

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 17

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	706.5	23755	5	1	0	22.50
				1	12	22.52
				1	24	22.39
				12	0	21.48
				12	6	21.62
				12	13	21.45
	25	0		21.55		
	710	23790		1	0	22.53
				1	12	22.44
				1	24	22.44
				12	0	21.66
				12	6	21.58
				12	13	21.58
	713.5	23825		25	0	21.56
				1	0	22.65
				1	12	22.48
				1	24	22.48
				12	0	21.70
12			6	21.60		
16QAM	706.5	23755	12	13	21.62	
			25	0	21.49	
			1	0	22.18	
			1	12	21.75	
			1	24	21.62	
			12	0	20.58	
	710	23790	12	6	20.61	
			12	13	20.57	
			25	0	20.49	
			1	0	21.75	
			1	12	22.18	
			1	24	21.50	
	713.5	23825	12	0	20.72	
			12	6	20.57	
			12	13	20.67	
			25	0	20.58	
			1	0	22.22	
			1	12	22.16	
			1	24	21.85	
			12	0	20.66	
			12	6	20.58	
			12	13	20.68	
			25	0	20.69	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	706.5	23755	5	1	0	20.44
				1	12	20.48
				1	24	20.32
				12	0	19.42
				12	6	19.58
				12	13	19.41
				25	0	19.52
	710	23790		1	0	20.43
				1	12	20.41
				1	24	20.40
				12	0	19.61
				12	6	19.55
				12	13	19.48
				25	0	19.47
	713.5	23825		1	0	20.56
				1	12	20.38
				1	24	20.40
				12	0	19.68
				12	6	19.56
				12	13	19.60
				25	0	19.45
256QAM	706.5	23755	5	1	0	18.13
				1	12	17.67
				1	24	17.53
				12	0	17.54
				12	6	17.57
				12	13	17.48
				25	0	17.41
	710	23790		1	0	17.72
				1	12	18.09
				1	24	17.46
				12	0	17.65
				12	6	17.55
				12	13	17.58
				25	0	17.53
	713.5	23825		1	0	18.14
				1	12	18.06
				1	24	17.80
				12	0	17.62
				12	6	17.49
				12	13	17.60
				25	0	20.44

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	709	23780	10	1	0	17.64
				1	24	22.54
				1	49	22.60
				25	0	22.44
				25	12	21.56
				25	25	21.59
	710	23790		50	0	21.66
				1	0	21.63
				1	24	22.51
				1	49	22.62
				25	0	22.49
				25	12	21.73
	711	23800		25	25	21.56
				50	0	21.71
				1	0	21.49
				1	24	22.46
				1	49	22.55
				25	0	22.43
16QAM	709	23780	25	12	21.60	
			25	25	21.56	
			50	0	21.72	
			1	0	21.60	
			1	24	21.80	
			1	49	21.93	
	710	23790	25	0	21.58	
			25	12	20.50	
			25	25	20.72	
			50	0	20.65	
			1	0	20.56	
			1	24	22.25	
	711	23800	1	49	22.08	
			25	0	22.04	
			25	12	20.59	
			25	25	20.66	
			50	0	20.65	
			1	0	20.58	
			1	24	21.84	
			1	49	22.16	
			25	0	22.12	
			25	12	20.53	
			25	25	20.64	
			50	0	20.72	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	709	23780	10	1	0	20.65
				1	24	20.50
				1	49	20.58
				25	0	20.34
				25	12	19.49
				25	25	19.52
	710	23790		50	0	19.56
				1	0	19.60
				1	24	20.46
				1	49	20.52
				25	0	20.41
				25	12	19.69
	711	23800		25	25	19.50
				50	0	19.63
				1	0	19.39
				1	24	20.42
				1	49	20.50
				25	0	20.41
64QAM	709	23780	10	25	12	19.52
				25	25	19.46
				50	0	19.65
				1	0	19.50
				1	24	17.76
				1	49	17.84
	710	23790		25	0	17.50
				25	12	17.40
				25	25	17.67
				50	0	17.62
				1	0	17.49
				1	24	18.23
	711	23800		1	49	18.01
				25	0	18.00
				25	12	17.51
				25	25	17.62
				50	0	17.57
				1	0	17.52
				1	24	17.74
				1	49	18.11
				25	0	18.06
				25	12	17.49
				25	25	17.58
				50	0	17.68

2 Occupied Bandwidth & Emission Bandwidth

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)							
						QPSK		16-QAM		64-QAM		256-QAM	
17	706.5	23755	5	25	0	4.476	Fig.1	4.466	Fig.4	4.476	Fig.7	4.466	Fig.10
	710	23790		25	0	4.476	Fig.2	4.466	Fig.5	4.486	Fig.8	4.466	Fig.11
	713.5	23825		25	0	4.466	Fig.3	4.466	Fig.6	4.476	Fig.9	4.466	Fig.12
	709	23780	10	50	0	8.918	Fig.13	8.918	Fig.16	8.918	Fig.19	8.918	Fig.22
	710	23790		50	0	8.952	Fig.14	8.918	Fig.17	8.918	Fig.20	8.918	Fig.23
	711	23800		50	0	8.918	Fig.15	8.918	Fig.18	8.918	Fig.21	8.918	Fig.24

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)							
						QPSK		16-QAM		64-QAM		256-QAM	
17	706.5	23755	5	25	0	4.890	Fig.1	4.890	Fig.4	4.870	Fig.7	4.850	Fig.10
	710	23790		25	0	4.890	Fig.2	4.910	Fig.5	4.900	Fig.8	4.840	Fig.11
	713.5	23825		25	0	4.880	Fig.3	4.900	Fig.6	4.910	Fig.9	4.850	Fig.12
	709	23780	10	50	0	9.700	Fig.13	9.667	Fig.16	9.733	Fig.19	9.633	Fig.22
	710	23790		50	0	9.700	Fig.14	9.700	Fig.17	9.667	Fig.20	9.633	Fig.23
	711	23800		50	0	9.667	Fig.15	9.667	Fig.18	9.667	Fig.21	9.633	Fig.24

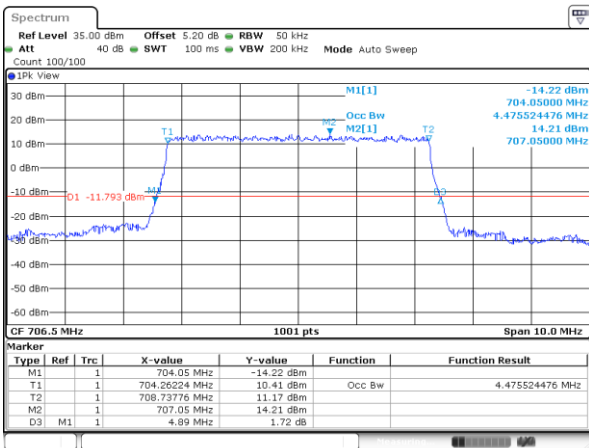


Fig.1

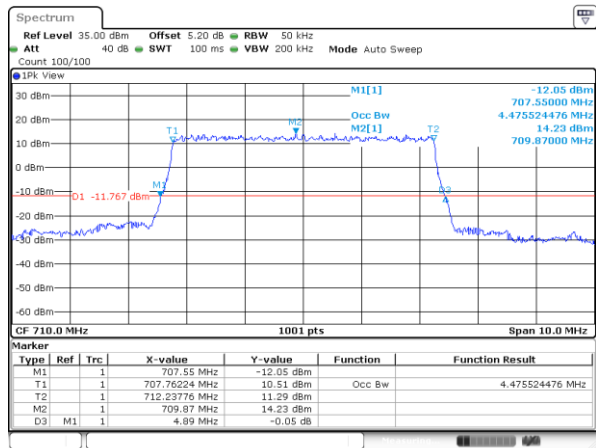


Fig.2

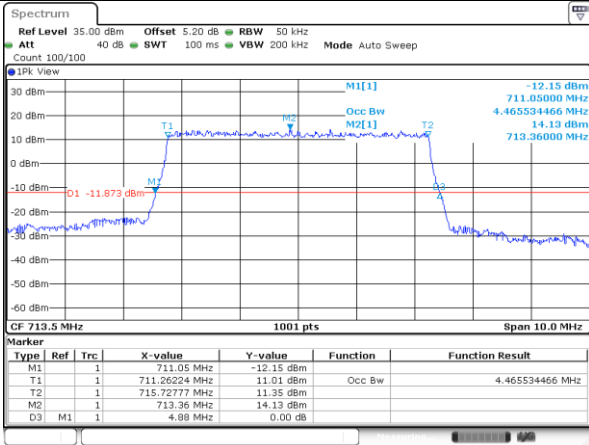


Fig.3

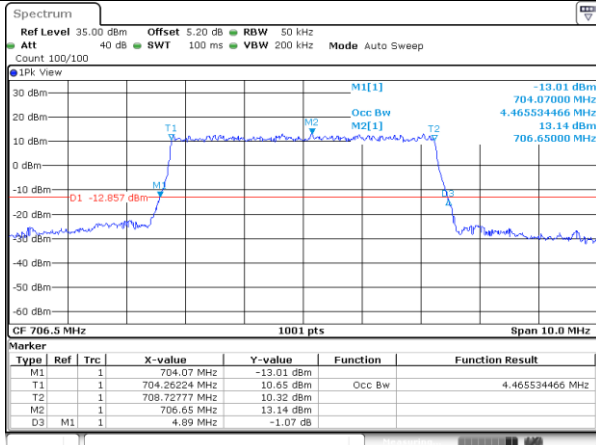


Fig.4

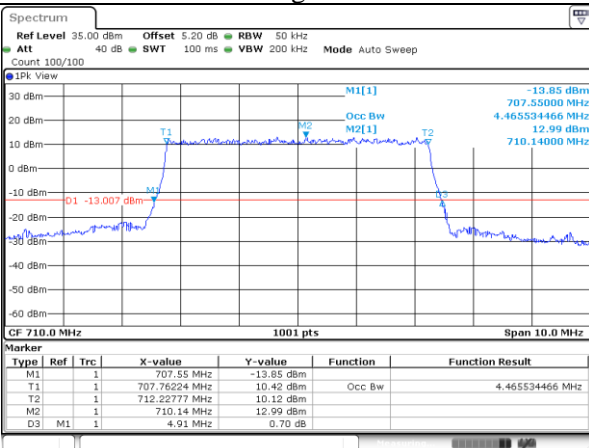


Fig.5

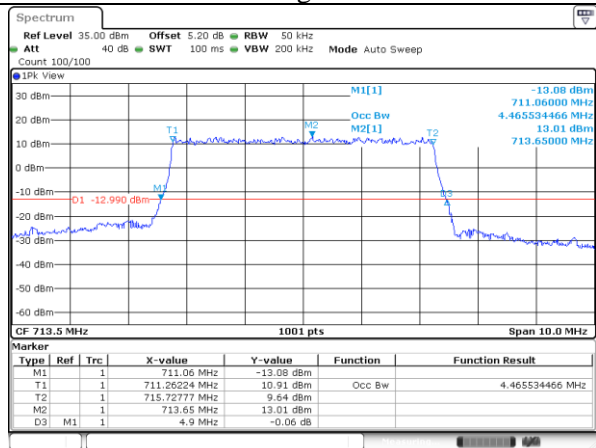


Fig.6

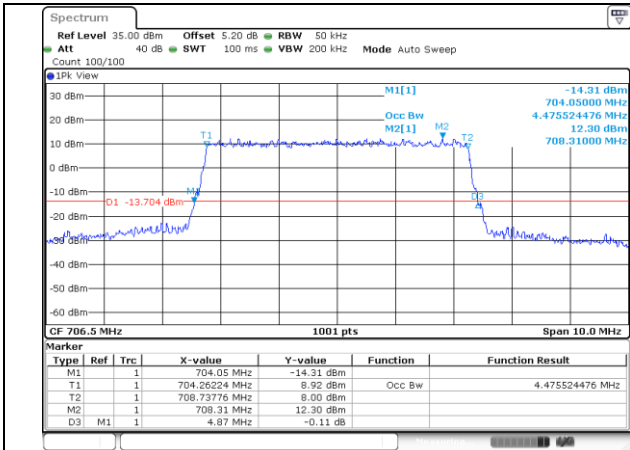


Fig.7

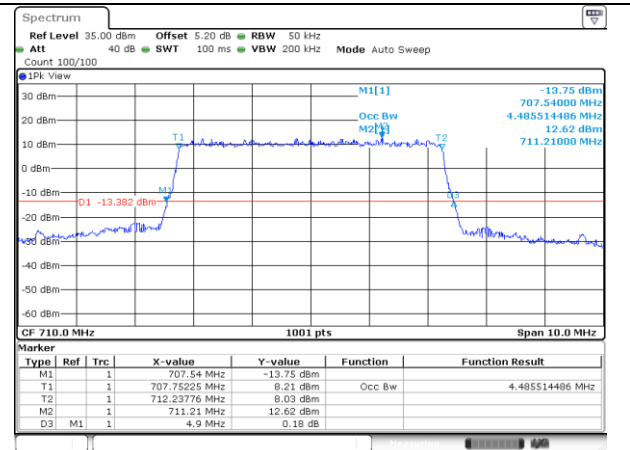


Fig.8

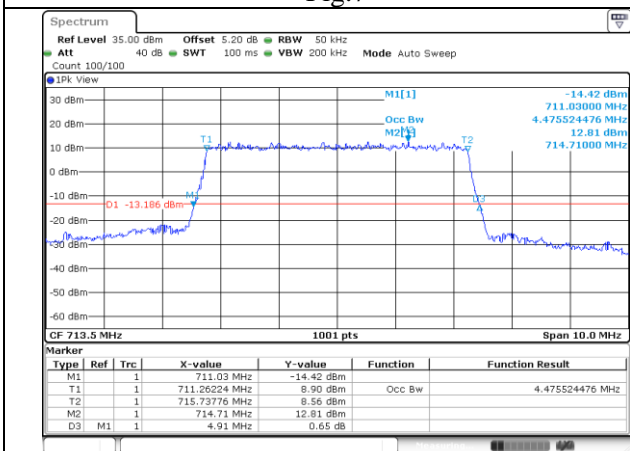


Fig.9

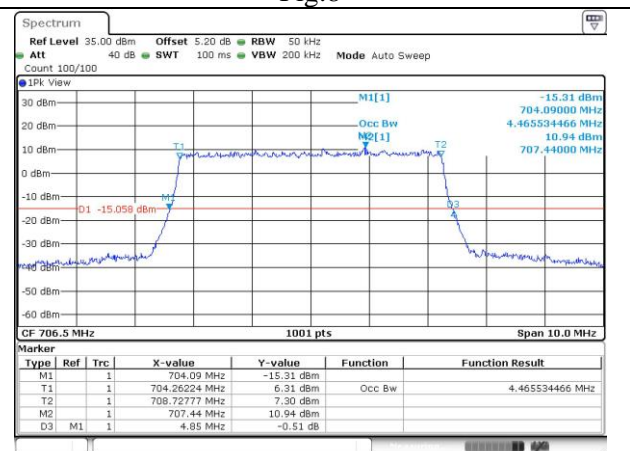


Fig.10

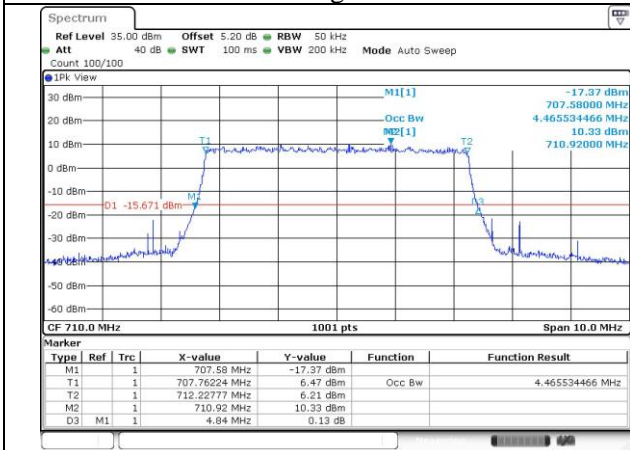


Fig.11

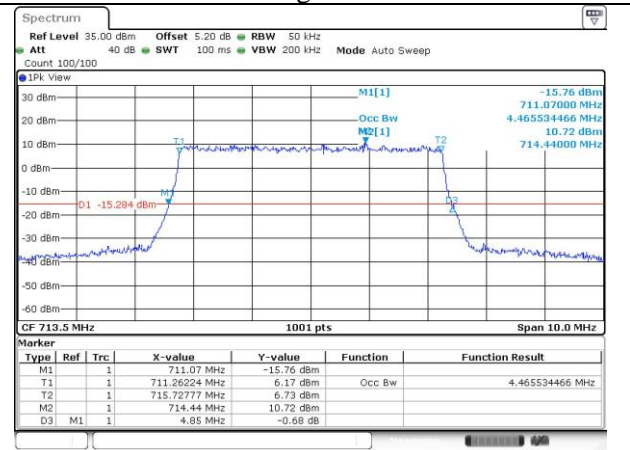


Fig.12

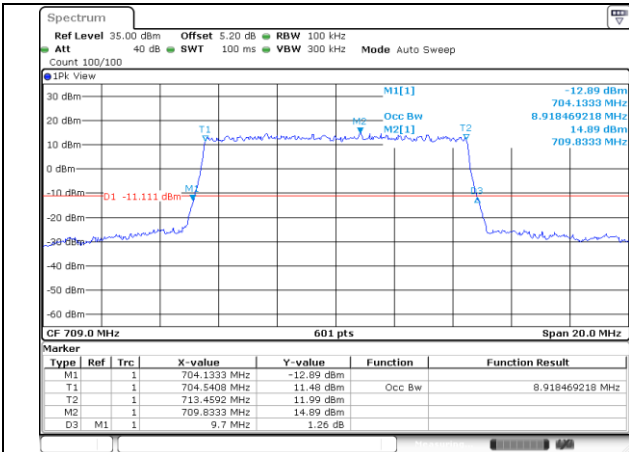


Fig.13

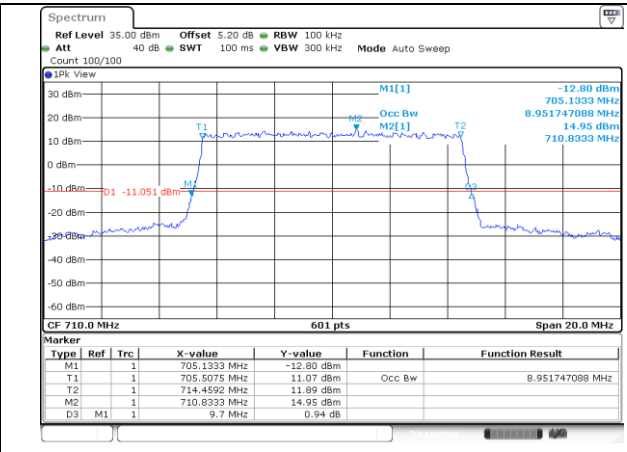


Fig.14

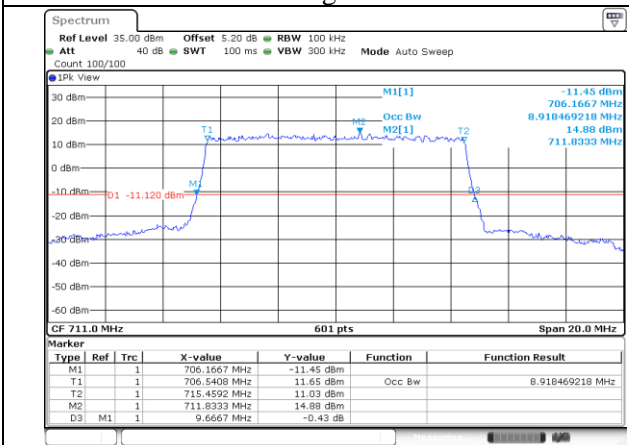


Fig.15

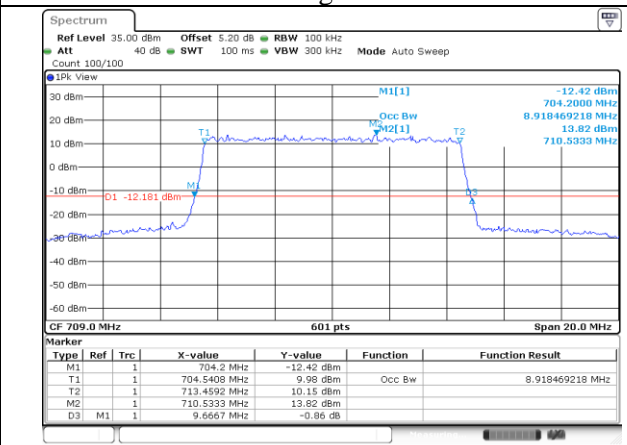


Fig.16

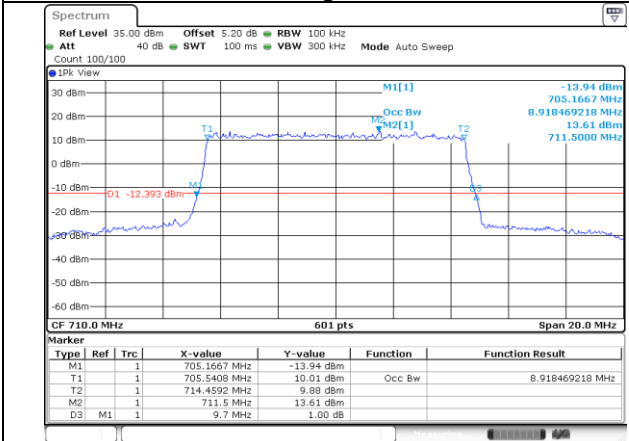


Fig.17

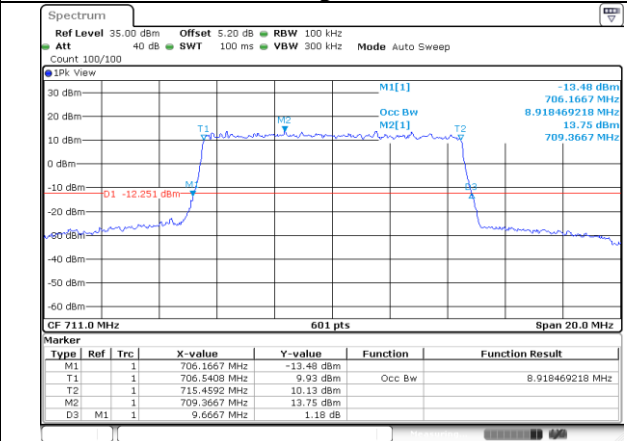
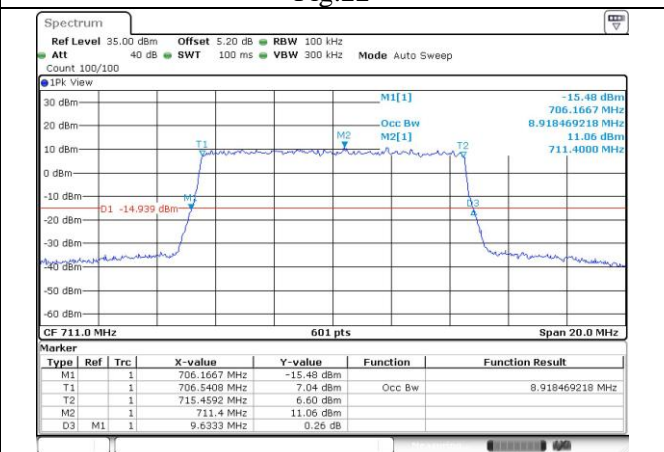
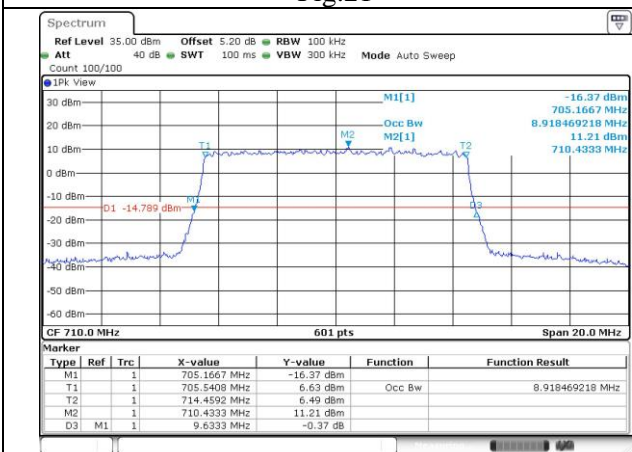
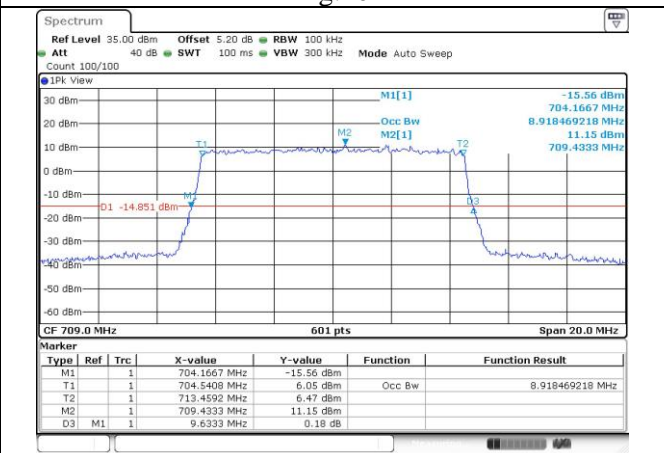
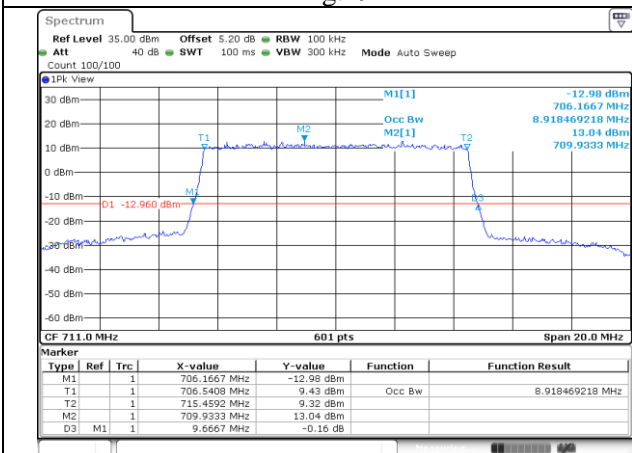
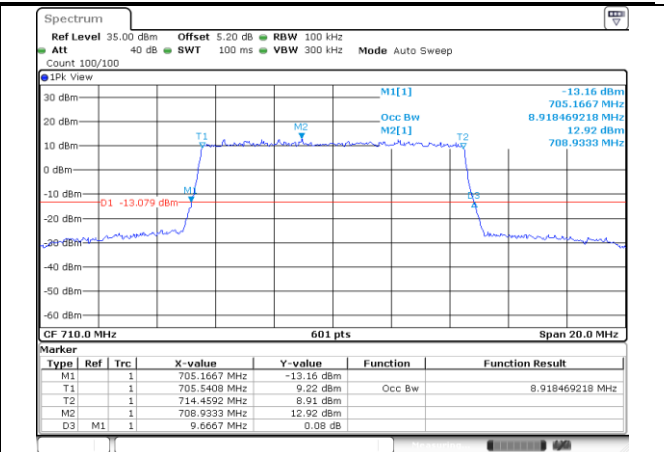
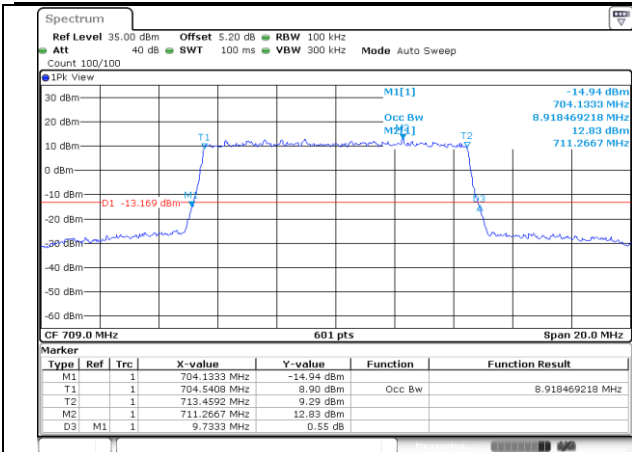


Fig.18



3 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM	256-QAM
17	709	23780	10	50	0	Fig.1	Fig.4	Fig.7	Fig.10
	710	23790		50	0	Fig.2	Fig.5	Fig.8	Fig.11
	711	23800		50	0	Fig.3	Fig.6	Fig.9	Fig.12

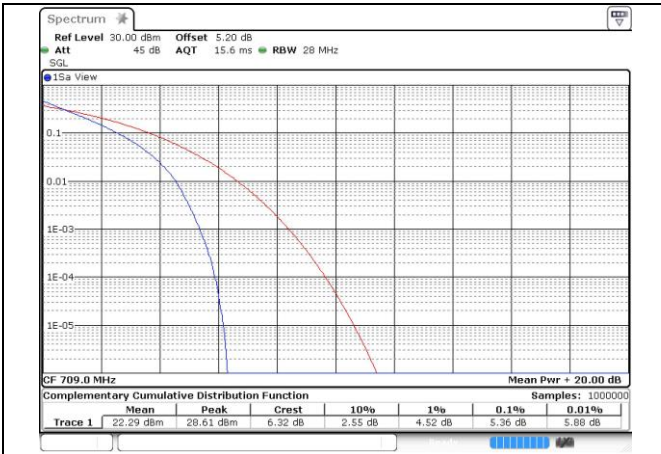


Fig.1

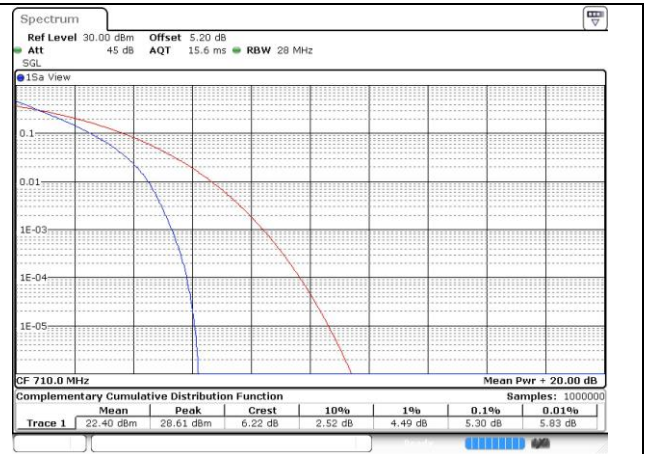


Fig.2

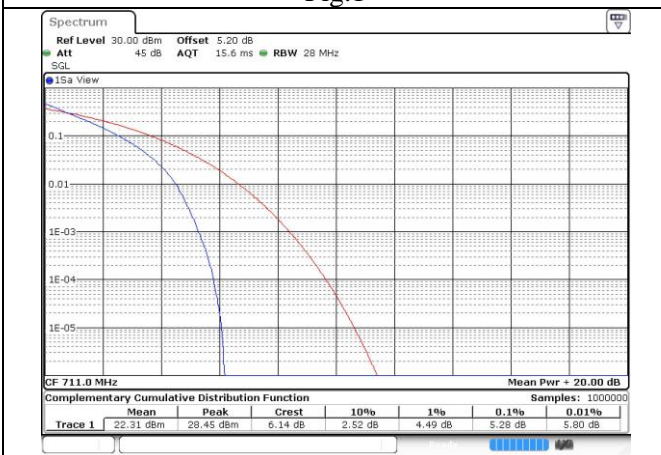


Fig.3

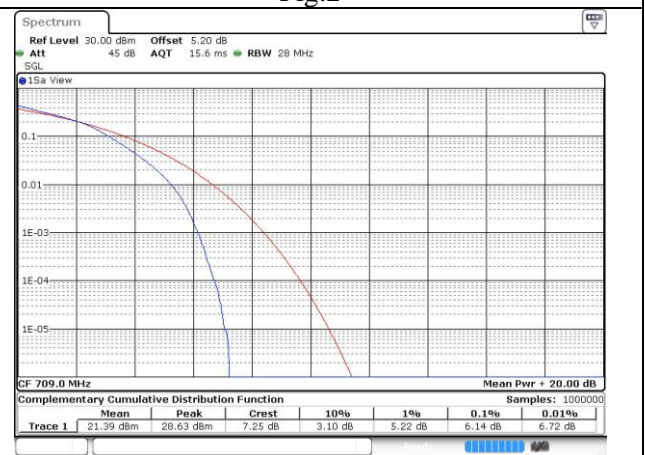


Fig.4

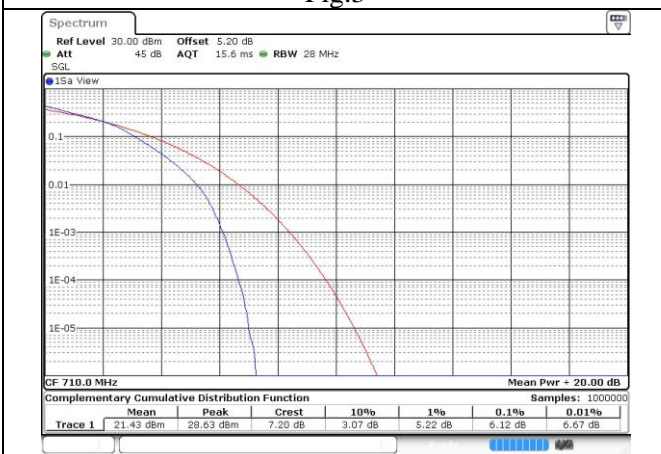


Fig.5

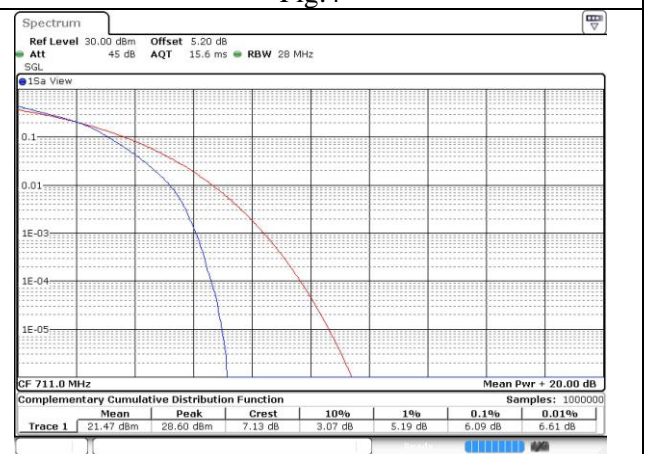


Fig.6



Fig.7

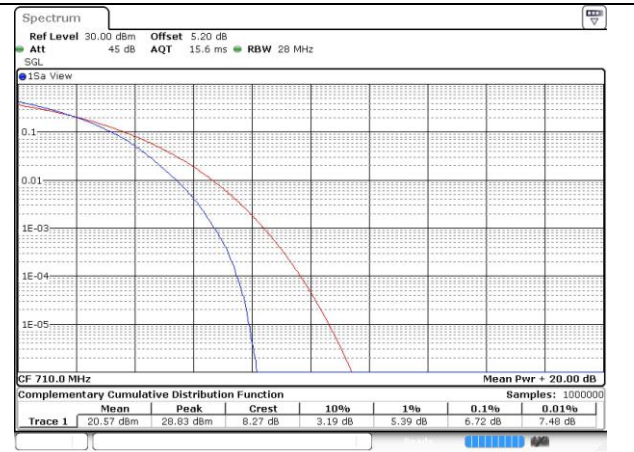


Fig.8



Fig.9



Fig.10



Fig.11

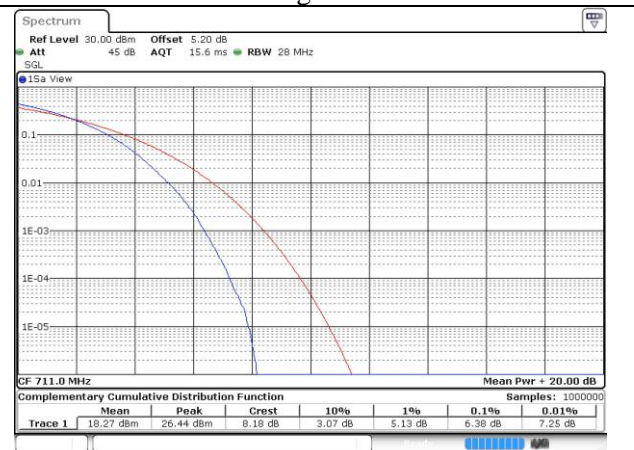


Fig.12

4 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
17	709	23780	10	1	0	Fig.1
	710	23790		1	0	Fig.2
	711	23800		1	0	Fig.3

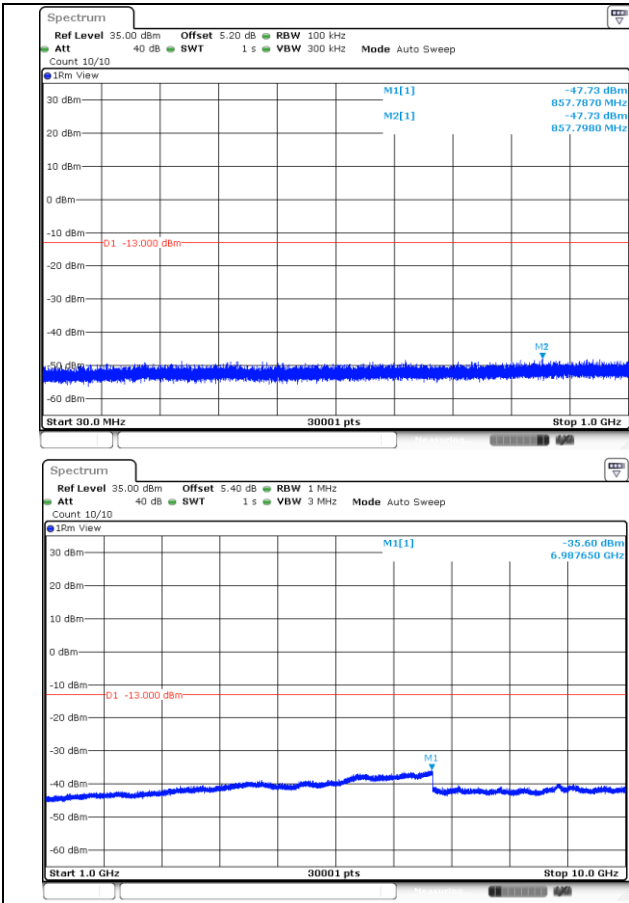


Fig.1

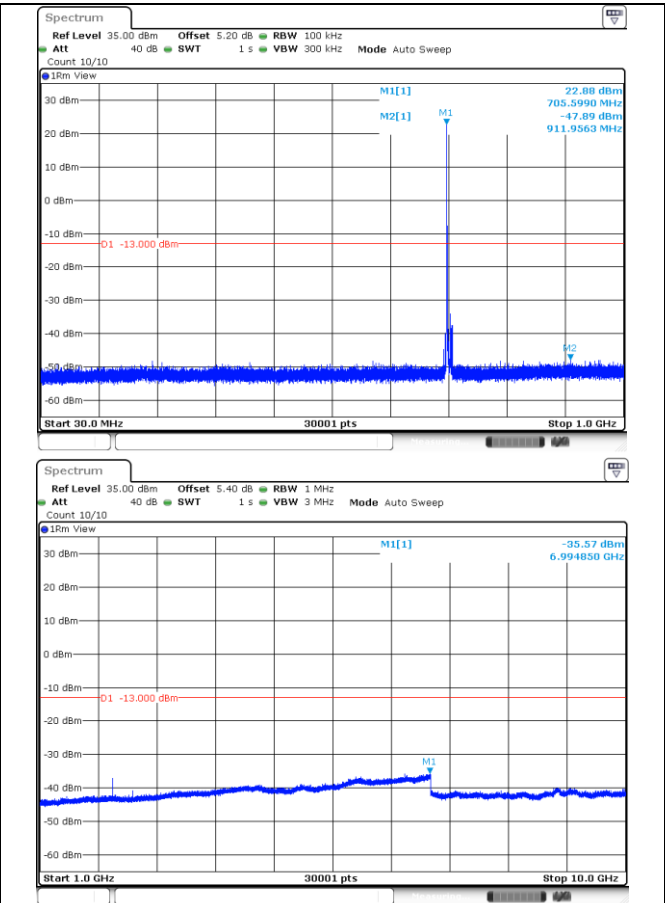
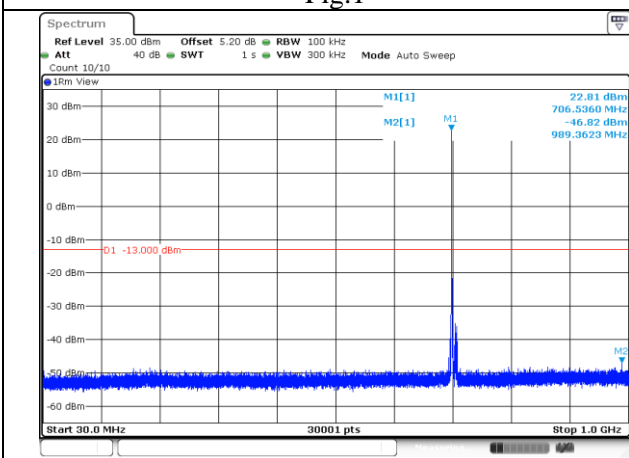


Fig.2



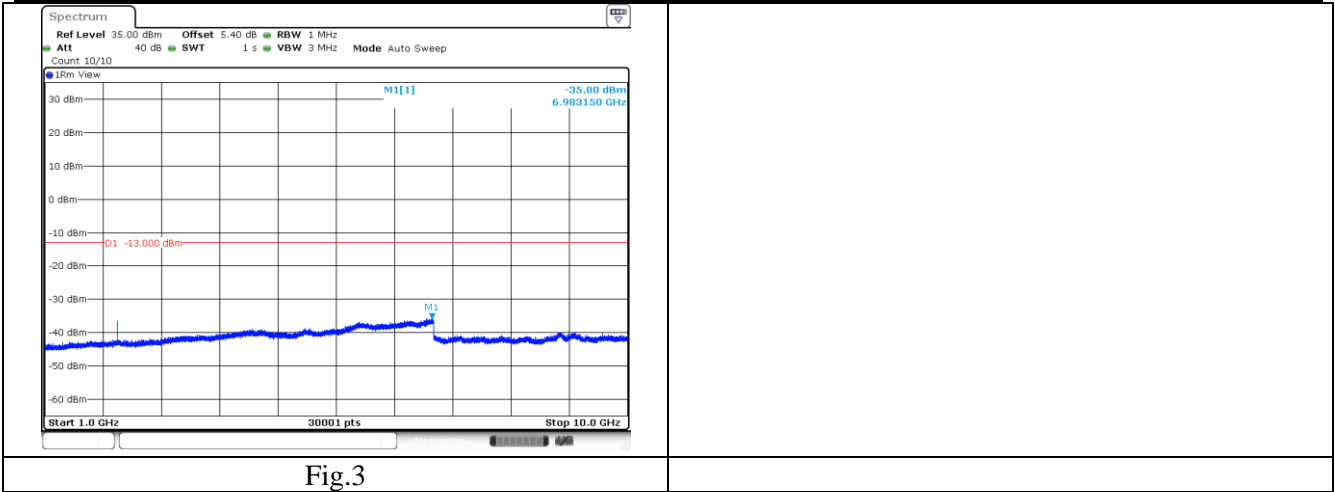


Fig.3

5 Band Edges Compliance

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
17	706.5	23755	5	1	0	Fig.1
				25	0	Fig.2
	1	24		Fig.3		
	25	0		Fig.4		
	709	23780	10	1	0	Fig.5
				50	0	Fig.6
	1	49		Fig.7		
	50	0		Fig.8		
711	23800					

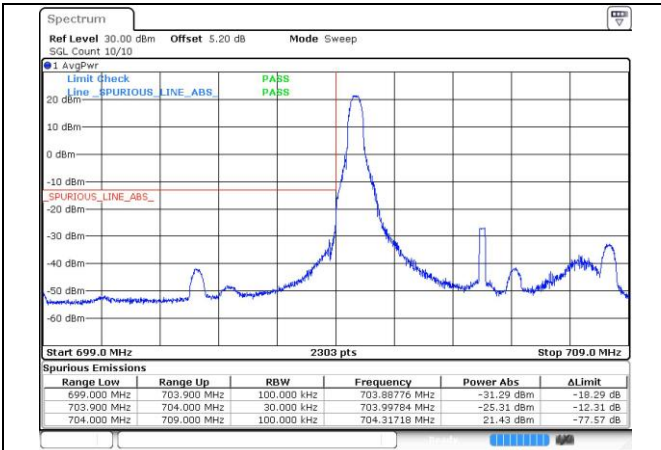


Fig.1

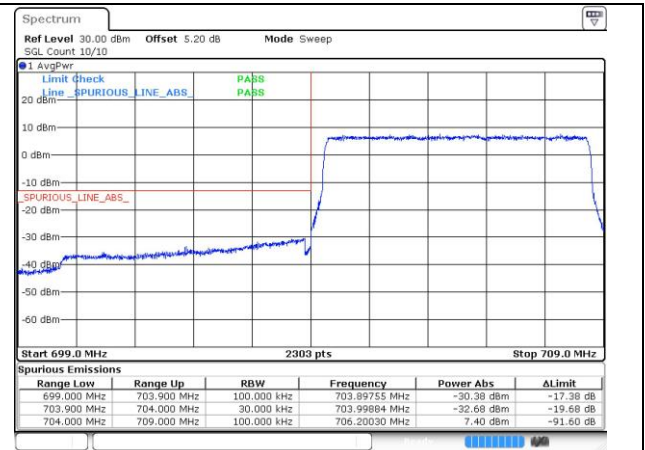


Fig.2

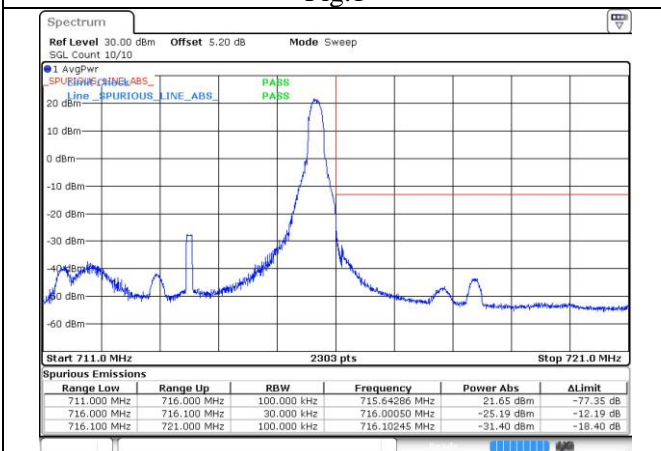


Fig.3

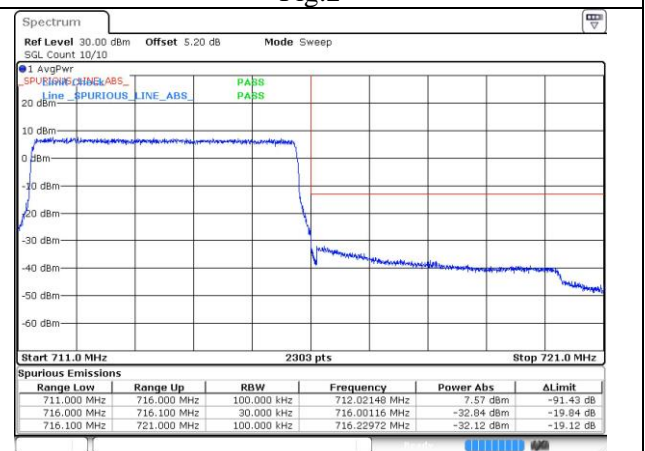


Fig.4

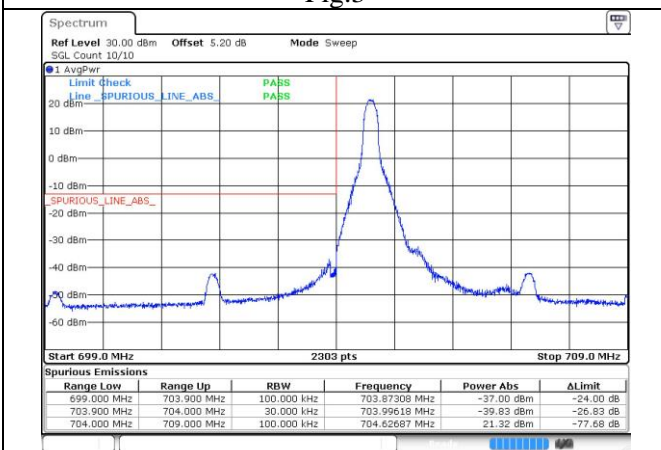


Fig.5

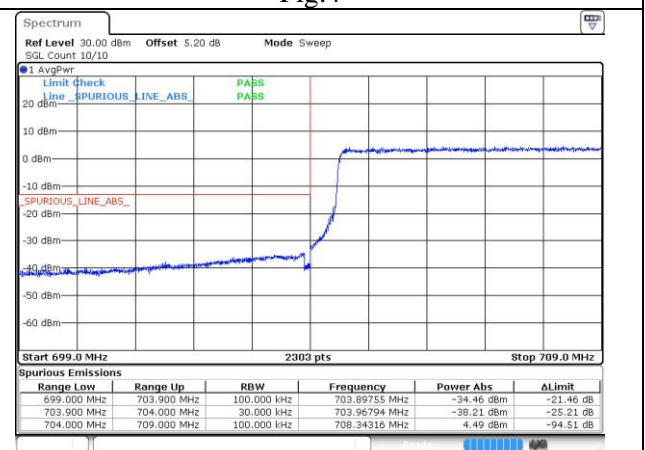


Fig.6

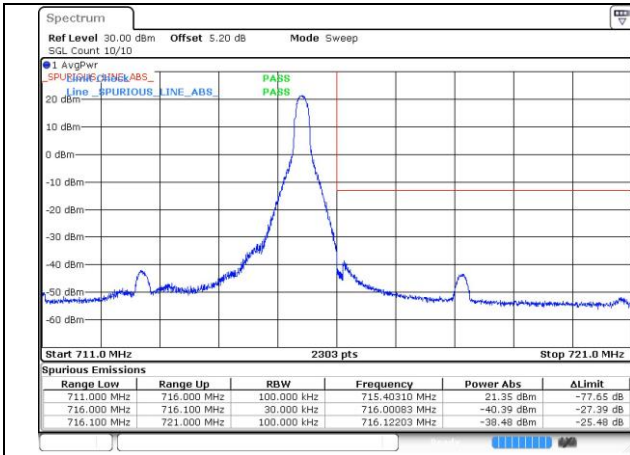


Fig.7

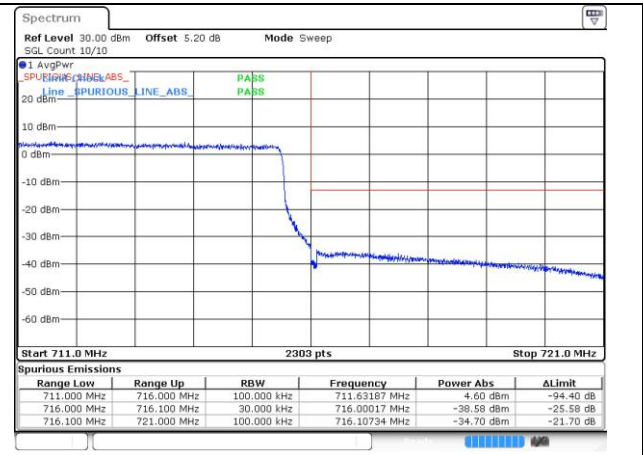


Fig.8

6 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band17 Low Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-30	NV	---	---	---	0.003244	---	---
-20	NV	---	---	---	0.003526	---	---
-10	NV	---	---	---	0.007052	---	---
0	NV	---	---	---	0.011001	---	---
+10	NV	---	---	---	0.004231	---	---
+20	NV	---	---	---	0.009732	---	---
+30	NV	---	---	---	0.003526	---	---
+40	NV	---	---	---	0.001693	---	---
+50	NV	---	---	---	0.004372	---	---
+20	LV	---	---	---	0.001269	---	---
+20	HV	---	---	---	0.004795	---	---

Temperature(°C)	Voltage	Test Result (ppm) Band17 High Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-30	NV	---	---	---	0.002954	---	---
-20	NV	---	---	---	0.007595	---	---
-10	NV	---	---	---	0.006188	---	---
0	NV	---	---	---	0.011533	---	---
+10	NV	---	---	---	0.007454	---	---
+20	NV	---	---	---	0.004782	---	---
+30	NV	---	---	---	0.006329	---	---
+40	NV	---	---	---	0.005485	---	---
+50	NV	---	---	---	0.007314	---	---
+20	LV	---	---	---	0.003376	---	---
+20	HV	---	---	---	0.005485	---	---

7 Effective Radiated Power and Effective Isotropic Radiated Power

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conduct ed power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	706.5	23755	5	1	0	22.50	16.35	0.043
				1	12	22.52	16.37	0.043
				1	24	22.39	16.24	0.042
				12	0	21.48	15.33	0.034
				12	6	21.62	15.47	0.035
				12	13	21.45	15.30	0.034
	25	0		21.55	15.40	0.035		
	710	23790		1	0	22.53	16.38	0.043
				1	12	22.44	16.29	0.043
				1	24	22.44	16.29	0.043
				12	0	21.66	15.51	0.036
				12	6	21.58	15.43	0.035
				12	13	21.58	15.43	0.035
	25	0		21.56	15.41	0.035		
	713.5	23825		1	0	22.65	16.50	0.045
				1	12	22.48	16.33	0.043
				1	24	22.48	16.33	0.043
				12	0	21.70	15.55	0.036
12			6	21.60	15.45	0.035		
12			13	21.62	15.47	0.035		
25	0	21.49	15.34	0.034				
16QAM	706.5	23755	1	0	22.18	16.03	0.040	
			1	12	21.75	15.60	0.036	
			1	24	21.62	15.47	0.035	
			12	0	20.58	14.43	0.028	
			12	6	20.61	14.46	0.028	
			12	13	20.57	14.42	0.028	
	25	0	20.49	14.34	0.027			
	710	23790	1	0	21.75	15.60	0.036	
			1	12	22.18	16.03	0.040	
			1	24	21.50	15.35	0.034	
			12	0	20.72	14.57	0.029	
			12	6	20.57	14.42	0.028	
			12	13	20.67	14.52	0.028	
	25	0	20.58	14.43	0.028			
	713.5	23825	1	0	22.22	16.07	0.040	
			1	12	22.16	16.01	0.040	
			1	24	21.85	15.70	0.037	
			12	0	20.66	14.51	0.028	
12			6	20.58	14.43	0.028		
12			13	20.68	14.53	0.028		
25	0	20.69	14.54	0.028				

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conduct ed power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	706.5	23755	5	1	0	20.44	14.29	0.027
				1	12	20.48	14.33	0.027
				1	24	20.32	14.17	0.026
				12	0	19.42	13.27	0.021
				12	6	19.58	13.43	0.022
				12	13	19.41	13.26	0.021
	25	0		19.52	13.37	0.022		
	710	23790		1	0	20.43	14.28	0.027
				1	12	20.41	14.26	0.027
				1	24	20.40	14.25	0.027
				12	0	19.61	13.46	0.022
				12	6	19.55	13.4	0.022
				12	13	19.48	13.33	0.022
	25	0		19.47	13.32	0.021		
	713.5	23825		1	0	20.56	14.41	0.028
				1	12	20.38	14.23	0.026
				1	24	20.40	14.25	0.027
				12	0	19.68	13.53	0.023
12			6	19.56	13.41	0.022		
12			13	19.60	13.45	0.022		
25	0	19.45	13.3	0.021				
256QAM	706.5	23755	5	1	0	18.13	11.98	0.016
				1	12	17.67	11.52	0.014
				1	24	17.53	11.38	0.014
				12	0	17.54	11.39	0.014
				12	6	17.57	11.42	0.014
				12	13	17.48	11.33	0.014
	25	0		17.41	11.26	0.013		
	710	23790		1	0	17.72	11.57	0.014
				1	12	18.09	11.94	0.016
				1	24	17.46	11.31	0.014
				12	0	17.65	11.5	0.014
				12	6	17.55	11.4	0.014
				12	13	17.58	11.43	0.014
	25	0		17.53	11.38	0.014		
	713.5	23825		1	0	18.14	11.99	0.016
				1	12	18.06	11.91	0.016
				1	24	17.80	11.65	0.015
				12	0	17.62	11.47	0.014
12			6	17.49	11.34	0.014		
12			13	17.60	11.45	0.014		
25	0	17.64	11.49	0.014				

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conduct ed power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	709	23780	10	1	0	22.54	16.39	0.044
				1	24	22.60	16.45	0.044
				1	49	22.44	16.29	0.043
				25	0	21.56	15.41	0.035
				25	12	21.59	15.44	0.035
				25	25	21.66	15.51	0.036
				50	0	21.63	15.48	0.035
	710	23790		1	0	22.51	16.36	0.043
				1	24	22.62	16.47	0.044
				1	49	22.49	16.34	0.043
				25	0	21.73	15.58	0.036
				25	12	21.56	15.41	0.035
				25	25	21.71	15.56	0.036
				50	0	21.49	15.34	0.034
	711	23800		1	0	22.46	16.31	0.043
1			24	22.55	16.4	0.044		
1			49	22.43	16.28	0.042		
25			0	21.60	15.45	0.035		
25			12	21.56	15.41	0.035		
25			25	21.72	15.57	0.036		
50			0	21.60	15.45	0.035		
16QAM	709	23780	1	0	21.80	15.65	0.037	
			1	24	21.93	15.78	0.038	
			1	49	21.58	15.43	0.035	
			25	0	20.50	14.35	0.027	
			25	12	20.72	14.57	0.029	
			25	25	20.65	14.5	0.028	
			50	0	20.56	14.41	0.028	
	710	23790	1	0	22.25	16.1	0.041	
			1	24	22.08	15.93	0.039	
			1	49	22.04	15.89	0.039	
			25	0	20.59	14.44	0.028	
			25	12	20.66	14.51	0.028	
			25	25	20.65	14.5	0.028	
			50	0	20.58	14.43	0.028	
	711	23800	1	0	21.84	15.69	0.037	
1			24	22.16	16.01	0.040		
1			49	22.12	15.97	0.040		
25			0	20.53	14.38	0.027		
25			12	20.64	14.49	0.028		
25			25	20.72	14.57	0.029		
50			0	20.65	14.5	0.028		

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conduct ed power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	709	23780	10	1	0	20.50	14.35	0.027
				1	24	20.58	14.43	0.028
				1	49	20.34	14.19	0.026
				25	0	19.49	13.34	0.022
				25	12	19.52	13.37	0.022
				25	25	19.56	13.41	0.022
	50	0		19.60	13.45	0.022		
	710	23790		1	0	20.46	14.31	0.027
				1	24	20.52	14.37	0.027
				1	49	20.41	14.26	0.027
				25	0	19.69	13.54	0.023
				25	12	19.50	13.35	0.022
				25	25	19.63	13.48	0.022
	711	23800		50	0	19.39	13.24	0.021
				1	0	20.42	14.27	0.027
				1	24	20.50	14.35	0.027
				1	49	20.41	14.26	0.027
				25	0	19.52	13.37	0.022
25			12	19.46	13.31	0.021		
256QAM	709	23780	10	25	25	19.65	13.5	0.022
				50	0	19.50	13.35	0.022
				1	0	17.76	11.61	0.014
				1	24	17.84	11.69	0.015
				1	49	17.5	11.35	0.014
				25	0	17.4	11.25	0.013
	710	23790		25	12	17.67	11.52	0.014
				25	25	17.62	11.47	0.014
				50	0	17.49	11.34	0.014
				1	0	18.23	12.08	0.016
				1	24	18.01	11.86	0.015
				1	49	18	11.85	0.015
	711	23800		25	0	17.51	11.36	0.014
				25	12	17.62	11.47	0.014
				25	25	17.57	11.42	0.014
				50	0	17.52	11.37	0.014
				1	0	17.74	11.59	0.014
				1	24	18.11	11.96	0.016
			10	1	49	18.06	11.91	0.016
				25	0	17.49	11.34	0.014
				25	12	17.58	11.43	0.014
				25	25	17.68	11.53	0.014
				50	0	17.60	11.45	0.014