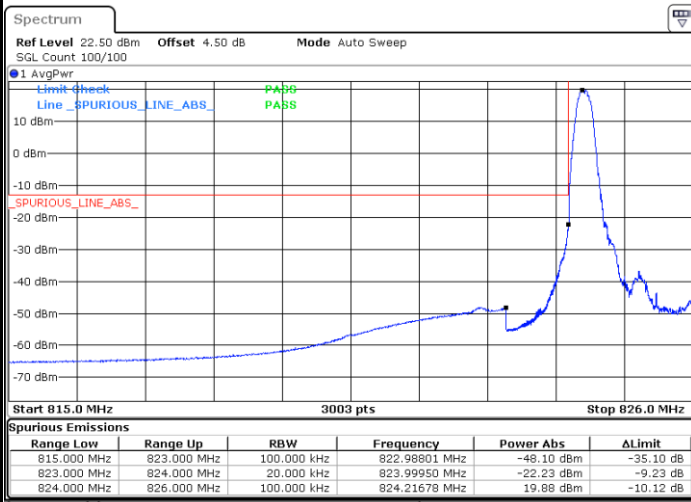




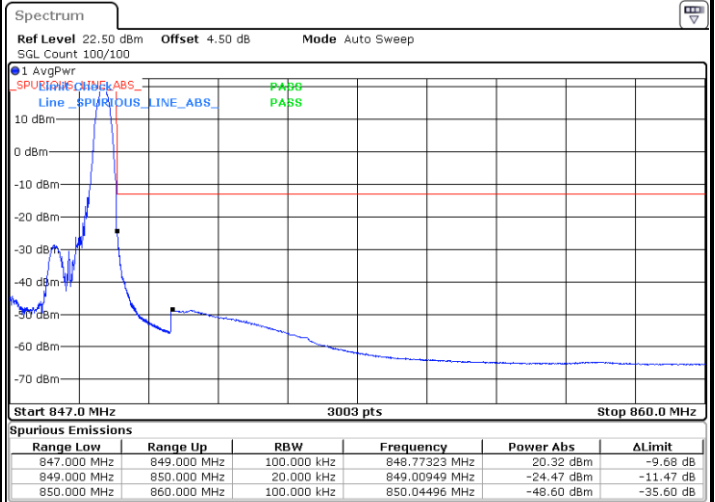
LTE Band 5 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



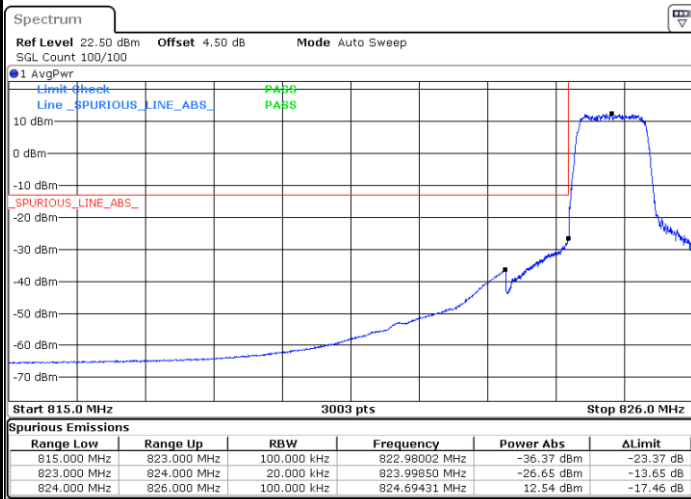
Date: 4 NOV.2021 21:02:16

Highest Band Edge / 1 RB



Date: 4 NOV.2021 21:09:16

Lowest Band Edge / Full RB



Date: 4 NOV.2021 21:03:43

Highest Band Edge / Full RB

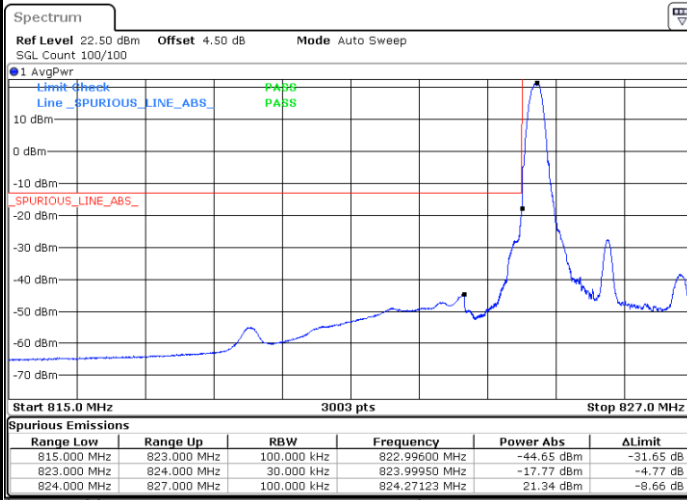


Date: 4 NOV.2021 21:10:52



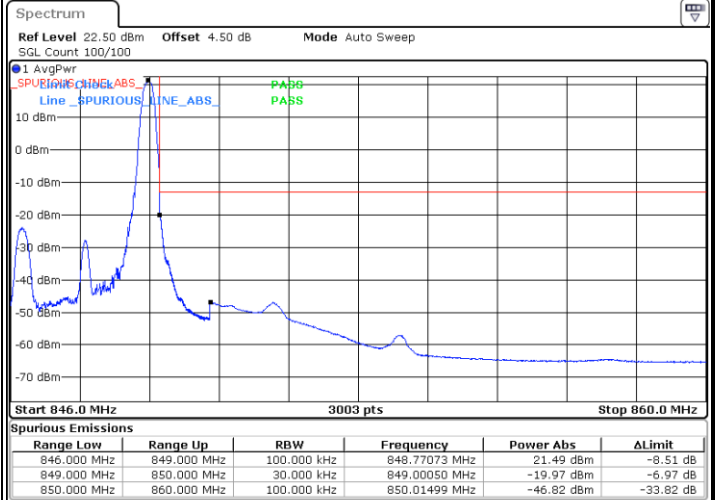
LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



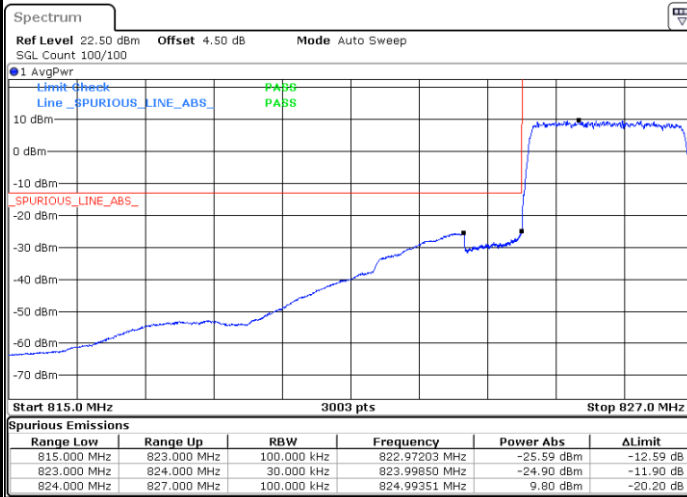
Date: 4 NOV 2021 20:48:25

Highest Band Edge / 1 RB



Date: 4 NOV 2021 20:53:36

Lowest Band Edge / Full RB



Date: 4 NOV 2021 20:51:28

Highest Band Edge / Full RB

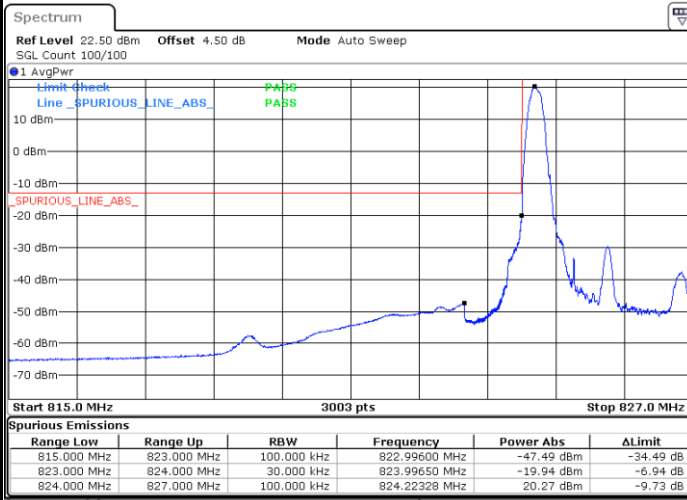


Date: 4 NOV 2021 20:56:33



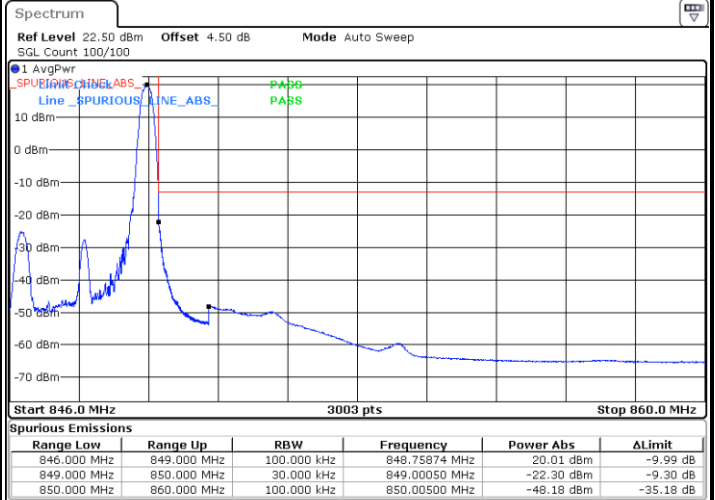
LTE Band 5 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



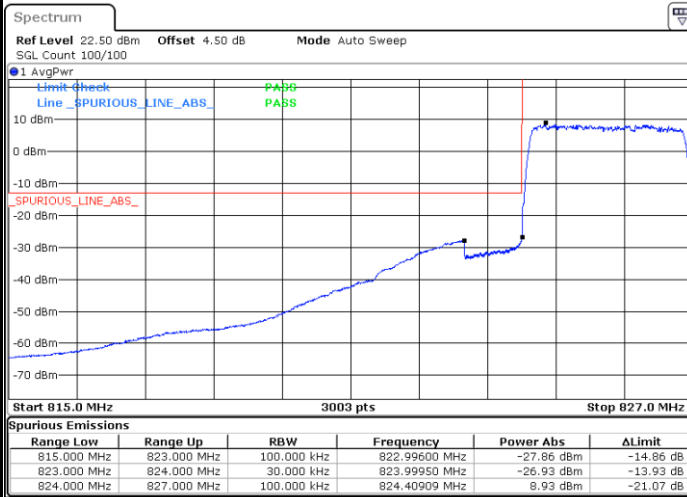
Date: 4 NOV 2021 20:49:21

Highest Band Edge / 1 RB



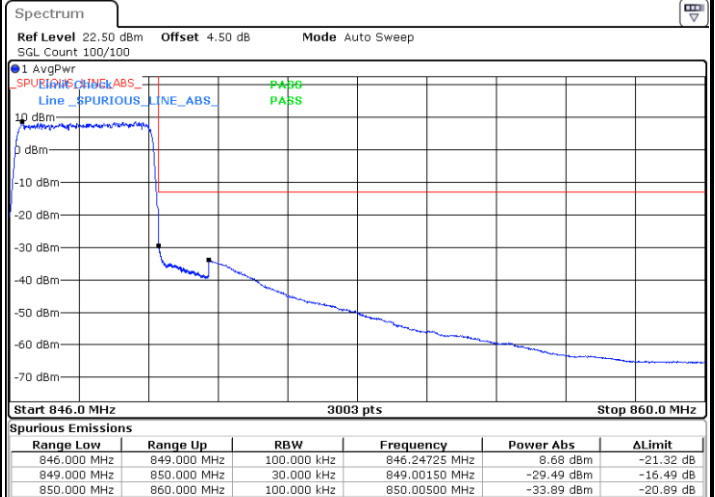
Date: 4 NOV 2021 20:54:34

Lowest Band Edge / Full RB



Date: 4 NOV 2021 20:50:25

Highest Band Edge / Full RB

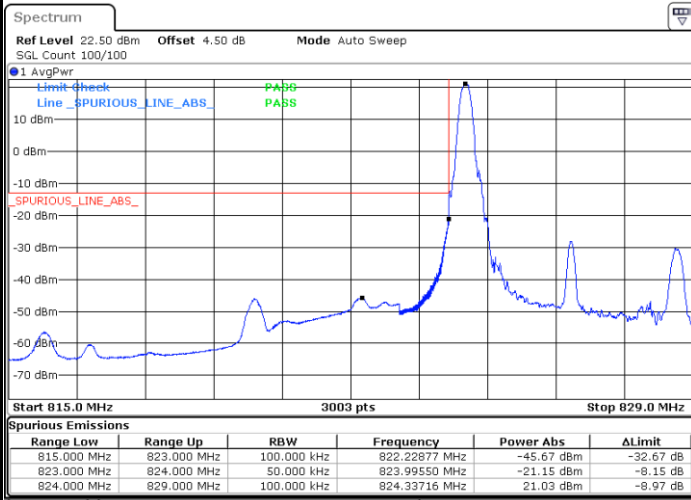


Date: 4 NOV 2021 20:55:34



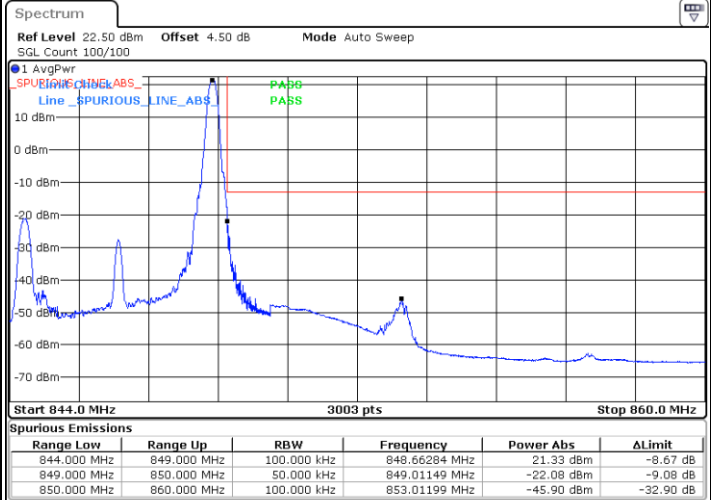
LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



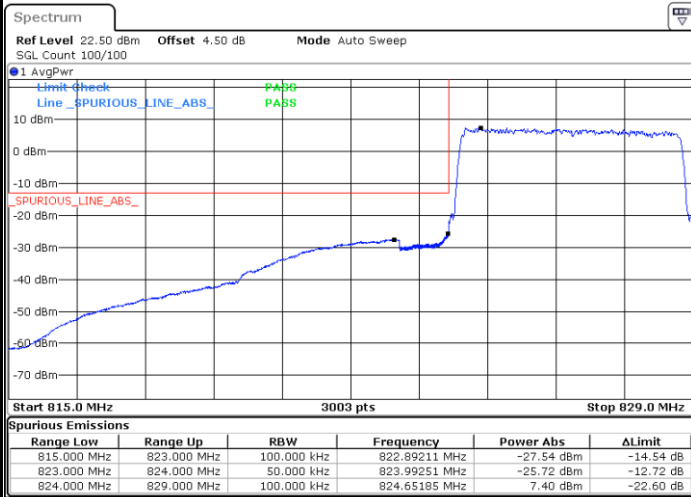
Date: 4 NOV. 2021 20:38:26

Highest Band Edge / 1 RB



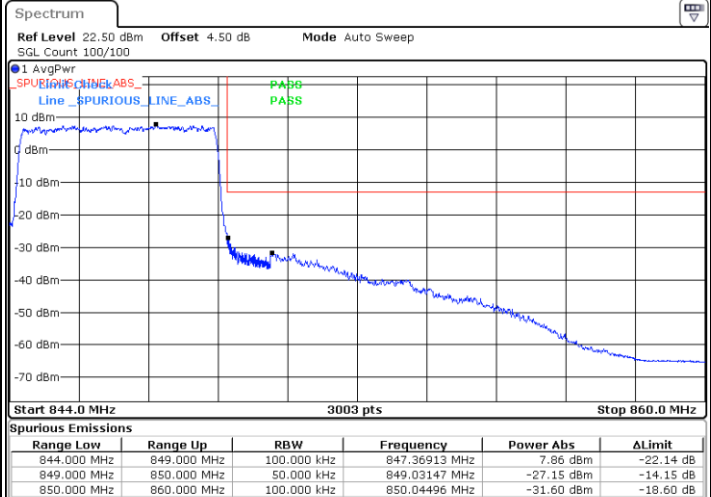
Date: 4 NOV. 2021 20:42:39

Lowest Band Edge / Full RB



Date: 4 NOV. 2021 20:40:39

Highest Band Edge / Full RB

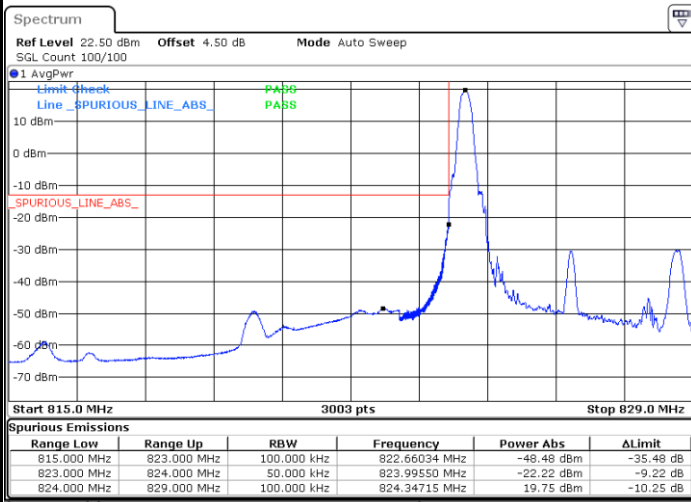


Date: 4 NOV. 2021 20:45:07



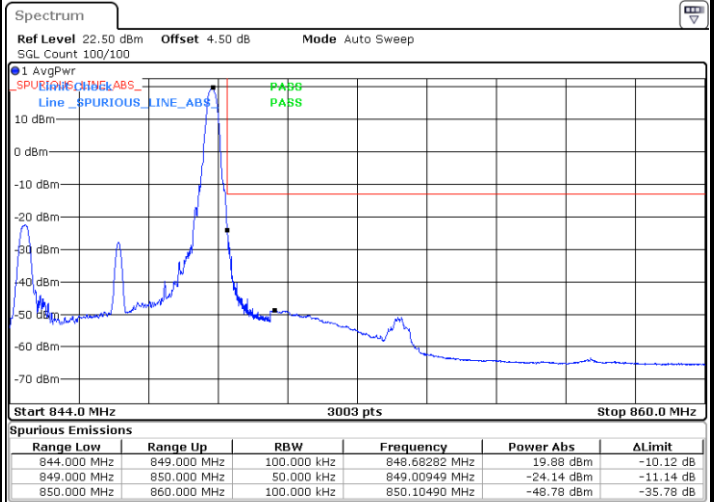
LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / 1RB



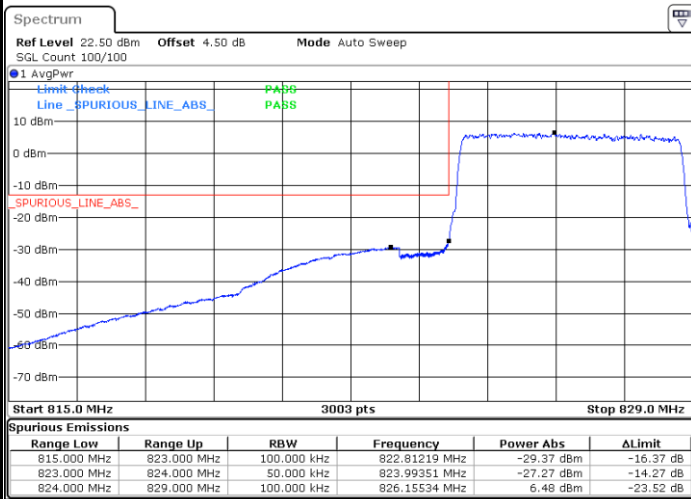
Date: 4 NOV. 2021 20:39:05

Highest Band Edge / 1 RB



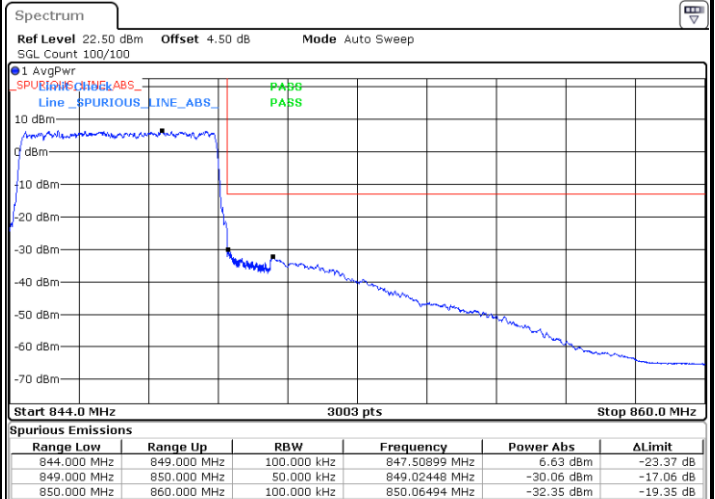
Date: 4 NOV. 2021 20:43:30

Lowest Band Edge / Full RB



Date: 4 NOV. 2021 20:39:44

Highest Band Edge / Full RB

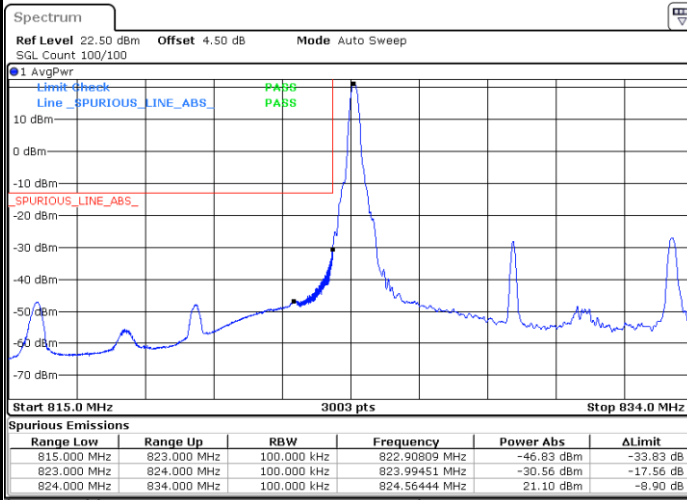


Date: 4 NOV. 2021 20:44:22



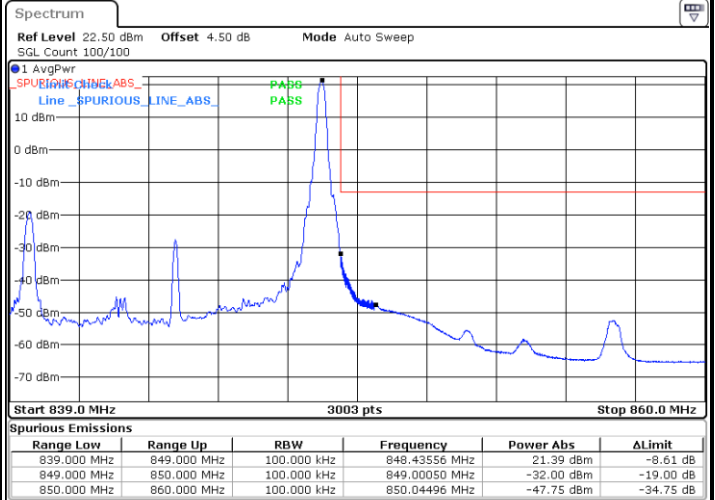
LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / 1 RB



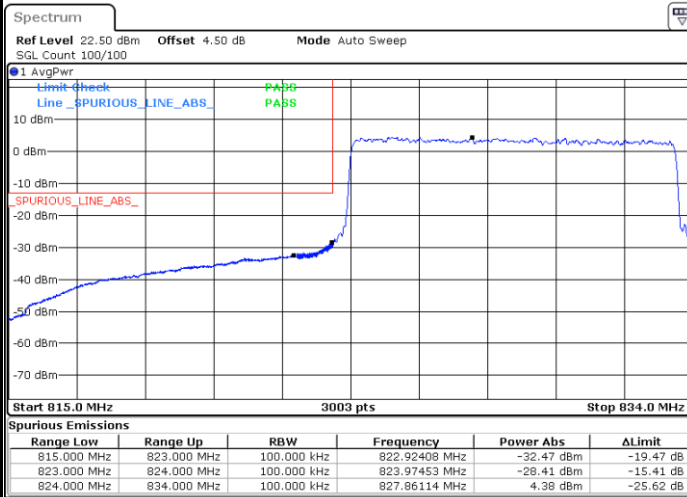
Date: 4 NOV. 2021 20:30:04

Highest Band Edge / 1 RB



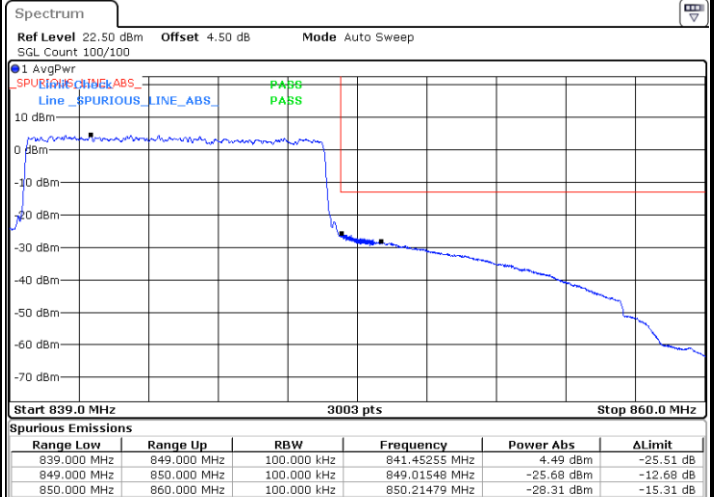
Date: 4 NOV. 2021 20:34:25

Lowest Band Edge / Full RB



Date: 4 NOV. 2021 20:31:52

Highest Band Edge / Full RB

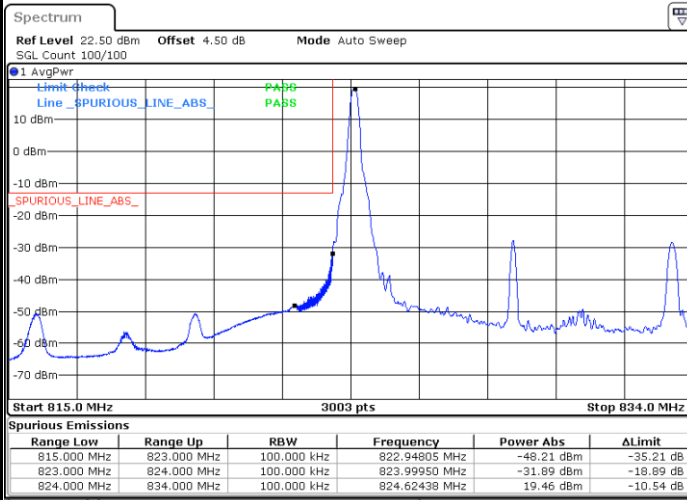


Date: 4 NOV. 2021 20:32:31



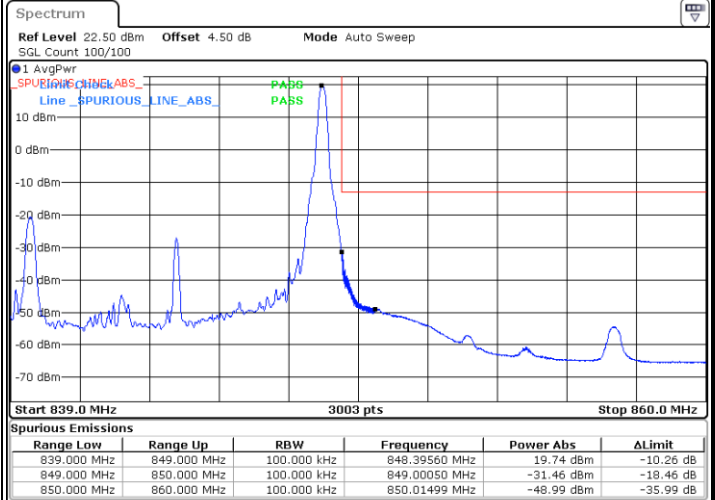
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



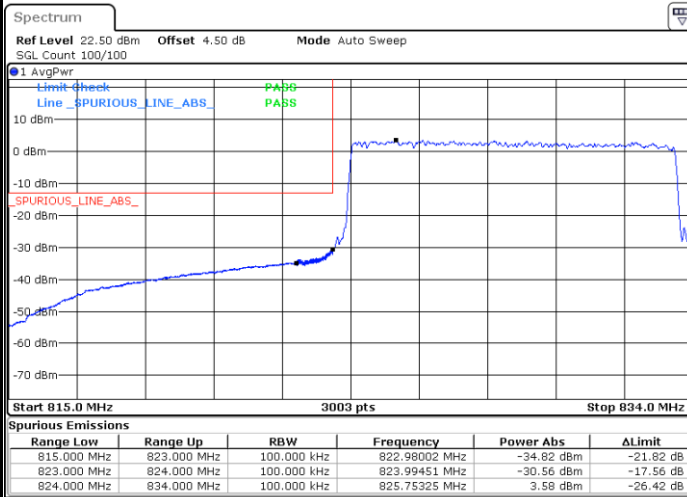
Date: 4 NOV.2021 20:30:39

Highest Band Edge / 1 RB



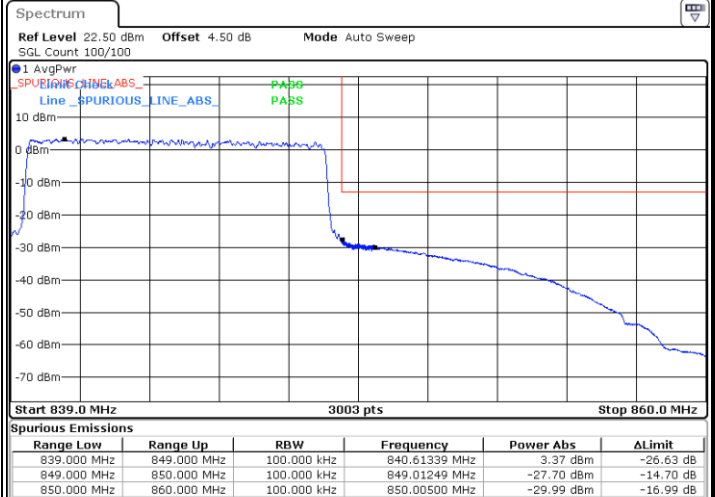
Date: 4 NOV.2021 20:33:47

Lowest Band Edge / Full RB



Date: 4 NOV.2021 20:31:16

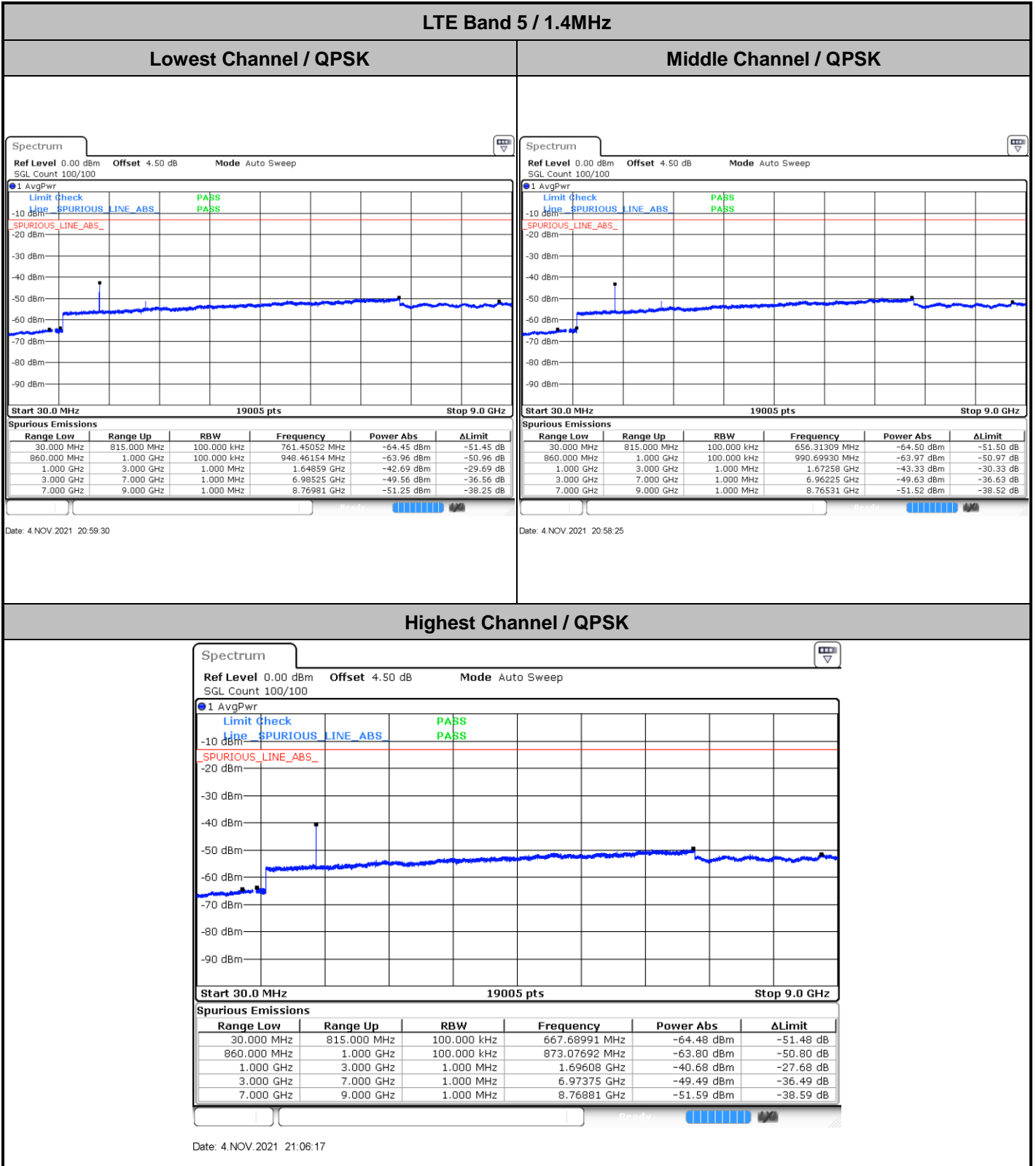
Highest Band Edge / Full RB



Date: 4 NOV.2021 20:33:09



Conducted Spurious Emission

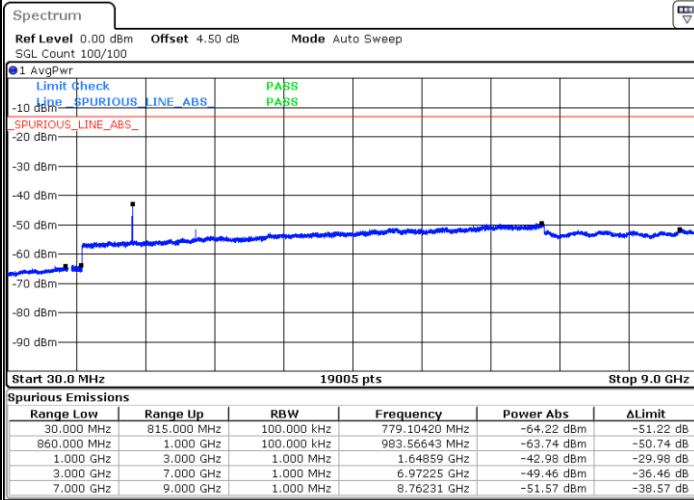




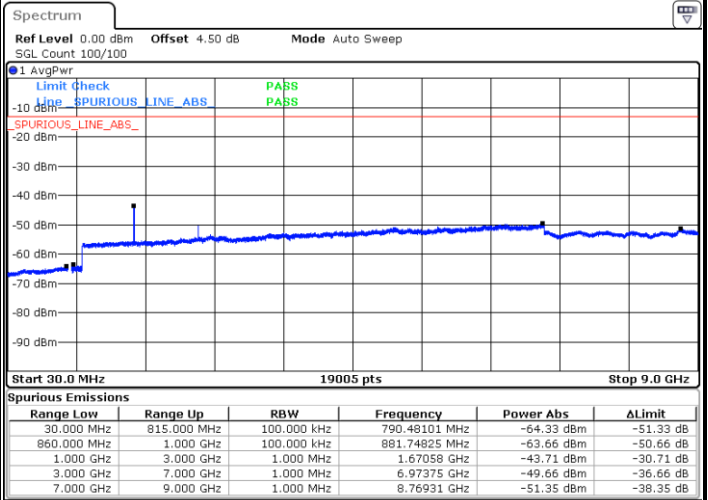
LTE Band 5 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

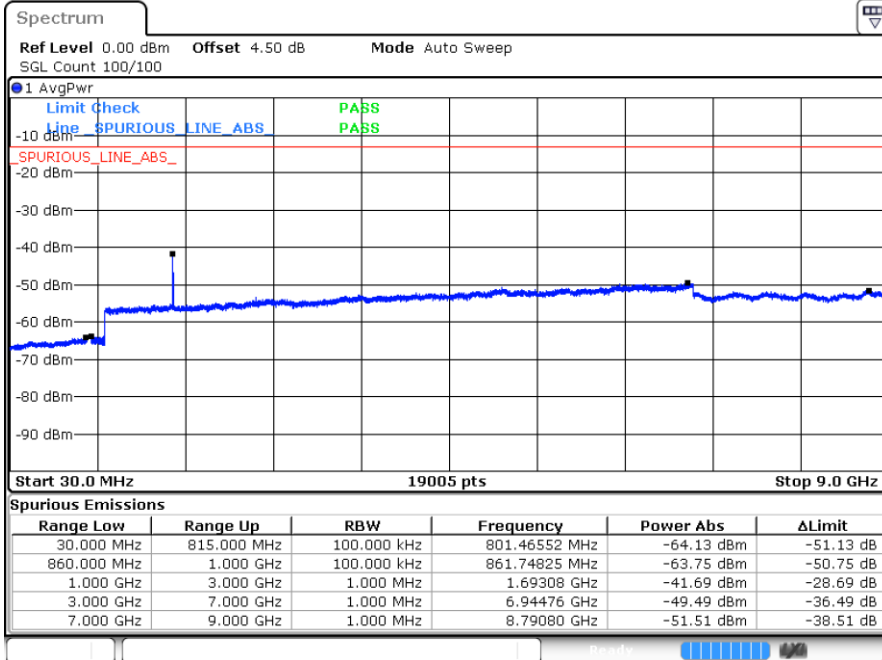


Date: 4.NOV.2021 20:47:31



Date: 4.NOV.2021 20:48:20

Highest Channel / QPSK



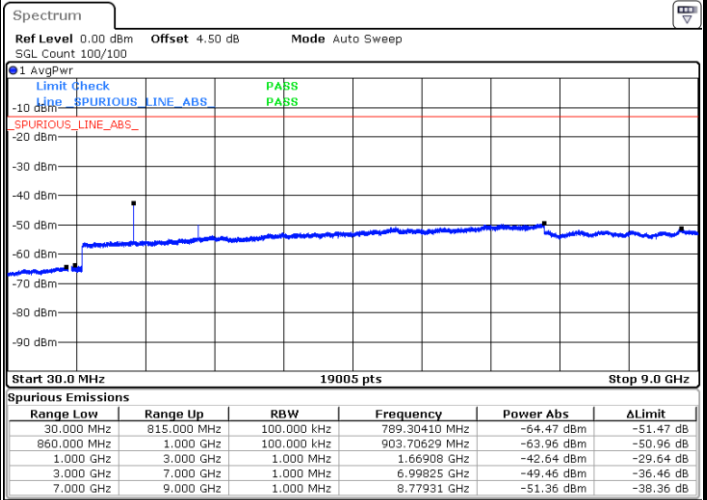
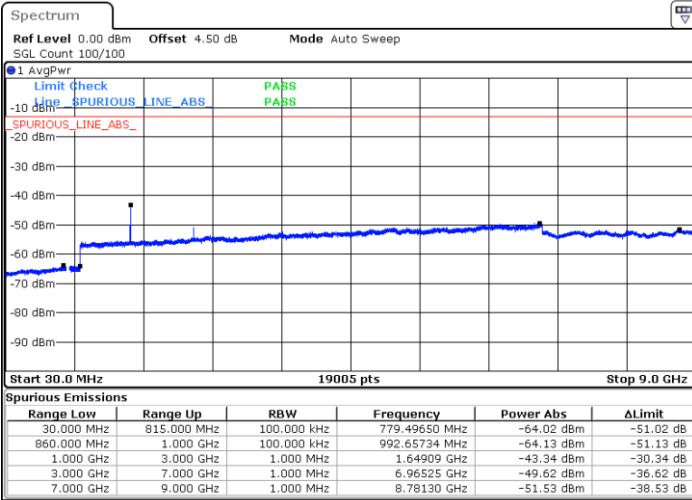
Date: 4.NOV.2021 20:52:38



LTE Band 5 / 5MHz

Lowest Channel / QPSK

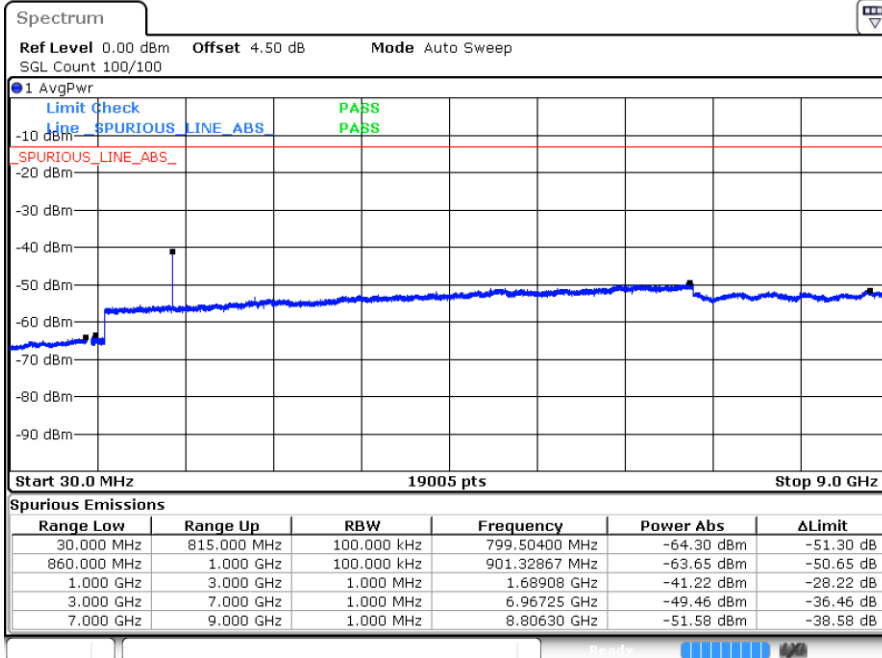
Middle Channel / QPSK



Date: 4 NOV.2021 20:37:49

Date: 4 NOV.2021 20:38:41

Highest Channel / QPSK



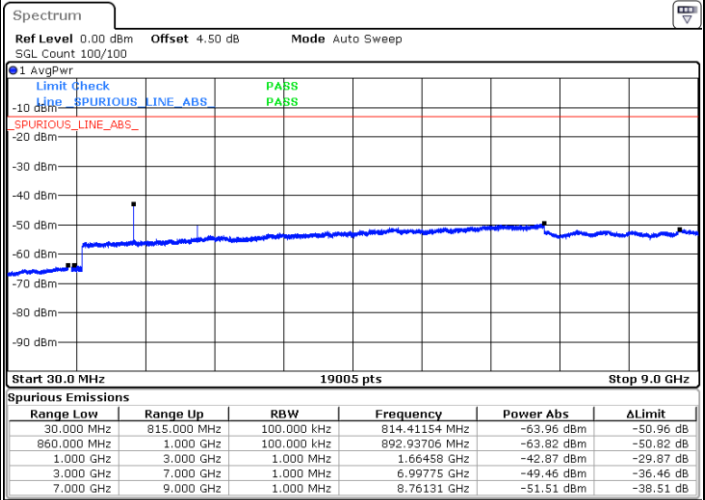
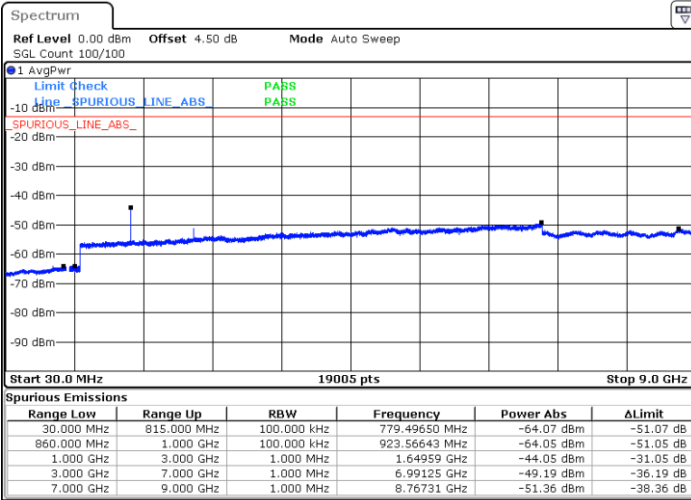
Date: 4 NOV.2021 20:41:55



LTE Band 5 / 10MHz

Lowest Channel / QPSK

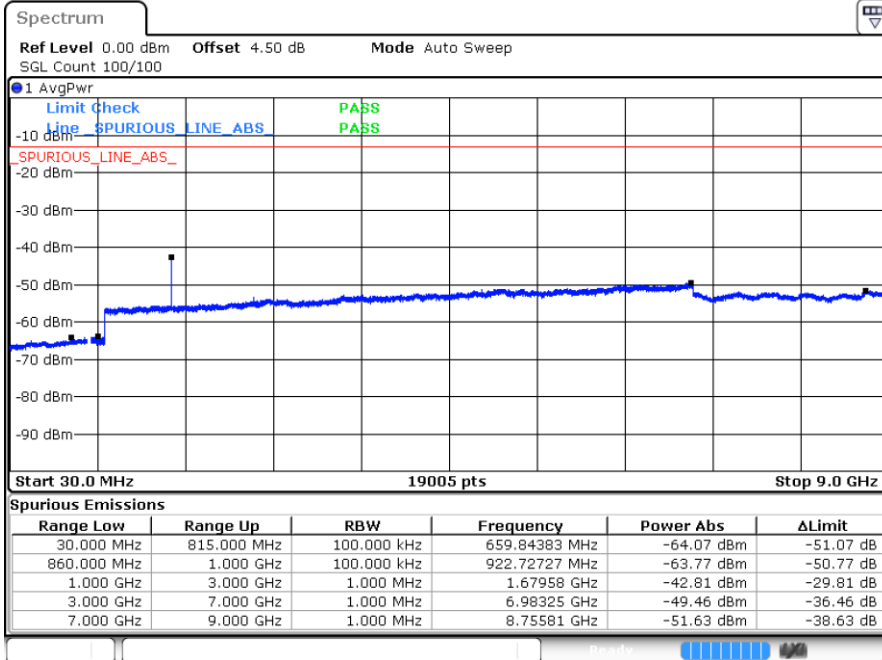
Middle Channel / QPSK



Date: 4 NOV.2021 20:28:20

Date: 4 NOV.2021 20:25:05

Highest Channel / QPSK



Date: 4 NOV.2021 20:35:34



Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0006	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0033	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0020	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0039	
-20	Normal Voltage	0.0014	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0020	
20	End Point	0.0032	

Note:

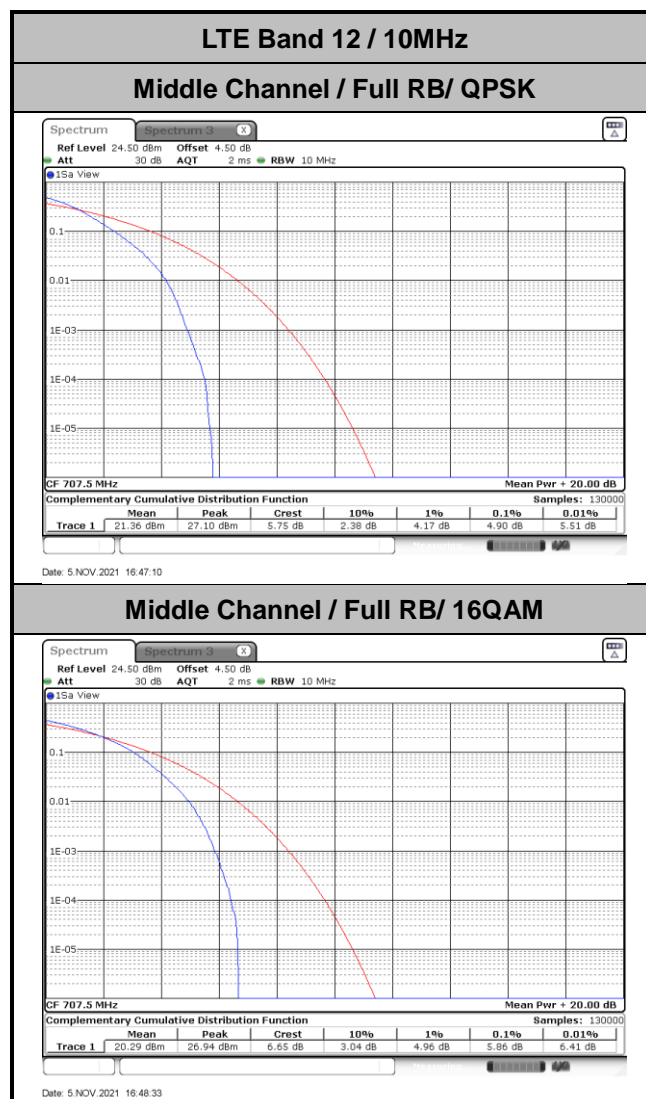
1. Normal Voltage =13 V. ; End Point (BEP) =12 V. ; Maximum Voltage =20 V.



LTE Band 12

Peak-to-Average Ratio

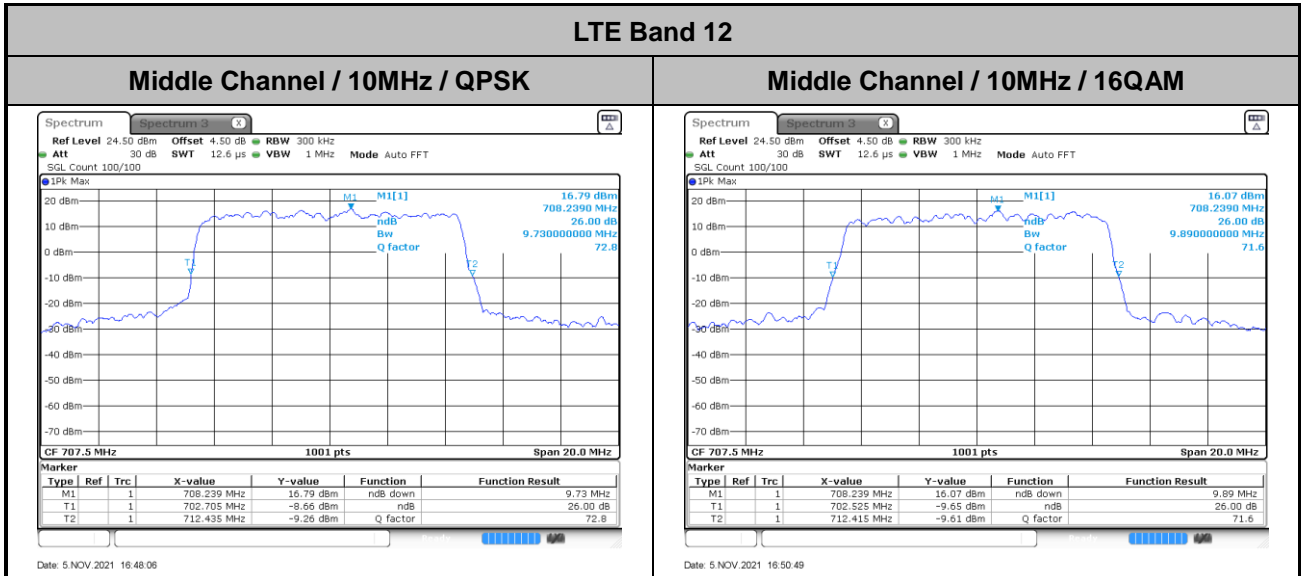
Mode	LTE Band 12 / 10MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	4.90	5.86	PASS





26dB Bandwidth

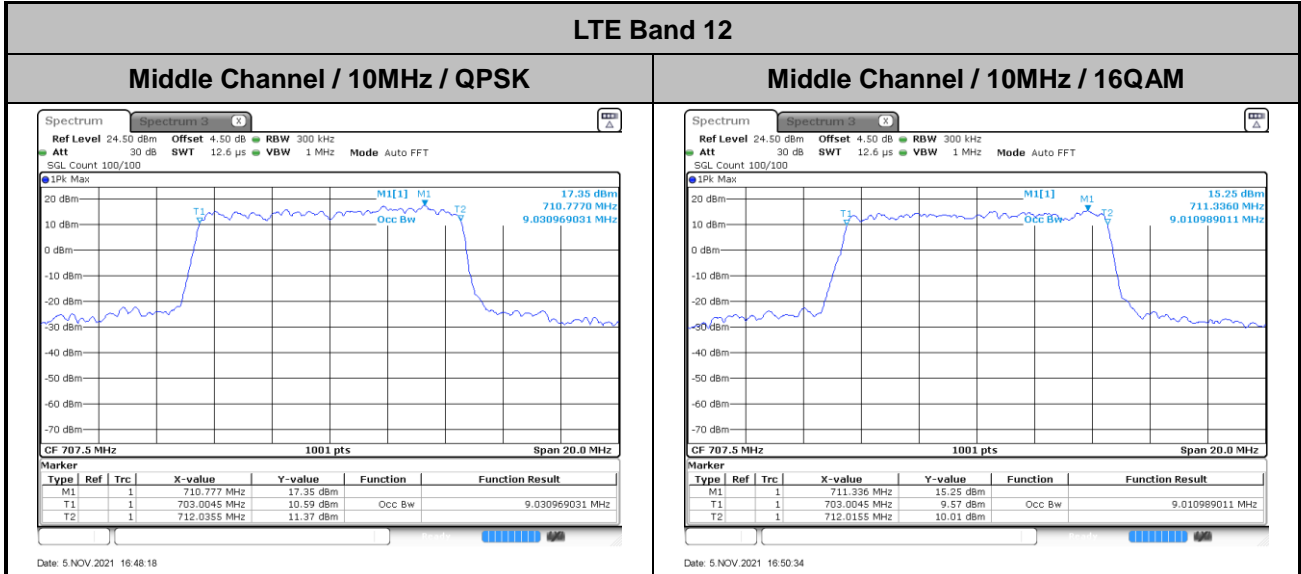
Mode	LTE Band 12 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.73	9.89





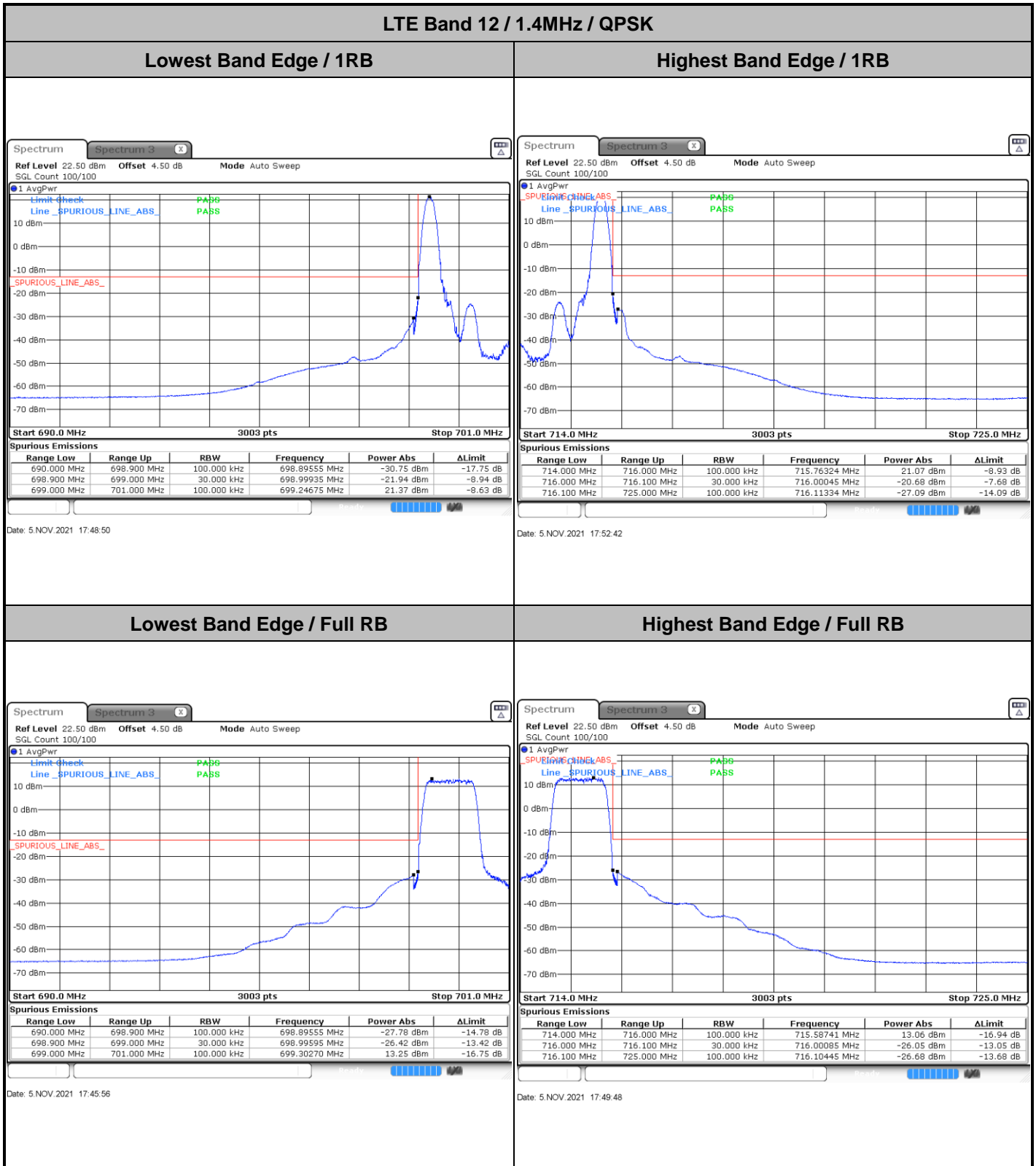
Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	9.01





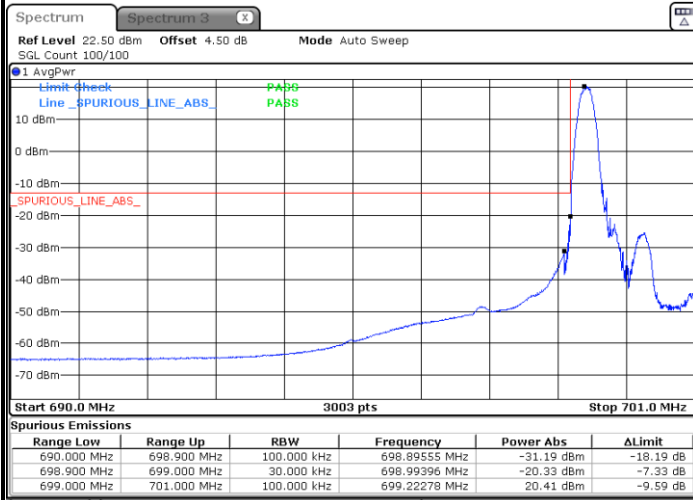
Conducted Band Edge





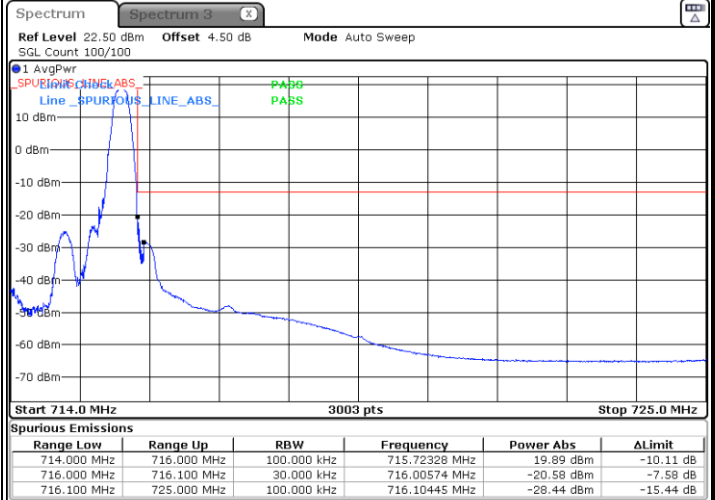
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 5 NOV 2021 17:47:52

Highest Band Edge / 1 RB



Date: 5 NOV 2021 17:51:44

Lowest Band Edge / Full RB



Date: 5 NOV 2021 17:46:54

Highest Band Edge / Full RB

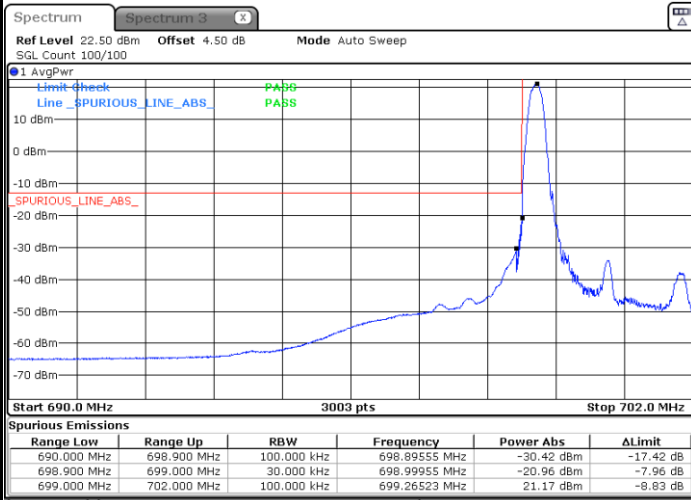


Date: 5 NOV 2021 17:50:46



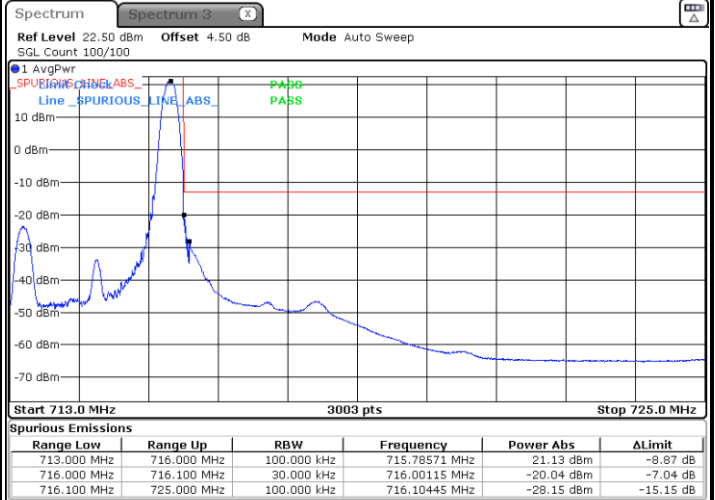
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



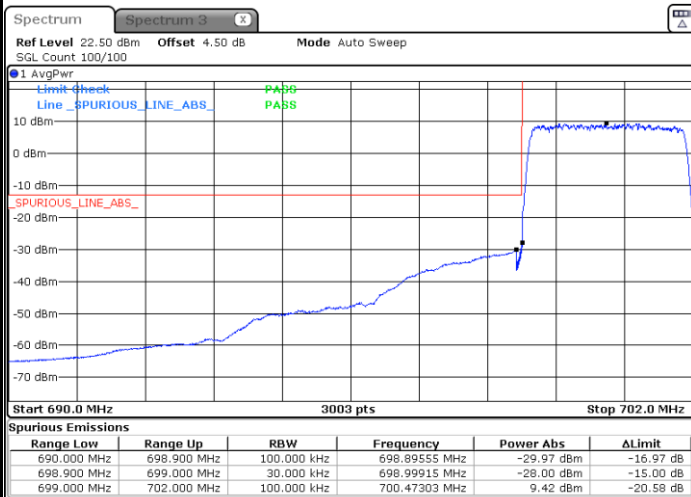
Date: 5 NOV 2021 17:08:02

Highest Band Edge / 1 RB



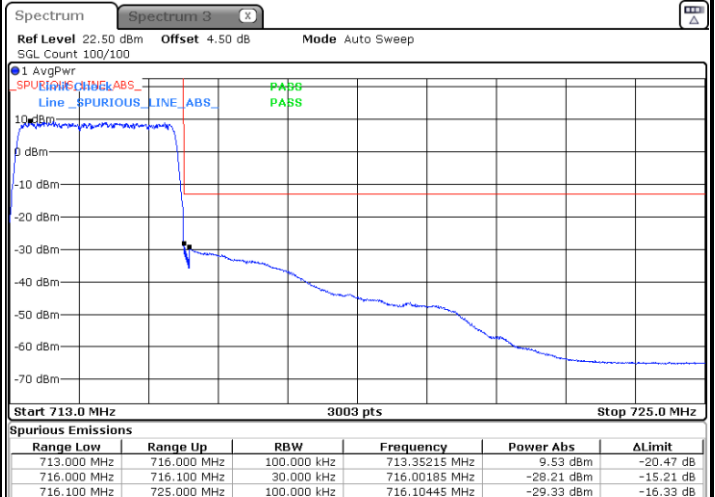
Date: 5 NOV 2021 17:11:54

Lowest Band Edge / Full RB



Date: 5 NOV 2021 17:04:27

Highest Band Edge / Full RB

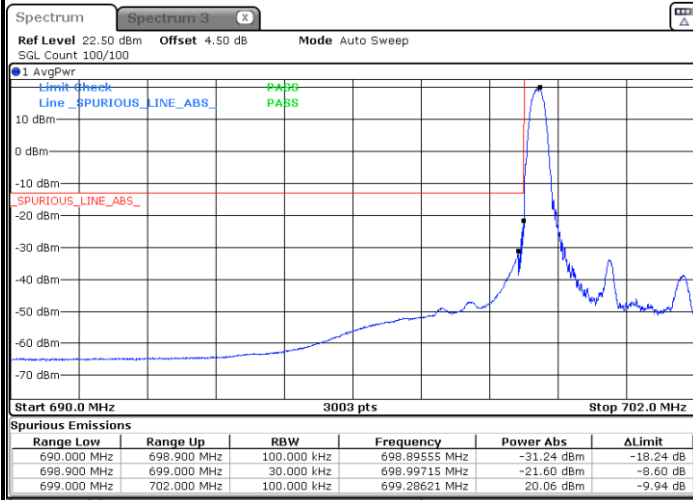


Date: 5 NOV 2021 17:09:00



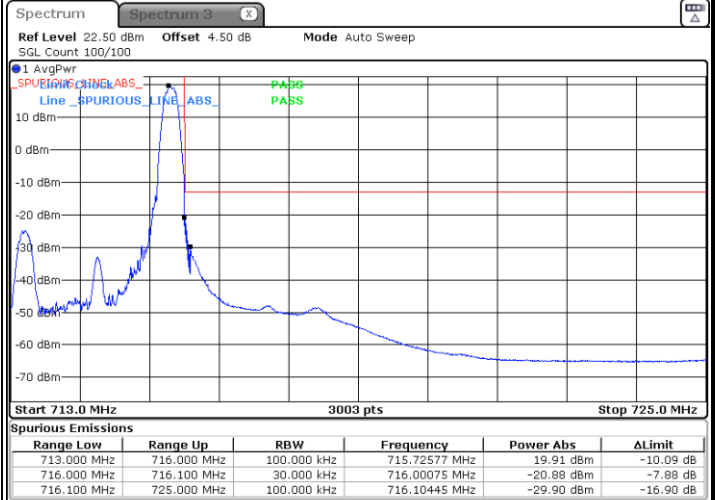
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



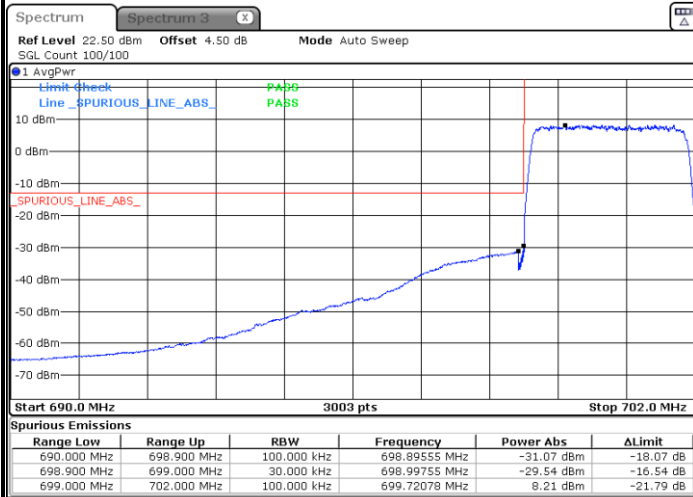
Date: 5 NOV 2021 17:07:04

Highest Band Edge / 1 RB



Date: 5 NOV 2021 17:10:56

Lowest Band Edge / Full RB



Date: 5 NOV 2021 18:08:06

Highest Band Edge / Full RB

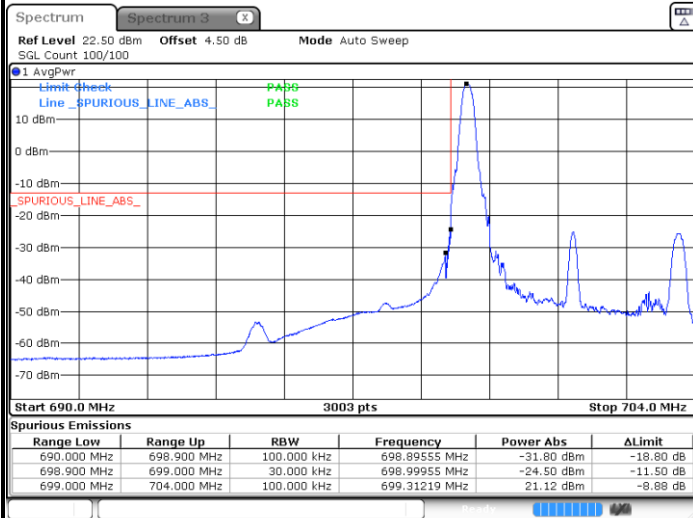


Date: 5 NOV 2021 17:09:58



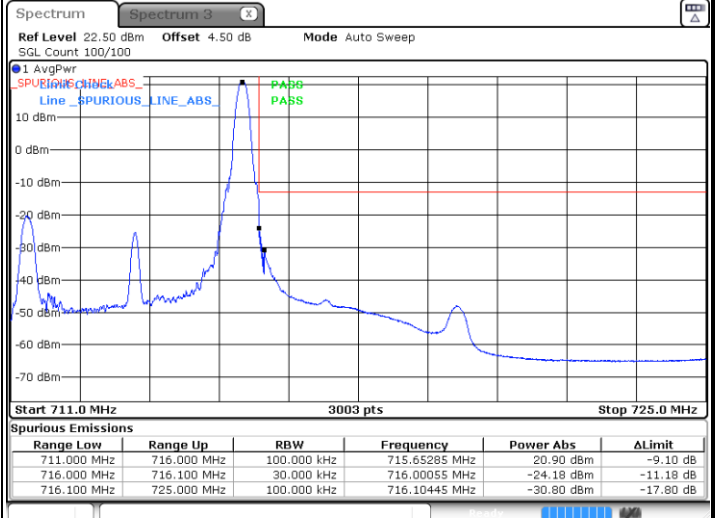
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



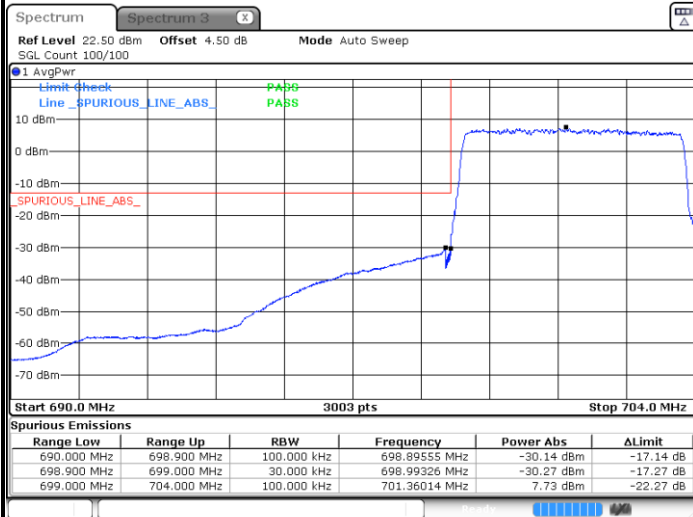
Date: 5 NOV 2021 17:29:39

Highest Band Edge / 1 RB



Date: 5 NOV 2021 17:32:33

Lowest Band Edge / Full RB



Date: 5 NOV 2021 17:26:45

Highest Band Edge / Full RB

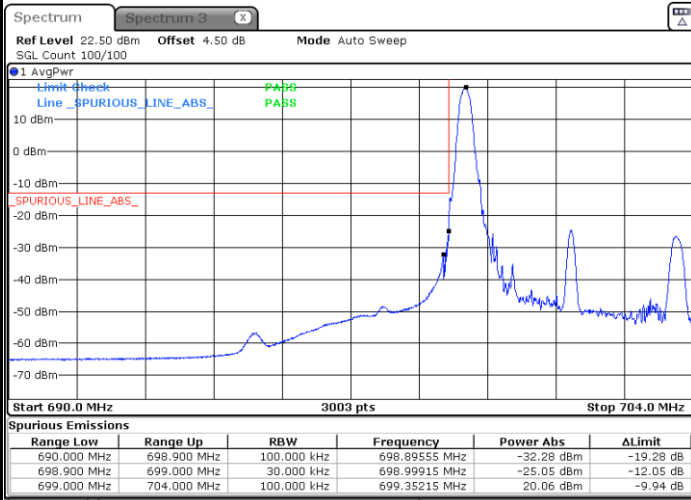


Date: 5 NOV 2021 17:30:37



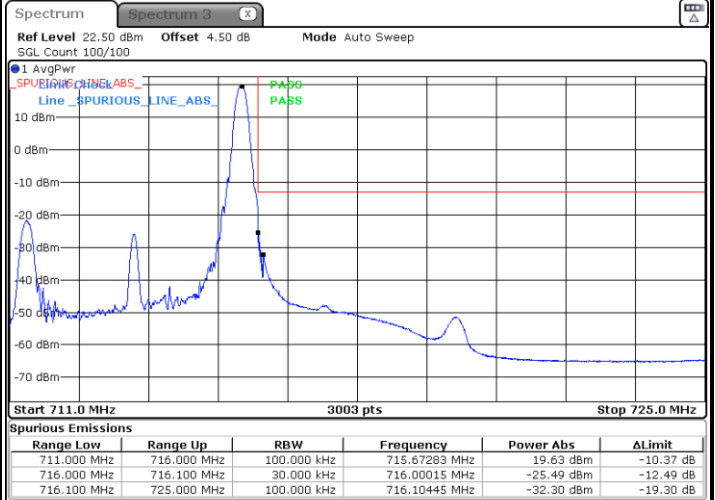
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



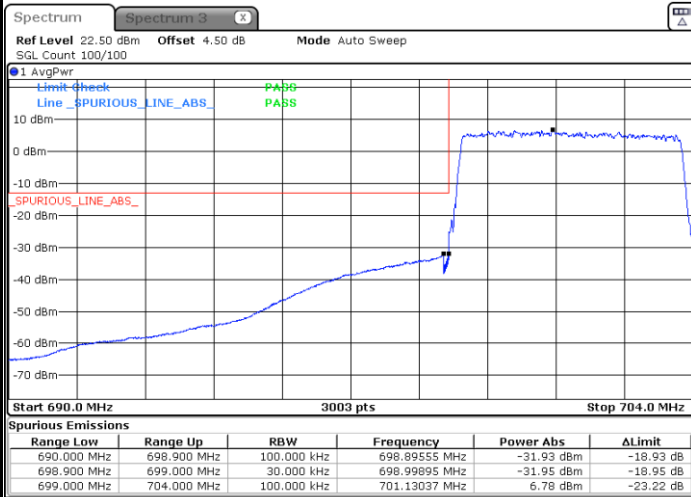
Date: 5 NOV 2021 17:28:41

Highest Band Edge / 1 RB



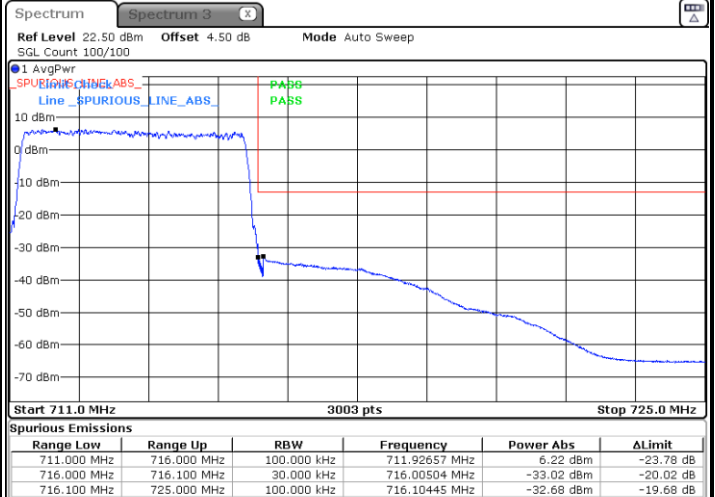
Date: 5 NOV 2021 18:04:32

Lowest Band Edge / Full RB



Date: 5 NOV 2021 17:27:43

Highest Band Edge / Full RB

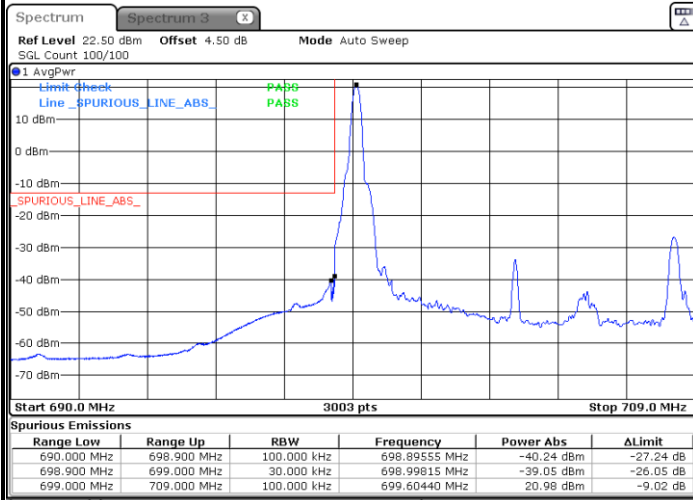


Date: 5 NOV 2021 17:31:35



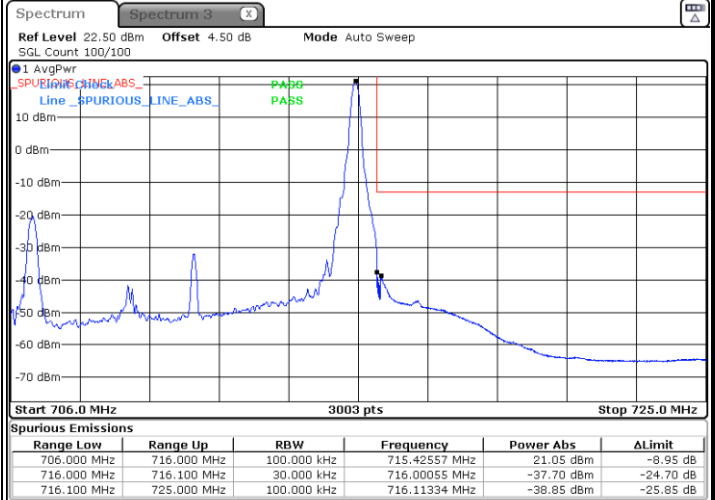
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



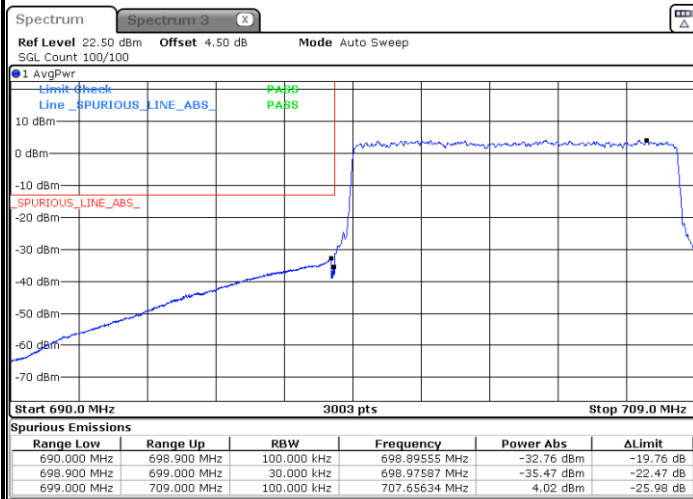
Date: 5 NOV 2021 18:00:25

Highest Band Edge / 1 RB



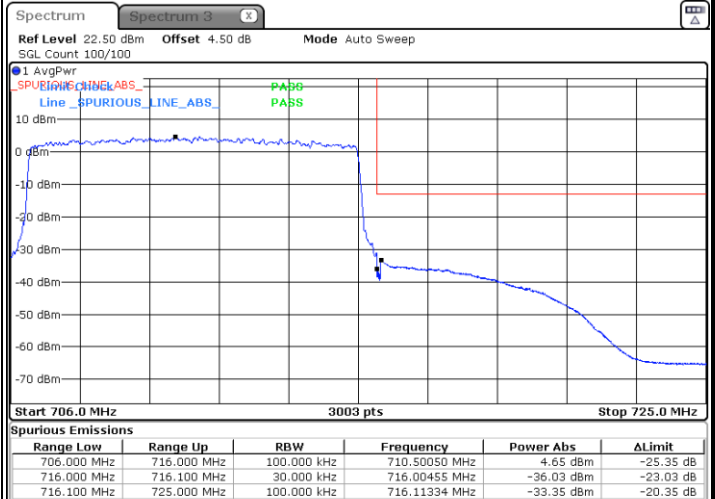
Date: 5 NOV 2021 17:44:09

Lowest Band Edge / Full RB



Date: 5 NOV 2021 17:35:19

Highest Band Edge / Full RB

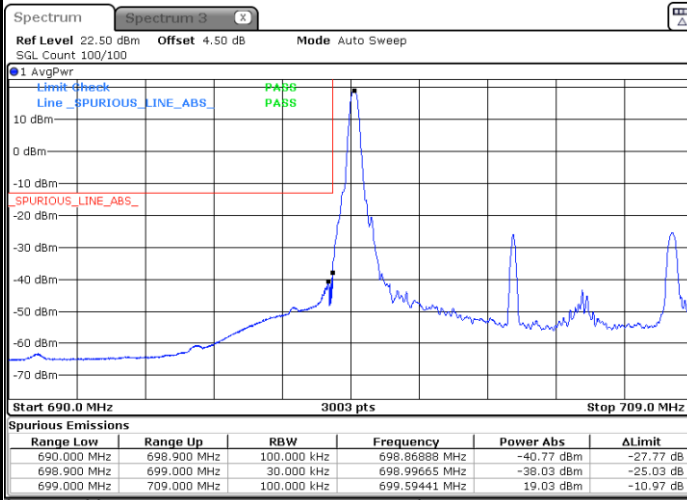


Date: 5 NOV 2021 17:41:15



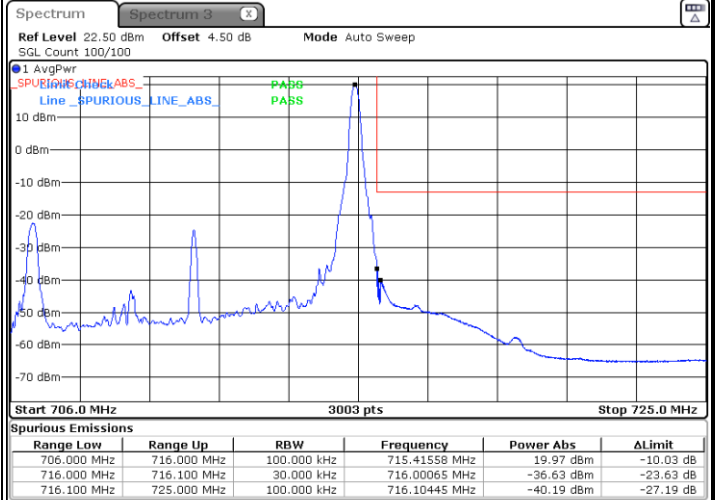
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



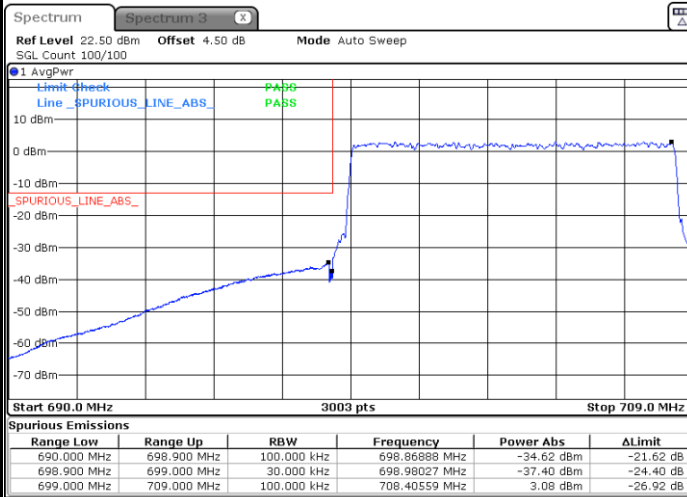
Date: 5.NOV.2021 17:37:15

Highest Band Edge / 1 RB



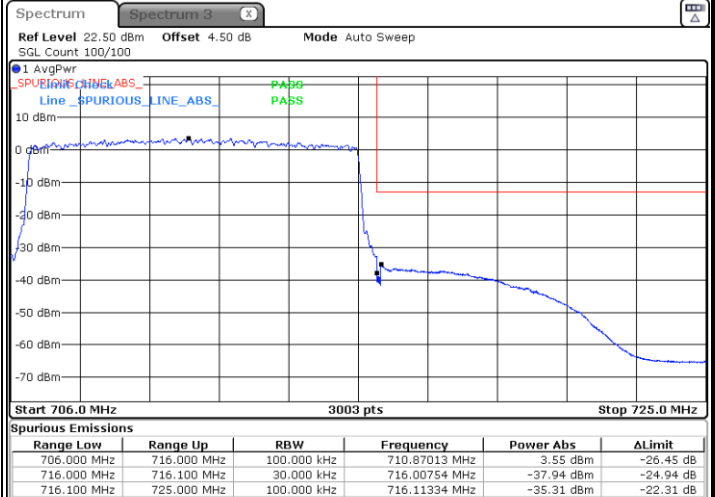
Date: 5.NOV.2021 17:43:11

Lowest Band Edge / Full RB



Date: 5.NOV.2021 17:36:17

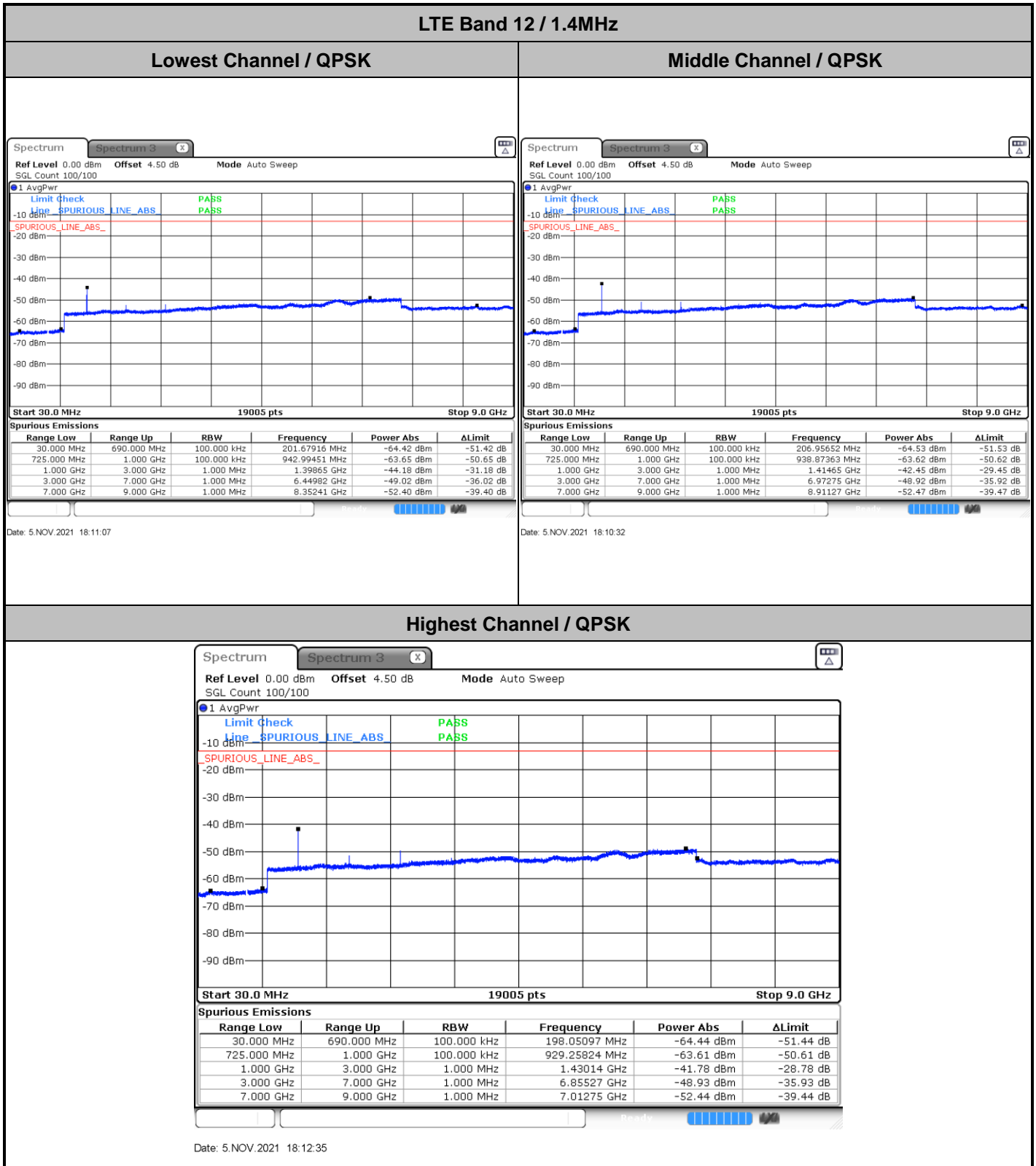
Highest Band Edge / Full RB



Date: 5.NOV.2021 17:42:13



Conducted Spurious Emission

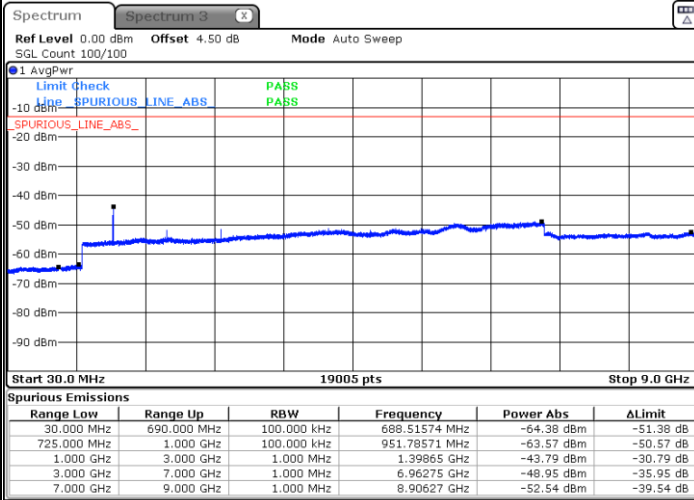




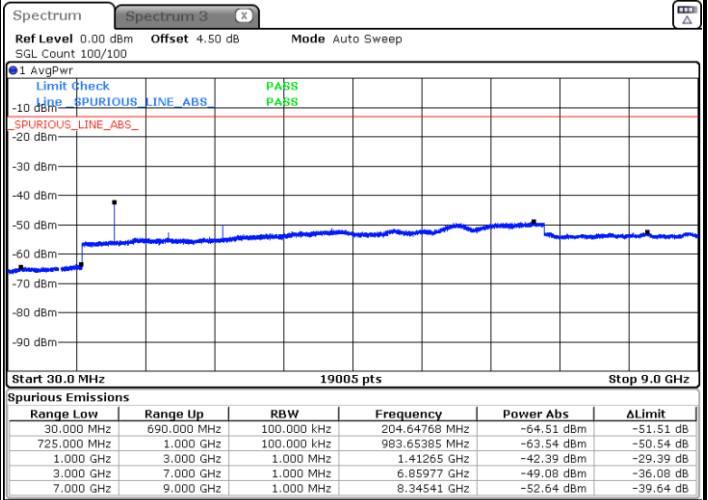
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

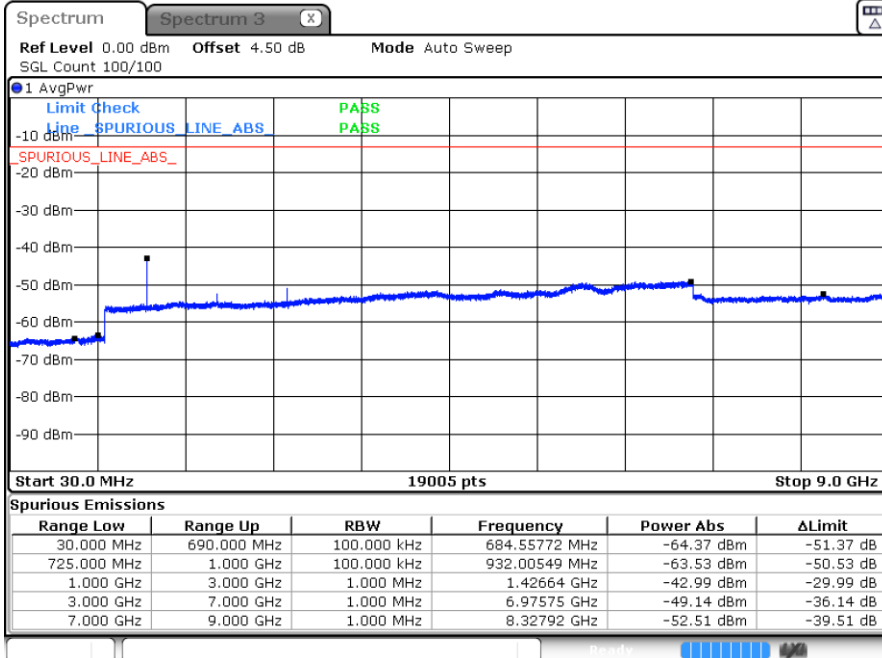


Date: 5.NOV.2021 18:07:28



Date: 5.NOV.2021 18:06:53

Highest Channel / QPSK



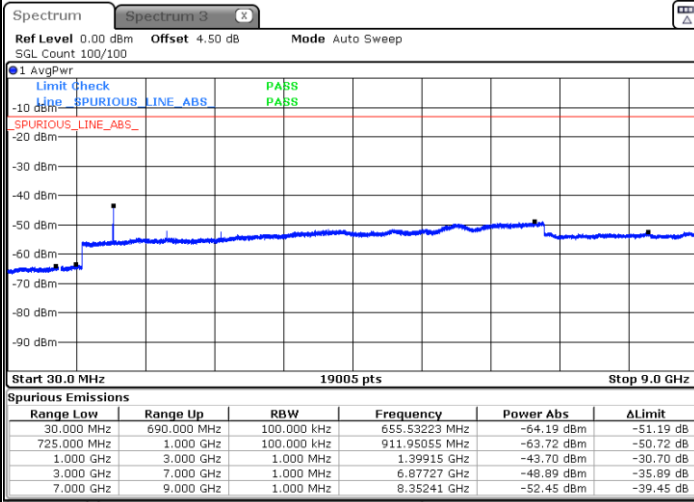
Date: 5.NOV.2021 18:08:48



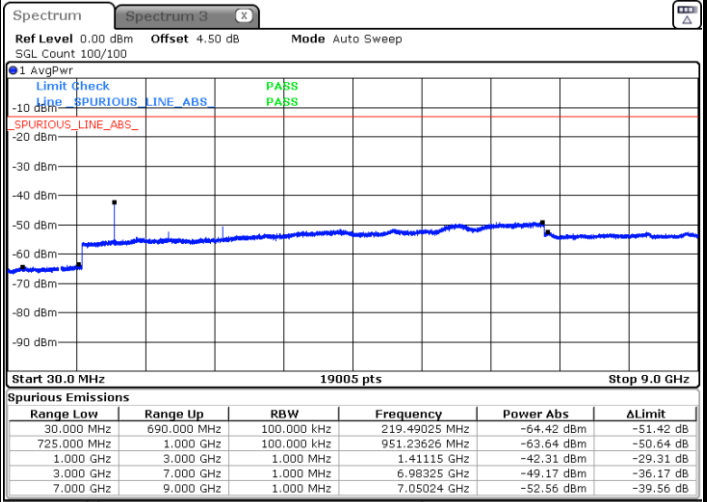
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

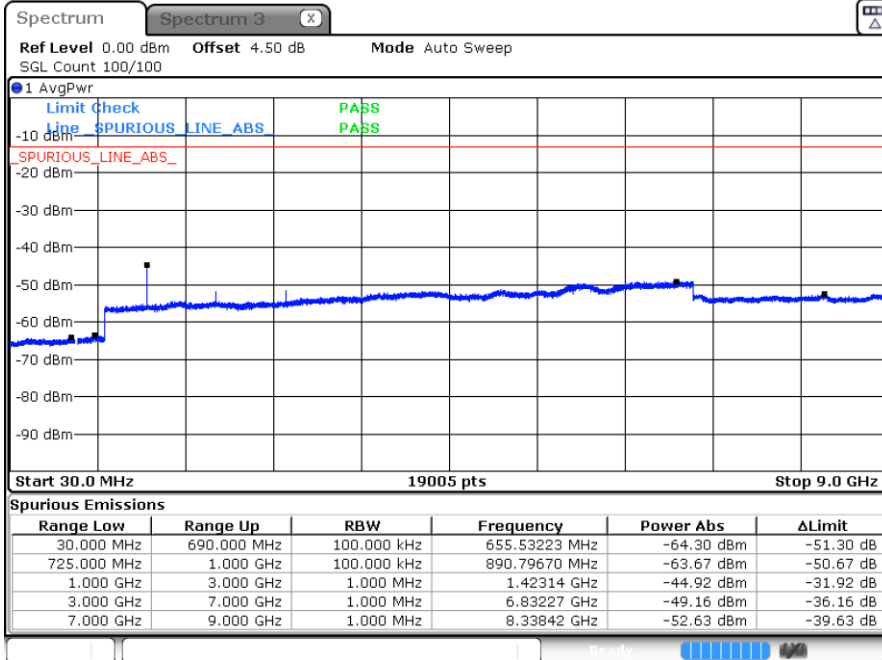


Date: 5.NOV.2021 18:02:30



Date: 5.NOV.2021 18:01:55

Highest Channel / QPSK



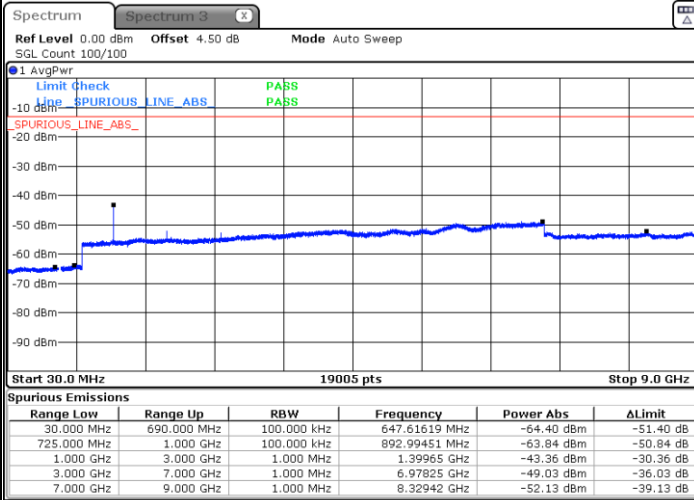
Date: 5.NOV.2021 18:05:47



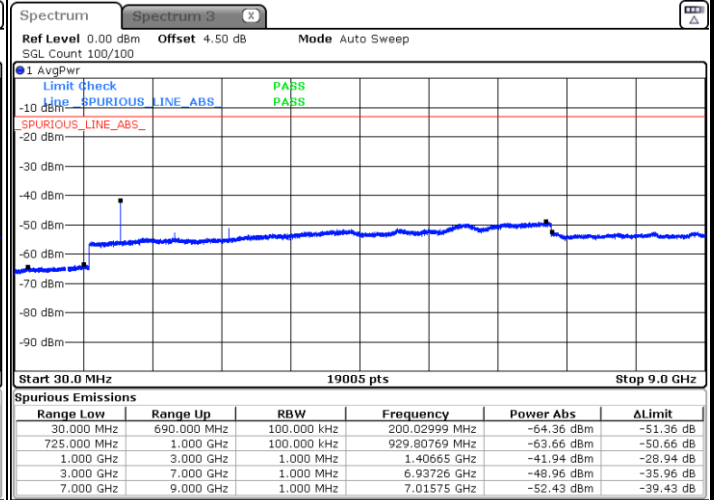
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

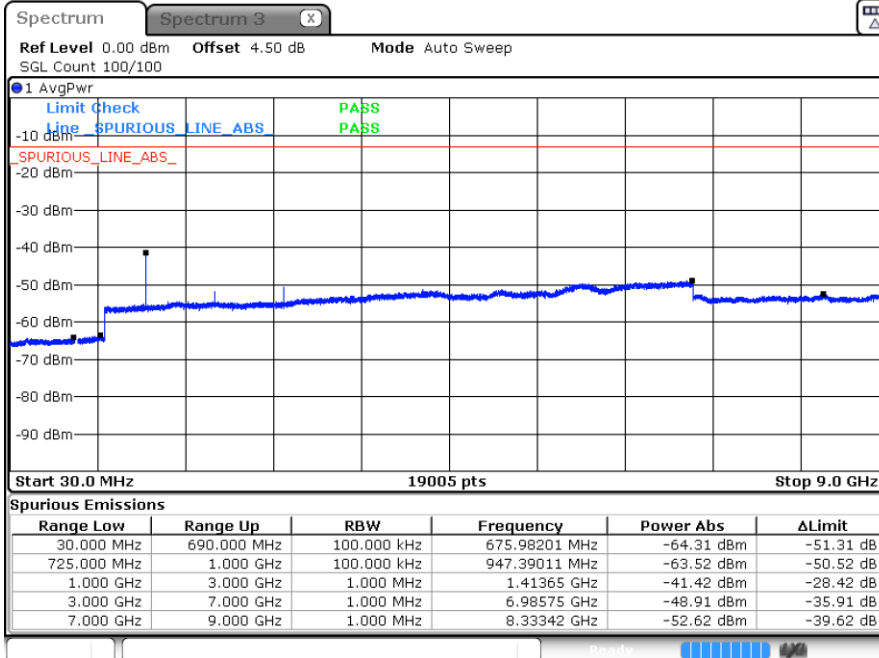


Date: 5.NOV.2021 17:01:16



Date: 5.NOV.2021 16:55:35

Highest Channel / QPSK



Date: 5.NOV.2021 17:59:22



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	0.0006	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0021	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0007	
20	End Point	0.0006	

Note:

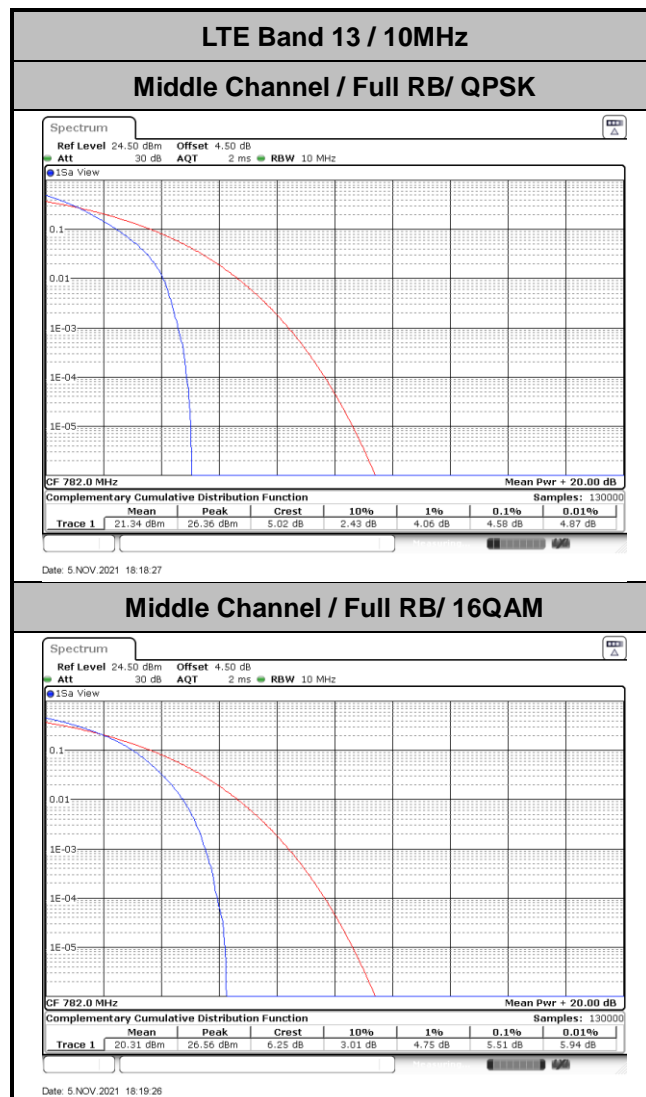
1. Normal Voltage =13 V. ; End Point (BEP) =12 V. ; Maximum Voltage =20 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

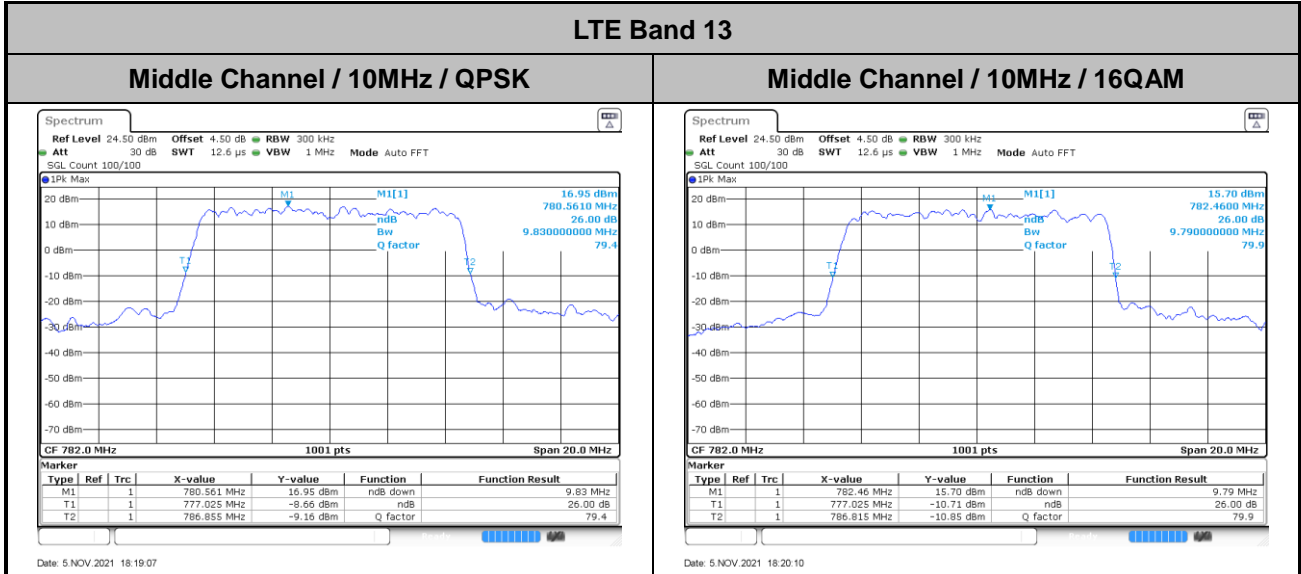
Mode	LTE Band 13 / 10MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	4.58	5.51	PASS





26dB Bandwidth

Mode	LTE Band 13 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.83	9.79





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	8.99

