

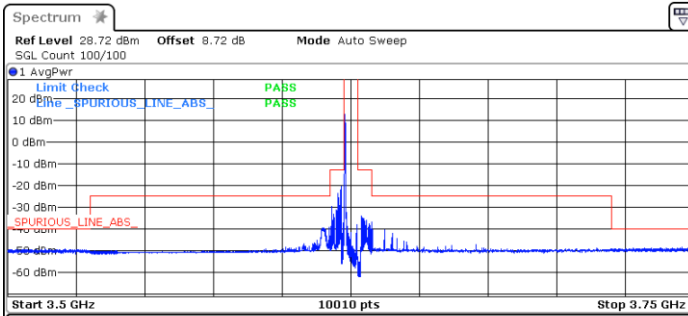


LTE Band 48 / 5MHz

256QAM

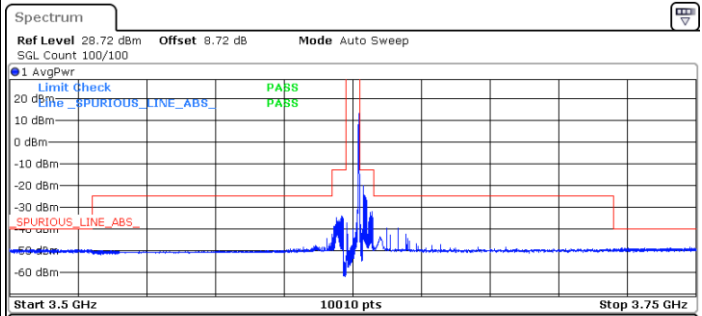
Middle Channel / 1RB0

Middle Channel / 1RBmax



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51377 GHz	-49.38 dBm	-9.38 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53768 GHz	-50.15 dBm	-25.15 dB
3.540 GHz	3.618 GHz	1.000 MHz	3.61715 GHz	-39.17 dBm	-14.17 dB
3.618 GHz	3.622 GHz	1.000 MHz	3.62139 GHz	-20.60 dBm	-7.60 dB
3.622 GHz	3.623 GHz	50.000 kHz	3.62250 GHz	-29.50 dBm	-16.50 dB
3.623 GHz	3.627 GHz	100.000 kHz	3.62286 GHz	12.59 dBm	-17.41 dB
3.627 GHz	3.629 GHz	50.000 kHz	3.62768 GHz	-54.52 dBm	-41.52 dB
3.629 GHz	3.633 GHz	1.000 MHz	3.62895 GHz	-33.88 dBm	-20.88 dB
3.633 GHz	3.720 GHz	1.000 MHz	3.63263 GHz	-37.02 dBm	-12.02 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74558 GHz	-48.46 dBm	-8.46 dB

Date: 19.JUN.2022 05:55:55

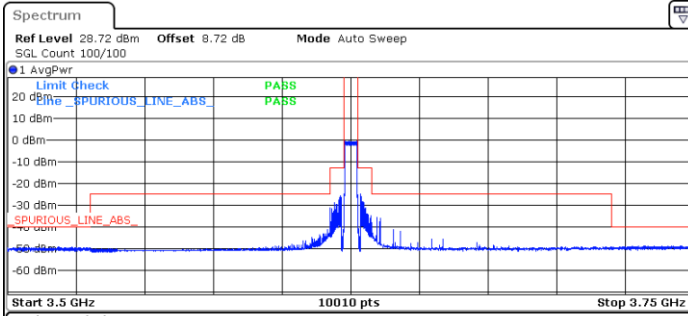


Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.50007 GHz	-49.33 dBm	-9.33 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53683 GHz	-49.96 dBm	-24.96 dB
3.540 GHz	3.618 GHz	1.000 MHz	3.61545 GHz	-44.35 dBm	-19.35 dB
3.618 GHz	3.622 GHz	1.000 MHz	3.62073 GHz	-33.88 dBm	-20.88 dB
3.622 GHz	3.623 GHz	50.000 kHz	3.62240 GHz	-55.43 dBm	-42.43 dB
3.623 GHz	3.627 GHz	100.000 kHz	3.62713 GHz	13.11 dBm	-16.89 dB
3.627 GHz	3.629 GHz	50.000 kHz	3.62750 GHz	-29.57 dBm	-16.57 dB
3.629 GHz	3.633 GHz	1.000 MHz	3.62888 GHz	-19.94 dBm	-6.94 dB
3.633 GHz	3.720 GHz	1.000 MHz	3.63726 GHz	-39.67 dBm	-14.67 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74792 GHz	-48.62 dBm	-8.62 dB

Date: 19.JUN.2022 05:57:28

Middle Channel / FullIRB

N/A



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52348 GHz	-49.32 dBm	-9.32 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53661 GHz	-50.00 dBm	-25.00 dB
3.540 GHz	3.618 GHz	1.000 MHz	3.61731 GHz	-41.36 dBm	-16.36 dB
3.618 GHz	3.622 GHz	1.000 MHz	3.62114 GHz	-25.66 dBm	-12.66 dB
3.622 GHz	3.623 GHz	50.000 kHz	3.62249 GHz	-34.27 dBm	-21.27 dB
3.623 GHz	3.627 GHz	100.000 kHz	3.62439 GHz	-0.60 dBm	-30.60 dB
3.627 GHz	3.629 GHz	50.000 kHz	3.62750 GHz	-34.04 dBm	-21.04 dB
3.629 GHz	3.633 GHz	1.000 MHz	3.62859 GHz	-24.82 dBm	-11.82 dB
3.633 GHz	3.720 GHz	1.000 MHz	3.63455 GHz	-35.84 dBm	-10.84 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74060 GHz	-48.75 dBm	-8.75 dB

Date: 19.JUN.2022 05:59:01

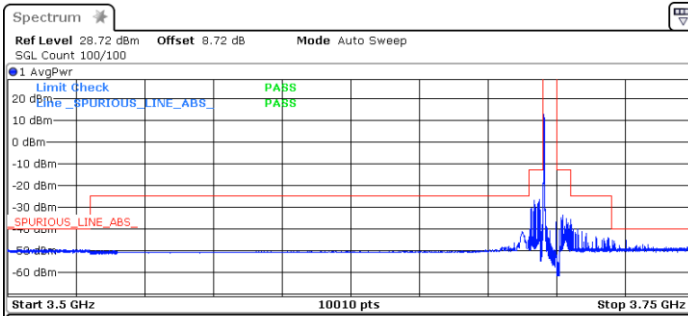


LTE Band 48 / 5MHz

256QAM

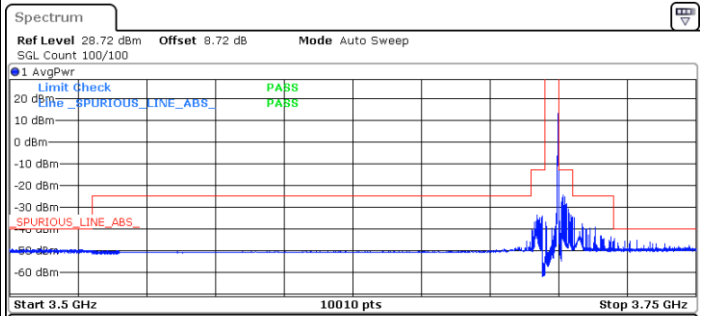
Highest Channel / 1RB0

Highest Channel / 1RBmax



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52420 GHz	-49.49 dBm	-9.49 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53707 GHz	-50.04 dBm	-25.04 dB
3.540 GHz	3.690 GHz	1.000 MHz	3.68738 GHz	-41.21 dBm	-16.21 dB
3.690 GHz	3.694 GHz	1.000 MHz	3.69361 GHz	-26.40 dBm	-13.40 dB
3.694 GHz	3.695 GHz	50.000 kHz	3.69499 GHz	-29.77 dBm	-16.77 dB
3.695 GHz	3.700 GHz	100.000 kHz	3.69538 GHz	12.80 dBm	-17.20 dB
3.700 GHz	3.701 GHz	50.000 kHz	3.70015 GHz	-55.44 dBm	-42.44 dB
3.701 GHz	3.705 GHz	1.000 MHz	3.70220 GHz	-33.67 dBm	-20.67 dB
3.705 GHz	3.720 GHz	1.000 MHz	3.70529 GHz	-37.98 dBm	-12.98 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72532 GHz	-45.11 dBm	-5.11 dB

Date: 19 JUN 2022 06:00:33

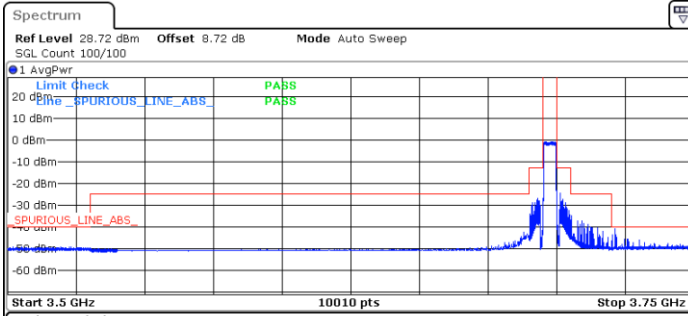


Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.50523 GHz	-49.13 dBm	-9.13 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53396 GHz	-49.97 dBm	-24.97 dB
3.540 GHz	3.690 GHz	1.000 MHz	3.68843 GHz	-45.84 dBm	-20.84 dB
3.690 GHz	3.694 GHz	1.000 MHz	3.69208 GHz	-33.56 dBm	-20.56 dB
3.694 GHz	3.695 GHz	50.000 kHz	3.69493 GHz	-55.41 dBm	-42.41 dB
3.695 GHz	3.700 GHz	100.000 kHz	3.69970 GHz	12.95 dBm	-17.05 dB
3.700 GHz	3.701 GHz	50.000 kHz	3.70001 GHz	-29.86 dBm	-16.86 dB
3.701 GHz	3.705 GHz	1.000 MHz	3.70163 GHz	-24.38 dBm	-11.38 dB
3.705 GHz	3.720 GHz	1.000 MHz	3.70559 GHz	-34.72 dBm	-9.72 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72019 GHz	-44.65 dBm	-4.65 dB

Date: 19 JUN 2022 06:02:10

Highest Channel / FullIRB

N/A



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.50523 GHz	-49.27 dBm	-9.27 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53681 GHz	-50.15 dBm	-25.15 dB
3.540 GHz	3.690 GHz	1.000 MHz	3.68798 GHz	-42.66 dBm	-17.66 dB
3.690 GHz	3.694 GHz	1.000 MHz	3.69301 GHz	-26.61 dBm	-13.61 dB
3.694 GHz	3.695 GHz	50.000 kHz	3.69498 GHz	-34.32 dBm	-21.32 dB
3.695 GHz	3.700 GHz	100.000 kHz	3.69620 GHz	-0.78 dBm	-30.78 dB
3.700 GHz	3.701 GHz	50.000 kHz	3.70000 GHz	-33.96 dBm	-20.96 dB
3.701 GHz	3.705 GHz	1.000 MHz	3.70123 GHz	-24.42 dBm	-11.42 dB
3.705 GHz	3.720 GHz	1.000 MHz	3.70550 GHz	-34.87 dBm	-9.87 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72127 GHz	-41.06 dBm	-1.06 dB

Date: 19 JUN 2022 06:03:46

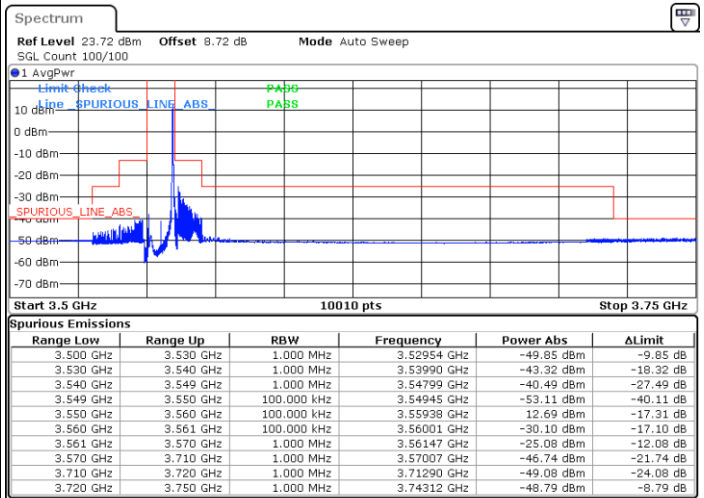
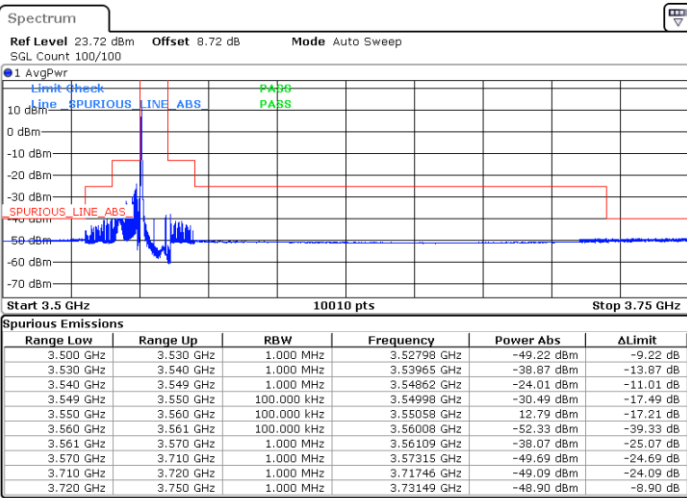


LTE Band 48 / 10MHz

256QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

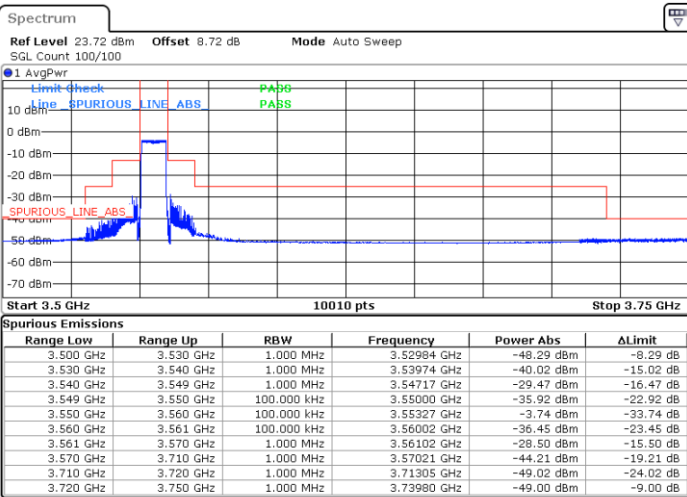


Date: 19.JUN.2022 06:05:56

Date: 19.JUN.2022 06:07:32

Lowest Channel / FullRB

N/A



Date: 19.JUN.2022 06:09:08

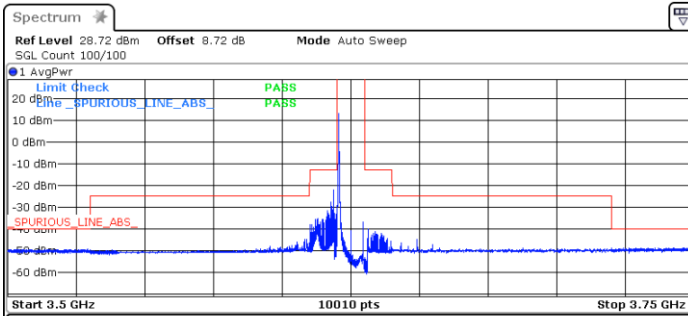


LTE Band 48 / 10MHz

256QAM

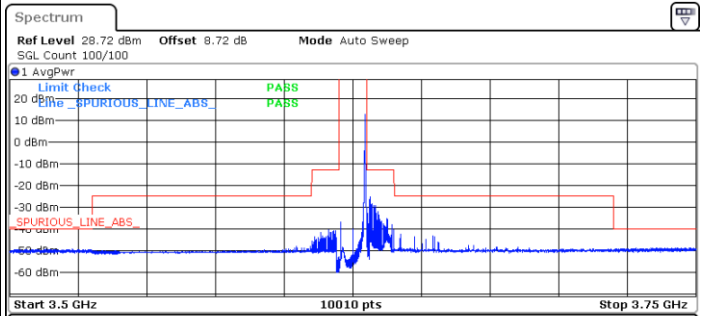
Middle Channel / 1RB0

Middle Channel / 1RBmax



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52915 GHz	-49.48 dBm	-9.48 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53797 GHz	-49.81 dBm	-24.81 dB
3.540 GHz	3.610 GHz	1.000 MHz	3.60815 GHz	-44.76 dBm	-19.76 dB
3.610 GHz	3.619 GHz	1.000 MHz	3.61881 GHz	-22.22 dBm	-9.22 dB
3.619 GHz	3.620 GHz	100.000 kHz	3.61997 GHz	-29.20 dBm	-16.20 dB
3.620 GHz	3.630 GHz	100.000 kHz	3.62057 GHz	13.01 dBm	-16.99 dB
3.630 GHz	3.631 GHz	100.000 kHz	3.63007 GHz	-53.46 dBm	-40.46 dB
3.631 GHz	3.640 GHz	1.000 MHz	3.63136 GHz	-40.04 dBm	-27.04 dB
3.640 GHz	3.720 GHz	1.000 MHz	3.64891 GHz	-44.80 dBm	-19.80 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74255 GHz	-48.73 dBm	-8.73 dB

Date: 19. JUN. 2022 06:10:42

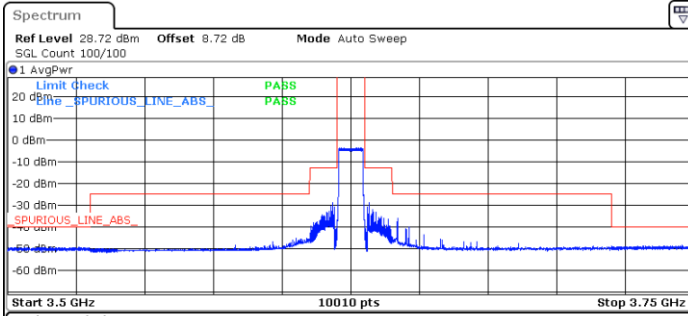


Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51323 GHz	-49.37 dBm	-9.37 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53365 GHz	-50.00 dBm	-25.00 dB
3.540 GHz	3.610 GHz	1.000 MHz	3.60437 GHz	-48.10 dBm	-23.10 dB
3.610 GHz	3.619 GHz	1.000 MHz	3.61619 GHz	-40.47 dBm	-27.47 dB
3.619 GHz	3.620 GHz	100.000 kHz	3.62000 GHz	-52.97 dBm	-39.97 dB
3.620 GHz	3.630 GHz	100.000 kHz	3.62940 GHz	12.86 dBm	-17.14 dB
3.630 GHz	3.631 GHz	100.000 kHz	3.63002 GHz	-31.32 dBm	-18.32 dB
3.631 GHz	3.640 GHz	1.000 MHz	3.63125 GHz	-25.20 dBm	-12.20 dB
3.640 GHz	3.720 GHz	1.000 MHz	3.64252 GHz	-42.63 dBm	-17.63 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74108 GHz	-48.76 dBm	-8.76 dB

Date: 19. JUN. 2022 06:12:14

Middle Channel / FullIRB

N/A



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52609 GHz	-49.25 dBm	-9.25 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53563 GHz	-49.98 dBm	-24.98 dB
3.540 GHz	3.610 GHz	1.000 MHz	3.60514 GHz	-45.20 dBm	-20.20 dB
3.610 GHz	3.619 GHz	1.000 MHz	3.61849 GHz	-29.05 dBm	-16.05 dB
3.619 GHz	3.620 GHz	100.000 kHz	3.62000 GHz	-36.88 dBm	-23.88 dB
3.620 GHz	3.630 GHz	100.000 kHz	3.62844 GHz	-3.73 dBm	-33.73 dB
3.630 GHz	3.631 GHz	100.000 kHz	3.63001 GHz	-36.92 dBm	-23.92 dB
3.631 GHz	3.640 GHz	1.000 MHz	3.63158 GHz	-29.06 dBm	-16.06 dB
3.640 GHz	3.720 GHz	1.000 MHz	3.64204 GHz	-36.25 dBm	-11.25 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74552 GHz	-48.67 dBm	-8.67 dB

Date: 19. JUN. 2022 06:13:47

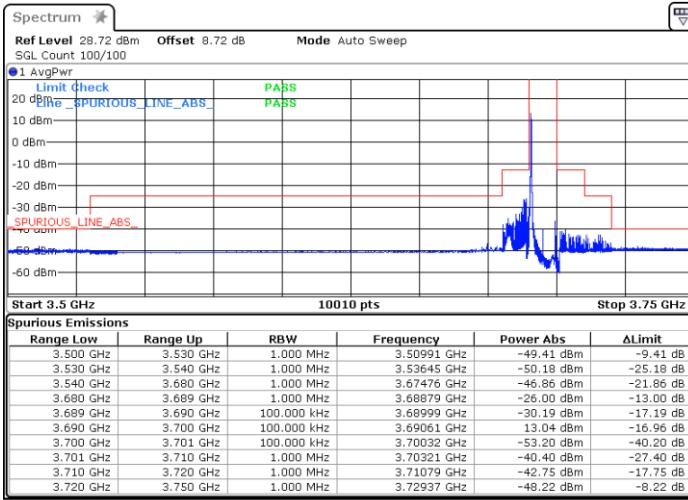


LTE Band 48 / 10MHz

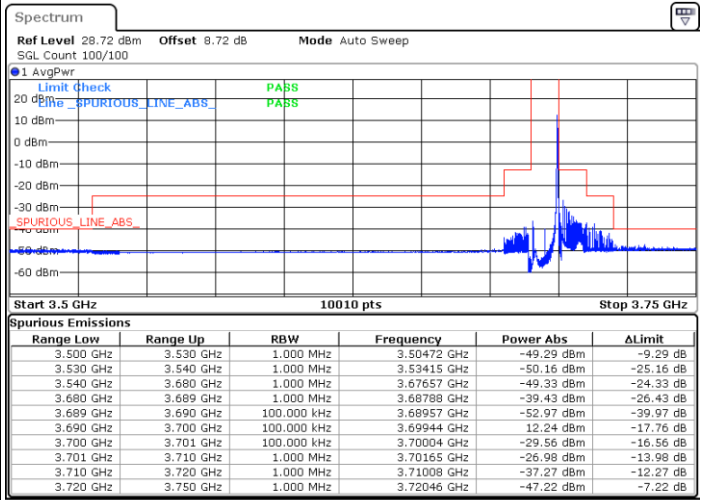
256QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



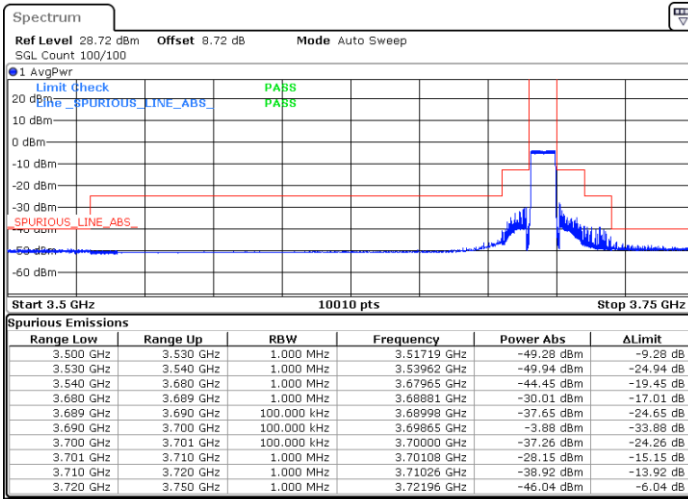
Date: 19. JUN. 2022 06:15:20



Date: 19. JUN. 2022 06:16:56

Highest Channel / FullIRB

N/A



Date: 19. JUN. 2022 06:18:32

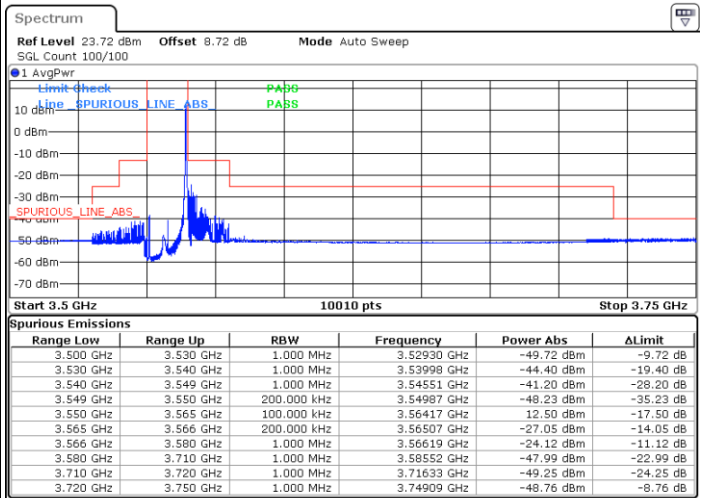
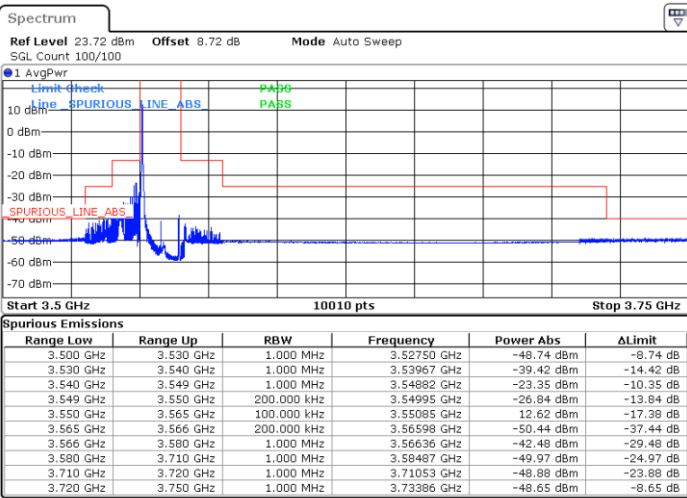


LTE Band 48 / 15MHz

256QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

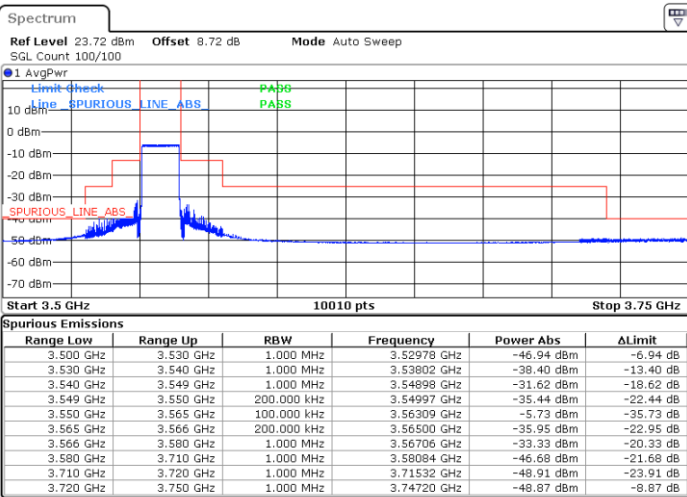


Date: 19.JUN.2022 04:02:10

Date: 19.JUN.2022 04:04:04

Lowest Channel / FullRB

N/A



Date: 19.JUN.2022 04:00:11

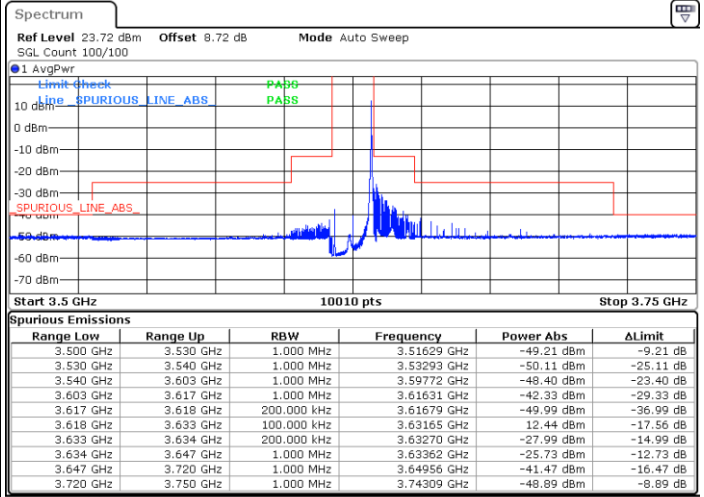
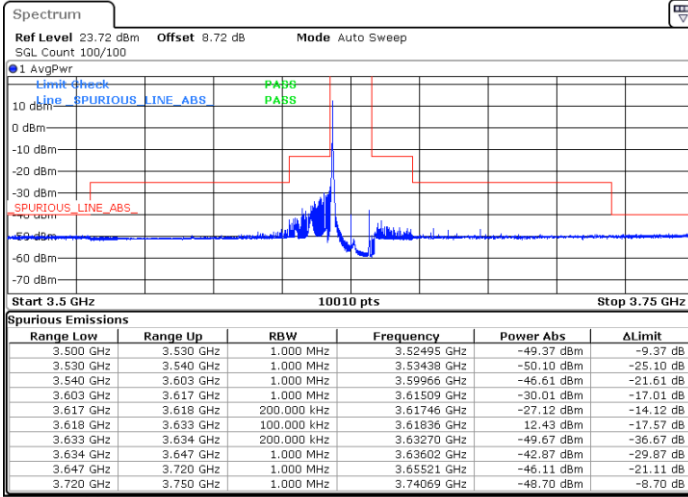


LTE Band 48 / 15MHz

256QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax

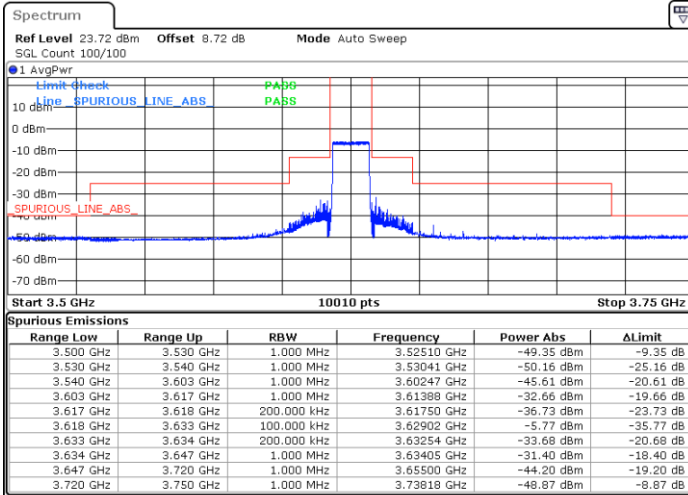


Date: 19. JUN. 2022 04:06:03

Date: 19. JUN. 2022 04:07:46

Middle Channel / FullIRB

N/A



Date: 19. JUN. 2022 04:09:32

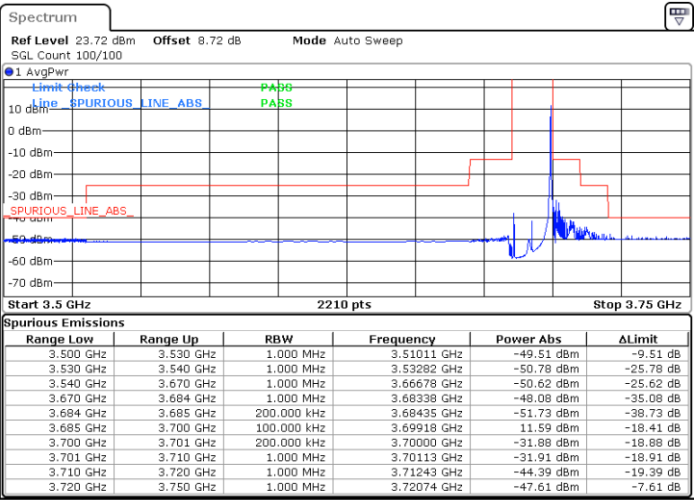
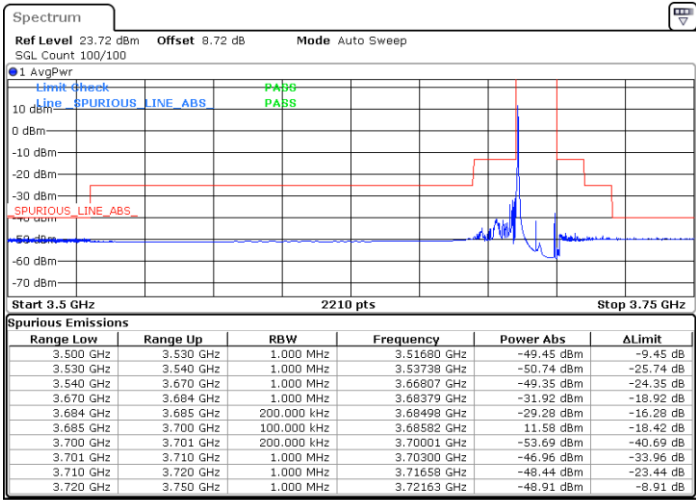


LTE Band 48 / 15MHz

256QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

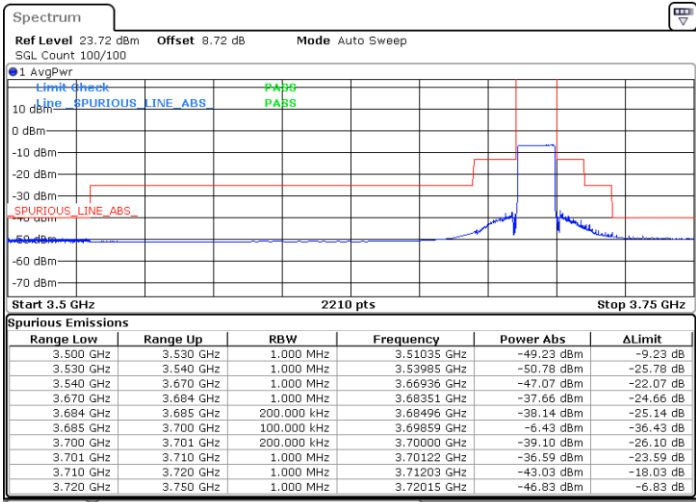


Date: 19. JUN. 2022 04:14:23

Date: 19. JUN. 2022 04:16:15

Highest Channel / FullIRB

N/A



Date: 19. JUN. 2022 04:12:41



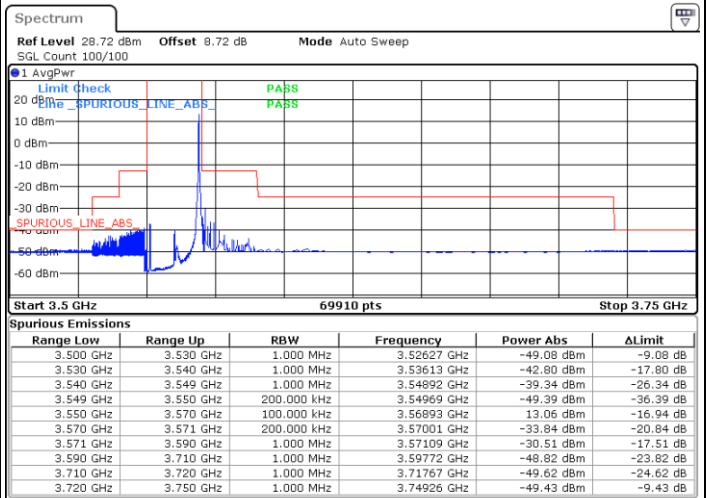
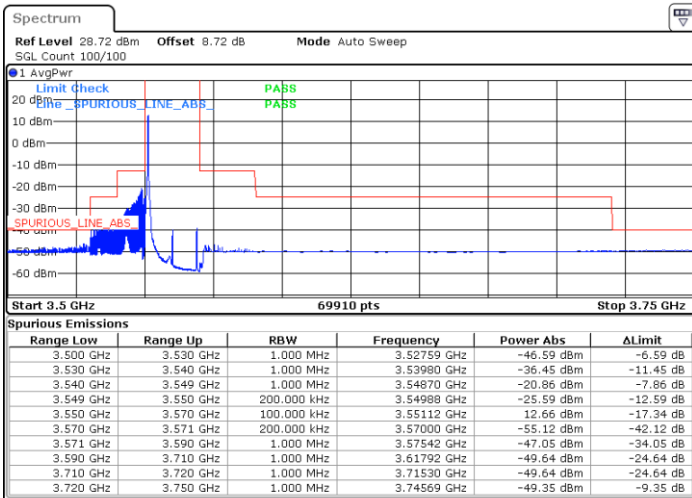


LTE Band 48 / 20MHz

256QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

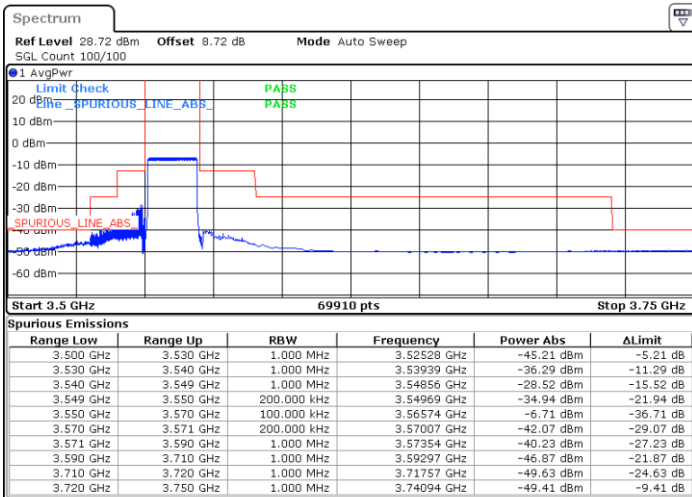


Date: 19.JUN.2022 03:32:49

Date: 19.JUN.2022 03:35:11

Lowest Channel / FullRB

N/A



Date: 19.JUN.2022 03:38:07

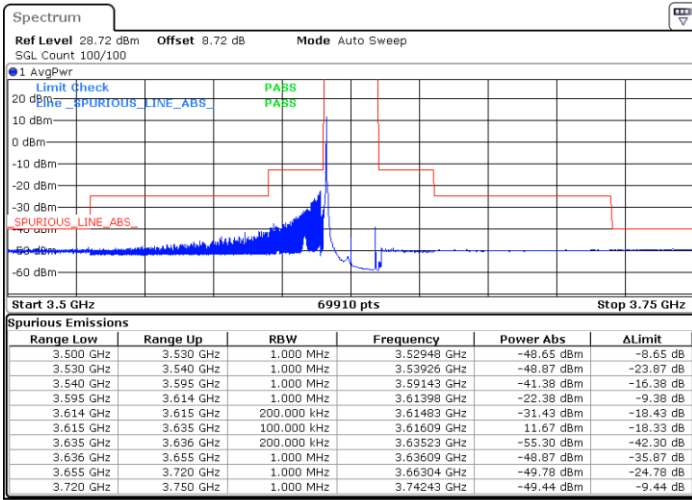


LTE Band 48 / 20MHz

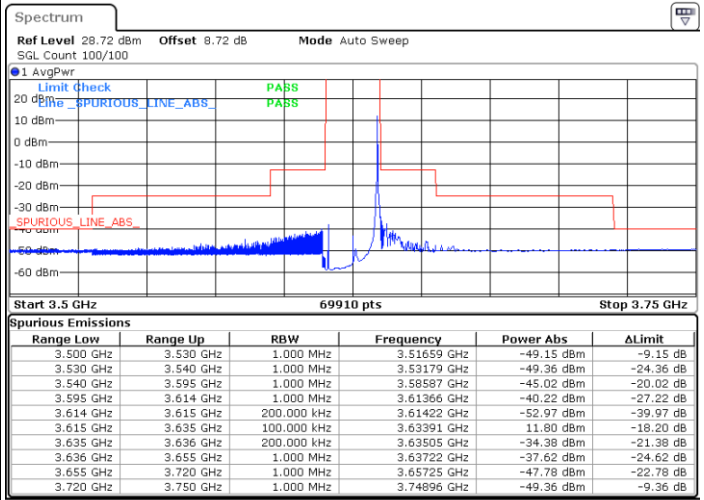
256QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



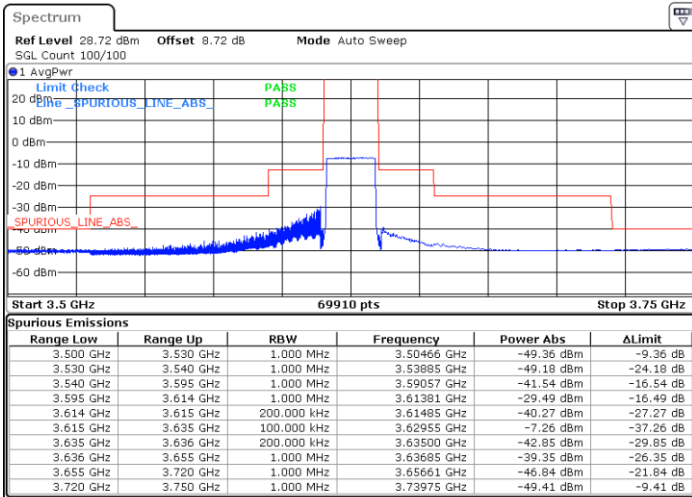
Date: 19. JUN. 2022 03:26:51



Date: 19. JUN. 2022 03:29:27

Middle Channel / FullIRB

N/A



Date: 19. JUN. 2022 03:24:40

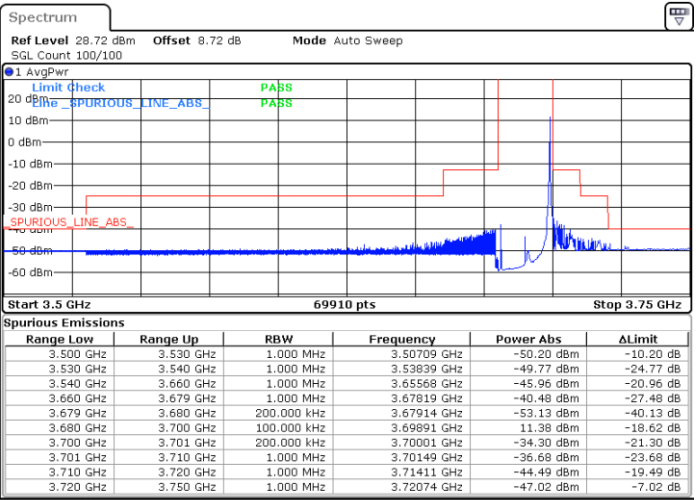
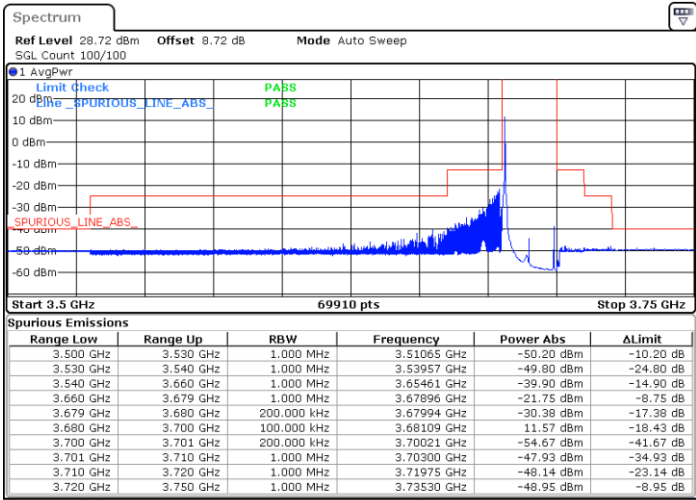


LTE Band 48 / 20MHz

256QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

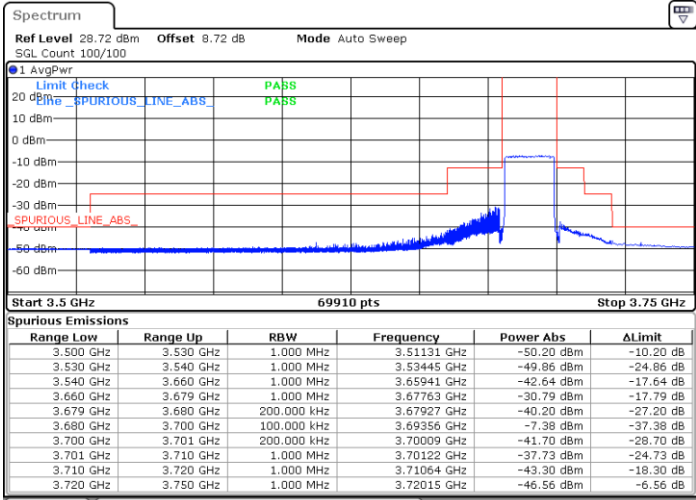


Date: 19. JUN. 2022 03:17:57

Date: 19. JUN. 2022 03:12:52

Highest Channel / FullIRB

N/A



Date: 19. JUN. 2022 03:19:40



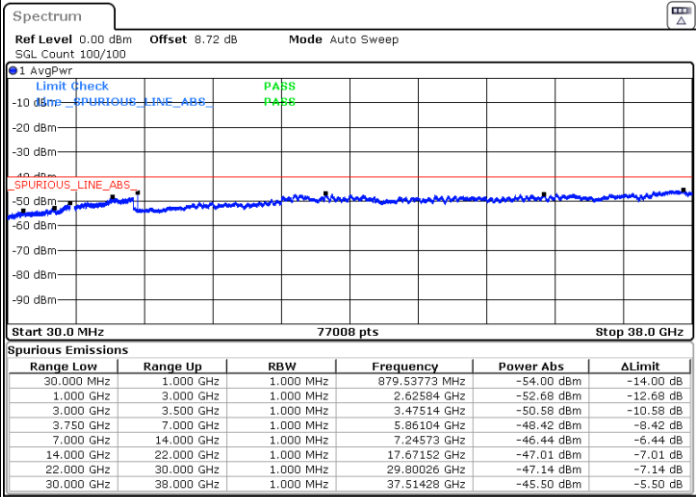
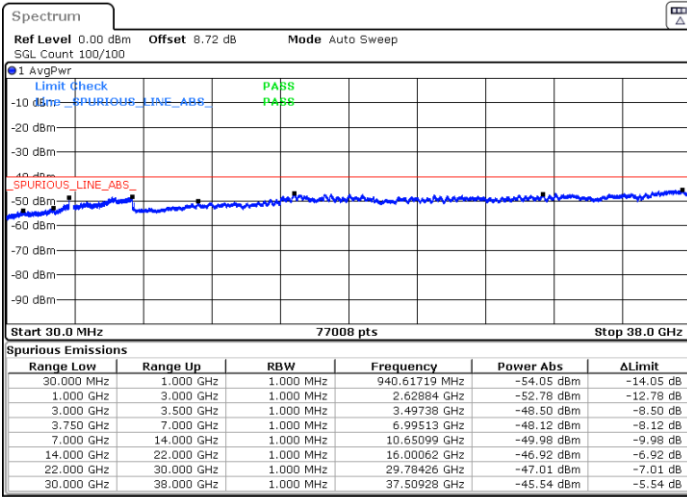
# Conducted Spurious Emission

## LTE Band 48 / 5MHz

### QPSK / 1RB0

#### Lowest Channel

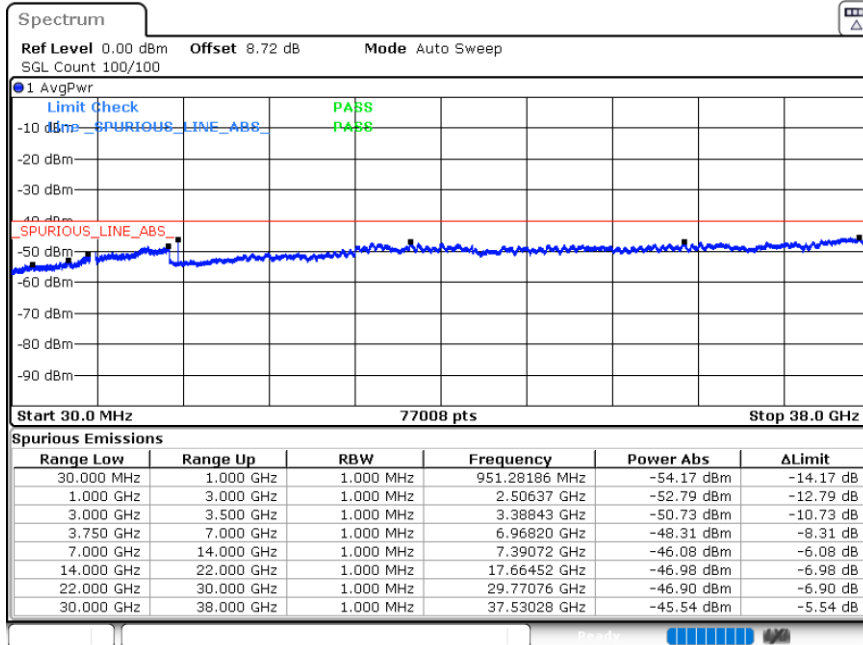
#### Middle Channel



Date: 18.JUN.2022 03:19:48

Date: 18.JUN.2022 03:21:48

#### Highest Channel



Date: 18.JUN.2022 03:23:49

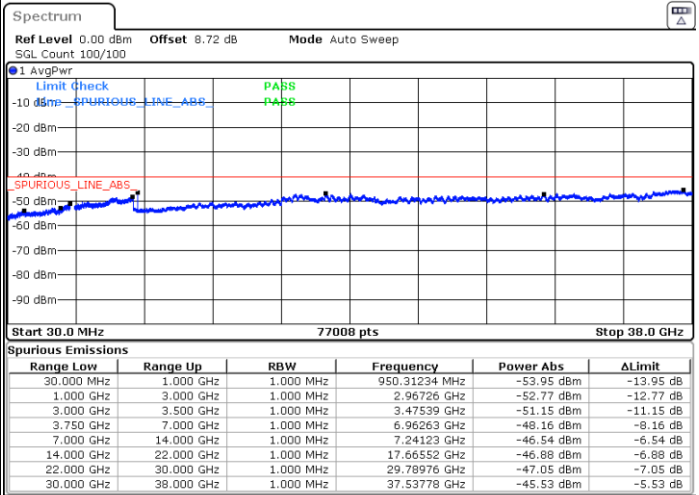
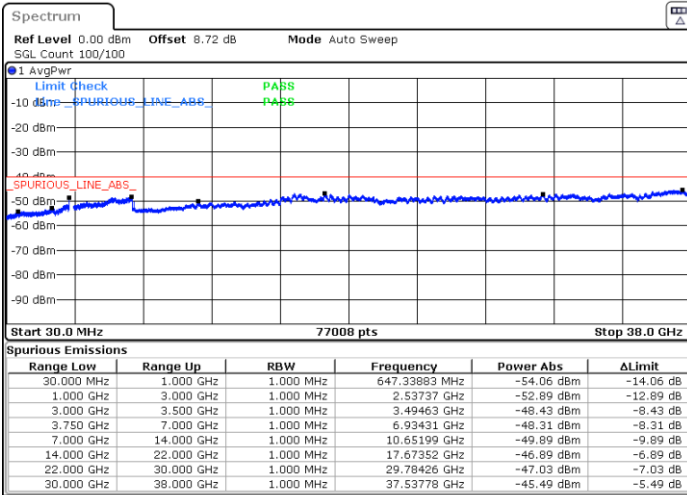


LTE Band 48 / 10MHz

QPSK / 1RB0

Lowest Channel

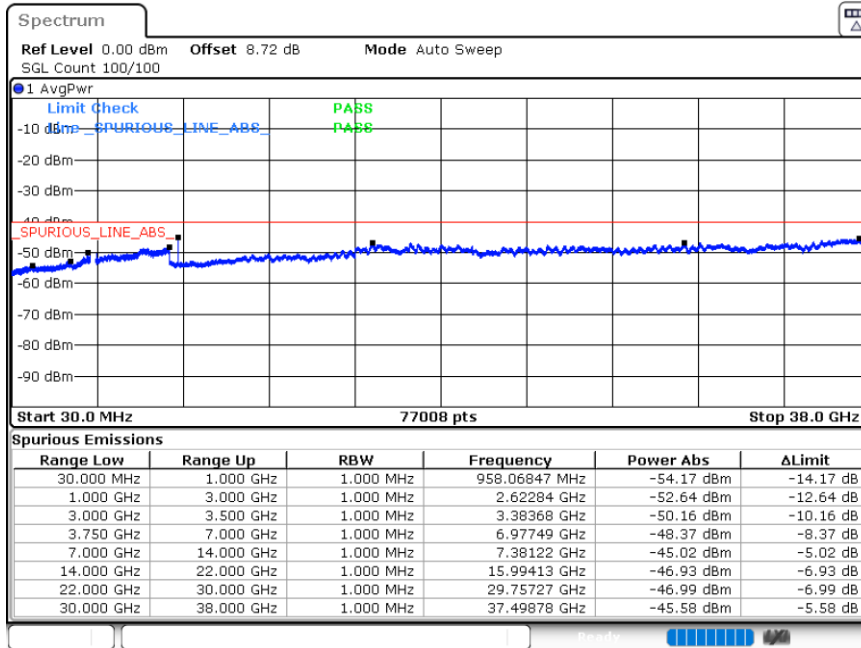
Middle Channel



Date: 18.JUN.2022 03:25:50

Date: 18.JUN.2022 03:27:51

Highest Channel



Date: 18.JUN.2022 03:29:51

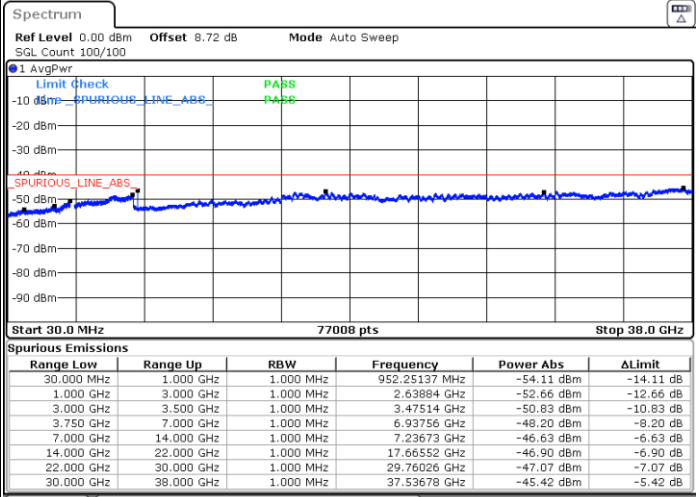
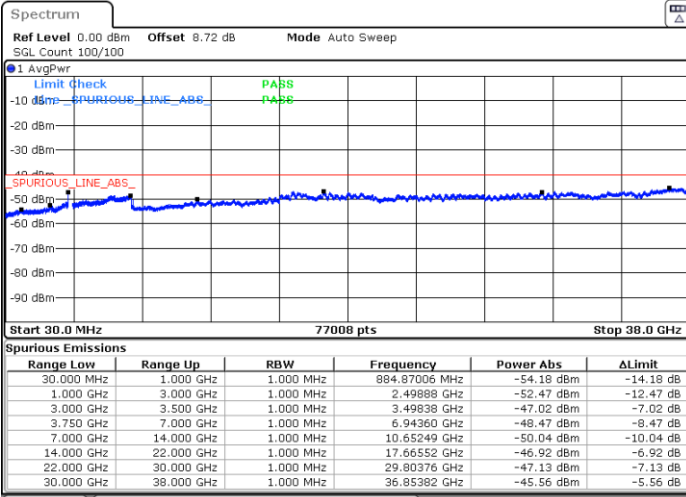


LTE Band 48 / 15MHz

QPSK / 1RB0

Lowest Channel

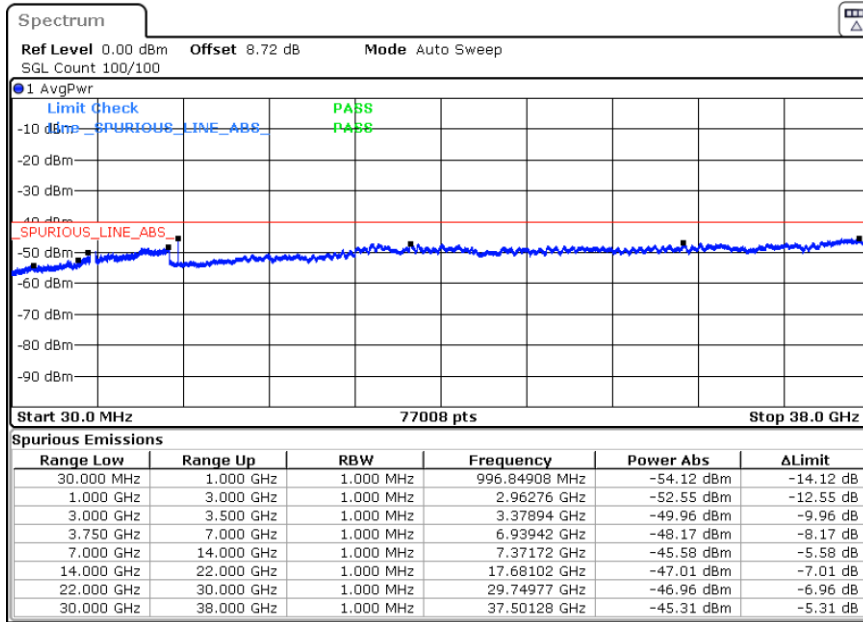
Middle Channel



Date: 18.JUN.2022 03:31:53

Date: 18.JUN.2022 03:31:54

Highest Channel



Date: 18.JUN.2022 03:35:54

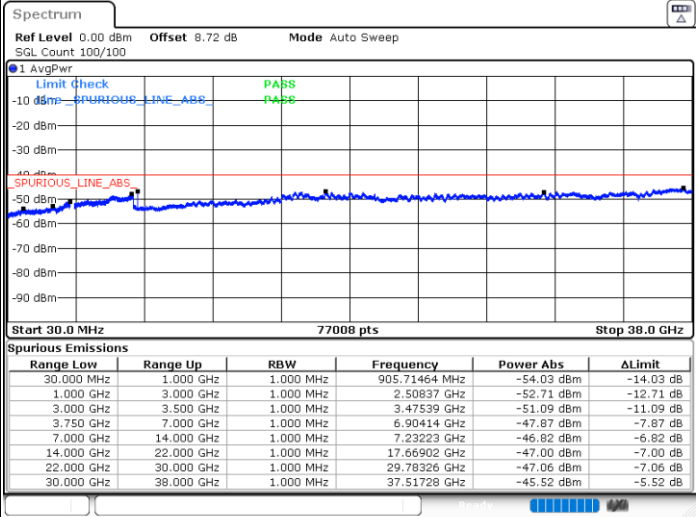
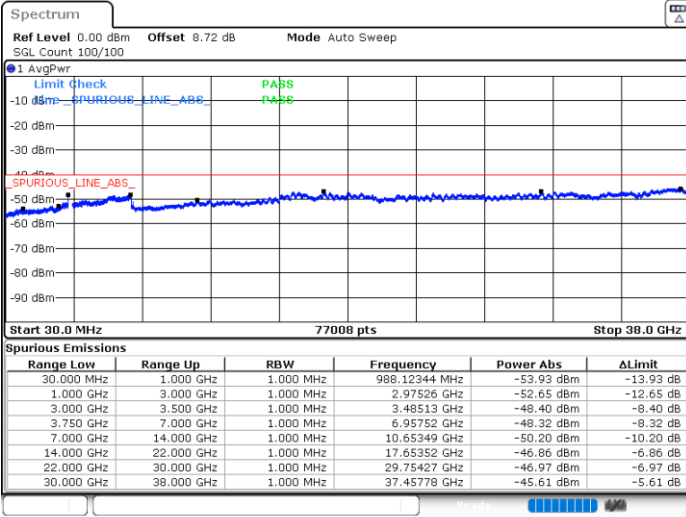


LTE Band 48 / 20MHz

QPSK / 1RB0

Lowest Channel

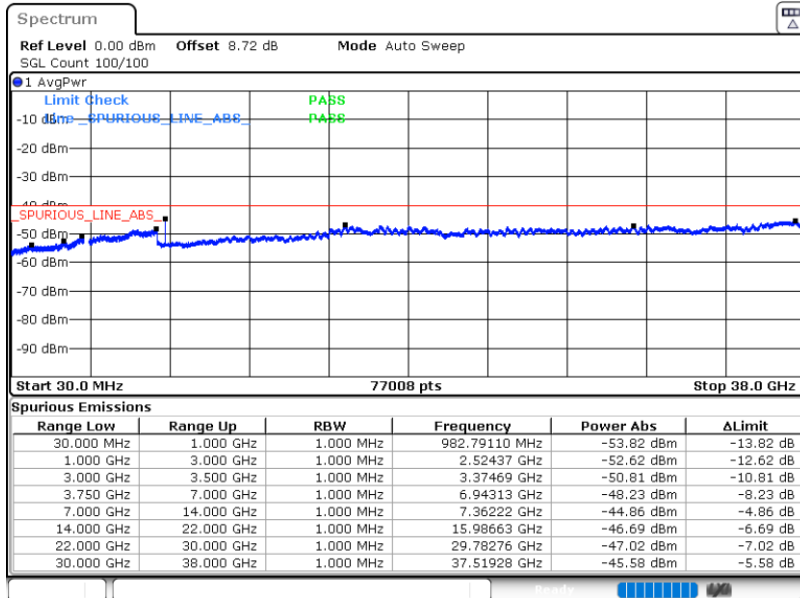
Middle Channel



Date: 18.JUN.2022 03:37:56

Date: 18.JUN.2022 03:39:57

Highest Channel



Date: 18.JUN.2022 03:41:58



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	0.0009	PASS
40	Normal Voltage	0.0011	
30	Normal Voltage	0.0016	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0007	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0009	
-30	Normal Voltage	0.0022	
20	Maximum Voltage	0.0019	
20	Normal Voltage	0.0004	
20	Battery End Point	0.0013	

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 :	Carl Ni	Temperature :	23~25°C
		Relative Humidity :	41~42%

LTE Band 48 / 20MHz / QPSK								
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	-56.63	-40	-16.63	-68.09	2.84	14.30	H
	10848	-44.58	-40	-4.58	-54.52	3.49	13.43	H
	14466	-57.24	-40	-17.24	-67.48	3.85	14.09	H
	7230	-62.00	-40	-22.00	-73.46	2.84	14.30	V
	10848	-49.77	-40	-9.77	-59.71	3.49	13.43	V
	14466	-52.05	-40	-12.05	-62.29	3.85	14.09	V

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