

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	23.44
				1	5	23.55
				3	2	22.76
				6	0	22.67
	707.5	23095		1	0	23.77
				1	5	23.64
				3	2	22.92
				6	0	22.89
	715.3	23173		1	0	23.50
				1	5	23.49
				3	2	22.71
				6	0	22.65
16QAM	699.7	23017	1.4	1	0	22.26
				1	5	22.21
				3	2	21.67
				6	0	21.63
	707.5	23095		1	0	22.22
				1	5	22.38
				3	2	21.77
				6	0	21.60
	715.3	23173		1	0	22.38
				1	5	22.14
				3	2	21.69
				6	0	21.62
64QAM	699.7	23017	1.4	1	0	22.15
				1	5	22.12
				3	2	21.88
				6	0	21.71
	707.5	23095		1	0	22.21
				1	5	22.32
				3	2	21.82
				6	0	21.74
	715.3	23173		1	0	22.30
				1	5	22.26
				3	2	21.74
				6	0	21.49

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	700.5	23025	3	1	0	23.62
				1	14	23.59
				8	4	22.70
				15	0	22.78
	707.5	23095		1	0	23.71
				1	14	23.71
				8	4	22.70
				15	0	22.75
	714.5	23165		1	0	23.62
				1	14	23.65
				8	4	22.90
				15	0	22.67
16QAM	700.5	23025	3	1	0	22.17
				1	14	22.31
				8	4	21.87
				15	0	21.67
	707.5	23095		1	0	22.31
				1	14	22.21
				8	4	21.79
				15	0	21.62
	714.5	23165		1	0	22.31
				1	14	22.18
				8	4	21.84
				15	0	21.53
64QAM	700.5	23025	3	1	0	22.15
				1	14	22.10
				8	4	21.73
				15	0	21.57
	707.5	23095		1	0	22.25
				1	14	22.29
				8	4	21.74
				15	0	21.68
	714.5	23165		1	0	22.11
				1	14	22.04
				8	4	21.73
				15	0	21.59

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	701.5	23035	5	1	0	23.58
				1	24	23.54
				12	6	22.89
				25	0	22.74
	707.5	23095		1	0	23.72
				1	24	23.62
				12	6	22.75
				25	0	22.71
	713.5	23155		1	0	23.76
				1	24	23.45
				12	6	22.93
				25	0	22.84
16QAM	701.5	23035	5	1	0	22.11
				1	24	22.17
				12	6	21.94
				25	0	21.67
	707.5	23095		1	0	22.39
				1	24	22.24
				12	6	21.85
				25	0	21.65
	713.5	23155		1	0	22.22
				1	24	22.31
				12	6	21.81
				25	0	21.52
64QAM	701.5	23035	5	1	0	22.01
				1	24	22.06
				12	6	21.66
				25	0	21.65
	707.5	23095		1	0	22.16
				1	24	22.12
				12	6	21.80
				25	0	21.78
	713.5	23155		1	0	22.34
				1	24	21.97
				12	6	21.64
				25	0	21.78

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	704	23060	10	1	0	23.74
				1	49	23.74
				24	12	22.98
				50	0	22.93
	707.5	23095		1	0	23.78
				1	49	23.78
				24	12	22.98
				50	0	22.97
	711	23130		1	0	23.76
				1	49	23.76
				24	12	22.94
				50	0	22.87
16QAM	704	23060	10	1	0	22.32
				1	49	22.37
				24	12	21.94
				50	0	21.86
	707.5	23095		1	0	22.4
				1	49	22.40
				24	12	21.96
				50	0	21.86
	711	23130		1	0	22.31
				1	49	22.37
				24	12	21.94
				50	0	21.80
64QAM	704	23060	10	1	0	22.28
				1	49	22.32
				24	12	21.88
				50	0	21.74
	707.5	23095		1	0	22.38
				1	49	22.33
				24	12	21.93
				50	0	21.82
	711	23130		1	0	22.35
				1	49	22.24
				24	12	21.85
				50	0	23.74

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	1.1	Fig.1	1.1	Fig.2	1.1	Fig.3
	707.5	23095		6	0	1.1	Fig.4	1.1	Fig.5	1.1	Fig.6
	715.3	23173		6	0	1.1	Fig.7	1.1	Fig.8	1.1	Fig.9
	700.5	23025	3	15	0	2.7	Fig.10	2.7	Fig.11	2.7	Fig.12
	707.5	23095		15	0	2.7	Fig.13	2.7	Fig.14	2.7	Fig.15
	714.5	23165		15	0	2.7	Fig.16	2.7	Fig.17	2.7	Fig.18
	701.5	23035	5	25	0	4.5	Fig.19	4.5	Fig.20	4.5	Fig.21
	707.5	23095		25	0	4.5	Fig.22	4.5	Fig.23	4.5	Fig.24
	713.5	23155		25	0	4.5	Fig.25	4.4	Fig.26	4.5	Fig.27
	704	23095	10	50	0	8.9	Fig.28	9.0	Fig.29	8.9	Fig.30
	707.5	23095		50	0	9.0	Fig.31	9.0	Fig.32	9.0	Fig.33
	711	23130		50	0	9.0	Fig.34	9.0	Fig.35	9.0	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	1.3	Fig.1	1.2	Fig.2	1.2	Fig.3
	707.5	23095		6	0	1.3	Fig.4	1.3	Fig.5	1.3	Fig.6
	715.3	23173		6	0	1.2	Fig.7	1.2	Fig.8	1.2	Fig.9
	700.5	23015	3	15	0	2.9	Fig.10	3.0	Fig.11	2.9	Fig.12
	707.5	23095		15	0	3.0	Fig.13	2.9	Fig.14	2.9	Fig.15
	714.5	23165		15	0	3.0	Fig.16	3.0	Fig.17	3.0	Fig.18
	701.5	23035	5	25	0	4.8	Fig.19	4.9	Fig.20	4.8	Fig.21
	707.5	23095		25	0	4.8	Fig.22	4.8	Fig.23	4.7	Fig.24
	713.5	23155		25	0	4.9	Fig.25	4.8	Fig.26	4.8	Fig.27
	704	23095	10	50	0	9.9	Fig.28	9.9	Fig.29	9.8	Fig.30
	707.5	23095		50	0	9.8	Fig.31	9.8	Fig.32	9.8	Fig.33
	711	23130		50	0	9.9	Fig.34	9.9	Fig.35	9.9	Fig.36

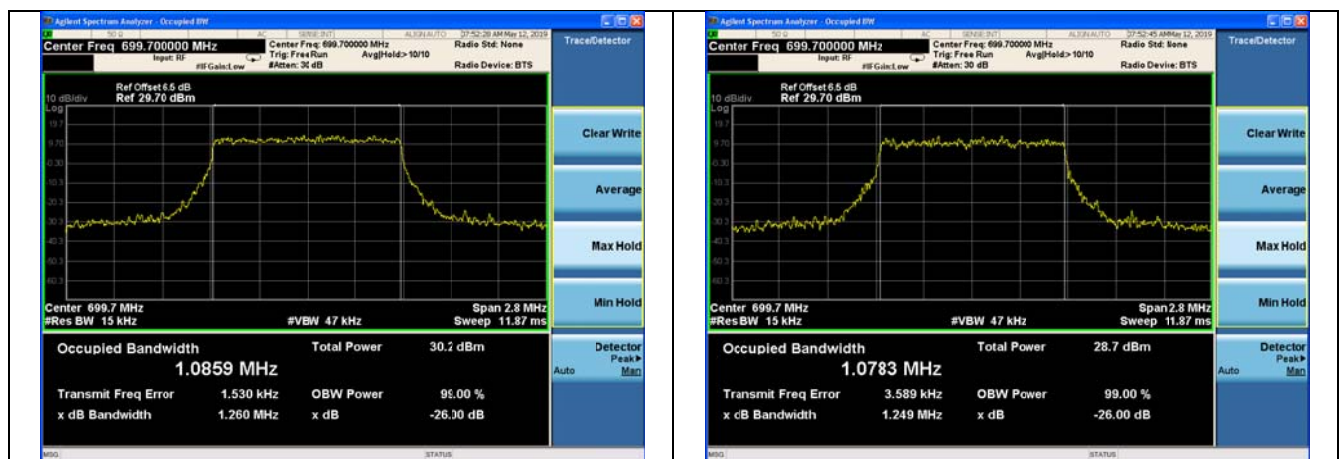


Fig.1



Fig.2

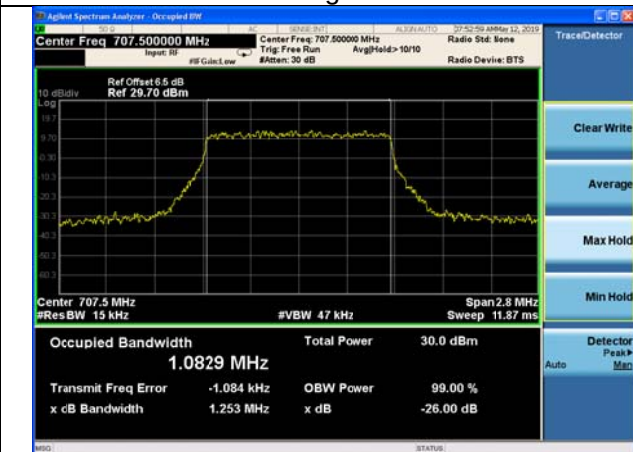


Fig.3

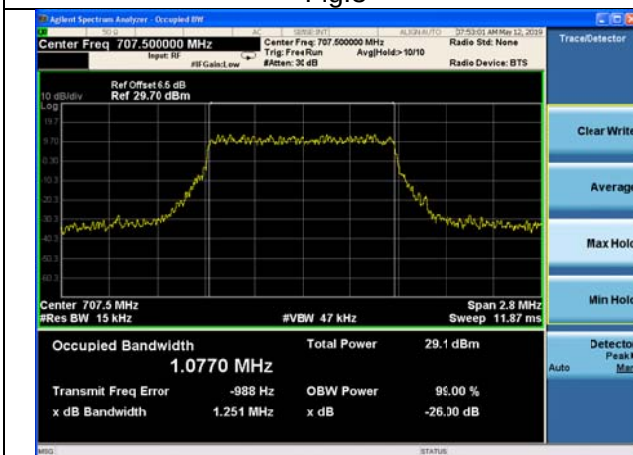


Fig.4

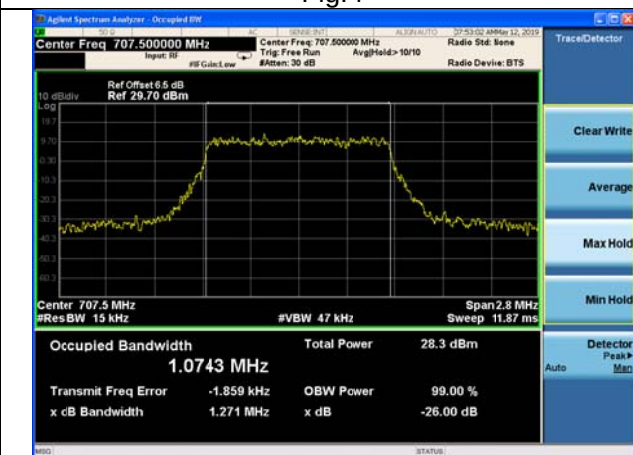


Fig.5

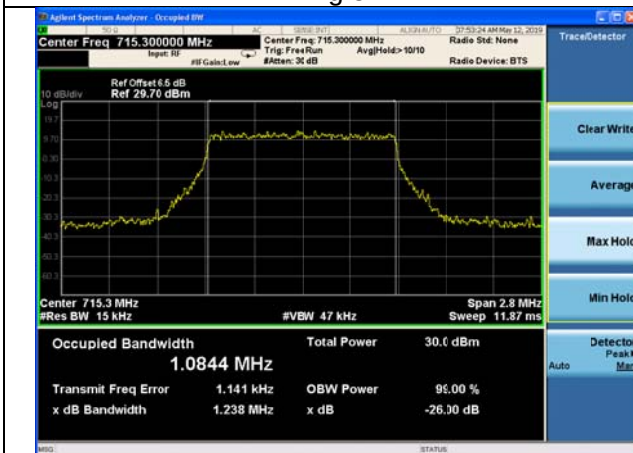


Fig.6

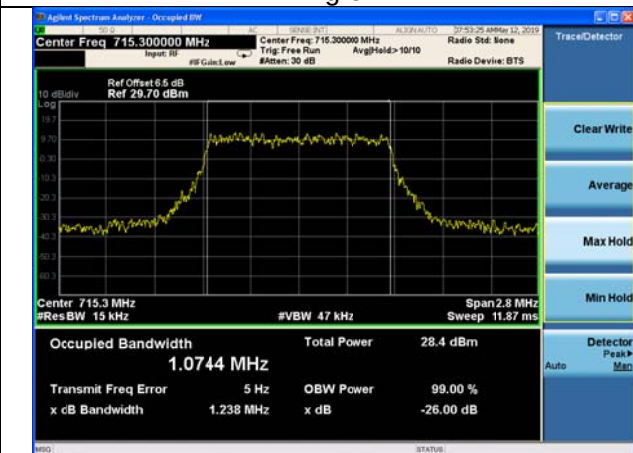


Fig.7

Fig.8

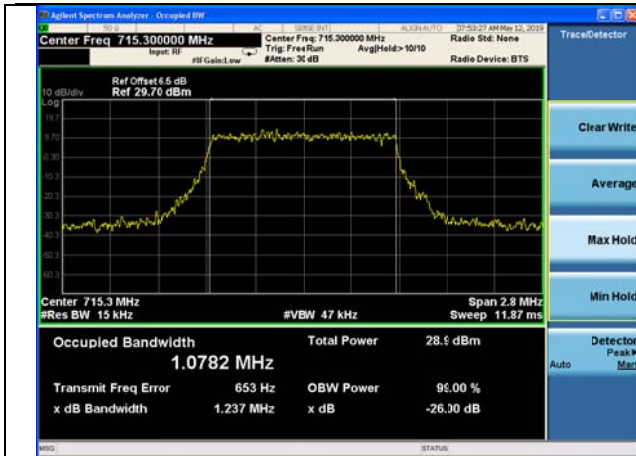


Fig.9

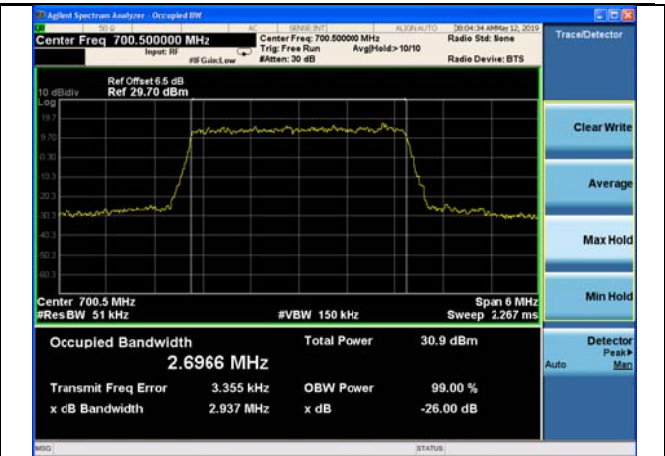


Fig.10

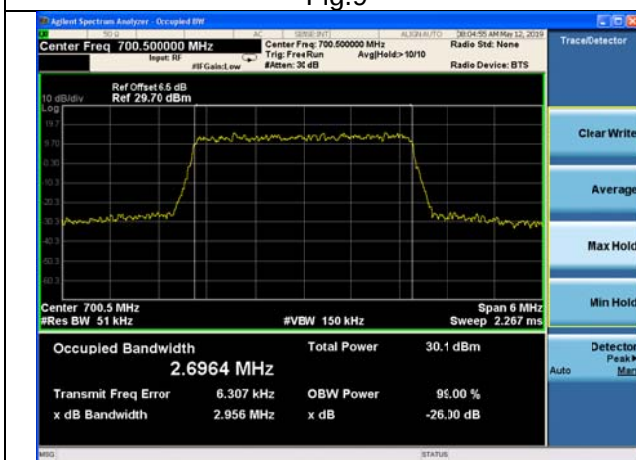


Fig.11

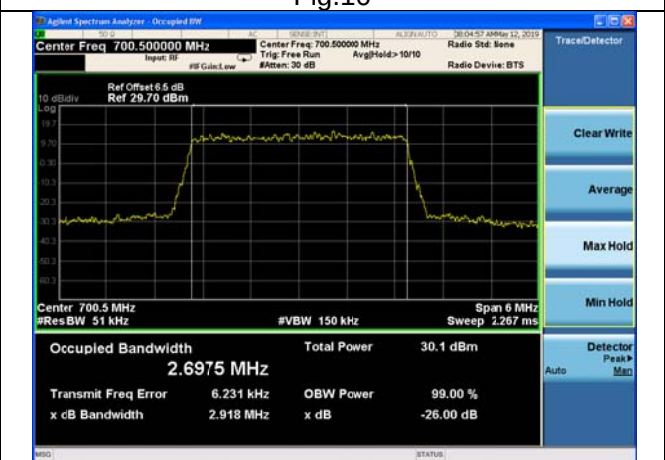


Fig.12

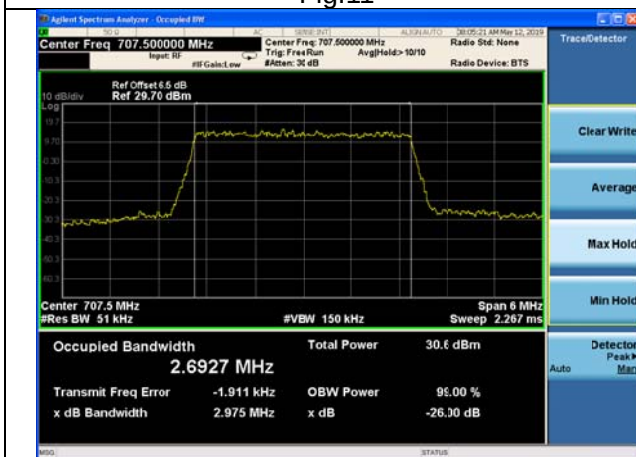


Fig.13

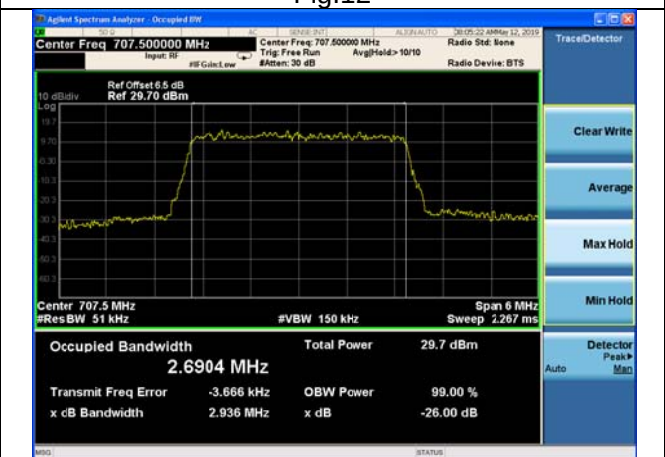


Fig.14



Fig.15

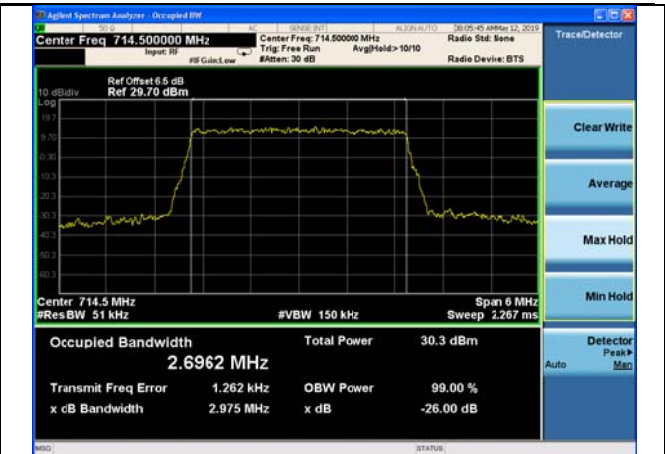


Fig.16

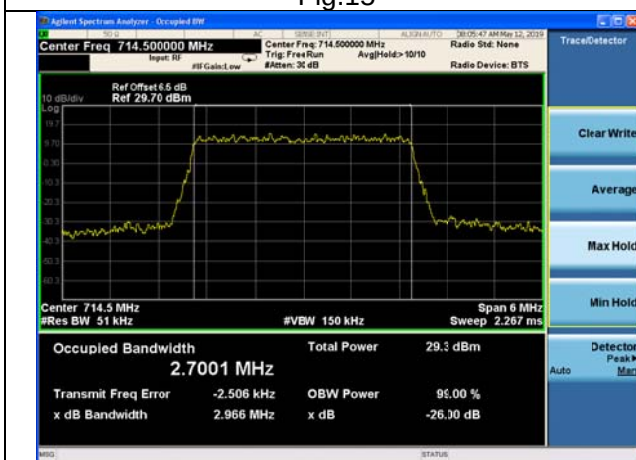


Fig.17

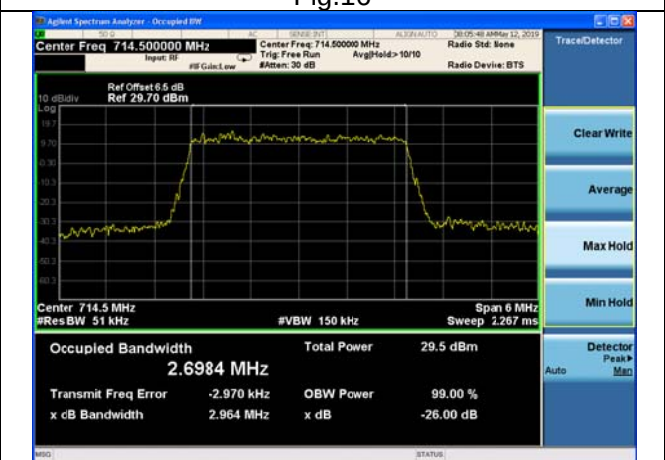


Fig.18

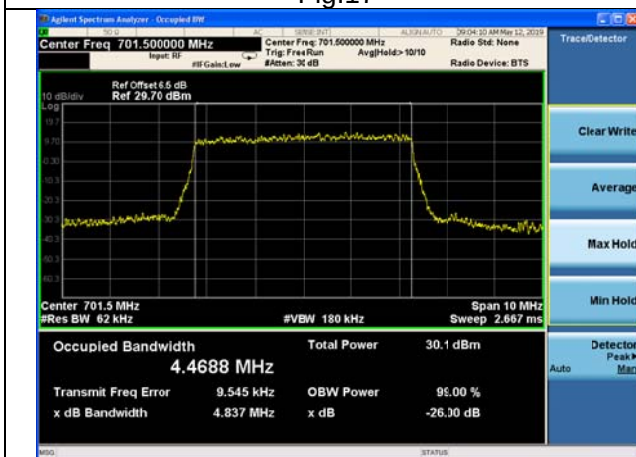


Fig.19

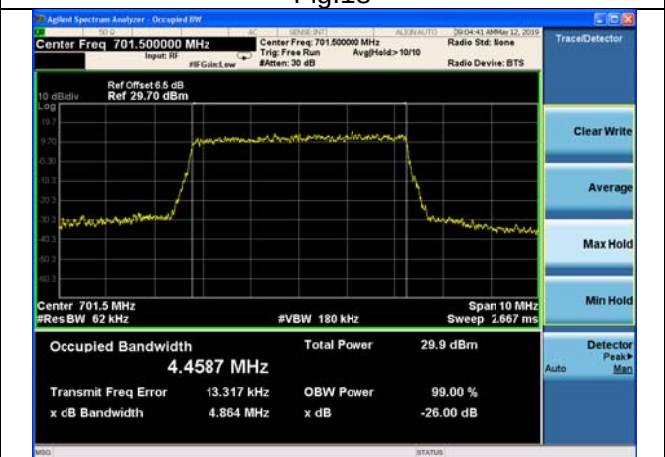


Fig.20

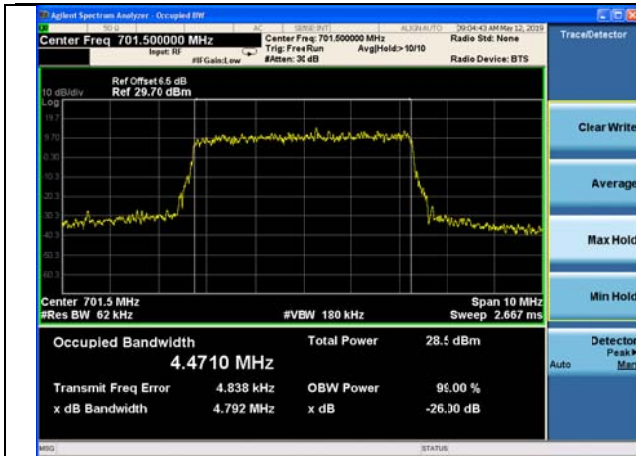


Fig.21

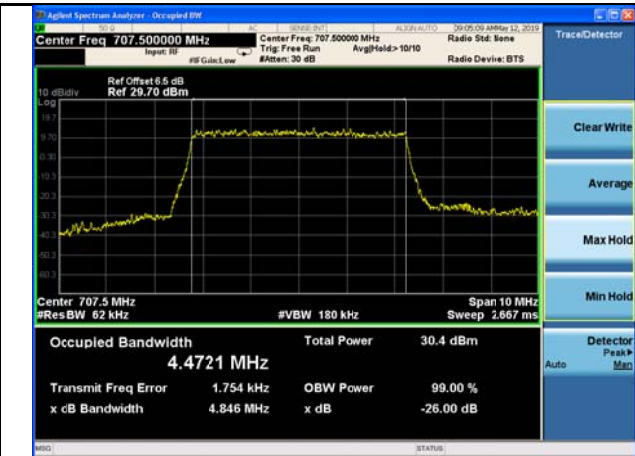


Fig.22

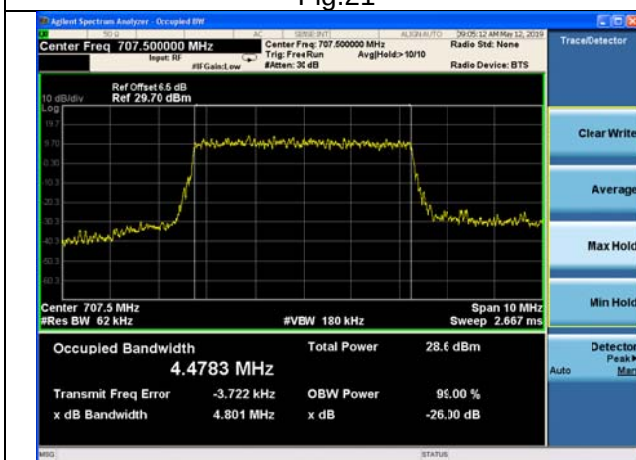


Fig.23

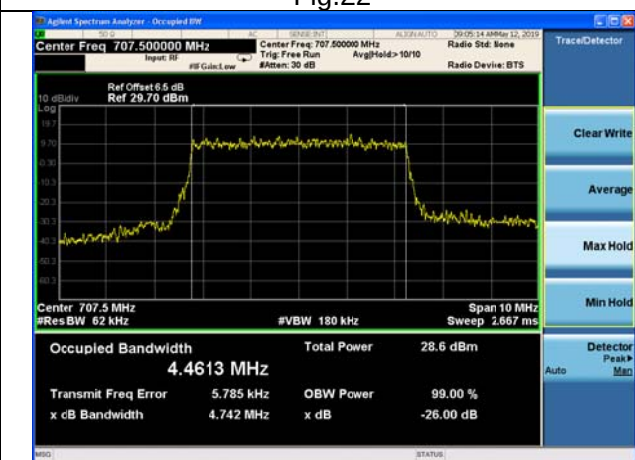


Fig.24

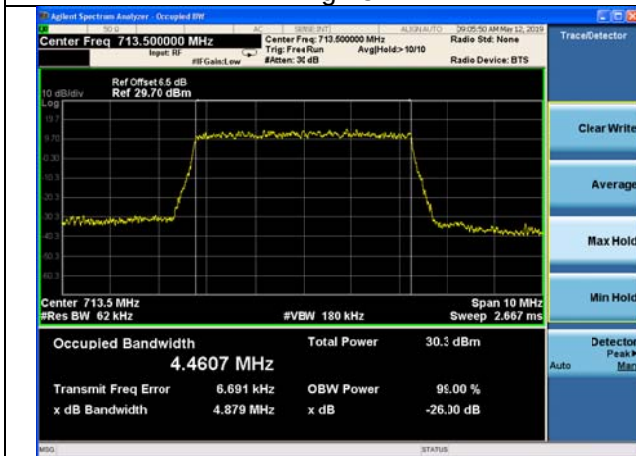


Fig.25

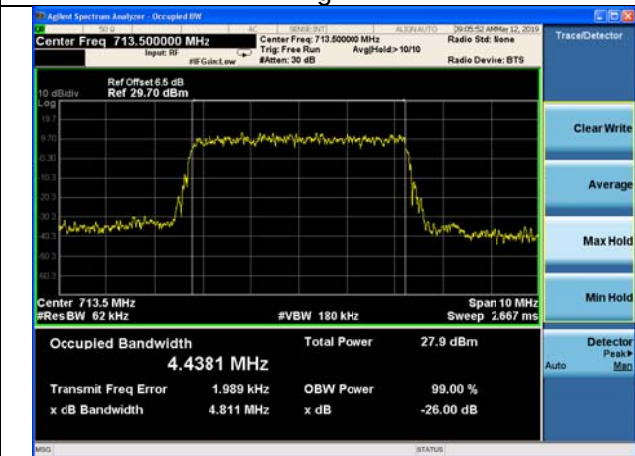


Fig.26

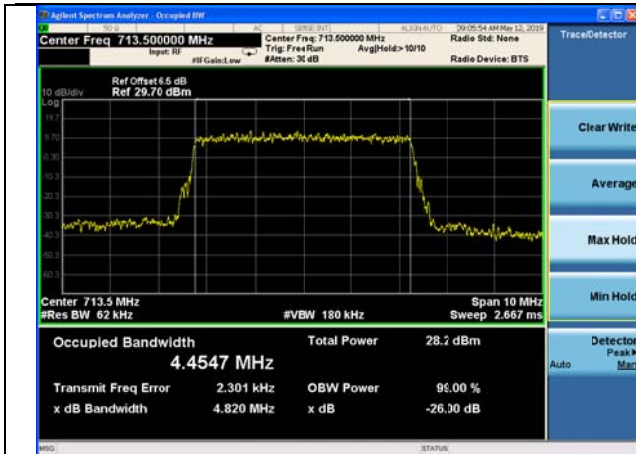


Fig.27

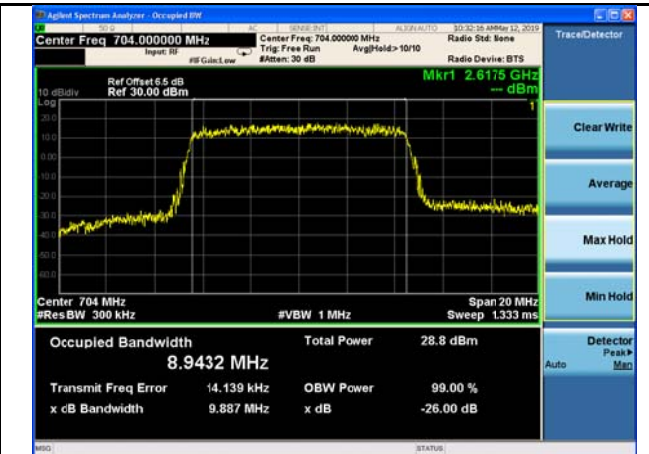


Fig.28

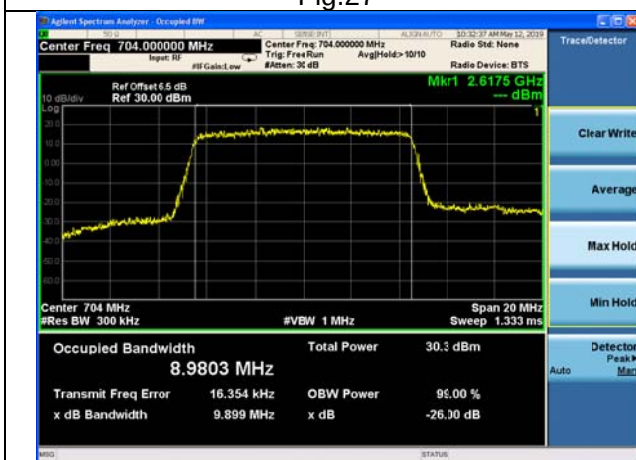


Fig.29

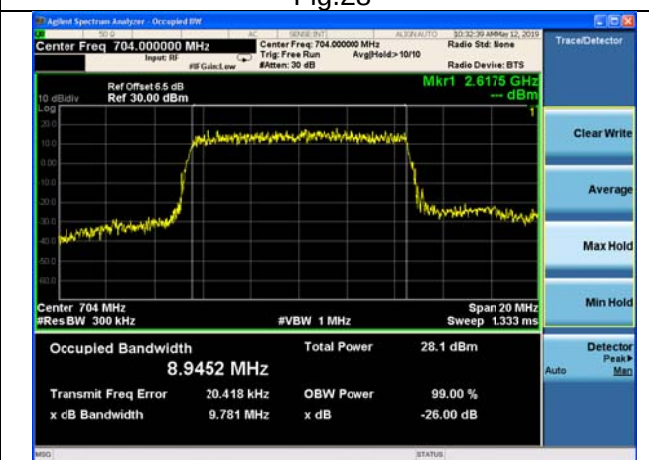


Fig.30

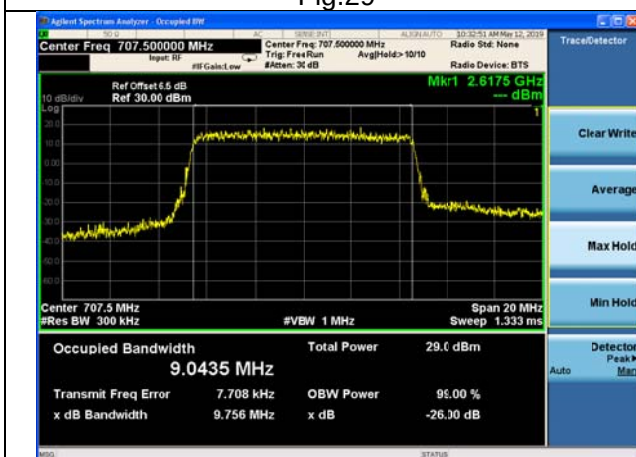


Fig.31

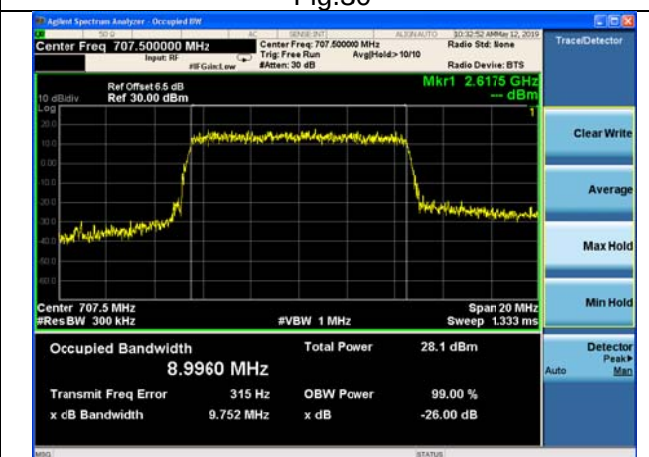


Fig.32

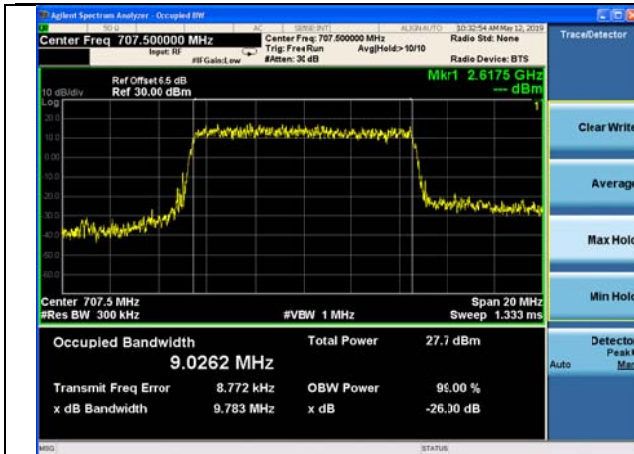


Fig.33

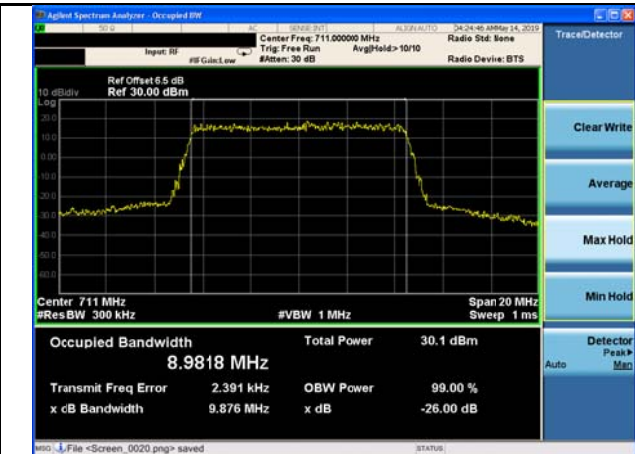


Fig.34

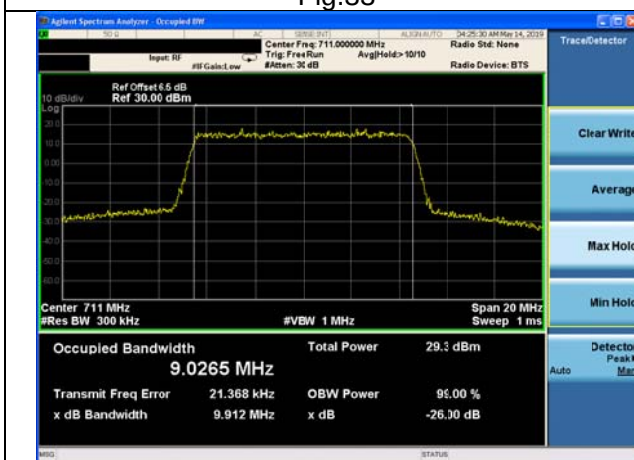


Fig.35

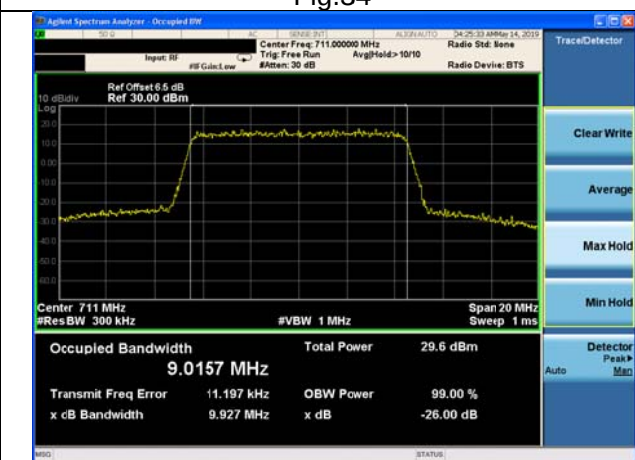


Fig.36

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

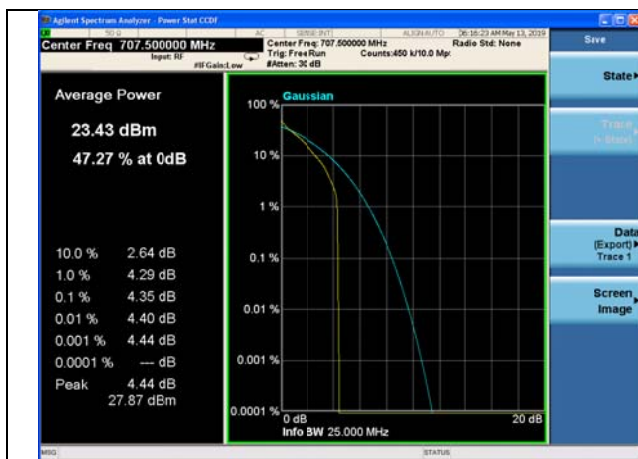


Fig.1

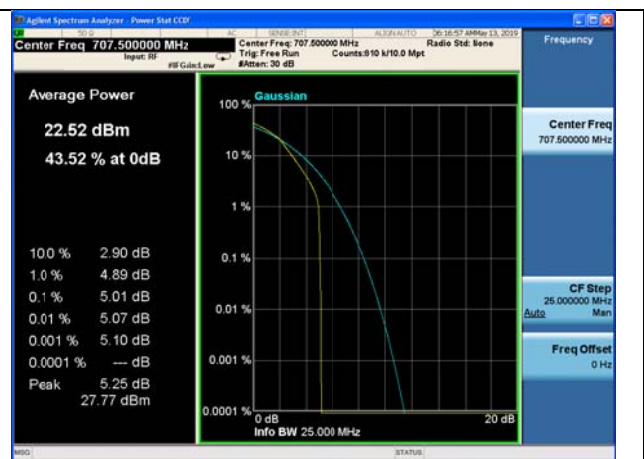


Fig.2

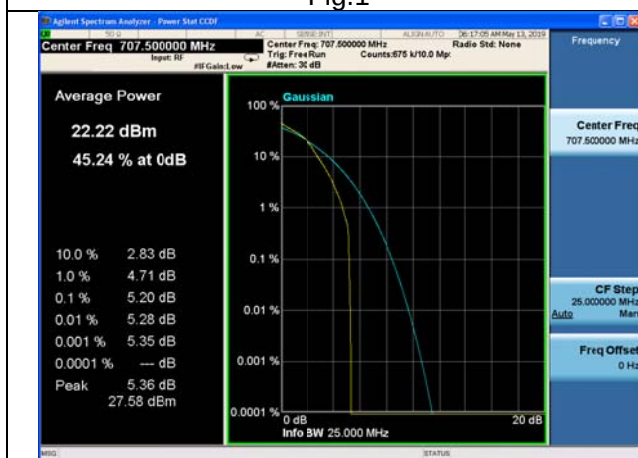


Fig.3

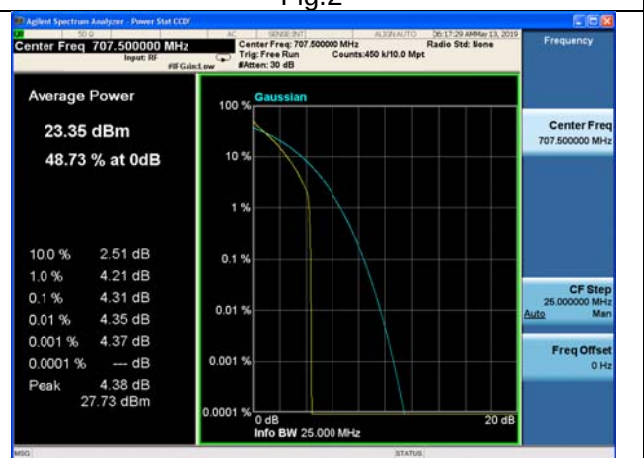


Fig.4



Fig.5



Fig.6

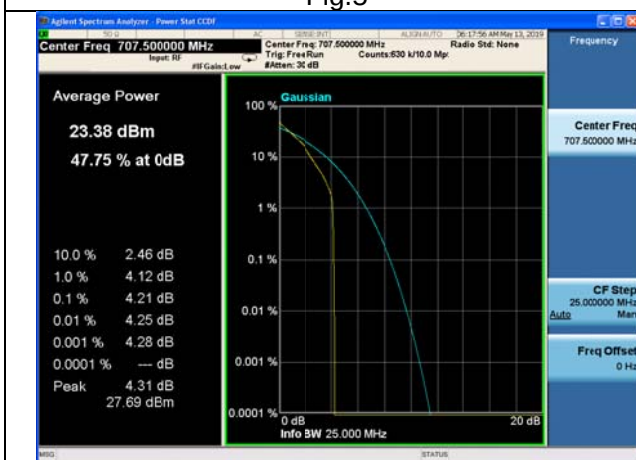


Fig.7



Fig.8

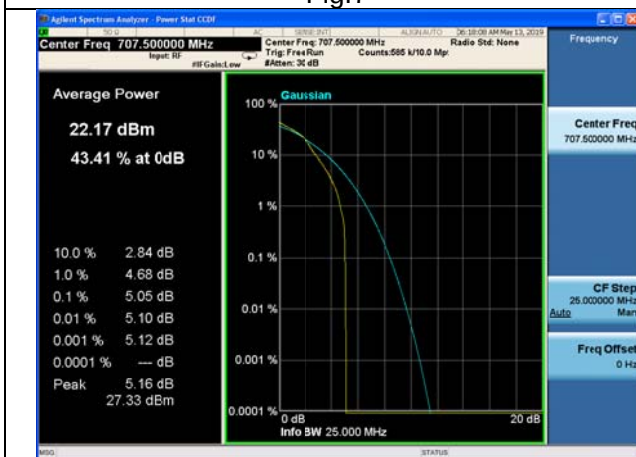


Fig.9



Fig.10

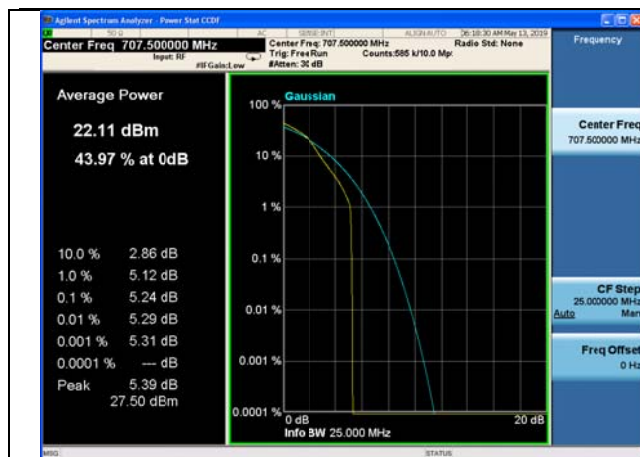


Fig.11



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
	707.5	23095	10	1	0	Fig.2
	711	23173	10	1	0	Fig.3

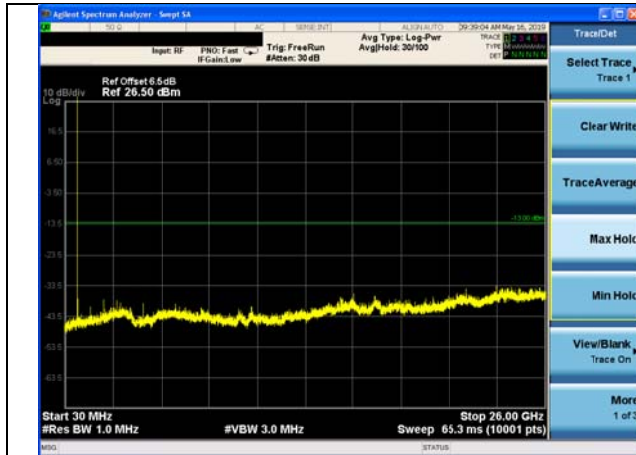


Fig.1

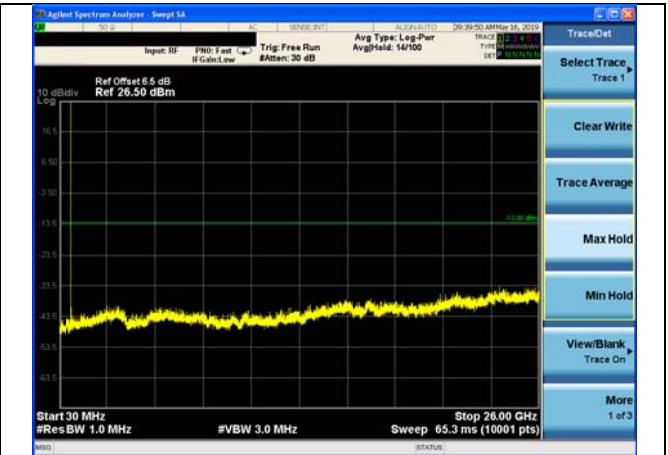


Fig.2

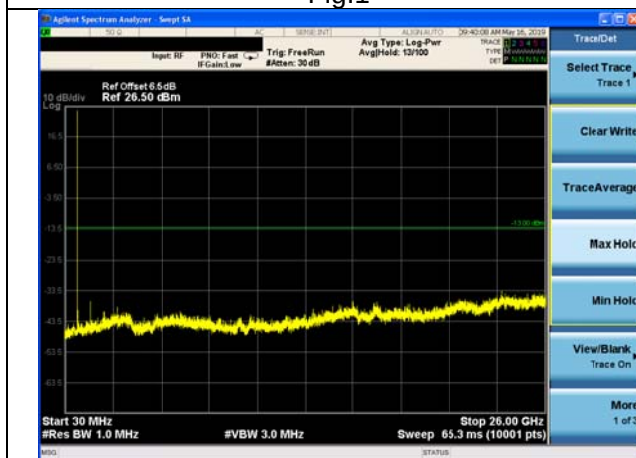


Fig3

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	0	Fig.1
				6	0	Fig.2
	715.3	23173		1	5	Fig.3
				6	0	Fig.4
	700.5	23015	3	1	0	Fig.5
				15	0	Fig.6
	714.5	23165		1	14	Fig.7
				15	0	Fig.8
	701.5	23035	5	1	0	Fig.9
				25	0	Fig.10
	713.5	23155		1	24	Fig.11
				25	0	Fig.12
	704	23095	10	1	0	Fig.13
				50	0	Fig.14
	711	23130		1	49	Fig.15
				50	0	Fig.16

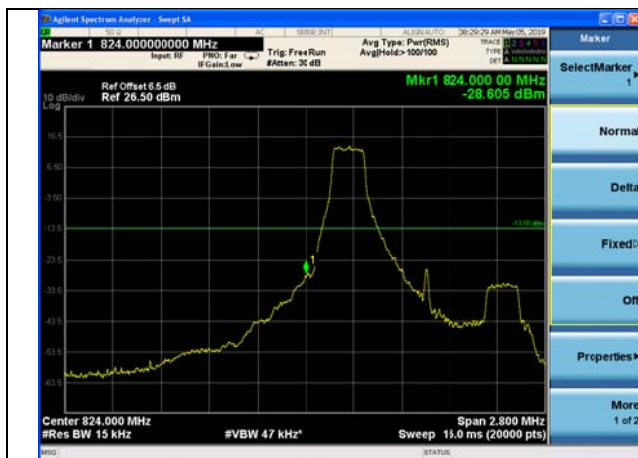


Fig.1

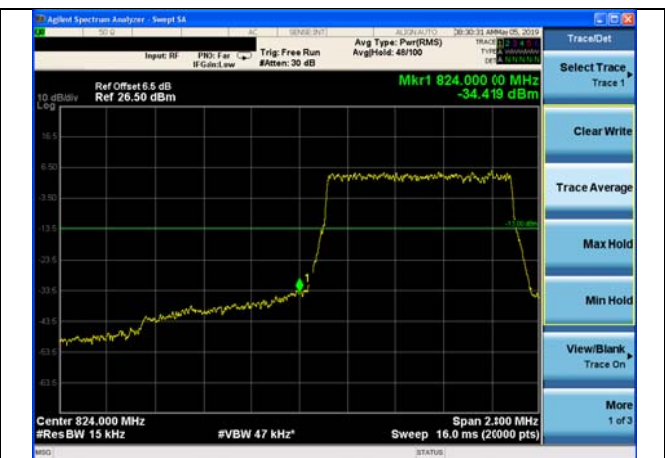


Fig.2

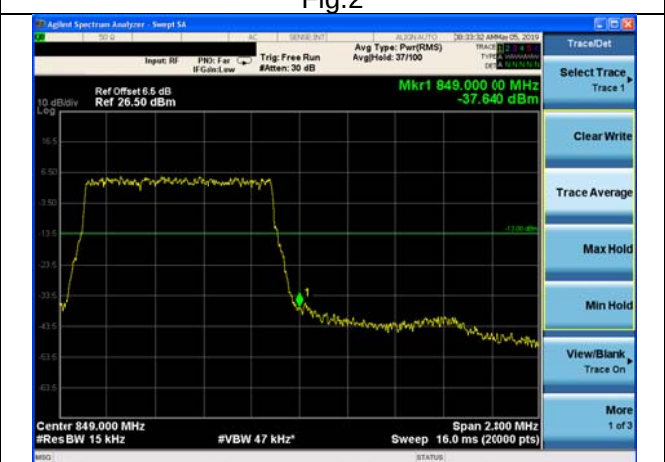
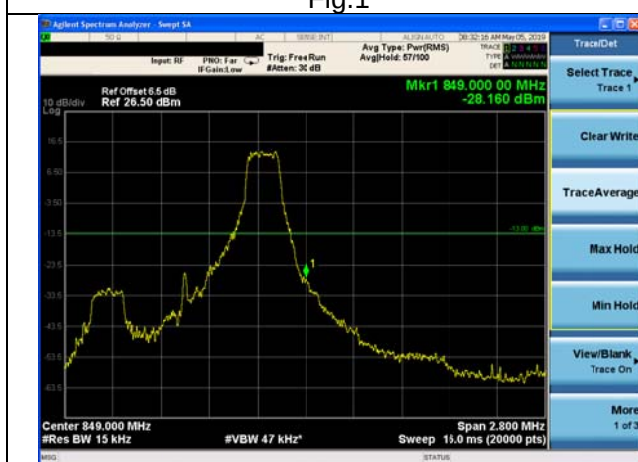


Fig.3

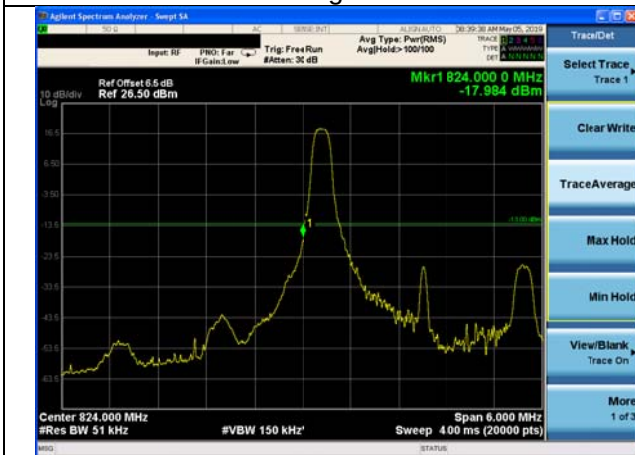


Fig.4

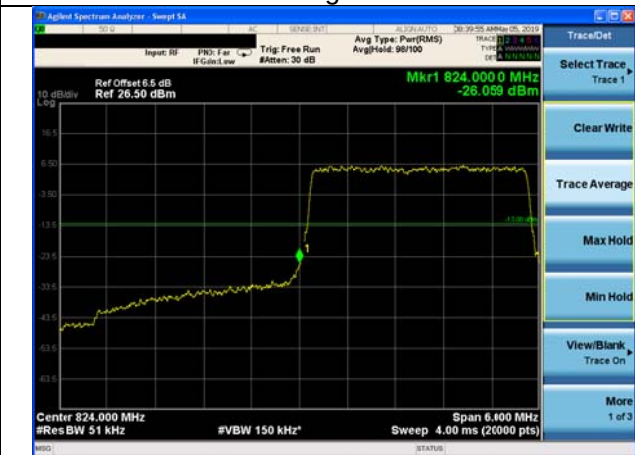


Fig.5

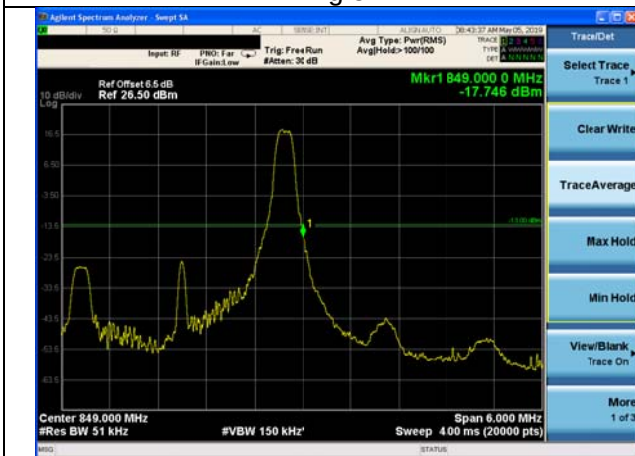


Fig.6



Fig.7

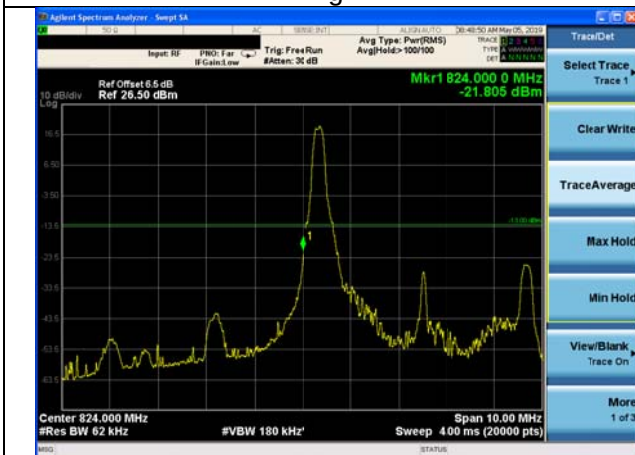


Fig.8

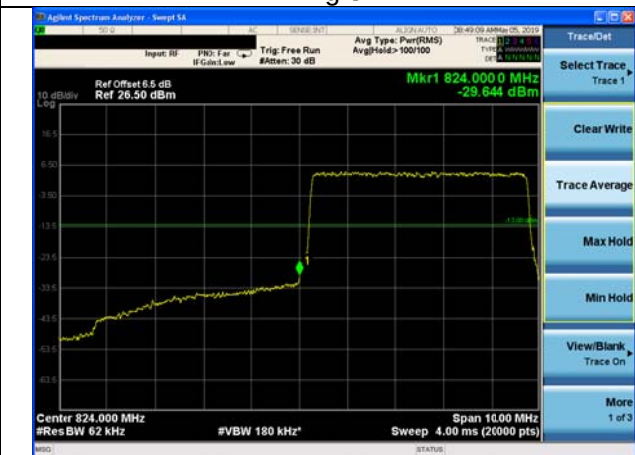


Fig.9

Fig.10

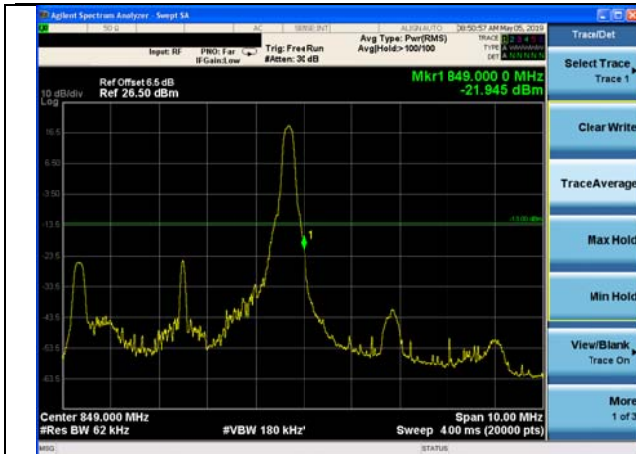


Fig.11



Fig.12

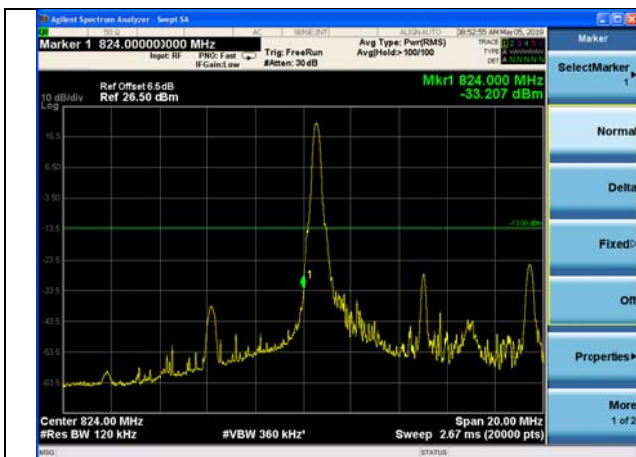


Fig.13

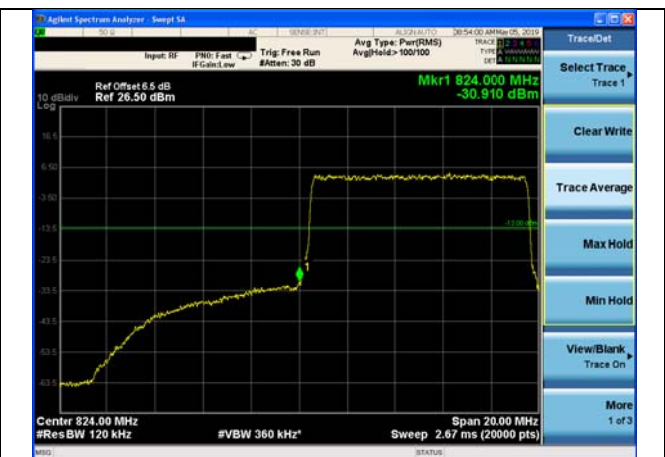


Fig.14

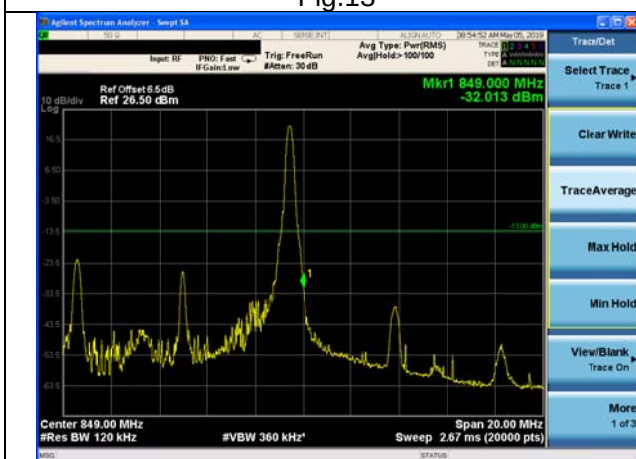


Fig.15



Fig.16

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band12 Low Channel			
		1.4M	3M	5M	10M
-10	NV	0.084	0.009	0.100	0.034
0	NV	0.077	0.045	0.007	0.086
+10	NV	0.122	0.078	0.082	0.110
+20	NV	0.052	0.019	0.070	0.005
+30	NV	0.081	0.043	0.144	0.015
+40	NV	0.082	0.039	0.033	0.004
+50	NV	0.114	0.035	0.124	0.073
+20	LV	0.081	0.011	0.101	0.081
+20	HV	0.061	0.074	0.049	0.054

Temperature(°C)	Voltage	Test Result (ppm) Band12 High Channel			
		1.4M	3M	5M	10M
-10	NV	0.060	0.127	0.057	0.034
0	NV	0.030	0.098	0.033	0.066
+10	NV	0.083	0.054	0.112	0.069
+20	NV	0.094	0.023	0.101	0.051
+30	NV	0.055	0.019	0.115	0.080
+40	NV	0.070	0.142	0.098	0.038
+50	NV	0.031	0.086	0.039	0.022
+20	LV	0.070	0.071	0.045	0.139
+20	HV	0.083	0.141	0.063	0.017