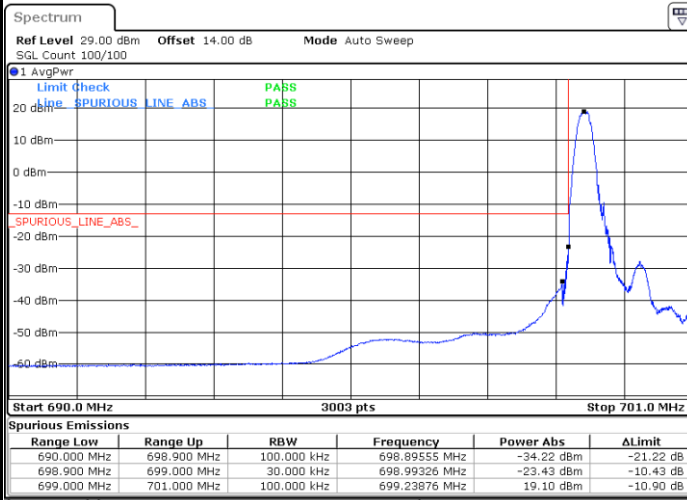




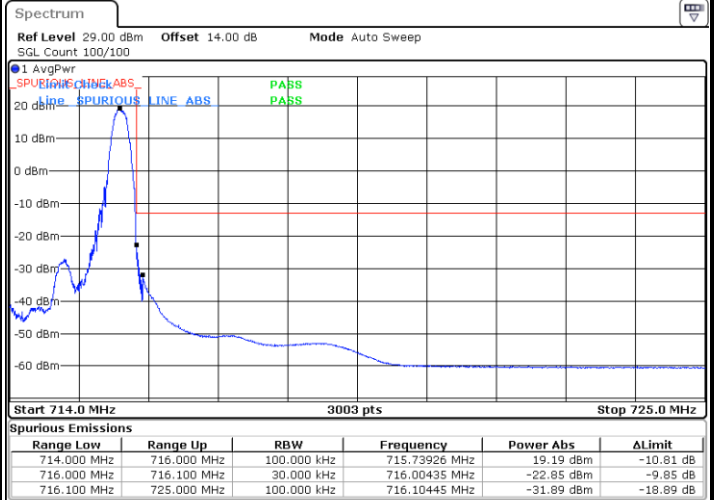
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



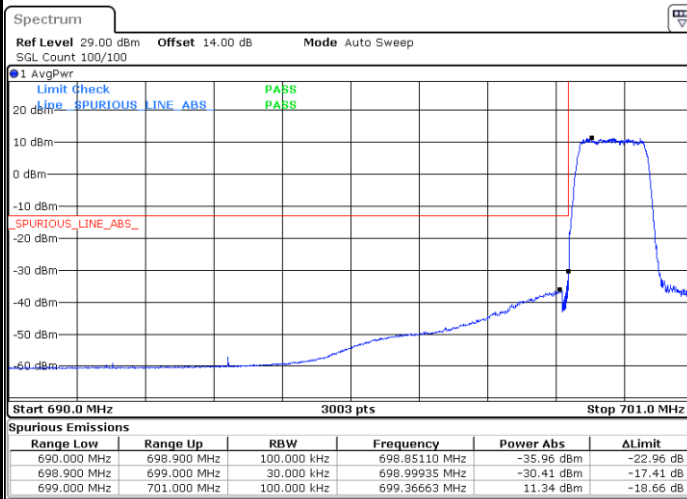
Date: 8.OCT.2021 22:01:14

Highest Band Edge / 1 RB



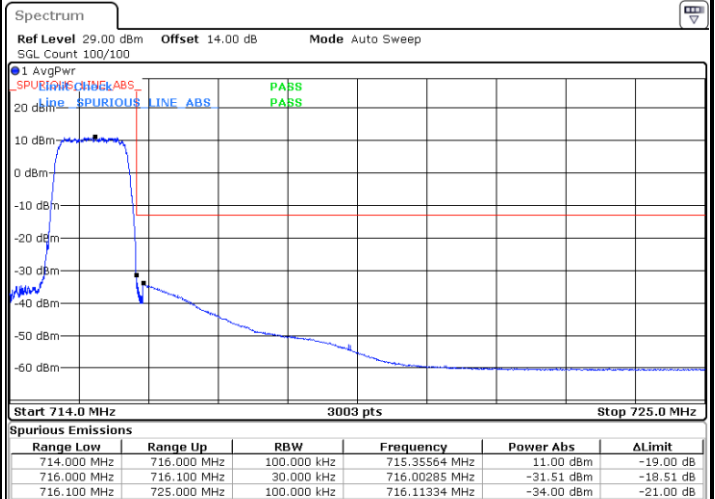
Date: 8.OCT.2021 22:04:54

Lowest Band Edge / Full RB



Date: 8.OCT.2021 22:00:30

Highest Band Edge / Full RB

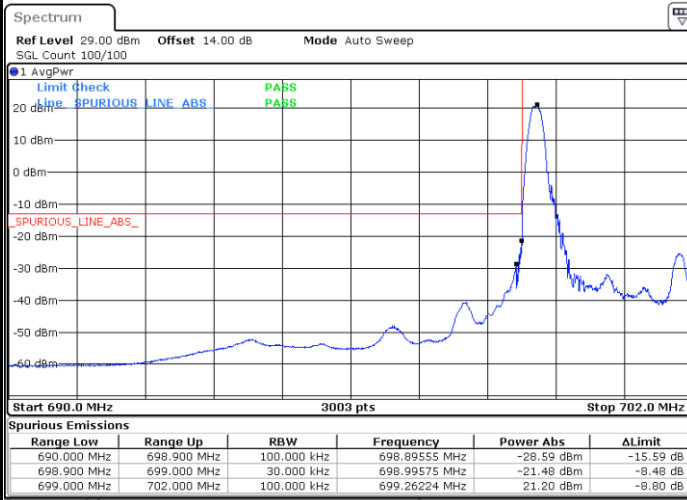


Date: 8.OCT.2021 22:04:10



LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



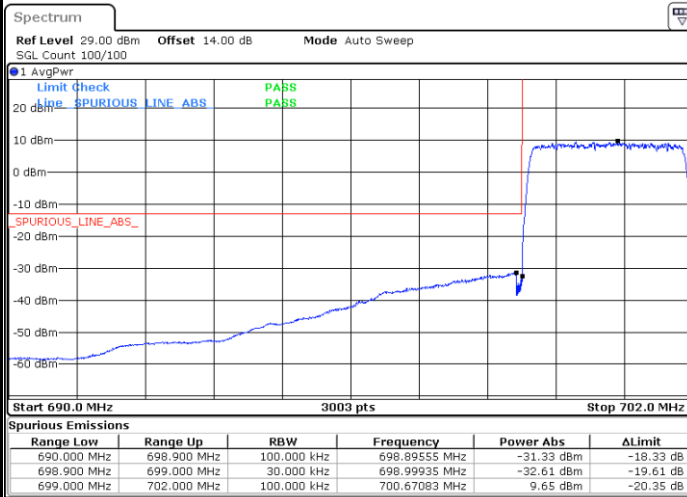
Date: 8.OCT.2021 20:54:25

Highest Band Edge / 1 RB



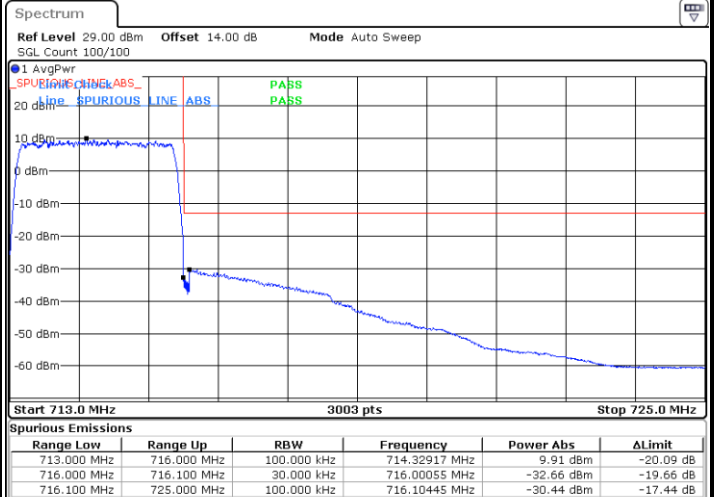
Date: 8.OCT.2021 21:01:45

Lowest Band Edge / Full RB



Date: 8.OCT.2021 20:52:13

Highest Band Edge / Full RB

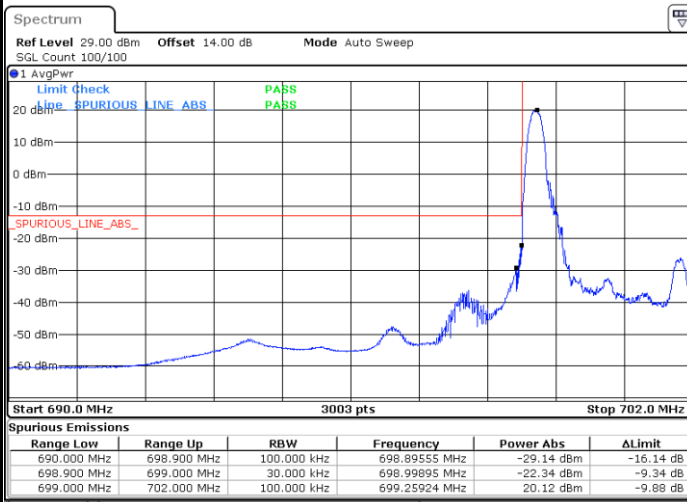


Date: 8.OCT.2021 20:59:34



LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



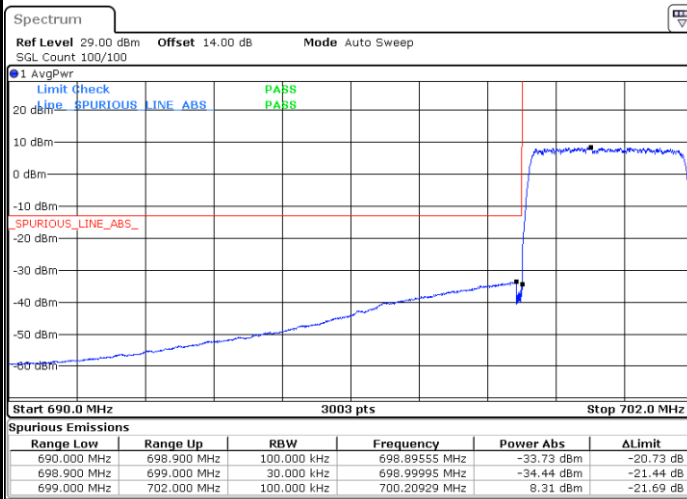
Date: 8.OCT.2021 20:53:41

Highest Band Edge / 1 RB



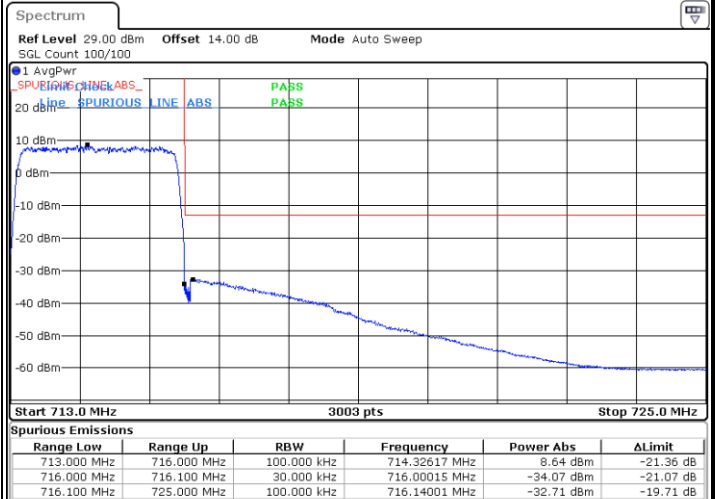
Date: 8.OCT.2021 21:01:01

Lowest Band Edge / Full RB



Date: 8.OCT.2021 20:52:57

Highest Band Edge / Full RB

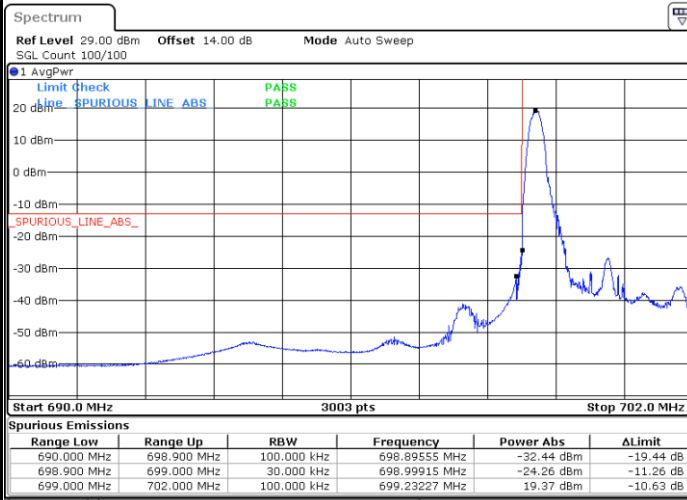


Date: 8.OCT.2021 21:00:18



LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



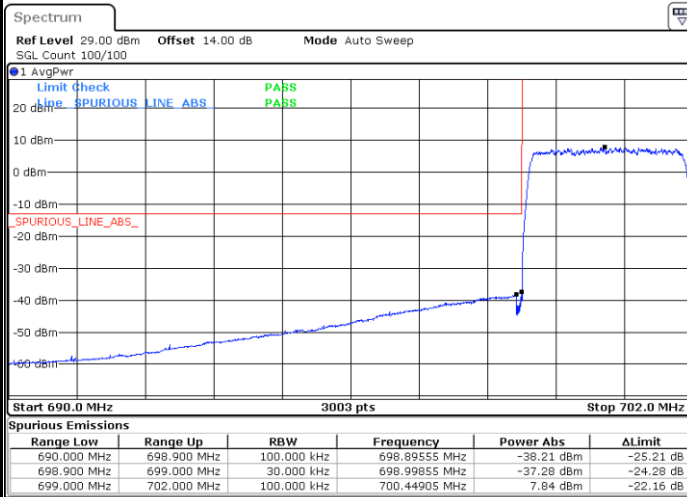
Date: 8.OCT.2021 21:05:04

Highest Band Edge / 1 RB



Date: 8.OCT.2021 21:08:44

Lowest Band Edge / Full RB



Date: 8.OCT.2021 21:04:20

Highest Band Edge / Full RB

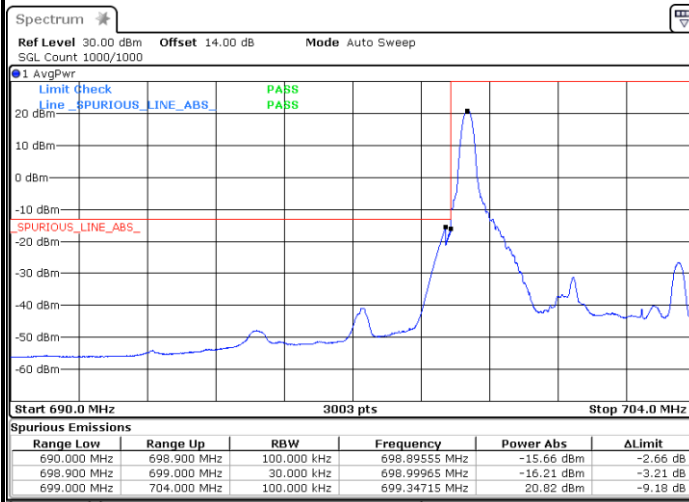


Date: 8.OCT.2021 21:08:00



LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



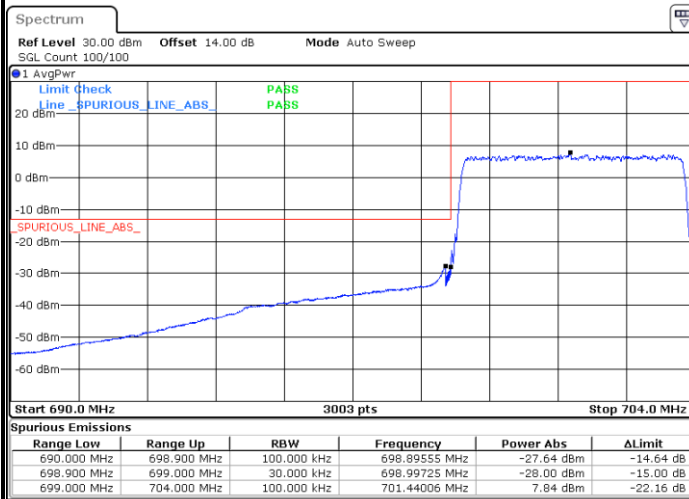
Date: 9.OCT.2021 00:34:05

Highest Band Edge / 1 RB



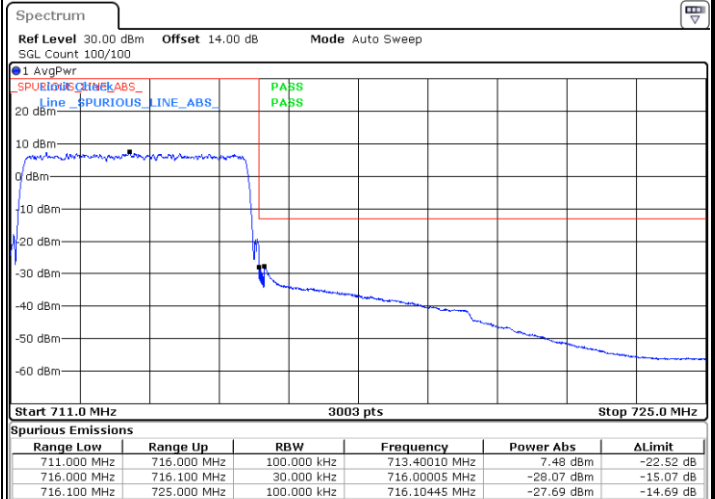
Date: 9.OCT.2021 01:01:18

Lowest Band Edge / Full RB



Date: 8.OCT.2021 21:17:11

Highest Band Edge / Full RB

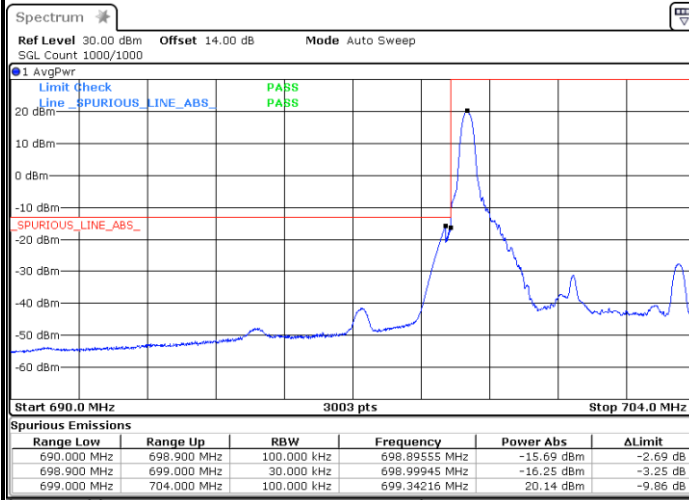


Date: 8.OCT.2021 21:24:32



LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



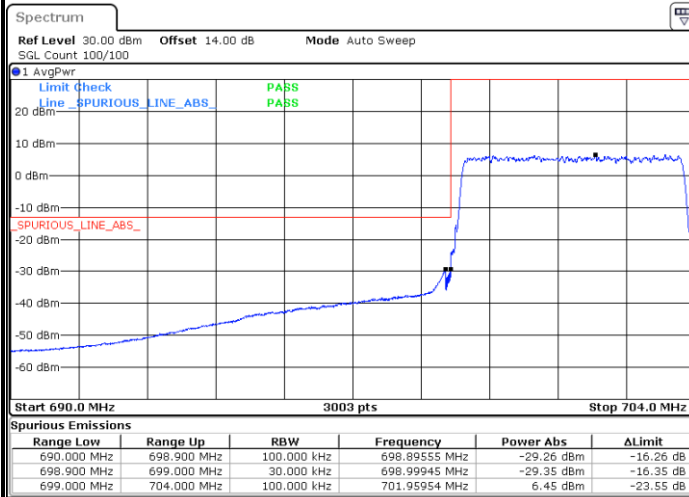
Date: 9.OCT.2021 00:39:02

Highest Band Edge / 1 RB



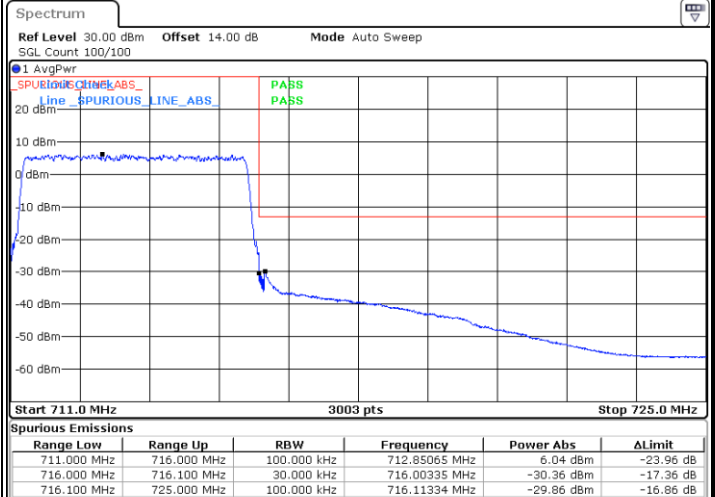
Date: 9.OCT.2021 00:40:08

Lowest Band Edge / Full RB



Date: 8.OCT.2021 21:17:55

Highest Band Edge / Full RB

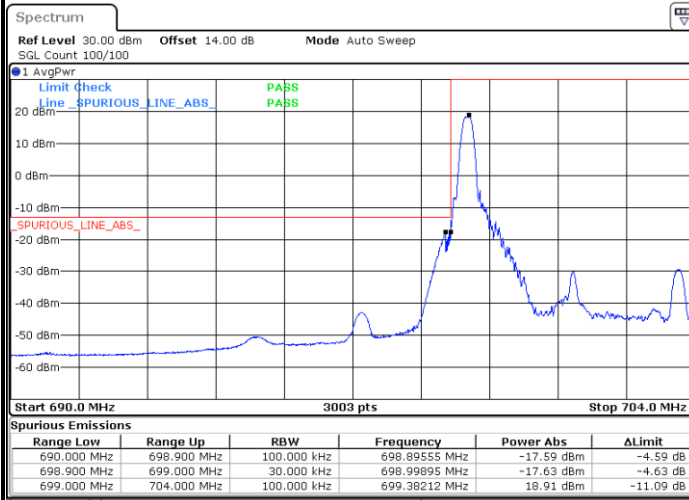


Date: 8.OCT.2021 21:25:16



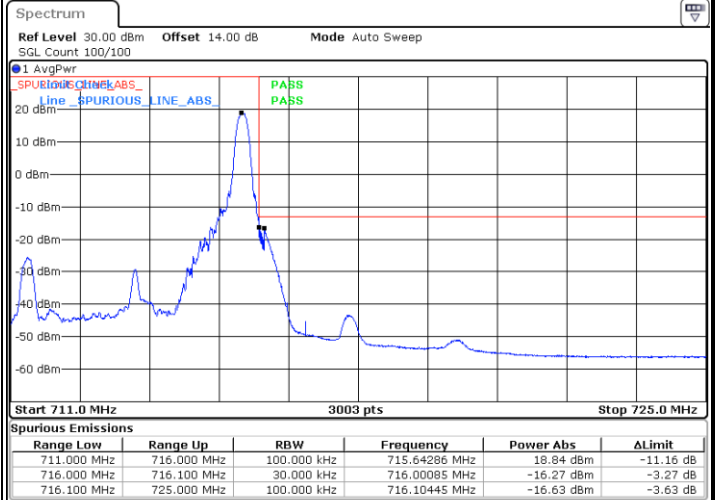
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



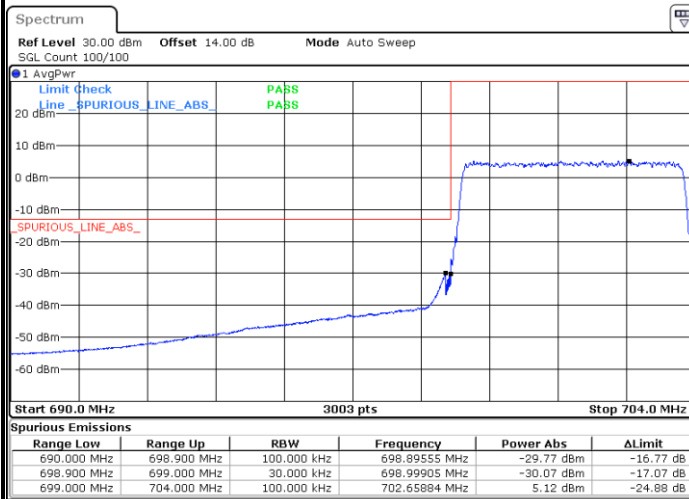
Date: 8.OCT.2021 21:11:18

Highest Band Edge / 1 RB



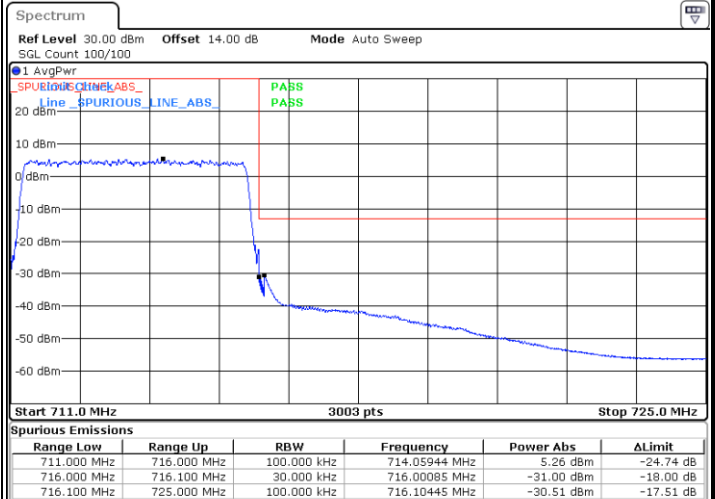
Date: 8.OCT.2021 21:14:59

Lowest Band Edge / Full RB



Date: 8.OCT.2021 21:10:34

Highest Band Edge / Full RB

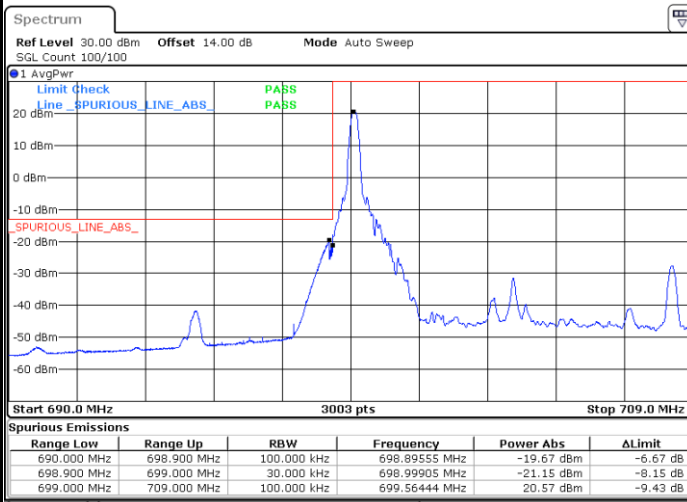


Date: 8.OCT.2021 21:14:15



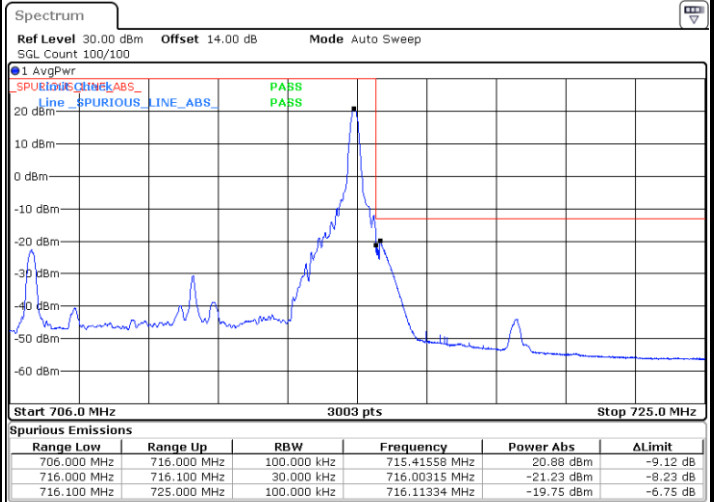
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



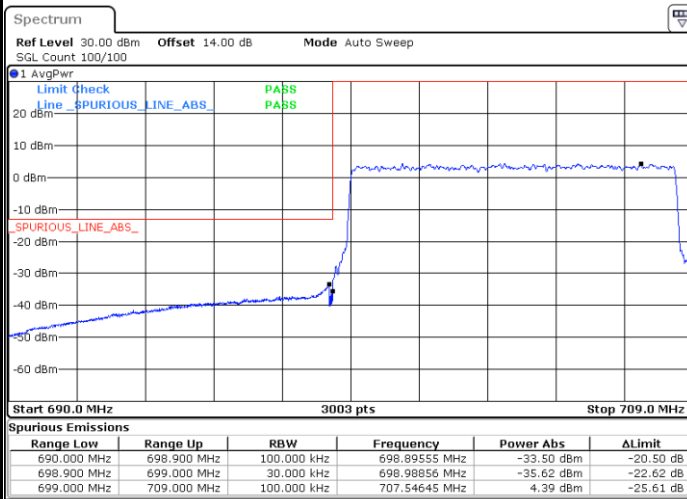
Date: 8 OCT.2021 21:31:52

Highest Band Edge / 1 RB



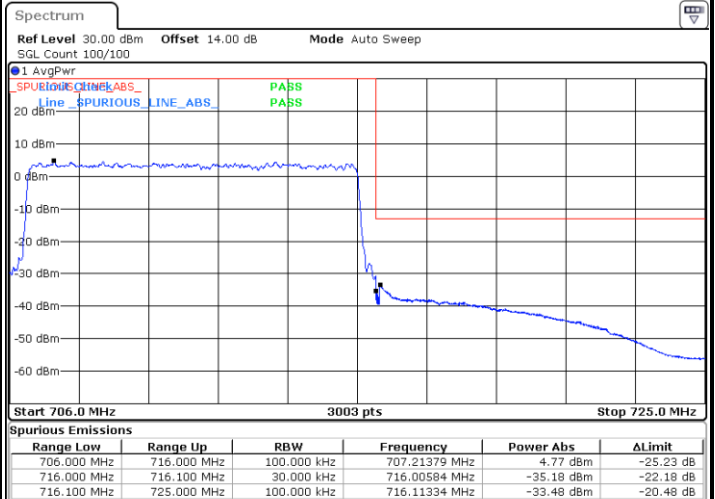
Date: 8 OCT.2021 21:39:12

Lowest Band Edge / Full RB



Date: 8 OCT.2021 21:29:40

Highest Band Edge / Full RB



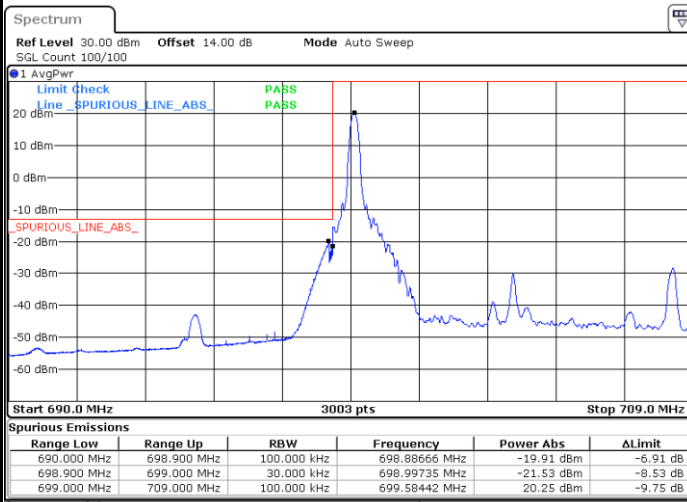
Date: 8 OCT.2021 21:37:01





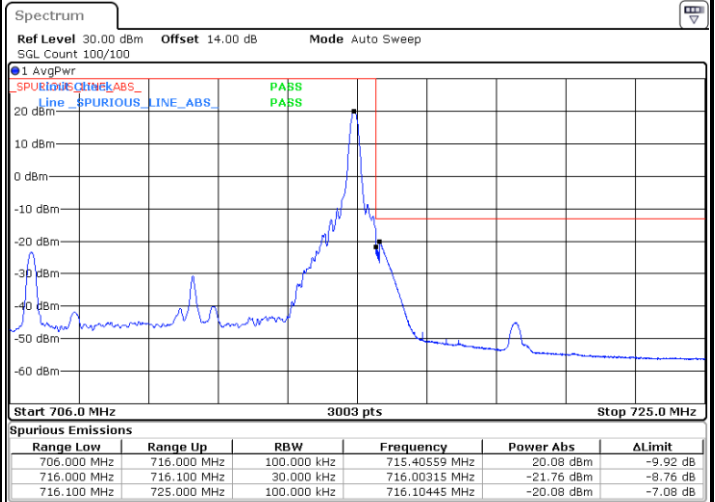
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



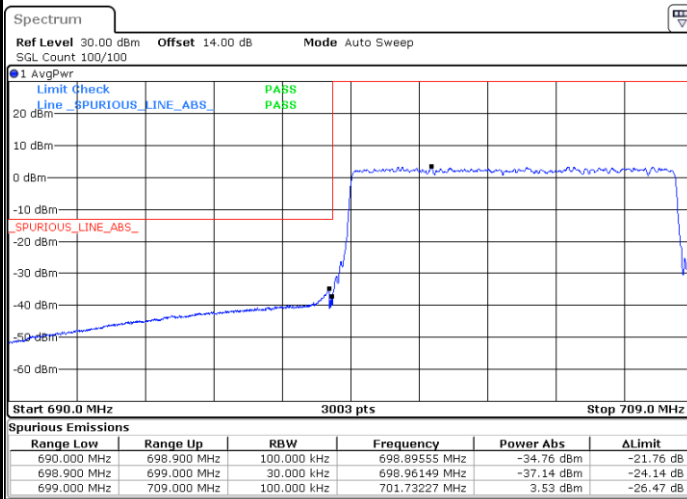
Date: 8.OCT.2021 21:31:08

Highest Band Edge / 1 RB



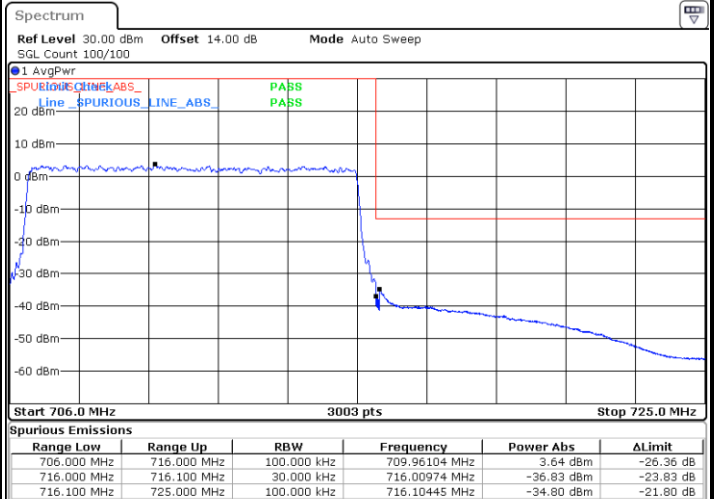
Date: 8.OCT.2021 21:38:28

Lowest Band Edge / Full RB



Date: 8.OCT.2021 21:30:24

Highest Band Edge / Full RB

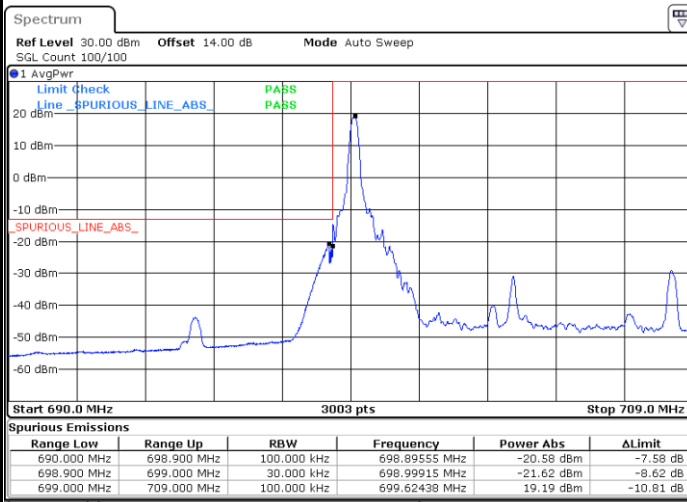


Date: 8.OCT.2021 21:37:45



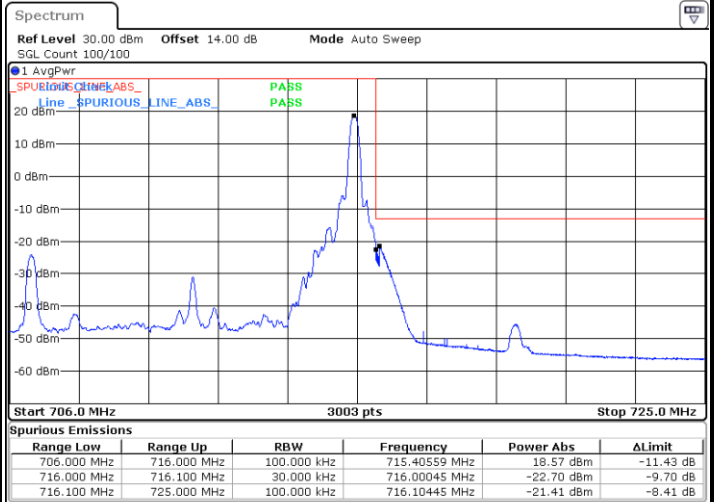
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



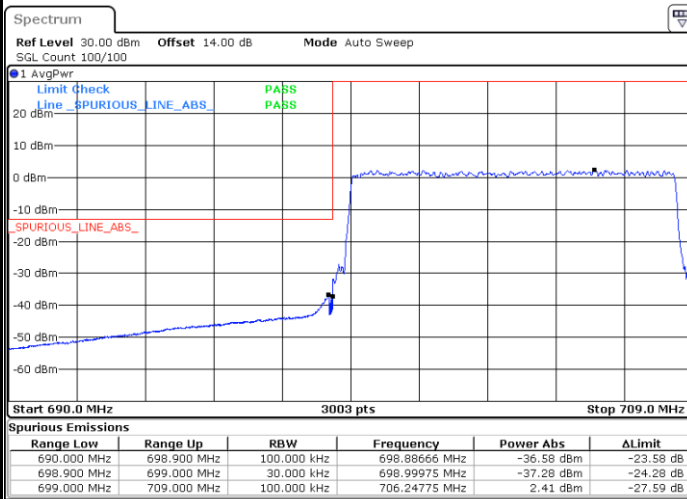
Date: 8.OCT.2021 21:42:31

Highest Band Edge / 1 RB



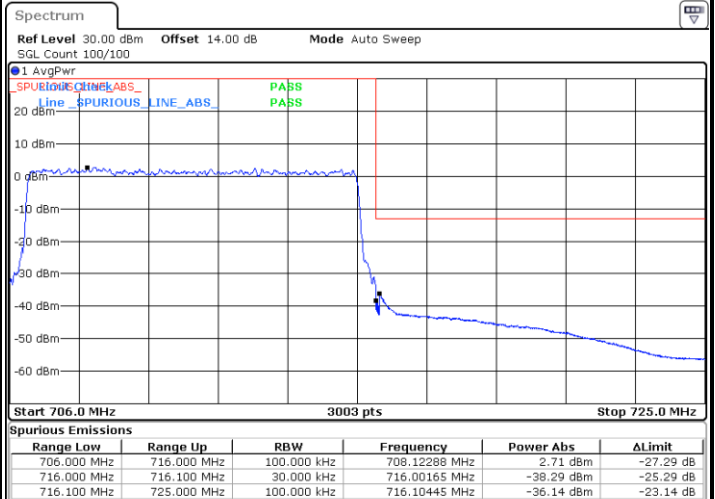
Date: 8.OCT.2021 21:46:11

Lowest Band Edge / Full RB



Date: 8.OCT.2021 21:41:47

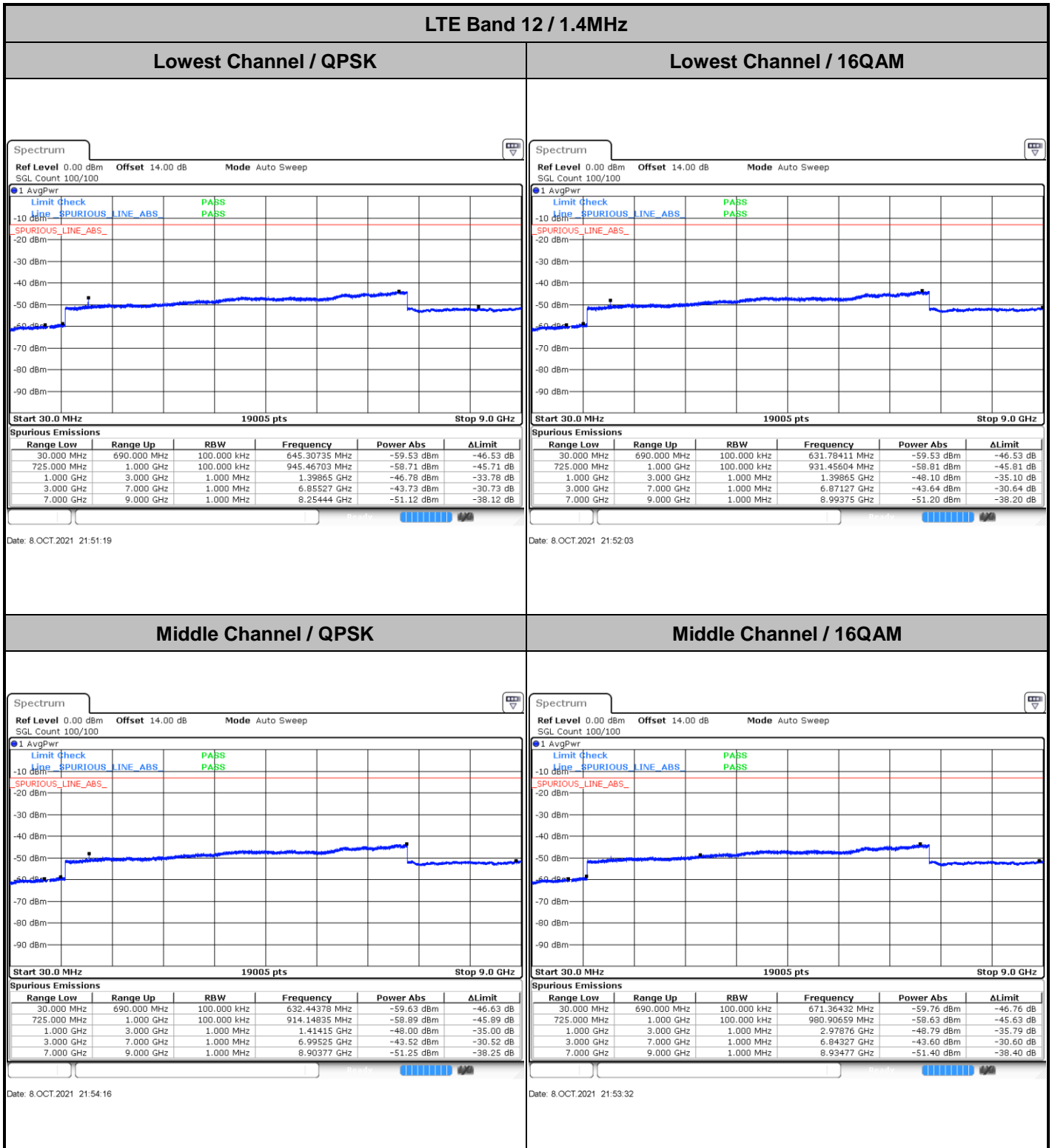
Highest Band Edge / Full RB



Date: 8.OCT.2021 21:45:27



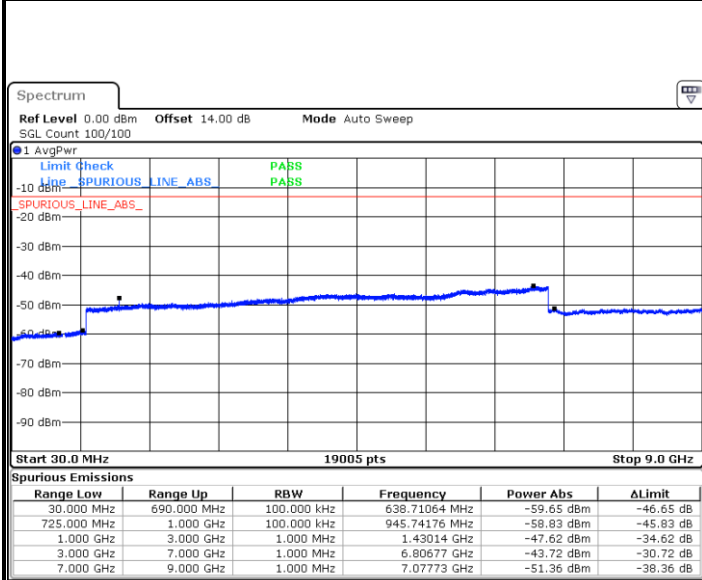
# Conducted Spurious Emission





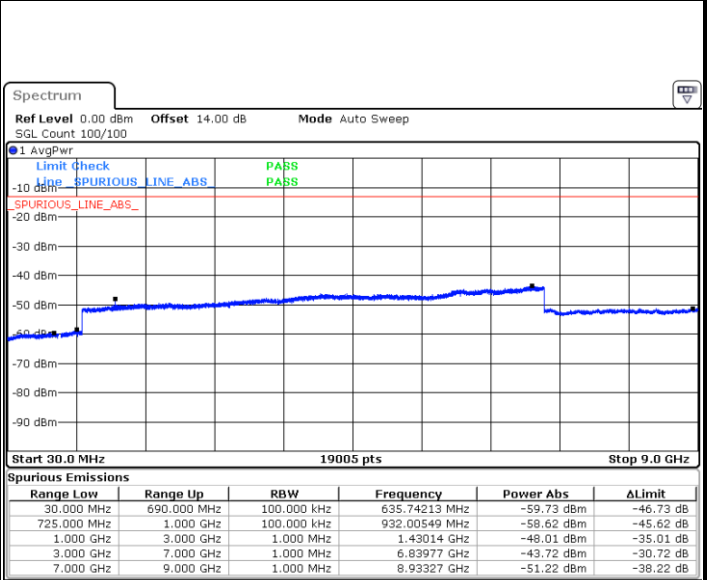
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 8.OCT.2021 21:58:40

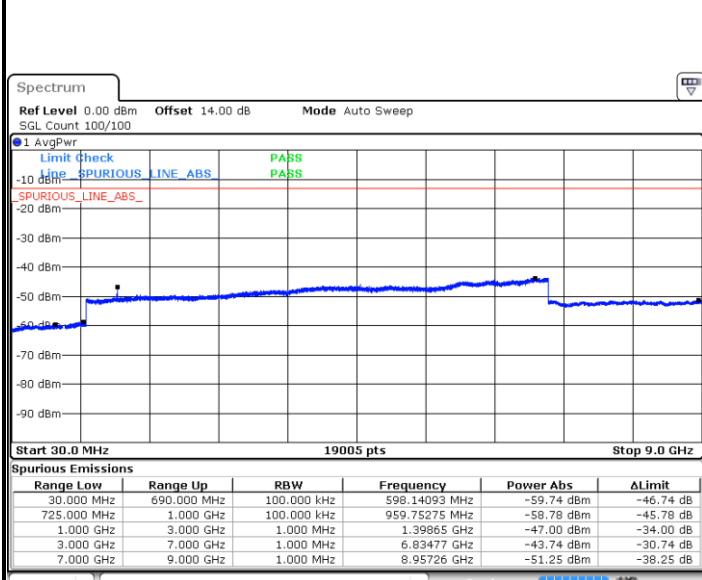
Highest Channel / 16QAM



Date: 8.OCT.2021 21:59:24

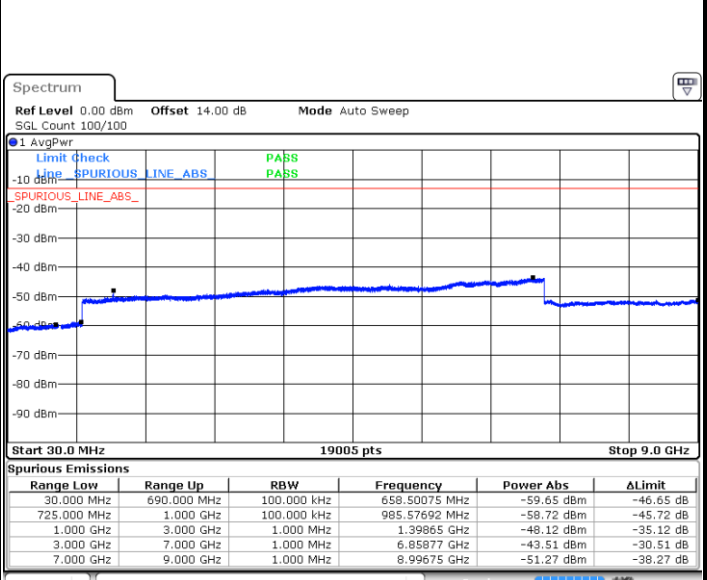
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 8.OCT.2021 20:55:09

Lowest Channel / 16QAM

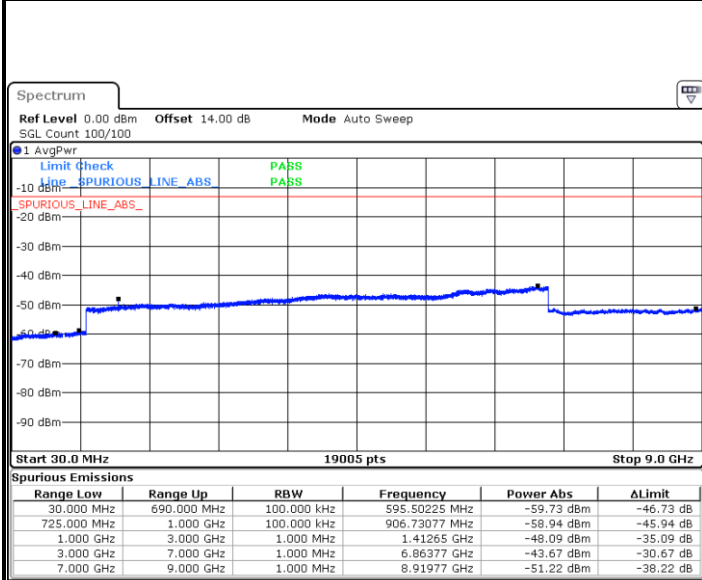


Date: 8.OCT.2021 20:55:53



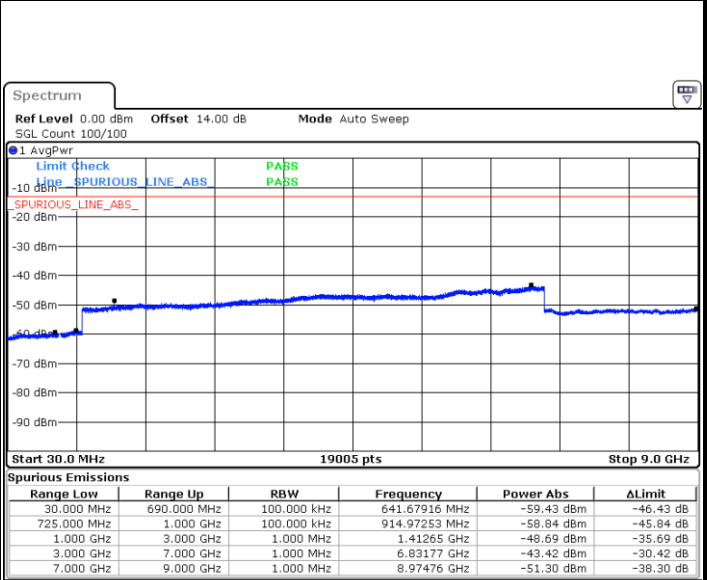
LTE Band 12 / 3MHz

Middle Channel / QPSK



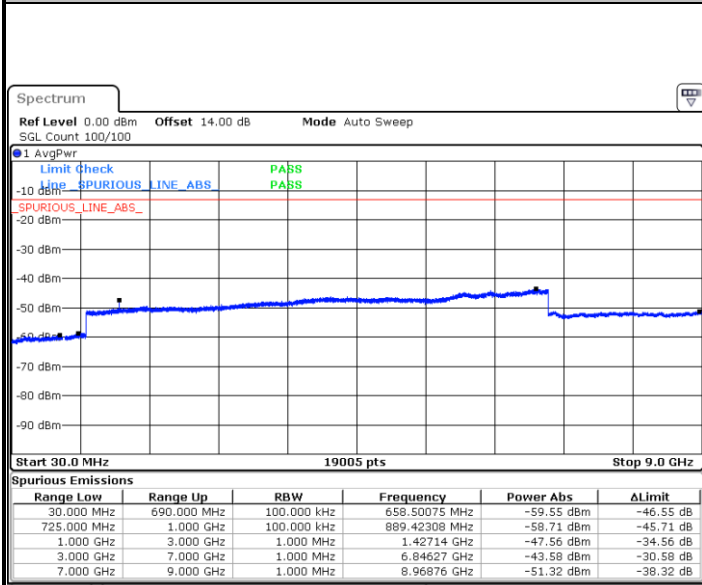
Date: 8.OCT.2021 20:58:06

Middle Channel / 16QAM



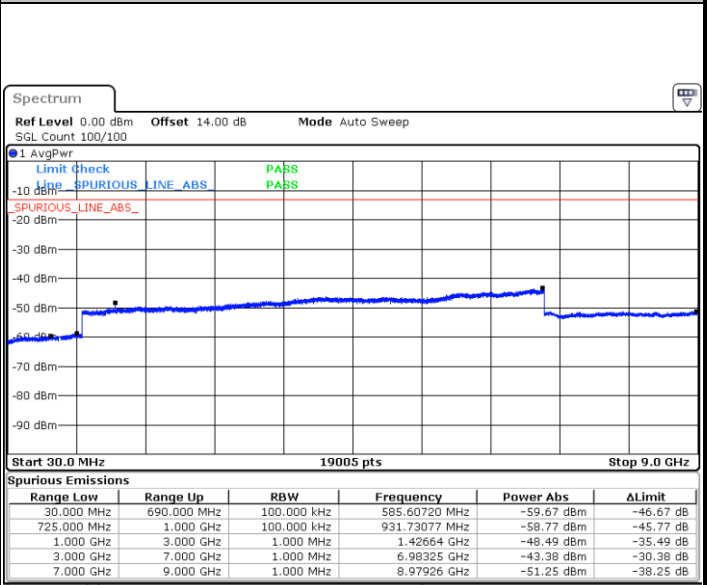
Date: 8.OCT.2021 20:57:22

Highest Channel / QPSK



Date: 8.OCT.2021 21:02:30

Highest Channel / 16QAM



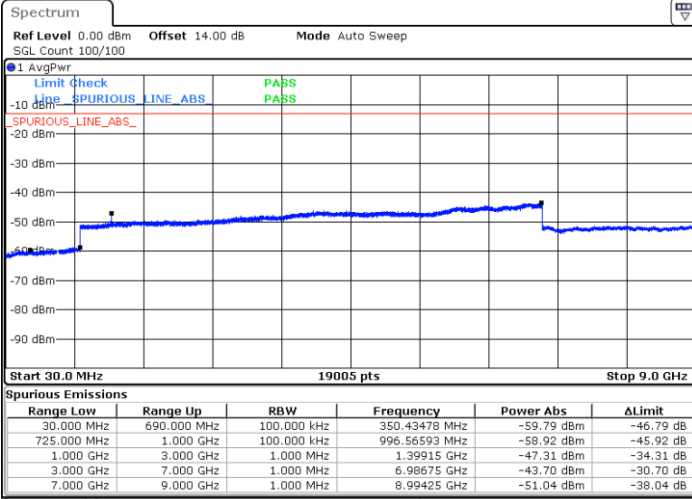
Date: 8.OCT.2021 21:03:14



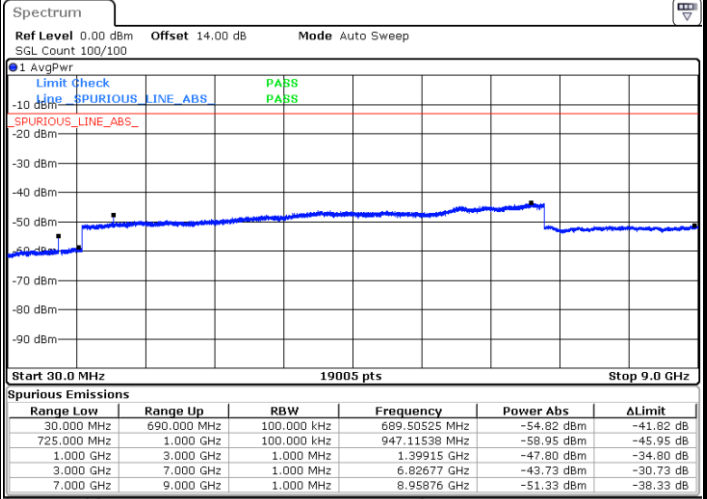
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



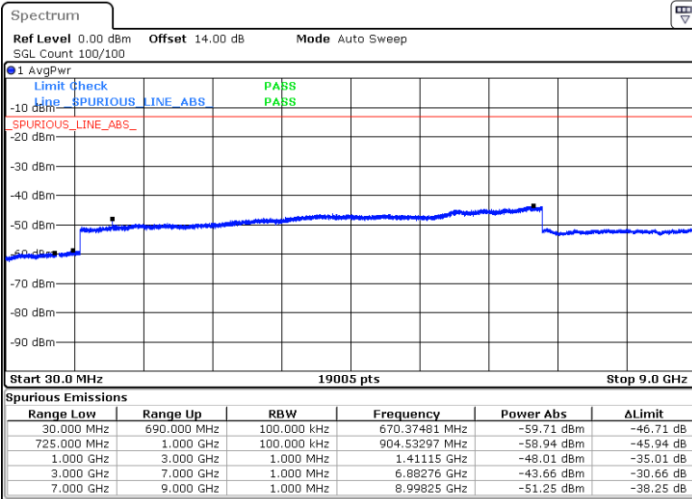
Date: 8.OCT.2021 21:20:07



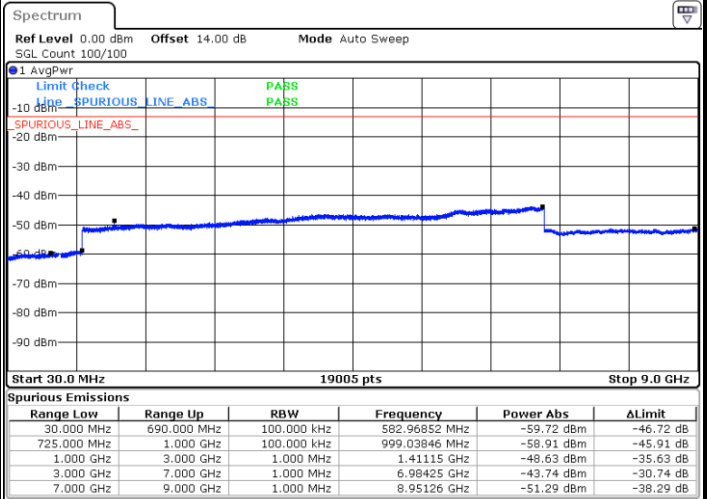
Date: 8.OCT.2021 21:20:52

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 8.OCT.2021 21:23:04

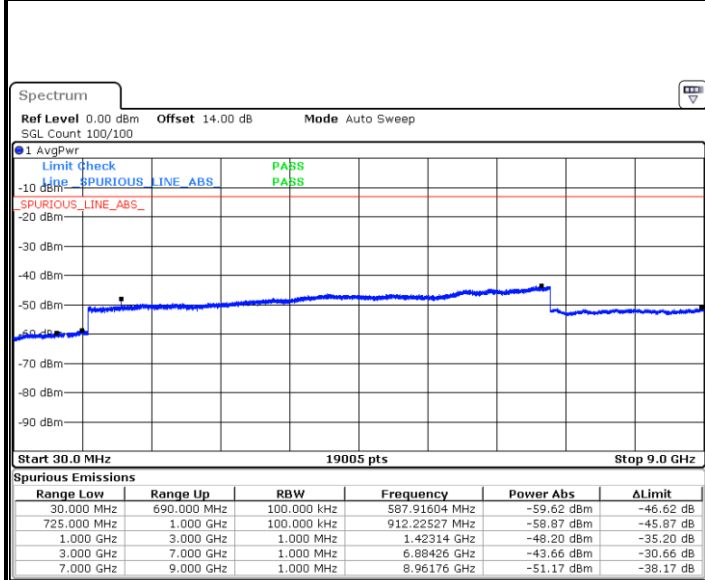


Date: 8.OCT.2021 21:22:20



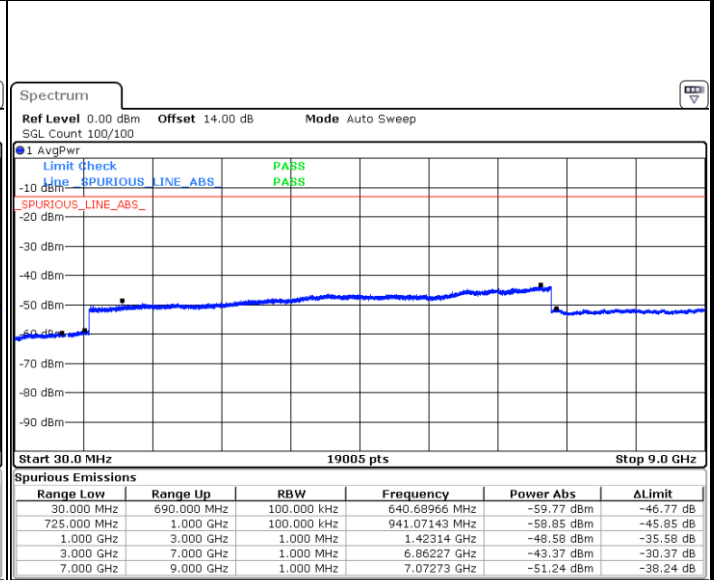
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 8.OCT.2021 21:28:13

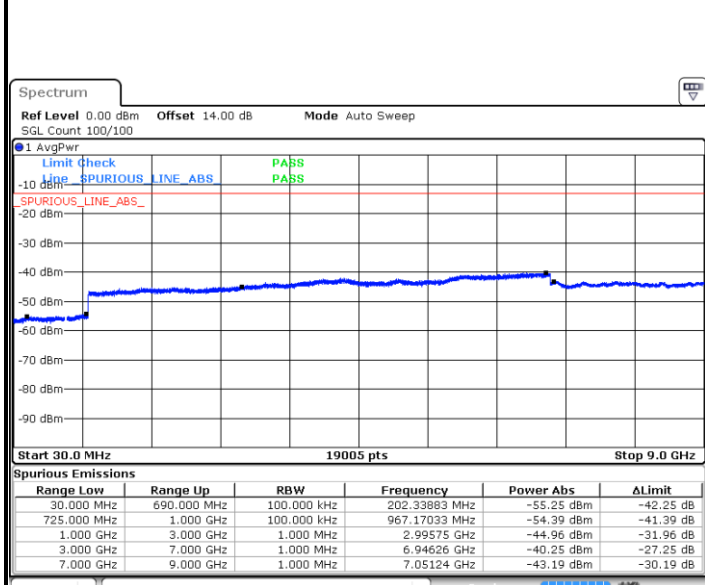
Highest Channel / 16QAM



Date: 8.OCT.2021 21:27:28

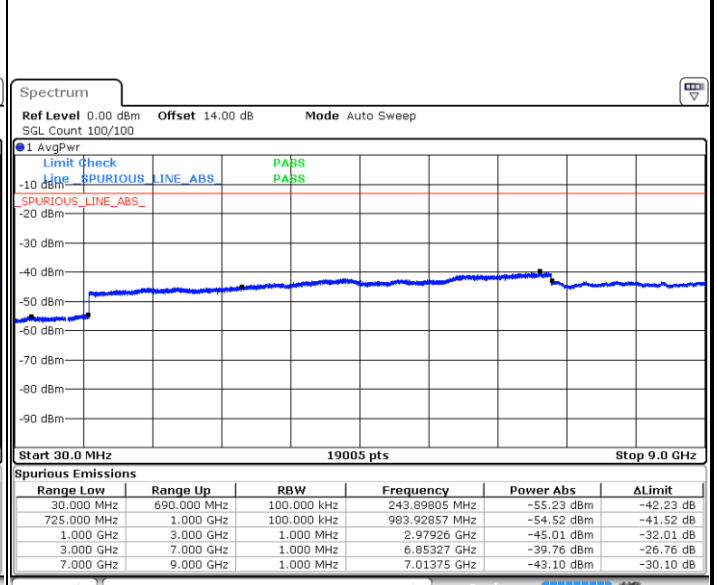
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 8.OCT.2021 21:32:37

Lowest Channel / 16QAM

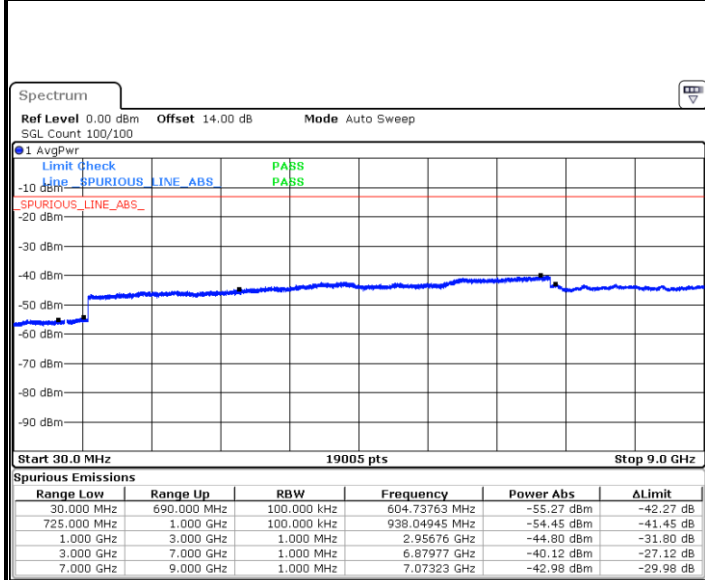


Date: 8.OCT.2021 21:33:21



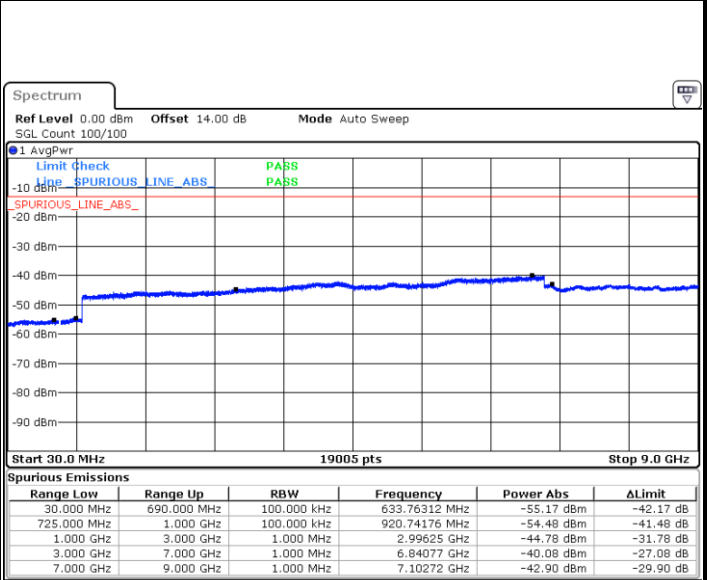
LTE Band 12 / 10MHz

Middle Channel / QPSK



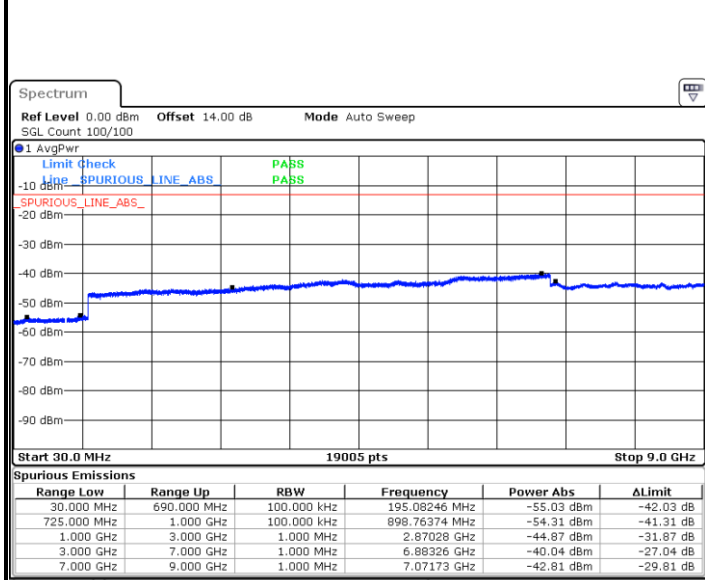
Date: 8.OCT.2021 21:35:33

Middle Channel / 16QAM



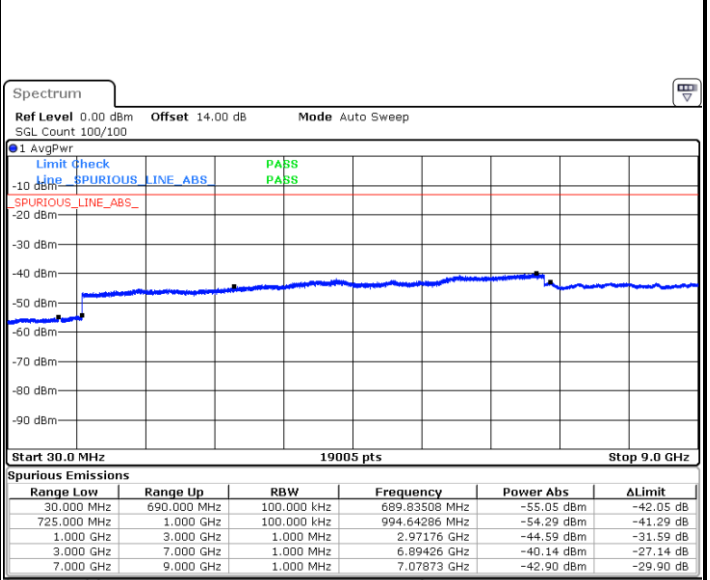
Date: 8.OCT.2021 21:34:49

Highest Channel / QPSK



Date: 8.OCT.2021 21:39:57

Highest Channel / 16QAM



Date: 8.OCT.2021 21:40:41

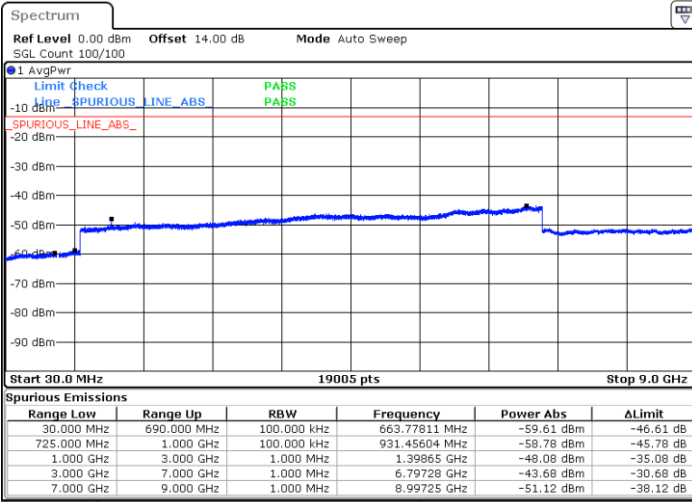




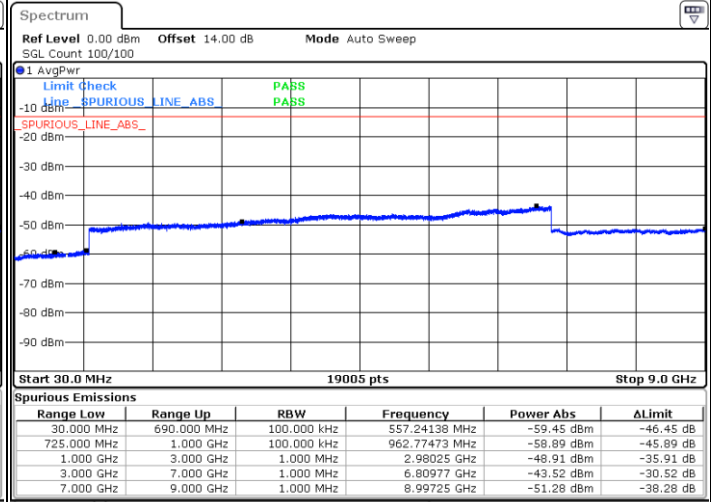
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

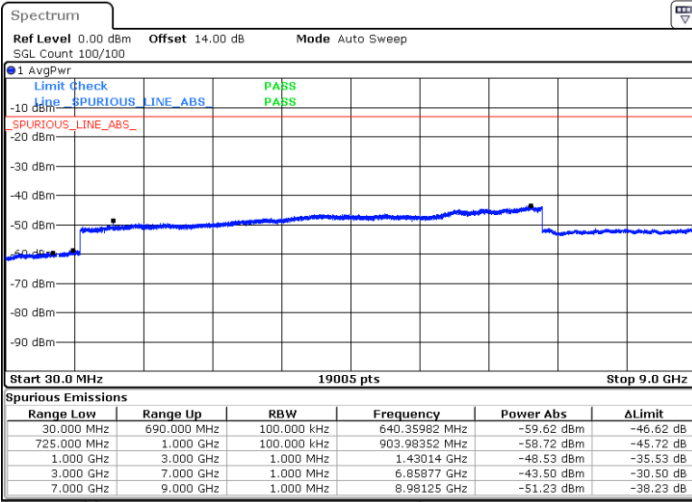


Date: 8.OCT.2021 22:01:58



Date: 8.OCT.2021 22:03:05

Highest Channel / 64QAM



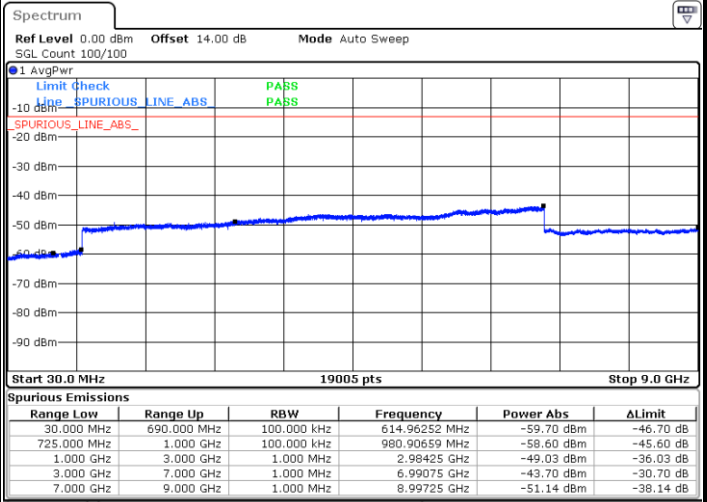
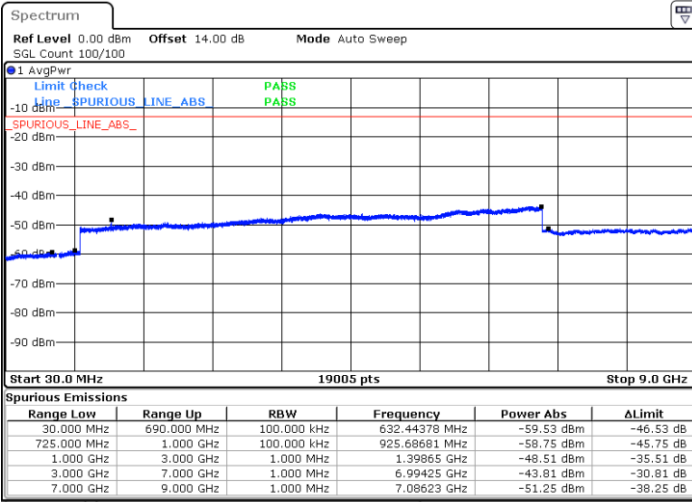
Date: 8.OCT.2021 22:05:39



LTE Band 12 / 3MHz

Lowest Channel / 64QAM

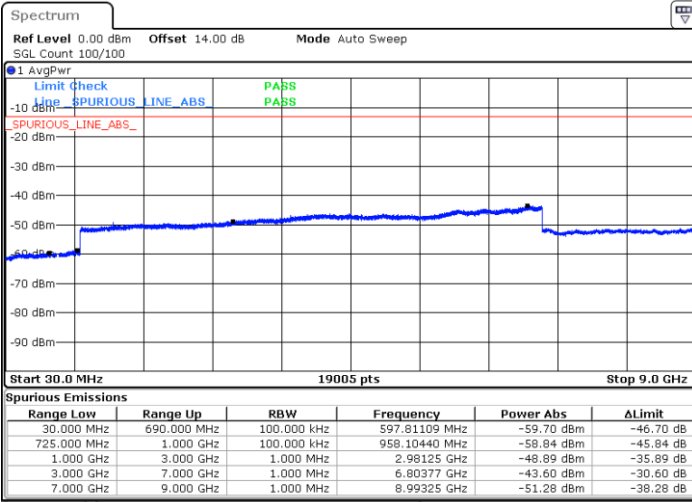
Middle Channel / 64QAM



Date: 8.OCT.2021 21:05:49

Date: 8.OCT.2021 21:06:55

Highest Channel / 64QAM



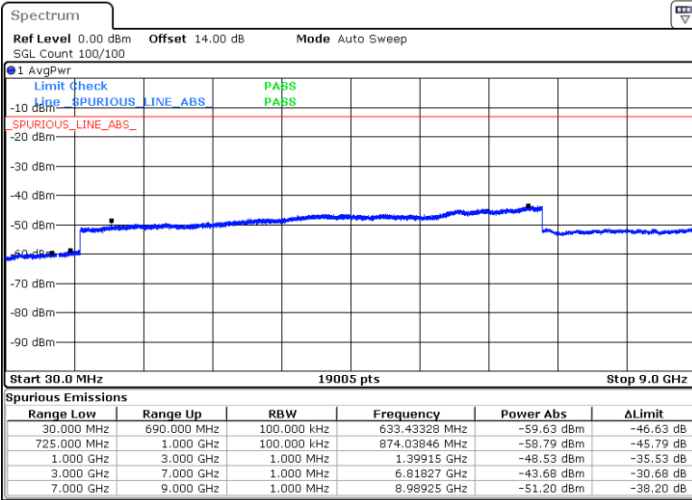
Date: 8.OCT.2021 21:09:29



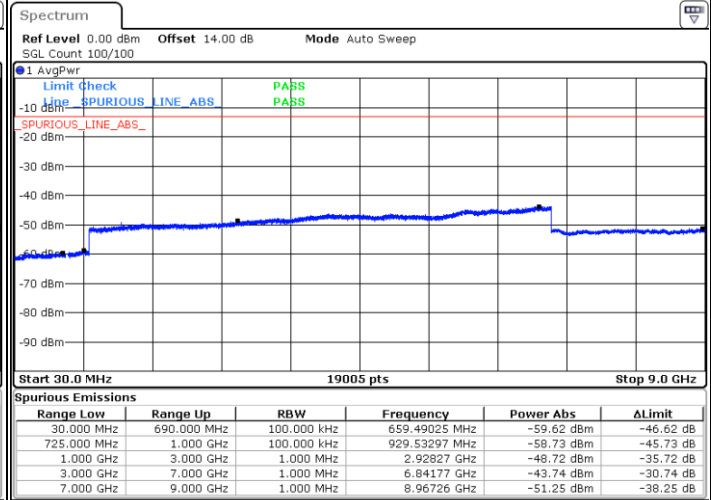
LTE Band 12 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

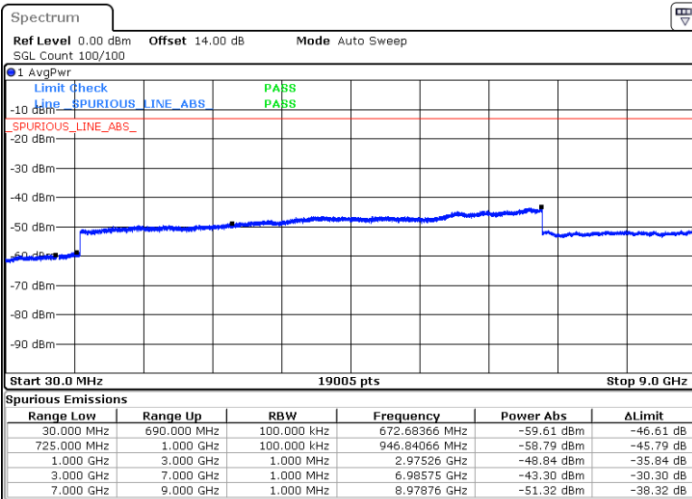


Date: 8.OCT.2021 21:12:03



Date: 8.OCT.2021 21:13:09

Highest Channel / 64QAM



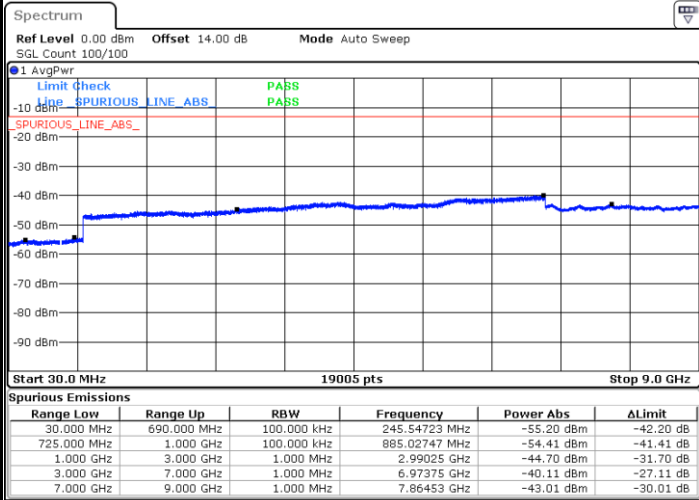
Date: 8.OCT.2021 21:15:43



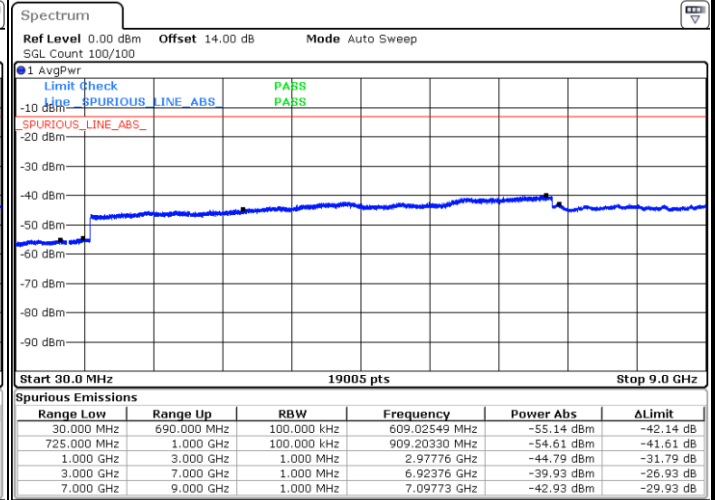
LTE Band 12 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

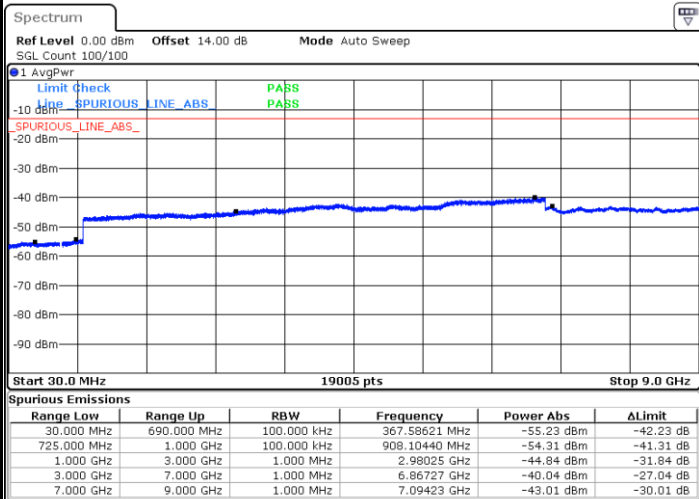


Date: 8.OCT.2021 21:43:15



Date: 8.OCT.2021 21:44:22

Highest Channel / 64QAM



Date: 8.OCT.2021 21:46:55



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	0.0010	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0004	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0025	
-20	Normal Voltage	0.0033	
-30	Normal Voltage	0.0047	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0008	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.43V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 13

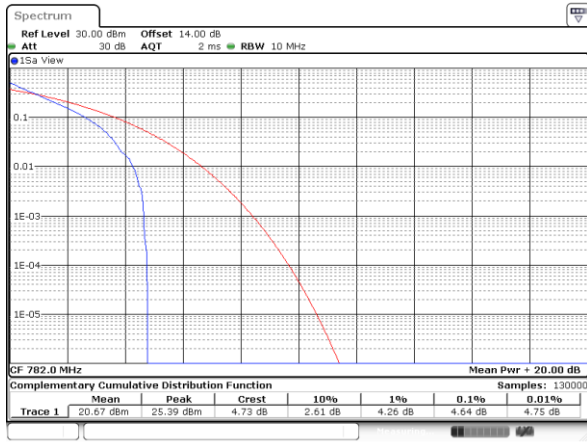
## Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	4.64	5.30	5.59	6.20	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.09	6.35	-	-	
Highest CH	-	-	-	-	



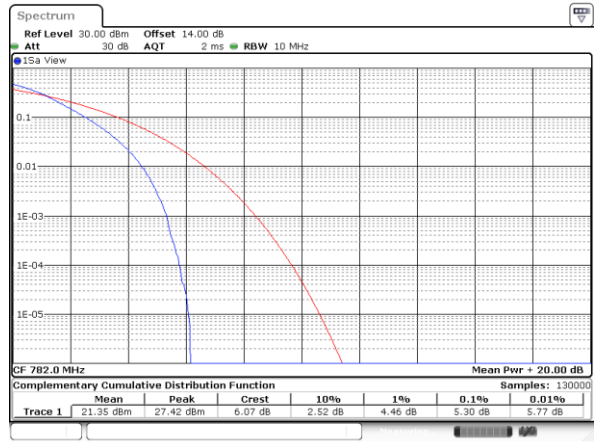
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 8.OCT.2021 23:34:59

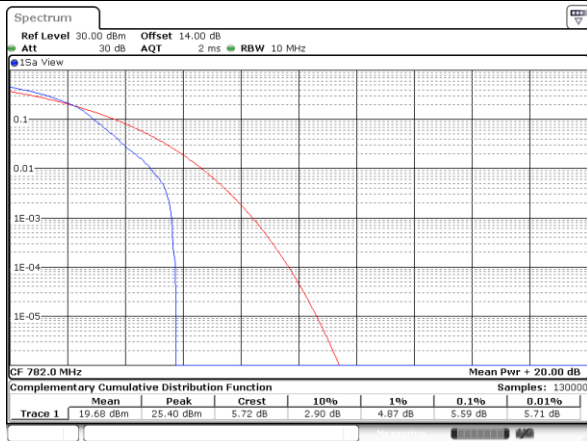
Middle Channel / Full RB



Date: 8.OCT.2021 23:35:10

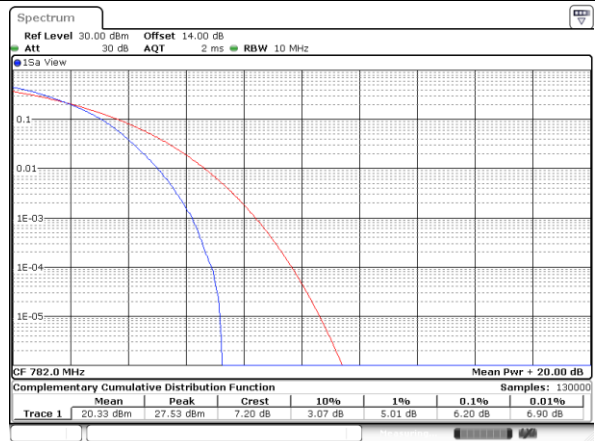
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 8.OCT.2021 23:34:40

Middle Channel / Full RB



Date: 8.OCT.2021 23:34:49

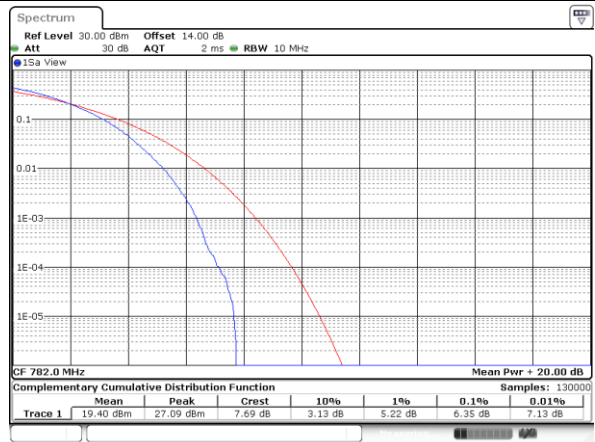
LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 8.OCT.2021 23:34:20

Middle Channel / Full RB



Date: 8.OCT.2021 23:34:30



26dB Bandwidth

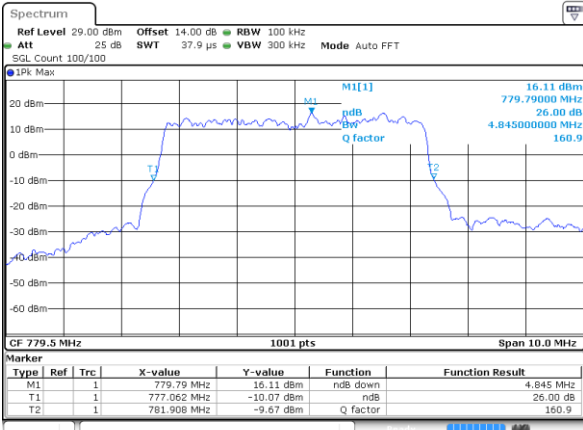
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.85	5.10	-	-	-	-	-	-
Middle CH	-	-	-	-	5.05	5.04	9.85	9.71	-	-	-	-
Highest CH	-	-	-	-	4.90	5.01	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.96	-	-	-	-	-	-	-
Middle CH	-	-	-	-	5.12	-	10.17	-	-	-	-	-
Highest CH	-	-	-	-	5.02	-	-	-	-	-	-	-





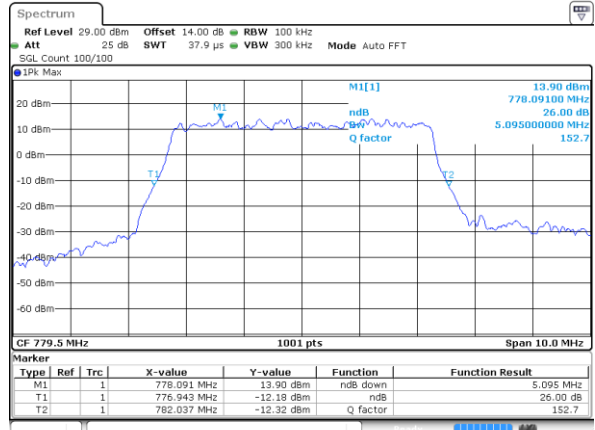
LTE Band 13

Lowest Channel / 5MHz / QPSK



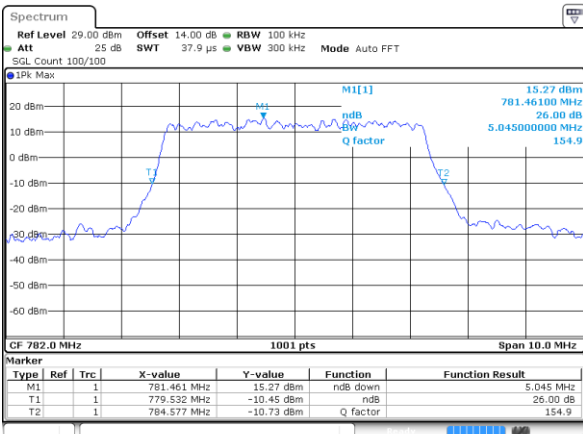
Date: 8.OCT.2021 22:47:01

Lowest Channel / 5MHz / 16QAM



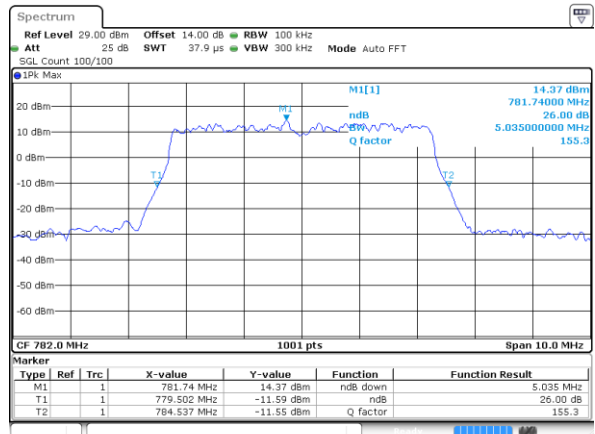
Date: 8.OCT.2021 22:46:51

Middle Channel / 5MHz / QPSK



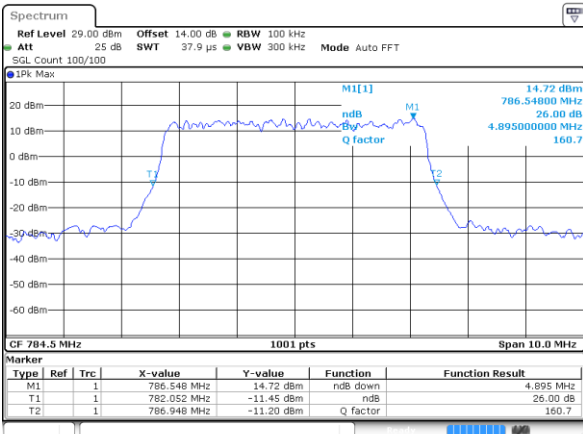
Date: 8.OCT.2021 22:56:45

Middle Channel / 5MHz / 16QAM



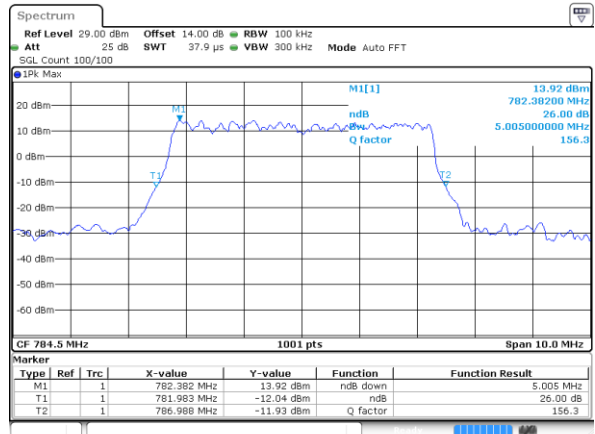
Date: 8.OCT.2021 22:56:56

Highest Channel / 5MHz / QPSK



Date: 8.OCT.2021 22:58:01

Highest Channel / 5MHz / 16QAM

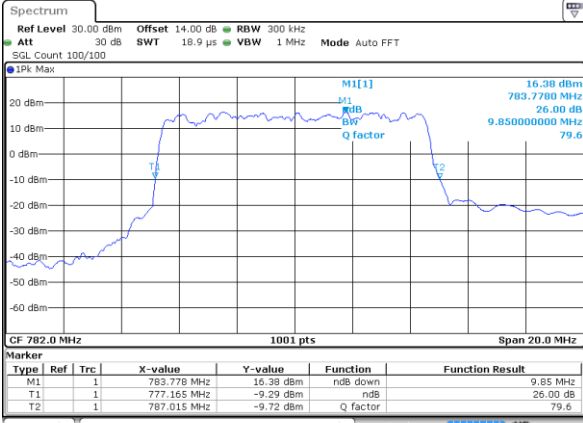


Date: 8.OCT.2021 22:57:50



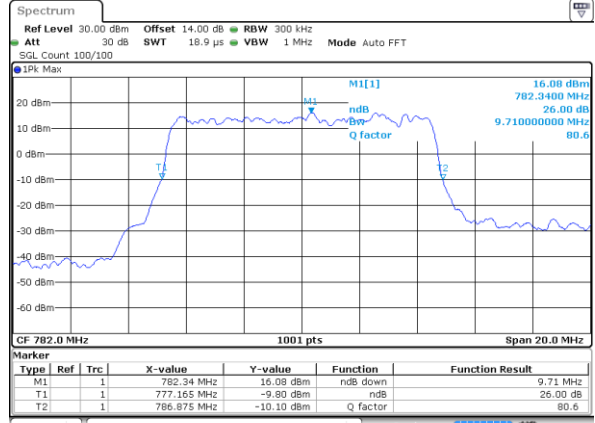
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 8.OCT.2021 23:16:44

Middle Channel / 10MHz / 16QAM

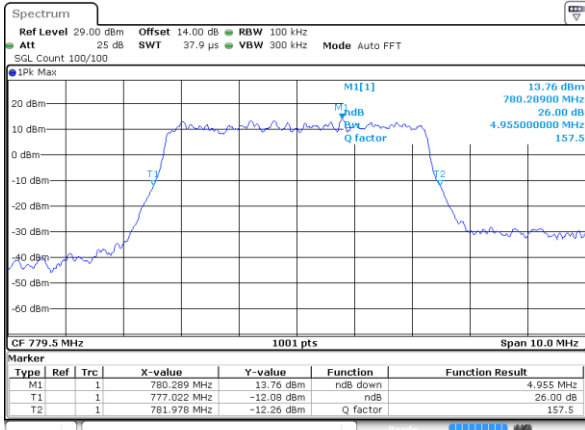


Date: 8.OCT.2021 23:16:33



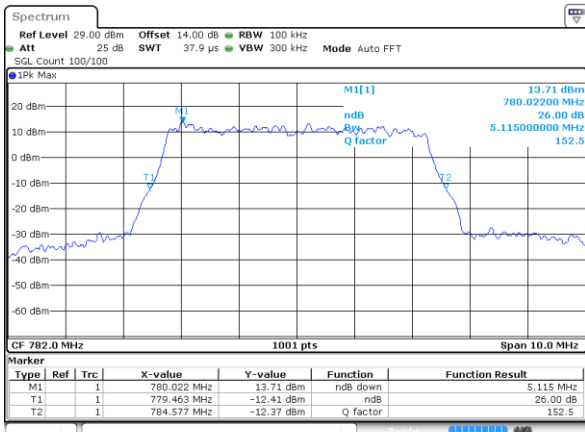
LTE Band 13

Lowest Channel / 5MHz / 64QAM



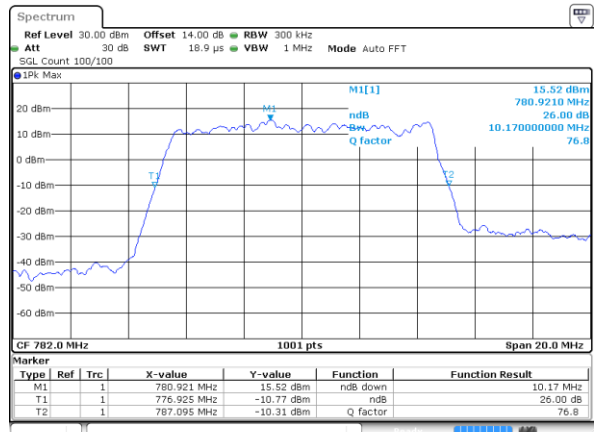
Date: 8.OCT.2021 23:06:28

Middle Channel / 5MHz / 64QAM



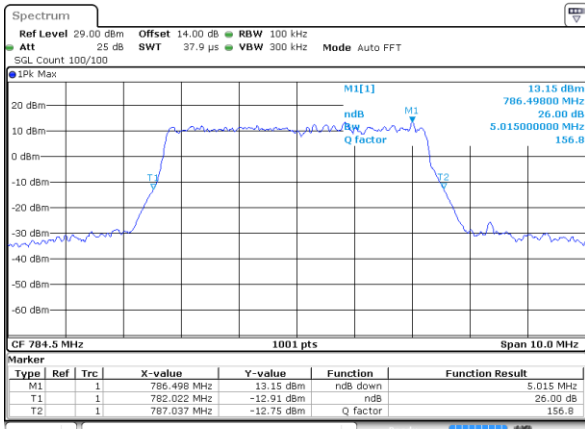
Date: 8.OCT.2021 23:11:25

Middle Channel / 10MHz / 64QAM



Date: 8.OCT.2021 23:28:28

Highest Channel / 5MHz / 64QAM



Date: 8.OCT.2021 23:11:58



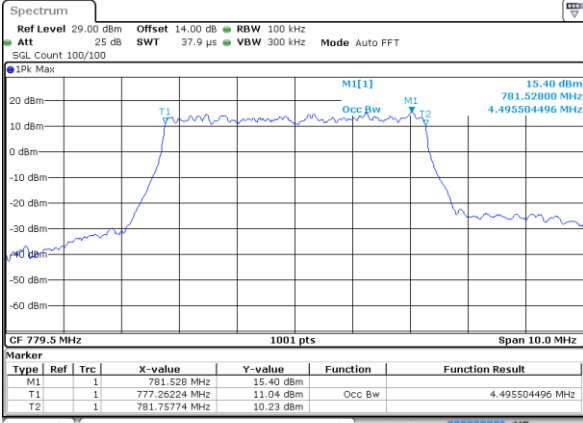
### Occupied Bandwidth

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
Lowest CH	-	-	-	-	4.50	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	4.46	9.03	9.01	-	-	-	-
Highest CH	-	-	-	-	4.50	4.52	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	-	9.05	-	-	-	-	-
Highest CH	-	-	-	-	4.51	-	-	-	-	-	-	-



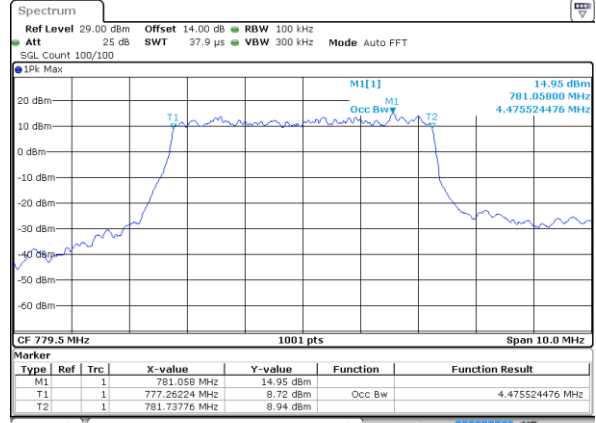
LTE Band 13

Lowest Channel / 5MHz / QPSK



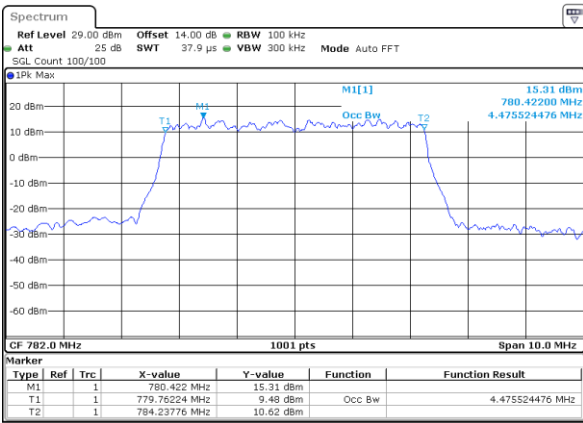
Date: 8 OCT 2021 22:46:29

Lowest Channel / 5MHz / 16QAM



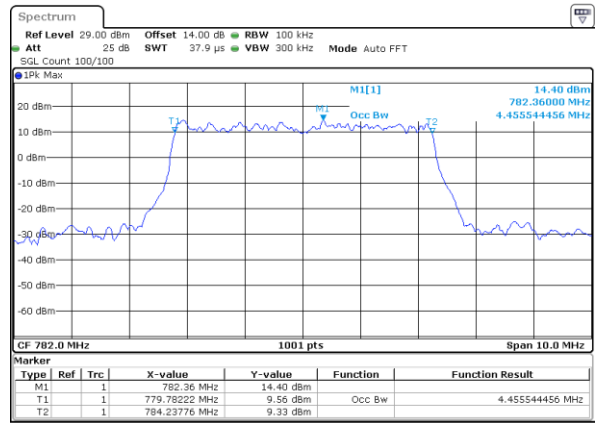
Date: 8 OCT 2021 22:46:40

Middle Channel / 5MHz / QPSK



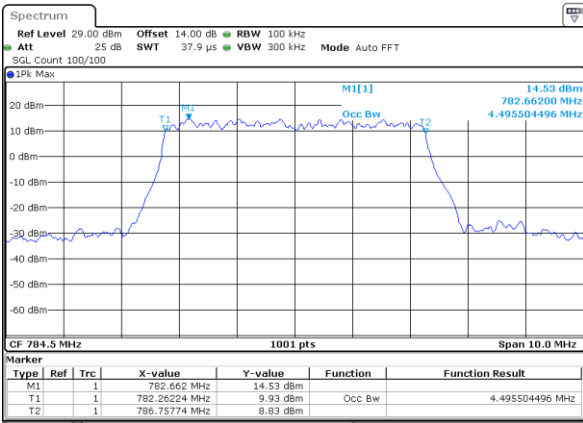
Date: 8 OCT 2021 22:57:18

Middle Channel / 5MHz / 16QAM



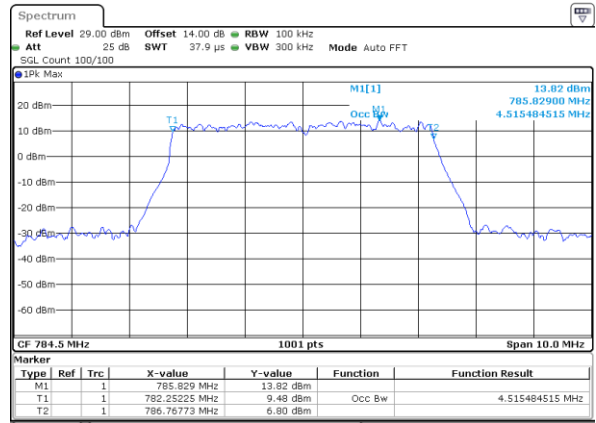
Date: 8 OCT 2021 22:57:06

Highest Channel / 5MHz / QPSK



Date: 8 OCT 2021 22:57:28

Highest Channel / 5MHz / 16QAM

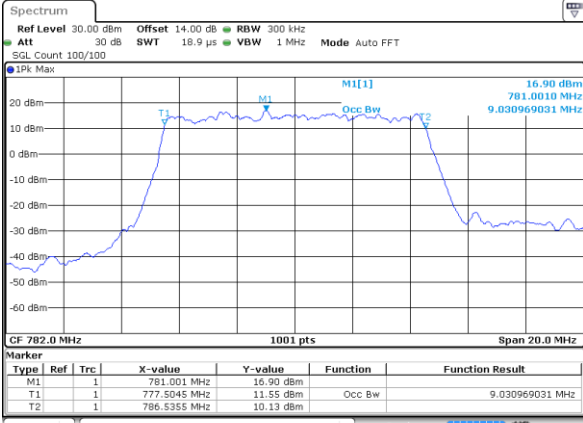


Date: 8 OCT 2021 22:57:39



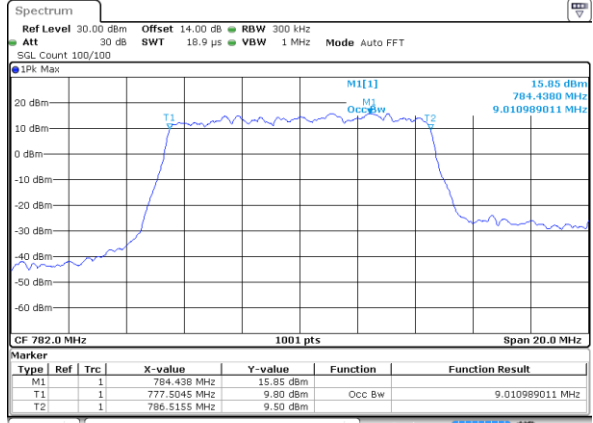
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 8 OCT 2021 23:16:11

Middle Channel / 10MHz / 16QAM

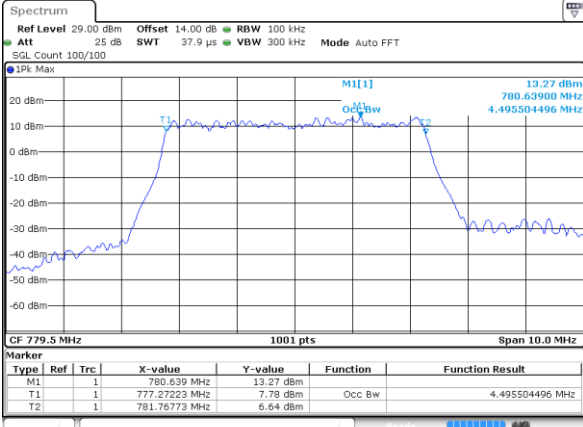


Date: 8 OCT 2021 23:16:22



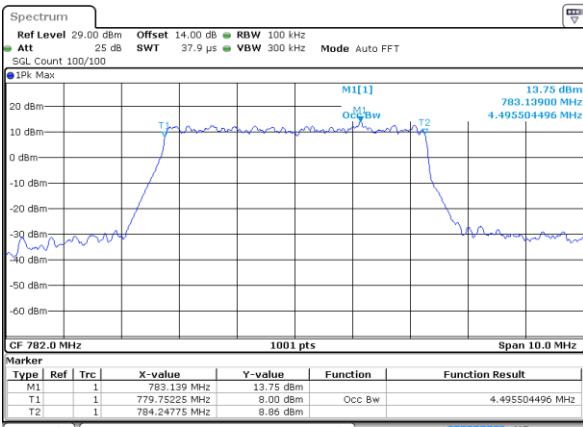
LTE Band 13

Lowest Channel / 5MHz / 64QAM



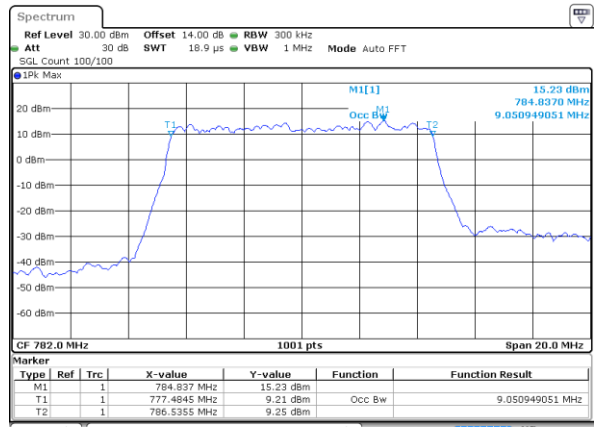
Date: 8.OCT.2021 23:06:16

Middle Channel / 5MHz / 64QAM



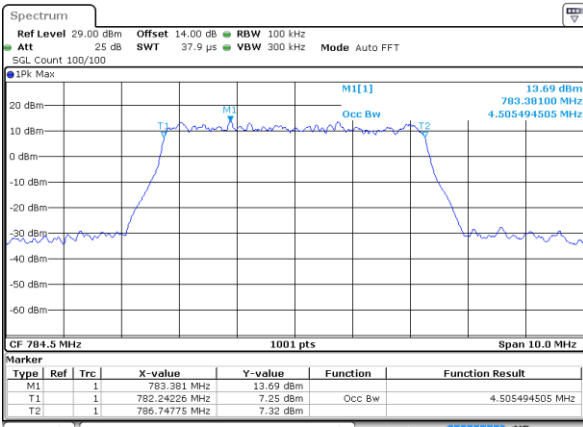
Date: 8.OCT.2021 23:11:36

Middle Channel / 10MHz / 64QAM



Date: 8.OCT.2021 23:28:17

Highest Channel / 5MHz / 64QAM



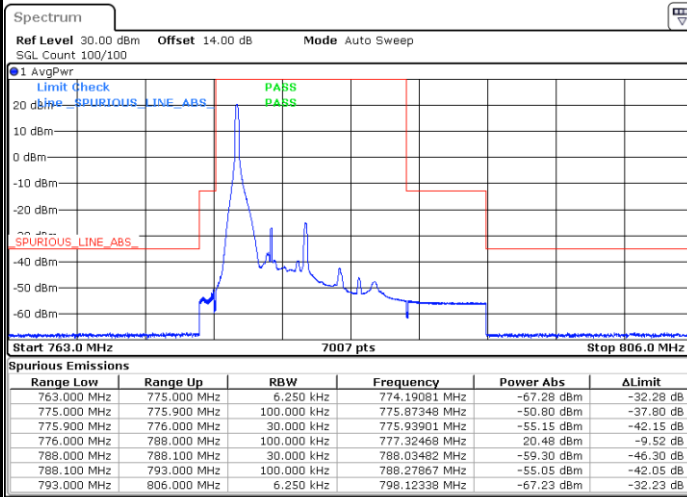
Date: 8.OCT.2021 23:11:47



# Conducted Band Edge

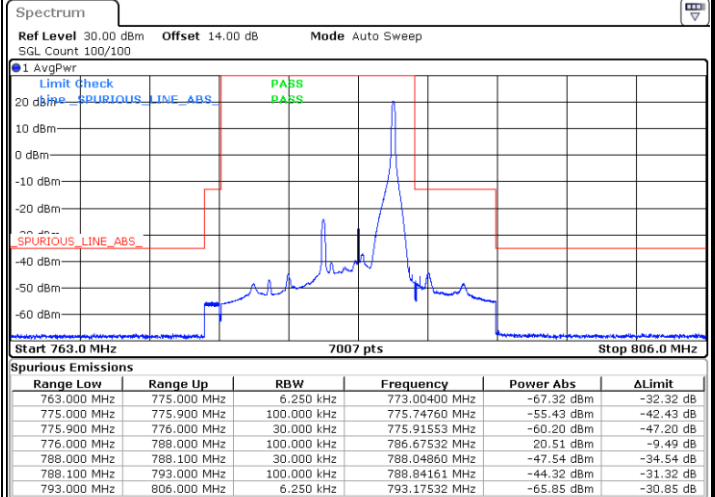
## LTE Band 13 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



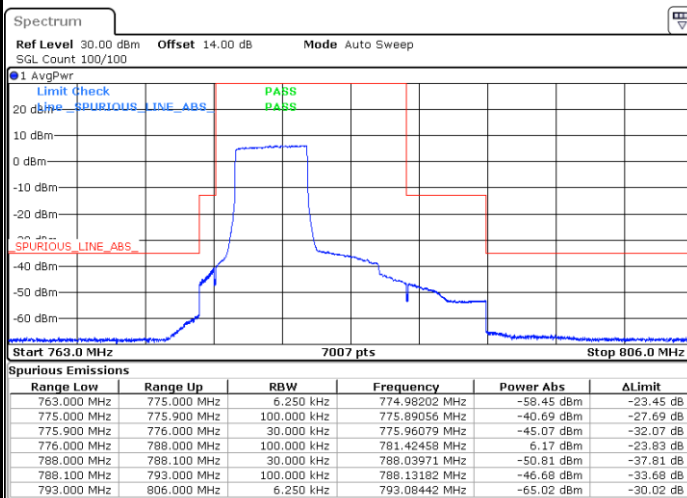
Date: 8 OCT.2021 22:53:37

### Highest Band Edge / 1 RB



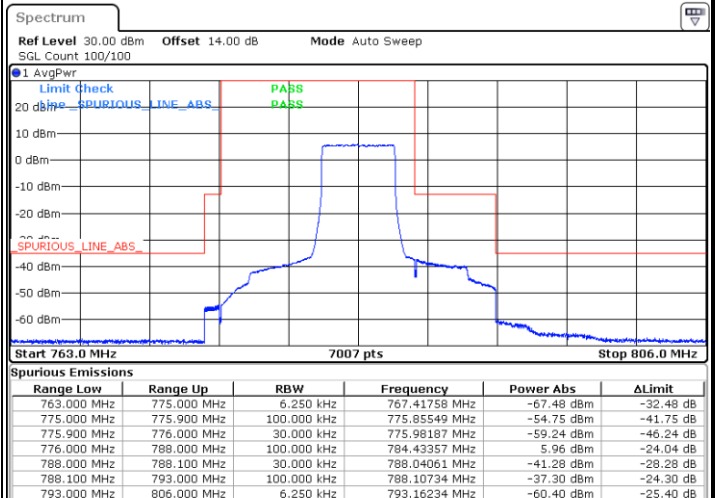
Date: 8 OCT.2021 23:04:37

### Lowest Band Edge / Full RB



Date: 8 OCT.2021 22:48:40

### Highest Band Edge / Full RB



Date: 8 OCT.2021 22:59:40