

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 12

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	699.7	23017	1.4	1	0	22.96
				1	5	22.92
				3	2	22.00
				6	0	21.96
	707.5	23095		1	0	23.08
				1	5	23.12
				3	2	22.05
				6	0	22.03
	715.3	23173		1	0	23.08
				1	5	23.00
				3	2	21.97
				6	0	21.95
16QAM	699.7	23017	1.4	1	0	21.77
				1	5	21.75
				3	2	21.07
				6	0	21.04
	707.5	23095		1	0	21.81
				1	5	21.74
				3	2	21.09
				6	0	21.05
	715.3	23173		1	0	21.75
				1	5	21.70
				3	2	21.04
				6	0	21.05
64QAM	699.7	23017	1.4	1	0	21.87
				1	5	21.86
				3	2	21.26
				6	0	21.21
	707.5	23095		1	0	21.98
				1	5	21.98
				3	2	21.29
				6	0	21.28
	715.3	23173		1	0	21.94
				1	5	21.93
				3	2	21.25
				6	0	21.09

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	700.5	23025	3	1	0	22.92
				1	14	22.89
				8	4	21.97
				15	0	21.96
	707.5	23095		1	0	23.09
				1	14	23.09
				8	4	22.03
				15	0	22.00
	714.5	23165		1	0	23.00
				1	14	22.96
				8	4	21.96
				15	0	21.94
16QAM	700.5	23025	3	1	0	21.69
				1	14	21.72
				8	4	20.97
				15	0	21.01
	707.5	23095		1	0	21.78
				1	14	21.70
				8	4	21.09
				15	0	21.01
	714.5	23165		1	0	21.66
				1	14	21.68
				8	4	21.01
				15	0	20.97
64QAM	700.5	23025	3	1	0	21.87
				1	14	21.84
				8	4	21.20
				15	0	21.16
	707.5	23095		1	0	21.97
				1	14	21.93
				8	4	21.22
				15	0	21.23
	714.5	23165		1	0	21.92
				1	14	21.91
				8	4	21.23
				15	0	21.22

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	701.5	23035	5	1	0	22.90
				1	24	22.87
				12	6	21.98
				25	0	21.95
	707.5	23095		1	0	23.06
				1	24	23.07
				12	6	22.08
				25	0	22.01
	713.5	23155		1	0	23.04
				1	24	23.03
				12	6	21.97
				25	0	21.97
16QAM	701.5	23035	5	1	0	21.76
				1	24	21.77
				12	6	21.06
				25	0	21.06
	707.5	23095		1	0	21.77
				1	24	21.71
				12	6	21.13
				25	0	21.01
	713.5	23155		1	0	21.72
				1	24	21.73
				12	6	21.06
				25	0	21.03
64QAM	701.5	23035	5	1	0	21.84
				1	24	21.81
				12	6	21.19
				25	0	21.18
	707.5	23095		1	0	21.97
				1	24	21.94
				12	6	21.25
				25	0	21.26
	713.5	23155		1	0	21.96
				1	24	21.94
				12	6	21.25
				25	0	21.21

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	704	23060	10	1	0	23.01
				1	49	22.98
				24	12	22.08
				50	0	22.05
	707.5	23095		1	0	23.17
				1	49	23.17
				24	12	22.15
				50	0	22.12
	711	23130		1	0	23.13
				1	49	23.11
				24	12	22.05
				50	0	22.04
16QAM	704	23060	10	1	0	21.83
				1	49	21.83
				24	12	21.14
				50	0	21.12
	707.5	23095		1	0	21.88
				1	49	21.85
				24	12	21.18
				50	0	21.16
	711	23130		1	0	21.82
				1	49	21.80
				24	12	21.11
				50	0	21.10
64QAM	704	23060	10	1	0	21.95
				1	49	21.92
				24	12	21.33
				50	0	21.30
	707.5	23095		1	0	22.08
				1	49	22.06
				24	12	21.40
				50	0	21.36
	711	23130		1	0	22.05
				1	49	22.01
				24	12	21.36
				50	0	21.35

2 Occupied Bandwidth

Test result

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
12	699.7	23017	1.4	6	0	1.0831	Fig.1	1.0827	Fig.2	1.0832	Fig.3
	707.5	23095		6	0	1.0836	Fig.4	1.0830	Fig.5	1.0832	Fig.6
	715.3	23173		6	0	1.0840	Fig.7	1.0837	Fig.8	1.0829	Fig.9
	700.5	23025	3	15	0	2.6845	Fig.10	2.6862	Fig.11	2.6915	Fig.12
	707.5	23095		15	0	2.6869	Fig.13	2.6895	Fig.14	2.6862	Fig.15
	714.5	23165		15	0	2.6875	Fig.16	2.6904	Fig.17	2.6834	Fig.18
	701.5	23035	5	25	0	4.4778	Fig.19	4.4750	Fig.20	4.4779	Fig.21
	707.5	23095		25	0	4.4839	Fig.22	4.4796	Fig.23	4.4729	Fig.24
	713.5	23155		25	0	4.4824	Fig.25	4.4770	Fig.26	4.4821	Fig.27
	704	23060	10	50	0	8.9587	Fig.28	8.9458	Fig.29	8.9454	Fig.30
	707.5	23095		50	0	8.9683	Fig.31	8.9651	Fig.32	8.9614	Fig.33
	711	23130		50	0	8.9583	Fig.34	8.9660	Fig.35	8.9414	Fig.36

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
12	699.7	23017	1.4	6	0	1.275	Fig.1	1.273	Fig.2	1.263	Fig.3
	707.5	23095		6	0	1.269	Fig.4	1.260	Fig.5	1.262	Fig.6
	715.3	23173		6	0	1.279	Fig.7	1.258	Fig.8	1.273	Fig.9
	700.5	23025	3	15	0	2.994	Fig.10	2.992	Fig.11	2.993	Fig.12
	707.5	23095		15	0	2.991	Fig.13	2.992	Fig.14	3.013	Fig.15
	714.5	23165		15	0	3.000	Fig.16	3.000	Fig.17	3.006	Fig.18
	701.5	23035	5	25	0	5.133	Fig.19	5.028	Fig.20	5.020	Fig.21
	707.5	23095		25	0	5.133	Fig.22	5.107	Fig.23	5.144	Fig.24
	713.5	23155		25	0	5.117	Fig.25	4.959	Fig.26	5.025	Fig.27
	704	23060	10	50	0	9.900	Fig.28	9.865	Fig.29	9.797	Fig.30
	707.5	23095		50	0	9.918	Fig.31	9.829	Fig.32	9.853	Fig.33
	711	23130		50	0	9.913	Fig.34	9.865	Fig.35	9.812	Fig.36

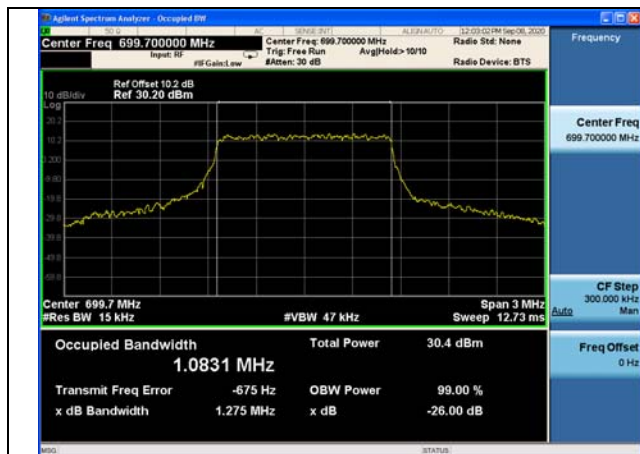


Fig.1

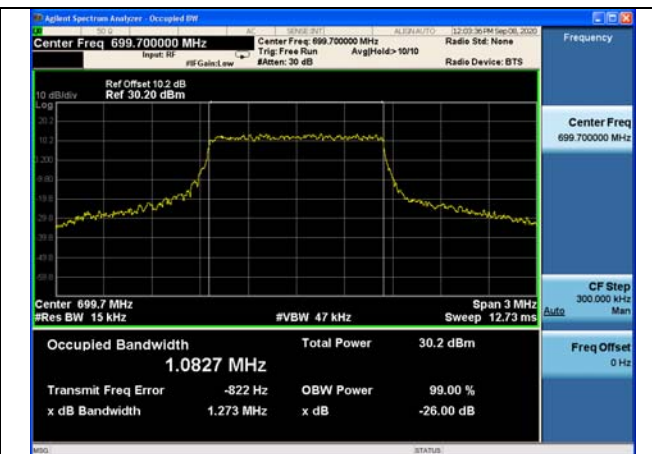


Fig.2

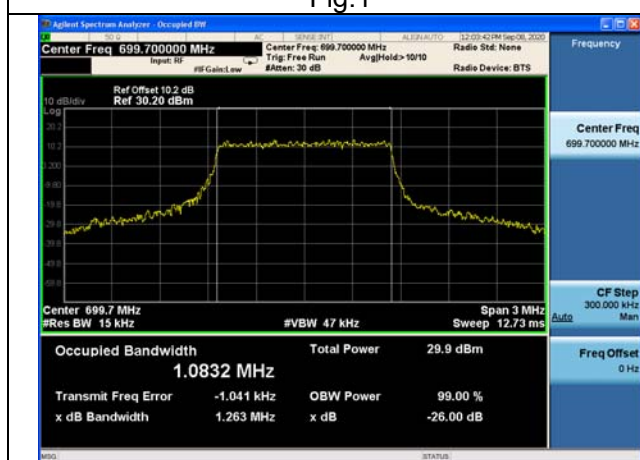


Fig.3

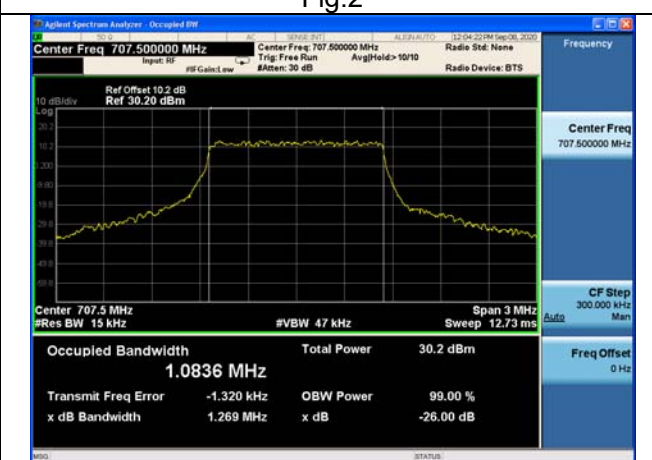


Fig.4

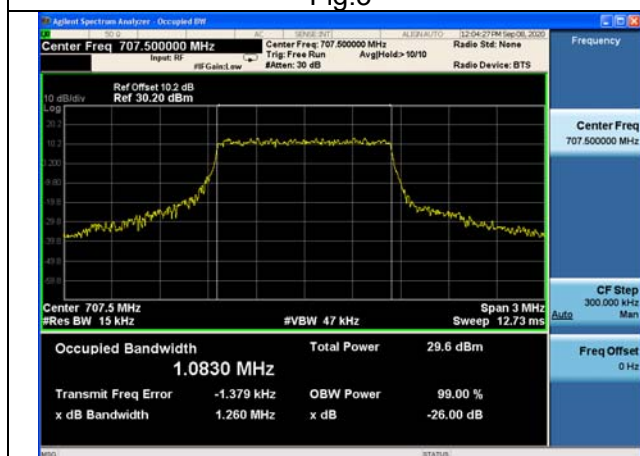


Fig.5

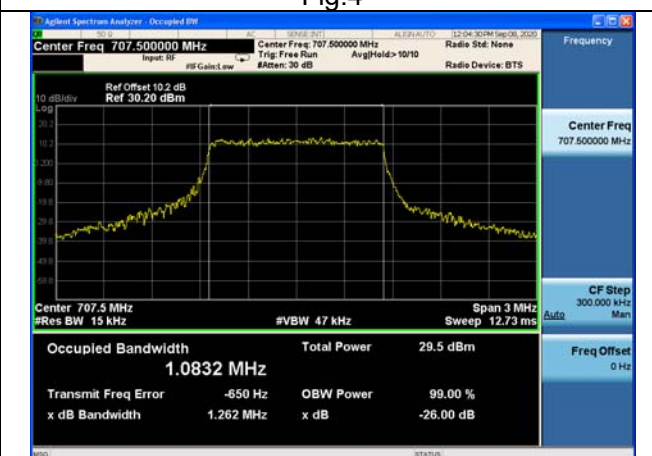


Fig.6

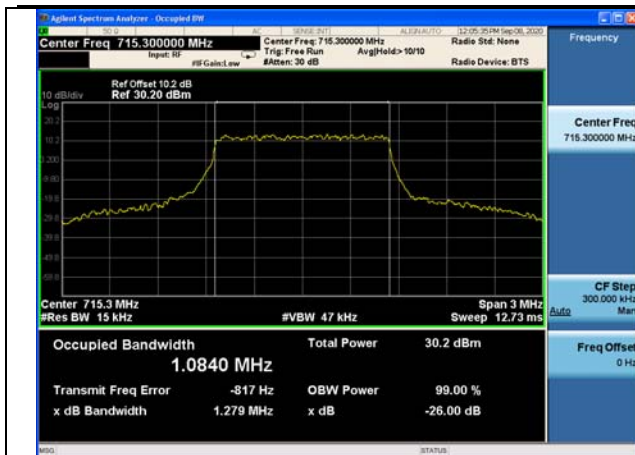


Fig.7

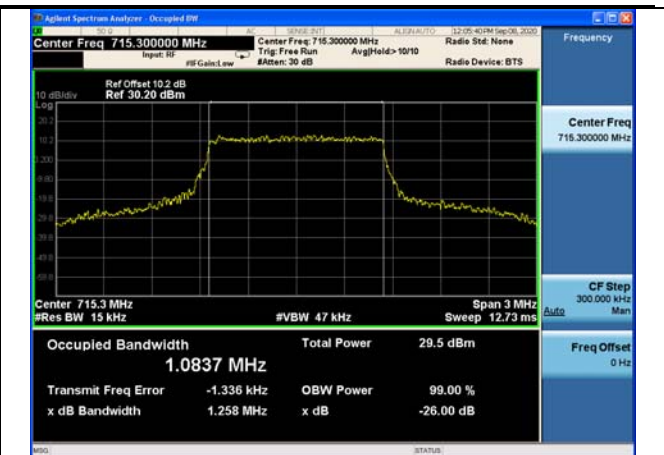


Fig.8

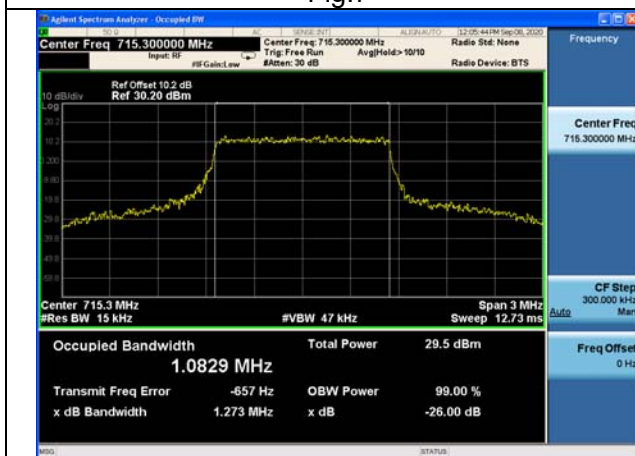


Fig.9

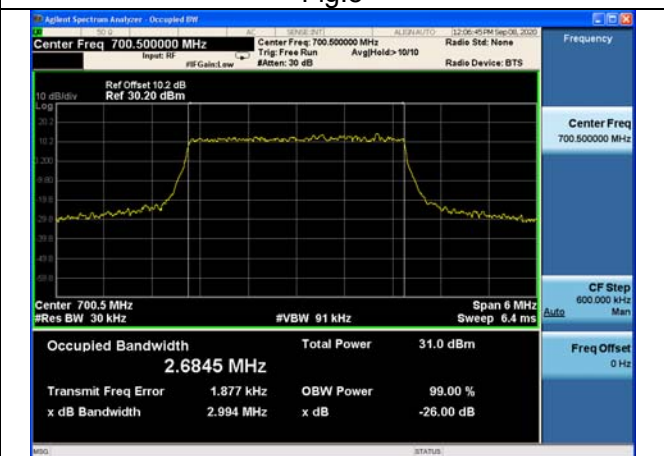


Fig.10

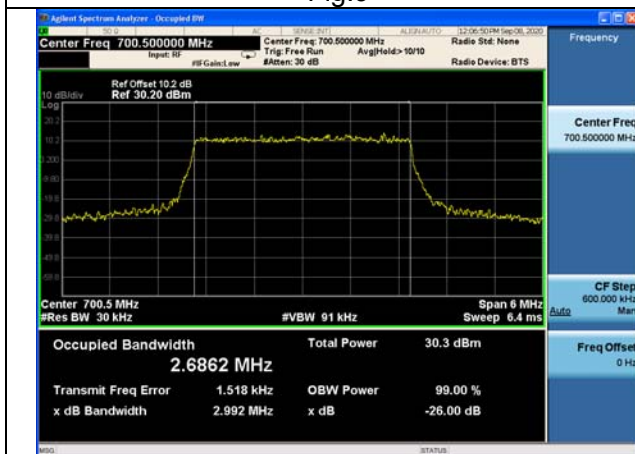


Fig.11

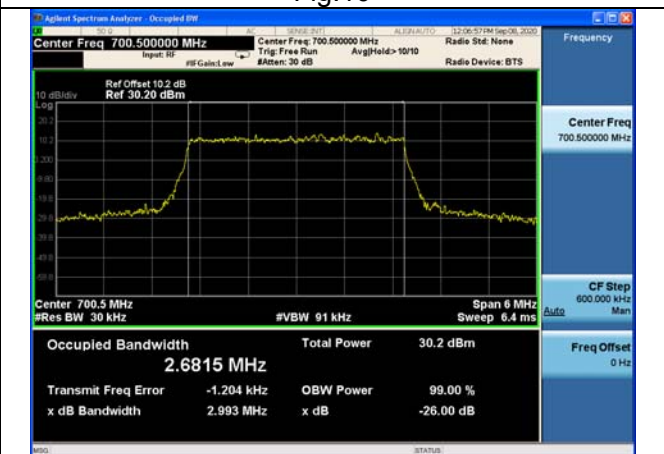


Fig.12



Fig.13

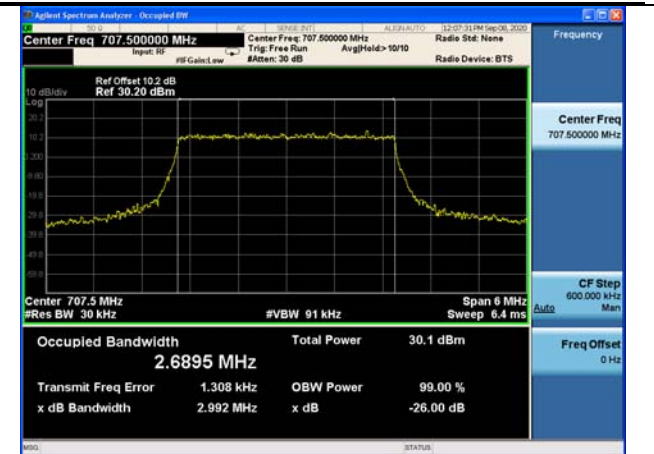


Fig.14

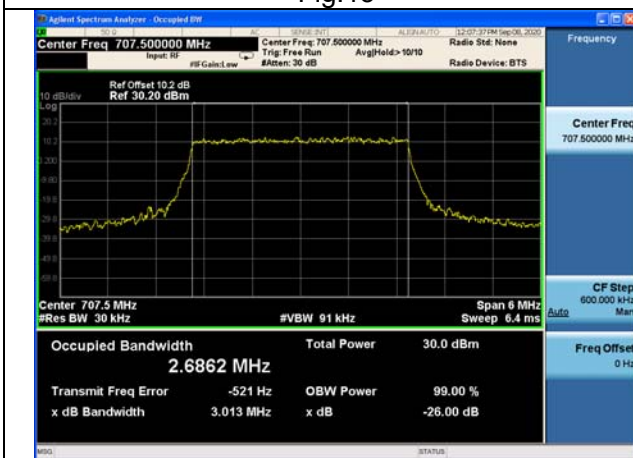


Fig.15

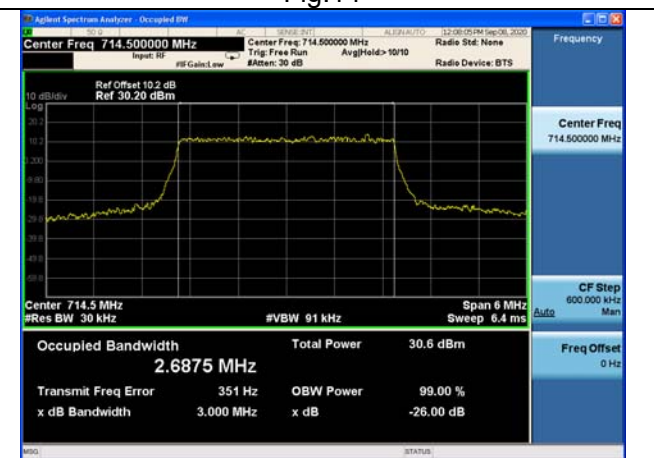


Fig.16

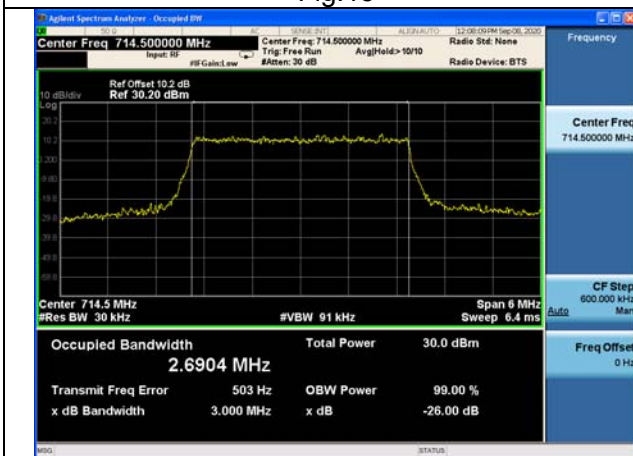


Fig.17

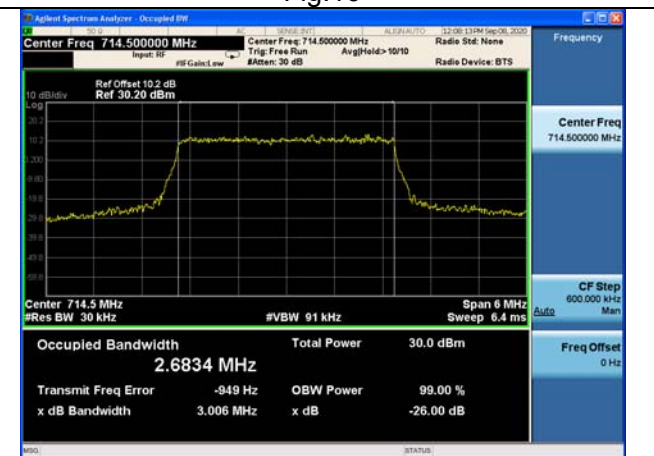


Fig.18

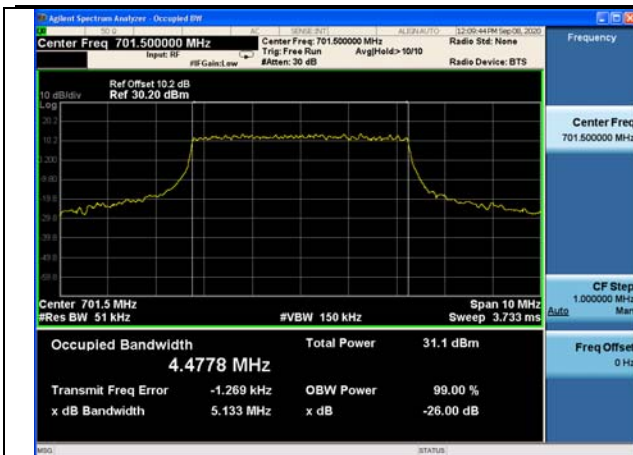


Fig.19

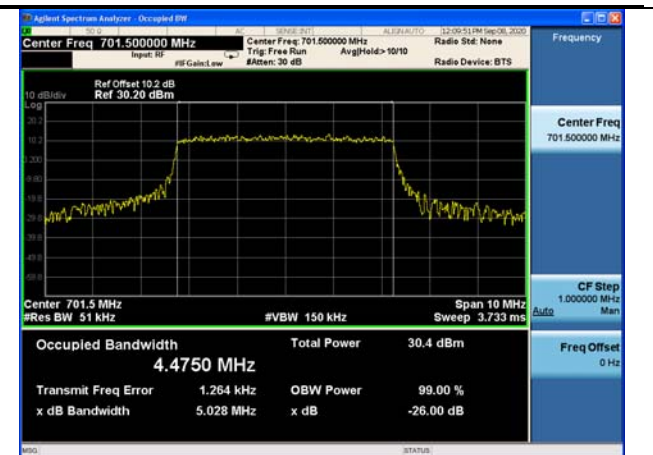


Fig.20

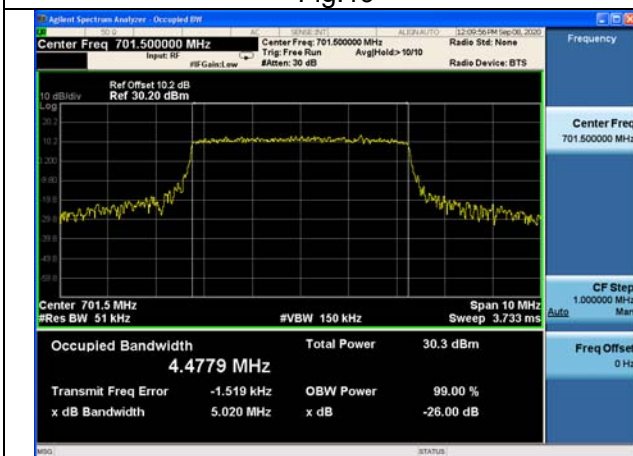


Fig.21

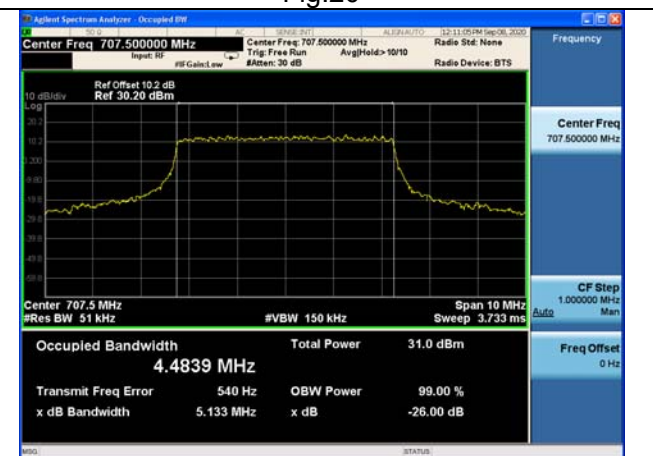


Fig.22

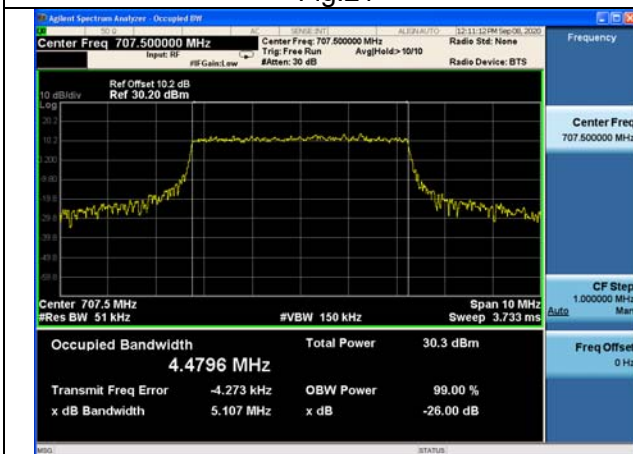


Fig.23

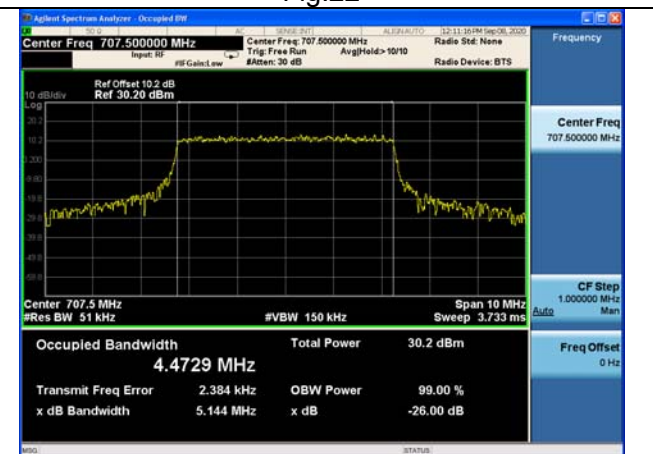


Fig.24

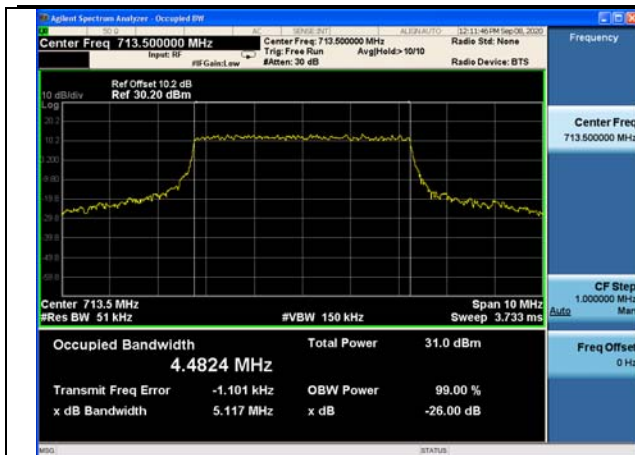


Fig.25

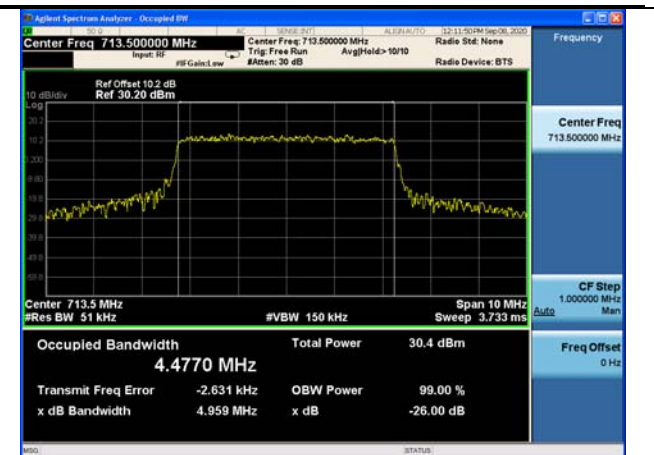


Fig.26

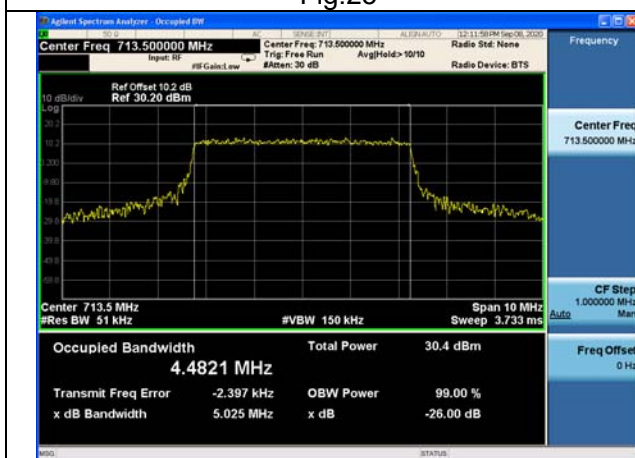


Fig.27

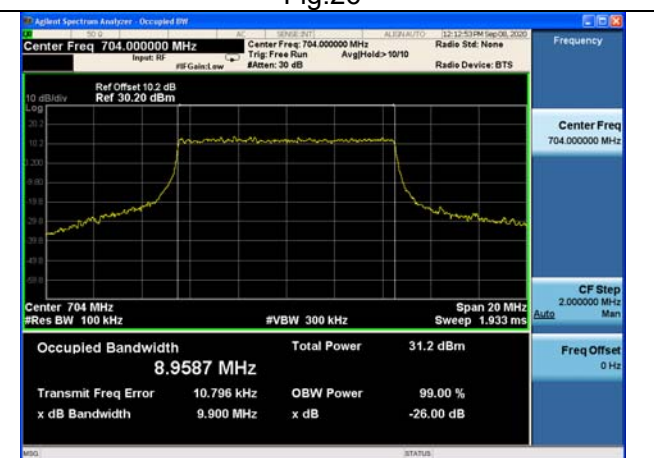


Fig.28

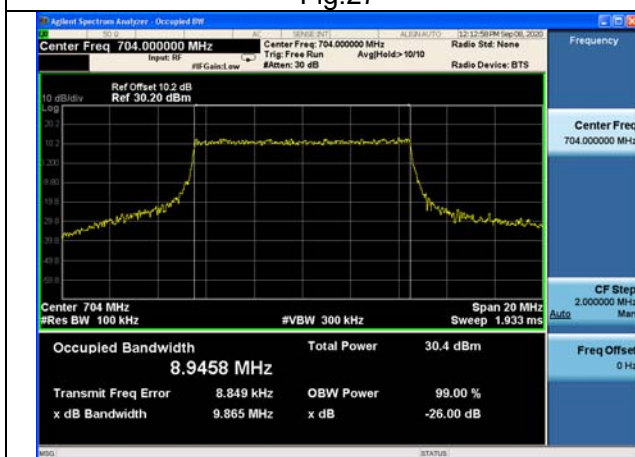


Fig.29

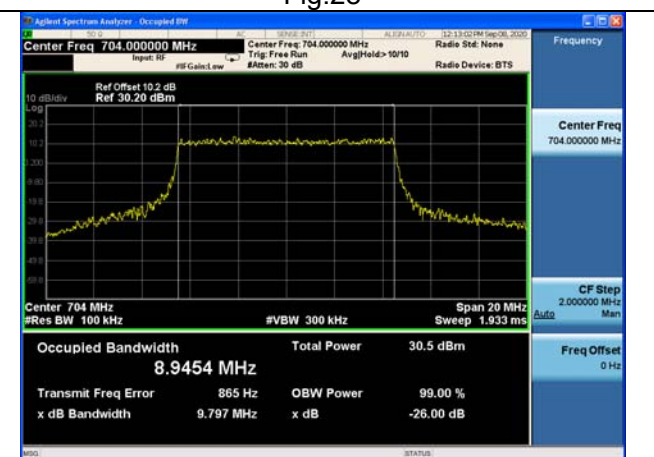


Fig.30

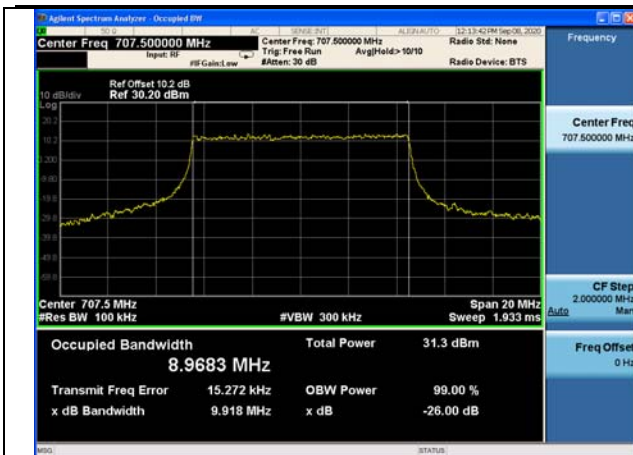


Fig.31

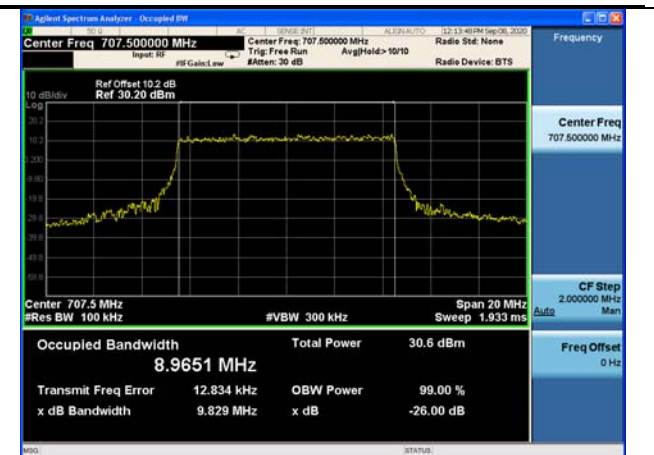


Fig.32

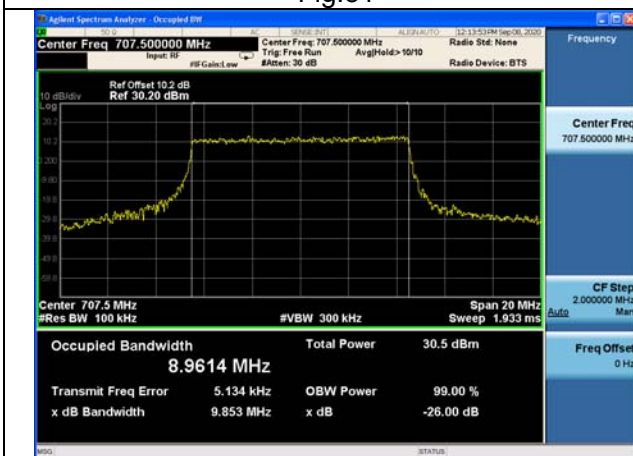


Fig.33



Fig.34

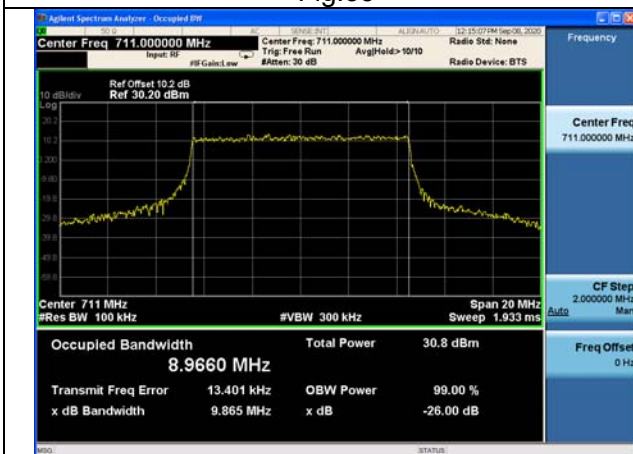


Fig.35

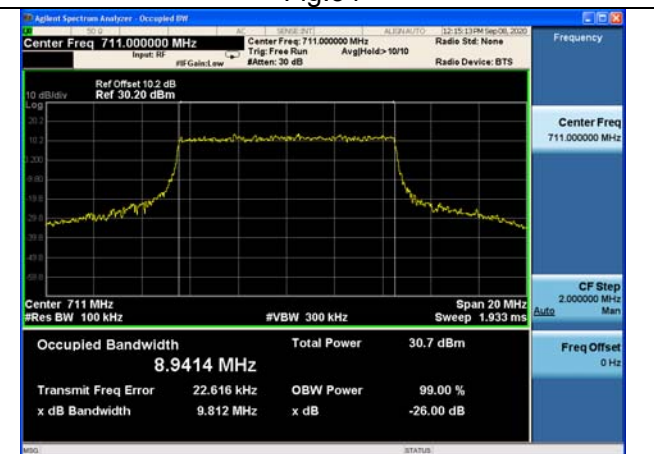


Fig.36

3 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
12	707.5	23095	1.4	1	0	Fig.1	Fig.2	Fig.3
			3	1	0	Fig.4	Fig.5	Fig.6
			5	1	0	Fig.7	Fig.8	Fig.9
			10	1	0	Fig.10	Fig.11	Fig.12



Fig.1

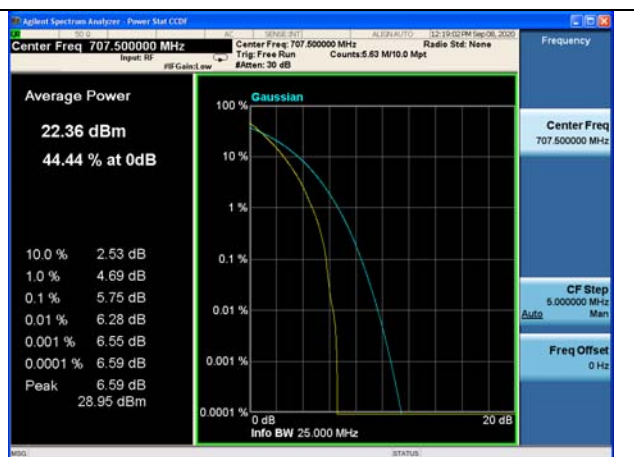


Fig.2



Fig.3



Fig.4



Fig.5



Fig.6



Fig.7

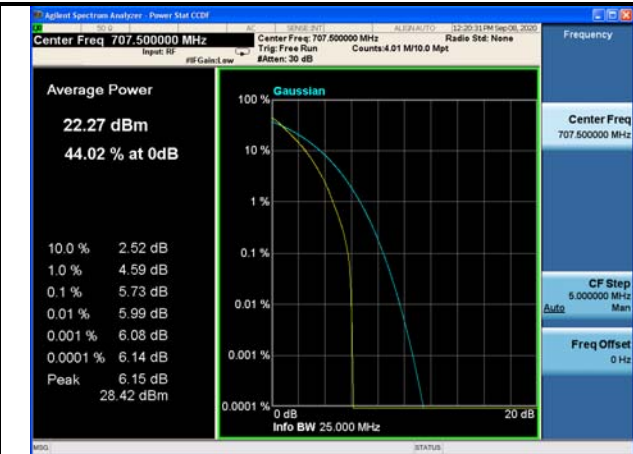


Fig.8

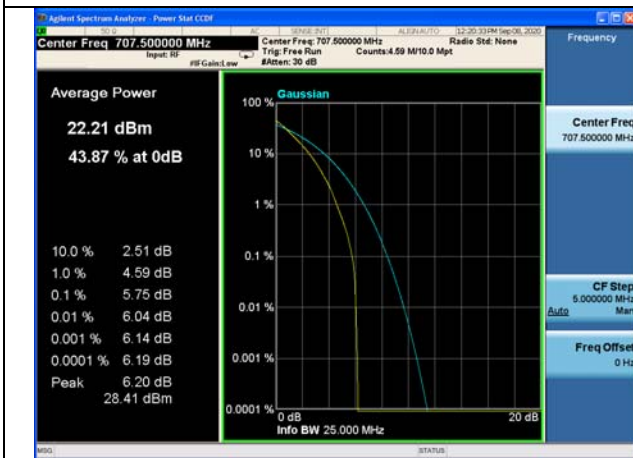


Fig.9

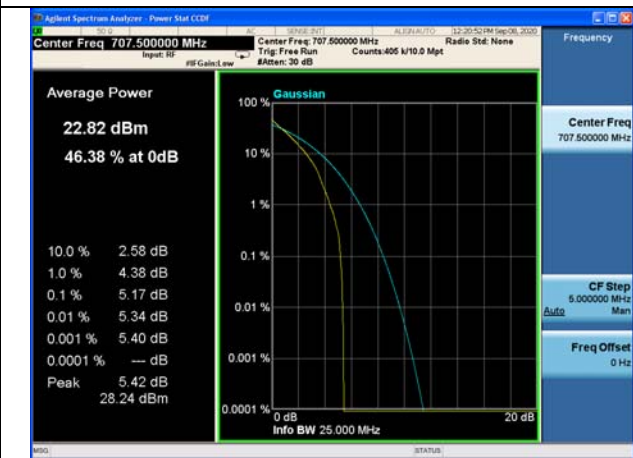


Fig.10



Fig.11



Fig.12

4 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
12	704	23060	10	1	0	Fig.1-2
	707.5	23095	10	1	0	Fig.3-4
	711	23130	10	1	0	Fig.5-6

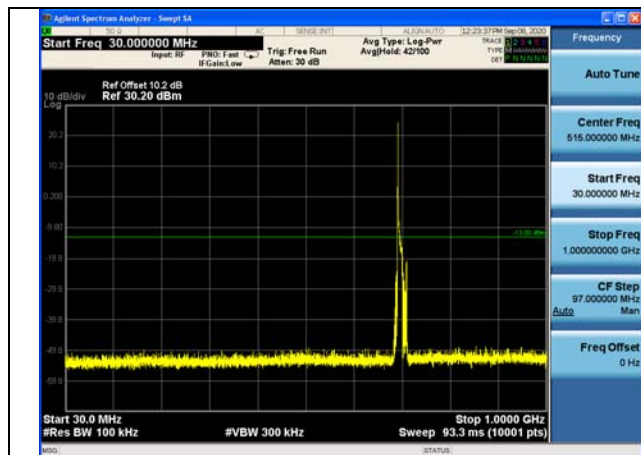


Fig.1



Fig.2

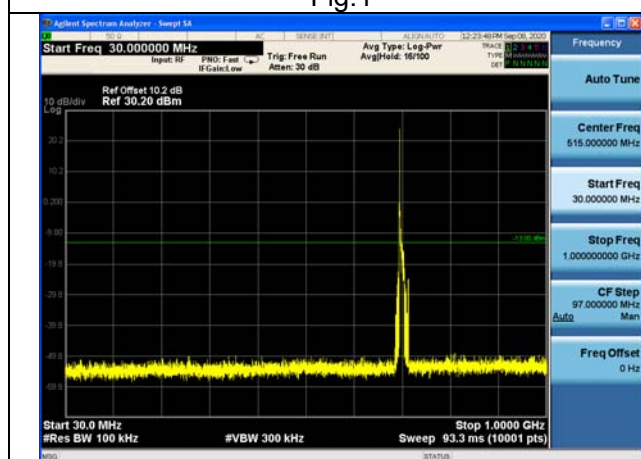


Fig3

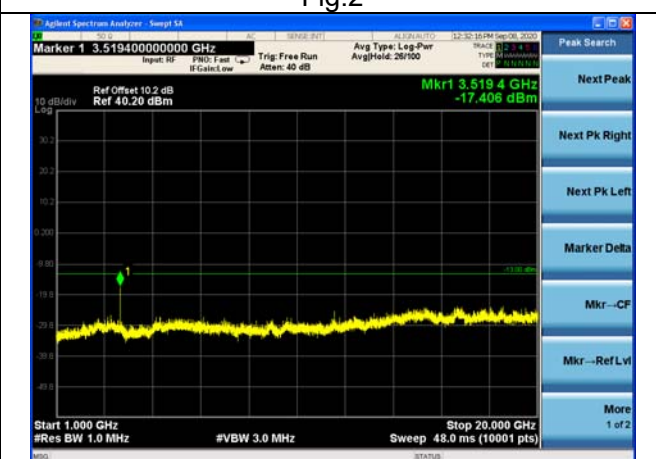


Fig4

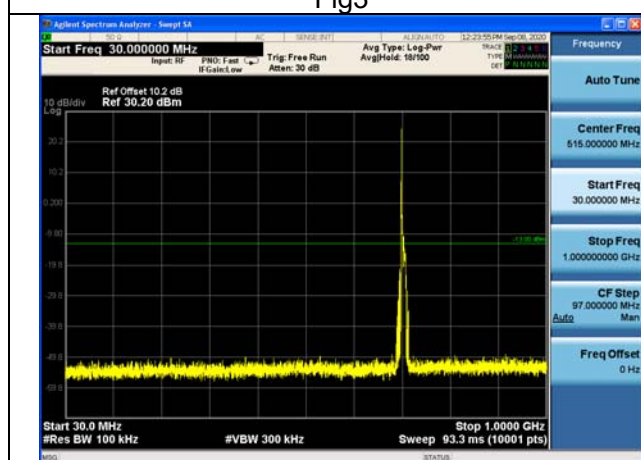


Fig5

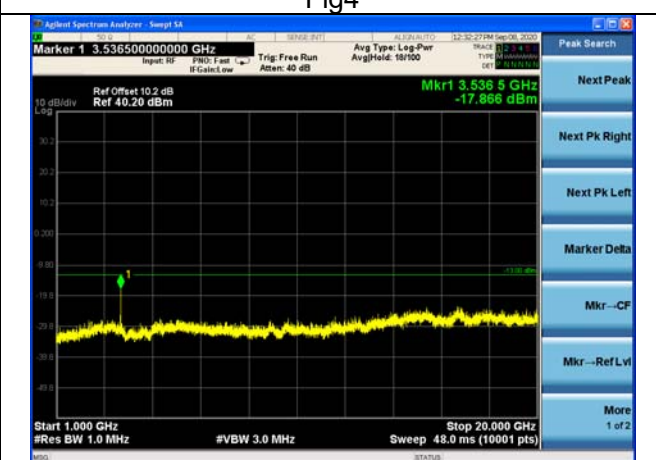


Fig6

5 Band Edges Compliance

Test result

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
12	699.7	23017	1.4	1	p/	Fig.1
				6	0	Fig.2
				1	5	Fig.3
	715.3	23173	3	6	0	Fig.4
				1	0	Fig.5
				15	0	Fig.6
	700.5	23025	5	1	14	Fig.7
				15	0	Fig.8
				1	0	Fig.9
	701.5	23035	10	25	0	Fig.10
				1	24	Fig.11
				25	0	Fig.12
	713.5	23155	10	1	0	Fig.13
				50	0	Fig.14
	704	23060		1	49	Fig.15
				50	0	Fig.16
	711	23130				

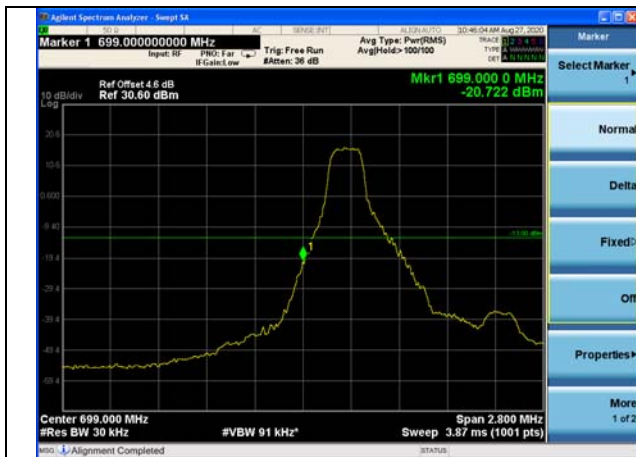


Fig.1

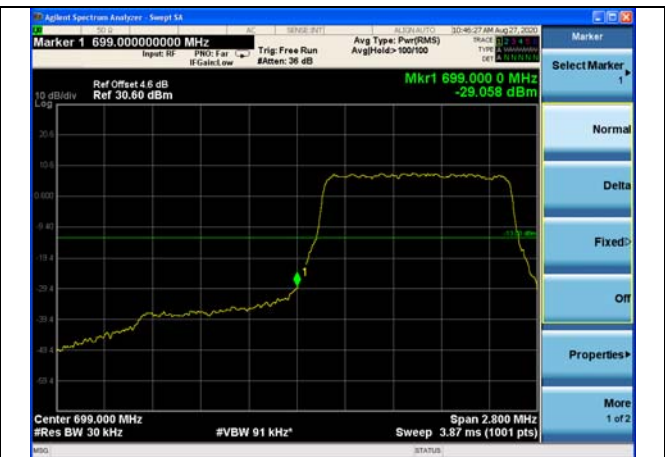


Fig.2

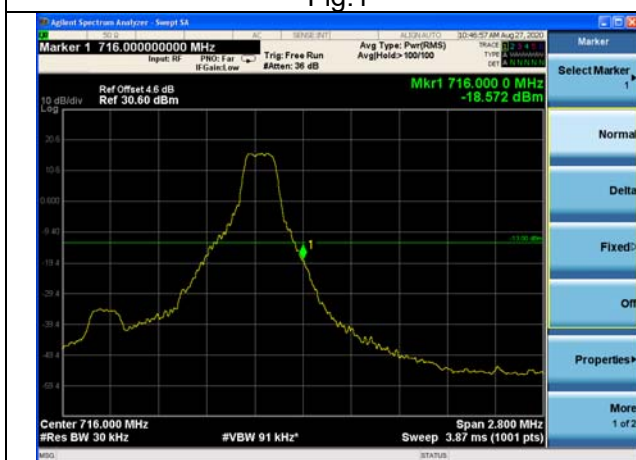


Fig.3



Fig.4

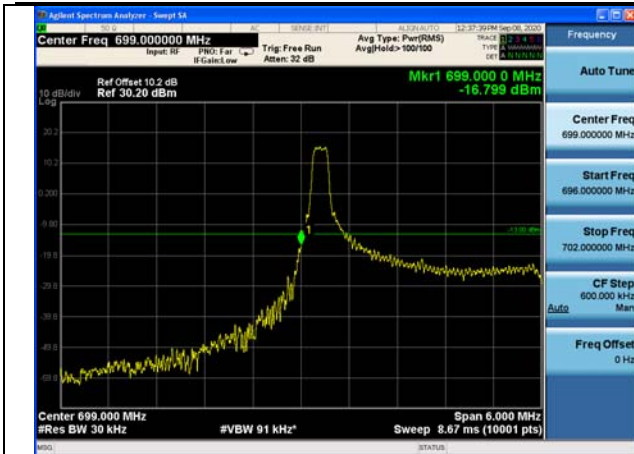


Fig.5



Fig.6

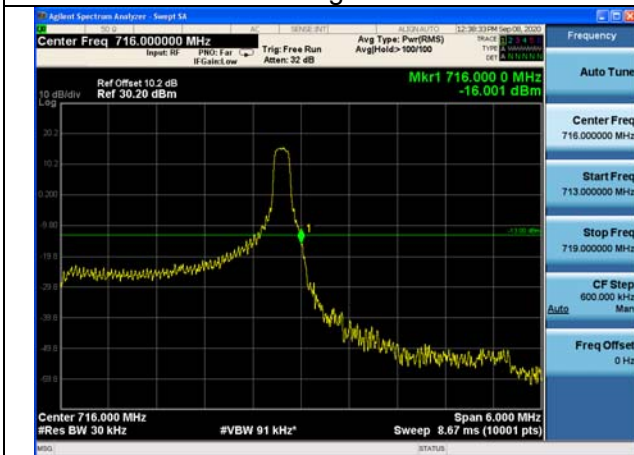


Fig.7



Fig.8

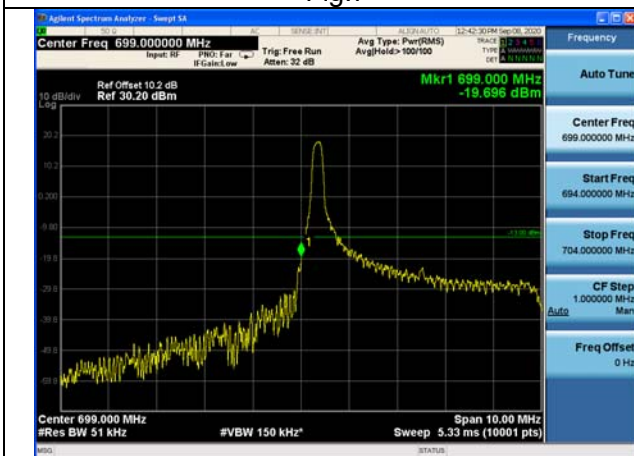


Fig.9

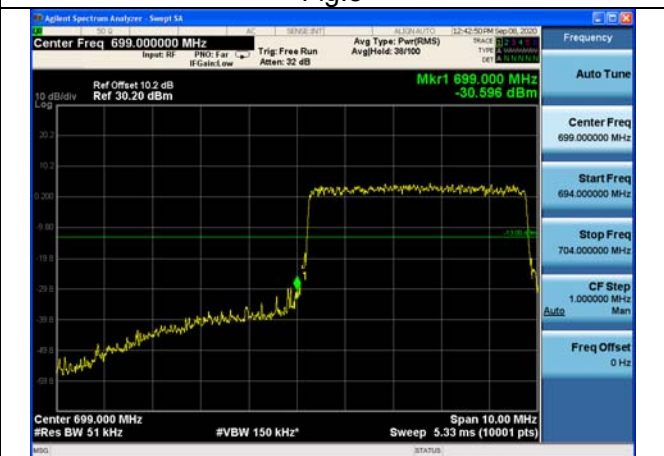


Fig.10

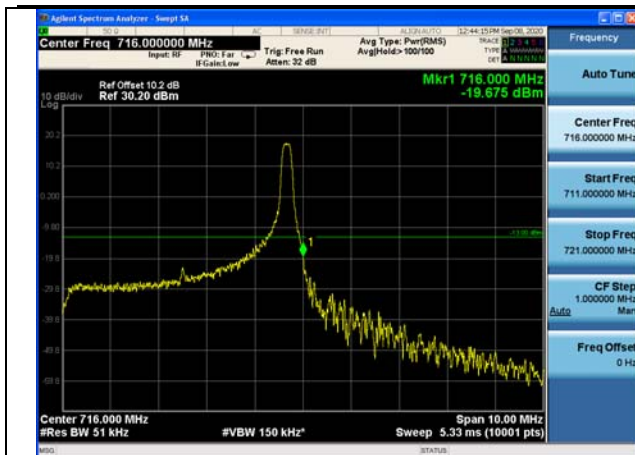


Fig.11



Fig.12

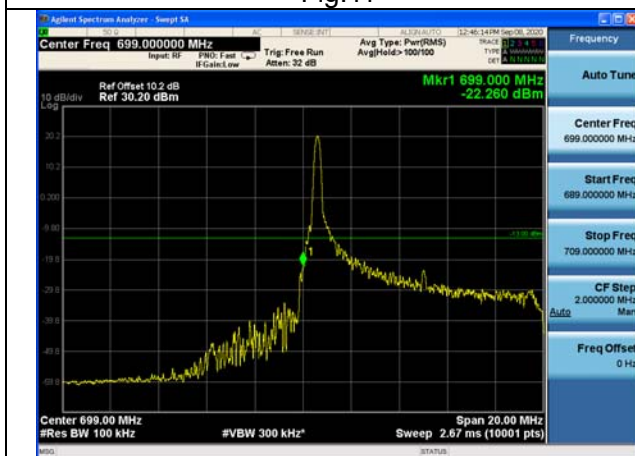


Fig.13

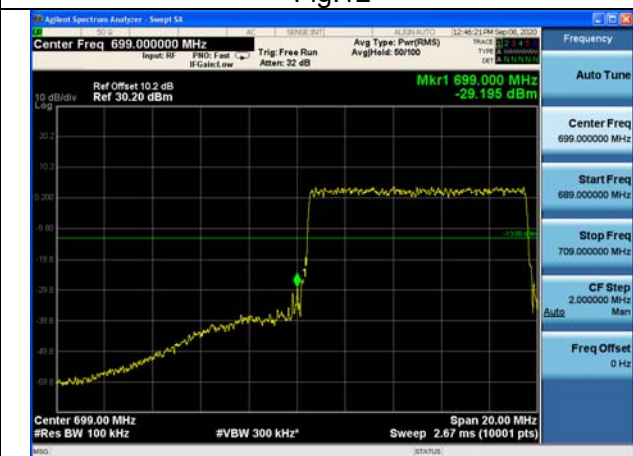


Fig.14

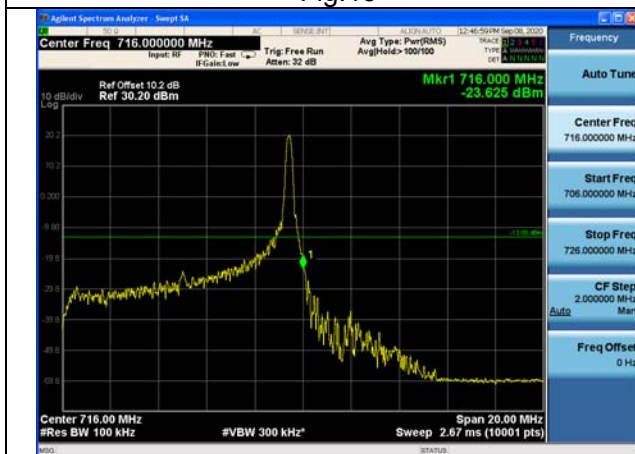


Fig.15



Fig.16

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band12 Low Channel			
		1.4M	3M	5M	10M
-25	NV	0.001	-0.009	-0.007	0.018
-20	NV	0.008	0.018	0.015	-0.003
-10	NV	-0.007	-0.014	0.004	0.002
0	NV	-0.017	-0.021	-0.006	-0.005
+10	NV	-0.006	0.028	0.022	0.010
+20	NV	0.000	0.000	0.000	0.000
+30	NV	-0.013	-0.007	0.002	0.008
+40	NV	-0.002	-0.002	0.012	-0.003
+50	NV	0.006	0.002	0.015	0.017
+20	LV	0.029	-0.016	-0.003	0.005
+20	HV	-0.020	0.006	-0.012	-0.007

Temperature(°C)	Voltage	Test Result (ppm) Band12 High Channel			
		1.4M	3M	5M	10M
-25	NV	0.017	0.007	0.007	0.019
-20	NV	-0.006	-0.005	0.011	-0.009
-10	NV	0.008	-0.016	-0.013	0.008
0	NV	-0.017	0.022	0.008	-0.002
+10	NV	0.000	0.000	0.000	0.000
+20	NV	0.015	0.014	-0.001	0.007
+30	NV	-0.001	0.006	0.008	-0.020
+40	NV	0.012	-0.013	0.013	-0.009
+50	NV	0.011	-0.023	-0.011	-0.024
+20	LV	-0.018	-0.013	-0.002	0.016
+20	HV	0.019	0.011	-0.008	-0.020