

**Frequency Stability**

Test Conditions		LTE Band 71 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0004	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0073	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0015	
-20	Normal Voltage	0.0062	
-30	Normal Voltage	0.0026	
20	Maximum Voltage	0.0007	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0003	

Note:

1. Normal Voltage =7.78 V. ; Battery End Point (BEP) =6 V. ; Maximum Voltage =8.96 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 :	Zhicheng Li	Temperature :	22~25°C
		Relative Humidity :	48~52%

RSE pre-scanned for all the supported antennas and only the worst antenna to do final test.

LTE Band 7 / 20MHz / QPSK for 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)
Lowest	5002.18	-55.11	-25	-30.11	-72.58	-60.67	7.12	12.68	H
	7503.27	-57.09	-25	-32.09	-79.42	-60.42	8.26	11.59	H
	10004.36	-53.60	-25	-28.60	-80.53	-55.13	10.45	11.98	H
	12505.45	-52.91	-25	-27.91	-80.01	-54.58	11.78	13.45	H
	5002.18	-59.84	-25	-34.84	-77.23	-65.40	7.12	12.68	V
	7503.27	-57.00	-25	-32.00	-79.23	-60.33	8.26	11.59	V
	10004.36	-54.28	-25	-29.28	-80.6	-55.81	10.45	11.98	V
	12505.45	-52.58	-25	-27.58	-80.22	-54.25	11.78	13.45	V
Middle	5052.18	-53.78	-25	-28.78	-71.20	-59.34	7.14	12.70	H
	7578.27	-56.83	-25	-31.83	-78.99	-60.13	8.30	11.60	H
	10104.36	-53.53	-25	-28.53	-80.42	-55.05	10.48	12.00	H
	12630.45	-52.96	-25	-27.96	-80.54	-54.66	11.80	13.50	H
	5052.18	-60.81	-25	-35.81	-78.16	-66.37	7.14	12.70	V
	7578.27	-57.07	-25	-32.07	-79.03	-60.37	8.30	11.60	V
	10104.36	-53.57	-25	-28.57	-79.97	-55.09	10.48	12.00	V
	12630.45	-52.37	-25	-27.37	-80.51	-54.07	11.80	13.50	V
Highest	5102.18	-53.20	-25	-28.20	-70.56	-58.76	7.16	12.72	H
	7653.27	-56.37	-25	-31.37	-78.64	-59.67	8.33	11.63	H
	10204.36	-53.03	-25	-28.03	-79.89	-54.63	10.50	12.10	H
	5102.18	-60.93	-25	-35.93	-78.22	-66.49	7.16	12.72	V
	7653.27	-56.51	-25	-31.51	-78.62	-59.81	8.33	11.63	V
	10204.36	-53.35	-25	-28.35	-79.83	-54.95	10.50	12.10	V

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



LTE Band 41(HPUE) / 20MHz / QPSK for 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)
Lowest	4994.00	-58.98	-25	-33.98	-76.46	-64.54	7.12	12.68	H
	7491.00	-57.25	-25	-32.25	-79.61	-60.58	8.26	11.59	H
	9988.00	-53.71	-25	-28.71	-80.62	-55.24	10.45	11.98	H
	12485.00	-53.02	-25	-28.02	-80.11	-54.69	11.78	13.45	H
	14982.00	-44.58	-25	-19.58	-75.96	-45.24	12.90	13.56	H
	4994.00	-61.15	-25	-36.15	-78.56	-66.71	7.12	12.68	V
	7491.00	-57.54	-25	-32.54	-79.82	-60.87	8.26	11.59	V
	9988.00	-54.33	-25	-29.33	-80.65	-55.86	10.45	11.98	V
	12485.00	-52.68	-25	-27.68	-80.30	-54.35	11.78	13.45	V
	14982.00	-46.88	-25	-21.88	-78.66	-47.54	12.90	13.56	V
Middle	5168.00	-54.57	-25	-29.57	-71.84	-60.13	7.14	12.70	H
	7752.00	-57.15	-25	-32.15	-79.72	-60.45	8.30	11.60	H
	10336.00	-53.07	-25	-28.07	-79.88	-54.59	10.48	12.00	H
	5168.00	-59.47	-25	-34.47	-76.69	-65.03	7.14	12.70	V
	7752.00	-56.92	-25	-31.92	-79.46	-60.22	8.30	11.60	V
	10336.00	-53.32	-25	-28.32	-79.9	-54.84	10.48	12.00	V
Highest	5342.00	-56.55	-25	-31.55	-72.91	-62.11	7.16	12.72	H
	8013.00	-56.13	-25	-31.13	-79.78	-59.43	8.33	11.63	H
	10684.00	-51.26	-25	-26.26	-78.75	-52.86	10.50	12.10	H
	13355.00	-49.32	-25	-24.32	-80.39	-51.04	11.82	13.54	H
	16026.00	-50.79	-25	-25.79	-79.45	-51.39	13.02	13.62	H
	5342.00	-59.26	-25	-34.26	-75.86	-64.82	7.16	12.72	V
	8013.00	-56.13	-25	-31.13	-79.84	-59.43	8.33	11.63	V
	10684.00	-52.77	-25	-27.77	-80.11	-54.37	10.50	12.10	V
	13355.00	-49.08	-25	-24.08	-80.20	-50.80	11.82	13.54	V
	16026.00	-48.34	-25	-23.34	-79.53	-48.94	13.02	13.62	V

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



LTE Band 71 / 20MHz / QPSK for 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)
Lowest	1328	-65.01	-13	-52.01	-71.69	-68.24	3.98	9.36	H
	1992	-66.31	-13	-53.31	-73.98	-69.86	4.85	10.55	H
	2656	-63.95	-13	-50.95	-74.63	-68.88	5.50	12.58	H
	1328	-65.15	-13	-52.15	-71.74	-68.38	3.98	9.36	V
	1992	-65.56	-13	-52.56	-73.64	-69.11	4.85	10.55	V
	2656	-63.81	-13	-50.81	-74.82	-68.74	5.50	12.58	V
Middle	1343	-64.68	-13	-51.68	-71.57	-67.93	4.00	9.40	H
	2014.5	-65.61	-13	-52.61	-73.60	-69.18	4.88	10.60	H
	2686	-63.35	-13	-50.35	-74.27	-68.28	5.52	12.60	H
	1343	-64.87	-13	-51.87	-71.71	-68.12	4.00	9.40	V
	2014.5	-65.39	-13	-52.39	-73.80	-68.96	4.88	10.60	V
	2686	-62.99	-13	-49.99	-74.21	-67.92	5.52	12.60	V
Highest	1358	-64.41	-13	-51.41	-71.62	-67.58	4.10	9.42	H
	2037	-65.11	-13	-52.11	-73.50	-68.69	4.90	10.63	H
	2716	-63.35	-13	-50.35	-74.51	-68.27	5.55	12.62	H
	1358	-64.83	-13	-51.83	-72.02	-68.00	4.10	9.42	V
	2037	-64.79	-13	-51.79	-73.59	-68.37	4.90	10.63	V
	2716	-63.13	-13	-50.13	-74.57	-68.05	5.55	12.62	V

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



LTE Band 7C_CA / 20MHz+20MHz / QPSK for 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	5002.00	-62.06	-25	-37.06	-79.53	-67.62	7.14	12.70	H
	7503.00	-57.56	-25	-32.56	-79.89	-60.86	8.30	11.60	H
	10004.00	-53.55	-25	-28.55	-80.48	-55.07	10.48	12.00	H
	5002.00	-62.13	-25	-37.13	-79.52	-67.69	7.14	12.70	V
	7503.00	-57.72	-25	-32.72	-79.95	-61.02	8.30	11.60	V
	10004.00	-54.32	-25	-29.32	-80.64	-55.84	10.48	12.00	V

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

LTE Band 41C_CA / 20MHz+20MHz / QPSK for 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)
Lowest	5031.80	-62.58	-25	-37.58	-80.03	-68.14	7.12	12.68	H
	7547.70	-57.76	-25	-32.76	-79.99	-61.09	8.26	11.59	H
	10063.60	-53.79	-25	-28.79	-80.69	-55.32	10.45	11.98	H
	5031.80	-62.79	-25	-37.79	-80.16	-68.35	7.12	12.68	V
	7547.70	-57.73	-25	-32.73	-79.8	-61.06	8.26	11.59	V
	10063.60	-53.90	-25	-28.90	-80.27	-55.43	10.45	11.98	V
Middle	5186.00	-61.50	-25	-36.50	-78.78	-67.06	7.14	12.70	H
	7779.00	-57.02	-25	-32.02	-79.67	-60.32	8.30	11.60	H
	10372.00	-53.60	-25	-28.60	-80.39	-55.12	10.48	12.00	H
	5186.00	-61.58	-25	-36.58	-78.81	-67.14	7.14	12.70	V
	7779.00	-57.02	-25	-32.02	-79.67	-60.32	8.30	11.60	V
	10372.00	-53.59	-25	-28.59	-80.2	-55.11	10.48	12.00	V
Highest	5340.00	-63.70	-25	-38.70	-80.06	-69.26	7.16	12.72	H
	8010.30	-56.78	-25	-31.78	-80.44	-60.08	8.33	11.63	H
	10680.40	-52.94	-25	-27.94	-80.41	-54.54	10.50	12.10	H
	5340.00	-63.39	-25	-38.39	-79.98	-68.95	7.16	12.72	V
	8010.30	-56.41	-25	-31.41	-80.13	-59.71	8.33	11.63	V
	10680.40	-52.72	-25	-27.72	-80.05	-54.32	10.50	12.10	V

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