

4.4. EIRP Power (density) Measurement

Test Mode	Mode 1					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
E.I.R.P	dBm/MHz	1.360	2.580	2.790	PASS	-----
Limit	dBm/MHz	≤ 6.91				

Test Mode	Mode 2					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
E.I.R.P	dBm/MHz	1.210	2.810	2.930	PASS	-----
Limit	dBm/MHz	≤ 6.91				

Test Mode	Mode 3					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
E.I.R.P	dBm/MHz	1.350	3.080	3.280	PASS	-----
Limit	dBm/MHz	≤ 6.91				



Test Mode	Mode 4					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
E.I.R.P	dBm/MHz	1.300	2.980	3.270	PASS	-----
Limit	dBm/MHz	≤ 6.91				

Test Mode	Mode 5					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
E.I.R.P	dBm/MHz	1.120	2.780	2.910	PASS	-----
Limit	dBm/MHz	≤ 6.91				

Test Mode	Mode 6					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
E.I.R.P	dBm/MHz	1.230	2.810	2.950	PASS	-----
Limit	dBm/MHz	≤ 6.91				

4.5. Spreading Rate (Effective Broadening) Measurement

Test Mode	Mode 1					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Spread Factor	-----	70.331			PASS	-----
Limit	-----	≥ 5				

Test Mode	Mode 2					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Spread Factor	-----	70.368			PASS	-----
Limit	-----	≥ 5				

Test Mode	Mode 3					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Spread Factor	-----	70.545			PASS	-----
Limit	-----	≥ 5				



Test Mode	Mode 4					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Spread Factor	-----	70.225			PASS	-----
Limit	-----	≥5				

Test Mode	Mode 5					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Spread Factor	-----	70.410			PASS	-----
Limit	-----	≥5				

Test Mode	Mode 6					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Spread Factor	-----	70.492			PASS	-----
Limit	-----	≥ 5				



4.6. Unwanted Emission Strength Measurement

Test Mode		Mode 1					
Test Voltage		5 Vdc	Normal Voltage				
Measurement Frequency		MHz	2402	2441	2480	Result	Notes
Channel Number		Ch.	0	39	78		
TX1	Under 2387 MHz	μ W/MHz	0.132	0.013	0.008	PASS	----
		MHz	2363.400	2387.000	1654.000	----	----
	2387-2400 MHz	μ W/MHz	5.573	0.049	0.017	PASS	----
		MHz	2400.000	2400.000	2399.805	----	----
	2483.5-2496.5 MHz	μ W/MHz	0.024	0.038	1.344	PASS	----
		MHz	2484.917	2492.041	2483.890	----	----
	2496.5 - 12.5 GHz	μ W/MHz	0.454	0.634	1.019	PASS	----
		MHz	7208.000	7318.000	7438.000	----	----
Limit	μ W/MHz	Under 2387 MHz and 2496.5 - 12.5 GHz ≤ 2.5					
		2387-2400 MHz and 2483.5-2496.5 MHz ≤ 25					

Test Mode		Mode 3					
Test Voltage		5 Vdc	Normal Voltage				
Measurement Frequency		MHz	2402	2441	2480	Result	Notes
Channel Number		Ch.	0	39	78		
TX1	Under 2387 MHz	μ W/MHz	0.126	0.012	0.007	PASS	-----
		MHz	2363.400	2377.600	1654.000	-----	-----
	2387-2400 MHz	μ W/MHz	8.555	0.047	0.018	PASS	-----
		MHz	2400.000	2399.974	2399.935	-----	-----
	2483.5-2496.5 MHz	μ W/MHz	0.023	0.039	0.721	PASS	-----
		MHz	2485.229	2484.800	2483.877	-----	-----
	2496.5 - 12.5 GHz	μ W/MHz	0.455	0.609	1.142	PASS	-----
		MHz	7208.000	7318.000	7438.000	-----	-----
Limit		μ W/MHz	Under 2387 MHz and 2496.5 - 12.5 GHz ≤ 2.5				
			2387-2400 MHz and 2483.5-2496.5 MHz ≤ 25				



Test Mode		Mode 4					
Test Voltage		5 Vdc	Normal Voltage				
Measurement Frequency		MHz	2402	2441	2480	Result	Notes
Channel Number		Ch.	0	39	78		
TX1	Under 2387 MHz	μ W/MHz	0.124	0.015	0.008	PASS	----
		MHz	2361.100	2387.000	1654.000	----	----
	2387-2400 MHz	μ W/MHz	0.241	0.049	0.021	PASS	----
		MHz	2399.987	2400.000	2399.870	----	----
	2483.5-2496.5 MHz	μ W/MHz	0.021	0.035	2.197	PASS	----
		MHz	2487.725	2483.513	2483.591	----	----
	2496.5 - 12.5 GHz	μ W/MHz	0.582	0.779	1.075	PASS	----
		MHz	7208.000	7318.000	7438.000	----	----
Limit		μ W/MHz	Under 2387 MHz and 2496.5 - 12.5 GHz ≤ 2.5				
			2387-2400 MHz and 2483.5-2496.5 MHz ≤ 25				

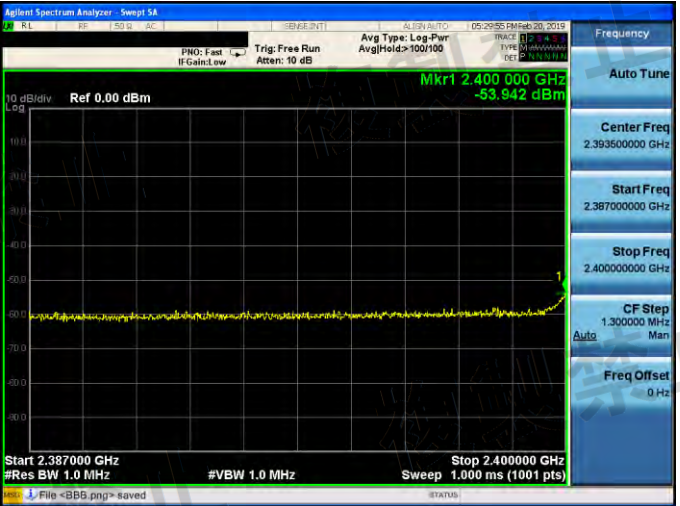
Test Mode		Mode 6					
Test Voltage		5 Vdc	Normal Voltage				
Measurement Frequency		MHz	2402	2441	2480	Result	Notes
Channel Number		Ch.	0	39	78		
TX1	Under 2387 MHz	μ W/MHz	0.152	0.015	0.009	PASS	----
		MHz	2363.400	2384.600	1654.000	----	----
	2387-2400 MHz	μ W/MHz	0.743	0.056	0.016	PASS	----
		MHz	2400.000	2399.974	2399.740	----	----
	2483.5-2496.5 MHz	μ W/MHz	0.022	0.038	1.144	PASS	----
		MHz	2484.657	2488.323	2483.591	----	----
	2496.5 - 12.5 GHz	μ W/MHz	1.061	1.252	1.533	PASS	----
		MHz	7208.000	7318.000	7438.000	----	----
Limit		μ W/MHz	Under 2387 MHz and 2496.5 - 12.5 GHz ≤ 2.5				
			2387-2400 MHz and 2483.5-2496.5 MHz ≤ 25				



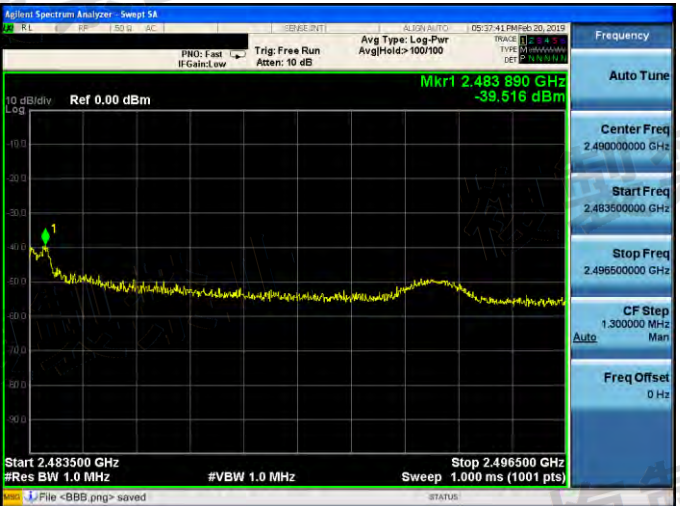
Test Graphs

Mode 1	
30 MHz - 2387 MHz	
2402 MHz	
2441 MHz	
2480 MHz	

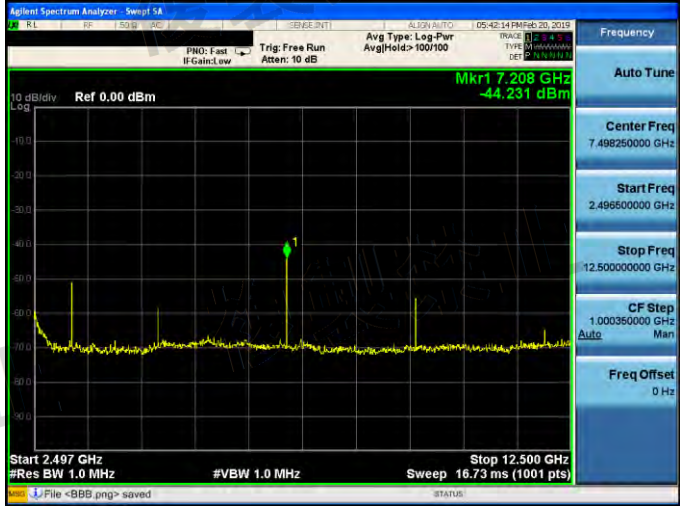
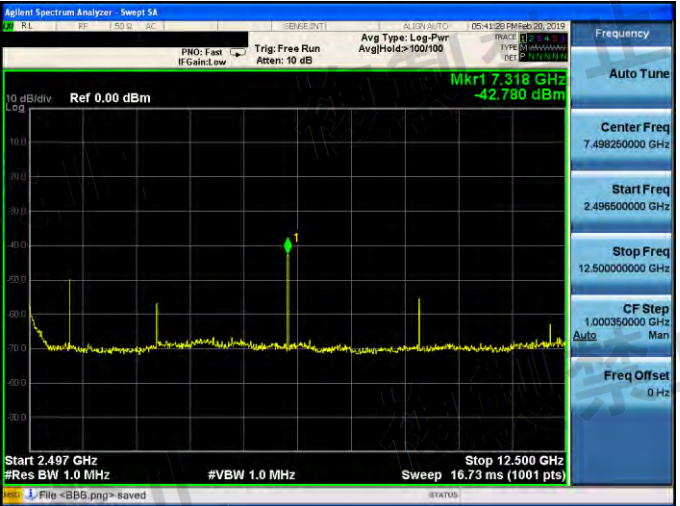
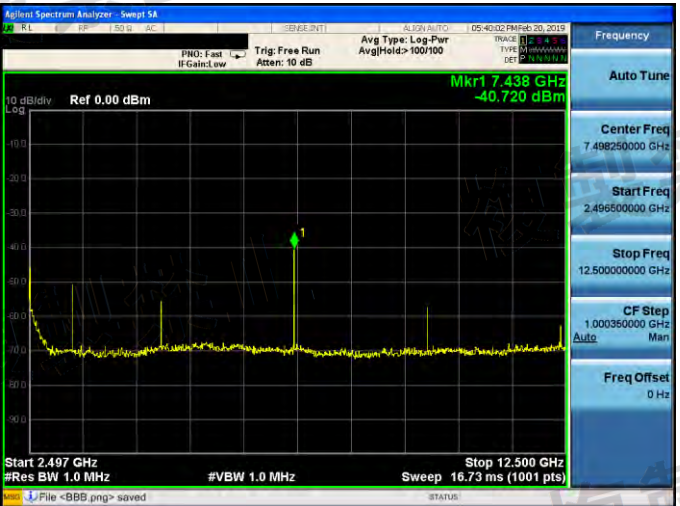


Mode 1	
2387 MHz - 2400 MHz	
2402 MHz	
2441 MHz	
2480 MHz	

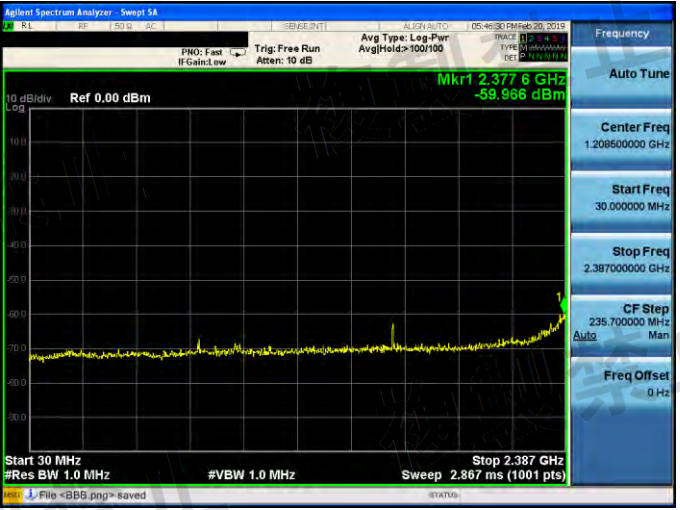
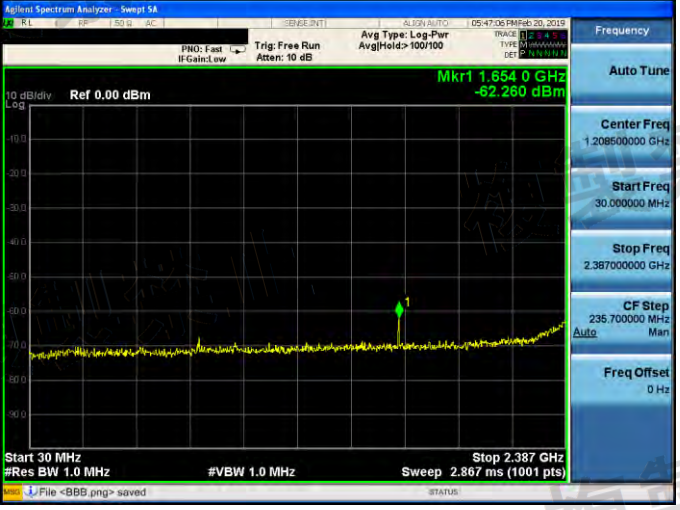


Mode 1	
2483.5 MHz - 2496.5 MHz	
2402 MHz	
2441 MHz	
2480 MHz	



Mode 1	
2496.5 MHz - 12.5 GHz	
2402 MHz	
2441 MHz	
2480 MHz	

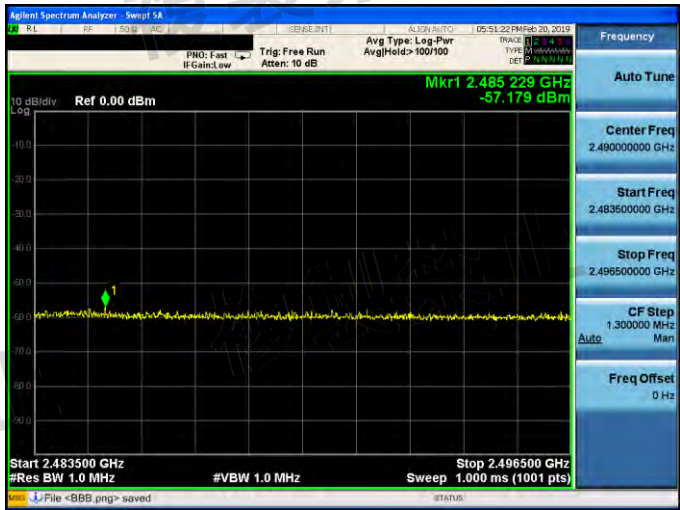
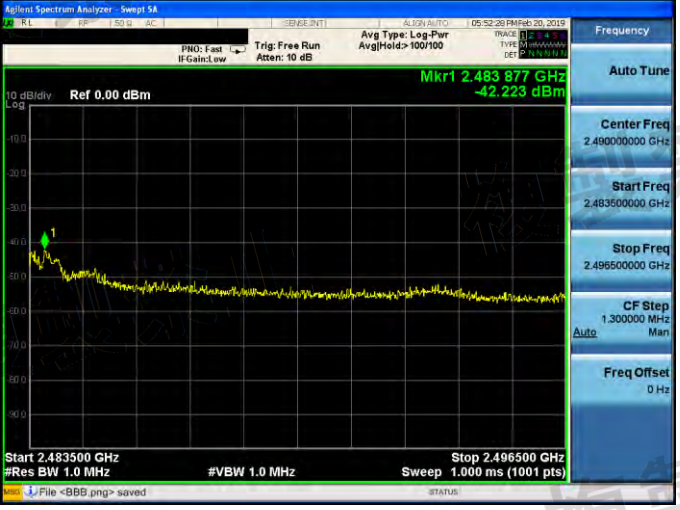


Mode 3	
30 MHz - 2387 MHz	
2402 MHz	
2441 MHz	
2480 MHz	

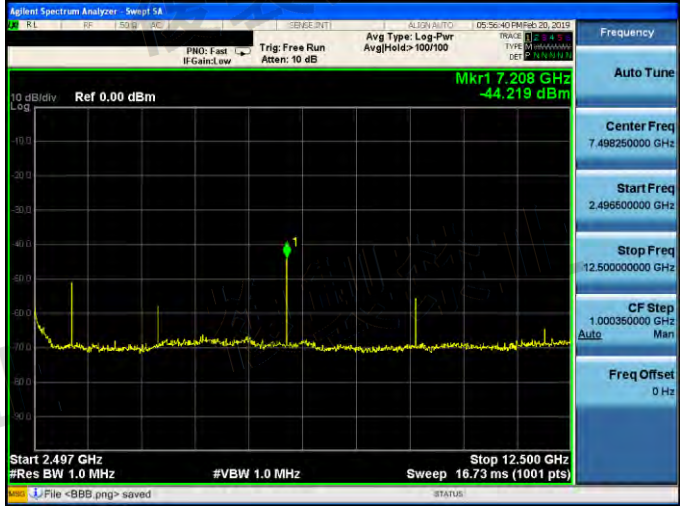
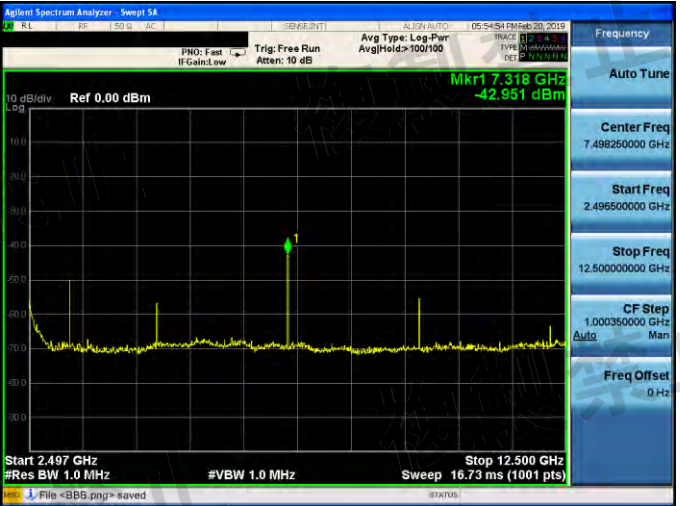
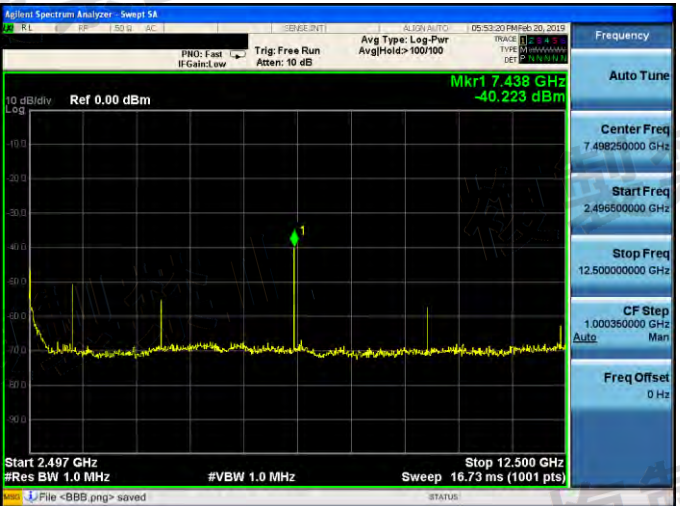


Mode 3	
2387 MHz - 2400 MHz	
2402 MHz	
2441 MHz	
2480 MHz	

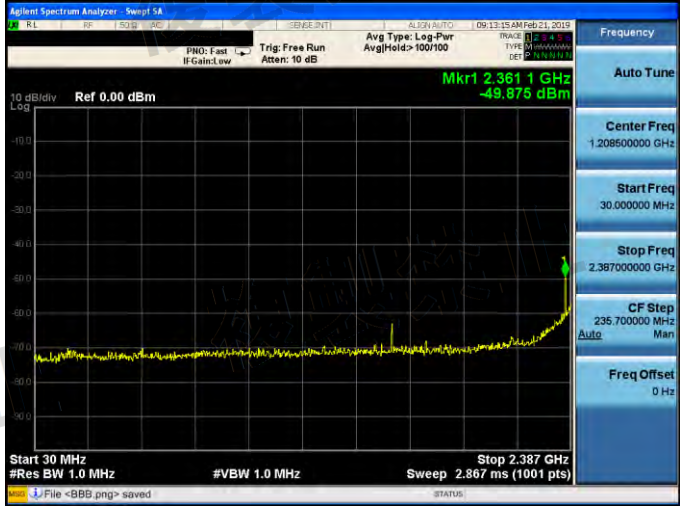
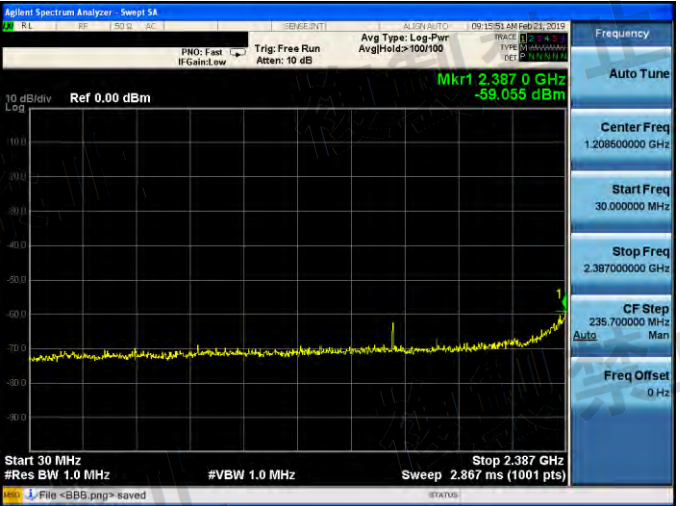
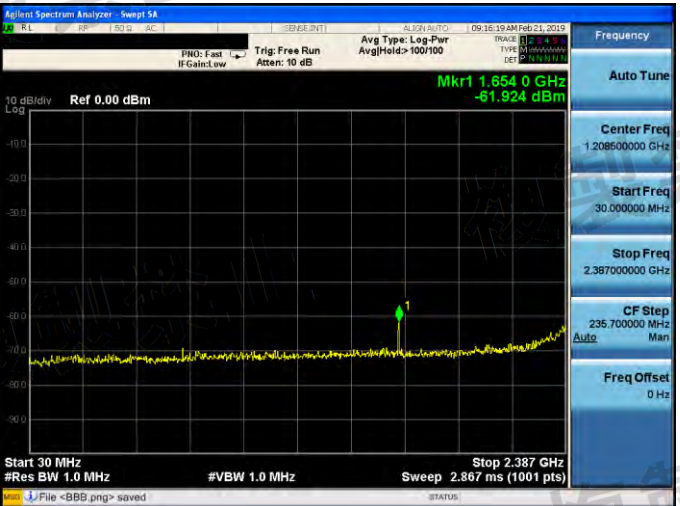


Mode 3	
2483.5 MHz - 2496.5 MHz	
2402 MHz	
2441 MHz	
2480 MHz	

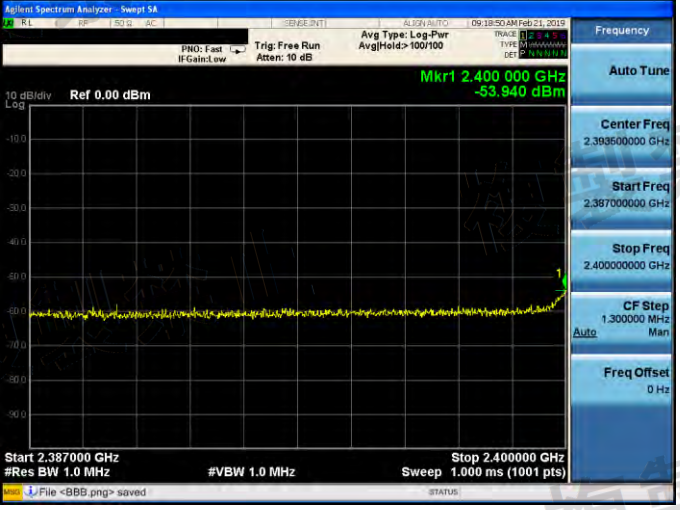


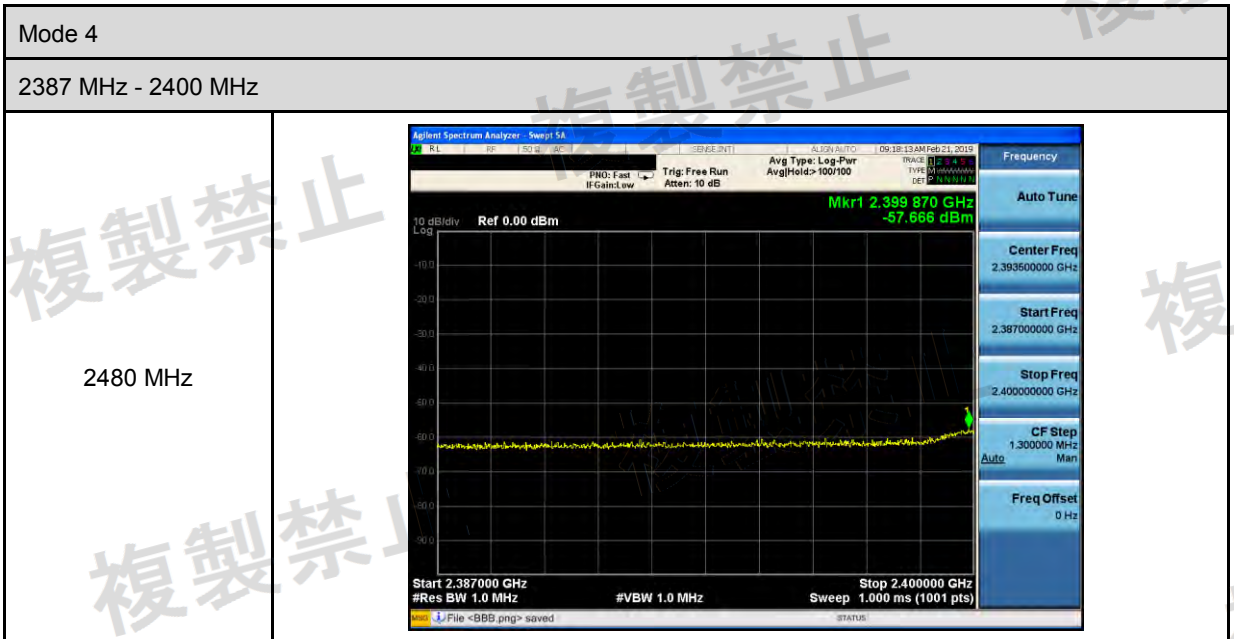
Mode 3	
2496.5 MHz - 12.5 GHz	
2402 MHz	
2441 MHz	
2480 MHz	



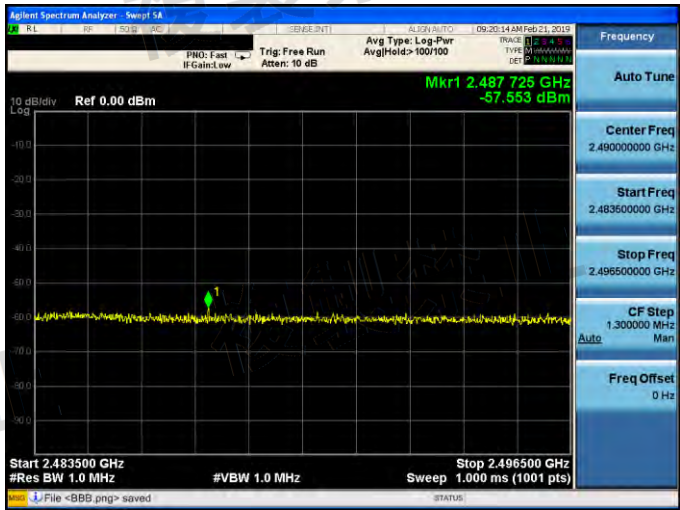
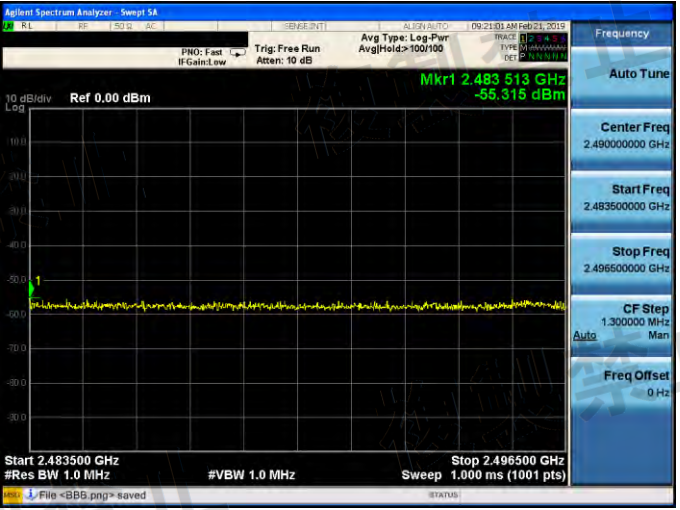
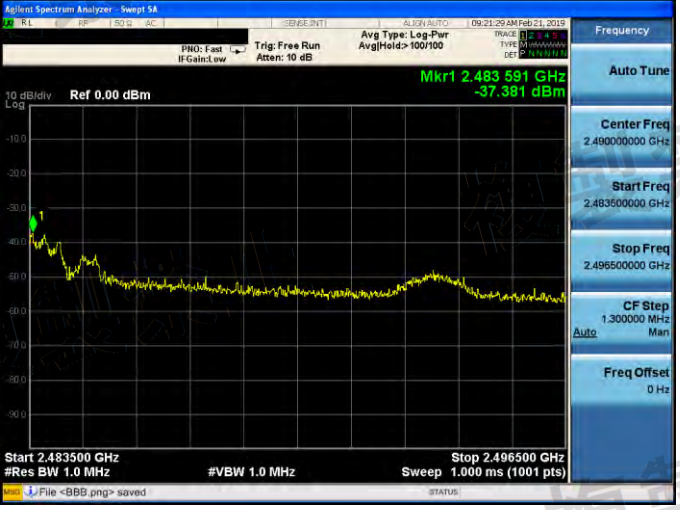
Mode 4	
30 MHz - 2387 MHz	
2402 MHz	
2441 MHz	
2480 MHz	



Mode 4	
2387 MHz - 2400 MHz	
2402 MHz	
2402 MHz	
2441 MHz	



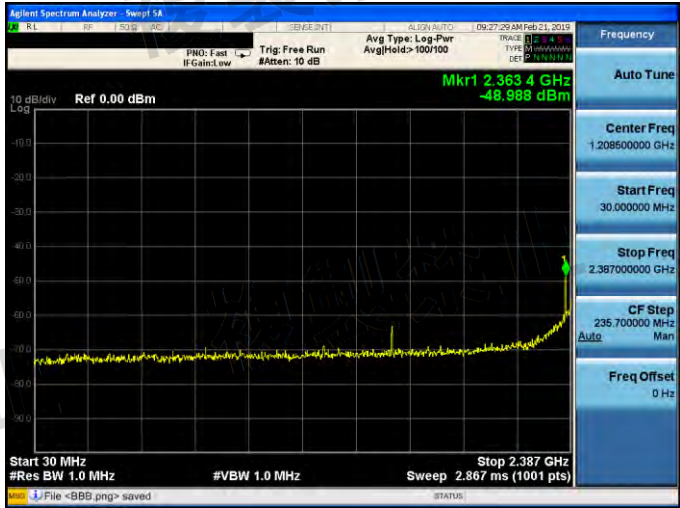
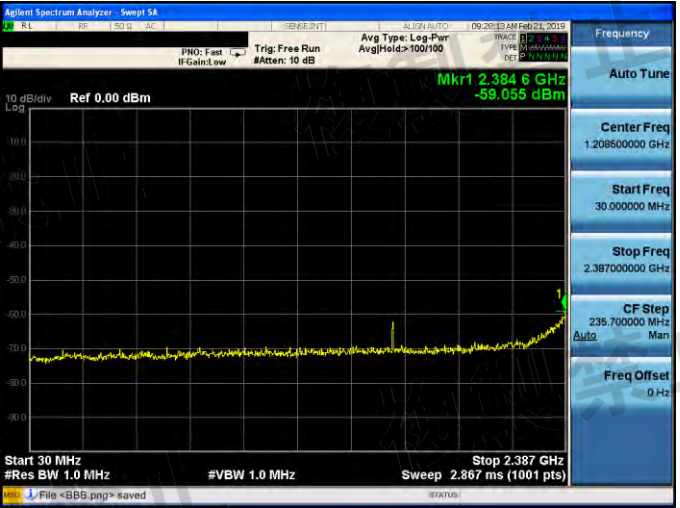
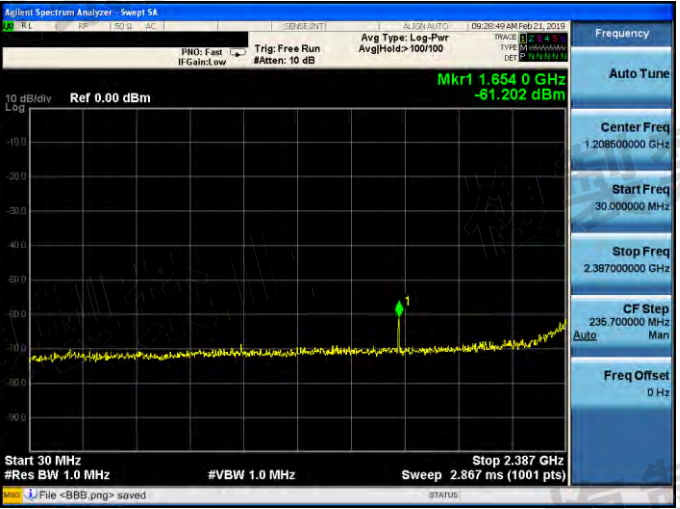


Mode 4	
2483.5 MHz - 2496.5 MHz	
2402 MHz	
2441 MHz	
2480 MHz	

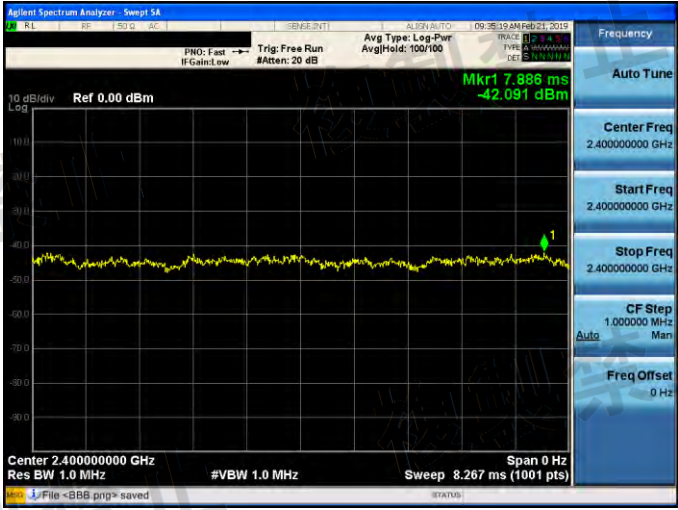
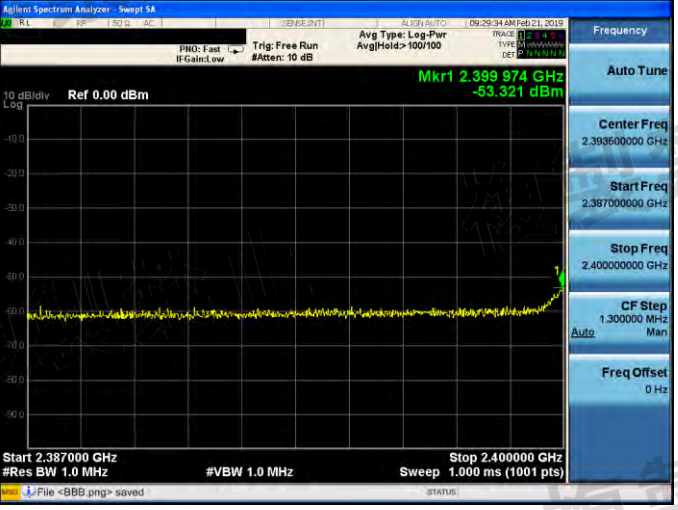


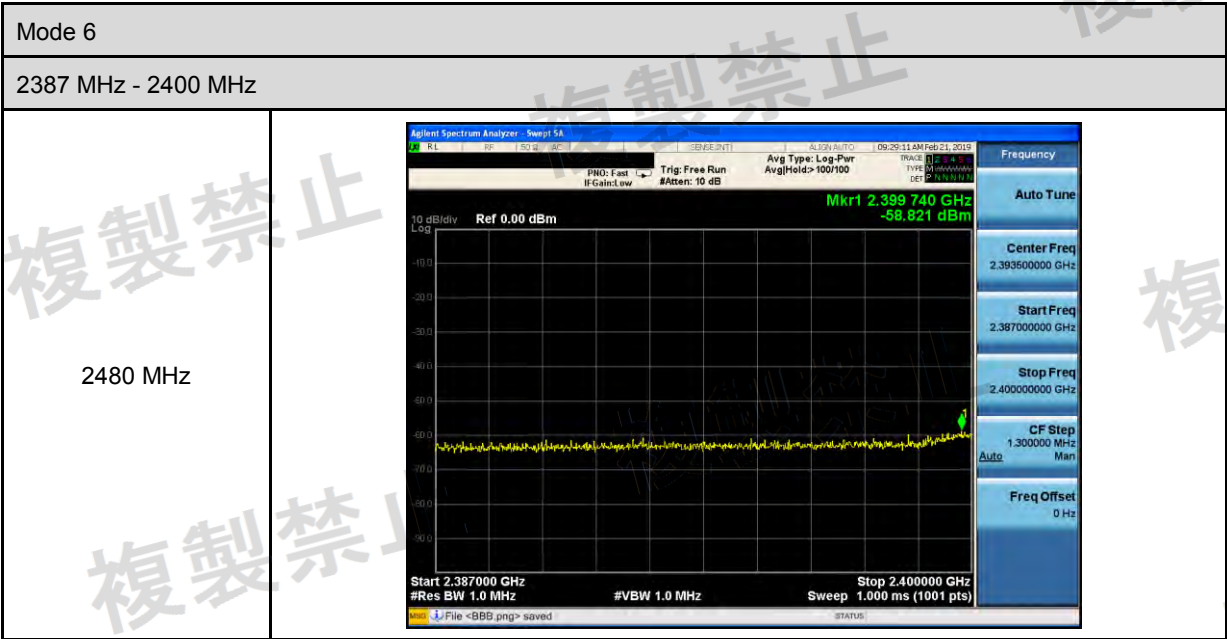
Mode 4	
2496.5 MHz - 12.5 GHz	
2402 MHz	
2441 MHz	
2480 MHz	



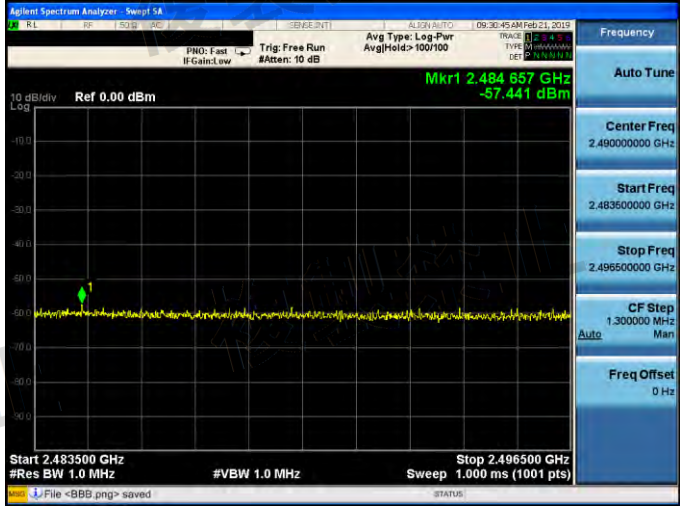
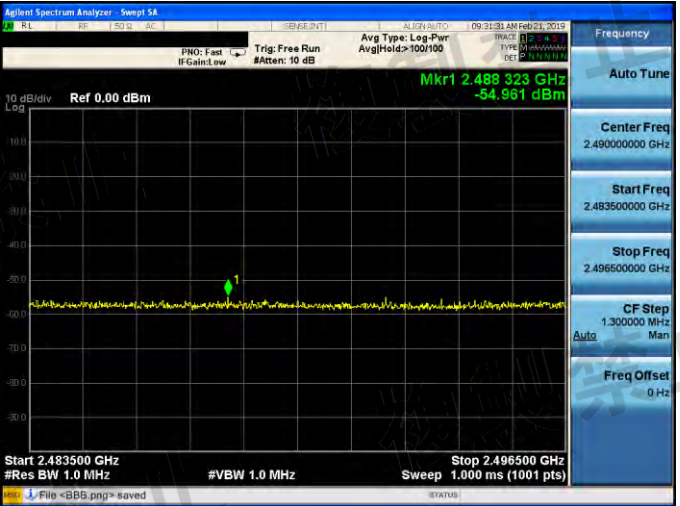
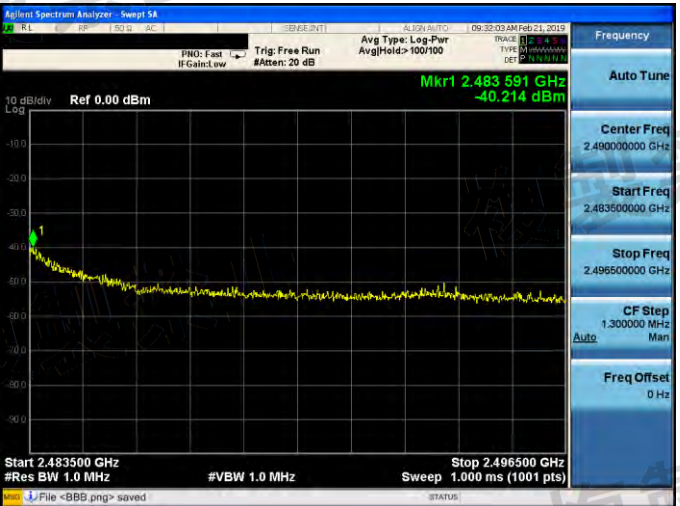
Mode 6	
30 MHz - 2387 MHz	
2402 MHz	
2441 MHz	
2480 MHz	



Mode 6	
2387 MHz - 2400 MHz	
2402 MHz	
2402 MHz	
2441 MHz	





Mode 6	
2483.5 MHz - 2496.5 MHz	
2402 MHz	
2441 MHz	
2480 MHz	



Mode 6	
2496.5 MHz - 12.5 GHz	
2402 MHz	
2441 MHz	
2480 MHz	

4.7. Secondly Emitted Radio Wave Strength Measurement

Test Mode		Mode 1					
Test Voltage		5 Vdc	Normal Voltage				
Measurement Frequency		MHz	2402	2441	2480	Result	Notes
Channel Number		Ch.	0	39	78		
RX1	Under 1 GHz	nW	0.012	0.009	0.010	PASS	----
		MHz	955.380	823.460	876.810	----	----
	1 - 12.5 GHz	nW	0.194	0.173	0.187	PASS	----
		MHz	5750.000	2691.000	2622.000	----	----
Limit		nW	Under 1 GHz ≤ 4				
			1 - 12.5 GHz ≤ 20				

Test Mode		Mode 3					
Test Voltage		5 Vdc	Normal Voltage				
Measurement Frequency		MHz	2402	2441	2480	Result	Notes
Channel Number		Ch.	0	39	78		
RX1	Under 1 GHz	nW	0.009	0.010	0.011	PASS	----
		MHz	224.970	812.790	904.940	----	----
	1 - 12.5 GHz	nW	0.242	0.178	0.214	PASS	----
		MHz	2518.000	5853.000	2679.000	----	----
Limit		nW	Under 1 GHz ≤ 4				
			1 - 12.5 GHz ≤ 20				



Test Mode		Mode 4					
Test Voltage		5 Vdc	Normal Voltage				
Measurement Frequency		MHz	2402	2441	2480	Result	Notes
Channel Number		Ch.	0	39	78		
RX1	Under 1 GHz	nW	0.011	0.010	0.010	PASS	----
		MHz	232.730	989.330	943.740	----	----
	1 - 12.5 GHz	nW	0.204	0.203	0.187	PASS	----
		MHz	5784.000	12500.000	2645.000	----	----
Limit		nW	Under 1 GHz ≤ 4				
			1 - 12.5 GHz ≤ 20				

Test Mode		Mode 6					
Test Voltage		5 Vdc	Normal Voltage				
Measurement Frequency		MHz	2402	2441	2480	Result	Notes
Channel Number		Ch.	0	39	78		
RX1	Under 1 GHz	nW	0.011	0.009	0.010	PASS	----
		MHz	838.980	945.680	943.740	----	----
	1 - 12.5 GHz	nW	0.184	0.183	0.177	PASS	----
		MHz	2679.000	3312.000	2702.000	----	----
Limit		nW	Under 1 GHz ≤ 4				
			1 - 12.5 GHz ≤ 20				



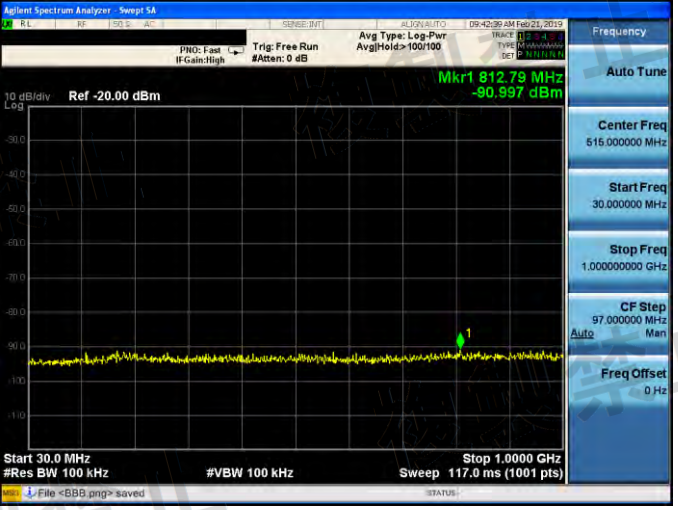
Test Graphs

Mode 1	
30 MHz – 1 GHz	
2402 MHz	
2441 MHz	
2480 MHz	

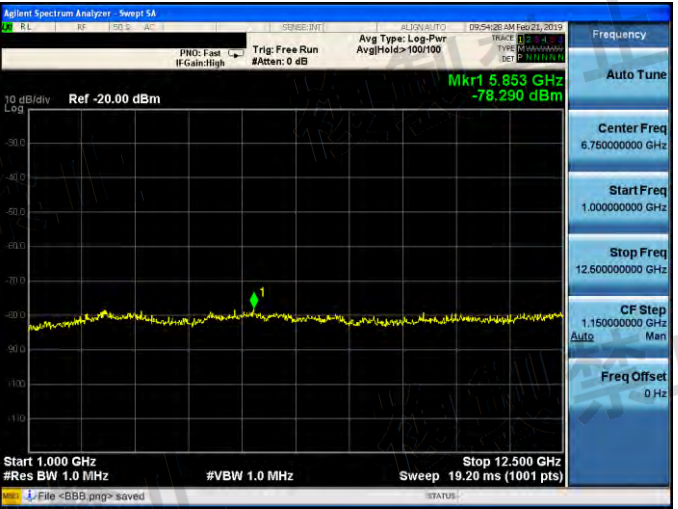
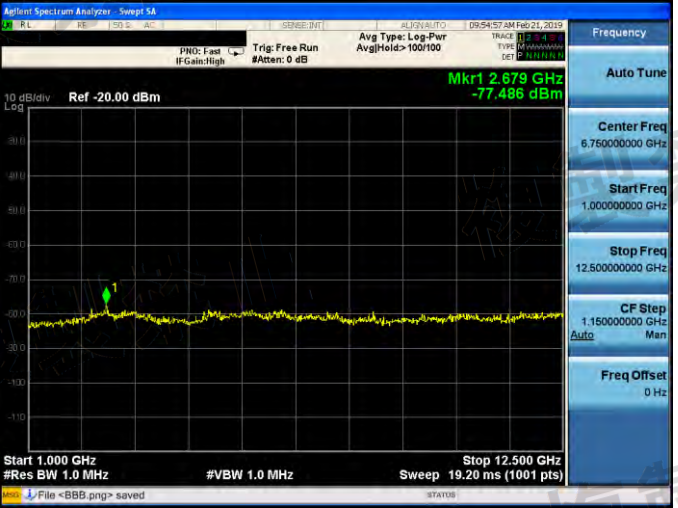


Mode 1	
1 GHz – 12.5 GHz	
2402 MHz	
2441 MHz	
2480 MHz	



Mode 3	
30 MHz – 1 GHz	
2402 MHz	
2441 MHz	
2480 MHz	

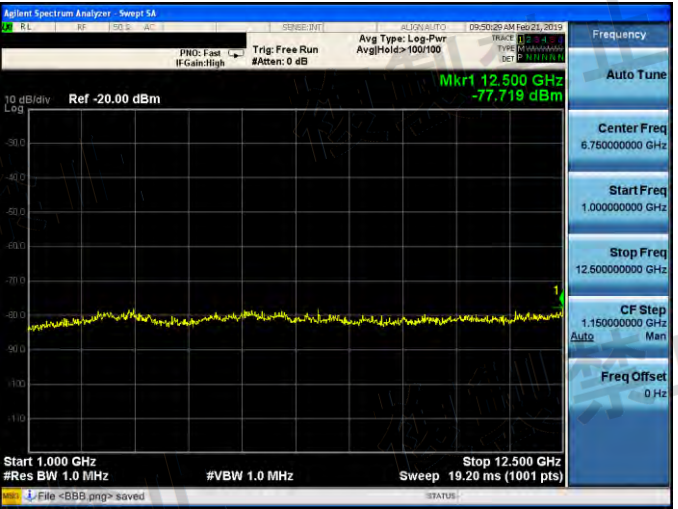


Mode 3	
1 GHz – 12.5 GHz	
2402 MHz	
2441 MHz	
2480 MHz	

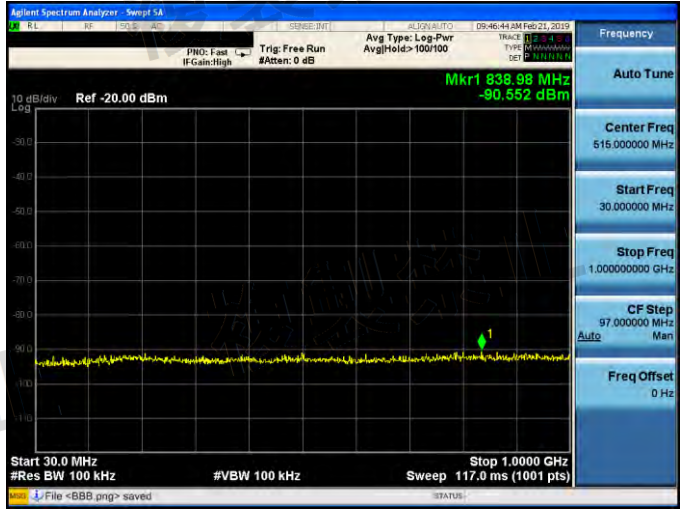
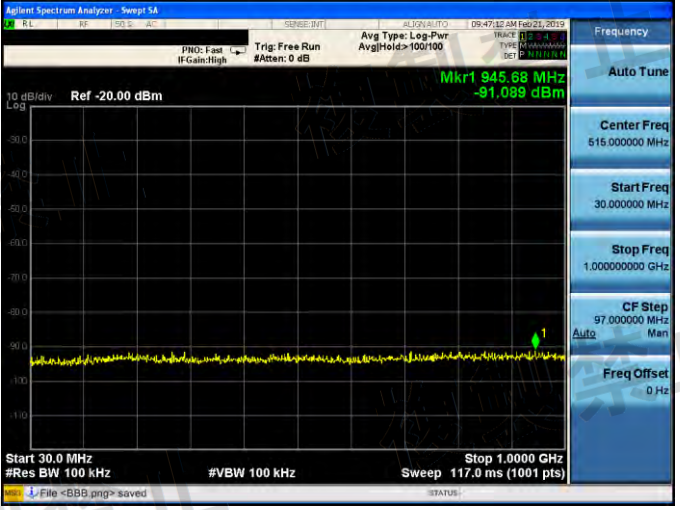


Mode 4	
30 MHz – 1 GHz	
2402 MHz	
2441 MHz	
2480 MHz	



Mode 4	
1 GHz – 12.5 GHz	
2402 MHz	
2441 MHz	
2480 MHz	



Mode 6	
30 MHz – 1 GHz	
2402 MHz	
2441 MHz	
2480 MHz	



Mode 6	
1 GHz – 12.5 GHz	
2402 MHz	
2441 MHz	
2480 MHz	



4.8. Dwell Time Measurement

Test Mode	Mode 1					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Dwell Time	mSec	275.389			PASS	-----
Limit	mSec	≤ 400				

Test Mode	Mode 2					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Dwell Time	mSec	275.534			PASS	-----
Limit	mSec	≤ 400				

Test Mode	Mode 3					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Dwell Time	mSec	276.227			PASS	-----
Limit	mSec	≤ 400				

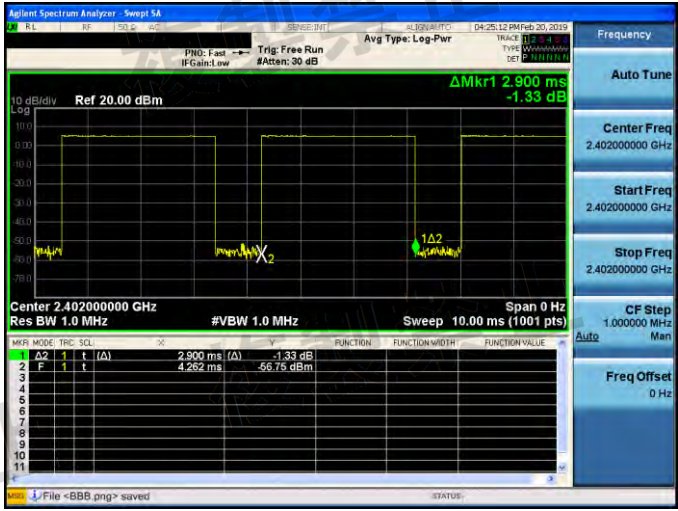
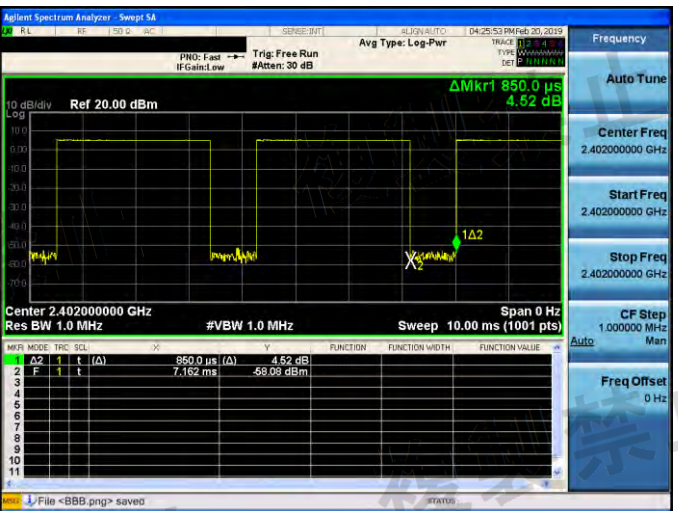
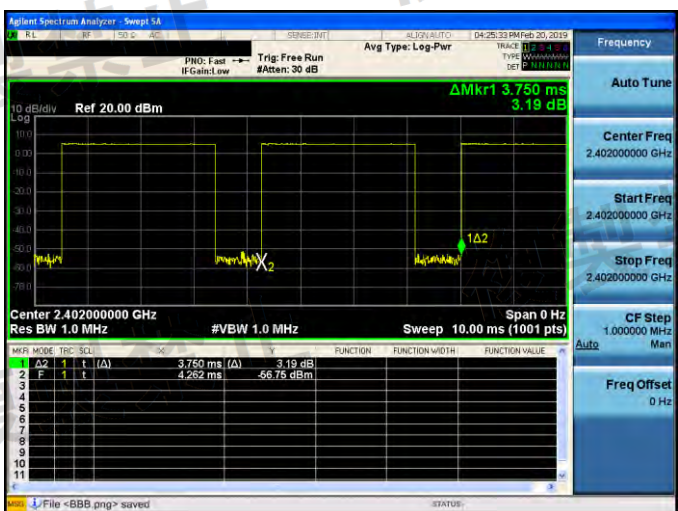


Test Mode	Mode 4					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Dwell Time	mSec	274.026			PASS	-----
Limit	mSec	≤ 400				

Test Mode	Mode 5					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Dwell Time	mSec	275.698			PASS	-----
Limit	mSec	≤ 400				

Test Mode	Mode 6					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Dwell Time	mSec	276.019			PASS	-----
Limit	mSec	≤ 400				

Test Graphs

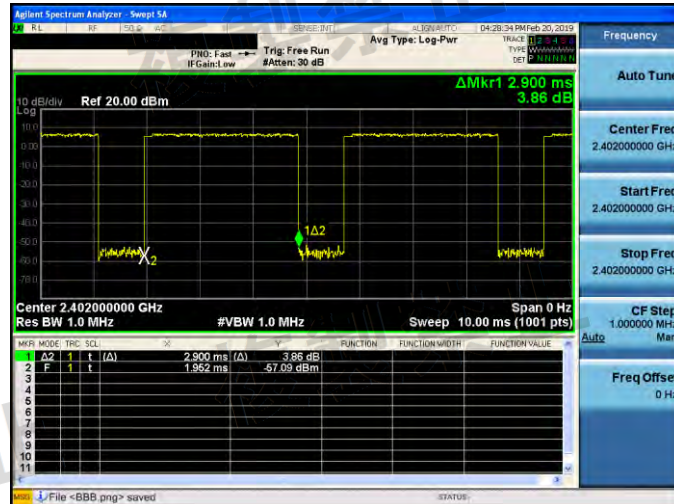
Mode 1	
Time on	
Time off	
Time on + off	



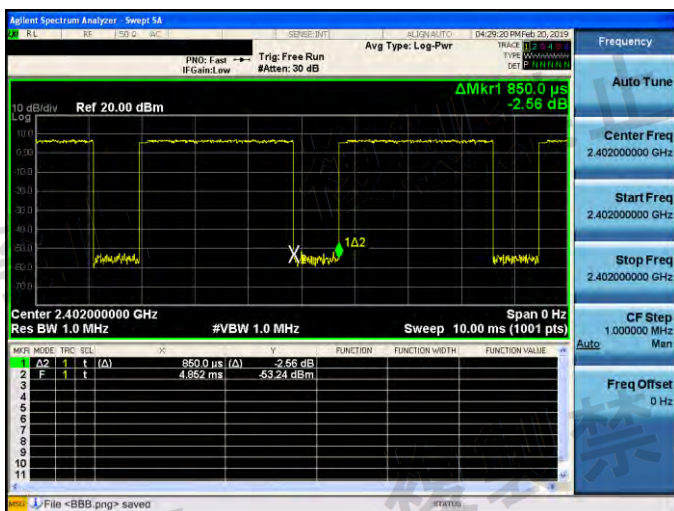
Mode 2	
Time on	
Time off	
Time on + off	

Mode 3

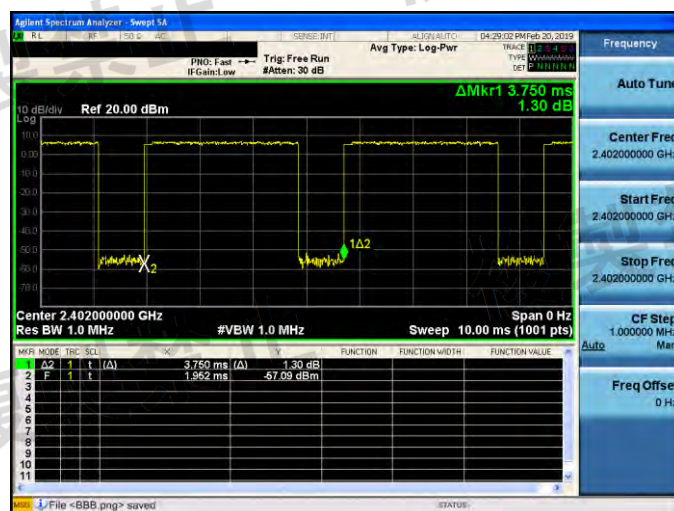
Time on



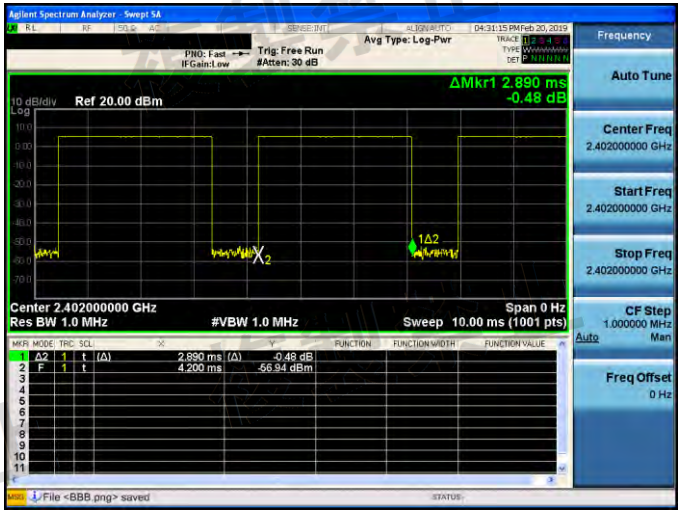
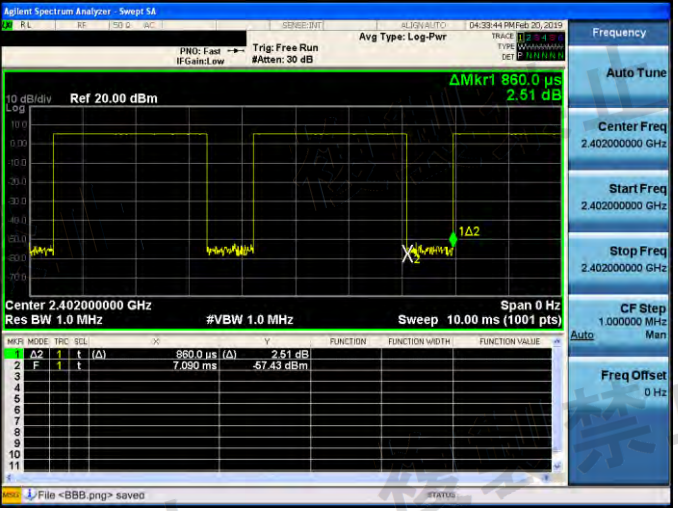
Time off



Time on + off



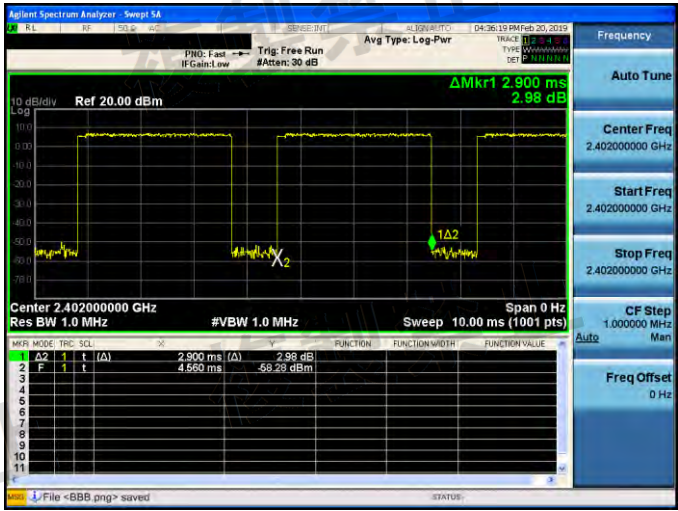
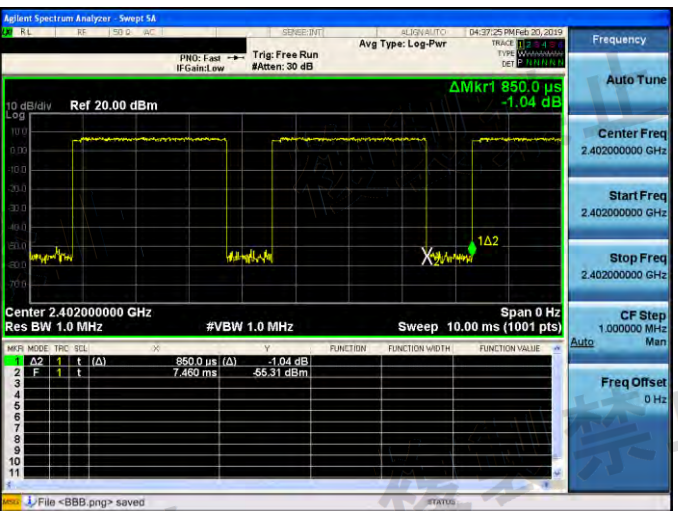
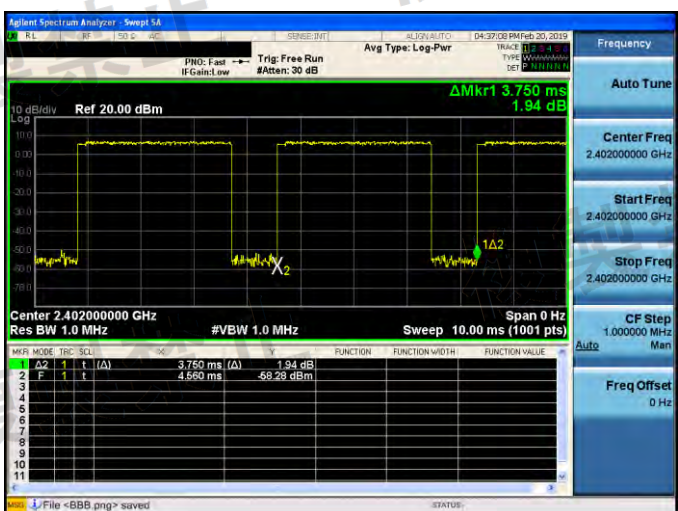


Mode 4	
Time on	
Time off	
Time on + off	



Mode 5	
Time on	
Time off	
Time on + off	



Mode 6	
Time on	
Time off	
Time on + off	

4.9. Radio Interference Prevention Capability Measurement

Test Mode	Mode 1					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Identification code	bits	48	48	48	PASS	-----
Limit	bits	≥ 48				

Test Mode	Mode 2					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Identification code	bits	48	48	48	PASS	-----
Limit	bits	≥ 48				

Test Mode	Mode 3					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Identification code	bits	48	48	48	PASS	-----
Limit	bits	≥ 48				



Test Mode	Mode 4					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Identification code	bits	48	48	48	PASS	-----
Limit	bits	≥ 48				

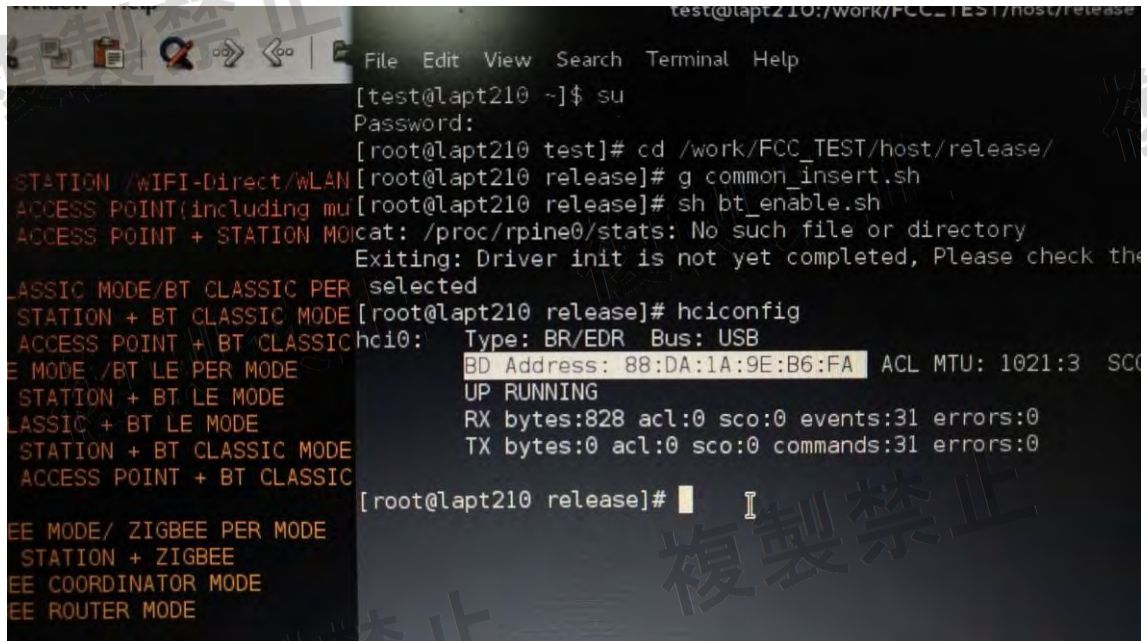
Test Mode	Mode 5					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Identification code	bits	48	48	48	PASS	-----
Limit	bits	≥ 48				

Test Mode	Mode 6					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2402	2441	2480	Result	Notes
Channel Number	Ch.	0	39	78		
Identification code	bits	48	48	48	PASS	-----
Limit	bits	≥ 48				



■ Test Graphs

Description: MAC Address



```
test@lapt210:/work/FCC_TEST/host/release/
[test@lapt210 ~]$ su
Password:
[root@lapt210 test]# cd /work/FCC_TEST/host/release/
[root@lapt210 release]# g common_insert.sh
[root@lapt210 release]# sh bt_enable.sh
cat: /proc/rpine0/stats: No such file or directory
Exiting: Driver init is not yet completed, Please check the
selected
CLASSIC MODE/BT CLASSIC PER
STATION + BT CLASSIC MODE
ACCESS POINT + BT CLASSIC
MODE /BT LE PER MODE
STATION + BT LE MODE
CLASSIC + BT LE MODE
STATION + BT CLASSIC MODE
ACCESS POINT + BT CLASSIC
MODE/ ZIGBEE PER MODE
STATION + ZIGBEE
COORDINATOR MODE
ROUTER MODE
hci0: Type: BR/EDR Bus: USB
BD Address: 88:DA:1A:9E:B6:FA ACL MTU: 1021:3 SCO MTU: 1021:3
UP RUNNING
RX bytes:828 acl:0 sco:0 events:31 errors:0
TX bytes:0 acl:0 sco:0 commands:31 errors:0
[root@lapt210 release]#
```

4.10. Antenna List

Antenna			Gain Specification			Notes (Cable or Others)
No	Type	Model Name	Max Gain (dBi)	Attenuation (dB)	Net Gain (dBi)	
1	Dipole Antenna	AEM6P-100000	2	0	0	Horizontal + Vertical
2	Dipole Antenna	AEM6P-100001	2	0	0	Horizontal + Vertical
3	Multilayer ceramic Antenna	AEEEE0-000000	2.13	0	0	Horizontal
4	Chip Antenna	AEEEE0-000001	4	0	0	Horizontal
5	Chip Antenna	AEEEE0-000002	4	0	0	Horizontal
6	PIFA Antenna	AEP6P-100006X	3	0	0	Horizontal + Vertical
7	PIFA Antenna	AEP6P-100008X	3	0	0	Horizontal + Vertical
8	PCB Trace Antenna	RSIA15	0.99	0	0	Horizontal + Vertical
9	Heavy Duty Screw Mount Antenna	WS.01.B.305151	4.10	0	0	Horizontal

4.11. Construction Protection Confirmation Method

■ Confirmation Method

Protected Method	shielding case
Description	This RF chip is sealed with a metal shield that is soldered down, If end user intends to open it, this product will be damaged and no longer be used
Photo	
	