

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 5

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	824.7	20407	1.4	1	0	24.50
				1	5	24.25
				3	2	23.04
				6	0	23.08
	836.5	20525		1	0	24.19
				1	5	24.64
				3	2	23.15
				6	0	23.16
	848.3	20643		1	0	24.24
				1	5	24.38
				3	2	23.21
				6	0	23.06
16QAM	824.7	20407	1.4	1	0	22.06
				1	5	22.20
				3	2	21.79
				6	0	22.09
	836.5	20525		1	0	22.61
				1	5	22.58
				3	2	22.24
				6	0	22.35
	848.3	20643		1	0	22.61
				1	5	22.70
				3	2	22.26
				6	0	22.19
64QAM	824.7	20407	1.4	1	0	22.17
				1	5	22.14
				3	2	22.06
				6	0	22.13
	836.5	20525		1	0	22.54
				1	5	22.71
				3	2	22.20
				6	0	22.30
	848.3	20643		1	0	22.31
				1	5	22.39
				3	2	22.05
				6	0	22.17

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	825.5	20415	3	1	0	24.48
				1	14	24.32
				8	4	23.00
				15	0	23.05
	836.5	20525		1	0	24.19
				1	14	24.56
				8	4	23.14
				15	0	23.24
	847.5	20635		1	0	24.35
				1	14	24.46
				8	4	23.19
				15	0	23.03
16QAM	825.5	20415	3	1	0	22.04
				1	14	22.27
				8	4	21.82
				15	0	22.11
	836.5	20525		1	0	22.60
				1	14	22.69
				8	4	22.27
				15	0	22.42
	847.5	20635		1	0	22.60
				1	14	22.68
				8	4	22.13
				15	0	22.23
64QAM	825.5	20415	3	1	0	22.24
				1	14	22.05
				8	4	22.06
				15	0	22.15
	836.5	20525		1	0	22.54
				1	14	22.62
				8	4	22.30
				15	0	22.24
	847.5	20635		1	0	22.38
				1	14	22.38
				8	4	22.07
				15	0	22.29

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	826.5	20425	5	1	0	24.41
				1	24	24.34
				12	6	23.06
				25	0	23.06
	836.5	20525		1	0	24.21
				1	24	24.64
				12	6	23.18
				25	0	23.24
	846.5	20625		1	0	24.36
				1	24	24.48
				12	6	23.19
				25	0	23.03
16QAM	826.5	20425	5	1	0	22.00
				1	24	22.25
				12	6	21.86
				25	0	22.15
	836.5	20525		1	0	22.55
				1	24	22.67
				12	6	22.22
				25	0	22.29
	846.5	20625		1	0	22.61
				1	24	22.77
				12	6	22.16
				25	0	22.20
64QAM	826.5	20425	5	1	0	22.26
				1	24	22.10
				12	6	22.08
				25	0	22.09
	836.5	20525		1	0	22.63
				1	24	22.57
				12	6	22.27
				25	0	22.27
	846.5	20625		1	0	22.33
				1	24	22.43
				12	6	22.12
				25	0	22.25

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	829	20450	10	1	0	24.55
				1	49	24.40
				24	12	23.08
				50	0	23.17
	836.5	20525		1	0	24.33
				1	49	24.71
				24	12	23.20
				50	0	23.27
	844	20600		1	0	24.37
				1	49	24.49
				24	12	23.29
				50	0	23.11
16QAM	829	20450	10	1	0	22.13
				1	49	22.29
				24	12	21.88
				50	0	22.16
	836.5	20525		1	0	22.69
				1	49	22.72
				24	12	22.34
				50	0	22.43
	844	20600		1	0	22.65
				1	49	22.78
				24	12	22.28
				50	0	22.27
64QAM	829	20450	10	1	0	22.28
				1	49	22.17
				24	12	22.10
				50	0	22.21
	836.5	20525		1	0	22.66
				1	49	22.71
				24	12	22.35
				50	0	22.38
	844	20600		1	0	22.39
				1	49	22.44
				24	12	22.17
				50	0	22.30

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	
5	824.7	20407	1.4	6	0	1.0819	Fig.1	1.0816	Fig.2	1.0782	Fig.3
	836.5	20525		6	0	1.0812	Fig.4	1.0810	Fig.5	1.0850	Fig.6
	848.3	20643		6	0	1.0804	Fig.7	1.0844	Fig.8	1.0827	Fig.9
	825.5	20415	3	15	0	2.6864	Fig.10	2.6905	Fig.11	2.6945	Fig.12
	836.5	20525		15	0	2.6931	Fig.13	2.6972	Fig.14	2.6906	Fig.15
	847.5	20635		15	0	2.6925	Fig.16	2.6940	Fig.17	2.6901	Fig.18
	826.5	20425	5	25	0	4.4683	Fig.19	4.4941	Fig.20	4.4715	Fig.21
	836.5	20525		25	0	4.4678	Fig.22	4.4705	Fig.23	4.4773	Fig.24
	846.5	20625		25	0	4.4789	Fig.25	4.4740	Fig.26	4.4743	Fig.27
	829	20450	10	50	0	8.9347	Fig.28	8.9129	Fig.29	8.9124	Fig.30
	836.5	20525		50	0	8.9346	Fig.31	8.9019	Fig.32	8.9335	Fig.33
	844	20600		50	0	8.9415	Fig.34	8.9135	Fig.35	8.9619	Fig.36

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
5	824.7	20407	1.4	6	0	1.245	Fig.1	1.241	Fig.2	1.237	Fig.3
	836.5	20525		6	0	1.240	Fig.4	1.232	Fig.5	1.245	Fig.6
	848.3	20643		6	0	1.246	Fig.7	1.230	Fig.8	1.227	Fig.9
	825.5	20415	3	15	0	2.933	Fig.10	2.928	Fig.11	2.971	Fig.12
	836.5	20525		15	0	2.957	Fig.13	2.949	Fig.14	2.933	Fig.15
	847.5	20635		15	0	2.944	Fig.16	2.979	Fig.17	2.967	Fig.18
	826.5	20425	5	25	0	4.836	Fig.19	4.950	Fig.20	4.882	Fig.21
	836.5	20525		25	0	4.964	Fig.22	4.816	Fig.23	4.876	Fig.24
	846.5	20625		25	0	4.938	Fig.25	4.851	Fig.26	4.866	Fig.27
	829	20450	10	50	0	9.678	Fig.28	9.644	Fig.29	9.606	Fig.30
	836.5	20525		50	0	9.688	Fig.31	9.471	Fig.32	9.653	Fig.33
	844	20600		50	0	9.626	Fig.34	9.568	Fig.35	9.599	Fig.36

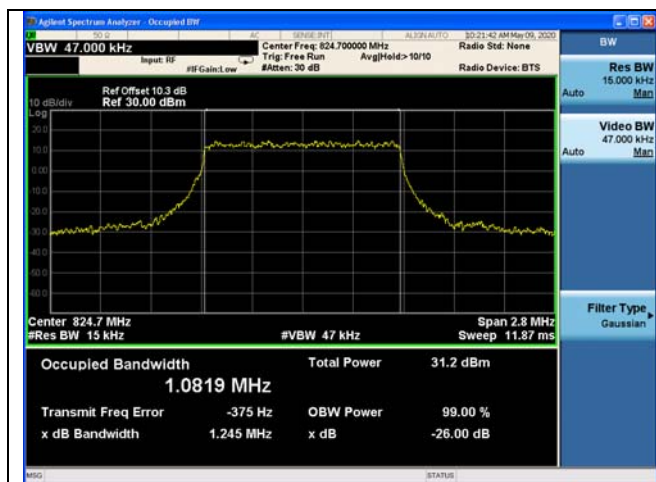


Fig.1

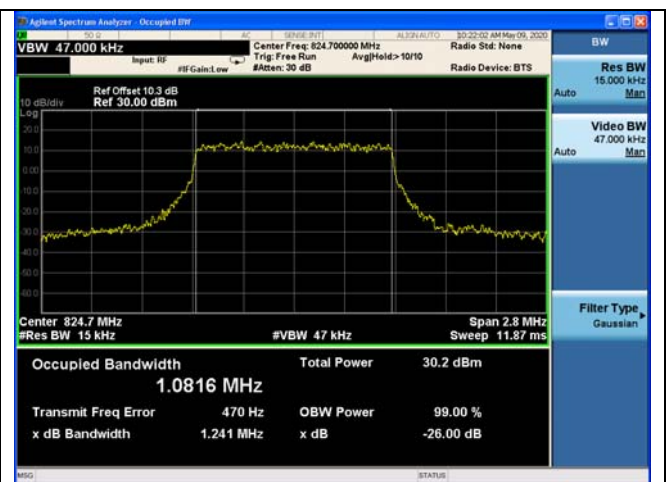


Fig.2

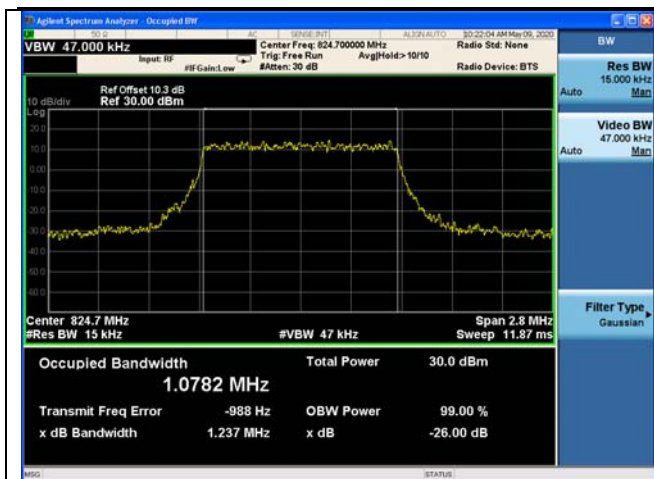


Fig.3

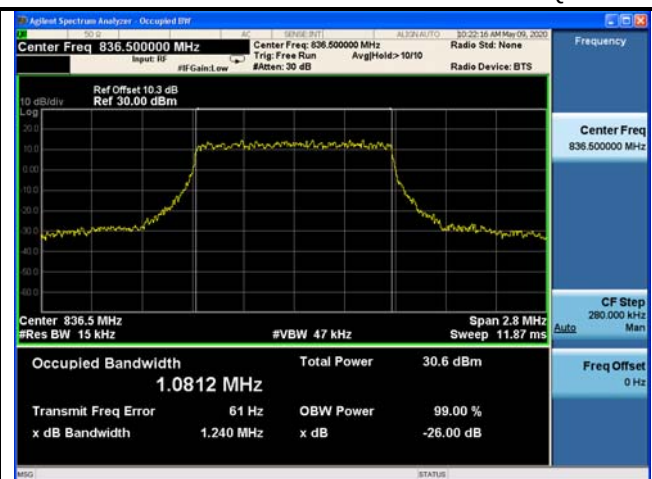


Fig.4

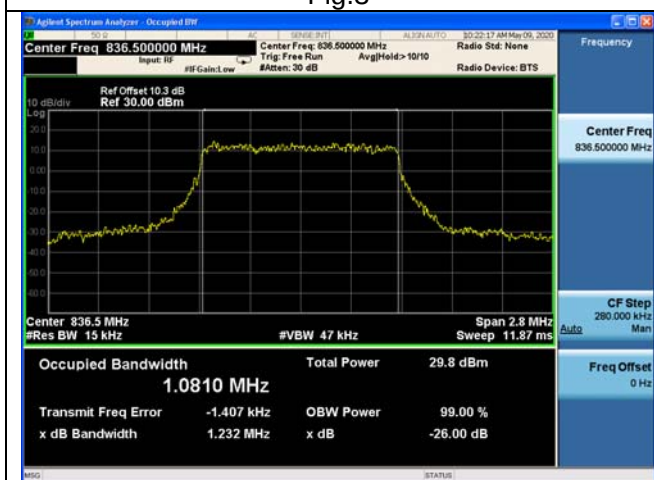


Fig.5

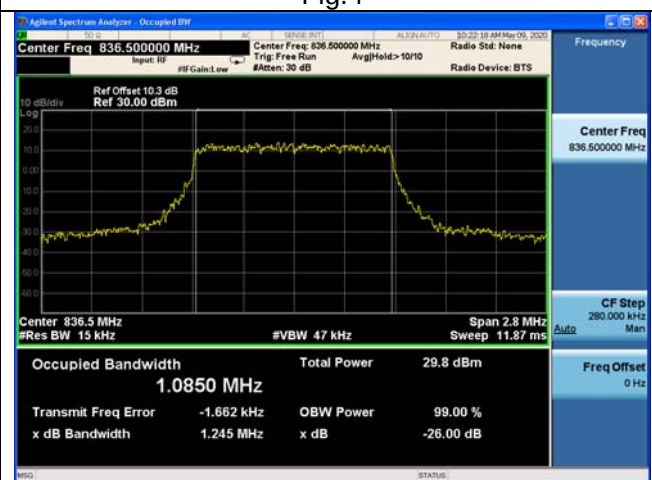


Fig.6

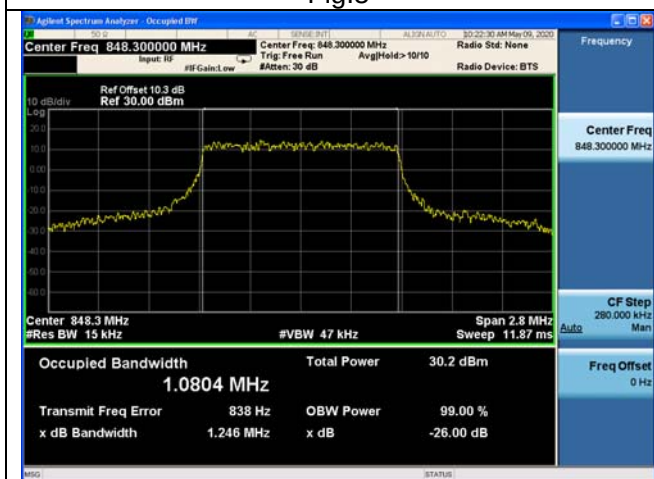


Fig.7

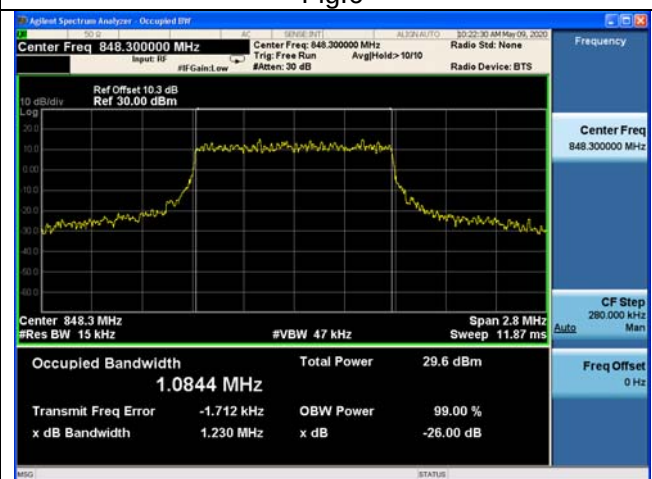


Fig.8

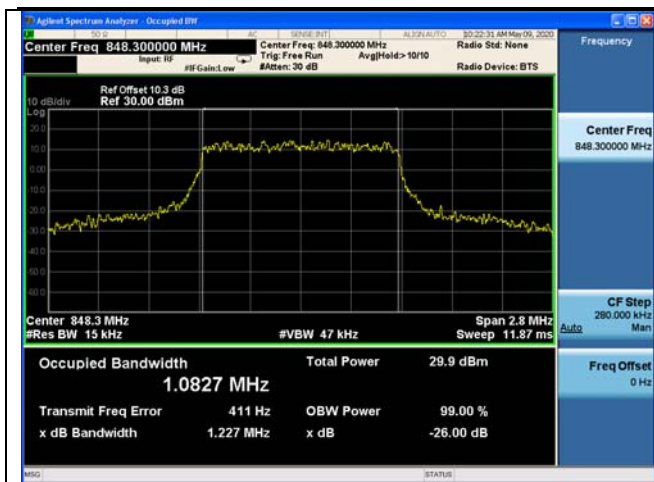


Fig.9

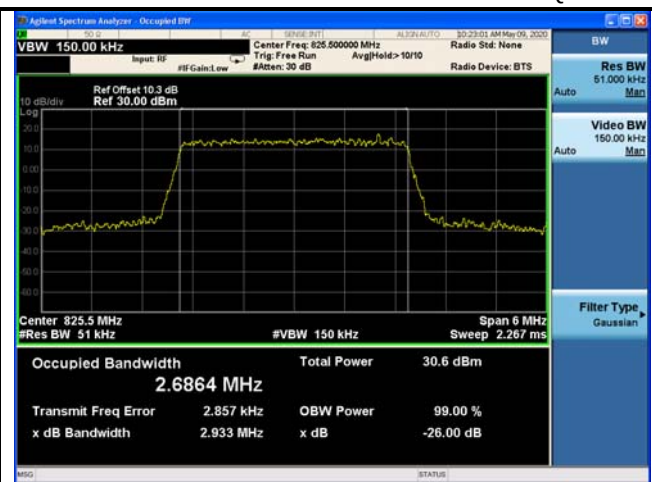


Fig.10

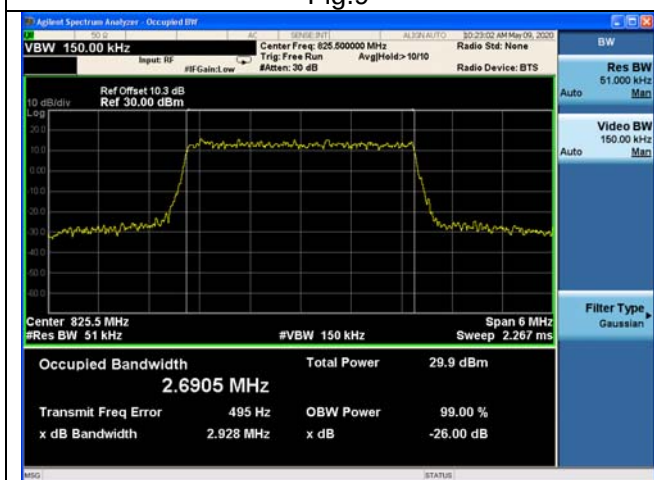


Fig.11

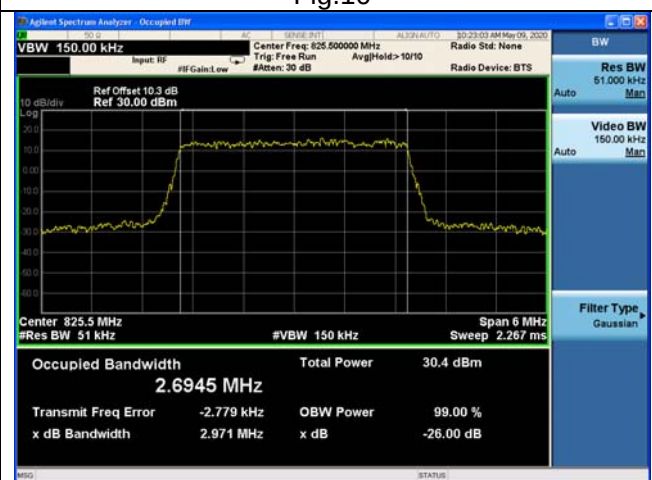


Fig.12

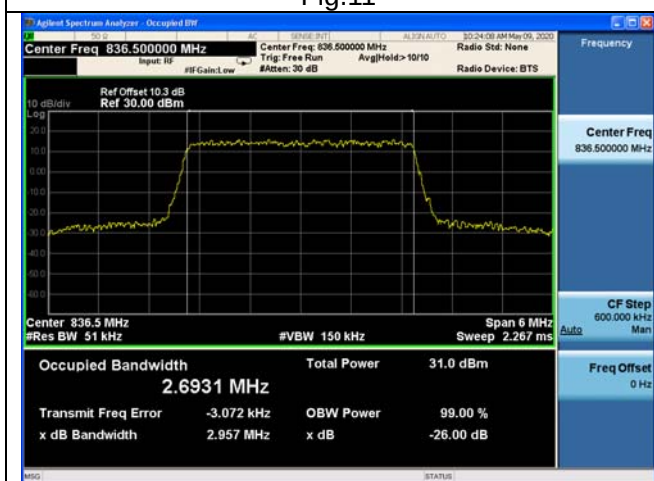


Fig.13

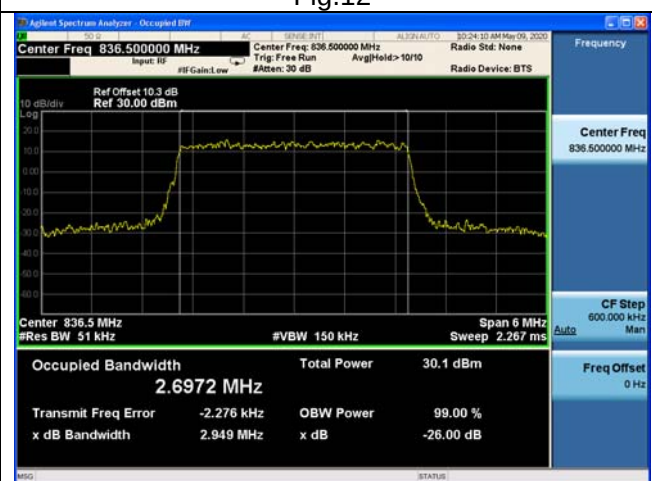


Fig.14

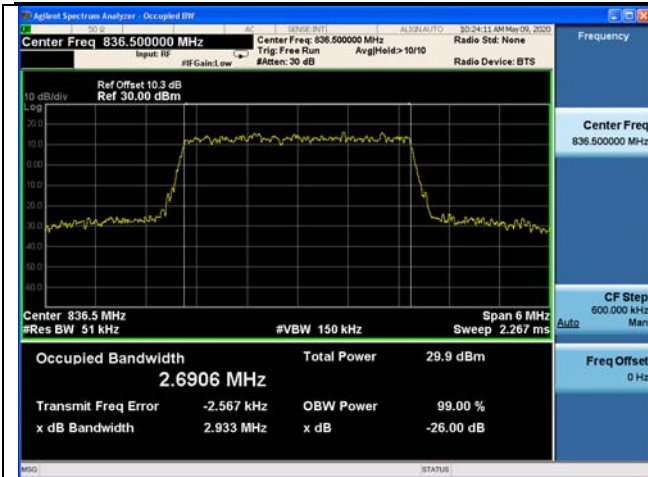


Fig.15



Fig.16

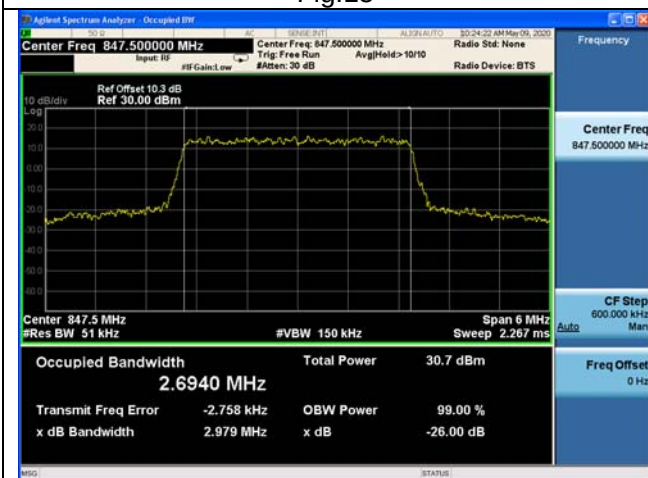


Fig.17

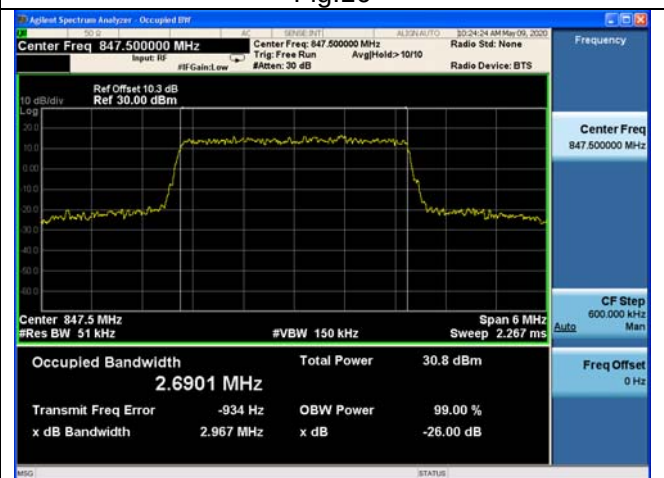


Fig.18

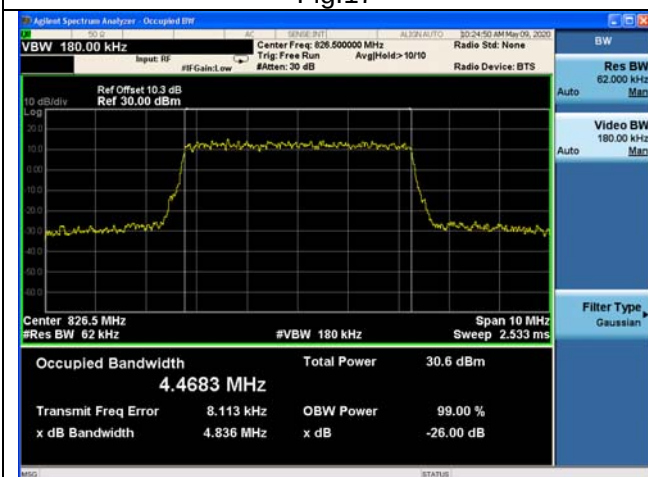


Fig.19

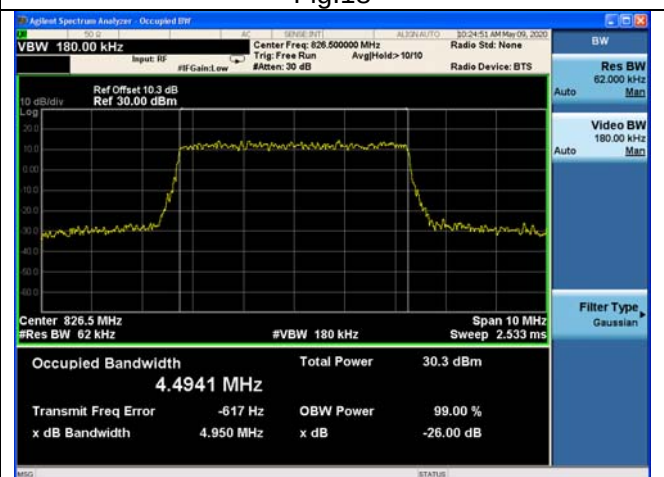


Fig.20

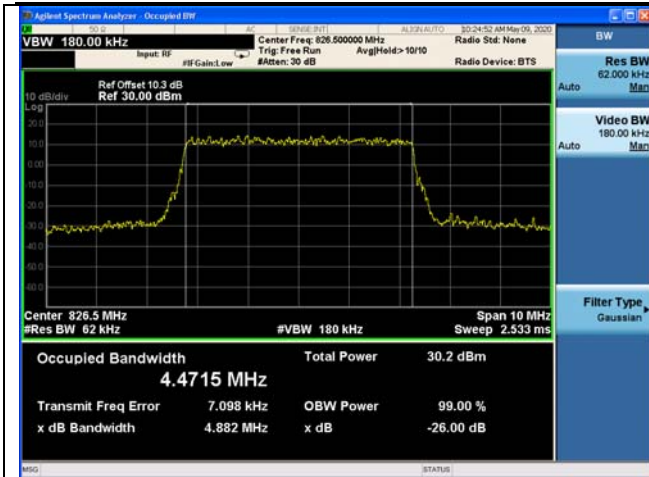


Fig.21



Fig.22

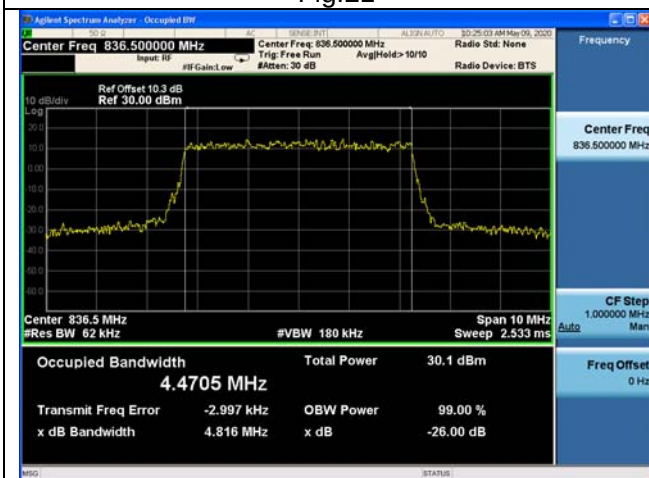


Fig.23

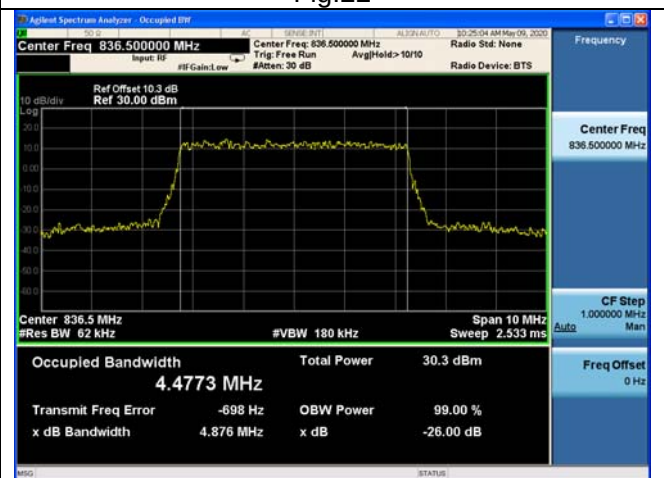


Fig.24

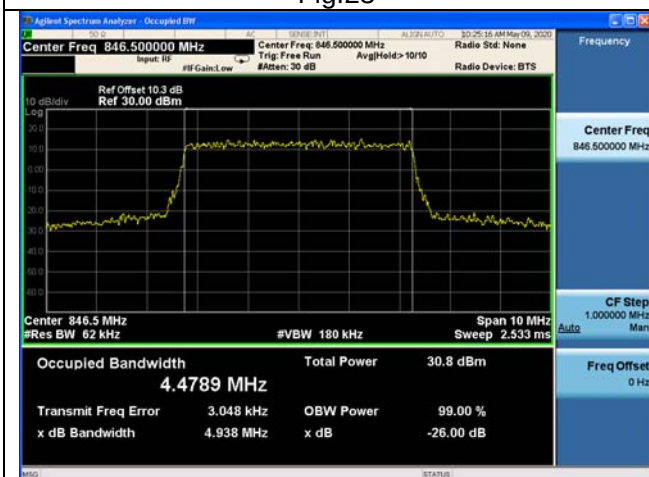


Fig.25

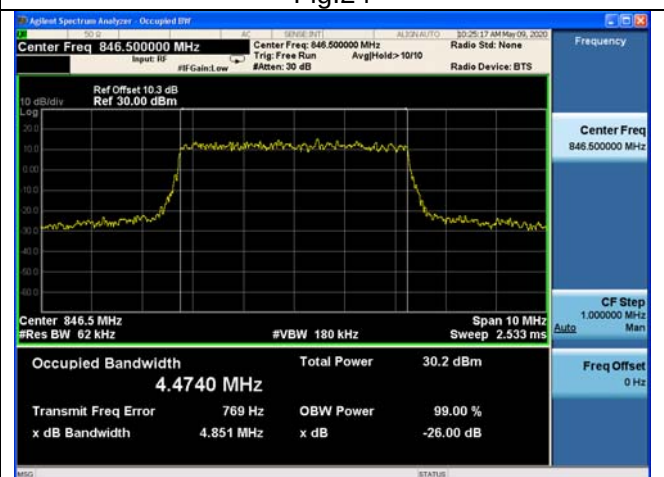


Fig.26

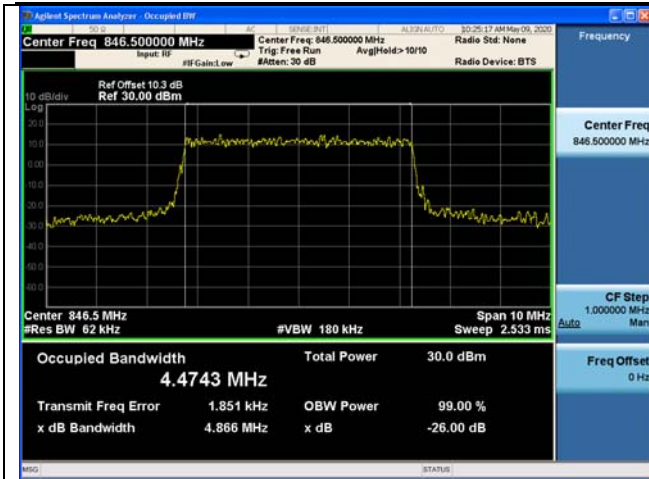


Fig.27

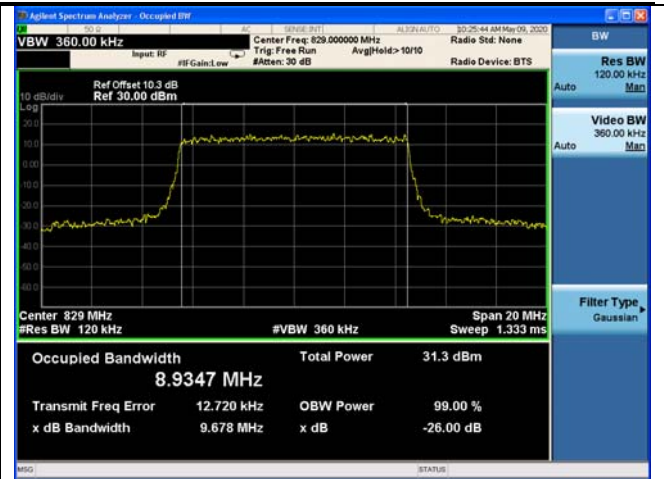


Fig.28

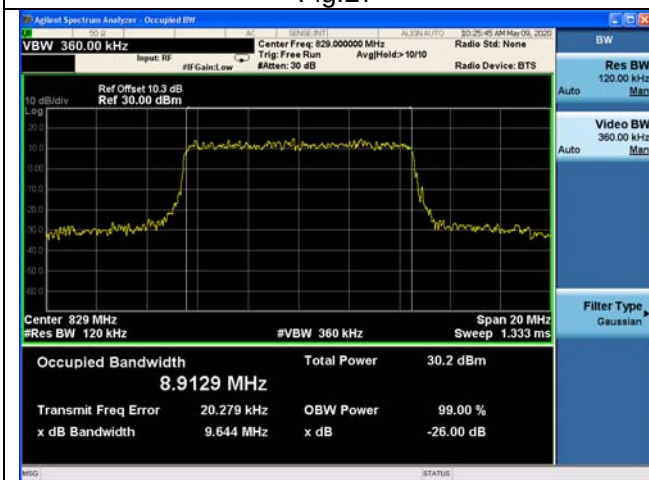


Fig.29

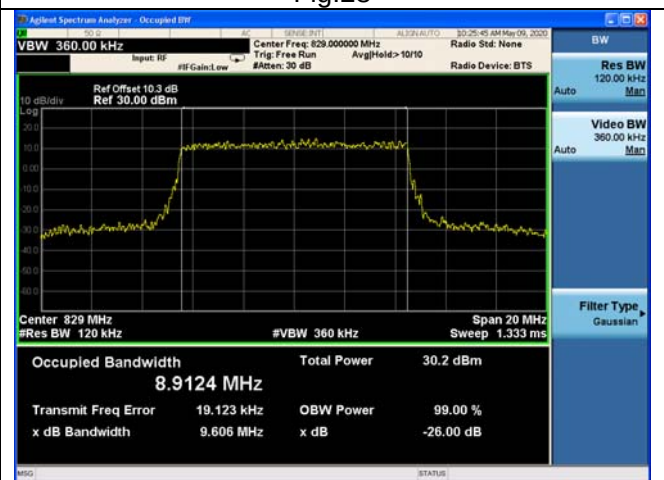


Fig.30

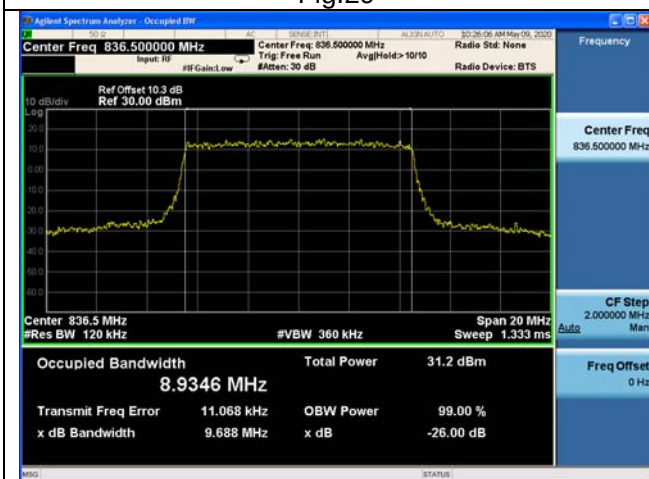


Fig.31

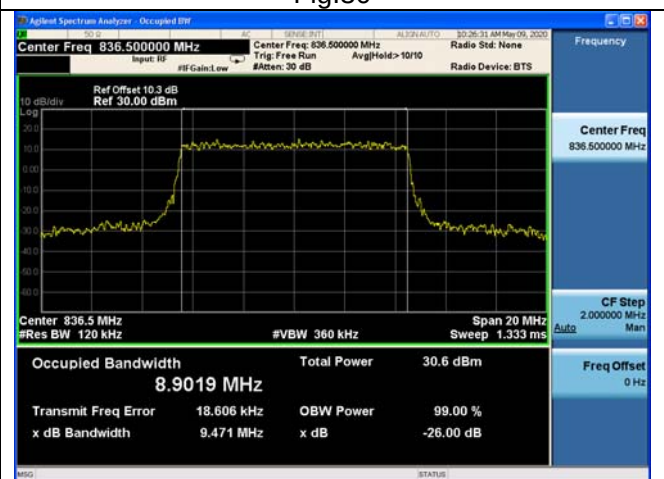


Fig.32

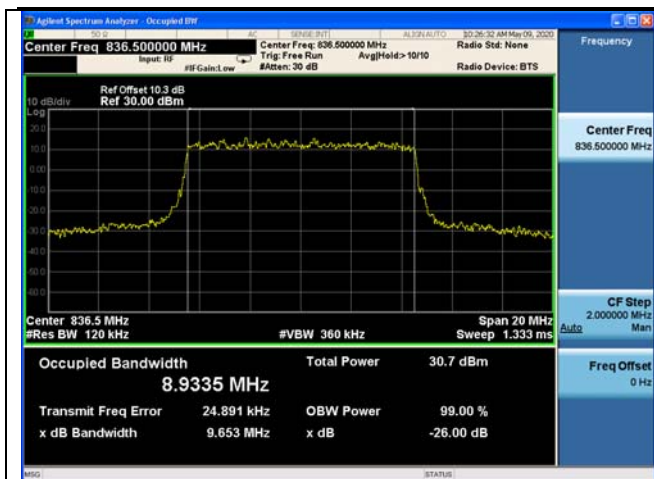


Fig.33

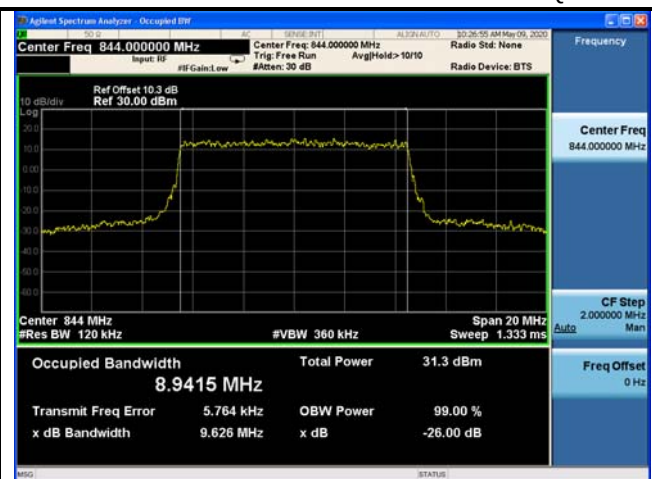


Fig.34

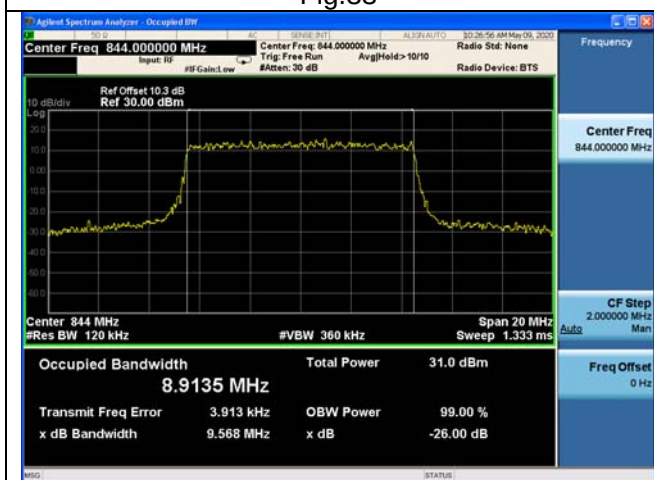


Fig.35

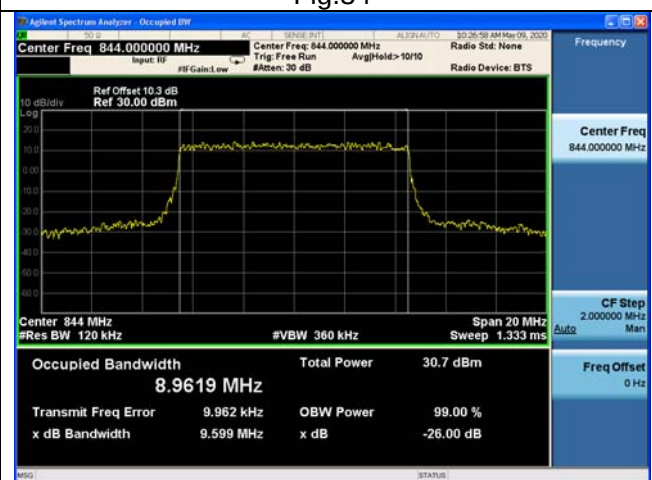


Fig.36

3 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
5	836.5	20525	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

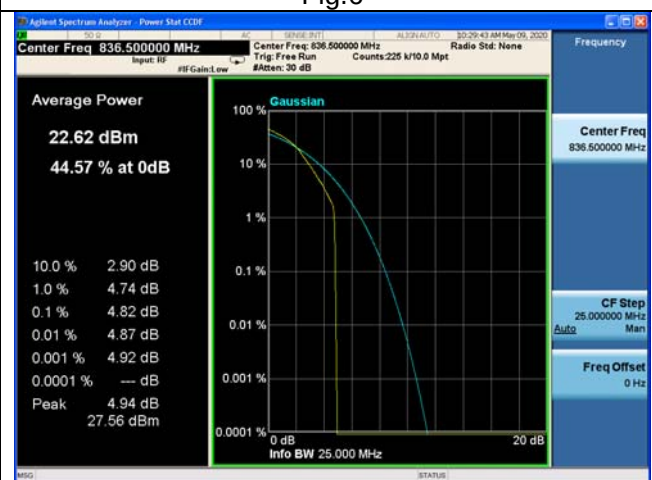


Fig.8



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
5	829	20450	10	1	0	Fig.1-2
	836.5	20525	10	1	0	Fig.3-4
	844	20600	10	1	0	Fig.4-5

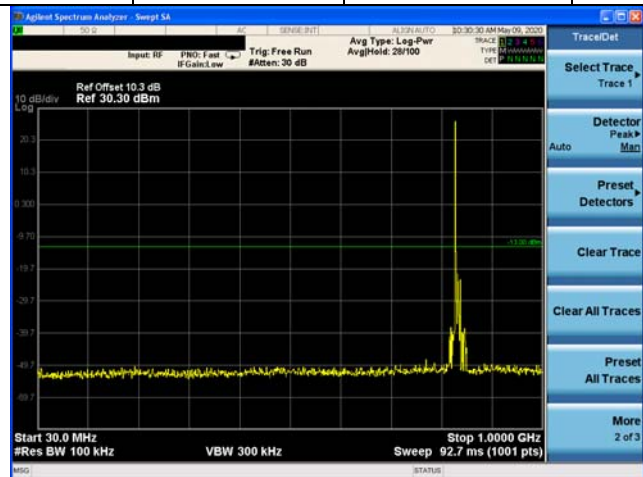


Fig.1

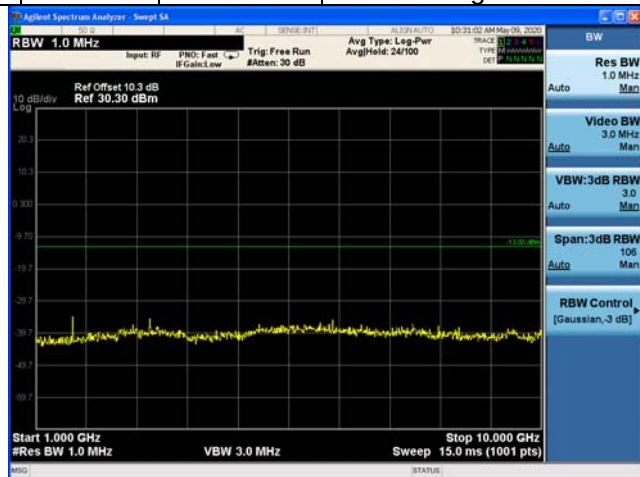


Fig.2

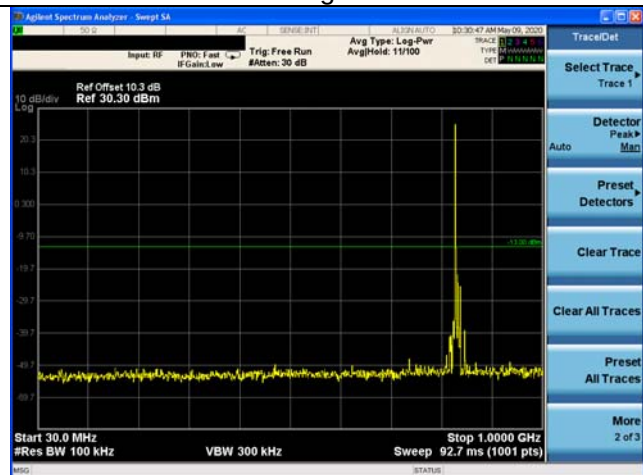


Fig3

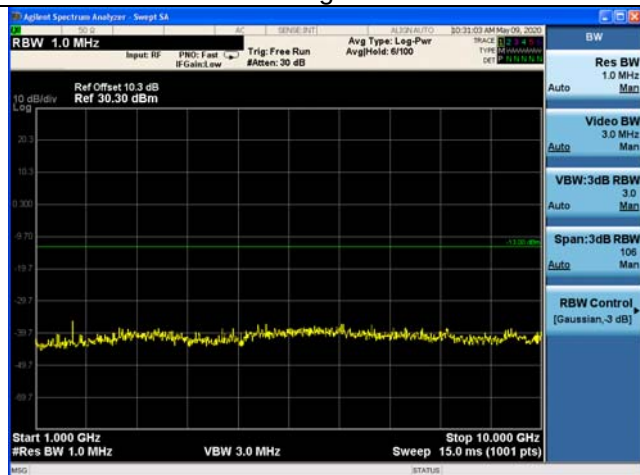


Fig4

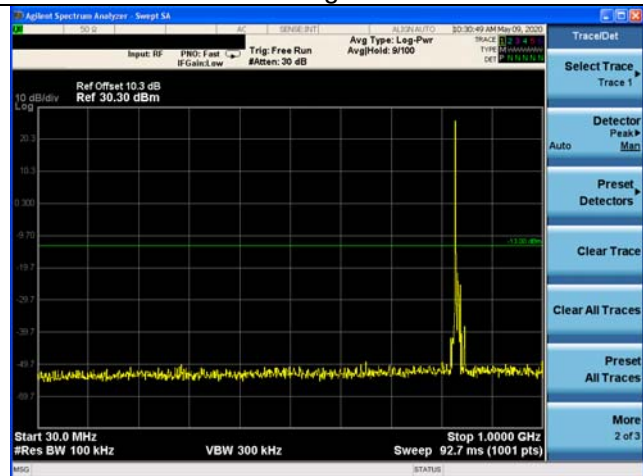


Fig5

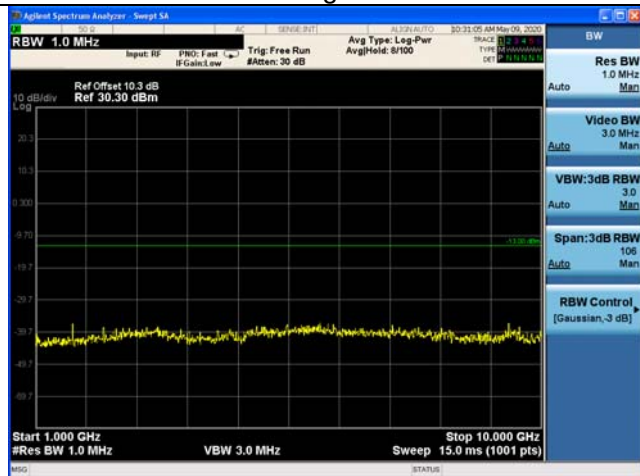


Fig6

5 Band Edges Compliance

Test result

Test Result						
Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
5	824.7	20407	1.4	1	0	Fig.1
				6	0	Fig.2
	848.3	20643		1	5	Fig.3
				6	0	Fig.4
	825.5	20415	3	1	0	Fig.5
				15	0	Fig.6
	847.5	20635		1	14	Fig.7
				15	0	Fig.8
	826.5	20425	5	1	0	Fig.9
				25	0	Fig.10
	846.5	20625		1	24	Fig.11
				25	0	Fig.12
	829	20450	10	1	0	Fig.13
				50	0	Fig.14
	844	20600		1	49	Fig.15
				50	0	Fig.16

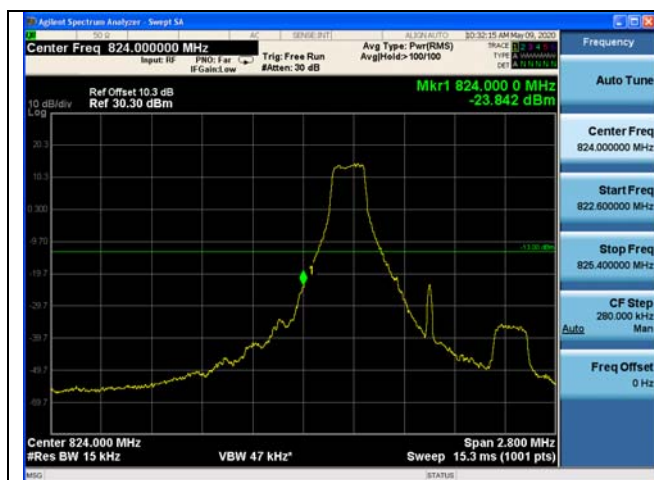


Fig.1

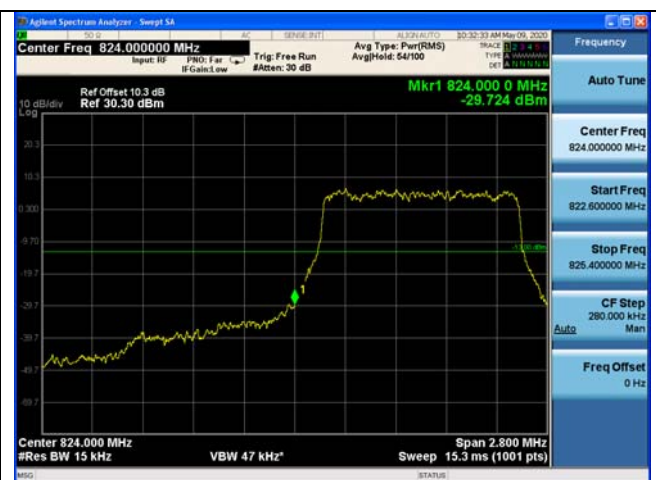


Fig.2

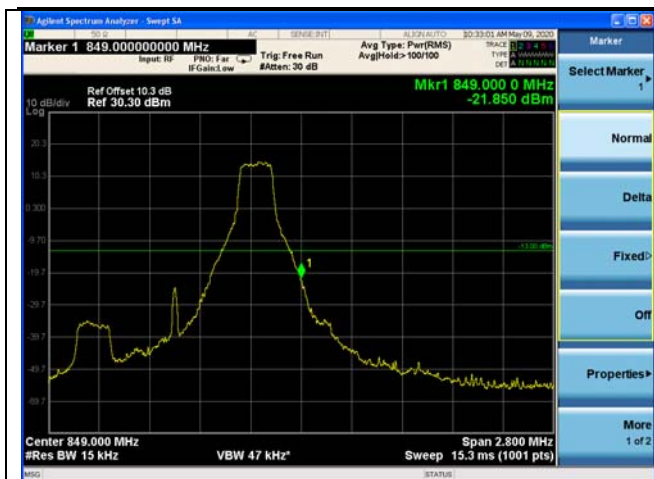


Fig.3



Fig.4

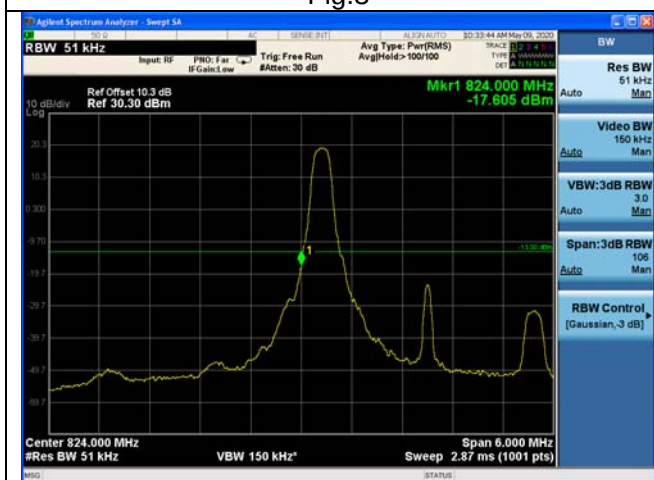


Fig.5



Fig.6

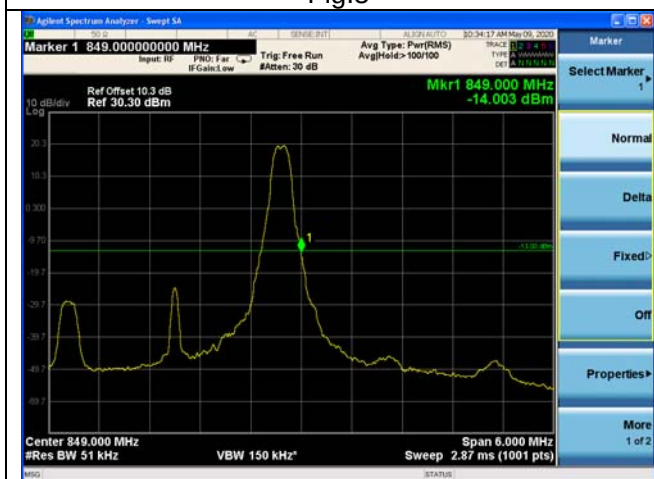


Fig.7



Fig.8

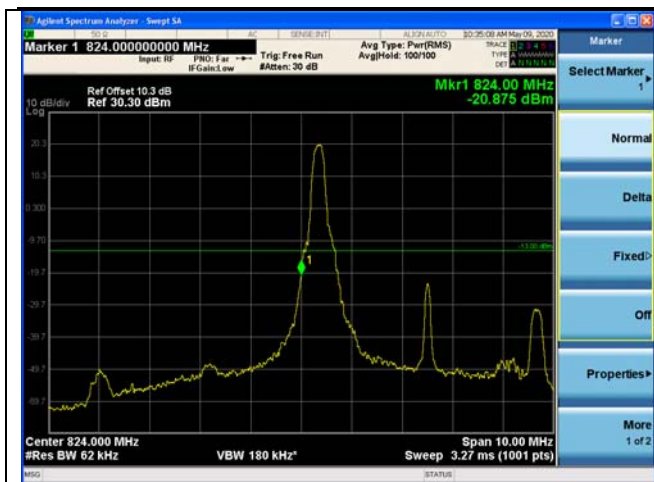


Fig.9



Fig.10

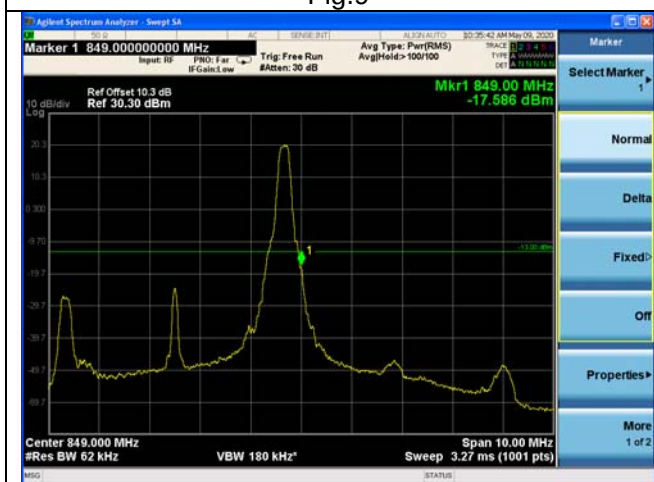


Fig.11



Fig.12

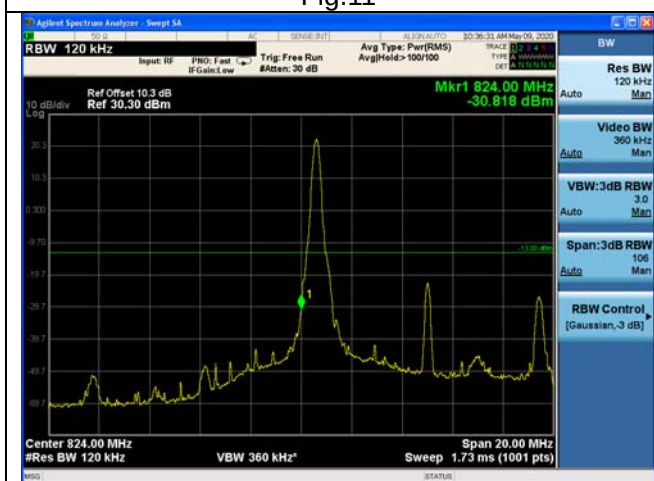


Fig.13

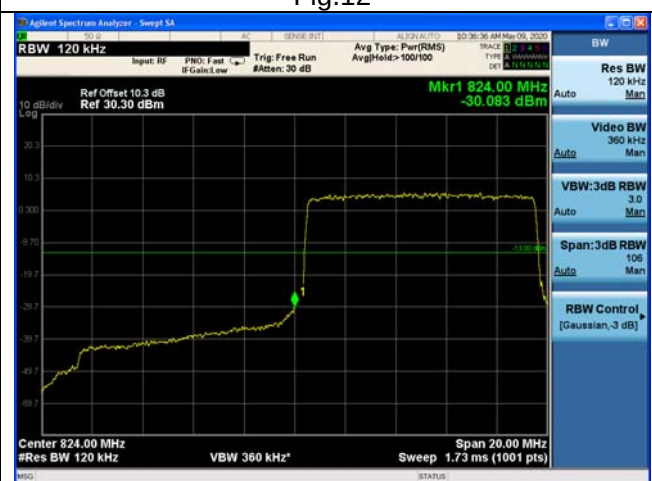


Fig.14

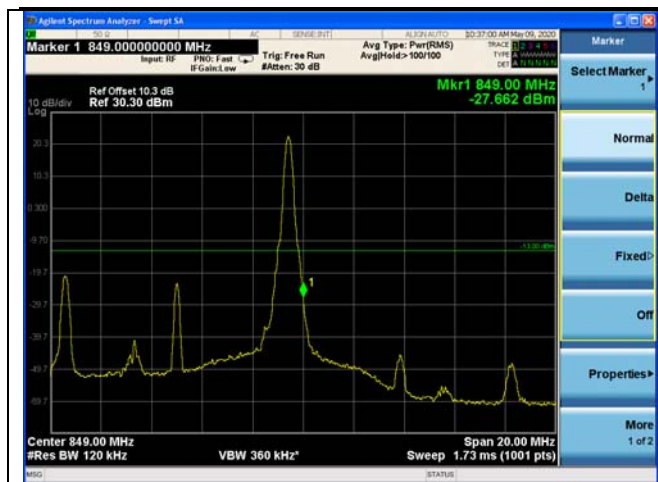


Fig.15



Fig.16

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band5Low Channel			
		1.4M	3M	5M	10M
-10	NV	0.047	0.015	-0.062	0.042
0	NV	-0.068	-0.021	0.060	-0.048
+10	NV	0.053	-0.017	0.087	-0.100
+20	NV	0.000	0.000	0.000	0.000
+30	NV	0.014	-0.073	-0.058	0.007
+40	NV	-0.092	0.048	0.005	0.040
+50	NV	-0.091	-0.028	0.092	-0.070
+55	NV	-0.025	0.008	0.086	-0.041
+20	LV	0.052	-0.070	-0.006	0.007
+20	HV	0.007	-0.036	0.003	-0.070

Temperature(°C)	Voltage	Test Result (ppm) Band5High annel			
		1.4M	3M	5M	10M
-10	NV	-0.079	-0.093	-0.064	0.044
0	NV	0.082	0.016	-0.067	-0.051
+10	NV	0.065	-0.062	0.030	-0.062
+20	NV	0.000	0.000	0.000	0.000
+30	NV	0.040	-0.026	0.080	-0.099
+40	NV	-0.079	0.028	0.033	0.050
+50	NV	0.031	-0.049	-0.009	0.012
+55	NV	0.003	-0.020	0.018	0.026
+20	LV	0.068	-0.025	0.067	-0.086
+20	HV	-0.073	-0.027	0.083	0.092