

Annex C. LTE Transmitter Spurious Emissions



1. LTE_Band7

1.1. LTE Transmitter Spurious Emissions(NTNV)(Subtest:1, Channel:20775, 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	0.009	-52.76	-25	Pass	601
0.15	30	0.01	RMS	0.15	-51.66	-25	Pass	2985
30	1000	0.1	RMS	898.29	-58.46	-25	Pass	9700
1000	2490	1	RMS	2490	-45.18	-25	Pass	1490
2490	2580	1	RMS	2500.35	23.55	60	Pass	601
2580	3000	1	RMS	2580	-44.36	-25	Pass	601
3000	12000	1	RMS	11900.989	-44.54	-25	Pass	9000
12000 30-	26500	1	RMS	26450.997	-25.98	-25	Pass	14500
20- 10- 0- -10- (mg/g) -30- -40- -50- -60- -70- -80-		Mark And paging and						
•	2500 5000	7500		2500 15000 uency(MHz)	17500 2	0000 22	500	26500



1.2. LTE Transmitter Spurious Emissions(NTNV)(Subtest:2, Channel:20775, 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	0.01	-54.09	-25	Pass	601
0.15	30	0.01	RMS	0.16	-52.66	-25	Pass	2985
30	1000	0.1	RMS	946.394	-58.47	-25	Pass	9700
1000	2490	1	RMS	2490	-45.18	-25	Pass	1490
2490	2580	1	RMS	2504.7	23.57	60	Pass	601
2580	3000	1	RMS	2580.7	-44.38	-25	Pass	601
3000	12000	1	RMS	11901.989	-44.55	-25	Pass	9000
12000	26500	1	RMS	26454.997	-25.89	-25	Pass	14500
20- 10- 0- -10- (mgp) -30- -40- -50- -60- -70- -80- 0.009	2500 5000	7500		500 15000	17500 2	0000 22	2500	26500
			Frequ	uency(MHz)				



1.3. LTE Transmitter Spurious Emissions(NTNV)(Subtest:3, Channel:20775, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:LOW)



1.4. LTE Transmitter Spurious Emissions(NTNV)(Subtest:4, Channel:20775, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

	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	-52.83	-25	Pass	601
	0.15	30	0.01	RMS	0.15	-51.34	-25	Pass	2985
	30	1000	0.1	RMS	884.388	-58.6	-25	Pass	9700
	1000	2490	1	RMS	2490	-45.28	-25	Pass	1490
	2490	2580	1	RMS	2504.7	22.55	60	Pass	601
	2580	3000	1	RMS	2592.6	-44.36	-25	Pass	601
	3000	12000	1	RMS	11899.989	-44.56	-25	Pass	9000
	12000	26500	1	RMS	26460.997	-26.02	-25	Pass	14500
Level(dBm)	20- 10- 0- -10- -20- -30- -40- -50- -60- -70- -80- 0.009	2500 5000	7500		500 15000	17500 2	0000 22	2500	26500
				Frequ	uency(MHz)				



1.5. LTE Transmitter Spurious Emissions(NTNV)(Subtest:5, Channel:21100, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:LOW)

0.009 0.15 30	0.15 30 1000	0.001	RMS	0.04				
		0.01		0.01	-53.8	-25	Pass	601
20	1000		RMS	0.15	-52.31	-25	Pass	2985
30		0.1	RMS	889.589	-58.65	-25	Pass	9700
1000	2490	1	RMS	2490	-45.34	-25	Pass	1490
2490	2580	1	RMS	2532.9	24.25	60	Pass	601
2580	3000	1	RMS	2589.8	-44.35	-25	Pass	601
3000	12000	1	RMS	11901.989	-44.57	-25	Pass	9000
20- 10- 0- -10- (Mg -20- -30- -40- -50- -60- -70- -80- 0.009 10	000 2000 30	000 400		6000 7000 Jency(MHz)		000 100		12000



1.6. LTE Transmitter Spurious Emissions(NTNV)(Subtest:7, Channel:21100, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

Fr	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	-52.57	-25	Pass	601
	0.15	30	0.01	RMS	0.15	-51.9	-25	Pass	2985
	30	1000	0.1	RMS	895.889	-58.74	-25	Pass	9700
	1000	2490	1	RMS	2490	-45.35	-25	Pass	1490
	2490	2580	1	RMS	2537.1	24.33	60	Pass	601
	2580	3000	1	RMS	2580.7	-44.35	-25	Pass	601
	3000	12000	1	RMS	11904.989	-44.6	-25	Pass	9000
	12000	26500	1	RMS	26455.997	-25.8	-25	Pass	14500
Level(dBm)	20- 10- 0- -10- -20- -30- -40- -50- -60- -70- -80- 0.009	2500 5000	7500	10000 12	500 15000	17500 2	0000 22	2500	26500
					uency(MHz)				



1.7. LTE Transmitter Spurious Emissions(NTNV)(Subtest:8, Channel:21100, 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	-54.05	-25	Pass	601
0.15	30	0.01	RMS	0.15	-52.49	-25	Pass	2985
30	1000	0.1	RMS	894.989	-58.65	-25	Pass	9700
1000	2490	1	RMS	2487.999	-45.37	-25	Pass	1490
2490	2580	1	RMS	2532.9	23.26	60	Pass	601
2580	3000	1	RMS	2582.8	-44.35	-25	Pass	601
3000	12000	1	RMS	11910.99	-44.6	-25	Pass	9000
12000	26500	1	RMS	26453.997	-25.8	-25	Pass	14500
20- 10- 0- -10- (Egp) -30- -30- -40- -50- -60- -70- -80- 0.009	2500 5000	7500		500 15000 Jency(MHz)	17500 2	0000 22	2500	26500



1.8. LTE Transmitter Spurious Emissions(NTNV)(Subtest:9, Channel:21100, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:HIGH)



-50

-60-

-70-

-80-

0.009

2500

7500

5000

1.9. LTE Transmitter Spurious Emissions(NTNV)(Subtest:10, Channel:21425, 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	0.009	-53.79	-25	Pass	601
0.15	30	0.01	RMS	0.15	-51.21	-25	Pass	2985
30	1000	0.1	RMS	924.692	-58.81	-25	Pass	9700
1000	2490	1	RMS	2490	-45.35	-25	Pass	1490
2490	2580	1	RMS	2565.3	25.51	60	Pass	601
2580	3000	1	RMS	2582.1	-44.21	-25	Pass	601
3000	12000	1	RMS	11903.989	-44.59	-25	Pass	9000
12000	26500	1	RMS	26469.998	-25.87	-25	Pass	14500
35- 20- 10- 0- -10- (Egg) -20-								

10000 12500 15000 17500 20000 22500

Frequency(MHz)

26500



-60-

-70

-80-

0.009

2500

7500

5000

1.10. LTE Transmitter Spurious Emissions(NTNV)(Subtest:11, Channel:21425, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

0.009 0.15	0.15			(MHz)	(dBm)	Limit (dBm)	Verdict	Sweep Point
0.15	00	0.001	RMS	0.009	-53.99	-25	Pass	601
	30	0.01	RMS	0.15	-52.13	-25	Pass	2985
30	1000	0.1	RMS	934.793	-58.62	-25	Pass	9700
1000	2490	1	RMS	2488.999	-45.37	-25	Pass	1490
2490	2580	1	RMS	2569.65	25.58	60	Pass	601
2580	3000	1	RMS	2580	-44.21	-25	Pass	601
3000	12000	1	RMS	11907.99	-44.64	-25	Pass	9000
12000	26500	1	RMS	26450.997	-25.96	-25	Pass	14500
20 - 10 - 0 - -10 - -20 - -40 -								

10000 12500 15000 17500

Frequency(MHz)

26500

20000 22500



1.11. LTE Transmitter Spurious Emissions(NTNV)(Subtest:12, Channel:21425, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:LOW)



1.12. LTE Transmitter Spurious Emissions(NTNV)(Subtest:13, Channel:21425, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

(MHz)	(MHz)	(MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep
0.009	0.15	0.001	RMS	0.009	-52.88	-25	Pass	601
0.15	30	0.01	RMS	0.16	-52.73	-25	Pass	2985
30	1000	0.1	RMS	805.78	-58.66	-25	Pass	9700
1000	2490	1	RMS	2490	-45.41	-25	Pass	1490
2490	2580	1	RMS	2569.65	24.62	60	Pass	601
2580	3000	1	RMS	2580	-44.19	-25	Pass	601
3000	12000	1	RMS	11905.99	-44.58	-25	Pass	9000
12000	26500	1	RMS	26447.996	-25.81	-25	Pass	14500
20- 10- 0- -10- (\text{\tin}\text{\texi}\text{\text{\text{\text{\text{\text{\text{\tet{\te	2500 5000	7500		500 15000 Jency(MHz)	17500 2	0000 22	500	26500



1.13. LTE Transmitter Spurious Emissions(NTNV)(Subtest:14, Channel:20800, 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	0.009	-53.15	-25	Pass	601
0.15	30	0.01	RMS	0.15	-52.37	-25	Pass	2985
30	1000	0.1	RMS	912.491	-58.51	-25	Pass	9700
1000	2490	1	RMS	2482.995	-41.45	-25	Pass	1490
2490	2580	1	RMS	2500.65	23.54	60	Pass	601
2580	3000	1	RMS	2580.7	-44.38	-25	Pass	601
3000	12000	1	RMS	11907.99	-44.6	-25	Pass	9000
12000	26500	1	RMS	26466.998	-25.89	-25	Pass	14500
20- 10- 0- -10- ((\text{Wgp}) -30- -30- -40- -50- -60- -70- -80- 0.009	2500 5000	7500		500 15000	17500 2	0000 22		26500
			Frequ	uency(MHz)				



1.14. LTE Transmitter Spurious Emissions(NTNV)(Subtest:15, Channel:20800, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:HIGH)



1.15. LTE Transmitter Spurious Emissions(NTNV)(Subtest:16, Channel:20800, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:LOW)



1.16. LTE Transmitter Spurious Emissions(NTNV)(Subtest:17, Channel:20800, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

	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	-54.01	-25	Pass	601
	0.15	30	0.01	RMS	0.15	-51.8	-25	Pass	2985
	30	1000	0.1	RMS	939.194	-58.7	-25	Pass	9700
	1000	2490	1	RMS	2490	-44.95	-25	Pass	1490
	2490	2580	1	RMS	2509.35	22.76	60	Pass	601
	2580	3000	1	RMS	2582.1	-44.4	-25	Pass	601
	3000	12000	1	RMS	11910.99	-44.58	-25	Pass	9000
	12000	26500	1	RMS	26459.997	-25.88	-25	Pass	14500
Level(dBm)	20- 10- 0- -10- -20- -30- -40- -50- -70- -80- 0.009	2500 5000	7500		500 15000	17500 2	0000 22	2500	26500
				Frequ	uency(MHz)				

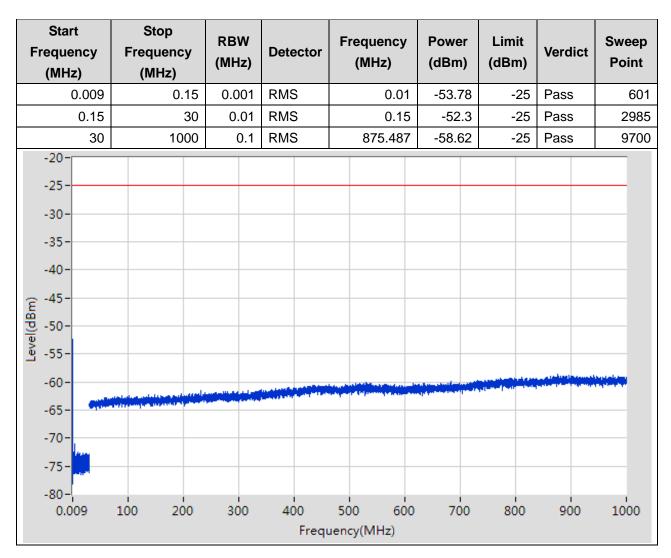


1.17. LTE Transmitter Spurious Emissions(NTNV)(Subtest:18, Channel:21100, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)

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	0.009	-53.88	-25	Pass	601
0.15	30	0.01	RMS	0.15	-52.5	-25	Pass	2985
30	1000	0.1	RMS	998.7	-58.61	-25	Pass	9700
1000	2490	1	RMS	2490	-45.36	-25	Pass	1490
2490	2580	1	RMS	2530.65	24.18	60	Pass	601
2580	3000	1	RMS	2580	-44.36	-25	Pass	601
3000	12000	1	RMS	11903.989	-44.57	-25	Pass	9000
12000	26500	1	RMS	26457.997	-25.92	-25	Pass	14500
20- 10- 0- -10- (mgp) -30- -30- -40- -50- -60- -70-	2500 5000	7500	10000 12	500 15000	17500 3	0000 33	2500	26500
0.009	2500 5000	7500		500 15000 uency(MHz)	17500 2	0000 22	2500	26500



1.18. LTE Transmitter Spurious Emissions(NTNV)(Subtest:19, Channel:21100, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:HIGH)





-40-

-50-

-60-

2490 4000

6000

1.19. LTE Transmitter Spurious Emissions(NTNV)(Subtest:21, Channel:21100, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

2490 2580 1 RMS 2539.35 24.49 60 Pass 6 2580 3000 1 RMS 2582.1 -44.36 -25 Pass 6 3000 12000 1 RMS 11906.99 -44.61 -25 Pass 90 12000 26500 1 RMS 26471.998 -25.88 -25 Pass 145	Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
3000 12000 1 RMS 11906.99 -44.61 -25 Pass 90 12000 26500 1 RMS 26471.998 -25.88 -25 Pass 145			1	RMS	2539.35	24.49	60	Pass	601
12000 26500 1 RMS 26471.998 -25.88 -25 Pass 145	2580	3000	1	RMS	2582.1	-44.36	-25	Pass	601
30- 20- 10- 0-	3000	12000	1	RMS	11906.99	-44.61	-25	Pass	9000
20-	12000	26500	1	RMS	26471.998	-25.88	-25	Pass	14500
<u>s</u> -20-	0-								

8000 10000 12000 14000 16000 18000 20000 22000 24000

Frequency(MHz)

26500



1.20. LTE Transmitter Spurious Emissions(NTNV)(Subtest:22, Channel:21100, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:LOW)



1.21. LTE Transmitter Spurious Emissions(NTNV)(Subtest:23, Channel:21100, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

	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	0.01	-54.1	-25	Pass	601
	0.15	30	0.01	RMS	0.15	-52.26	-25	Pass	2985
	30	1000	0.1	RMS	892.689	-58.73	-25	Pass	9700
	1000	2490	1	RMS	2488.999	-45.31	-25	Pass	1490
	2490	2580	1	RMS	2539.35	23.49	60	Pass	601
	2580	3000	1	RMS	2580	-44.35	-25	Pass	601
	3000	12000	1	RMS	11902.989	-44.61	-25	Pass	9000
	12000	26500	1	RMS	26452.997	-25.91	-25	Pass	14500
Level(dBm)	20- 10- 0- -10- -20- -30- -40- -50- -60- -70- -80- 0.009	2500 5000	7500		500 15000	17500 2	0000 22	2500	26500
				Frequ	uency(MHz)				



1.22. LTE Transmitter Spurious Emissions(NTNV)(Subtest:24, Channel:21400, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)

у	Stop Frequency (MHz)	RBW (MHz)	Detector	-	-	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
09	0.15	0.001	RMS	0	.009	-53.87	-25	Pass	601
15	30	0.01	RMS		0.15	-52.44	-25	Pass	2985
30	1000	0.1	RMS	882	.388	-58.69	-25	Pass	9700
00	2490	1	RMS	2	2490	-45.31	-25	Pass	1490
90	2580	1	RMS	256	0.65	25.41	60	Pass	601
80	3000	1	RMS	2	2580	-43.99	-25	Pass	601
00	12000	1	RMS	1191	0.99	-44.55	-25	Pass	9000
00	26500	1	RMS	26465	.998	-25.92	-25	Pass	14500
		~~							
)	900 15 30 15 30 15 30 15 15 15 15 15 15 15 1	Frequency (MHz) 009	Frequency (MHz) 009	Frequency (MHz) Detector (MHz) Double (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (MHz) 109	Frequency (MHz)	Frequency (MHz)

Frequency(MHz)



-50

-60-

-70

-80-

0.009

2500

7500

5000

1.23. LTE Transmitter Spurious Emissions(NTNV)(Subtest:25, Channel:21400, Bandwidth:10, 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	0.009	-54.04	-25	Pass	601
0.15	30	0.01	RMS	0.15	-53.5	-25	Pass	2985
30	1000	0.1	RMS	922.492	-58.58	-25	Pass	9700
1000	2490	1	RMS	2490	-45.32	-25	Pass	1490
2490	2580	1	RMS	2569.35	25.58	60	Pass	601
2580	3000	1	RMS	2587	-38.64	-25	Pass	601
3000	12000	1	RMS	11906.99	-44.67	-25	Pass	9000
12000	26500	1	RMS	26468.998	-25.73	-25	Pass	14500
35- 20- 10- 0- -10- (Mg 20- 30- -40-								

10000 12500 15000 17500 20000 22500

Frequency(MHz)

26500



1.24. LTE Transmitter Spurious Emissions(NTNV)(Subtest:26, Channel:21400, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:LOW)



1.25. LTE Transmitter Spurious Emissions(NTNV)(Subtest:27, Channel:21400, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

	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	-53.79	-25	Pass	601
	0.15	30	0.01	RMS	0.15	-51.7	-25	Pass	2985
	30	1000	0.1	RMS	905.39	-58.85	-25	Pass	9700
	1000	2490	1	RMS	2490	-45.31	-25	Pass	1490
	2490	2580	1	RMS	2569.35	24.57	60	Pass	601
	2580	3000	1	RMS	2587	-40.1	-25	Pass	601
	3000	12000	1	RMS	11906.99	-44.5	-25	Pass	9000
	12000	26500	1	RMS	26471.998	-26	-25	Pass	14500
Level(dBm)	20- 10- 0- -10- -20- -30- -40- -50- -60- -70- -80- 0.009	2500 5000	7500		500 15000	17500 2	0000 22	2500	26500
					uency(MHz)				



1.26. LTE Transmitter Spurious Emissions(NTNV)(Subtest:28, Channel:20825, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:LOW)



1.27. LTE Transmitter Spurious Emissions(NTNV)(Subtest:29, Channel:20825, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:HIGH)



1.28. LTE Transmitter Spurious Emissions(NTNV)(Subtest:30, Channel:20825, Bandwidth:15, Modulation:16QAM, RB Number: 1, RB Position:LOW)



1.29. LTE Transmitter Spurious Emissions(NTNV)(Subtest:31, Channel:20825, Bandwidth:15, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

(MHz)	(MHz)	(MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	RMS	0.009	-54.63	-25	Pass	601
0.15	30	0.01	RMS	0.15	-51.58	-25	Pass	2985
30	1000	0.1	RMS	968.397	-58.61	-25	Pass	9700
1000	2490	1	RMS	2487.999	-29.81	-25	Pass	1490
2490	2580	1	RMS	2514.15	22.89	60	Pass	601
2580	3000	1	RMS	2584.2	-44.39	-25	Pass	601
3000	12000	1	RMS	11902.989	-44.56	-25	Pass	9000
12000	26500	1	RMS	26468.998	-25.81	-25	Pass	14500
20- 10- 0- -10- (Egp) -30- -40- -50- -60- -70- -80- 0.009	2500 5000	7500		500 15000 uency(MHz)	17500 2	0000 22	500	26500



1.30. LTE Transmitter Spurious Emissions(NTNV)(Subtest:32, Channel:21100, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:LOW)

	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	-53.42	-25	Pass	601
	0.15	30	0.01	RMS	0.15	-53.96	-25	Pass	2985
	30	1000	0.1	RMS	998.7	-58.68	-25	Pass	9700
	1000	2490	1	RMS	2487.999	-45.42	-25	Pass	1490
	2490	2580	1	RMS	2528.4	24.13	60	Pass	601
	2580	3000	1	RMS	2583.5	-44.36	-25	Pass	601
	3000	12000	1	RMS	11900.989	-44.39	-25	Pass	9000
	12000	26500	1	RMS	26452.997	-25.87	-25	Pass	14500
Level(dBm)	20- 10- 0- -10- -20- -30- -40- -50- -70- -80- 0.009	2500 5000	7500		500 15000	17500 2	0000 22	2500	26500
				Frequ	uency(MHz)				



1.31. LTE Transmitter Spurious Emissions(NTNV)(Subtest:33, Channel:21100, Bandwidth:15, 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	0.009	-52.73	-25	Pass	601
0.15	30	0.01	RMS	0.15	-51.7	-25	Pass	2985
30	1000	0.1	RMS	876.287	-58.79	-25	Pass	9700
1000	2490	1	RMS	2490	-45.36	-25	Pass	1490
2490	2580	1	RMS	2541.6	24.66	60	Pass	601
2580	3000	1	RMS	2581.4	-44.37	-25	Pass	601
3000	12000	1	RMS	11903.989	-44.61	-25	Pass	9000
20- 10- 0- -10- (\(\bar{W}\) -20- -30- -40- -50- -60- -70- -80- 0.009 1	.000 2000 30	000 400		6000 7000 Jency(MHz)		000 100	00 11000	



1.32. LTE Transmitter Spurious Emissions(NTNV)(Subtest:35, Channel:21100, Bandwidth:15, 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	-54.06	-25	Pass	601
0.15	30	0.01	RMS	0.15	-51.88	-25	Pass	2985
30	1000	0.1	RMS	921.192	-58.76	-25	Pass	9700
1000	2490	1	RMS	2488.999	-45.29	-25	Pass	1490
2490		1	RMS	2528.4	23.08	60	Pass	601
2580		1	RMS	2589.8	-44.36	-25	Pass	601
3000		1	RMS	11907.99	-44.61	-25	Pass	9000
30-	26500	1	RMS	26439.996	-26.05	-25	Pass	14500
20- 10- 0- -10- (mg -20- -30- -40- -50- -60- -70- -80- 0.009	2500 5000	7500	10000 12	500 15000	17500 2	0000 22	.500	26500
				uency(MHz)				



1.33. LTE Transmitter Spurious Emissions(NTNV)(Subtest:36, Channel:21100, Bandwidth:15, Modulation:16QAM, RB Number: 1, RB Position:HIGH)



1.34. LTE Transmitter Spurious Emissions(NTNV)(Subtest:37, Channel:21375, Bandwidth:15, 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
0.0)9	0.15	0.001	RMS		0.01	-55.08	-25	Pass	601
0.	15	30	0.01	RMS		0.15	-53.62	-25	Pass	2985
;	30	1000	0.1	RMS	873	.987	-60.16	-25	Pass	9700
10	00	2490	1	RMS	2432	.962	-48.01	-25	Pass	1490
24	90	2580	1	RMS	25	69.2	22.94	60	Pass	601
25	30	3000	1	RMS	25	82.8	-42.17	-25	Pass	601
30		12000	1	RMS	5138	.238	-40.61	-25	Pass	9000
30-	00	26500	1	RMS	26453	.997	-26.9	-25	Pass	14500
20- 10- 0- -10- (mg -20- -30- -40- -50- -60- -70-			7500	10000 12						25500
0.009	25	500 5000	7500		500 150		17500 20	0000 22	500	26500
					iency(MH					



1.35. LTE Transmitter Spurious Emissions(NTNV)(Subtest:38, Channel:21375, Bandwidth:15, 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	0.009	-53.05	-25	Pass	601
0.15	30	0.01	RMS	0.15	-51.21	-25	Pass	2985
30	1000	0.1	RMS	907.09	-58.58	-25	Pass	9700
1000	2490	1	RMS	2490	-45.36	-25	Pass	1490
2490	2580	1	RMS	2569.2	25.68	60	Pass	601
2580	3000	1	RMS	2582.8	-39.71	-25	Pass	601
3000	12000	1	RMS	11899.989	-44.62	-25	Pass	9000
12000 35-	26500	1	RMS	26453.997	-25.97	-25	Pass	14500
20- 10- 0- -10- (\text{\tin}\text{\texi}\text{\text{\text{\text{\text{\text{\text{\tet{\te		75.00	10000 12	500 15000	17500 2	0000 33	500	26500
0.009	2500 5000	7500		500 15000 Jency(MHz)	17500 2	0000 22	500	26500



1.36. LTE Transmitter Spurious Emissions(NTNV)(Subtest:39, Channel:21375, Bandwidth:15, Modulation:16QAM, RB Number: 1, RB Position:LOW)

ss 601 ss 2985 ss 9700 ss 1490
ss 9700
ss 1490
ss 601
ss 601
s 9000
s 14500
~~~~
26500
5



# 1.37. LTE Transmitter Spurious Emissions(NTNV)(Subtest:40, Channel:21375, Bandwidth:15, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

	(MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	RMS	0.01	-53.3	-25	Pass	601
0.15	30	0.01	RMS	0.15	-51.11	-25	Pass	2985
30	1000	0.1	RMS	937.394	-58.8	-25	Pass	9700
1000	2490	1	RMS	2490	-45.37	-25	Pass	1490
2490	2580	1	RMS	2569.2	24.72	60	Pass	601
2580	3000	1	RMS	2582.8	-40.25	-25	Pass	601
3000	12000	1	RMS	11899.989	-44.56	-25	Pass	9000
12000 30-	26500	1	RMS	26443.996	-25.99	-25	Pass	14500
20- 10- 0- -10- (Eg -20- -30- -40- -50- -60- -70- -80- 0.009	2500 5000	7500		500 15000 Jency(MHz)	17500 2	0000 22	500	26500



# 1.38. LTE Transmitter Spurious Emissions(NTNV)(Subtest:41, Channel:20850, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



# 1.39. LTE Transmitter Spurious Emissions(NTNV)(Subtest:42, Channel:20850, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

Start Frequency (MHz)		Stop Frequen (MHz)	су	RB (MH		De	etector	Freque (MHz	-	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.00	9	C	).15	0.0	001	R۱	//S	0	.009	-54.32	-25	Pass	601
0.1	5		30	0	.01	R۱	//S		0.16	-53.51	-25	Pass	2985
3	0	1	000	(	0.1	R۱	/IS	895	.389	-57.91	-25	Pass	9700
100	0	2	490		1	R۱	/IS	2482	.995	-32.34	-25	Pass	1490
249	0	2	580		1	R۱		251	8.95	23.92	60	Pass	601
258	_	3	000		1	R۱			2580	-43.99	-25	Pass	601
300			000		1	R۱		11904		-44.56	-25	Pass	9000
1200	0	26	500		1	R۱	/IS	26449	.997	-25.92	-25	Pass	14500
20- 10- 0- -10- (mgp) -30- -40- -50- -60- -70- -80- 0.009	250	00 50	00	750	0	100	00 12	500 150	000	17500	20000 22	2500	26500
							Frequ	iency(MH	z)				



# 1.40. LTE Transmitter Spurious Emissions(NTNV)(Subtest:43, Channel:20850, Bandwidth:20, Modulation:16QAM, RB Number: 1, RB Position:LOW)



# 1.41. LTE Transmitter Spurious Emissions(NTNV)(Subtest:44, Channel:20850, Bandwidth:20, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

0.15 30 0.01 RMS 0.15 -52.18 -25 Pass 298  30 1000 0.1 RMS 985.398 -58.68 -25 Pass 970  1000 2490 1 RMS 2482.995 -32.86 -25 Pass 149  2490 2580 1 RMS 2518.95 22.98 60 Pass 60  2580 3000 1 RMS 11902.989 -44.45 -25 Pass 900  12000 26500 1 RMS 26462.997 -25.89 -25 Pass 1450  30 -10 - 010 - 020304050607080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080808080	Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
30 1000 0.1 RMS 985.398 -58.68 -25 Pass 970  1000 2490 1 RMS 2482.995 -32.86 -25 Pass 149  2490 2580 1 RMS 2518.95 22.98 60 Pass 60  2580 3000 1 RMS 2582.1 -44.01 -25 Pass 60  3000 12000 1 RMS 11902.989 -44.45 -25 Pass 900  12000 26500 1 RMS 26462.997 -25.89 -25 Pass 1450  30 30 30 30 30 30 30 30 30 30 30 30 30 3	0.009	0.15	0.001	RMS	0.01	-53.08	-25	Pass	601
1000	0.15	30	0.01	RMS	0.15	-52.18	-25	Pass	2985
2490	30	1000	0.1	RMS	985.398	-58.68	-25	Pass	9700
2580 3000 1 RMS 2582.1 -44.01 -25 Pass 60 3000 12000 1 RMS 11902.989 -44.45 -25 Pass 9000 12000 26500 1 RMS 26462.997 -25.89 -25 Pass 14500  20-10-0	1000	2490	1	RMS	2482.995	-32.86	-25	Pass	1490
3000 12000 1 RMS 11902.989 -44.45 -25 Pass 9000 12000 26500 1 RMS 26462.997 -25.89 -25 Pass 14500 20-10-010	2490	2580	1	RMS	2518.95	22.98	60	Pass	601
12000 26500 1 RMS 26462.997 -25.89 -25 Pass 14500	2580	3000	1	RMS	2582.1	-44.01	-25	Pass	601
30- 20- 10- 0- -10- -20- -30- -40- -50- -60- -70- -80-		12000			11902.989	-44.45	-25	Pass	9000
20- 10- 0- -10- -20- -30- -40- -50- -60- -70- -80-		26500	1	RMS	26462.997	-25.89	-25	Pass	14500
0.000 2500 5000 7500 10000 12500 15000 17500 20000 22500 26500	0- -10- (\text{\text{\$\text{\$(\text{\$\text{\$(\text{\$\text{\$(\text{\$\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\text{\$(\cdint\\$\$}}})}}}}}})}}}}}}}}}}}}}}}}}}}}}}}}\rtestrimententententententententententententente	2500 5000	7500	10000 12	2500 15000	17500 2	0000 22	2500	26500



# 1.42. LTE Transmitter Spurious Emissions(NTNV)(Subtest:45, Channel:21100, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)

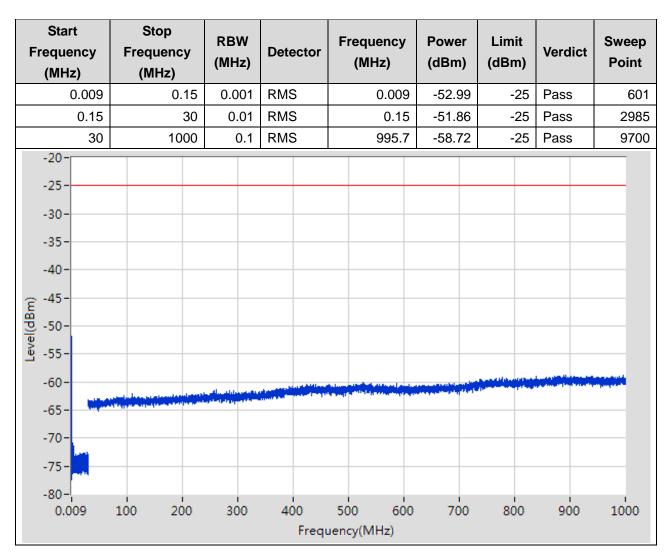


# 1.43. LTE Transmitter Spurious Emissions(NTNV)(Subtest:46, Channel:21100, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

	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	0.01	-53.24	-25	Pass	601
	0.15	30	0.01	RMS	0.15	-51.17	-25	Pass	2985
	30	1000	0.1	RMS	886.388	-58.74	-25	Pass	9700
	1000	2490	1	RMS	2490	-45.4	-25	Pass	1490
	2490	2580	1	RMS	2543.85	24.84	60	Pass	601
	2580	3000	1	RMS	2580	-39.1	-25	Pass	601
	3000	12000	1	RMS	11901.989	-44.68	-25	Pass	9000
	12000	26500	1	RMS	26448.996	-25.82	-25	Pass	14500
Level(dBm)	20- 10- 0- -10- -20- -30- -40- -50- -70- -80- 0.009	2500 5000	7500		500 15000	17500 2	0000 22	2500	26500
				Frequ	uency(MHz)				



### 1.44. LTE Transmitter Spurious Emissions(NTNV)(Subtest:47, Channel:21100, Bandwidth:20, Modulation:16QAM, RB Number: 1, RB Position:LOW)





-40-

-50-

-60-

2490 4000

6000

#### 1.45. LTE Transmitter Spurious Emissions(NTNV)(Subtest:49, Channel:21100, Bandwidth:20, Modulation:16QAM, RB Number: 1, RB Position:LOW)

			ſ					
Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
2490	2580	1	RMS	2526.15	23.1	60	Pass	601
2580	3000	1	RMS	2581.4	-43.97	-25	Pass	601
3000	12000	1	RMS	11899.989	-44.69	-25	Pass	9000
12000	26500	1	RMS	26443.996	-25.91	-25	Pass	14500
30- 20- 10- 0- (Egp) -20-								
-30-								~~~

8000 10000 12000 14000 16000 18000 20000 22000 24000

Frequency(MHz)

26500



# 1.46. LTE Transmitter Spurious Emissions(NTNV)(Subtest:50, Channel:21100, Bandwidth:20, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

0.009 0.15 30 1000 2490 2580 3000	0.15 30 1000 2490 2580 3000 12000 26500	0.001 0.01 0.1 1 1 1	RMS RMS RMS RMS RMS RMS	0.009 0.15 881.388 2487.999 2543.85	-53.85 -51.92 -58.78 -45.38 23.78	-25 -25 -25 -25 60	Pass Pass Pass	601 2985 9700 1490
30 1000 2490 2580 3000	1000 2490 2580 3000 12000	0.1 1 1	RMS RMS RMS	881.388 2487.999 2543.85	-58.78 -45.38	-25 -25	Pass	9700
1000 2490 2580 3000	2490 2580 3000 12000	1 1 1	RMS RMS	2487.999 2543.85	-45.38	-25		
2490 2580 3000	2580 3000 12000	1	RMS	2543.85			Pass	1/00
2580 3000	3000 12000	1			23.78	60		1490
3000	12000		RMS	0500		0	Pass	601
		1		2580	-40.62	-25	Pass	601
	26500		RMS	11908.99	-44.6	-25	Pass	9000
12000		1	RMS	26475.998	-25.97	-25	Pass	14500
20- 10- 0- -10- (Egp) -30- -40- -50- -60- -70- -80- 0.009 2	2500 5000	7500		500 15000 Jency(MHz)	17500 2	0000 22	500	26500



# 1.47. LTE Transmitter Spurious Emissions(NTNV)(Subtest:51, Channel:21350, Bandwidth:20, 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	0.009	-53.59	-25	Pass	601
0.15	30	0.01	RMS	0.15	-51.66	-25	Pass	2985
30	1000	0.1	RMS	878.888	-58.53	-25	Pass	9700
1000	2490	1	RMS	2485.997	-45.4	-25	Pass	1490
2490	2580	1	RMS	2551.05	25.26	60	Pass	601
2580	3000	1	RMS	2587	-26.02	-25	Pass	601
3000	12000	1	RMS	11901.989	-44.69	-25	Pass	9000
12000 35-	26500	1	RMS	26438.996	-25.94	-25	Pass	14500
20- 10- 0- -10- (\(\mathbb{R}\) -20- -30- -40- -50- -60- -70- -80- 0.009	2500 5000	7500	10000 12	500 15000	17500 2	0000 22	500	26500

Frequency(MHz)



# 1.48. LTE Transmitter Spurious Emissions(NTNV)(Subtest:52, Channel:21350, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

	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	-53.95	-25	Pass	601
	0.15	30	0.01	RMS	0.15	-52.61	-25	Pass	2985
	30	1000	0.1	RMS	920.992	-58.71	-25	Pass	9700
	1000	2490	1	RMS	2487.999	-45.38	-25	Pass	1490
	2490	2580	1	RMS	2568.9	25.69	60	Pass	601
	2580	3000	1	RMS	2587	-40.38	-25	Pass	601
	3000	12000	1	RMS	11910.99	-44.49	-25	Pass	9000
	12000	26500	1	RMS	26457.997	-25.99	-25	Pass	14500
Level(dBm)	20 - 10 - 0 - -10 - -20 - -30 - -40 - -50 - -60 - -70 - -80 - 0.009	2500 5000	7500	10000 12	500 15000	17500 2	0000 22	500	26500
					uency(MHz)				



# 1.49. LTE Transmitter Spurious Emissions(NTNV)(Subtest:53, Channel:21350, Bandwidth:20, Modulation:16QAM, RB Number: 1, RB Position:LOW)



### 1.50. LTE Transmitter Spurious Emissions(NTNV)(Subtest:54, Channel:21350, Bandwidth:20, 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	-53.87	-25	Pass	601
0.15	30	0.01	RMS	0.15	-52.86	-25	Pass	2985
30	1000	0.1	RMS	906.49	-58.73	-25	Pass	9700
1000	2490	1	RMS	2488.999	-45.39	-25	Pass	1490
2490	2580	1	RMS	2568.9	24.64	60	Pass	601
2580	3000	1	RMS	2587	-41.26	-25	Pass	601
3000	12000	1	RMS	11904.989	-44.48	-25	Pass	9000
12000 30-	26500	1	RMS	26457.997	-25.79	-25	Pass	14500
20- 10- 0- -10- (mgp) -30- -30- -40- -50- -60- -70- -80- 0.009	2500 5000	7500		2500 15000 Jency(MHz)	17500 2	0000 22	2500	26500



END