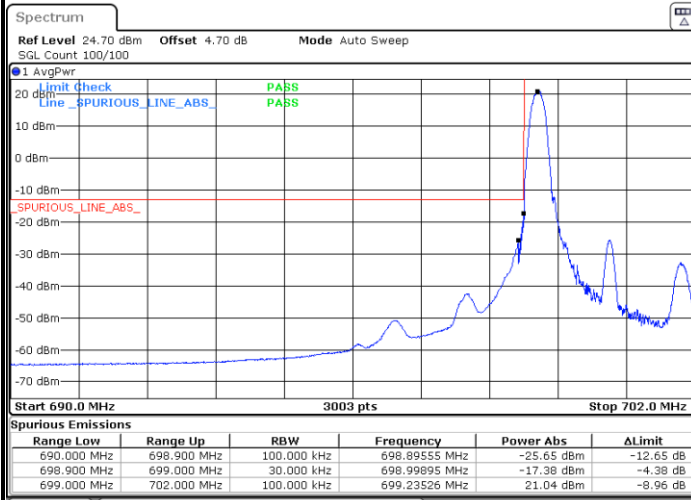


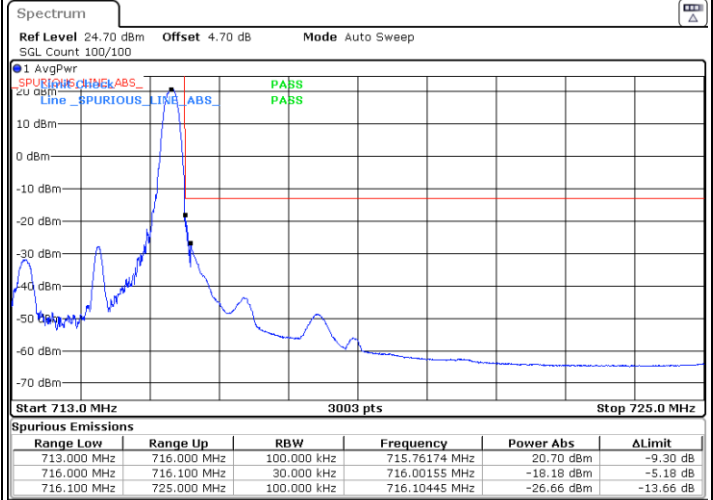


LTE Band 12 / 3MHz / QPSK

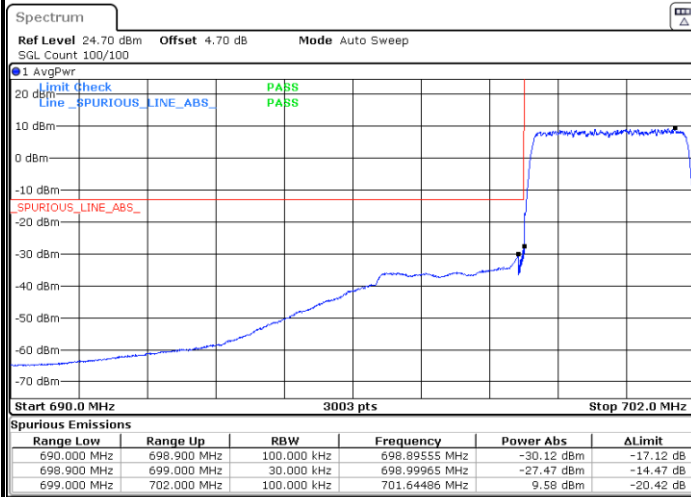
Lowest Band Edge / 1RB



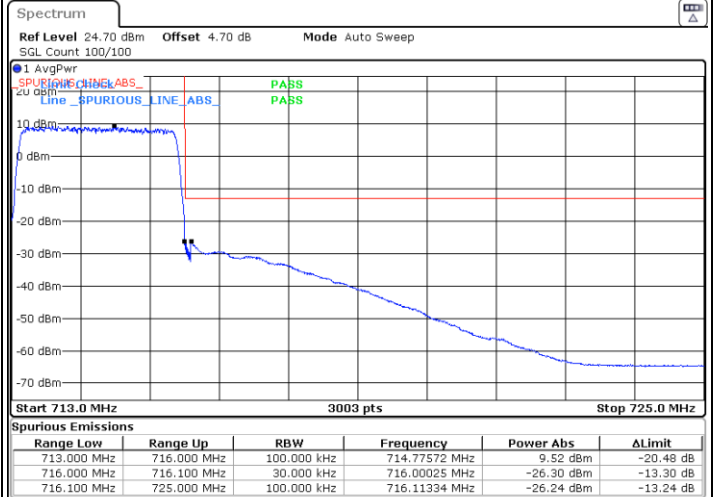
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



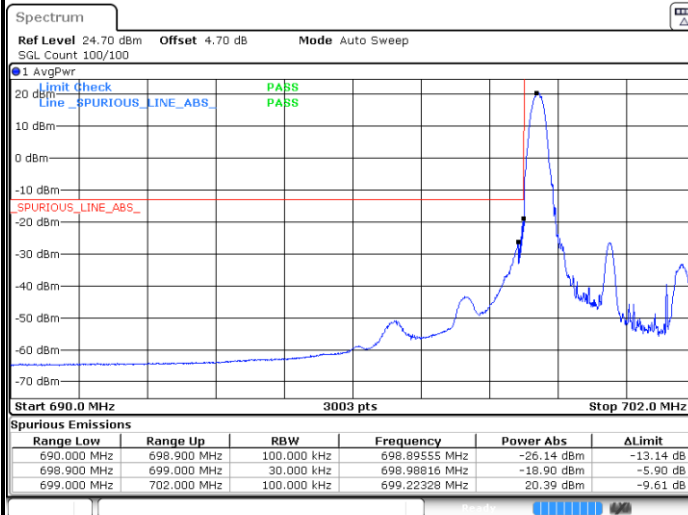
Highest Band Edge / Full RB



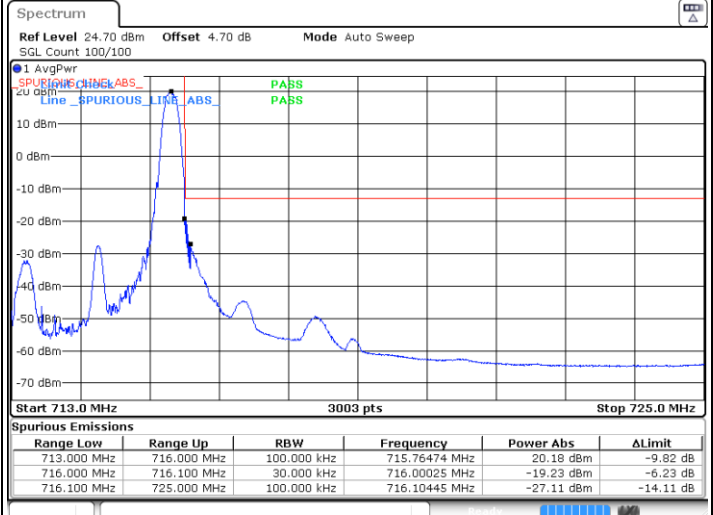


LTE Band 12 / 3MHz / 16QAM

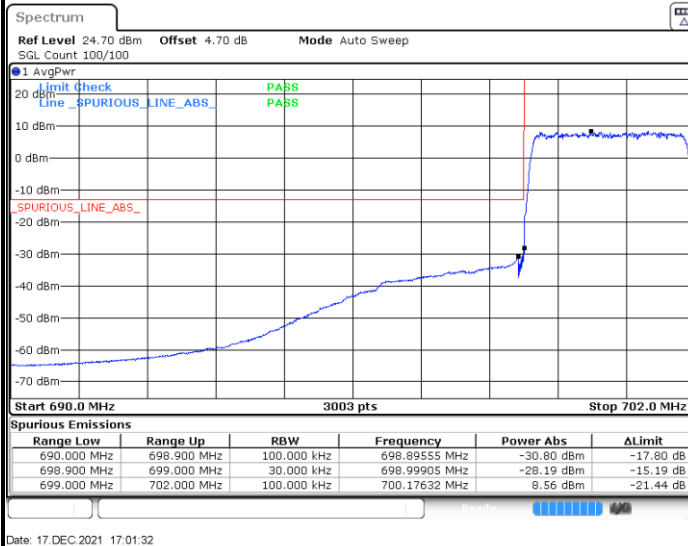
Lowest Band Edge / 1 RB



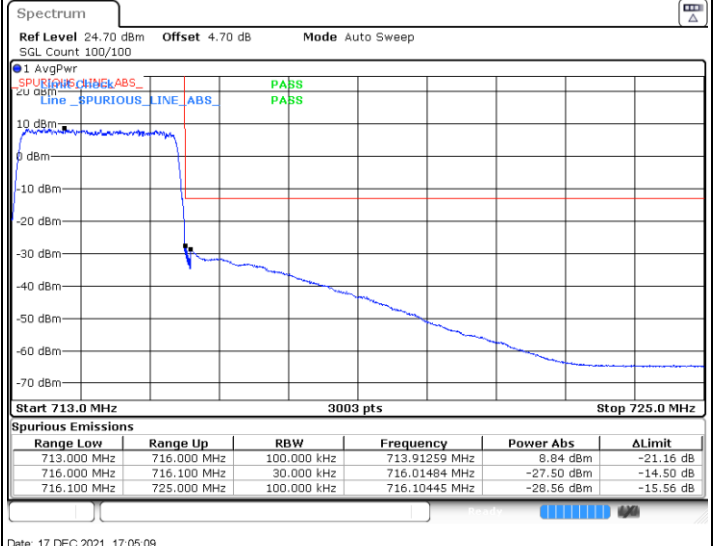
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



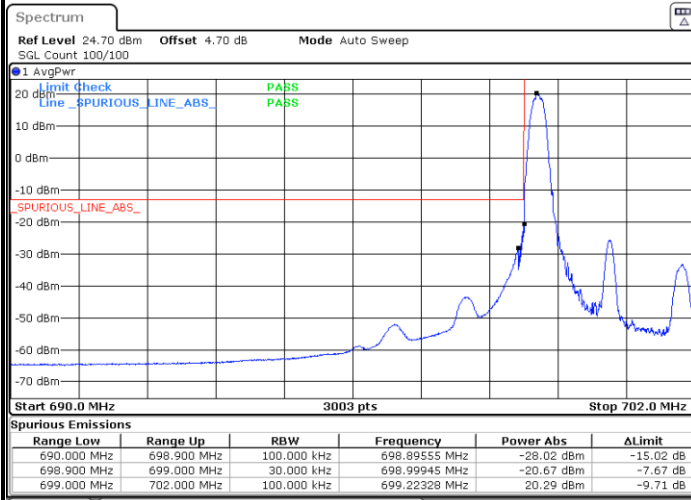
Highest Band Edge / Full RB



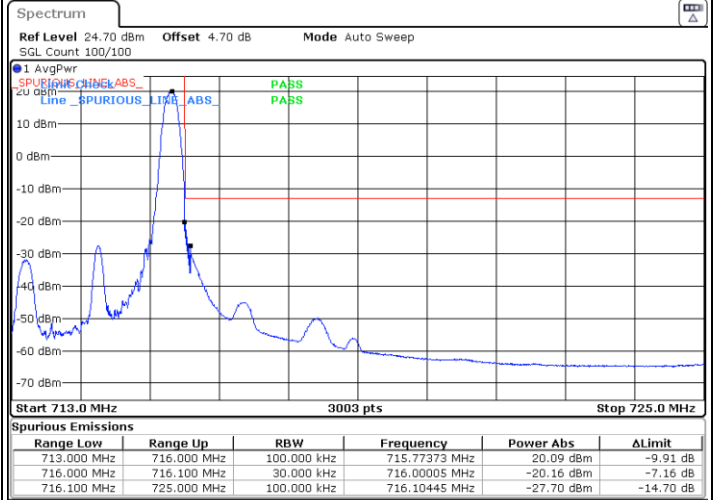


LTE Band 12 / 3MHz / 64QAM

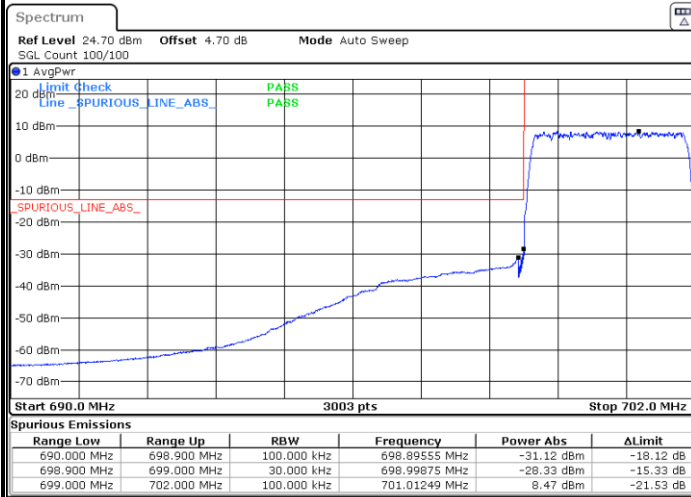
Lowest Band Edge / 1 RB



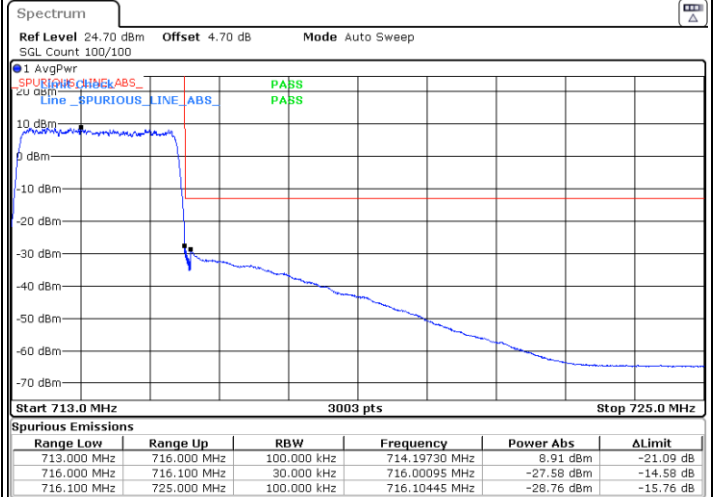
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



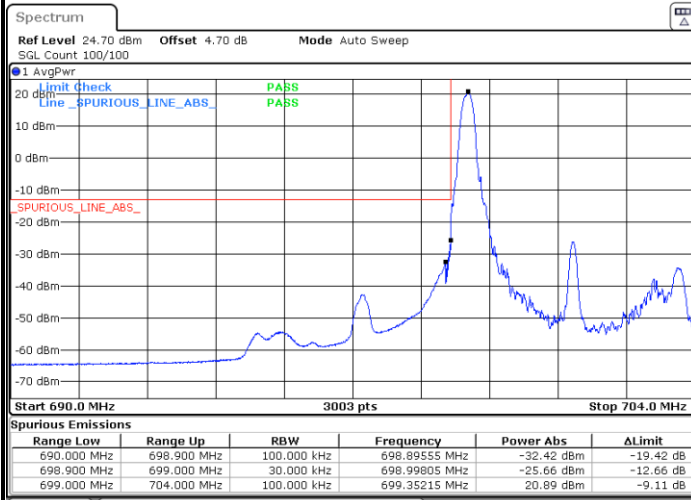
Highest Band Edge / Full RB



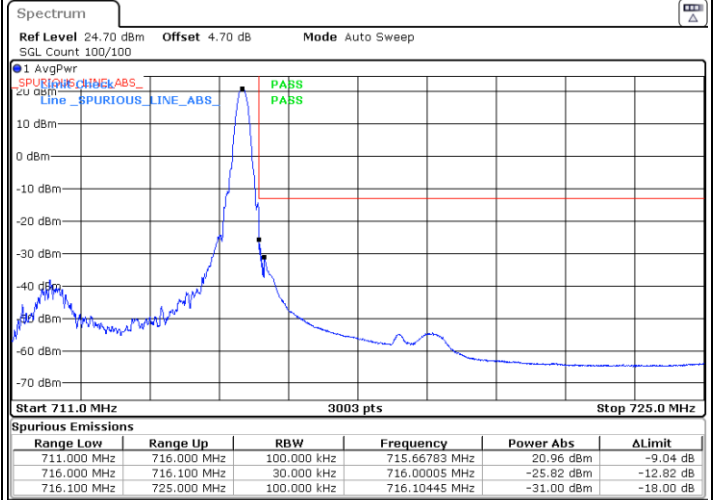


LTE Band 12 / 5MHz / QPSK

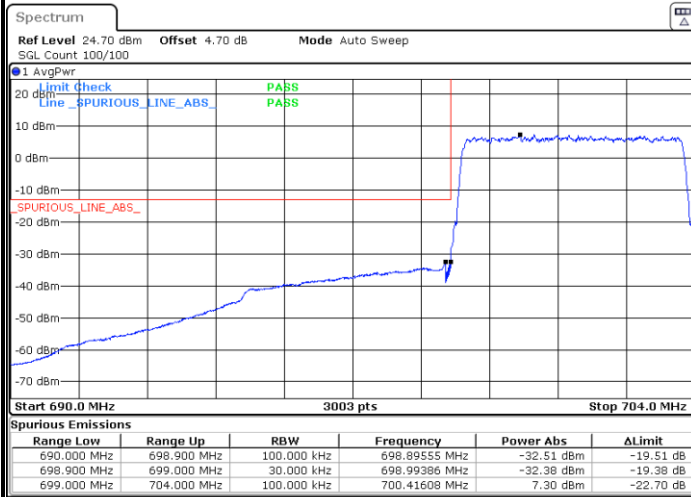
Lowest Band Edge / 1 RB



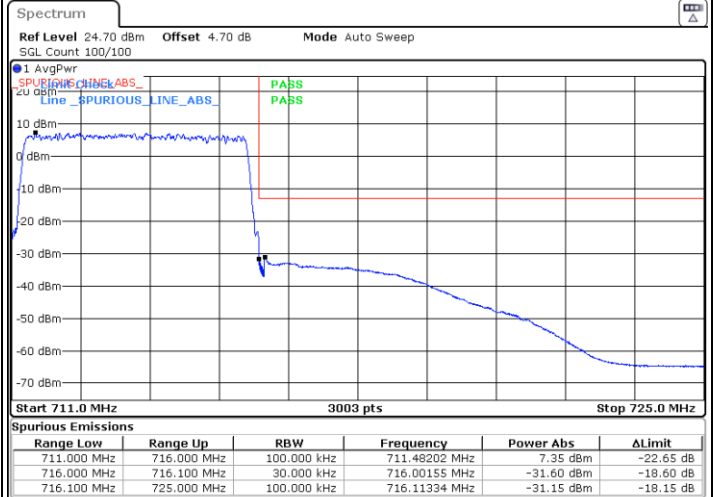
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



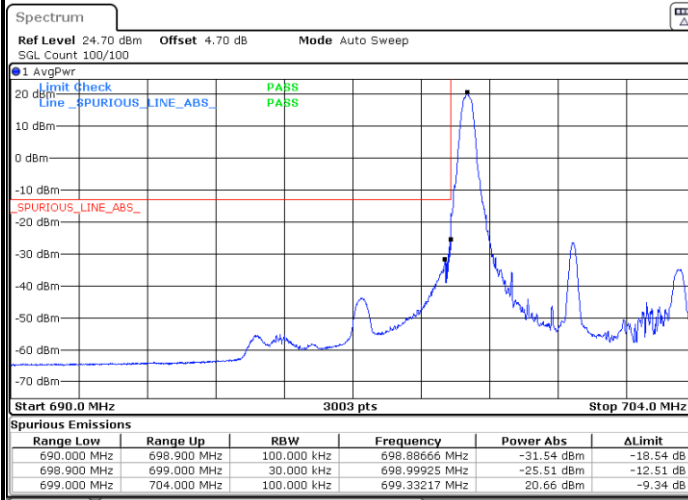
Highest Band Edge / Full RB





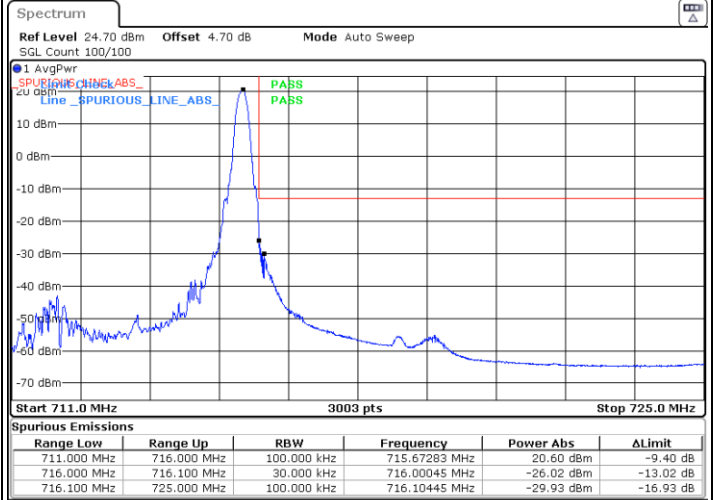
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



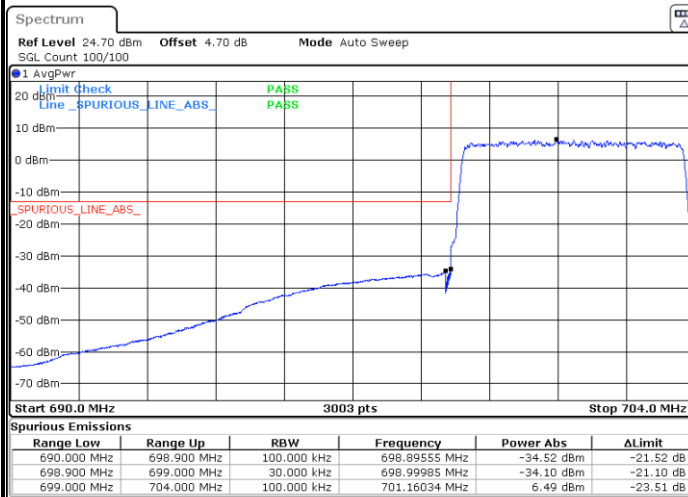
Date: 17 DEC 2021 17:09:43

Highest Band Edge / 1 RB



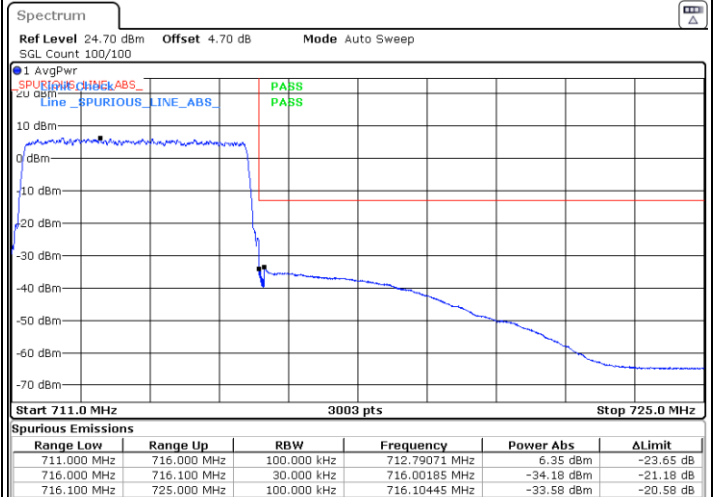
Date: 17 DEC 2021 17:14:13

Lowest Band Edge / Full RB



Date: 17 DEC 2021 17:08:49

Highest Band Edge / Full RB

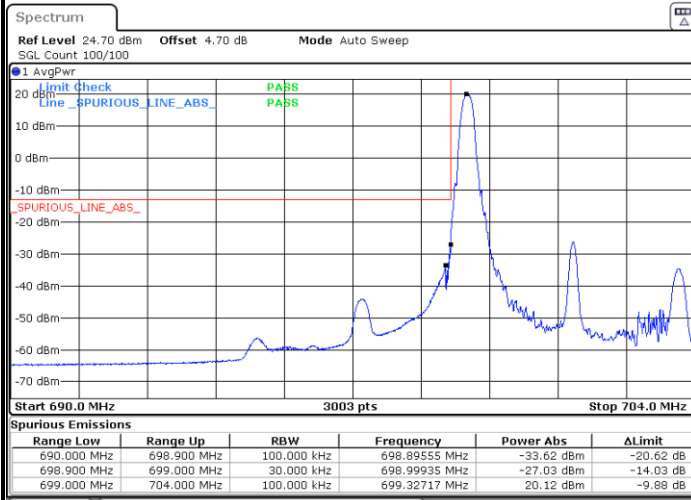


Date: 17 DEC 2021 17:12:25

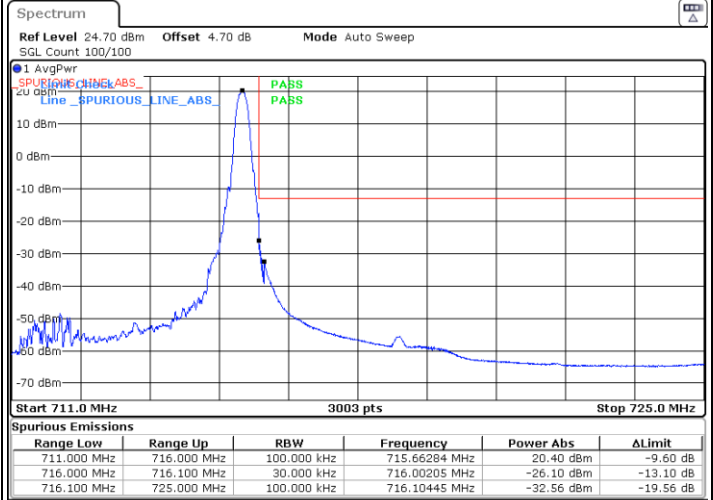


LTE Band 12 / 5MHz / 64QAM

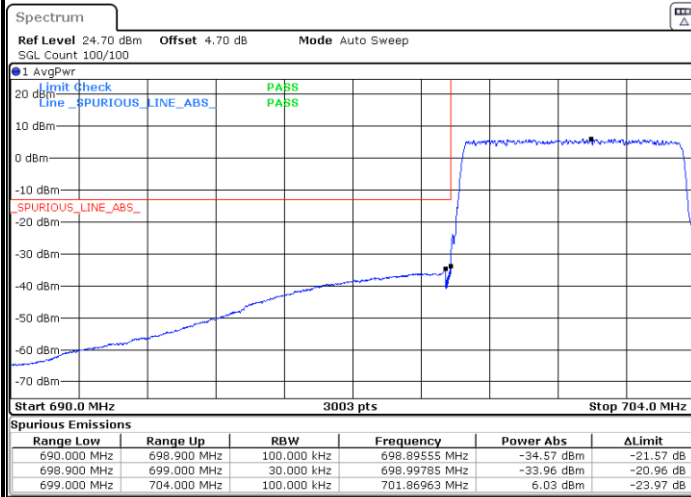
Lowest Band Edge / 1RB



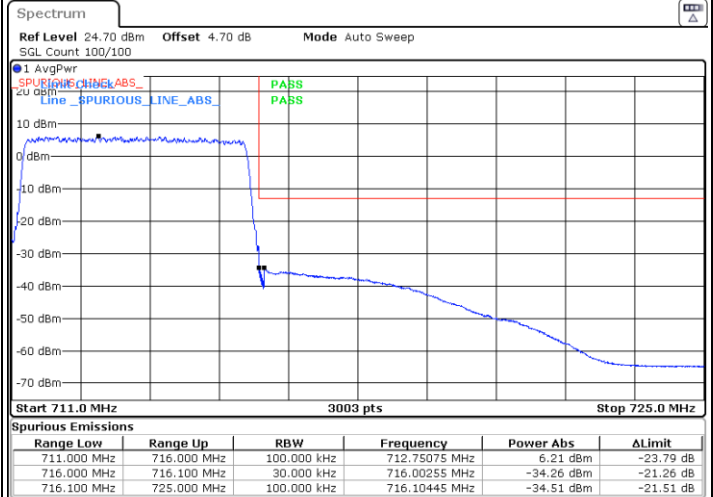
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



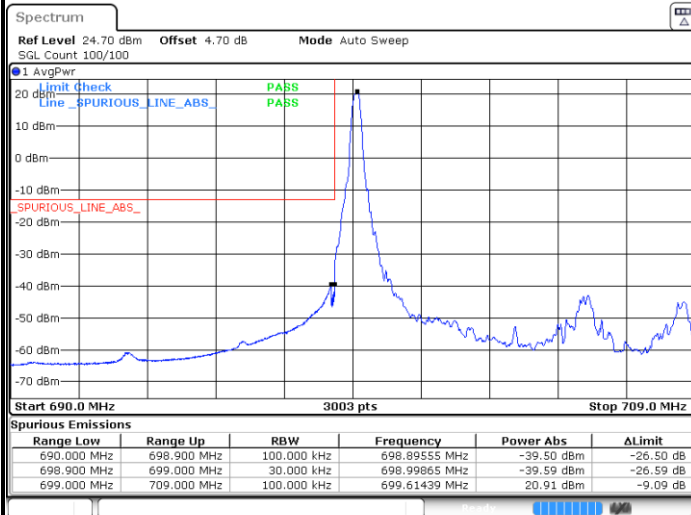
Highest Band Edge / Full RB



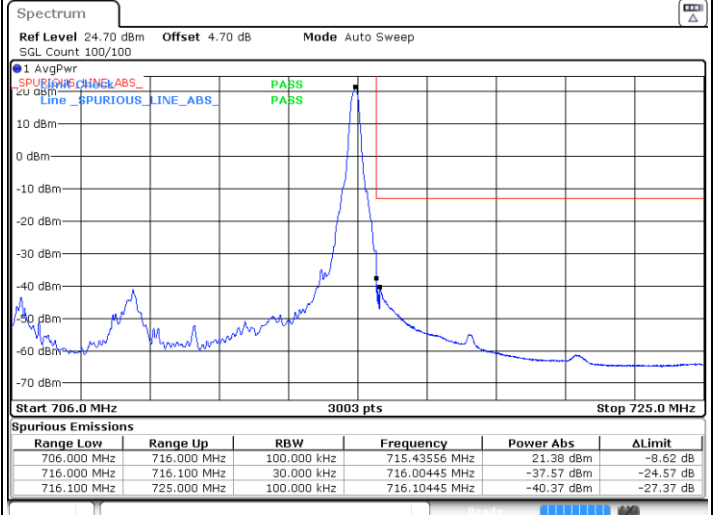


LTE Band 12 / 10MHz / QPSK

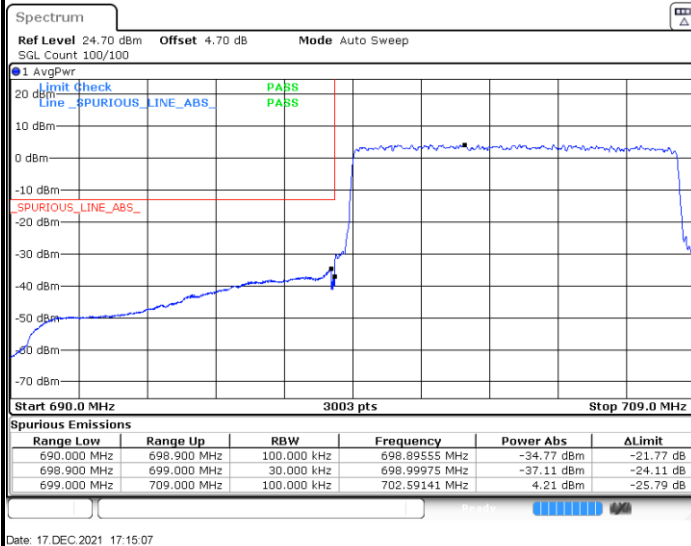
Lowest Band Edge / 1 RB



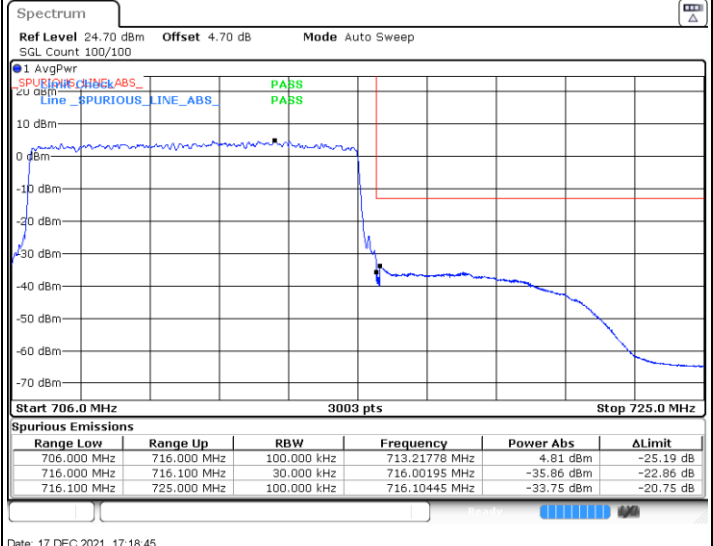
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



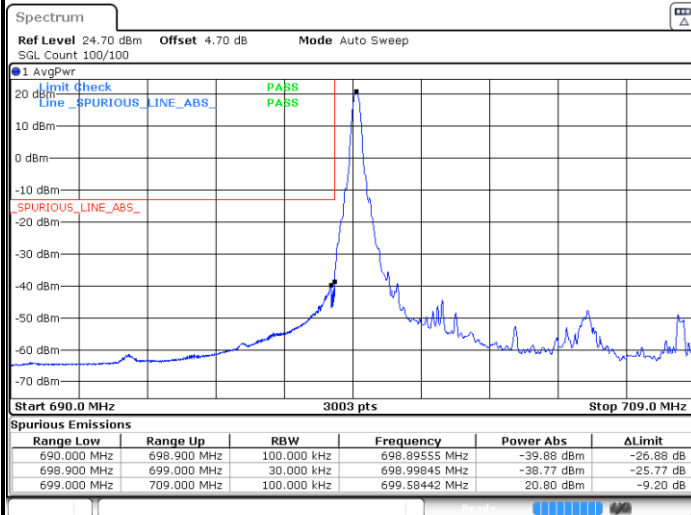
Highest Band Edge / Full RB



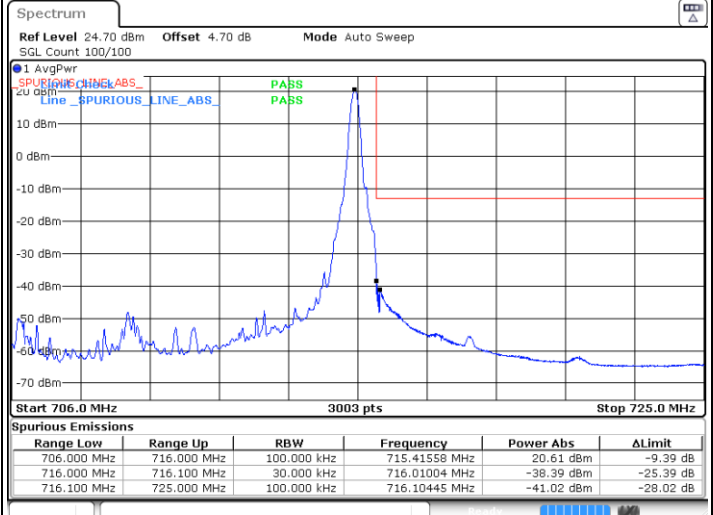


LTE Band 12 / 10MHz / 16QAM

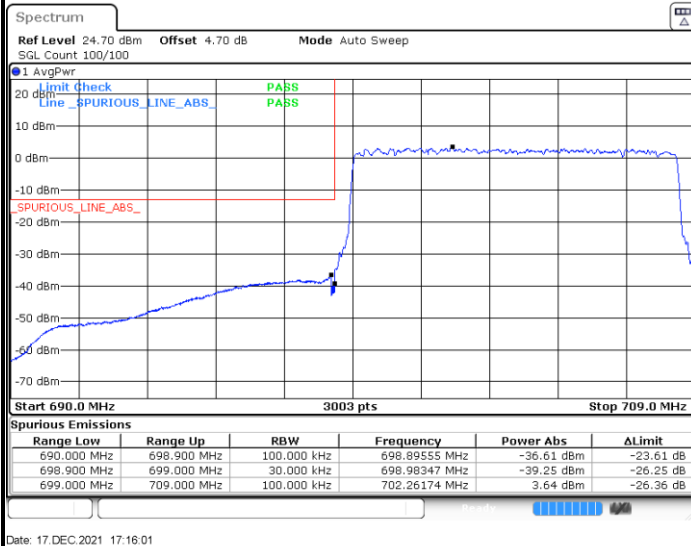
Lowest Band Edge / 1 RB



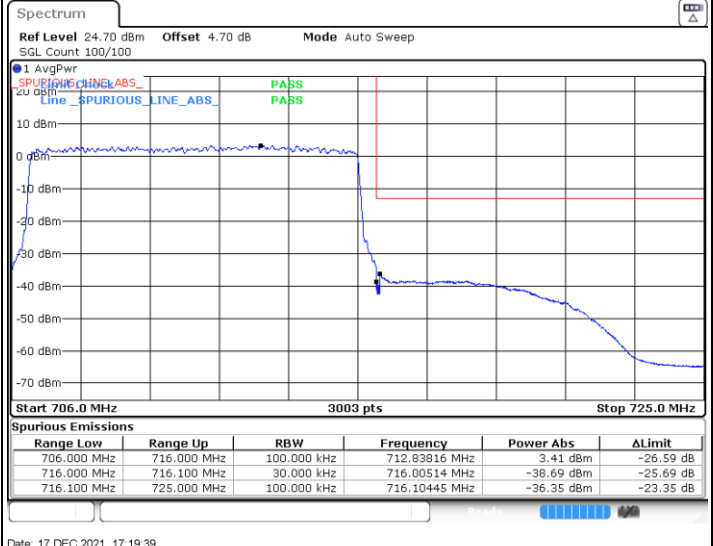
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



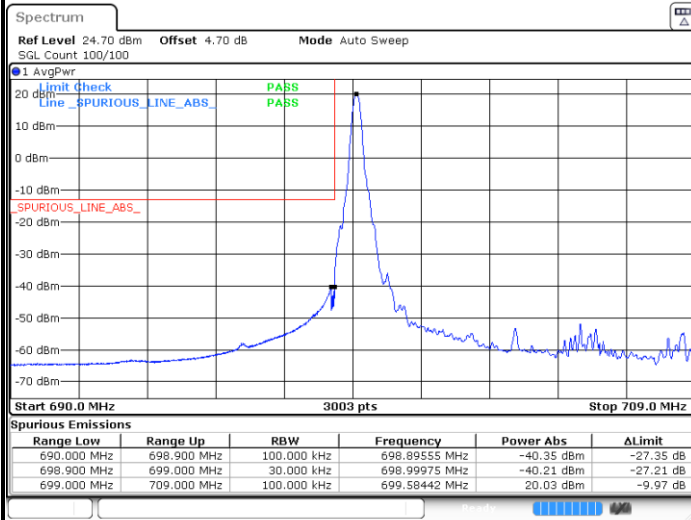
Highest Band Edge / Full RB



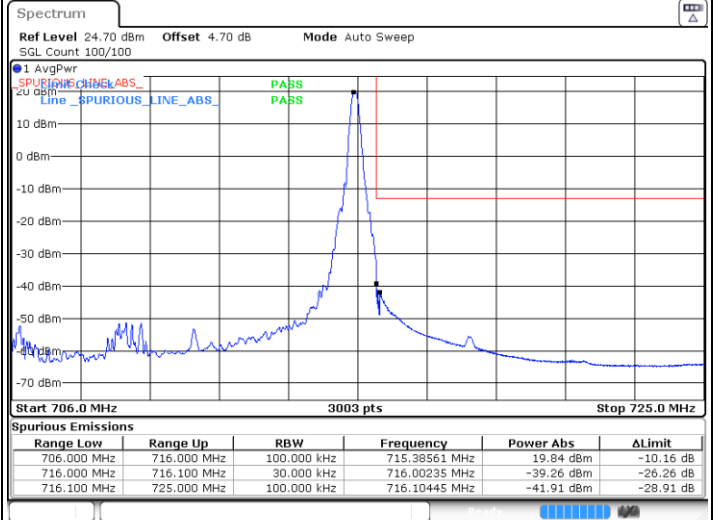


LTE Band 12 / 10MHz / 64QAM

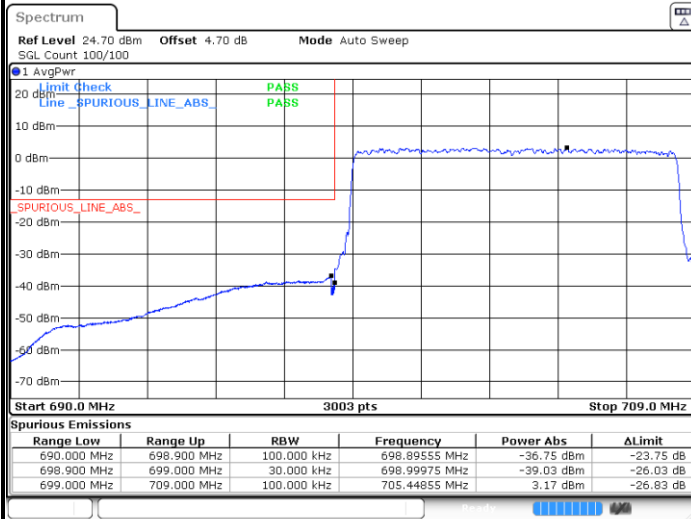
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

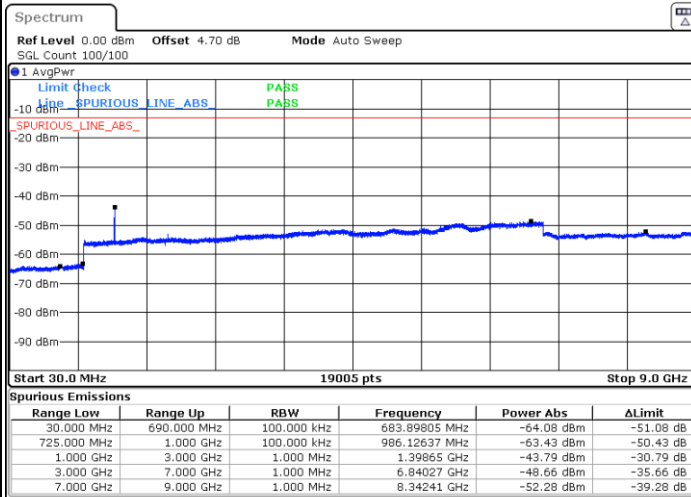




Conducted Spurious Emission

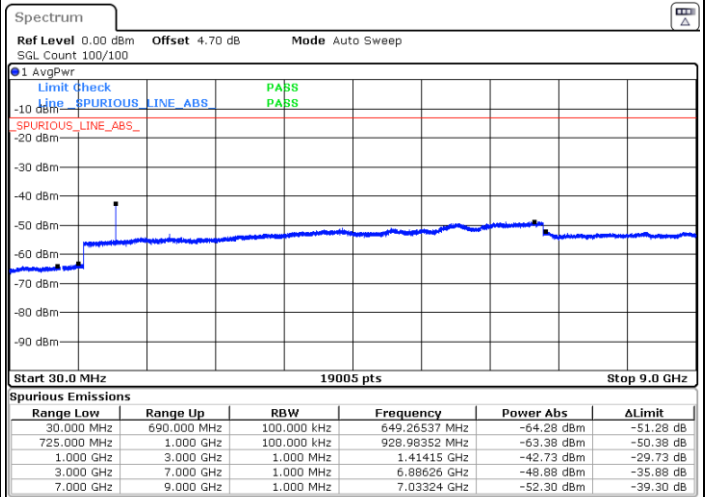
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



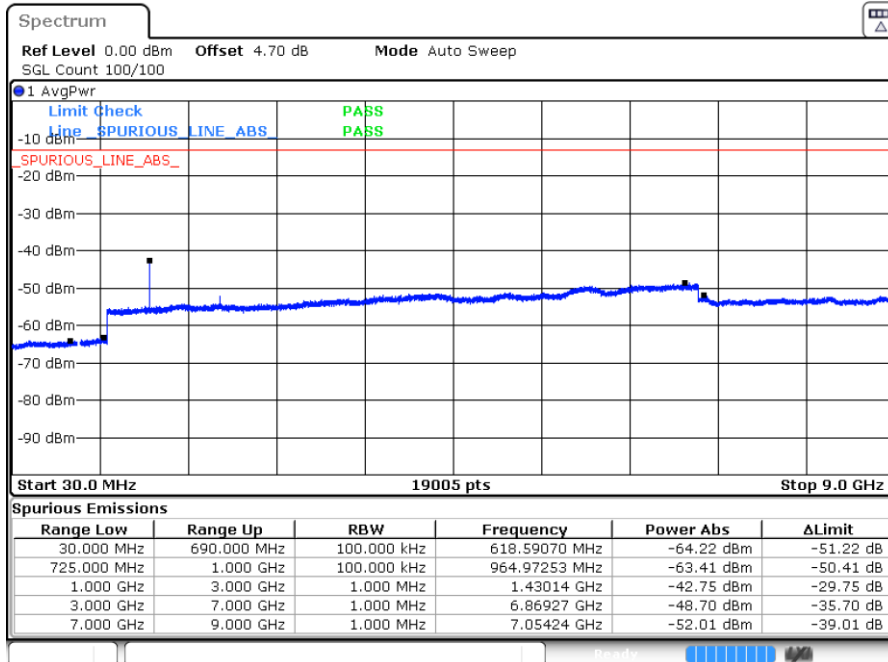
Date: 17.DEC.2021 17:46:31

Middle Channel / QPSK



Date: 17.DEC.2021 17:45:38

Highest Channel / QPSK

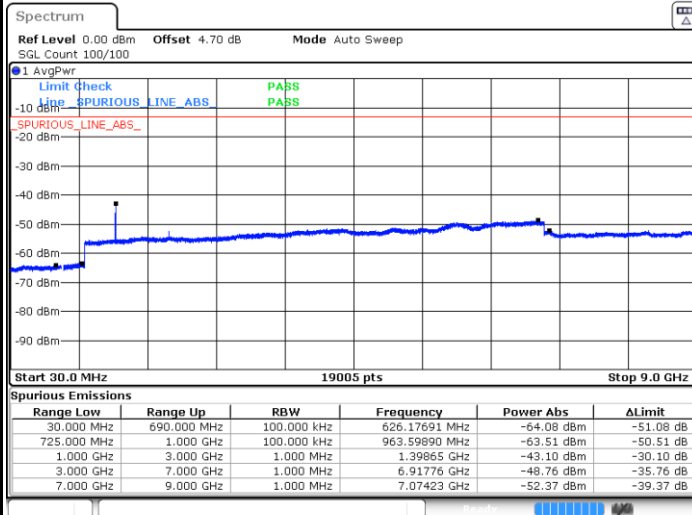


Date: 17.DEC.2021 17:44:44



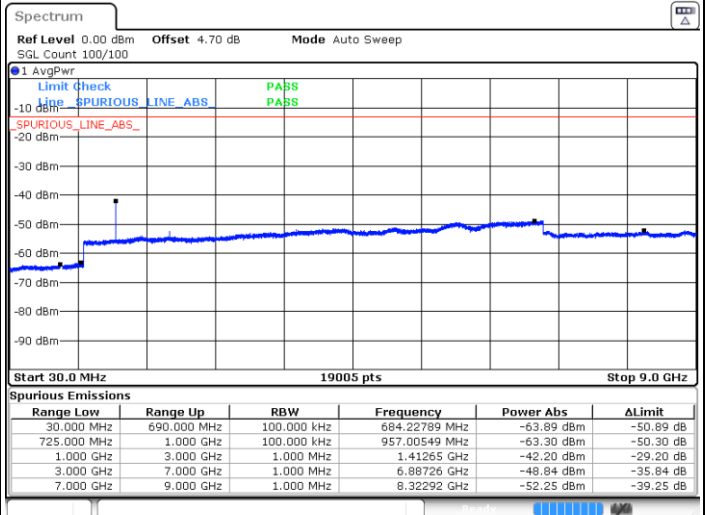
LTE Band 12 / 3MHz

Lowest Channel / QPSK



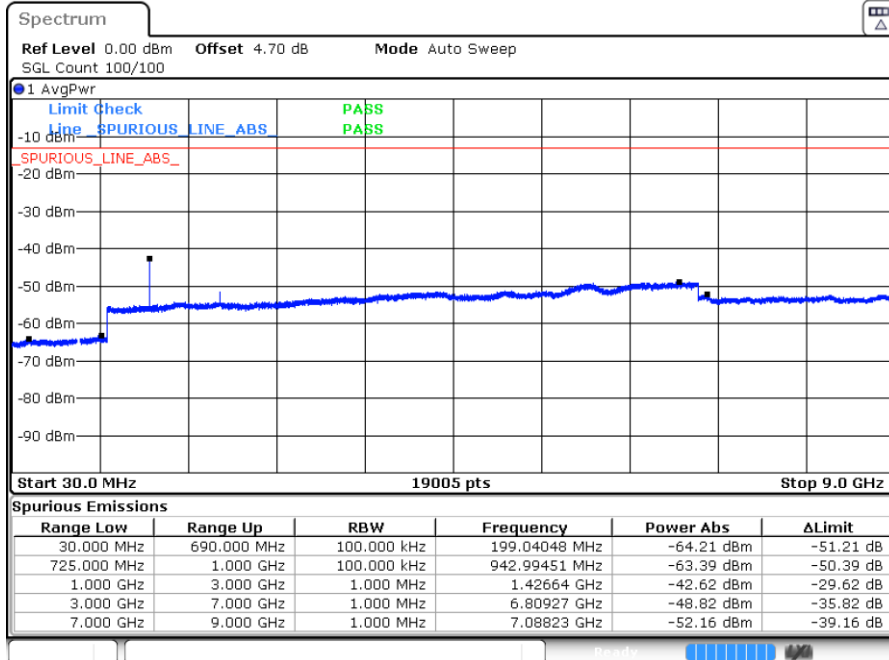
Date: 17.DEC.2021 17:47:26

Middle Channel / QPSK



Date: 17.DEC.2021 17:48:20

Highest Channel / QPSK

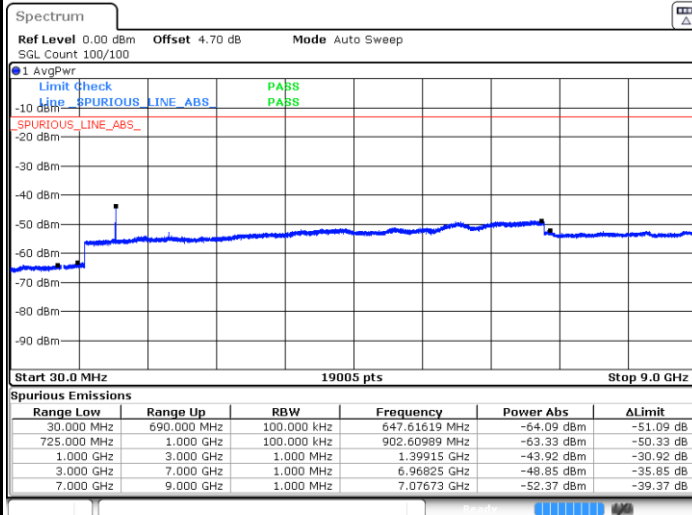


Date: 17.DEC.2021 17:49:13



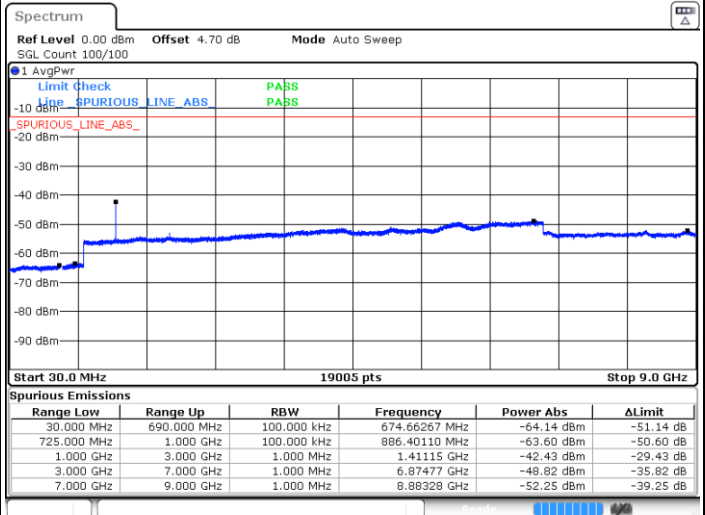
LTE Band 12 / 5MHz

Lowest Channel / QPSK



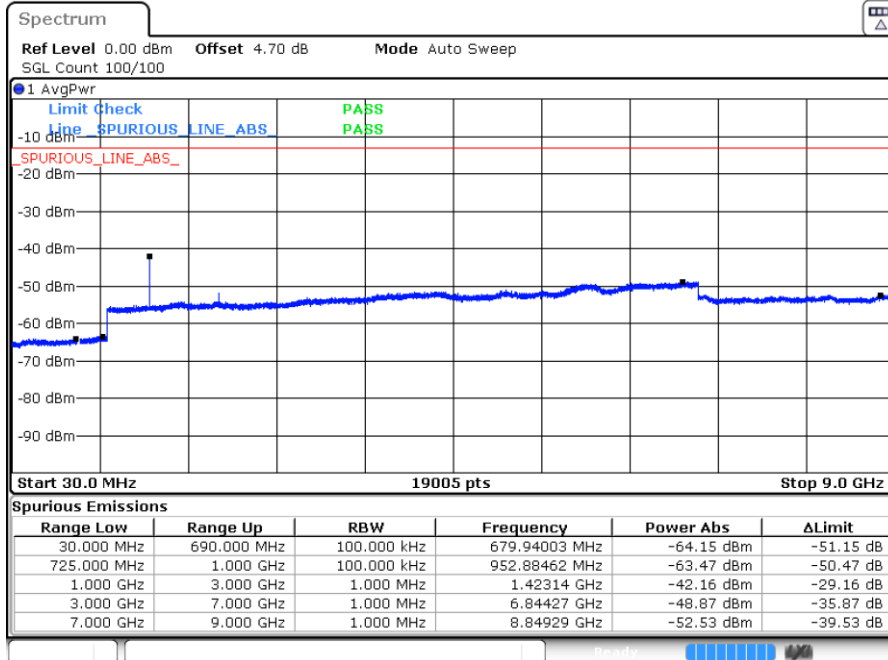
Date: 17.DEC.2021 17:50:46

Middle Channel / QPSK



Date: 17.DEC.2021 17:51:40

Highest Channel / QPSK

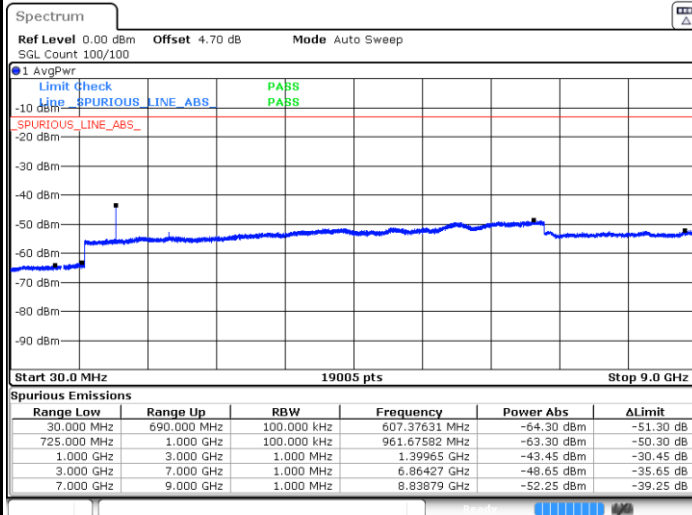


Date: 17.DEC.2021 17:52:34



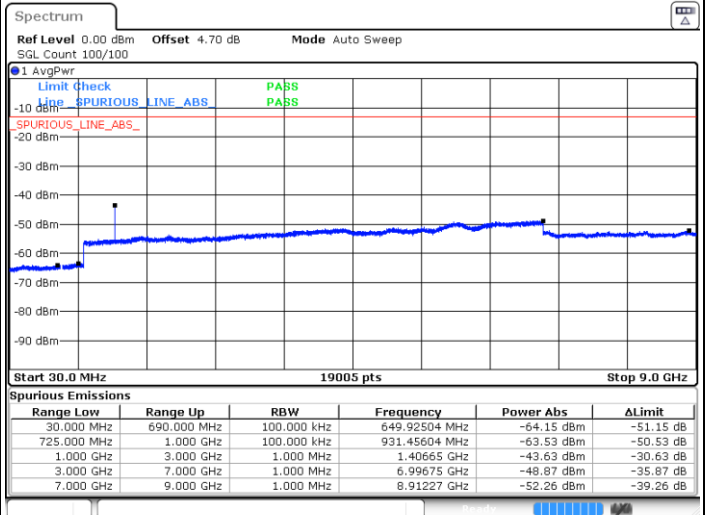
LTE Band 12 / 10MHz

Lowest Channel / QPSK



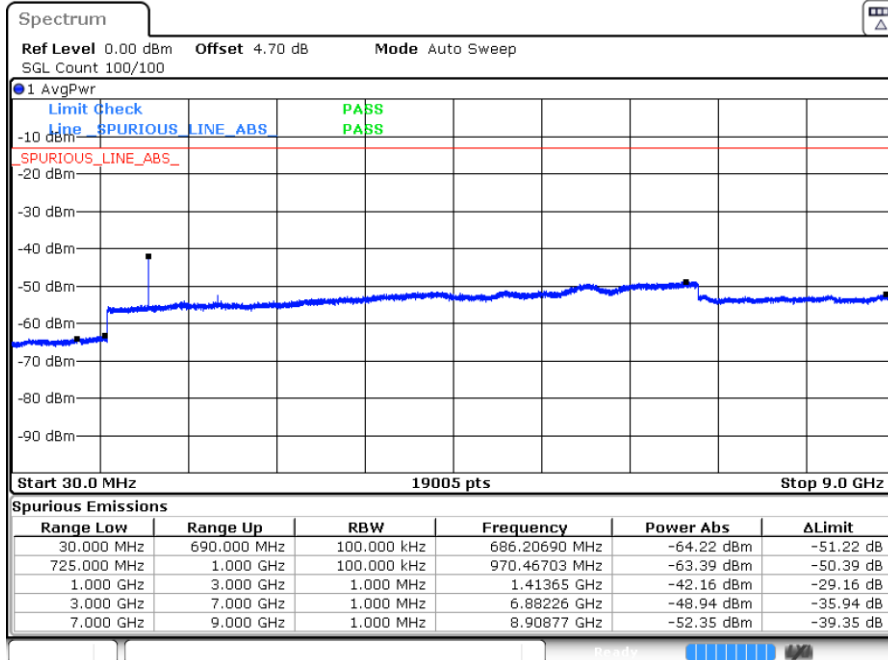
Date: 17.DEC.2021 17:53:29

Middle Channel / QPSK



Date: 17.DEC.2021 17:54:23

Highest Channel / QPSK



Date: 17.DEC.2021 17:55:17

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	0.0011	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0090	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0102	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0076	
-30	Normal Voltage	0.0068	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0007	
20	Battery End Point	0.0106	

Note:

1. Normal Voltage =3.89 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.48 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

LTE Band 5

LTE Band 5 / 10MHz / QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1649.18	-60.02	-13	-47.02	-67.31	-63.25	3.98	9.36	H
	2473.77	-54.99	-13	-41.99	-66.60	-58.54	4.85	10.55	H
	3298.36	-62.37	-13	-49.37	-77.25	-67.30	5.50	12.58	H
	1649.18	-61.65	-13	-48.65	-68.99	-64.88	3.98	9.36	V
	2473.77	-58.66	-13	-45.66	-70.31	-62.21	4.85	10.55	V
	3298.36	-62.61	-13	-49.61	-77.41	-67.54	5.50	12.58	V
Middle	1664.18	-57.26	-13	-44.26	-64.26	-60.51	4.00	9.40	H
	2496.27	-57.85	-13	-44.85	-69.53	-61.42	4.88	10.60	H
	3328.36	-62.22	-13	-49.22	-77.09	-67.15	5.52	12.60	H
	1664.18	-57.02	-13	-44.02	-64.16	-60.27	4.00	9.40	V
	2496.27	-59.97	-13	-46.97	-71.74	-63.54	4.88	10.60	V
	3328.36	-62.42	-13	-49.42	-77.27	-67.35	5.52	12.60	V
Highest	1679.18	-61.01	-13	-48.01	-67.94	-64.18	4.10	9.42	H
	2518.77	-57.77	-13	-44.77	-69.55	-61.35	4.90	10.63	H
	3358.36	-62.85	-13	-49.85	-77.71	-67.77	5.55	12.62	H
	1679.18	-63.43	-13	-50.43	-70.55	-66.60	4.10	9.42	V
	2518.77	-60.03	-13	-47.03	-71.90	-63.61	4.90	10.63	V
	3358.36	-62.80	-13	-49.80	-77.67	-67.72	5.55	12.62	V

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

**LTE Band 12**

LTE Band 12 / 10MHz / QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1399	-54.44	-13	-41.44	-62.74	-57.67	3.98	9.36	H
	2098.5	-58.84	-13	-45.84	-69.23	-62.39	4.85	10.55	H
	2798	-62.74	-13	-49.74	-76.31	-67.67	5.50	12.58	H
	1399	-61.64	-13	-48.64	-69.84	-64.87	3.98	9.36	V
	2098.5	-58.90	-13	-45.90	-69.52	-62.45	4.85	10.55	V
	2798	-62.99	-13	-49.99	-76.49	-67.92	5.50	12.58	V
Middle	1406	-56.84	-13	-43.84	-65.14	-60.09	4.00	9.40	H
	2109	-59.06	-13	-46.06	-69.57	-62.63	4.88	10.60	H
	2812	-62.76	-13	-49.76	-76.36	-67.69	5.52	12.60	H
	1406	-62.69	-13	-49.69	-70.88	-65.94	4.00	9.40	V
	2109	-60.59	-13	-47.59	-71.33	-64.16	4.88	10.60	V
	2812	-62.82	-13	-49.82	-76.35	-67.75	5.52	12.60	V
Highest	1413	-56.42	-13	-43.42	-64.71	-59.59	4.10	9.42	H
	2119.5	-56.68	-13	-43.68	-67.32	-60.26	4.90	10.63	H
	2826	-62.65	-13	-49.65	-76.30	-67.57	5.55	12.62	H
	1413	-61.73	-13	-48.73	-69.90	-64.90	4.10	9.42	V
	2119.5	-58.00	-13	-45.00	-68.89	-61.58	4.90	10.63	V
	2826	-62.69	-13	-49.69	-76.27	-67.61	5.55	12.62	V

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

————THE END————