

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 7

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	B W	RB Size	RB Offset	Conducted power (dBm)
QPSK	2502.5	20775	5	1	0	23.09
				1	24	23.11
				12	6	22.45
				25	0	22.47
	2535	21100		1	0	22.98
				1	24	22.94
				12	6	22.47
				25	0	22.46
	2567.5	21425		1	0	22.93
				1	24	22.93
				12	6	22.48
				25	0	22.56
16QAM	2502.5	20775	5	1	0	22.78
				1	24	22.81
				12	6	21.67
				25	0	21.59
	2535	21100		1	0	22.70
				1	24	22.64
				12	6	21.56
				25	0	21.53
	2567.5	21425		1	0	22.64
				1	24	22.66
				12	6	21.68
				25	0	21.59

Modulation	Carrier frequency (MHz)	UL Channel	B W	RB Size	RB Offset	Conducted power (dBm)
QPSK	2505	20800	10	1	0	23.10
				1	49	23.11
				24	12	22.40
				50	0	22.46
	2535	21100		1	0	23.00
				1	49	23.02
				24	12	22.48
				50	0	22.44
	2565	21400		1	0	22.94
				1	49	22.95
				24	12	22.47
				50	0	22.60
16QAM	2505	20800	10	1	0	22.74
				1	49	22.78
				24	12	21.59
				50	0	21.63
	2535	21100		1	0	22.63
				1	49	22.67
				24	12	21.58
				50	0	21.51
	2565	21400		1	0	22.62
				1	49	22.62
				24	12	21.61
				50	0	21.62

Modulation	Carrier frequency (MHz)	UL Channel	B W	RB Size	RB Offset	Conducted power (dBm)
QPSK	2507.5	20825	15	1	0	23.08
				1	74	23.13
				40	18	22.47
				75	0	22.42
	2535	21100		1	0	22.99
				1	74	22.94
				40	18	22.49
				75	0	22.51
	2562.5	21375		1	0	22.93
				1	74	22.95
				40	18	22.46
				75	0	22.57
16QAM	2507.5	20825	15	1	0	22.82
				1	74	22.78
				40	18	21.68
				75	0	21.62
	2535	21100		1	0	22.68
				1	74	22.69
				40	18	21.55
				75	0	21.58
	2562.5	21375		1	0	22.65
				1	74	22.67
				40	18	21.61
				75	0	21.59

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2510	20850	20	1	0	23.19
				1	99	23.19
				50	25	22.51
				100	0	22.52
	2535	21100		1	0	23.05
				1	99	23.05
				50	25	22.58
				100	0	22.57
	2560	21350		1	0	23.02
				1	99	23.02
				50	25	22.52
				100	0	22.64
16QAM	2510	20850	20	1	0	22.86
				1	99	22.86
				50	25	21.72
				100	0	21.69
	2535	21100		1	0	22.75
				1	99	22.75
				50	25	21.67
				100	0	21.62
	2560	21350		1	0	22.71
				1	99	22.71
				50	25	21.73
				100	0	21.68

2 Occupied Bandwidth

Test result

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
7	2502.5	20775	5	25	0	4.4682	Fig.1	4.4612	Fig.2
	2535	21100		25	0	4.4641	Fig.3	4.4667	Fig.4
	2567.5	21425		25	0	4.4749	Fig.5	4.4703	Fig.6
	2505	20800	10	50	0	8.9433	Fig.7	8.9497	Fig.8
	2535	21100		50	0	8.9390	Fig.9	8.9294	Fig.10
	2565	21400		50	0	8.9335	Fig.11	8.9423	Fig.12
	2507.5	20825	15	75	0	13.476	Fig.13	13.398	Fig.14
	2535	21100		75	0	13.430	Fig.15	13.432	Fig.16
	2562.5	21375		75	0	13.376	Fig.17	13.413	Fig.18
	2510	20850	20	100	0	17.891	Fig.19	17.864	Fig.20
	2535	21100		100	0	17.874	Fig.21	17.868	Fig.22
	2560	21350		100	0	17.890	Fig.23	17.852	Fig.24

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
7	2502.5	20775	5	25	0	4.887	Fig.1	4.866	Fig.2
	2535	21100		25	0	4.894	Fig.3	4.899	Fig.4
	2567.5	21425		25	0	4.937	Fig.5	4.890	Fig.6
	2505	20800	10	50	0	9.682	Fig.7	9.601	Fig.8
	2535	21100		50	0	9.667	Fig.9	9.851	Fig.10
	2565	21400		50	0	9.764	Fig.11	9.658	Fig.12
	2507.5	20825	15	75	0	14.37	Fig.13	14.43	Fig.14
	2535	21100		75	0	14.60	Fig.15	14.51	Fig.16
	2562.5	21375		75	0	14.51	Fig.17	14.58	Fig.18
	2510	20850	20	100	0	19.27	Fig.19	19.11	Fig.20
	2535	21100		100	0	19.26	Fig.21	19.57	Fig.22
	2560	21350		100	0	19.46	Fig.23	19.24	Fig.24

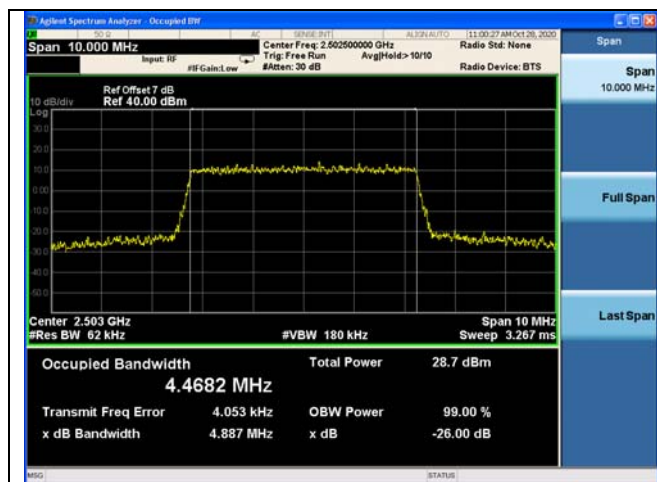


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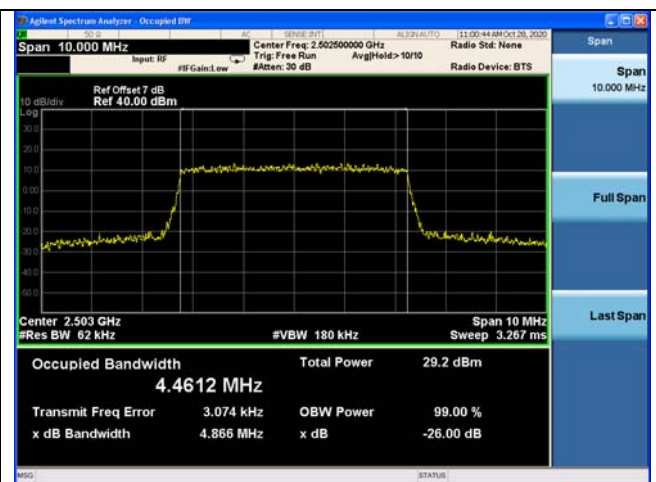


Fig.2

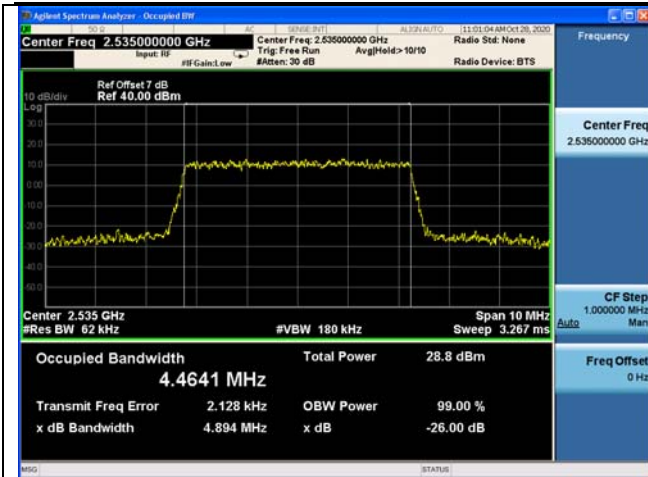


Fig.3

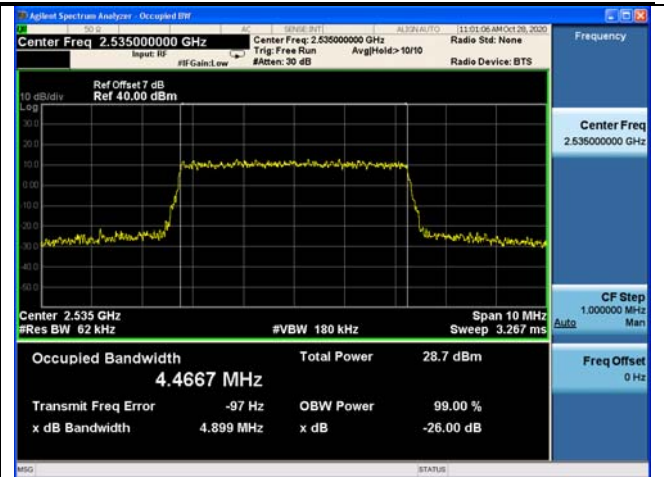


Fig.4

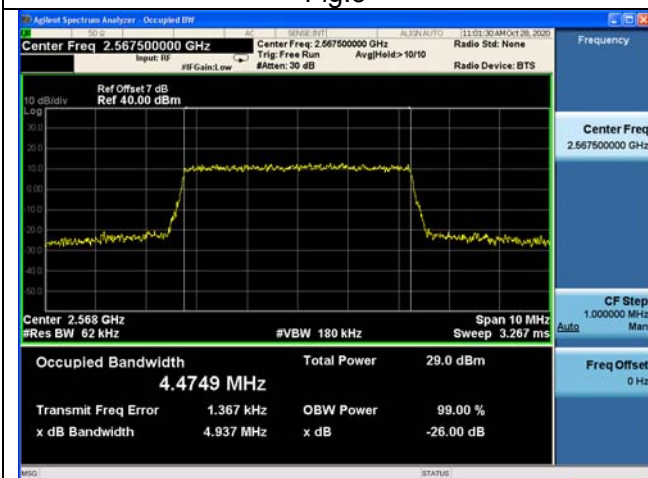


Fig.5

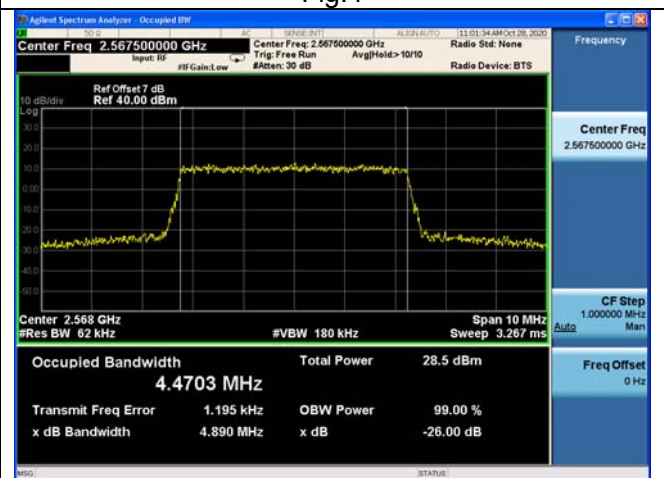


Fig.6

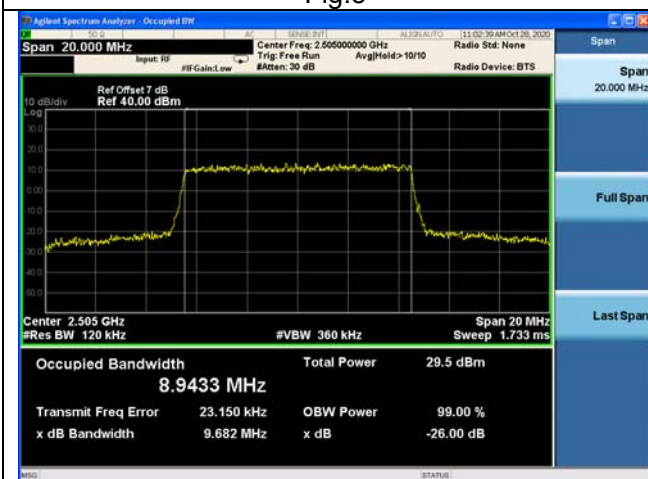


Fig.7

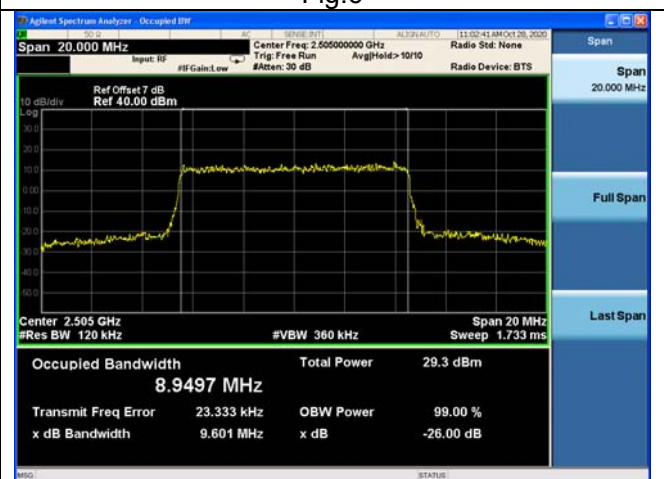


Fig.8

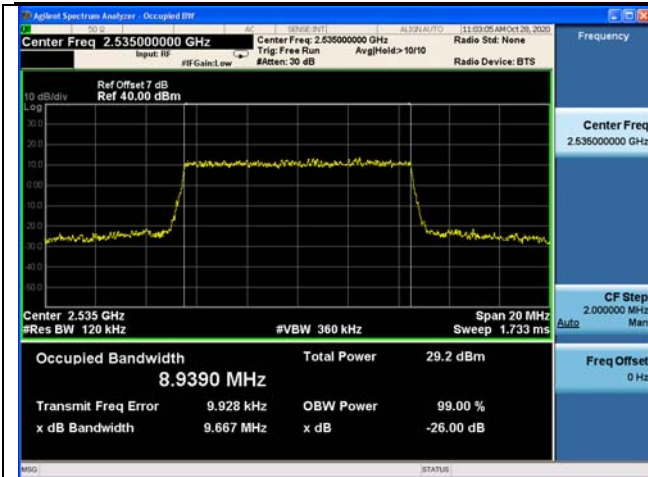


Fig.9

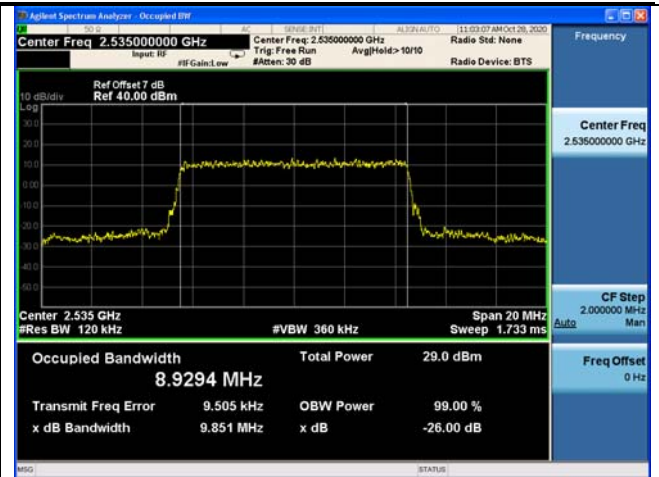


Fig.10

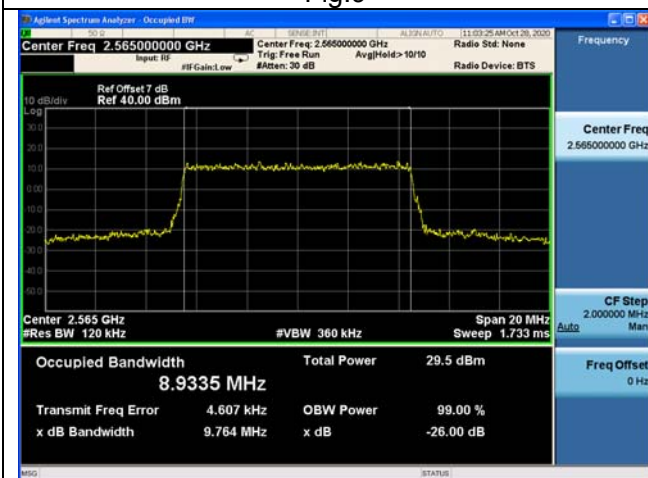


Fig.11

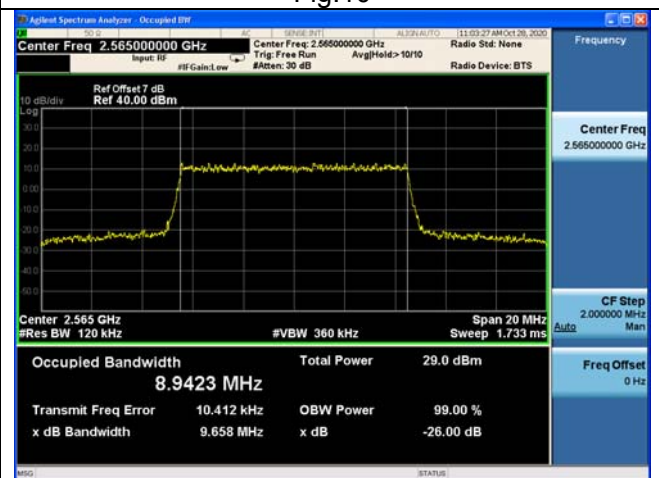


Fig.12

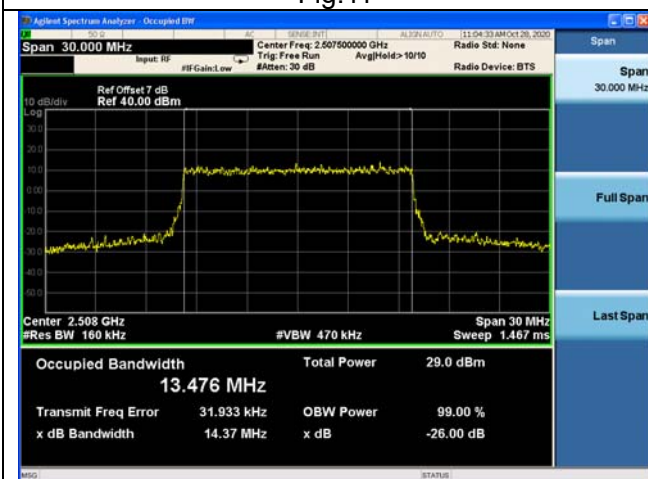


Fig.13

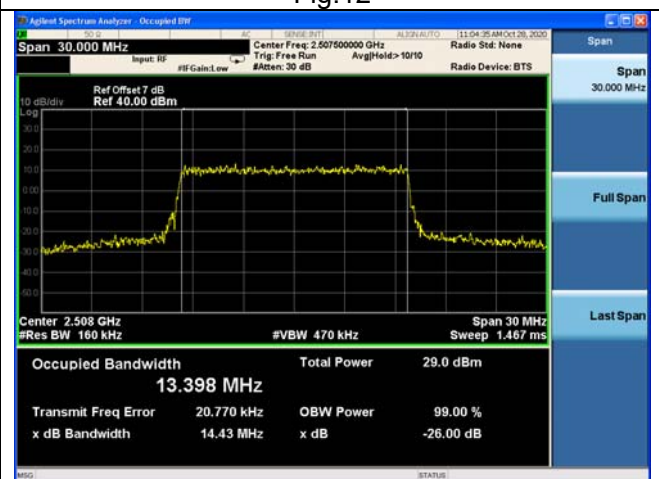


Fig.14

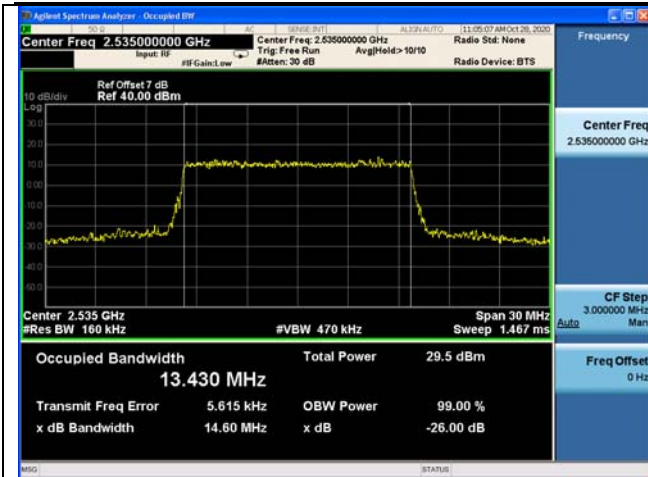


Fig.15

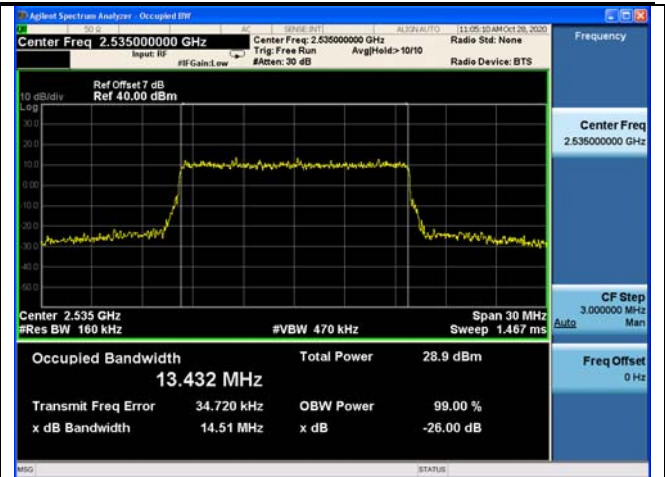


Fig.16

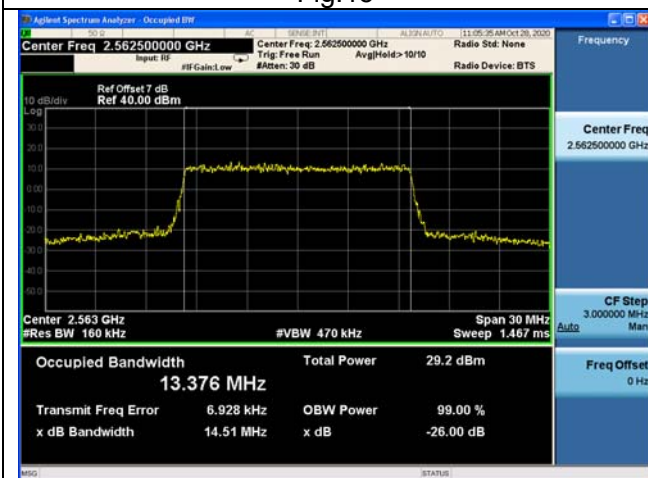


Fig.17

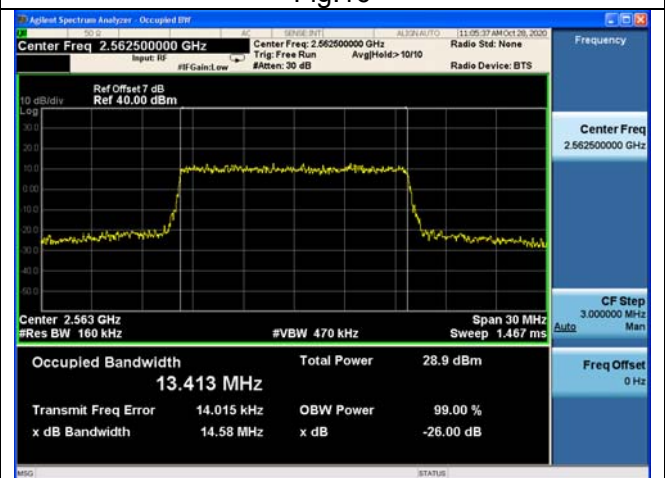


Fig.18

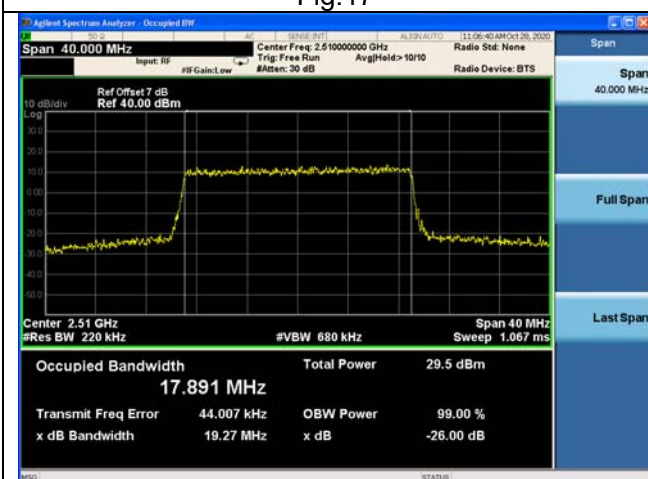


Fig.19

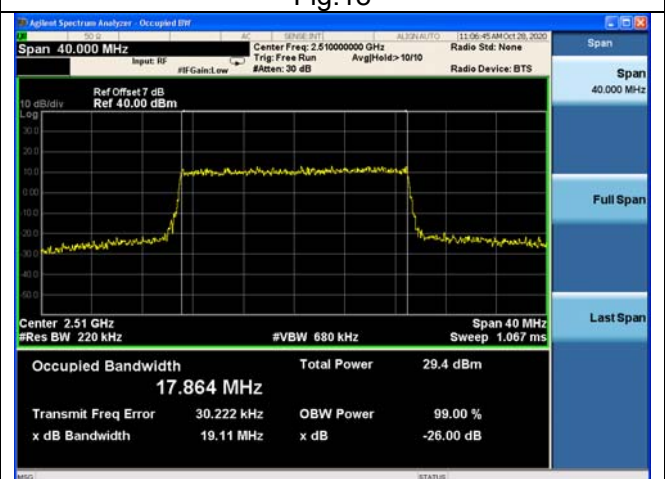


Fig.20

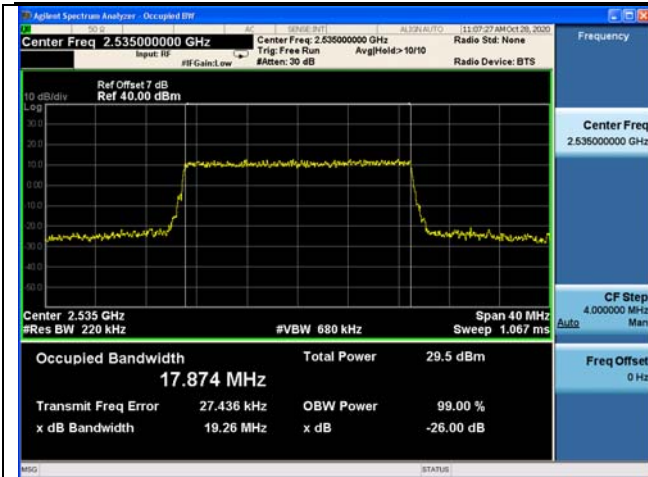


Fig.21

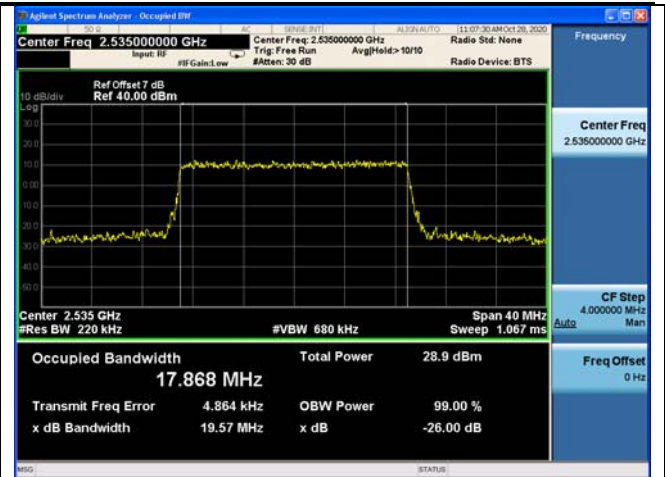


Fig.22

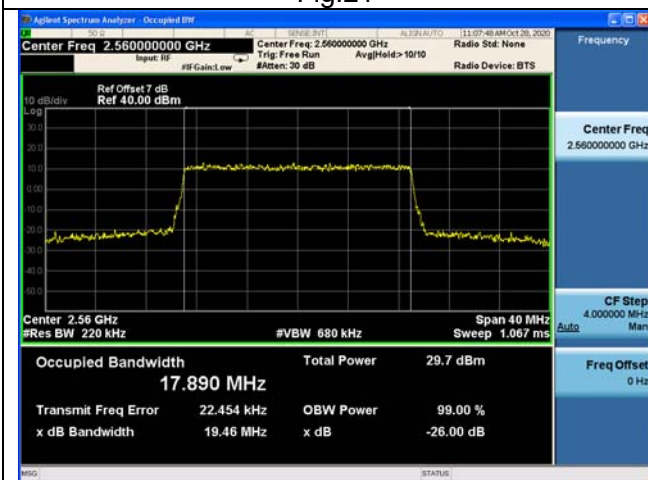


Fig.23

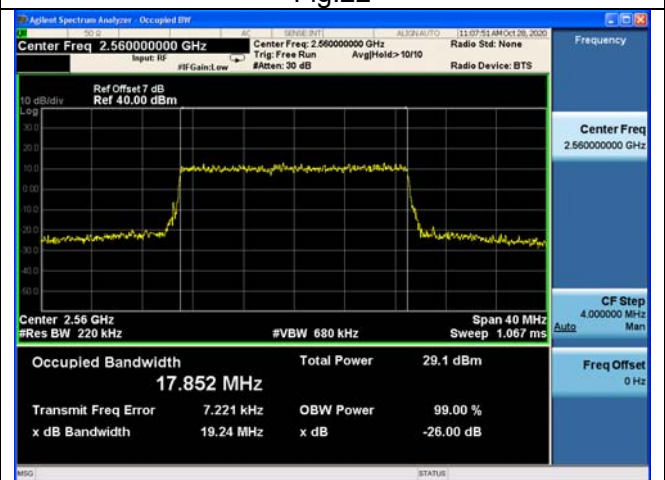


Fig.24

3 Peak-Average Ratio

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



Fig.1



Fig.2

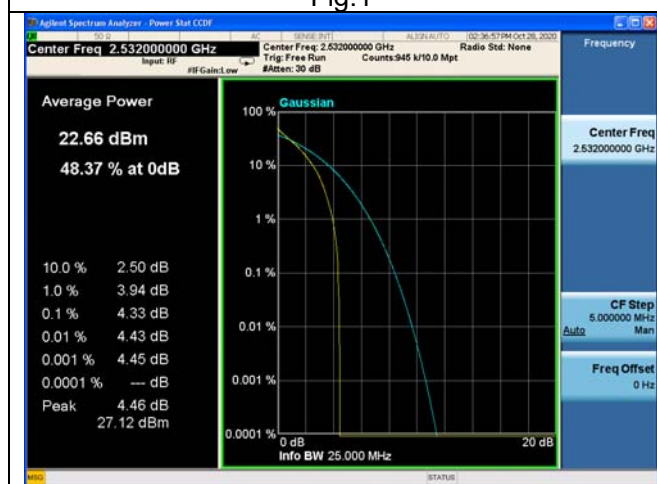


Fig.3



Fig.4



Fig.5

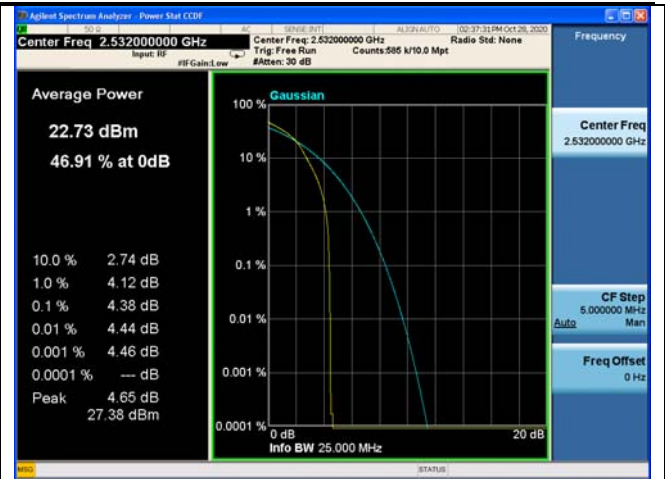
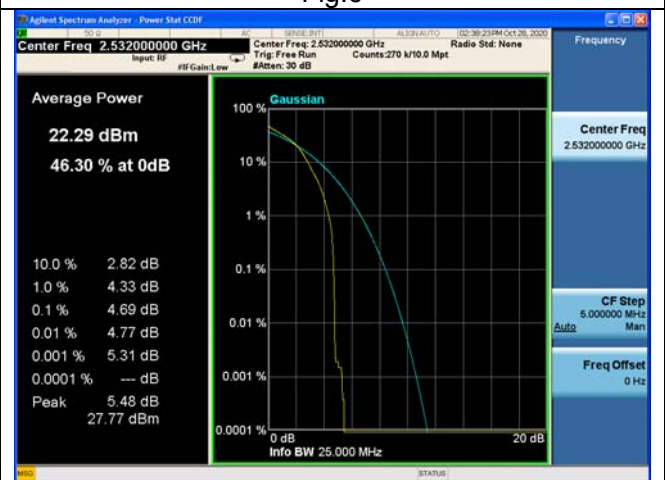


Fig.6



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

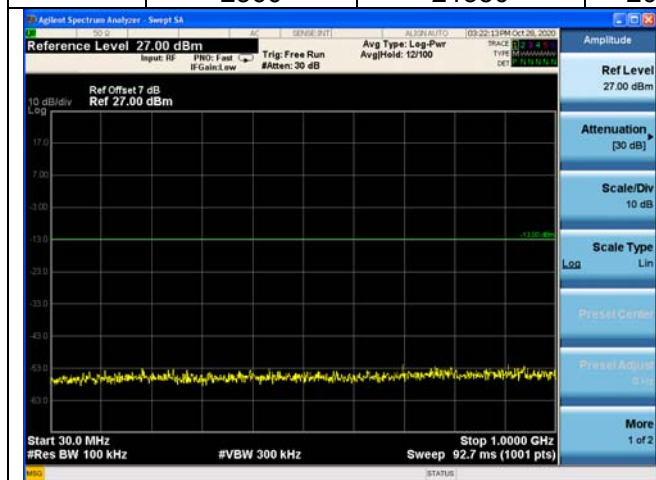


Fig.1

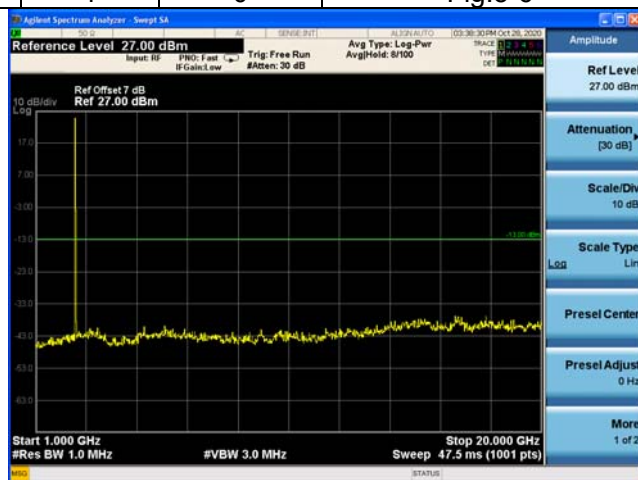


Fig.2

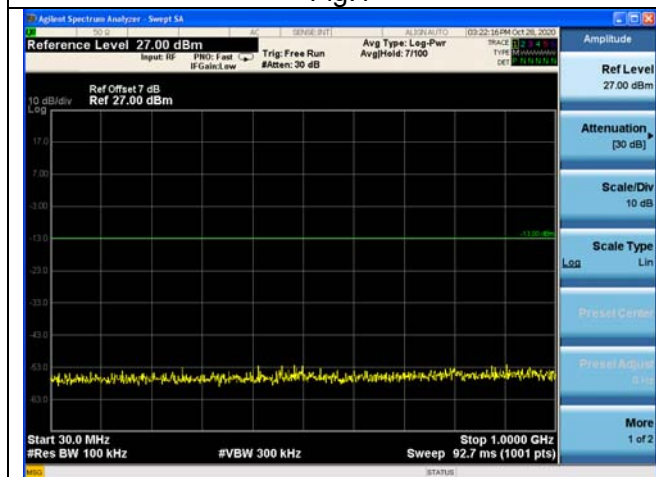


Fig3



Fig4

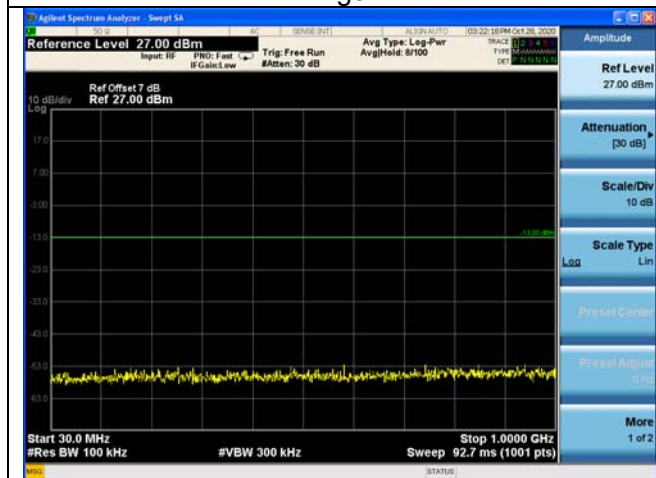


Fig5



Fig6

5 Band Edges Compliance

Test result

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

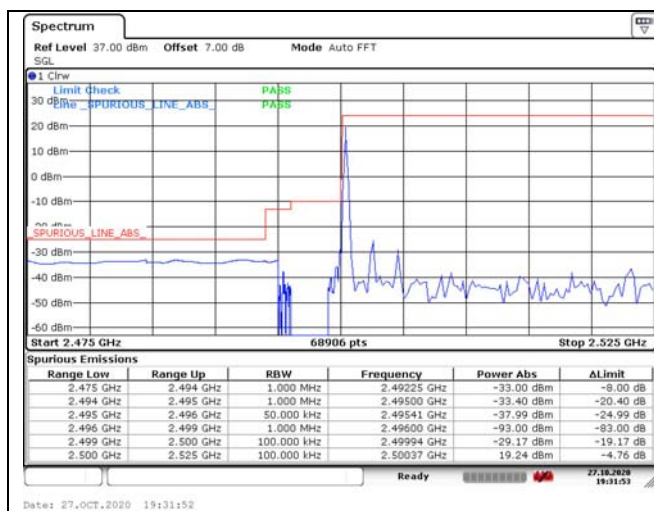


Fig.1

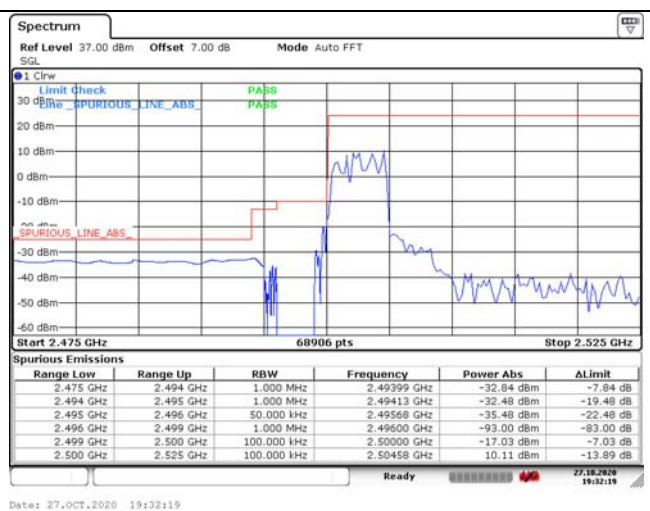


Fig.2

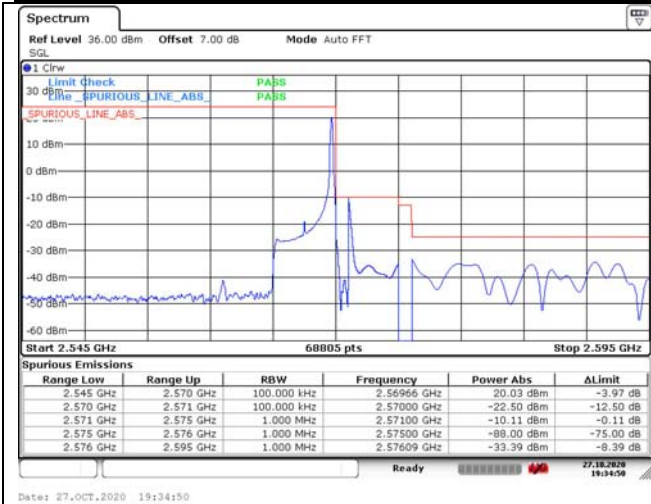


Fig.3

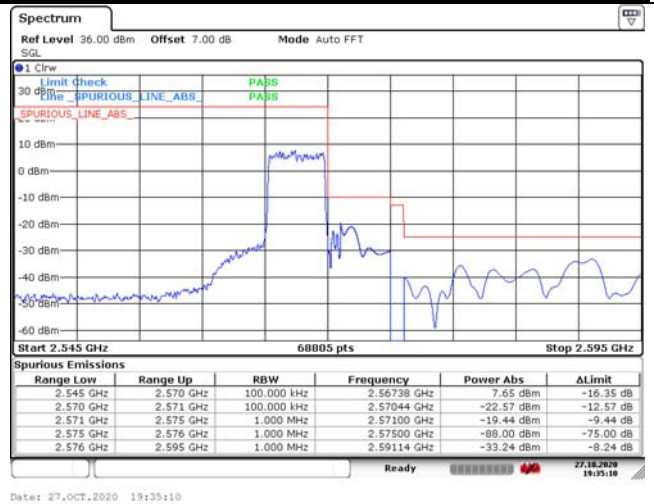


Fig.4

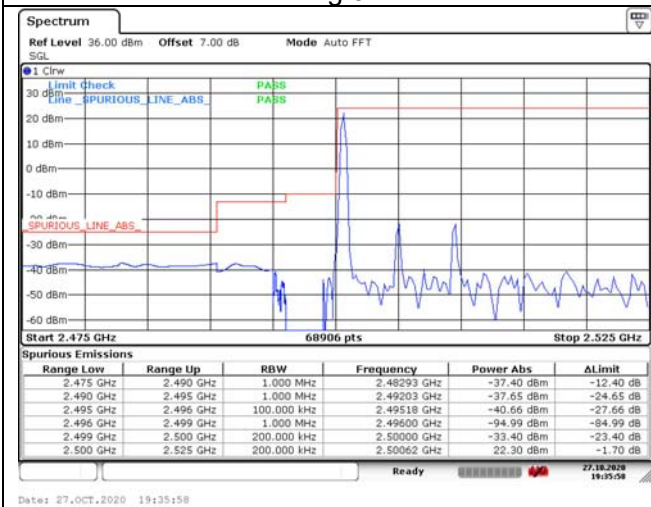


Fig.5

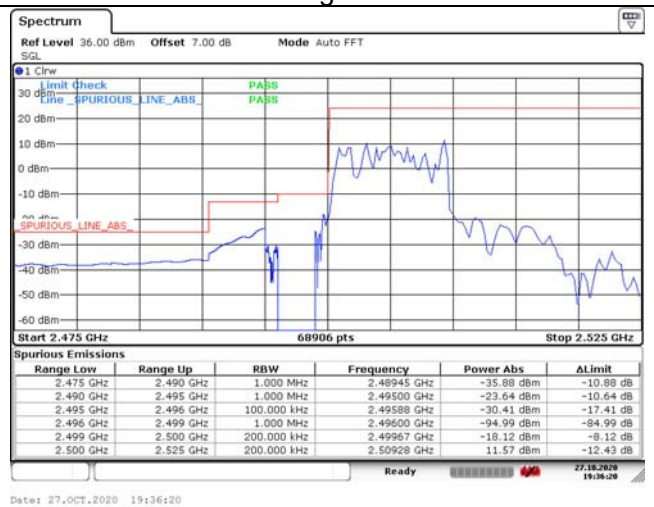


Fig.6

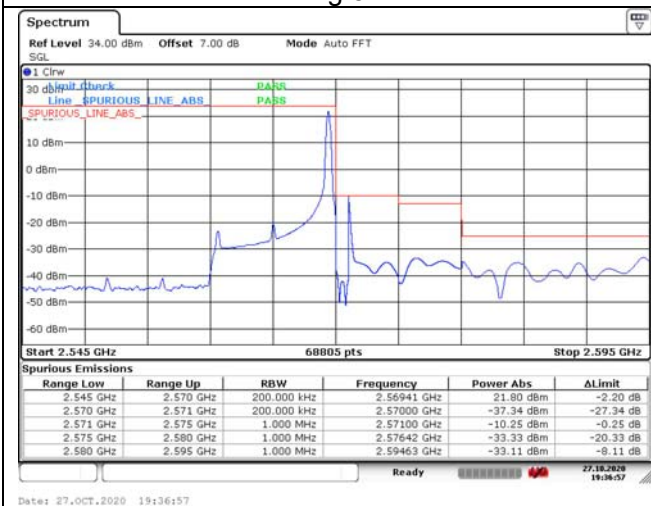


Fig.7

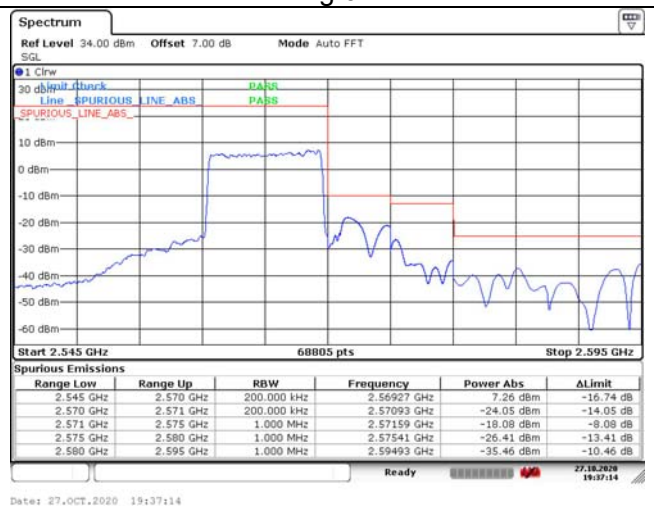


Fig.8

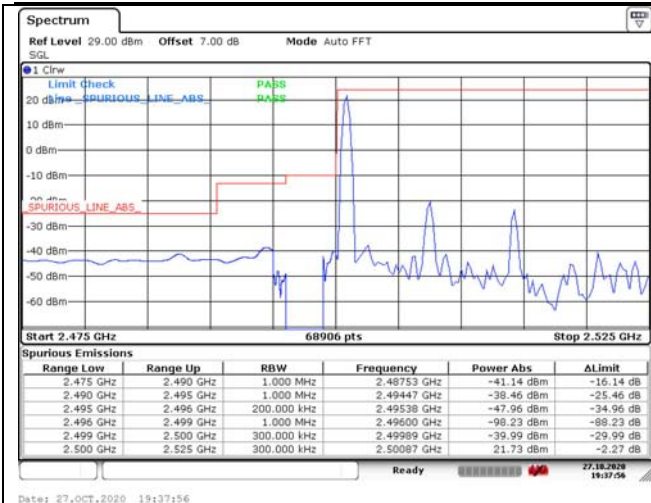


Fig.9

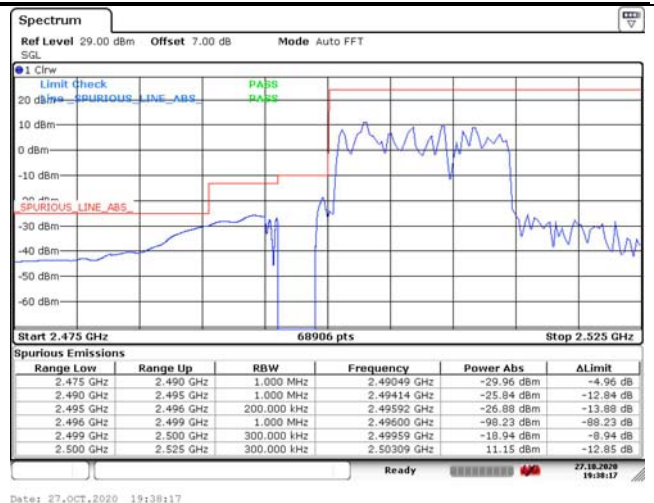


Fig.10

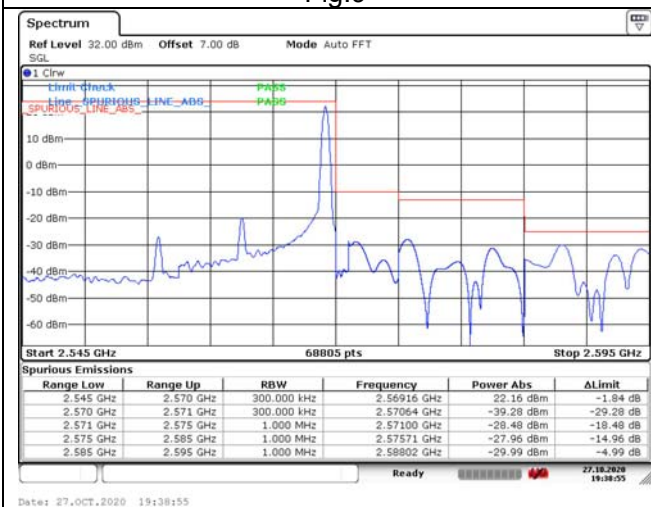


Fig.11

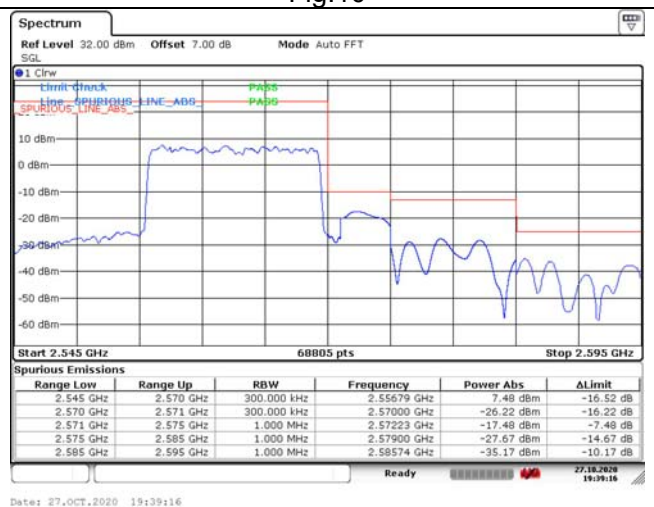


Fig.12

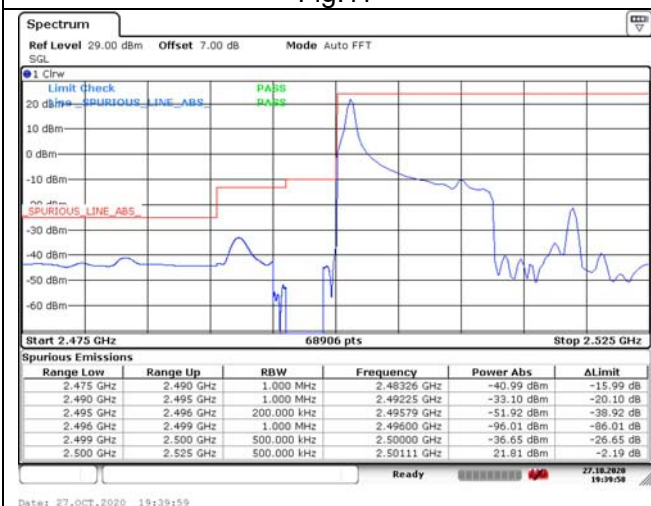


Fig.13

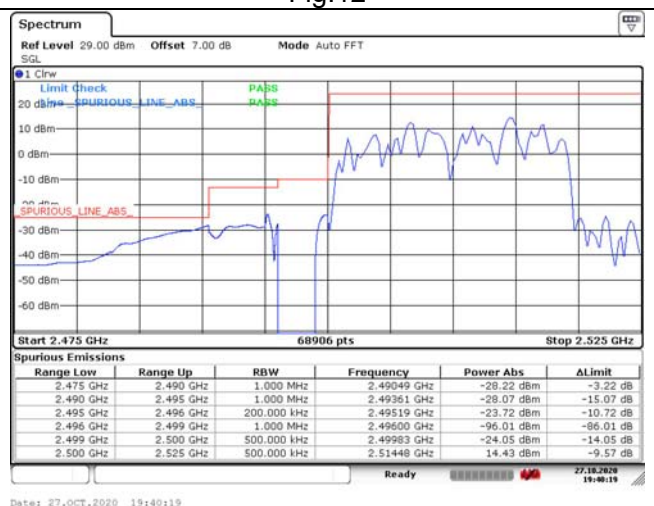


Fig.14

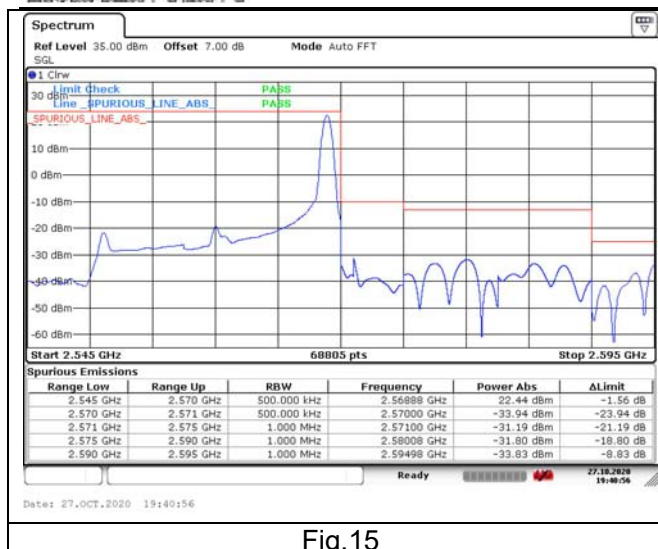


Fig.15

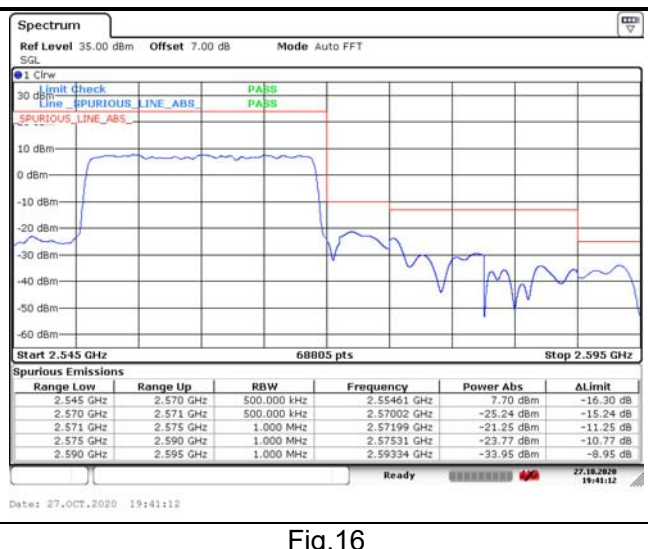


Fig.16

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band7 Low Channel			
		5M	10M	15M	20M
-20	NV	0.032	-0.020	0.019	-0.016
-10	NV	0.029	-0.022	-0.036	-0.005
0	NV	-0.025	0.028	0.022	0.019
+10	NV	-0.014	-0.015	-0.007	0.030
+20	NV	0.000	0.000	0.000	0.000
+30	NV	0.037	0.021	0.022	0.019
+40	NV	-0.033	-0.009	-0.003	-0.010
+50	NV	0.040	0.031	-0.028	-0.016
+55	NV	0.032	-0.005	0.026	0.020
+20	LV	-0.029	0.038	0.014	0.018
+20	HV	-0.031	0.040	-0.019	0.000

Temperature(°C)	Voltage	Test Result (ppm) Band7 High Channel			
		5M	10M	15M	20M
-20	NV	0.001	0.030	-0.032	0.017
-10	NV	0.031	-0.029	-0.004	-0.035
0	NV	-0.025	-0.016	0.021	0.008
+10	NV	0.009	-0.009	0.003	-0.026
+20	NV	0.000	0.000	0.000	0.000
+30	NV	0.038	0.024	0.009	-0.016
+40	NV	0.033	0.027	-0.031	0.018
+50	NV	-0.012	0.038	-0.025	0.034
+55	NV	-0.020	0.002	0.005	0.022
+20	LV	0.013	-0.009	0.031	0.010
+20	HV	-0.027	0.024	-0.001	-0.001