

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 7

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2502.5	20775	5	1	0	23.31
				1	24	23.29
				12	6	22.45
				25	0	22.47
	2535	21100		1	0	23.35
				1	24	23.35
				12	6	22.54
				25	0	22.53
	2567.5	21425		1	0	23.37
				1	24	23.30
				12	6	22.51
				25	0	22.44
16QAM	2502.5	20775	5	1	0	22.76
				1	24	22.75
				12	6	21.71
				25	0	21.65
	2535	21100		1	0	22.81
				1	24	22.77
				12	6	21.71
				25	0	21.61
	2567.5	21425		1	0	22.73
				1	24	22.71
				12	6	21.57
				25	0	21.60
64QAM	2502.5	20775	5	1	0	22.53
				1	24	22.50
				12	6	21.60
				25	0	21.57
	2535	21100		1	0	22.61
				1	24	22.61
				12	6	21.57
				25	0	21.58
	2567.5	21425		1	0	22.62
				1	24	22.59
				12	6	21.57
				25	0	21.36

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2505	20800	10	1	0	23.31
				1	49	23.20
				24	12	22.43
				50	0	22.38
	2535	21100		1	0	23.35
				1	49	23.36
				24	12	22.44
				50	0	22.45
	2565	21400		1	0	23.31
				1	49	23.27
				24	12	22.49
				50	0	22.38
16QAM	2505	20800	10	1	0	22.72
				1	49	22.72
				24	12	21.60
				50	0	21.62
	2535	21100		1	0	22.72
				1	49	22.80
				24	12	21.62
				50	0	21.52
	2565	21400		1	0	22.64
				1	49	22.68
				24	12	21.59
				50	0	21.49
64QAM	2505	20800	10	1	0	22.51
				1	49	22.49
				24	12	21.56
				50	0	21.55
	2535	21100		1	0	22.53
				1	49	22.60
				24	12	21.53
				50	0	21.50
	2565	21400		1	0	22.58
				1	49	22.57
				24	12	21.56
				50	0	21.47

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2507.5	20825	15	1	0	23.33
				1	74	23.29
				40	18	22.49
				75	0	22.46
	2535	21100		1	0	23.38
				1	74	23.37
				40	18	22.52
				75	0	22.51
	2562.5	21375		1	0	23.37
				1	74	23.33
				40	18	22.51
				75	0	22.45
16QAM	2507.5	20825	15	1	0	22.75
				1	74	22.70
				40	18	21.61
				75	0	21.59
	2535	21100		1	0	22.74
				1	74	22.75
				40	18	21.69
				75	0	21.64
	2562.5	21375		1	0	22.74
				1	74	22.63
				40	18	21.60
				75	0	21.57
64QAM	2507.5	20825	15	1	0	22.51
				1	74	22.51
				40	18	21.57
				75	0	21.55
	2535	21100		1	0	22.62
				1	74	22.60
				40	18	21.61
				75	0	21.53
	2562.5	21375		1	0	22.59
				1	74	22.58
				40	18	21.59
				75	0	21.54

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2510	20850	20	1	0	23.41
				1	99	23.37
				50	25	22.56
				100	0	22.54
	2535	21100		1	0	23.45
				1	99	23.44
				50	25	22.60
				100	0	22.58
	2560	21350		1	0	23.44
				1	99	23.41
				50	25	22.58
				100	0	22.52
16QAM	2510	20850	20	1	0	22.86
				1	99	22.82
				50	25	21.76
				100	0	21.74
	2535	21100		1	0	22.88
				1	99	22.88
				50	25	21.79
				100	0	21.70
	2560	21350		1	0	22.79
				1	99	22.77
				50	25	21.68
				100	0	21.66
64QAM	2510	20850	20	1	0	22.64
				1	99	22.61
				50	25	21.67
				100	0	21.65
	2535	21100		1	0	22.71
				1	99	22.70
				50	25	21.68
				100	0	21.65
	2560	21350		1	0	22.69
				1	99	22.66
				50	25	21.64
				100	0	21.61

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	
7	2502.5	20775	5	25	0	4.4812	Fig.1	4.4795	Fig.2	4.4798	Fig.3
	2535	21100		25	0	4.4786	Fig.4	4.4788	Fig.5	4.4770	Fig.6
	2567.5	21425		25	0	4.4795	Fig.7	4.4748	Fig.8	4.4752	Fig.9
	2505	20800	10	50	0	8.9642	Fig.10	8.9646	Fig.11	8.9529	Fig.12
	2535	21100		50	0	8.9607	Fig.13	8.9453	Fig.14	8.9595	Fig.15
	2565	21400		50	0	8.9593	Fig.16	8.9409	Fig.17	8.9407	Fig.18
	2507.5	20825	15	75	0	13.460	Fig.19	13.449	Fig.20	13.475	Fig.21
	2535	21100		75	0	13.456	Fig.22	13.415	Fig.23	13.469	Fig.24
	2562.5	21375		75	0	13.432	Fig.25	13.402	Fig.26	13.395	Fig.27
	2510	20850	20	100	0	17.918	Fig.28	17.931	Fig.29	17.891	Fig.30
	2535	21100		100	0	17.904	Fig.31	17.879	Fig.32	17.894	Fig.33
	2560	21350		100	0	17.874	Fig.34	17.848	Fig.35	17.885	Fig.36

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2502.5	20775	5	25	0	5.163	Fig.1	5.099	Fig.2	5.073	Fig.3
	2535	21100		25	0	5.151	Fig.4	5.150	Fig.5	5.065	Fig.6
	2567.5	21425		25	0	5.163	Fig.7	5.145	Fig.8	5.100	Fig.9
	2505	20800	10	50	0	9.904	Fig.10	9.888	Fig.11	9.885	Fig.12
	2535	21100		50	0	9.868	Fig.13	9.902	Fig.14	9.890	Fig.15
	2565	21400		50	0	9.895	Fig.16	9.807	Fig.17	9.829	Fig.18
	2507.5	20825	15	75	0	14.78	Fig.19	14.59	Fig.20	14.73	Fig.21
	2535	21100		75	0	14.95	Fig.22	14.89	Fig.23	14.90	Fig.24
	2562.5	21375		75	0	14.64	Fig.25	14.57	Fig.26	14.66	Fig.27
	2510	20850	20	100	0	19.62	Fig.28	19.69	Fig.29	19.44	Fig.30
	2535	21100		100	0	19.52	Fig.31	19.49	Fig.32	19.50	Fig.33
	2560	21350		100	0	19.47	Fig.34	18.98	Fig.35	19.29	Fig.36

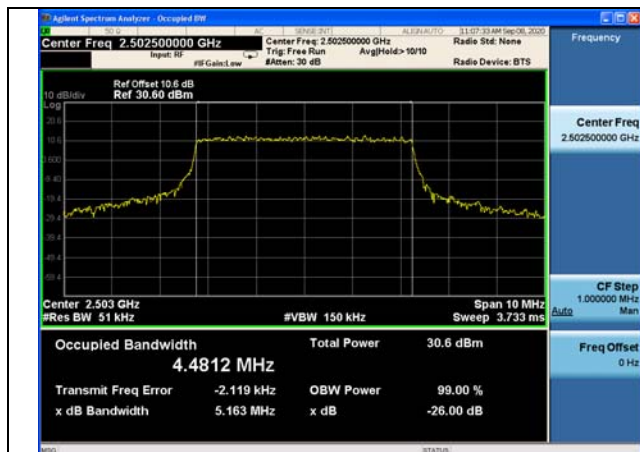


Fig.1

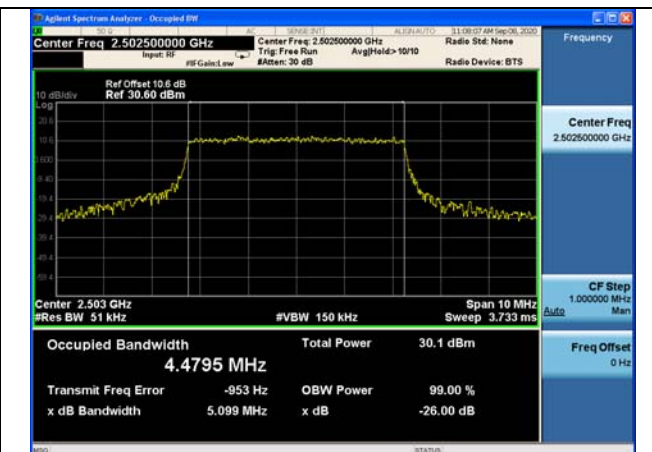


Fig.2

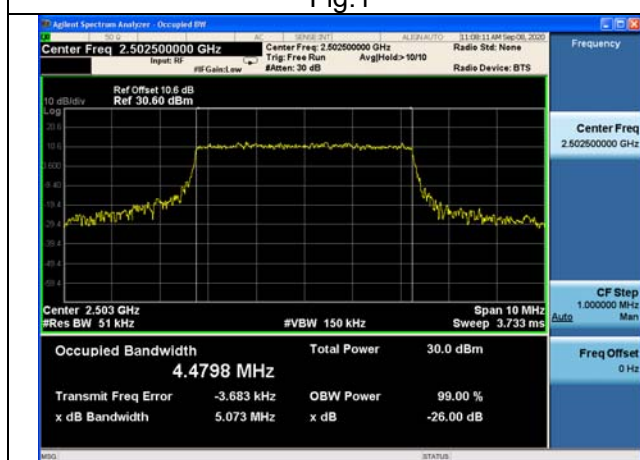


Fig.3

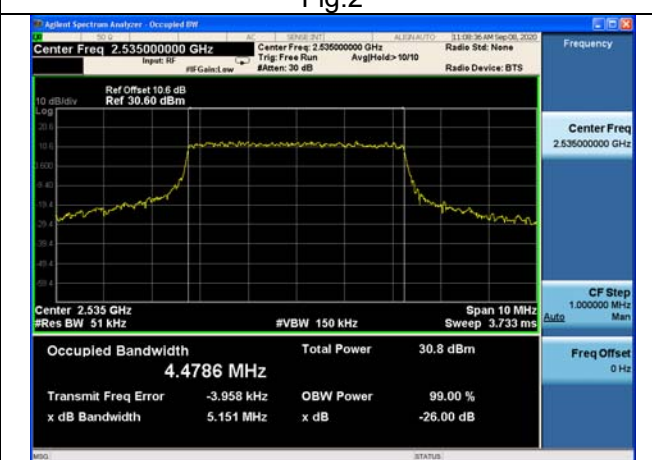


Fig.4

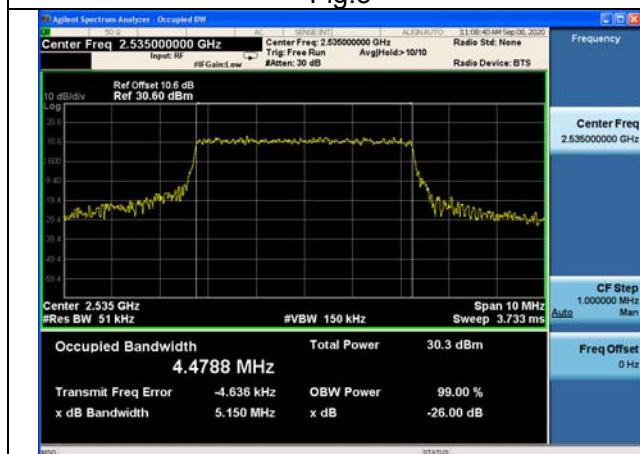


Fig.5

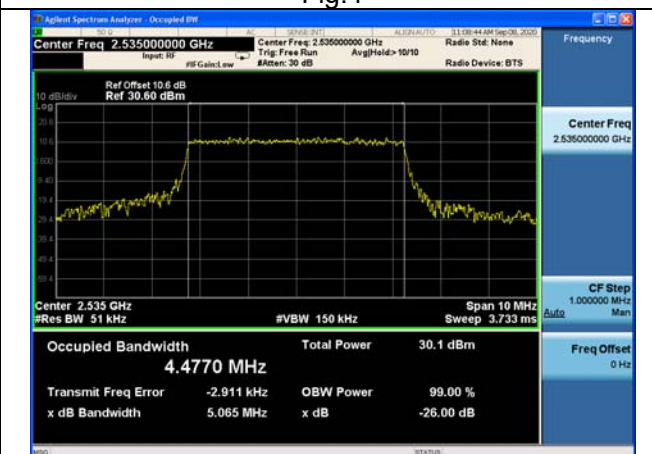


Fig.6

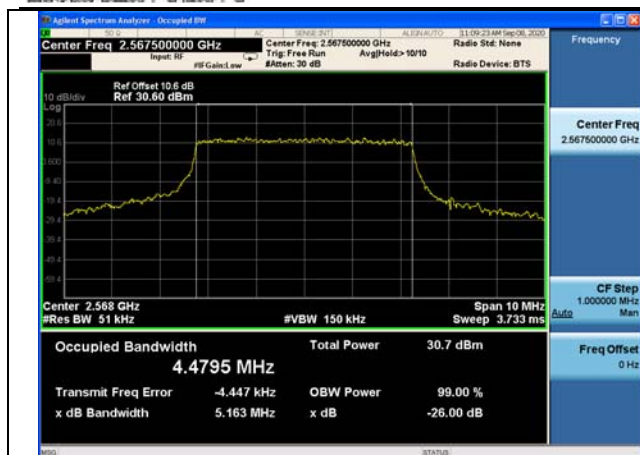


Fig.7

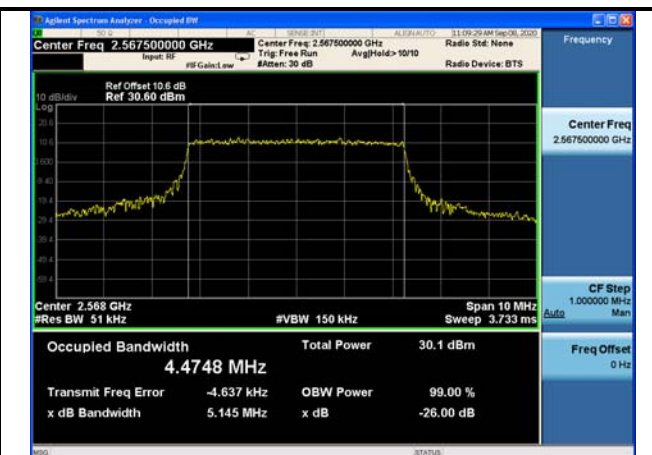


Fig.8

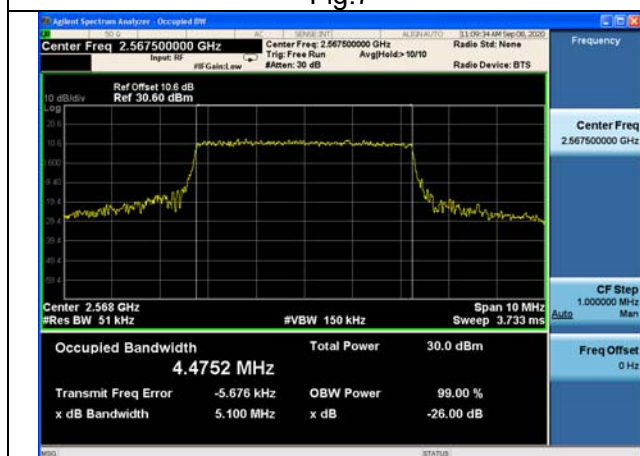


Fig.9

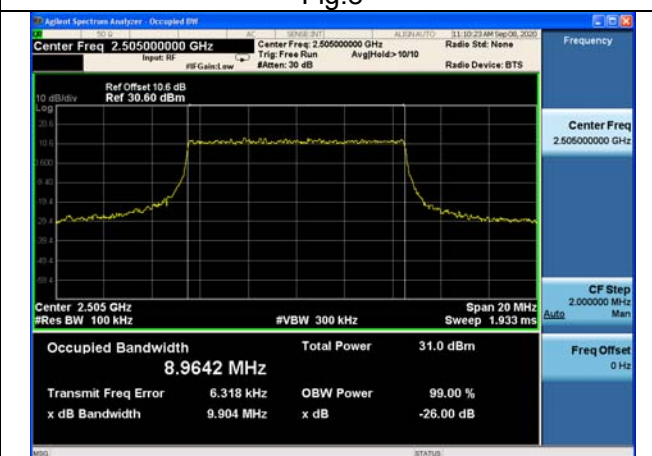


Fig.10

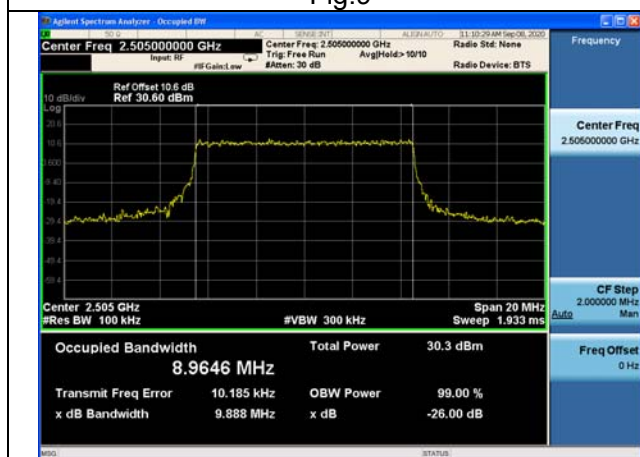


Fig.11

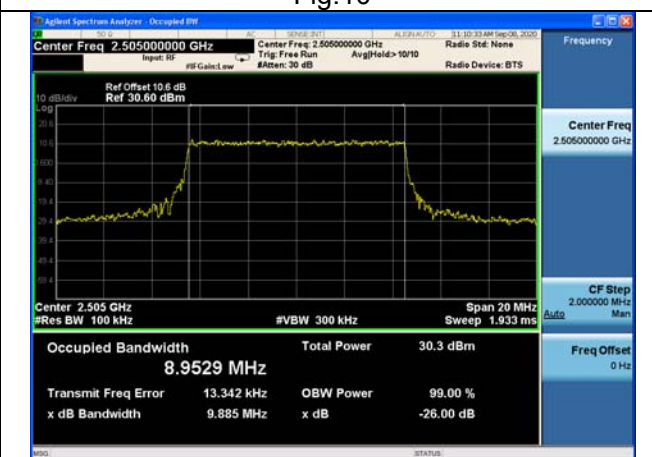


Fig.12

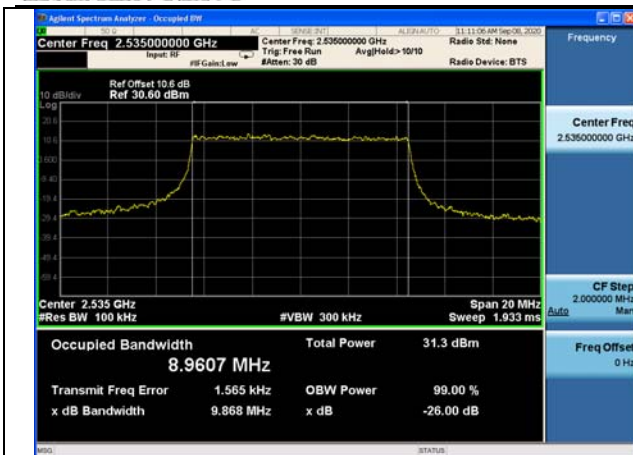


Fig.13

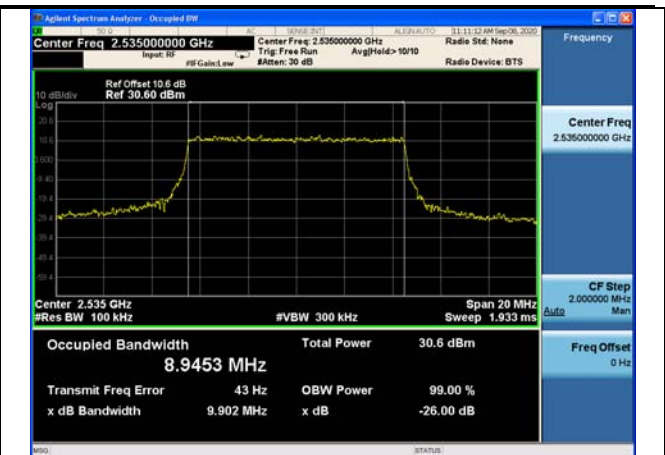


Fig.14

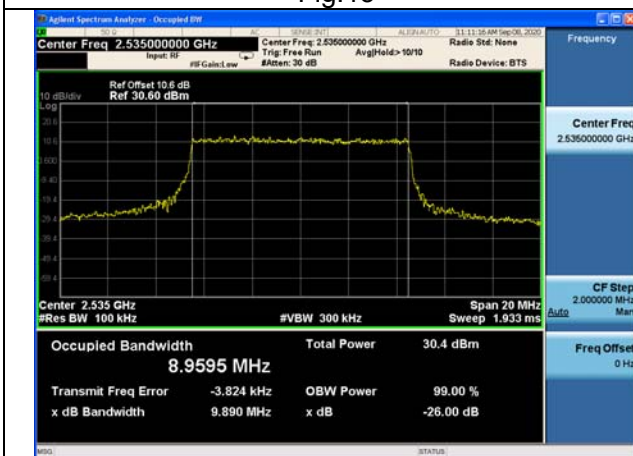


Fig.15

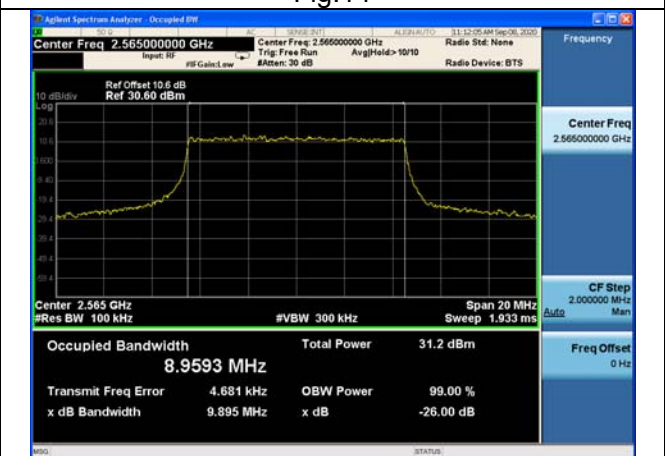


Fig.16

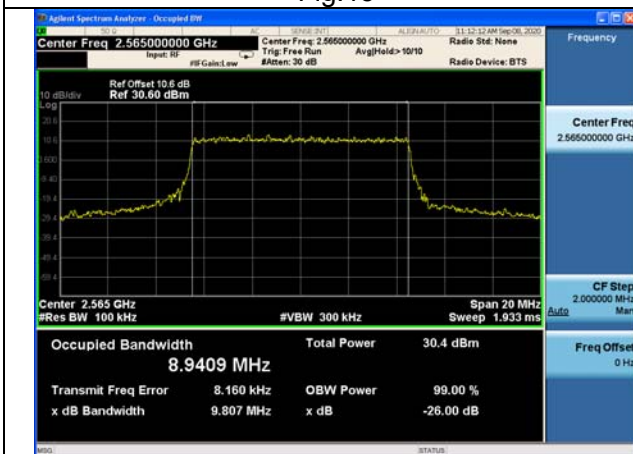


Fig.17



Fig.18

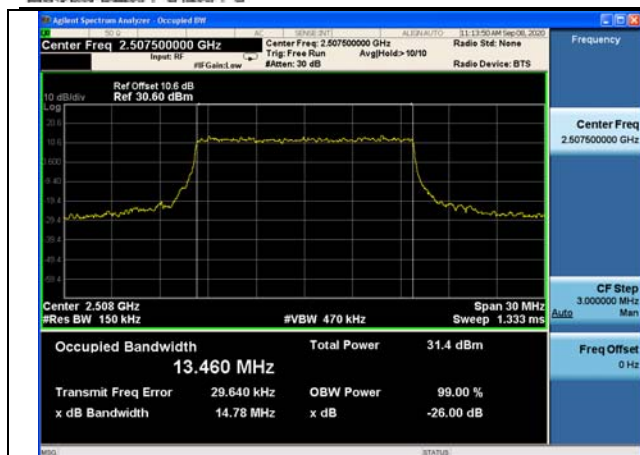


Fig.19

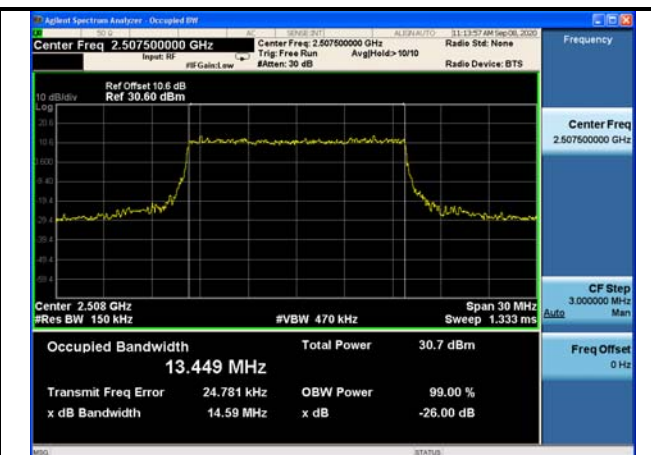


Fig.20

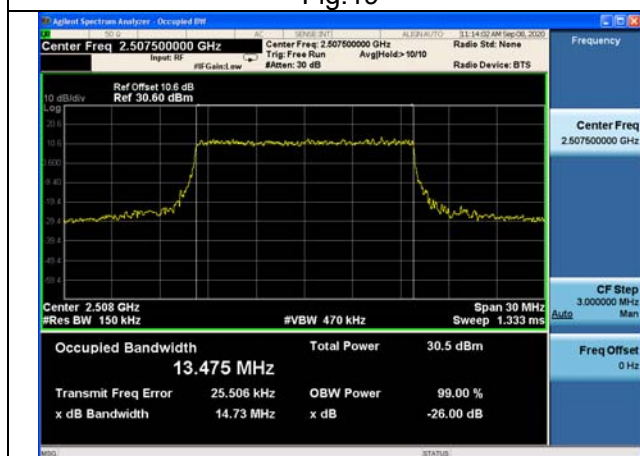


Fig.21

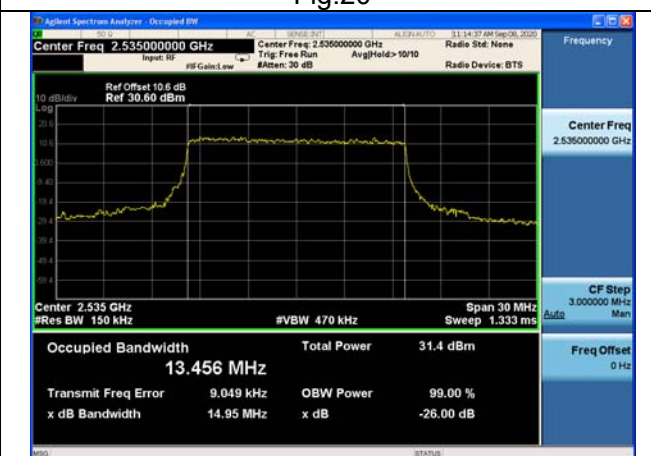


Fig.22

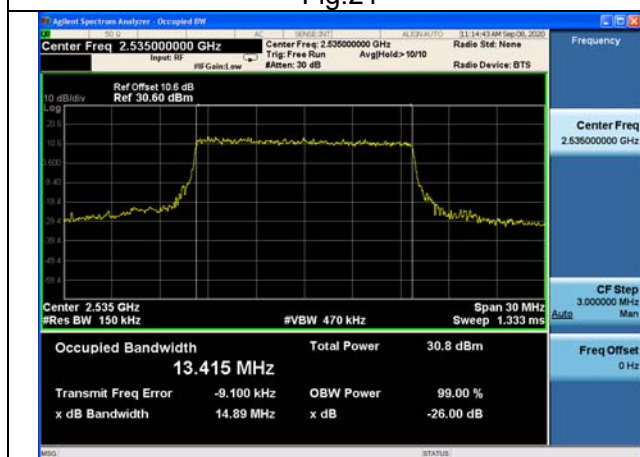


Fig.23

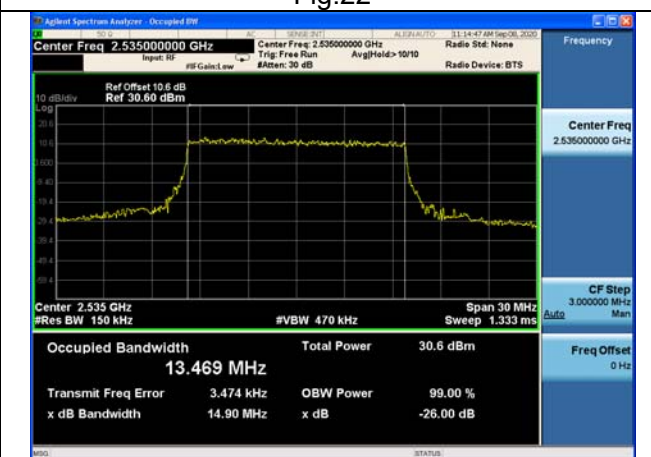


Fig.24

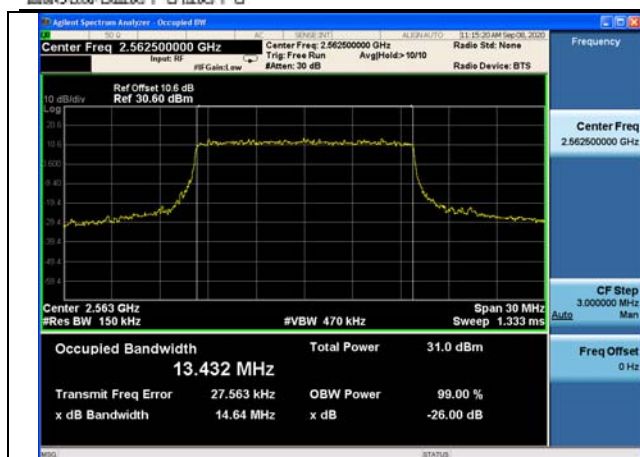


Fig.25

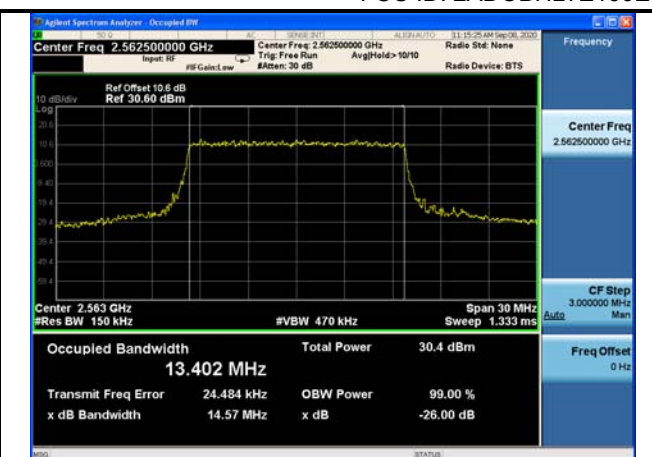


Fig.26

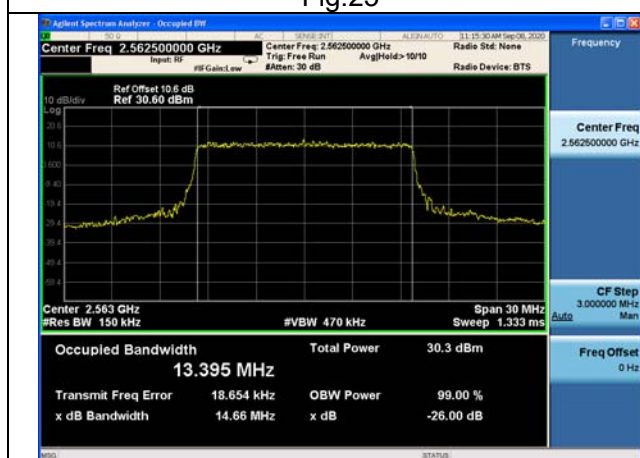


Fig.27

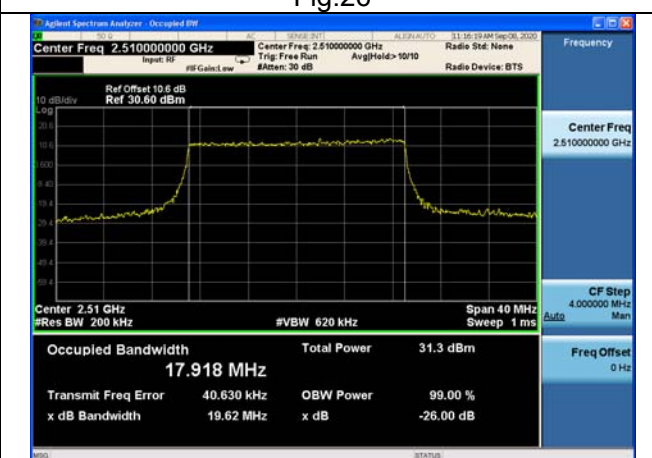


Fig.28

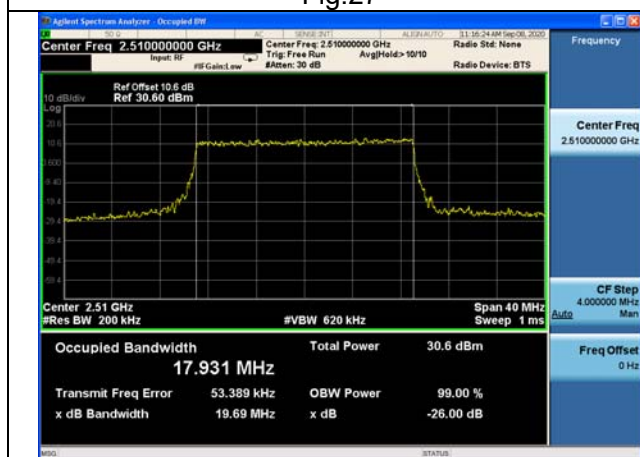


Fig.29

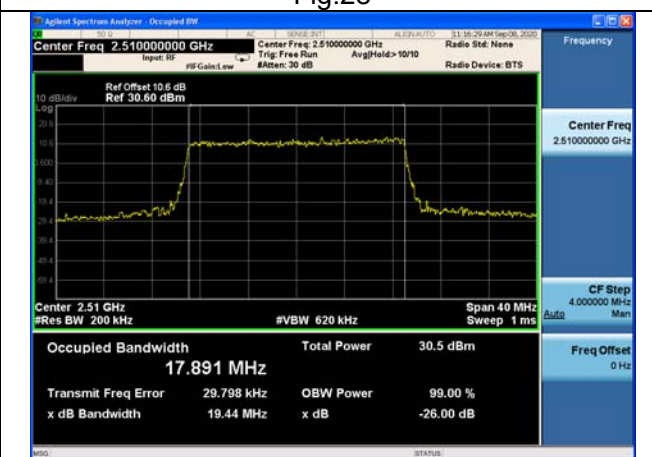


Fig.30

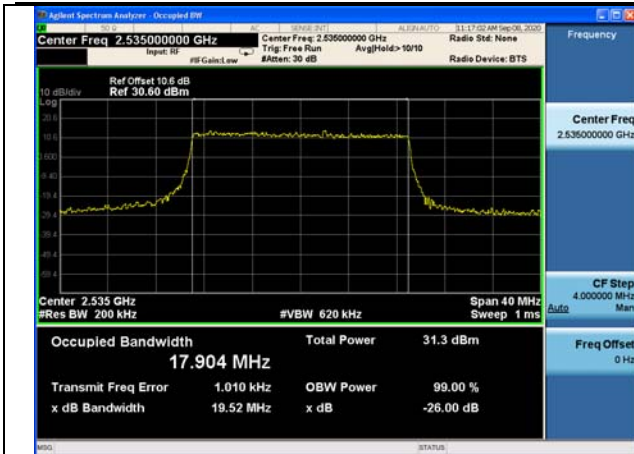


Fig.31



Fig.32

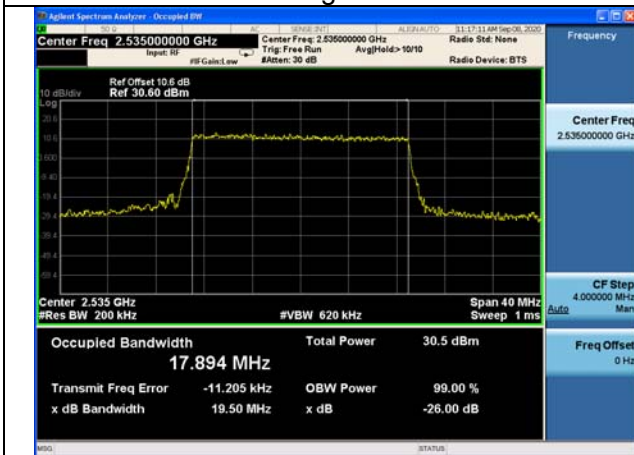


Fig.33



Fig.34

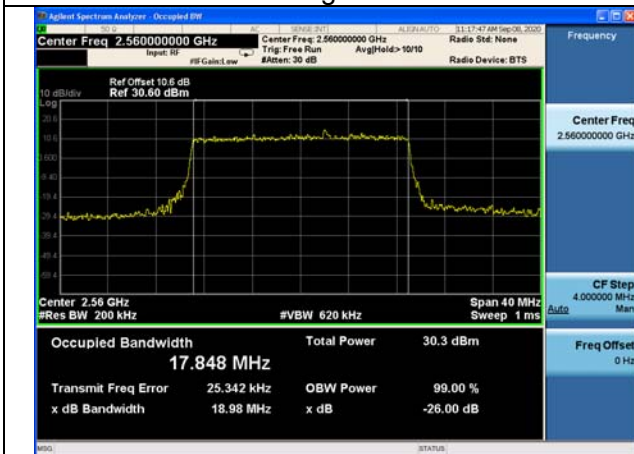


Fig.35



Fig.36

3 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
7	2535	21100	5	1	0	Fig.1	Fig.2	Fig.3
			10	1	0	Fig.4	Fig.5	Fig.6
			15	1	0	Fig.7	Fig.8	Fig.9
			20	1	0	Fig.10	Fig.11	Fig.12



Fig.1



Fig.2



Fig.3



Fig.4

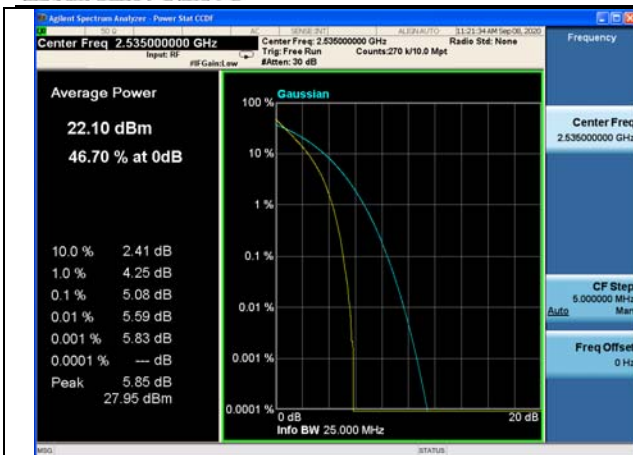


Fig.5

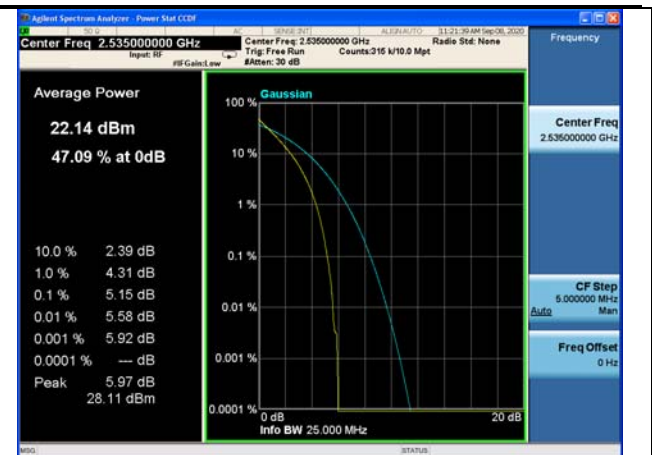


Fig.6



Fig.7

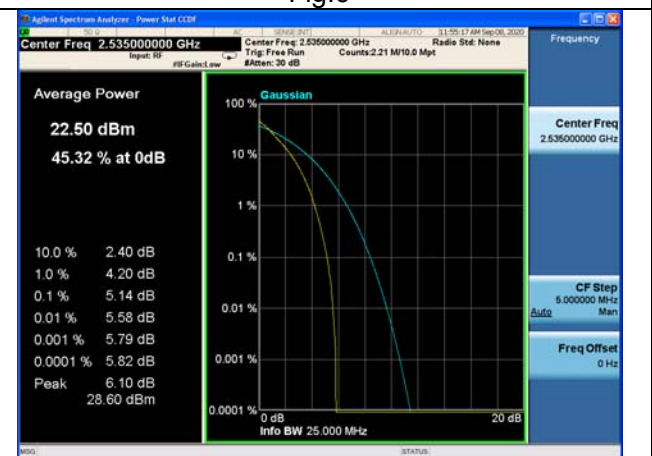


Fig.8



Fig.9



Fig.10

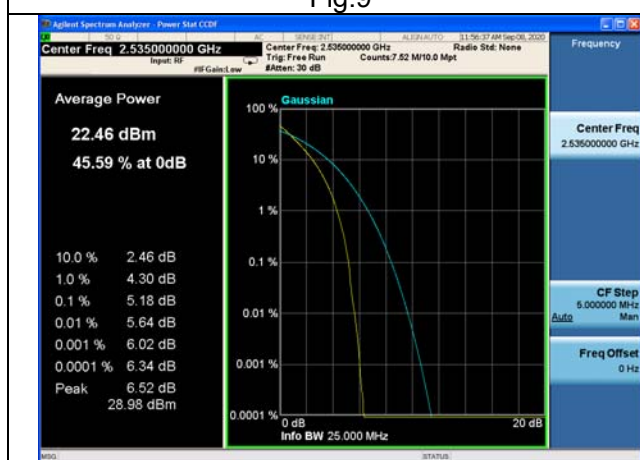


Fig.11



Fig.12

4 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
7	2510	20850	20	1	0	Fig.1-2
	2535	21100	20	1	0	Fig.3-4
	2560	21350	20	1	0	Fig.5-6

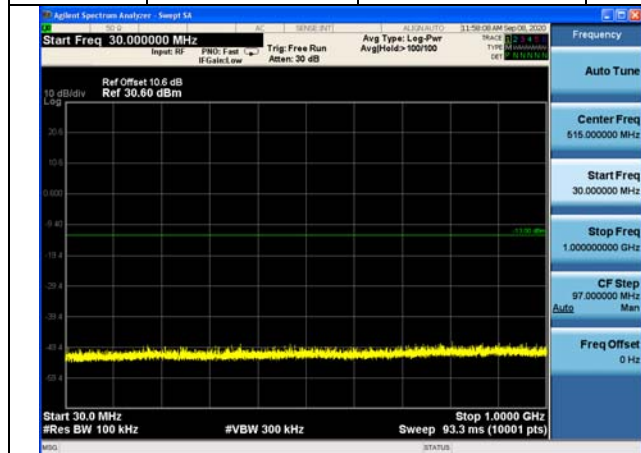


Fig.1

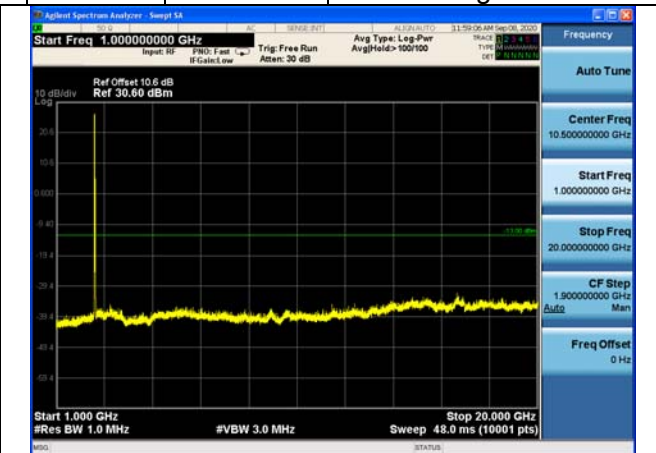


Fig.2

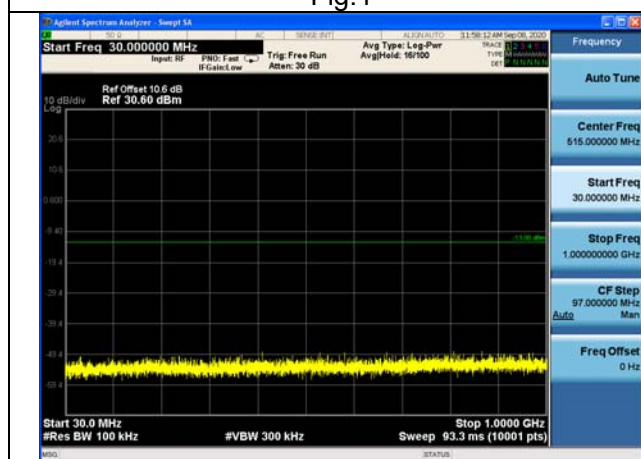


Fig3

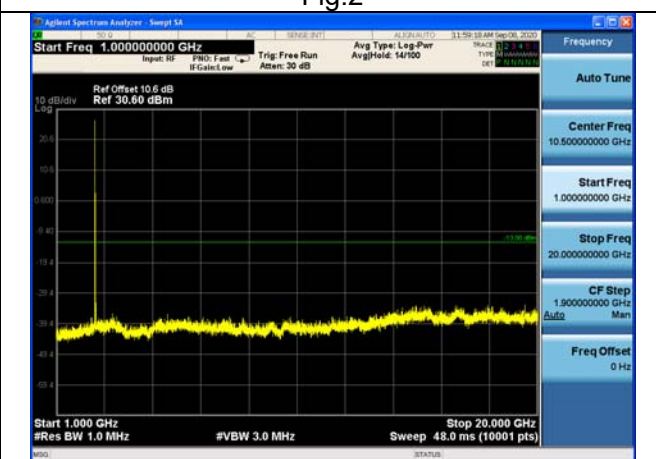


Fig4

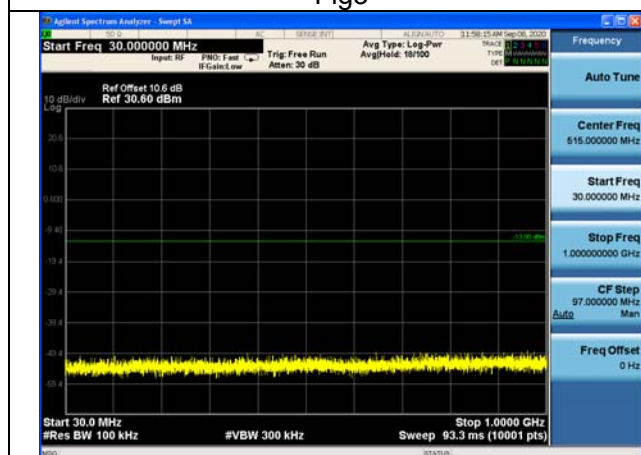


Fig5

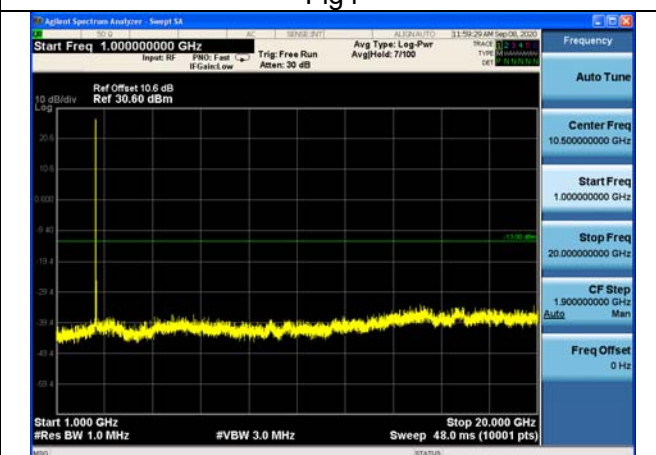


Fig6

5 Band Edges Compliance

Test result

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
7	2502.5	20775	5	1	0	Fig.1
				25	0	Fig.2
	2567.5	21425		1	24	Fig.3
				25	0	Fig.4
	2505	20800	10	1	0	Fig.5
				50	0	Fig.6
	2565	21400		1	49	Fig.7
				50	0	Fig.8
	2507.5	20825	15	1	0	Fig.9
				75	0	Fig.10
	2562.5	21375		1	74	Fig.11
				75	0	Fig.12
	2510	20850	20	1	0	Fig.13
				100	0	Fig.14
	2560	21350		1	99	Fig.15
				100	0	Fig.16

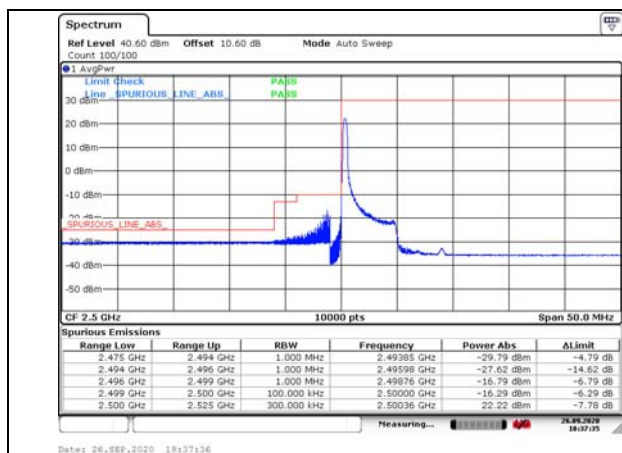


Fig.1

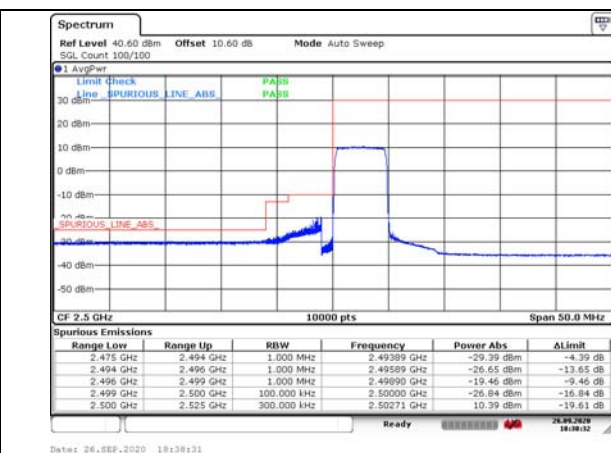


Fig.2

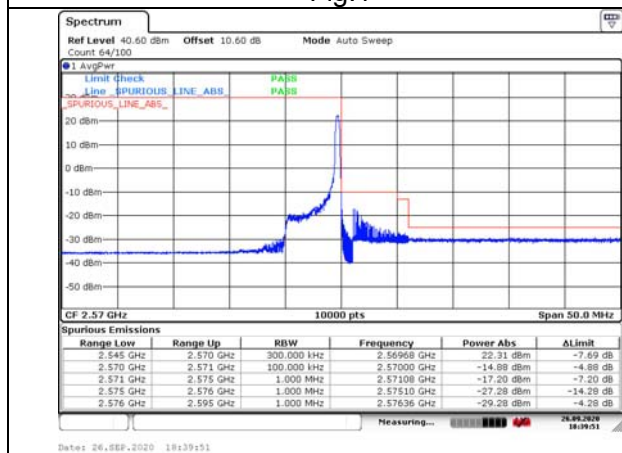


Fig.3

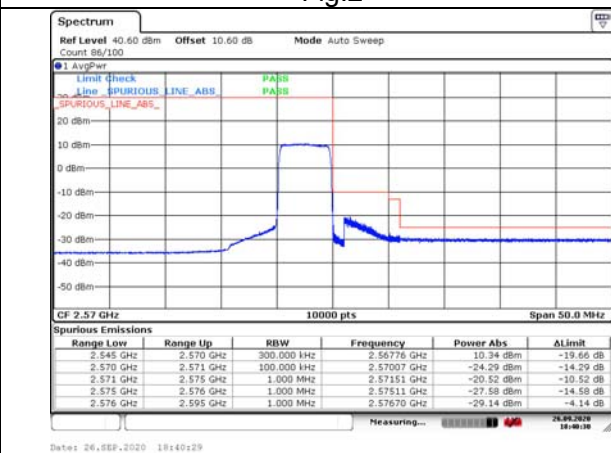


Fig.4

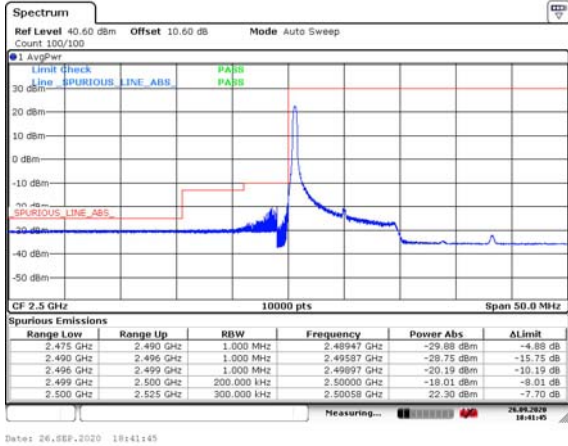


Fig.5

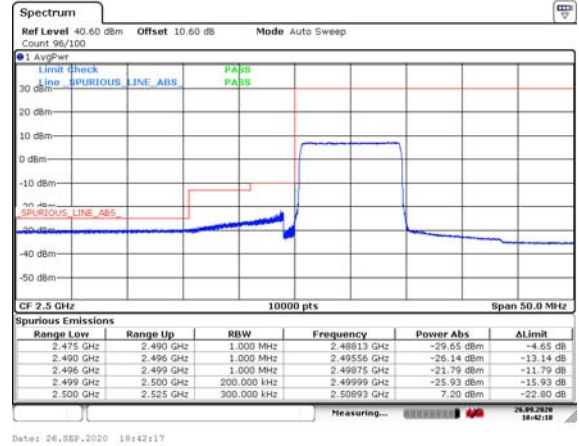


Fig.6

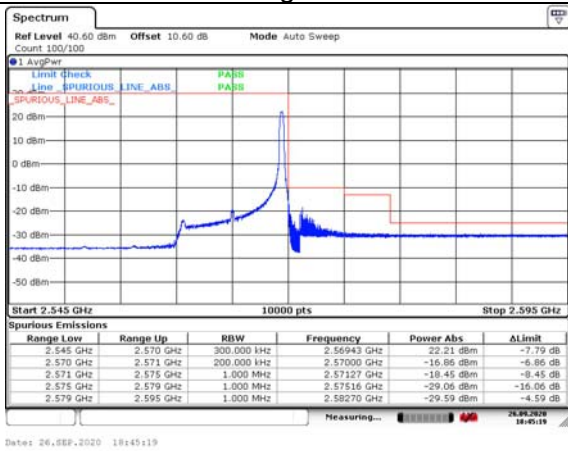


Fig.7

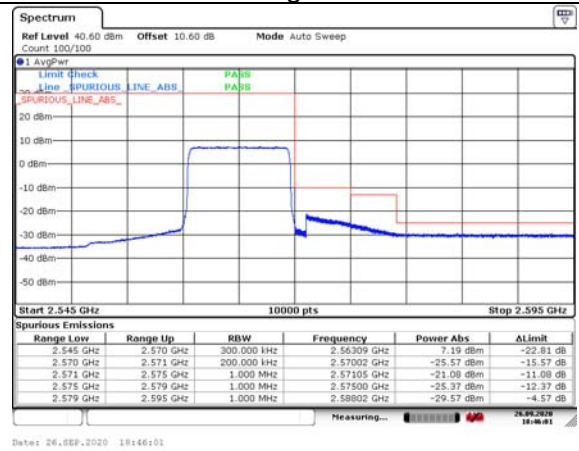


Fig.8

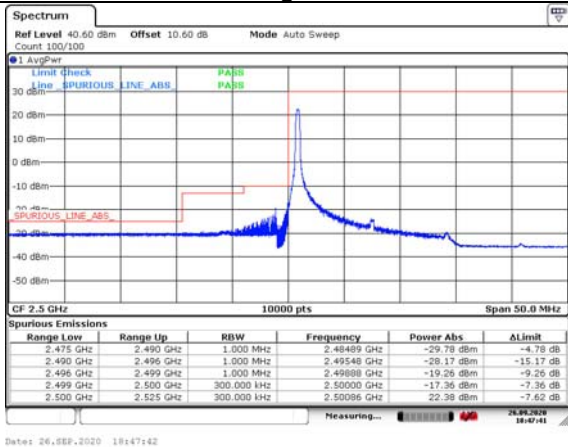


Fig.9

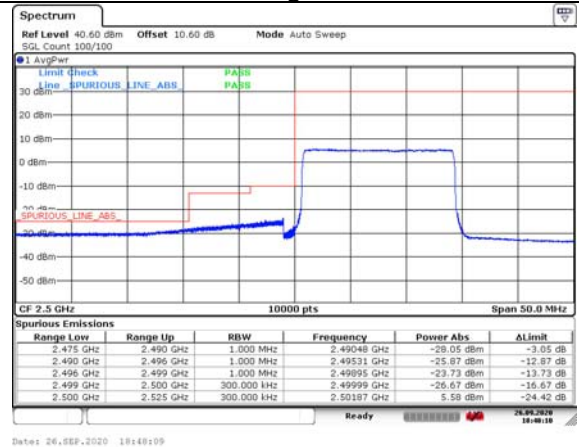


Fig.10

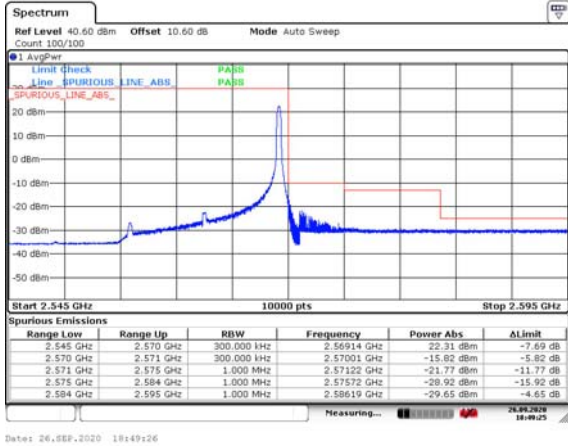


Fig.11

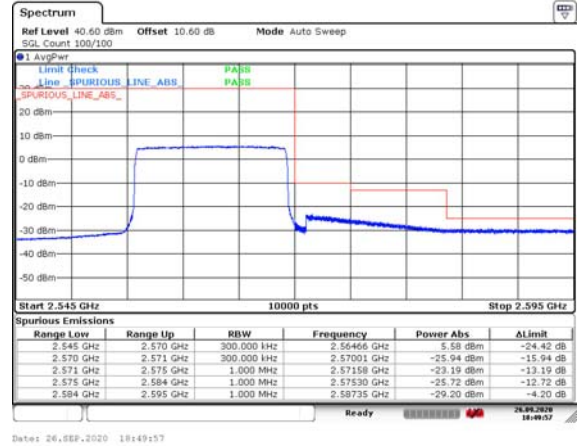


Fig.12

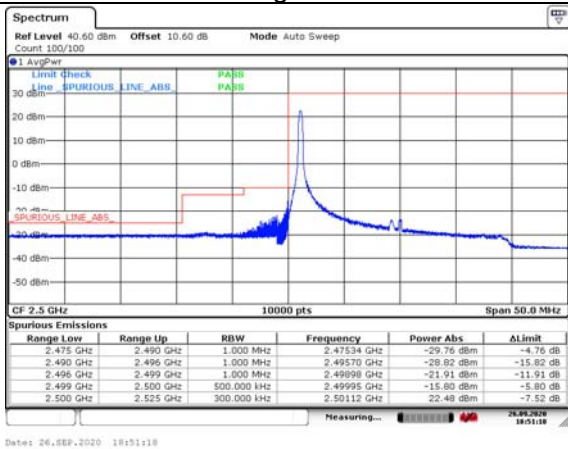


Fig.13

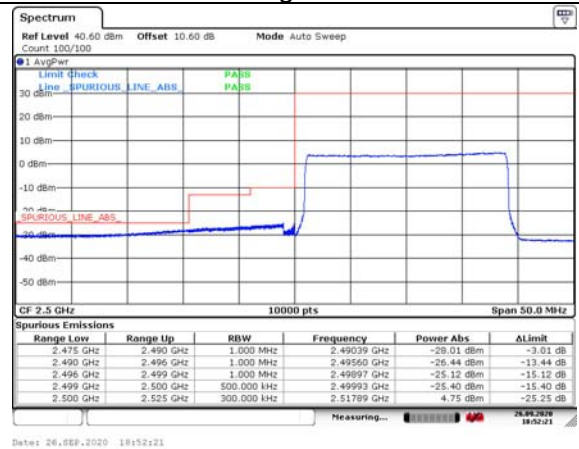


Fig.14

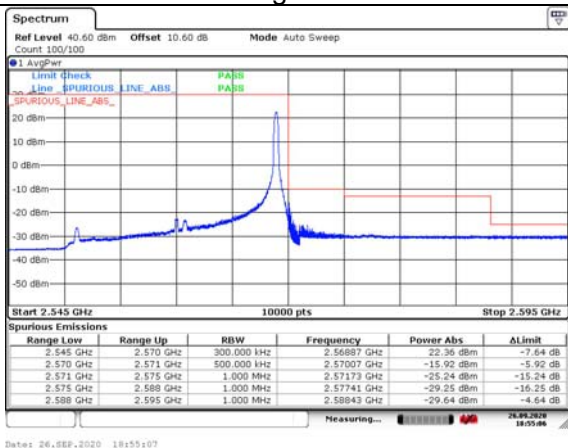


Fig.15

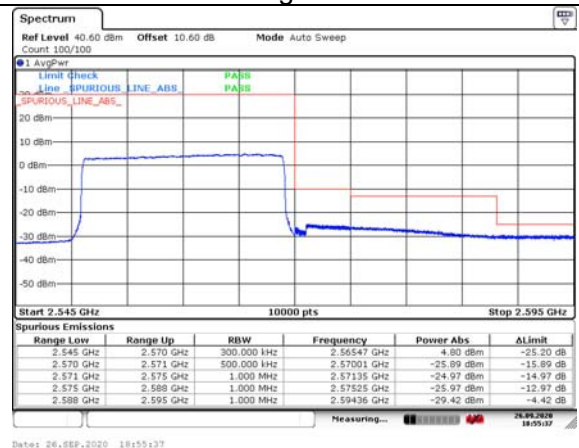


Fig.16

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band7 Low Channel			
		5M	10M	15M	20M
-25	NV	0.011	-0.021	-0.016	0.008
-20	NV	0.003	-0.012	0.005	0.000
-10	NV	0.008	-0.005	-0.003	0.003
0	NV	-0.009	-0.004	-0.003	-0.002
+10	NV	0.011	0.010	-0.006	0.015
+20	NV	0.000	0.000	0.000	0.000
+30	NV	-0.029	-0.003	0.001	0.015
+40	NV	-0.011	0.016	0.003	-0.006
+50	NV	-0.013	-0.014	0.006	-0.014
+20	LV	-0.009	-0.007	-0.006	0.011
+20	HV	0.022	-0.019	-0.001	-0.008

Temperature(°C)	Voltage	Test Result (ppm) Band7 High Channel			
		5M	10M	15M	20M
-25	NV	0.005	-0.011	0.008	0.014
-20	NV	0.020	0.002	-0.021	0.007
-10	NV	0.017	0.011	-0.009	-0.015
0	NV	-0.002	0.012	-0.014	0.005
+10	NV	-0.013	0.018	0.004	-0.009
+20	NV	0.000	0.000	0.000	0.000
+30	NV	-0.010	-0.005	0.023	0.018
+40	NV	0.020	-0.011	0.002	-0.001
+50	NV	0.002	0.015	0.006	-0.004
+20	LV	-0.020	-0.005	-0.018	0.011
+20	HV	0.013	-0.019	-0.011	0.000