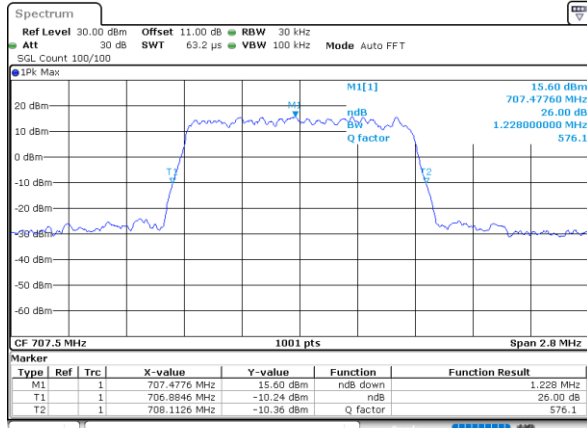




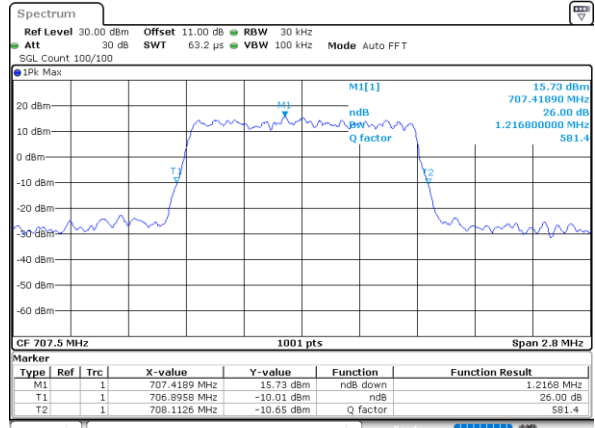
LTE Band 12

Middle Channel / 1.4MHz / QPSK



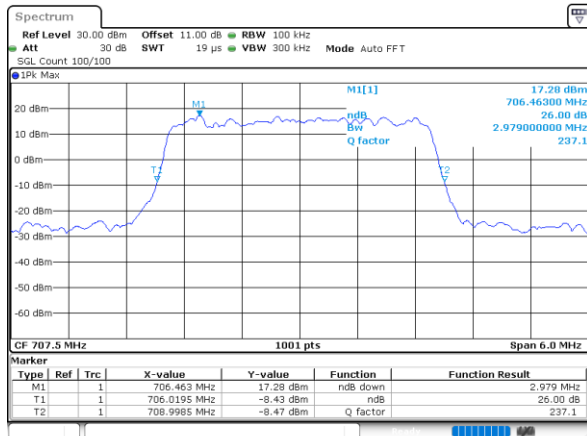
Date: 22.SEP.2021 15:02:06

Middle Channel / 1.4MHz / 16QAM



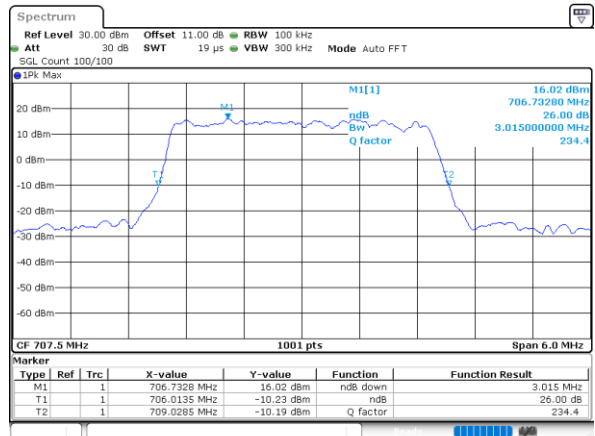
Date: 22.SEP.2021 15:02:27

Middle Channel / 3MHz / QPSK



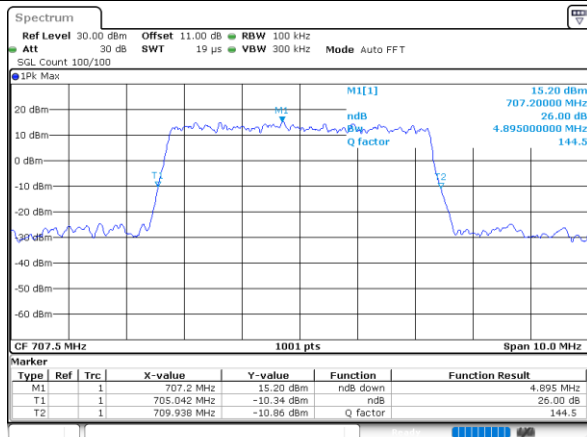
Date: 22.SEP.2021 15:14:40

Middle Channel / 3MHz / 16QAM



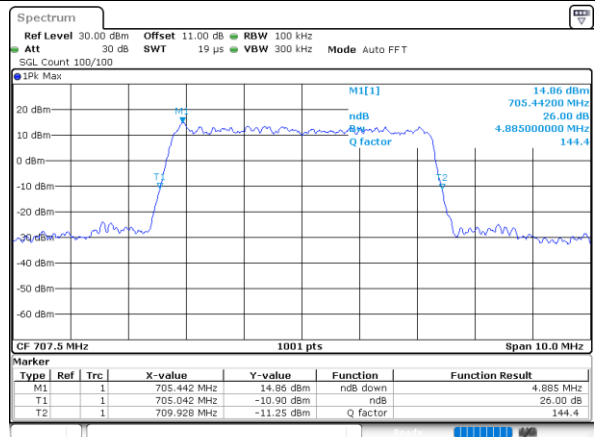
Date: 22.SEP.2021 15:15:01

Middle Channel / 5MHz / QPSK



Date: 22.SEP.2021 15:31:07

Middle Channel / 5MHz / 16QAM

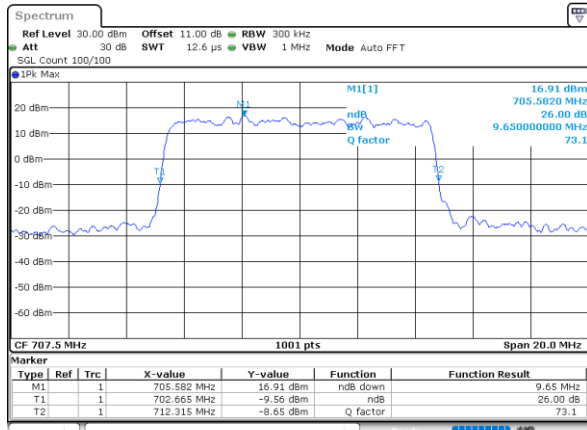


Date: 22.SEP.2021 15:31:27



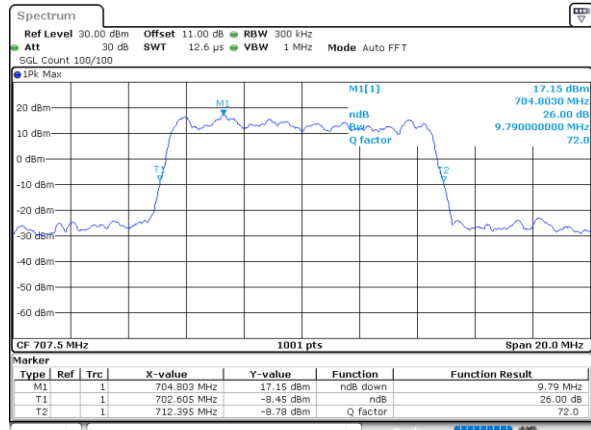
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 22,SEP,2021 15:40:24

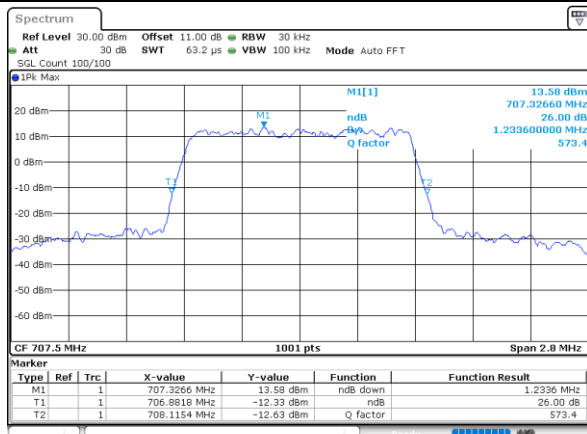
Middle Channel / 10MHz / 16QAM



Date: 22,SEP,2021 15:40:44

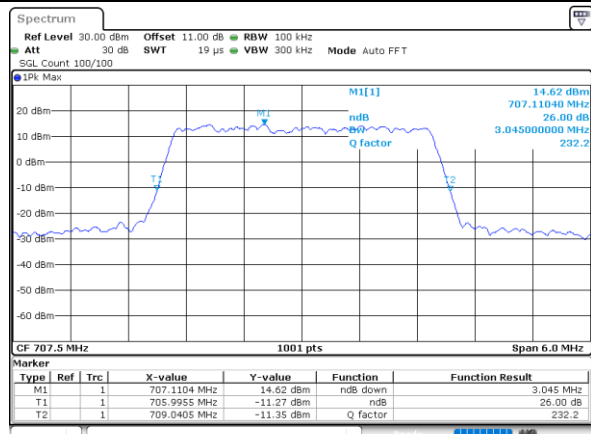
LTE Band 12

Middle Channel / 1.4MHz / 64QAM



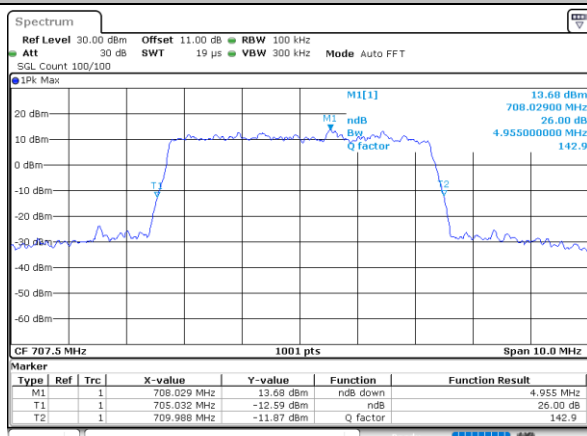
Date: 22,SEP,2021 15:08:47

Middle Channel / 3MHz / 64QAM



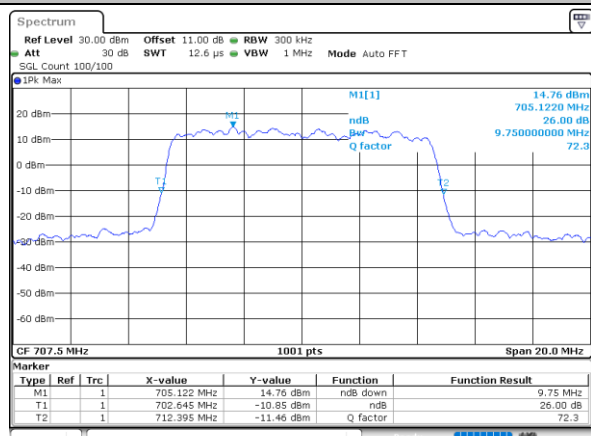
Date: 22,SEP,2021 15:21:43

Middle Channel / 5MHz / 64QAM



Date: 22,SEP,2021 15:25:14

Middle Channel / 10MHz / 64QAM



Date: 22,SEP,2021 16:29:14

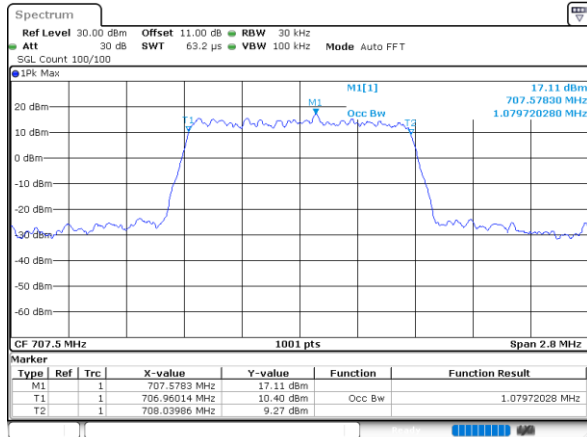
**Occupied Bandwidth**

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	1.08	1.09	2.73	2.72	4.47	4.49	8.99	9.07	-	-	-	-
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	1.09	-	2.72	-	4.48	-	9.03	-	-	-	-	-

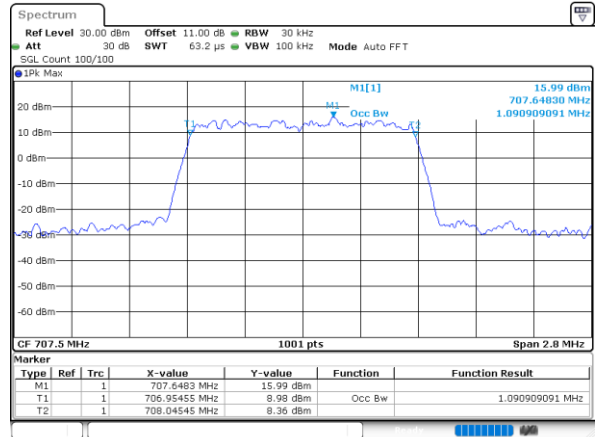


LTE Band 12

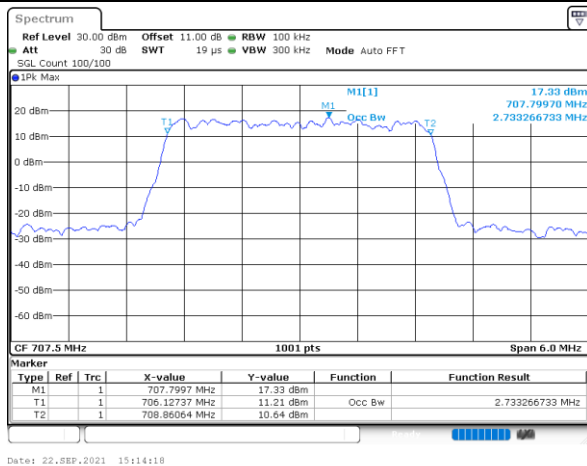
Middle Channel / 1.4MHz / QPSK



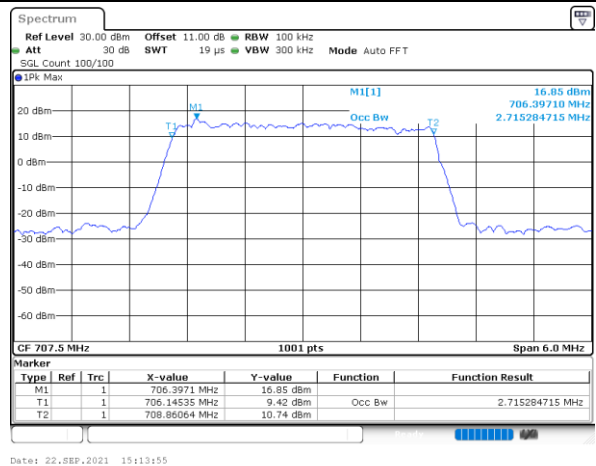
Middle Channel / 1.4MHz / 16QAM



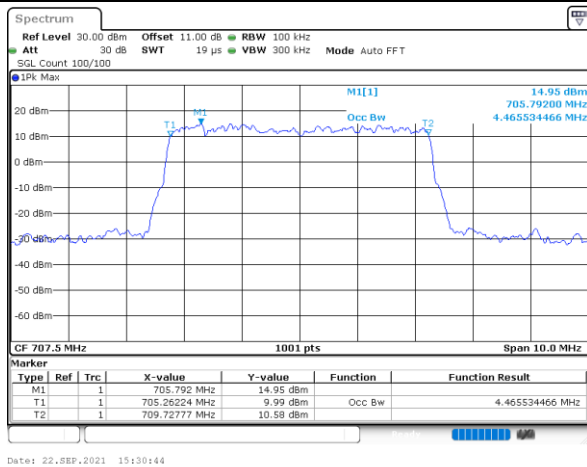
Middle Channel / 3MHz / QPSK



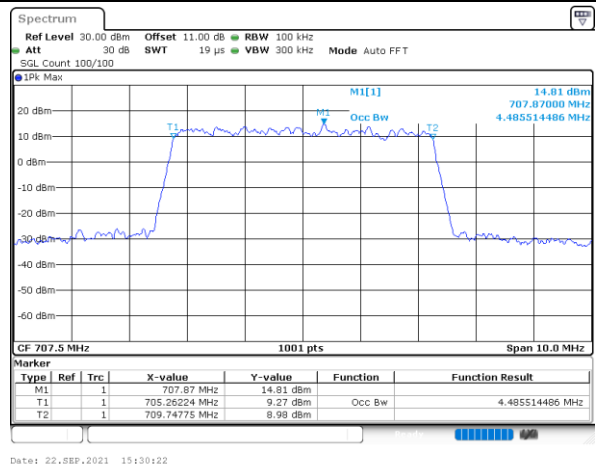
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



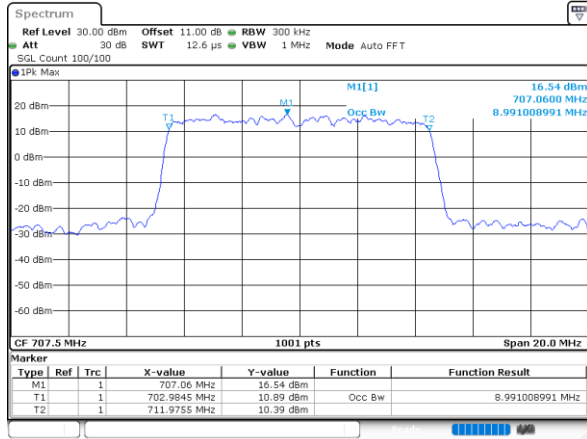
Middle Channel / 5MHz / 16QAM



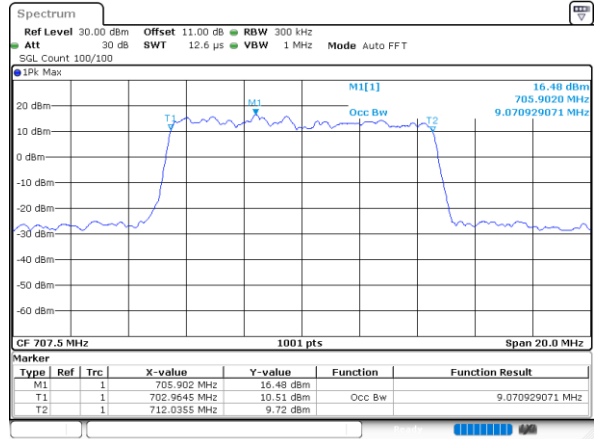


LTE Band 12

Middle Channel / 10MHz / QPSK

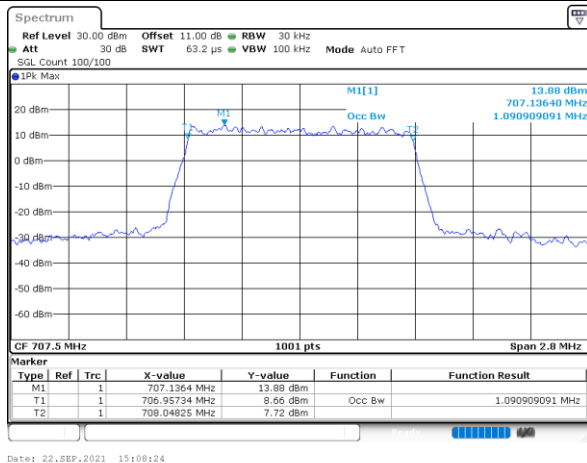


Middle Channel / 10MHz / 16QAM

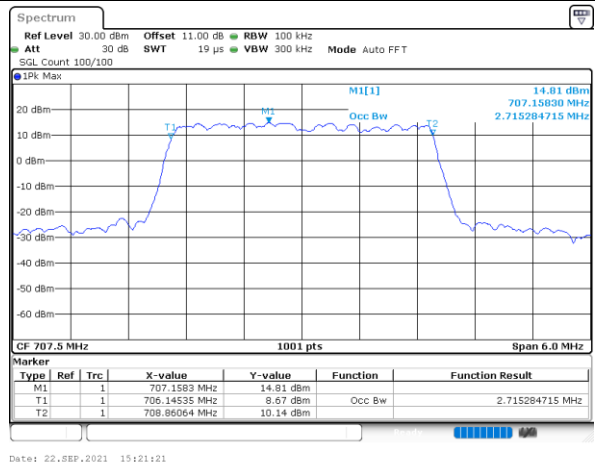


LTE Band 12

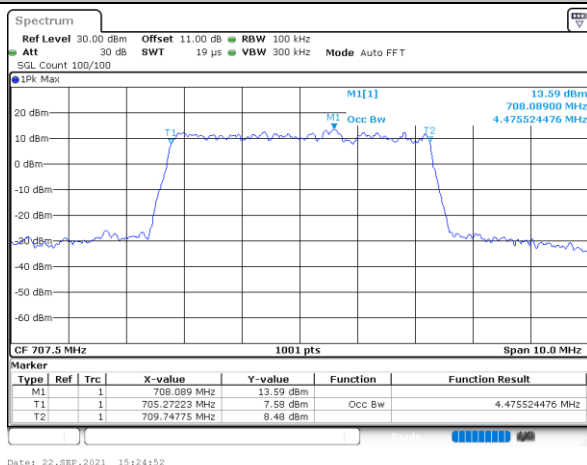
Middle Channel / 1.4MHz / 64QAM



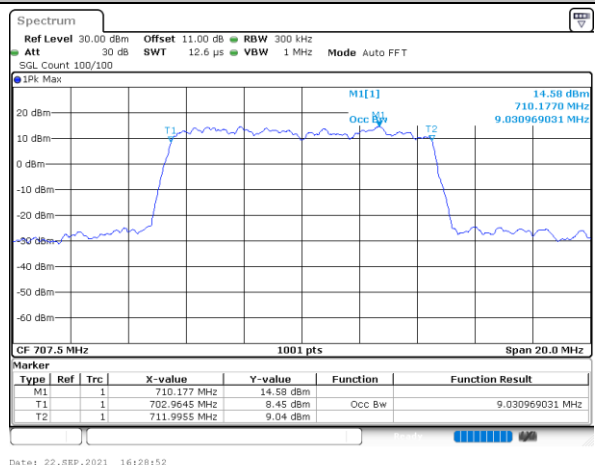
Middle Channel / 3MHz / 64QAM



Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM

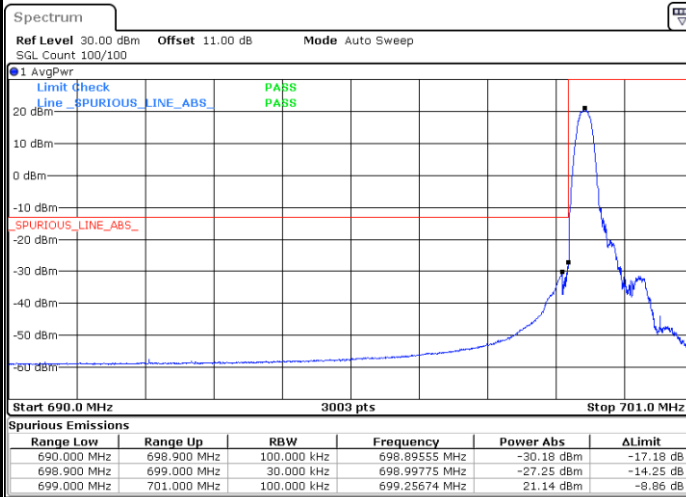




Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

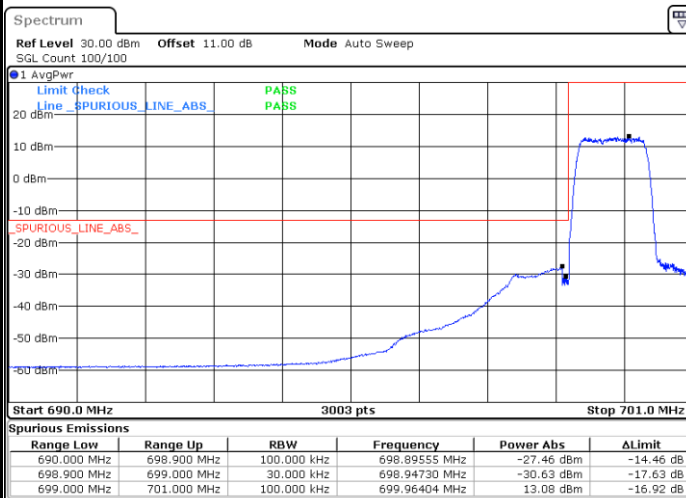
Lowest Band Edge / 1RB



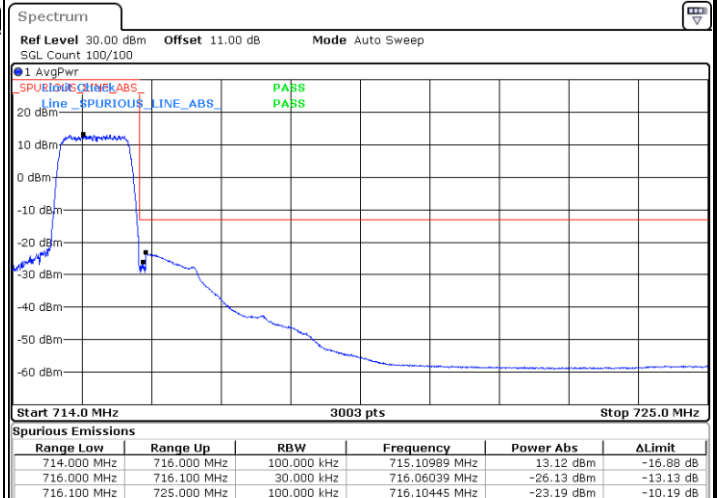
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



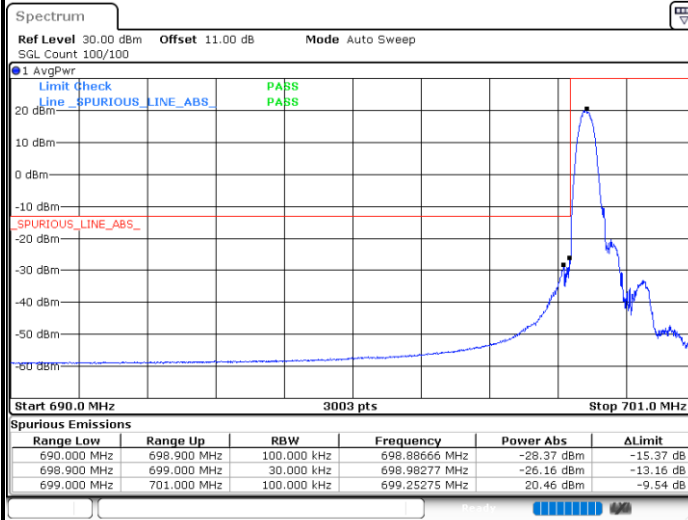
Highest Band Edge / Full RB



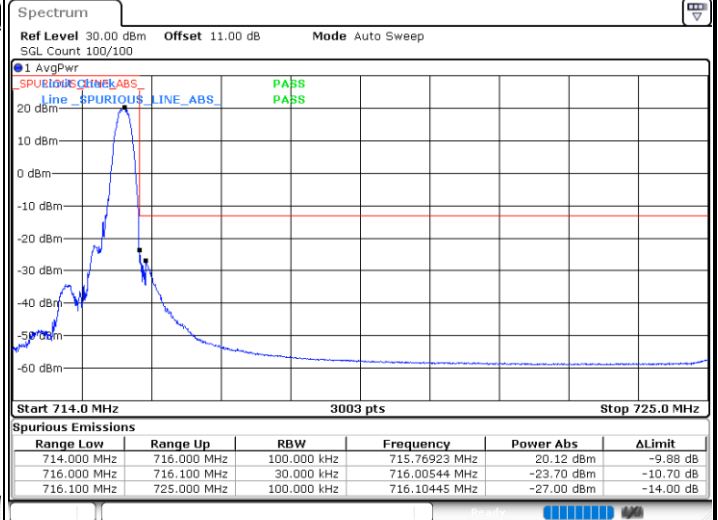


LTE Band 12 / 1.4MHz / 16QAM

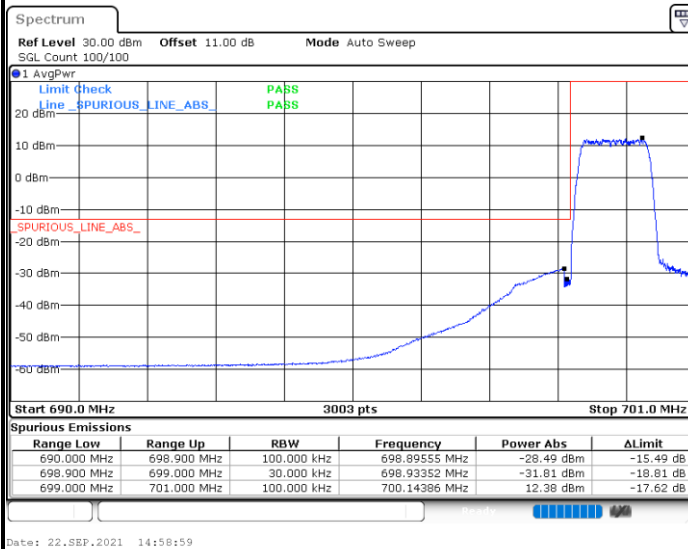
Lowest Band Edge / 1 RB



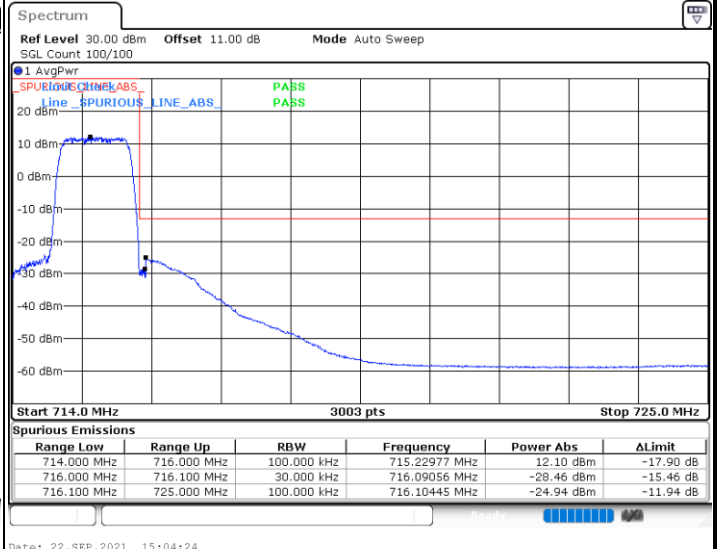
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



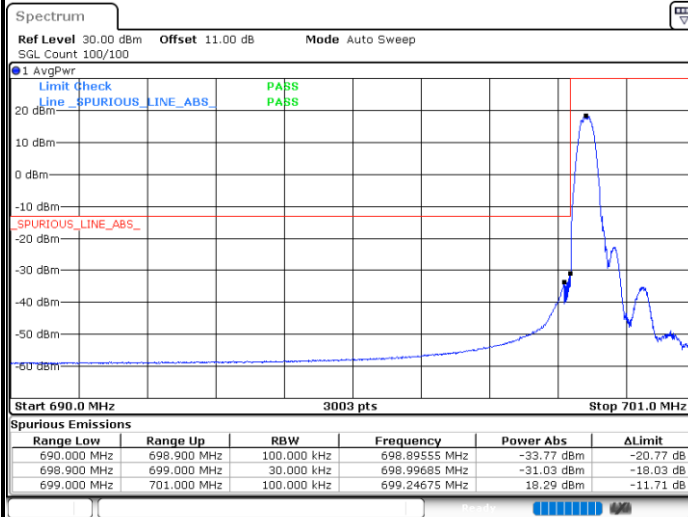
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 64QAM

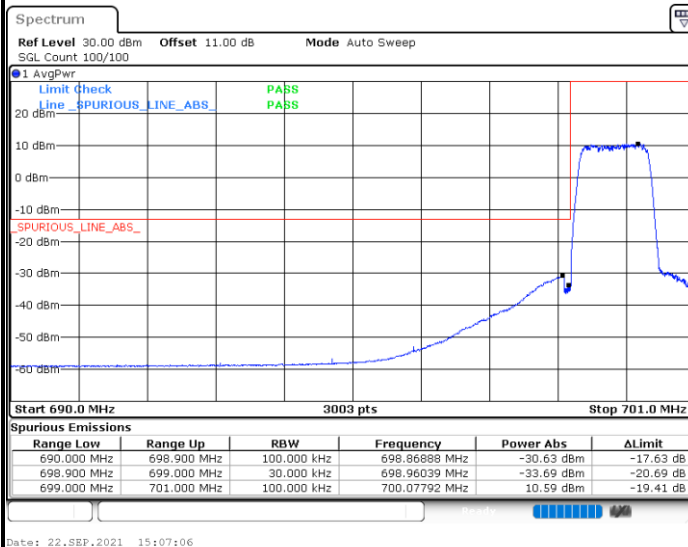
Lowest Band Edge / 1 RB



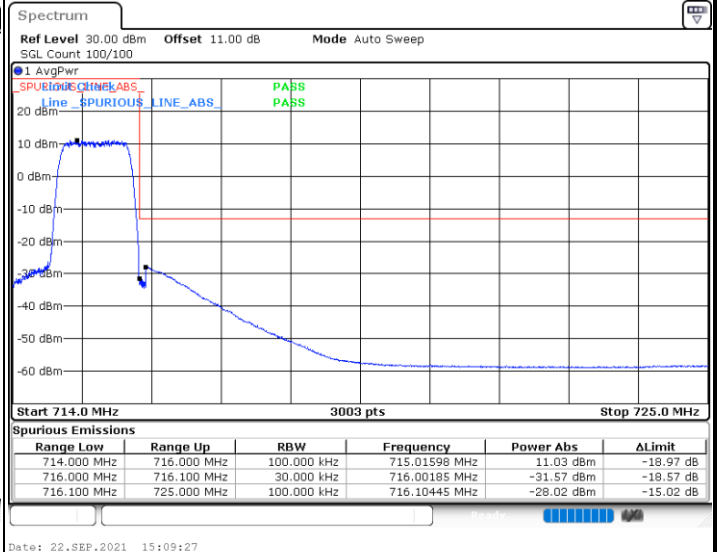
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



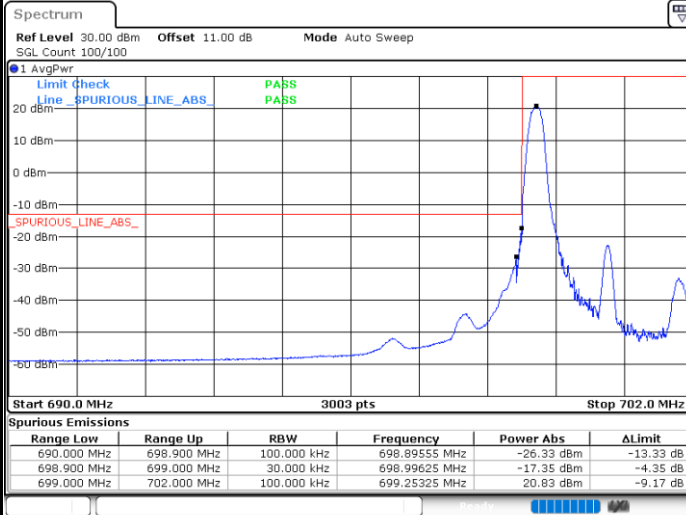
Highest Band Edge / Full RB



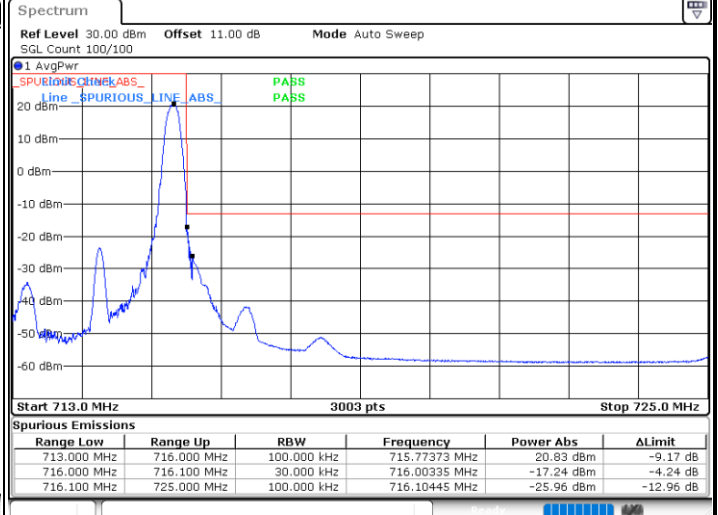


LTE Band 12 / 3MHz / QPSK

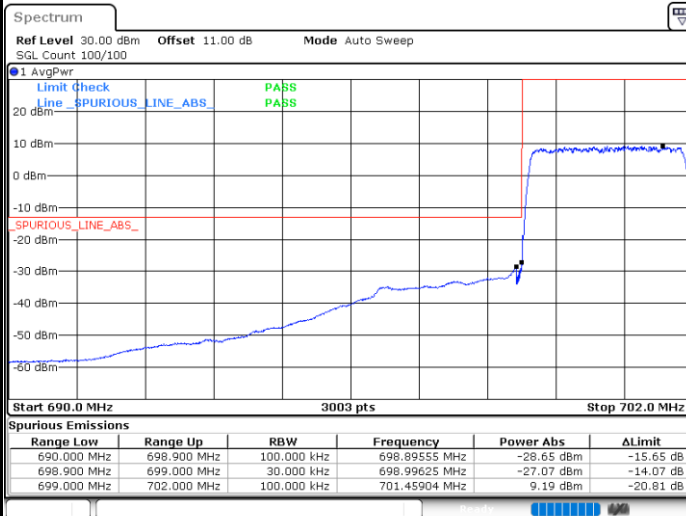
Lowest Band Edge / 1RB



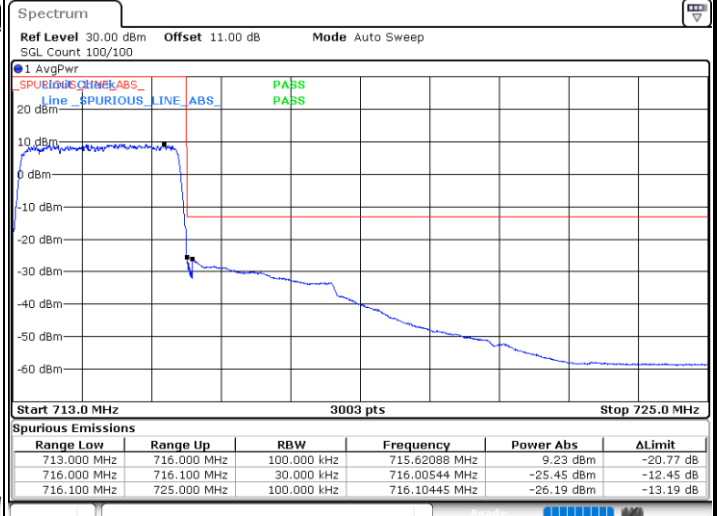
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



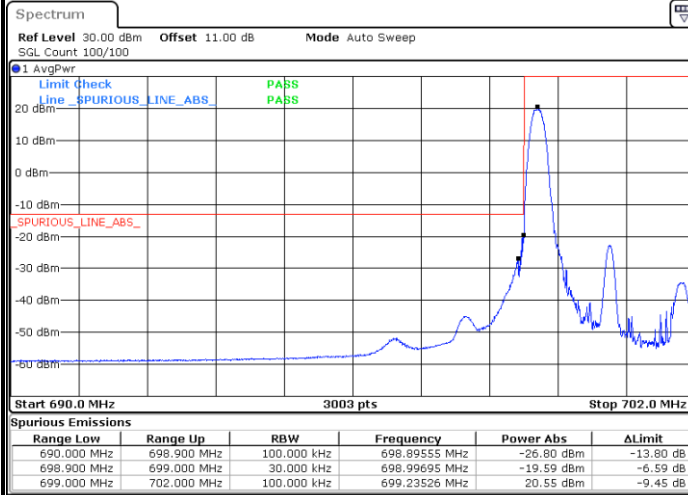
Highest Band Edge / Full RB



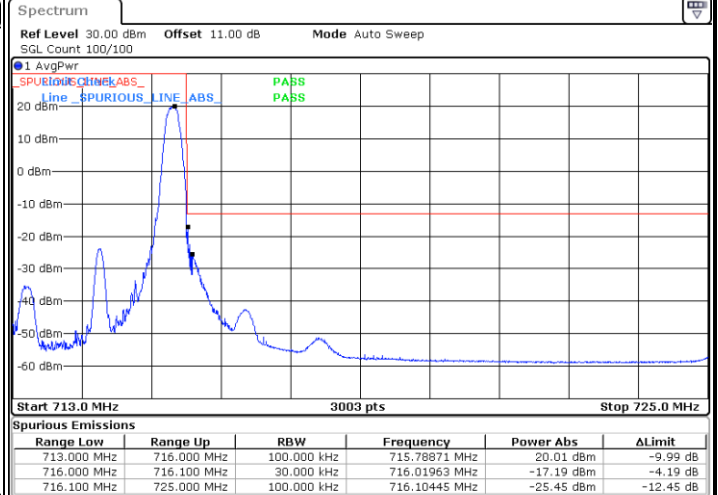


LTE Band 12 / 3MHz / 16QAM

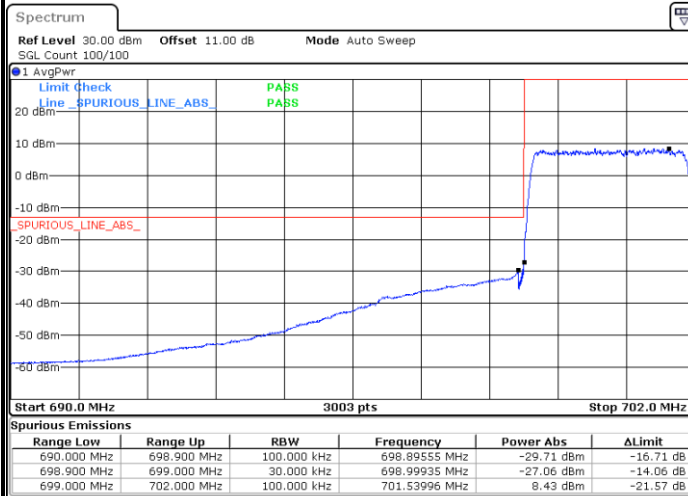
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



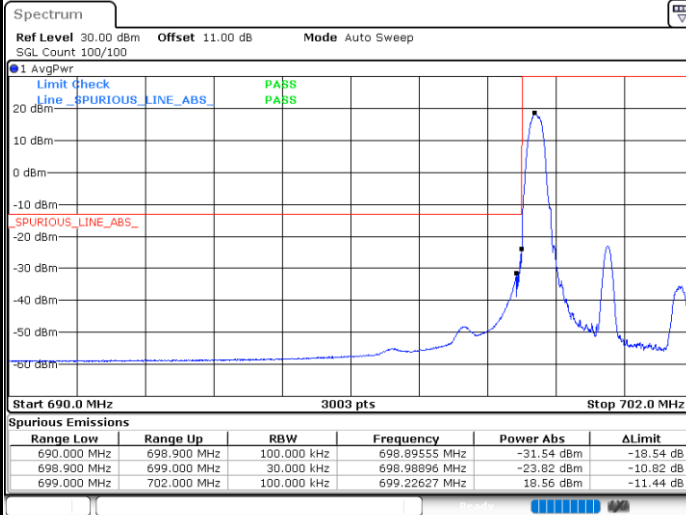
Highest Band Edge / Full RB



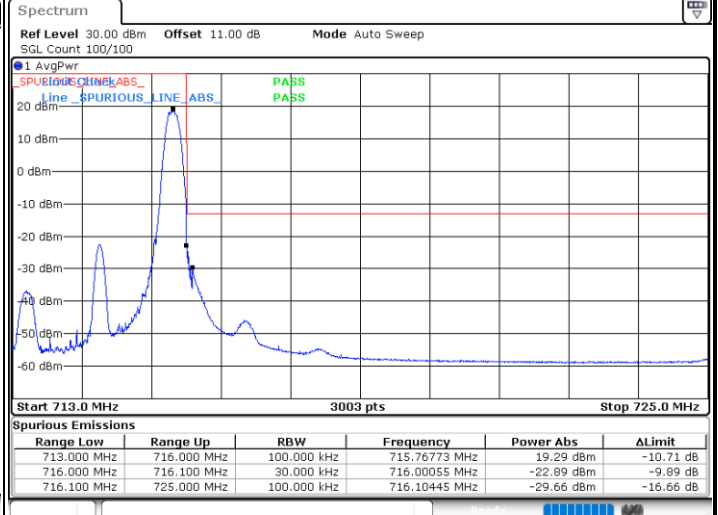


LTE Band 12 / 3MHz / 64QAM

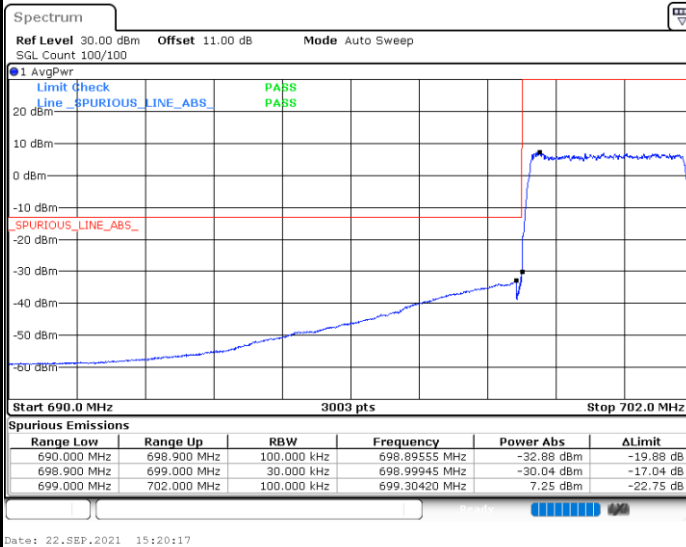
Lowest Band Edge / 1 RB



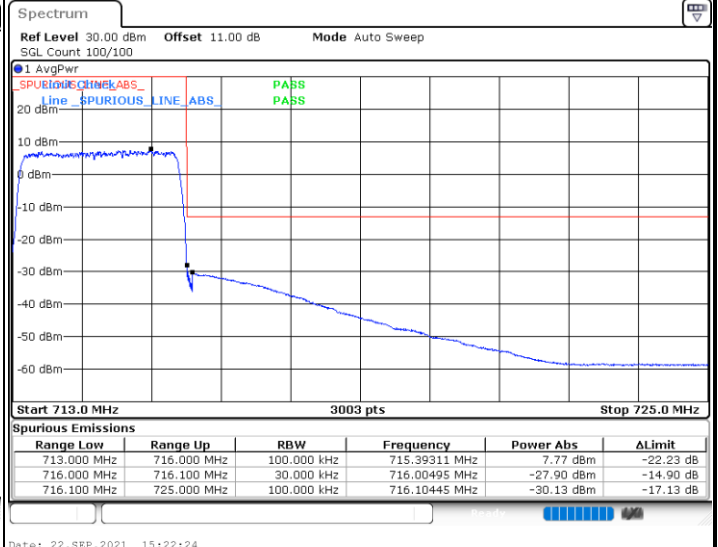
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



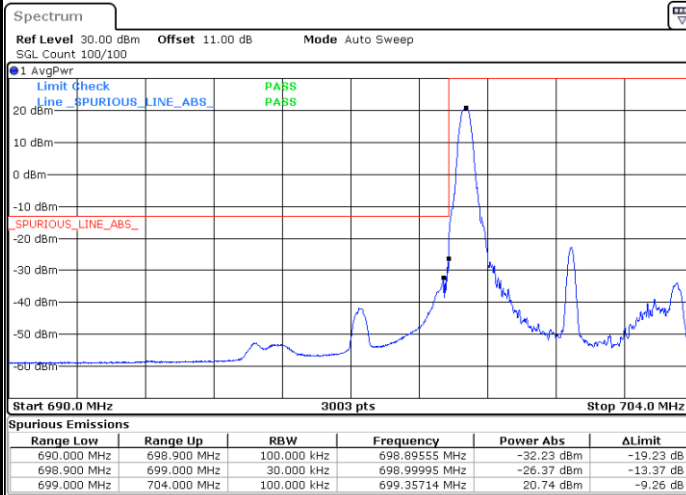
Highest Band Edge / Full RB



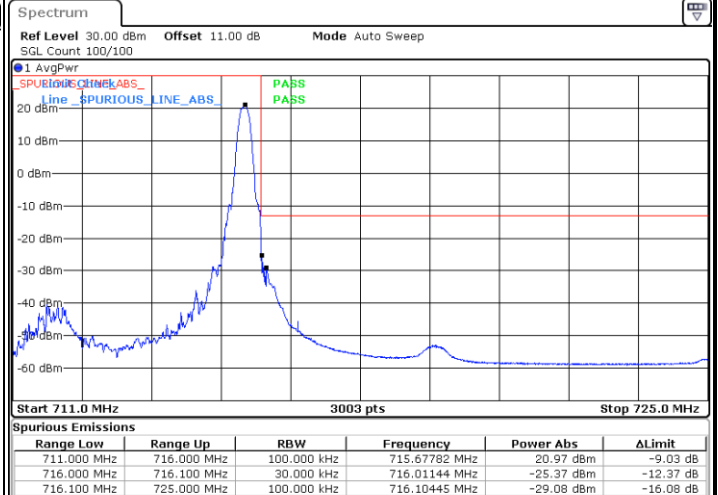


LTE Band 12 / 5MHz / QPSK

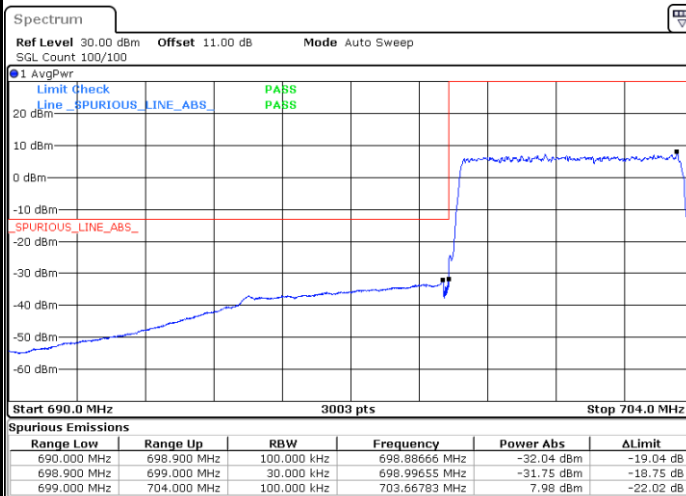
Lowest Band Edge / 1 RB



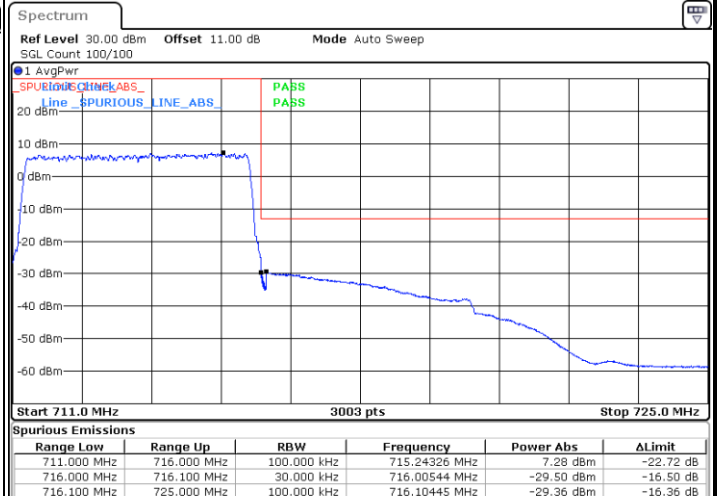
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



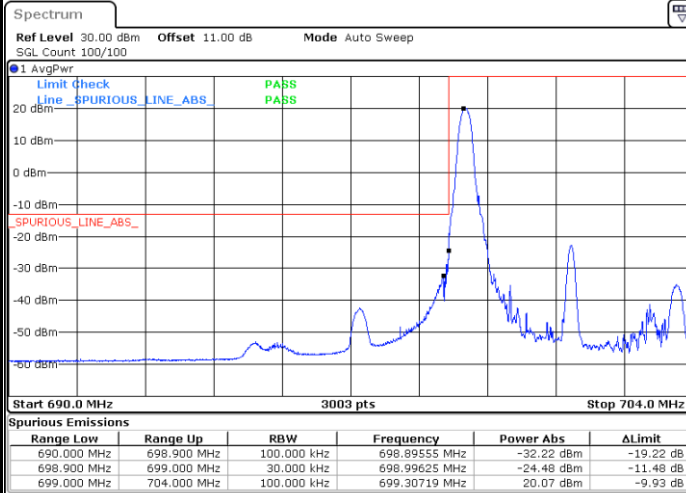
Highest Band Edge / Full RB



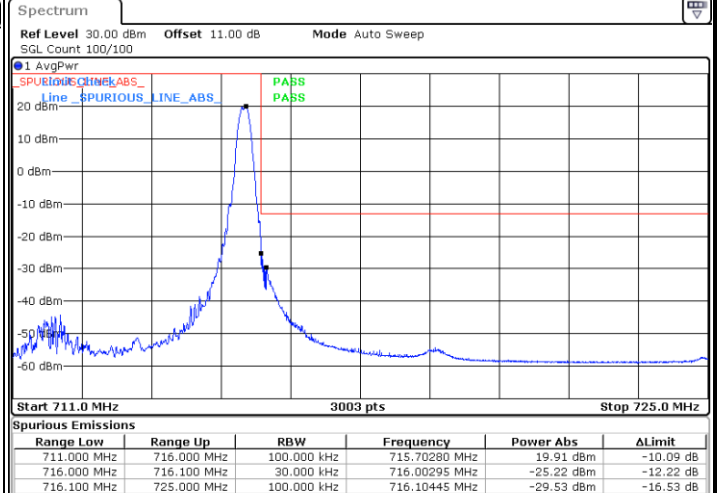


LTE Band 12 / 5MHz / 16QAM

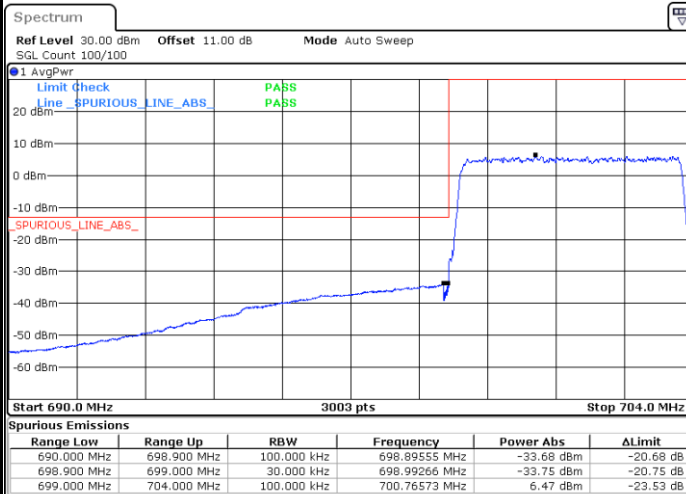
Lowest Band Edge / 1RB



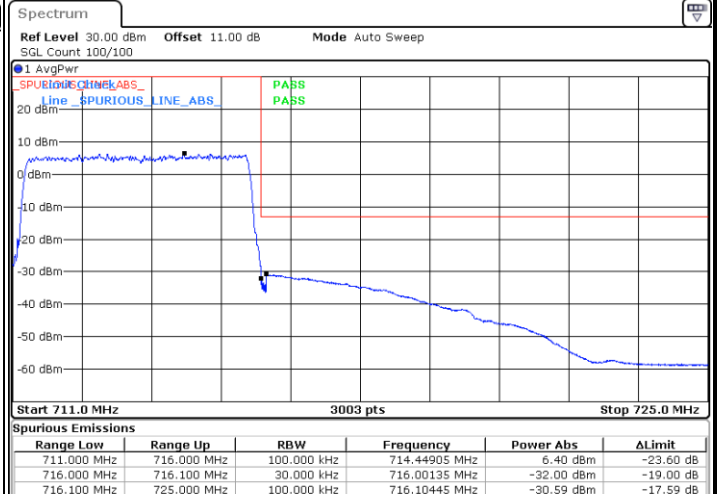
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



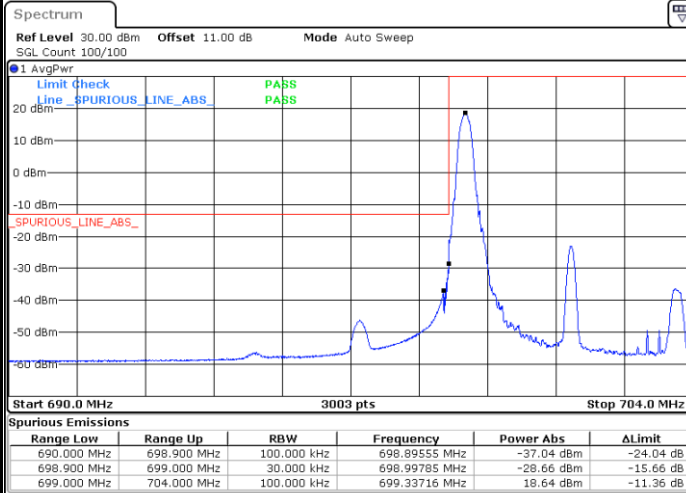
Highest Band Edge / Full RB



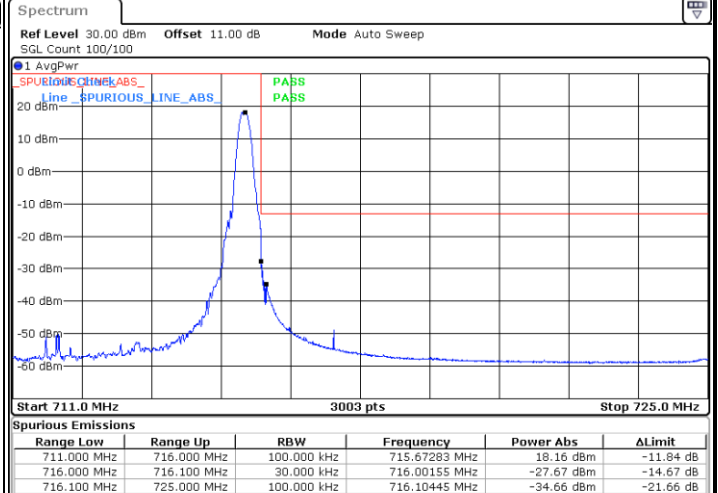


LTE Band 12 / 5MHz / 64QAM

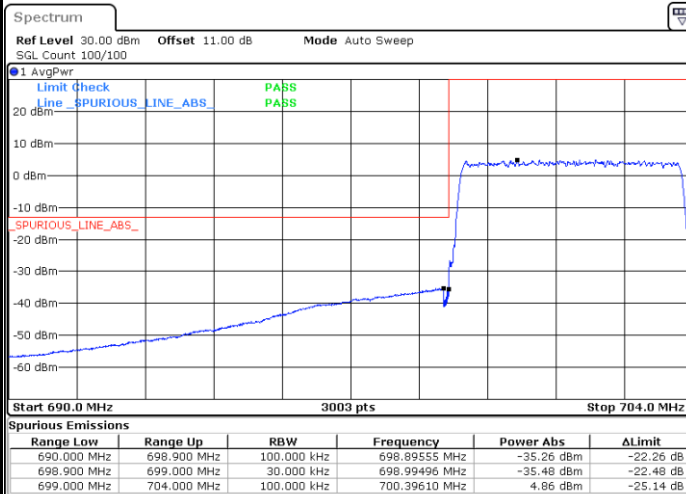
Lowest Band Edge / 1RB



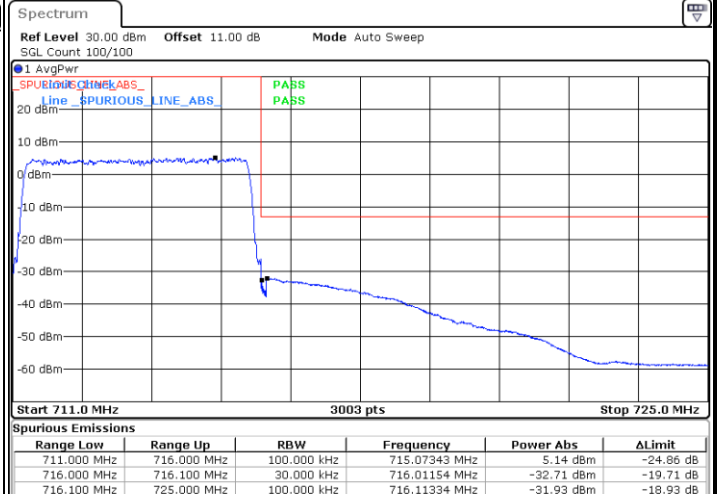
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



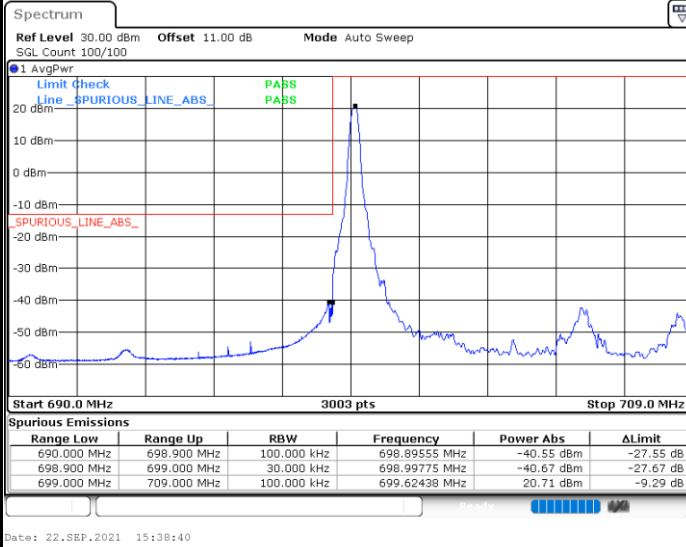
Highest Band Edge / Full RB



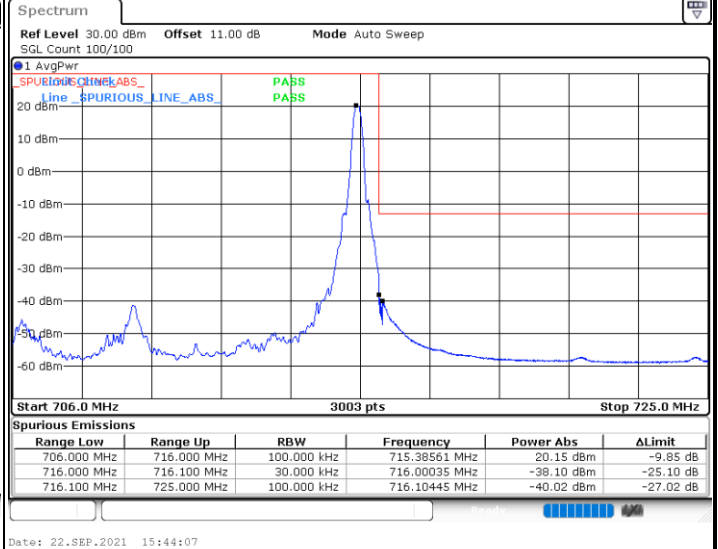


LTE Band 12 / 10MHz / QPSK

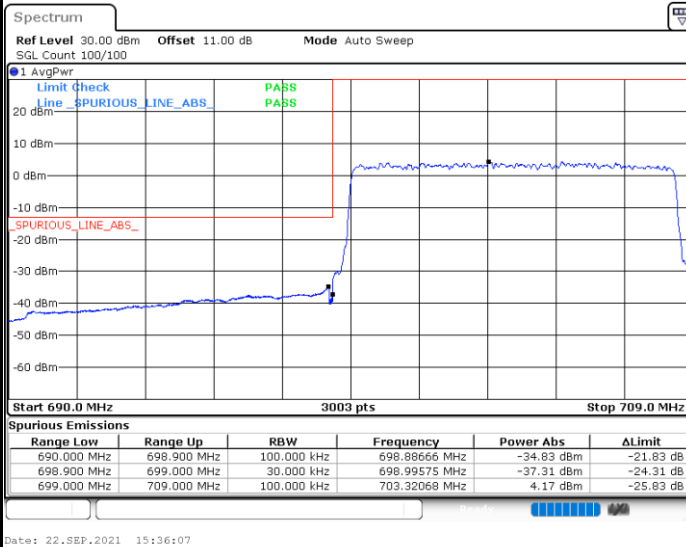
Lowest Band Edge / 1 RB



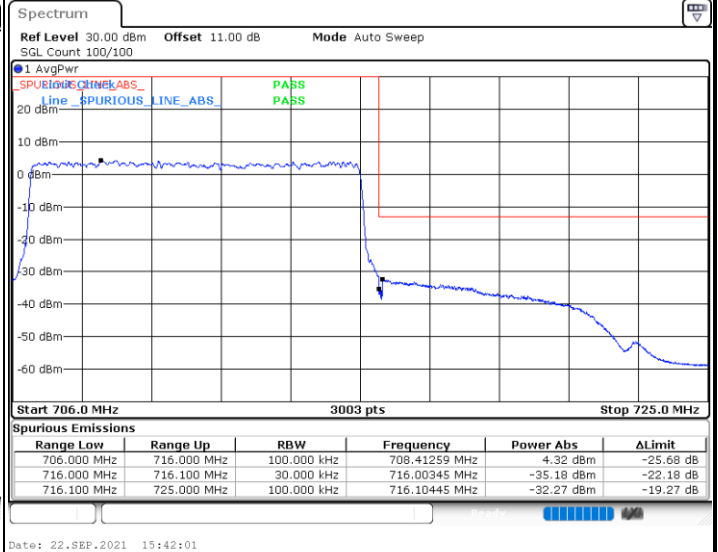
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



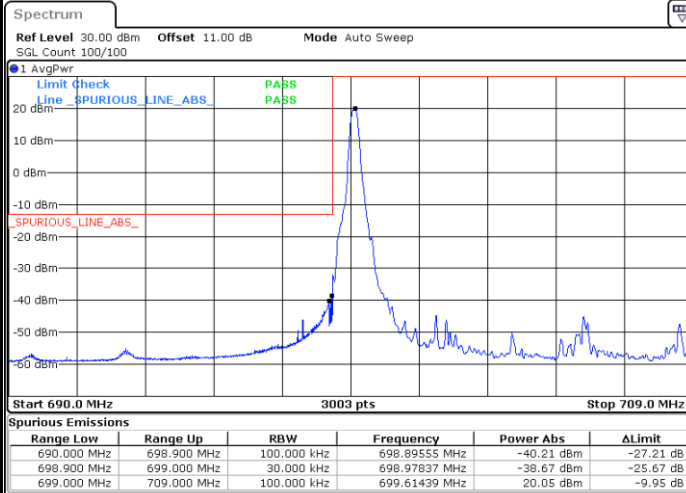
Highest Band Edge / Full RB



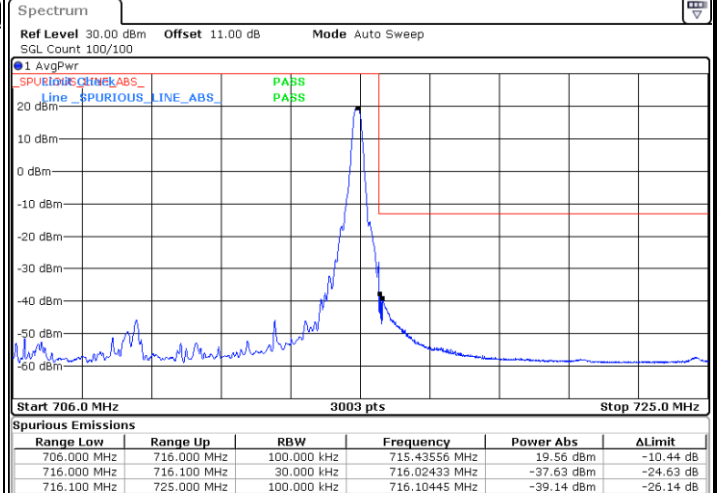


LTE Band 12 / 10MHz / 16QAM

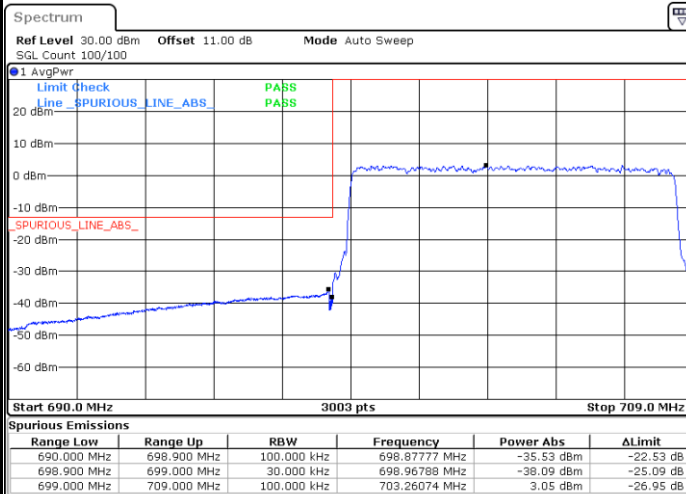
Lowest Band Edge / 1 RB



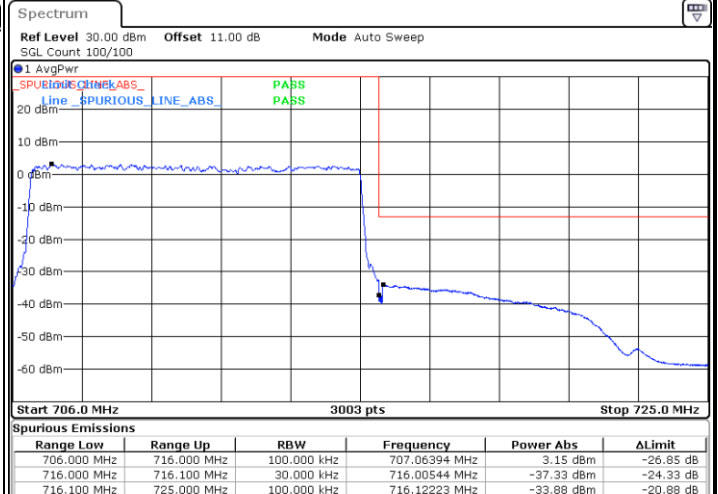
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



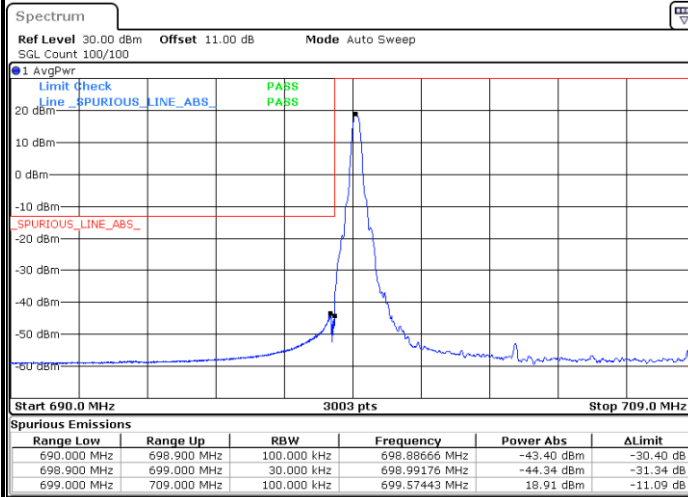
Highest Band Edge / Full RB



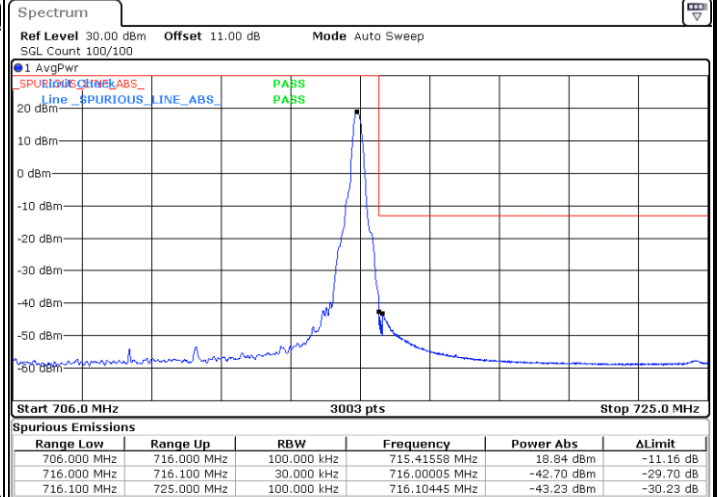


LTE Band 12 / 10MHz / 64QAM

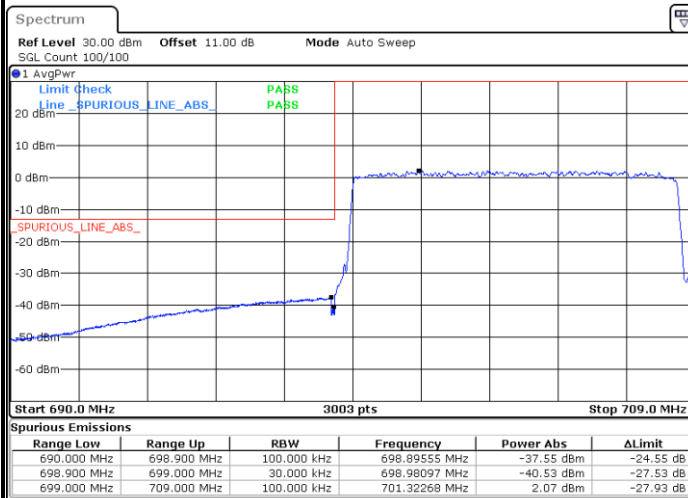
Lowest Band Edge / 1 RB



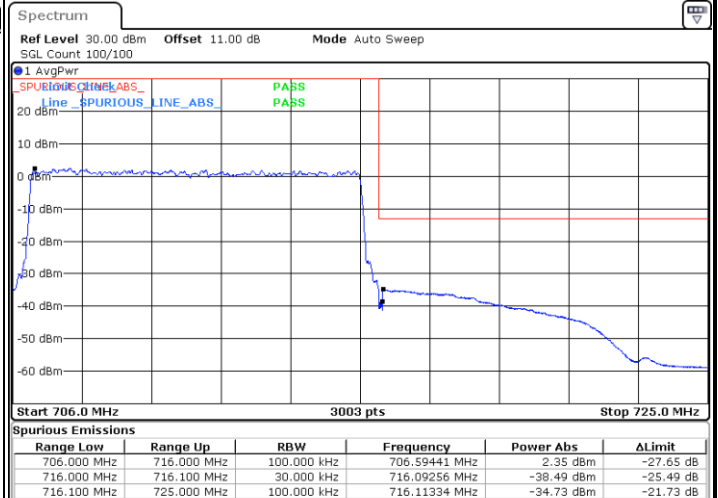
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

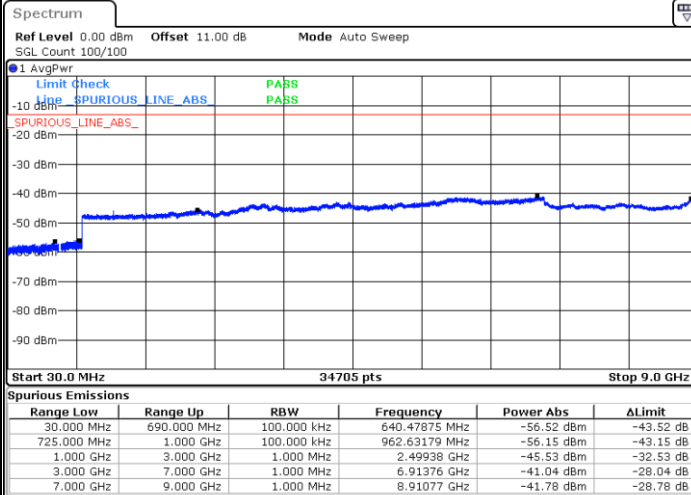




Conducted Spurious Emission

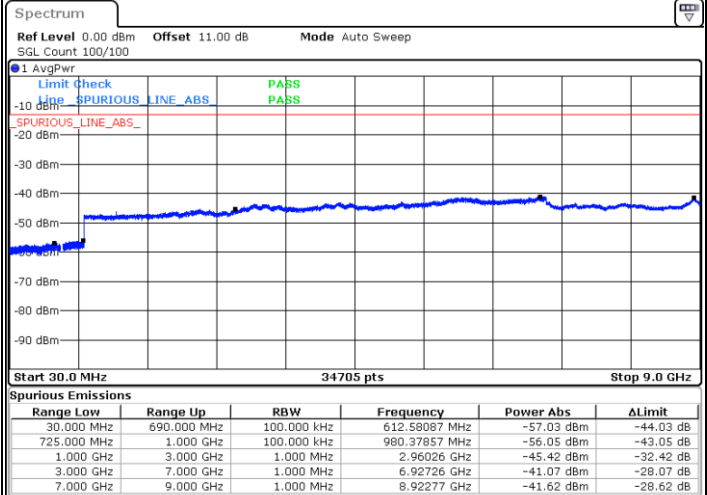
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



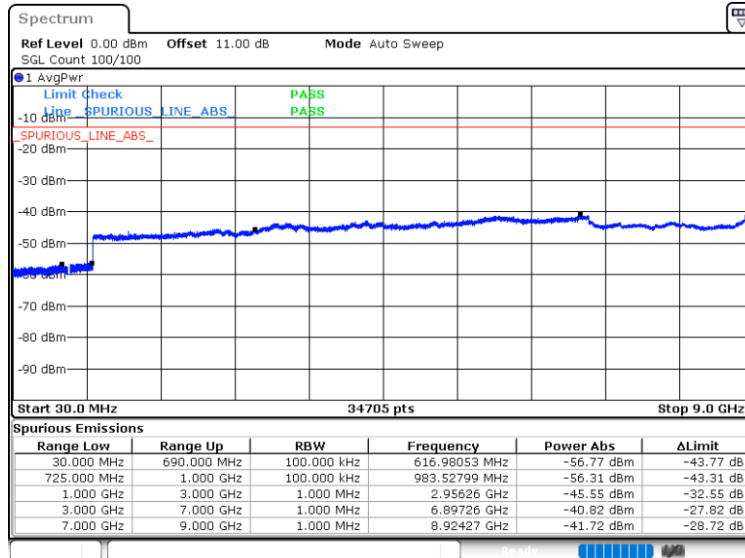
Date: 22.SEP.2021 15:00:59

Middle Channel / QPSK



Date: 22.SEP.2021 15:03:02

Highest Channel / QPSK

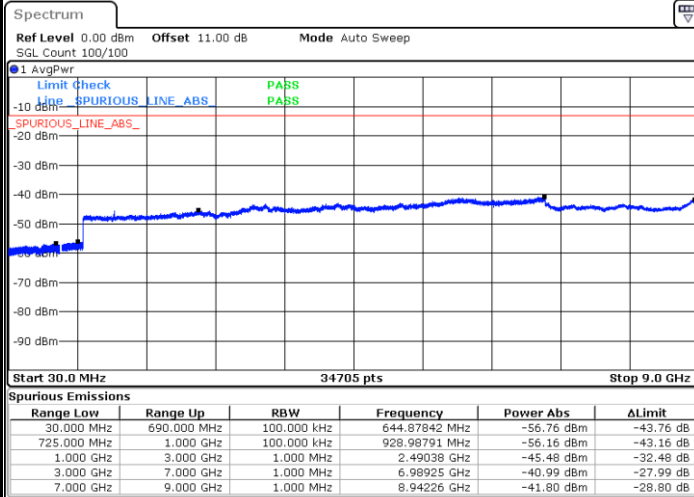


Date: 22.SEP.2021 15:06:24



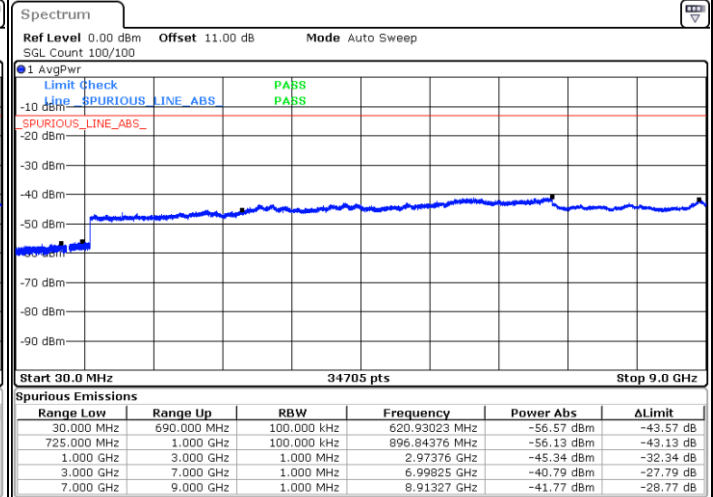
LTE Band 12 / 3MHz

Lowest Channel / QPSK



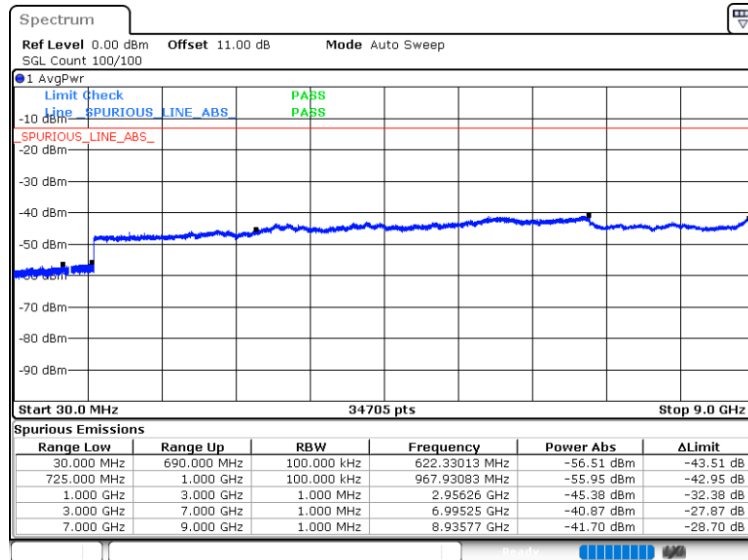
Date: 22.SEP.2021 15:13:33

Middle Channel / QPSK



Date: 22.SEP.2021 15:15:36

Highest Channel / QPSK

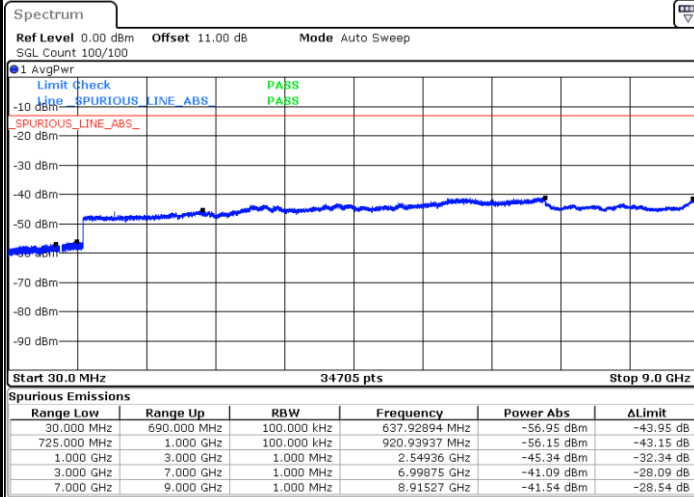


Date: 22.SEP.2021 15:19:35



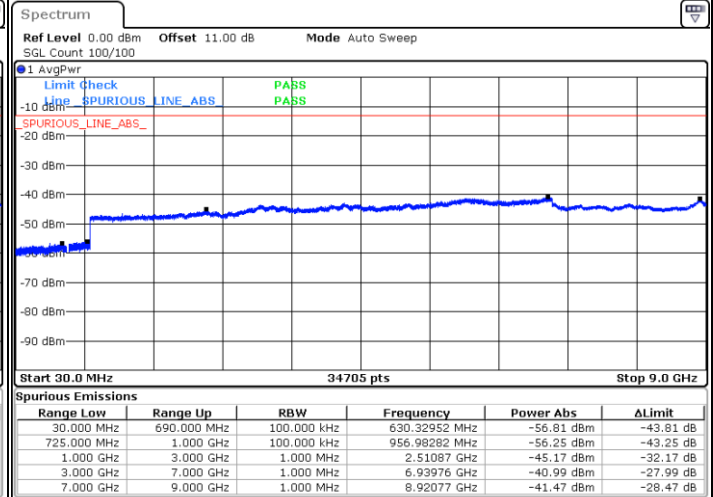
LTE Band 12 / 5MHz

Lowest Channel / QPSK



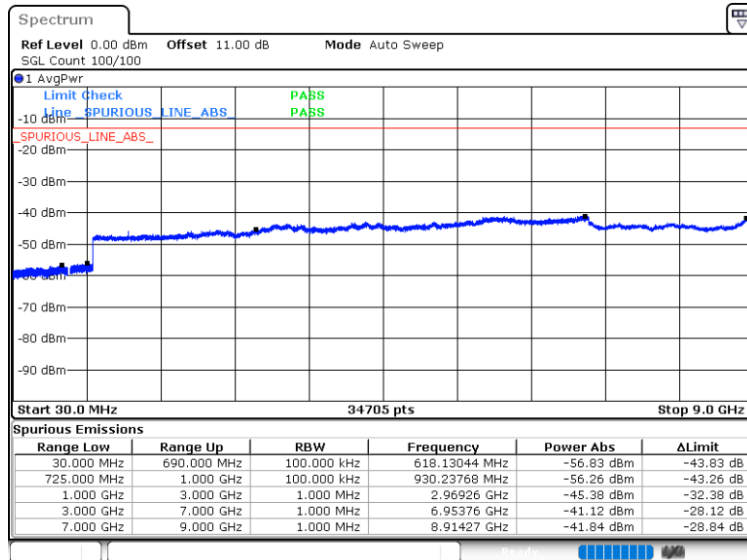
Date: 22.SEP.2021 15:30:00

Middle Channel / QPSK



Date: 22.SEP.2021 15:32:02

Highest Channel / QPSK

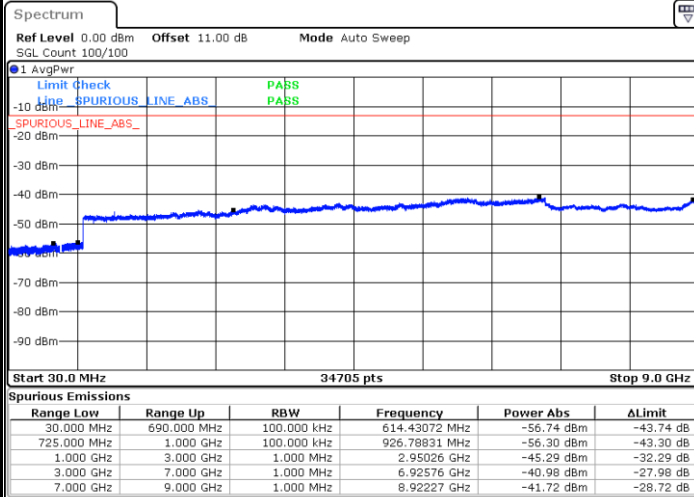


Date: 22.SEP.2021 15:35:24



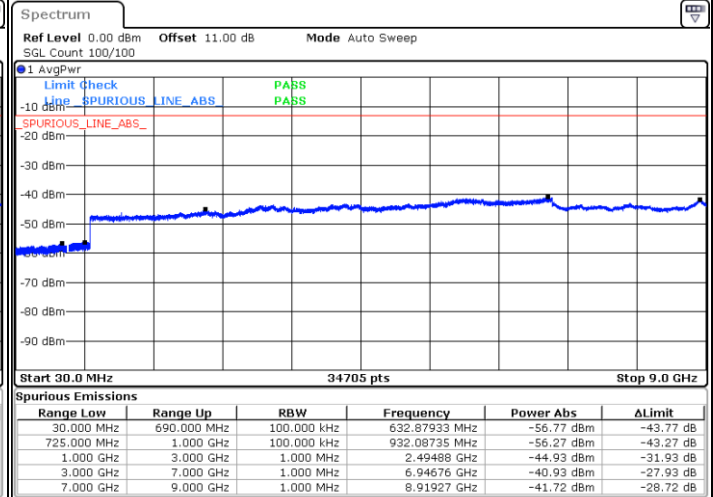
LTE Band 12 / 10MHz

Lowest Channel / QPSK



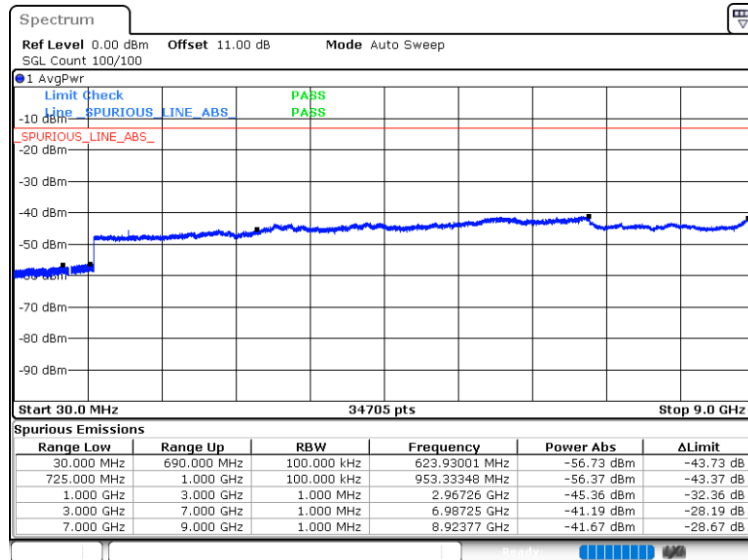
Date: 22.SEP.2021 15:39:17

Middle Channel / QPSK



Date: 22.SEP.2021 15:41:19

Highest Channel / QPSK



Date: 22.SEP.2021 15:44:43

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	0.0028	PASS
40	Normal Voltage	0.0198	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0137	
0	Normal Voltage	0.0033	
-10	Normal Voltage	0.0163	
-20	Normal Voltage	0.0182	
-30	Normal Voltage	0.0174	
20	Maximum Voltage	0.0229	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0098	

Note:

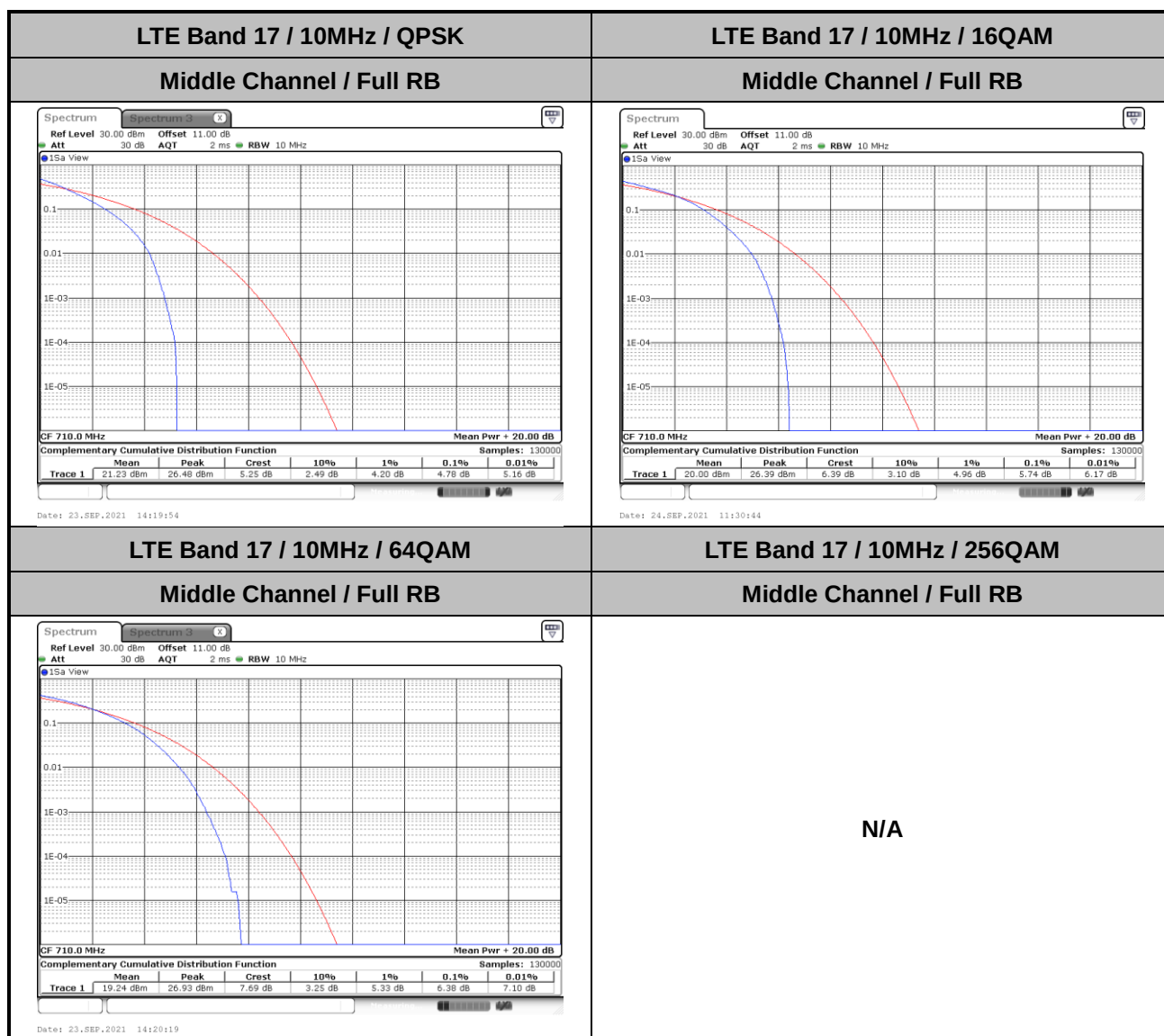
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 17

Peak-to-Average Ratio

Mode	LTE Band 17 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.78	5.74	6.38	-	PASS



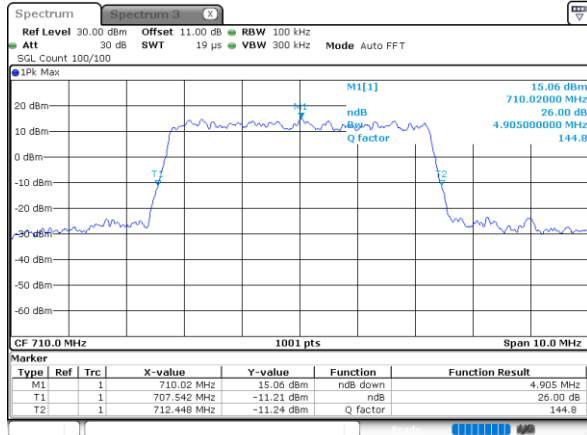
**26dB Bandwidth**

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	-	-	-	-	4.91	4.93	9.81	9.63	-	-	-	-
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	-	-	-	-	4.94	-	9.99	-	-	-	-	-



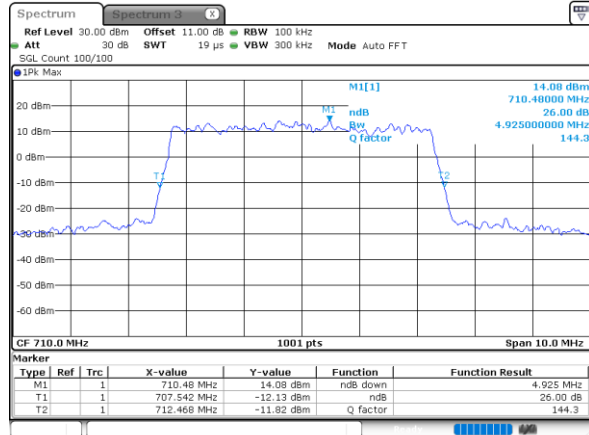
LTE Band 17

Middle Channel / 5MHz / QPSK



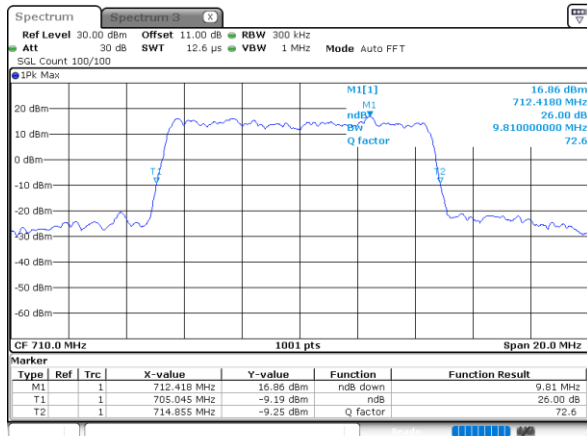
Date: 23.SEP.2021 13:55:26

Middle Channel / 5MHz / 16QAM



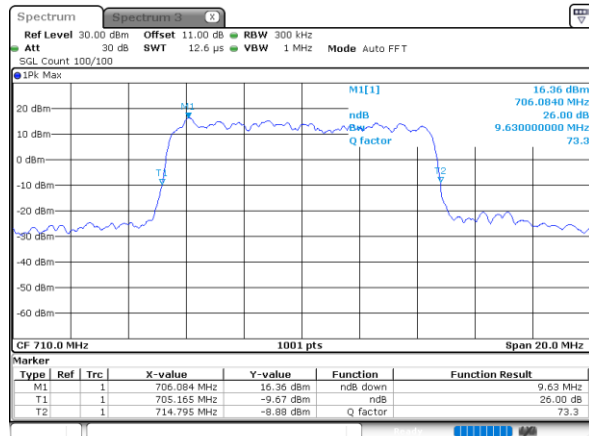
Date: 23.SEP.2021 13:55:47

Middle Channel / 10MHz / QPSK



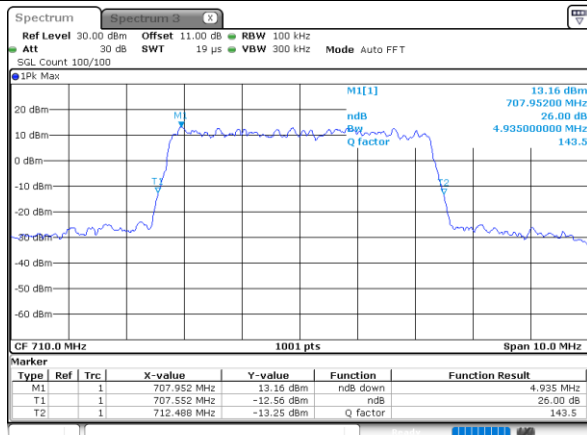
Date: 23.SEP.2021 14:05:40

Middle Channel / 10MHz / 16QAM



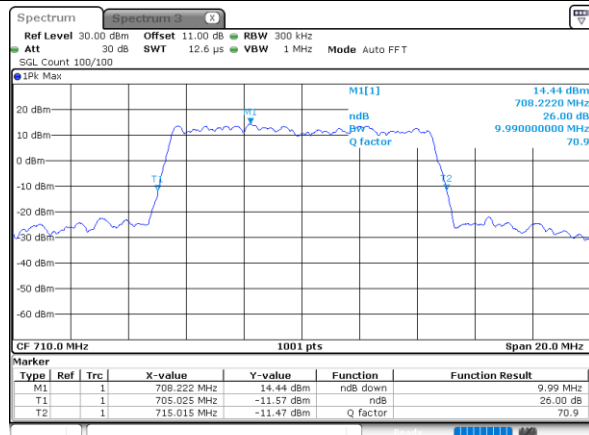
Date: 23.SEP.2021 14:06:00

Middle Channel / 5MHz / 64QAM



Date: 23.SEP.2021 14:13:08

Middle Channel / 10MHz / 64QAM



Date: 23.SEP.2021 14:17:21

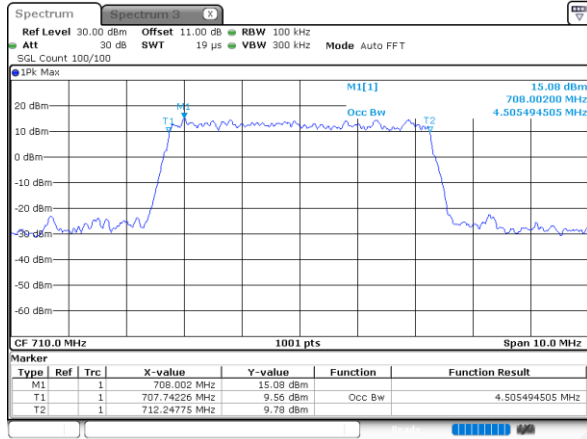
**Occupied Bandwidth**

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	-	-	-	-	4.51	4.49	8.99	9.05	-	-	-	-
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	-	-	-	-	4.53	-	9.07	-	-	-	-	-

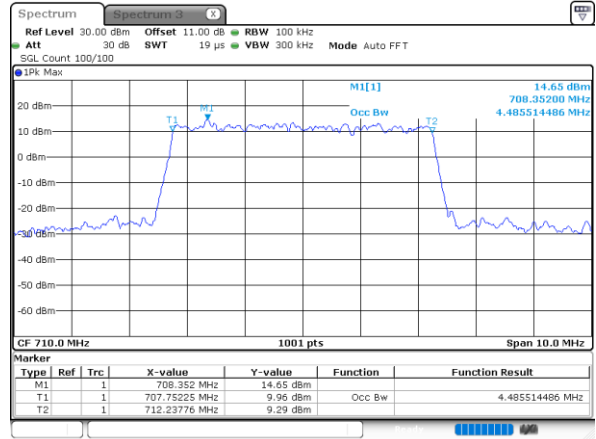


LTE Band 17

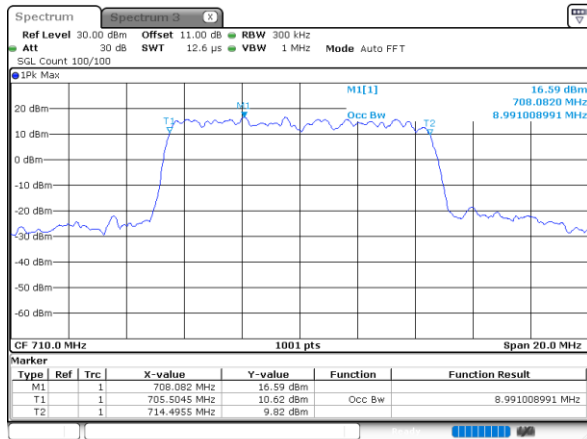
Middle Channel / 5MHz / QPSK



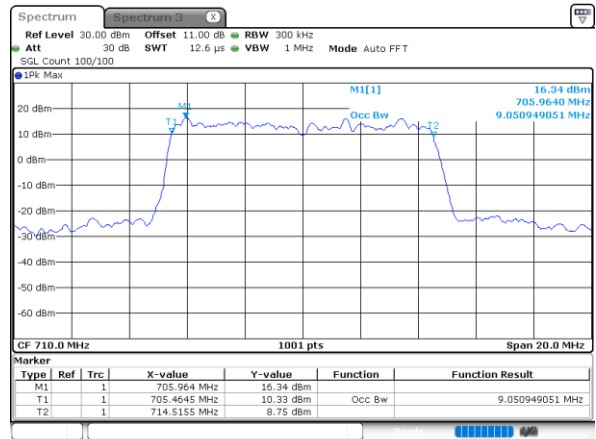
Middle Channel / 5MHz / 16QAM



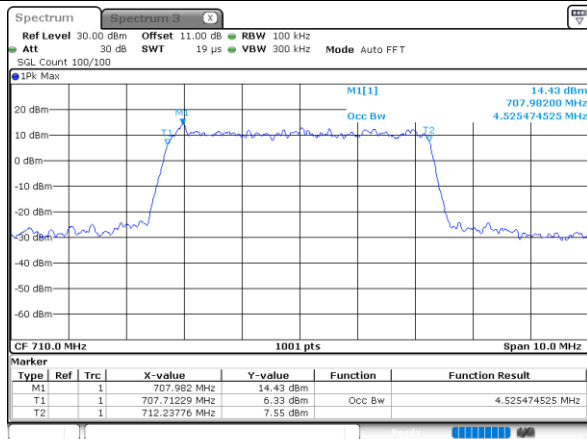
Middle Channel / 10MHz / QPSK



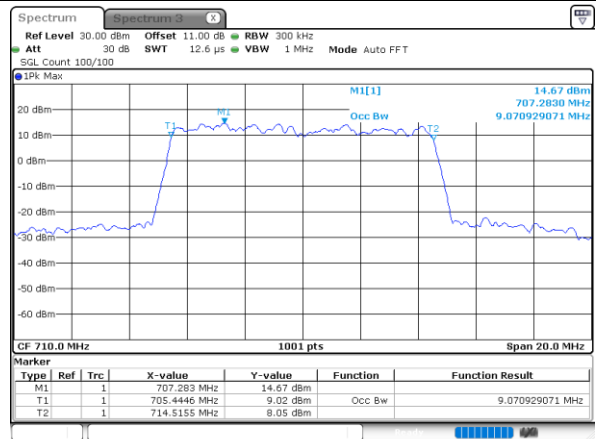
Middle Channel / 10MHz / 16QAM



Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM

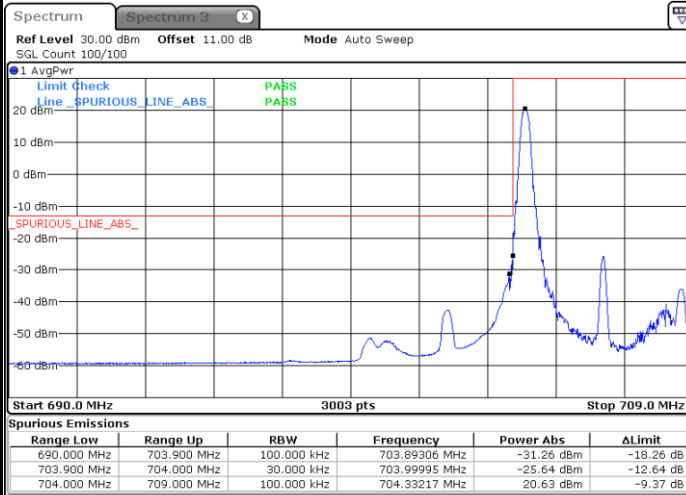




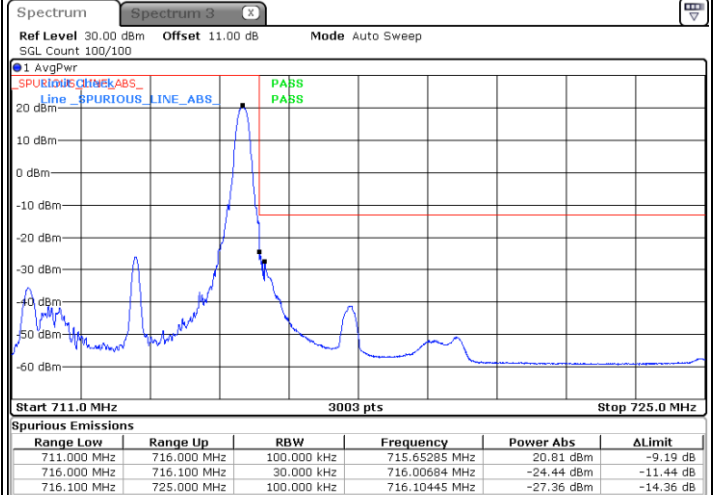
Conducted Band Edge

LTE Band 17 / 5MHz / QPSK

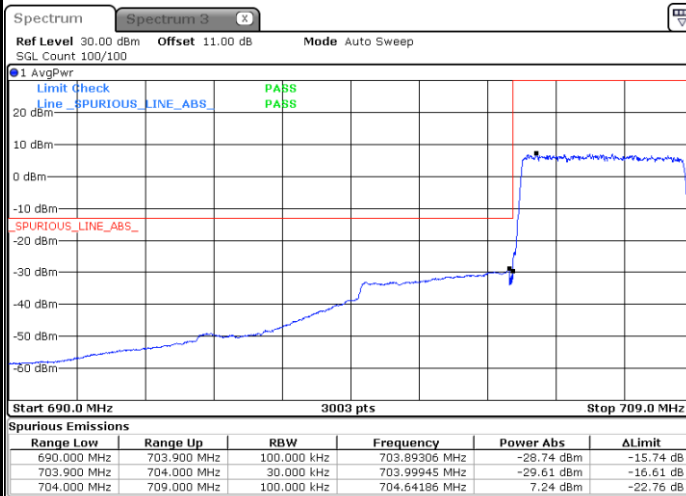
Lowest Band Edge / 1 RB



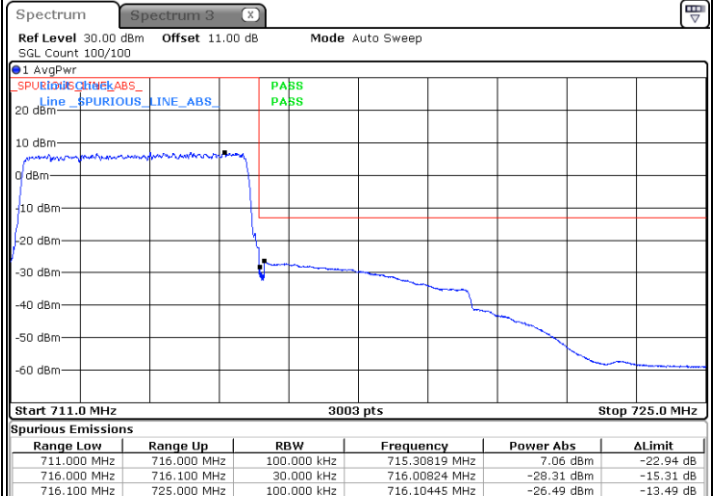
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



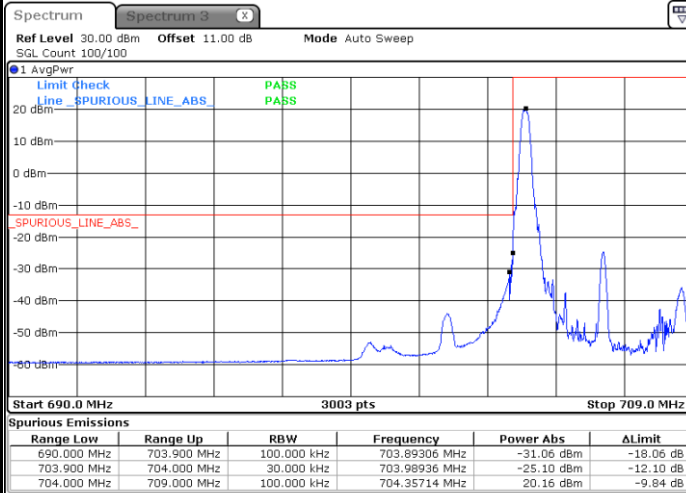
Highest Band Edge / Full RB



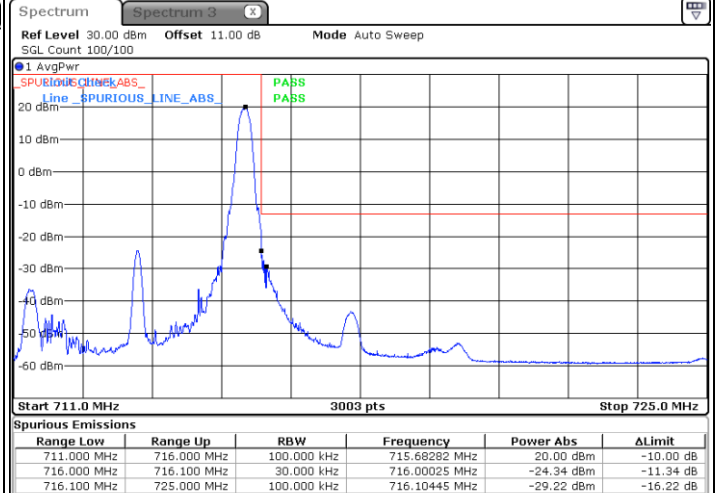


LTE Band 17 / 5MHz / 16QAM

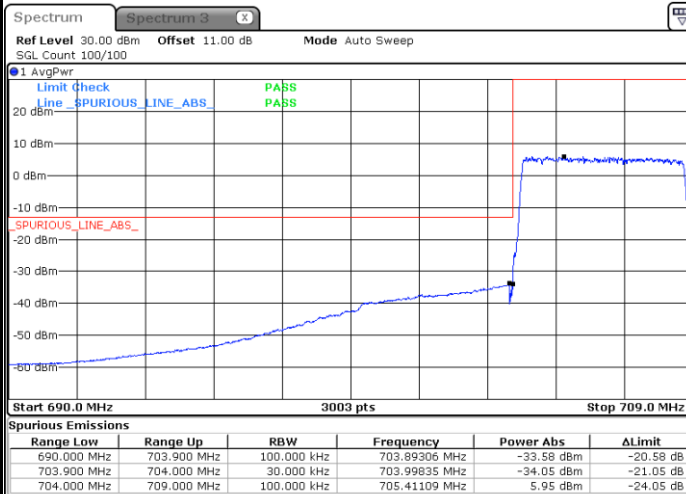
Lowest Band Edge / 1 RB



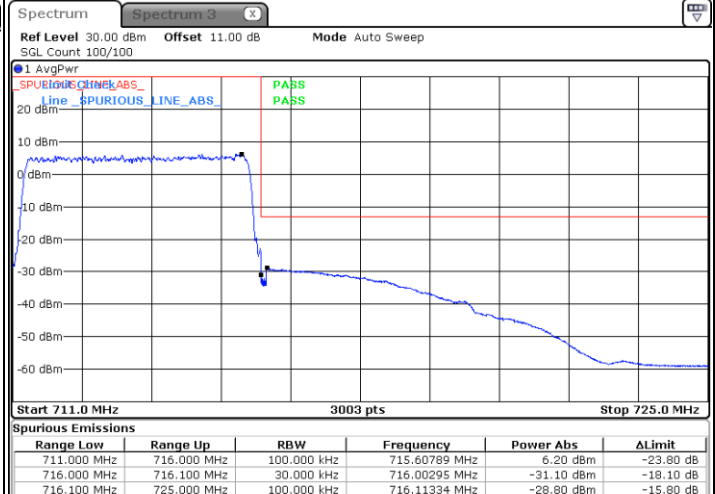
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



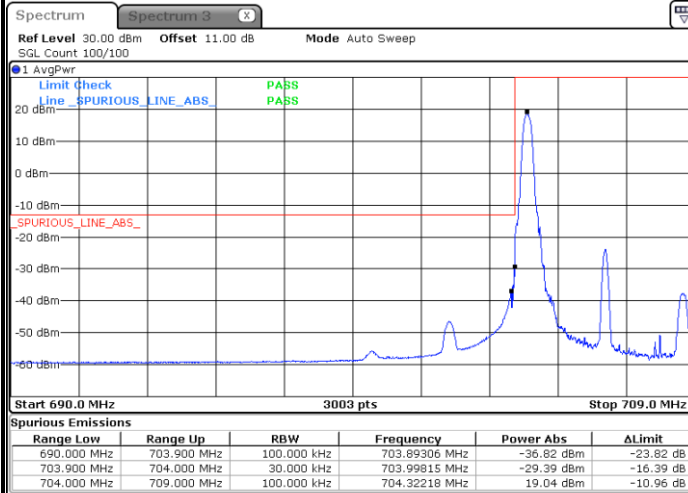
Highest Band Edge / Full RB



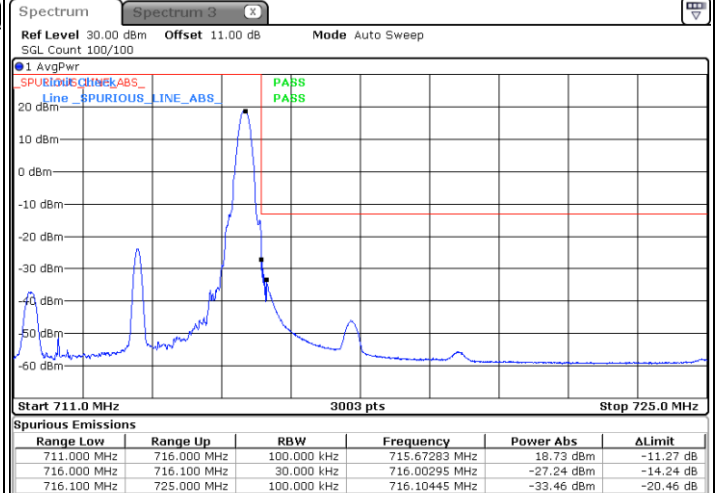


LTE Band 17 / 5MHz / 64QAM

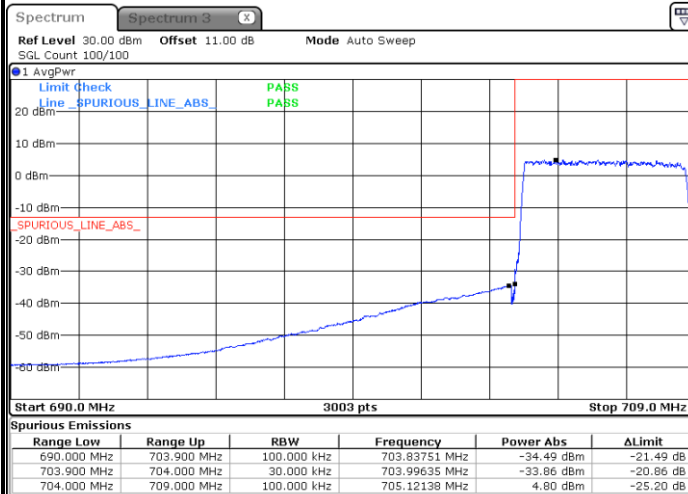
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

