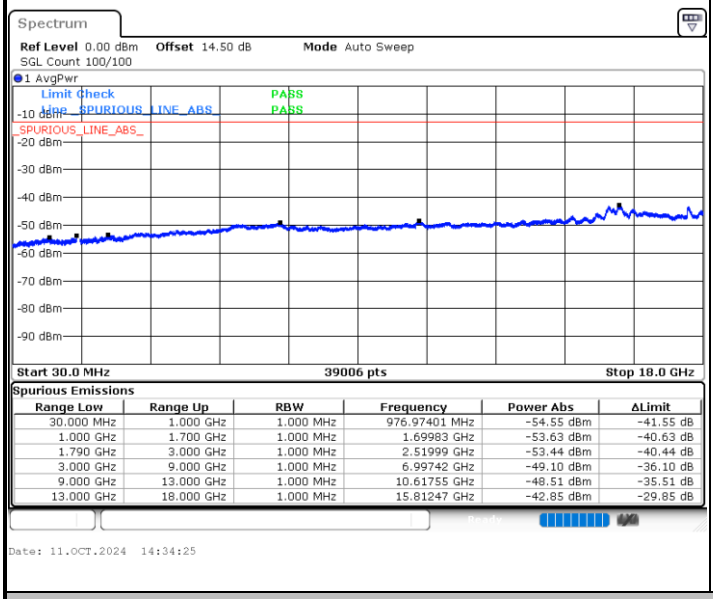
Conducted Spurious Emission

LTE Band 66 / 1.4MHz

Lowest Channel / QPSK

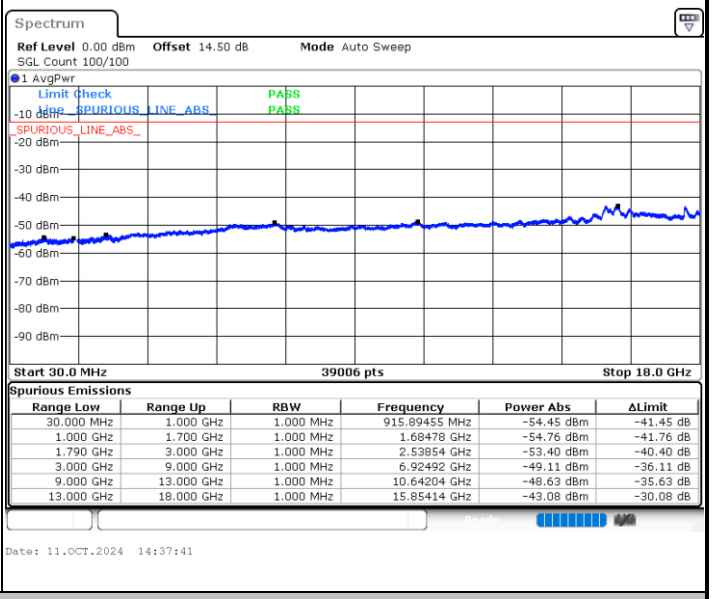


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	976.97401 MHz	-54.55 dBm	-41.55 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69983 GHz	-53.63 dBm	-40.63 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.51999 GHz	-53.44 dBm	-40.44 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99742 GHz	-49.10 dBm	-36.10 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.61755 GHz	-48.51 dBm	-35.51 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.81247 GHz	-42.85 dBm	-29.85 dB

Date: 11.OCT.2024 14:34:25

Middle Channel / QPSK

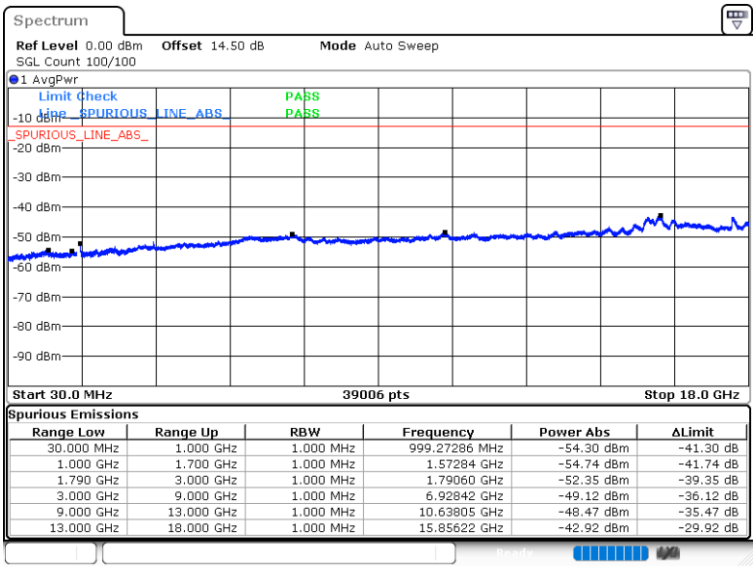


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	915.89455 MHz	-54.45 dBm	-41.45 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.68478 GHz	-54.76 dBm	-41.76 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.53854 GHz	-53.40 dBm	-40.40 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92492 GHz	-49.11 dBm	-36.11 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.64204 GHz	-48.63 dBm	-35.63 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.85414 GHz	-43.08 dBm	-30.08 dB

Date: 11.OCT.2024 14:37:41

Highest Channel / QPSK



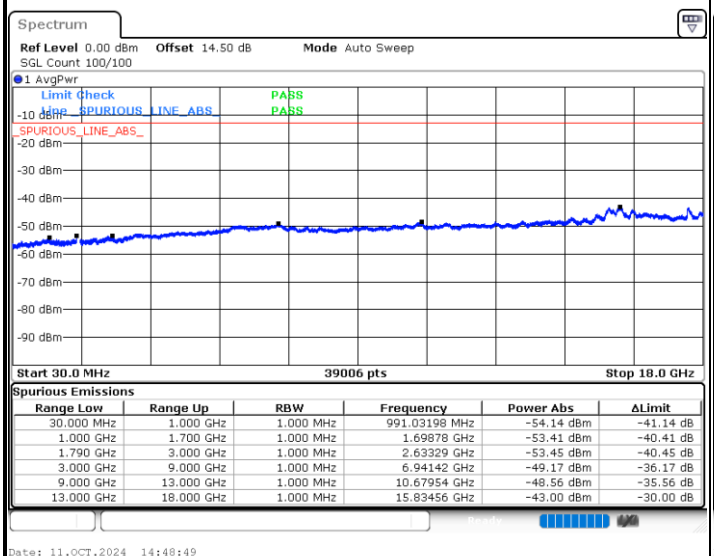
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	999.27286 MHz	-54.30 dBm	-41.30 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.57284 GHz	-54.74 dBm	-41.74 dB
1.790 GHz	3.000 GHz	1.000 MHz	1.79060 GHz	-52.35 dBm	-39.35 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92842 GHz	-49.12 dBm	-36.12 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.63805 GHz	-48.47 dBm	-35.47 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.85622 GHz	-42.92 dBm	-29.92 dB

Date: 11.OCT.2024 14:42:15

LTE Band 66 / 3MHz

Lowest Channel / QPSK

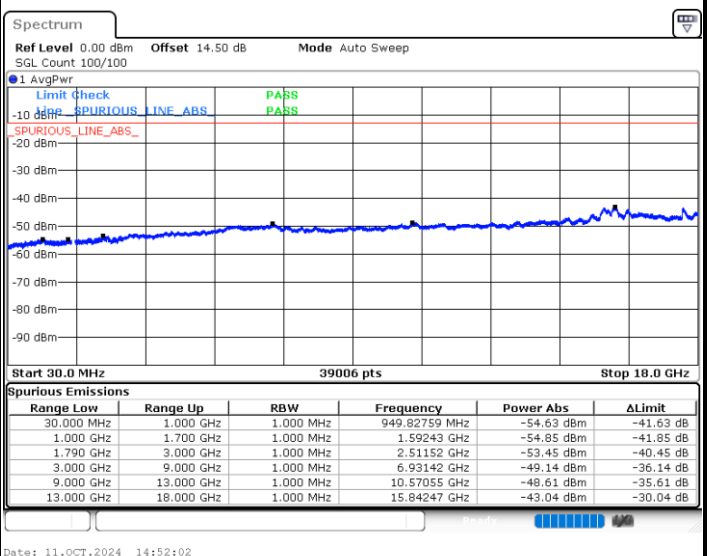


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	991.03198 MHz	-54.14 dBm	-41.14 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69878 GHz	-53.41 dBm	-40.41 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.63329 GHz	-53.45 dBm	-40.45 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.94142 GHz	-49.17 dBm	-36.17 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.67954 GHz	-48.56 dBm	-35.56 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.83456 GHz	-43.00 dBm	-30.00 dB

Date: 11.OCT.2024 14:48:49

Middle Channel / QPSK

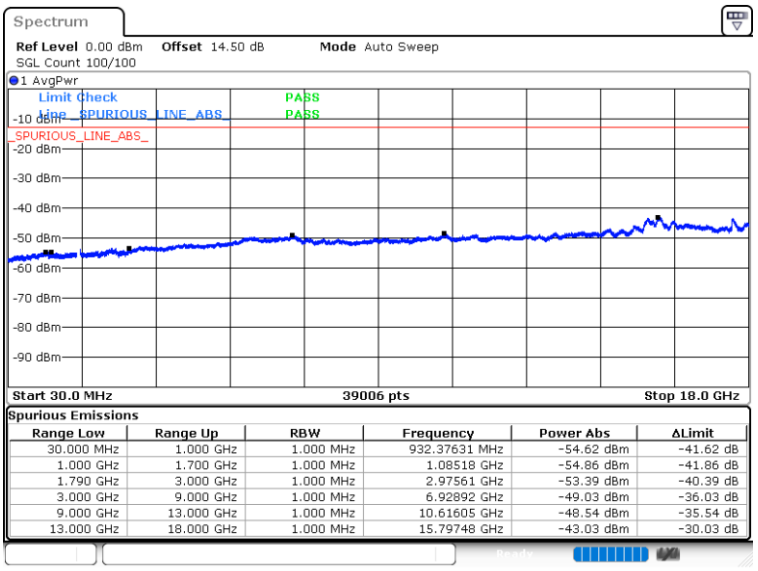


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	949.82759 MHz	-54.63 dBm	-41.63 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.59243 GHz	-54.85 dBm	-41.85 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.51152 GHz	-53.45 dBm	-40.45 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.93142 GHz	-49.14 dBm	-36.14 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.57055 GHz	-48.61 dBm	-35.61 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.84247 GHz	-43.04 dBm	-30.04 dB

Date: 11.OCT.2024 14:52:02

Highest Channel / QPSK



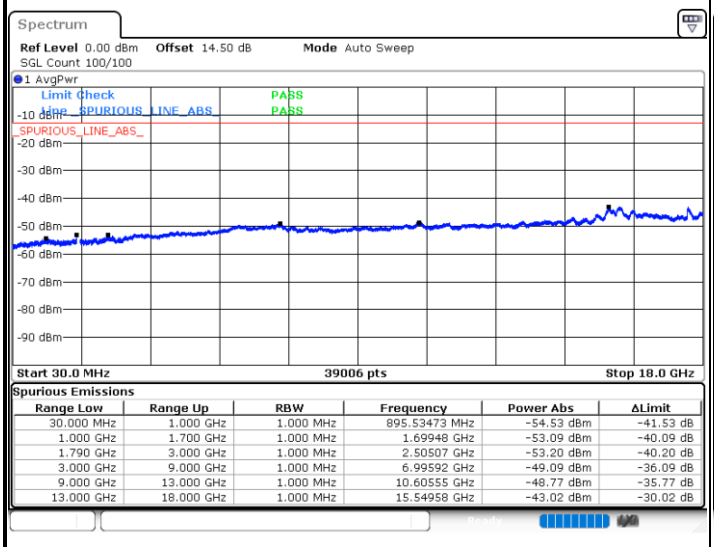
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	932.37631 MHz	-54.62 dBm	-41.62 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.08518 GHz	-54.86 dBm	-41.86 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.97561 GHz	-53.39 dBm	-40.39 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92892 GHz	-49.03 dBm	-36.03 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.61605 GHz	-48.54 dBm	-35.54 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.79748 GHz	-43.03 dBm	-30.03 dB

Date: 11.OCT.2024 14:58:42

LTE Band 66 / 5MHz

Lowest Channel / QPSK

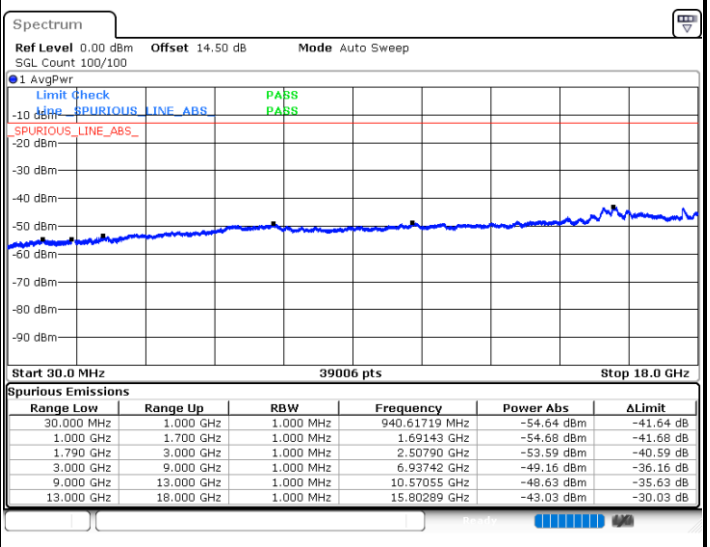


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	895.53473 MHz	-54.53 dBm	-41.53 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69948 GHz	-53.09 dBm	-40.09 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.50507 GHz	-53.20 dBm	-40.20 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99592 GHz	-49.09 dBm	-36.09 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.60555 GHz	-48.77 dBm	-35.77 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.54958 GHz	-43.02 dBm	-30.02 dB

Date: 11.OCT.2024 15:02:49

Middle Channel / QPSK

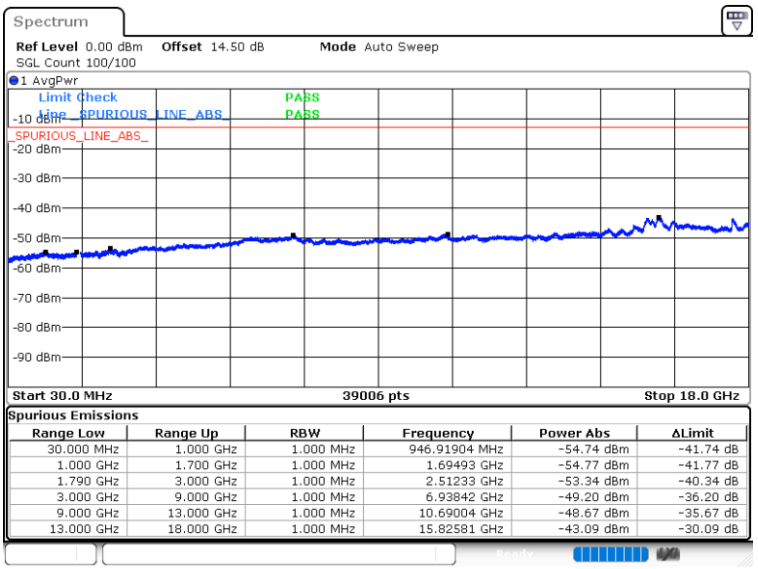


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	940.61719 MHz	-54.64 dBm	-41.64 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69143 GHz	-54.68 dBm	-41.68 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.50790 GHz	-53.59 dBm	-40.59 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.93742 GHz	-49.16 dBm	-36.16 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.57055 GHz	-48.63 dBm	-35.63 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.80289 GHz	-43.03 dBm	-30.03 dB

Date: 11.OCT.2024 15:06:09

Highest Channel / QPSK



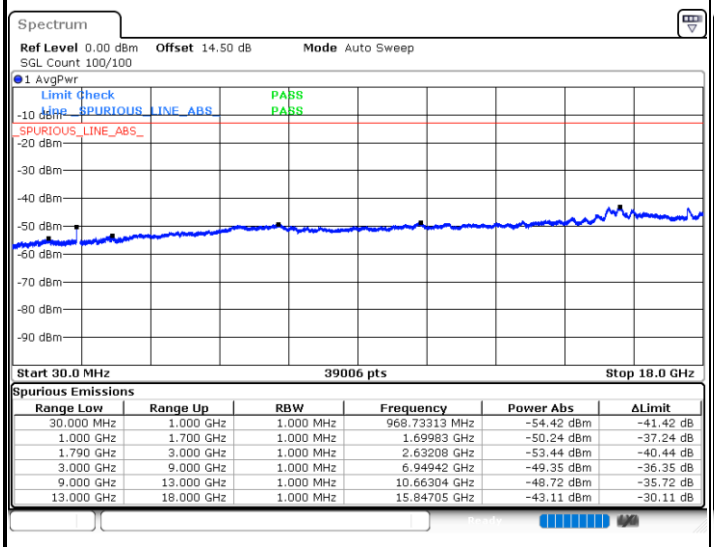
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	946.91904 MHz	-54.74 dBm	-41.74 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69493 GHz	-54.77 dBm	-41.77 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.51233 GHz	-53.34 dBm	-40.34 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.93842 GHz	-49.20 dBm	-36.20 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.69004 GHz	-48.67 dBm	-35.67 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.82581 GHz	-43.09 dBm	-30.09 dB

Date: 11.OCT.2024 15:13:40

LTE Band 66 / 10MHz

Lowest Channel / QPSK

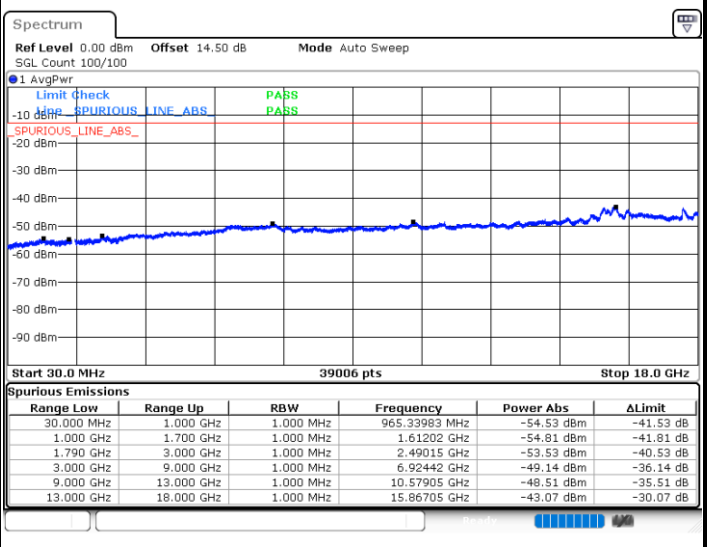


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	968.73313 MHz	-54.42 dBm	-41.42 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69983 GHz	-50.24 dBm	-37.24 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.63208 GHz	-53.44 dBm	-40.44 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.94942 GHz	-49.35 dBm	-36.35 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.66304 GHz	-48.72 dBm	-35.72 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.84705 GHz	-43.11 dBm	-30.11 dB

Date: 11.OCT.2024 15:28:12

Middle Channel / QPSK

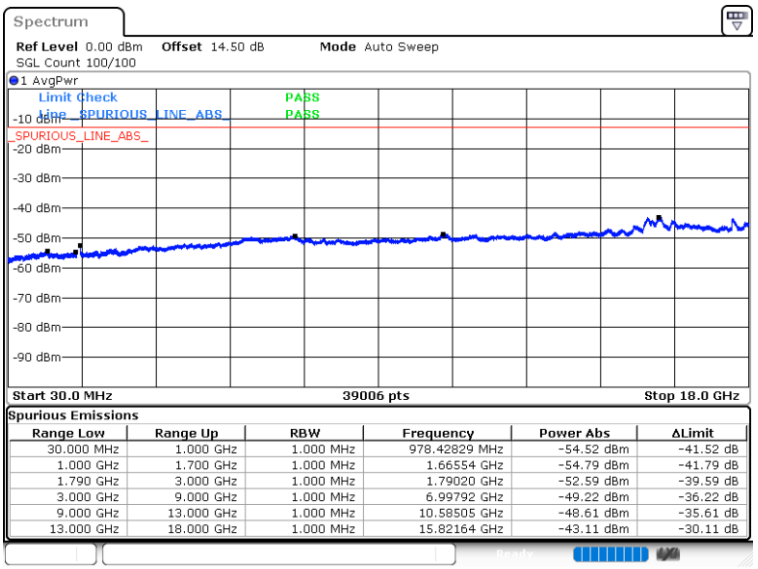


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	965.33983 MHz	-54.53 dBm	-41.53 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.61202 GHz	-54.81 dBm	-41.81 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.49015 GHz	-53.53 dBm	-40.53 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92442 GHz	-49.14 dBm	-36.14 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.57905 GHz	-48.51 dBm	-35.51 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.86705 GHz	-43.07 dBm	-30.07 dB

Date: 11.OCT.2024 15:29:22

Highest Channel / QPSK



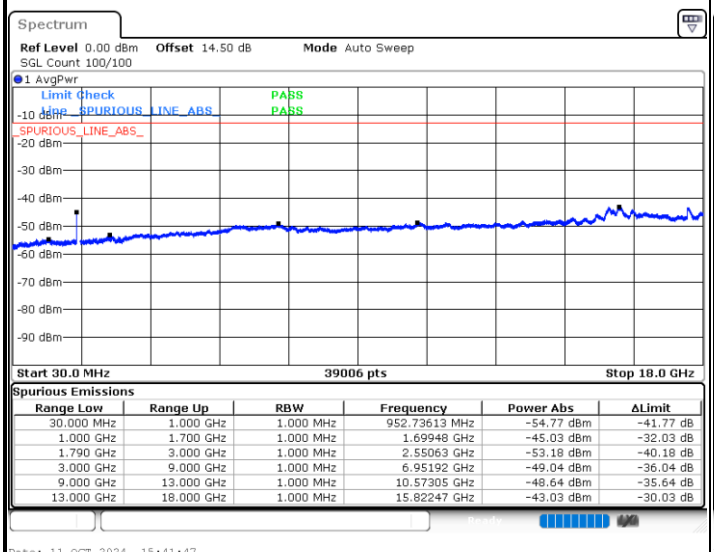
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	978.42829 MHz	-54.52 dBm	-41.52 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.66554 GHz	-54.79 dBm	-41.79 dB
1.790 GHz	3.000 GHz	1.000 MHz	1.79020 GHz	-52.59 dBm	-39.59 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99792 GHz	-49.22 dBm	-36.22 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.58505 GHz	-48.61 dBm	-35.61 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.82164 GHz	-43.11 dBm	-30.11 dB

Date: 11.OCT.2024 15:35:53

LTE Band 66 / 15MHz

Lowest Channel / QPSK

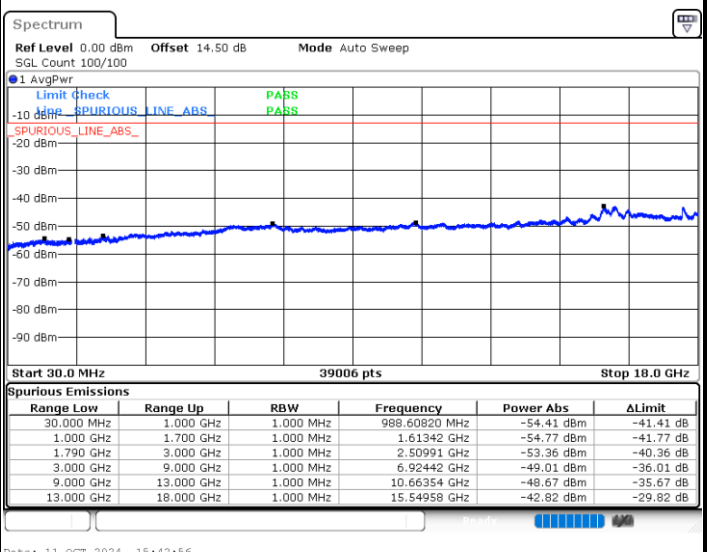


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	952.73613 MHz	-54.77 dBm	-41.77 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69948 GHz	-45.03 dBm	-32.03 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.55063 GHz	-53.18 dBm	-40.18 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.95192 GHz	-49.04 dBm	-36.04 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.57305 GHz	-48.64 dBm	-35.64 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.82247 GHz	-43.03 dBm	-30.03 dB

Date: 11.OCT.2024 15:41:47

Middle Channel / QPSK

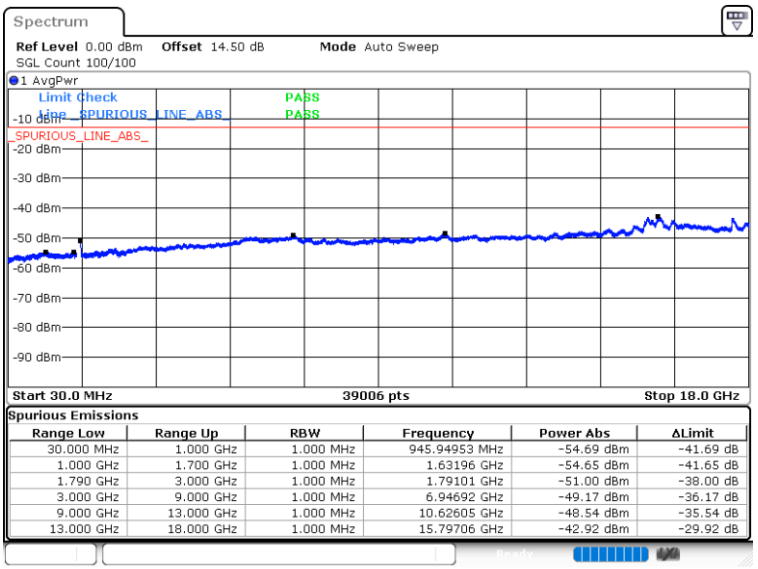


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	988.60820 MHz	-54.41 dBm	-41.41 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.61342 GHz	-54.77 dBm	-41.77 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.50991 GHz	-53.36 dBm	-40.36 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92442 GHz	-49.01 dBm	-36.01 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.66354 GHz	-48.67 dBm	-35.67 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.54958 GHz	-42.82 dBm	-29.82 dB

Date: 11.OCT.2024 15:42:56

Highest Channel / QPSK



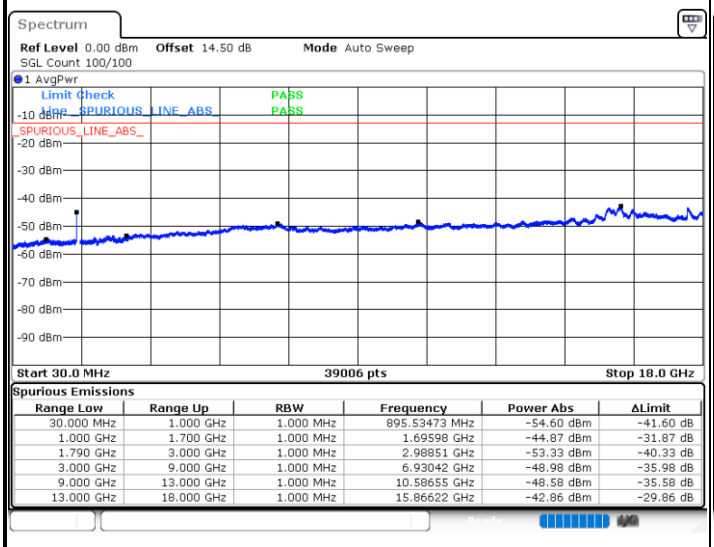
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	945.94953 MHz	-54.69 dBm	-41.69 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.63196 GHz	-54.65 dBm	-41.65 dB
1.790 GHz	3.000 GHz	1.000 MHz	1.79101 GHz	-51.00 dBm	-38.00 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.94692 GHz	-49.17 dBm	-36.17 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.62605 GHz	-48.54 dBm	-35.54 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.79706 GHz	-42.92 dBm	-29.92 dB

Date: 11.OCT.2024 15:49:28

LTE Band 66 / 20MHz

Lowest Channel / QPSK

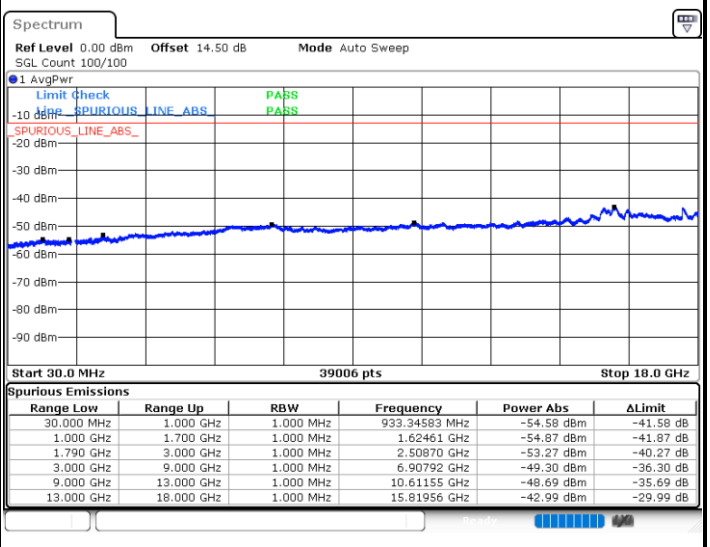


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	895.53473 MHz	-54.60 dBm	-41.60 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69598 GHz	-44.87 dBm	-31.87 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.98851 GHz	-53.33 dBm	-40.33 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.93042 GHz	-48.98 dBm	-35.98 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.58655 GHz	-48.58 dBm	-35.58 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.86622 GHz	-42.86 dBm	-29.86 dB

Date: 11.OCT.2024 15:55:26

Middle Channel / QPSK

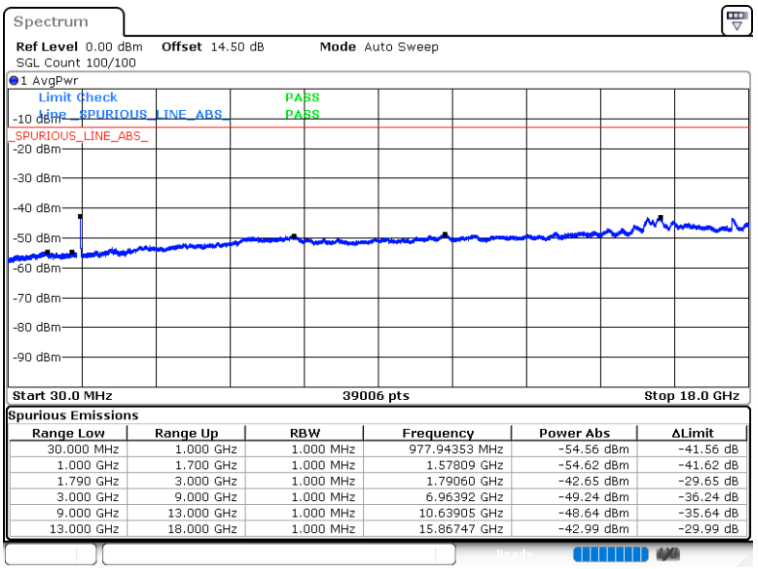


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	933.34583 MHz	-54.58 dBm	-41.58 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.62461 GHz	-54.87 dBm	-41.87 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.50870 GHz	-53.27 dBm	-40.27 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.90792 GHz	-49.30 dBm	-36.30 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.61155 GHz	-48.69 dBm	-35.69 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.81956 GHz	-42.99 dBm	-29.99 dB

Date: 11.OCT.2024 15:56:36

Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	977.94353 MHz	-54.56 dBm	-41.56 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.57809 GHz	-54.62 dBm	-41.62 dB
1.790 GHz	3.000 GHz	1.000 MHz	1.79060 GHz	-42.65 dBm	-29.65 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.96392 GHz	-49.24 dBm	-36.24 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.63905 GHz	-48.64 dBm	-35.64 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.86747 GHz	-42.99 dBm	-29.99 dB

Date: 11.OCT.2024 16:04:32

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	0.0006	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0002	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0003	

Note:

1. Normal Voltage = 3.91 V. ; Minimum Voltage = 3.6 V. ; Maximum Voltage = 4.3 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

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

LTE Band 2 / 20MHz / QPSK / Ant2									
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	3742	-60.98	-13	-47.98	-79.56	-67.73	5.85	12.60	H
	5613	-59.05	-13	-46.05	-81.44	-64.85	7.30	13.10	H
	7484	-55.09	-13	-42.09	-82.02	-58.24	8.35	11.50	H
	3742	-60.90	-13	-47.90	-79.4	-67.65	5.85	12.60	V
	5613	-59.70	-13	-46.70	-82.28	-65.50	7.30	13.10	V
	7484	-55.27	-13	-42.27	-82.19	-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 / Ant1									
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	1649.5	-66.17	-13	-53.17	-76.09	-69.42	4.00	9.40	H
	2474.25	-62.97	-13	-49.97	-77.44	-66.54	4.88	10.60	H
	3299	-61.94	-13	-48.94	-78.44	-66.87	5.52	12.60	H
	1649.5	-66.30	-13	-53.30	-75.96	-69.55	4.00	9.40	V
	2474.25	-62.98	-13	-49.98	-77.42	-66.55	4.88	10.60	V
	3299	-61.81	-13	-48.81	-78.12	-66.74	5.52	12.60	V

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

LTE Band 66 / 20MHz / QPSK / Ant2									
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	-61.49	-13	-48.49	-78.39	-68.34	5.65	12.50	H
	5208	-60.43	-13	-47.43	-82.16	-66.10	7.13	12.80	H
	6944	-56.27	-13	-43.27	-82.19	-59.67	8.40	11.80	H
	3472	-61.79	-13	-48.79	-78.71	-68.64	5.65	12.50	V
	5208	-60.27	-13	-47.27	-82.25	-65.94	7.13	12.80	V
	6944	-55.75	-13	-42.75	-82.14	-59.15	8.40	11.80	V

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