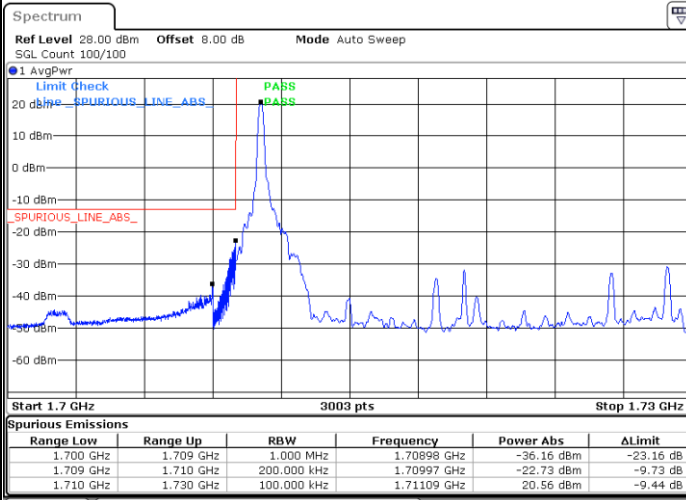




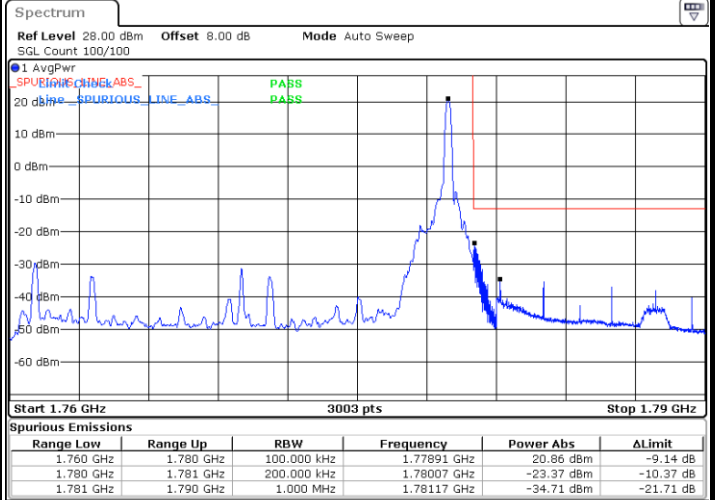
LTE Band 66 / 20MHz / QPSK

Lowest Band Edge / 1RB



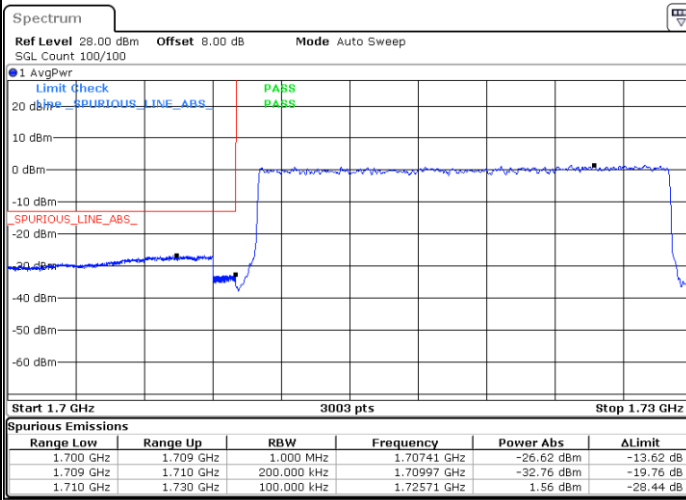
Date: 4.DEC.2023 17:32:42

Highest Band Edge / 1RB



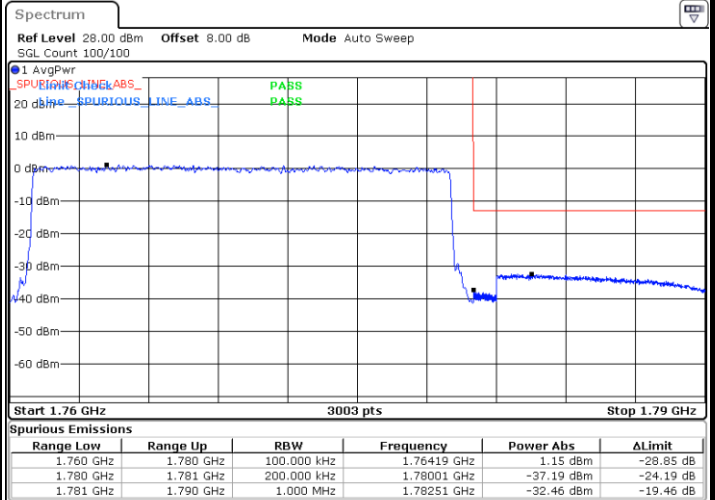
Date: 4.DEC.2023 17:42:39

Lowest Band Edge / Full RB



Date: 4.DEC.2023 17:35:06

Highest Band Edge / Full RB

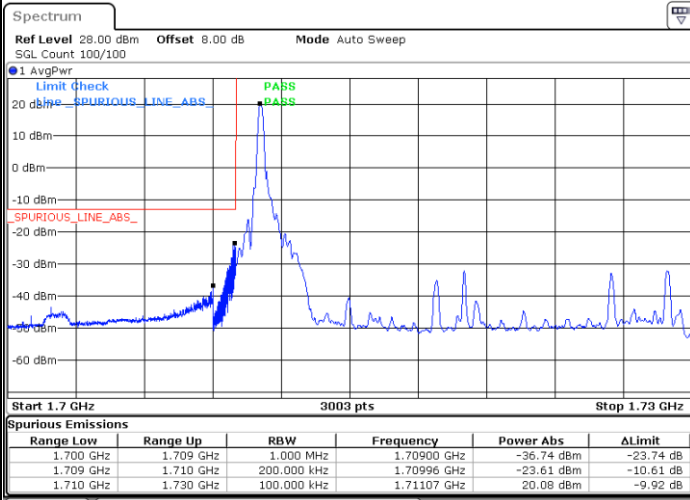


Date: 4.DEC.2023 17:45:03



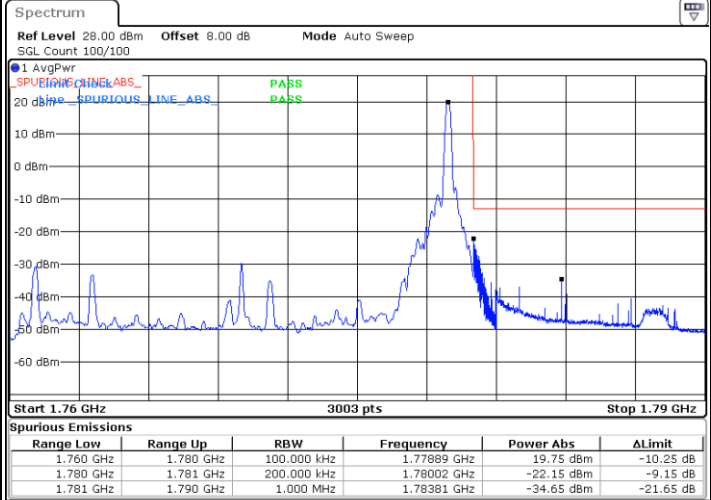
LTE Band 66 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



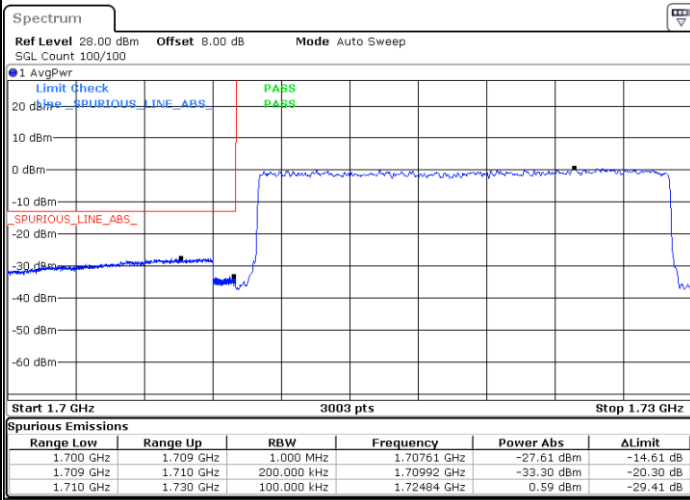
Date: 4.DEC.2023 17:33:30

Highest Band Edge / 1 RB



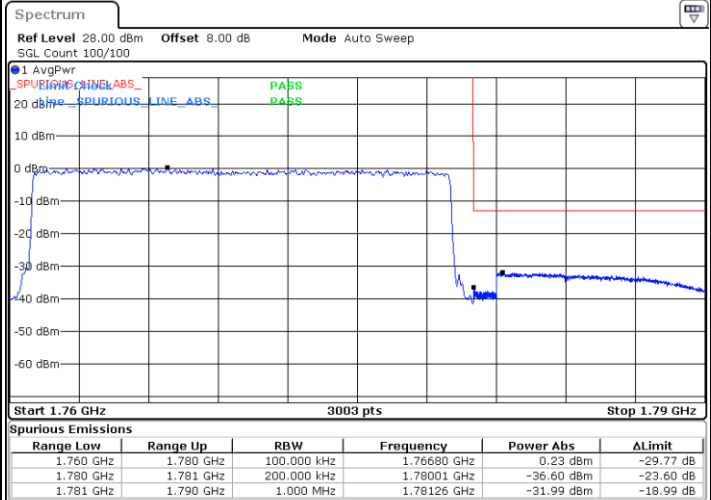
Date: 4.DEC.2023 17:43:27

Lowest Band Edge / Full RB



Date: 4.DEC.2023 17:35:54

Highest Band Edge / Full RB

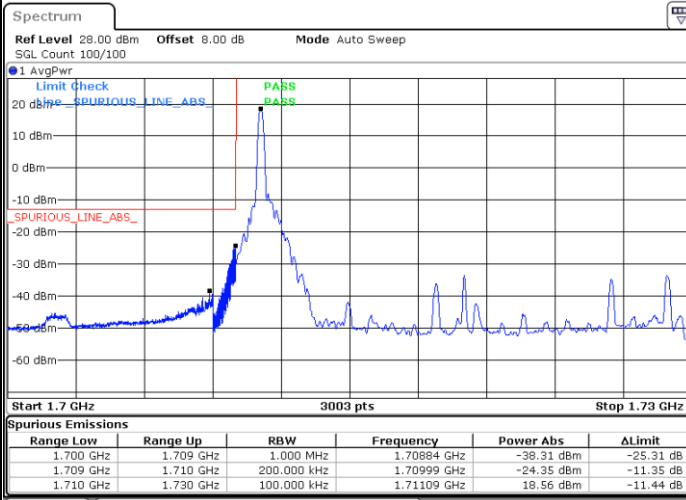


Date: 4.DEC.2023 17:45:51



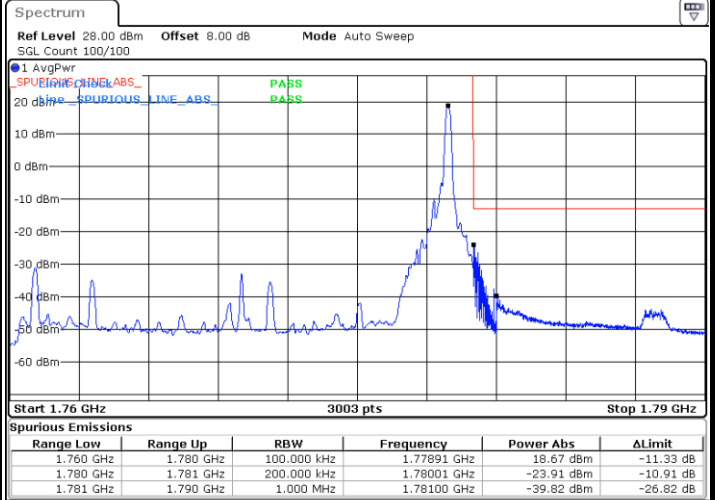
LTE Band 66 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



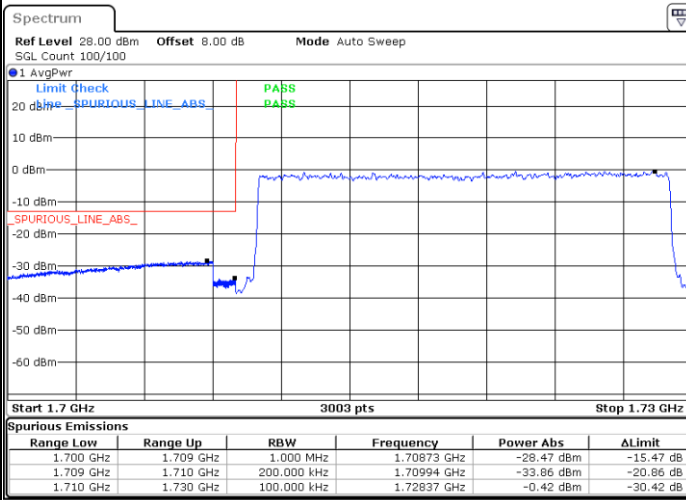
Date: 4.DEC.2023 17:34:18

Highest Band Edge / 1 RB



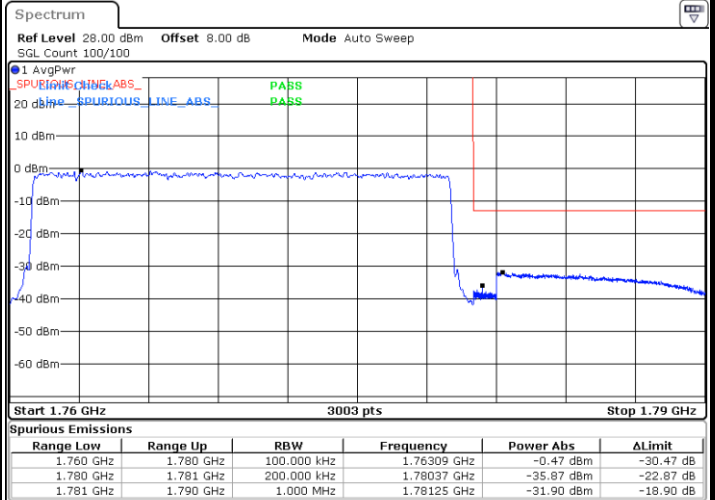
Date: 4.DEC.2023 17:44:15

Lowest Band Edge / Full RB



Date: 4.DEC.2023 17:36:42

Highest Band Edge / Full RB



Date: 4.DEC.2023 17:46:39

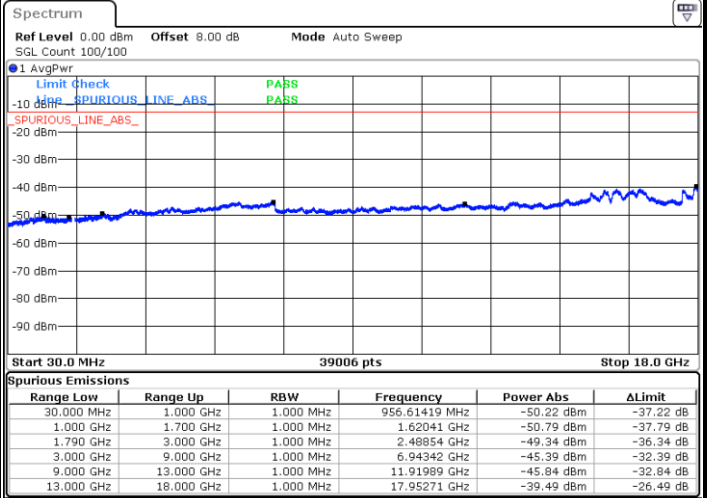
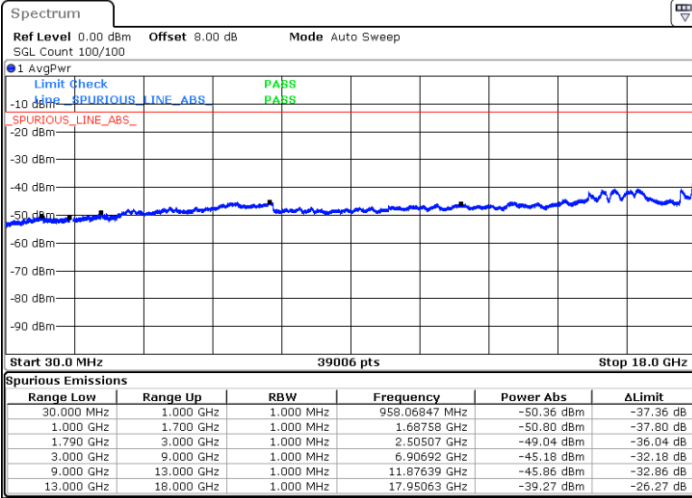


Conducted Spurious Emission

LTE Band 66 / 1.4MHz

Lowest Channel / QPSK

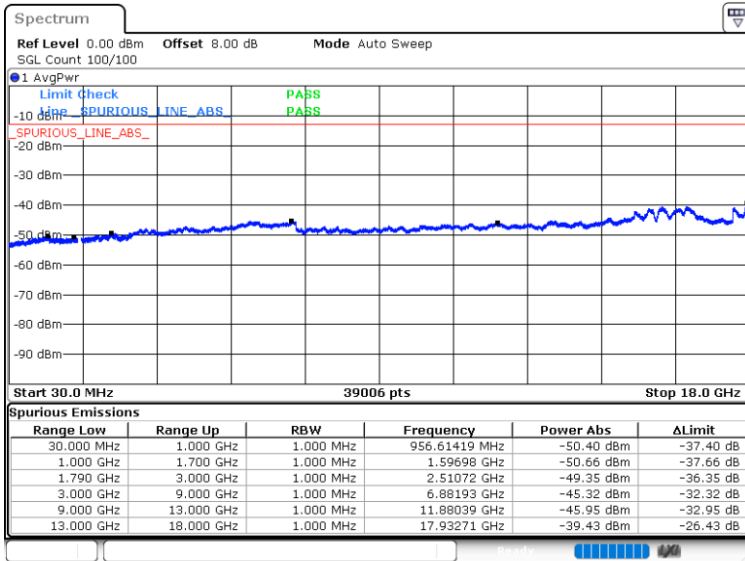
Middle Channel / QPSK



Date: 4.DEC.2023 16:04:56

Date: 4.DEC.2023 16:10:10

Highest Channel / QPSK



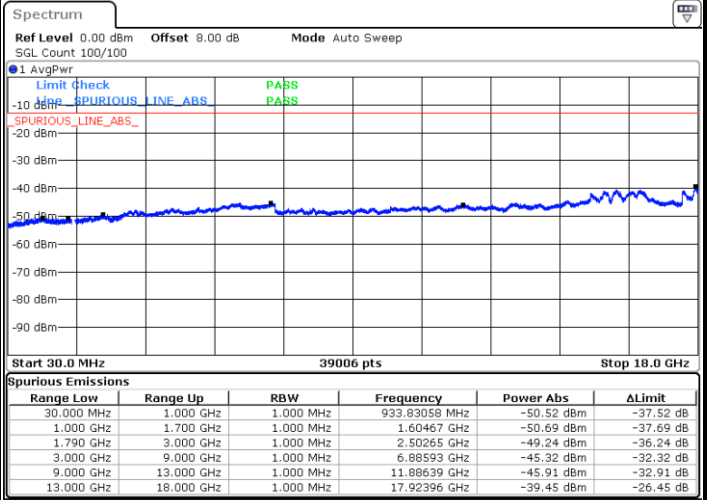
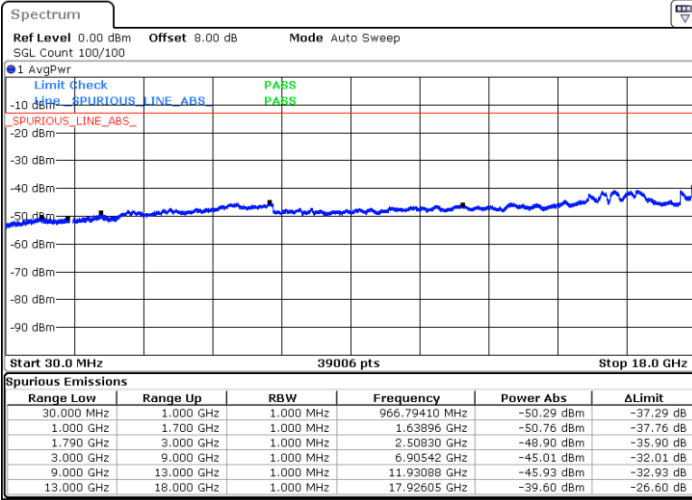
Date: 4.DEC.2023 16:16:47



LTE Band 66 / 3MHz

Lowest Channel / QPSK

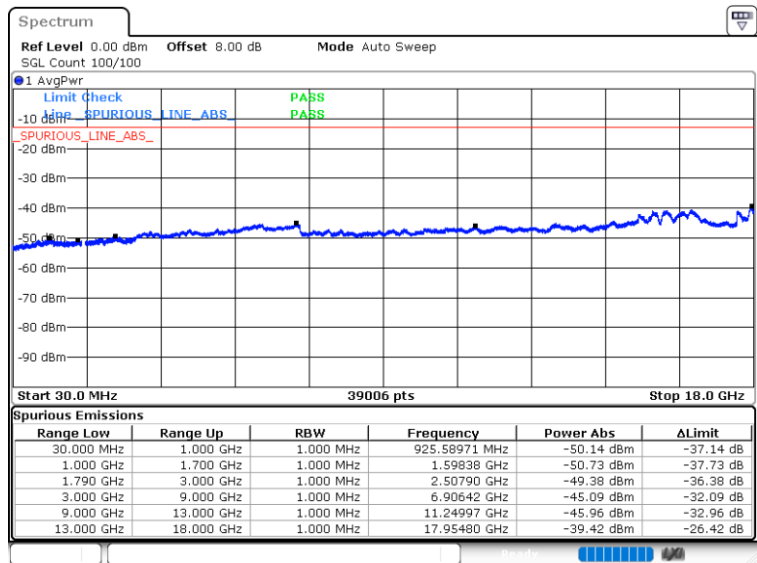
Middle Channel / QPSK



Date: 4. DEC. 2023 16:29:29

Date: 4. DEC. 2023 16:33:31

Highest Channel / QPSK



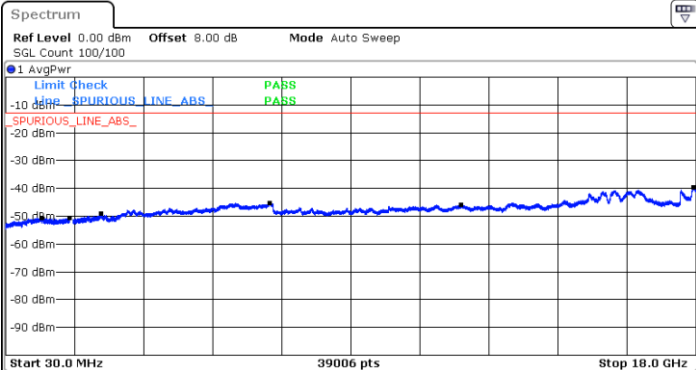
Date: 4. DEC. 2023 16:41:51



LTE Band 66 / 5MHz

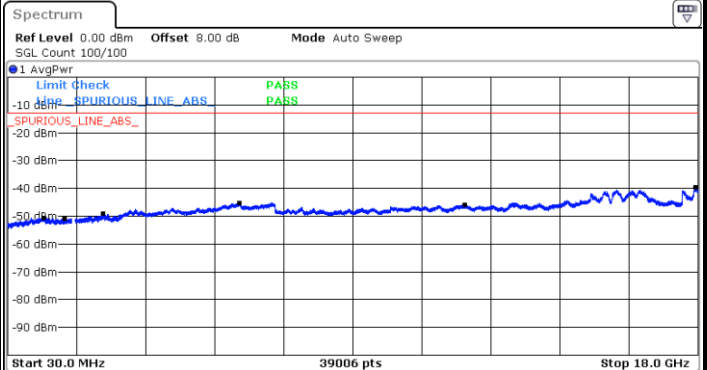
Lowest Channel / QPSK

Middle Channel / QPSK



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	971.15692 MHz	-50.55 dBm	-37.55 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69983 GHz	-50.70 dBm	-37.70 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.51959 GHz	-49.01 dBm	-36.01 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.90342 GHz	-45.25 dBm	-32.25 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.87439 GHz	-45.98 dBm	-32.98 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.93063 GHz	-39.52 dBm	-26.52 dB

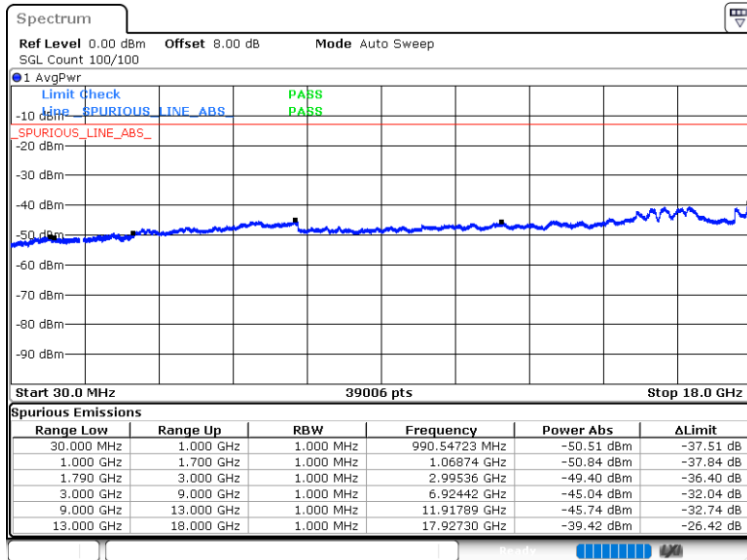
Date: 4. DEC. 2023 16:46:40



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	956.61419 MHz	-50.50 dBm	-37.50 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.49868 GHz	-50.81 dBm	-37.81 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.51475 GHz	-49.03 dBm	-36.03 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.06399 GHz	-45.23 dBm	-32.23 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.91589 GHz	-45.83 dBm	-32.83 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.92605 GHz	-39.56 dBm	-26.56 dB

Date: 4. DEC. 2023 16:50:42

Highest Channel / QPSK



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	990.54723 MHz	-50.51 dBm	-37.51 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.06874 GHz	-50.84 dBm	-37.84 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.99536 GHz	-49.40 dBm	-36.40 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92442 GHz	-45.04 dBm	-32.04 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.91789 GHz	-45.74 dBm	-32.74 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.92730 GHz	-39.42 dBm	-26.42 dB

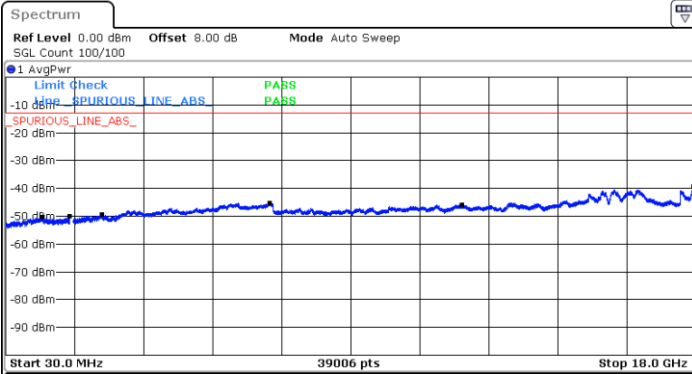
Date: 4. DEC. 2023 16:59:03



LTE Band 66 / 10MHz

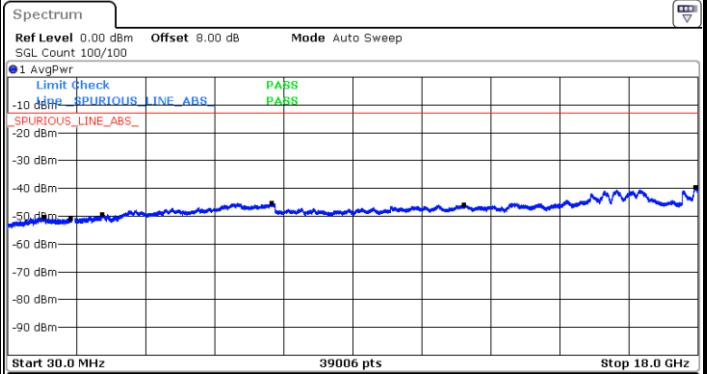
Lowest Channel / QPSK

Middle Channel / QPSK



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	976.00450 MHz	-50.43 dBm	-37.43 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69948 GHz	-50.05 dBm	-37.05 dB
1.700 GHz	3.000 GHz	1.000 MHz	2.52160 GHz	-49.40 dBm	-36.40 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.89693 GHz	-45.31 dBm	-32.31 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.89789 GHz	-45.95 dBm	-32.95 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.92480 GHz	-39.43 dBm	-26.43 dB

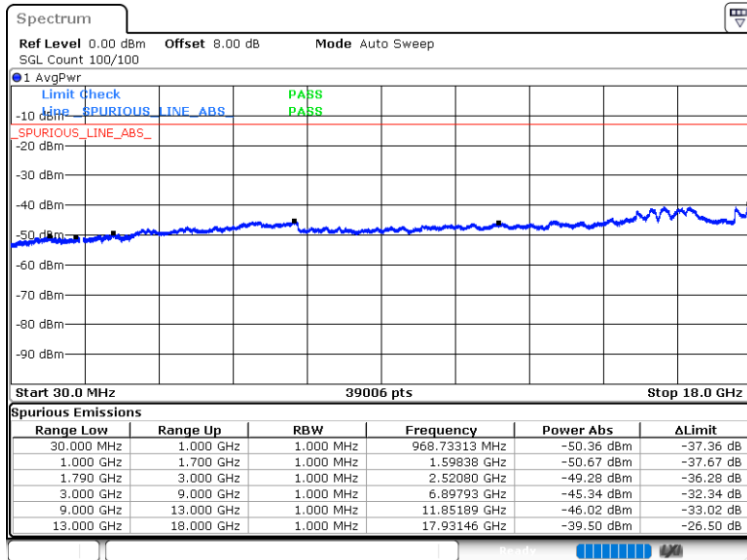
Date: 4.DEC.2023 17:05:46



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	991.51674 MHz	-50.43 dBm	-37.43 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.67884 GHz	-50.91 dBm	-37.91 dB
1.700 GHz	3.000 GHz	1.000 MHz	2.48209 GHz	-49.22 dBm	-36.22 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.89793 GHz	-45.20 dBm	-32.20 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.91139 GHz	-45.84 dBm	-32.84 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.92355 GHz	-39.48 dBm	-26.48 dB

Date: 4.DEC.2023 17:06:54

Highest Channel / QPSK



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	968.73313 MHz	-50.36 dBm	-37.36 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.59838 GHz	-50.67 dBm	-37.67 dB
1.700 GHz	3.000 GHz	1.000 MHz	2.52080 GHz	-49.28 dBm	-36.28 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.89793 GHz	-45.34 dBm	-32.34 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.85189 GHz	-46.02 dBm	-33.02 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.93146 GHz	-39.50 dBm	-26.50 dB

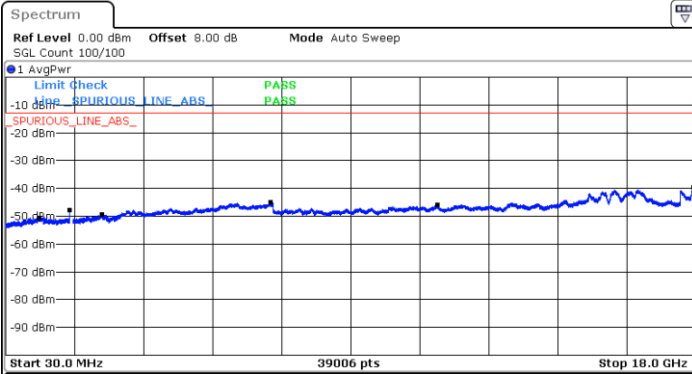
Date: 4.DEC.2023 17:14:13



LTE Band 66 / 15MHz

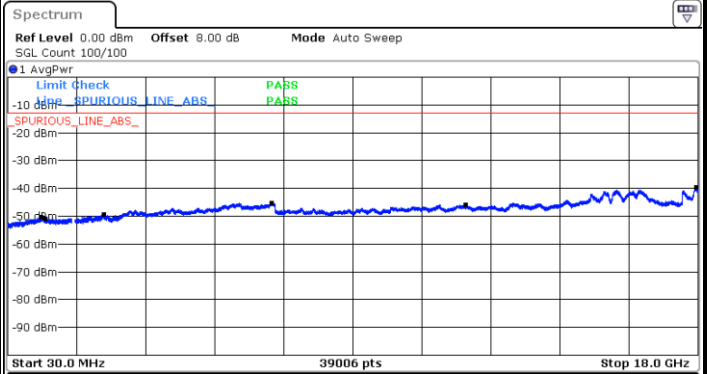
Lowest Channel / QPSK

Middle Channel / QPSK



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	904.74513 MHz	-50.54 dBm	-37.54 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69773 GHz	-47.82 dBm	-34.82 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.52685 GHz	-49.31 dBm	-36.31 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92842 GHz	-45.00 dBm	-32.00 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.27597 GHz	-45.97 dBm	-32.97 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.92688 GHz	-39.56 dBm	-26.56 dB

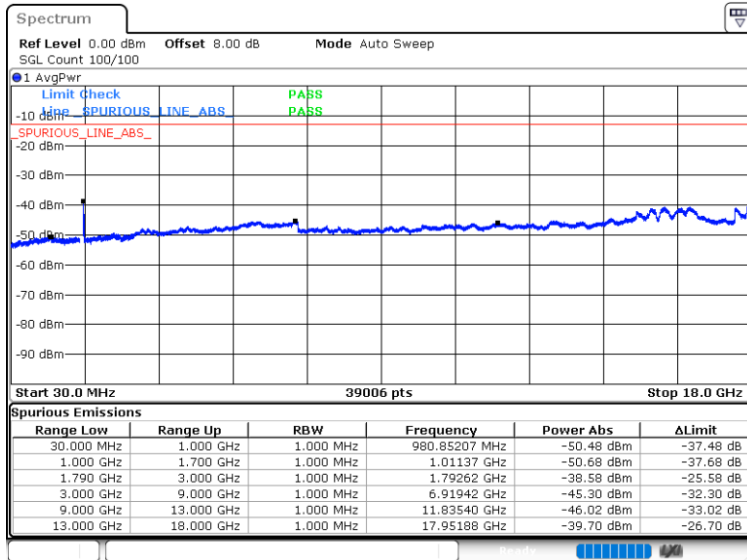
Date: 4.DEC.2023 17:20:56



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	900.86707 MHz	-50.43 dBm	-37.43 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.00332 GHz	-50.87 dBm	-37.87 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.52281 GHz	-49.25 dBm	-36.25 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.90692 GHz	-45.25 dBm	-32.25 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.94638 GHz	-45.92 dBm	-32.92 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.95521 GHz	-39.57 dBm	-26.57 dB

Date: 4.DEC.2023 17:22:04

Highest Channel / QPSK



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	980.85207 MHz	-50.48 dBm	-37.48 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.01137 GHz	-50.68 dBm	-37.68 dB
1.790 GHz	3.000 GHz	1.000 MHz	1.79262 GHz	-38.58 dBm	-25.58 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.91942 GHz	-45.30 dBm	-32.30 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.83540 GHz	-46.02 dBm	-33.02 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.95188 GHz	-39.70 dBm	-26.70 dB

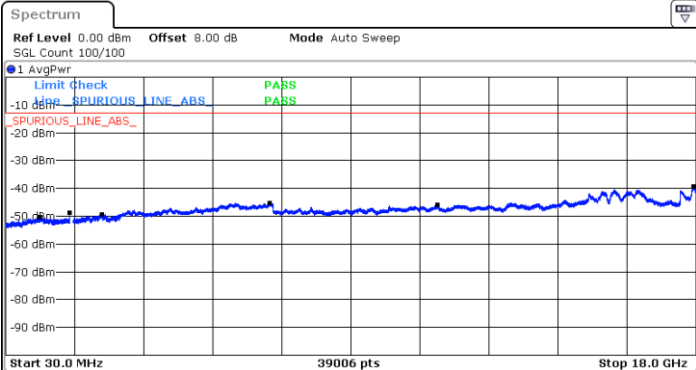
Date: 4.DEC.2023 17:29:25



LTE Band 66 / 20MHz

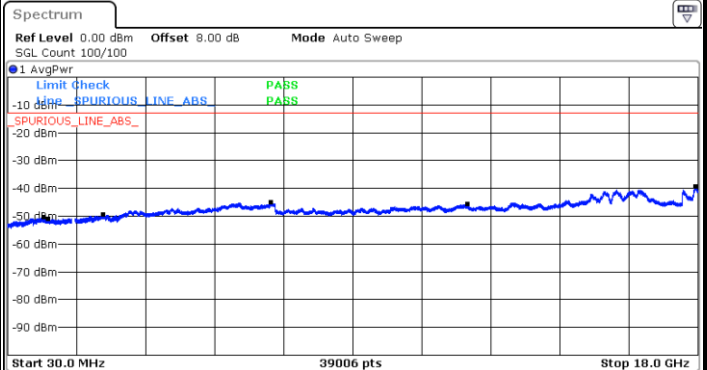
Lowest Channel / QPSK

Middle Channel / QPSK



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	923.65067 MHz	-50.32 dBm	-37.32 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69948 GHz	-48.74 dBm	-35.74 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.54176 GHz	-49.38 dBm	-36.38 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.90292 GHz	-45.32 dBm	-32.32 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.26147 GHz	-45.91 dBm	-32.91 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.92896 GHz	-39.39 dBm	-26.39 dB

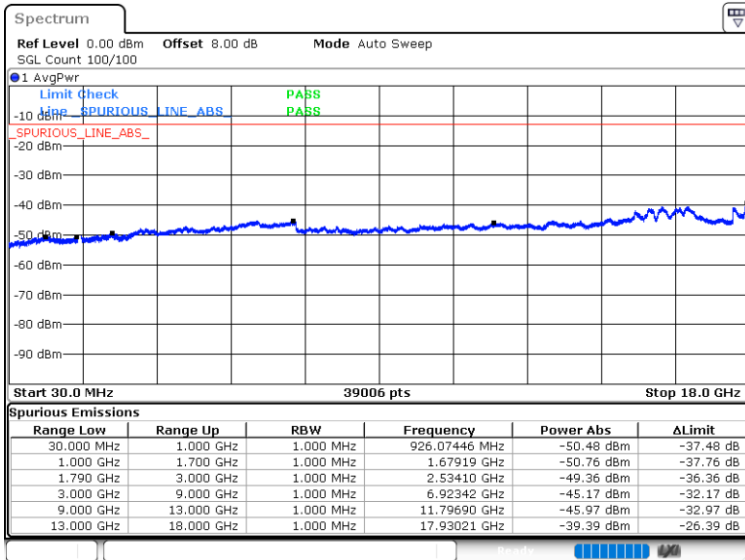
Date: 4.DEC.2023 17:37:50



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	957.58371 MHz	-50.32 dBm	-37.32 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.07434 GHz	-50.94 dBm	-37.94 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.51475 GHz	-49.24 dBm	-36.24 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.87993 GHz	-45.08 dBm	-32.08 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.99488 GHz	-45.75 dBm	-32.75 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.92188 GHz	-39.35 dBm	-26.35 dB

Date: 4.DEC.2023 17:38:57

Highest Channel / QPSK



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	926.07446 MHz	-50.48 dBm	-37.48 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.67919 GHz	-50.76 dBm	-37.76 dB
1.790 GHz	3.000 GHz	1.000 MHz	2.53410 GHz	-49.36 dBm	-36.36 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.92342 GHz	-45.17 dBm	-32.17 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.79690 GHz	-45.97 dBm	-32.97 dB
13.000 GHz	18.000 GHz	1.000 MHz	17.93021 GHz	-39.39 dBm	-26.39 dB

Date: 4.DEC.2023 17:47:47



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	0.0043	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0040	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0048	
-20	Normal Voltage	0.0005	
-30	Normal Voltage	0.0056	
20	Maximum Voltage	0.0058	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0011	

Note:

1. Normal Voltage = 3.91 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.5 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°C
		Relative Humidity :	48~52%

RSE pretest all the support Antennas, only the worst results are shown in the report.

LTE Band 2 / 20MHz / 64QAM / 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	3742.18	-55.98	-13	-42.98	-79.02	-62.73	5.85	12.60	H
	5613.27	-55.24	-13	-42.24	-79.82	-61.04	7.30	13.10	H
	7484.36	-54.10	-13	-41.10	-81.18	-57.25	8.35	11.50	H
	3742.18	-53.63	-13	-40.63	-78.68	-60.38	5.85	12.60	V
	5613.27	-54.88	-13	-41.88	-80.31	-60.68	7.30	13.10	V
	7484.36	-54.15	-13	-41.15	-81.21	-57.30	8.35	11.50	V

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

LTE Band 12 / 10MHz / 64QAM / Ant.1									
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	1406	-64.17	-13	-51.17	-75.43	-67.42	4.00	9.40	H
	2109	-59.22	-13	-46.22	-77.37	-62.79	4.88	10.60	H
	2812	-58.05	-13	-45.05	-77.49	-62.98	5.52	12.60	H
	1406	-63.07	-13	-50.07	-75.39	-66.32	4.00	9.40	V
	2109	-59.43	-13	-46.43	-77.37	-63.00	4.88	10.60	V
	2812	-57.14	-13	-44.14	-77.39	-62.07	5.52	12.60	V

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

LTE Band 13 / 5MHz / QPSK / Ant.1									
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	1559.5	-63.98	-42.15	-21.83	-75.76	-67.23	4.00	9.40	H
	2339.25	-58.70	-13	-45.70	-77.31	-62.27	4.88	10.60	H
	3119	-57.37	-13	-44.37	-77.69	-62.30	5.52	12.60	H
	1559.5	-63.26	-42.15	-21.11	-75.66	-66.51	4.00	9.40	V
	2339.25	-58.13	-13	-45.13	-77.11	-61.70	4.88	10.60	V
	3119	-55.61	-13	-42.61	-77.73	-60.54	5.52	12.60	V

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



LTE Band 13 / 10MHz / QPSK / Ant.1									
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	1559.5	-64.14	-42.15	-21.99	-75.92	-67.39	4.00	9.40	H
	2339.25	-58.70	-13	-45.70	-77.31	-62.27	4.88	10.60	H
	3119	-57.38	-13	-44.38	-77.70	-62.31	5.52	12.60	H
	1559.5	-63.52	-42.15	-21.37	-75.92	-66.77	4.00	9.40	V
	2339.25	-58.23	-13	-45.23	-77.21	-61.80	4.88	10.60	V
	3119	-55.44	-13	-42.44	-77.56	-60.37	5.52	12.60	V

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

LTE Band 26 / 5MHz / 64QAM / Ant.1									
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	1659.5	-63.81	-13	-50.81	-76.01	-67.06	4.00	9.40	H
	2489.25	-57.91	-13	-44.91	-77.29	-61.48	4.88	10.60	H
	3319	-56.53	-13	-43.53	-77.68	-61.46	5.52	12.60	H
	1659.5	-62.98	-13	-49.98	-75.85	-66.23	4.00	9.40	V
	2489.25	-57.83	-13	-44.83	-77.47	-61.40	4.88	10.60	V
	3319	-56.28	-13	-43.28	-78.13	-61.21	5.52	12.60	V

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

LTE Band 66 / 20MHz / 64QAM / Ant.1									
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	-56.40	-13	-43.40	-78.65	-63.25	5.65	12.50	H
	5208	-55.40	-13	-42.40	-80.31	-61.07	7.13	12.80	H
	6944	-54.69	-13	-41.69	-81.02	-58.09	8.40	11.80	H
	3472	-55.36	-13	-42.36	-77.41	-62.21	5.65	12.50	V
	5208	-55.49	-13	-42.49	-80.57	-61.16	7.13	12.80	V
	6944	-54.06	-13	-41.06	-81.12	-57.46	8.40	11.80	V

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