

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 2

1 RF Power Output

BW	RB Size	RB Offset	Carrier frequency (MHz)	UL Channel	Conducted power (dBm)		
					QPSK	16QAM	64QAM
1.4	1	5	1909.3	19193	24.04	22.62	22.49
			1880	18900	23.98	22.65	22.78
			1850.7	18607	23.79	23.23	22.83
	1	3	1909.3	19193	23.95	22.78	22.87
			1880	18900	23.77	22.91	22.64
			1850.7	18607	24.11	23.22	23.00
	1	0	1909.3	19193	23.93	22.65	22.57
			1880	18900	23.75	22.83	22.81
			1850.7	18607	24.05	22.73	22.84
	3	3	1909.3	19193	24.01	23.17	23.02
			1880	18900	23.99	22.98	22.98
			1850.7	18607	24.21	22.88	23.19
	3	1	1909.3	19193	24.09	22.91	23.19
			1880	18900	23.94	22.89	23.07
			1850.7	18607	24.05	23.22	23.10
	3	0	1909.3	19193	24.05	22.89	22.99
			1880	18900	24.01	22.93	22.94
			1850.7	18607	24.21	23.19	22.96
	6	0	1909.3	19193	23.07	21.85	22.15
			1880	18900	22.93	21.97	21.80
			1850.7	18607	23.15	21.88	22.23

BW	RB Size	RB Offset	Carrier frequency (MHz)	UL Channel	Conducted power (dBm)		
					QPSK	16QAM	64QAM
3	1	14	1908.5	19185	24.02	22.68	22.82
			1880	18900	23.78	22.57	22.81
			1851.5	18615	23.99	22.58	22.75
	1	7	1908.5	19185	24.21	22.81	22.88
			1880	18900	24.01	22.77	22.89
			1851.5	18615	24.07	22.77	22.99
	1	0	1908.5	19185	24.01	23.36	22.83
			1880	18900	23.99	22.78	22.51
			1851.5	18615	23.97	22.80	22.88
	8	7	1908.5	19185	23.17	22.03	22.26
			1880	18900	23.13	22.10	21.88
			1851.5	18615	23.14	22.06	22.08
	8	4	1908.5	19185	23.06	22.11	21.95
			1880	18900	23.03	22.05	21.93
			1851.5	18615	23.22	22.04	22.00
	8	0	1908.5	19185	23.15	22.10	21.97
			1880	18900	23.14	22.04	21.92
			1851.5	18615	23.14	22.06	22.03
	15	0	1908.5	19185	23.09	22.02	22.18
			1880	18900	23.11	21.99	21.88
			1851.5	18615	23.07	21.96	21.94

BW	RB Size	RB Offset	Carrier frequency (MHz)	UL Channel	Conducted power (dBm)		
					QPSK	16QAM	64QAM
5	1	24	1907.5	19175	23.54	22.16	22.44
			1880	18900	23.56	22.54	22.51
			1852.5	18625	23.37	22.56	22.53
	1	12	1907.5	19175	23.73	22.46	22.70
			1880	18900	23.64	22.41	22.55
			1852.5	18625	23.60	22.59	22.53
	1	0	1907.5	19175	23.60	22.50	22.41
			1880	18900	23.53	22.42	22.40
			1852.5	18625	23.58	22.63	22.62
	12	13	1907.5	19175	22.70	21.70	21.68
			1880	18900	22.73	21.51	21.63
			1852.5	18625	22.59	21.68	21.69
	12	6	1907.5	19175	22.81	21.62	21.71
			1880	18900	22.64	21.61	21.61
			1852.5	18625	22.72	21.61	21.60
	12	0	1907.5	19175	22.67	21.67	21.76
			1880	18900	22.64	21.51	21.53
			1852.5	18625	22.67	21.57	21.55
	25	0	1907.5	19175	22.72	21.82	21.73
			1880	18900	22.68	21.77	21.68
			1852.5	18625	22.68	21.67	21.64

BW	RB Size	RB Offset	Carrier frequency (MHz)	UL Channel	Conducted power (dBm)		
					QPSK	16QAM	64QAM
10	1	49	1905	19150	23.51	22.15	22.37
			1880	18900	23.58	22.48	22.45
			1855	18650	23.69	22.22	22.29
	1	24	1905	19150	23.62	22.89	22.61
			1880	18900	23.68	22.37	22.59
			1855	18650	23.75	22.27	22.59
	1	0	1905	19150	23.73	22.42	22.10
			1880	18900	23.78	22.28	22.24
			1855	18650	23.80	22.52	22.02
	25	25	1905	19150	22.78	21.75	21.66
			1880	18900	22.61	21.80	21.59
			1855	18650	22.61	21.58	21.88
	25	12	1905	19150	22.72	21.70	21.79
			1880	18900	22.66	21.94	21.91
			1855	18650	22.68	21.62	21.94
	25	0	1905	19150	22.74	21.71	21.70
			1880	18900	22.66	21.65	21.63
			1855	18650	22.64	21.54	21.65
	50	0	1905	19150	22.73	21.83	21.80
			1880	18900	22.76	21.66	21.71
			1855	18650	22.67	21.57	21.69

BW	RB Size	RB Offset	Carrier frequency (MHz)	UL Channel	Conducted power (dBm)		
					QPSK	16QAM	64QAM
15	1	74	1902.5	19125	23.33	22.58	22.55
			1880	18900	23.50	21.99	21.98
			1857.5	18675	23.71	22.01	22.34
	1	37	1902.5	19125	23.64	22.93	22.64
			1880	18900	23.68	22.17	22.44
			1857.5	18675	23.64	22.31	22.70
	1	0	1902.5	19125	23.39	22.40	22.16
			1880	18900	23.56	22.29	22.27
			1857.5	18675	23.57	22.11	22.00
	36	38	1902.5	19125	22.79	21.66	21.65
			1880	18900	22.65	21.53	21.63
			1857.5	18675	22.68	21.59	21.73
	36	19	1902.5	19125	22.78	21.65	21.64
			1880	18900	22.68	21.55	21.54
			1857.5	18675	22.78	21.66	21.78
	36	0	1902.5	19125	22.74	21.59	21.70
			1880	18900	22.64	21.61	21.60
			1857.5	18675	22.67	21.63	21.57
	75	0	1902.5	19125	22.70	21.77	21.67
			1880	18900	22.74	21.73	21.79
			1857.5	18675	22.76	21.66	21.58

BW	RB Size	RB Offset	Carrier frequency (MHz)	UL Channel	Conducted power (dBm)		
					QPSK	16QAM	64QAM
20	1	99	1900	19100	23.30	22.30	21.91
			1880	18900	23.47	22.63	22.33
			1860	18700	23.27	22.94	22.22
	1	50	1900	19100	23.61	22.95	22.67
			1880	18900	23.72	23.01	22.60
			1860	18700	23.81	22.60	22.66
	1	0	1900	19100	23.23	22.33	21.86
			1880	18900	23.37	22.25	21.84
			1860	18700	23.56	22.14	22.08
	50	50	1900	19100	22.60	21.60	21.68
			1880	18900	22.61	21.65	21.70
			1860	18700	22.68	21.46	21.73
	50	25	1900	19100	22.72	21.61	21.69
			1880	18900	22.63	21.68	21.74
			1860	18700	22.76	21.83	21.79
	50	0	1900	19100	22.67	21.66	21.64
			1880	18900	22.63	21.59	21.66
			1860	18700	22.65	21.71	21.54
	100	0	1900	19100	22.62	21.63	21.71
			1880	18900	22.64	21.56	21.65
			1860	18700	22.79	21.75	21.65

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	
2	1850.7	18607	1.4	6	0	1.0775	Fig.1	1.0757	Fig.2	1.0749	Fig.3
	1880.0	18900		6	0	1.0761	Fig.4	1.0755	Fig.5	1.0757	Fig.6
	1909.3	19193		6	0	1.0776	Fig.7	1.0770	Fig.8	1.0766	Fig.9
	1851.5	18615	3	15	0	1.7035	Fig.10	2.7035	Fig.11	2.6993	Fig.12
	1880.0	18900		15	0	2.7024	Fig.13	2.7134	Fig.14	2.6987	Fig.15
	1908.5	19185		15	0	2.6918	Fig.16	2.6911	Fig.17	2.7003	Fig.18
	1852.5	18625	5	25	0	4.4841	Fig.19	4.4756	Fig.20	4.4586	Fig.21
	1880.0	18900		25	0	4.4869	Fig.22	4.4734	Fig.23	4.4793	Fig.24
	1907.5	19175		25	0	4.4492	Fig.25	4.4696	Fig.26	4.4752	Fig.27
	1855	18650	10	50	0	8.9294	Fig.28	8.9512	Fig.29	8.9133	Fig.30
	1880	18900		50	0	8.8937	Fig.31	8.9192	Fig.32	8.9378	Fig.33
	1905	19150		50	0	8.9224	Fig.34	8.9277	Fig.35	8.9215	Fig.36
	1857.5	18675	15	75	0	13.400	Fig.37	13.412	Fig.38	13.367	Fig.39
	1880.0	18900		75	0	13.350	Fig.40	13.364	Fig.41	13.246	Fig.42
	1902.5	19125		75	0	13.333	Fig.43	13.413	Fig.44	13.348	Fig.45
	1860	18700	20	100	0	17.924	Fig.46	17.855	Fig.47	17.850	Fig.48
	1880	18900		100	0	17.807	Fig.49	17.763	Fig.50	17.743	Fig.51
	1900	19100		100	0	17.837	Fig.52	17.770	Fig.53	17.792	Fig.54

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
2	1850.7	18607	1.4	6	0	1.287	Fig.1	1.292	Fig.2	1.289	Fig.3
	1880.0	18900		6	0	1.275	Fig.4	1.269	Fig.5	1.265	Fig.6
	1909.3	19193		6	0	1.278	Fig.7	1.285	Fig.8	1.287	Fig.9
	1851.5	18615	3	15	0	2.987	Fig.10	2.963	Fig.11	2.964	Fig.12
	1880.0	18900		15	0	2.976	Fig.13	2.992	Fig.14	2.963	Fig.15
	1908.5	19185		15	0	2.951	Fig.16	2.958	Fig.17	3.000	Fig.18
	1852.5	18625	5	25	0	4.876	Fig.19	4.920	Fig.20	4.875	Fig.21
	1880.0	18900		25	0	4.875	Fig.22	4.915	Fig.23	4.868	Fig.24
	1907.5	19175		25	0	4.879	Fig.25	4.826	Fig.26	4.839	Fig.27
	1855	18650	10	50	0	9.724	Fig.28	9.769	Fig.29	9.595	Fig.30
	1880	18900		50	0	9.643	Fig.31	9.784	Fig.32	9.720	Fig.33
	1905	19150		50	0	9.600	Fig.34	9.588	Fig.35	9.781	Fig.36
	1857.5	18675	15	75	0	14.22	Fig.37	14.25	Fig.38	14.27	Fig.39
	1880.0	18900		75	0	14.24	Fig.40	14.29	Fig.41	14.31	Fig.42
	1902.5	19125		75	0	14.22	Fig.43	14.10	Fig.44	14.24	Fig.45
	1860	18700	20	100	0	19.12	Fig.46	19.06	Fig.47	19.14	Fig.48
	1880	18900		100	0	19.00	Fig.49	18.89	Fig.50	18.81	Fig.51
	1900	19100		100	0	19.07	Fig.52	18.81	Fig.53	18.77	Fig.54

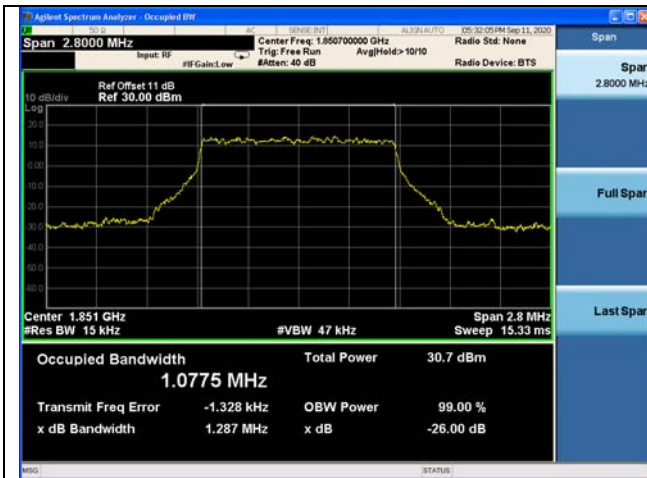


Fig.1

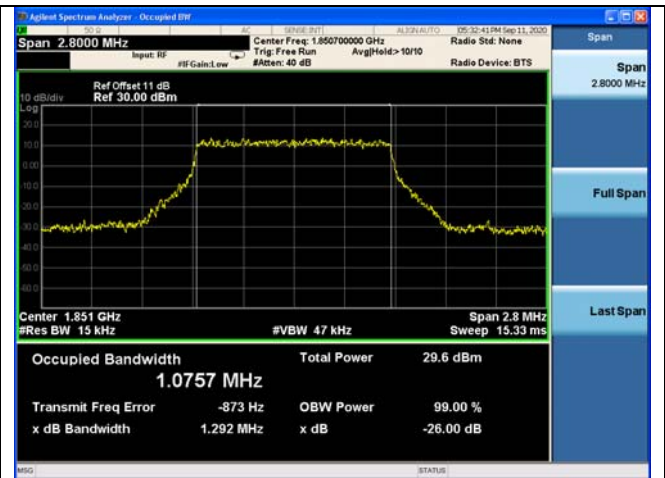


Fig.2

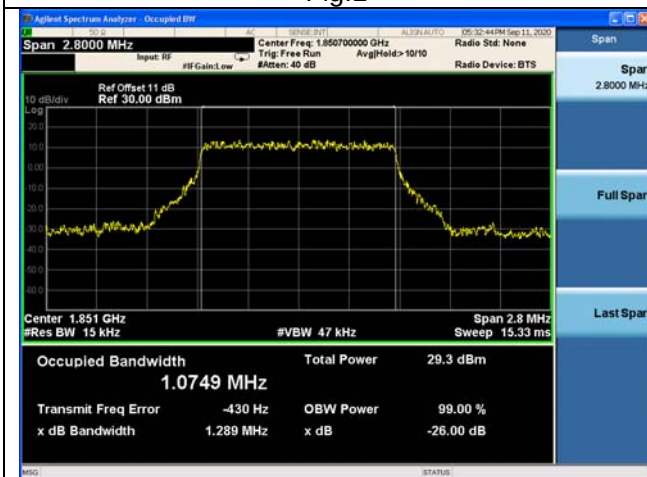


Fig.3

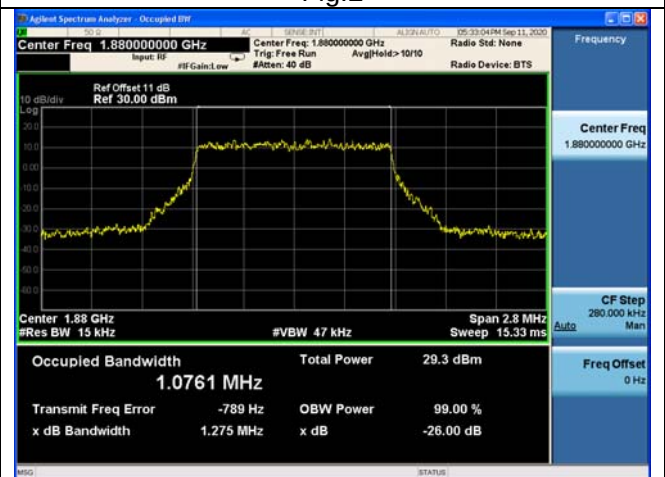


Fig.4

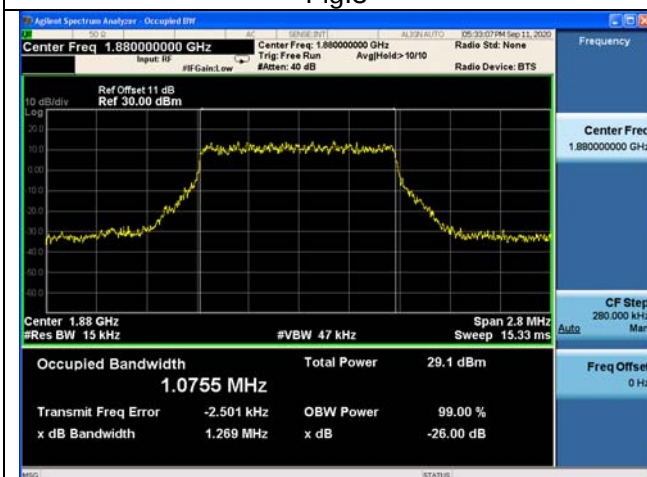


Fig.5

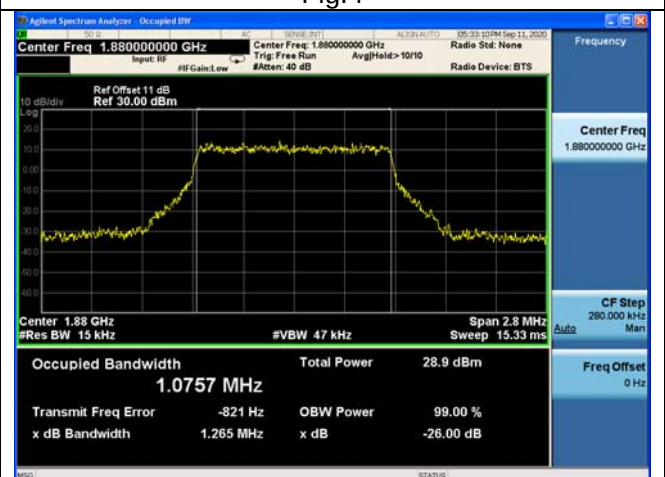


Fig.6

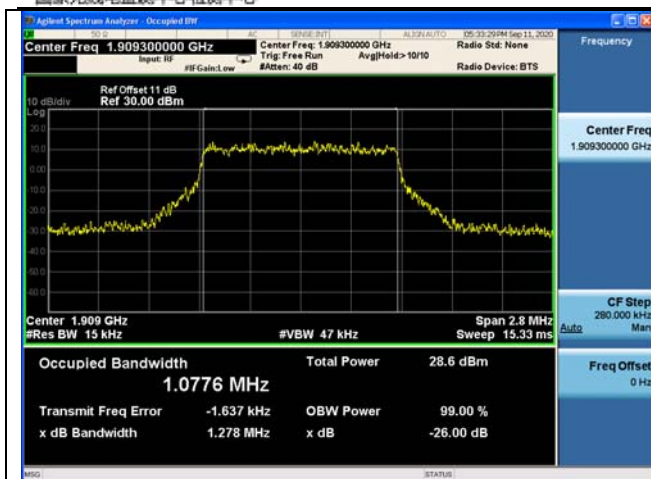


Fig.7

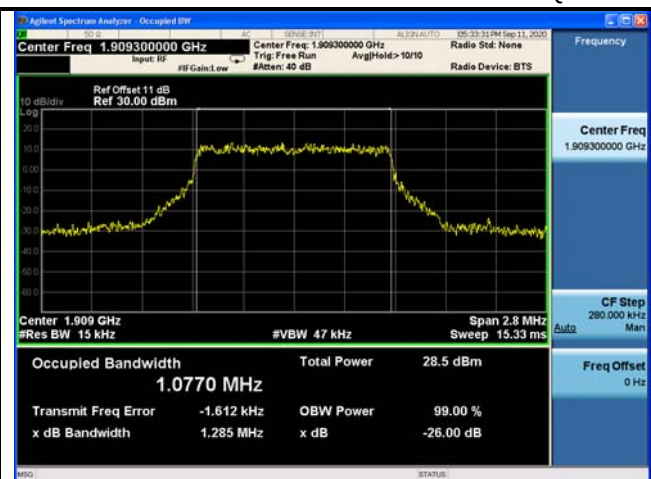


Fig.8

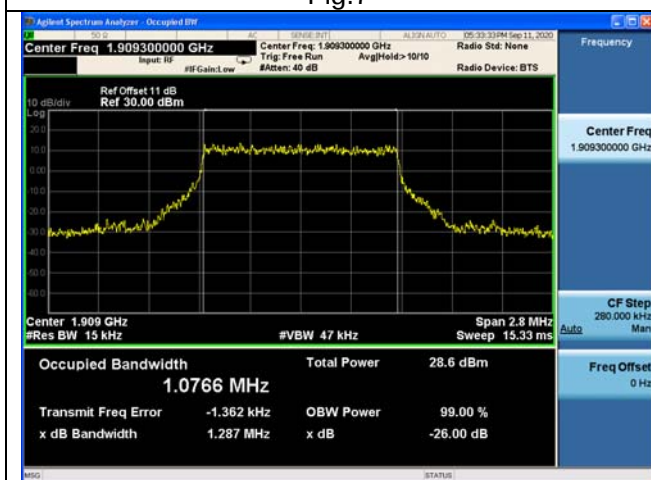


Fig.9

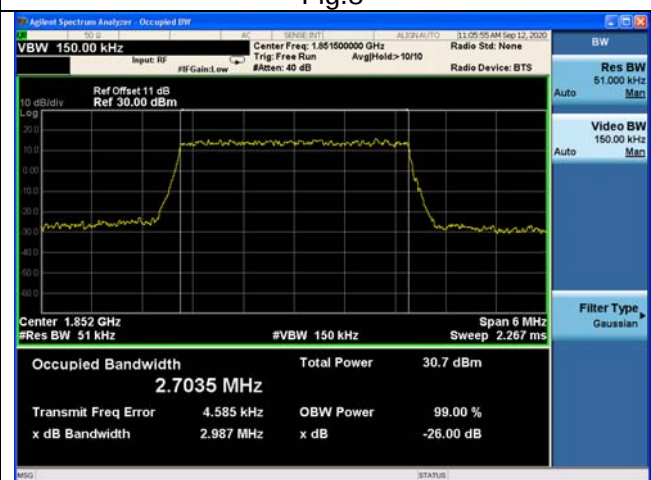


Fig.10

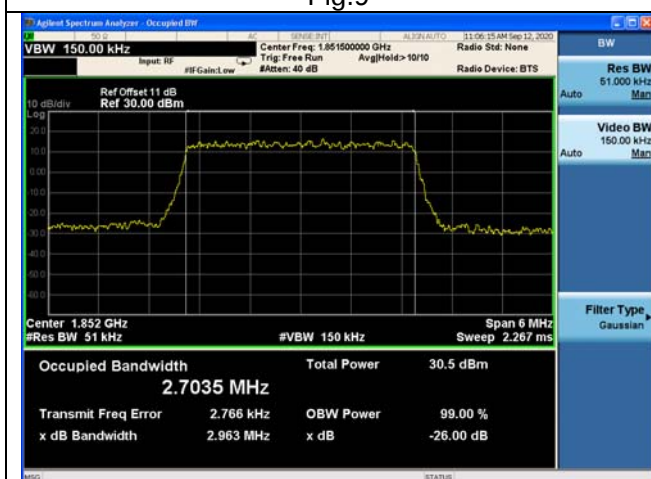


Fig.11

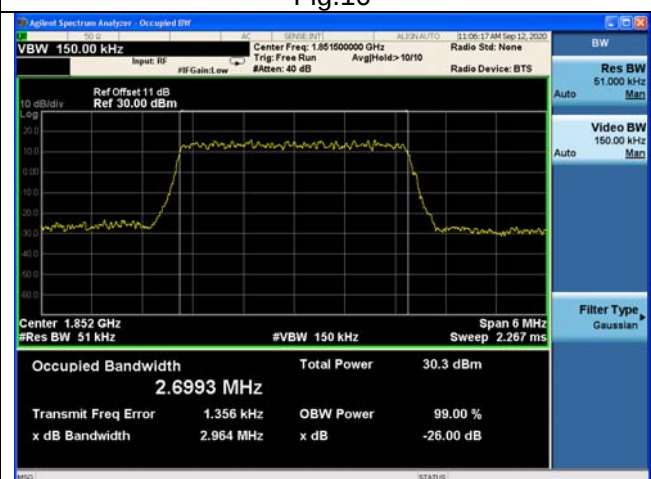


Fig.12

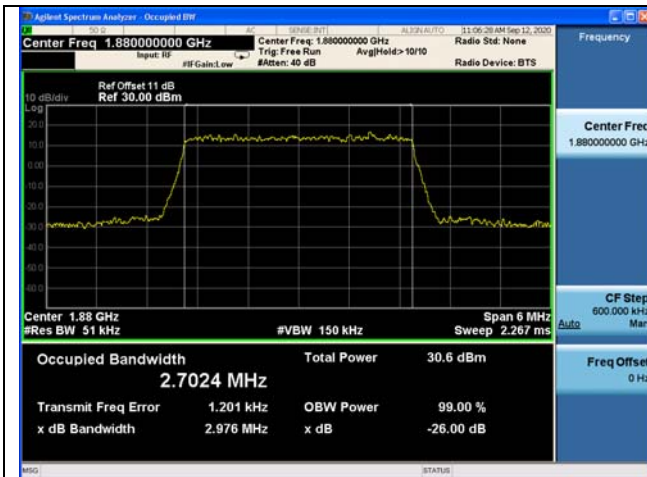


Fig.13

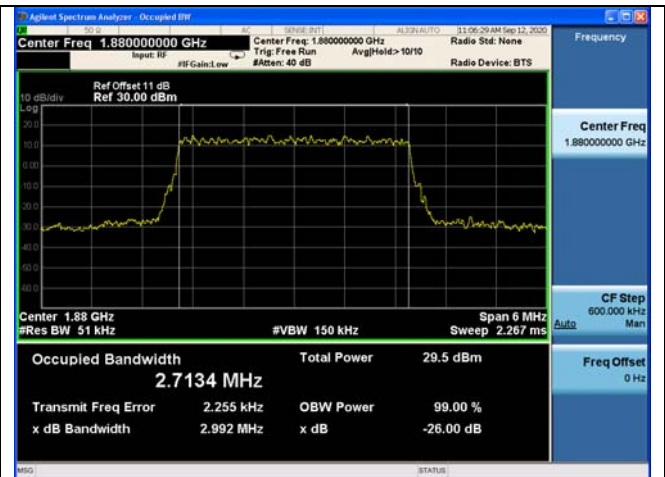


Fig.14

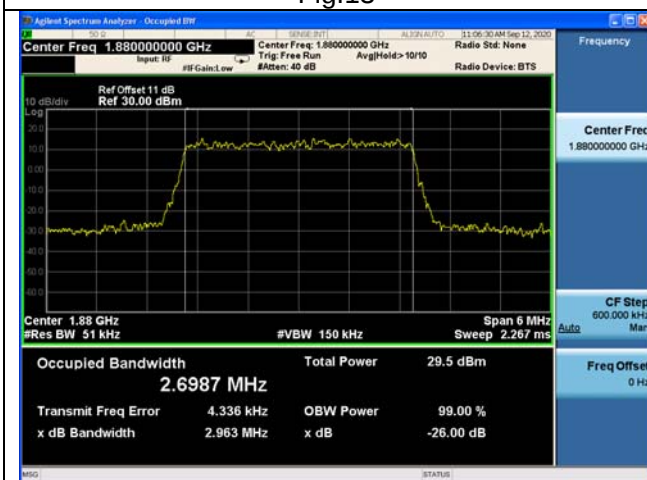


Fig.15

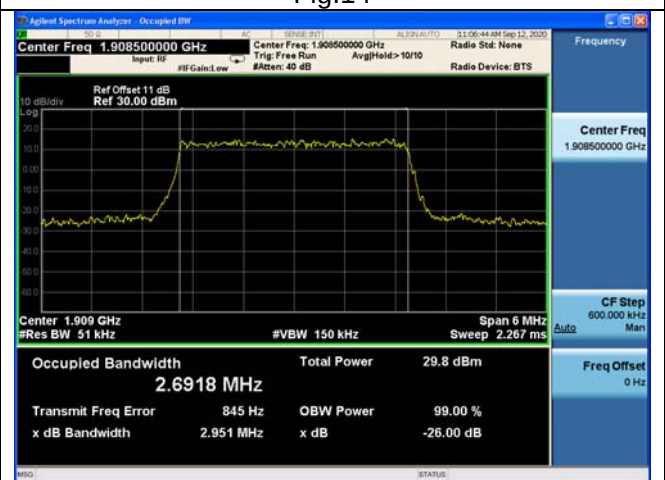


Fig.16

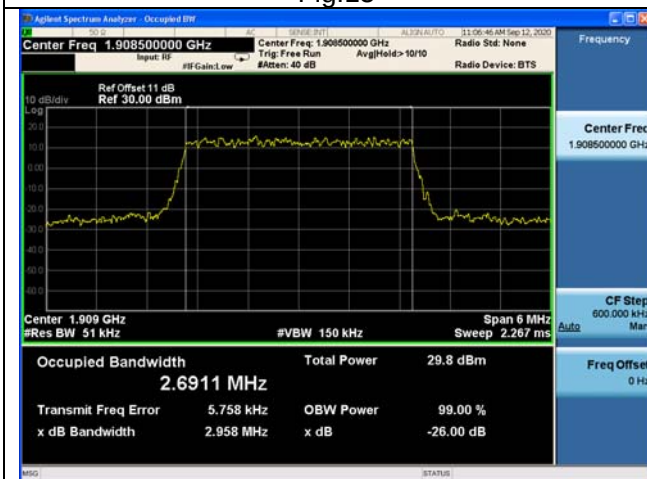


Fig.17

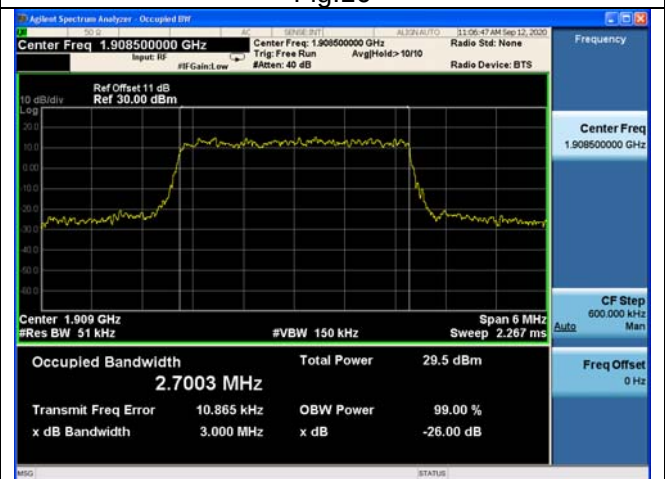


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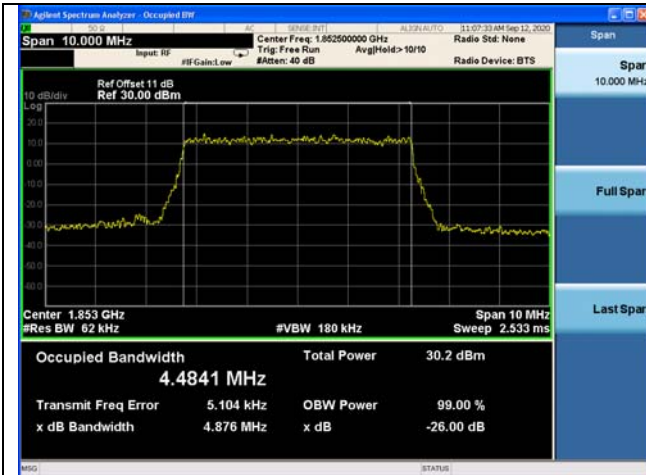


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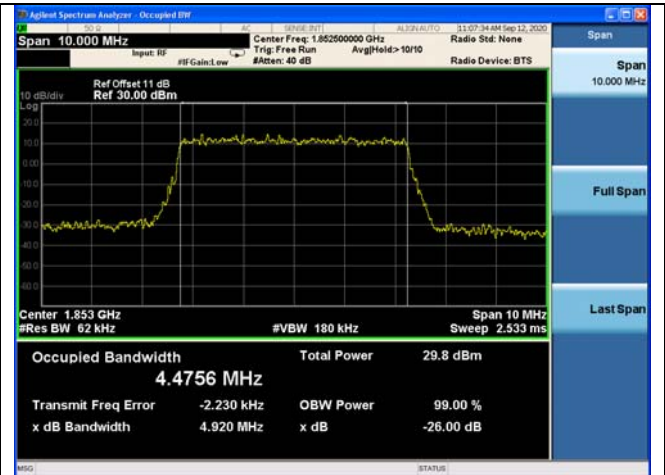


Fig.20

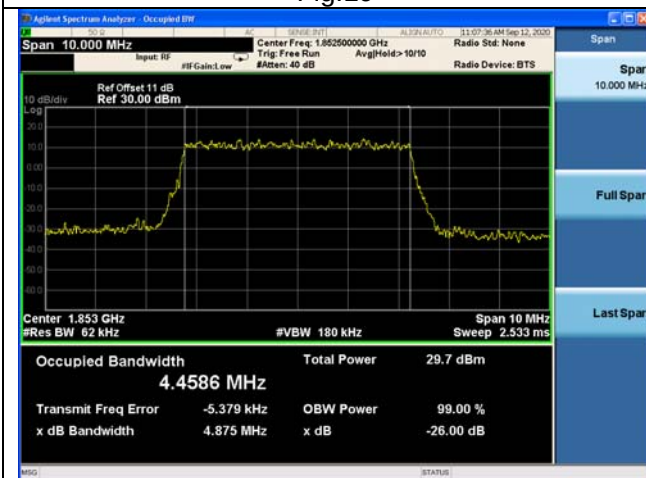


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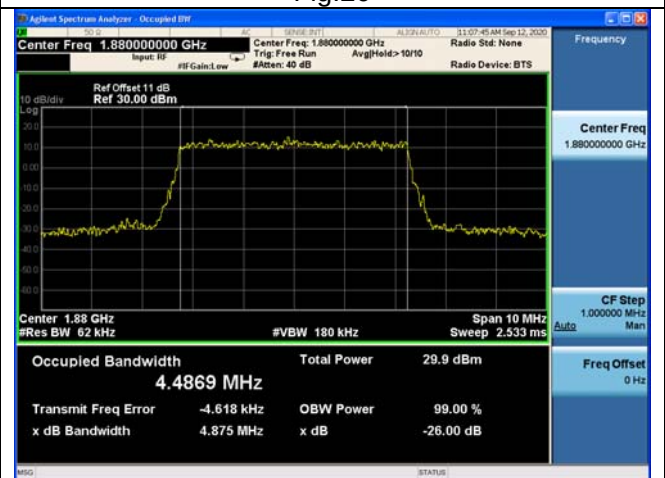


Fig.22

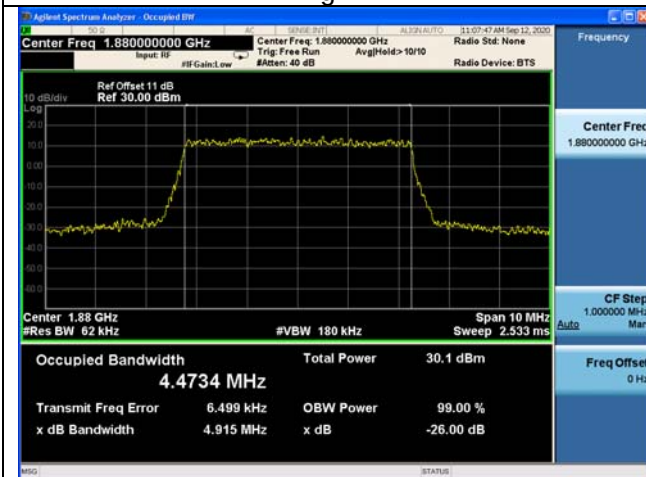


Fig.23

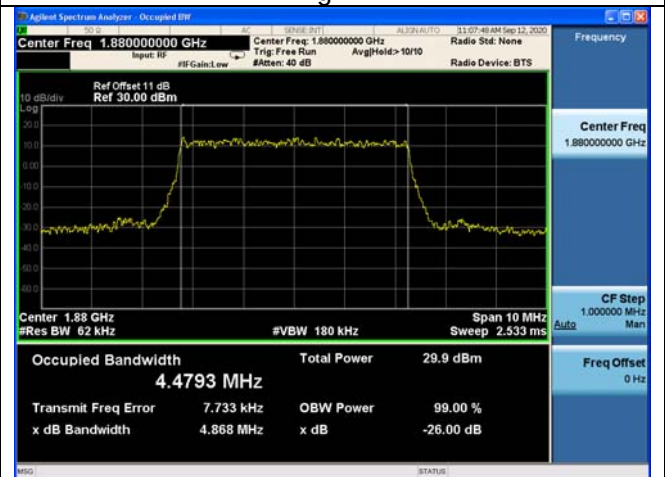


Fig.24

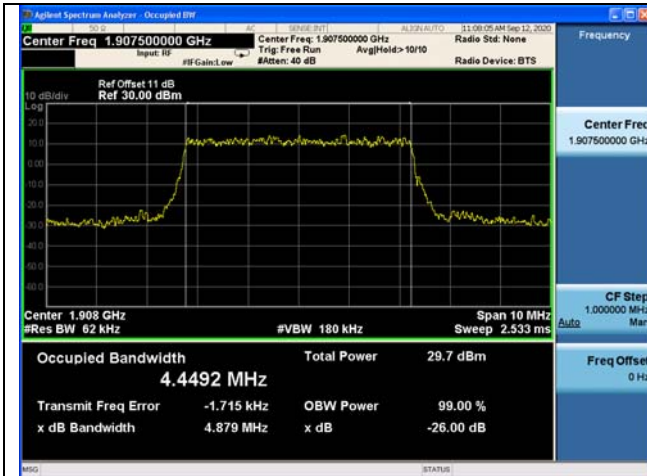


Fig.25

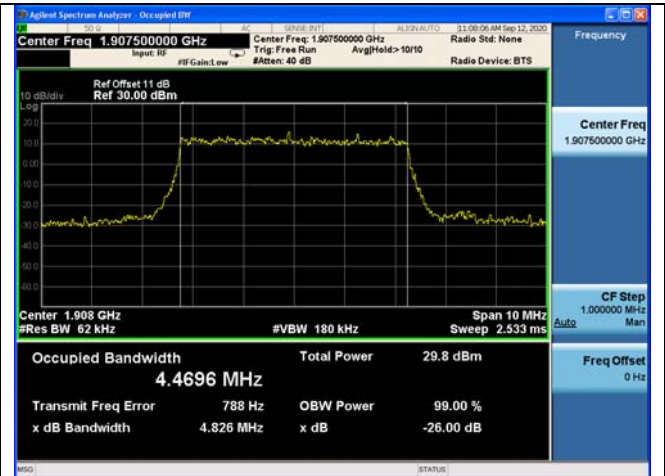


Fig.26

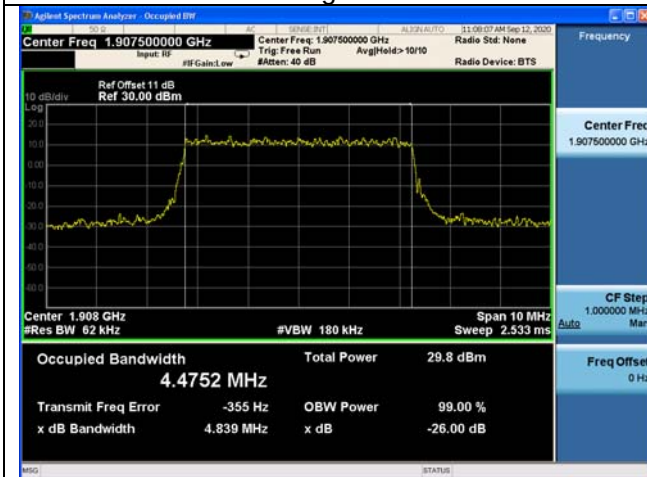


Fig.27

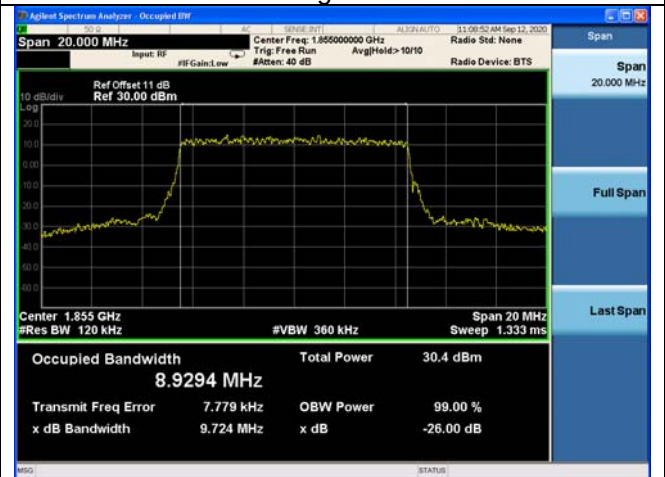


Fig.28

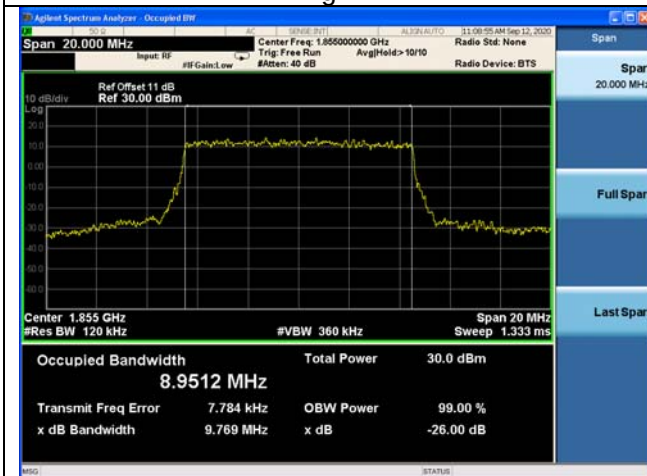


Fig.29

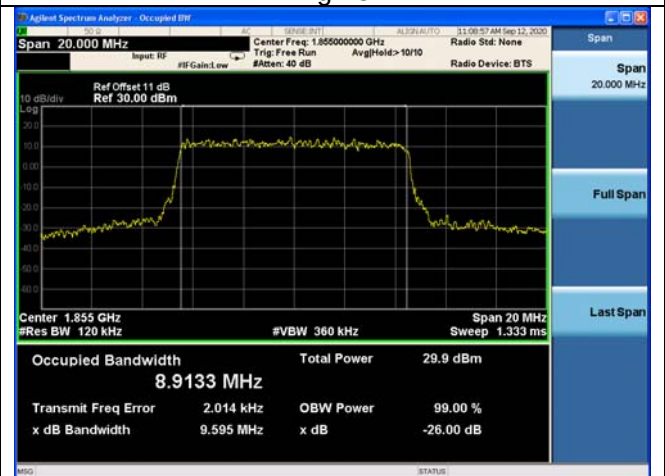


Fig.30

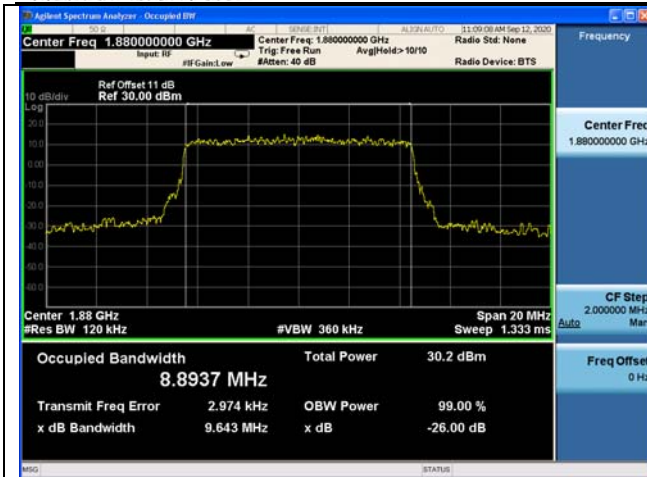


Fig.31

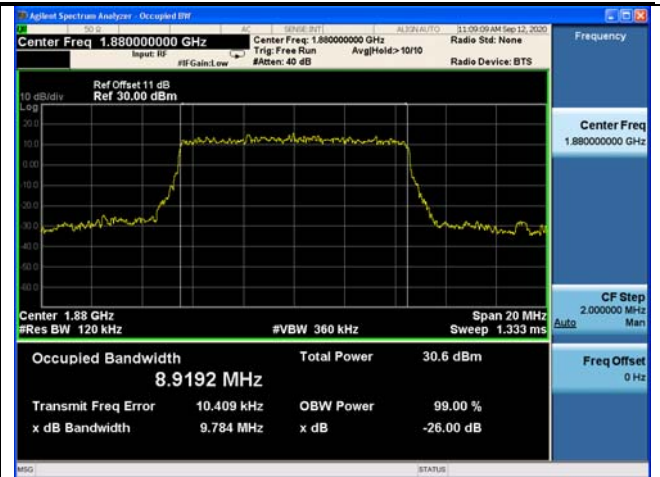


Fig.32

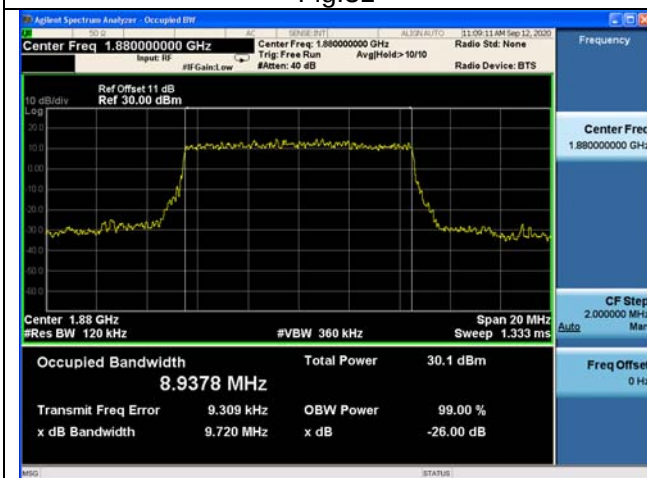


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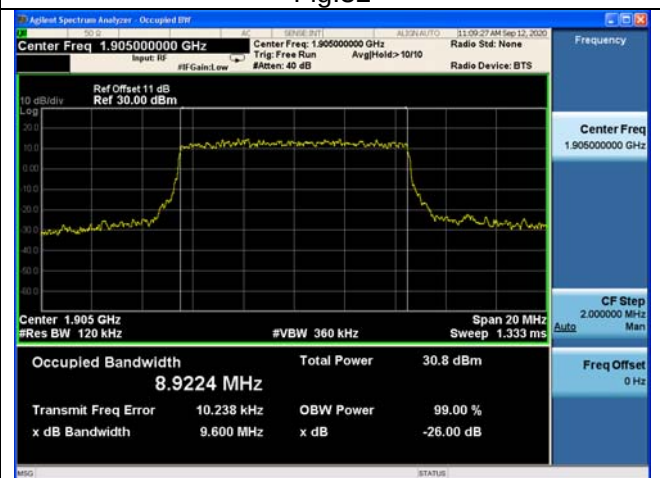


Fig.34

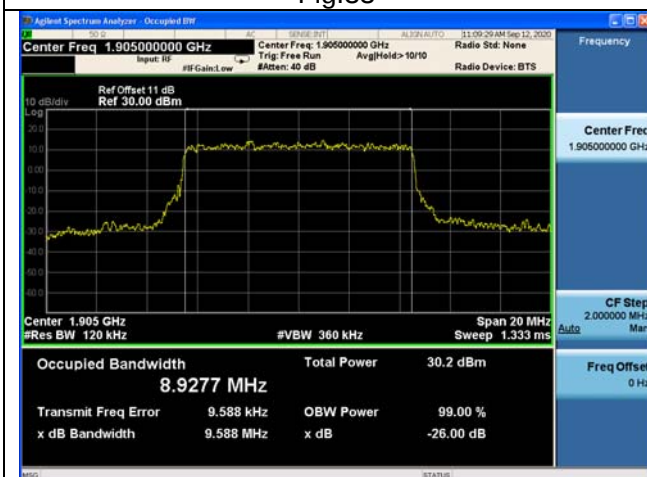


Fig.35

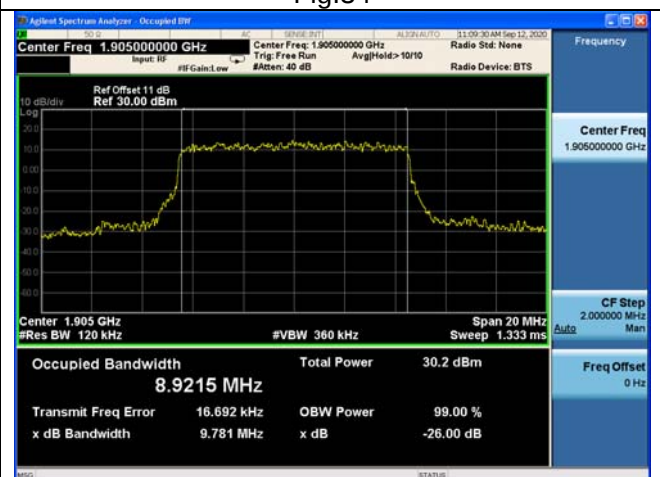


Fig.36

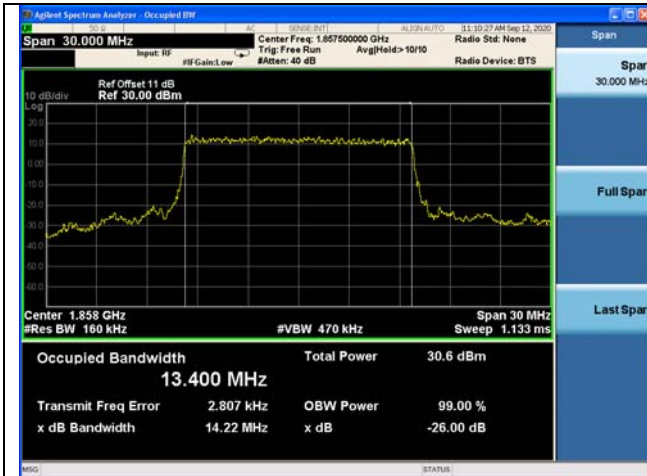


Fig.37

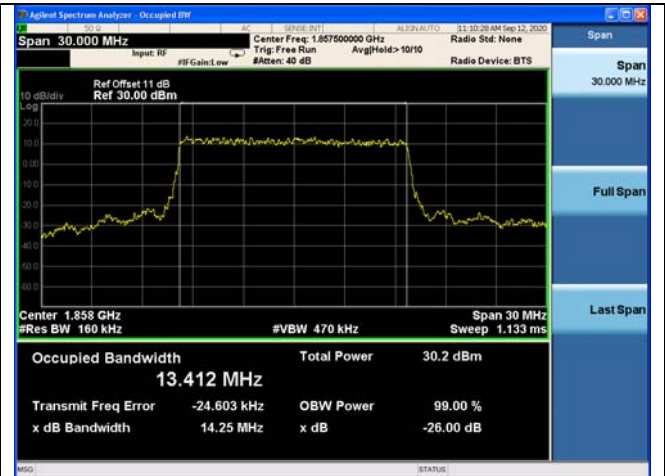


Fig.38

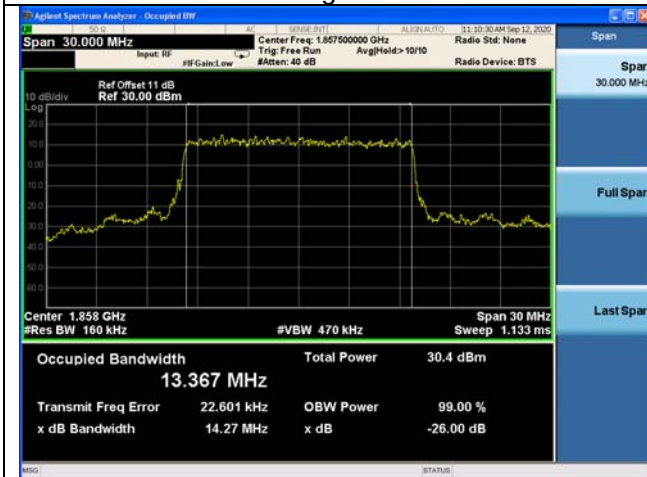


Fig.39



Fig.40

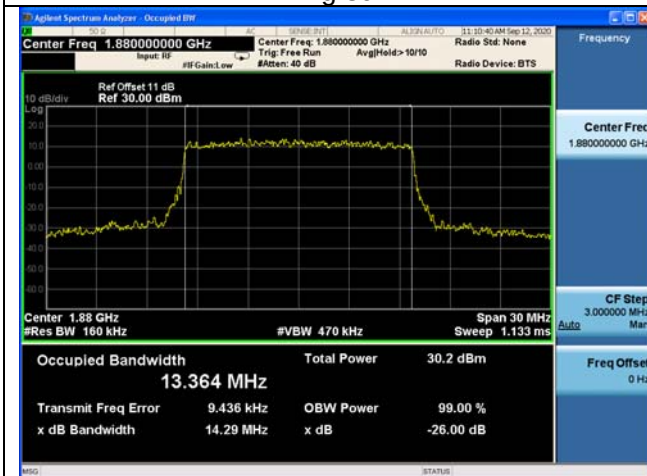


Fig.41

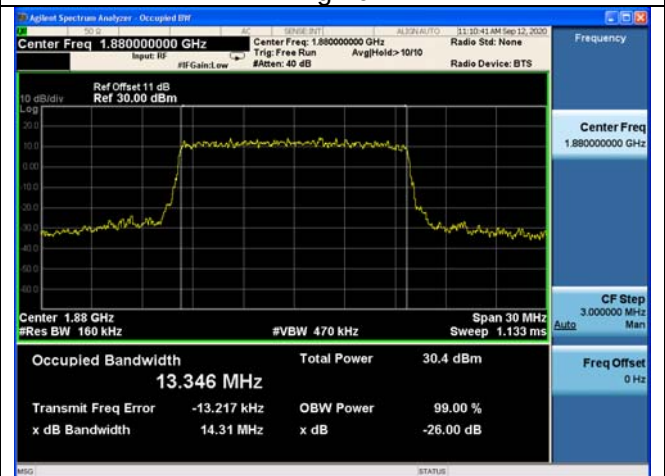


Fig.42

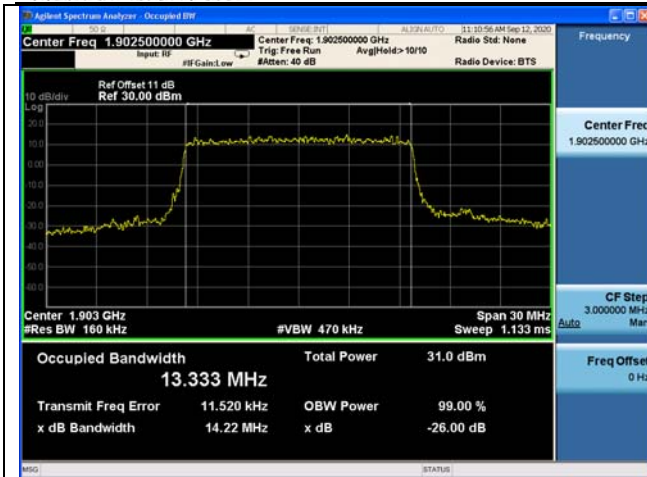


Fig.43

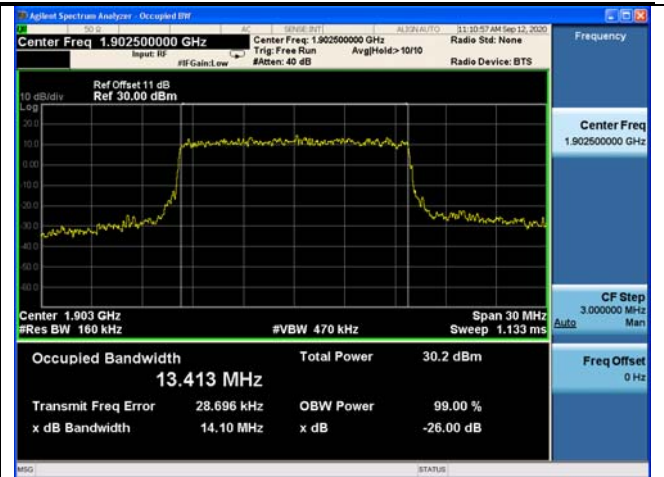


Fig.44

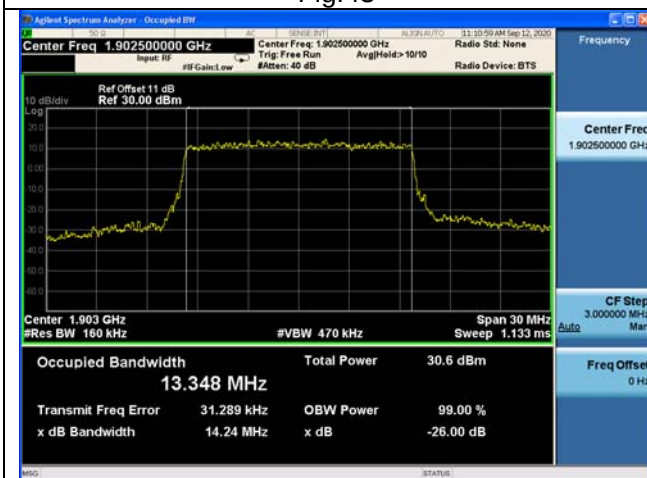


Fig.45

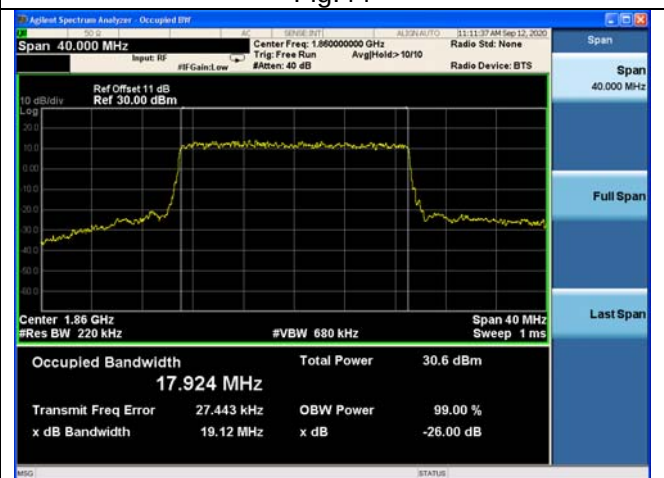


Fig.46

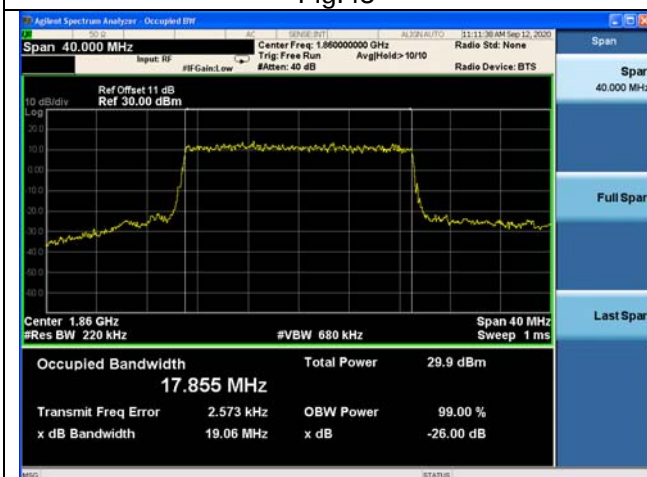


Fig.47

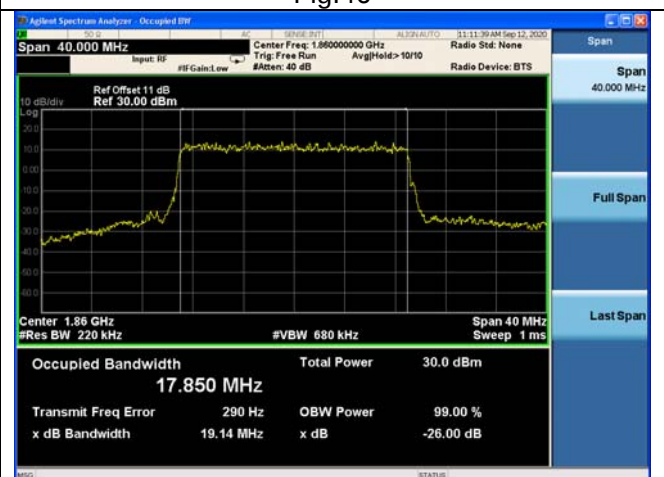


Fig.48

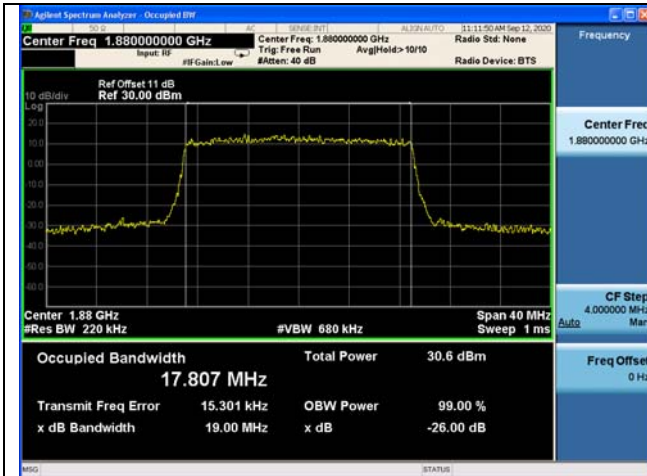


Fig.49



Fig.50

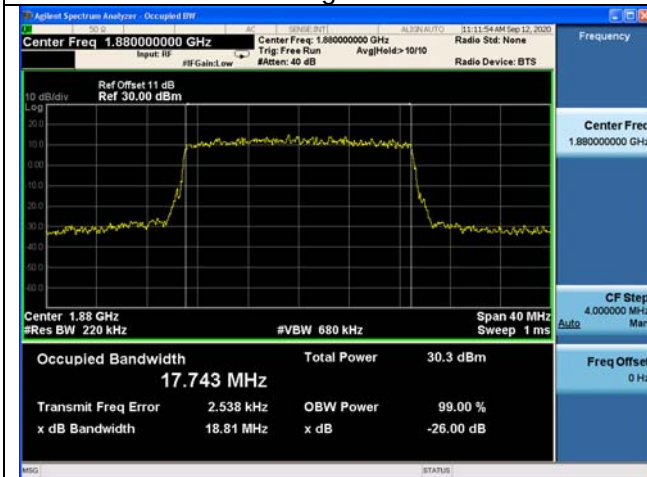


Fig.51

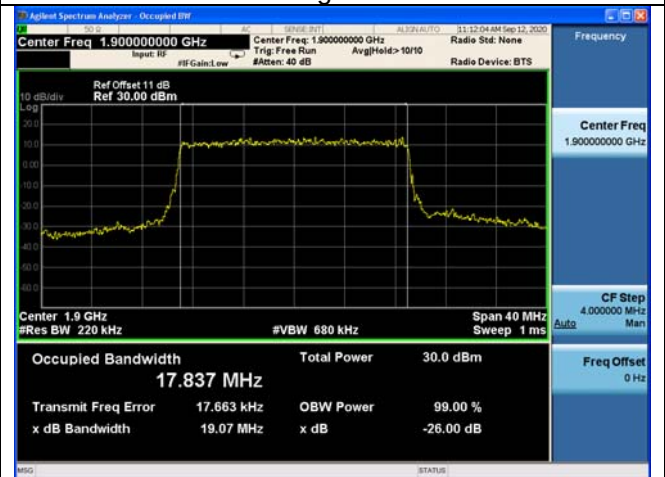


Fig.52

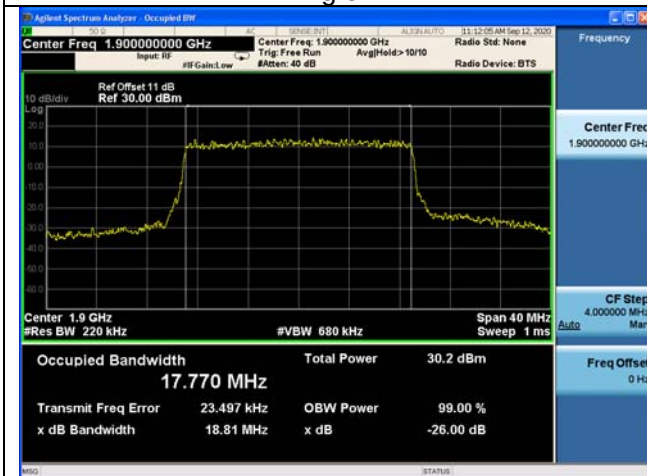


Fig.53

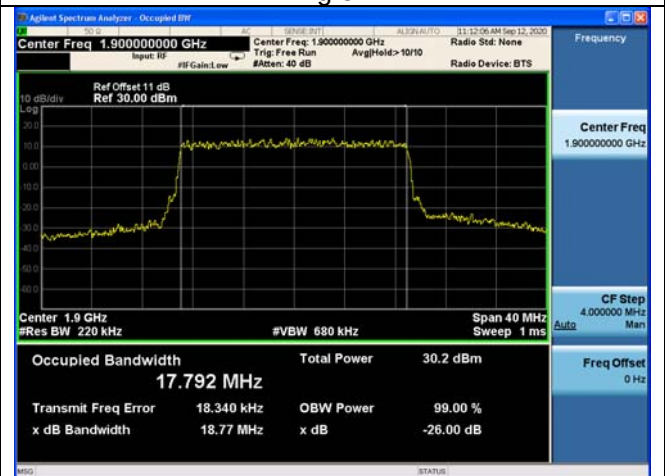


Fig.54

3 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
2	1880.0	18900	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

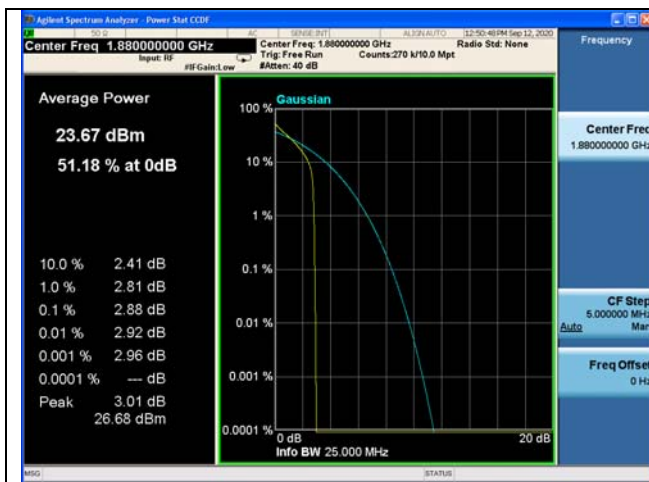


Fig.1

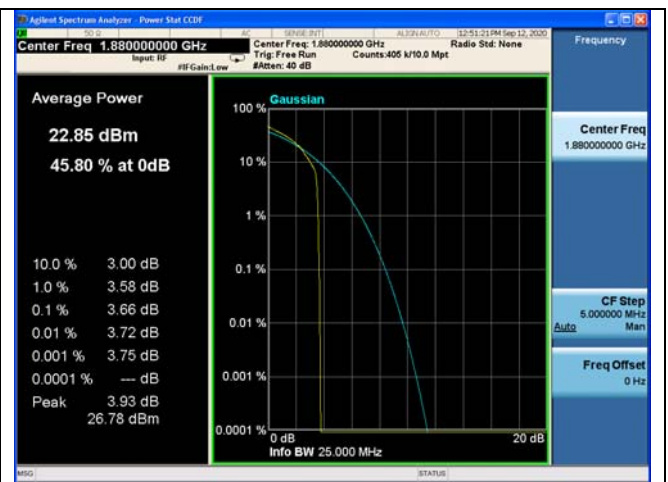


Fig.2

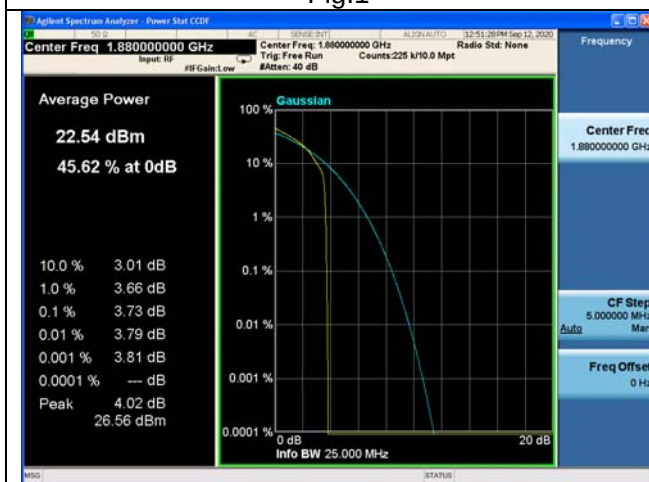


Fig.3

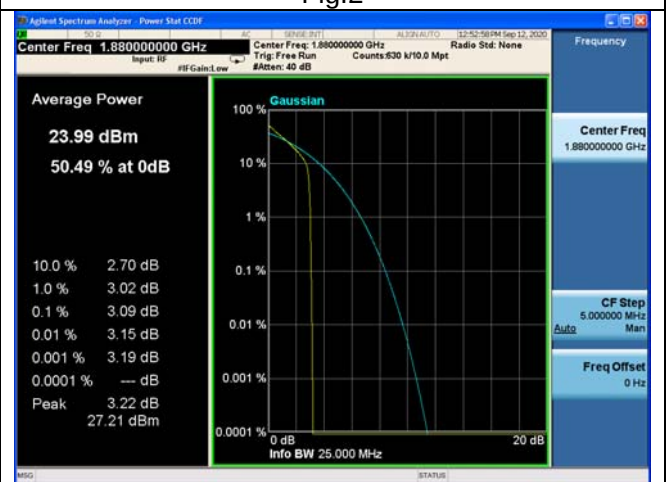


Fig.4

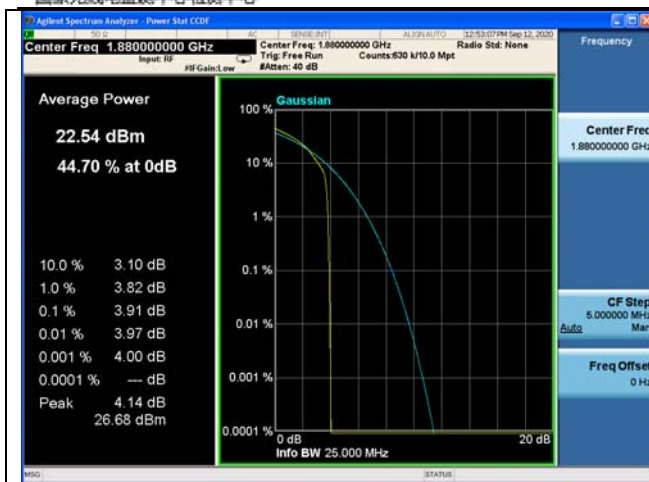


Fig.5



Fig.6

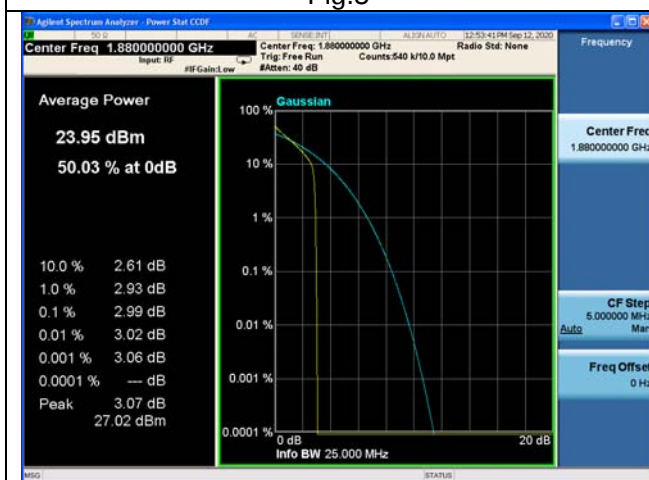


Fig.7



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
2	1860	18700	20	1	0	Fig.1-2
	1880	18900	20	1	0	Fig.3-4
	1900	19100	20	1	0	Fig.5-6

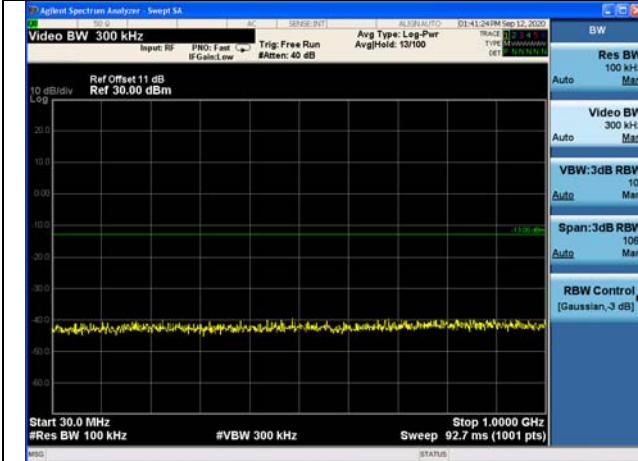


Fig.1

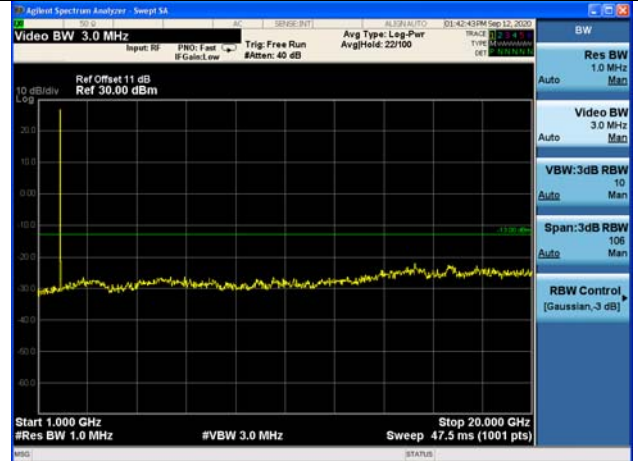


Fig.2

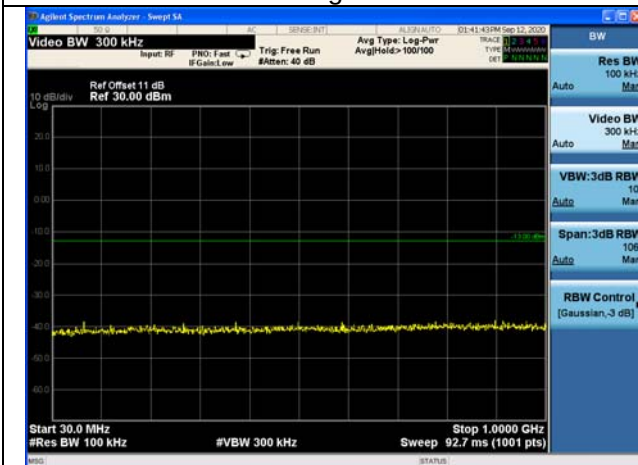


Fig3



Fig4

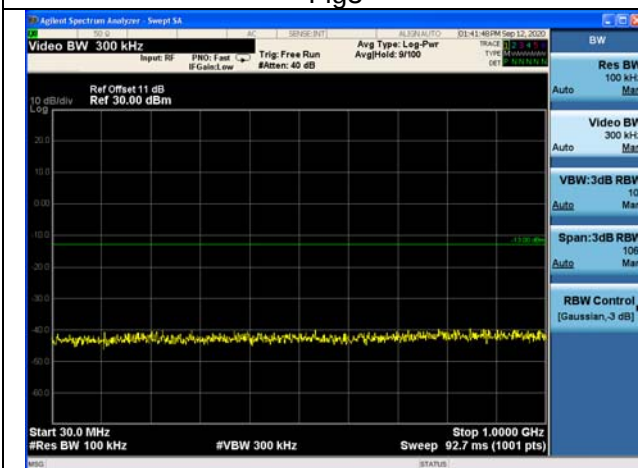


Fig5

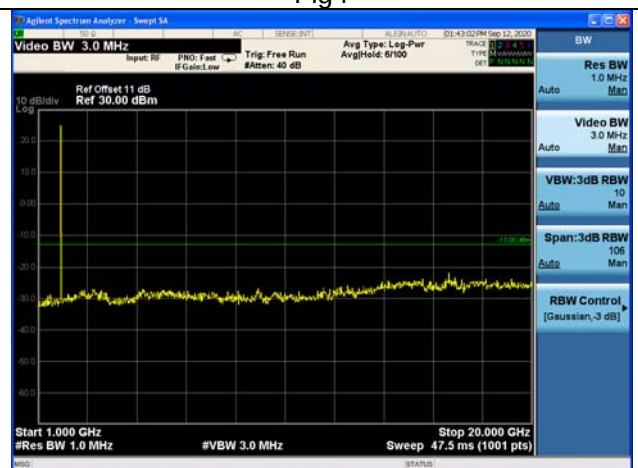


Fig6

5 Band Edges Compliance

Test result

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
2	1850.7	18607	1.4	1	0	Fig.1
				6	0	Fig.2
	1909.3	19193		1	5	Fig.3
				6	0	Fig.4
	1851.5	18615	3	1	0	Fig.5
				15	0	Fig.6
	1908.5	19185		1	14	Fig.7
				15	0	Fig.8
	1852.5	18625	5	1	0	Fig.9
				25	0	Fig.10
	1907.5	19175		1	24	Fig.11
				25	0	Fig.12
	1855	18650	10	1	0	Fig.13
				50	0	Fig.14
	1905	19150		1	49	Fig.15
				50	0	Fig.16
	1857.5	18675	15	1	0	Fig.17
				75	0	Fig.18
	1902.5	19125		1	74	Fig.19
				75	0	Fig.20
	1860	18700	20	1	0	Fig.21
				100	0	Fig.22
	1900	19100		1	99	Fig.23
				100	0	Fig.24

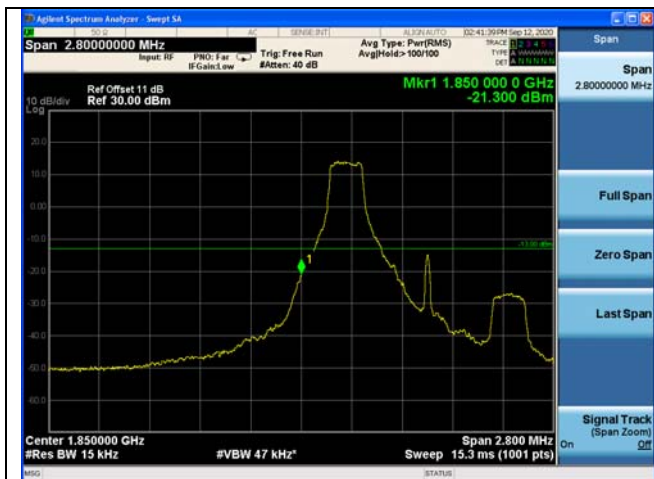


Fig.1



Fig.2

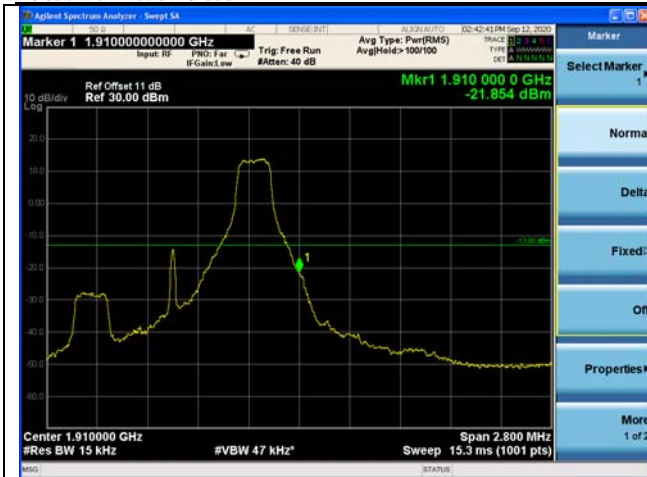


Fig.3



Fig.4

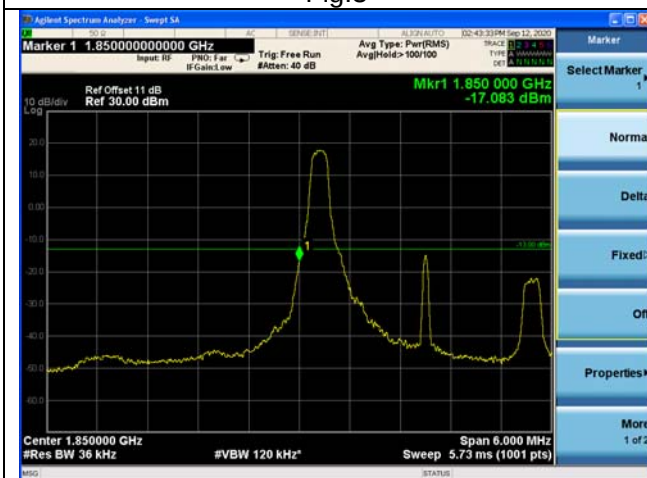


Fig.5



Fig.6

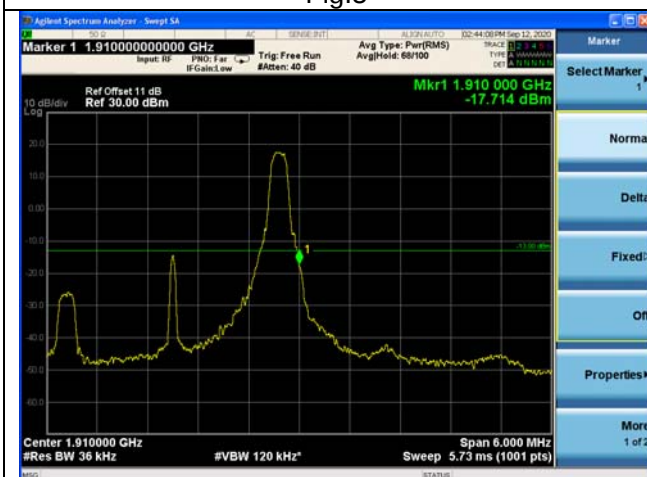


Fig.7



Fig.8

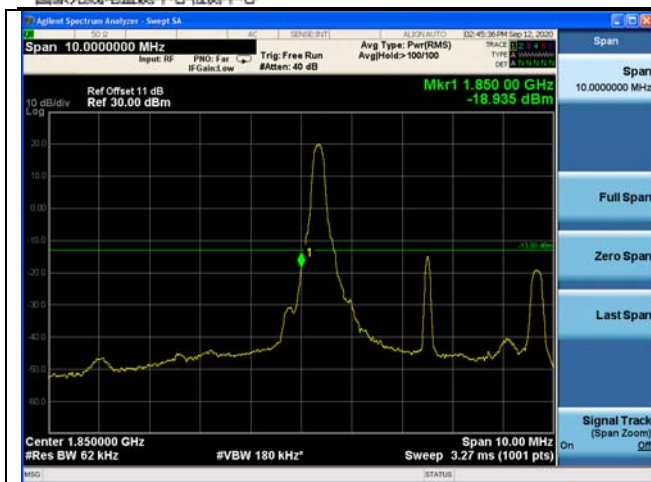


Fig.9

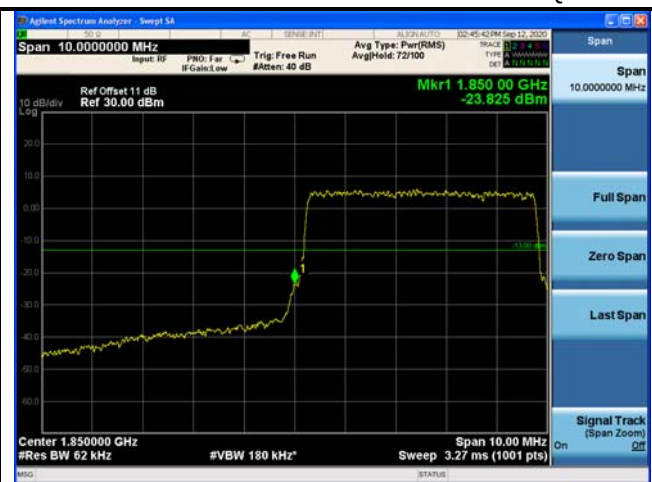


Fig.10

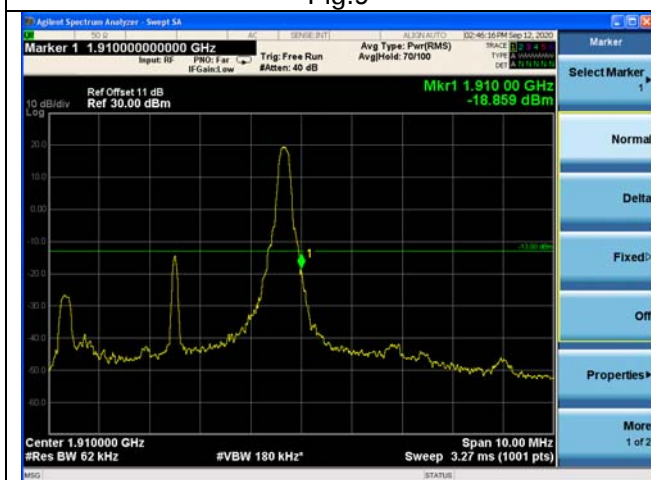


Fig.11



Fig.12

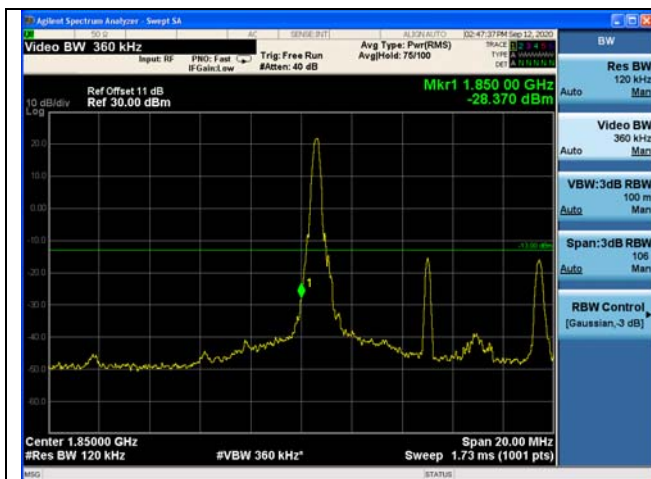


Fig.13



Fig.14

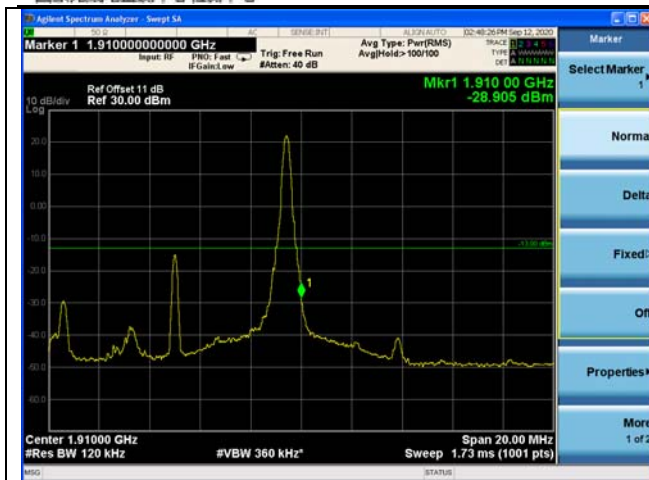


Fig.15



Fig.16

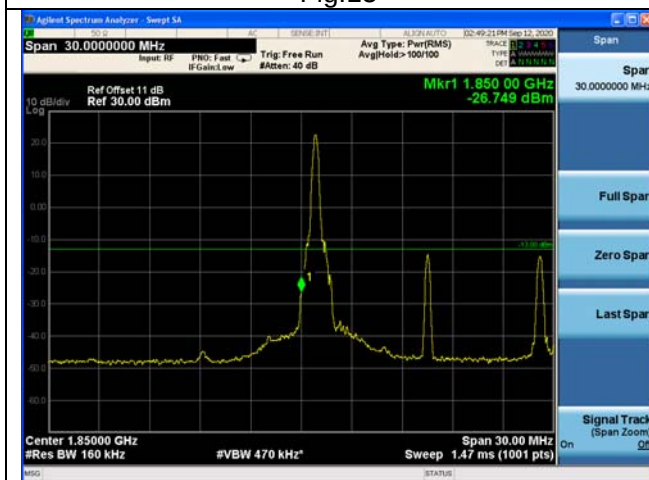


Fig.17



Fig.18

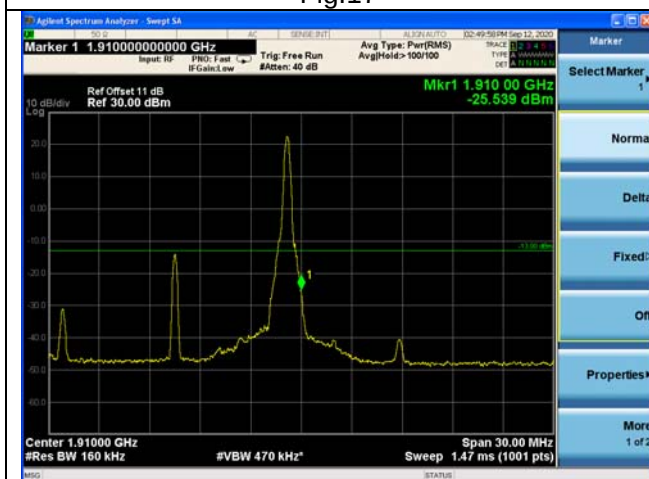


Fig.19



Fig.20

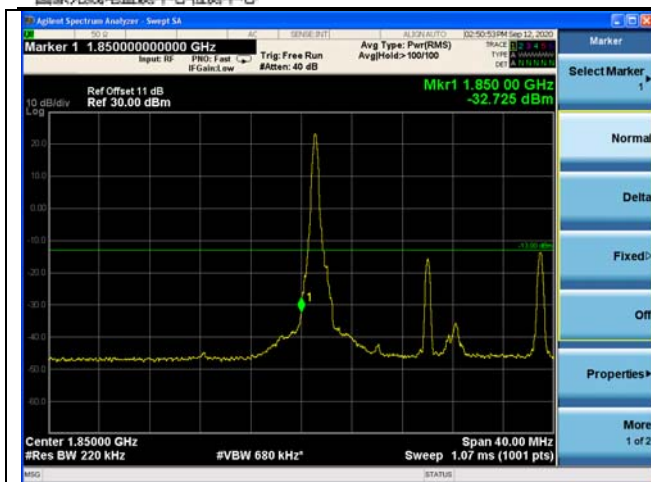


Fig.21



Fig.22

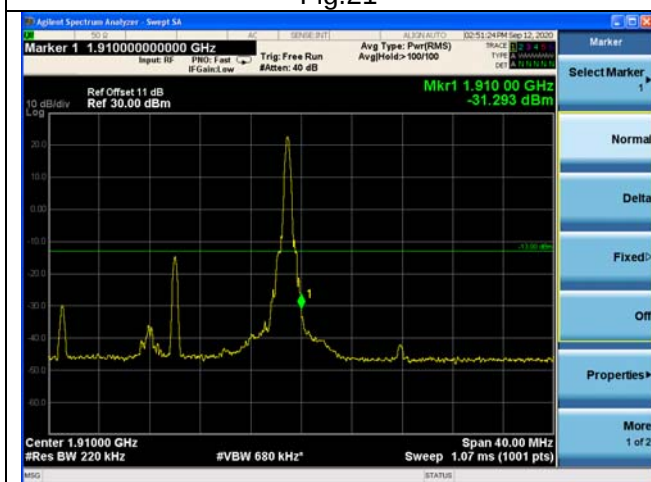


Fig.23



Fig.24

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band2 Low Channel					
		1.4M	3M	5M	10M	15M	20M
-10	NV	0.010	0.017	-0.037	-0.010	0.044	0.035
0	NV	0.021	0.024	-0.026	-0.028	0.032	-0.024
+10	NV	-0.038	0.033	0.022	0.032	0.012	-0.004
+20	NV	0	0	0	0	0	0
+30	NV	0.014	0.004	-0.039	-0.037	-0.035	-0.027
+40	NV	0.005	-0.041	-0.028	-0.001	-0.022	-0.016
+50	NV	0.014	0.003	0.046	-0.037	-0.032	0.024
+55	NV	-0.007	0.025	0.009	0.021	0.024	-0.036
+20	LV	-0.014	0.051	0.007	0.015	0.043	0.048
+20	HV	-0.023	0.039	0.035	-0.020	0.002	-0.001

Temperature(°C)	Voltage	Test Result (ppm) Band2 High Channel					
		1.4M	3M	5M	10M	15M	20M
-10	NV	0.043	0.029	0.027	0.053	0.005	-0.007
0	NV	0.037	0.036	0.004	-0.007	-0.030	0.046
+10	NV	0.049	-0.042	-0.032	-0.020	-0.042	0.046
+20	NV	0	0	0	0	0	0
+30	NV	-0.011	0.042	-0.009	0.053	-0.022	-0.028
+40	NV	0.041	0.041	-0.030	0.036	0.039	0.045
+50	NV	-0.041	-0.041	0.039	-0.004	0.007	-0.037
+55	NV	0.009	-0.013	-0.016	0.036	-0.037	0.010
+20	LV	0.018	-0.036	-0.007	-0.009	0.007	0.040
+20	HV	-0.027	0.050	0.037	0.047	-0.035	-0.022