

Annex C. LTE Transmitter Spurious Emissions



1. LTE_Band41

1.1. LTE Transmitter Spurious Emissions(NTNV)(Subtest:1, Channel:39675, 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	-51.36	-25	Pass	601
0.15	30	0.01	RMS	0.15	-53.25	-25	Pass	2985
30	1000	0.1	RMS	902.99	-60.75	-25	Pass	9700
1000	2485	1	RMS	2485	-48.95	-25	Pass	1485
2485	2700	1	RMS	2496.108	19.4	60	Pass	601
2700	3000	1	RMS	2700.5	-48.72	-25	Pass	601
3000	12000	1	RMS	4992.221	-43.91	-25	Pass	9000
12000	27000	1	RMS	25754.917	-34.42	-25	Pass	15000
10-								





1.2. LTE Transmitter Spurious Emissions(NTNV)(Subtest:2, Channel:39675, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

0.15 30 0.01 RMS 0.16 -53.85 -25 Pass 29 30 1000 0.1 RMS 962.796 -60.82 -25 Pass 97 1000 2485 1 RMS 2485 -48.96 -25 Pass 14 2485 2700 1 RMS 2500.767 19.06 60 Pass 6 2700 3000 1 RMS 2776 -48.74 -25 Pass 6 3000 12000 1 RMS 5001.222 -43.19 -25 Pass 90	Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
30	0.009	0.15	0.001	RMS	0.009	-51.09	-25	Pass	601
1000 2485 1 RMS 2485 -48.96 -25 Pass 14 2485 2700 1 RMS 2500.767 19.06 60 Pass 6 2700 3000 1 RMS 2776 -48.74 -25 Pass 6 3000 12000 1 RMS 5001.222 -43.19 -25 Pass 90 12000 27000 1 RMS 25777.919 -34.35 -25 Pass 150 25	0.15	30	0.01	RMS	0.16	-53.85	-25	Pass	2985
2485 2700 1 RMS 2500.767 19.06 60 Pass 6 2700 3000 1 RMS 2776 -48.74 -25 Pass 6 3000 12000 1 RMS 5001.222 -43.19 -25 Pass 90 12000 27000 1 RMS 25777.919 -34.35 -25 Pass 150 25 - 10 - 010	30	1000	0.1	RMS	962.796	-60.82	-25	Pass	9700
2700 3000 1 RMS 2776 -48.74 -25 Pass 6 3000 12000 1 RMS 5001.222 -43.19 -25 Pass 90 12000 27000 1 RMS 25777.919 -34.35 -25 Pass 150 25- 101030405070-	1000	2485	1	RMS	2485	-48.96	-25	Pass	1485
3000 12000 1 RMS 5001.222 -43.19 -25 Pass 90 12000 27000 1 RMS 25777.919 -34.35 -25 Pass 150 25- 101010506070-	2485	2700	1	RMS	2500.767	19.06	60	Pass	601
12000 27000 1 RMS 25777.919 -34.35 -25 Pass 150	2700	3000	1	RMS	2776	-48.74	-25	Pass	601
25- 10- 0- -10- -20- -30- -40- -50- -60- -70-	3000	12000	1	RMS	5001.222	-43.19	-25	Pass	9000
10- 0- -10- (E -20- -30- -40- -50- -60- -70-		27000	1	RMS	25777.919	-34.35	-25	Pass	15000
0.009 2500 5000 7500 10000 12500 15000 17500 20000 22500 27000 Frequency(MHz)	0- -10- (mgp) -30- -30- -50- -50- -70- -80-	2500 5000	7500			7500 20	000 225	00	27000



1.3. LTE Transmitter Spurious Emissions(NTNV)(Subtest:3, Channel:39675, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:LOW)

0.009	0.15			(MHz)	(dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	****	0.001	RMS	0.009	-50.48	-25	Pass	601
0.15	30	0.01	RMS	0.15	-53.3	-25	Pass	2985
30	1000	0.1	RMS	809.98	-60.78	-25	Pass	9700
1000	2485	1	RMS	2483.999	-48.94	-25	Pass	1485
2485	2700	1	RMS	2496.467	18.49	60	Pass	601
2700	3000	1	RMS	2774	-48.75	-25	Pass	601
3000	12000	1	RMS	4993.221	-42.9	-25	Pass	9000
12000 25-	27000	1	RMS	25762.918	-34.35	-25	Pass	15000
10- 0- -10- ((mg/p))-30- -30- -40- -50- -60- -70- -80- 0.009	2500 5000	7500		500 15000 1 iency(MHz)	7500 200	000 225	00	27000



1.4. LTE Transmitter Spurious Emissions(NTNV)(Subtest:4, Channel:39675, 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	-51.04	-25	Pass	601
0.15	30	0.01	RMS	0.15	-53.43	-25	Pass	2985
30	1000	0.1	RMS	911.591	-61.01	-25	Pass	9700
1000	2485	1	RMS	2483.999	-48.99	-25	Pass	1485
2485	2700	1	RMS	2500.408	18.07	60	Pass	601
2700	3000	1	RMS	2792.5	-48.76	-25	Pass	601
3000	12000	1	RMS	5001.222	-43.93	-25	Pass	9000
12000	27000	1	RMS	25785.919	-34.33	-25	Pass	15000
10- 0- -10- (mgp) -30- -30- -40- -50- -60- -70- -80- 0.009	2500 5000	7500	10000 129	500 15000 1	7500 20	000 225	00	27000

Frequency(MHz)



1.5. LTE Transmitter Spurious Emissions(NTNV)(Subtest:9, Channel:41565, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:LOW)

0.15 30 1000 2485 2700 3000 12000 27000	0.001 0.01 0.1 1 1 1 1	RMS	0.009 0.15 938.894 2485 2685.308 2700 5370.263 25766.918	-51.11 -54.01 -60.84 -49.07 18.89 -48.62 -49.46	-25 -25 -25 -25 -60 -25 -25	Pass Pass Pass Pass Pass Pass	601 2985 9700 1485 601 601
1000 2485 2700 3000 12000	0.1 1 1 1	RMS RMS RMS RMS RMS	938.894 2485 2685.308 2700 5370.263	-60.84 -49.07 18.89 -48.62	-25 -25 60 -25	Pass Pass Pass	9700 1485 601
2485 2700 3000 12000	1 1 1	RMS RMS RMS RMS	2485 2685.308 2700 5370.263	-49.07 18.89 -48.62	-25 60 -25	Pass Pass	1485 601
2700 3000 12000	1 1	RMS RMS RMS	2685.308 2700 5370.263	18.89 -48.62	60 -25	Pass	601
3000 12000	1	RMS RMS	2700 5370.263	-48.62	-25		
12000	1	RMS	5370.263			Pass	601
				-49.46	25		001
27000	1	RMS	25766 010		-23	Pass	9000
			23700.910	-34.39	-25	Pass	15000
	7500	10000 129	500 15000 1	7500 20	000 225	00	27000
	00 5000	00 5000 7500					00 5000 7500 10000 12500 15000 17500 20000 22500 Frequency(MHz)



-60

-70

-80-[0.009

2500

5000

1.6. LTE Transmitter Spurious Emissions(NTNV)(Subtest:10, Channel:41565, 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	0.009	-51.84	-25	Pass	601
0.15	30	0.01	RMS	0.15	-54.36	-25	Pass	2985
30	1000	0.1	RMS	128.41	-59.33	-25	Pass	9700
1000	2485	1	RMS	2482.999	-49.03	-25	Pass	1485
2485	2700	1	RMS	2689.608	18.47	60	Pass	601
2700	3000	1	RMS	2700.5	-48.42	-25	Pass	601
3000	12000	1	RMS	5379.264	-48.08	-25	Pass	9000
12000	27000	1	RMS	25768.918	-34.37	-25	Pass	15000
25- 10- 0- -10- (Egg) -30-						~~~	~	~~

7500 10000 12500 15000 17500 20000 22500

Frequency(MHz)

27000



-80-

0.009

2500

1.7. LTE Transmitter Spurious Emissions(NTNV)(Subtest:11, Channel:41565, 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	-50.84	-25	Pass	601
0.15	30	0.01	RMS	0.15	-54.17	-25	Pass	2985
30	1000	0.1	RMS	966.297	-60.77	-25	Pass	9700
1000	2485	1	RMS	2485	-48.97	-25	Pass	1485
2485	2700	1	RMS	2685.308	18.46	60	Pass	601
2700	3000	1	RMS	2700	-48.64	-25	Pass	601
3000	12000	1	RMS	5370.263	-48.47	-25	Pass	9000
12000	27000	1	RMS	25771.918	-34.37	-25	Pass	15000
10- 0- -10- (Egp) -30- -40- -50-				- Marian		~~~	,	~~.

5000 7500 10000 12500 15000 17500 20000 22500

Frequency(MHz)

27000



-60-

-70·

-80-

0.009

5000

2500

1.8. LTE Transmitter Spurious Emissions(NTNV)(Subtest:12, Channel:41565, 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	-50.89	-25	Pass	601
0.15	30	0.01	RMS	0.15	-53.41	-25	Pass	298
30	1000	0.1	RMS	902.09	-60.85	-25	Pass	970
1000	2485	1	RMS	2485	-49.04	-25	Pass	148
2485	2700	1	RMS	2689.608	17.85	60	Pass	60
2700	3000	1	RMS	2700	-48.29	-25	Pass	60
3000	12000	1	RMS	5379.264	-47.71	-25	Pass	9000
12000	27000	1	RMS	25757.917	-34.39	-25	Pass	15000
10- 0- -10- -20- -30- -40-					pad	~~~		~~

7500 10000 12500 15000 17500 20000 22500

Frequency(MHz)

27000



1.9. LTE Transmitter Spurious Emissions(NTNV)(Subtest:13, Channel:39700, 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	-51.08	-25	Pass	601	
0.15	30	0.01	RMS	0.15	-53.45	-25	Pass	2985	
30	1000	0.1	RMS	900.39	-60.97	-25	Pass	9700	
1000	2485	1	RMS	2483.999	-48.94	-25	Pass	1485	
2485	2700	1	RMS	2496.825	19.15	60	Pass	601	
2700	3000	1	RMS	2772.5	-48.68	-25	Pass	601	
3000	12000	1	RMS	4993.221	-42.01	-25	Pass	9000	
12000	27000	1	RMS	25785.919	-34.38	-25	Pass	15000	
10- 0- -10- (mgp) -30- -30- -40- -50- -60- -70- -80- 0.009	2500 5000	7500			7500 20	000 225	00	27000	
Frequency(MHz)									



1.10. LTE Transmitter Spurious Emissions(NTNV)(Subtest:14, Channel:39700, 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	-51.61	-25	Pass	601	
0.15	30	0.01	RMS	0.15	-54.04	-25	Pass	2985	
30	1000	0.1	RMS	689.968	-60.76	-25	Pass	9700	
1000	2485	1	RMS	2485	-48.99	-25	Pass	1485	
2485	2700	1	RMS	2505.425	19.41	60	Pass	601	
2700	3000	1	RMS	2700.5	-48.7	-25	Pass	601	
3000	12000	1	RMS	5011.223	-45.78	-25	Pass	9000	
12000	27000	1	RMS	25756.917	-34.38	-25	Pass	15000	
10- 0- -10- (\tilde{\ti	2500 5000	7500			7500 20	000 225	00	27000	
Frequency(MHz)									



1.11. LTE Transmitter Spurious Emissions(NTNV)(Subtest:15, Channel:39700, 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	-51.19	-25	Pass	601	
0.15	30	0.01	RMS	0.15	-52.87	-25	Pass	2985	
30	1000	0.1	RMS	923.692	-60.64	-25	Pass	9700	
1000	2485	1	RMS	2485	-48.87	-25	Pass	1485	
2485	2700	1	RMS	2496.467	18.81	60	Pass	601	
2700	3000	1	RMS	2770.5	-48.71	-25	Pass	601	
3000	12000	1	RMS	4993.221	-42.44	-25	Pass	9000	
12000	27000	1	RMS	25767.918	-34.33	-25	Pass	15000	
10- 0- -10- (Eg) -20- -90 -30- -40- -50- -60- -70- -80- 0.009	2500 5000	7500			7500 20	000 225	00	27000	
Frequency(MHz)									



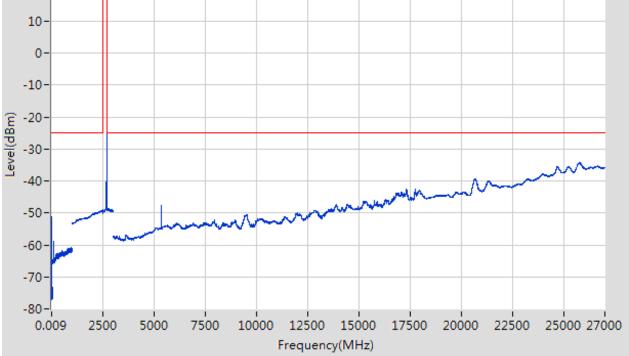
1.12. LTE Transmitter Spurious Emissions(NTNV)(Subtest:16, Channel:39700, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

0.15 30 0.01 RMS 0.15 -52.65 -25 Pass 29 30 1000 0.1 RMS 968.397 -60.91 -25 Pass 97 1000 2485 1 RMS 2483.999 -49.04 -25 Pass 14 2485 2700 1 RMS 2505.425 18.87 60 Pass 6 2700 3000 1 RMS 2791 -48.69 -25 Pass 6 3000 12000 1 RMS 5010.223 -47.26 -25 Pass 90 12000 27000 1 RMS 25767.918 -34.33 -25 Pass 150	Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
30	0.009	0.15	0.001	RMS	0.01	-51.5	-25	Pass	601
1000	0.15	30	0.01	RMS	0.15	-52.65	-25	Pass	2985
2485 2700 1 RMS 2505.425 18.87 60 Pass 6 2700 3000 1 RMS 2791 -48.69 -25 Pass 6 3000 12000 1 RMS 5010.223 -47.26 -25 Pass 90 12000 27000 1 RMS 25767.918 -34.33 -25 Pass 150 25 - 10 - 010 - 050607080 -	30	1000	0.1	RMS	968.397	-60.91	-25	Pass	9700
2700 3000 1 RMS 2791 -48.69 -25 Pass 6 3000 12000 1 RMS 5010.223 -47.26 -25 Pass 90 12000 27000 1 RMS 25767.918 -34.33 -25 Pass 150 25- 10- 01010607080-	1000	2485	1	RMS	2483.999	-49.04	-25	Pass	1485
3000 12000 1 RMS 5010.223 -47.26 -25 Pass 90 12000 27000 1 RMS 25767.918 -34.33 -25 Pass 150 25 - 10 - 01010504050607080 -	2485	2700	1	RMS	2505.425	18.87	60	Pass	601
12000 27000 1 RMS 25767.918 -34.33 -25 Pass 150 25- 10- 010- 3050607080-	2700	3000	1	RMS	2791	-48.69	-25	Pass	601
25- 10- 0- -10- -20- -30- -40- -50- -60- -70- -80-								Pass	9000
10- 0- -10- -20- -30- -40- -50- -60- -70- -80-		27000	1	RMS	25767.918	-34.33	-25	Pass	15000
0.009 2500 5000 7500 10000 12500 15000 17500 20000 22500 27000 Frequency(MHz)	0- -10- (mg/p) -30- -30- -40- -50- -60- -70-	2500 5000	7500			7500 20	000 225	00	27000



1.13. LTE Transmitter Spurious Emissions(NTNV)(Subtest:21, Channel:41540, 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	-51.26	-25	Pass	601
0.15	30	0.01	RMS	0.15	-52.98	-25	Pass	2985
30	1000	0.1	RMS	119.409	-58.87	-25	Pass	9700
1000	2485	1	RMS	2481.998	-49.03	-25	Pass	1485
2485	2700	1	RMS	2680.292	19.25	60	Pass	601
2700	3000	1	RMS	2700	-48.65	-25	Pass	601
3000	12000	1	RMS	5361.262	-47.58	-25	Pass	9000
12000	27000	1	RMS	25762.918	-34.09	-25	Pass	15000
25- 10- 0- -10-								





1.14. LTE Transmitter Spurious Emissions(NTNV)(Subtest:22, Channel:41540, 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	0.01	-51.19	-25	Pass	601
0.15	30	0.01	RMS	0.15	-53.43	-25	Pass	2985
30	1000	0.1	RMS	128.11	-60.39	-25	Pass	9700
1000	2485	1	RMS	2485	-48.68	-25	Pass	1485
2485	2700	1	RMS	2689.25	19.04	60	Pass	601
2700	3000	1	RMS	2700	-48.16	-25	Pass	601
3000	12000	1	RMS	5379.264	-47.56	-25	Pass	9000
12000	27000	1	RMS	25761.917	-34.11	-25	Pass	15000
25- 10- 0- -10-								





1.15. LTE Transmitter Spurious Emissions(NTNV)(Subtest:23, Channel:41540, 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	-51.18	-25	Pass	601
0.15	30	0.01	RMS	0.15	-54.32	-25	Pass	2985
30	1000	0.1	RMS	119.309	-57.92	-25	Pass	9700
1000	2485	1	RMS	2482.999	-48.71	-25	Pass	1485
2485	2700	1	RMS	2680.65	19.6	60	Pass	601
2700	3000	1	RMS	2700.5	-48.33	-25	Pass	601
3000	12000	1	RMS	5361.262	-47.51	-25	Pass	9000
12000	27000	1	RMS	25770.918	-34.12	-25	Pass	15000
25- 10- 0- -10-								





1.16. LTE Transmitter Spurious Emissions(NTNV)(Subtest:24, Channel:41540, 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	0.009	-51.21	-25	Pass	601
0.15	30	0.01	RMS	0.15	-53.06	-25	Pass	2985
30	1000	0.1	RMS	930.493	-60.55	-25	Pass	9700
1000	2485	1	RMS	2483.999	-48.7	-25	Pass	1485
2485	2700	1	RMS	2689.25	18.26	60	Pass	601
2700	3000	1	RMS	2700	-48.2	-25	Pass	601
3000	12000	1	RMS	5378.264	-48.32	-25	Pass	9000
12000	27000	1	RMS	25763.918	-34.13	-25	Pass	15000
25 - - 10 - 0 - -10 -								





1.17. LTE Transmitter Spurious Emissions(NTNV)(Subtest:25, Channel:39725, 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
0.009	0.15	0.001	RMS	0.01	-51.65	-25	Pass	601
0.15	30	0.01	RMS	0.15	-52.73	-25	Pass	2985
30	1000	0.1	RMS	923.792	-60.58	-25	Pass	9700
1000	2485	1	RMS	2483.999	-43.64	-25	Pass	1485
2485	2700	1	RMS	2496.825	19.91	60	Pass	601
2700	3000	1	RMS	2770.5	-48.38	-25	Pass	601
3000	12000	1	RMS	4993.221	-42.48	-25	Pass	9000
12000	27000	1	RMS	25764.918	-34.15	-25	Pass	15000
25 - - 10 - 0 - -10 -								





1.18. LTE Transmitter Spurious Emissions(NTNV)(Subtest:26, Channel:39725, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

			1					
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	-50.88	-25	Pass	601
0.15	30	0.01	RMS	0.15	-53.16	-25	Pass	2985
30	1000	0.1	RMS	954.595	-60.66	-25	Pass	9700
1000	2485	1	RMS	2483.999	-46.56	-25	Pass	1485
2485	2700	1	RMS	2510.083	19.56	60	Pass	601
2700	3000	1	RMS	2772.5	-48.39	-25	Pass	601
3000	12000	1	RMS	5020.224	-45.15	-25	Pass	9000
12000	27000	1	RMS	25762.918	-34.12	-25	Pass	15000
25- 10- 0- -10-								





1.19. LTE Transmitter Spurious Emissions(NTNV)(Subtest:27, Channel:39725, Bandwidth:15, Modulation:16QAM, RB Number: 1, RB Position:LOW)

Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.15	0.001	RMS	0.009	-50.06	-25	Pass	601
30	0.01	RMS	0.15	-52.96	-25	Pass	2985
1000	0.1	RMS	977.298	-60.49	-25	Pass	9700
2485	1	RMS	2483.999	-44.52	-25	Pass	1485
2700	1	RMS	2496.825	18.65	60	Pass	601
3000	1	RMS	2700	-48.42	-25	Pass	601
12000	1	RMS	4993.221	-42.43	-25	Pass	9000
27000	1	RMS	25764.918	-34.07	-25	Pass	15000
	Frequency (MHz) 0.15 30 1000 2485 2700 3000 12000	Frequency (MHz) 0.15 0.001 30 0.01 1000 0.1 2485 1 2700 1 3000 1 12000 1	Frequency (MHz) RBW (MHz) Detector 0.15 0.001 RMS 30 0.01 RMS 1000 0.1 RMS 2485 1 RMS 2700 1 RMS 3000 1 RMS 12000 1 RMS	Frequency (MHz) RBW (MHz) Detector (MHz) Frequency (MHz) 0.15 0.001 RMS 0.009 30 0.01 RMS 0.15 1000 0.1 RMS 977.298 2485 1 RMS 2483.999 2700 1 RMS 2496.825 3000 1 RMS 4993.221	Frequency (MHz) RBW (MHz) Detector (MHz) Frequency (MHz) Power (dBm) 0.15 0.001 RMS 0.009 -50.06 30 0.01 RMS 0.15 -52.96 1000 0.1 RMS 977.298 -60.49 2485 1 RMS 2483.999 -44.52 2700 1 RMS 2496.825 18.65 3000 1 RMS 2700 -48.42 12000 1 RMS 4993.221 -42.43	Frequency (MHz) RBW (MHz) Detector (MHz) Frequency (MHz) Power (dBm) Limit (dBm) 0.15 0.001 RMS 0.009 -50.06 -25 30 0.01 RMS 0.15 -52.96 -25 1000 0.1 RMS 977.298 -60.49 -25 2485 1 RMS 2483.999 -44.52 -25 2700 1 RMS 2496.825 18.65 60 3000 1 RMS 2700 -48.42 -25 12000 1 RMS 4993.221 -42.43 -25	Frequency (MHz) RBW (MHz) Detector (MHz) Frequency (MHz) Power (dBm) Limit (dBm) Verdict 0.15 0.001 RMS 0.009 -50.06 -25 Pass 30 0.01 RMS 0.15 -52.96 -25 Pass 1000 0.1 RMS 977.298 -60.49 -25 Pass 2485 1 RMS 2483.999 -44.52 -25 Pass 2700 1 RMS 2496.825 18.65 60 Pass 3000 1 RMS 2700 -48.42 -25 Pass 12000 1 RMS 4993.221 -42.43 -25 Pass



-50

-60

-70-

-80-

0.009

2500

5000

7500

1.20. LTE Transmitter Spurious Emissions(NTNV)(Subtest:28, Channel:39725, Bandwidth:15, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

0.009 0.15 30 1000 2485 2700	0.15 30 1000 2485	0.001 0.01 0.1	RMS RMS RMS	0.01 0.15	-50.51 -54.22	-25	Pass	601
30 1000 2485	1000 2485			0.15	E4 22			
1000 2485	2485	0.1	DMC		-54.22	-25	Pass	2985
2485			KIVIS	949.695	-60.55	-25	Pass	9700
	0700	1	RMS	2483.999	-47.09	-25	Pass	1485
2700	2700	1	RMS	2510.083	18.65	60	Pass	601
2700	3000	1	RMS	2700.5	-48.39	-25	Pass	601
3000	12000	1	RMS	5020.224	-45.15	-25	Pass	9000
12000	27000	1	RMS	25756.917	-34.14	-25	Pass	15000
25- 10- 0- -10- -20-								

Frequency(MHz)

10000 12500 15000 17500 20000 22500 25000 27000



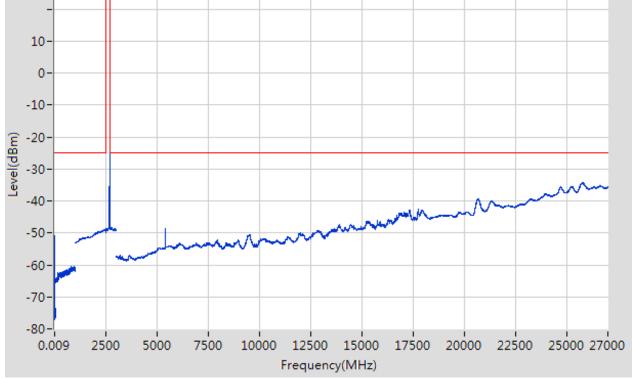
1.21. LTE Transmitter Spurious Emissions(NTNV)(Subtest:33, Channel:41515, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:LOW)

0.009 0.15 0.001 RMS 0.009 -49.5 -25 Pass 0.15 30 0.01 RMS 0.15 -53.21 -25 Pass 30 1000 0.1 RMS 114.609 -58.33 -25 Pass 1000 2485 1 RMS 2483.999 -48.67 -25 Pass 2485 2700 1 RMS 2675.992 21.03 60 Pass 2700 3000 1 RMS 2702.5 -45.6 -25 Pass 3000 12000 1 RMS 5351.261 -47.98 -25 Pass 12000 27000 1 RMS 25767.918 -34.15 -25 Pass	Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
30 1000 0.1 RMS 114.609 -58.33 -25 Pass 1000 2485 1 RMS 2483.999 -48.67 -25 Pass 2485 2700 1 RMS 2675.992 21.03 60 Pass 2700 3000 1 RMS 2702.5 -45.6 -25 Pass 3000 12000 1 RMS 5351.261 -47.98 -25 Pass 12000 27000 1 RMS 25767.918 -34.15 -25 Pass 3000 2000 27000 1 RMS 25767.918 -34.15 -25 Pass 3000 2000 2000 2000 2000 2000 2000 20	0.009	0.15	0.001	RMS	0.009	-49.5	-25	Pass	601
1000	0.15	30	0.01	RMS	0.15	-53.21	-25	Pass	2985
2485 2700 1 RMS 2675.992 21.03 60 Pass 2700 3000 1 RMS 2702.5 -45.6 -25 Pass 3000 12000 1 RMS 5351.261 -47.98 -25 Pass 12000 27000 1 RMS 25767.918 -34.15 -25 Pass 300 20 - 10 - 0 - 10 - 0 - 10 - 0 - 10 - 0 -	30	1000	0.1	RMS	114.609	-58.33	-25	Pass	9700
2700 3000 1 RMS 2702.5 -45.6 -25 Pass 3000 12000 1 RMS 5351.261 -47.98 -25 Pass 12000 27000 1 RMS 25767.918 -34.15 -25 Pass 30- 20- 10- 0105060-	1000	2485	1	RMS	2483.999	-48.67	-25	Pass	1485
3000 12000 1 RMS 5351.261 -47.98 -25 Pass 12000 27000 1 RMS 25767.918 -34.15 -25 Pass 30- 20- 1010405060-	2485	2700	1	RMS	2675.992	21.03	60	Pass	601
12000 27000 1 RMS 25767.918 -34.15 -25 Pass 30- 20- 1010405060-	2700	3000	1	RMS	2702.5	-45.6	-25	Pass	601
30- 20- 10- 0- -10- EB -20- -30- -40- -50- -60-			1					Pass	9000
20- 10- 0- -10- -20- -30- -40- -50- -60-		27000	1	RMS	25767.918	-34.15	-25	Pass	15000
-80-	10- 0- -10- (Rg -20- -30- -40- -50- -60- -70- -80-	2500 5000	7500		500 15000 1		000 225	00 2500	0 27000



1.22. LTE Transmitter Spurious Emissions(NTNV)(Subtest:34, Channel:41515, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

Start Frequency (MHz)	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequen (MHz)	_	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.009	0.15	0.001	RMS	0.0	009	-50.94	-25	Pass	601
0.15	30	0.01	RMS	0).15	-53.5	-25	Pass	2985
30	1000	0.1	RMS	937.4	494	-60.6	-25	Pass	9700
1000	2485	1	RMS	24	485	-48.7	-25	Pass	1485
2485	2700	1	RMS	2689	9.25	18.46	60	Pass	601
2700	3000	1	RMS	270	2.5	-43.62	-25	Pass	601
3000	12000	1	RMS	5378.2	264	-48.54	-25	Pass	9000
12000	27000	1	RMS	25758.9	917	-34.11	-25	Pass	15000
25 - - 10 - 0 - -10 -									





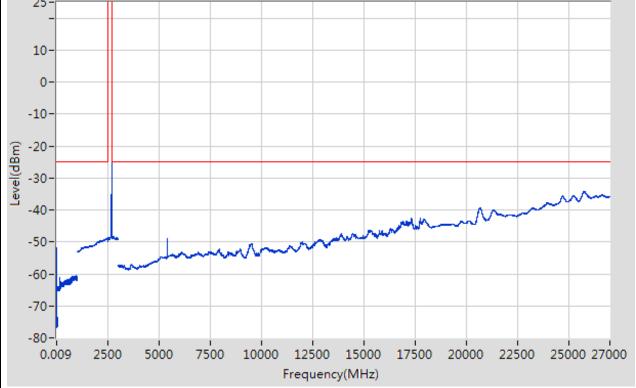
1.23. LTE Transmitter Spurious Emissions(NTNV)(Subtest:35, Channel:41515, Bandwidth:15, Modulation:16QAM, RB Number: 1, RB Position:LOW)

Fre	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	-50.6	-25	Pass	601
	0.15	30	0.01	RMS	0.15	-53.07	-25	Pass	2985
	30	1000	0.1	RMS	114.609	-57.17	-25	Pass	9700
	1000	2485	1	RMS	2483.999	-48.67	-25	Pass	1485
	2485	2700	1	RMS	2675.992	20.11	60	Pass	601
	2700	3000	1	RMS	2702.5	-45.66	-25	Pass	601
	3000	12000	1	RMS	5351.261	-47.05	-25	Pass	9000
	12000 30-	27000	1	RMS	25770.918	-34.13	-25	Pass	15000
Level(dBm)	20 - 10 - 0 - 10 - 20 - 30 - 40 - 50 - 70 - 80 - 0.009	2500 5000	7500	10000 125	00 15000 1	.7500 20	000 225	00 2500	0 27000
				Frequ	iency(MHz)				



1.24. LTE Transmitter Spurious Emissions(NTNV)(Subtest:36, Channel:41515, Bandwidth:15, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

Start Frequency	Stop Frequency	RBW	Detector	Frequency	Power	Limit	Verdict	Sweep
(MHz)	(MHz)	(MHz)		(MHz)	(dBm)	(dBm)		Point
0.009	0.15	0.001	RMS	0.01	-51.74	-25	Pass	601
0.15	30	0.01	RMS	0.15	-53.8	-25	Pass	2985
30	1000	0.1	RMS	930.093	-60.59	-25	Pass	9700
1000	2485	1	RMS	2485	-48.74	-25	Pass	1485
2485	2700	1	RMS	2689.25	18.4	60	Pass	601
2700	3000	1	RMS	2702.5	-43.78	-25	Pass	601
3000	12000	1	RMS	5378.264	-48.88	-25	Pass	9000
12000	27000	1	RMS	25764.918	-34.11	-25	Pass	15000
25-								
0-								





1.25. LTE Transmitter Spurious Emissions(NTNV)(Subtest:37, Channel:39750, 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	-50.84	-25	Pass	601
0.15	30	0.01	RMS	0.15	-52.51	-25	Pass	2985
30	1000	0.1	RMS	809.98	-60.33	-25	Pass	9700
1000	2485	1	RMS	2479.997	-44.54	-25	Pass	1485
2485	2700	1	RMS	2497.183	19.54	60	Pass	601
2700	3000	1	RMS	2792.5	-48.41	-25	Pass	601
3000	12000	1	RMS	4994.222	-43.52	-25	Pass	9000
12000	27000	1	RMS	25763.918	-34.11	-25	Pass	15000
10-								





-40-

-50

-60

-70-

-80-

0.009

2500

5000

7500

1.26. LTE Transmitter Spurious Emissions(NTNV)(Subtest:38, Channel:39750, Bandwidth:20, 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	-51.26	-25	Pass	601
0.15	30	0.01	RMS	0.15	-52.46	-25	Pass	2985
30	1000	0.1	RMS	915.191	-60.53	-25	Pass	9700
1000	2485	1	RMS	2478.996	-46.68	-25	Pass	1485
2485	2700	1	RMS	2514.742	19.45	60	Pass	601
2700	3000	1	RMS	2701	-48.41	-25	Pass	601
3000	12000	1	RMS	5030.226	-44.33	-25	Pass	9000
12000	27000	1	RMS	25761.917	-34.04	-25	Pass	15000
25 - 10 - 0 - -10 - 20 - 20 - 30 -								

Frequency(MHz)

10000 12500 15000 17500 20000 22500 25000 27000



Level(dBr

-40

-50-

-60

-70-

-80-

0.009

2500

1.27. LTE Transmitter Spurious Emissions(NTNV)(Subtest:39, Channel:39750, Bandwidth:20, Modulation:16QAM, RB Number: 1, RB Position:LOW)

Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.15	0.001	RMS	0.009	-48.9	-25	Pass	601
30	0.01	RMS	0.15	-52.34	-25	Pass	2985
1000	0.1	RMS	689.968	-60.37	-25	Pass	9700
2485	1	RMS	2478.996	-45.13	-25	Pass	1485
2700	1	RMS	2497.183	19.69	60	Pass	601
3000	1	RMS	2789.5	-48.41	-25	Pass	601
12000	1	RMS	4994.222	-43.03	-25	Pass	9000
27000	1	RMS	25773.918	-34.11	-25	Pass	15000
	Frequency (MHz) 0.15 30 1000 2485 2700 3000 12000	Frequency (MHz) RBW (MHz) 0.15 0.001 30 0.01 1000 0.1 2485 1 2700 1 3000 1 12000 1	Frequency (MHz) RBW (MHz) Detector 0.15 0.001 RMS 30 0.01 RMS 1000 0.1 RMS 2485 1 RMS 2700 1 RMS 3000 1 RMS 12000 1 RMS	Frequency (MHz) RBW (MHz) Detector (MHz) Frequency (MHz) 0.15 0.001 RMS 0.009 30 0.01 RMS 0.15 1000 0.1 RMS 689.968 2485 1 RMS 2478.996 2700 1 RMS 2497.183 3000 1 RMS 4994.222	Frequency (MHz) RBW (MHz) Detector Frequency (MHz) Power (dBm) 0.15 0.001 RMS 0.009 -48.9 30 0.01 RMS 0.15 -52.34 1000 0.1 RMS 689.968 -60.37 2485 1 RMS 2478.996 -45.13 2700 1 RMS 2497.183 19.69 3000 1 RMS 2789.5 -48.41 12000 1 RMS 4994.222 -43.03	Frequency (MHz) RBW (MHz) Detector (MHz) Frequency (MHz) Power (dBm) Limit (dBm) 0.15 0.001 RMS 0.009 -48.9 -25 30 0.01 RMS 0.15 -52.34 -25 1000 0.1 RMS 689.968 -60.37 -25 2485 1 RMS 2478.996 -45.13 -25 2700 1 RMS 2497.183 19.69 60 3000 1 RMS 2789.5 -48.41 -25 12000 1 RMS 4994.222 -43.03 -25	Frequency (MHz) RBW (MHz) Detector (MHz) Frequency (MHz) Power (dBm) Limit (dBm) Verdict 0.15 0.001 RMS 0.009 -48.9 -25 Pass 30 0.01 RMS 0.15 -52.34 -25 Pass 1000 0.1 RMS 689.968 -60.37 -25 Pass 2485 1 RMS 2478.996 -45.13 -25 Pass 2700 1 RMS 2497.183 19.69 60 Pass 3000 1 RMS 2789.5 -48.41 -25 Pass 12000 1 RMS 4994.222 -43.03 -25 Pass



1.28. LTE Transmitter Spurious Emissions(NTNV)(Subtest:40, Channel:39750, Bandwidth:20, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
0.15	0.001	RMS	0.009	-50.22	-25	Pass	601
30	0.01	RMS	0.16	-53.22	-25	Pass	2985
1000	0.1	RMS	927.493	-60.56	-25	Pass	9700
2485	1	RMS	2478.996	-47.46	-25	Pass	1485
2700	1	RMS	2515.1	18.33	60	Pass	601
3000	1	RMS	2772.5	-48.4	-25	Pass	601
12000	1	RMS	5030.226	-45.06	-25	Pass	9000
27000	1	RMS	25780.919	-34.1	-25	Pass	15000
	Frequency (MHz) 0.15 30 1000 2485 2700 3000 12000	Frequency (MHz) 0.15 0.001 30 0.01 1000 0.1 2485 1 2700 1 3000 1 12000 1	Frequency (MHz) RBW (MHz) Detector 0.15 0.001 RMS 30 0.01 RMS 1000 0.1 RMS 2485 1 RMS 2700 1 RMS 3000 1 RMS 12000 1 RMS	Frequency (MHz) RBW (MHz) Detector (MHz) Frequency (MHz) 0.15 0.001 RMS 0.009 30 0.01 RMS 0.16 1000 0.1 RMS 927.493 2485 1 RMS 2478.996 2700 1 RMS 2515.1 3000 1 RMS 2772.5 12000 1 RMS 5030.226	Frequency (MHz) RBW (MHz) Detector Frequency (MHz) Power (dBm) 0.15 0.001 RMS 0.009 -50.22 30 0.01 RMS 0.16 -53.22 1000 0.1 RMS 927.493 -60.56 2485 1 RMS 2478.996 -47.46 2700 1 RMS 2515.1 18.33 3000 1 RMS 2772.5 -48.4 12000 1 RMS 5030.226 -45.06	Frequency (MHz) RBW (MHz) Detector (MHz) Frequency (MHz) Power (dBm) Limit (dBm) 0.15 0.001 RMS 0.009 -50.22 -25 30 0.01 RMS 0.16 -53.22 -25 1000 0.1 RMS 927.493 -60.56 -25 2485 1 RMS 2478.996 -47.46 -25 2700 1 RMS 2515.1 18.33 60 3000 1 RMS 2772.5 -48.4 -25 12000 1 RMS 5030.226 -45.06 -25	Frequency (MHz) RBW (MHz) Detector (MHz) Frequency (MHz) Power (dBm) Limit (dBm) Verdict 0.15 0.001 RMS 0.009 -50.22 -25 Pass 30 0.01 RMS 0.16 -53.22 -25 Pass 1000 0.1 RMS 927.493 -60.56 -25 Pass 2485 1 RMS 2478.996 -47.46 -25 Pass 2700 1 RMS 2515.1 18.33 60 Pass 3000 1 RMS 2772.5 -48.4 -25 Pass 12000 1 RMS 5030.226 -45.06 -25 Pass



1.29. LTE Transmitter Spurious Emissions(NTNV)(Subtest:45, Channel:41490, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)

Star Freque (MHz	ncy	Stop Frequency (MHz)	RBW (MHz)	Detector	Frequency (MHz)	Power (dBm)	Limit (dBm)	Verdict	Sweep Point
(0.009	0.15	0.001	RMS	0.009	-50.67	-25	Pass	601
	0.15	30	0.01	RMS	0.15	-52.91	-25	Pass	2985
	30	1000	0.1	RMS	109.808	-56.17	-25	Pass	9700
	1000	2485	1	RMS	2485	-48.66	-25	Pass	1485
	2485	2700	1	RMS	2670.975	20.62	60	Pass	601
	2700	3000	1	RMS	2706.5	-46.05	-25	Pass	601
	3000	12000	1	RMS	5342.26	-47.01	-25	Pass	9000
30-r	2000	27000	1	RMS	25764.918	-34.12	-25	Pass	15000
20 10 010 ([Agp])-304050607080 0.0	09 2	2500 5000	7500	10000 125	500 15000 1	17500 20	000 225	00 2500	0 27000
				Frequ	uency(MHz)				



1.30. LTE Transmitter Spurious Emissions(NTNV)(Subtest:46, Channel:41490, Bandwidth:20, 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	-49.93	-25	Pass	601
0.15	30	0.01	RMS	0.15	-52.69	-25	Pass	2985
30	1000	0.1	RMS	689.968	-60.64	-25	Pass	9700
1000	2485	1	RMS	2485	-48.84	-25	Pass	1485
2485	2700	1	RMS	2688.892	18.68	60	Pass	601
2700	3000	1	RMS	2706.5	-42.27	-25	Pass	601
3000	12000	1	RMS	5378.264	-49.31	-25	Pass	9000
12000	27000	1	RMS	25746.916	-34.17	-25	Pass	15000
25- 10- 0- -10-								





1.31. LTE Transmitter Spurious Emissions(NTNV)(Subtest:47, Channel:41490, Bandwidth:20, 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	-51.47	-25	Pass	601
0.15	30	0.01	RMS	0.15	-53.34	-25	Pass	2985
30	1000	0.1	RMS	109.808	-57.05	-25	Pass	9700
1000	2485	1	RMS	2485	-48.8	-25	Pass	1485
2485	2700	1	RMS	2671.333	19.83	60	Pass	601
2700	3000	1	RMS	2707	-46.27	-25	Pass	601
3000	12000	1	RMS	5342.26	-46.2	-25	Pass	9000
12000	27000	1	RMS	25754.917	-34.16	-25	Pass	15000
25- 10- 0- -10-								





1.32. LTE Transmitter Spurious Emissions(NTNV)(Subtest:48, Channel:41490, 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	0.01	-51.6	-25	Pass	601
0.15	30	0.01	RMS	0.15	-53.41	-25	Pass	2985
30	1000	0.1	RMS	957.696	-60.66	-25	Pass	9700
1000	2485	1	RMS	2483.999	-48.84	-25	Pass	1485
2485	2700	1	RMS	2688.892	17.59	60	Pass	601
2700	3000	1	RMS	2707	-41.96	-25	Pass	601
3000	12000	1	RMS	5377.264	-49.54	-25	Pass	9000
12000	27000	1	RMS	25753.917	-34.18	-25	Pass	15000
25- 10- 0- -10-								



END