

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	23.12
				1	5	23.06
				3	2	22.05
				6	0	21.98
	707.5	23095		1	0	23.22
				1	5	23.09
				3	2	22.05
				6	0	22.02
	715.3	23173		1	0	23.09
				1	5	23.11
				3	2	22.00
				6	0	22.03
16QAM	699.7	23017	1.4	1	0	21.85
				1	5	21.83
				3	2	20.80
				6	0	20.68
	707.5	23095		1	0	21.89
				1	5	21.85
				3	2	20.80
				6	0	20.73
	715.3	23173		1	0	21.93
				1	5	21.83
				3	2	20.67
				6	0	20.79
64QAM	699.7	23017	1.4	1	0	21.83
				1	5	21.85
				3	2	20.81
				6	0	20.69
	707.5	23095		1	0	21.94
				1	5	21.81
				3	2	20.81
				6	0	20.67
	715.3	23173		1	0	21.81
				1	5	21.84
				3	2	20.71
				6	0	20.72

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	700.5	23025	3	1	0	23.18
				1	14	23.16
				8	4	22.17
				15	0	22.03
	707.5	23095		1	0	23.23
				1	14	23.13
				8	4	22.16
				15	0	22.10
	714.5	23165		1	0	23.24
				1	14	23.10
				8	4	22.07
				15	0	22.08
16QAM	700.5	23025	3	1	0	21.99
				1	14	21.89
				8	4	20.93
				15	0	20.79
	707.5	23095		1	0	21.98
				1	14	21.86
				8	4	20.94
				15	0	20.86
	714.5	23165		1	0	21.99
				1	14	21.90
				8	4	20.81
				15	0	20.81
64QAM	700.5	23025	3	1	0	21.95
				1	14	21.94
				8	4	20.83
				15	0	20.78
	707.5	23095		1	0	21.97
				1	14	21.87
				8	4	20.91
				15	0	20.83
	714.5	23165		1	0	21.88
				1	14	21.89
				8	4	20.77
				15	0	20.89

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	701.5	23035	5	1	0	23.19
				1	24	23.13
				12	6	22.14
				25	0	22.14
	707.5	23095		1	0	23.23
				1	24	23.24
				12	6	22.18
				25	0	22.16
	713.5	23155		1	0	23.28
				1	24	23.22
				12	6	22.16
				25	0	22.08
16QAM	701.5	23035	5	1	0	21.94
				1	24	21.96
				12	6	20.97
				25	0	20.77
	707.5	23095		1	0	22.08
				1	24	21.89
				12	6	20.97
				25	0	20.84
	713.5	23155		1	0	21.96
				1	24	21.91
				12	6	20.79
				25	0	20.90
64QAM	701.5	23035	5	1	0	21.92
				1	24	21.89
				12	6	20.85
				25	0	20.82
	707.5	23095		1	0	22.02
				1	24	21.93
				12	6	20.92
				25	0	20.85
	713.5	23155		1	0	21.96
				1	24	21.88
				12	6	20.89
				25	0	20.90

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	704	23060	10	1	0	23.32
				1	49	23.26
				24	12	22.25
				50	0	22.19
	707.5	23095		1	0	23.37
				1	49	23.29
				24	12	22.29
				50	0	22.22
	711	23130		1	0	23.35
				1	49	23.27
				24	12	22.23
				50	0	22.21
16QAM	704	23060	10	1	0	22.09
				1	49	22.04
				24	12	21.03
				50	0	20.90
	707.5	23095		1	0	22.13
				1	49	22.04
				24	12	21.05
				50	0	20.97
	711	23130		1	0	22.08
				1	49	22.01
				24	12	20.93
				50	0	20.95
64QAM	704	23060	10	1	0	22.05
				1	49	22.02
				24	12	20.96
				50	0	20.95
	707.5	23095		1	0	22.10
				1	49	22.02
				24	12	21.03
				50	0	20.93
	711	23130		1	0	22.05
				1	49	21.98
				24	12	20.94
				50	0	20.98

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	1.0812	Fig.1	1.0795	Fig.2	1.0772	Fig.3
	707.5	23095		6	0	1.0799	Fig.4	1.0819	Fig.5	1.0809	Fig.6
	715.3	23173		6	0	1.0803	Fig.7	1.0824	Fig.8	1.0772	Fig.9
	700.5	23025	3	15	0	2.6917	Fig.10	2.6909	Fig.11	2.6927	Fig.12
	707.5	23095		15	0	2.6909	Fig.13	2.6914	Fig.14	2.6919	Fig.15
	714.5	23165		15	0	2.6917	Fig.16	2.6896	Fig.17	2.6884	Fig.18
	701.5	23035	5	25	0	4.4756	Fig.19	4.4796	Fig.20	4.4697	Fig.21
	707.5	23095		25	0	4.4864	Fig.22	4.4856	Fig.23	4.4801	Fig.24
	713.5	23155		25	0	4.4769	Fig.25	4.4686	Fig.26	4.4693	Fig.27
	704	23060	10	50	0	8.9329	Fig.28	8.9367	Fig.29	8.9267	Fig.30
	707.5	23095		50	0	8.9543	Fig.31	8.9620	Fig.32	8.9439	Fig.33
	711	23130		50	0	8.9094	Fig.34	8.9058	Fig.35	8.8976	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	1.312	Fig.1	1.263	Fig.2	1.292	Fig.3
	707.5	23095		6	0	1.260	Fig.4	1.243	Fig.5	1.244	Fig.6
	715.3	23173		6	0	1.286	Fig.7	1.289	Fig.8	1.272	Fig.9
	700.5	23025	3	15	0	2.967	Fig.10	2.937	Fig.11	2.967	Fig.12
	707.5	23095		15	0	2.967	Fig.13	2.934	Fig.14	2.930	Fig.15
	714.5	23165		15	0	2.967	Fig.16	2.940	Fig.17	2.943	Fig.18
	701.5	23035	5	25	0	4.918	Fig.19	4.865	Fig.20	4.903	Fig.21
	707.5	23095		25	0	4.929	Fig.22	4.903	Fig.23	4.889	Fig.24
	713.5	23155		25	0	4.899	Fig.25	4.870	Fig.26	4.839	Fig.27
	704	23060	10	50	0	9.665	Fig.28	9.635	Fig.29	9.679	Fig.30
	707.5	23095		50	0	9.746	Fig.31	9.705	Fig.32	9.695	Fig.33
	711	23130		50	0	9.631	Fig.34	9.564	Fig.35	9.544	Fig.36

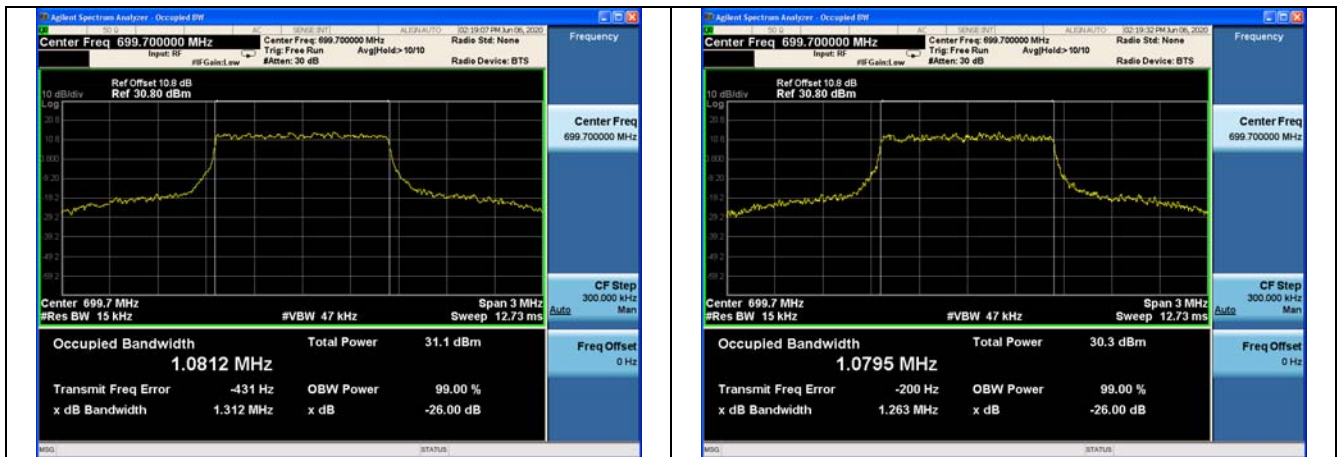


Fig.1

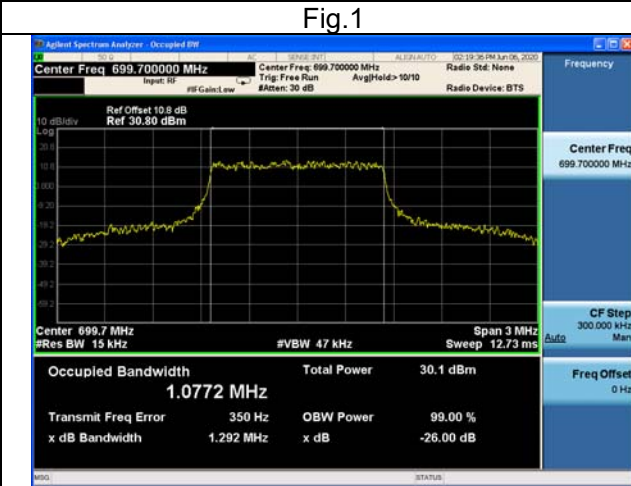


Fig.2

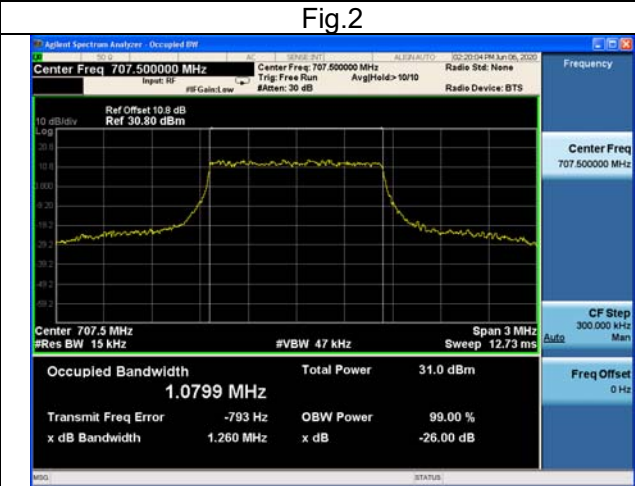


Fig.3

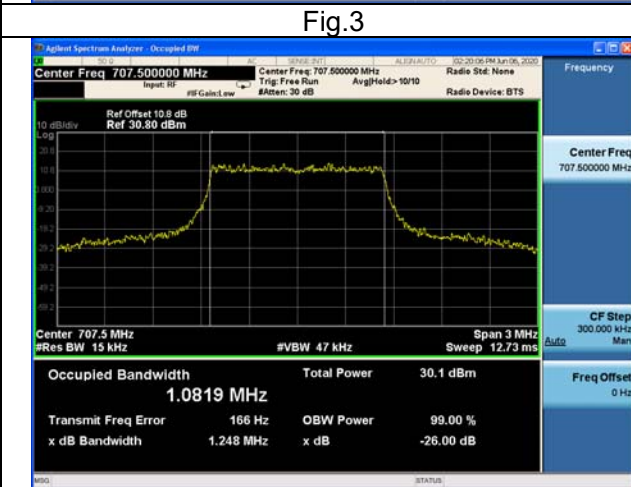


Fig.4

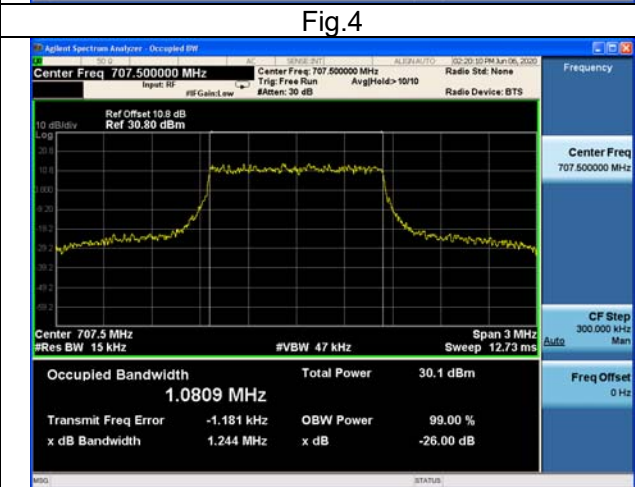


Fig.5

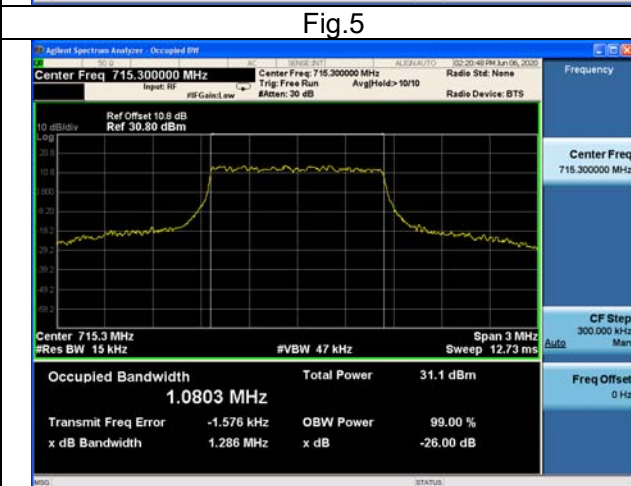


Fig.6

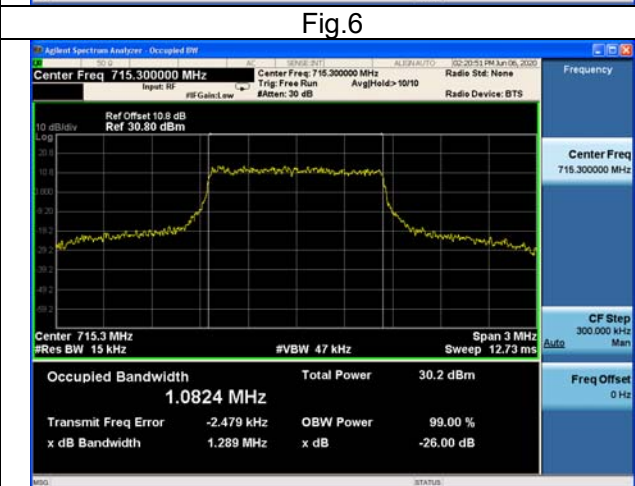


Fig.7

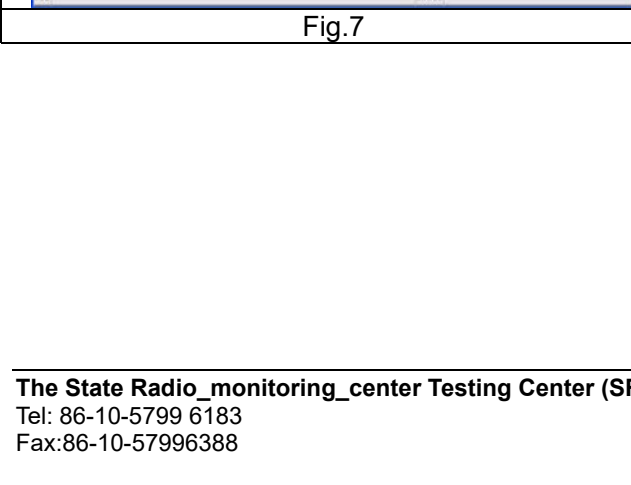
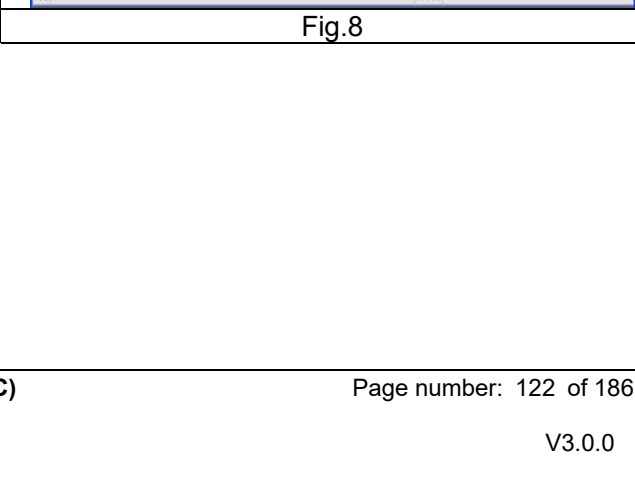


Fig.8



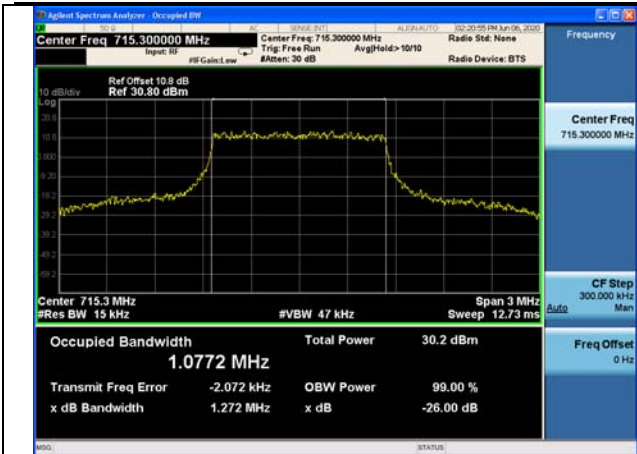


Fig.9



Fig.10

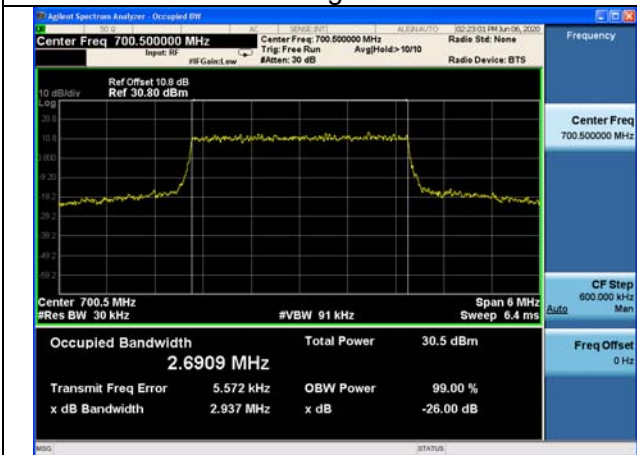


Fig.11

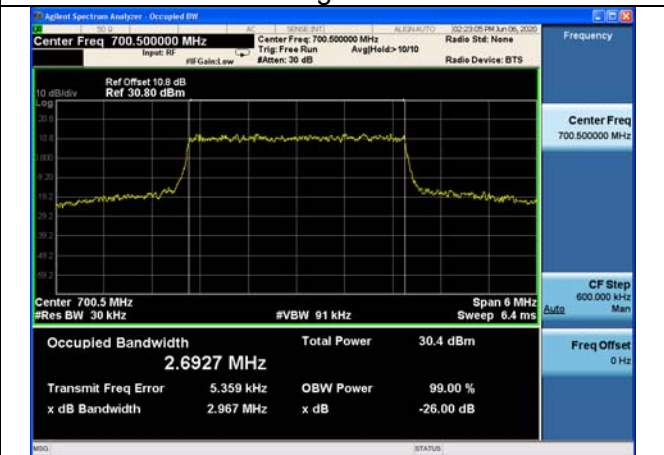


Fig.12

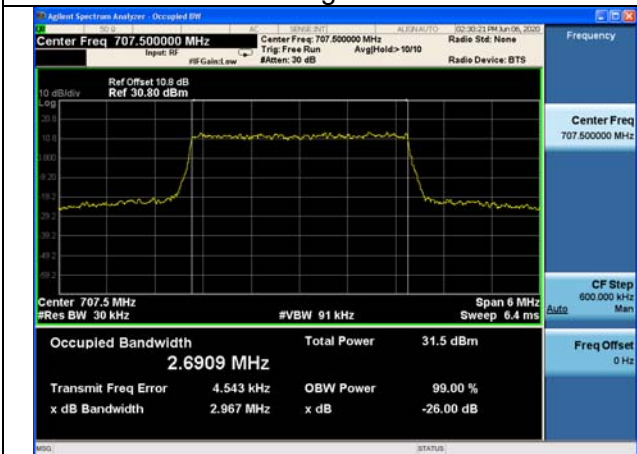


Fig.13

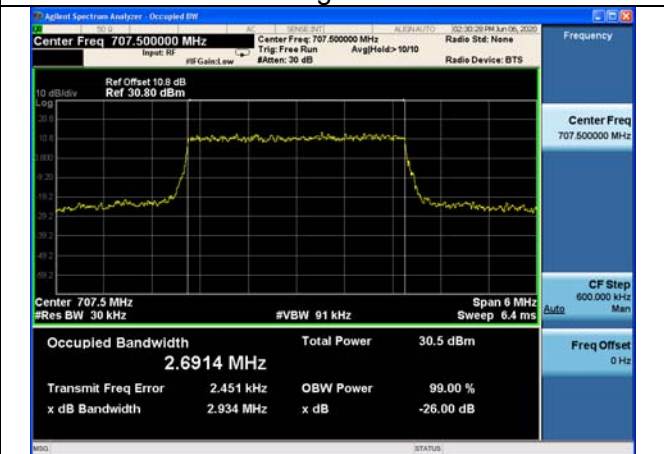


Fig.14

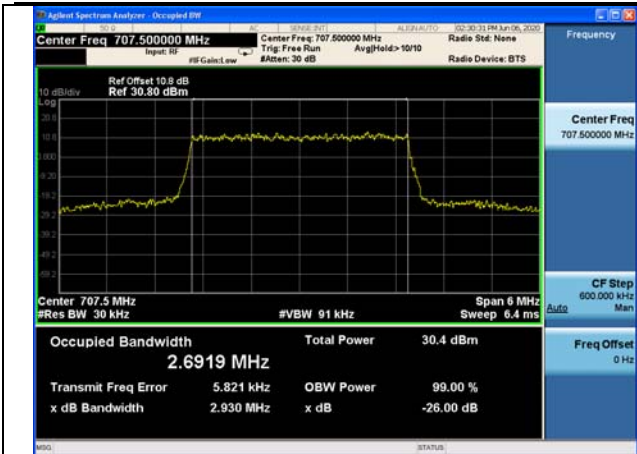


Fig.15

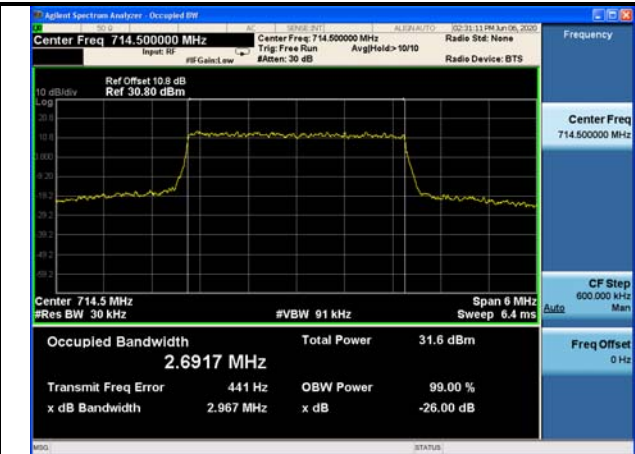


Fig.16

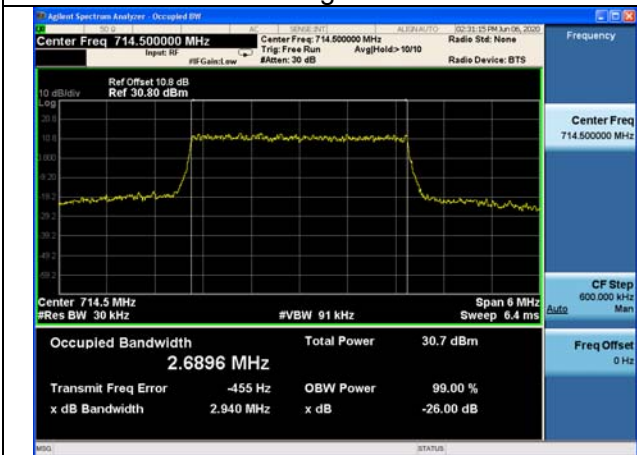


Fig.17

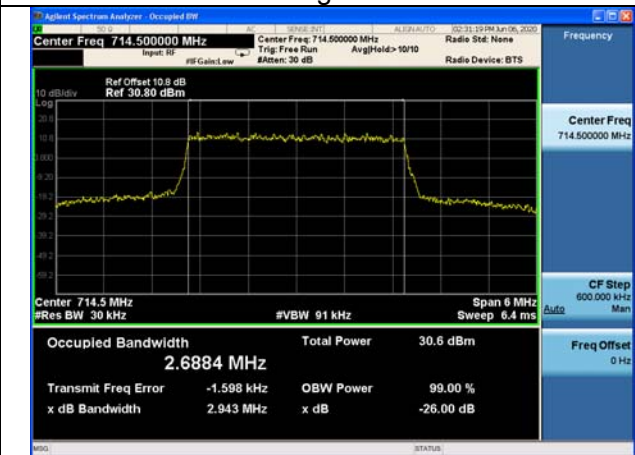


Fig.18

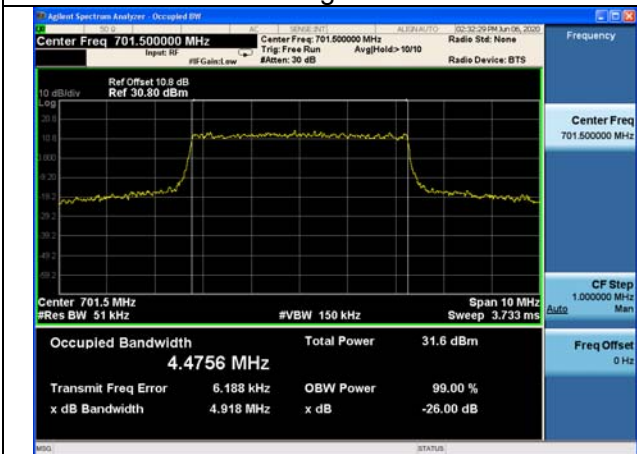


Fig.19

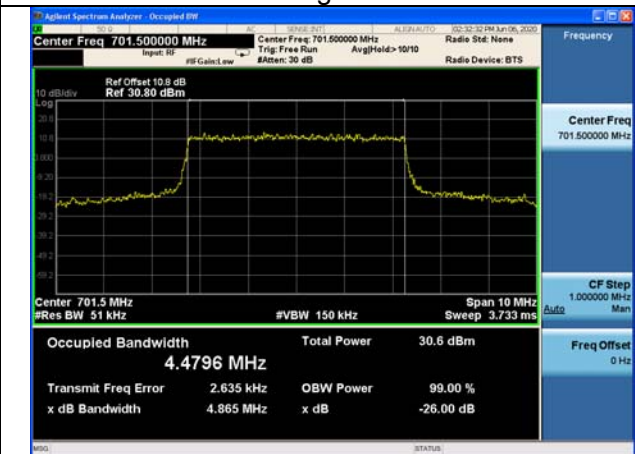


Fig.20

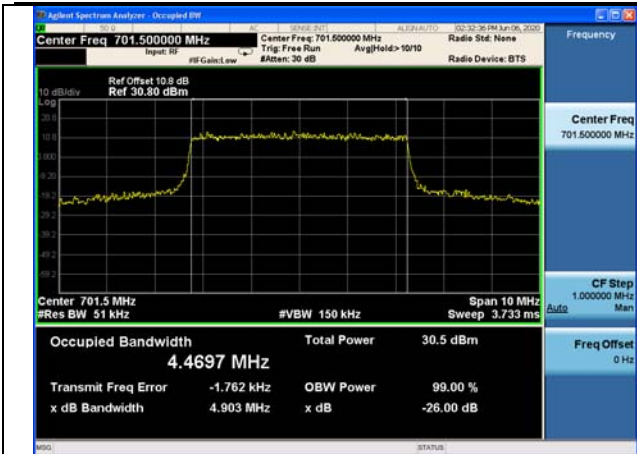


Fig.21

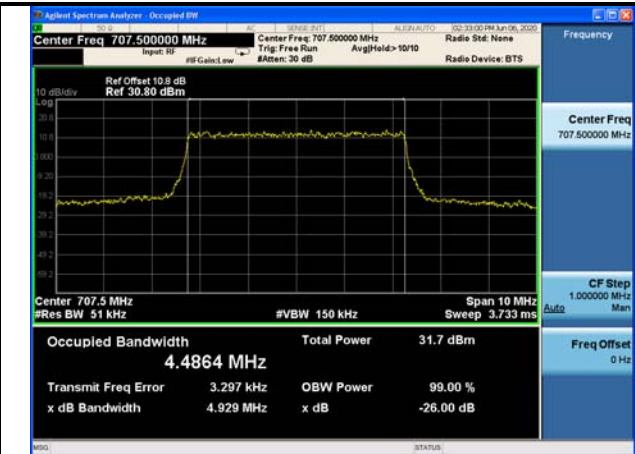


Fig.22

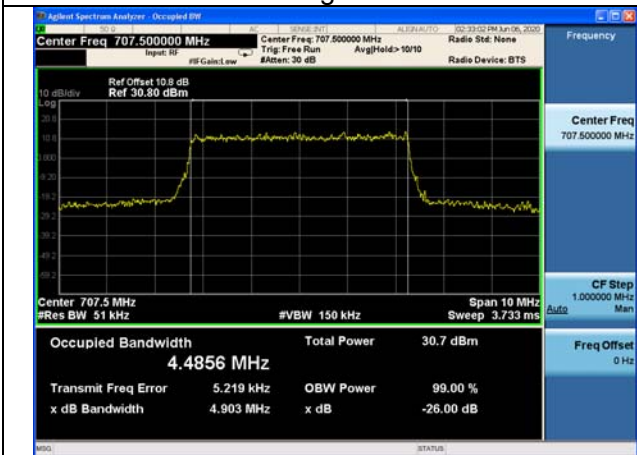


Fig.23

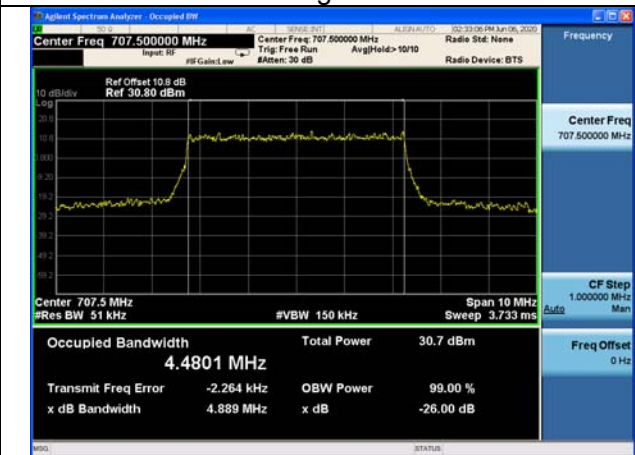


Fig.24

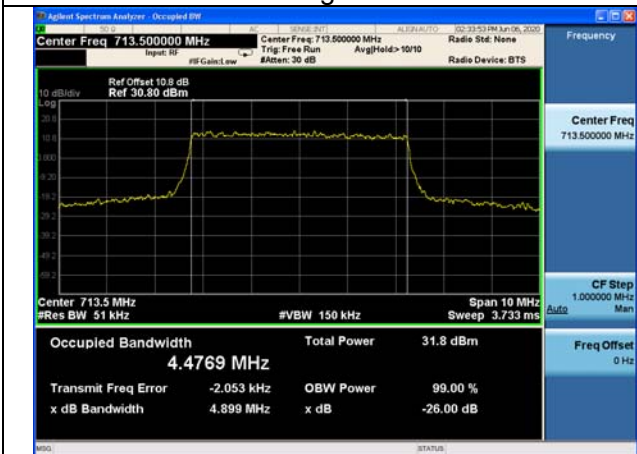


Fig.25

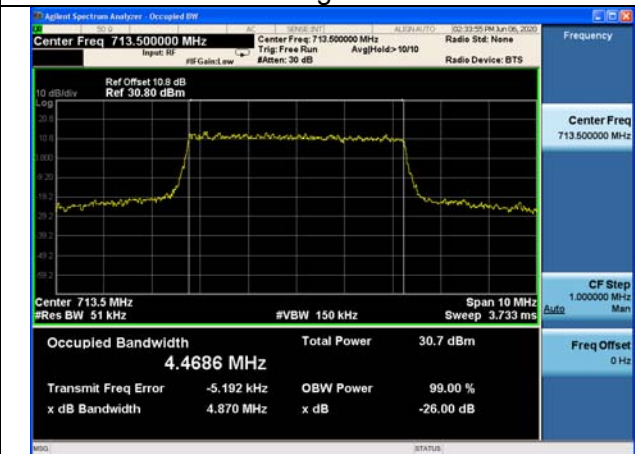


Fig.26

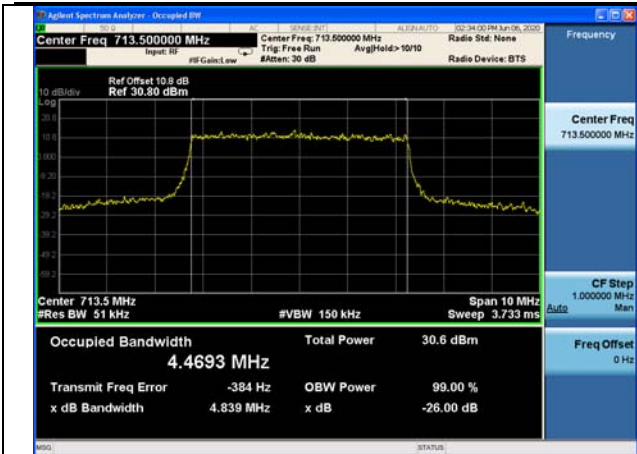


Fig.27

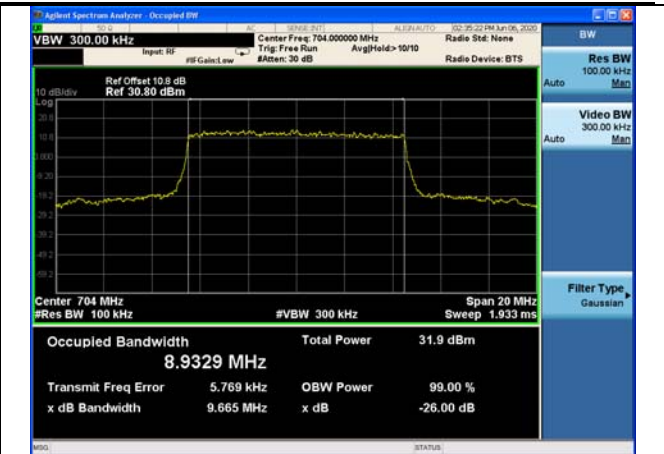


Fig.28

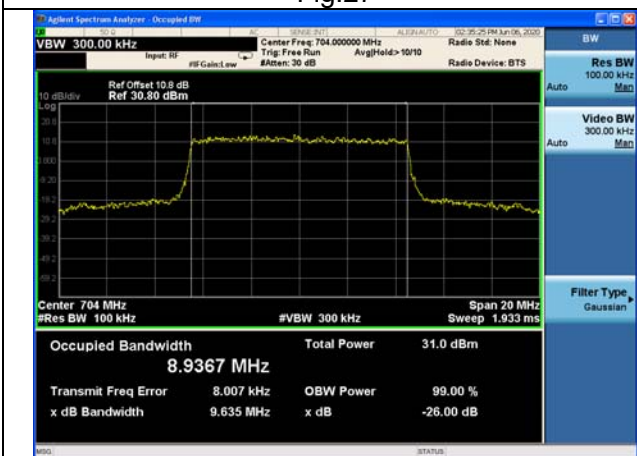


Fig.29

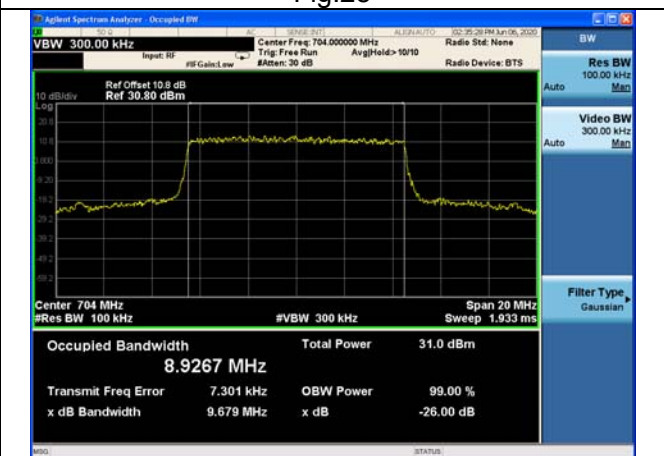


Fig.30

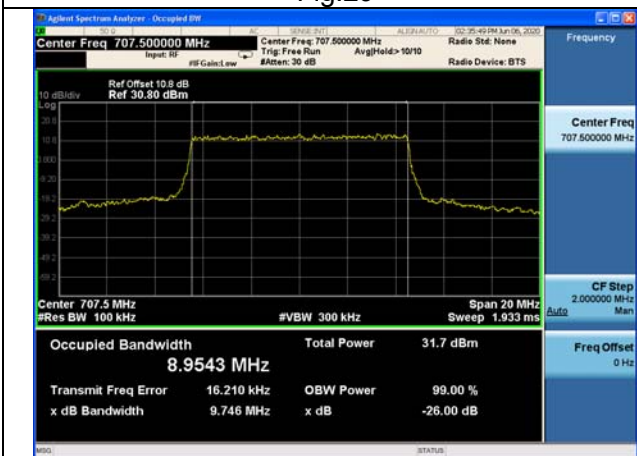


Fig.31

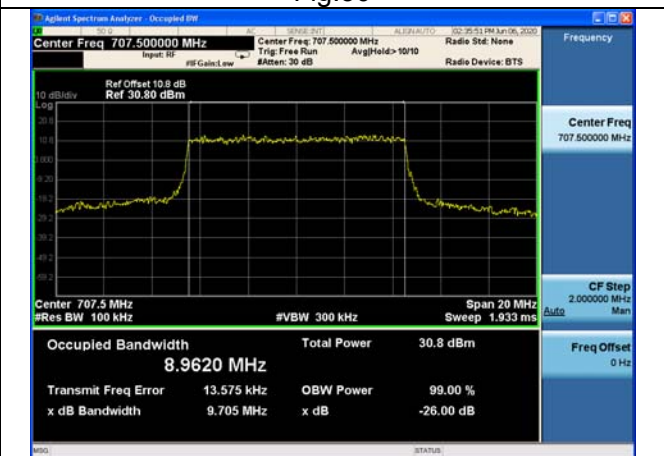


Fig.32

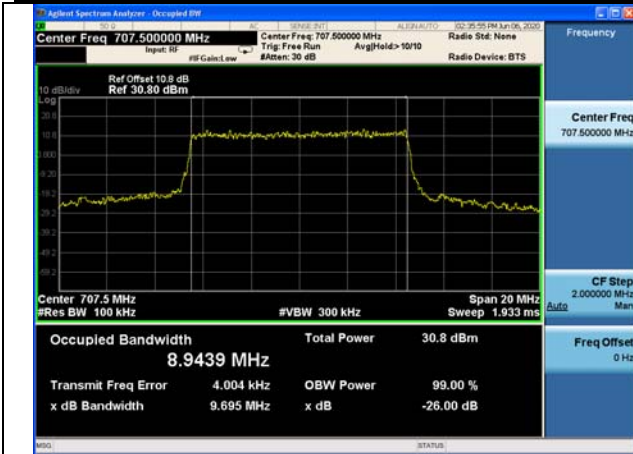


Fig.33

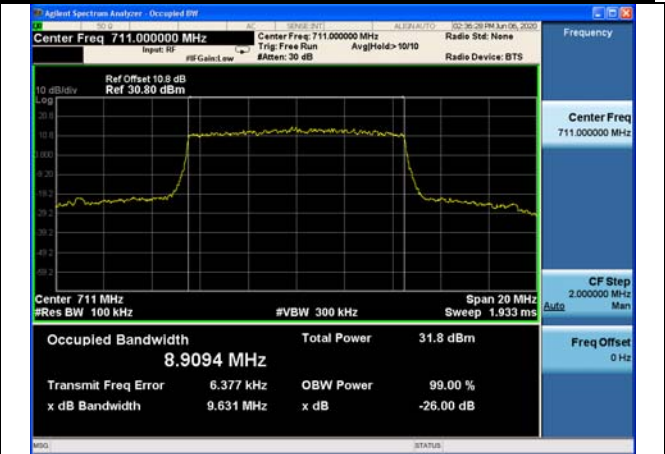


Fig.34



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

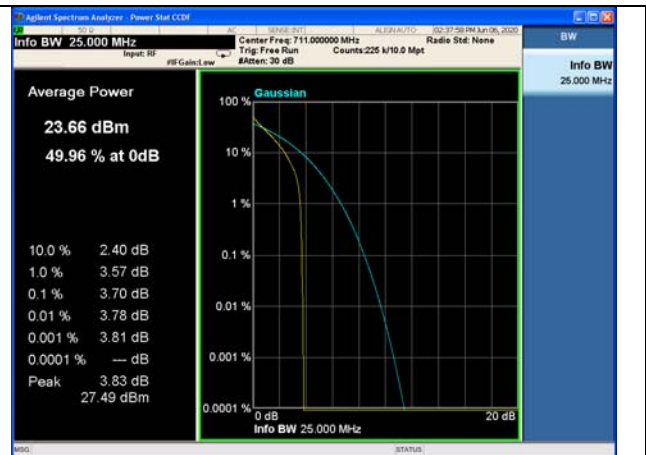


Fig.2



Fig.3

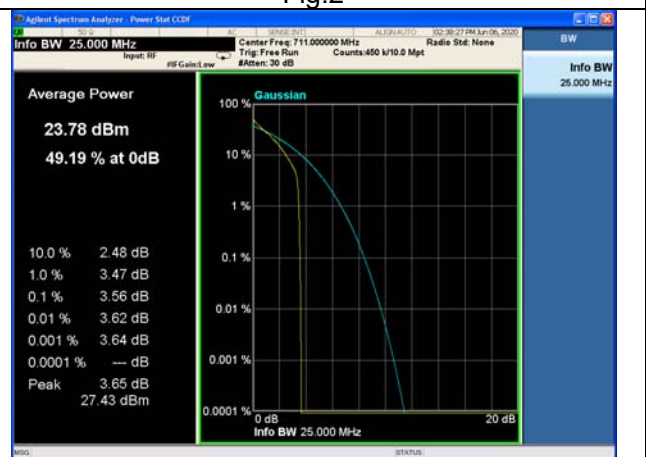


Fig.4



Fig.5

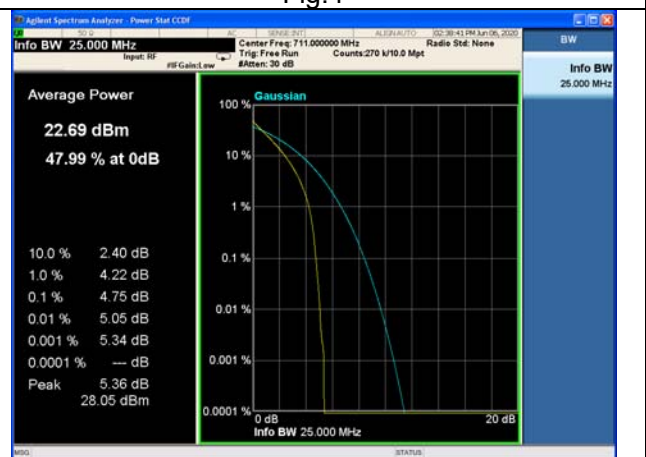


Fig.6

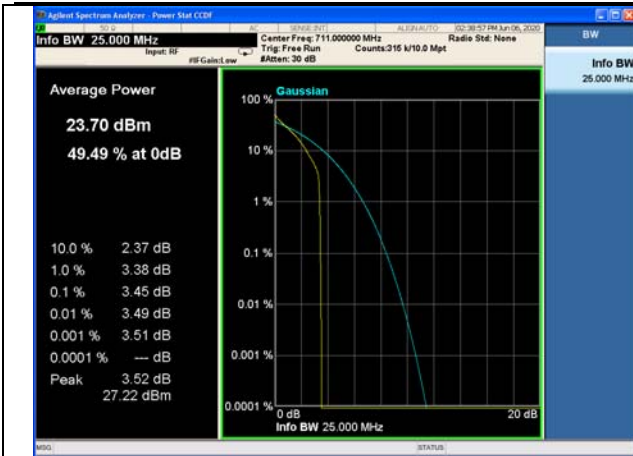


Fig.7



Fig.8

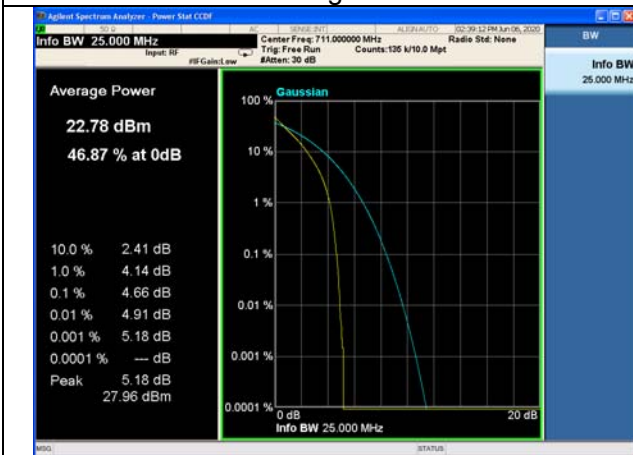


Fig.9

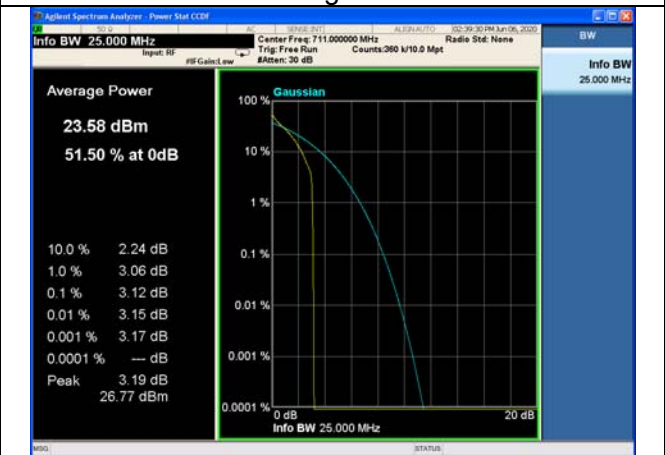


Fig.10



Fig.11

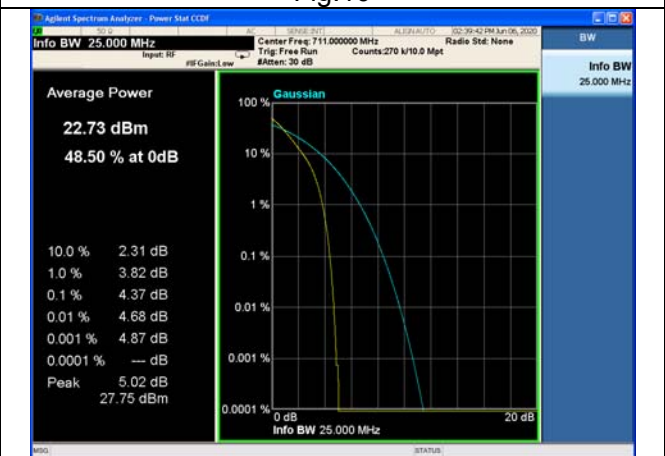


Fig.12

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

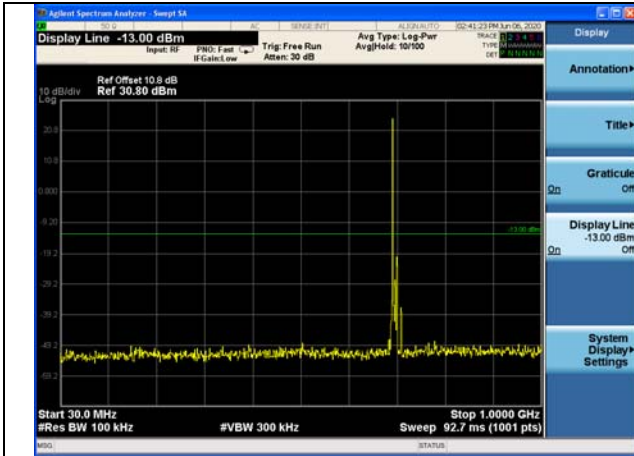


Fig.1



Fig.2

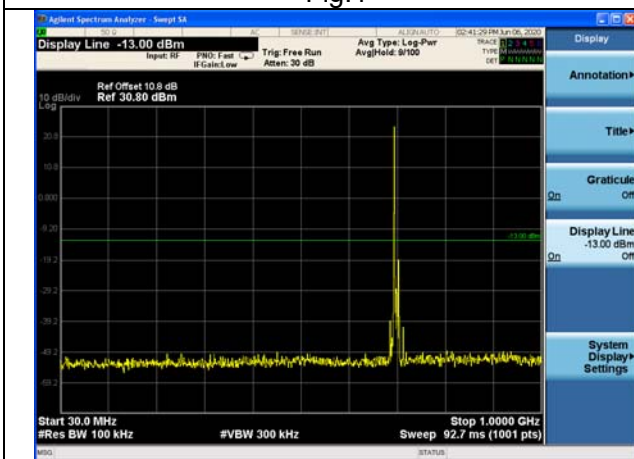


Fig3

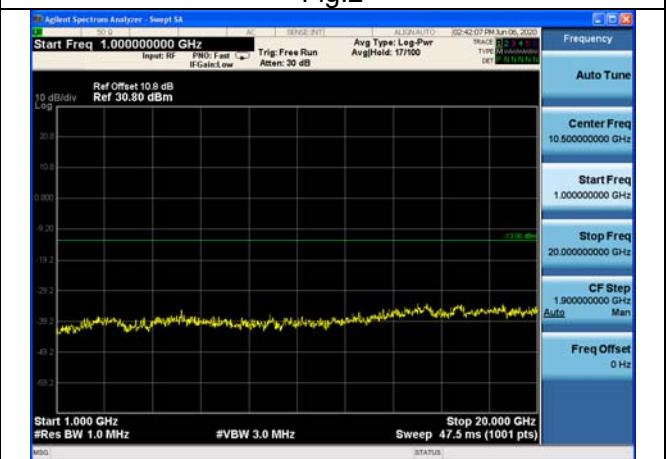


Fig4

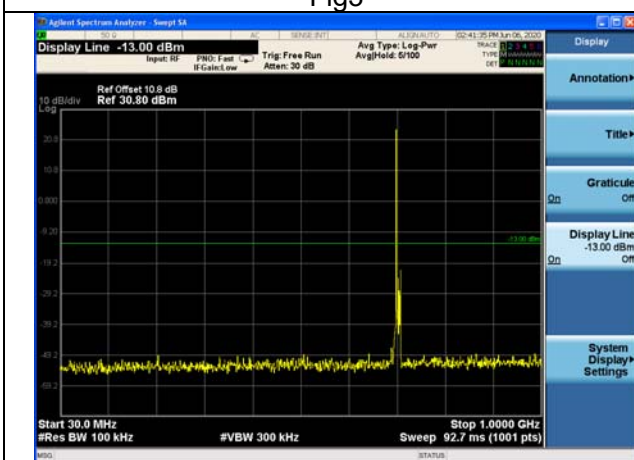


Fig5

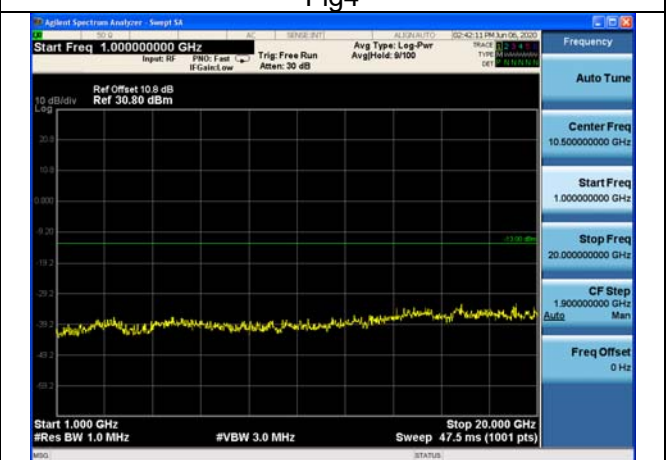


Fig6

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
	715.3	23173		1	5	Fig.3
				6	0	Fig.4
	700.5	23025	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	23060	10	1	0	Fig.13
				50	0	Fig.14
	711	23130		1	49	Fig.15
				50	0	Fig.16

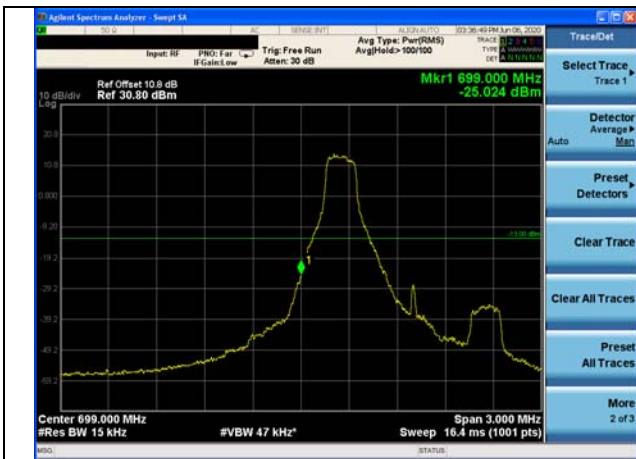


Fig.1



Fig.2

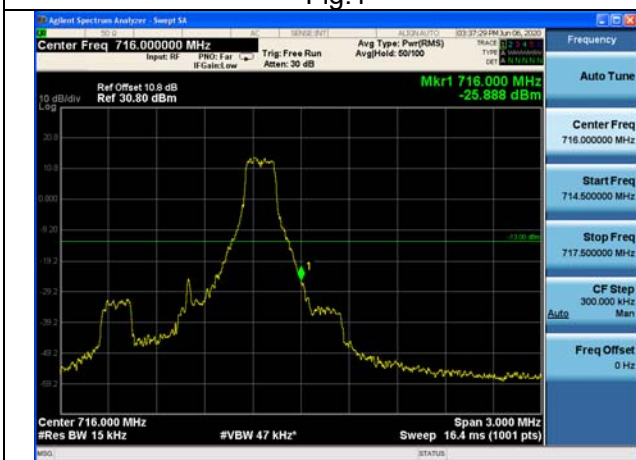


Fig.3



Fig.4

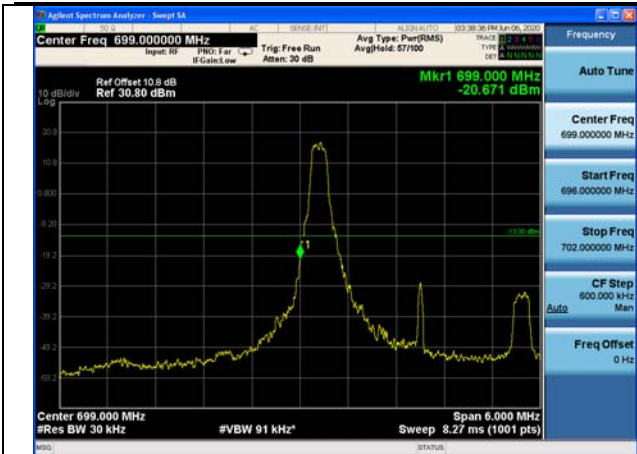


Fig.5



Fig.6

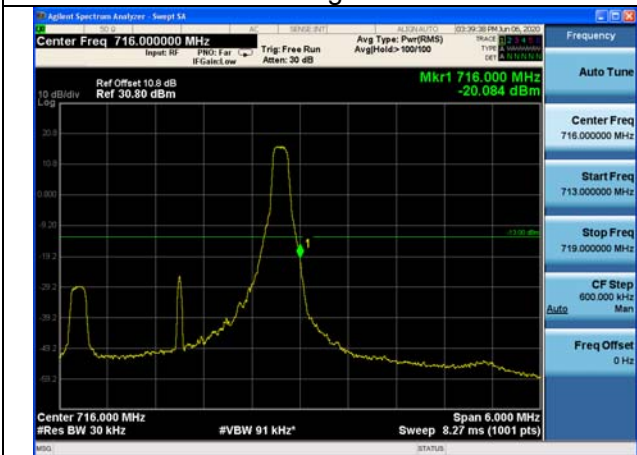


Fig.7



Fig.8

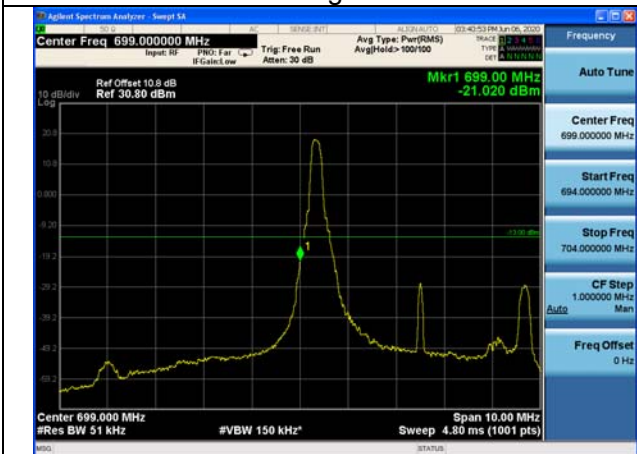


Fig.9



Fig.10

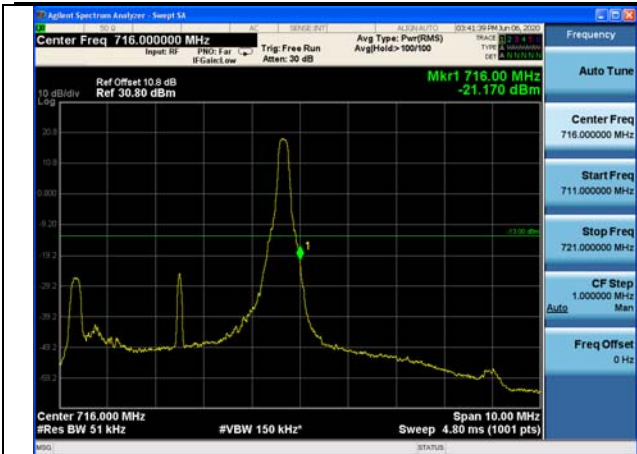


Fig.11



Fig.12

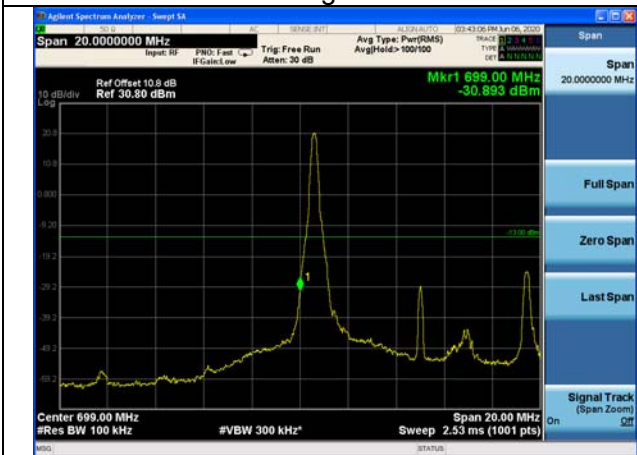


Fig.13



Fig.14

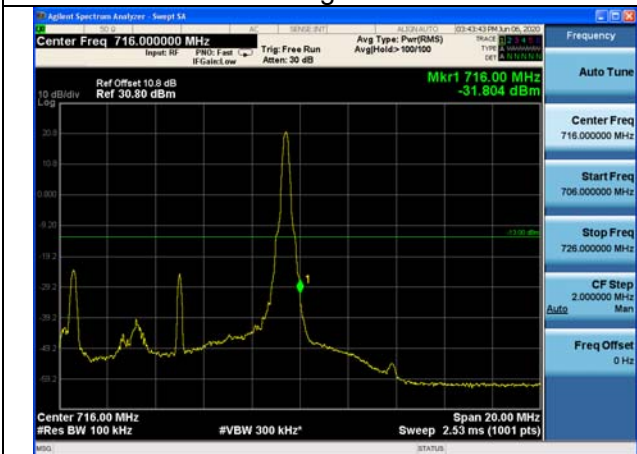


Fig.15



Fig.16

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band12 Low Channel			
		1.4M	3M	5M	10M
-10	NV	0.008	0.018	0.015	-0.003
0	NV	-0.007	-0.014	0.004	0.002
+10	NV	-0.017	-0.021	-0.006	-0.005
+20	NV	0.000	0.000	0.000	0.000
+30	NV	-0.010	-0.010	0.003	-0.021
+40	NV	-0.013	-0.007	0.002	0.008
+50	NV	-0.002	-0.002	0.012	-0.003
+55	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
-10	NV	0.017	0.007	0.007	0.019
0	NV	-0.006	-0.005	0.011	-0.009
+10	NV	-0.017	0.022	0.008	-0.002
+20	NV	0.000	0.000	0.000	0.000
+30	NV	0.015	0.014	-0.001	0.007
+40	NV	-0.001	0.006	0.008	-0.020
+50	NV	0.012	-0.013	0.013	-0.009
+55	NV	0.011	-0.023	-0.011	0.024
+20	LV	-0.018	-0.013	-0.002	-0.020
+20	HV	0.019	0.011	-0.008	-0.020