

TEST REPORT

Report number : KR18-SRT0011

Issue date : 2018-04-05

Applicant : SELVAS Healthcare, Inc.
174 Gajung-ro, Yuseong-gu Daejeon South Kor
TEL : +82 42 864 4460
FAX : +82 42 864 4462

Equipment under test (EUT) : BrailleSense Polaris

Model name : H532B

Date of test : 2018-02-20 ~ 2018-02-22

Test place : KCTL Inc.
65 Sinwon-ro, Yeongtong-gu, Suwon-si,
Gyeonggi-do, Korea

Test results : PASS

The results in this report are applicable only to the equipment tested.
This report shall not be re-produced except in full without the written approval of **KCTL Inc.**

Tested by;


Eui Jung.Kim

Approved by;


Seung Yong.Kim

1. Summary of Test

1. Purpose of test

Ordinance on Technical Standards Conformity Certification of Specified Radio Equipment

2.4GHz Band wide band low power data communication System

2. Standards

Certification Ordinance Article 2 Clause 1 Item19

1) Test Methods

Ministry of Internal Affairs and Communications Notification Article 88 Appendix 43

2) Deviation from standards

None

3. List of applied test to the EUT

Article 88 Appendix 43	Classification of EUT	Condition	Result
3	Frequency Tolerance	Conducted	PASS
4	Occupied Bandwidth	Conducted	PASS
4	Spread Bandwidth	Conducted	PASS
5	Unwanted (Spurious) Emission Strength	Conducted	PASS
6	RF Output Power Tolerance	Conducted	PASS
7	Secondary Emitted Radio Wave Strength	Conducted	PASS
8	Carrier Sensing Function	Conducted	N/A
12	Interference Prevention Function	Conducted	PASS

1) Test set up

Table-Top

2) Modification to the EUT by laboratory

None

1. Test Information

1. Applicant

SELVAS Healthcare, Inc.
174 Gajung-ro, Yuseong-gu Daejeon South Korea

2. Equipment under test BrailleSense Polaris

3. Model number H532B

4. Serial number None

5. Size (W) 245 mm x (D) 144 mm x (H) 25.5 mm

6. Terminal limitation -20°C to 60°C

7. RF Specification Frequency range IEEE802.11b/g/n (HT20) : 2412 - 2472 MHz IEEE802.11n (HT40) : 2422 - 2462 MHz

8. Number of RF Channels IEEE802.11b/g/n (HT20) : 13 Ch IEEE802.11n (HT40) : 9 Ch

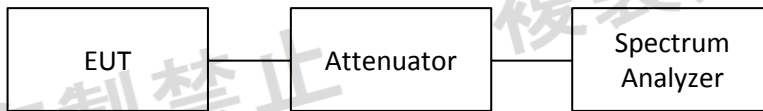
9. Modulation method IEEE802.11b: DSSS (DBPSK, DQPSK, CCK) IEEE802.11g / n (HT20,40) : OFDM (BPSK, QPSK, 16QAM, 64QAM)

10. Data rate IEEE802.11b: 1, 2, 5.5, 11Mbps IEEE802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps IEEE802.11n (HT20,40 LGI): 6.5, 13, 19.5, 26, 39, 52, 58.5, 65Mbps IEEE802.11n (HT20,40 SGI): 7.2, 14.4, 21.7, 28.9, 43.3, 57.8, 65, 72.2Mbps

11. Variation of the family model(s) None

2. Configuration of equipment

1. Frequency tolerance, RF output power tolerance, Occupied Bandwidth, Spread bandwidth, Interference Prevention Function, Unwanted(Spurious) emission strength, Secondary emitted radio wave strength



3. Test results (Rated voltage)

S/N : N/A

Environment of test room	Date of test	2018-02-20	2018-02-21	2018-02-22
	Temperature	24 °C	23 °C	25 °C
	Humidity	51 %	50 %	53 %

Test category	IEEE802.11b/1-13ch	
Peak Antenna Gain	2.35	dBi
Declaration Output Power	2.500	mW/MHz
Declaration Output Power	3.98	dBm/MHz
E.I.R.P.	6.33	dBm/MHz
Input Power Voltage	5.00	VDC

Test category	IEEE802.11b/1-13ch	
Tested Circuit Insertion Loss	0	dB
Frequency equal to the Transmission rate	1.375	MHz
Transmission Time	ON TIME (1sec or less)	4.5215 ms
	OFF TIME (0.1sec or more)	3.608 ms
	Ratio	0.5562 %
Packet Type (Mode)	Not Applicable	mode
Transmit Speed	Not Applicable	MHz

Using TDF and offset function in Spectrum Analyzer.
Measurement of plots are included Loss value.

(Att : 10dB + Cable loss + EUT cable: 0.5dB offset)

Test category :	2.4GHz Band Low-Power Data Communication System (IEEE802.11b/1-13ch)
The reason why the tests are performed only at rated voltage :	

Measurement Frequency	MHz	2412	2442	2472	Result	Limit	Note
Channel Number	Ch.	1	7	13	---	---	
Frequency Measurements	MHz	2411.982986	2441.983370	2471.982291	---	---	
Frequency Tolerance	ppm	-7.05390	-6.80999	-7.16383	PASS	±50×10 ⁻⁶ (50ppm)	
Occupied Bandwidth	MHz	13.38661339	13.38661339	13.58641359	PASS	26MHz or below	
Spread Bandwidth	MHz	9.2907	9.1908	9.2907	PASS	500kHz or more	
RF Output Power	mW/MHz	2.146749	2.545548	2.253104	PASS	10mW/MHz or below	
RF Output Power Tolerance	%	-14.1300	1.8219	-9.8758		+20 to -80%	
Unwanted (Spurious) Emission Strength (1-13ch)	30 to 2387MHz	uW/MHz	0.017660	0.004018	0.002958	PASS	2.5uW/MHz or below
		MHz	2385.800	2367.000	2327.000	----	
	2387 to 2400MHz	uW/MHz	5.023426	0.062517	0.004613	PASS	25uW/MHz or below
		MHz	2399.188	2395.942	2399.006	----	
	2483.5 to 2496.5MHz	uW/MHz	0.005585	0.069343	1.790606	PASS	25uW/MHz or below
		MHz	2488.247	2484.779	2484.974	----	
	2496.5 to 12750MHz	uW/MHz	0.009638	0.011041	0.010233	PASS	2.5uW/MHz or below
		MHz	4818.500	4878.500	4937.500	----	
Secondary Emitted Radio Wave Strength	30 to 1000MHz	nW	0.324340	0.258226	0.284446	PASS	4nW or below
		MHz	519.850	519.850	519.850	----	
	1000 to 10000MHz	nW	0.885116	0.950605	1.051962	PASS	20nW or below
		MHz	6911.600	6956.500	6929.600	----	
	10000 to 12750MHz	nW	0.783430	0.883080	0.827942	PASS	20nW or below
		MHz	12633.200	12712.900	12734.900	----	
Spreading Factor	---	6.7569	6.6842	6.7569	PASS	5 / 10 or more	
Interference Prevention Function	Good				PASS		
Transmitting antenna absolute gain					----	*1	
Angular width of the main radiation of the transmitting antenna					----	*1	

*1 Measurement only if the E.I.R.P. exceeds 12.14dBm/MHz

3. Test results (-10 % voltage)

S/N : N/A

Environment of test room	Date of test	2018-02-20	2018-02-21	2018-02-22
	Temperature	24 °C	23 °C	25 °C
	Humidity	51 %	50 %	53 %

Test category	IEEE802.11b/1-13ch	
Peak Antenna Gain	2.35	dBi
Declaration Output Power	2.500	mW/MHz
Declaration Output Power	3.98	dBm/MHz
E.I.R.P.	6.33	dBm/MHz
Input Power Voltage	4.50	VDC

Test category	IEEE802.11b/1-13ch	
Tested Circuit Insertion Loss	0	dB
Frequency equal to the Transmission rate	1.375	MHz
Transmission Time	ON TIME (1sec or less)	4.5215 ms
	OFF TIME (0.1sec or more)	3.608 ms
	Ratio	0.5562 %
Packet Type (Mode)	Not Applicable	mode
Transmit Speed	Not Applicable	MHz

Using TDF and offset function in Spectrum Analyzer.
Measurement of plots are included Loss value.

(Att : 10dB + Cable loss + EUT cable: 0.5dB offset)

Test category :	2.4GHz Band Low-Power Data Communication System (IEEE802.11b/1-13ch)
The reason why the tests are performed only at rated voltage :	

Measurement Frequency	MHz	2412	2442	2472	Result	Limit	Note
Channel Number	Ch.	1	7	13	---	---	
Frequency Measurements	MHz	2411.982730	2441.983173	2471.982258	---	---	
Frequency Tolerance	ppm	-7.16003	-6.89066	-7.17718	PASS	±50×10 ⁻⁶ (50ppm)	
Occupied Bandwidth	MHz	13.38661339	13.38661339	13.58641359	PASS	26MHz or below	
Spread Bandwidth	MHz	9.2907	9.1908	9.2907	PASS	500kHz or more	
RF Output Power	mW/MHz	2.122176	2.499087	2.232448	PASS	10mW/MHz or below	
RF Output Power Tolerance	%	-15.1130	-0.0365	-10.7021		+20 to -80%	
Unwanted (Spurious) Emission Strength (1-13ch)	30 to 2387MHz	uW/MHz	0.013552	0.003327	0.002588	PASS	2.5uW/MHz or below
		MHz	2385.800	2369.300	2277.500	-----	
	2387 to 2400MHz	uW/MHz	2.930893	0.069984	0.007379	PASS	25uW/MHz or below
		MHz	2396.084	2396.539	2398.721	-----	
	2483.5 to 2496.5MHz	uW/MHz	0.005346	0.064417	1.999862	PASS	25uW/MHz or below
		MHz	2488.675	2484.143	2485.312	-----	
	2496.5 to 12750MHz	uW/MHz	0.011015	0.009204	0.008204	PASS	2.5uW/MHz or below
		MHz	4818.500	4878.500	4937.500	-----	
Secondary Emitted Radio Wave Strength	30 to 1000MHz	nW	0.251768	0.289068	0.294442	PASS	4nW or below
		MHz	519.850	519.850	519.850	-----	
	1000 to 10000MHz	nW	1.199499	1.233105	1.091440	PASS	20nW or below
		MHz	6471.000	7001.500	6992.500	-----	
	10000 to 12750MHz	nW	0.891251	0.781628	0.827942	PASS	20nW or below
		MHz	12745.900	12737.600	12737.600	-----	
Spreading Factor	---	6.7569	6.6842	6.7569	PASS	5 / 10 or more	
Interference Prevention Function	Good				PASS		
Transmitting antenna absolute gain					-----	*1	
Angular width of the main radiation of the transmitting antenna					-----	*1	

*1 Measurement only if the E.I.R.P. exceeds 12.14dBm/MHz

3. Test results (+10 % voltage)

S/N : N/A

Environment of test room	Date of test	2018-02-20	2018-02-21	2018-02-22
	Temperature	24 °C	23 °C	25 °C
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Test category	IEEE802.11b/1-13ch	
Peak Antenna Gain	2.35	dBi
Declaration Output Power	2.500	mW/MHz
Declaration Output Power	3.98	dBm/MHz
E.I.R.P.	6.33	dBm/MHz
Input Power Voltage	5.50	VDC

Test category	IEEE802.11b/1-13ch	
Tested Circuit Insertion Loss	0	dB
Frequency equal to the Transmission rate	1.375	MHz
Transmission Time	ON TIME (1sec or less)	4.5215 ms
	OFF TIME (0.1sec or more)	3.608 ms
	Ratio	0.5562 %
Packet Type (Mode)	Not Applicable	mode
Transmit Speed	Not Applicable	MHz

Using TDF and offset function in Spectrum Analyzer.
Measurement of plots are included Loss value.

(Att : 10dB + Cable loss + EUT cable: 0.5dB offset)

Test category :	2.4GHz Band Low-Power Data Communication System (IEEE802.11b/1-13ch)
The reason why the tests are performed only at rated voltage :	

Measurement Frequency	MHz	2412	2442	2472	Result	Limit	Note
Channel Number	Ch.	1	7	13	---	---	
Frequency Measurements	MHz	2411.982707	2441.983021	2471.982229	---	---	
Frequency Tolerance	ppm	-7.16957	-6.95291	-7.18892	PASS	±50×10 ⁻⁶ (50ppm)	
Occupied Bandwidth	MHz	13.38661339	13.38661339	13.58641359	PASS	26MHz or below	
Spread Bandwidth	MHz	9.2907	9.1908	9.2907	PASS	500kHz or more	
RF Output Power	mW/MHz	2.136886	2.557298	2.353864	PASS	10mW/MHz or below	
RF Output Power Tolerance	%	-14.5246	2.2919	-5.8455		+20 to -80%	
Unwanted (Spurious) Emission Strength (1-13ch)	30 to 2387MHz	uW/MHz	0.014962	0.005662	0.002483	PASS	2.5uW/MHz or below
		MHz	2385.800	2371.700	2322.200	-----	
	2387 to 2400MHz	uW/MHz	3.140509	0.074817	0.006026	PASS	25uW/MHz or below
		MHz	2399.617	2399.604	2393.942	-----	
	2483.5 to 2496.5MHz	uW/MHz	0.004498	0.061802	2.103778	PASS	25uW/MHz or below
		MHz	2488.584	2483.701	2486.403	-----	
	2496.5 to 12750MHz	uW/MHz	0.012647	0.007852	0.008730	PASS	2.5uW/MHz or below
		MHz	4818.500	4878.500	4937.500	-----	
Secondary Emitted Radio Wave Strength	30 to 1000MHz	nW	0.254683	0.269774	0.297852	PASS	4nW or below
		MHz	519.850	519.850	519.850	-----	
	1000 to 10000MHz	nW	1.088930	1.196741	0.920450	PASS	20nW or below
		MHz	6848.700	6992.500	6516.000	-----	
	10000 to 12750MHz	nW	0.937562	1.023293	1.174898	PASS	20nW or below
		MHz	12743.100	12674.500	12726.600	-----	
Spreading Factor	---	6.7569	6.6842	6.7569	PASS	5 / 10 or more	
Interference Prevention Function	Good				PASS		
Transmitting antenna absolute gain					-----	*1	
Angular width of the main radiation of the transmitting antenna					-----	*1	

*1 Measurement only if the E.I.R.P. exceeds 12.14dBm/MHz

4. Measurement equipment list

[illegible]

Note1: "X" は使用した測定機器です。
"X" used equipment.

Note2: 較正期限は、較正を行った日の翌月から起算して1年以内です。
The validity of measurement equipment is one year from the first day of the following month of the calibration date.

Note3: 較正方法 ... Cal.Method ...

イ): 国立研究開発法人情報通信研究機構（NICT）（以下「機構」という。）又は第百二条の十八第一項の指定較正機関（TELEC, インターテックジャパン、キーサイト）が行う較正

a): Calibration conducted by the National Institute of Information and Communications Technology～NICT～ or a designated calibration agency under Article 102-18 paragraph (1)～ TELECOM Engineering Center, Intertek Japan K.K., Keysight Technologies, Inc～.

ロ): 計量法（平成四年法律第五十一号）第百三十五条 又は第百四十四条 の規定に基づく校正（JCSS校正）

b): Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law（Law No. 51 of 1992）～Japan Calibration Service System～

ハ): 外国において行う較正であつて、機構又は第百二条の十八第一項の指定較正機関（TELEC, インターテックジャパン、キーサイト）が行う較正に相当するもの

c): Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1)～ TELECOM Engineering Center, Intertek Japan K.K., Keysight Technologies, Inc～.

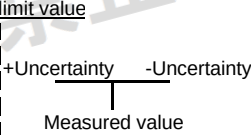
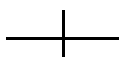
ニ): イからハまでのいずれかに掲げる較正等を受けたものを用いて行う較正等

d): Calibration conducted by using other equipment that listed above from a) to c)

5. Uncertainty

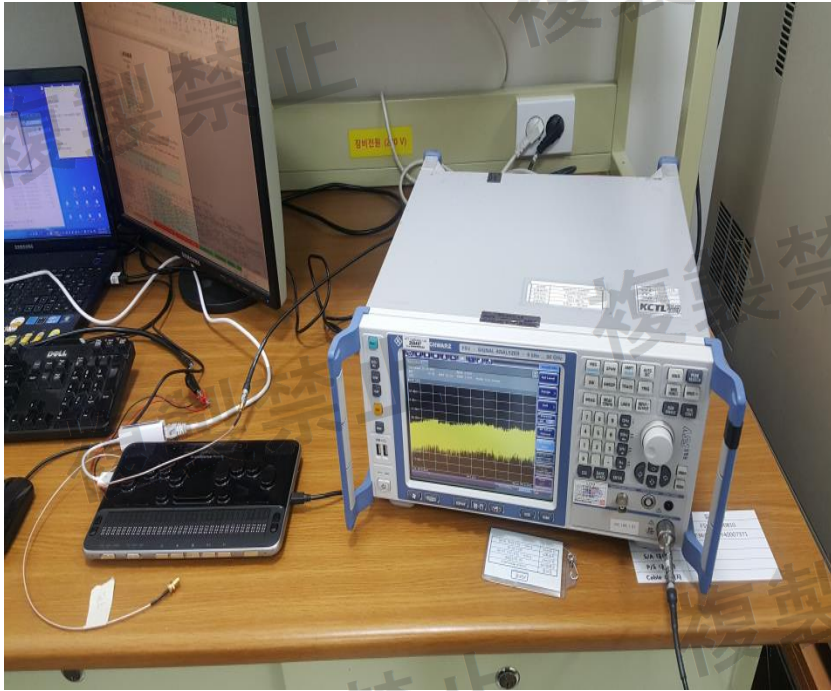
About uncertainty of measured value

Parameter	Uncertainty
Total RF power conducted	$\pm 1.44\text{dB}$
Spurious emissions conducted	$\pm 1.53\text{dB}$
Temperature	$\pm 2^\circ\text{C}$
Humidity	$\pm 0.1\%$

Judge	Measured value and standard limit value	
PASS	Case1	 <p>Standard limit value</p> <p>+Uncertainty -Uncertainty</p> <p>Measured value</p> <p>Even if it takes uncertainty into consideration, a standard limit value is fulfilled.</p>
	Case2	 <p>Although measured value is in a standard limit value, a limit value won't be fulfilled if uncertainty is taken into consideration.</p>
FAIL	Case3	 <p>Although measured value exceeds a standard limit value, a limit value will be fulfilled if uncertainty is taken into consideration.</p>
	Case4	 <p>Even if it takes uncertainty into consideration, a standard limit value isn't fulfilled.</p>

6. Photographs

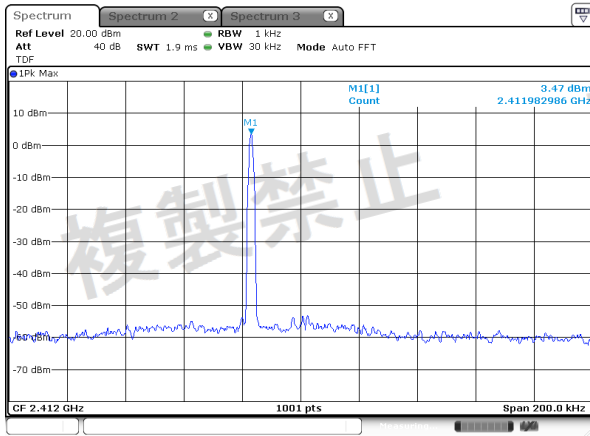
Conducted Measurement Photo



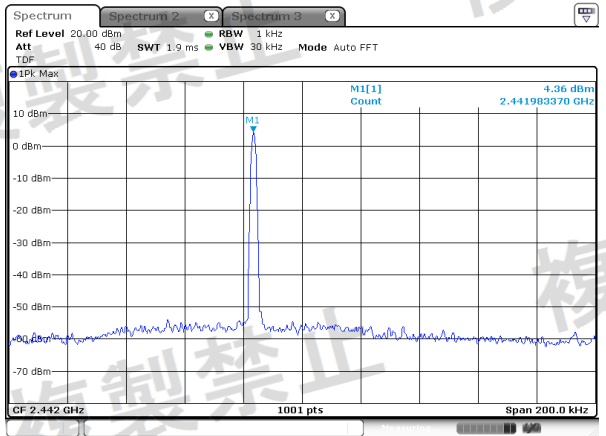
7. Test chart

7.1 Frequency tolerance (Rated voltage)

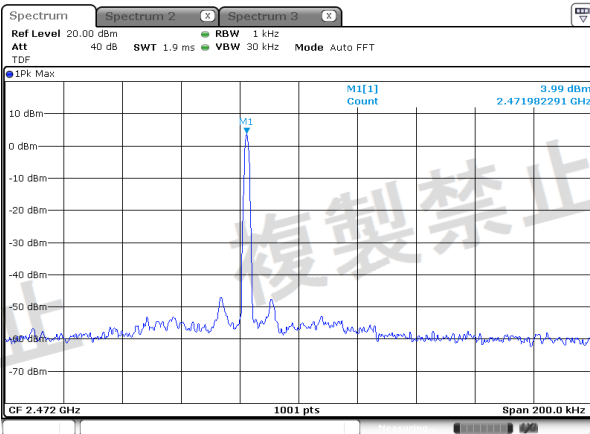
Ch.1: 2412MHz



Ch.7: 2442MHz



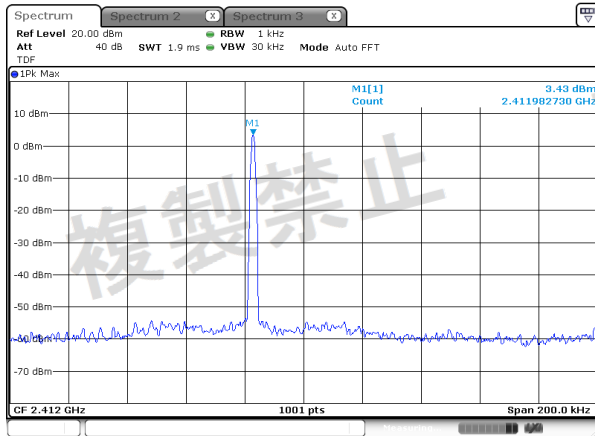
Ch.13: 2472MHz



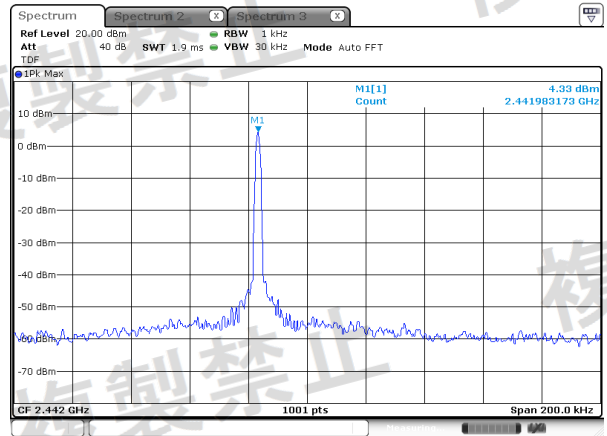
7. Test chart

7.1 Frequency tolerance (-10% voltage)

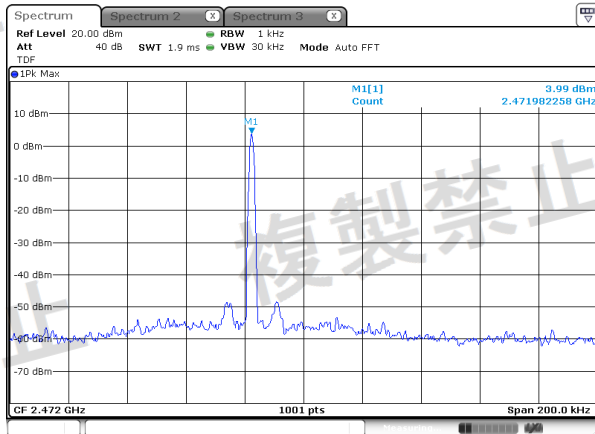
Ch.1: 2412MHz



Ch.7: 2442MHz



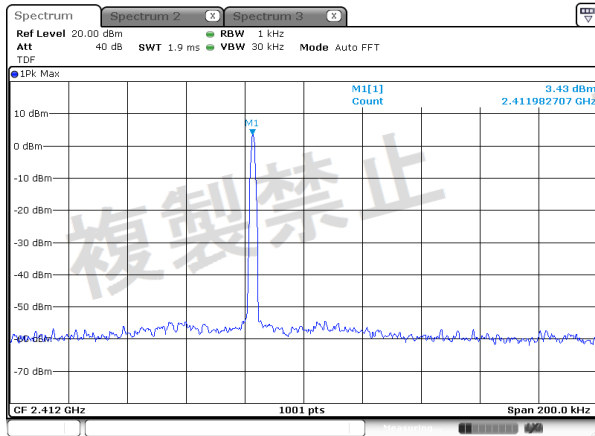
Ch.13: 2472MHz



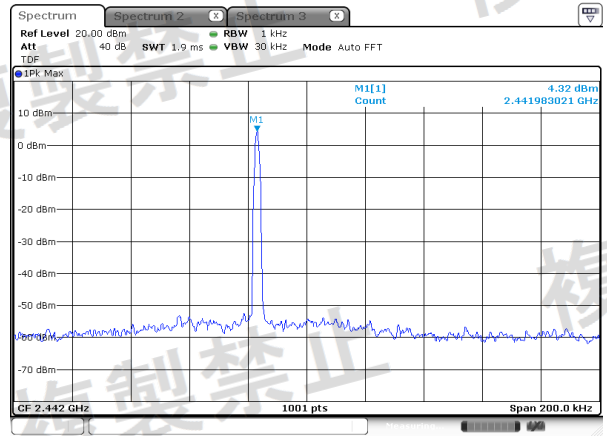
7. Test chart

7.1 Frequency tolerance (+10% voltage)

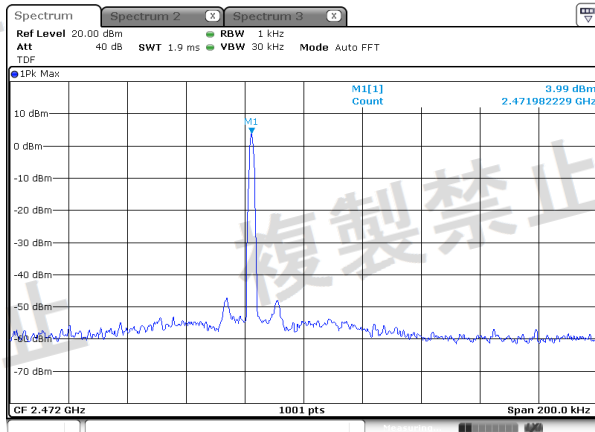
Ch.1: 2412MHz



Ch.7: 2442MHz



Ch.13: 2472MHz

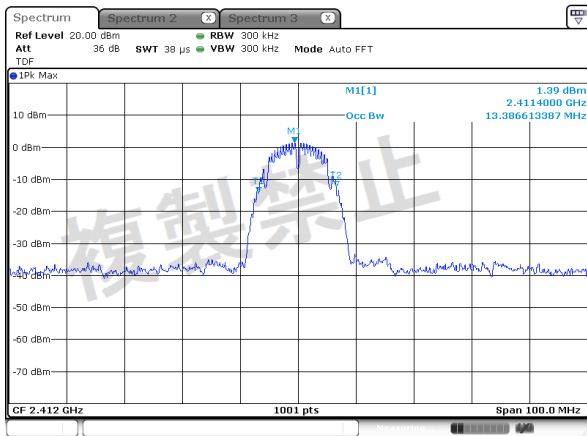


7. Test chart

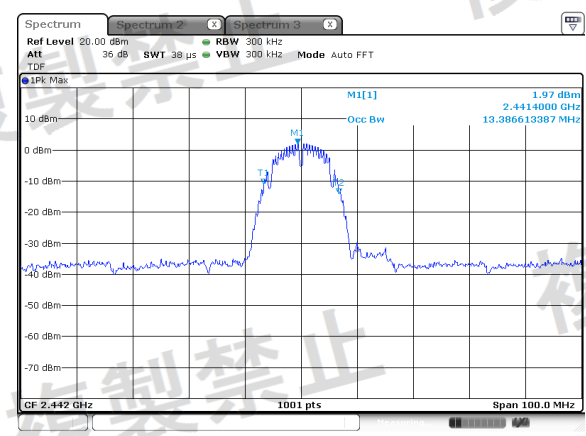
7.2 Occupied bandwidth / Spread bandwidth (Rated voltage)

Occupied bandwidth

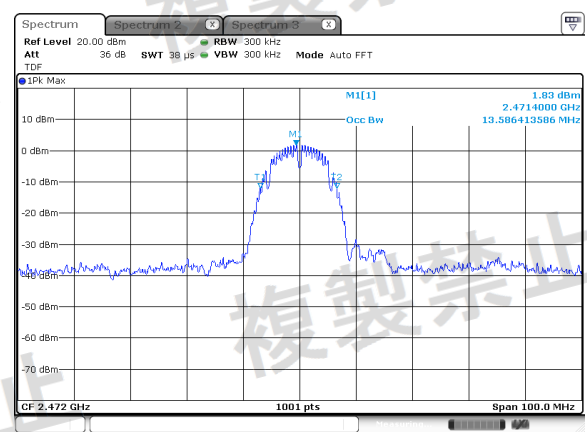
Ch.1: 2412MHz



Ch.7: 2442MHz

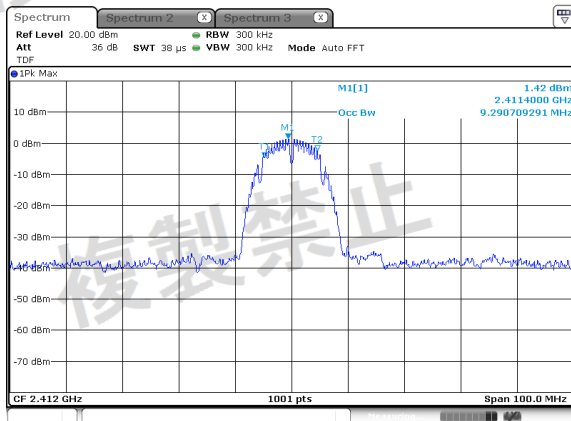


Ch.13: 2472MHz

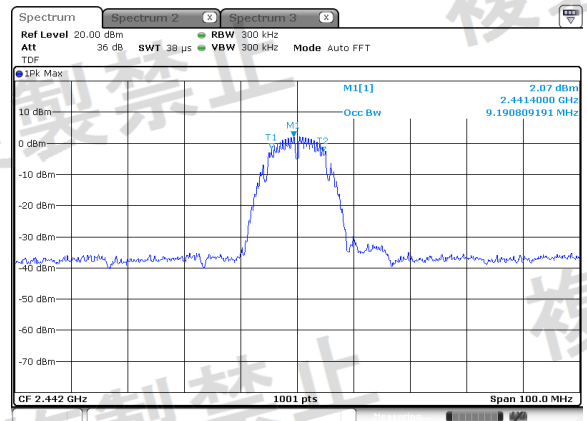


Spread bandwidth

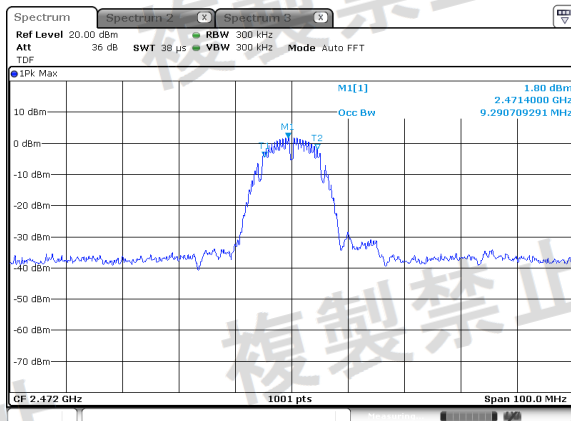
Ch.1: 2412MHz



Ch.7: 2442MHz



Ch.13: 2472MHz

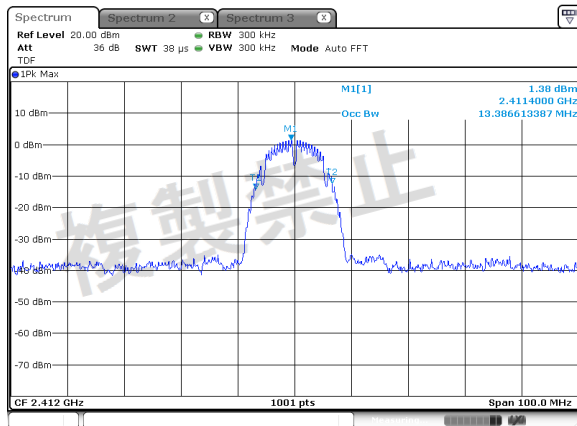


7. Test chart

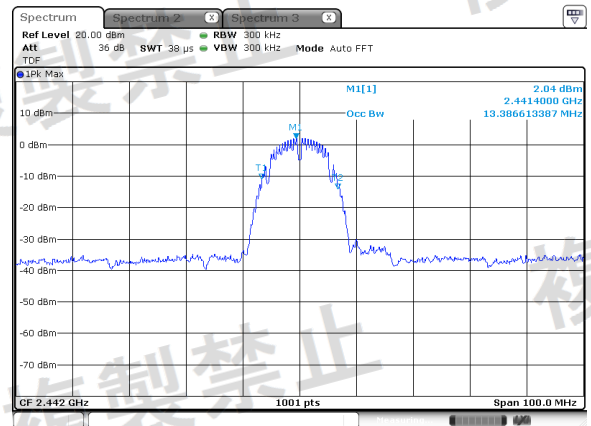
7.2 Occupied bandwidth / Spread bandwidth (-10% voltage)

Occupied bandwidth

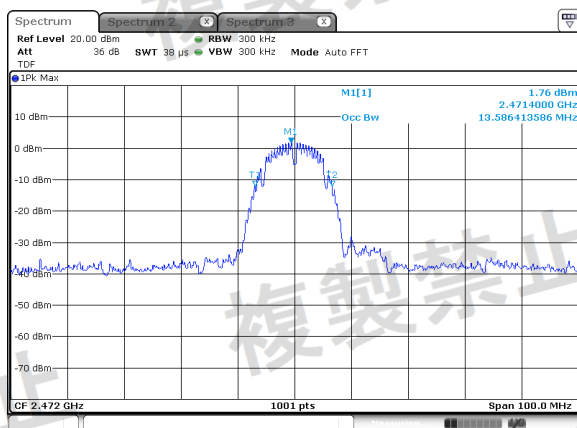
Ch.1: 2412MHz



Ch.7: 2442MHz

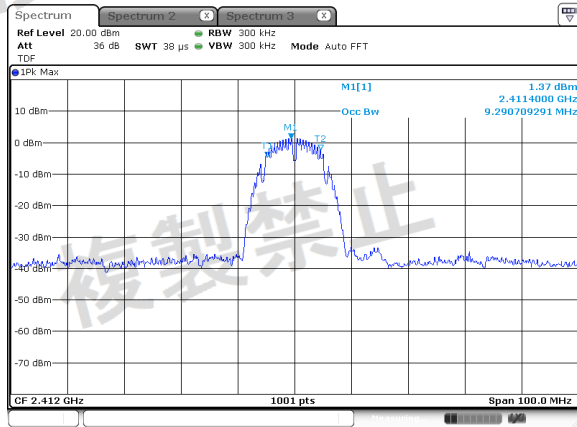


Ch.13: 2472MHz

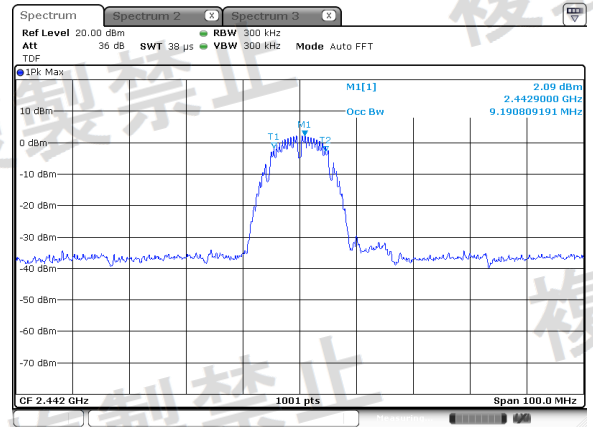


Spread bandwidth

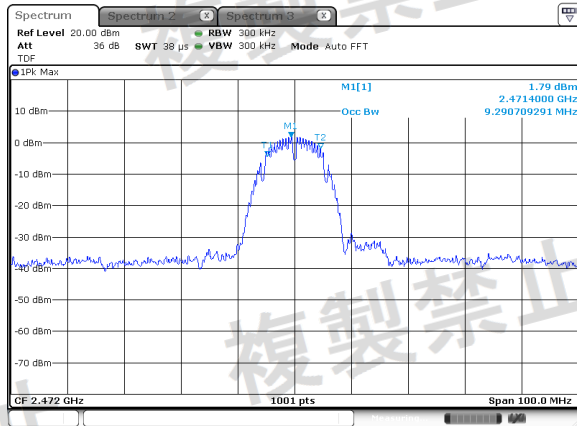
Ch.1: 2412MHz



Ch.7: 2442MHz



Ch.13: 2472MHz

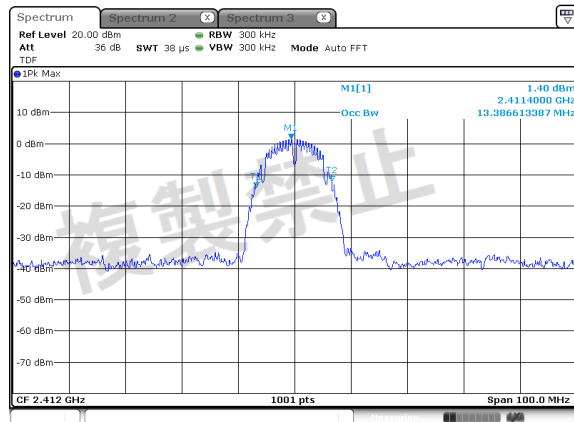


7. Test chart

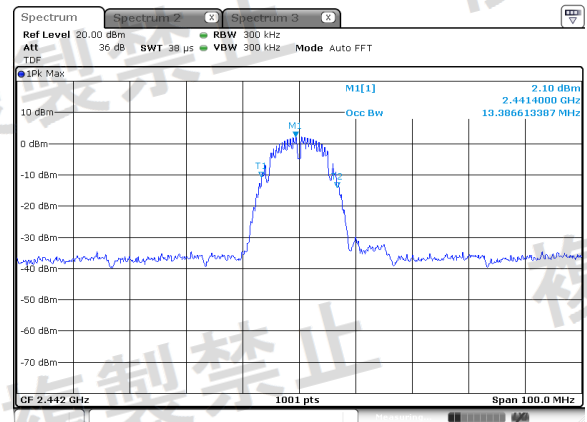
7.2 Occupied bandwidth / Spread bandwidth (+10% voltage)

Occupied bandwidth

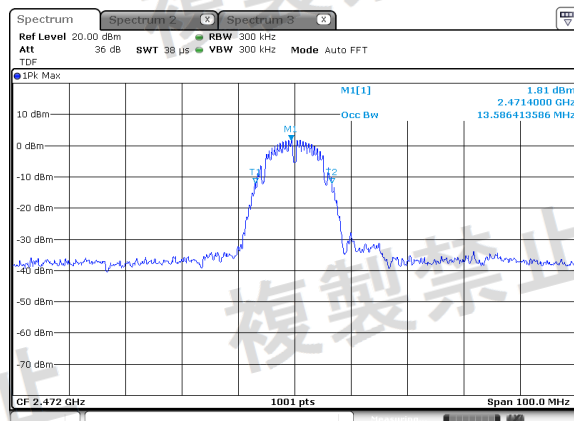
Ch.1: 2412MHz



Ch.7: 2442MHz

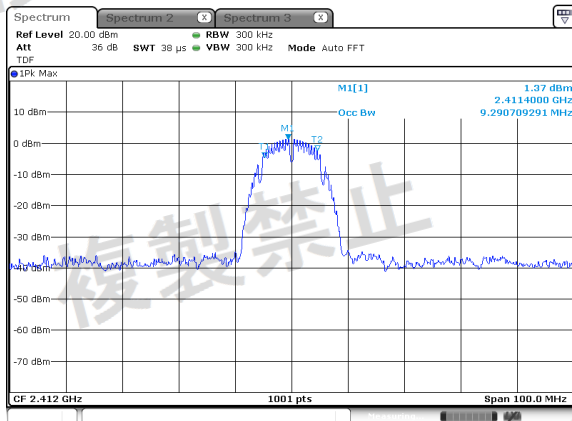


Ch.13: 2472MHz

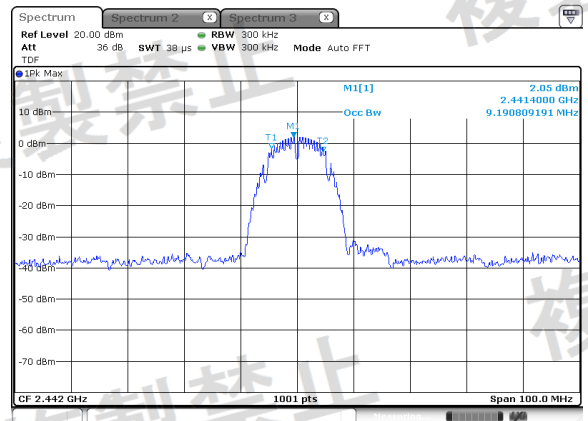


Spread bandwidth

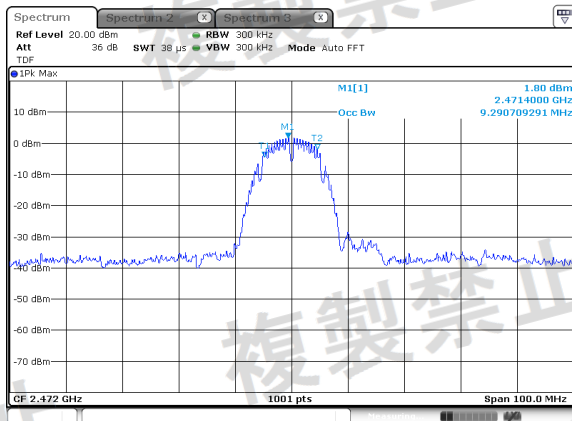
Ch.1: 2412MHz



Ch.7: 2442MHz



Ch.13: 2472MHz

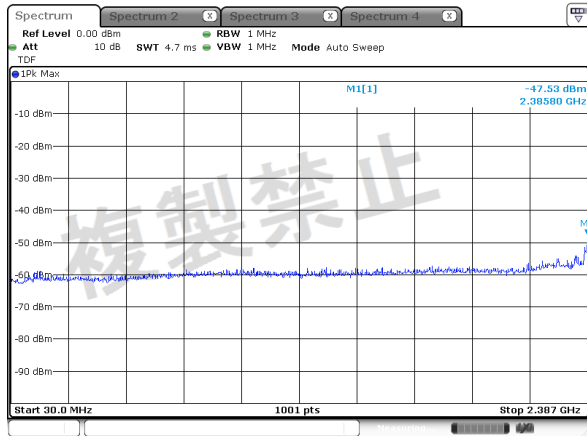


7. Test chart

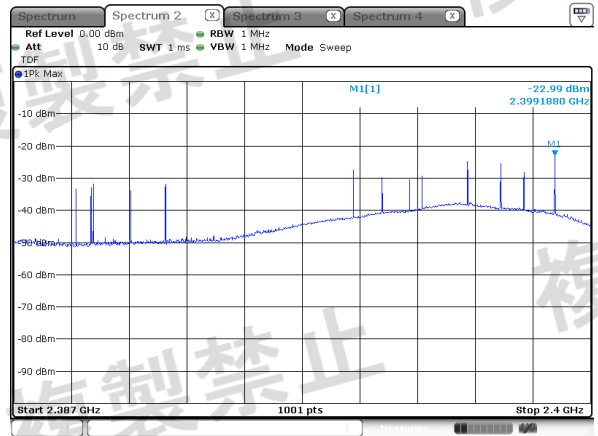
7.3 Unwanted(Spurious) emission strength (Rated voltage)

Ch.1: 2412MHz

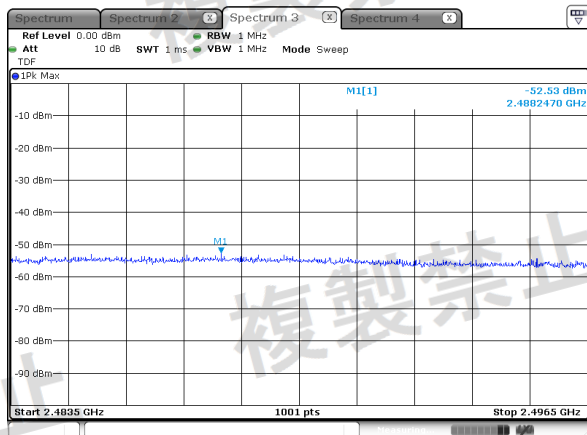
30-2387MHz



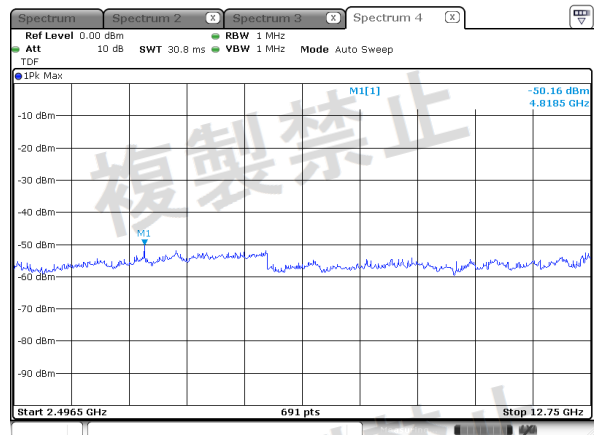
2387-2400MHz



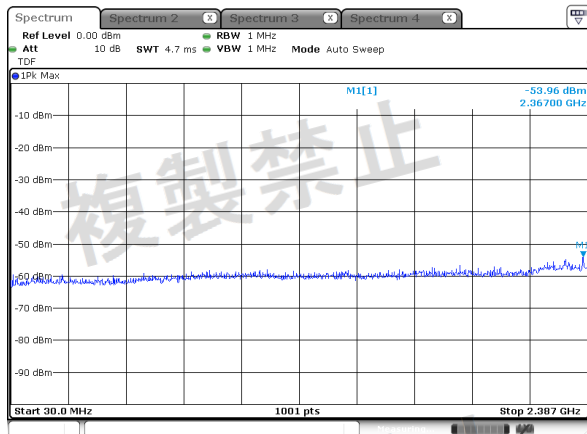
2483.5-2496.5MHz



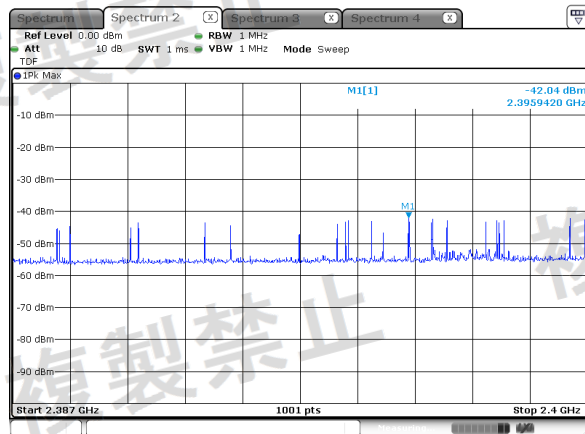
2496.5-12750MHz



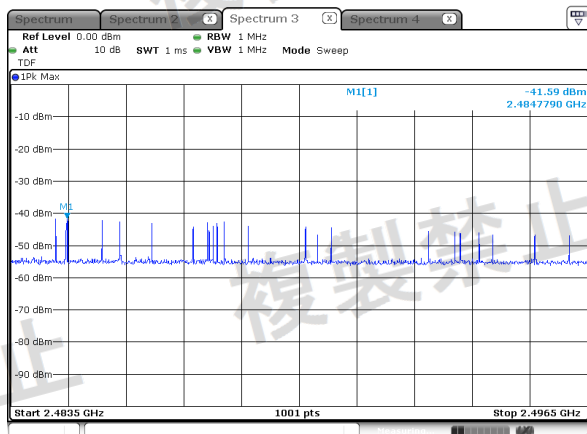
Ch.7: 2442MHz
30-2387MHz



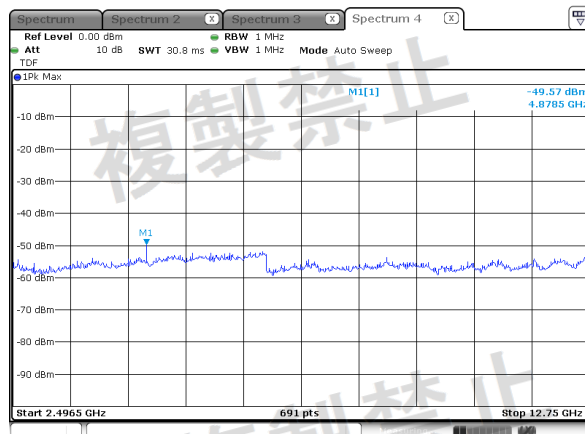
2387-2400MHz



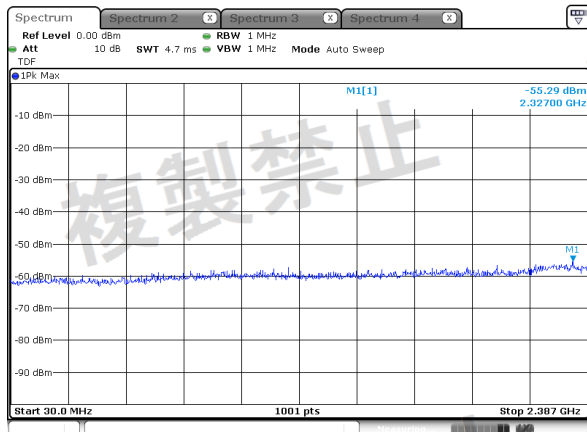
2483.5-2496.5MHz



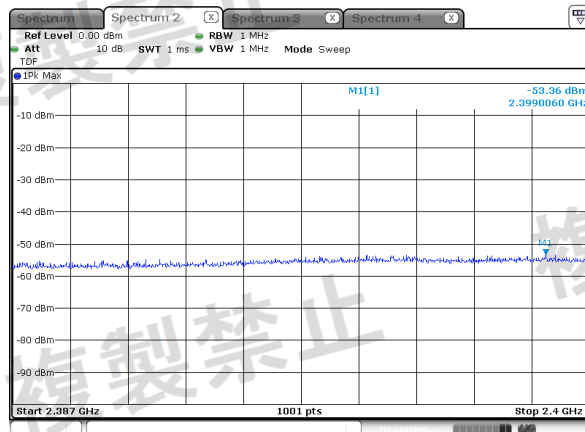
2496.5-12750MHz



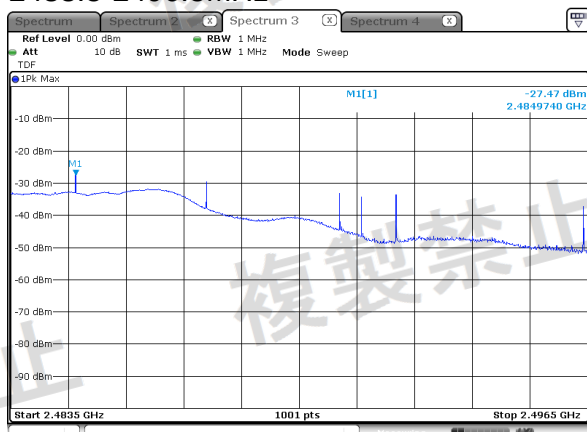
Ch.13: 2472MHz 30-2387MHz



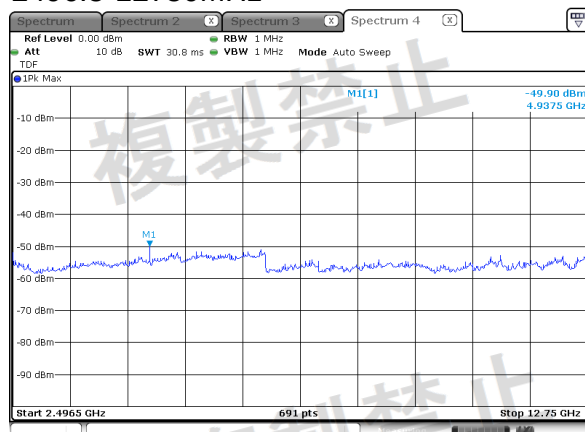
2387-2400MHz



2483.5-2496.5MHz



2496.5-12750MHz

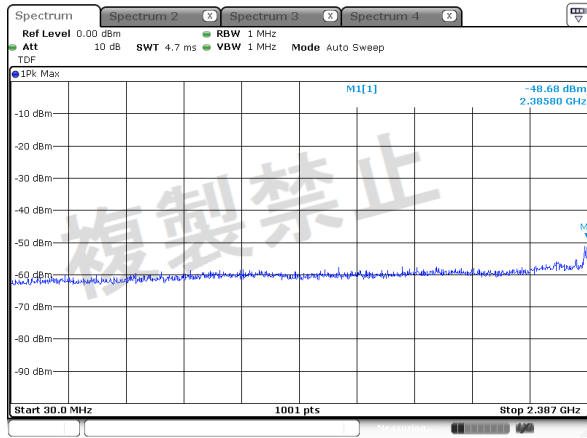


7. Test chart

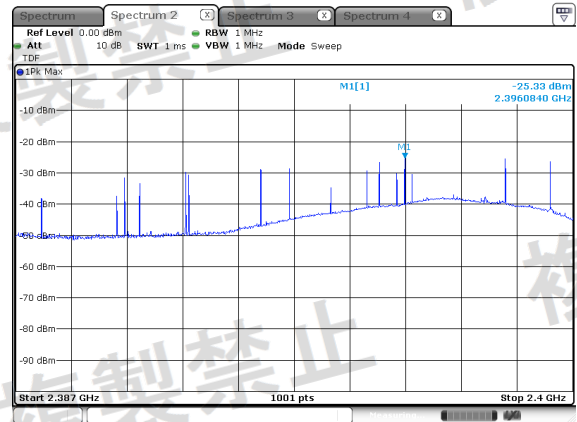
7.3 Unwanted(Spurious) emission strength (-10% voltage)

Ch.1: 2412MHz

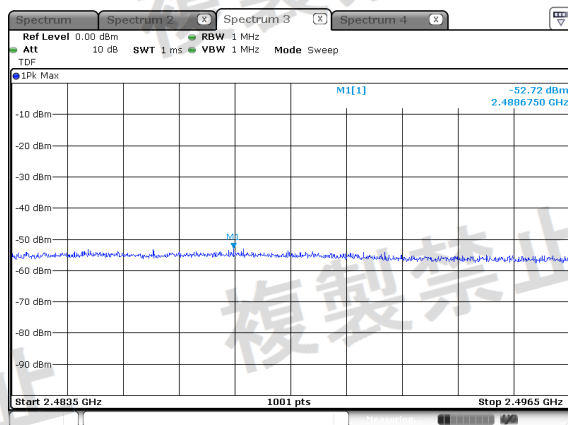
30-2387MHz



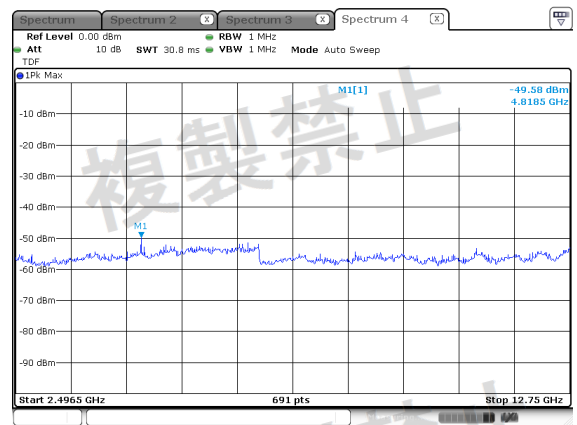
2387-2400MHz



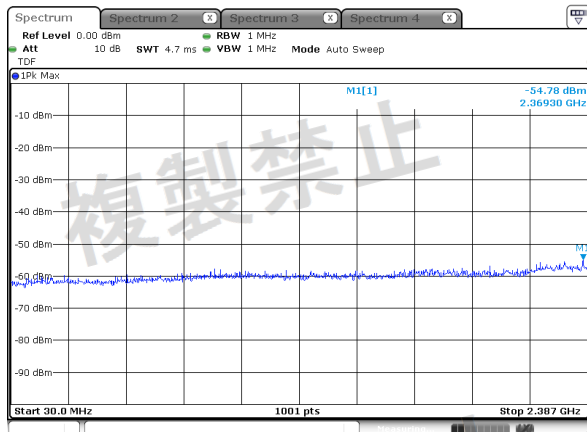
2483.5-2496.5MHz



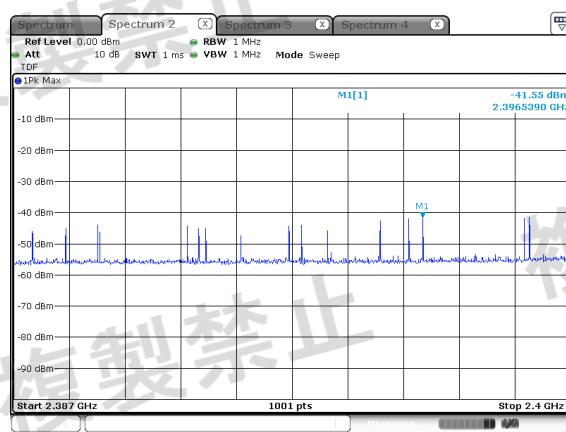
2496.5-12750MHz



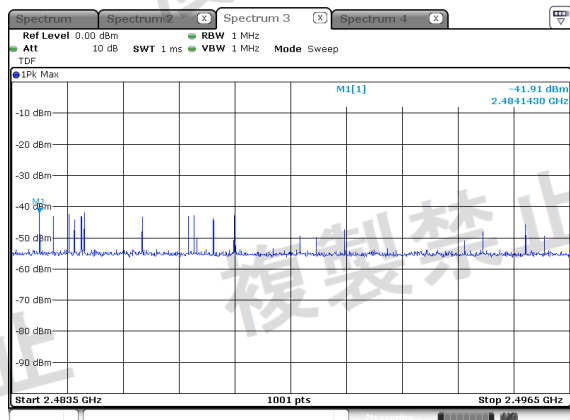
Ch.7: 2442MHz
30-2387MHz



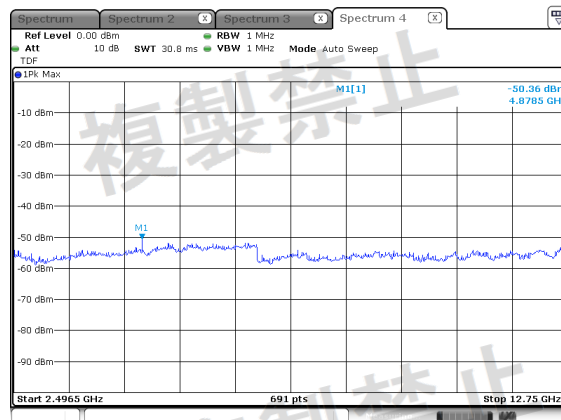
2387-2400MHz



2483.5-2496.5MHz



2496.5-12750MHz



The screenshot shows the Spectrum Analyzer window with the following settings and display:

- Top Panel:**
 - Buttons: Spectrum, Spectrum 2, Spectrum 3, Spectrum 4
 - Ref Level: 0.00 dBm
 - Att: 10 dB
 - SWT: 1 ms
 - RBW: 1 MHz
 - VBW: 1 MHz
 - Mode: Sweep
- Plot Area:**
 - Y-axis: Power in dBm, ranging from -10 to -90.
 - X-axis: Frequency in GHz, ranging from 2.387 to 2.4.
 - Trace: A blue line representing the noise floor.
 - Peak Marker: A blue dot labeled "Pk Max" at approximately -51.32 dBm.
 - Marker Label: "M1[1]" is displayed above the peak.
 - Frequency Label: "2.3987210 GHz" is displayed below the peak.
- Bottom Panel:**
 - Start: 2.387 GHz
 - 1001 pts
 - Stop: 2.4 GHz

Spectrum 1 Spectrum 2 Spectrum 3 Spectrum 4

Ref Level 0.00 dBm RBW 1 MHz
 Att 10 dB SWT 30.8 ms VBW 1 MHz Mode Auto Sweep
 TDF

3PK Max

MI [1] ~50.86 dBm
 4.9375 GHz

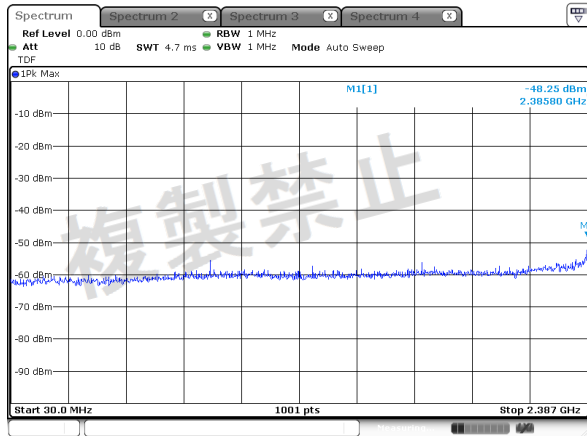
Start 2.4965 GHz 691 pts Stop 12.75 GHz

7. Test chart

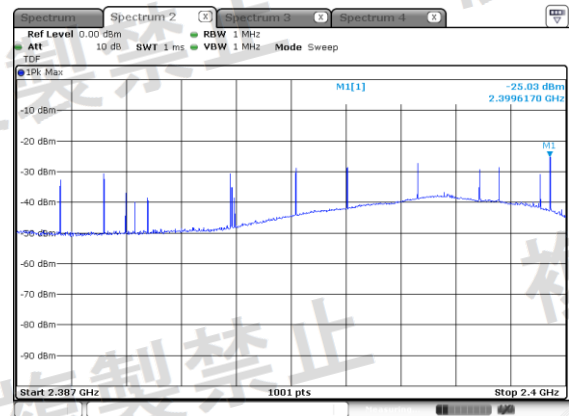
7.3 Unwanted(Spurious) emission strength (+10% voltage)

Ch.1: 2412MHz

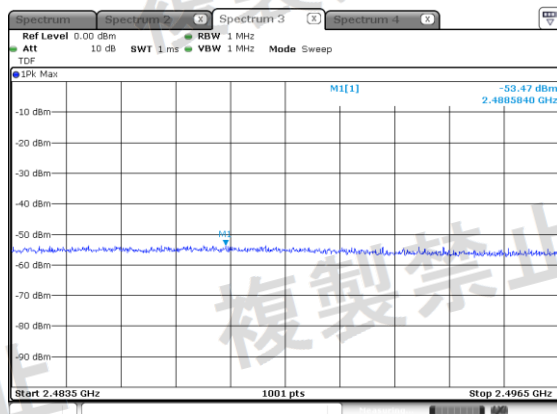
30-2387MHz



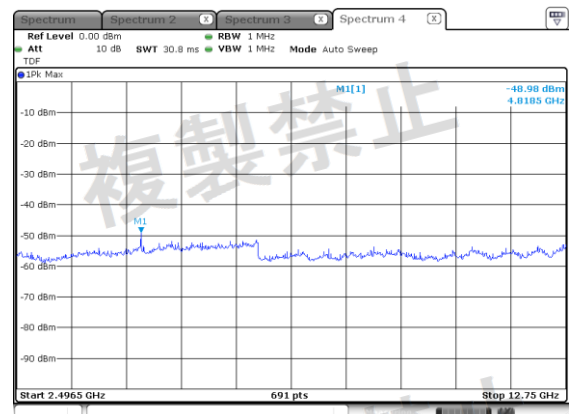
2387-2400MHz



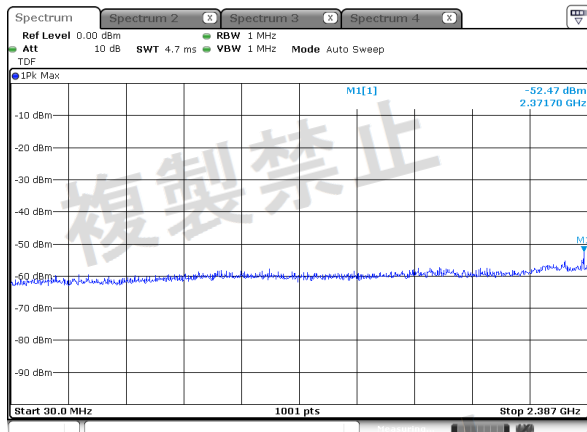
2483.5-2496.5MHz



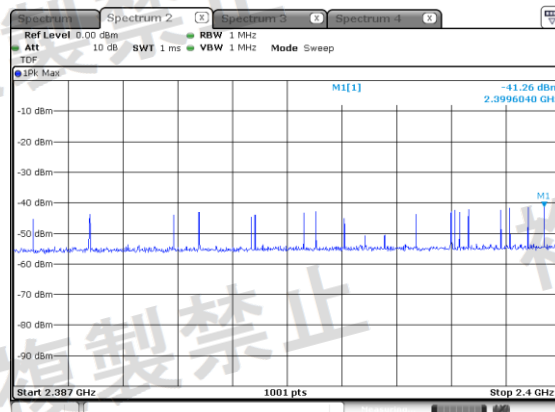
2496.5-12750MHz



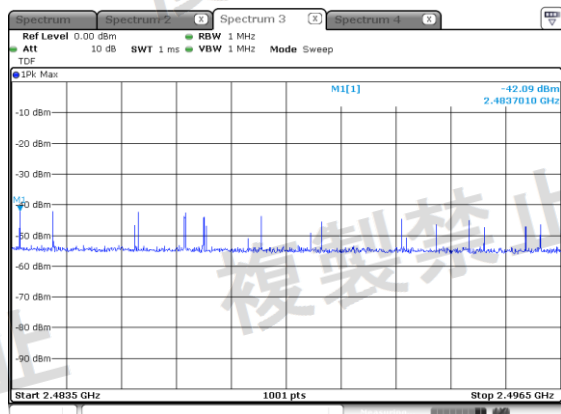
Ch.7: 2442MHz
30-2387MHz



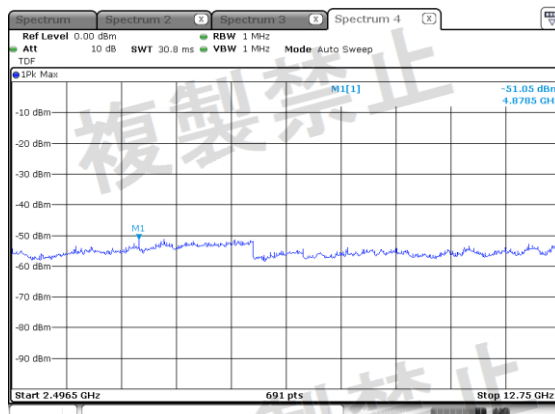
2387-2400MHz



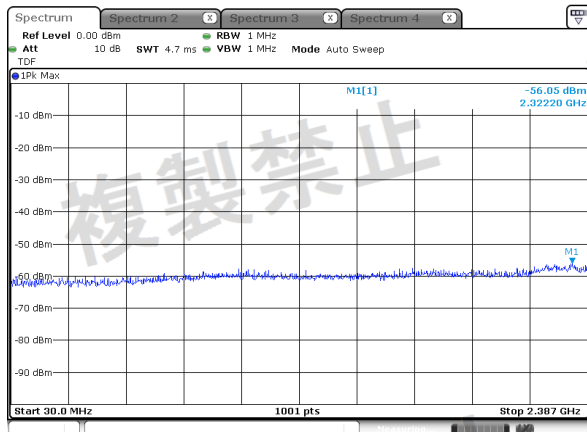
2483.5-2496.5MHz



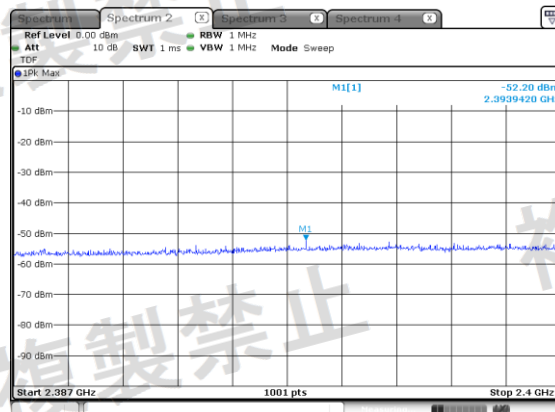
2496.5-12750MHz



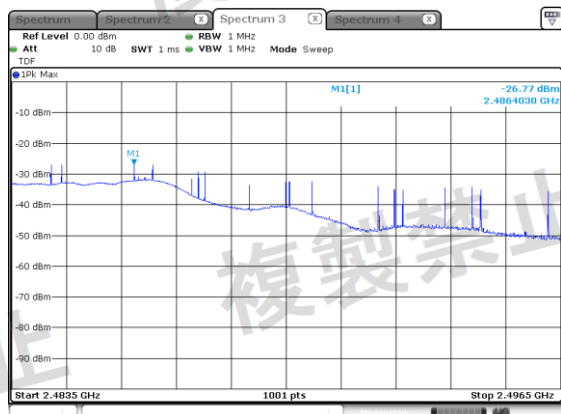
Ch.13: 2472MHz
30-2387MHz



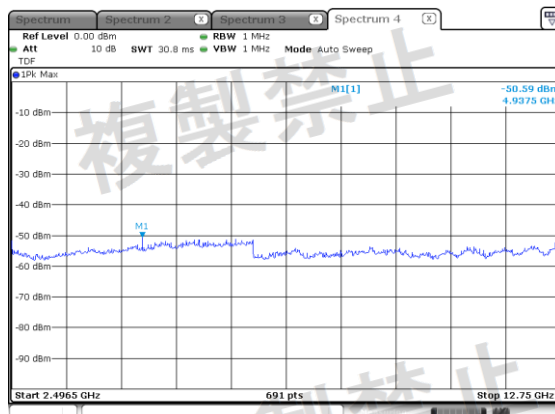
2387-2400MHz



2483.5-2496.5MHz



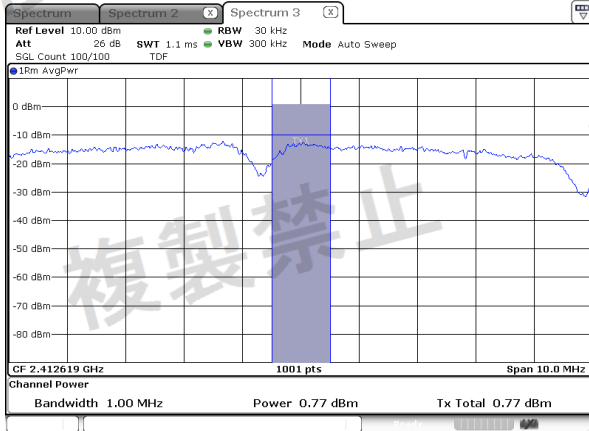
2496.5-12750MHz



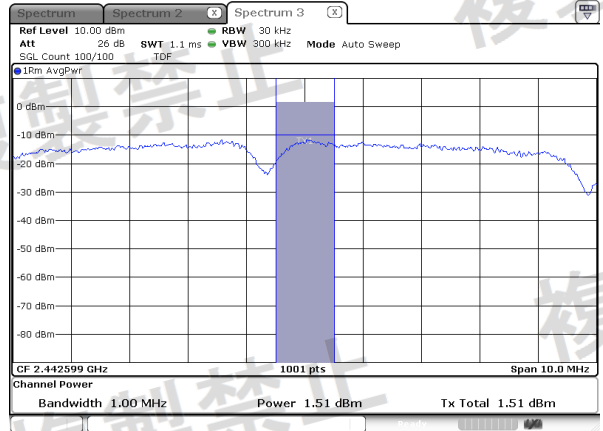
7. Test chart

7.4 RF output power tolerance (Rated voltage)

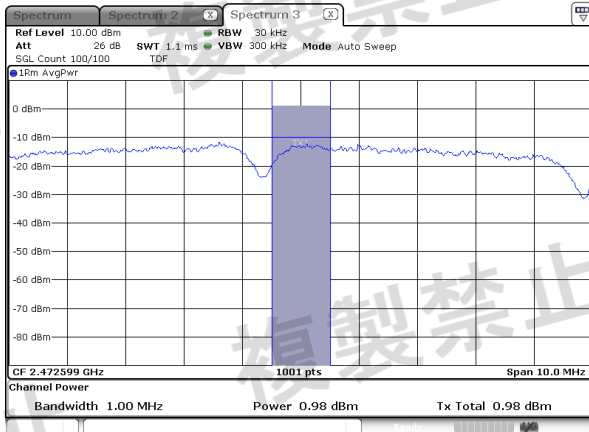
Ch.1: 2412MHz



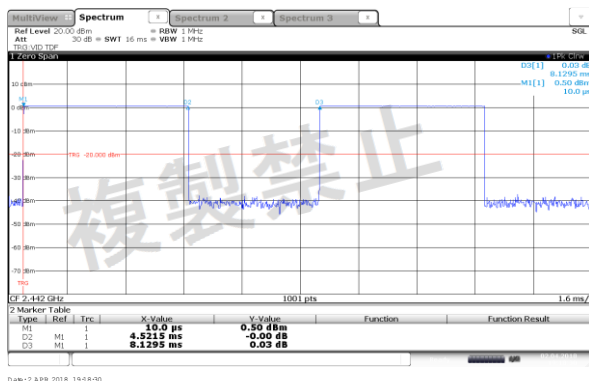
Ch.7: 2442MHz



Ch.13: 2472MHz



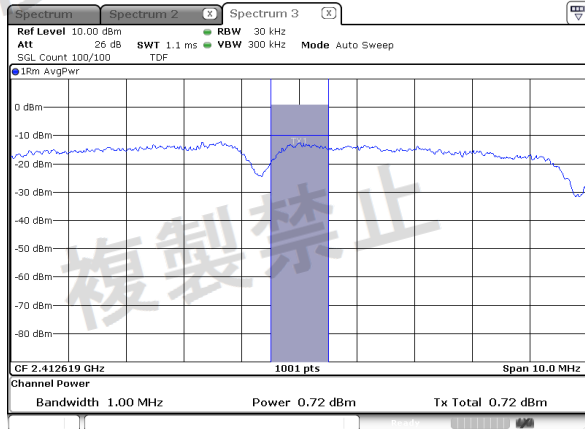
11b 1-13ch
ON/OFF time



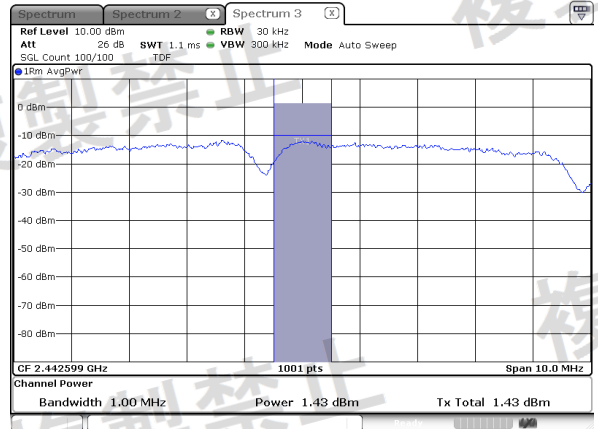
7. Test chart

7.4 RF output power tolerance (-10% voltage)

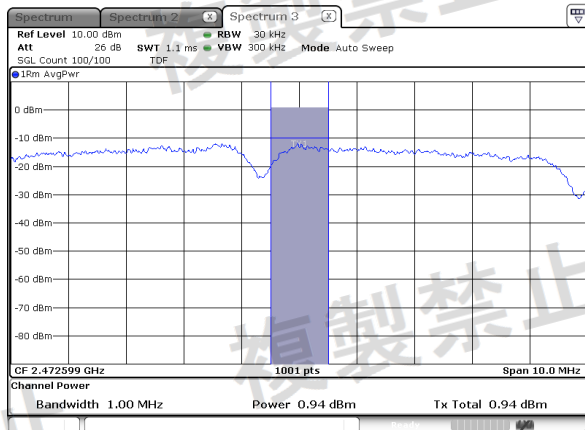
Ch.1: 2412MHz



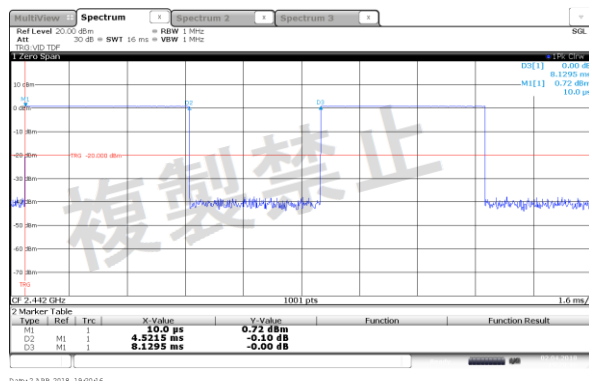
Ch.7: 2442MHz



Ch.13: 2472MHz



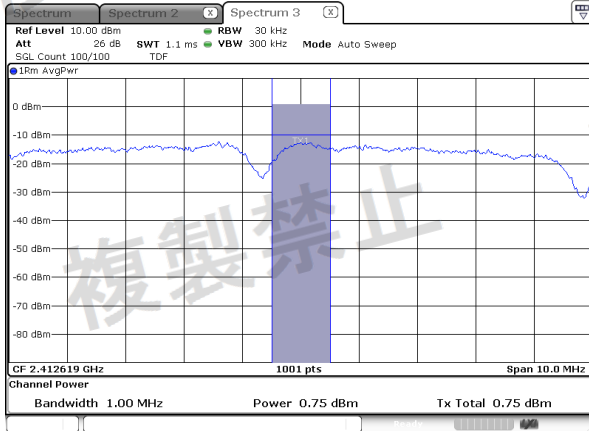
11b 1-13ch
ON/OFF time



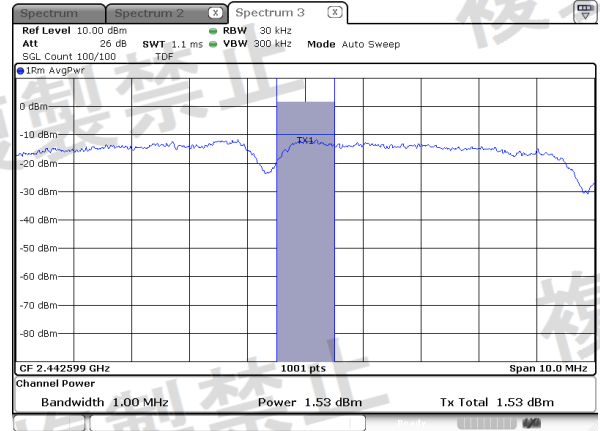
7. Test chart

7.4 RF output power tolerance (+10% voltage)

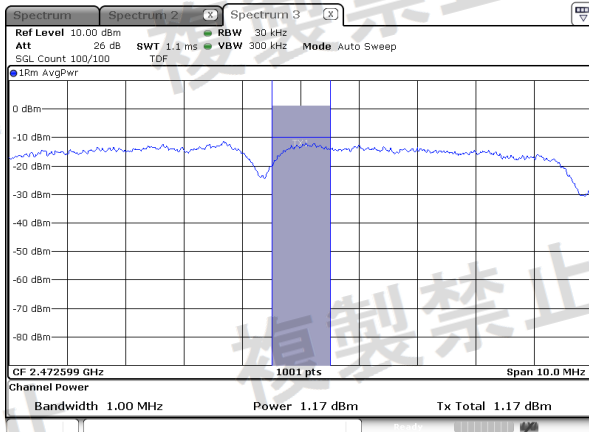
Ch.1: 2412MHz



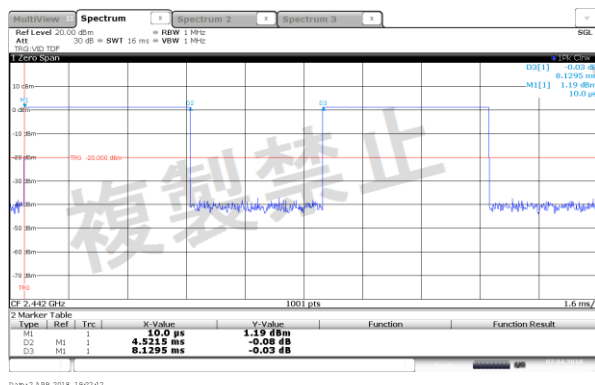
Ch.7: 2442MHz



Ch.13: 2472MHz



11b 1-13ch
ON/OFF time

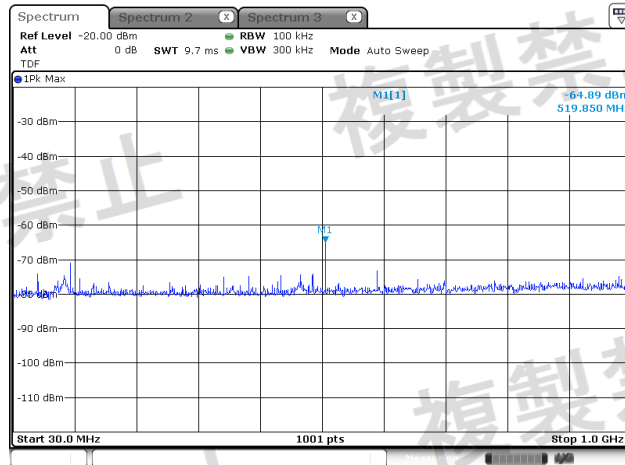


7. Test chart

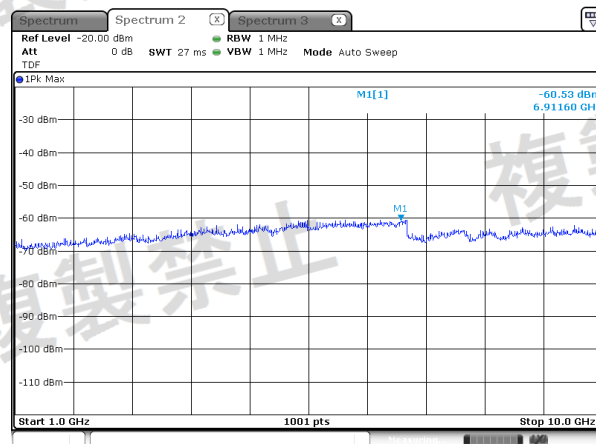
7.5 Secondary emitted radio wave strength (Rated voltage)

Ch.1: 2412MHz

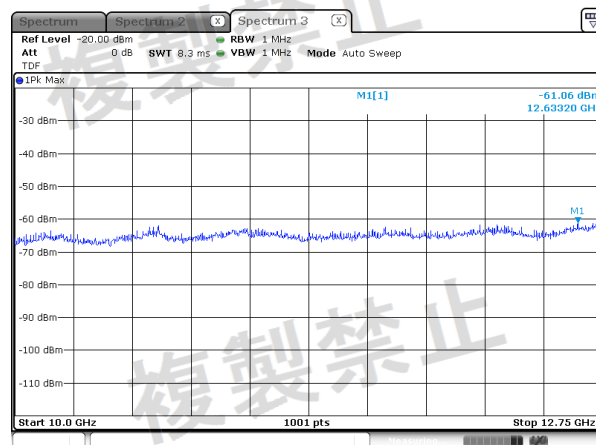
30MHz-1GHz



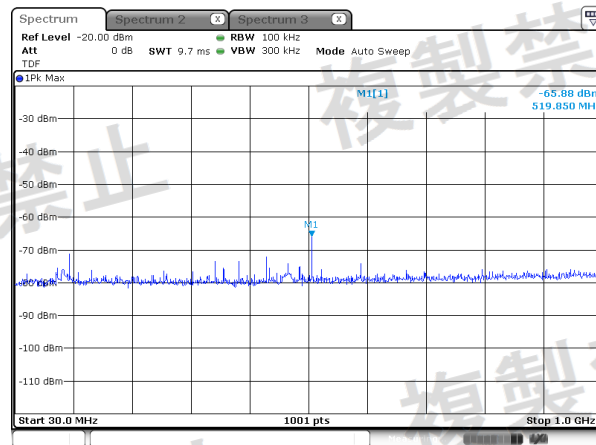
1-10GHz



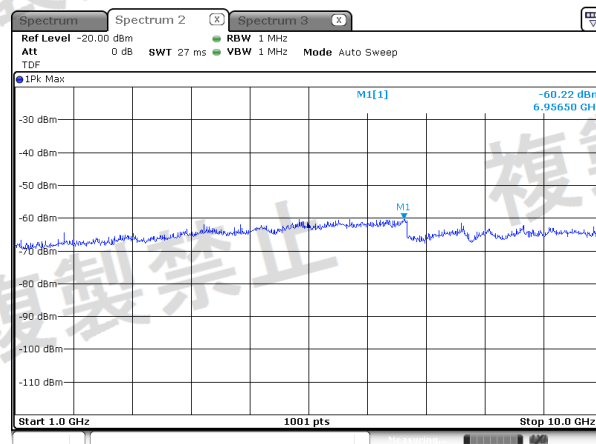
10-12.75GHz



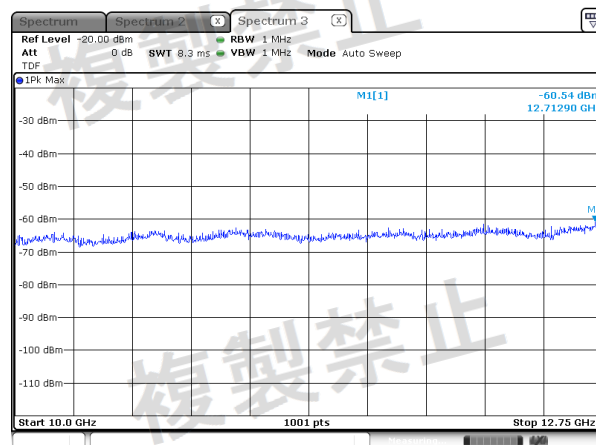
Ch.7: 2442MHz
30MHz-1GHz



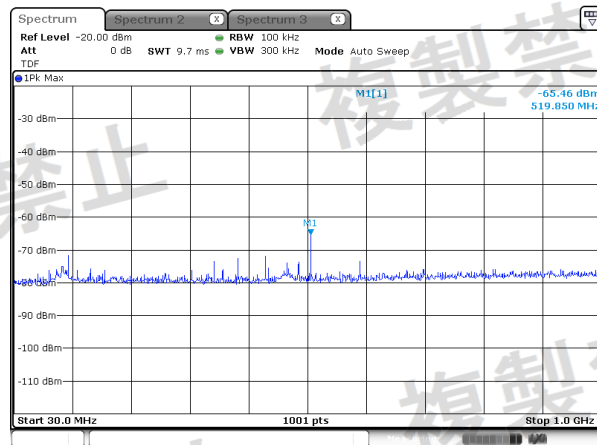
1-10GHz



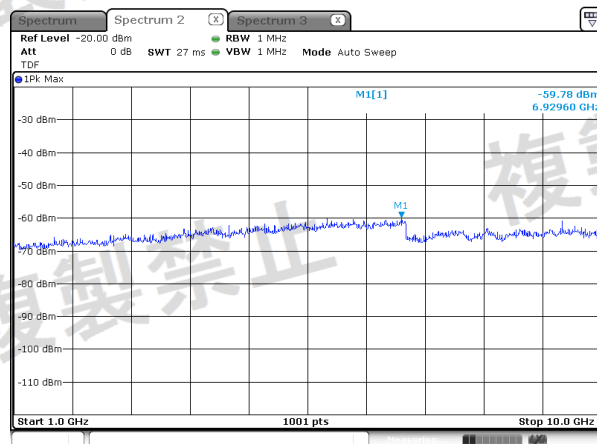
10-12.75GHz



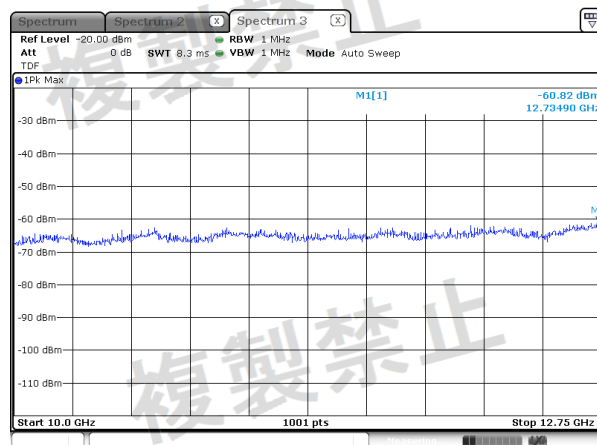
Ch.13: 2472MHz
30MHz-1GHz



1-10GHz



10-12.75GHz

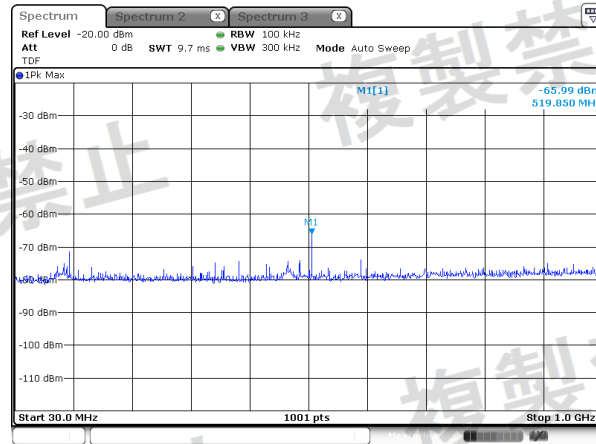


7. Test chart

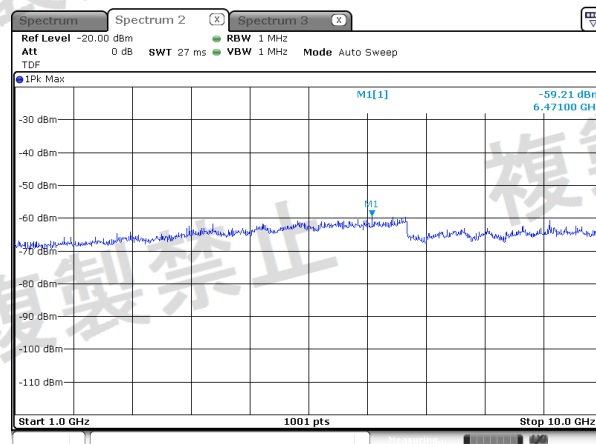
7.5 Secondary emitted radio wave strength (-10% voltage)

Ch.1: 2412MHz

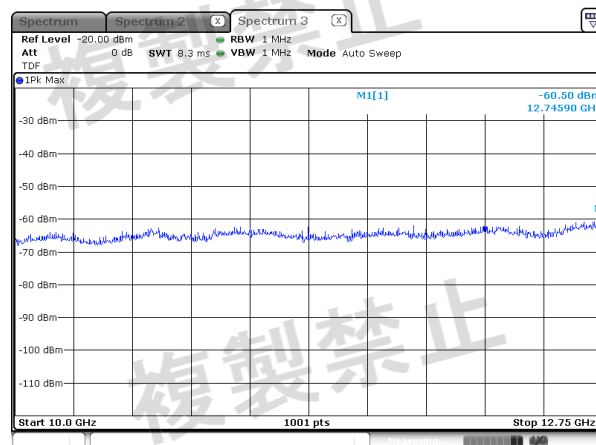
30MHz-1GHz



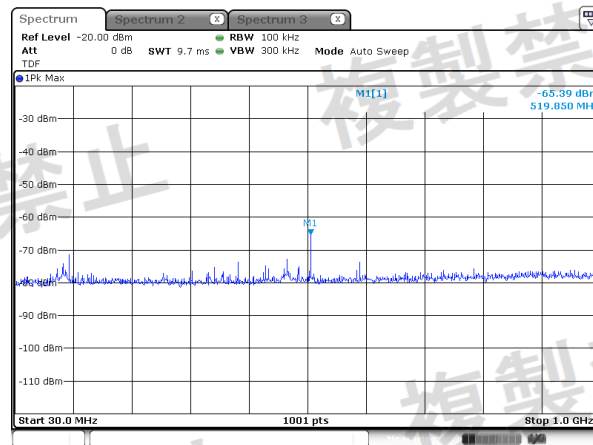
1-10GHz



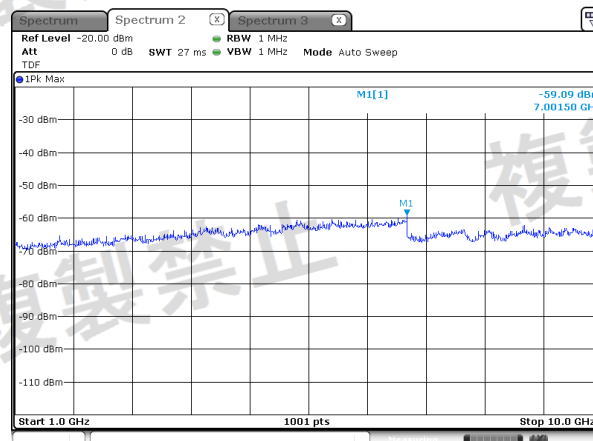
10-12.75GHz



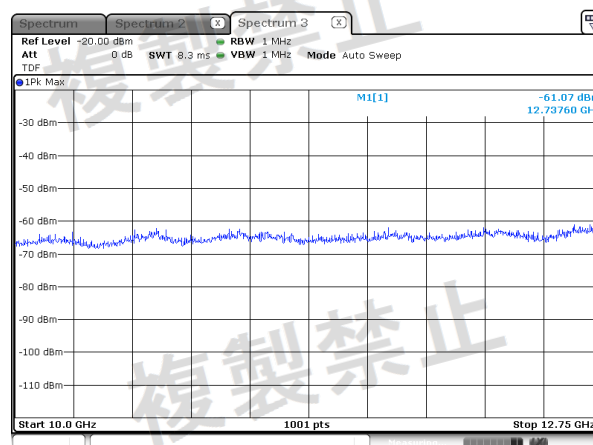
Ch.7: 2442MHz
30MHz-1GHz



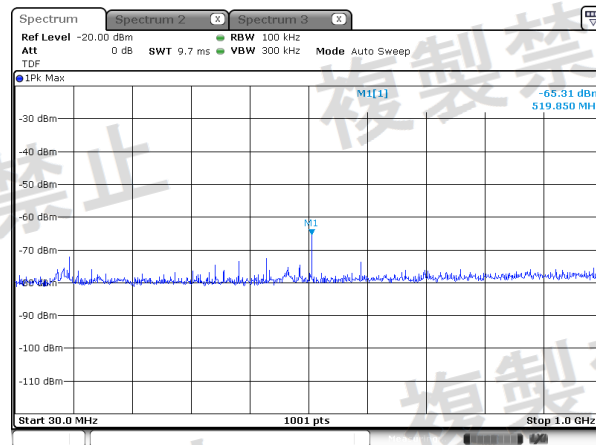
1-10GHz



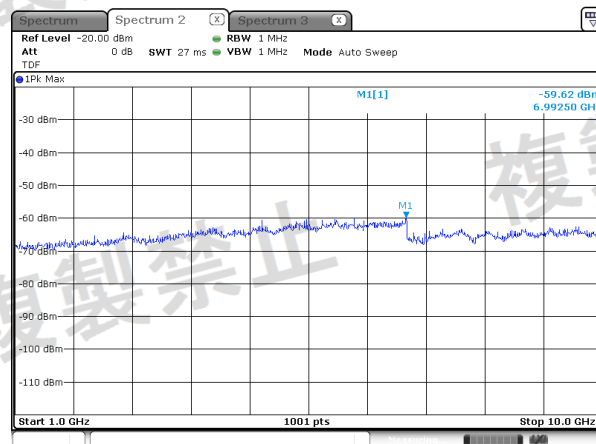
10-12.75GHz



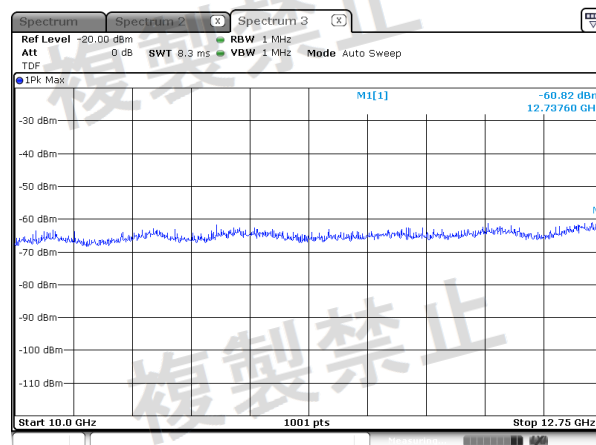
Ch.13: 2472MHz
30MHz-1GHz



1-10GHz



10-12.75GHz

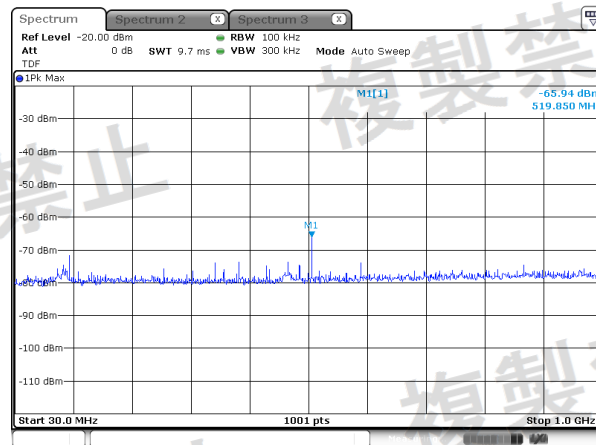


7. Test chart

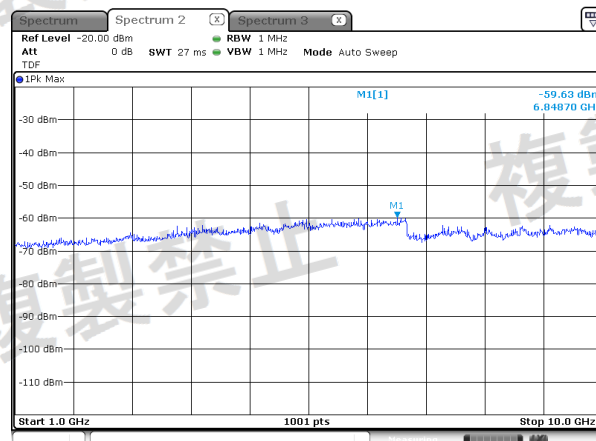
7.5 Secondary emitted radio wave strength (+10% voltage)

Ch.1: 2412MHz

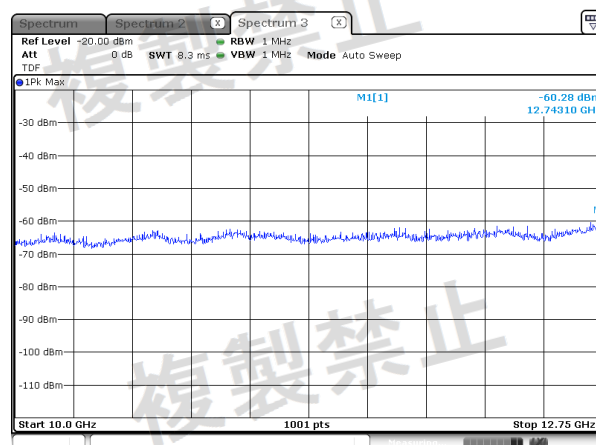
30MHz-1GHz



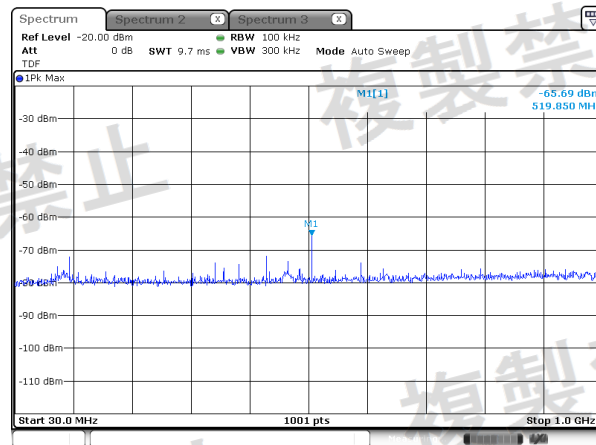
1-10GHz



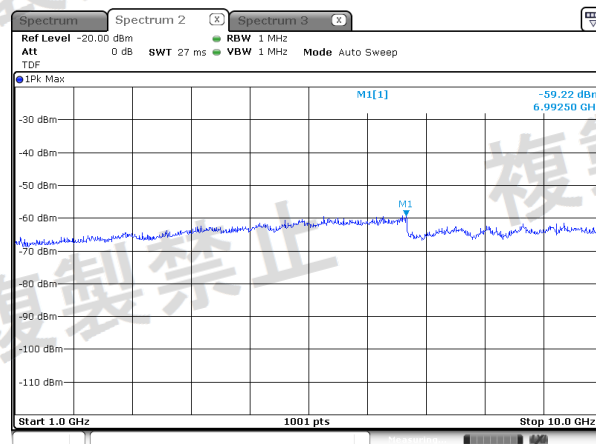
10-12.75GHz



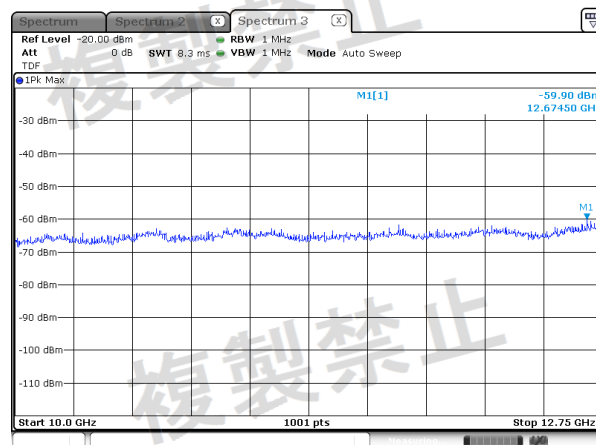
Ch.7: 2442MHz
30MHz-1GHz



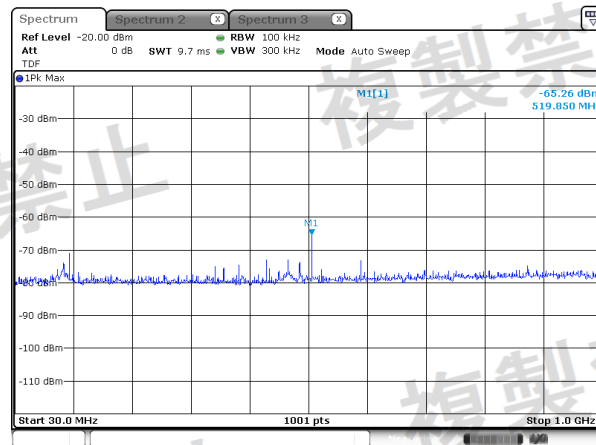
1-10GHz



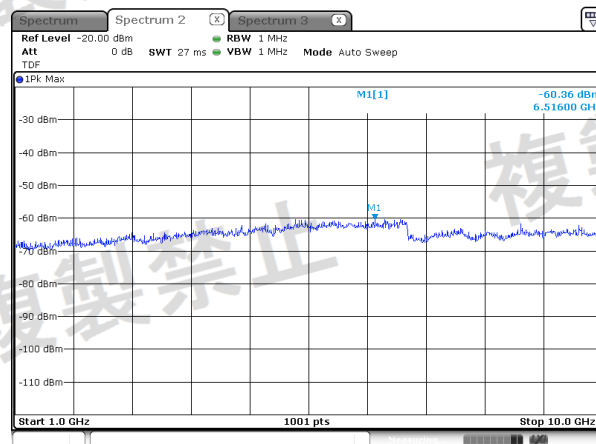
10-12.75GHz



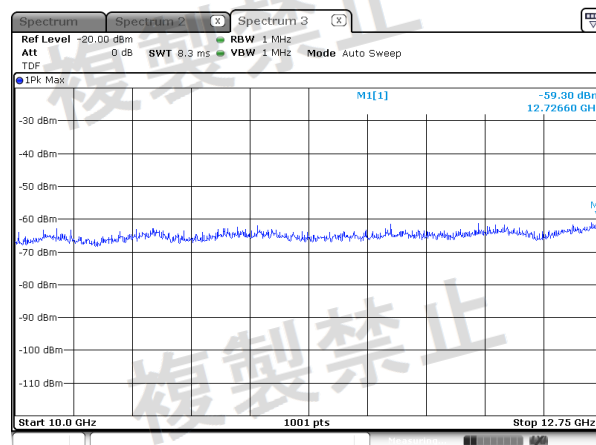
Ch.13: 2472MHz
30MHz-1GHz



1-10GHz



10-12.75GHz



8. Laboratory description

1. Location

Name: KCTL Inc.

65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea

Telephone Number: +82 31 285 0894

Facsimile Number: +82 505 299 8311

2. Accreditation and Registration

1) FCC

Site Designation No.: KR0040

Site Registration No.: 687132

2) VCCI

Registration No.: R-3327, G-198, C-3706, T-1849

3) Industry Canada

Registration No.: 8035A

Test Site	OATS 3m	OATS 10m	OATS 30m	Chamber 3m	Chamber 10m	Expiry Date
8035A-2	No	No	No	Yes	Yes	2018-07-10

4) KOLAS

Registration number	Expiration date
KT231	2020-09-13