

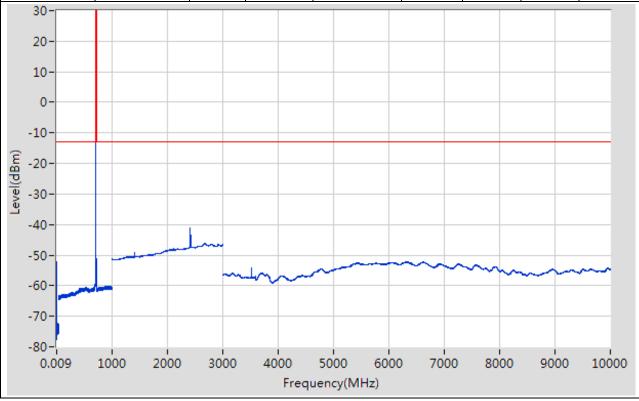
Annex C. LTE Transmitter Spurious Emissions



1. LTE_Band17

1.1. LTE Transmitter Spurious Emissions(NTNV)(Subtest:1, Channel:23755, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:LOW)

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	RMS	0.011	-54.28	-13	Pass	601
0.15	30	0.01	RMS	0.15	-52.05	-13	Pass	2985
30	695	0.1	RMS	694.9	-59.6	-13	Pass	6650
695	725	0.1	RMS	704.35	20.34	60	Pass	601
725	1000	0.1	RMS	891.16	-60.09	-13	Pass	2750
1000	3000	1	RMS	2411.706	-40.94	-13	Pass	2000
3000	10000	1	RMS	6316.474	-52.13	-13	Pass	7000
30-								





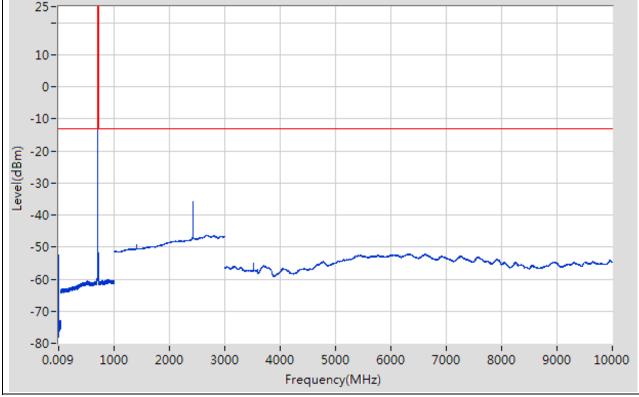
1.2. LTE Transmitter Spurious Emissions(NTNV)(Subtest:2, Channel:23755, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

Fre	Start equency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
	0.009	0.15	0.001	RMS	0.009	-53.2	-13	Pass	601
	0.15	30	0.01	RMS	0.15	-52.96	-13	Pass	2985
	30	695	0.1	RMS	694.6	-60.47	-13	Pass	6650
	695	725	0.1	RMS	708.65	20.44	60	Pass	601
	725	1000	0.1	RMS	898.963	-60.01	-13	Pass	2750
	1000	3000	1	RMS	2418.709	-32.84	-13	Pass	2000
	3000	10000	1	RMS	6321.474	-52.12	-13	Pass	7000
Level(dBm)	20- 10- 0- -10- -20- -30- -40- -50- -60- -70- -80- 0.009	1000 2000	3000	4000	5000 6000) 7000	8000	9000	10000
				Frequ	uency(MHz)				



1.3. LTE Transmitter Spurious Emissions(NTNV)(Subtest:3, Channel:23755, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:LOW)

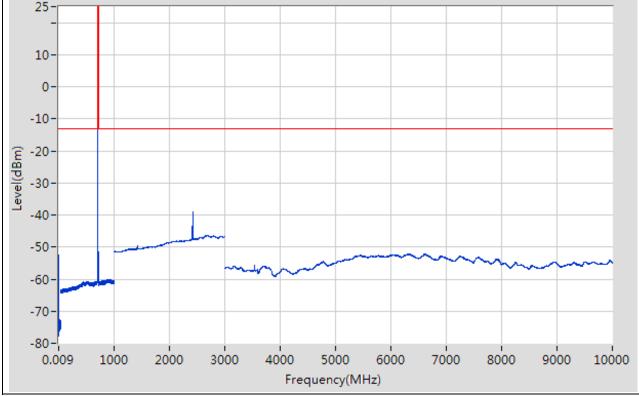
Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	RMS	0.01	-53.96	-13	Pass	601
0.15	30	0.01	RMS	0.15	-52.58	-13	Pass	2985
30	695	0.1	RMS	695	-59.88	-13	Pass	6650
695	725	0.1	RMS	704.35	19.75	60	Pass	601
725	1000	0.1	RMS	867.752	-60.21	-13	Pass	2750
1000	3000	1	RMS	2418.709	-35.89	-13	Pass	2000
3000	10000	1	RMS	6302.472	-52.18	-13	Pass	7000
25-								





1.4. LTE Transmitter Spurious Emissions(NTNV)(Subtest:4, Channel:23755, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	RMS	0.011	-53.81	-13	Pass	601
0.15	30	0.01	RMS	0.15	-52.35	-13	Pass	2985
30	695	0.1	RMS	694.8	-60.44	-13	Pass	6650
695	725	0.1	RMS	708.65	19.08	60	Pass	601
725	1000	0.1	RMS	882.957	-60.12	-13	Pass	2750
1000	3000	1	RMS	2416.708	-39.03	-13	Pass	2000
3000	10000	1	RMS	6330.476	-52.22	-13	Pass	7000
25-								





1.5. LTE Transmitter Spurious Emissions(NTNV)(Subtest:11, Channel:23825, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:LOW)

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	RMS	0.01	-53.68	-13	Pass	601
0.15	30	0.01	RMS	0.15	-52.08	-13	Pass	2985
30	695	0.1	RMS	692.2	-59.92	-13	Pass	6650
695	725	0.1	RMS	711.35	21.06	60	Pass	601
725	1000	0.1	RMS	883.258	-59.96	-13	Pass	2750
1000		1	RMS	2419.71	-36.92	-13	Pass	2000
3000	10000	1	RMS	6632.519	-52.21	-13	Pass	7000
20- 10- 0- -10- (mg-20- -30- -40- -50- -60- -70-	1000 2000	2000	4000	5000 6000	7000	~~~	2000	10000
0.009	1000 2000	3000	4000 Frequ	5000 6000 uency(MHz)	7000	8000	9000	10000



-80-0.009

Frequency(MHz)

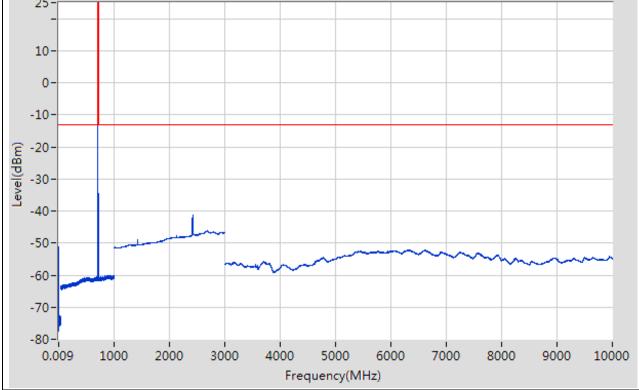
1.6. LTE Transmitter Spurious Emissions(NTNV)(Subtest:12, Channel:23825, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	RMS	0.013	-54.71	-13	Pass	601
0.15	30	0.01	RMS	0.15	-53.54	-13	Pass	2985
30	695	0.1	RMS	694.1	-60.55	-13	Pass	6650
695	725	0.1	RMS	715.65	20.74	60	Pass	601
725	1000	0.1	RMS	890.56	-59.99	-13	Pass	2750
1000	3000	1	RMS	2414.707	-35.51	-13	Pass	2000
3000	10000	1	RMS	6325.475	-52.19	-13	Pass	7000
20- 10- 0- -10- (\text{\text{\$\text{\$W}\$}}\) -30- -40- -50- -60- -70-					~~~			



1.7. LTE Transmitter Spurious Emissions(NTNV)(Subtest:13, Channel:23825, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:LOW)

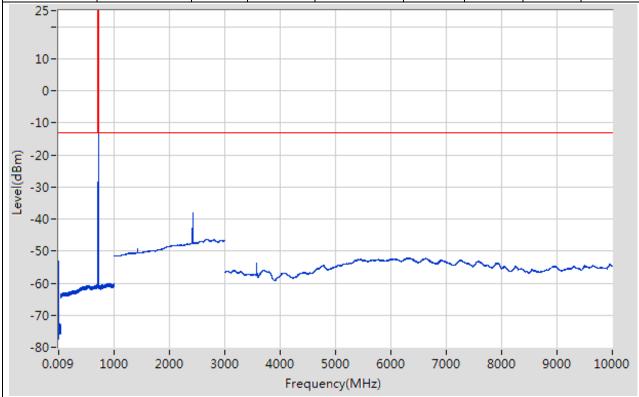
Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	RMS	0.009	-54.17	-13	Pass	601
0.15	30	0.01	RMS	0.15	-51.1	-13	Pass	2985
30	695	0.1	RMS	692.2	-60.34	-13	Pass	6650
695	725	0.1	RMS	711.35	19.94	60	Pass	601
725	1000	0.1	RMS	914.569	-60.02	-13	Pass	2750
1000	3000	1	RMS	2421.711	-41.19	-13	Pass	2000
3000	10000	1	RMS	6322.475	-52.23	-13	Pass	7000
10-								





1.8. LTE Transmitter Spurious Emissions(NTNV)(Subtest:14, Channel:23825, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	RMS	0.009	-53.84	-13	Pass	601
0.15	30	0.01	RMS	0.15	-53.1	-13	Pass	2985
30	695	0.1	RMS	694.2	-60.5	-13	Pass	6650
695	725	0.1	RMS	715.65	19.12	60	Pass	601
725	1000	0.1	RMS	895.062	-60.02	-13	Pass	2750
1000	3000	1	RMS	2416.708	-38.06	-13	Pass	2000
3000	10000	1	RMS	6342.477	-52.22	-13	Pass	7000
25-								





1.9. LTE Transmitter Spurious Emissions(NTNV)(Subtest:15, Channel:23780, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	RMS	0.01	-53.2	-13	Pass	601
0.15	30	0.01	RMS	0.15	-52.16	-13	Pass	2985
30	695	0.1	RMS	695	-59.48	-13	Pass	6650
695	725	0.1	RMS	704.6	21.16	60	Pass	601
725	1000	0.1	RMS	889.06	-59.98	-13	Pass	2750
1000	3000	1	RMS	2418.709	-35.77	-13	Pass	2000
3000	10000	1	RMS	6302.472	-52.18	-13	Pass	7000
20- 10- 0- -10- (Mgp) -30- -30- -40- -50- -60- -70-	1000 3000	2000	4000	5000 6000	7000	~~~		10000
0.009	1000 2000	3000	4000 Frequ	5000 6000 uency(MHz)	7000	8000	9000	10000



1.10. LTE Transmitter Spurious Emissions(NTNV)(Subtest:16, Channel:23780, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

Stop equency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.15	0.001	RMS	0.01	-53.22	-13	Pass	601
30	0.01	RMS	0.15	-52.11	-13	Pass	2985
695	0.1	RMS	694.2	-58.66	-13	Pass	6650
725	0.1	RMS	713.4	20.82	60	Pass	601
1000	0.1	RMS	895.762	-60.08	-13	Pass	2750
3000	1	RMS	2421.711	-41.03	-13	Pass	2000
10000	1	RMS	6304.472	-52.18	-13	Pass	7000
2000	3000	4000		7000	8000	9000	10000
)	2000	2000 3000		2000 3000 4000 5000 6000 Frequency(MHz)			



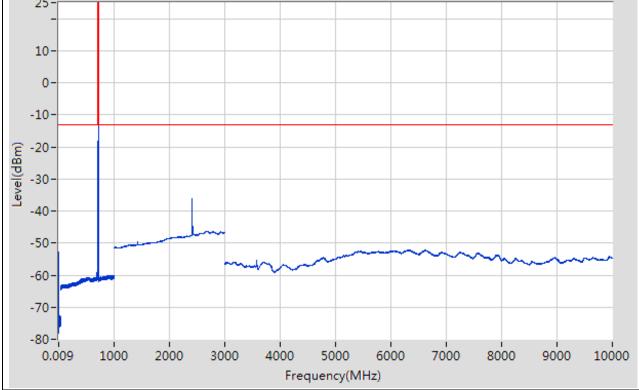
1.11. LTE Transmitter Spurious Emissions(NTNV)(Subtest:17, Channel:23780, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:LOW)

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	RMS	0.009	-53.79	-13	Pass	601
0.15	30	0.01	RMS	0.15	-52.1	-13	Pass	2985
30	695	0.1	RMS	695	-59.63	-13	Pass	6650
695	725	0.1	RMS	704.6	20.5	60	Pass	601
725	1000	0.1	RMS	889.86	-60.03	-13	Pass	2750
1000	3000	1	RMS	2419.71	-37.19	-13	Pass	2000
3000	10000	1	RMS	6326.475	-52.17	-13	Pass	7000
20- 10- 0- -10- (\(\mathbb{G}\) -30- -40- -50- -60- -70- -80- 0.009	1000 2000	3000	4000	5000 6000	7000	8000	9000	10000
0.009	1000 2000	3000		5000 6000 uency(MHz)	7000	8000	9000	10000



1.12. LTE Transmitter Spurious Emissions(NTNV)(Subtest:18, Channel:23780, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	RMS	0.01	-53.75	-13	Pass	601
0.15	30	0.01	RMS	0.16	-52.91	-13	Pass	2985
30	695	0.1	RMS	694.3	-59.28	-13	Pass	6650
695	725	0.1	RMS	713.4	19.52	60	Pass	601
725	1000	0.1	RMS	881.857	-60.16	-13	Pass	2750
1000	3000	1	RMS	2414.707	-36.07	-13	Pass	2000
3000	10000	1	RMS	6326.475	-52.17	-13	Pass	7000
10-								





1.13. LTE Transmitter Spurious Emissions(NTNV)(Subtest:24, Channel:23800, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)

Start quency MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	RMS	0.009	-53.45	-13	Pass	601
0.15	30	0.01	RMS	0.15	-51.83	-13	Pass	2985
30	695	0.1	RMS	694.3	-59.79	-13	Pass	6650
695	725	0.1	RMS	706.6	21.08	60	Pass	601
		0.1		883.858		-13	Pass	2750
		1						2000
	10000	1	RMS	6317.474	-52.16	-13	Pass	7000
00- 00- 00- 00- 00- 00- 00- 00- 00- 00-	1000 2000	3000	4000	5000 6000	7000	8000	9000	10000
2,003	2000	2000			,000	2000	3000	20000
	nuency //Hz) 0.009 0.15 30 695 725 1000 3000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Frequency (MHz)	Frequency (MHz)					



1.14. LTE Transmitter Spurious Emissions(NTNV)(Subtest:25, Channel:23800, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

0.009 0.15 30 695 725 1000 3000 30- 20- 10- 0- -10- (Egg) -30-	0.15 30 695 725 1000 3000 10000	0.001 0.01 0.1 0.1 0.1 1	RMS RMS RMS RMS RMS RMS RMS	0.012 0.15 694.6 715.4 885.258 2417.709 6298.471	-54.11 -51.79 -60.29 21.07 -59.98 -37.39 -52.16	-13 -13 -13 60 -13 -13	Pass Pass Pass Pass Pass Pass Pass	601 2985 6650 601 2750 2000 7000
30 695 725 1000 3000 30- 20- 10- 0- -10-	695 725 1000 3000	0.1 0.1 0.1	RMS RMS RMS RMS	694.6 715.4 885.258 2417.709	-60.29 21.07 -59.98 -37.39	-13 60 -13 -13	Pass Pass Pass Pass	6650 601 2750 2000
695 725 1000 3000 30- 20- 10- 0- -10-	725 1000 3000	0.1 0.1 1	RMS RMS RMS	715.4 885.258 2417.709	21.07 -59.98 -37.39	60 -13 -13	Pass Pass Pass	601 2750 2000
725 1000 3000 30- 20- 10- 0- -10-	1000 3000	0.1	RMS RMS	885.258 2417.709	-59.98 -37.39	-13 -13	Pass Pass	2750 2000
1000 3000 30 - 20 - 10 - 0 - -10 -	3000	1	RMS	2417.709	-37.39	-13	Pass	2000
3000 30- 20- 10- 0- -10-								
30- 20- 10- 0- -10-	10000	1	RMS	6298.471	-52.16	-13	Pass	7000
20- 10- 0- -10-								
-40 - -50 - -60 - -70 - -80 - 0.009 1000	2000	3000	4000	5000 6000	7000	8000	9000	10000



1.15. LTE Transmitter Spurious Emissions(NTNV)(Subtest:26, Channel:23800, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:LOW)

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	RMS	0.01	-53.58	-13	Pass	601
0.15	30	0.01	RMS	0.15	-51.3	-13	Pass	2985
30	695	0.1	RMS	693.9	-60.08	-13	Pass	6650
695	725	0.1	RMS	706.6	20.72	60	Pass	601
725	1000	0.1	RMS	897.463	-59.89	-13	Pass	2750
1000	3000	1	RMS	2414.707	-35.79	-13	Pass	2000
3000	10000	1	RMS	6350.479	-52.15	-13	Pass	7000
20- 10- 0- -10- (Mgp) -30- -30- -40- -50- -60- -70-	1000 2000	2000	4000	5000 6000	7000	2000	9000	10000
0.009	1000 2000	3000	4000 Frequ	5000 6000 uency(MHz)	7000	8000	9000	10000



1.16. LTE Transmitter Spurious Emissions(NTNV)(Subtest:27, Channel:23800, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	RMS	0.01	-52.55	-13	Pass	601
0.15	30	0.01	RMS	0.15	-51.66	-13	Pass	2985
30	695	0.1	RMS	694.9	-60.36	-13	Pass	6650
695	725	0.1	RMS	715.4	20.47	60	Pass	601
725	1000	0.1	RMS	923.972	-59.99	-13	Pass	2750
1000	3000	1	RMS	2419.71	-36.27	-13	Pass	2000
3000	10000	1	RMS	6625.518	-52.17	-13	Pass	7000
20- 10- 0- -10- (Egp) -30- -40- -50- -60- -70- -80- 0.009	1000 2000	3000	4000 Frequ	5000 6000 Jency(MHz)	7000	8000	9000	10000



END