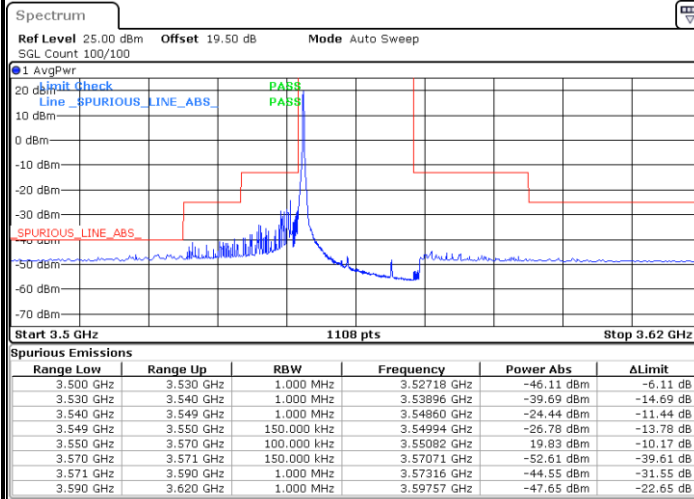




LTE Band 48 / 15MHz

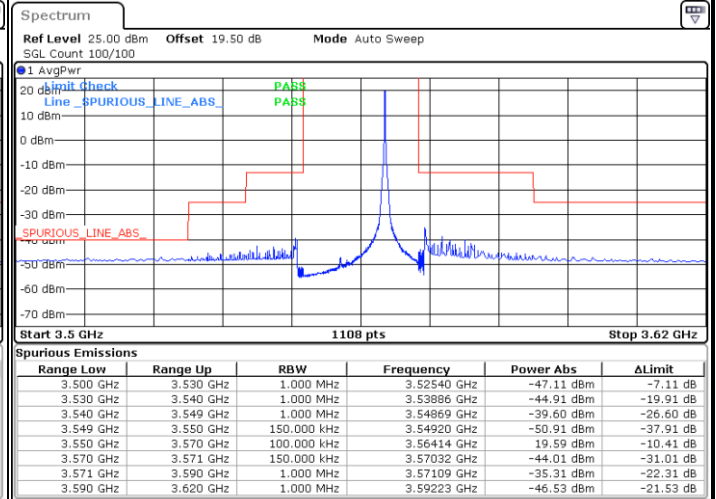
64QAM

Lowest Channel / 1RB0



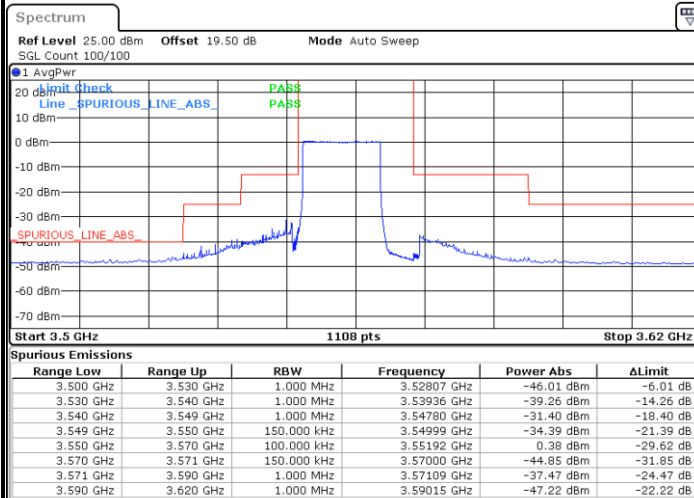
Date: 11.DEC.2023 22:53:35

Lowest Channel / 1RBmax



Date: 11.DEC.2023 22:59:57

Lowest Channel / FullIRB



Date: 11.DEC.2023 23:01:13

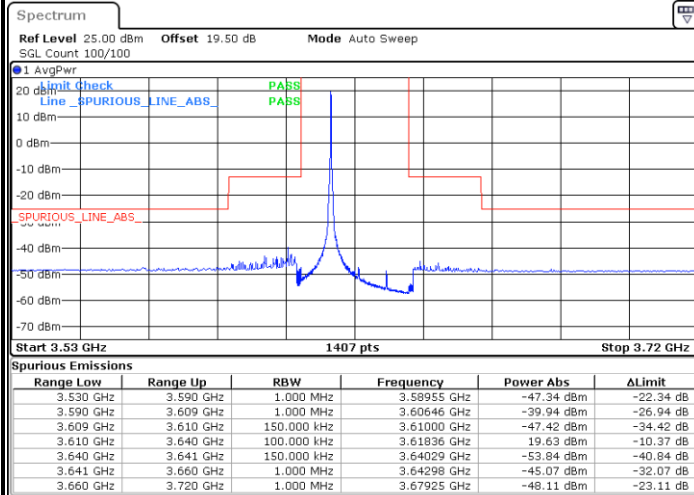
N/A



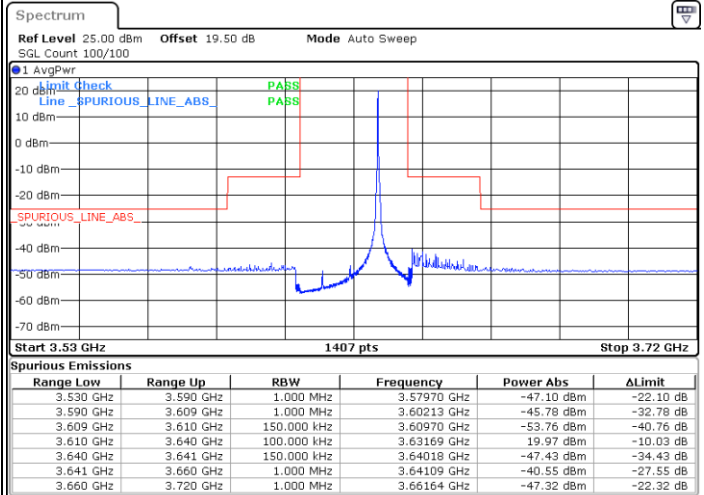
LTE Band 48 / 15MHz

64QAM

Middle Channel / 1RB0



Middle Channel / 1RBmax



Middle Channel / FullRB



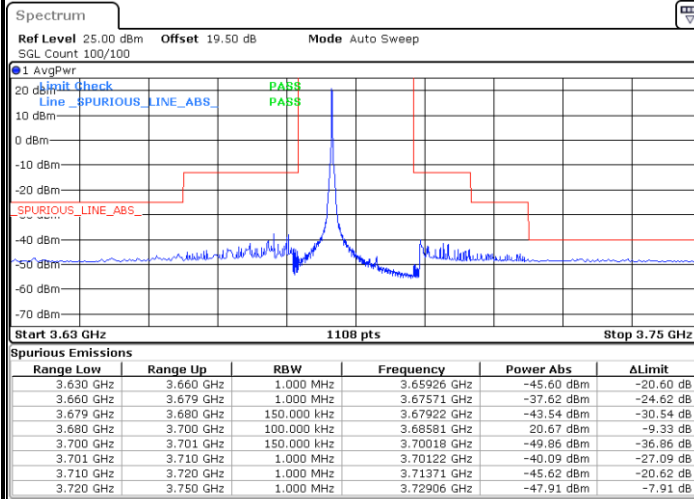
N/A



LTE Band 48 / 15MHz

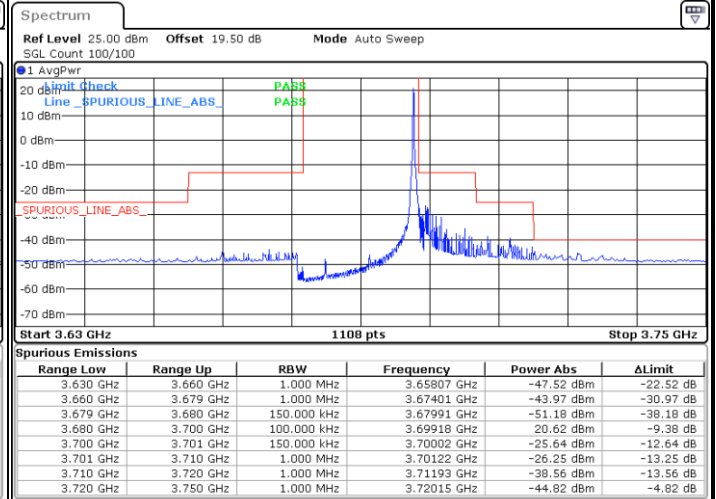
64QAM

Highest Channel / 1RB0



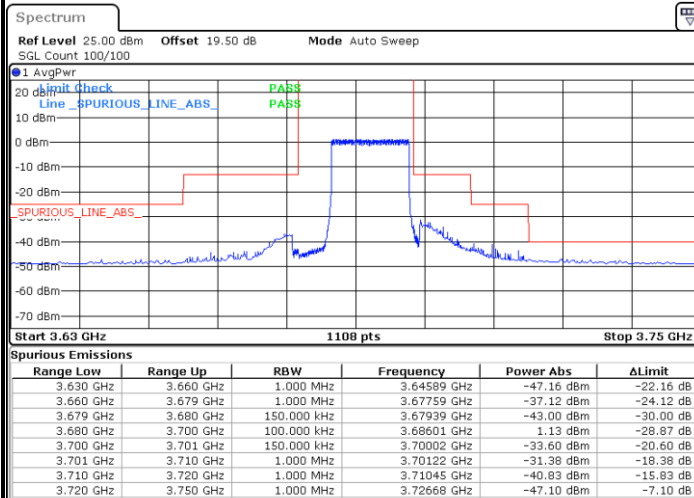
Date: 11.DEC.2023 23:36:27

Highest Channel / 1RBmax



Date: 11.DEC.2023 23:42:46

Highest Channel / FullRB



Date: 11.DEC.2023 23:44:02

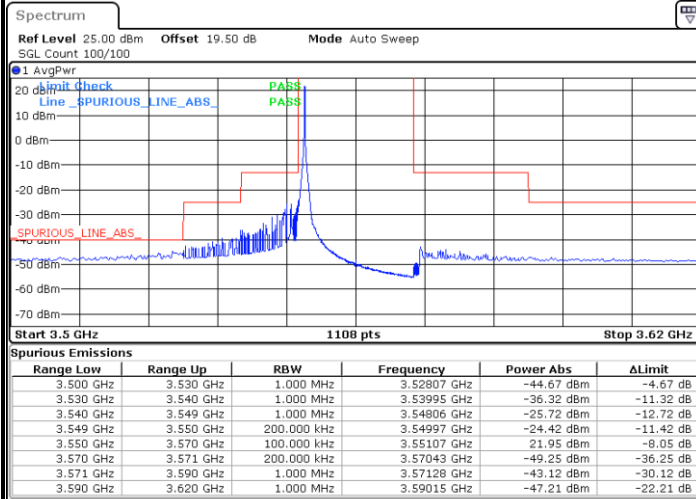
N/A



LTE Band 48 / 20MHz

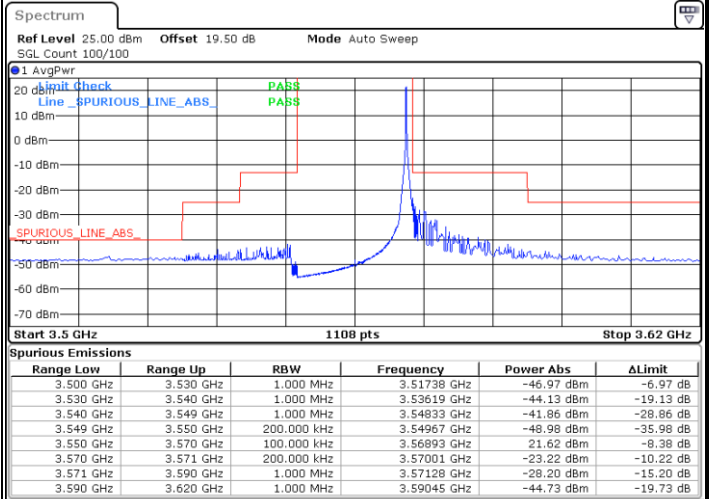
QPSK

Lowest Channel / 1RB0



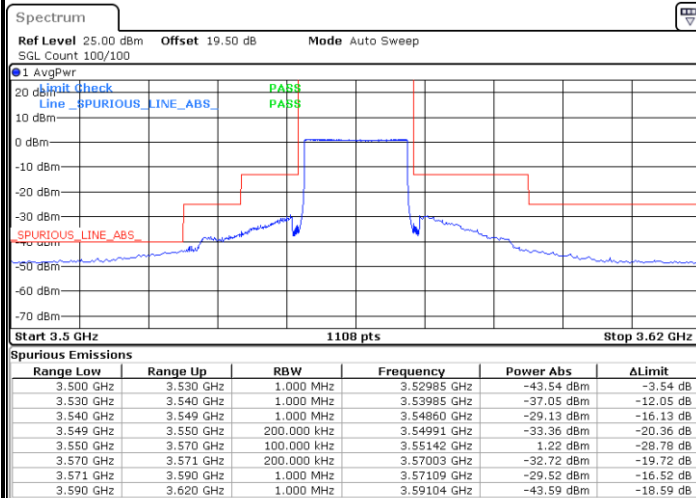
Date: 11.DEC.2023 23:56:01

Lowest Channel / 1RBmax



Date: 12.DEC.2023 00:02:23

Lowest Channel / FullIRB



Date: 12.DEC.2023 00:03:40

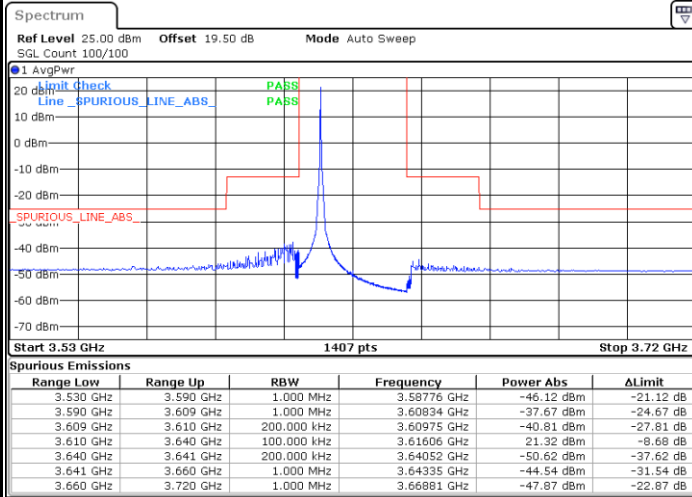
N/A



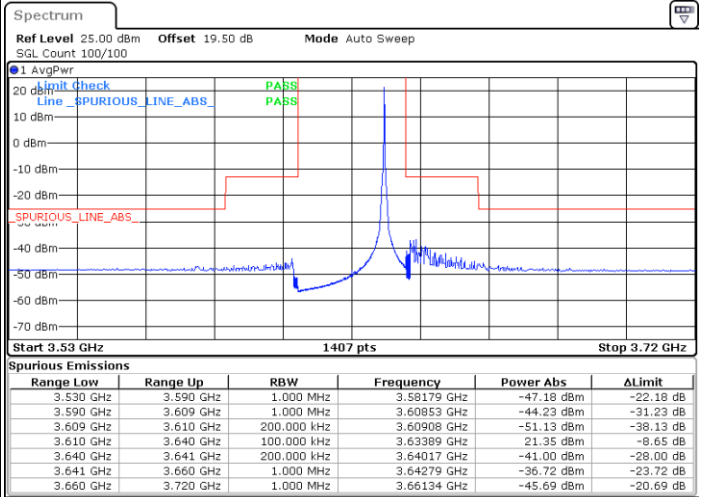
LTE Band 48 / 20MHz

QPSK

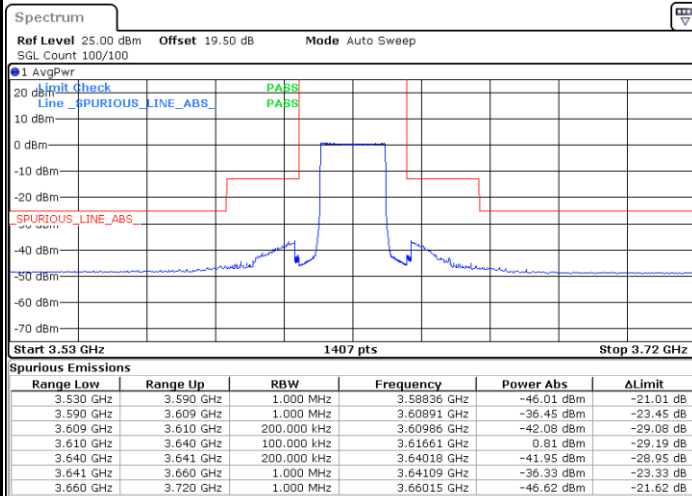
Middle Channel / 1RB0



Middle Channel / 1RBmax



Middle Channel / FullRB



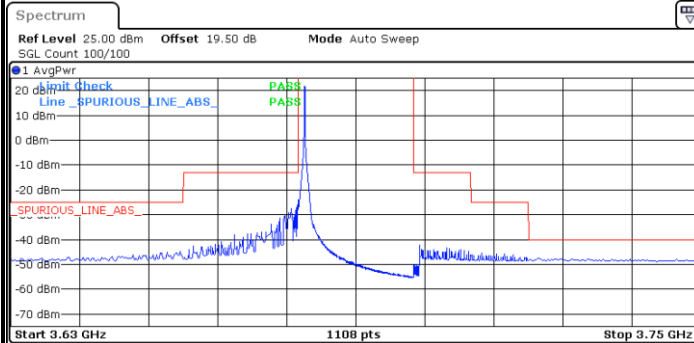
N/A



LTE Band 48 / 20MHz

QPSK

Highest Channel / 1RB0

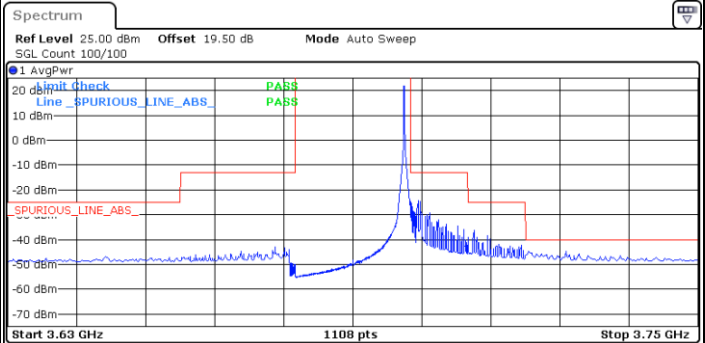


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.630 GHz	3.660 GHz	1.000 MHz	3.65955 GHz	-44.68 dBm	-19.68 dB
3.660 GHz	3.679 GHz	1.000 MHz	3.67872 GHz	-27.49 dBm	-14.49 dB
3.679 GHz	3.680 GHz	200.000 kHz	3.68000 GHz	-23.84 dBm	-10.84 dB
3.680 GHz	3.700 GHz	100.000 kHz	3.68107 GHz	21.75 dBm	-8.25 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70004 GHz	-50.08 dBm	-37.08 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70104 GHz	-42.26 dBm	-29.26 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71183 GHz	-45.27 dBm	-20.27 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72193 GHz	-47.46 dBm	-7.46 dB

Date: 12.DEC.2023 00:39:56

Highest Channel / 1RBmax

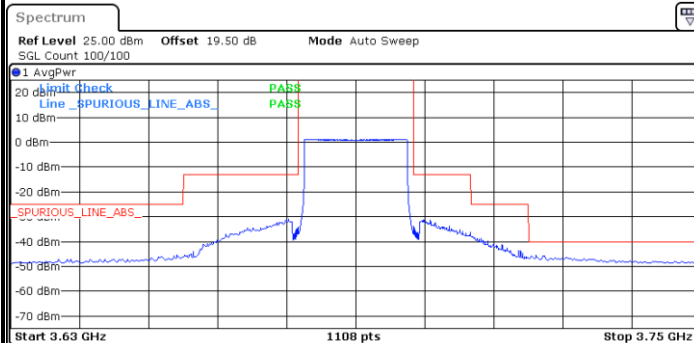


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.630 GHz	3.660 GHz	1.000 MHz	3.64708 GHz	-46.82 dBm	-21.82 dB
3.660 GHz	3.679 GHz	1.000 MHz	3.67646 GHz	-42.81 dBm	-29.81 dB
3.679 GHz	3.680 GHz	200.000 kHz	3.67922 GHz	-49.44 dBm	-36.44 dB
3.680 GHz	3.700 GHz	100.000 kHz	3.69888 GHz	21.80 dBm	-8.20 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70003 GHz	-24.49 dBm	-11.49 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70131 GHz	-24.38 dBm	-11.38 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71114 GHz	-36.26 dBm	-11.26 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72045 GHz	-44.57 dBm	-4.57 dB

Date: 12.DEC.2023 00:46:15

Highest Channel / FullRB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.630 GHz	3.660 GHz	1.000 MHz	3.65896 GHz	-45.34 dBm	-20.34 dB
3.660 GHz	3.679 GHz	1.000 MHz	3.67834 GHz	-31.11 dBm	-18.11 dB
3.679 GHz	3.680 GHz	200.000 kHz	3.67997 GHz	-34.24 dBm	-21.24 dB
3.680 GHz	3.700 GHz	100.000 kHz	3.68127 GHz	1.22 dBm	-28.78 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70000 GHz	-33.74 dBm	-20.74 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70185 GHz	-31.24 dBm	-18.24 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71035 GHz	-37.88 dBm	-12.88 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72134 GHz	-45.32 dBm	-5.32 dB

Date: 12.DEC.2023 00:47:31

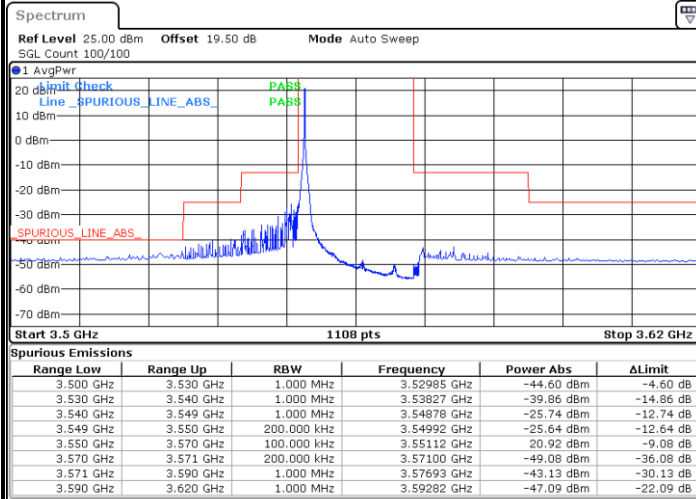
N/A



LTE Band 48 / 20MHz

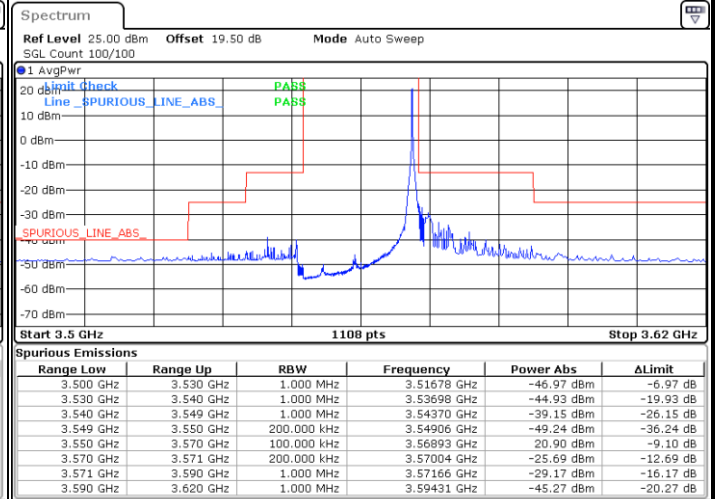
16QAM

Lowest Channel / 1RB0



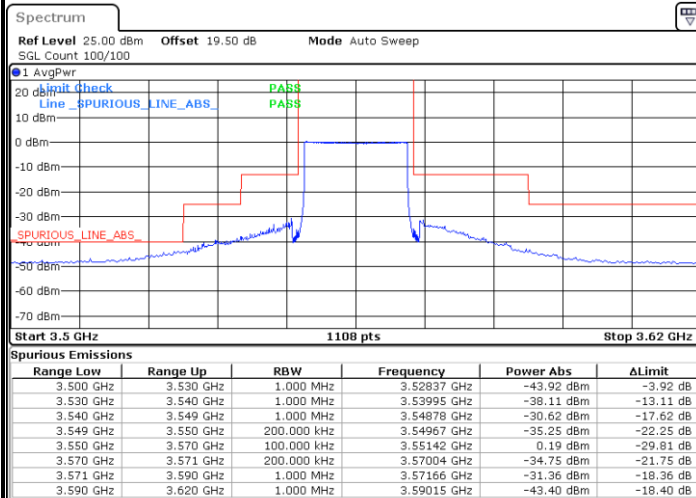
Date: 11.DEC.2023 23:57:18

Lowest Channel / 1RBmax



Date: 12.DEC.2023 00:01:07

Lowest Channel / FullIRB



Date: 12.DEC.2023 00:04:56

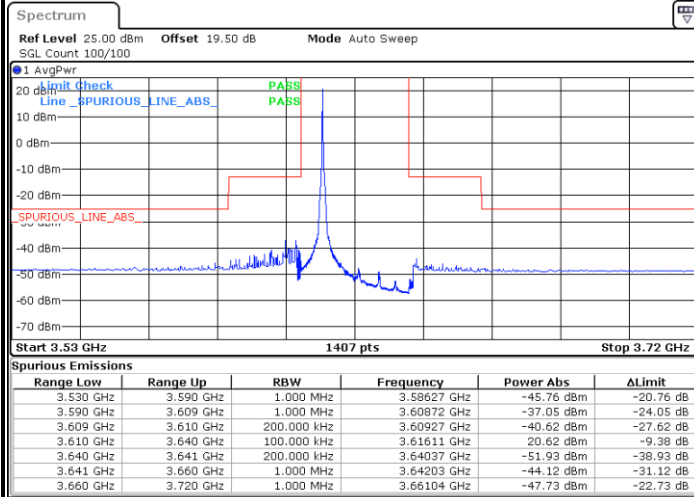
N/A



LTE Band 48 / 20MHz

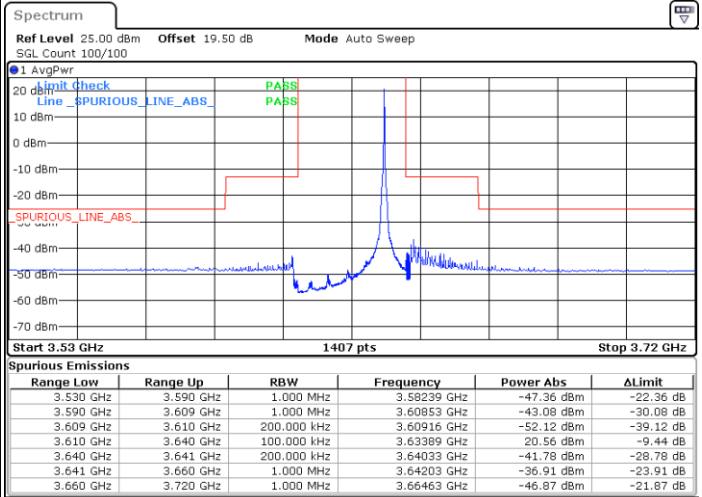
16QAM

Middle Channel / 1RB0



Date: 15.DEC.2023 17:34:02

Middle Channel / 1RBmax



Date: 15.DEC.2023 17:27:19

Middle Channel / FullRB



Date: 15.DEC.2023 17:22:35

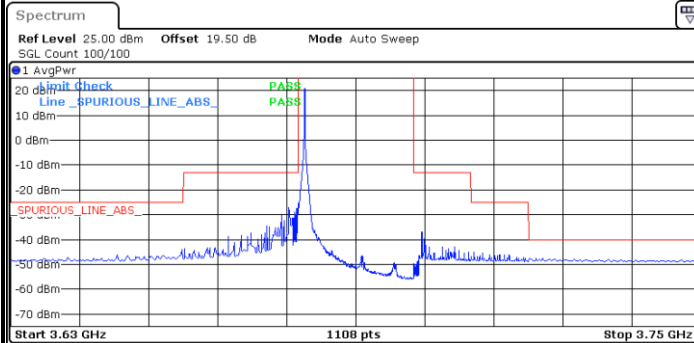
N/A



LTE Band 48 / 20MHz

16QAM

Highest Channel / 1RB0

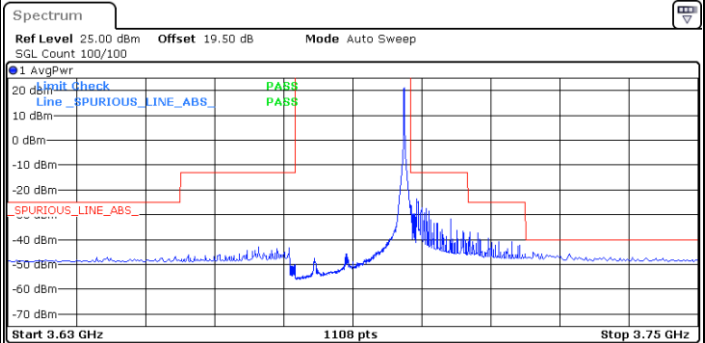


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.630 GHz	3.660 GHz	1.000 MHz	3.65985 GHz	-44.08 dBm	-19.08 dB
3.660 GHz	3.679 GHz	1.000 MHz	3.67834 GHz	-27.10 dBm	-14.10 dB
3.679 GHz	3.680 GHz	200.000 kHz	3.68000 GHz	-25.49 dBm	-12.49 dB
3.680 GHz	3.700 GHz	100.000 kHz	3.68107 GHz	20.91 dBm	-9.19 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70099 GHz	-46.38 dBm	-33.38 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70131 GHz	-37.04 dBm	-24.04 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71045 GHz	-45.11 dBm	-20.11 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72015 GHz	-47.52 dBm	-7.52 dB

Date: 12.DEC.2023 00:41:12

Highest Channel / 1RBmax

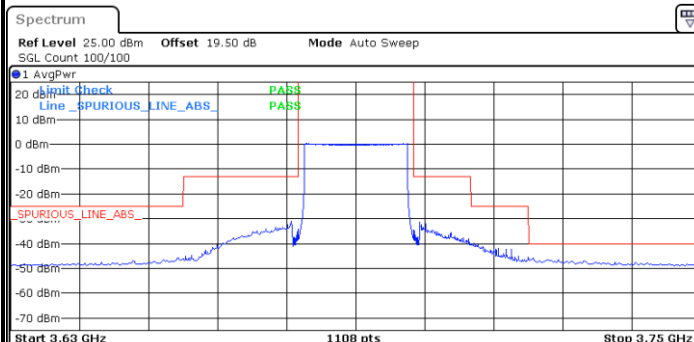


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.630 GHz	3.660 GHz	1.000 MHz	3.65926 GHz	-46.94 dBm	-21.94 dB
3.660 GHz	3.679 GHz	1.000 MHz	3.67364 GHz	-42.94 dBm	-29.94 dB
3.679 GHz	3.680 GHz	200.000 kHz	3.67914 GHz	-47.48 dBm	-34.48 dB
3.680 GHz	3.700 GHz	100.000 kHz	3.69893 GHz	21.12 dBm	-8.88 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70001 GHz	-25.89 dBm	-12.89 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70113 GHz	-23.51 dBm	-10.51 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71035 GHz	-36.82 dBm	-11.82 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72134 GHz	-45.21 dBm	-5.21 dB

Date: 12.DEC.2023 00:44:59

Highest Channel / FullRB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.630 GHz	3.660 GHz	1.000 MHz	3.65926 GHz	-45.63 dBm	-20.63 dB
3.660 GHz	3.679 GHz	1.000 MHz	3.67872 GHz	-30.94 dBm	-17.94 dB
3.679 GHz	3.680 GHz	200.000 kHz	3.68000 GHz	-34.33 dBm	-21.33 dB
3.680 GHz	3.700 GHz	100.000 kHz	3.68157 GHz	0.33 dBm	-29.67 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70005 GHz	-34.65 dBm	-21.65 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70104 GHz	-31.47 dBm	-18.47 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71054 GHz	-39.89 dBm	-14.89 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72074 GHz	-45.95 dBm	-5.95 dB

Date: 12.DEC.2023 00:48:47

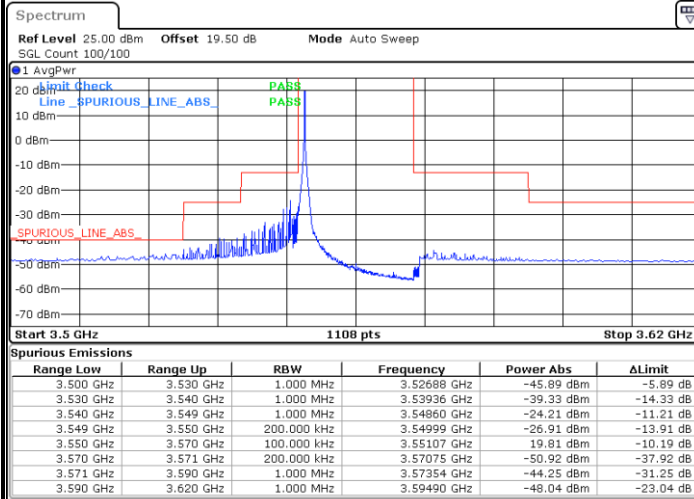
N/A



LTE Band 48 / 20MHz

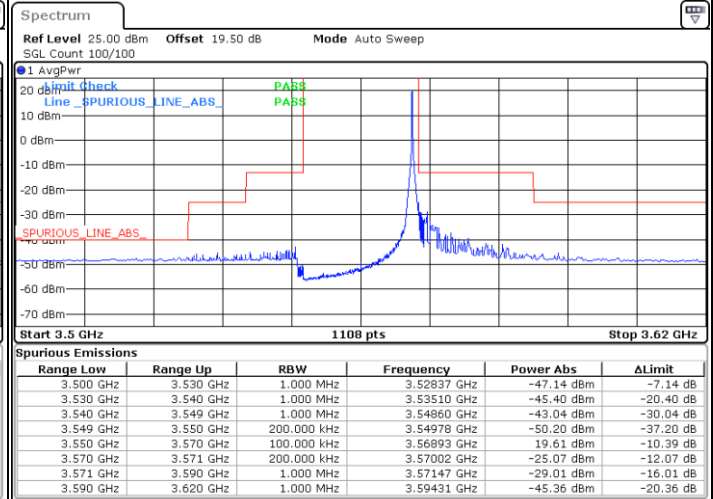
64QAM

Lowest Channel / 1RB0



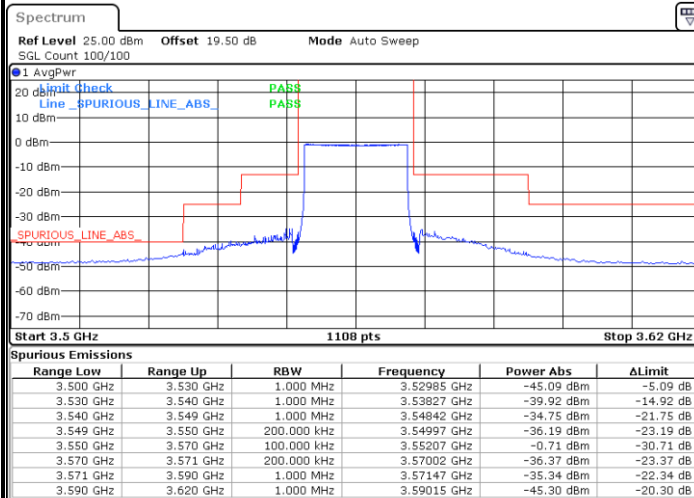
Date: 11.DEC.2023 23:58:34

Lowest Channel / 1RBmax



Date: 11.DEC.2023 23:59:51

Lowest Channel / FullIRB



Date: 12.DEC.2023 00:06:12

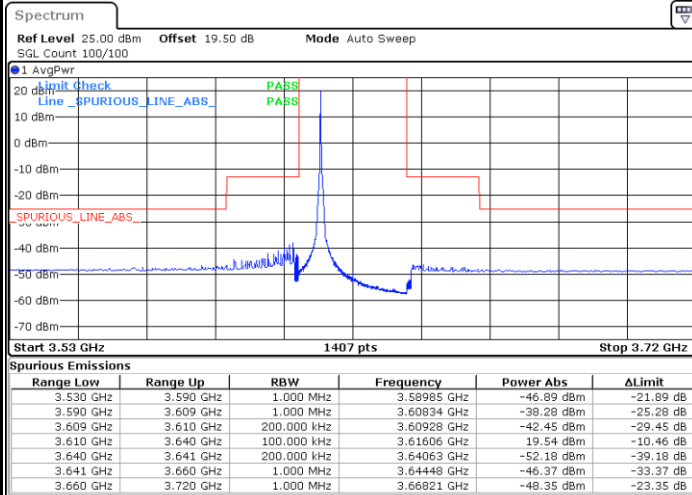
N/A



LTE Band 48 / 20MHz

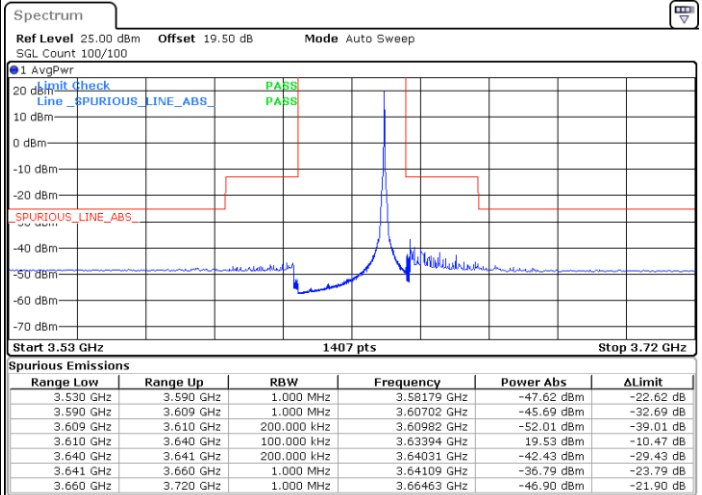
64QAM

Middle Channel / 1RB0



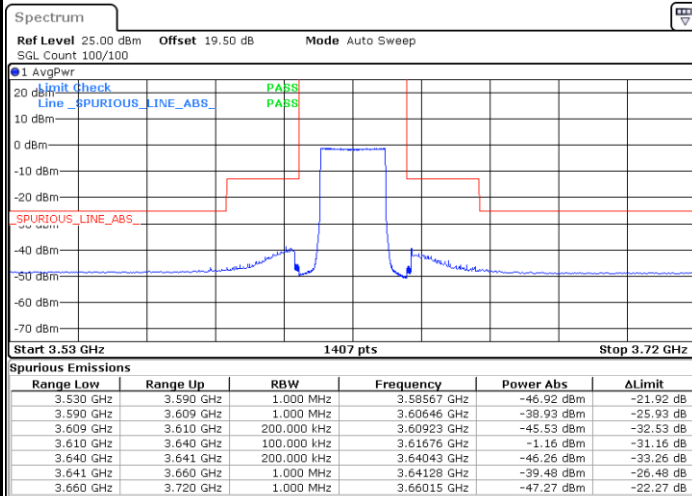
Date: 15.DEC.2023 17:30:28

Middle Channel / 1RBmax



Date: 15.DEC.2023 17:28:54

Middle Channel / FullRB



Date: 15.DEC.2023 17:21:01

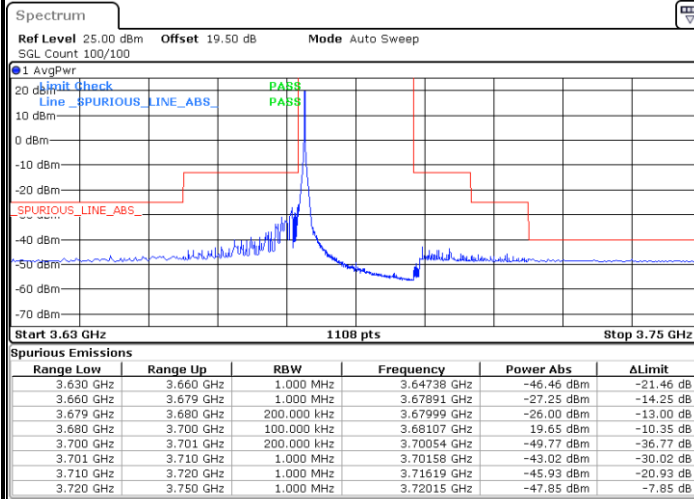
N/A



LTE Band 48 / 20MHz

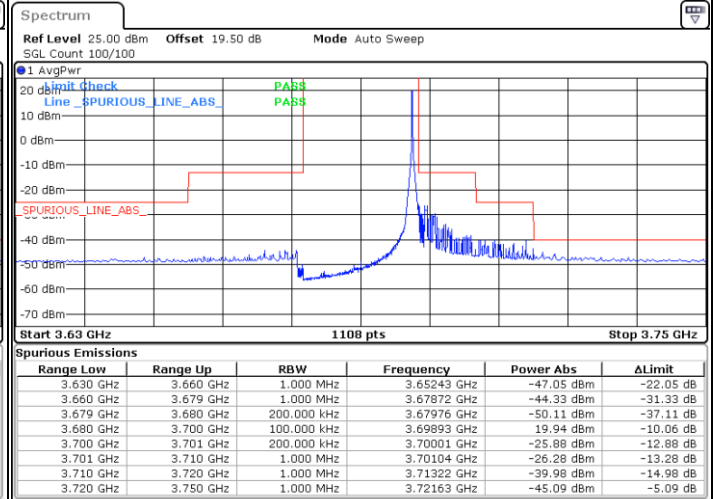
64QAM

Highest Channel / 1RB0



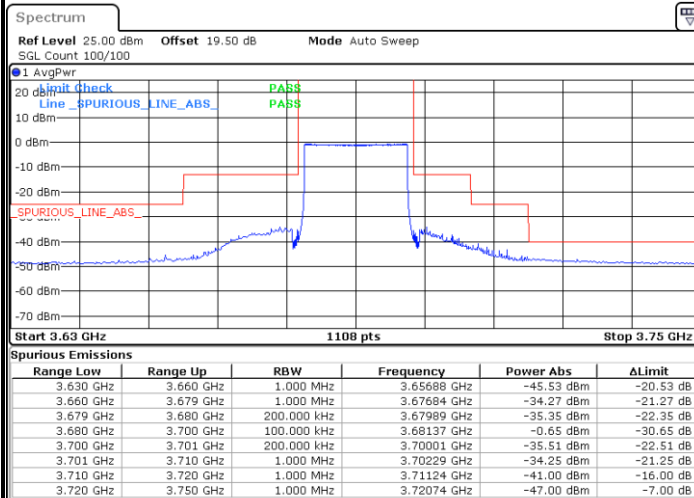
Date: 12.DEC.2023 00:42:28

Highest Channel / 1RBmax



Date: 12.DEC.2023 00:43:44

Highest Channel / FullRB



Date: 12.DEC.2023 00:50:03

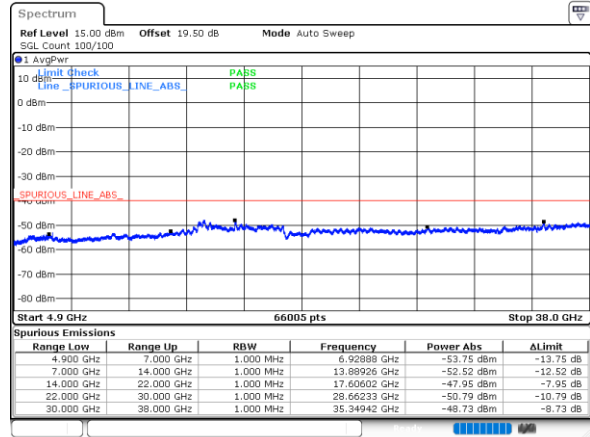
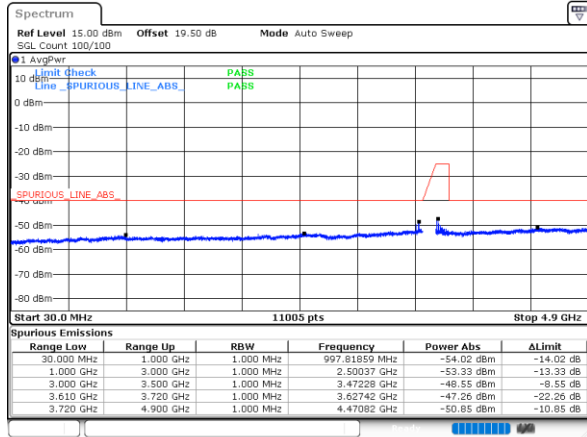
N/A



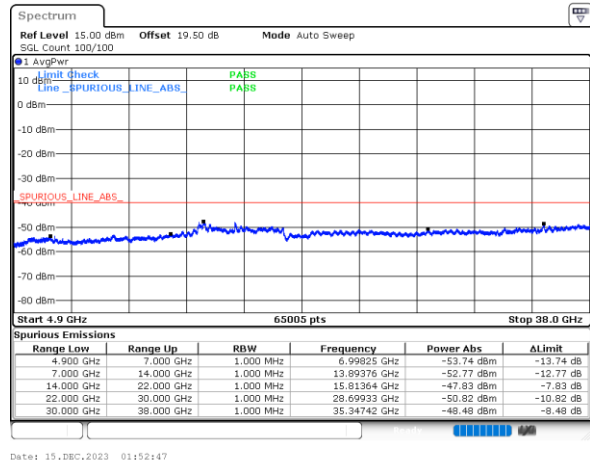
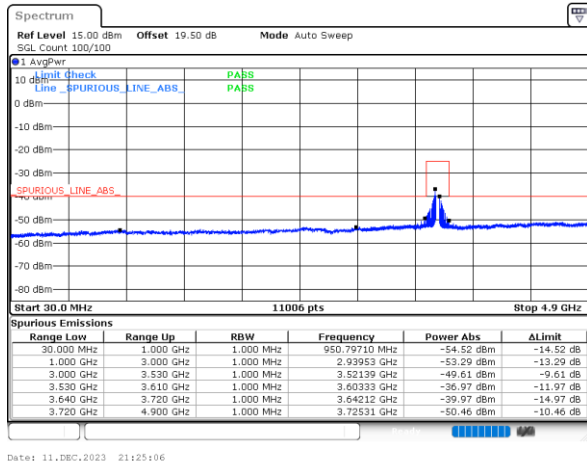
Conducted Spurious Emission

LTE Band 48 / 5MHz

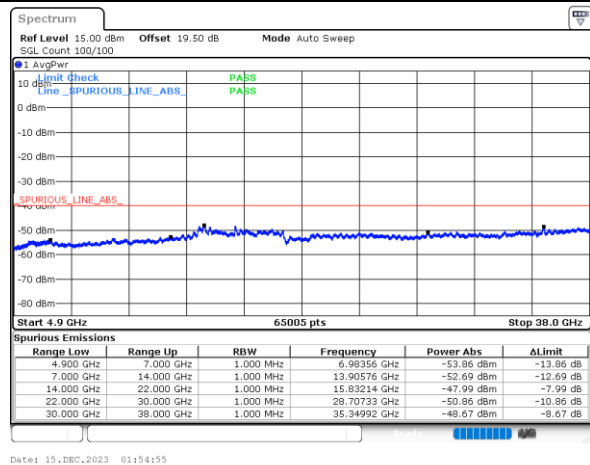
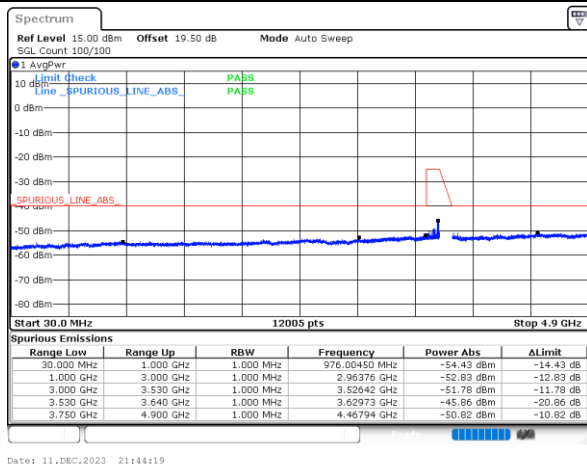
Lowest Channel / QPSK



Middle Channel / QPSK



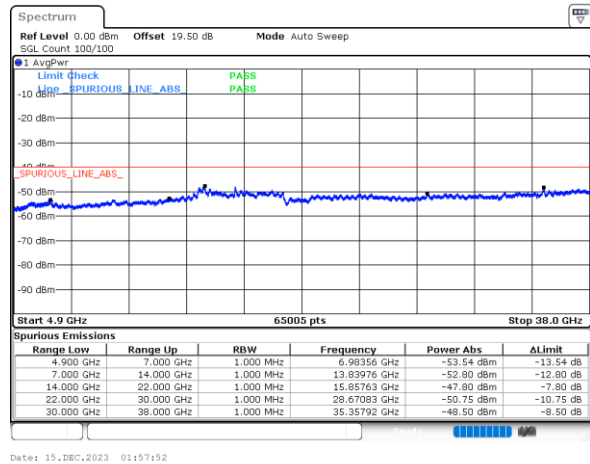
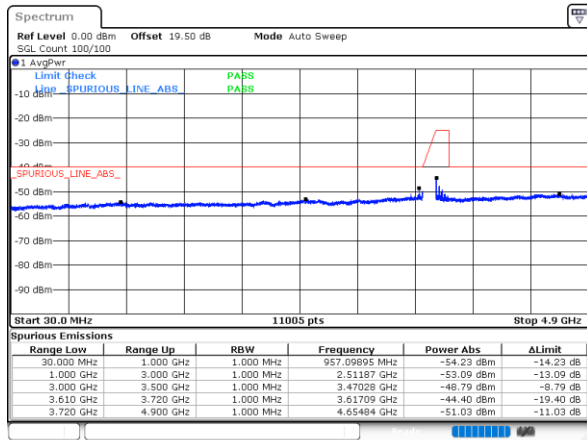
Highest Channel / QPSK



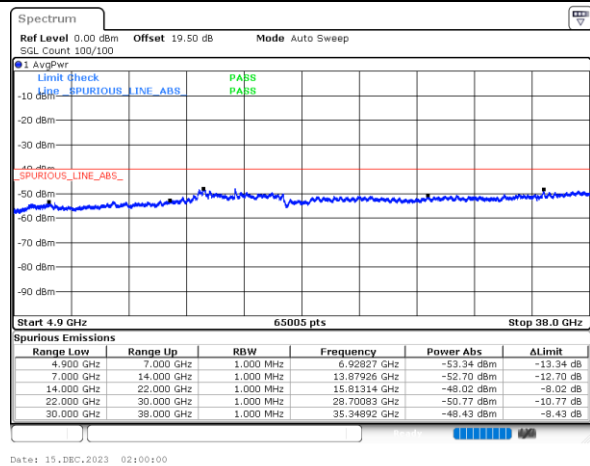
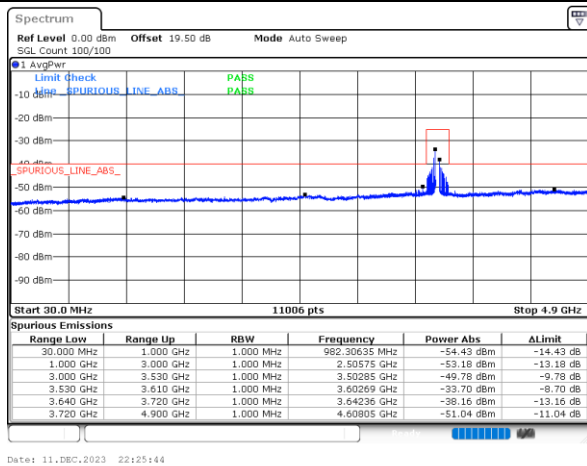


LTE Band 48 / 10MHz

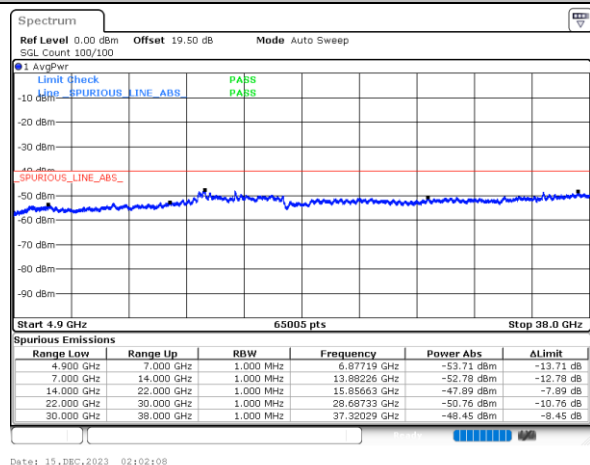
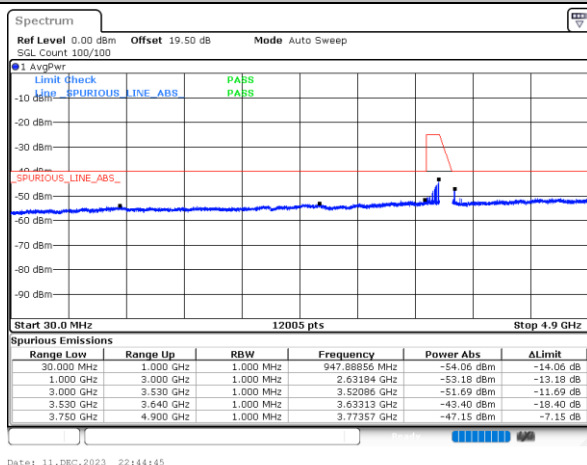
Lowest Channel / QPSK



Middle Channel / QPSK



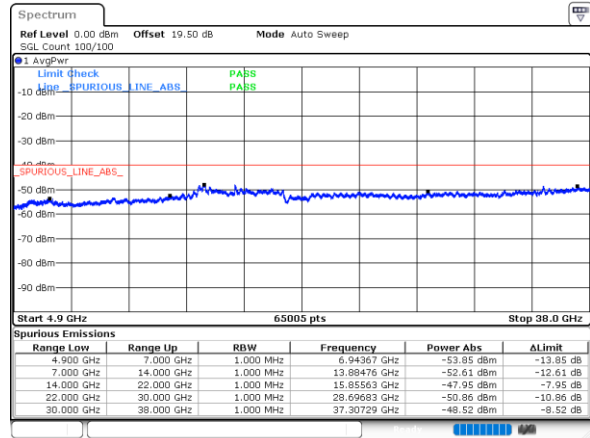
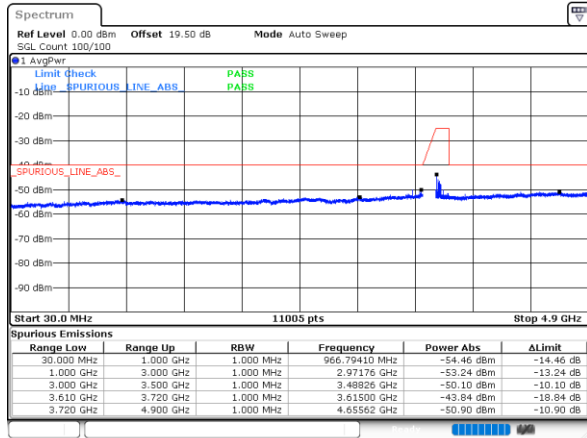
Highest Channel / QPSK



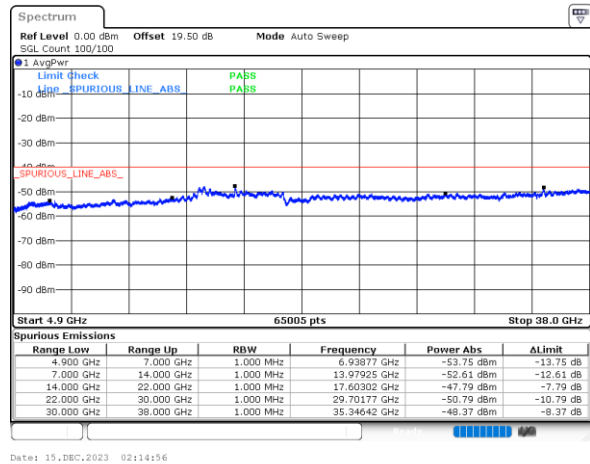
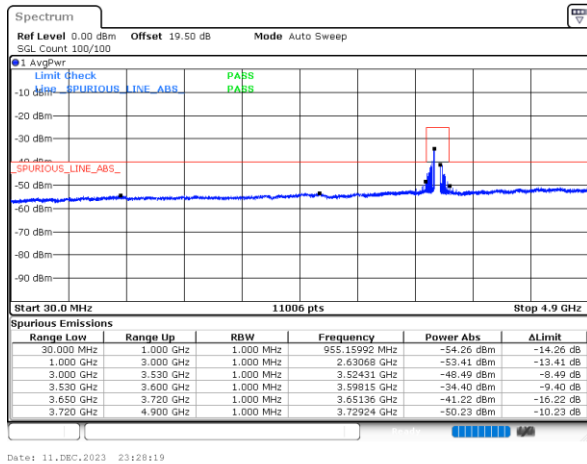


LTE Band 48 / 15MHz

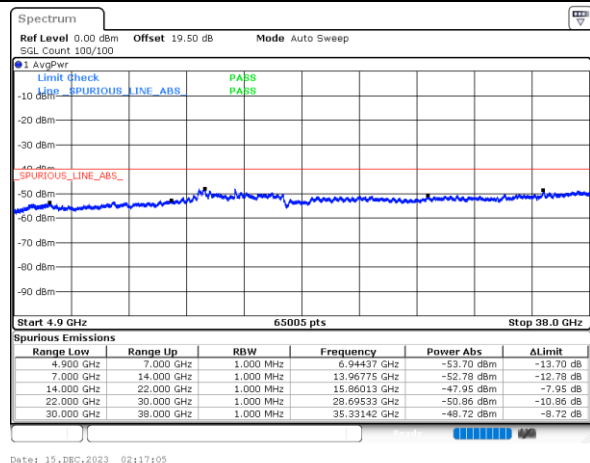
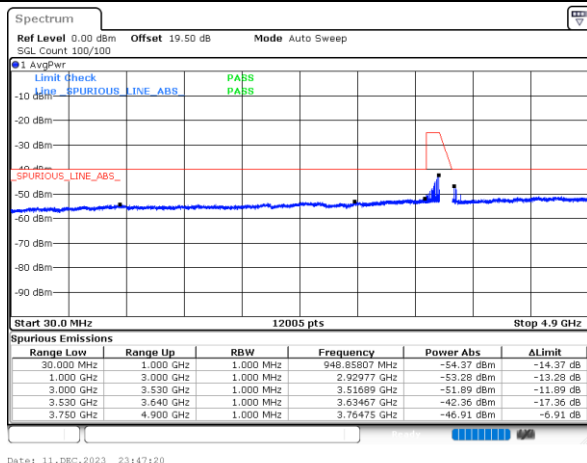
Lowest Channel / QPSK



Middle Channel / QPSK



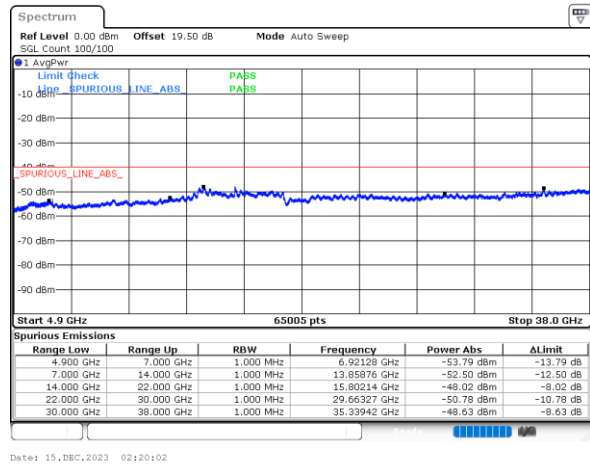
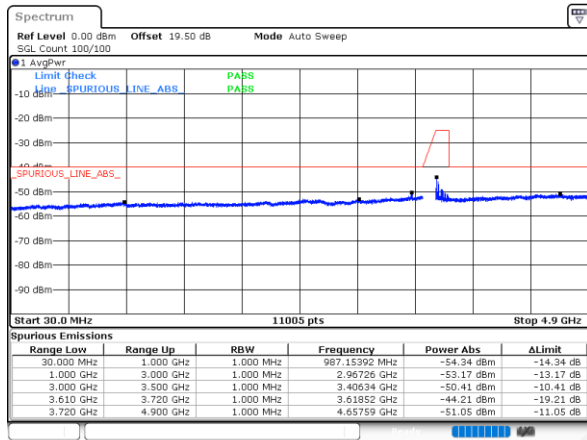
Highest Channel / QPSK



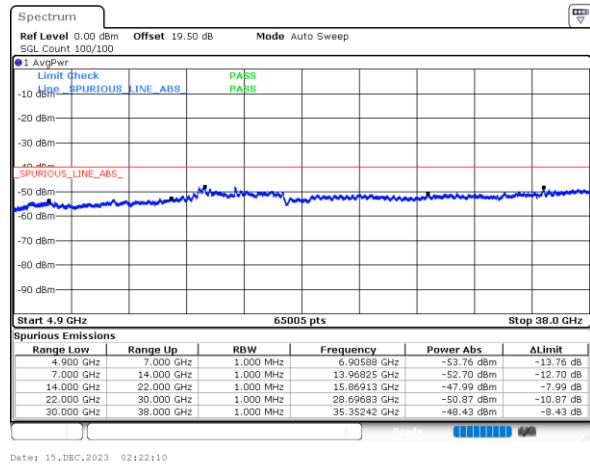
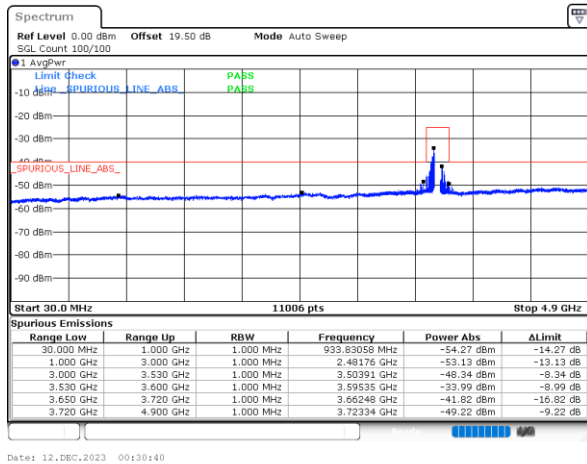


LTE Band 48 / 20MHz

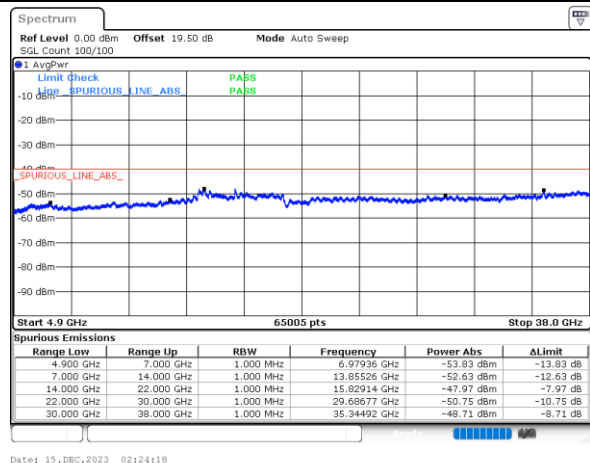
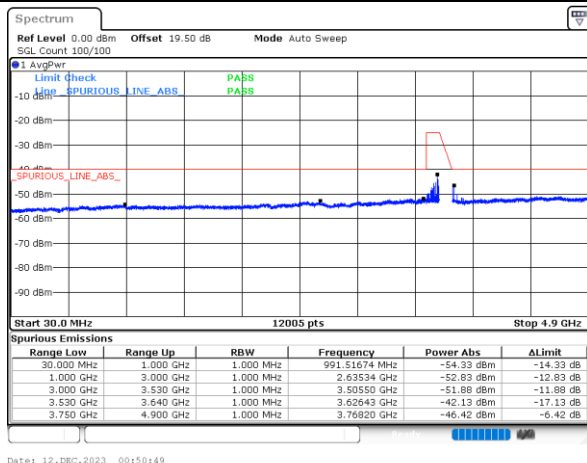
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK



**Frequency Stability**

Test Conditions		LTE Band 48 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0002	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0001	
0	Normal Voltage	0.0000	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage = 3.85 V. ; Battery End Point (ACLRP) = 3.6 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Chris	Temperature :	23~25°C
		Relative Humidity :	41~42%

LTE Band 48 / 20MHz / QPSK / Ant.8								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7231	-44.68	-40	-4.68	-56.14	2.84	14.30	H
	10850	-46.79	-40	-6.79	-56.73	3.49	13.43	H
	14469	-54.75	-40	-14.75	-64.99	3.85	14.09	H
	7231	-43.06	-40	-3.06	-54.52	2.84	14.30	V
	10850	-45.65	-40	-5.65	-55.59	3.49	13.43	V
	14469	-57.08	-40	-17.08	-67.32	3.85	14.09	V

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