

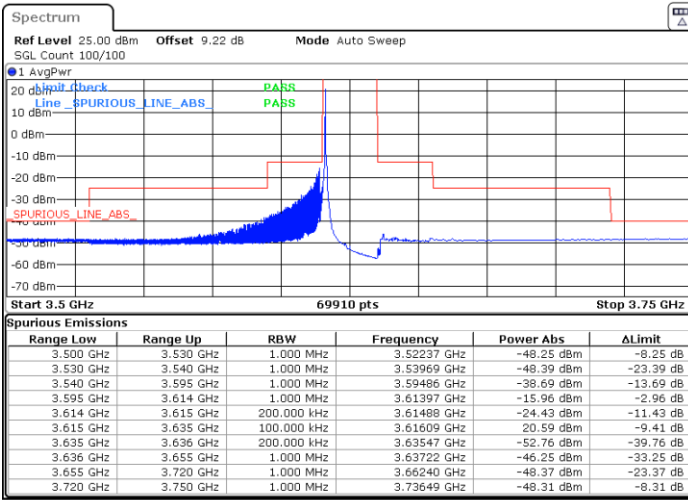


LTE Band 48 / 20MHz

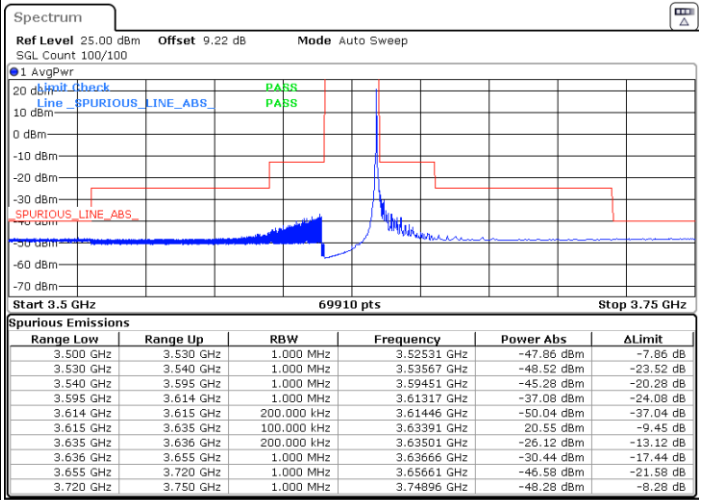
QPSK

Middle Channel / 1RB0

Middle Channel / 1RBmax



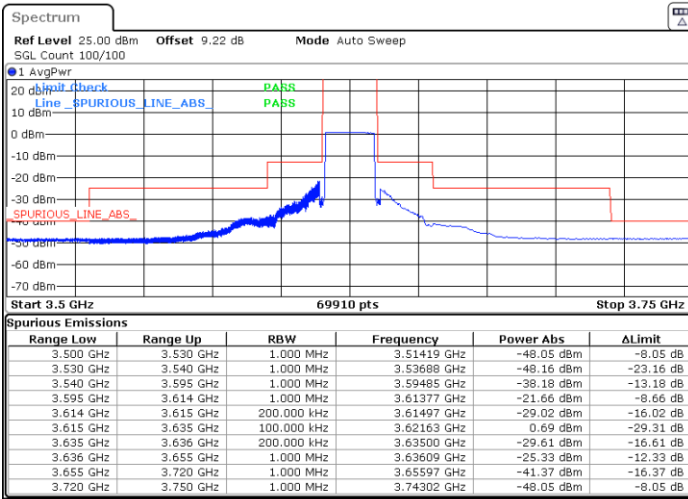
Date: 5.MAR.2024 02:52:50



Date: 5.MAR.2024 02:58:46

Middle Channel / Full

N/A



Date: 5.MAR.2024 03:04:40

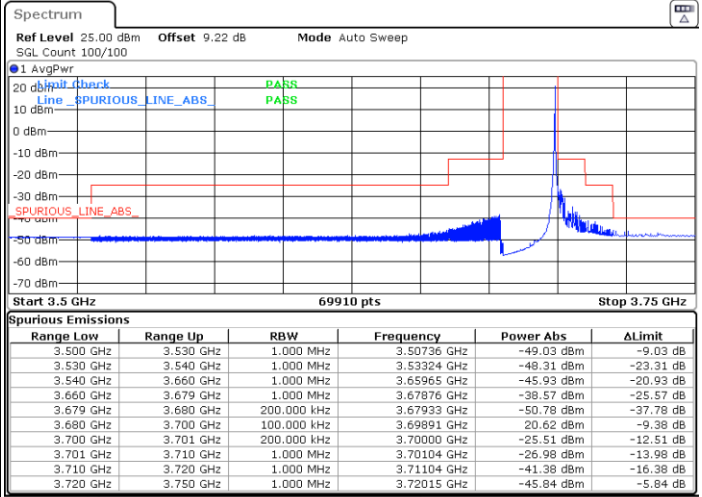
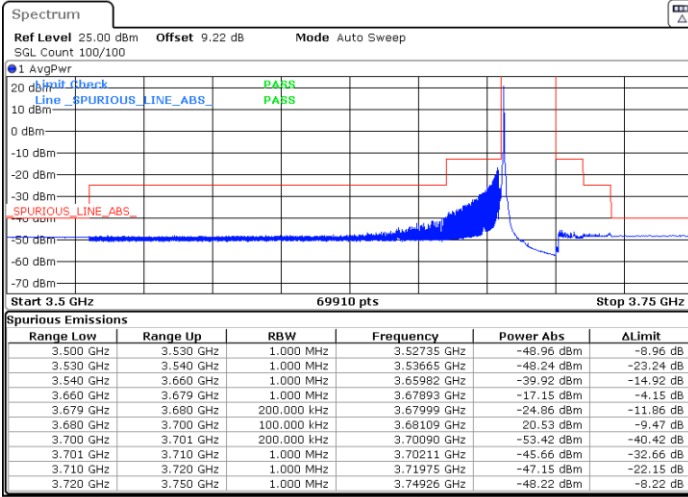


LTE Band 48 / 20MHz

QPSK

Highest Channel / 1RB0

Highest Channel / 1RBmax

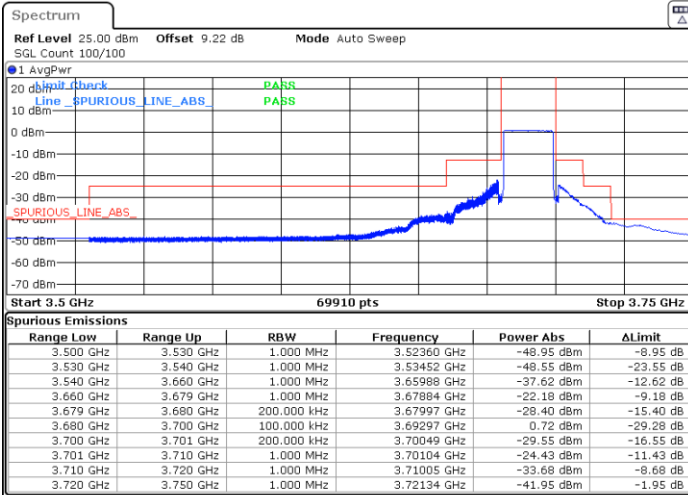


Date: 5.MAR.2024 03:23:34

Date: 5.MAR.2024 03:30:06

Highest Channel / FullIRB

N/A



Date: 5.MAR.2024 03:36:39

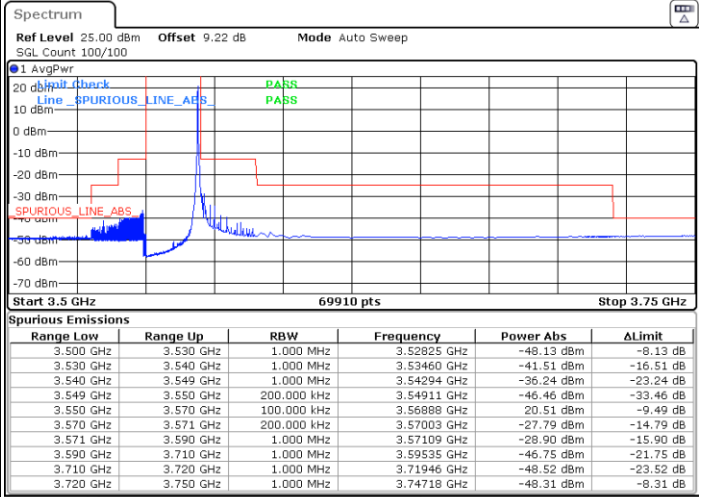
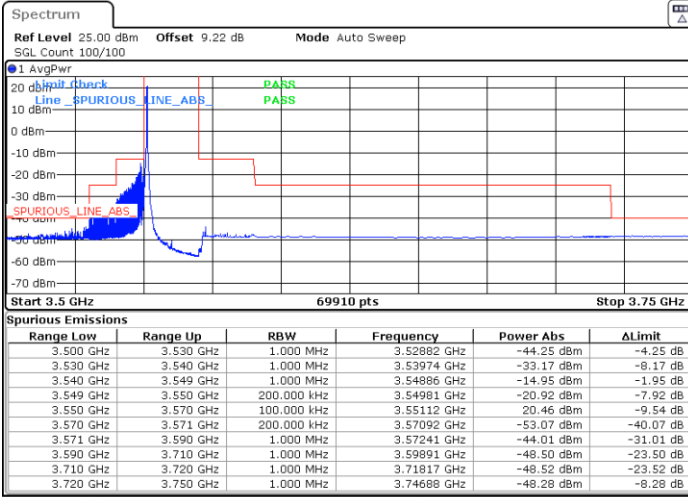


LTE Band 48 / 20MHz

16QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

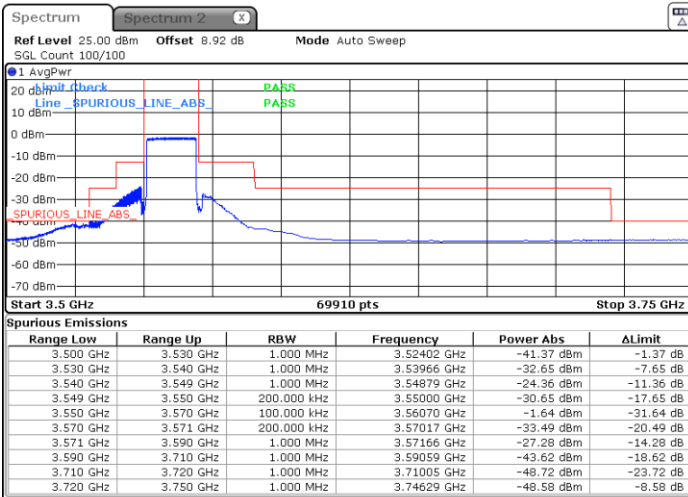


Date: 5.MAR.2024 02:16:24

Date: 5.MAR.2024 02:42:24

Lowest Channel / FullIRB

N/A



Date: 5.MAR.2024 23:51:17

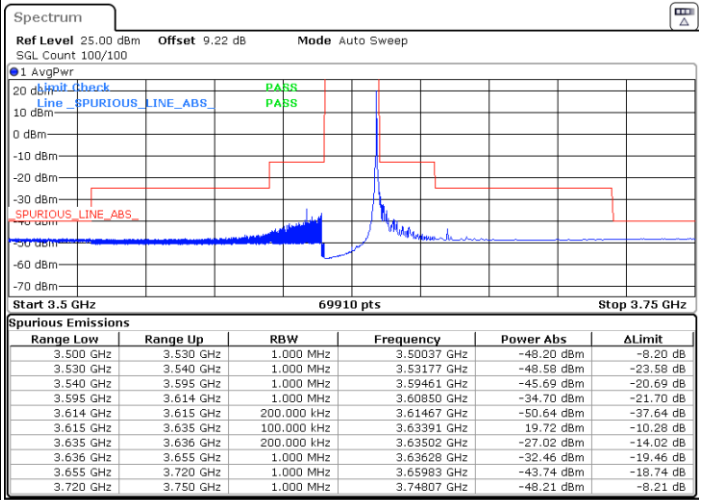
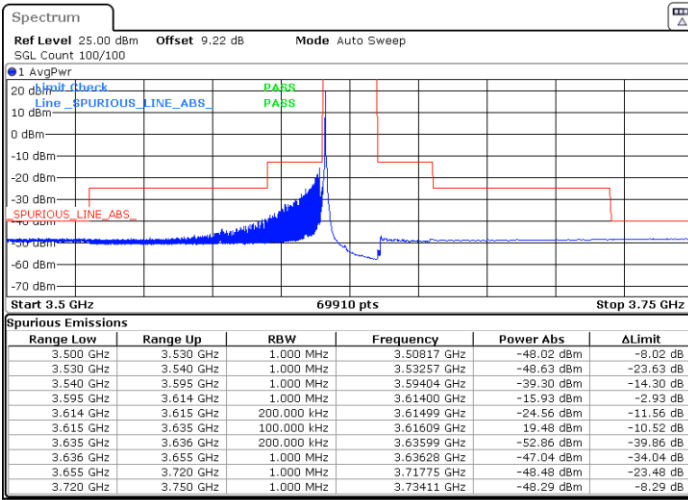


LTE Band 48 / 20MHz

16QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax

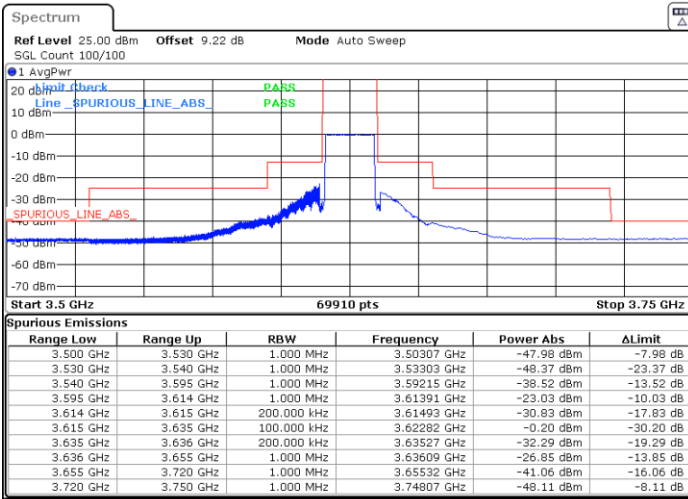


Date: 5.MAR.2024 02:54:19

Date: 5.MAR.2024 03:00:15

Middle Channel / Full

N/A



Date: 5.MAR.2024 03:06:09

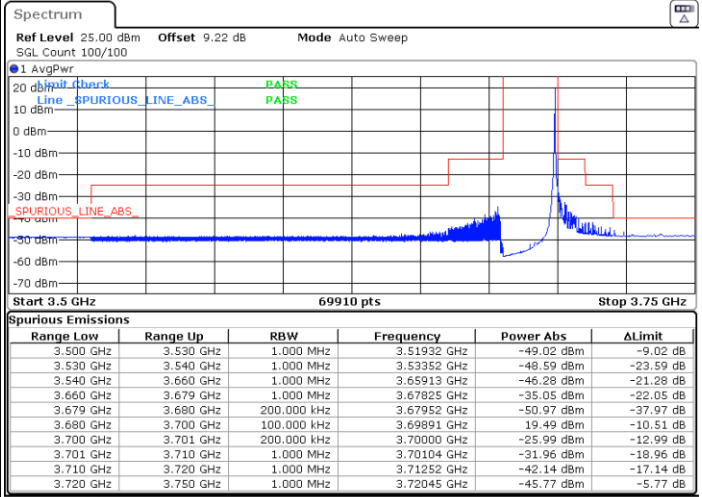
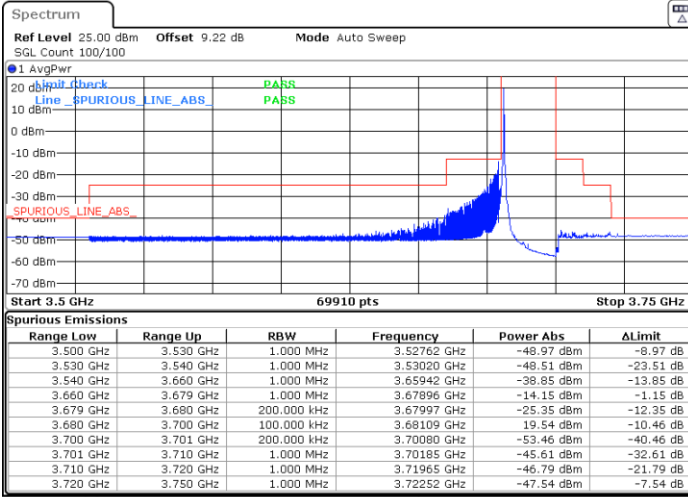


LTE Band 48 / 20MHz

16QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

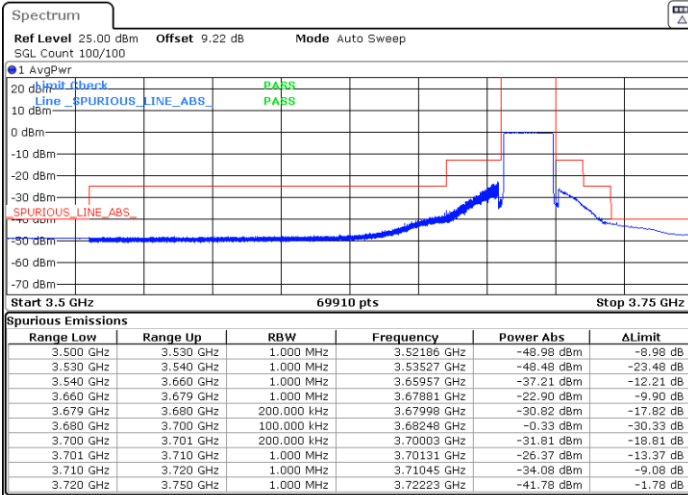


Date: 5.MAR.2024 03:25:11

Date: 5.MAR.2024 03:31:44

Highest Channel / FullIRB

N/A



Date: 5.MAR.2024 03:38:16

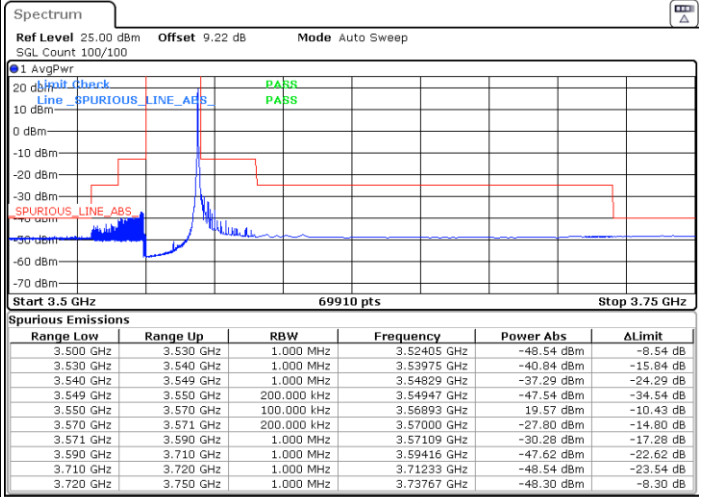
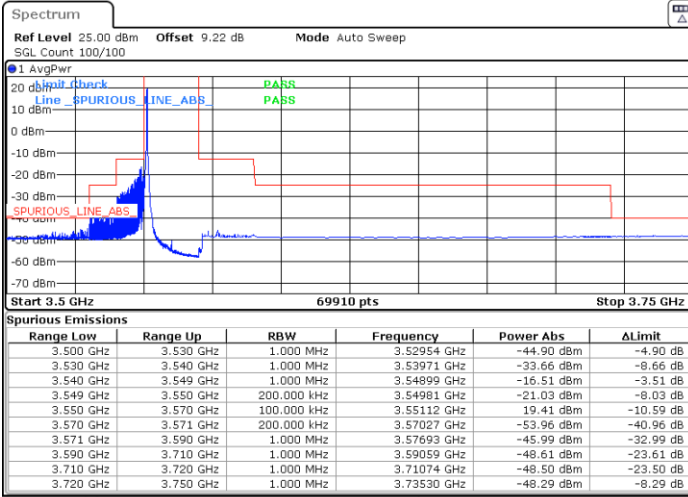


LTE Band 48 / 20MHz

64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

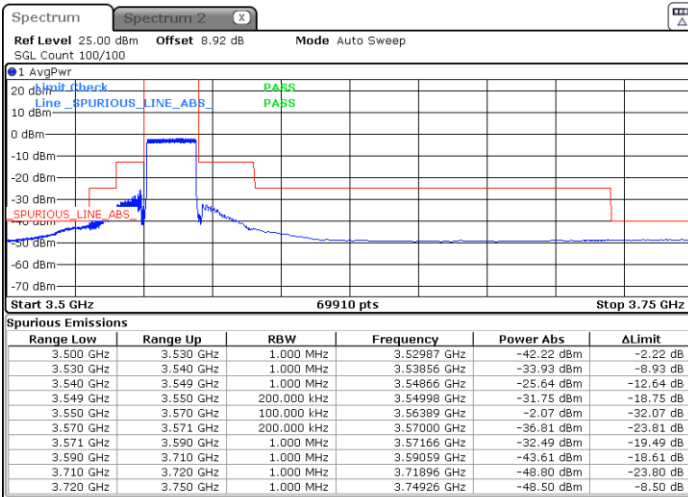


Date: 5.MAR.2024 02:37:54

Date: 5.MAR.2024 02:43:52

Lowest Channel / FullIRB

N/A



Date: 5.MAR.2024 23:52:54

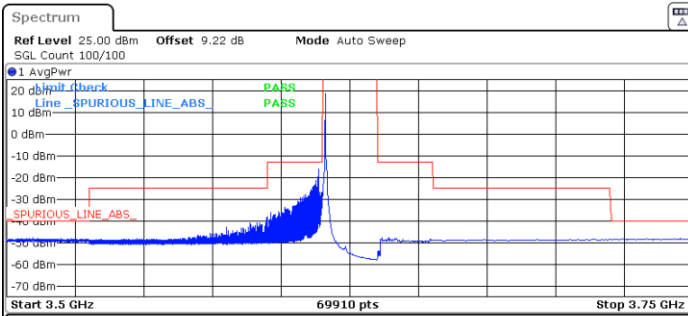


LTE Band 48 / 20MHz

64QAM

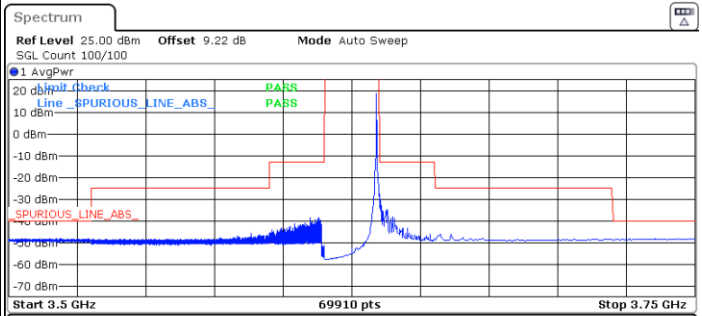
Middle Channel / 1RB0

Middle Channel / 1RBmax



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.50943 GHz	-47.98 dBm	-7.98 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53406 GHz	-48.65 dBm	-23.65 dB
3.540 GHz	3.595 GHz	1.000 MHz	3.59453 GHz	-38.72 dBm	-13.72 dB
3.595 GHz	3.614 GHz	1.000 MHz	3.61374 GHz	-16.06 dBm	-3.06 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.61470 GHz	-27.04 dBm	-14.04 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.61609 GHz	18.63 dBm	-11.37 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.63544 GHz	-53.76 dBm	-40.76 dB
3.636 GHz	3.655 GHz	1.000 MHz	3.63910 GHz	-47.69 dBm	-34.69 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.71839 GHz	-48.57 dBm	-23.57 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74896 GHz	-48.31 dBm	-8.31 dB

Date: 5.MAR.2024 02:55:48

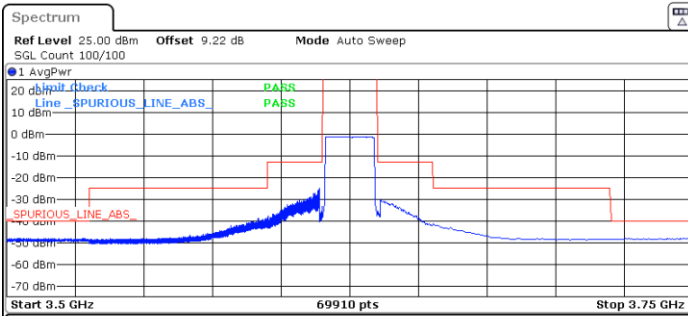


Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51152 GHz	-48.20 dBm	-8.20 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53109 GHz	-48.61 dBm	-23.61 dB
3.540 GHz	3.595 GHz	1.000 MHz	3.59487 GHz	-45.75 dBm	-20.75 dB
3.595 GHz	3.614 GHz	1.000 MHz	3.61302 GHz	-38.51 dBm	-25.51 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.61475 GHz	-51.39 dBm	-38.39 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.63391 GHz	18.69 dBm	-11.31 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.63501 GHz	-27.69 dBm	-14.69 dB
3.636 GHz	3.655 GHz	1.000 MHz	3.63779 GHz	-35.01 dBm	-22.01 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.65725 GHz	-46.08 dBm	-21.08 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74777 GHz	-48.30 dBm	-8.30 dB

Date: 5.MAR.2024 03:01:43

Middle Channel / Full

N/A



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52507 GHz	-48.10 dBm	-8.10 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53776 GHz	-48.24 dBm	-23.24 dB
3.540 GHz	3.595 GHz	1.000 MHz	3.59443 GHz	-38.90 dBm	-13.90 dB
3.595 GHz	3.614 GHz	1.000 MHz	3.61388 GHz	-24.89 dBm	-11.89 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.61496 GHz	-33.35 dBm	-20.35 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.62084 GHz	-1.21 dBm	-31.21 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.63501 GHz	-35.44 dBm	-22.44 dB
3.636 GHz	3.655 GHz	1.000 MHz	3.63609 GHz	-30.34 dBm	-17.34 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.65532 GHz	-41.33 dBm	-16.33 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74807 GHz	-48.14 dBm	-8.14 dB

Date: 5.MAR.2024 03:07:38

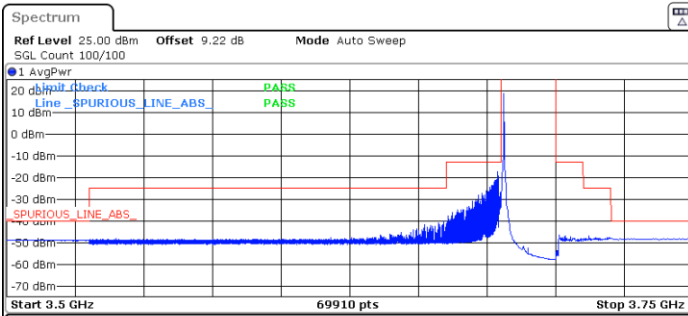


LTE Band 48 / 20MHz

64QAM

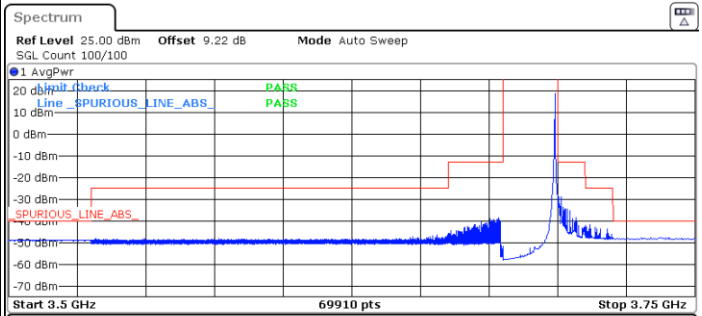
Highest Channel / 1RB0

Highest Channel / 1RBmax



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52486 GHz	-48.99 dBm	-8.99 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53960 GHz	-48.91 dBm	-23.91 dB
3.540 GHz	3.660 GHz	1.000 MHz	3.65910 GHz	-40.14 dBm	-15.14 dB
3.660 GHz	3.679 GHz	1.000 MHz	3.67895 GHz	-17.29 dBm	-4.29 dB
3.679 GHz	3.680 GHz	200.000 kHz	3.67993 GHz	-26.76 dBm	-13.76 dB
3.680 GHz	3.700 GHz	100.000 kHz	3.68109 GHz	18.77 dBm	-11.23 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70021 GHz	-53.75 dBm	-40.75 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70113 GHz	-46.78 dBm	-33.78 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71203 GHz	-46.96 dBm	-21.96 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74985 GHz	-48.21 dBm	-8.21 dB

Date: 5.MAR.2024 03:26:49

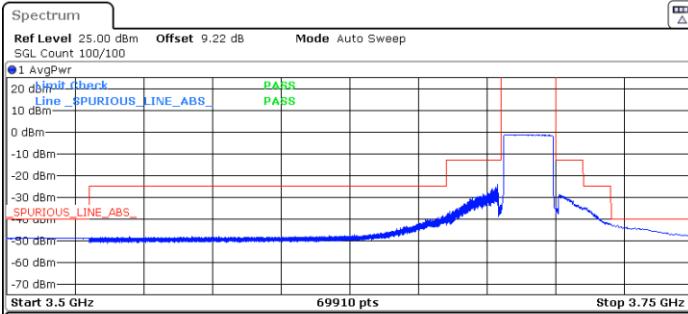


Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52039 GHz	-49.03 dBm	-9.03 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53157 GHz	-48.38 dBm	-23.38 dB
3.540 GHz	3.660 GHz	1.000 MHz	3.65995 GHz	-46.57 dBm	-21.57 dB
3.660 GHz	3.679 GHz	1.000 MHz	3.67850 GHz	-38.75 dBm	-25.75 dB
3.679 GHz	3.680 GHz	200.000 kHz	3.67933 GHz	-51.42 dBm	-38.42 dB
3.680 GHz	3.700 GHz	100.000 kHz	3.69891 GHz	18.53 dBm	-11.47 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70000 GHz	-28.26 dBm	-15.26 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70113 GHz	-29.10 dBm	-16.10 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71183 GHz	-41.66 dBm	-16.66 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.73025 GHz	-47.74 dBm	-7.74 dB

Date: 5.MAR.2024 03:33:21

Highest Channel / FullIRB

N/A



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52510 GHz	-49.01 dBm	-9.01 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53473 GHz	-48.69 dBm	-23.69 dB
3.540 GHz	3.660 GHz	1.000 MHz	3.65889 GHz	-38.77 dBm	-13.77 dB
3.660 GHz	3.679 GHz	1.000 MHz	3.67989 GHz	-24.37 dBm	-11.37 dB
3.679 GHz	3.680 GHz	200.000 kHz	3.67986 GHz	-33.66 dBm	-20.66 dB
3.680 GHz	3.700 GHz	100.000 kHz	3.68149 GHz	-1.26 dBm	-31.26 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70002 GHz	-34.49 dBm	-21.49 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70149 GHz	-28.88 dBm	-15.88 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71035 GHz	-35.02 dBm	-10.02 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72015 GHz	-42.72 dBm	-2.72 dB

Date: 5.MAR.2024 03:39:53

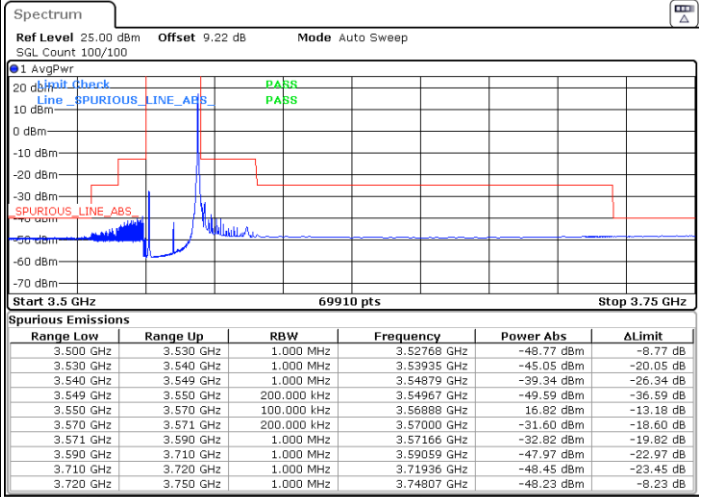
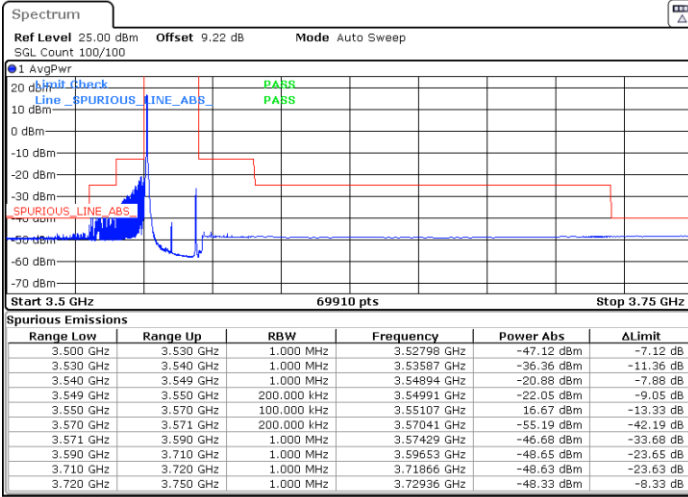


LTE Band 48 / 20MHz

256QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

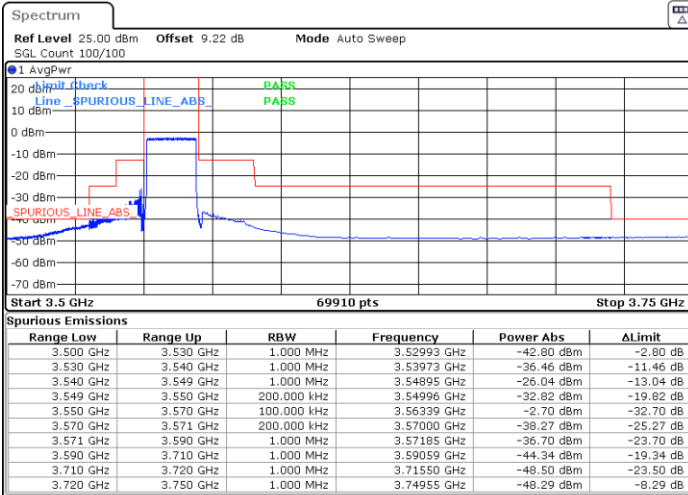


Date: 5.MAR.2024 02:39:22

Date: 5.MAR.2024 02:45:22

Lowest Channel / FullIRB

N/A



Date: 5.MAR.2024 02:51:22

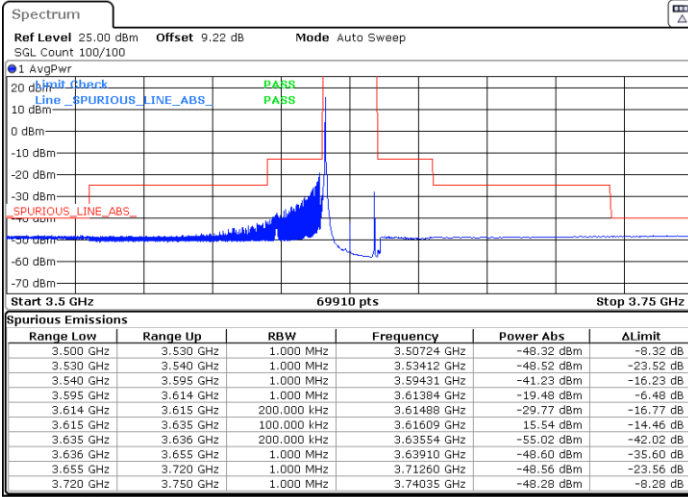


LTE Band 48 / 20MHz

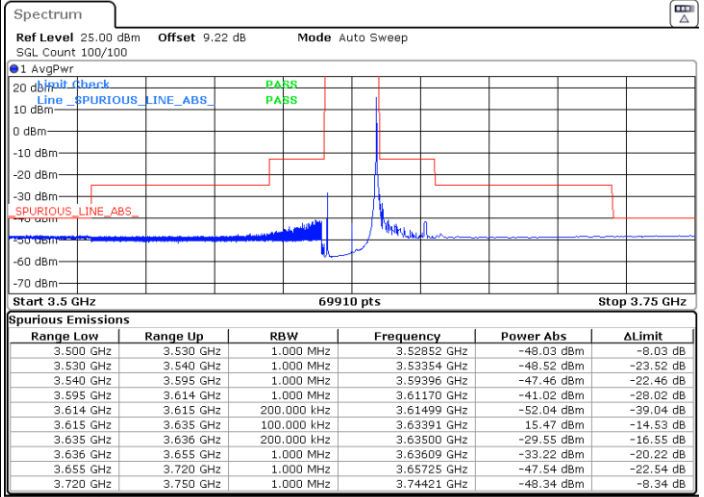
256QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



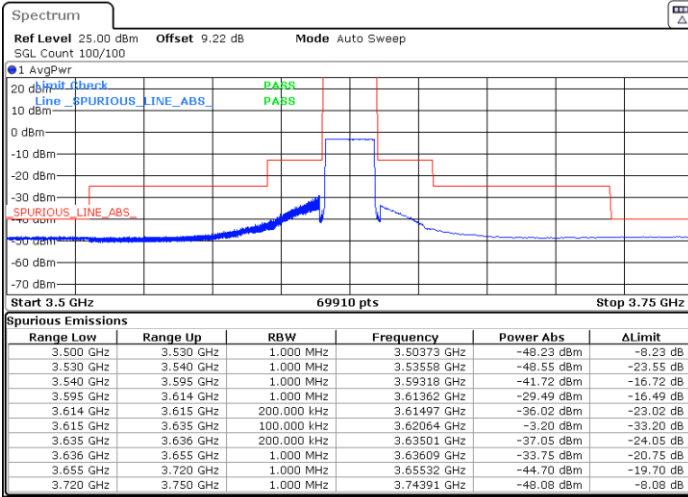
Date: 5.MAR.2024 02:57:17



Date: 5.MAR.2024 03:03:11

Middle Channel / Full

N/A



Date: 5.MAR.2024 03:09:07

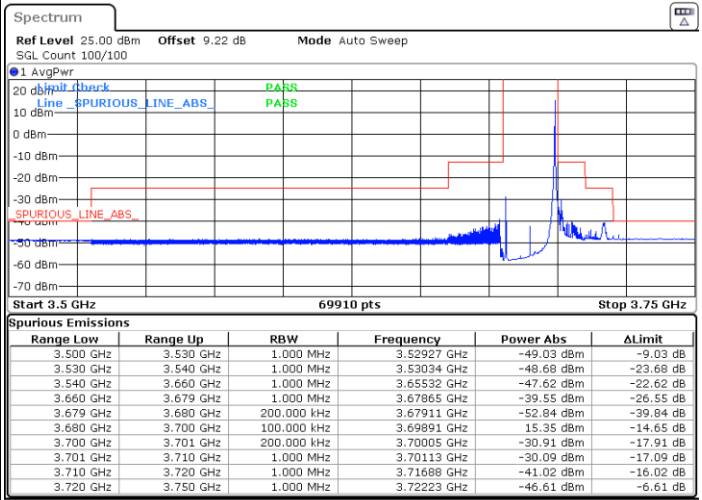
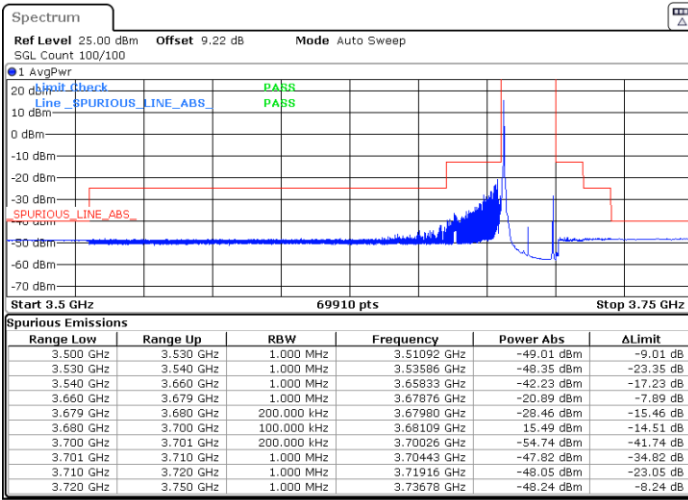


LTE Band 48 / 20MHz

256QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

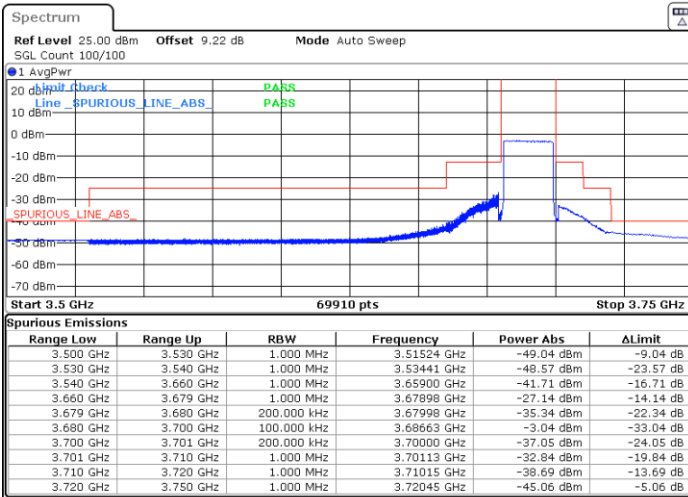


Date: 5.MAR.2024 03:28:26

Date: 5.MAR.2024 03:34:59

Highest Channel / FullIRB

N/A



Date: 5.MAR.2024 03:41:31



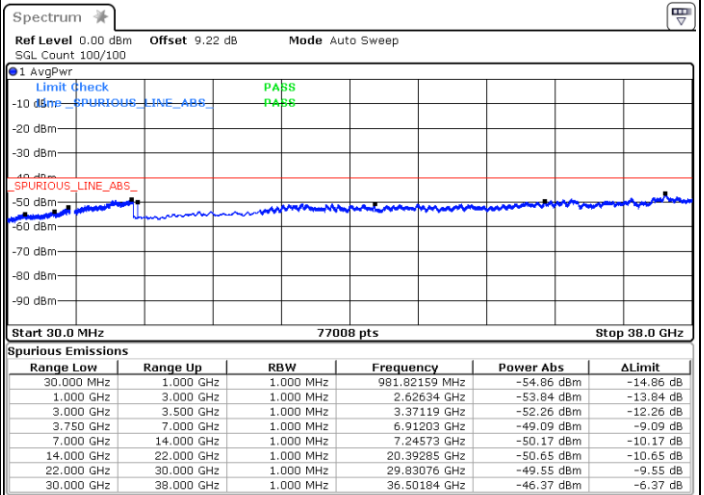
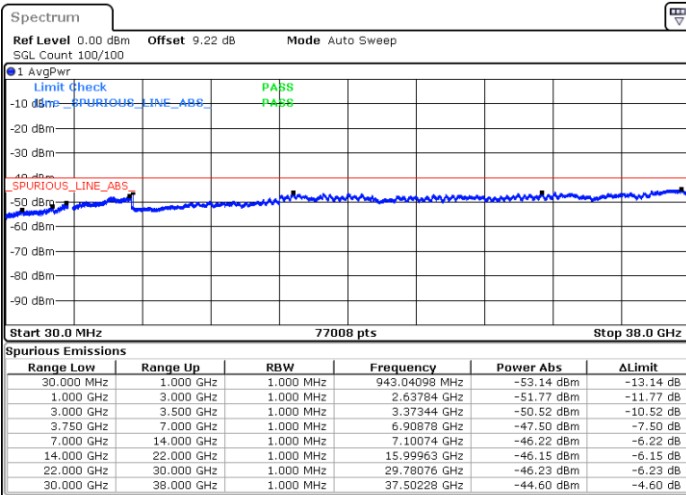
Conducted Spurious Emission

LTE Band 48 / 5MHz

QPSK / 1RB0

Lowest Channel

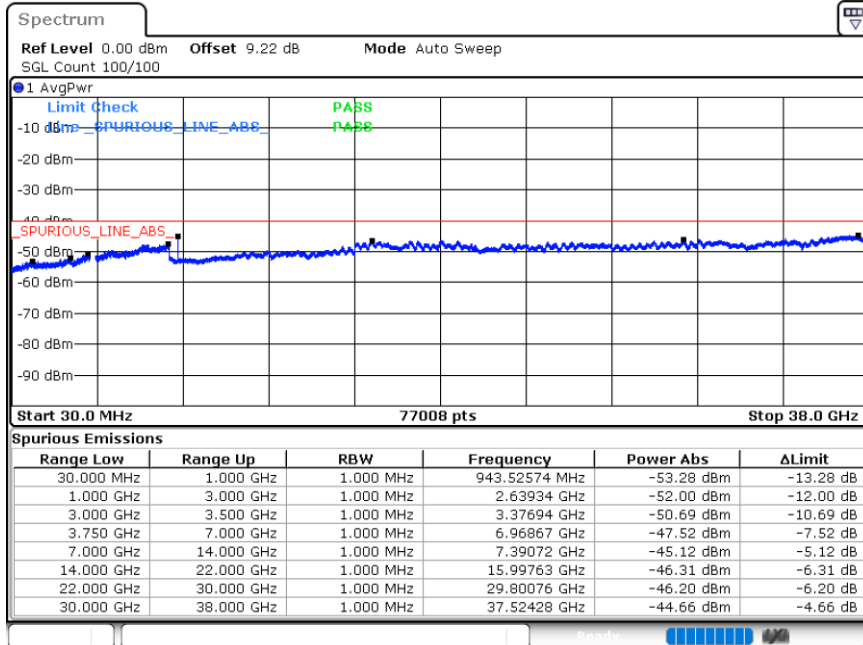
Middle Channel



Date: 14.MAR.2024 10:15:16

Date: 14.MAR.2024 10:57:22

Highest Channel



Date: 14.MAR.2024 10:17:33

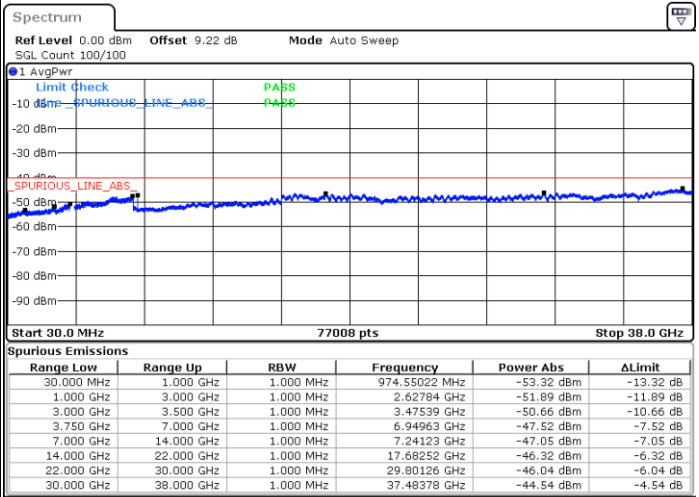
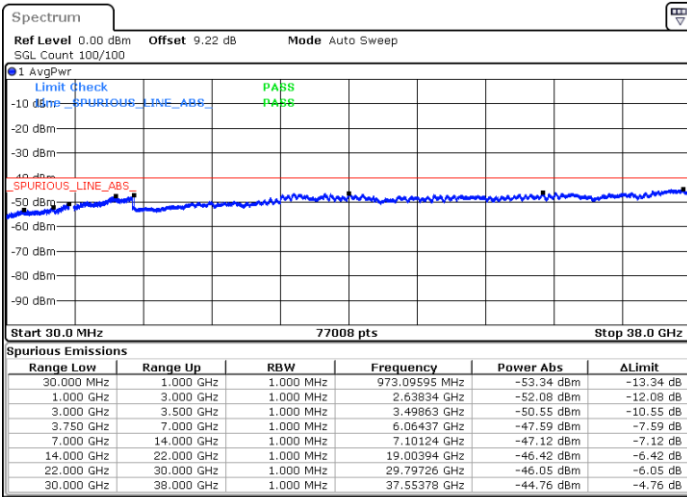


LTE Band 48 / 10MHz

QPSK / 1RB0

Lowest Channel

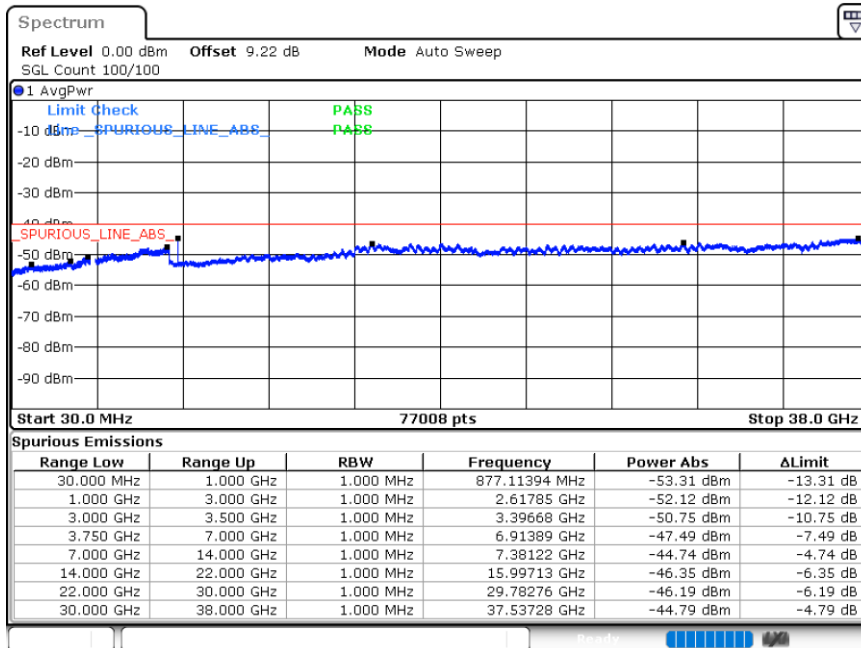
Middle Channel



Date: 14.MAR.2024 10:20:12

Date: 14.MAR.2024 10:23:18

Highest Channel



Date: 14.MAR.2024 10:25:40

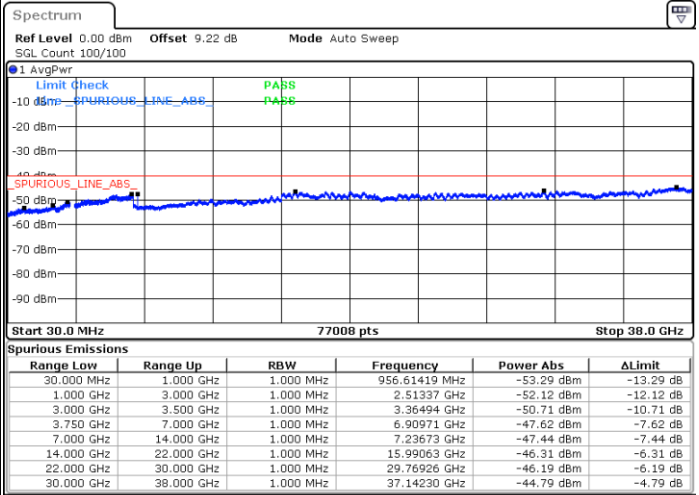
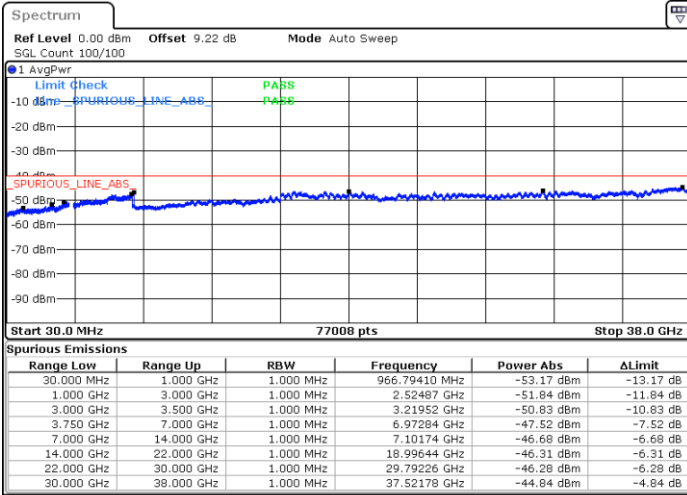


LTE Band 48 / 15MHz

QPSK / 1RB0

Lowest Channel

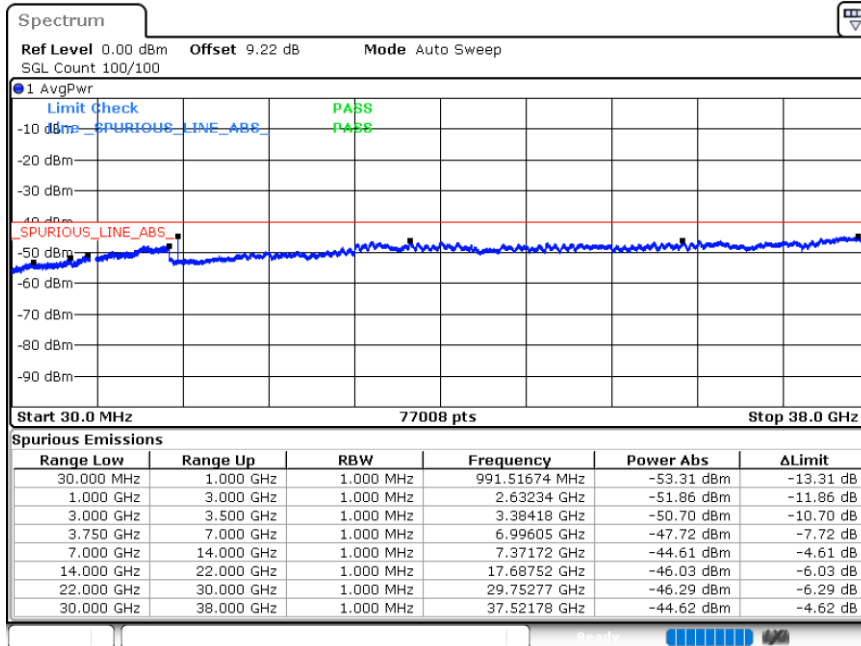
Middle Channel



Date: 14.MAR.2024 10:28:03

Date: 14.MAR.2024 10:32:04

Highest Channel



Date: 14.MAR.2024 10:34:36

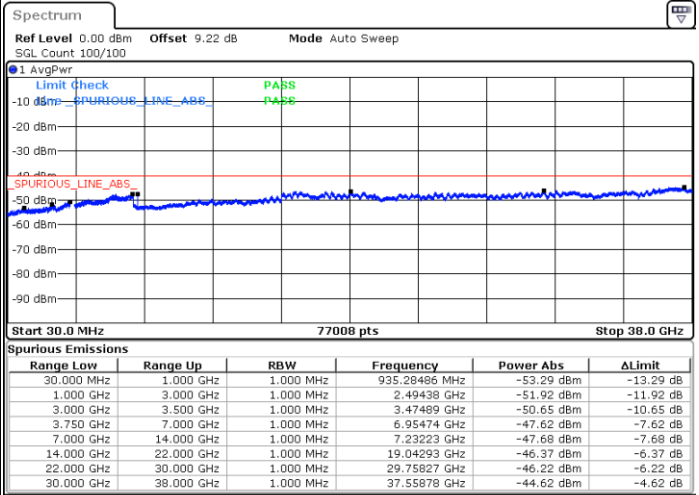
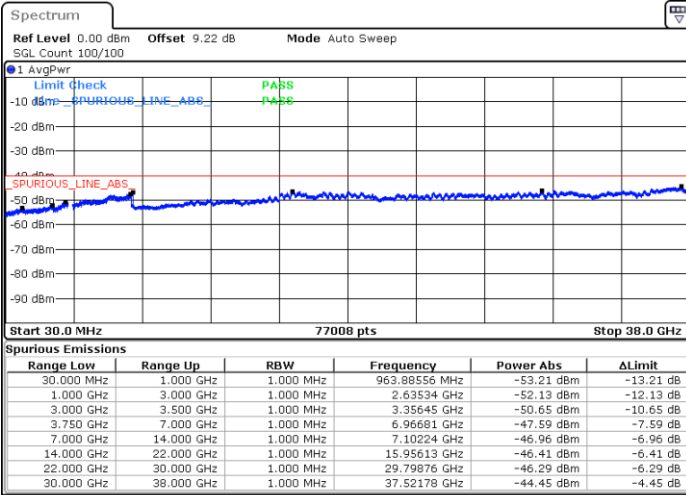


LTE Band 48 / 20MHz

QPSK / 1RB0

Lowest Channel

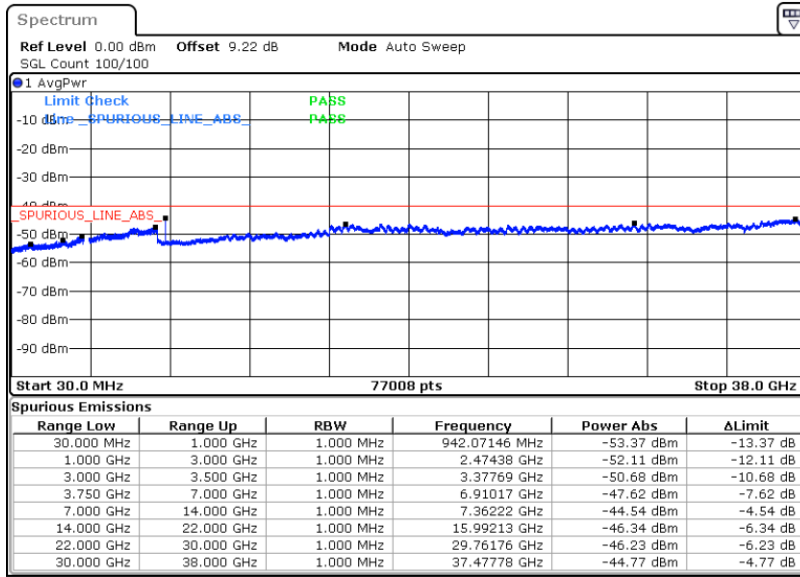
Middle Channel



Date: 14.MAR.2024 10:37:18

Date: 14.MAR.2024 10:45:29

Highest Channel



Date: 14.MAR.2024 10:47:48



Frequency Stability

Test Conditions		LTE Band 48 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0029	PASS
40	Normal Voltage	0.0048	
30	Normal Voltage	0.0022	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0034	
-10	Normal Voltage	0.0049	
-20	Normal Voltage	0.0051	
-30	Normal Voltage	0.0055	
20	Maximum Voltage	0.0022	
20	Normal Voltage	0.0003	
20	Battery End Point	0.0008	

Note:

1. Normal Voltage =3.91 V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.3 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 Chen	Temperature :	23~25°C
		Relative Humidity :	41~42%

Note: Pre-scanned harmonic for the different antennas, we choose the worst antenna mode to perform final test and record in the report.

LTE Band 48 / 20MHz / QPSK / ANT5								
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	-65.86	-40	-25.86	-77.32	2.84	14.30	H
	10850	-59.02	-40	-19.02	-68.96	3.49	13.43	H
	14469	-62.64	-40	-22.64	-72.88	3.85	14.09	H
	7231	-65.71	-40	-25.71	-77.17	2.84	14.30	V
	10850	-52.56	-40	-12.56	-62.50	3.49	13.43	V
	14469	-62.88	-40	-22.88	-73.12	3.85	14.09	V

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