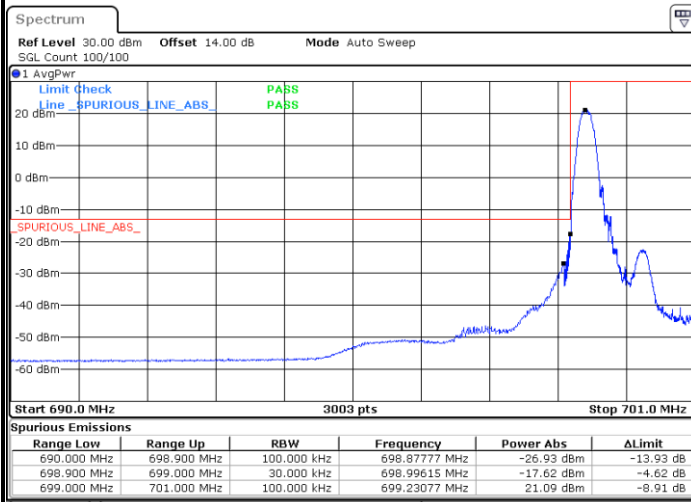


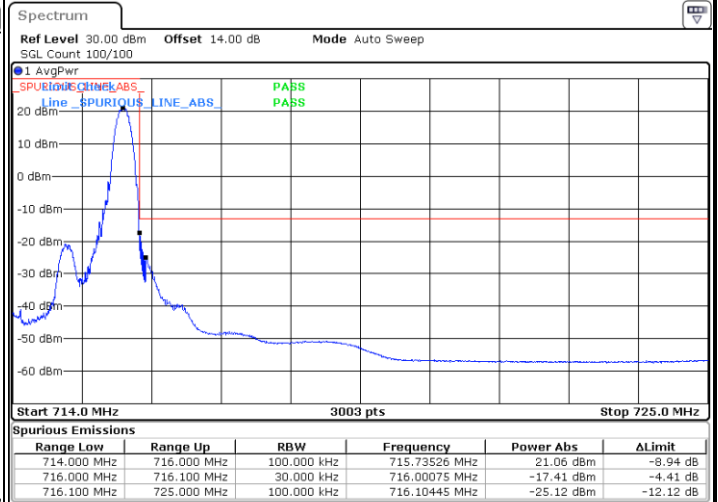


LTE Band 12 / 1.4MHz / 16QAM

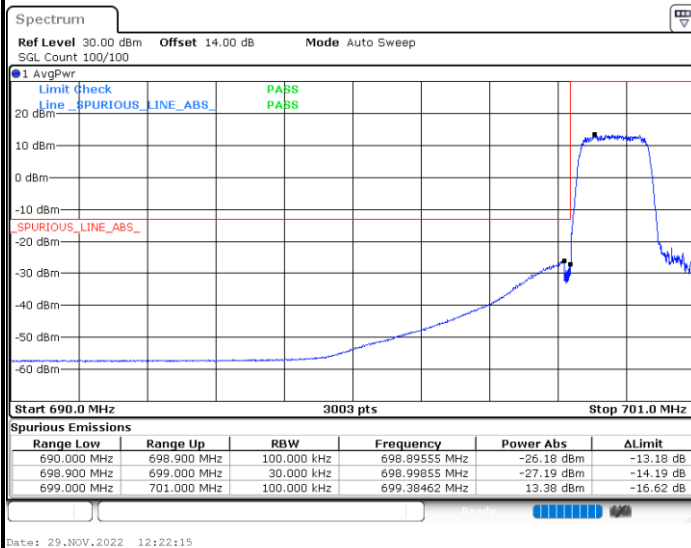
Lowest Band Edge / 1 RB



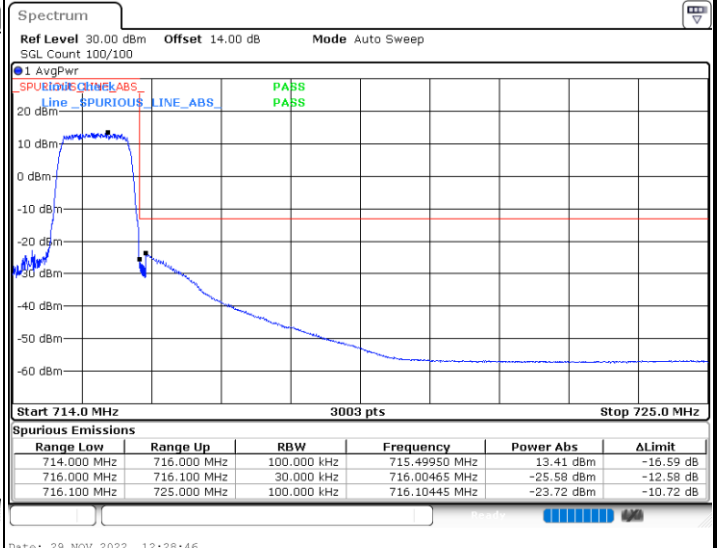
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



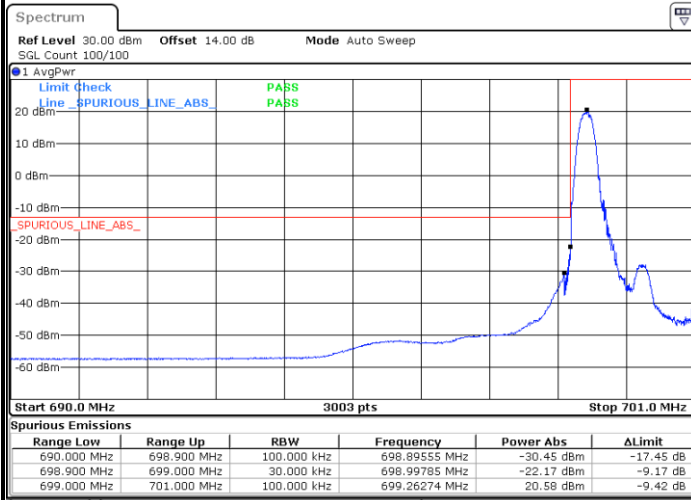
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 64QAM

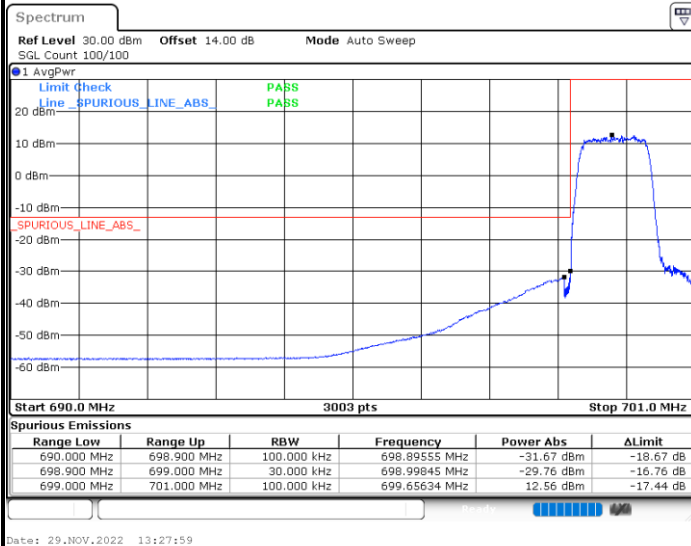
Lowest Band Edge / 1 RB



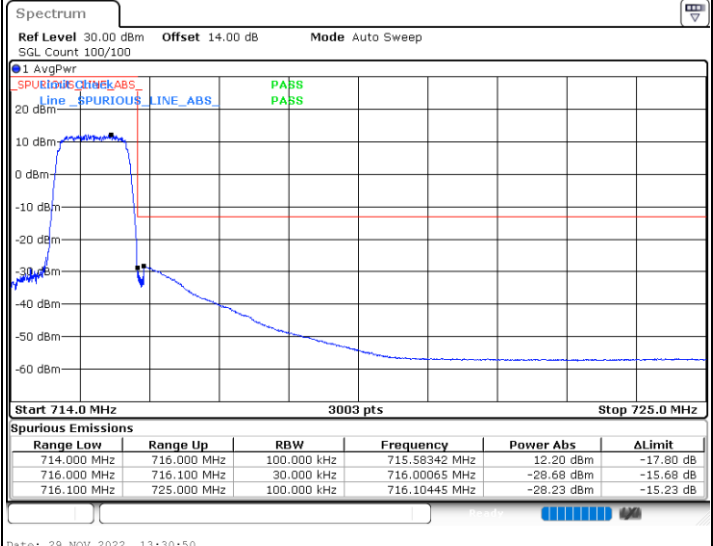
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



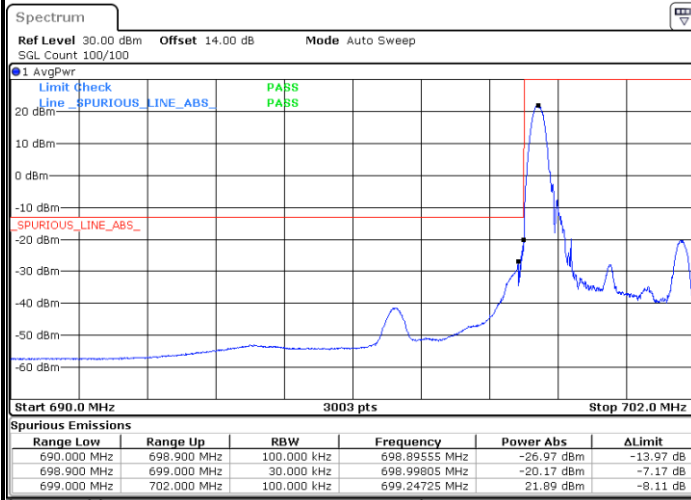
Highest Band Edge / Full RB



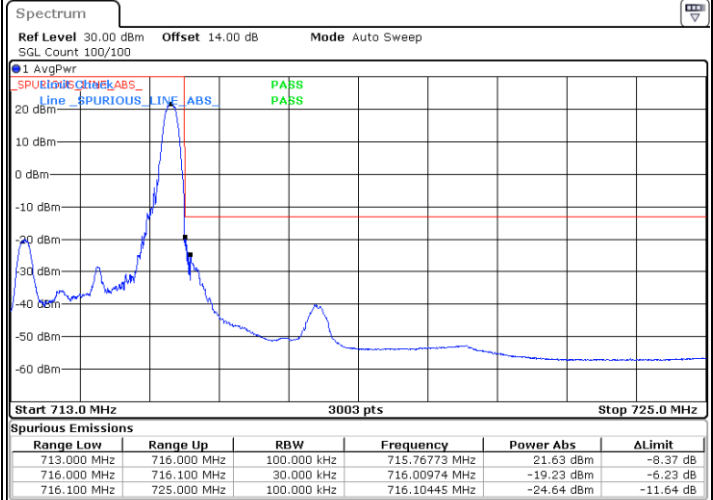


LTE Band 12 / 3MHz / QPSK

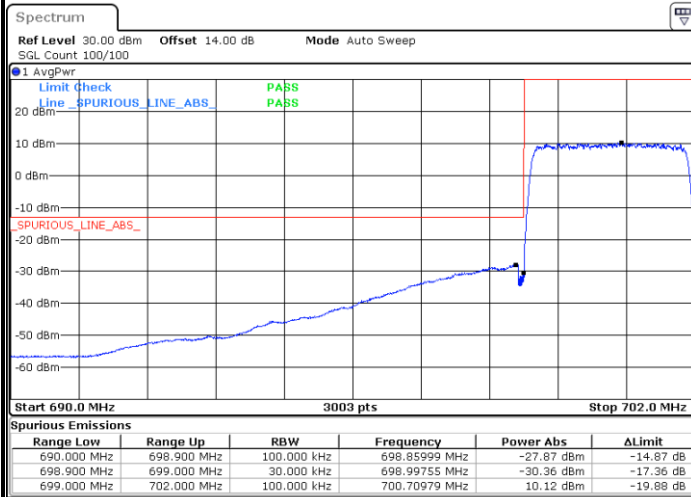
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



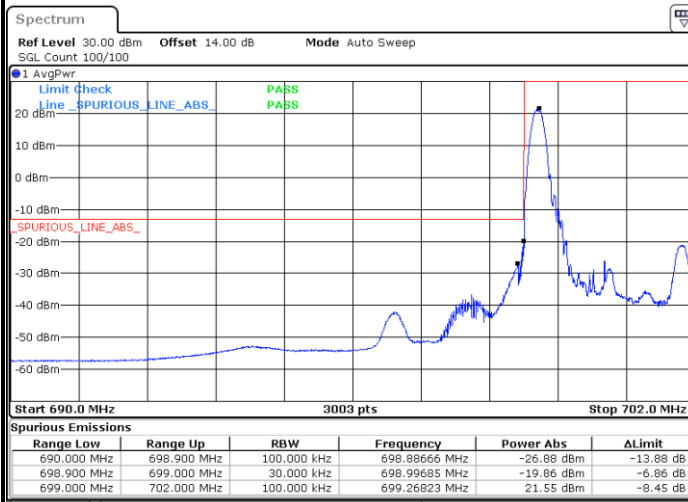
Highest Band Edge / Full RB



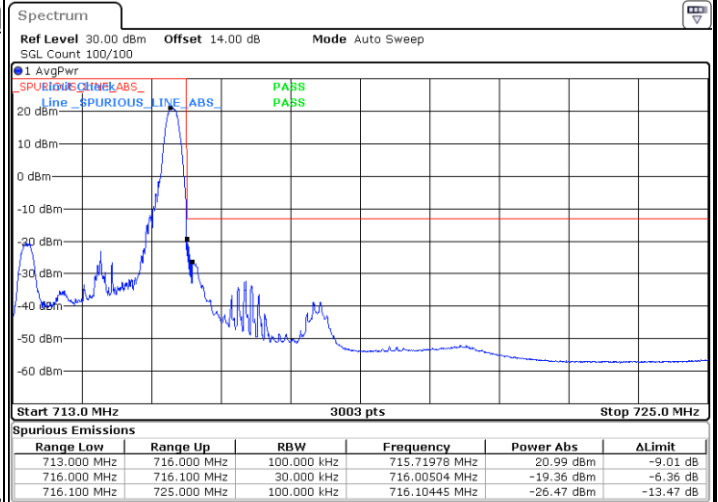


LTE Band 12 / 3MHz / 16QAM

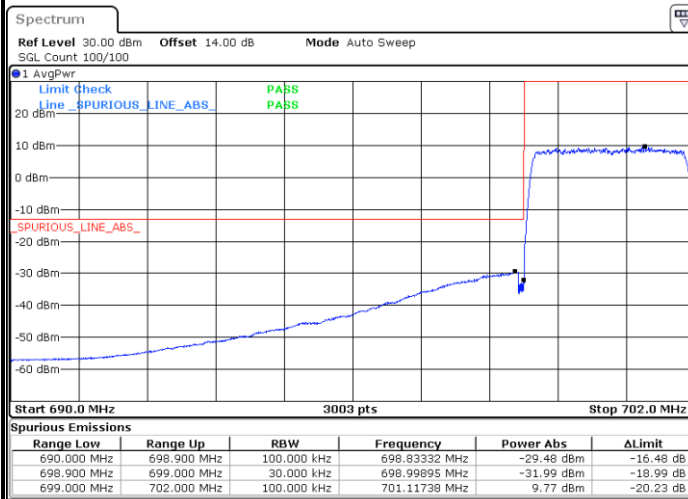
Lowest Band Edge / 1 RB



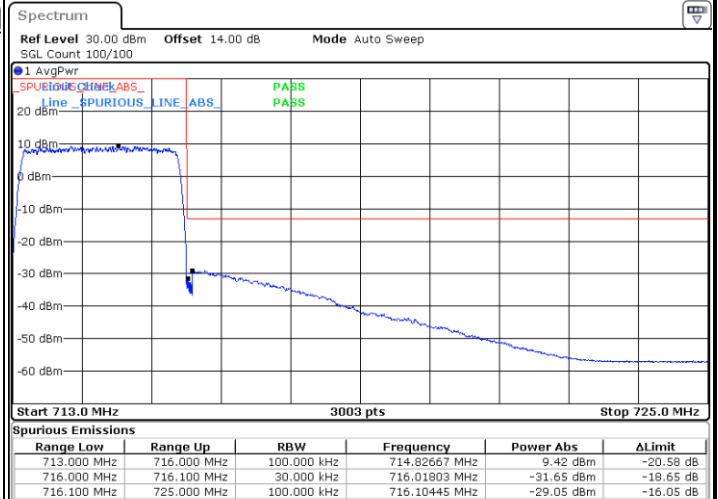
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



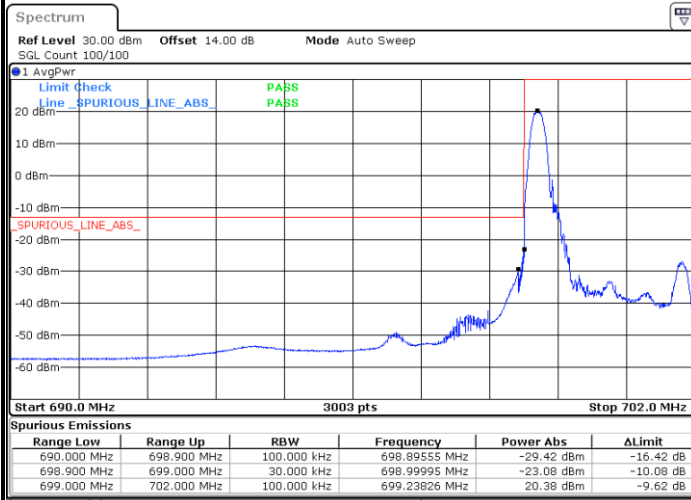
Highest Band Edge / Full RB



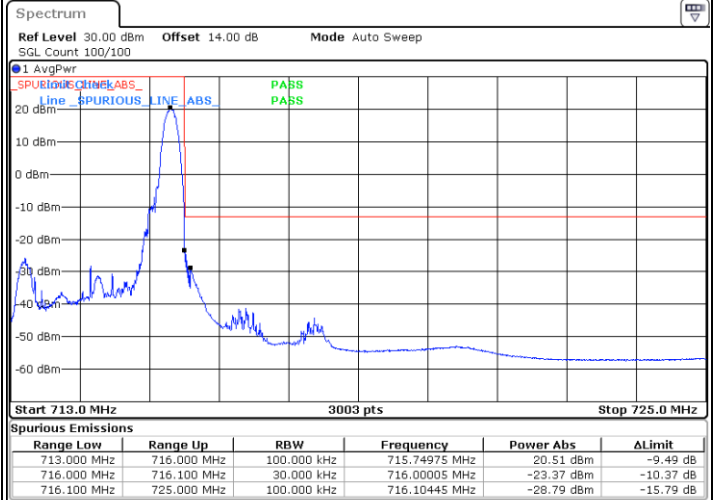


LTE Band 12 / 3MHz / 64QAM

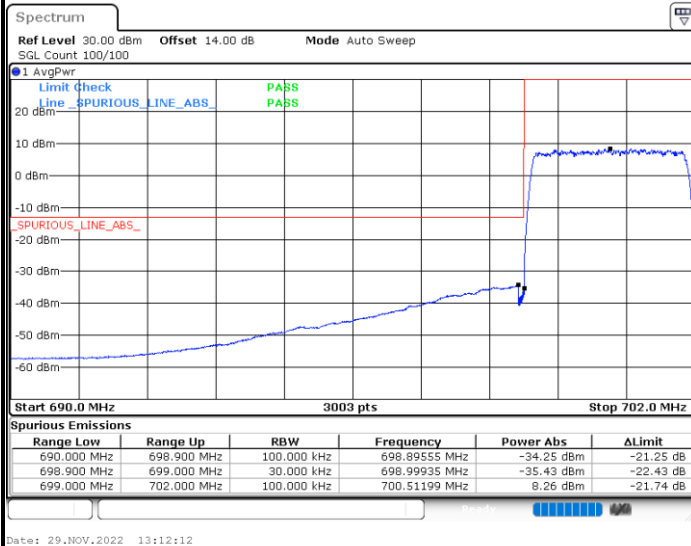
Lowest Band Edge / 1 RB



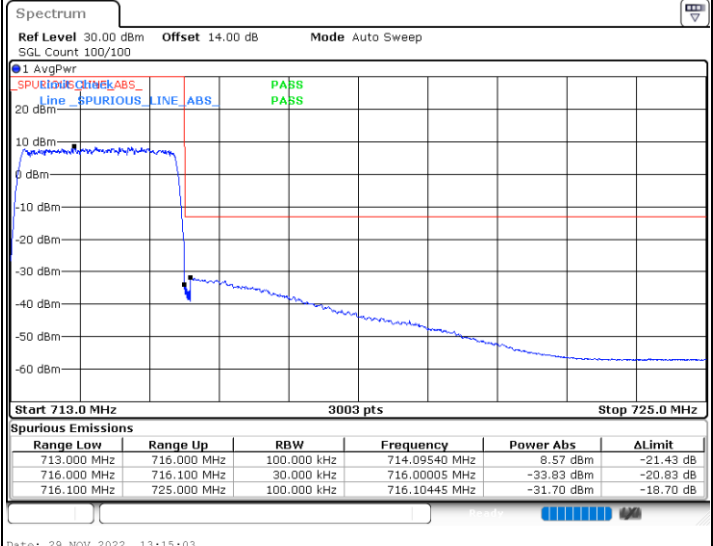
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



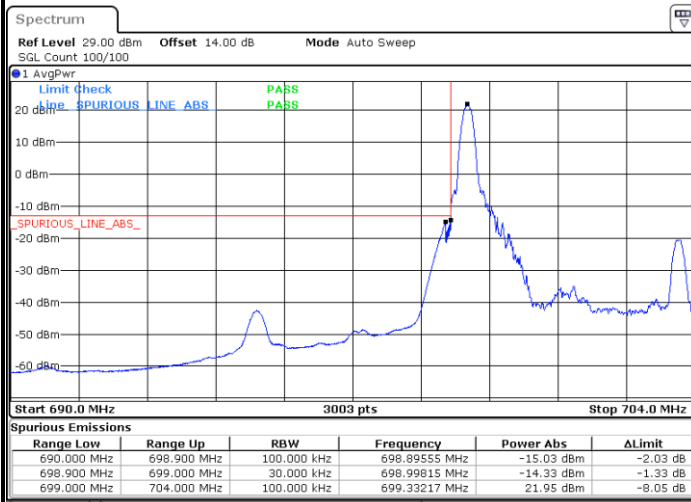
Highest Band Edge / Full RB



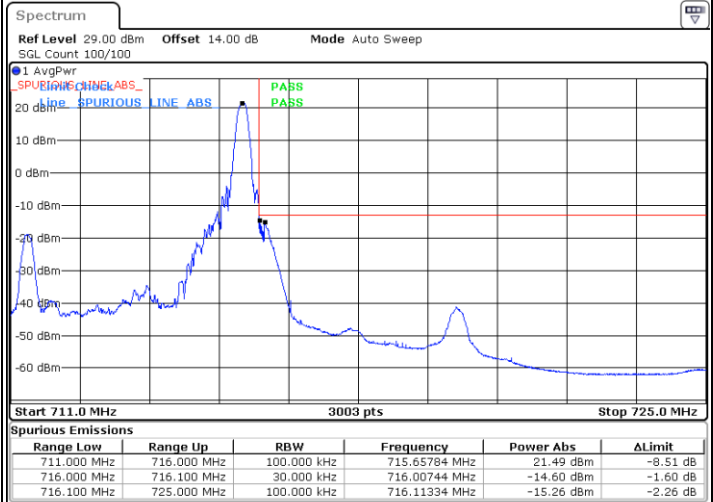


LTE Band 12 / 5MHz / QPSK

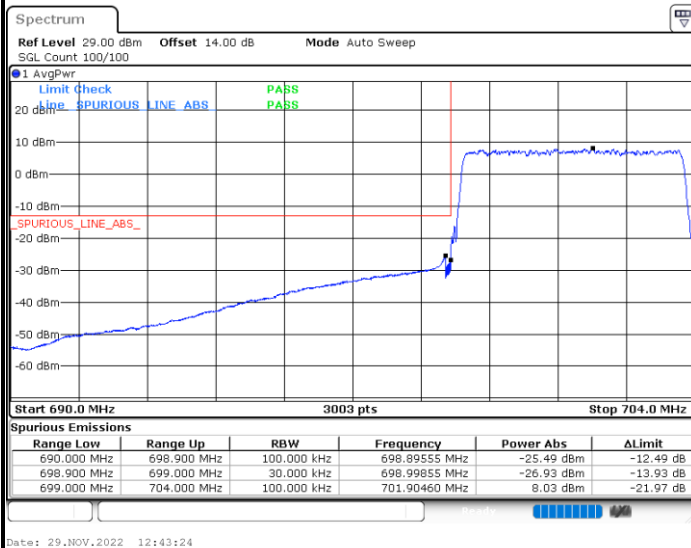
Lowest Band Edge / 1 RB



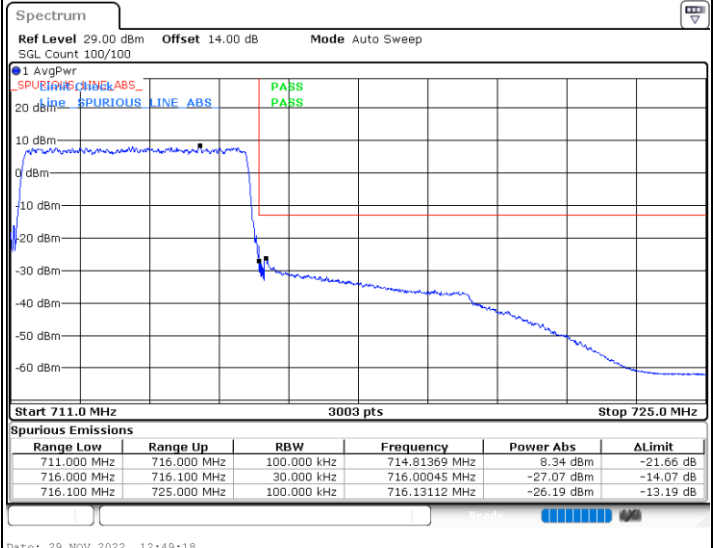
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



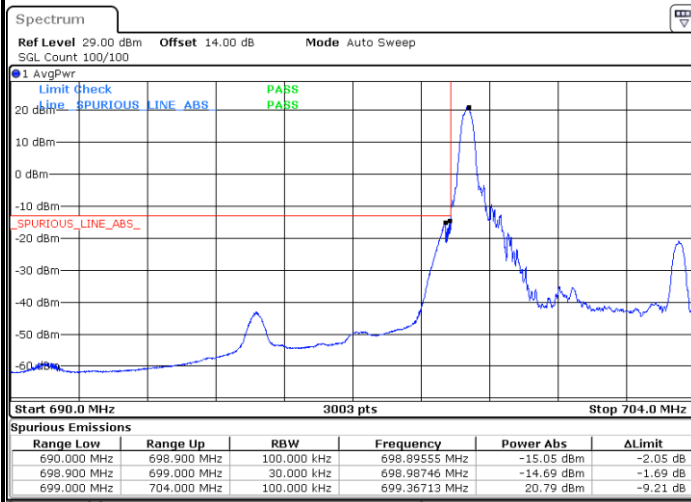
Highest Band Edge / Full RB



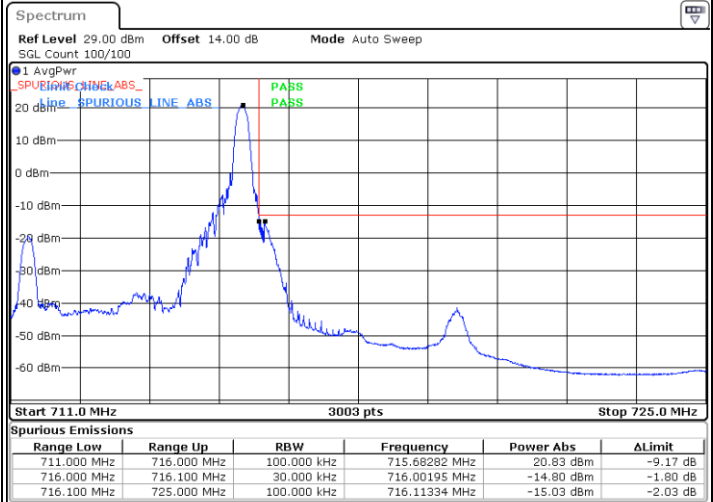


LTE Band 12 / 5MHz / 16QAM

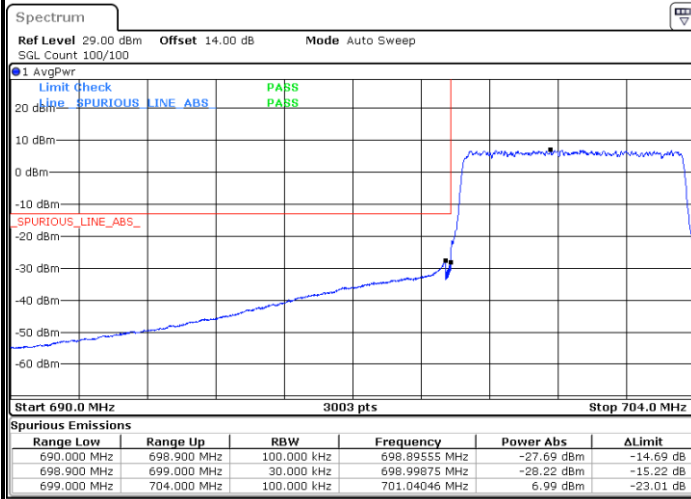
Lowest Band Edge / 1RB



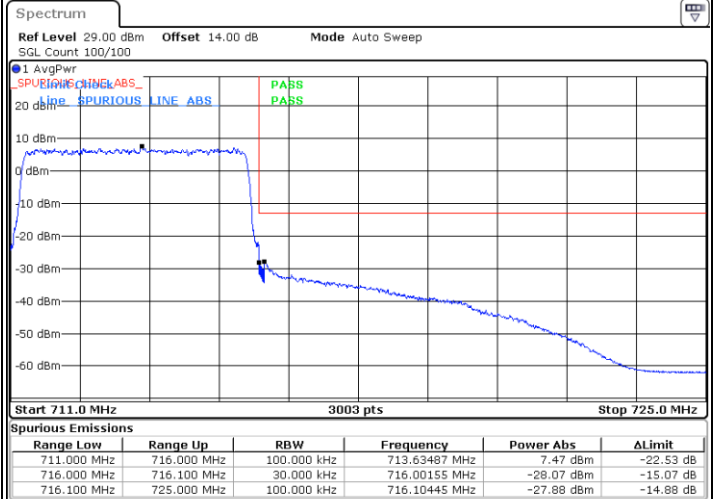
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



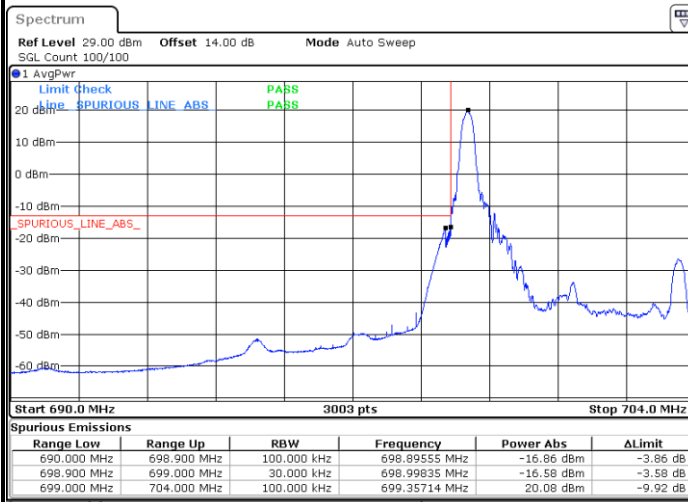
Highest Band Edge / Full RB



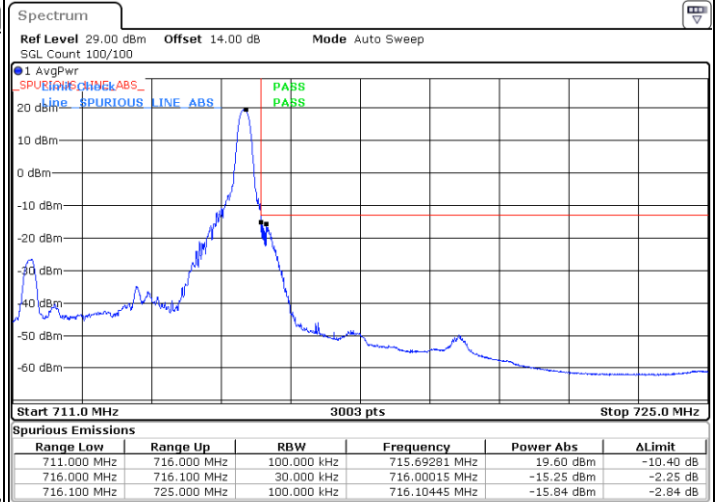


LTE Band 12 / 5MHz / 64QAM

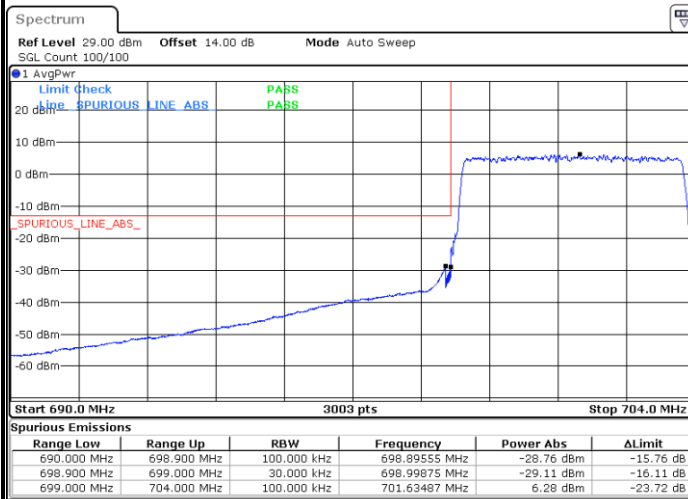
Lowest Band Edge / 1RB



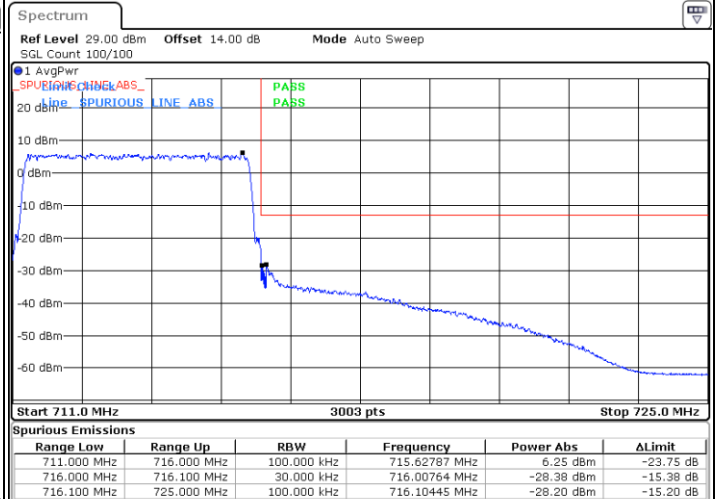
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



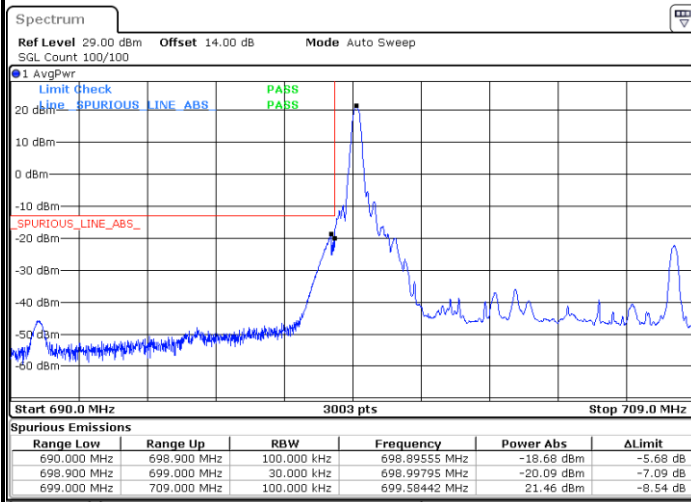
Highest Band Edge / Full RB



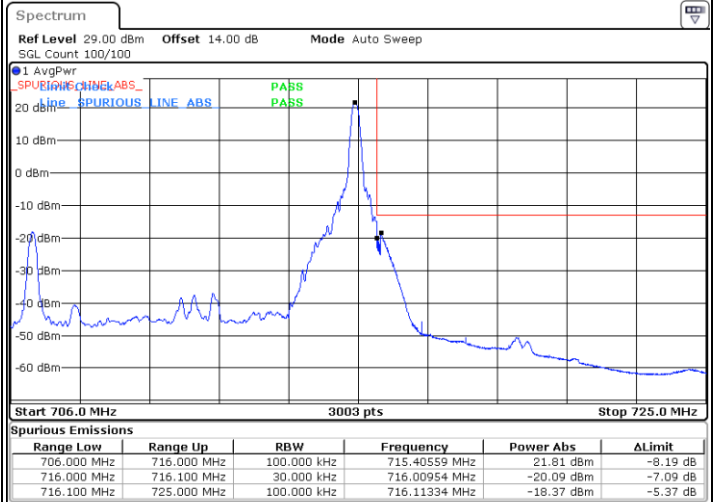


LTE Band 12 / 10MHz / QPSK

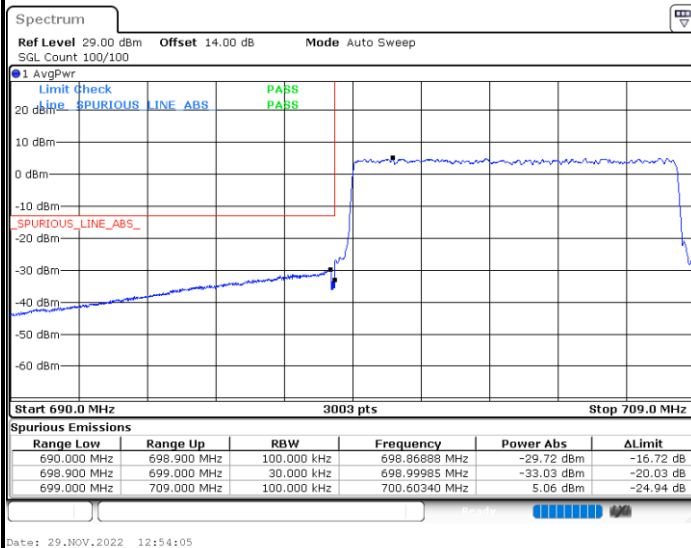
Lowest Band Edge / 1 RB



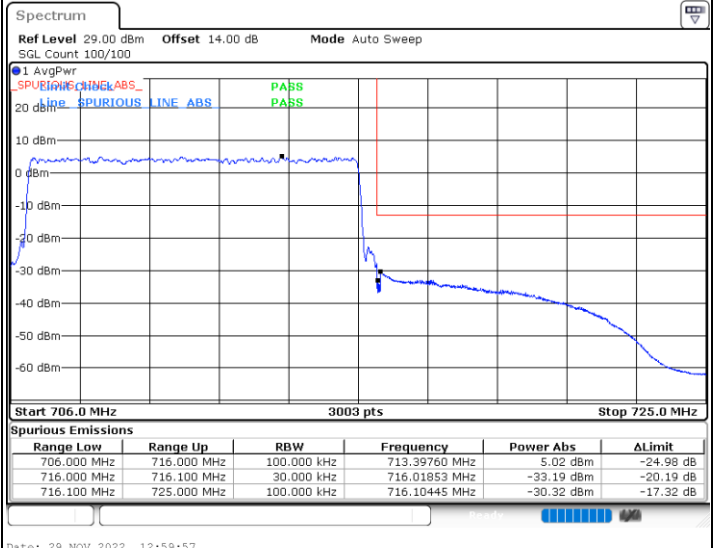
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



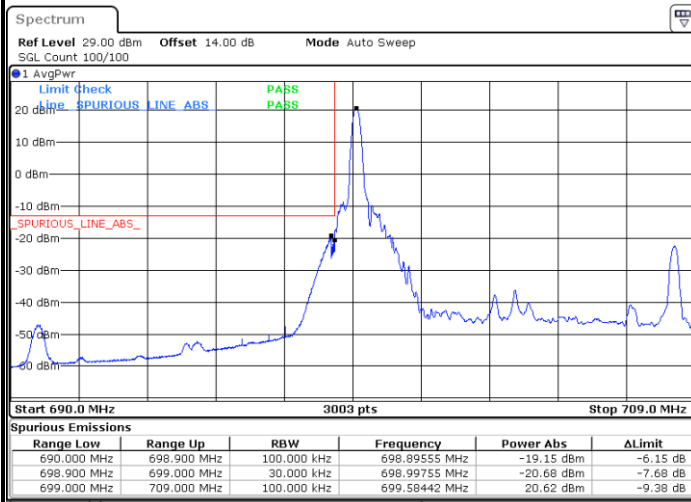
Highest Band Edge / Full RB



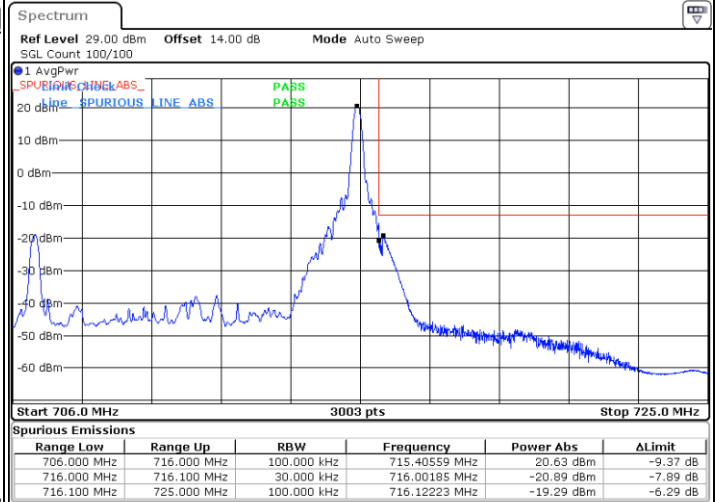


LTE Band 12 / 10MHz / 16QAM

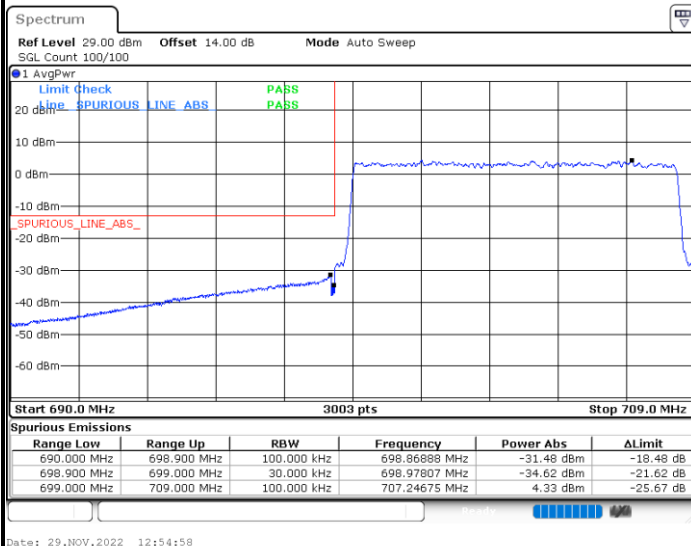
Lowest Band Edge / 1 RB



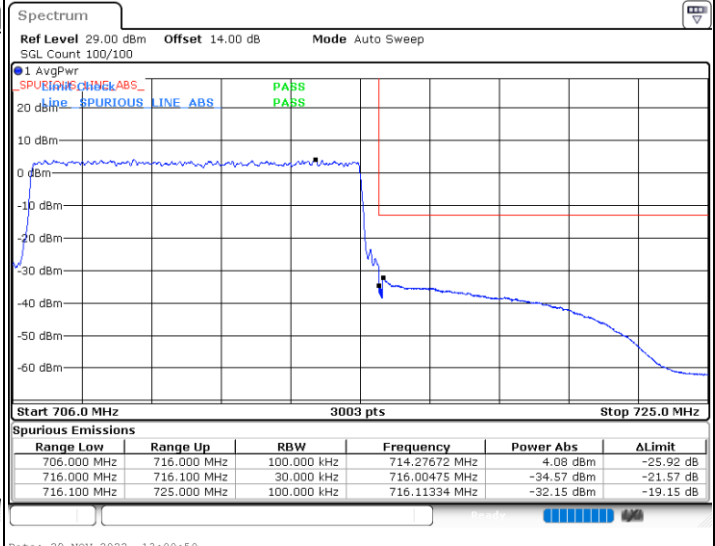
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



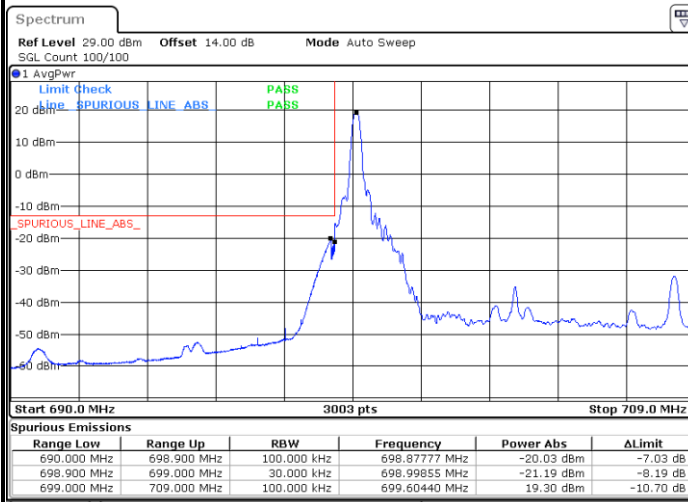
Highest Band Edge / Full RB



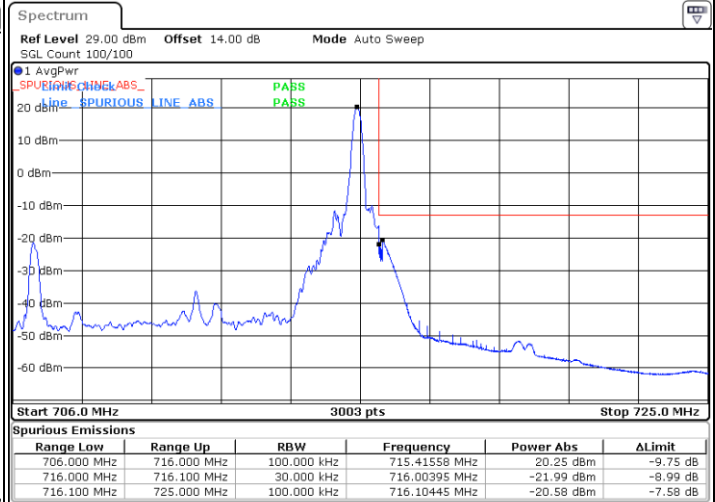


LTE Band 12 / 10MHz / 64QAM

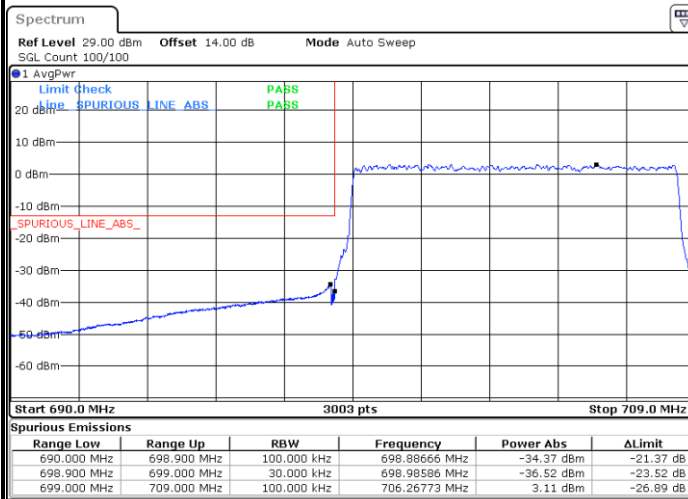
Lowest Band Edge / 1 RB



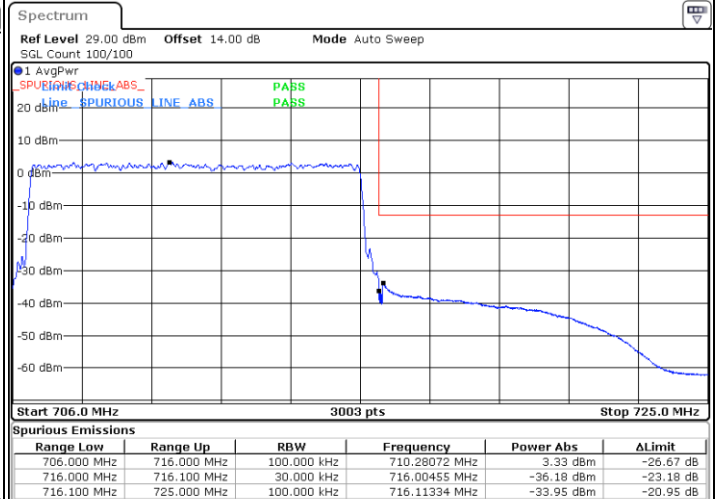
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

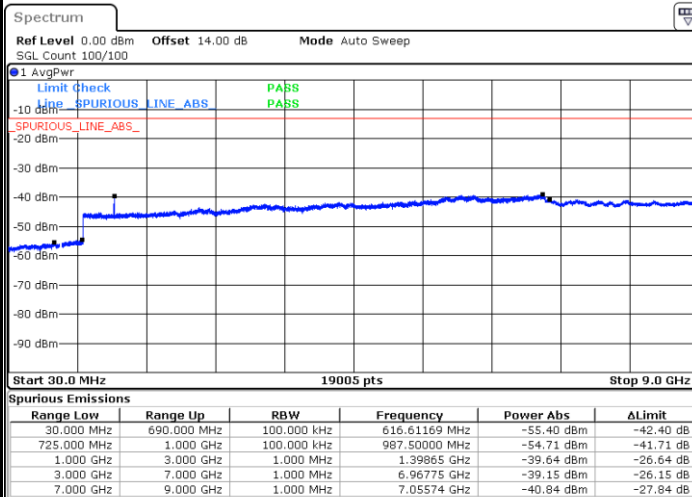




Conducted Spurious Emission

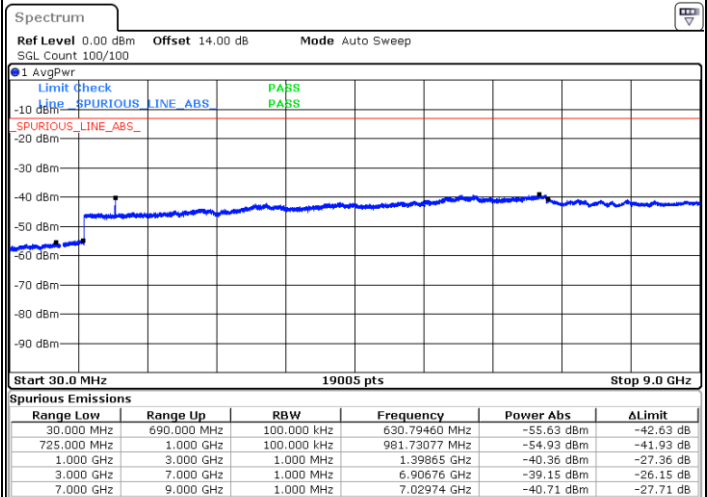
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



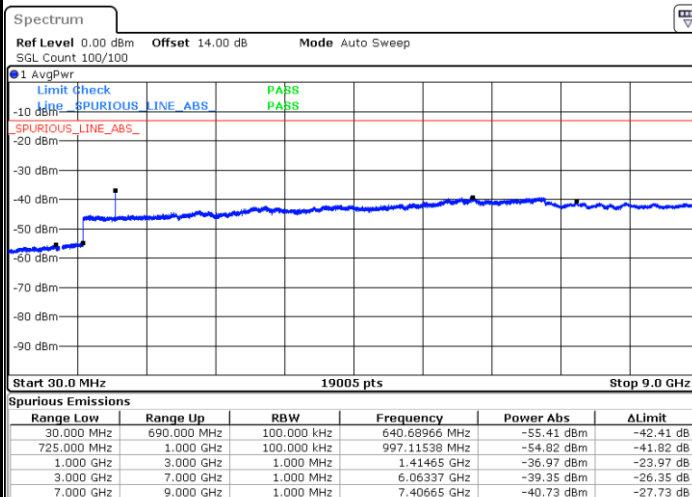
Date: 29.NOV.2022 12:24:48

Lowest Channel / 16QAM



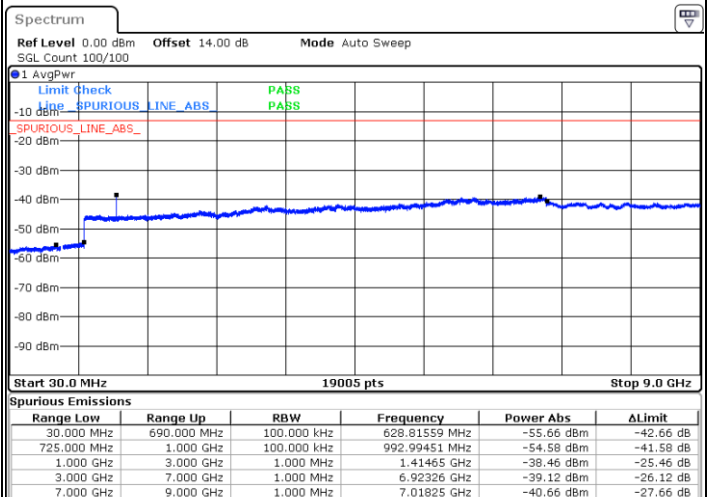
Date: 29.NOV.2022 12:25:46

Middle Channel / QPSK



Date: 29.NOV.2022 12:27:01

Middle Channel / 16QAM

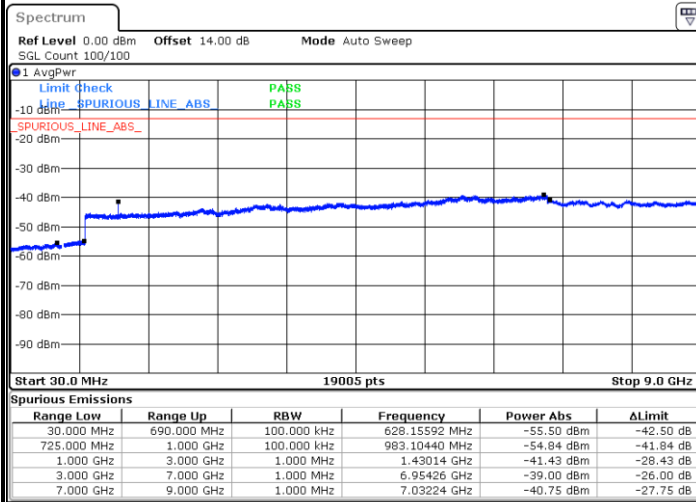


Date: 29.NOV.2022 12:26:24



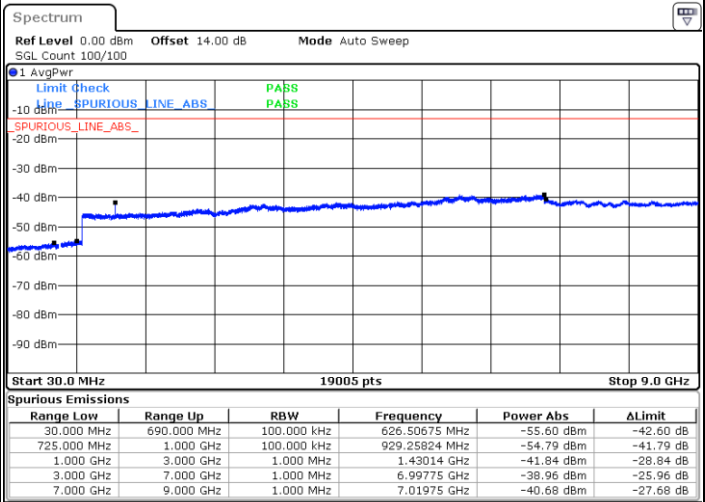
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 29.NOV.2022 12:31:10

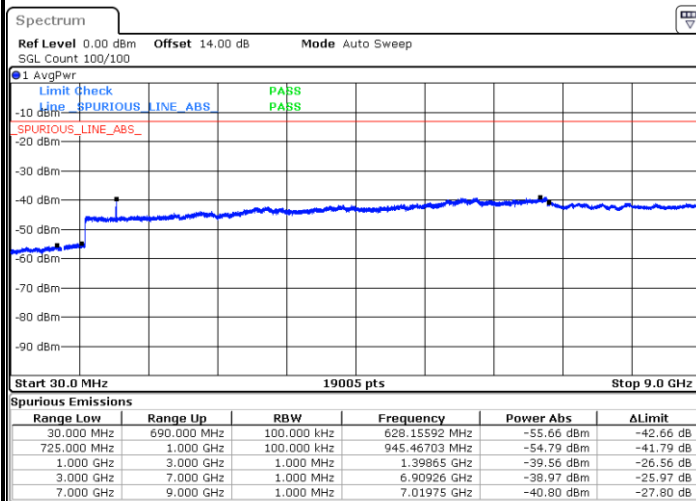
Highest Channel / 16QAM



Date: 29.NOV.2022 12:31:48

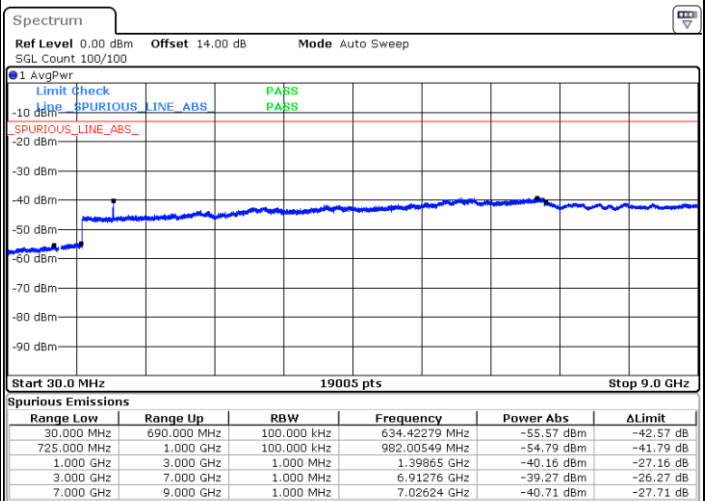
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 29.NOV.2022 12:35:49

Lowest Channel / 16QAM

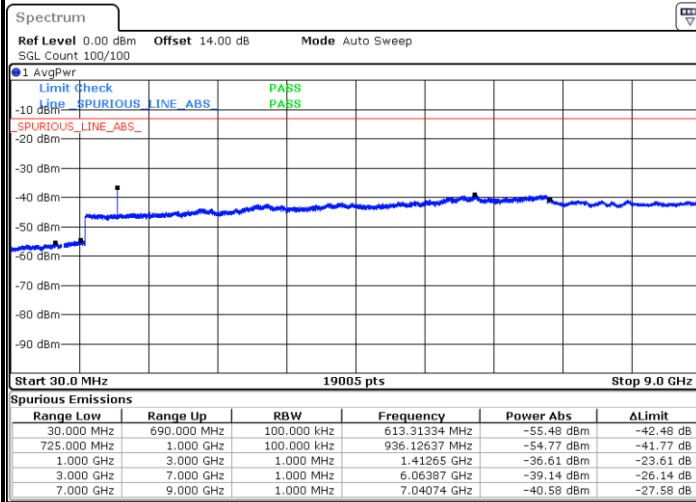


Date: 29.NOV.2022 12:36:27



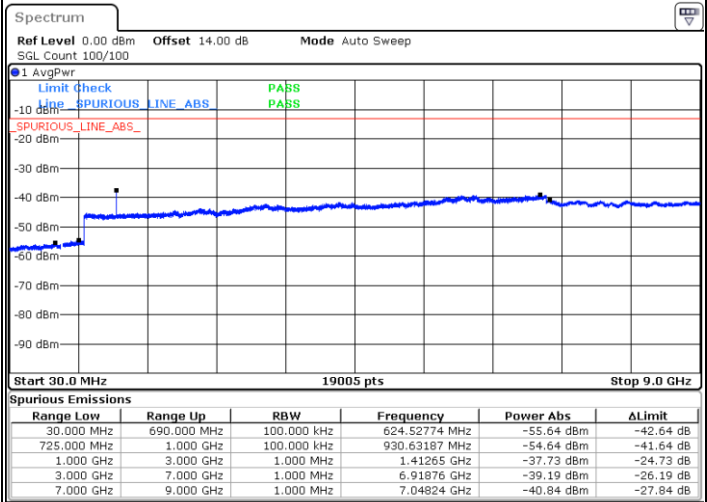
LTE Band 12 / 3MHz

Middle Channel / QPSK



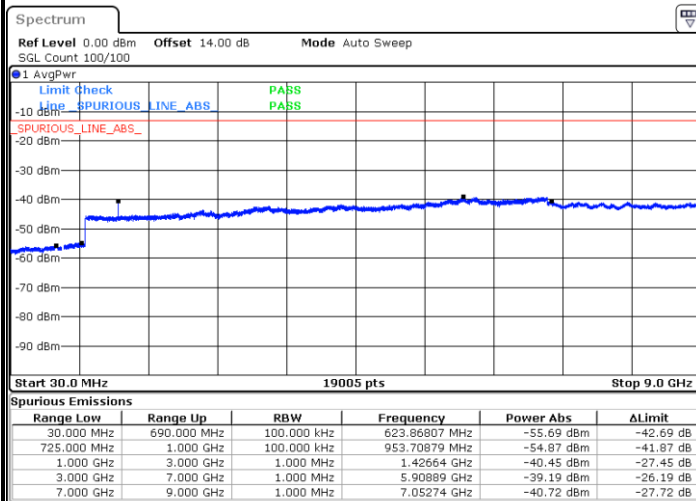
Date: 29.NOV.2022 12:37:43

Middle Channel / 16QAM



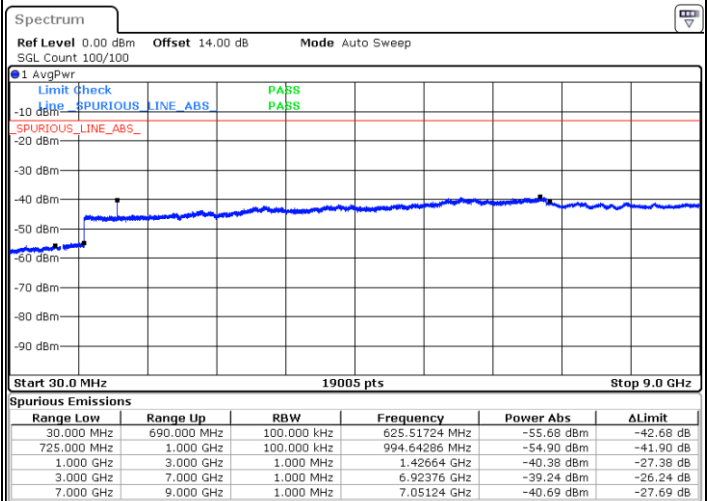
Date: 29.NOV.2022 12:37:05

Highest Channel / QPSK



Date: 29.NOV.2022 12:41:53

Highest Channel / 16QAM

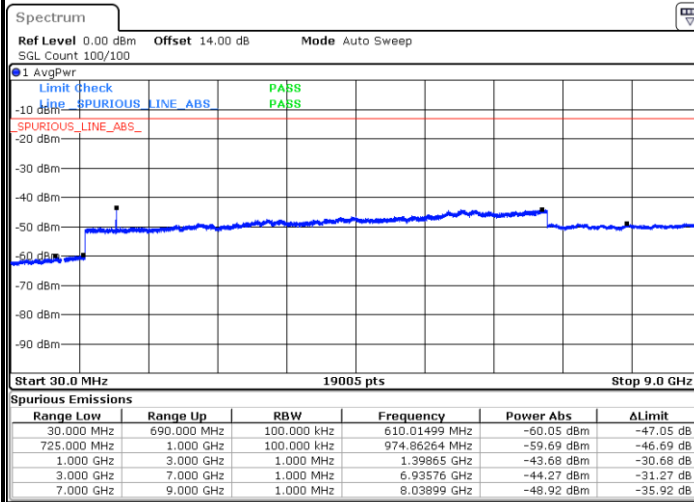


Date: 29.NOV.2022 12:42:31



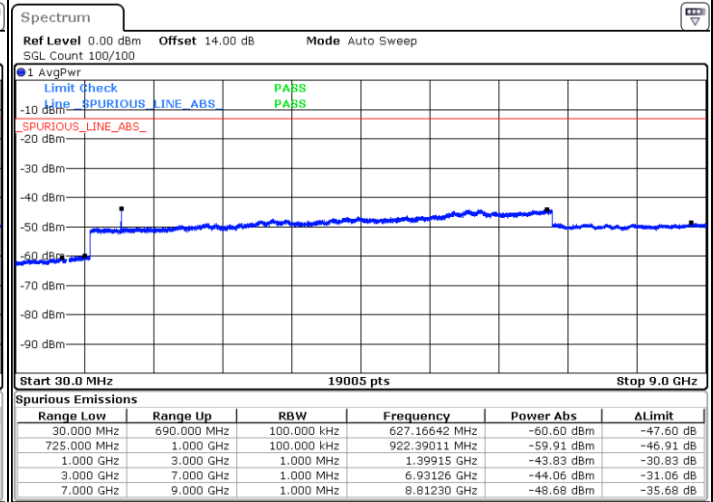
LTE Band 12 / 5MHz

Lowest Channel / QPSK



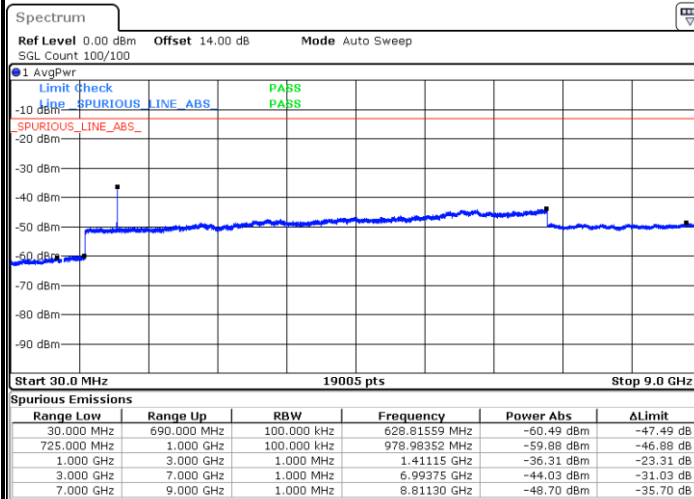
Date: 29.NOV.2022 12:46:31

Lowest Channel / 16QAM



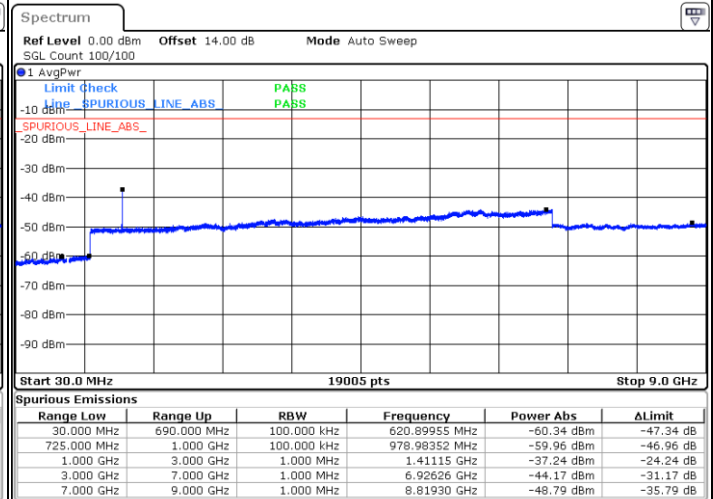
Date: 29.NOV.2022 12:47:09

Middle Channel / QPSK



Date: 29.NOV.2022 12:48:25

Middle Channel / 16QAM

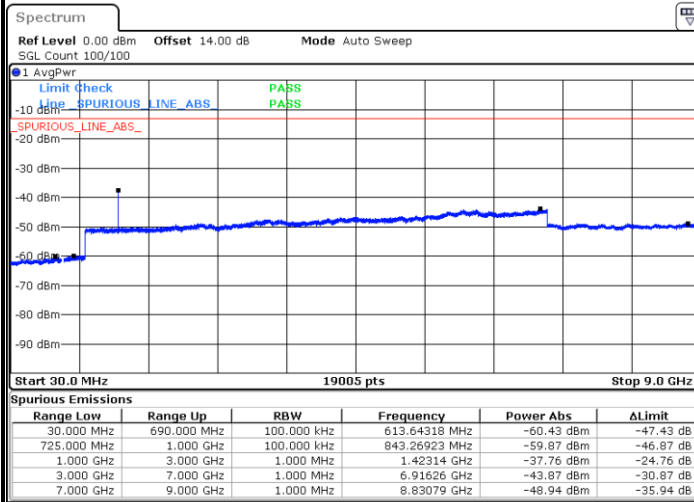


Date: 29.NOV.2022 12:47:48



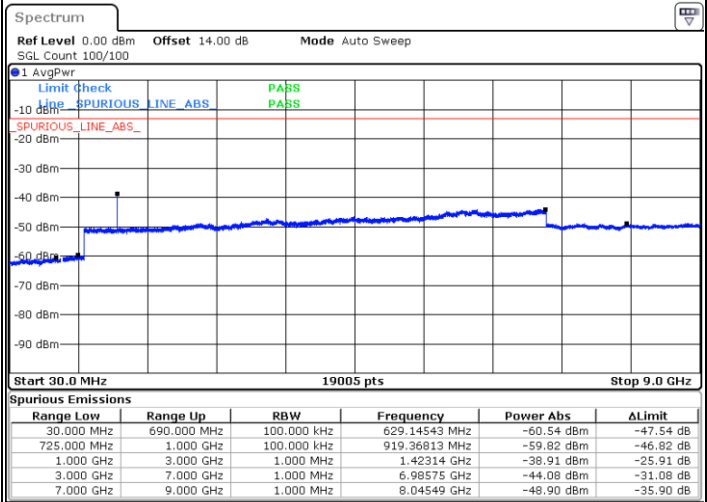
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 29.NOV.2022 12:53:12

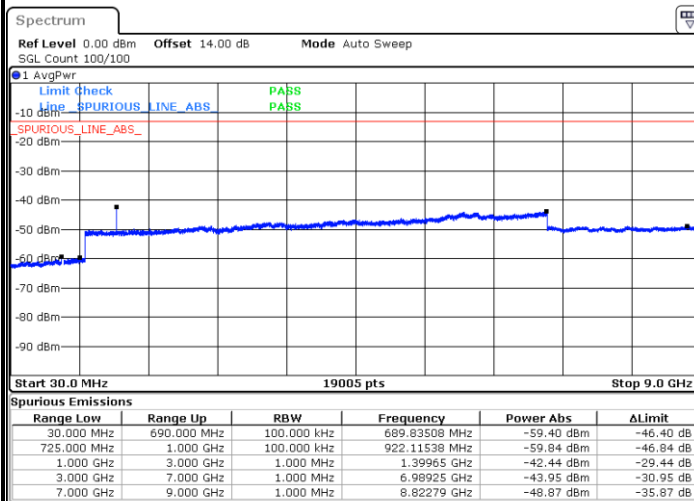
Highest Channel / 16QAM



Date: 29.NOV.2022 12:52:34

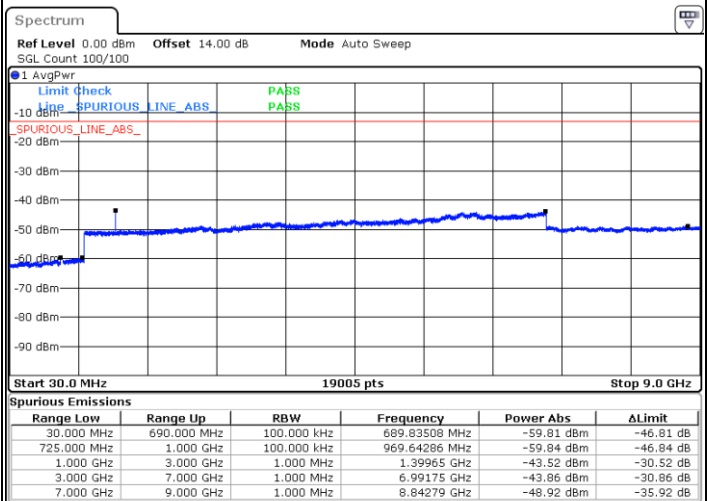
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 29.NOV.2022 12:57:12

Lowest Channel / 16QAM

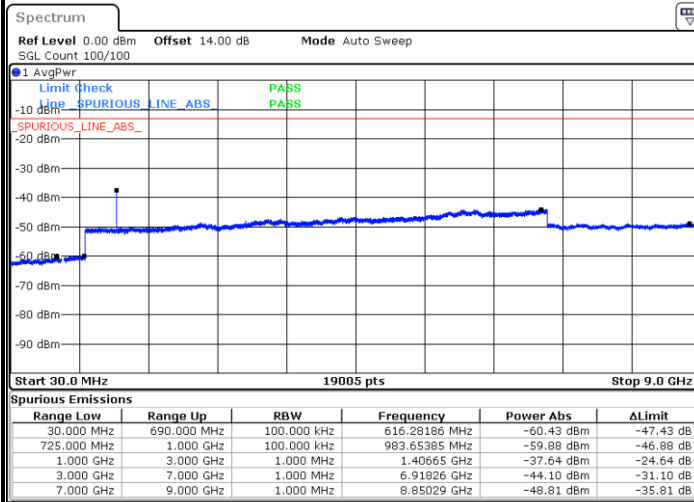


Date: 29.NOV.2022 12:57:50



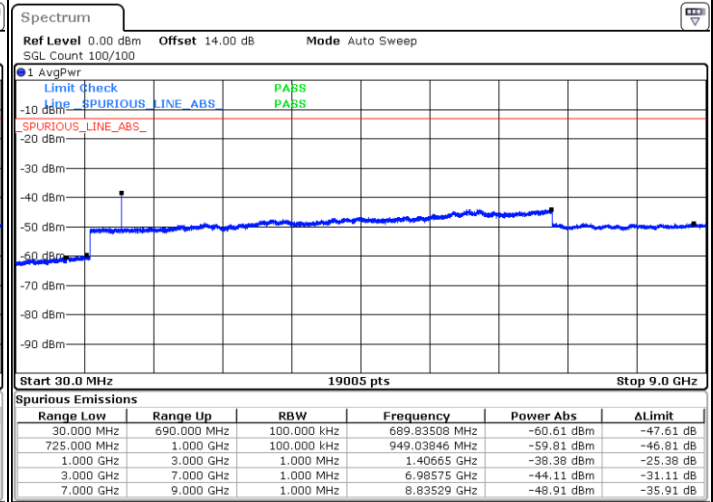
LTE Band 12 / 10MHz

Middle Channel / QPSK



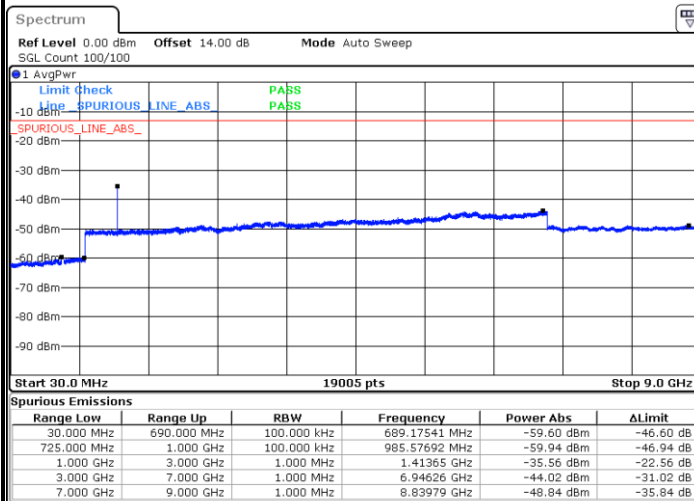
Date: 29.NOV.2022 12:59:05

Middle Channel / 16QAM



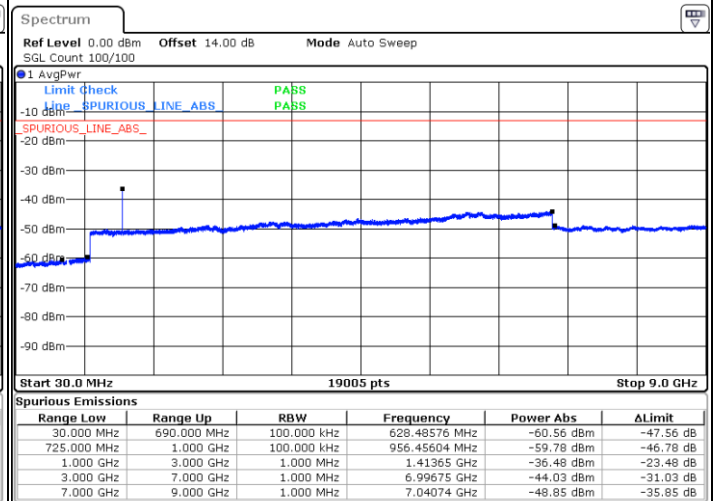
Date: 29.NOV.2022 12:58:27

Highest Channel / QPSK



Date: 29.NOV.2022 13:03:14

Highest Channel / 16QAM

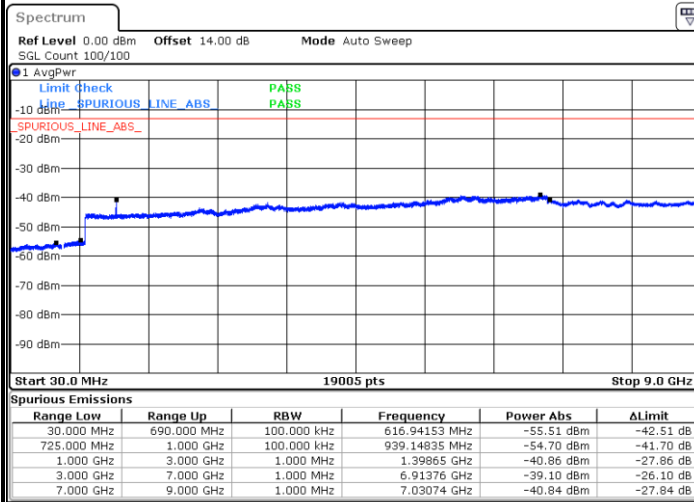


Date: 29.NOV.2022 13:03:52



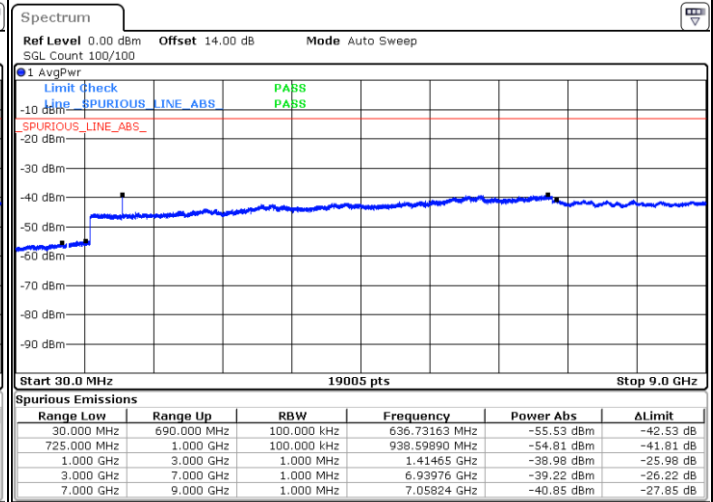
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



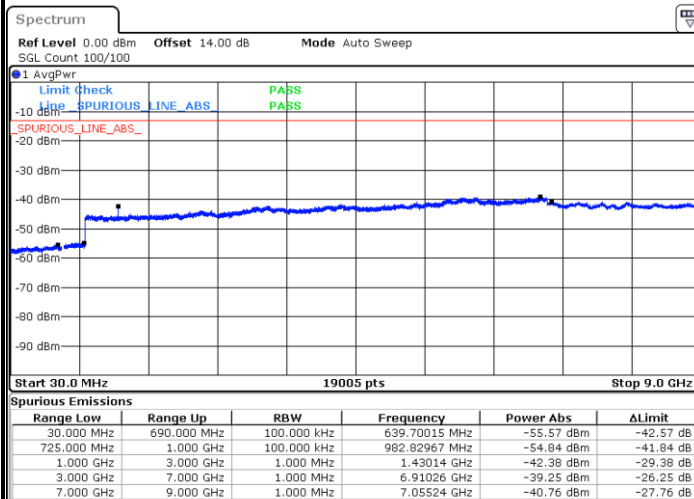
Date: 29.NOV.2022 13:29:20

Middle Channel / 64QAM



Date: 29.NOV.2022 13:29:58

Highest Channel / 64QAM

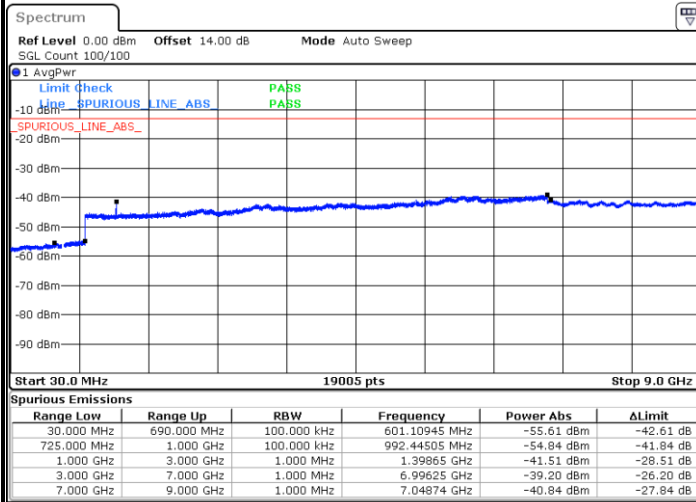


Date: 29.NOV.2022 13:32:21



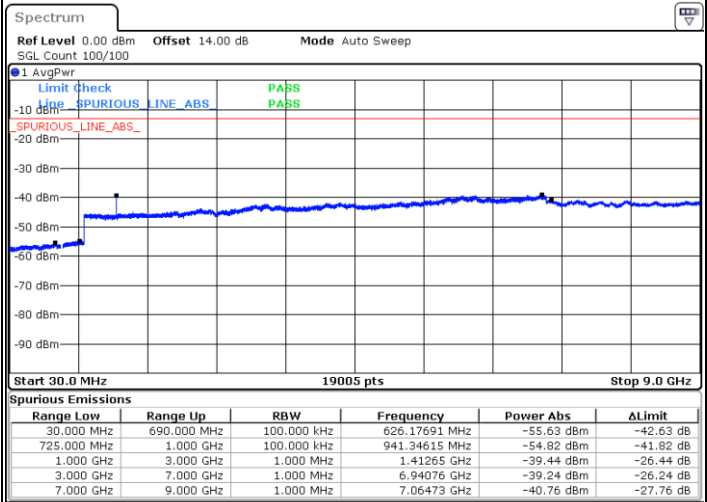
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



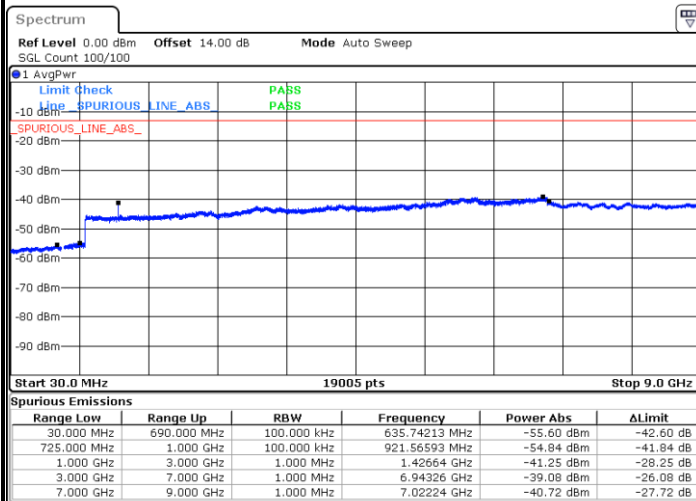
Date: 29.NOV.2022 13:13:33

Middle Channel / 64QAM



Date: 29.NOV.2022 13:14:10

Highest Channel / 64QAM

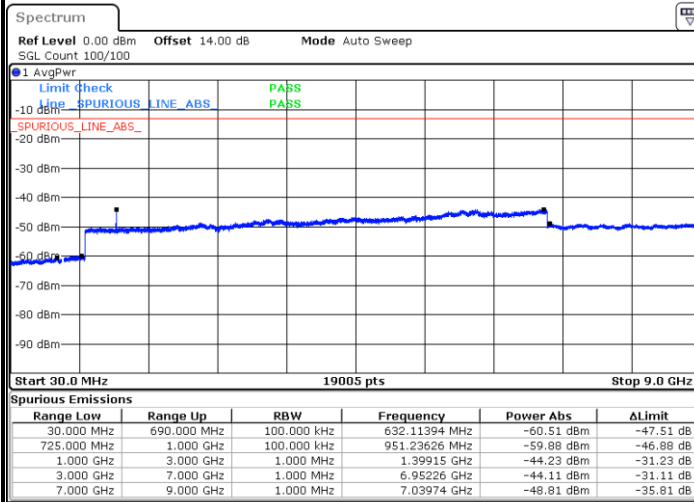


Date: 29.NOV.2022 13:16:34



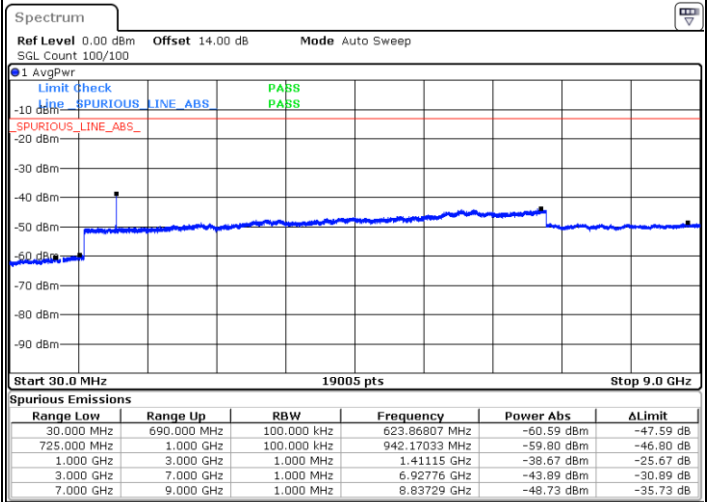
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



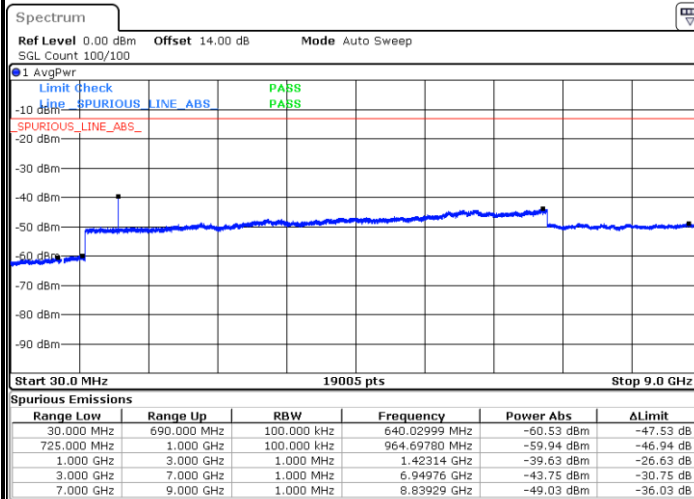
Date: 29.NOV.2022 13:18:48

Middle Channel / 64QAM



Date: 29.NOV.2022 13:19:26

Highest Channel / 64QAM

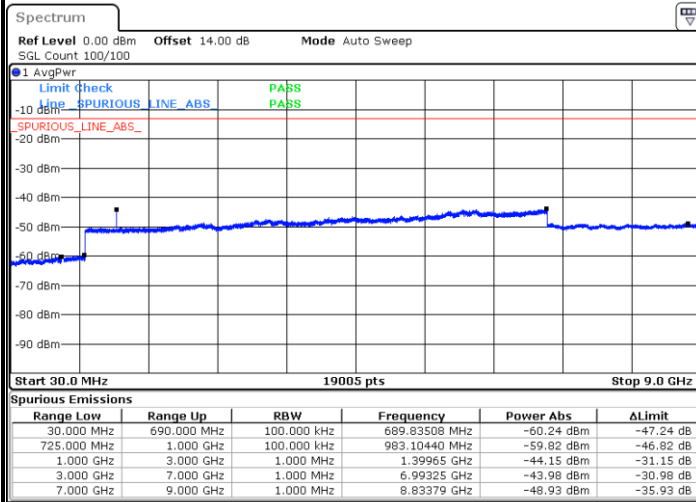


Date: 29.NOV.2022 13:21:49



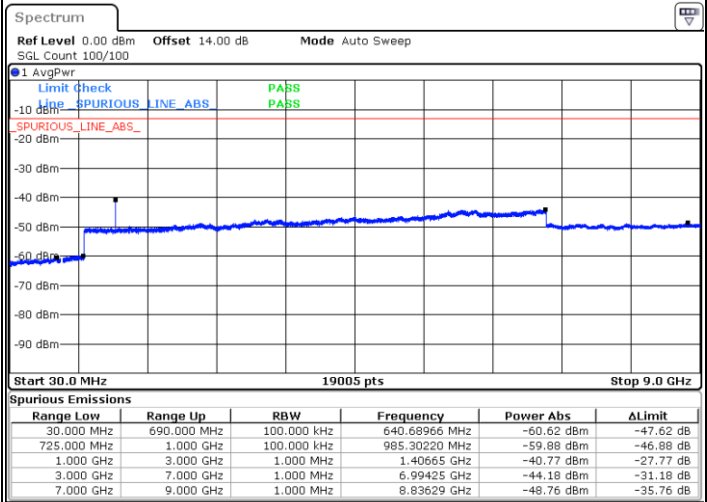
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



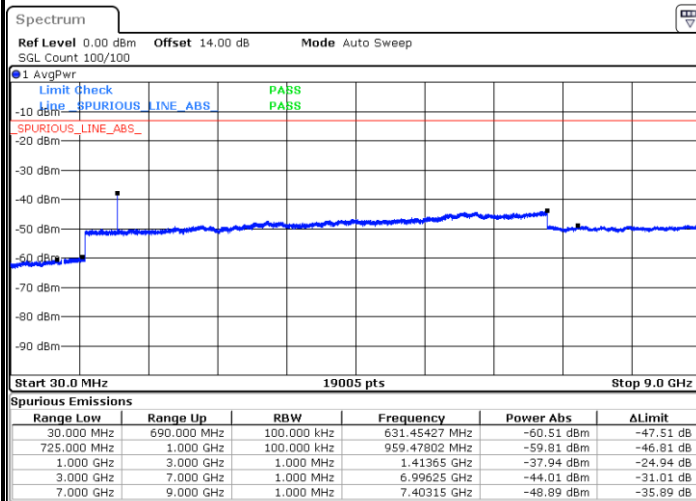
Date: 29.NOV.2022 13:24:03

Middle Channel / 64QAM



Date: 29.NOV.2022 13:24:41

Highest Channel / 64QAM



Date: 29.NOV.2022 13:27:06

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	0.0020	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0028	
0	Normal Voltage	0.0013	
-10	Normal Voltage	0.0020	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0025	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0031	

Note:

1. Normal Voltage =3.85 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

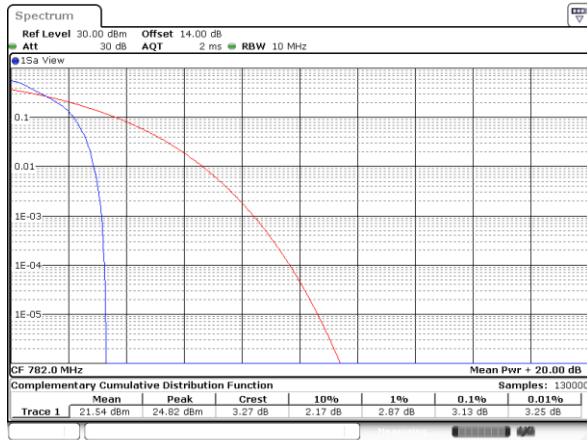
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.13	5.07	3.83	5.91	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	4.90	6.32	-	-	
Highest CH	-	-	-	-	

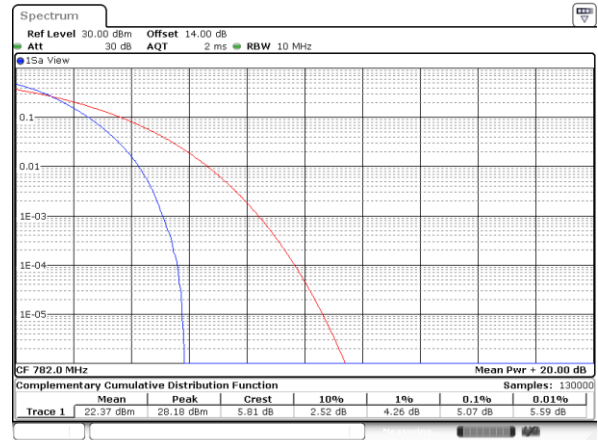


LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB

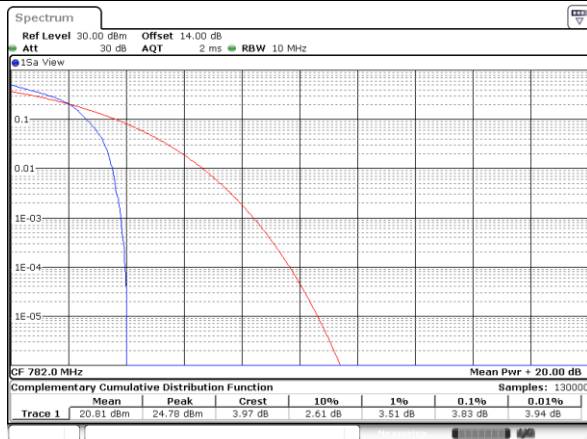


Middle Channel / Full RB



LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB

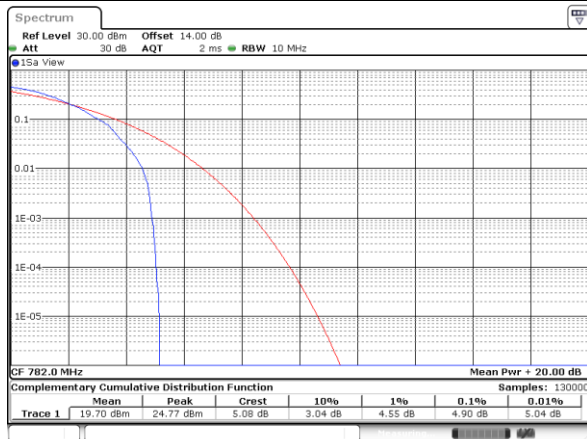


Middle Channel / Full RB

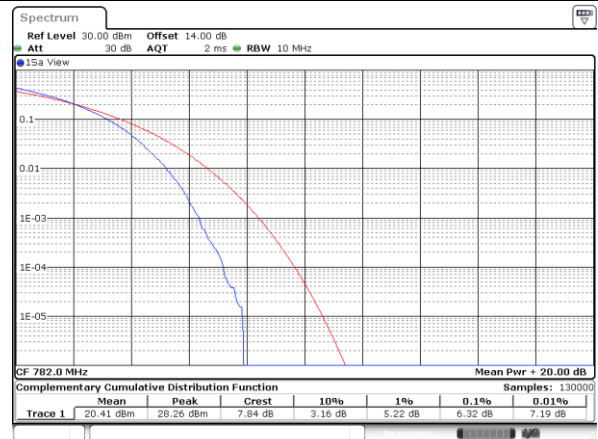


LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Middle Channel / Full RB



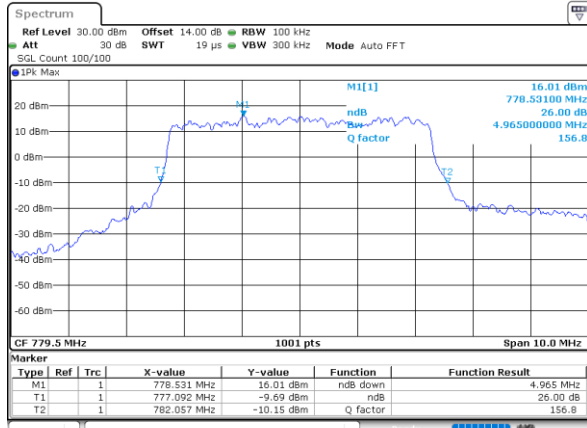
**26dB Bandwidth**

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	-	-	-	-	4.97	4.90	-	-	-	-	-	-
Middle CH	-	-	-	-	5.09	5.10	9.99	9.91	-	-	-	-
Highest CH	-	-	-	-	4.88	4.98	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	5.14	-	-	-	-	-	-	-
Middle CH	-	-	-	-	5.06	-	9.99	-	-	-	-	-
Highest CH	-	-	-	-	4.99	-	-	-	-	-	-	-



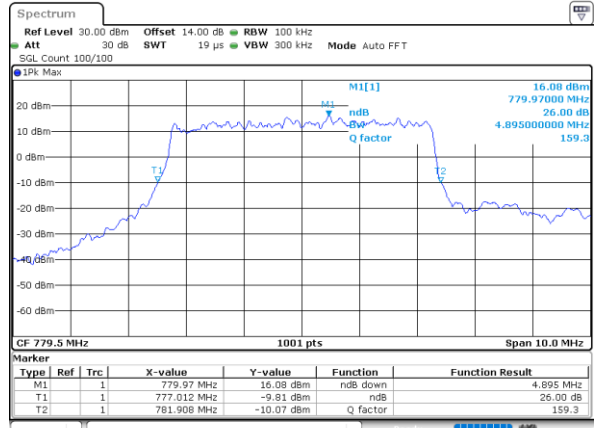
LTE Band 13

Lowest Channel / 5MHz / QPSK



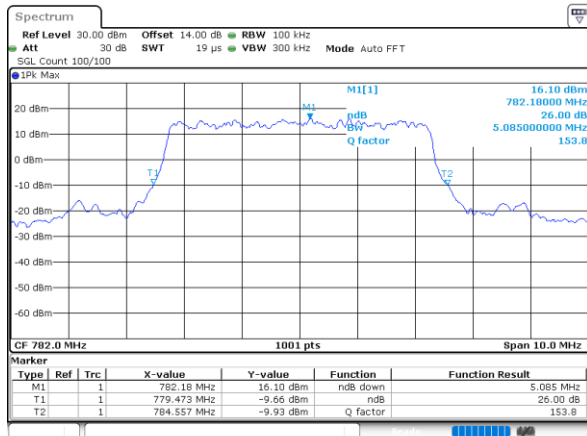
Date: 29,NOV,2022 19:32:04

Lowest Channel / 5MHz / 16QAM



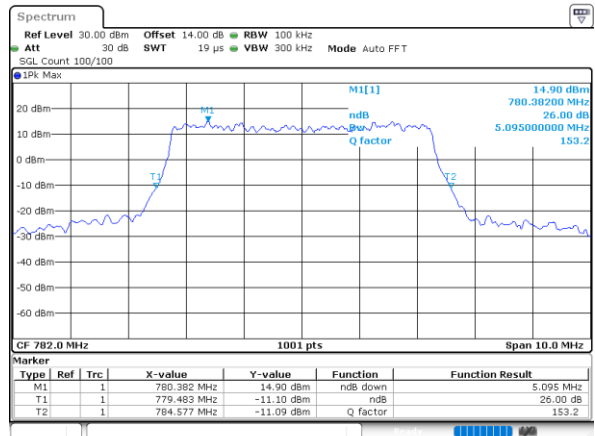
Date: 29,NOV,2022 19:31:39

Middle Channel / 5MHz / QPSK



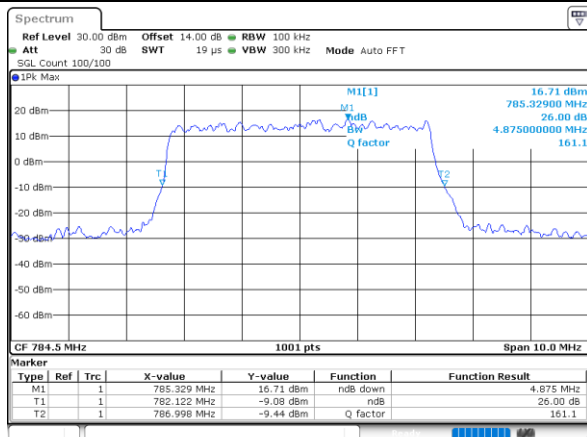
Date: 29,NOV,2022 19:32:29

Middle Channel / 5MHz / 16QAM



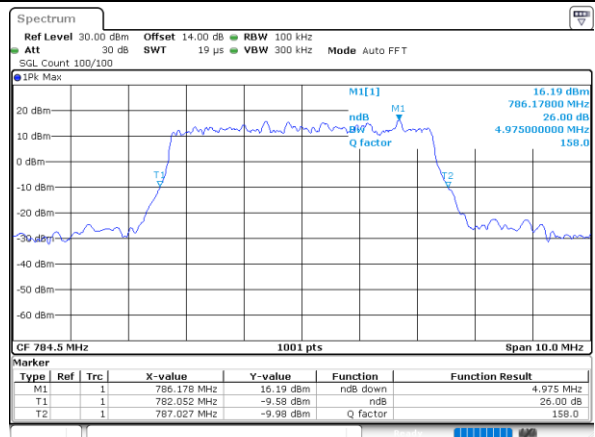
Date: 29,NOV,2022 19:32:53

Highest Channel / 5MHz / QPSK



Date: 29,NOV,2022 19:35:03

Highest Channel / 5MHz / 16QAM

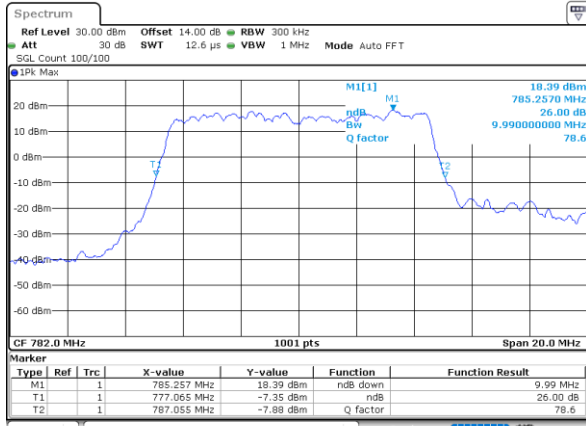


Date: 29,NOV,2022 19:34:38



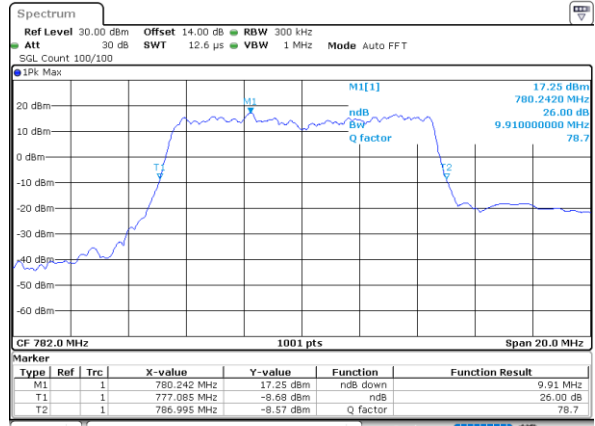
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 29,NOV,2022 19:38:31

Middle Channel / 10MHz / 16QAM

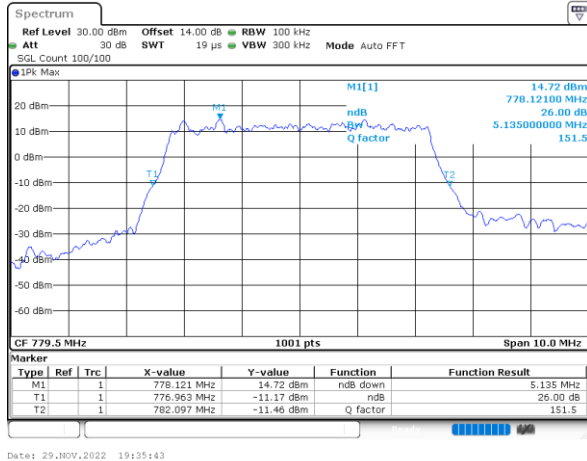


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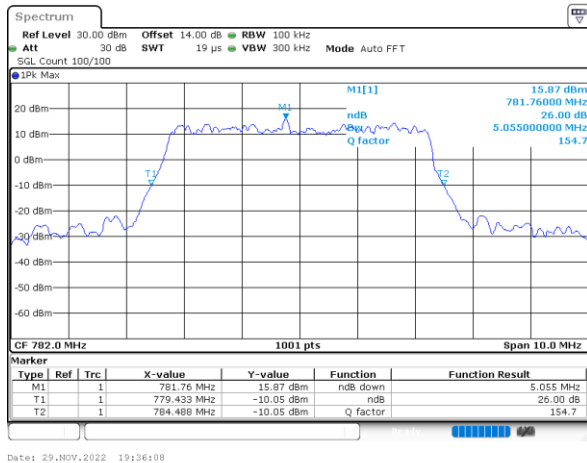


LTE Band 13

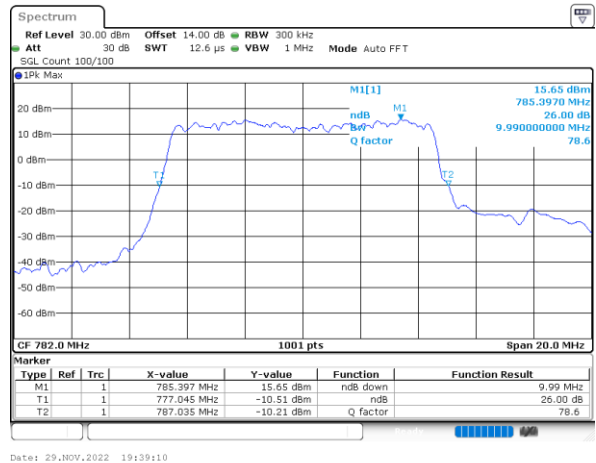
Lowest Channel / 5MHz / 64QAM



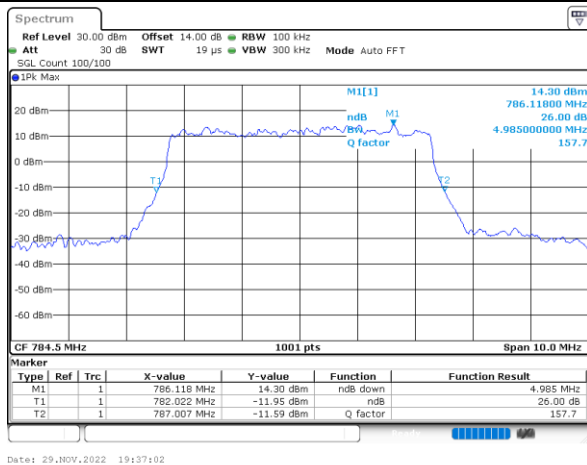
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



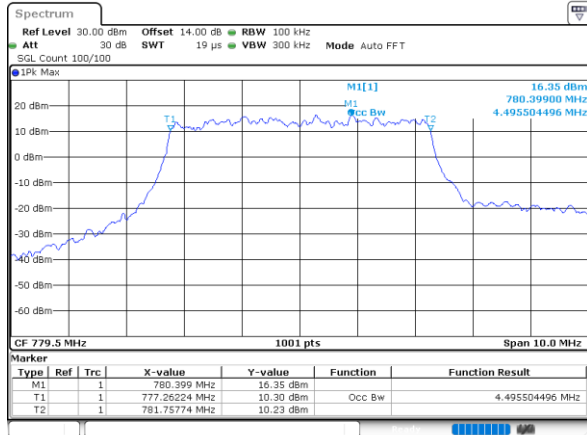
**Occupied Bandwidth**

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	4.50	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	4.50	8.99	9.09	-	-	-	-
Highest CH	-	-	-	-	4.48	4.49	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.51	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.51	-	9.05	-	-	-	-	-
Highest CH	-	-	-	-	4.53	-	-	-	-	-	-	-



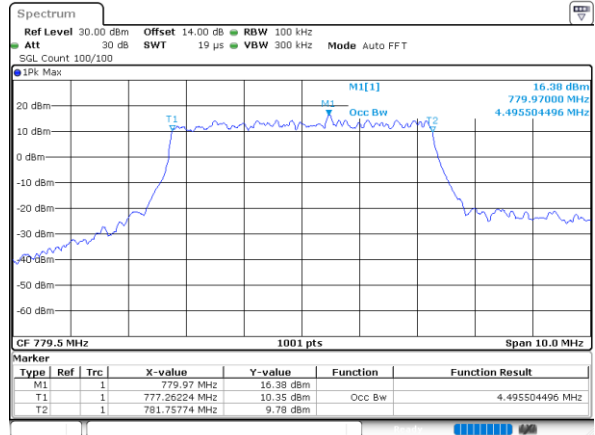
LTE Band 13

Lowest Channel / 5MHz / QPSK



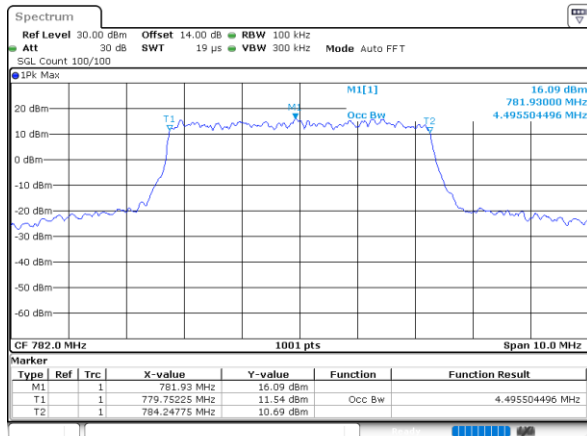
Date: 29.NOV.2022 19:30:59

Lowest Channel / 5MHz / 16QAM



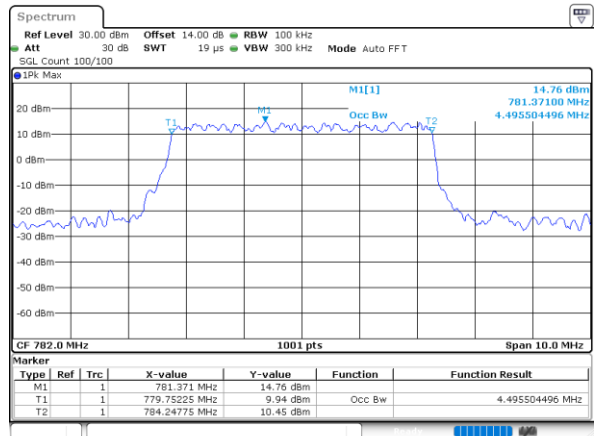
Date: 29.NOV.2022 19:31:24

Middle Channel / 5MHz / QPSK



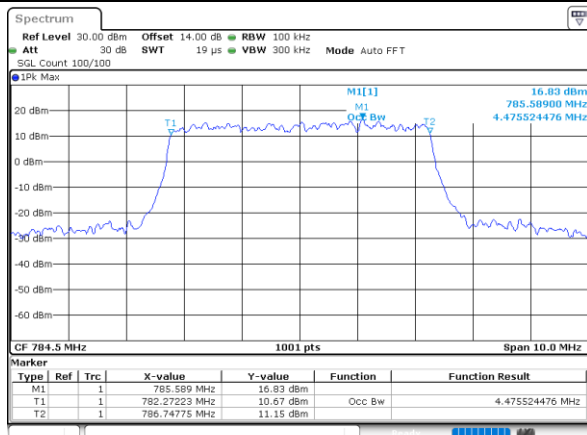
Date: 29.NOV.2022 19:33:33

Middle Channel / 5MHz / 16QAM



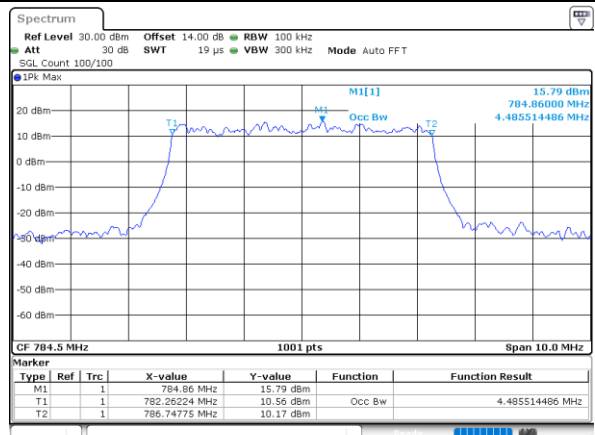
Date: 29.NOV.2022 19:33:08

Highest Channel / 5MHz / QPSK



Date: 29.NOV.2022 19:33:58

Highest Channel / 5MHz / 16QAM

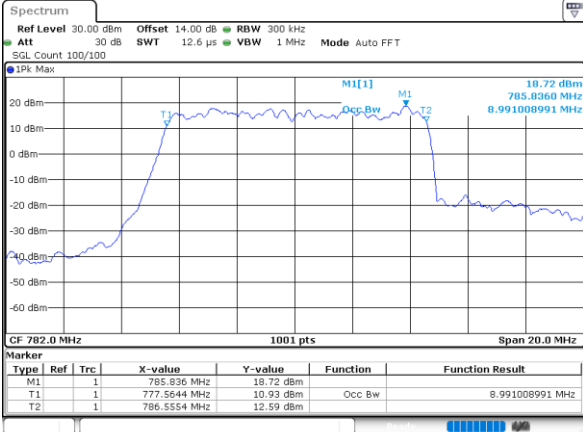


Date: 29.NOV.2022 19:34:22



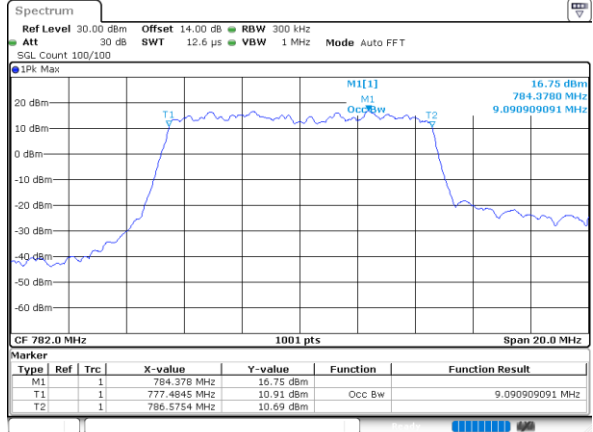
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 29,NOV,2022 19:37:20

Middle Channel / 10MHz / 16QAM



Date: 29,NOV,2022 19:37:52