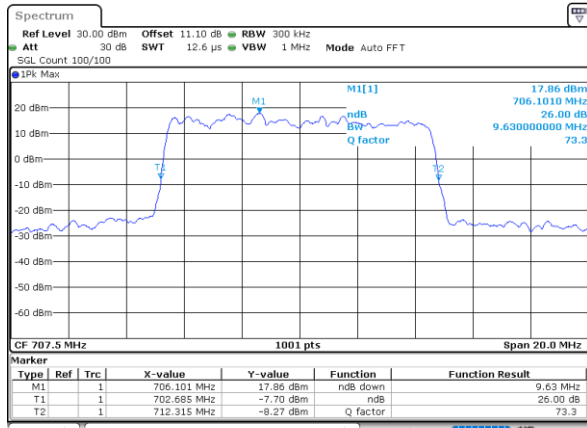




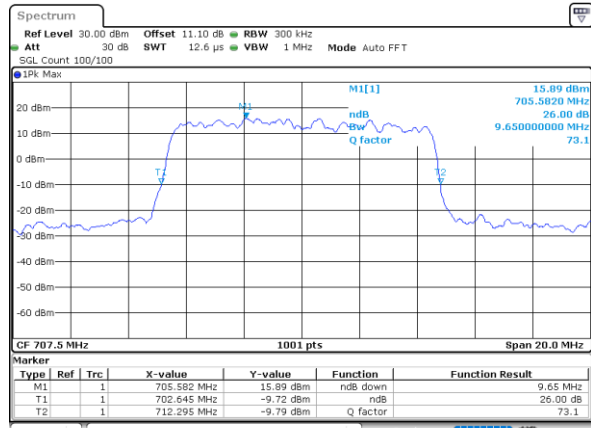
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 27_JAN,2022 11:41:42

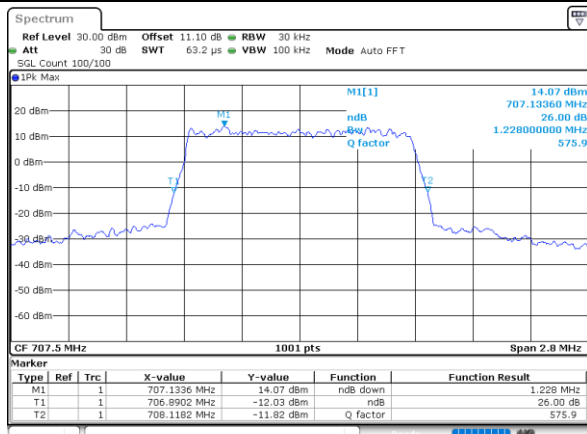
Middle Channel / 10MHz / 16QAM



Date: 27_JAN,2022 11:42:02

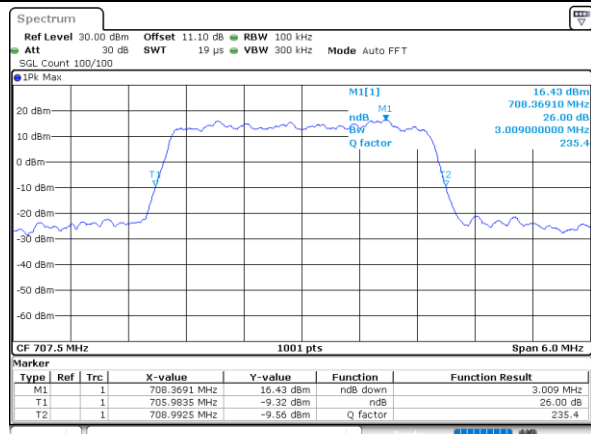
LTE Band 12

Middle Channel / 1.4MHz / 64QAM



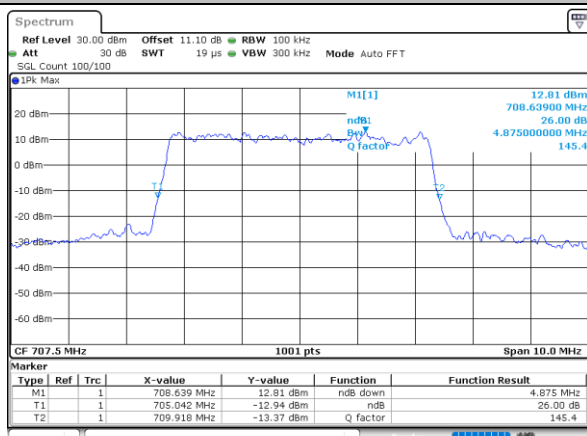
Date: 27_JAN,2022 11:08:02

Middle Channel / 3MHz / 64QAM



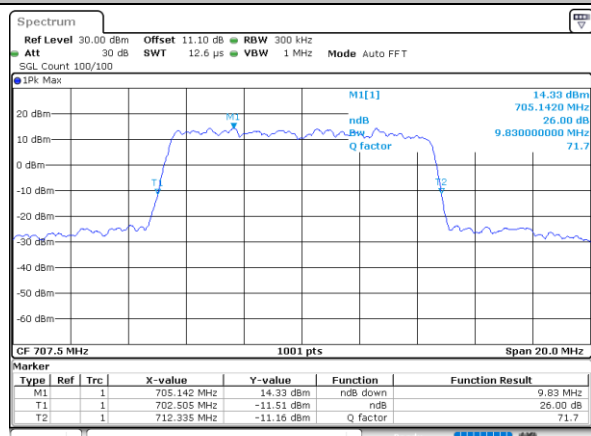
Date: 27_JAN,2022 13:50:43

Middle Channel / 5MHz / 64QAM



Date: 27_JAN,2022 11:25:07

Middle Channel / 10MHz / 64QAM



Date: 27_JAN,2022 11:49:09

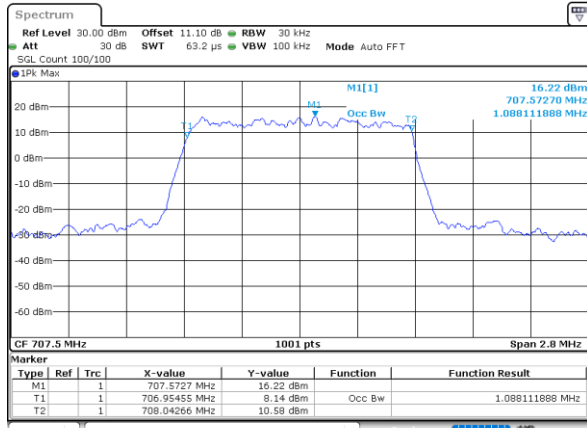
**Occupied Bandwidth**

Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.09	1.09	2.71	2.73	4.48	4.49	8.99	9.01	-	-	-	-
Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	1.10	-	2.73	-	4.51	-	8.97	-	-	-	-	-



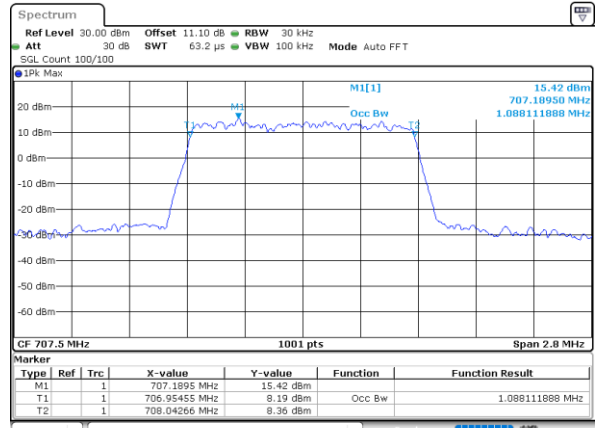
LTE Band 12

Middle Channel / 1.4MHz / QPSK



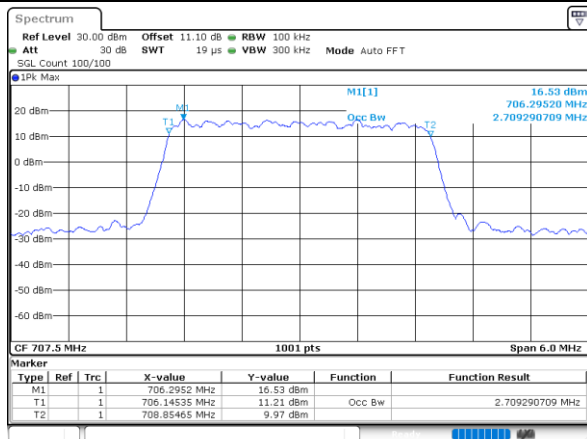
Date: 27.JAN.2022 11:00:18

Middle Channel / 1.4MHz / 16QAM



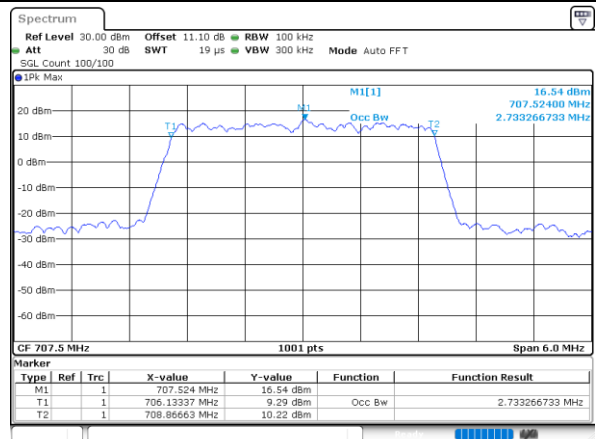
Date: 27.JAN.2022 10:59:58

Middle Channel / 3MHz / QPSK



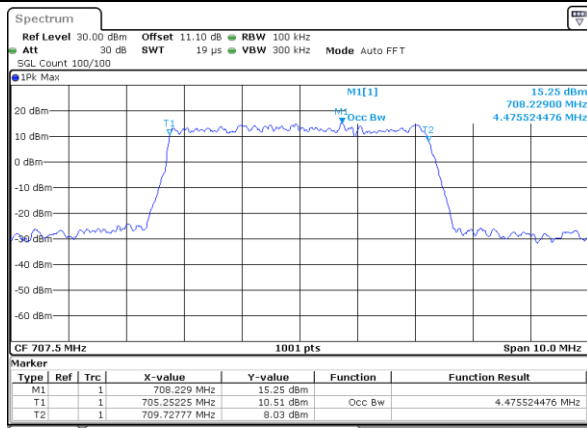
Date: 27.JAN.2022 11:13:58

Middle Channel / 3MHz / 16QAM



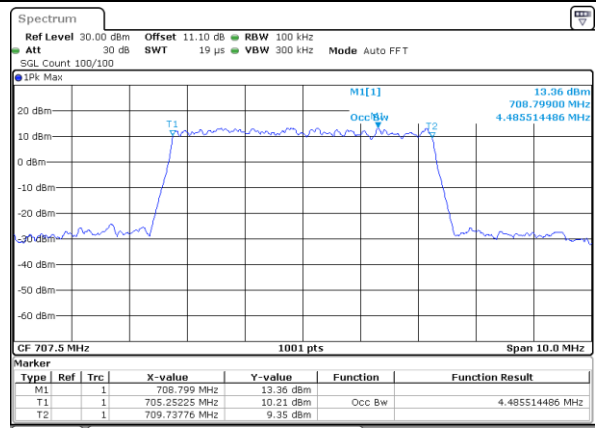
Date: 27.JAN.2022 11:13:57

Middle Channel / 5MHz / QPSK



Date: 27.JAN.2022 11:31:02

Middle Channel / 5MHz / 16QAM

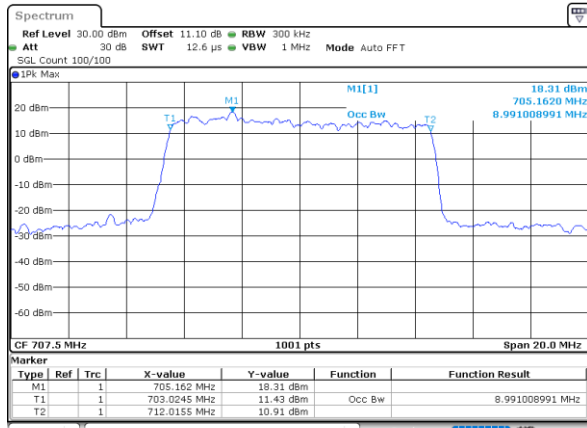


Date: 27.JAN.2022 11:30:42



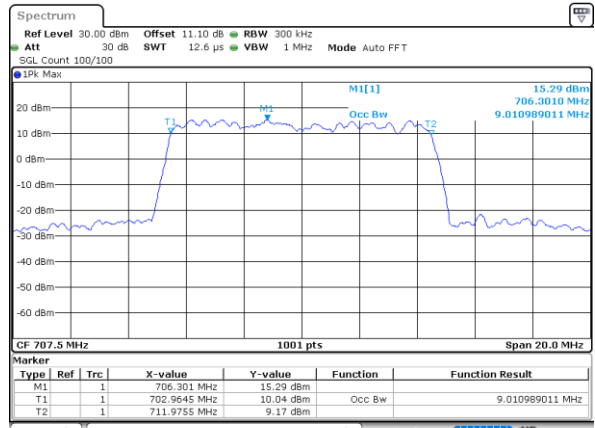
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 27.JAN.2022 11:41:22

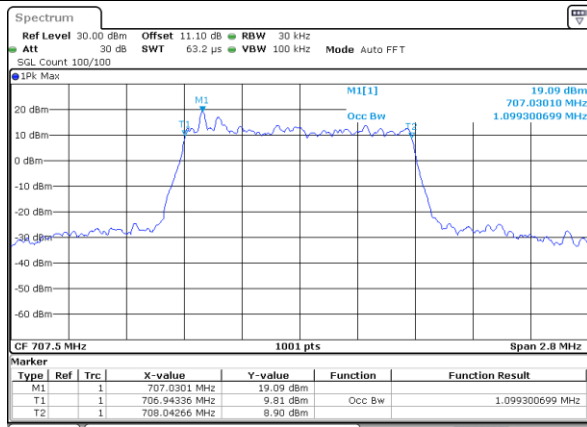
Middle Channel / 10MHz / 16QAM



Date: 27.JAN.2022 11:41:01

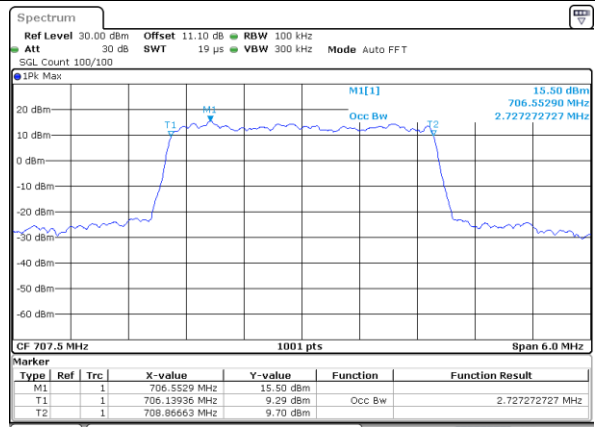
LTE Band 12

Middle Channel / 1.4MHz / 64QAM



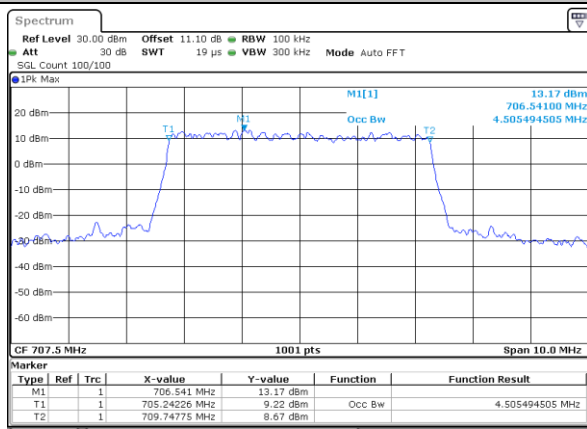
Date: 27.JAN.2022 11:07:42

Middle Channel / 3MHz / 64QAM



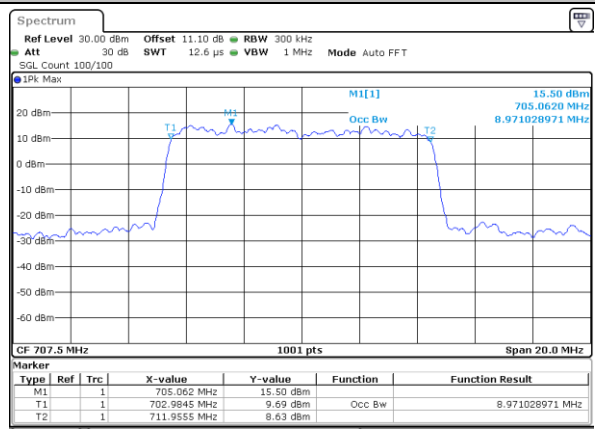
Date: 27.JAN.2022 11:21:22

Middle Channel / 5MHz / 64QAM



Date: 27.JAN.2022 11:24:47

Middle Channel / 10MHz / 64QAM



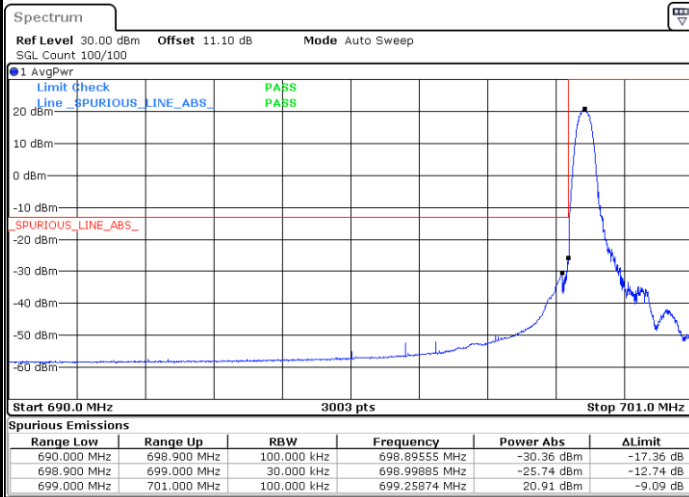
Date: 27.JAN.2022 11:48:18



Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

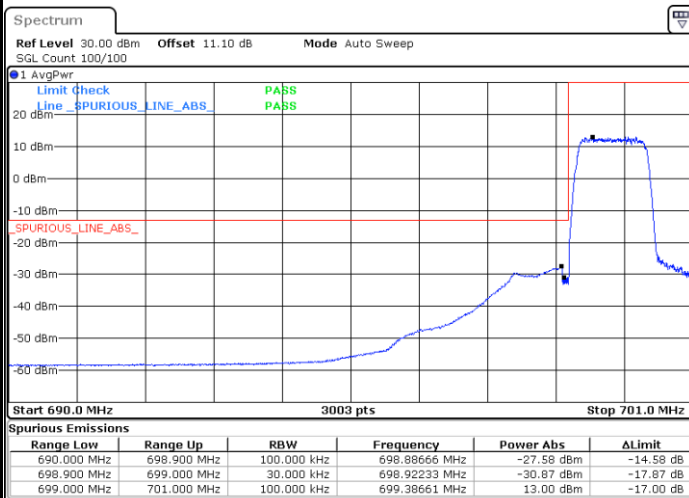
Lowest Band Edge / 1RB



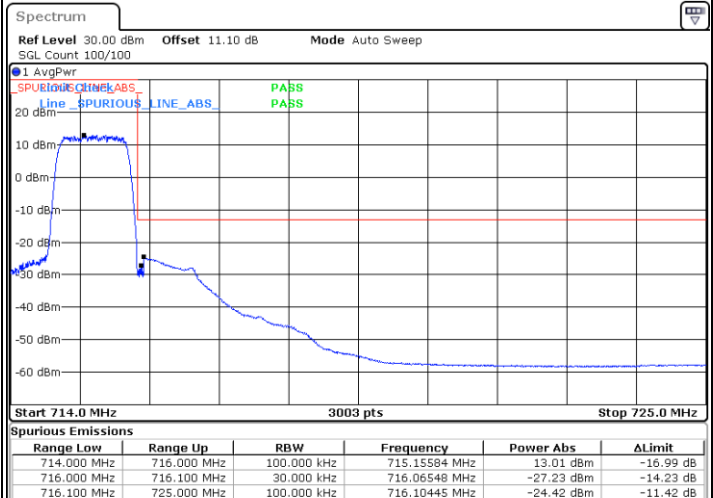
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



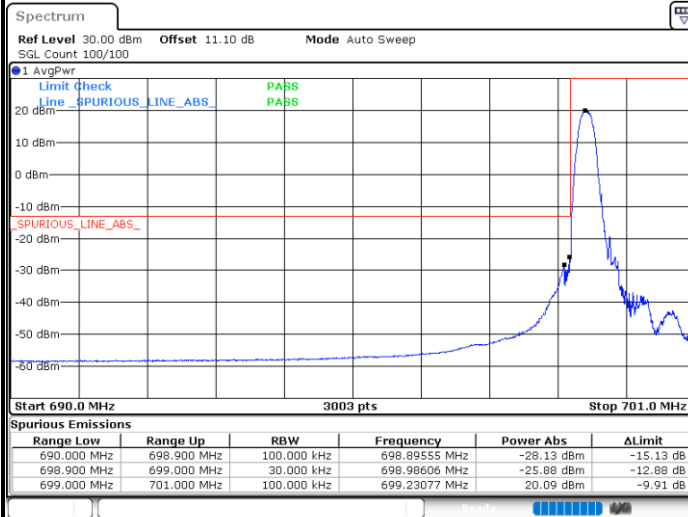
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 16QAM

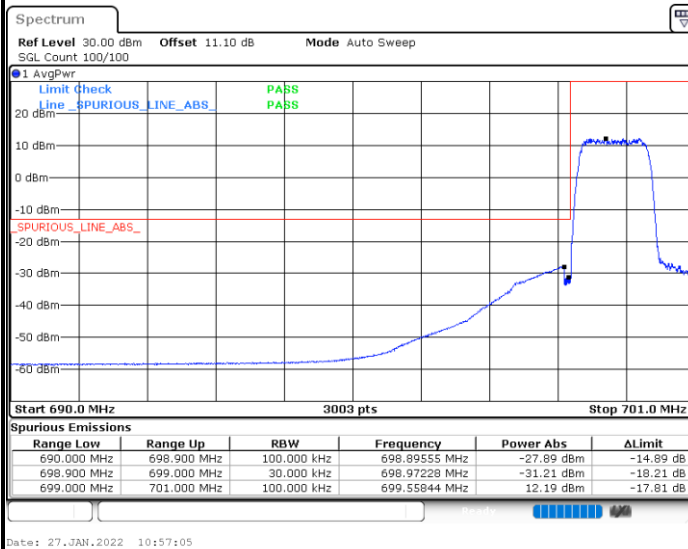
Lowest Band Edge / 1 RB



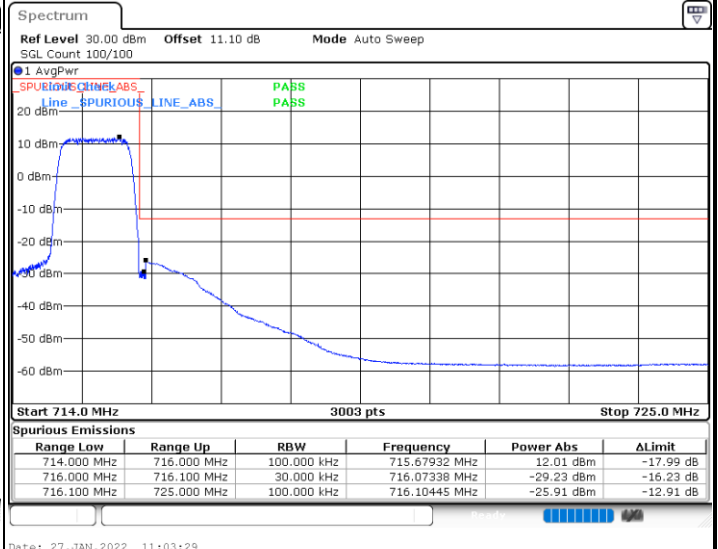
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



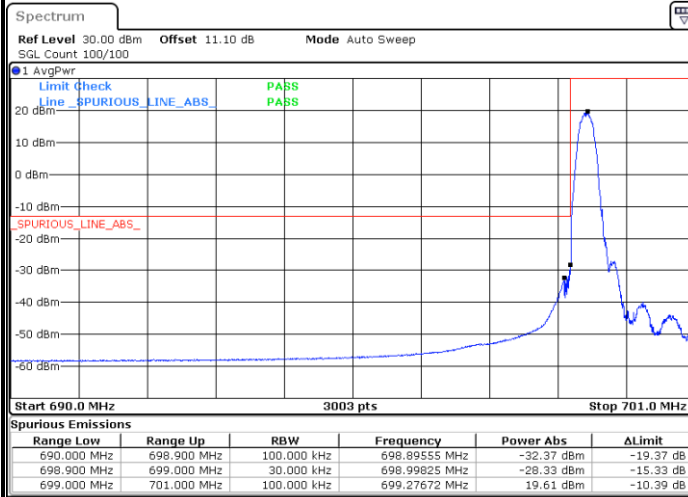
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 64QAM

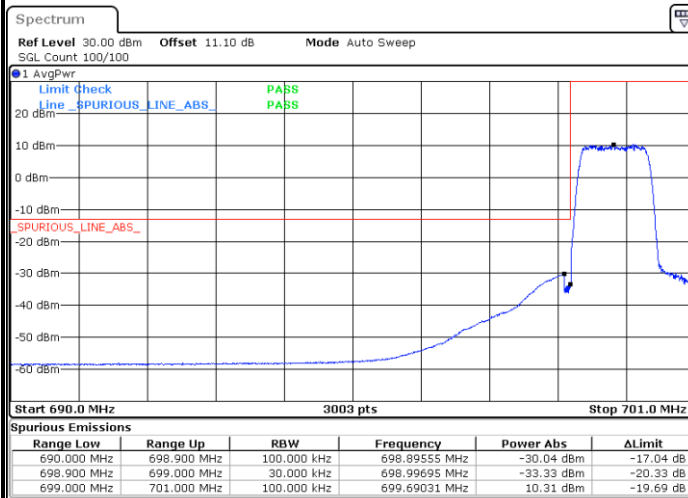
Lowest Band Edge / 1 RB



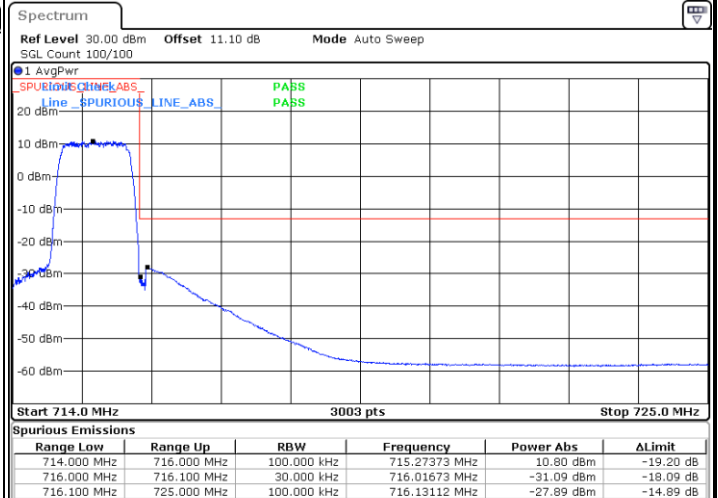
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



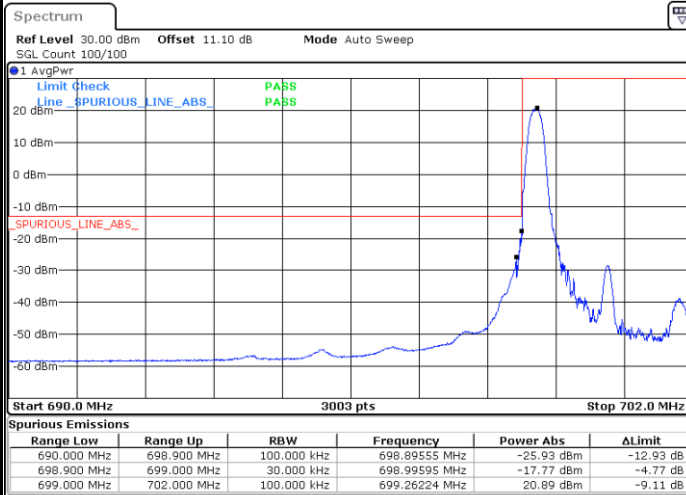
Highest Band Edge / Full RB



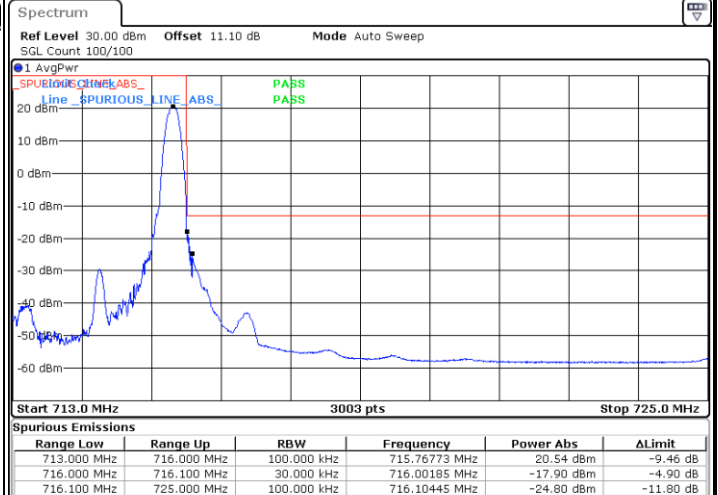


LTE Band 12 / 3MHz / QPSK

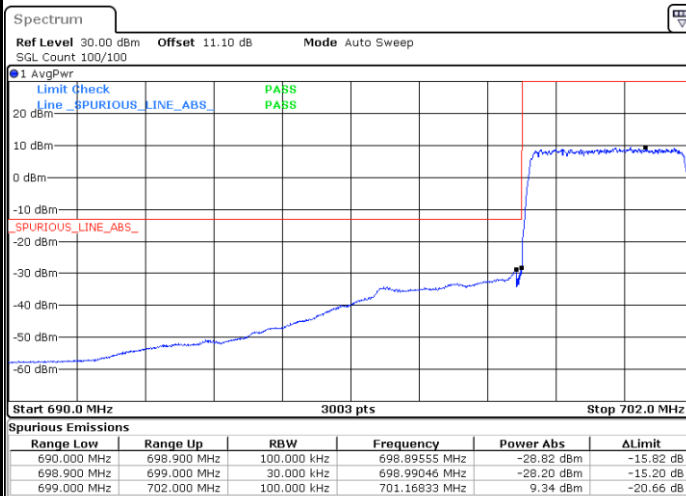
Lowest Band Edge / 1RB



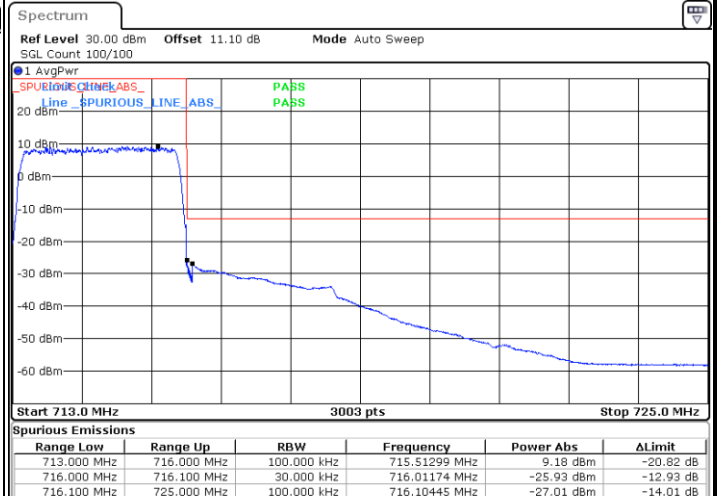
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



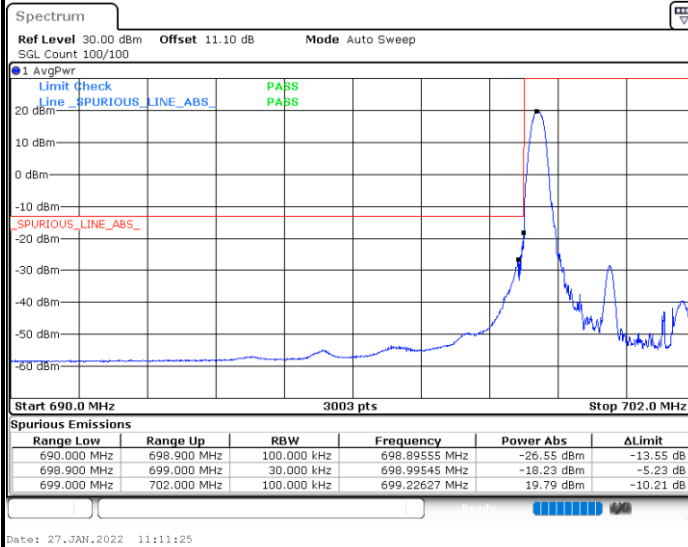
Highest Band Edge / Full RB



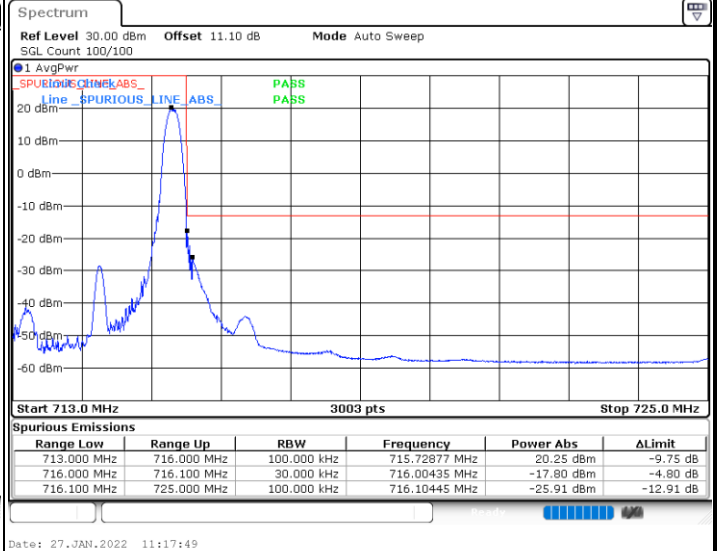


LTE Band 12 / 3MHz / 16QAM

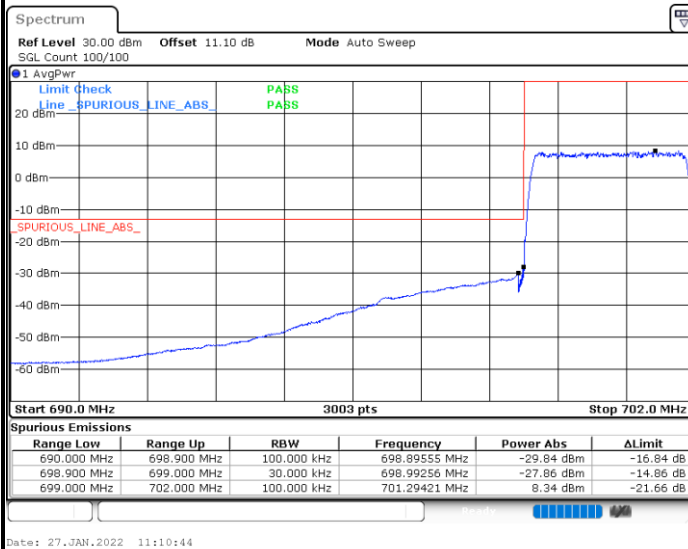
Lowest Band Edge / 1 RB



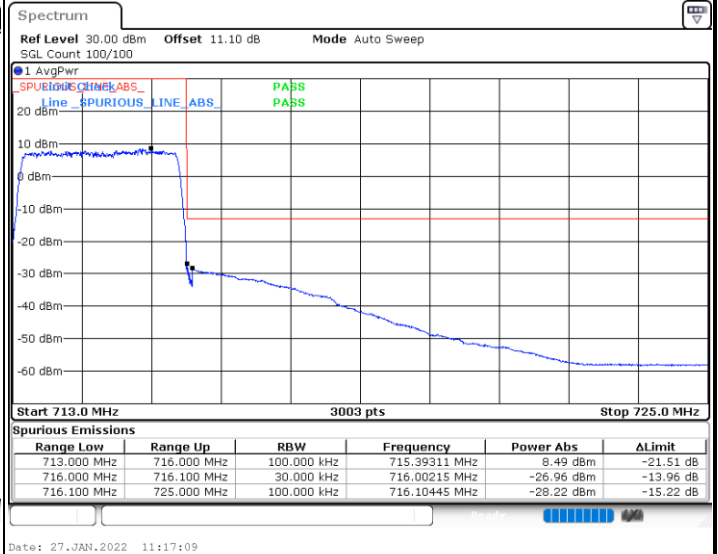
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



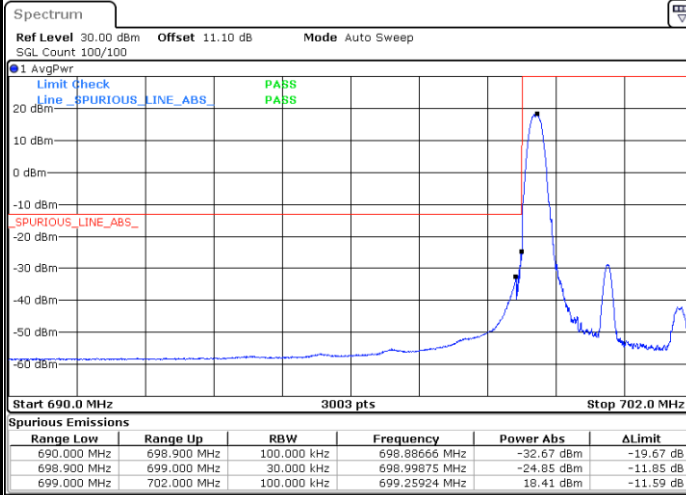
Highest Band Edge / Full RB



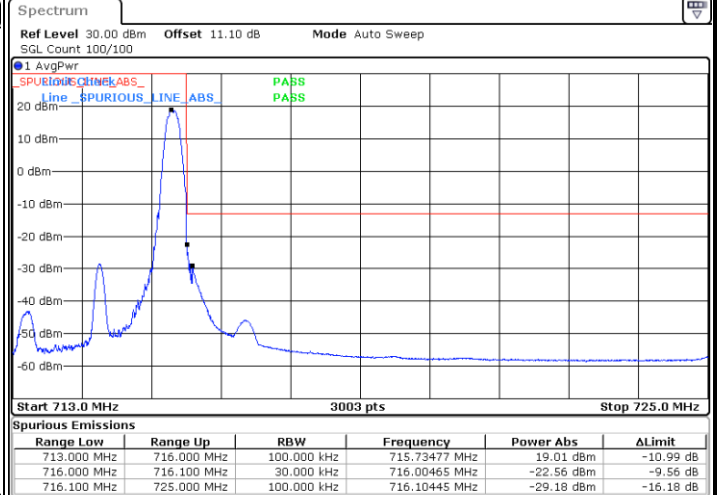


LTE Band 12 / 3MHz / 64QAM

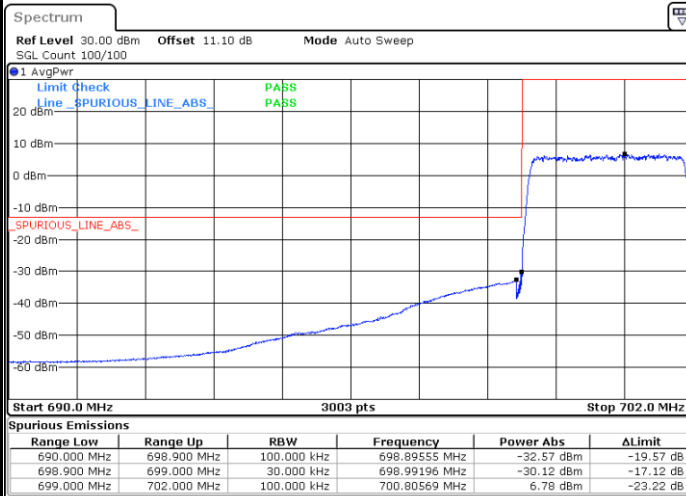
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



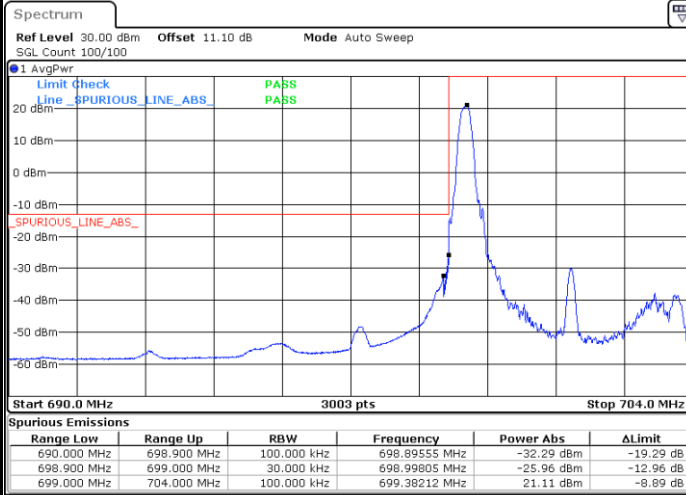
Highest Band Edge / Full RB



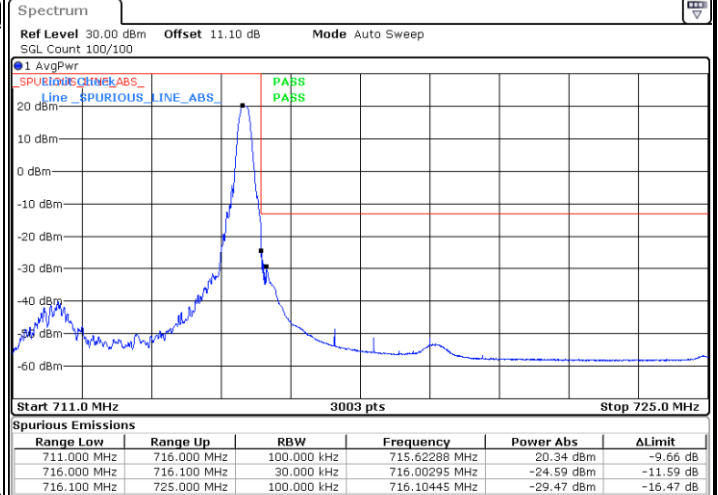


LTE Band 12 / 5MHz / QPSK

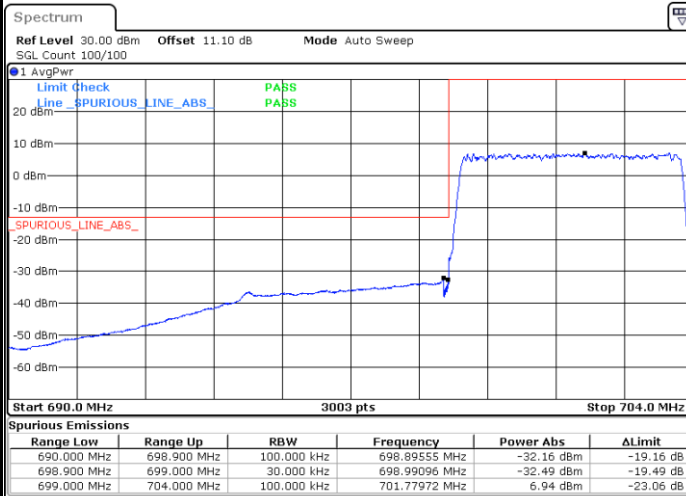
Lowest Band Edge / 1 RB



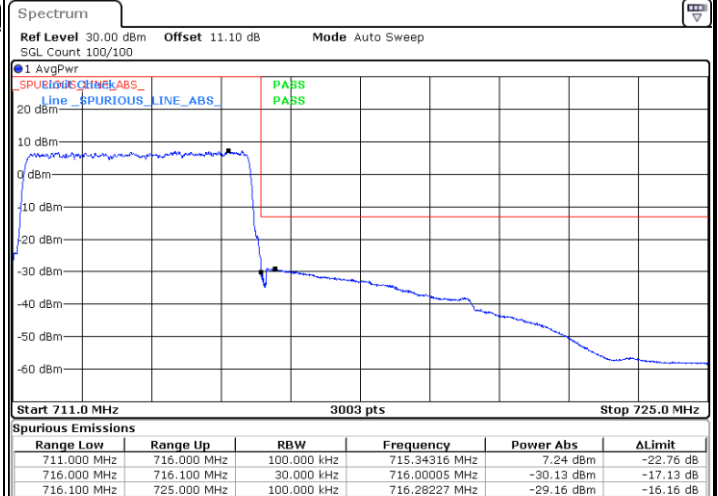
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



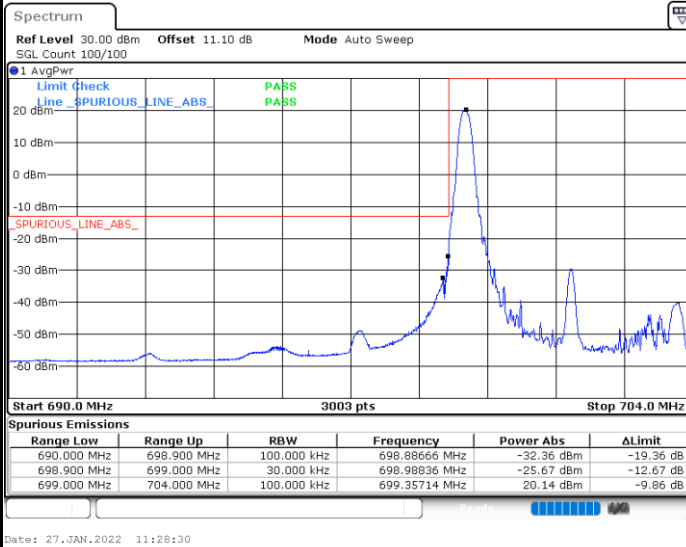
Highest Band Edge / Full RB



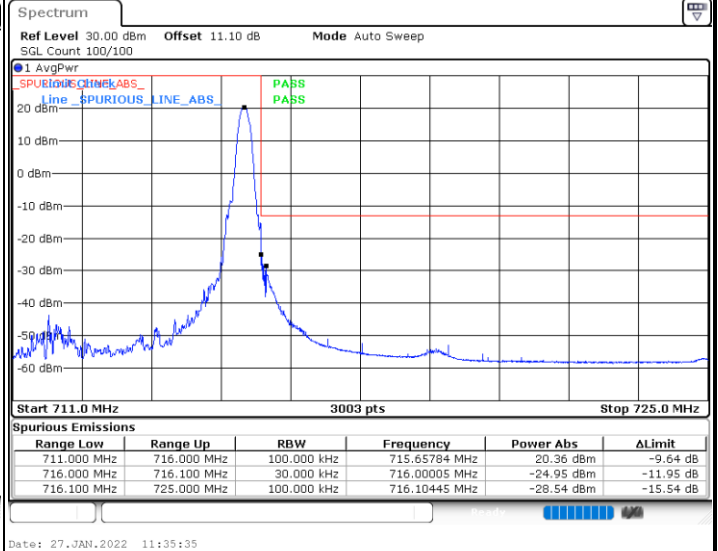


LTE Band 12 / 5MHz / 16QAM

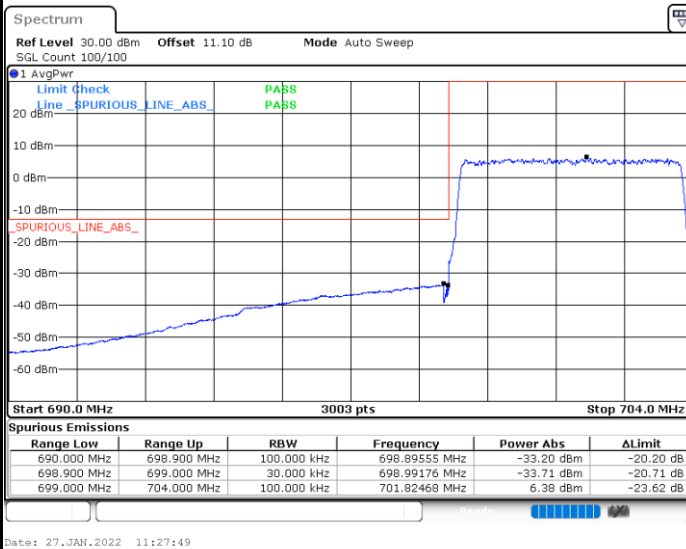
Lowest Band Edge / 1RB



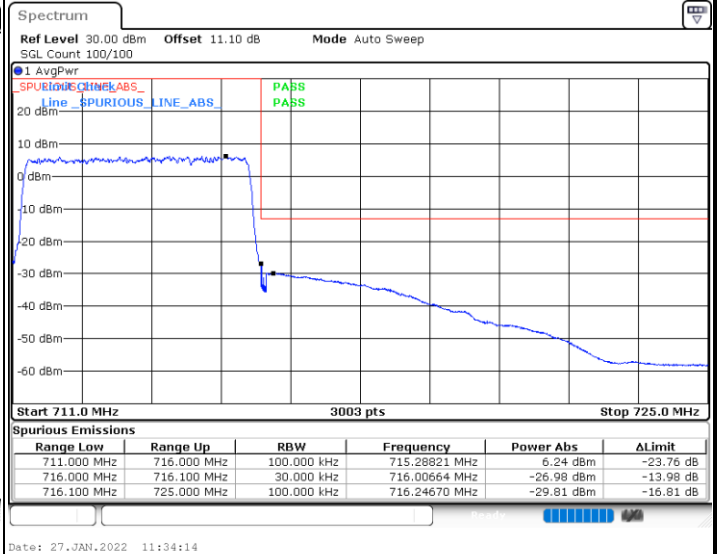
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



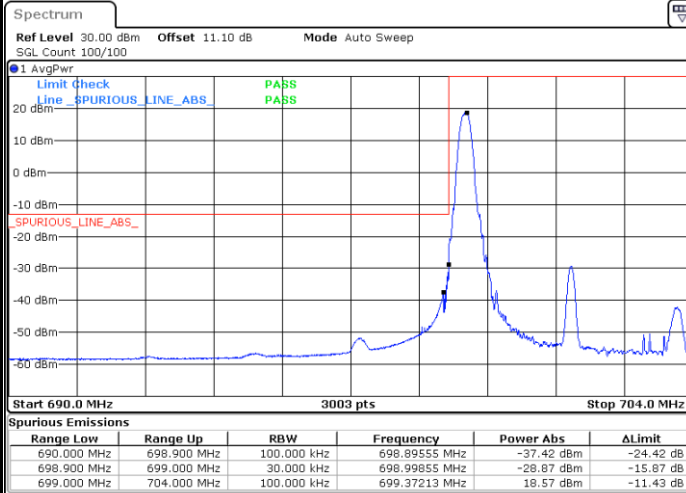
Highest Band Edge / Full RB



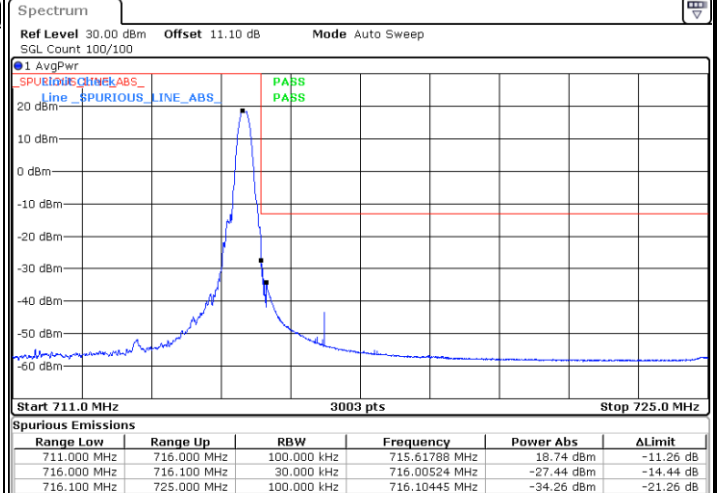


LTE Band 12 / 5MHz / 64QAM

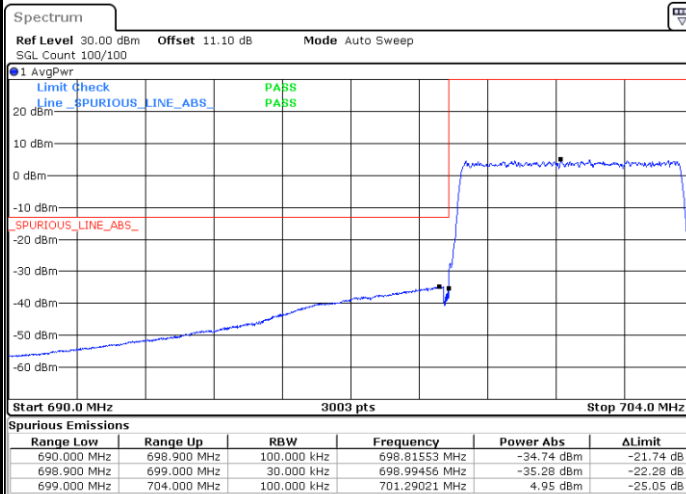
Lowest Band Edge / 1RB



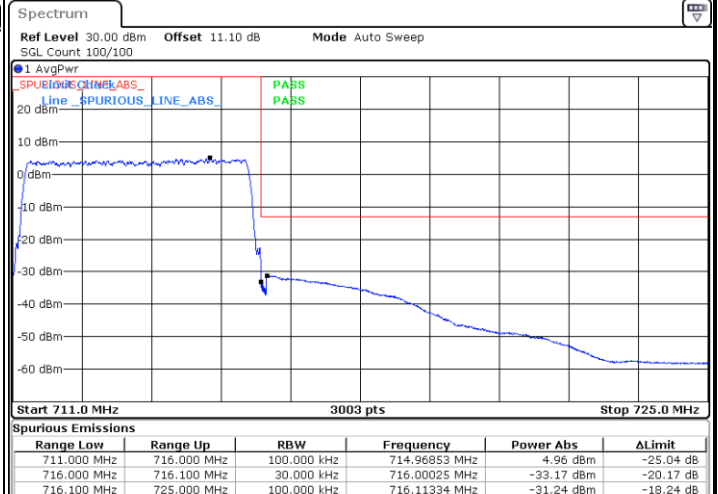
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



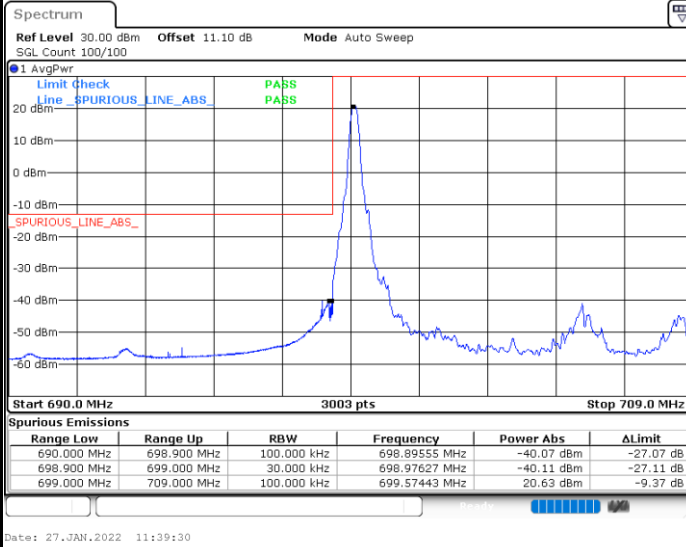
Highest Band Edge / Full RB



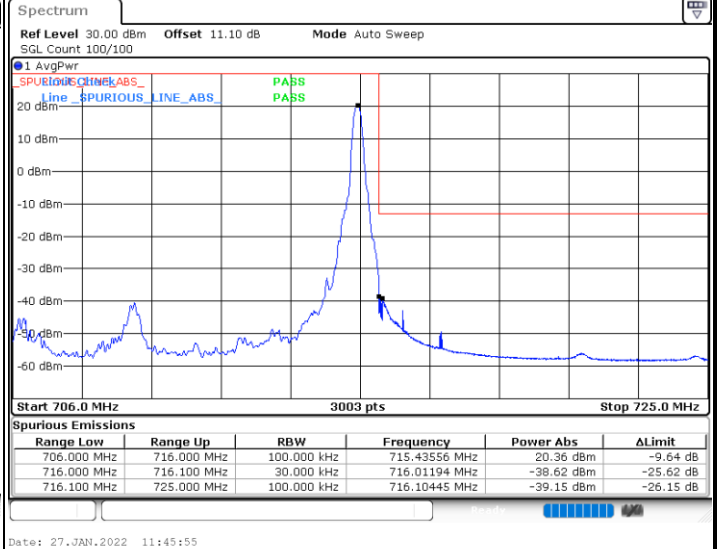


LTE Band 12 / 10MHz / QPSK

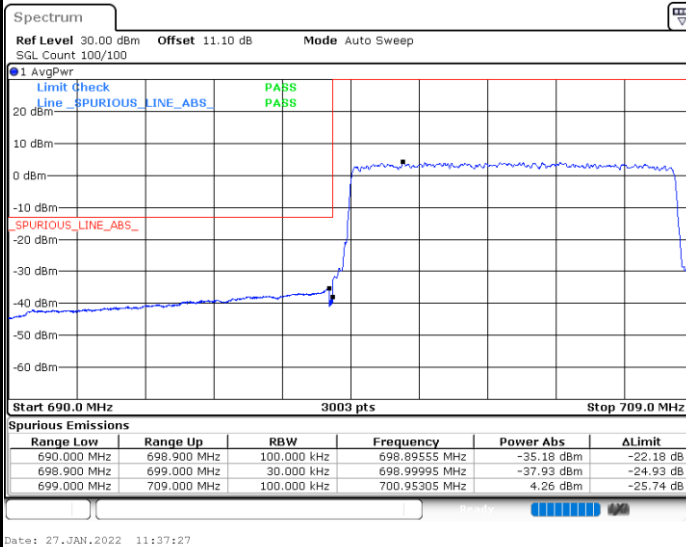
Lowest Band Edge / 1 RB



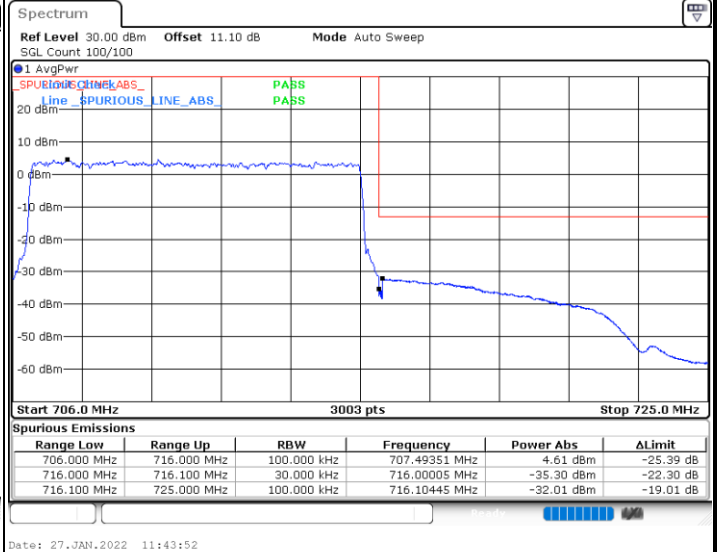
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



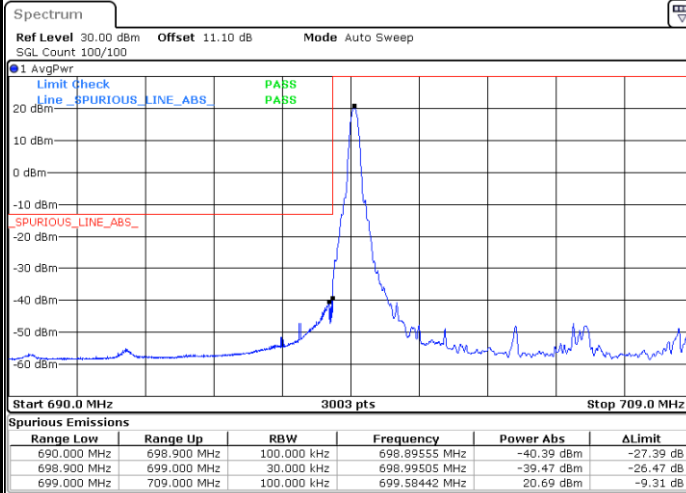
Highest Band Edge / Full RB



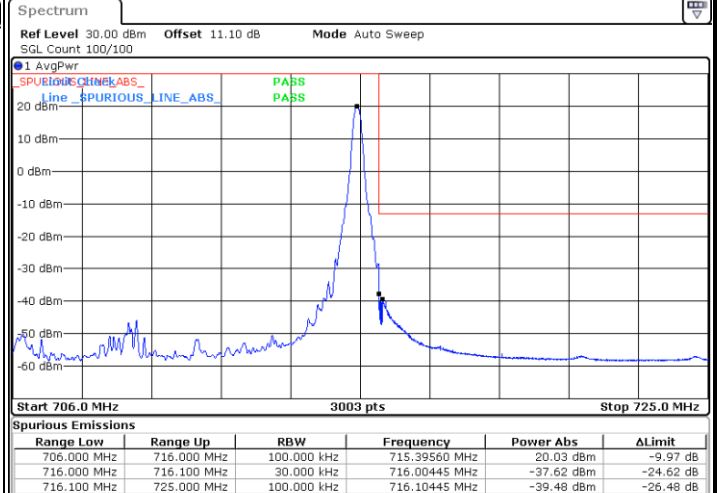


LTE Band 12 / 10MHz / 16QAM

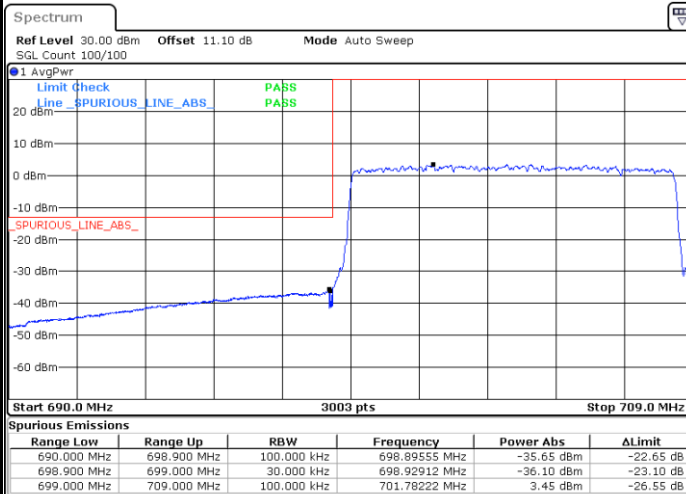
Lowest Band Edge / 1 RB



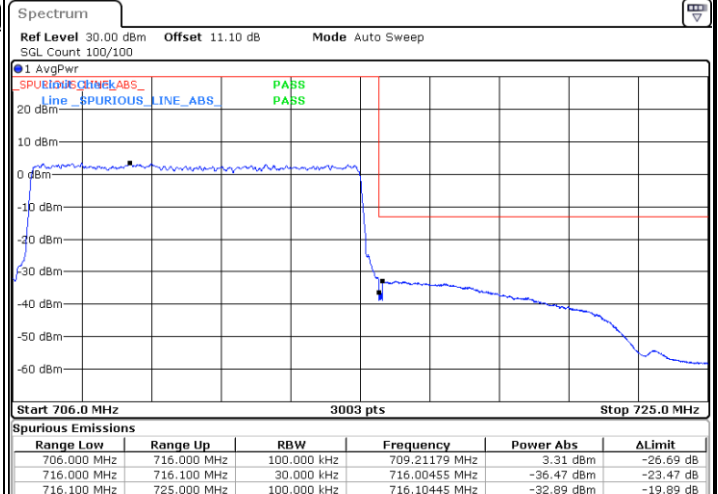
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



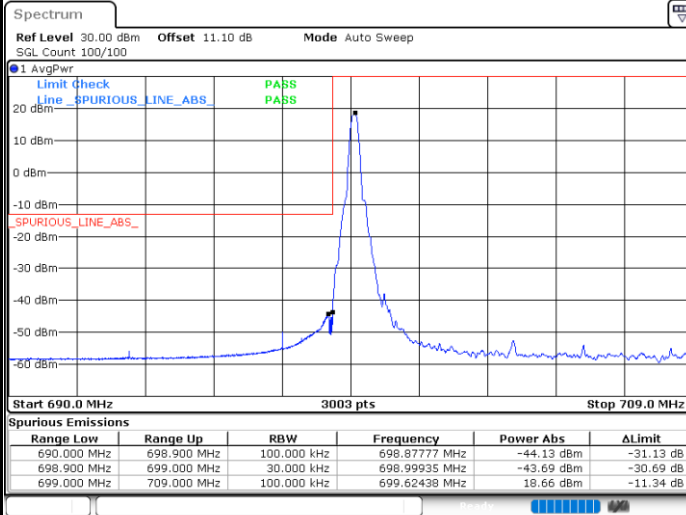
Highest Band Edge / Full RB



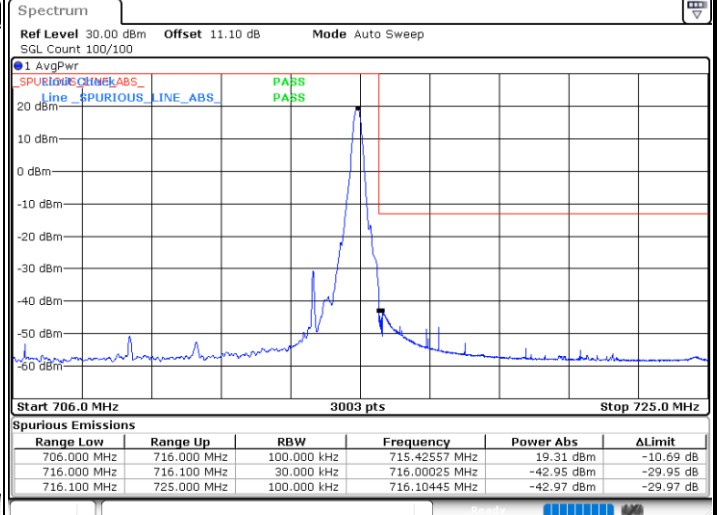


LTE Band 12 / 10MHz / 64QAM

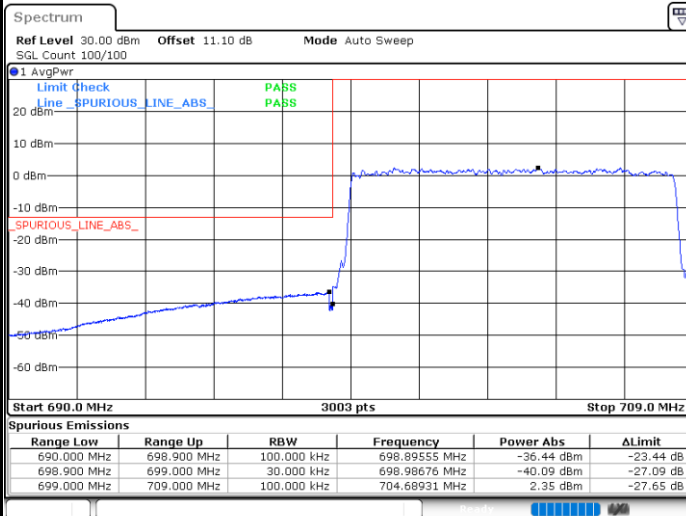
Lowest Band Edge / 1 RB



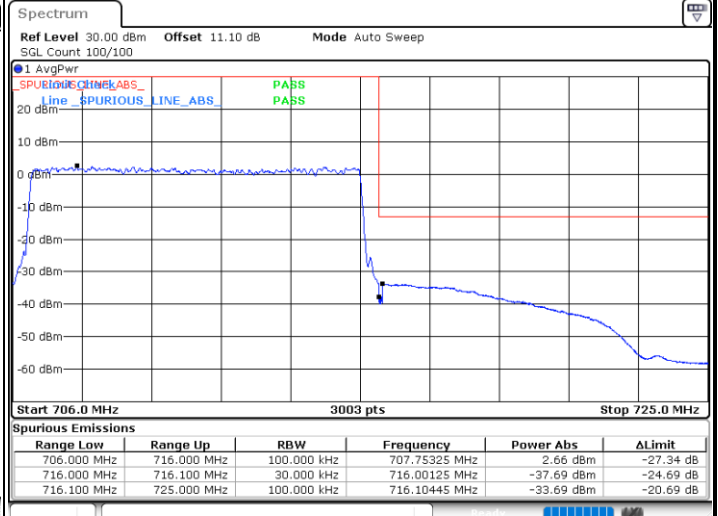
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

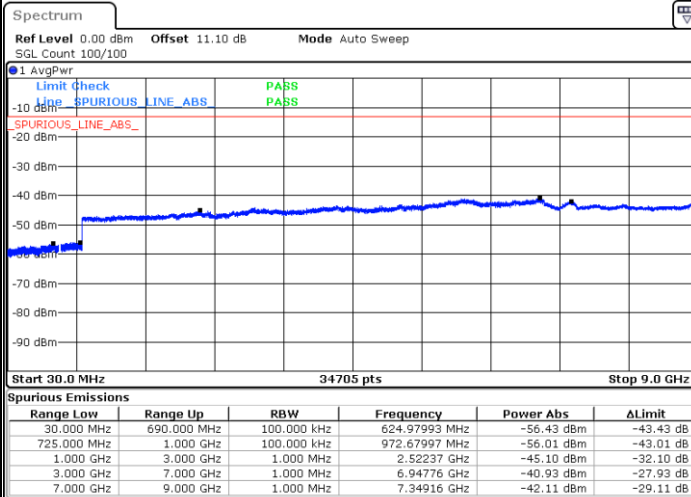




Conducted Spurious Emission

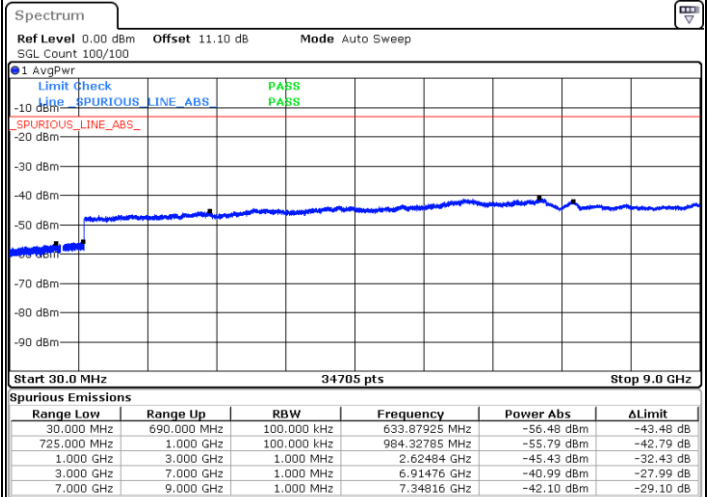
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



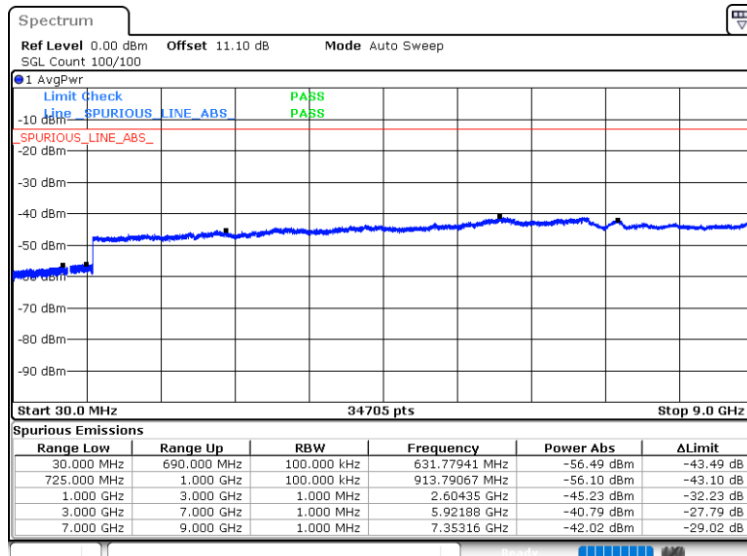
Date: 27.JAN.2022 10:59:36

Middle Channel / QPSK



Date: 27.JAN.2022 11:02:08

Highest Channel / QPSK

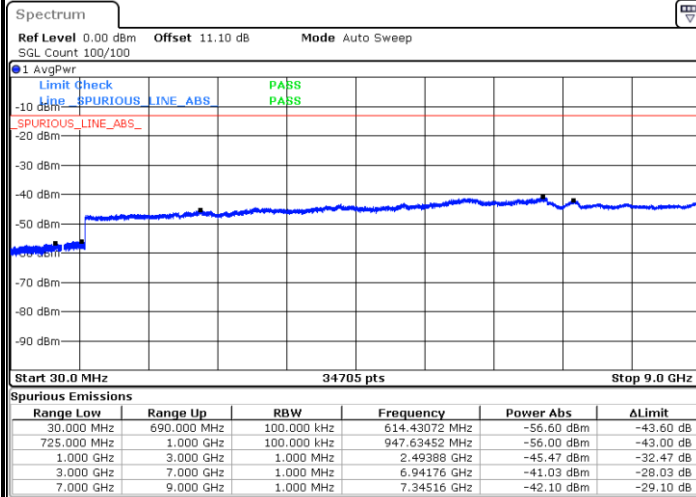


Date: 27.JAN.2022 11:05:59



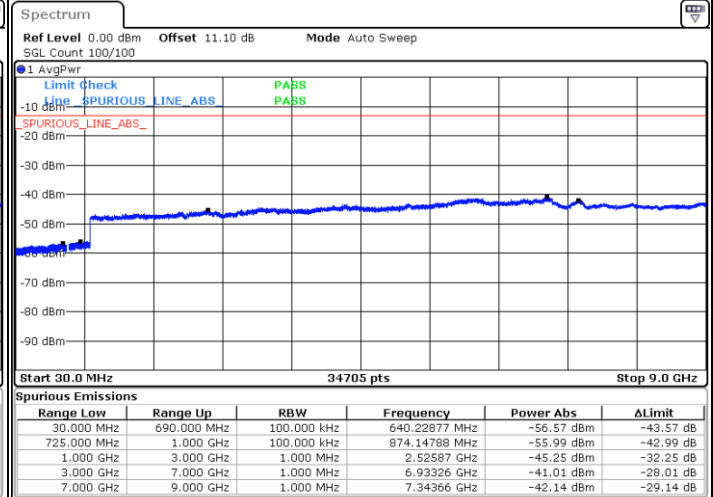
LTE Band 12 / 3MHz

Lowest Channel / QPSK



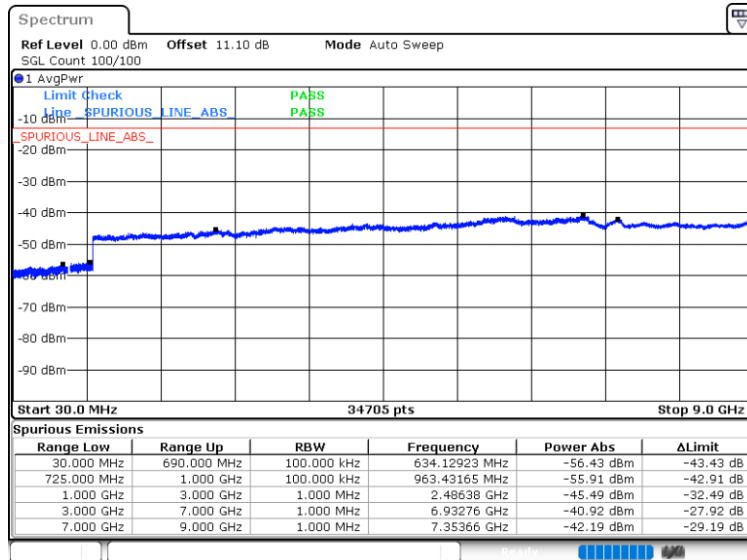
Date: 27.JAN.2022 11:13:15

Middle Channel / QPSK



Date: 27.JAN.2022 11:15:48

Highest Channel / QPSK

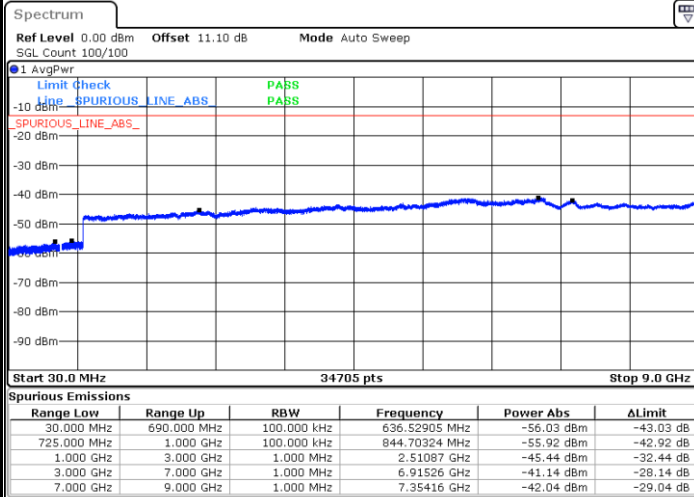


Date: 27.JAN.2022 11:19:40



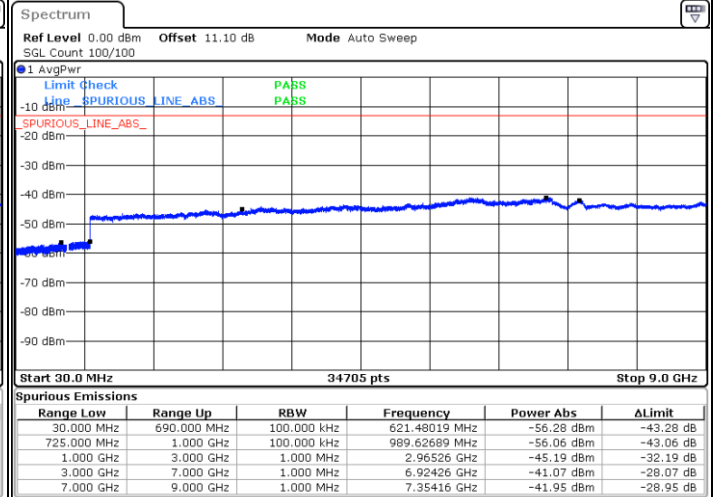
LTE Band 12 / 5MHz

Lowest Channel / QPSK



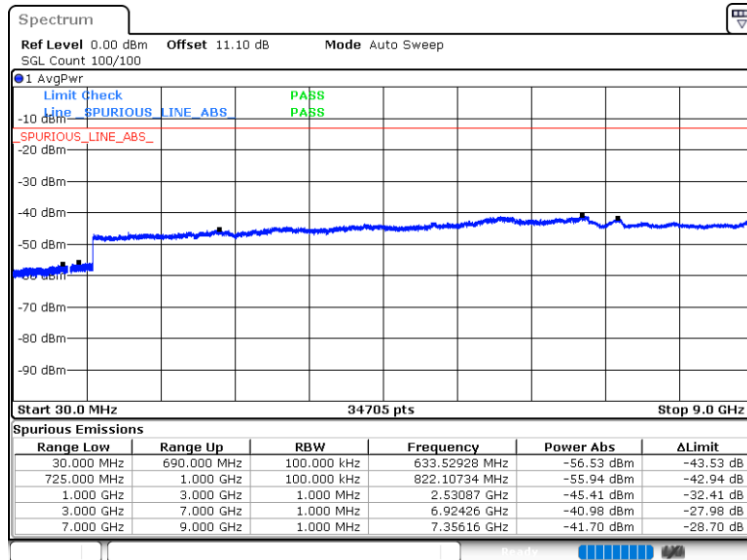
Date: 27.JAN.2022 11:30:20

Middle Channel / QPSK



Date: 27.JAN.2022 11:32:52

Highest Channel / QPSK

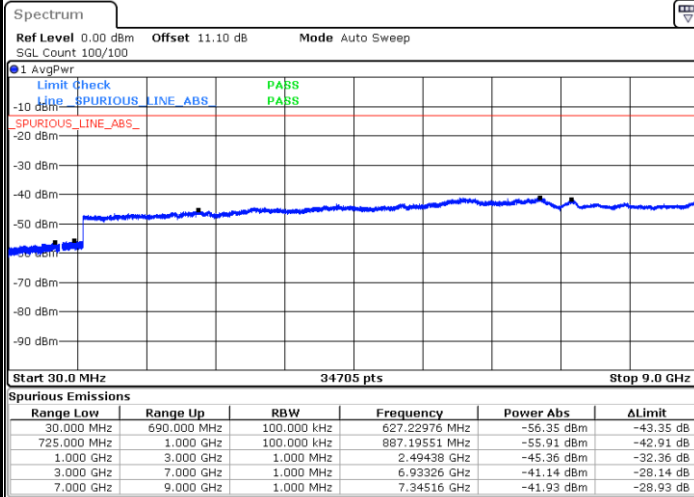


Date: 27.JAN.2022 11:36:45



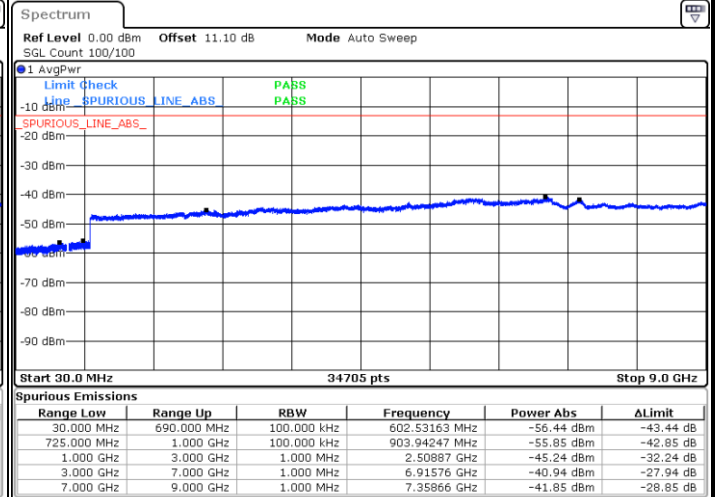
LTE Band 12 / 10MHz

Lowest Channel / QPSK



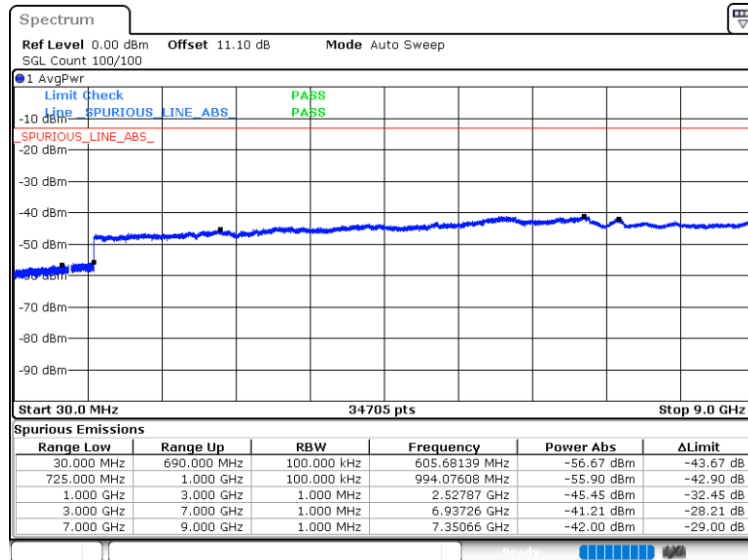
Date: 27.JAN.2022 11:40:40

Middle Channel / QPSK



Date: 27.JAN.2022 11:43:12

Highest Channel / QPSK



Date: 27.JAN.2022 11:47:05

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	0.0040	PASS
40	Normal Voltage	0.0073	
30	Normal Voltage	0.0164	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0093	
0	Normal Voltage	0.0082	
-10	Normal Voltage	0.0020	
-20	Normal Voltage	0.0047	
-30	Normal Voltage	0.0092	
20	Maximum Voltage	0.0105	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0028	

Note:

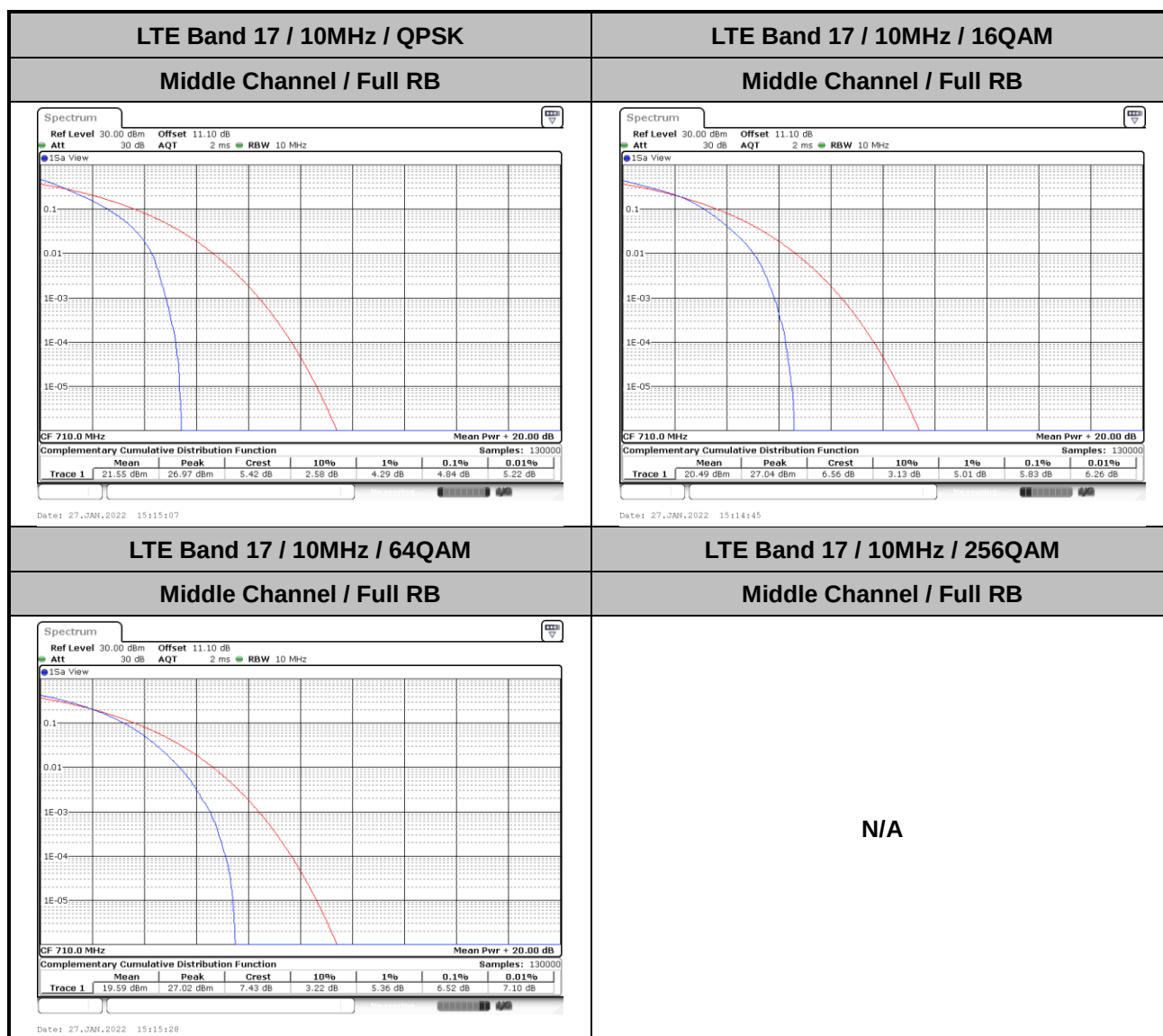
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 17

Peak-to-Average Ratio

Mode	LTE Band 17 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.84	5.83	6.52	PASS



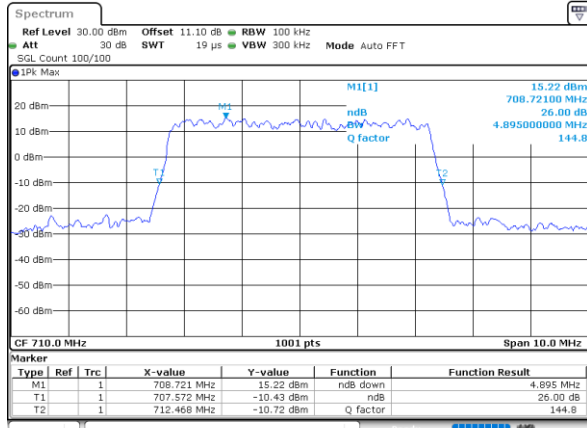
**26dB Bandwidth**

Mode	LTE Band 17 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.90	4.89	9.73	9.79	-	-	-	-
Mode	LTE Band 17 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	4.90	-	9.83	-	-	-	-	-



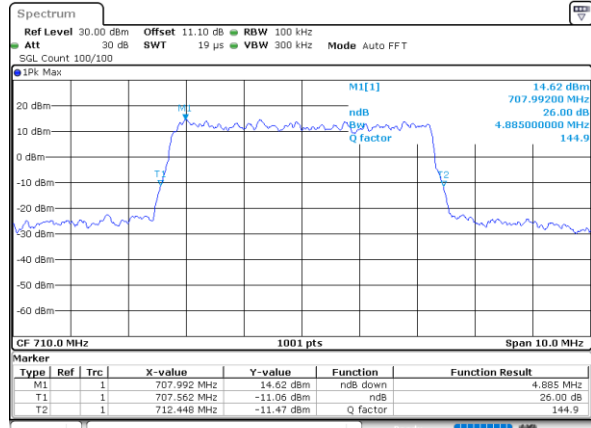
LTE Band 17

Middle Channel / 5MHz / QPSK



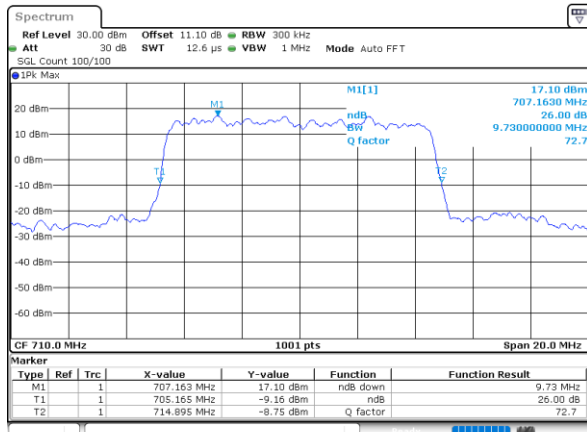
Date: 27.JAN.2022 14:42:01

Middle Channel / 5MHz / 16QAM



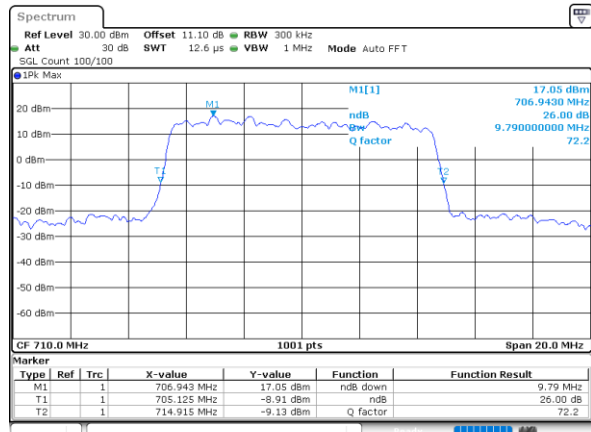
Date: 27.JAN.2022 14:42:21

Middle Channel / 10MHz / QPSK



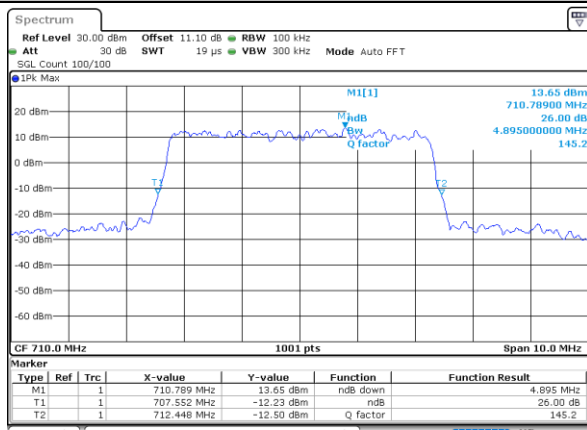
Date: 27.JAN.2022 14:56:15

Middle Channel / 10MHz / 16QAM



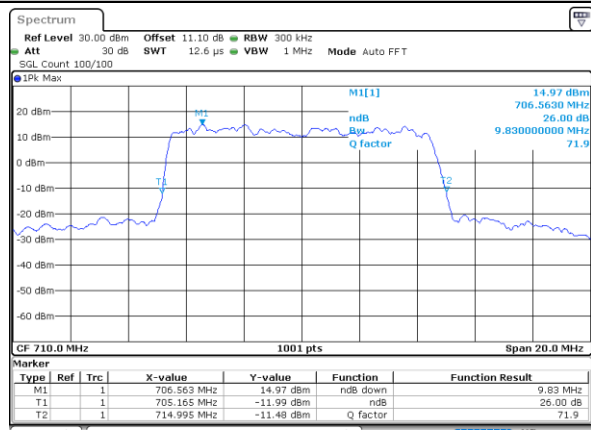
Date: 27.JAN.2022 14:56:36

Middle Channel / 5MHz / 64QAM



Date: 27.JAN.2022 15:06:40

Middle Channel / 10MHz / 64QAM



Date: 27.JAN.2022 15:12:02

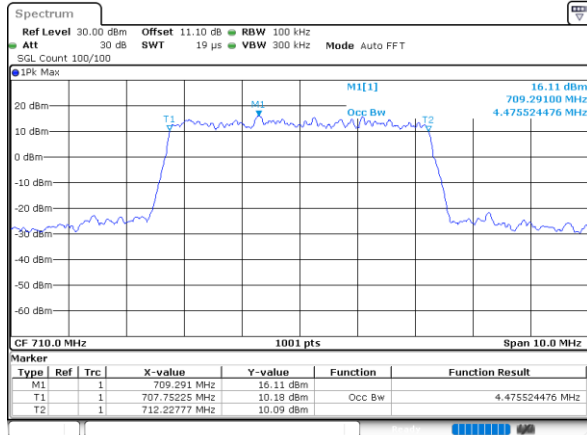
**Occupied Bandwidth**

Mode	LTE Band 17 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.48	4.49	9.03	9.01	-	-	-	-
Mode	LTE Band 17 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	4.50	-	9.07	-	-	-	-	-

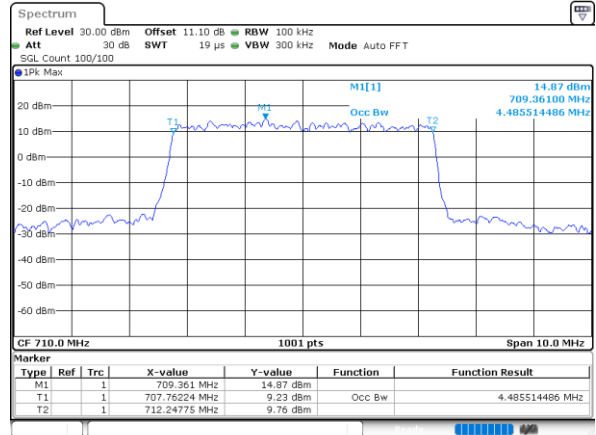


LTE Band 17

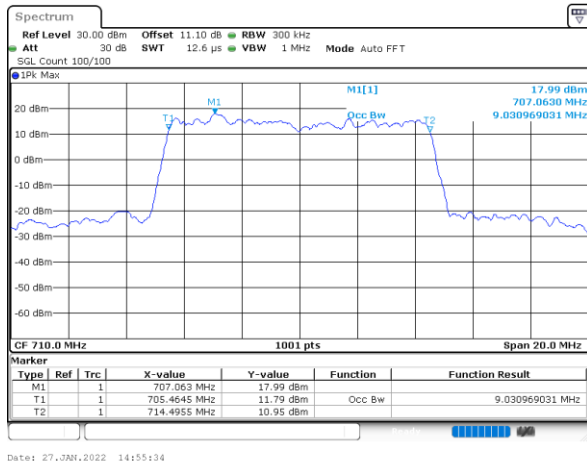
Middle Channel / 5MHz / QPSK



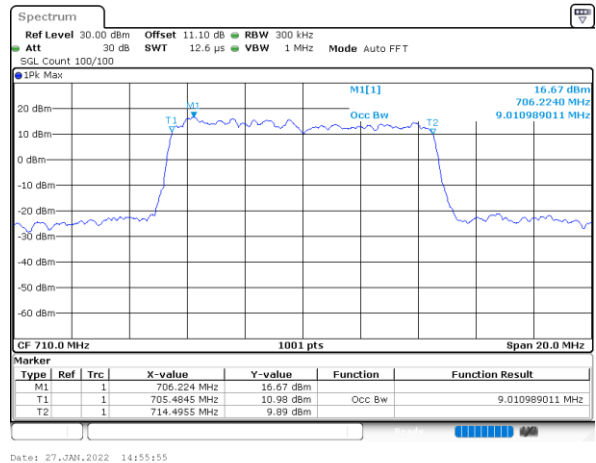
Middle Channel / 5MHz / 16QAM



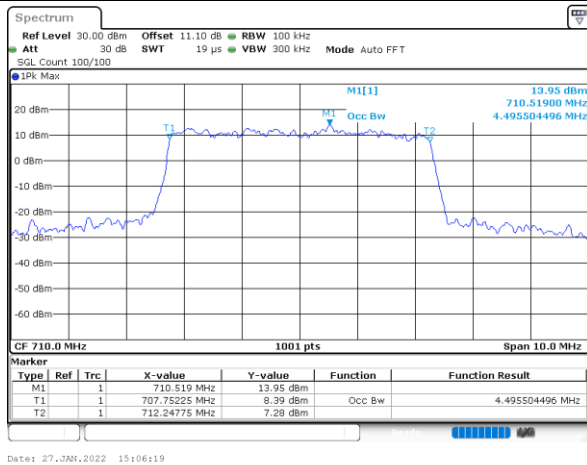
Middle Channel / 10MHz / QPSK



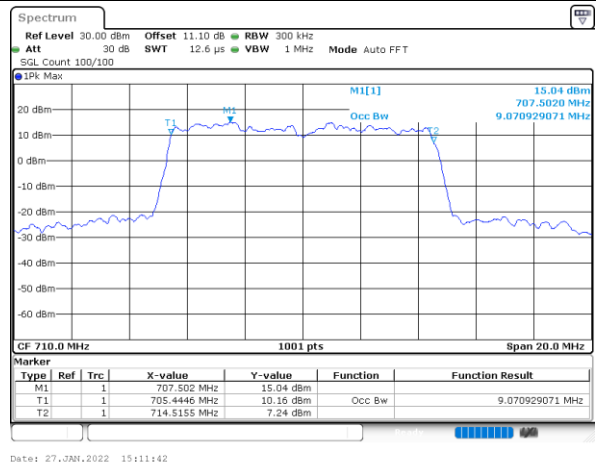
Middle Channel / 10MHz / 16QAM



Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM

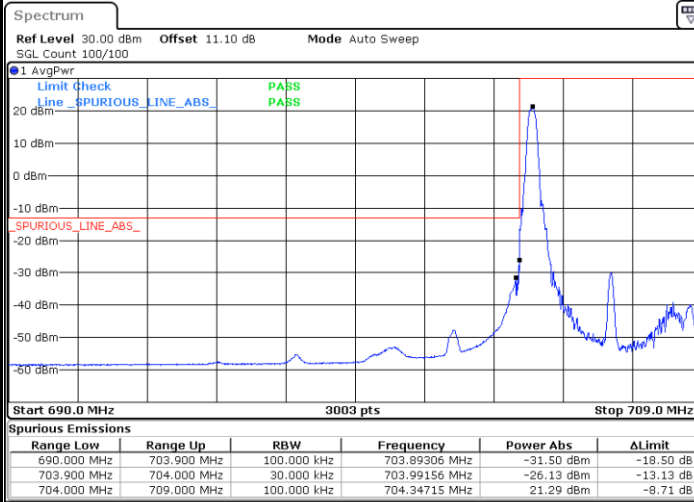




Conducted Band Edge

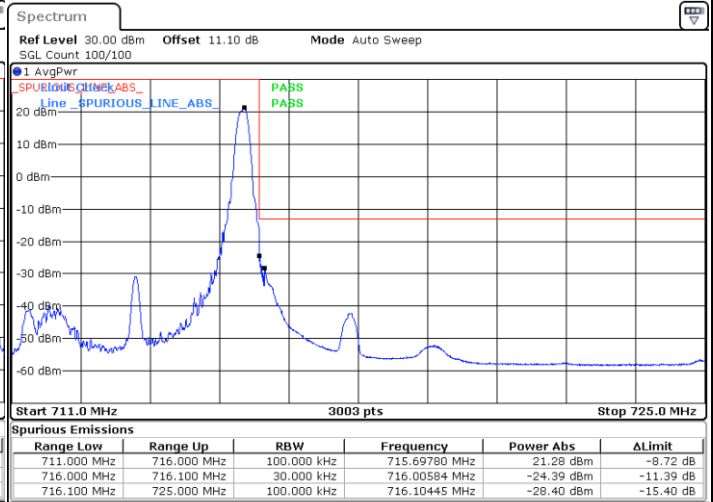
LTE Band 17 / 5MHz / QPSK

Lowest Band Edge / 1 RB



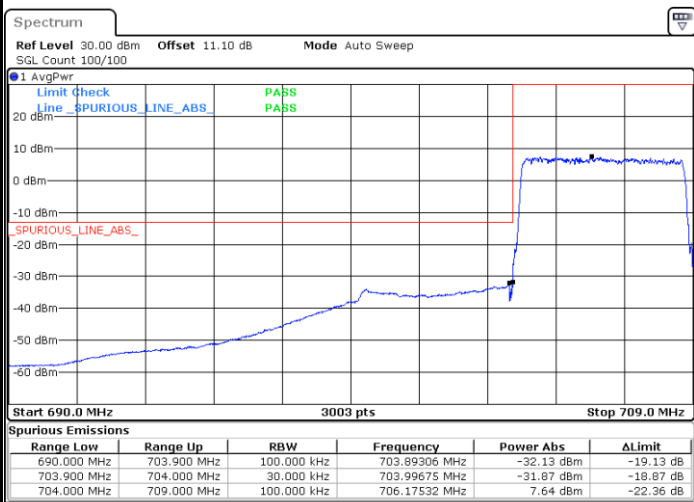
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Highest Band Edge / 1 RB



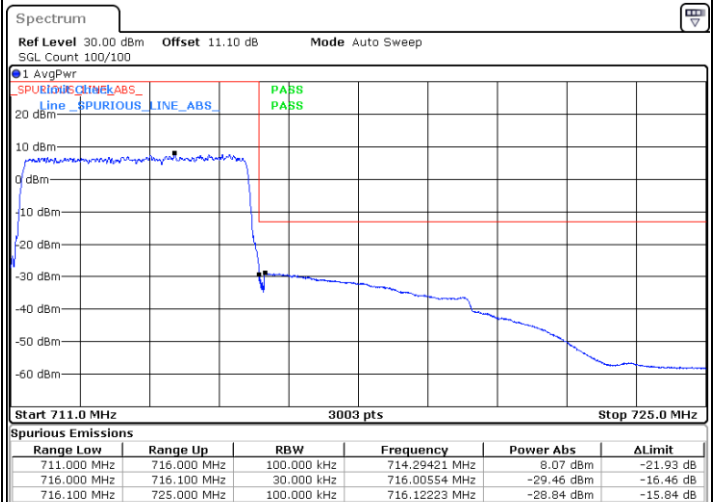
Date: 27.JAN.2022 14:44:41

Lowest Band Edge / Full RB



Date: 27.JAN.2022 14:38:38

Highest Band Edge / Full RB

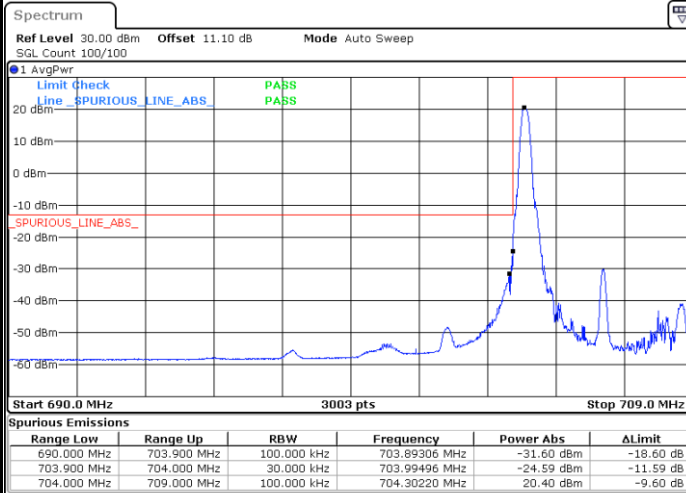


Date: 27.JAN.2022 14:47:01

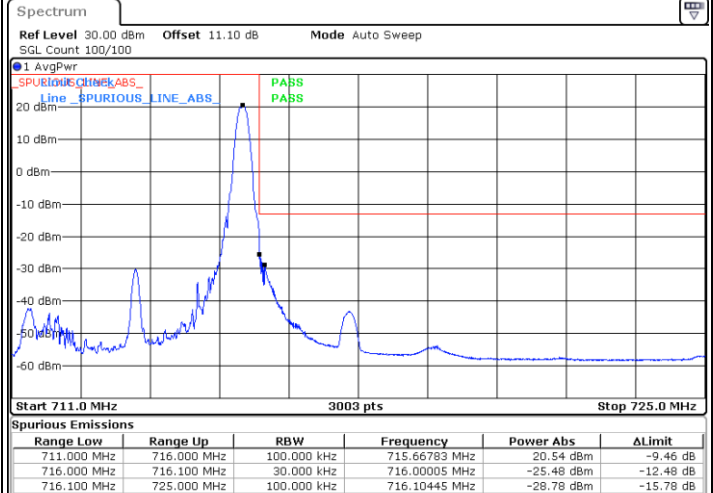


LTE Band 17 / 5MHz / 16QAM

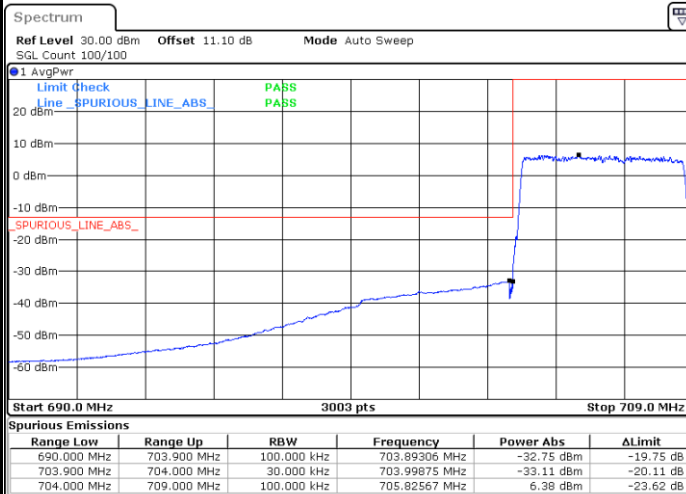
Lowest Band Edge / 1 RB



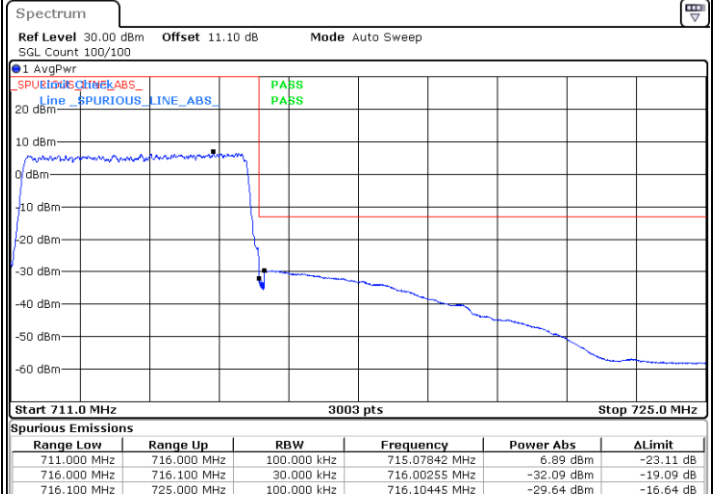
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



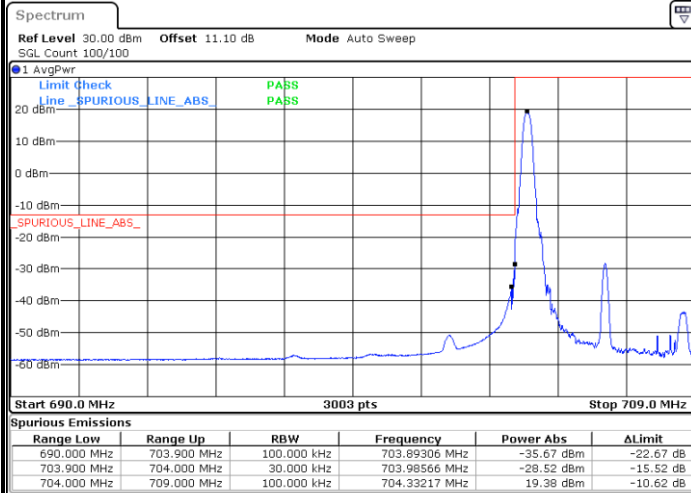
Highest Band Edge / Full RB



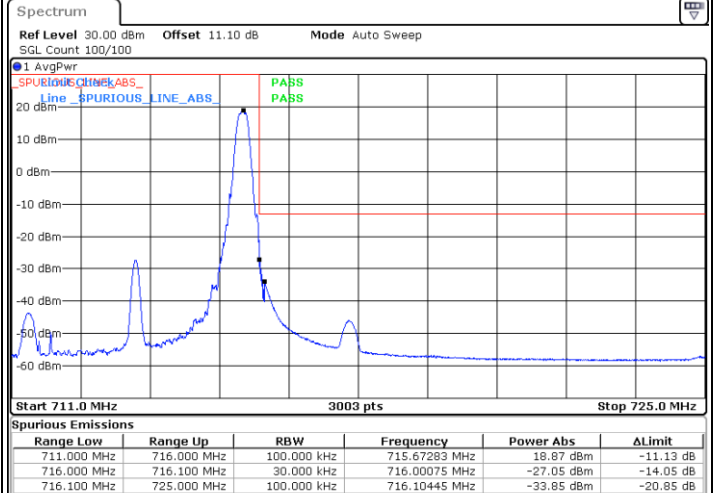


LTE Band 17 / 5MHz / 64QAM

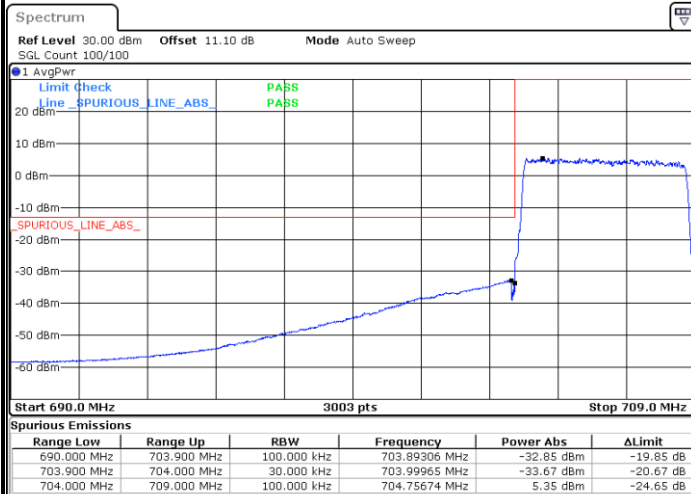
Lowest Band Edge / 1 RB



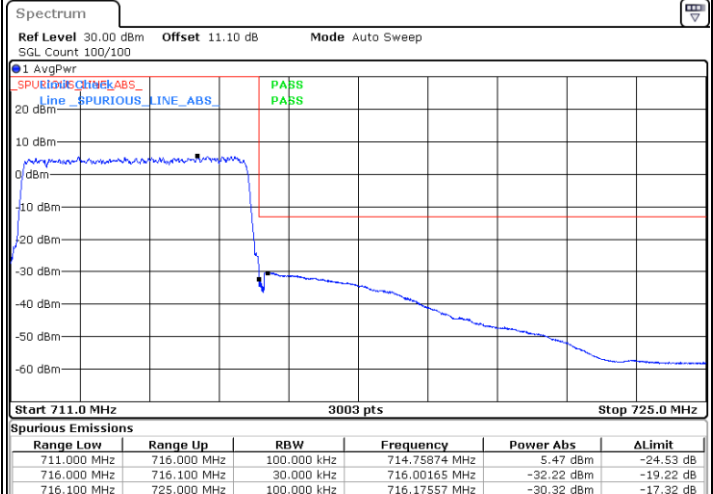
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



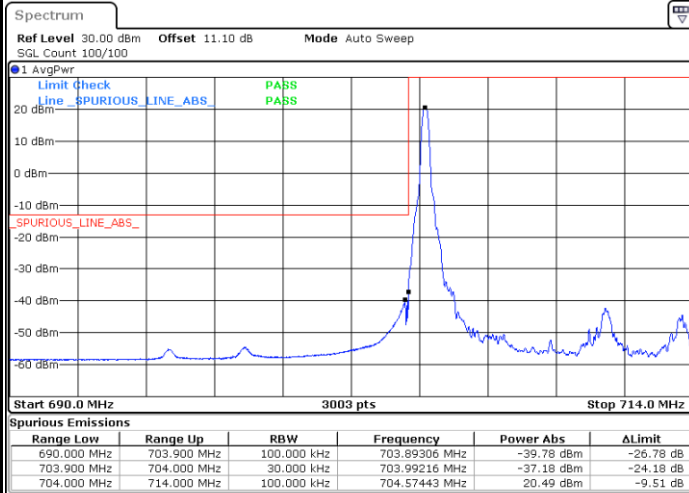
Highest Band Edge / Full RB



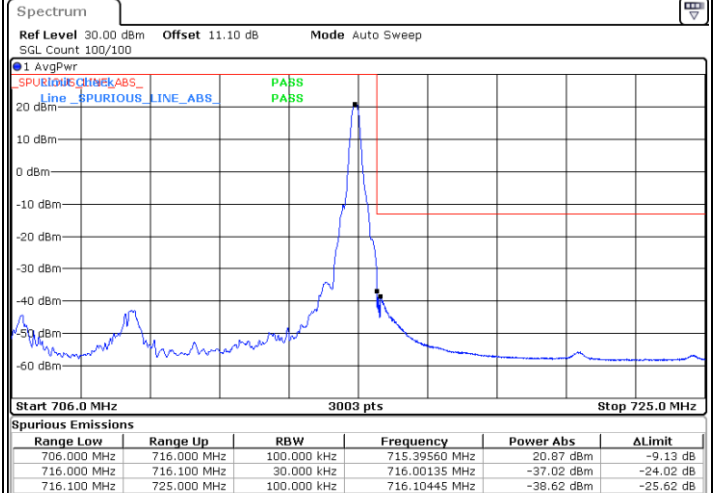


LTE Band 17 / 10MHz / QPSK

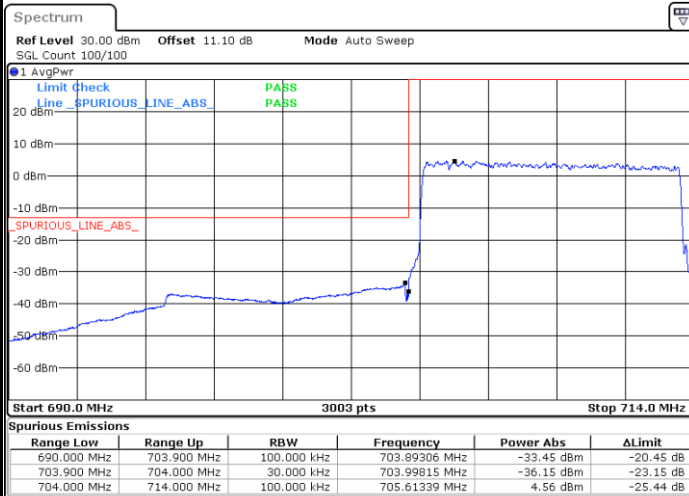
Lowest Band Edge / 1 RB



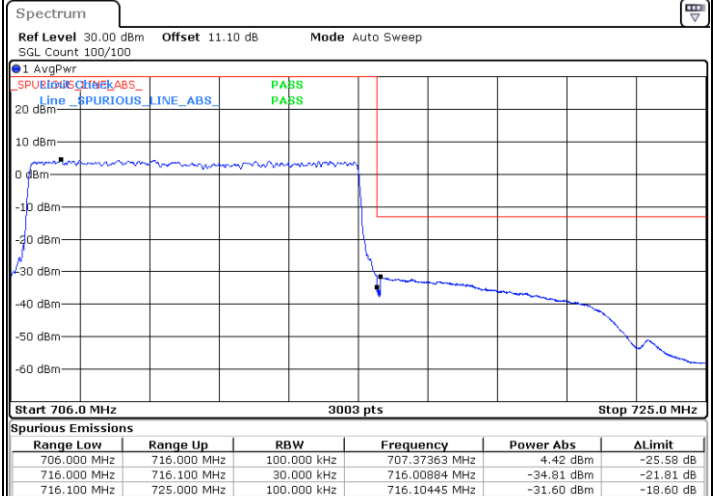
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



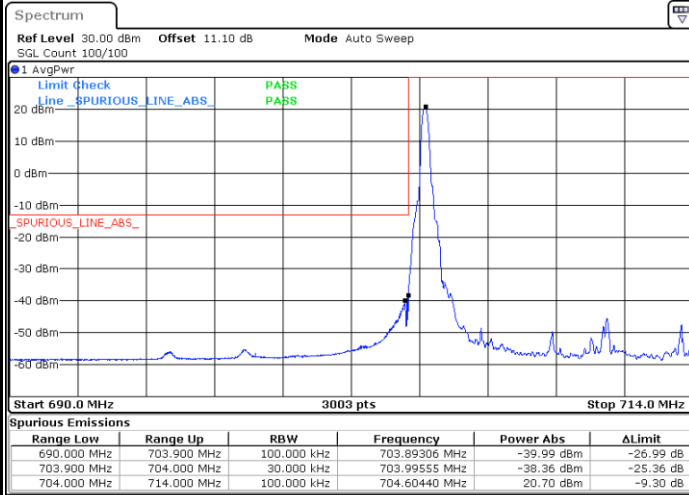
Highest Band Edge / Full RB



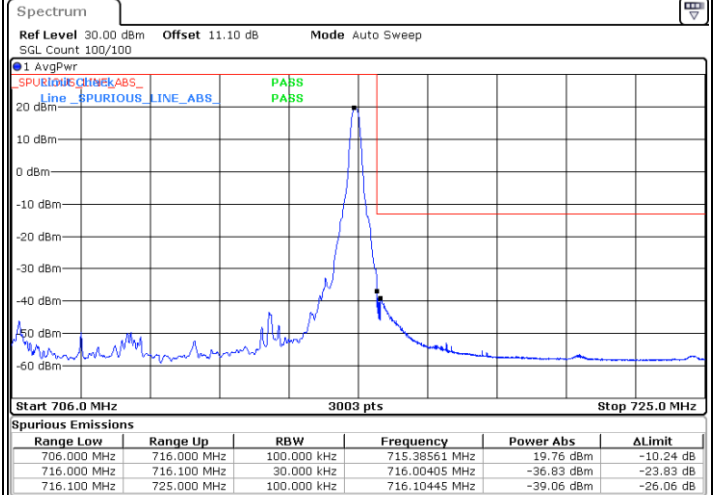


LTE Band 17 / 10MHz / 16QAM

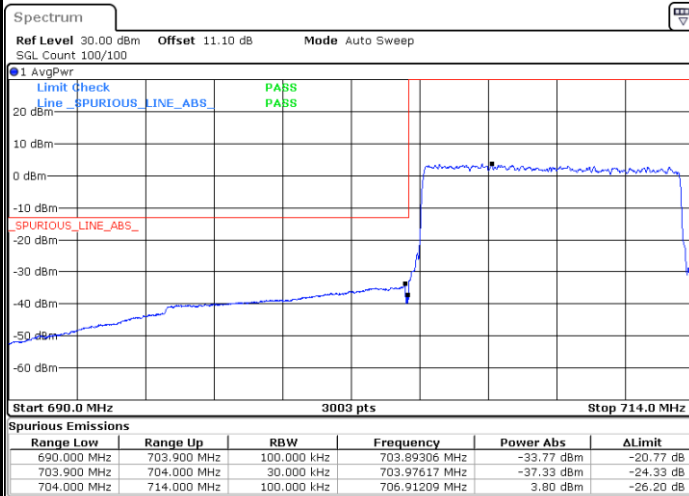
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

