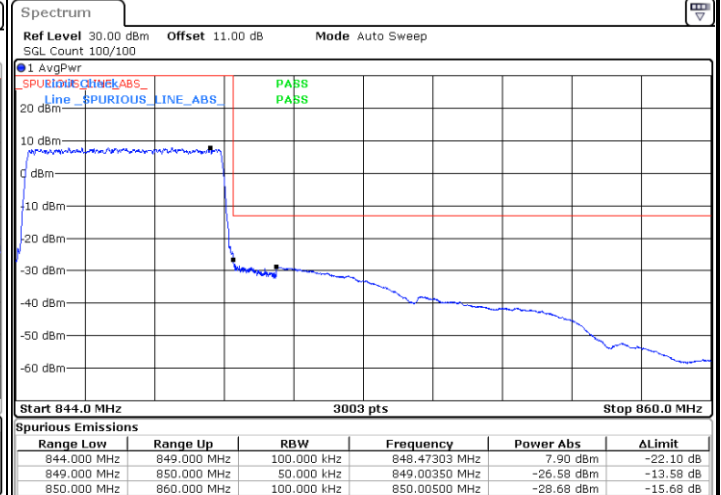
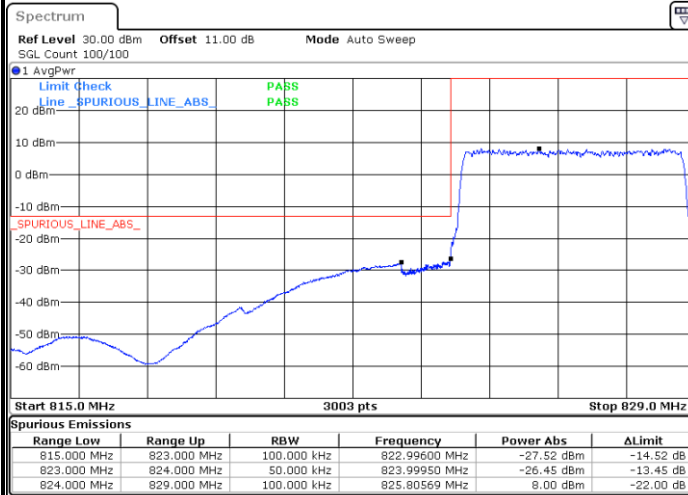




LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / Full RB

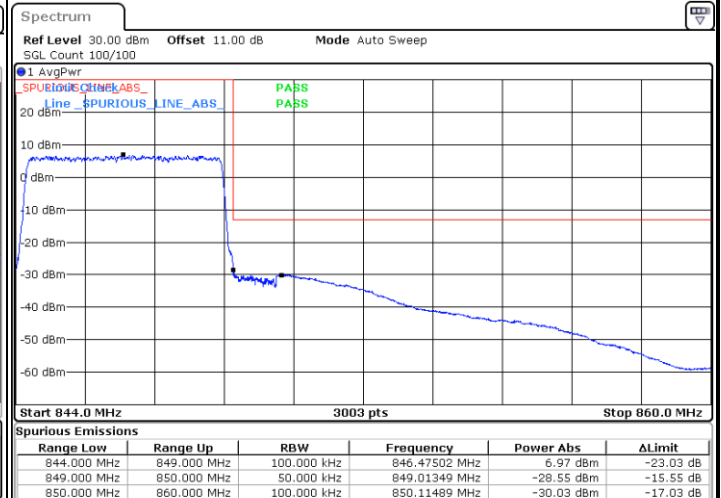
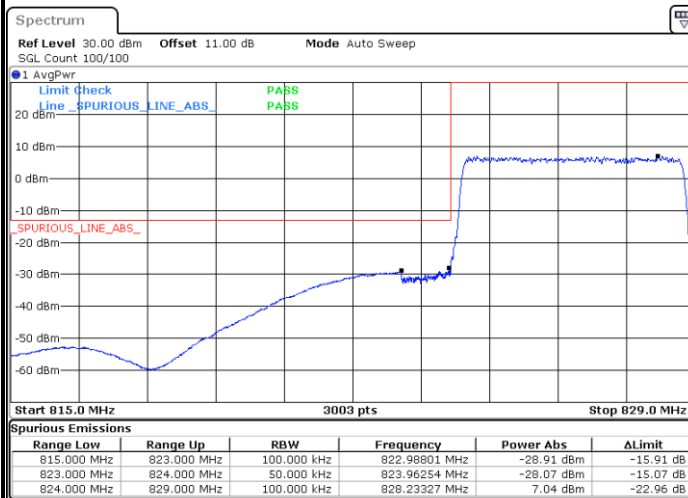
Highest Band Edge / Full RB



LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

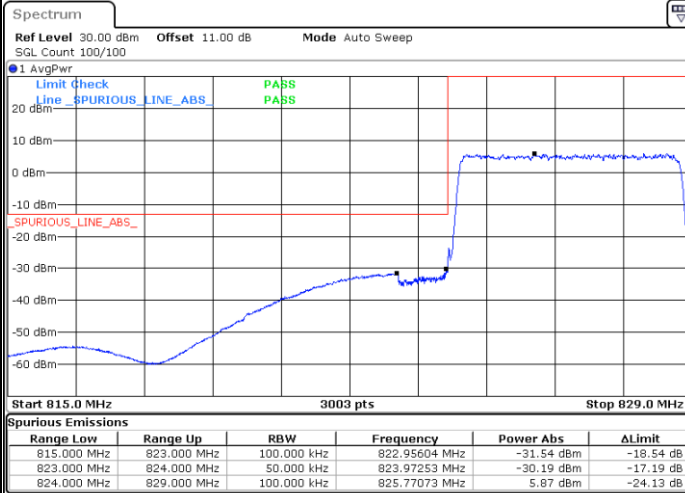




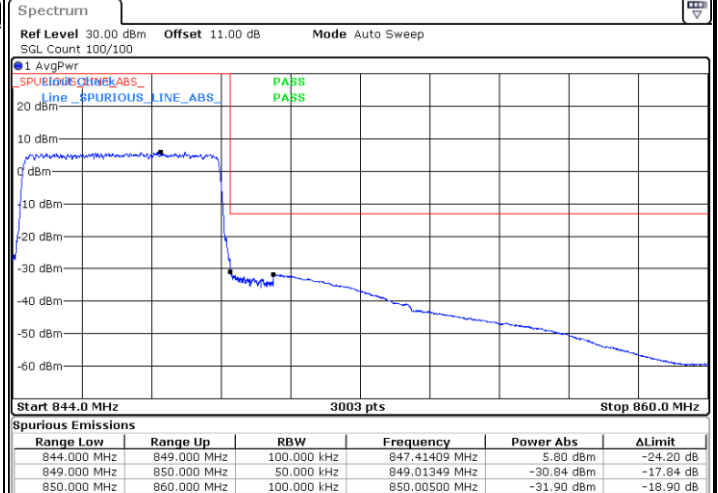
LTE Band 5 / 5MHz / 64QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14.DEC.2022 16:53:30

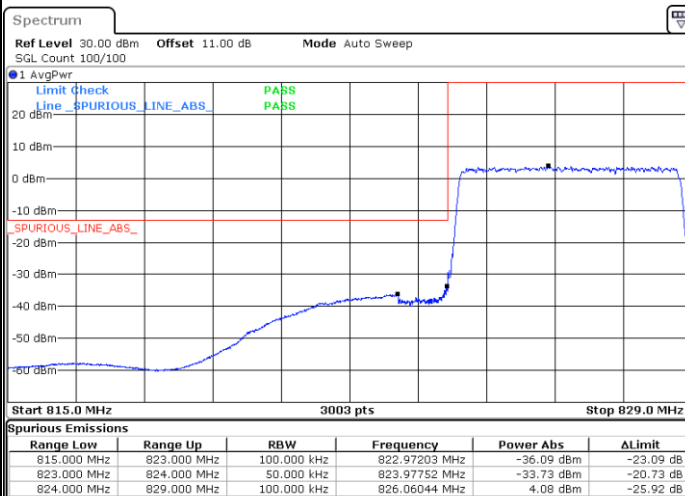


Date: 14.DEC.2022 17:00:17

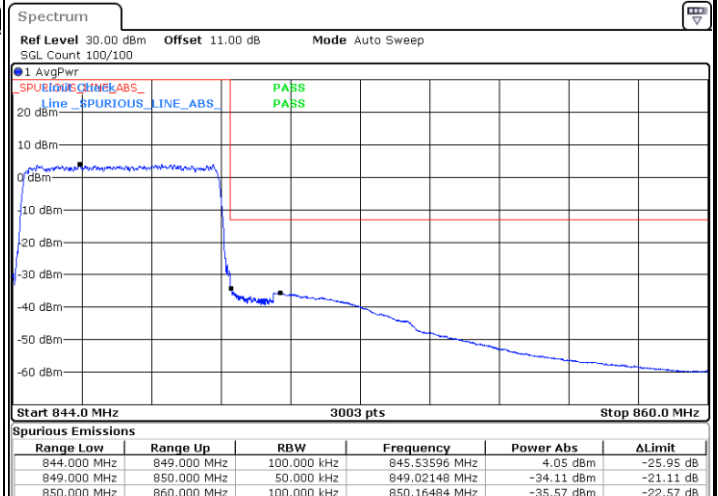
LTE Band 5 / 5MHz / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14.DEC.2022 16:54:29



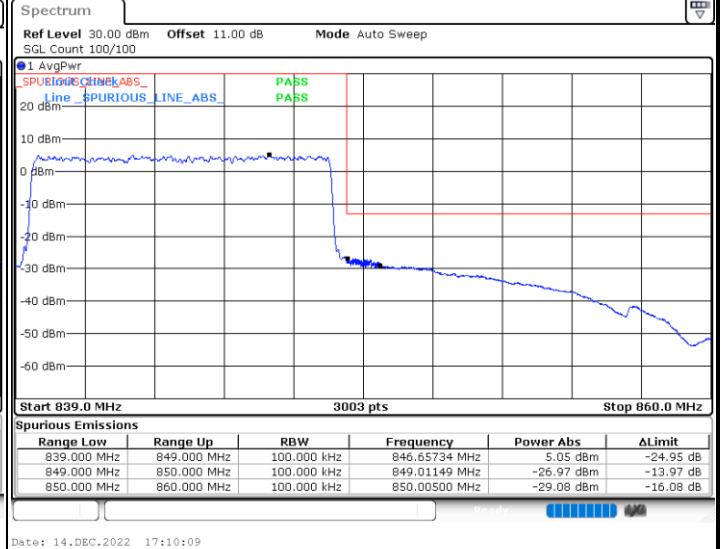
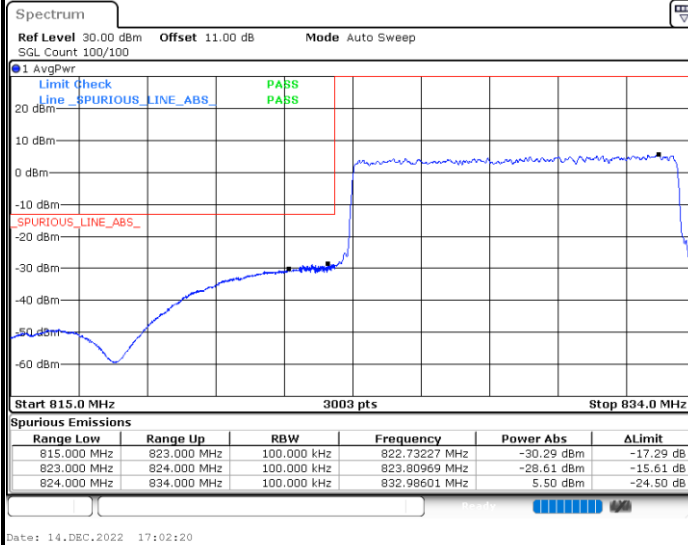
Date: 14.DEC.2022 17:01:16



LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / Full RB

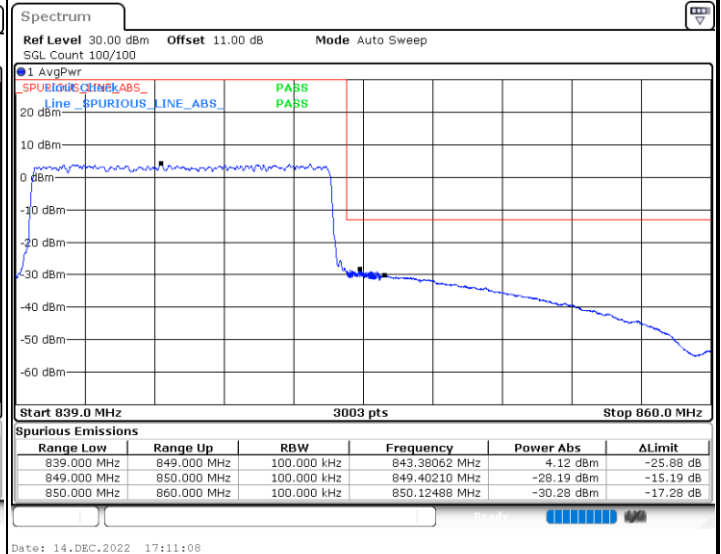
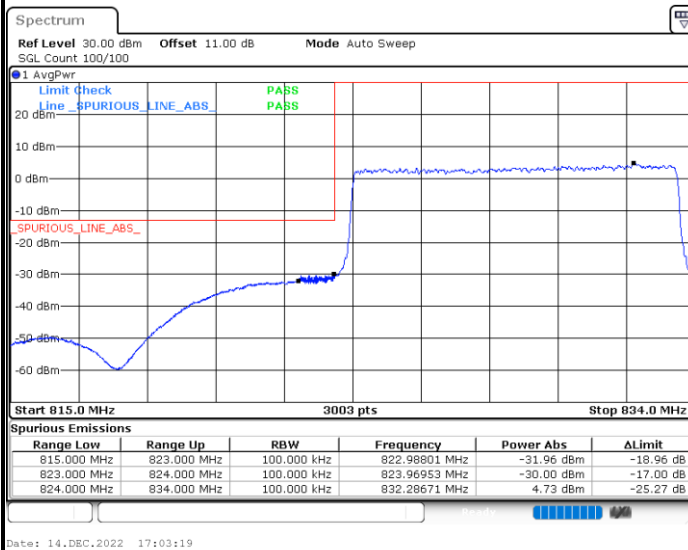
Highest Band Edge / Full RB



LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

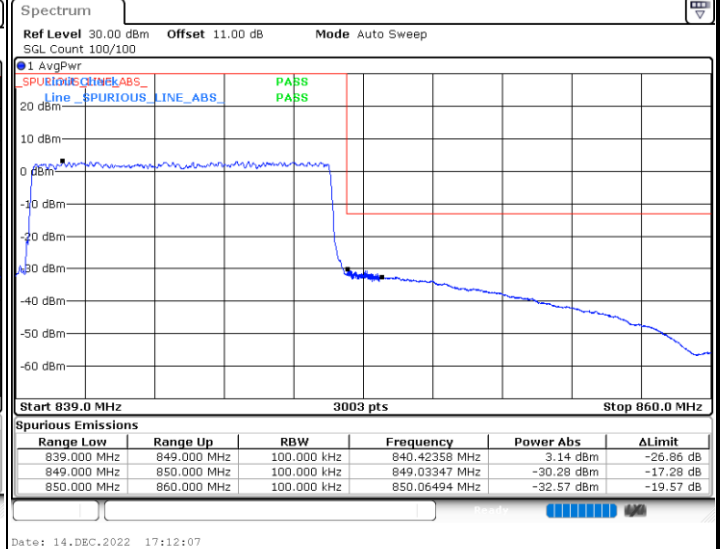
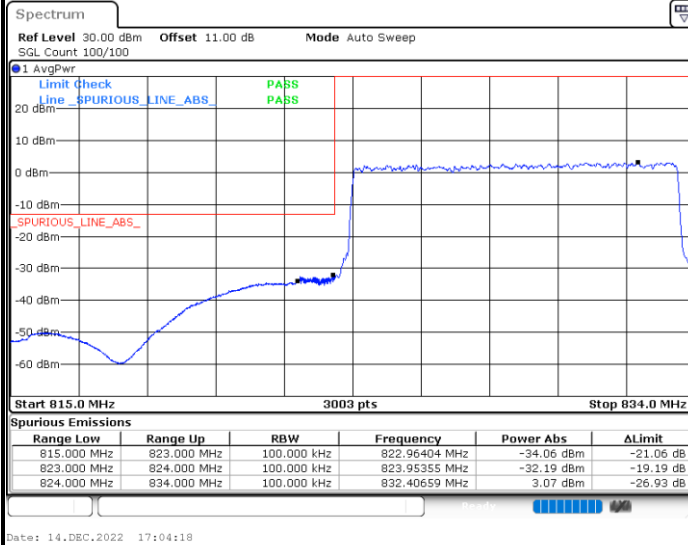




LTE Band 5 / 10MHz / 64QAM

Lowest Band Edge / Full RB

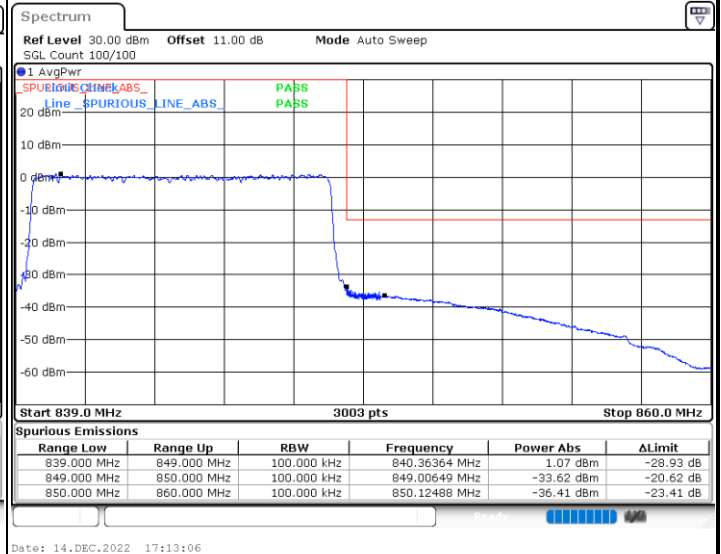
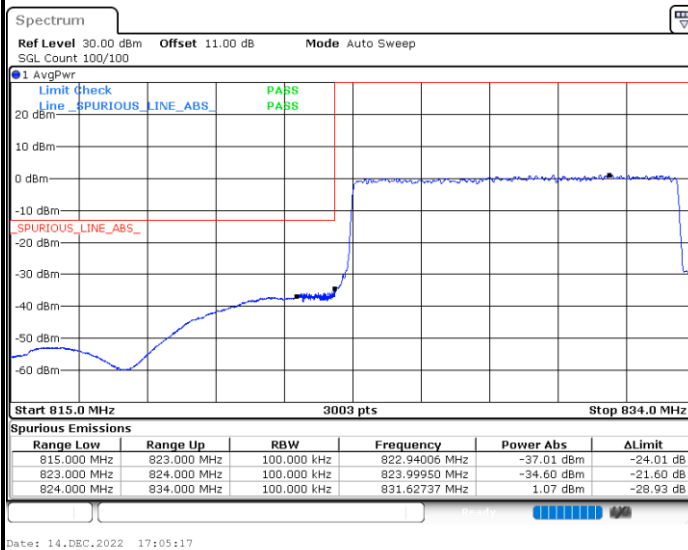
Highest Band Edge / Full RB



LTE Band 5 / 10MHz / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

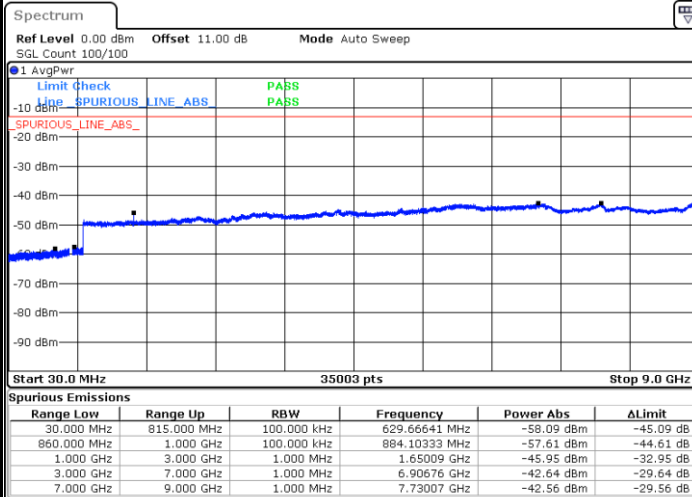




Conducted Spurious Emission

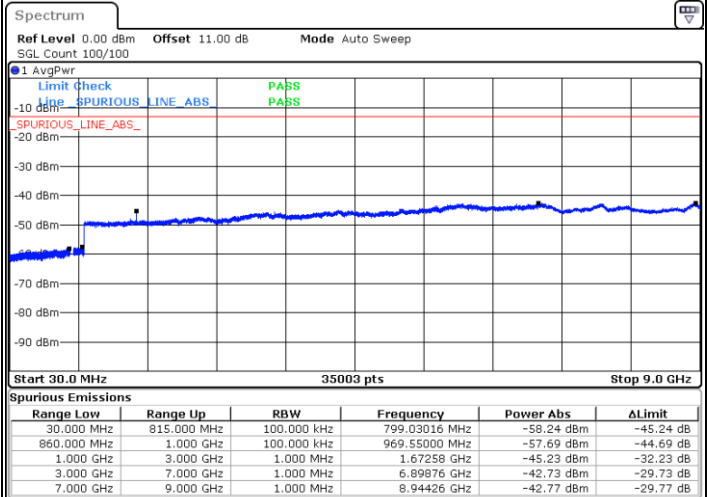
LTE Band 5 / 1.4MHz

Lowest Channel / QPSK



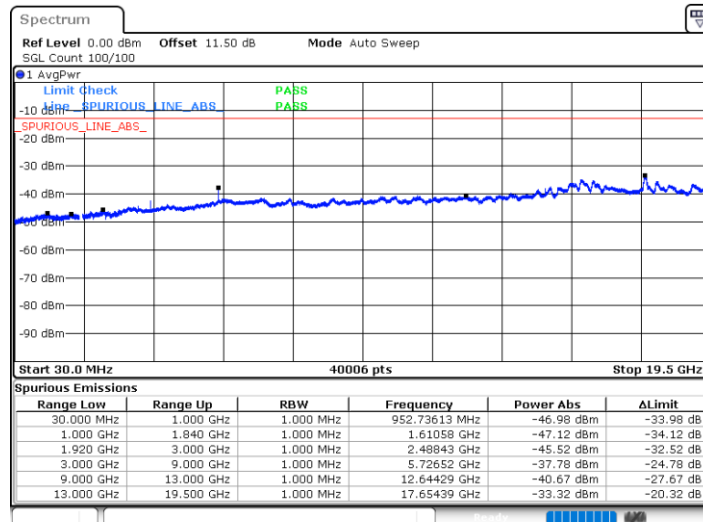
Date: 14.DEC.2022 16:09:33

Middle Channel / QPSK



Date: 14.DEC.2022 16:15:03

Highest Channel / QPSK

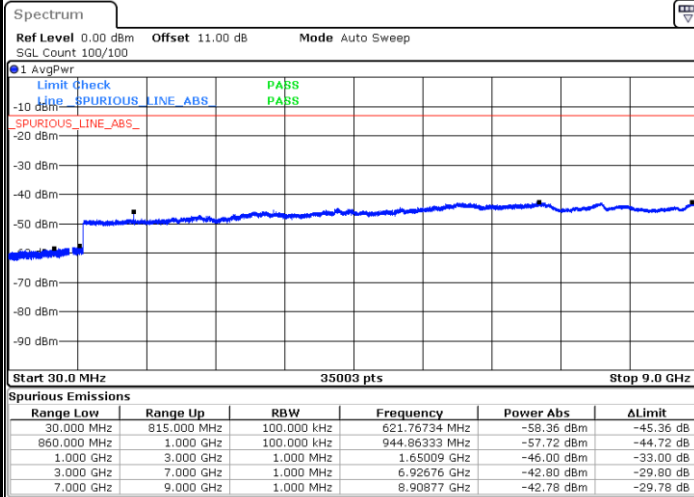


Date: 4.JAN.2023 14:12:11



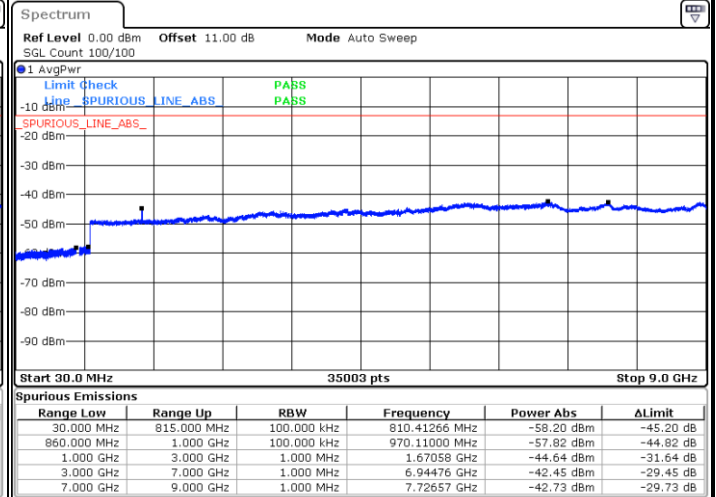
LTE Band 5 / 3MHz

Lowest Channel / QPSK



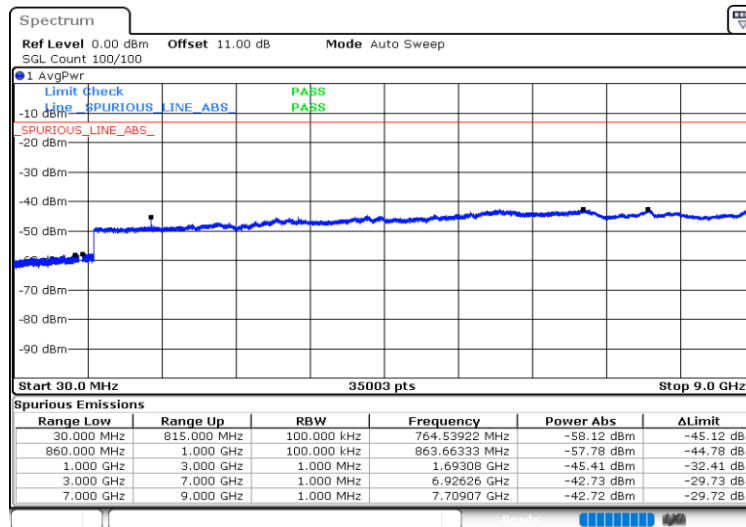
Date: 14.DEC.2022 17:14:30

Middle Channel / QPSK



Date: 14.DEC.2022 17:15:48

Highest Channel / QPSK

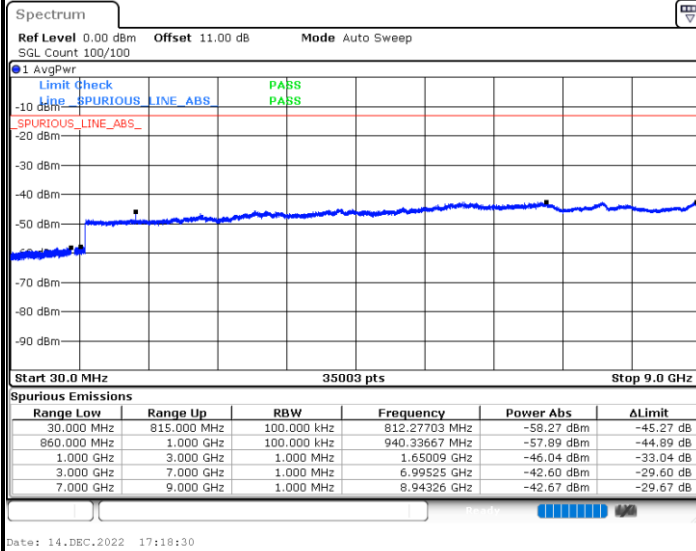


Date: 14.DEC.2022 17:17:06

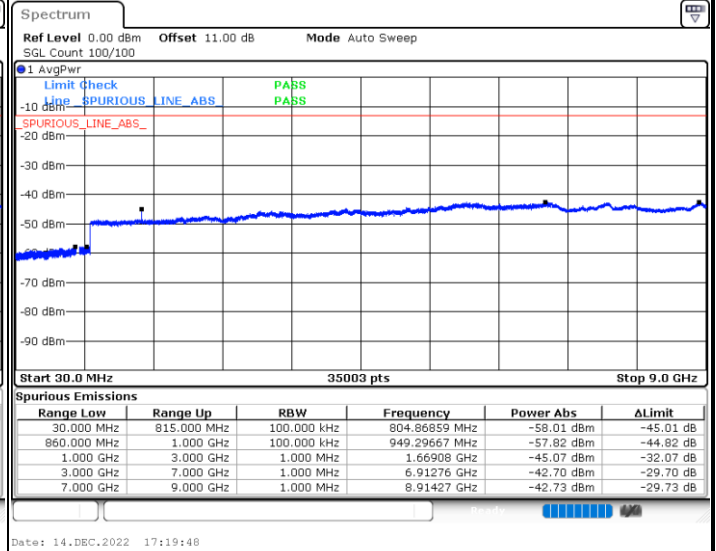


LTE Band 5 / 5MHz

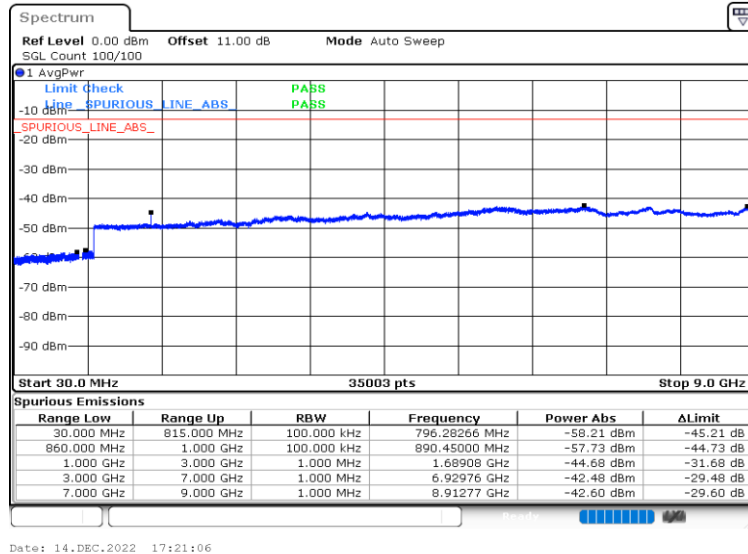
Lowest Channel / QPSK



Middle Channel / QPSK



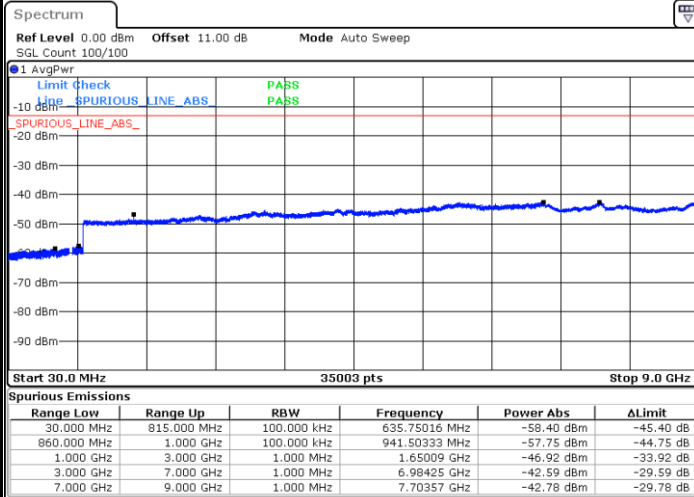
Highest Channel / QPSK





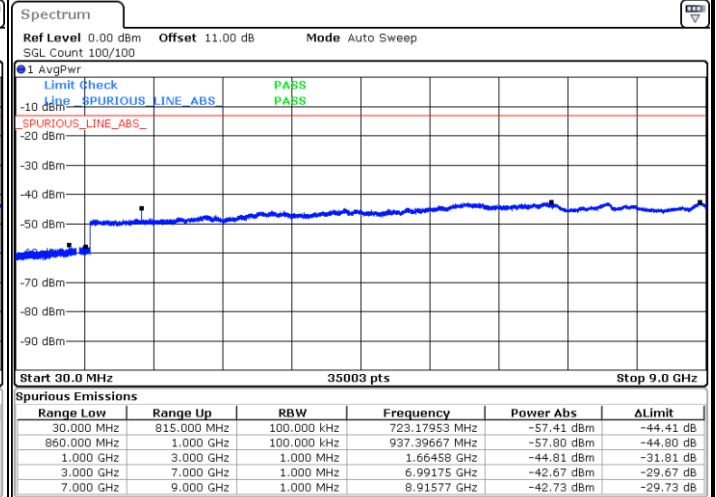
LTE Band 5 / 10MHz

Lowest Channel / QPSK



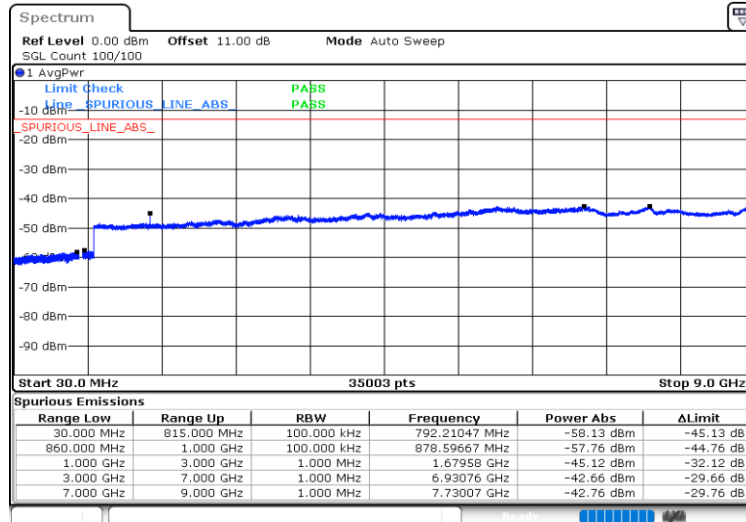
Date: 14.DEC.2022 17:22:29

Middle Channel / QPSK



Date: 14.DEC.2022 17:23:47

Highest Channel / QPSK



Date: 14.DEC.2022 17:25:05

Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0072	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0051	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0044	
0	Normal Voltage	0.0116	
-10	Normal Voltage	0.0031	
-20	Normal Voltage	0.0042	
-30	Normal Voltage	0.0134	
20	Maximum Voltage	0.0008	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0055	

Note:

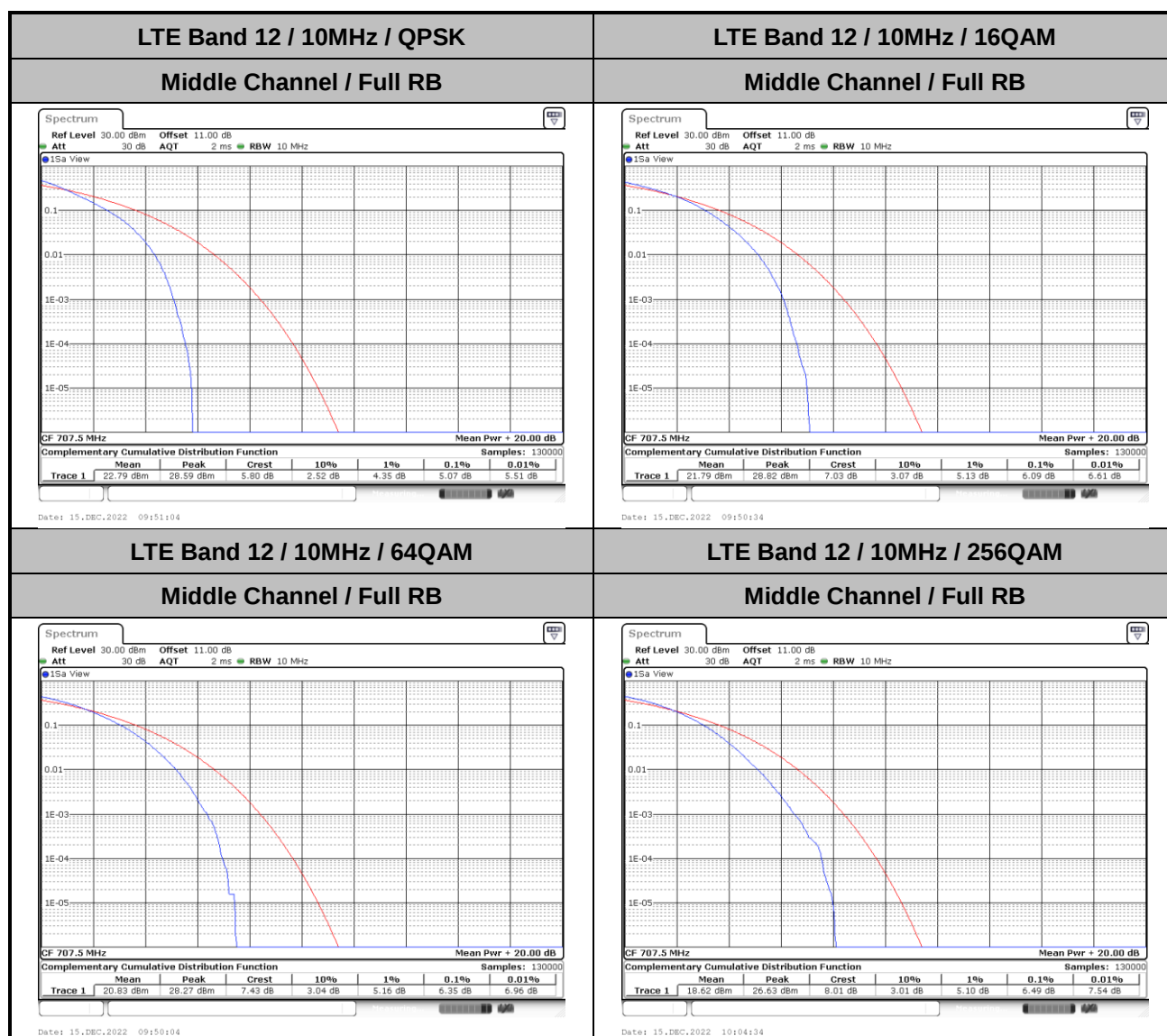
1. Normal Voltage = 4.2 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.3 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.07	6.09	6.35	6.49	PASS



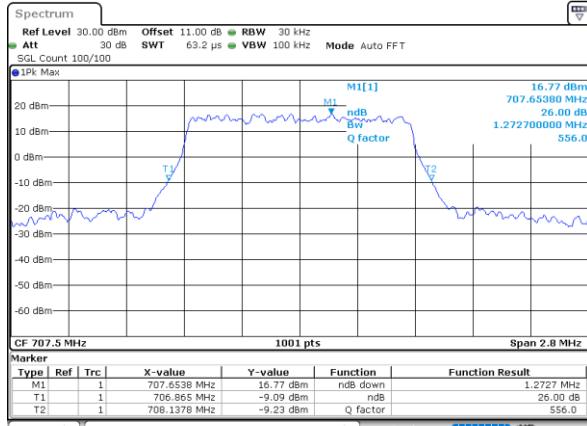
**26dB Bandwidth**

Mode	LTE Band 12 : 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	1.27	1.29	2.94	2.98	4.84	4.90	9.67	9.69	-	-	-	-
Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	1.27	1.24	2.95	2.99	4.94	4.84	9.71	9.65	-	-	-	-



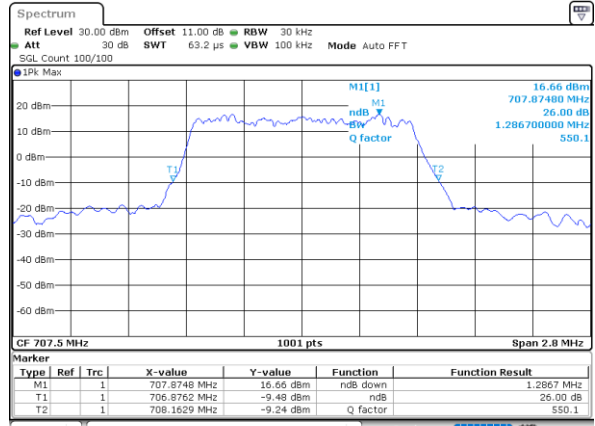
LTE Band 12

Middle Channel / 1.4MHz / QPSK



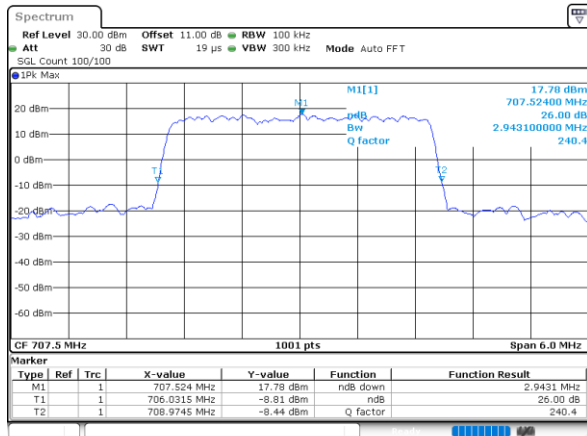
Date: 15.DEC.2022 09:12:56

Middle Channel / 1.4MHz / 16QAM



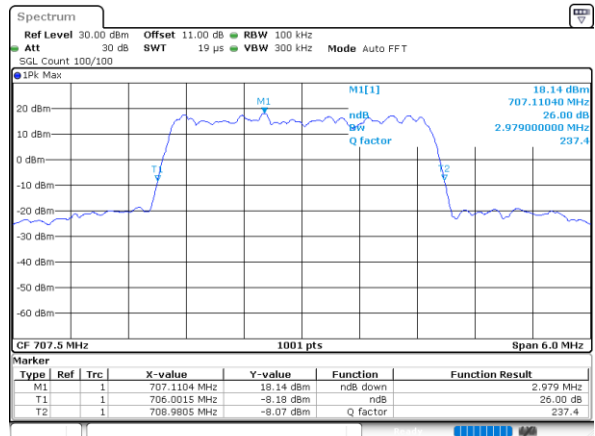
Date: 15.DEC.2022 09:13:25

Middle Channel / 3MHz / QPSK



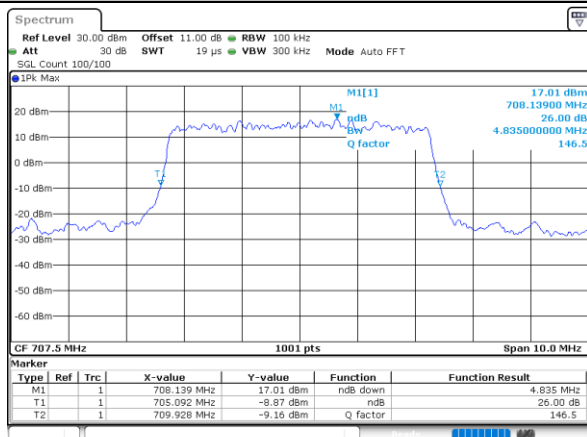
Date: 15.DEC.2022 09:27:48

Middle Channel / 3MHz / 16QAM



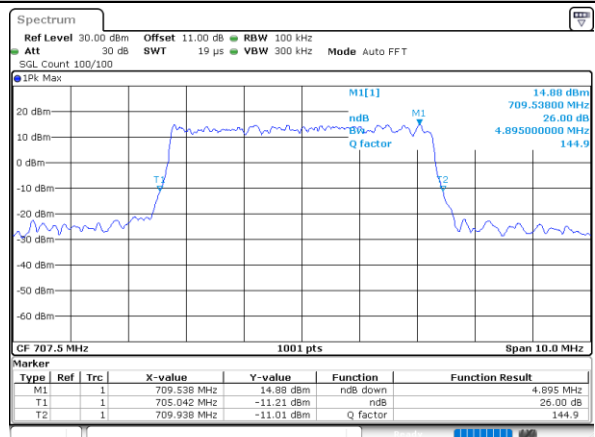
Date: 15.DEC.2022 09:28:17

Middle Channel / 5MHz / QPSK



Date: 15.DEC.2022 09:38:48

Middle Channel / 5MHz / 16QAM

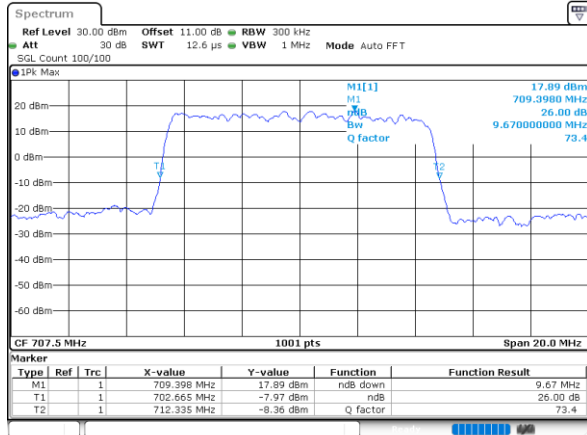


Date: 15.DEC.2022 09:39:17



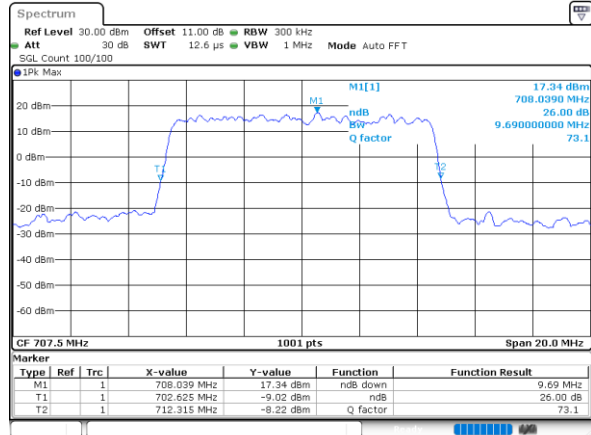
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 15.DEC.2022 09:44:29

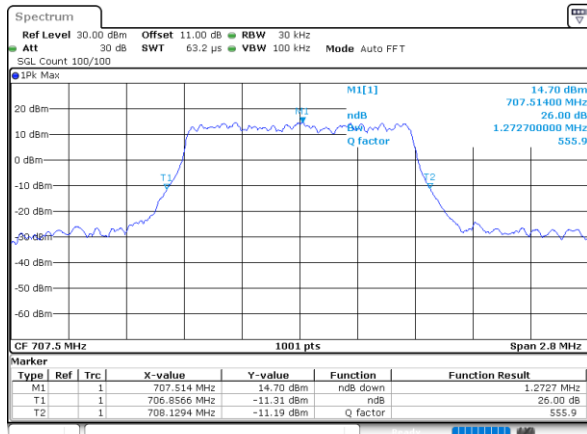
Middle Channel / 10MHz / 16QAM



Date: 15.DEC.2022 09:44:57

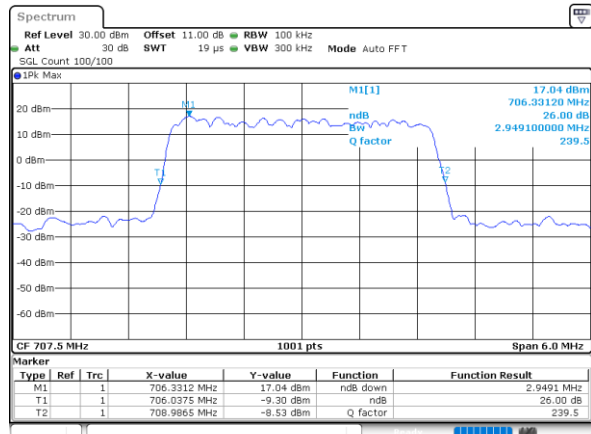
LTE Band 12

Middle Channel / 1.4MHz / 64QAM



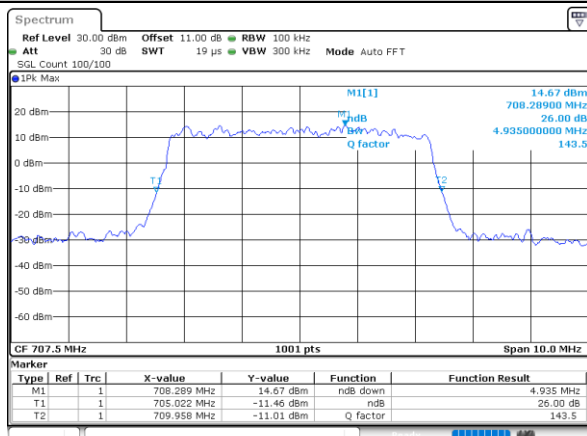
Date: 15.DEC.2022 09:22:36

Middle Channel / 3MHz / 64QAM



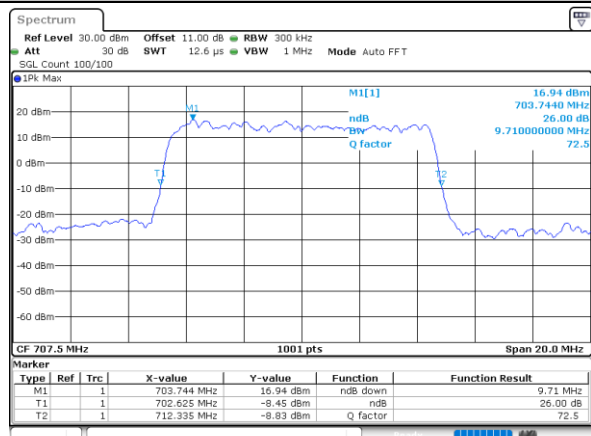
Date: 15.DEC.2022 09:31:56

Middle Channel / 5MHz / 64QAM



Date: 15.DEC.2022 09:34:42

Middle Channel / 10MHz / 64QAM

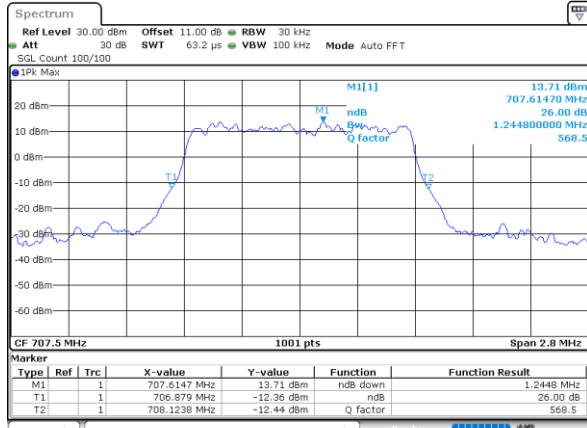


Date: 15.DEC.2022 09:48:36



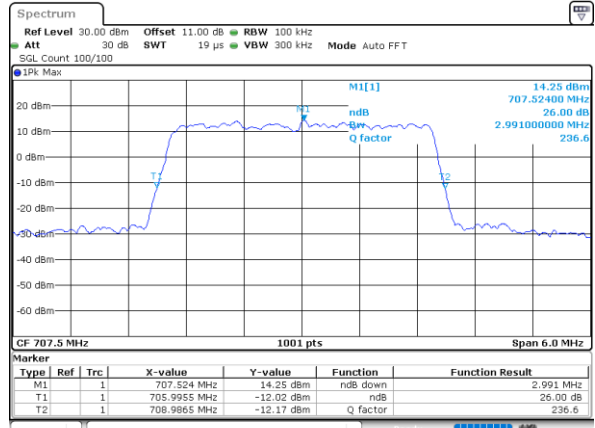
LTE Band 12

Middle Channel / 1.4MHz / 256QAM



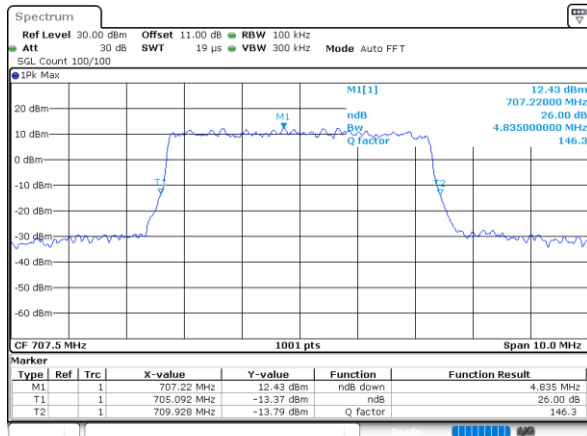
Date: 15.DEC.2022 09:53:50

Middle Channel / 3MHz / 256QAM



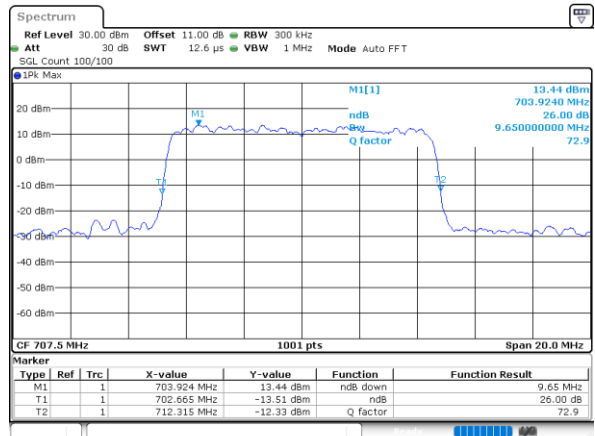
Date: 15.DEC.2022 09:57:34

Middle Channel / 5MHz / 256QAM



Date: 15.DEC.2022 10:00:20

Middle Channel / 10MHz / 256QAM



Date: 15.DEC.2022 10:03:05

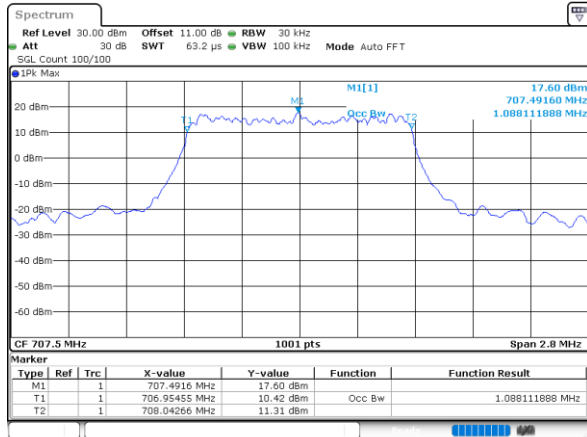
**Occupied Bandwidth**

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	2.70	4.48	4.49	9.05	9.01	-	-	-	-
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	1.09	1.10	2.72	2.72	4.49	4.49	9.03	9.01	-	-	-	-

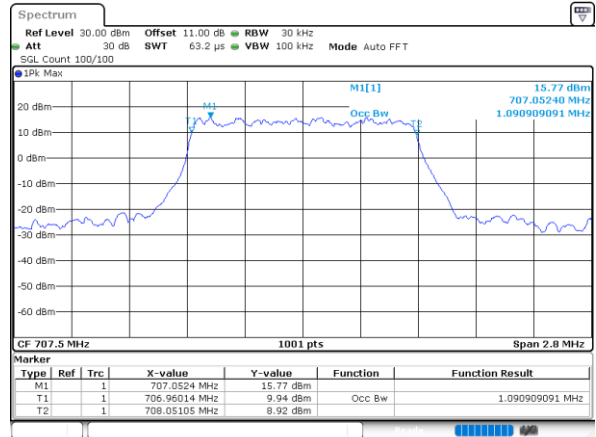


LTE Band 12

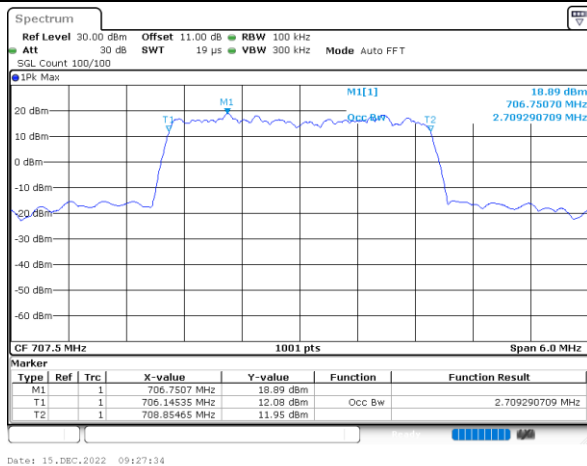
Middle Channel / 1.4MHz / QPSK



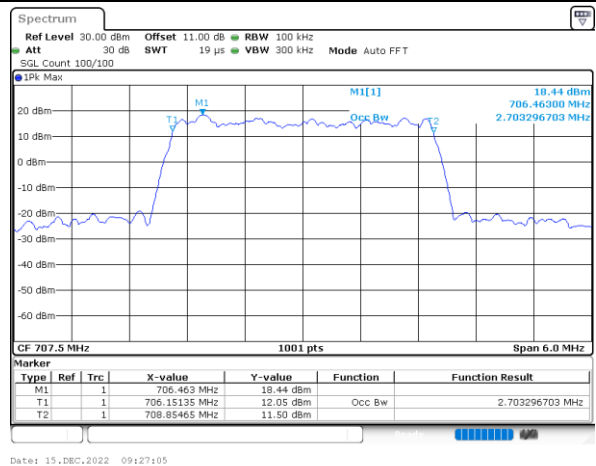
Middle Channel / 1.4MHz / 16QAM



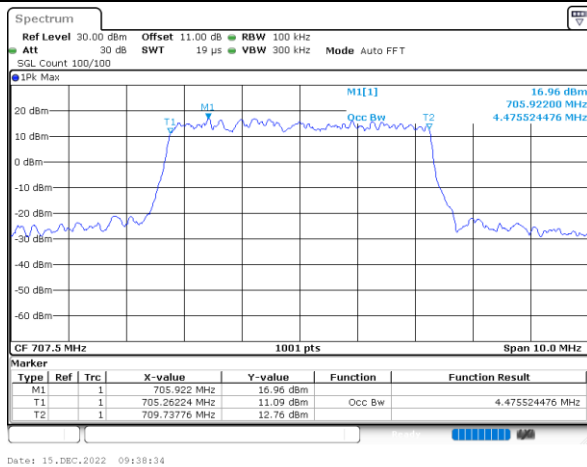
Middle Channel / 3MHz / QPSK



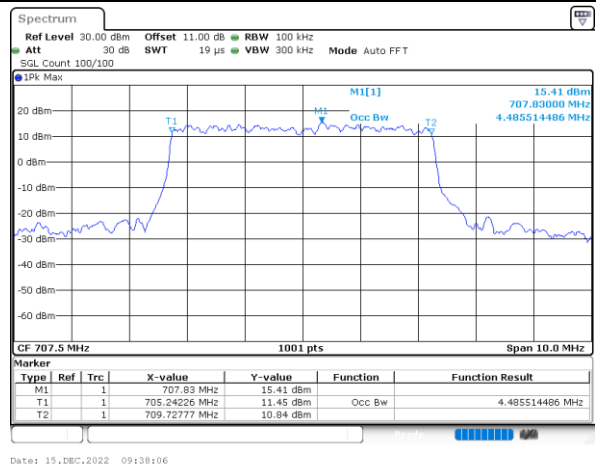
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



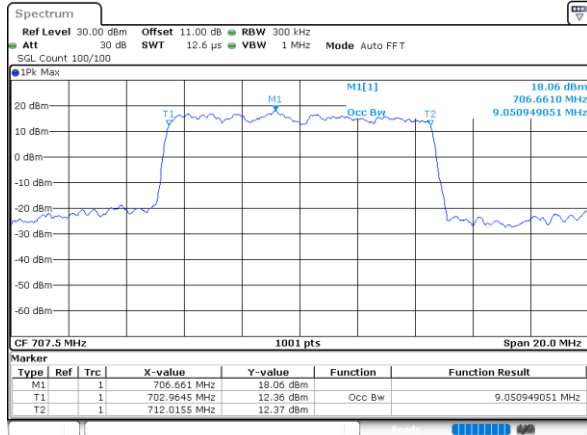
Middle Channel / 5MHz / 16QAM





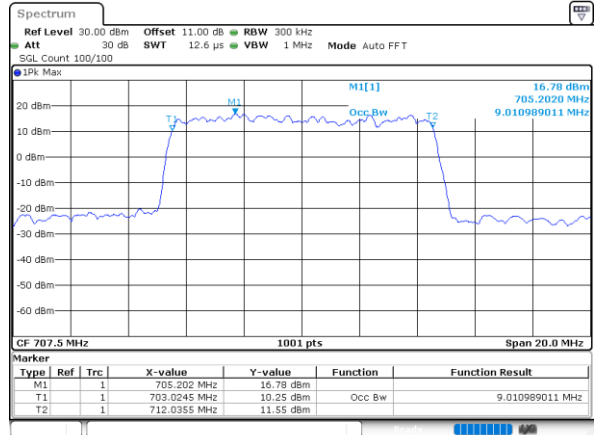
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 15.DEC.2022 09:44:15

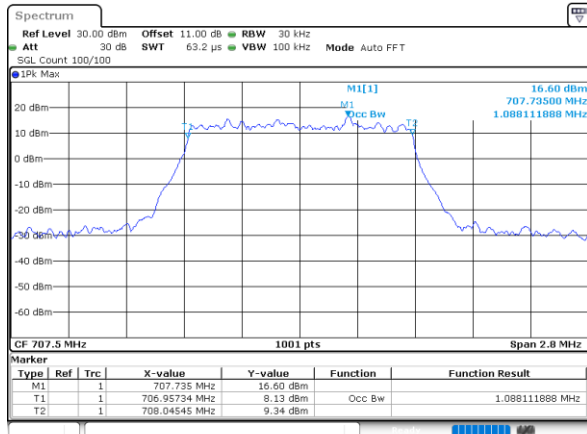
Middle Channel / 10MHz / 16QAM



Date: 15.DEC.2022 09:43:46

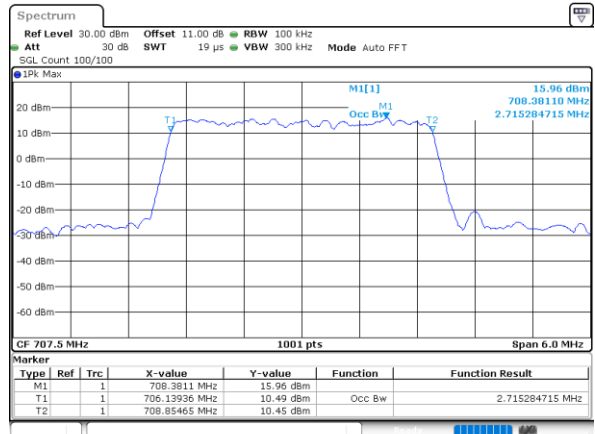
LTE Band 12

Middle Channel / 1.4MHz / 64QAM



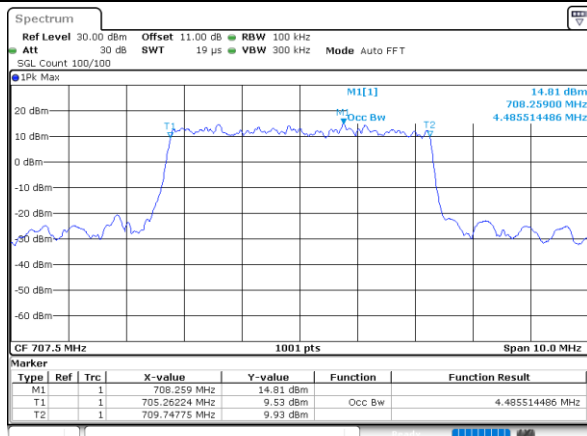
Date: 15.DEC.2022 09:22:22

Middle Channel / 3MHz / 64QAM



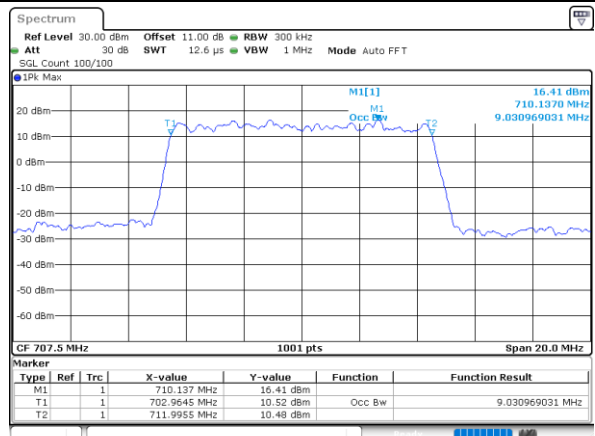
Date: 15.DEC.2022 09:13:42

Middle Channel / 5MHz / 64QAM



Date: 15.DEC.2022 09:34:28

Middle Channel / 10MHz / 64QAM

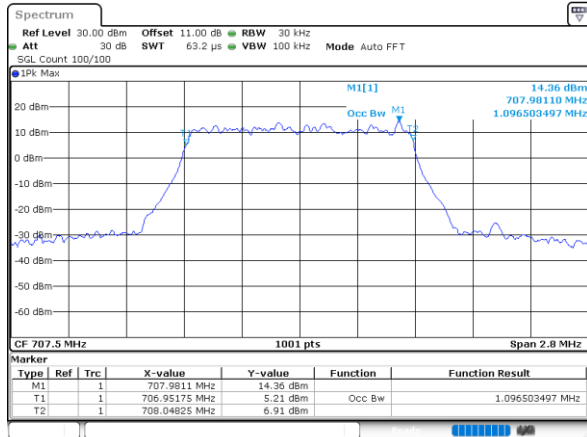


Date: 15.DEC.2022 09:48:22

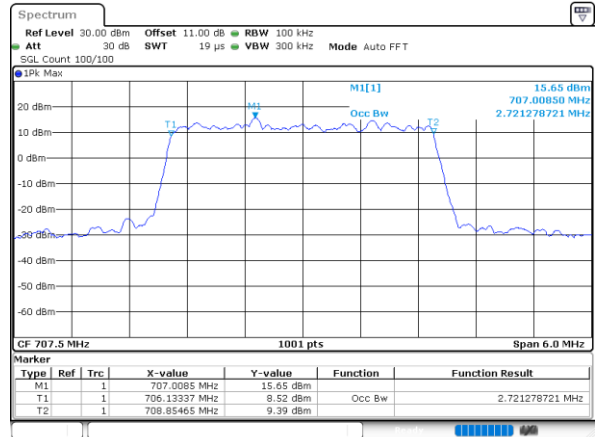


LTE Band 12

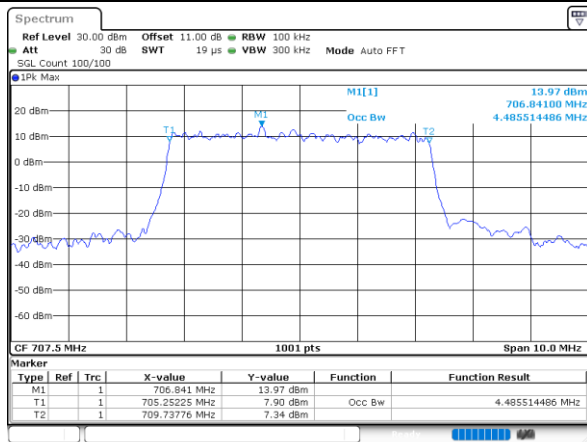
Middle Channel / 1.4MHz / 256QAM



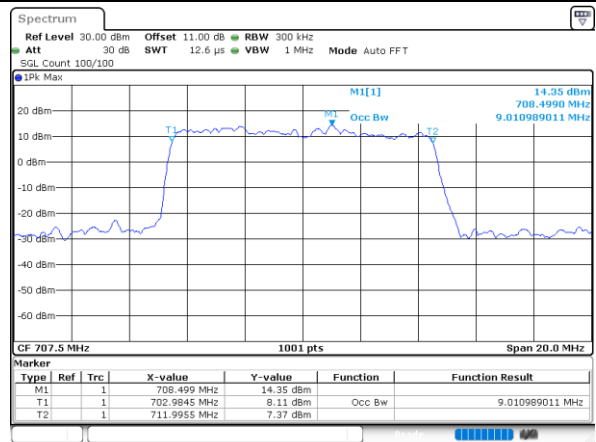
Middle Channel / 3MHz / 256QAM



Middle Channel / 5MHz / 256QAM



Middle Channel / 10MHz / 256QAM





Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

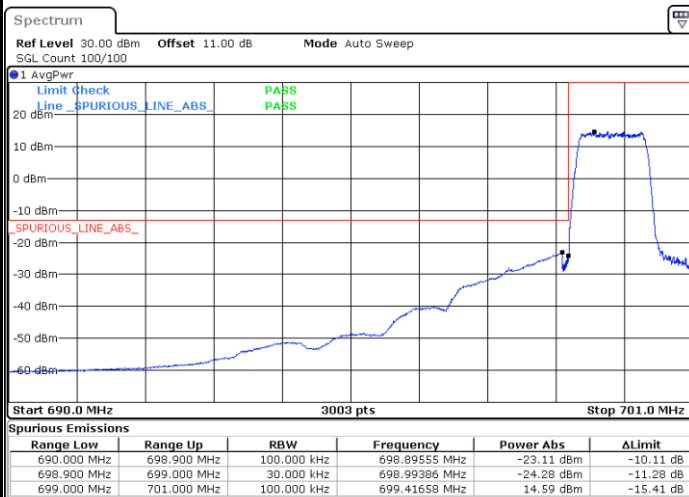
Lowest Band Edge / 1RB



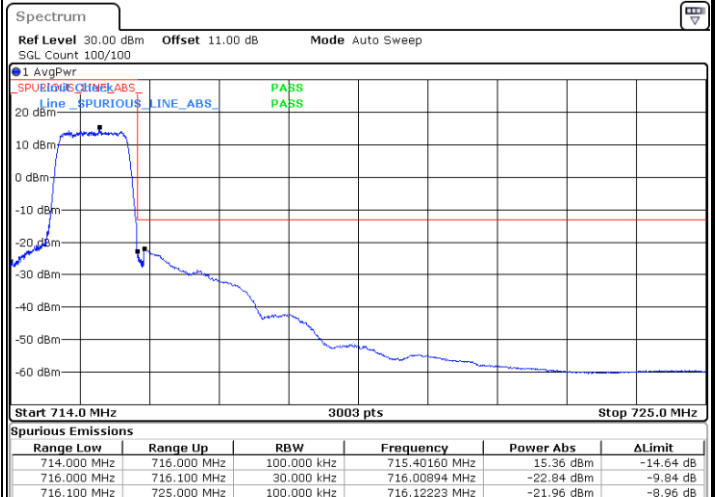
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



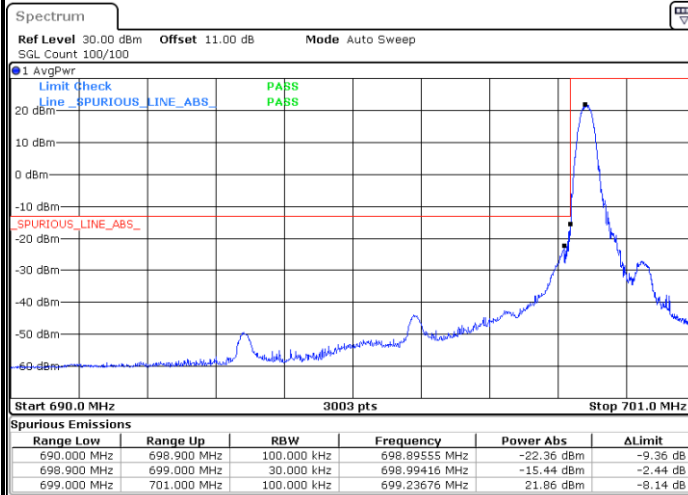
Highest Band Edge / Full RB



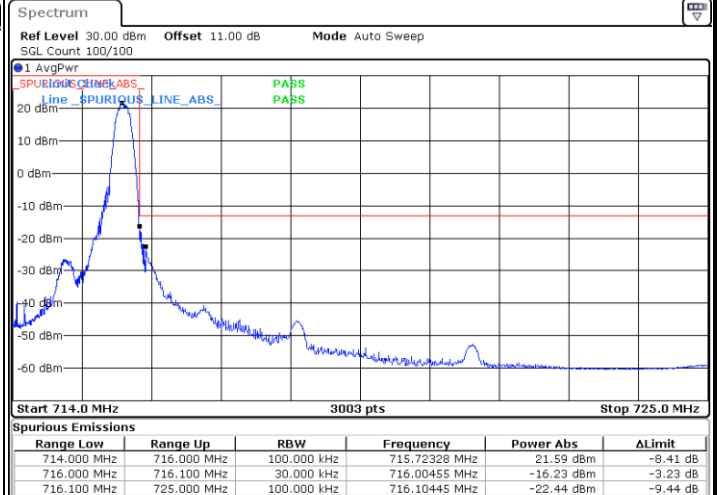


LTE Band 12 / 1.4MHz / 16QAM

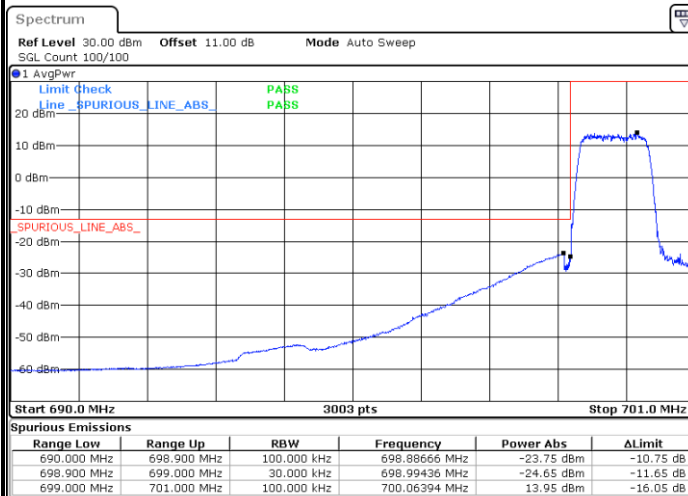
Lowest Band Edge / 1 RB



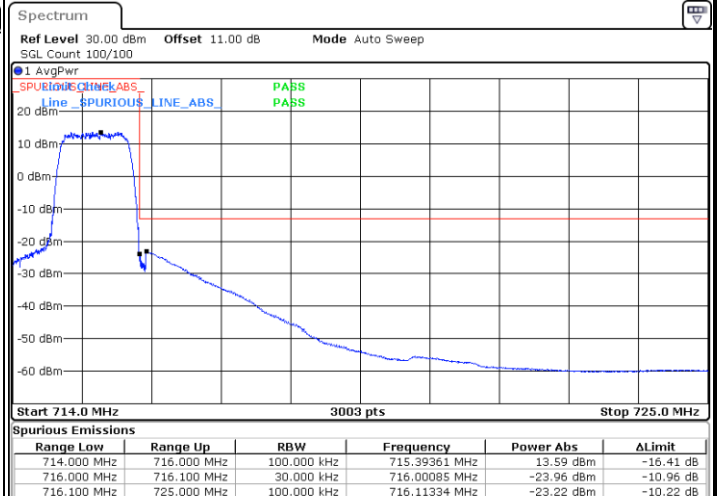
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



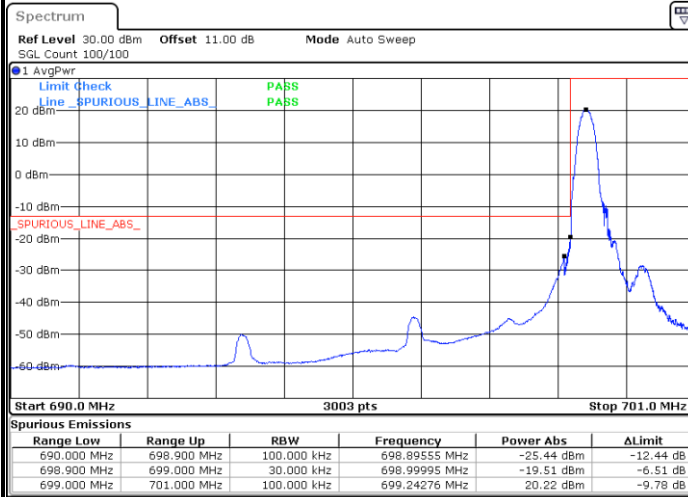
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 64QAM

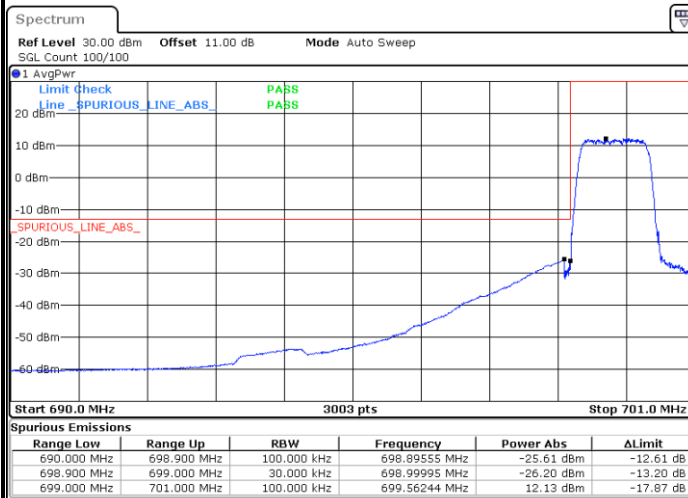
Lowest Band Edge / 1 RB



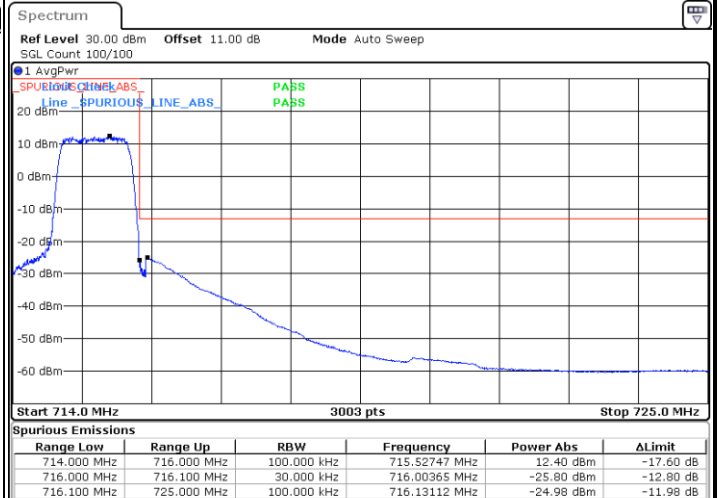
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



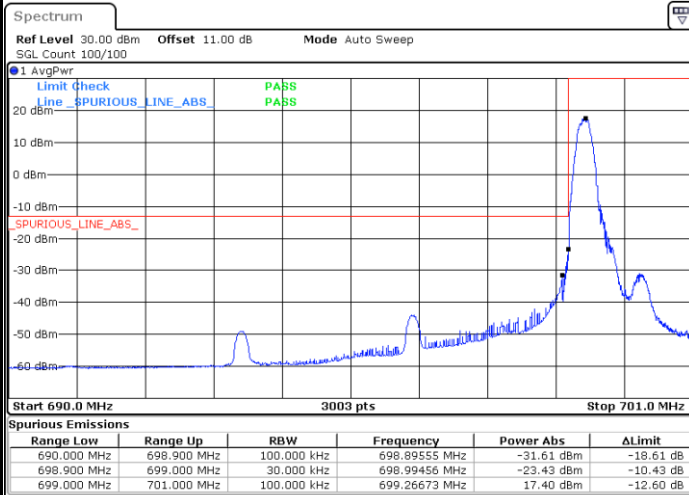
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 256QAM

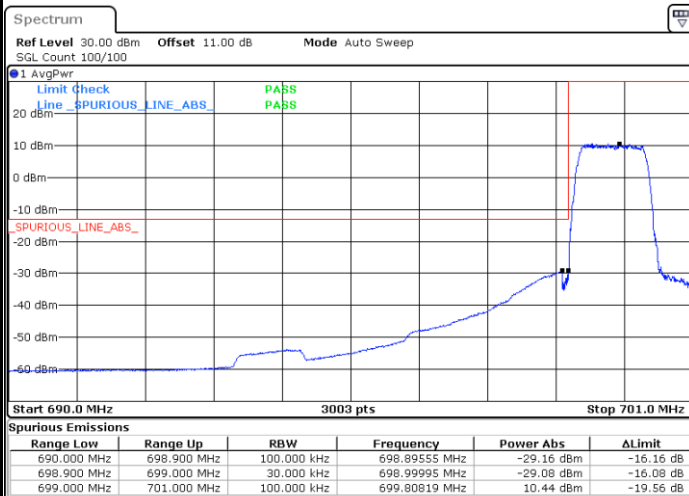
Lowest Band Edge / 1 RB



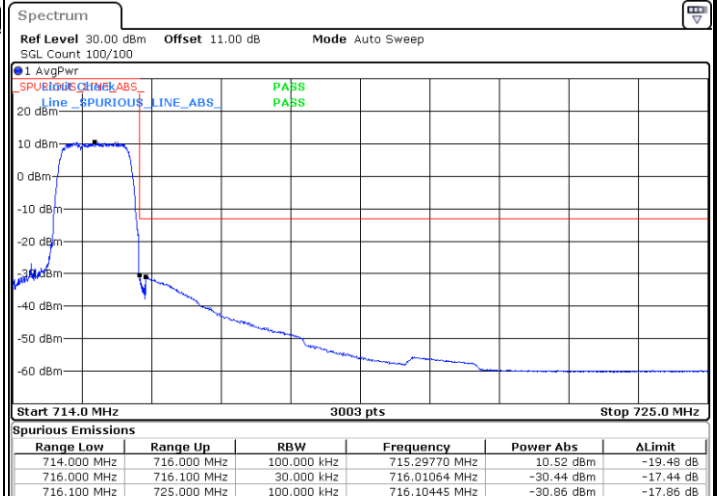
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

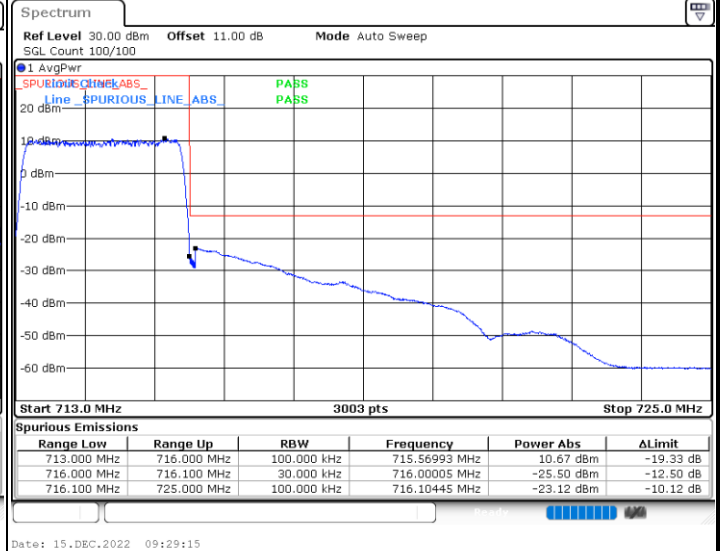
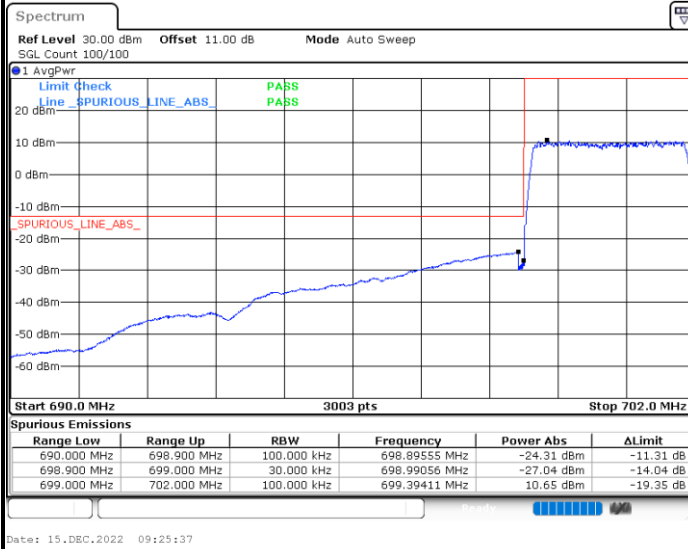




LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / Full RB

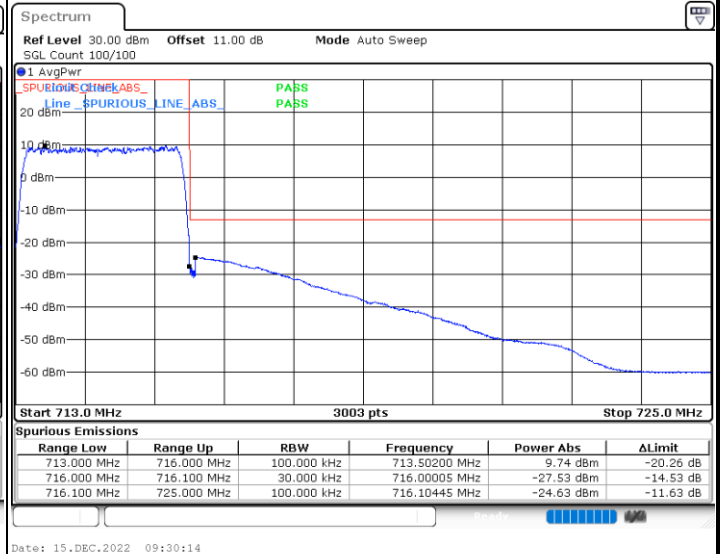
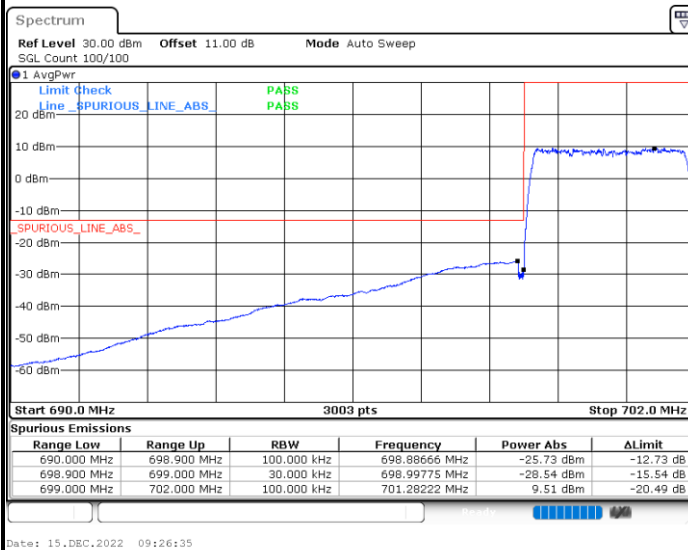
Highest Band Edge / Full RB



LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

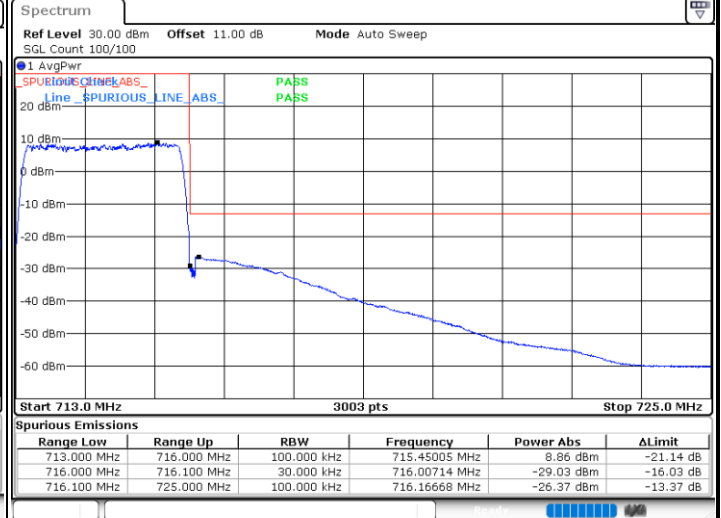
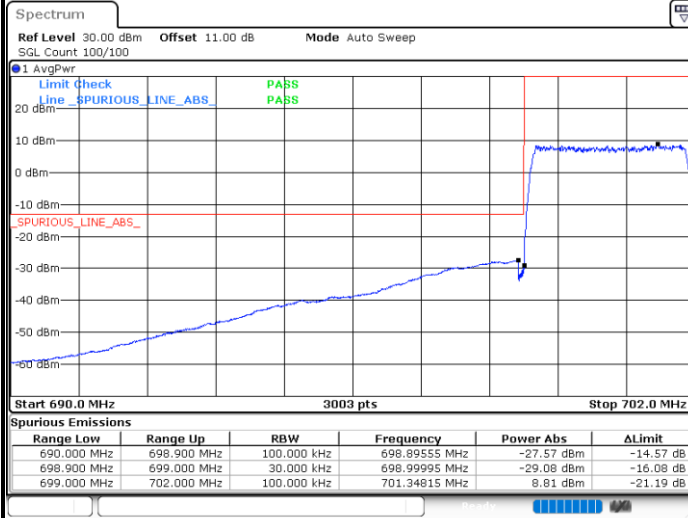




LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / Full RB

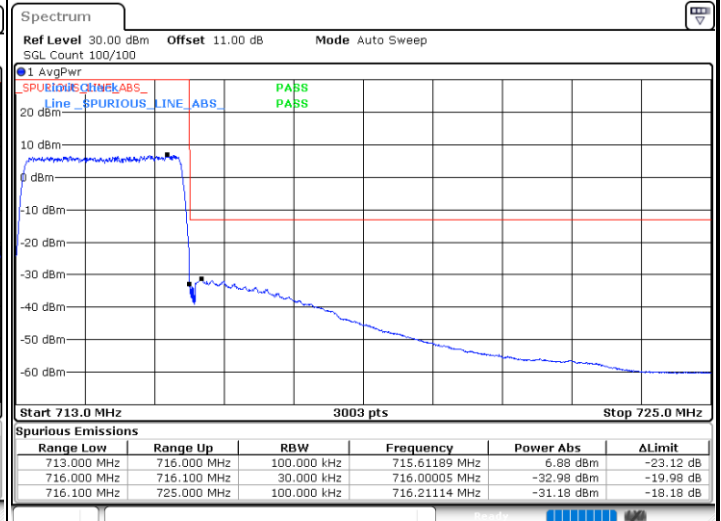
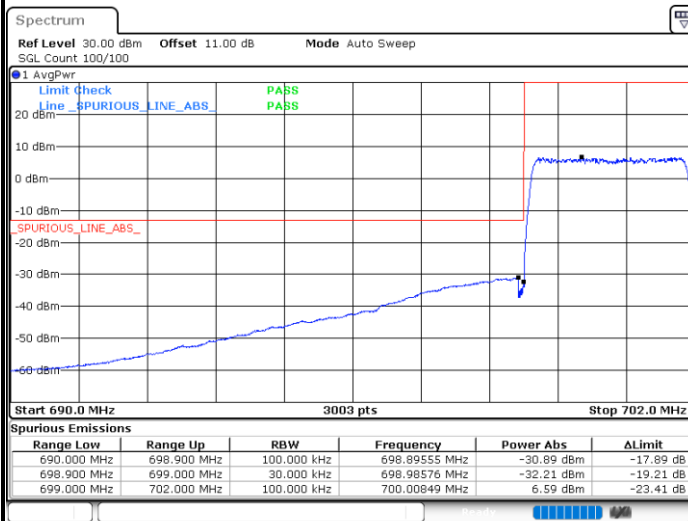
Highest Band Edge / Full RB



LTE Band 12 / 3MHz / 256QAM

Lowest Band Edge / Full RB

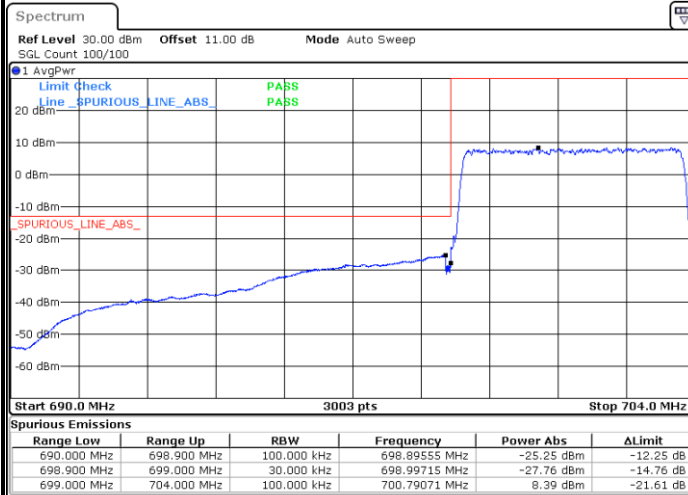
Highest Band Edge / Full RB



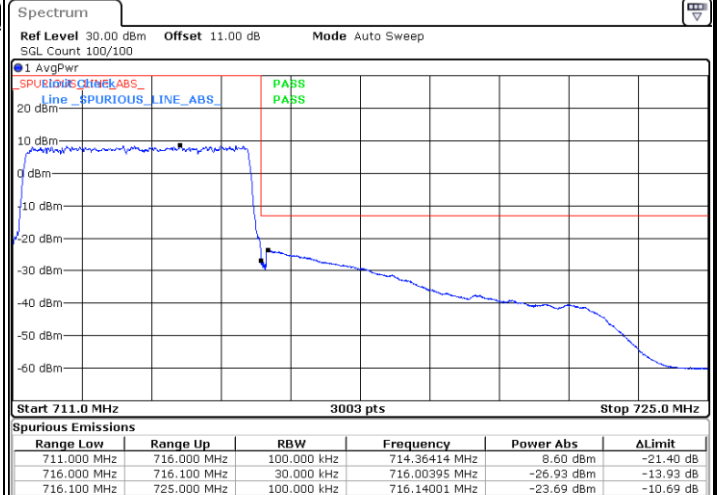


LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / Full RB

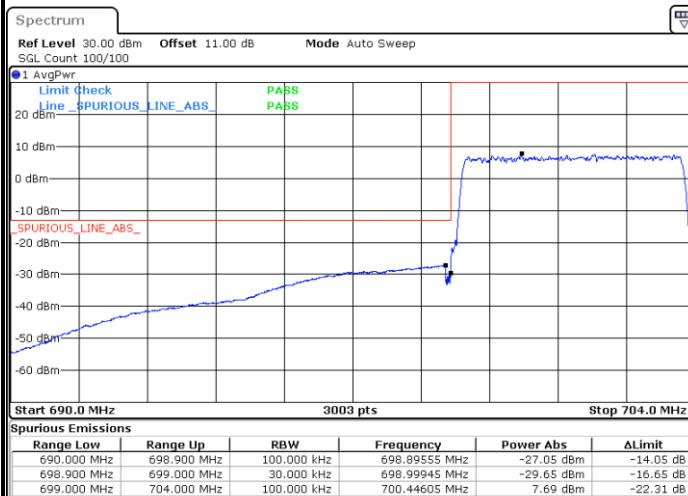


Highest Band Edge / Full RB

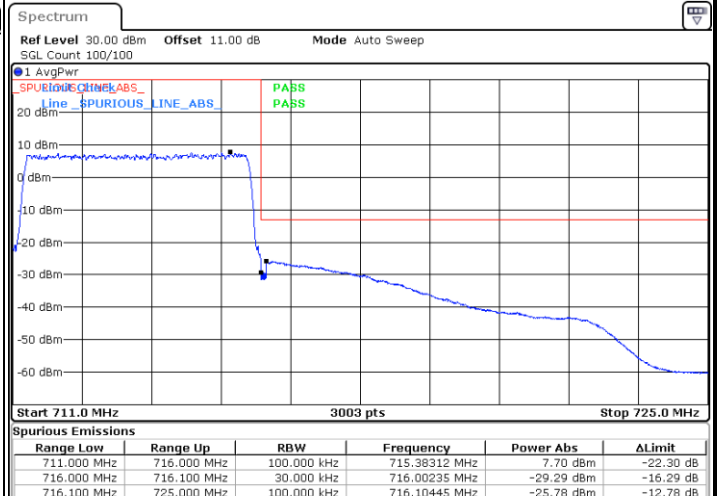


LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

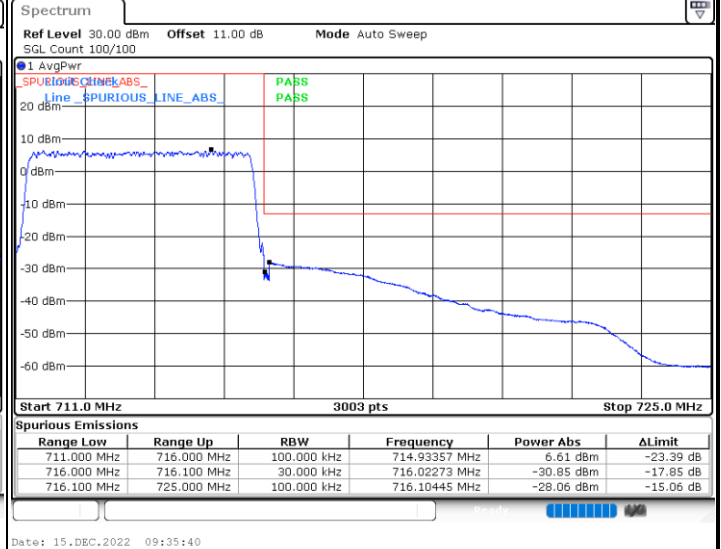
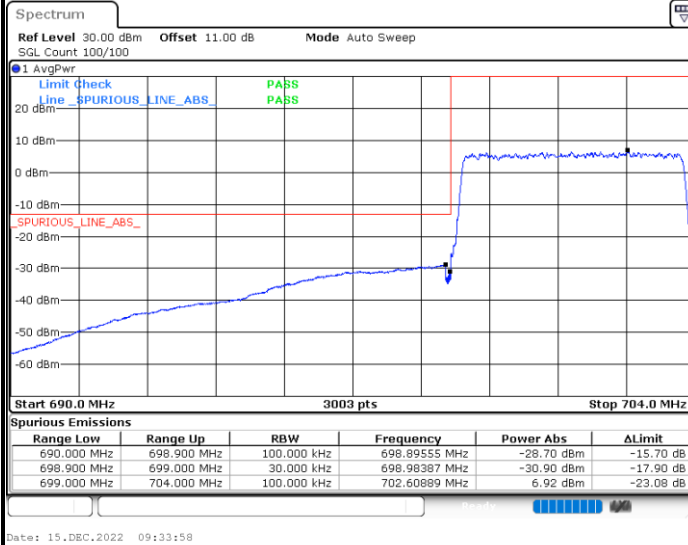




LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / Full RB

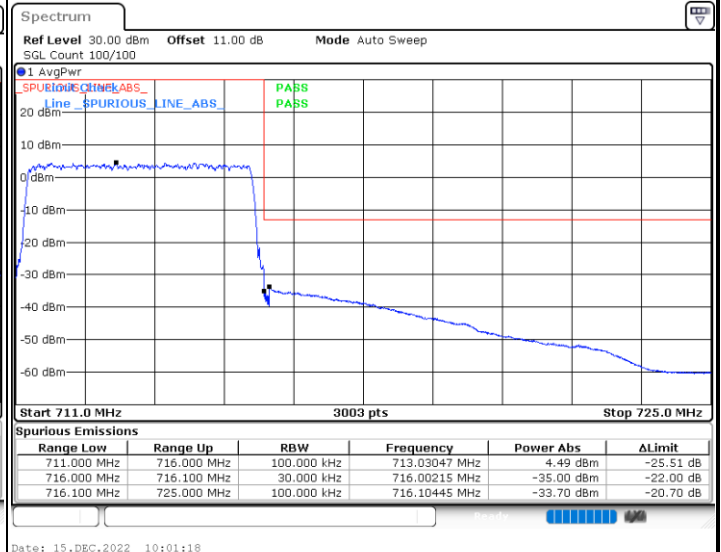
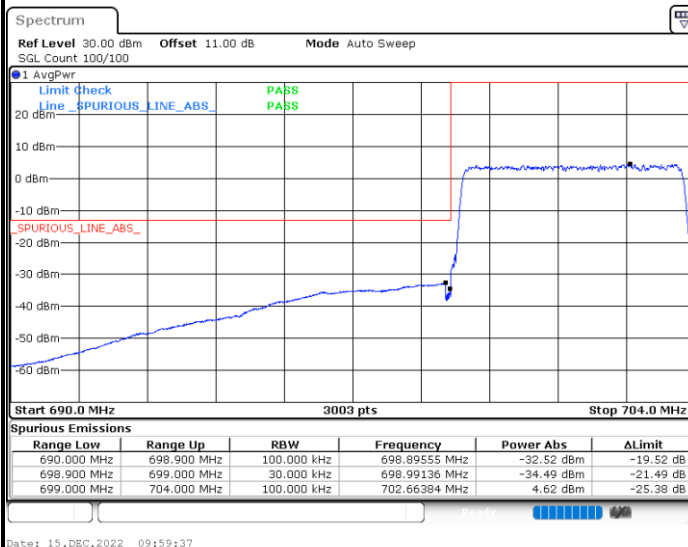
Highest Band Edge / Full RB



LTE Band 12 / 5MHz / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

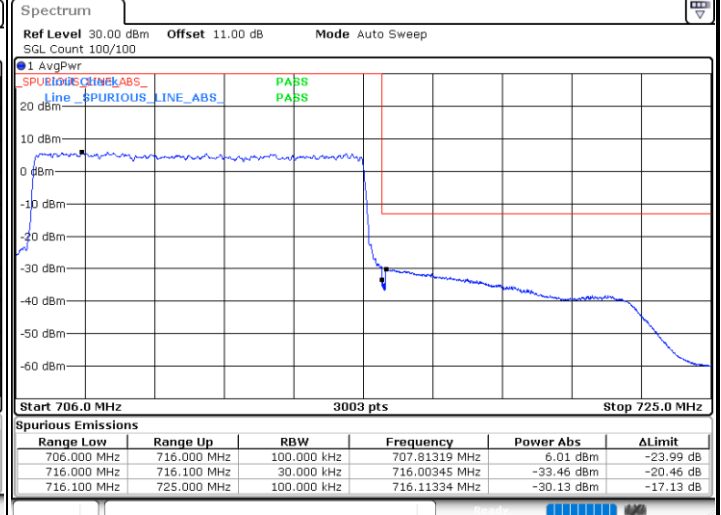
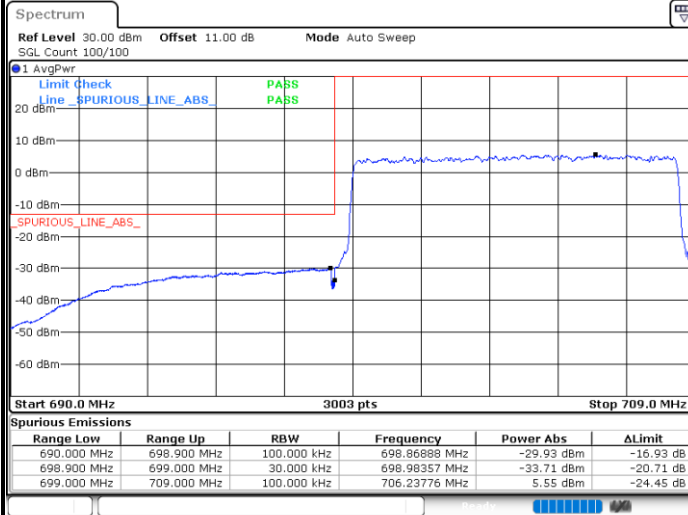




LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / Full RB

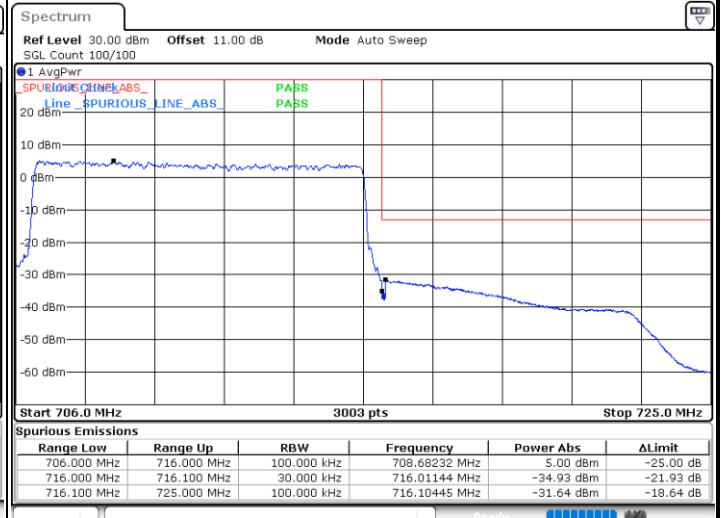
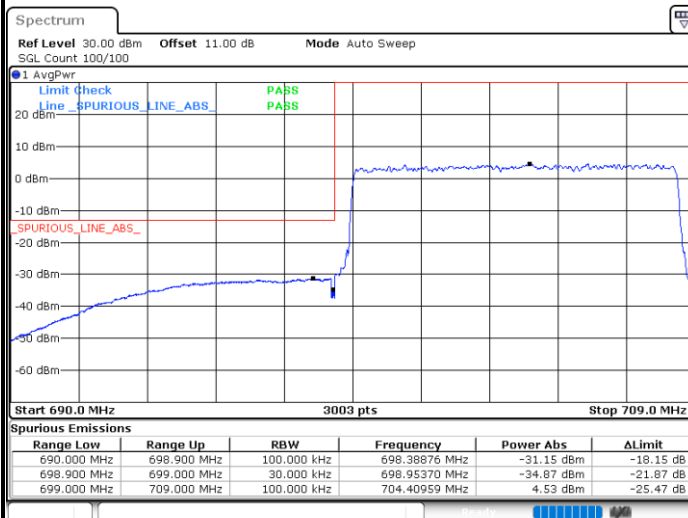
Highest Band Edge / Full RB



LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / Full RB

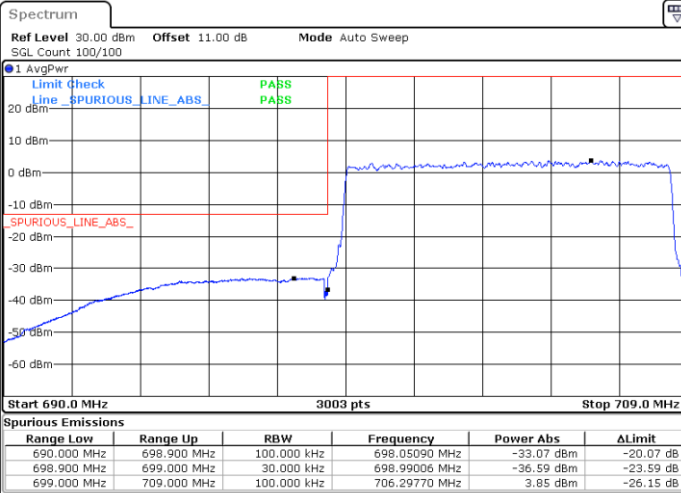
Highest Band Edge / Full RB



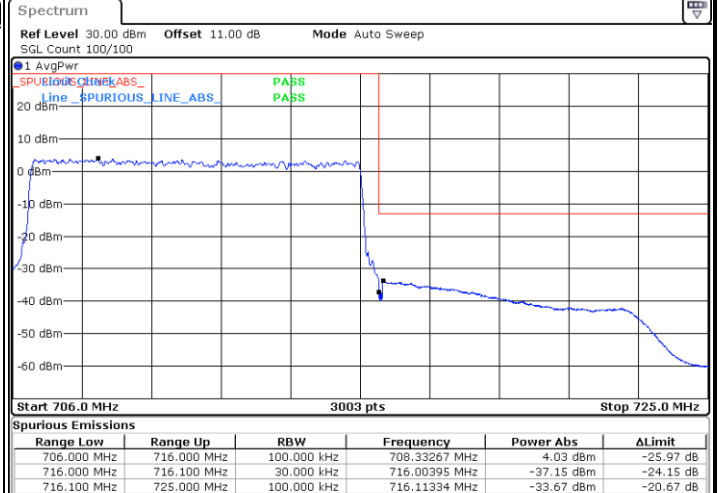


LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / Full RB

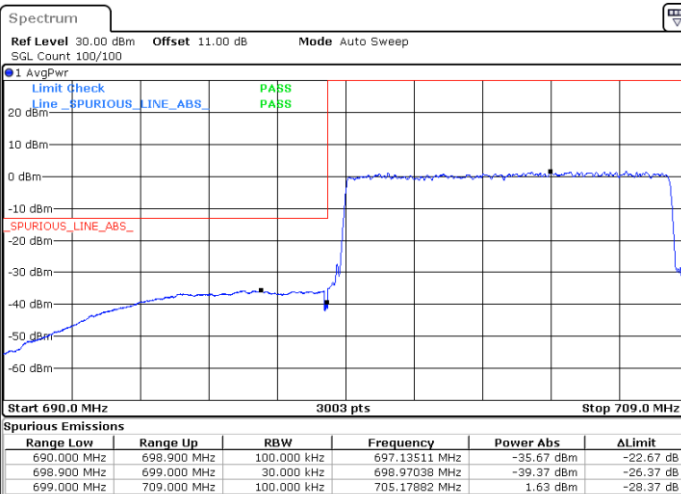


Highest Band Edge / Full RB

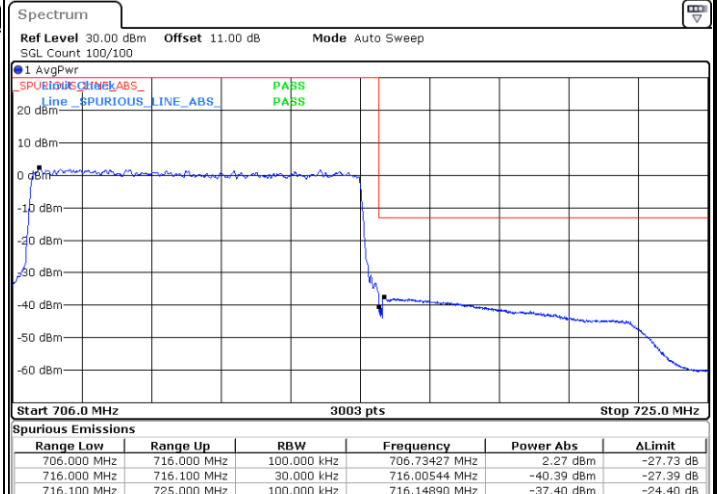


LTE Band 12 / 10MHz / 256QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

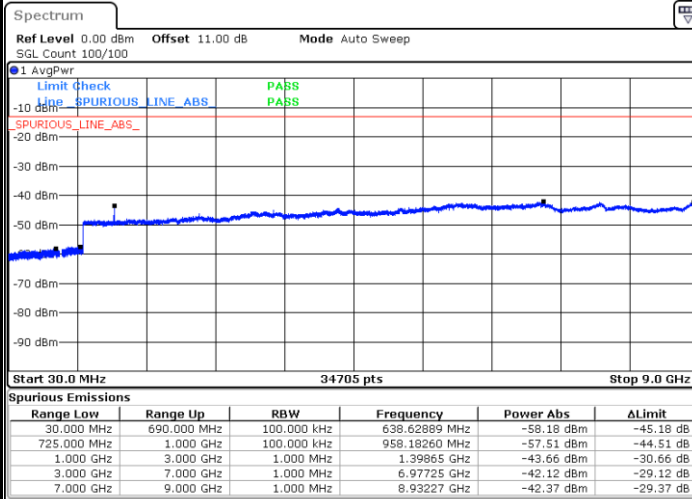




Conducted Spurious Emission

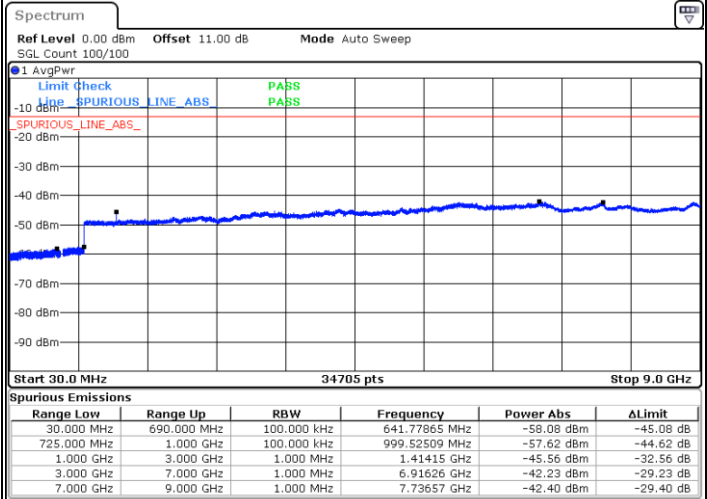
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



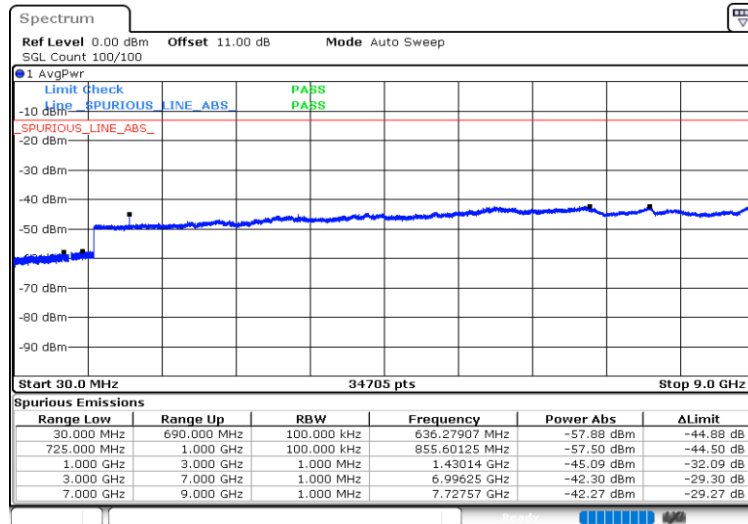
Date: 15.DEC.2022 09:11:44

Middle Channel / QPSK



Date: 15.DEC.2022 09:14:42

Highest Channel / QPSK

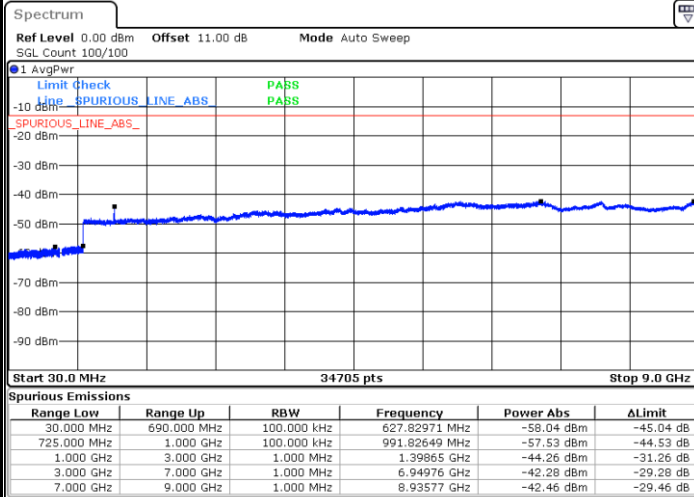


Date: 15.DEC.2022 09:19:55



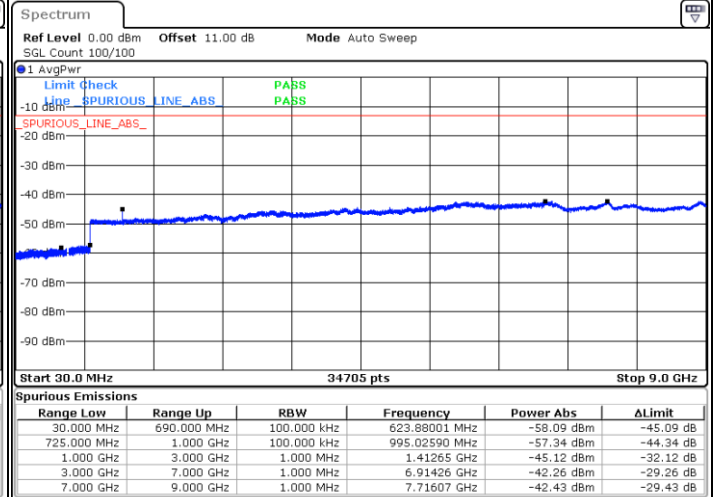
LTE Band 12 / 3MHz

Lowest Channel / QPSK



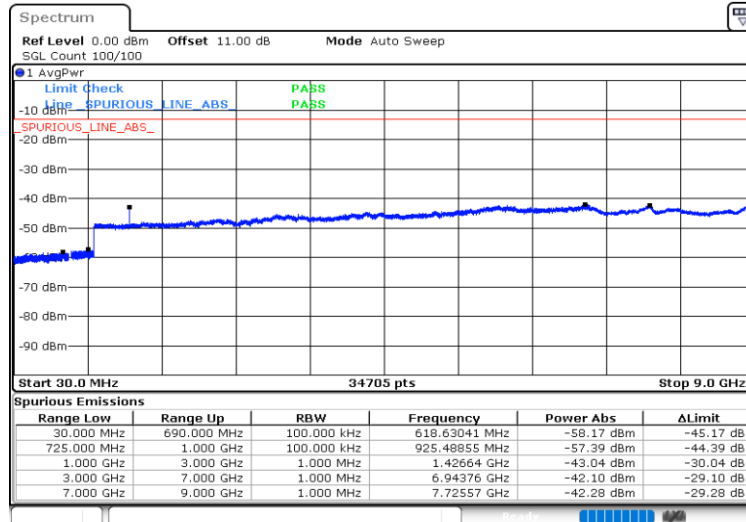
Date: 15.DEC.2022 10:05:57

Middle Channel / QPSK



Date: 15.DEC.2022 10:07:15

Highest Channel / QPSK



Date: 15.DEC.2022 10:08:33