

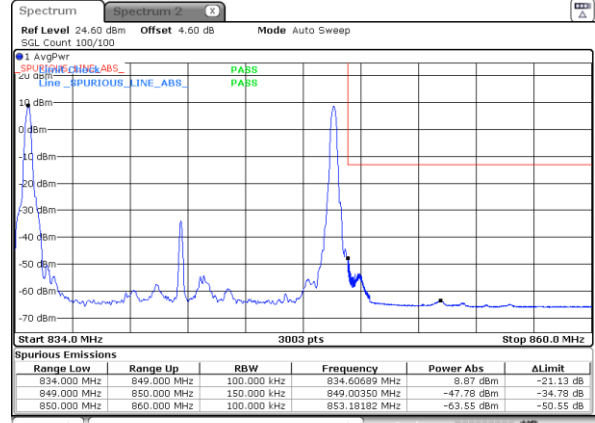
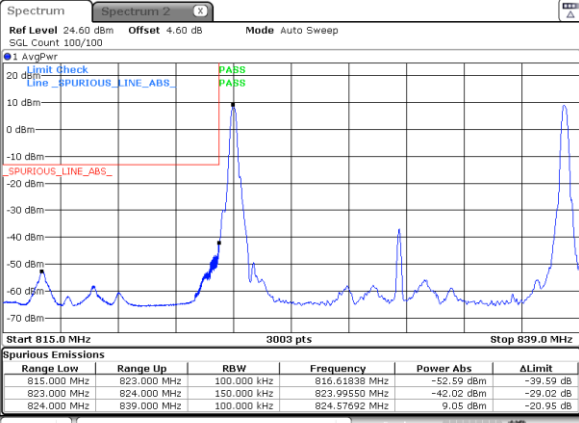


LTE Band 5B / 10MHz+5MHz

64QAM

Lowest Band Edge / 1RB0 and 1RB24

Highest Band Edge / 1RB0 and 1RB24

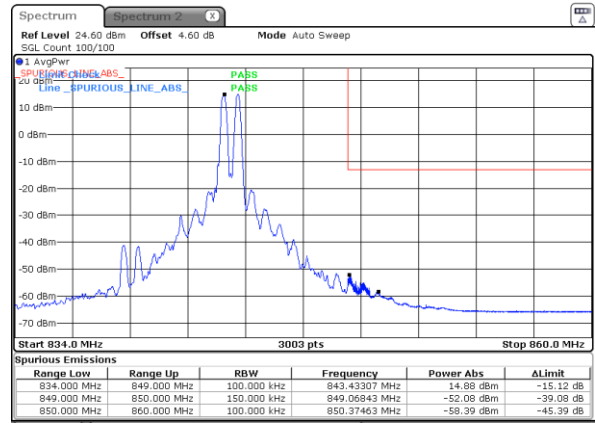
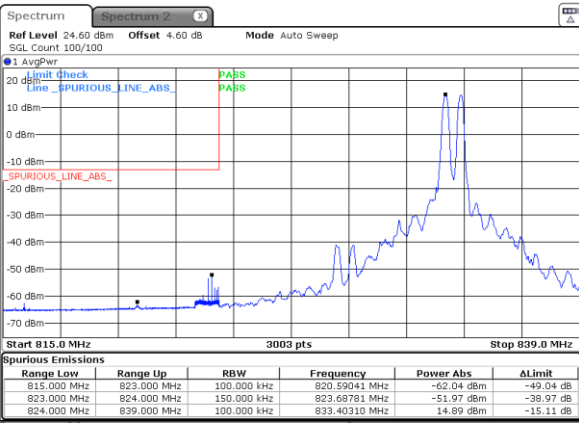


Date: 18, DEC, 2024 12:48:41

Date: 18, DEC, 2024 13:18:27

Lowest Band Edge / 1RB49 and 1RB0

Highest Band Edge / 1RB49 and 1RB0

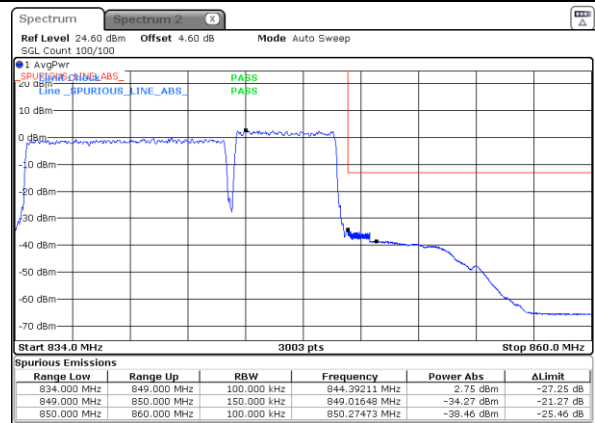
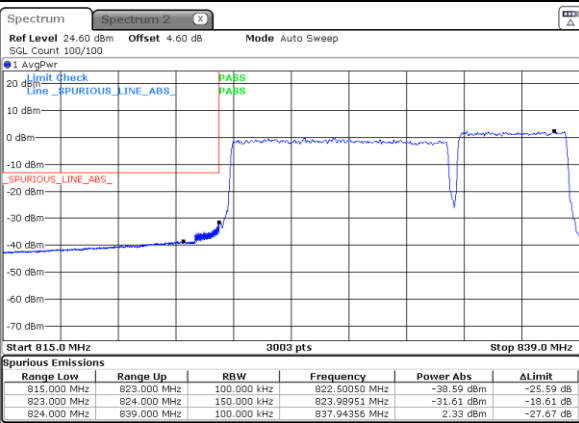


Date: 18, DEC, 2024 12:56:44

Date: 18, DEC, 2024 13:26:19

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 18, DEC, 2024 12:40:39

Date: 18, DEC, 2024 13:10:35

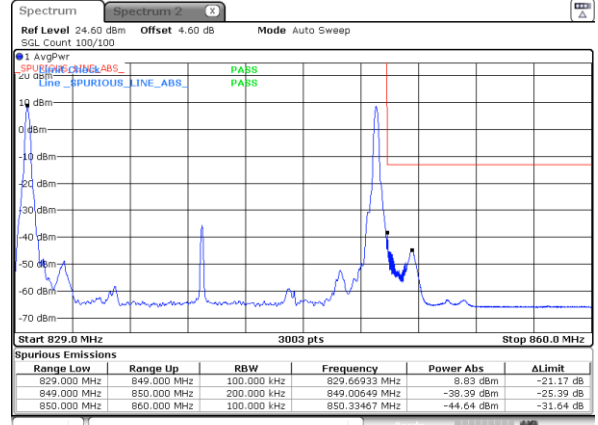
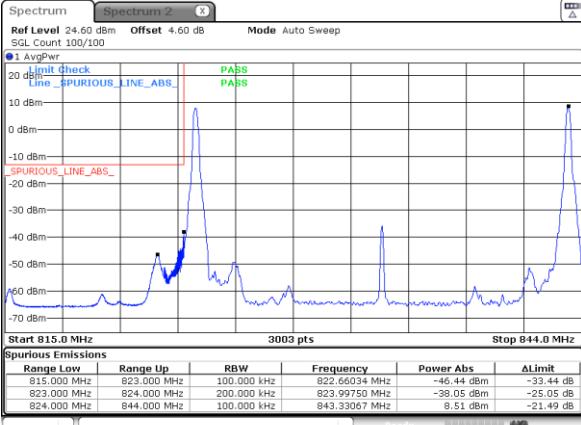


LTE Band 5B / 10MHz+10MHz

64QAM

Lowest Band Edge / 1RB0 and 1RB49

Highest Band Edge / 1RB0 and 1RB49

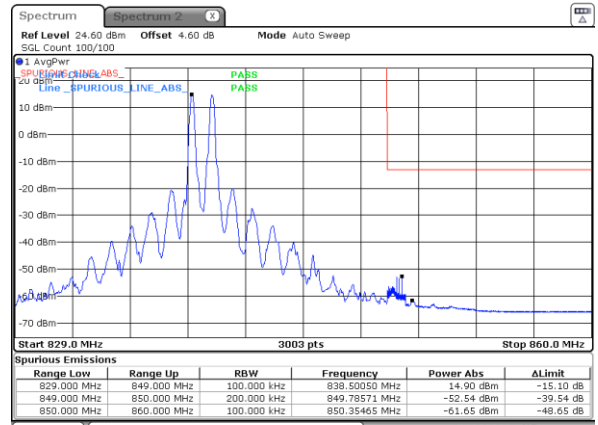
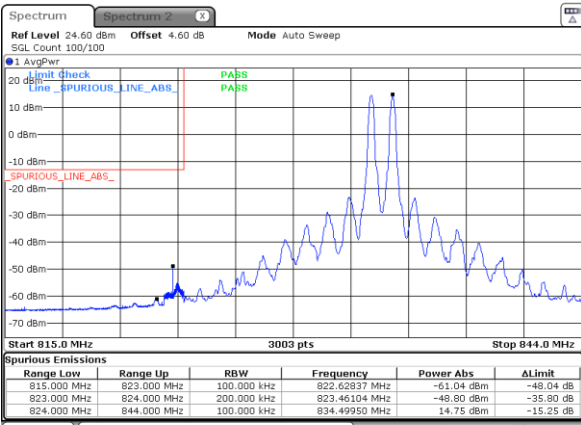


Date: 18, DEC, 2024 13:42:28

Date: 18, DEC, 2024 14:07:00

Lowest Band Edge / 1RB49 and 1RB0

Highest Band Edge / 1RB49 and 1RB0

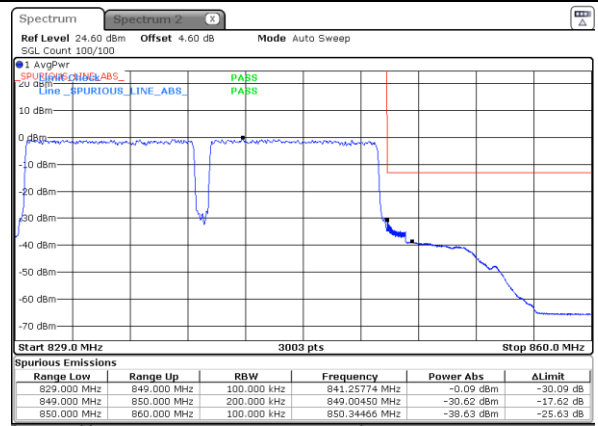
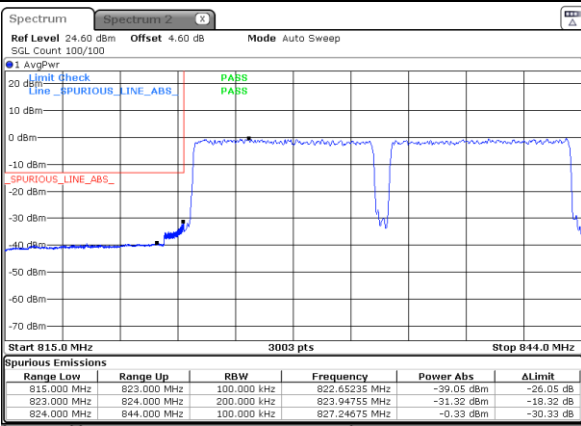


Date: 18, DEC, 2024 13:50:31

Date: 18, DEC, 2024 14:14:52

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 18, DEC, 2024 13:34:26

Date: 18, DEC, 2024 13:59:07

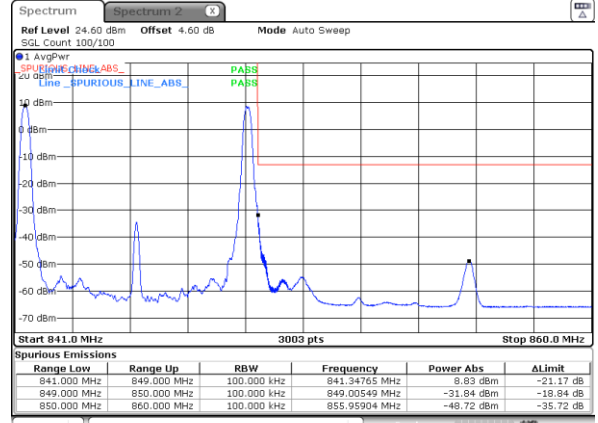
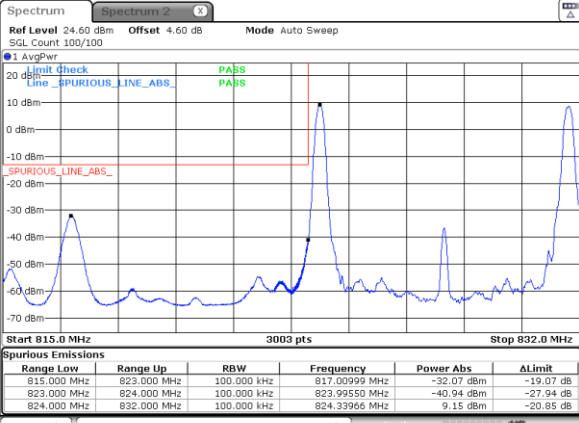


LTE Band 5B / 3MHz+5MHz

256QAM

Lowest Band Edge / 1RB0 and 1RB24

Highest Band Edge / 1RB0 and 1RB24

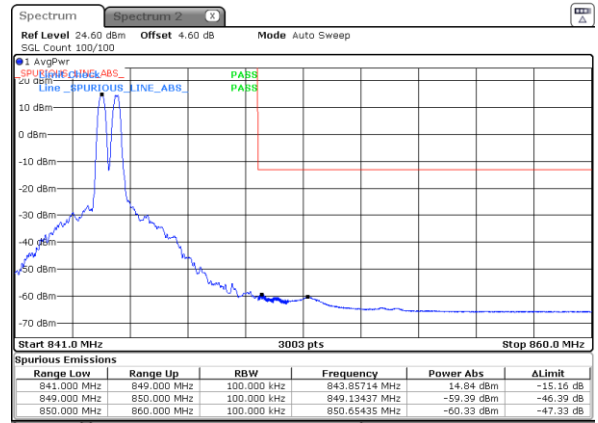
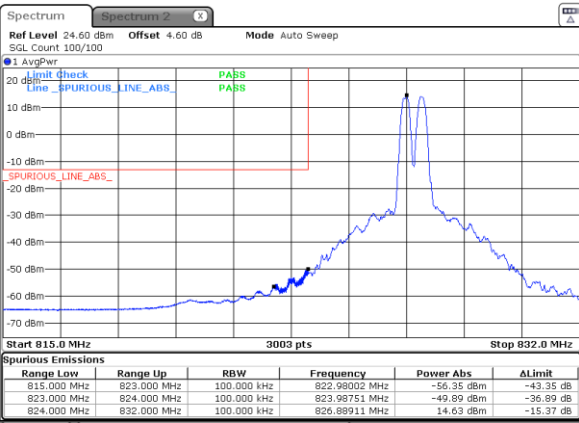


Date: 18, DEC, 2024 09:25:23

Date: 18, DEC, 2024 09:51:18

Lowest Band Edge / 1RB14 and 1RB0

Highest Band Edge / 1RB14 and 1RB0

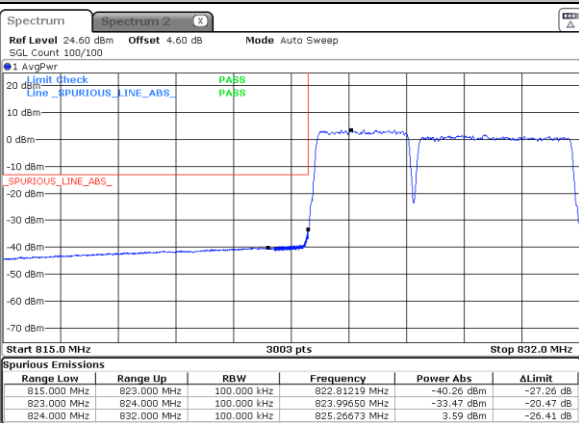


Date: 18, DEC, 2024 09:33:28

Date: 18, DEC, 2024 09:59:12

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 18, DEC, 2024 09:17:19

Date: 18, DEC, 2024 09:43:25

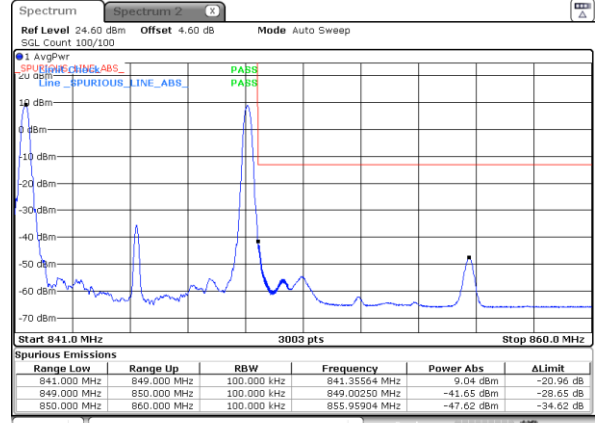
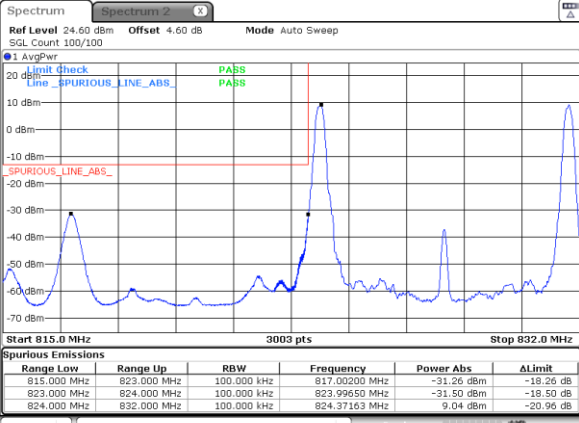


LTE Band 5B / 5MHz+3MHz

256QAM

Lowest Band Edge / 1RB0 and 1RB14

Highest Band Edge / 1RB0 and 1RB14

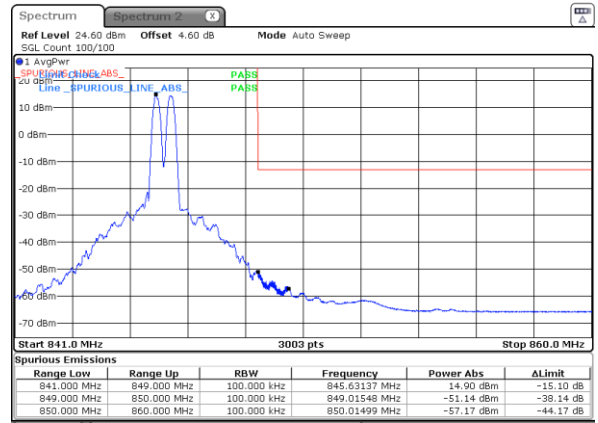
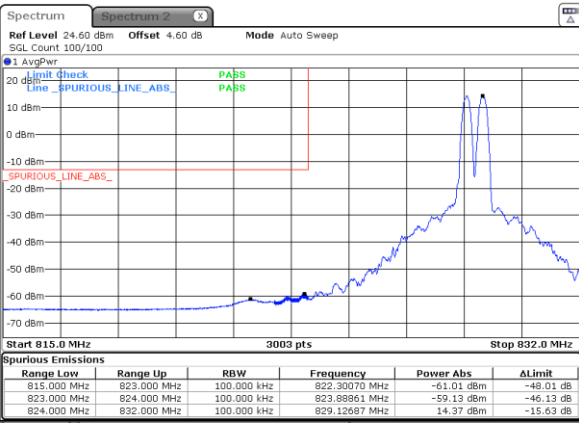


Date: 18, DEC, 2024 10:17:21

Date: 18, DEC, 2024 10:41:57

Lowest Band Edge / 1RB24 and 1RB0

Highest Band Edge / 1RB24 and 1RB0

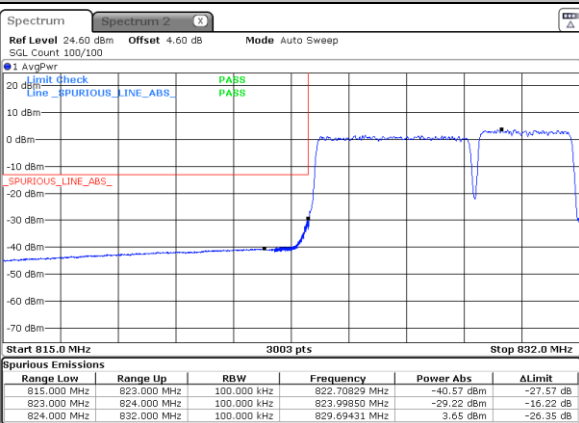


Date: 18, DEC, 2024 10:25:25

Date: 18, DEC, 2024 10:49:50

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 18, DEC, 2024 10:09:16

Date: 18, DEC, 2024 10:34:02

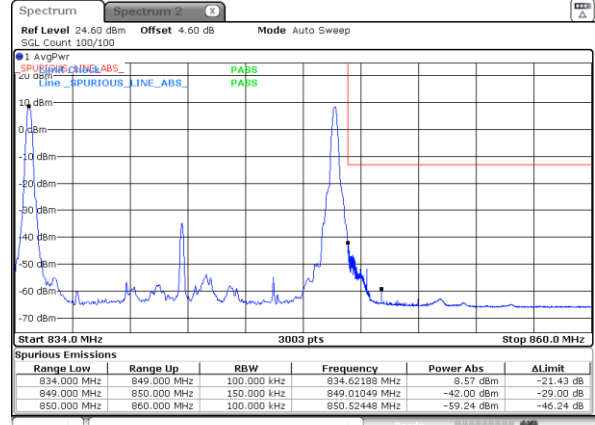
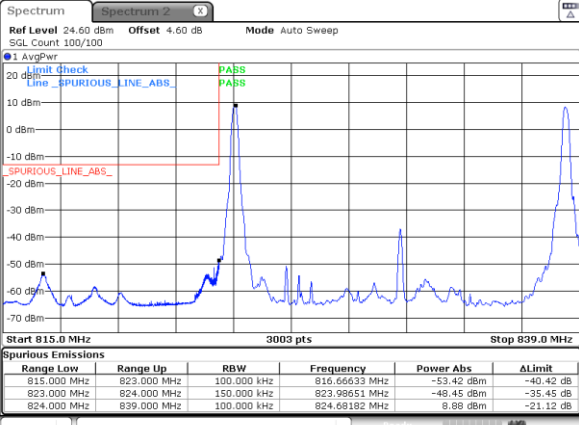


LTE Band 5B / 5MHz+10MHz

256QAM

Lowest Band Edge / 1RB0 and 1RB49

Highest Band Edge / 1RB0 and 1RB49

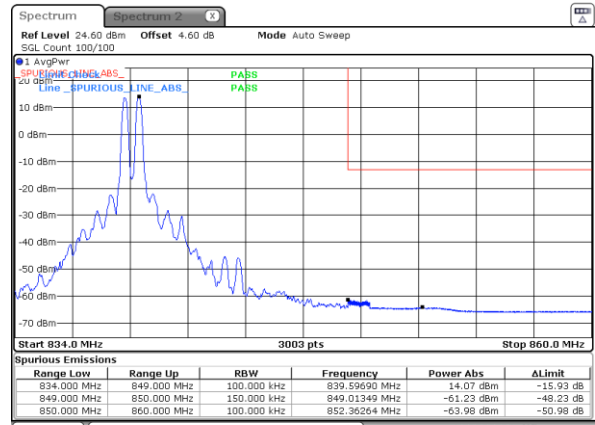
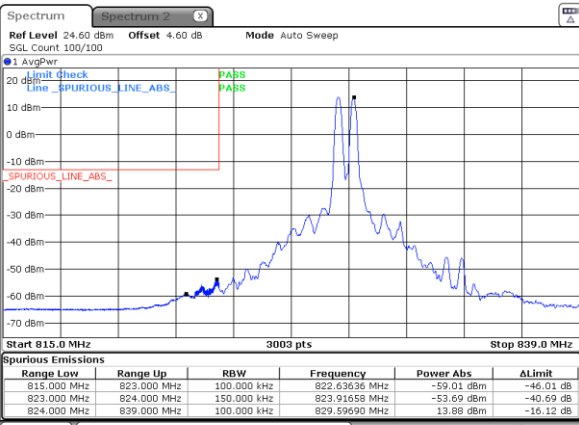


Date: 18, DEC, 2024 12:00:53

Date: 18, DEC, 2024 12:26:07

Lowest Band Edge / 1RB24 and 1RB0

Highest Band Edge / 1RB24 and 1RB0

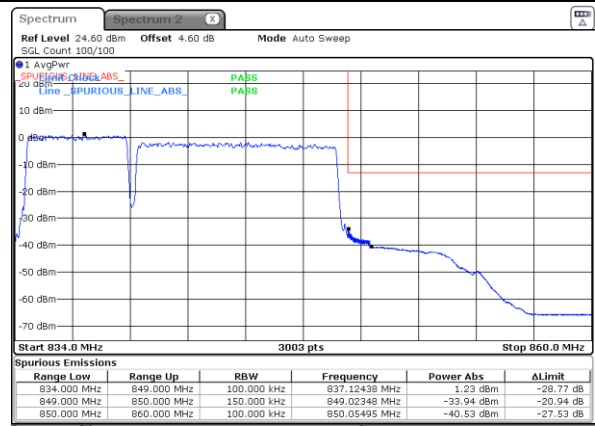
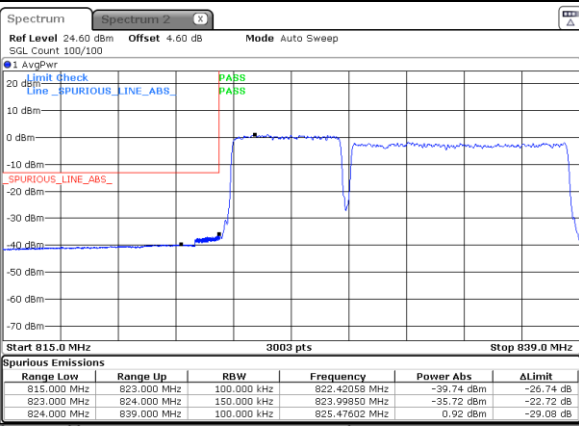


Date: 18, DEC, 2024 12:09:56

Date: 18, DEC, 2024 12:34:00

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 18, DEC, 2024 11:52:49

Date: 18, DEC, 2024 12:18:14

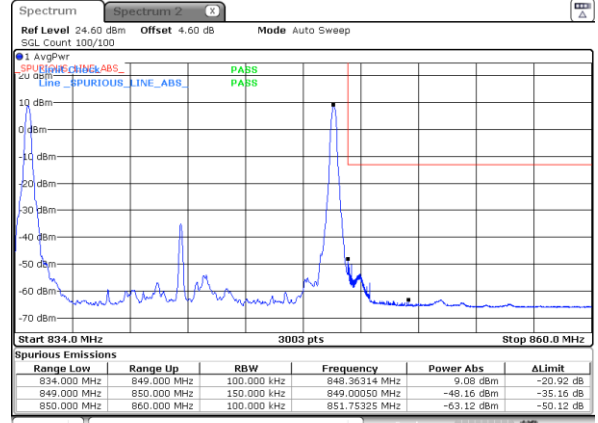
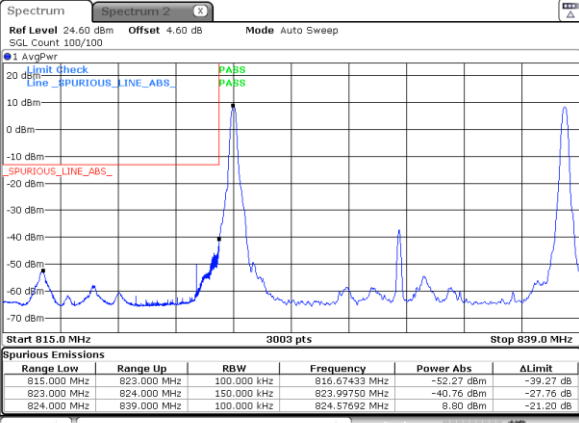


LTE Band 5B / 10MHz+5MHz

256QAM

Lowest Band Edge / 1RB0 and 1RB24

Highest Band Edge / 1RB0 and 1RB24

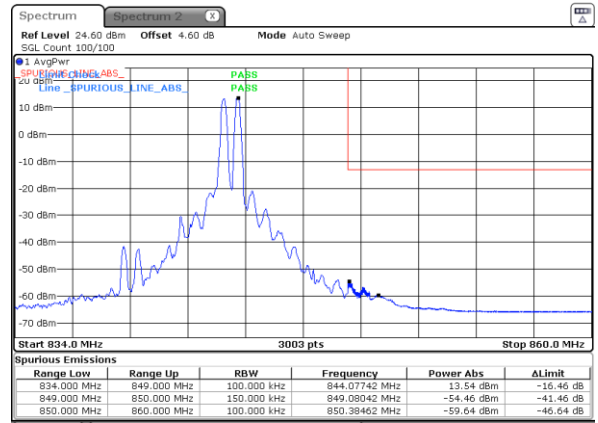
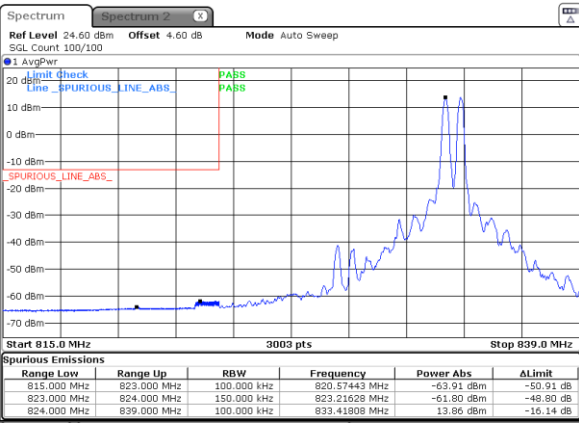


Date: 18, DEC, 2024 12:50:42

Date: 18, DEC, 2024 13:20:25

Lowest Band Edge / 1RB49 and 1RB0

Highest Band Edge / 1RB49 and 1RB0

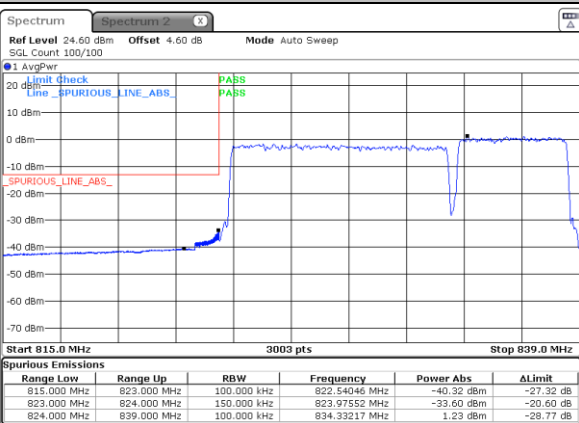


Date: 18, DEC, 2024 12:58:45

Date: 18, DEC, 2024 13:28:17

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 18, DEC, 2024 12:42:39

Date: 18, DEC, 2024 13:12:33

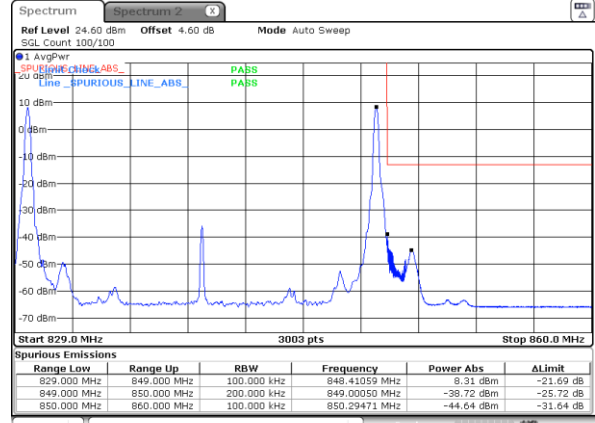
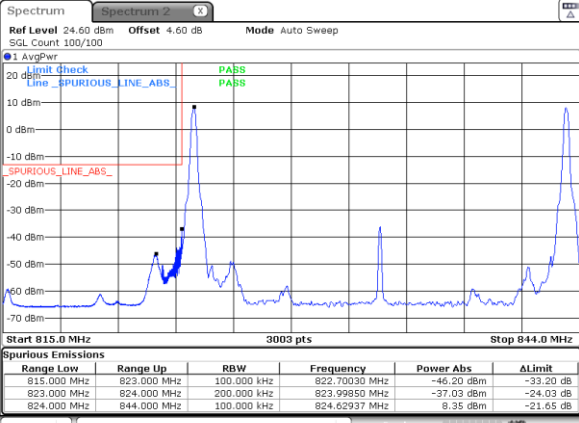


LTE Band 5B / 10MHz+10MHz

256QAM

Lowest Band Edge / 1RB0 and 1RB49

Highest Band Edge / 1RB0 and 1RB49

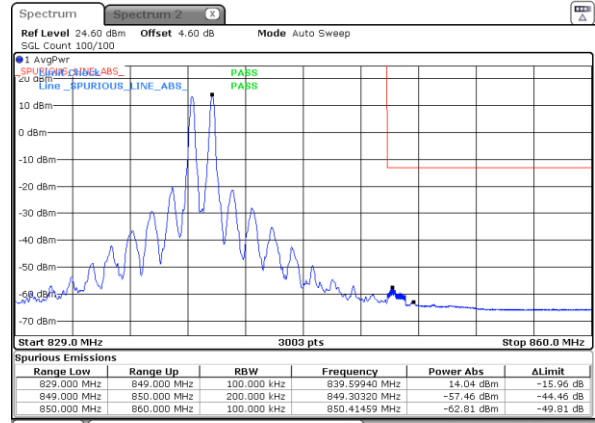
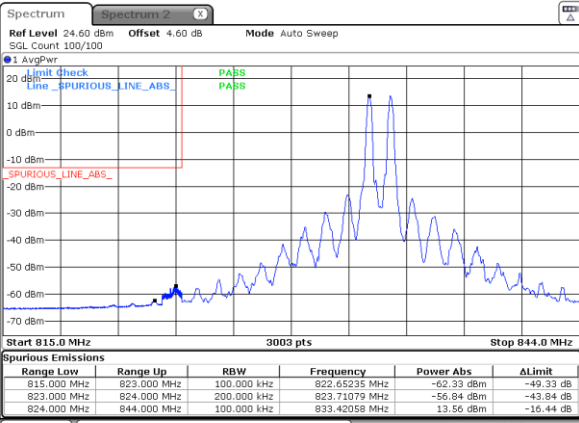


Date: 18, DEC, 2024 13:44:29

Date: 18, DEC, 2024 14:09:58

Lowest Band Edge / 1RB49 and 1RB0

Highest Band Edge / 1RB49 and 1RB0

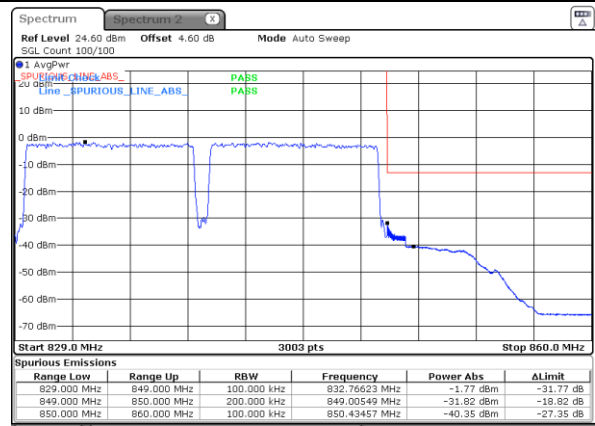
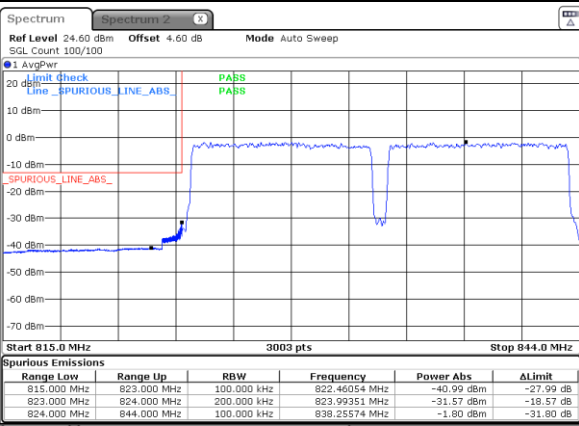


Date: 18, DEC, 2024 13:52:32

Date: 18, DEC, 2024 14:16:49

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 18, DEC, 2024 13:36:26

Date: 18, DEC, 2024 14:01:06



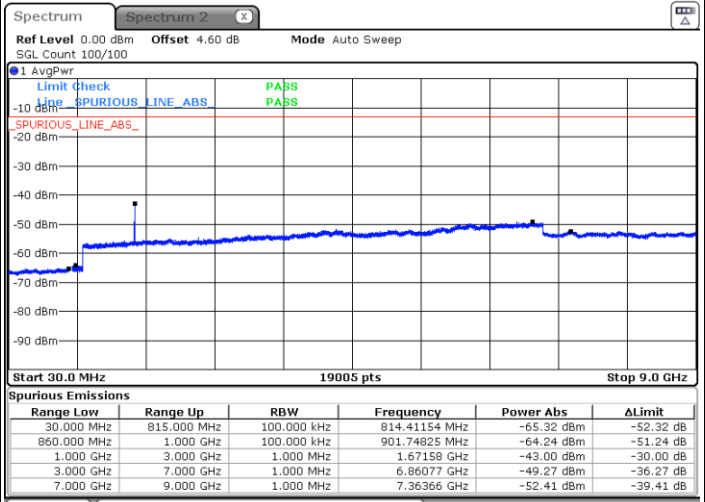
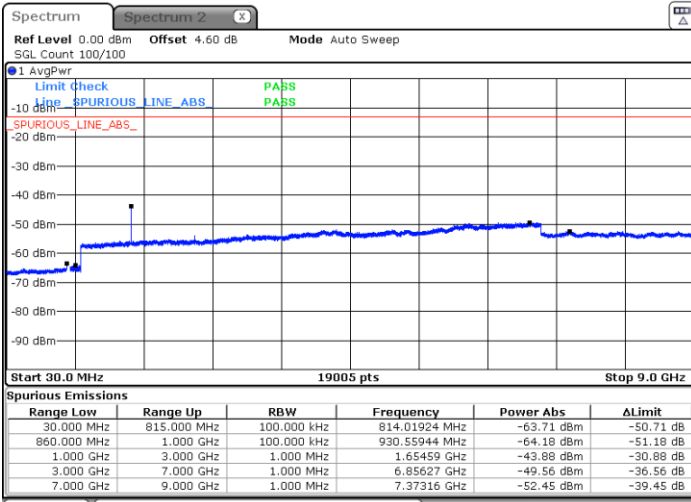
# Conducted Spurious Emission

LTE Band 5B / 3MHz+5MHz

QPSK

Lowest Channel / 1RB14 and 1RB0

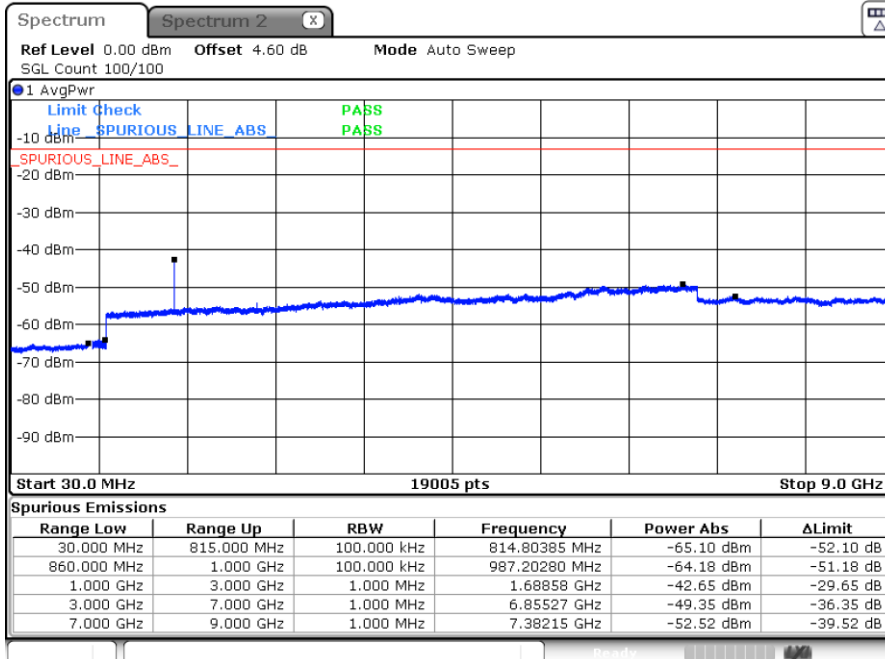
Middle Channel / 1RB14 and 1RB0



Date: 18.DEC.2024 14:18:24

Date: 18.DEC.2024 14:19:57

Highest Channel / 1RB14 and 1RB0



Date: 18.DEC.2024 14:23:23

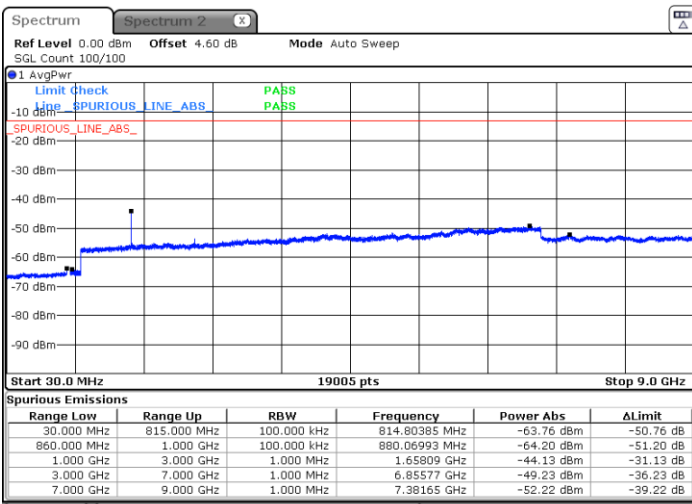


LTE Band 5B / 5MHz+3MHz

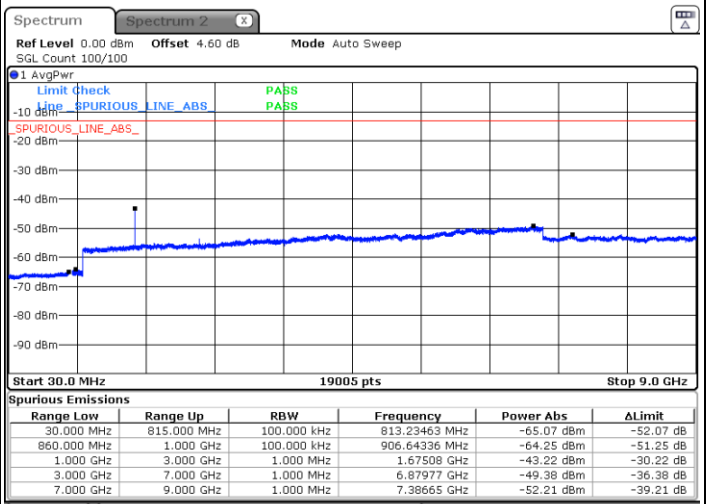
QPSK

Lowest Channel / 1RB24 and 1RB0

Middle Channel / 1RB24 and 1RB0

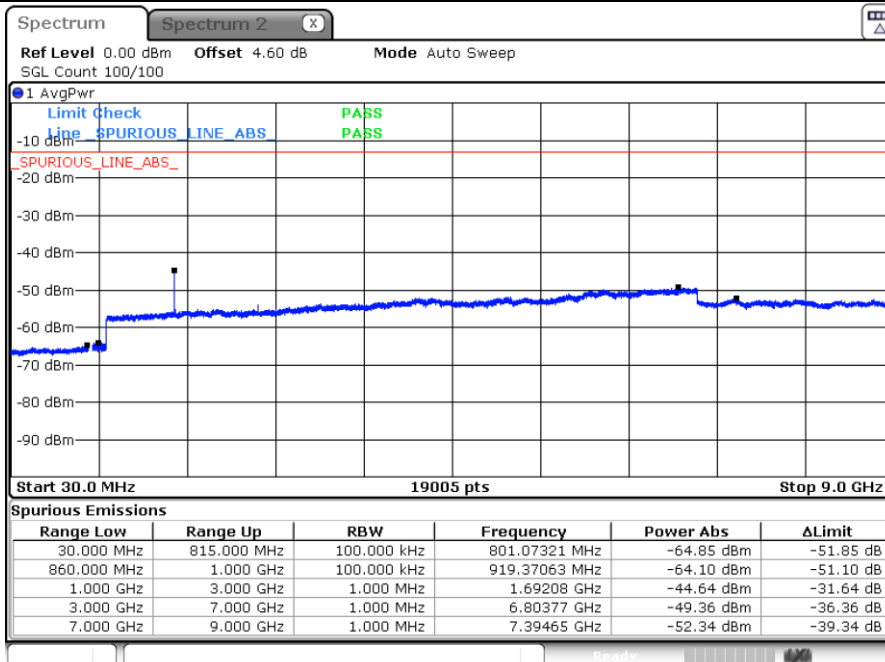


Date: 18.DEC.2024 14:24:58



Date: 18.DEC.2024 14:27:13

Highest Channel / 1RB24 and 1RB0



Date: 18.DEC.2024 14:30:38

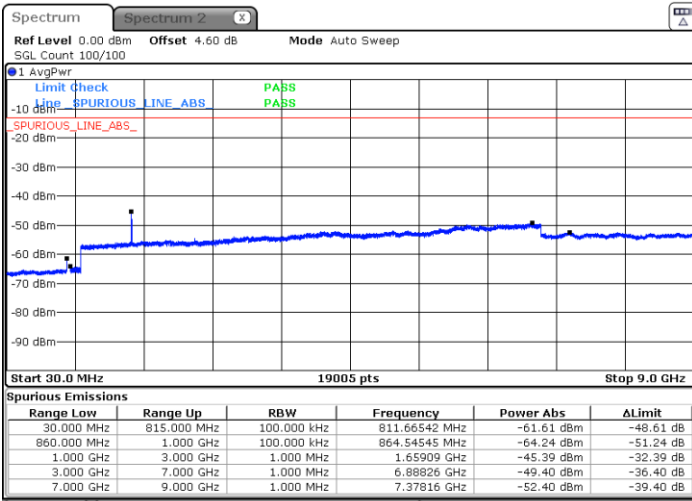


LTE Band 5B / 5MHz+10MHz

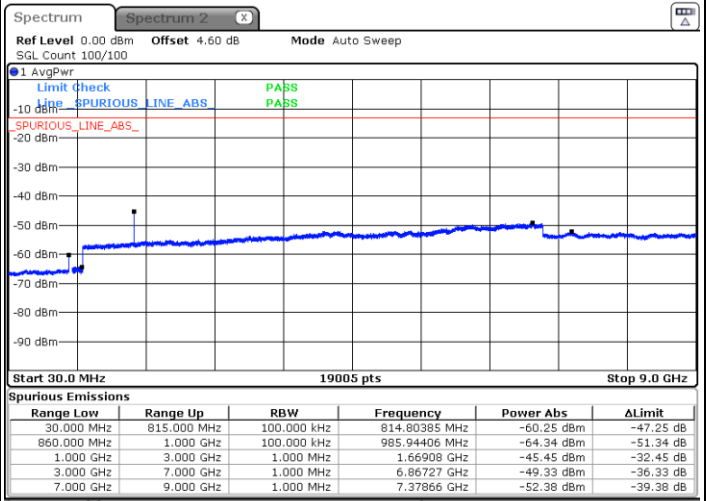
QPSK

Lowest Channel / 1RB24 and 1RB0

Middle Channel / 1RB24 and 1RB0

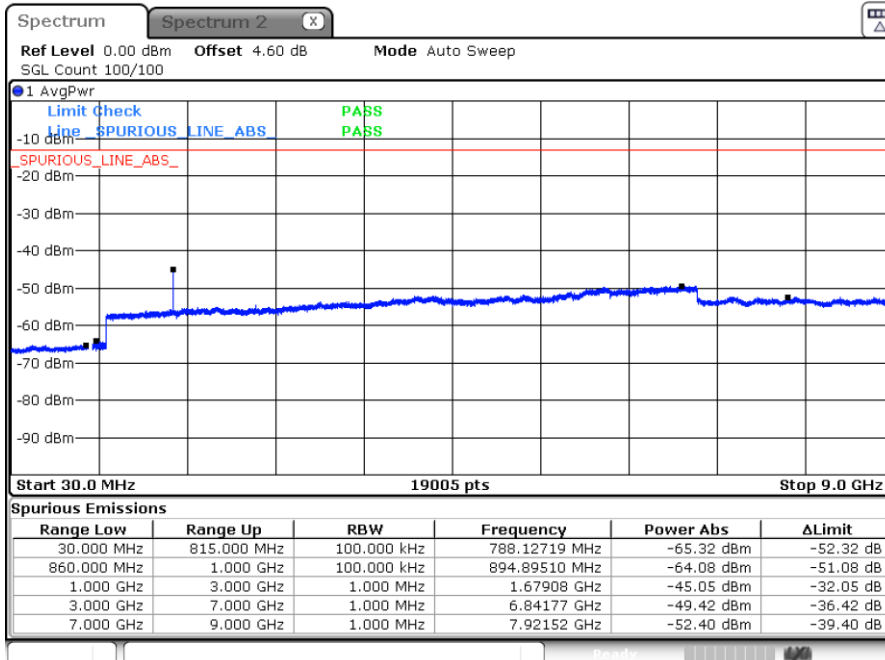


Date: 18.DEC.2024 14:32:12



Date: 18.DEC.2024 14:35:05

Highest Channel / 1RB24 and 1RB0



Date: 18.DEC.2024 14:38:30

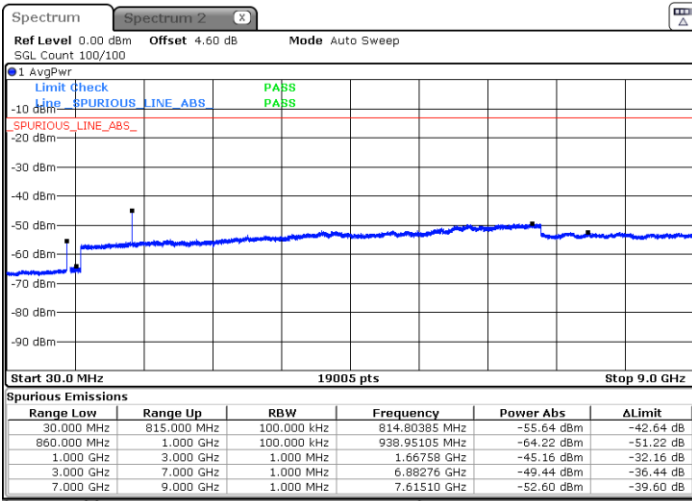


LTE Band 5B / 10MHz+5MHz

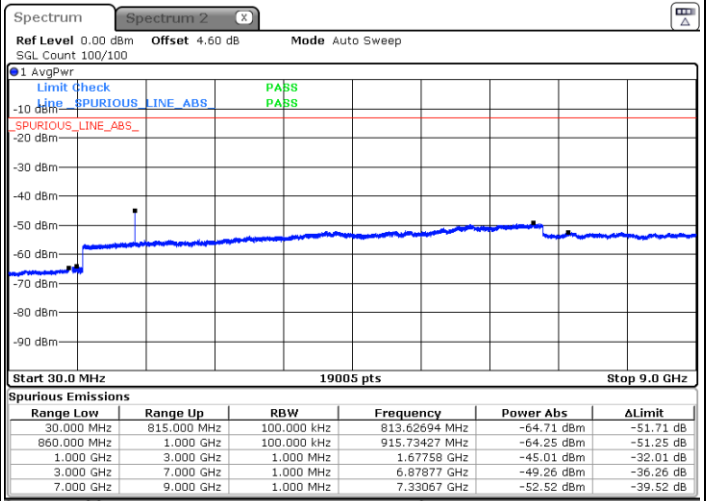
QPSK

Lowest Channel / 1RB49 and 1RB0

Middle Channel / 1RB49 and 1RB0

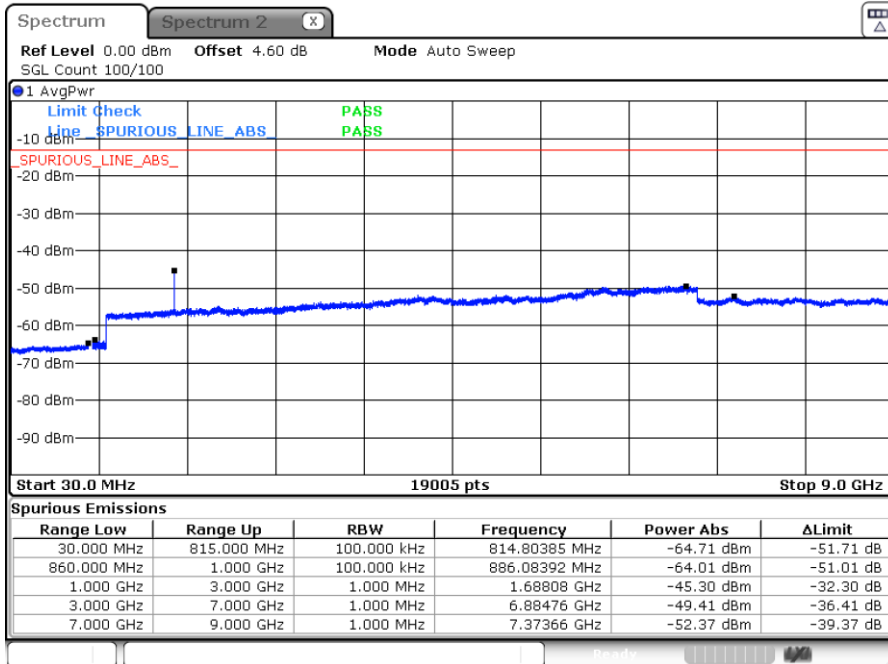


Date: 18.DEC.2024 14:40:04



Date: 18.DEC.2024 14:42:31

Highest Channel / 1RB49 and 1RB0



Date: 18.DEC.2024 14:45:55

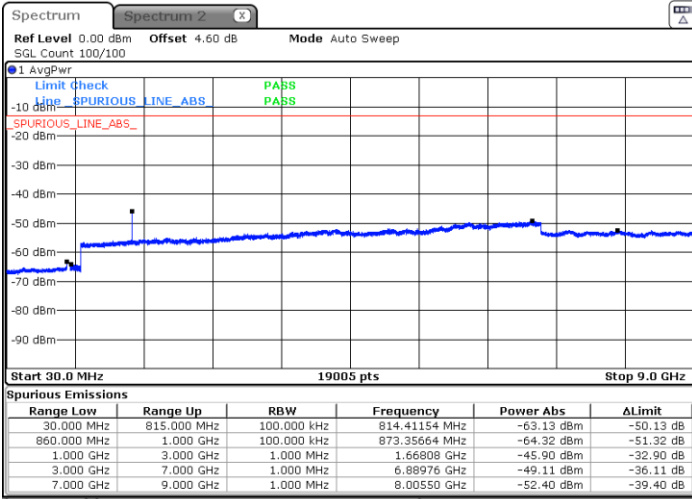


LTE Band 5B / 10MHz+10MHz

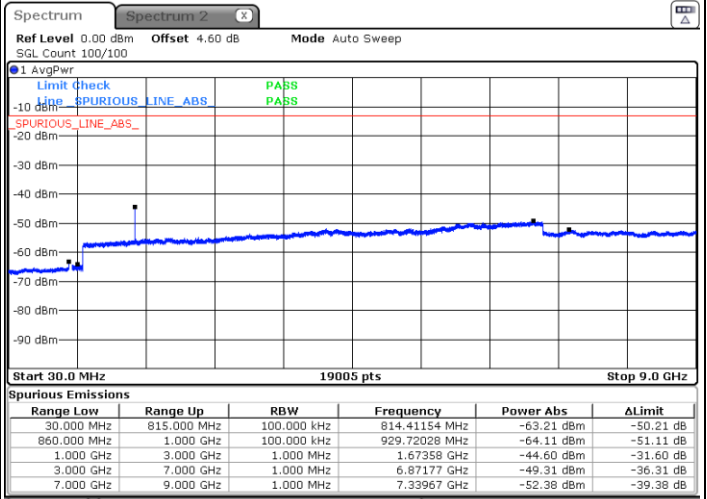
QPSK

Lowest Channel / 1RB49 and 1RB0

Middle Channel / 1RB49 and 1RB0

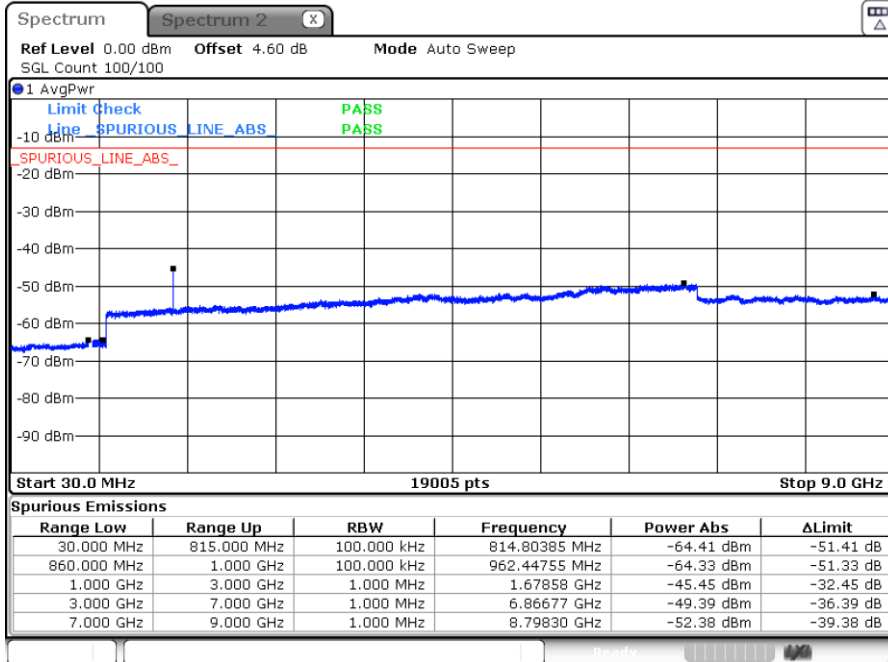


Date: 18.DEC.2024 14:47:29



Date: 18.DEC.2024 14:49:40

Highest Channel / 1RB49 and 1RB0



Date: 18.DEC.2024 14:53:05



Frequency Stability

Test Conditions		LTE Band 5B (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz+10MHZ	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0013	PASS
40	Normal Voltage	0.0022	
30	Normal Voltage	0.0057	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0038	
0	Normal Voltage	0.0056	
-10	Normal Voltage	0.0073	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0046	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0024	

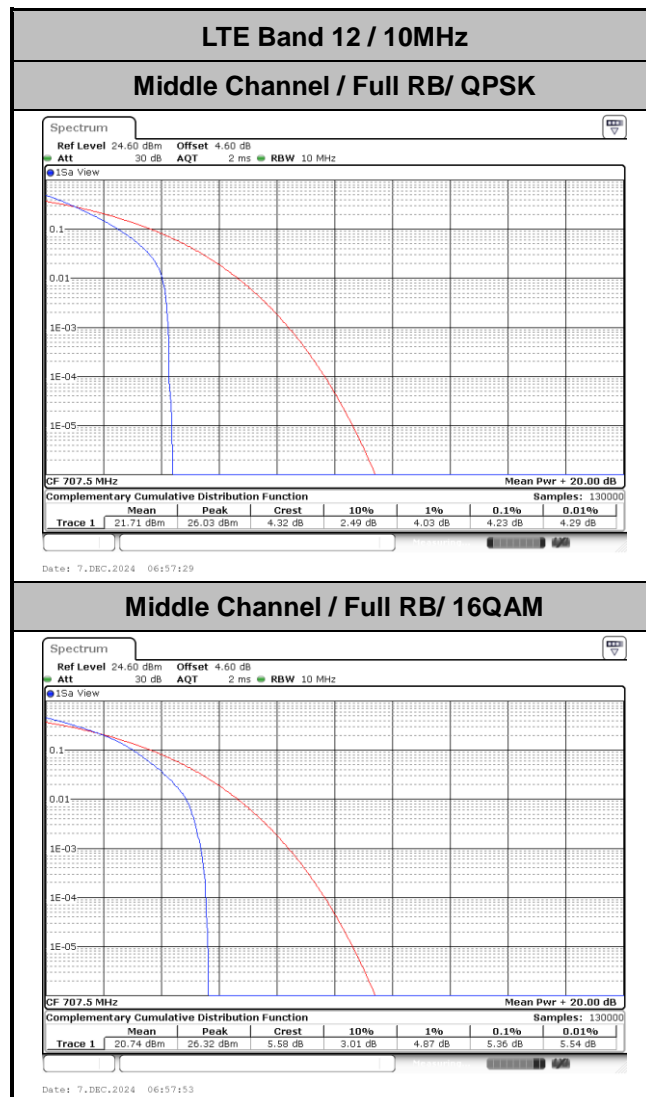
Note: Normal Voltage =3.86V. ; Battery End Point (BEP) =3.5V. ; Maximum Voltage =4.53 V.

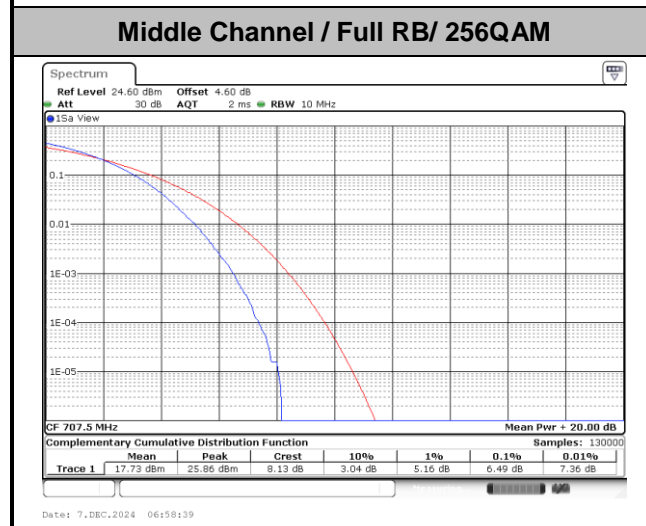
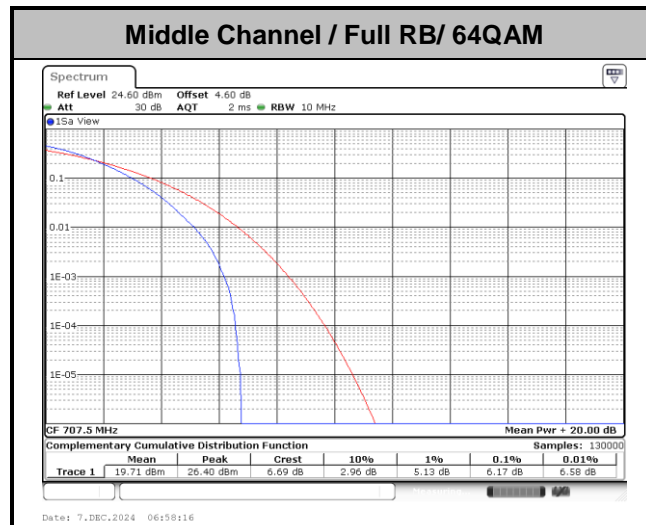


# LTE Band 12

## 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	4.23	5.36	6.17	6.49	PASS

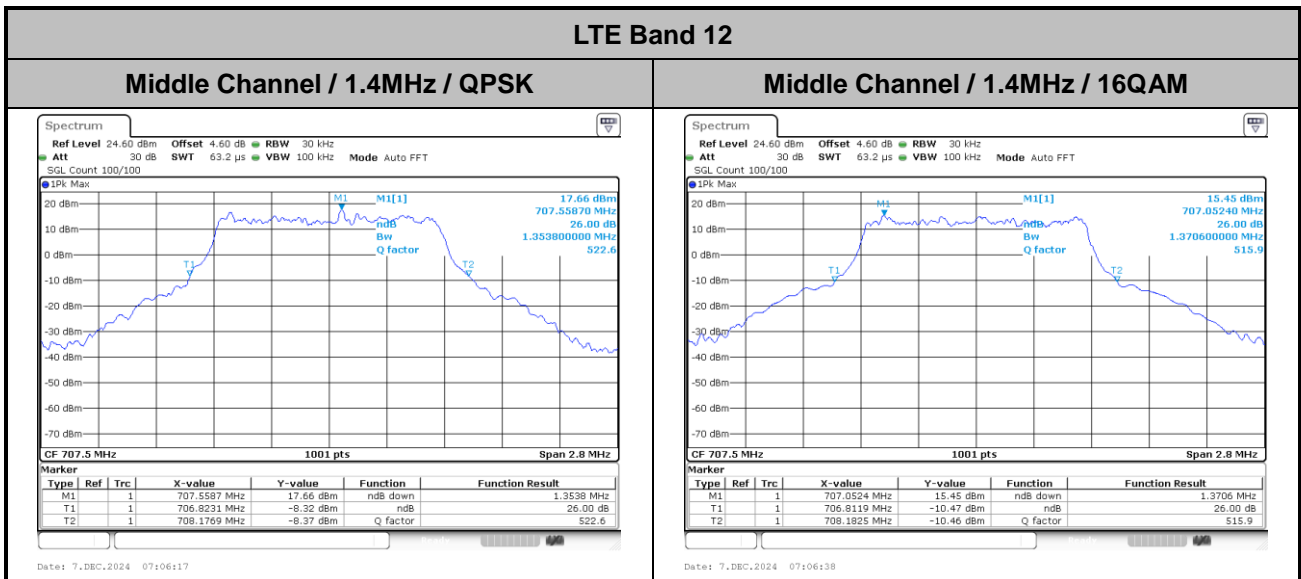






## 26dB Bandwidth

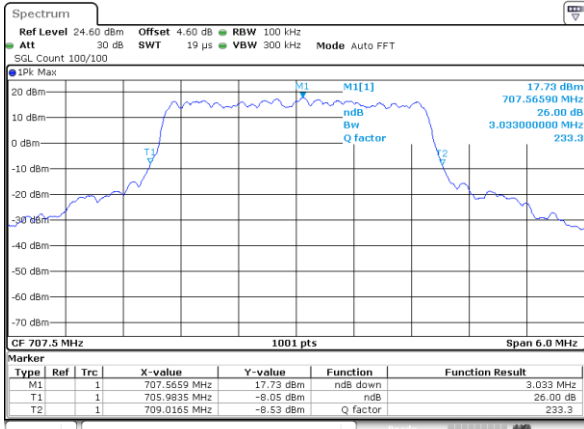
Mode	LTE Band 12 : 26dB BW(MHz)	
<b>BW</b>	<b>1.4MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	1.35	1.37
<b>BW</b>	<b>3MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	3.03	3.06
<b>BW</b>	<b>5MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	5.03	5.15
<b>BW</b>	<b>10MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	9.91	9.99





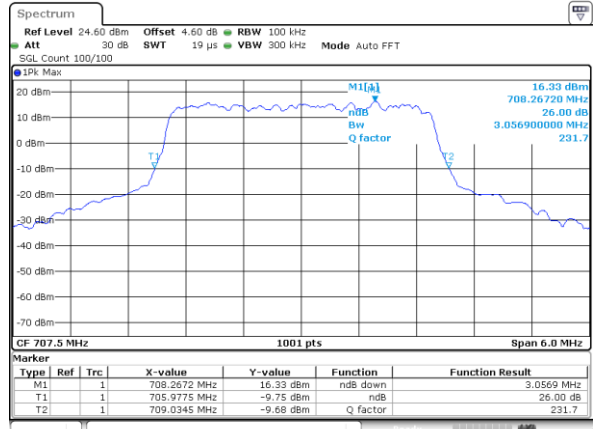
LTE Band 12

Middle Channel / 3MHz / QPSK



Date: 7,DEC,2024 07:04:04

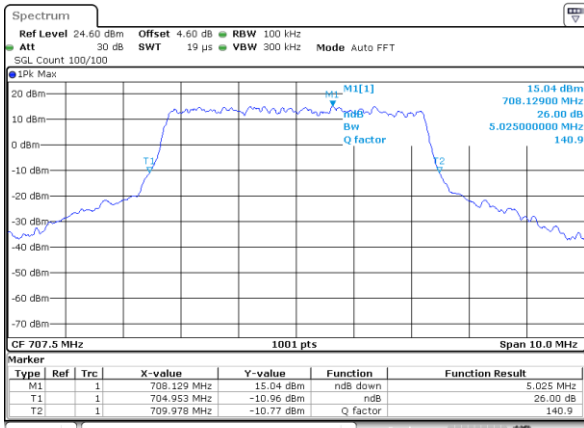
Middle Channel / 3MHz / 16QAM



Date: 7,DEC,2024 07:04:25

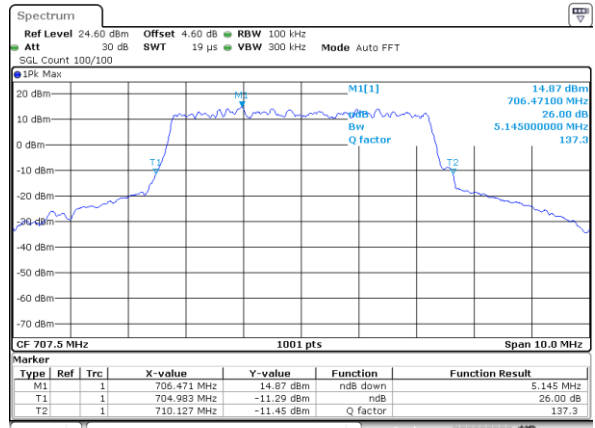
LTE Band 12

Middle Channel / 5MHz / QPSK



Date: 7,DEC,2024 07:02:38

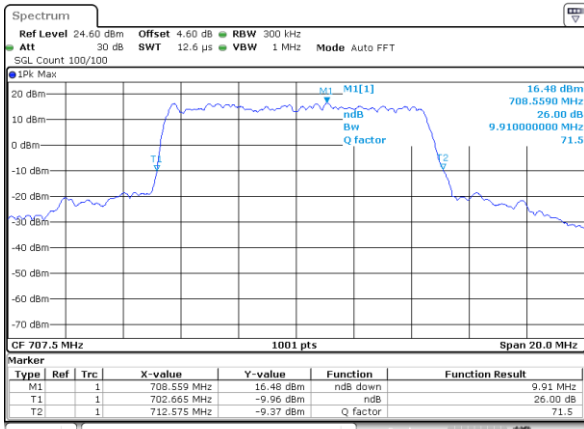
Middle Channel / 5MHz / 16QAM



Date: 7,DEC,2024 07:03:00

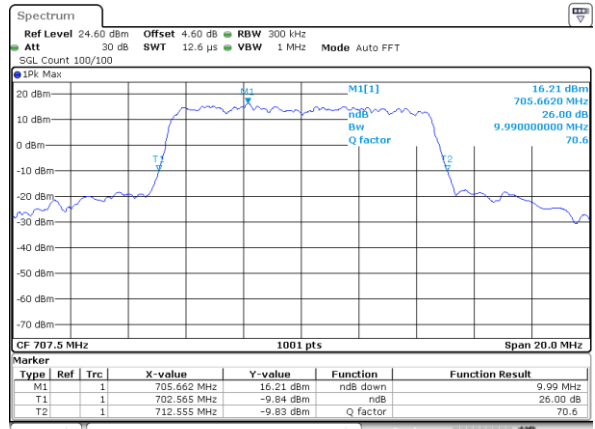
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 7,DEC,2024 07:01:34

Middle Channel / 10MHz / 16QAM

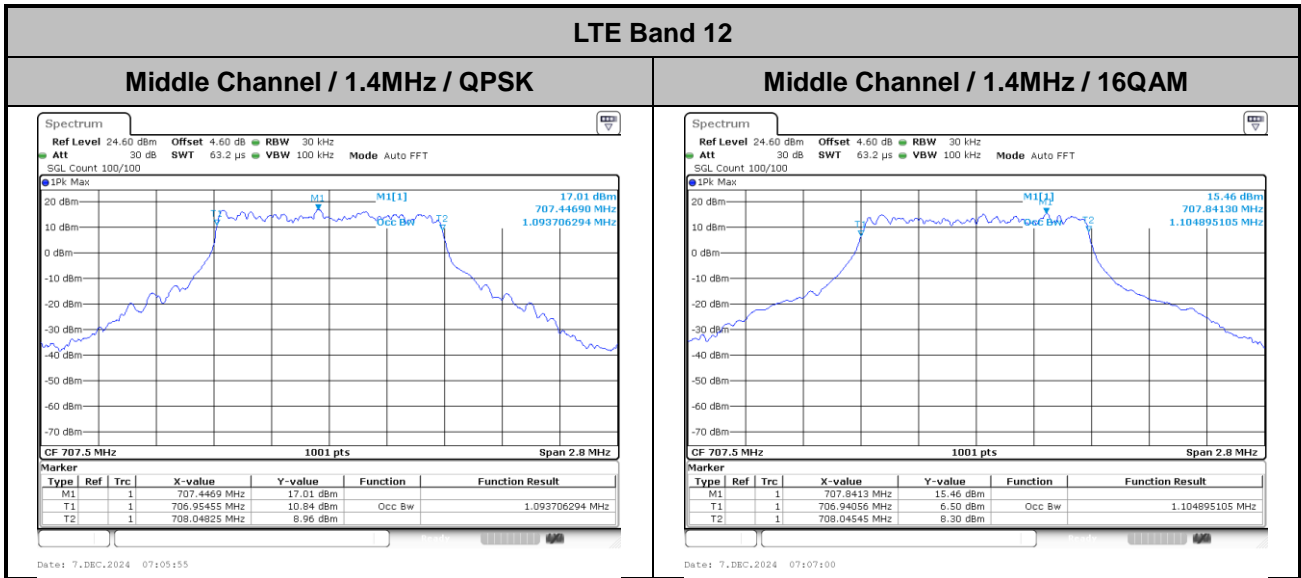


Date: 7,DEC,2024 07:01:55



## Occupied Bandwidth

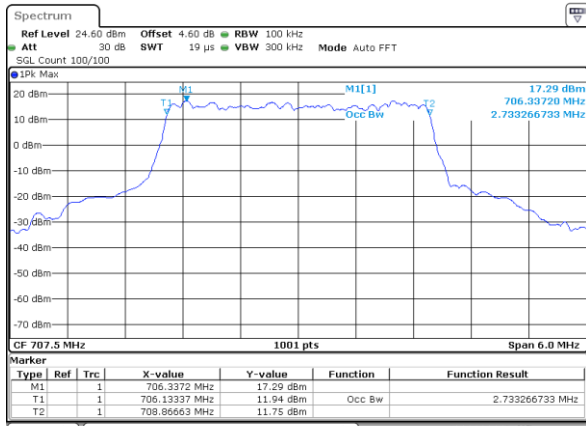
Mode	LTE Band 12 : 99%OBW(MHz)	
<b>BW</b>	<b>1.4MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	1.09	1.10
<b>BW</b>	<b>3MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	2.73	2.74
<b>BW</b>	<b>5MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	4.49	4.49
<b>BW</b>	<b>10MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	9.01	9.05





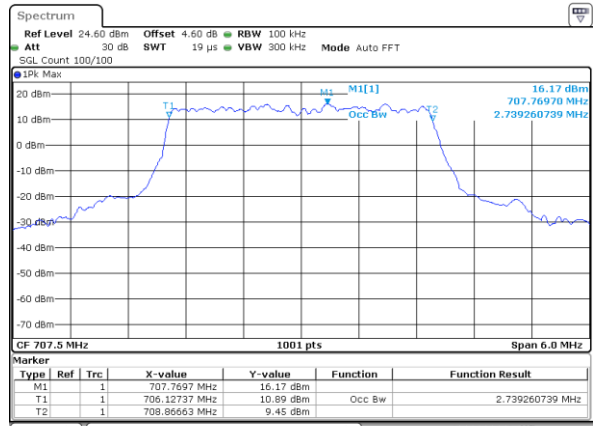
LTE Band 12

Middle Channel / 3MHz / QPSK



Date: 7.DEC.2024 07:03:43

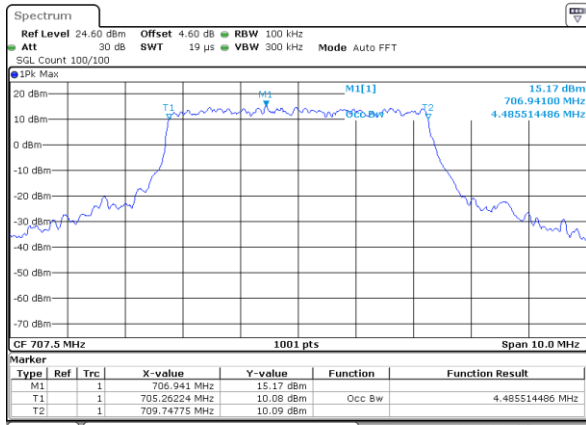
Middle Channel / 3MHz / 16QAM



Date: 7.DEC.2024 07:04:47

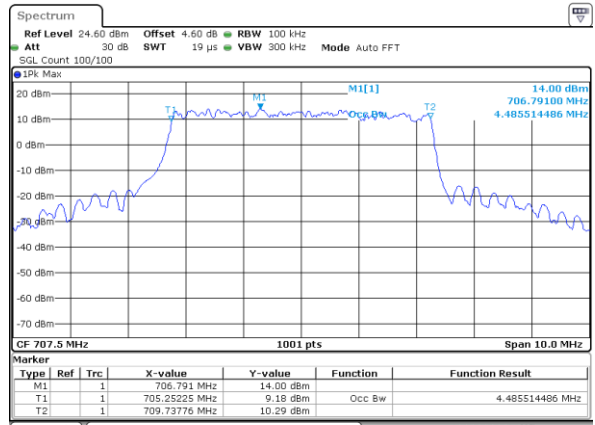
LTE Band 12

Middle Channel / 5MHz / QPSK



Date: 7.DEC.2024 07:02:17

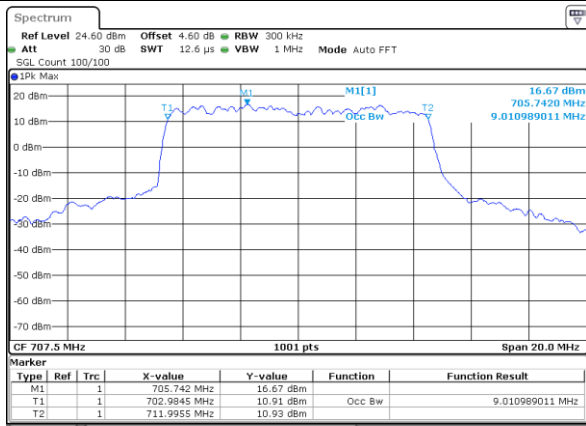
Middle Channel / 5MHz / 16QAM



Date: 7.DEC.2024 07:03:21

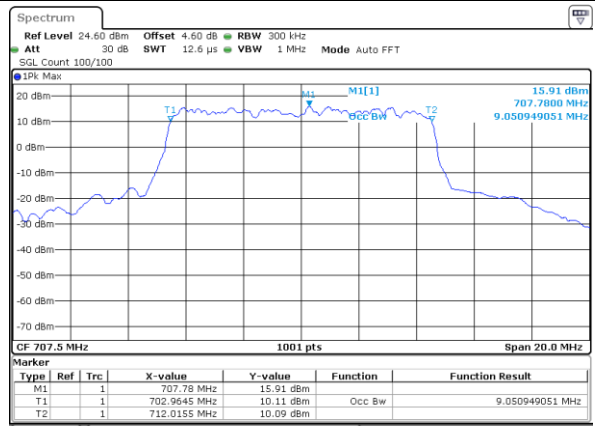
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 7.DEC.2024 07:00:51

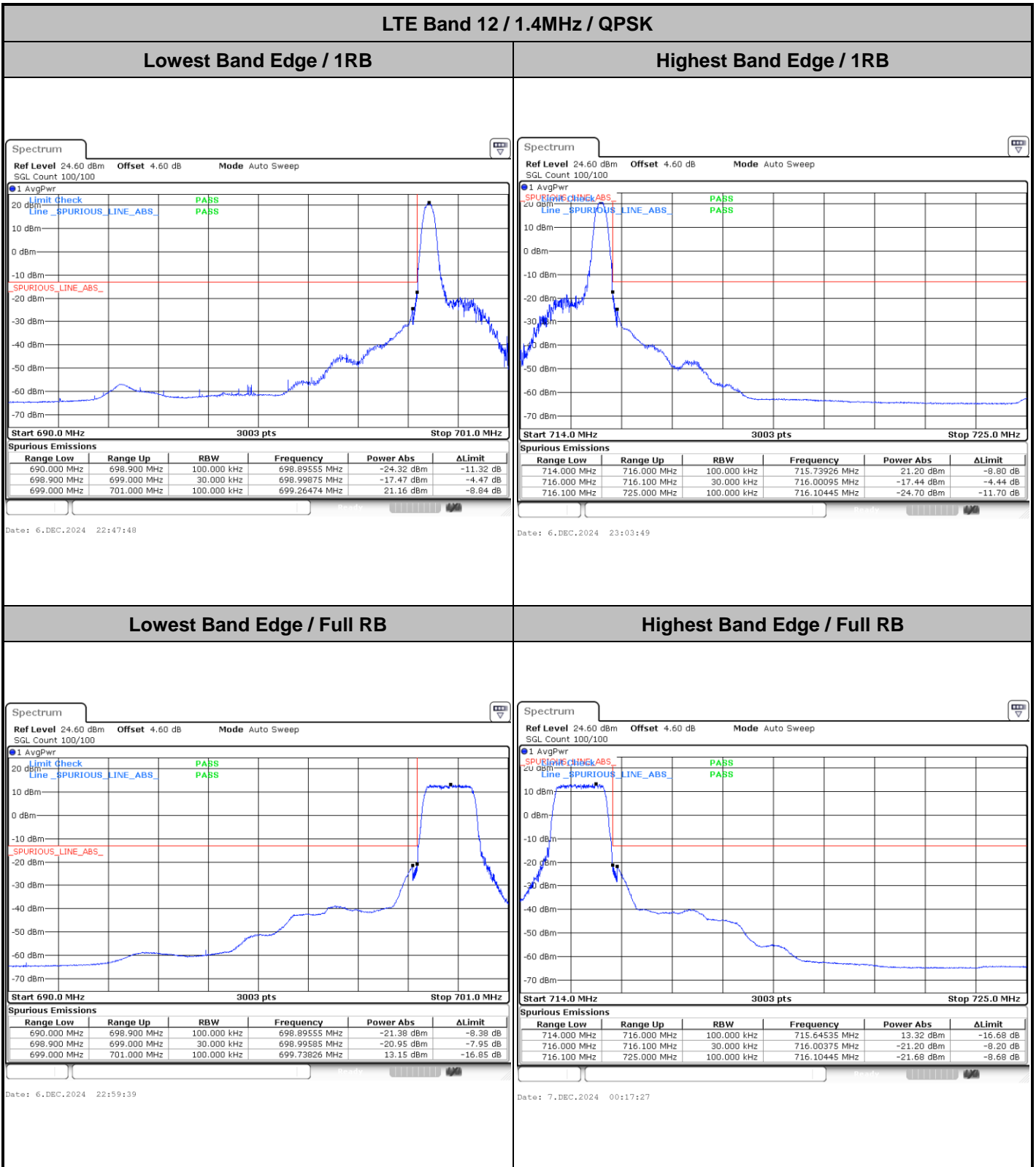
Middle Channel / 10MHz / 16QAM



Date: 7.DEC.2024 07:01:13



# Conducted Band Edge





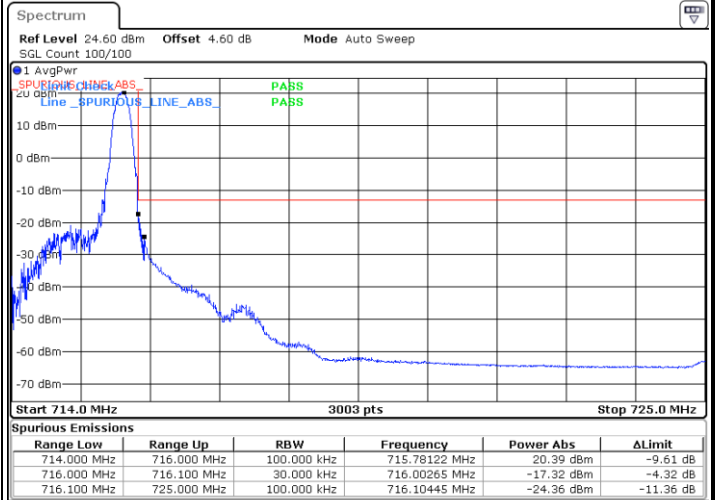
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



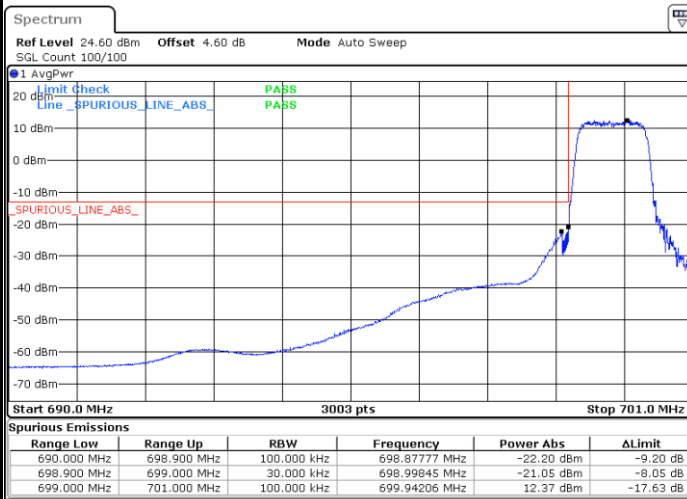
Date: 6.DEC.2024 22:49:14

Highest Band Edge / 1 RB



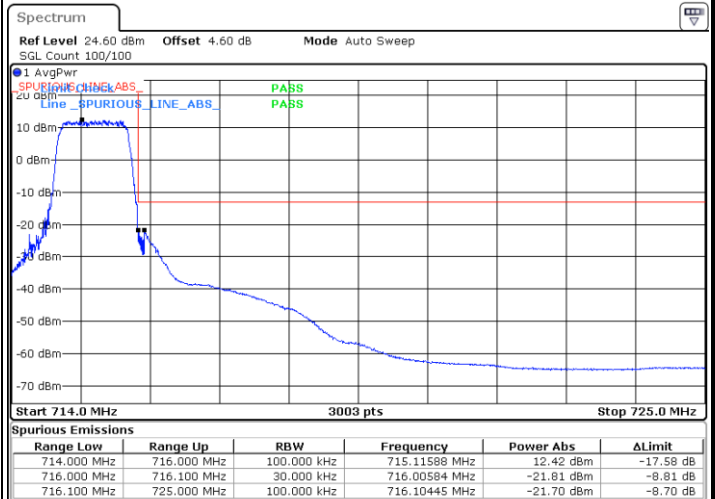
Date: 6.DEC.2024 23:05:15

Lowest Band Edge / Full RB



Date: 6.DEC.2024 22:58:14

Highest Band Edge / Full RB

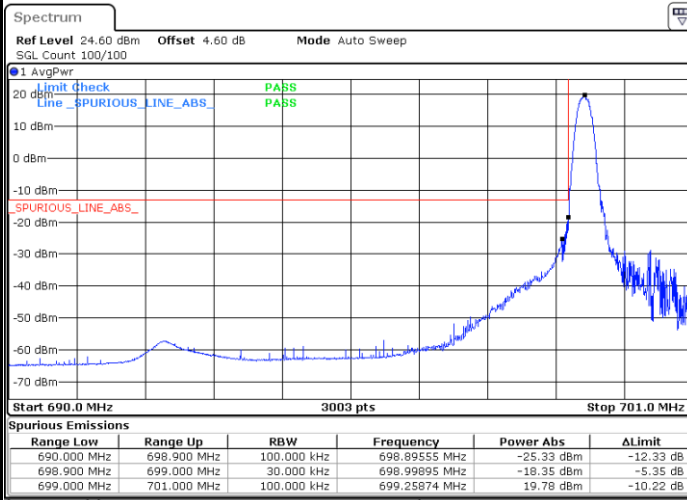


Date: 7.DEC.2024 00:16:02



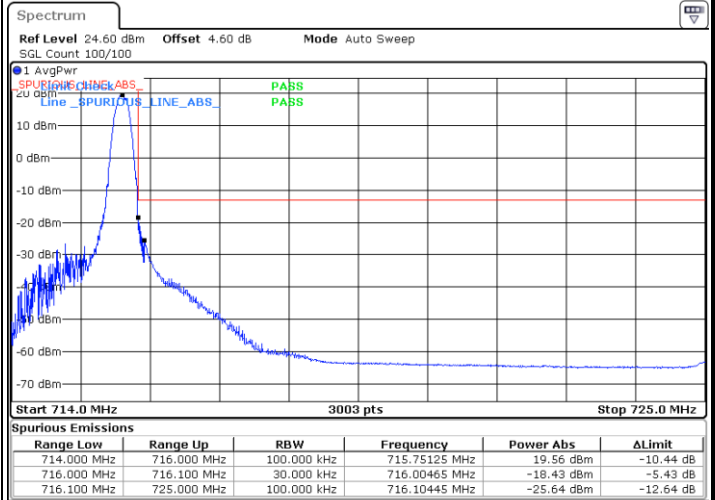
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



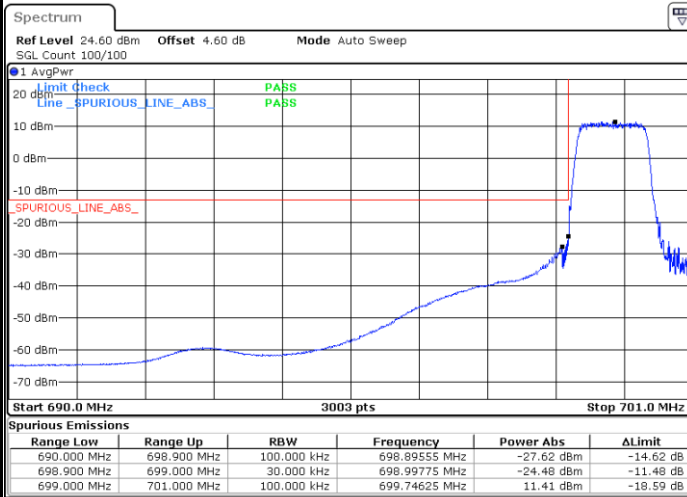
Date: 6.DEC.2024 22:50:39

Highest Band Edge / 1 RB



Date: 6.DEC.2024 23:06:40

Lowest Band Edge / Full RB



Date: 6.DEC.2024 22:56:49

Highest Band Edge / Full RB

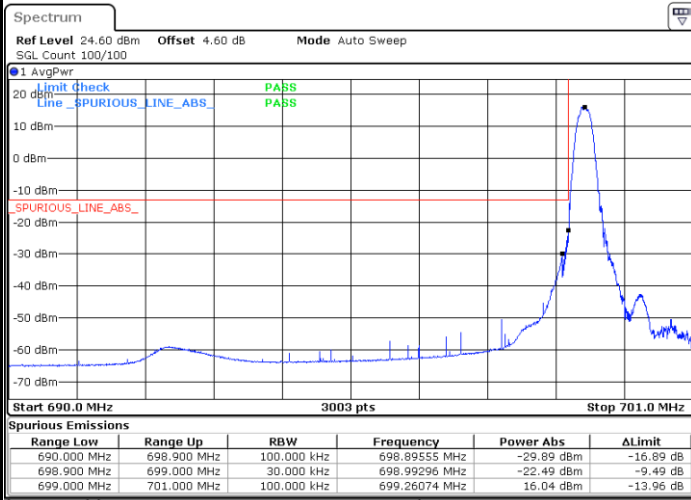


Date: 7.DEC.2024 00:14:36

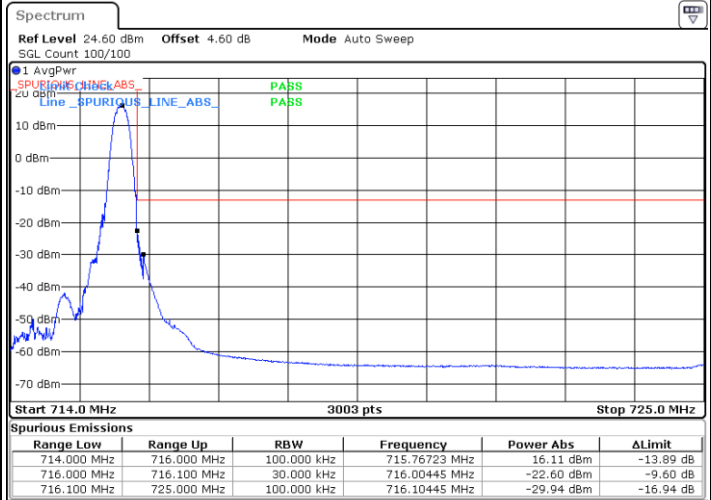


LTE Band 12 / 1.4MHz / 256QAM

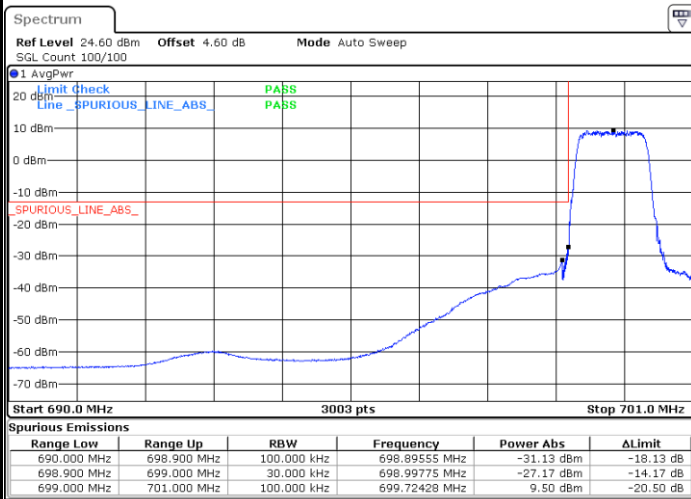
Lowest Band Edge / 1 RB



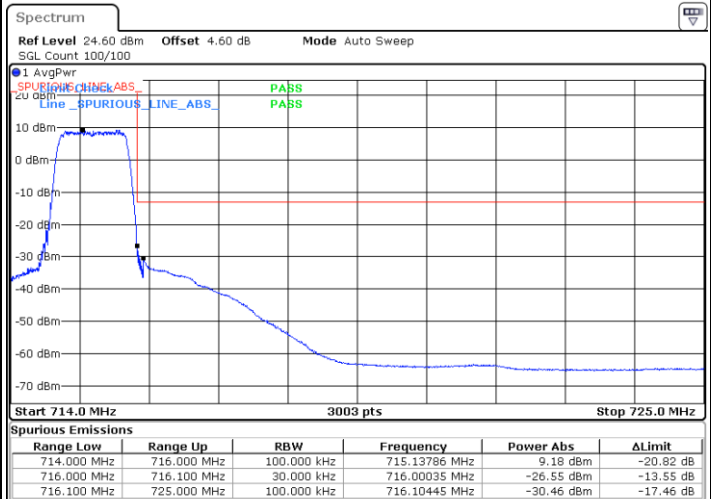
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



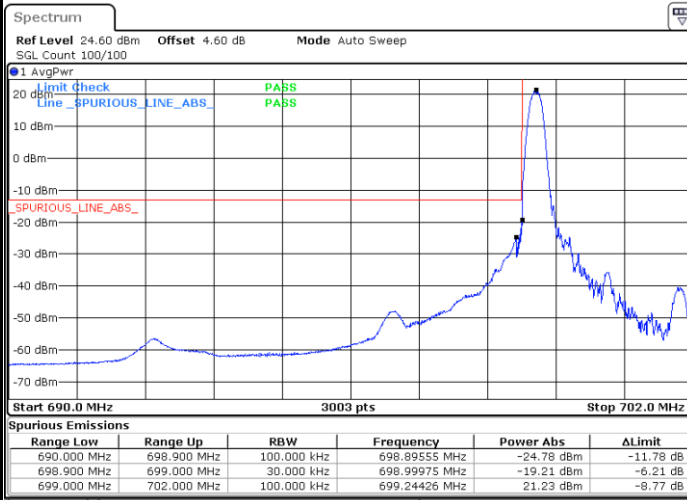
Highest Band Edge / Full RB





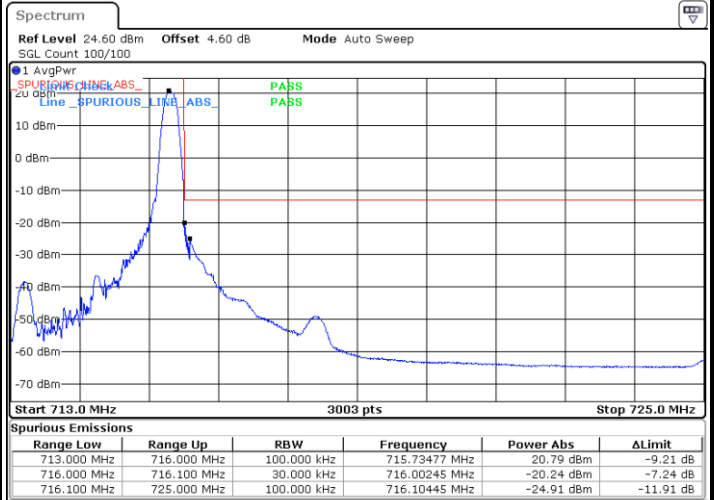
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



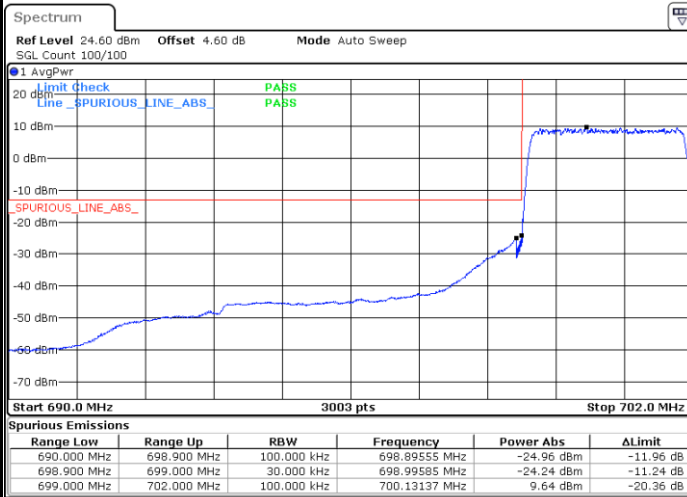
Date: 7.DEC.2024 00:20:15

Highest Band Edge / 1 RB



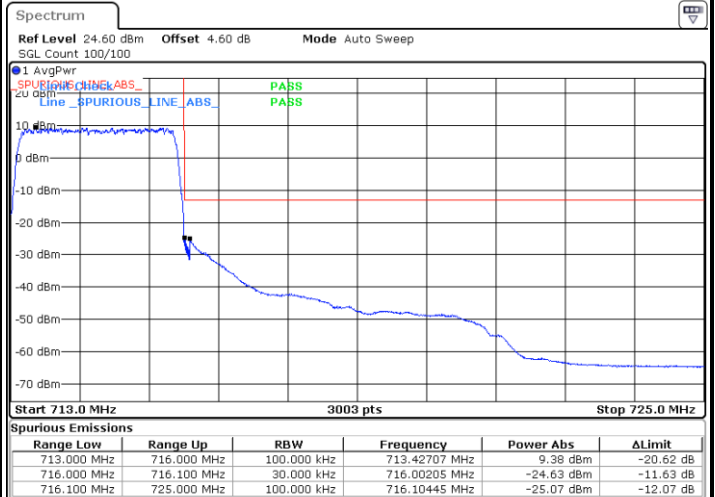
Date: 7.DEC.2024 00:34:22

Lowest Band Edge / Full RB



Date: 7.DEC.2024 00:30:12

Highest Band Edge / Full RB

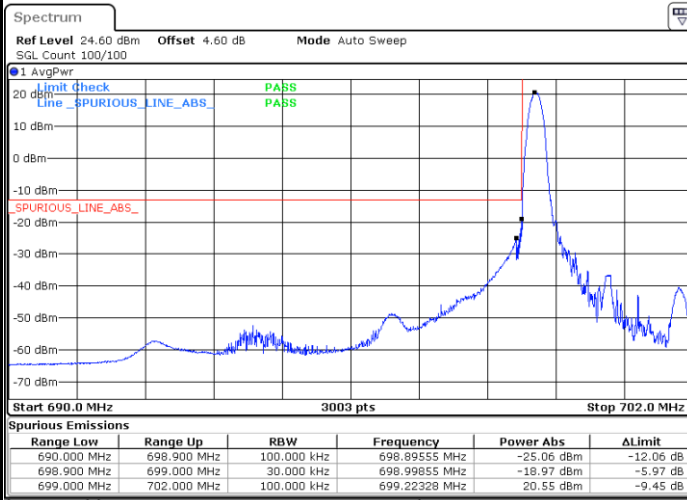


Date: 7.DEC.2024 00:44:18



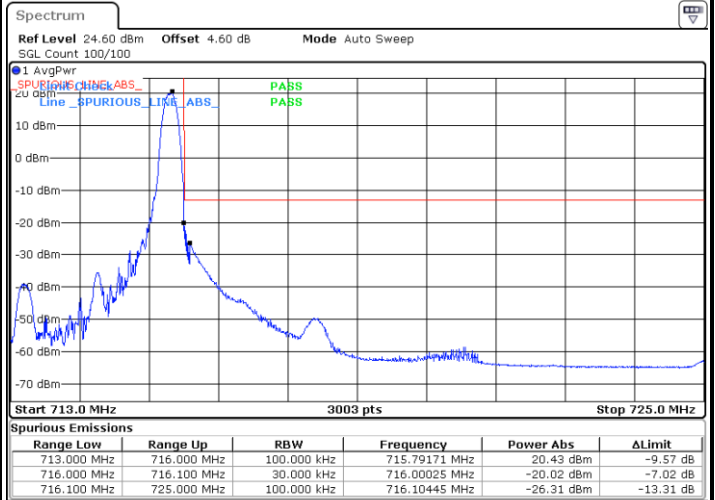
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



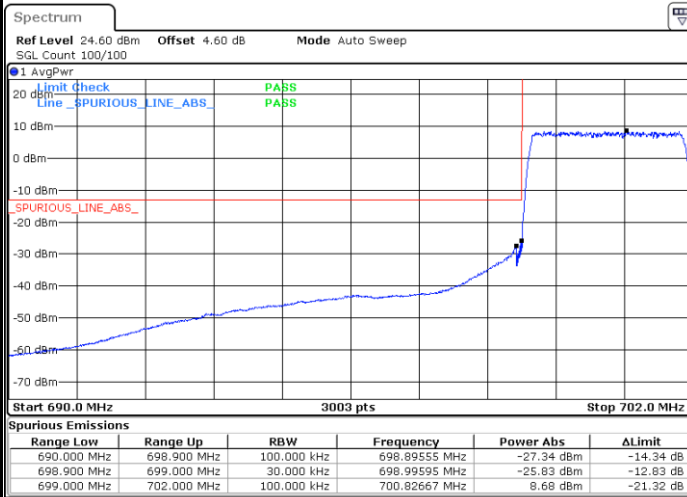
Date: 7. DEC. 2024 00:21:41

Highest Band Edge / 1 RB



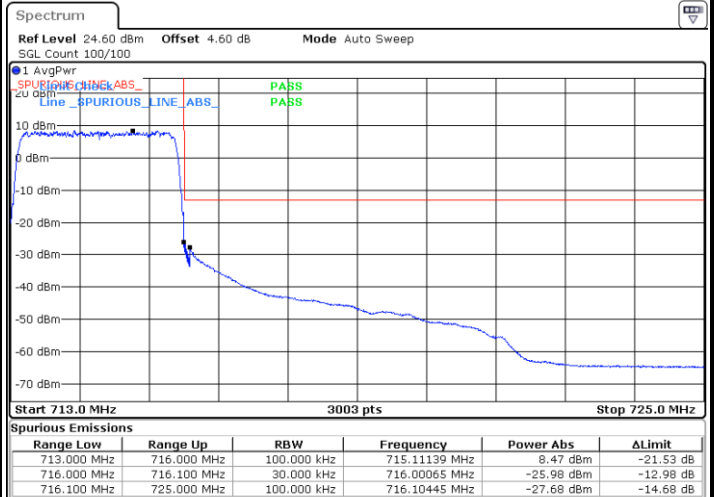
Date: 7. DEC. 2024 00:35:47

Lowest Band Edge / Full RB



Date: 7. DEC. 2024 00:28:47

Highest Band Edge / Full RB

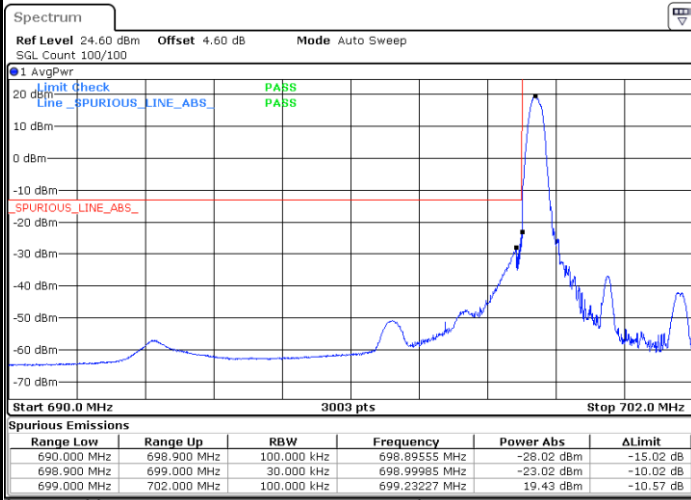


Date: 7. DEC. 2024 00:42:53



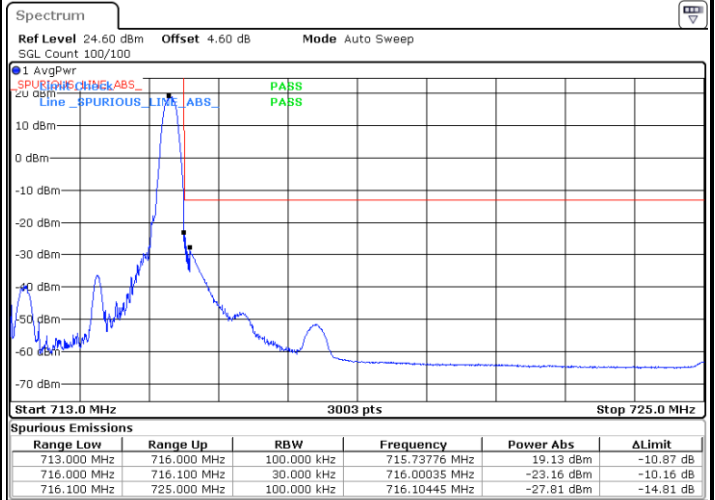
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



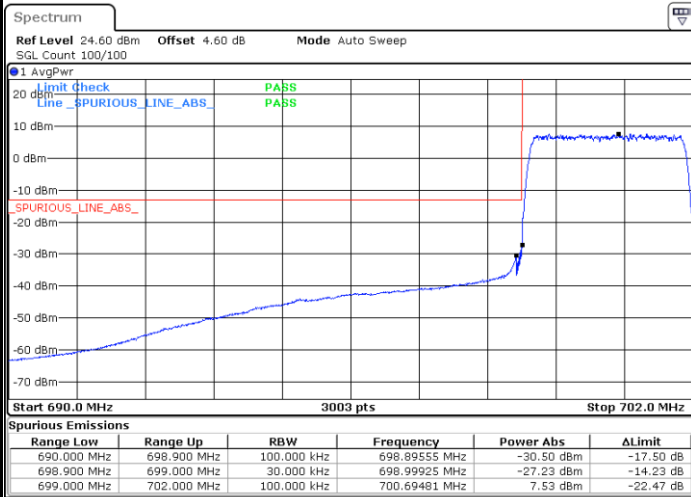
Date: 7.DEC.2024 00:23:06

Highest Band Edge / 1 RB



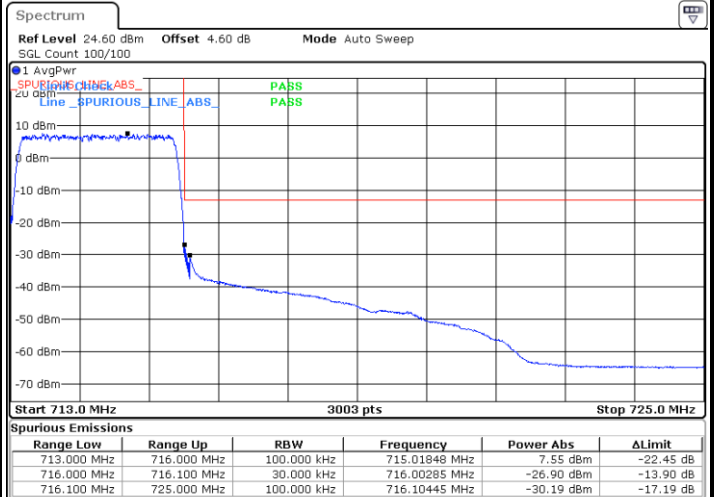
Date: 7.DEC.2024 00:37:12

Lowest Band Edge / Full RB



Date: 7.DEC.2024 00:27:21

Highest Band Edge / Full RB



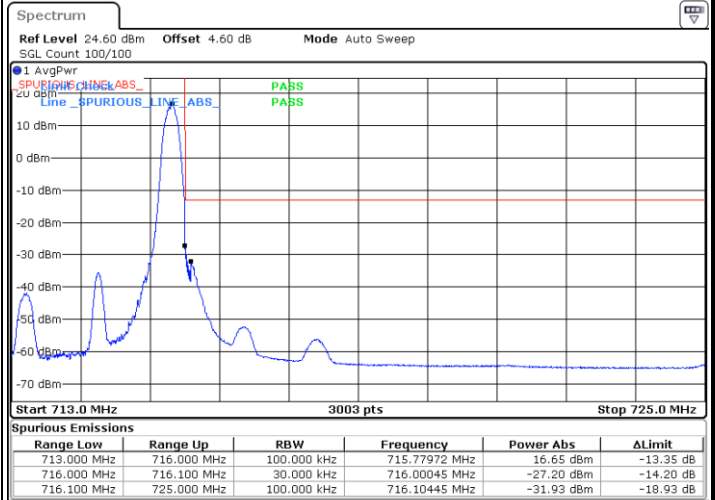
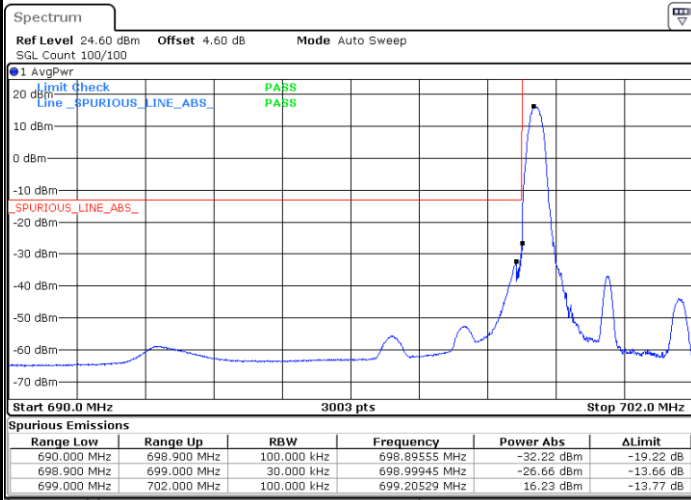
Date: 7.DEC.2024 00:41:28



LTE Band 12 / 3MHz / 256QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

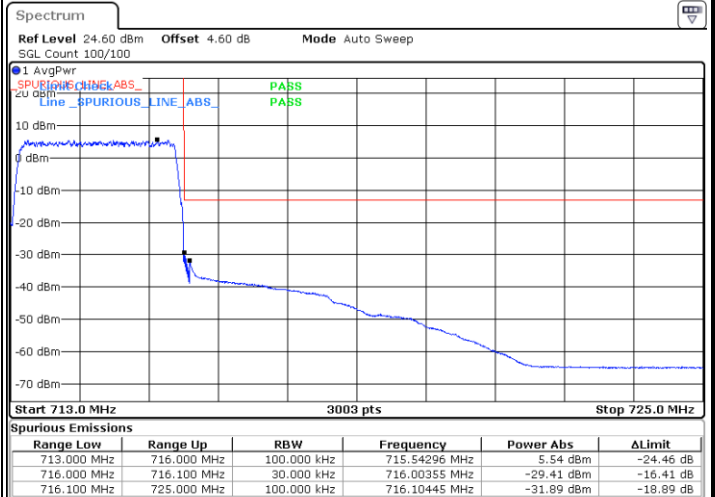
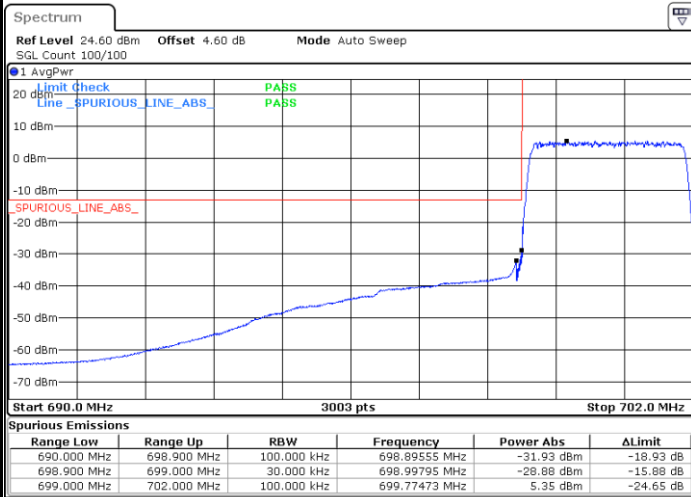


Date: 7.DEC.2024 00:24:31

Date: 7.DEC.2024 00:38:37

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



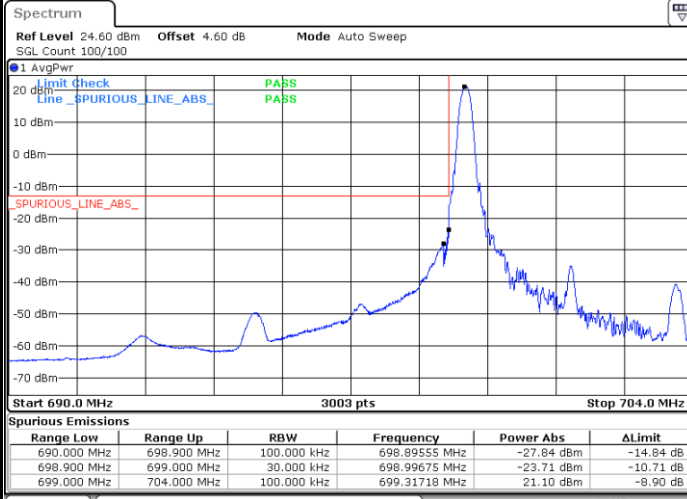
Date: 7.DEC.2024 00:25:56

Date: 7.DEC.2024 00:40:03



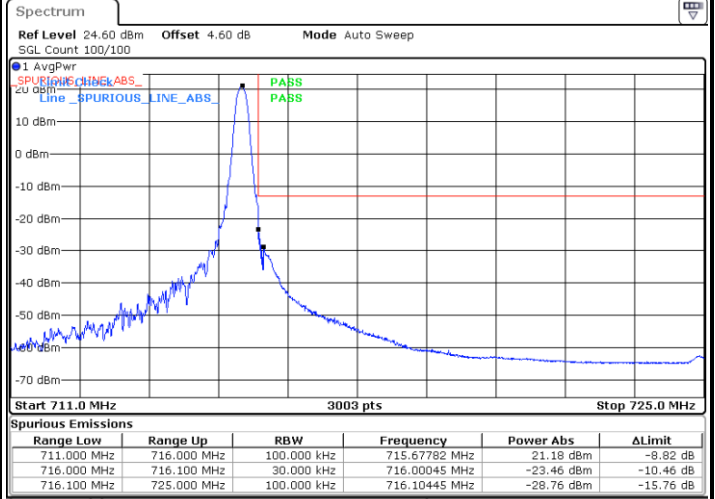
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



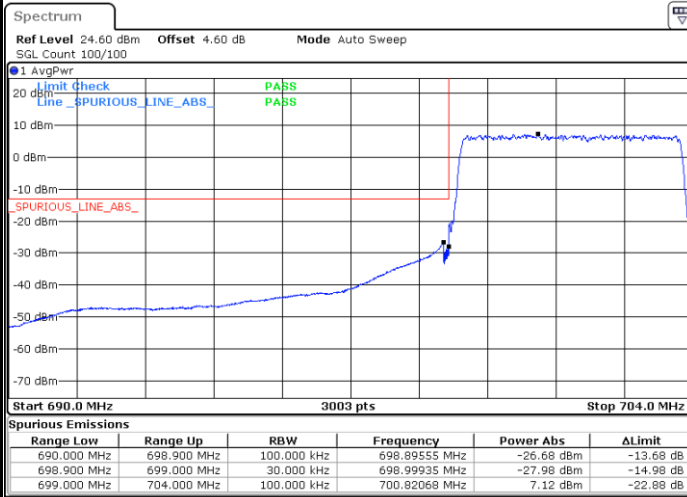
Date: 7.DEC.2024 00:47:06

Highest Band Edge / 1 RB



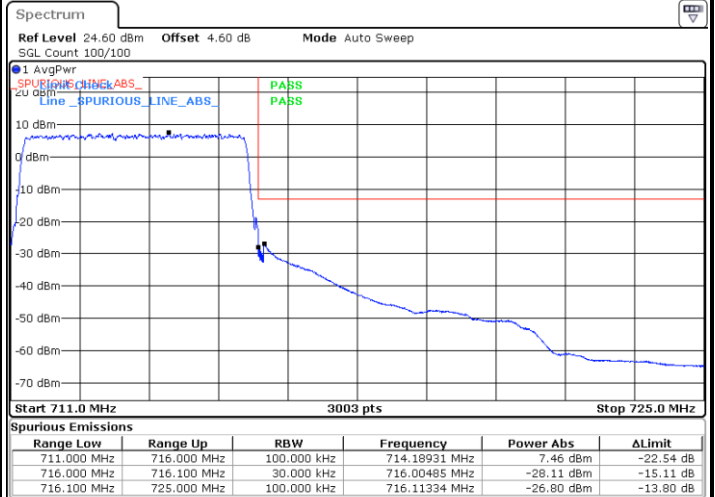
Date: 7.DEC.2024 06:25:58

Lowest Band Edge / Full RB



Date: 7.DEC.2024 00:57:03

Highest Band Edge / Full RB



Date: 7.DEC.2024 06:35:20