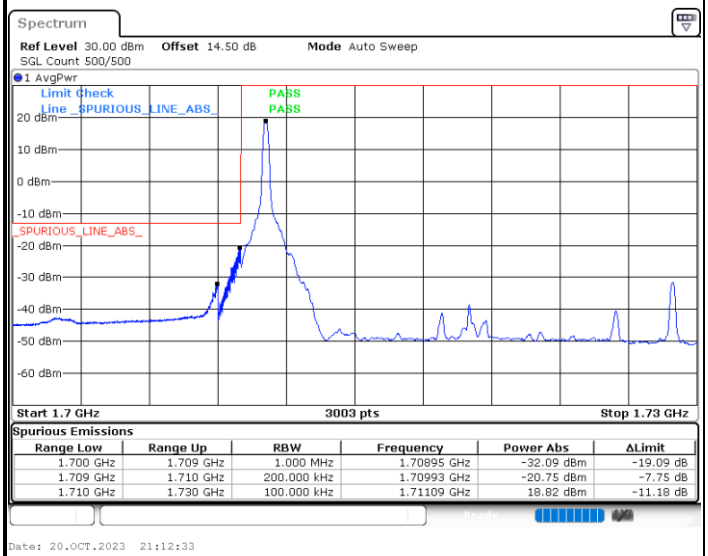
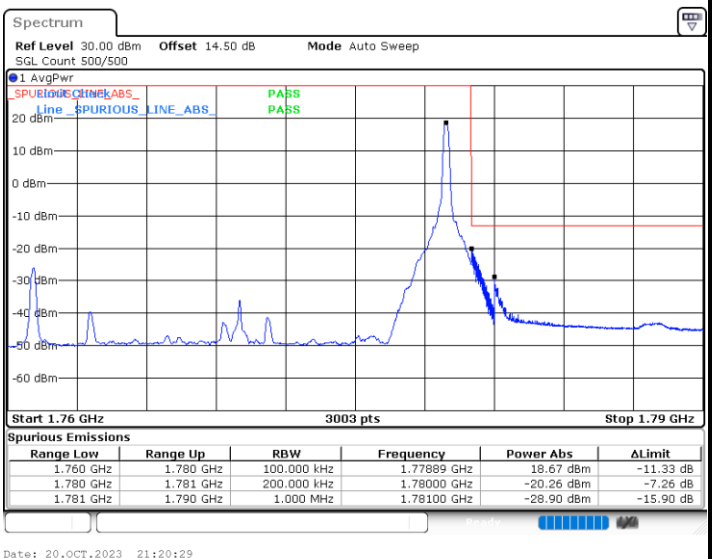
LTE Band 66 / 20MHz / 16QAM

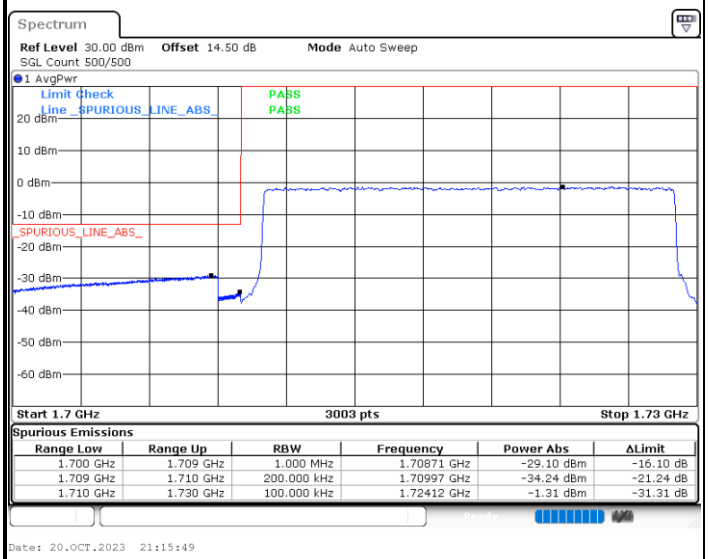
Lowest Band Edge / 1 RB



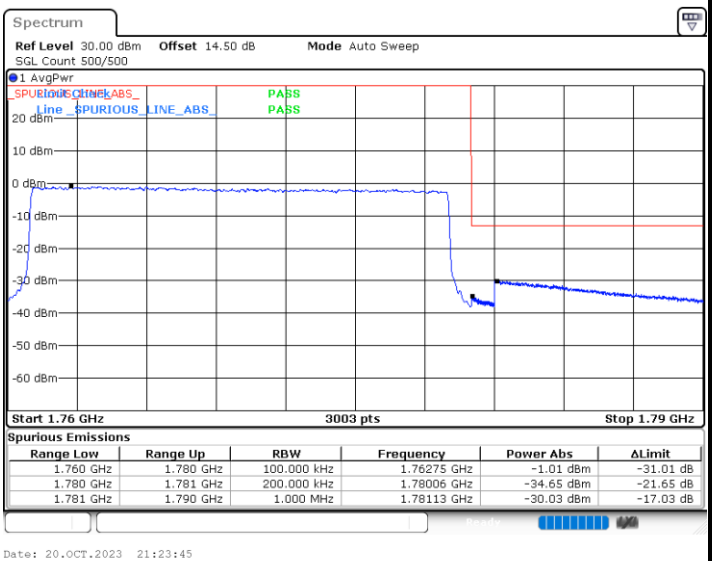
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

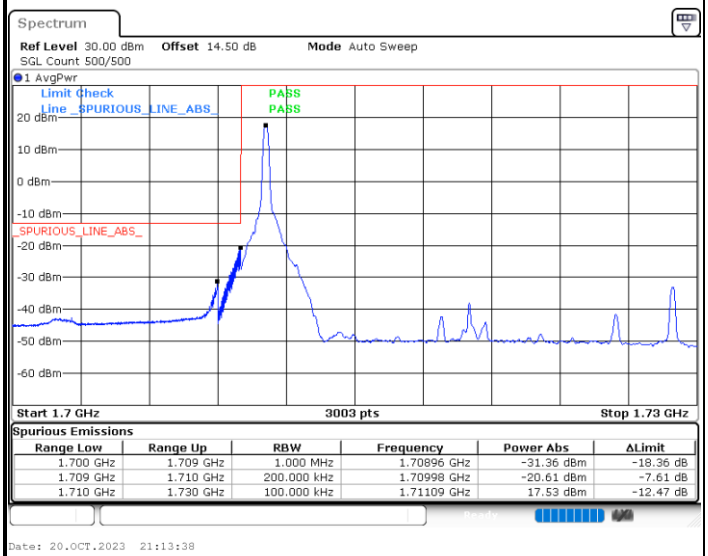


Highest Band Edge / Full RB



LTE Band 66 / 20MHz / 64QAM

Lowest Band Edge / 1 RB

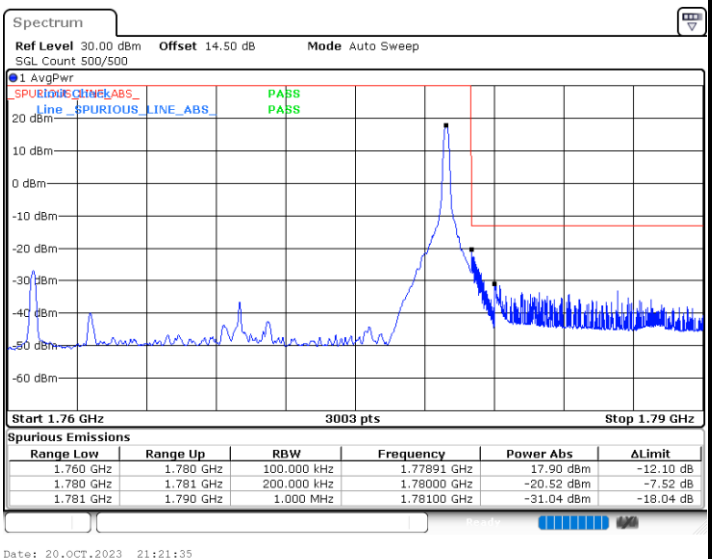


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70896 GHz	-31.36 dBm	-18.36 dB
1.709 GHz	1.710 GHz	200.000 kHz	1.70998 GHz	-20.61 dBm	-7.61 dB
1.710 GHz	1.730 GHz	100.000 kHz	1.71109 GHz	17.53 dBm	-12.47 dB

Date: 20.OCT.2023 21:13:38

Highest Band Edge / 1 RB

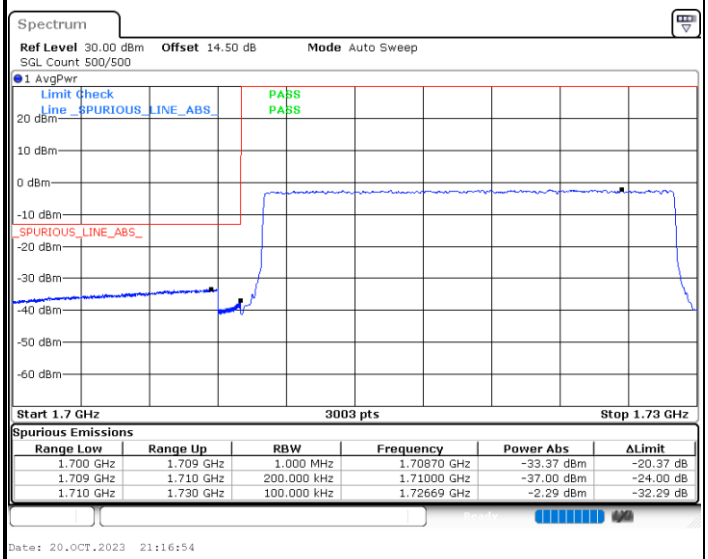


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.760 GHz	1.780 GHz	100.000 kHz	1.77891 GHz	17.90 dBm	-12.10 dB
1.780 GHz	1.781 GHz	200.000 kHz	1.78000 GHz	-20.52 dBm	-7.52 dB
1.781 GHz	1.790 GHz	1.000 MHz	1.78100 GHz	-31.04 dBm	-18.04 dB

Date: 20.OCT.2023 21:21:35

Lowest Band Edge / Full RB

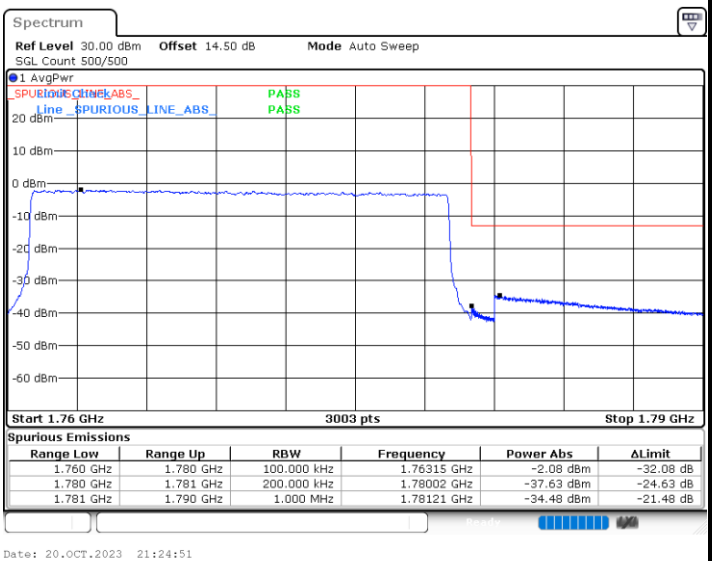


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70870 GHz	-33.37 dBm	-20.37 dB
1.709 GHz	1.710 GHz	200.000 kHz	1.71000 GHz	-37.00 dBm	-24.00 dB
1.710 GHz	1.730 GHz	100.000 kHz	1.72669 GHz	-2.29 dBm	-32.29 dB

Date: 20.OCT.2023 21:16:54

Highest Band Edge / Full RB



Spurious Emissions

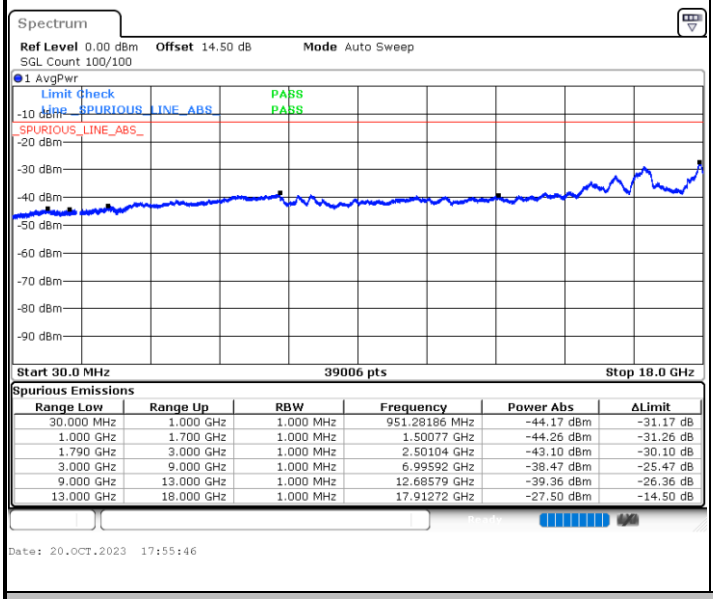
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.760 GHz	1.780 GHz	100.000 kHz	1.76315 GHz	-2.08 dBm	-32.08 dB
1.780 GHz	1.781 GHz	200.000 kHz	1.78002 GHz	-37.63 dBm	-24.63 dB
1.781 GHz	1.790 GHz	1.000 MHz	1.78121 GHz	-34.48 dBm	-21.48 dB

Date: 20.OCT.2023 21:24:51

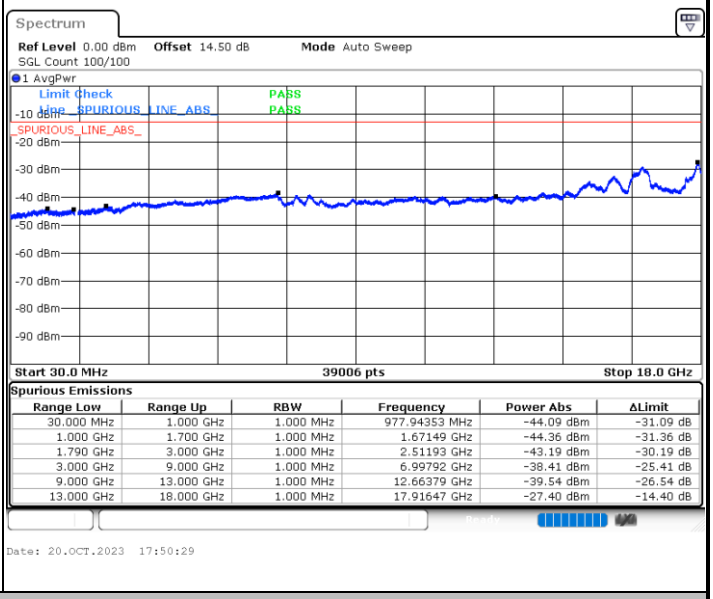
Conducted Spurious Emission

LTE Band 66 / 1.4MHz

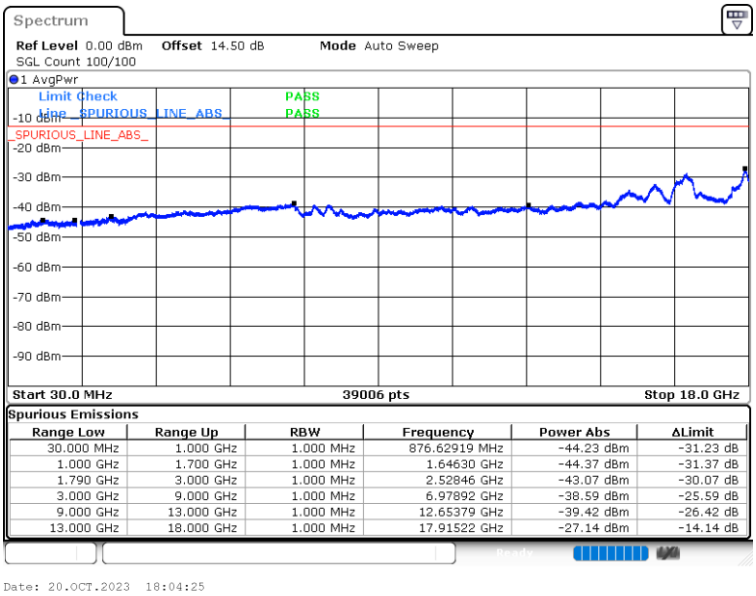
Lowest Channel / QPSK



Middle Channel / QPSK

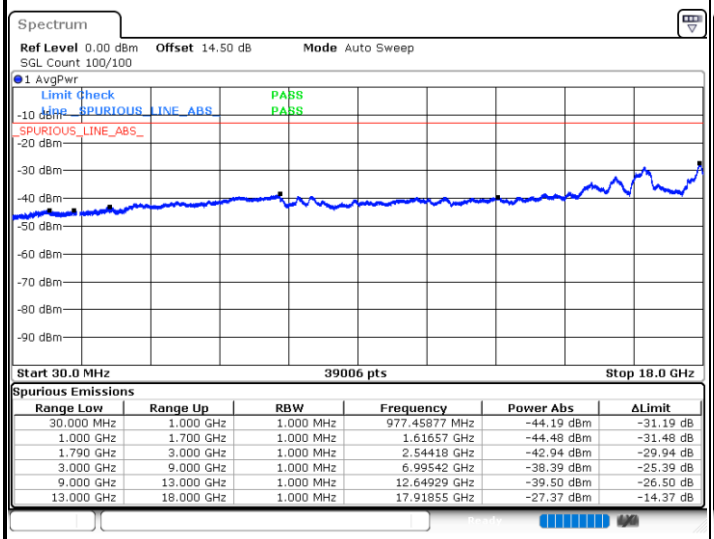


Highest Channel / QPSK



LTE Band 66 / 3MHz

Lowest Channel / QPSK

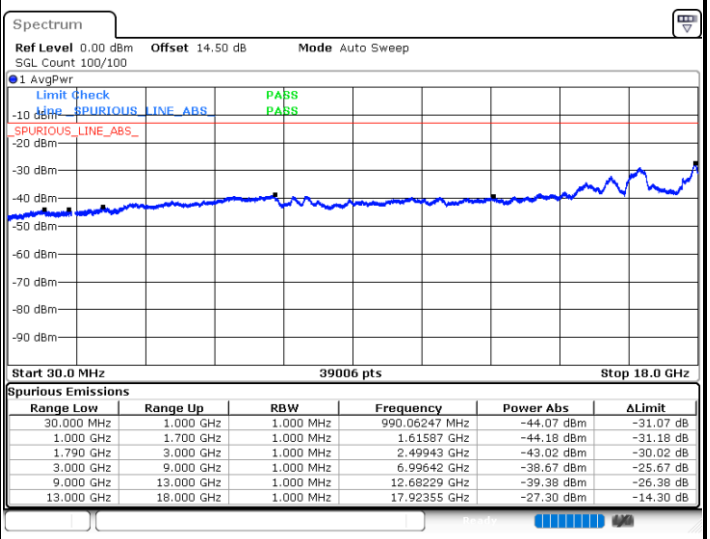


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	977.45877 MHz	-44.19 dBm	-31.19 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.61657 GHz	-44.48 dBm	-31.48 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.54418 GHz	-42.94 dBm	-29.94 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99542 GHz	-38.39 dBm	-25.39 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.64929 GHz	-39.50 dBm	-26.50 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.91855 GHz	-27.37 dBm	-14.37 dB

Date: 20.OCT.2023 18:31:01

Middle Channel / QPSK

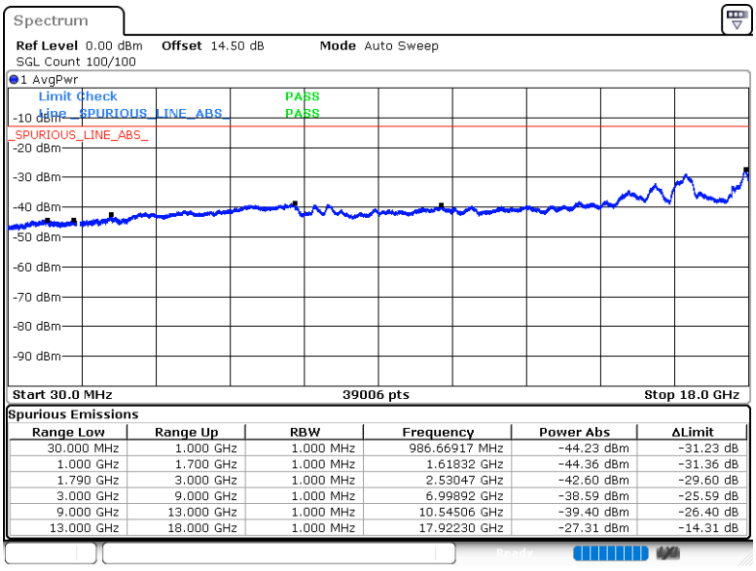


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	990.06247 MHz	-44.07 dBm	-31.07 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.61587 GHz	-44.18 dBm	-31.18 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.49943 GHz	-43.02 dBm	-30.02 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99642 GHz	-38.67 dBm	-25.67 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.68229 GHz	-39.38 dBm	-26.38 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.92355 GHz	-27.30 dBm	-14.30 dB

Date: 20.OCT.2023 18:25:30

Highest Channel / QPSK



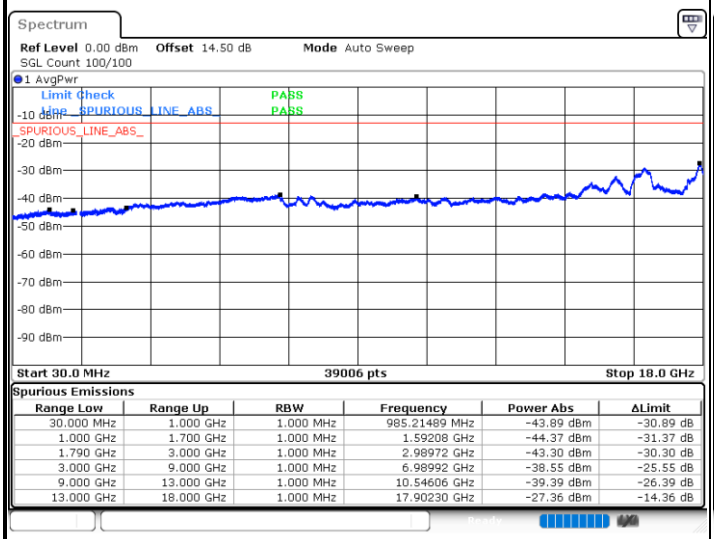
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	986.66917 MHz	-44.23 dBm	-31.23 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.61832 GHz	-44.36 dBm	-31.36 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.53047 GHz	-42.60 dBm	-29.60 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99892 GHz	-38.59 dBm	-25.59 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.54506 GHz	-39.40 dBm	-26.40 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.92230 GHz	-27.31 dBm	-14.31 dB

Date: 20.OCT.2023 18:52:58

LTE Band 66 / 5MHz

Lowest Channel / QPSK

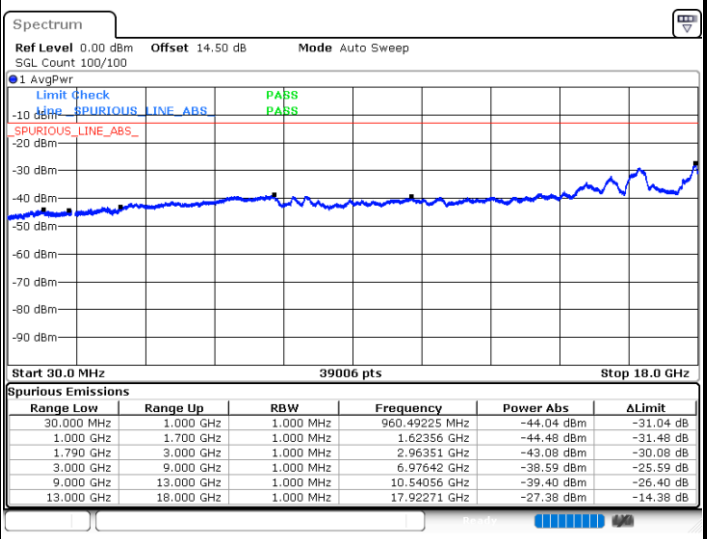


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	985.21489 MHz	-43.89 dBm	-30.89 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.59208 GHz	-44.37 dBm	-31.37 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.98972 GHz	-43.30 dBm	-30.30 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98992 GHz	-38.55 dBm	-25.55 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.54606 GHz	-39.39 dBm	-26.39 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.90230 GHz	-27.36 dBm	-14.36 dB

Date: 20.OCT.2023 19:05:58

Middle Channel / QPSK

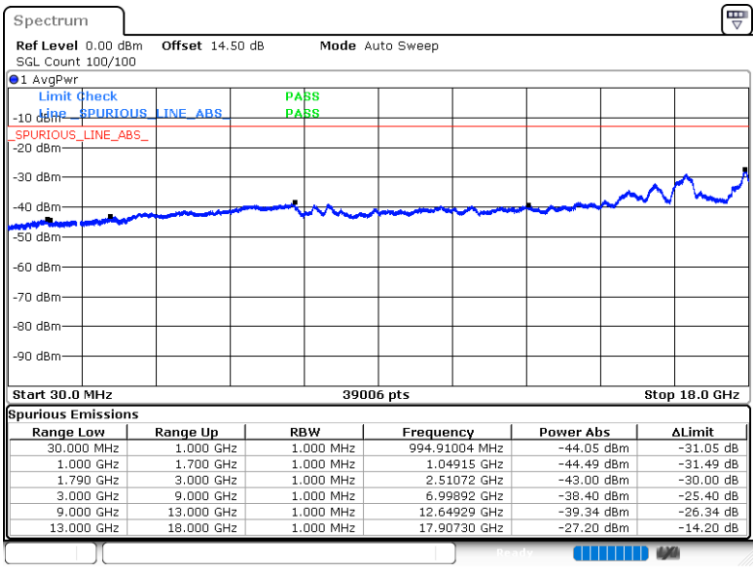


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	960.49225 MHz	-44.04 dBm	-31.04 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.62356 GHz	-44.48 dBm	-31.48 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.96351 GHz	-43.08 dBm	-30.08 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.97642 GHz	-38.59 dBm	-25.59 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.54056 GHz	-39.40 dBm	-26.40 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.92271 GHz	-27.38 dBm	-14.38 dB

Date: 20.OCT.2023 19:00:38

Highest Channel / QPSK



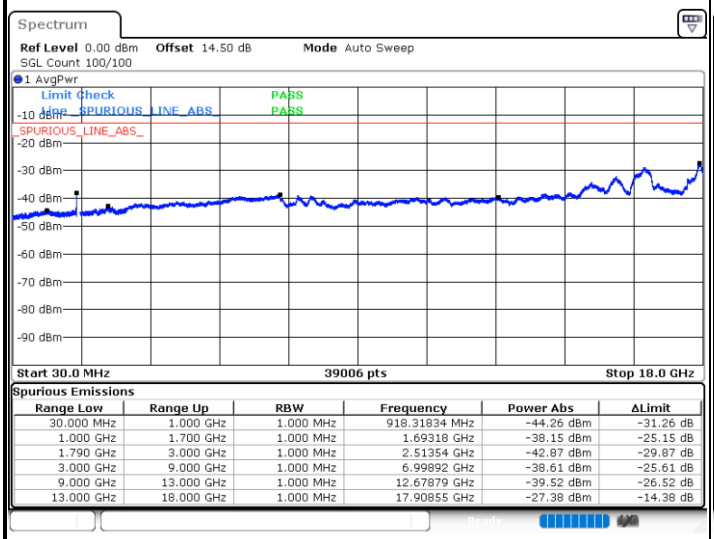
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	994.91004 MHz	-44.05 dBm	-31.05 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.04915 GHz	-44.49 dBm	-31.49 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.51072 GHz	-43.00 dBm	-30.00 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99892 GHz	-38.40 dBm	-25.40 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.64929 GHz	-39.34 dBm	-26.34 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.90730 GHz	-27.20 dBm	-14.20 dB

Date: 20.OCT.2023 19:17:10

LTE Band 66 / 10MHz

Lowest Channel / QPSK

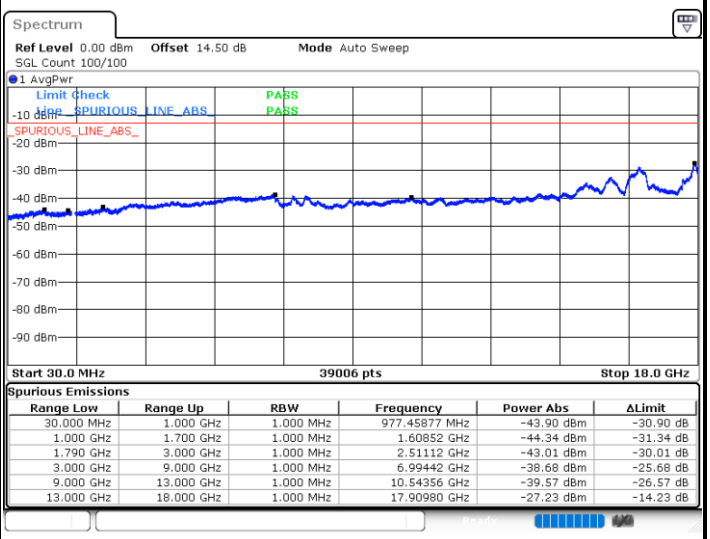


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	918.31834 MHz	-44.26 dBm	-31.26 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69318 GHz	-38.15 dBm	-25.15 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.51354 GHz	-42.87 dBm	-29.87 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99892 GHz	-38.61 dBm	-25.61 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.67879 GHz	-39.52 dBm	-26.52 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.90855 GHz	-27.38 dBm	-14.38 dB

Date: 20.OCT.2023 20:27:57

Middle Channel / QPSK

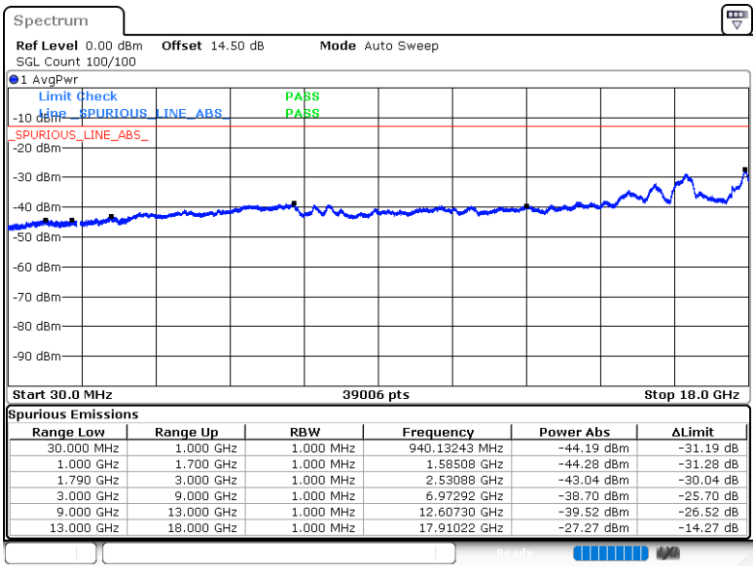


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	977.45877 MHz	-43.90 dBm	-30.90 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.60852 GHz	-44.34 dBm	-31.34 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.51112 GHz	-43.01 dBm	-30.01 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99442 GHz	-38.68 dBm	-25.68 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.54356 GHz	-39.57 dBm	-26.57 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.90980 GHz	-27.23 dBm	-14.23 dB

Date: 20.OCT.2023 20:19:19

Highest Channel / QPSK



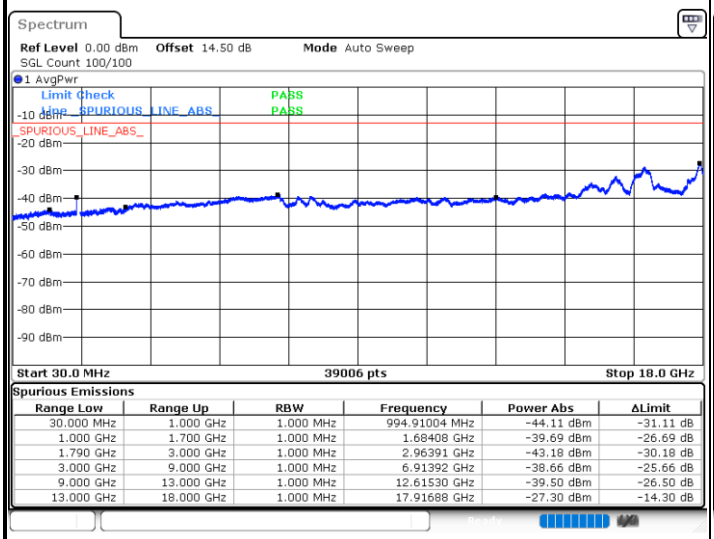
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	940.13243 MHz	-44.19 dBm	-31.19 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.58508 GHz	-44.28 dBm	-31.28 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.53088 GHz	-43.04 dBm	-30.04 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.97292 GHz	-38.70 dBm	-25.70 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.60730 GHz	-39.52 dBm	-26.52 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.91022 GHz	-27.27 dBm	-14.27 dB

Date: 20.OCT.2023 20:35:55

LTE Band 66 / 15MHz

Lowest Channel / QPSK

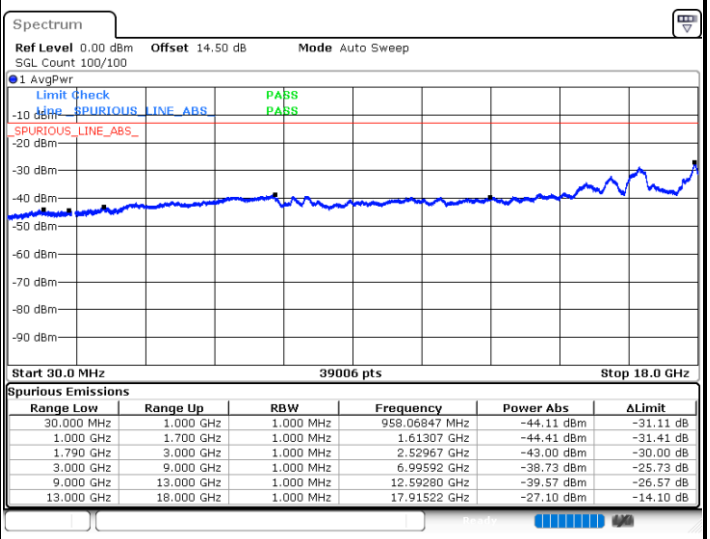


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	994.91004 MHz	-44.11 dBm	-31.11 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.68408 GHz	-39.69 dBm	-26.69 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.96391 GHz	-43.18 dBm	-30.18 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.91392 GHz	-38.66 dBm	-25.66 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.61530 GHz	-39.50 dBm	-26.50 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.91688 GHz	-27.30 dBm	-14.30 dB

Date: 20.OCT.2023 20:56:24

Middle Channel / QPSK

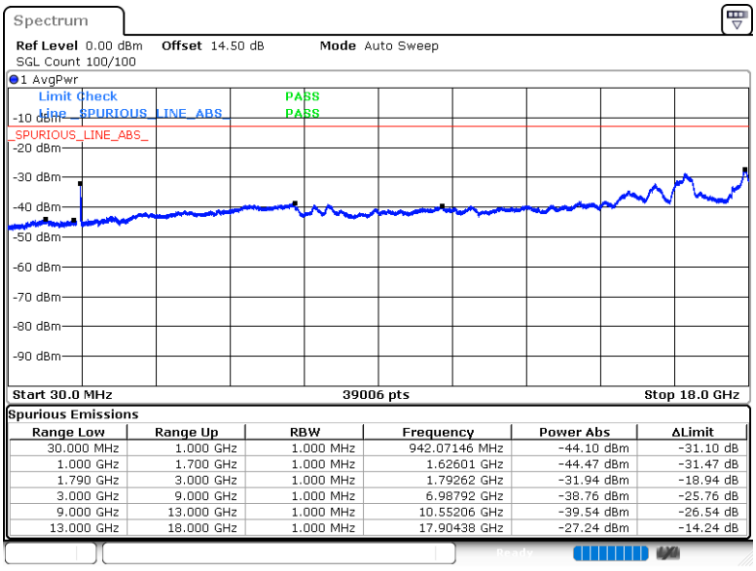


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	958.06847 MHz	-44.11 dBm	-31.11 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.61307 GHz	-44.41 dBm	-31.41 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.52967 GHz	-43.00 dBm	-30.00 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99592 GHz	-38.73 dBm	-25.73 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.59280 GHz	-39.57 dBm	-26.57 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.91522 GHz	-27.10 dBm	-14.10 dB

Date: 20.OCT.2023 20:47:48

Highest Channel / QPSK



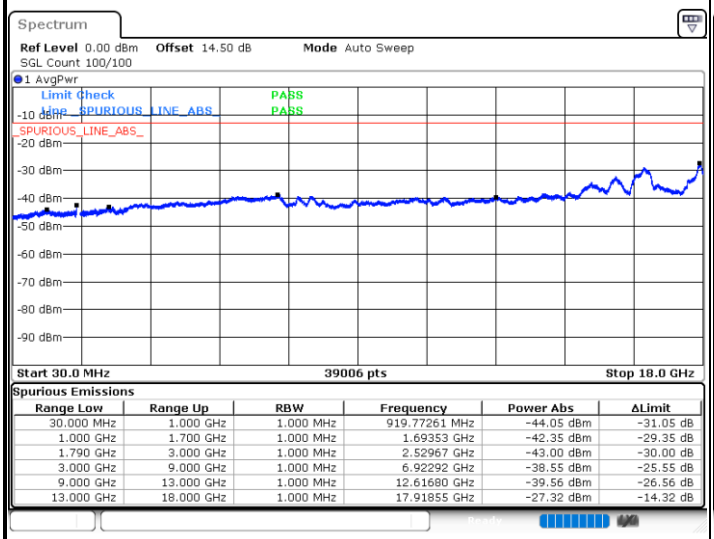
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	942.07146 MHz	-44.10 dBm	-31.10 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.62601 GHz	-44.47 dBm	-31.47 dB
1.790 GHz	3.000 GHz	1.000 MHz	1.79262 GHz	-31.94 dBm	-18.94 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98792 GHz	-38.76 dBm	-25.76 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.55206 GHz	-39.54 dBm	-26.54 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.90438 GHz	-27.24 dBm	-14.24 dB

Date: 20.OCT.2023 21:04:22

LTE Band 66 / 20MHz

Lowest Channel / QPSK

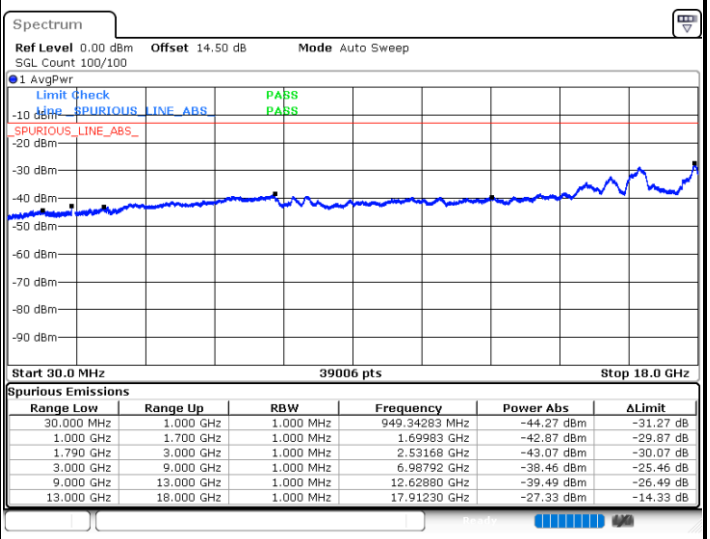


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	919.77261 MHz	-44.05 dBm	-31.05 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69353 GHz	-42.35 dBm	-29.35 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.52967 GHz	-43.00 dBm	-30.00 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92292 GHz	-38.55 dBm	-25.55 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.61680 GHz	-39.56 dBm	-26.56 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.91855 GHz	-27.32 dBm	-14.32 dB

Date: 20.OCT.2023 21:18:19

Middle Channel / QPSK

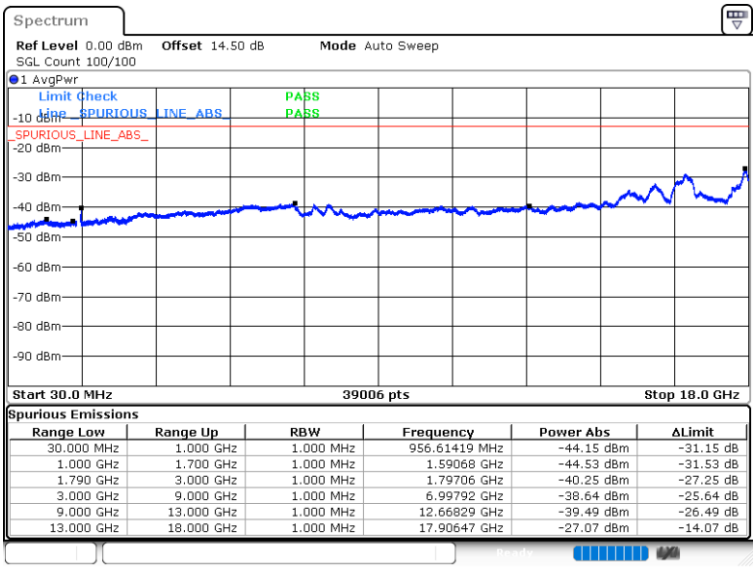


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	949.34283 MHz	-44.27 dBm	-31.27 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69983 GHz	-42.87 dBm	-29.87 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.53168 GHz	-43.07 dBm	-30.07 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98792 GHz	-38.46 dBm	-25.46 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.62880 GHz	-39.49 dBm	-26.49 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.91230 GHz	-27.33 dBm	-14.33 dB

Date: 20.OCT.2023 21:07:42

Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	956.61419 MHz	-44.15 dBm	-31.15 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.59068 GHz	-44.53 dBm	-31.53 dB
1.790 GHz	3.000 GHz	1.000 MHz	1.79706 GHz	-40.25 dBm	-27.25 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99792 GHz	-38.64 dBm	-25.64 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.66829 GHz	-39.49 dBm	-26.49 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.90647 GHz	-27.07 dBm	-14.07 dB

Date: 20.OCT.2023 21:26:16

Frequency Stability

Test Conditions		LTE Band 66 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0014	PASS
40	Normal Voltage	0.0010	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0005	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0015	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0017	

Note:

1. Normal Voltage = 3.85 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Zhaohui Liang	Temperature :	22~25℃
		Relative Humidity :	48~52%

LTE Band 25 /20MHz / QPSK									
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)
Middle	3747	-50.44	-13	-37.44	-72.93	-57.19	5.85	12.60	H
	5620.5	-54.75	-13	-41.75	-79.25	-60.55	7.30	13.10	H
	7494	-53.76	-13	-40.76	-80.76	-56.91	8.35	11.50	H
	3747	-49.43	-13	-36.43	-75.08	-56.18	5.85	12.60	V
	5620.5	-50.62	-13	-37.62	-75.62	-56.42	7.30	13.10	V
	7494	-55.27	-13	-42.27	-82.26	-58.42	8.35	11.50	V

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

LTE Band 26 /15MHz / QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1659.5	-59.88	-13	-46.88	-72.08	-63.13	4.00	9.40	H
	2489.25	-55.32	-13	-42.32	-74.70	-58.89	4.88	10.60	H
	3319	-58.12	-13	-45.12	-79.27	-63.05	5.52	12.60	H
	1659.5	-63.12	-13	-50.12	-75.99	-66.37	4.00	9.40	V
	2489.25	-57.95	-13	-44.95	-77.59	-61.52	4.88	10.60	V
	3319	-57.68	-13	-44.68	-79.53	-62.61	5.52	12.60	V

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

LTE Band 66 /20MHz / QPSK									
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)
Middle	3472	-51.17	-13	-38.17	-73.42	-58.02	5.65	12.50	H
	5208	-52.82	-13	-39.82	-77.73	-58.49	7.13	12.80	H
	6944	-55.46	-13	-42.46	-81.79	-58.86	8.40	11.80	H
	3472	-54.59	-13	-41.59	-76.64	-61.44	5.65	12.50	V
	5208	-54.16	-13	-41.16	-79.24	-59.83	7.13	12.80	V
	6944	-54.62	-13	-41.62	-81.68	-58.02	8.40	11.80	V

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