

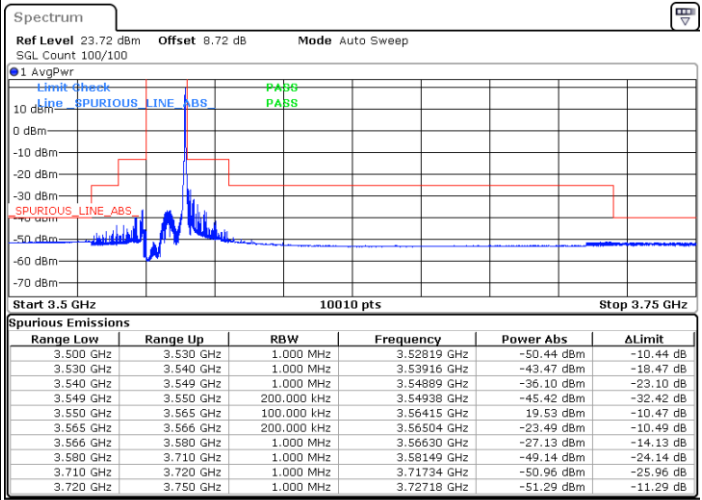
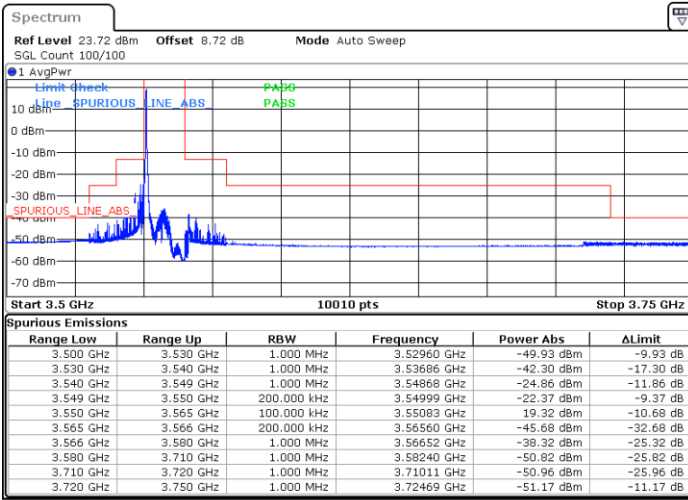


LTE Band 48 / 15MHz

64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

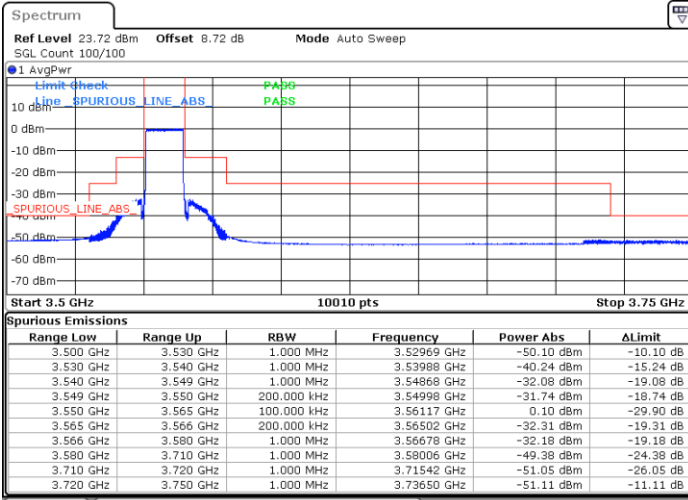


Date: 21.FEB.2025 06:44:12

Date: 21.FEB.2025 06:39:02

Lowest Channel / FullIRB

N/A



Date: 21.FEB.2025 06:52:05

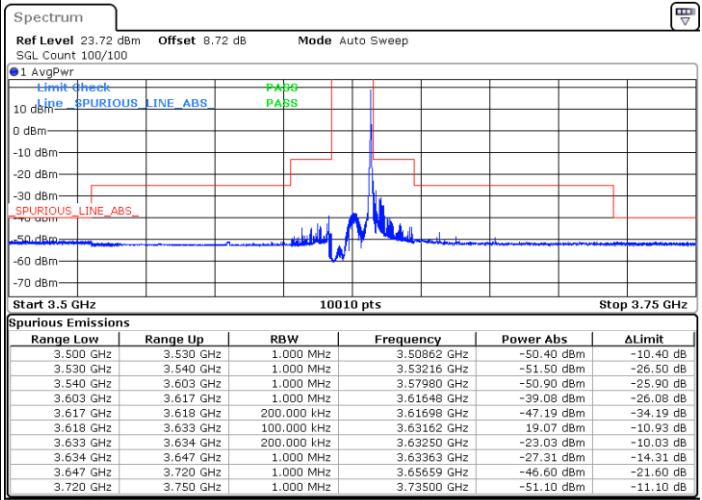
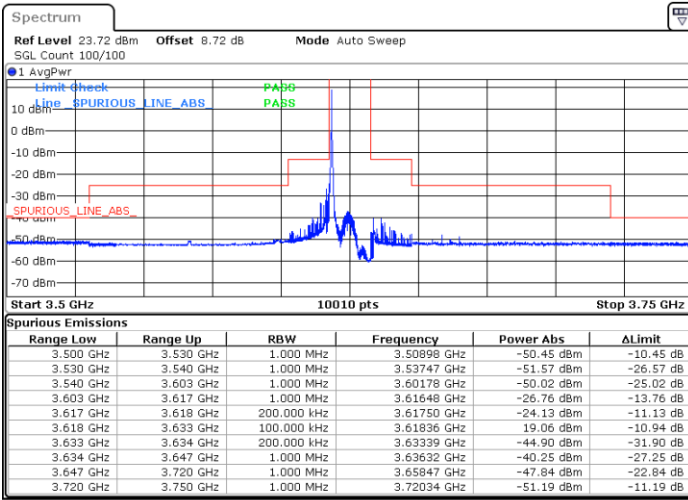


LTE Band 48 / 15MHz

64QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax

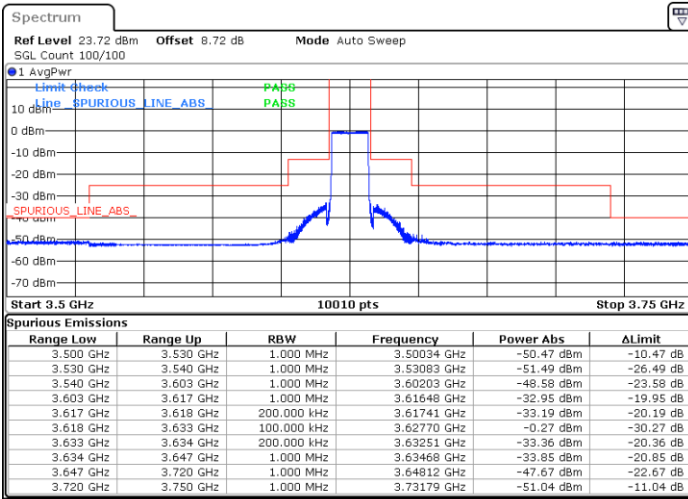


Date: 21.FEB.2025 06:26:56

Date: 21.FEB.2025 06:32:59

Middle Channel / Full

N/A



Date: 21.FEB.2025 06:22:59

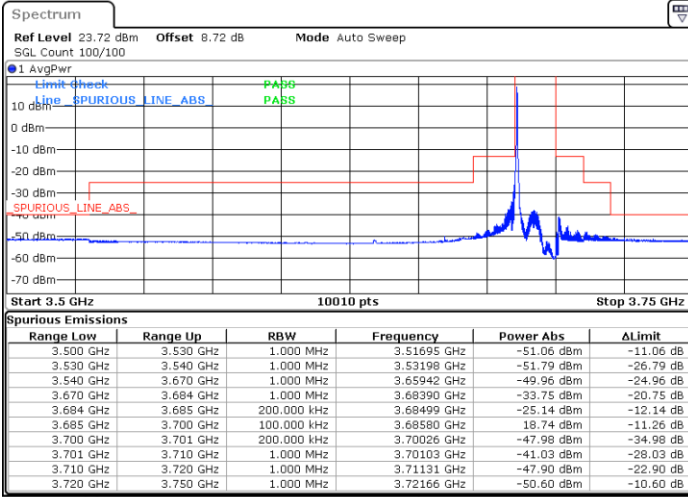


LTE Band 48 / 15MHz

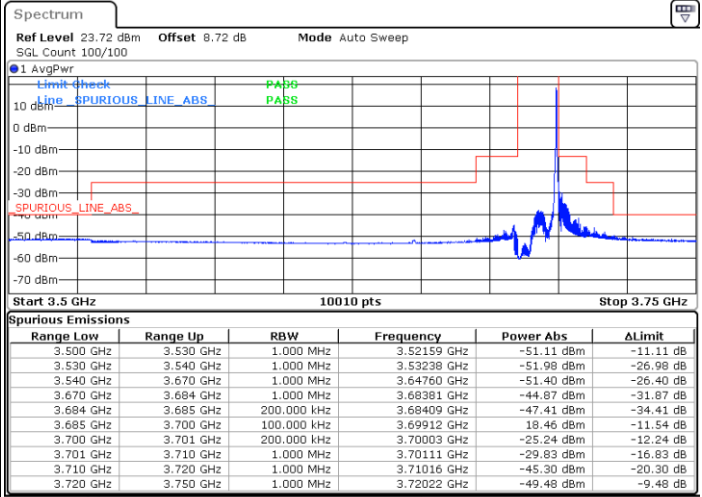
64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



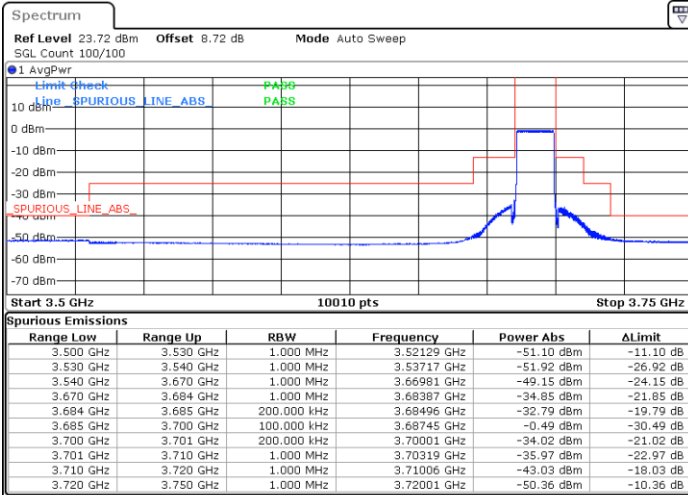
Date: 21.FEB.2025 07:10:48



Date: 21.FEB.2025 07:04:38

Highest Channel / FullIRB

N/A



Date: 21.FEB.2025 06:59:45

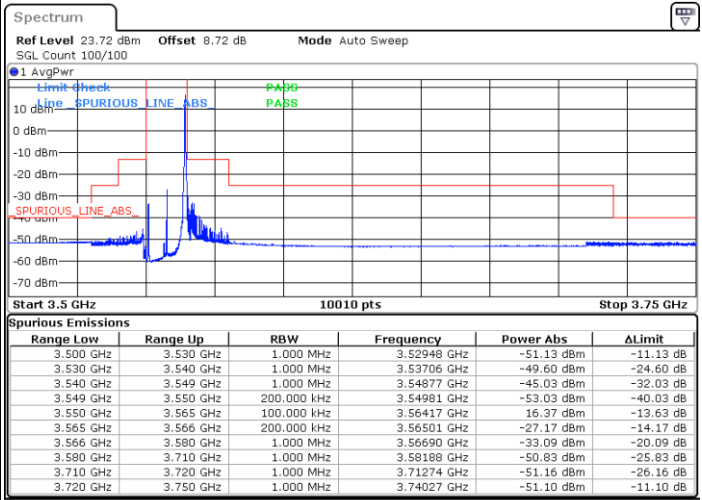
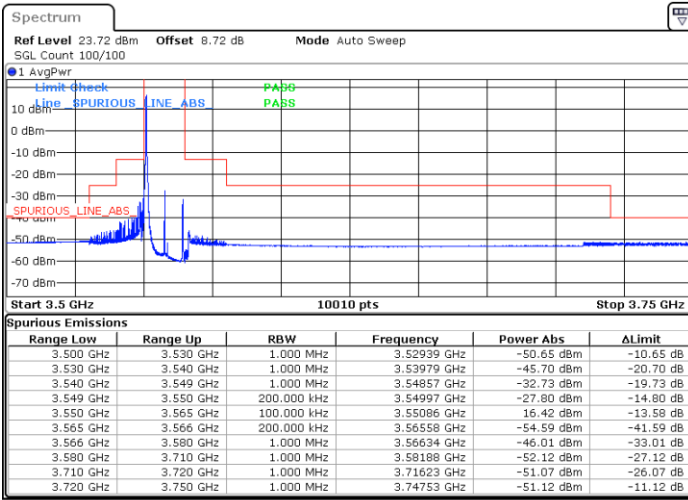


LTE Band 48 / 15MHz

256QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

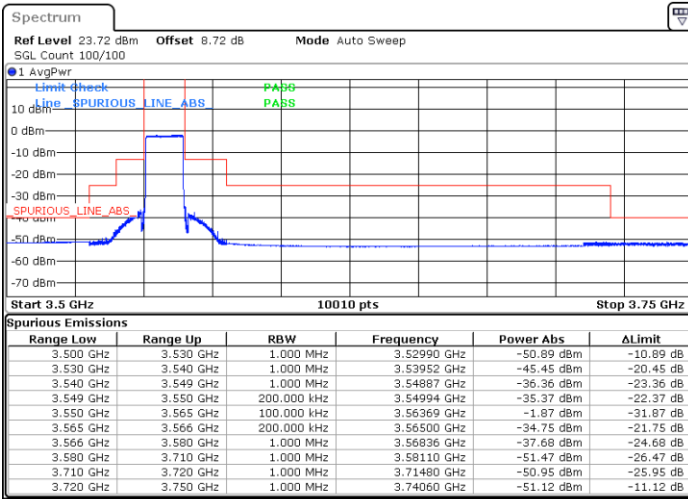


Date: 21.FEB.2025 06:45:22

Date: 21.FEB.2025 06:40:20

Lowest Channel / FullIRB

N/A



Date: 21.FEB.2025 06:53:24

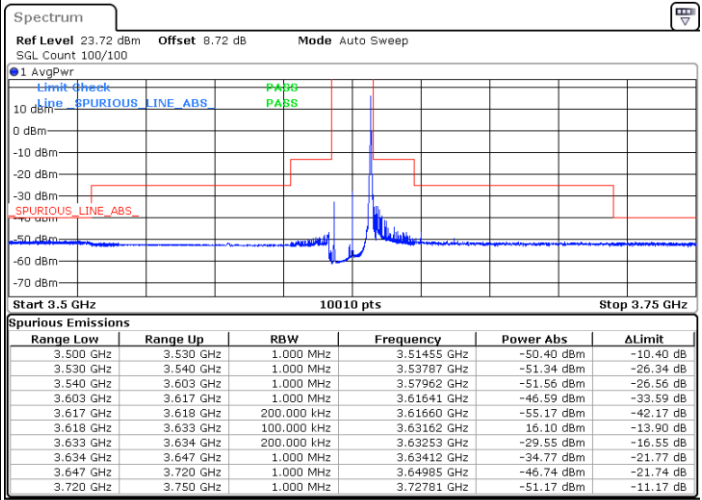
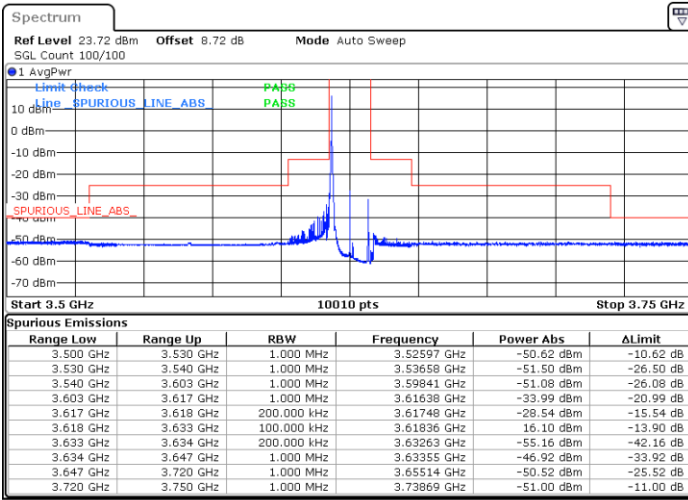


LTE Band 48 / 15MHz

256QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax

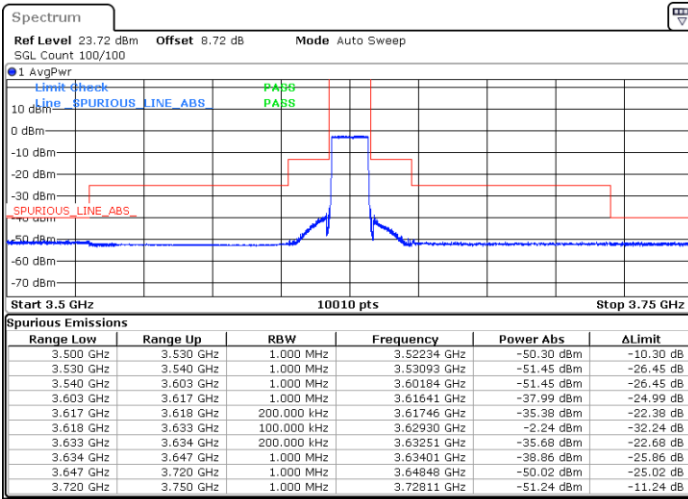


Date: 21.FEB.2025 06:25:49

Date: 21.FEB.2025 06:34:01

Middle Channel / Full

N/A



Date: 21.FEB.2025 06:24:03

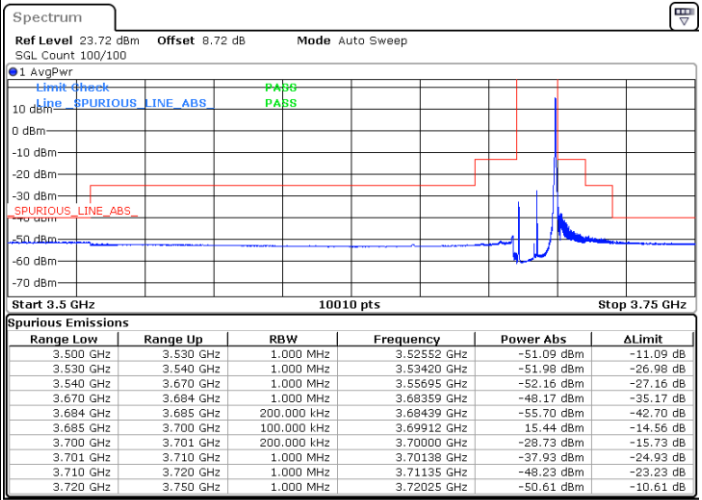
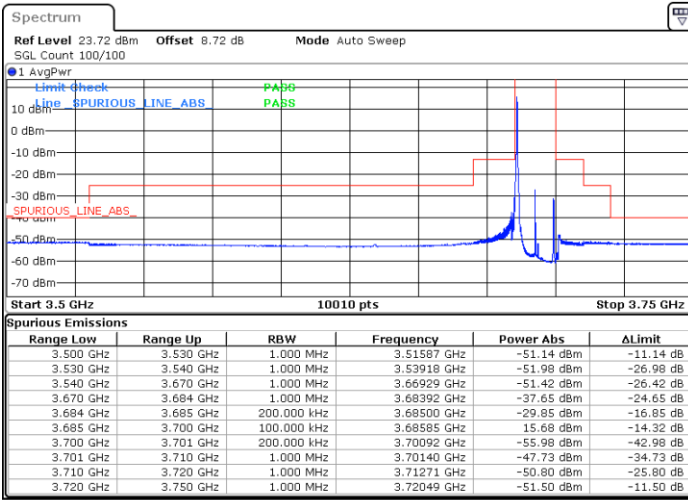


LTE Band 48 / 15MHz

256QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

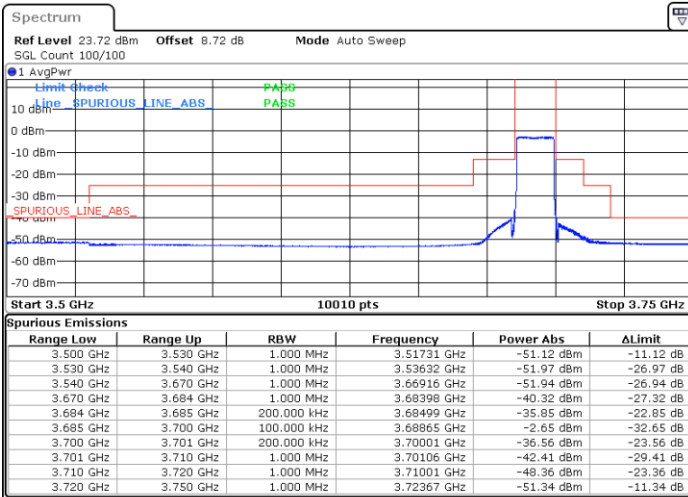


Date: 21.FEB.2025 07:12:26

Date: 21.FEB.2025 07:03:16

Highest Channel / FullIRB

N/A



Date: 21.FEB.2025 07:01:01

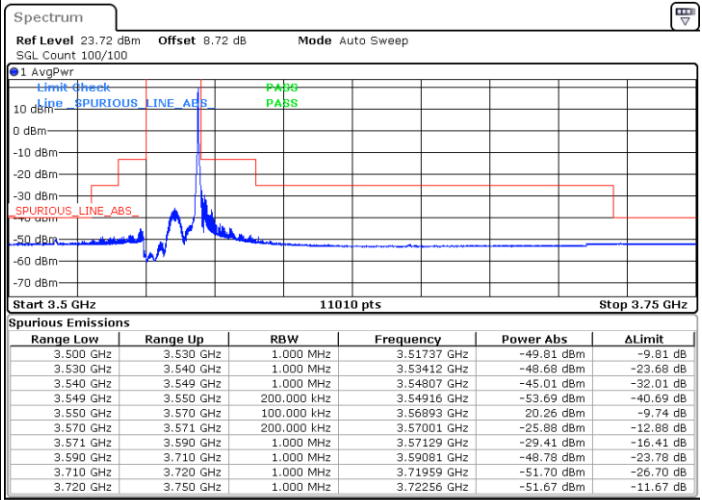
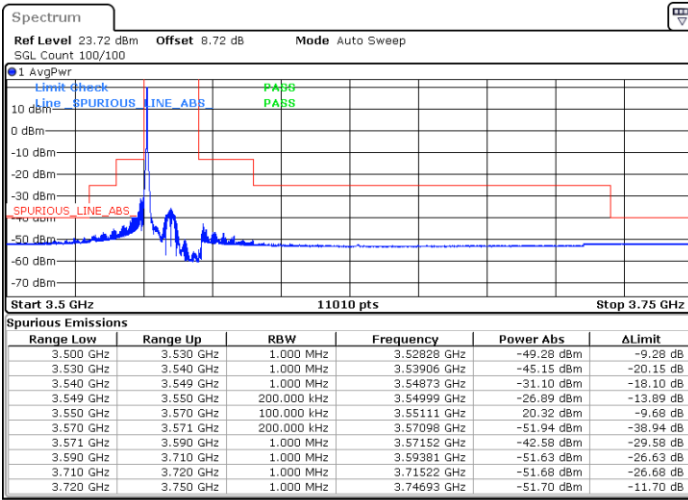


LTE Band 48 / 20MHz

QPSK

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

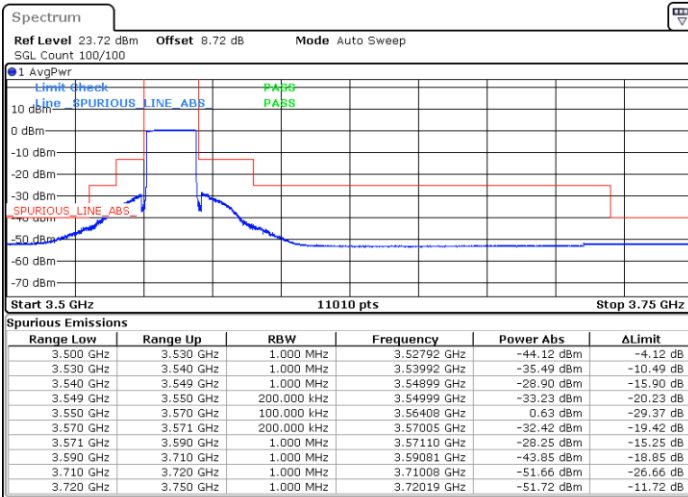


Date: 21.FEB.2025 05:53:32

Date: 21.FEB.2025 05:55:16

Lowest Channel / FullIRB

N/A



Date: 21.FEB.2025 06:14:20

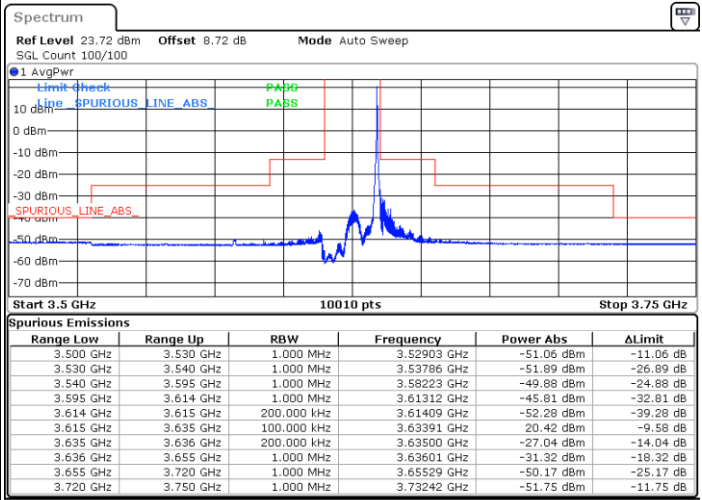
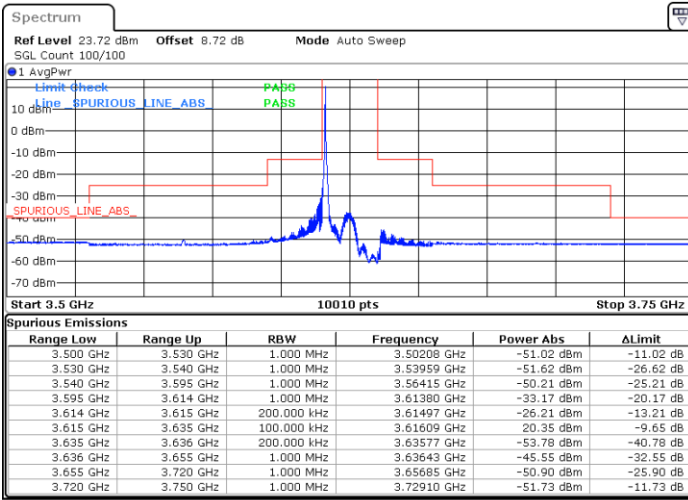


LTE Band 48 / 20MHz

QPSK

Middle Channel / 1RB0

Middle Channel / 1RBmax

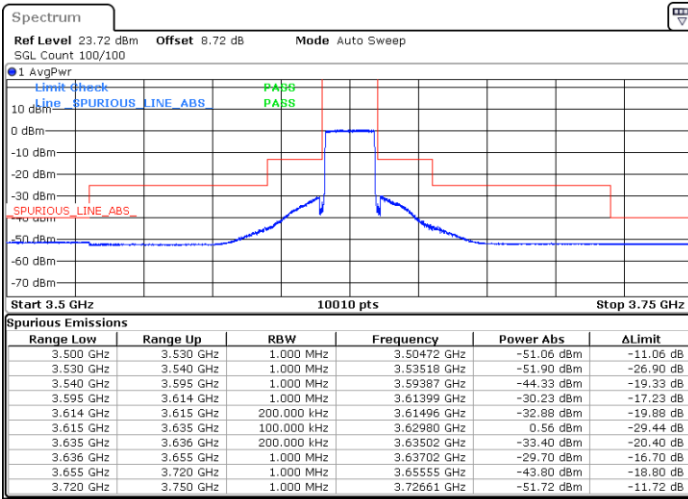


Date: 21.FEB.2025 05:29:58

Date: 21.FEB.2025 05:31:48

Middle Channel / Full

N/A



Date: 21.FEB.2025 05:19:26

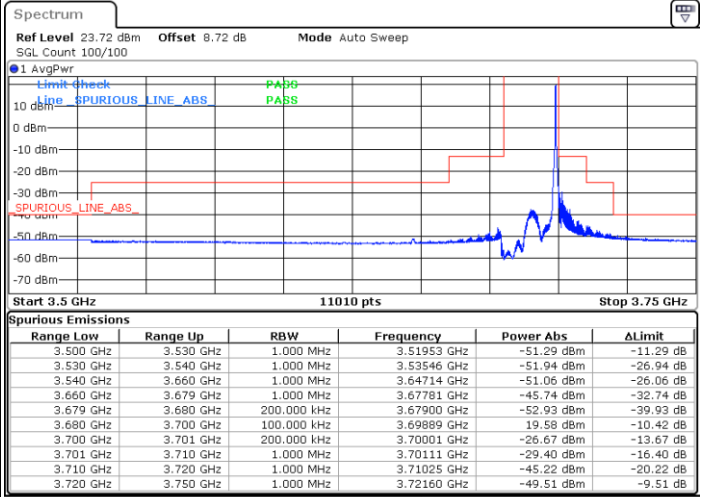
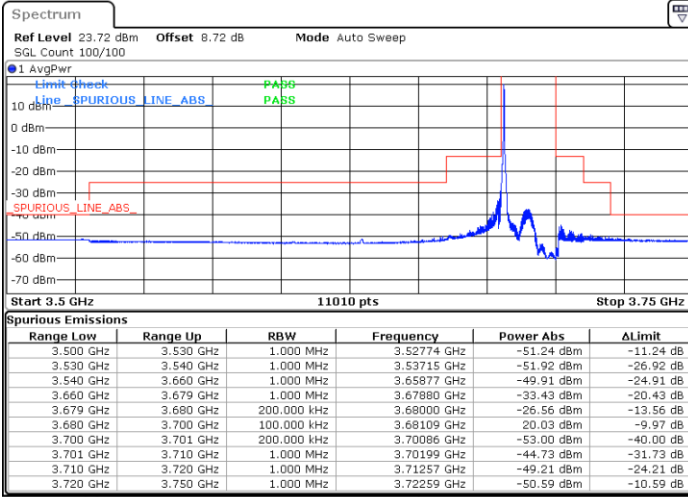


LTE Band 48 / 20MHz

QPSK

Highest Channel / 1RB0

Highest Channel / 1RBmax

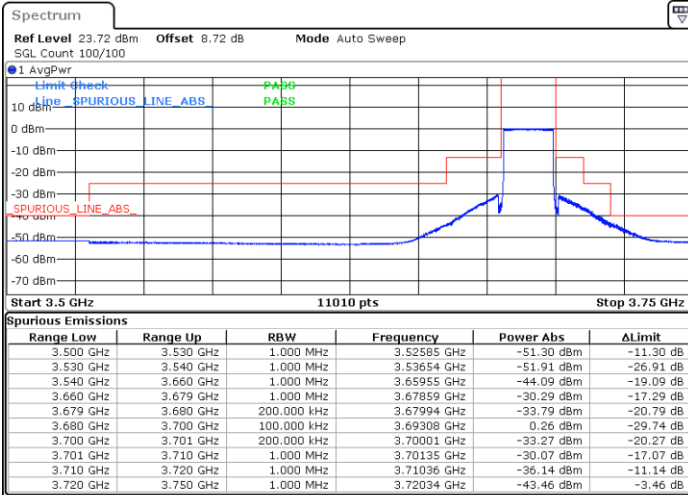


Date: 21.FEB.2025 04:24:36

Date: 21.FEB.2025 05:08:54

Highest Channel / FullIRB

N/A



Date: 21.FEB.2025 05:10:33

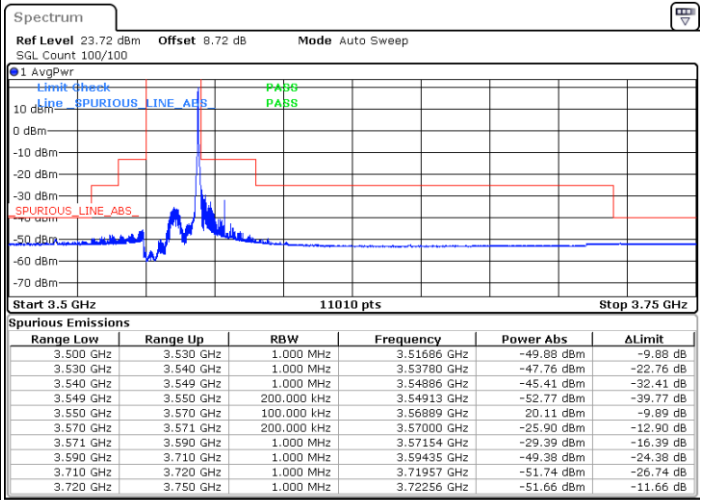
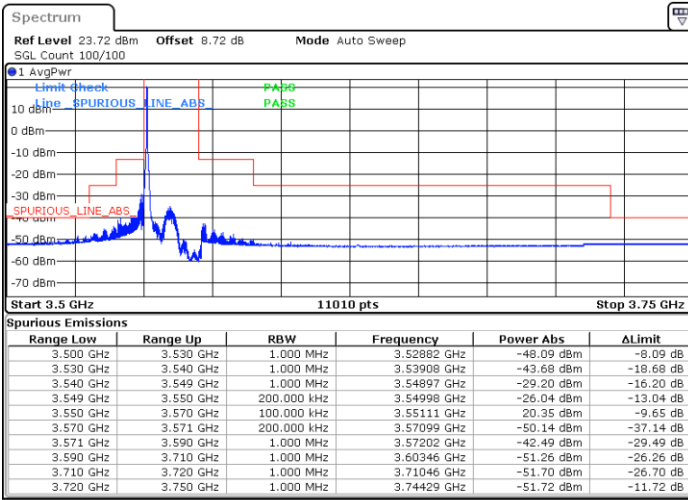


LTE Band 48 / 20MHz

16QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

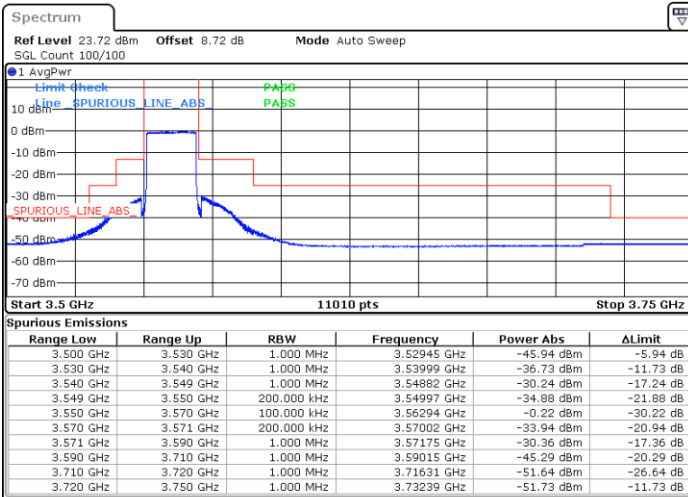


Date: 21.FEB.2025 05:52:10

Date: 21.FEB.2025 05:56:56

Lowest Channel / FullIRB

N/A



Date: 21.FEB.2025 06:04:21

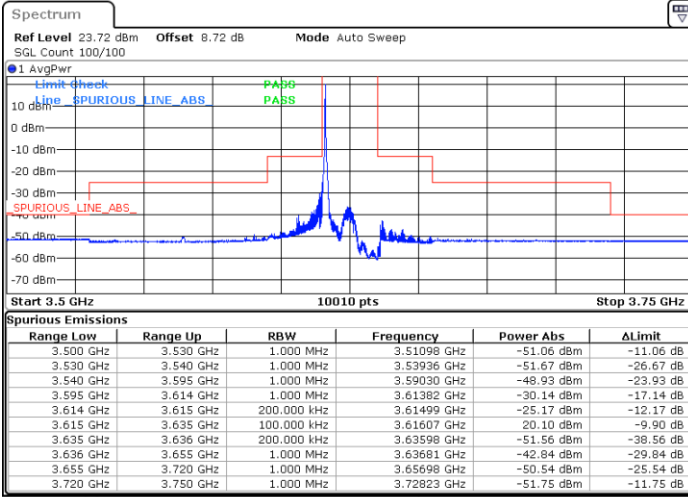


LTE Band 48 / 20MHz

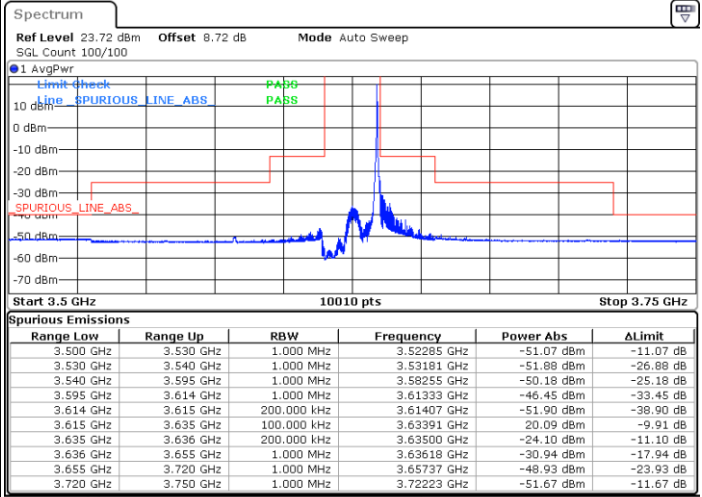
16QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



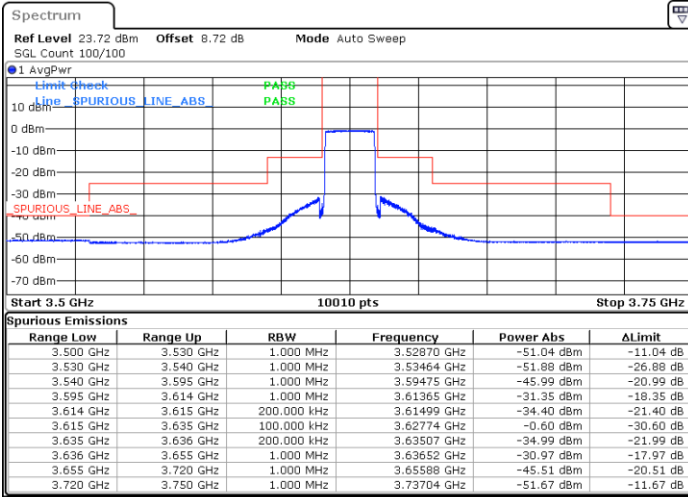
Date: 21.FEB.2025 05:28:30



Date: 21.FEB.2025 05:33:19

Middle Channel / Full

N/A



Date: 21.FEB.2025 05:20:52

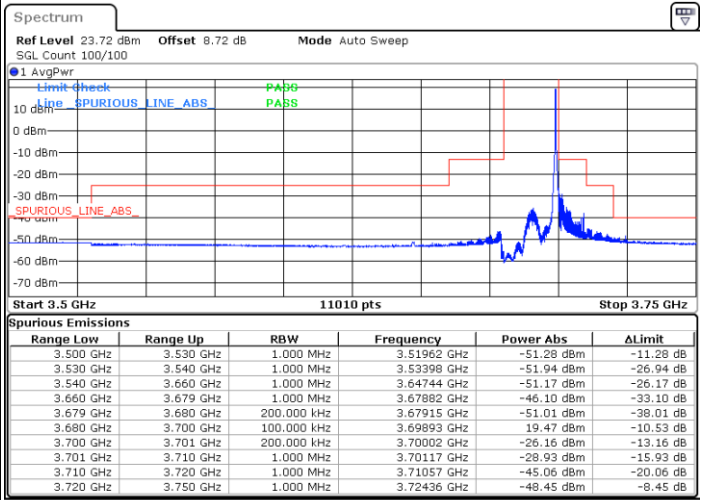
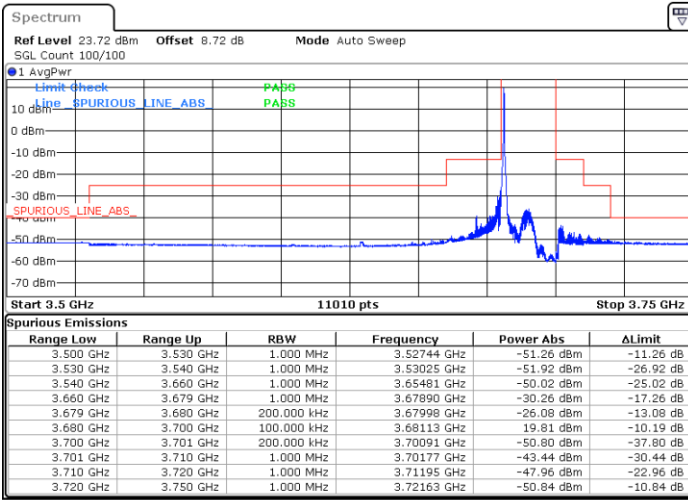


LTE Band 48 / 20MHz

16QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

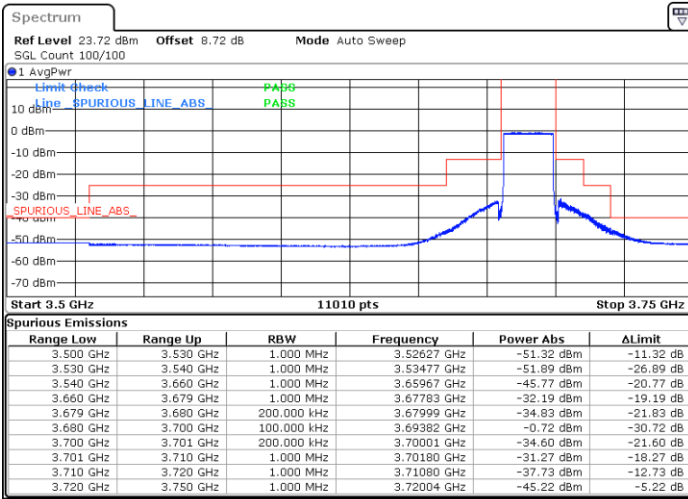


Date: 21.FEB.2025 04:26:10

Date: 21.FEB.2025 04:34:17

Highest Channel / FullIRB

N/A



Date: 21.FEB.2025 05:12:13

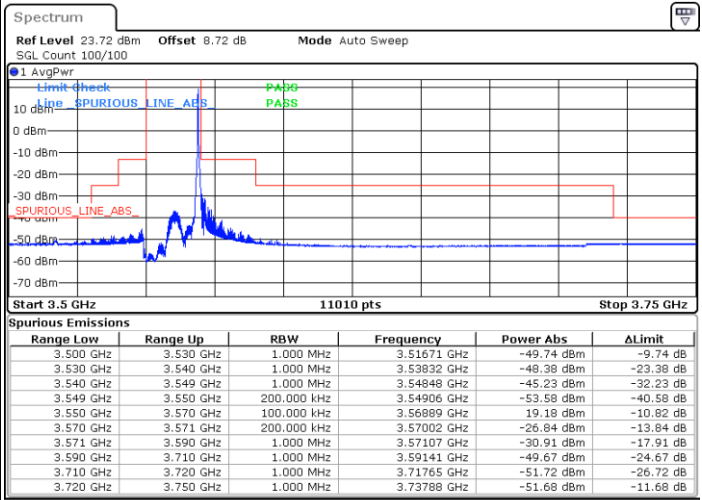
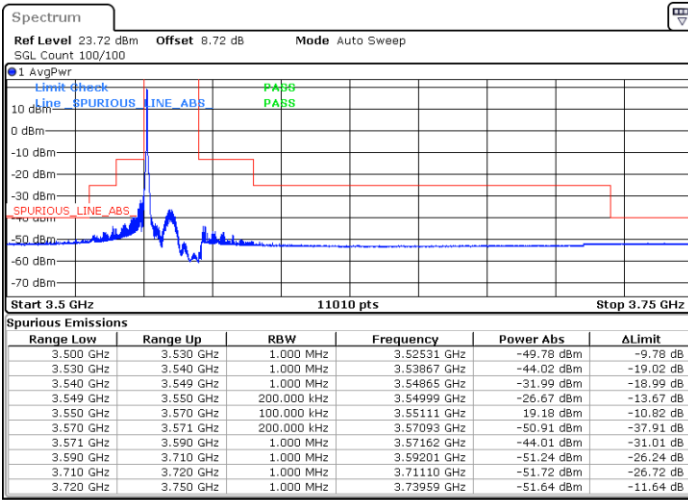


LTE Band 48 / 20MHz

64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

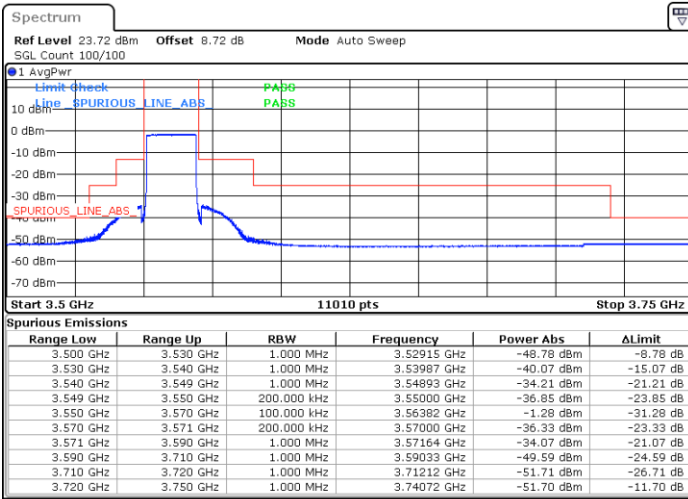


Date: 21.FEB.2025 05:50:19

Date: 21.FEB.2025 05:58:24

Lowest Channel / FullIRB

N/A



Date: 21.FEB.2025 06:03:01

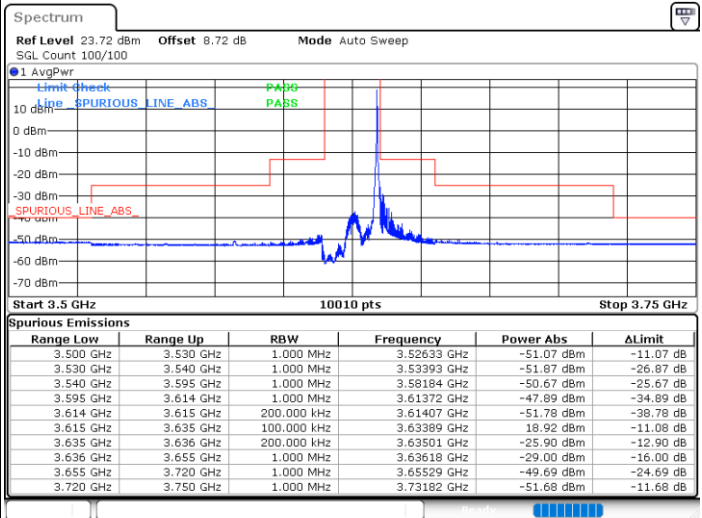
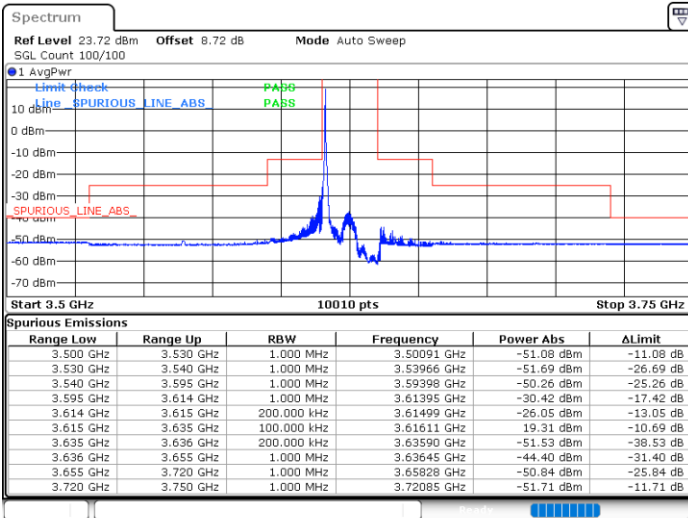


LTE Band 48 / 20MHz

64QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax

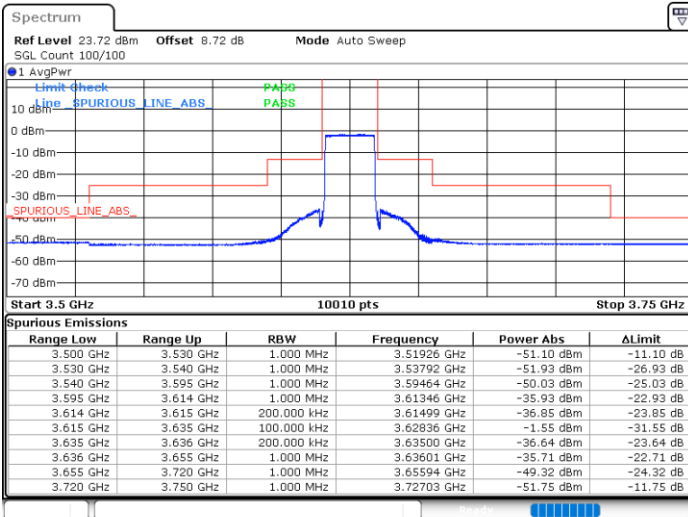


Date: 21.FEB.2025 05:27:06

Date: 21.FEB.2025 05:34:41

Middle Channel / Full

N/A



Date: 21.FEB.2025 05:22:31

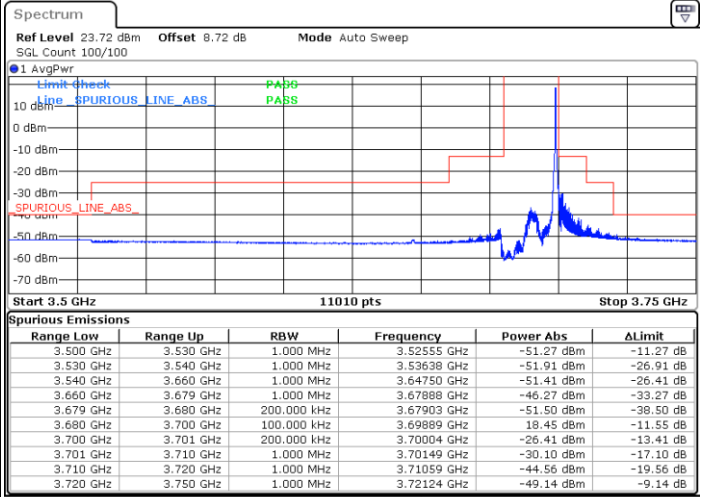
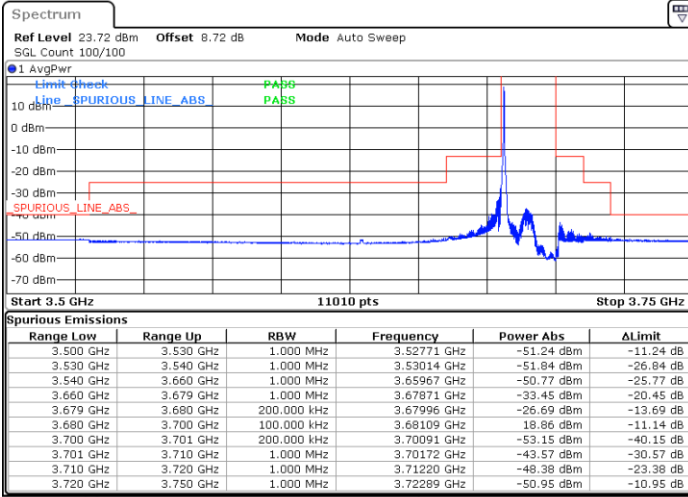


LTE Band 48 / 20MHz

64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

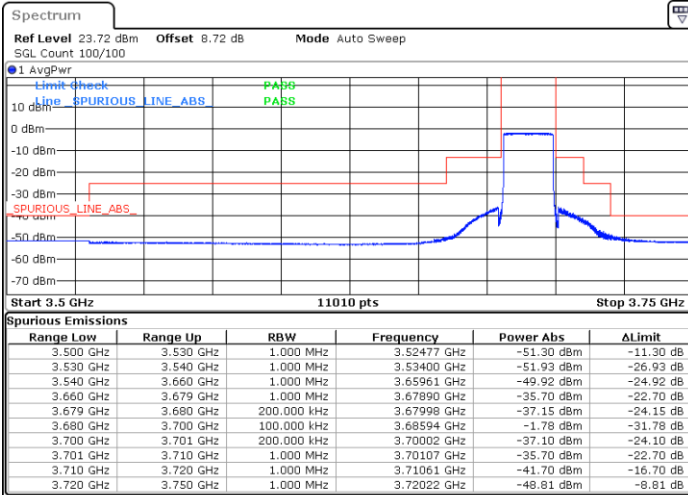


Date: 21.FEB.2025 04:27:47

Date: 21.FEB.2025 04:32:49

Highest Channel / FullIRB

N/A



Date: 21.FEB.2025 05:13:43

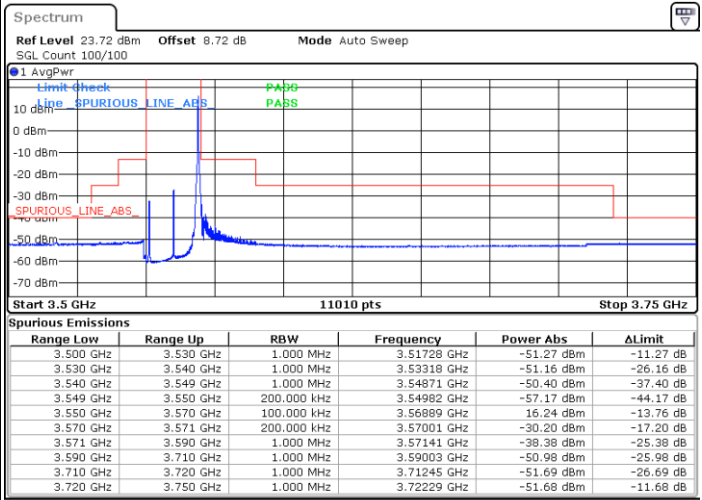
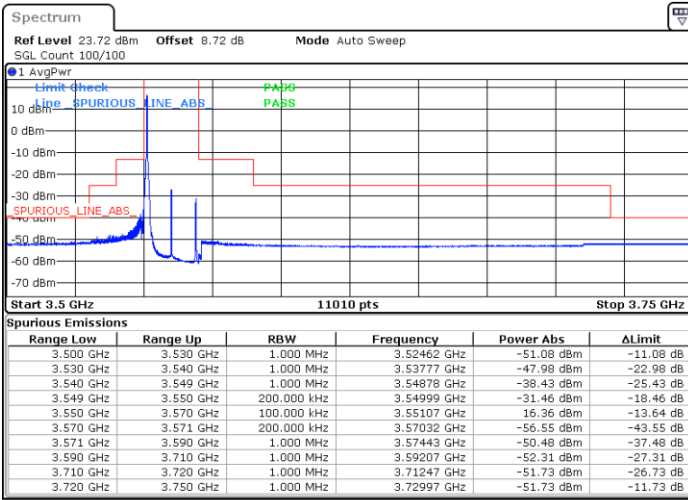


LTE Band 48 / 20MHz

256QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

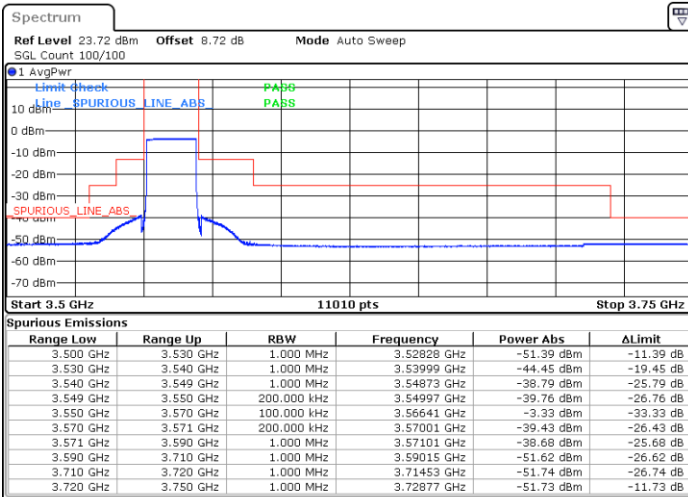


Date: 21.FEB.2025 05:48:50

Date: 21.FEB.2025 06:00:08

Lowest Channel / FullIRB

N/A



Date: 21.FEB.2025 06:01:35

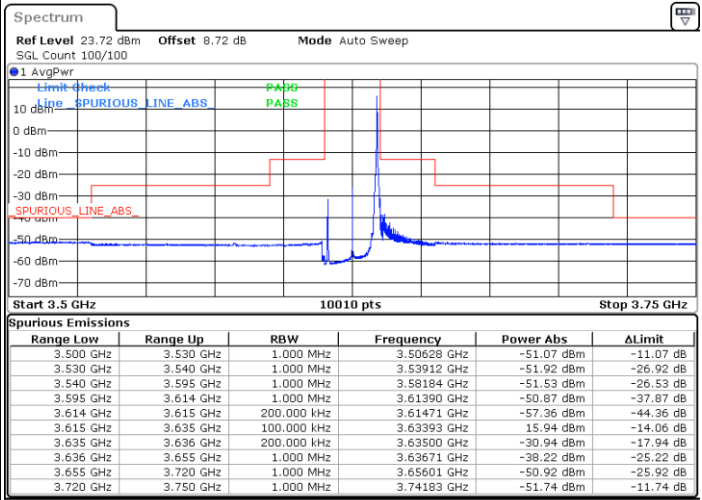
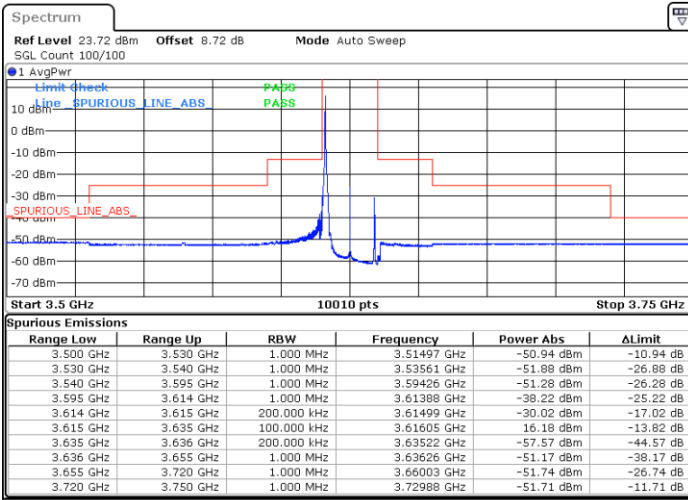


LTE Band 48 / 20MHz

256QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax

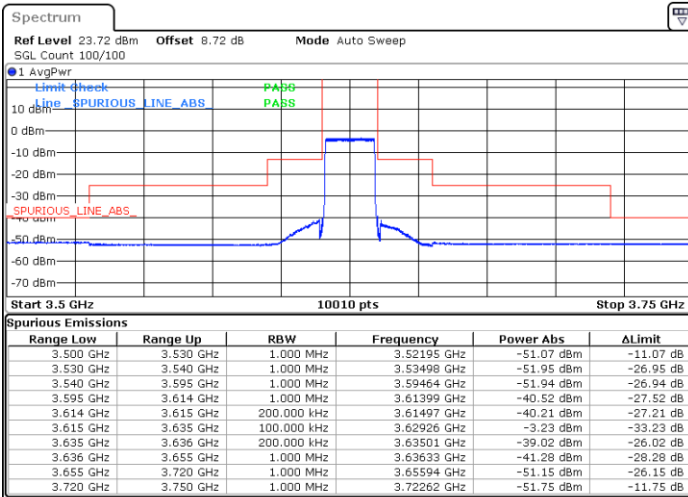


Date: 21.FEB.2025 05:25:47

Date: 21.FEB.2025 05:36:11

Middle Channel / Full

N/A



Date: 21.FEB.2025 05:24:07

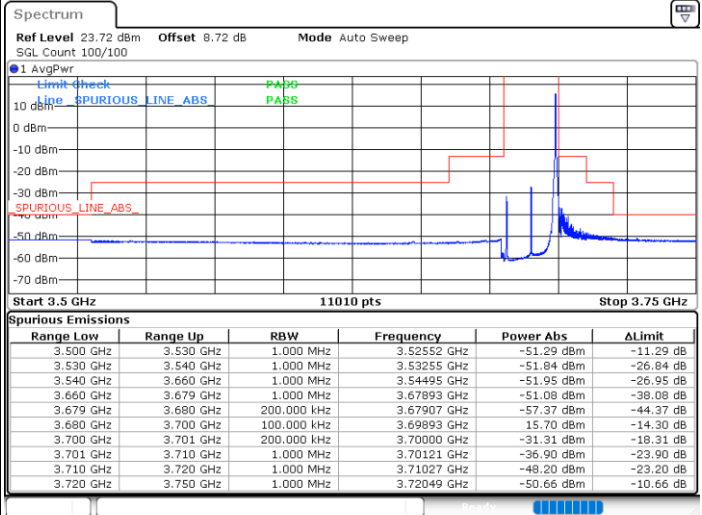
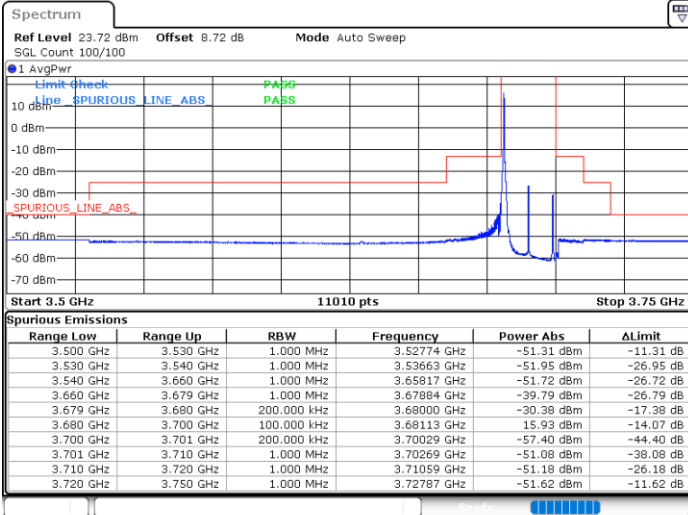


LTE Band 48 / 20MHz

256QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

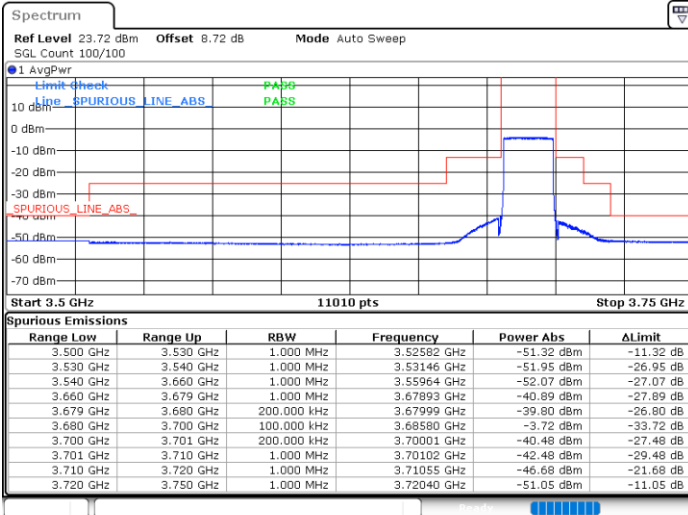


Date: 21.FEB.2025 04:29:20

Date: 21.FEB.2025 04:31:19

Highest Channel / FullIRB

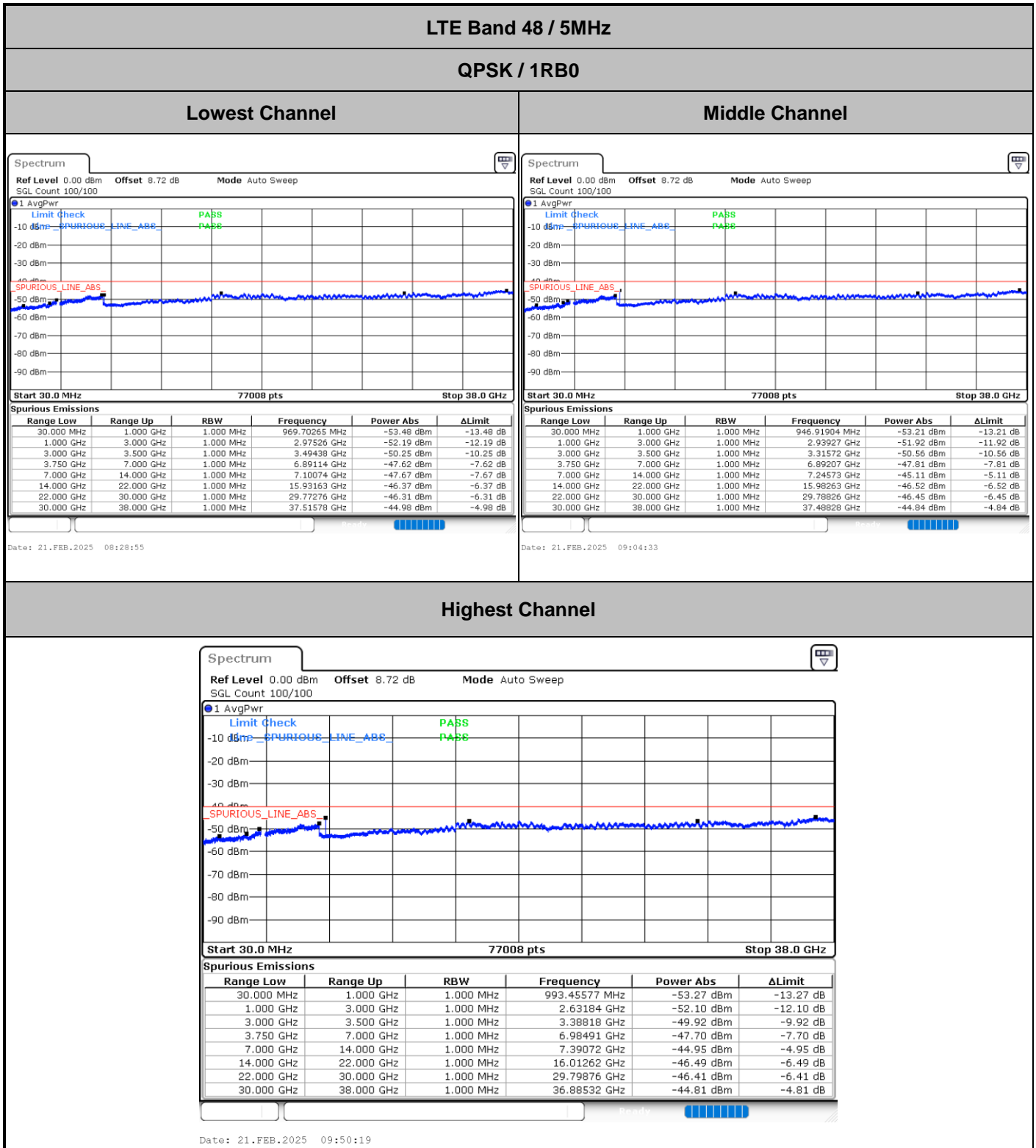
N/A



Date: 21.FEB.2025 05:16:49



Conducted Spurious Emission



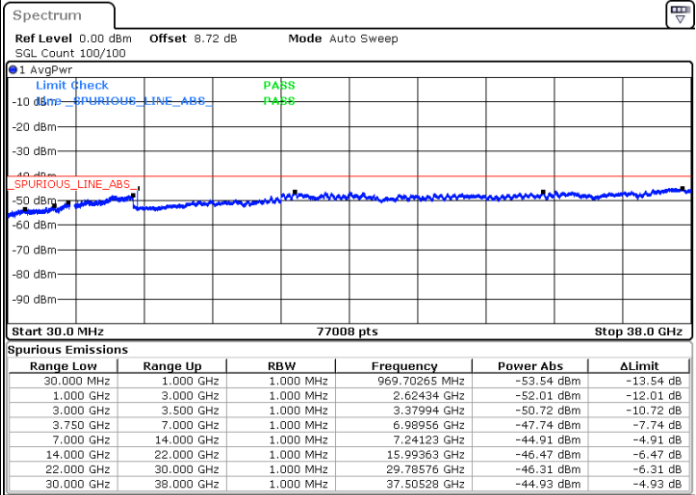
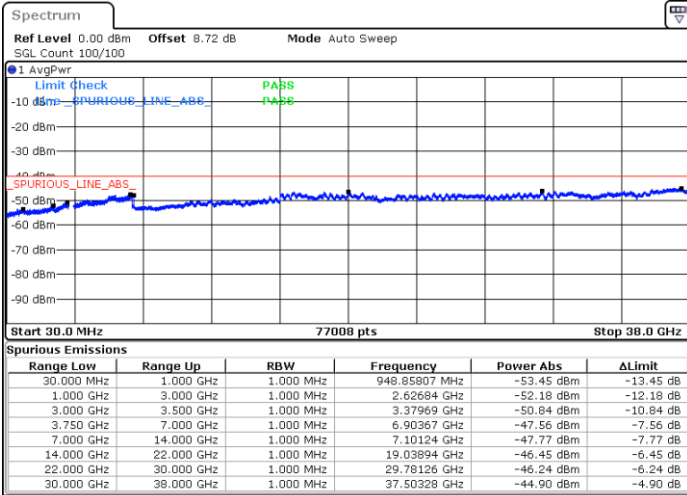


LTE Band 48 / 10MHz

QPSK / 1RB0

Lowest Channel

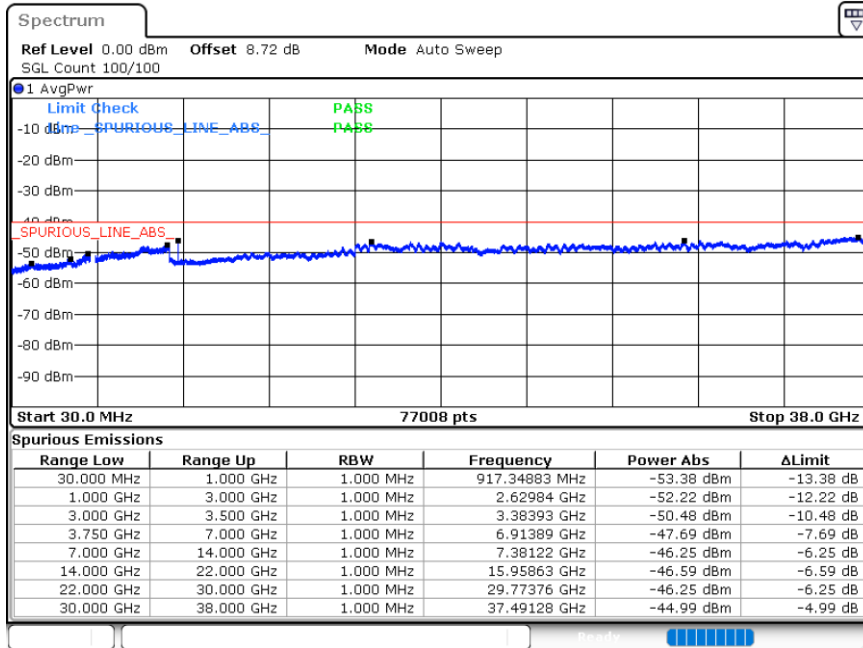
Middle Channel



Date: 21.FEB.2025 09:58:12

Date: 21.FEB.2025 10:00:14

Highest Channel



Date: 21.FEB.2025 10:01:58

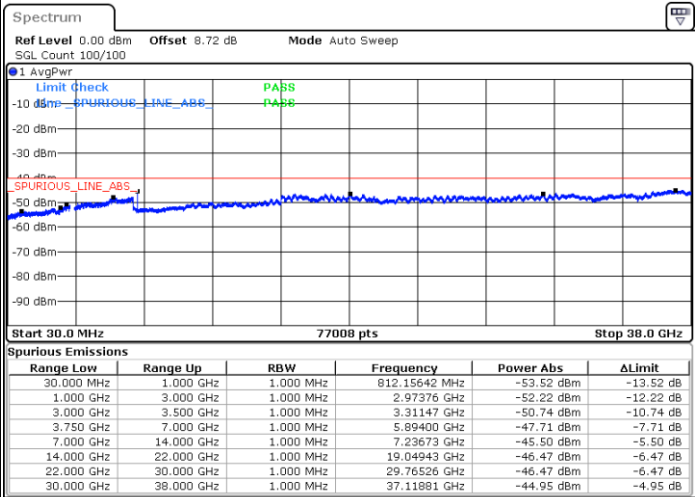
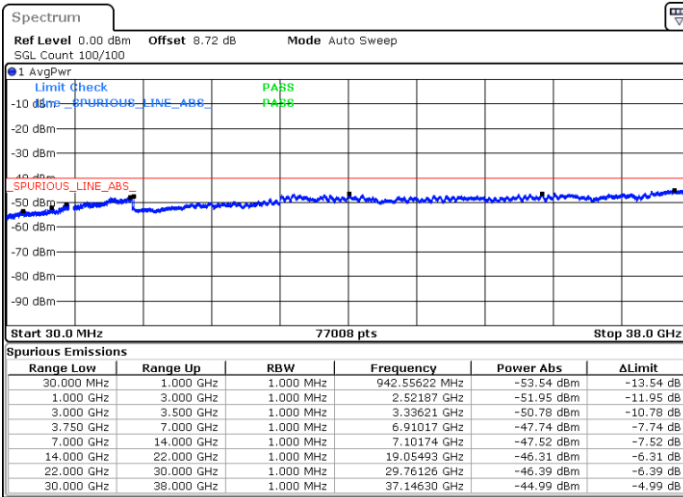


LTE Band 48 / 15MHz

QPSK / 1RB0

Lowest Channel

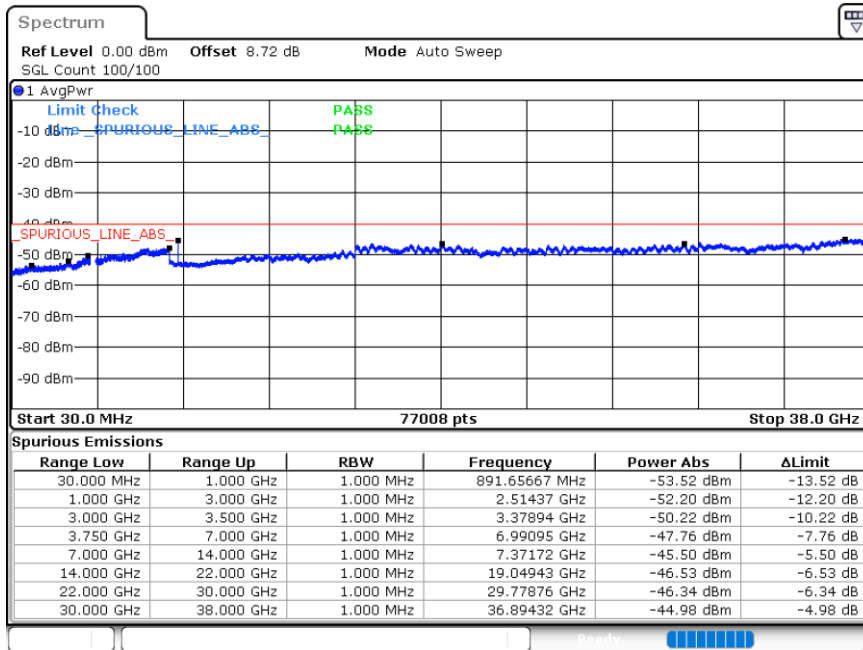
Middle Channel



Date: 21.FEB.2025 10:04:26

Date: 21.FEB.2025 10:06:09

Highest Channel



Date: 21.FEB.2025 10:08:00

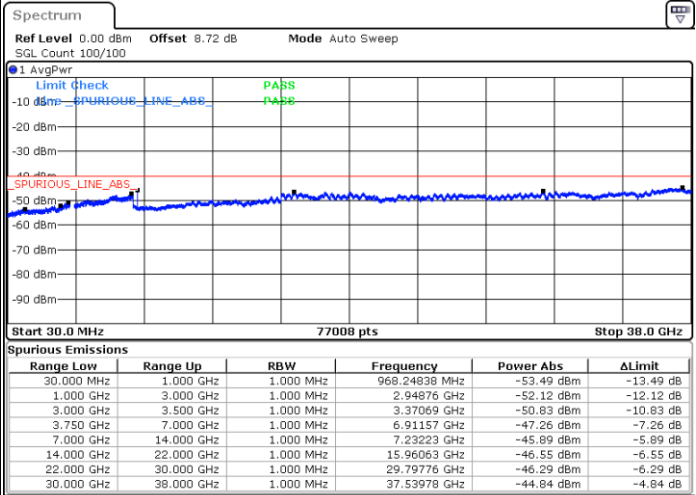
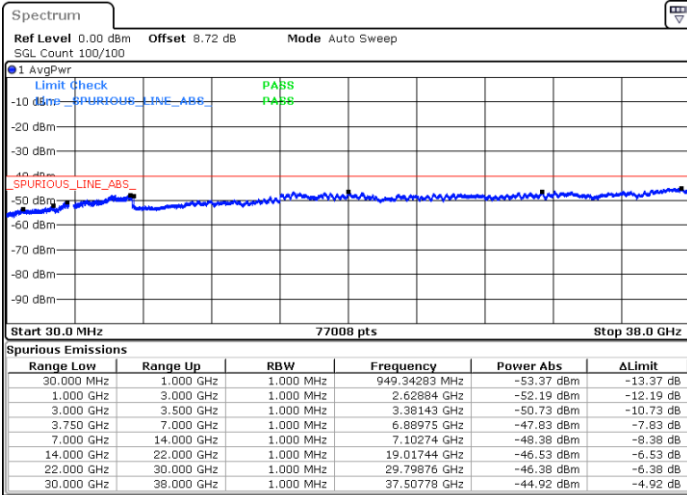


LTE Band 48 / 20MHz

QPSK / 1RB0

Lowest Channel

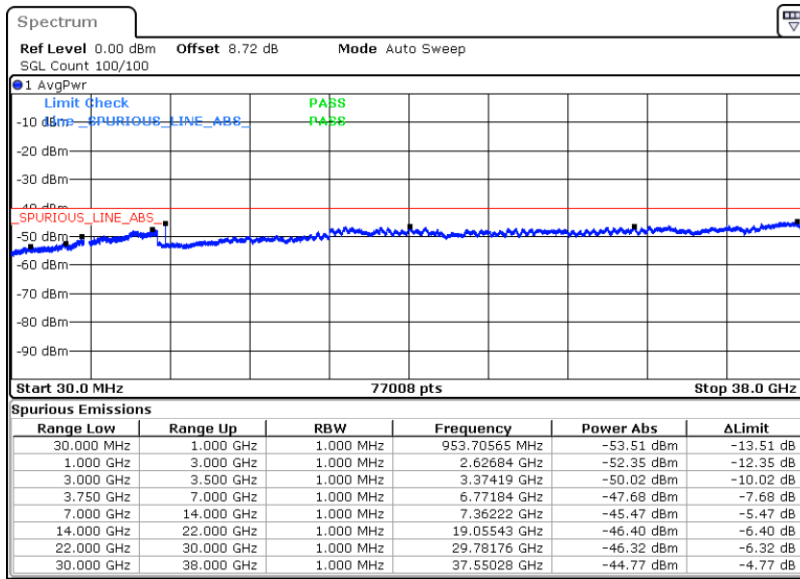
Middle Channel



Date: 21.FEB.2025 10:10:32

Date: 21.FEB.2025 10:12:17

Highest Channel



Date: 21.FEB.2025 10:14:05

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	0.0035	PASS
40	Normal Voltage	0.0041	
30	Normal Voltage	0.0085	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0051	
0	Normal Voltage	0.0034	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0035	
20	Maximum Voltage	0.0022	
20	Normal Voltage	0.0016	
20	Battery End Point	0.0013	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.65V. ; Maximum Voltage =4.45 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 :	Shunping You	Temperature :	22~25°C
		Relative Humidity :	48~52%

LTE Band 48 / 20MHz / QPSK / Ant.3									
Channel	Frequency (MHz)	EIRP (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	7102.00	-47.72	-40	-7.72	-54.89	-51.05	8.25	11.58	H
	10653.00	-51.96	-40	-11.96	-64.39	-53.51	10.45	12.00	H
	14204.00	-47.37	-40	-7.37	-62.01	-49.08	11.74	13.45	H
	7102.00	-50.38	-40	-10.38	-58.71	-53.71	8.25	11.58	V
	10653.00	-51.48	-40	-11.48	-66.37	-53.03	10.45	12.00	V
	14204.00	-52.02	-40	-12.02	-66.05	-53.73	11.74	13.45	V
Middle	7102.00	-46.17	-40	-6.17	-53.34	-49.47	8.30	11.60	H
	10653.00	-50.04	-40	-10.04	-62.47	-51.56	10.48	12.00	H
	14204.00	-40.78	-40	-0.78	-55.42	-42.48	11.80	13.50	H
	7102.00	-46.98	-40	-6.98	-55.31	-50.28	8.30	11.60	V
	10653.00	-47.15	-40	-7.15	-62.04	-48.67	10.48	12.00	V
	14204.00	-51.62	-40	-11.62	-65.65	-53.32	11.80	13.50	V
Highest	7362.00	-48.22	-40	-8.22	-56.06	-51.52	8.32	11.62	H
	11043.00	-50.43	-40	-10.43	-64.75	-52.11	10.52	12.20	H
	14724.00	-53.98	-40	-13.98	-69.78	-55.68	11.85	13.55	H
	7362.00	-48.12	-40	-8.12	-56.32	-51.42	8.32	11.62	V
	11043.00	-50.90	-40	-10.90	-66.57	-52.58	10.52	12.20	V
	14724.00	-54.38	-40	-14.38	-70.27	-56.08	11.85	13.55	V

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



EN-DC_48A_n5A / LTE 20MHz + NR 20MHz / QPSK (ANT7+1)- other PA									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE Band 48 Lowest	7232.00	-56.36	-40	-16.36	-64.00	-59.69	8.25	11.58	H
	10848.00	-52.71	-40	-12.71	-66.17	-54.26	10.45	12.00	H
	14464.00	-54.34	-40	-14.34	-69.53	-56.05	11.74	13.45	H
	7232.00	-50.49	-40	-10.49	-59.86	-53.82	8.25	11.58	V
	10848.00	-47.74	-40	-7.74	-62.82	-49.29	10.45	12.00	V
	14464.00	-52.80	-40	-12.80	-67.58	-54.51	11.74	13.45	V
NR n5 Lowest	1650	-68.61	-13	-55.61	-60.82	-71.84	3.98	9.36	H
	2475	-52.61	-13	-39.61	-51.46	-56.16	4.85	10.55	H
	3300	-64.10	-13	-51.10	-64.63	-69.03	5.50	12.58	H
	1650	-68.70	-13	-55.70	-61.55	-71.93	3.98	9.36	V
	2475	-58.76	-13	-45.76	-57.93	-62.31	4.85	10.55	V
	3300	-63.29	-13	-50.29	-64.71	-68.22	5.50	12.58	V
LTE Band 48 Middle	7232.00	-56.87	-40	-16.87	-64.51	-60.17	8.30	11.60	H
	10848.00	-53.62	-40	-13.62	-67.08	-55.14	10.48	12.00	H
	14464.00	-54.42	-40	-14.42	-69.61	-56.12	11.80	13.50	H
	7232.00	-50.43	-40	-10.43	-59.8	-53.73	8.30	11.60	V
	10848.00	-45.01	-40	-5.01	-60.09	-46.53	10.48	12.00	V
	14464.00	-53.70	-40	-13.70	-68.48	-55.40	11.80	13.50	V
NR n5 Middle	1654.5	-68.87	-13	-55.87	-61.08	-72.12	4.00	9.40	H
	2481.75	-56.30	-13	-43.30	-55.14	-59.87	4.88	10.60	H
	3309	-64.24	-13	-51.24	-64.86	-69.17	5.52	12.60	H
	1654.5	-69.38	-13	-56.38	-62.23	-72.63	4.00	9.40	V
	2481.75	-61.69	-13	-48.69	-60.85	-65.26	4.88	10.60	V
	3309	-63.33	-13	-50.33	-64.65	-68.26	5.52	12.60	V
LTE Band 48 Highest	7232.00	-56.36	-40	-16.36	-64.00	-59.66	8.32	11.62	H
	10848.00	-54.41	-40	-14.41	-67.87	-56.09	10.52	12.20	H
	14464.00	-54.10	-40	-14.10	-69.29	-55.80	11.85	13.55	H
	7232.00	-50.02	-40	-10.02	-59.39	-53.32	8.32	11.62	V
	10848.00	-46.42	-40	-6.42	-61.5	-48.10	10.52	12.20	V
	14464.00	-53.77	-40	-13.77	-68.55	-55.47	11.85	13.55	V
NR n5 Highest	1660	-69.25	-13	-56.25	-61.53	-72.42	4.10	9.42	H
	2490	-54.19	-13	-41.19	-53.16	-57.77	4.90	10.63	H
	3320	-64.23	-13	-51.23	-64.85	-69.15	5.55	12.62	H
	1660	-69.60	-13	-56.60	-62.55	-72.77	4.10	9.42	V
	2490	-60.44	-13	-47.44	-59.67	-64.02	4.90	10.63	V
	3320	-63.78	-13	-50.78	-65.10	-68.70	5.55	12.62	V

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