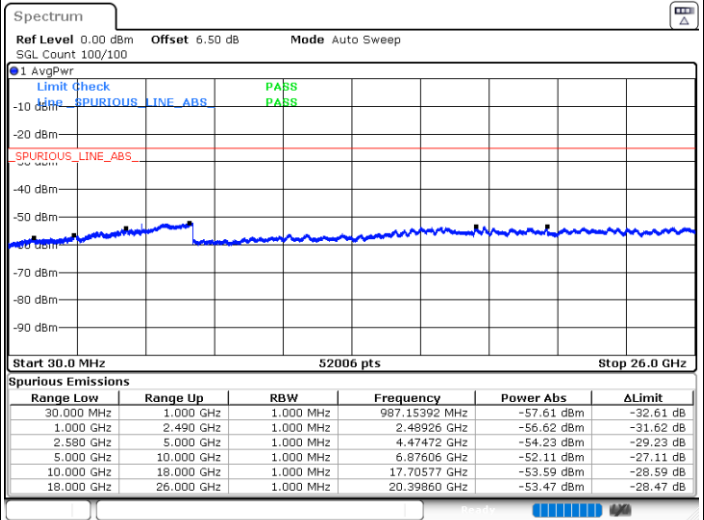
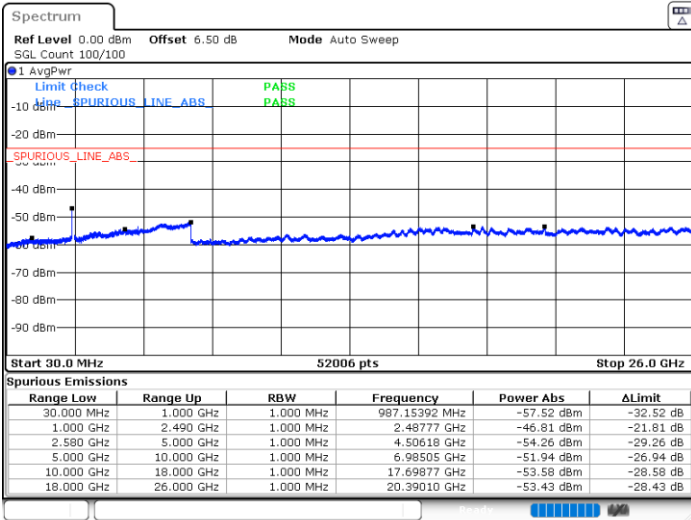




LTE Band 7 / 15MHz

Lowest Channel / QPSK

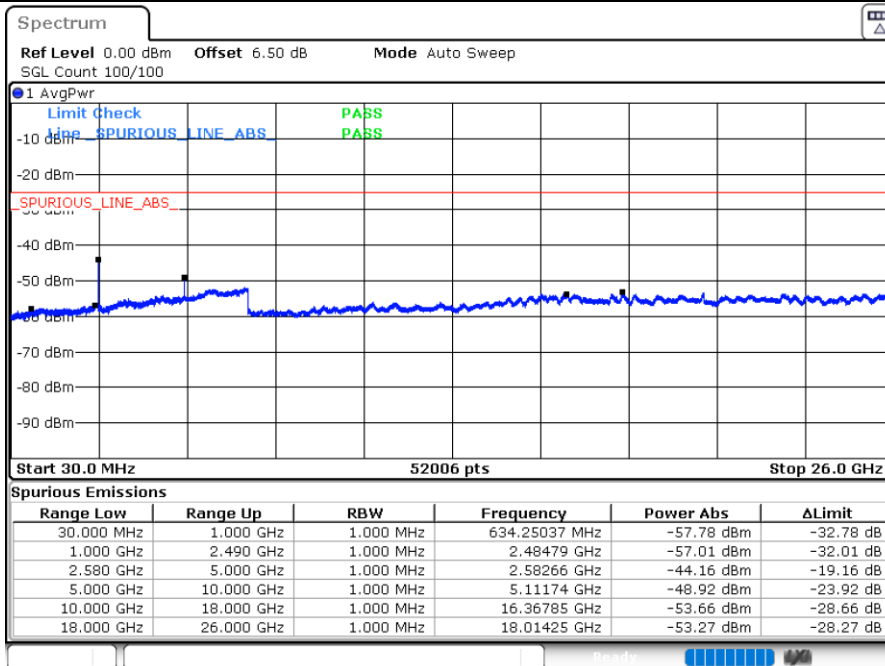
Middle Channel / QPSK



Date: 1.NOV.2023 21:03:21

Date: 1.NOV.2023 21:11:27

Highest Channel / QPSK



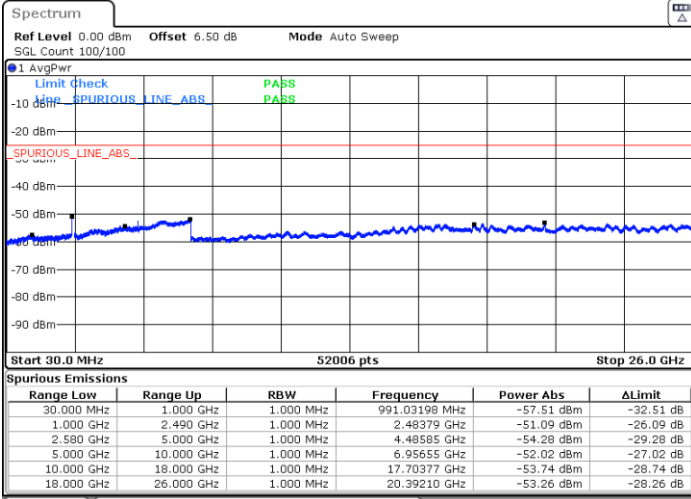
Date: 1.NOV.2023 21:12:47



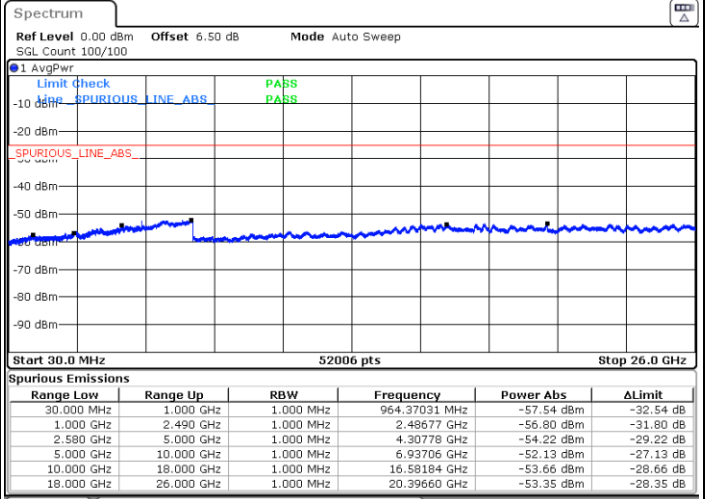
LTE Band 7 / 20MHz

Lowest Channel / QPSK

Middle Channel / QPSK

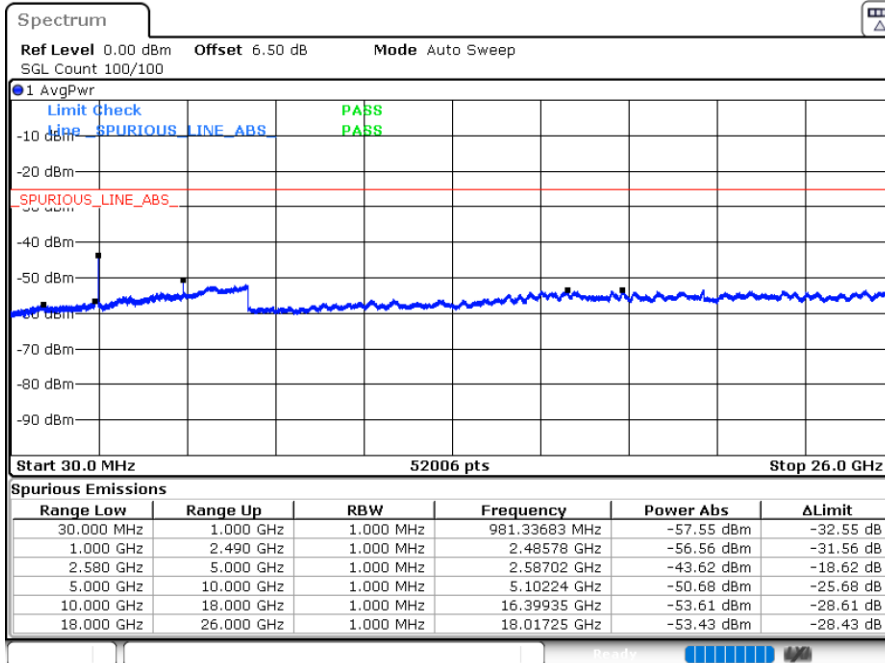


Date: 1.NOV.2023 21:18:11



Date: 1.NOV.2023 21:23:38

Highest Channel / QPSK



Date: 1.NOV.2023 21:24:57



Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0002	PASS
40	Normal Voltage	0.0006	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0026	
0	Normal Voltage	0.0031	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0044	
-30	Normal Voltage	0.0056	
20	Maximum Voltage	0.0069	
20	Normal Voltage	0.0013	
20	Battery End Point	0.0005	

Note:

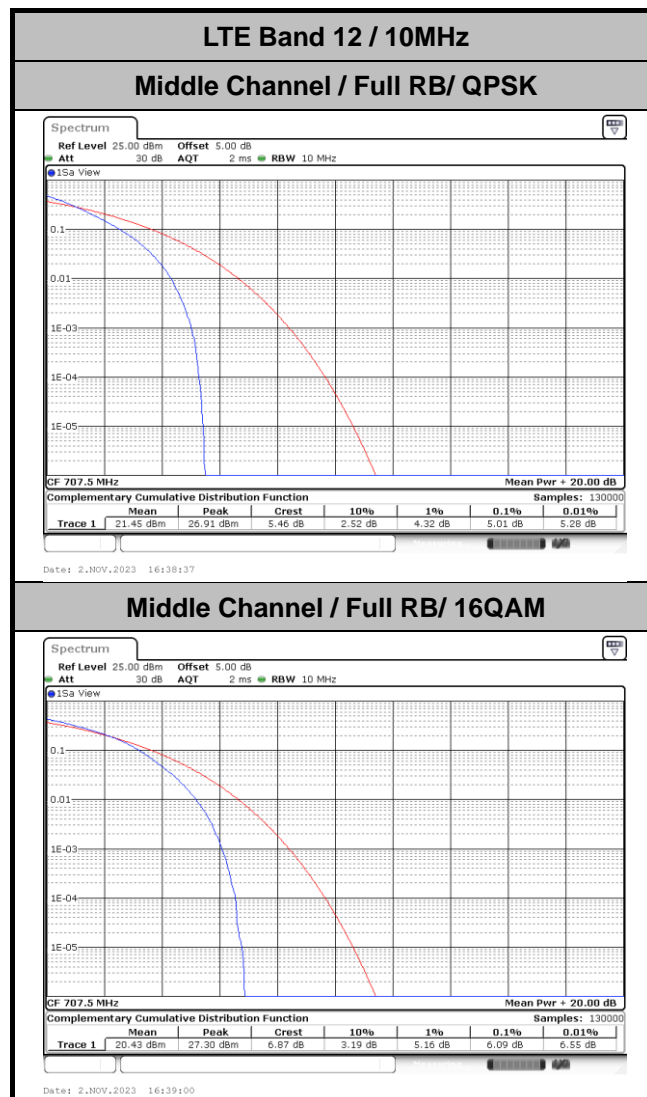
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

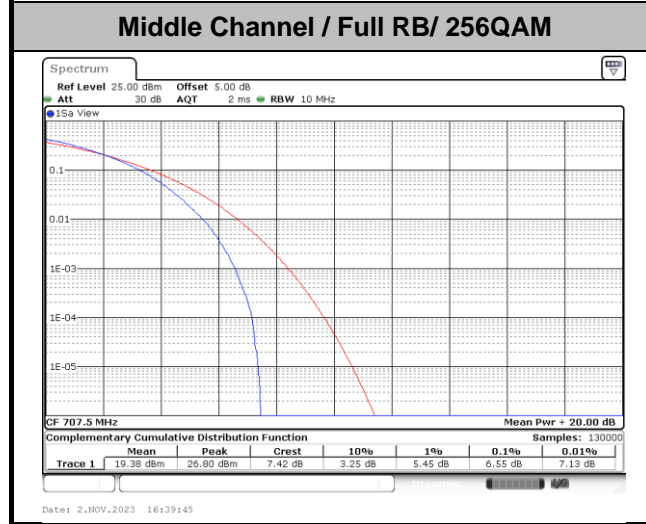
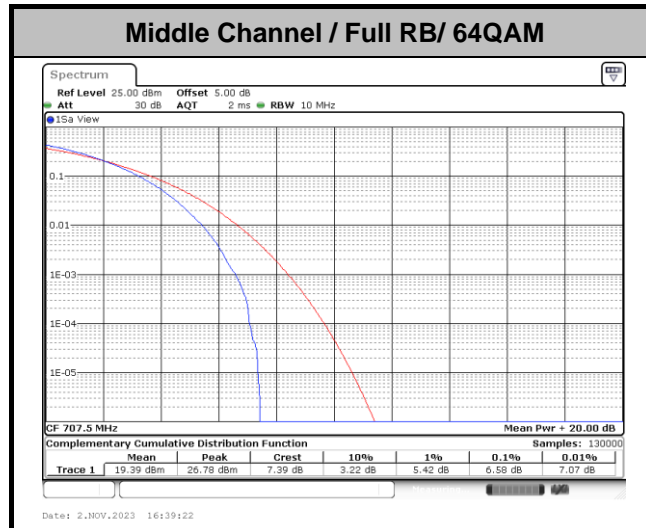


LTE Band 12

Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.01	6.09	6.58	6.55	PASS

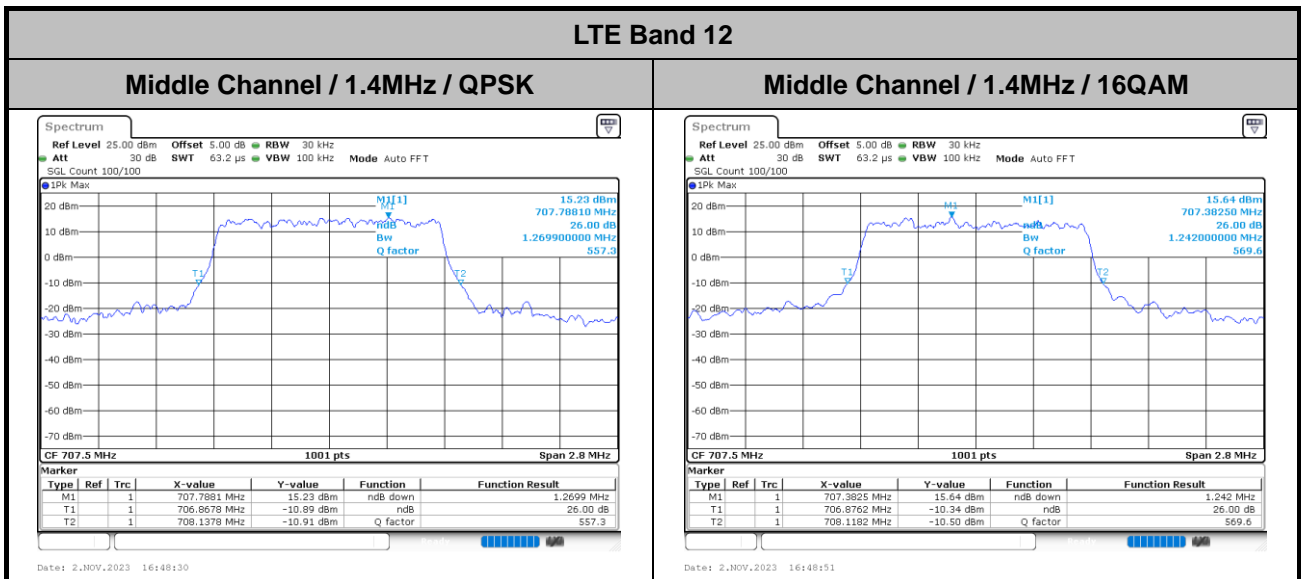






26dB Bandwidth

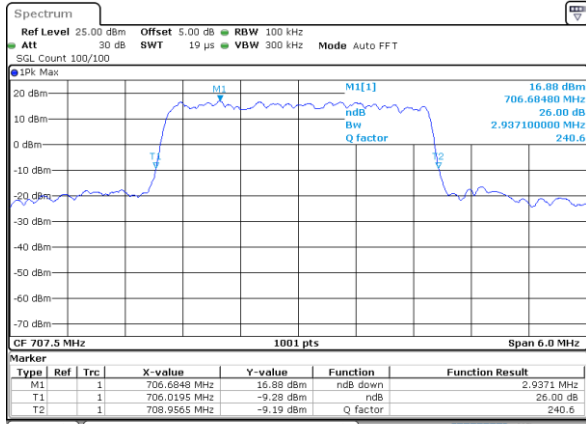
Mode	LTE Band 12 : 26dB BW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.27	1.24
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.94	3.02
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.85	4.92
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.65	9.79





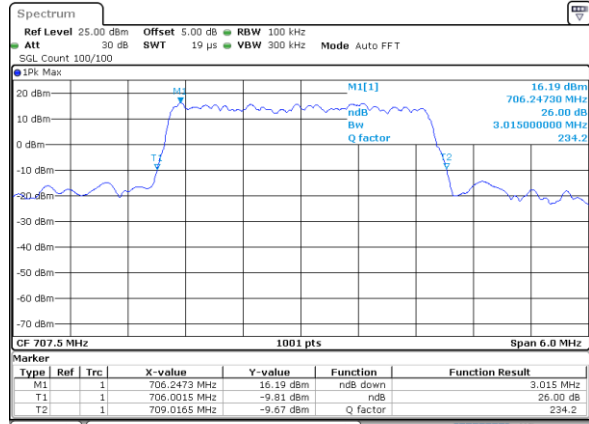
LTE Band 12

Middle Channel / 3MHz / QPSK



Date: 2.NOV.2023 16:44:36

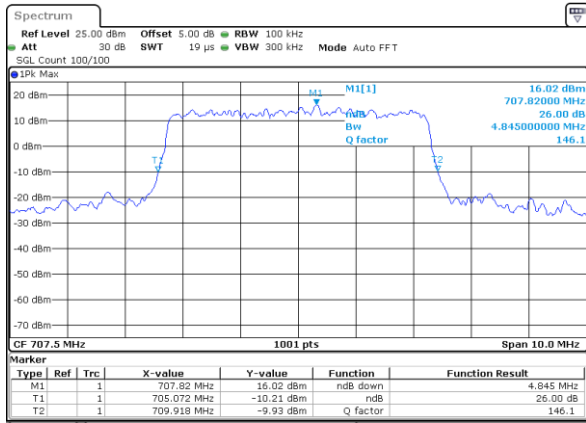
Middle Channel / 3MHz / 16QAM



Date: 2.NOV.2023 16:44:58

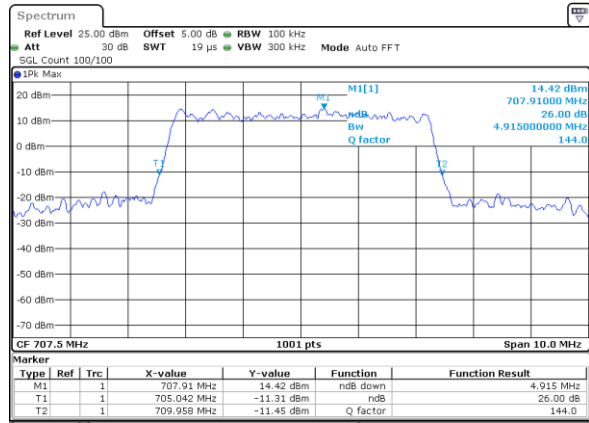
LTE Band 12

Middle Channel / 5MHz / QPSK



Date: 2.NOV.2023 16:43:11

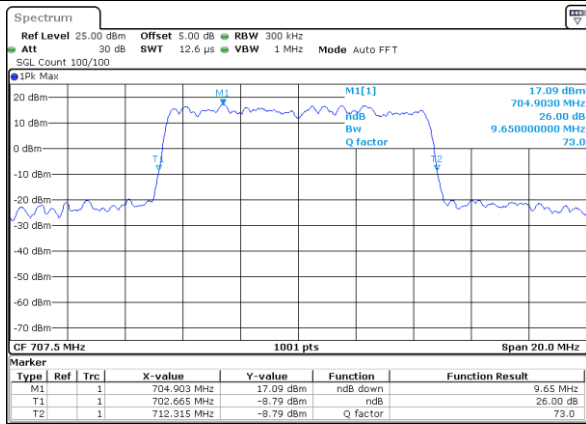
Middle Channel / 5MHz / 16QAM



Date: 2.NOV.2023 16:43:33

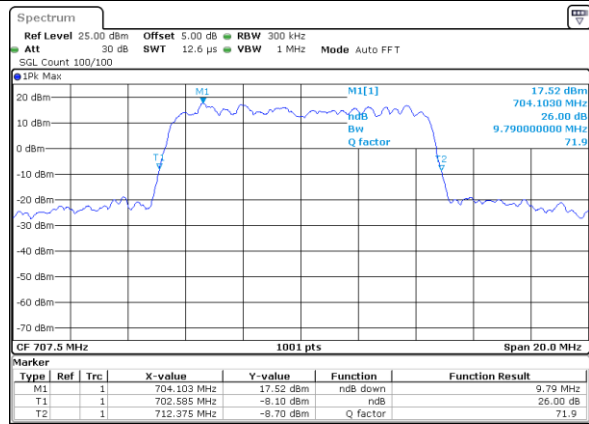
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 2.NOV.2023 16:41:26

Middle Channel / 10MHz / 16QAM

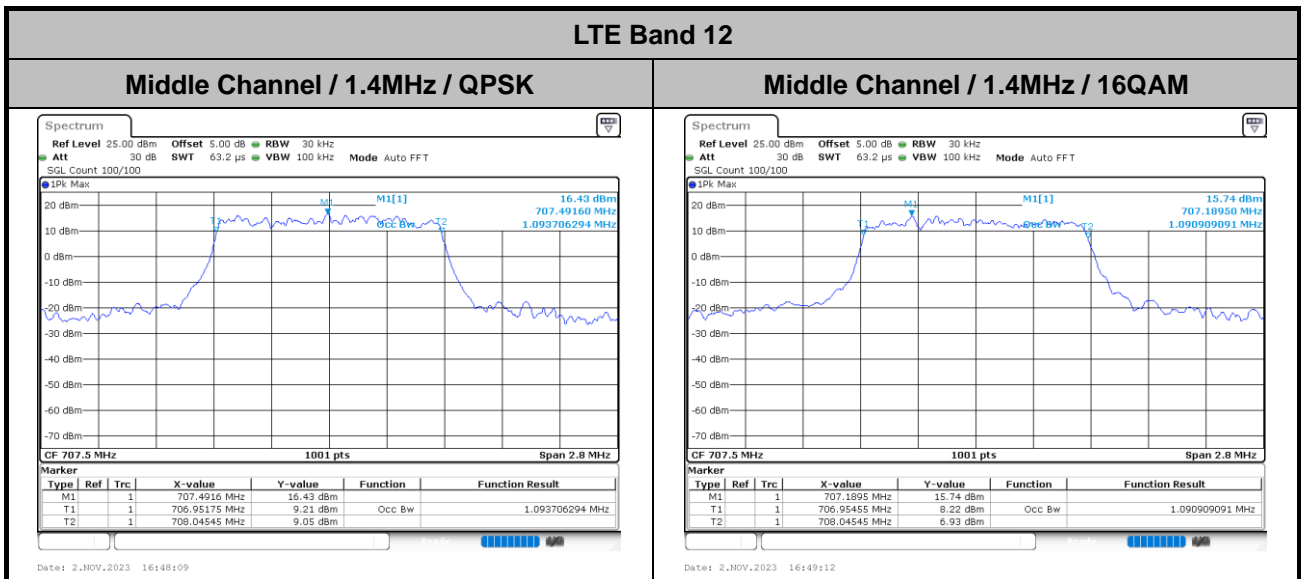


Date: 2.NOV.2023 16:41:47



Occupied Bandwidth

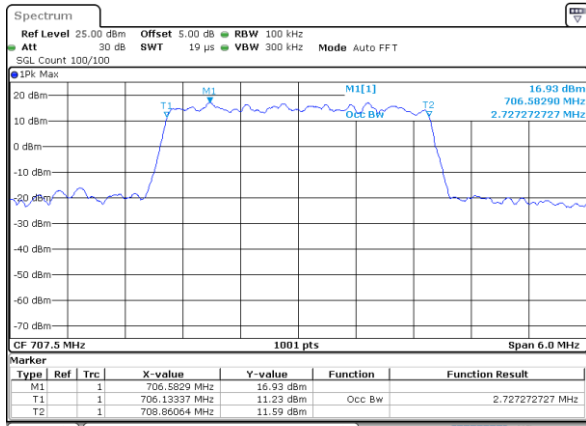
Mode	LTE Band 12 : 99%OBW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.09	1.09
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.73	2.72
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.48	4.50
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	9.01





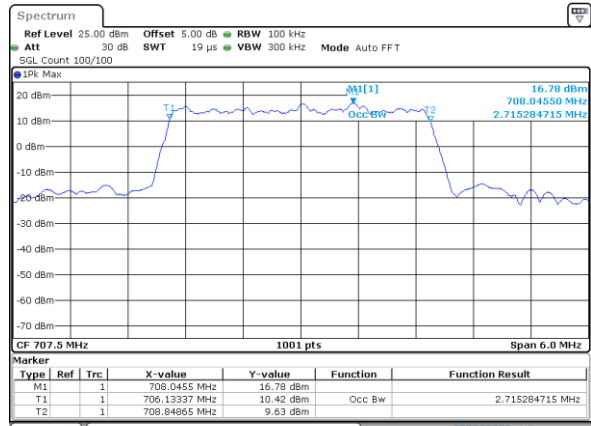
LTE Band 12

Middle Channel / 3MHz / QPSK



Date: 2.NOV.2023 16:44:15

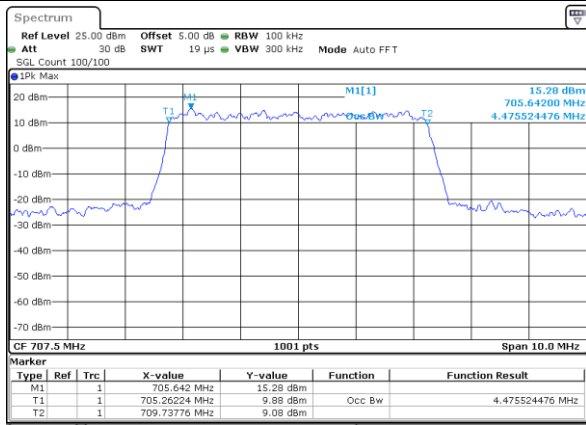
Middle Channel / 3MHz / 16QAM



Date: 2.NOV.2023 16:45:19

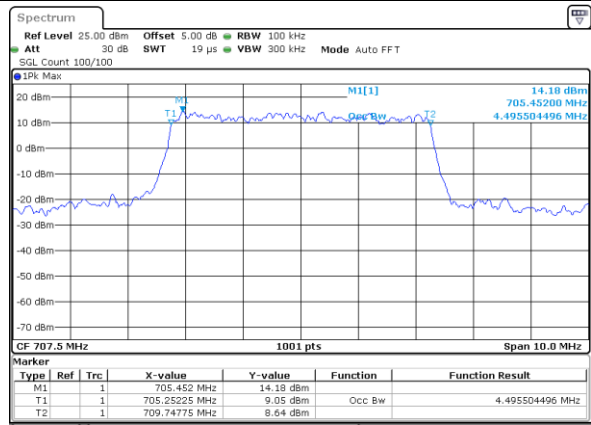
LTE Band 12

Middle Channel / 5MHz / QPSK



Date: 2.NOV.2023 16:42:50

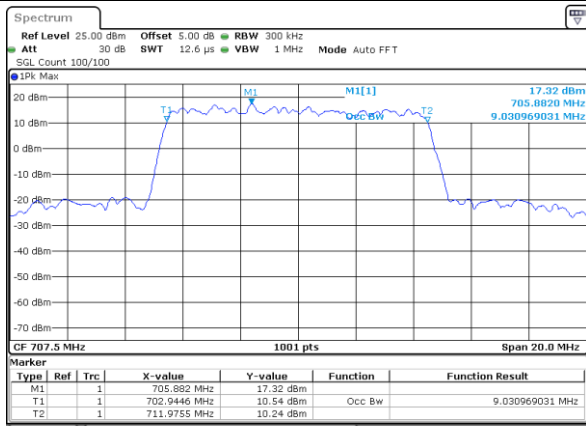
Middle Channel / 5MHz / 16QAM



Date: 2.NOV.2023 16:43:54

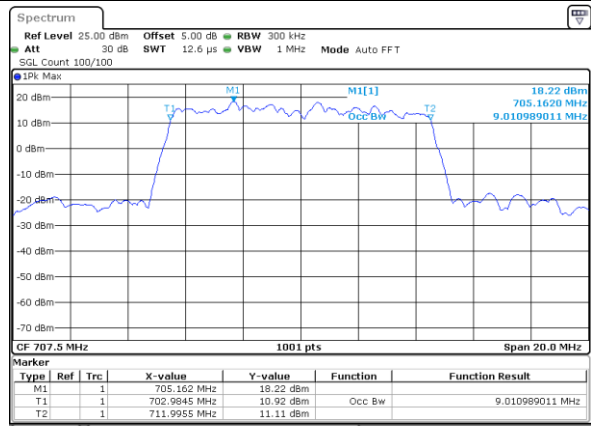
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 2.NOV.2023 16:40:44

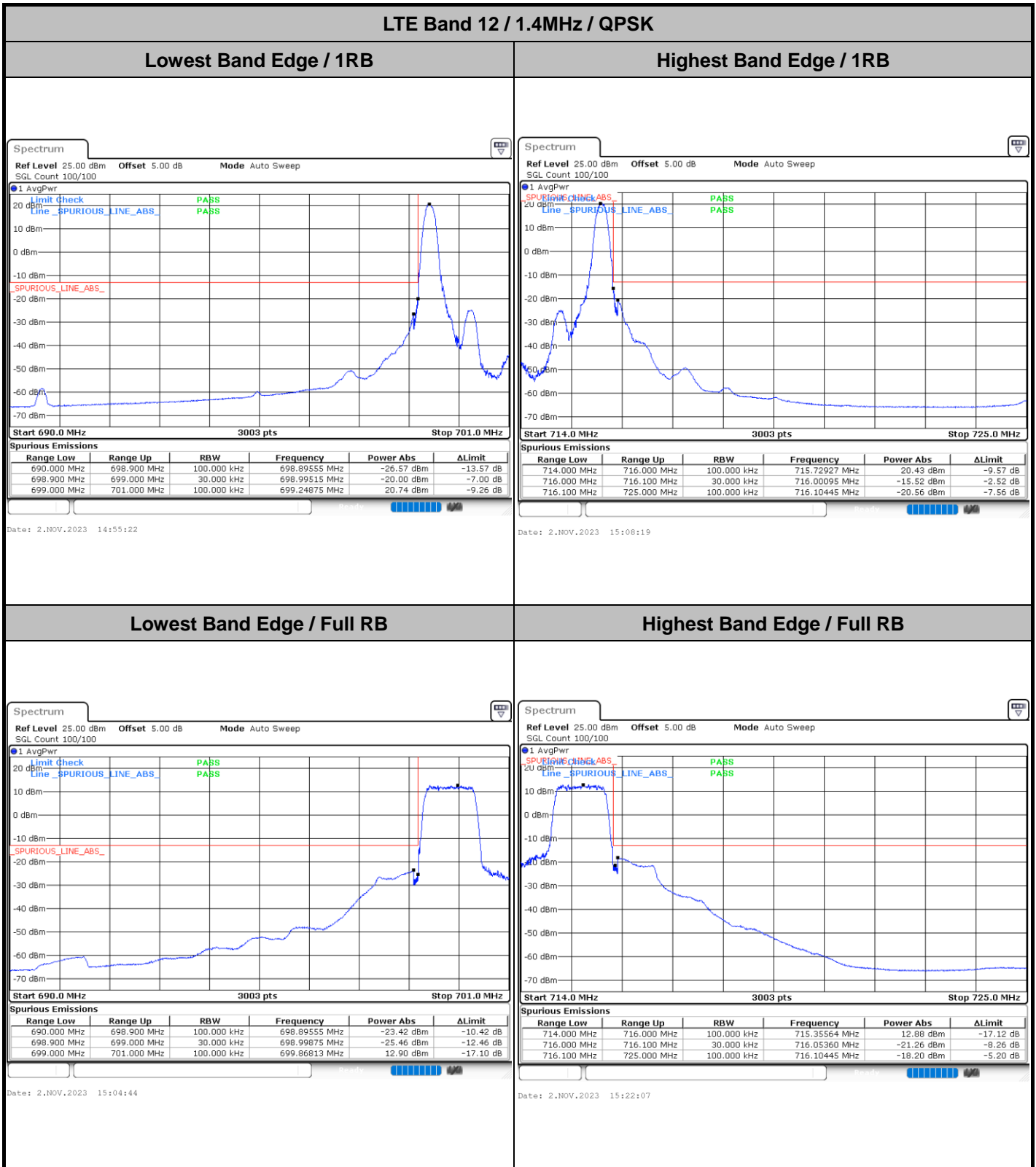
Middle Channel / 10MHz / 16QAM



Date: 2.NOV.2023 16:41:05



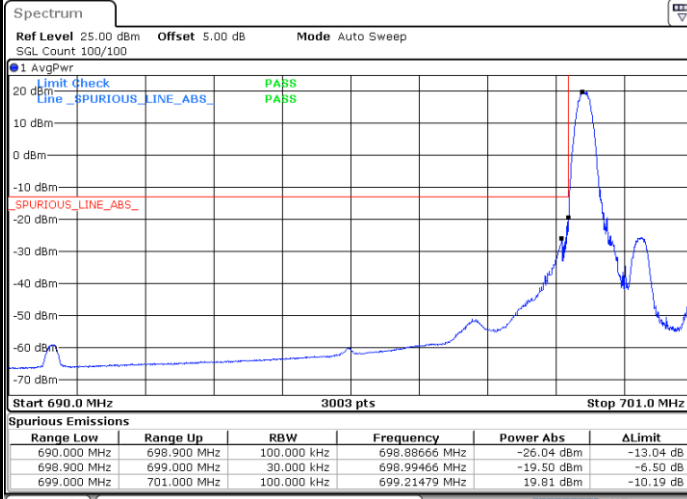
Conducted Band Edge





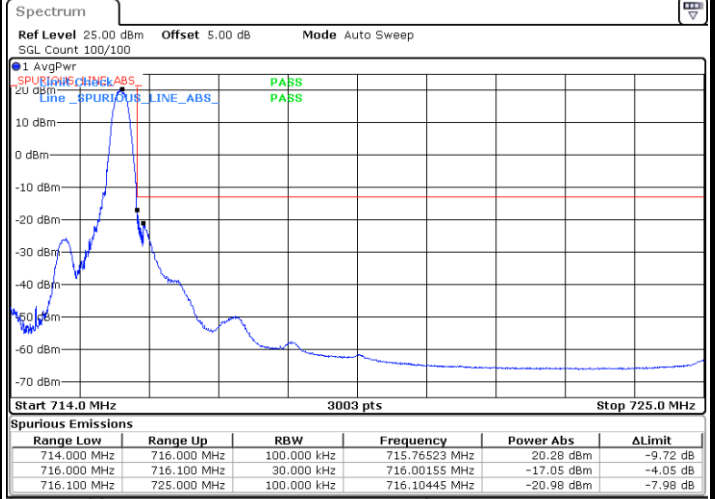
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



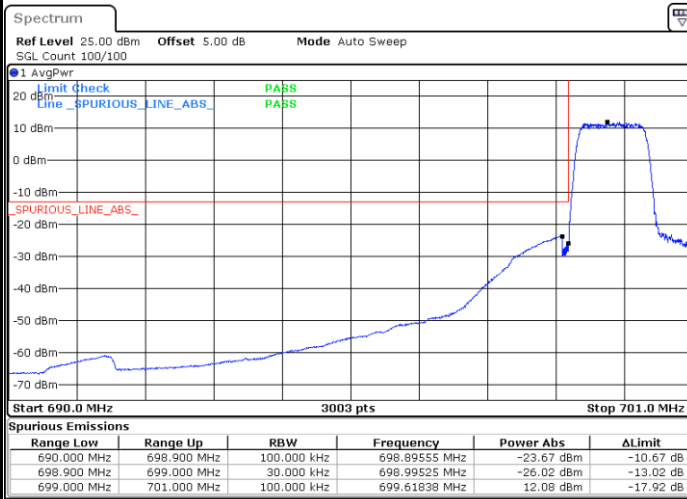
Date: 2.NOV.2023 14:56:33

Highest Band Edge / 1 RB



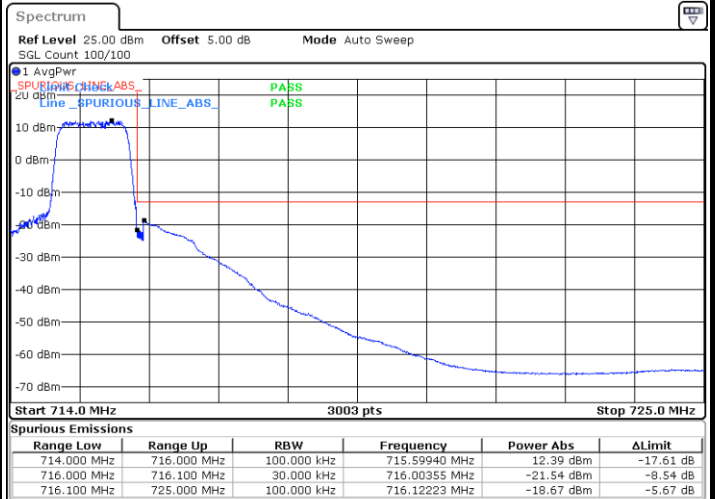
Date: 2.NOV.2023 15:09:14

Lowest Band Edge / Full RB



Date: 2.NOV.2023 15:03:49

Highest Band Edge / Full RB

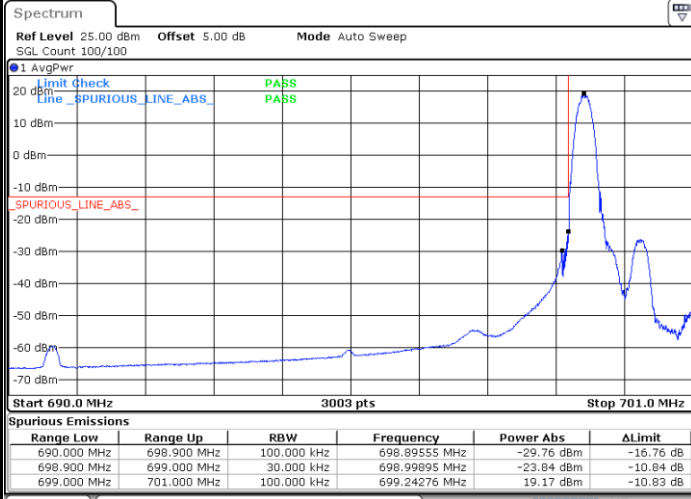


Date: 2.NOV.2023 15:21:12



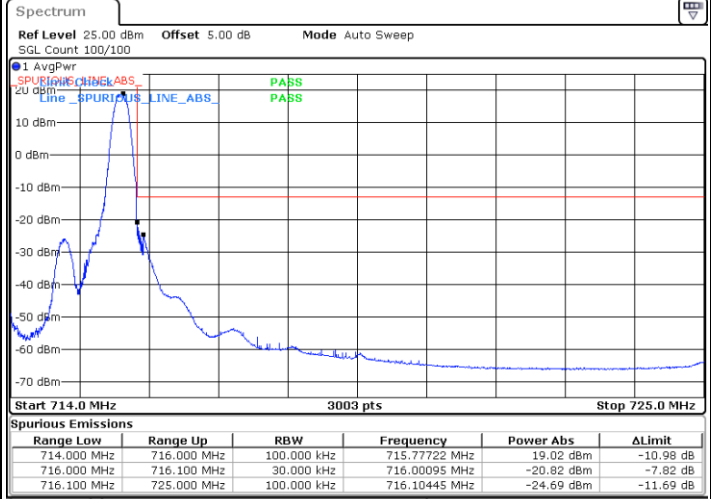
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



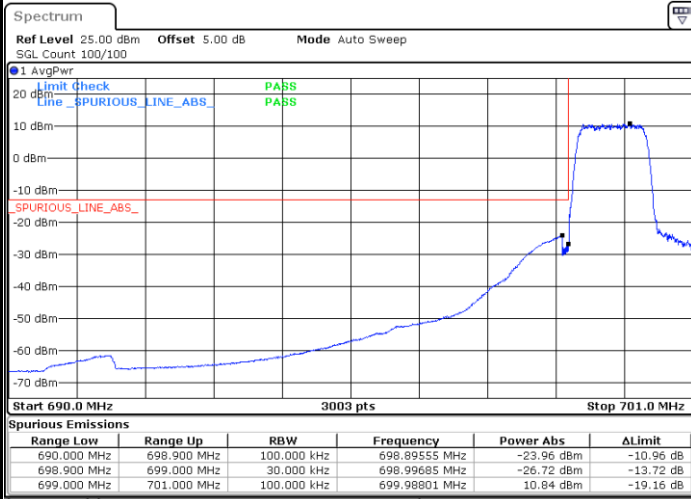
Date: 2.NOV.2023 14:57:43

Highest Band Edge / 1 RB



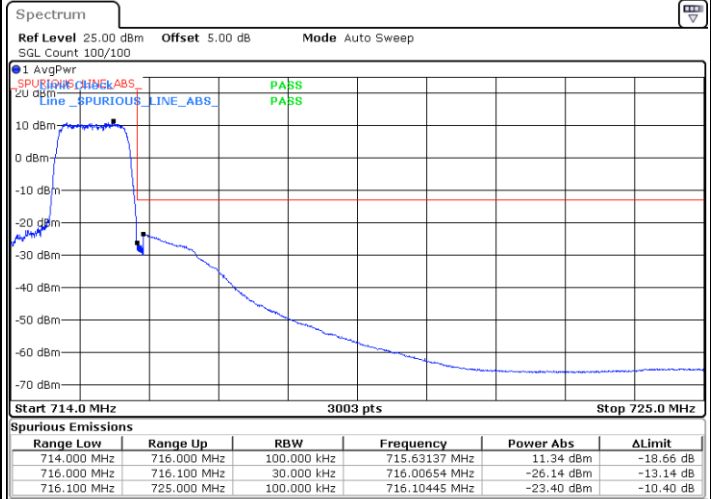
Date: 2.NOV.2023 15:10:09

Lowest Band Edge / Full RB



Date: 2.NOV.2023 15:02:54

Highest Band Edge / Full RB

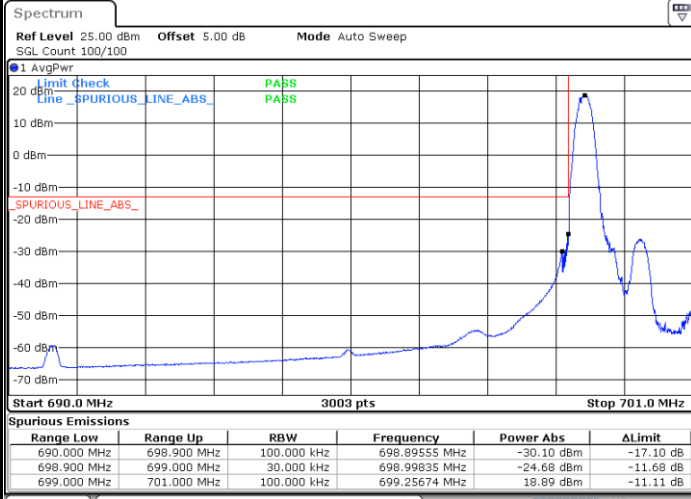


Date: 2.NOV.2023 15:20:16



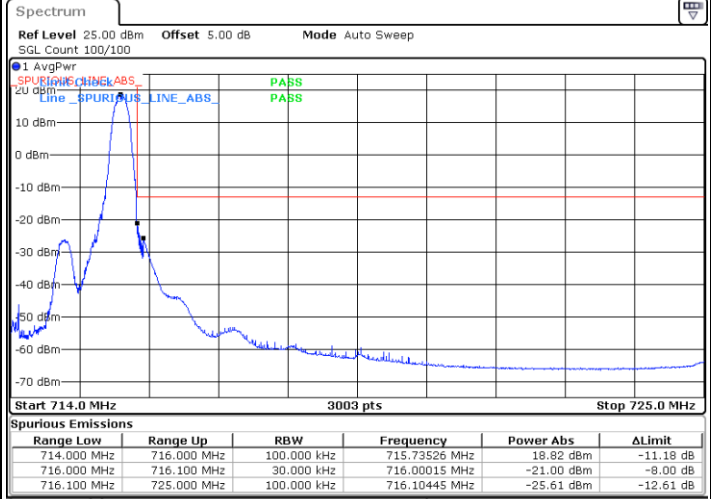
LTE Band 12 / 1.4MHz / 256QAM

Lowest Band Edge / 1 RB



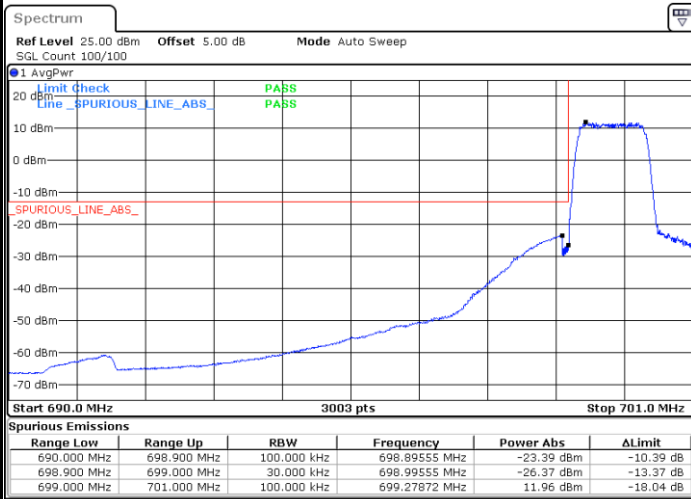
Date: 2.NOV.2023 14:58:38

Highest Band Edge / 1 RB



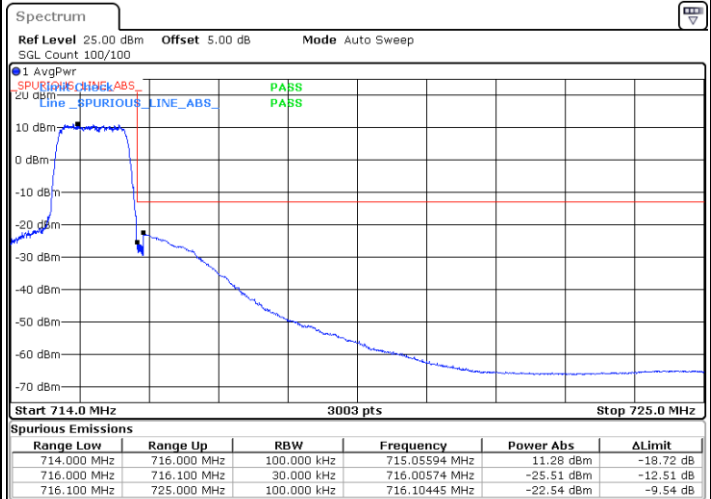
Date: 2.NOV.2023 15:11:04

Lowest Band Edge / Full RB



Date: 2.NOV.2023 16:50:56

Highest Band Edge / Full RB

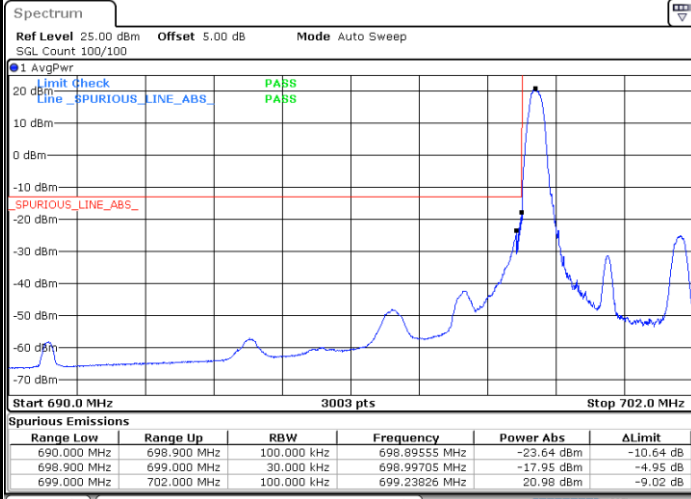


Date: 2.NOV.2023 15:15:51



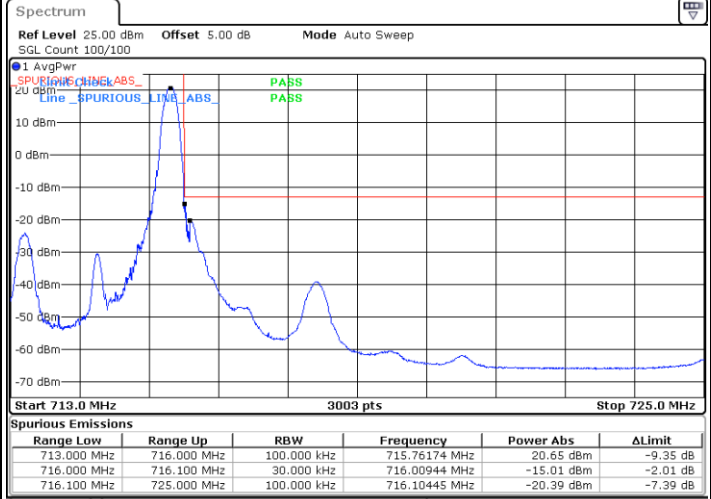
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



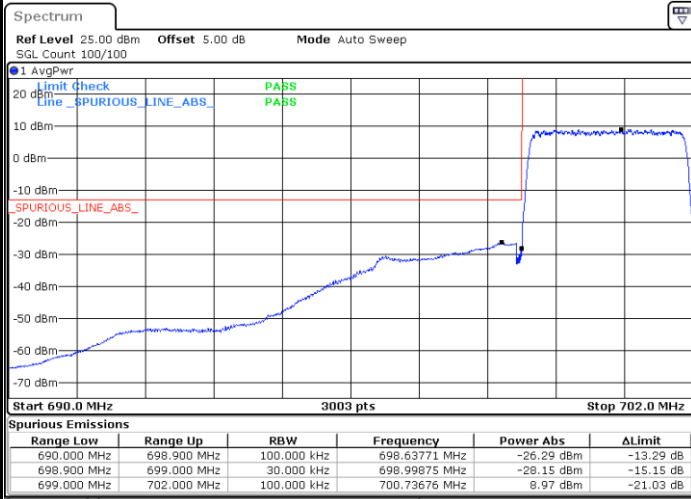
Date: 2.NOV.2023 15:24:23

Highest Band Edge / 1 RB



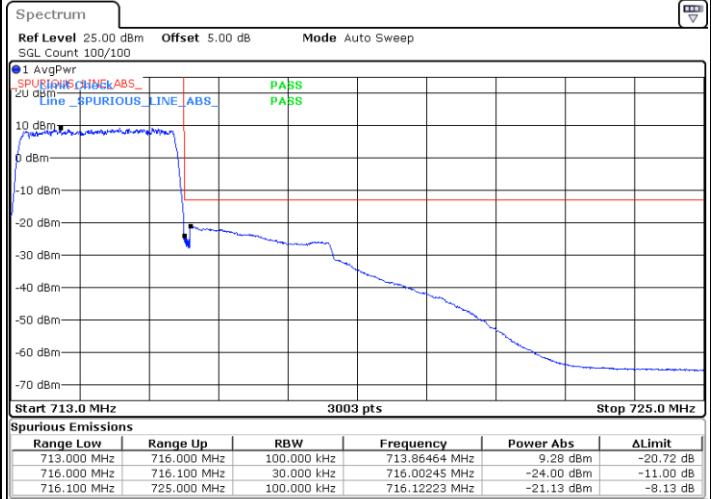
Date: 2.NOV.2023 15:38:18

Lowest Band Edge / Full RB



Date: 2.NOV.2023 15:34:43

Highest Band Edge / Full RB

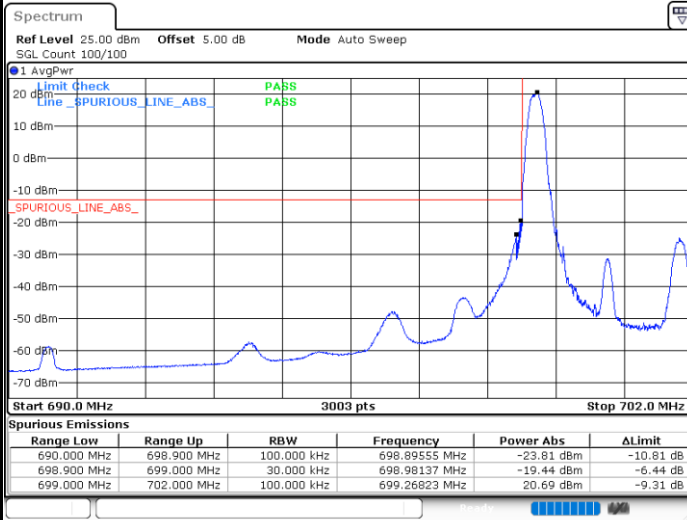


Date: 2.NOV.2023 15:49:48



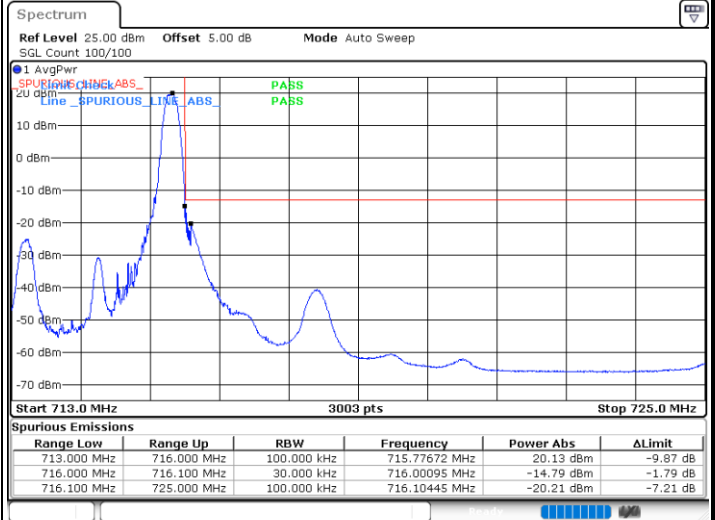
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



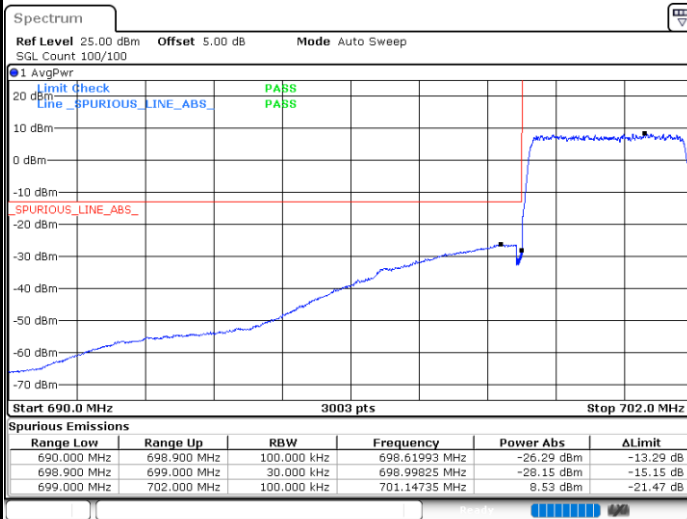
Date: 2.NOV.2023 15:25:18

Highest Band Edge / 1 RB



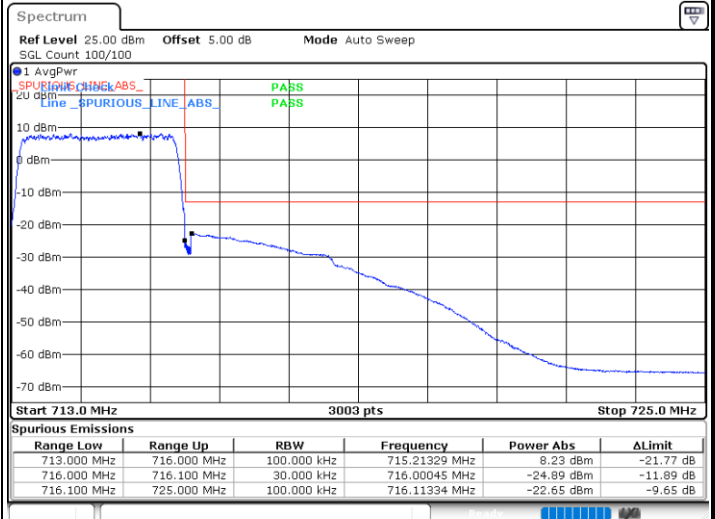
Date: 2.NOV.2023 15:39:13

Lowest Band Edge / Full RB



Date: 2.NOV.2023 15:33:48

Highest Band Edge / Full RB

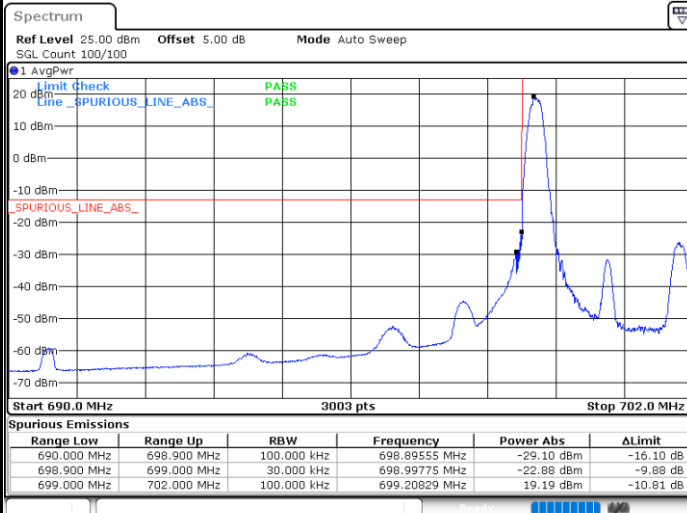


Date: 2.NOV.2023 15:48:53



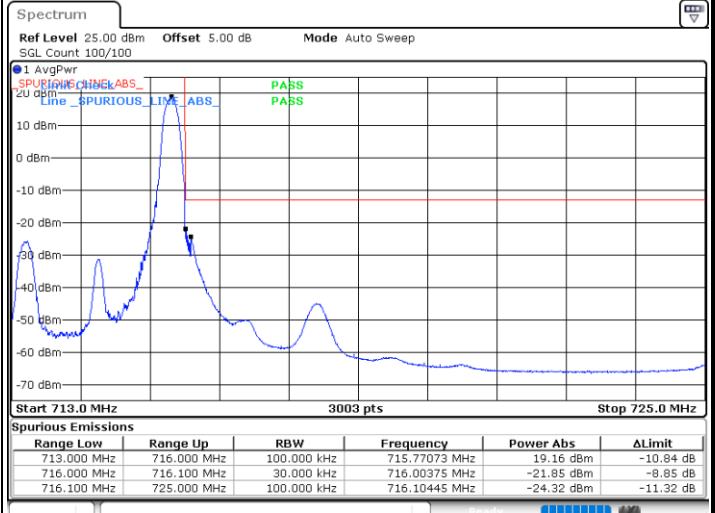
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



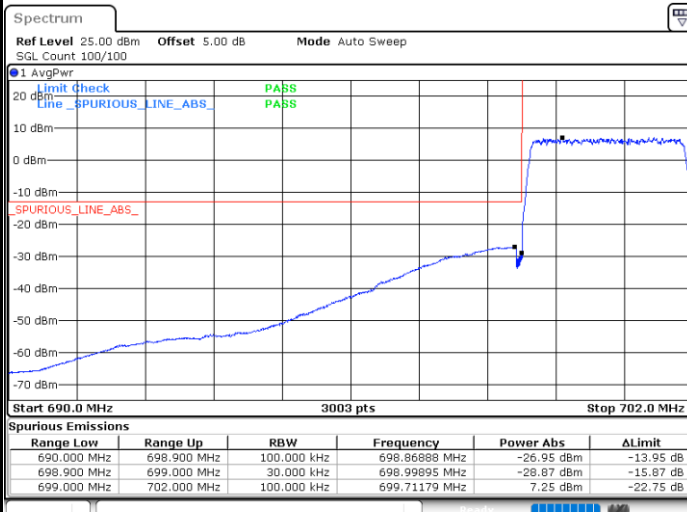
Date: 2.NOV.2023 15:26:13

Highest Band Edge / 1 RB



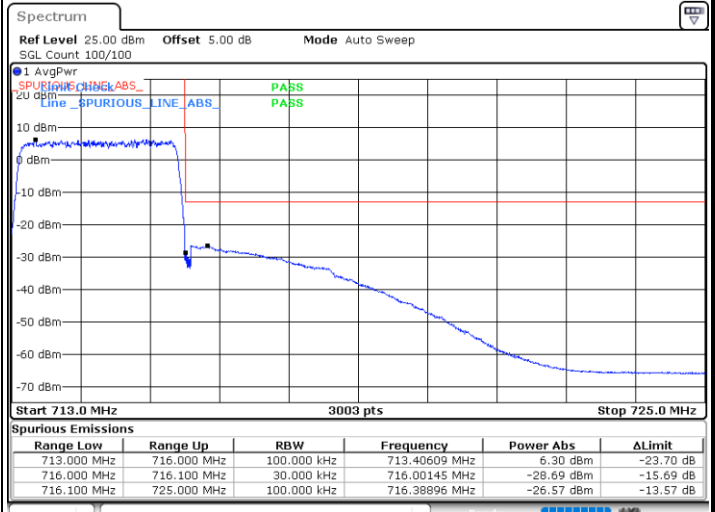
Date: 2.NOV.2023 15:40:09

Lowest Band Edge / Full RB



Date: 2.NOV.2023 15:32:53

Highest Band Edge / Full RB

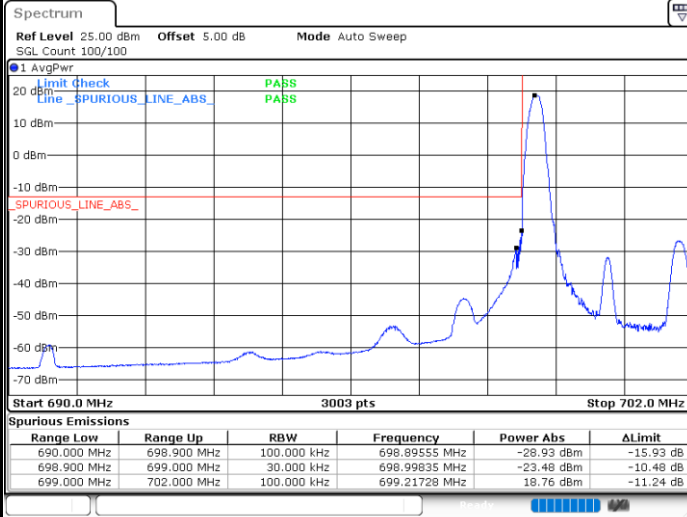


Date: 2.NOV.2023 15:47:58



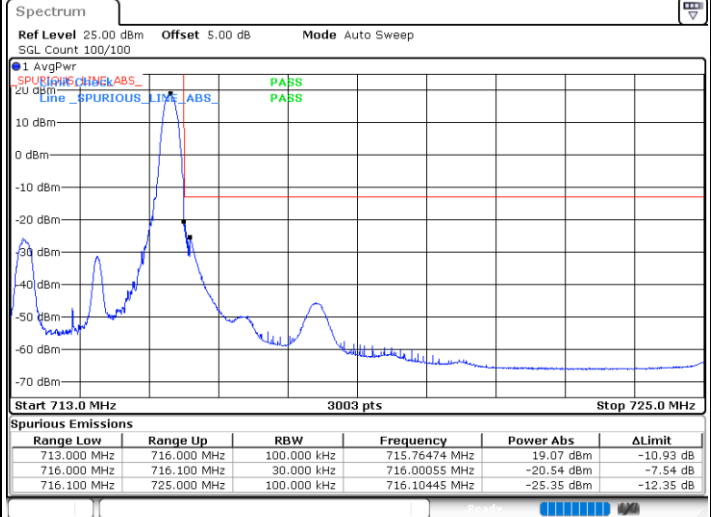
LTE Band 12 / 3MHz / 256QAM

Lowest Band Edge / 1 RB



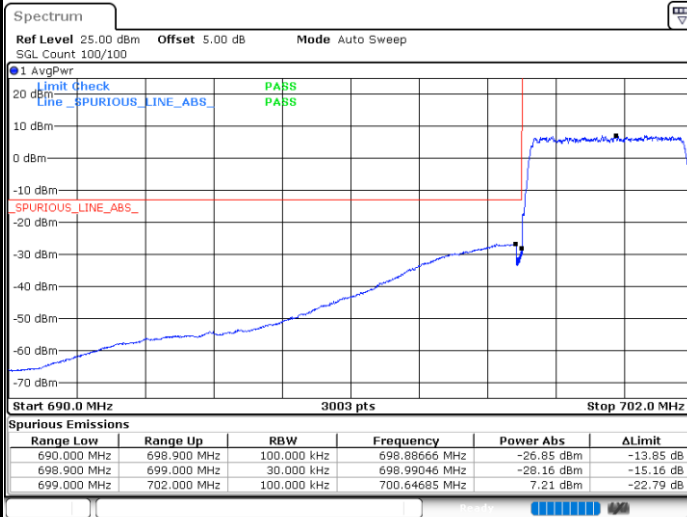
Date: 2.NOV.2023 15:27:08

Highest Band Edge / 1 RB



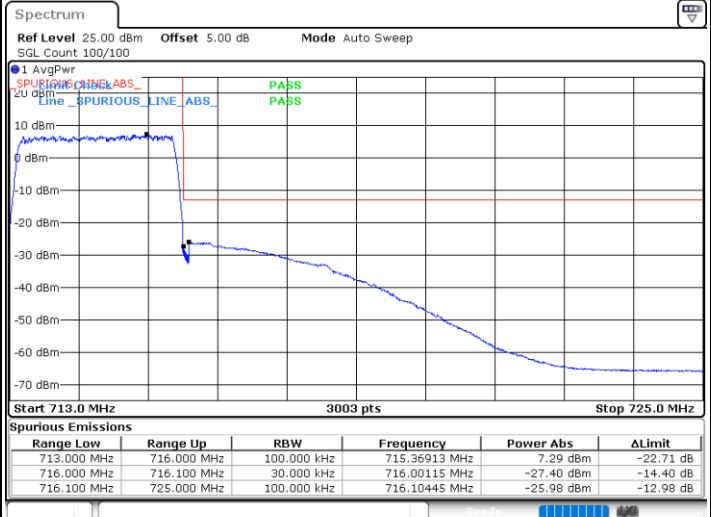
Date: 2.NOV.2023 15:41:04

Lowest Band Edge / Full RB



Date: 2.NOV.2023 15:31:43

Highest Band Edge / Full RB

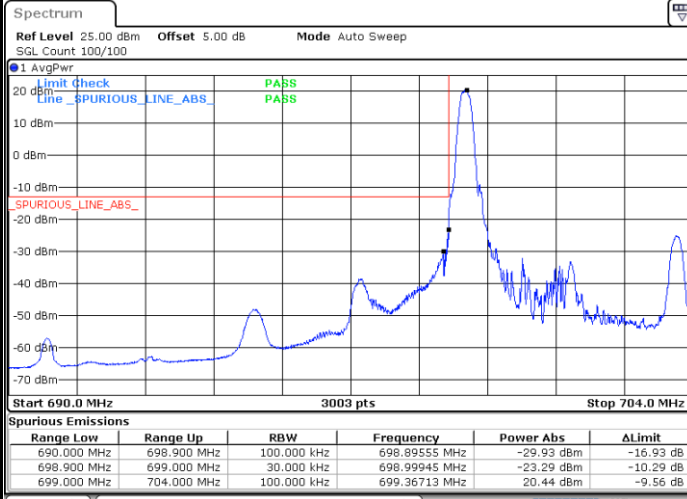


Date: 2.NOV.2023 15:46:34



LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



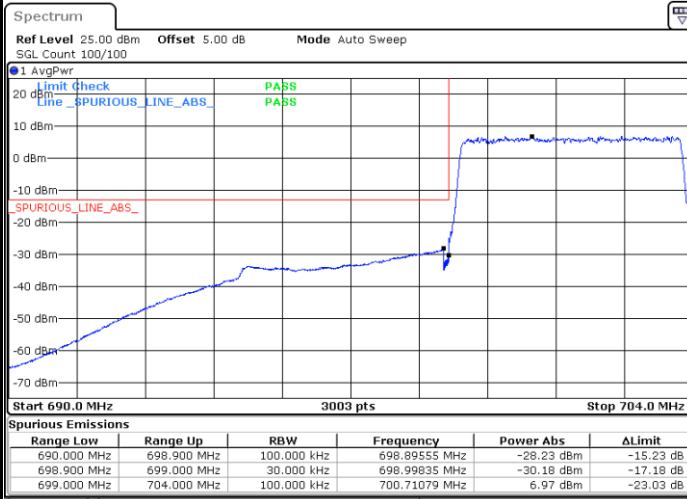
Date: 2.NOV.2023 15:52:04

Highest Band Edge / 1 RB



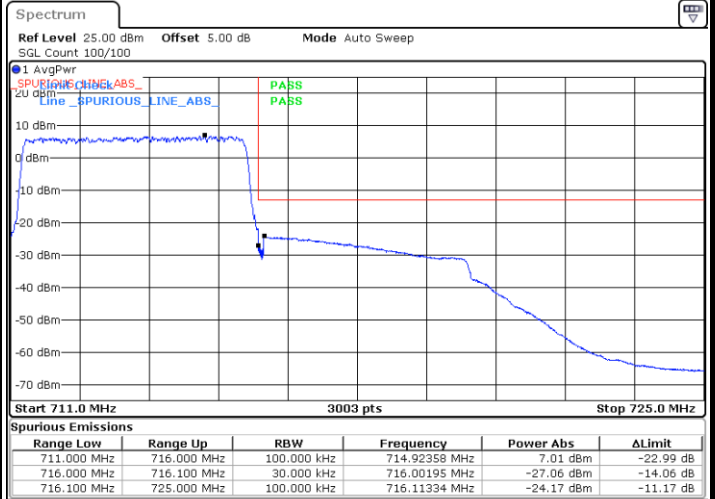
Date: 2.NOV.2023 16:04:53

Lowest Band Edge / Full RB



Date: 2.NOV.2023 16:01:19

Highest Band Edge / Full RB

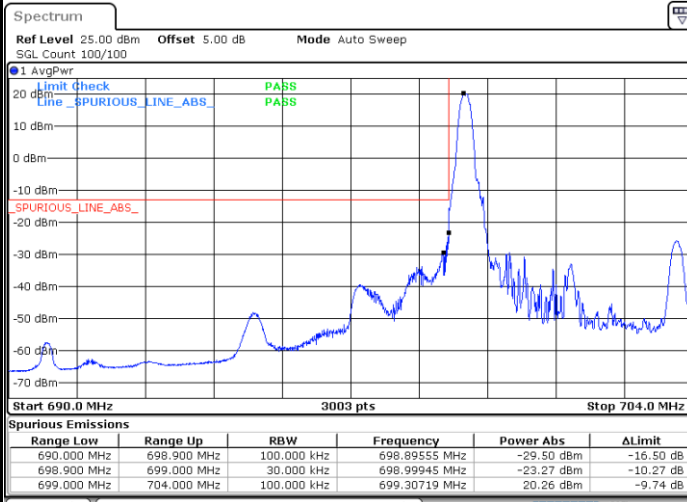


Date: 2.NOV.2023 16:14:53



LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



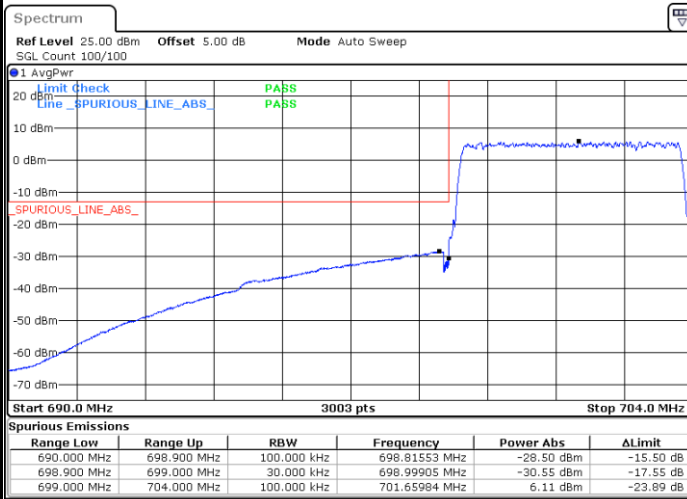
Date: 2.NOV.2023 15:52:59

Highest Band Edge / 1 RB



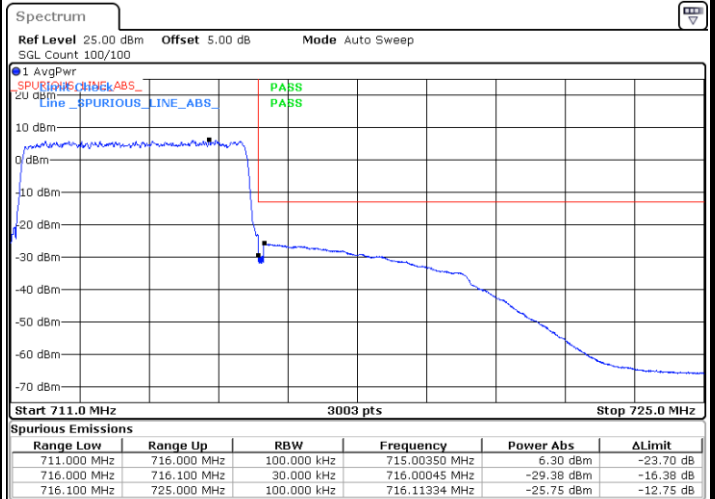
Date: 2.NOV.2023 16:05:48

Lowest Band Edge / Full RB



Date: 2.NOV.2023 16:00:24

Highest Band Edge / Full RB

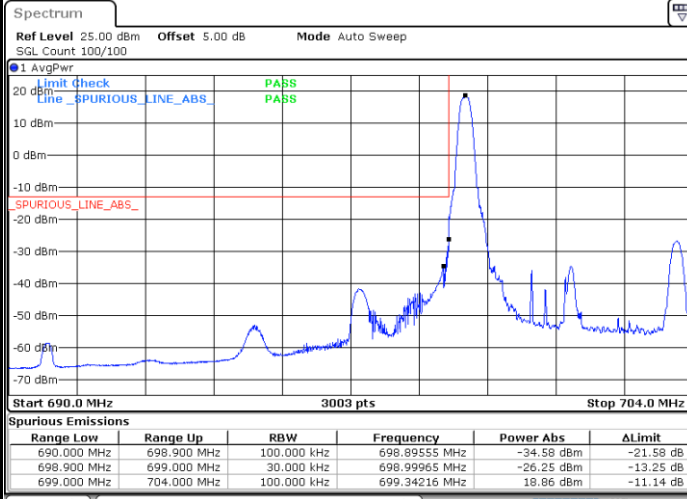


Date: 2.NOV.2023 16:13:57



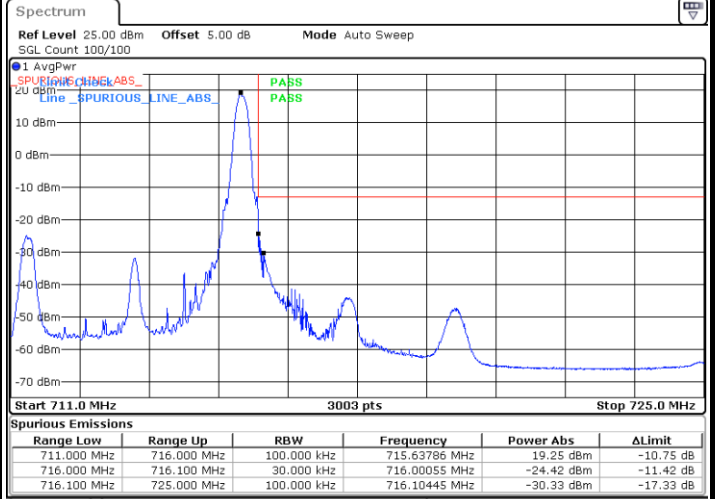
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



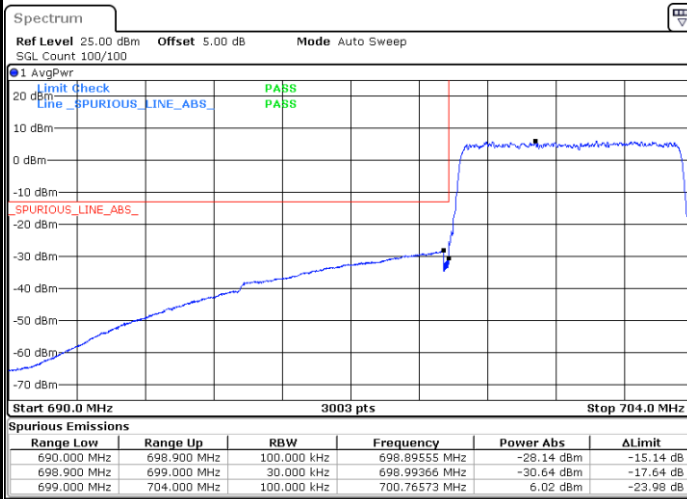
Date: 2.NOV.2023 15:53:54

Highest Band Edge / 1 RB



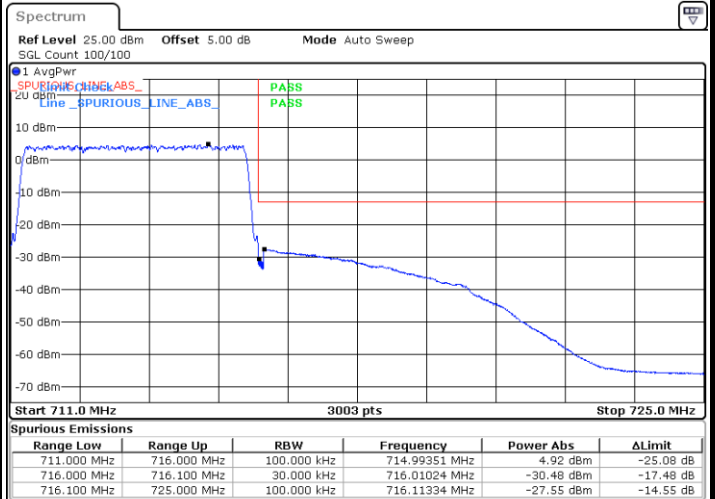
Date: 2.NOV.2023 16:06:43

Lowest Band Edge / Full RB



Date: 2.NOV.2023 15:59:29

Highest Band Edge / Full RB

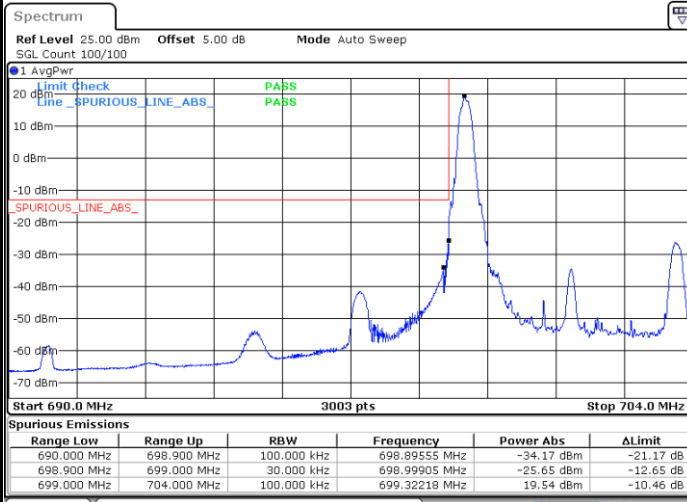


Date: 2.NOV.2023 16:13:02



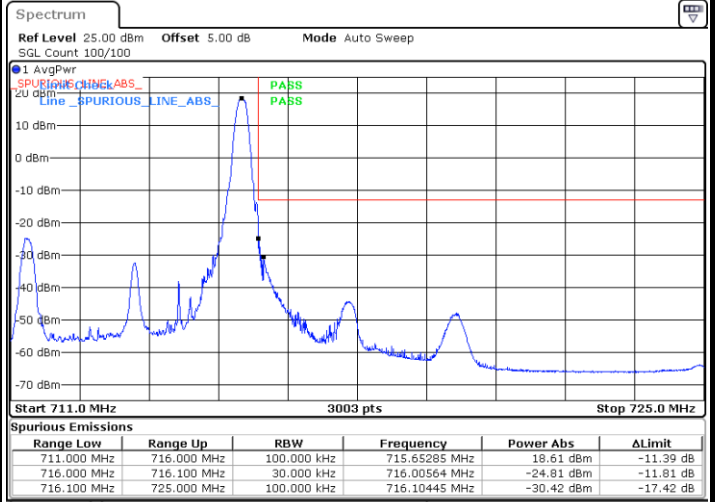
LTE Band 12 / 5MHz / 256QAM

Lowest Band Edge / 1RB



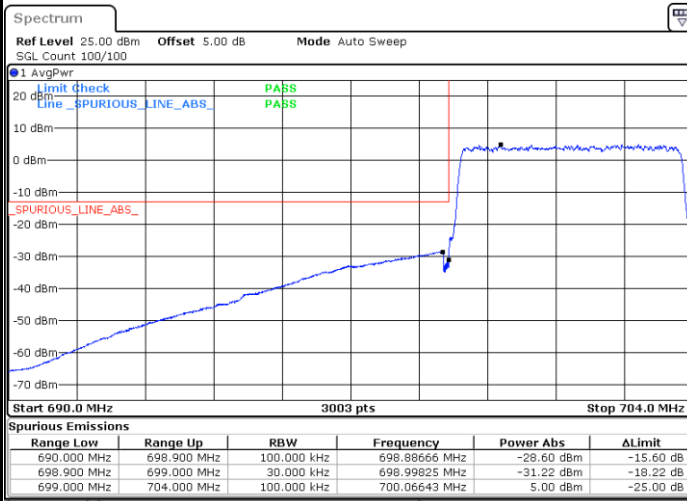
Date: 2.NOV.2023 15:54:49

Highest Band Edge / 1 RB



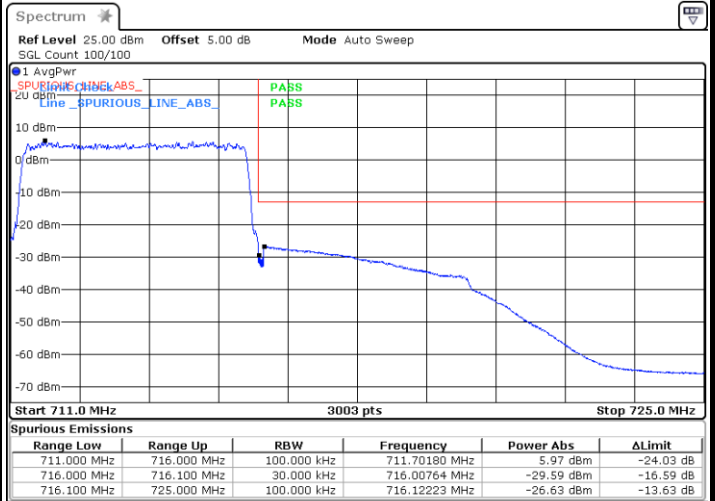
Date: 2.NOV.2023 16:07:39

Lowest Band Edge / Full RB



Date: 2.NOV.2023 15:56:52

Highest Band Edge / Full RB

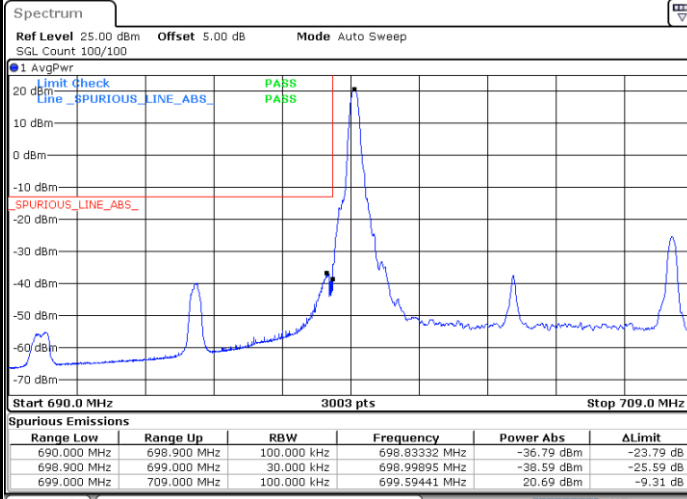


Date: 2.NOV.2023 16:11:34



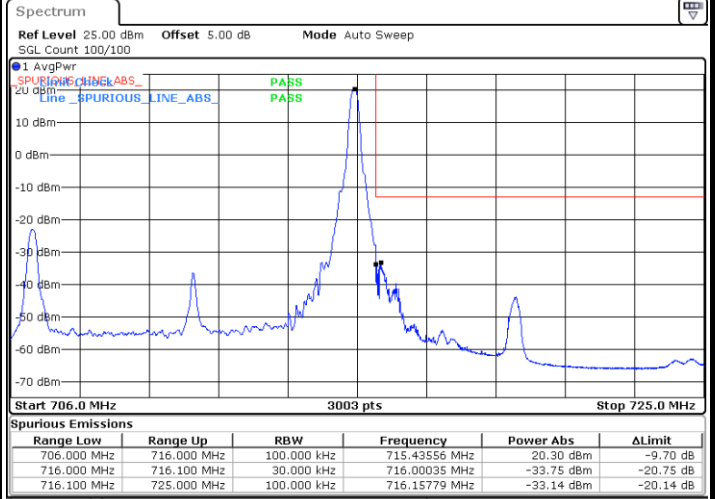
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



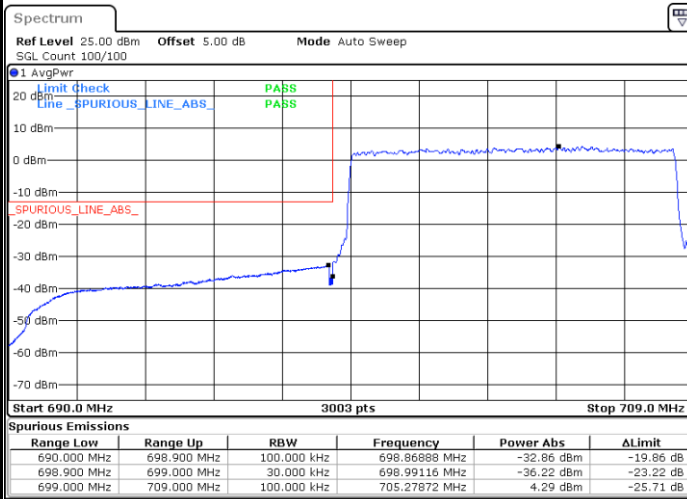
Date: 2.NOV.2023 16:17:08

Highest Band Edge / 1 RB



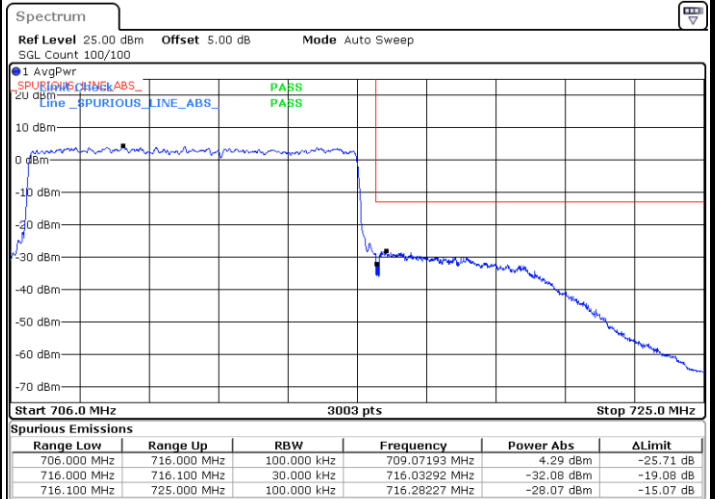
Date: 2.NOV.2023 16:28:42

Lowest Band Edge / Full RB



Date: 2.NOV.2023 16:25:07

Highest Band Edge / Full RB

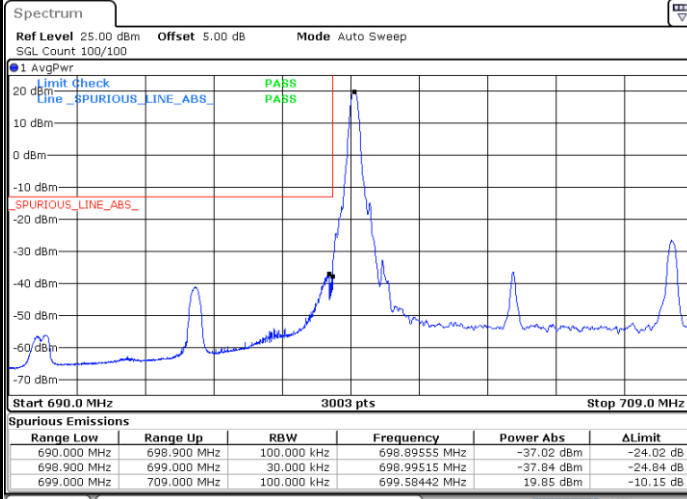


Date: 2.NOV.2023 16:38:14



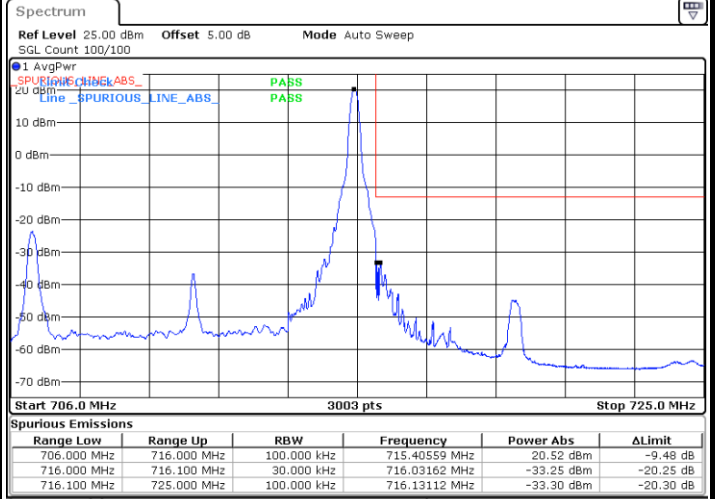
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



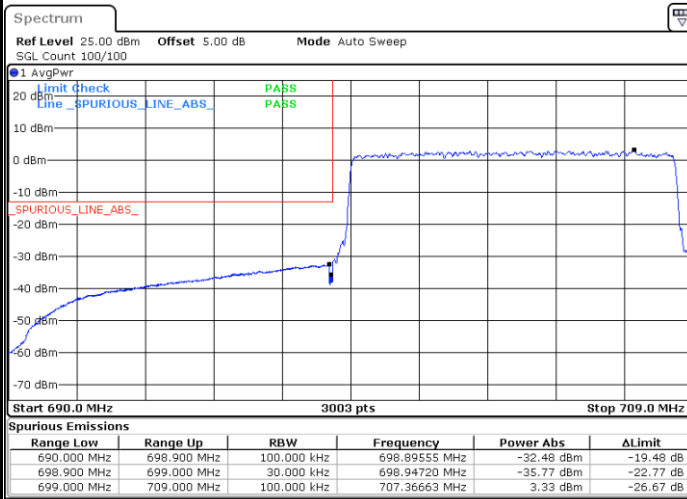
Date: 2.NOV.2023 16:18:03

Highest Band Edge / 1 RB



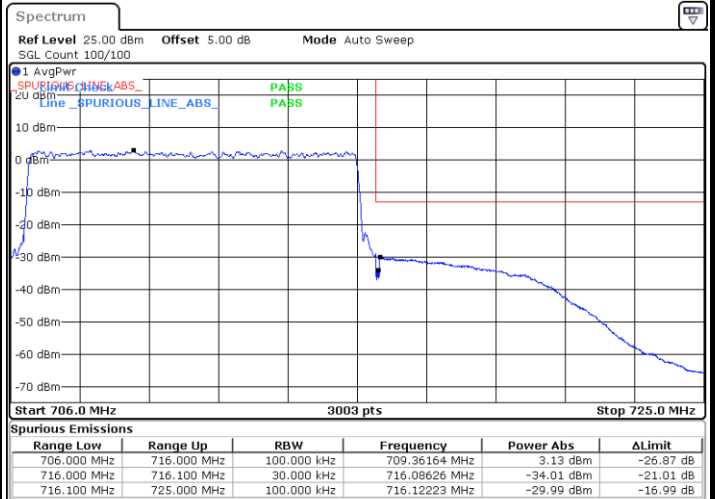
Date: 2.NOV.2023 16:29:37

Lowest Band Edge / Full RB



Date: 2.NOV.2023 16:24:11

Highest Band Edge / Full RB

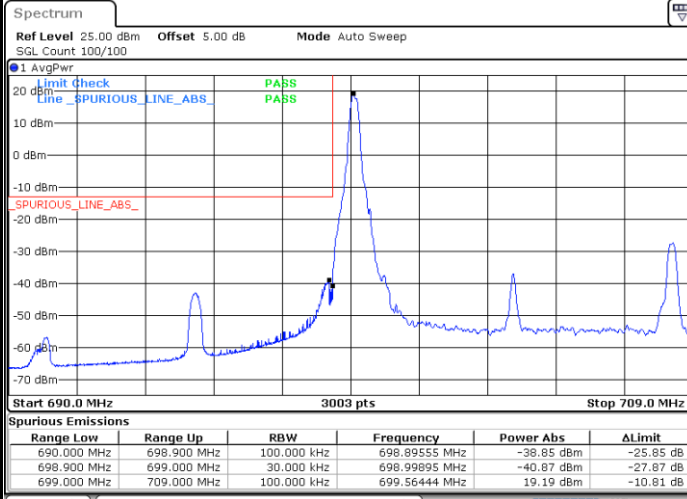


Date: 2.NOV.2023 16:37:19



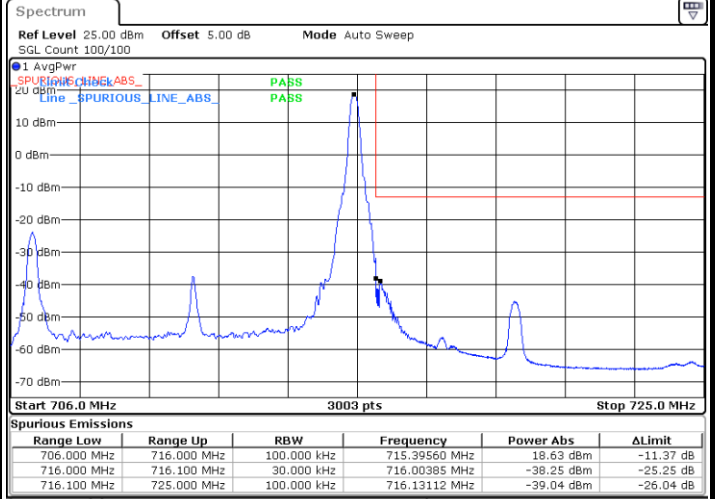
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



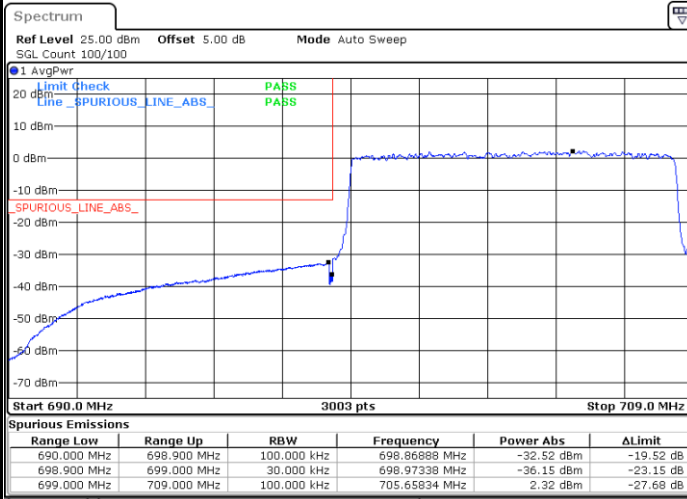
Date: 2.NOV.2023 16:18:58

Highest Band Edge / 1 RB



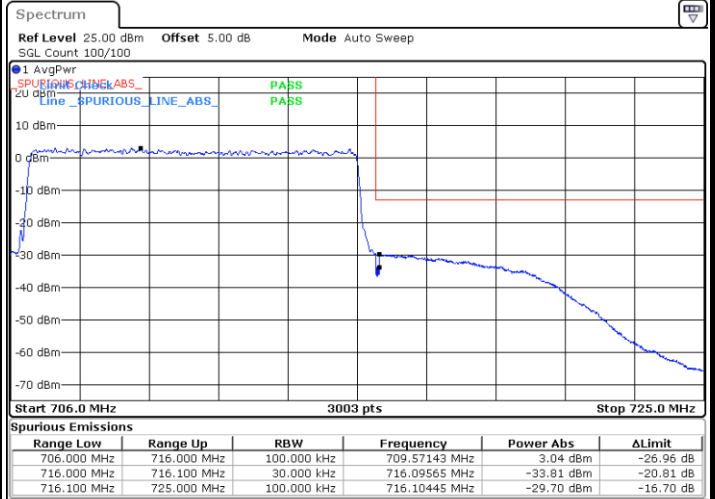
Date: 2.NOV.2023 16:30:32

Lowest Band Edge / Full RB



Date: 2.NOV.2023 16:23:16

Highest Band Edge / Full RB

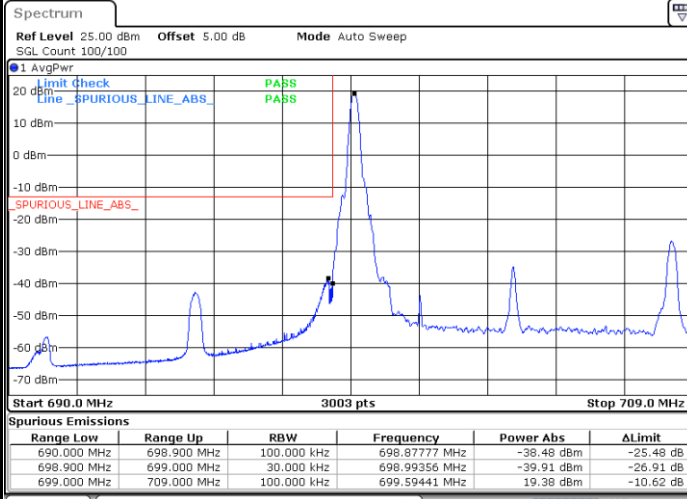


Date: 2.NOV.2023 16:34:49



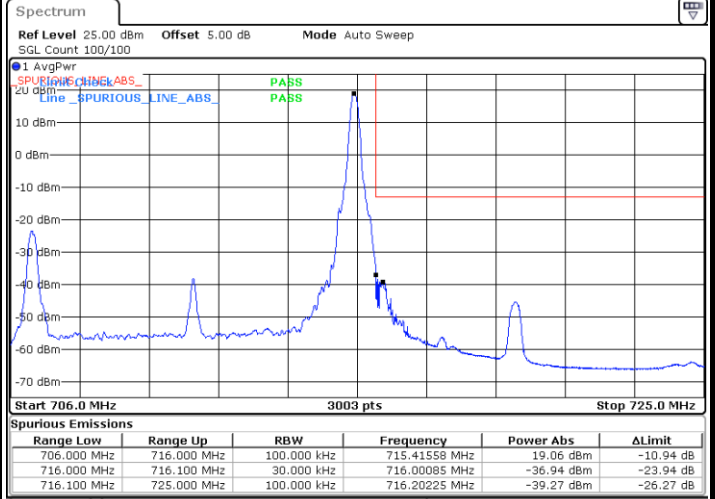
LTE Band 12 / 10MHz / 256QAM

Lowest Band Edge / 1 RB



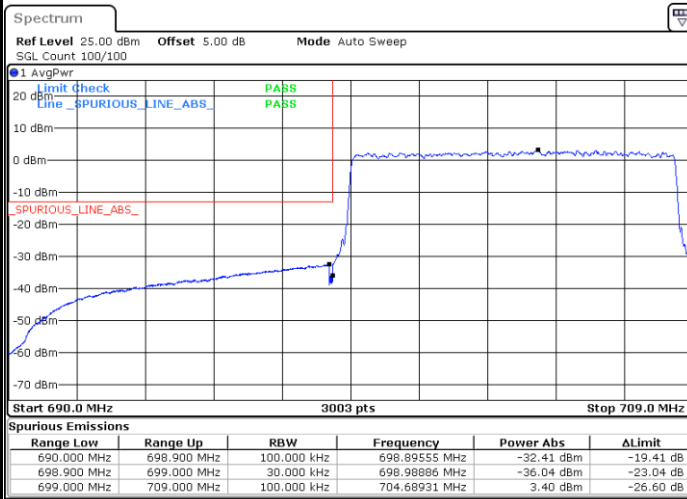
Date: 2.NOV.2023 16:19:53

Highest Band Edge / 1 RB



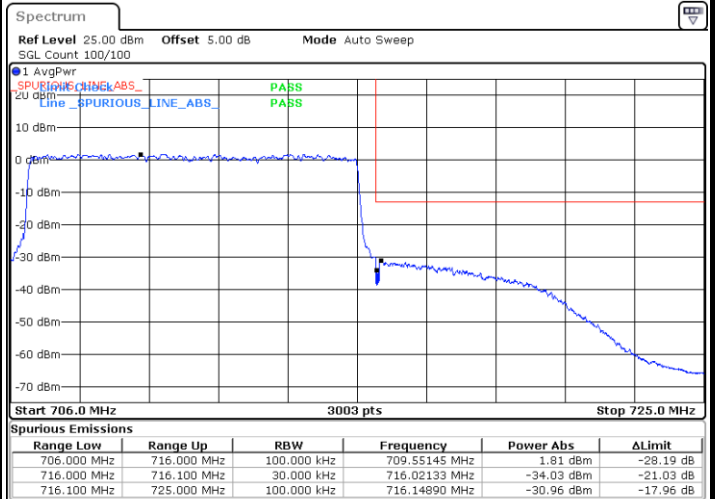
Date: 2.NOV.2023 16:31:27

Lowest Band Edge / Full RB



Date: 2.NOV.2023 16:21:39

Highest Band Edge / Full RB



Date: 2.NOV.2023 16:33:19

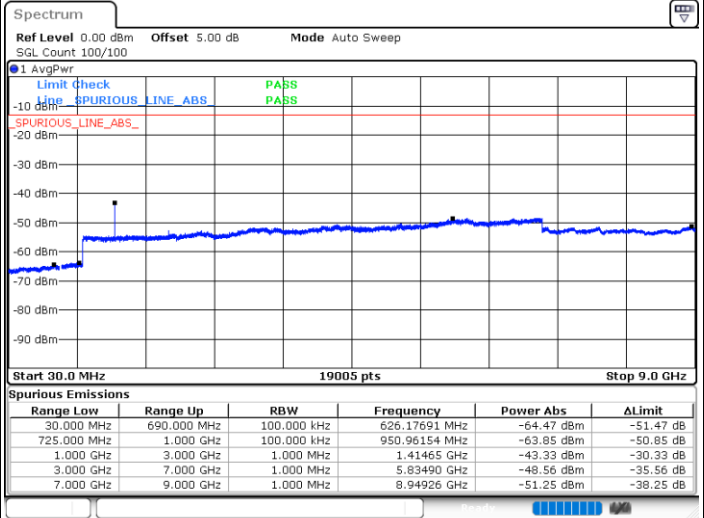
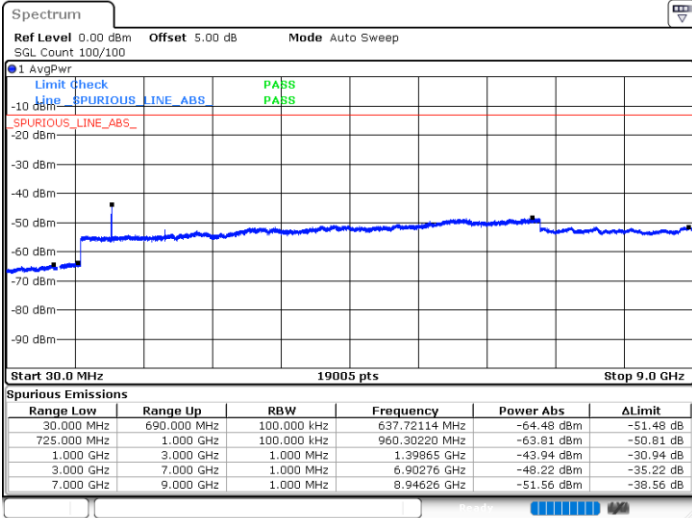


Conducted Spurious Emission

LTE Band 12 / 1.4MHz

Lowest Channel / QPSK

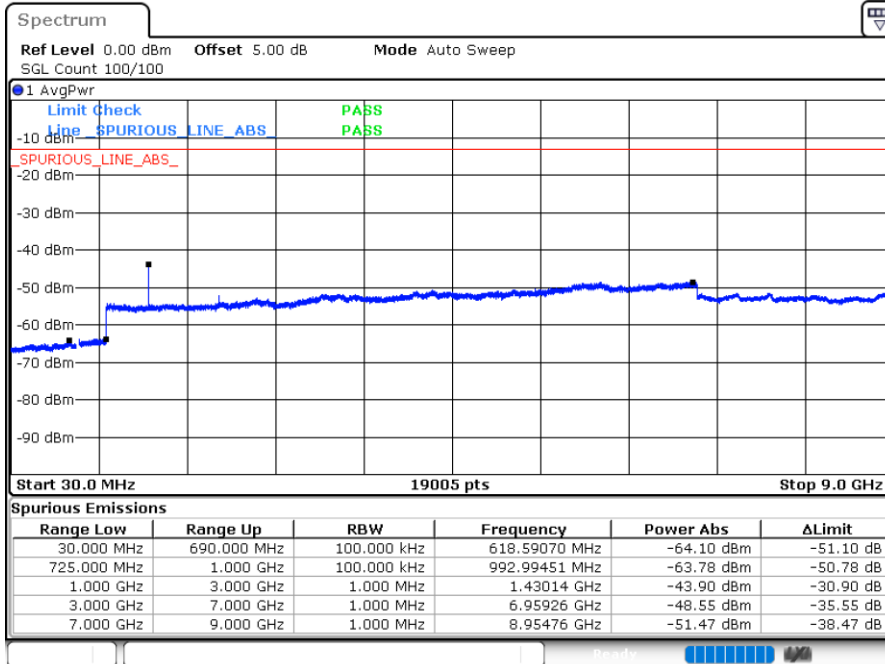
Middle Channel / QPSK



Date: 2.NOV.2023 14:54:12

Date: 2.NOV.2023 15:06:04

Highest Channel / QPSK



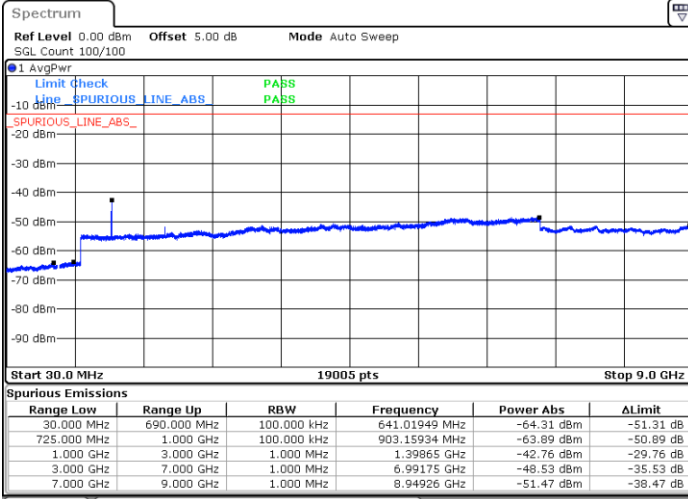
Date: 2.NOV.2023 15:07:24



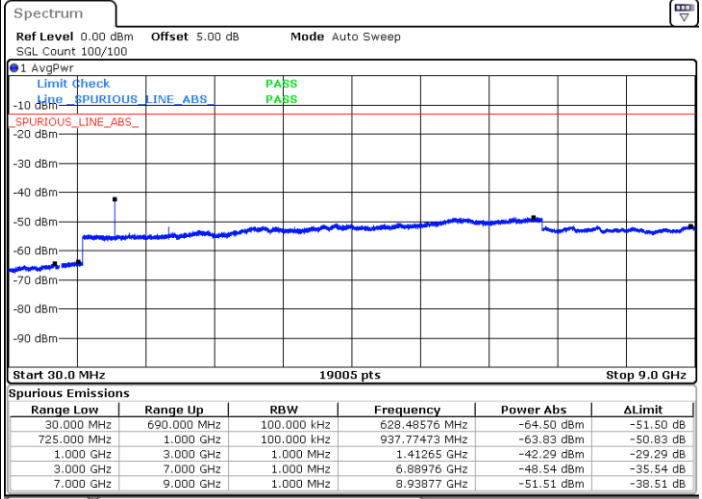
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

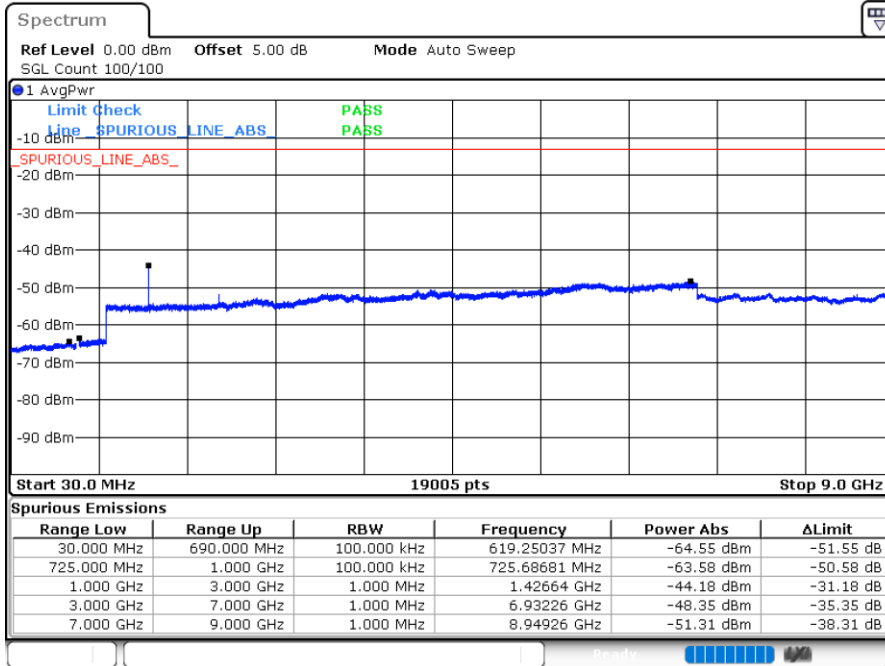


Date: 2.NOV.2023 15:23:28



Date: 2.NOV.2023 15:36:03

Highest Channel / QPSK



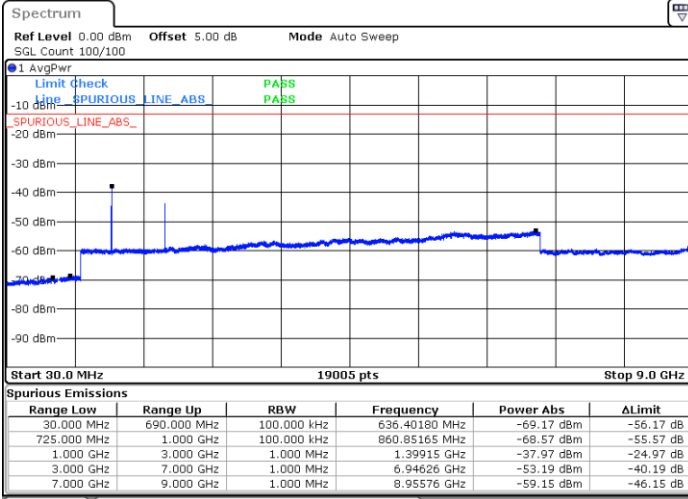
Date: 2.NOV.2023 15:37:23



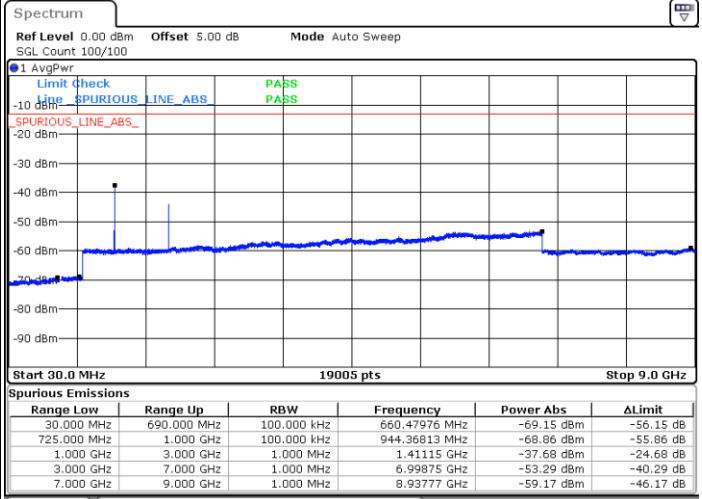
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

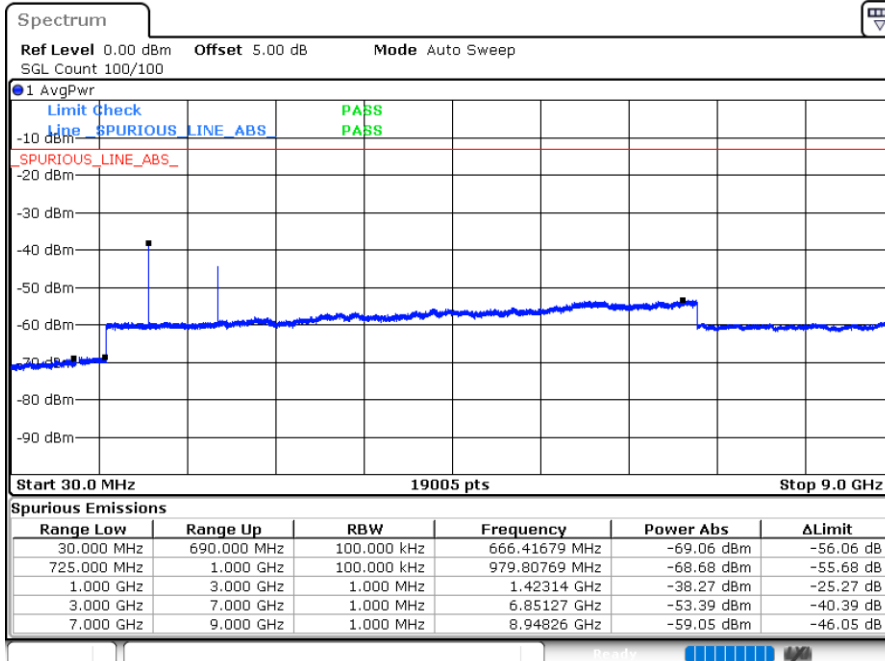


Date: 2.NOV.2023 15:51:09



Date: 2.NOV.2023 16:02:38

Highest Channel / QPSK



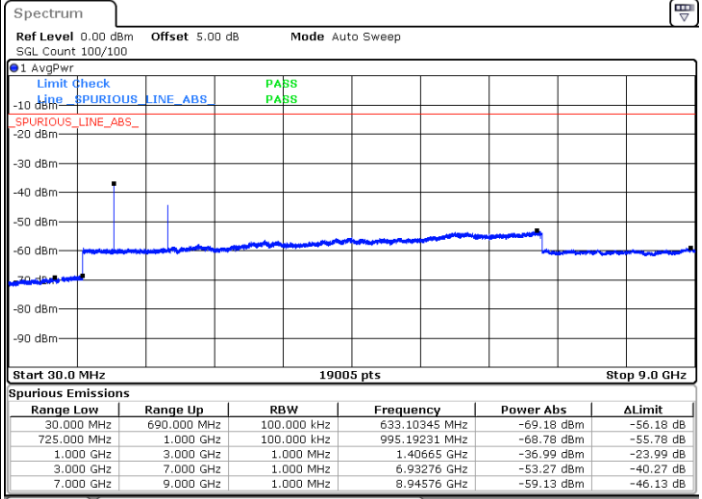
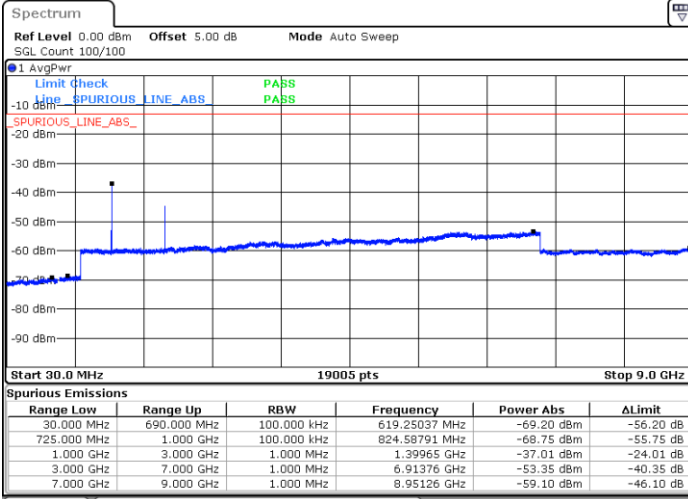
Date: 2.NOV.2023 16:03:58



LTE Band 12 / 10MHz

Lowest Channel / QPSK

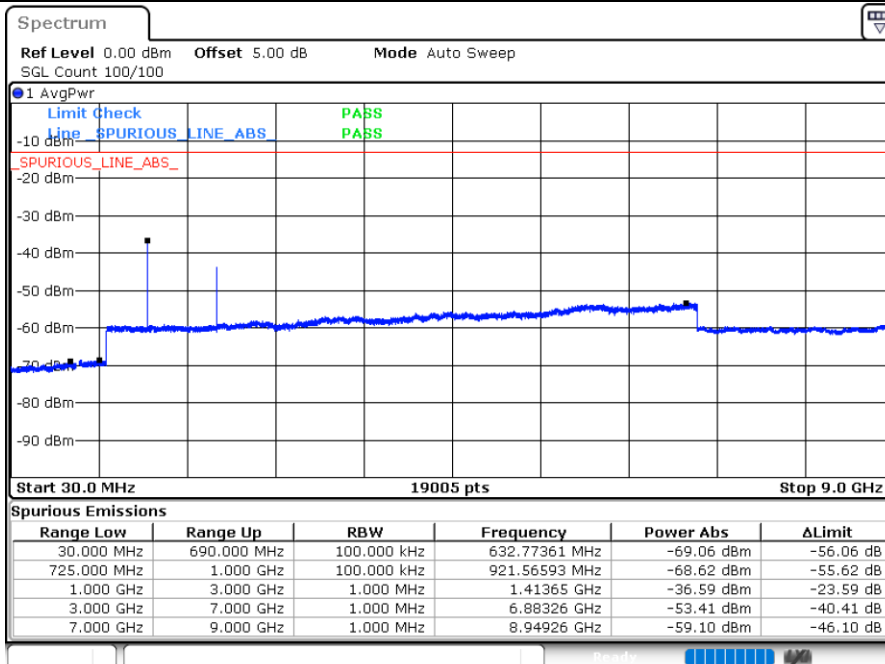
Middle Channel / QPSK



Date: 2.NOV.2023 16:16:13

Date: 2.NOV.2023 16:26:27

Highest Channel / QPSK



Date: 2.NOV.2023 16:27:47



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	0.0047	PASS
40	Normal Voltage	0.0011	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0063	
0	Normal Voltage	0.0052	
-10	Normal Voltage	0.0022	
-20	Normal Voltage	0.0014	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0037	
20	Normal Voltage	0.0031	
20	Battery End Point	0.0012	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.35 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	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.72	5.65	6.00	5.54	PASS

