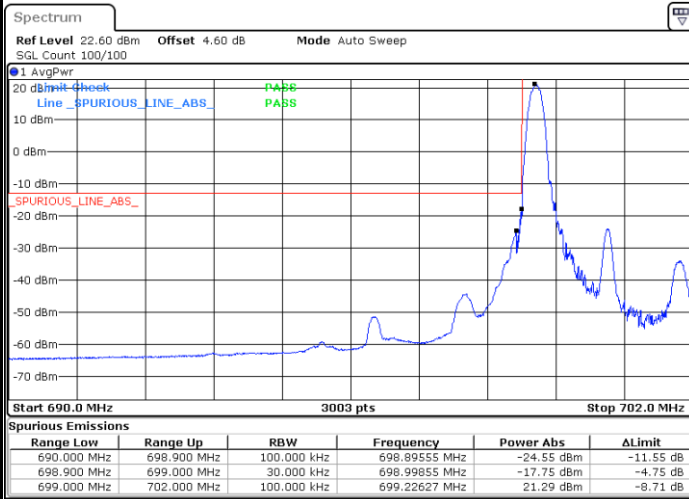


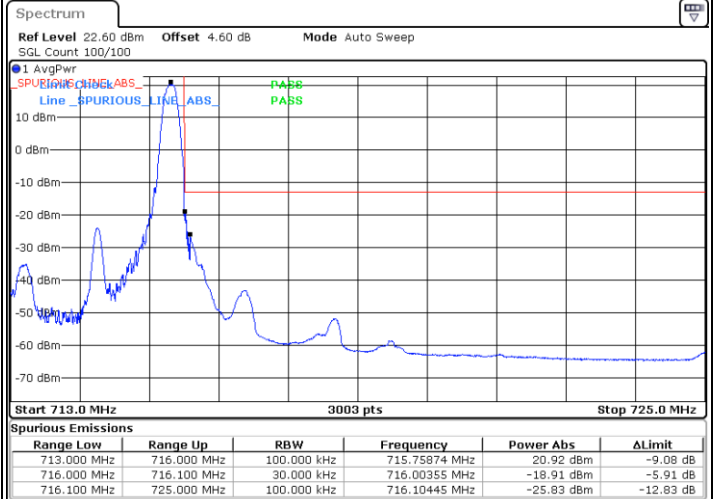


LTE Band 12 / 3MHz / QPSK

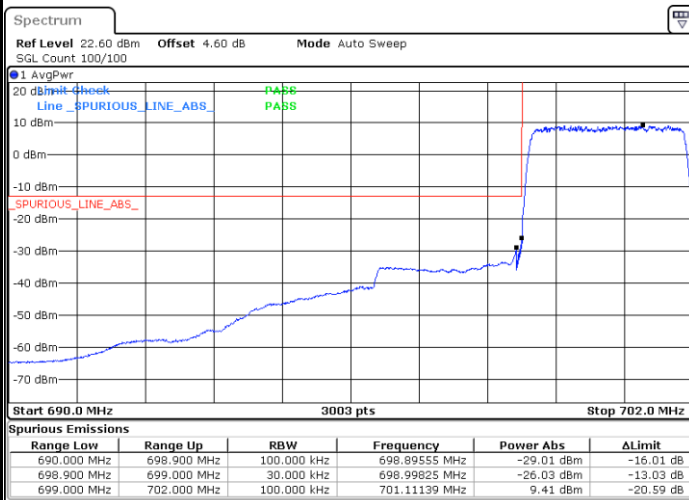
Lowest Band Edge / 1RB



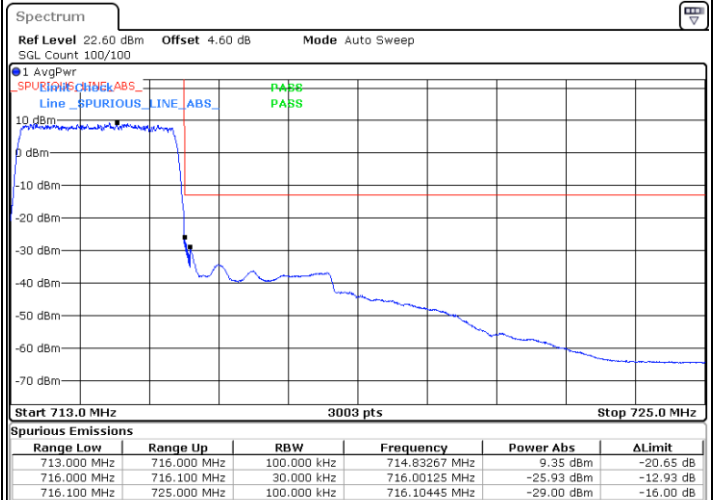
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



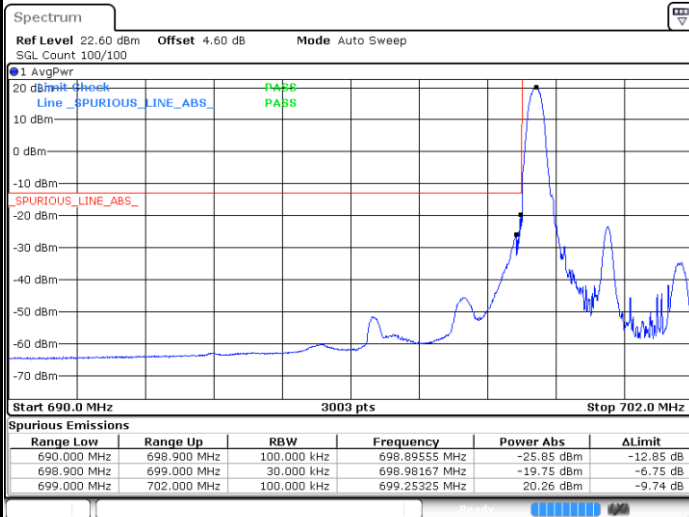
Highest Band Edge / Full RB



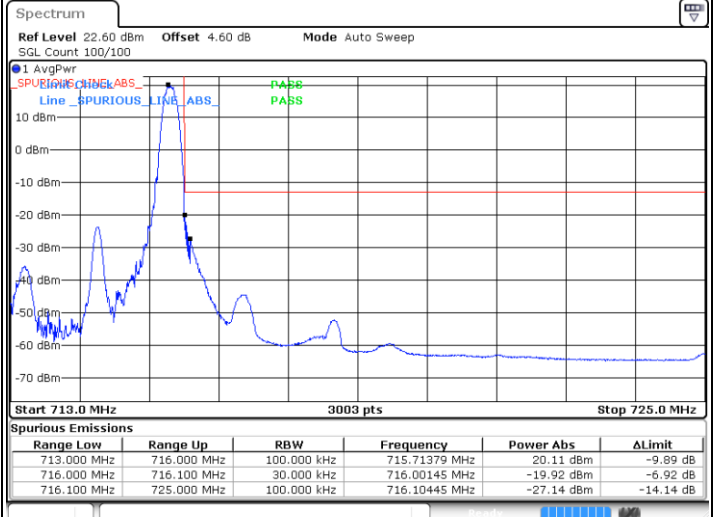


LTE Band 12 / 3MHz / 16QAM

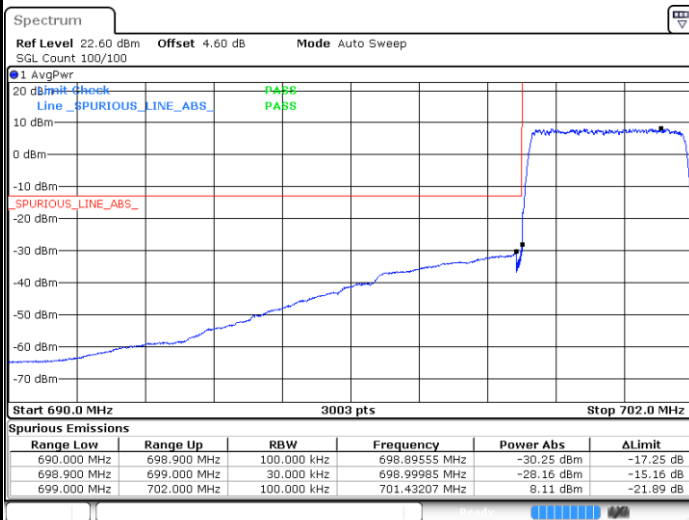
Lowest Band Edge / 1 RB



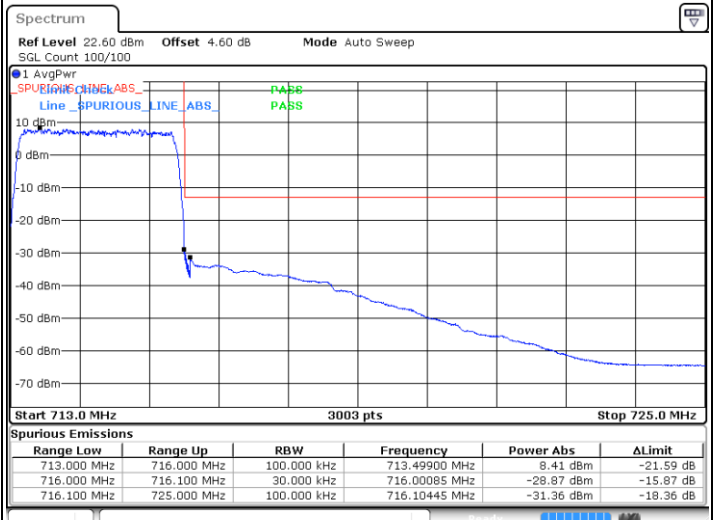
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



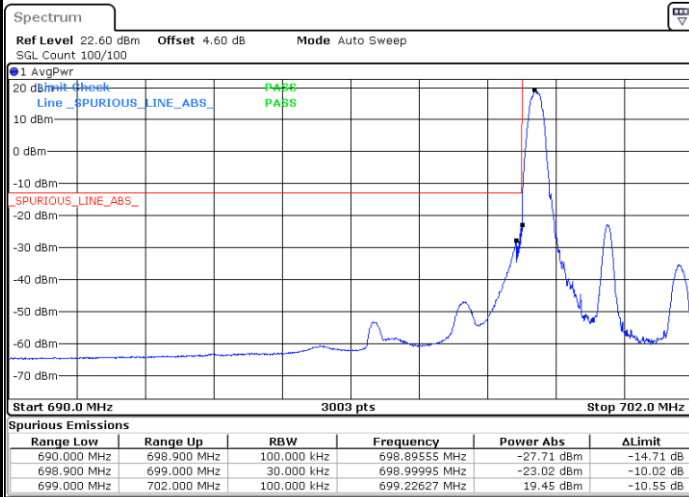
Highest Band Edge / Full RB



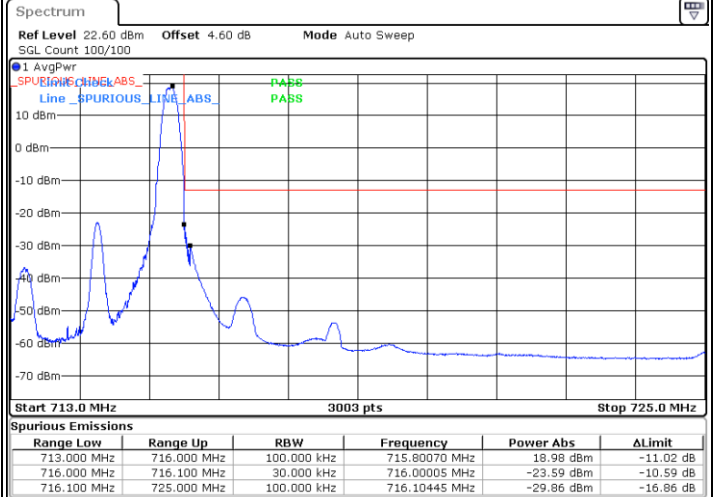


LTE Band 12 / 3MHz / 64QAM

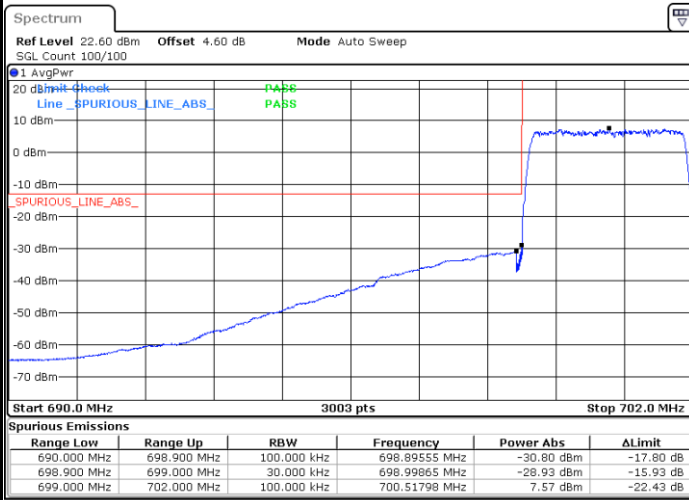
Lowest Band Edge / 1 RB



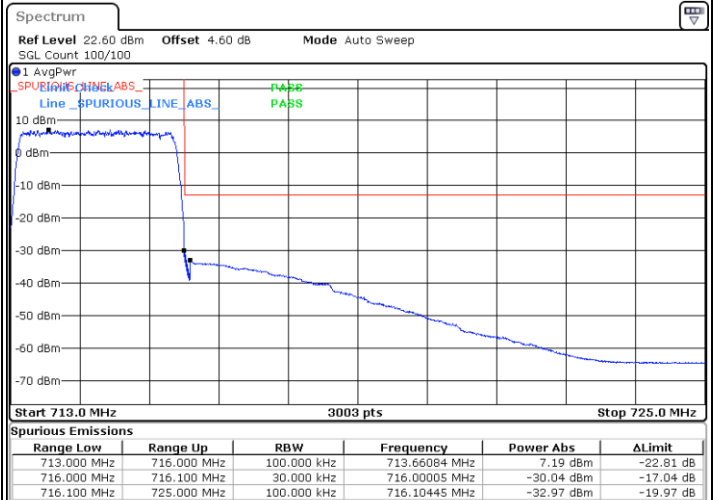
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



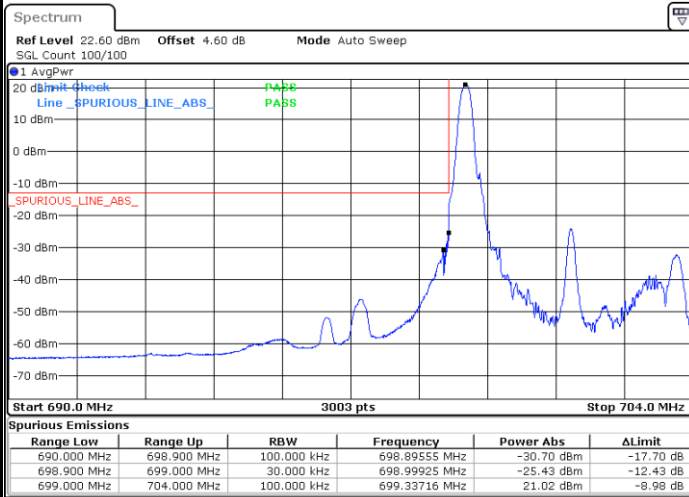
Highest Band Edge / Full RB



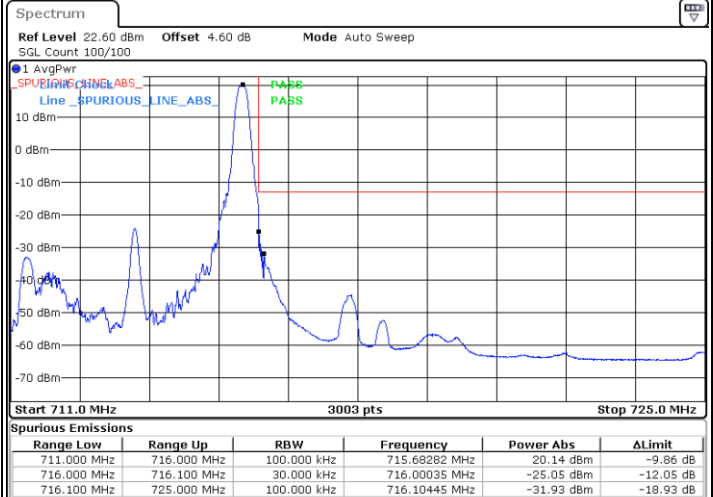


LTE Band 12 / 5MHz / QPSK

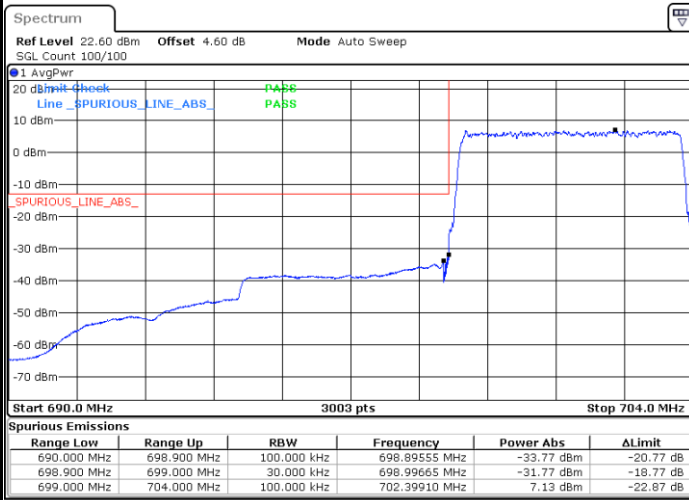
Lowest Band Edge / 1 RB



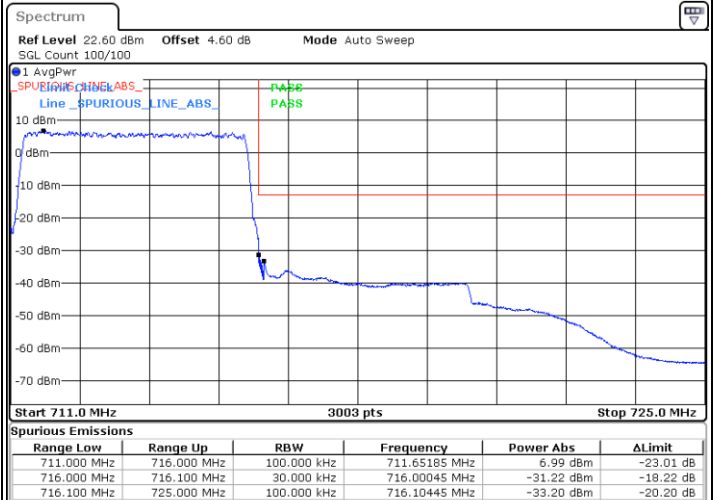
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



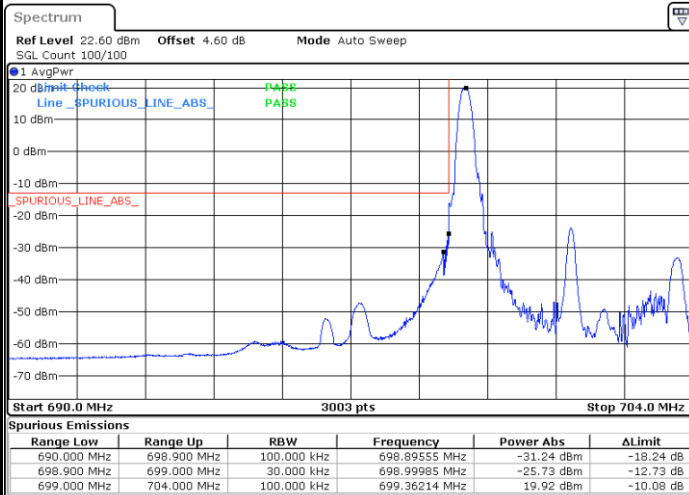
Highest Band Edge / Full RB



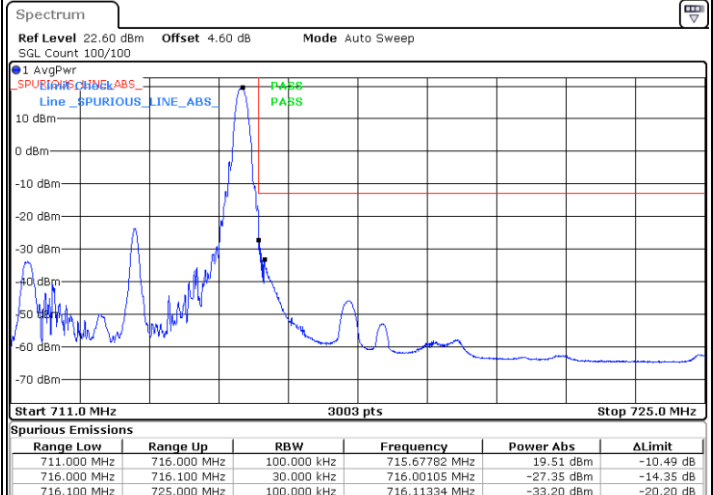


LTE Band 12 / 5MHz / 16QAM

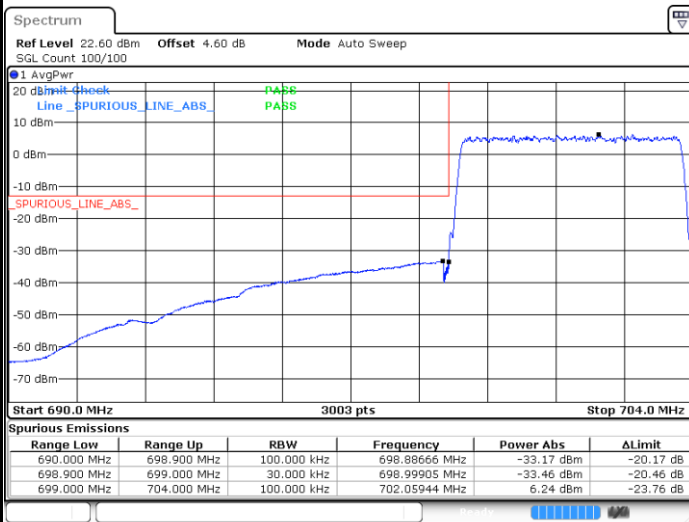
Lowest Band Edge / 1RB



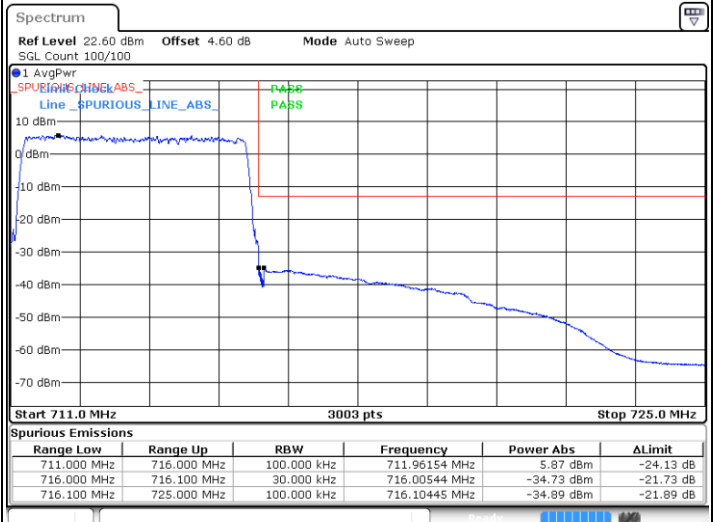
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



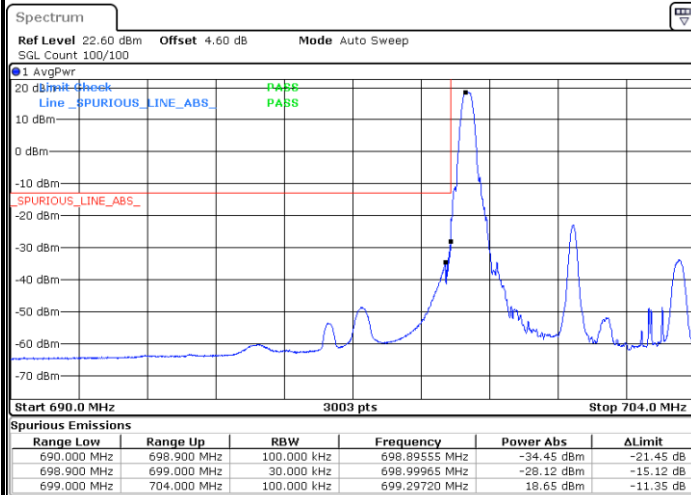
Highest Band Edge / Full RB



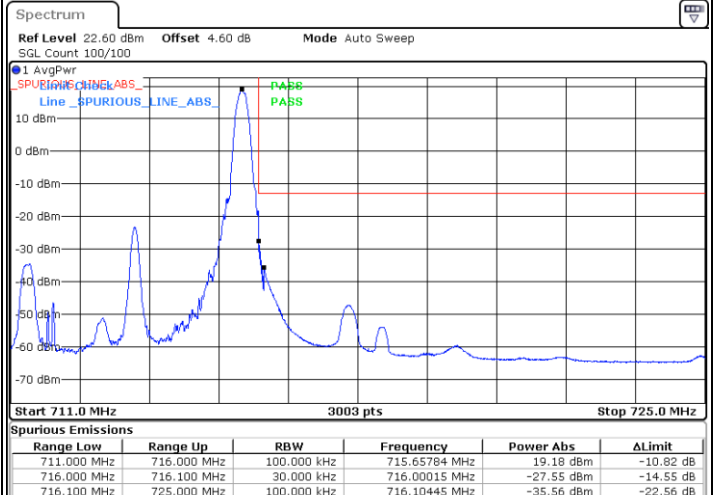


LTE Band 12 / 5MHz / 64QAM

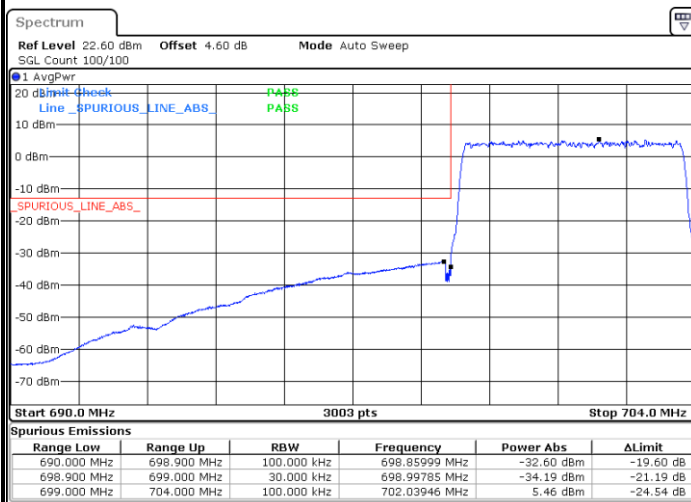
Lowest Band Edge / 1RB



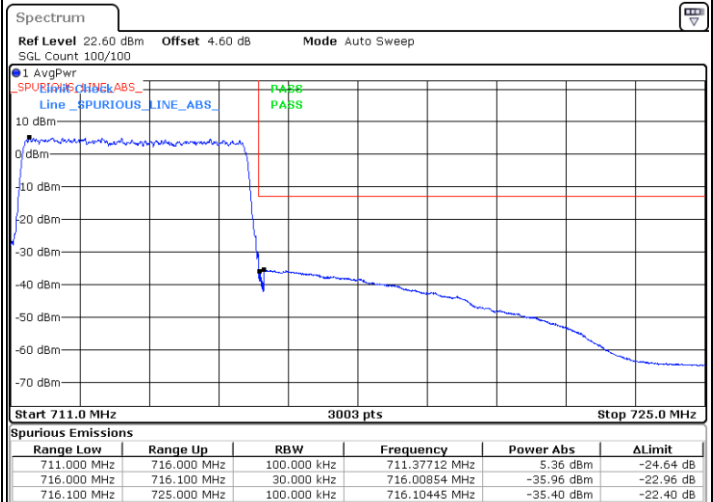
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



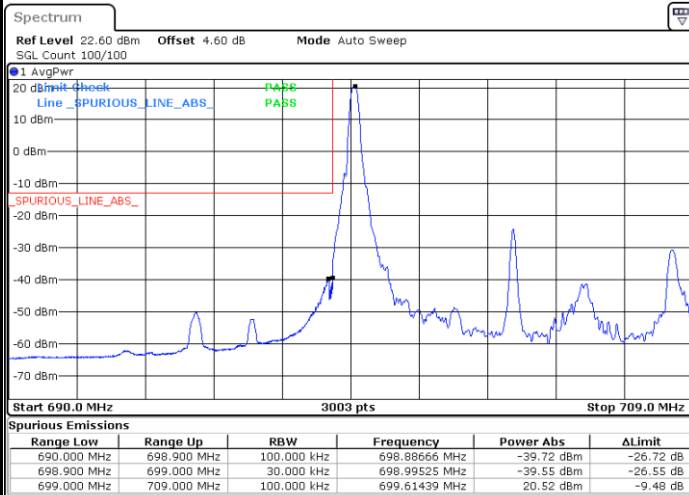
Highest Band Edge / Full RB



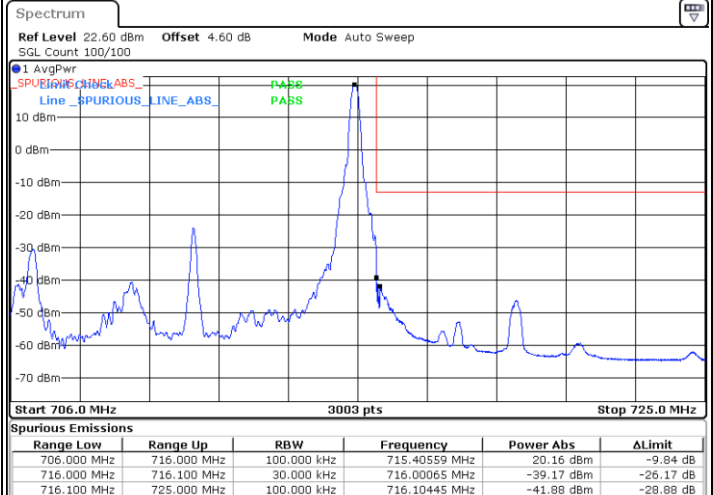


LTE Band 12 / 10MHz / QPSK

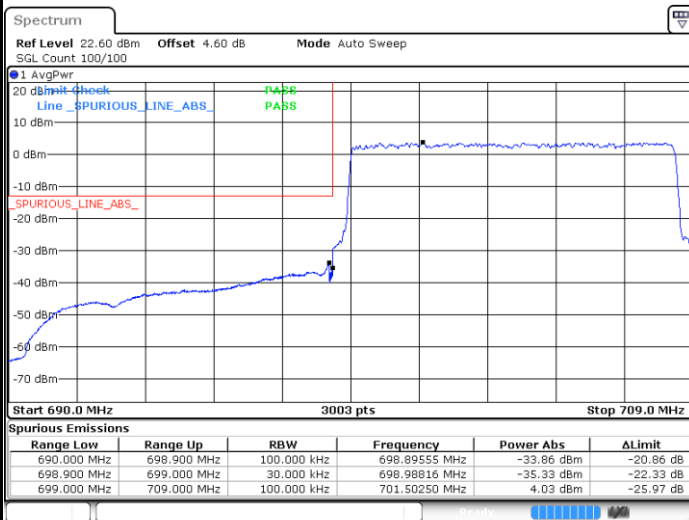
Lowest Band Edge / 1 RB



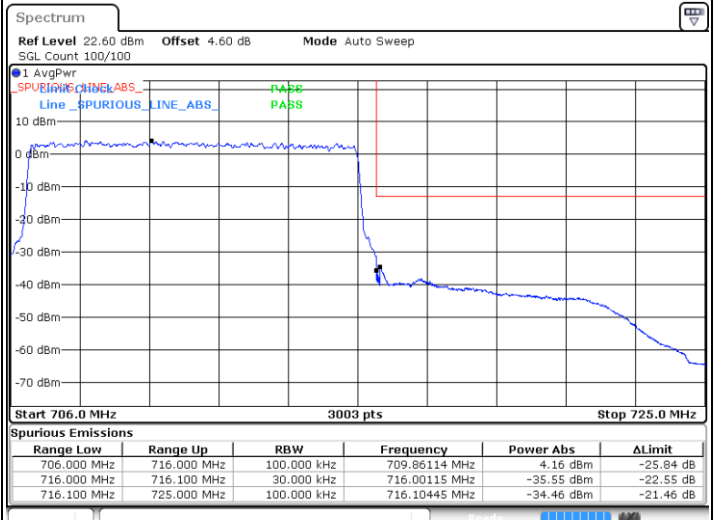
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



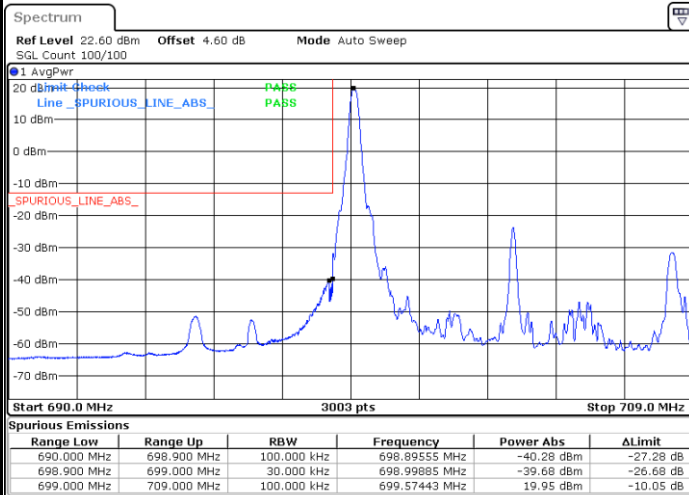
Highest Band Edge / Full RB



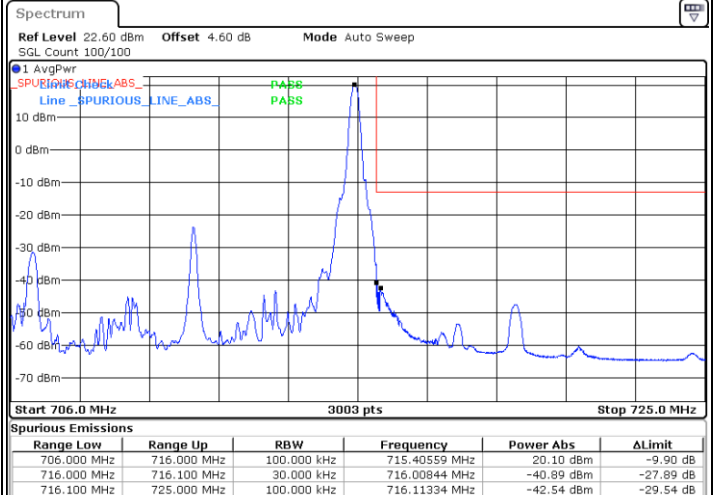


LTE Band 12 / 10MHz / 16QAM

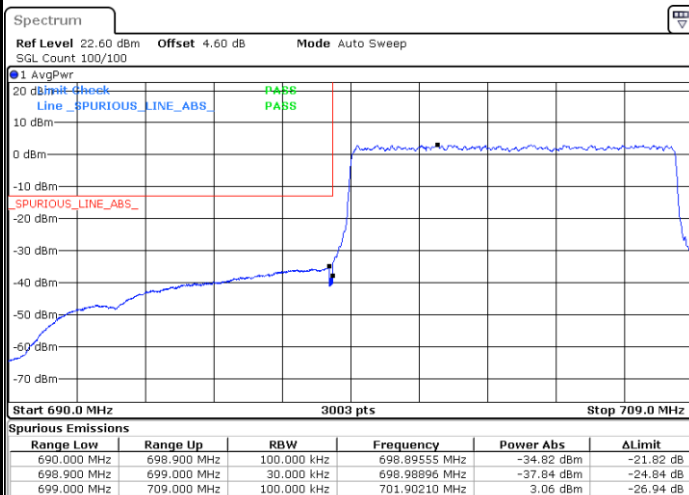
Lowest Band Edge / 1 RB



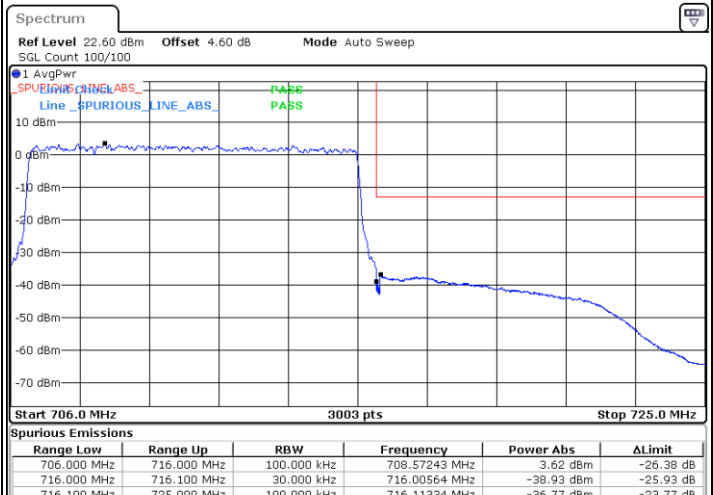
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



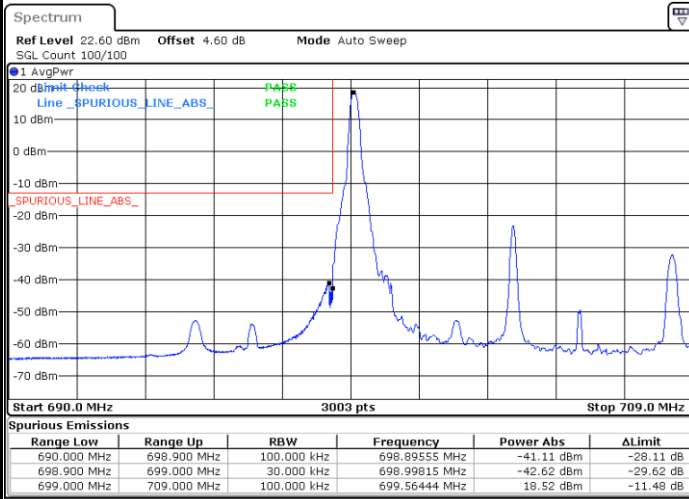
Highest Band Edge / Full RB



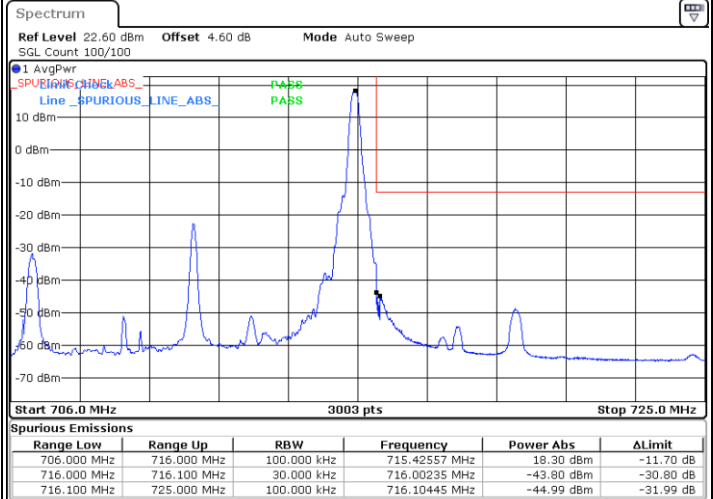


LTE Band 12 / 10MHz / 64QAM

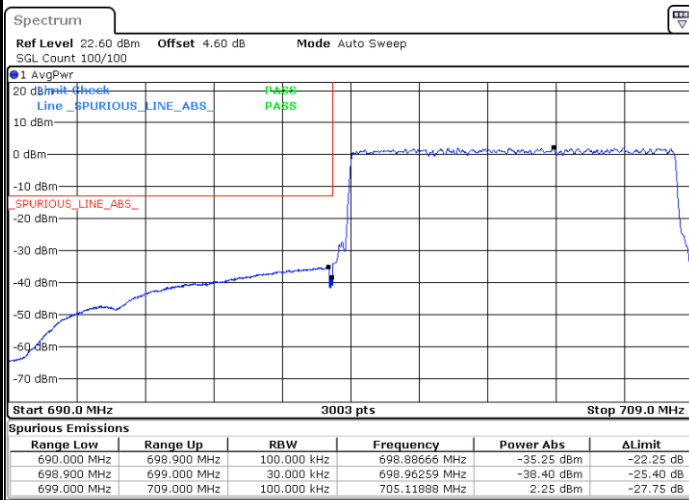
Lowest Band Edge / 1 RB



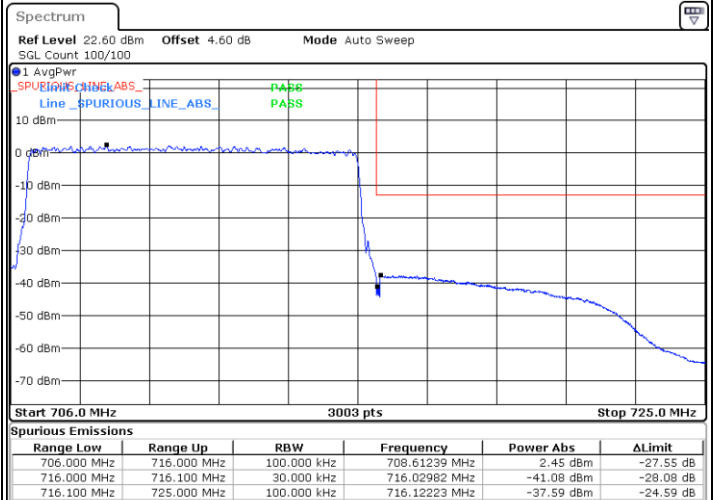
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

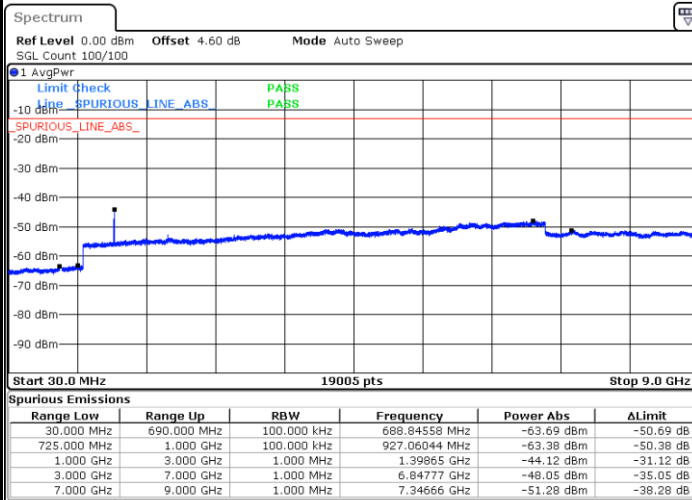




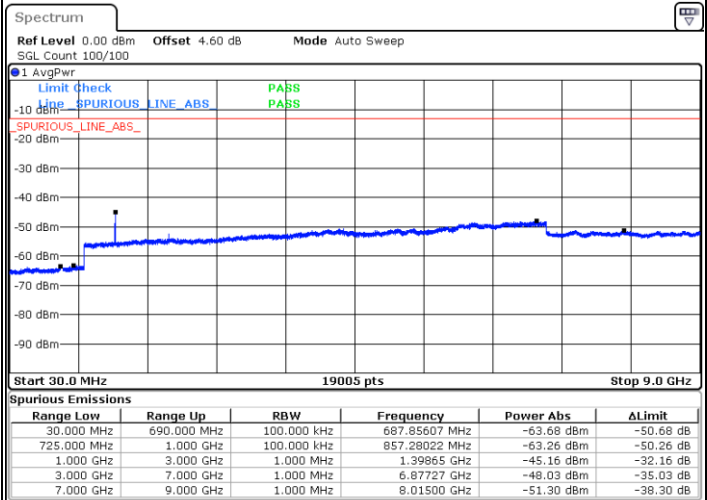
Conducted Spurious Emission

LTE Band 12 / 1.4MHz

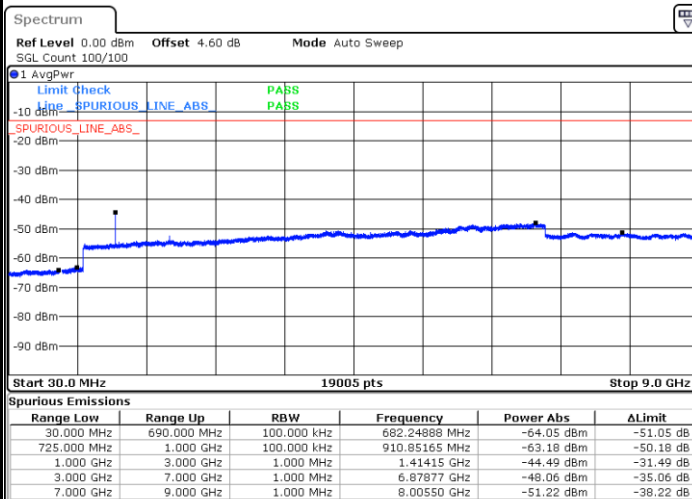
Lowest Channel / QPSK



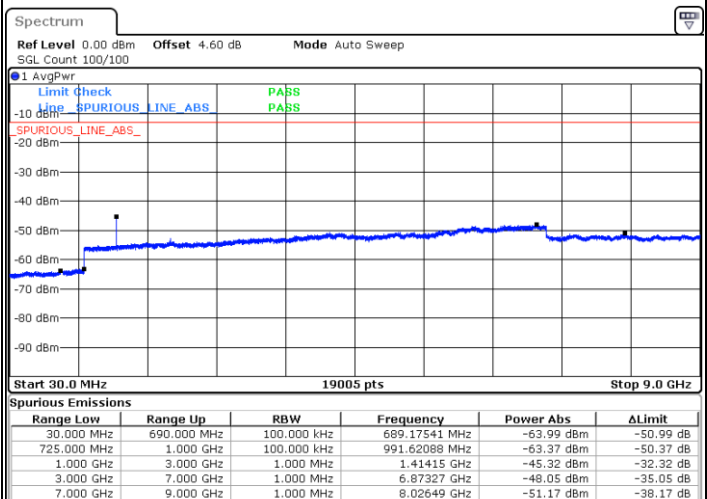
Lowest Channel / 16QAM



Middle Channel / QPSK



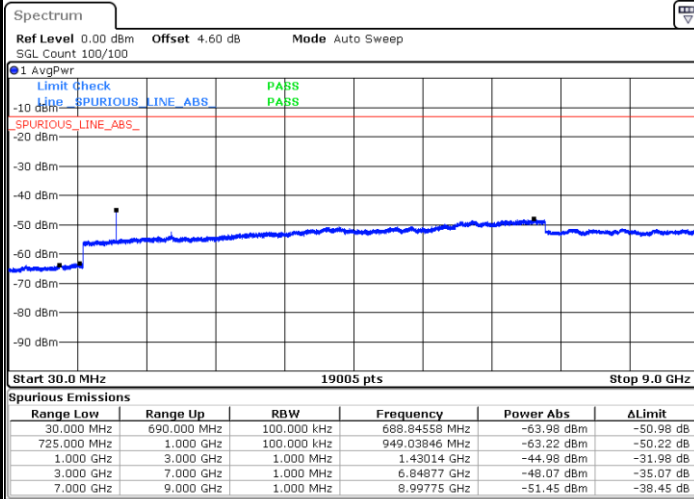
Middle Channel / 16QAM



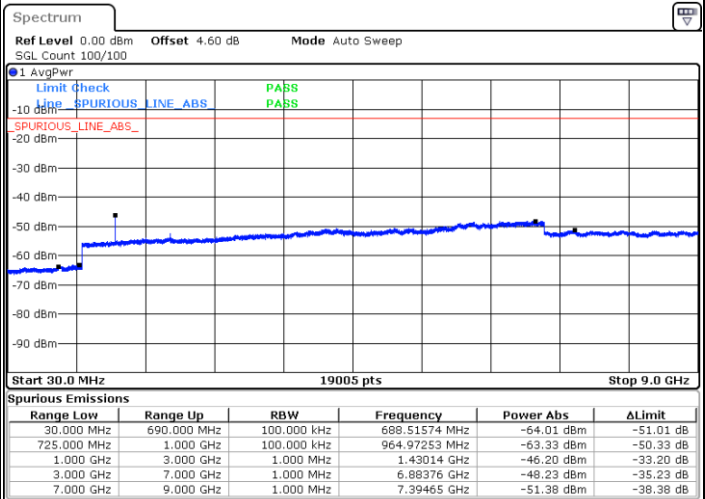


LTE Band 12 / 1.4MHz

Highest Channel / QPSK

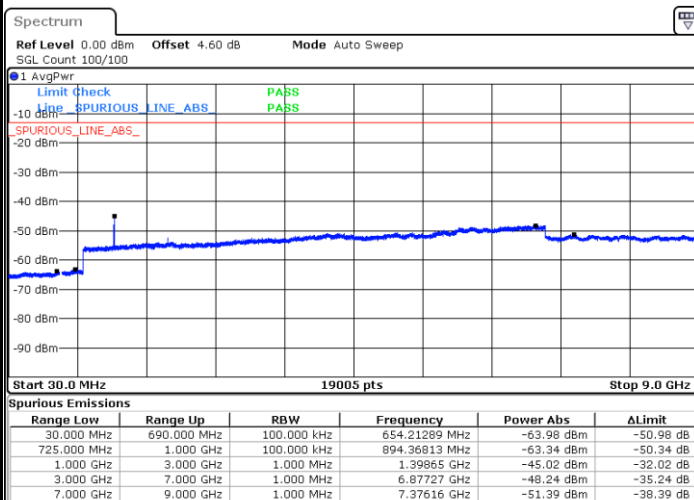


Highest Channel / 16QAM

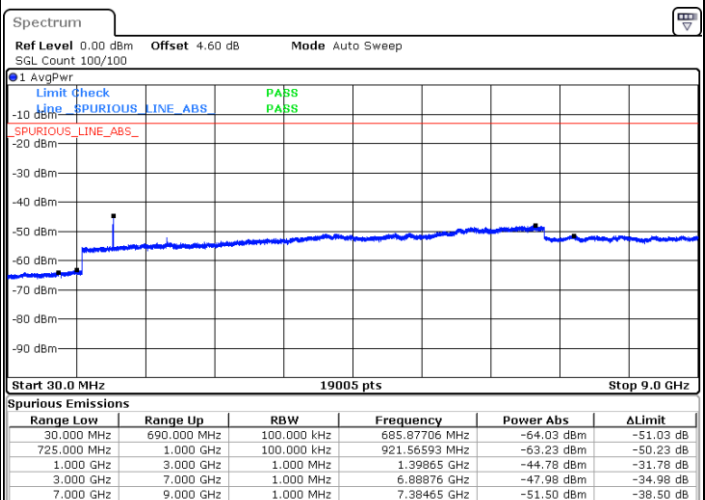


LTE Band 12 / 3MHz

Lowest Channel / QPSK



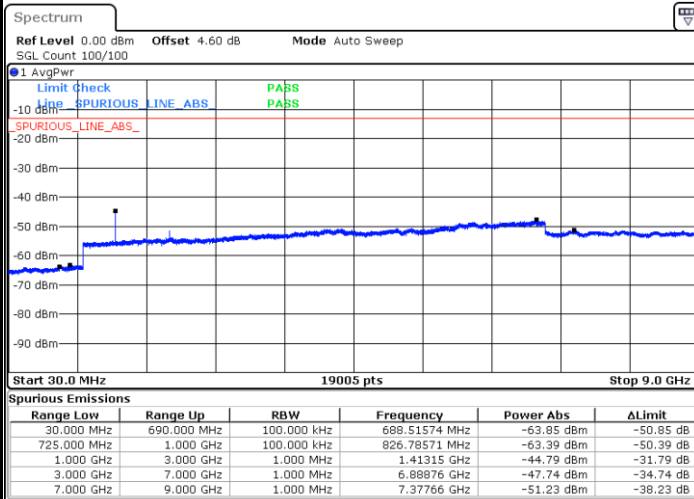
Lowest Channel / 16QAM



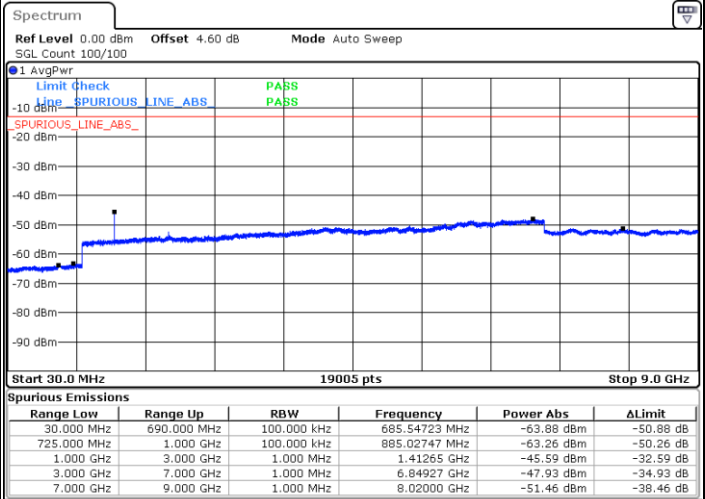


LTE Band 12 / 3MHz

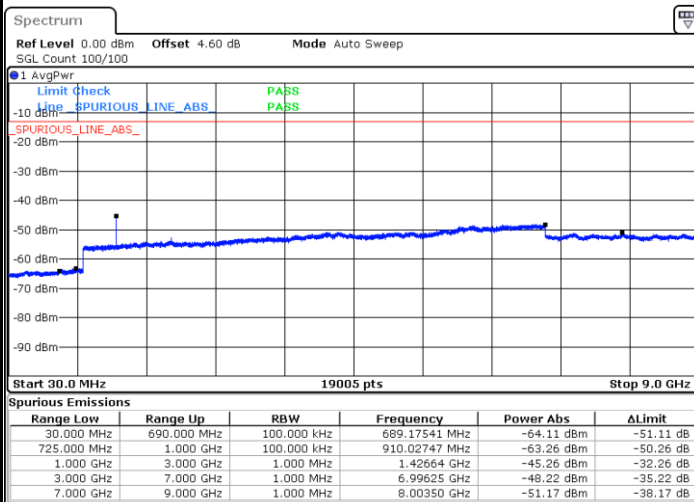
Middle Channel / QPSK



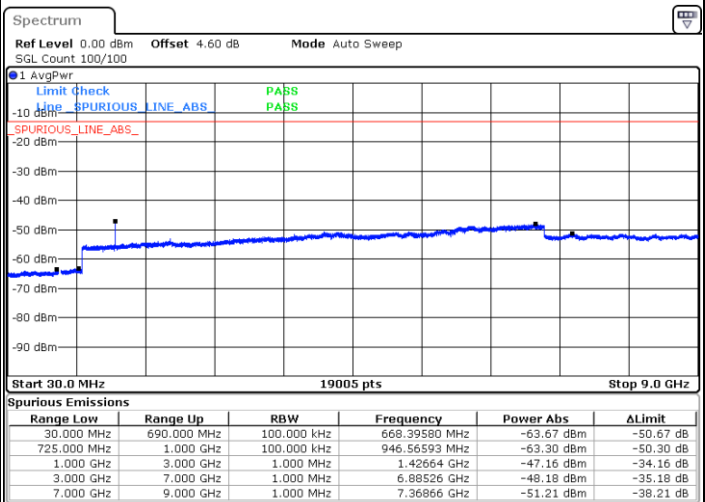
Middle Channel / 16QAM



Highest Channel / QPSK



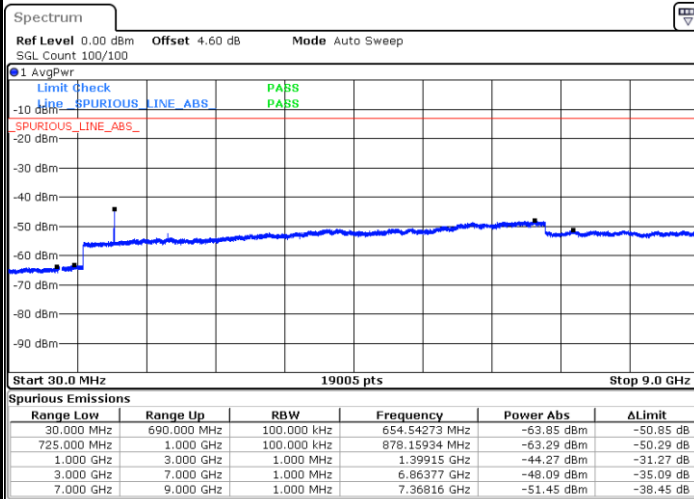
Highest Channel / 16QAM



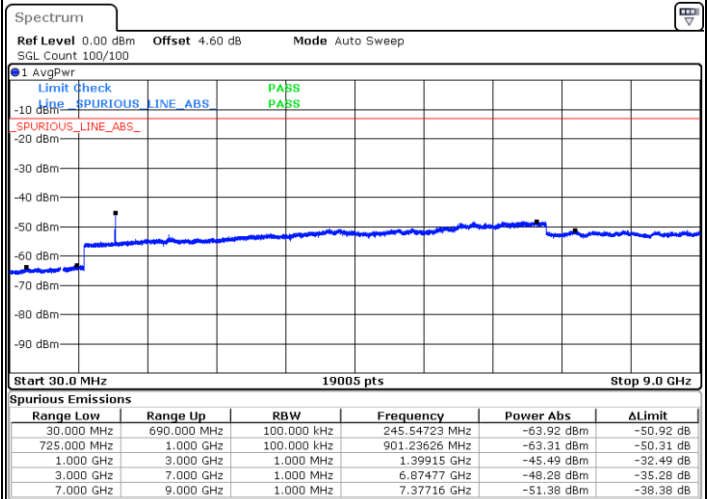


LTE Band 12 / 5MHz

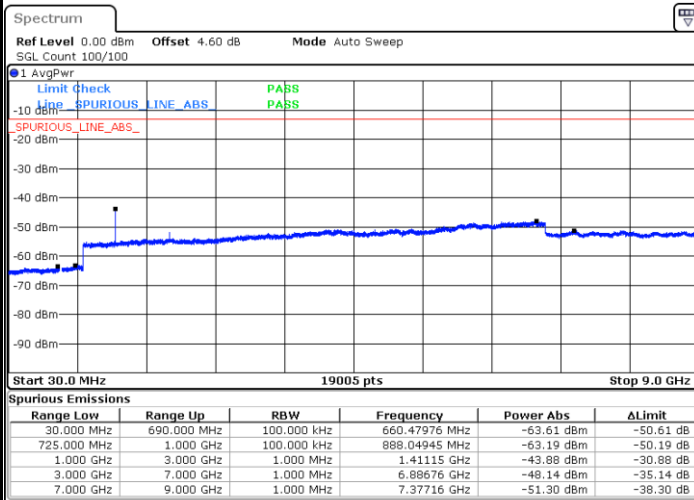
Lowest Channel / QPSK



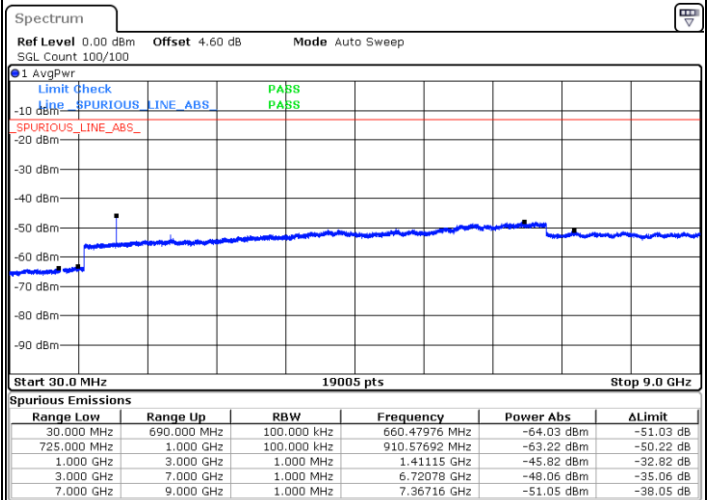
Lowest Channel / 16QAM



Middle Channel / QPSK



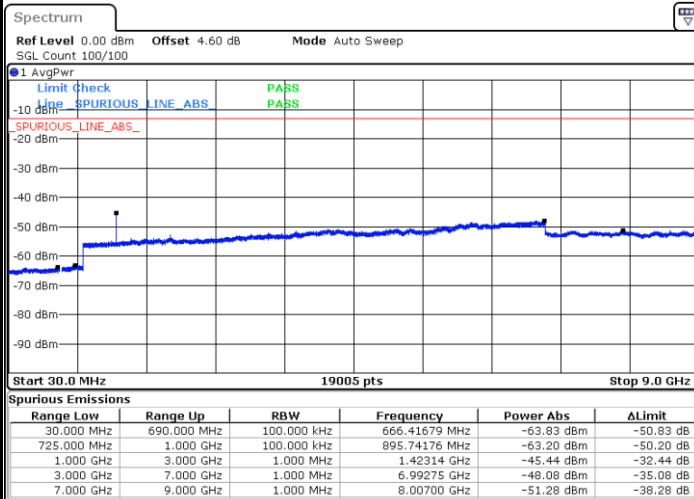
Middle Channel / 16QAM



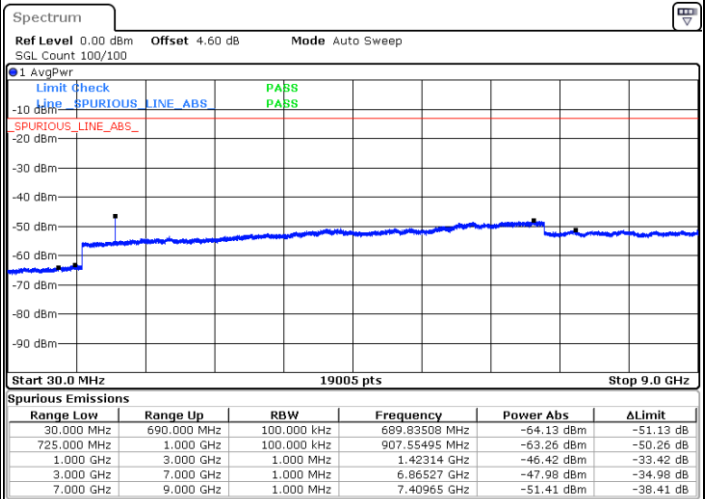


LTE Band 12 / 5MHz

Highest Channel / QPSK

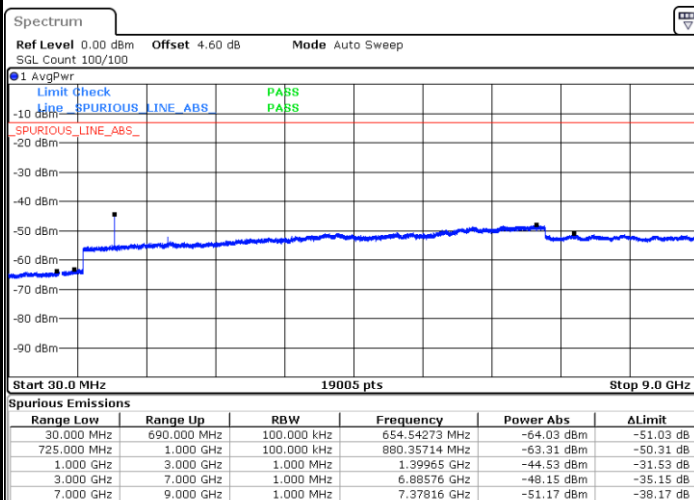


Highest Channel / 16QAM

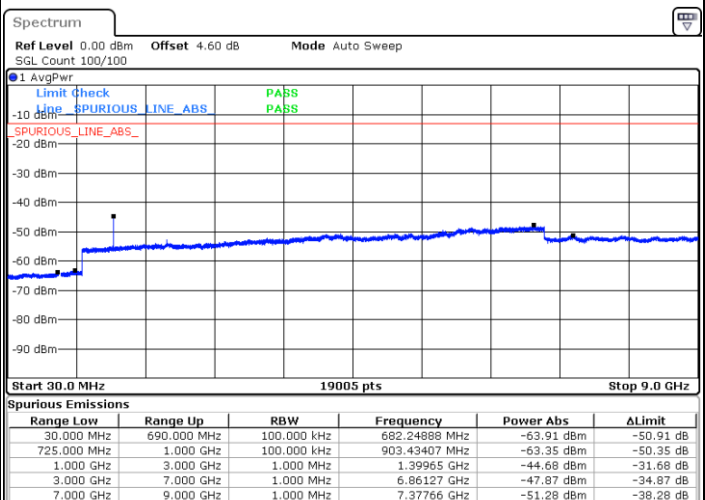


LTE Band 12 / 10MHz

Lowest Channel / QPSK



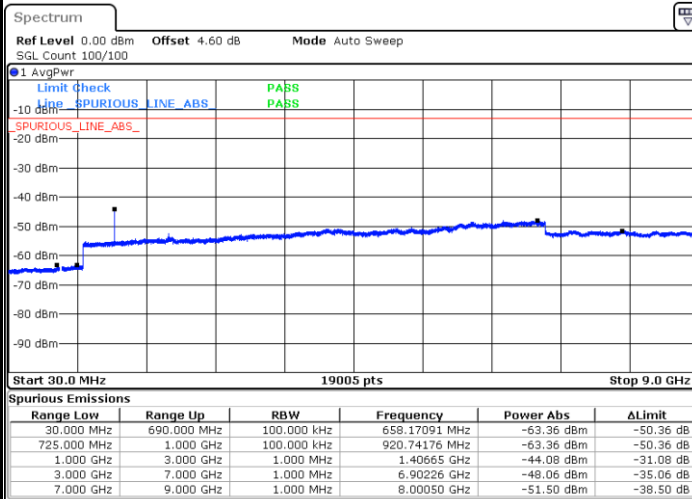
Lowest Channel / 16QAM



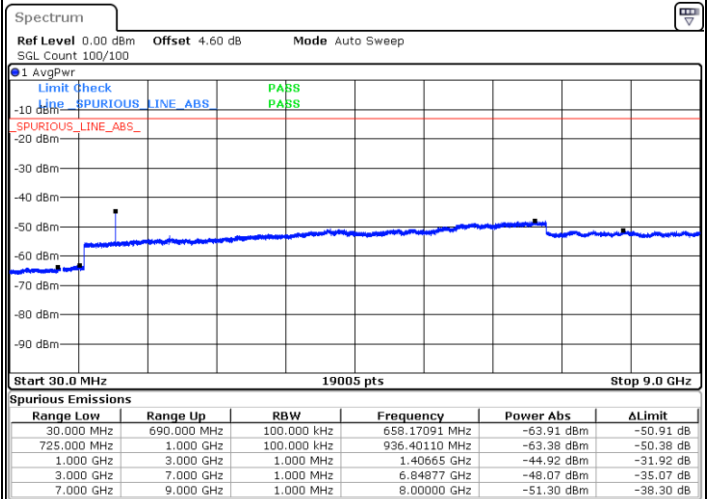


LTE Band 12 / 10MHz

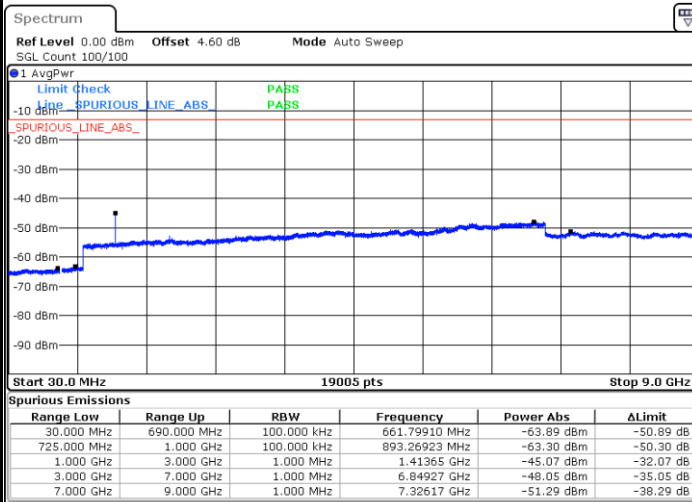
Middle Channel / QPSK



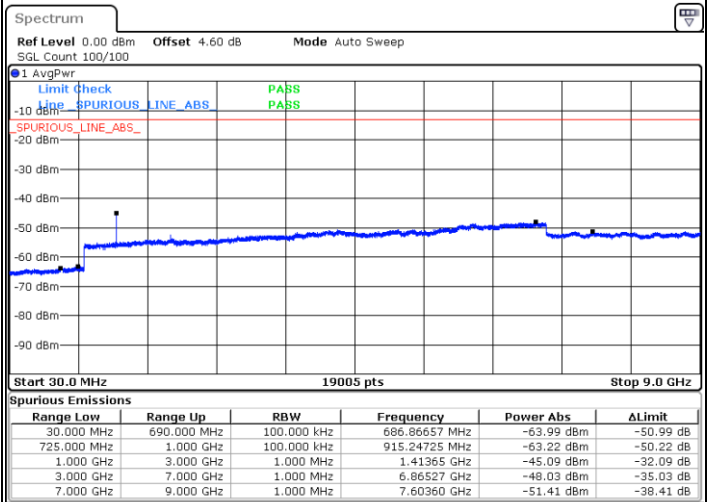
Middle Channel / 16QAM



Highest Channel / QPSK



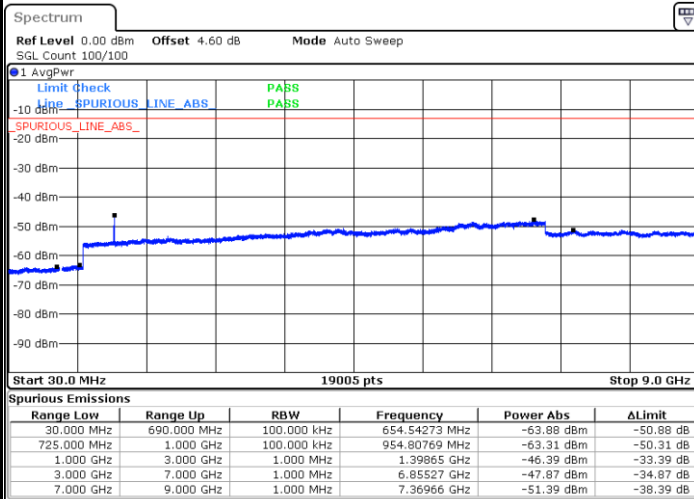
Highest Channel / 16QAM



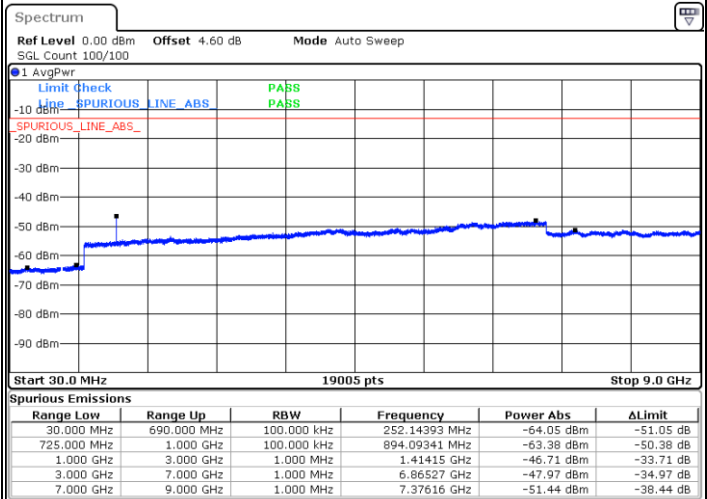


LTE Band 12 / 1.4MHz

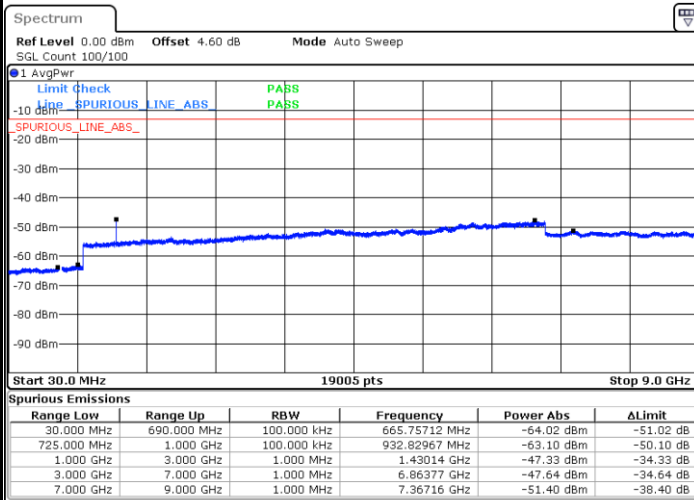
Lowest Channel / 64QAM



Middle Channel / 64QAM



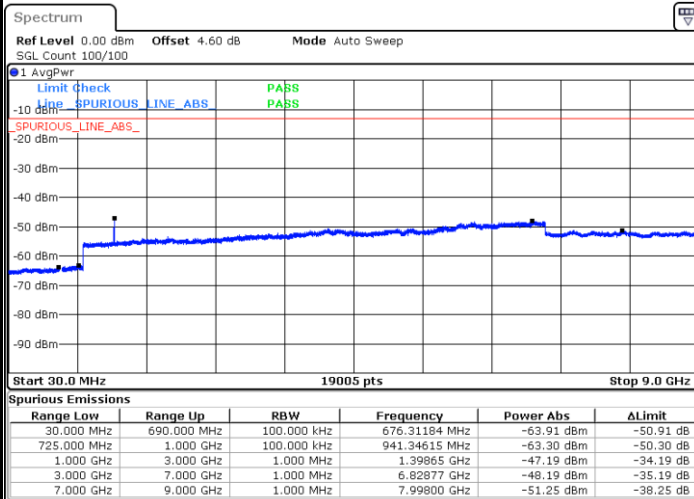
Highest Channel / 64QAM



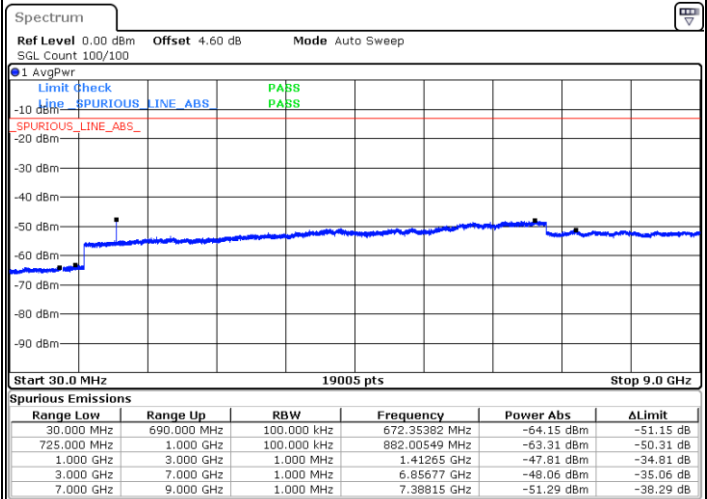


LTE Band 12 / 3MHz

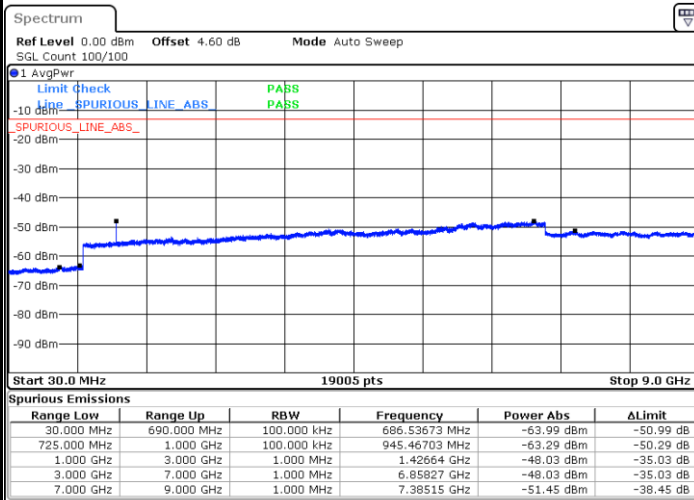
Lowest Channel / 64QAM



Middle Channel / 64QAM



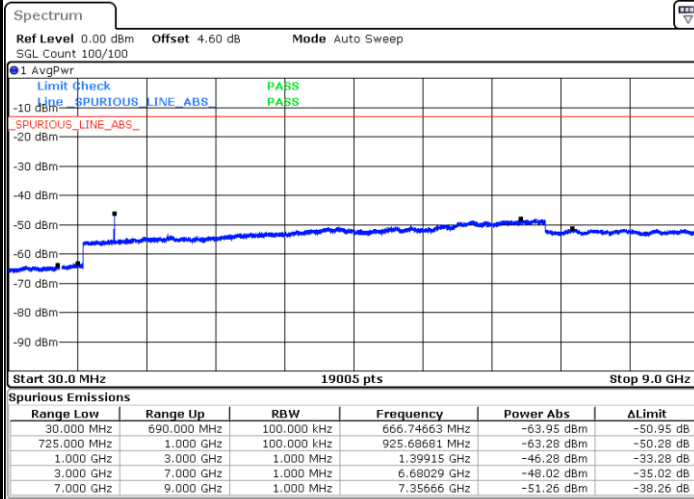
Highest Channel / 64QAM



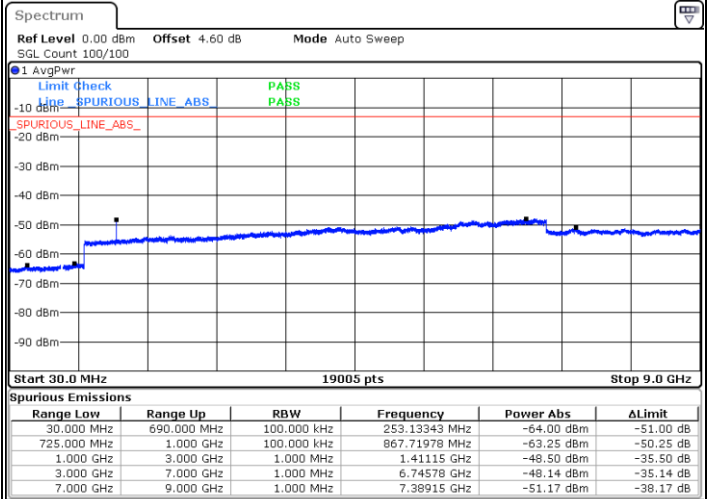


LTE Band 12 / 5MHz

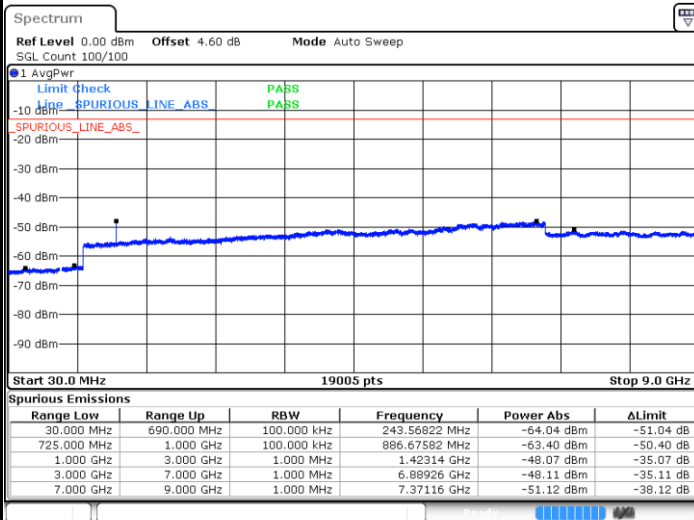
Lowest Channel / 64QAM



Middle Channel / 64QAM



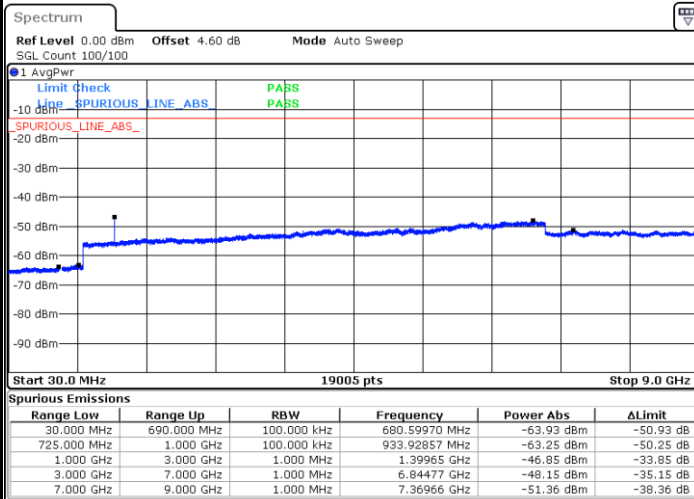
Highest Channel / 64QAM



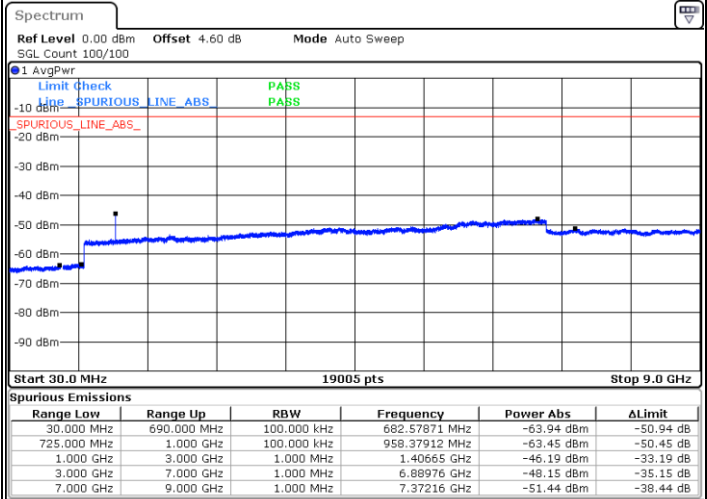


LTE Band 12 / 10MHz

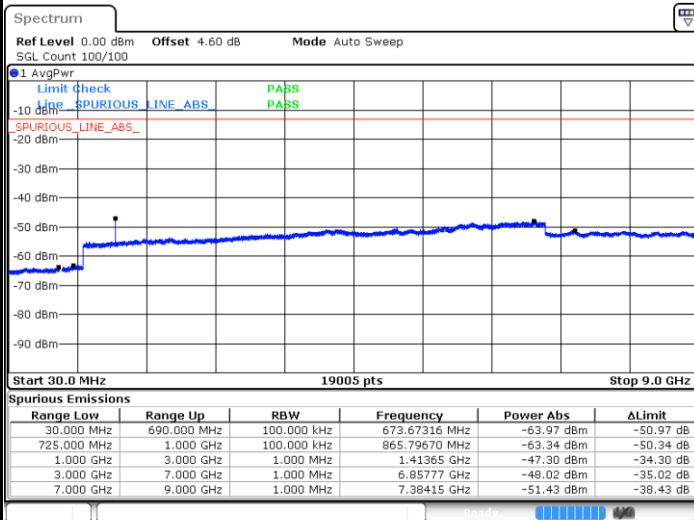
Lowest Channel / 64QAM



Middle Channel / 64QAM



Highest Channel / 64QAM



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	0.0023	
30	Normal Voltage	0.0089	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0100	
0	Normal Voltage	0.0004	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0075	
-30	Normal Voltage	0.0066	
20	Maximum Voltage	0.0013	
20	Normal Voltage	0.0008	
20	Battery End Point	0.0105	

Note:

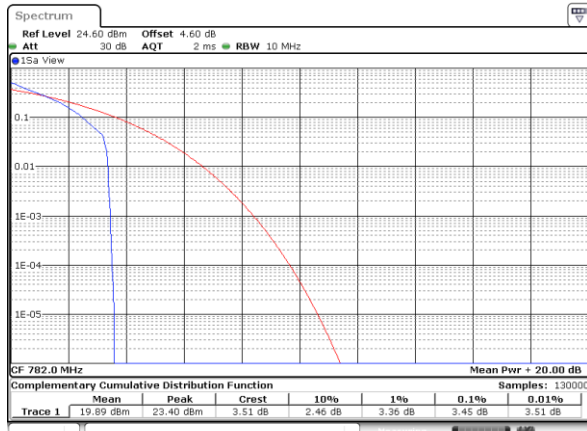
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



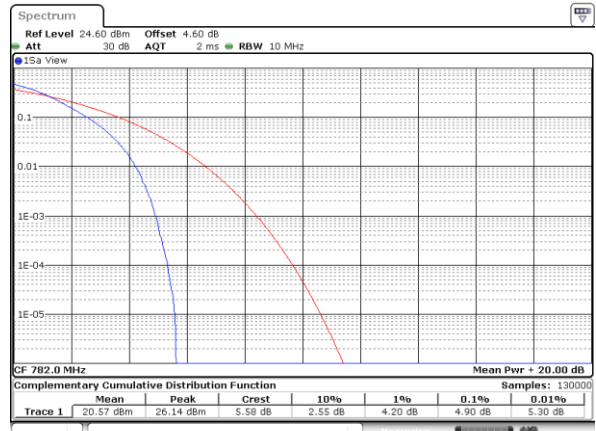
LTE Band 13

Peak-to-Average Ratio

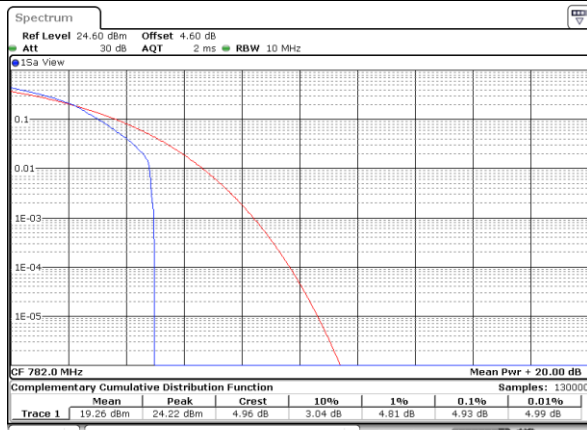
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH		-	-	-	PASS
Middle CH	3.45	4.90	4.93	6.14	
Highest CH	-	-	-	-	
Mod.	64QAM		Limit: 13dB		
RB Size	1RB	Full RB	Result		
Lowest CH			PASS		
Middle CH	4.84	6.09			
Highest CH					

LTE Band 13 / 10MHz / QPSK
Middle Channel / 1RB


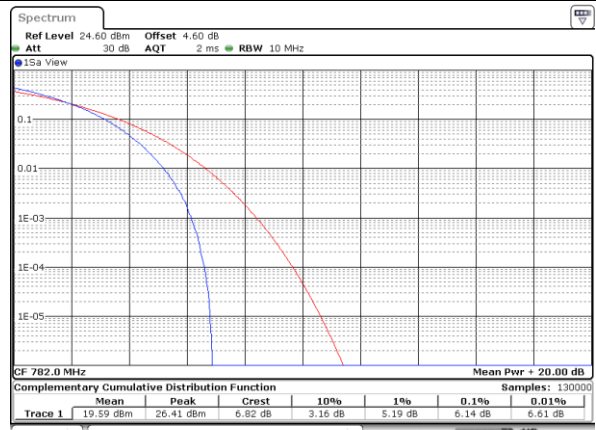
Date: 14.OCT.2019 21:08:11

Middle Channel / Full RB


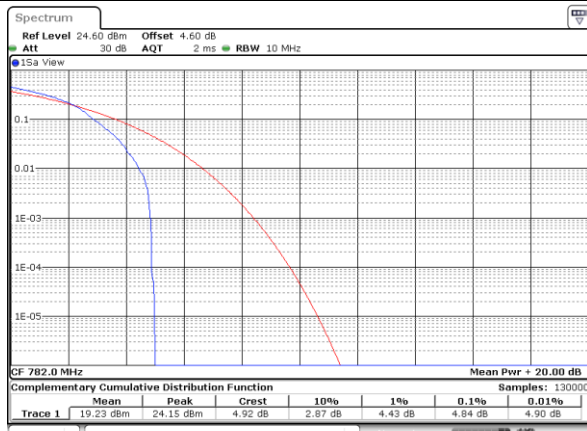
Date: 14.OCT.2019 21:09:07

LTE Band 13 / 10MHz / 16QAM
Middle Channel / 1RB


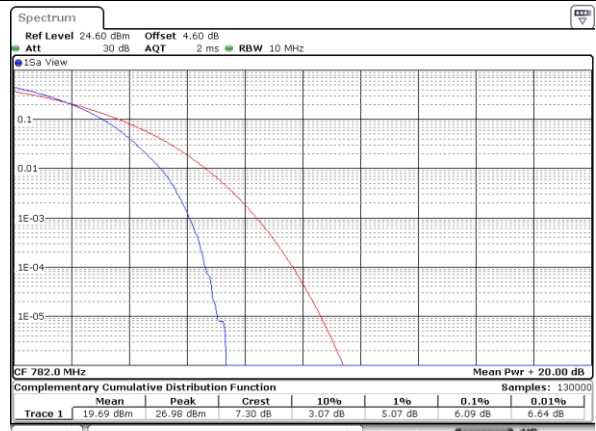
Date: 14.OCT.2019 21:08:22

Middle Channel / Full RB


Date: 14.OCT.2019 21:08:56

LTE Band 13 / 10MHz / 64QAM
Middle Channel / 1RB


Date: 14.OCT.2019 21:08:33

Middle Channel / Full RB


Date: 14.OCT.2019 21:08:46



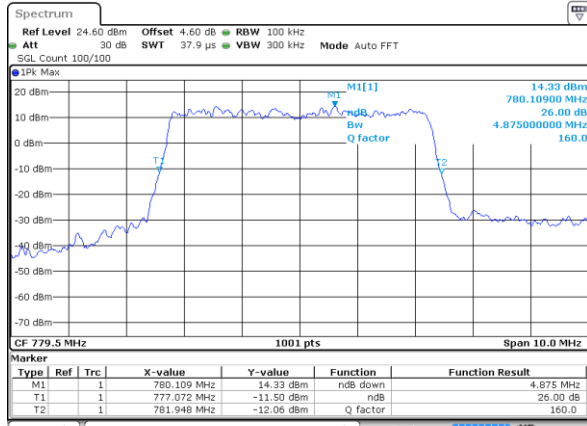
26dB Bandwidth

Mode	LTE Band 13 : 26dB BW(MHz)											
BW	5MHz		10MHz		5MHz	10MHz						
Mod.	QPSK	16QAM	QPSK	16QAM	64QAM	64QAM						
Lowest CH	4.875	4.885			4.905							
Middle CH	4.935	4.885	9.83	9.71	4.845	9.77						
Highest CH	4.875	4.975			4.875							



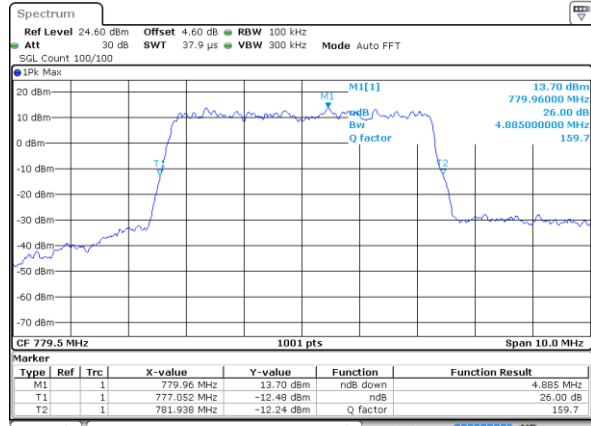
LTE Band 13

Lowest Channel / 5MHz / QPSK



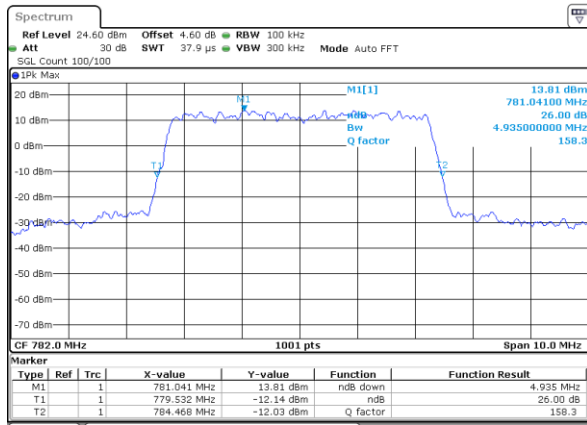
Date: 14.OCT.2019 21:27:51

Lowest Channel / 5MHz / 16QAM



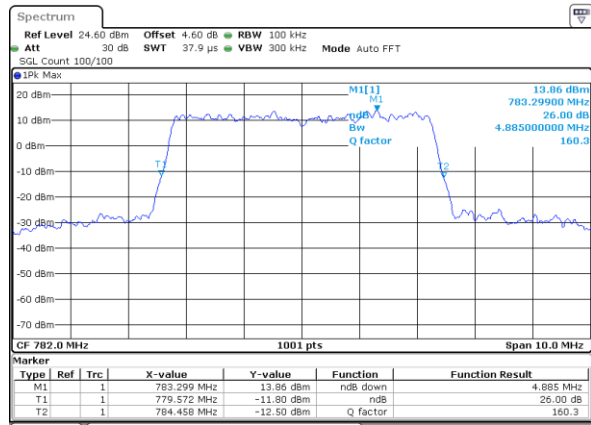
Date: 14.OCT.2019 21:28:01

Middle Channel / 5MHz / QPSK



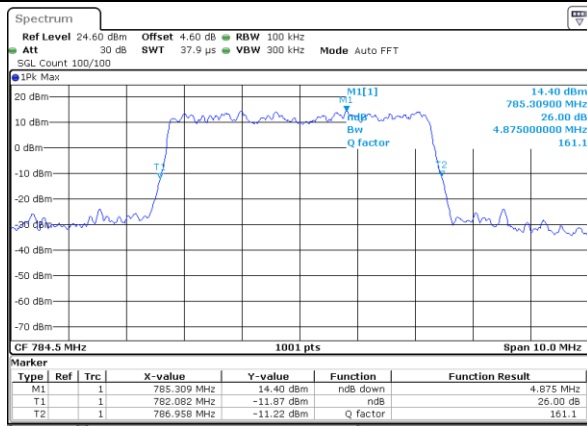
Date: 14.OCT.2019 21:36:54

Middle Channel / 5MHz / 16QAM



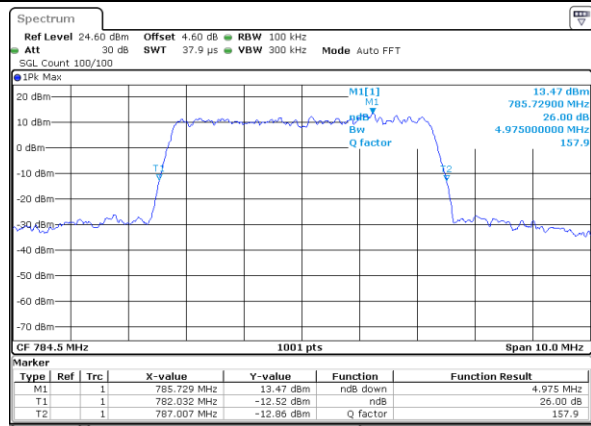
Date: 14.OCT.2019 21:37:05

Highest Channel / 5MHz / QPSK



Date: 14.OCT.2019 21:39:32

Highest Channel / 5MHz / 16QAM

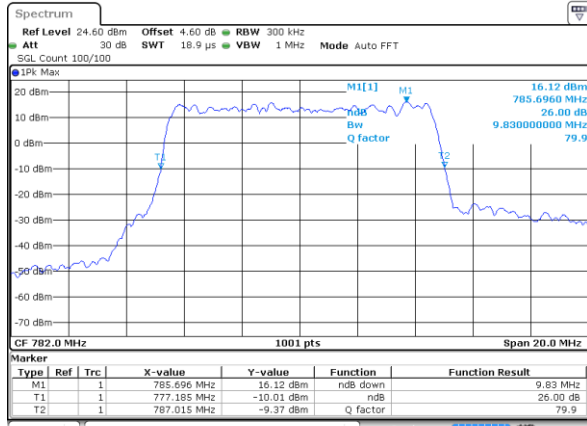


Date: 14.OCT.2019 21:39:22



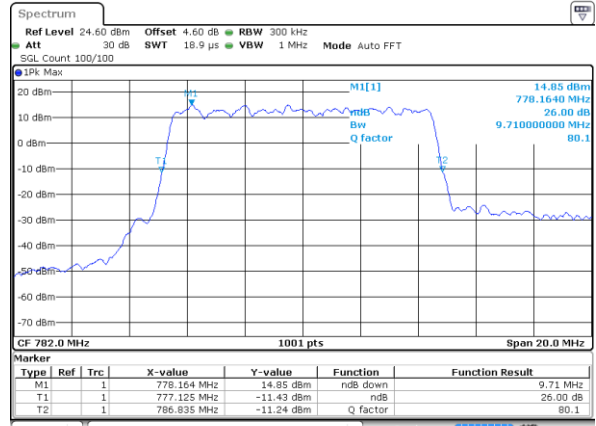
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 14.OCT.2019 21:10:00

Middle Channel / 10MHz / 16QAM

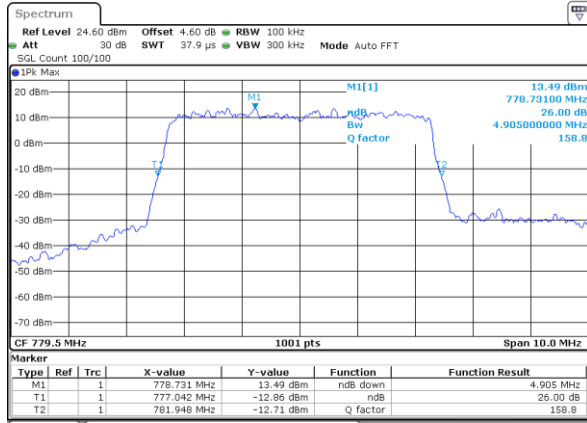


Date: 14.OCT.2019 21:11:58



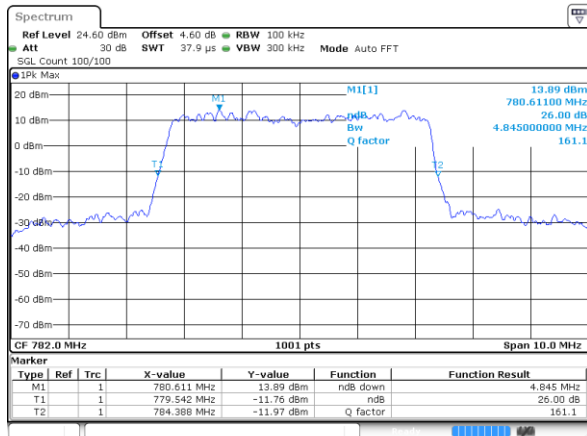
LTE Band 13

Lowest Channel / 5MHz / 64QAM



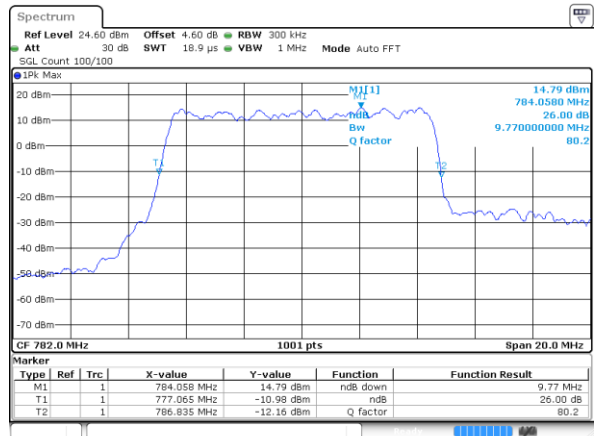
Date: 14.OCT.2019 21:48:56

Middle Channel / 5MHz / 64QAM



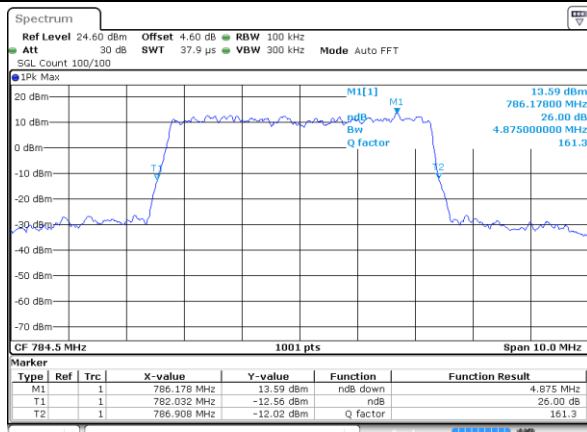
Date: 14.OCT.2019 21:49:07

Middle Channel / 10MHz / 64QAM



Date: 14.OCT.2019 21:14:04

Highest Channel / 5MHz / 64QAM



Date: 14.OCT.2019 21:49:17



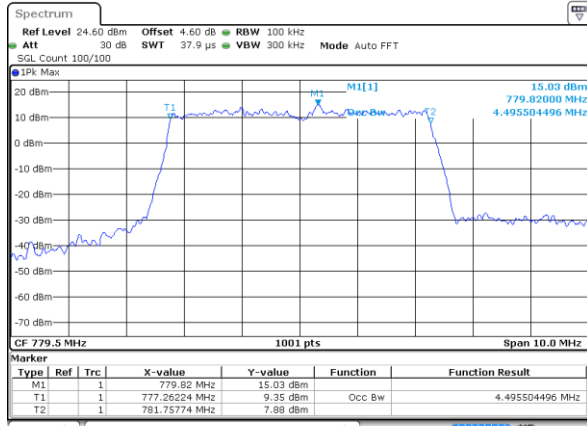
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	5MHz		10MHz		5MHz	10MHz						
Mod.	QPSK	16QAM	QPSK	16QAM	64QAM	64QAM						
Lowest CH	4.50	4.49			4.47							
Middle CH	4.50	4.49	9.01	9.03	4.51	9.01						
Highest CH	4.50	4.48			4.51							



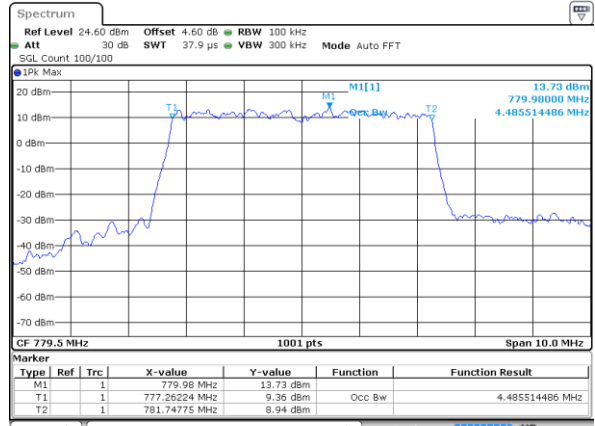
LTE Band 13

Lowest Channel / 5MHz / QPSK



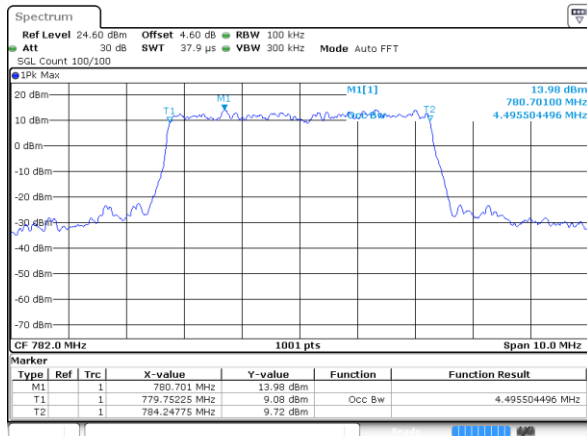
Date: 14.OCT.2019 21:28:21

Lowest Channel / 5MHz / 16QAM



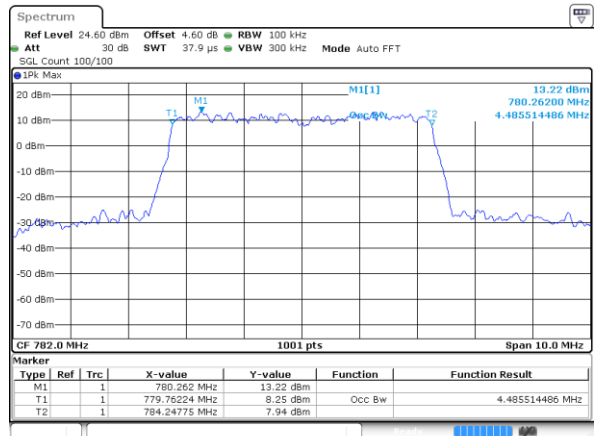
Date: 14.OCT.2019 21:28:11

Middle Channel / 5MHz / QPSK



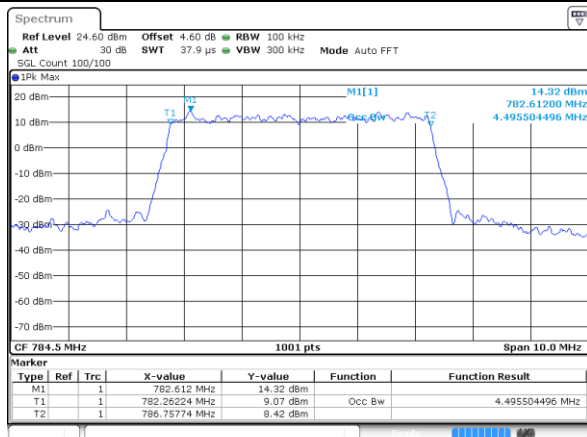
Date: 14.OCT.2019 21:37:15

Middle Channel / 5MHz / 16QAM



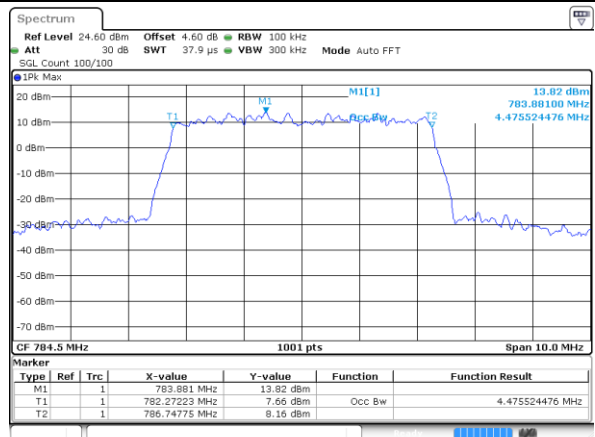
Date: 14.OCT.2019 21:37:25

Highest Channel / 5MHz / QPSK



Date: 14.OCT.2019 21:39:42

Highest Channel / 5MHz / 16QAM

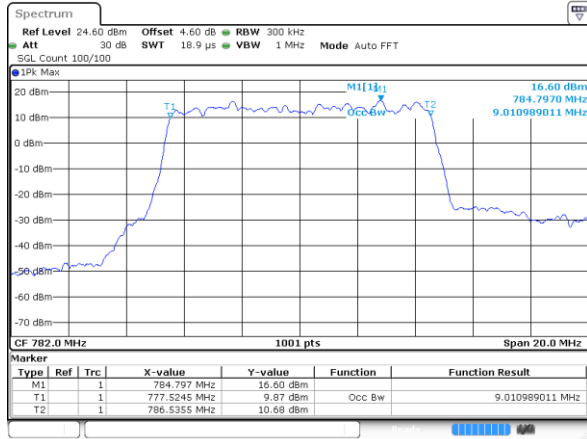


Date: 14.OCT.2019 21:39:52



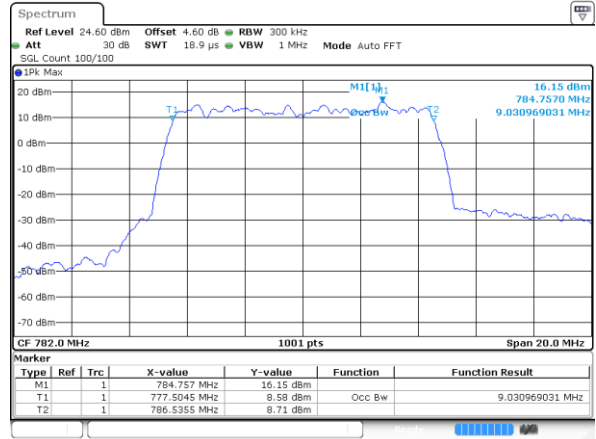
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 14.OCT.2019 21:09:45

Middle Channel / 10MHz / 16QAM

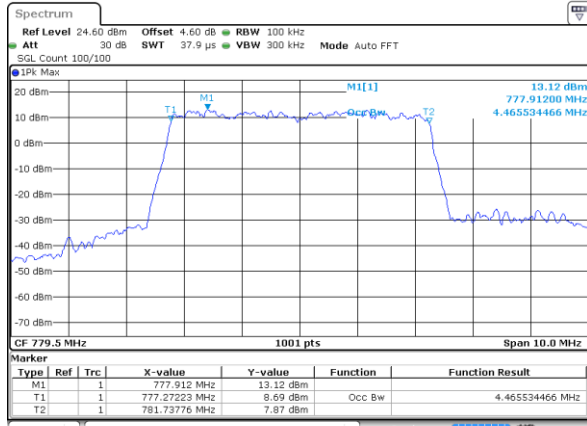


Date: 14.OCT.2019 21:11:17



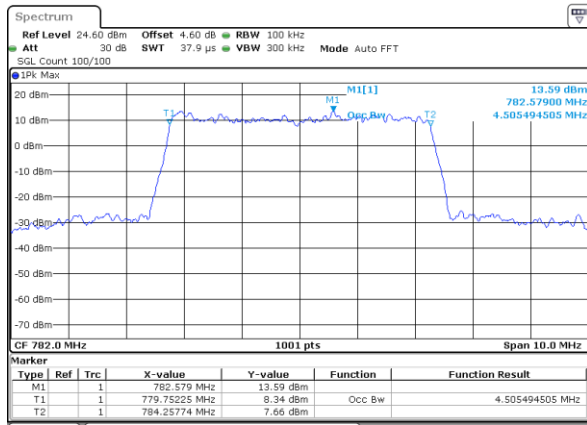
LTE Band 13

Lowest Channel / 5MHz / 64QAM



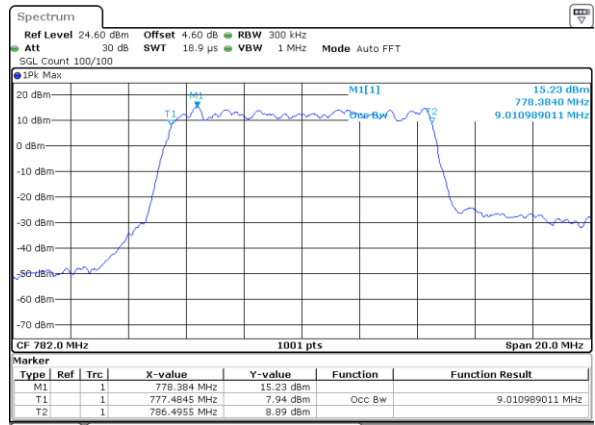
Date: 14.OCT.2019 21:48:26

Middle Channel / 5MHz / 64QAM



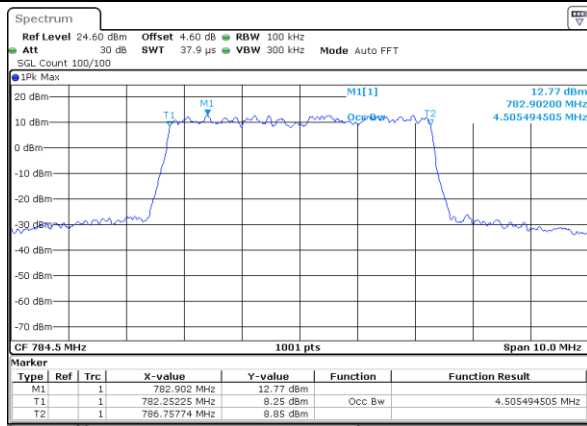
Date: 14.OCT.2019 21:48:36

Middle Channel / 10MHz / 64QAM



Date: 14.OCT.2019 21:13:37

Highest Channel / 5MHz / 64QAM



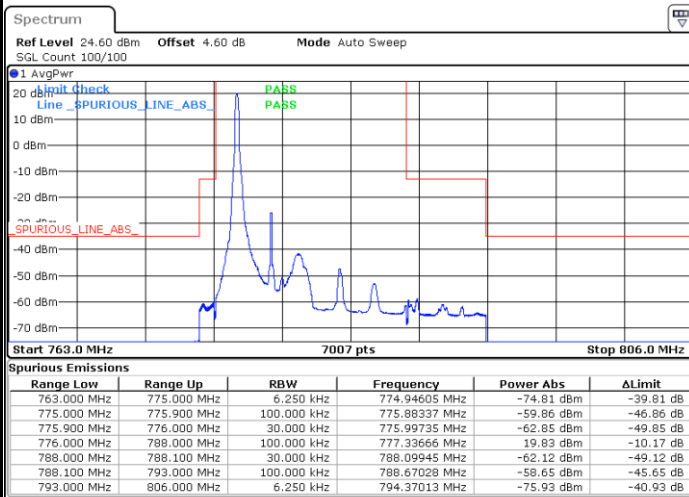
Date: 14.OCT.2019 21:48:46



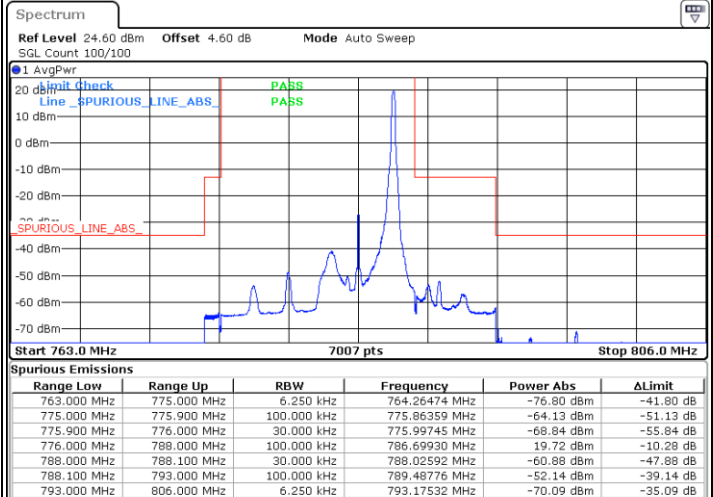
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

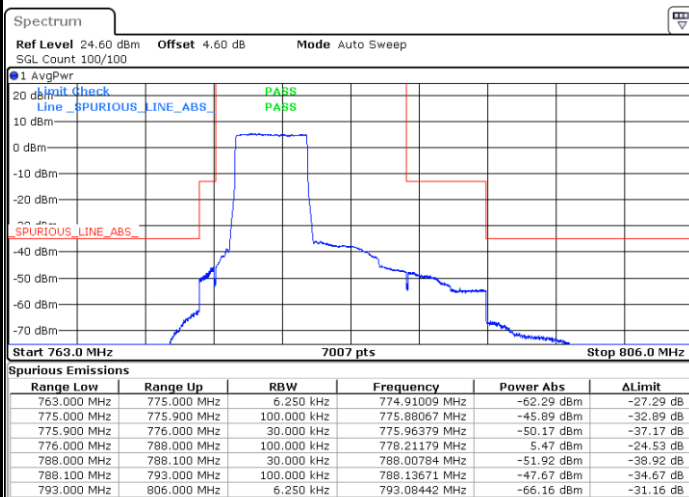
Lowest Band Edge / 1 RB



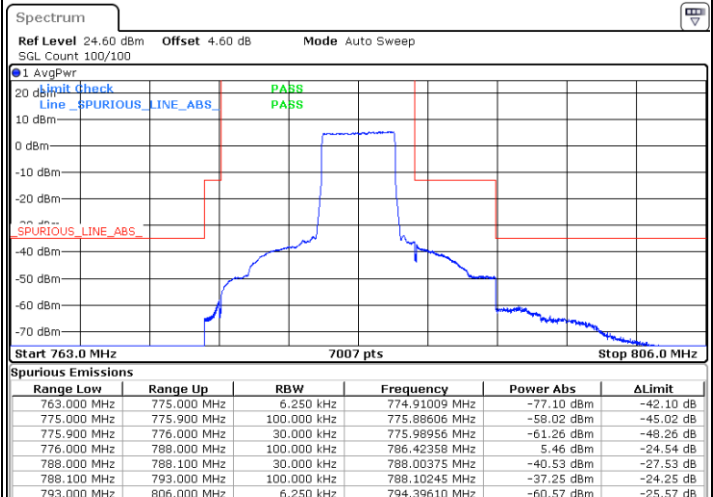
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



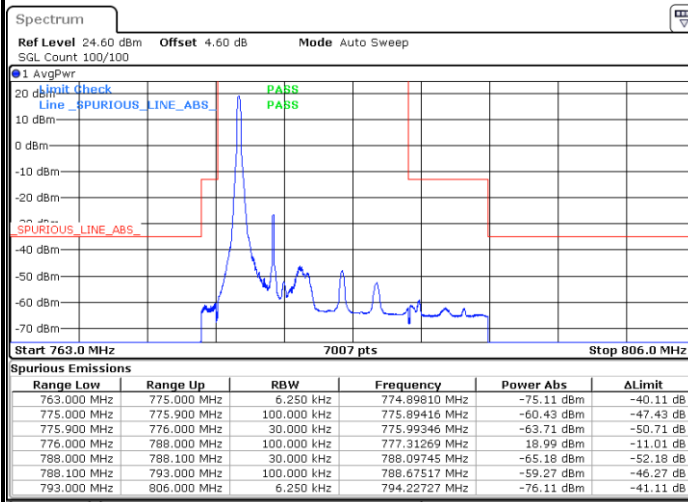
Highest Band Edge / Full RB





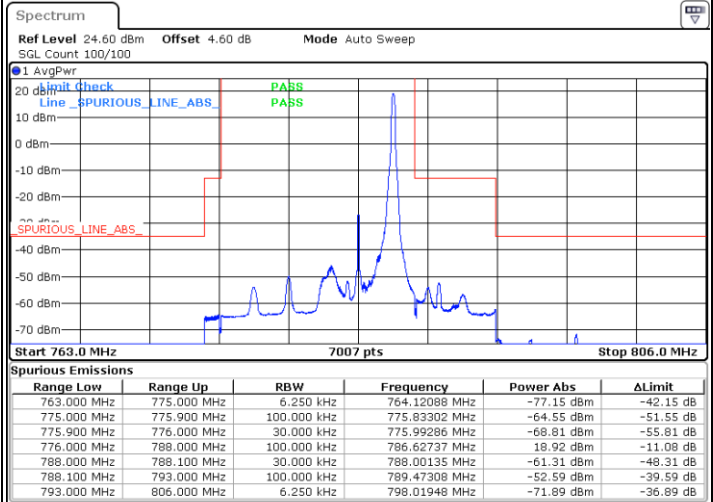
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



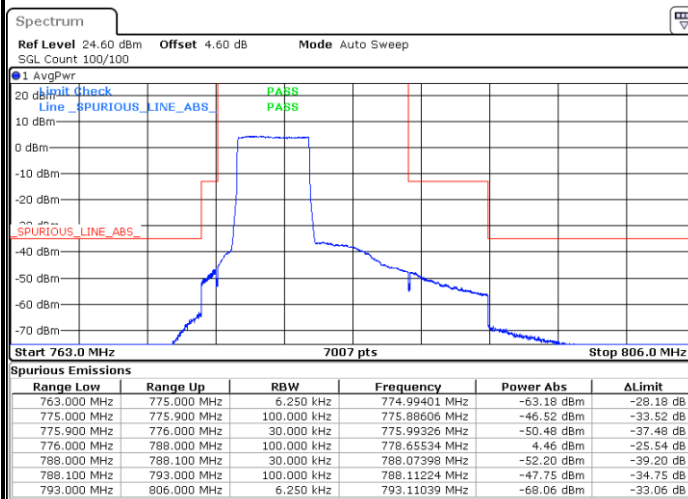
Date: 14.OCT.2019 21:34:57

Highest Band Edge / 1 RB



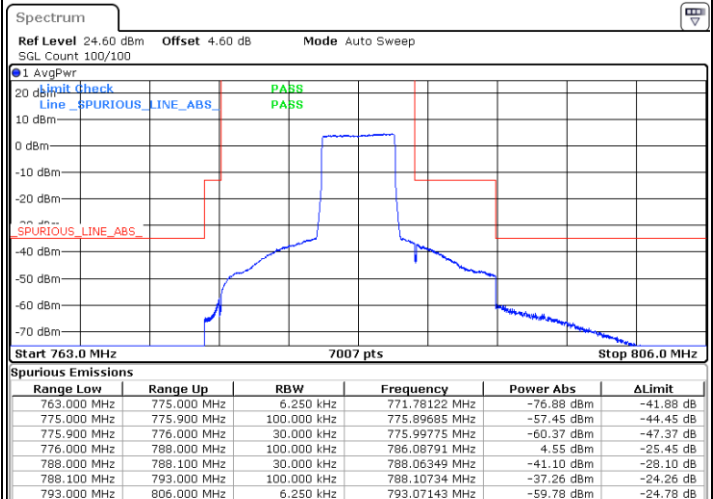
Date: 14.OCT.2019 21:46:28

Lowest Band Edge / Full RB



Date: 14.OCT.2019 21:30:00

Highest Band Edge / Full RB



Date: 14.OCT.2019 21:41:31