

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 13

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	779.5	23205	5	1	0	24.08
				1	24	24.17
				12	6	23.14
				25	0	23.04
	782	23230		1	0	24.16
				1	24	24.06
				12	6	23.17
				25	0	22.98
	784.5	23255		1	0	24.07
				1	24	24.18
				12	6	23.03
				25	0	22.98
16QAM	779.5	23205	5	1	0	23.59
				1	24	22.81
				12	6	22.01
				25	0	22.13
	782	23230		1	0	22.98
				1	24	22.94
				12	6	22.21
				25	0	22.18
	784.5	23255		1	0	22.45
				1	24	22.76
				12	6	21.83
				25	0	22.09
64QAM	779.5	23205	5	1	0	23.24
				1	24	22.67
				12	6	21.88
				25	0	22.16
	782	23230		1	0	22.95
				1	24	22.84
				12	6	21.87
				25	0	22.12
	784.5	23255		1	0	22.44
				1	24	22.72
				12	6	21.75
				25	0	21.94

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	782	23230	10	1	0	24.26
				1	49	24.34
				24	12	23.05
				50	0	22.98
16QAM	782	23230	10	1	0	22.27
				1	49	22.26
				24	12	22.06
				50	0	22.02
64QAM	782	23230	10	1	0	22.51
				1	49	22.54
				24	12	22.14
				50	0	22.13

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	
13	779.5	23205	5	25	0	4.4711	Fig.1	4.4682	Fig.2	4.4650	Fig.3
	782	23230		25	0	4.4830	Fig.4	4.4760	Fig.5	4.4837	Fig.6
	784.5	23255		25	0	4.4823	Fig.7	4.4743	Fig.8	4.4756	Fig.9
	782	23230	10	50	0	8.9159	Fig.10	8.9155	Fig.11	8.9287	Fig.12

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
13	779.5	23205	5	25	0	4.941	Fig.1	4.841	Fig.2	4.826	Fig.3
	782	23230		25	0	4.939	Fig.4	4.865	Fig.5	4.866	Fig.6
	784.5	23255		25	0	4.964	Fig.7	4.860	Fig.8	4.943	Fig.9
	782	23230	10	50	0	9.660	Fig.10	9.577	Fig.11	9.469	Fig.12

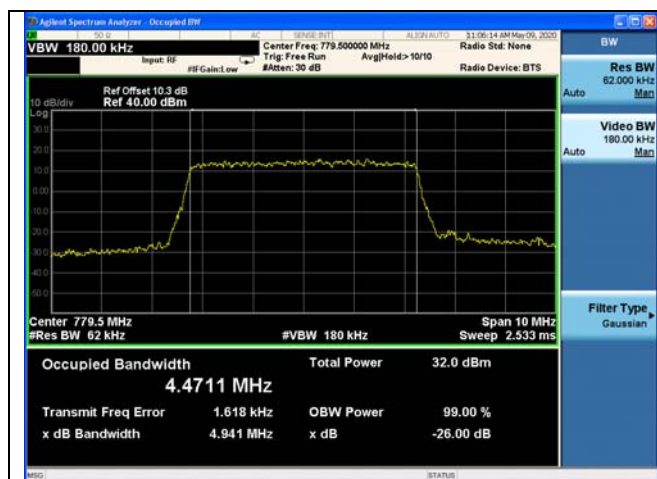


Fig.1

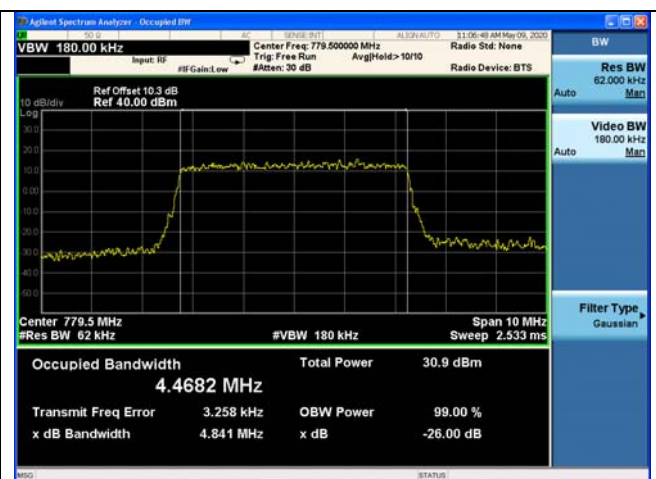


Fig.2

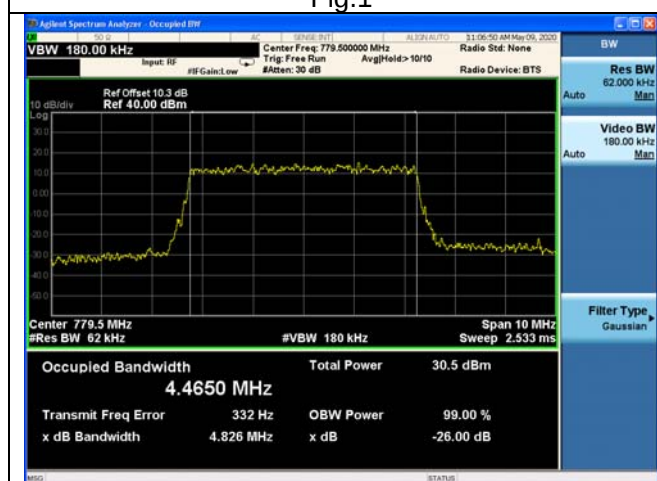


Fig.3

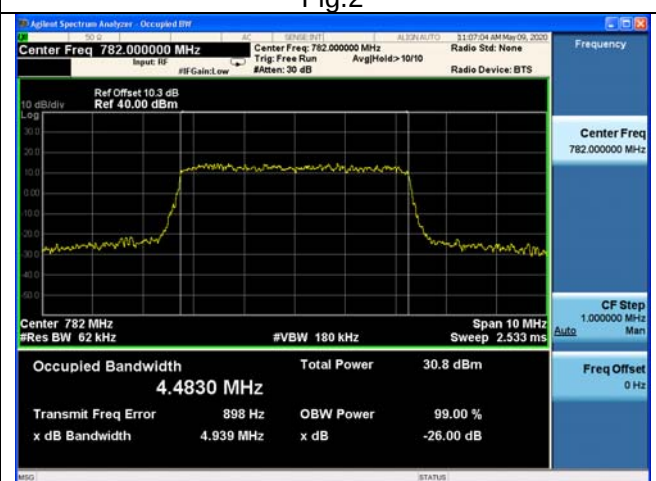


Fig.4

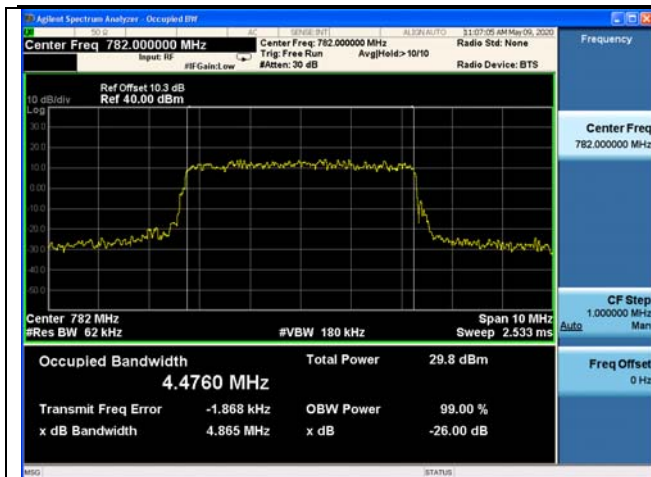


Fig.5

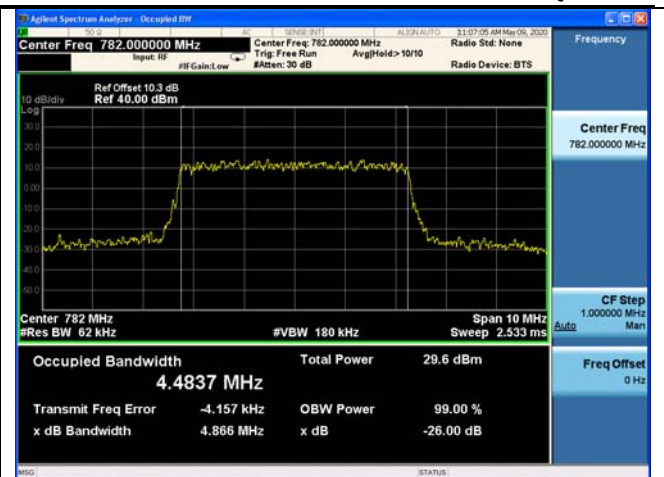


Fig.6

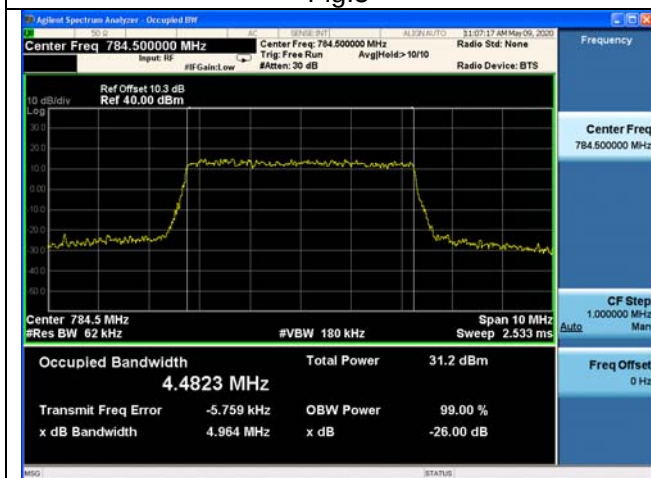


Fig.7

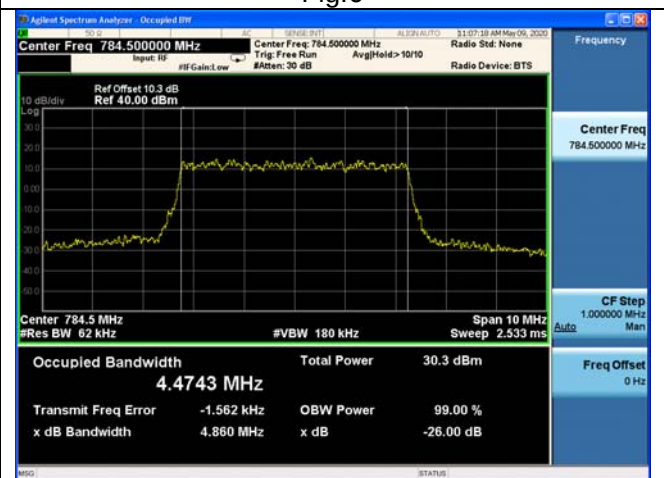


Fig.8

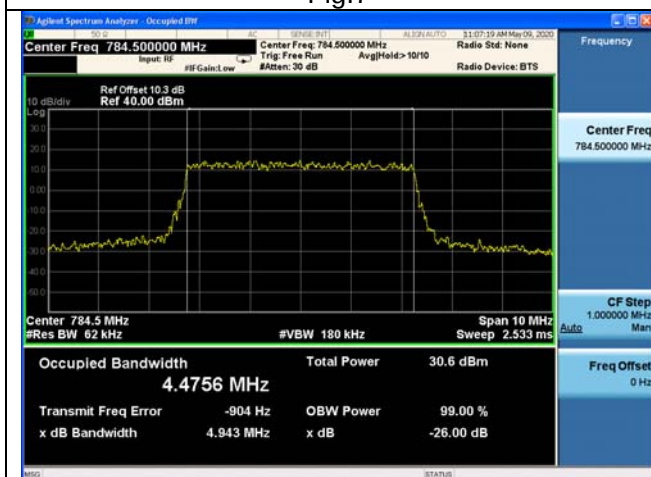


Fig.9

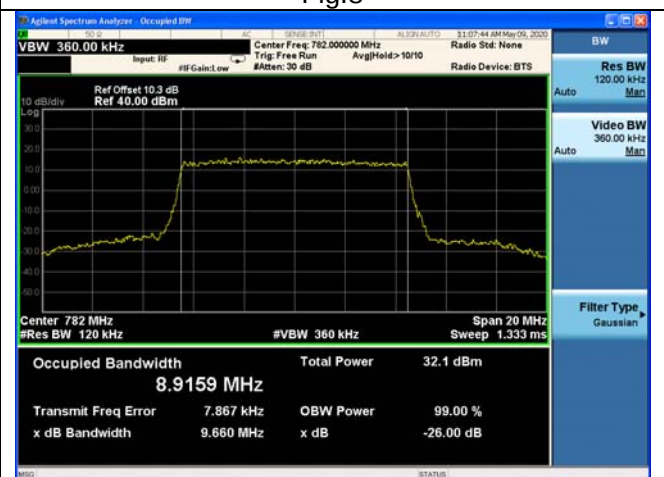


Fig.10

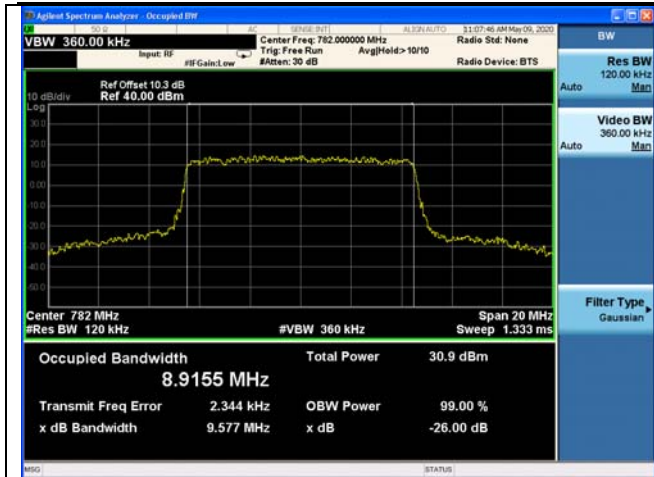


Fig.11

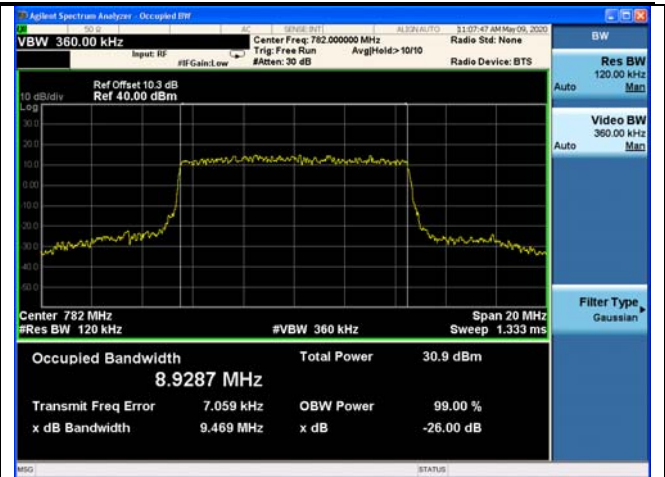


Fig.12

3 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
13	782	23230	5	1	0	Fig.1	Fig.2	Fig.3
			10	1	0	Fig.4	Fig.5	Fig.6



Fig.1

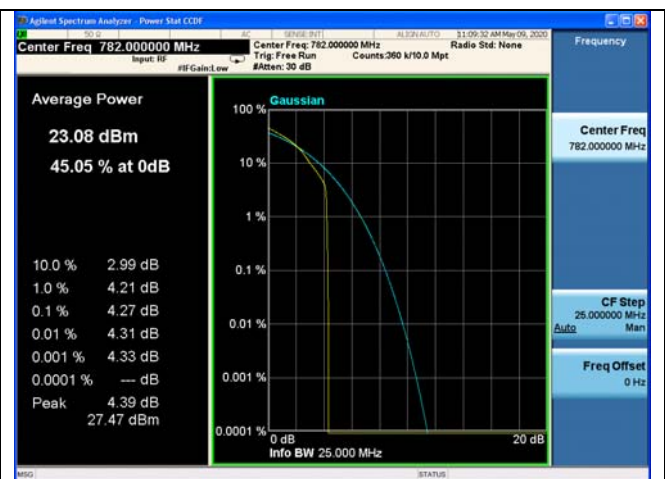


Fig.2

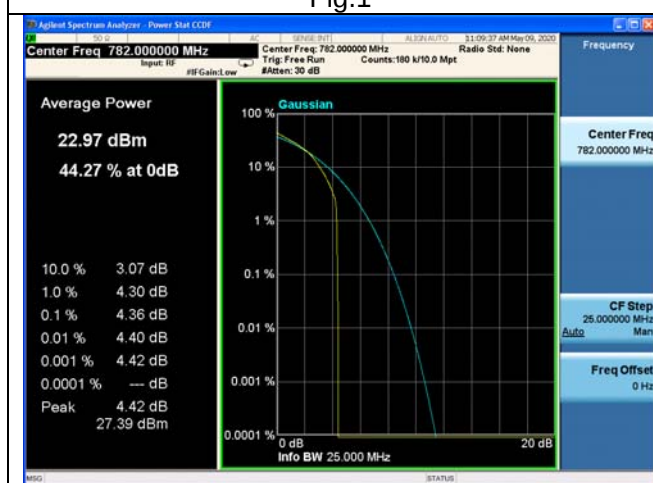


Fig.3



Fig.4

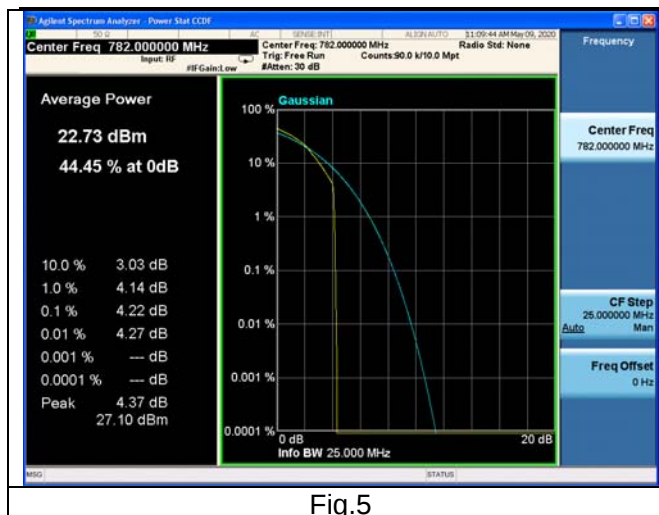


Fig.5

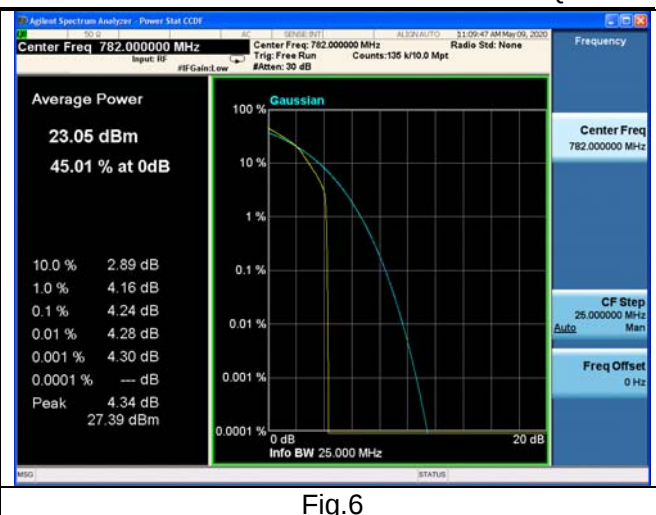


Fig.6

4 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
13	782	23230	10	1	0	Fig.1-2

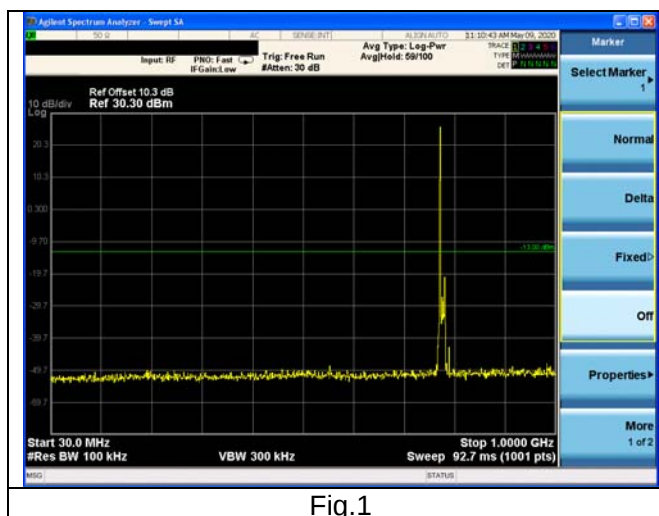


Fig.1

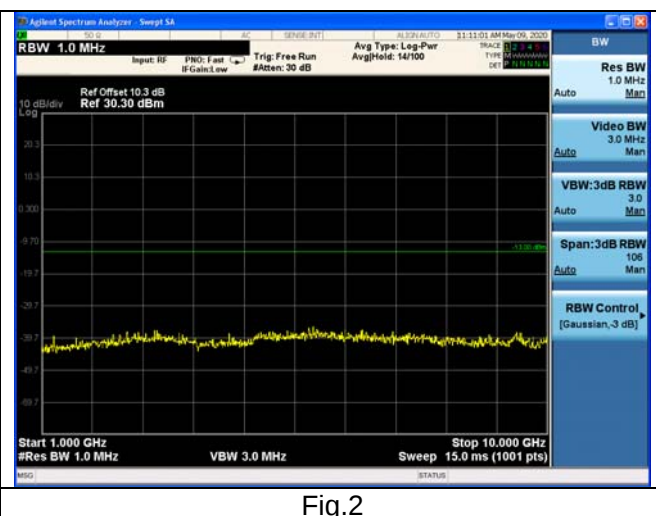


Fig.2

5 Band Edges Compliance

Test result

Test Result						
Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
13	779.5	23205	5	1	0	Fig.1
				25	0	Fig.2
	784.5	23255		1	24	Fig.3
				25	0	Fig.4
	782	23230	10	1	0	Fig.5
				50	0	Fig.6
	782	23230		1	49	Fig.7
				50	0	Fig.8

Emission Mask Edge

Emission Mask Edge						
Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
13	779.5	23205	5	1	0	Fig.9
				25	0	Fig.10
	784.5	23255		1	24	Fig.11
				25	0	Fig.12
	782	23230	10	1	0	Fig.13
				50	0	Fig.14
	782	23230		1	49	Fig.15
				50	0	Fig.16

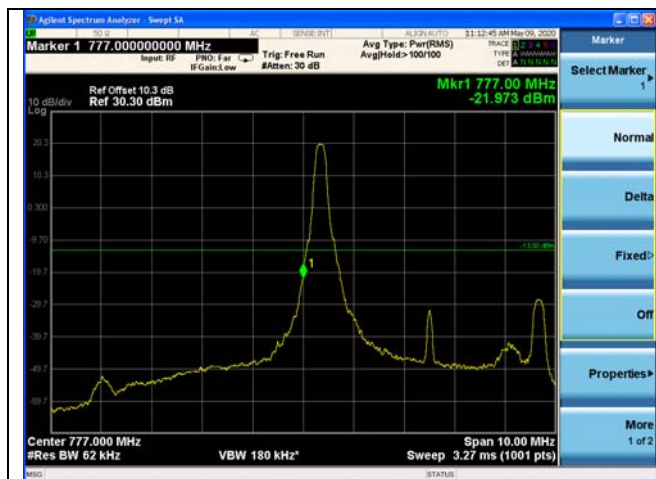


Fig.1



Fig.2

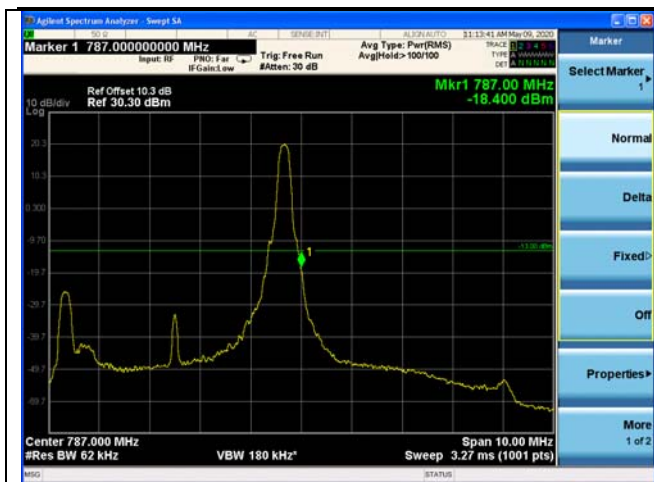


Fig.3



Fig.4

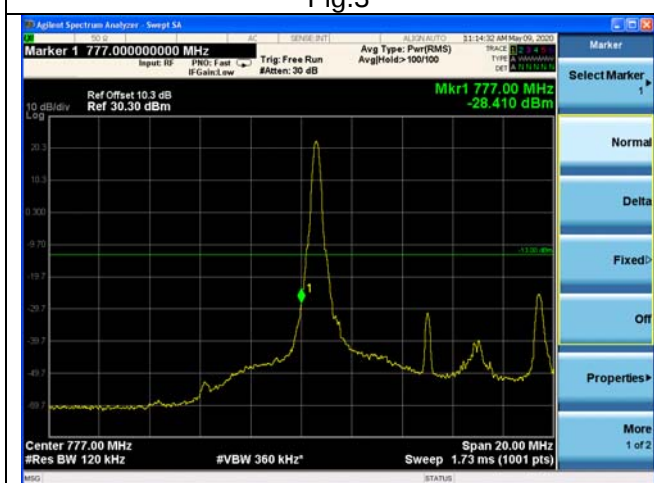


Fig.5



Fig.6

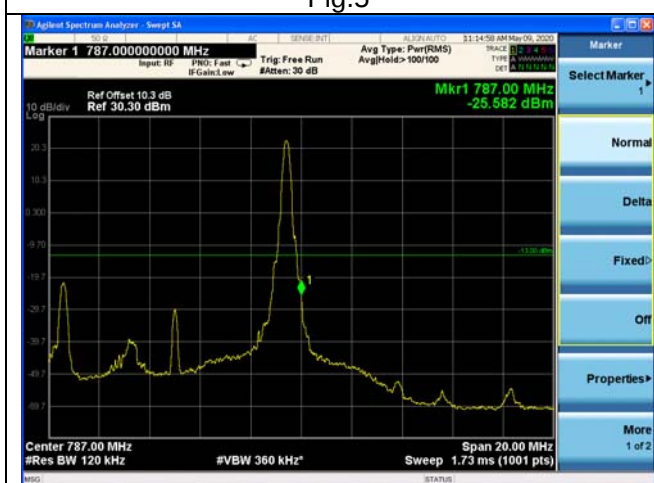


Fig.7



Fig.8

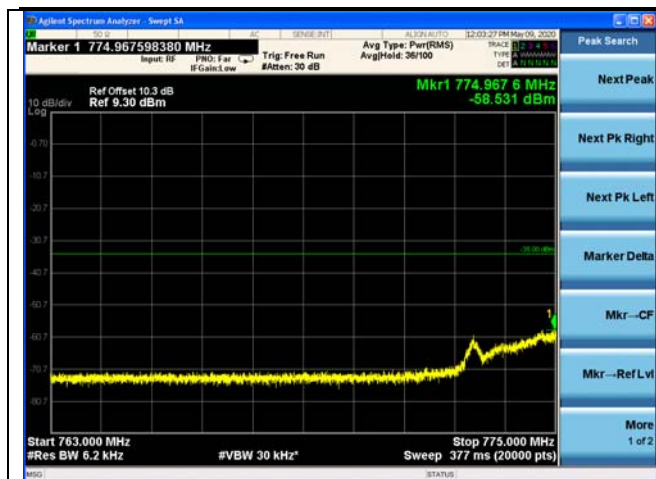


Fig.9

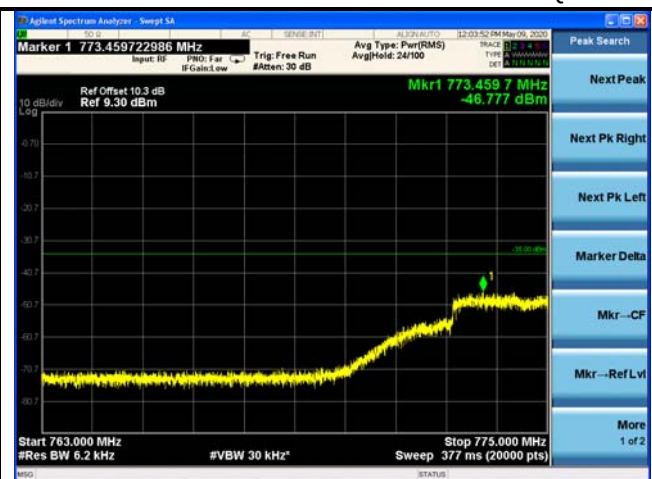


Fig.10

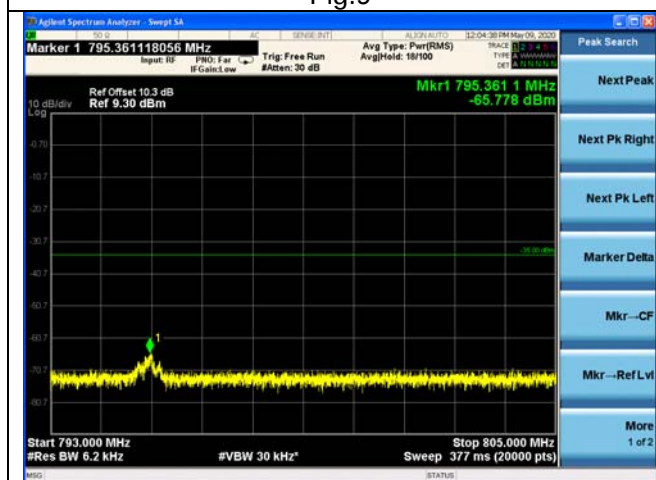


Fig.11

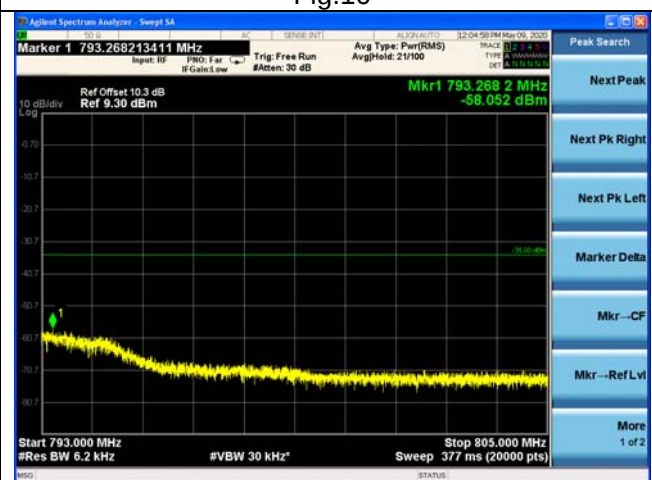


Fig.12

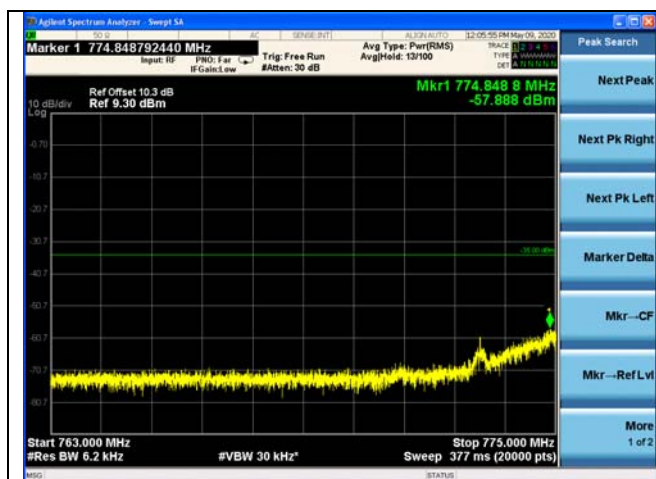


Fig.13

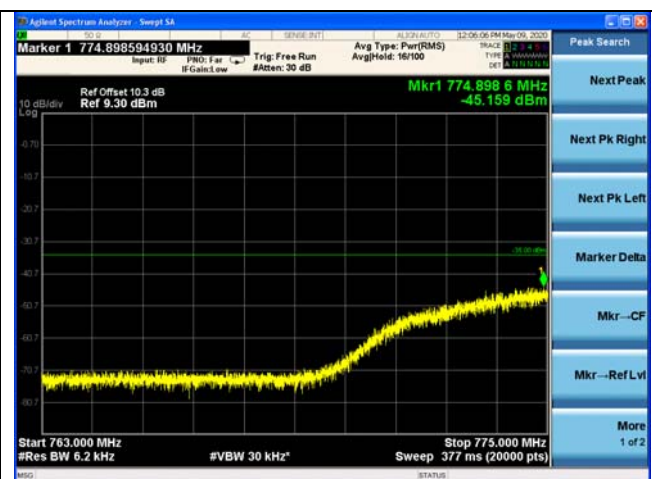


Fig.14

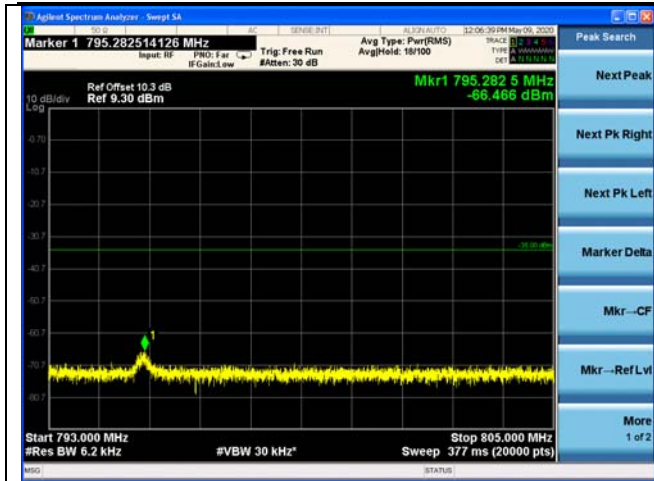


Fig.15

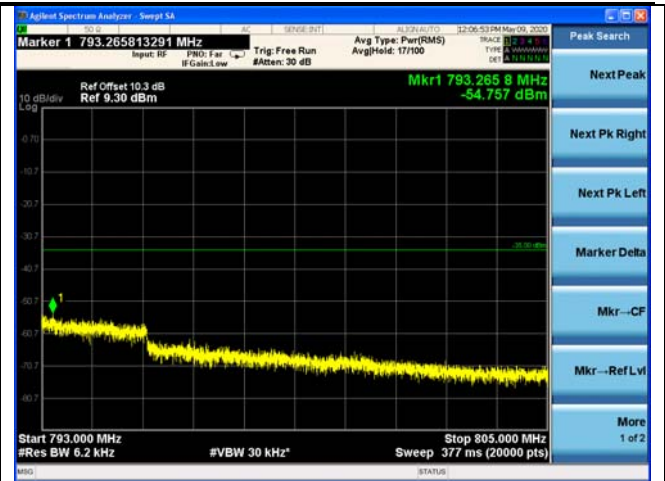


Fig.16

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band13 Low Channel	
		5M	10M
-10	NV	0.068	-0.040
0	NV	0.029	0.095
+10	NV	0.023	0.025
+20	NV	0.000	0.000
+30	NV	-0.024	0.097
+40	NV	0.077	-0.078
+50	NV	-0.022	-0.084
+55	NV	0.063	0.054
+20	LV	-0.081	-0.094
+20	HV	0.037	0.027

Temperature(°C)	Voltage	Test Result (ppm) Band13 High Channel	
		5M	10M
-10	NV	-0.026	-0.013
0	NV	0.024	-0.018
+10	NV	0.068	0.062
+20	NV	0.000	0.000
+30	NV	0.003	0.022
+40	NV	0.066	0.092
+50	NV	-0.077	-0.048
+55	NV	0.055	0.039
+20	LV	0.094	-0.048
+20	HV	-0.085	0.086