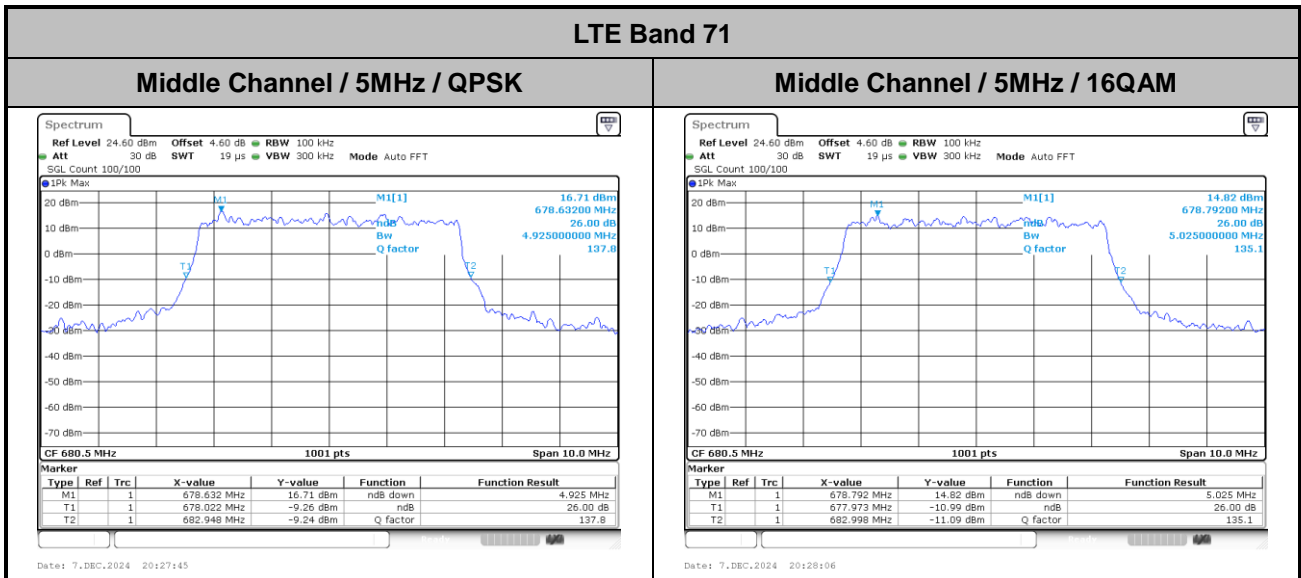




**26dB Bandwidth**

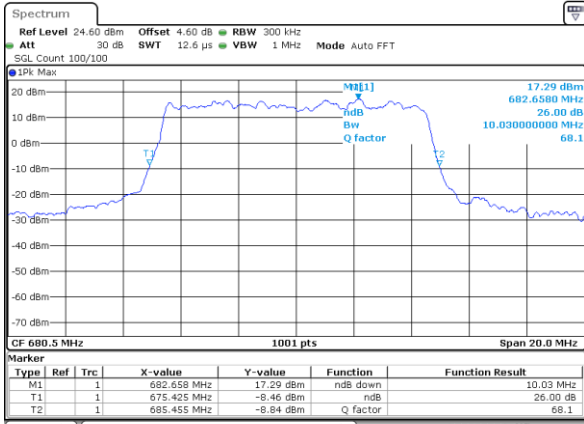
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.93	5.03
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	10.03	10.09
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.45	14.27
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.66	18.98





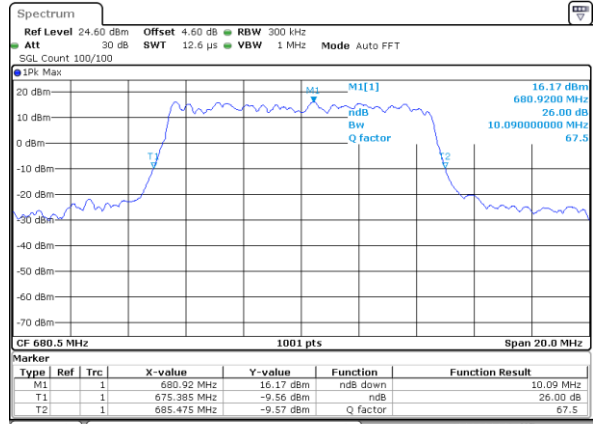
LTE Band 71

Middle Channel / 10MHz / QPSK



Date: 7,DEC,2024 20:51:17

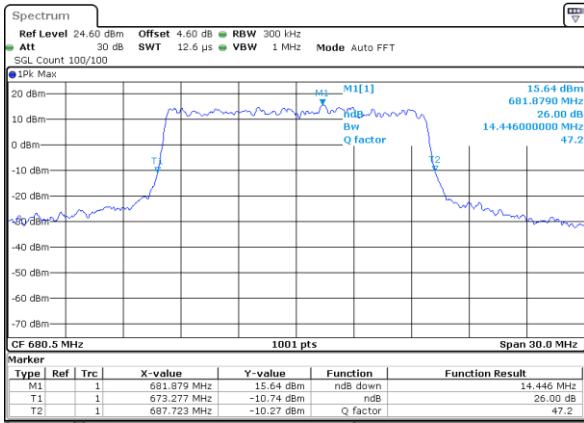
Middle Channel / 10MHz / 16QAM



Date: 7,DEC,2024 20:51:39

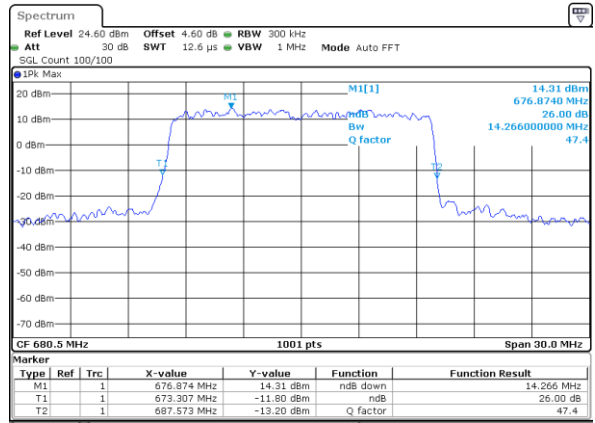
LTE Band 71

Middle Channel / 15MHz / QPSK



Date: 7,DEC,2024 21:14:54

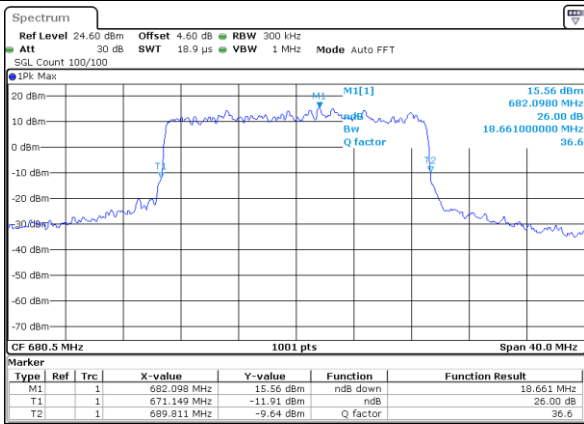
Middle Channel / 15MHz / 16QAM



Date: 7,DEC,2024 21:15:15

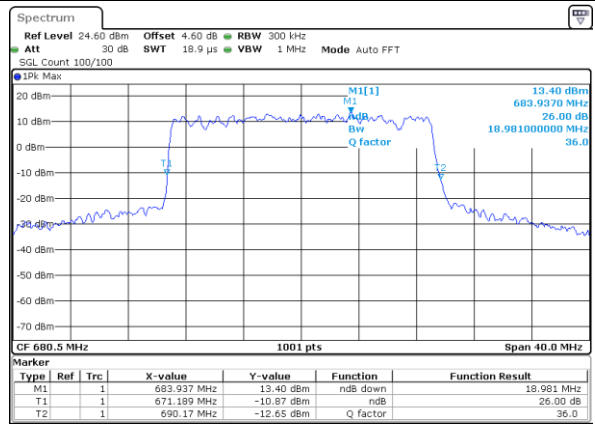
LTE Band 71

Middle Channel / 20MHz / QPSK



Date: 7,DEC,2024 21:38:29

Middle Channel / 20MHz / 16QAM

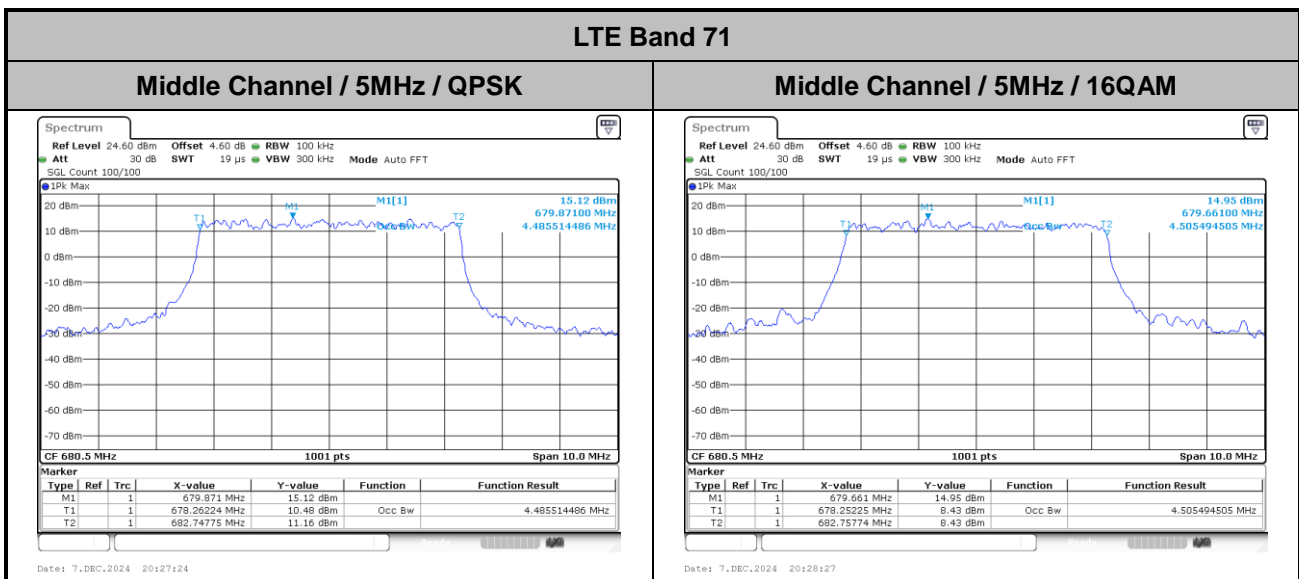


Date: 7,DEC,2024 21:38:50



## Occupied Bandwidth

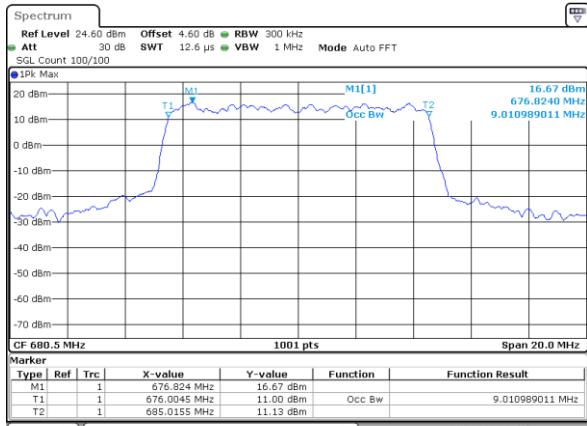
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.49	4.51
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	9.01
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.46	13.40
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.90	17.78





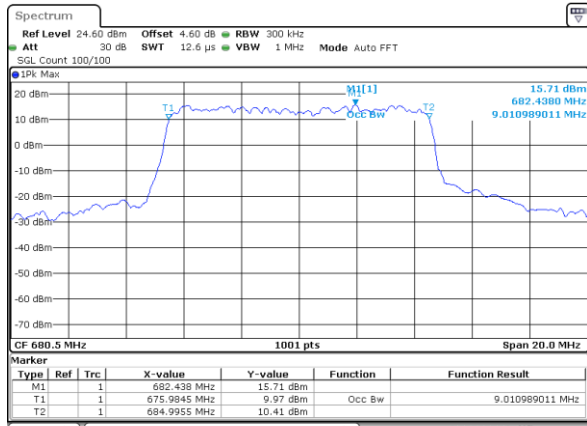
LTE Band 71

Middle Channel / 10MHz / QPSK



Date: 7,DEC,2024 20:50:57

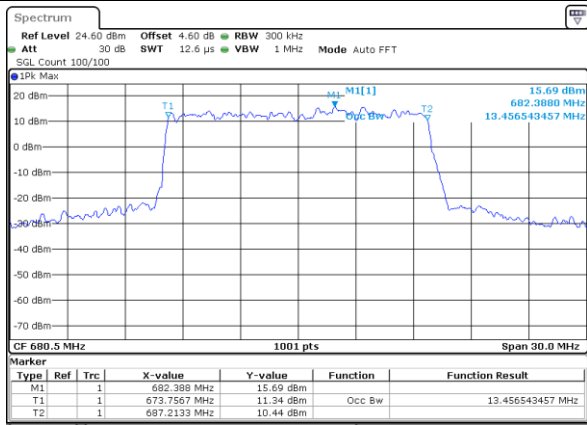
Middle Channel / 10MHz / 16QAM



Date: 7,DEC,2024 20:52:00

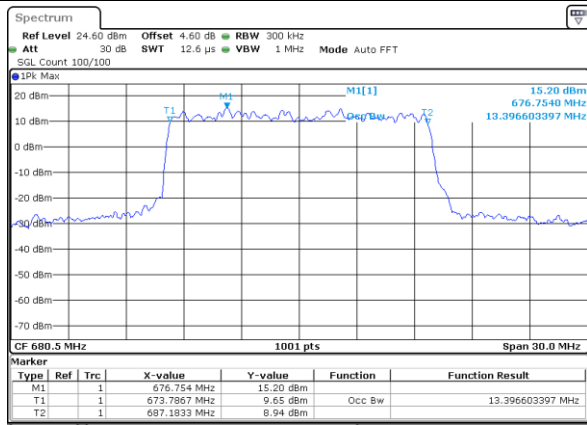
LTE Band 71

Middle Channel / 15MHz / QPSK



Date: 7,DEC,2024 21:14:33

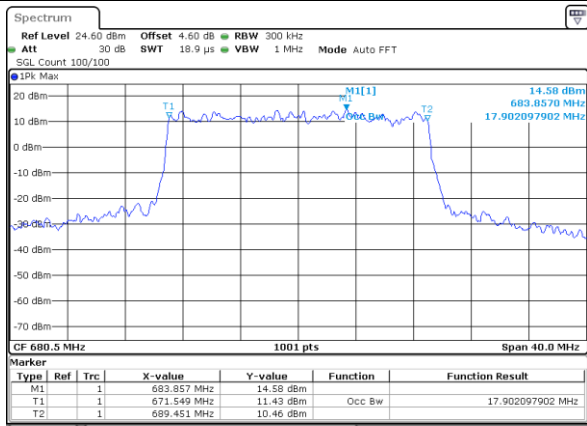
Middle Channel / 15MHz / 16QAM



Date: 7,DEC,2024 21:15:36

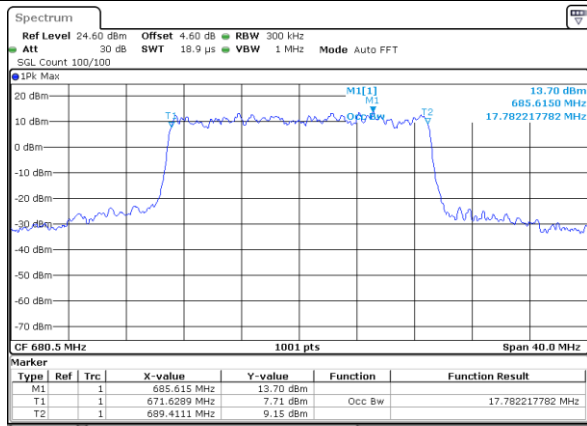
LTE Band 71

Middle Channel / 20MHz / QPSK



Date: 7,DEC,2024 21:38:08

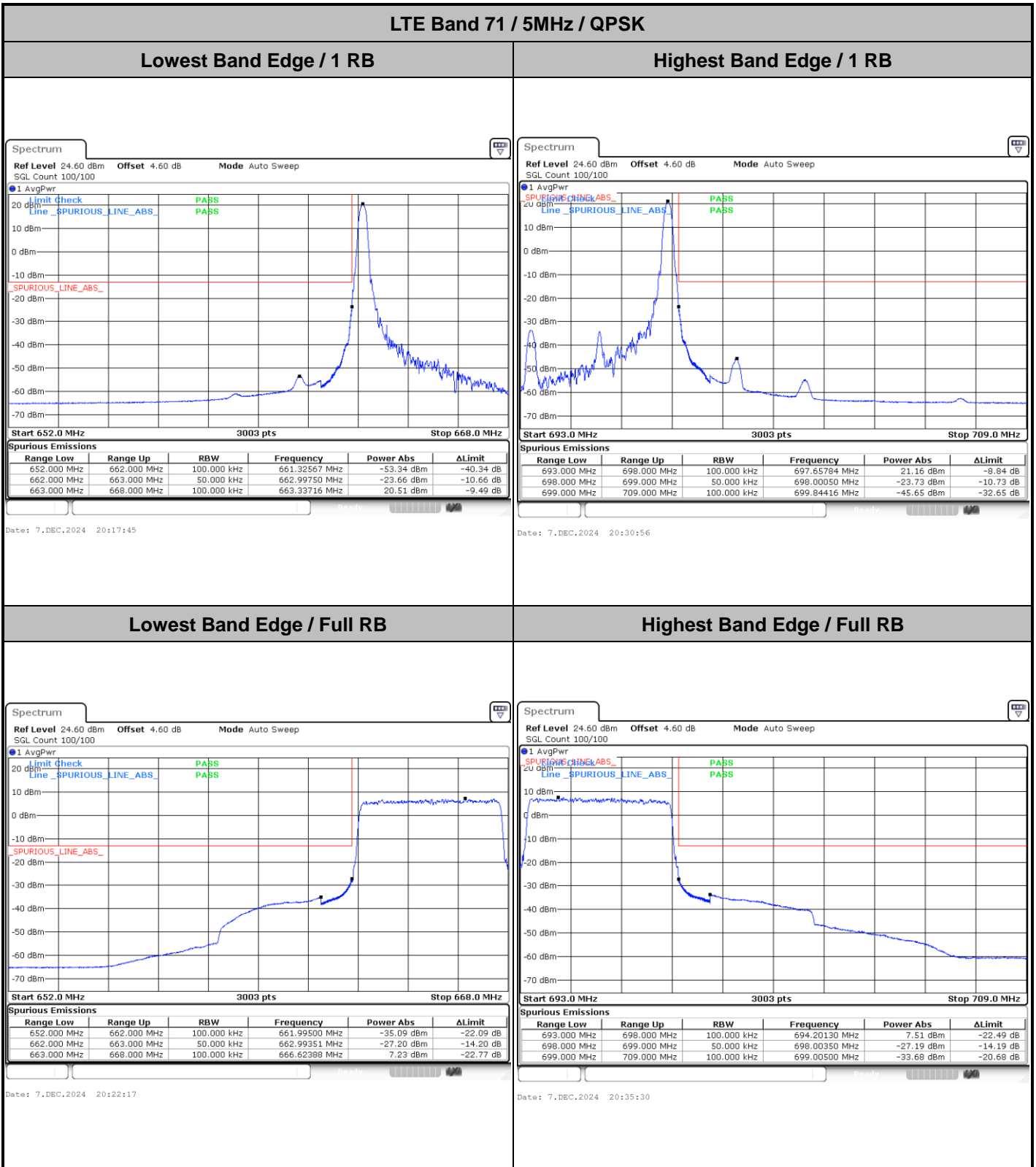
Middle Channel / 20MHz / 16QAM



Date: 7,DEC,2024 21:39:12



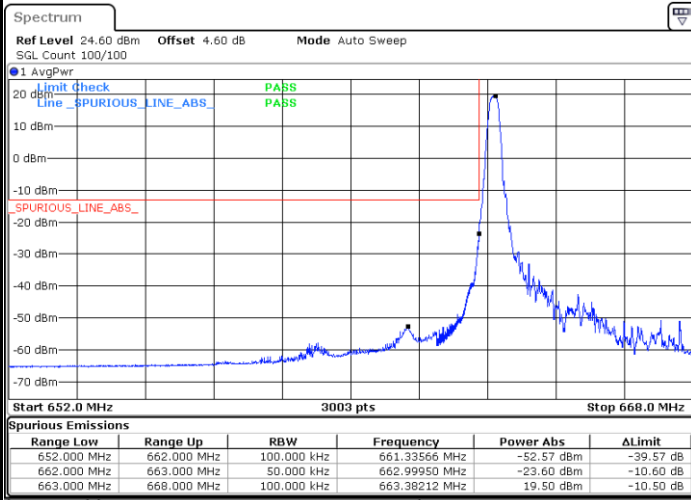
# Conducted Band Edge





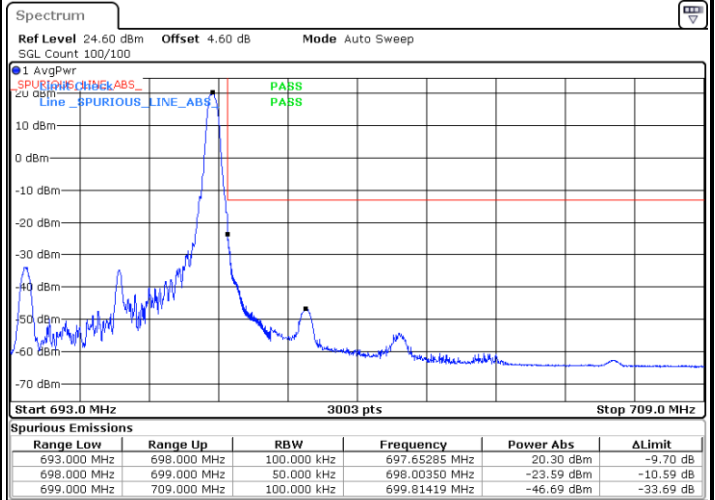
LTE Band 71 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



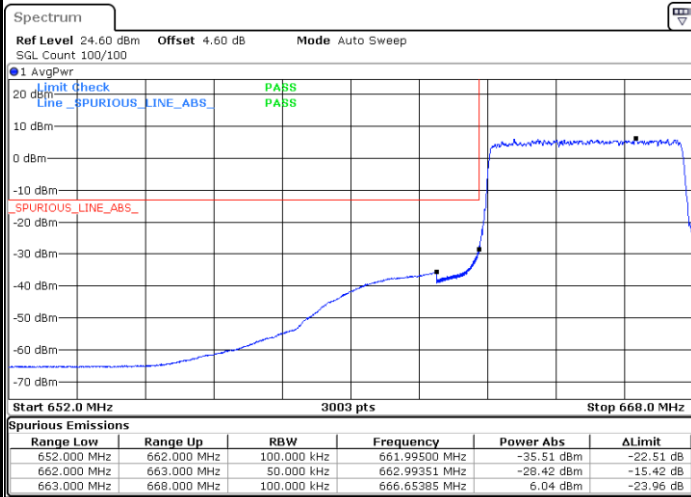
Date: 7.DEC.2024 20:18:53

Highest Band Edge / 1 RB



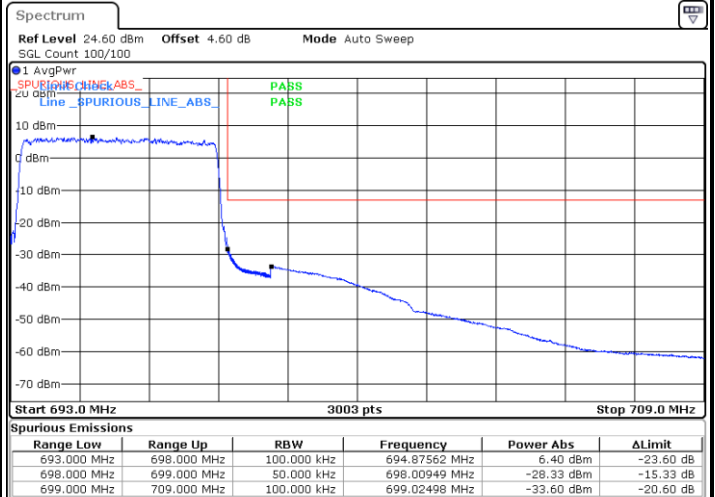
Date: 7.DEC.2024 20:32:04

Lowest Band Edge / Full RB



Date: 7.DEC.2024 20:23:26

Highest Band Edge / Full RB

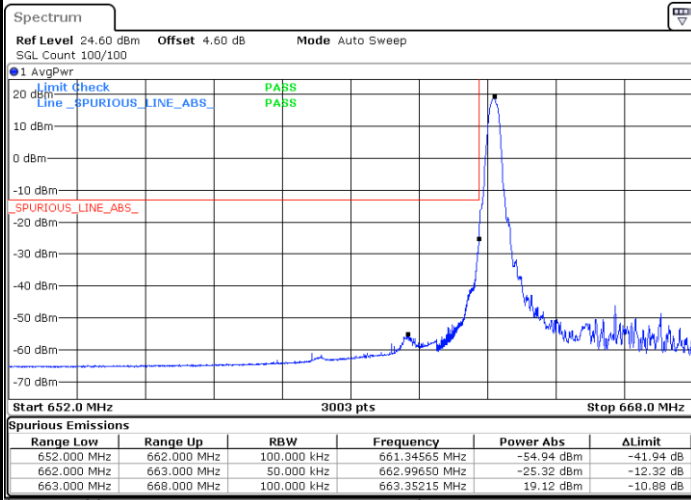


Date: 7.DEC.2024 20:36:38



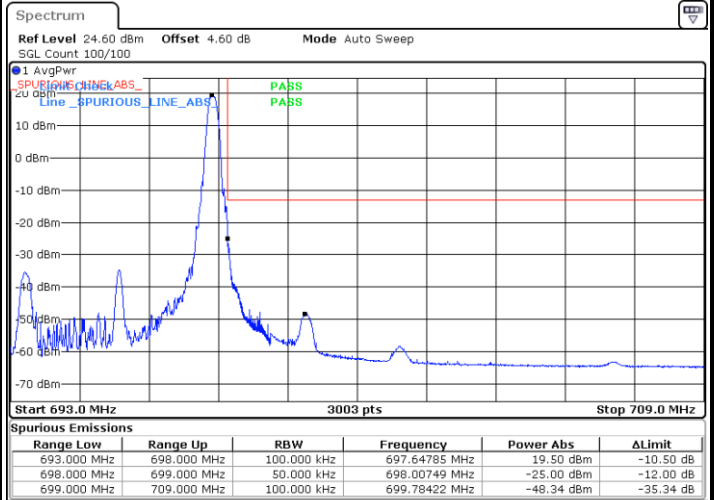
LTE Band 71 / 5MHz / 64QAM

Lowest Band Edge / 1RB



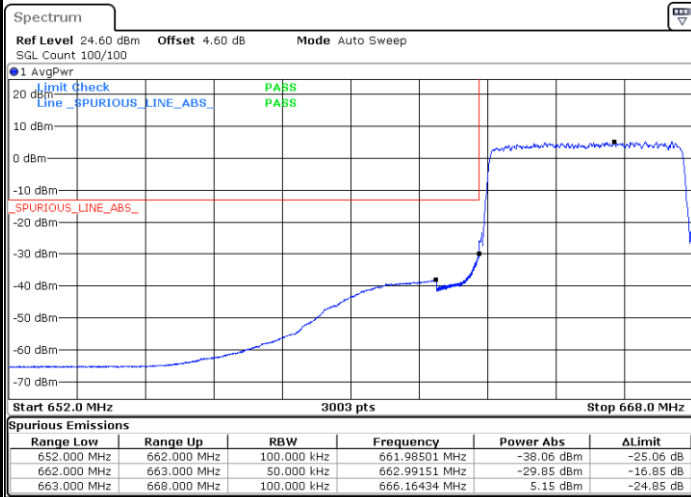
Date: 7.DEC.2024 20:20:01

Highest Band Edge / 1 RB



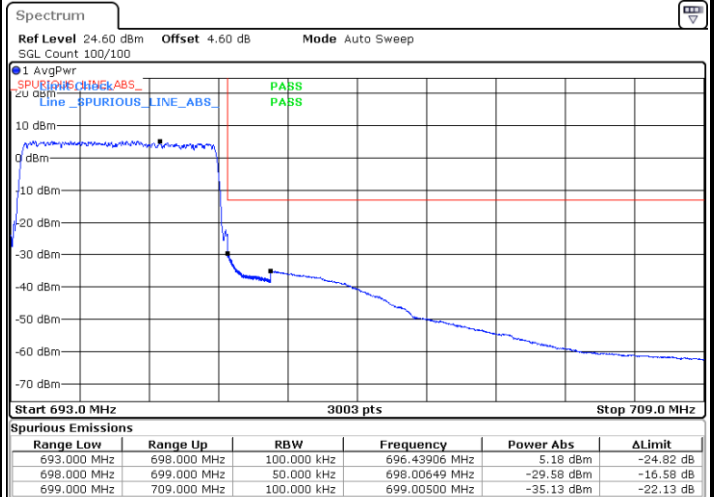
Date: 7.DEC.2024 20:33:13

Lowest Band Edge / Full RB



Date: 7.DEC.2024 20:24:34

Highest Band Edge / Full RB

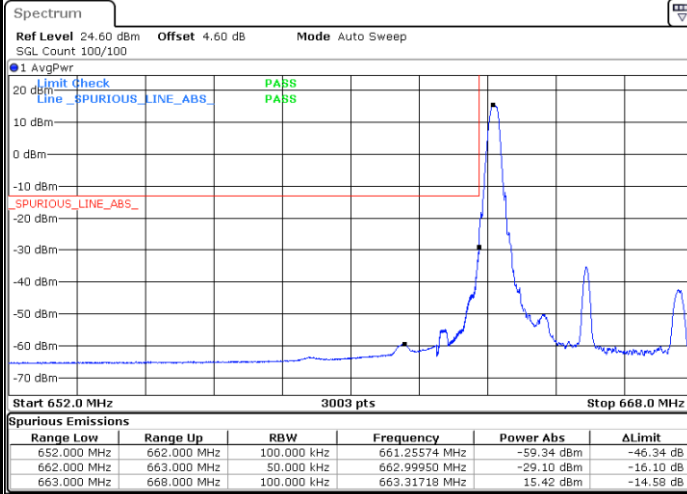


Date: 7.DEC.2024 20:37:45



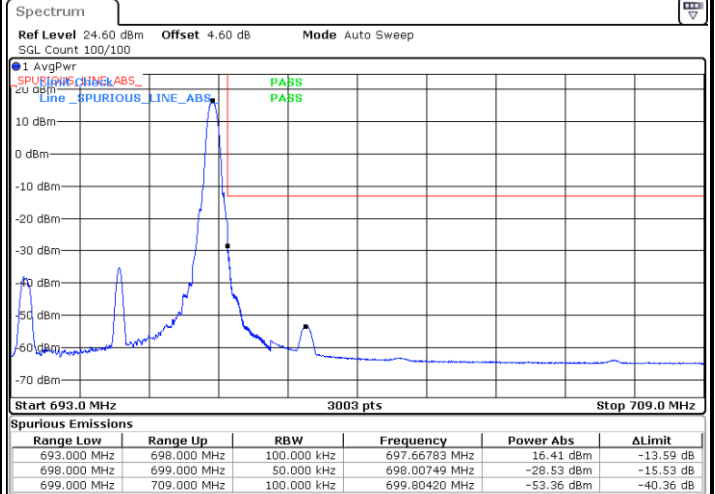
LTE Band 71 / 5MHz / 256QAM

Lowest Band Edge / 1RB



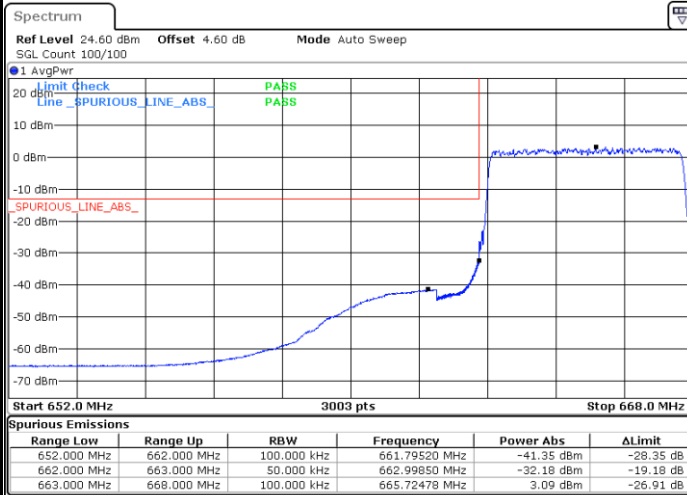
Date: 7.DEC.2024 20:21:09

Highest Band Edge / 1 RB



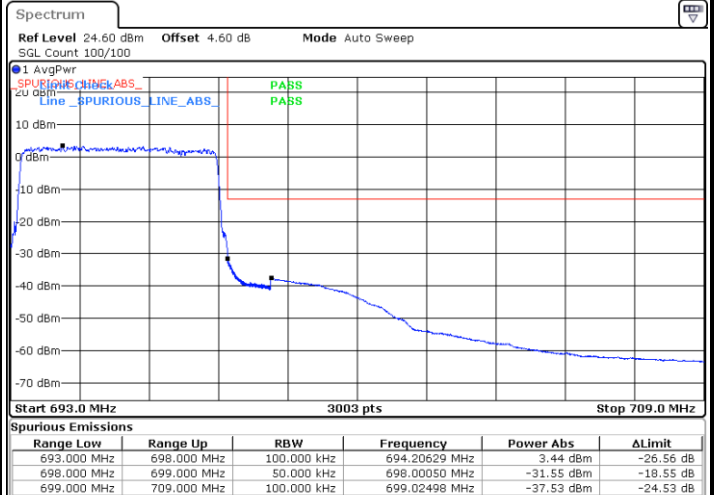
Date: 7.DEC.2024 20:34:21

Lowest Band Edge / Full RB



Date: 7.DEC.2024 20:25:42

Highest Band Edge / Full RB

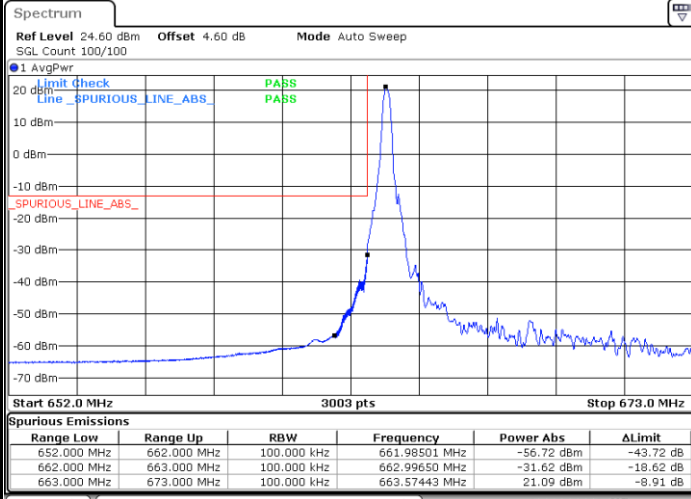


Date: 7.DEC.2024 20:38:53



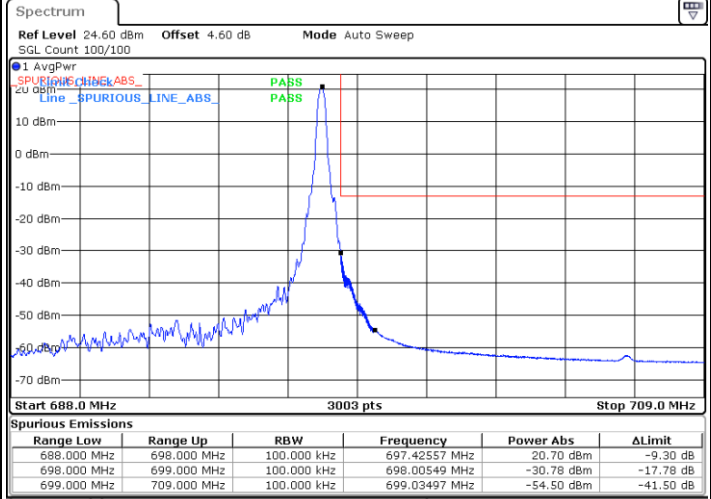
LTE Band 71 / 10MHz / QPSK

Lowest Band Edge / 1 RB



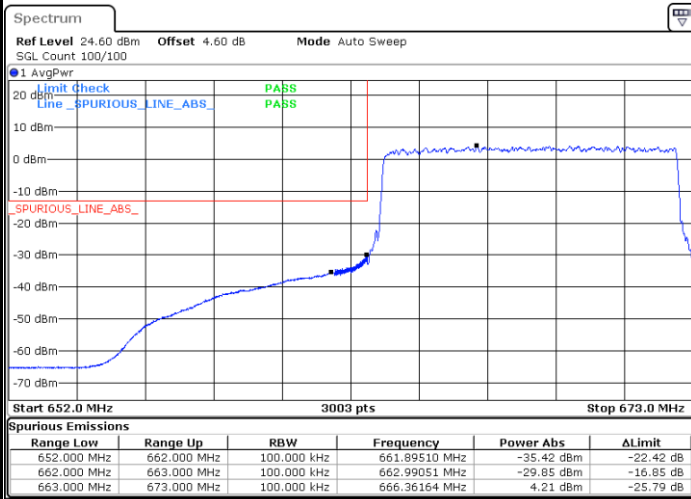
Date: 7.DEC.2024 20:44:32

Highest Band Edge / 1 RB



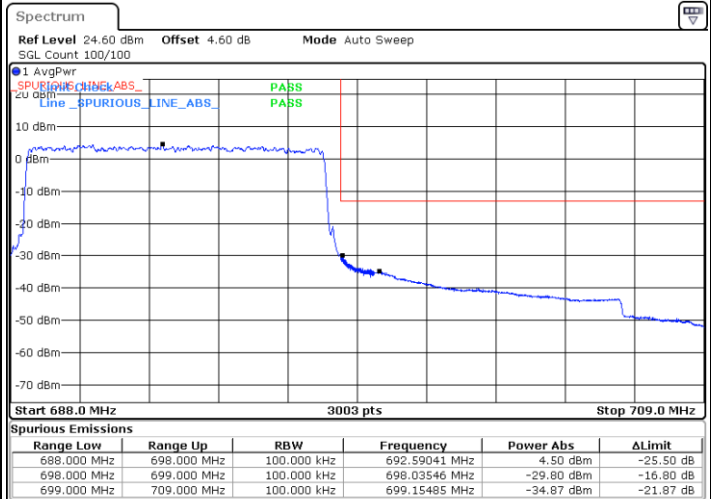
Date: 7.DEC.2024 20:54:28

Lowest Band Edge / Full RB



Date: 7.DEC.2024 20:40:01

Highest Band Edge / Full RB

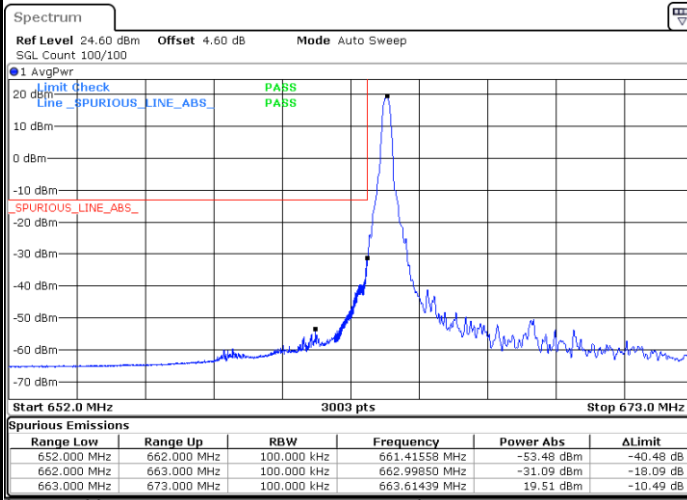


Date: 7.DEC.2024 20:59:01



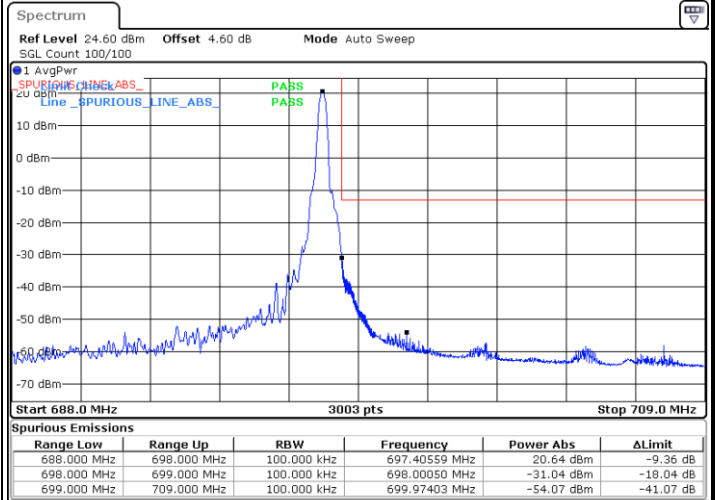
LTE Band 71 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



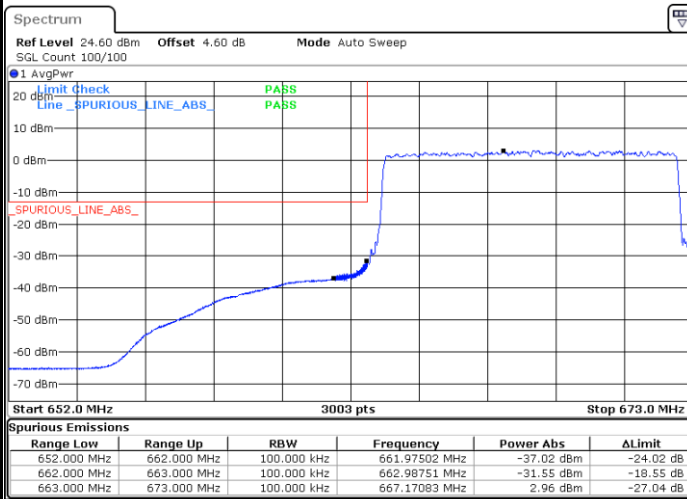
Date: 7.DEC.2024 20:45:40

Highest Band Edge / 1 RB



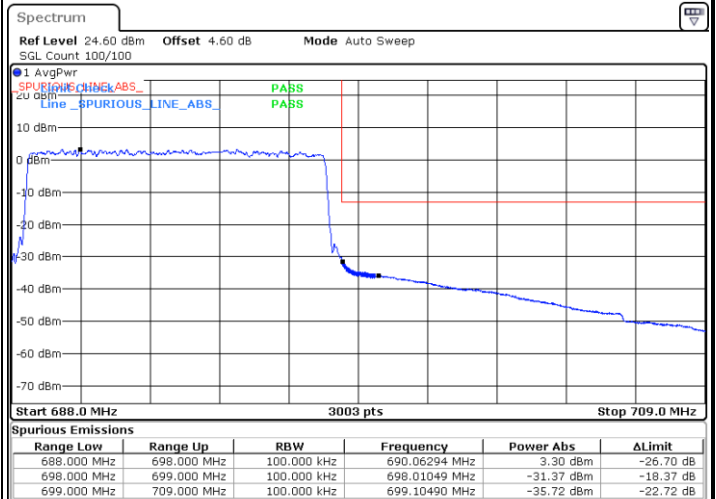
Date: 7.DEC.2024 20:55:36

Lowest Band Edge / Full RB



Date: 7.DEC.2024 20:41:09

Highest Band Edge / Full RB

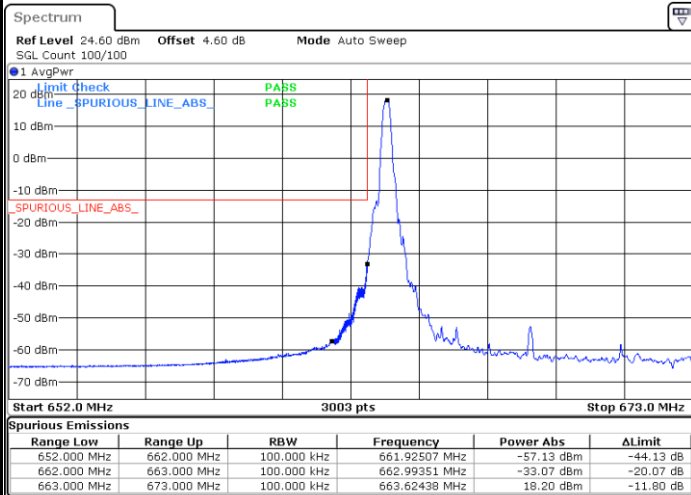


Date: 7.DEC.2024 21:00:09



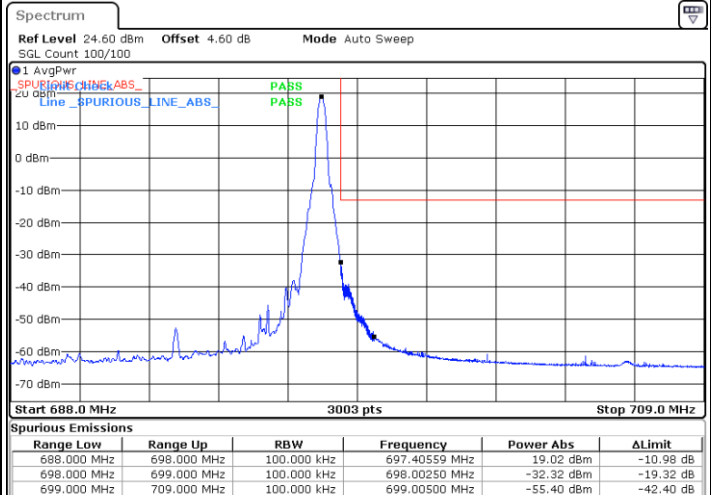
LTE Band 71 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



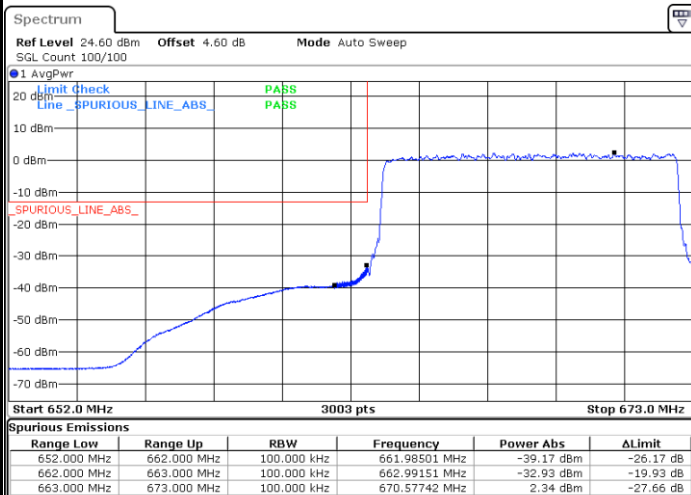
Date: 7.DEC.2024 20:46:47

Highest Band Edge / 1 RB



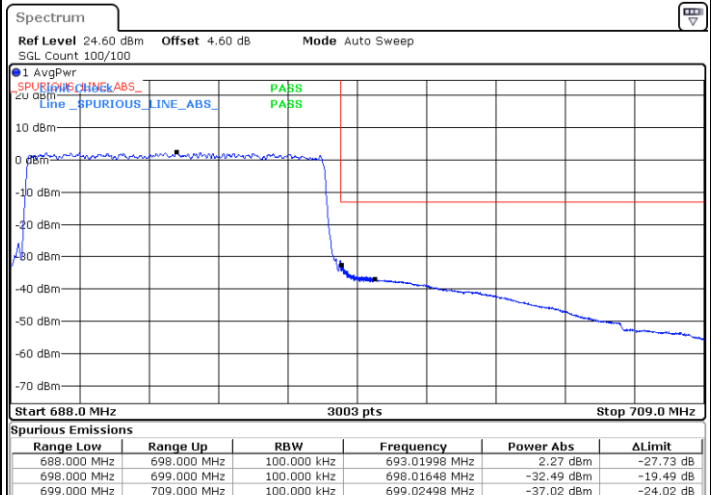
Date: 7.DEC.2024 20:56:44

Lowest Band Edge / Full RB



Date: 7.DEC.2024 20:42:17

Highest Band Edge / Full RB



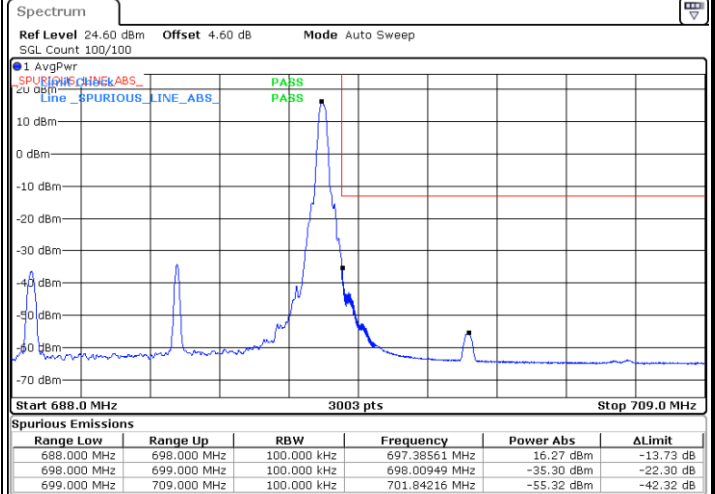
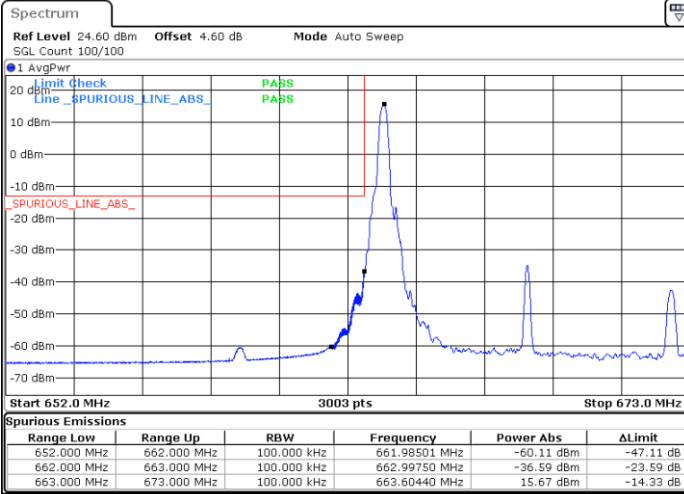
Date: 7.DEC.2024 21:01:17



LTE Band 71 / 10MHz / 256QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

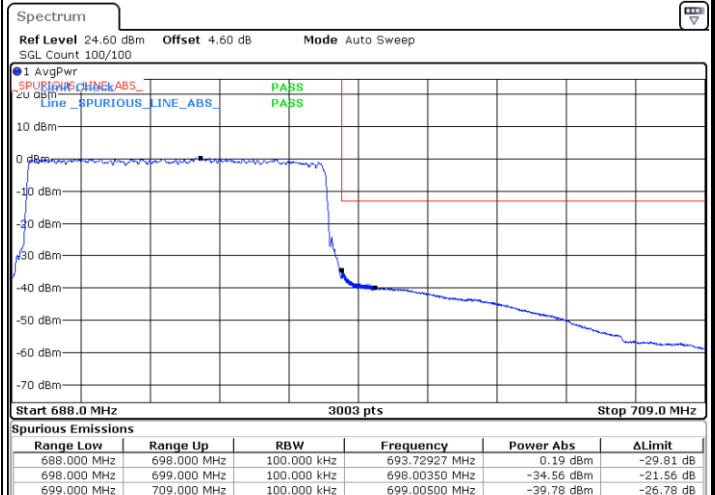
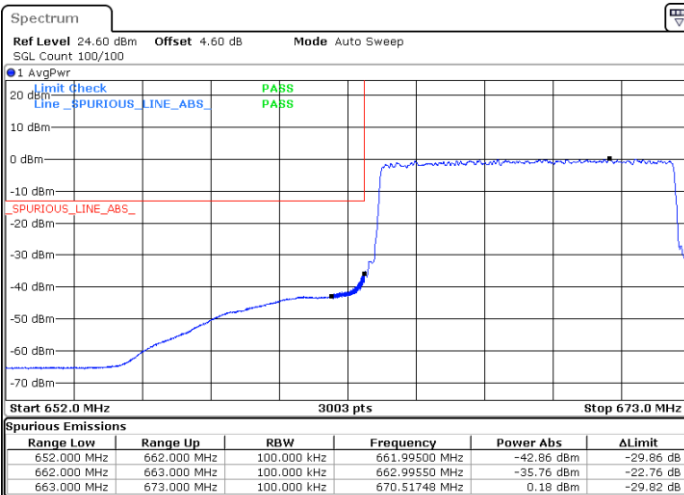


Date: 7.DEC.2024 20:47:55

Date: 7.DEC.2024 20:57:52

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



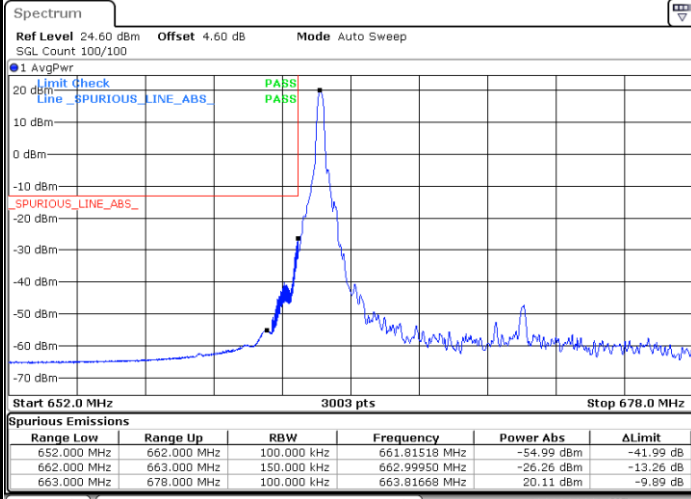
Date: 7.DEC.2024 20:43:25

Date: 7.DEC.2024 21:02:26



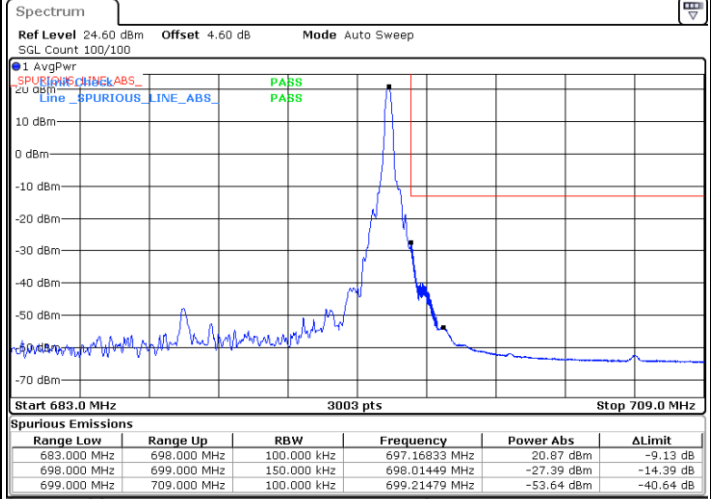
LTE Band 71 / 15MHz / QPSK

Lowest Band Edge / 1 RB



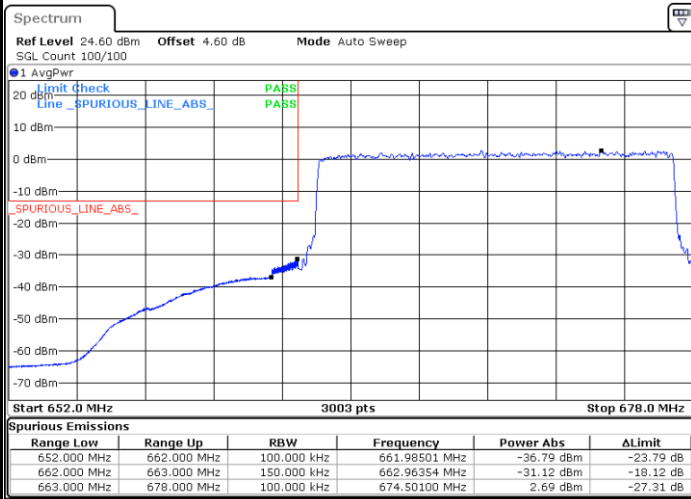
Date: 7.DEC.2024 21:08:07

Highest Band Edge / 1 RB



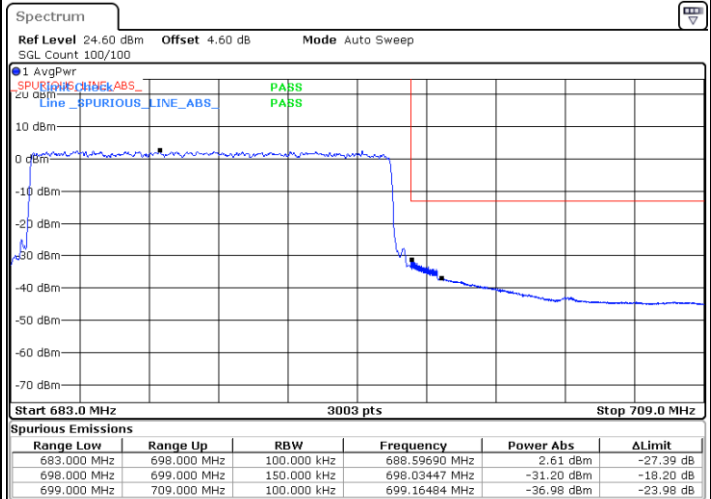
Date: 7.DEC.2024 21:18:05

Lowest Band Edge / Full RB



Date: 7.DEC.2024 21:03:34

Highest Band Edge / Full RB

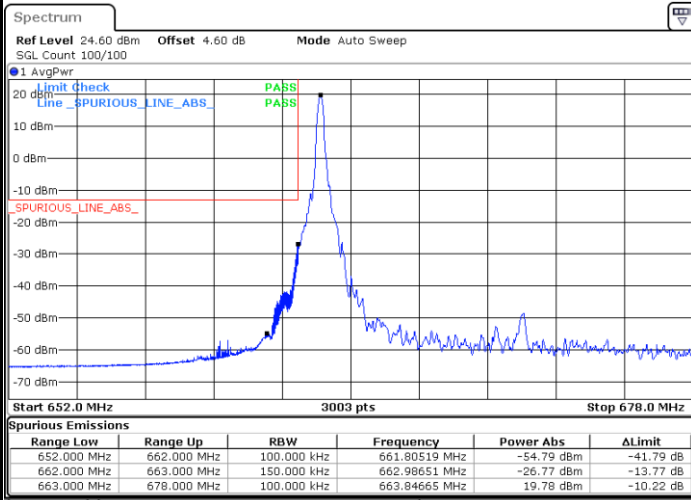


Date: 7.DEC.2024 21:22:38



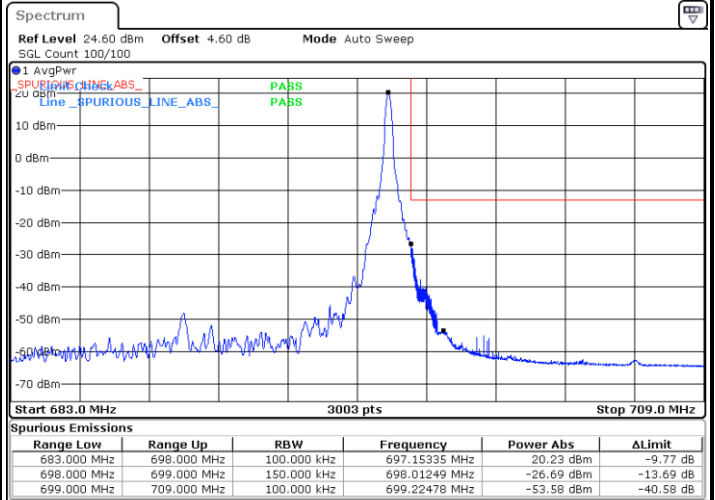
LTE Band 71 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



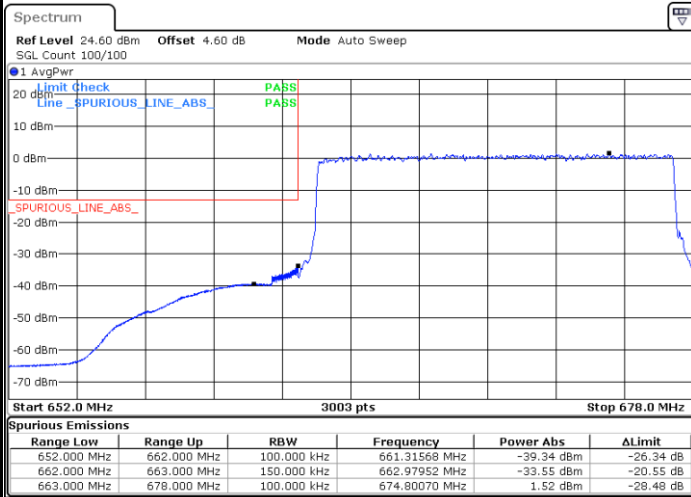
Date: 7.DEC.2024 21:09:15

Highest Band Edge / 1 RB



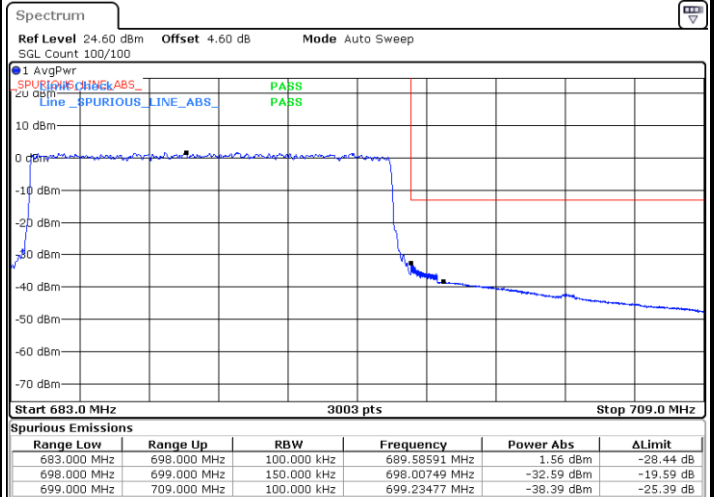
Date: 7.DEC.2024 21:19:13

Lowest Band Edge / Full RB



Date: 7.DEC.2024 21:04:42

Highest Band Edge / Full RB

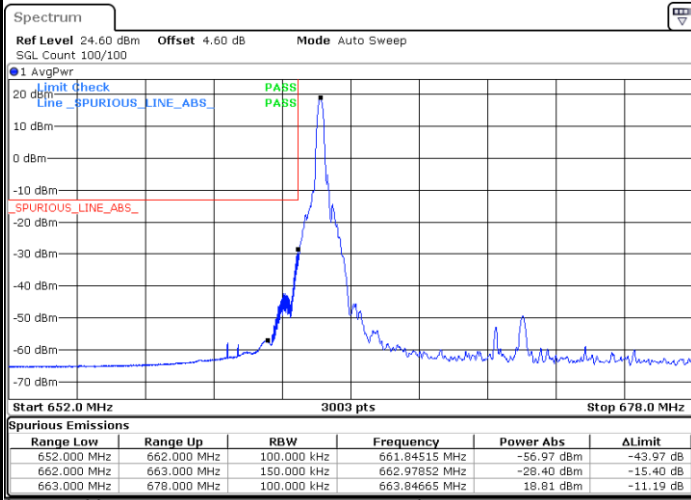


Date: 7.DEC.2024 21:23:46



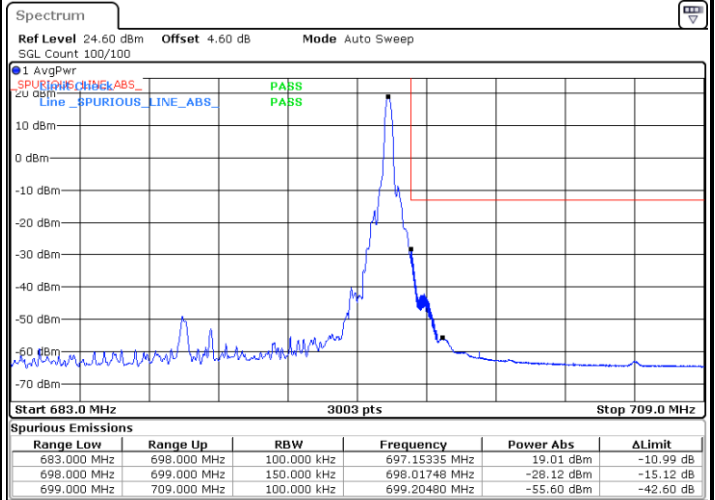
LTE Band 71 / 15MHz / 64QAM

Lowest Band Edge / 1 RB



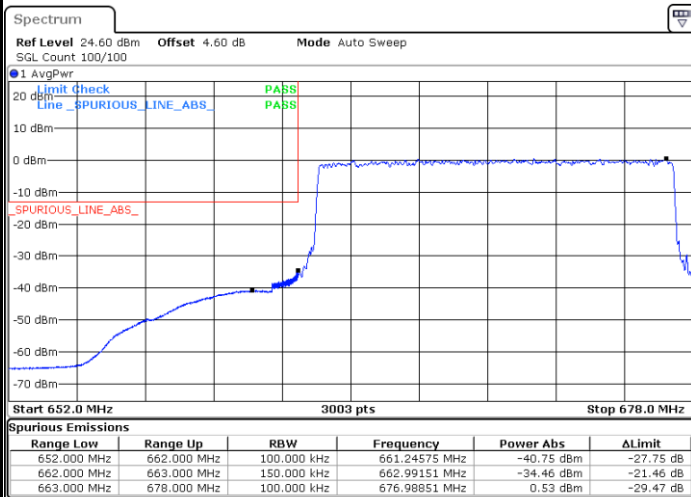
Date: 7.DEC.2024 21:10:23

Highest Band Edge / 1 RB



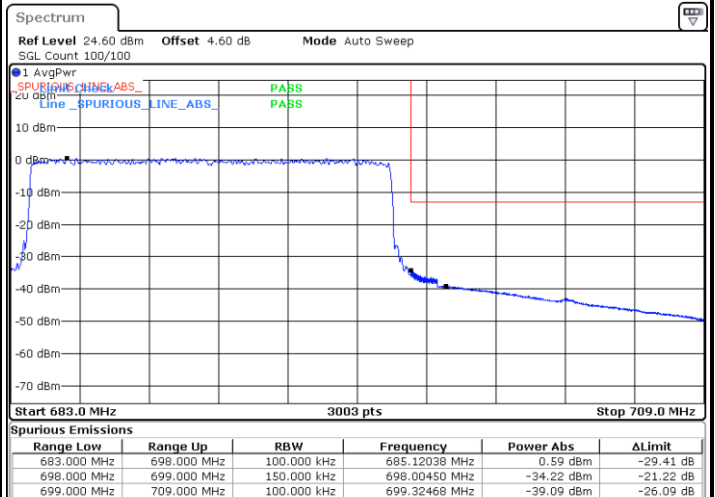
Date: 7.DEC.2024 21:20:21

Lowest Band Edge / Full RB



Date: 7.DEC.2024 21:05:50

Highest Band Edge / Full RB

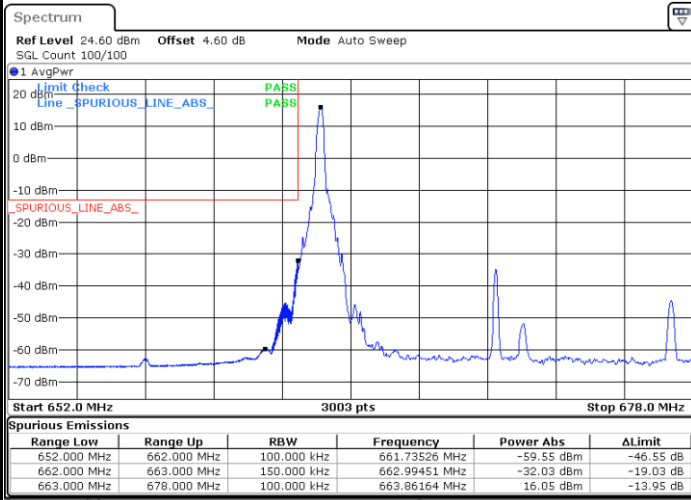


Date: 7.DEC.2024 21:24:54



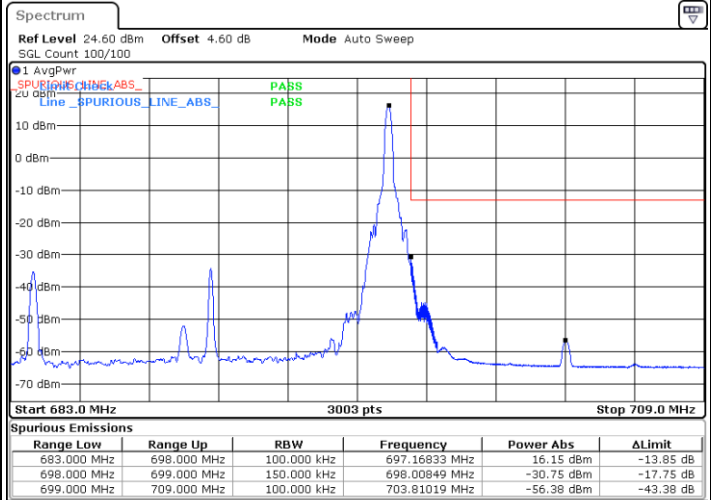
LTE Band 71 / 15MHz / 256QAM

Lowest Band Edge / 1 RB



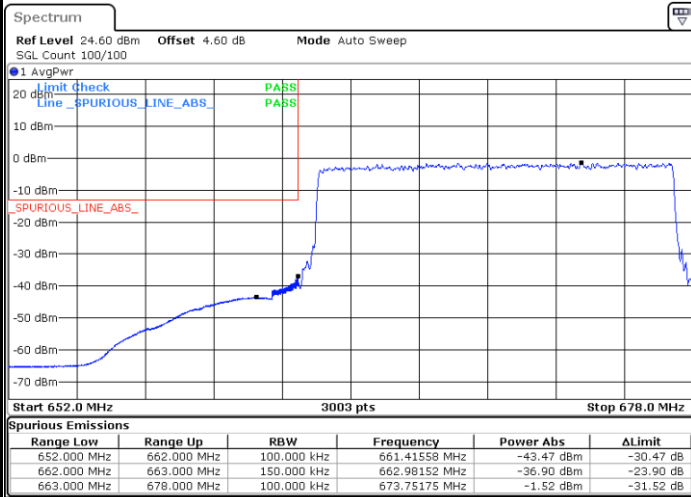
Date: 7.DEC.2024 21:11:32

Highest Band Edge / 1 RB



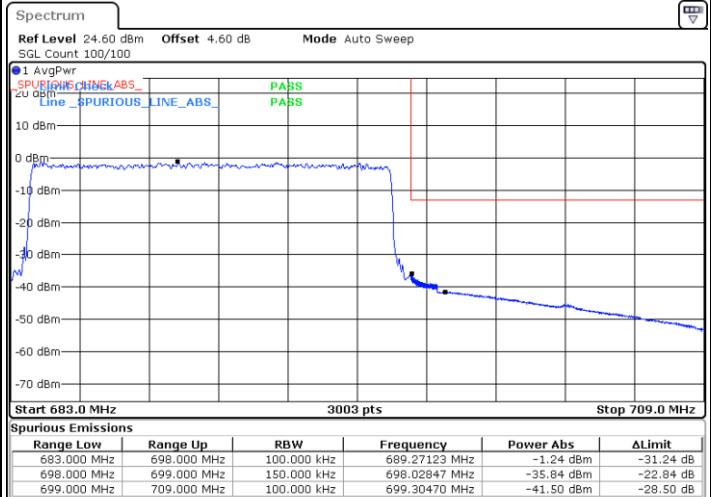
Date: 7.DEC.2024 21:21:29

Lowest Band Edge / Full RB



Date: 7.DEC.2024 21:06:59

Highest Band Edge / Full RB

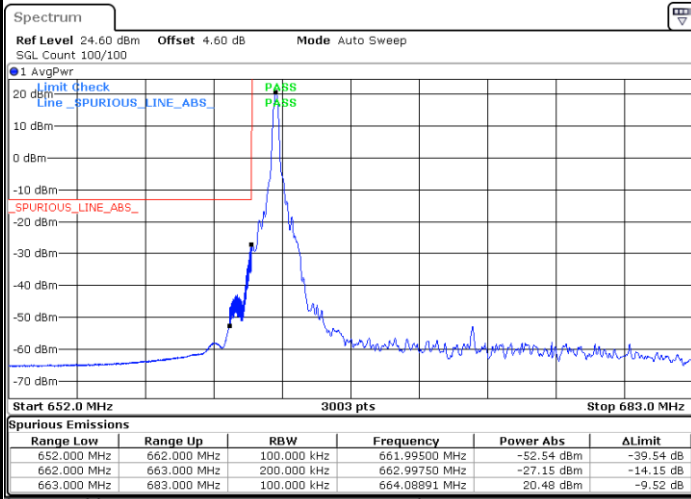


Date: 7.DEC.2024 21:26:02



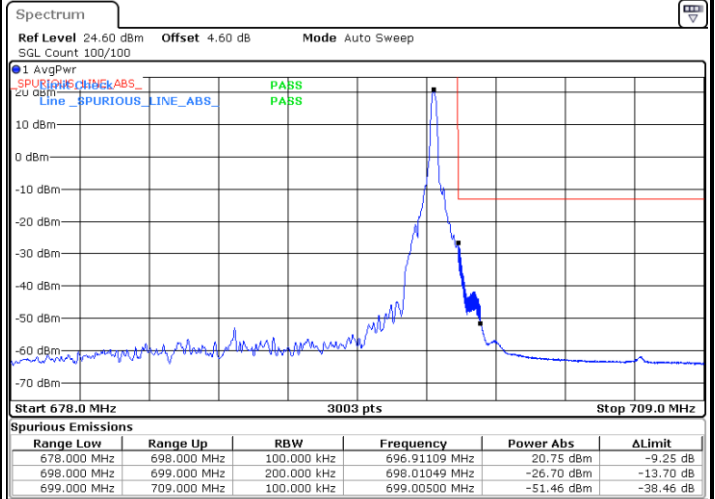
LTE Band 71 / 20MHz / QPSK

Lowest Band Edge / 1 RB



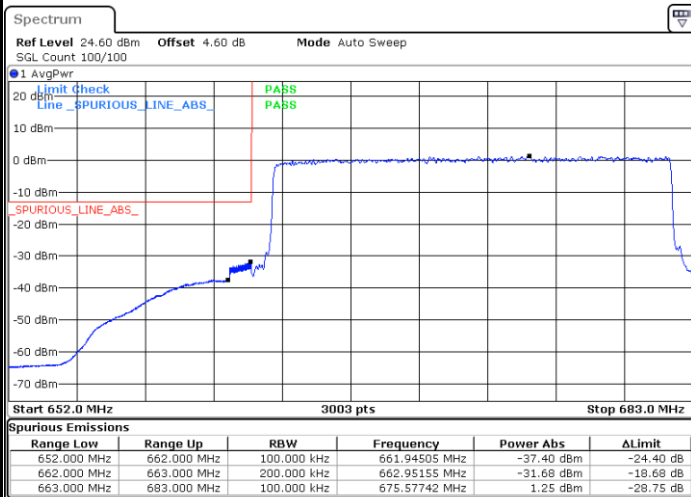
Date: 7.DEC.2024 21:31:44

Highest Band Edge / 1 RB



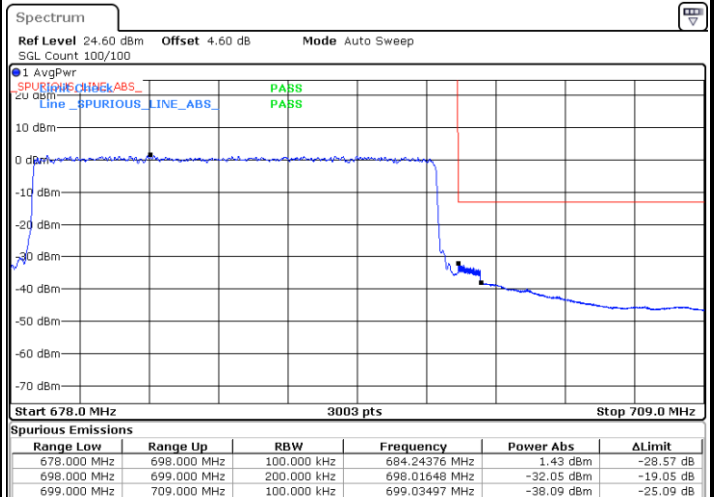
Date: 7.DEC.2024 21:41:39

Lowest Band Edge / Full RB



Date: 7.DEC.2024 21:27:11

Highest Band Edge / Full RB

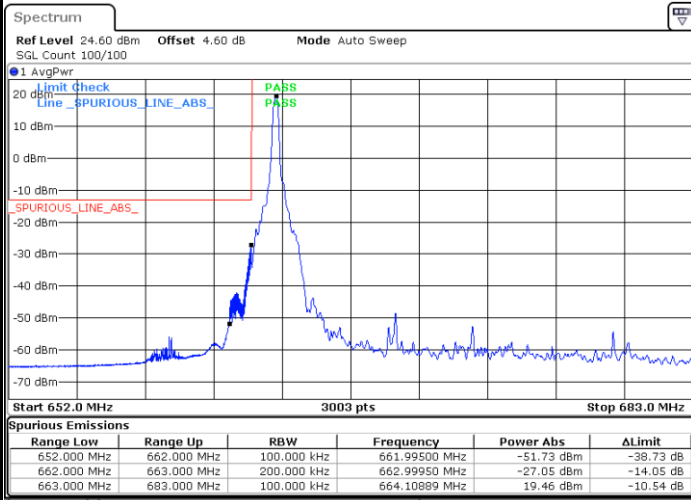


Date: 7.DEC.2024 21:46:12



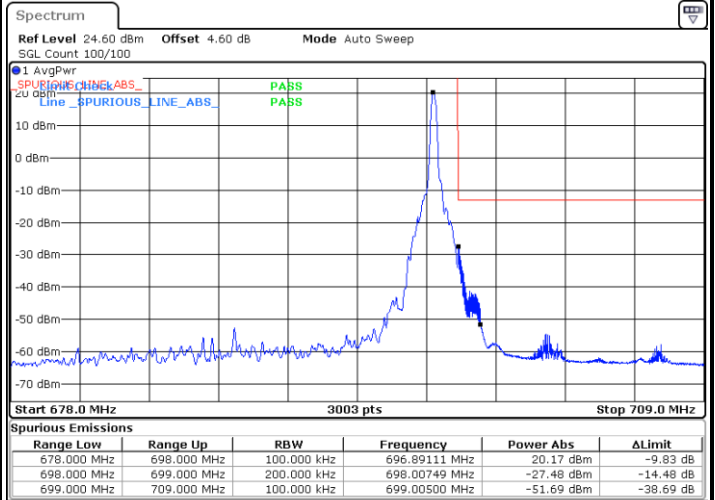
LTE Band 71 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



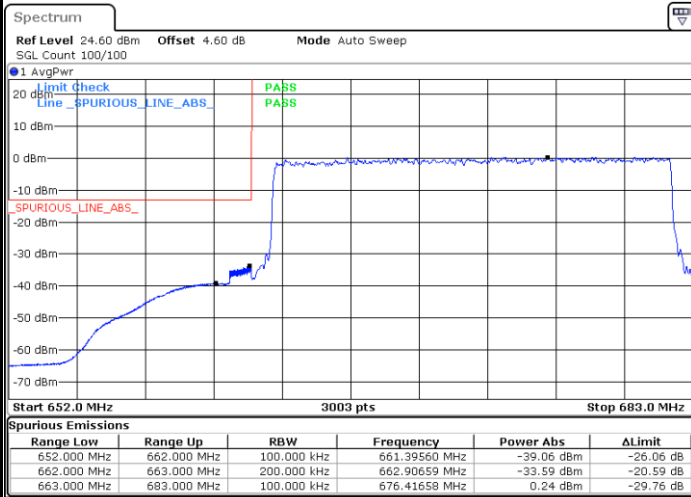
Date: 7.DEC.2024 21:32:52

Highest Band Edge / 1RB



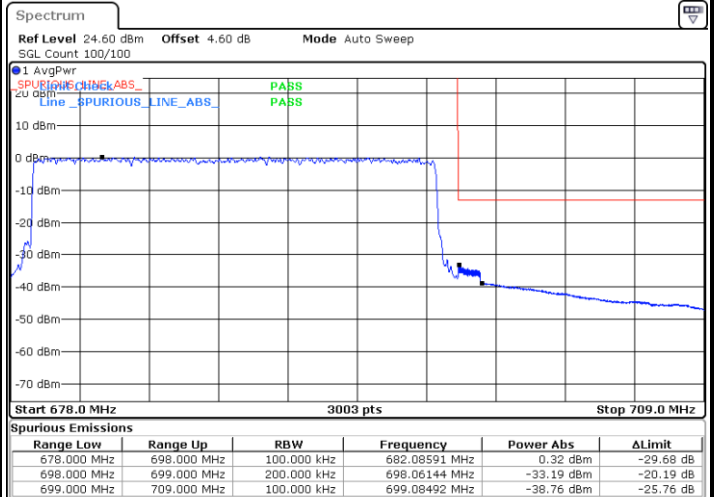
Date: 7.DEC.2024 21:42:48

Lowest Band Edge / Full RB



Date: 7.DEC.2024 21:28:19

Highest Band Edge / Full RB

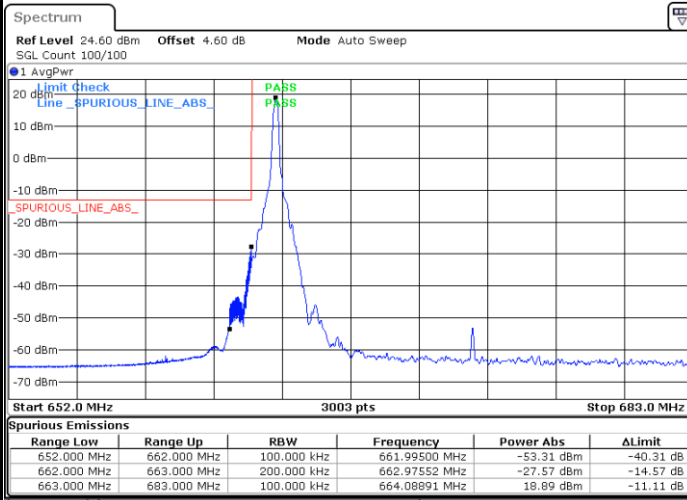


Date: 7.DEC.2024 21:47:20



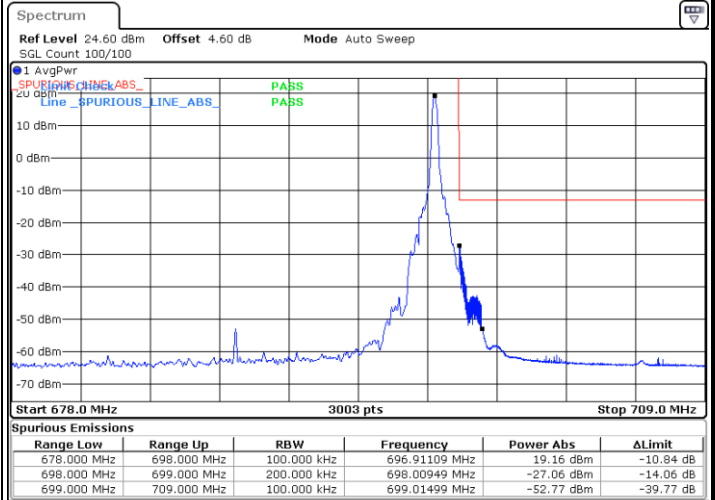
LTE Band 71 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



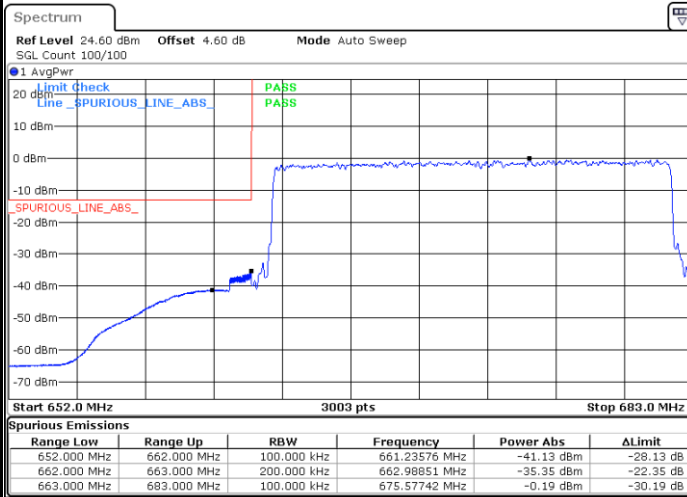
Date: 7.DEC.2024 21:34:00

Highest Band Edge / 1 RB



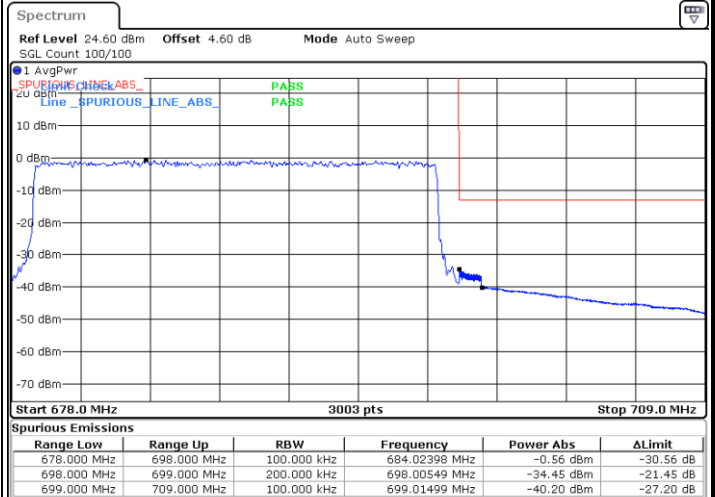
Date: 7.DEC.2024 21:43:55

Lowest Band Edge / Full RB



Date: 7.DEC.2024 21:29:27

Highest Band Edge / Full RB



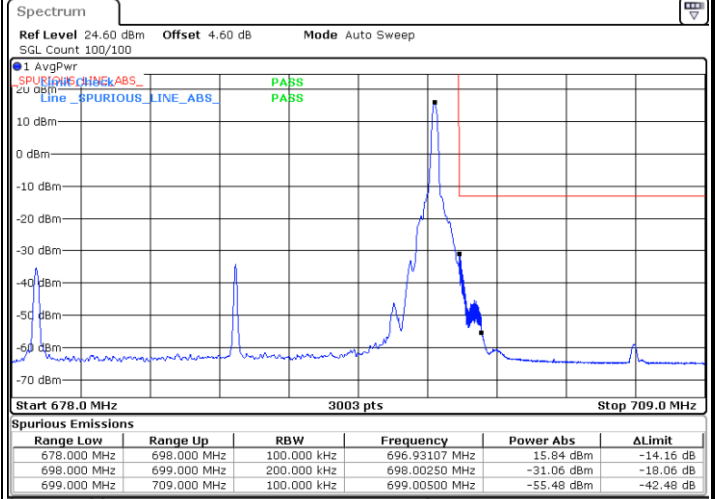
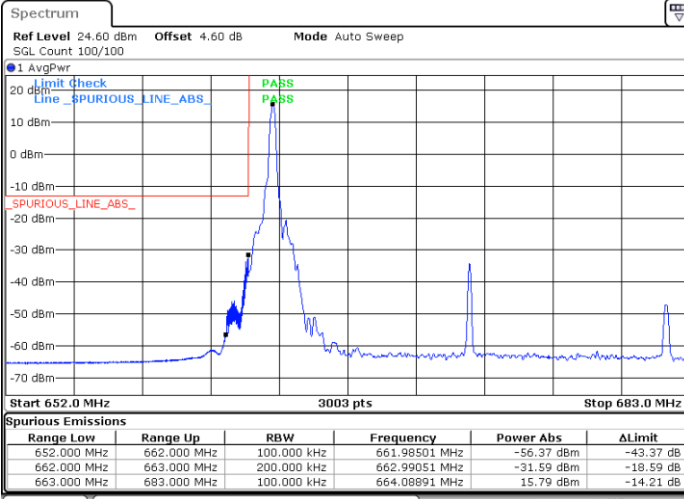
Date: 7.DEC.2024 21:48:28



LTE Band 71 / 20MHz / 256QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

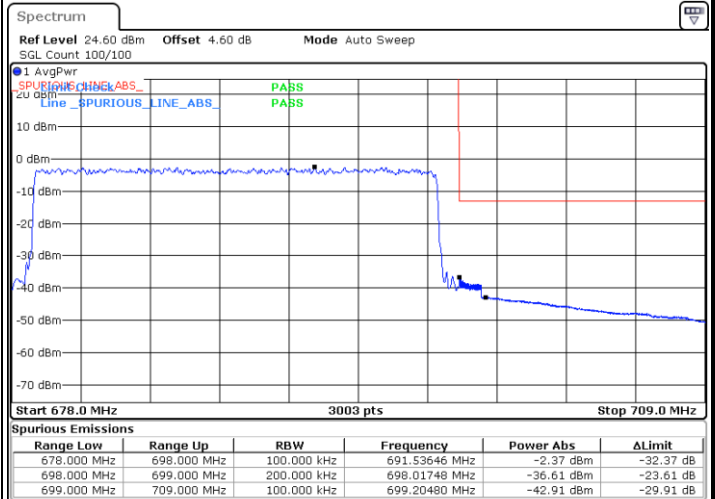
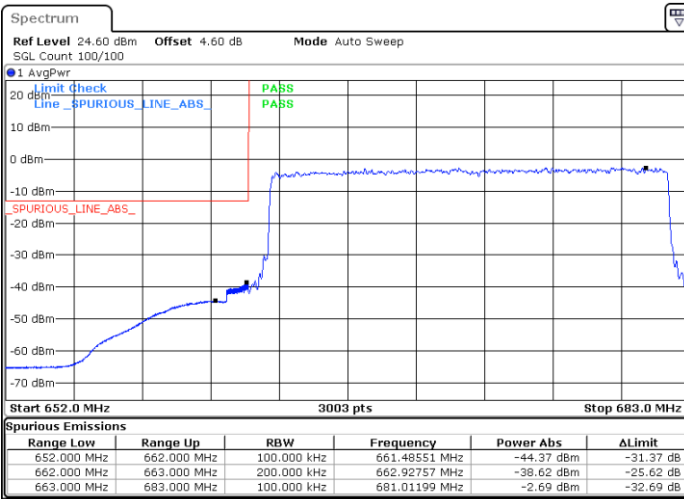


Date: 7.DEC.2024 21:35:08

Date: 7.DEC.2024 21:45:04

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 7.DEC.2024 21:30:36

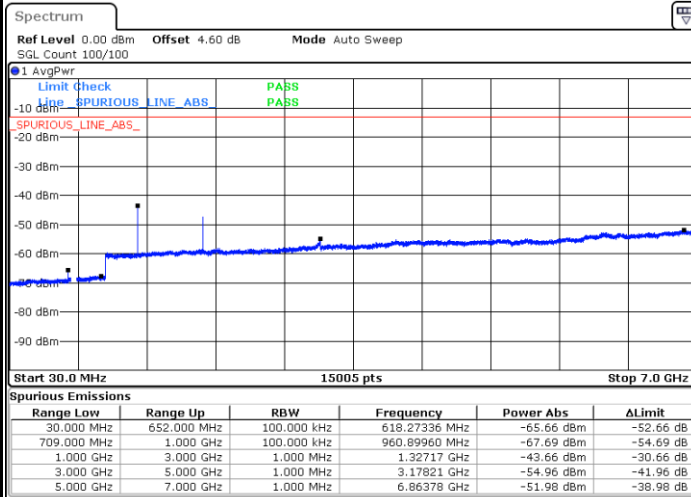
Date: 7.DEC.2024 21:49:36



# Conducted Spurious Emission

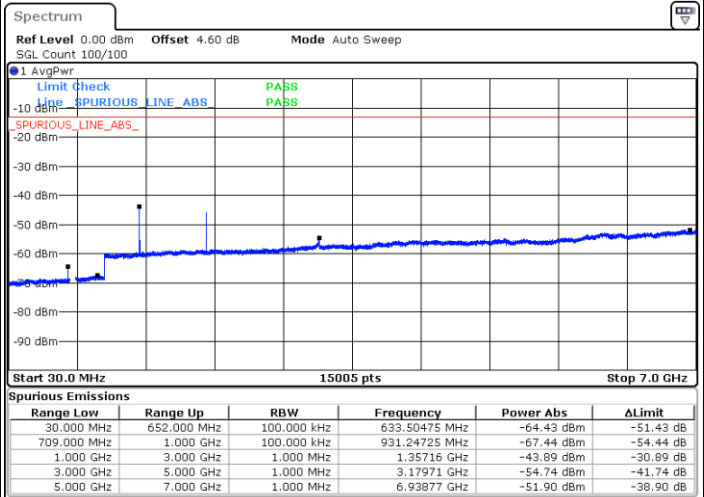
## LTE Band 71 / 5MHz

### Lowest Channel / QPSK



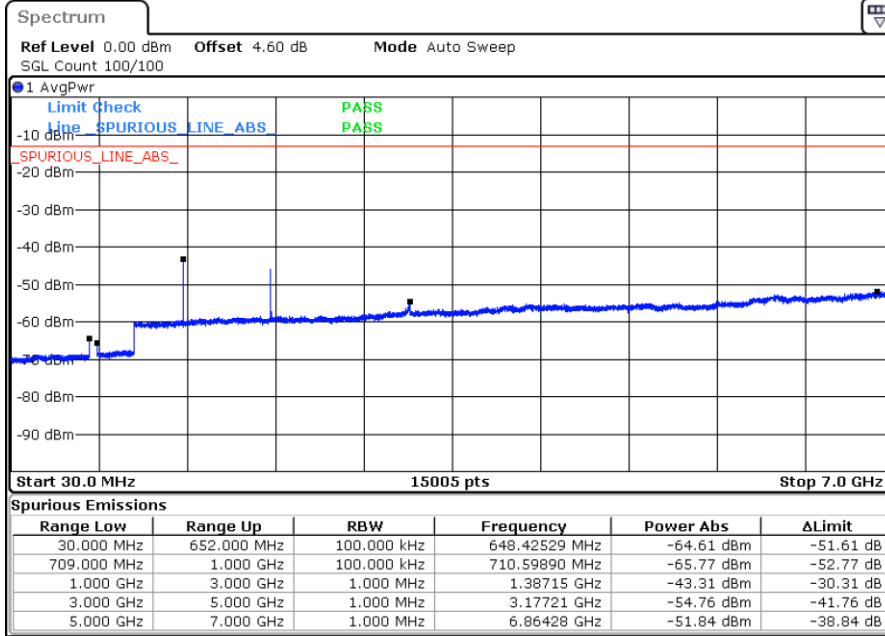
Date: 7.DEC.2024 20:16:38

### Middle Channel / QPSK



Date: 7.DEC.2024 20:27:02

### Highest Channel / QPSK



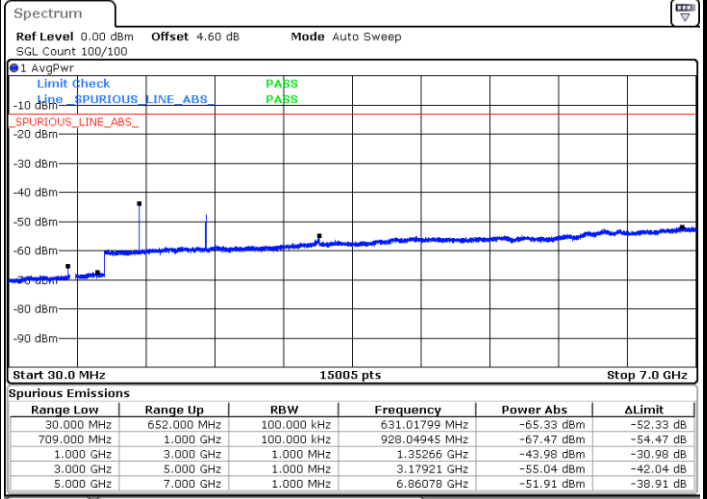
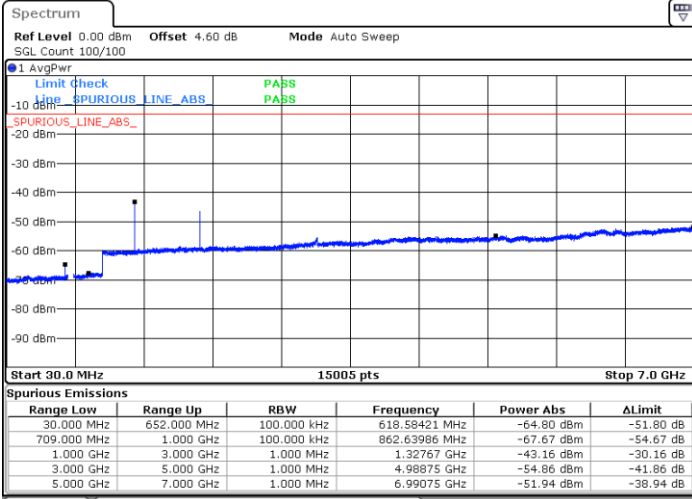
Date: 7.DEC.2024 20:29:47



LTE Band 71 / 10MHz

Lowest Channel / QPSK

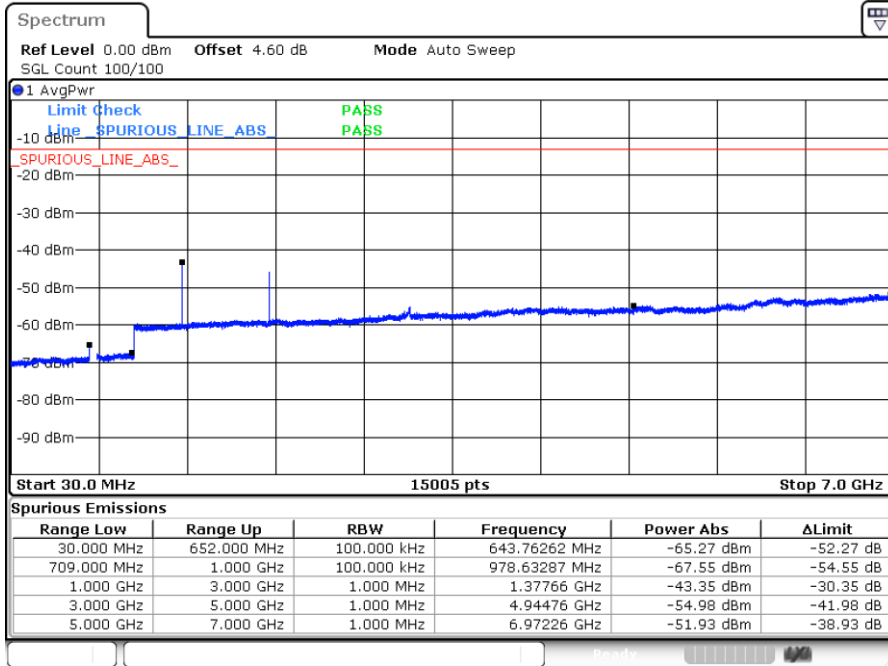
Middle Channel / QPSK



Date: 7.DEC.2024 20:49:15

Date: 7.DEC.2024 20:50:35

Highest Channel / QPSK



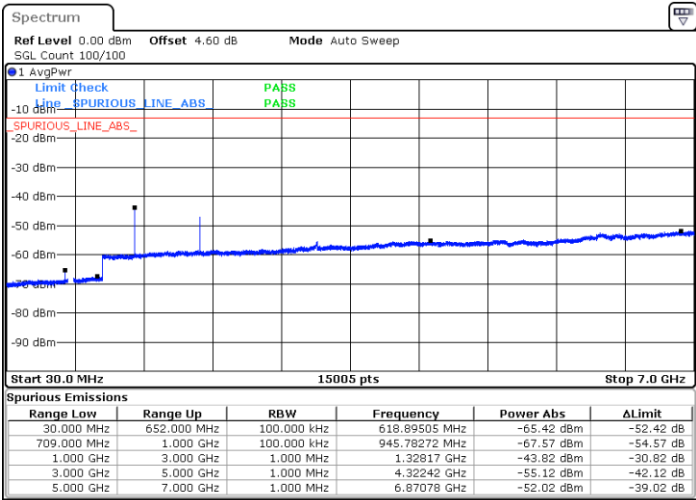
Date: 7.DEC.2024 20:53:19



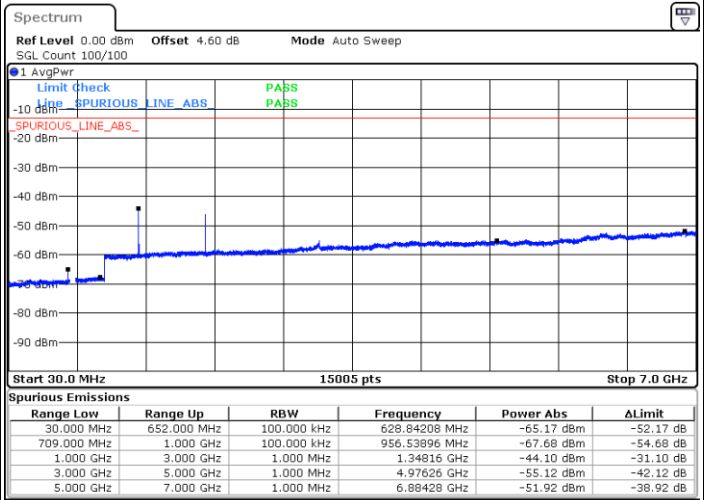
LTE Band 71 / 15MHz

Lowest Channel / QPSK

Middle Channel / QPSK

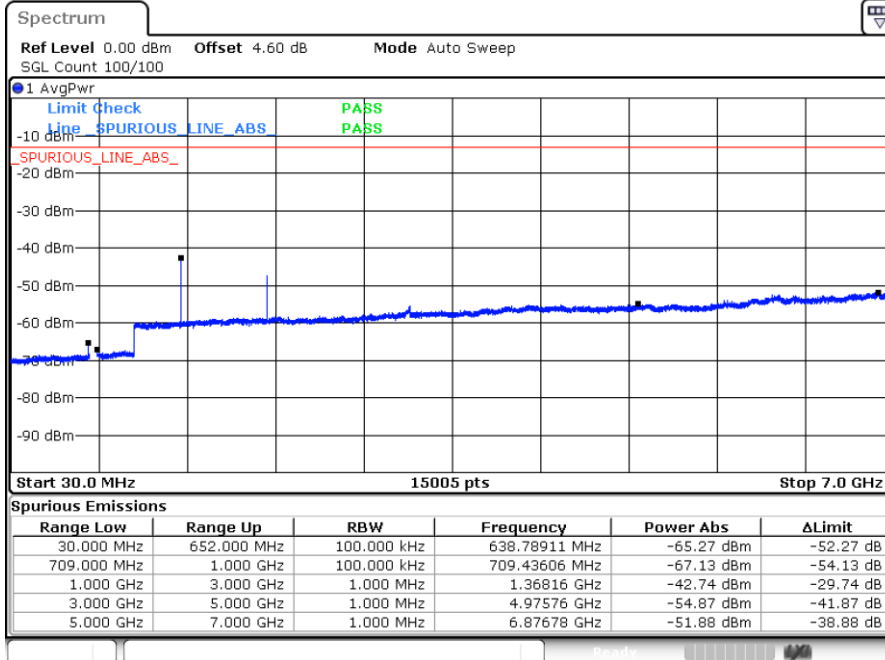


Date: 7.DEC.2024 21:12:52



Date: 7.DEC.2024 21:14:12

Highest Channel / QPSK



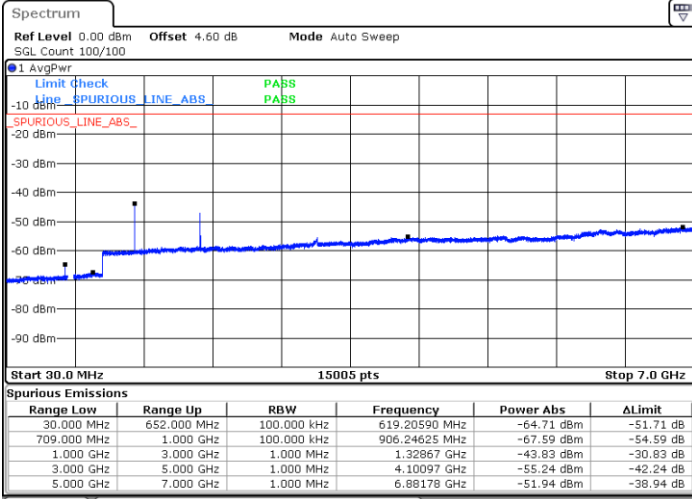
Date: 7.DEC.2024 21:16:56



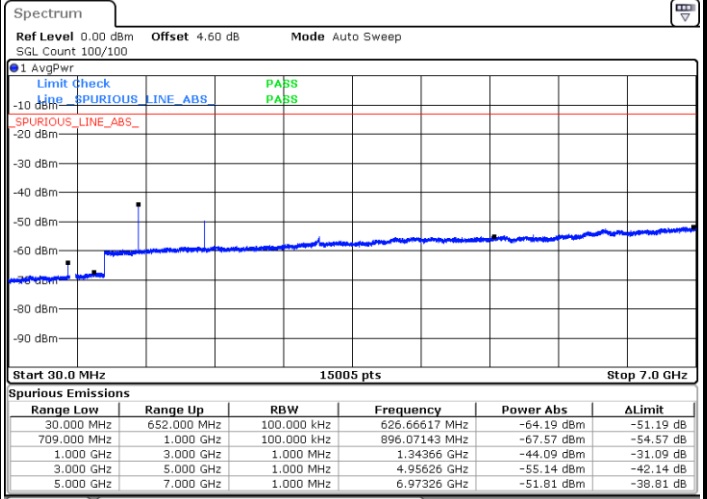
LTE Band 71 / 20MHz

Lowest Channel / QPSK

Middle Channel / QPSK

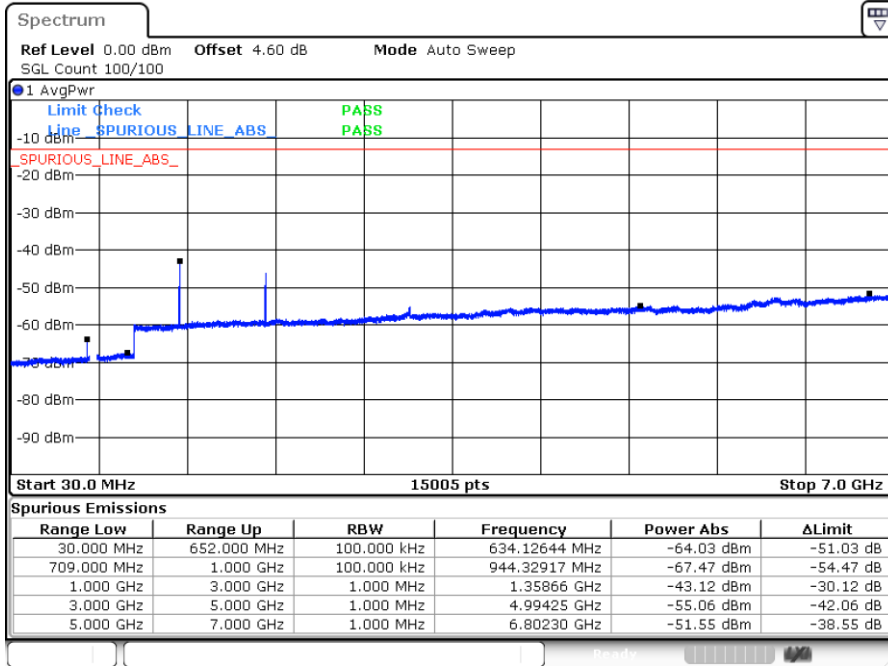


Date: 7.DEC.2024 21:36:27



Date: 7.DEC.2024 21:37:47

Highest Channel / QPSK



Date: 7.DEC.2024 21:40:31



Frequency Stability

Test Conditions		LTE Band 71 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0021	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0038	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0042	
0	Normal Voltage	0.0051	
-10	Normal Voltage	0.0044	
-20	Normal Voltage	0.0016	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage =3.86V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.53 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## Appendix B. Test Results of Radiated Test

### Radiated Spurious Emission

Test Engineer :	Chris	Temperature :	21~25°C
		Relative Humidity :	51~53%

Note: Pre-scanned harmonic for the different antennas, we choose the worst antenna mode to test.

LTE Band 12 / 10MHz / QPSK Ant.0 open status								
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1408	-72.56	-13	-59.56	-79.53	1.58	10.70	H
	2112	-62.40	-13	-49.40	-70.65	2.102	12.50	H
	2816	-68.62	-13	-55.62	-77.51	2.856	13.90	H
	1408	-73.44	-13	-60.44	-80.41	1.58	10.70	V
	2112	-63.63	-13	-50.63	-71.88	2.10	12.50	V
	2816	-68.33	-13	-55.33	-77.22	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE CA_5B PCC / 10+10MHz / QPSK Ant.0 open status								
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1656	-62.75	-13	-49.75	-69.72	1.58	10.70	H
	2480	-59.75	-13	-46.75	-68.00	2.102	12.50	H
	3312	-57.86	-13	-44.86	-66.75	2.856	13.90	H
	1656	-61.64	-13	-48.64	-68.61	1.58	10.70	V
	2480	-57.56	-13	-44.56	-65.81	2.10	12.50	V
	3312	-58.17	-13	-45.17	-67.06	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE CA_5B SCC / 10+10MHz / QPSK Ant.0 open status								
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1672	-62.89	-13	-49.89	-69.86	1.58	10.70	H
	2512	-57.53	-13	-44.53	-65.78	2.102	12.50	H
	3352	-57.56	-13	-44.56	-66.45	2.856	13.90	H
	1672	-61.96	-13	-48.96	-68.93	1.58	10.70	V
	2512	-56.25	-13	-43.25	-64.50	2.10	12.50	V
	3352	-57.31	-13	-44.31	-66.20	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 13 / 5MHz / QPSK Ant.0 open status								
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1560	-64.88	-42.15	-22.73	-67.51	1.09	5.87	H
	2336	-59.51	-13	-46.51	-61.91	1.37	5.92	H
	3120	-58.03	-13	-45.03	-61.92	1.64	7.68	H
	1560	-64.13	-42.15	-21.98	-66.76	1.09	5.87	V
	2336	-58.39	-13	-45.39	-60.79	1.37	5.92	V
	3120	-58.38	-13	-45.38	-62.27	1.64	7.68	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 13 / 10MHz / QPSK Ant.0 open status								
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1552	-70.17	-13	-57.17	-72.80	1.09	5.87	H
	2336	-53.53	-13	-40.53	-55.93	1.37	5.92	H
	3112	-68.71	-13	-55.71	-72.60	1.64	7.68	H
	1552	-72.67	-13	-59.67	-75.30	1.09	5.87	V
	2336	-59.41	-13	-46.41	-61.81	1.37	5.92	V
	3112	-68.55	-13	-55.55	-72.44	1.64	7.68	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 26 / 15MHz / QPSK Ant.0 open status								
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1656	-70.60	-13	-57.60	-77.57	1.58	10.70	H
	2488	-66.01	-13	-53.01	-74.26	2.102	12.50	H
	3320	-68.85	-13	-55.85	-77.74	2.856	13.90	H
	1656	-72.28	-13	-59.28	-79.25	1.58	10.70	V
	2488	-65.99	-13	-52.99	-74.24	2.10	12.50	V
	3320	-68.70	-13	-55.70	-77.59	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 71 / 20MHz / QPSK Ant.1 open status								
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1344	-70.55	-13	-57.55	-81.29	2.604	13.34	H
	2024	-54.33	-13	-41.33	-64.84	3.011	13.52	H
	2696	-68.37	-13	-55.37	-78.57	3.271	13.47	H
	1344	-72.71	-13	-59.71	-83.45	2.604	13.34	V
	2024	-54.83	-13	-41.83	-65.34	3.011	13.52	V
	2696	-68.60	-13	-55.60	-78.80	3.271	13.47	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.