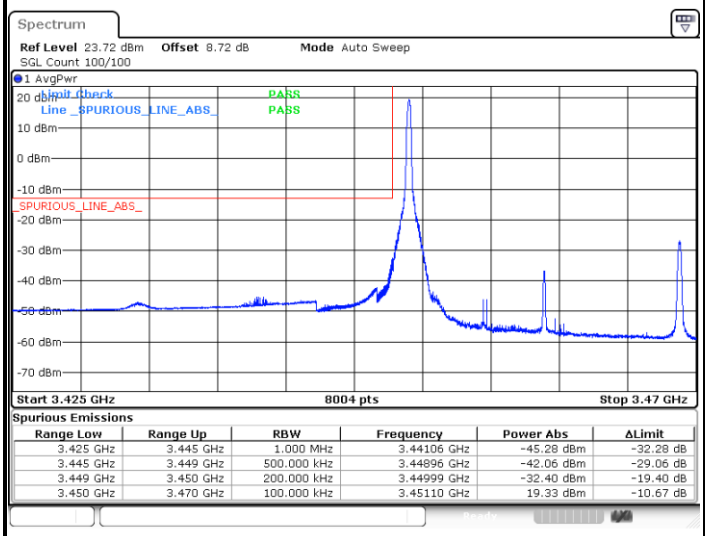
LTE Band 42 / 20MHz / 16QAM

Lowest Band Edge / 1 RB

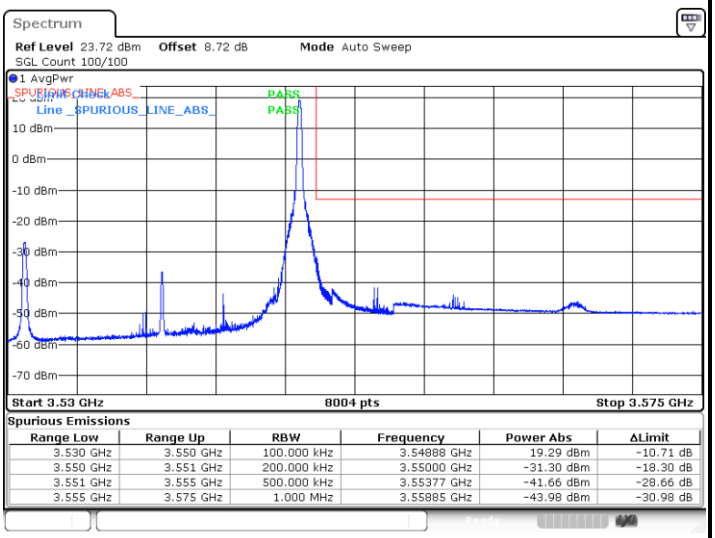


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.425 GHz	3.445 GHz	1.000 MHz	3.44106 GHz	-45.28 dBm	-32.28 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44896 GHz	-42.06 dBm	-29.06 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44999 GHz	-32.40 dBm	-19.40 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45110 GHz	19.33 dBm	-10.67 dB

Date: 17.AUG.2022 11:34:31

Highest Band Edge / 1 RB

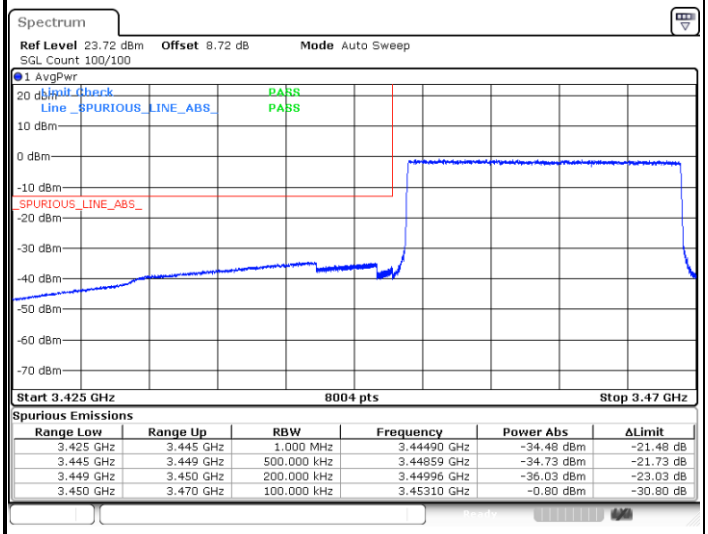


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54888 GHz	19.29 dBm	-10.71 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55000 GHz	-31.30 dBm	-18.30 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55377 GHz	-41.66 dBm	-28.66 dB
3.555 GHz	3.575 GHz	1.000 MHz	3.55885 GHz	-43.98 dBm	-30.98 dB

Date: 17.AUG.2022 11:48:05

Lowest Band Edge / Full RB

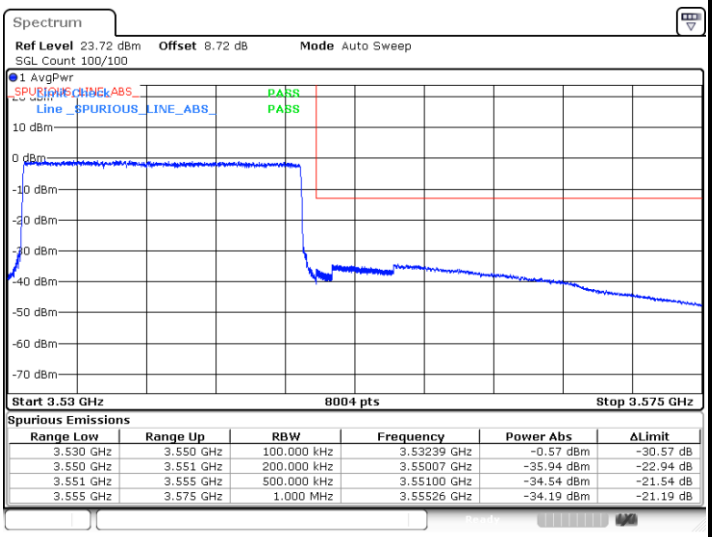


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.425 GHz	3.445 GHz	1.000 MHz	3.44490 GHz	-34.48 dBm	-21.48 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44859 GHz	-34.73 dBm	-21.73 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44996 GHz	-36.03 dBm	-23.03 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45310 GHz	-0.80 dBm	-30.80 dB

Date: 17.AUG.2022 11:40:37

Highest Band Edge / Full RB



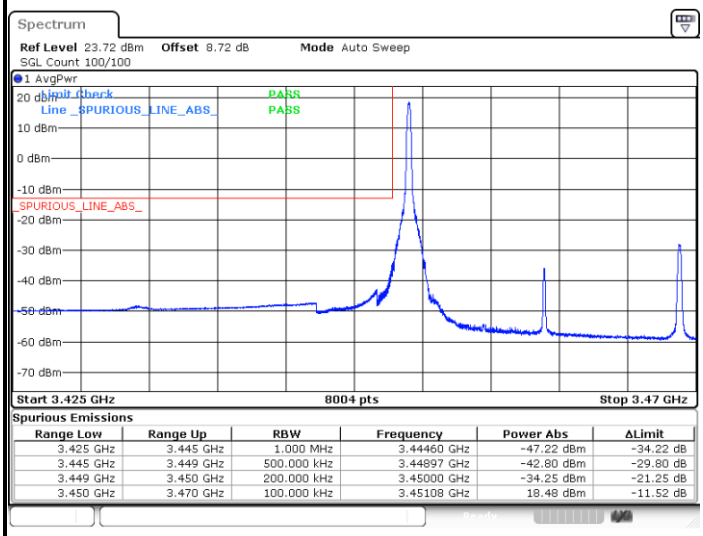
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.53239 GHz	-0.57 dBm	-30.57 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55007 GHz	-35.94 dBm	-22.94 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55100 GHz	-34.54 dBm	-21.54 dB
3.555 GHz	3.575 GHz	1.000 MHz	3.55526 GHz	-34.19 dBm	-21.19 dB

Date: 17.AUG.2022 11:53:27

LTE Band 42 / 20MHz / 64QAM

Lowest Band Edge / 1 RB

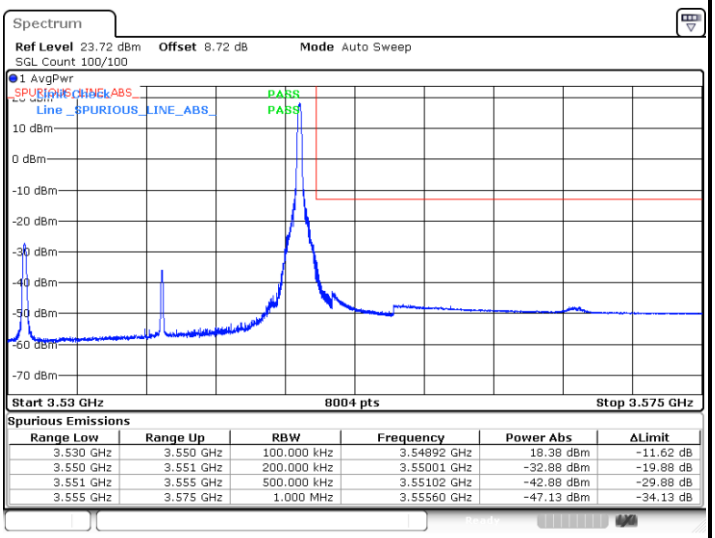


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.425 GHz	3.445 GHz	1.000 MHz	3.44460 GHz	-47.22 dBm	-34.22 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44897 GHz	-42.80 dBm	-29.80 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.45000 GHz	-34.25 dBm	-21.25 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45108 GHz	18.48 dBm	-11.52 dB

Date: 17.AUG.2022 11:35:18

Highest Band Edge / 1 RB

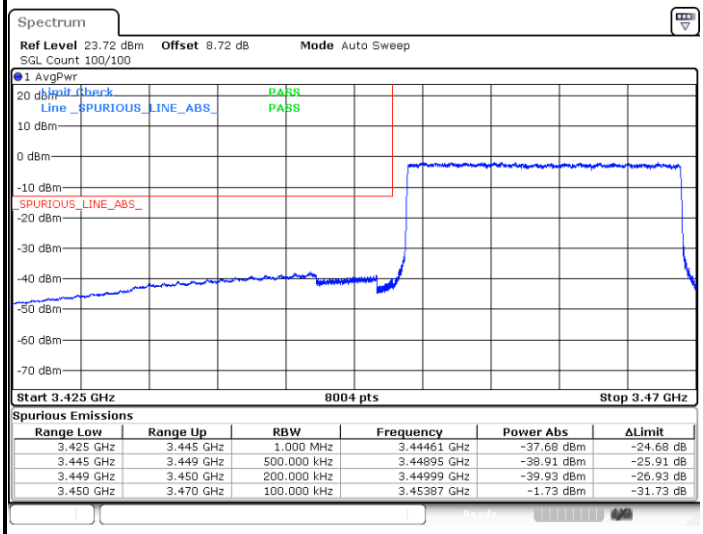


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54892 GHz	18.38 dBm	-11.62 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55001 GHz	-32.88 dBm	-19.88 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55102 GHz	-42.88 dBm	-29.88 dB
3.555 GHz	3.575 GHz	1.000 MHz	3.55560 GHz	-47.13 dBm	-34.13 dB

Date: 17.AUG.2022 11:48:52

Lowest Band Edge / Full RB

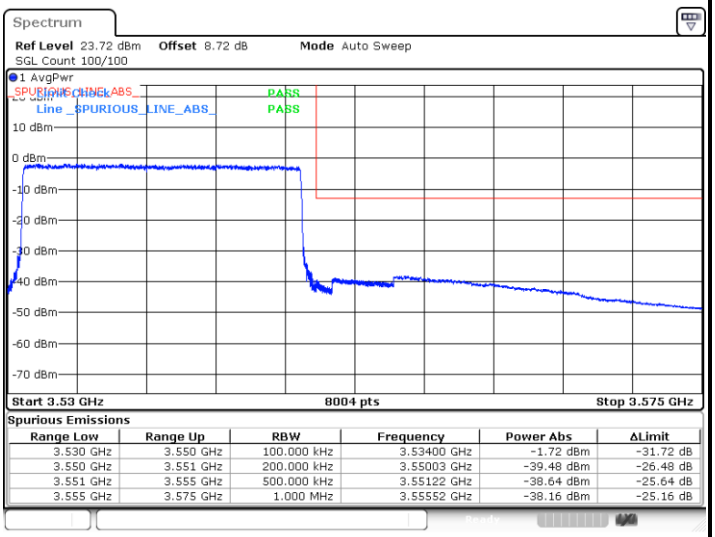


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.425 GHz	3.445 GHz	1.000 MHz	3.44461 GHz	-37.68 dBm	-24.68 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44895 GHz	-38.91 dBm	-25.91 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44999 GHz	-39.93 dBm	-26.93 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45387 GHz	-1.73 dBm	-31.73 dB

Date: 17.AUG.2022 11:41:23

Highest Band Edge / Full RB



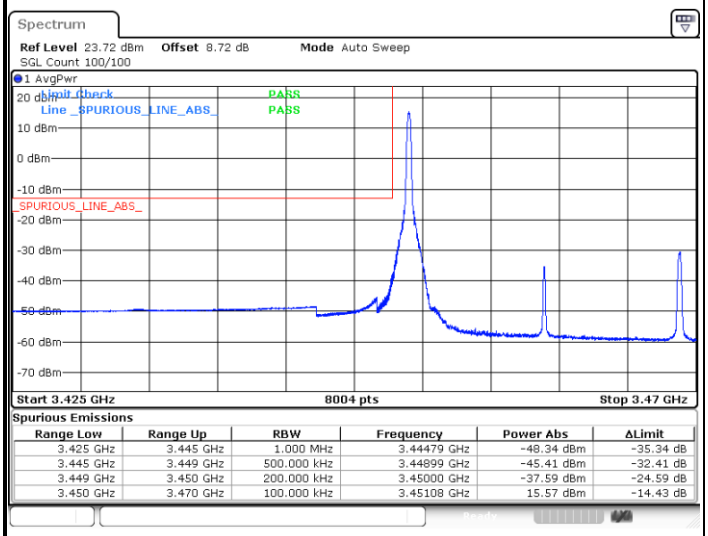
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.53400 GHz	-1.72 dBm	-31.72 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55003 GHz	-39.48 dBm	-26.48 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55122 GHz	-38.64 dBm	-25.64 dB
3.555 GHz	3.575 GHz	1.000 MHz	3.55552 GHz	-38.16 dBm	-25.16 dB

Date: 17.AUG.2022 11:54:14

LTE Band 42 / 20MHz / 256QAM

Lowest Band Edge / 1 RB

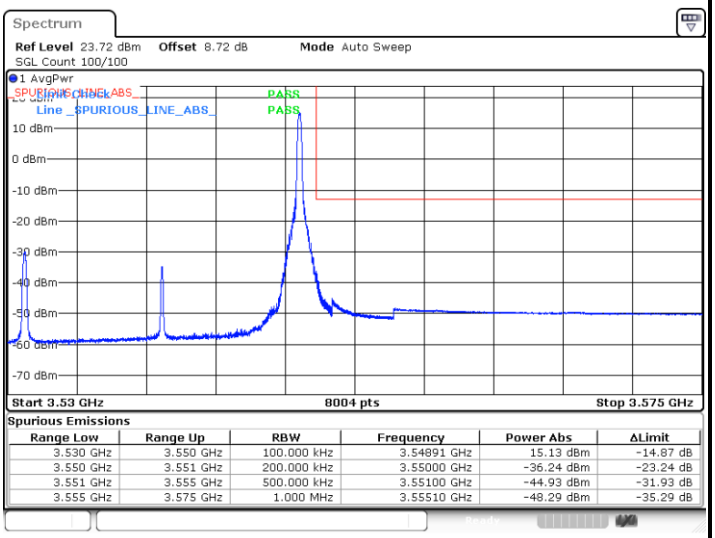


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.425 GHz	3.445 GHz	1.000 MHz	3.44479 GHz	-48.34 dBm	-35.34 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44899 GHz	-45.41 dBm	-32.41 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.45000 GHz	-37.59 dBm	-24.59 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45108 GHz	15.57 dBm	-14.43 dB

Date: 17.AUG.2022 11:36:06

Highest Band Edge / 1 RB

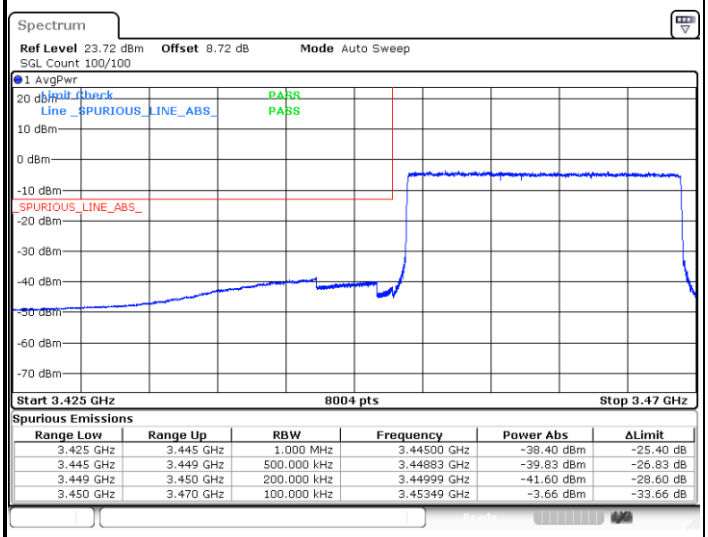


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54891 GHz	15.13 dBm	-14.87 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55000 GHz	-36.24 dBm	-23.24 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55100 GHz	-44.93 dBm	-31.93 dB
3.555 GHz	3.575 GHz	1.000 MHz	3.55510 GHz	-48.29 dBm	-35.29 dB

Date: 17.AUG.2022 11:49:39

Lowest Band Edge / Full RB

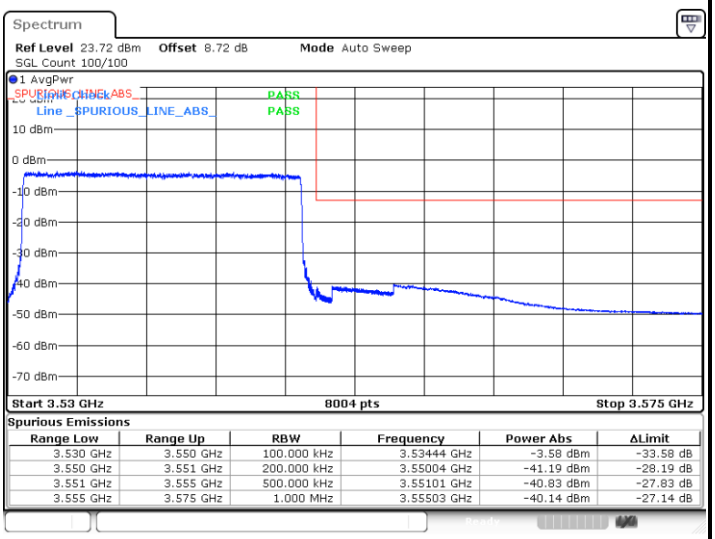


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.425 GHz	3.445 GHz	1.000 MHz	3.44500 GHz	-38.40 dBm	-25.40 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44883 GHz	-39.83 dBm	-26.83 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44999 GHz	-41.60 dBm	-28.60 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45349 GHz	-3.66 dBm	-33.66 dB

Date: 17.AUG.2022 11:42:10

Highest Band Edge / Full RB



Spurious Emissions

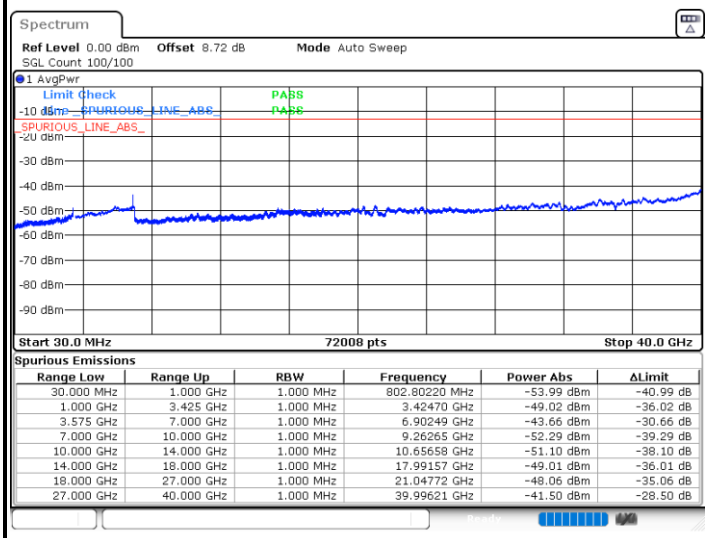
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.53444 GHz	-3.58 dBm	-33.58 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55004 GHz	-41.19 dBm	-28.19 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55101 GHz	-40.83 dBm	-27.83 dB
3.555 GHz	3.575 GHz	1.000 MHz	3.55503 GHz	-40.14 dBm	-27.14 dB

Date: 17.AUG.2022 11:55:01

Conducted Spurious Emission

LTE Band 42 / 5MHz

Lowest Channel / QPSK

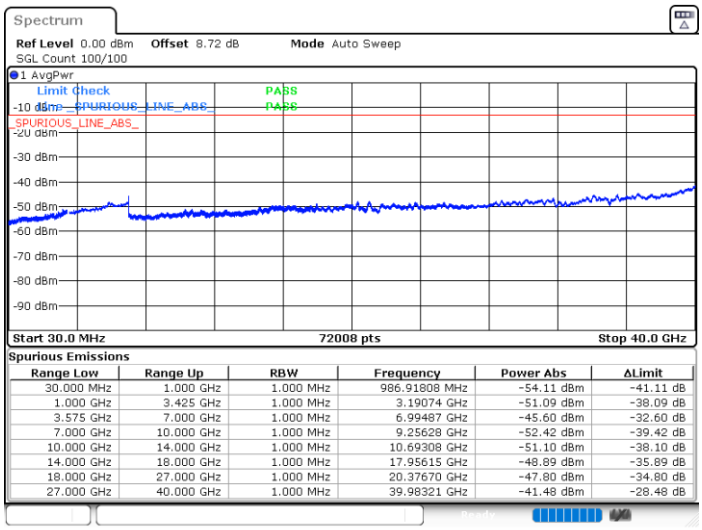


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	802.80220 MHz	-53.99 dBm	-40.99 dB
1.000 GHz	3.425 GHz	1.000 MHz	3.42470 GHz	-49.02 dBm	-36.02 dB
3.575 GHz	7.000 GHz	1.000 MHz	6.90249 GHz	-43.66 dBm	-30.66 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.26265 GHz	-52.29 dBm	-39.29 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.65658 GHz	-51.10 dBm	-38.10 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.99157 GHz	-49.01 dBm	-36.01 dB
18.000 GHz	27.000 GHz	1.000 MHz	21.04772 GHz	-48.06 dBm	-35.06 dB
27.000 GHz	40.000 GHz	1.000 MHz	39.99621 GHz	-41.50 dBm	-28.50 dB

Date: 17.AUG.2022 03:22:33

Middle Channel / QPSK

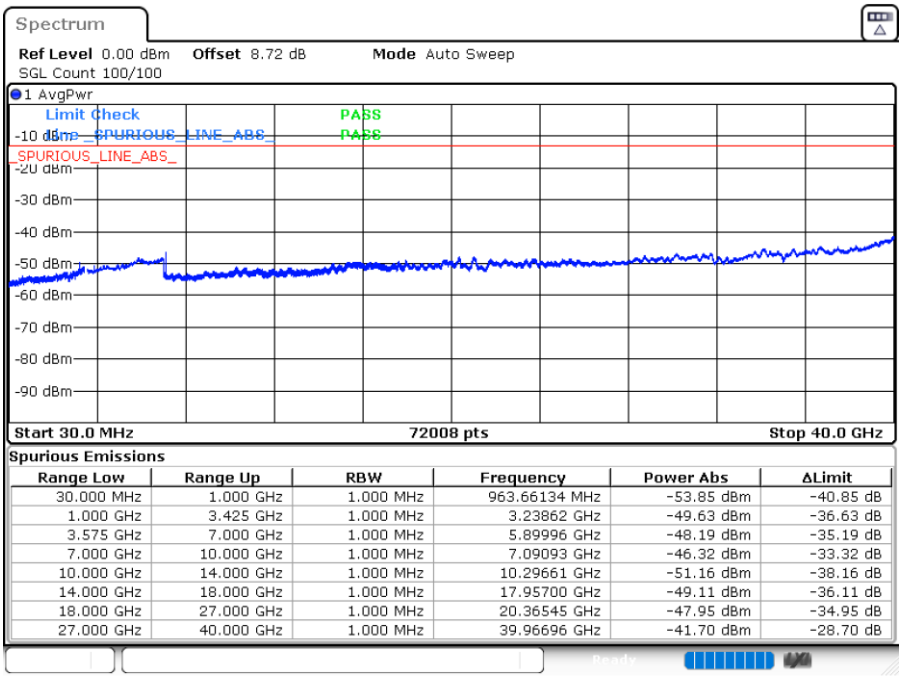


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	986.91808 MHz	-54.11 dBm	-41.11 dB
1.000 GHz	3.425 GHz	1.000 MHz	3.19074 GHz	-51.09 dBm	-38.09 dB
3.575 GHz	7.000 GHz	1.000 MHz	6.99487 GHz	-45.60 dBm	-32.60 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.25628 GHz	-52.42 dBm	-39.42 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.69308 GHz	-51.10 dBm	-38.10 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.95615 GHz	-48.89 dBm	-35.89 dB
18.000 GHz	27.000 GHz	1.000 MHz	20.37670 GHz	-47.80 dBm	-34.80 dB
27.000 GHz	40.000 GHz	1.000 MHz	39.98321 GHz	-41.48 dBm	-28.48 dB

Date: 17.AUG.2022 03:44:30

Highest Channel / QPSK



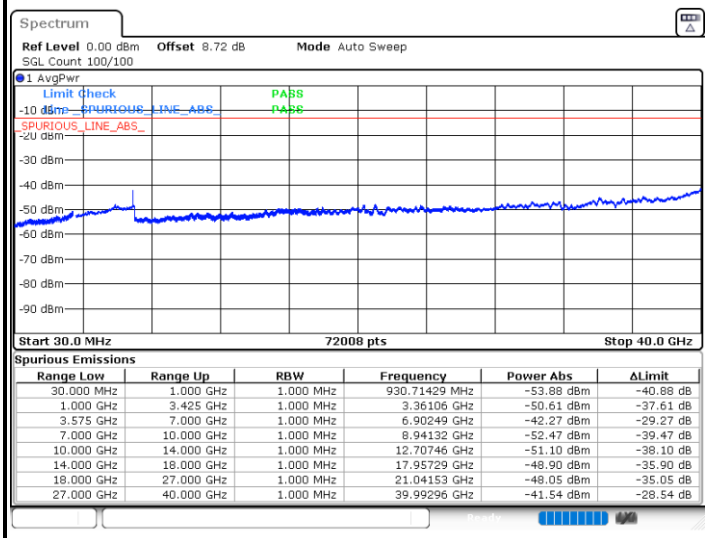
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	963.66134 MHz	-53.85 dBm	-40.85 dB
1.000 GHz	3.425 GHz	1.000 MHz	3.23862 GHz	-49.63 dBm	-36.63 dB
3.575 GHz	7.000 GHz	1.000 MHz	5.89996 GHz	-48.19 dBm	-35.19 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.09093 GHz	-46.32 dBm	-33.32 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.29661 GHz	-51.16 dBm	-38.16 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.95700 GHz	-49.11 dBm	-36.11 dB
18.000 GHz	27.000 GHz	1.000 MHz	20.36545 GHz	-47.95 dBm	-34.95 dB
27.000 GHz	40.000 GHz	1.000 MHz	39.96696 GHz	-41.70 dBm	-28.70 dB

Date: 17.AUG.2022 03:45:50

LTE Band 42 / 10MHz

Lowest Channel / QPSK

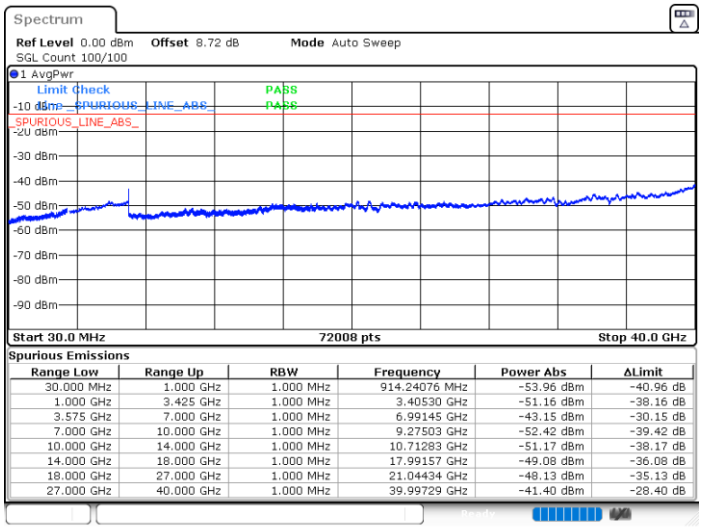


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	930.71429 MHz	-53.88 dBm	-40.88 dB
1.000 GHz	3.425 GHz	1.000 MHz	3.36106 GHz	-50.61 dBm	-37.61 dB
3.575 GHz	7.000 GHz	1.000 MHz	6.90249 GHz	-42.27 dBm	-29.27 dB
7.000 GHz	10.000 GHz	1.000 MHz	8.94132 GHz	-52.47 dBm	-39.47 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.70746 GHz	-51.10 dBm	-38.10 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.95729 GHz	-48.90 dBm	-35.90 dB
18.000 GHz	27.000 GHz	1.000 MHz	21.04153 GHz	-48.05 dBm	-35.05 dB
27.000 GHz	40.000 GHz	1.000 MHz	39.99296 GHz	-41.54 dBm	-28.54 dB

Date: 17.AUG.2022 04:05:41

Middle Channel / QPSK

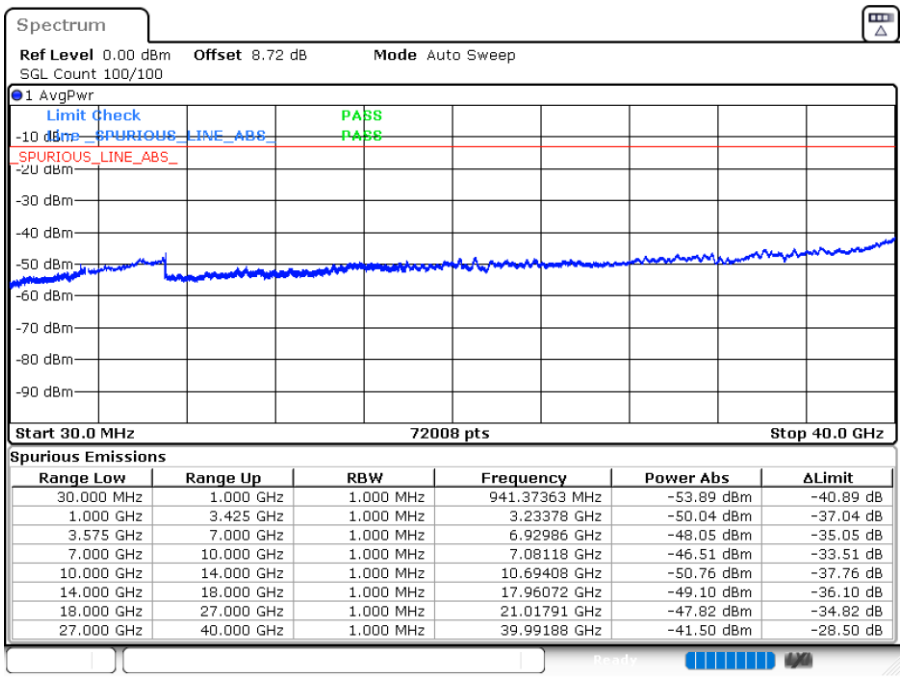


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	914.24076 MHz	-53.96 dBm	-40.96 dB
1.000 GHz	3.425 GHz	1.000 MHz	3.40530 GHz	-51.16 dBm	-38.16 dB
3.575 GHz	7.000 GHz	1.000 MHz	6.99145 GHz	-43.15 dBm	-30.15 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.27503 GHz	-52.42 dBm	-39.42 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.71283 GHz	-51.17 dBm	-38.17 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.99157 GHz	-49.08 dBm	-36.08 dB
18.000 GHz	27.000 GHz	1.000 MHz	21.04434 GHz	-48.13 dBm	-35.13 dB
27.000 GHz	40.000 GHz	1.000 MHz	39.99729 GHz	-41.40 dBm	-28.40 dB

Date: 17.AUG.2022 04:28:40

Highest Channel / QPSK



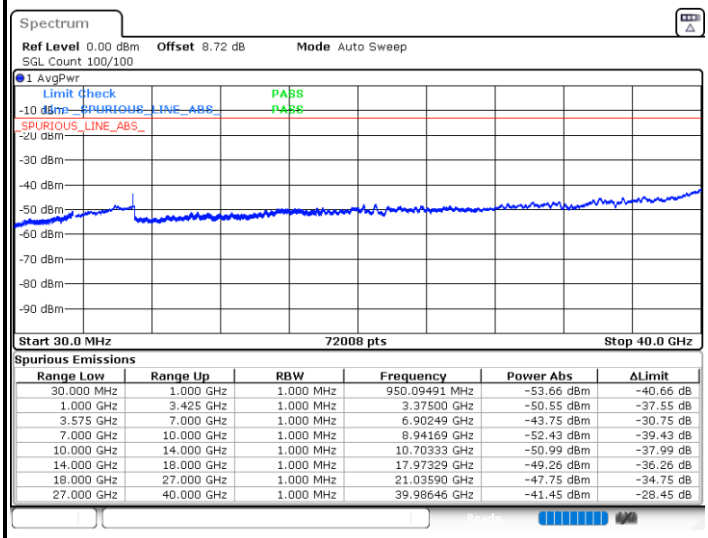
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	941.37363 MHz	-53.89 dBm	-40.89 dB
1.000 GHz	3.425 GHz	1.000 MHz	3.23378 GHz	-50.04 dBm	-37.04 dB
3.575 GHz	7.000 GHz	1.000 MHz	6.92986 GHz	-48.05 dBm	-35.05 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.08118 GHz	-46.51 dBm	-33.51 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.69408 GHz	-50.76 dBm	-37.76 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.96072 GHz	-49.10 dBm	-36.10 dB
18.000 GHz	27.000 GHz	1.000 MHz	21.01791 GHz	-47.82 dBm	-34.82 dB
27.000 GHz	40.000 GHz	1.000 MHz	39.99188 GHz	-41.50 dBm	-28.50 dB

Date: 17.AUG.2022 04:30:00

LTE Band 42 / 15MHz

Lowest Channel / QPSK

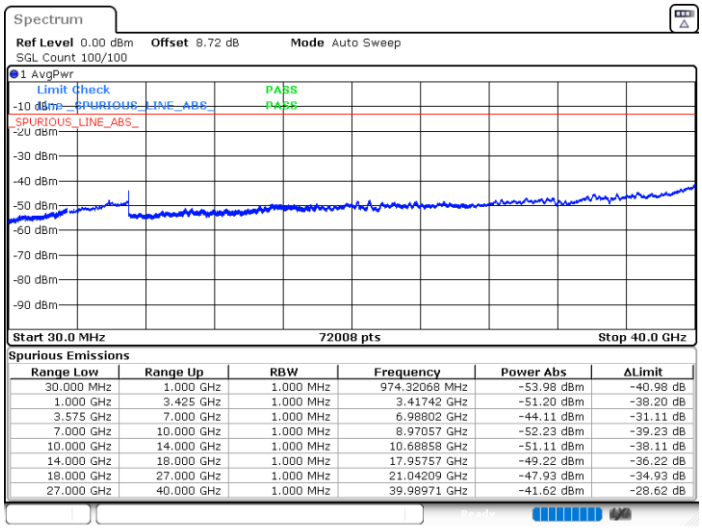


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	950.09491 MHz	-53.66 dBm	-40.66 dB
1.000 GHz	3.425 GHz	1.000 MHz	3.37500 GHz	-50.55 dBm	-37.55 dB
3.575 GHz	7.000 GHz	1.000 MHz	6.90249 GHz	-43.75 dBm	-30.75 dB
7.000 GHz	10.000 GHz	1.000 MHz	8.94169 GHz	-52.43 dBm	-39.43 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.70333 GHz	-50.99 dBm	-37.99 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.97329 GHz	-49.26 dBm	-36.26 dB
18.000 GHz	27.000 GHz	1.000 MHz	21.03590 GHz	-47.75 dBm	-34.75 dB
27.000 GHz	40.000 GHz	1.000 MHz	39.98646 GHz	-41.45 dBm	-28.45 dB

Date: 17.AUG.2022 04:39:42

Middle Channel / QPSK

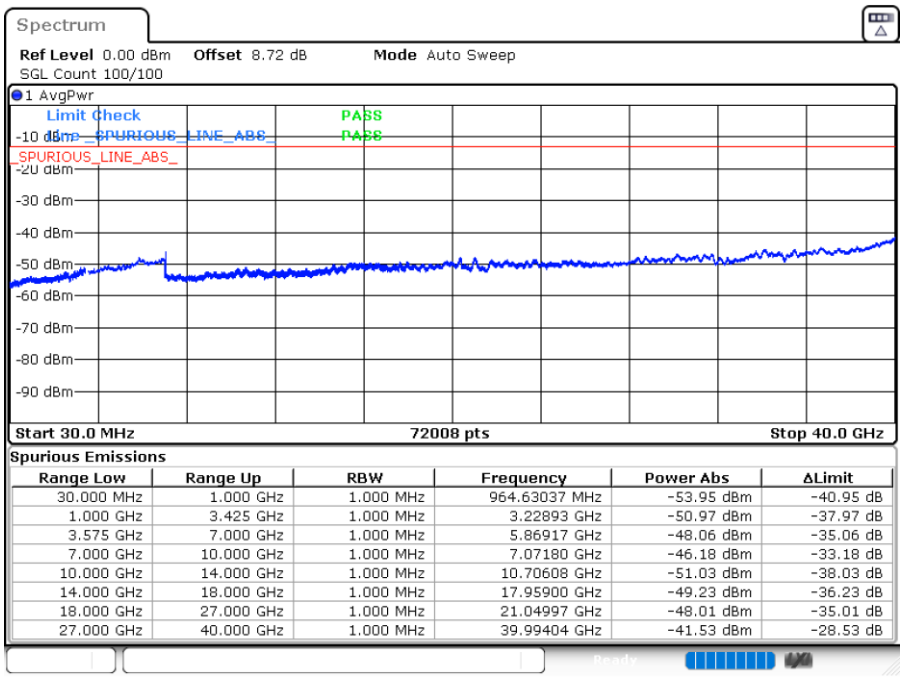


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	974.32068 MHz	-53.98 dBm	-40.98 dB
1.000 GHz	3.425 GHz	1.000 MHz	3.41742 GHz	-51.20 dBm	-38.20 dB
3.575 GHz	7.000 GHz	1.000 MHz	6.98802 GHz	-44.11 dBm	-31.11 dB
7.000 GHz	10.000 GHz	1.000 MHz	8.97057 GHz	-52.23 dBm	-39.23 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.68858 GHz	-51.11 dBm	-38.11 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.95757 GHz	-49.22 dBm	-36.22 dB
18.000 GHz	27.000 GHz	1.000 MHz	21.04209 GHz	-47.93 dBm	-34.93 dB
27.000 GHz	40.000 GHz	1.000 MHz	39.98971 GHz	-41.62 dBm	-28.62 dB

Date: 17.AUG.2022 04:51:02

Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	964.63037 MHz	-53.95 dBm	-40.95 dB
1.000 GHz	3.425 GHz	1.000 MHz	3.22893 GHz	-50.97 dBm	-37.97 dB
3.575 GHz	7.000 GHz	1.000 MHz	5.86917 GHz	-48.06 dBm	-35.06 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.07180 GHz	-46.18 dBm	-33.18 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.70608 GHz	-51.03 dBm	-38.03 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.95900 GHz	-49.23 dBm	-36.23 dB
18.000 GHz	27.000 GHz	1.000 MHz	21.04997 GHz	-48.01 dBm	-35.01 dB
27.000 GHz	40.000 GHz	1.000 MHz	39.99404 GHz	-41.53 dBm	-28.53 dB

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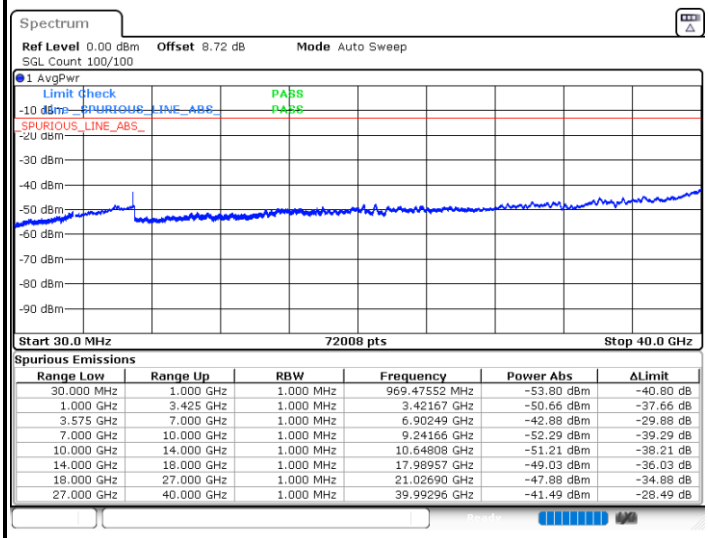
LTE Band 42 / 20MHz

Lowest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	969.47552 MHz	-53.80 dBm	-40.80 dB
1.000 GHz	3.425 GHz	1.000 MHz	3.42167 GHz	-50.66 dBm	-37.66 dB
3.575 GHz	7.000 GHz	1.000 MHz	6.90249 GHz	-42.88 dBm	-29.88 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.24166 GHz	-52.29 dBm	-39.29 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.64808 GHz	-51.21 dBm	-38.21 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.98957 GHz	-49.03 dBm	-36.03 dB
18.000 GHz	27.000 GHz	1.000 MHz	21.02690 GHz	-47.88 dBm	-34.88 dB
27.000 GHz	40.000 GHz	1.000 MHz	39.99296 GHz	-41.49 dBm	-28.49 dB

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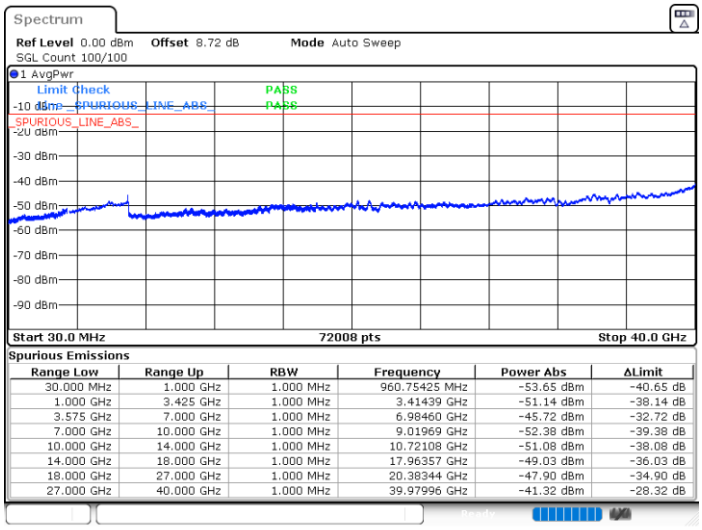
Middle Channel / QPSK

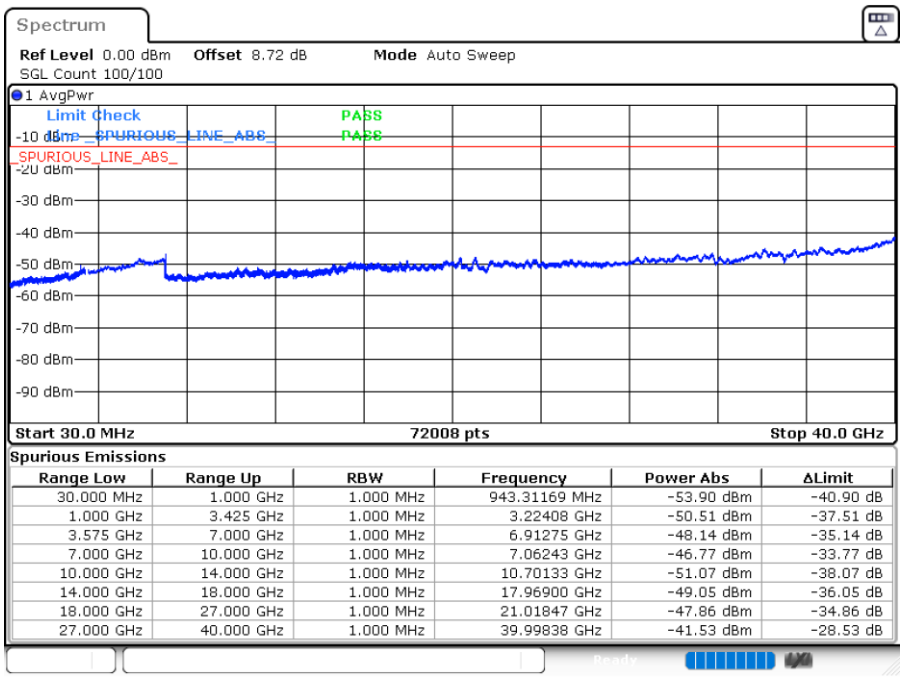


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	960.75425 MHz	-53.65 dBm	-40.65 dB
1.000 GHz	3.425 GHz	1.000 MHz	3.41439 GHz	-51.14 dBm	-38.14 dB
3.575 GHz	7.000 GHz	1.000 MHz	6.98460 GHz	-45.72 dBm	-32.72 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.01969 GHz	-52.38 dBm	-39.38 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.72108 GHz	-51.08 dBm	-38.08 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.96357 GHz	-49.03 dBm	-36.03 dB
18.000 GHz	27.000 GHz	1.000 MHz	20.38344 GHz	-47.90 dBm	-34.90 dB
27.000 GHz	40.000 GHz	1.000 MHz	39.97996 GHz	-41.32 dBm	-28.32 dB

Date: 17.AUG.2022 04:55:04

Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	943.31169 MHz	-53.90 dBm	-40.90 dB
1.000 GHz	3.425 GHz	1.000 MHz	3.22408 GHz	-50.51 dBm	-37.51 dB
3.575 GHz	7.000 GHz	1.000 MHz	6.91275 GHz	-48.14 dBm	-35.14 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.06243 GHz	-46.77 dBm	-33.77 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.70133 GHz	-51.07 dBm	-38.07 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.96900 GHz	-49.05 dBm	-36.05 dB
18.000 GHz	27.000 GHz	1.000 MHz	21.01847 GHz	-47.86 dBm	-34.86 dB
27.000 GHz	40.000 GHz	1.000 MHz	39.99838 GHz	-41.53 dBm	-28.53 dB

Date: 17.AUG.2022 04:56:24

Frequency Stability

Test Conditions		LTE Band 42 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0013	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0021	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0017	
0	Normal Voltage	0.0025	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0026	
20	Maximum Voltage	0.0023	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0028	

Note:

1. Normal Voltage =3.89 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.52 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Chris Chen	Temperature :	23~25℃
		Relative Humidity :	41~42%

Note: Pre-scanned harmonic for the different antenna combinations, we choose the worst antenna mode to perform final test.

LTE Band 42 / 20MHz / QPSK / RB Size 1 Offset 0(Ant.0)								
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	6984	-49.24	-13	-36.24	-59.45	3.03	13.24	H
	10476	-40.11	-13	-27.11	-49.56	3.56	13.01	H
	13962	-29.54	-13	-16.54	-39.06	3.92	13.44	H
	6984	-49.28	-13	-36.28	-59.49	3.03	13.24	V
	10476	-40.25	-13	-27.25	-49.70	3.56	13.01	V
	13962	-29.59	-13	-16.59	-39.11	3.92	13.44	V

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