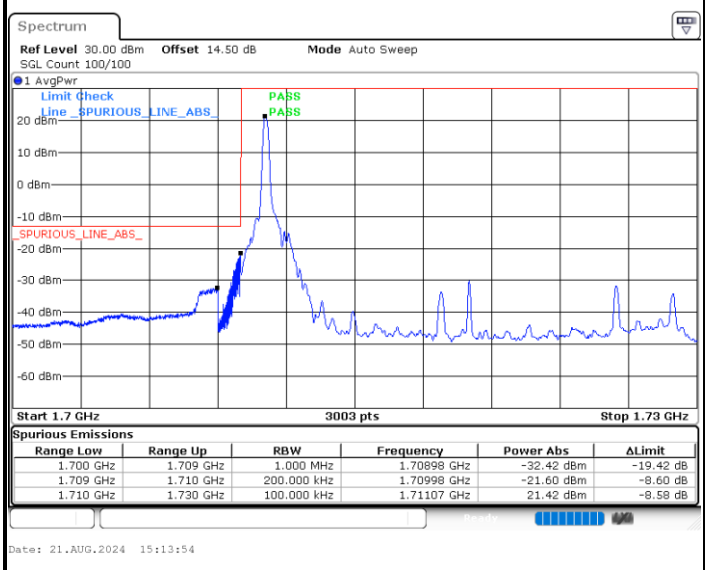
LTE Band 66 / 20MHz / 16QAM

Lowest Band Edge / 1 RB

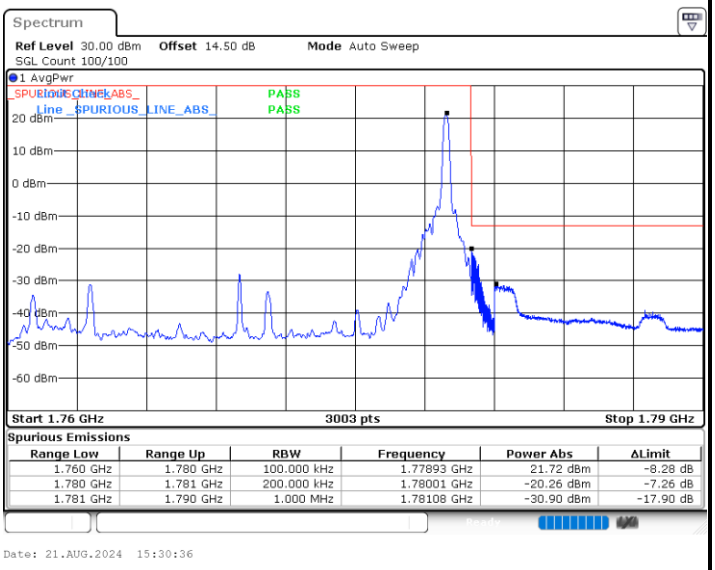


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70898 GHz	-32.42 dBm	-19.42 dB
1.709 GHz	1.710 GHz	200.000 kHz	1.70998 GHz	-21.60 dBm	-8.60 dB
1.710 GHz	1.730 GHz	100.000 kHz	1.71107 GHz	21.42 dBm	-8.58 dB

Date: 21.AUG.2024 15:13:54

Highest Band Edge / 1 RB

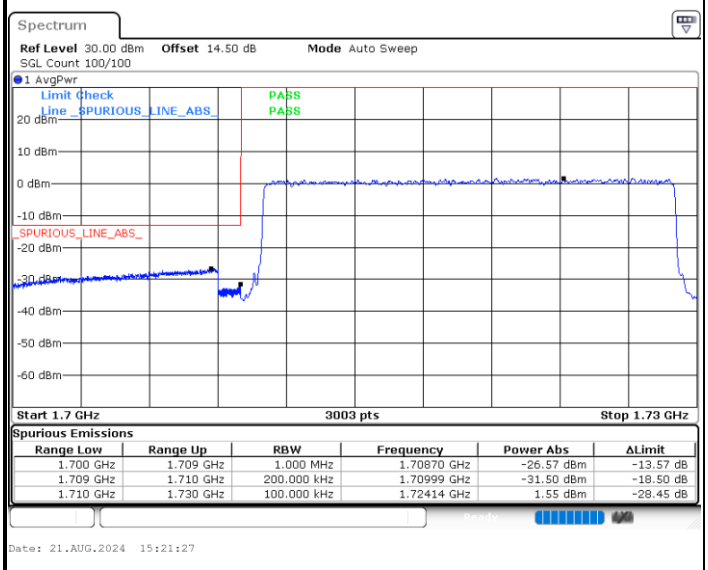


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.760 GHz	1.780 GHz	100.000 kHz	1.77893 GHz	21.72 dBm	-8.28 dB
1.780 GHz	1.781 GHz	200.000 kHz	1.78001 GHz	-20.26 dBm	-7.26 dB
1.781 GHz	1.790 GHz	1.000 MHz	1.78108 GHz	-30.90 dBm	-17.90 dB

Date: 21.AUG.2024 15:30:36

Lowest Band Edge / Full RB

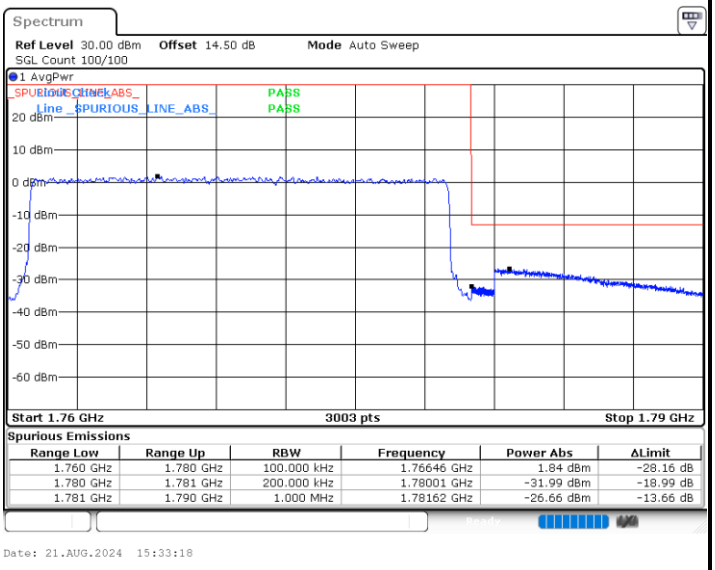


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70870 GHz	-26.57 dBm	-13.57 dB
1.709 GHz	1.710 GHz	200.000 kHz	1.70999 GHz	-31.50 dBm	-18.50 dB
1.710 GHz	1.730 GHz	100.000 kHz	1.72414 GHz	1.55 dBm	-28.45 dB

Date: 21.AUG.2024 15:21:27

Highest Band Edge / Full RB



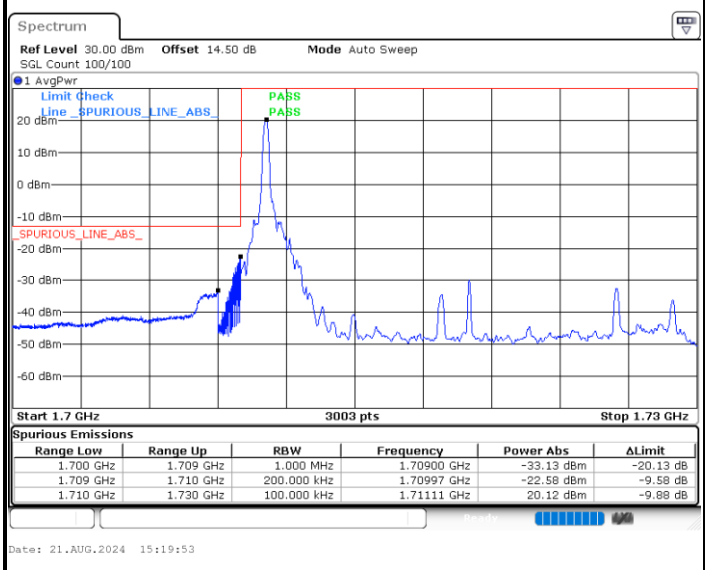
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.760 GHz	1.780 GHz	100.000 kHz	1.76646 GHz	1.84 dBm	-28.16 dB
1.780 GHz	1.781 GHz	200.000 kHz	1.78001 GHz	-31.99 dBm	-18.99 dB
1.781 GHz	1.790 GHz	1.000 MHz	1.78162 GHz	-26.66 dBm	-13.66 dB

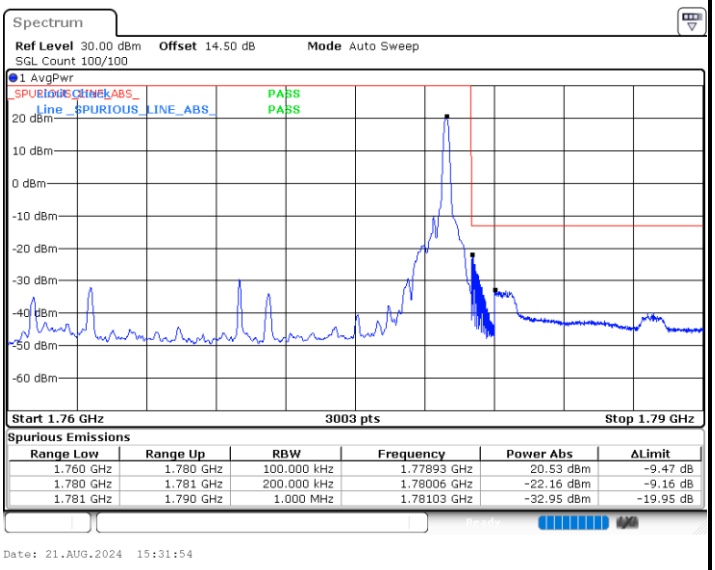
Date: 21.AUG.2024 15:33:18

LTE Band 66 / 20MHz / 64QAM

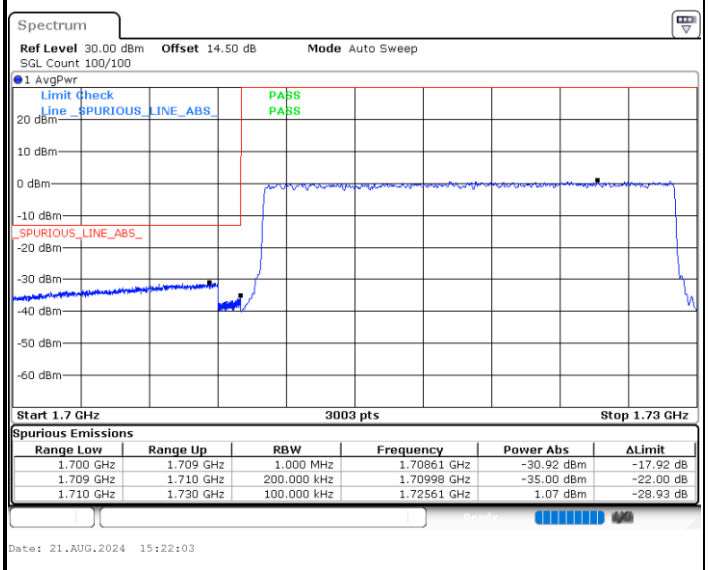
Lowest Band Edge / 1 RB



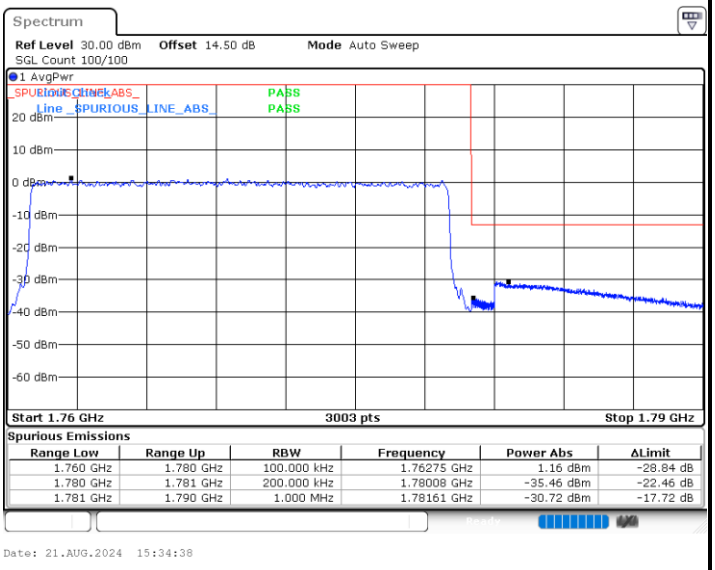
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



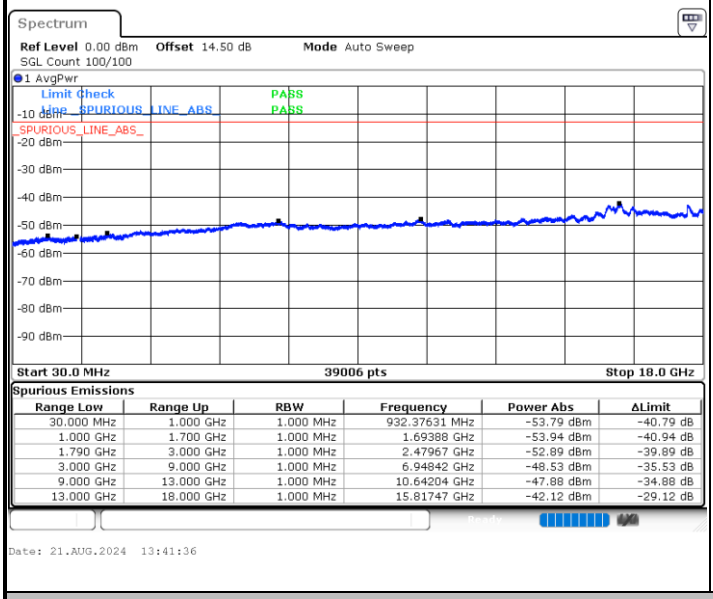
Highest Band Edge / Full RB



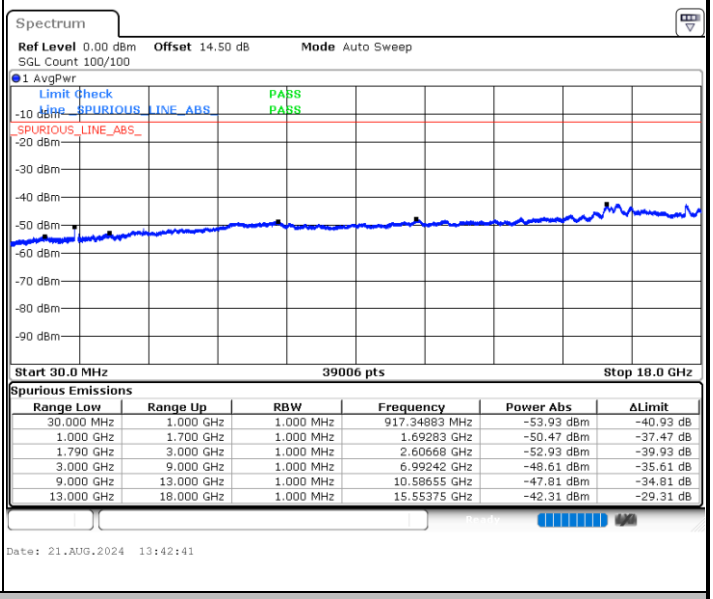
Conducted Spurious Emission

LTE Band 66 / 1.4MHz

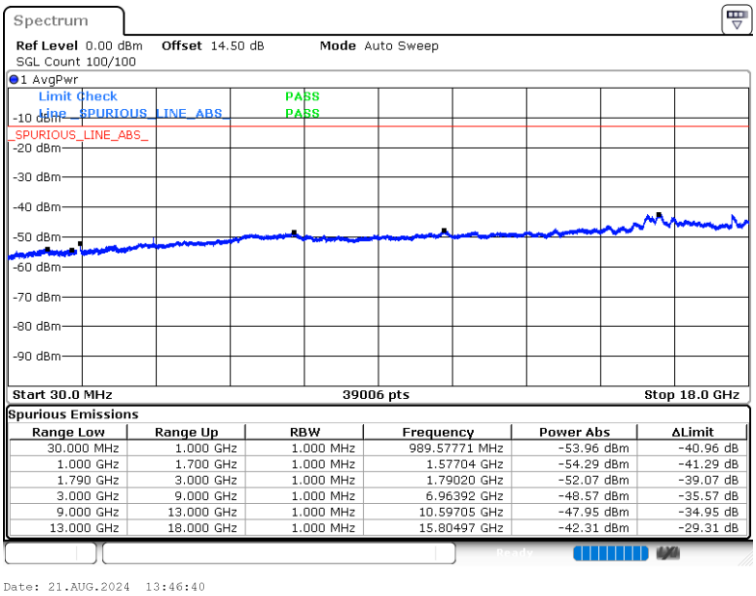
Lowest Channel / QPSK



Middle Channel / QPSK

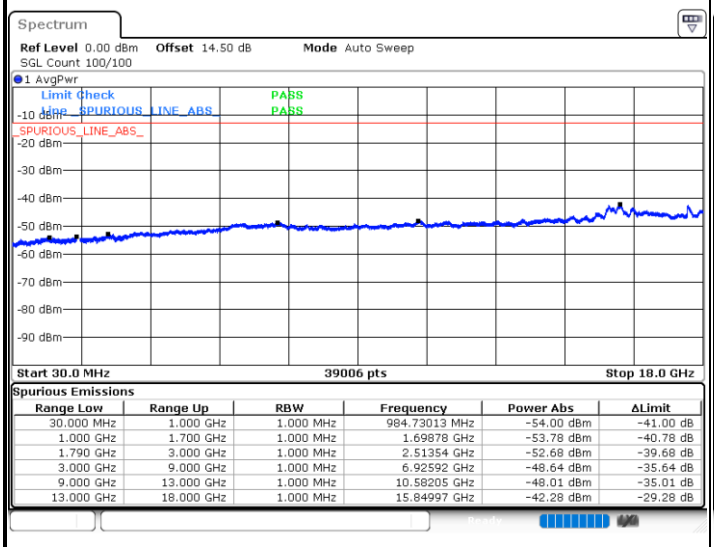


Highest Channel / QPSK



LTE Band 66 / 3MHz

Lowest Channel / QPSK

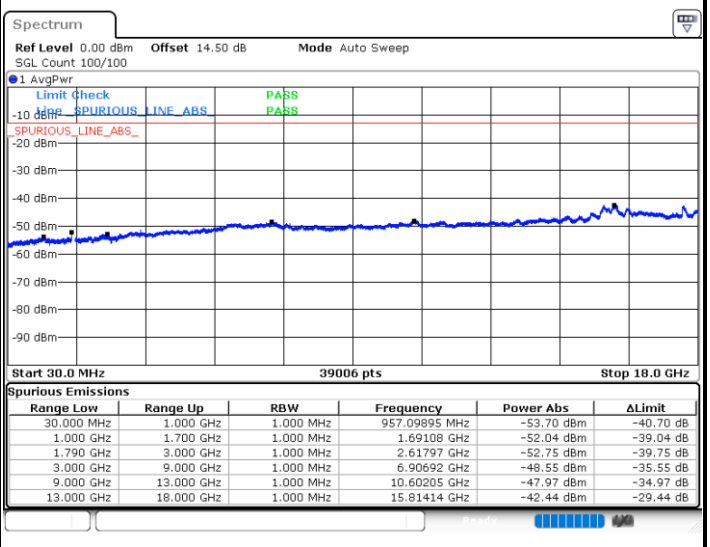


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	984.73013 MHz	-54.00 dBm	-41.00 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69878 GHz	-53.78 dBm	-40.78 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.51354 GHz	-52.68 dBm	-39.68 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92592 GHz	-48.64 dBm	-35.64 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.58205 GHz	-48.01 dBm	-35.01 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.84997 GHz	-42.28 dBm	-29.28 dB

Date: 21.AUG.2024 13:58:59

Middle Channel / QPSK

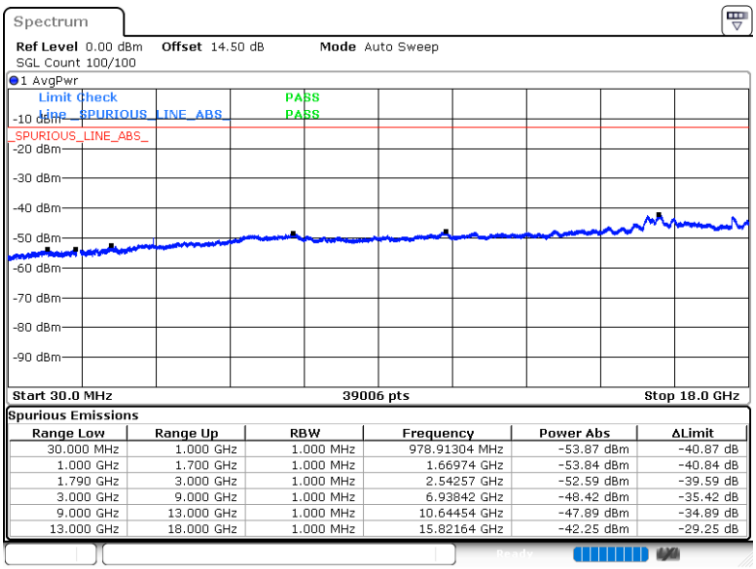


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	957.09895 MHz	-53.70 dBm	-40.70 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69108 GHz	-52.04 dBm	-39.04 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.61797 GHz	-52.75 dBm	-39.75 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.90692 GHz	-48.55 dBm	-35.55 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.60205 GHz	-47.97 dBm	-34.97 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.81414 GHz	-42.44 dBm	-29.44 dB

Date: 21.AUG.2024 14:00:01

Highest Channel / QPSK



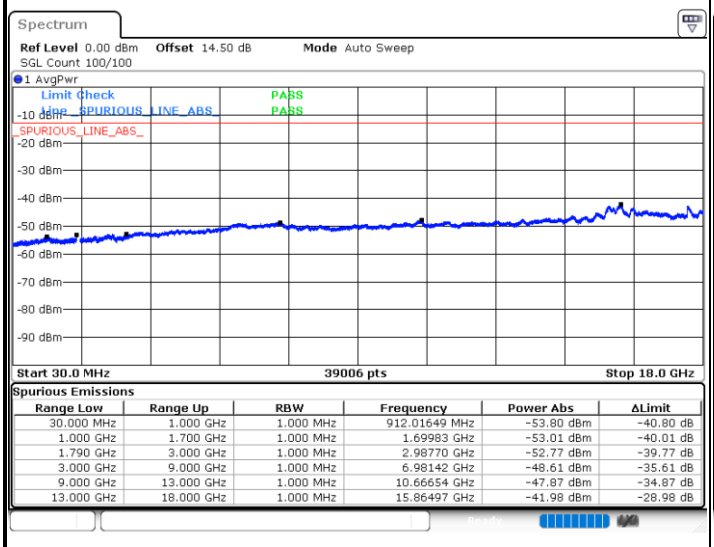
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	978.91304 MHz	-53.87 dBm	-40.87 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.66974 GHz	-53.84 dBm	-40.84 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.54257 GHz	-52.59 dBm	-39.59 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.93842 GHz	-48.42 dBm	-35.42 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.64454 GHz	-47.89 dBm	-34.89 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.82164 GHz	-42.25 dBm	-29.25 dB

Date: 21.AUG.2024 14:07:33

LTE Band 66 / 5MHz

Lowest Channel / QPSK

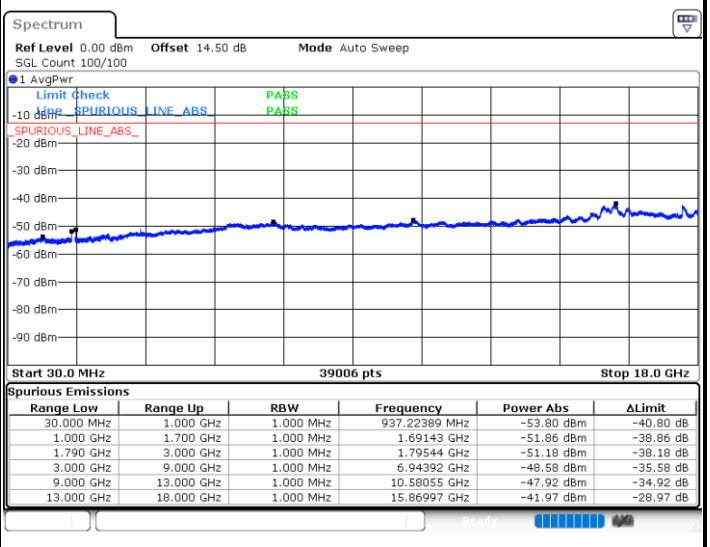


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	912.01649 MHz	-53.80 dBm	-40.80 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69983 GHz	-53.01 dBm	-40.01 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.98770 GHz	-52.77 dBm	-39.77 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98142 GHz	-48.61 dBm	-35.61 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.66654 GHz	-47.87 dBm	-34.87 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.86497 GHz	-41.98 dBm	-28.98 dB

Date: 21.AUG.2024 14:38:53

Middle Channel / QPSK

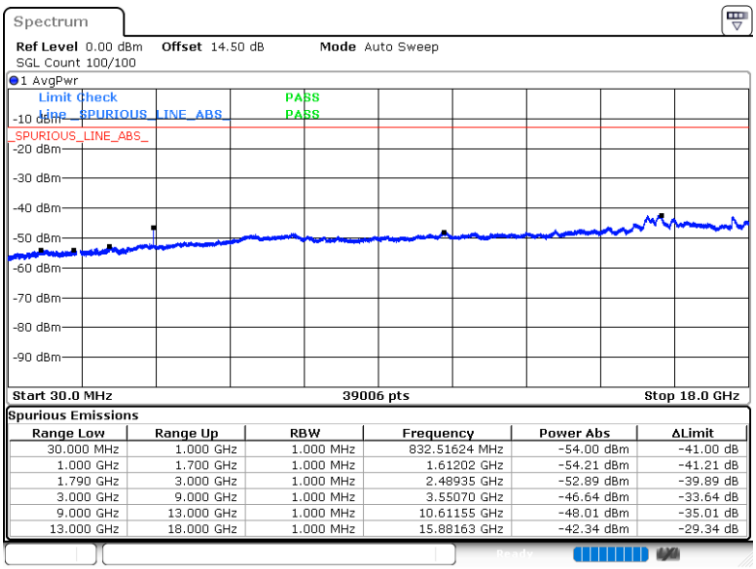


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	937.22389 MHz	-53.80 dBm	-40.80 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69143 GHz	-51.86 dBm	-38.86 dB
1.790 GHz	3.000 GHz	1.000 MHz	1.79544 GHz	-51.18 dBm	-38.18 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.94392 GHz	-48.58 dBm	-35.58 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.58055 GHz	-47.92 dBm	-34.92 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.86997 GHz	-41.97 dBm	-28.97 dB

Date: 21.AUG.2024 14:40:09

Highest Channel / QPSK



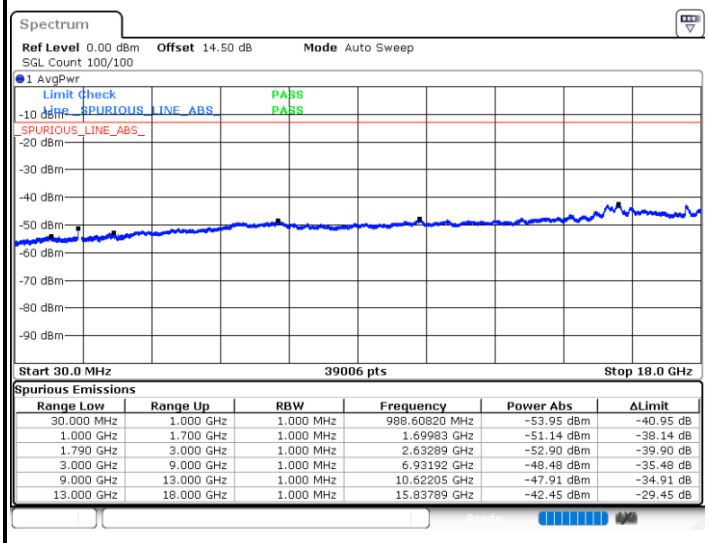
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	832.51624 MHz	-54.00 dBm	-41.00 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.61202 GHz	-54.21 dBm	-41.21 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.48935 GHz	-52.89 dBm	-39.89 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.55070 GHz	-46.64 dBm	-33.64 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.61155 GHz	-48.01 dBm	-35.01 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.88163 GHz	-42.34 dBm	-29.34 dB

Date: 21.AUG.2024 14:43:16

LTE Band 66 / 10MHz

Lowest Channel / QPSK

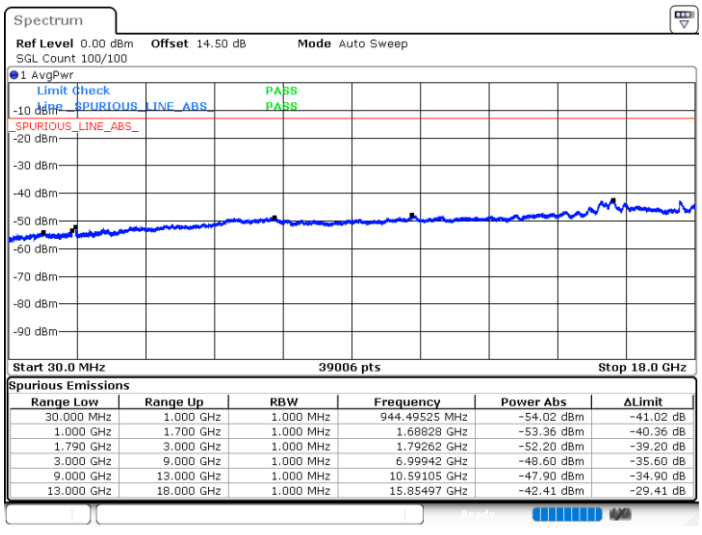


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	988.60820 MHz	-53.95 dBm	-40.95 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69983 GHz	-51.14 dBm	-38.14 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.63289 GHz	-52.90 dBm	-39.90 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.93192 GHz	-48.48 dBm	-35.48 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.62205 GHz	-47.91 dBm	-34.91 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.83789 GHz	-42.45 dBm	-29.45 dB

Date: 23.AUG.2024 07:24:05

Middle Channel / QPSK

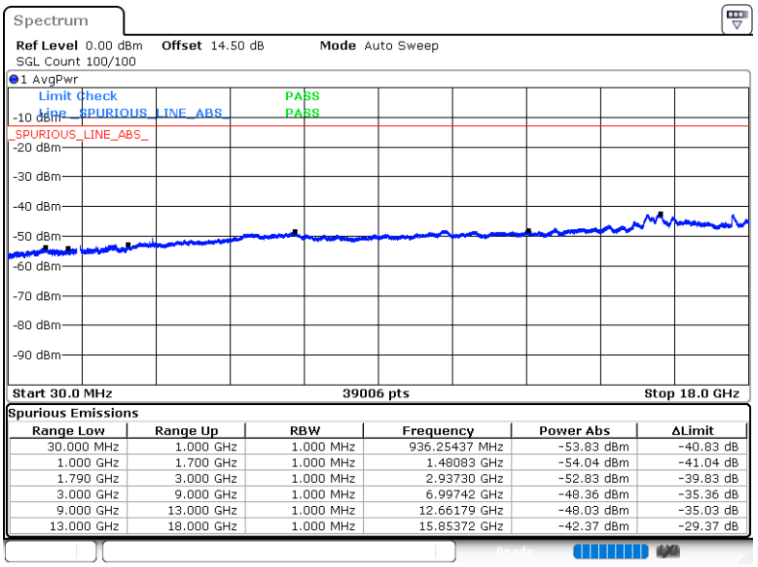


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	944.49525 MHz	-54.02 dBm	-41.02 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.68828 GHz	-53.36 dBm	-40.36 dB
1.790 GHz	3.000 GHz	1.000 MHz	1.79262 GHz	-52.20 dBm	-39.20 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99942 GHz	-48.60 dBm	-35.60 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.59105 GHz	-47.90 dBm	-34.90 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.85497 GHz	-42.41 dBm	-29.41 dB

Date: 23.AUG.2024 07:22:41

Highest Channel / QPSK



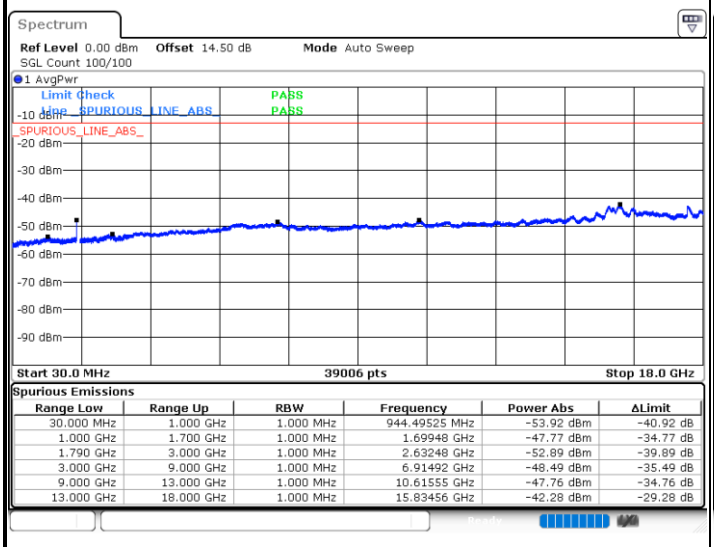
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	936.25437 MHz	-53.83 dBm	-40.83 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.48083 GHz	-54.04 dBm	-41.04 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.93730 GHz	-52.83 dBm	-39.83 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99742 GHz	-48.36 dBm	-35.36 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.66179 GHz	-48.03 dBm	-35.03 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.85372 GHz	-42.37 dBm	-29.37 dB

Date: 23.AUG.2024 07:21:16

LTE Band 66 / 15MHz

Lowest Channel / QPSK

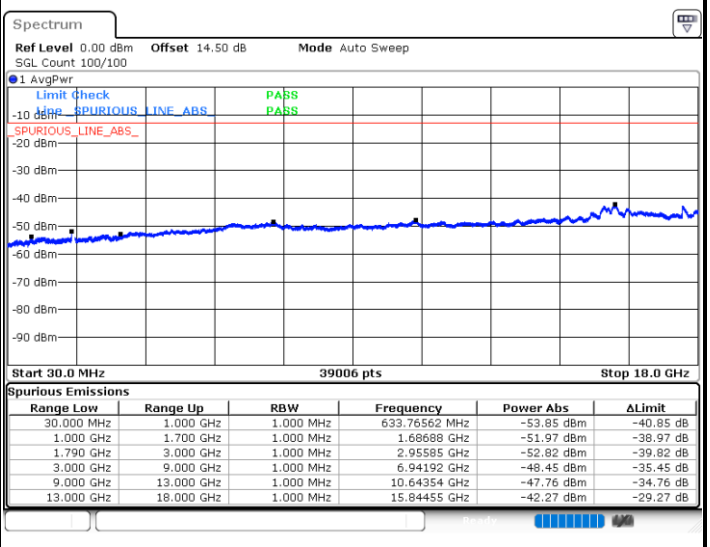


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	944.49525 MHz	-53.92 dBm	-40.92 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69948 GHz	-47.77 dBm	-34.77 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.63248 GHz	-52.89 dBm	-39.89 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.91492 GHz	-48.49 dBm	-35.49 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.61555 GHz	-47.76 dBm	-34.76 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.83456 GHz	-42.28 dBm	-29.28 dB

Date: 21.AUG.2024 14:55:27

Middle Channel / QPSK

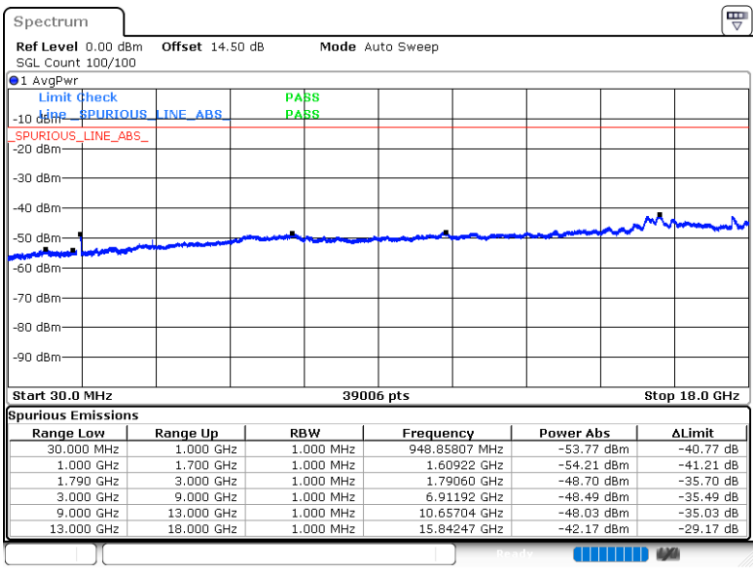


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	633.76562 MHz	-53.85 dBm	-40.85 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.68688 GHz	-51.97 dBm	-38.97 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.95585 GHz	-52.82 dBm	-39.82 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.94192 GHz	-48.45 dBm	-35.45 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.64354 GHz	-47.76 dBm	-34.76 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.84455 GHz	-42.27 dBm	-29.27 dB

Date: 21.AUG.2024 14:59:54

Highest Channel / QPSK



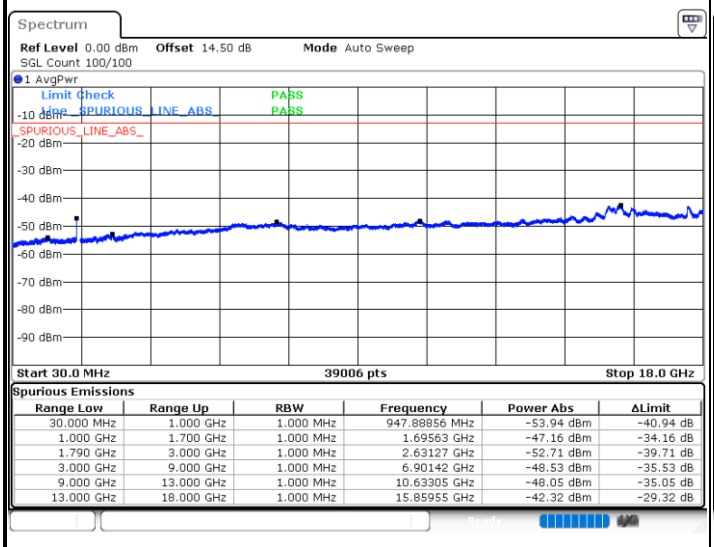
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	948.85807 MHz	-53.77 dBm	-40.77 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.60922 GHz	-54.21 dBm	-41.21 dB
1.790 GHz	3.000 GHz	1.000 MHz	1.79060 GHz	-48.70 dBm	-35.70 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.91192 GHz	-48.49 dBm	-35.49 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.65704 GHz	-48.03 dBm	-35.03 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.84247 GHz	-42.17 dBm	-29.17 dB

Date: 21.AUG.2024 15:11:16

LTE Band 66 / 20MHz

Lowest Channel / QPSK

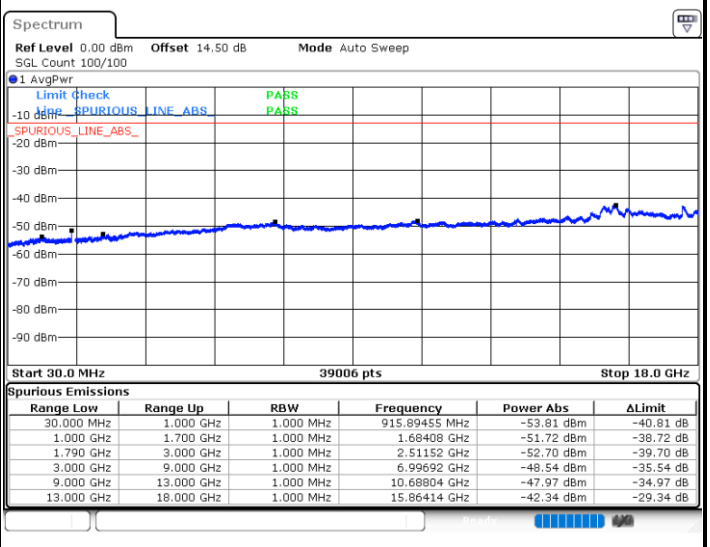


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	947.88856 MHz	-53.94 dBm	-40.94 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69563 GHz	-47.16 dBm	-34.16 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.63127 GHz	-52.71 dBm	-39.71 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.90142 GHz	-48.53 dBm	-35.53 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.63305 GHz	-48.05 dBm	-35.05 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.85955 GHz	-42.32 dBm	-29.32 dB

Date: 21.AUG.2024 15:23:45

Middle Channel / QPSK

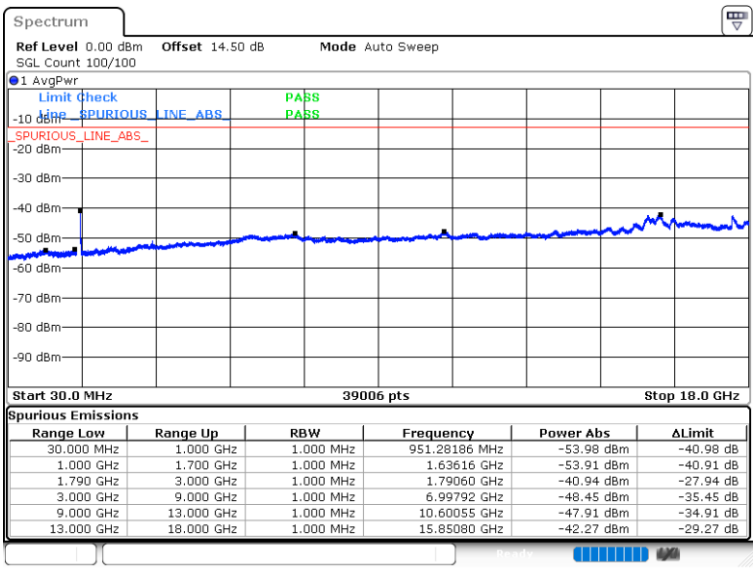


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	915.89455 MHz	-53.81 dBm	-40.81 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.68408 GHz	-51.72 dBm	-38.72 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.51152 GHz	-52.70 dBm	-39.70 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99692 GHz	-48.54 dBm	-35.54 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.68804 GHz	-47.97 dBm	-34.97 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.86414 GHz	-42.34 dBm	-29.34 dB

Date: 21.AUG.2024 15:24:53

Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	951.28186 MHz	-53.98 dBm	-40.98 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.63616 GHz	-53.91 dBm	-40.91 dB
1.790 GHz	3.000 GHz	1.000 MHz	1.79060 GHz	-40.94 dBm	-27.94 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99792 GHz	-48.45 dBm	-35.45 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.60055 GHz	-47.91 dBm	-34.91 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.85080 GHz	-42.27 dBm	-29.27 dB

Date: 21.AUG.2024 15:28:11

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	0.0079	PASS
40	Normal Voltage	0.0022	
30	Normal Voltage	0.0044	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0068	
0	Normal Voltage	0.0021	
-10	Normal Voltage	0.0036	
20	Maximum Voltage	0.0045	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0069	

Note:

1. Normal Voltage =3.8V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4V.
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%

RSE pretest all the supported antennas, only the worst results are recorded in the report.

LTE Band 25 / 20MHz / QPSK_ANT 3									
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	-57.18	-13	-44.18	-79.67	-63.93	5.85	12.60	H
	5620.5	-54.85	-13	-41.85	-79.35	-60.65	7.30	13.10	H
	7494	-54.21	-13	-41.21	-81.21	-57.36	8.35	11.50	H
	3747	-54.85	-13	-41.85	-80.5	-61.60	5.85	12.60	V
	5620.5	-54.48	-13	-41.48	-79.48	-60.28	7.30	13.10	V
	7494	-54.44	-13	-41.44	-81.43	-57.59	8.35	11.50	V

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

LTE Band 26 / 15MHz / QPSK_ANT 0									
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	1649.5	-60.18	-13	-47.18	-72.27	-63.43	4.00	9.40	H
	2474.25	-54.29	-13	-41.29	-73.54	-57.86	4.88	10.60	H
	3299	-57.45	-13	-44.45	-78.50	-62.38	5.52	12.60	H
	1649.5	-61.00	-13	-48.00	-73.73	-64.25	4.00	9.40	V
	2474.25	-47.39	-13	-34.39	-66.96	-50.96	4.88	10.60	V
	3299	-56.36	-13	-43.36	-78.30	-61.29	5.52	12.60	V

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

LTE Band 66 / 20MHz / QPSK_ANT 3									
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	-56.99	-13	-43.99	-79.24	-63.84	5.65	12.50	H
	5208	-54.91	-13	-41.91	-79.82	-60.58	7.13	12.80	H
	6944	-55.44	-13	-42.44	-81.77	-58.84	8.40	11.80	H
	3472	-56.21	-13	-43.21	-78.26	-63.06	5.65	12.50	V
	5208	-53.36	-13	-40.36	-78.44	-59.03	7.13	12.80	V
	6944	-54.23	-13	-41.23	-81.29	-57.63	8.40	11.80	V

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