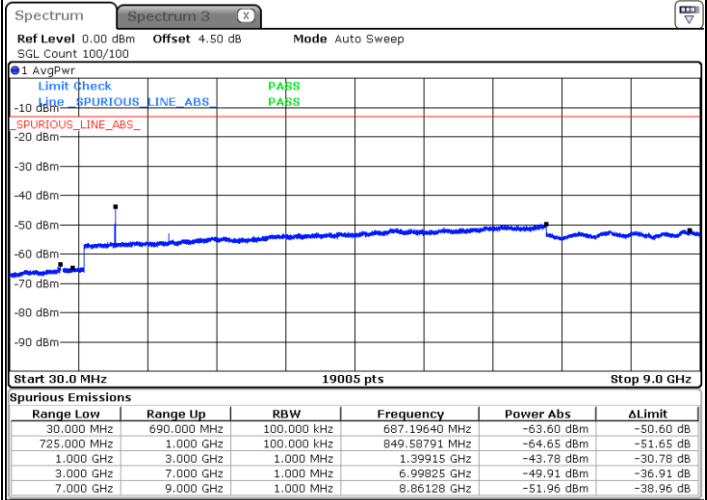
LTE Band 12 / 5MHz

Lowest Channel / QPSK



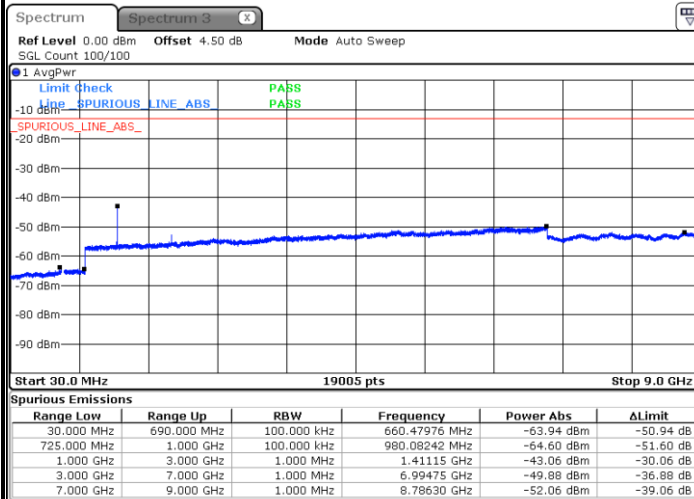
Date: 18 FEB 2020 22:03:36

Lowest Channel / 16QAM



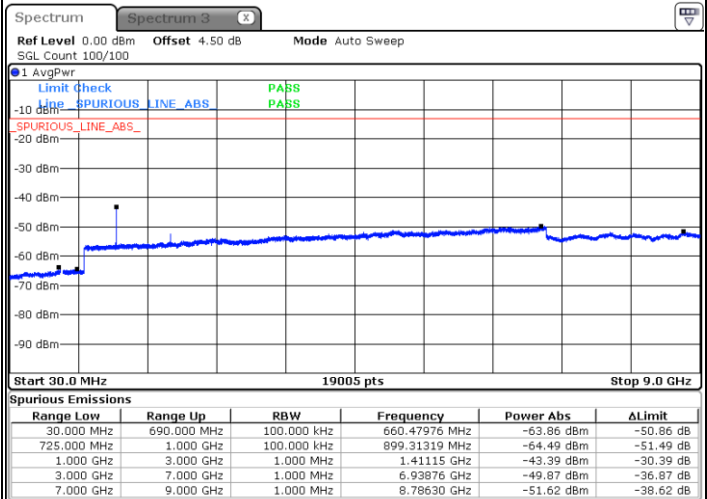
Date: 18 FEB 2020 22:41:51

Middle Channel / QPSK



Date: 18 FEB 2020 22:43:40

Middle Channel / 16QAM

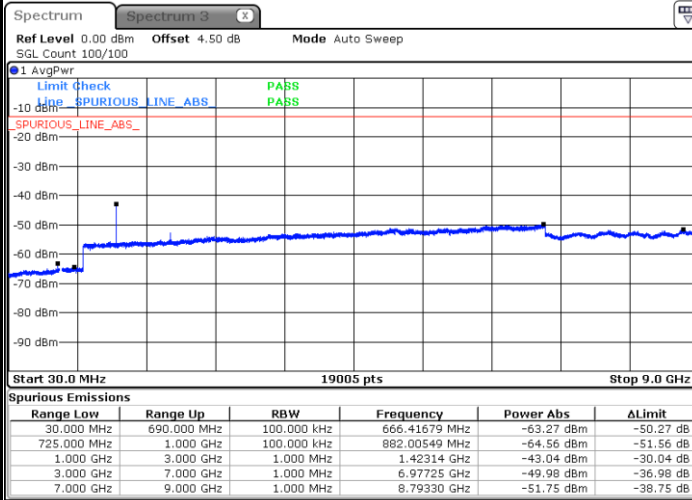


Date: 18 FEB 2020 22:42:46



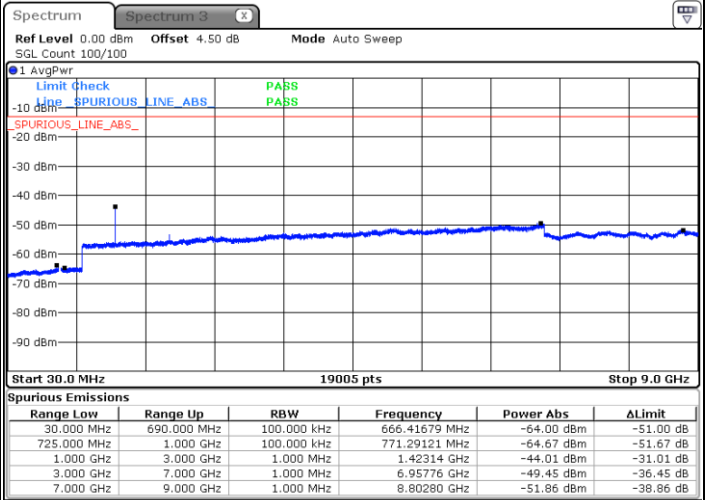
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 18 FEB 2020 22:44:34

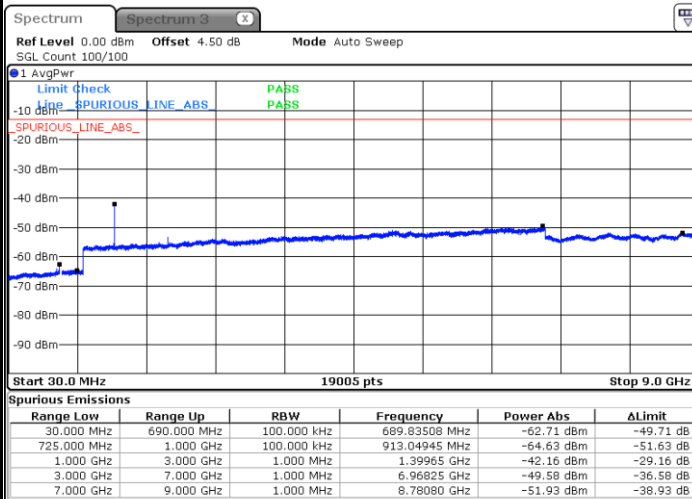
Highest Channel / 16QAM



Date: 18 FEB 2020 22:45:29

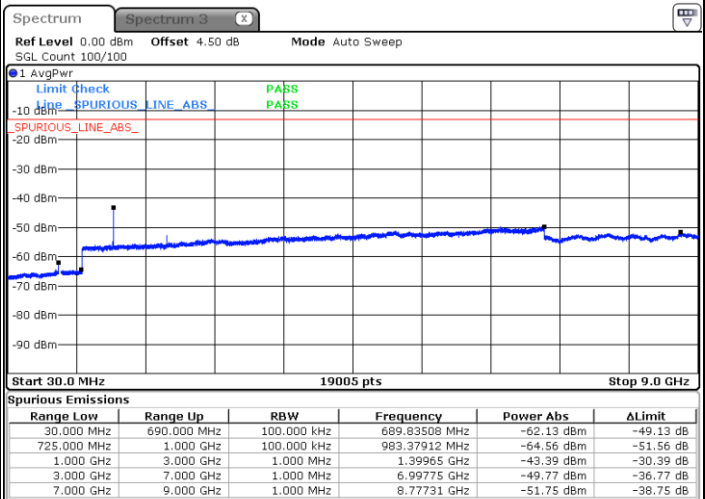
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 18 FEB 2020 22:57:24

Lowest Channel / 16QAM

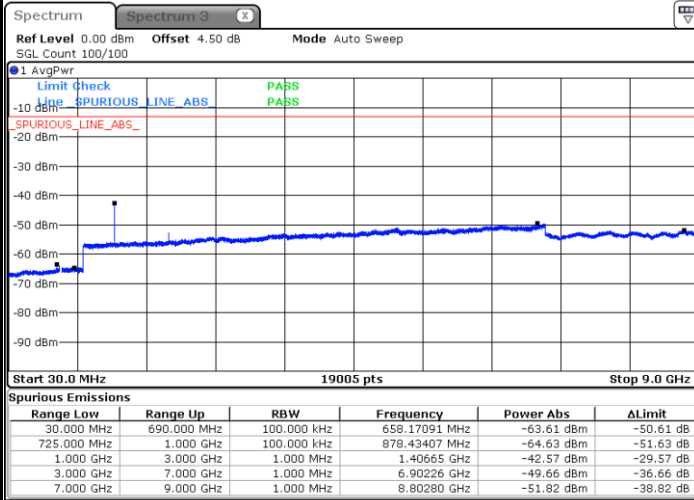


Date: 18 FEB 2020 22:58:18



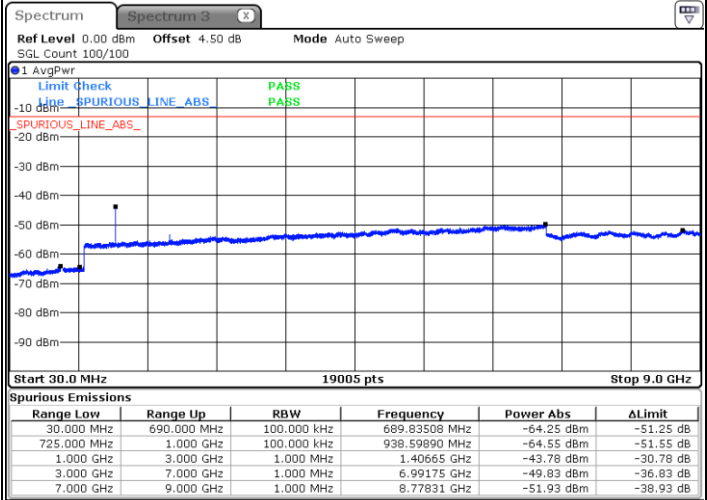
LTE Band 12 / 10MHz

Middle Channel / QPSK



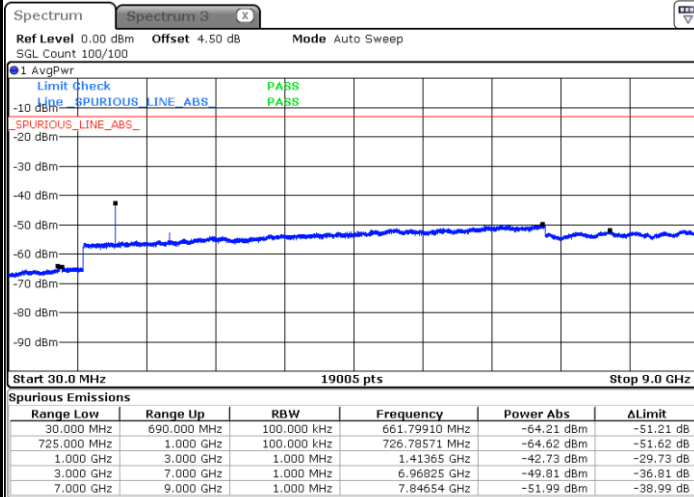
Date: 18 FEB 2020 23:00:07

Middle Channel / 16QAM



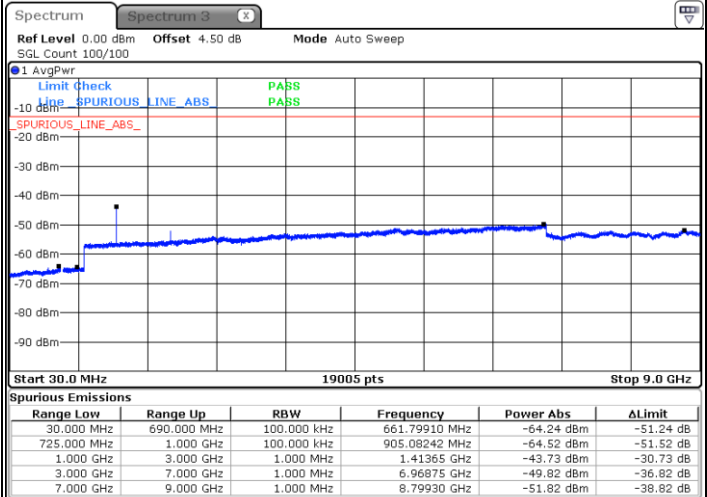
Date: 18 FEB 2020 22:59:12

Highest Channel / QPSK



Date: 18 FEB 2020 23:01:01

Highest Channel / 16QAM

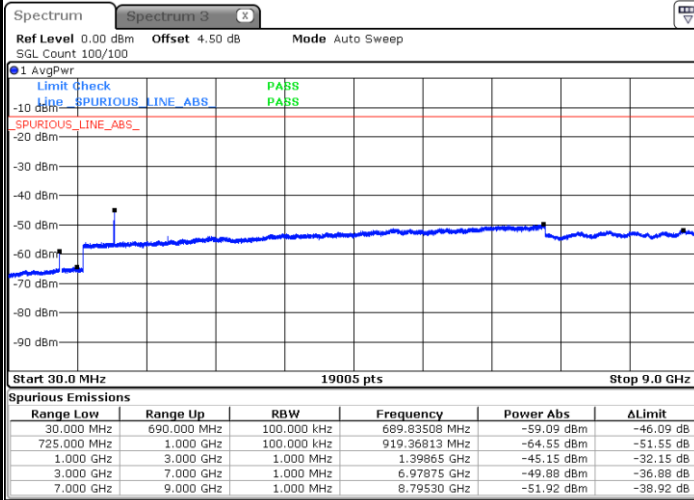


Date: 18 FEB 2020 23:01:55



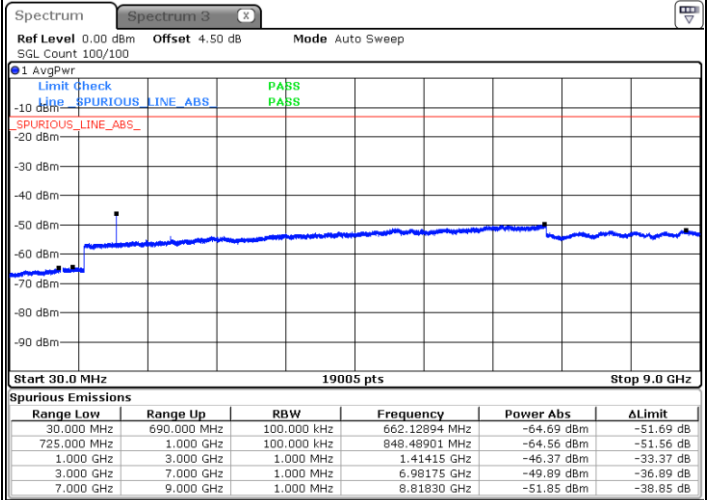
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



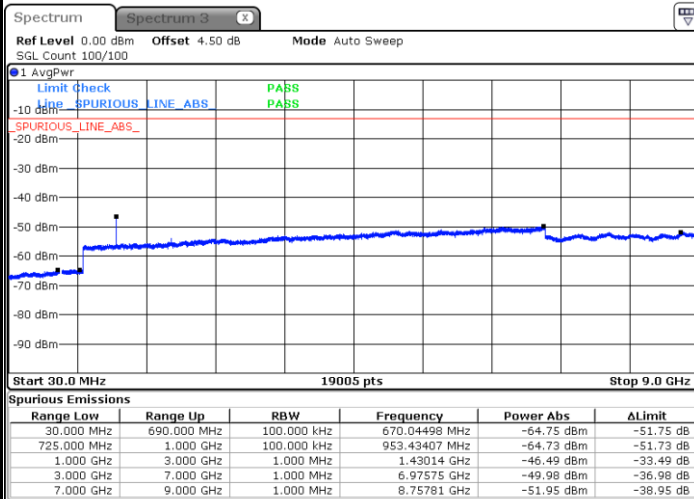
Date: 18.FEB.2020 23:17:19

Middle Channel / 64QAM



Date: 18.FEB.2020 23:18:14

Highest Channel / 64QAM

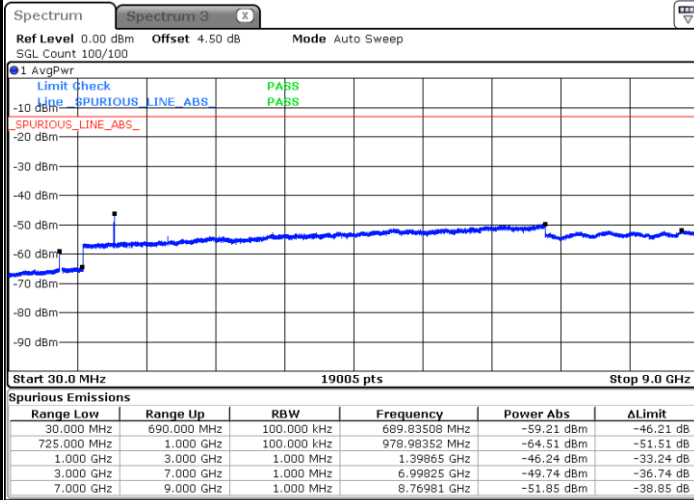


Date: 18.FEB.2020 23:19:08



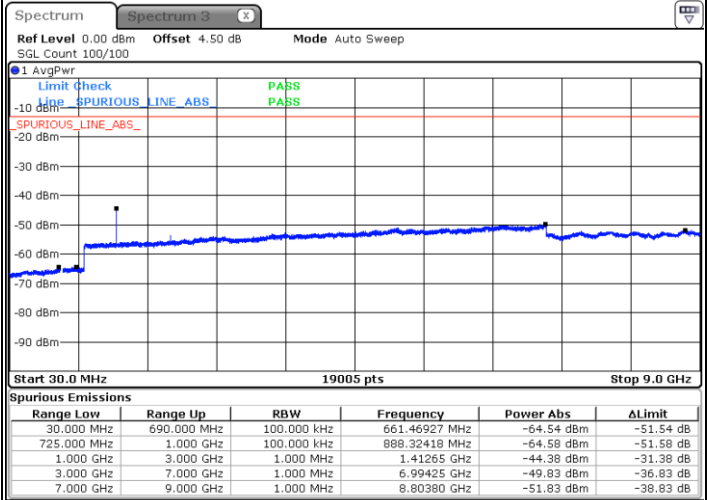
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



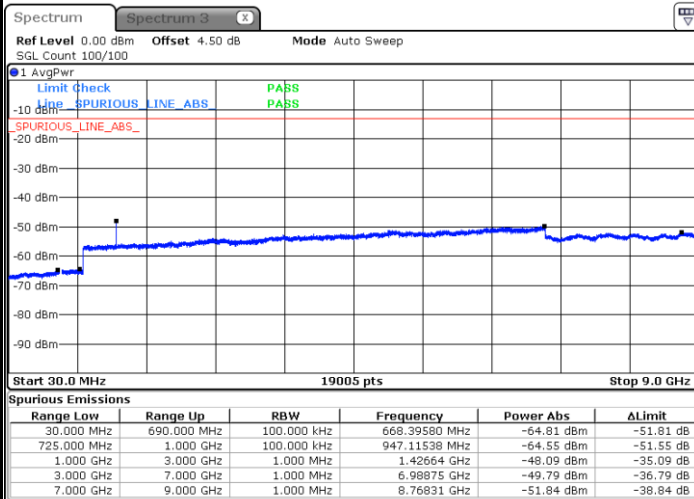
Date: 18 FEB 2020 23:20:02

Middle Channel / 64QAM



Date: 18 FEB 2020 23:20:57

Highest Channel / 64QAM

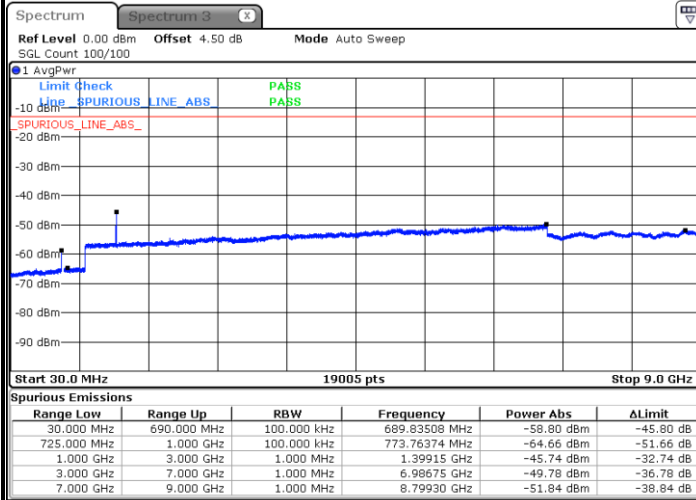


Date: 18 FEB 2020 23:21:51



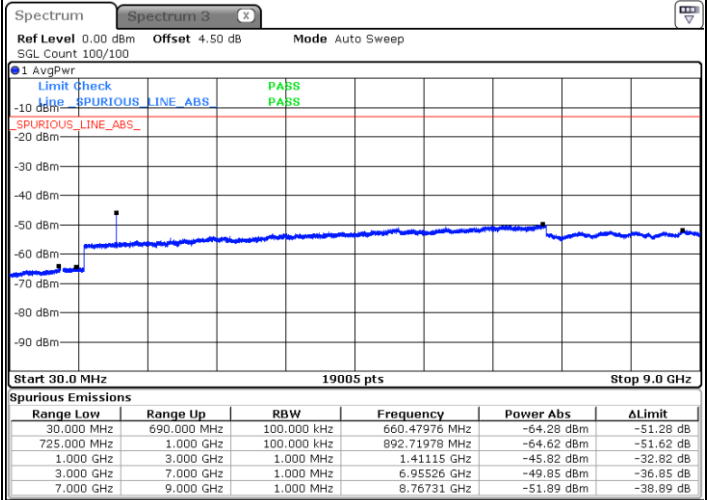
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



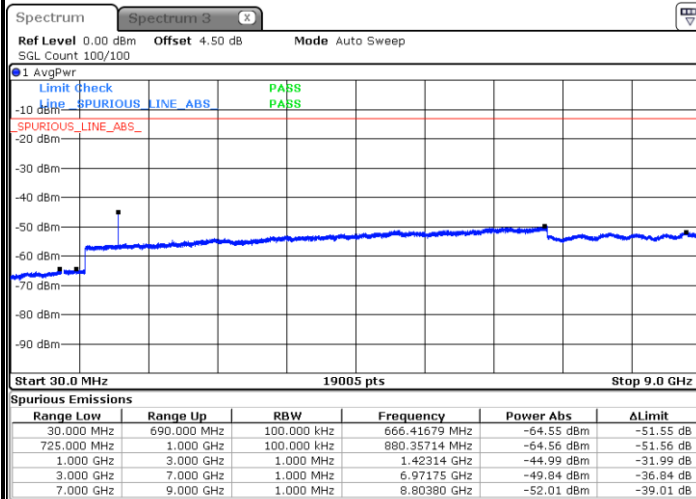
Date: 18 FEB 2020 23:33:46

Middle Channel / 64QAM



Date: 18 FEB 2020 23:34:40

Highest Channel / 64QAM

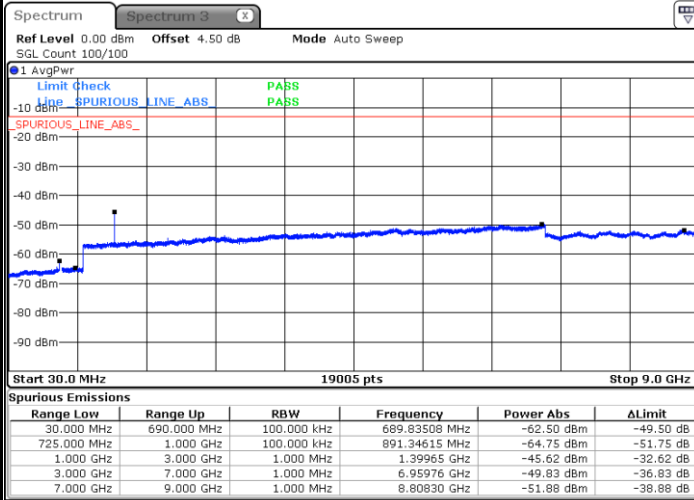


Date: 18 FEB 2020 23:35:34



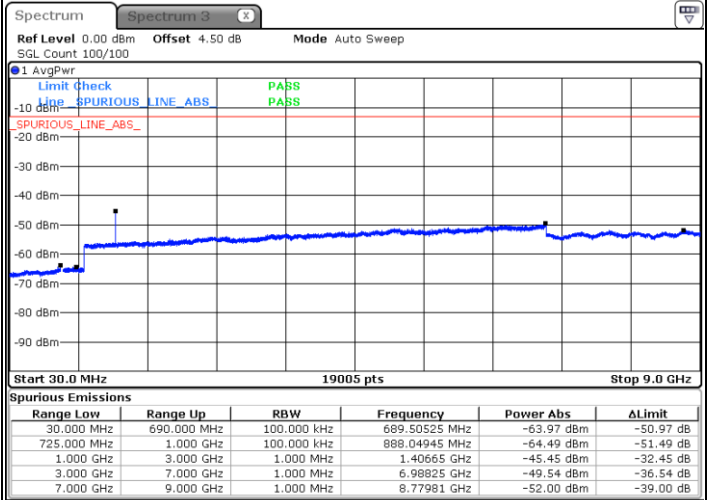
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



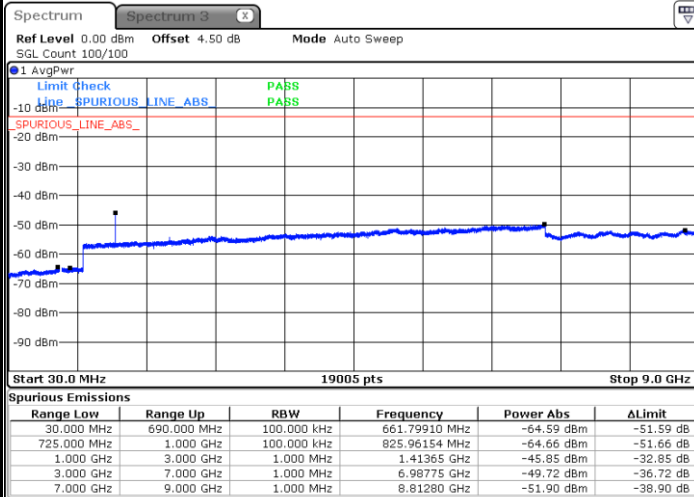
Date: 18 FEB 2020 23:36:28

Middle Channel / 64QAM



Date: 18 FEB 2020 23:37:23

Highest Channel / 64QAM



Date: 18 FEB 2020 23:38:17

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	0.0011	PASS
40	Normal Voltage	0.0044	
30	Normal Voltage	0.0070	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0102	
0	Normal Voltage	0.0036	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0076	
-30	Normal Voltage	0.0068	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0007	
20	Battery End Point	0.0106	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

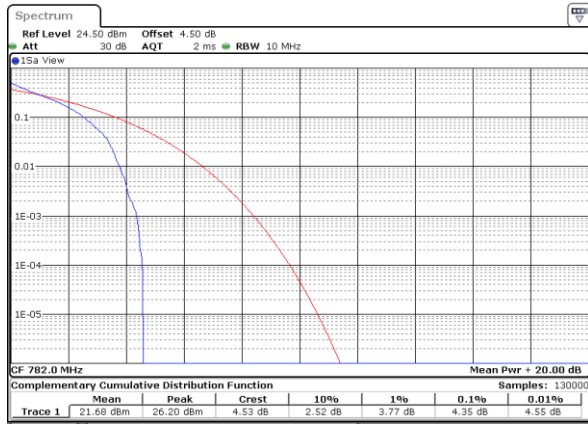
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH		-	-	-	PASS
Middle CH	4.35	4.96	5.54	5.71	
Highest CH	-	-	-	-	
Mod.	64QAM		Limit: 13dB		
RB Size	1RB	Full RB	Result		
Lowest CH			PASS		
Middle CH	5.54	5.77			
Highest CH					

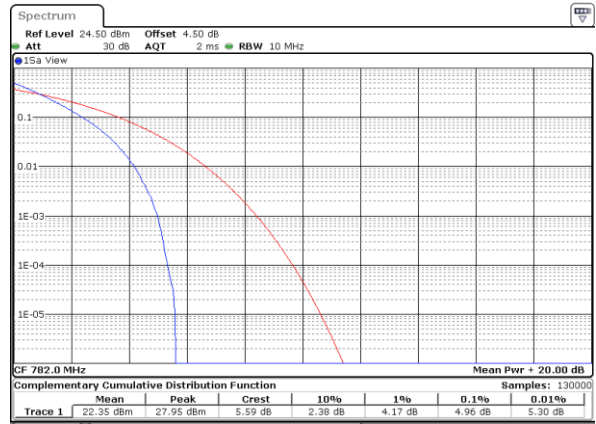


LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB

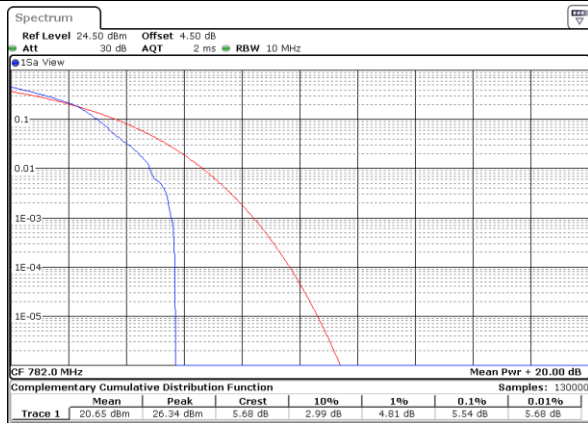


Middle Channel / Full RB

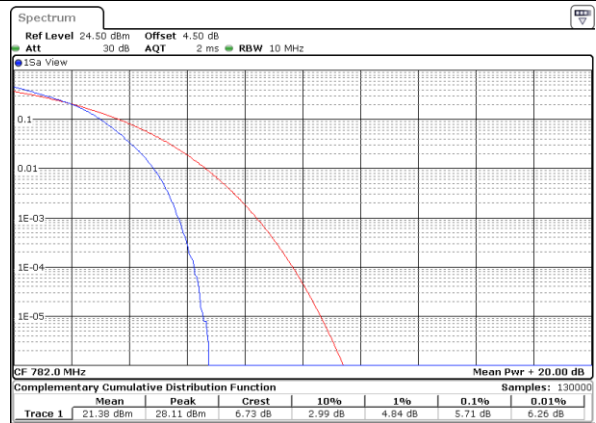


LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB

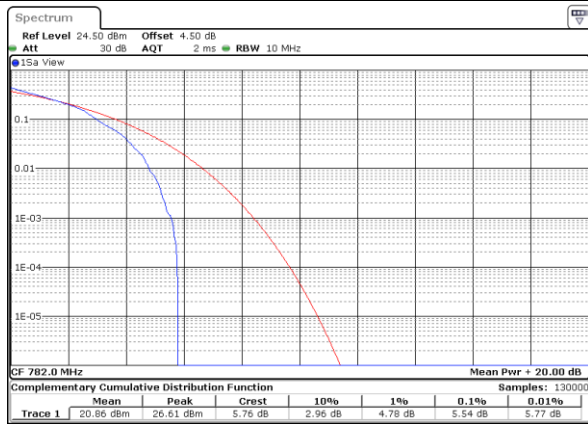


Middle Channel / Full RB

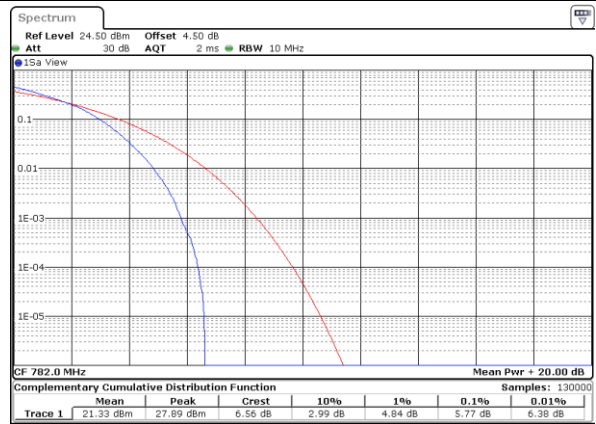


LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Middle Channel / Full RB





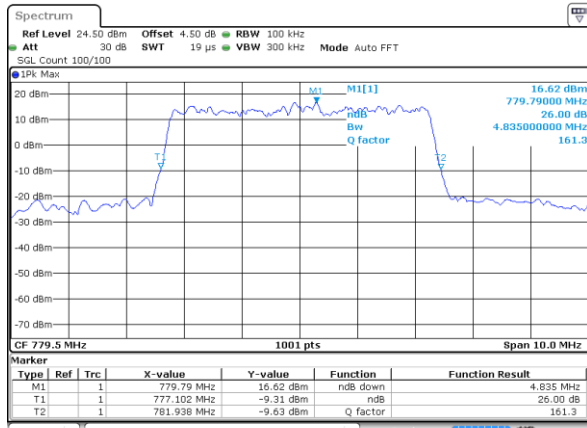
26dB Bandwidth

Mode	LTE Band 13 : 26dB BW(MHz)											
BW	5MHz		10MHz		5MHz	10MHz						
Mod.	QPSK	16QAM	QPSK	16QAM	64QAM	64QAM						
Lowest CH	4.835	4.925			4.825							
Middle CH	4.805	4.895	9.67	9.71	4.835	9.77						
Highest CH	4.855	4.845			4.835							



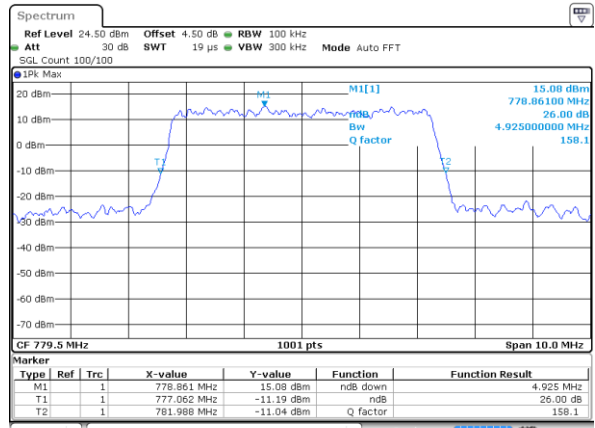
LTE Band 13

Lowest Channel / 5MHz / QPSK



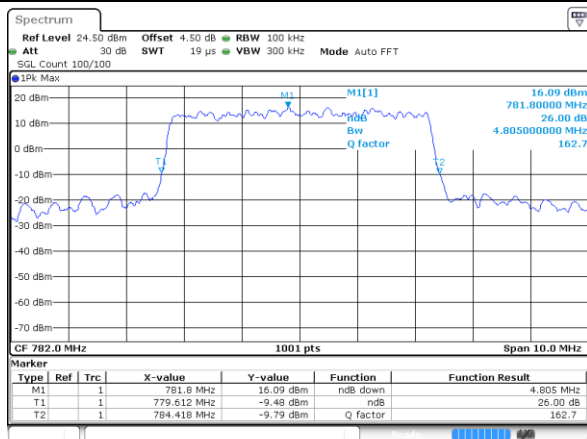
Date: 22 FEB 2020 07:02:43

Lowest Channel / 5MHz / 16QAM



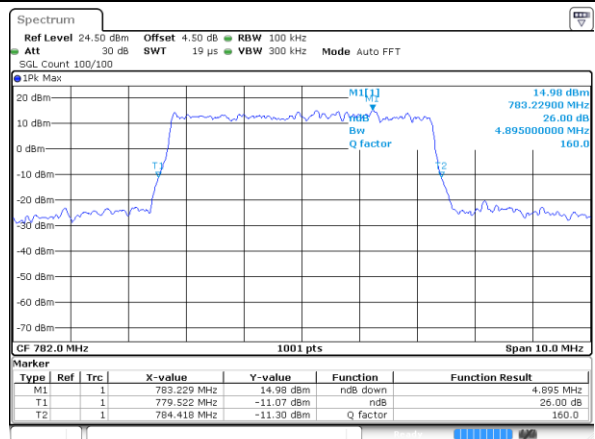
Date: 22 FEB 2020 07:02:53

Middle Channel / 5MHz / QPSK



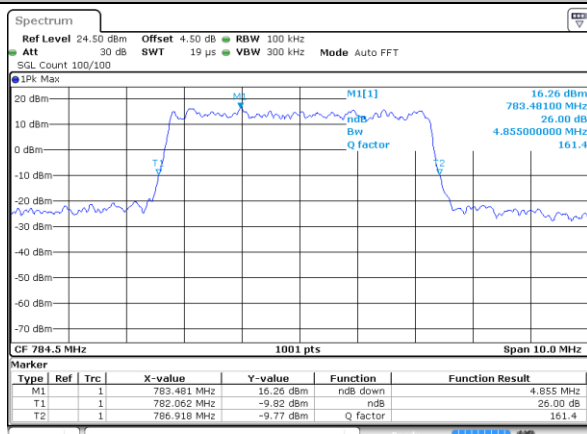
Date: 22 FEB 2020 07:11:42

Middle Channel / 5MHz / 16QAM



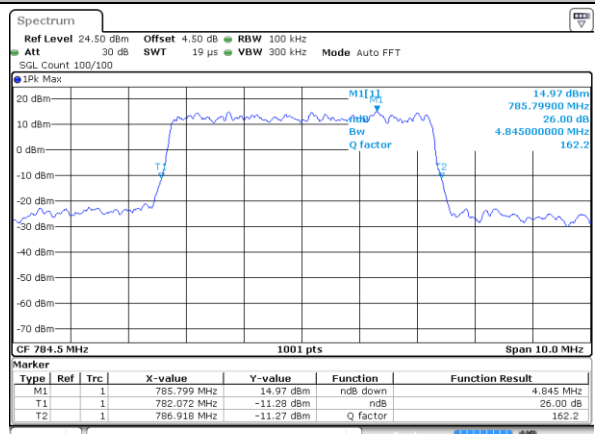
Date: 22 FEB 2020 07:11:52

Highest Channel / 5MHz / QPSK



Date: 22 FEB 2020 07:14:21

Highest Channel / 5MHz / 16QAM

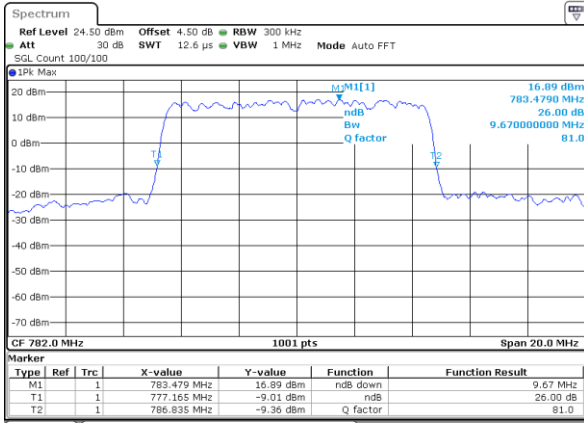


Date: 22 FEB 2020 07:14:11



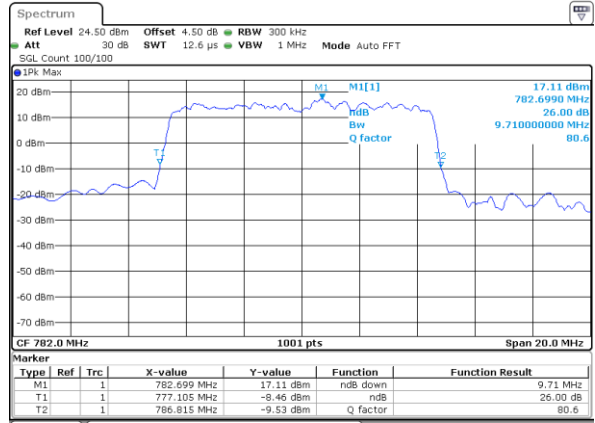
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 22 FEB 2020 07:25:08

Middle Channel / 10MHz / 16QAM



Date: 22 FEB 2020 07:24:58