

7. TEST RESULT FOR BLUETOOTH (CH0~CH78) (FOR 8DPSK)

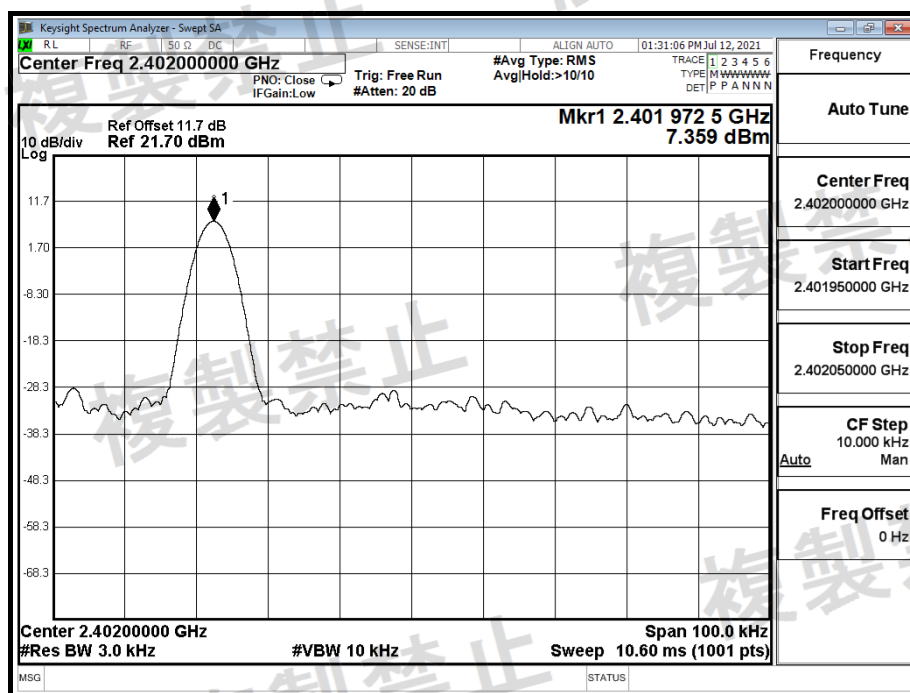
7.1 FREQUENCY ERROR

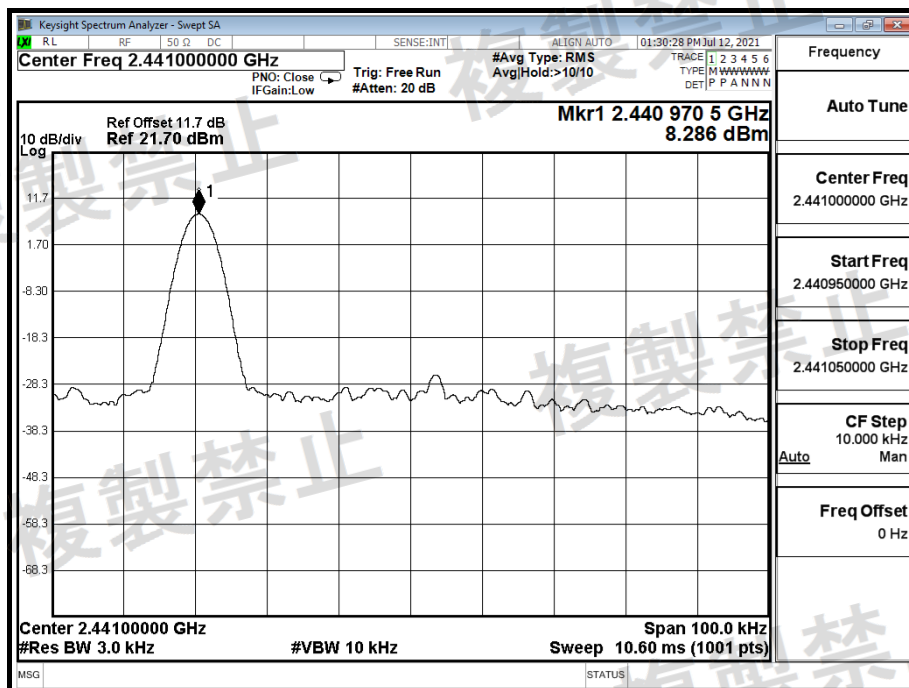
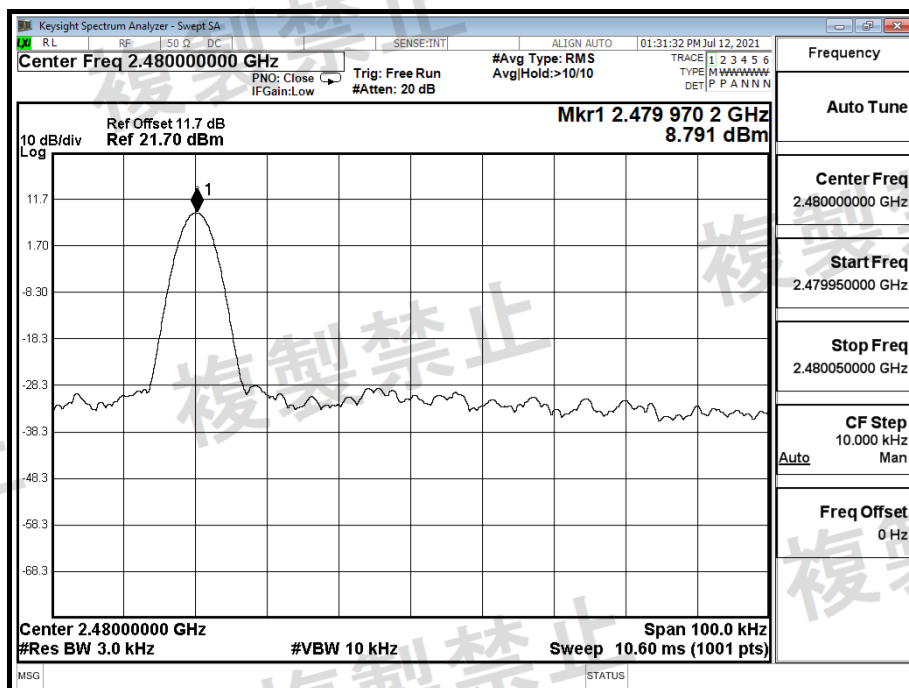
TEST RESULT

Frequency (MH z)	Reading (MH z)	Deviation (Hz)	Tolerance (ppm)	Remark
2402.00	2401.9725	-27500	-11.4488	Normal Voltage : AC100V
2441.00	2440.9705	-29500	-12.0852	
2480.00	2479.9702	-29800	-12.0161	

TEST PLOTS

CH Low



CH MidCH High

7.2 ANTENNA POWER

TEST RESULT

Equiv. Noise BW : 1.13 MH z

Modulation : 3 [Mbps]

Frequency (MH z)	Power Meter (d B m)	Power Meter (mW)	Burst Ratio	Output Power (mW/MHz)	Remark
2402.00	-1.32	0.74	0.78	2.73444	Normal Voltage : AC100V
2441.00	-1.11	0.78	0.78	2.86992	
2480.00	-1.00	0.80	0.78	2.94353	

(Duty Cycle)

(RBW=3MHz,VBW=3MHz,Span=0Hz)

Frequency (MH z)	ON time (ms)	OFF time (ms)	Offset Factor (d B)	Remark
2402	2.9000	0.8400	1.10	Normal Voltage : AC100V
2441	2.9000	0.8400	1.10	
2480	2.9000	0.8400	1.10	

7.3 SPURIOUS EMISSIONS INTENSITY

TEST RESULT

30MHz~2387MHz

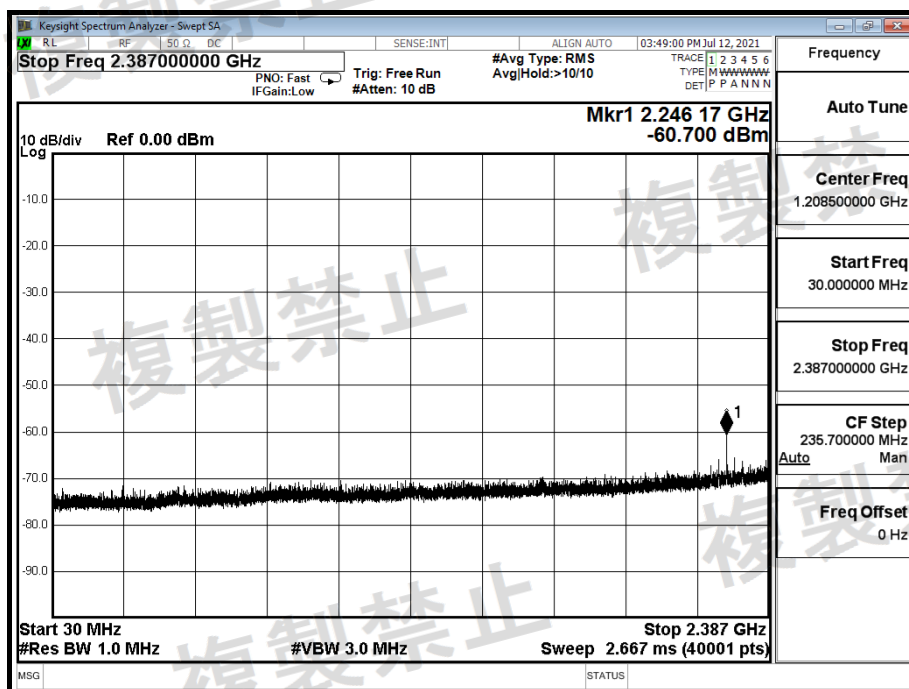
Freq: 30MHz~2,387MHz, RBW=1MHz, VBW=1MHz, RLV=0dB, ATT=10dB, ST=auto

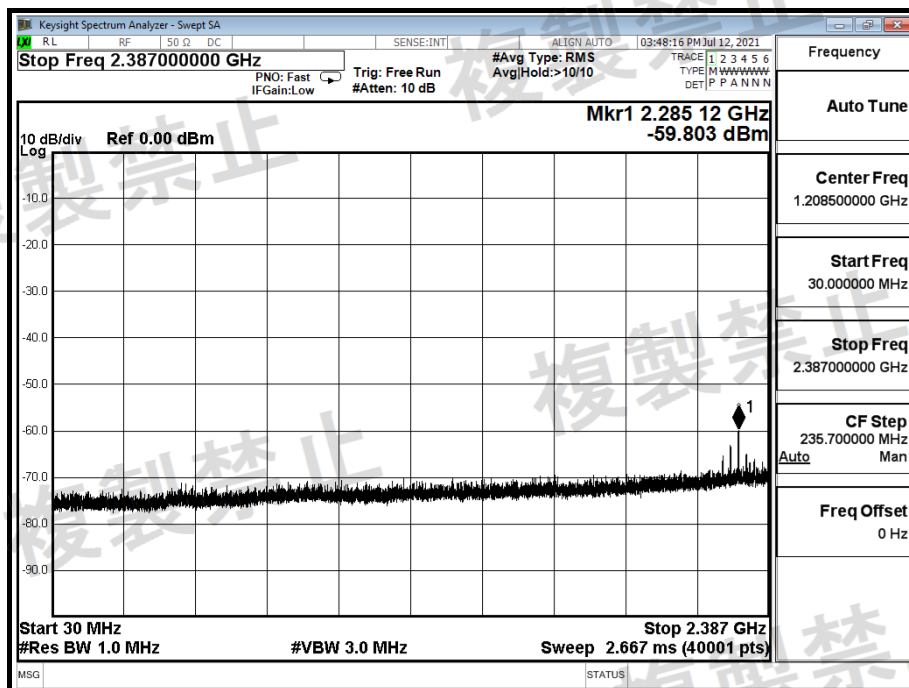
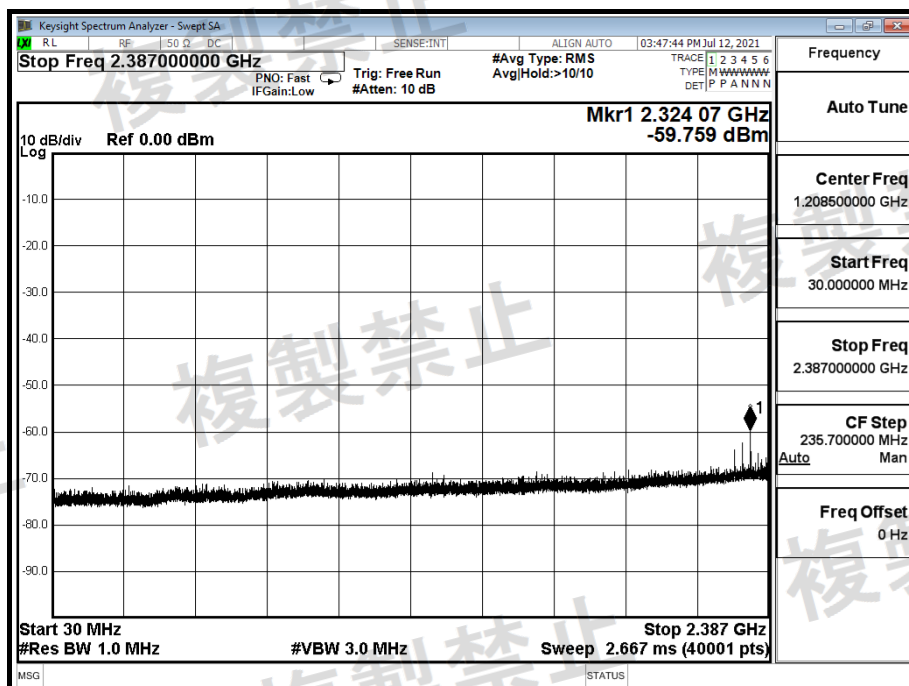
(1) Spurious Emission Intensity : 30MHz~less than 2,387MHz

Frequency (MH z)	Reading (MH z)	Reading (d Bm)	Cable Factor (d B)	Result (μ W/MHz)	Remark
2402.00	2246.17	-60.70	11.60	0.01230	Normal Voltage : AC100V
2441.00	2285.12	-59.80	11.60	0.01513	
2480.00	2324.07	-59.76	11.60	0.01528	

TEST PLOTS

CH Low



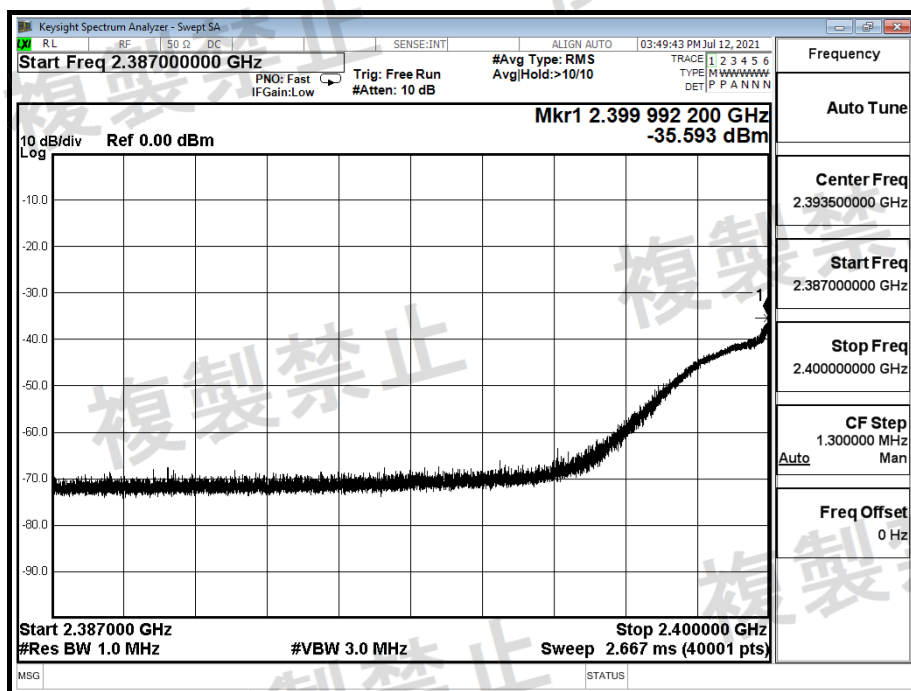
CH MidCH High

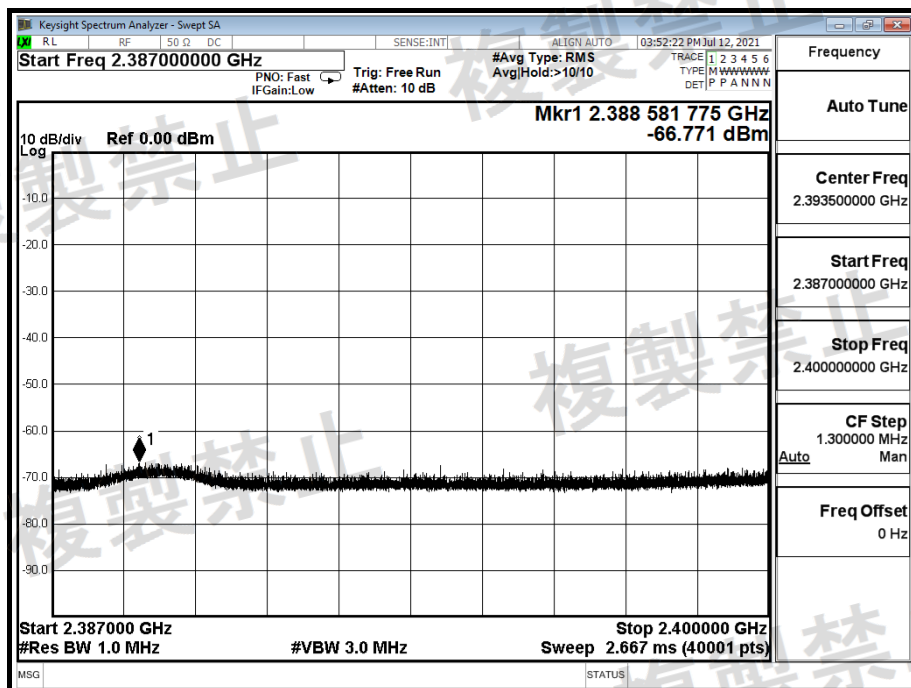
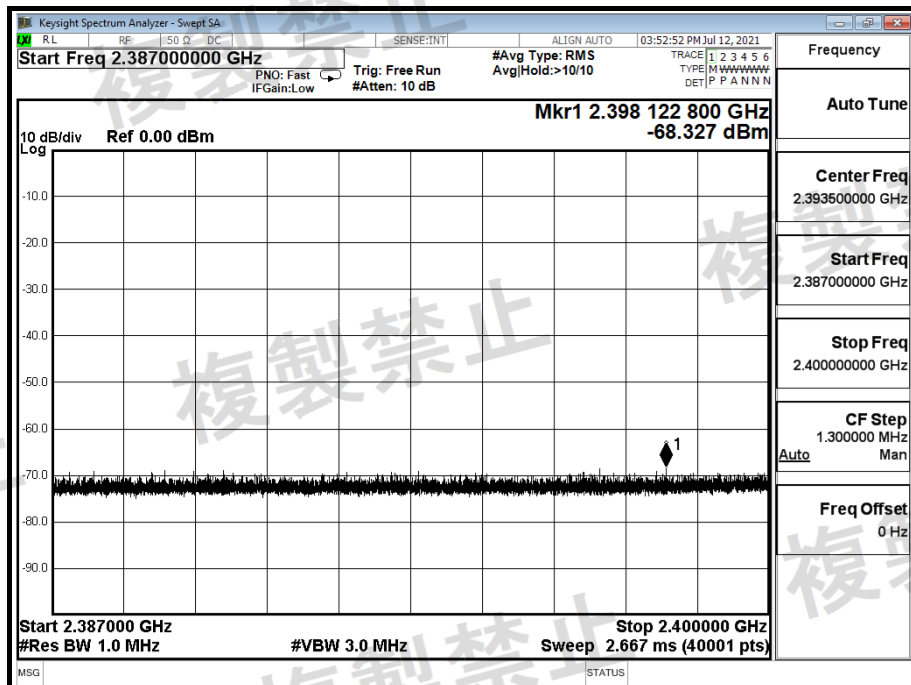
TEST RESULT**2387MHz~2400MHz**

Freq: 2,387MHz~2,400MHz, RBW=1MHz, VBW=1MHz, RLV=0dB, ATT=10dB, ST=auto

(2) Spurious Emission Intensity : 2,387MHz~less than 2,400MHz

Frequency (MHz)	Reading (MHz)	Reading (dBm)	Cable Factor (dB)	Result (μW/MHz)	Remark
2402.00	2399.99	-35.59	11.60	3.98749	Normal Voltage : AC100V
2441.00	2388.58	-66.77	11.60	0.00304	
2480.00	2398.12	-68.33	11.60	0.00212	

TEST PLOTS**CH Low**

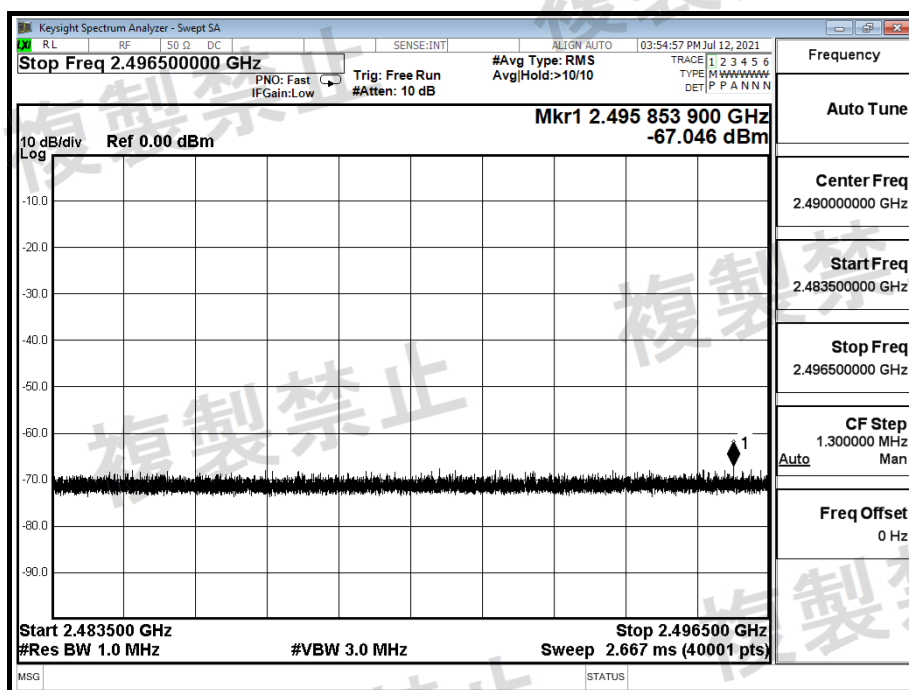
CH MidCH High

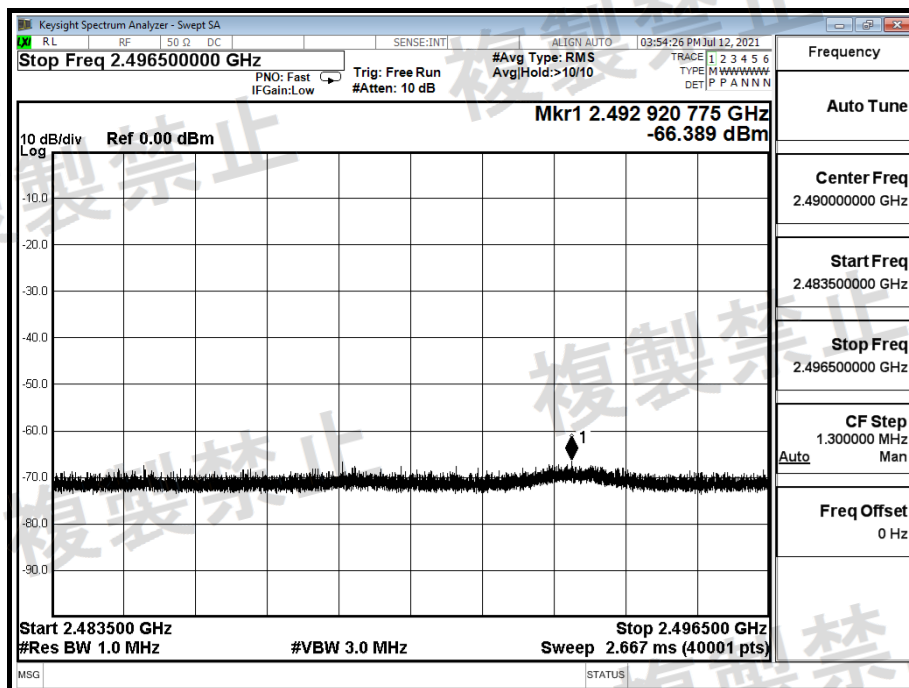
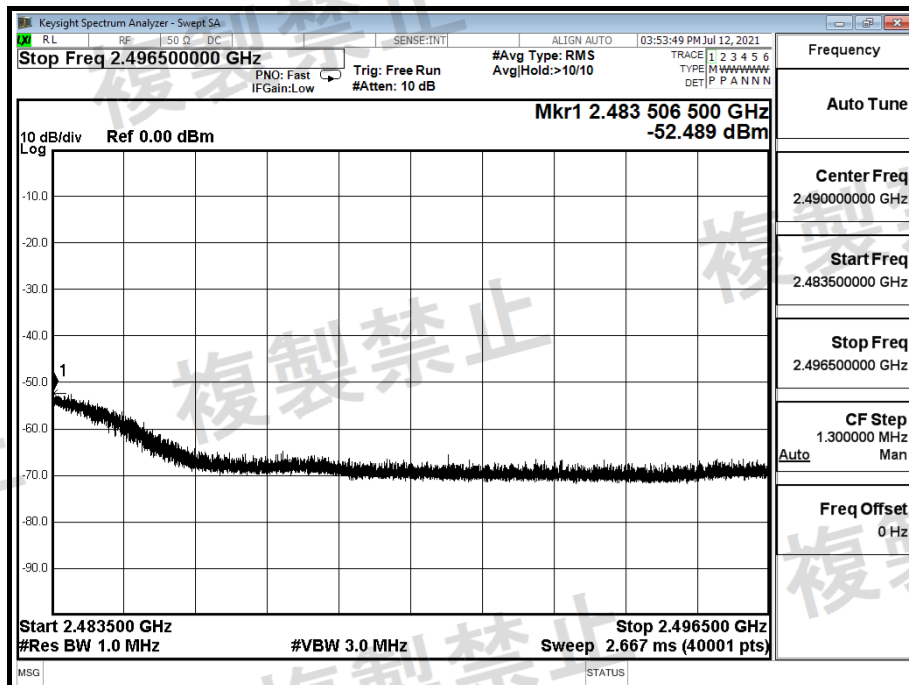
TEST RESULT**2483.5MHZ~2496.5MHZ**

Freq: 2,483.5MHz~2,496.5MHz, RBW=1MHz, VBW=1MHz, RLV=0dB, ATT=10dB, ST=auto

(3) Spurious Emission Intensity : 2,483.5MHz~2,496.5MHz

Frequency (MH z)	Reading (MH z)	Reading (d Bm)	Cable Factor (d B)	Result (μ W/MHz)	Remark
2402.00	2495.85	-67.05	11.60	0.00285	Normal Voltage : AC100V
2441.00	2492.92	-66.39	11.60	0.00332	
2480.00	2483.51	-52.49	11.60	0.08149	

TEST PLOTS**CH Low**

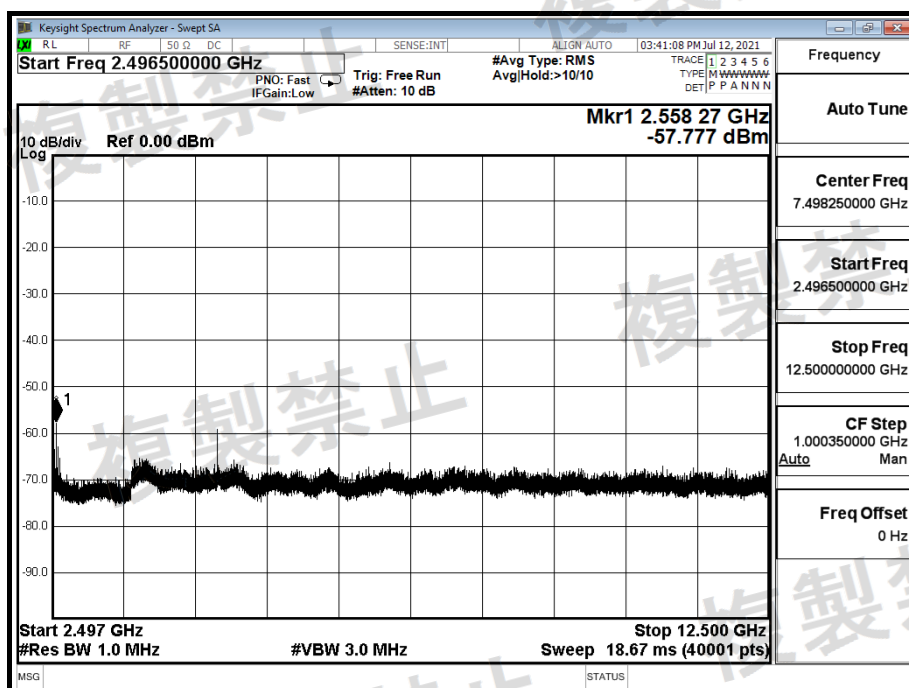
CH MidCH High

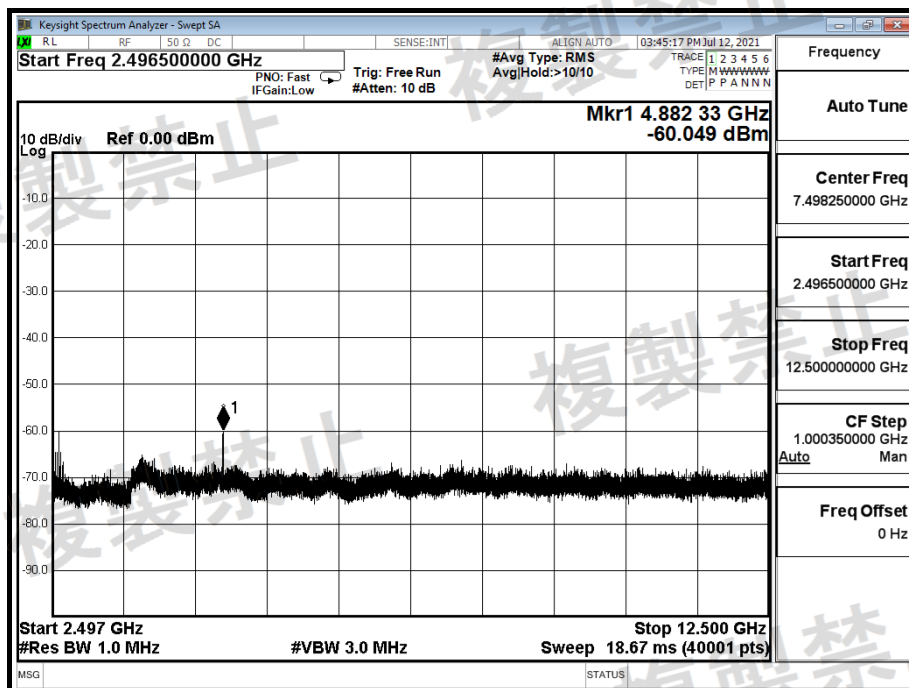
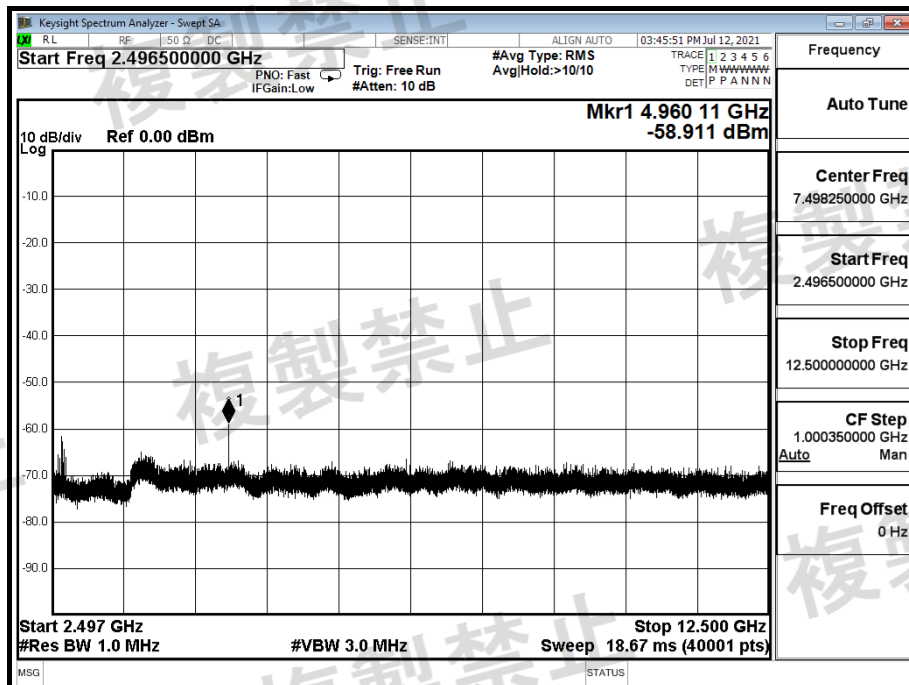
TEST RESULT**2496.5MHz~12.5GHz**

Freq: 2,497MHz~12.5GHz, RBW=1MHz, VBW=1MHz, RLV=0dB, ATT=10dB, ST=auto

(4) Spurious Emission Intensity : more than 2,497MHz~12.5GHz

Frequency (MHz)	Reading (MHz)	Reading (dBm)	Cable Factor (dB)	Result (μW/MHz)	Remark
2402.00	2558.27	-57.78	11.60	0.02412	Normal Voltage : AC100V
2441.00	4882.33	-60.05	11.60	0.01429	
2480.00	4960.11	-58.91	11.60	0.01858	

TEST PLOTS**CH Low**

CH MidCH High

7.4 OCCUPIED BANDWIDTH (99%)

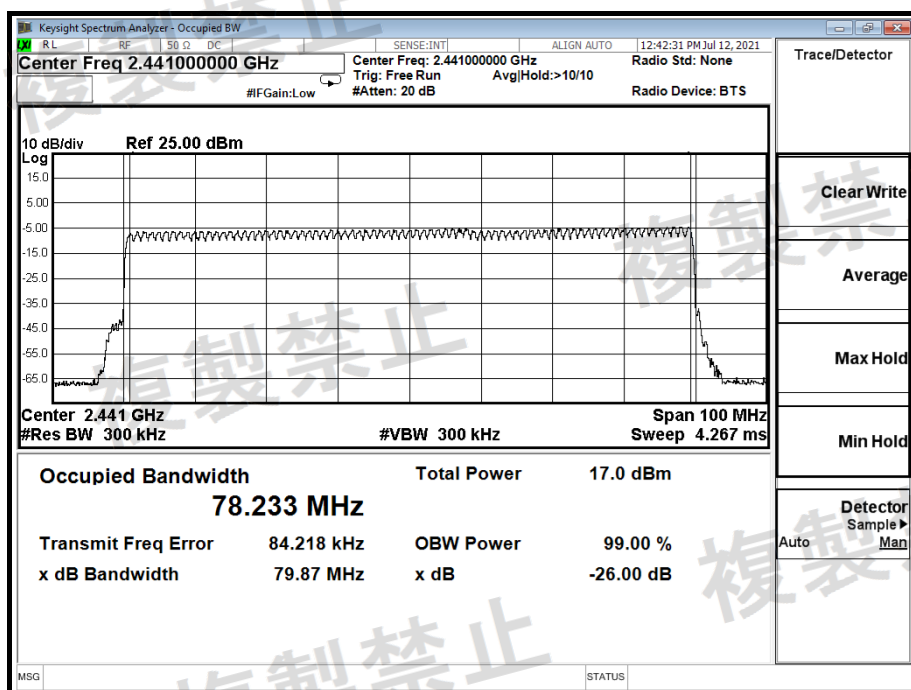
TEST RESULT

CF=fo, SPAN=auto, RBW=VBW=300kHz, RLV=0dB, ATT=10dB, ST=auto

Modulation : 3 [Mbps]

Frequency (MH z)	Center Frequency (MH z)	Bandwidth (MH z)	Remark
2402-2480	2441	78.23	Normal Voltage : AC100V

TEST PLOTS



7.5 SPREAD-SPECTRUM BANDWIDTH (90%)

TEST RESULT

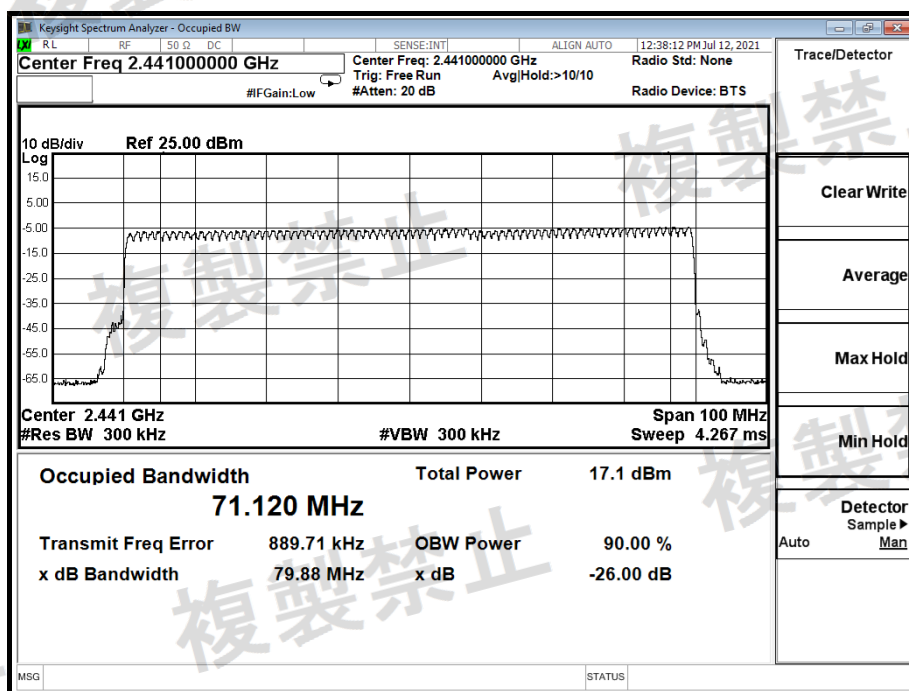
CF=fo, SPAN=auto, RBW=VBW=300kHz, RLV=0dB, ATT=10dB, ST=auto

Modulation : 3 [Mbps]

Frequency equal to the transmission rate : 3 [MHz]

Frequency (MHz)	Center Frequency (MHz)	Bandwidth (MHz)	Remark
2402-2480	2441	71.12	Normal Voltage : AC100V

TEST PLOTS



7.6 LIMITATION OF COLLATERAL EMISSIONS OF RECEIVER

TEST RESULT

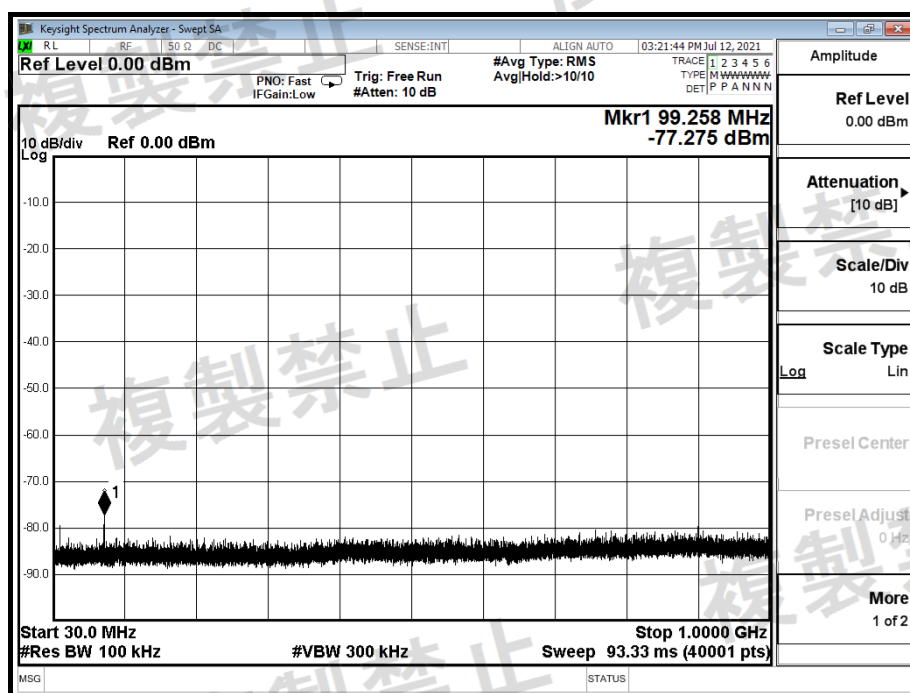
30MHz~1000MHz

Freq: 30MHz~1GHz, RBW=VBW=100kHz, RLV=0dB, ATT=10dB, ST=auto

30MHz~less than 1GHz

Frequency (MHz)	Reading (dBm)	Cable Factor (dB)	Result (nW/MHz)	Remark
99.26	-77.28	11.60	0.2707	Normal Voltage : AC100V

TEST PLOTS



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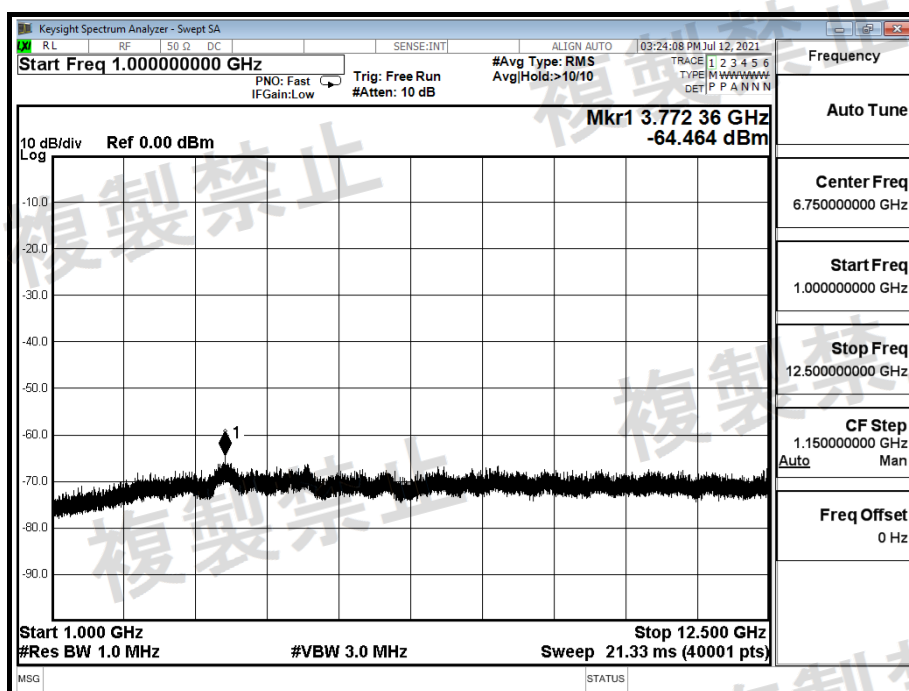
Rev.: 00

1GHZ~12.5GHZ

Freq: 1GHz~12.5GHz, RBW=VBW=1MHz, RLV=0dB, ATT=10dB, ST=auto

1GHz~12.5GHz

Frequency (MHz)	Reading (dBm)	Cable Factor (dB)	Result (nW/MHz)	Remark
3772.36	-64.46	11.60	5.1713	Normal Voltage : AC100V

TEST PLOTS

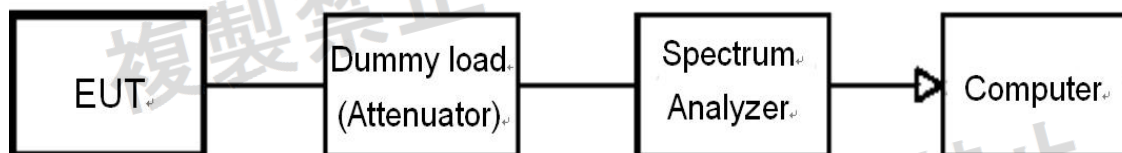
7.7 DWELL TIME

SP=0Hz, RBW=VBW=1MHz, ATT=10dB, ST=Spread-spectrum Bandwidth*0.4S

Time per one hopping (ON time)	hopping numbers	Dwell Time(ms)
2.9	110	319

8. TEST RESULT FOR BLUETOOTH 4.0 (CH0~CH39) (FOR DSSS)

8.1 FREQUENCY ERROR

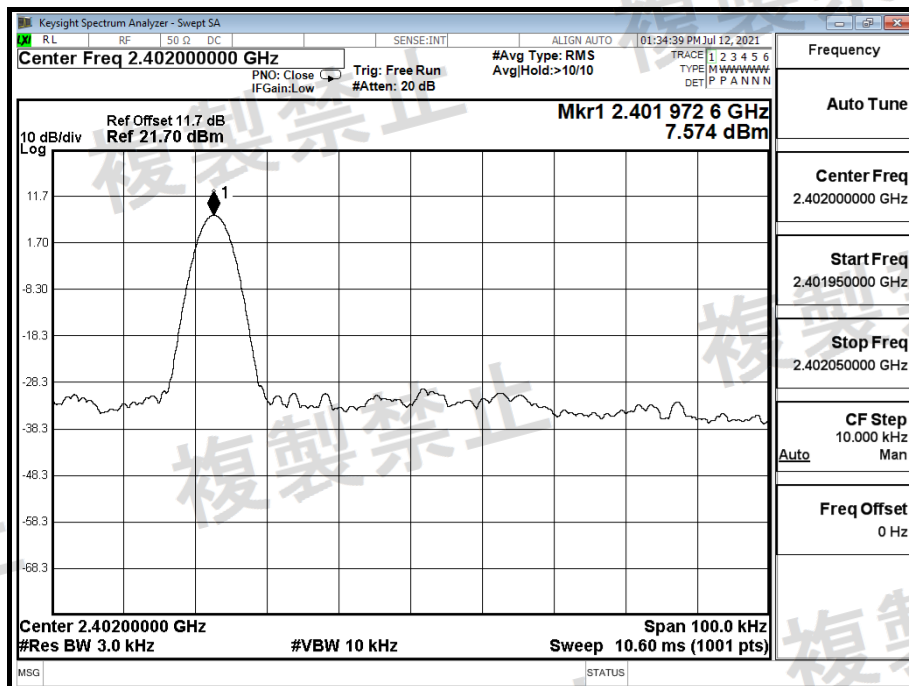


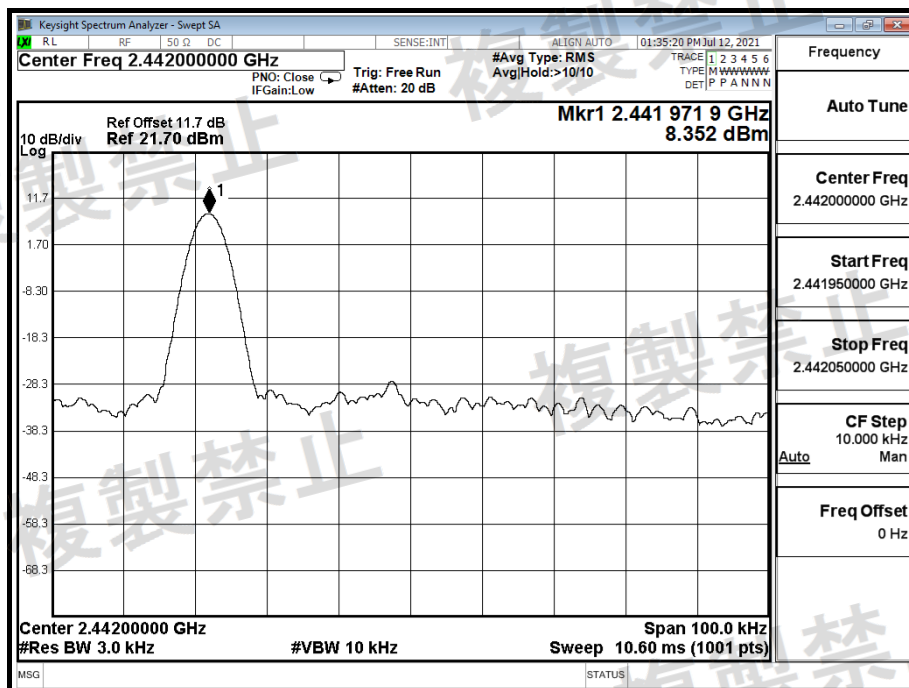
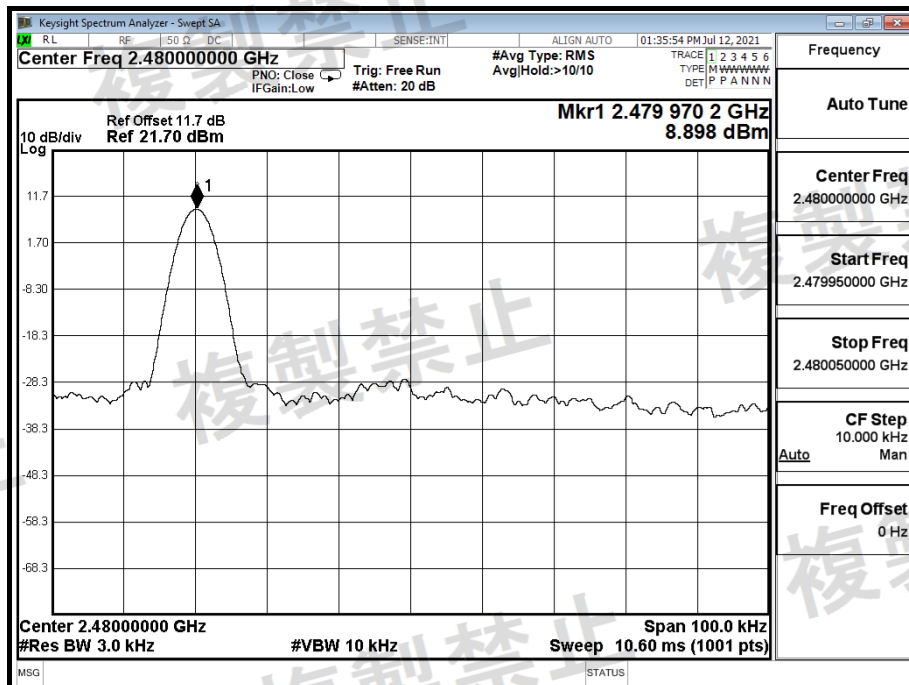
TEST RESULT

Frequency (MH z)	Reading (MH z)	Deviation (Hz)	Tolerance (ppm)	Remark
2402.00	2401.9726	-27400	-11.4072	Normal Voltage : AC100V
2442.00	2441.9719	-28100	-11.5070	
2480.00	2479.9702	-29800	-12.0161	

TEST PLOTS

CH Low



CH MidCH High

8.2 ANTENNA POWER

TEST RESULT

Equiv. Noise BW : 1.14 MH z

Modulation : 1 [Mbps]

Frequency (MH z)	Power Meter (d B m)	Power Meter (mW)	Burst Ratio	Output Power (mW/MHz)	Remark
2402.00	-19.02	23.47	5.99	3.97510	Normal Voltage : AC100V
2442.00	-17.92	23.47	7.09	5.11975	
2480.00	-17.28	23.47	7.73	5.93128	

(Duty Cycle)

(RBW=3MHz,VBW=3MHz,Span=0Hz)

Frequency (MH z)	ON time (ms)	OFF time (ms)	Offset Factor (d B)	Remark
2402.00	0.400	0.250	2.11	Normal Voltage : AC100V
2442.00	0.400	0.250	2.11	
2480.00	0.400	0.250	2.11	

8.3 SPURIOUS EMISSIONS INTENSITY

TEST RESULT

30MHz~1000MHz

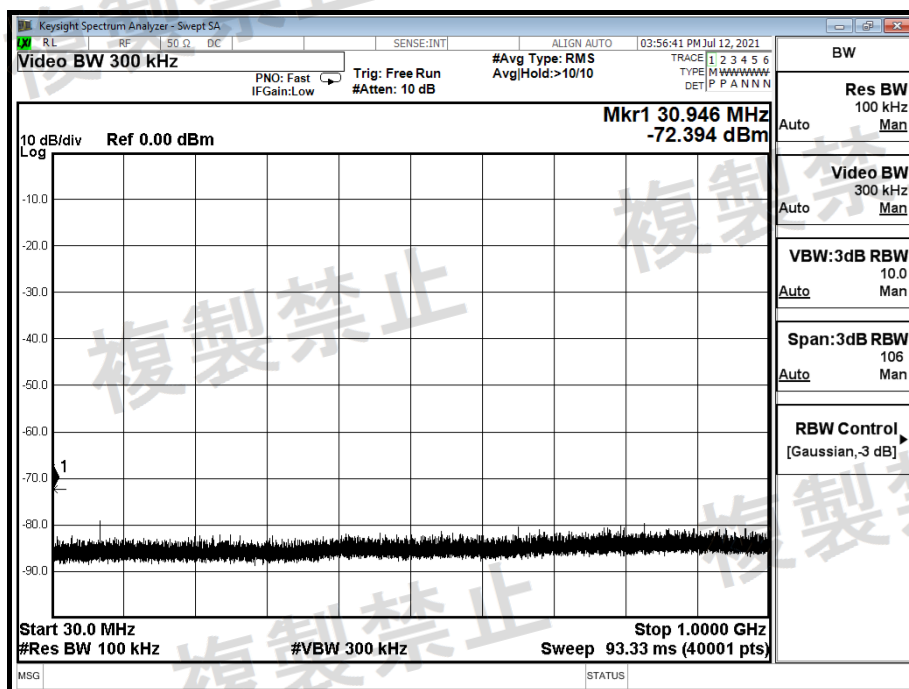
Freq: 30MHz~1,000MHz, RBW=1MHz, VBW=1MHz, RLV=0dB, ATT=10dB, ST=auto

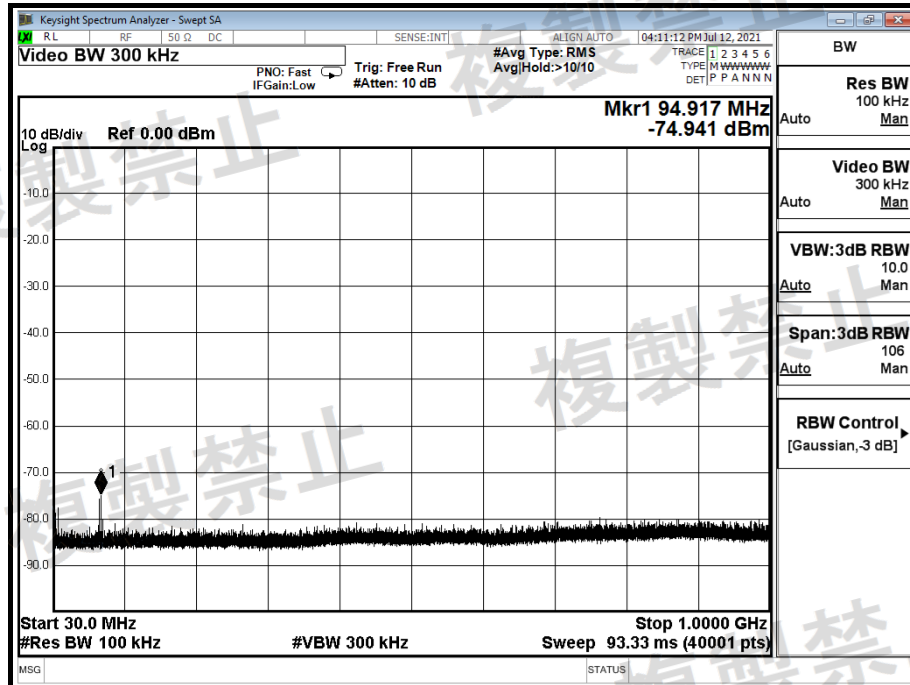
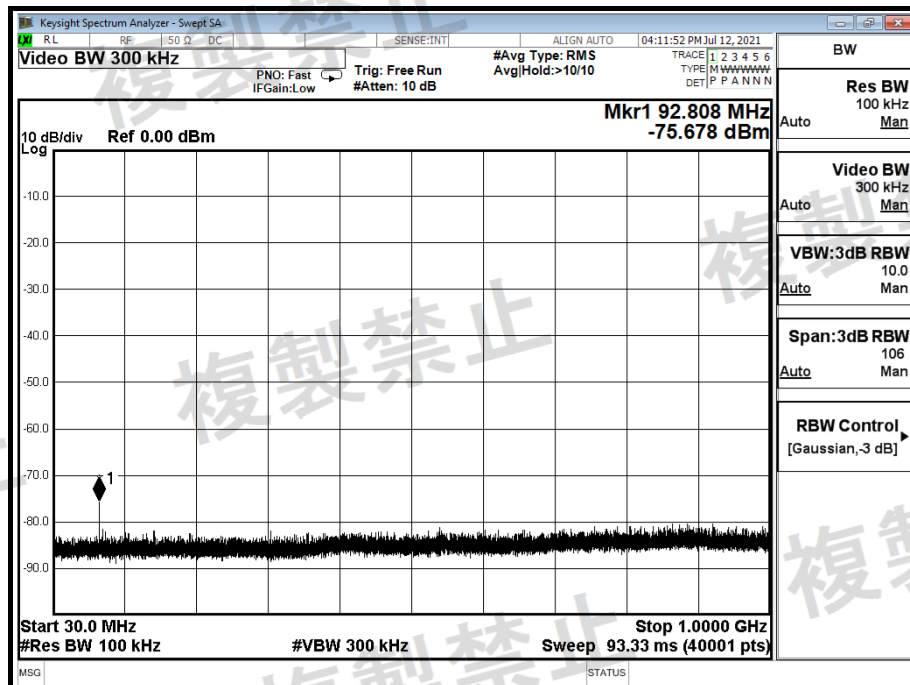
(1) Spurious Emission Intensity : 30MHz~less than 1,000MHz

Frequency (MHz)	Reading (MHz)	Reading (dBm)	Cable Factor (dB)	Result (μW/MHz)	Remark
2402.00	30.95	-72.39	11.60	0.00833	Normal Voltage : AC100V
2442.00	94.92	-74.94	11.60	0.00463	
2480.00	92.81	-75.68	11.60	0.00391	

TEST PLOTS

CH Low



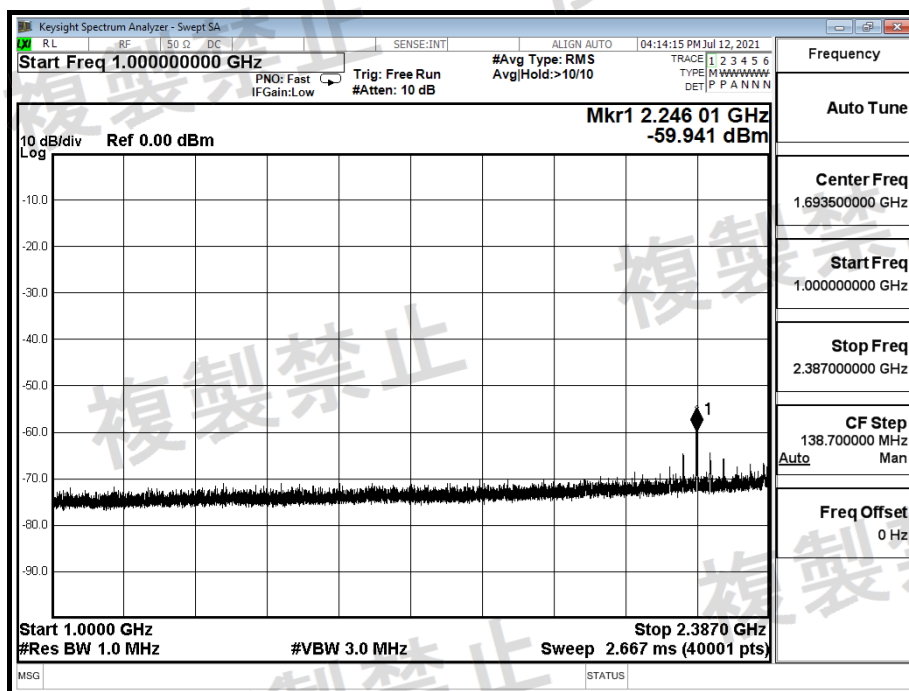
CH MidCH High

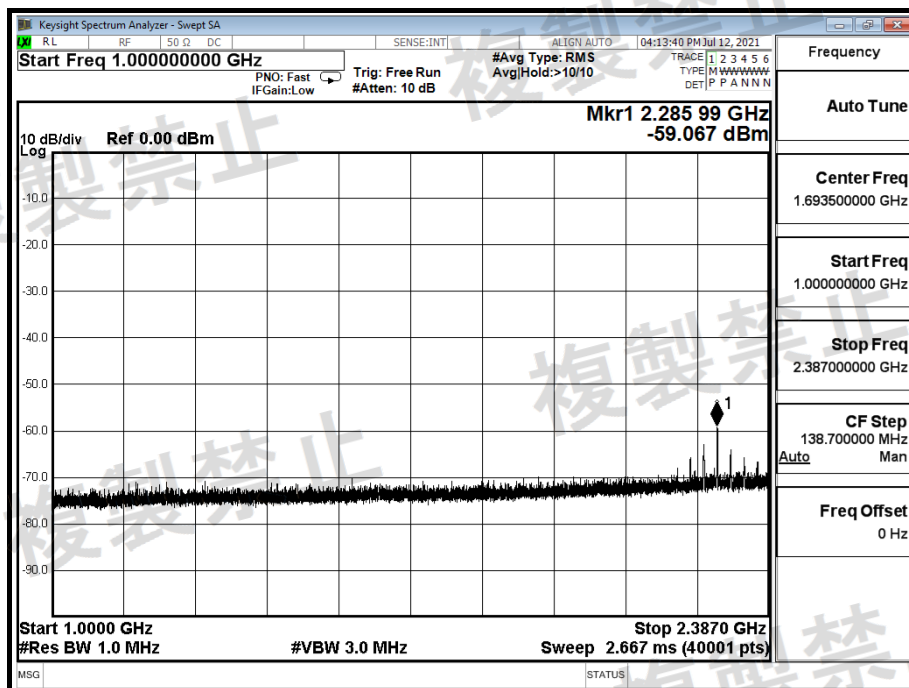
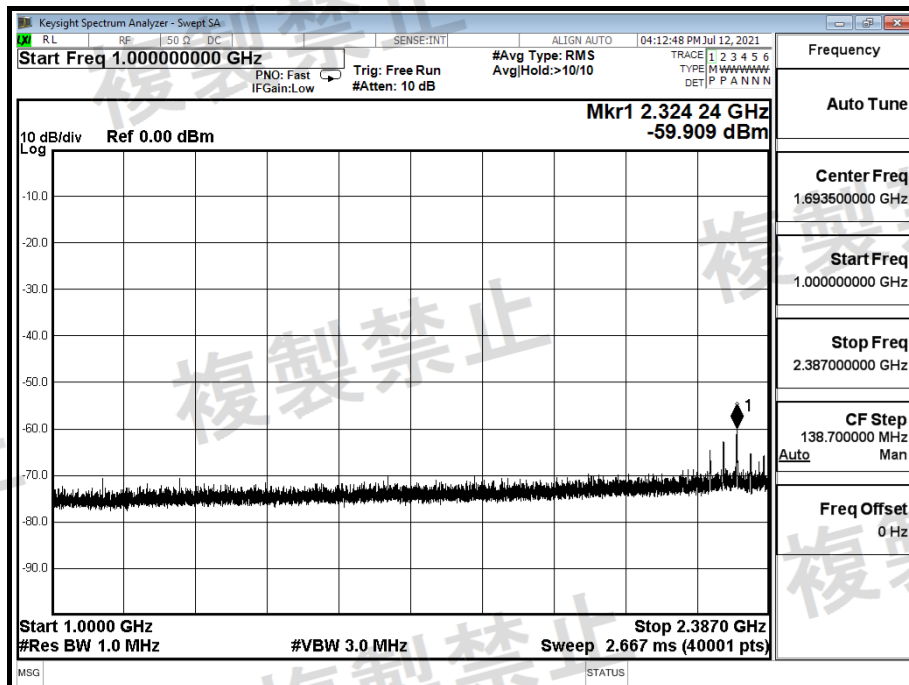
TEST RESULT**1000MHz~2387MHz**

Freq: 1,000MHz~2,387MHz, RBW=1MHz, VBW=1MHz, RLV=0dB, ATT=10dB, ST=auto

(2) Spurious Emission Intensity : 1,000MHz~less than 2,387MHz

Frequency (MHz)	Reading (MHz)	Reading (dBm)	Cable Factor (dB)	Result (μW/MHz)	Remark
2402.00	2276.01	-59.94	11.60	0.01465	Normal Voltage : AC100V
2442.00	2285.99	-59.07	11.60	0.01792	
2480.00	2324.24	-59.91	11.60	0.01476	

TEST PLOTS**CH Low**

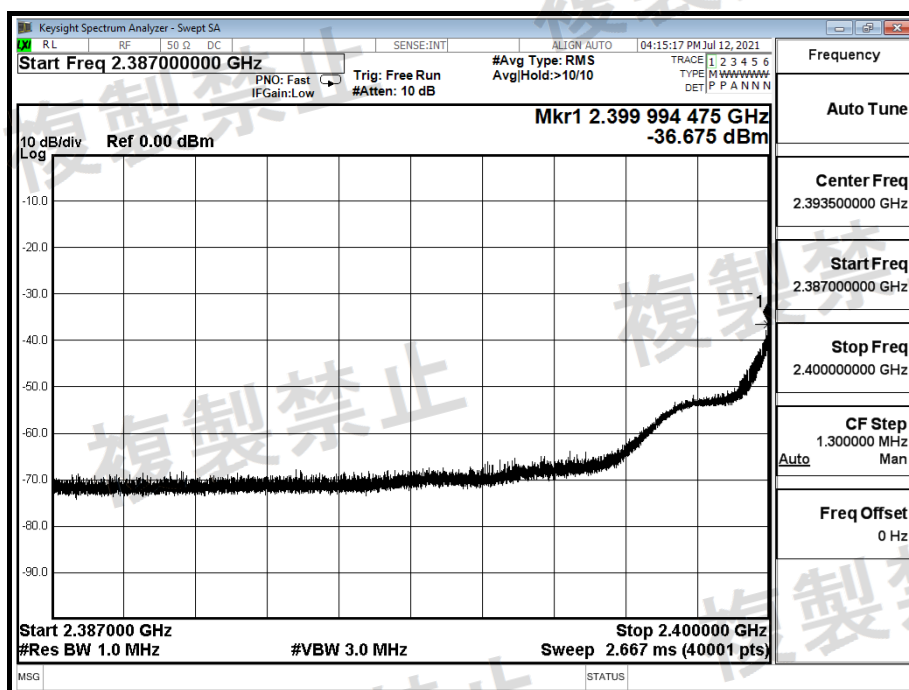
CH MidCH High

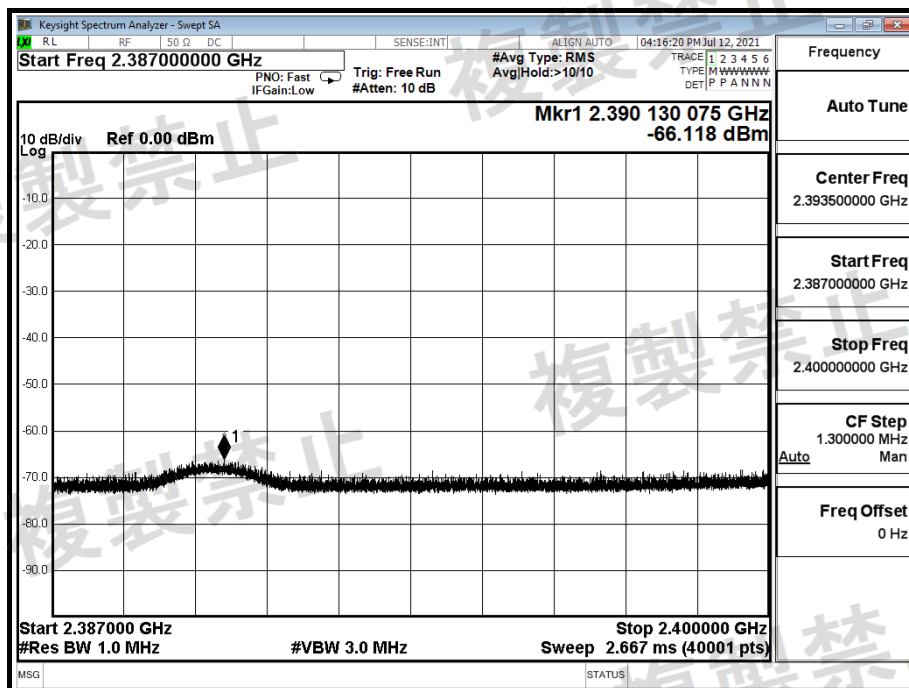
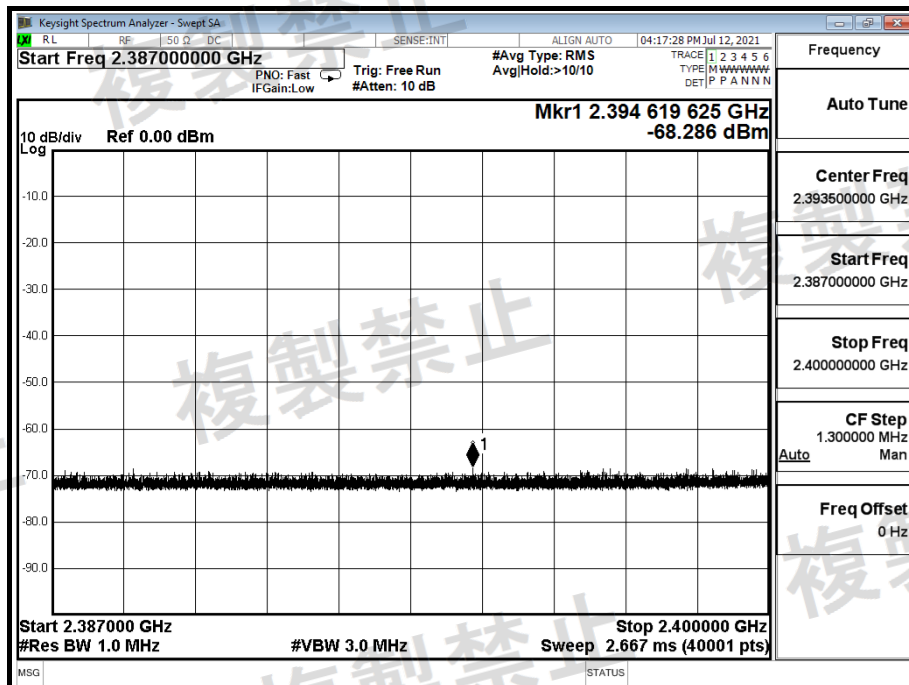
TEST RESULT**2387MHZ~2400MHZ**

Freq: 2,387MHz~2,400MHz, RBW=1MHz, VBW=1MHz, RLV=0dB, ATT=10dB, ST=auto

(3) Spurious Emission Intensity : 2,387MHz~2,400MHz

Frequency (MH z)	Reading (MH z)	Reading (d Bm)	Cable Factor (d B)	Result (μ W/MHz)	Remark
2402.00	2399.99	-36.68	11.60	3.10814	Normal Voltage : AC100V
2442.00	2390.13	-66.12	11.60	0.00353	
2480.00	2394.62	-68.29	11.60	0.00214	

TEST PLOTS**CH Low**

CH MidCH High

TEST RESULT

2483.5MHz~2496.5MHz

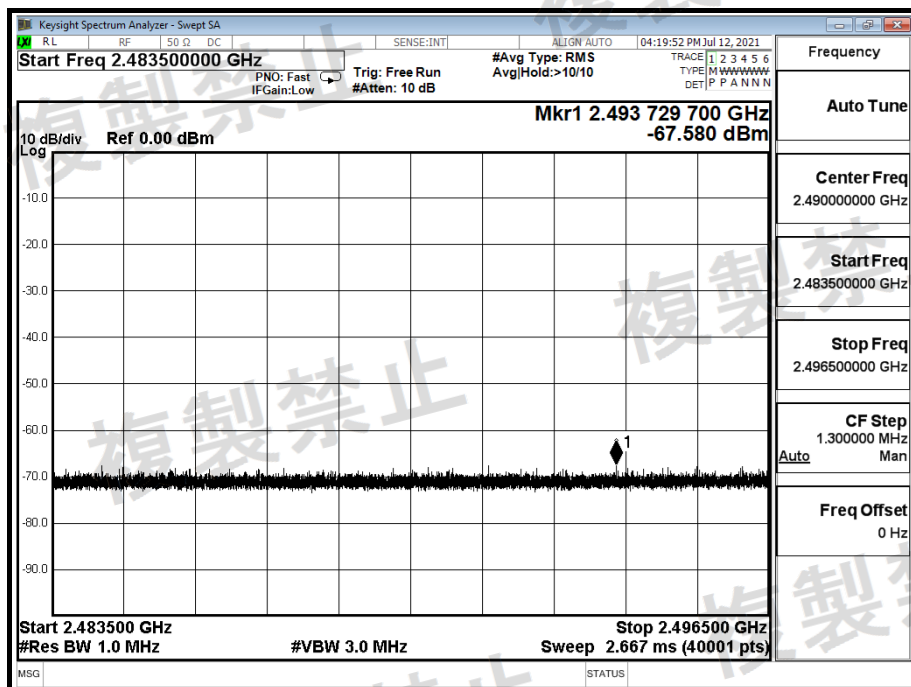
Freq: 2.483.5MHz~2496.5MHz, RBW=1MHz, VBW=1MHz, RLV=0dB, ATT=10dB, ST=auto

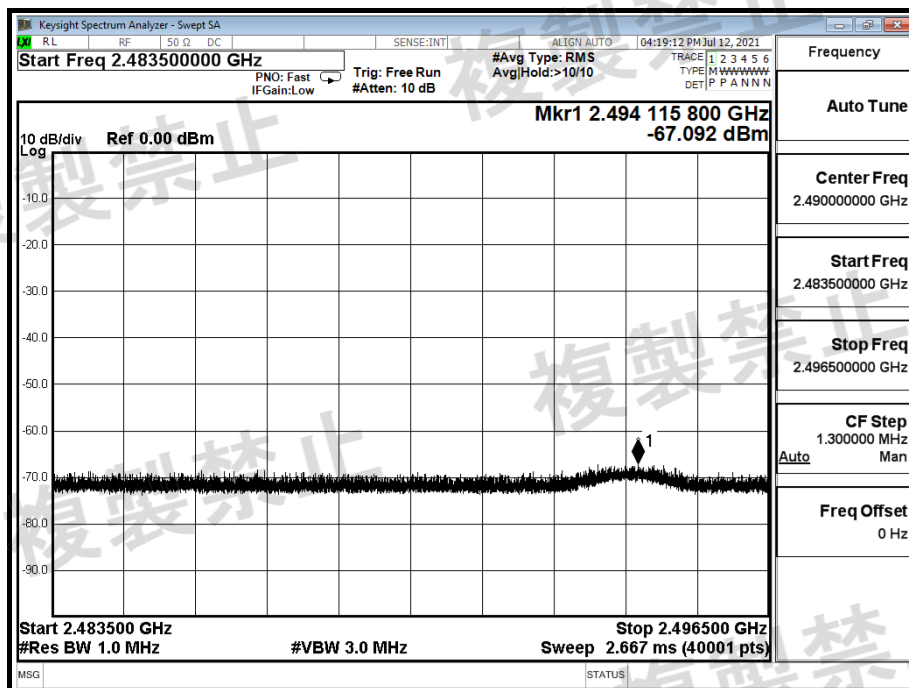
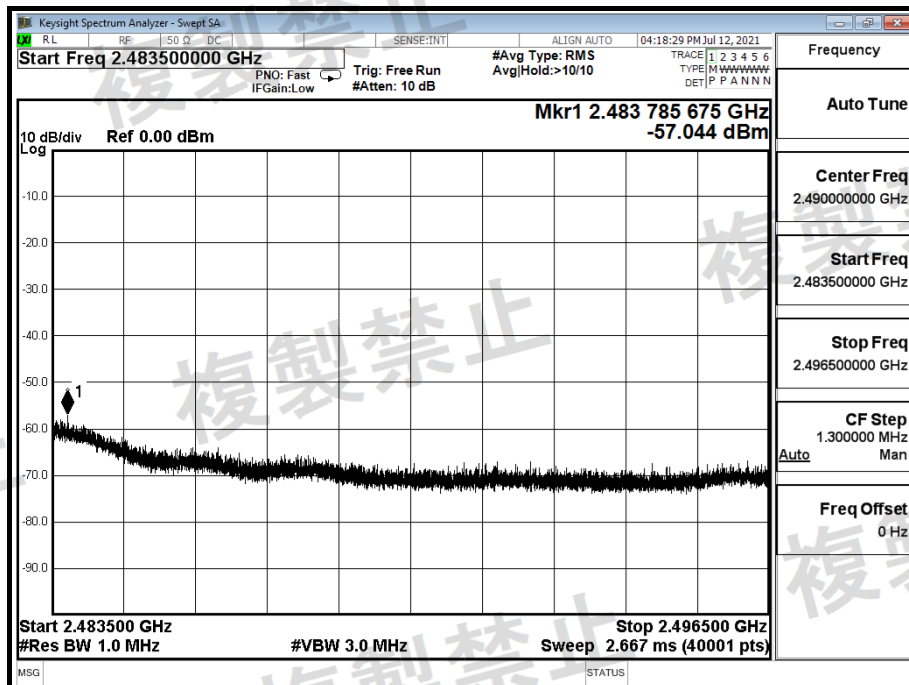
(4) Spurious Emission Intensity : more than 2,483.5MHz~2496.5MHz

Frequency (MH z)	Reading (MH z)	Reading (d Bm)	Cable Factor (d B)	Result (μW/MHz)	Remark
2402.00	2493.73	-67.58	11.60	0.00252	Normal Voltage : AC100V
2442.00	2494.12	-67.09	11.60	0.00282	
2480.00	2483.79	-57.04	11.60	0.02855	

TEST PLOTS

CH Low



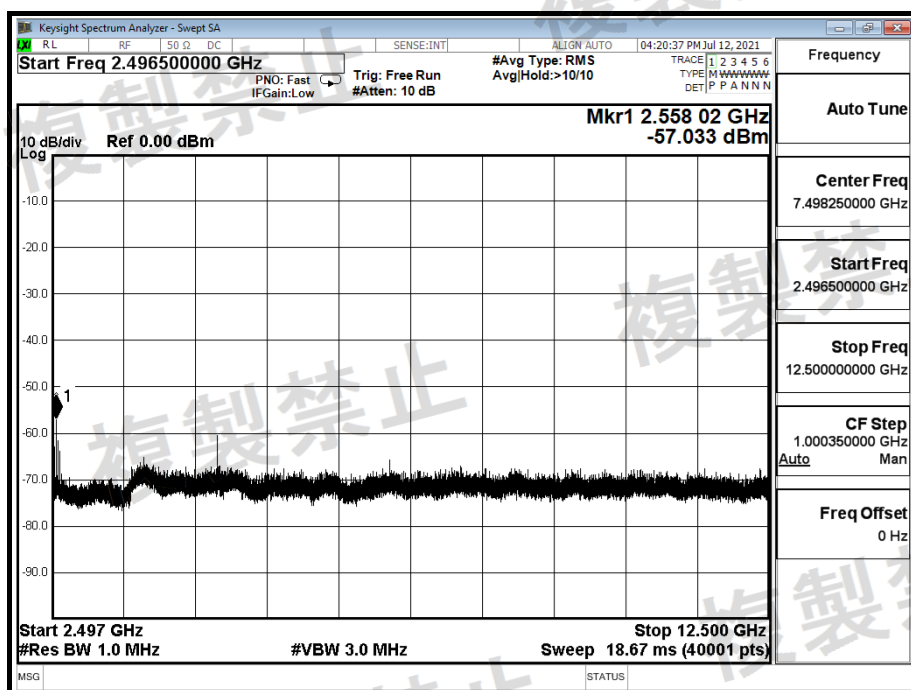
CH MidCH High

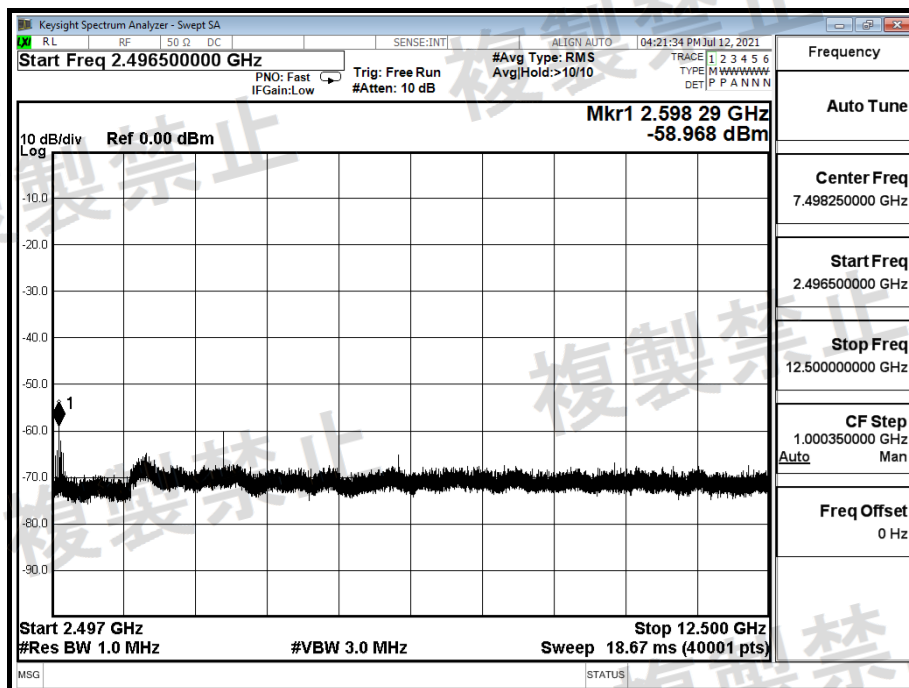
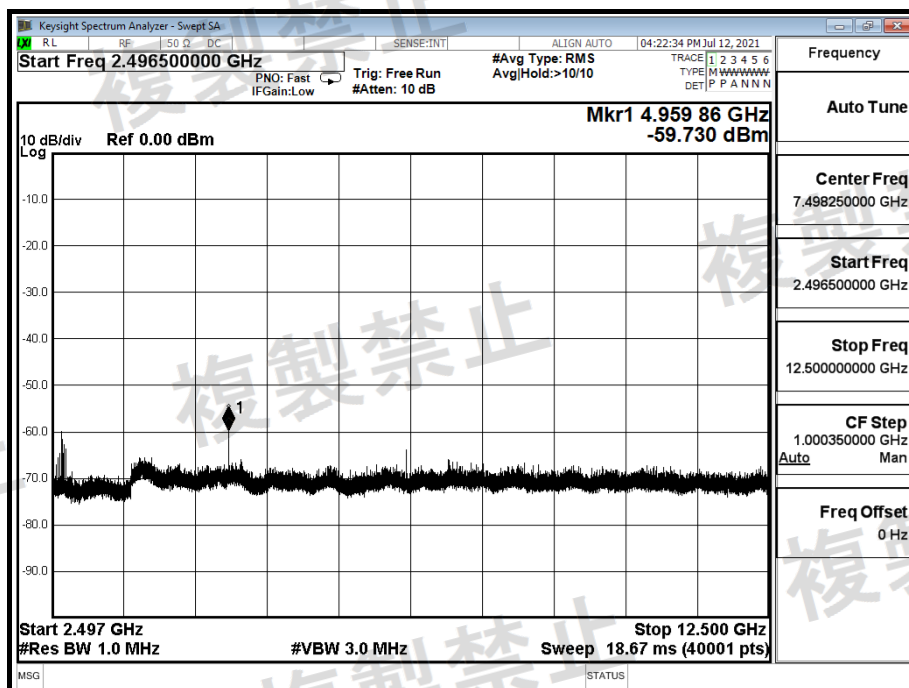
TEST RESULT**2496.5MHz~12.5GHz**

Freq: 2,496.5MHz~12.5GHz, RBW=1MHz, VBW=1MHz, RLV=0dB, ATT=10dB, ST=auto

(5) Spurious Emission Intensity : more than 2,496.5MHz~12.5GHz

Frequency (MHz)	Reading (MHz)	Reading (dBm)	Cable Factor (dB)	Result (μW/MHz)	Remark
2402.00	2558.02	-59.03	11.60	0.01806	Normal Voltage : AC100V
2442.00	2598.29	-58.97	11.60	0.01833	
2480.00	4959.86	-59.73	11.60	0.01538	

TEST PLOTS**CH Low**

CH MidCH High

8.4 OCCUPIED BANDWIDTH (99%)

TEST RESULT

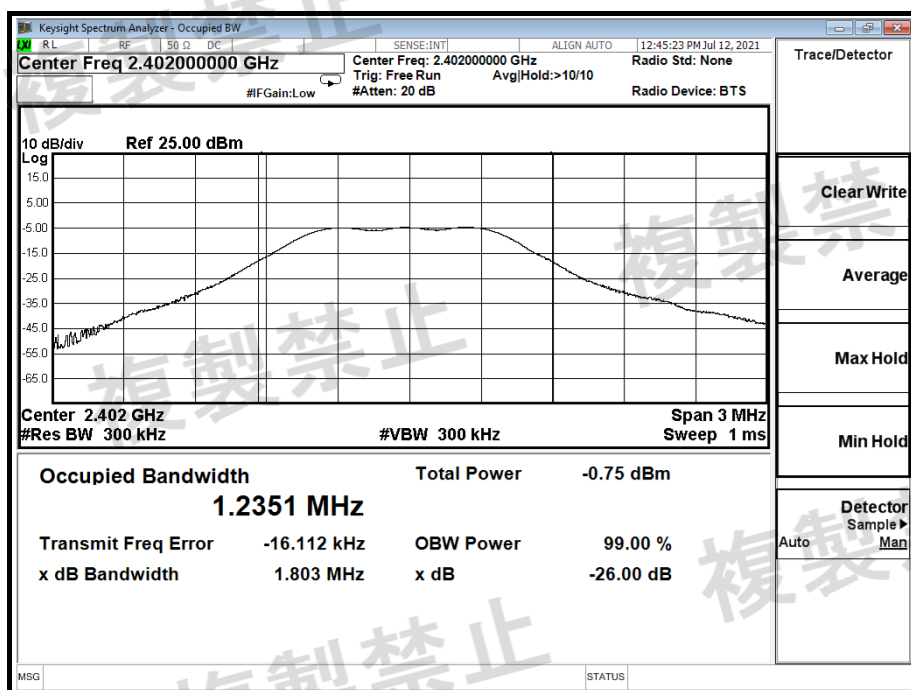
CF=fo, SPAN=auto, RBW=VBW=300kHz, RLV=0dB, ATT=10dB, ST=auto

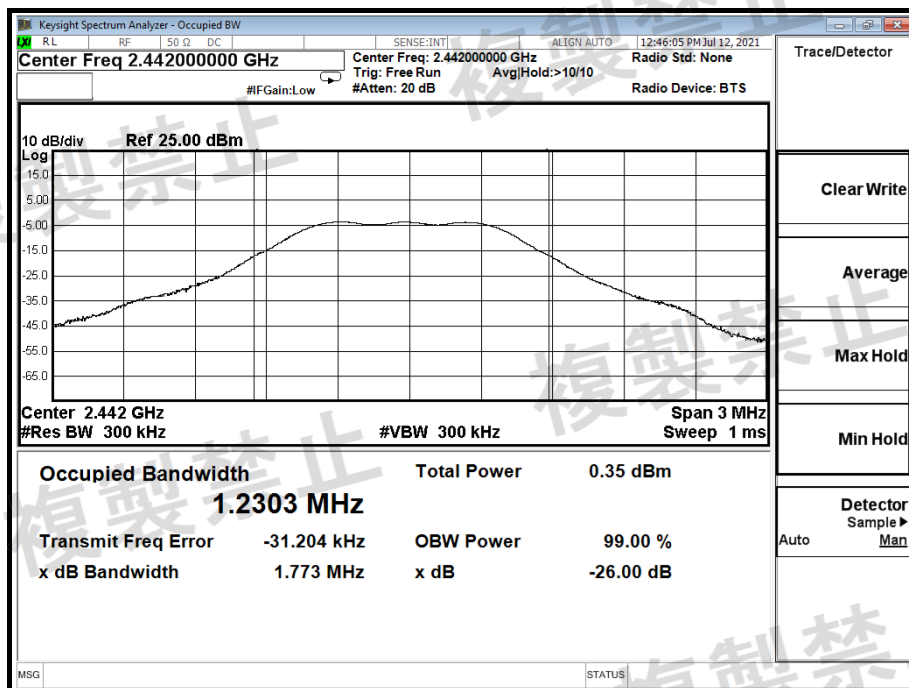
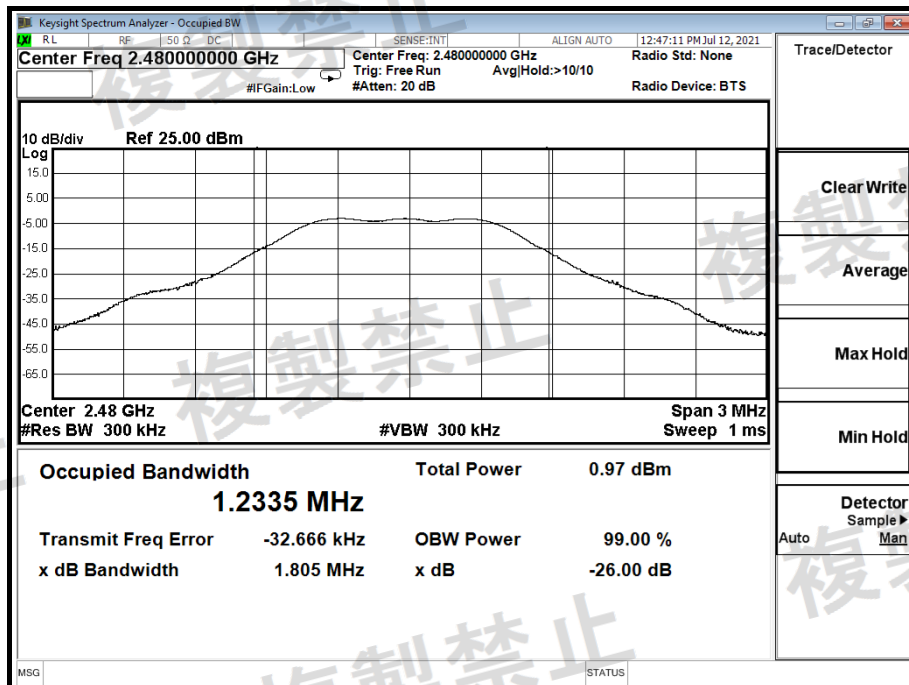
Modulation : 1 [Mbps]

Frequency (MH z)	Bandwidth (MH z)	Remark
2402.00	1.235	Normal Voltage : AC100V
2442.00	1.230	
2480.00	1.234	

TEST PLOTS

CH Low



CH MidCH High

8.5 SPREAD-SPECTRUM BANDWIDTH (90%)

TEST RESULT

Normal

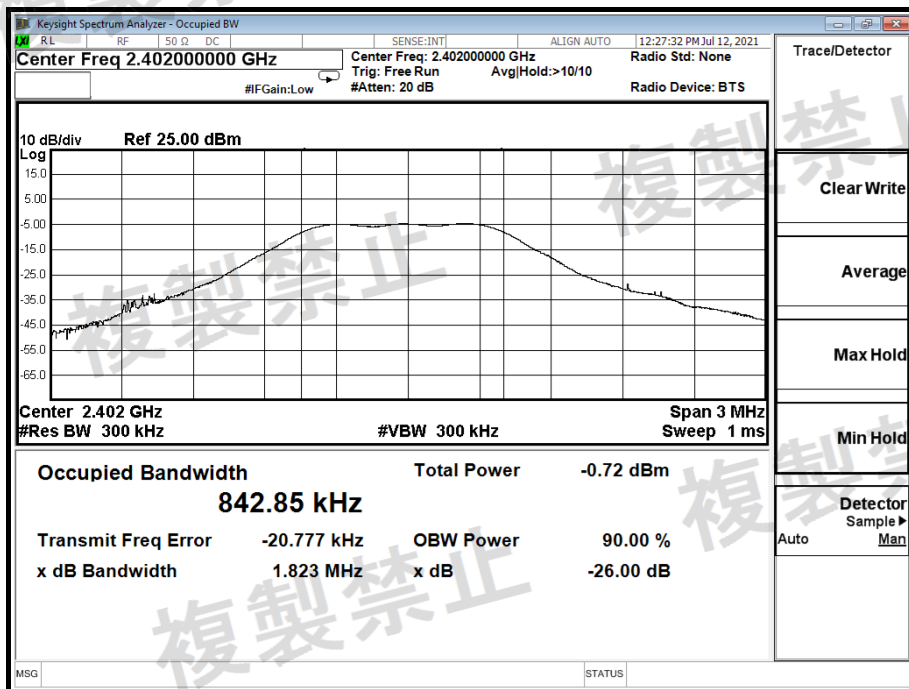
Modulation : 1

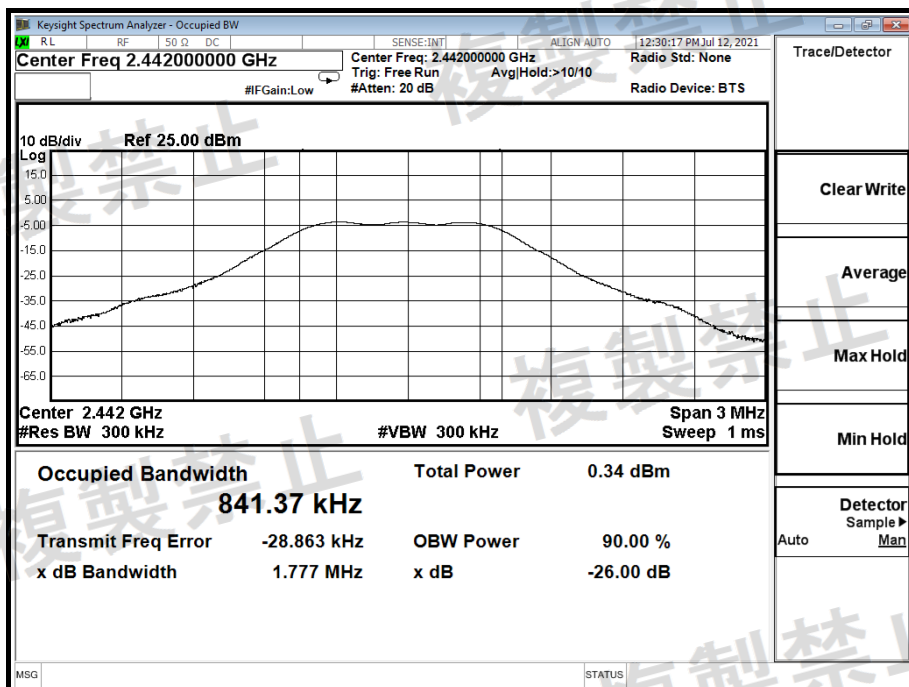
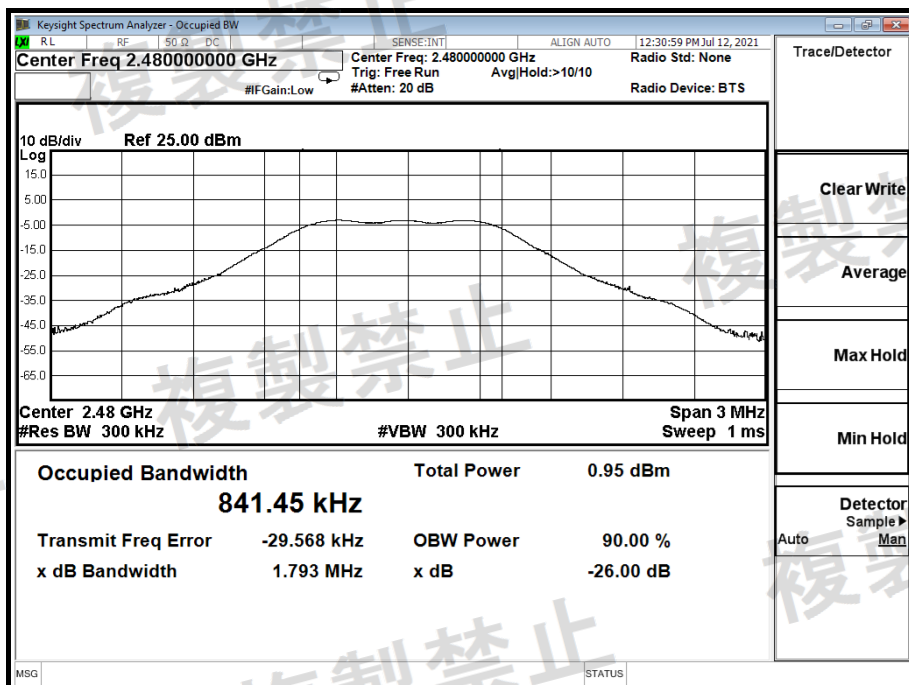
Frequency equal to the transmission rate : 1.375 [MHz]

Frequency (MHz)	Bandwidth (MHz)	Spreading Factor (Bandwidth/Frequency equal TX rate)	Remark
2402.00	0.8429	0.61	Normal Voltage : AC100V
2442.00	0.8414	0.61	
2480.00	0.8415	0.61	

TEST PLOTS

CH Low



CH MidCH High

6.6 LIMITATION OF COLLATERAL EMISSIONS OF RECEIVER

TEST RESULT

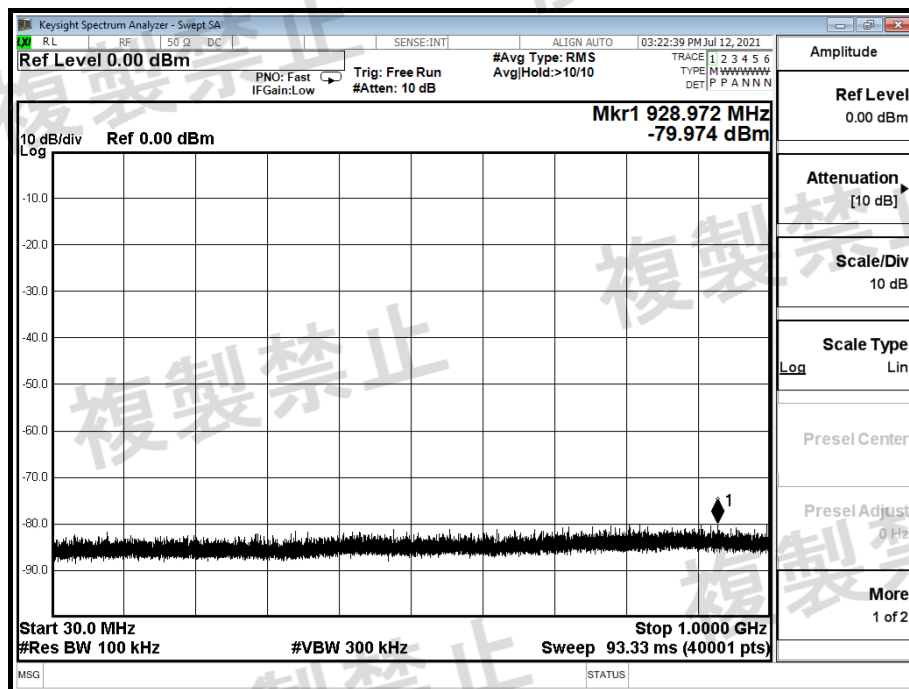
30MHz~1000MHz

Freq: 30MHz~1GHz, RBW=VBW=100kHz, RLV=0dB, ATT=10dB, ST=auto

30MHz~less than 1GHz

Frequency (MHz)	Reading (dBm)	Cable Factor (dB)	Result (nW/MHz)	Remark
928.97	-79.97	11.60	0.1454	Normal Voltage : AC100V

TEST PLOTS



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1GHZ~12.5GHZ

Freq: 1GHz~12.5GHz, RBW=VBW=1MHz, RLV=0dB, ATT=10dB, ST=auto

1GHz~12.5GHz

Frequency (MHz)	Reading (dBm)	Cable Factor (dB)	Result (nW/MHz)	Remark
3814.05	-64.61	11.60	5.0003	Normal Voltage : AC100V

TEST PLOTS