

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	23.65
				1	24	23.65
				12	6	23.42
				25	0	23.52
	2535	21100		1	0	23.53
				1	24	23.55
				12	6	23.45
				25	0	23.32
	2567.5	21425		1	0	23.23
				1	24	23.30
				12	6	23.19
				25	0	23.37
16QAM	2502.5	20775	5	1	0	23.44
				1	24	23.49
				12	6	22.71
				25	0	22.72
	2535	21100		1	0	23.61
				1	24	23.53
				12	6	22.51
				25	0	22.65
	2567.5	21425		1	0	23.27
				1	24	23.33
				12	6	22.40
				25	0	22.46
64QAM	2502.5	20775	5	1	0	23.46
				1	24	23.50
				12	6	22.66
				25	0	22.66
	2535	21100		1	0	23.51
				1	24	23.49
				12	6	22.75
				25	0	22.53
	2567.5	21425		1	0	23.14
				1	24	23.17
				12	6	22.54
				25	0	22.39

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2505	20800	10	1	0	23.68
				1	49	23.56
				24	12	23.48
				50	0	23.51
	2535	21100		1	0	23.58
				1	49	23.46
				24	12	23.33
	2565	21400		50	0	23.35
				1	0	23.33
1			49	23.27		
24	12	23.16				
50	0	23.41				
16QAM	2505	20800	10	1	0	23.55
				1	49	23.44
				24	12	22.71
				50	0	22.69
	2535	21100		1	0	23.63
				1	49	23.63
				24	12	22.62
	2565	21400		50	0	22.64
				1	0	23.31
1			49	23.21		
24	12	22.46				
50	0	22.42				
64QAM	2505	20800	10	1	0	23.52
				1	49	23.45
				24	12	22.68
				50	0	22.66
	2535	21100		1	0	23.61
				1	49	23.54
				24	12	22.68
	2565	21400		50	0	22.58
				1	0	23.10
1			49	23.09		
24	12	22.51				
50	0	22.41				

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2507.5	20825	15	1	0	23.58
				1	74	23.51
				40	18	23.46
				75	0	23.49
	2535	21100		1	0	23.55
				1	74	23.51
				40	18	23.42
				75	0	23.43
	2562.5	21375		1	0	23.25
				1	74	23.35
				40	18	23.21
				75	0	23.39
16QAM	2507.5	20825	15	1	0	23.50
				1	74	23.45
				40	18	22.75
				75	0	22.71
	2535	21100		1	0	23.51
				1	74	23.60
				40	18	22.61
				75	0	22.71
	2562.5	21375		1	0	23.35
				1	74	23.22
				40	18	22.42
				75	0	22.44
64QAM	2507.5	20825	15	1	0	23.44
				1	74	23.50
				40	18	22.78
				75	0	22.60
	2535	21100		1	0	23.62
				1	74	23.43
				40	18	22.61
				75	0	22.61
	2562.5	21375		1	0	23.03
				1	74	23.15
				40	18	22.44
				75	0	22.48

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2510	20850	20	1	0	23.72
				1	99	23.65
				50	25	23.56
				100	0	23.60
	2535	21100		1	0	23.65
				1	99	23.57
				50	25	23.48
				100	0	23.44
	2560	21350		1	0	23.34
				1	99	23.37
				50	25	23.29
				100	0	23.44
16QAM	2510	20850	20	1	0	23.59
				1	99	23.55
				50	25	22.79
				100	0	22.80
	2535	21100		1	0	23.65
				1	99	23.64
				50	25	22.63
				100	0	22.72
	2560	21350		1	0	23.37
				1	99	23.34
				50	25	22.55
				100	0	22.51
64QAM	2510	20850	20	1	0	23.58
				1	99	23.57
				50	25	22.81
				100	0	22.75
	2535	21100		1	0	23.64
				1	99	23.57
				50	25	22.75
				100	0	22.63
	2560	21350		1	0	23.17
				1	99	23.18
				50	25	22.56
				100	0	22.54

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	4.4818	Fig.1	4.4755	Fig.2	4.4651	Fig.3
	2535	21100		25	0	4.4803	Fig.4	4.4764	Fig.5	4.4670	Fig.6
	2567.5	21425		25	0	4.4774	Fig.7	4.4681	Fig.8	4.4550	Fig.9
	2505	20800	10	50	0	8.9600	Fig.10	8.9342	Fig.11	8.9616	Fig.12
	2535	21100		50	0	8.9497	Fig.13	8.9321	Fig.14	8.9670	Fig.15
	2565	21400		50	0	8.9583	Fig.16	8.9510	Fig.17	8.9728	Fig.18
	2507.5	20825	15	75	0	13.441	Fig.19	13.441	Fig.20	13.415	Fig.21
	2535	21100		75	0	13.473	Fig.22	13.425	Fig.23	13.450	Fig.24
	2562.5	21375		75	0	13.414	Fig.25	13.417	Fig.26	13.414	Fig.27
	2510	20850	20	100	0	17.841	Fig.28	17.840	Fig.29	17.885	Fig.30
	2535	21100		100	0	17.894	Fig.31	17.953	Fig.32	17.927	Fig.33
	2560	21350		100	0	17.843	Fig.34	17.854	Fig.35	17.823	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	5.143	Fig.1	4.892	Fig.2	4.970	Fig.3
	2535	21100		25	0	5.192	Fig.4	5.116	Fig.5	5.000	Fig.6
	2567.5	21425		25	0	5.157	Fig.7	5.021	Fig.8	5.034	Fig.9
	2505	20800	10	50	0	9.937	Fig.10	9.889	Fig.11	9.766	Fig.12
	2535	21100		50	0	9.999	Fig.13	9.673	Fig.14	9.777	Fig.15
	2565	21400		50	0	9.956	Fig.16	9.691	Fig.17	9.832	Fig.18
	2507.5	20825	15	75	0	14.66	Fig.19	14.52	Fig.20	14.72	Fig.21
	2535	21100		75	0	14.92	Fig.22	14.51	Fig.23	14.84	Fig.24
	2562.5	21375		75	0	14.65	Fig.25	14.83	Fig.26	14.91	Fig.27
	2510	20850	20	100	0	19.56	Fig.28	19.42	Fig.29	19.23	Fig.30
	2535	21100		100	0	19.85	Fig.31	19.59	Fig.32	19.59	Fig.33
	2560	21350		100	0	19.48	Fig.34	19.25	Fig.35	19.29	Fig.36

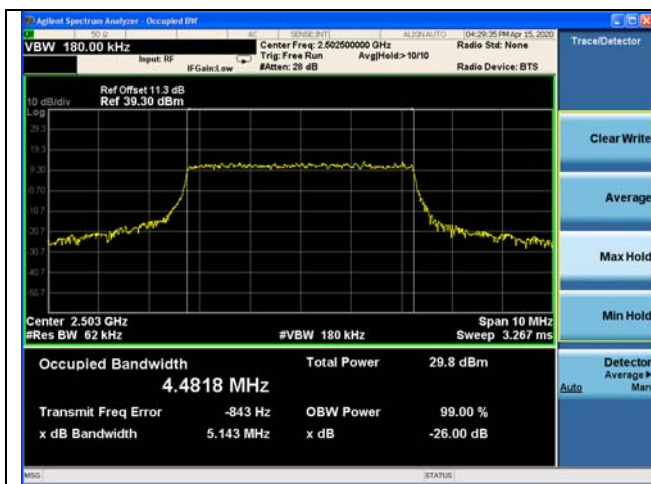


Fig.1

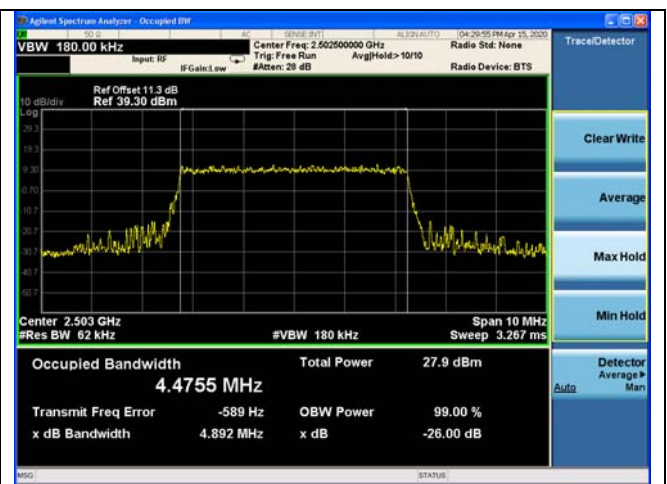


Fig.2

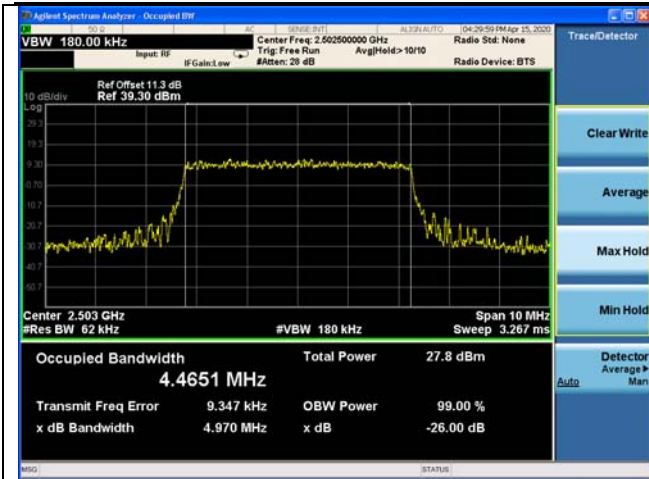


Fig.3



Fig.4

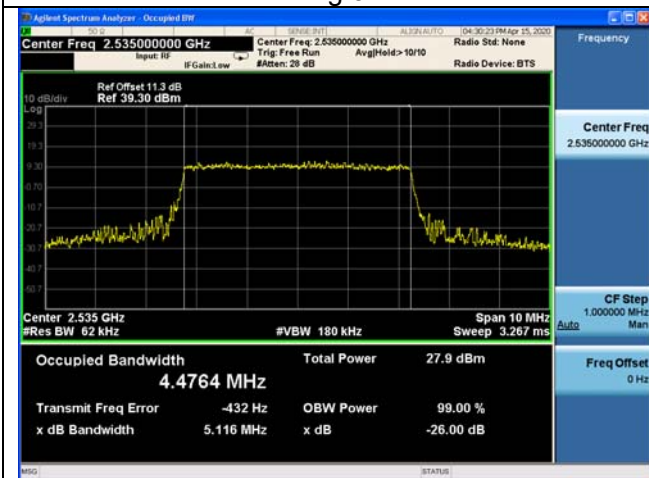


Fig.5

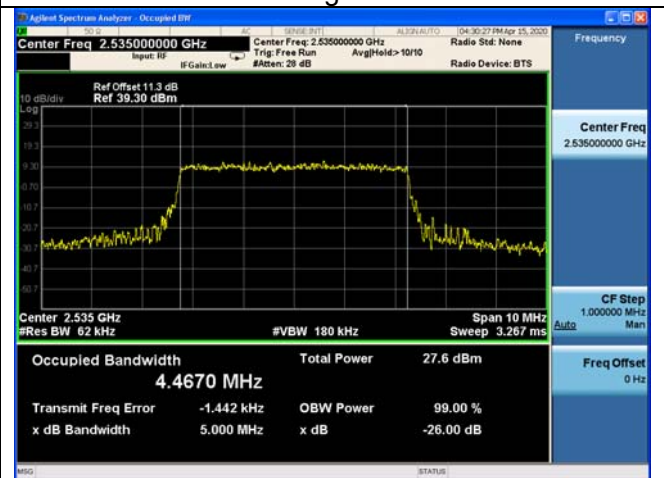


Fig.6

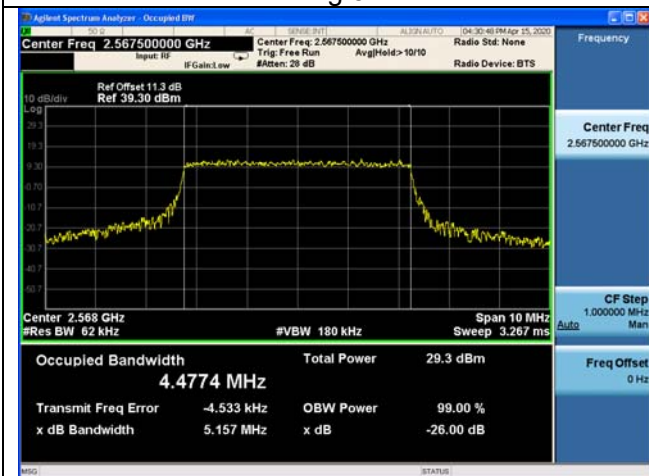


Fig.7

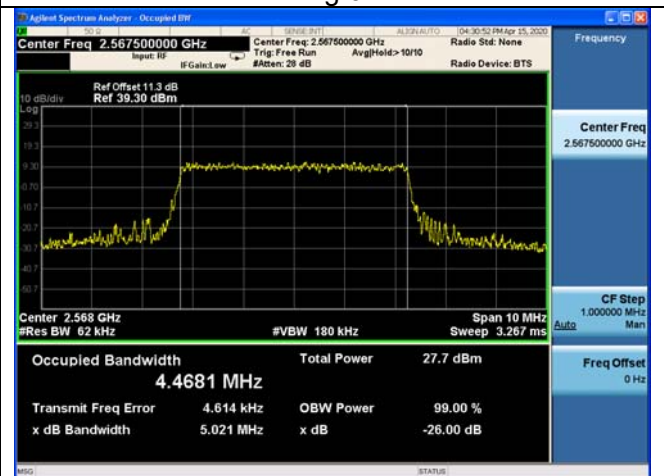


Fig.8

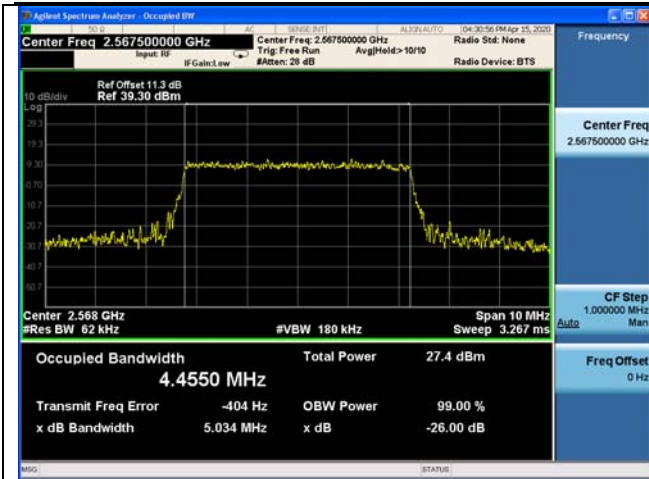


Fig.9



Fig.10

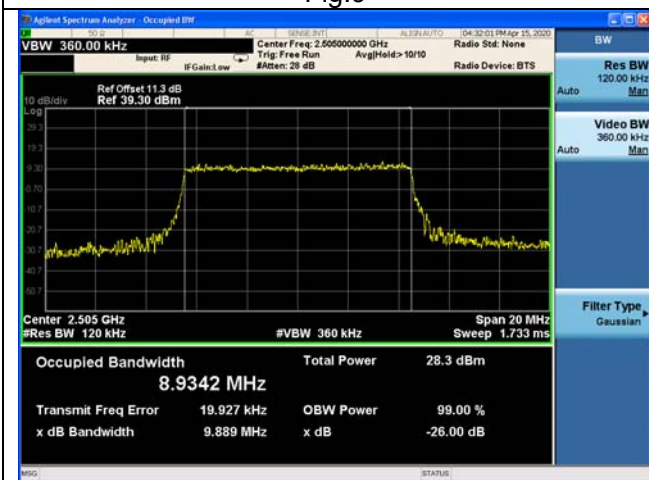


Fig.11

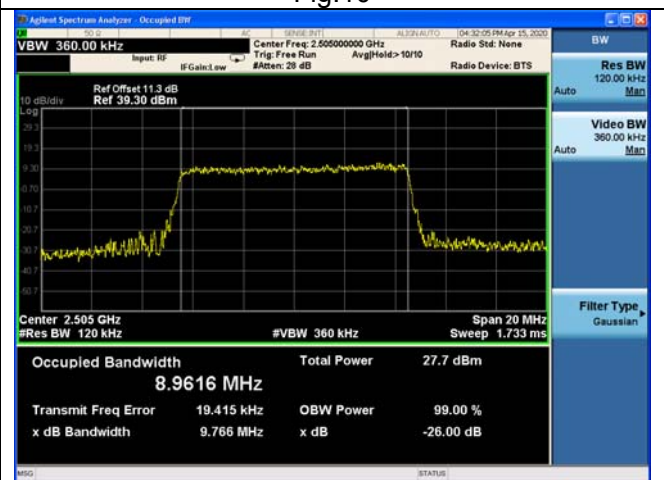


Fig.12

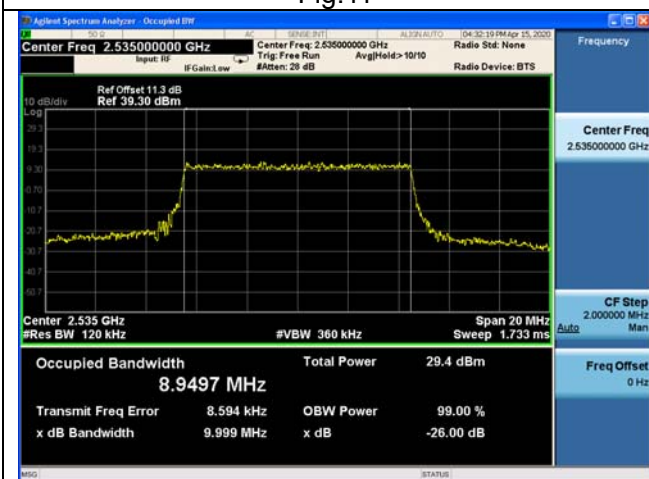


Fig.13

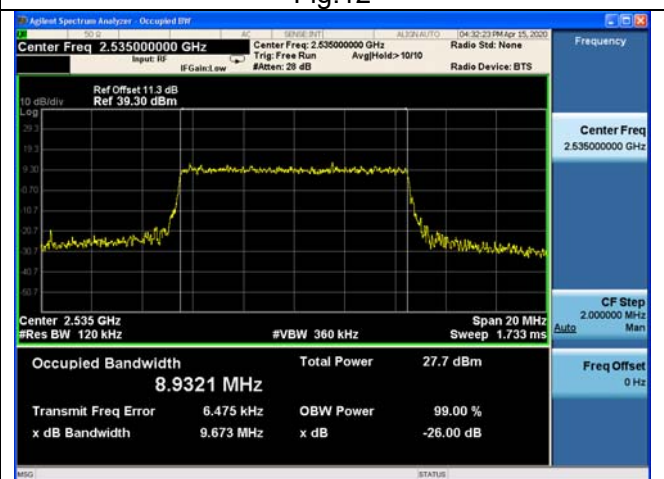


Fig.14

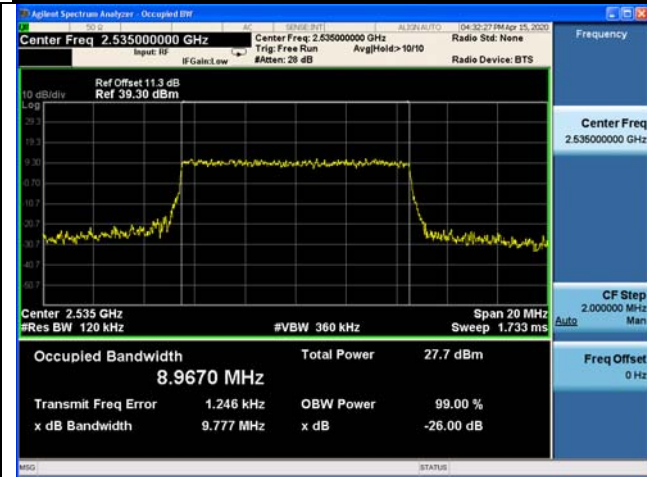


Fig.15



Fig.16

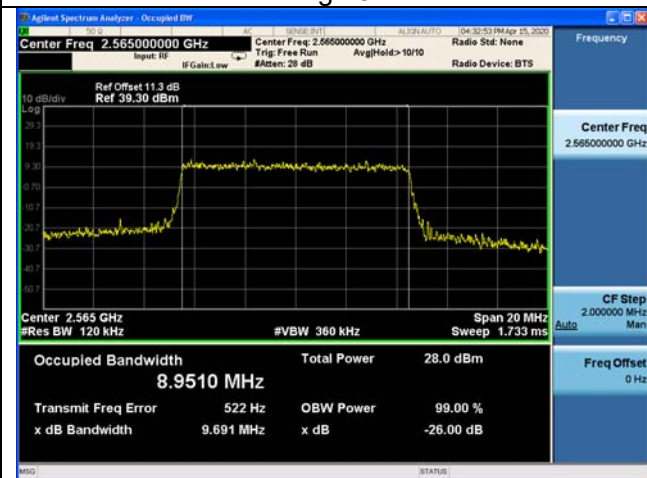


Fig.17

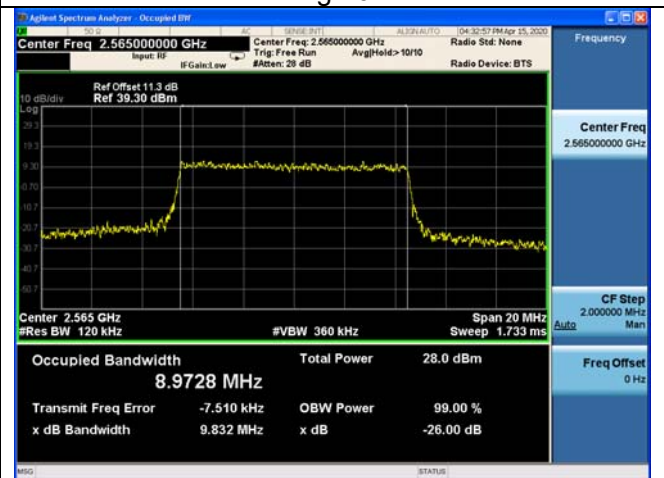


Fig.18

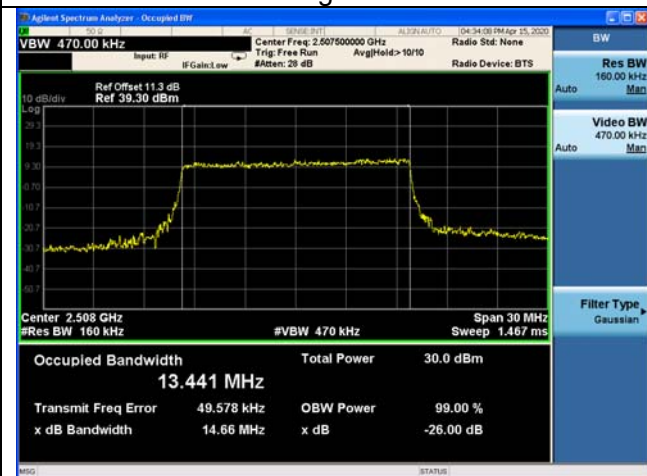


Fig.19

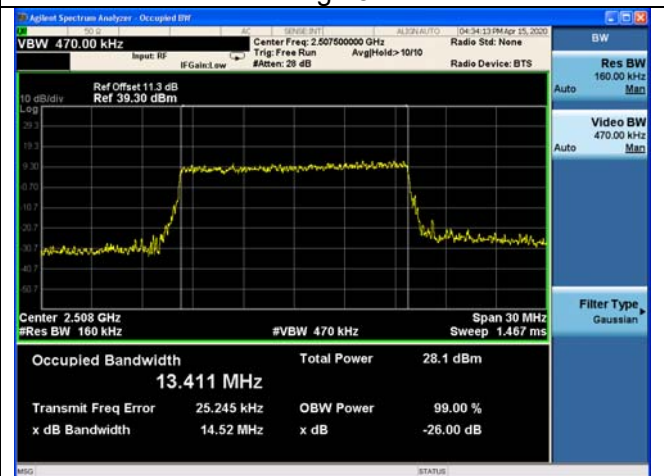


Fig.20

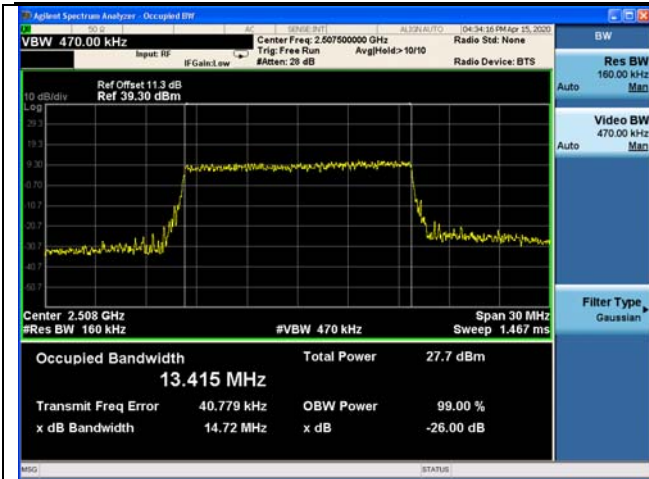


Fig.21

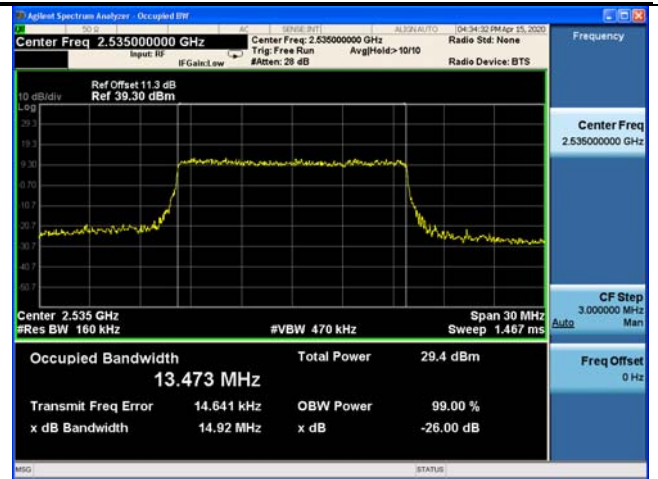


Fig.22

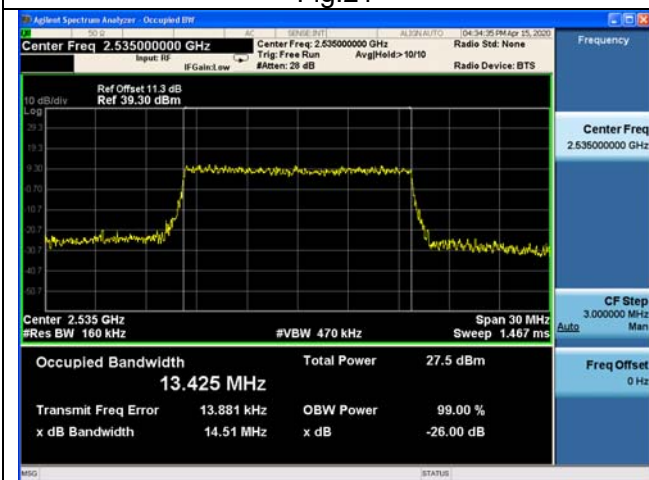


Fig.23

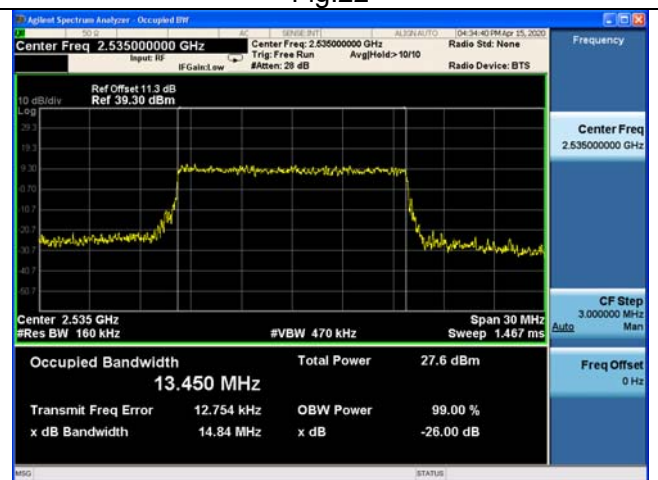


Fig.24

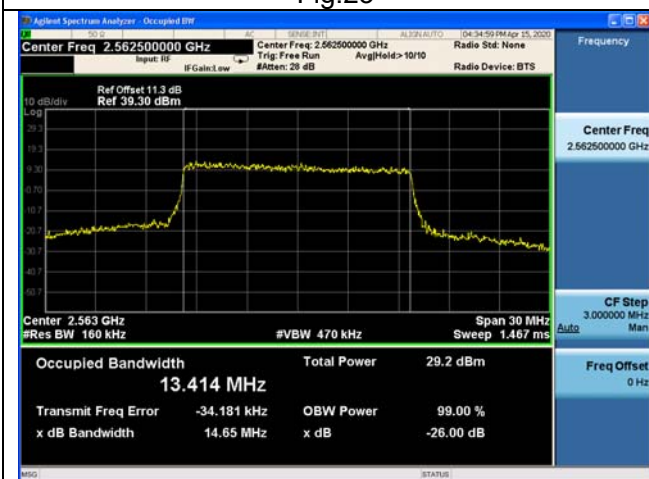


Fig.25

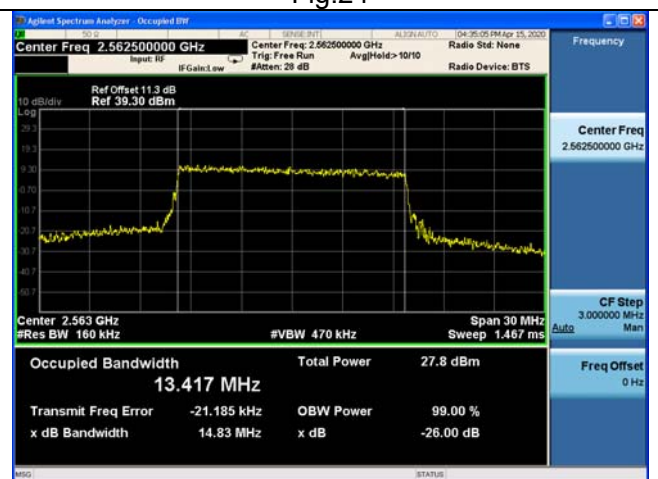


Fig.26

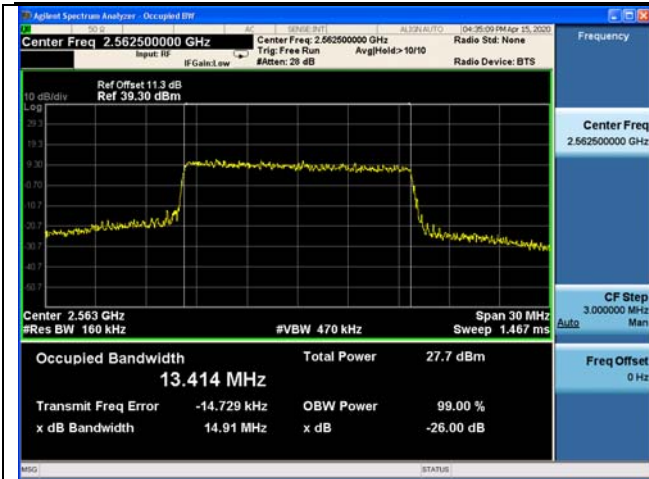


Fig.27

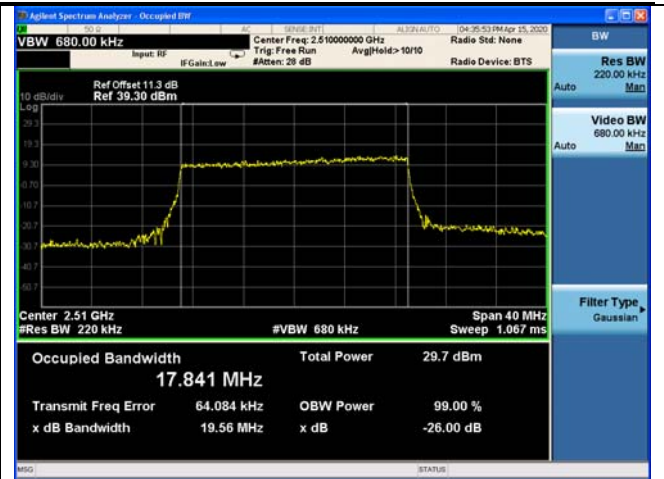


Fig.28

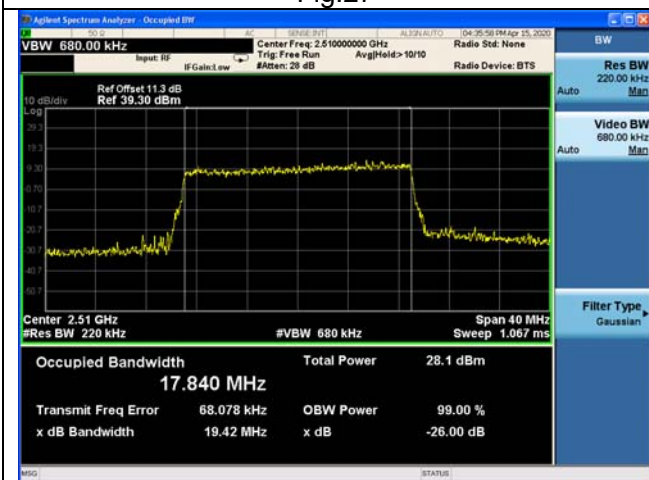


Fig.29

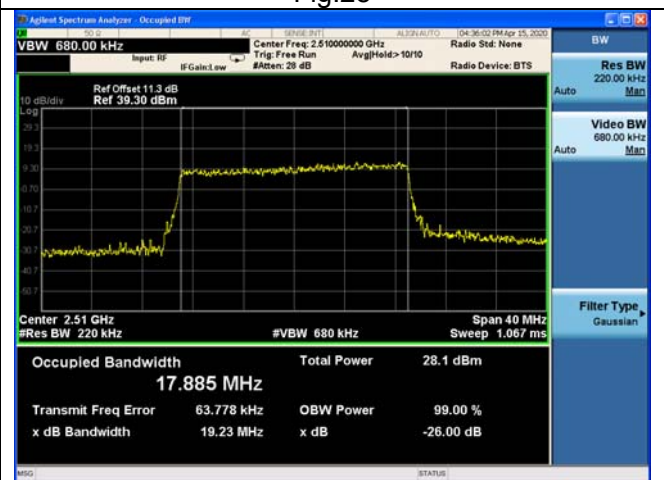


Fig.30

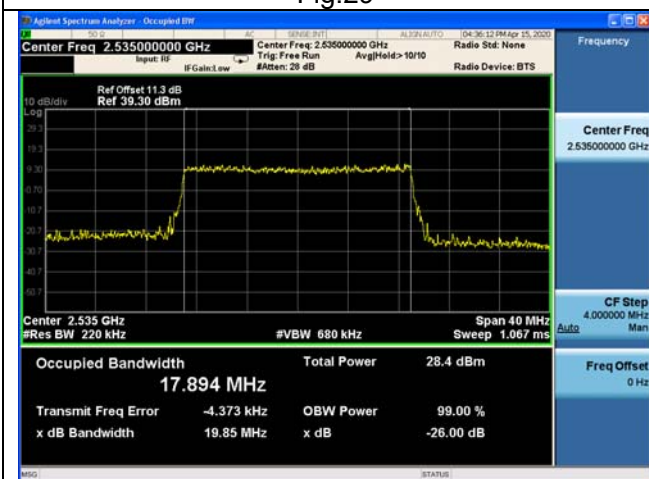


Fig.31

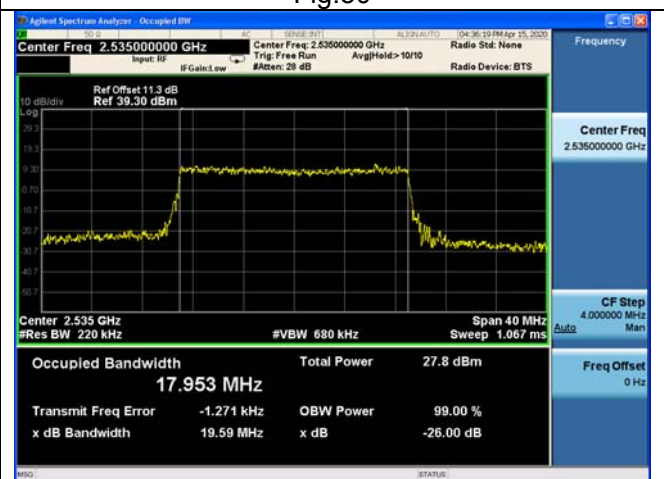


Fig.32

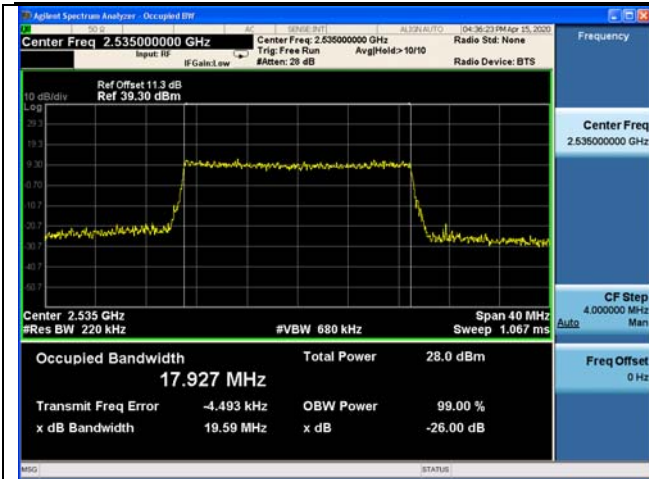


Fig.33

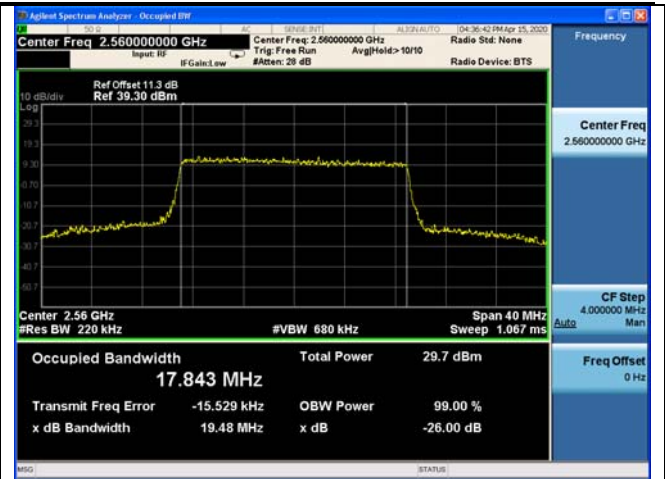


Fig.34

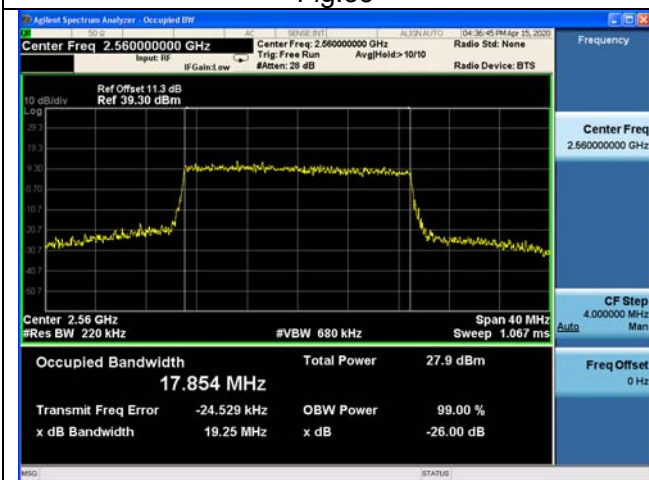


Fig.35

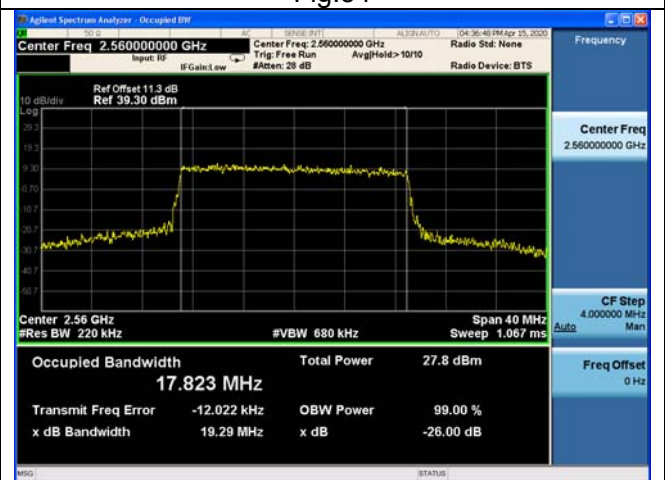


Fig.36

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

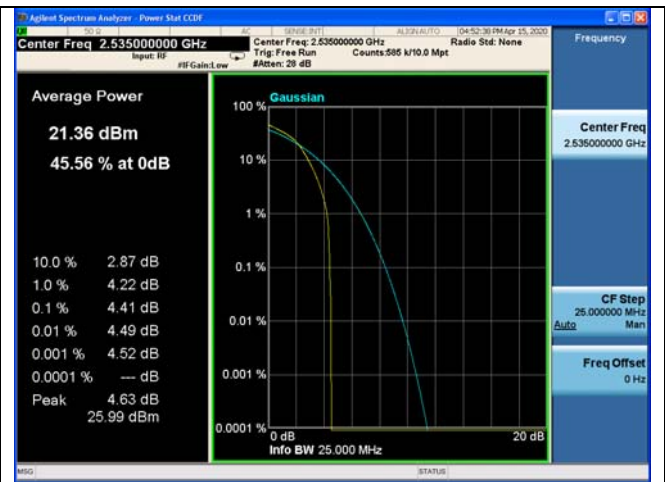


Fig.2

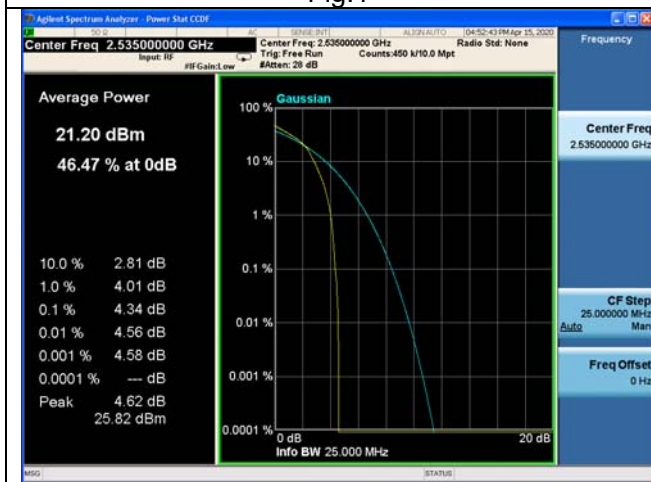


Fig.3

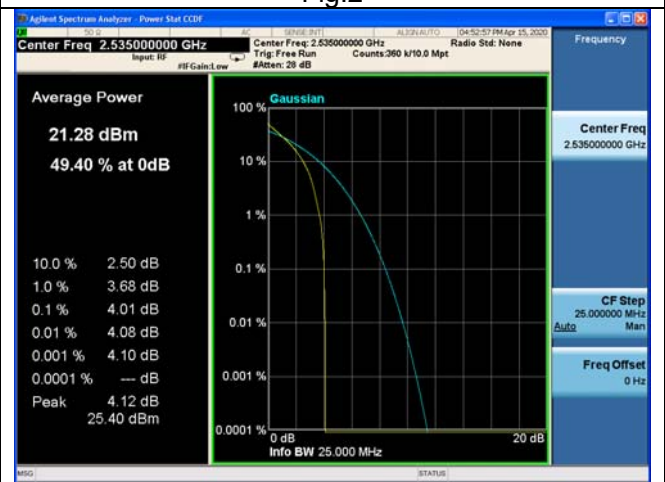


Fig.4

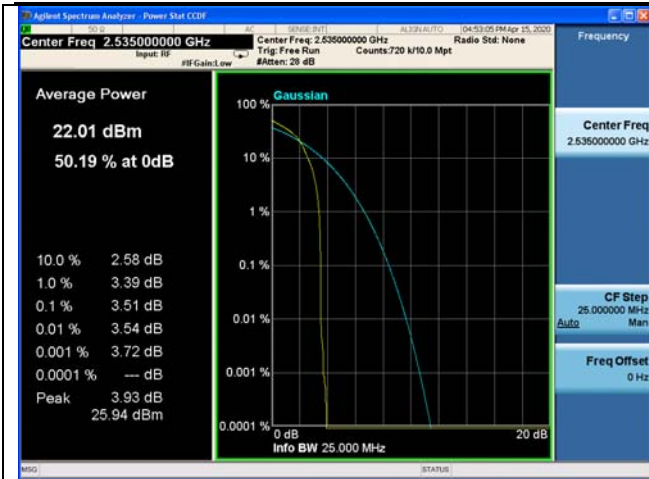


Fig.5

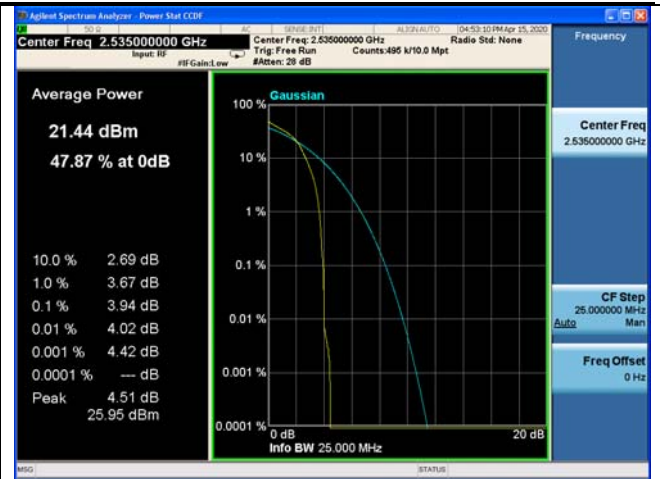


Fig.6



Fig.7



Fig.8

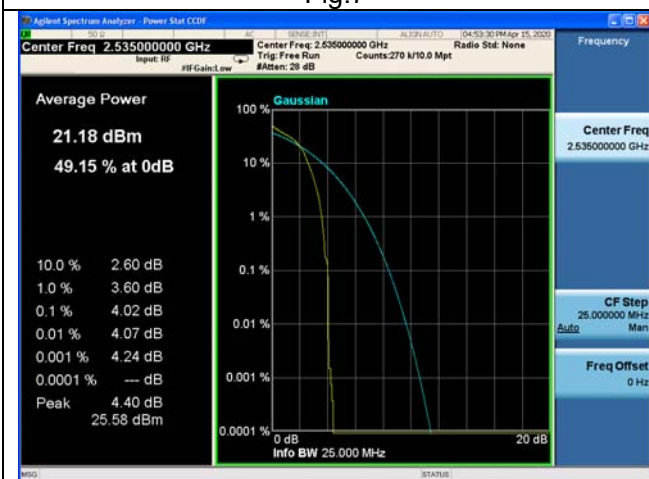


Fig.9

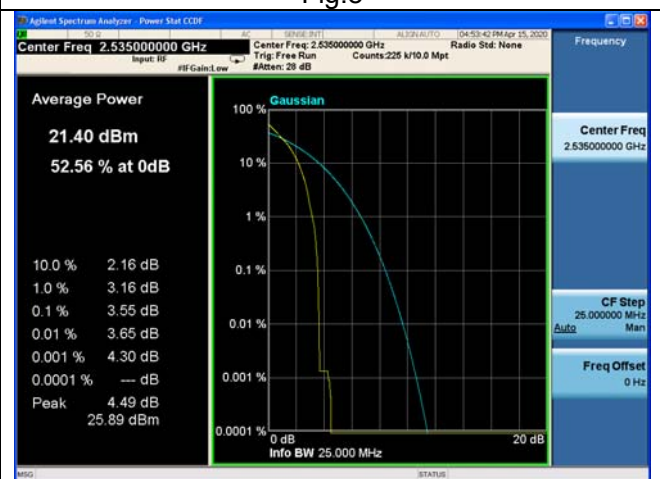


Fig.10



Fig.11

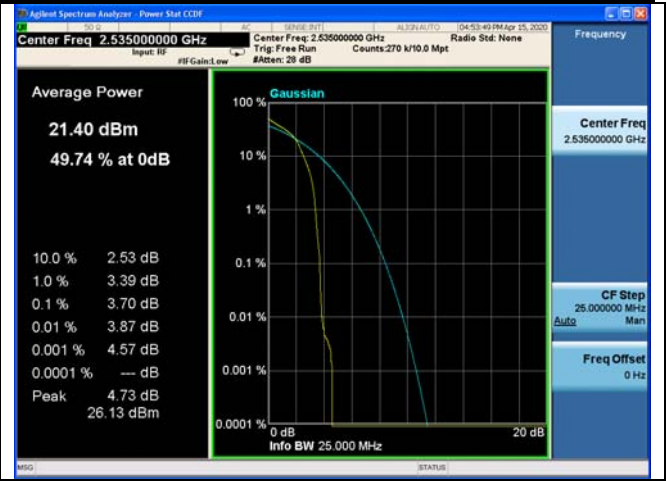


Fig.12

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

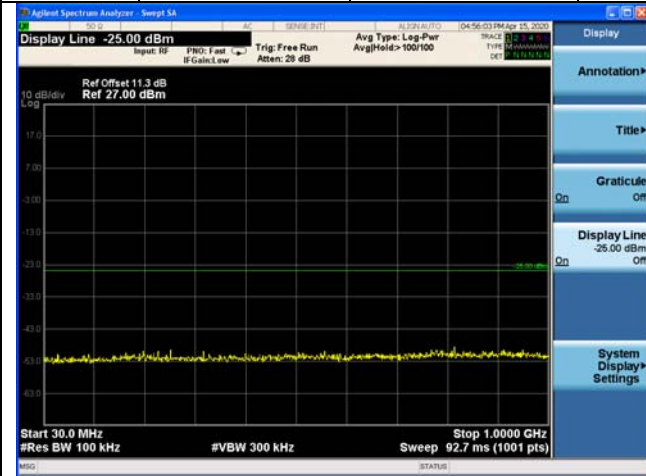


Fig.1



Fig.2

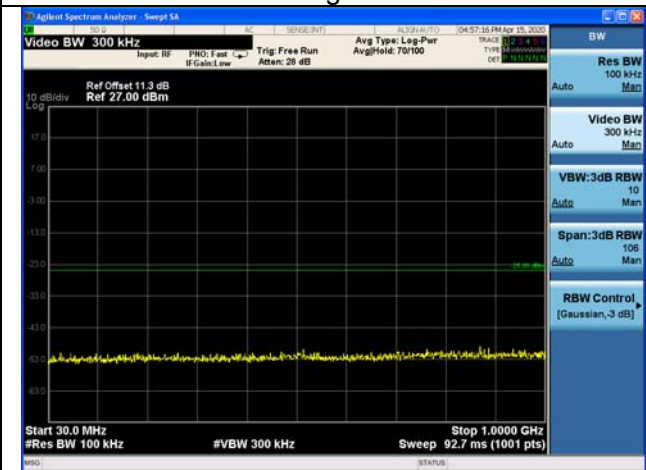


Fig3



Fig4

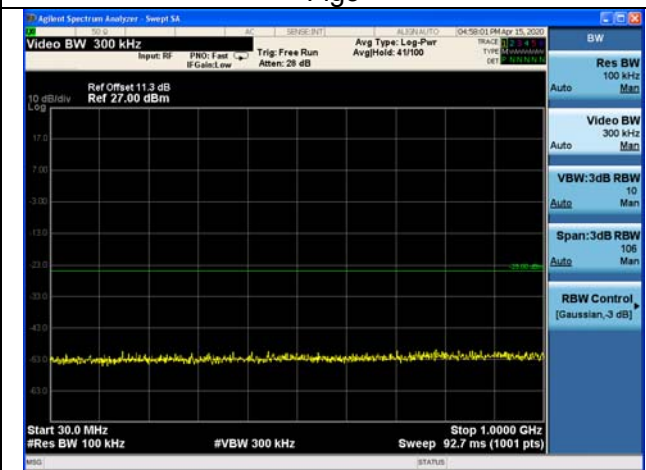


Fig5



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

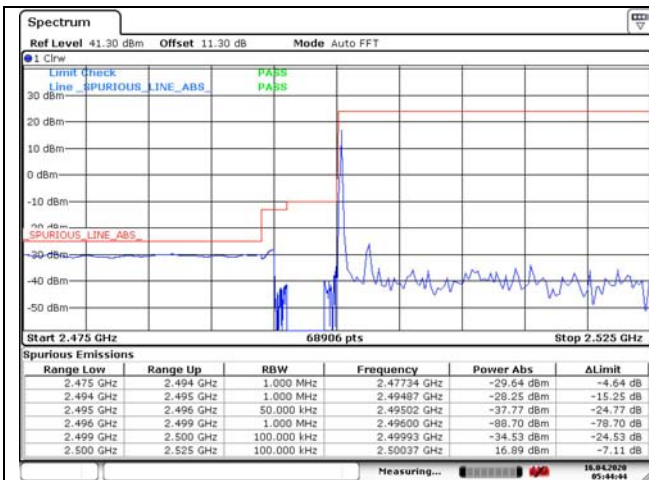


Fig.1

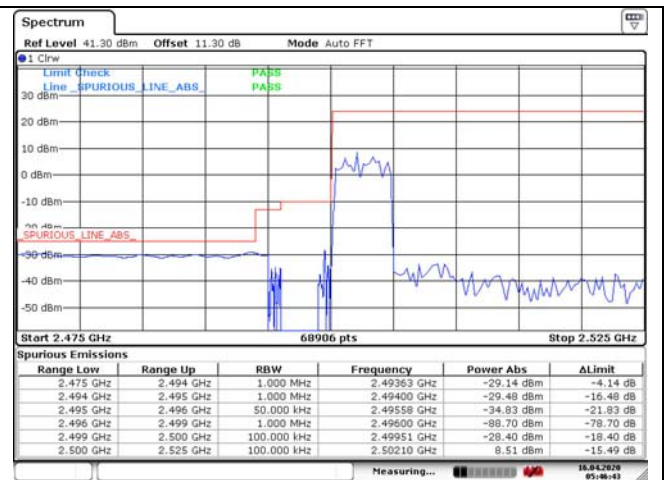


Fig.2

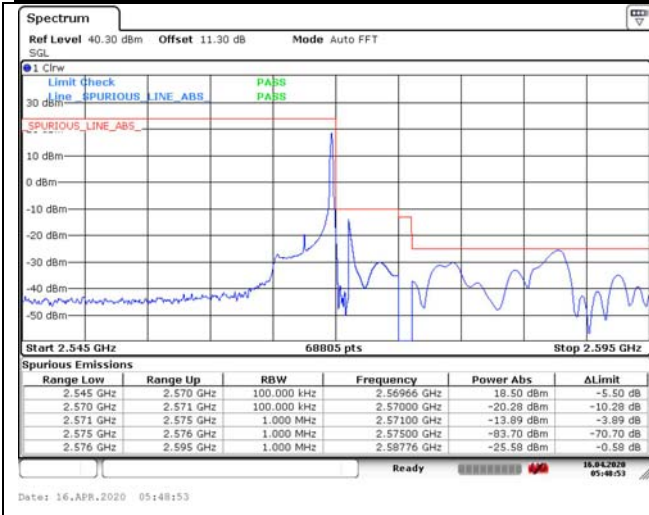


Fig.3

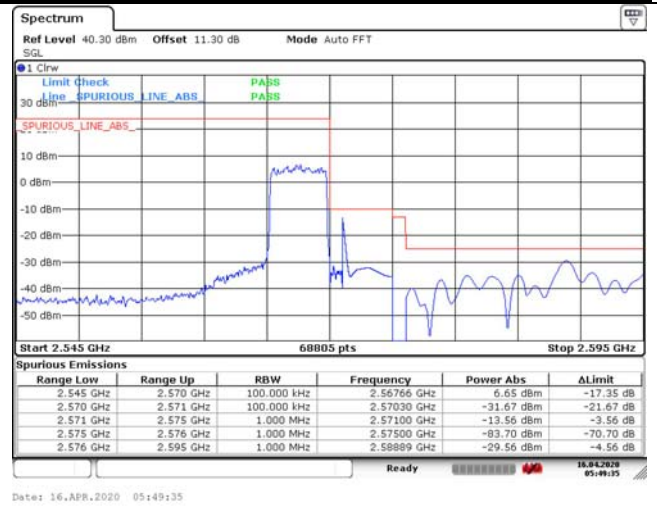


Fig.4

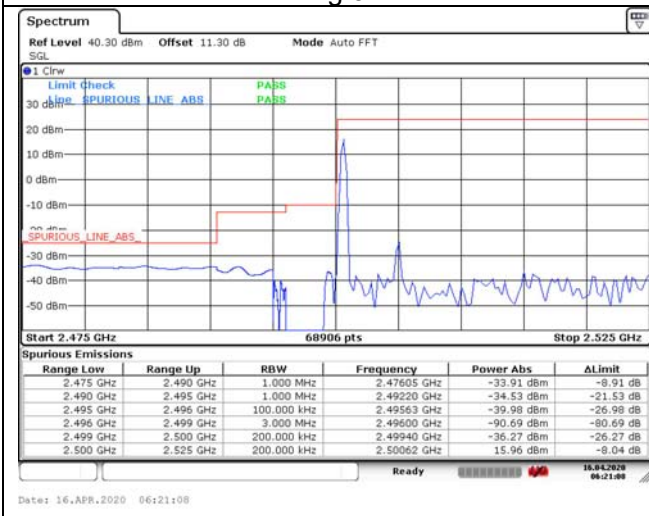


Fig.5

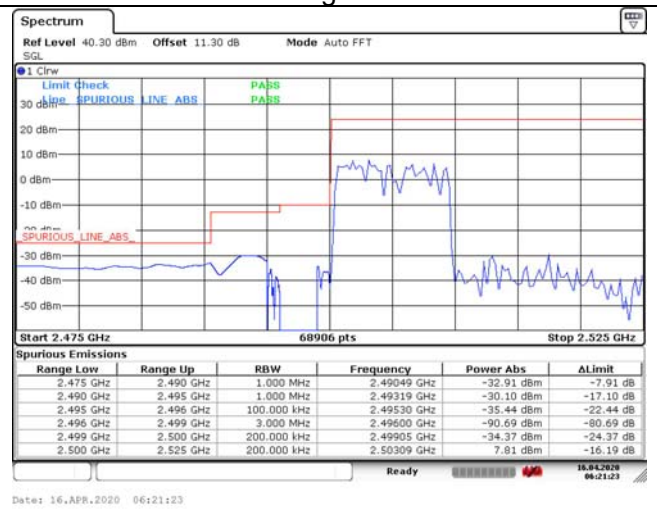


Fig.6

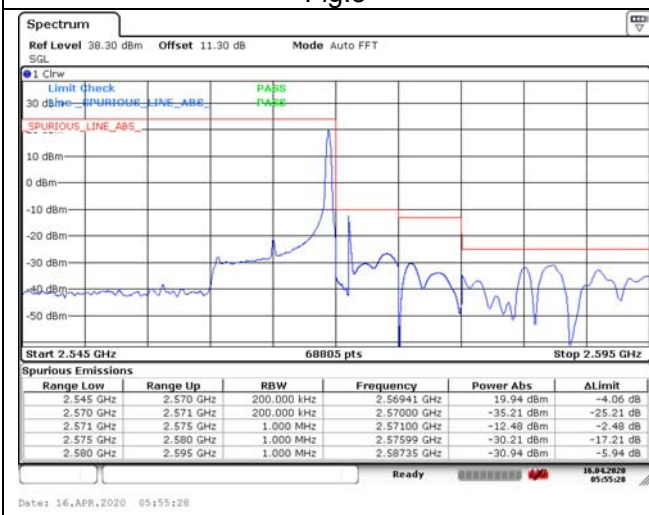


Fig.7

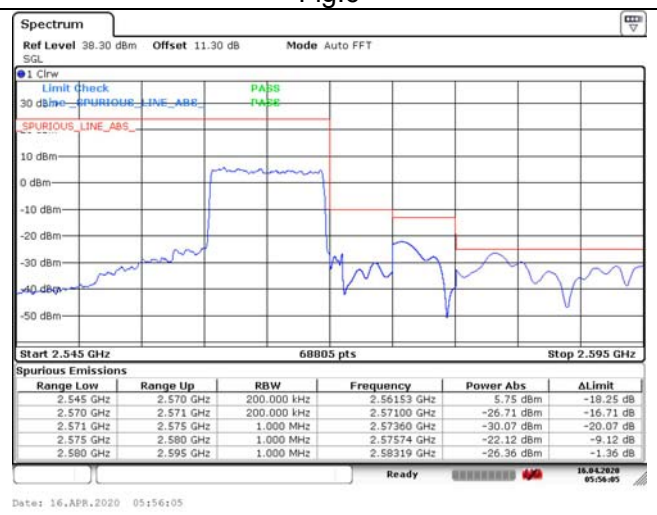


Fig.8

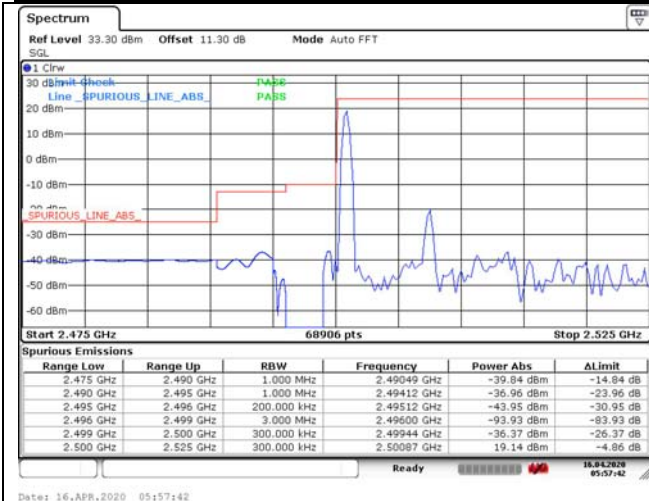


Fig.9

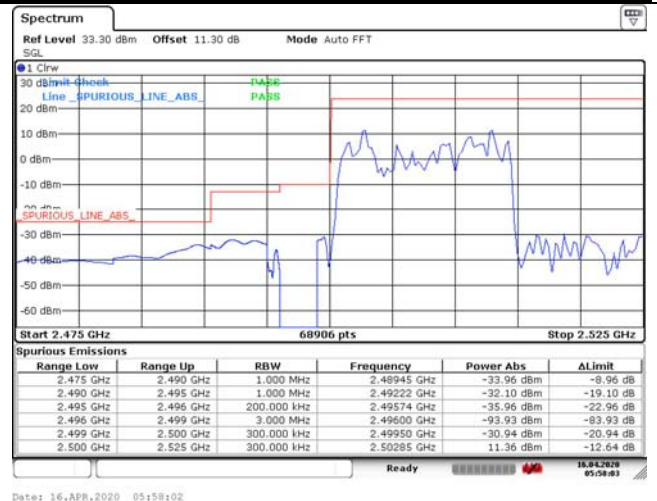


Fig.10

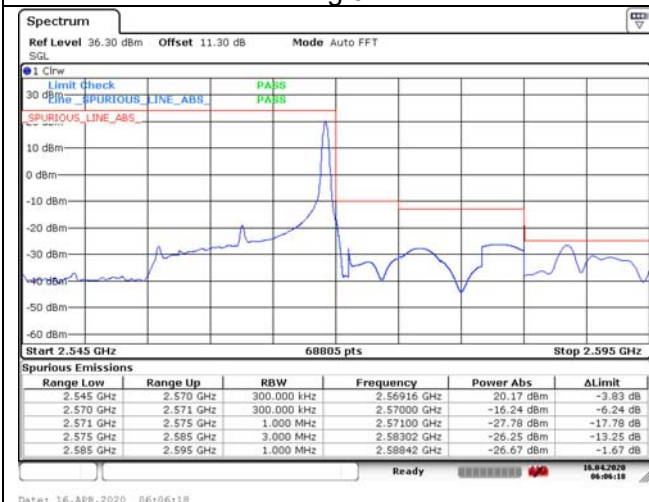


Fig.11

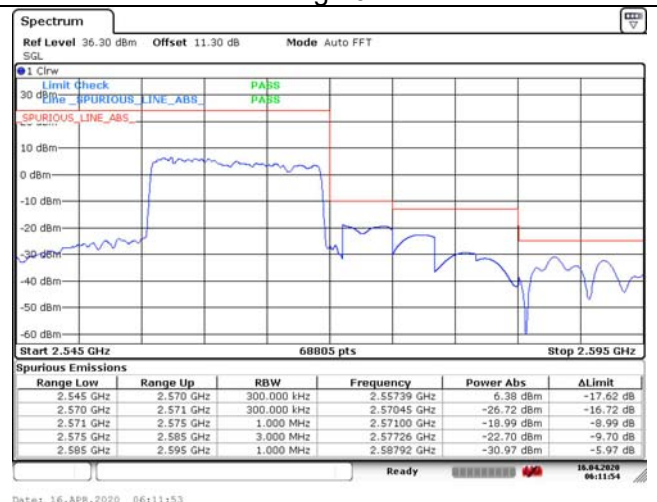


Fig.12

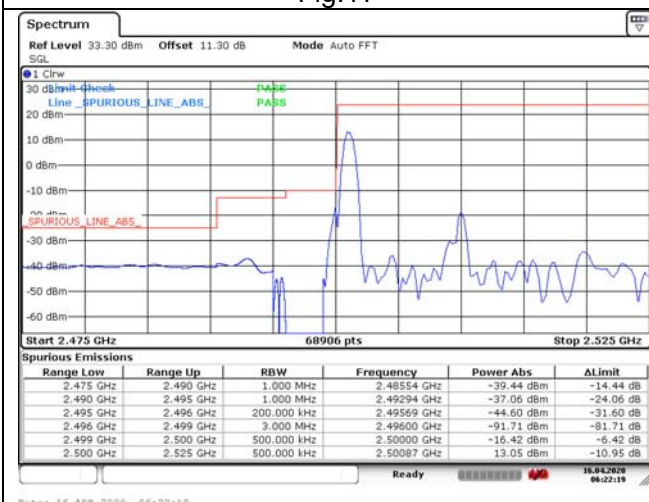


Fig.13

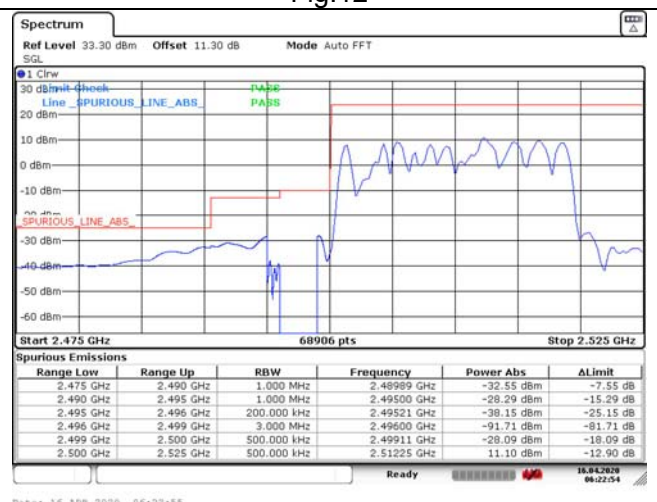


Fig.14

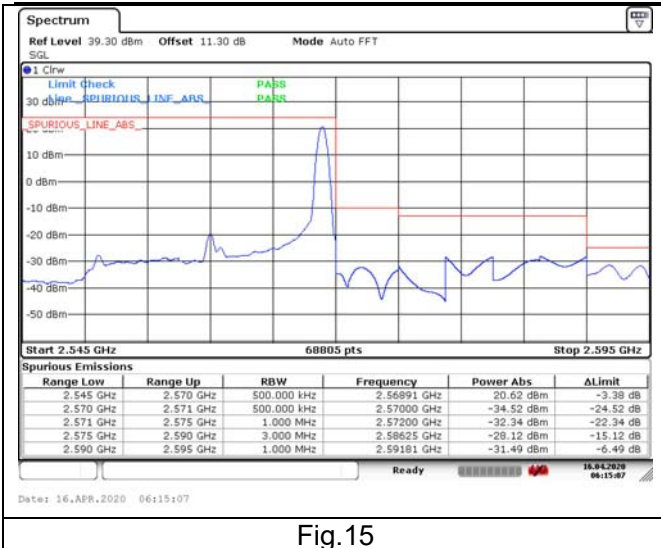


Fig.15

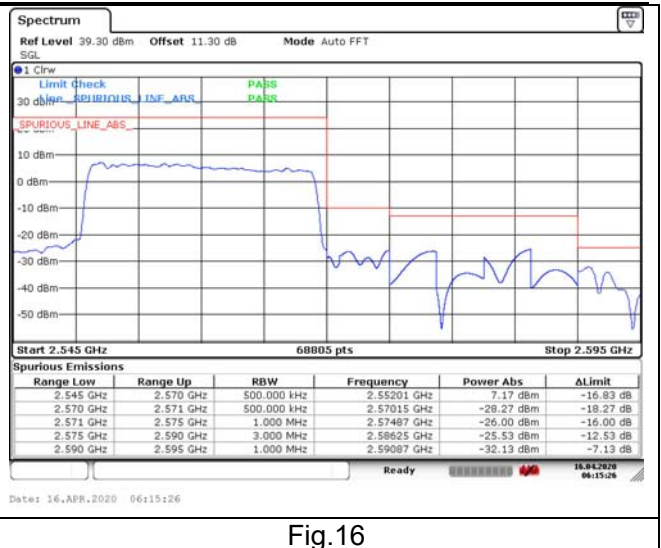


Fig.16

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band7 Low Channel			
		5M	10M	15M	20M
-30	NV	0.047	0.005	-0.003	-0.017
-20	NV	0.075	-0.029	0.006	0.094
-10	NV	0.046	0.027	-0.035	-0.025
0	NV	0.019	0.062	0.072	0.053
+10	NV	-0.049	-0.024	-0.015	-0.007
+20	NV	0.000	0.000	0.000	0.000
+30	NV	-0.083	-0.055	-0.050	0.003
+40	NV	0.045	0.021	0.015	0.020
+50	NV	0.082	0.027	-0.018	-0.043
+20	LV	-0.036	0.052	0.026	0.054
+20	HV	0.033	0.002	0.051	-0.046

Temperature(°C)	Voltage	Test Result (ppm) Band7 High Channel			
		5M	10M	15M	20M
-30	NV	-0.026	0.044	0.036	0.018
-20	NV	0.041	-0.016	-0.049	-0.023
-10	NV	-0.026	-0.027	-0.054	0.076
0	NV	-0.009	-0.032	-0.059	0.012
+10	NV	0.013	0.011	0.016	0.061
+20	NV	0.000	0.000	0.000	0.000
+30	NV	-0.047	-0.017	-0.043	0.071
+40	NV	-0.016	-0.012	-0.067	-0.032
+50	NV	0.066	0.006	0.058	-0.053
+20	LV	-0.042	-0.063	-0.044	0.045
+20	HV	0.019	-0.002	-0.007	-0.028