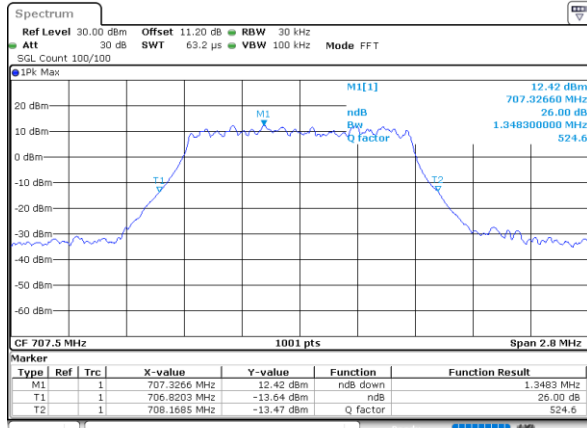




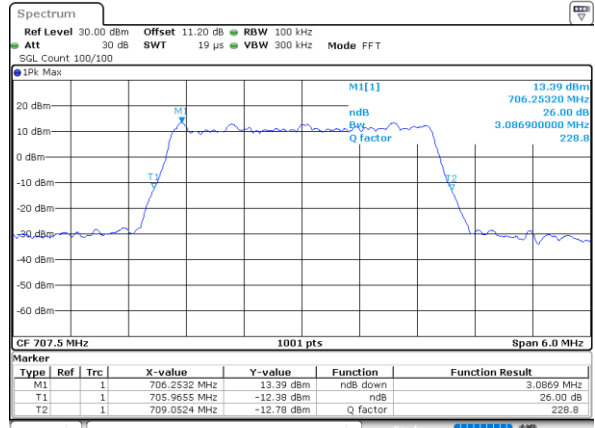
LTE Band 12

Middle Channel / 1.4MHz / 256QAM



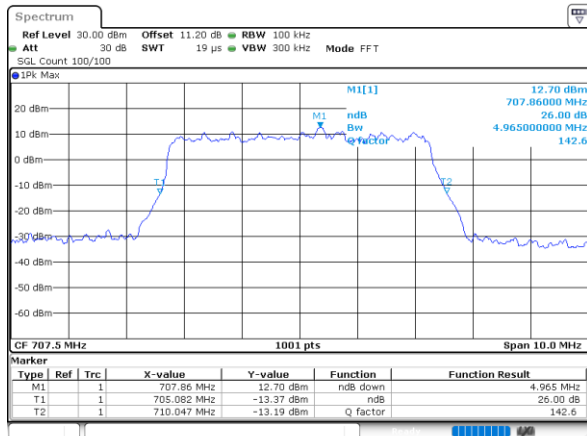
Date: 26,NOV,2024 21:51:50

Middle Channel / 3MHz / 256QAM



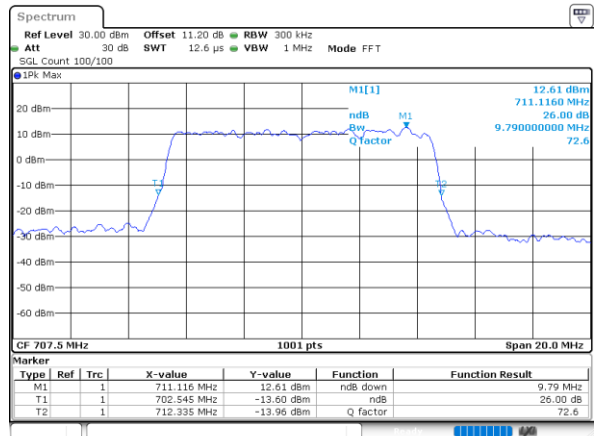
Date: 26,NOV,2024 21:54:39

Middle Channel / 5MHz / 256QAM



Date: 26,NOV,2024 21:57:29

Middle Channel / 10MHz / 256QAM



Date: 26,NOV,2024 22:00:52

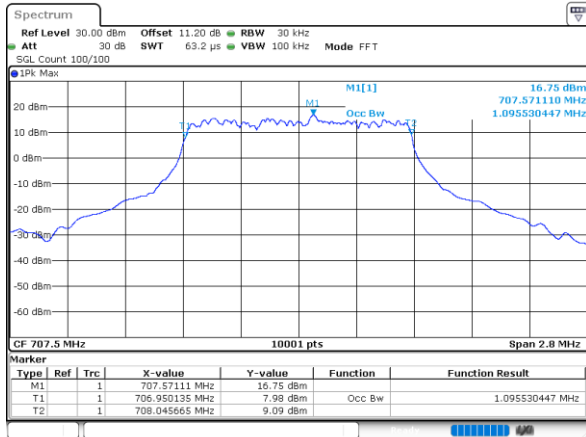
**Occupied Bandwidth**

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	1.10	2.71	2.71	4.49	4.48	9.02	9.03	-	-	-	-
Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	1.08	1.09	2.72	2.70	4.50	4.50	9.05	9.00	-	-	-	-



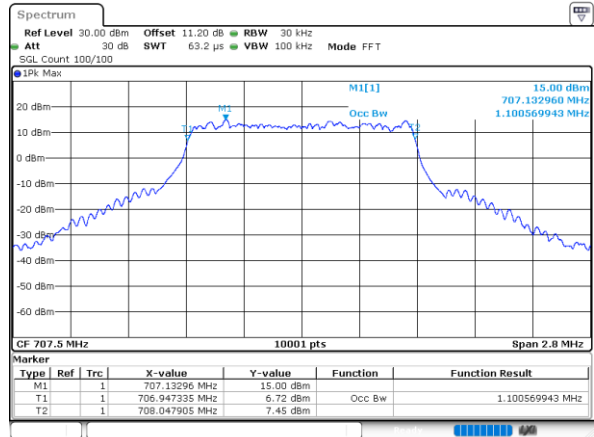
LTE Band 12

Middle Channel / 1.4MHz / QPSK



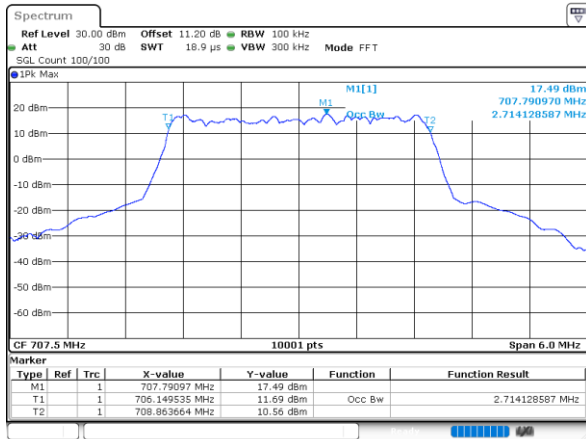
Date: 26.NOV.2024 21:38:13

Middle Channel / 1.4MHz / 16QAM



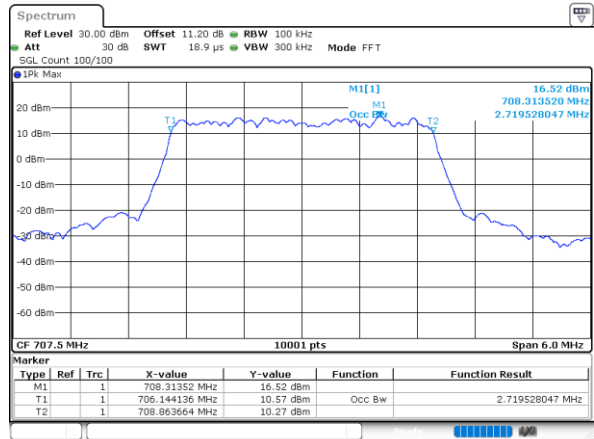
Date: 26.NOV.2024 21:38:54

Middle Channel / 3MHz / QPSK



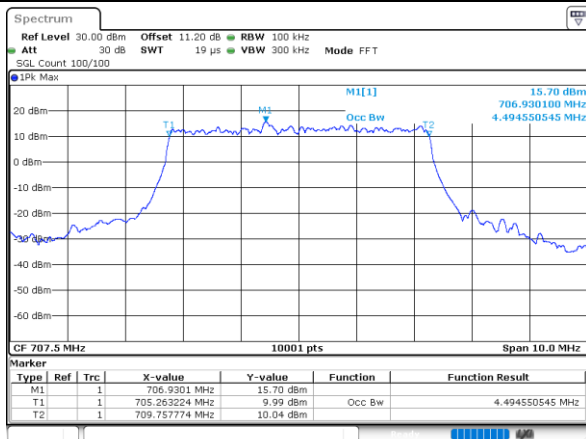
Date: 26.NOV.2024 21:41:01

Middle Channel / 3MHz / 16QAM



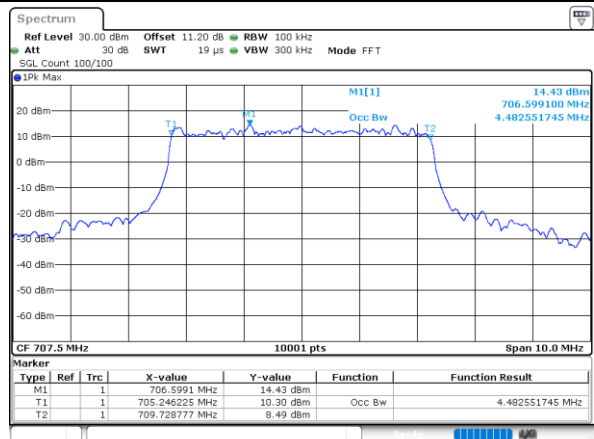
Date: 26.NOV.2024 21:41:41

Middle Channel / 5MHz / QPSK



Date: 26.NOV.2024 21:44:03

Middle Channel / 5MHz / 16QAM

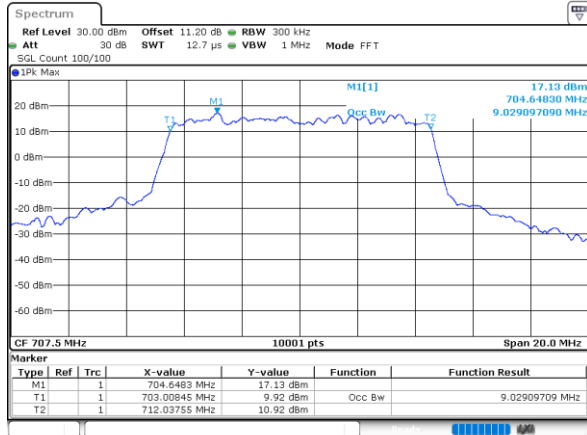


Date: 26.NOV.2024 21:44:44



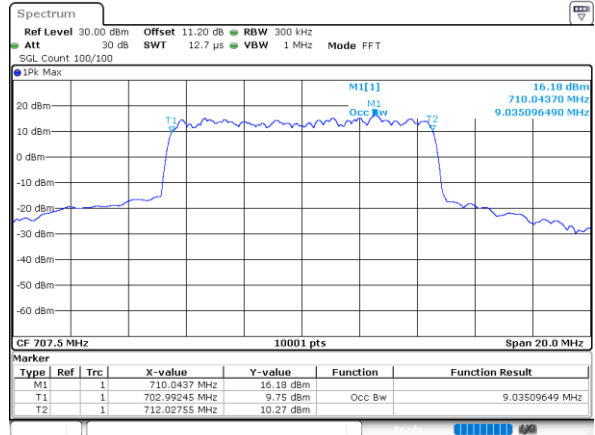
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 26,NOV,2024 21:46:50

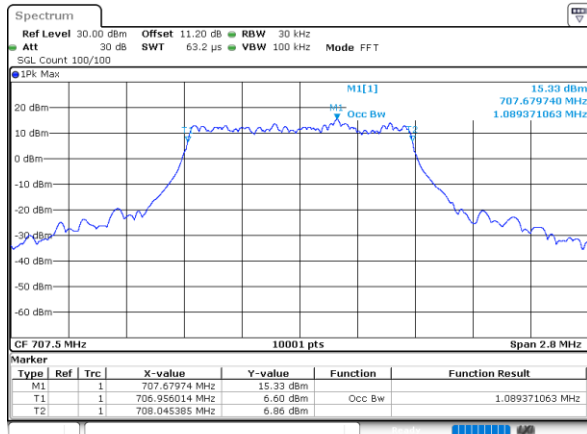
Middle Channel / 10MHz / 16QAM



Date: 26,NOV,2024 21:47:12

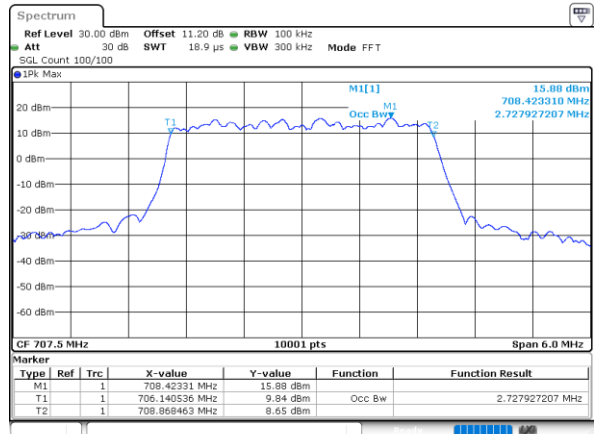
LTE Band 12

Middle Channel / 1.4MHz / 64QAM



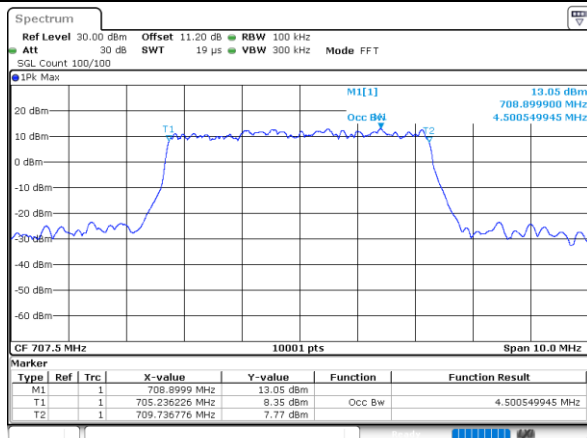
Date: 26,NOV,2024 21:39:33

Middle Channel / 3MHz / 64QAM



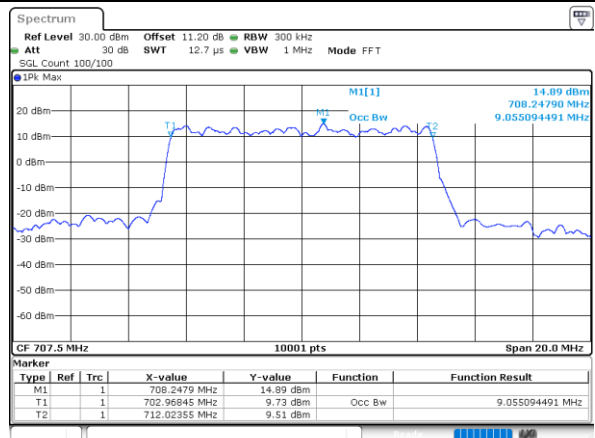
Date: 26,NOV,2024 21:42:25

Middle Channel / 5MHz / 64QAM



Date: 26,NOV,2024 21:45:25

Middle Channel / 10MHz / 64QAM

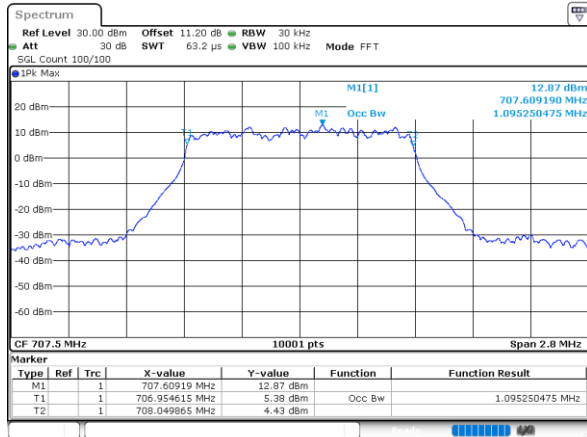


Date: 26,NOV,2024 21:48:23

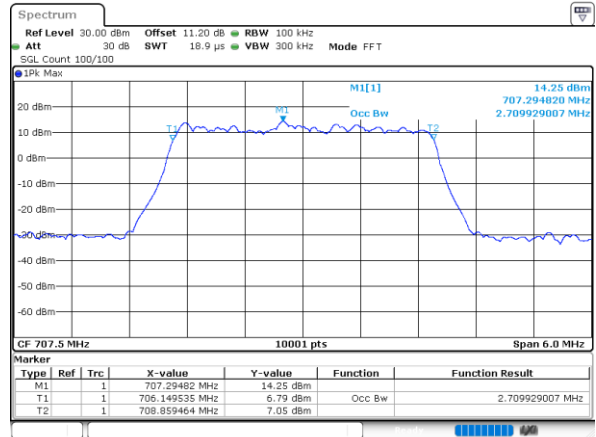


LTE Band 12

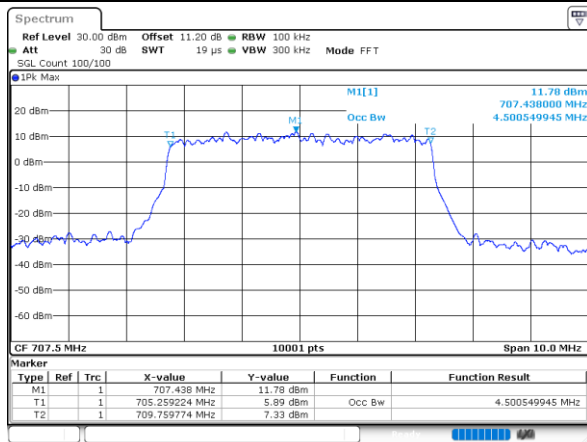
Middle Channel / 1.4MHz / 256QAM



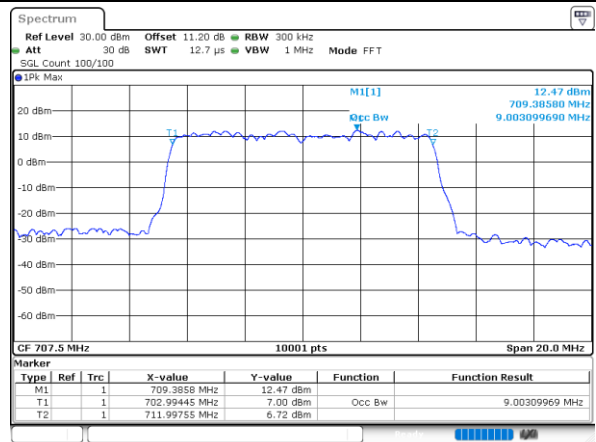
Middle Channel / 3MHz / 256QAM

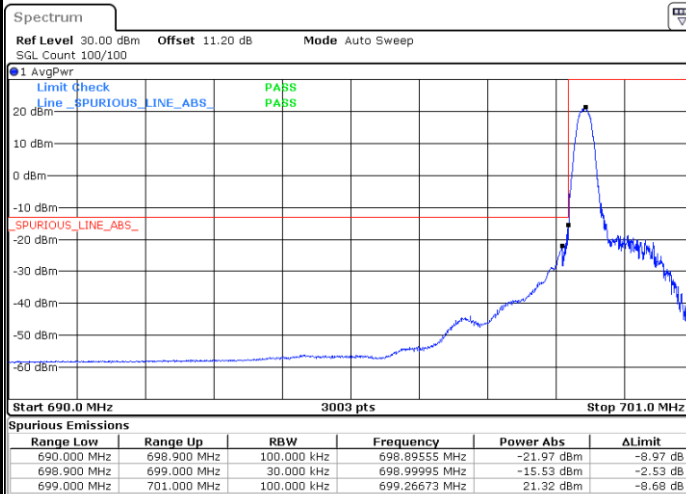
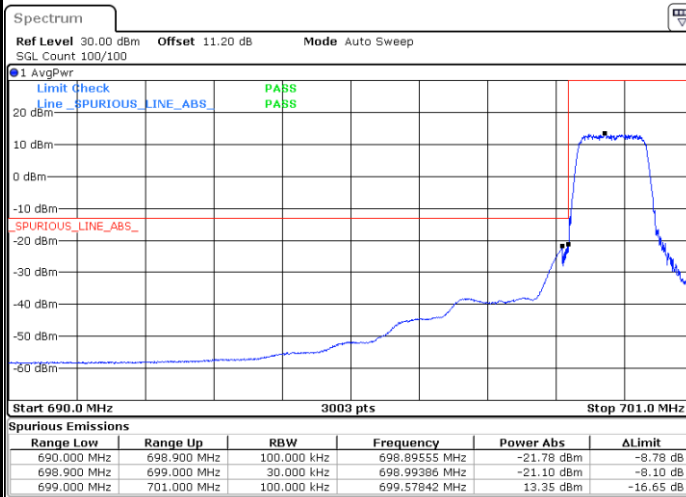


Middle Channel / 5MHz / 256QAM



Middle Channel / 10MHz / 256QAM

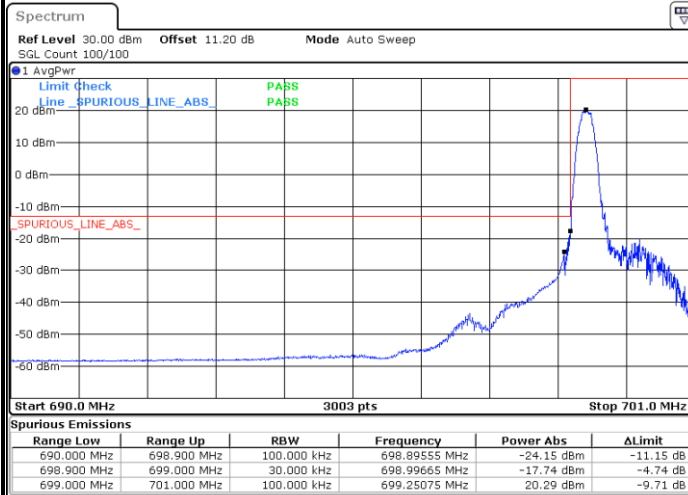


**Conducted Band Edge****LTE Band 12 / 1.4MHz / QPSK****Lowest Band Edge / 1RB****Highest Band Edge / 1RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**



LTE Band 12 / 1.4MHz / 16QAM

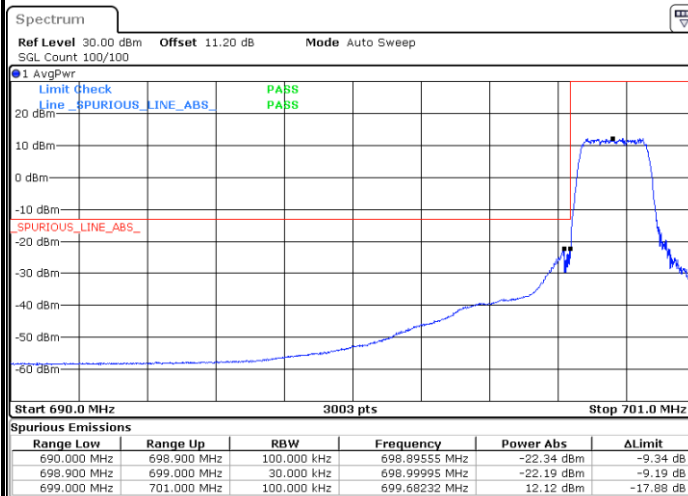
Lowest Band Edge / 1 RB



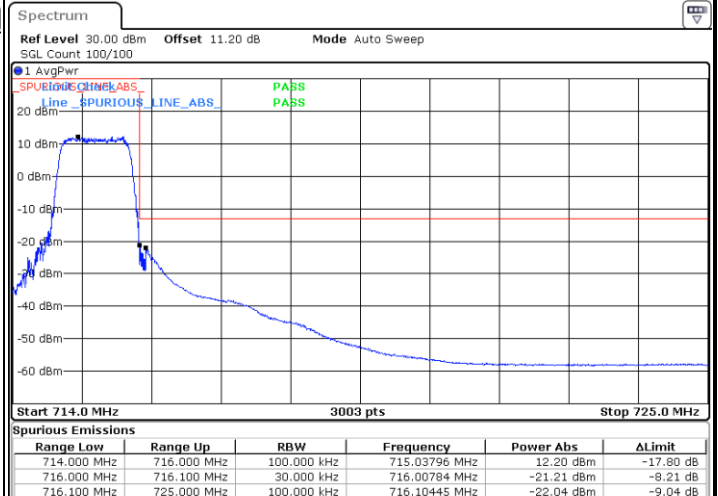
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



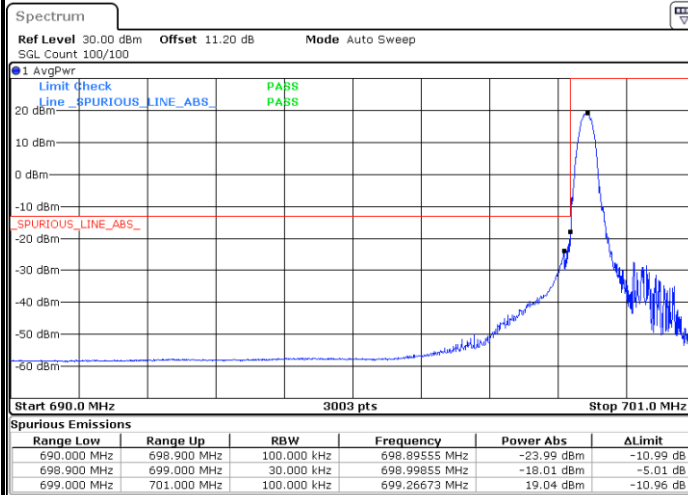
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 64QAM

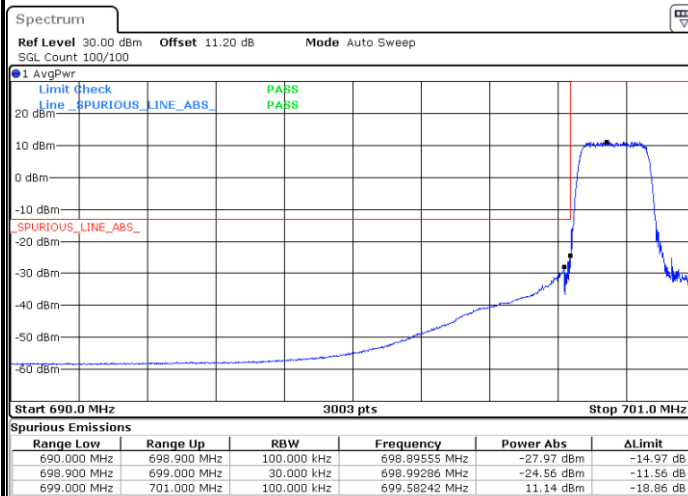
Lowest Band Edge / 1 RB



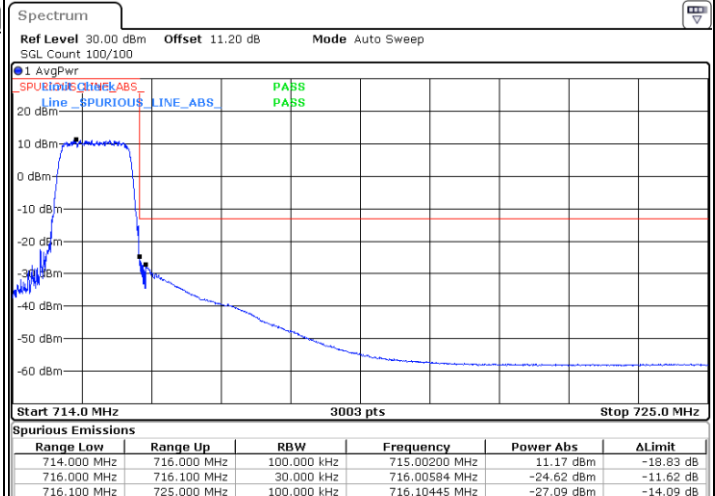
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



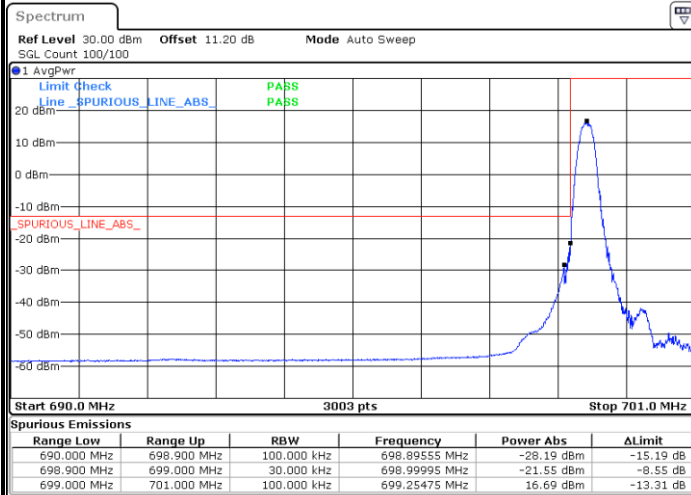
Highest Band Edge / Full RB



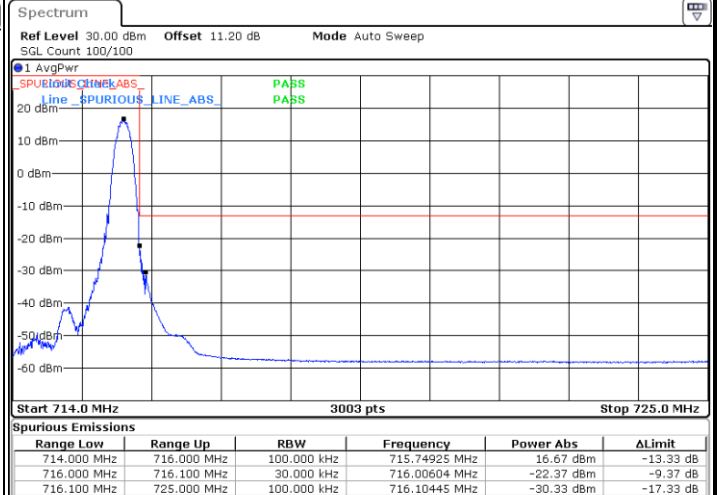


LTE Band 12 / 1.4MHz / 256QAM

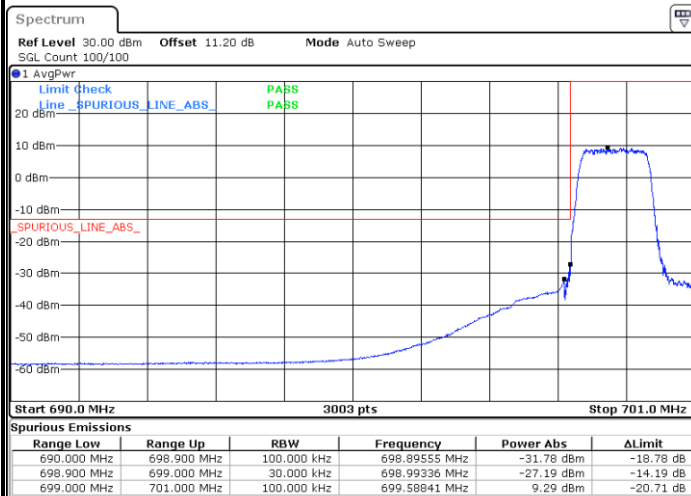
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



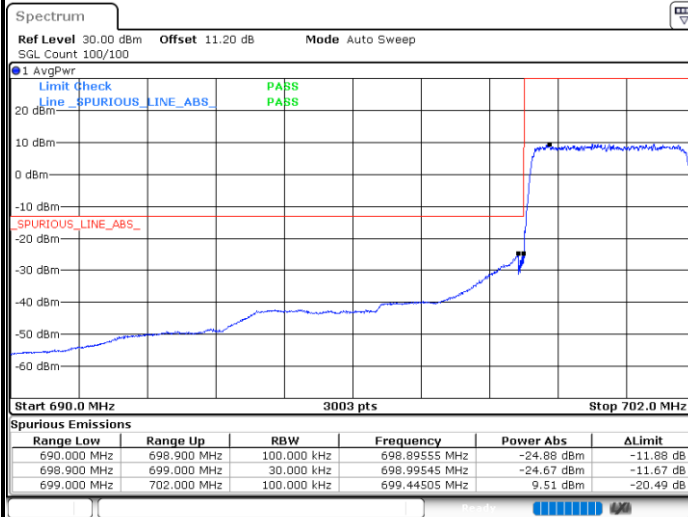
Highest Band Edge / Full RB



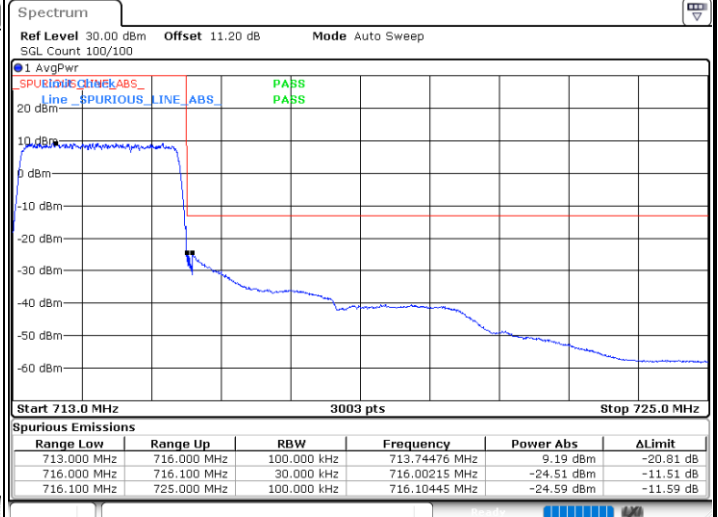


LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / Full RB

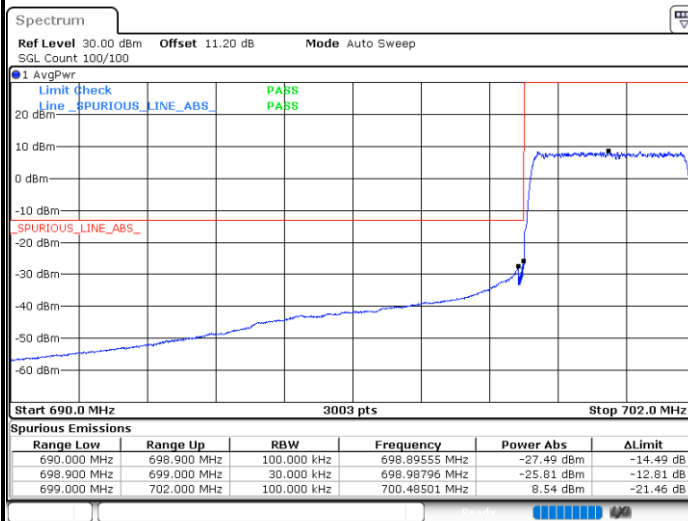


Highest Band Edge / Full RB

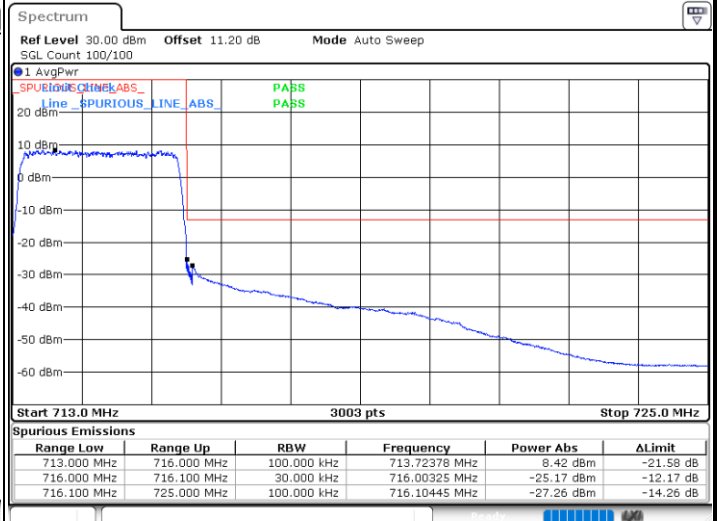


LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / Full RB



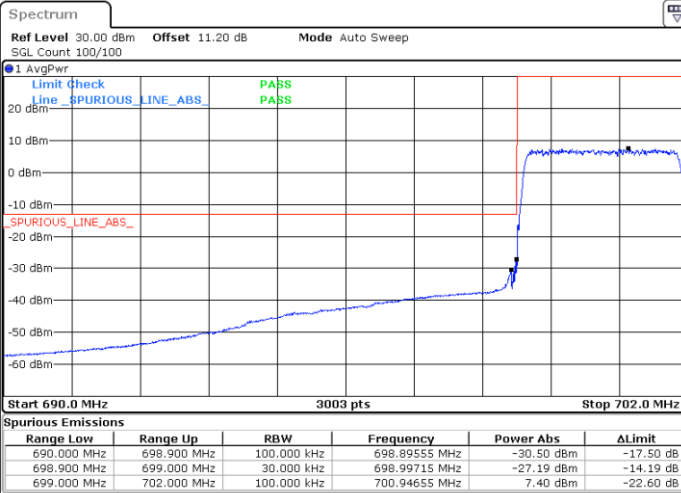
Highest Band Edge / Full RB



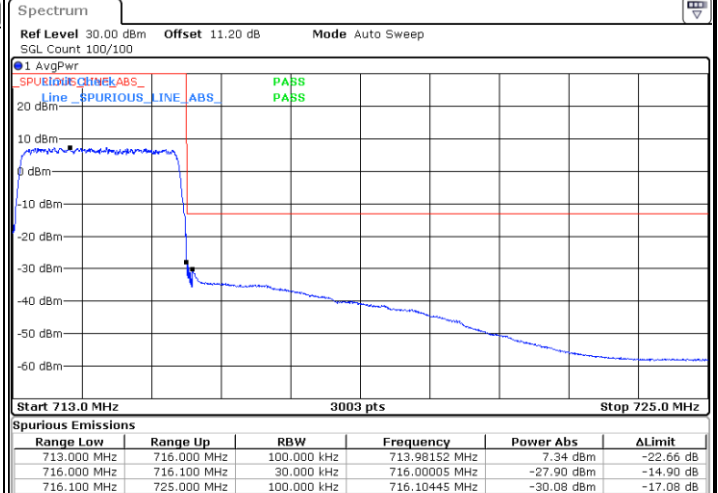


LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / Full RB

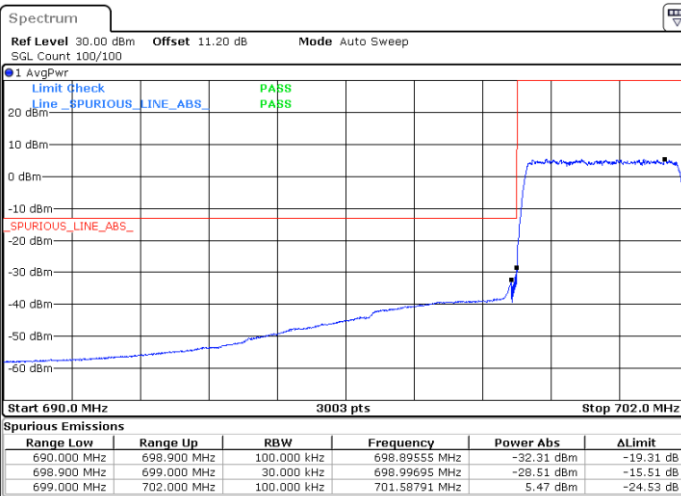


Highest Band Edge / Full RB

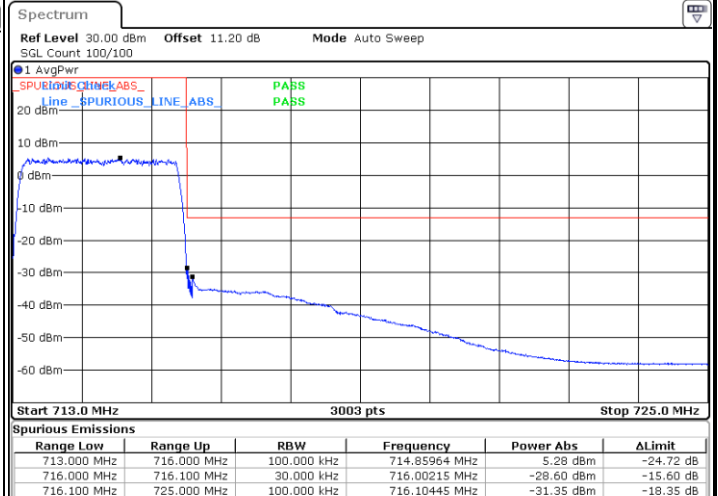


LTE Band 12 / 3MHz / 256QAM

Lowest Band Edge / Full RB



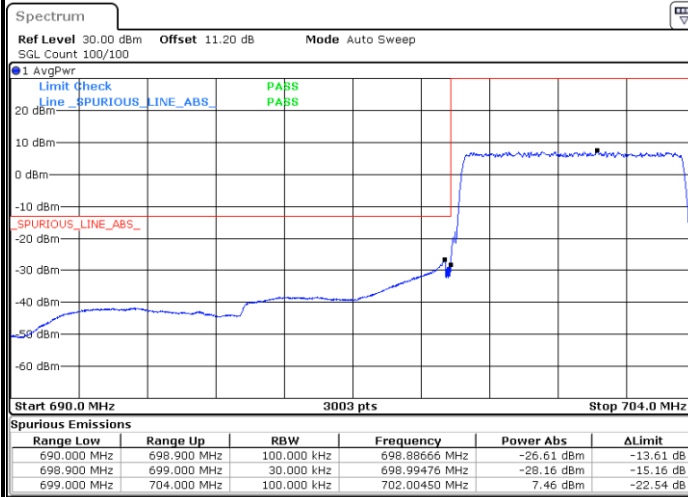
Highest Band Edge / Full RB



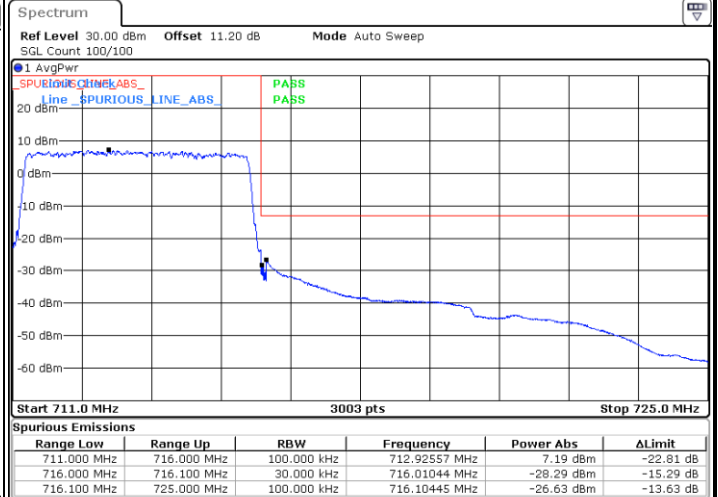


LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / Full RB

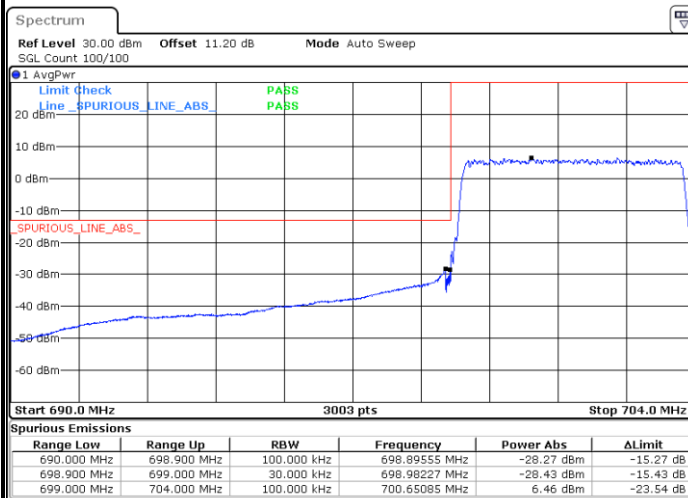


Highest Band Edge / Full RB

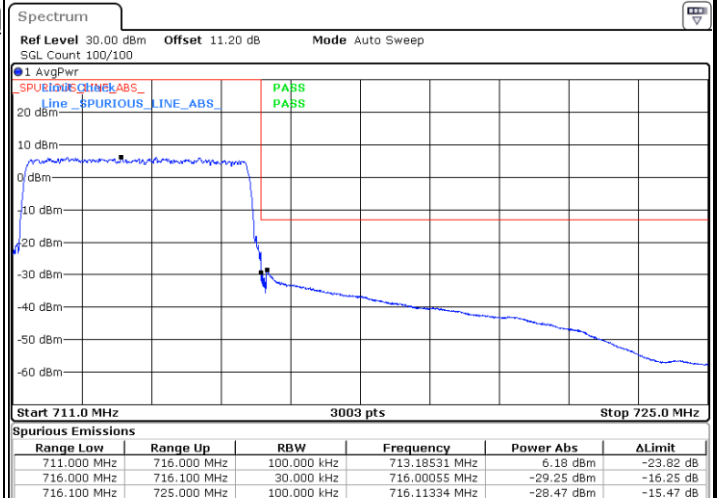


LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / Full RB



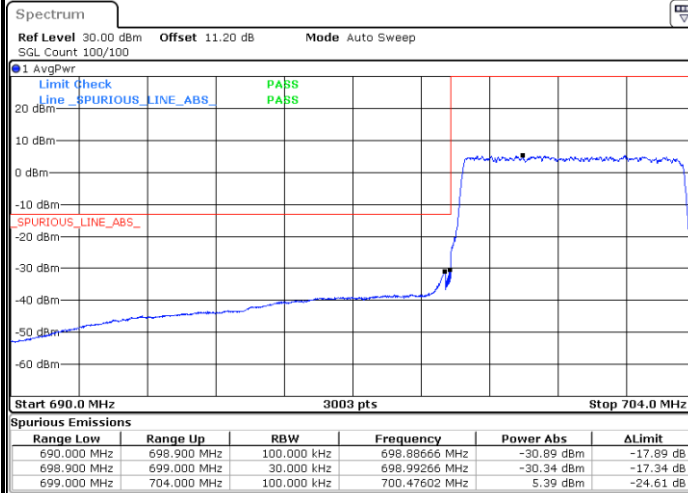
Highest Band Edge / Full RB



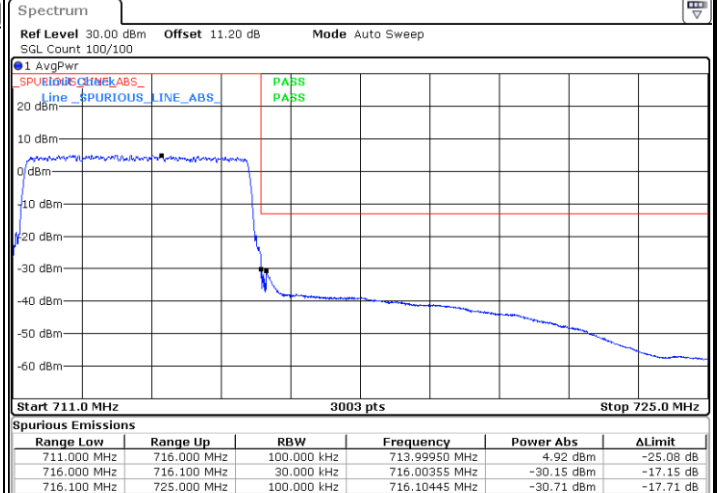


LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / Full RB

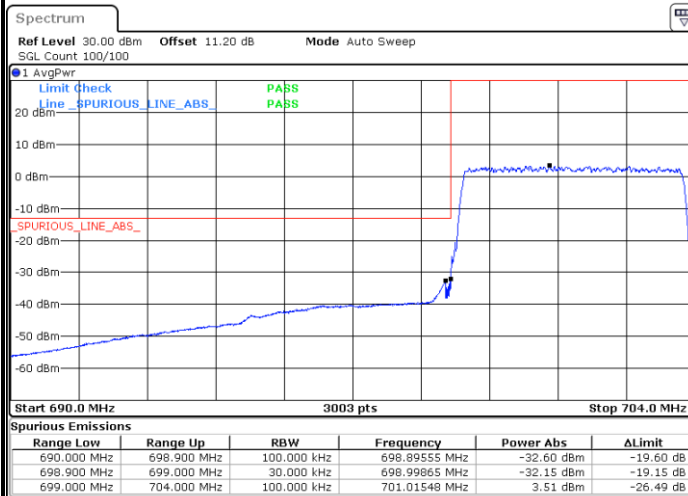


Highest Band Edge / Full RB

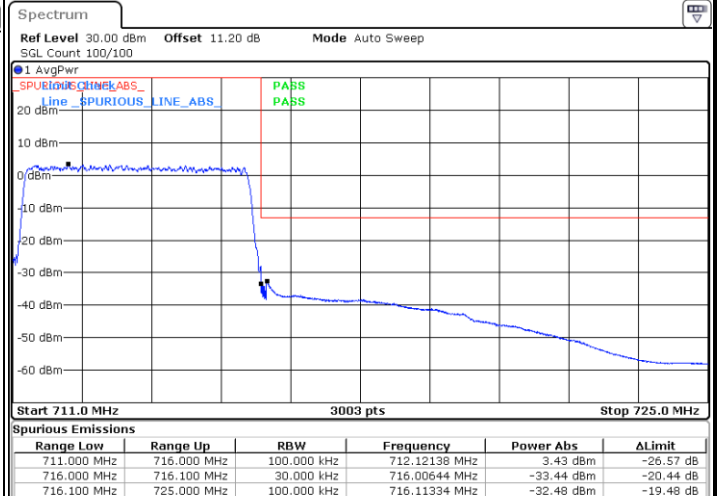


LTE Band 12 / 5MHz / 256QAM

Lowest Band Edge / Full RB



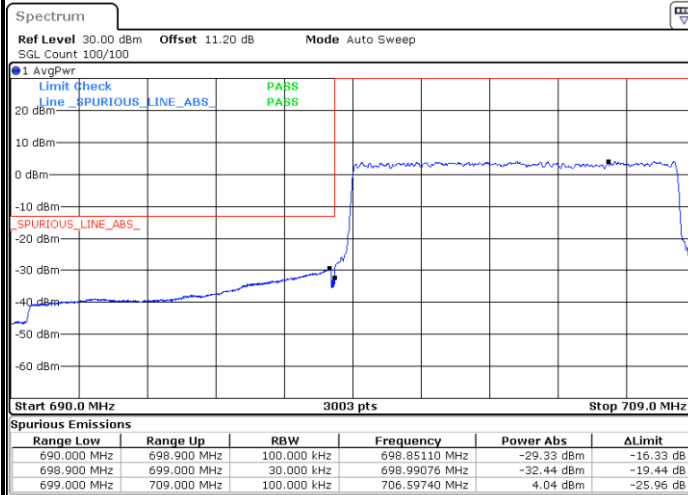
Highest Band Edge / Full RB





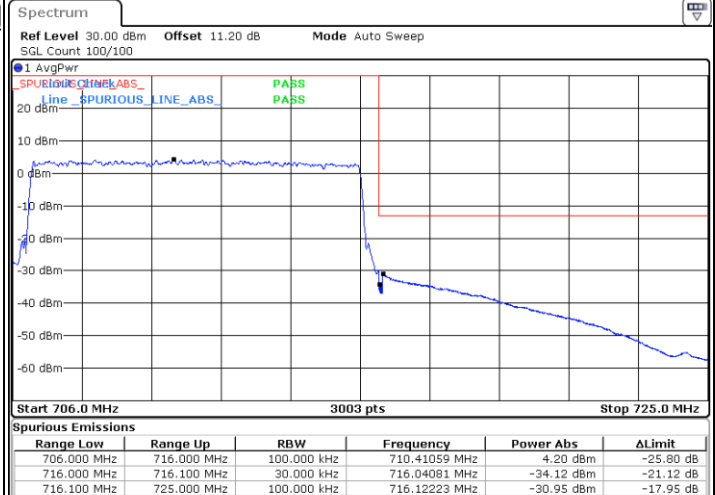
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / Full RB



Date: 26.NOV.2024 21:29:02

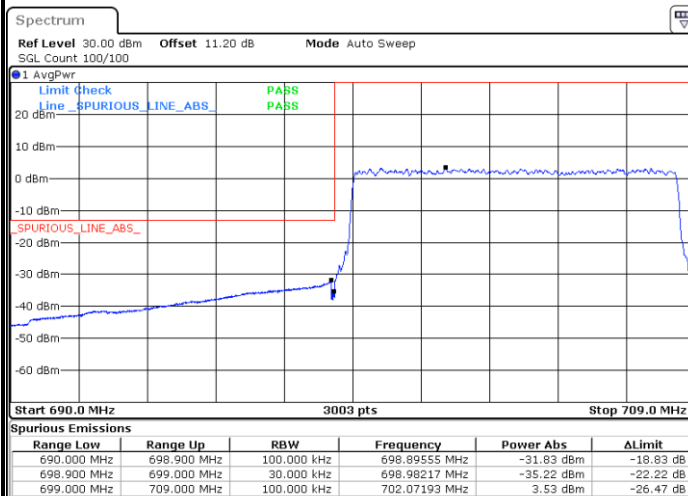
Highest Band Edge / Full RB



Date: 26.NOV.2024 21:33:46

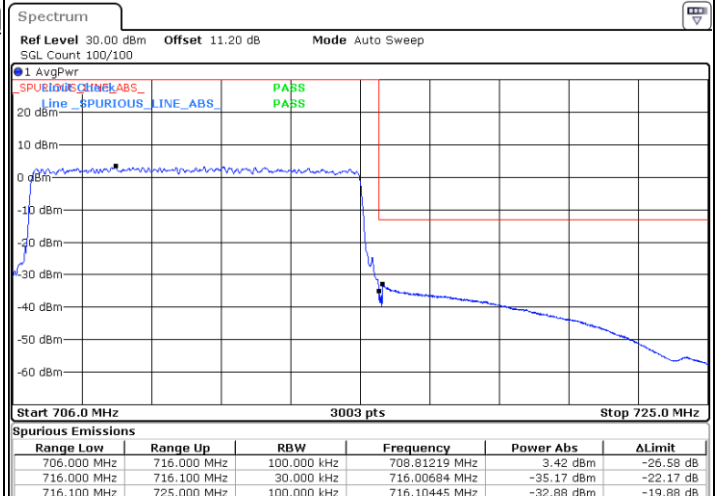
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / Full RB



Date: 26.NOV.2024 21:30:10

Highest Band Edge / Full RB

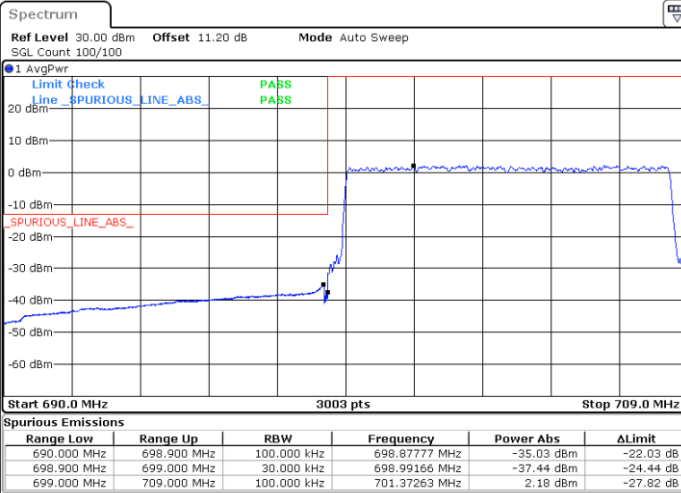


Date: 26.NOV.2024 21:34:54



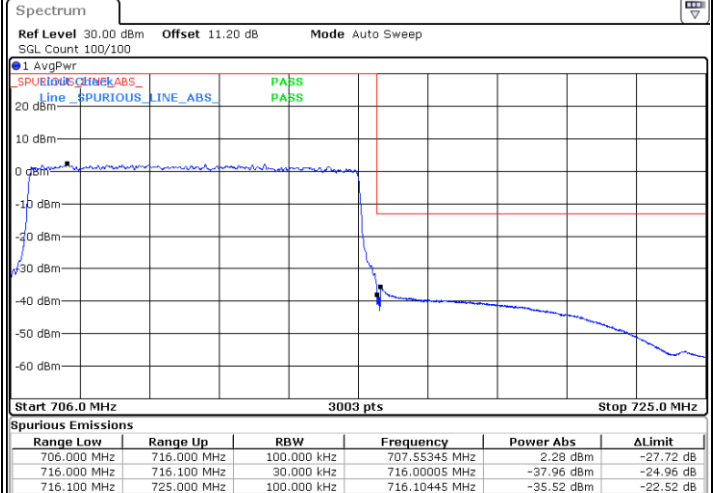
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / Full RB



Date: 26.NOV.2024 21:31:25

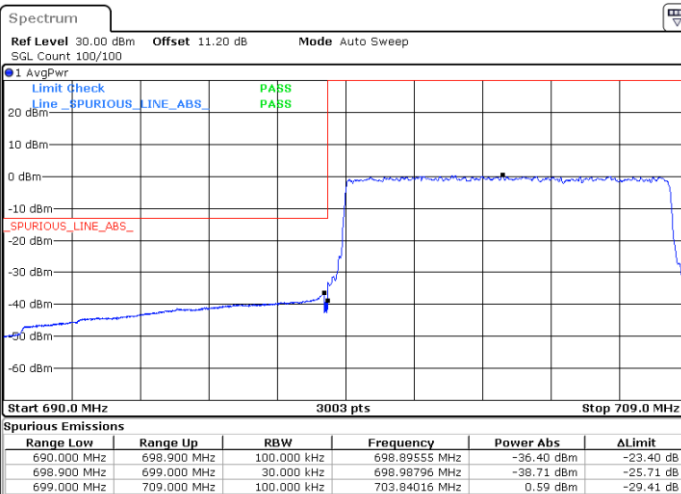
Highest Band Edge / Full RB



Date: 26.NOV.2024 21:36:08

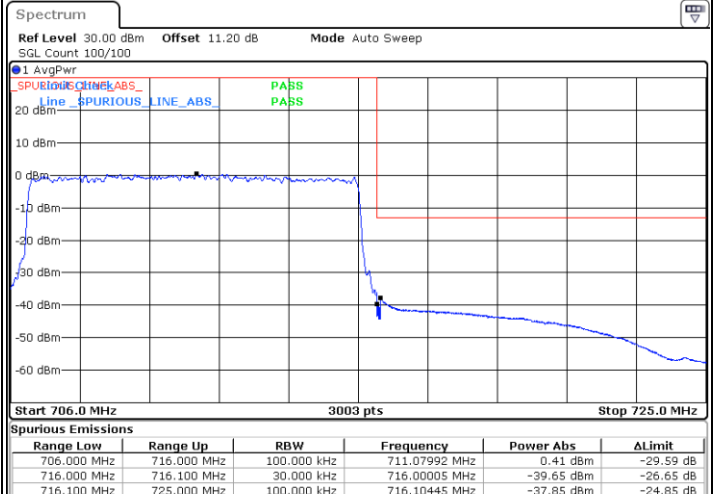
LTE Band 12 / 10MHz / 256QAM

Lowest Band Edge / Full RB



Date: 26.NOV.2024 21:32:33

Highest Band Edge / Full RB



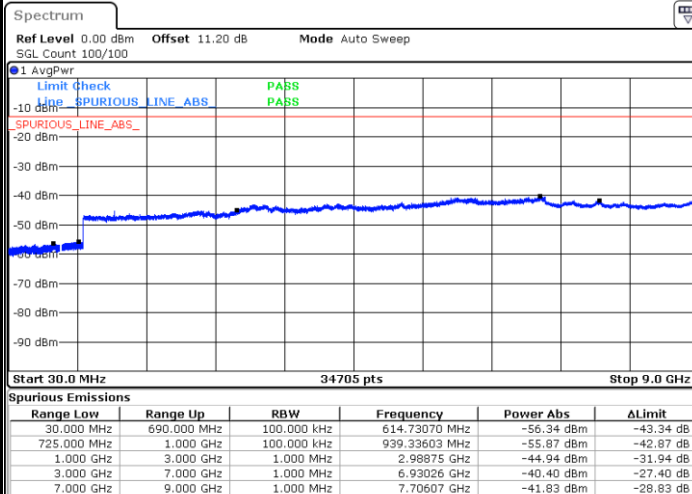
Date: 26.NOV.2024 21:37:25



Conducted Spurious Emission

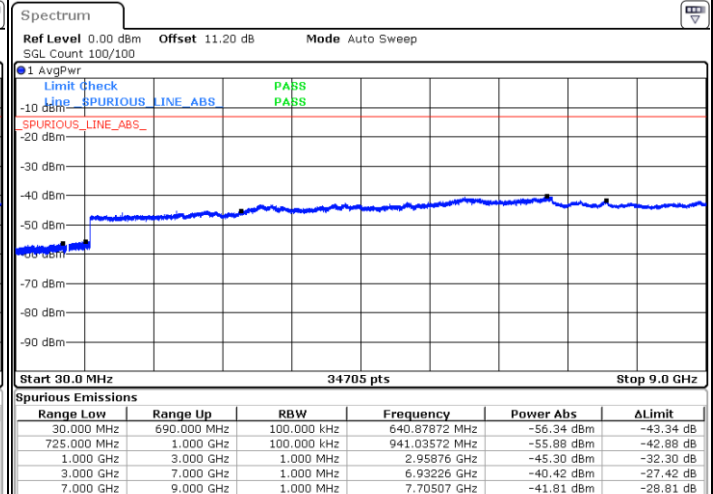
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



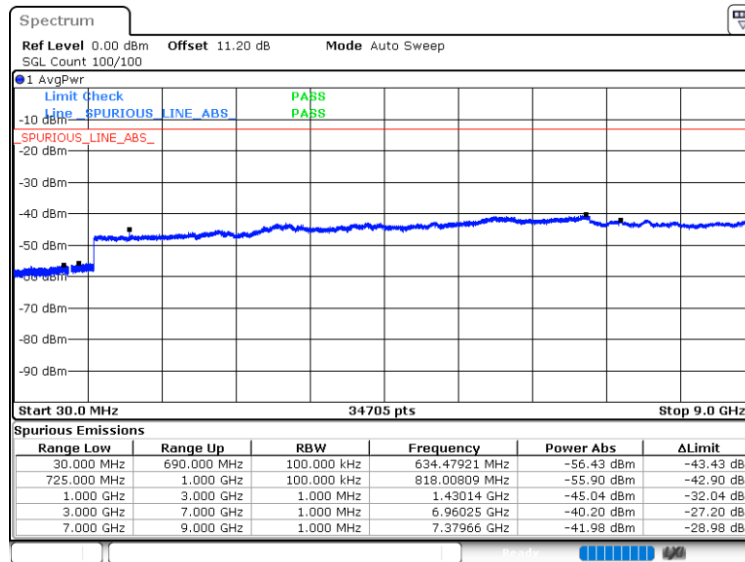
Date: 26.NOV.2024 22:02:30

Middle Channel / QPSK



Date: 26.NOV.2024 22:04:05

Highest Channel / QPSK

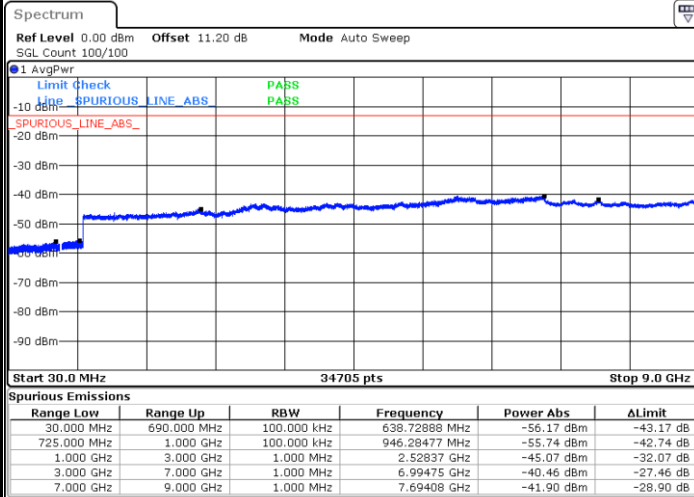


Date: 26.NOV.2024 22:05:42



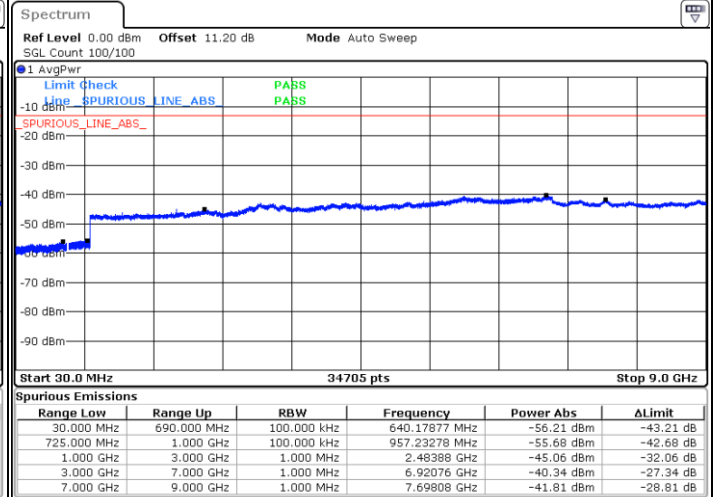
LTE Band 12 / 3MHz

Lowest Channel / QPSK



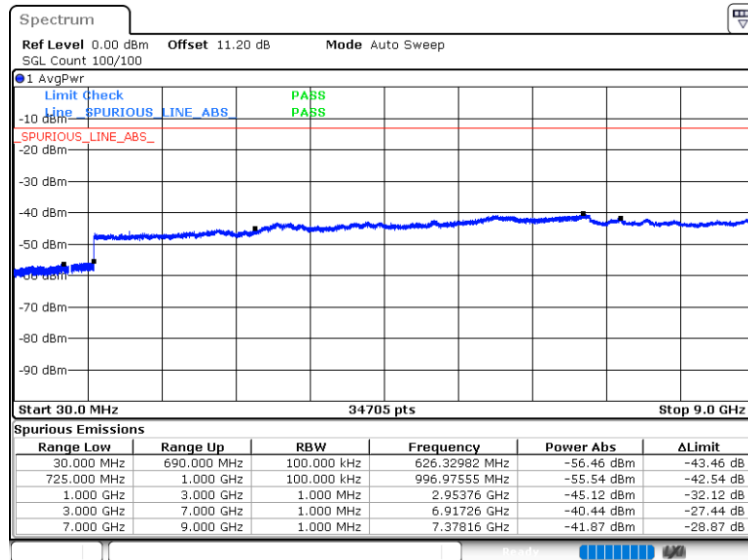
Date: 26.NOV.2024 22:07:20

Middle Channel / QPSK



Date: 26.NOV.2024 22:08:54

Highest Channel / QPSK

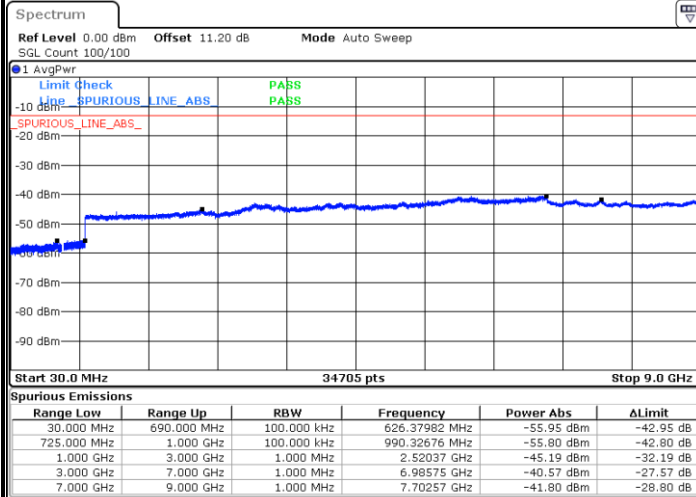


Date: 26.NOV.2024 22:10:32



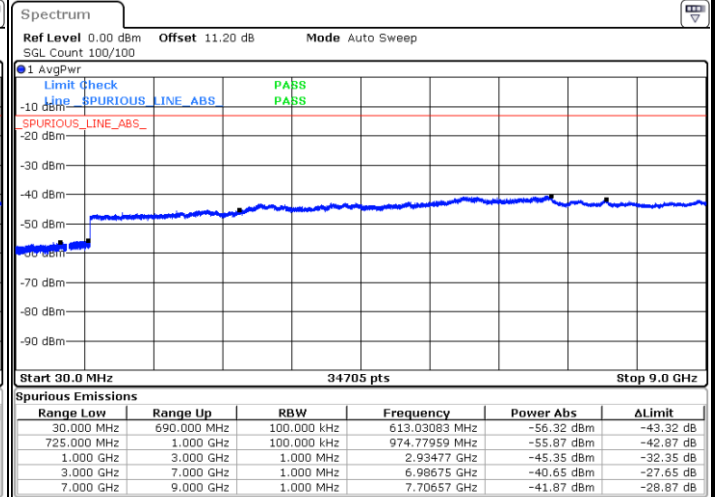
LTE Band 12 / 5MHz

Lowest Channel / QPSK



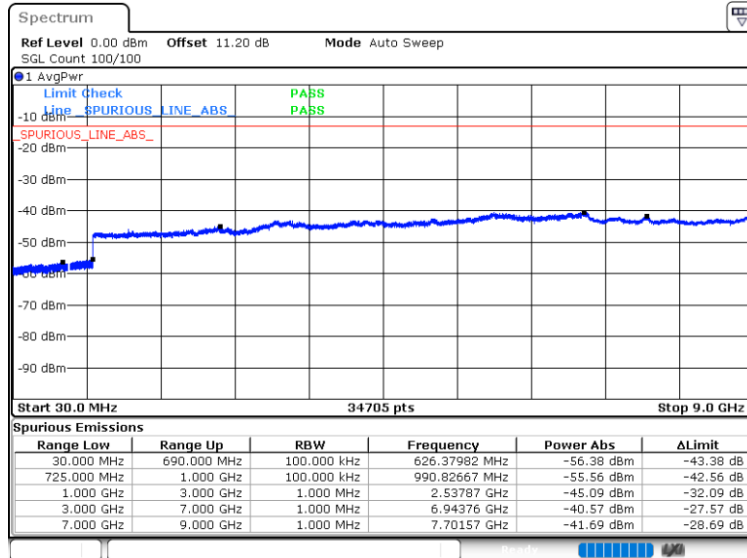
Date: 26.NOV.2024 22:12:11

Middle Channel / QPSK



Date: 26.NOV.2024 22:13:55

Highest Channel / QPSK

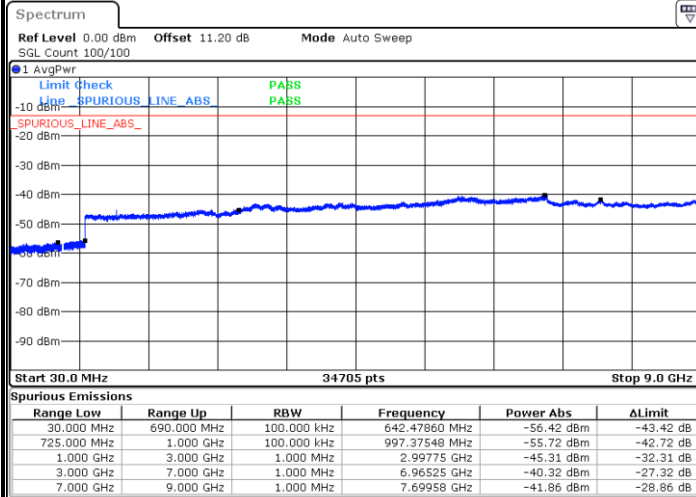


Date: 26.NOV.2024 22:15:30



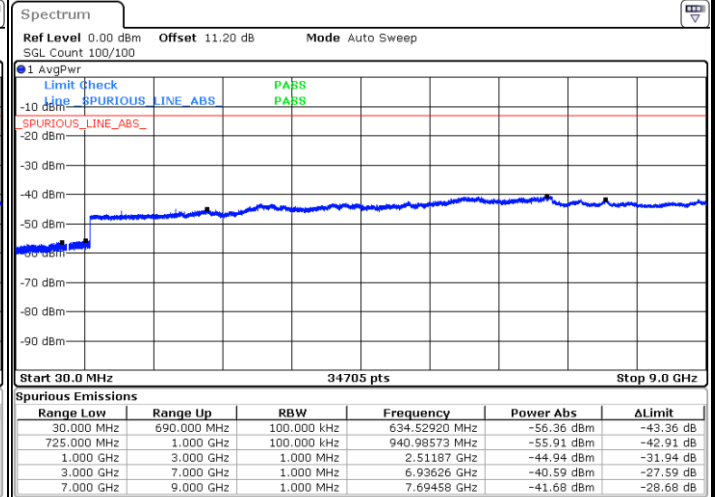
LTE Band 12 / 10MHz

Lowest Channel / QPSK



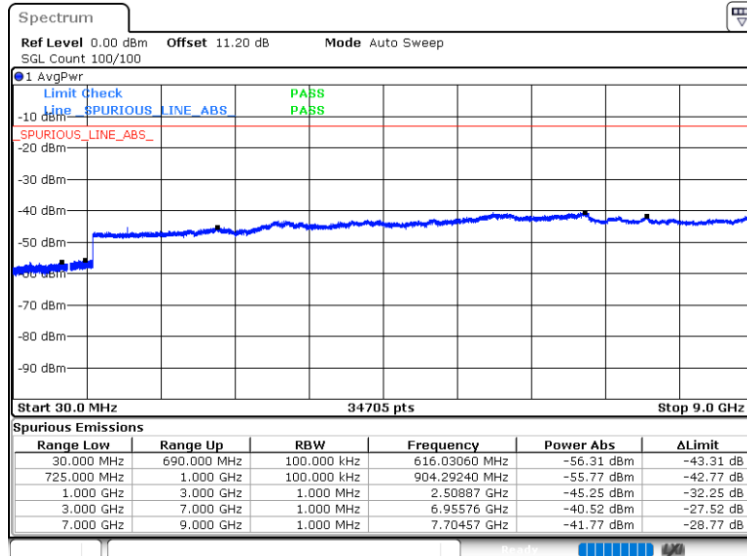
Date: 26.NOV.2024 22:17:10

Middle Channel / QPSK



Date: 26.NOV.2024 22:18:43

Highest Channel / QPSK



Date: 26.NOV.2024 22:20:19

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	0.0034	PASS
40	Normal Voltage	0.0096	
30	Normal Voltage	0.0052	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0081	
0	Normal Voltage	0.0140	
-10	Normal Voltage	0.0165	
-20	Normal Voltage	0.0225	
-30	Normal Voltage	0.0129	
20	Maximum Voltage	0.0137	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0139	

Note:

1. Normal Voltage = 3.3 V. ; Minimum Voltage = 3.14 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 12B

26dB Bandwidth

Mode	LTE Band 12B : 26dB BW(MHz)	
	QPSK	
BW	5MHz+5MHz	5MHz+10MHz
Middle CH	9.99	14.62

Mode	LTE Band 12B : 26dB BW(MHz)	
	16QAM	
BW	5MHz+5MHz	5MHz+10MHz
Middle CH	9.91	14.56

Mode	LTE Band 12B : 26dB BW(MHz)	
	64QAM	
BW	5MHz+5MHz	5MHz+10MHz
Middle CH	9.94	14.56

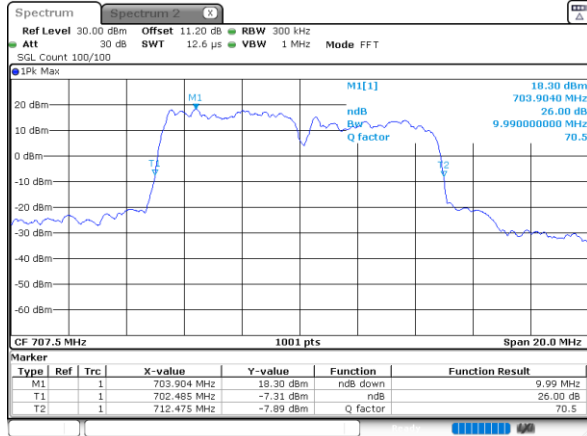
Mode	LTE Band 12B : 26dB BW(MHz)	
	256QAM	
BW	5MHz+5MHz	5MHz+10MHz
Middle CH	9.99	14.74



LTE Band 12B

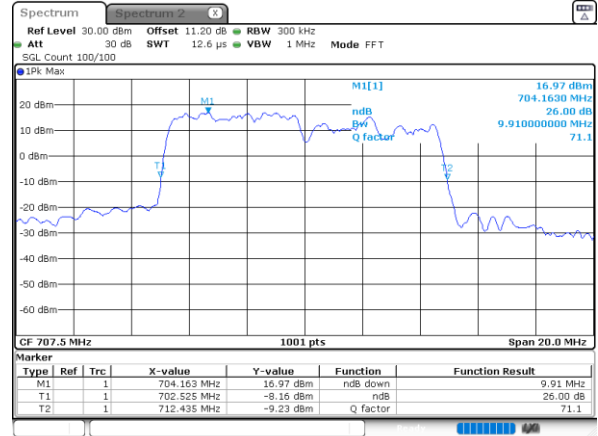
QPSK

Middle Channel / 5MHz+5MHz



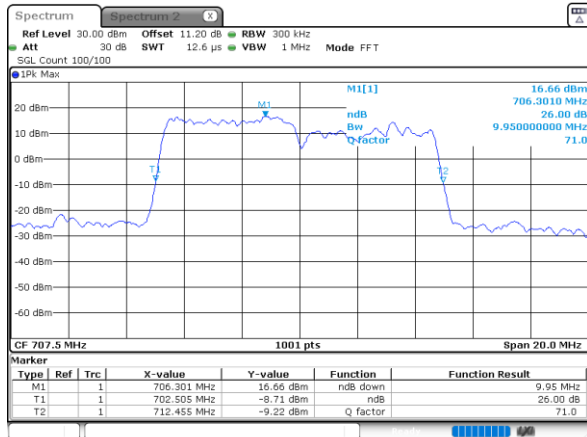
16QAM

Middle Channel / 5MHz+5MHz



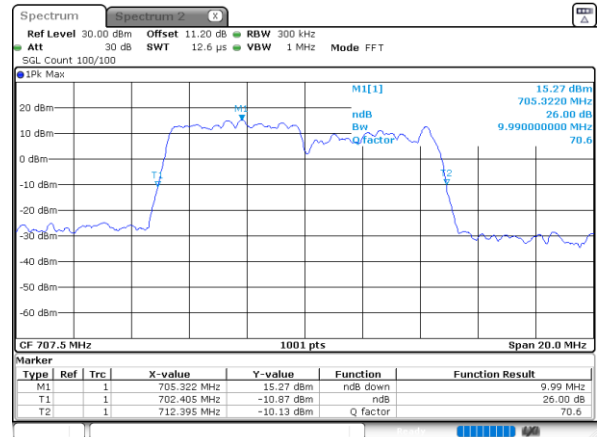
64QAM

Middle Channel / 5MHz+5MHz



256QAM

Middle Channel / 5MHz+5MHz

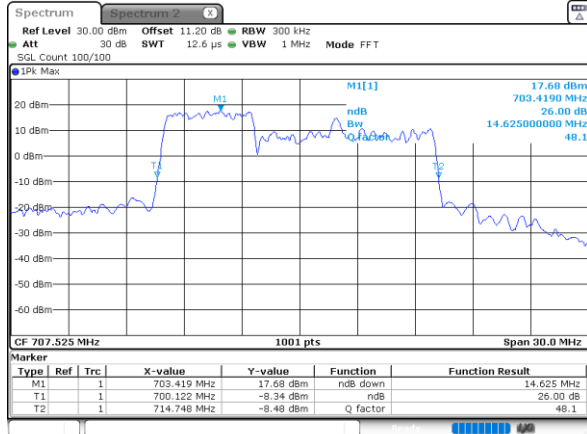




LTE Band 12B

QPSK

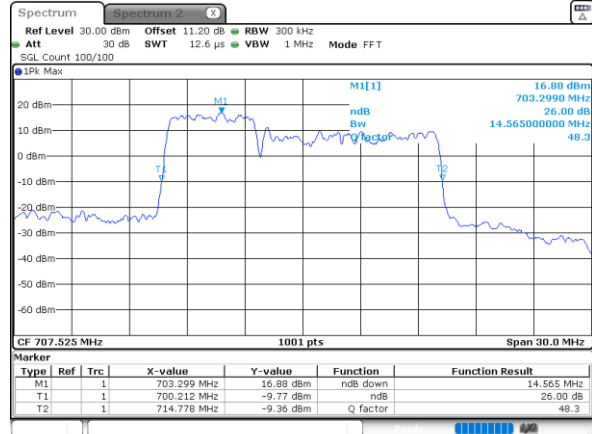
Middle Channel / 5MHz+10MHz



Date: 21.NOV.2024 19:06:23

16QAM

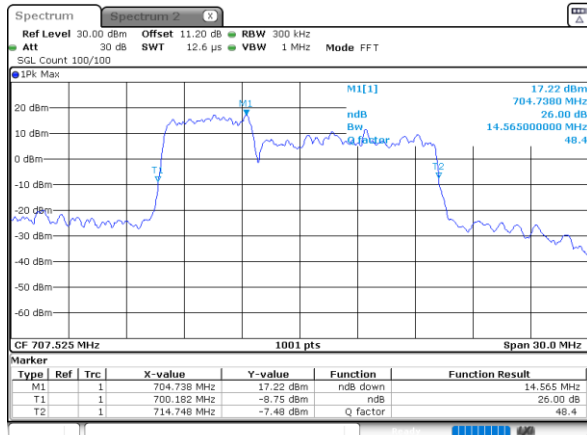
Middle Channel / 5MHz+10MHz



Date: 21.NOV.2024 19:06:58

64QAM

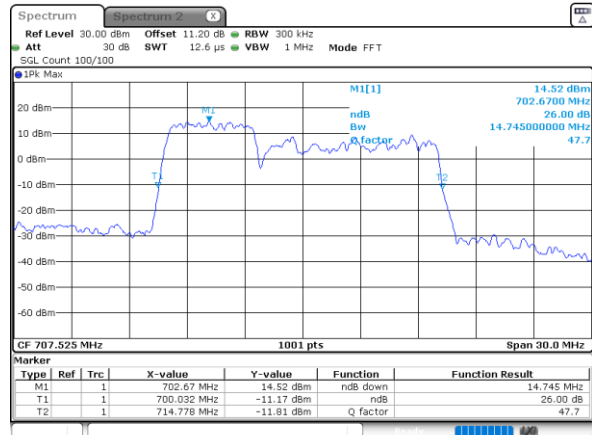
Middle Channel / 5MHz+10MHz



Date: 21.NOV.2024 19:07:35

256QAM

Middle Channel / 5MHz+10MHz



Date: 21.NOV.2024 19:08:11

Occupied Bandwidth

Mode	LTE Band 12B : 99%OBW(MHz)	
	QPSK	
BW	5MHz+5MHz	5MHz+10MHz
Middle CH	9.30	13.83

Mode	LTE Band 12B : 99%OBW(MHz)	
	16QAM	
BW	5MHz+5MHz	5MHz+10MHz
Middle CH	9.28	13.81

Mode	LTE Band 12B : 99%OBW(MHz)	
	64QAM	
BW	5MHz+5MHz	5MHz+10MHz
Middle CH	9.35	13.82

Mode	LTE Band 12B : 99%OBW(MHz)	
	256QAM	
BW	5MHz+5MHz	5MHz+10MHz
Middle CH	9.36	13.84



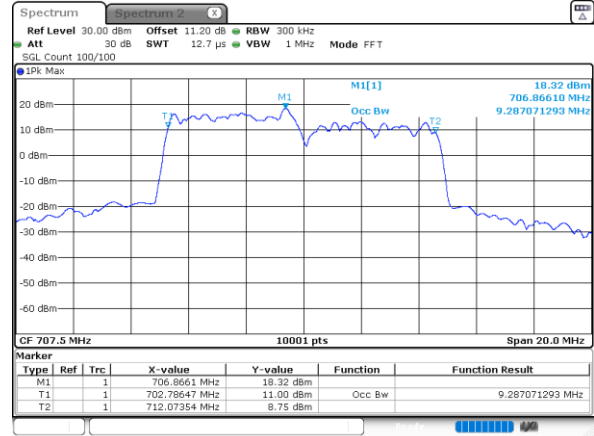
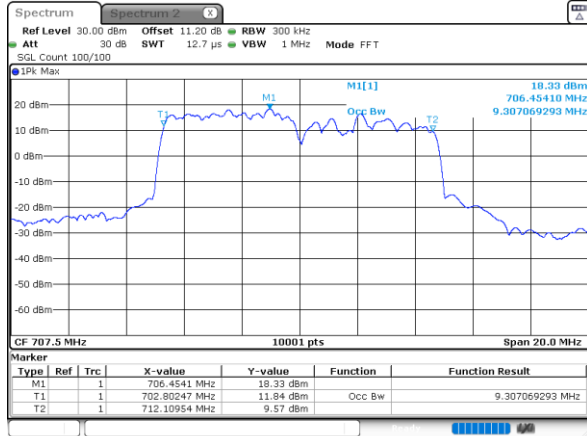
LTE Band 12B

QPSK

16QAM

Middle Channel / 5MHz+5MHz

Middle Channel / 5MHz+5MHz

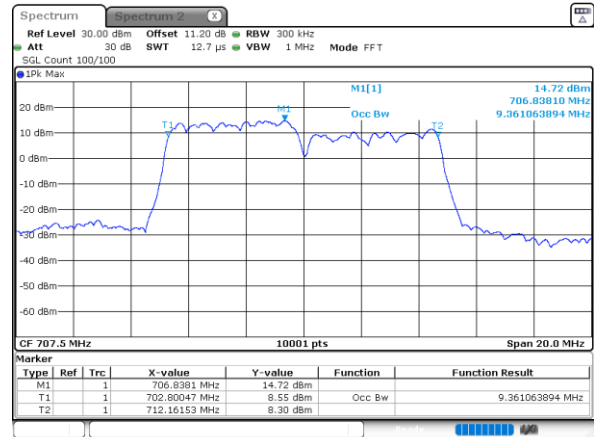
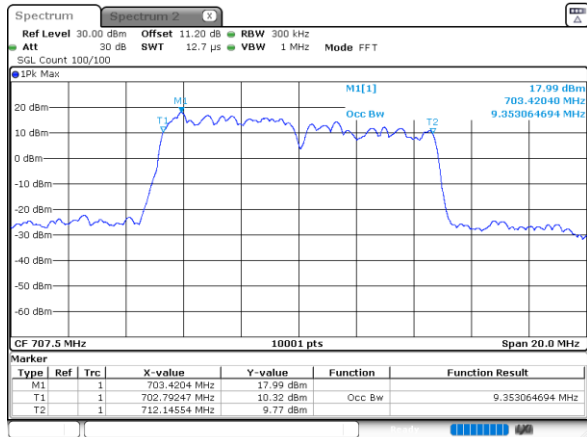


64QAM

256QAM

Middle Channel / 5MHz+5MHz

Middle Channel / 5MHz+5MHz

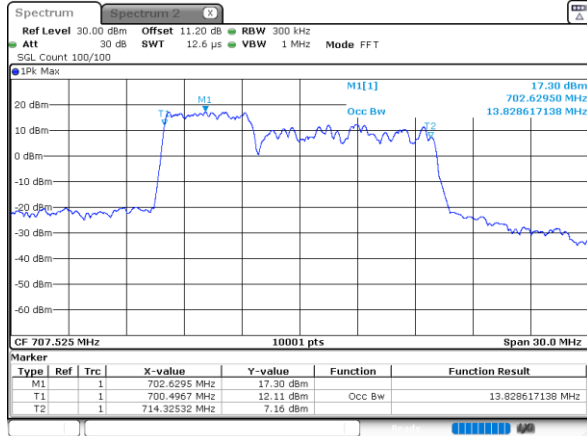




LTE Band 12B

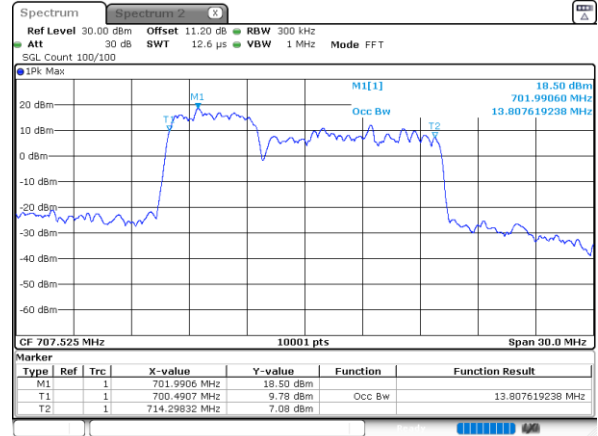
QPSK

Middle Channel / 5MHz+10MHz



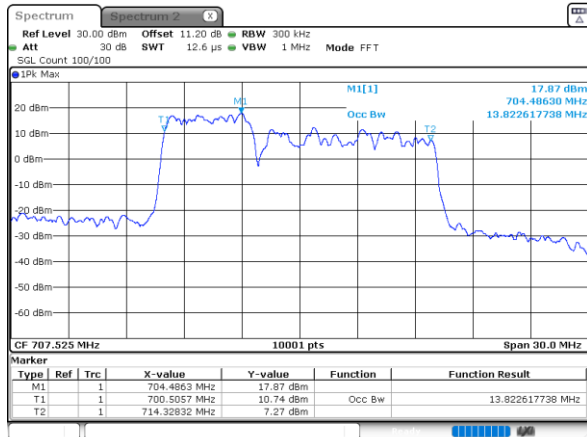
16QAM

Middle Channel / 5MHz+10MHz



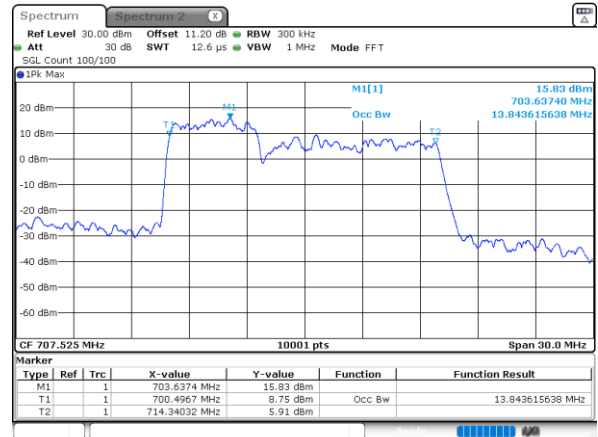
64QAM

Middle Channel / 5MHz+10MHz



256QAM

Middle Channel / 5MHz+10MHz





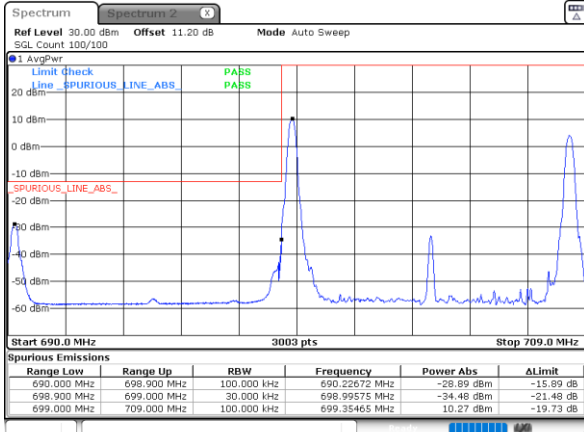
Conducted Band Edge



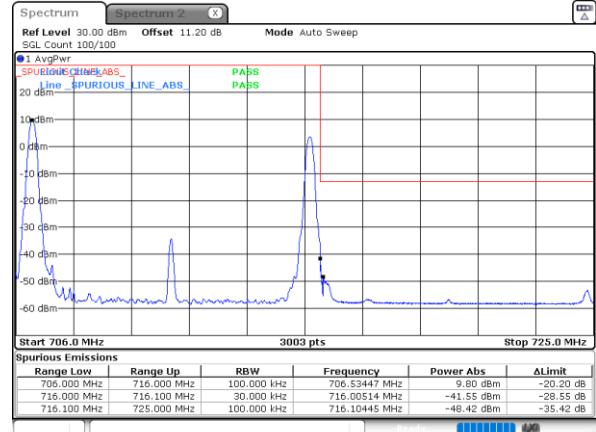
LTE Band 12B / 5MHz+5MHz

QPSK

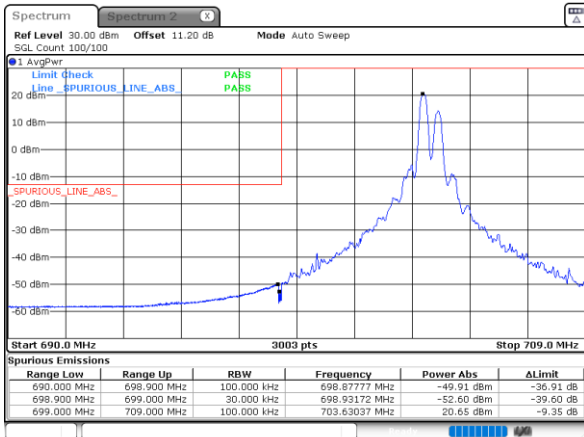
Lowest Band Edge / 1RB0 and 1RB24



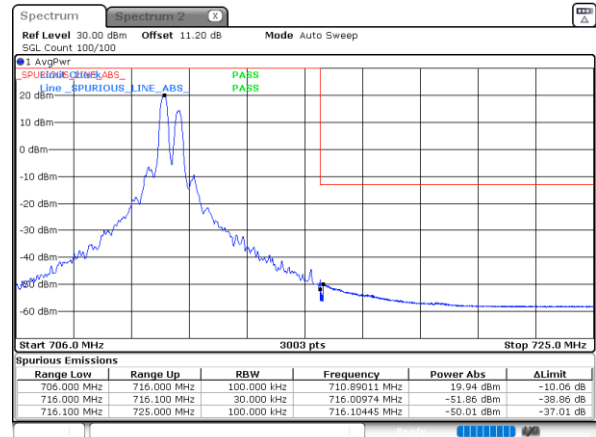
Highest Band Edge / 1RB0 and 1RB24



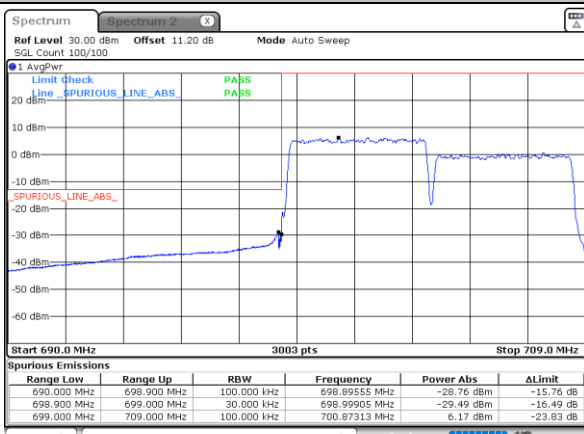
Lowest Band Edge / 1RB24 and 1RB0



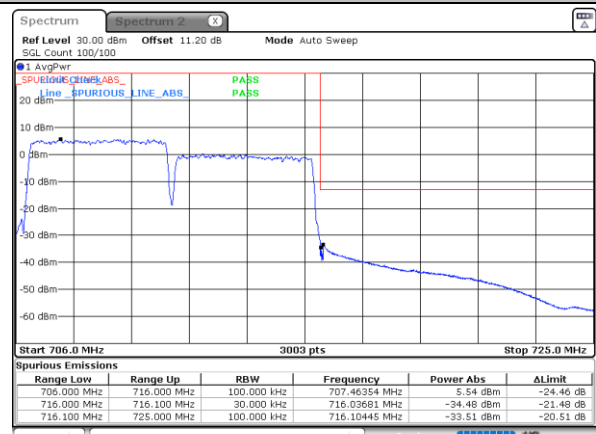
Highest Band Edge / 1RB24 and 1RB0



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

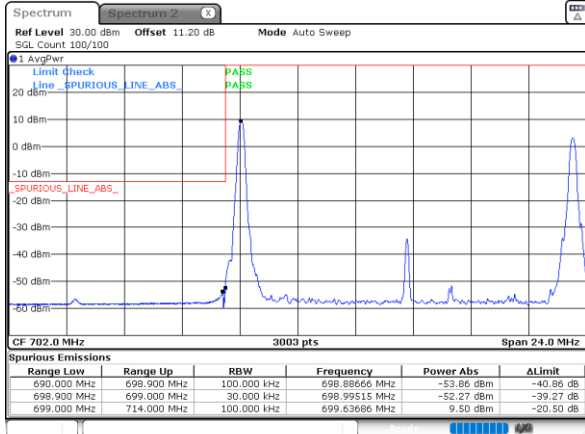




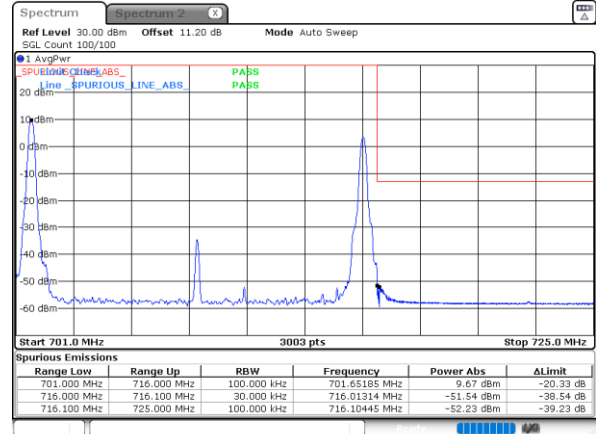
LTE Band 12B / 5MHz+10MHz

QPSK

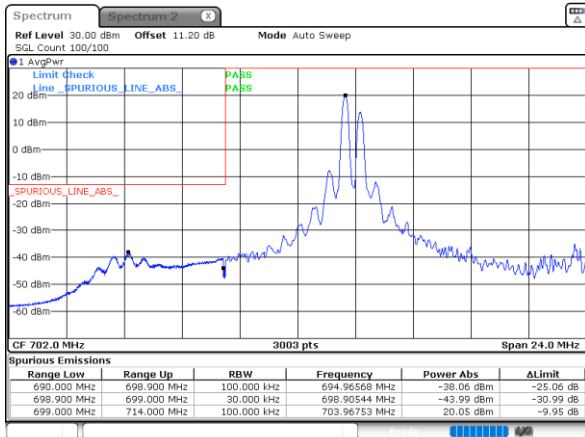
Lowest Band Edge / 1RB0 and 1RB49



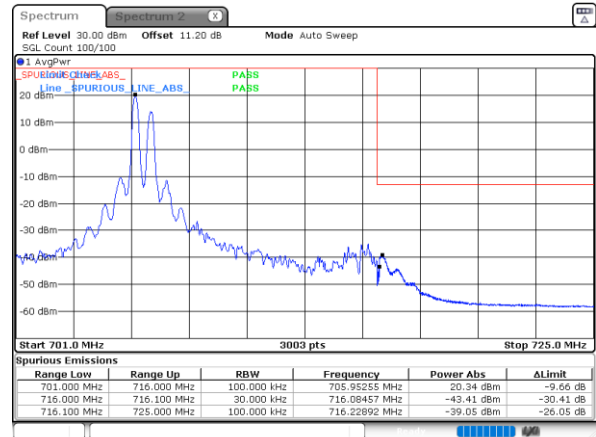
Highest Band Edge / 1RB0 and 1RB49



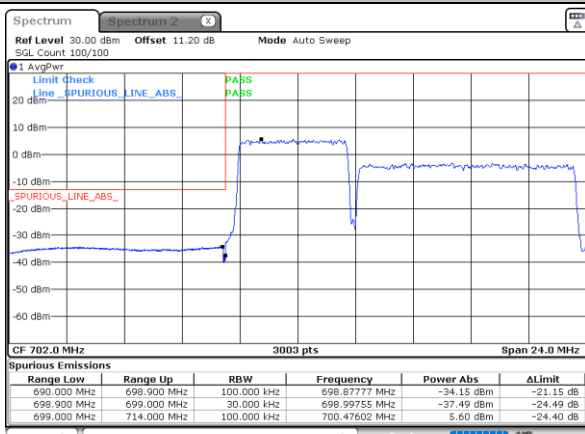
Lowest Band Edge / 1RB24 and 1RB0



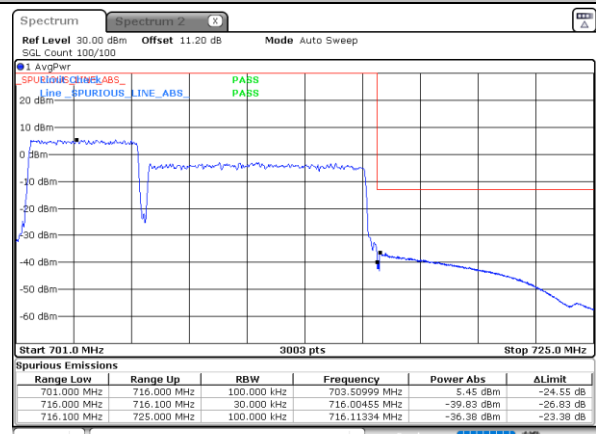
Highest Band Edge / 1RB24 and 1RB0



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

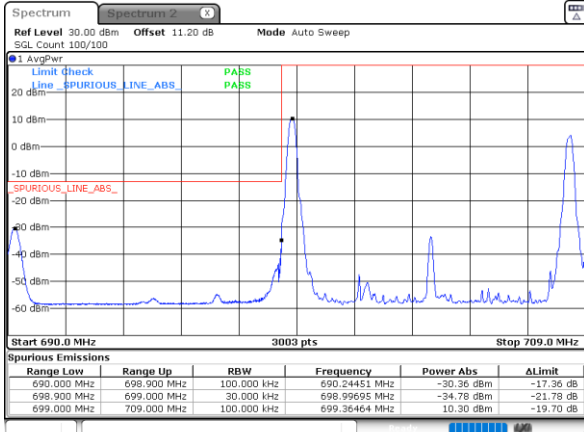




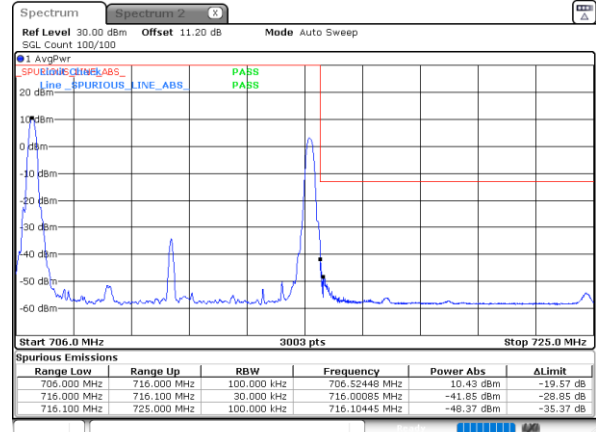
LTE Band 12B / 5MHz+5MHz

16QAM

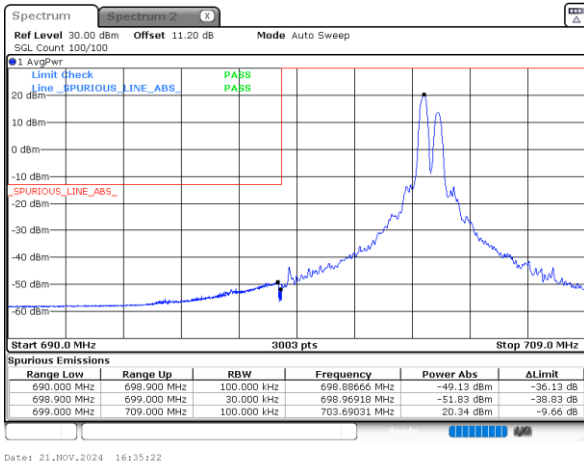
Lowest Band Edge / 1RB0 and 1RB24



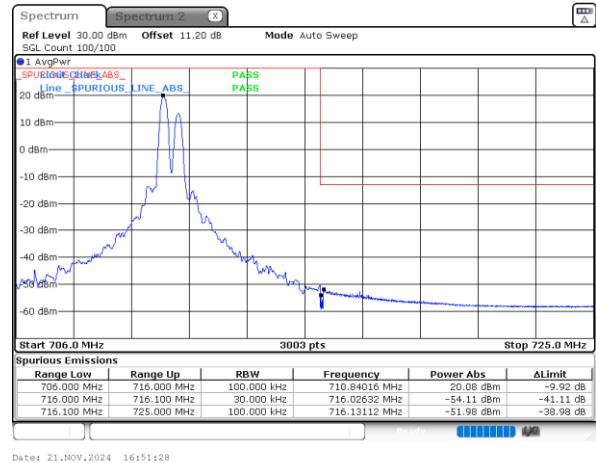
Highest Band Edge / 1RB0 and 1RB24



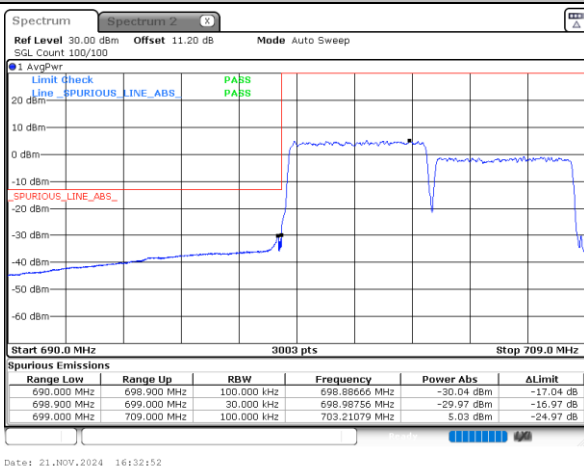
Lowest Band Edge / 1RB24 and 1RB0



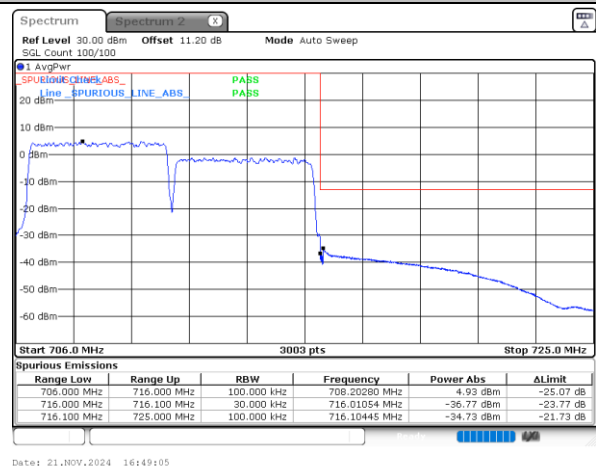
Highest Band Edge / 1RB24 and 1RB0



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

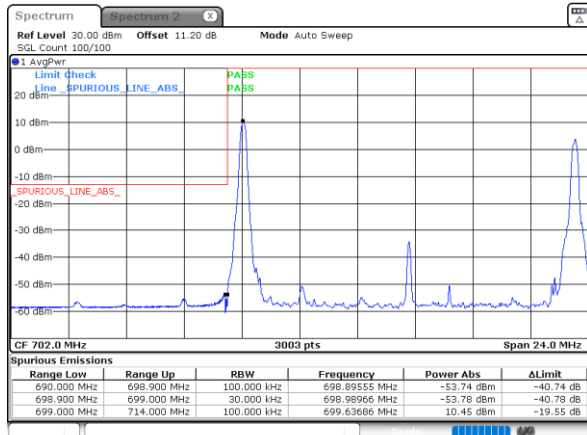




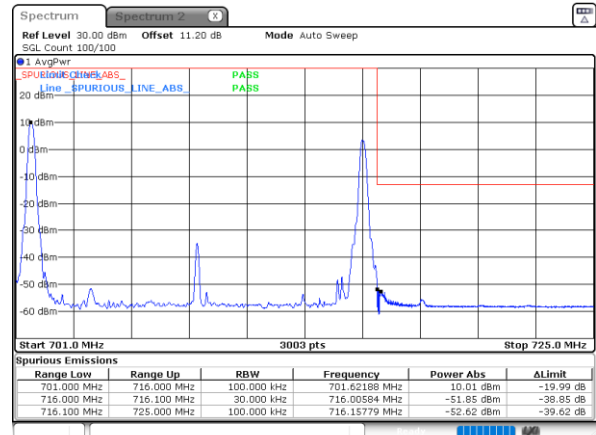
LTE Band 12B / 5MHz+10MHz

16QAM

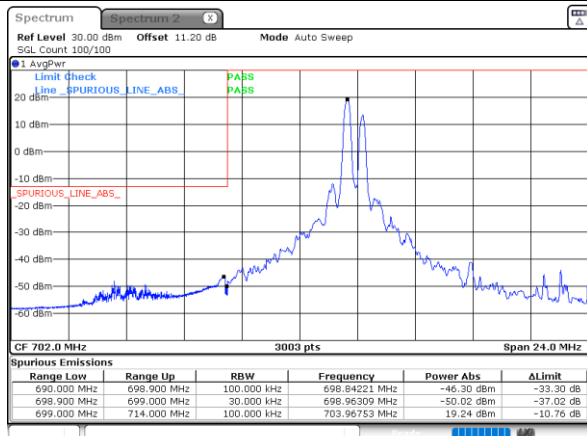
Lowest Band Edge / 1RB0 and 1RB49



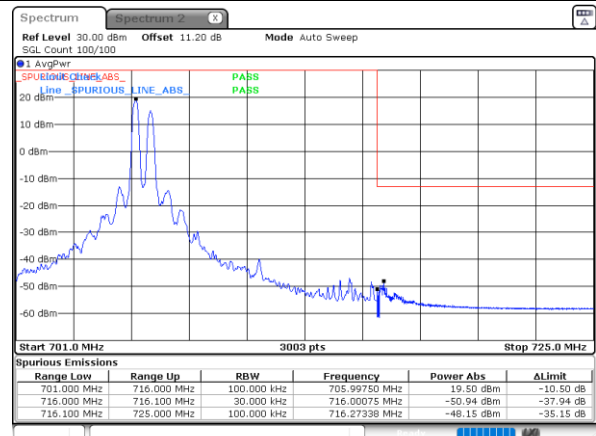
Highest Band Edge / 1RB0 and 1RB49



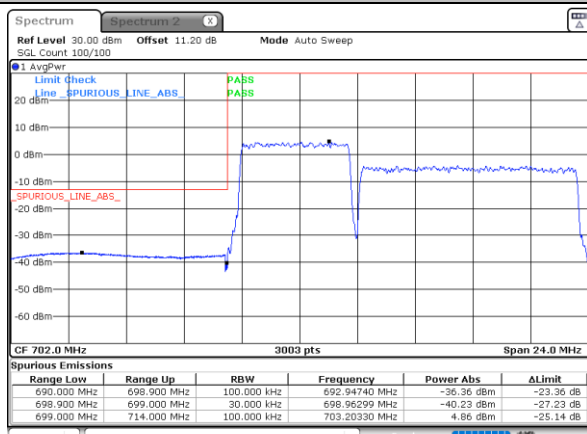
Lowest Band Edge / 1RB24 and 1RB0



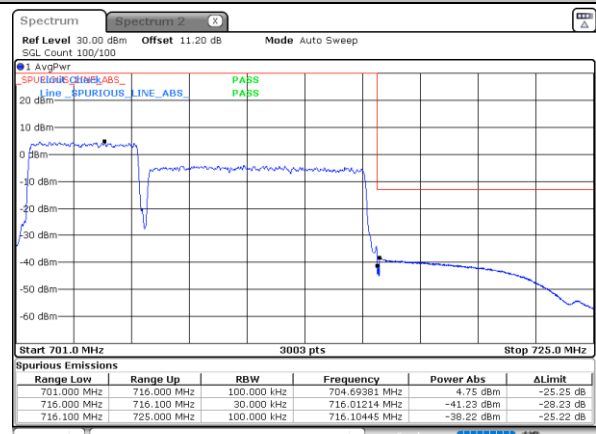
Highest Band Edge / 1RB24 and 1RB0



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

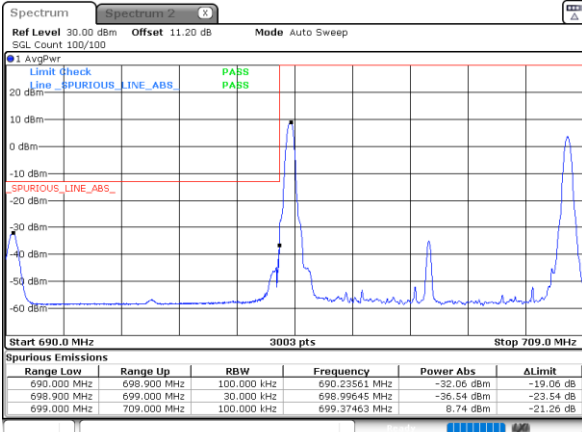




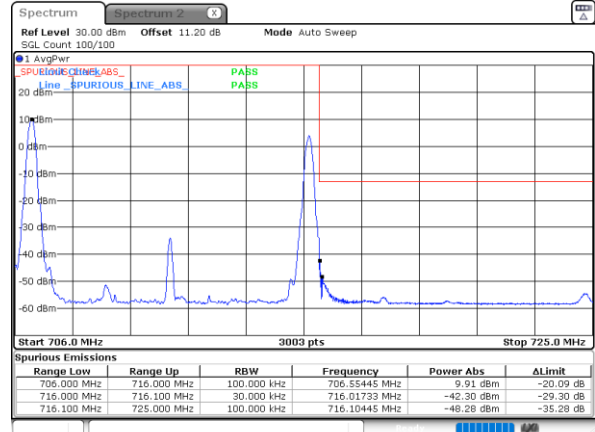
LTE Band 12B / 5MHz+5MHz

64QAM

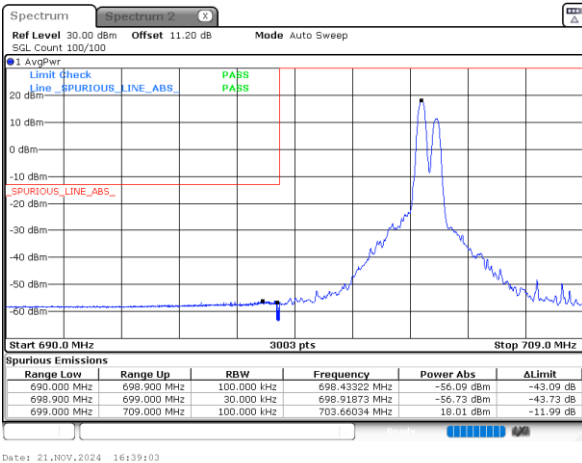
Lowest Band Edge / 1RB0 and 1RB24



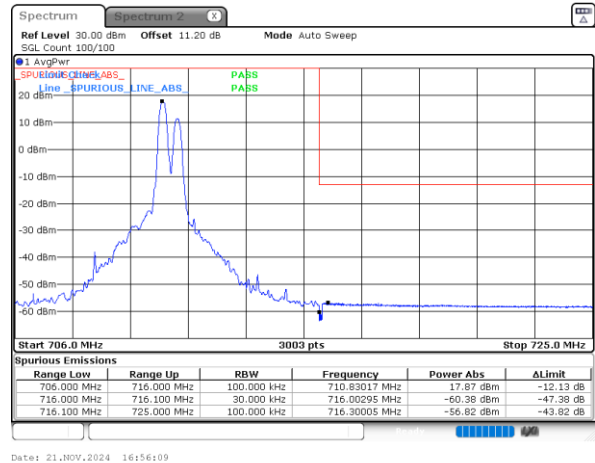
Highest Band Edge / 1RB0 and 1RB24



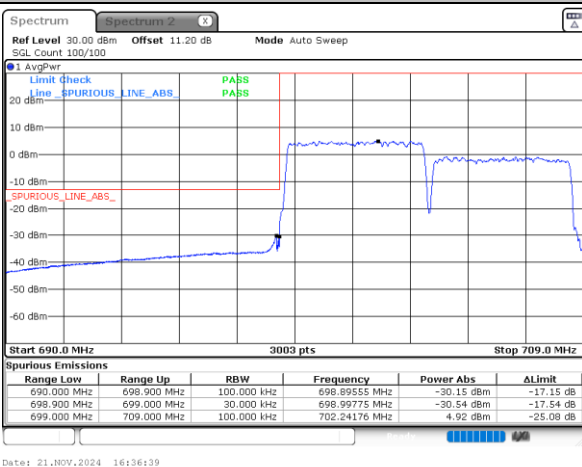
Lowest Band Edge / 1RB24 and 1RB0



Highest Band Edge / 1RB24 and 1RB0



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

