

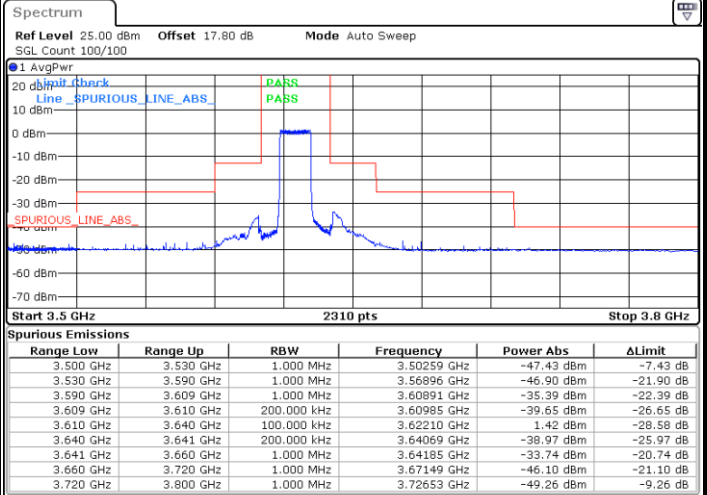
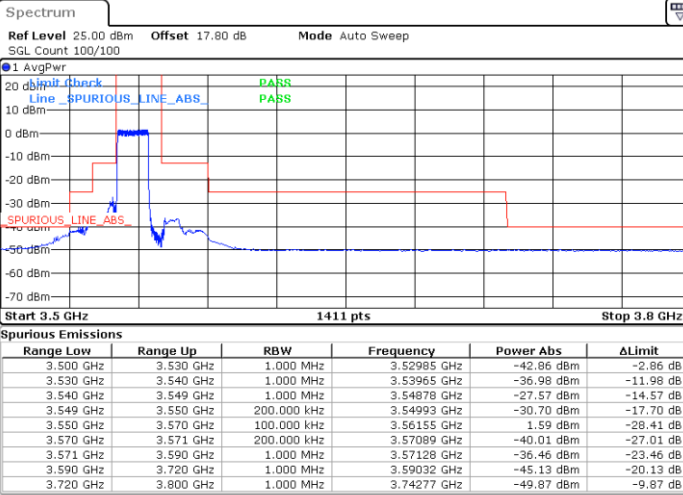


LTE Band 48 / 15MHz

QPSK

Lowest Channel / FullIRB

Middle Channel / FullIRB

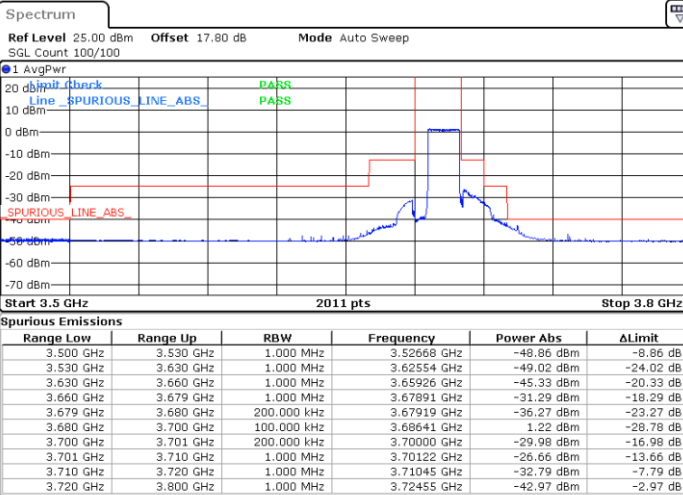


Date: 26.APR.2024 12:48:18

Date: 26.APR.2024 12:52:35

Highest Channel / FullIRB

N/A



Date: 26.APR.2024 12:53:26

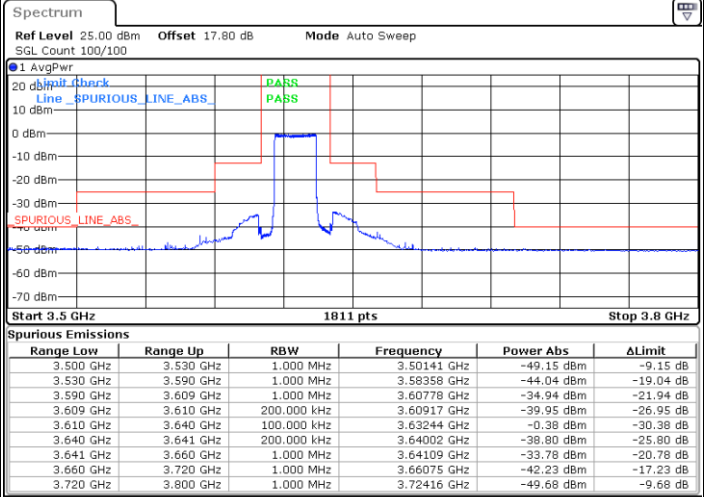
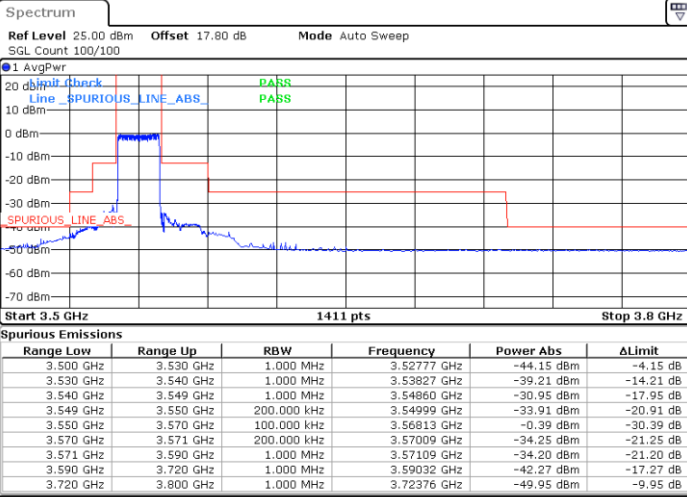


LTE Band 48 / 20MHz

QPSK

Lowest Channel / FullIRB

Middle Channel / FullIRB

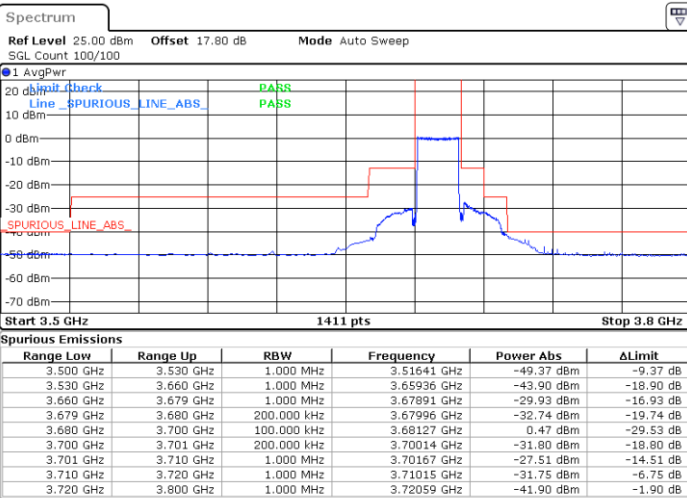


Date: 26.APR.2024 12:57:47

Date: 26.APR.2024 12:58:38

Highest Channel / FullIRB

N/A



Date: 26.APR.2024 15:16:19

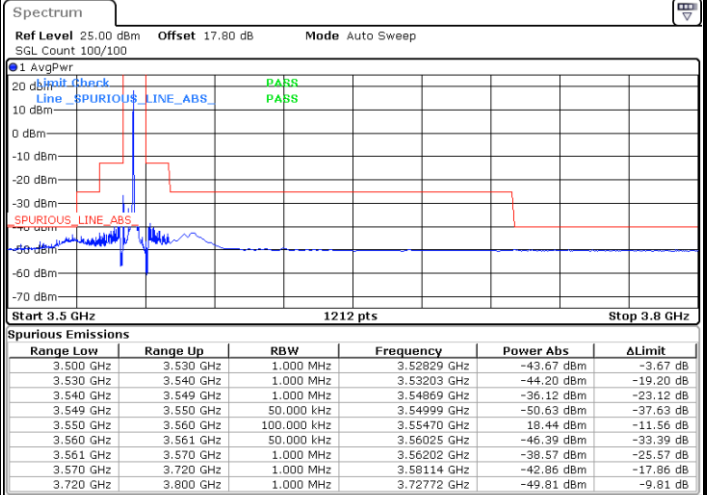
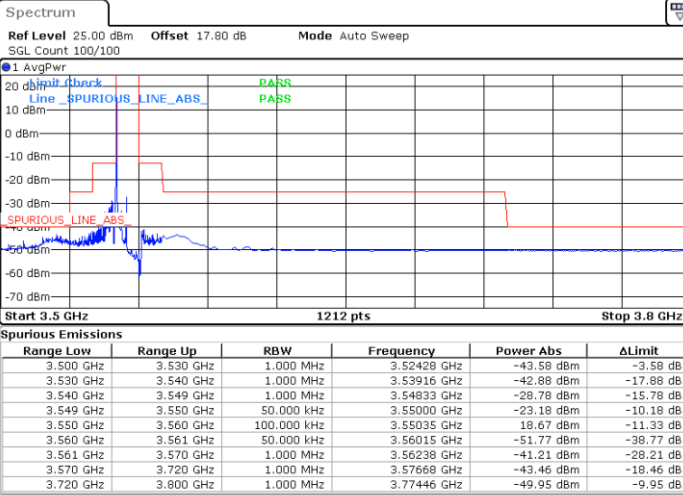


LTE Band 48 / 5MHz

16QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

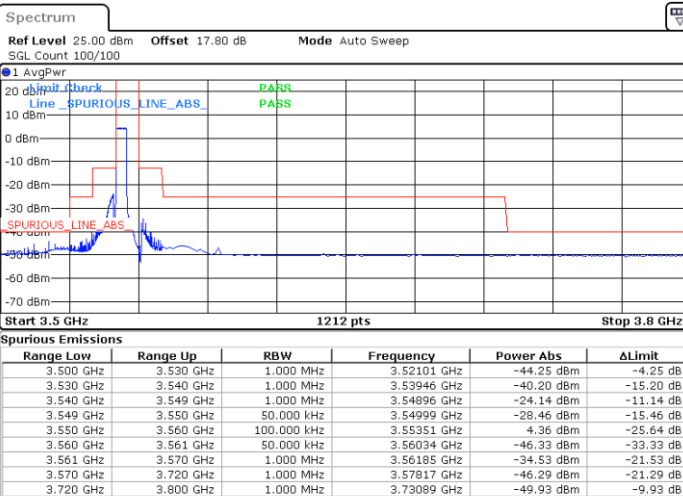


Date: 26.APR.2024 12:18:16

Date: 26.APR.2024 12:33:43

Lowest Channel / FullIRB

N/A



Date: 26.APR.2024 12:25:59

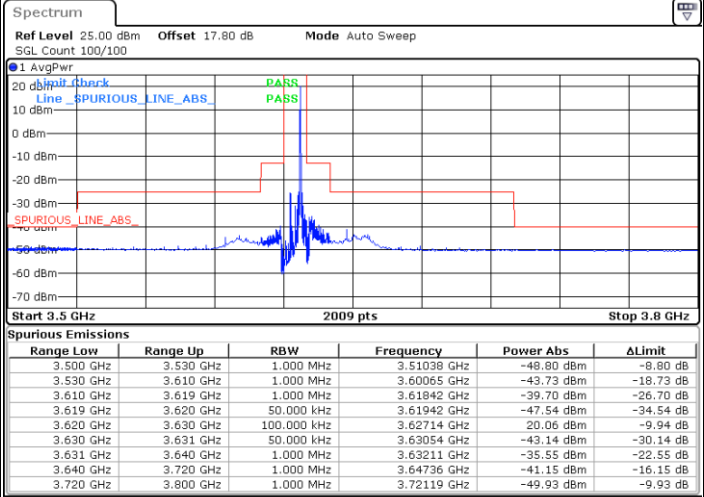
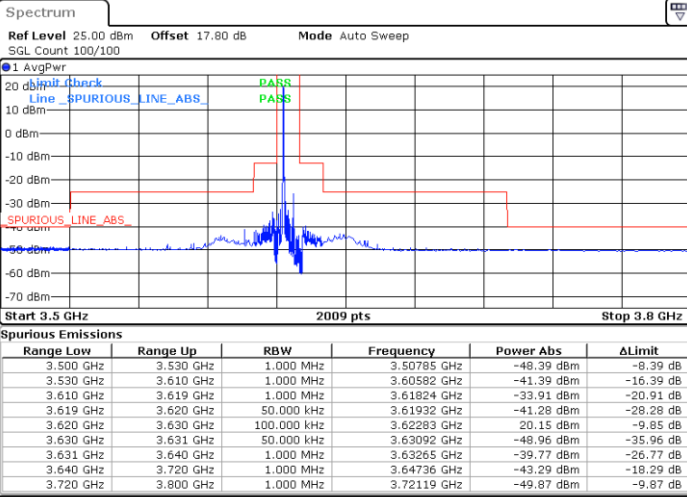


LTE Band 48 / 5MHz

16QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax

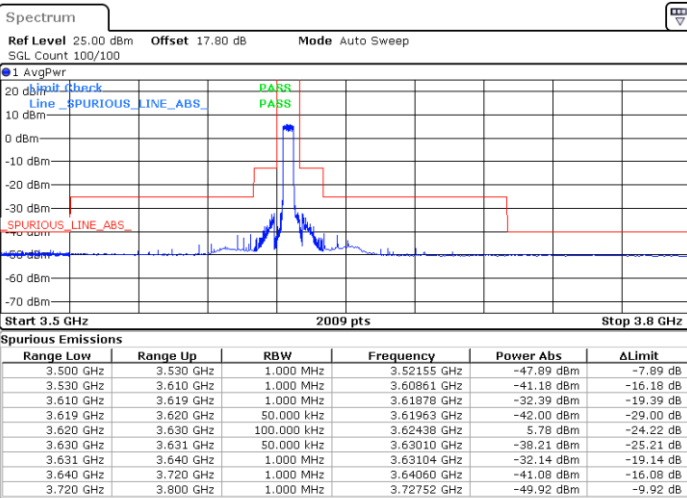


Date: 26.APR.2024 12:20:50

Date: 26.APR.2024 12:36:17

Middle Channel / FullIRB

N/A



Date: 26.APR.2024 12:28:33

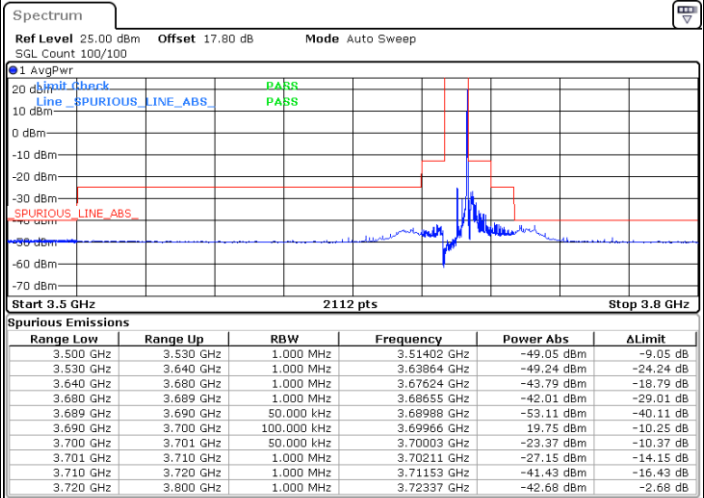
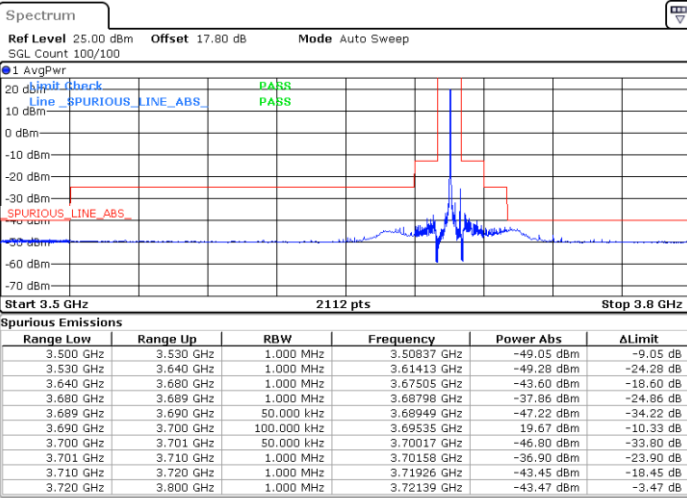


LTE Band 48 / 5MHz

16QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

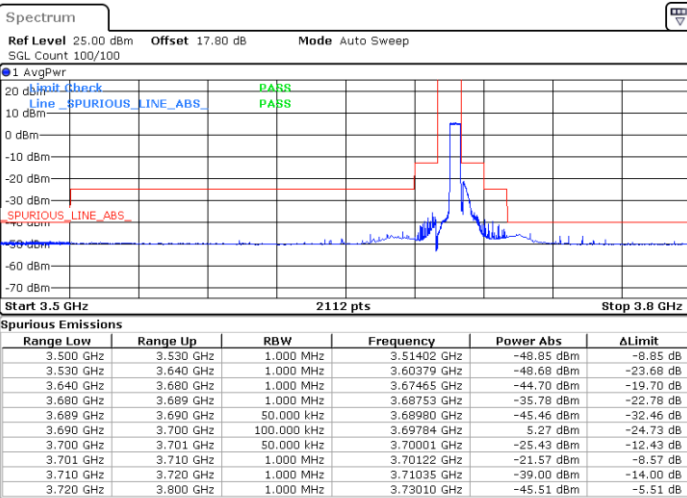


Date: 26.APR.2024 12:23:24

Date: 26.APR.2024 12:38:51

Highest Channel / FullRB

N/A



Date: 26.APR.2024 12:31:08

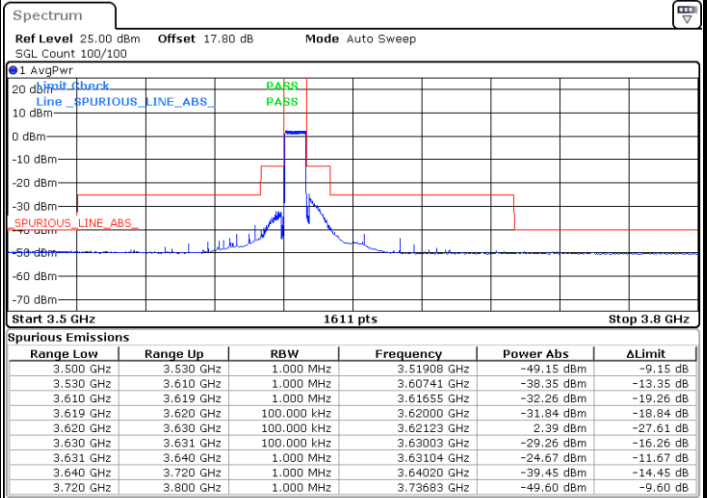
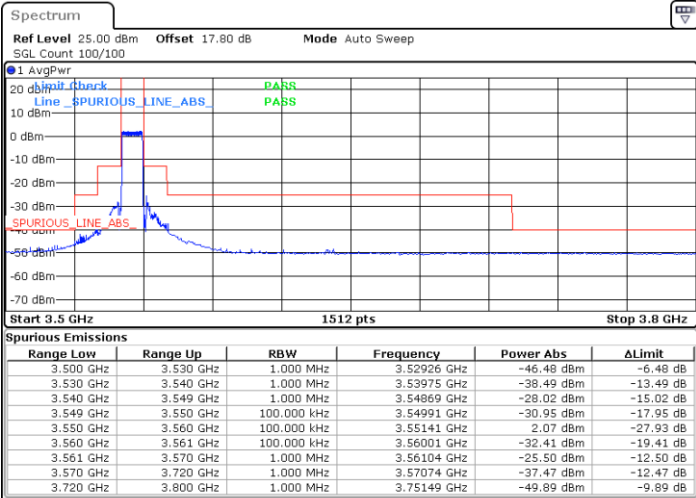


LTE Band 48 / 10MHz

16QAM

Lowest Channel / FullIRB

Middle Channel / FullIRB

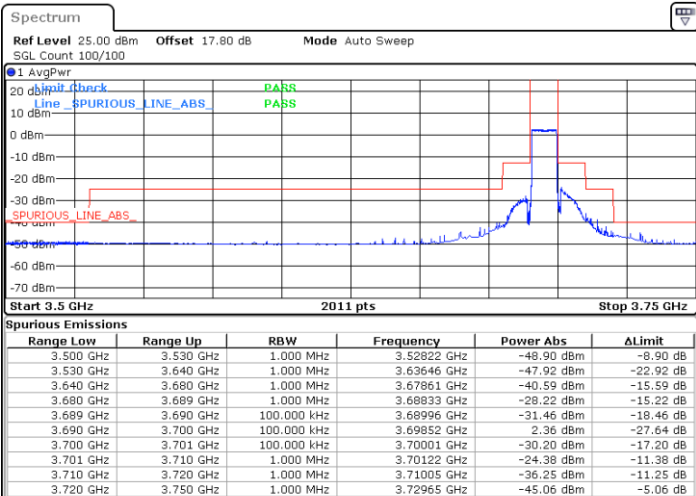


Date: 26.APR.2024 12:41:26

Date: 26.APR.2024 12:44:00

Highest Channel / FullIRB

N/A



Date: 26.APR.2024 12:46:34

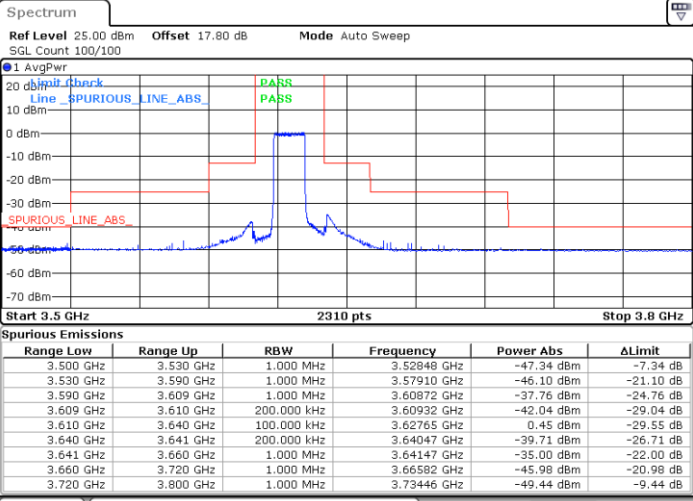
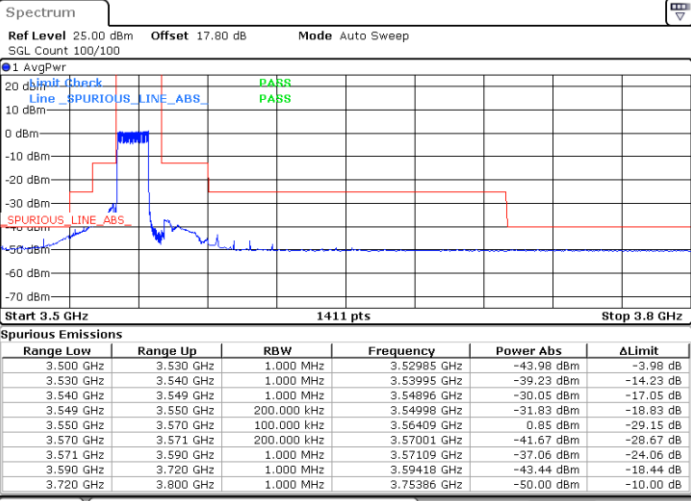


LTE Band 48 / 15MHz

16QAM

Lowest Channel / FullIRB

Middle Channel / FullIRB

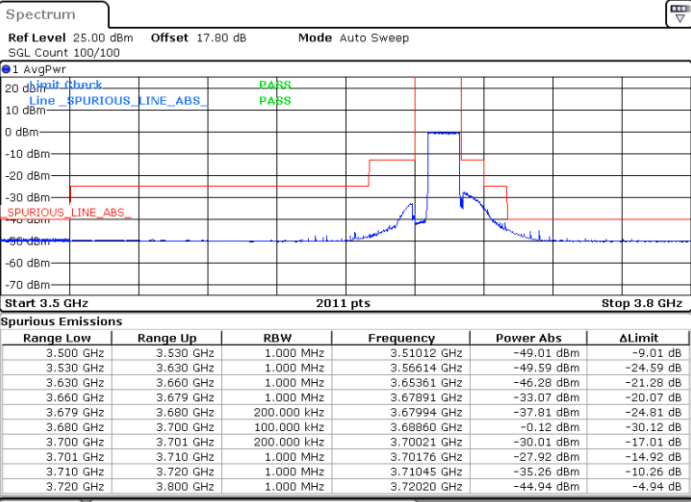


Date: 26.APR.2024 12:49:10

Date: 26.APR.2024 12:51:44

Highest Channel / FullIRB

N/A



Date: 26.APR.2024 12:54:18

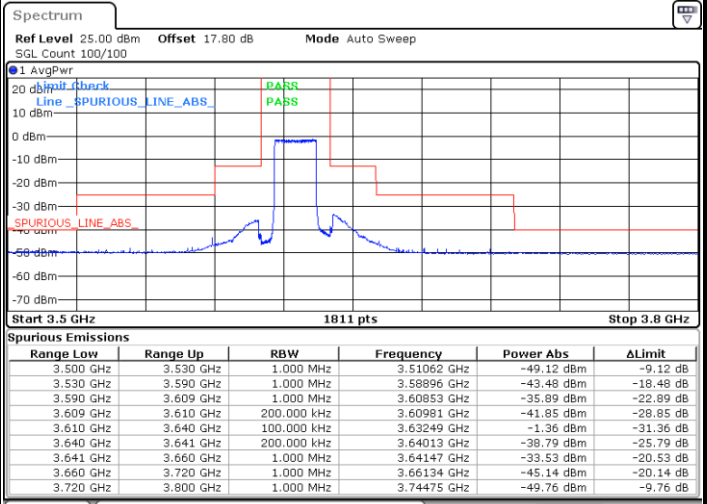
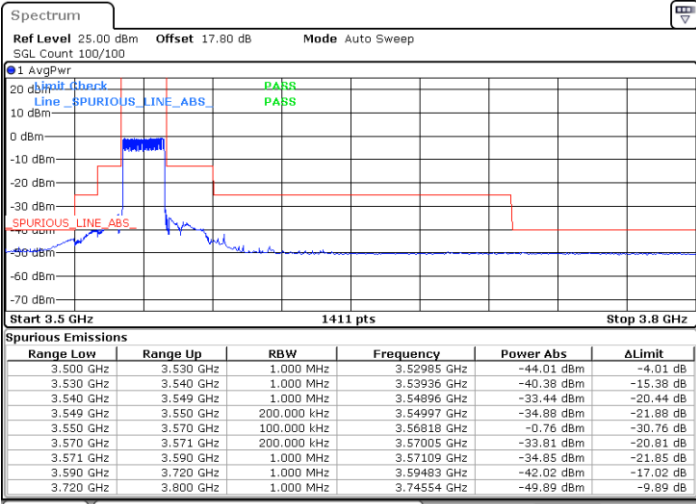


LTE Band 48 / 20MHz

16QAM

Lowest Channel / FullIRB

Middle Channel / FullIRB

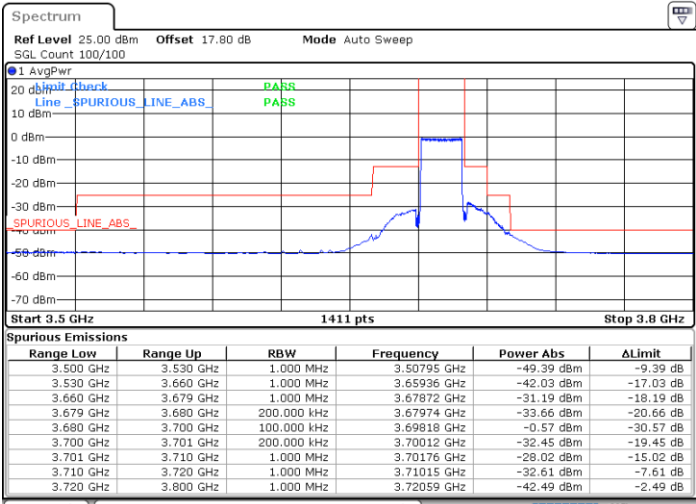


Date: 26.APR.2024 12:56:55

Date: 26.APR.2024 12:59:29

Highest Channel / FullIRB

N/A



Date: 26.APR.2024 15:14:26

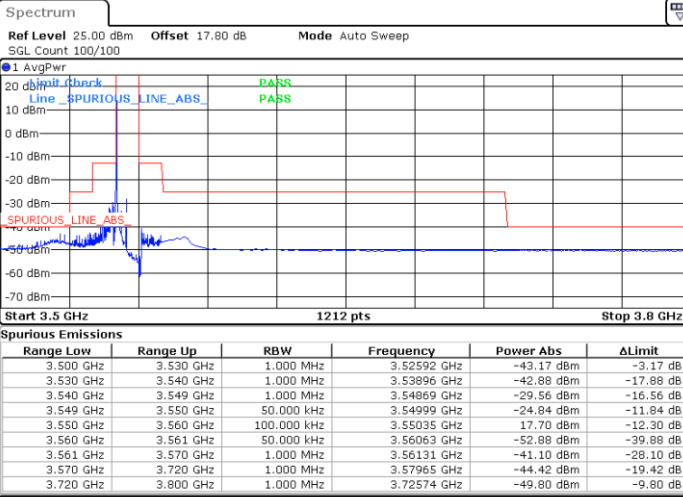


LTE Band 48 / 5MHz

64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

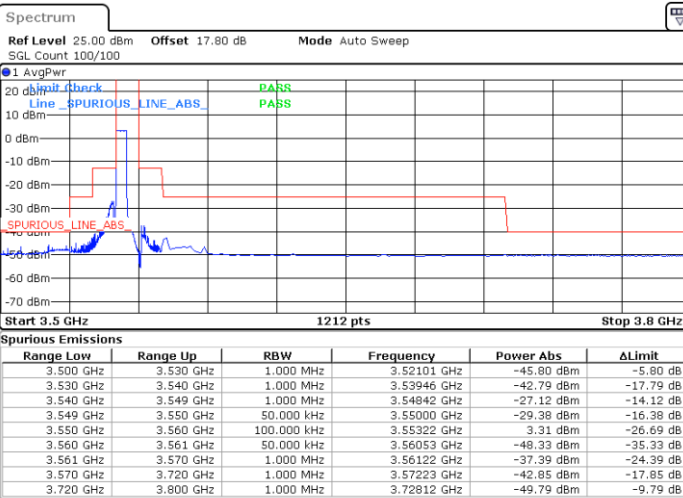


Date: 26.APR.2024 12:19:08

Date: 26.APR.2024 12:34:35

Lowest Channel / FullIRB

N/A



Date: 26.APR.2024 12:26:51

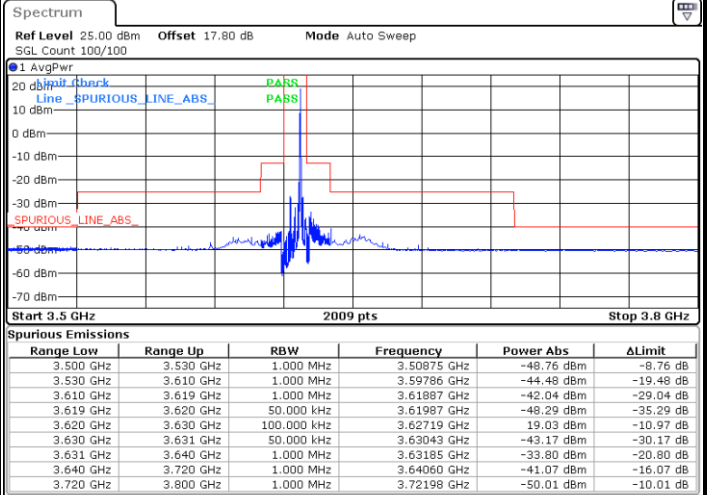
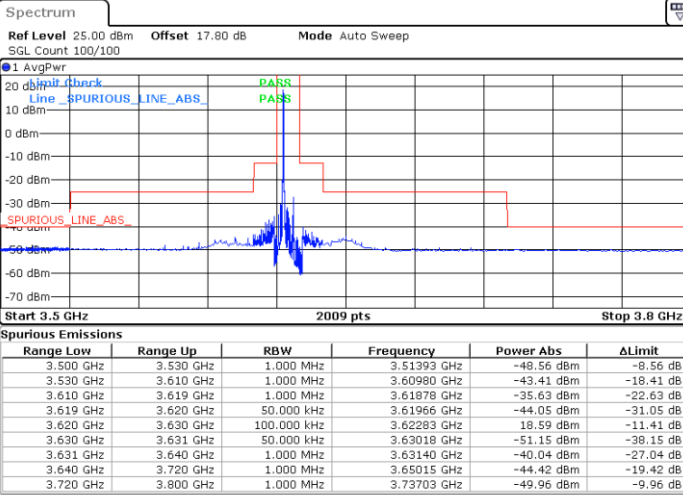


LTE Band 48 / 5MHz

64QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax

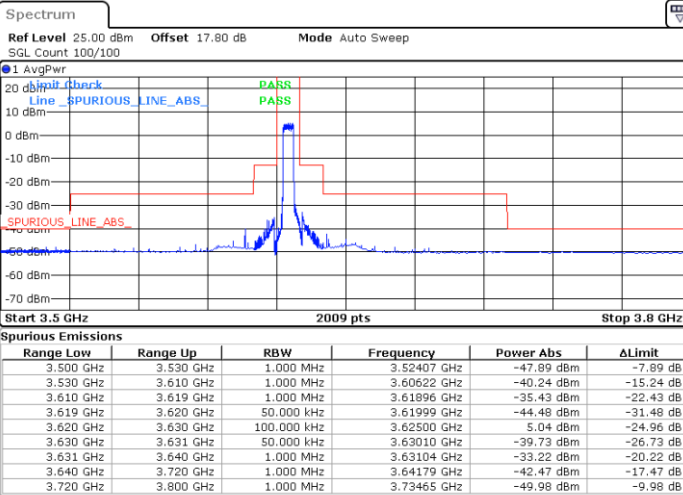


Date: 26.APR.2024 12:19:59

Date: 26.APR.2024 12:35:26

Middle Channel / FullRB

N/A



Date: 26.APR.2024 12:27:42

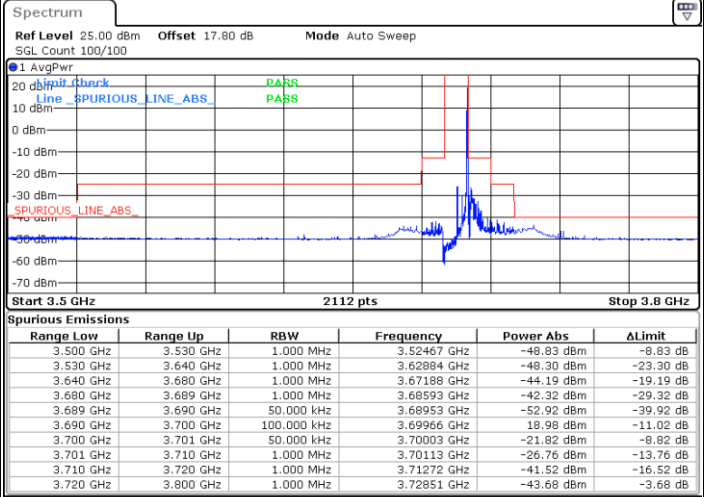
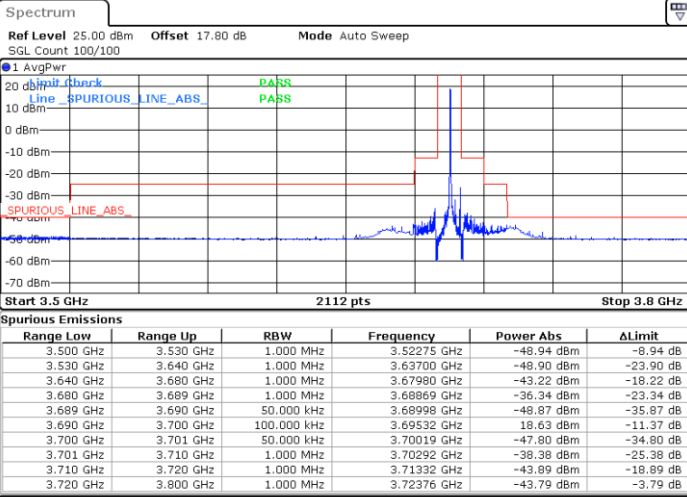


LTE Band 48 / 5MHz

64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

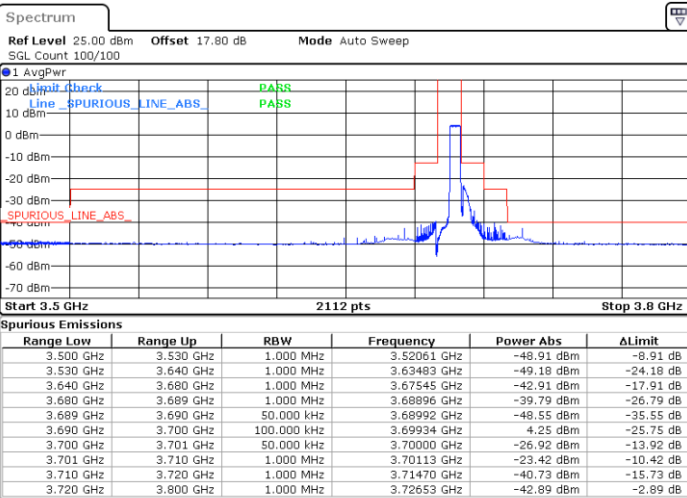


Date: 26.APR.2024 12:24:16

Date: 26.APR.2024 12:39:42

Highest Channel / FullIRB

N/A



Date: 26.APR.2024 12:31:59

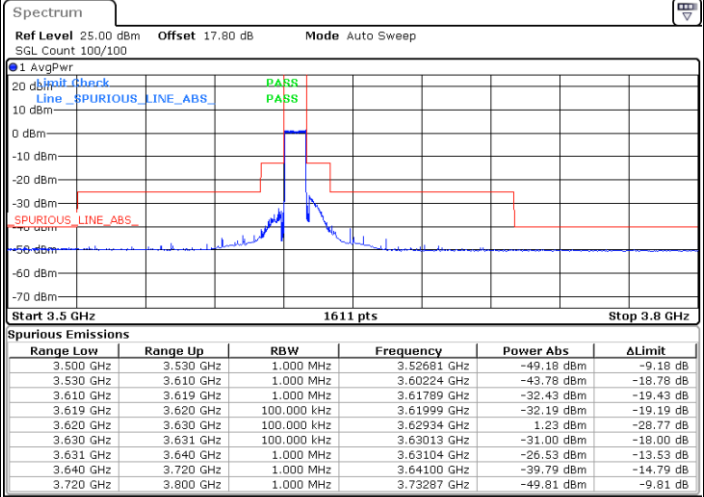
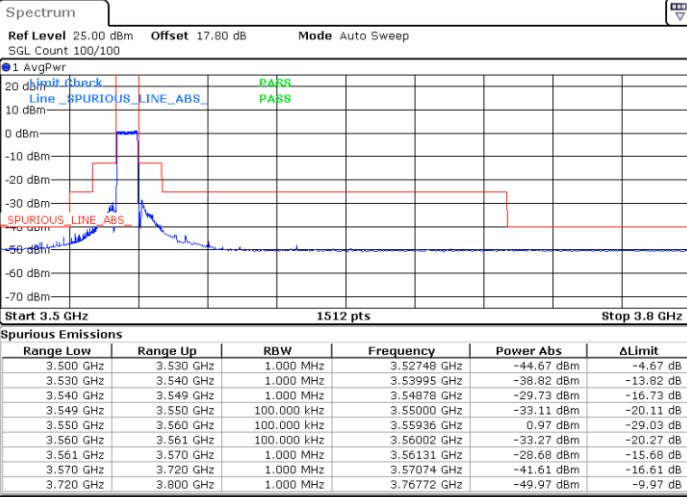


LTE Band 48 / 10MHz

64QAM

Lowest Channel / FullIRB

Middle Channel / FullIRB

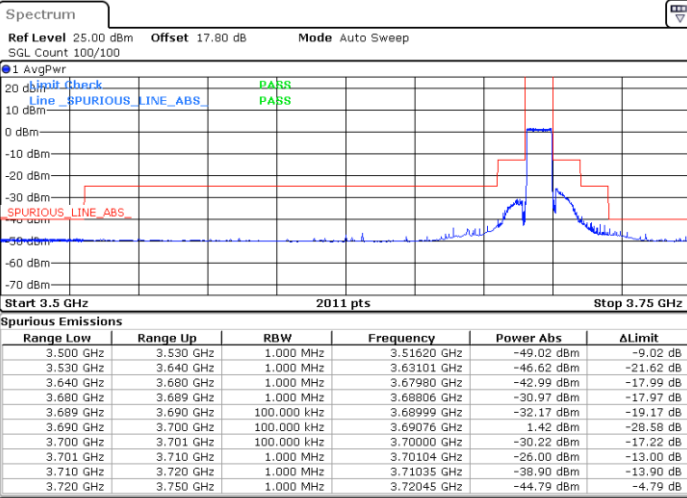


Date: 26.APR.2024 12:40:35

Date: 26.APR.2024 12:44:51

Highest Channel / FullIRB

N/A



Date: 26.APR.2024 12:45:43

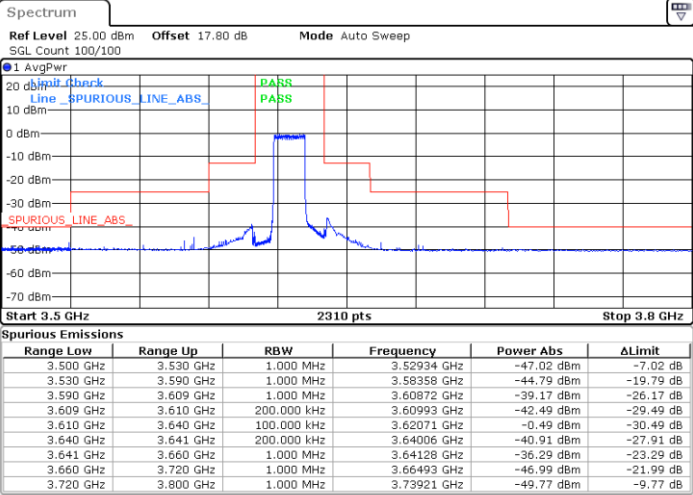
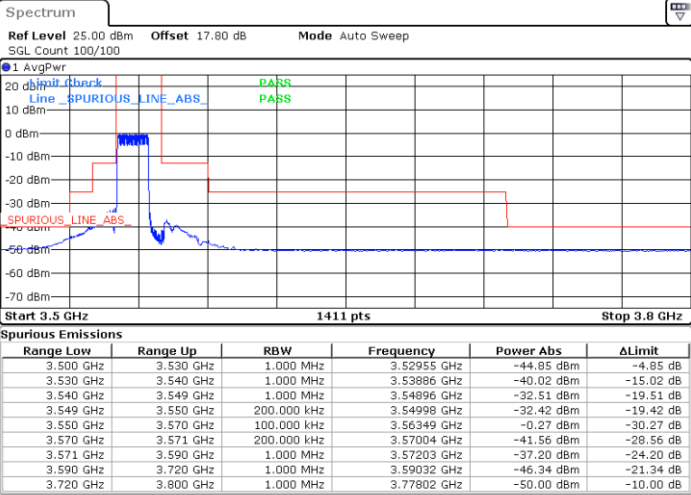


LTE Band 48 / 15MHz

64QAM

Lowest Channel / FullIRB

Middle Channel / FullIRB

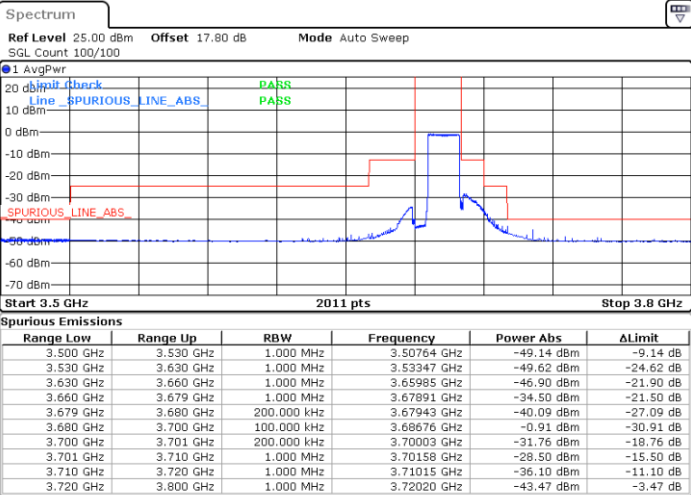


Date: 26.APR.2024 12:50:01

Date: 26.APR.2024 12:50:53

Highest Channel / FullIRB

N/A



Date: 26.APR.2024 12:55:10

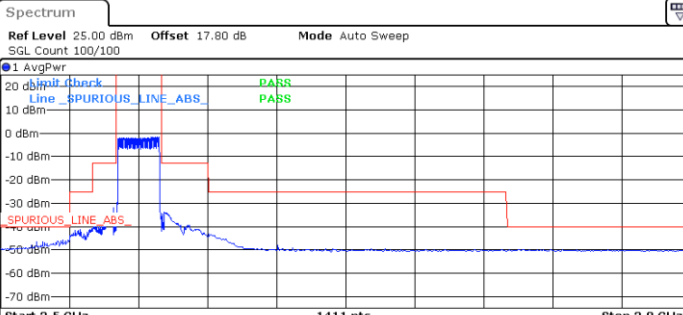


LTE Band 48 / 20MHz

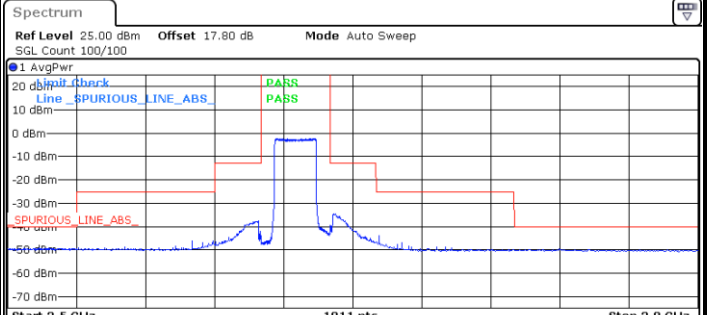
64QAM

Lowest Channel / FullIRB

Middle Channel / FullIRB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52688 GHz	-45.80 dBm	-5.80 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53946 GHz	-41.07 dBm	-16.07 dB
3.540 GHz	3.549 GHz	1.000 MHz	3.54896 GHz	-31.77 dBm	-18.77 dB
3.549 GHz	3.550 GHz	200.000 kHz	3.54999 GHz	-35.50 dBm	-22.50 dB
3.550 GHz	3.570 GHz	100.000 kHz	3.56868 GHz	-1.68 dBm	-31.68 dB
3.570 GHz	3.571 GHz	200.000 kHz	3.57033 GHz	-34.62 dBm	-21.62 dB
3.571 GHz	3.590 GHz	1.000 MHz	3.57109 GHz	-33.80 dBm	-20.80 dB
3.590 GHz	3.720 GHz	1.000 MHz	3.59032 GHz	-43.21 dBm	-18.21 dB
3.720 GHz	3.800 GHz	1.000 MHz	3.72495 GHz	-49.88 dBm	-9.88 dB



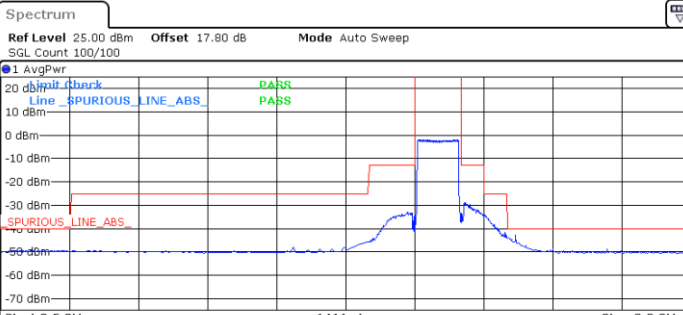
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51374 GHz	-49.27 dBm	-9.27 dB
3.530 GHz	3.590 GHz	1.000 MHz	3.58000 GHz	-46.19 dBm	-21.19 dB
3.590 GHz	3.609 GHz	1.000 MHz	3.60891 GHz	-37.45 dBm	-24.45 dB
3.609 GHz	3.610 GHz	200.000 kHz	3.60962 GHz	-42.15 dBm	-29.15 dB
3.610 GHz	3.640 GHz	100.000 kHz	3.61951 GHz	-2.26 dBm	-32.26 dB
3.640 GHz	3.641 GHz	200.000 kHz	3.64022 GHz	-39.59 dBm	-26.59 dB
3.641 GHz	3.660 GHz	1.000 MHz	3.64166 GHz	-34.52 dBm	-21.52 dB
3.660 GHz	3.720 GHz	1.000 MHz	3.66134 GHz	-44.08 dBm	-19.08 dB
3.720 GHz	3.800 GHz	1.000 MHz	3.73950 GHz	-49.66 dBm	-9.66 dB

Date: 26.APR.2024 12:56:03

Date: 26.APR.2024 13:00:20

Highest Channel / FullIRB

N/A



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51300 GHz	-49.41 dBm	-9.41 dB
3.530 GHz	3.660 GHz	1.000 MHz	3.65936 GHz	-45.86 dBm	-20.86 dB
3.660 GHz	3.679 GHz	1.000 MHz	3.67665 GHz	-33.13 dBm	-20.13 dB
3.679 GHz	3.680 GHz	200.000 kHz	3.67993 GHz	-34.62 dBm	-21.62 dB
3.680 GHz	3.700 GHz	100.000 kHz	3.68182 GHz	-1.04 dBm	-31.04 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70000 GHz	-33.50 dBm	-20.50 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70158 GHz	-28.95 dBm	-15.95 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71045 GHz	-33.99 dBm	-8.99 dB
3.720 GHz	3.800 GHz	1.000 MHz	3.72376 GHz	-42.90 dBm	-2.90 dB

Date: 26.APR.2024 13:01:11

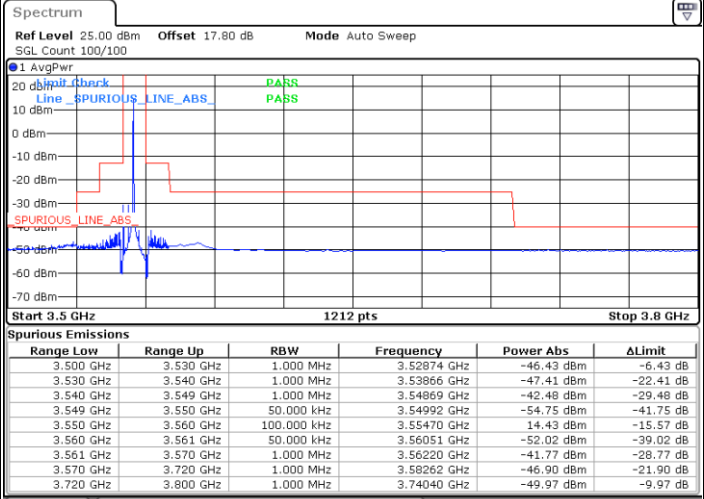
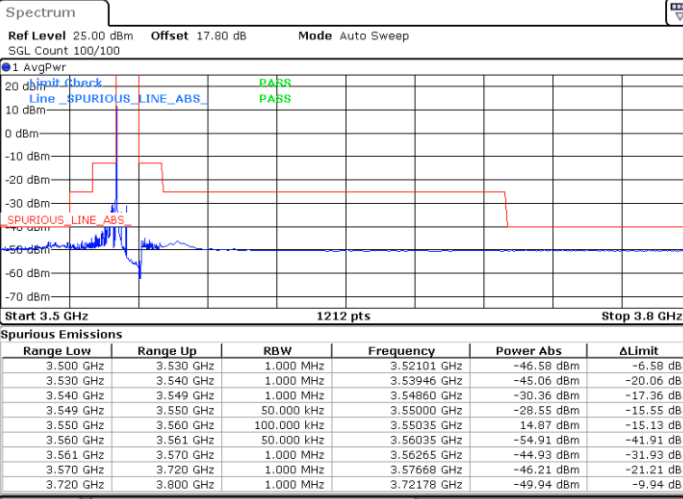


LTE Band 48 / 5MHz

256QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

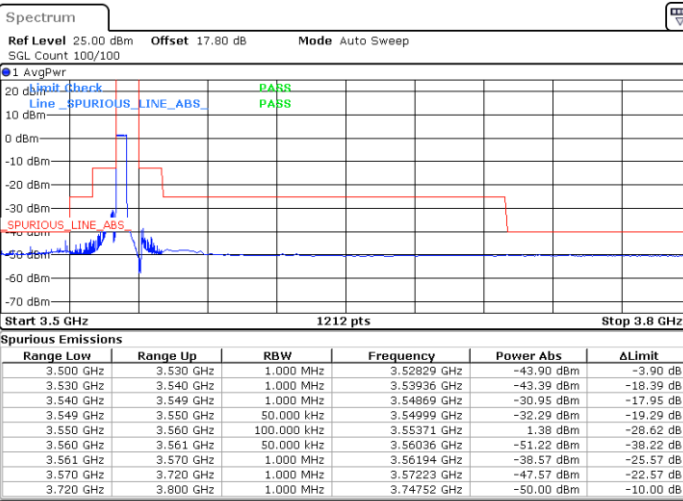


Date: 26.APR.2024 13:18:01

Date: 26.APR.2024 13:26:24

Lowest Channel / FullIRB

N/A



Date: 26.APR.2024 13:22:12

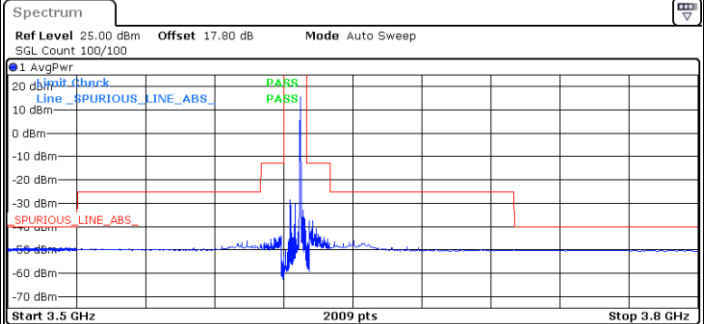
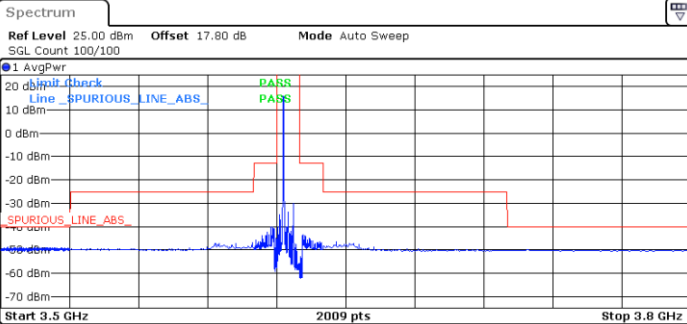


LTE Band 48 / 5MHz

256QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.50293 GHz	-48.90 dBm	-8.90 dB
3.530 GHz	3.610 GHz	1.000 MHz	3.60940 GHz	-46.80 dBm	-21.80 dB
3.610 GHz	3.619 GHz	1.000 MHz	3.61815 GHz	-40.00 dBm	-27.00 dB
3.619 GHz	3.620 GHz	50.000 kHz	3.61956 GHz	-45.11 dBm	-32.11 dB
3.620 GHz	3.630 GHz	100.000 kHz	3.62286 GHz	15.85 dBm	-14.15 dB
3.630 GHz	3.631 GHz	50.000 kHz	3.63033 GHz	-52.94 dBm	-39.94 dB
3.631 GHz	3.640 GHz	1.000 MHz	3.63158 GHz	-43.55 dBm	-30.55 dB
3.640 GHz	3.720 GHz	1.000 MHz	3.64577 GHz	-46.37 dBm	-21.37 dB
3.720 GHz	3.800 GHz	1.000 MHz	3.72911 GHz	-50.07 dBm	-10.07 dB

Spurious Emissions

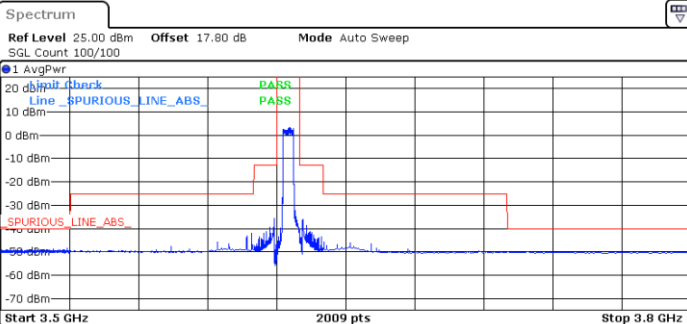
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.50413 GHz	-49.16 dBm	-9.16 dB
3.530 GHz	3.610 GHz	1.000 MHz	3.60423 GHz	-46.22 dBm	-21.22 dB
3.610 GHz	3.619 GHz	1.000 MHz	3.61896 GHz	-44.00 dBm	-31.00 dB
3.619 GHz	3.620 GHz	50.000 kHz	3.61983 GHz	-52.92 dBm	-39.92 dB
3.620 GHz	3.630 GHz	100.000 kHz	3.62717 GHz	15.66 dBm	-14.34 dB
3.630 GHz	3.631 GHz	50.000 kHz	3.63037 GHz	-46.86 dBm	-33.86 dB
3.631 GHz	3.640 GHz	1.000 MHz	3.63247 GHz	-37.70 dBm	-24.70 dB
3.640 GHz	3.720 GHz	1.000 MHz	3.65055 GHz	-46.32 dBm	-21.32 dB
3.720 GHz	3.800 GHz	1.000 MHz	3.75604 GHz	-50.10 dBm	-10.10 dB

Date: 26.APR.2024 13:19:39

Date: 26.APR.2024 13:28:01

Middle Channel / FullRB

N/A



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52891 GHz	-48.54 dBm	-8.54 dB
3.530 GHz	3.610 GHz	1.000 MHz	3.60900 GHz	-42.13 dBm	-17.13 dB
3.610 GHz	3.619 GHz	1.000 MHz	3.61878 GHz	-35.69 dBm	-22.69 dB
3.619 GHz	3.620 GHz	50.000 kHz	3.61955 GHz	-46.87 dBm	-33.87 dB
3.620 GHz	3.630 GHz	100.000 kHz	3.62565 GHz	3.39 dBm	-26.61 dB
3.630 GHz	3.631 GHz	50.000 kHz	3.63006 GHz	-43.56 dBm	-30.56 dB
3.631 GHz	3.640 GHz	1.000 MHz	3.63122 GHz	-36.01 dBm	-23.01 dB
3.640 GHz	3.720 GHz	1.000 MHz	3.64060 GHz	-45.97 dBm	-20.97 dB
3.720 GHz	3.800 GHz	1.000 MHz	3.72040 GHz	-50.04 dBm	-10.04 dB

Date: 26.APR.2024 13:23:51

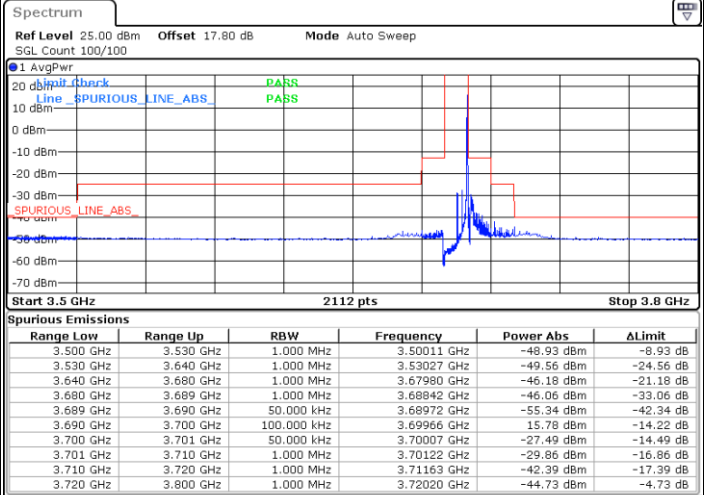
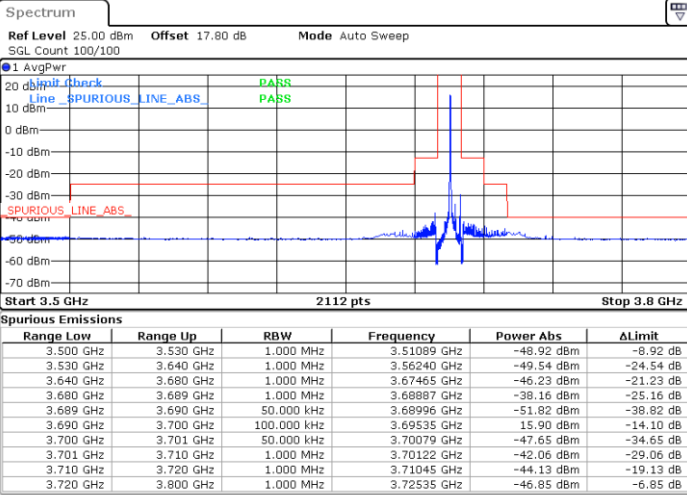


LTE Band 48 / 5MHz

256QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

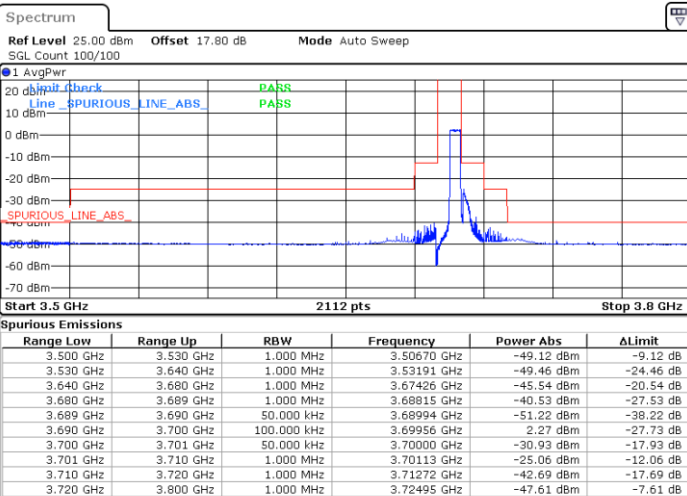


Date: 26.APR.2024 13:21:18

Date: 26.APR.2024 13:29:40

Highest Channel / FullRB

N/A



Date: 26.APR.2024 13:25:29

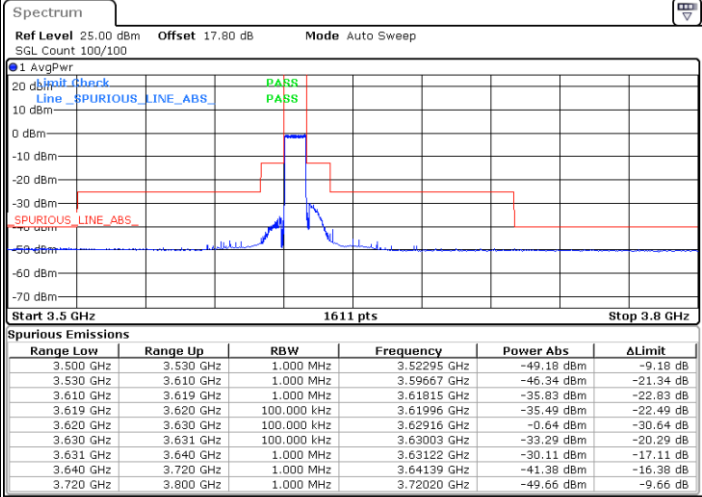
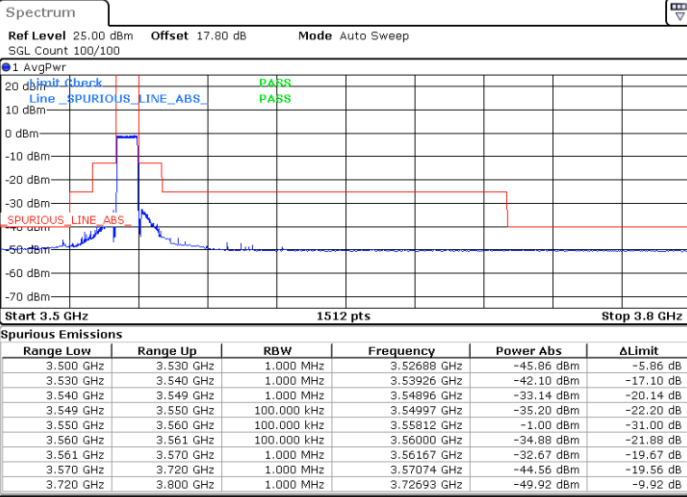


LTE Band 48 / 10MHz

256QAM

Lowest Channel / FullIRB

Middle Channel / FullIRB

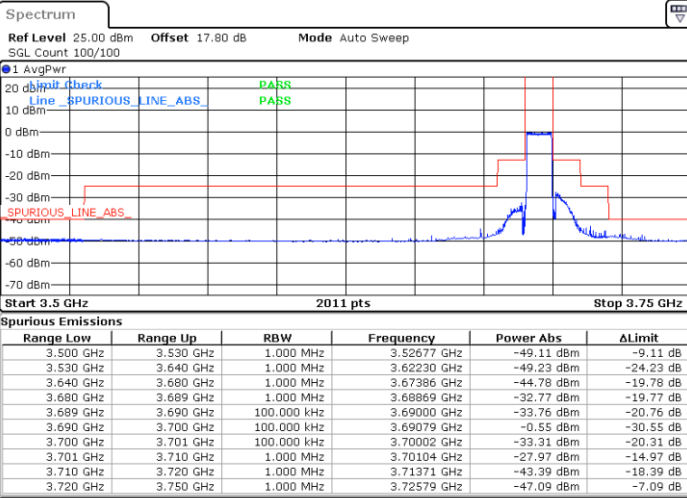


Date: 26.APR.2024 14:39:36

Date: 26.APR.2024 14:41:14

Highest Channel / FullIRB

N/A



Date: 26.APR.2024 14:42:53

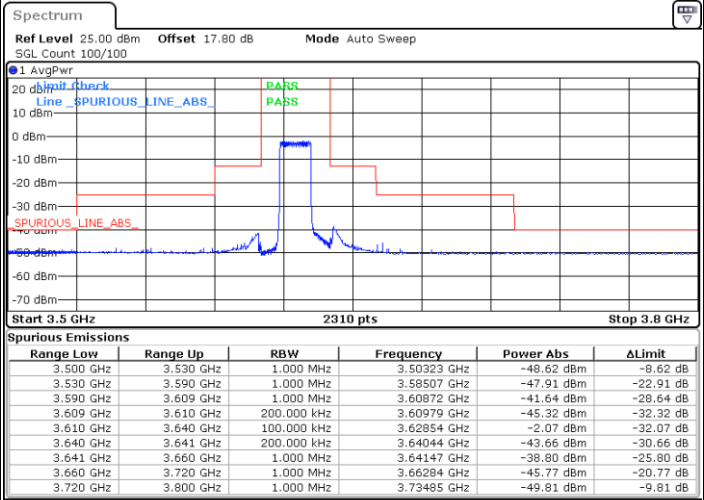
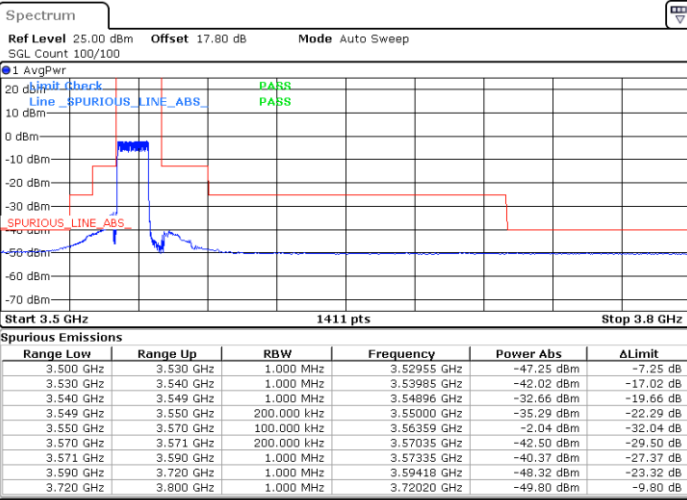


LTE Band 48 / 15MHz

256QAM

Lowest Channel / FullIRB

Middle Channel / FullIRB

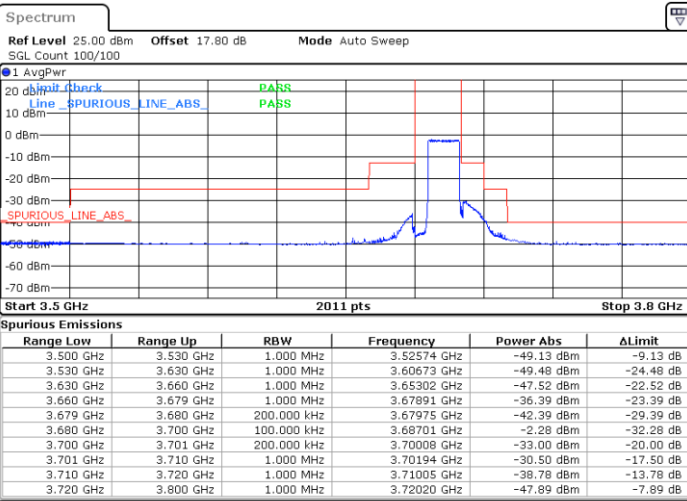


Date: 26.APR.2024 14:54:52

Date: 26.APR.2024 14:56:31

Highest Channel / FullIRB

N/A



Date: 26.APR.2024 14:58:09

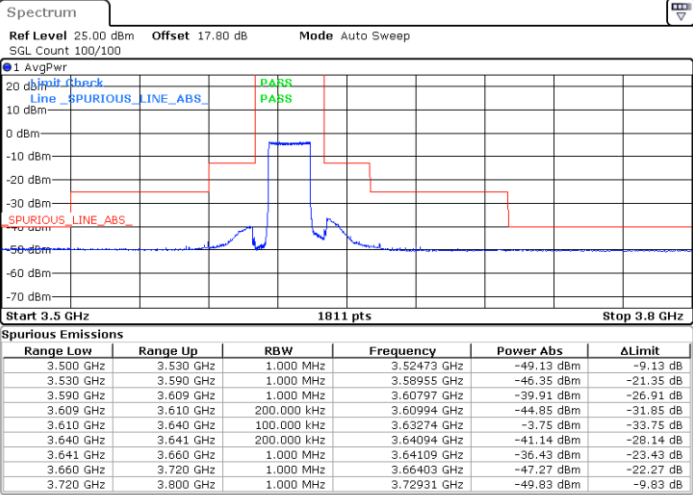
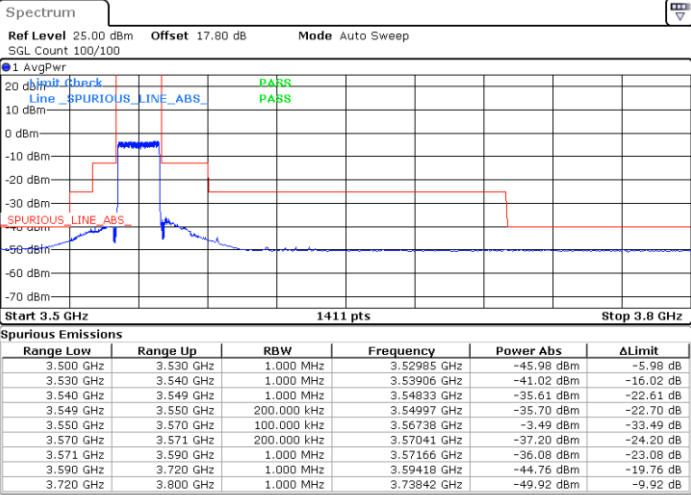


LTE Band 48 / 20MHz

256QAM

Lowest Channel / FullIRB

Middle Channel / FullIRB

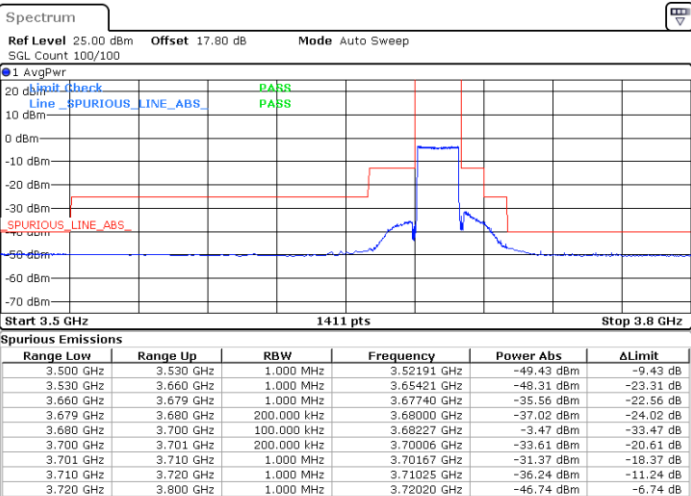


Date: 26.APR.2024 15:00:35

Date: 26.APR.2024 15:02:13

Highest Channel / FullIRB

N/A



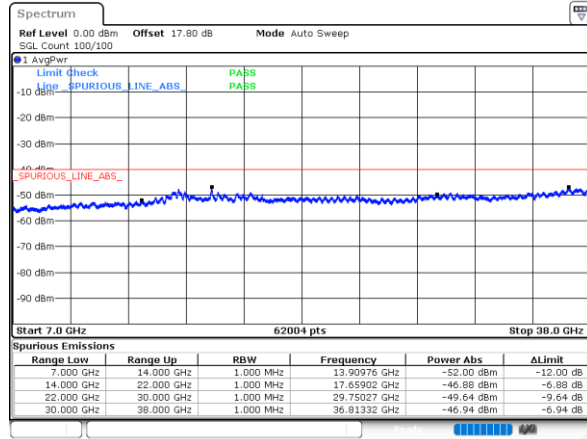
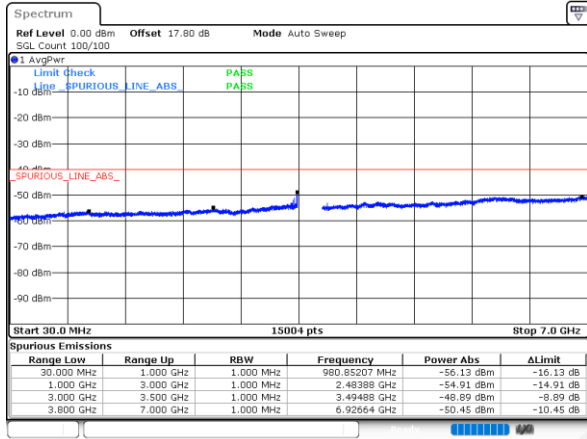
Date: 26.APR.2024 15:03:52



Conducted Spurious Emission

LTE Band 48 / 5MHz

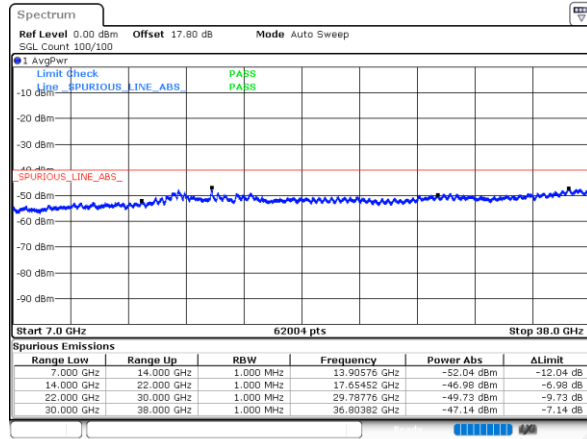
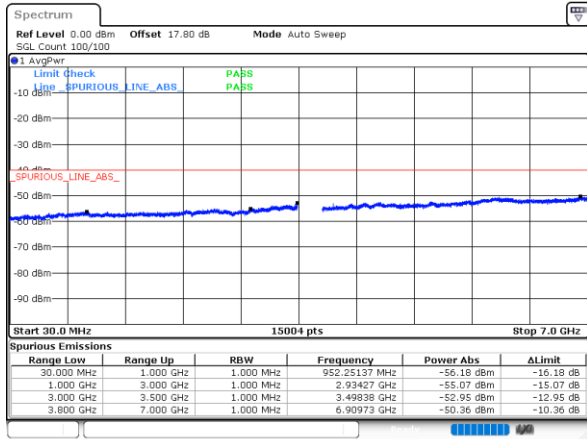
Lowest Channel / QPSK



Date: 26.APR.2024 13:04:07

Date: 26.APR.2024 15:54:55

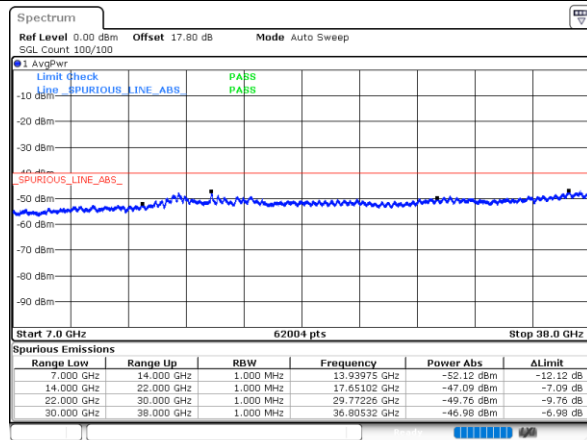
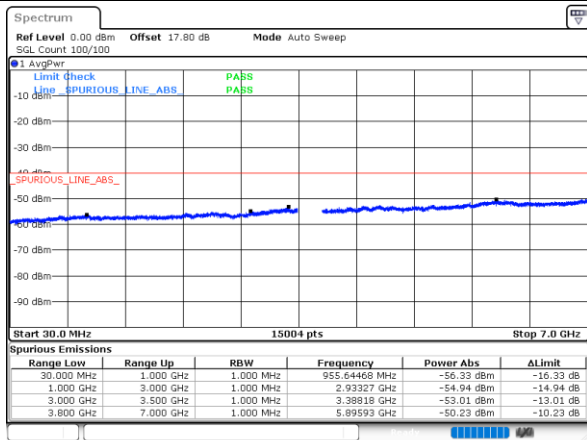
Middle Channel / QPSK



Date: 26.APR.2024 13:05:18

Date: 26.APR.2024 15:56:06

Highest Channel / QPSK



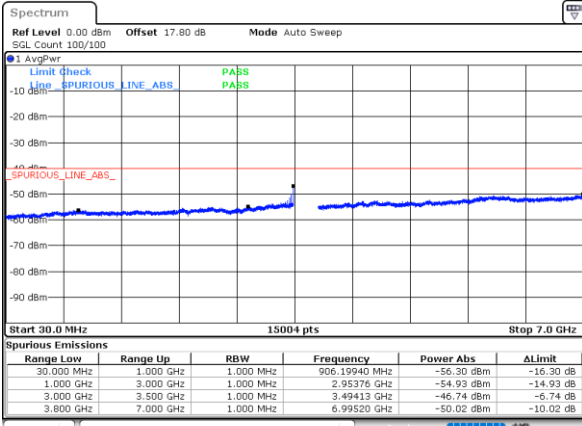
Date: 26.APR.2024 13:06:29

Date: 26.APR.2024 15:57:17

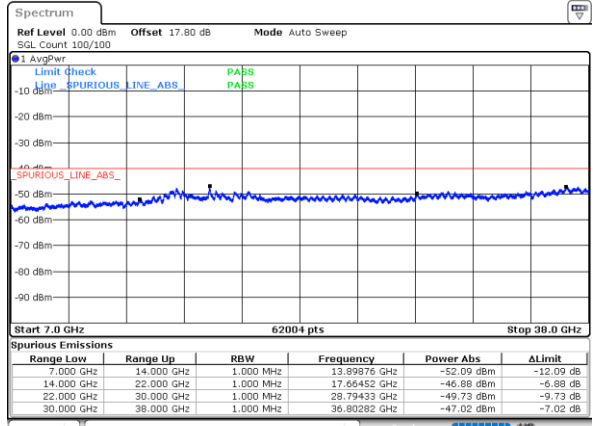


LTE Band 48 / 10MHz

Lowest Channel / QPSK

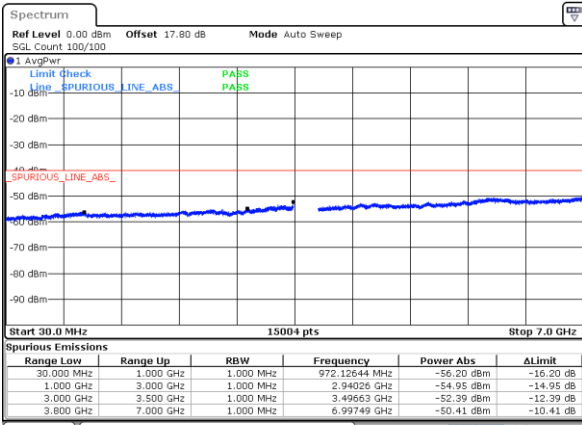


Date: 26.APR.2024 13:07:41

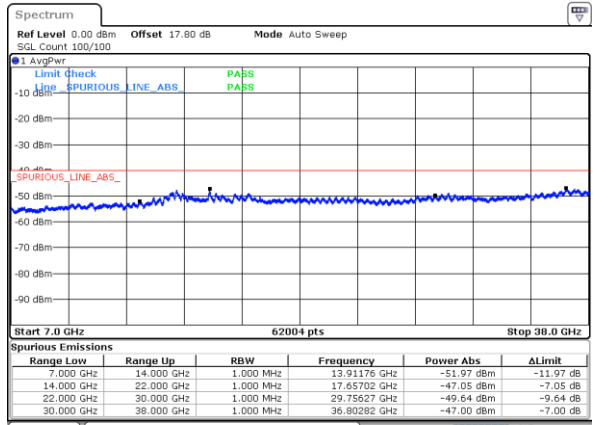


Date: 26.APR.2024 15:58:30

Middle Channel / QPSK

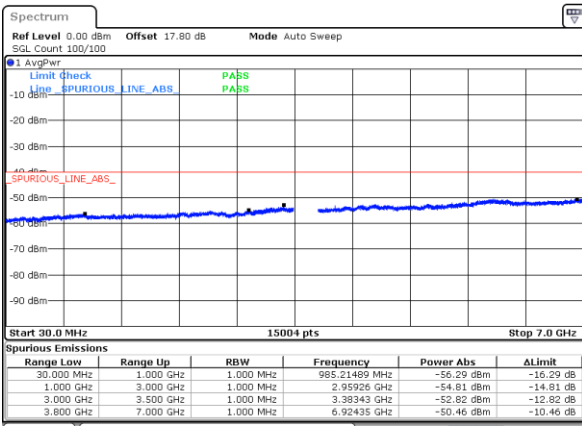


Date: 26.APR.2024 13:08:51

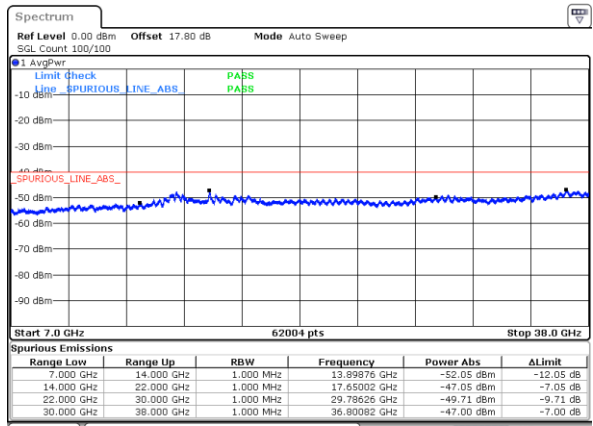


Date: 26.APR.2024 16:10:56

Highest Channel / QPSK



Date: 26.APR.2024 13:10:02

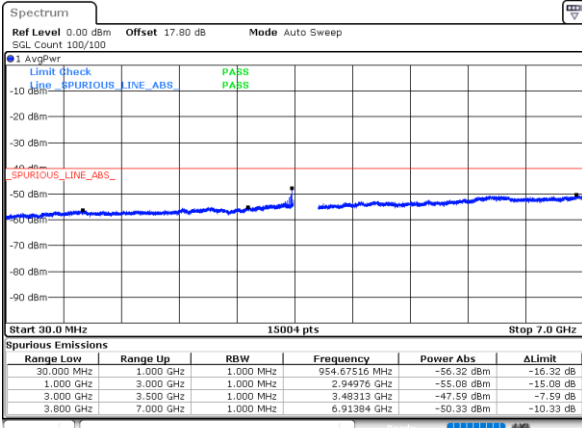


Date: 26.APR.2024 16:12:07

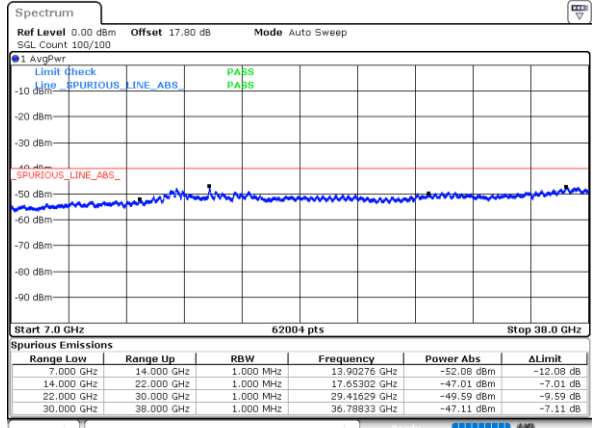


LTE Band 48 / 15MHz

Lowest Channel / QPSK

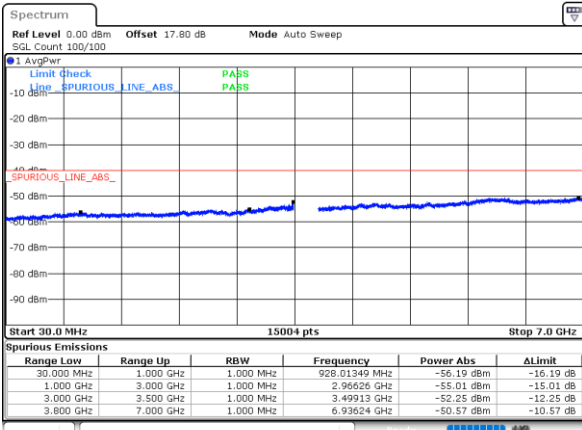


Date: 26.APR.2024 13:11:14

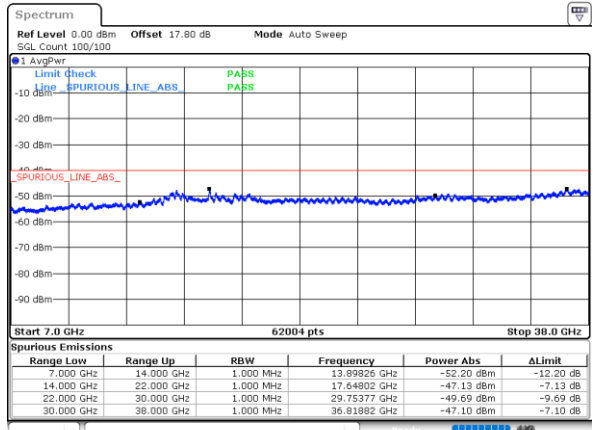


Date: 26.APR.2024 16:13:19

Middle Channel / QPSK

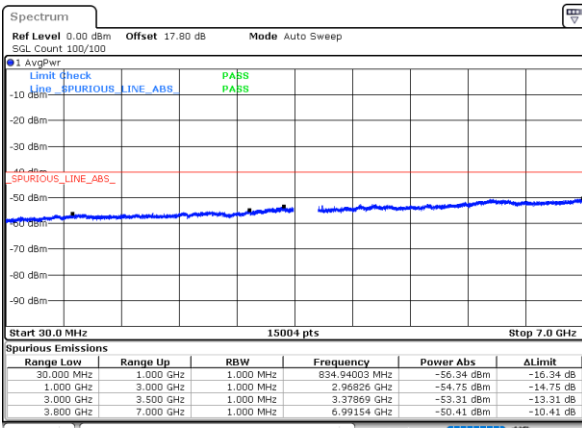


Date: 26.APR.2024 13:12:25

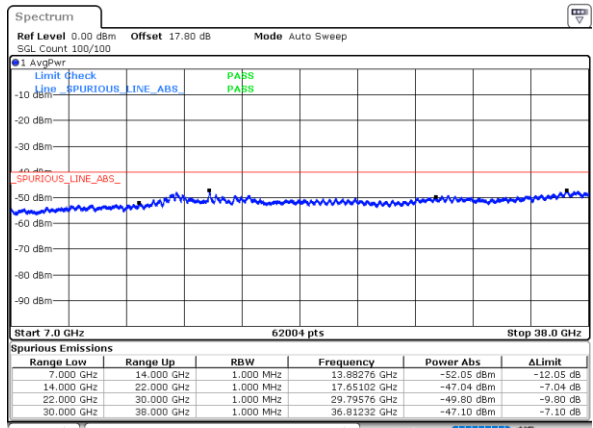


Date: 26.APR.2024 16:14:31

Highest Channel / QPSK



Date: 26.APR.2024 13:13:36

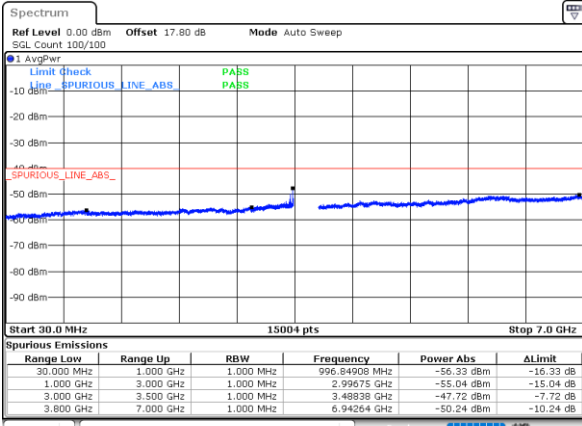


Date: 26.APR.2024 16:15:42

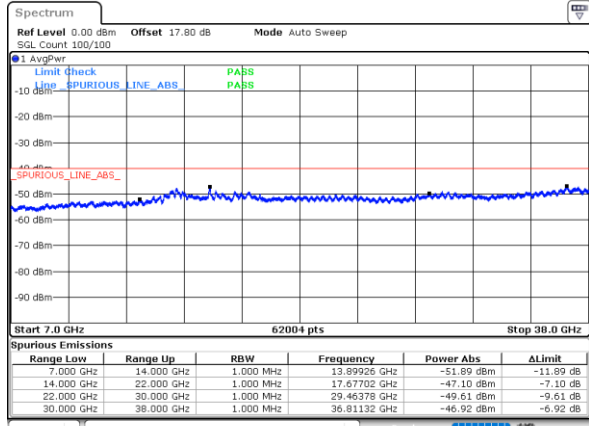


LTE Band 48 / 20MHz

Lowest Channel / QPSK

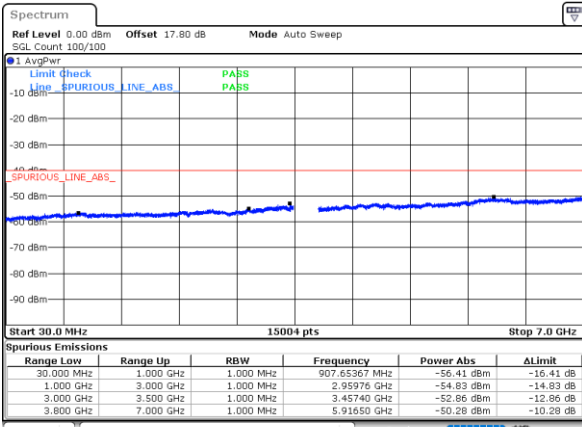


Date: 26.APR.2024 13:14:47

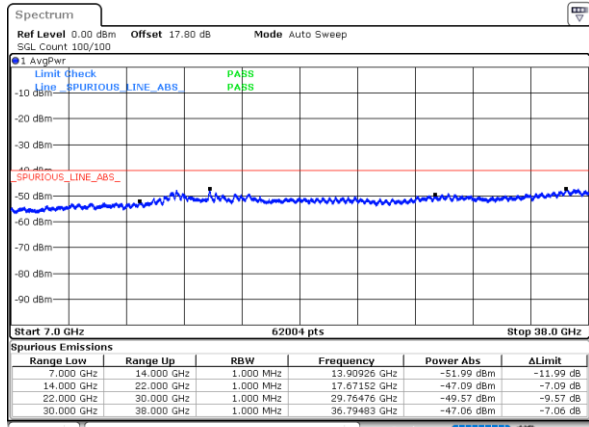


Date: 26.APR.2024 16:16:54

Middle Channel / QPSK

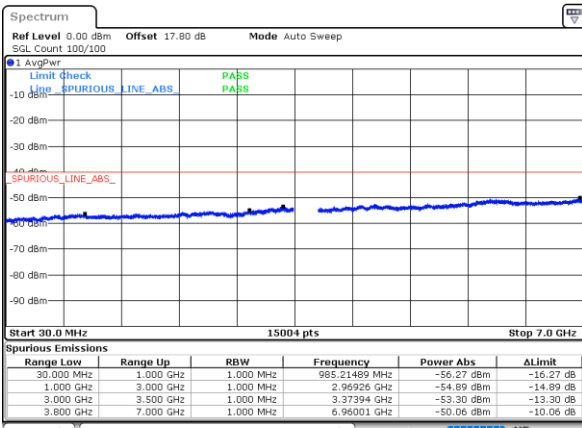


Date: 26.APR.2024 13:15:58

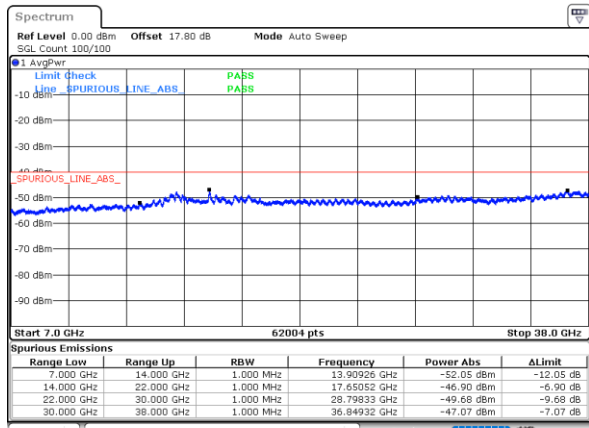


Date: 26.APR.2024 16:18:05

Highest Channel / QPSK



Date: 26.APR.2024 13:17:09



Date: 26.APR.2024 16:19:16



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	0.0020	PASS
40	Normal Voltage	0.0011	
30	Normal Voltage	0.0020	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0009	
0	Normal Voltage	0.0013	
-10	Normal Voltage	0.0017	
-20	Normal Voltage	0.0016	
20	Maximum Voltage	0.0020	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

Note:

1. Normal Voltage = 3.86 V. ; Battery End Point (ACLRP) = 3.5 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

B1. Summary of each worse mode

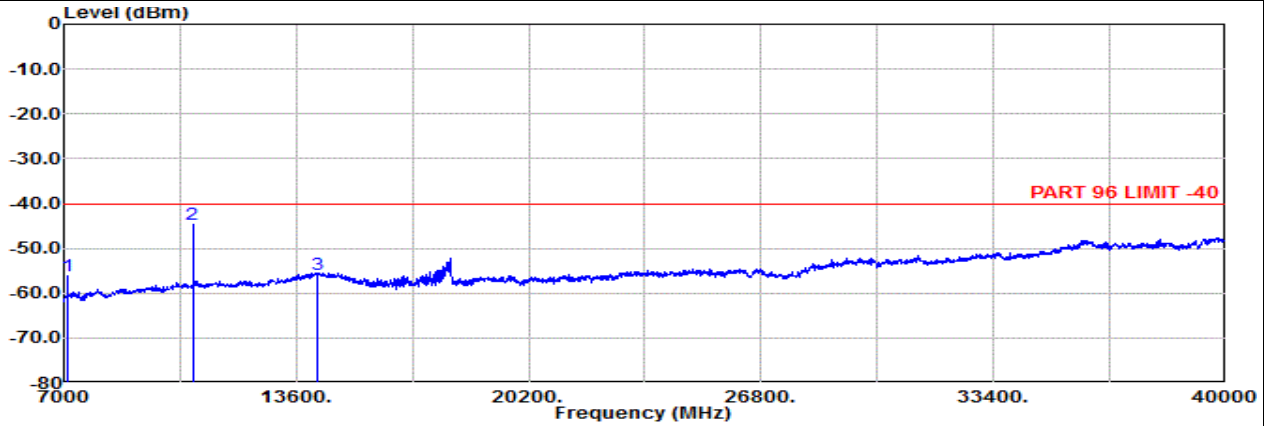
<Sample 1>

Mode	Part	Band	Ch	Freq (MHz)	Level (dBm)	Det	Ant Factor (dB)	Amp\Cbl (dB)	Filter (dB)	EIRPCF (dB)	Reading (dBuV)	Limit (dBm)	Margin (dB)	Pol	Ant
1	Part 96	LTE B48	M	10848	-44.27	RMS	39.15	-46.59	0.64	-95.23	57.76	-40.00	-4.27	V	7



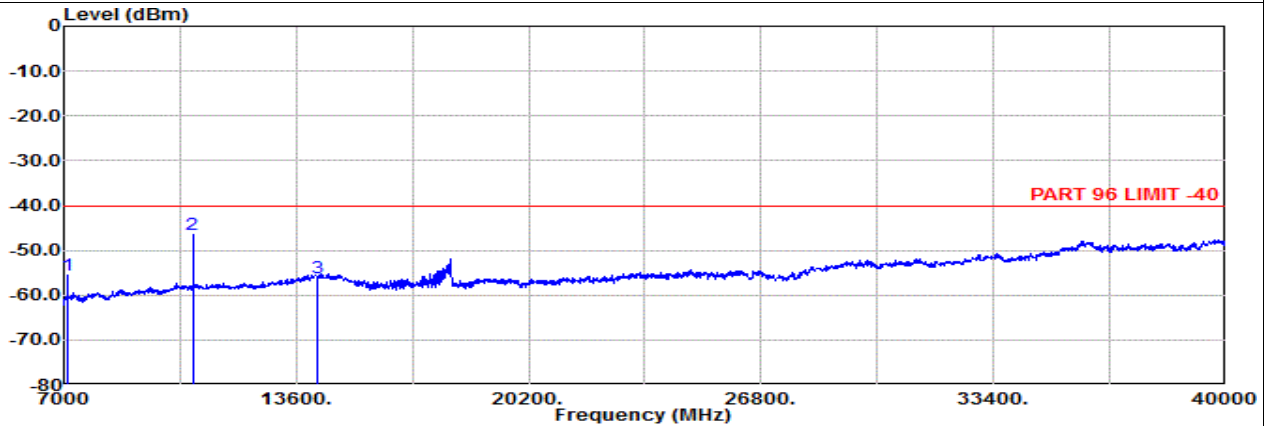
Ant. 7

Part 96 Mode 1
LTE B48 20M Ch55340 1RB0 QPSK
L



Site : 03CH15-HY
Condition: PART 96 LIMIT -40 3m BBHA 9120 D_9120D-02038 Horizontal
: LTE Band 48 20M Ch55340 1RB0 QPSK

Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin	Pol
			Factor	l					
MHz	dBm		dB/m	dB	dB	dBuV	dBm	dB	
1	7102.54	-56.20 RMS	36.32	-49.82	1.11	-95.23	51.42	-40.00	-16.20 Horizontal
2	10653.81	-44.58 RMS	39.11	-46.84	0.66	-95.23	57.72	-40.00	-4.58 Horizontal
3	14205.08	-55.80 RMS	41.29	-44.08	0.47	-95.23	41.75	-40.00	-15.80 Horizontal



Site : 03CH15-HY
Condition: PART 96 LIMIT -40 3m BBHA 9120 D_9120D-02038 Vertical
: LTE Band 48 20M Ch55340 1RB0 QPSK

Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin	Pol
			Factor	l					
MHz	dBm		dB/m	dB	dB	dBuV	dBm	dB	
1	7102.54	-55.53 RMS	36.32	-49.82	1.11	-95.23	52.09	-40.00	-15.53 Vertical
2	10653.81	-46.42 RMS	39.11	-46.84	0.66	-95.23	55.88	-40.00	-6.42 Vertical
3	14205.08	-56.24 RMS	41.29	-44.08	0.47	-95.23	41.31	-40.00	-16.24 Vertical