

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 66

1 RF Power Output

PRF Power Output						
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1710.7	131979	1.4	1	0	23.90
				1	5	23.83
				3	2	22.76
				6	0	22.70
	1745	132322		1	0	23.97
				1	5	23.91
				3	2	22.88
				6	0	22.83
	1779.3	132665		1	0	23.47
				1	5	23.49
				3	2	22.58
				6	0	22.54
16QAM	1710.7	131979	1.4	1	0	22.87
				1	5	22.82
				3	2	21.72
				6	0	21.68
	1745	132322		1	0	23.05
				1	5	22.98
				3	2	21.99
				6	0	21.88
	1779.3	132665		1	0	22.52
				1	5	22.49
				3	2	21.62
				6	0	21.56

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1711.5	131987	3	1	0	23.83
				1	14	23.85
				8	4	22.74
				15	0	22.66
	1745	132322		1	0	23.98
				1	14	23.97
				8	4	22.92
				15	0	22.90
	1778.5	132657		1	0	23.48
				1	14	23.53
				8	4	22.60
				15	0	22.53
16QAM	1711.5	131987	3	1	0	22.89
				1	14	22.87
				8	4	21.73
				15	0	21.66
	1745	132322		1	0	22.98
				1	14	22.99
				8	4	22.02
				15	0	21.90
	1778.5	132657		1	0	22.51
				1	14	22.52
				8	4	21.59
				15	0	21.64

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1712.5	131997	5	1	0	23.97
				1	24	23.92
				12	6	22.84
				25	0	22.66
	1745	132322		1	0	24.03
				1	24	23.99
				12	6	22.97
				25	0	22.93
	1777.5	132647		1	0	23.60
				1	24	23.58
				12	6	22.62
				25	0	22.59
16QAM	1712.5	131997	5	1	0	22.91
				1	24	22.87
				12	6	21.79
				25	0	21.76
	1745	132322		1	0	23.10
				1	24	23.11
				12	6	21.97
				25	0	21.90
	1777.5	132647		1	0	22.58
				1	24	22.47
				12	6	21.71
				25	0	21.67

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1715	132022	10	1	0	23.96
				1	49	23.90
				24	12	22.88
				50	0	22.74
	1745	132322		1	0	24.18
				1	49	24.07
				24	12	23.08
				50	0	22.93
	1775	132622		1	0	23.65
				1	49	23.59
				24	12	22.77
				50	0	22.65
16QAM	1715	132022	10	1	0	23.07
				1	49	22.89
				24	12	21.88
				50	0	21.80
	1745	132322		1	0	23.10
				1	49	23.08
				24	12	22.06
				50	0	22.01
	1775	132622		1	0	22.72
				1	49	22.56
				24	12	21.74
				50	0	21.72

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1717.5	132047	15	1	0	23.97
				1	74	23.99
				40	18	22.92
				75	0	22.77
	1745	132322		1	0	24.14
				1	74	24.14
				40	18	23.12
				75	0	23.01
	1772.5	132597		1	0	23.66
				1	74	23.60
				40	18	22.77
				75	0	22.71
16QAM	1717.5	132047	15	1	0	23.07
				1	74	22.93
				40	18	21.92
				75	0	21.78
	1745	132322		1	0	23.14
				1	74	23.17
				40	18	22.08
				75	0	21.97
	1772.5	132597		1	0	22.69
				1	74	22.65
				40	18	21.81
				75	0	21.73

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1720	132072	20	1	0	24.12
				1	99	24.07
				50	25	22.98
				100	0	22.92
	1745	132322		1	0	24.27
				1	99	24.21
				50	25	23.18
				100	0	23.11
	1770	132572		1	0	23.77
				1	99	23.74
				50	25	22.88
				100	0	22.83
16QAM	1720	132072	20	1	0	23.17
				1	99	23.07
				50	25	22.02
				100	0	21.91
	1745	132322		1	0	23.27
				1	99	23.25
				50	25	22.23
				100	0	22.11
	1770	132572		1	0	22.80
				1	99	22.73
				50	25	21.90
				100	0	21.87

2 Occupied Bandwidth

Test result

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
66	1710.7	131979	1.4	6	0	1.0833	Fig.1	1.0814	Fig.2
	1745	132322		6	0	1.0836	Fig.3	1.0840	Fig.4
	1779.3	132665		6	0	1.0841	Fig.5	1.0841	Fig.6
	1711.5	131987	3	15	0	2.6801	Fig.7	2.6818	Fig.8
	1745	132322		15	0	2.6806	Fig.9	2.6845	Fig.10
	1778.5	132657		15	0	2.6827	Fig.11	2.6818	Fig.12
	1712.5	131997	5	25	0	4.4775	Fig.13	4.4731	Fig.14
	1745	132322		25	0	4.4730	Fig.15	4.4714	Fig.16
	1777.5	132647		25	0	4.4759	Fig.17	4.4782	Fig.18
	1715	132022	10	50	0	8.9412	Fig.19	8.9286	Fig.20
	1745	132322		50	0	8.9344	Fig.21	8.9296	Fig.22
	1775	132622		50	0	8.9281	Fig.23	8.9259	Fig.24
	1717.5	132047	15	75	0	13.431	Fig.25	13.406	Fig.26
	1745	132322		75	0	13.408	Fig.27	13.425	Fig.28
	1772.5	132597		75	0	13.384	Fig.29	13.338	Fig.30
	1720	132072	20	100	0	17.849	Fig.31	17.827	Fig.32
	1745	132322		100	0	17.798	Fig.33	17.805	Fig.34
	1770	132572		100	0	17.784	Fig.35	17.762	Fig.36

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
66	1710.7	131979	1.4	6	0	1.252	Fig.1	1.245	Fig.2
	1745	132322		6	0	1.273	Fig.3	1.248	Fig.4
	1779.3	132665		6	0	1.261	Fig.5	1.268	Fig.6
	1711.5	131987	3	15	0	2.943	Fig.7	2.934	Fig.8
	1745	132322		15	0	2.935	Fig.9	2.919	Fig.10
	1778.5	132657		15	0	2.920	Fig.11	2.927	Fig.12
	1712.5	131997	5	25	0	4.949	Fig.13	4.920	Fig.14
	1745	132322		25	0	4.955	Fig.15	4.868	Fig.16
	1777.5	132647		25	0	4.940	Fig.17	4.901	Fig.18
	1715	132022	10	50	0	9.686	Fig.19	9.711	Fig.20
	1745	132322		50	0	9.636	Fig.21	9.595	Fig.22
	1775	132622		50	0	9.582	Fig.23	9.626	Fig.24
	1717.5	132047	15	75	0	14.34	Fig.25	14.26	Fig.26
	1745	132322		75	0	14.33	Fig.27	14.31	Fig.28
	1772.5	132597		75	0	14.37	Fig.29	14.28	Fig.30
	1720	132072	20	100	0	18.99	Fig.31	18.99	Fig.32
	1745	132322		100	0	19.02	Fig.33	19.07	Fig.34
	1770	132572		100	0	19.01	Fig.35	18.96	Fig.36

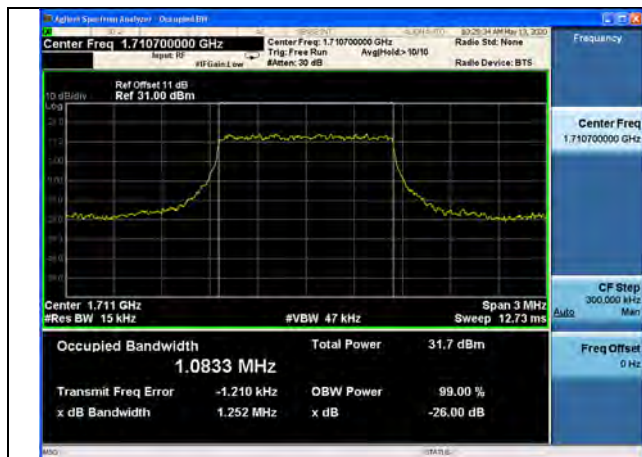


Fig.1

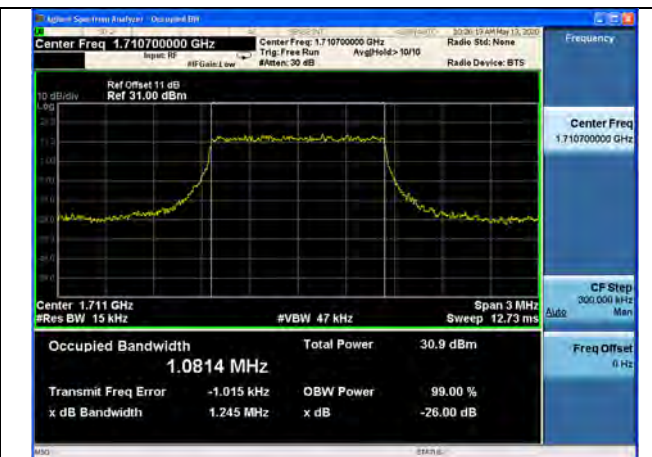


Fig.2

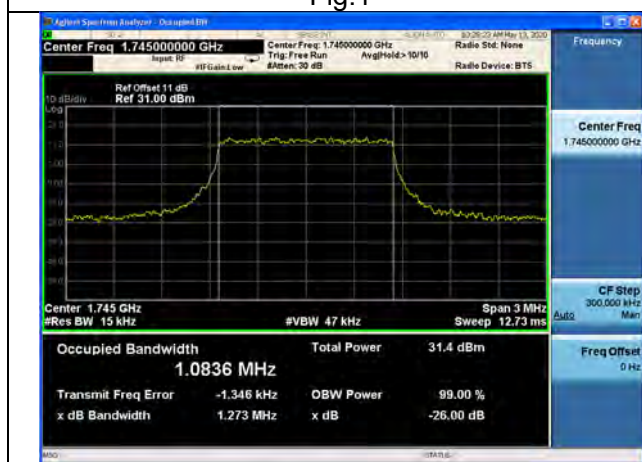


Fig.3

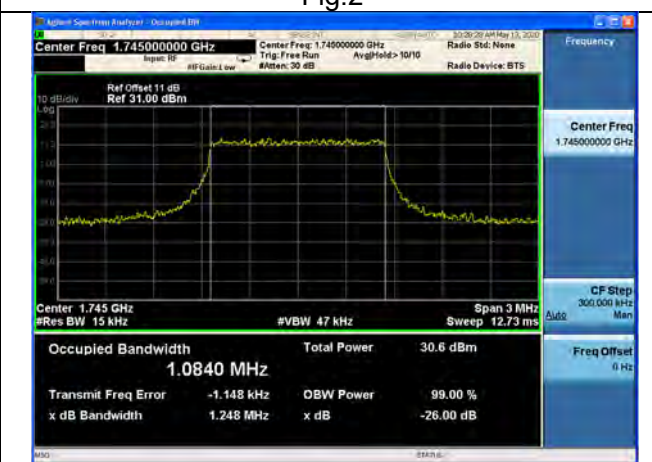


Fig.4

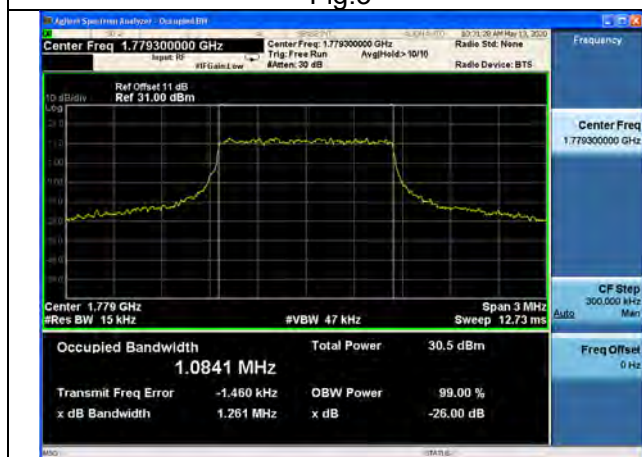


Fig.5

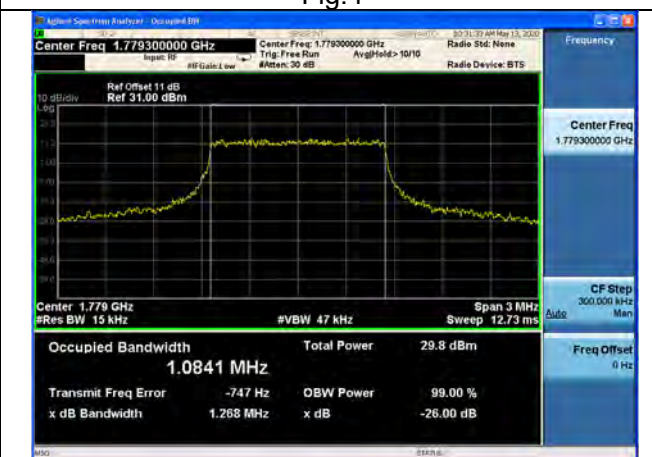


Fig.6



Fig.7

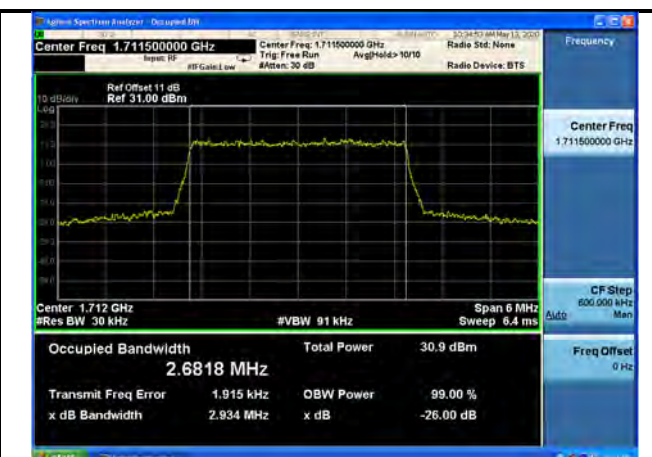


Fig.8

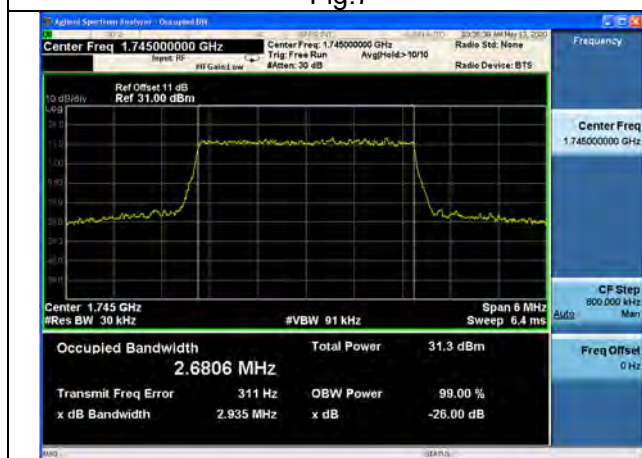


Fig.9

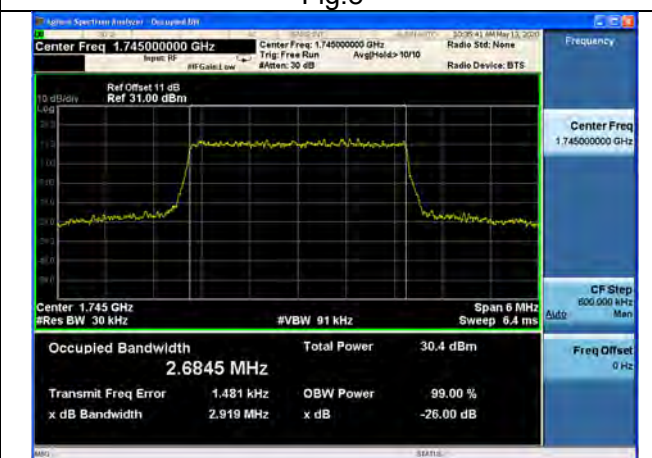


Fig.10

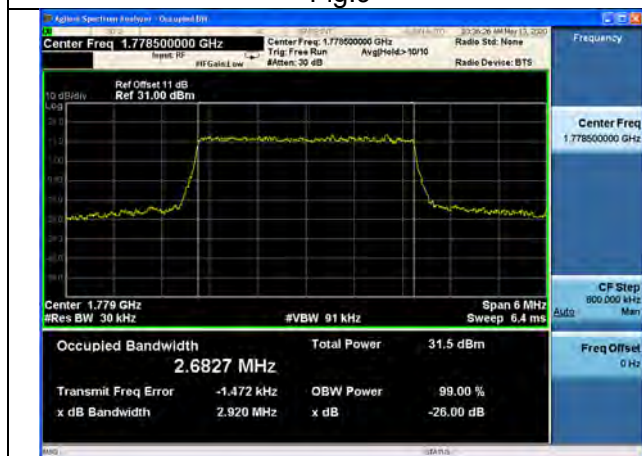


Fig.11

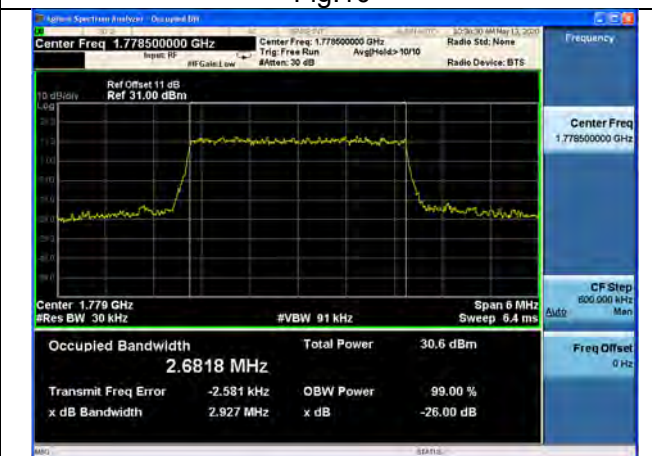


Fig.12

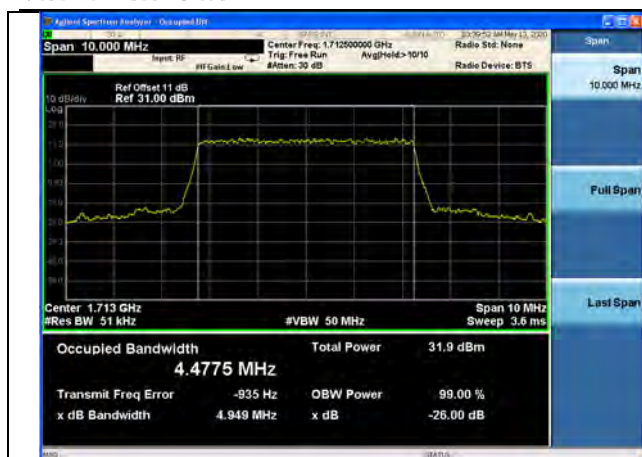


Fig.13

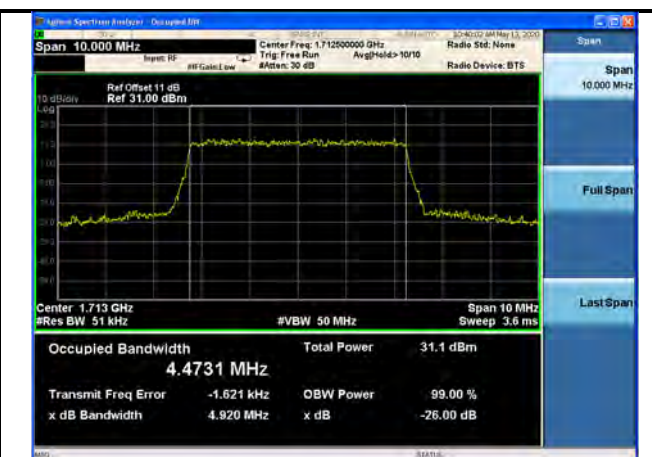


Fig.14



Fig.15

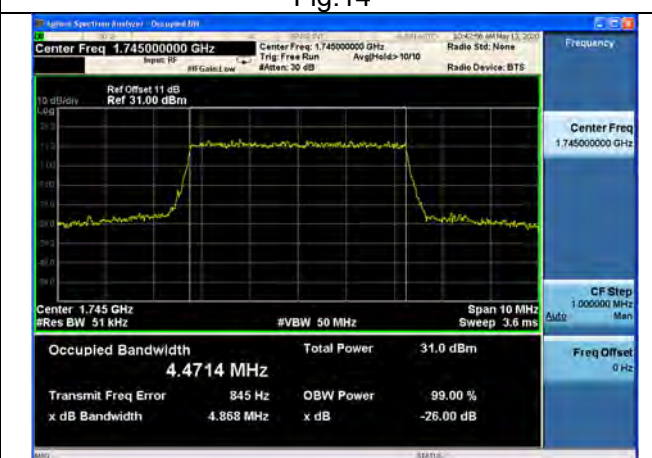


Fig.16



Fig.17

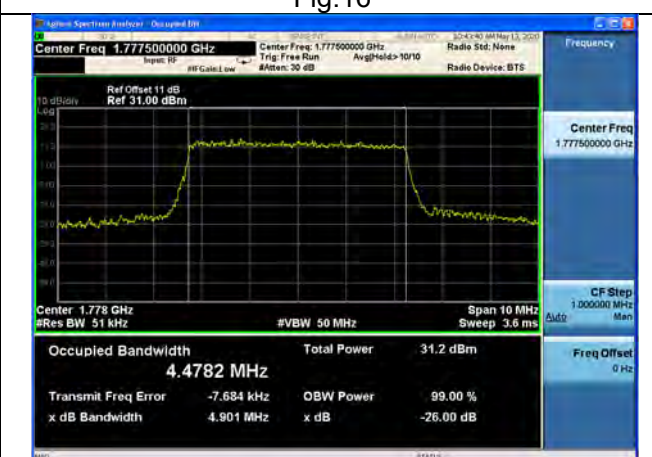


Fig.18

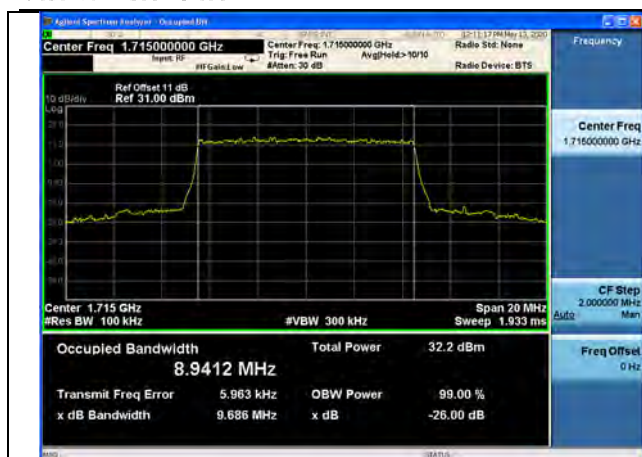


Fig.19

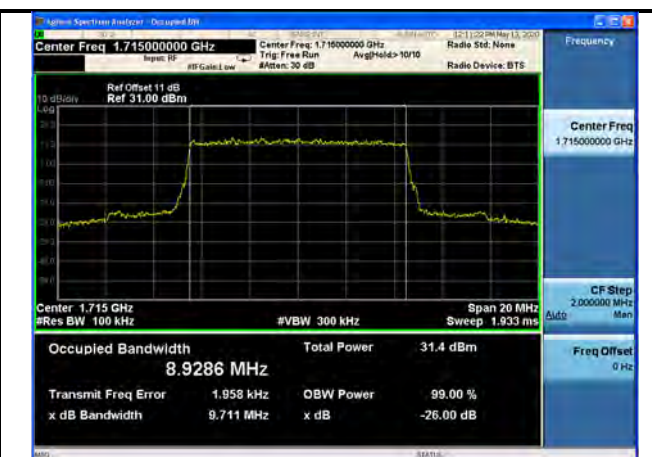


Fig.20



Fig.21

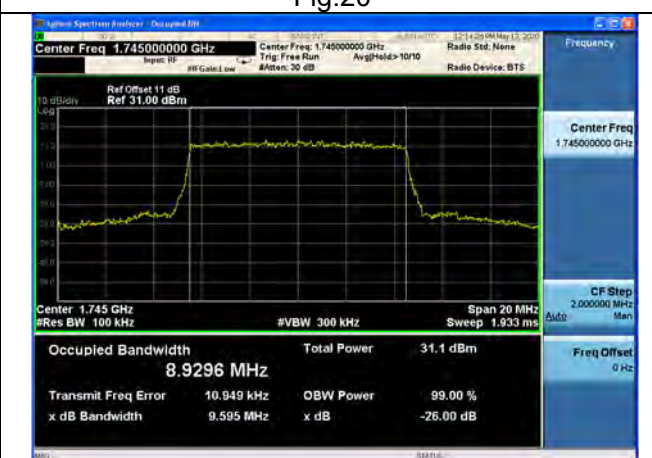


Fig.22

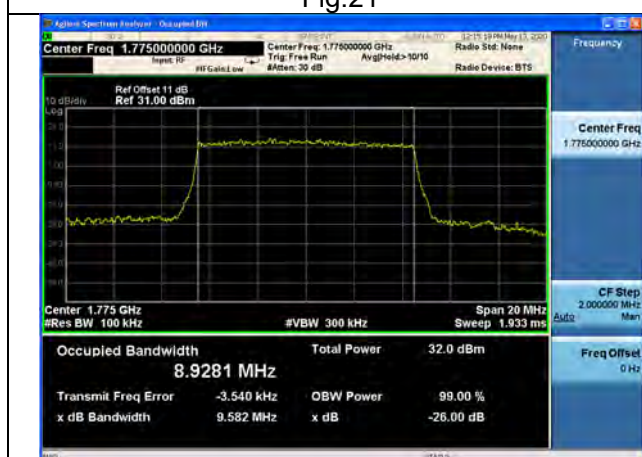


Fig.23

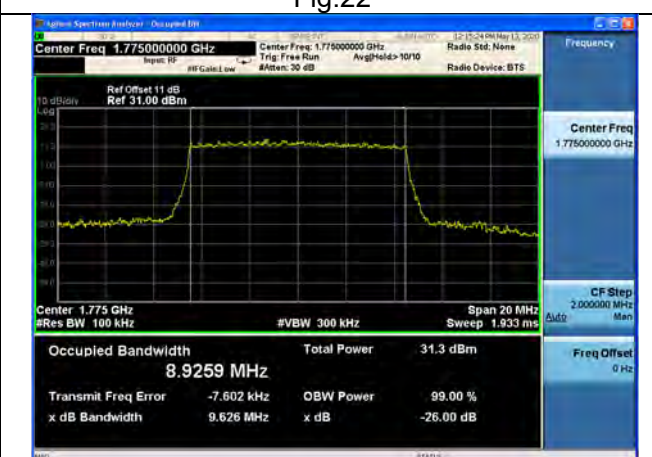


Fig.24

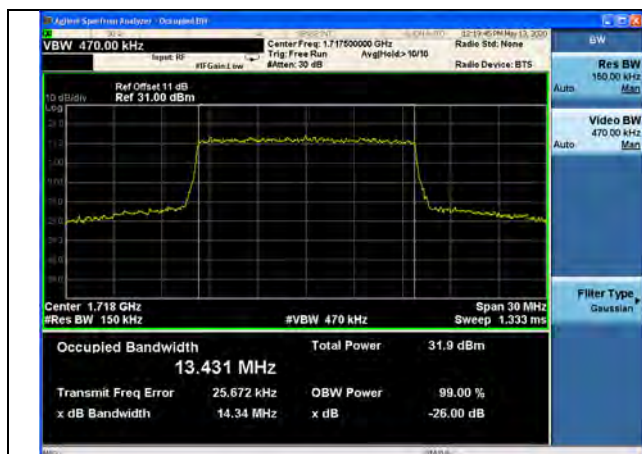


Fig.25

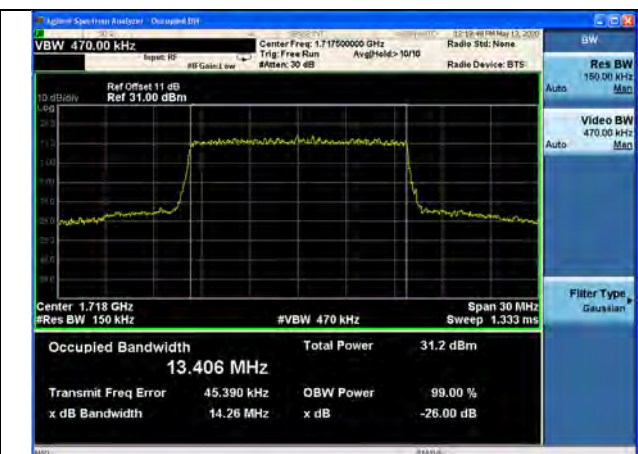


Fig.26

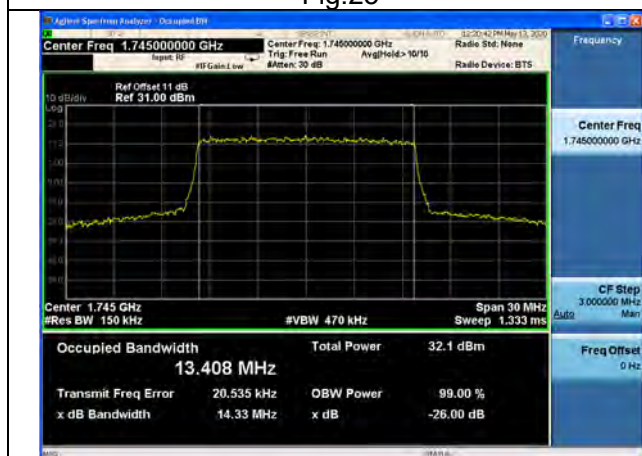


Fig.27

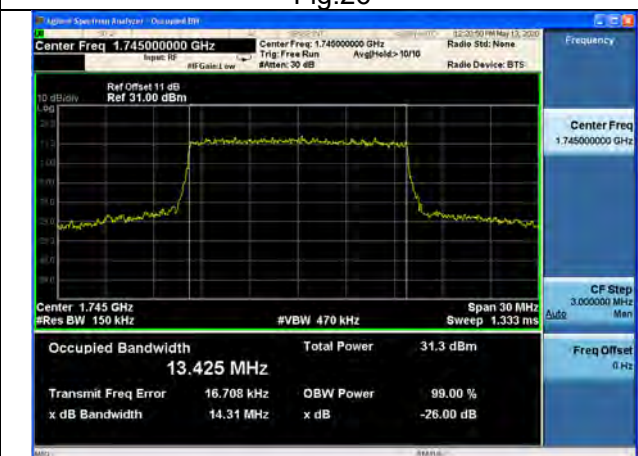


Fig.28

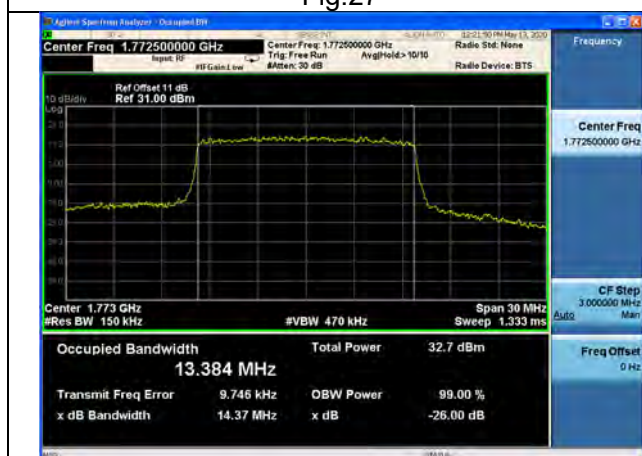


Fig.29

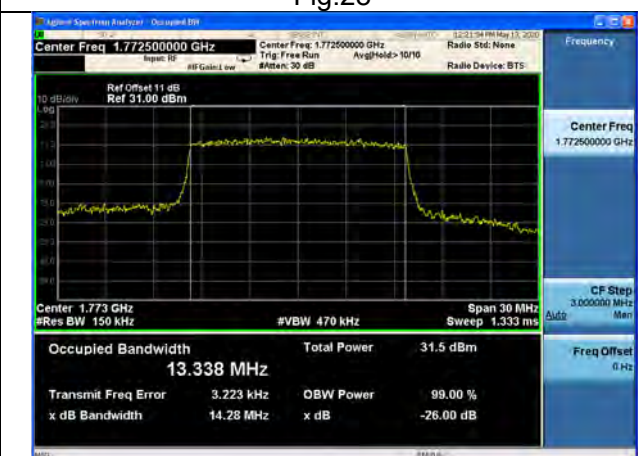


Fig.30

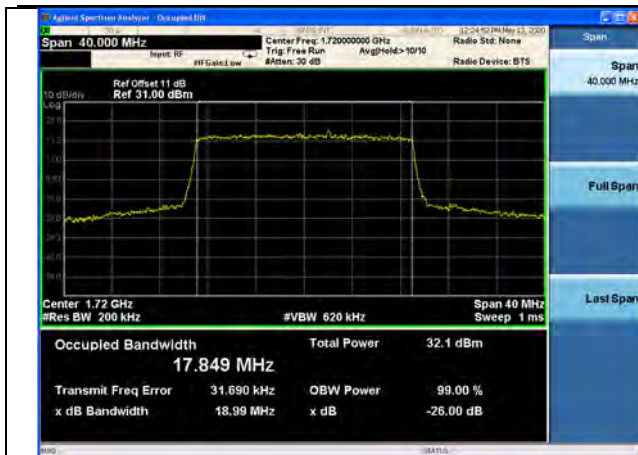


Fig.31

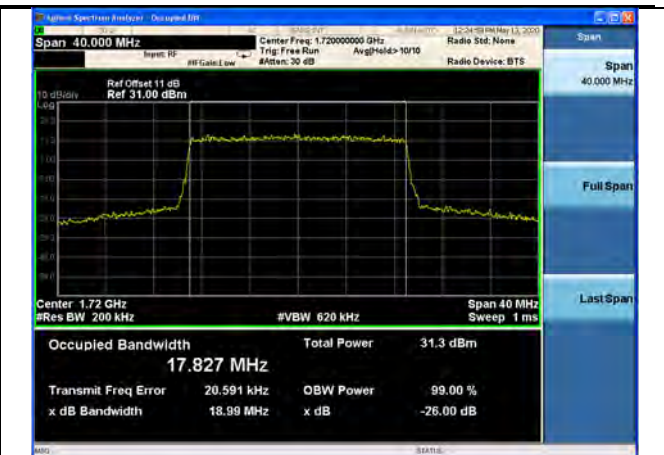


Fig.32



Fig.33

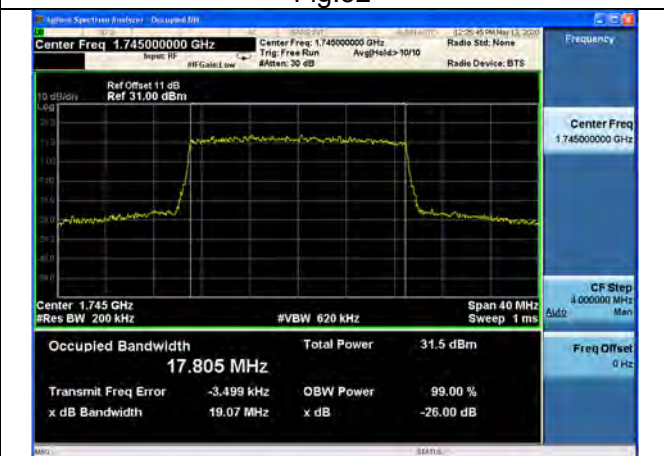


Fig.34



Fig.35

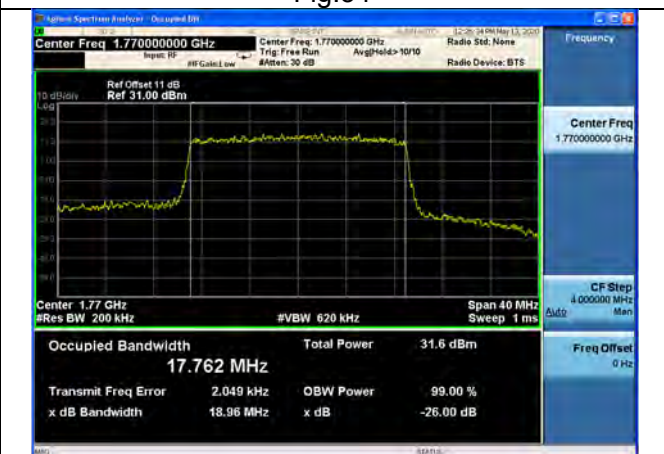


Fig.36

3 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM
66	1745	132322	1.4	1	0	Fig.1	Fig.2
			3	1	0	Fig.3	Fig.4
			5	1	0	Fig.5	Fig.6
			10	1	0	Fig.7	Fig.8
			15	1	0	Fig.9	Fig.10
			20	1	0	Fig.11	Fig.12



Fig.1

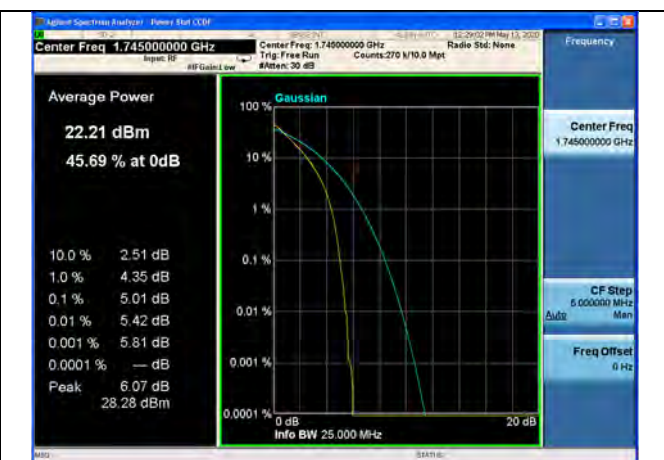


Fig.2



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
66	1720	132072	20	1	0	Fig.1
	1745	132322	20	1	0	Fig.2
	1770	132572	20	1	0	Fig.3

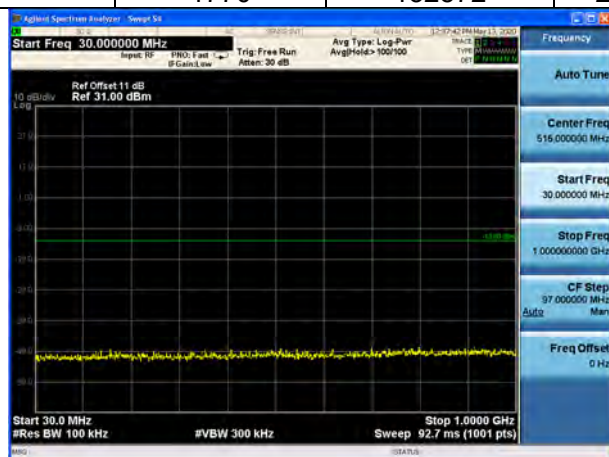


Fig.1

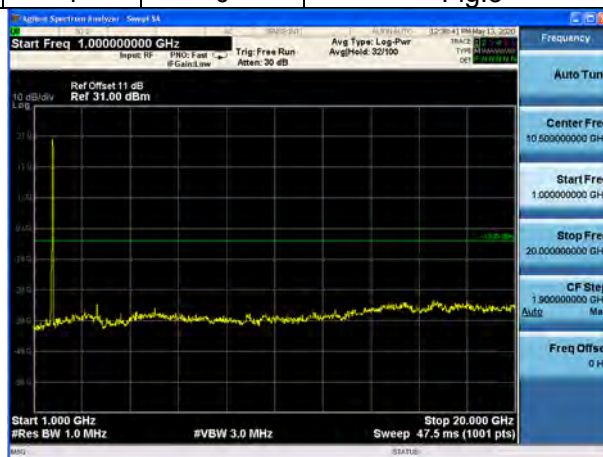


Fig.2

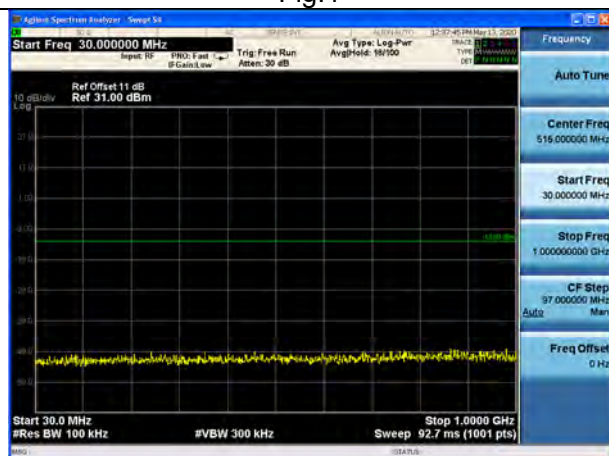


Fig3



Fig4

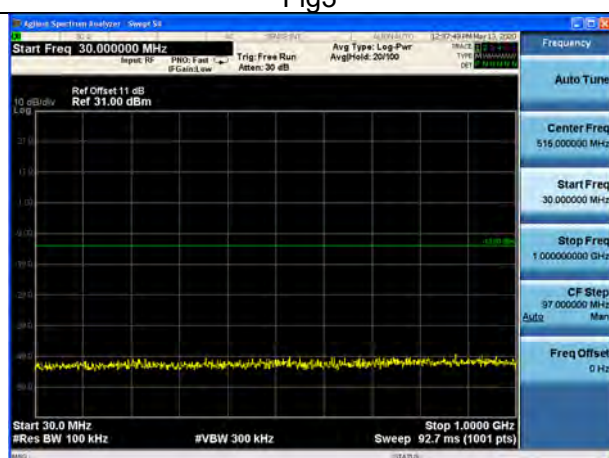


Fig.5



Fig.6

5 Band Edges Compliance

Test result

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
66	1710.7	131979	1.4	1	0	Fig.1
				6	0	Fig.2
	1779.3	132665		1	5	Fig.3
				6	0	Fig.4
	1711.5	131987	3	1	0	Fig.5
				15	0	Fig.6
	1778.5	132657		1	14	Fig.7
				15	0	Fig.8
	1712.5	131997	5	1	0	Fig.9
				25	0	Fig.10
	1777.5	132647		1	24	Fig.11
				25	0	Fig.12
	1715	132022	10	1	0	Fig.13
				50	0	Fig.14
	1775	132622		1	49	Fig.15
				50	0	Fig.16
	1717.5	132047	15	1	0	Fig.17
				75	0	Fig.18
	1772.5	132597		1	74	Fig.19
				75	0	Fig.20
	1772.5	132597	20	1	0	Fig.21
				100	0	Fig.22
	1770	132572		1	99	Fig.23
				100	0	Fig.24

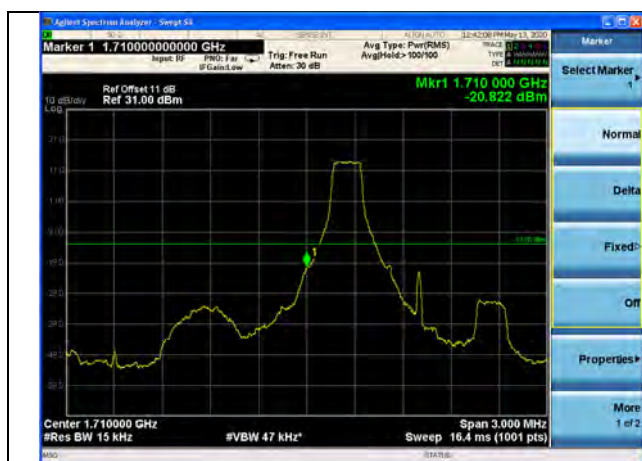


Fig.1

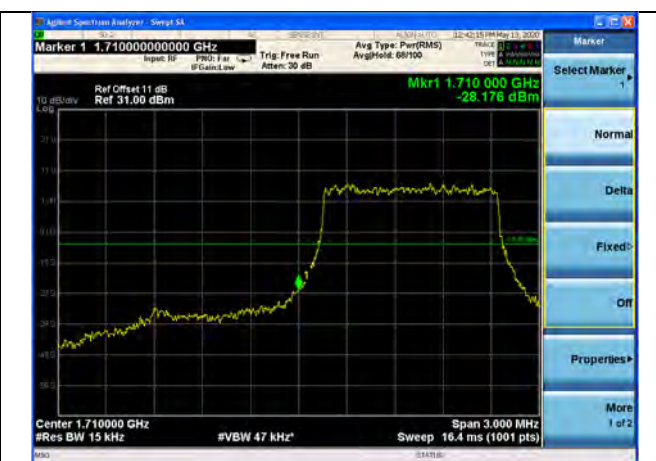


Fig.2

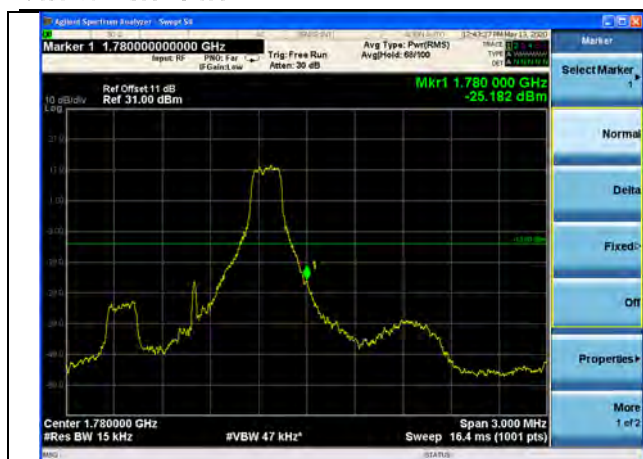


Fig.3

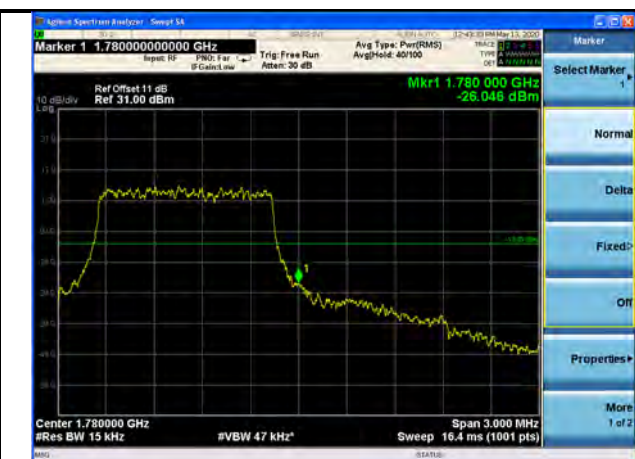


Fig.4

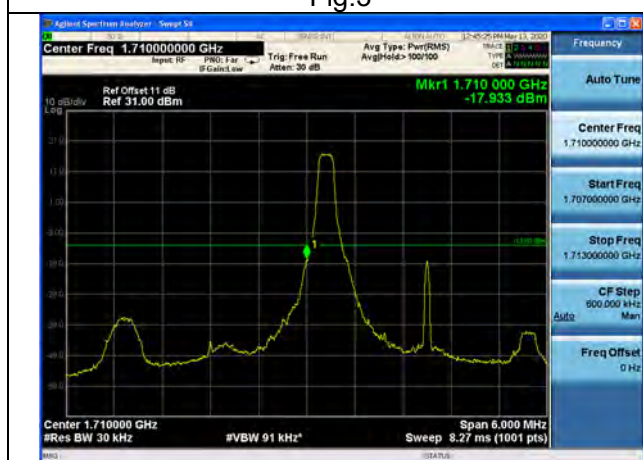


Fig.5

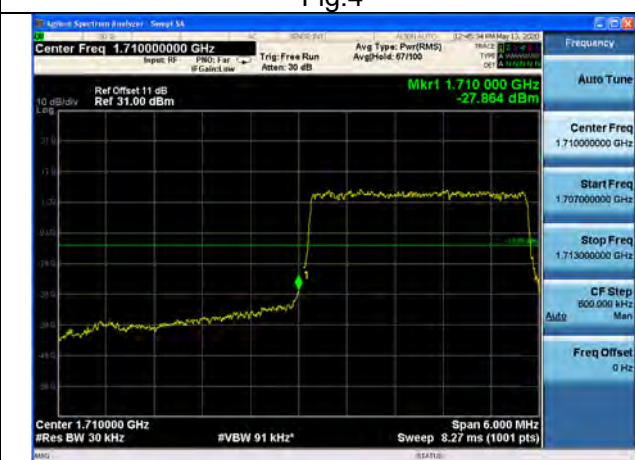


Fig.6

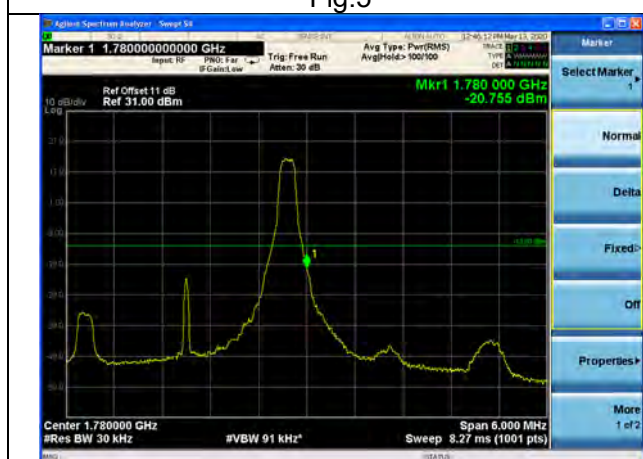


Fig.7

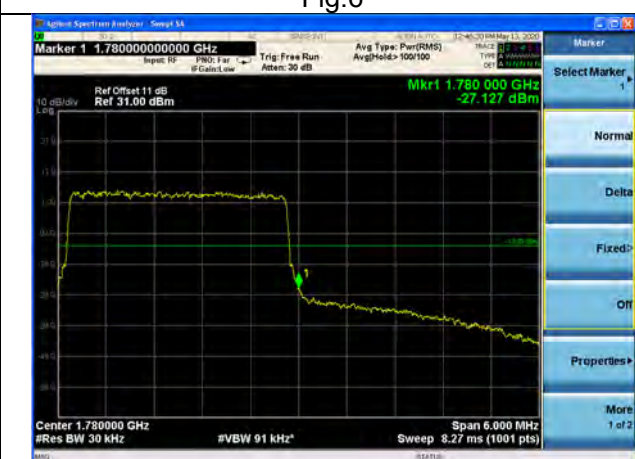


Fig.8

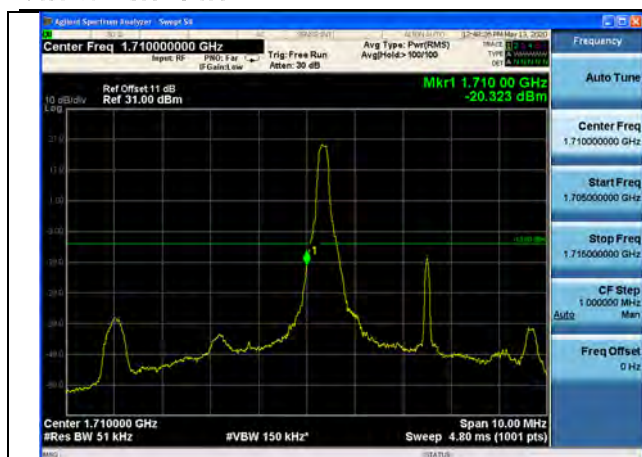


Fig.9

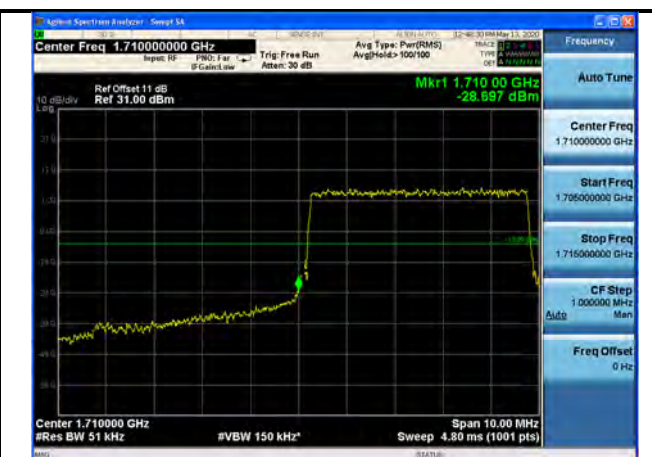


Fig.10

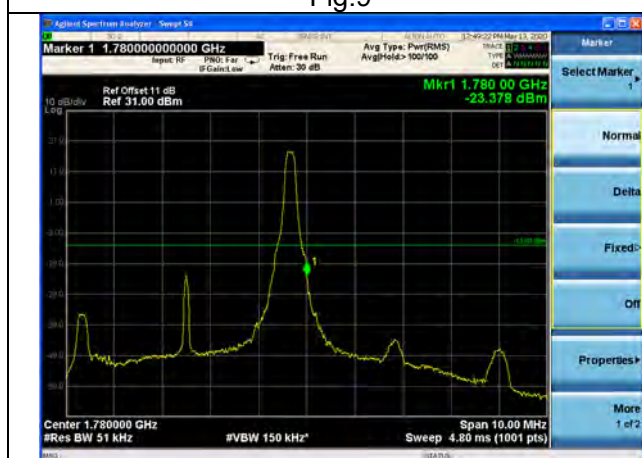


Fig.11



Fig.12

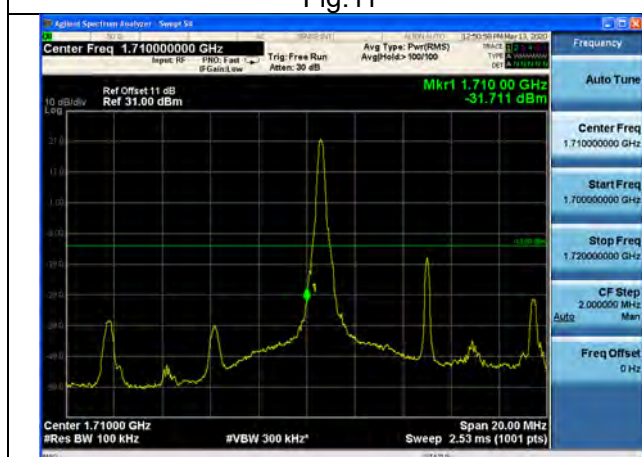


Fig.13



Fig.14

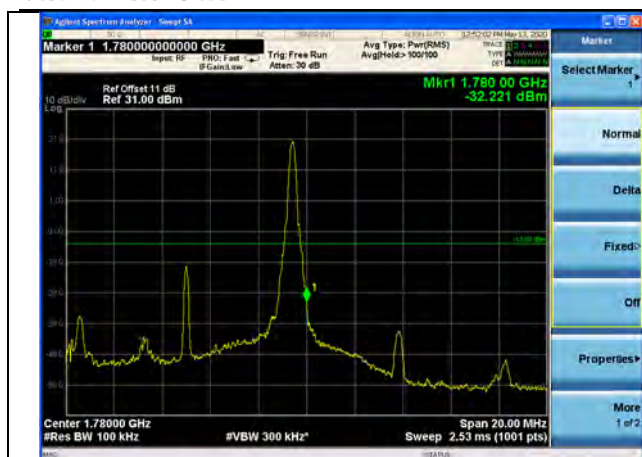


Fig.15



Fig.16

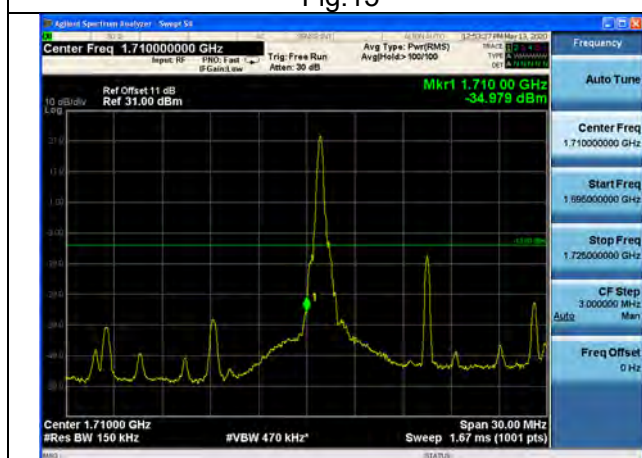


Fig.17

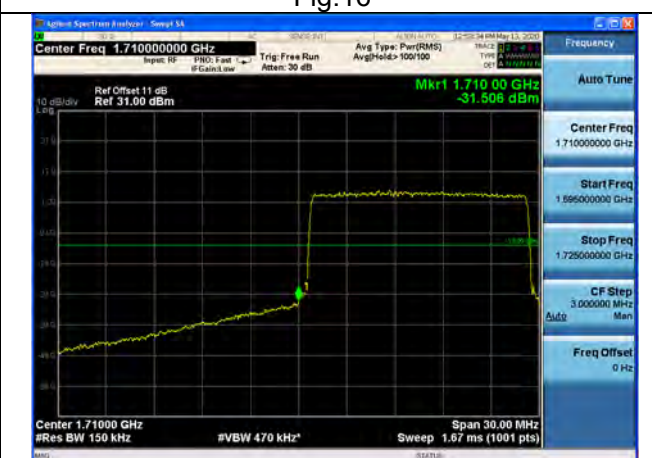


Fig.18

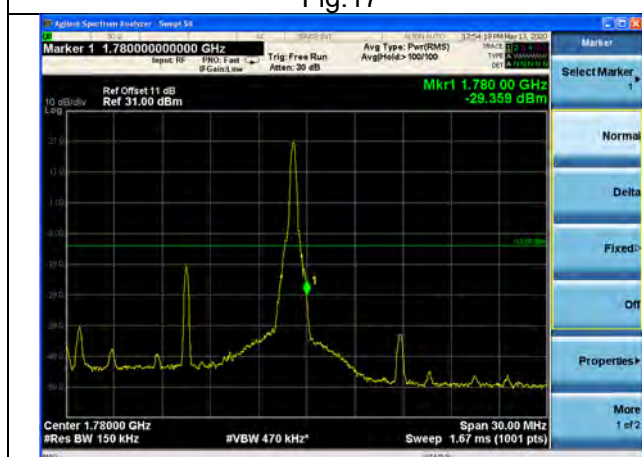


Fig.19



Fig.20

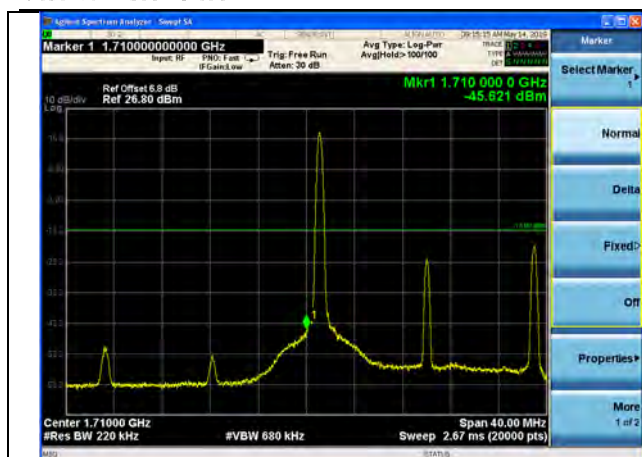


Fig.21

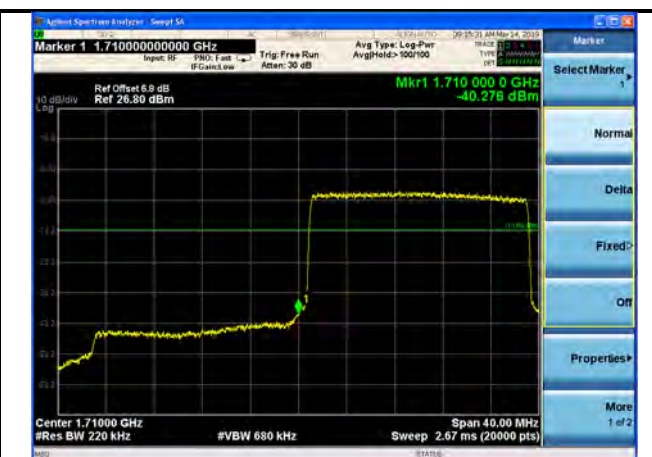


Fig.22

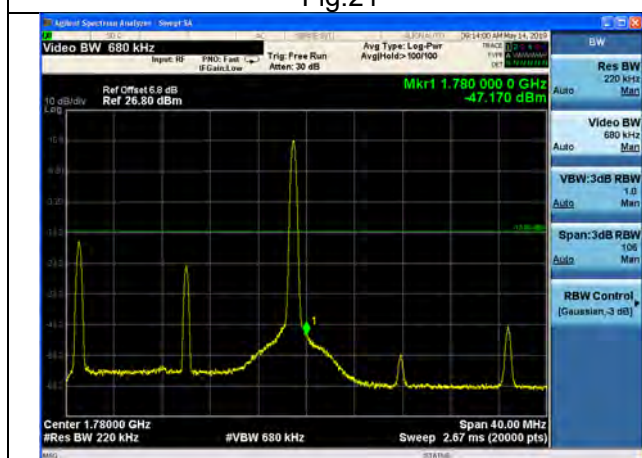


Fig.23



Fig.24

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band66 Low Channel					
		1.4M	3M	5M	10M	15M	20M
-10	NV	-0.004	0.018	0.009	0.007	-0.020	-0.016
0	NV	-0.014	-0.010	0.011	0.004	0.001	0.014
+10	NV	-0.009	0.006	0.023	0.003	0.013	0.031
+20	NV	0.000	0.000	0.000	0.000	0.000	0.000
+30	NV	-0.019	0.013	0.003	0.014	0.012	0.012
+40	NV	0.000	0.009	0.002	0.023	-0.016	0.000
+50	NV	-0.002	0.007	-0.001	-0.008	-0.013	0.031
+55	NV	0.020	0.012	-0.020	0.023	0.011	0.020
+20	LV	-0.010	-0.011	-0.015	-0.019	-0.005	0.028
+20	HV	0.024	-0.013	0.011	-0.020	-0.011	0.002

Temperature(°C)	Voltage	Test Result (ppm) Band66 High Channel					
		1.4M	3M	5M	10M	15M	20M
-10	NV	0.031	-0.013	-0.020	-0.017	-0.001	0.014
0	NV	-0.009	-0.010	-0.008	0.021	0.015	0.005
+10	NV	-0.010	0.017	0.002	0.010	0.003	-0.007
+20	NV	0.000	0.000	0.000	0.000	0.000	0.000
+30	NV	-0.002	-0.008	-0.007	-0.008	-0.008	-0.018
+40	NV	0.020	0.018	-0.006	0.010	-0.012	-0.007
+50	NV	0.013	0.009	-0.017	-0.026	0.012	0.009
+55	NV	-0.015	0.014	-0.017	0.018	-0.006	0.033
+20	LV	0.024	-0.005	0.019	-0.008	0.021	0.024
+20	HV	-0.002	-0.005	0.008	0.023	0.014	-0.010