

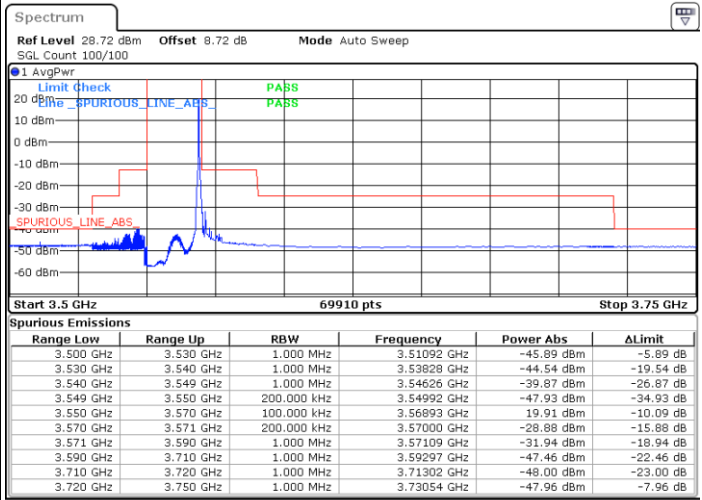
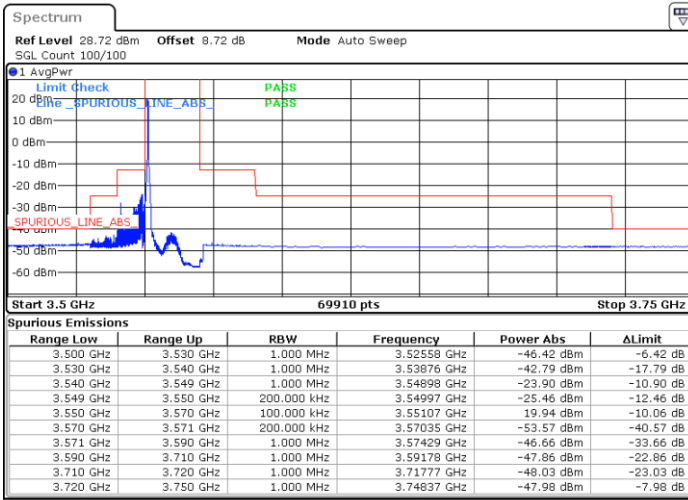


LTE Band 48 / 20MHz

16QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

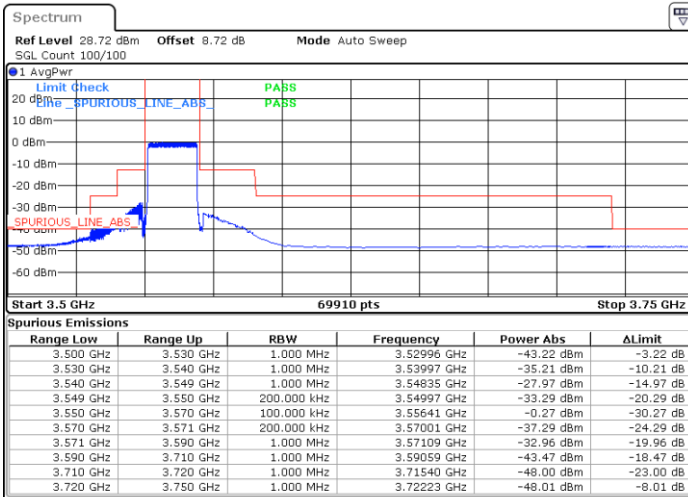


Date: 9.NOV.2022 18:35:36

Date: 9.NOV.2022 18:41:05

Lowest Channel / FullRB

N/A



Date: 9.NOV.2022 18:46:34

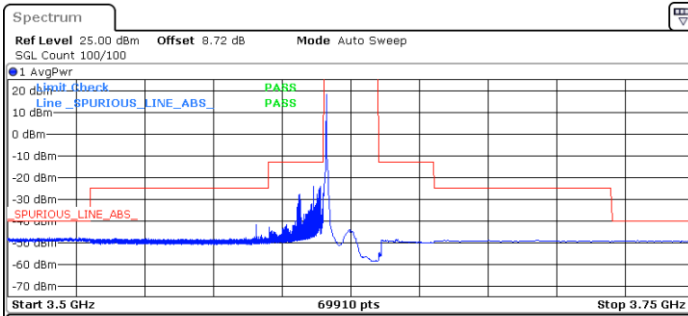


LTE Band 48 / 20MHz

16QAM

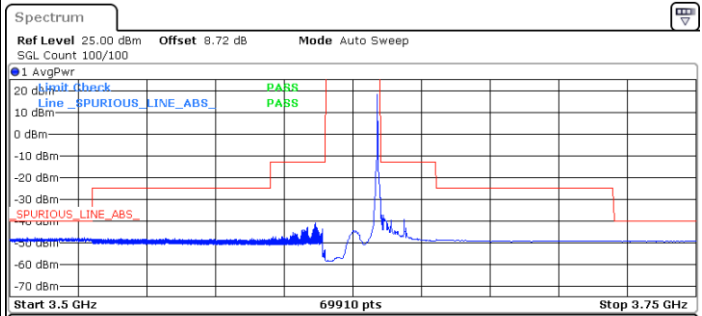
Middle Channel / 1RB0

Middle Channel / 1RBmax



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51509 GHz	-47.91 dBm	-7.91 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53941 GHz	-48.28 dBm	-23.28 dB
3.540 GHz	3.595 GHz	1.000 MHz	3.59054 GHz	-41.98 dBm	-16.98 dB
3.595 GHz	3.614 GHz	1.000 MHz	3.61148 GHz	-24.07 dBm	-11.07 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.61498 GHz	-27.58 dBm	-14.58 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.61609 GHz	18.34 dBm	-11.66 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.63532 GHz	-54.78 dBm	-41.78 dB
3.636 GHz	3.655 GHz	1.000 MHz	3.64211 GHz	-48.64 dBm	-35.64 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.69265 GHz	-48.88 dBm	-23.88 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72936 GHz	-49.09 dBm	-9.09 dB

Date: 8.NOV.2022 21:139:09

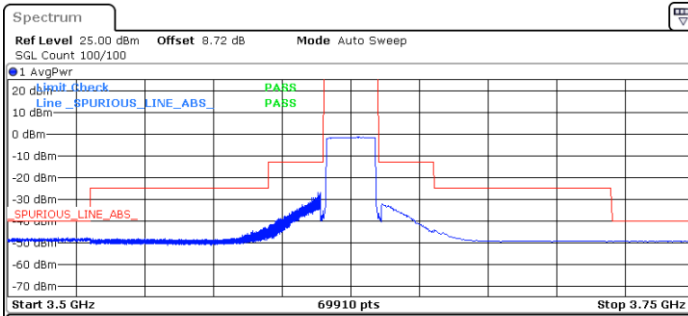


Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52276 GHz	-47.80 dBm	-7.80 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53572 GHz	-48.38 dBm	-23.38 dB
3.540 GHz	3.595 GHz	1.000 MHz	3.55671 GHz	-48.08 dBm	-23.08 dB
3.595 GHz	3.614 GHz	1.000 MHz	3.61131 GHz	-41.10 dBm	-28.10 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.61484 GHz	-53.26 dBm	-40.26 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.63391 GHz	18.35 dBm	-11.65 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.63500 GHz	-29.24 dBm	-16.24 dB
3.636 GHz	3.655 GHz	1.000 MHz	3.63609 GHz	-37.50 dBm	-24.50 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.65532 GHz	-48.66 dBm	-23.66 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72668 GHz	-49.22 dBm	-9.22 dB

Date: 8.NOV.2022 21:45:51

Middle Channel / Full

N/A



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52894 GHz	-47.93 dBm	-7.93 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53099 GHz	-48.12 dBm	-23.12 dB
3.540 GHz	3.595 GHz	1.000 MHz	3.59381 GHz	-42.97 dBm	-17.97 dB
3.595 GHz	3.614 GHz	1.000 MHz	3.61296 GHz	-26.90 dBm	-13.90 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.61498 GHz	-35.29 dBm	-22.29 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.62936 GHz	-1.55 dBm	-31.55 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.63505 GHz	-36.53 dBm	-23.53 dB
3.636 GHz	3.655 GHz	1.000 MHz	3.63647 GHz	-32.07 dBm	-19.07 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.65532 GHz	-44.31 dBm	-19.31 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.73530 GHz	-49.20 dBm	-9.20 dB

Date: 8.NOV.2022 21:52:34

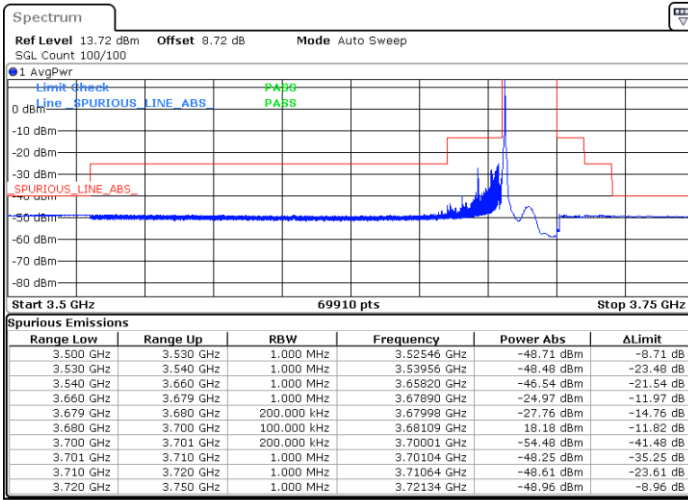


LTE Band 48 / 20MHz

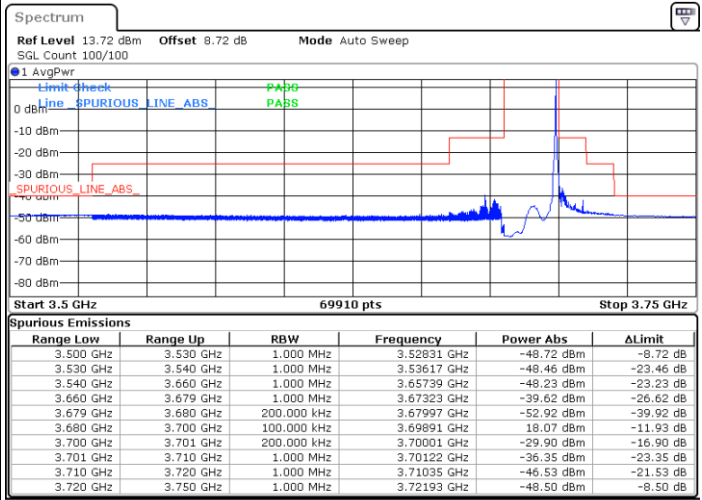
16QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



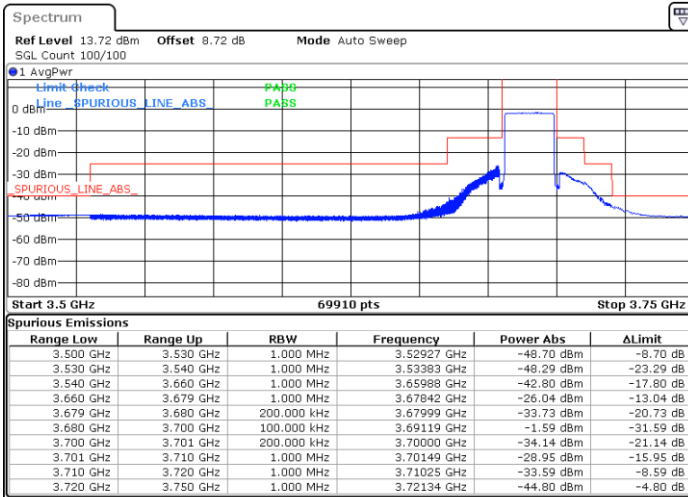
Date: 8.NOV.2022 21:59:17



Date: 8.NOV.2022 22:18:03

Highest Channel / FullIRB

N/A



Date: 8.NOV.2022 22:24:51

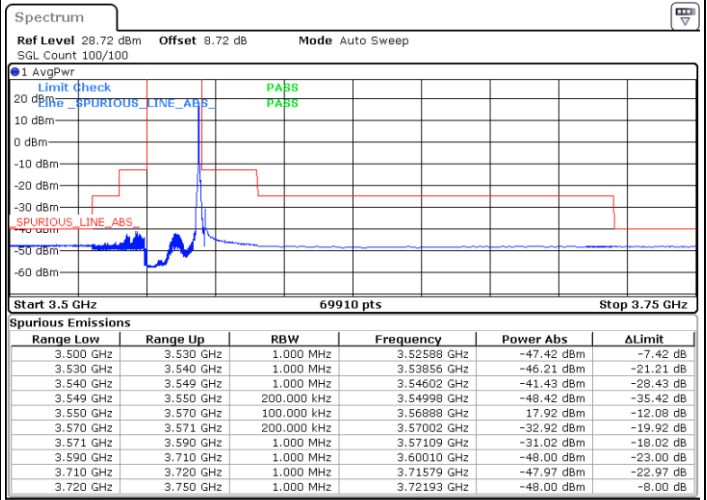
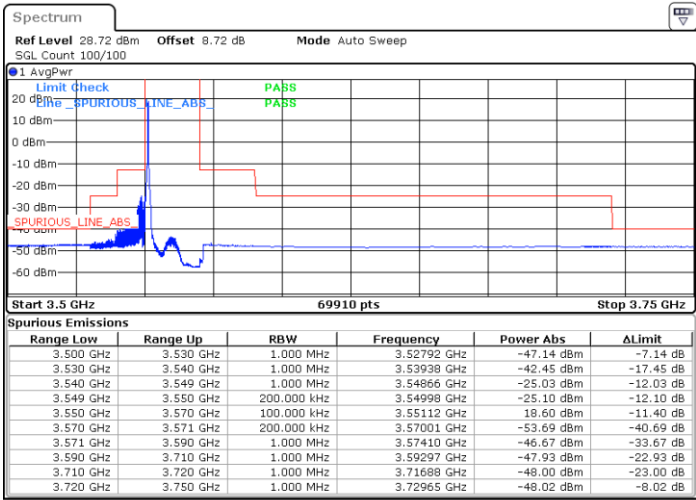


LTE Band 48 / 20MHz

64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

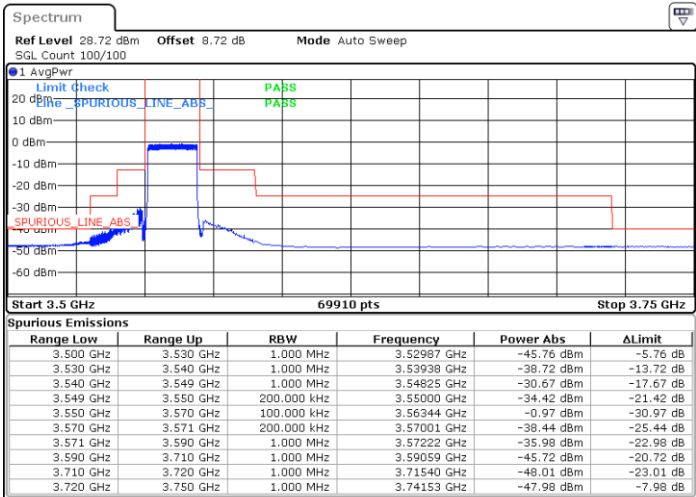


Date: 9.NOV.2022 18:36:57

Date: 9.NOV.2022 18:42:27

Lowest Channel / FullIRB

N/A



Date: 9.NOV.2022 18:47:56

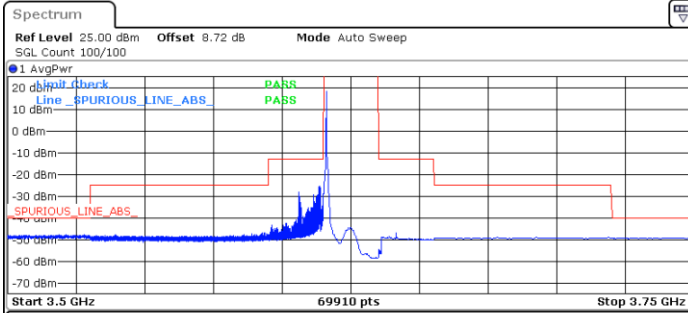


LTE Band 48 / 20MHz

64QAM

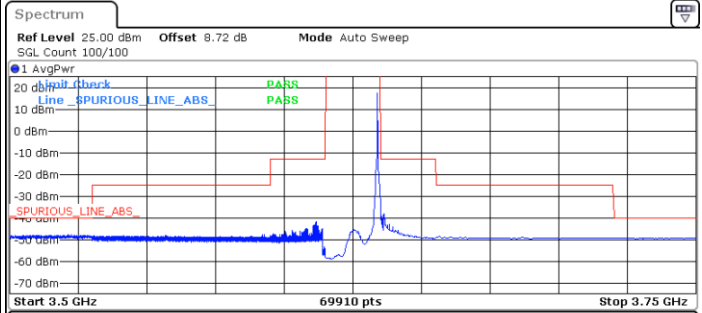
Middle Channel / 1RB0

Middle Channel / 1RBmax



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51878 GHz	-47.69 dBm	-7.69 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53927 GHz	-47.92 dBm	-22.92 dB
3.540 GHz	3.595 GHz	1.000 MHz	3.59370 GHz	-46.80 dBm	-21.80 dB
3.595 GHz	3.614 GHz	1.000 MHz	3.61372 GHz	-25.32 dBm	-12.32 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.61498 GHz	-28.97 dBm	-15.97 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.61609 GHz	18.23 dBm	-11.77 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.63516 GHz	-54.59 dBm	-41.59 dB
3.636 GHz	3.655 GHz	1.000 MHz	3.64155 GHz	-47.11 dBm	-34.11 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.69265 GHz	-49.13 dBm	-24.13 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.73114 GHz	-49.20 dBm	-9.20 dB

Date: 8.NOV.2022 21:40:50

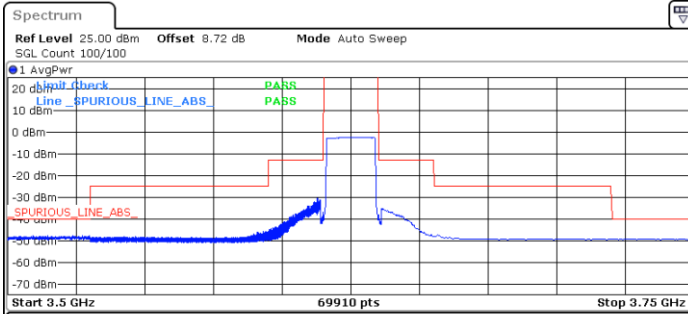


Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52117 GHz	-47.85 dBm	-7.85 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53076 GHz	-48.39 dBm	-23.39 dB
3.540 GHz	3.595 GHz	1.000 MHz	3.59257 GHz	-47.82 dBm	-22.82 dB
3.595 GHz	3.614 GHz	1.000 MHz	3.61158 GHz	-41.63 dBm	-28.63 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.61460 GHz	-53.28 dBm	-40.28 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.63391 GHz	17.41 dBm	-12.59 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.63500 GHz	-30.98 dBm	-17.98 dB
3.636 GHz	3.655 GHz	1.000 MHz	3.63647 GHz	-38.18 dBm	-25.18 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.65661 GHz	-48.59 dBm	-23.59 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.73767 GHz	-49.22 dBm	-9.22 dB

Date: 8.NOV.2022 21:47:32

Middle Channel / Full

N/A



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52735 GHz	-47.86 dBm	-7.86 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53094 GHz	-48.51 dBm	-23.51 dB
3.540 GHz	3.595 GHz	1.000 MHz	3.59315 GHz	-45.71 dBm	-20.71 dB
3.595 GHz	3.614 GHz	1.000 MHz	3.61290 GHz	-30.66 dBm	-17.66 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.61500 GHz	-36.89 dBm	-23.89 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.62856 GHz	-2.55 dBm	-32.55 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.63501 GHz	-38.17 dBm	-25.17 dB
3.636 GHz	3.655 GHz	1.000 MHz	3.63609 GHz	-35.41 dBm	-22.41 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.65661 GHz	-47.59 dBm	-22.59 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72995 GHz	-49.23 dBm	-9.23 dB

Date: 8.NOV.2022 21:54:14

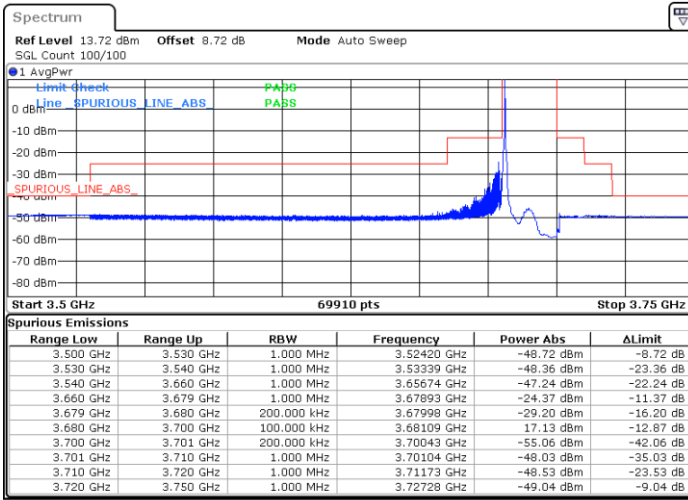


LTE Band 48 / 20MHz

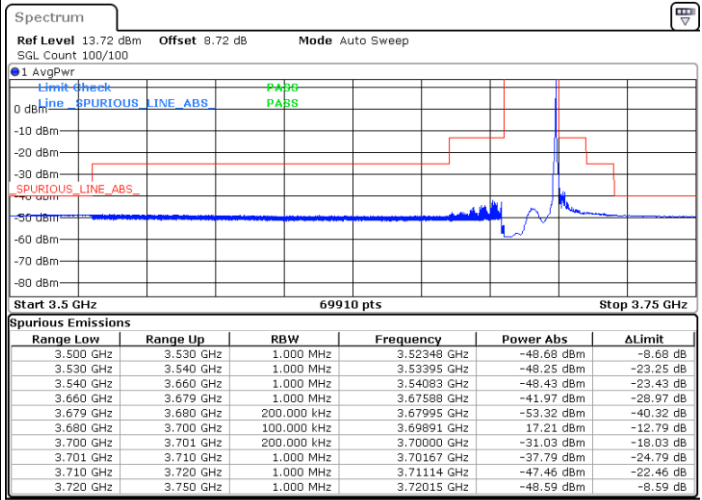
64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



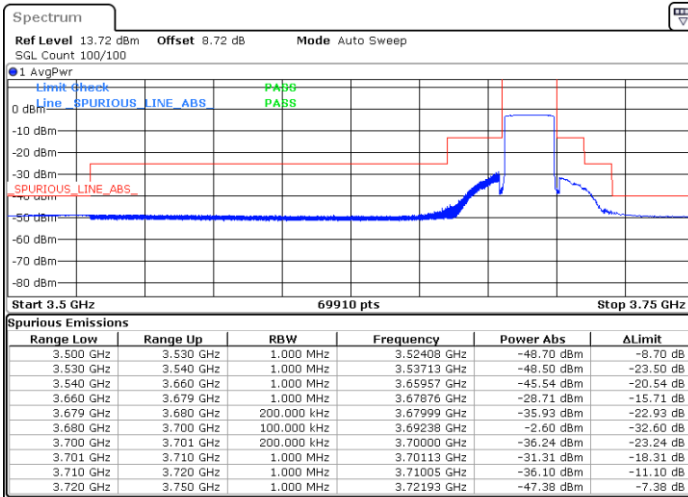
Date: 8.NOV.2022 22:00:58



Date: 8.NOV.2022 22:19:44

Highest Channel / FullIRB

N/A



Date: 8.NOV.2022 22:26:32

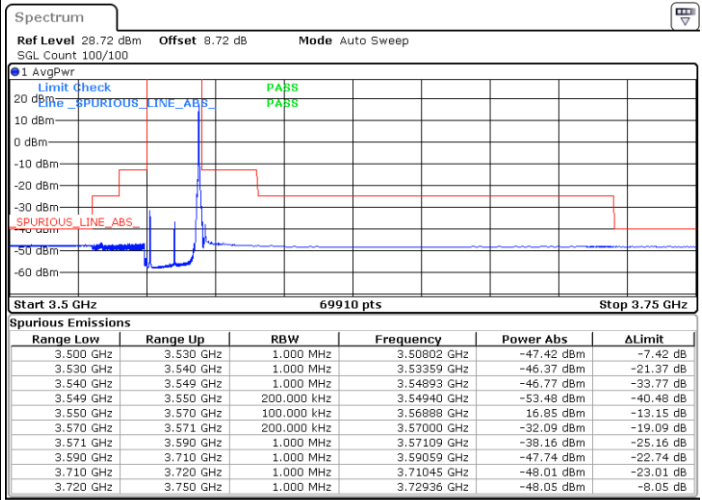
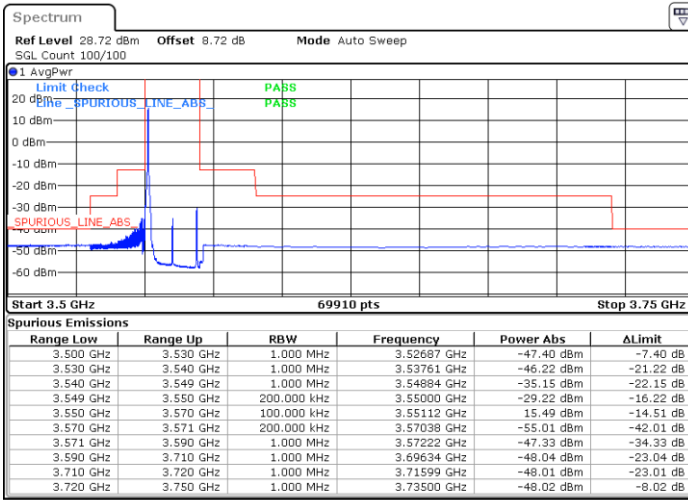


LTE Band 48 / 20MHz

256QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

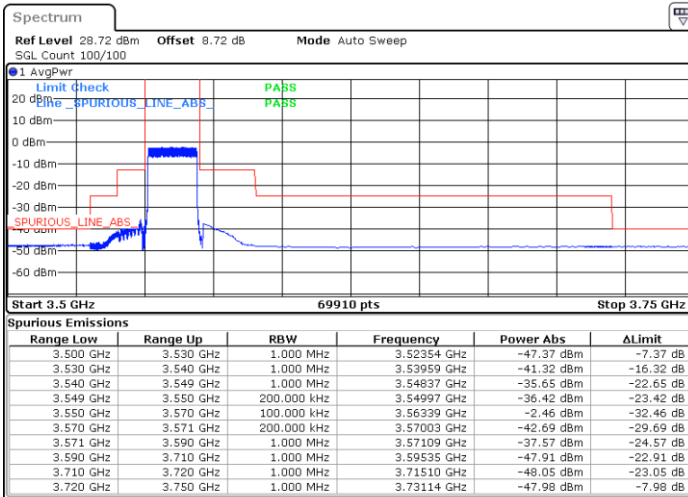


Date: 9.NOV.2022 18:38:19

Date: 9.NOV.2022 18:43:49

Lowest Channel / FullIRB

N/A



Date: 9.NOV.2022 18:49:18

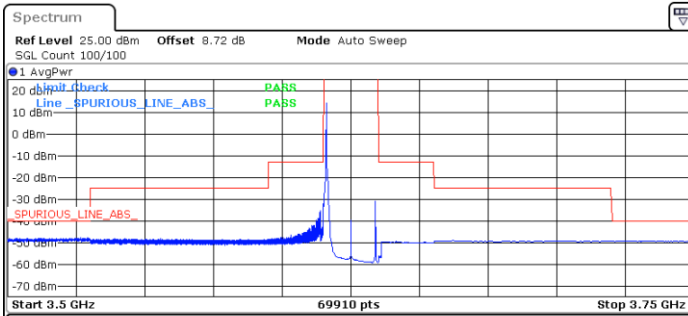


LTE Band 48 / 20MHz

256QAM

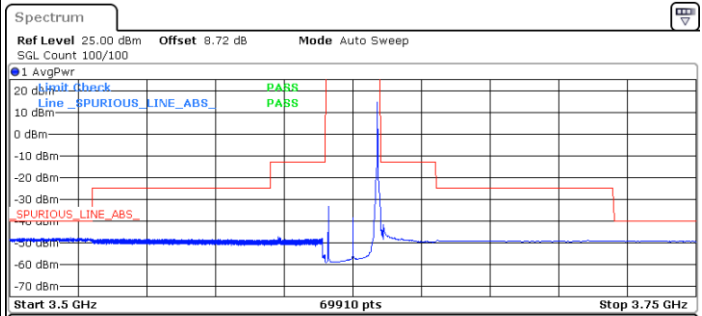
Middle Channel / 1RB0

Middle Channel / 1RBmax



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52909 GHz	-47.94 dBm	-7.94 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53891 GHz	-48.33 dBm	-23.33 dB
3.540 GHz	3.595 GHz	1.000 MHz	3.55574 GHz	-48.35 dBm	-23.35 dB
3.595 GHz	3.614 GHz	1.000 MHz	3.61396 GHz	-35.59 dBm	-22.59 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.61500 GHz	-32.12 dBm	-19.12 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.61609 GHz	14.33 dBm	-15.67 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.63579 GHz	-56.24 dBm	-43.24 dB
3.636 GHz	3.655 GHz	1.000 MHz	3.64136 GHz	-49.56 dBm	-36.56 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.66240 GHz	-49.20 dBm	-24.20 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74777 GHz	-49.21 dBm	-9.21 dB

Date: 8.NOV.2022 21:42:31

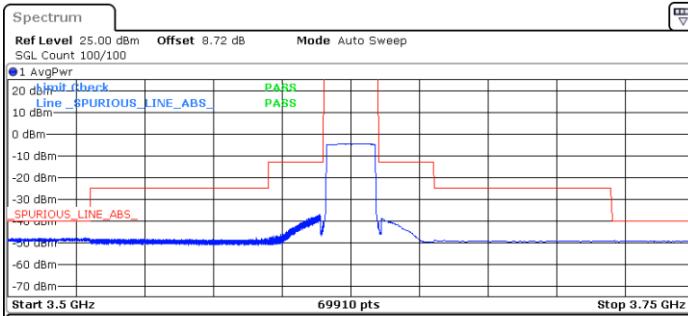


Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52213 GHz	-47.98 dBm	-7.98 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53396 GHz	-48.42 dBm	-23.42 dB
3.540 GHz	3.595 GHz	1.000 MHz	3.54139 GHz	-48.07 dBm	-23.07 dB
3.595 GHz	3.614 GHz	1.000 MHz	3.59785 GHz	-47.39 dBm	-34.39 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.61444 GHz	-55.86 dBm	-42.86 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.63391 GHz	14.45 dBm	-15.55 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.63500 GHz	-33.89 dBm	-20.89 dB
3.636 GHz	3.655 GHz	1.000 MHz	3.63609 GHz	-41.98 dBm	-28.98 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.65597 GHz	-49.14 dBm	-24.14 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72490 GHz	-49.21 dBm	-9.21 dB

Date: 8.NOV.2022 21:49:13

Middle Channel / Full

N/A



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52813 GHz	-47.95 dBm	-7.95 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53465 GHz	-48.48 dBm	-23.48 dB
3.540 GHz	3.595 GHz	1.000 MHz	3.59048 GHz	-47.67 dBm	-22.67 dB
3.595 GHz	3.614 GHz	1.000 MHz	3.61347 GHz	-37.19 dBm	-24.19 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.61497 GHz	-40.25 dBm	-27.25 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.62896 GHz	-4.54 dBm	-34.54 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.63500 GHz	-41.12 dBm	-28.12 dB
3.636 GHz	3.655 GHz	1.000 MHz	3.63609 GHz	-38.93 dBm	-25.93 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.65597 GHz	-49.15 dBm	-24.15 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72134 GHz	-49.19 dBm	-9.19 dB

Date: 8.NOV.2022 21:55:55

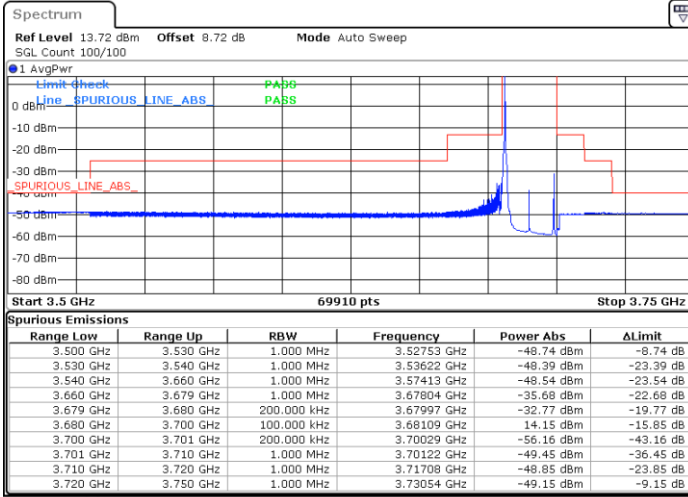


LTE Band 48 / 20MHz

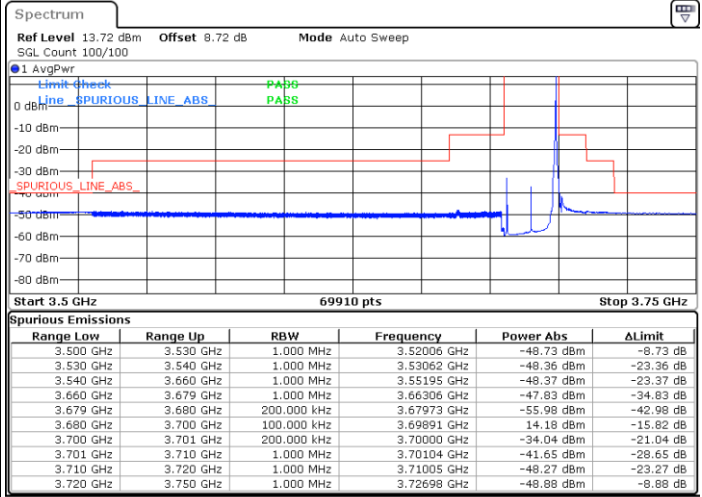
256QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



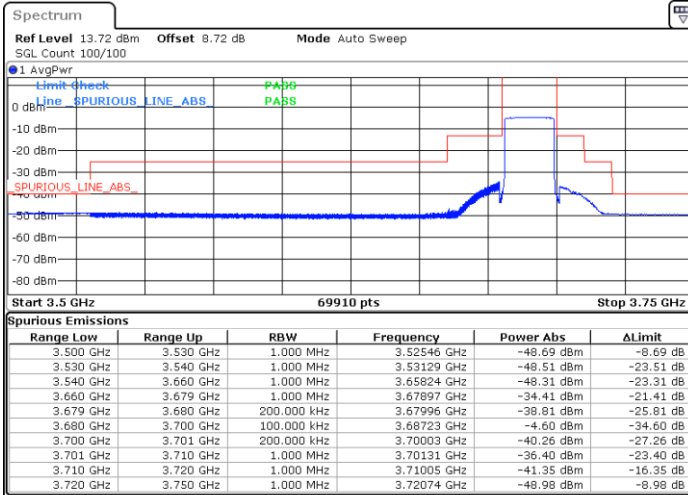
Date: 8.NOV.2022 22:14:40



Date: 8.NOV.2022 22:21:25

Highest Channel / FullIRB

N/A



Date: 8.NOV.2022 22:28:13



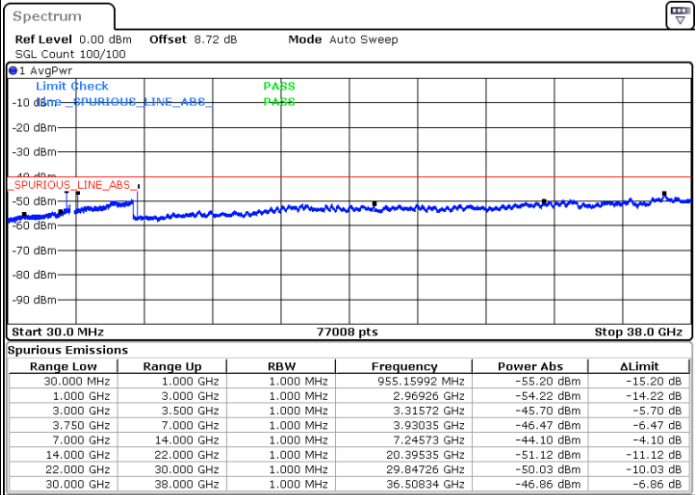
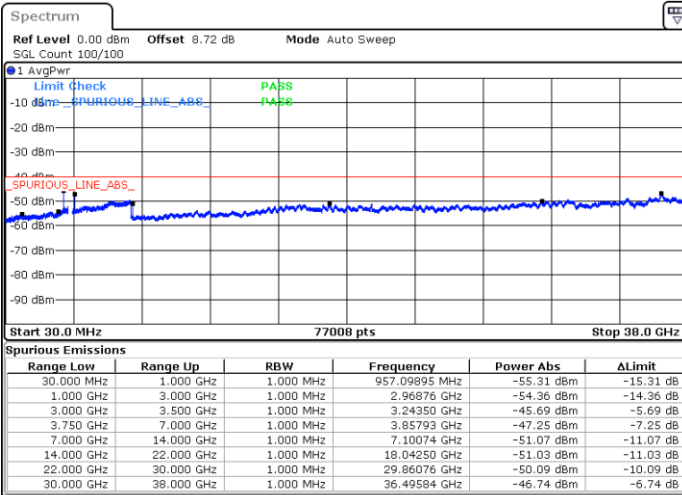
Conducted Spurious Emission

LTE Band 48 / 5MHz

QPSK / 1RB0

Lowest Channel

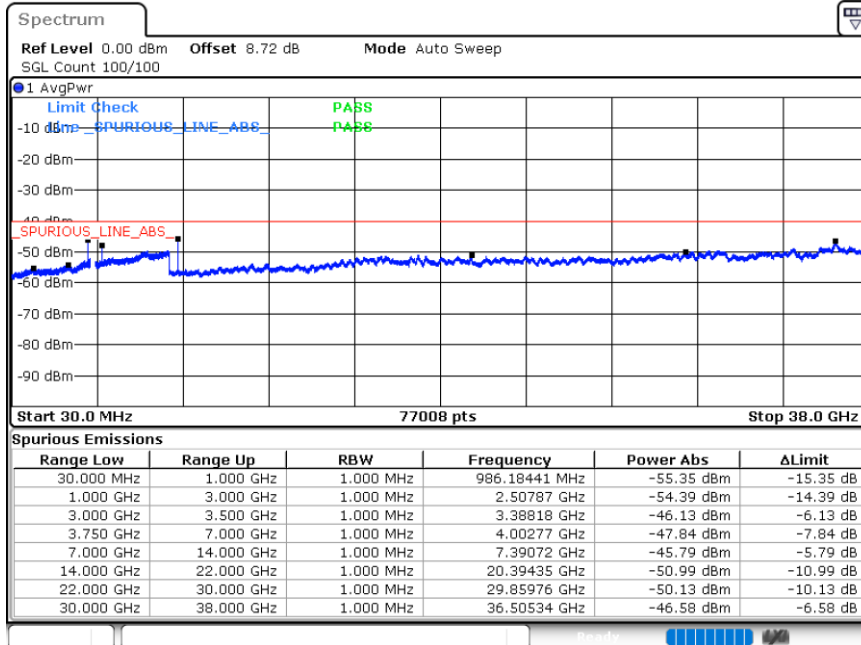
Middle Channel



Date: 9.NOV.2022 05:05:01

Date: 9.NOV.2022 05:06:21

Highest Channel



Date: 9.NOV.2022 05:07:41

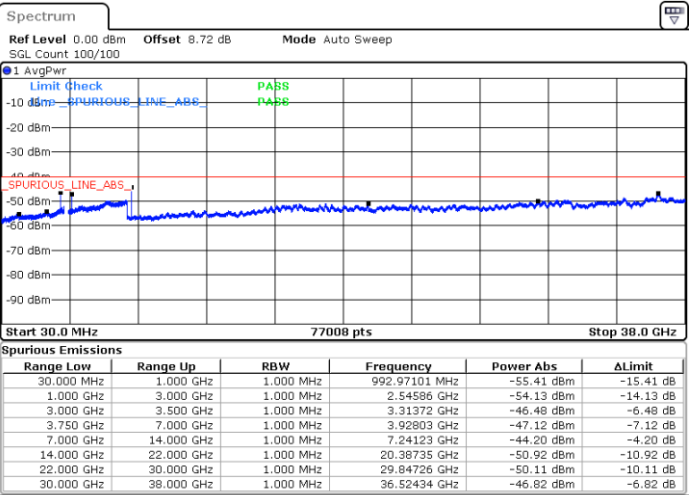
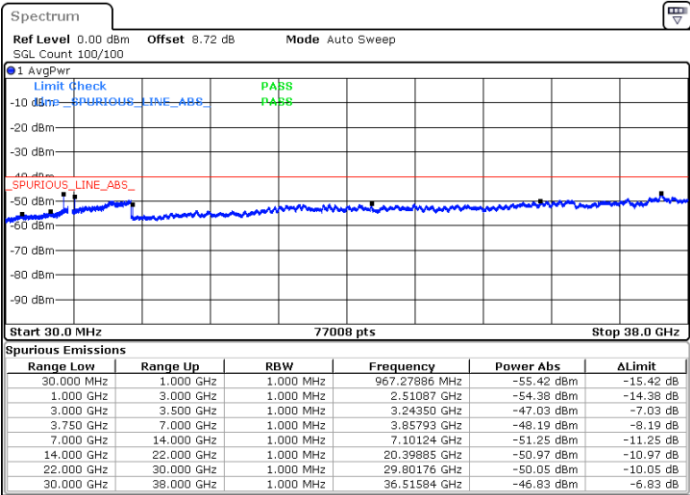


LTE Band 48 / 10MHz

QPSK / 1RB0

Lowest Channel

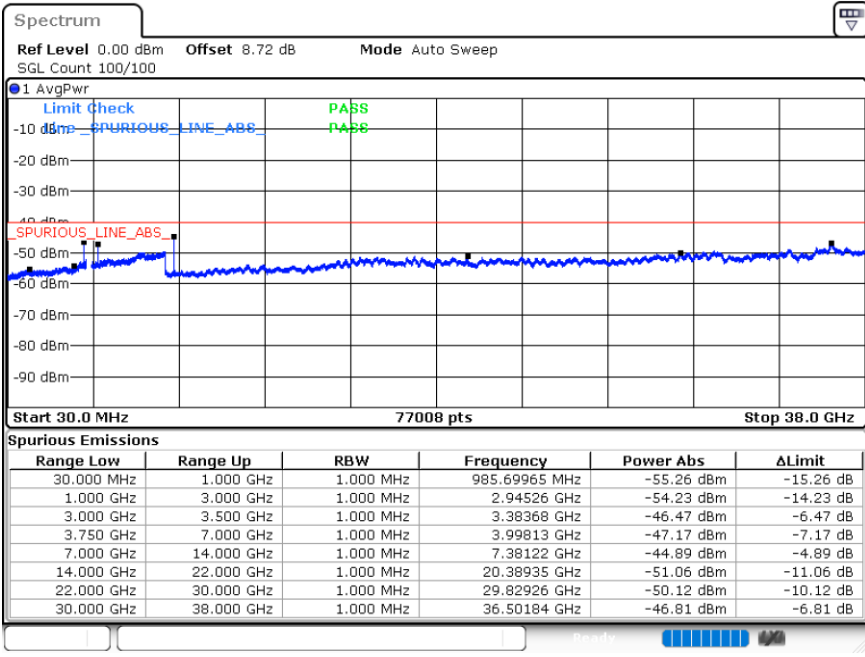
Middle Channel



Date: 9.NOV.2022 05:09:02

Date: 9.NOV.2022 05:10:22

Highest Channel



Date: 9.NOV.2022 05:11:42

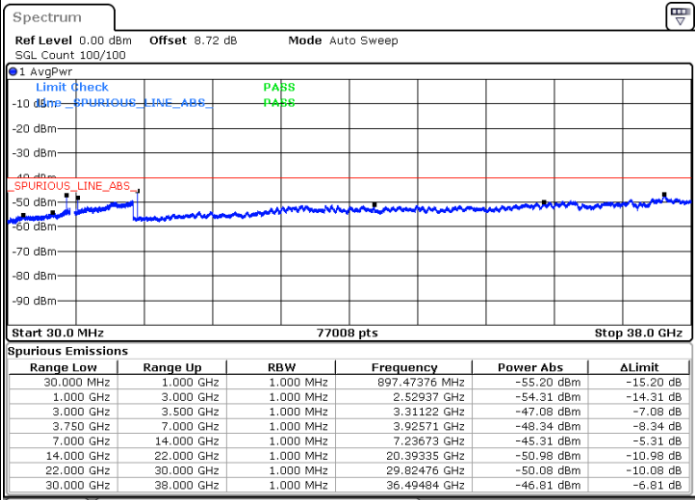
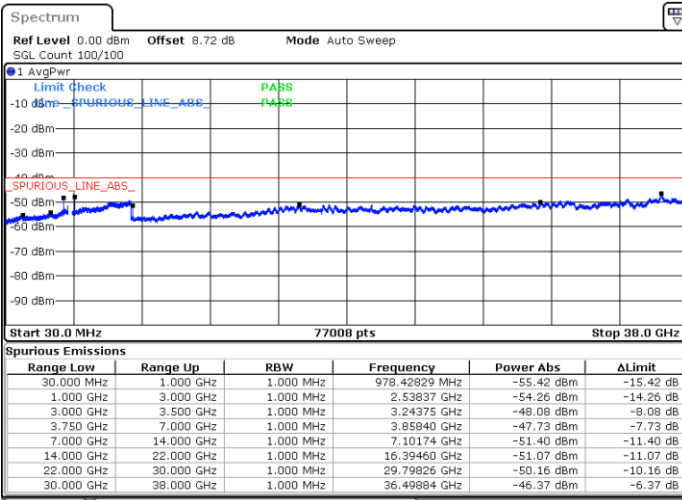


LTE Band 48 / 15MHz

QPSK / 1RB0

Lowest Channel

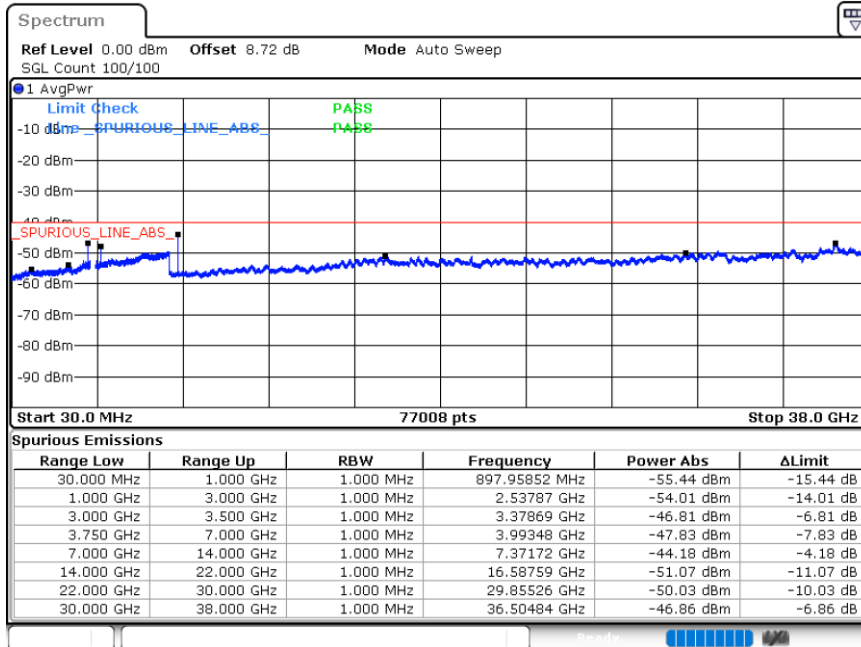
Middle Channel



Date: 9.NOV.2022 05:13:03

Date: 9.NOV.2022 05:14:23

Highest Channel



Date: 9.NOV.2022 05:15:43

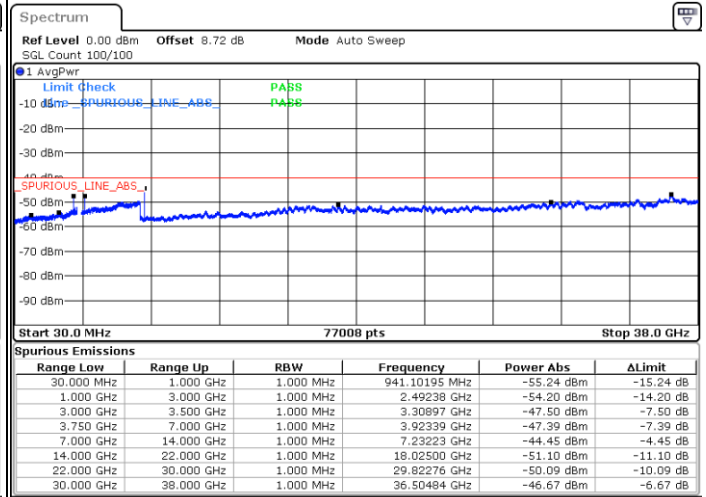
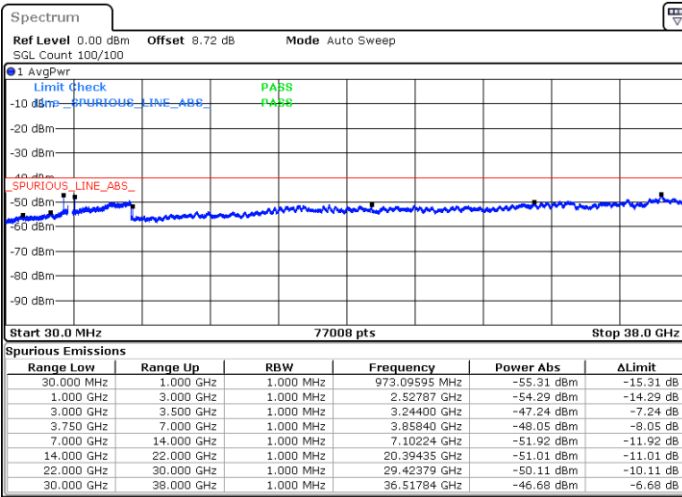


LTE Band 48 / 20MHz

QPSK / 1RB0

Lowest Channel

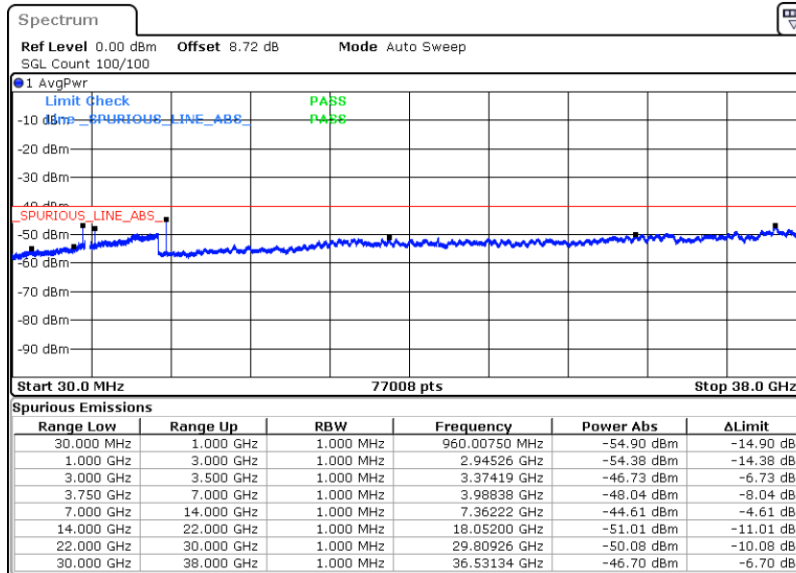
Middle Channel



Date: 9.NOV.2022 05:17:04

Date: 9.NOV.2022 05:18:24

Highest Channel



Date: 9.NOV.2022 05:19:44

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	0.0024	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0016	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0018	
-30	Normal Voltage	0.0026	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0022	

Note:

1. Normal Voltage =3.89 V. ; Battery End Point (BEP) =3.4V. ; 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

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

LTE Band 48 / 20MHz / QPSK / ANT2								
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	7230	-61.10	-40	-21.10	-72.56	2.84	14.30	H
	10848	-56.87	-40	-16.87	-66.81	3.49	13.43	H
	14466	-60.24	-40	-20.24	-70.48	3.85	14.09	H
	7232	-62.53	-40	-22.53	-73.99	2.84	14.30	V
	10848	-58.38	-40	-18.38	-68.32	3.49	13.43	V
	14466	-59.64	-40	-19.64	-69.88	3.85	14.09	V

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