

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 66

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1710.7	131979	1.4	1	0	24.02
				1	5	23.87
				3	2	22.76
				6	0	22.75
	1745	132322		1	0	23.99
				1	5	23.98
				3	2	22.73
				6	0	22.61
	1779.3	132665		1	0	24.11
				1	5	23.88
				3	2	22.68
				6	0	22.59
16QAM	1710.7	131979	1.4	1	0	22.95
				1	5	22.95
				3	2	21.89
				6	0	21.87
	1745	132322		1	0	22.87
				1	5	22.90
				3	2	21.92
				6	0	21.74
	1779.3	132665		1	0	22.69
				1	5	22.85
				3	2	21.90
				6	0	21.69
64QAM	1710.7	131979	1.4	1	0	22.81
				1	5	22.86
				3	2	21.65
				6	0	21.58
	1745	132322		1	0	22.84
				1	5	22.85
				3	2	21.83
				6	0	21.81
	1779.3	132665		1	0	22.68
				1	5	22.85
				3	2	21.65
				6	0	21.72

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1711.5	131987	3	1	0	24.09
				1	14	23.84
				8	4	22.63
				15	0	22.59
	1745	132322		1	0	24.12
				1	14	24.07
				8	4	22.64
				15	0	22.79
	1778.5	132657		1	0	24.01
				1	14	23.91
				8	4	22.68
				15	0	22.63
16QAM	1711.5	131987	3	1	0	22.80
				1	14	22.78
				8	4	21.85
				15	0	21.84
	1745	132322		1	0	22.83
				1	14	22.75
				8	4	21.90
				15	0	21.65
	1778.5	132657		1	0	22.91
				1	14	22.64
				8	4	21.90
				15	0	21.82
64QAM	1711.5	131987	3	1	0	22.91
				1	14	22.71
				8	4	21.71
				15	0	21.80
	1745	132322		1	0	22.86
				1	14	22.89
				8	4	21.73
				15	0	21.62
	1778.5	132657		1	0	22.70
				1	14	22.54
				8	4	21.75
				15	0	21.72

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1712.5	131997	5	1	0	24.03
				1	24	24.00
				12	6	22.84
				25	0	22.79
	1745	132322		1	0	24.08
				1	24	23.95
				12	6	22.88
				25	0	22.77
	1777.5	132647		1	0	24.04
				1	24	24.01
				12	6	22.82
				25	0	22.74
16QAM	1712.5	131997	5	1	0	22.65
				1	24	22.88
				12	6	21.71
				25	0	21.71
	1745	132322		1	0	22.91
				1	24	22.98
				12	6	22.01
				25	0	21.71
	1777.5	132647		1	0	22.77
				1	24	22.70
				12	6	21.70
				25	0	21.78
64QAM	1712.5	131997	5	1	0	22.90
				1	24	22.80
				12	6	21.59
				25	0	21.88
	1745	132322		1	0	22.98
				1	24	22.92
				12	6	21.70
				25	0	21.88
	1777.5	132647		1	0	22.92
				1	24	22.81
				12	6	21.66
				25	0	21.60

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1715	132022	10	1	0	23.95
				1	49	23.98
				24	12	22.61
				50	0	22.83
	1745	132322		1	0	23.90
				1	49	24.01
				24	12	22.79
				50	0	22.85
	1775	132622		1	0	23.89
				1	49	23.96
				24	12	22.60
				50	0	22.64
16QAM	1715	132022	10	1	0	22.77
				1	49	22.83
				24	12	21.74
				50	0	21.80
	1745	132322		1	0	22.89
				1	49	22.94
				24	12	21.84
				50	0	21.72
	1775	132622		1	0	22.73
				1	49	22.70
				24	12	21.96
				50	0	21.62
64QAM	1715	132022	10	1	0	22.57
				1	49	22.79
				24	12	21.88
				50	0	21.51
	1745	132322		1	0	22.78
				1	49	22.86
				24	12	21.80
				50	0	21.81
	1775	132622		1	0	22.76
				1	49	22.89
				24	12	21.76
				50	0	21.57

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1717.5	132047	15	1	0	23.74
				1	74	23.98
				40	18	22.80
				75	0	22.70
	1745	132322		1	0	23.88
				1	74	23.95
				40	18	22.59
				75	0	22.69
	1772.5	132597		1	0	23.99
				1	74	24.02
				40	18	22.70
				75	0	22.68
16QAM	1717.5	132047	15	1	0	22.64
				1	74	22.68
				40	18	21.81
				75	0	21.75
	1745	132322		1	0	23.00
				1	74	22.96
				40	18	21.97
				75	0	21.88
	1772.5	132597		1	0	22.94
				1	74	22.78
				40	18	21.83
				75	0	21.83
64QAM	1717.5	132047	15	1	0	22.72
				1	74	22.71
				40	18	21.68
				75	0	21.68
	1745	132322		1	0	22.70
				1	74	22.75
				40	18	21.98
				75	0	21.82
	1772.5	132597		1	0	22.62
				1	74	22.76
				40	18	21.74
				75	0	21.84

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1720	132072	20	1	0	24.02
				1	99	24.02
				50	25	22.85
				100	0	22.79
	1745	132322		1	0	24.12
				1	99	24.12
				50	25	22.89
				100	0	22.88
	1770	132572		1	0	24.04
				1	99	24.04
				50	25	22.88
				100	0	22.83
16QAM	1720	132072	20	1	0	22.92
				1	99	22.91
				50	25	21.97
				100	0	21.86
	1745	132322		1	0	23.01
				1	99	23.01
				50	25	22.03
				100	0	21.93
	1770	132572		1	0	22.95
				1	99	22.98
				50	25	21.96
				100	0	21.90
64QAM	1720	132072	20	1	0	22.89
				1	99	22.87
				50	25	21.92
				100	0	21.83
	1745	132322		1	0	22.94
				1	99	22.93
				50	25	22.01
				100	0	21.90
	1770	132572		1	0	22.87
				1	99	22.88
				50	25	21.95
				100	0	21.86

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	
66	1710.7	131979	1.4	6	0	1.1	Fig.1	1.1	Fig.2	1.1	Fig.3
	1745	132322		6	0	1.1	Fig.4	1.1	Fig.5	1.1	Fig.6
	1779.3	132665		6	0	1.1	Fig.7	1.1	Fig.8	1.1	Fig.9
	1711.5	131987	3	15	0	2.7	Fig.10	2.7	Fig.11	2.7	Fig.12
	1745	132322		15	0	2.7	Fig.13	2.7	Fig.14	2.7	Fig.15
	1778.5	132657		15	0	2.7	Fig.16	2.7	Fig.17	2.7	Fig.18
	1712.5	131997	5	25	0	4.5	Fig.19	4.5	Fig.20	4.5	Fig.21
	1745	132322		25	0	4.5	Fig.22	4.5	Fig.23	4.5	Fig.24
	1777.5	132647		25	0	4.5	Fig.25	4.5	Fig.26	4.5	Fig.27
	1715	132022	10	50	0	9.0	Fig.28	9.0	Fig.29	9.0	Fig.30
	1745	132322		50	0	9.0	Fig.31	9.0	Fig.32	9.0	Fig.33
	1775	132622		50	0	9.0	Fig.34	9.0	Fig.35	9.0	Fig.36
	1717.5	132047	15	75	0	13.4	Fig.37	13.3	Fig.38	13.3	Fig.39
	1745	132322		75	0	13.4	Fig.40	13.4	Fig.41	13.3	Fig.42
	1772.5	132597		75	0	13.4	Fig.43	13.4	Fig.44	13.4	Fig.45
	1720	132072	20	100	0	17.8	Fig.46	17.7	Fig.47	17.8	Fig.48
	1745	132322		100	0	17.8	Fig.49	17.8	Fig.50	17.8	Fig.51
	1770	132572		100	0	17.8	Fig.52	17.8	Fig.53	17.8	Fig.54

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
66	1710.7	131979	1.4	6	0	1.3	Fig.1	1.2	Fig.2	1.2	Fig.3
	1745	132322		6	0	1.3	Fig.4	1.2	Fig.5	1.2	Fig.6
	1779.3	132665		6	0	1.2	Fig.7	1.3	Fig.8	1.3	Fig.9
	1711.5	131987	3	15	0	3.0	Fig.10	2.9	Fig.11	2.9	Fig.12
	1745	132322		15	0	3.0	Fig.13	2.9	Fig.14	3.0	Fig.15
	1778.5	132657		15	0	3.0	Fig.16	2.9	Fig.17	3.0	Fig.18
	1712.5	131997	5	25	0	4.9	Fig.19	4.9	Fig.20	4.9	Fig.21
	1745	132322		25	0	4.9	Fig.22	4.9	Fig.23	4.9	Fig.24
	1777.5	132647		25	0	4.9	Fig.25	4.9	Fig.26	4.9	Fig.27
	1715	132022	10	50	0	9.9	Fig.28	9.9	Fig.29	9.7	Fig.30
	1745	132322		50	0	10.0	Fig.31	9.7	Fig.32	9.8	Fig.33
	1775	132622		50	0	9.8	Fig.34	9.7	Fig.35	9.8	Fig.36
	1717.5	132047	15	75	0	14.2	Fig.37	14.2	Fig.38	14.3	Fig.39
	1745	132322		75	0	14.3	Fig.40	13.9	Fig.41	13.9	Fig.42
	1772.5	132597		75	0	14.2	Fig.43	14.0	Fig.44	14.1	Fig.45
	1720	132072	20	100	0	18.8	Fig.46	18.8	Fig.47	18.8	Fig.48
	1745	132322		100	0	18.8	Fig.49	18.7	Fig.50	18.7	Fig.51
	1770	132572		100	0	18.8	Fig.52	18.8	Fig.53	18.7	Fig.54

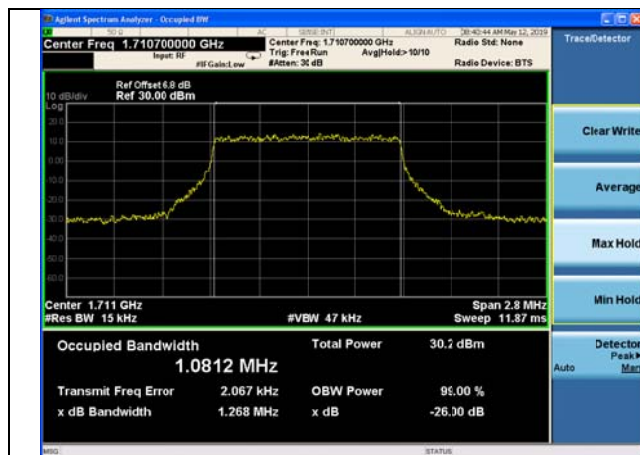


Fig.1

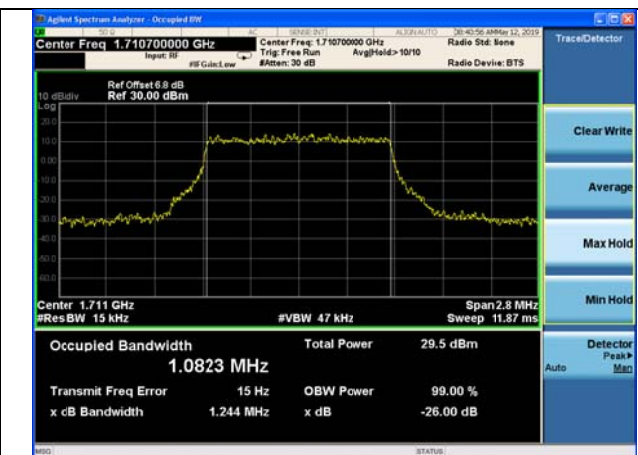


Fig.2

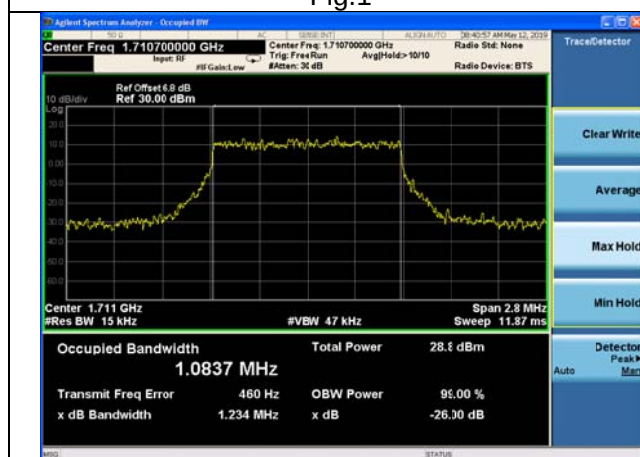


Fig.3

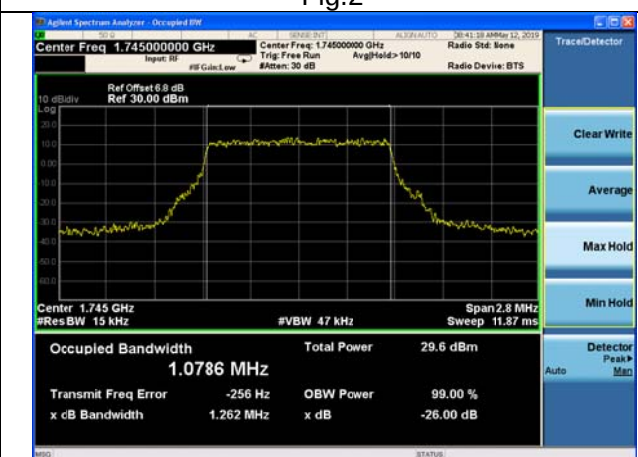


Fig.4

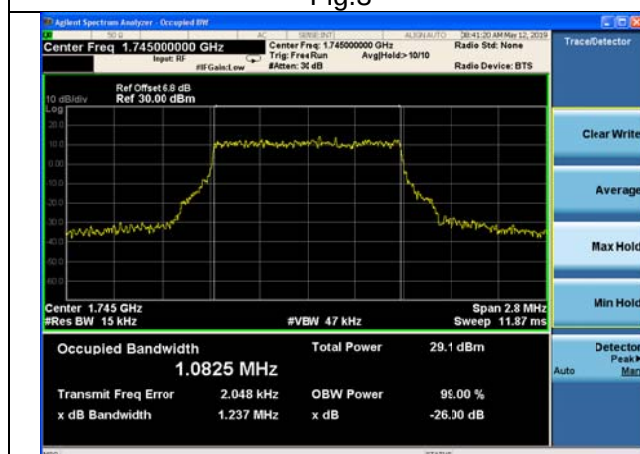


Fig.5

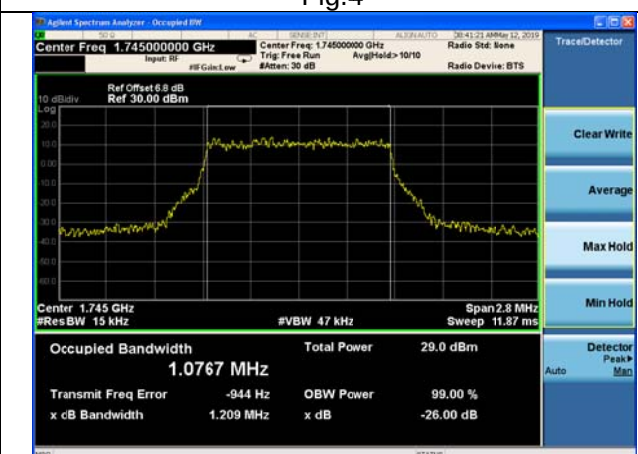


Fig.6

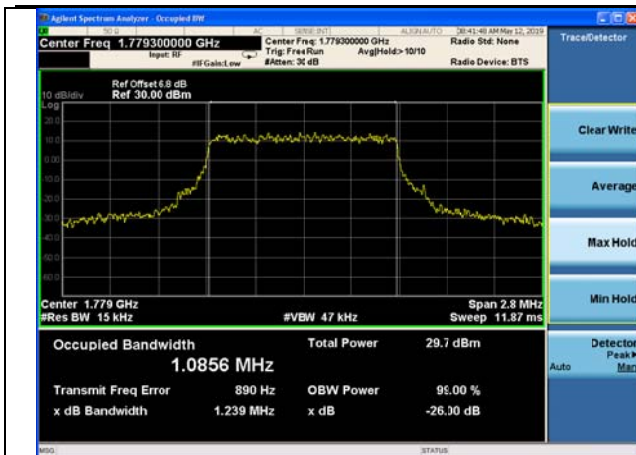


Fig.7

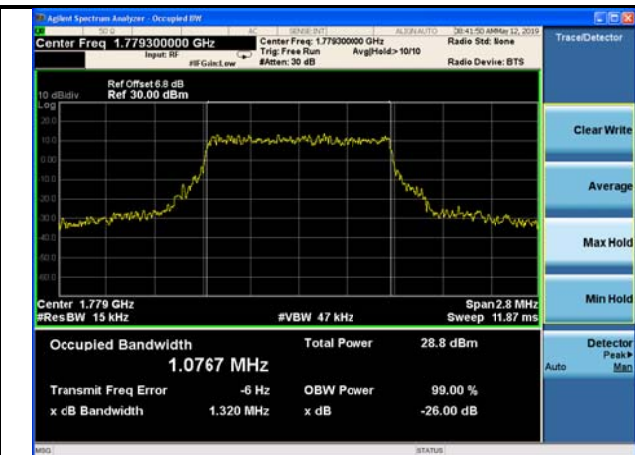


Fig.8

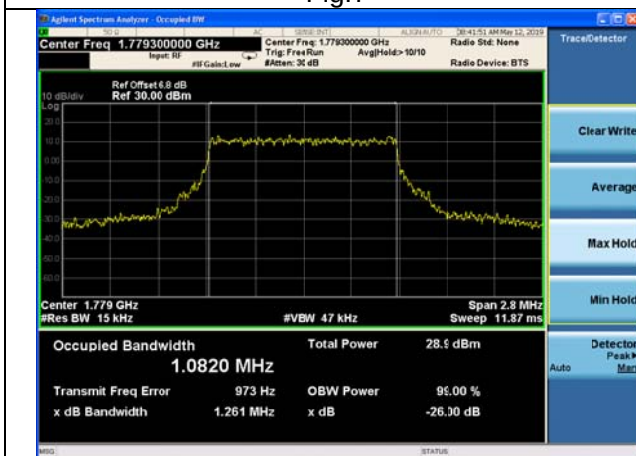


Fig.9

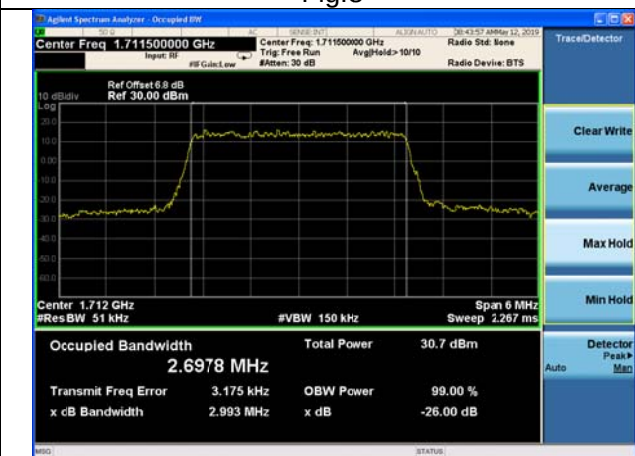


Fig.10

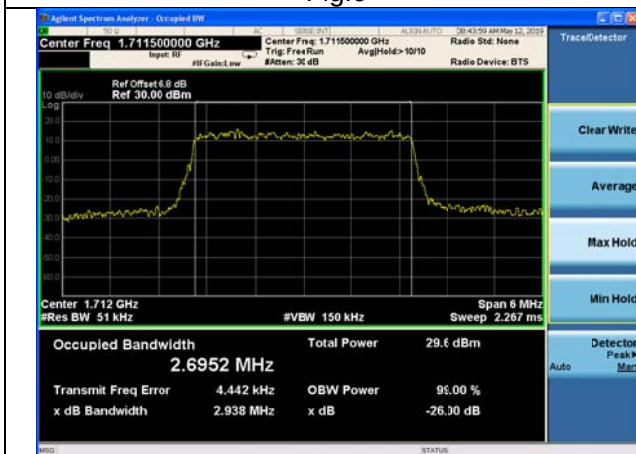


Fig.11

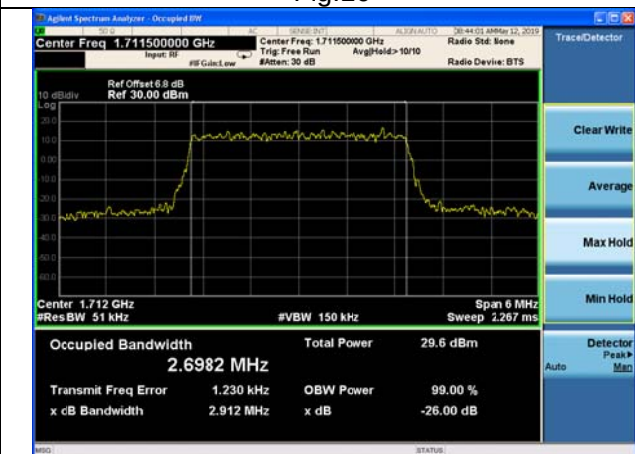


Fig.12

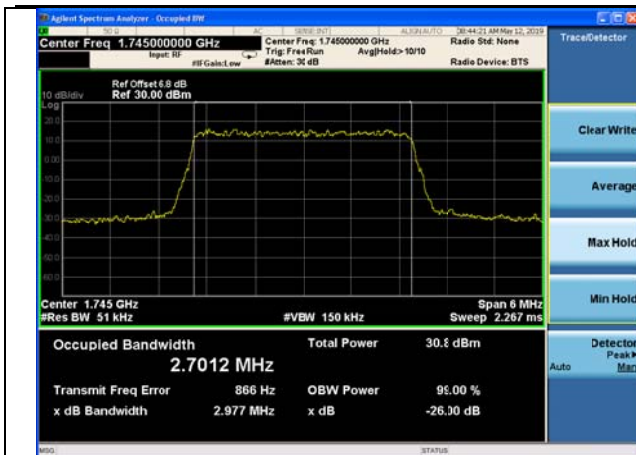


Fig.13

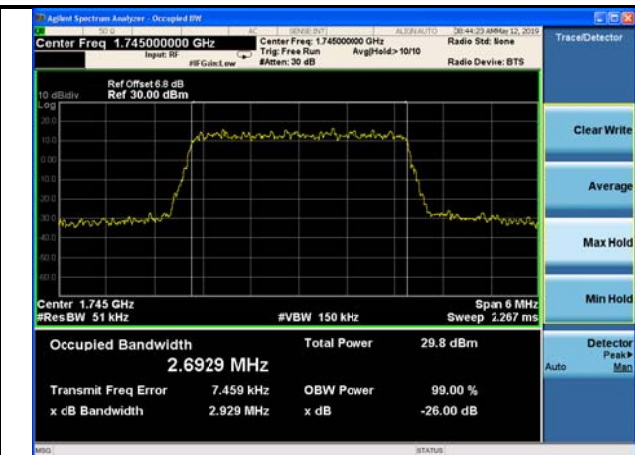


Fig.14

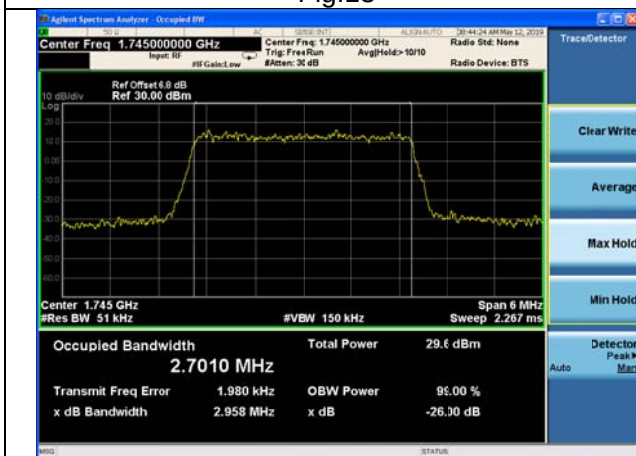


Fig.15

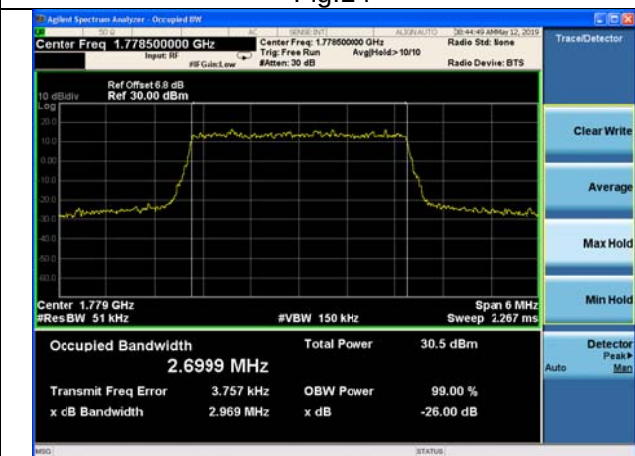


Fig.16

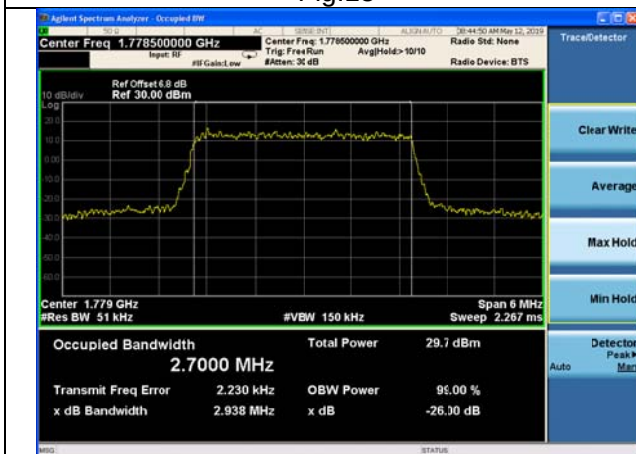


Fig.17

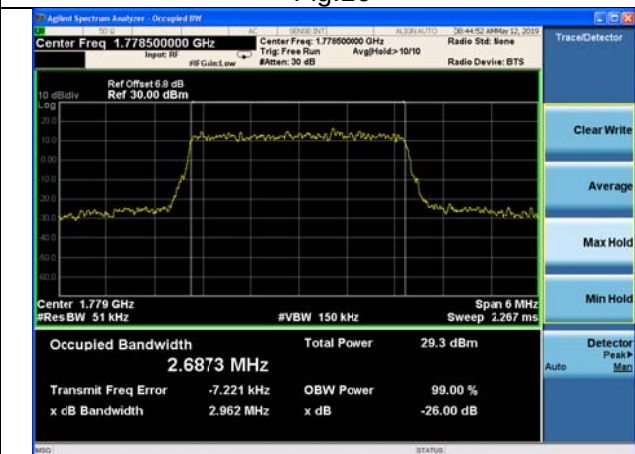


Fig.18

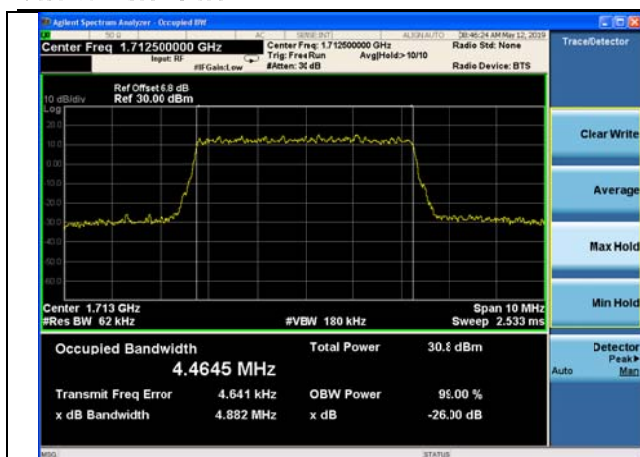


Fig.19

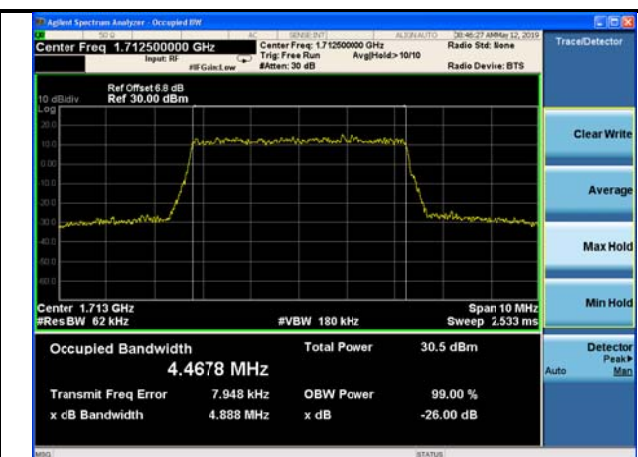


Fig.20

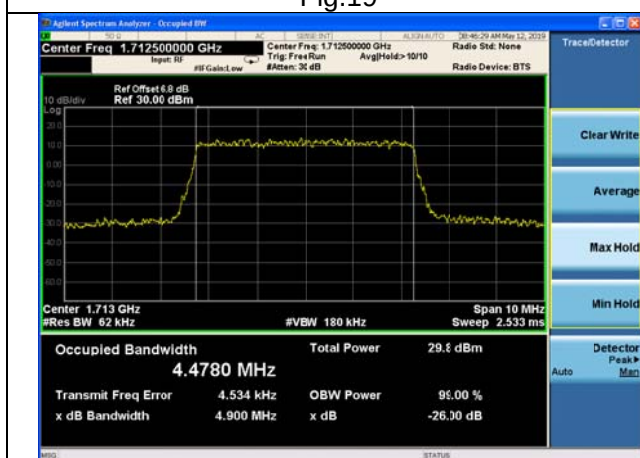


Fig.21

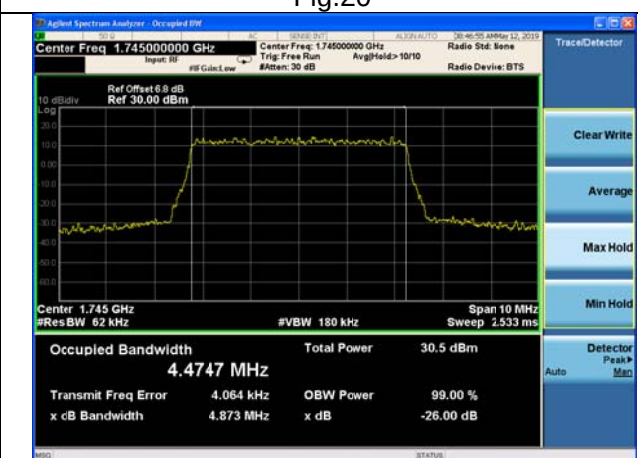


Fig.22

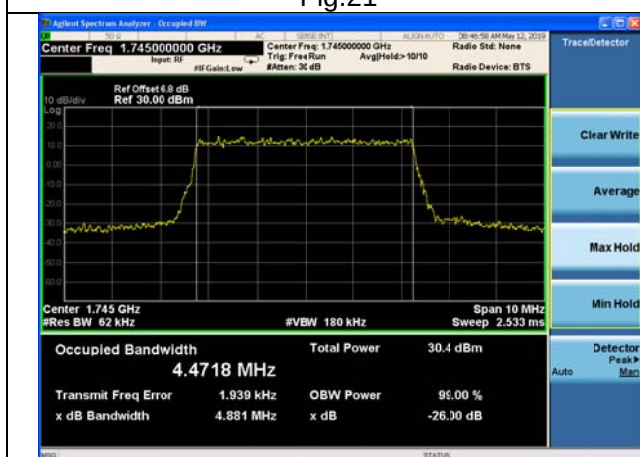


Fig.23

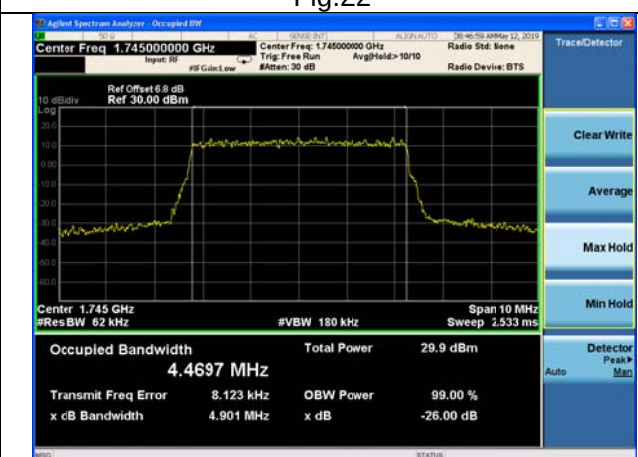


Fig.24

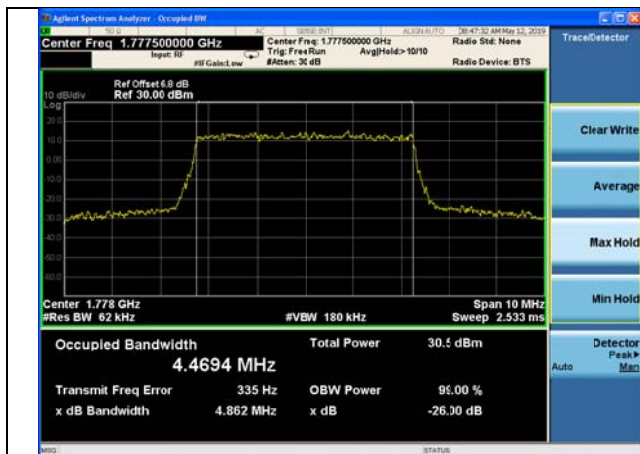


Fig.25

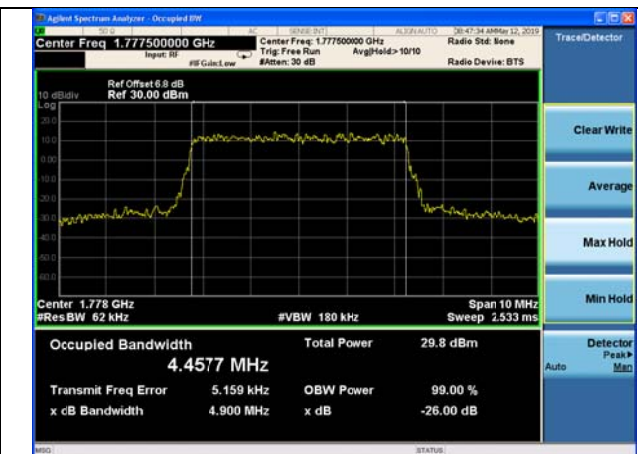


Fig.26

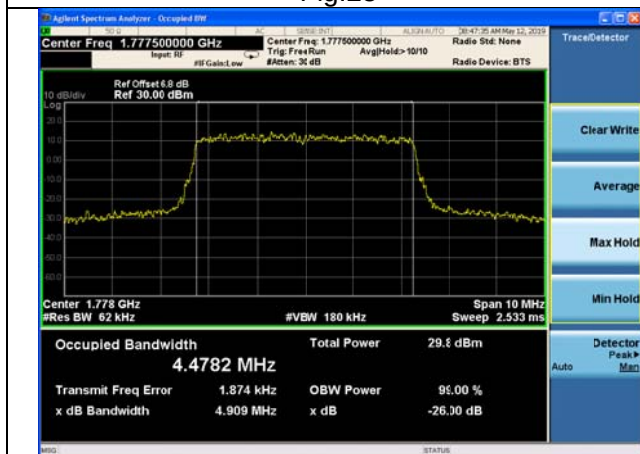


Fig.27

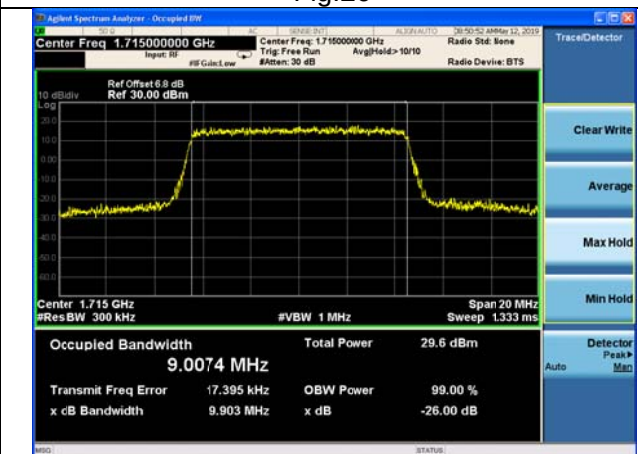


Fig.28

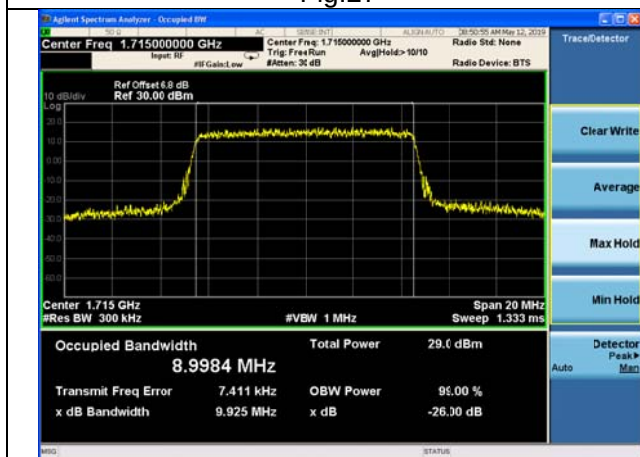


Fig.29

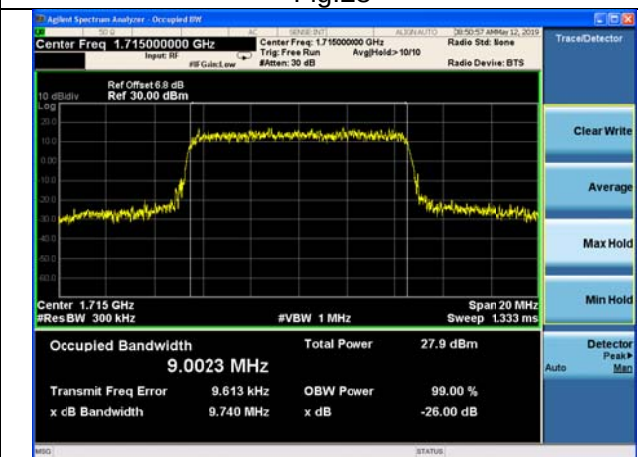


Fig.30

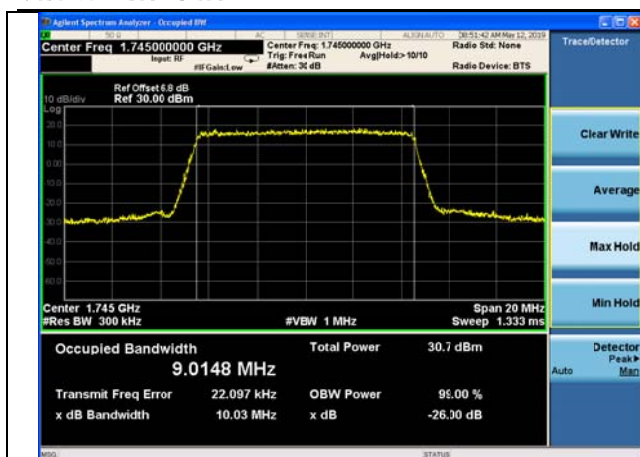


Fig.31

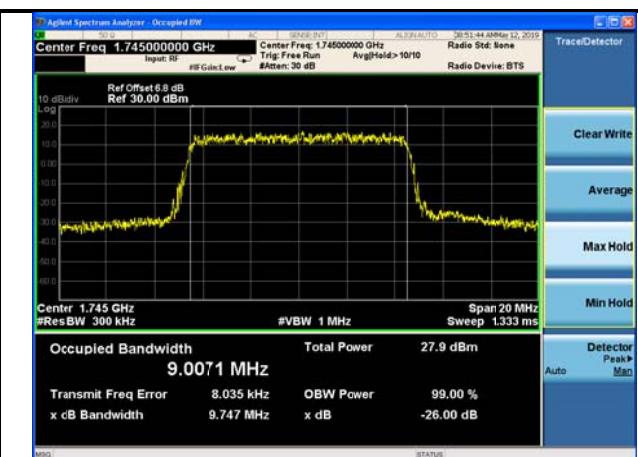


Fig.32

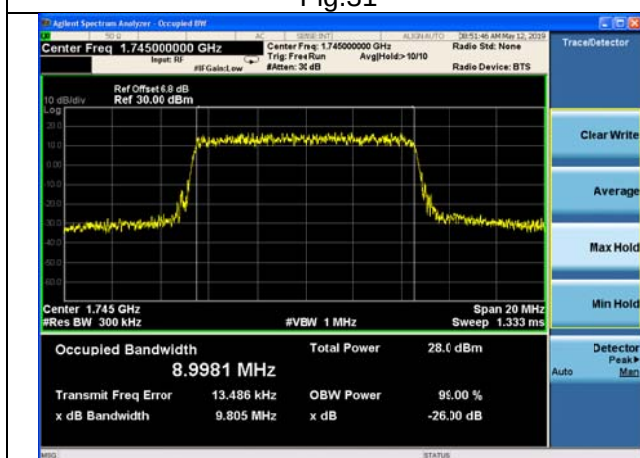


Fig.33

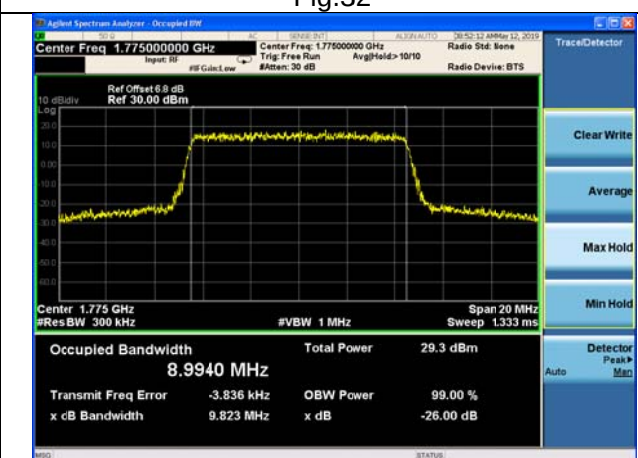


Fig.34

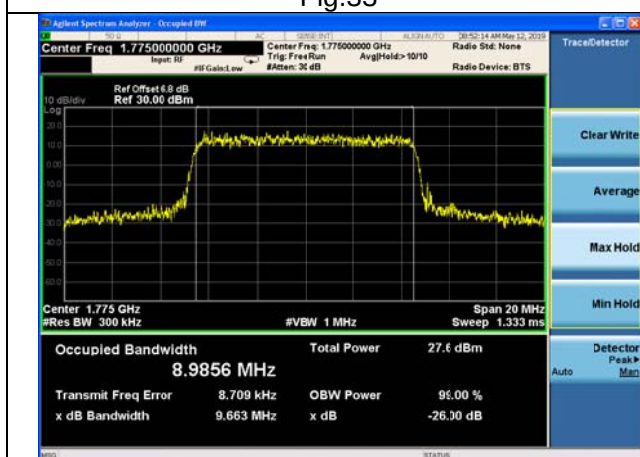


Fig.35

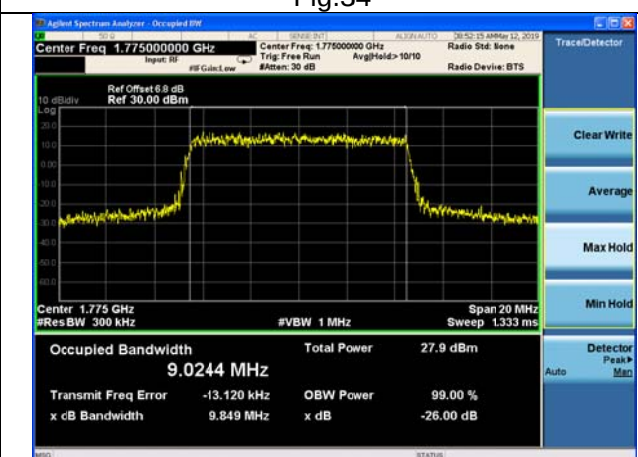


Fig.36

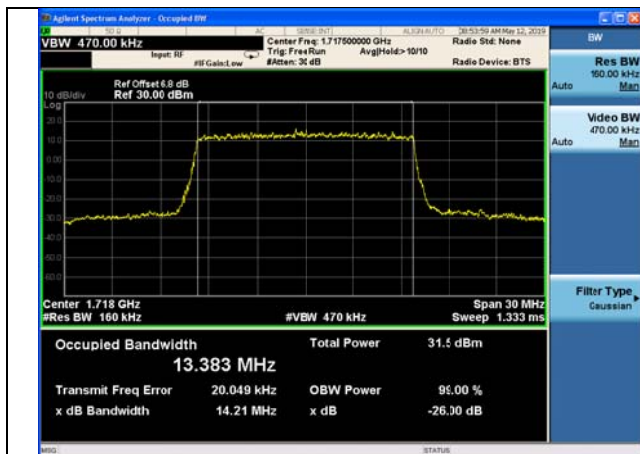


Fig.37

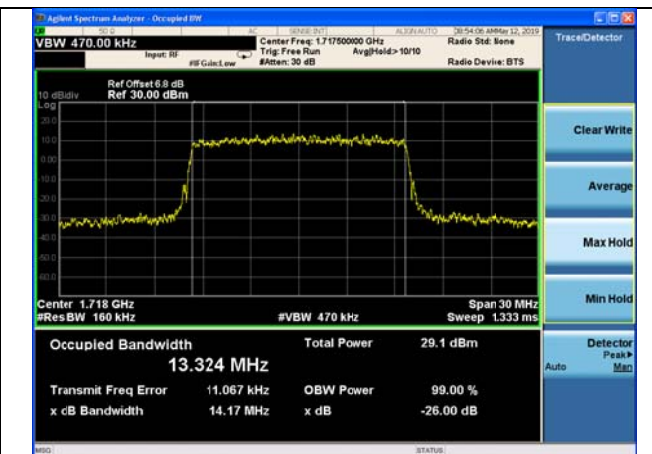


Fig.38

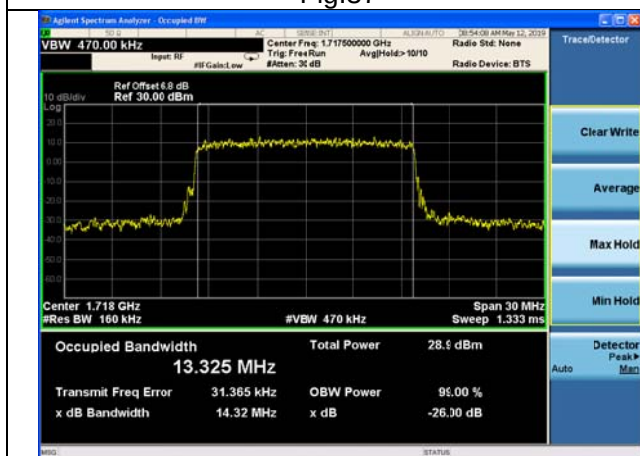


Fig.39

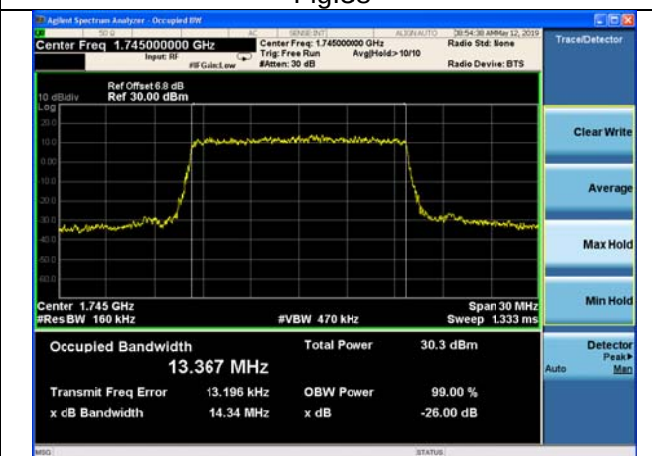


Fig.40

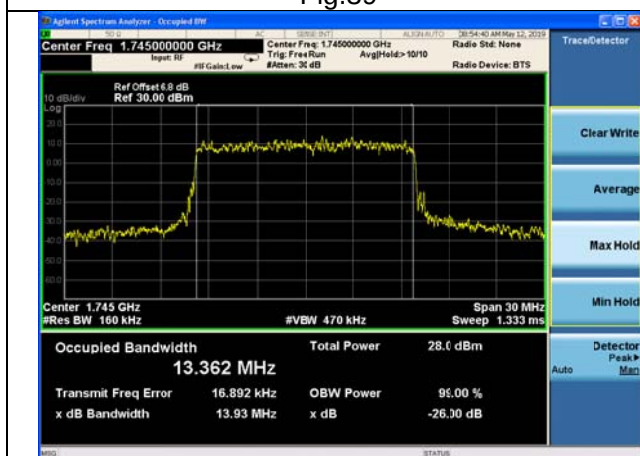


Fig.41

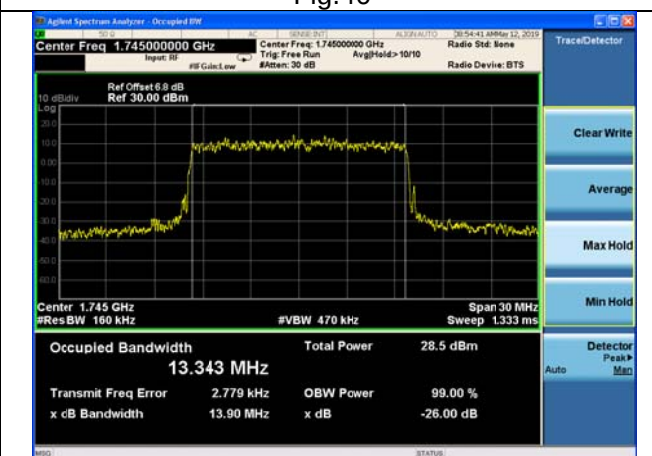


Fig.42

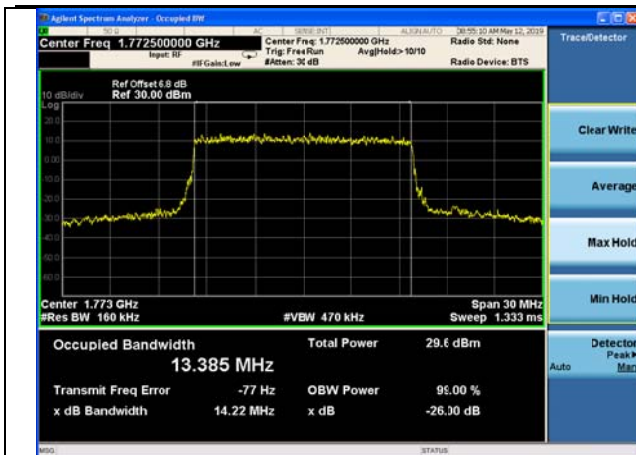


Fig.43

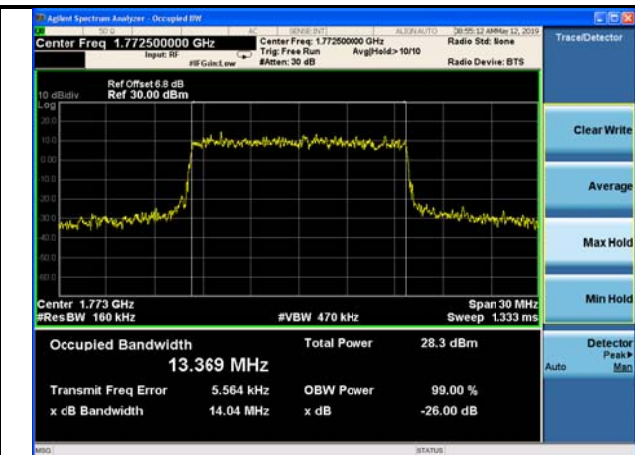


Fig.44

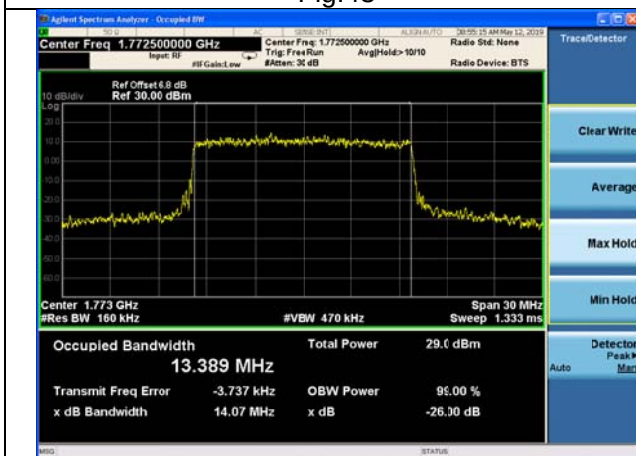


Fig.45

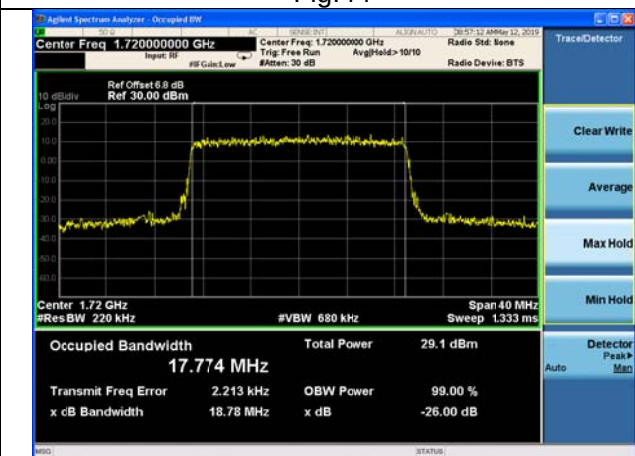


Fig.46

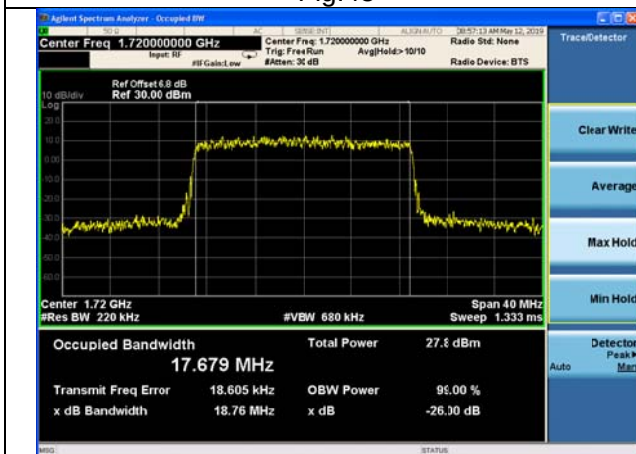


Fig.47

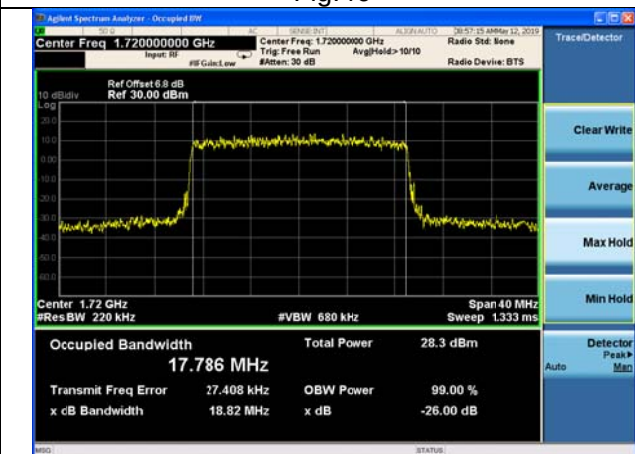


Fig.48

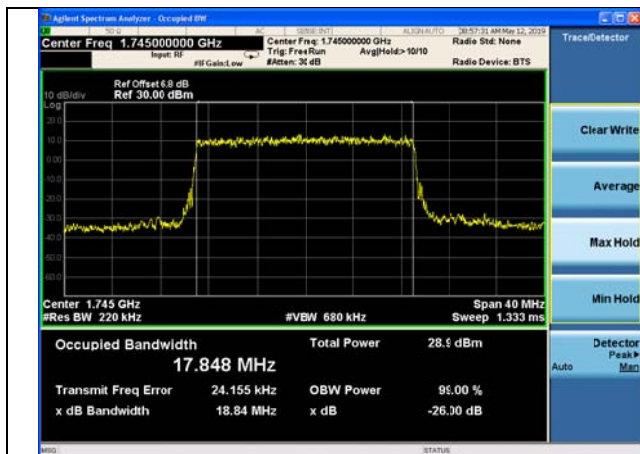


Fig.49

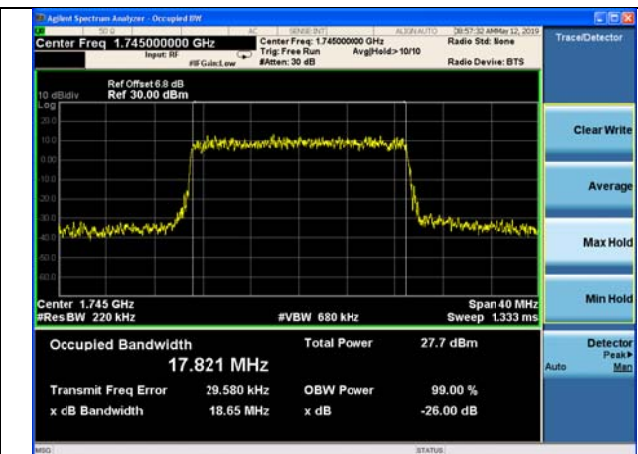


Fig.50

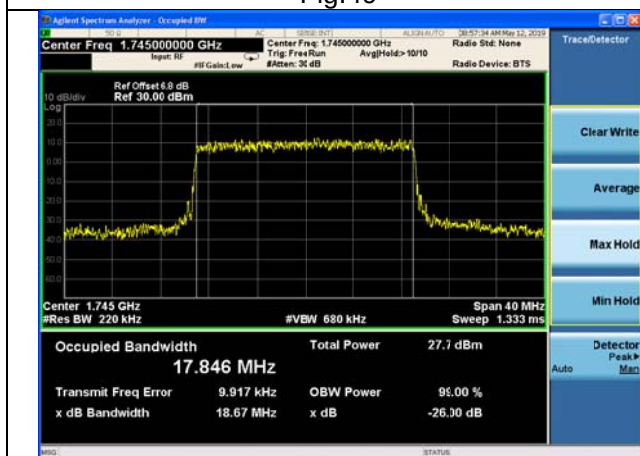


Fig.51

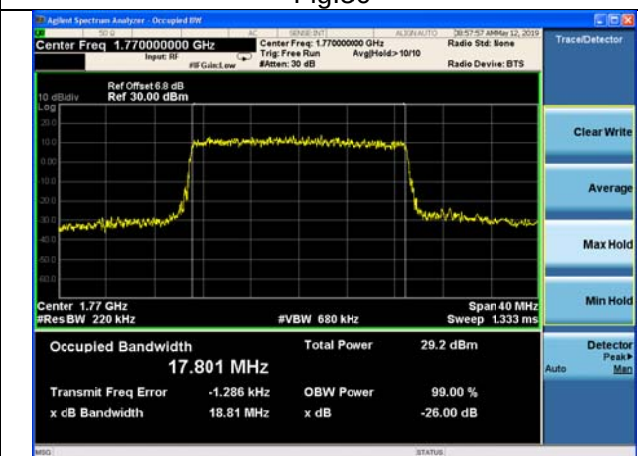


Fig.52

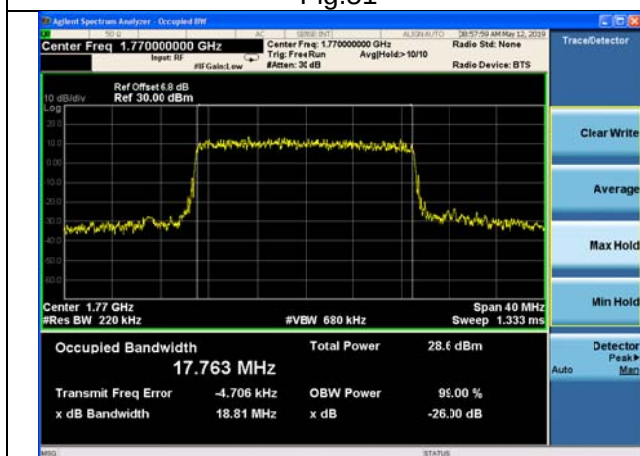


Fig.53

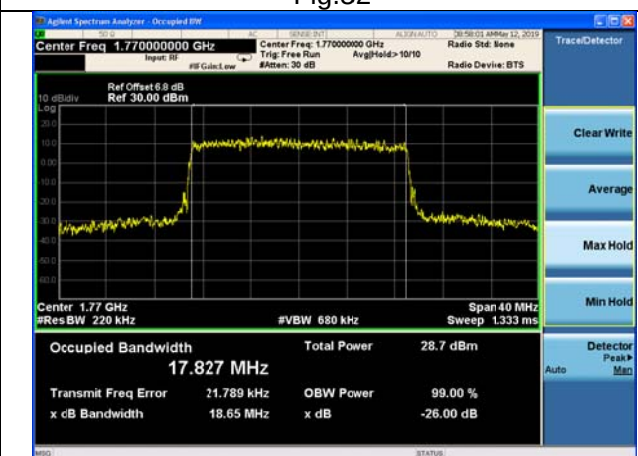


Fig.54

3 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
66	1745	132322	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
			15	1	0	Fig.13	Fig.14	Fig.15
			20	1	0	Fig.16	Fig.17	Fig.18

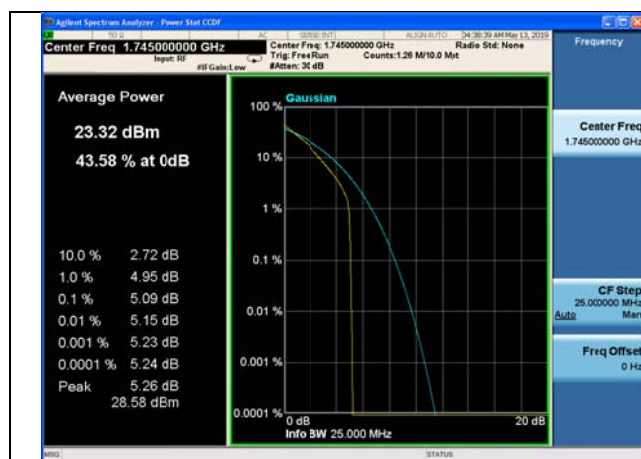


Fig.1

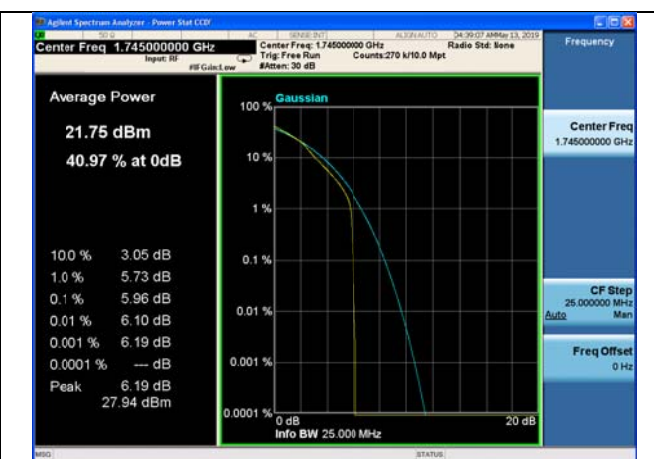


Fig.2

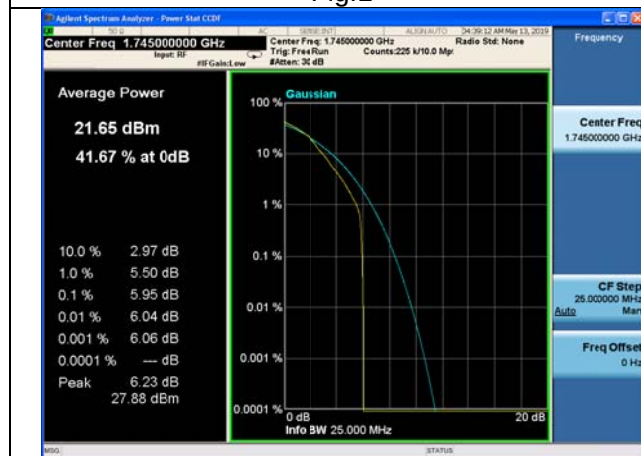


Fig.3



Fig.4

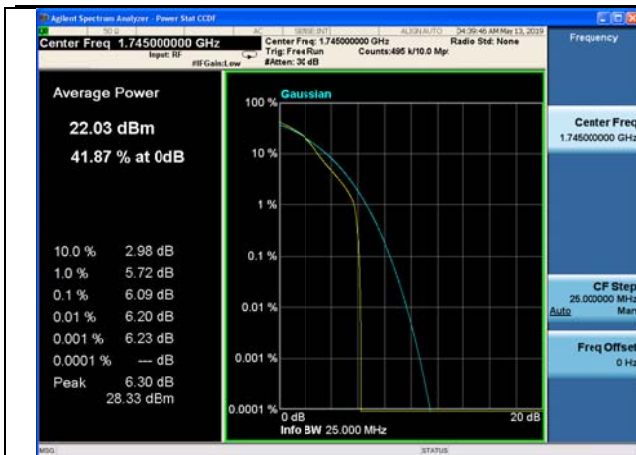


Fig.5



Fig.6

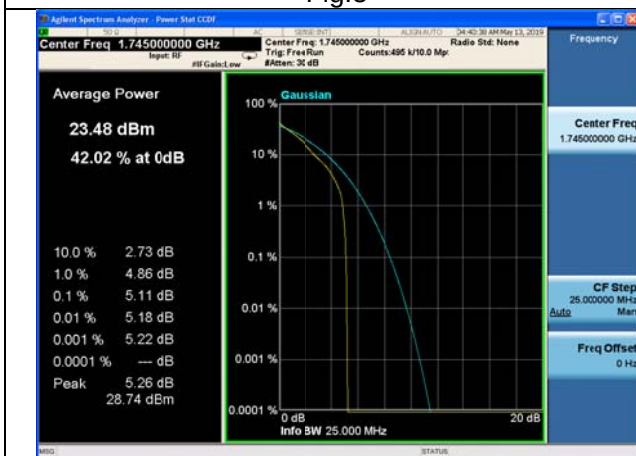


Fig.7



Fig.8



Fig.9

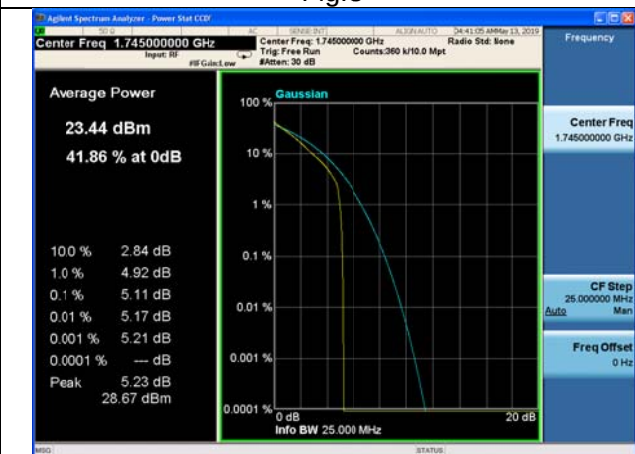


Fig.10



Fig.11



Fig.12



Fig.13



Fig.14



Fig.15



Fig.16



Fig.17

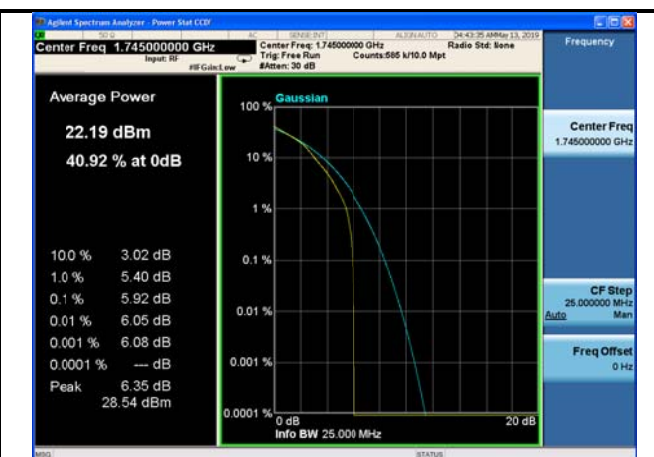


Fig.18

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

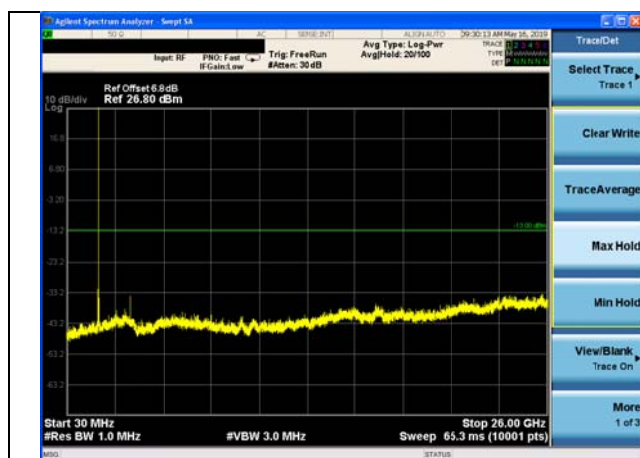


Fig.1



Fig.2

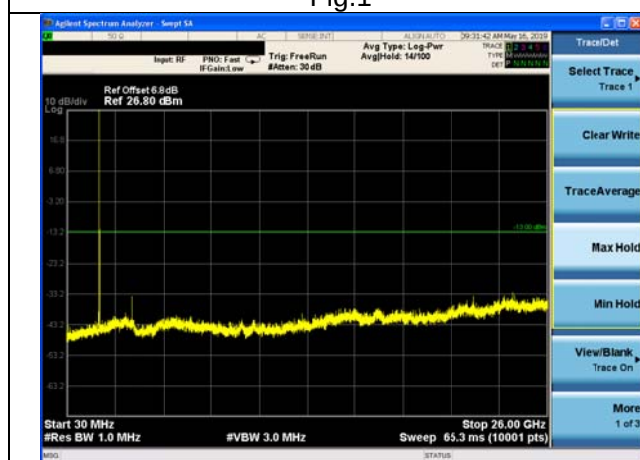


Fig3

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

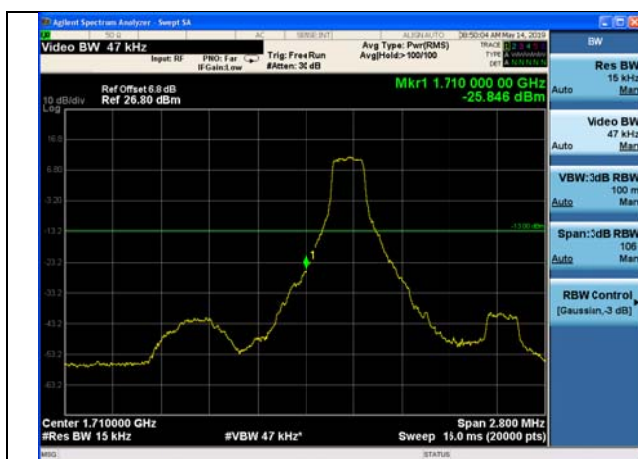


Fig.1

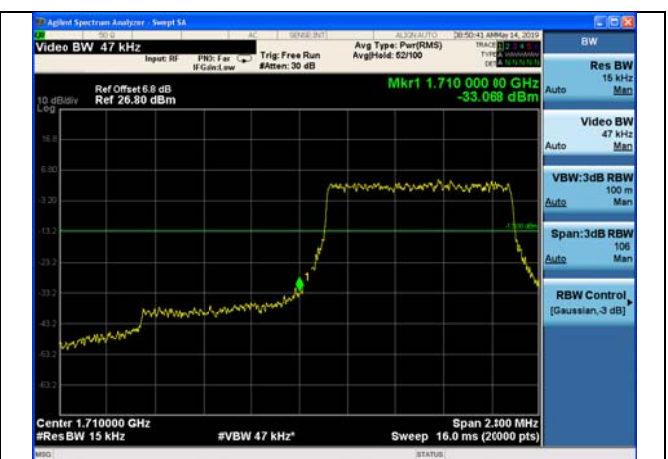


Fig.2



Fig.3

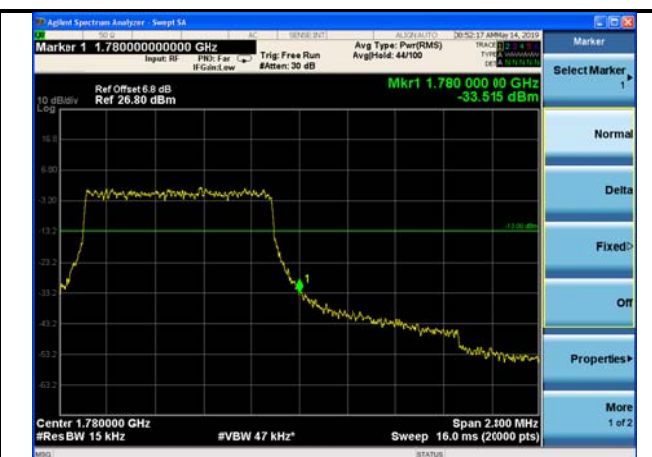


Fig.4

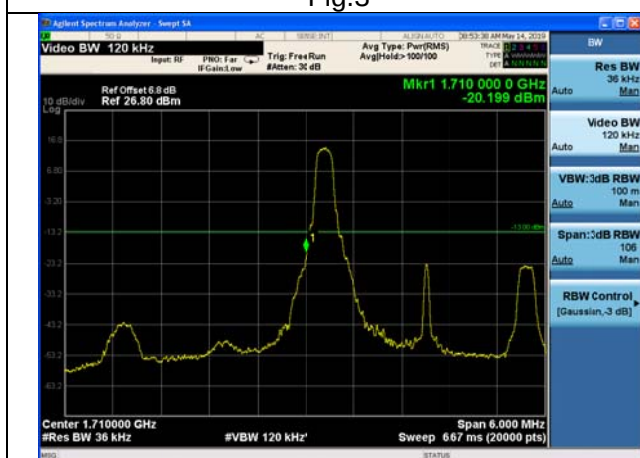


Fig.5



Fig.6

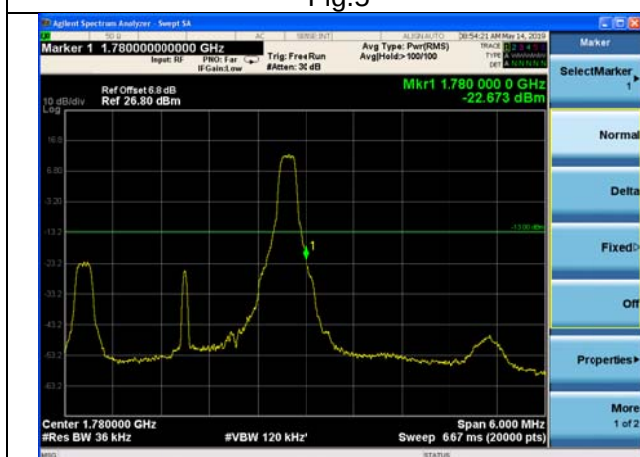


Fig.7



Fig.8

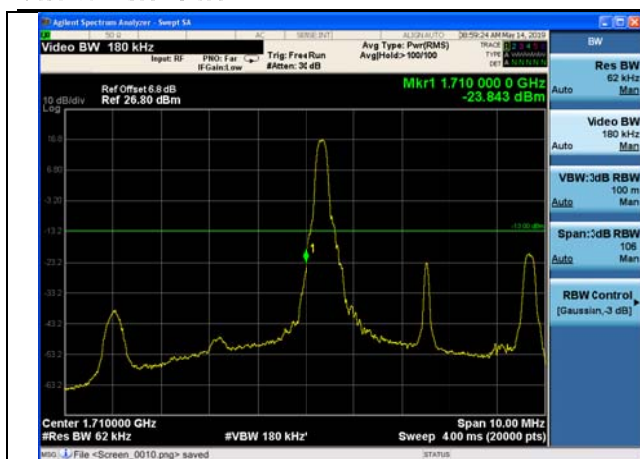


Fig.9

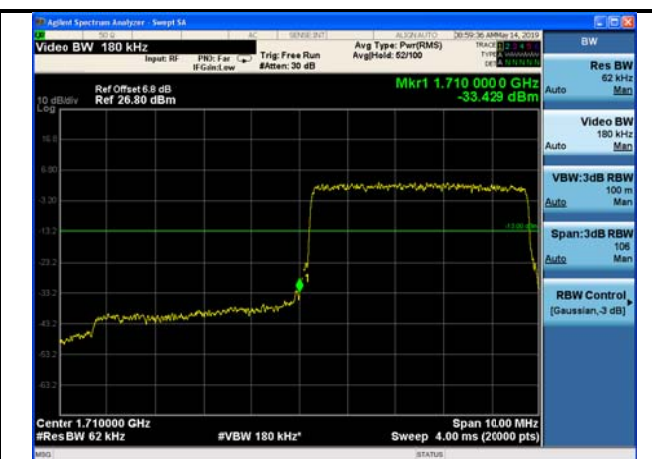


Fig.10

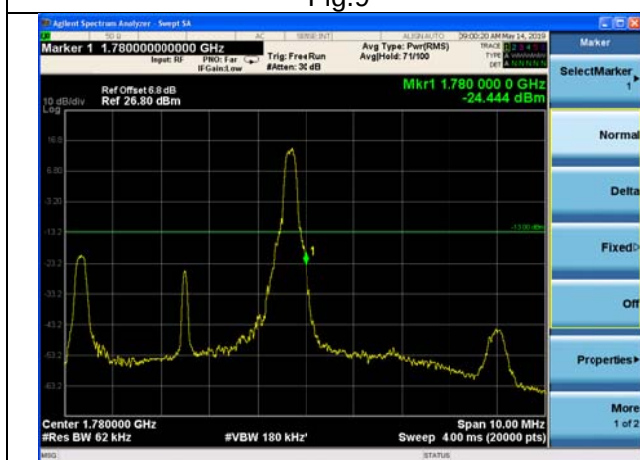


Fig.11



Fig.12

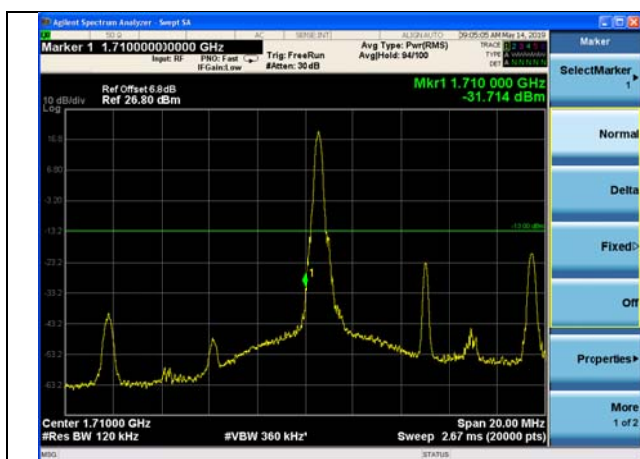


Fig.13

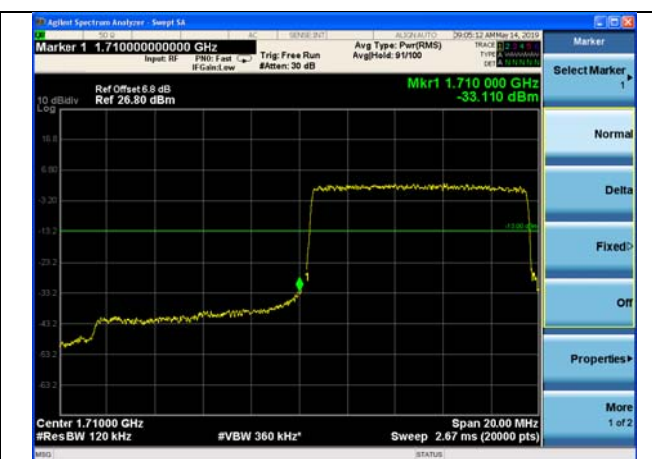


Fig.14

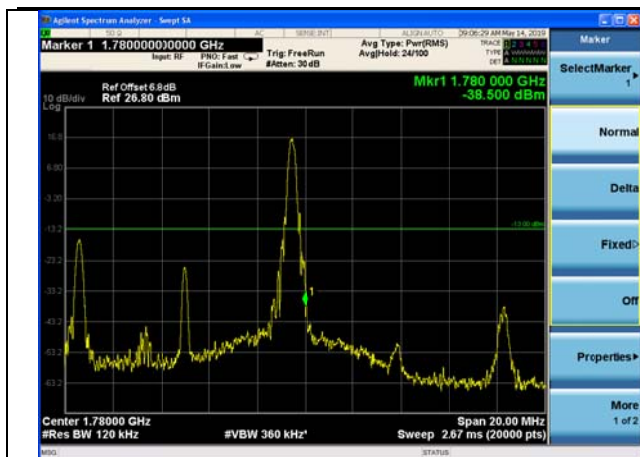


Fig.15



Fig.16

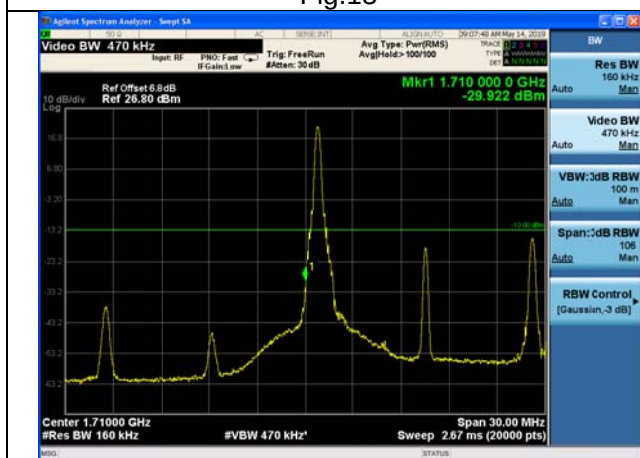


Fig.17

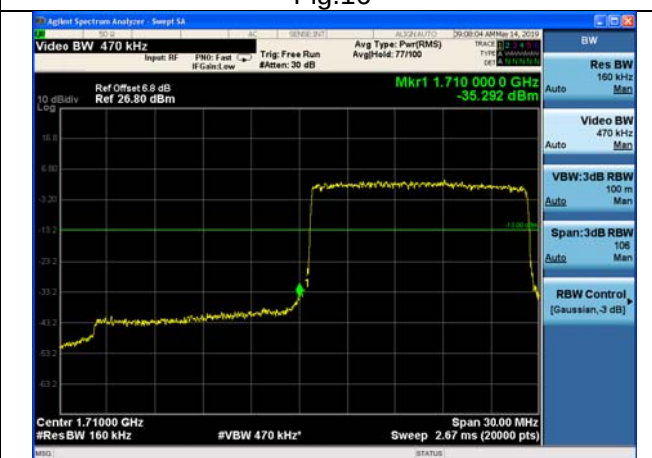


Fig.18

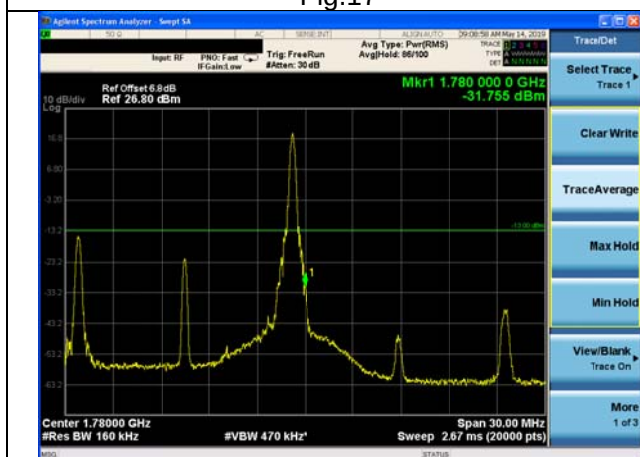


Fig.19

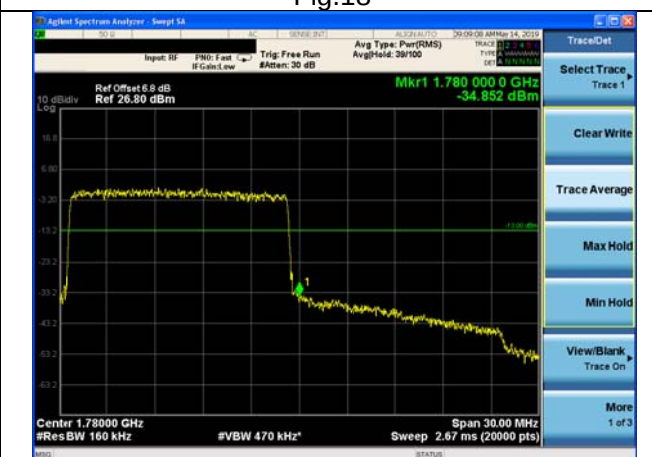


Fig.20

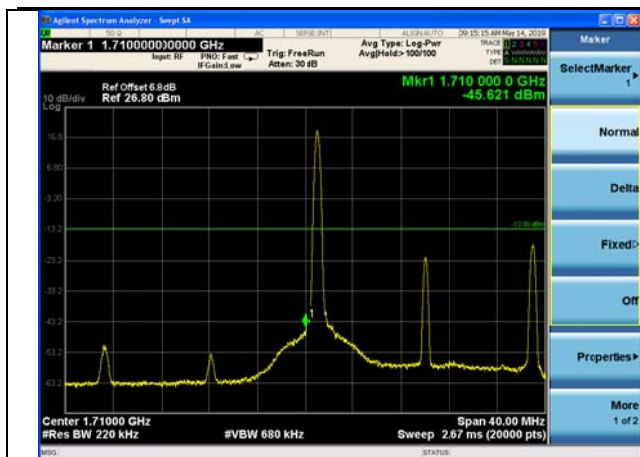


Fig.21

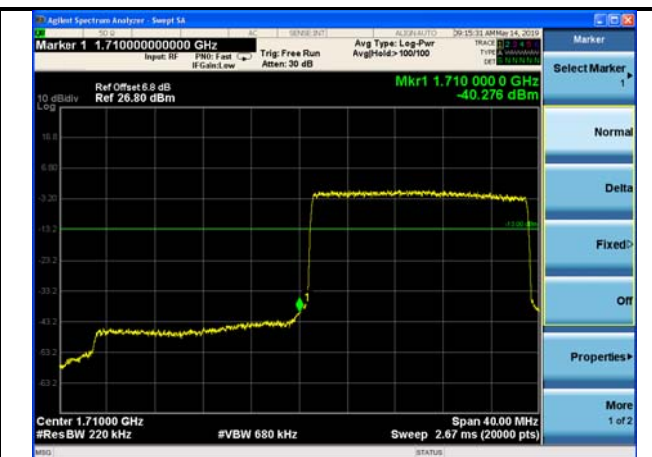


Fig.22

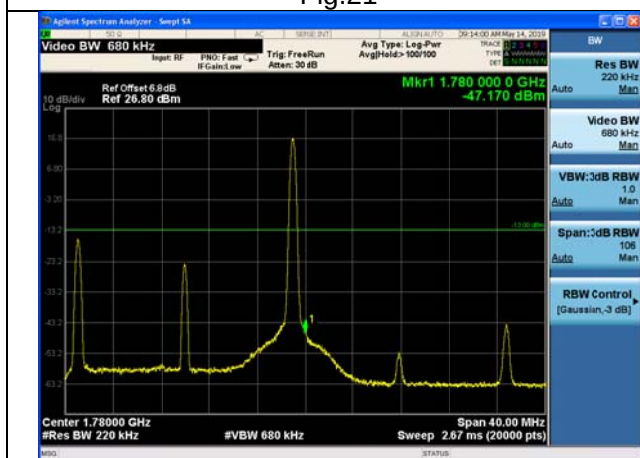


Fig.23



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	0.103	0.000	0.023	0.120	0.136	0.096
0	NV	0.004	0.026	0.011	0.110	0.008	0.119
+10	NV	0.021	0.058	0.086	0.029	0.064	0.117
+20	NV	0.015	0.048	0.074	0.042	0.016	0.116
+30	NV	0.103	0.107	0.011	0.065	0.039	0.068
+40	NV	0.067	0.019	0.002	0.119	0.058	0.026
+50	NV	0.065	0.018	0.149	0.019	0.098	0.047
+20	LV	0.044	0.004	0.078	0.068	0.135	0.038
+20	HV	0.095	0.101	0.126	0.086	0.042	0.068

Temperature(°C)	Voltage	Test Result (ppm) Band66 High Channel					
		1.4M	3M	5M	10M	15M	20M
-10	NV	0.061	0.089	0.061	0.031	0.032	0.136
0	NV	0.070	0.048	0.105	0.005	0.096	0.158
+10	NV	0.006	0.097	0.147	0.018	0.110	0.002
+20	NV	0.109	0.102	0.089	0.027	0.098	0.067
+30	NV	0.082	0.011	0.092	0.092	0.050	0.111
+40	NV	0.032	0.104	0.053	0.083	0.014	0.151
+50	NV	0.107	0.004	0.108	0.100	0.012	0.111
+20	LV	0.105	0.011	0.088	0.006	0.025	0.054
+20	HV	0.067	0.049	0.067	0.043	0.129	0.087