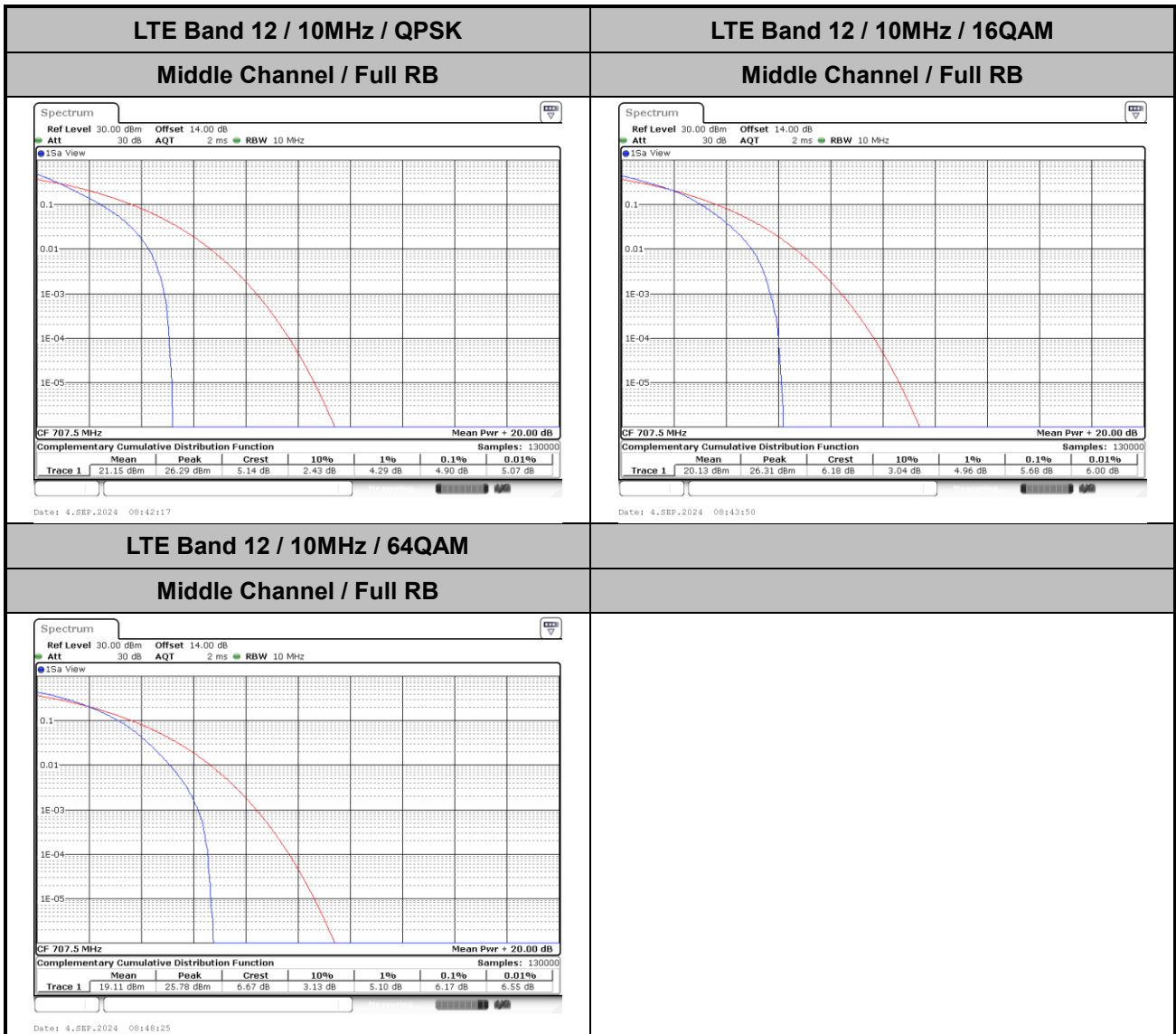




LTE Band 12

Peak-to-Average Ratio

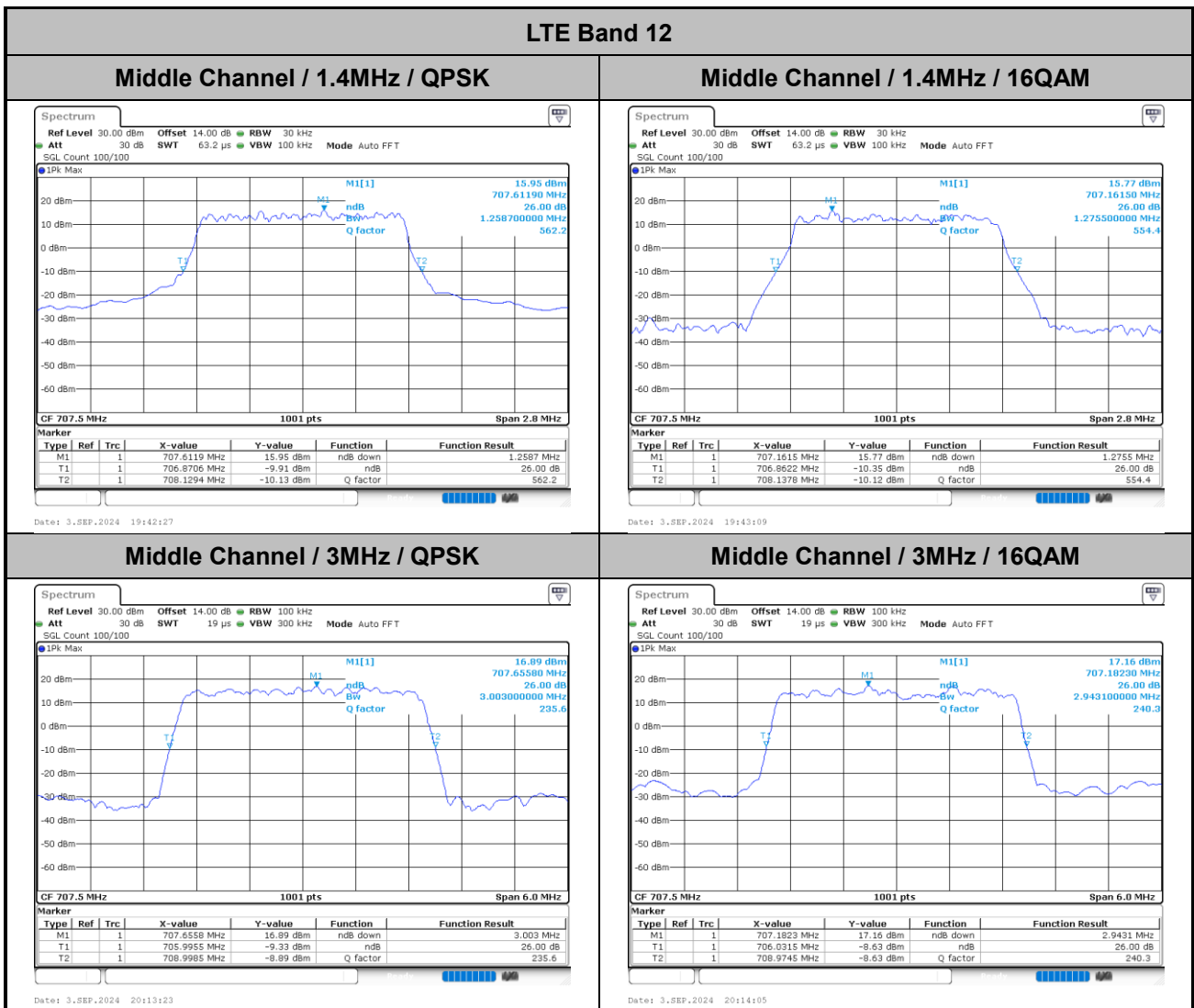
Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.90	5.68	6.17	PASS





26dB Bandwidth

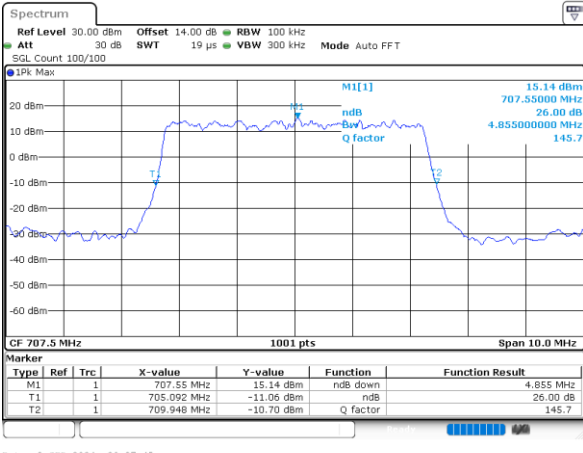
Mode	LTE Band 12 : 26dB BW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.26	1.28	3.00	2.94	4.86	4.85	9.65	9.81





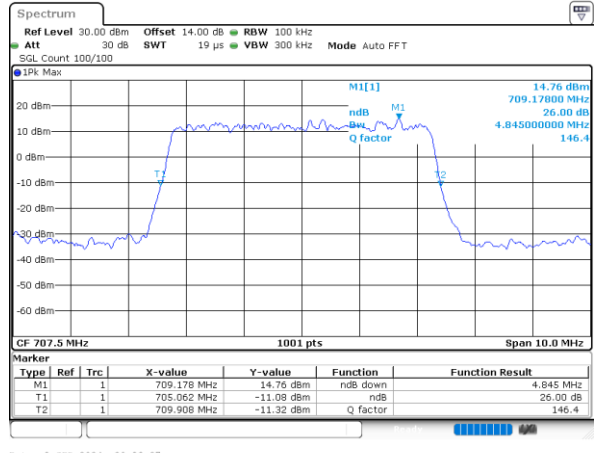
LTE Band 12

Middle Channel / 5MHz / QPSK



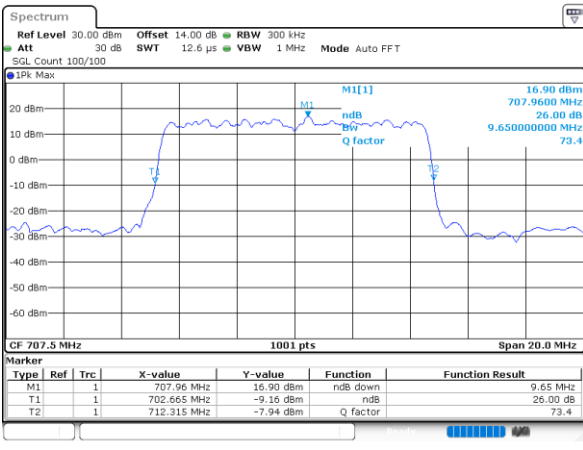
Date: 3,SEP,2024 20:37:45

Middle Channel / 5MHz / 16QAM



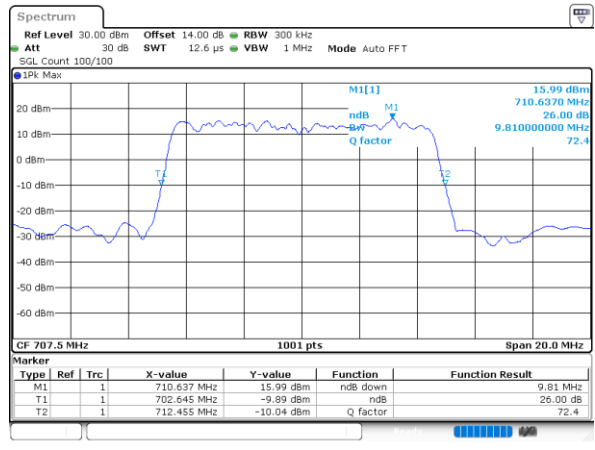
Date: 3,SEP,2024 20:38:27

Middle Channel / 10MHz / QPSK



Date: 3,SEP,2024 21:00:28

Middle Channel / 10MHz / 16QAM

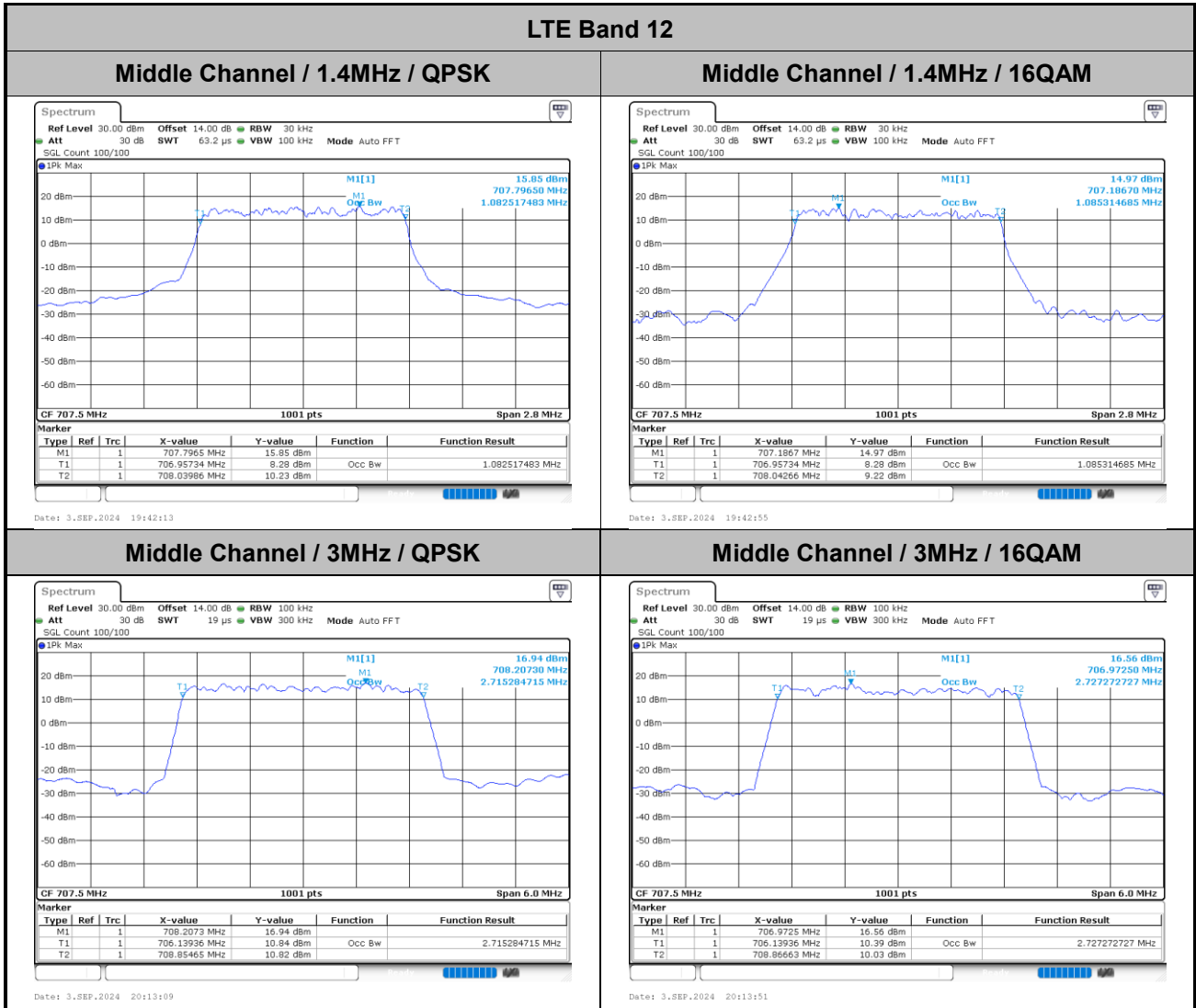


Date: 3,SEP,2024 21:01:11



Occupied Bandwidth

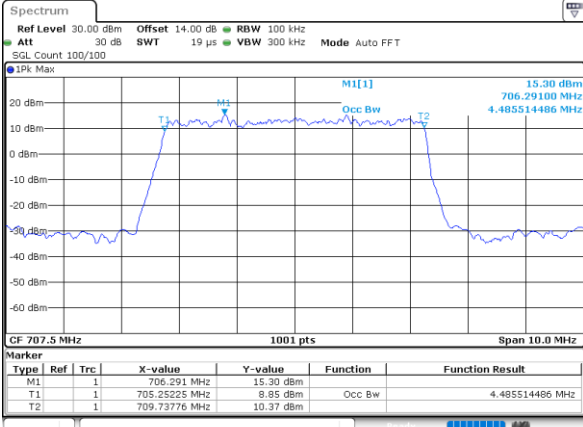
Mode	LTE Band 12 : 99%OBW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.08	1.09	2.72	2.73	4.49	4.51	8.99	9.01





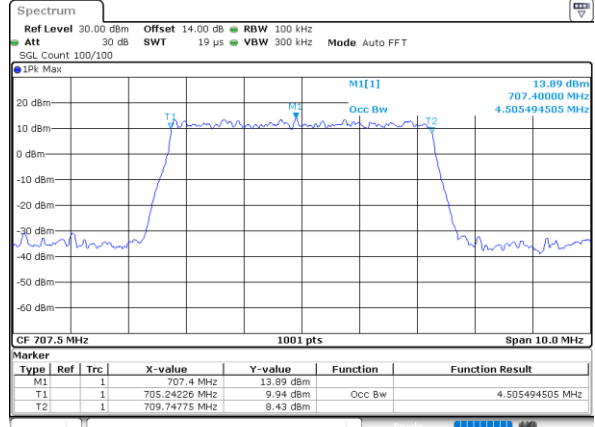
LTE Band 12

Middle Channel / 5MHz / QPSK



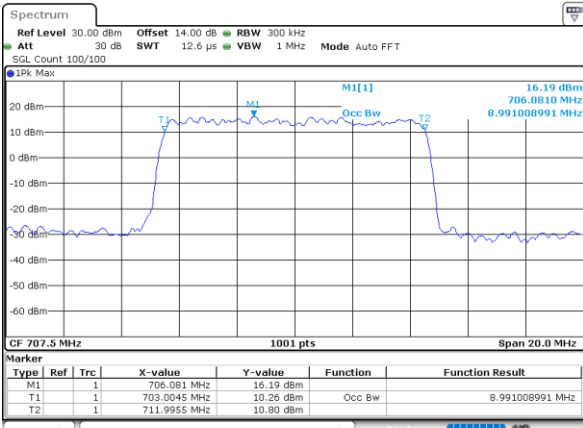
Date: 3,SEP,2024 20:13:11

Middle Channel / 5MHz / 16QAM



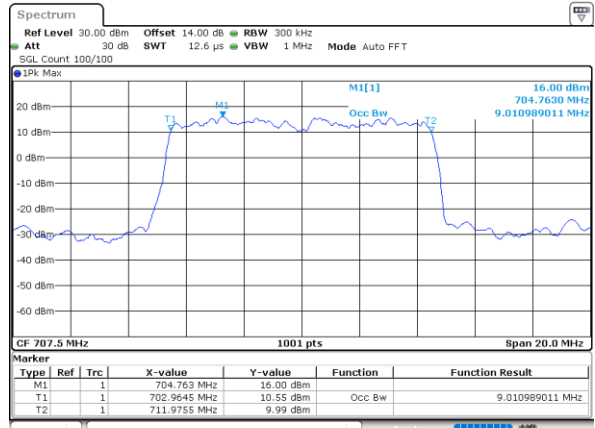
Date: 3,SEP,2024 20:38:14

Middle Channel / 10MHz / QPSK



Date: 3,SEP,2024 21:00:14

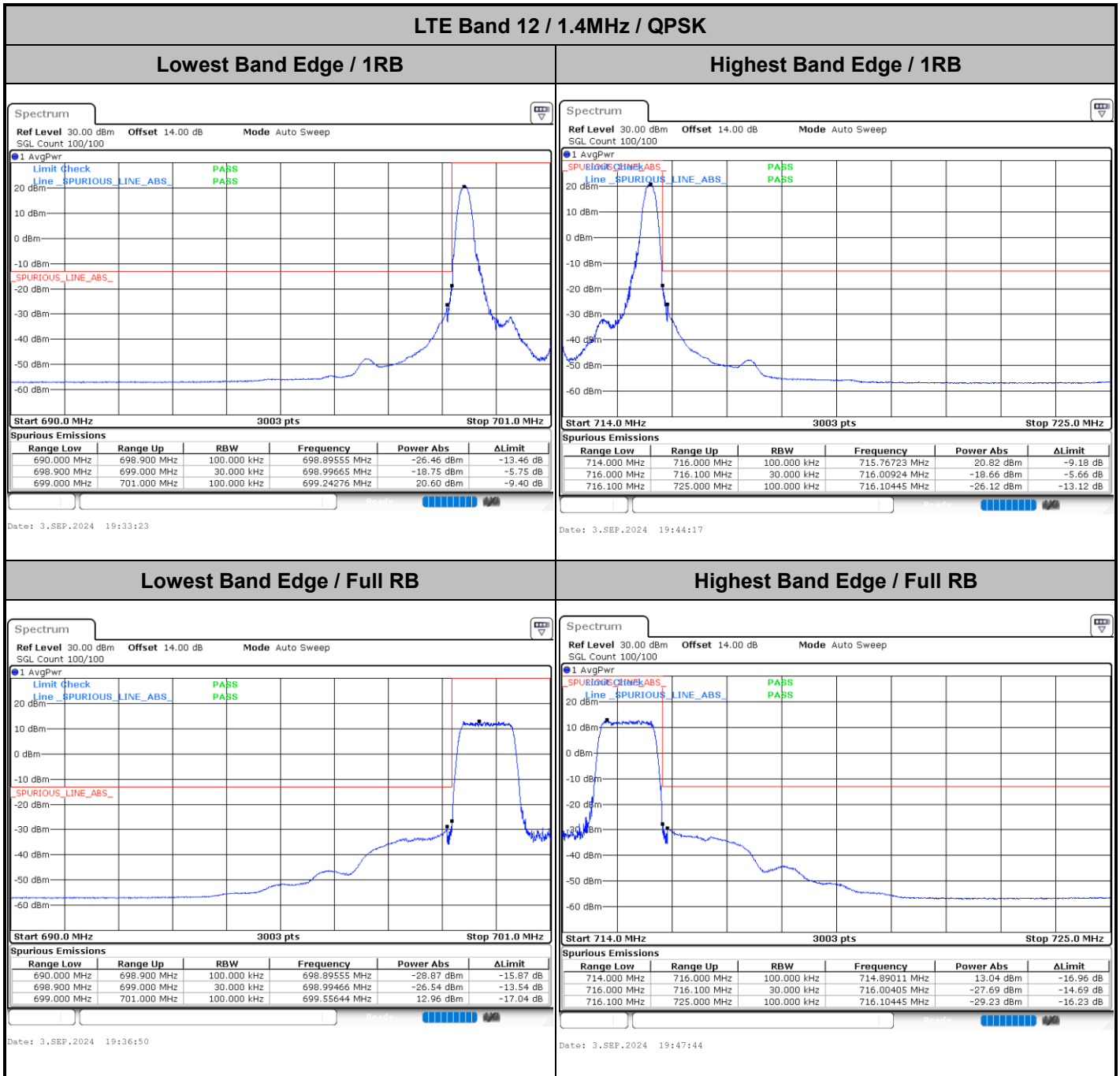
Middle Channel / 10MHz / 16QAM



Date: 3,SEP,2024 21:00:57



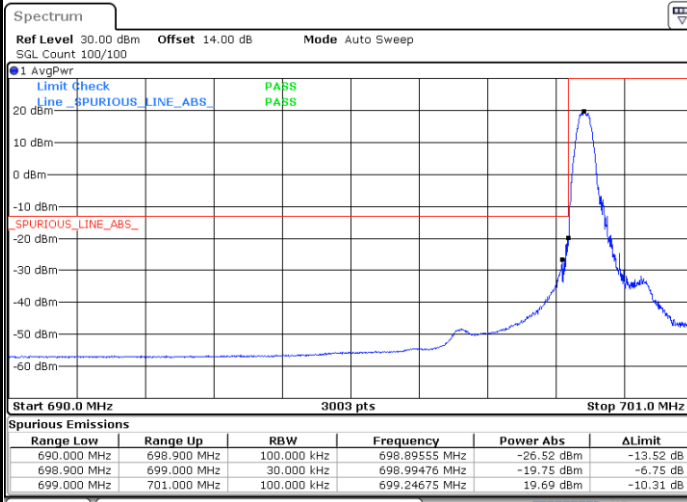
Conducted Band Edge





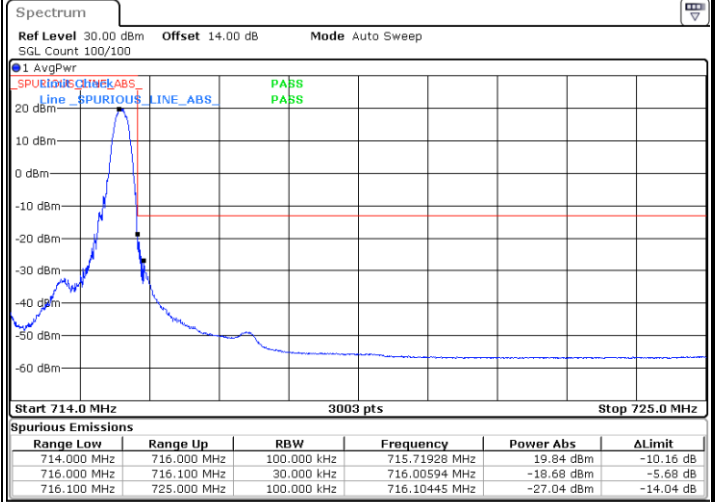
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



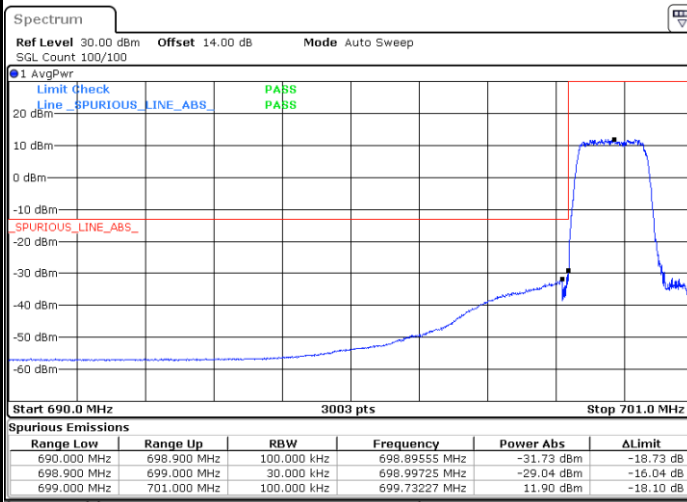
Date: 3.SEP.2024 19:34:32

Highest Band Edge / 1 RB



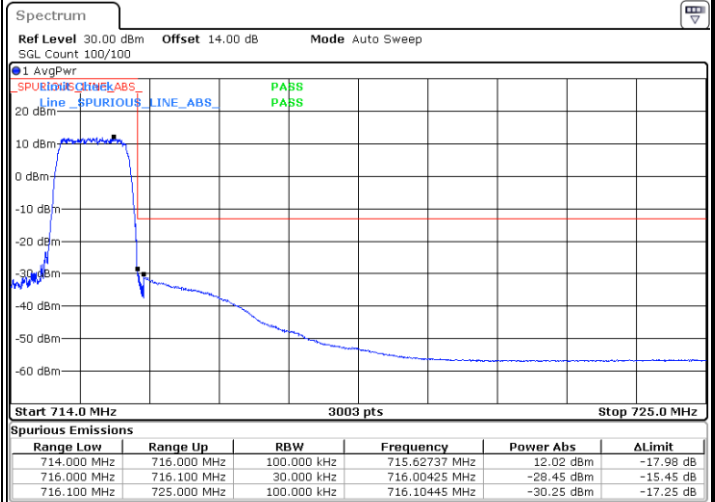
Date: 3.SEP.2024 19:45:26

Lowest Band Edge / Full RB



Date: 3.SEP.2024 19:37:59

Highest Band Edge / Full RB

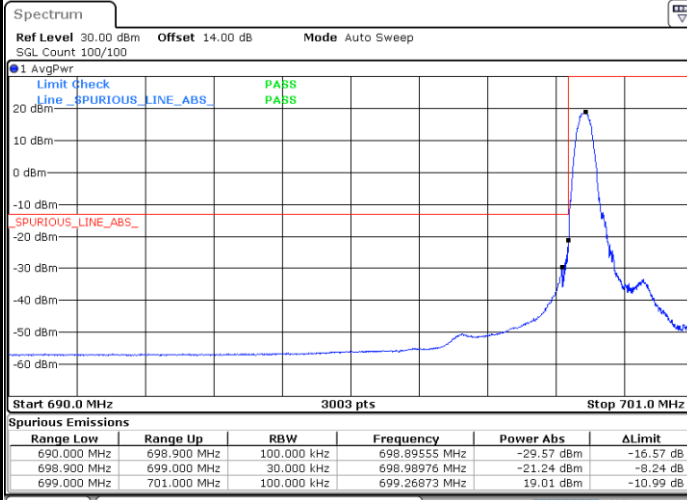


Date: 3.SEP.2024 19:48:52



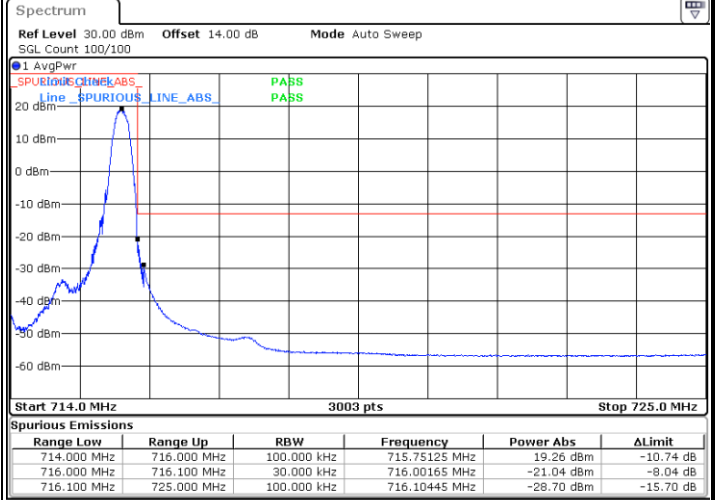
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



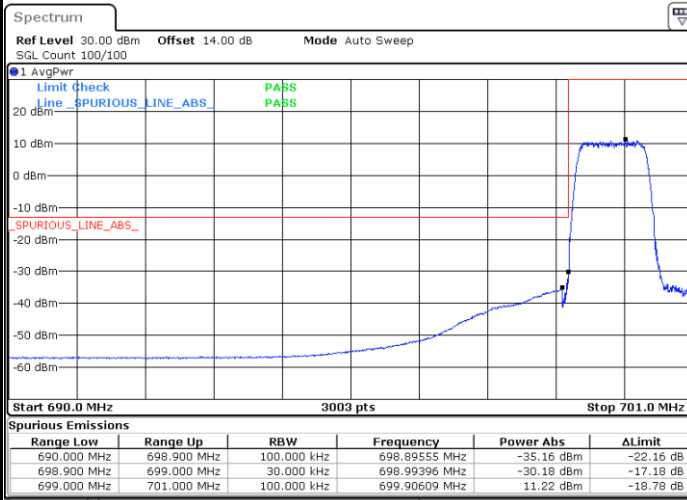
Date: 3.SEP.2024 19:35:41

Highest Band Edge / 1 RB



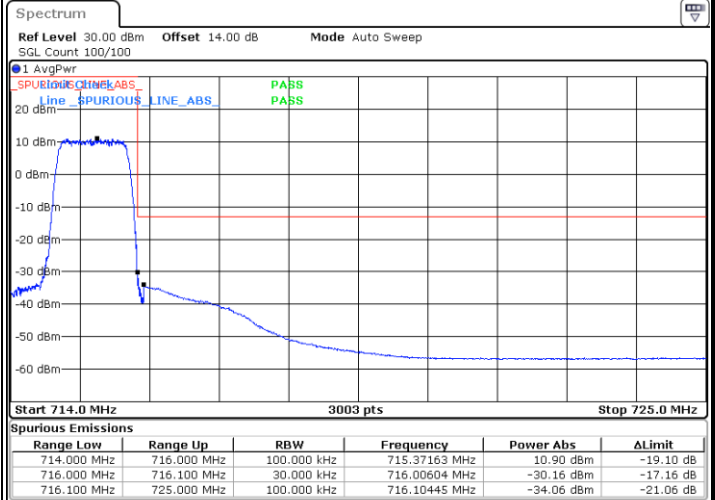
Date: 3.SEP.2024 19:46:35

Lowest Band Edge / Full RB



Date: 3.SEP.2024 19:39:08

Highest Band Edge / Full RB

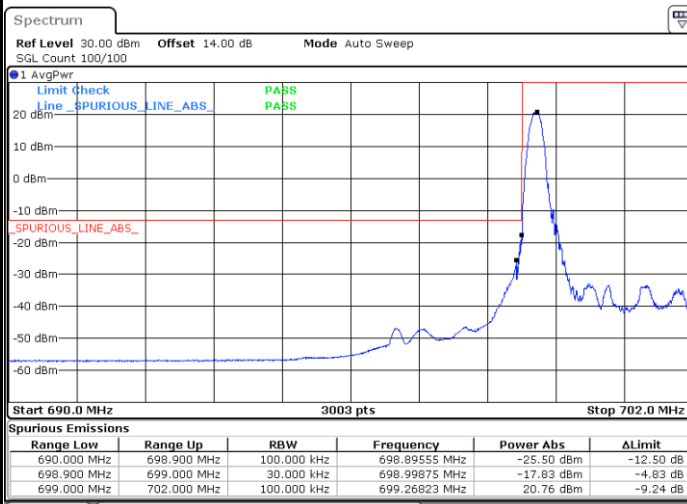


Date: 3.SEP.2024 19:50:01



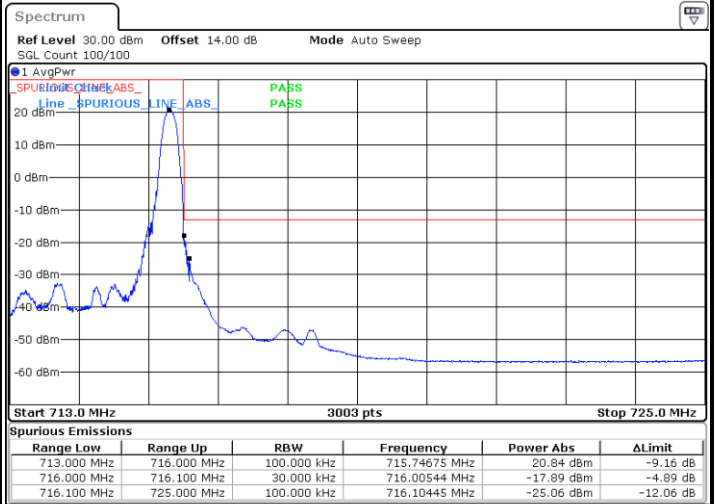
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



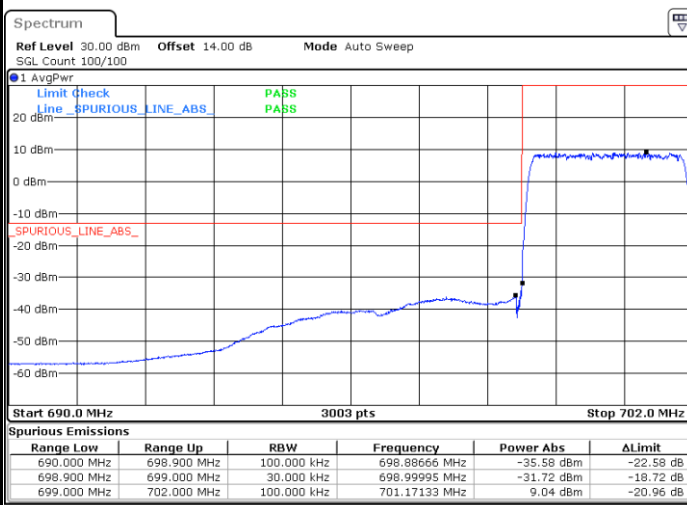
Date: 3.SEP.2024 20:04:20

Highest Band Edge / 1RB



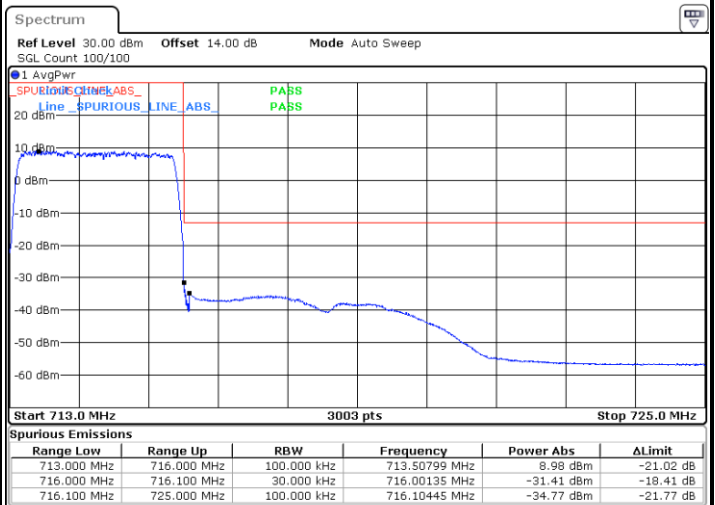
Date: 3.SEP.2024 20:15:13

Lowest Band Edge / Full RB



Date: 3.SEP.2024 20:07:46

Highest Band Edge / Full RB

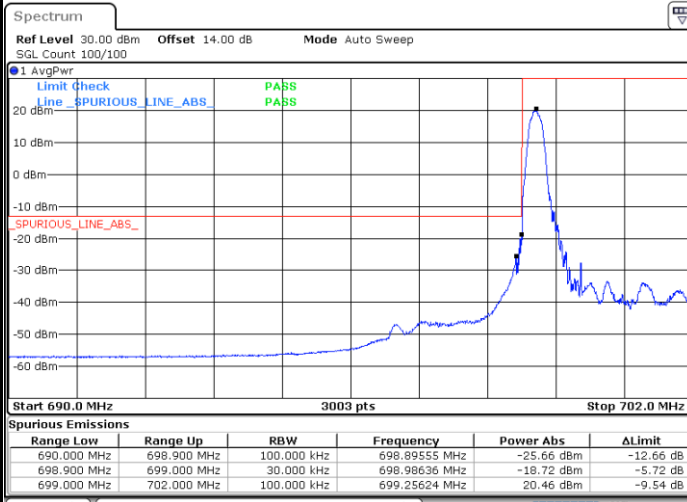


Date: 3.SEP.2024 20:18:40



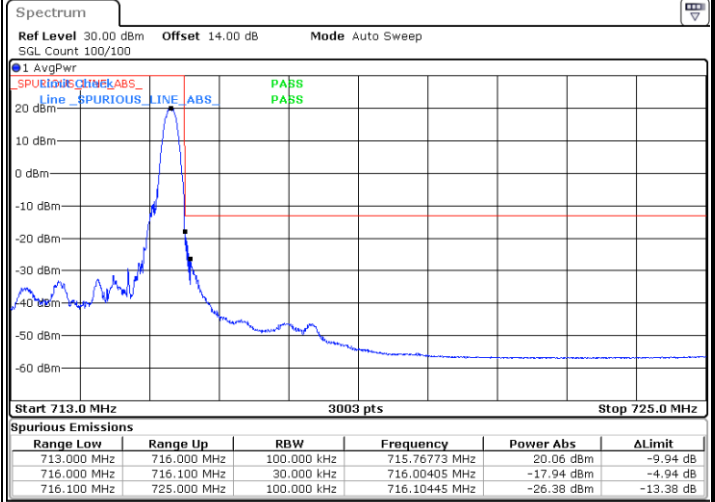
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



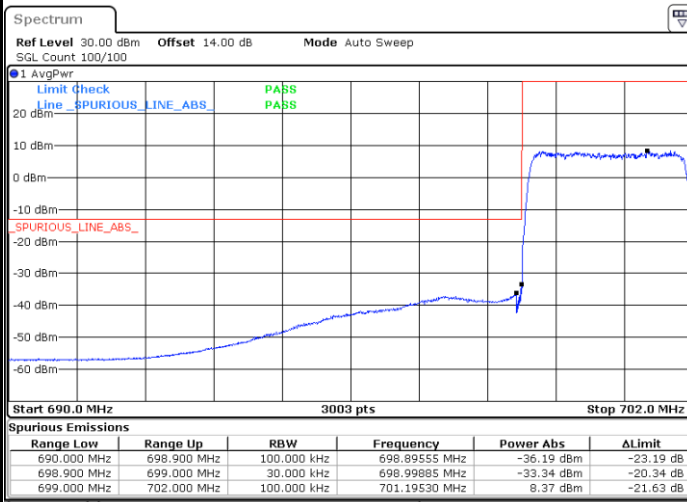
Date: 3.SEP.2024 20:05:28

Highest Band Edge / 1 RB



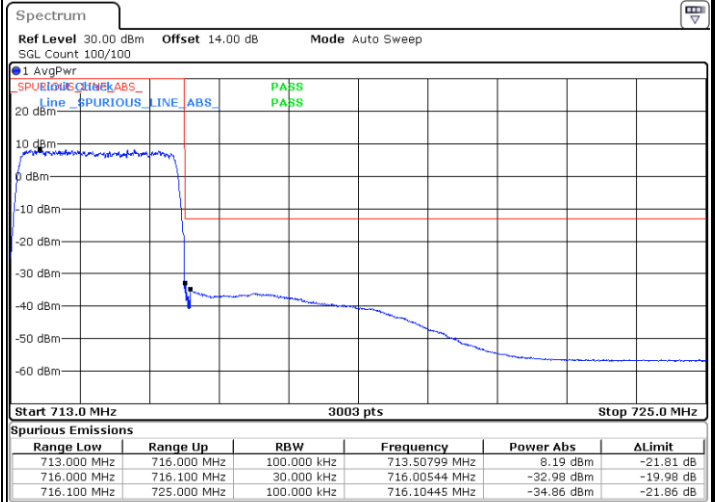
Date: 3.SEP.2024 20:16:22

Lowest Band Edge / Full RB



Date: 3.SEP.2024 20:08:55

Highest Band Edge / Full RB

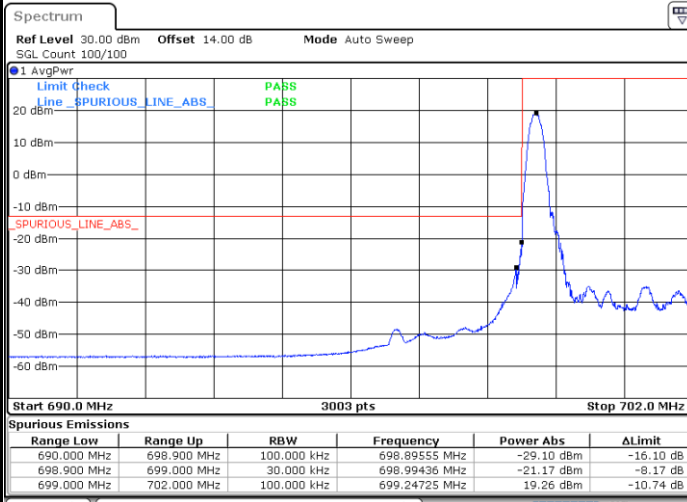


Date: 3.SEP.2024 20:19:49



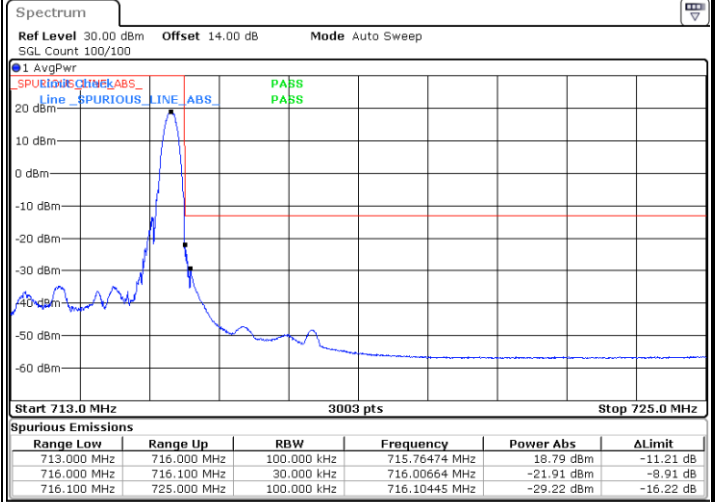
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



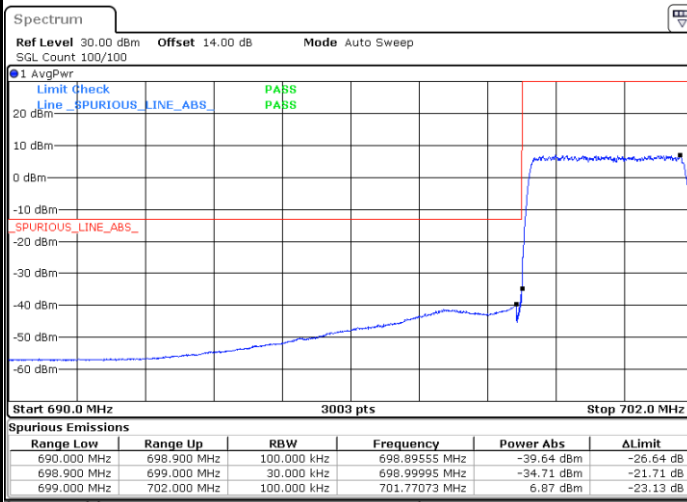
Date: 3.SEP.2024 20:06:37

Highest Band Edge / 1 RB



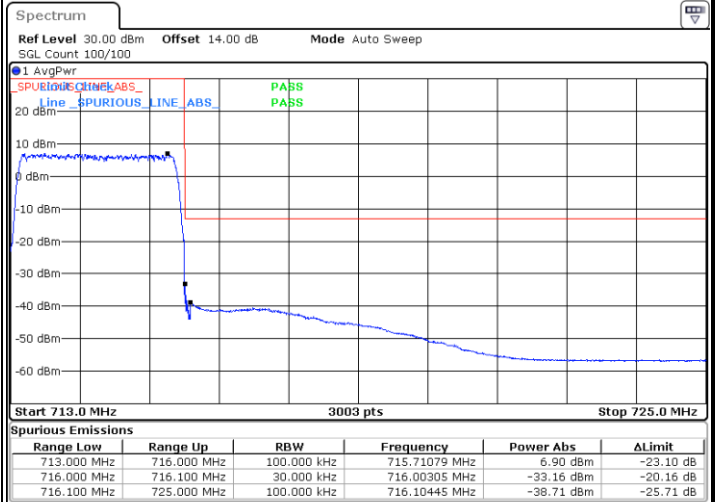
Date: 3.SEP.2024 20:17:31

Lowest Band Edge / Full RB



Date: 3.SEP.2024 20:10:04

Highest Band Edge / Full RB

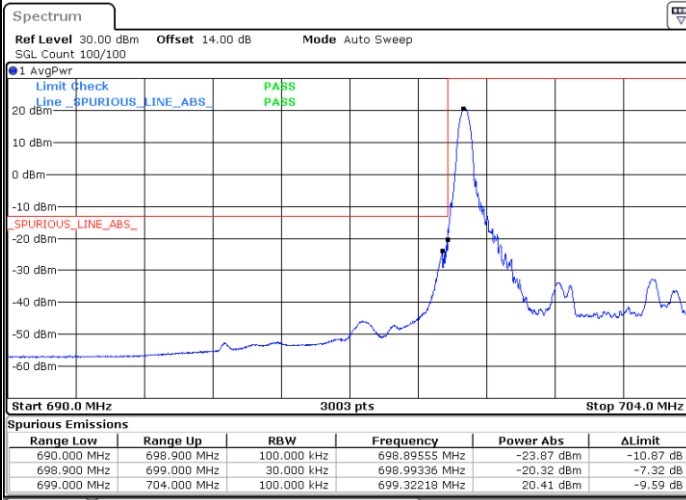


Date: 3.SEP.2024 20:20:58



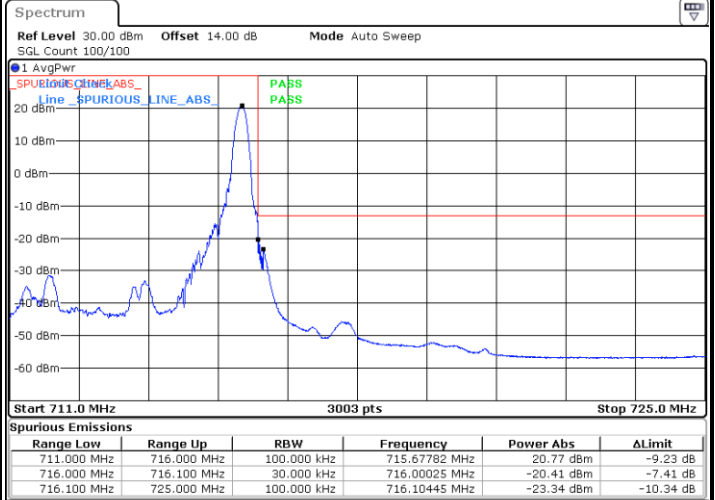
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1RB



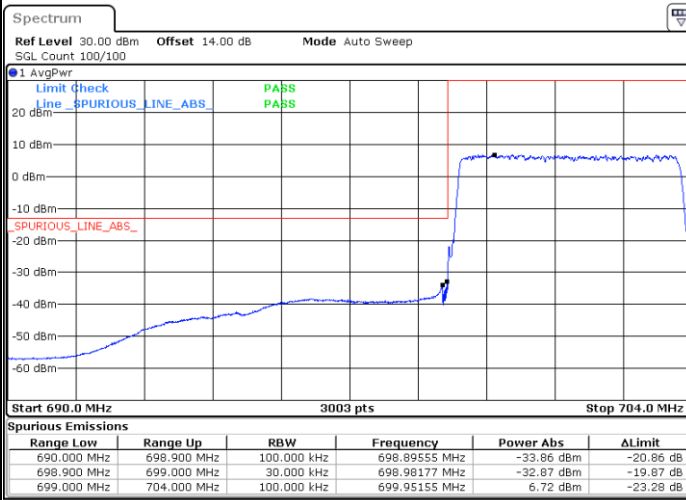
Date: 3.SEP.2024 20:28:41

Highest Band Edge / 1RB



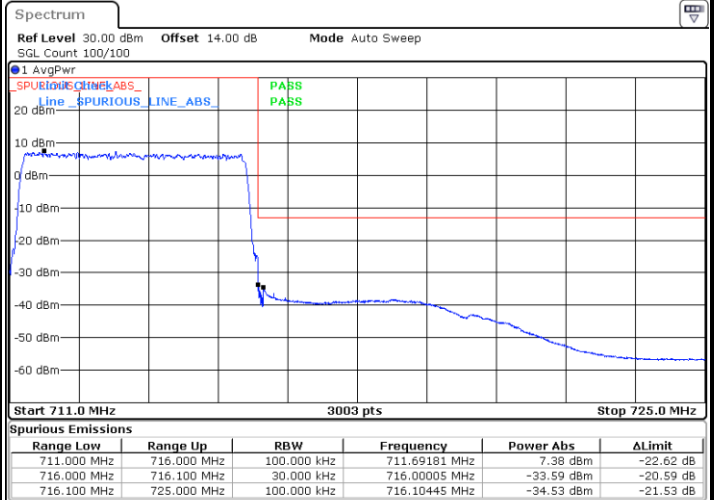
Date: 3.SEP.2024 20:39:35

Lowest Band Edge / Full RB



Date: 3.SEP.2024 20:32:08

Highest Band Edge / Full RB

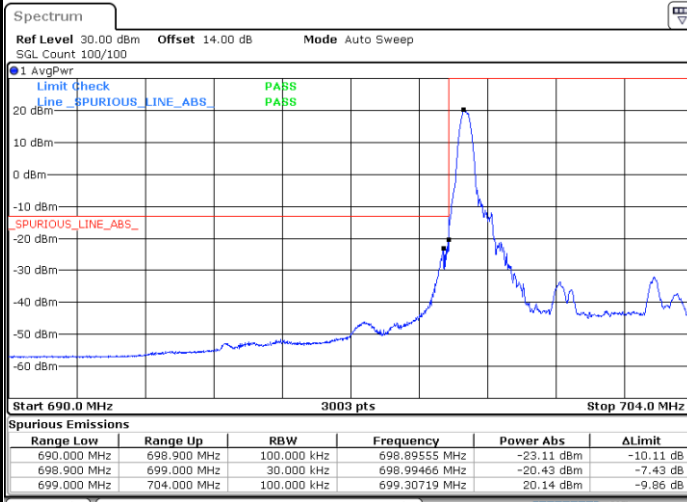


Date: 3.SEP.2024 20:43:03



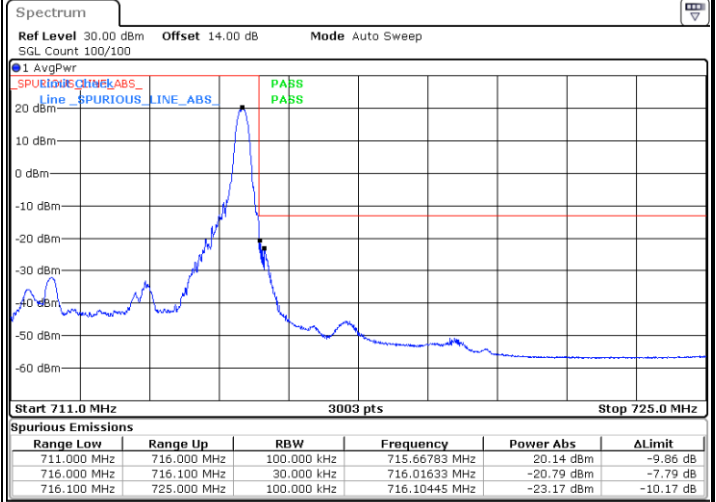
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



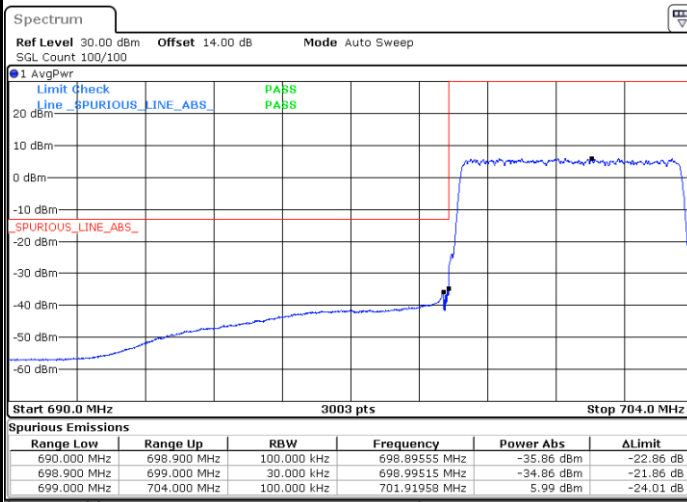
Date: 3.SEP.2024 20:29:50

Highest Band Edge / 1 RB



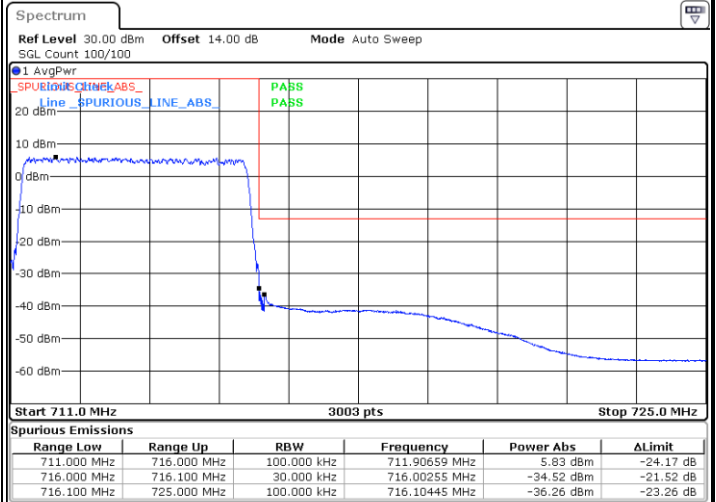
Date: 3.SEP.2024 20:40:44

Lowest Band Edge / Full RB



Date: 3.SEP.2024 20:33:17

Highest Band Edge / Full RB

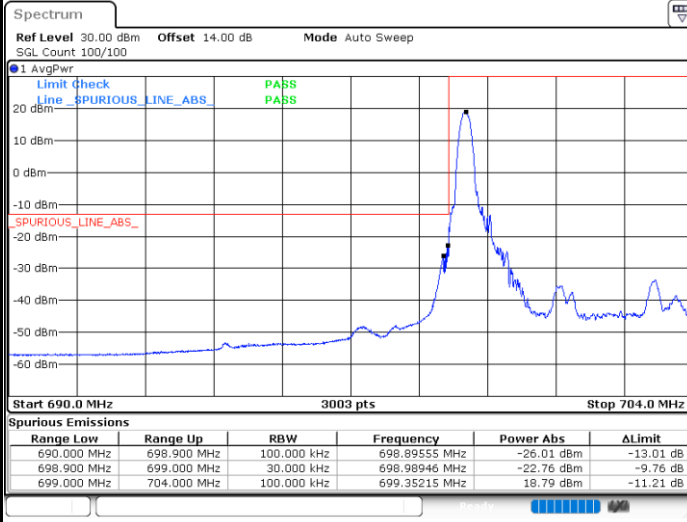


Date: 3.SEP.2024 20:44:11



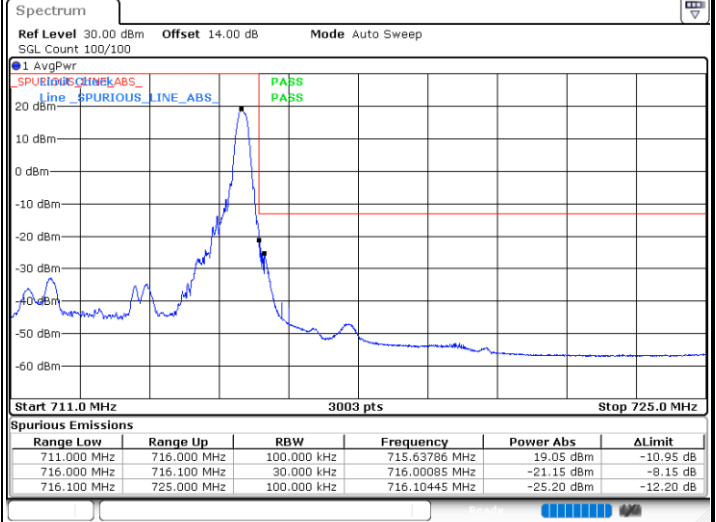
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



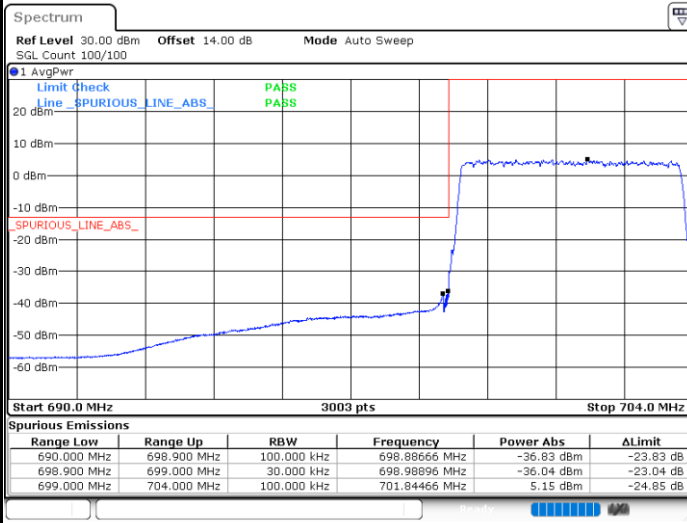
Date: 3.SEP.2024 20:30:59

Highest Band Edge / 1 RB



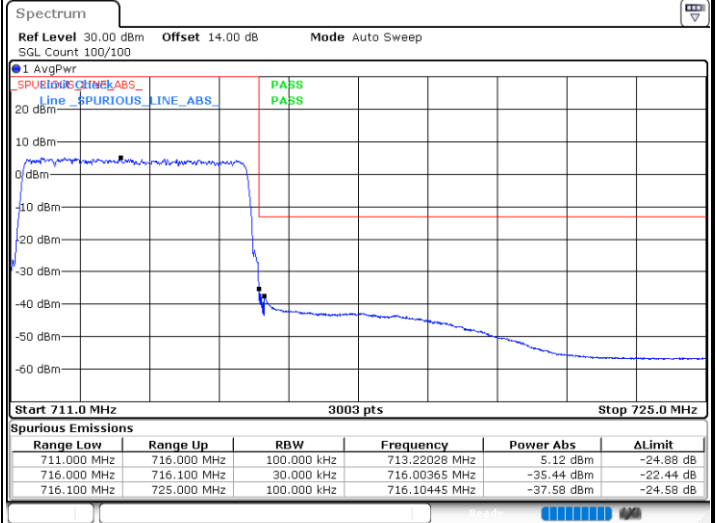
Date: 3.SEP.2024 20:41:53

Lowest Band Edge / Full RB



Date: 3.SEP.2024 20:34:26

Highest Band Edge / Full RB

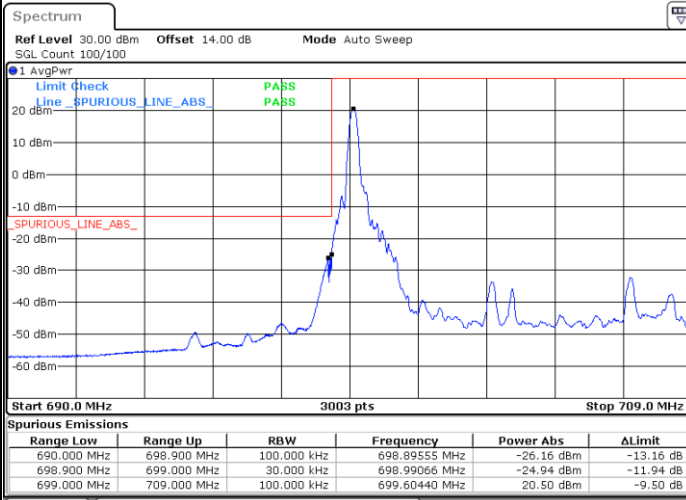


Date: 3.SEP.2024 20:45:20



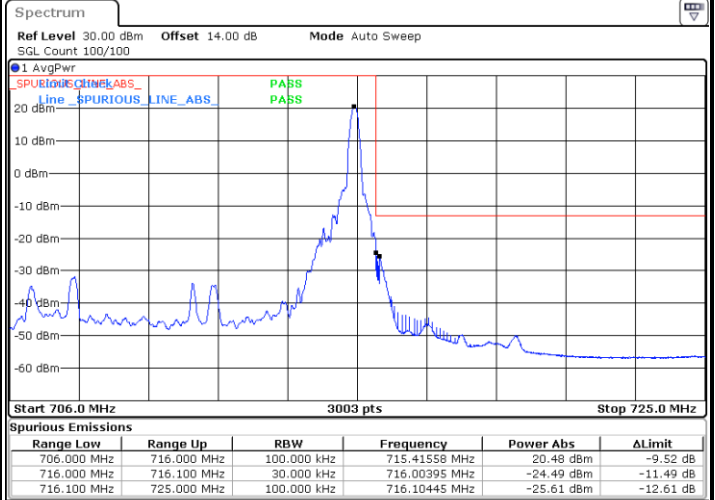
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1RB



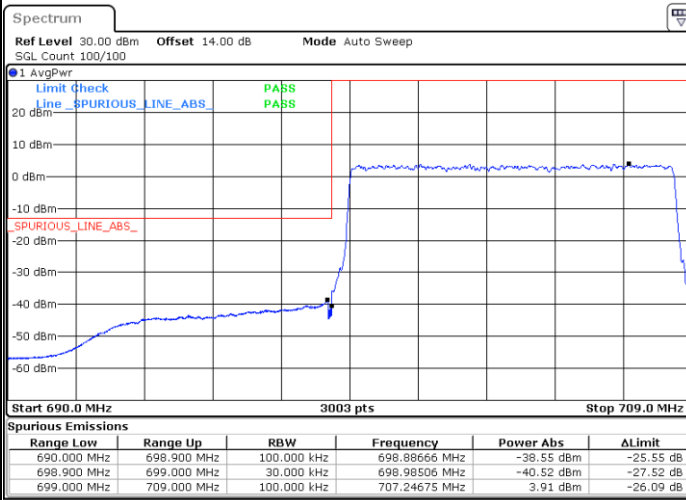
Date: 3.SEP.2024 20:51:25

Highest Band Edge / 1RB



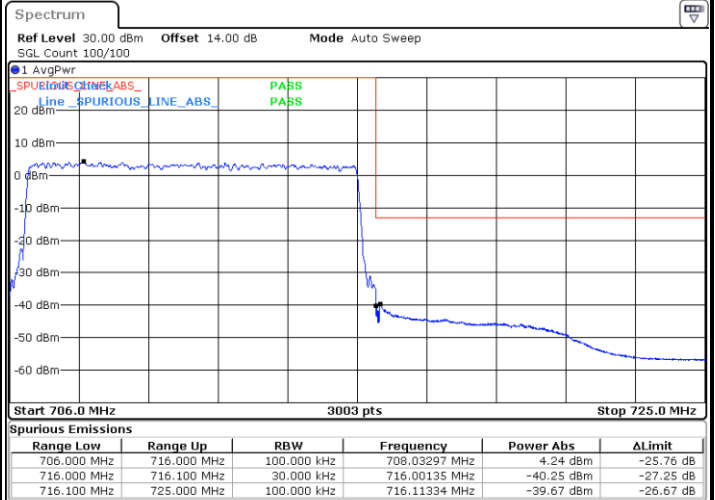
Date: 3.SEP.2024 21:02:19

Lowest Band Edge / Full RB



Date: 3.SEP.2024 20:54:52

Highest Band Edge / Full RB

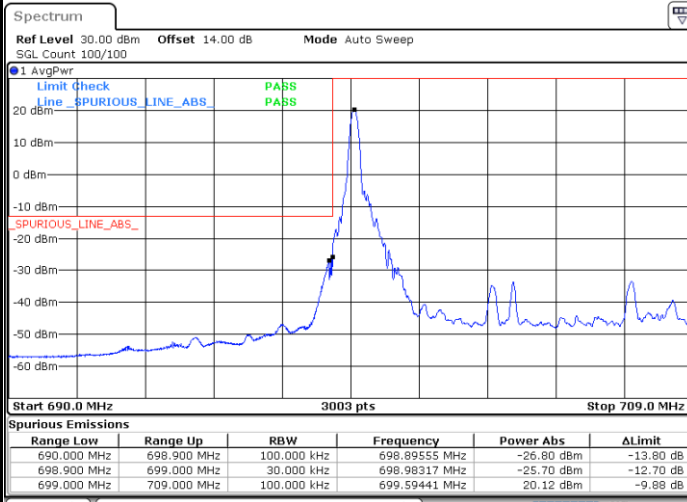


Date: 3.SEP.2024 21:05:46



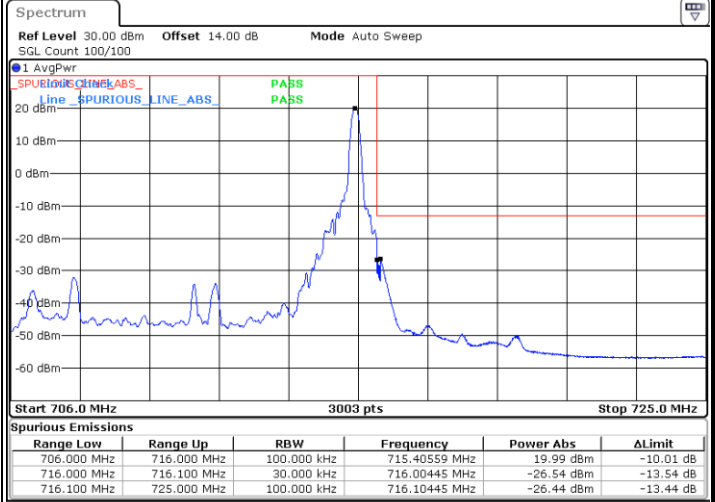
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



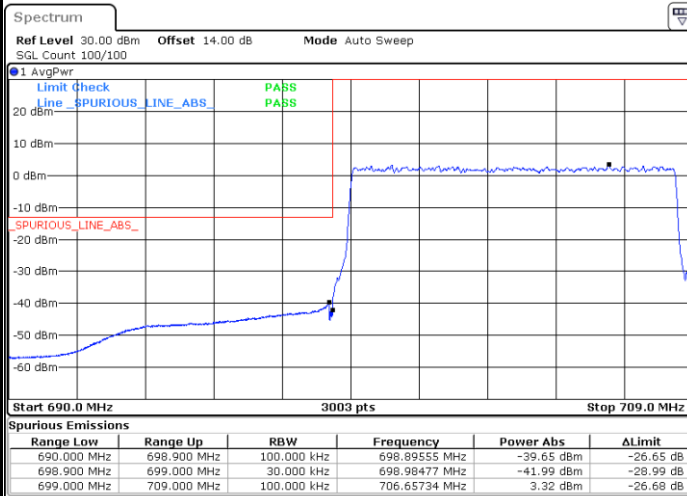
Date: 3.SEP.2024 20:52:34

Highest Band Edge / 1 RB



Date: 3.SEP.2024 21:03:28

Lowest Band Edge / Full RB



Date: 3.SEP.2024 20:56:01

Highest Band Edge / Full RB

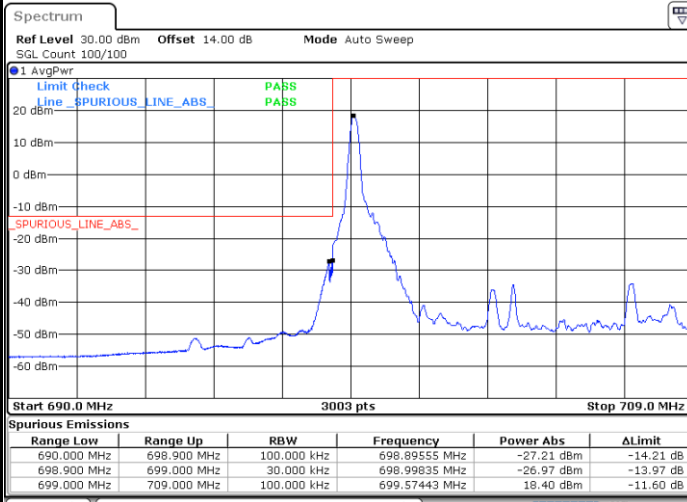


Date: 3.SEP.2024 21:06:55



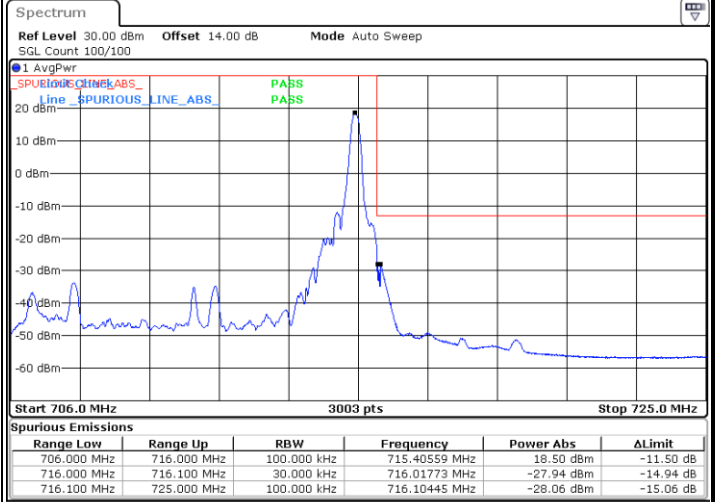
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



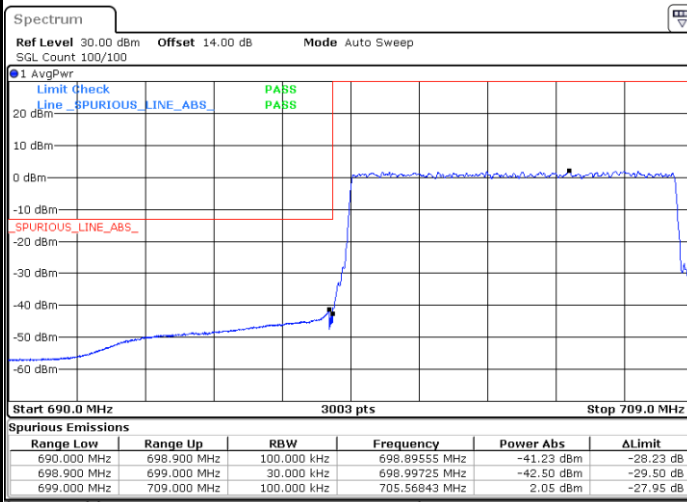
Date: 3.SEP.2024 20:53:43

Highest Band Edge / 1 RB



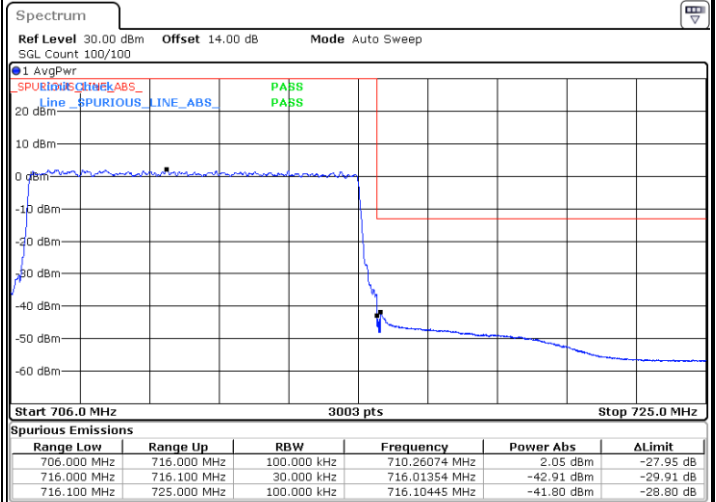
Date: 3.SEP.2024 21:04:37

Lowest Band Edge / Full RB



Date: 3.SEP.2024 20:57:09

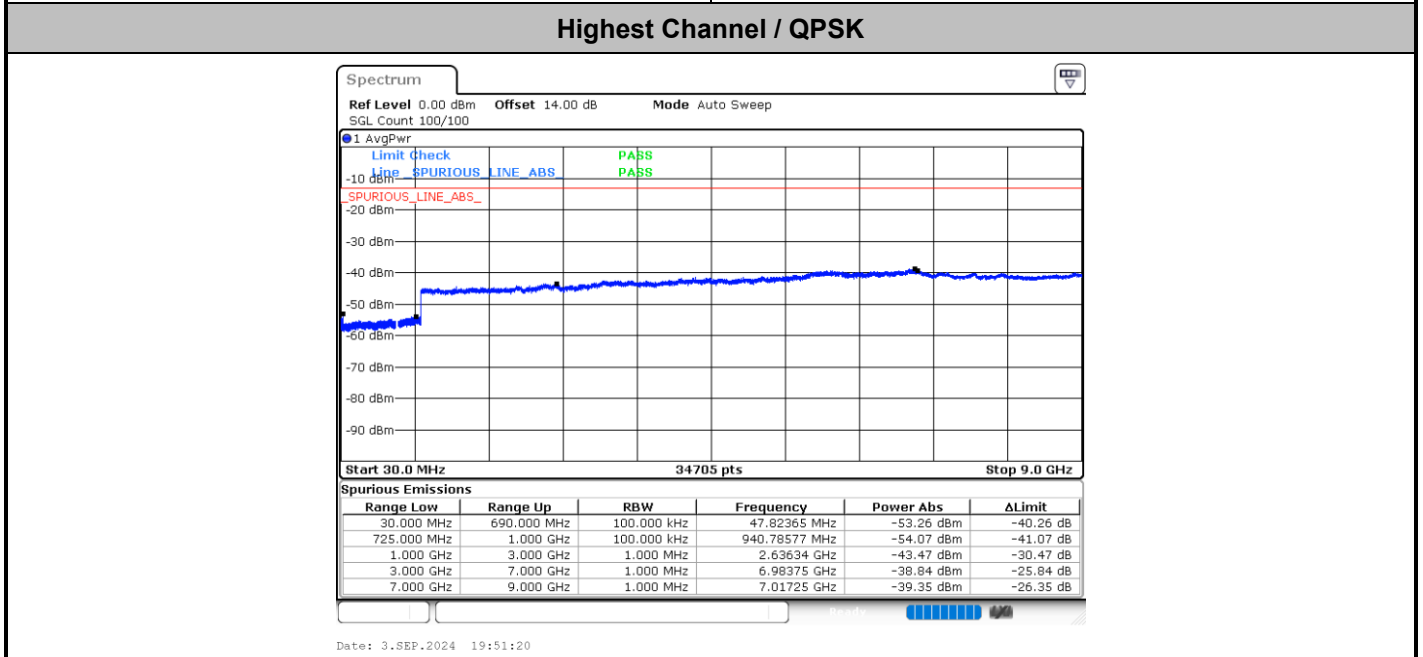
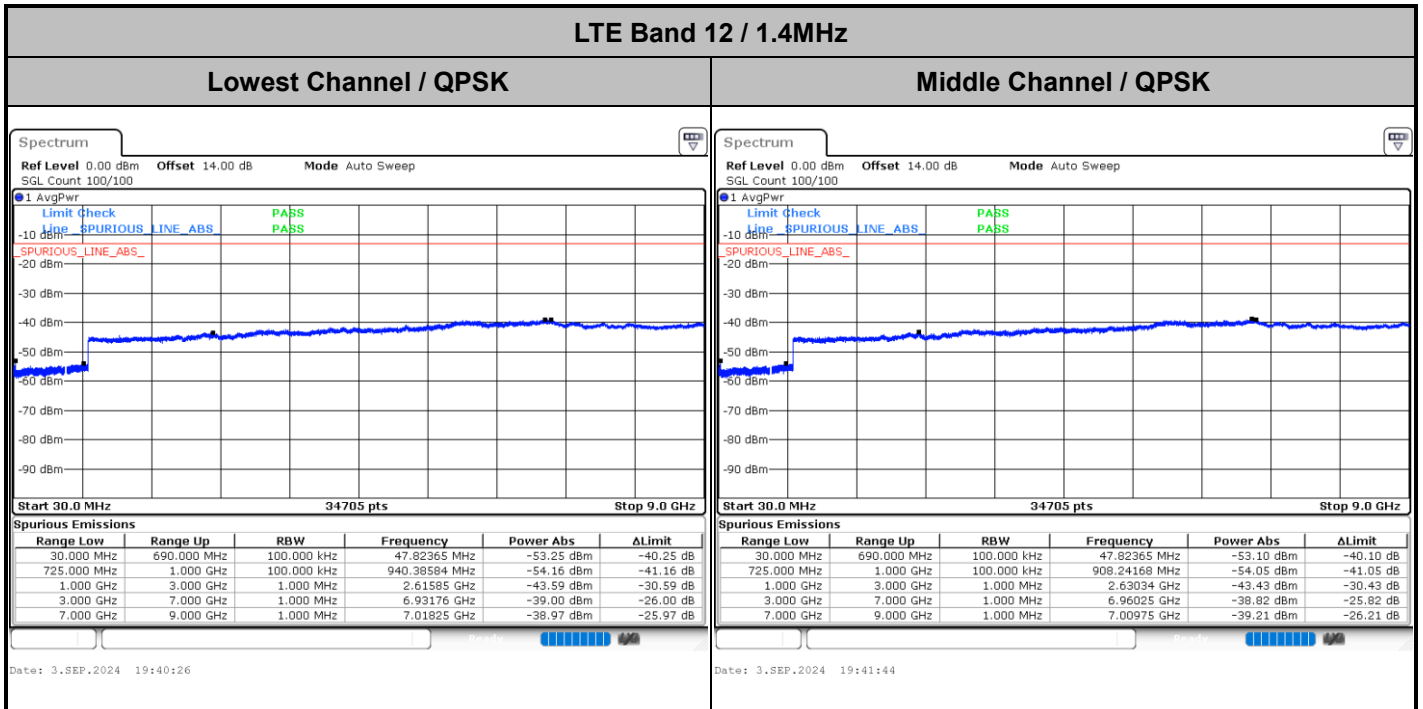
Highest Band Edge / Full RB



Date: 3.SEP.2024 21:08:04



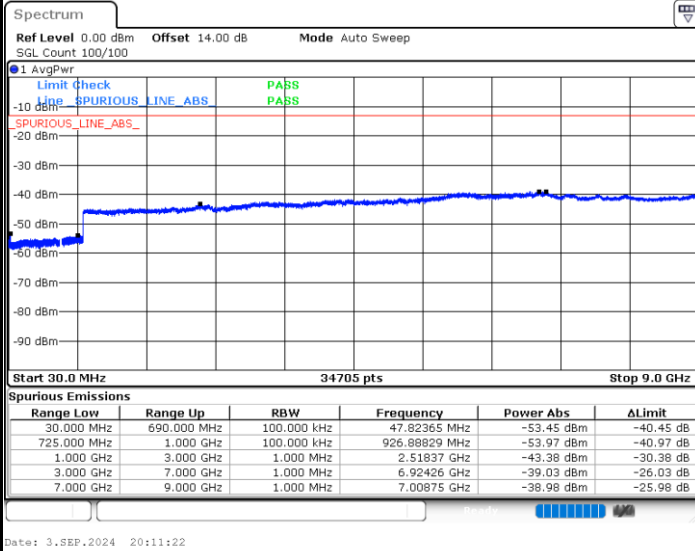
Conducted Spurious Emission



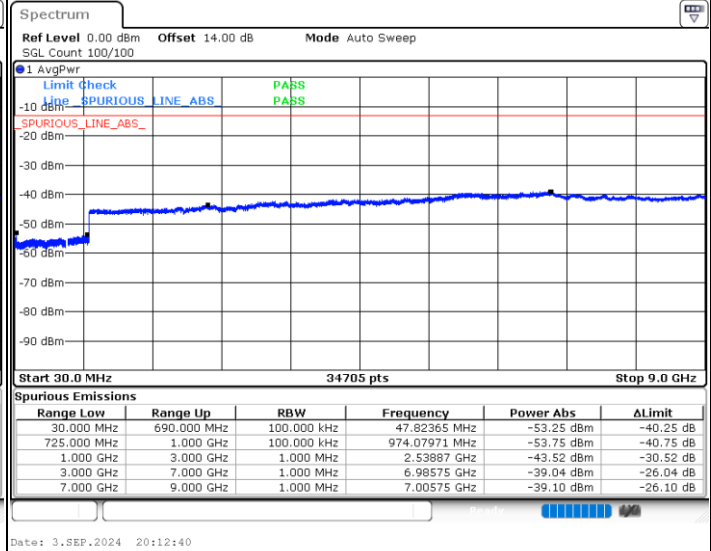


LTE Band 12 / 3MHz

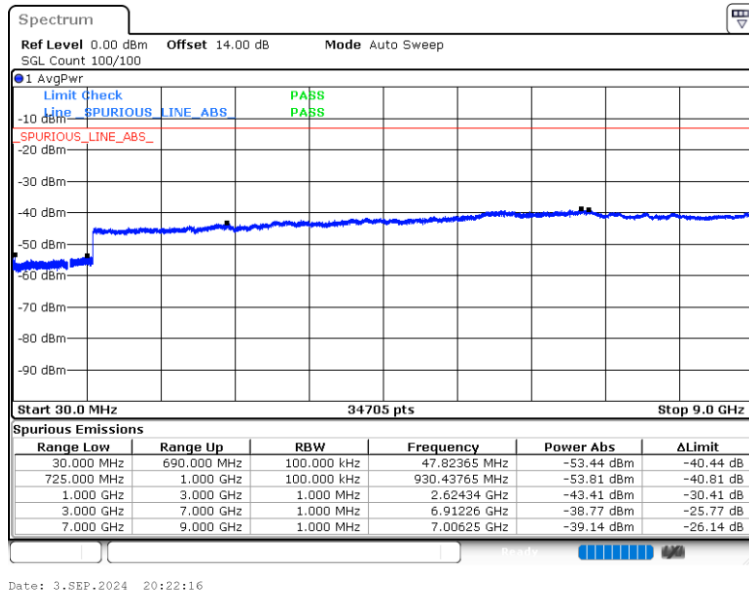
Lowest Channel / QPSK



Middle Channel / QPSK



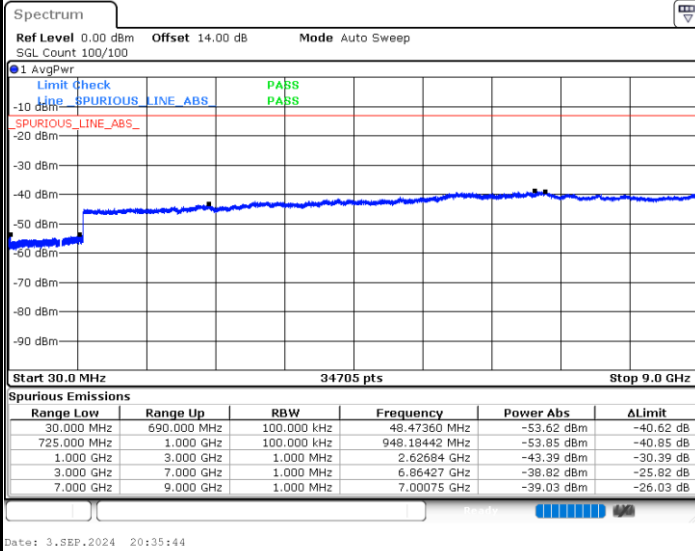
Highest Channel / QPSK



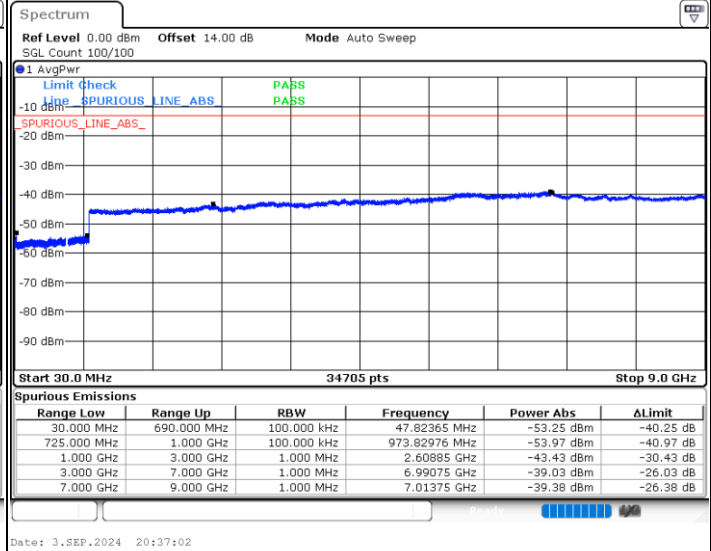


LTE Band 12 / 5MHz

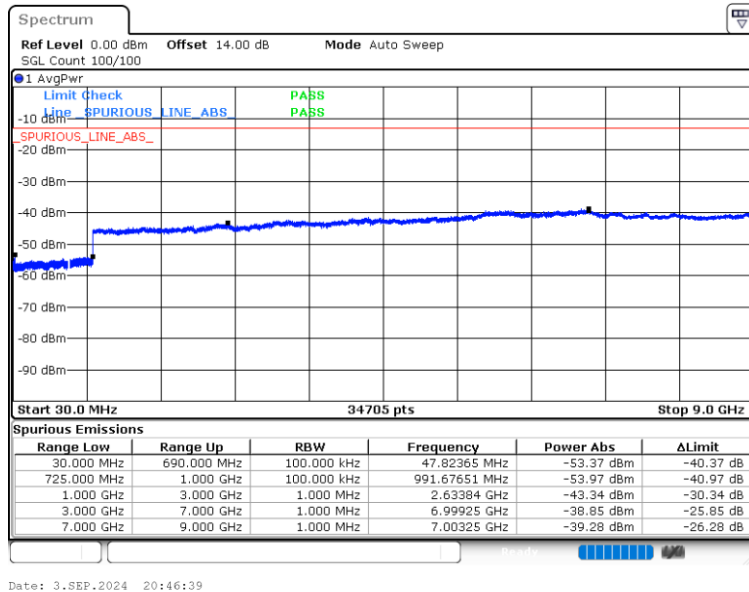
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK

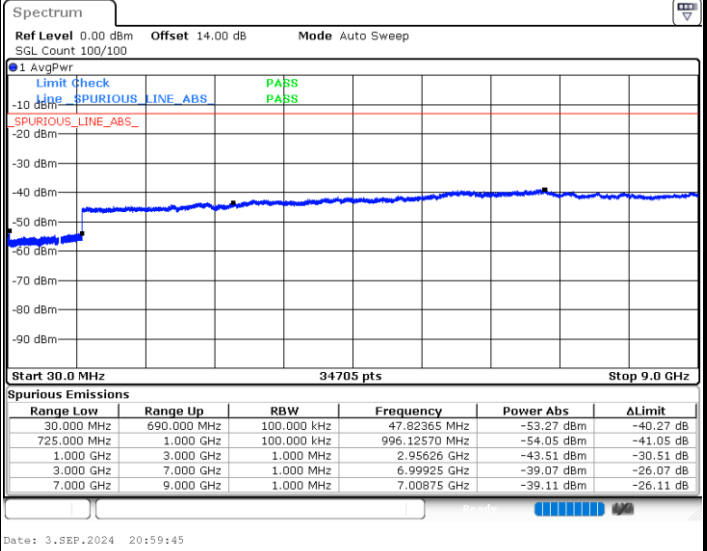
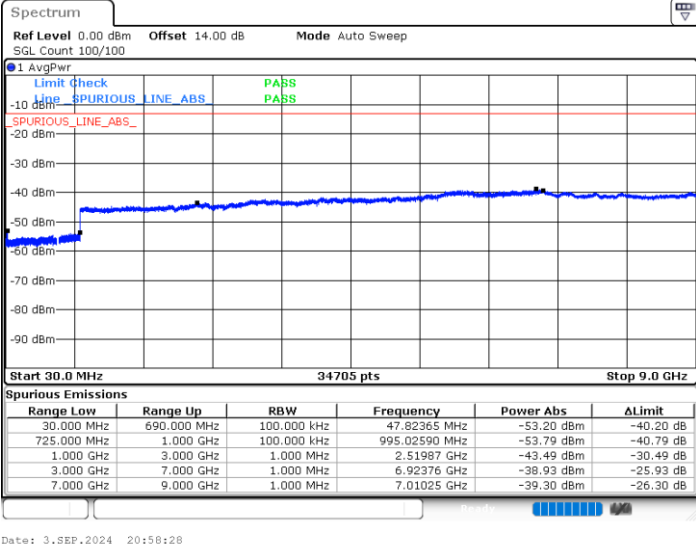




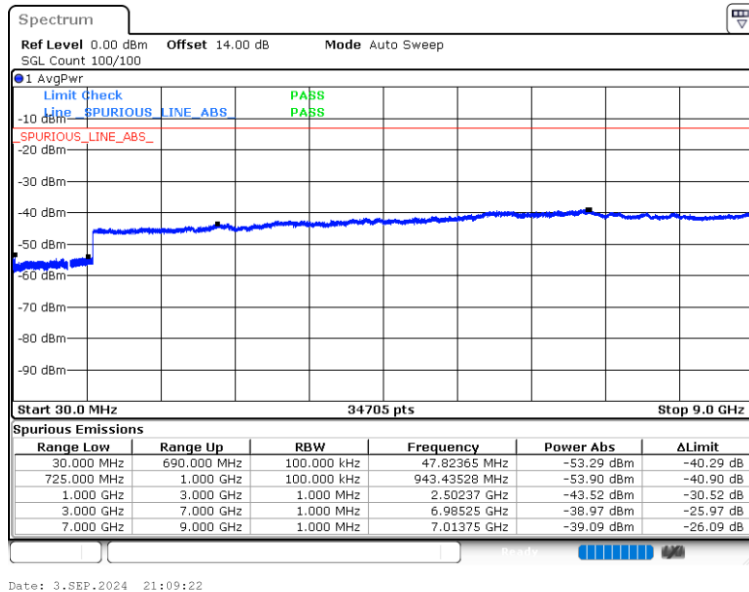
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK





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	0.0023	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0016	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0003	

Note:

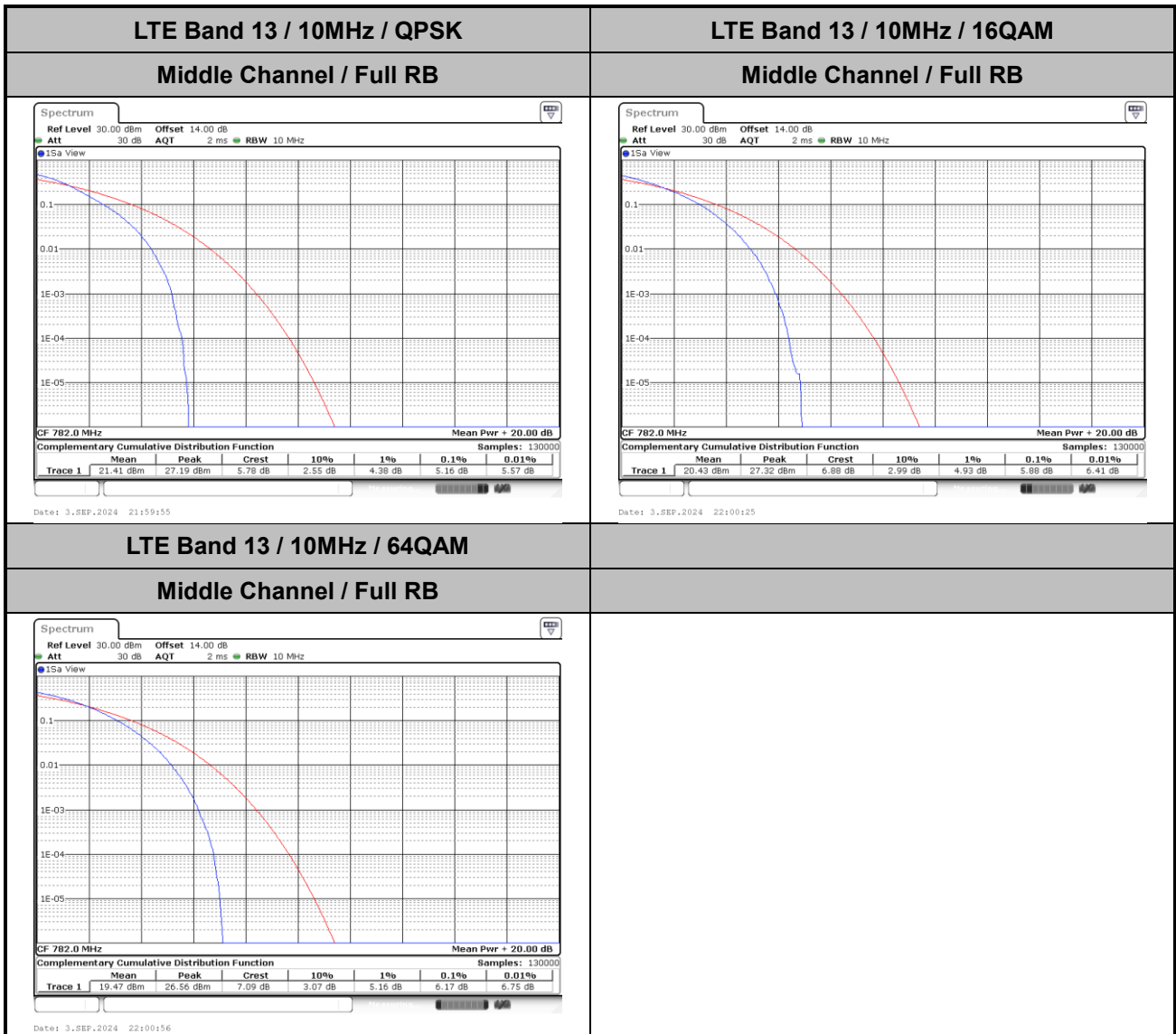
1. Normal Voltage = 3.91 V. ; Battery End Point (BEP) = 3.45 V. ; Maximum Voltage = 4.50 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

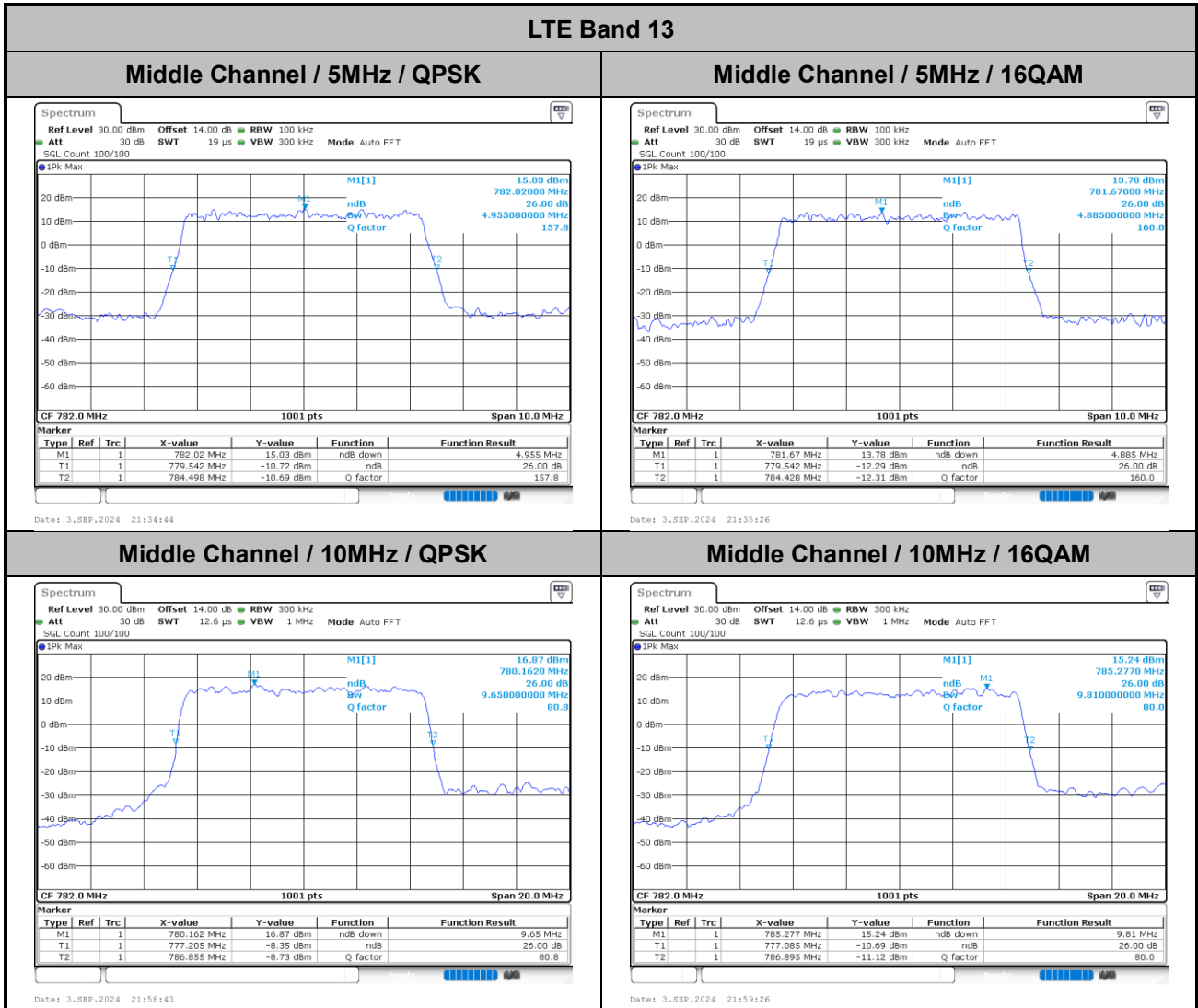
Mode	LTE Band 13 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.16	5.88	6.17	PASS





26dB Bandwidth

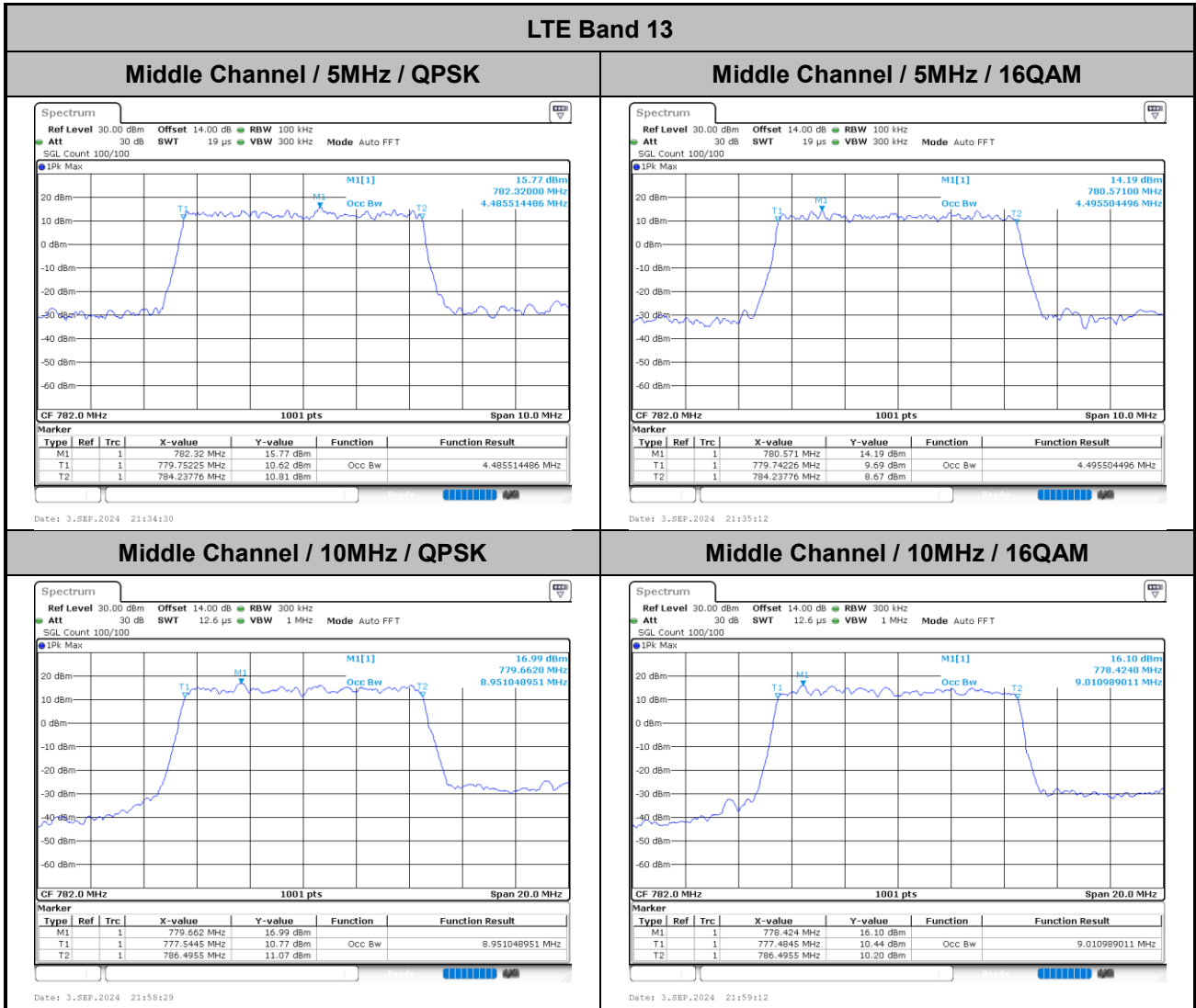
Mode	LTE Band 13 : 26dB BW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	4.96	4.89	9.65	9.81





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	4.49	4.50	8.95	9.01



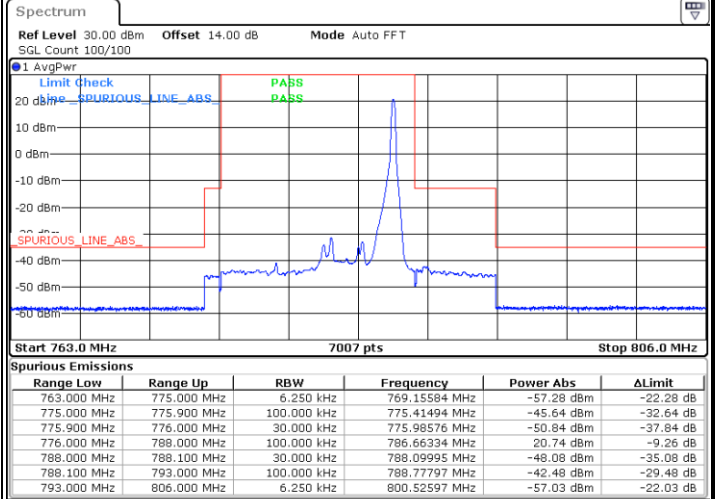
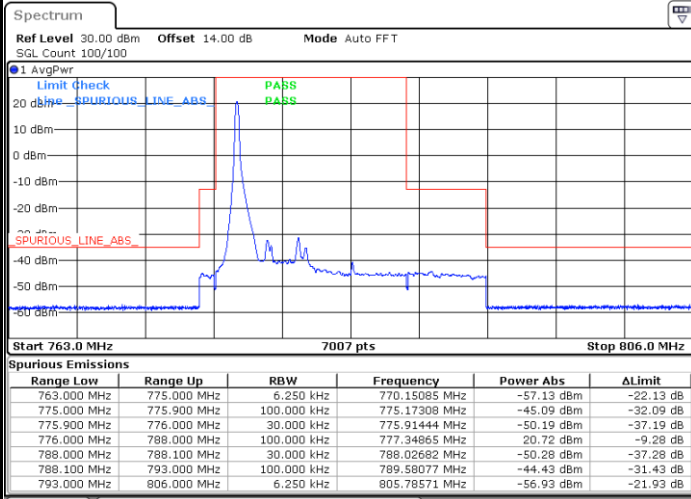


Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

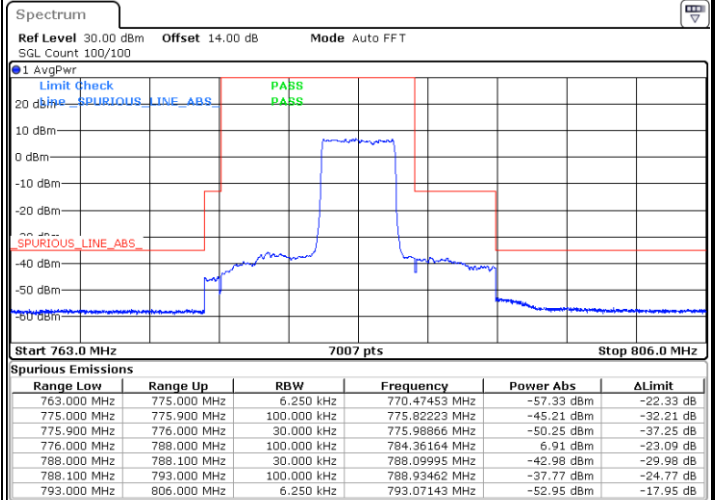
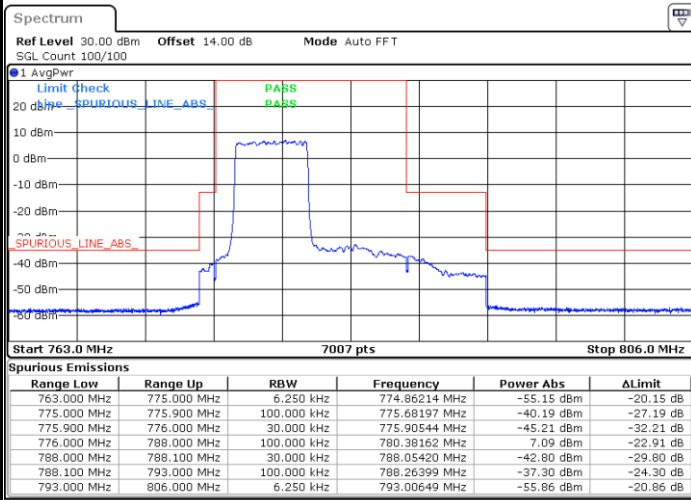


Date: 3.SEP.2024 21:25:40

Date: 3.SEP.2024 21:36:34

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 3.SEP.2024 21:29:07

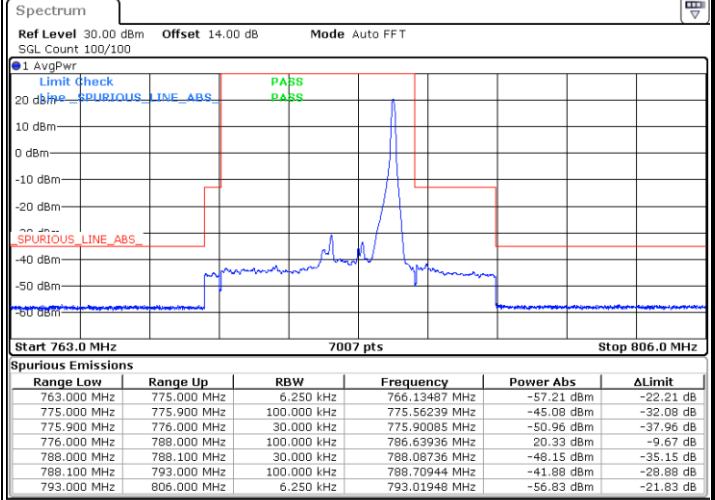
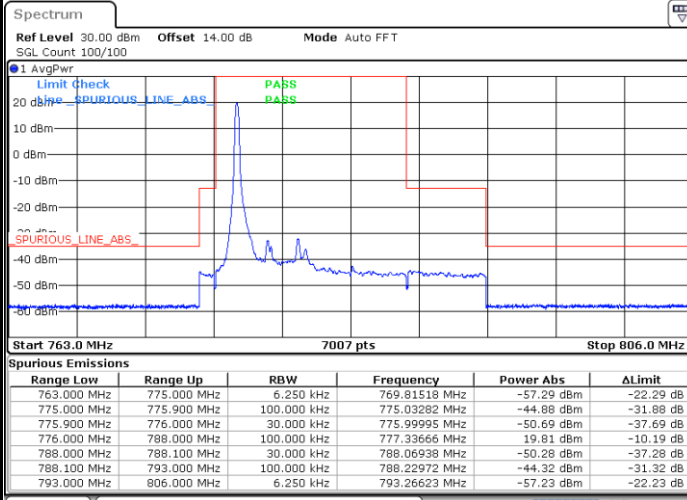
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LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

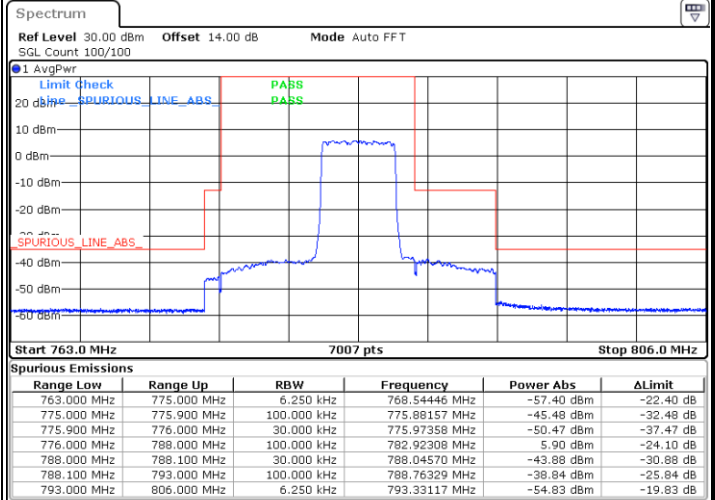
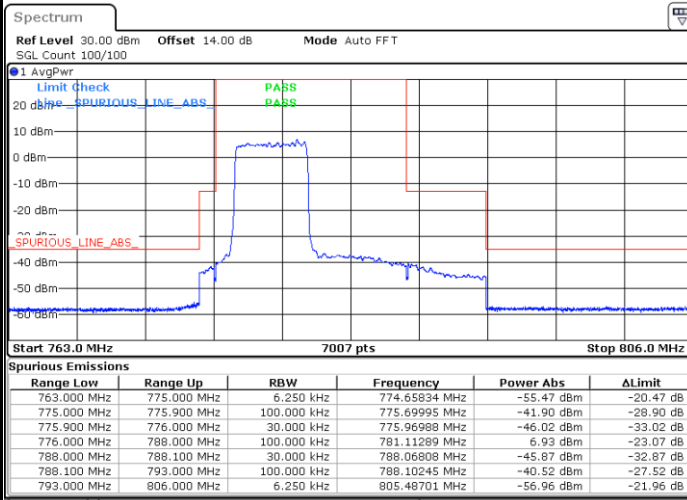


Date: 3.SEP.2024 21:26:49

Date: 3.SEP.2024 21:37:44

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 3.SEP.2024 21:30:15

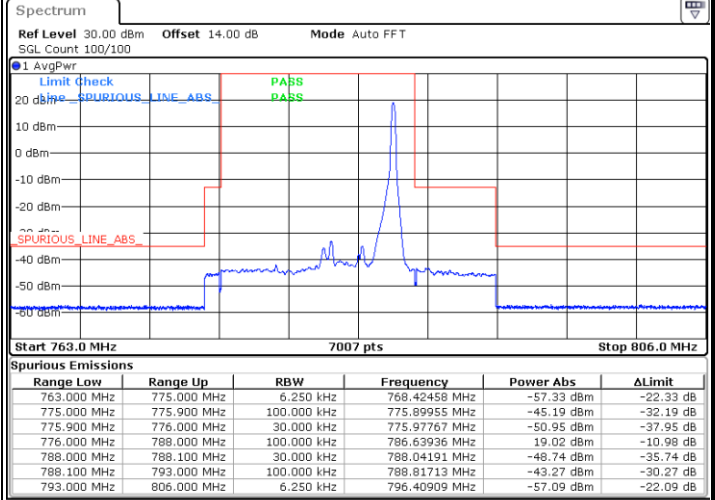
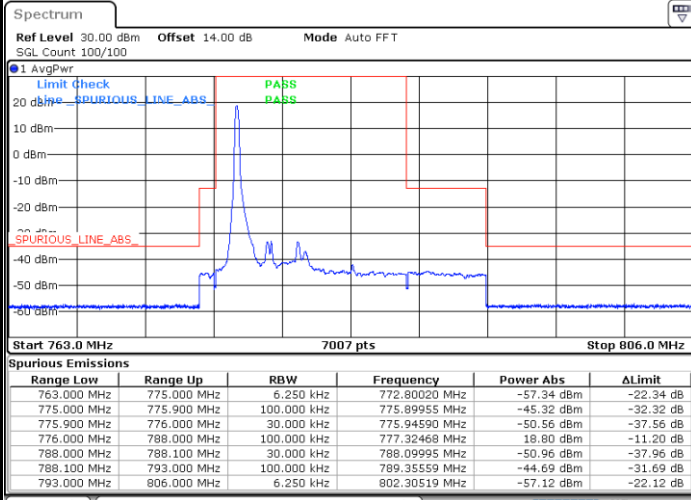
Date: 3.SEP.2024 21:41:11



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

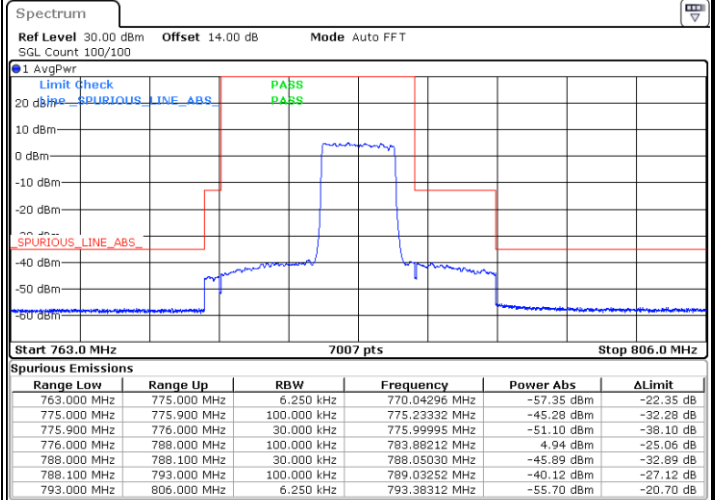
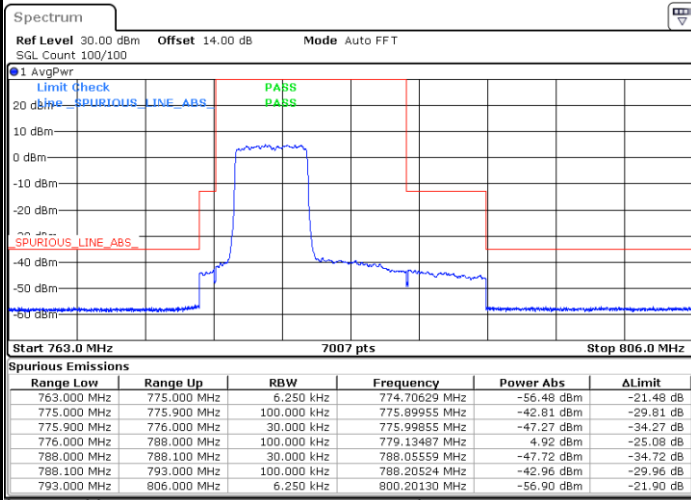


Date: 3.SEP.2024 21:27:57

Date: 3.SEP.2024 21:38:52

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 3.SEP.2024 21:31:25

Date: 3.SEP.2024 21:42:19

