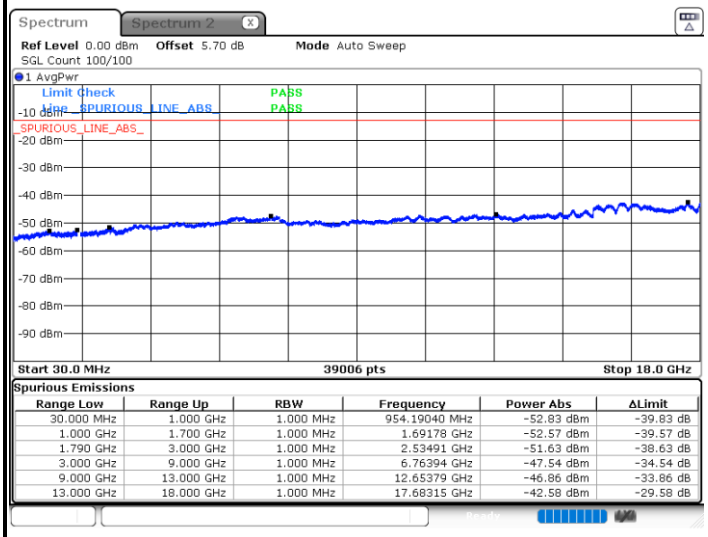
LTE Band 66 / 3MHz

Lowest Channel / QPSK

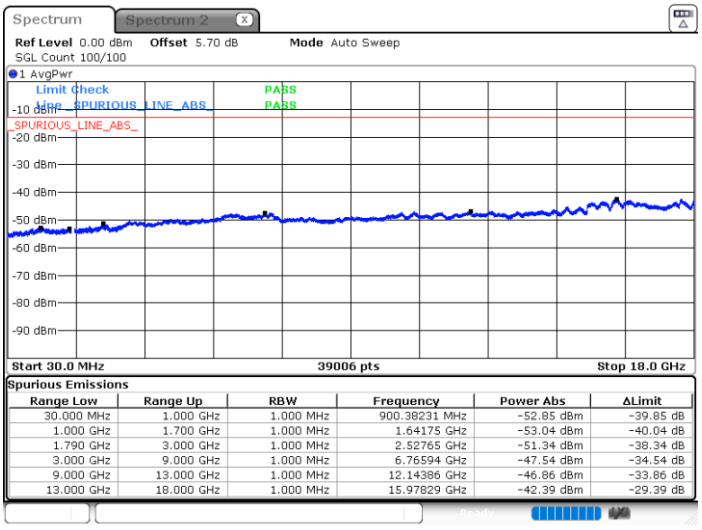


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	954.19040 MHz	-52.83 dBm	-39.83 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69178 GHz	-52.57 dBm	-39.57 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.53491 GHz	-51.63 dBm	-38.63 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.76394 GHz	-47.54 dBm	-34.54 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.65379 GHz	-46.86 dBm	-33.86 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.68315 GHz	-42.58 dBm	-29.58 dB

Date: 22.APR.2024 21:17:07

Middle Channel / QPSK

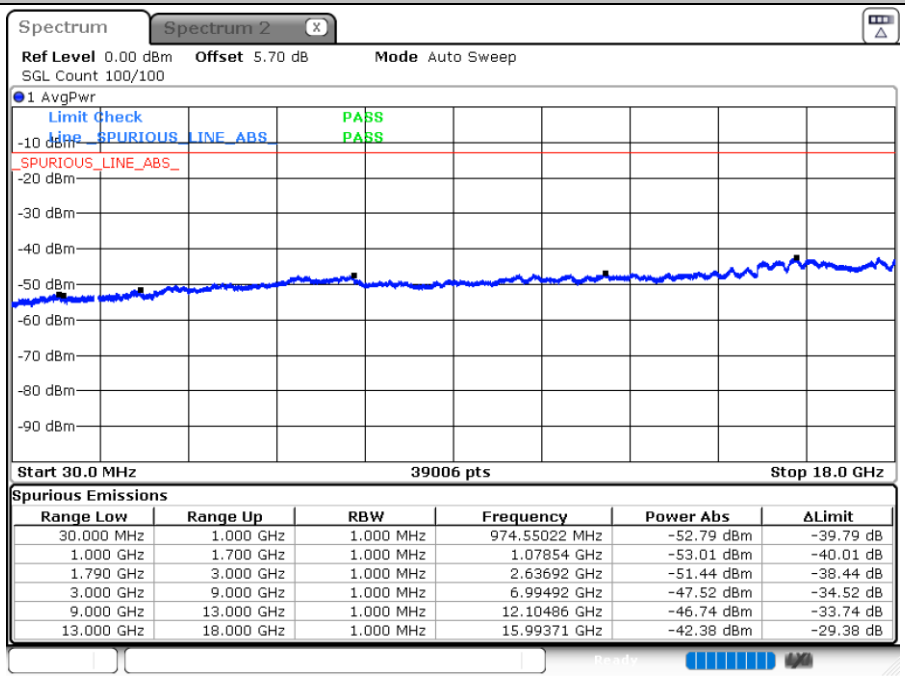


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	900.38231 MHz	-52.85 dBm	-39.85 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.64175 GHz	-53.04 dBm	-40.04 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.52765 GHz	-51.34 dBm	-38.34 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.76594 GHz	-47.54 dBm	-34.54 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.14386 GHz	-46.86 dBm	-33.86 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.97829 GHz	-42.39 dBm	-29.39 dB

Date: 22.APR.2024 21:14:31

Highest Channel / QPSK



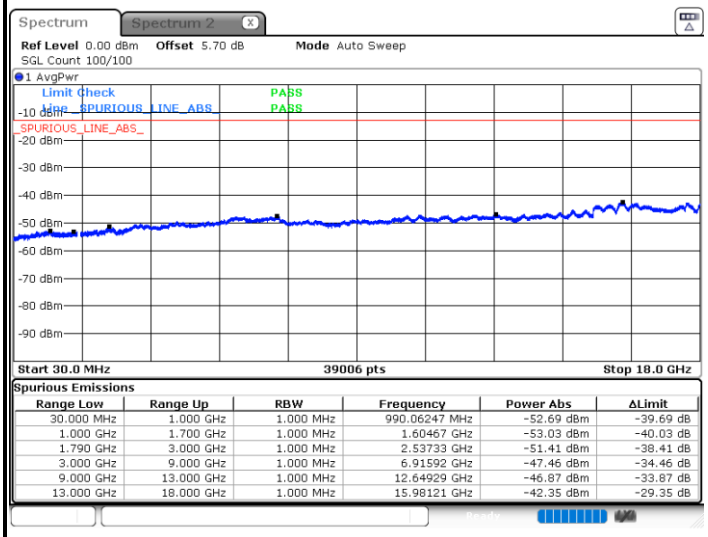
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	974.55022 MHz	-52.79 dBm	-39.79 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.07854 GHz	-53.01 dBm	-40.01 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.63692 GHz	-51.44 dBm	-38.44 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99492 GHz	-47.52 dBm	-34.52 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.10486 GHz	-46.74 dBm	-33.74 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.99371 GHz	-42.38 dBm	-29.38 dB

Date: 22.APR.2024 21:29:16

LTE Band 66 / 5MHz

Lowest Channel / QPSK

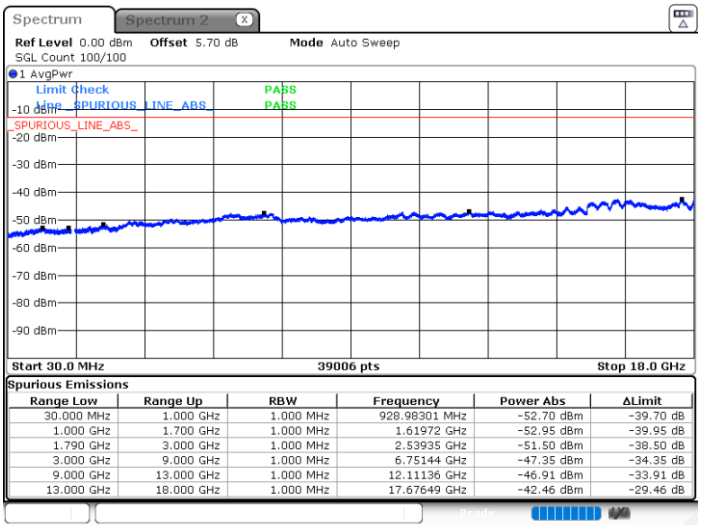


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	990.06247 MHz	-52.69 dBm	-39.69 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.60467 GHz	-53.03 dBm	-40.03 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.53733 GHz	-51.41 dBm	-38.41 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.91592 GHz	-47.46 dBm	-34.46 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.64929 GHz	-46.87 dBm	-33.87 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.98121 GHz	-42.35 dBm	-29.35 dB

Date: 22.APR.2024 21:46:04

Middle Channel / QPSK

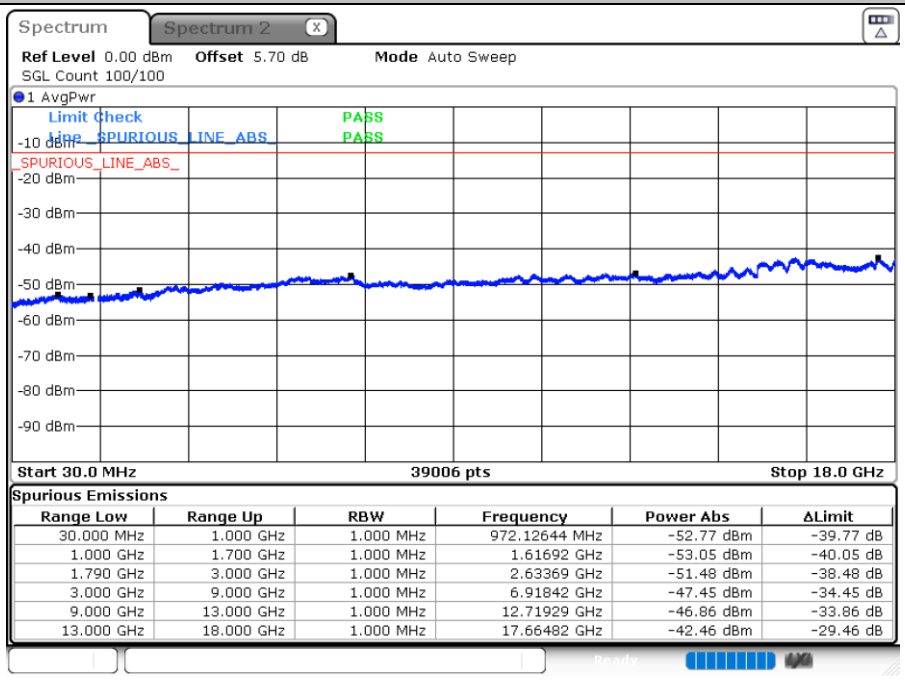


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	928.98301 MHz	-52.70 dBm	-39.70 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.61972 GHz	-52.95 dBm	-39.95 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.53935 GHz	-51.50 dBm	-38.50 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.75144 GHz	-47.35 dBm	-34.35 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.11136 GHz	-46.91 dBm	-33.91 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.67649 GHz	-42.46 dBm	-29.46 dB

Date: 22.APR.2024 21:43:14

Highest Channel / QPSK



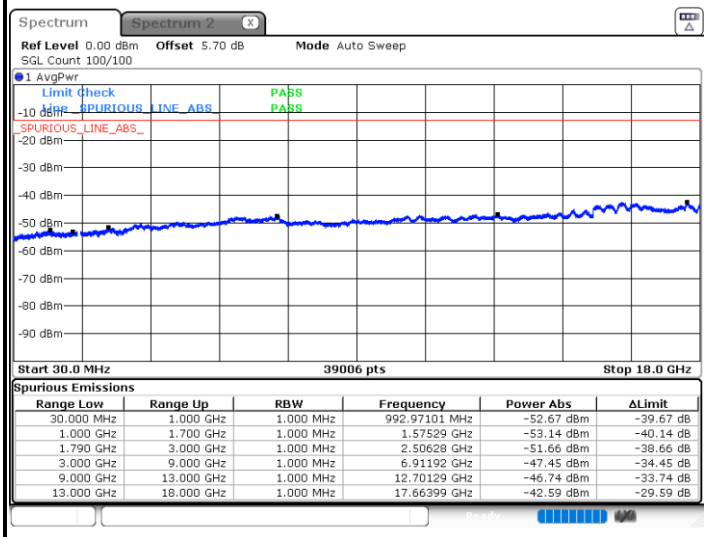
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	972.12644 MHz	-52.77 dBm	-39.77 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.61692 GHz	-53.05 dBm	-40.05 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.63369 GHz	-51.48 dBm	-38.48 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.91842 GHz	-47.45 dBm	-34.45 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.71929 GHz	-46.86 dBm	-33.86 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.66482 GHz	-42.46 dBm	-29.46 dB

Date: 22.APR.2024 21:57:05

LTE Band 66 / 10MHz

Lowest Channel / QPSK

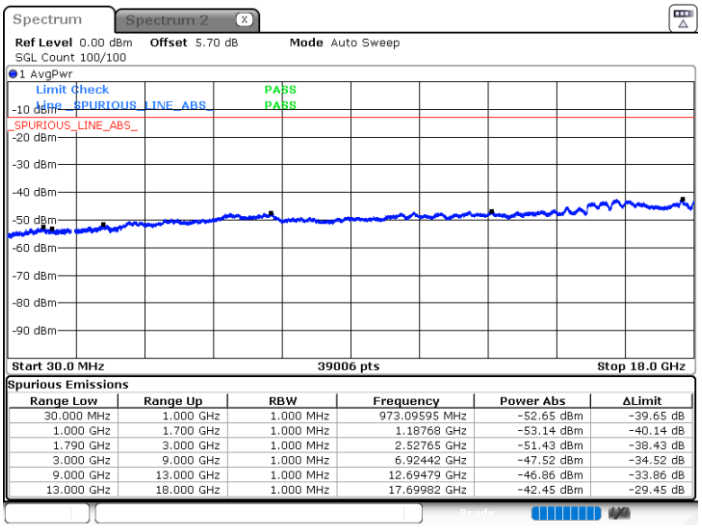


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	992.97101 MHz	-52.67 dBm	-39.67 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.57529 GHz	-53.14 dBm	-40.14 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.50628 GHz	-51.66 dBm	-38.66 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.91192 GHz	-47.45 dBm	-34.45 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.70129 GHz	-46.74 dBm	-33.74 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.66399 GHz	-42.59 dBm	-29.59 dB

Date: 22.APR.2024 22:16:28

Middle Channel / QPSK

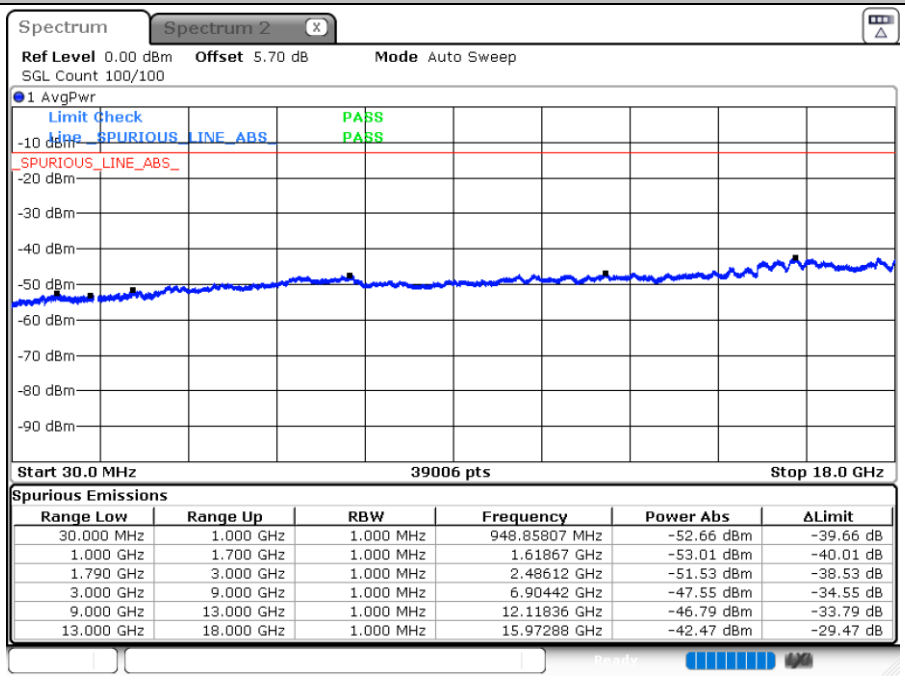


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	973.09595 MHz	-52.65 dBm	-39.65 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.18768 GHz	-53.14 dBm	-40.14 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.52765 GHz	-51.43 dBm	-38.43 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92442 GHz	-47.52 dBm	-34.52 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.69479 GHz	-46.86 dBm	-33.86 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.69982 GHz	-42.45 dBm	-29.45 dB

Date: 22.APR.2024 22:10:24

Highest Channel / QPSK



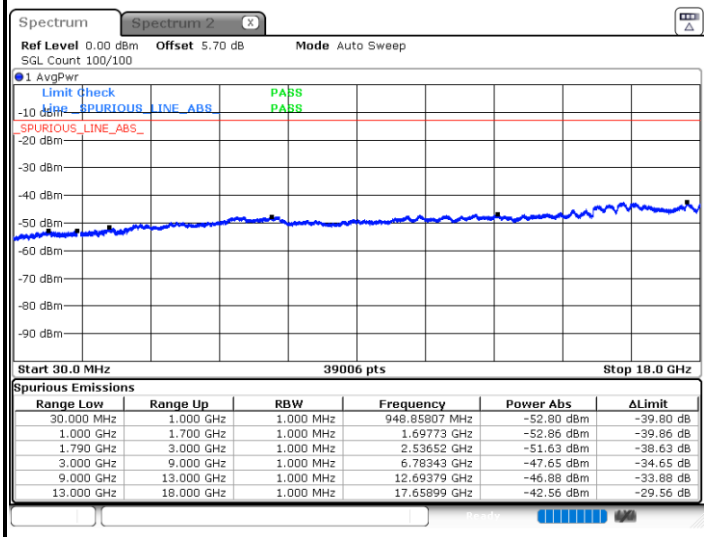
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	948.85807 MHz	-52.66 dBm	-39.66 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.61867 GHz	-53.01 dBm	-40.01 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.48612 GHz	-51.53 dBm	-38.53 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.90442 GHz	-47.55 dBm	-34.55 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.11836 GHz	-46.79 dBm	-33.79 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.97288 GHz	-42.47 dBm	-29.47 dB

Date: 22.APR.2024 22:23:12

LTE Band 66 / 15MHz

Lowest Channel / QPSK

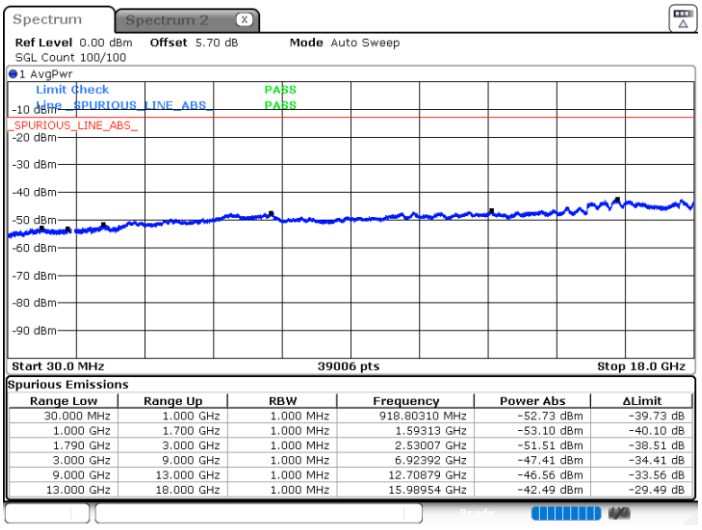


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	948.85807 MHz	-52.80 dBm	-39.80 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69773 GHz	-52.86 dBm	-39.86 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.53652 GHz	-51.63 dBm	-38.63 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.78343 GHz	-47.65 dBm	-34.65 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.69379 GHz	-46.88 dBm	-33.88 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.65899 GHz	-42.56 dBm	-29.56 dB

Date: 22.APR.2024 22:31:52

Middle Channel / QPSK

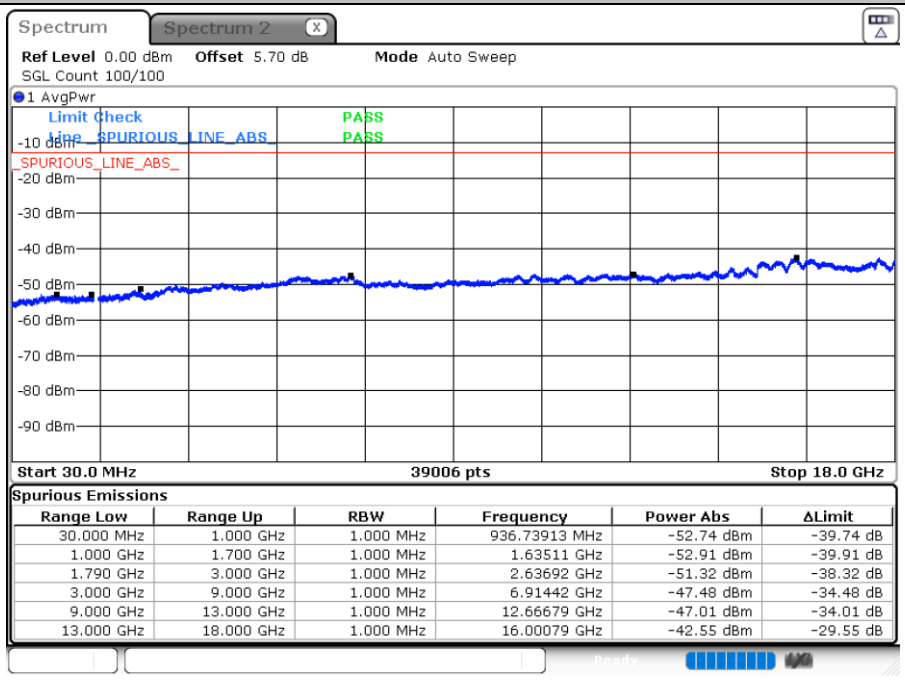


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	918.80310 MHz	-52.73 dBm	-39.73 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.59313 GHz	-53.10 dBm	-40.10 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.53007 GHz	-51.51 dBm	-38.51 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92392 GHz	-47.41 dBm	-34.41 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.70879 GHz	-46.56 dBm	-33.56 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.98954 GHz	-42.49 dBm	-29.49 dB

Date: 22.APR.2024 22:29:29

Highest Channel / QPSK



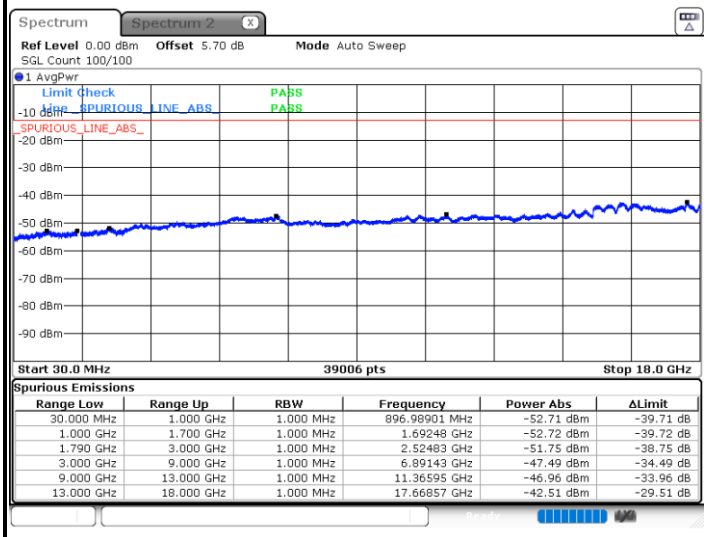
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	936.73913 MHz	-52.74 dBm	-39.74 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.63511 GHz	-52.91 dBm	-39.91 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.63692 GHz	-51.32 dBm	-38.32 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.91442 GHz	-47.48 dBm	-34.48 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.66679 GHz	-47.01 dBm	-34.01 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.00079 GHz	-42.55 dBm	-29.55 dB

Date: 22.APR.2024 22:36:59

LTE Band 66 / 20MHz

Lowest Channel / QPSK

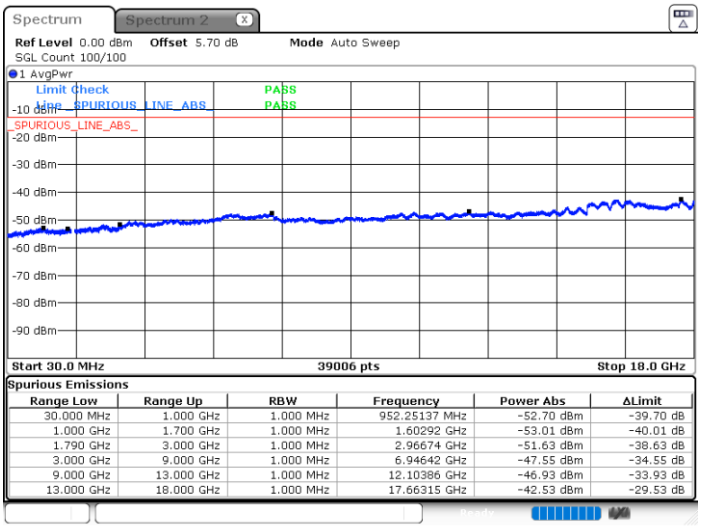


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	896.98901 MHz	-52.71 dBm	-39.71 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69248 GHz	-52.72 dBm	-39.72 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.52483 GHz	-51.75 dBm	-38.75 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.89143 GHz	-47.49 dBm	-34.49 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.36595 GHz	-46.96 dBm	-33.96 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.66857 GHz	-42.51 dBm	-29.51 dB

Date: 22.APR.2024 23:14:09

Middle Channel / QPSK

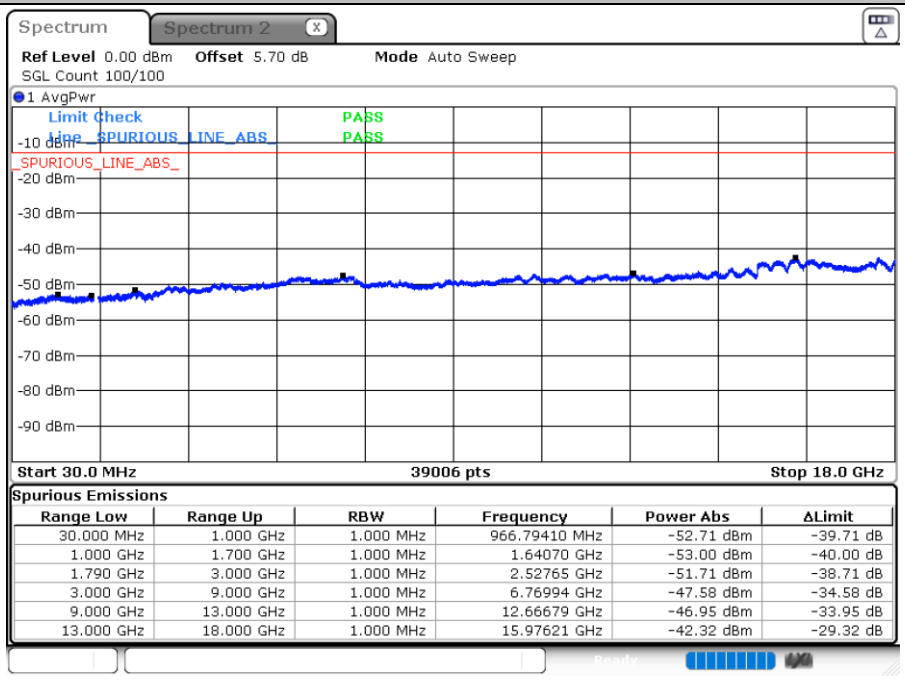


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	952.25137 MHz	-52.70 dBm	-39.70 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.60292 GHz	-53.01 dBm	-40.01 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.96674 GHz	-51.63 dBm	-38.63 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.94642 GHz	-47.55 dBm	-34.55 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.10386 GHz	-46.93 dBm	-33.93 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.66315 GHz	-42.53 dBm	-29.53 dB

Date: 22.APR.2024 22:42:24

Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	966.79410 MHz	-52.71 dBm	-39.71 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.64070 GHz	-53.00 dBm	-40.00 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.52765 GHz	-51.71 dBm	-38.71 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.76994 GHz	-47.58 dBm	-34.58 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.66679 GHz	-46.95 dBm	-33.95 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.97621 GHz	-42.32 dBm	-29.32 dB

Date: 22.APR.2024 23:18:45

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	0.0019	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0016	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0024	
0	Normal Voltage	0.0038	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0029	
-30	Normal Voltage	0.0008	
20	Maximum Voltage	0.0044	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0032	

Note:

1. Normal Voltage =3.91 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.5 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 :	Shunping You	Temperature :	22~25℃
		Relative Humidity :	48~52%

Note: Pre-scanned harmonic for the different antennas, we choose the worst antenna mode to perform final test and record in the report.

LTE Band 12 / 10MHz / QPSK/ ANT0									
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	1406	-55.29	-13	-42.29	-63.37	-58.54	4.00	9.40	H
	2109	-65.15	-13	-52.15	-74.91	-68.72	4.88	10.60	H
	2812	-63.27	-13	-50.27	-75.29	-68.20	5.52	12.60	H
	1406	-56.90	-13	-43.90	-65.06	-60.15	4.00	9.40	V
	2109	-65.09	-13	-52.09	-75.22	-68.66	4.88	10.60	V
	2812	-62.94	-13	-49.94	-75.20	-67.87	5.52	12.60	V

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

LTE Band 13 / 10MHz / QPSK / ANT0									
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	1559.5	-56.94	-42.15	-14.79	-63.72	-60.19	4.00	9.40	H
	2339.25	-64.41	-13	-51.41	-75.20	-67.98	4.88	10.60	H
	3119	-62.90	-13	-49.90	-75.79	-67.83	5.52	12.60	H
	1559.5	-56.35	-42.15	-14.20	-63.34	-59.60	4.00	9.40	V
	2339.25	-63.86	-13	-50.86	-75.04	-67.43	4.88	10.60	V
	3119	-62.39	-13	-49.39	-75.79	-67.32	5.52	12.60	V

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

LTE Band 13 / 5MHz / QPSK / ANT0									
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	1559.5	-62.53	-42.15	-20.38	-69.31	-65.78	4.00	9.40	H
	2339.25	-64.44	-13	-51.44	-75.23	-68.01	4.88	10.60	H
	3119	-63.02	-13	-50.02	-75.91	-67.95	5.52	12.60	H
	1559.5	-61.57	-42.15	-19.42	-68.56	-64.82	4.00	9.40	V
	2339.25	-64.25	-13	-51.25	-75.43	-67.82	4.88	10.60	V
	3119	-62.54	-13	-49.54	-75.94	-67.47	5.52	12.60	V

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

LTE Band 25 / 20MHz / QPSK / ANT1									
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	-62.65	-13	-49.65	-77.28	-69.40	5.85	12.60	H
	5620.5	-61.35	-13	-48.35	-79.08	-67.15	7.30	13.10	H
	7494	-56.25	-13	-43.25	-78.60	-59.40	8.35	11.50	H
	3747	-62.37	-13	-49.37	-77.21	-69.12	5.85	12.60	V
	5620.5	-61.65	-13	-48.65	-79.29	-67.45	7.30	13.10	V
	7494	-56.94	-13	-43.94	-79.21	-60.09	8.35	11.50	V

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

LTE Band 26 / 15MHz / QPSK / ANT0									
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	-57.74	-13	-44.74	-64.00	-60.99	4.00	9.40	H
	2474.25	-64.03	-13	-51.03	-74.38	-67.60	4.88	10.60	H
	3299	-63.97	-13	-50.97	-76.38	-68.90	5.52	12.60	H
	1649.5	-58.52	-13	-45.52	-64.66	-61.77	4.00	9.40	V
	2474.25	-63.41	-13	-50.41	-74.11	-66.98	4.88	10.60	V
	3299	-63.36	-13	-50.36	-76.22	-68.29	5.52	12.60	V

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

LTE Band 66 / 20MHz / QPSK / ANT1									
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	-64.02	-13	-51.02	-76.84	-70.87	5.65	12.50	H
	5208	-62.27	-13	-49.27	-79.73	-67.94	7.13	12.80	H
	6944	-59.34	-13	-46.34	-80.25	-62.74	8.40	11.80	H
	3472	-63.83	-13	-50.83	-77.2	-70.68	5.65	12.50	V
	5208	-62.39	-13	-49.39	-79.8	-68.06	7.13	12.80	V
	6944	-59.23	-13	-46.23	-80.19	-62.63	8.40	11.80	V

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

DC_66A_n7A / 20MHz / QPSK / ANT1+ANT4 for Other PA									
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)
B66	3472	-58.73	-13	-45.73	-80.98	-65.58	5.65	12.50	H
	5208	-56.80	-13	-43.80	-81.71	-62.47	7.13	12.80	H
	6944	-55.57	-13	-42.57	-81.90	-58.97	8.40	11.80	H
	3472	-57.87	-13	-44.87	-79.92	-64.72	5.65	12.50	V
	5208	-56.47	-13	-43.47	-81.55	-62.14	7.13	12.80	V
	6944	-54.31	-13	-41.31	-81.37	-57.71	8.40	11.80	V
N7	5033.00	-58.05	-25	-33.05	-81.91	-63.61	7.14	12.70	H
	7549.50	-54.99	-25	-29.99	-81.81	-58.29	8.30	11.60	H
	10066.00	-52.11	-25	-27.11	-82.99	-53.63	10.48	12.00	H
	5033.00	-56.41	-25	-31.41	-81.72	-61.97	7.14	12.70	V
	7549.50	-54.91	-25	-29.91	-81.72	-58.21	8.30	11.60	V
	10066.00	-51.92	-25	-26.92	-83.61	-53.44	10.48	12.00	V

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

DC_2A_n7A / 20MHz / QPSK / ANT1+ANT4 for Other PA									
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)
B2	3742.18	-57.72	-25	-32.72	-80.76	-64.47	5.85	12.60	H
	5613.27	-57.21	-25	-32.21	-81.79	-63.01	7.30	13.10	H
	7484.36	-54.05	-25	-29.05	-81.13	-57.20	8.35	11.50	H
	3742.18	-55.63	-25	-30.63	-80.68	-62.38	5.85	12.60	V
	5613.27	-56.55	-25	-31.55	-81.98	-62.35	7.30	13.10	V
	7484.36	-54.82	-25	-29.82	-81.88	-57.97	8.35	11.50	V
N7	5033.00	-57.67	-25	-32.67	-81.53	-63.23	7.14	12.70	H
	7549.50	-54.72	-25	-29.72	-81.54	-58.02	8.30	11.60	H
	10066.00	-52.52	-25	-27.52	-83.40	-54.04	10.48	12.00	H
	5033.00	-56.81	-25	-31.81	-82.12	-62.37	7.14	12.70	V
	7549.50	-54.96	-25	-29.96	-81.77	-58.26	8.30	11.60	V
	10066.00	-51.63	-25	-26.63	-83.32	-53.15	10.48	12.00	V

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