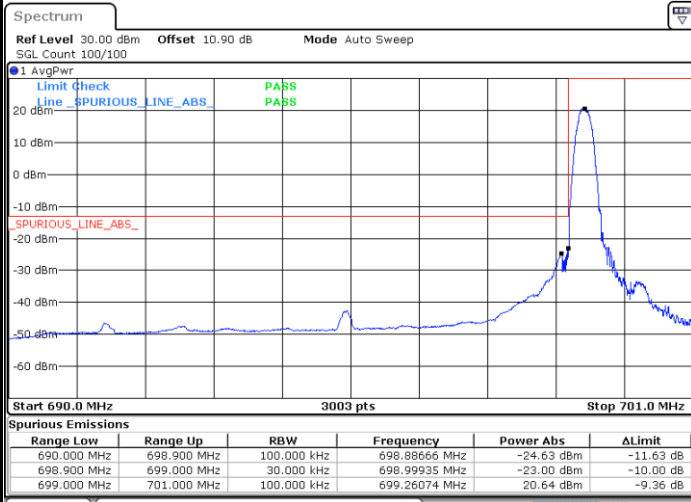




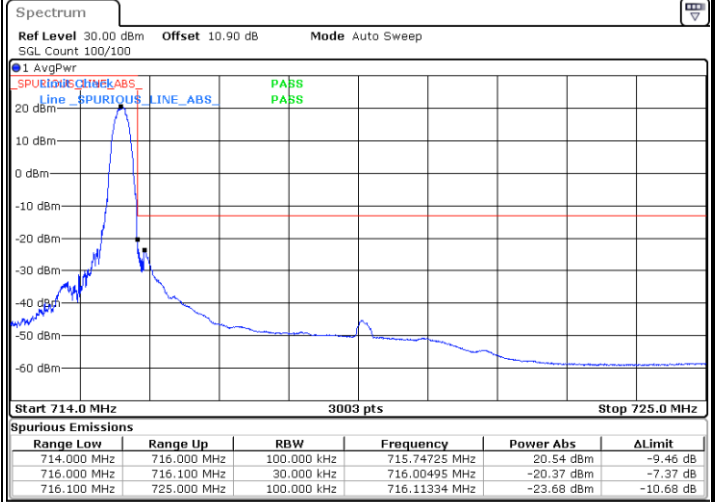
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



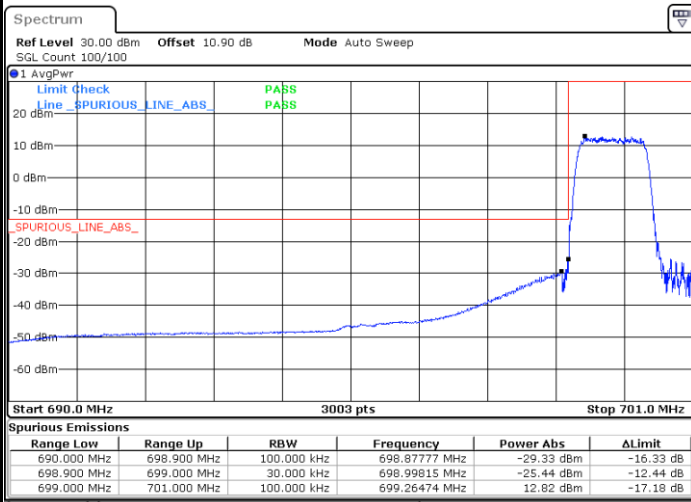
Date: 17.NOV.2021 09:11:18

Highest Band Edge / 1 RB



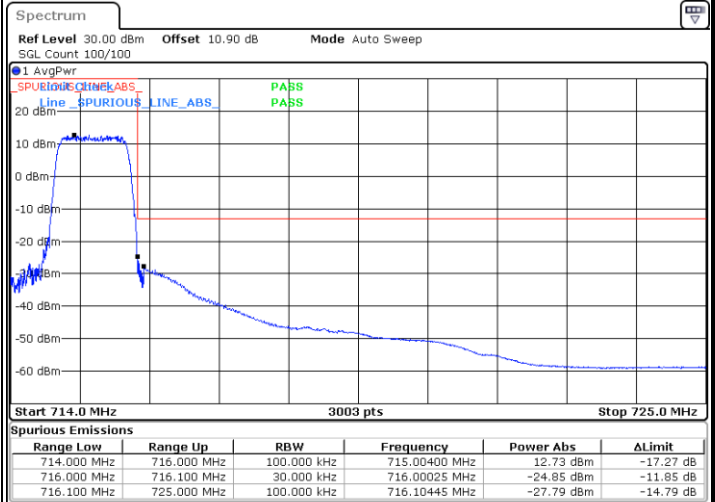
Date: 17.NOV.2021 09:13:21

Lowest Band Edge / Full RB



Date: 17.NOV.2021 09:10:38

Highest Band Edge / Full RB

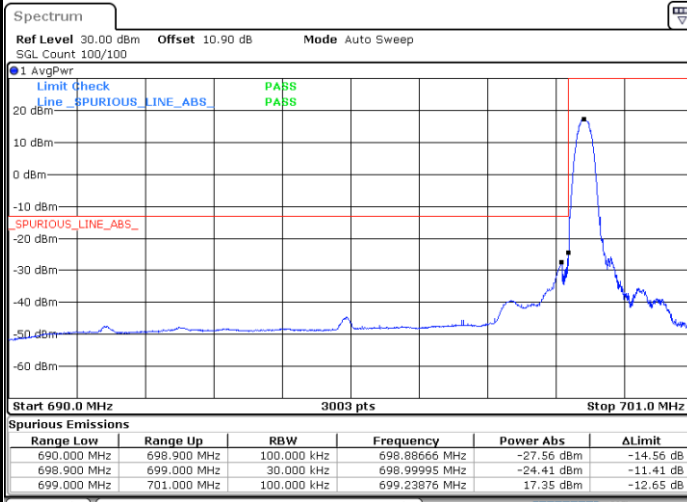


Date: 17.NOV.2021 09:12:40



LTE Band 12 / 1.4MHz / 256QAM

Lowest Band Edge / 1 RB



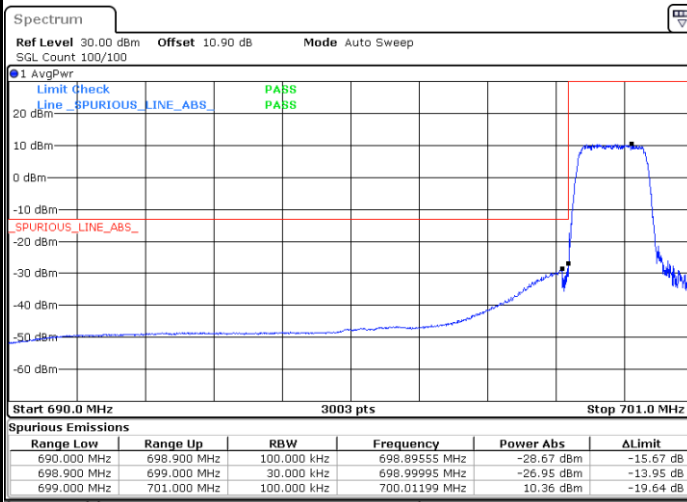
Date: 26.NOV.2021 09:22:30

Highest Band Edge / 1 RB



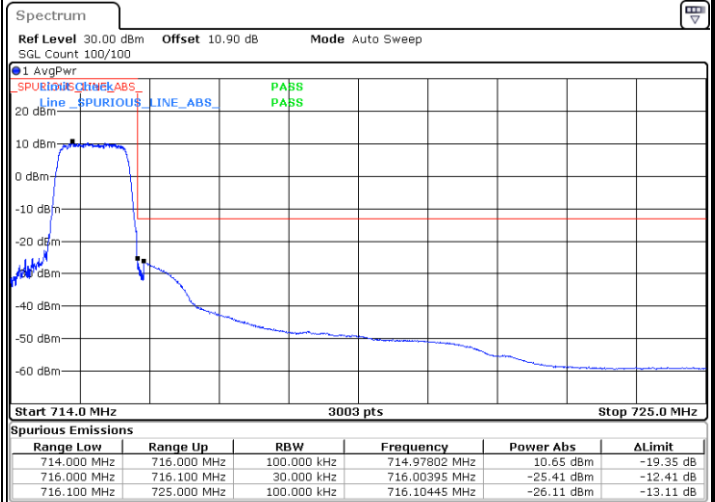
Date: 26.NOV.2021 09:24:30

Lowest Band Edge / Full RB



Date: 26.NOV.2021 09:21:31

Highest Band Edge / Full RB

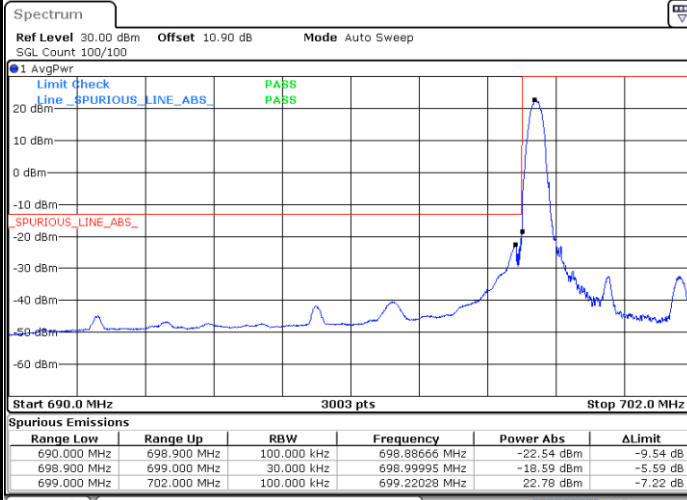


Date: 26.NOV.2021 09:27:18



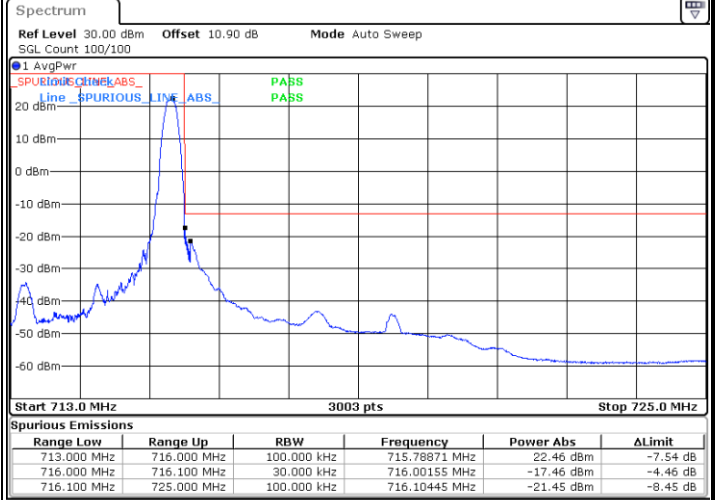
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



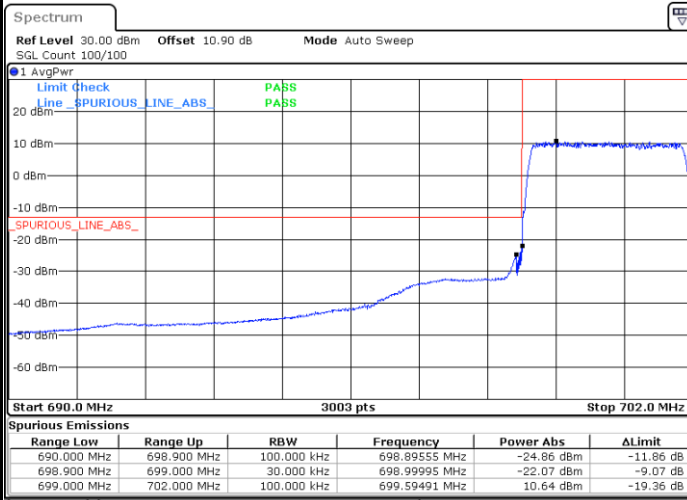
Date: 17.NOV.2021 09:20:10

Highest Band Edge / 1 RB



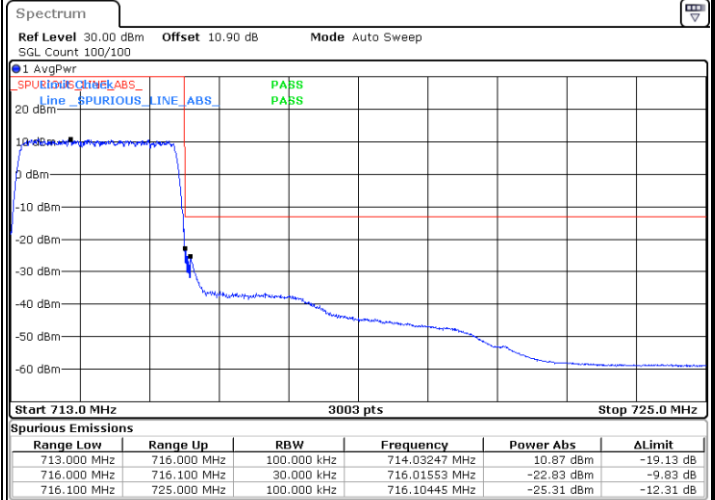
Date: 17.NOV.2021 09:25:27

Lowest Band Edge / Full RB



Date: 17.NOV.2021 09:18:07

Highest Band Edge / Full RB

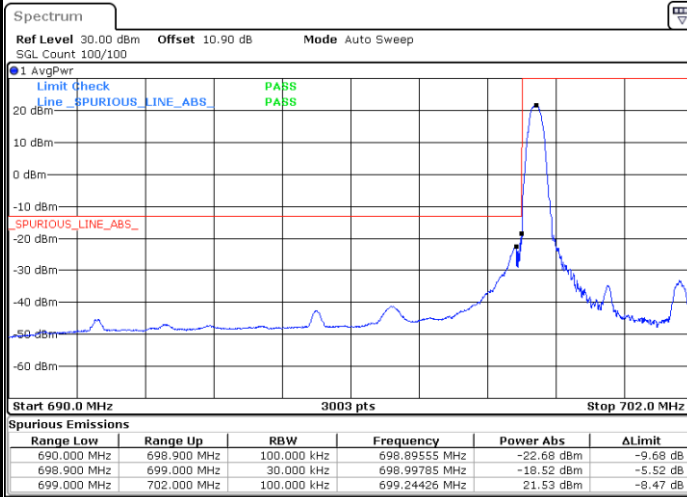


Date: 17.NOV.2021 09:23:25



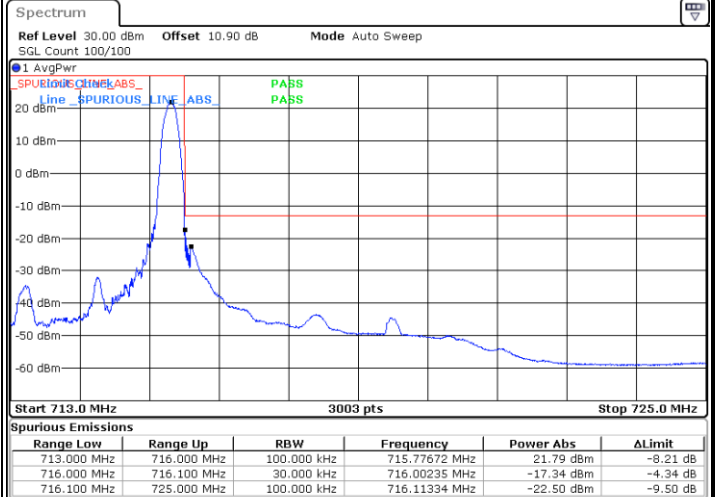
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



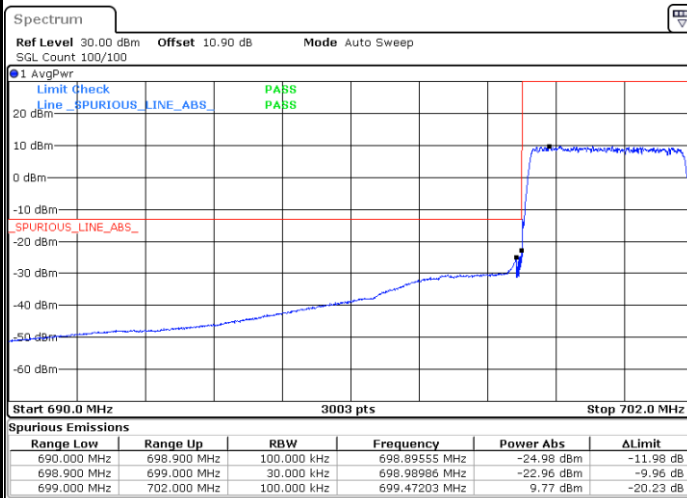
Date: 17.NOV.2021 09:19:29

Highest Band Edge / 1 RB



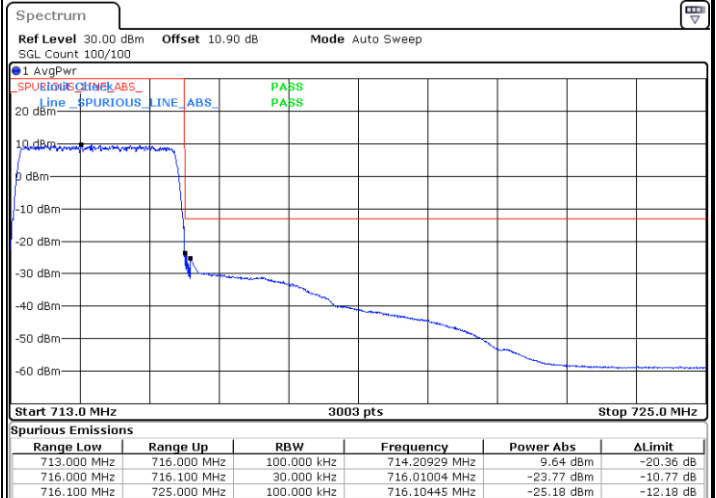
Date: 17.NOV.2021 09:24:46

Lowest Band Edge / Full RB



Date: 17.NOV.2021 09:18:48

Highest Band Edge / Full RB

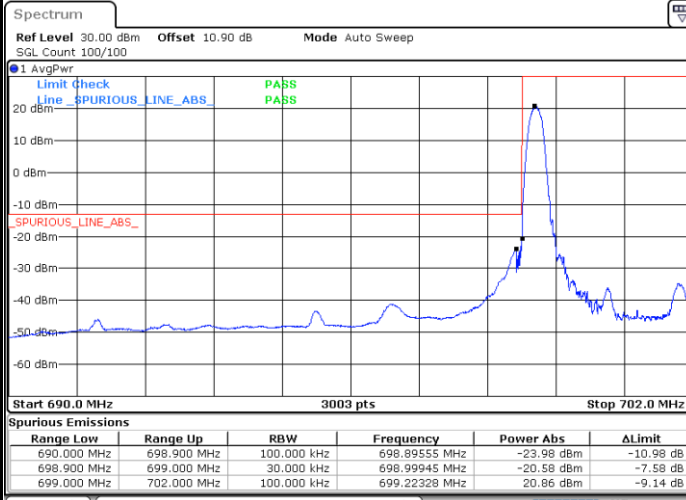


Date: 17.NOV.2021 09:24:05

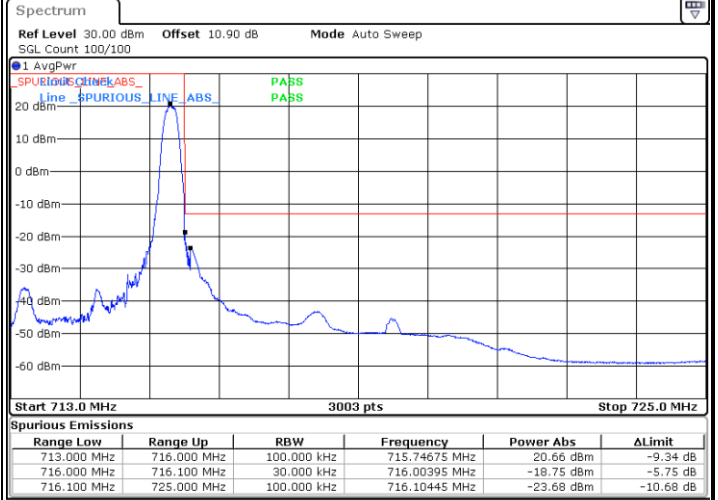


LTE Band 12 / 3MHz / 64QAM

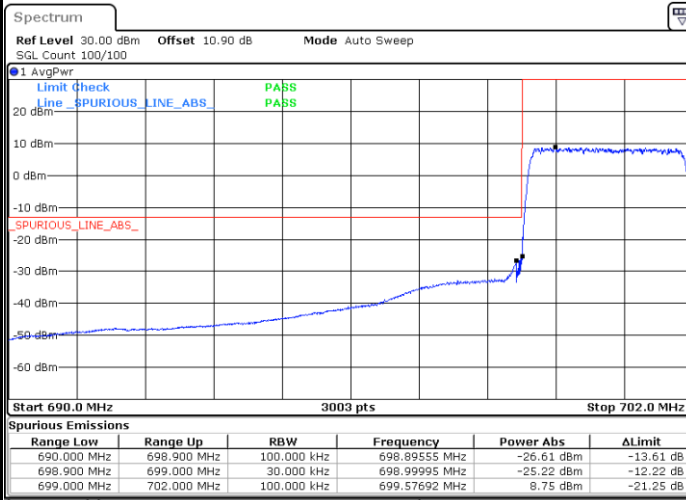
Lowest Band Edge / 1 RB



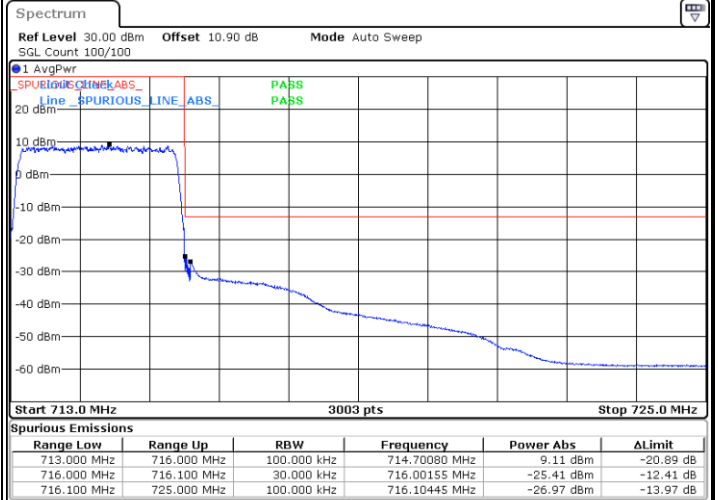
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



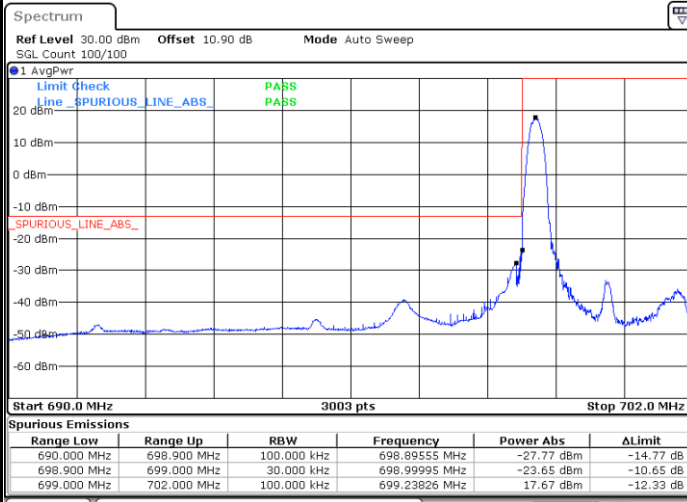
Highest Band Edge / Full RB





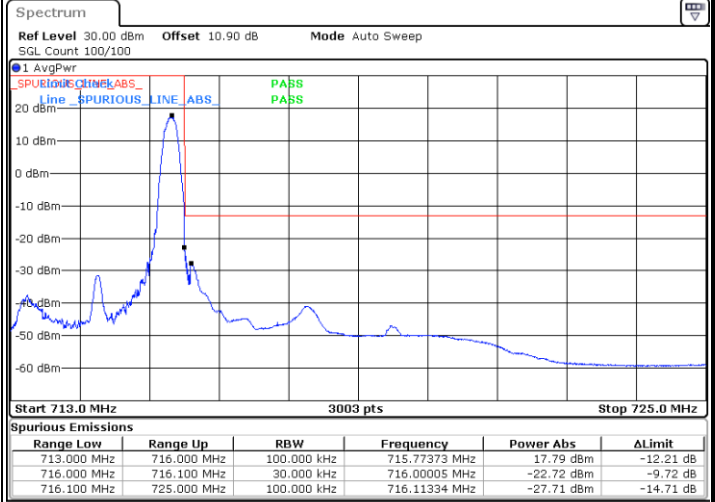
LTE Band 12 / 3MHz / 256QAM

Lowest Band Edge / 1 RB



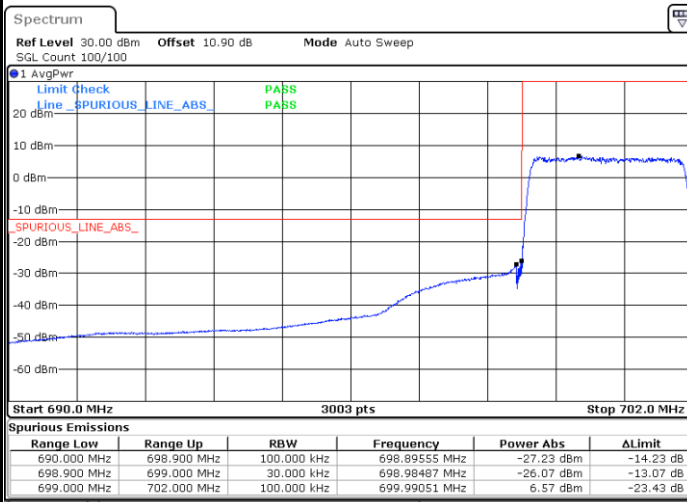
Date: 26.NOV.2021 10:00:01

Highest Band Edge / 1 RB



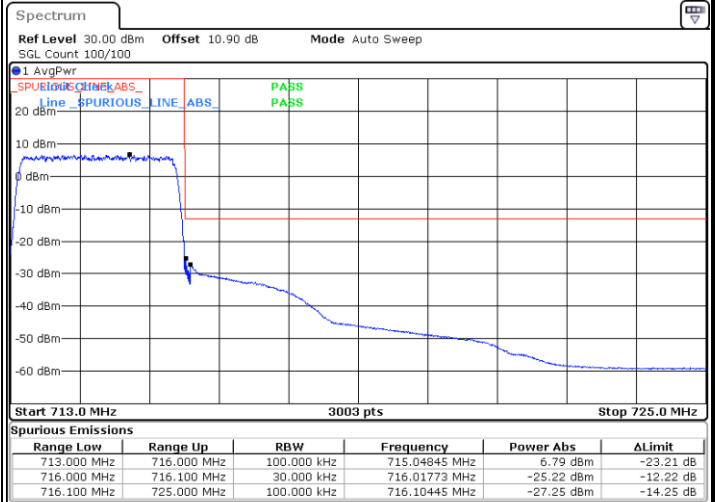
Date: 26.NOV.2021 10:01:13

Lowest Band Edge / Full RB



Date: 26.NOV.2021 09:59:15

Highest Band Edge / Full RB

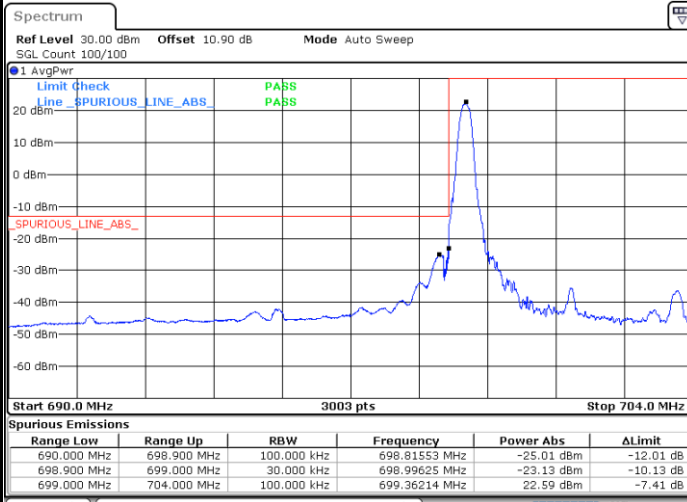


Date: 26.NOV.2021 10:02:04



LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



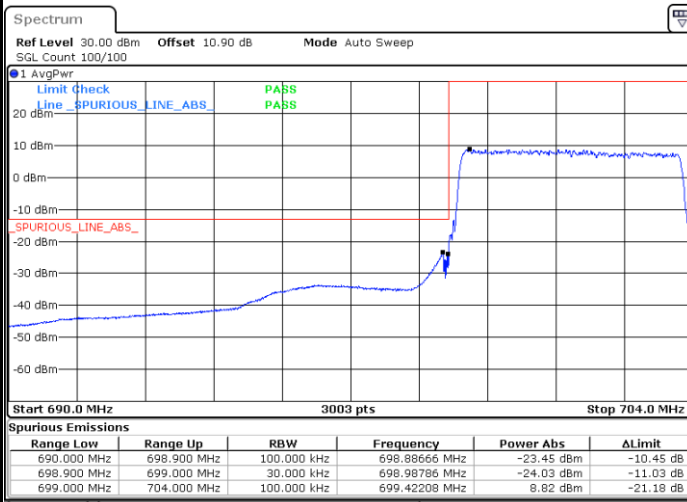
Date: 17.NOV.2021 09:39:19

Highest Band Edge / 1 RB



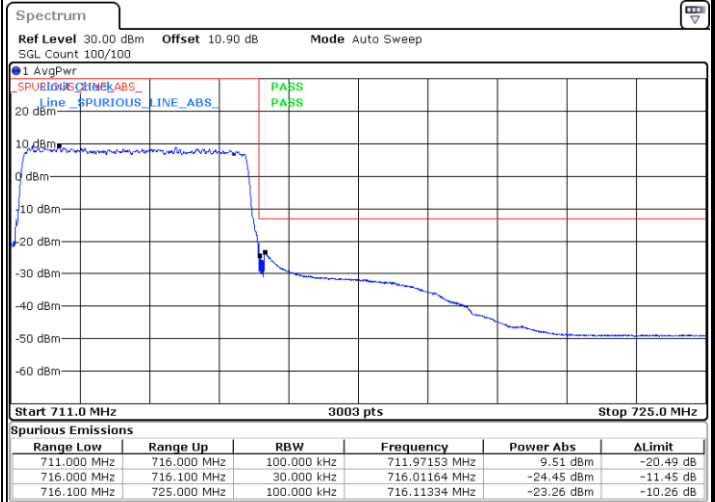
Date: 17.NOV.2021 09:43:56

Lowest Band Edge / Full RB



Date: 17.NOV.2021 09:37:16

Highest Band Edge / Full RB

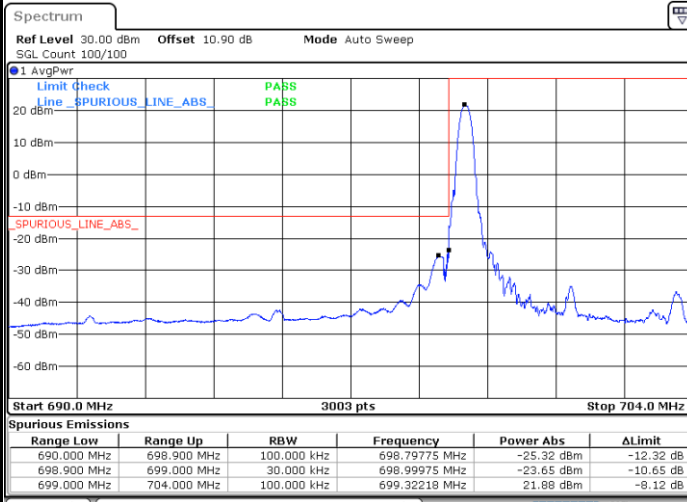


Date: 17.NOV.2021 09:42:34



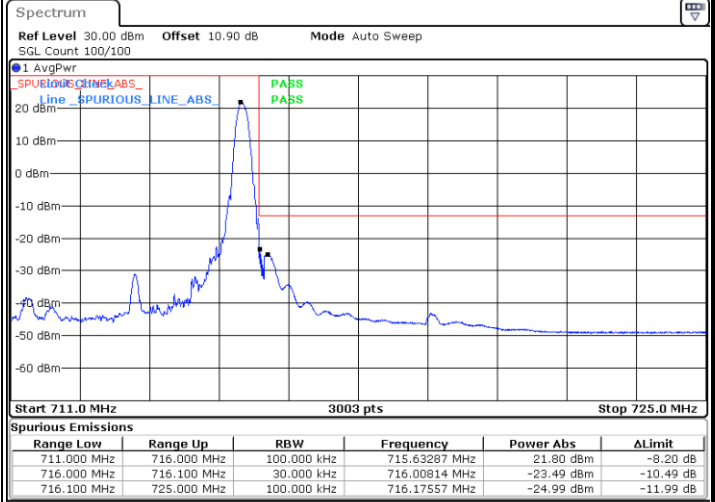
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



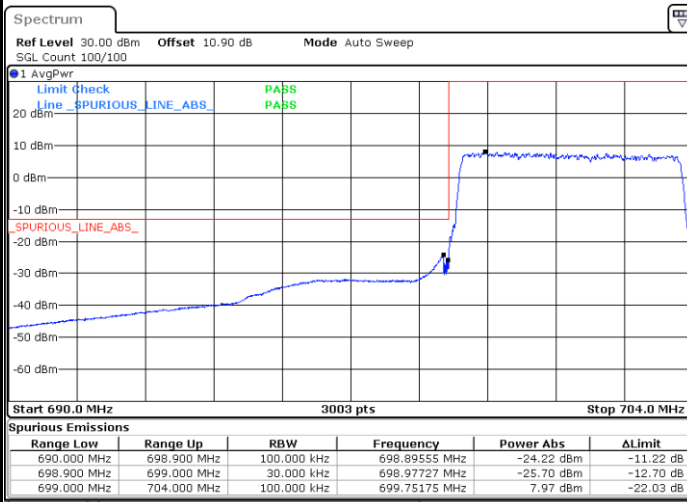
Date: 17.NOV.2021 09:38:38

Highest Band Edge / 1 RB



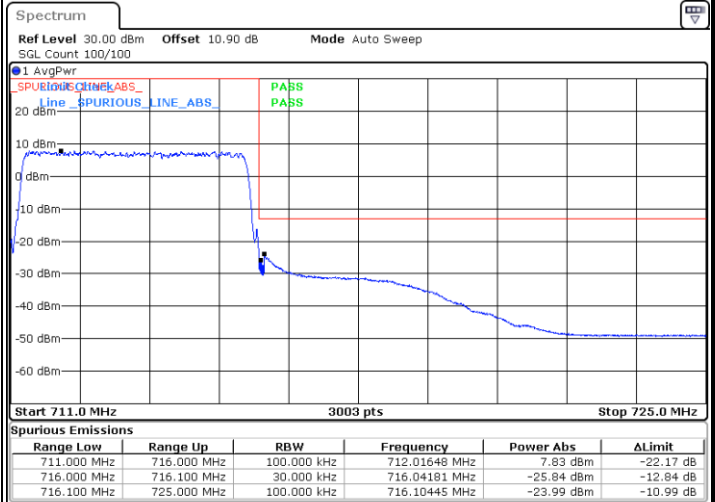
Date: 17.NOV.2021 09:44:37

Lowest Band Edge / Full RB



Date: 17.NOV.2021 09:37:57

Highest Band Edge / Full RB

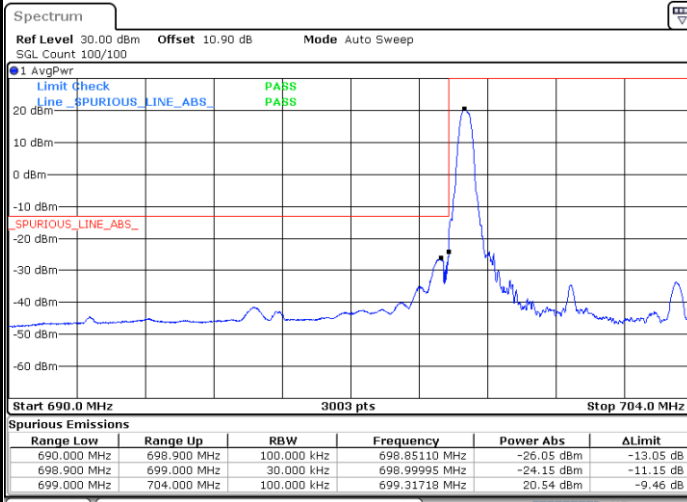


Date: 17.NOV.2021 09:43:15

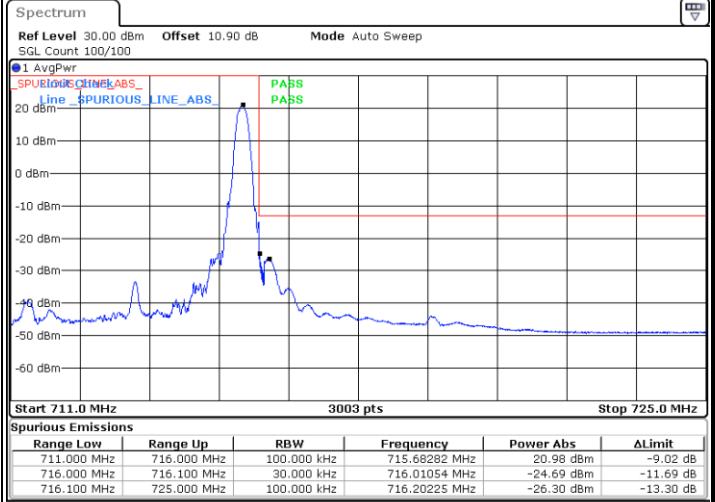


LTE Band 12 / 5MHz / 64QAM

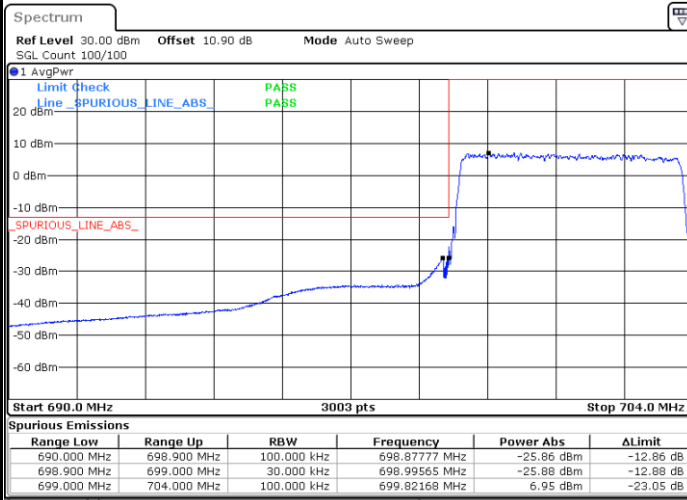
Lowest Band Edge / 1RB



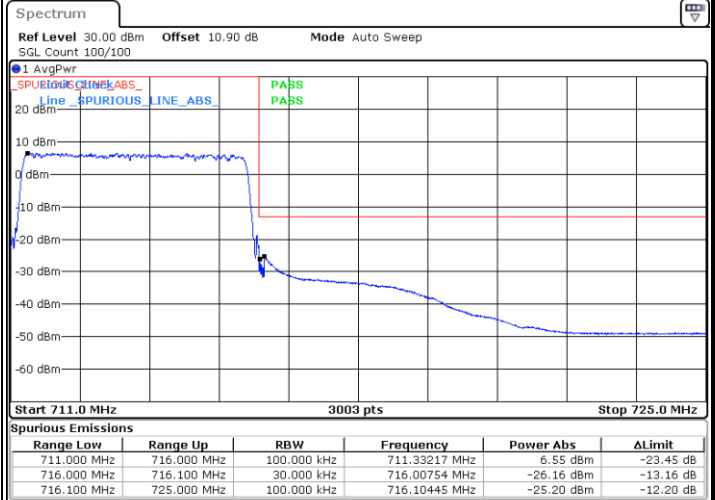
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



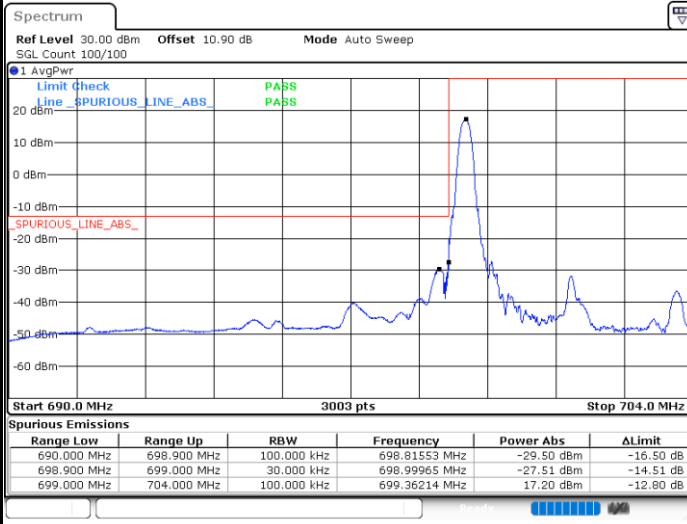
Highest Band Edge / Full RB





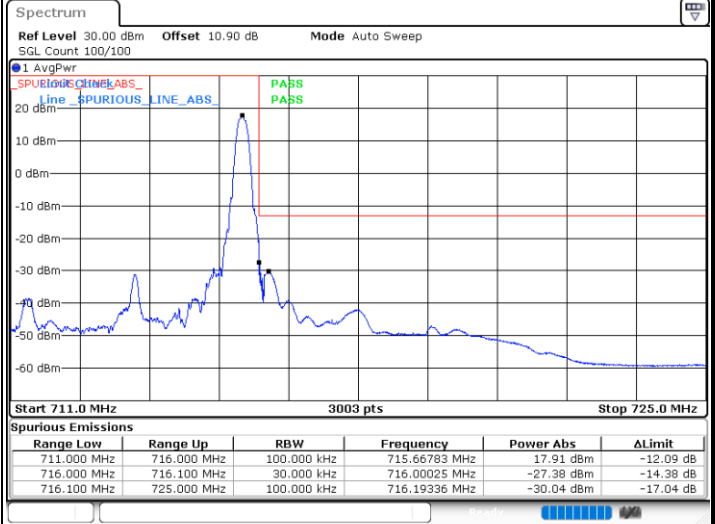
LTE Band 12 / 5MHz / 256QAM

Lowest Band Edge / 1RB



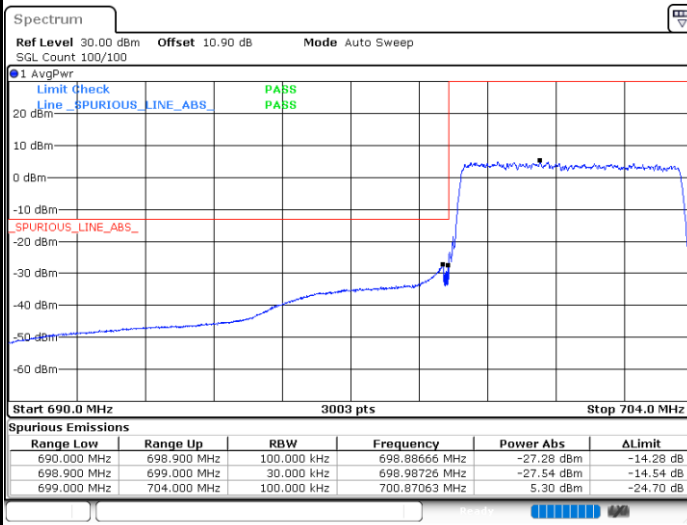
Date: 26.NOV.2021 10:06:31

Highest Band Edge / 1 RB



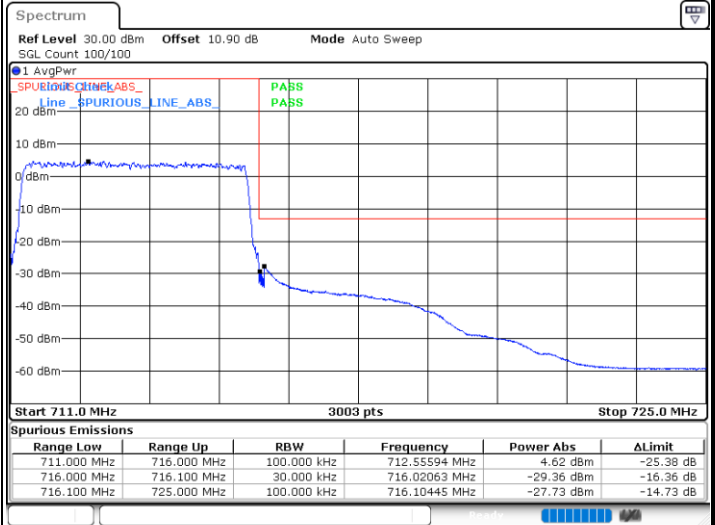
Date: 26.NOV.2021 10:07:28

Lowest Band Edge / Full RB



Date: 26.NOV.2021 10:04:58

Highest Band Edge / Full RB

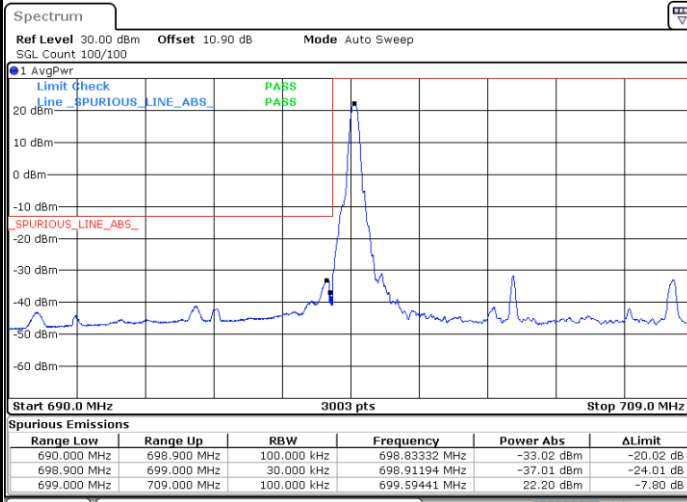


Date: 26.NOV.2021 10:08:28



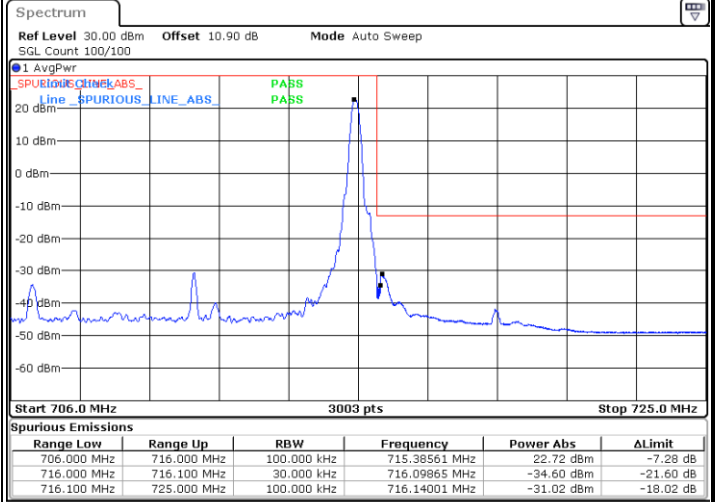
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



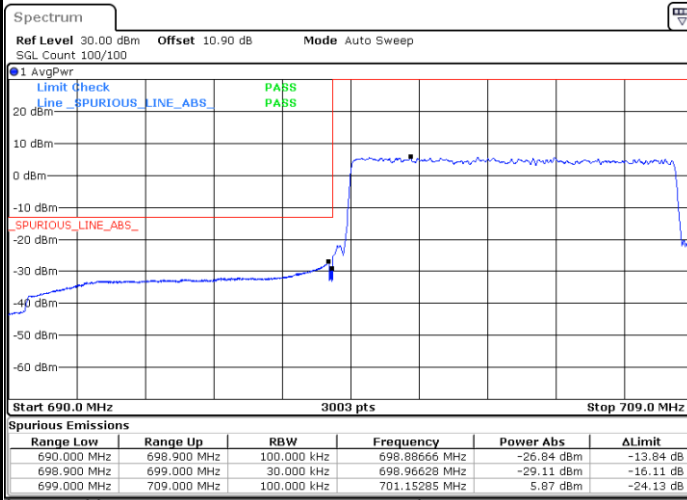
Date: 17.NOV.2021 09:48:09

Highest Band Edge / 1 RB



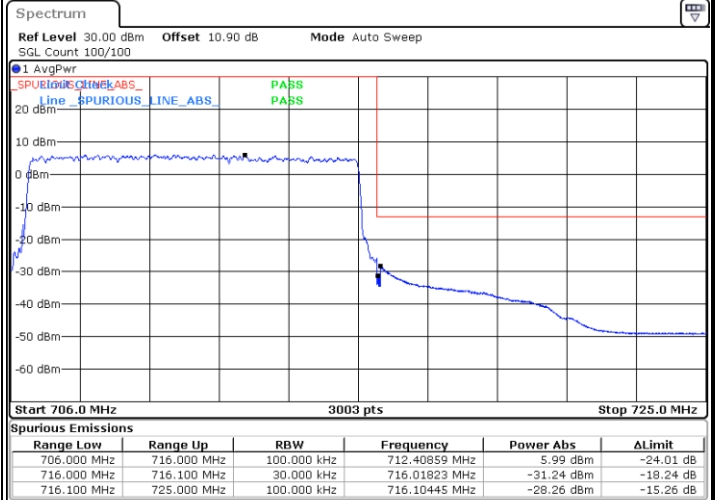
Date: 17.NOV.2021 09:53:27

Lowest Band Edge / Full RB



Date: 17.NOV.2021 09:46:04

Highest Band Edge / Full RB

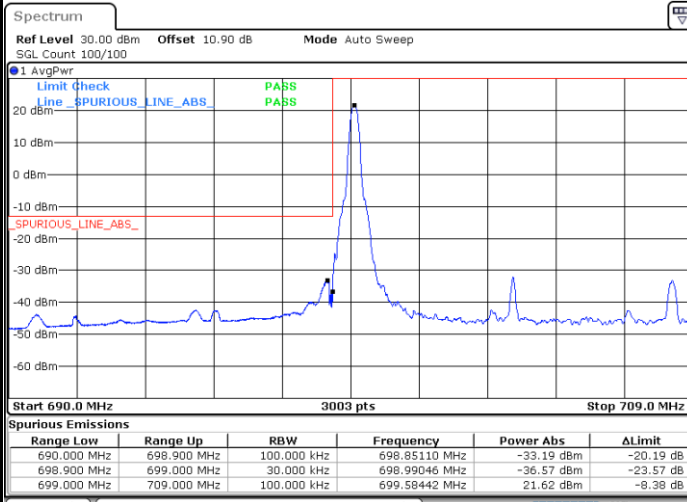


Date: 17.NOV.2021 09:51:24



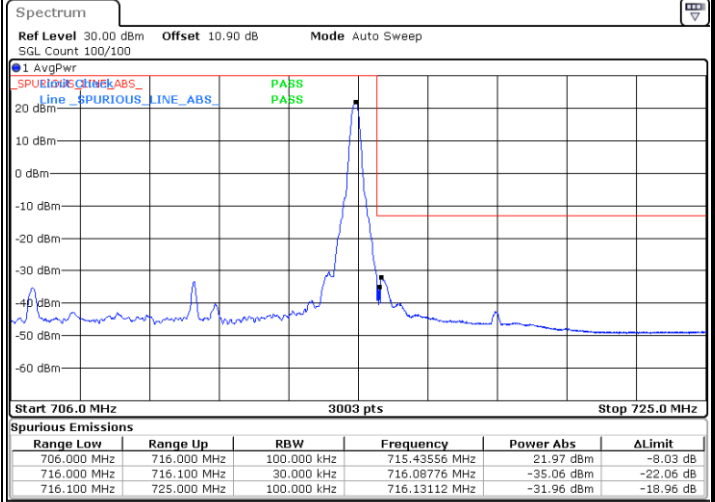
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



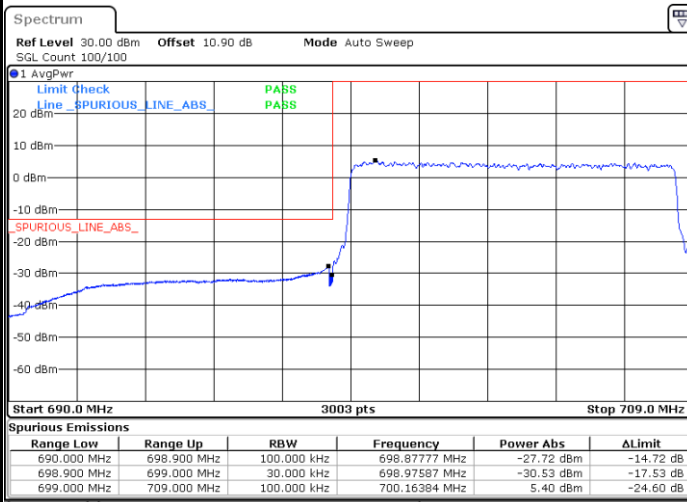
Date: 17.NOV.2021 09:47:27

Highest Band Edge / 1 RB



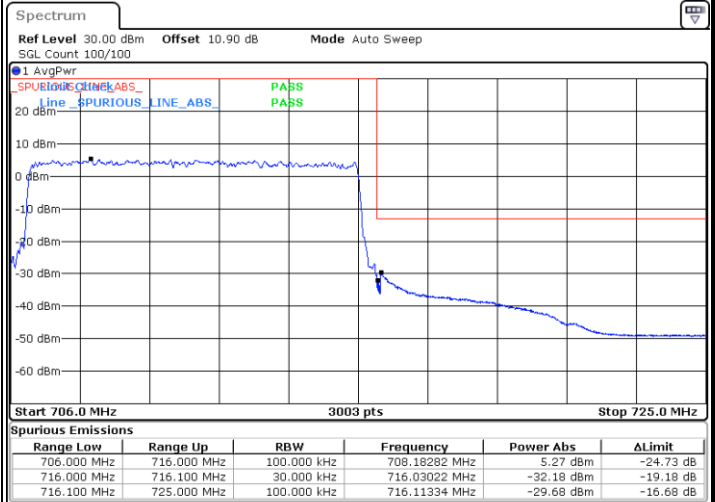
Date: 17.NOV.2021 09:52:46

Lowest Band Edge / Full RB



Date: 17.NOV.2021 09:46:46

Highest Band Edge / Full RB

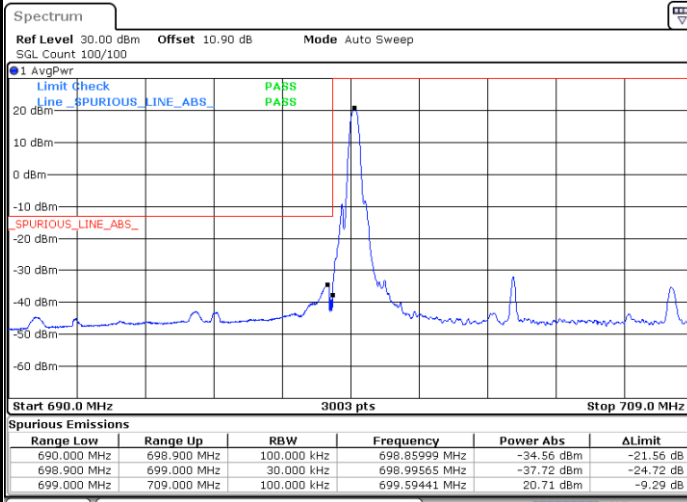


Date: 17.NOV.2021 09:52:05



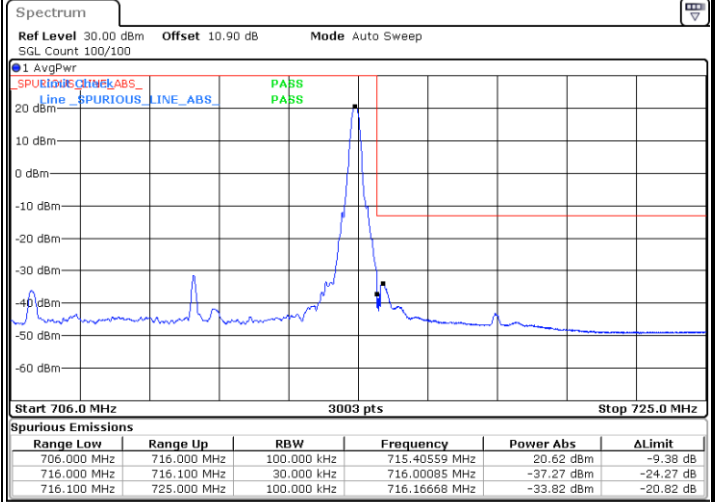
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



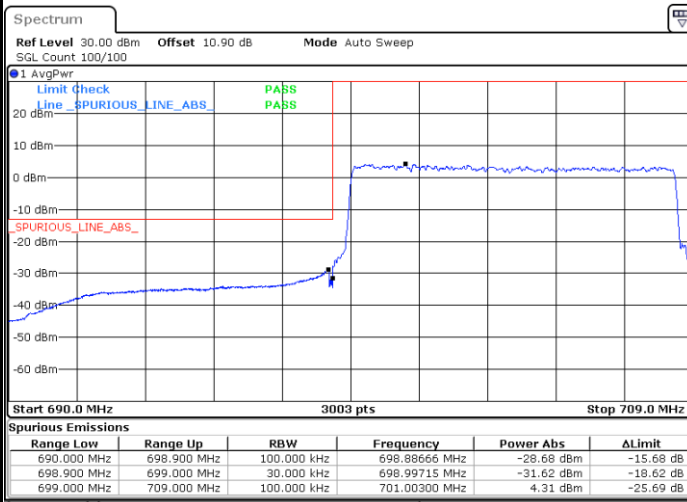
Date: 17.NOV.2021 09:55:26

Highest Band Edge / 1 RB



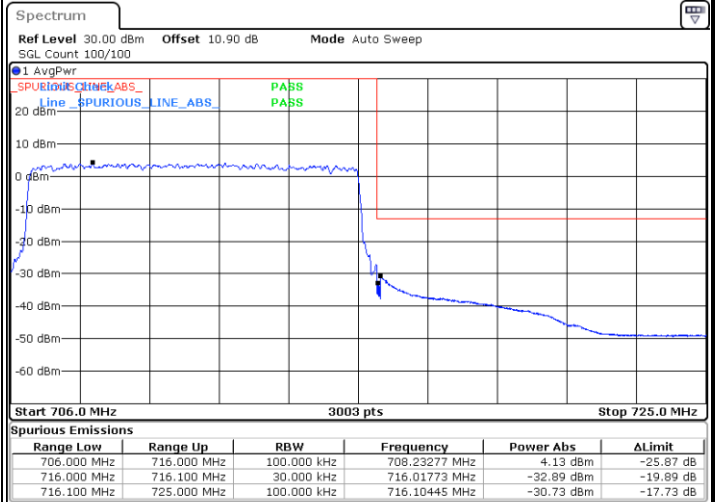
Date: 17.NOV.2021 09:57:31

Lowest Band Edge / Full RB



Date: 17.NOV.2021 09:54:44

Highest Band Edge / Full RB

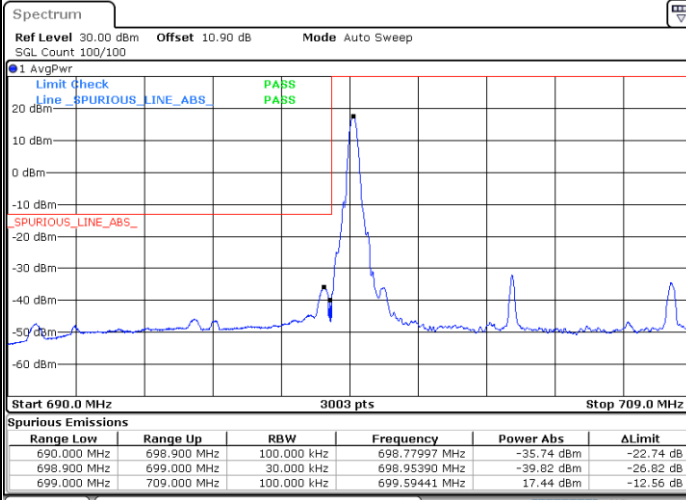


Date: 17.NOV.2021 09:56:50



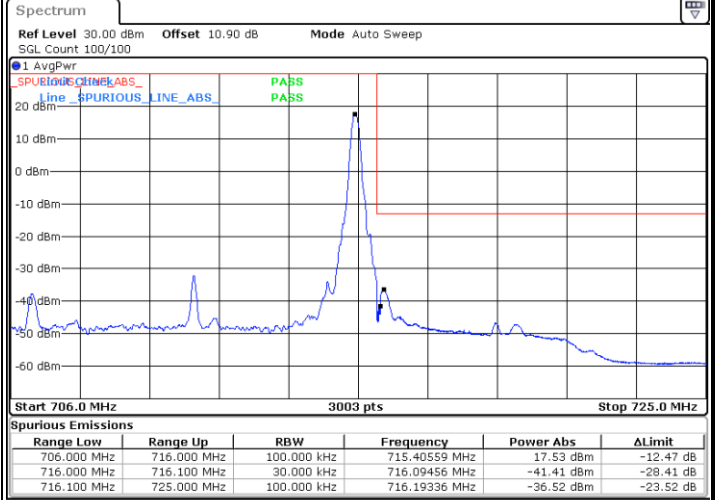
LTE Band 12 / 10MHz / 256QAM

Lowest Band Edge / 1 RB



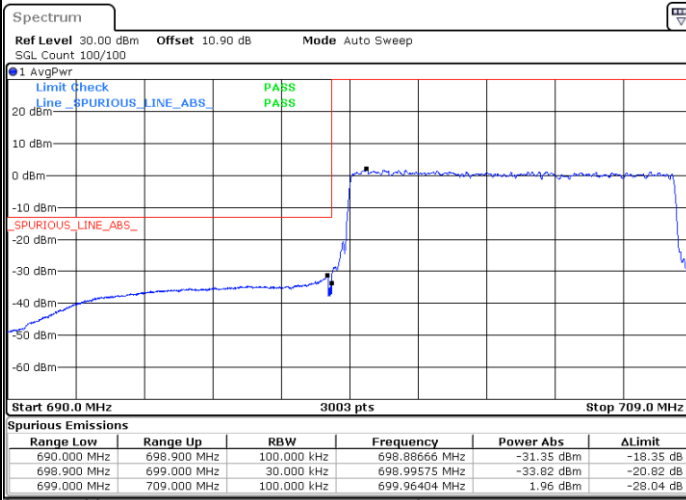
Date: 26.NOV.2021 10:12:31

Highest Band Edge / 1 RB



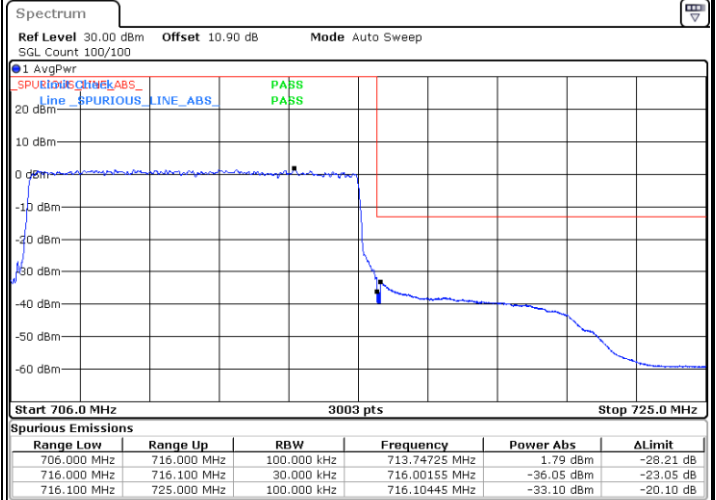
Date: 26.NOV.2021 10:13:20

Lowest Band Edge / Full RB



Date: 26.NOV.2021 10:11:48

Highest Band Edge / Full RB



Date: 26.NOV.2021 10:14:07

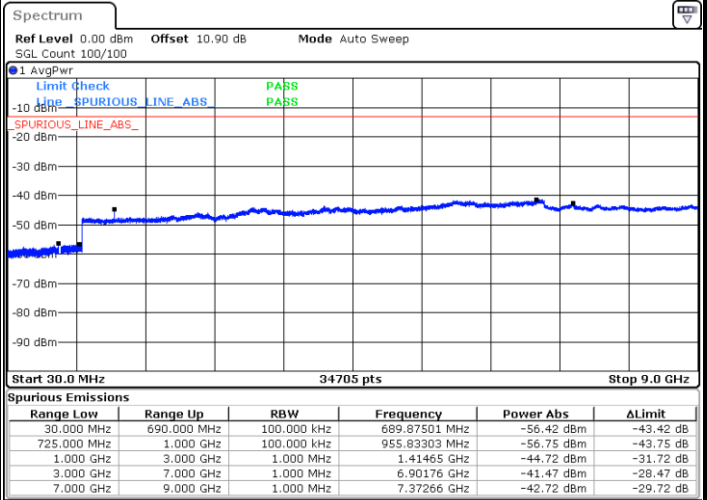
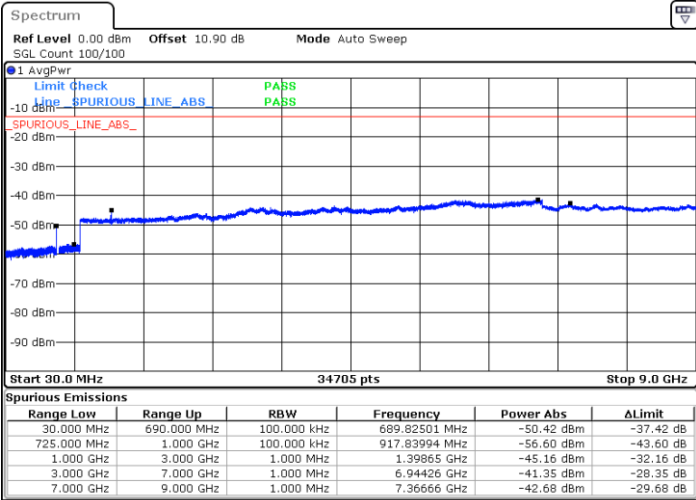


Conducted Spurious Emission

LTE Band 12 / 1.4MHz

Lowest Channel / QPSK

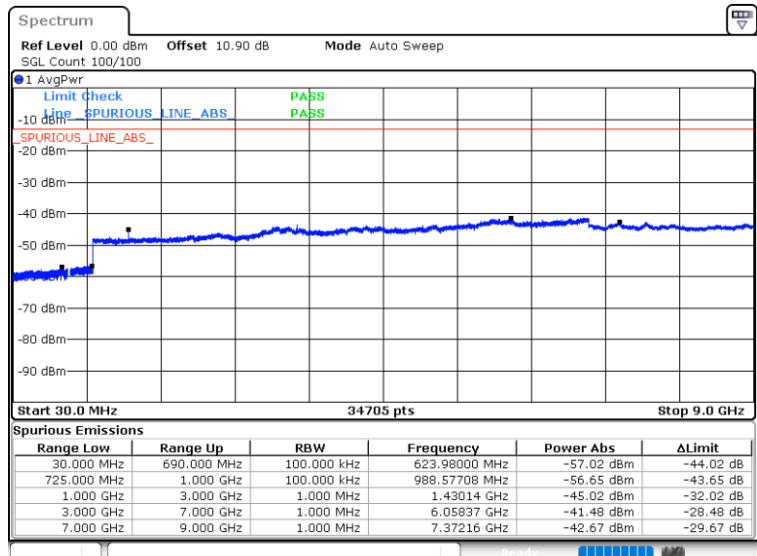
Middle Channel / QPSK



Date: 17.NOV.2021 09:04:40

Date: 17.NOV.2021 09:06:39

Highest Channel / QPSK



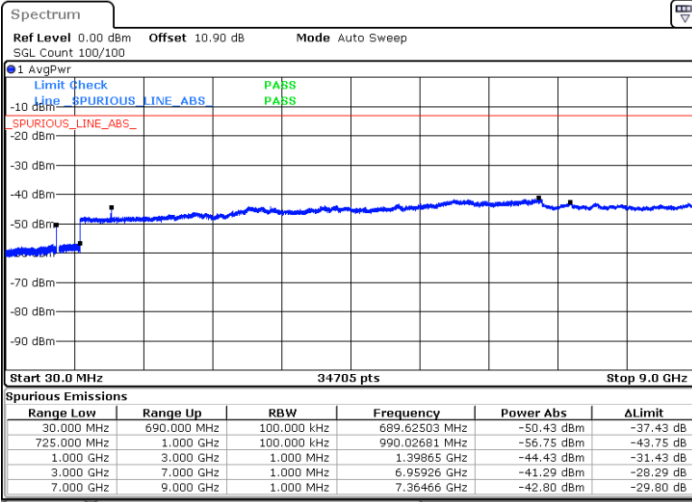
Date: 17.NOV.2021 09:09:56



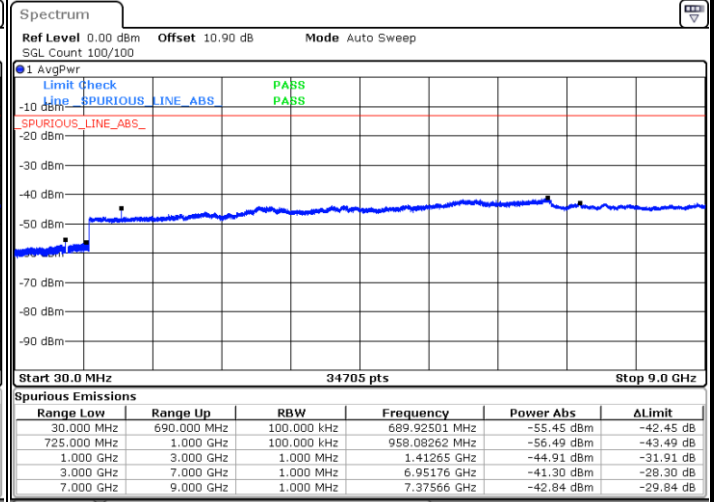
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

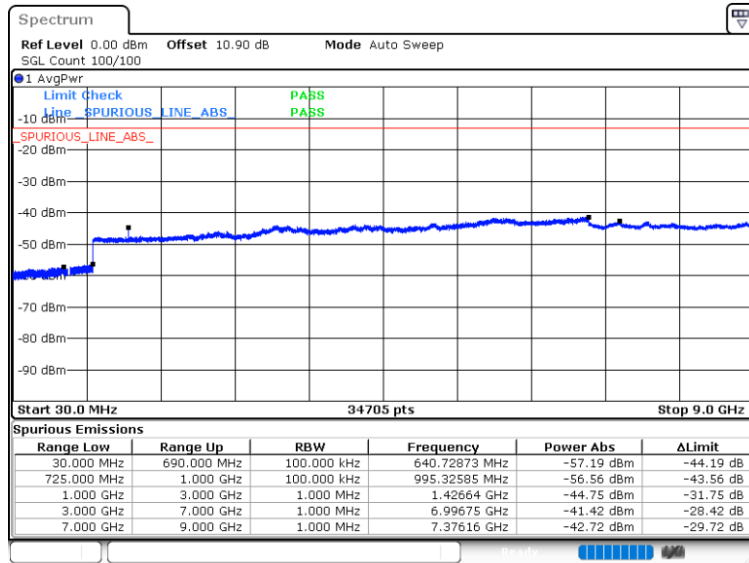


Date: 17.NOV.2021 09:20:45



Date: 17.NOV.2021 09:22:44

Highest Channel / QPSK



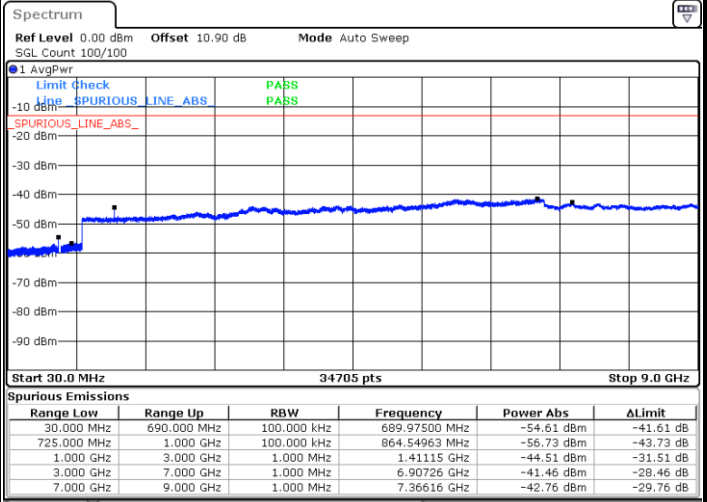
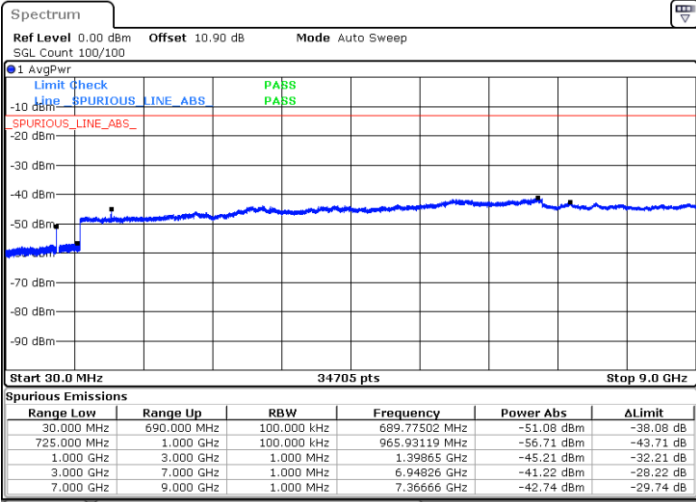
Date: 17.NOV.2021 09:26:02



LTE Band 12 / 5MHz

Lowest Channel / QPSK

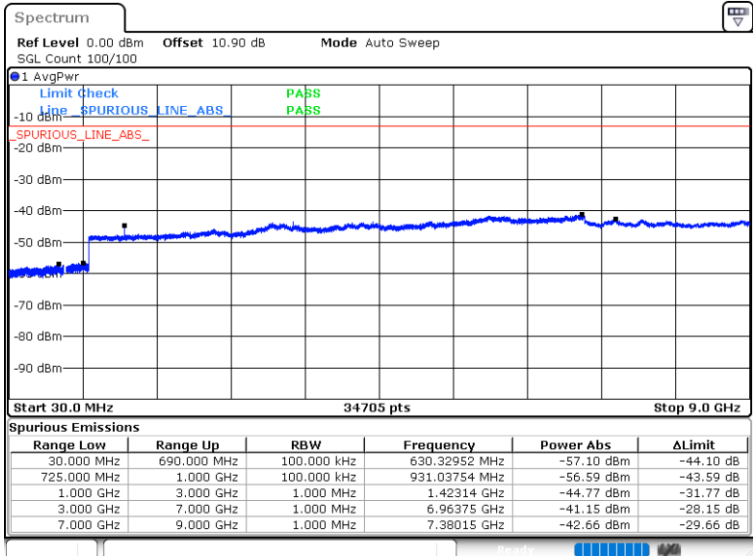
Middle Channel / QPSK



Date: 17.NOV.2021 09:39:55

Date: 17.NOV.2021 09:41:53

Highest Channel / QPSK



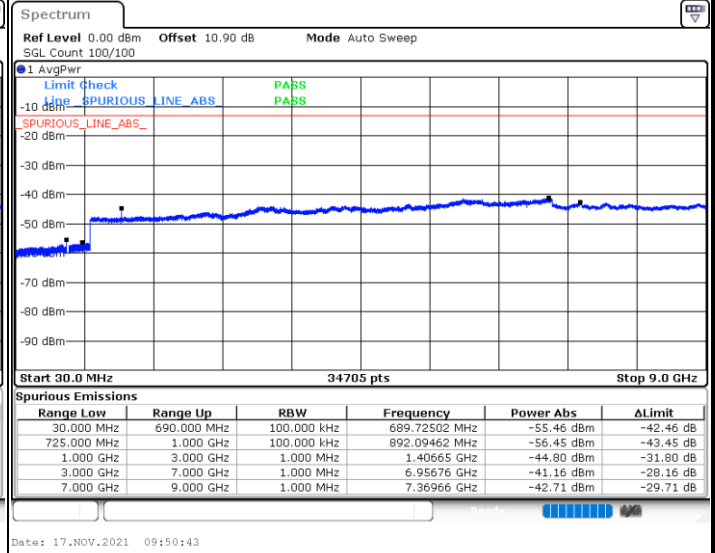
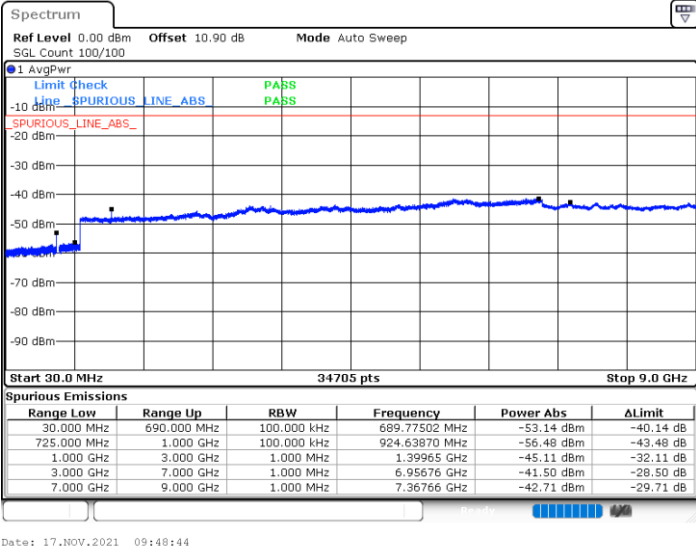
Date: 17.NOV.2021 09:45:12



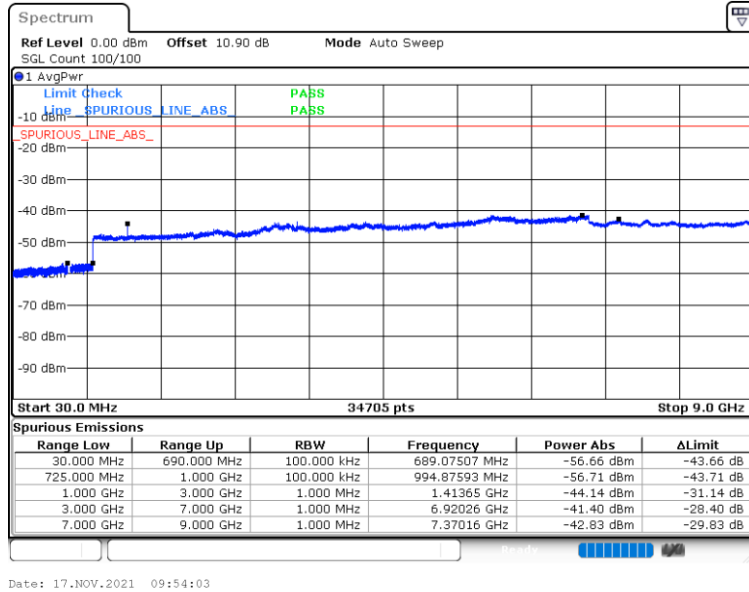
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK





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	0.0085	PASS
40	Normal Voltage	0.0001	
30	Normal Voltage	0.0044	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0049	
0	Normal Voltage	0.0034	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0055	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0086	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0016	

Note:

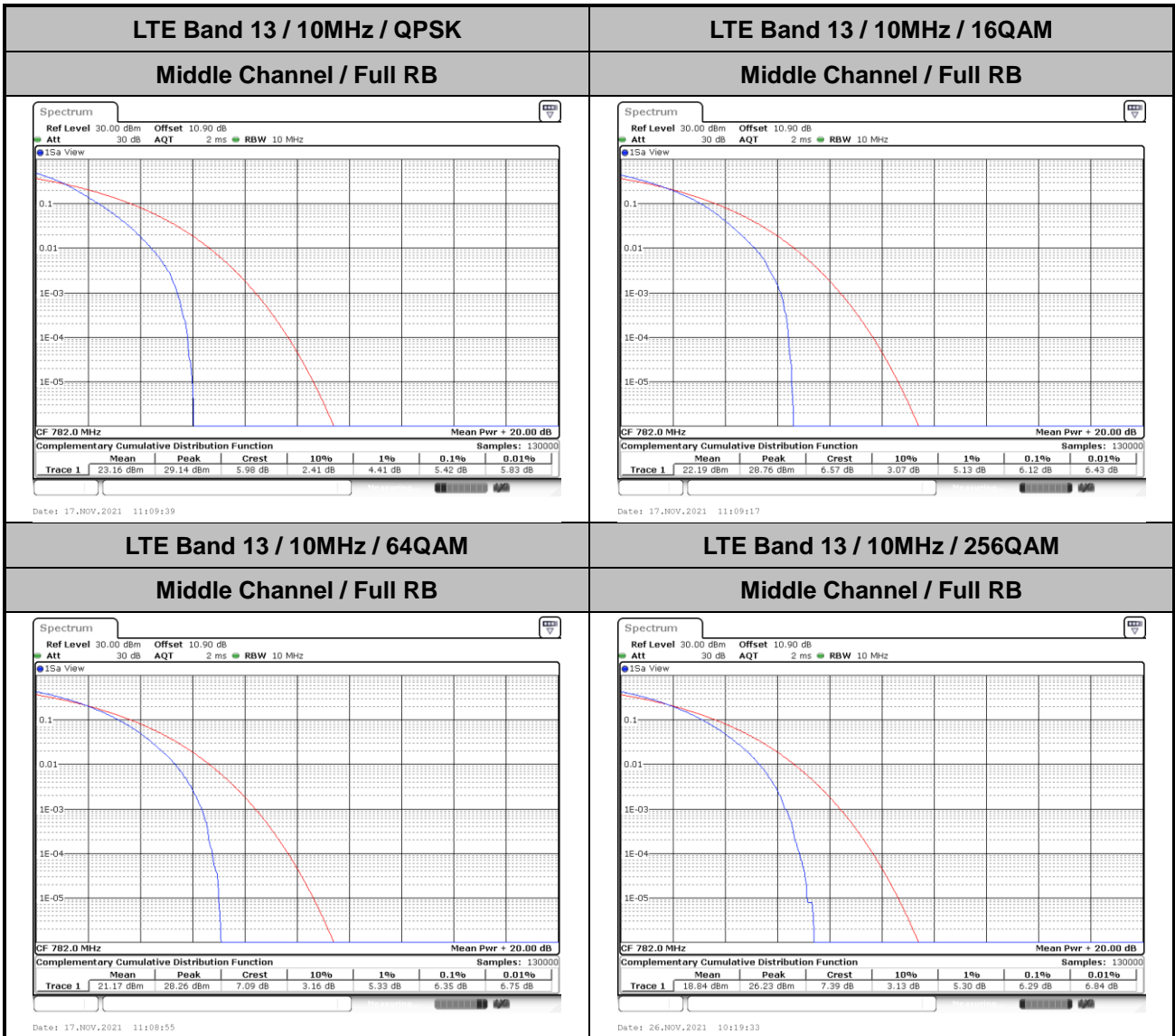
- 1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.42	6.12	6.35	6.29	PASS





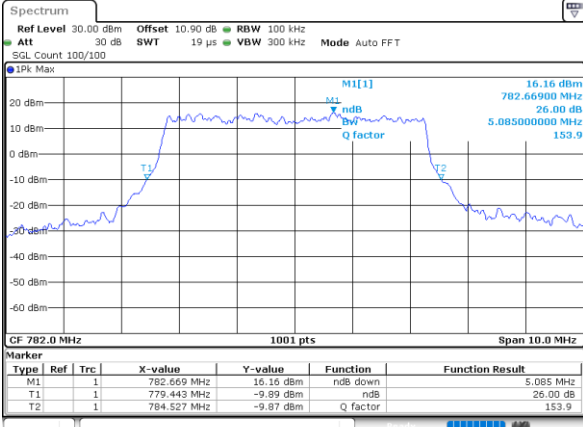
26dB Bandwidth

Mode	LTE Band 13 : 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	-	-	-	-	5.09	5.20	10.13	9.97	-	-	-	-
Mode	LTE Band 13 : 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	-	-	-	-	5.05	5.11	9.83	9.87	-	-	-	-



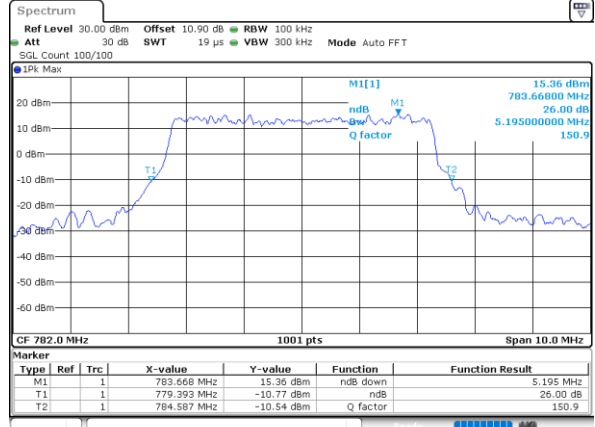
LTE Band 13

Middle Channel / 5MHz / QPSK



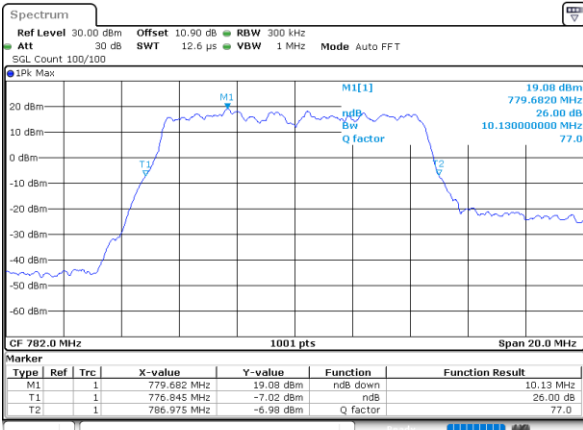
Date: 17.NOV.2021 10:10:21

Middle Channel / 5MHz / 16QAM



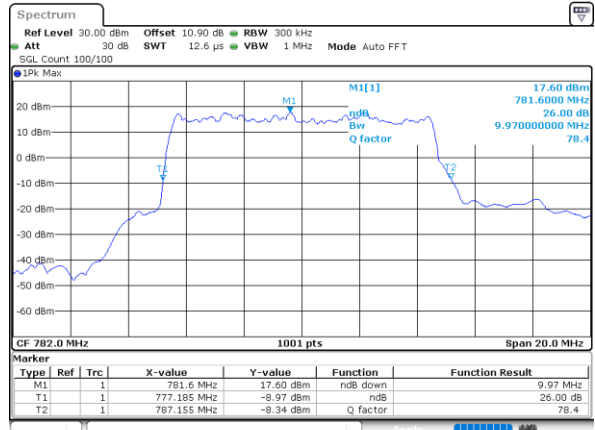
Date: 17.NOV.2021 10:11:42

Middle Channel / 10MHz / QPSK



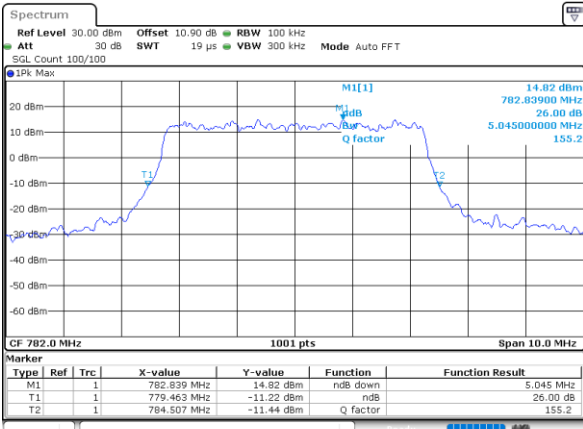
Date: 17.NOV.2021 10:50:48

Middle Channel / 10MHz / 16QAM



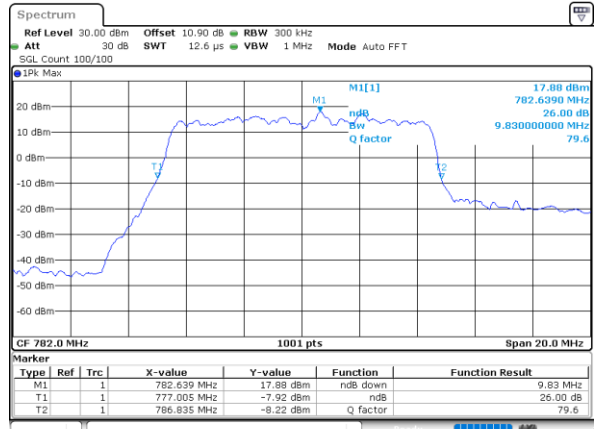
Date: 17.NOV.2021 10:50:27

Middle Channel / 5MHz / 64QAM



Date: 17.NOV.2021 10:23:23

Middle Channel / 10MHz / 64QAM



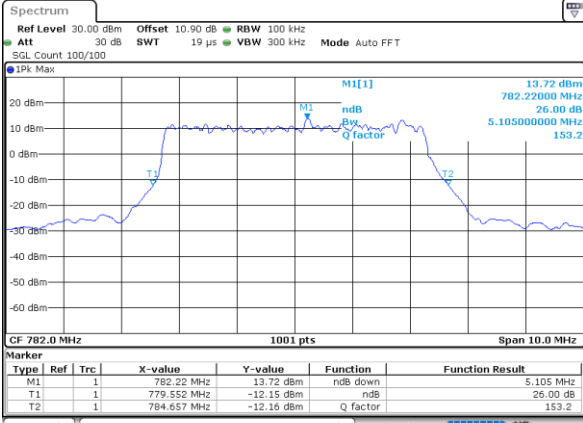
Date: 17.NOV.2021 11:03:03



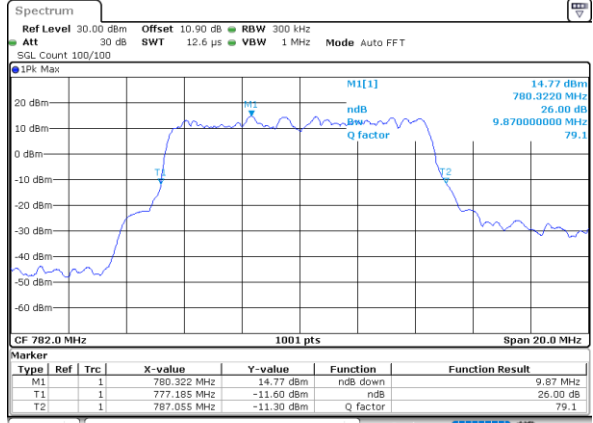
LTE Band 13

Middle Channel / 5MHz / 256QAM

Middle Channel / 10MHz / 256QAM



Date: 26.NOV.2021 10:15:40



Date: 26.NOV.2021 10:18:52



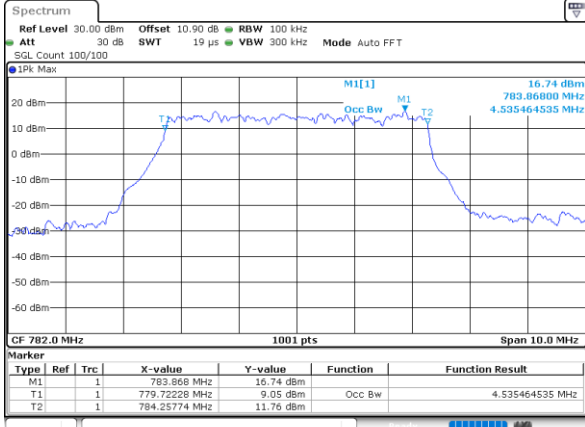
Occupied Bandwidth

Mode	LTE Band 13 : 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	-	-	-	-	4.54	4.53	9.07	8.99	-	-	-	-
Mode	LTE Band 13 : 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	-	-	-	-	4.51	4.50	9.05	9.05	-	-	-	-



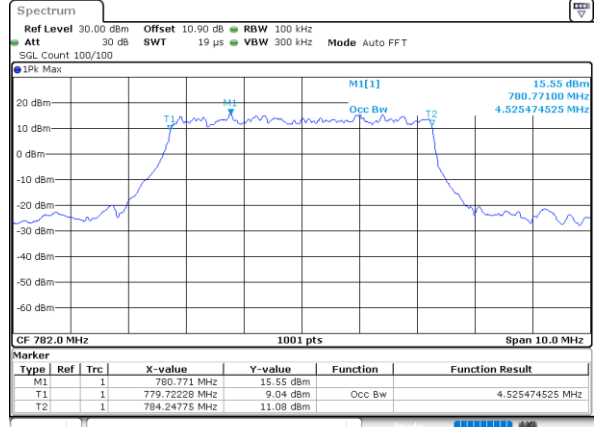
LTE Band 13

Middle Channel / 5MHz / QPSK



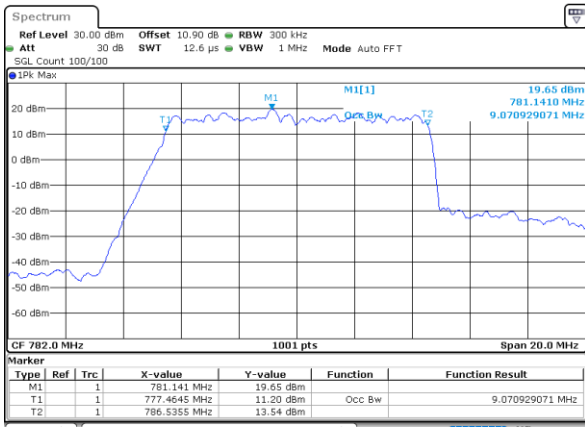
Date: 17.NOV.2021 10:11:24

Middle Channel / 5MHz / 16QAM



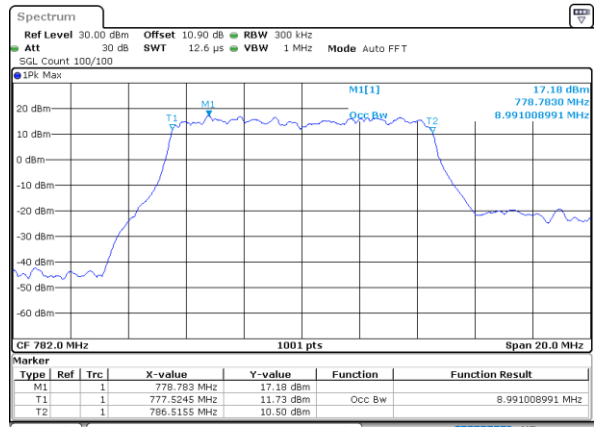
Date: 17.NOV.2021 10:11:03

Middle Channel / 10MHz / QPSK



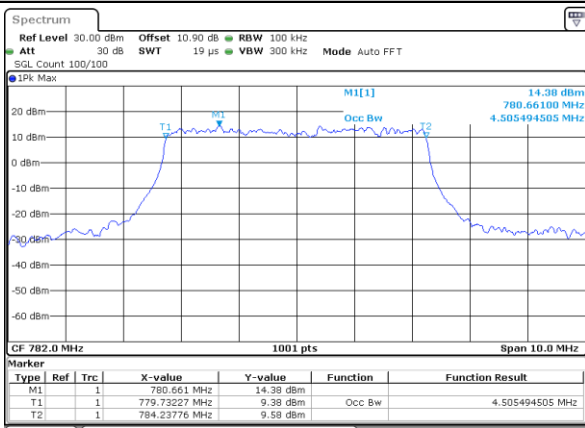
Date: 17.NOV.2021 10:49:46

Middle Channel / 10MHz / 16QAM



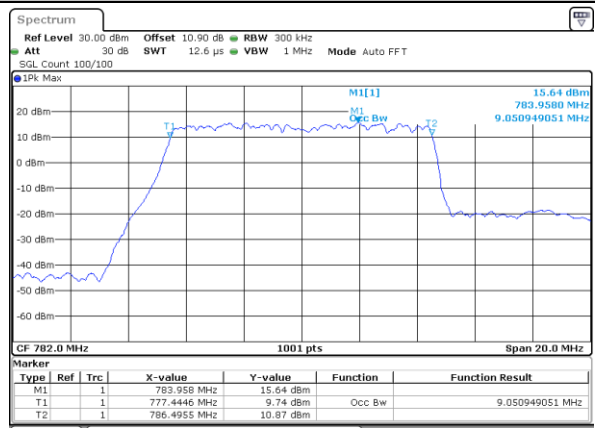
Date: 17.NOV.2021 10:50:06

Middle Channel / 5MHz / 64QAM



Date: 17.NOV.2021 10:23:44

Middle Channel / 10MHz / 64QAM



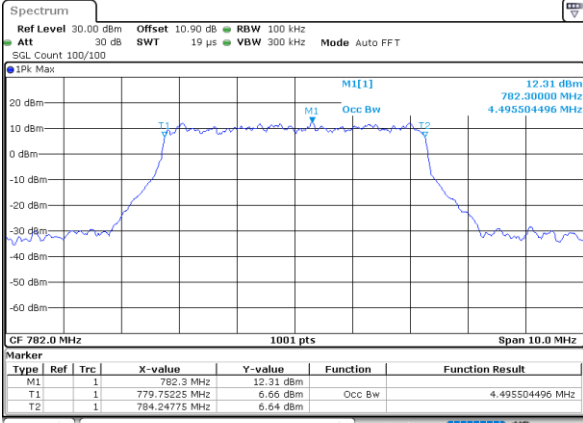
Date: 17.NOV.2021 11:02:43



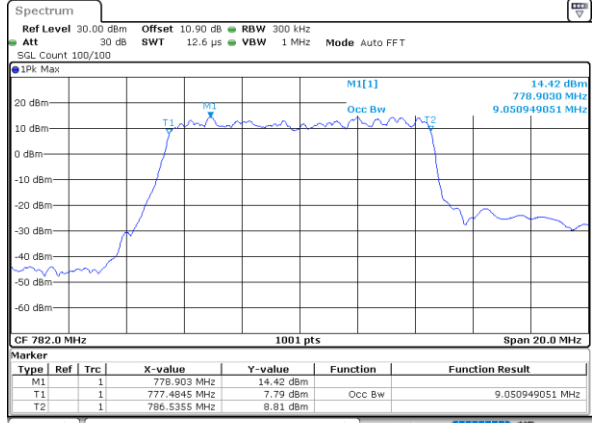
LTE Band 13

Middle Channel / 5MHz / 256QAM

Middle Channel / 10MHz / 256QAM



Date: 26.NOV.2021 10:15:39



Date: 26.NOV.2021 10:18:43

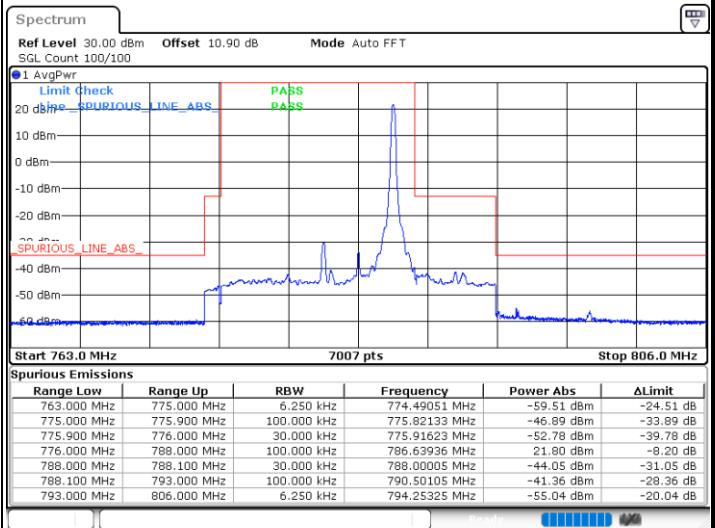
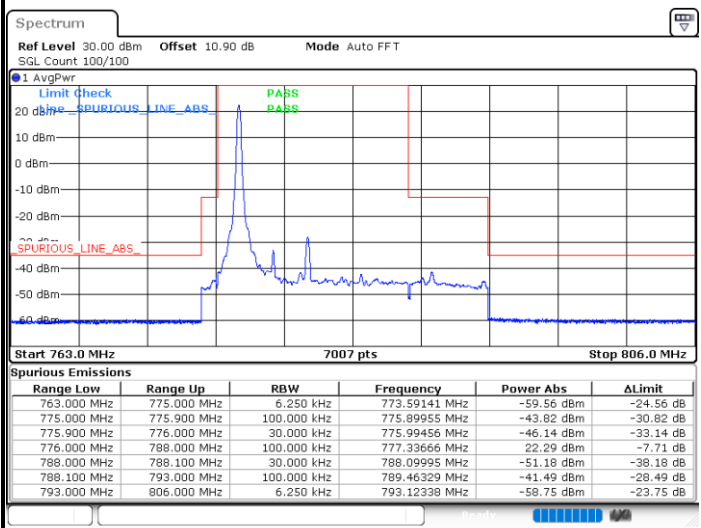


Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

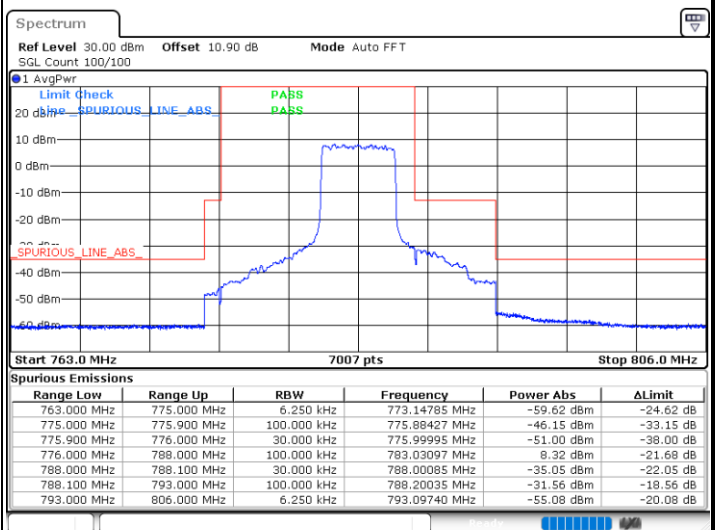
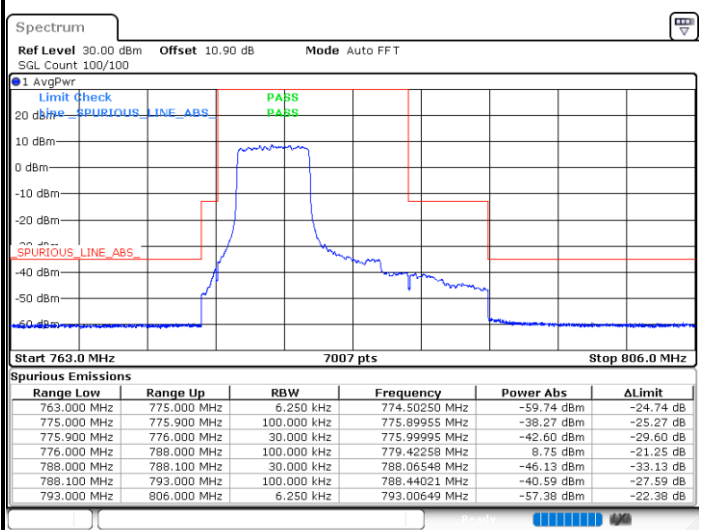


Date: 17.NOV.2021 10:08:51

Date: 17.NOV.2021 10:18:46

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 17.NOV.2021 10:03:19

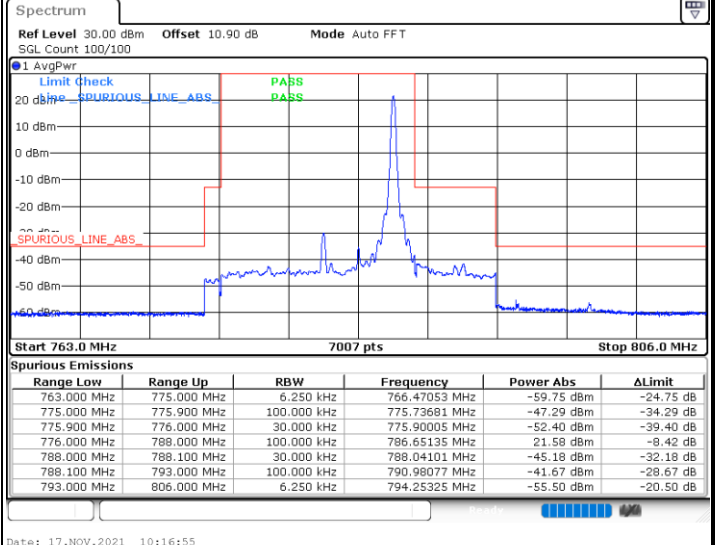
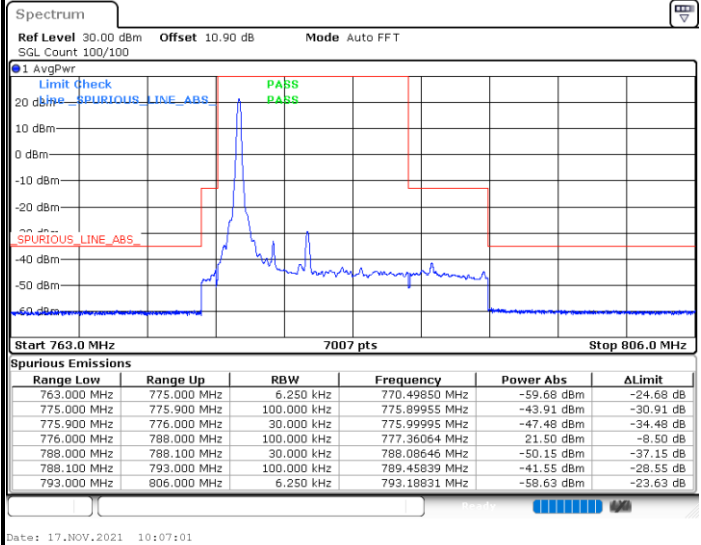
Date: 17.NOV.2021 10:13:14



LTE Band 13 / 5MHz / 16QAM

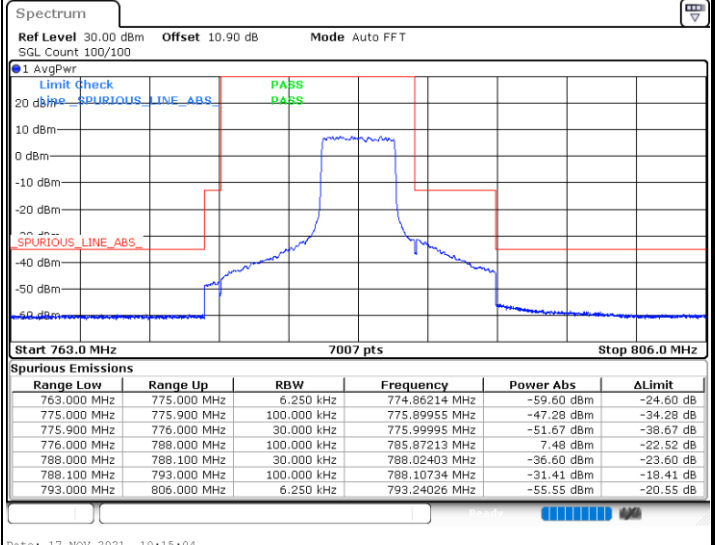
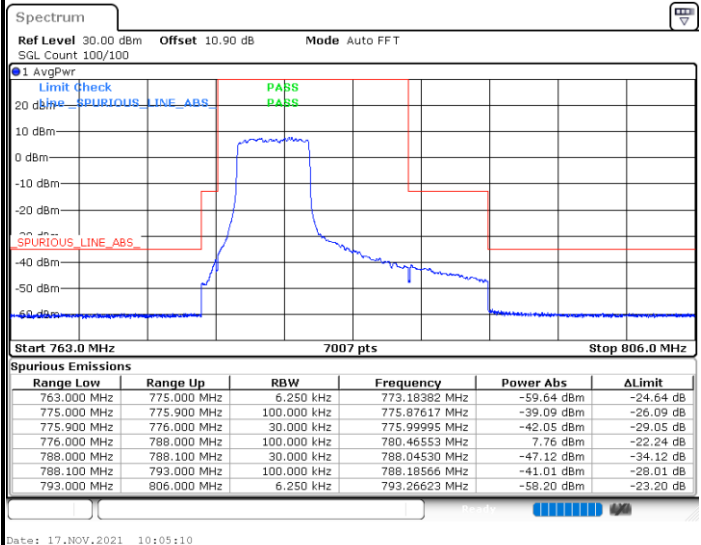
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

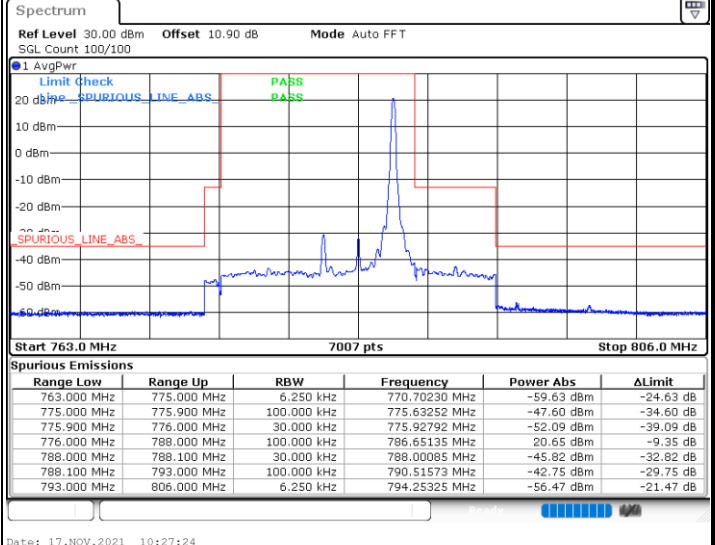
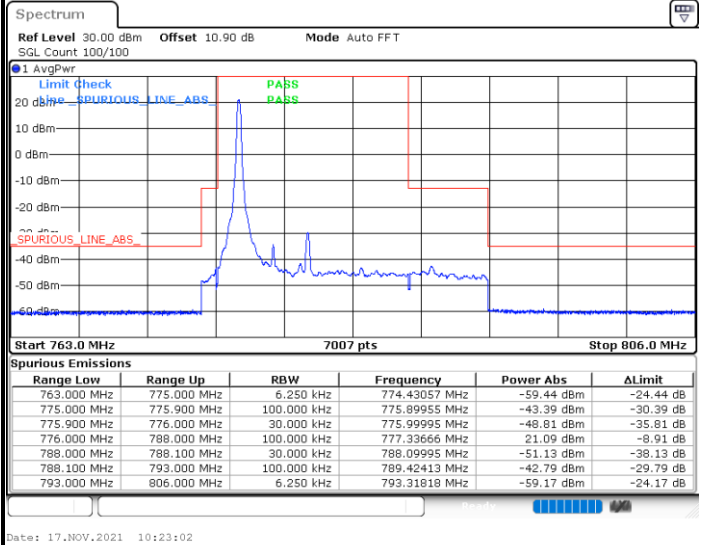




LTE Band 13 / 5MHz / 64QAM

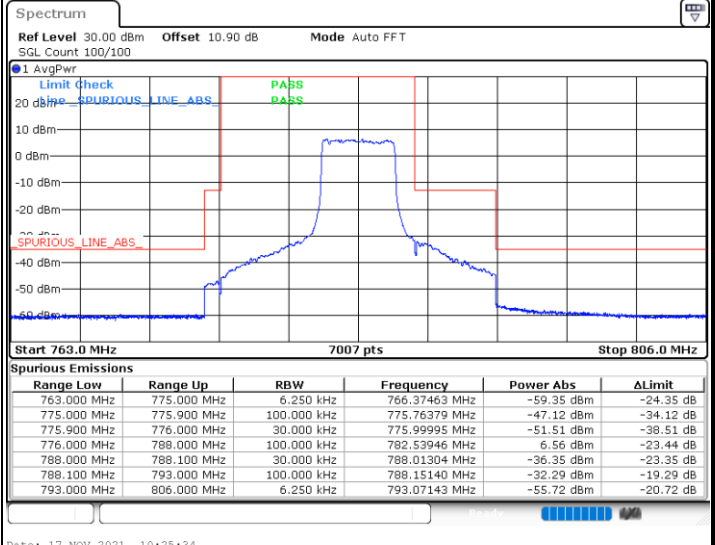
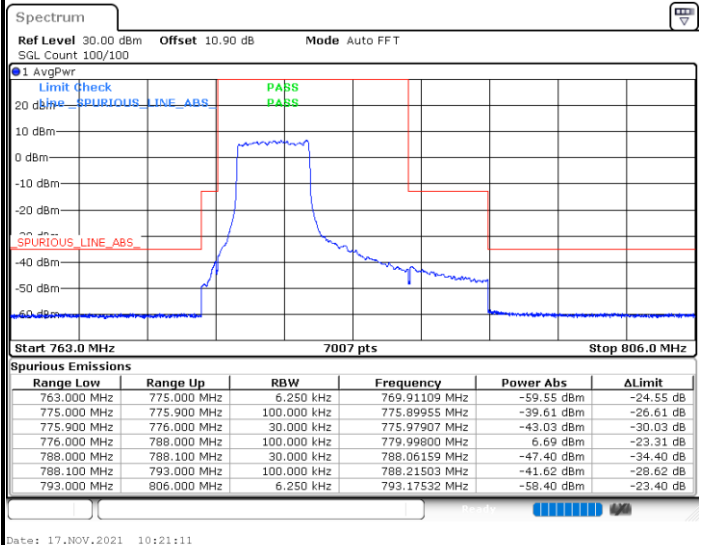
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

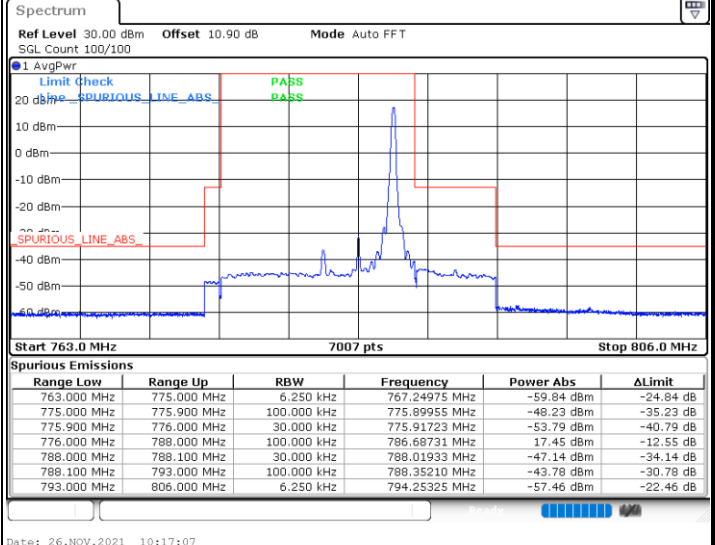
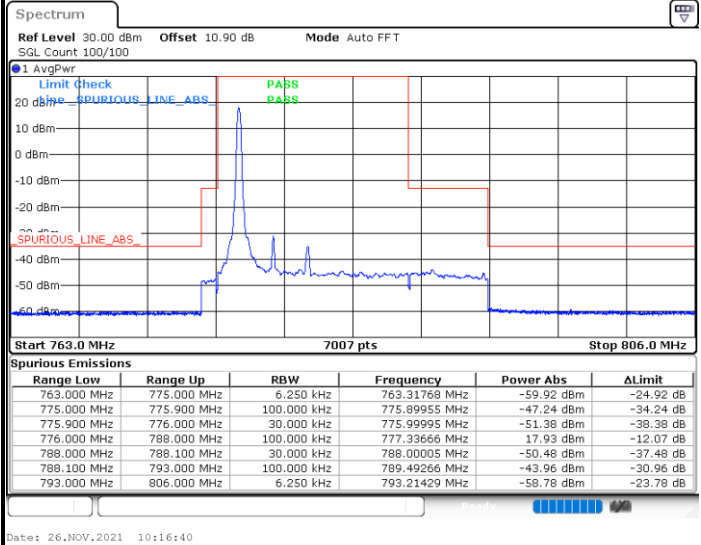




LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

