

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: Certification Ordinance Article 2-1-19
Report No.: RJBDKG-WTW-P21030648C
Product: 2.4GHz Transceiver
Brand: logicool G, G
Model No.: C-U0008
Received Date: 2023/11/15
Test Date: 2023/11/21
Issued Date: 2024/2/1
Applicant: LOGITECH FAR EAST LTD.
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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Hsin Chu Laboratory
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Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan

Approved by: _____, **Date:** 2024/2/1
May Chen / Manager

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Prepared by : Vito Lung / Specialist



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Release Control Record

Issue No.	Description	Date Issued
RJBDBG-WTW-P21030648C	Original release.	2024/2/1

1 Certificate

Product: 2.4GHz Transceiver
Brand: logicool G, G
Test Model: C-U0008
Sample Status: Engineering sample
Applicant: LOGITECH FAR EAST LTD.
Test Date: 2023/11/21
Standard: Certification Ordinance Article 2-1-19
Measurement procedure: MIC notice 88 Appendix 43

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

2 Summary of Test Results

Certification Ordinance Article 2-1-19		
Clause	Test Item	Result
OR: Article 5 OR: Annex 1 table 7-8	Frequency Tolerance	Pass
OR: Article 6 Annex 2.30	Occupied Bandwidth	Pass
OR: Article 7. Annex 3.26	Spurious Emissions	Pass
OR: Article 49-20	Antenna Specifications	Pass
OR: Article 24.2	Spurious Emissions of Receiver	Pass
OR: Article 49-20	Housing Requirements	Pass (Refer to Note 1)
OR: Article 49-20	Antenna Power	Pass
OR: Article 49-20	Absolute Gain of Transmitting Antenna	Pass
OR: Article 49-20	Angular Width of Principal Radiation (AWPR)	N/A
OR: Article 49-20	Number of Carriers within 1 MHz Bandwidth in OFDM	N/A
OR: Article 49-20	Dwell Time (FH employed)	N/A
OR: Article 9-4.5 RE: Article 6-2.3 RE: Article 6-2.5	Interference Prevention Function	Pass
OR: Article 49-20	Carrier Sense Capability	N/A

Notes:

1. The relative information refer section 3.1 of this report.
2. OR: Ordinance Regulating Radio Equipment
3. RE: Regulations for Enforcement of the radio law
4. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in ETSI TR 100 028-1 and ETSI TR 100 028-2:

Parameter	Uncertainty (±)
Occupied Bandwidth	1050.00 Hz
Spurious Emissions	2.5 dB
Output Power Density	1.2 dB
Out of Band Radiated Power	2.5 dB
Frequency Tolerance	960 Hz

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

3 General Information

3.1 General Description

Product	2.4GHz Transceiver
Brand	logicool G, G
Test Model	C-U0008
Test Software Version	BT/BLE:RF Sample with Receiver [Number Lock]
Status of EUT	Engineering sample
Power Supply Rating	5 Vdc form host equipment
Modulation Type	GFSK
Modulation Technology	DTS
Transfer Rate	2 Mbps
Operating Frequency	2.403 GHz ~ 2.479 GHz
Number of Channel	77
Assembly	The EUT is constructed as a 2.4GHz Transceiver. The housing consists of two parts, and the plastic enclosure was assembled with glue and covered by rubbers, separating the two parts was only possible by means of brute force.
Accessory	USB extender cable x1 (shielded, 1.6m) USB-A to USB-C Cable x1 (shielded, 1.85m, with 1 core) Extender x1

Note:

1. The EUT may have a lot of colors for marketing requirement.
2. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 Output Power Description of EUT

Operation Mode	Rated Output Power (mW)	Conducted RF Output Power (mW)	Radiated RF Output Power (mW)
GFSK	2	1.153	5.222

3.3 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna Gain (dBi)	Frequency range (GHz)	Antenna Type	Connector Type
6.56	2.4~2.4835	PIFA	None

* Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.

2. Antenna Pattern:

Please refer to the attached file (Antenna pattern).

3.4 Channel List

77 channels are provided to this EUT: (LIGHTSPEED)

Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460		
19	2421	39	2441	59	2461		
20	2422	40	2442	60	2462		

3.5 Power Setting

Channel	Power Setting
1	default
40	default
77	default

Test Item	Operation Description
Frequency Tolerance	LS2 TX Unmodulated 2403MHz LS2 TX Unmodulated 2442MHz LS2 TX Unmodulated 2479MHz
Occupied Bandwidth	LS2 TX Modulated 2403MHz LS2 TX Modulated 2442MHz LS2 TX Modulated 2479MHz
Spurious Emissions	
Antenna Power	
Spurious Emissions of Receiver	LS2 RX 2403MHz LS2 RX 2442MHz LS2 RX 2479MHz
Interference Prevention Function	Normal mode

3.6 Test Mode Applicability and Tested Channel Detail

Test Conditions	Voltage (Vdc)
V_{normal}	5
$V_{max. (+10\%)}$	5.5
$V_{min. (-10\%)}$	4.5

Pre-Scan:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
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Following channel(s) was (were) selected for the final test as listed below:

Test Item	Tested Channel	Modulation	Data Rate Parameter
Frequency Tolerance	1, 40, 77	GFSK	2Mb/s
Occupied Bandwidth	1, 40, 77	GFSK	2Mb/s
Spurious Emissions	1, 40, 77	GFSK	2Mb/s
Spurious Emissions of Receiver	1, 40, 77	-	-
Antenna Power	1, 40, 77	GFSK	2Mb/s
Interference Prevention Function	Operation in Normal mode		

4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.1 Frequency Tolerance

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until	Calibration Authority	Calibration Method
DC Power Supply GOOD WILL INSTRUMENT CO. LTD	GPC-3030D	E847076	Note 2	Note 2	BV CPS E&E	(d)
MXA Signal Analyzer Keysight	N9020B	MY60112409	2023/2/18	2024/2/17	ETC	(c)
Software	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A	N/A	N/A
True RMS Clamp Meter FLUKE	325	31130711WS	2023/6/8	2024/6/7	ETC	(c)

Notes:

- Calibration method:
 - Calibration conducted by the National Institute of Information and Communications Technology (NICT) or a designated calibration agency under Article 102-18 paragraph (1).
 - Calibration conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992) Japan Calibration Service System.
 - 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).
 - Calibration conducted by using other equipment that listed above from a) to c).
- The power supply no evaluation calibrated, which used the RMS clamp meter to verify before each testing.
- The test was performed in Oven room 2.
- Tested Date: 2023/11/21

4.2 Occupied Bandwidth

Refer to section 4.1 to get information of the instruments.

4.3 Spurious Emissions

Refer to section 4.1 to get information of the instruments.

4.4 Spurious Emissions of Receiver

Refer to section 4.1 to get information of the instruments.

4.5 Antenna Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until	Calibration Authority	Calibration Method
DC Power Supply GOOD WILL INSTRUMENT CO. LTD	GPC-3030D	E847076	Note 2	Note 2	BV CPS E&E	(d)
Power Meter Anritsu	ML2495A	1529002	2023/6/17	2024/6/16	ETC	(c)
Pulse Power Sensor Anritsu	MA2411B	1726434	2023/6/19	2024/6/18	ETC	(c)
True RMS Clamp Meter FLUKE	325	31130711WS	2023/6/8	2024/6/7	ETC	(c)

Notes:

- Calibration method:
 - Calibration conducted by the National Institute of Information and Communications Technology (NICT) or a designated calibration agency under Article 102-18 paragraph (1).
 - Calibration conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992) Japan Calibration Service System.
 - 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).
 - Calibration conducted by using other equipment that listed above from a) to c).
- The power supply no evaluation calibrated, which used the RMS clamp meter to verify before each testing.
- The test was performed in Oven room 2.
- Tested Date: 2023/11/21

4.6 Interference Prevention Function

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until	Calibration Authority	Calibration Method
Bluetooth Simulator Anritsu	MT8852B	1218002	2023/5/21	2024/5/20	ETC	(c)
DC Power Supply GOOD WILL INSTRUMENT CO. LTD	GPC-3030D	E847076	Note 2	Note 2	BV CPS E&E	(d)
Fixed Attenuator Woken	MDCS18N-10	MDCS18N-10-01	2023/3/27	2024/3/26	BV CPS E&E	(d)
True RMS Clamp Meter FLUKE	325	31130711WS	2023/6/8	2024/6/7	ETC	(c)

Notes:

- Calibration method:
 - Calibration conducted by the National Institute of Information and Communications Technology (NICT) or a designated calibration agency under Article 102-18 paragraph (1).
 - Calibration conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992) Japan Calibration Service System.
 - 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).
 - Calibration conducted by using other equipment that listed above from a) to c).
- The power supply no evaluation calibrated, which used the RMS clamp meter to verify before each testing.
- The test was performed in Oven room 2.
- Tested Date: 2023/11/21

5 Limits of Test Items

5.1 Frequency Tolerance

Tolerance of frequency shall be +/- 50ppm.

5.2 Occupied Bandwidth

Modulation Method	Limit	Remark
DSSS	<26 MHz	
OFDM	<26 MHz	Antenna power limitation is 10 mW/MHz
	26 – 40 MHz	Antenna power limitation is 5 mW/MHz
FHSS	<83.5 MHz	
Other Digital	<26 MHz	

5.3 Spurious Emissions

Frequencies	Limit
Operating frequency 2400 to 2483.5 MHz	
30.0 MHz to 1000.0 MHz	$\leq 0.25 \text{ uW/100 kHz}$
1000.0 MHz to 2387 MHz	$\leq 2.5 \text{ uW/MHz}$
2387.0 MHz to 2400.0 MHz	$\leq 25 \text{ uW/MHz}$
2483.5 MHz to 2496.5 MHz	$\leq 25 \text{ uW/MHz}$
2496.5 MHz to 12500.0 MHz	$\leq 2.5 \text{ uW/MHz}$

5.4 Spurious Emissions of Receiver

Frequencies	Limit
Below 1 GHz	$\leq 4 \text{ nW}$
Above 1 GHz	$\leq 20 \text{ nW}$

5.5 Antenna Power

Modulation System	Frequency Band Used	Antenna Power (Max.)	E.I.R.P. Limit (Note 3)
DSSS	2400 – 2483.5 MHz	10 mW/MHz	12.14 dBm/MHz ~ 22.14 dBm/MHz (16.368 mW/MHz ~ 163.68 mW/MHz)
OFDM (Note 1)	2400 – 2483.5 MHz	10 mW/MHz	12.14 dBm/MHz ~ 22.14 dBm/MHz (16.368 mW/MHz ~ 163.68 mW/MHz)
OFDM (Note 2)	2400 – 2483.5 MHz	5 mW/MHz	9.13 dBm/MHz ~ 19.13 dBm/MHz (8.184 mW/MHz ~ 81.84 mW/MHz)
FHSS	2400 – 2483.5 MHz	3 mW/MHz	6.91 dBm/MHz ~ 16.91 dBm/MHz (4.91 mW/MHz ~ 49.10 mW/MHz)
Other Digital	2400 – 2483.5 MHz	10 mW	12.14 dBm ~ 22.14 dBm (16.368 mW ~ 163.68 mW)

Notes:

- Occupied bandwidth is less than 26 MHz
- Occupied bandwidth is more than 26 MHz and less than 40 MHz
- E.I.R.P. limit is variable by the HPBA, the HPBA (half-power beam width) of the antenna shall be 360 / A degrees or less, where A = E.I.R.P. / (2.14 dBi + "Antenna Power (limit)").
- Tolerance of antenna power shall be +20% (upper value).

5. When an E.I.R.P. is less than 2.14 dBi + antenna power limit. The shortage can be compensated for by the antenna power. (Application to transmitting devices using "Other method" is Limited to "GFSK")

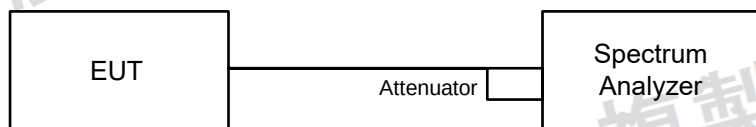
5.6 Interference Prevention Function

When conducting wireless communications that transmit data or other information: A function that automatically sends or receives an identification code.

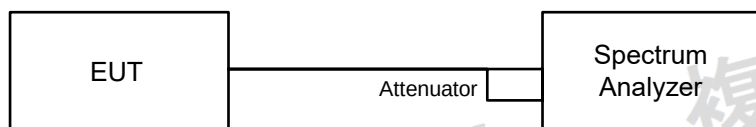
When performing radiolocation work: A function that allows you to distinguish between reflected waves of radio waves transmitted by your own station and radio waves transmitted by other radio stations by identifying the modulation method and other characteristics of received radio waves. (However, if it also has the function of transmitting signals for data transmission, both functions shall be included.)

6 Test Arrangements

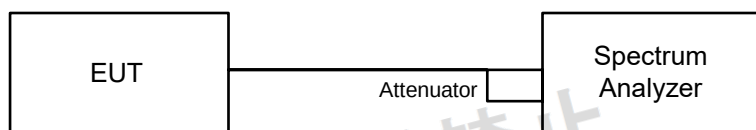
6.1 Frequency Tolerance



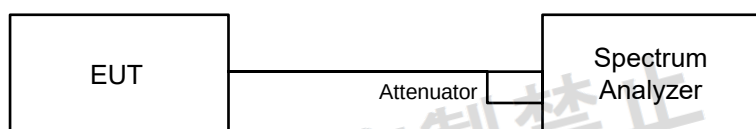
6.2 Occupied Bandwidth



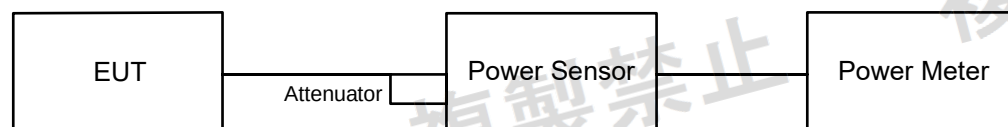
6.3 Spurious Emissions



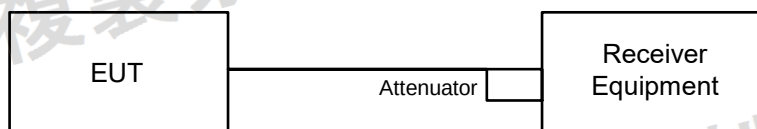
6.4 Spurious Emissions of Receiver



6.5 Antenna Power



6.6 Interference Prevention Function



7 Test Results of Test Item

7.1 Frequency Tolerance

Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng
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Channel	Frequency (MHz)	V_{normal}		$V_{max.}$		$V_{min.}$	
		Carrier frequency (MHz)	Frequency tolerance (ppm)	Carrier frequency (MHz)	Frequency tolerance (ppm)	Carrier frequency (MHz)	Frequency tolerance (ppm)
1	2403	2402.991160	-3.678	2402.991020	-3.736	2402.990680	-3.878
40	2442	2441.990260	-3.988	2441.990320	-3.963	2441.990120	-4.045
77	2479	2478.989900	-4.074	2478.989680	-4.162	2478.989980	-4.041

7.2 Occupied Bandwidth

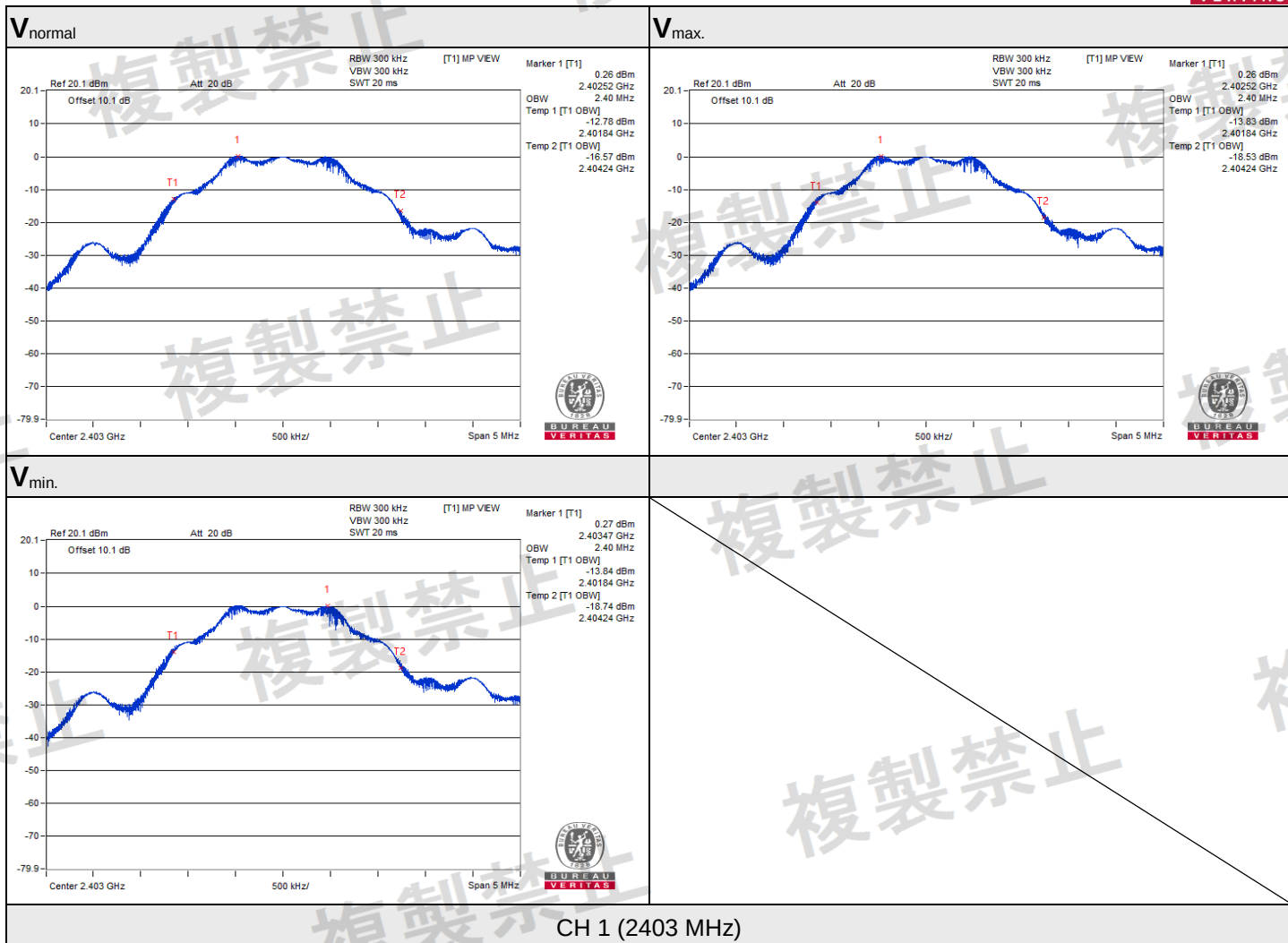
Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng
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Channel	Frequency (MHz)	V_{normal}	$V_{max.}$	$V_{min.}$
		Occupied Bandwidth (MHz)	Occupied Bandwidth (MHz)	Occupied Bandwidth (MHz)
1	2403	2.40	2.40	2.40
40	2442	2.31	2.31	2.31
77	2479	2.27	2.27	2.28

NOTE: For the test plots please refer to the below pages.

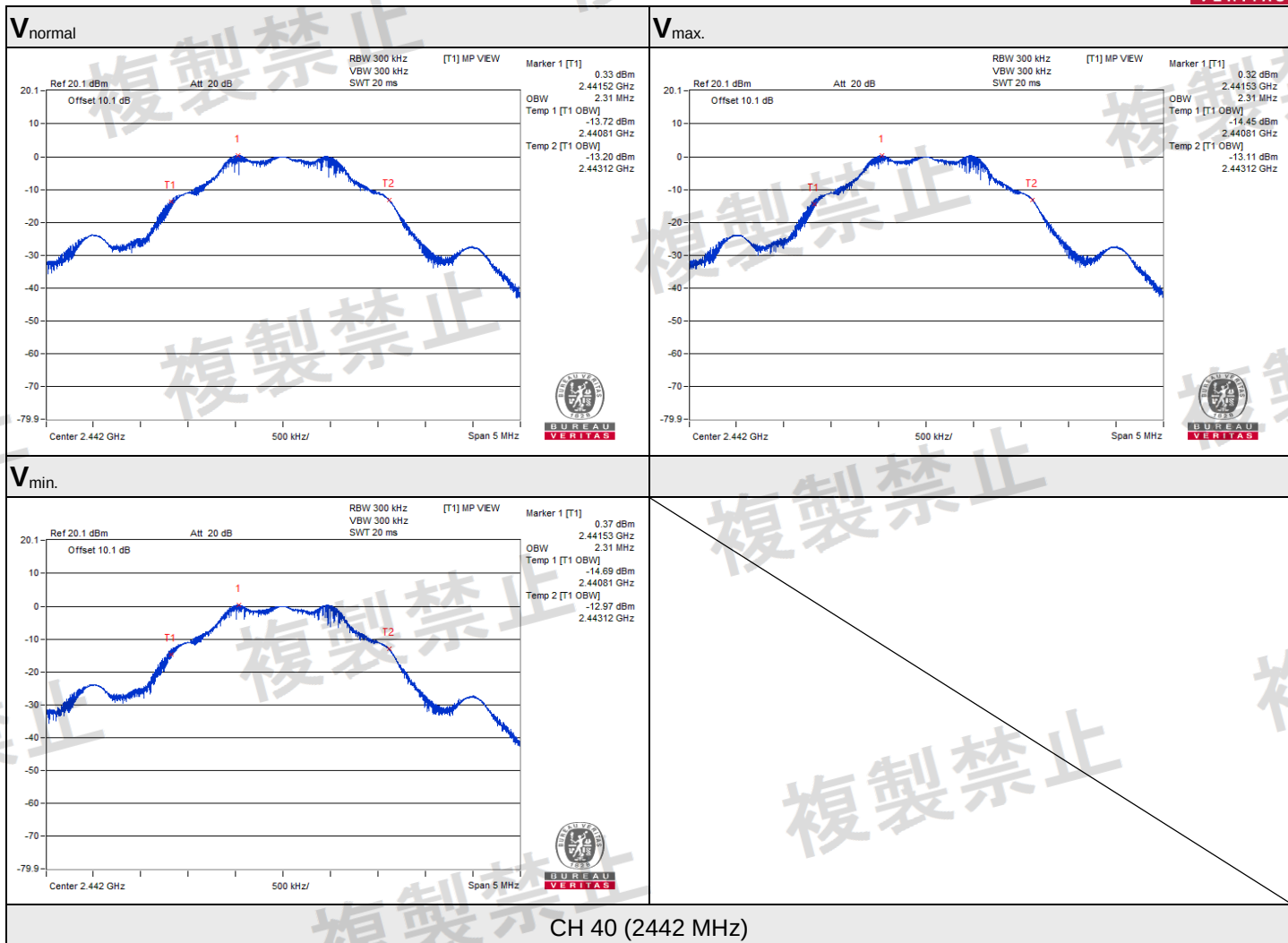


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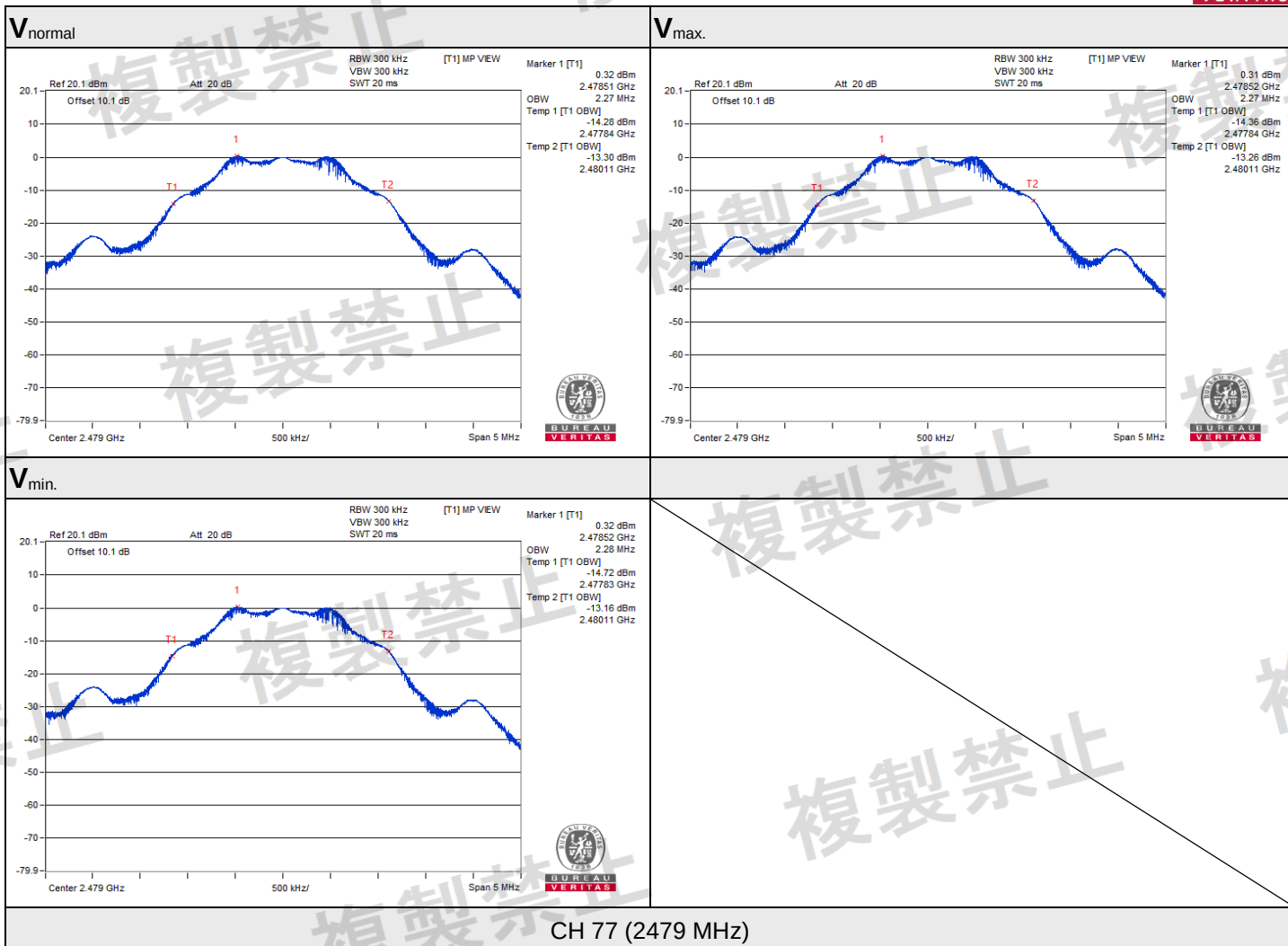


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7.3 Spurious Emissions

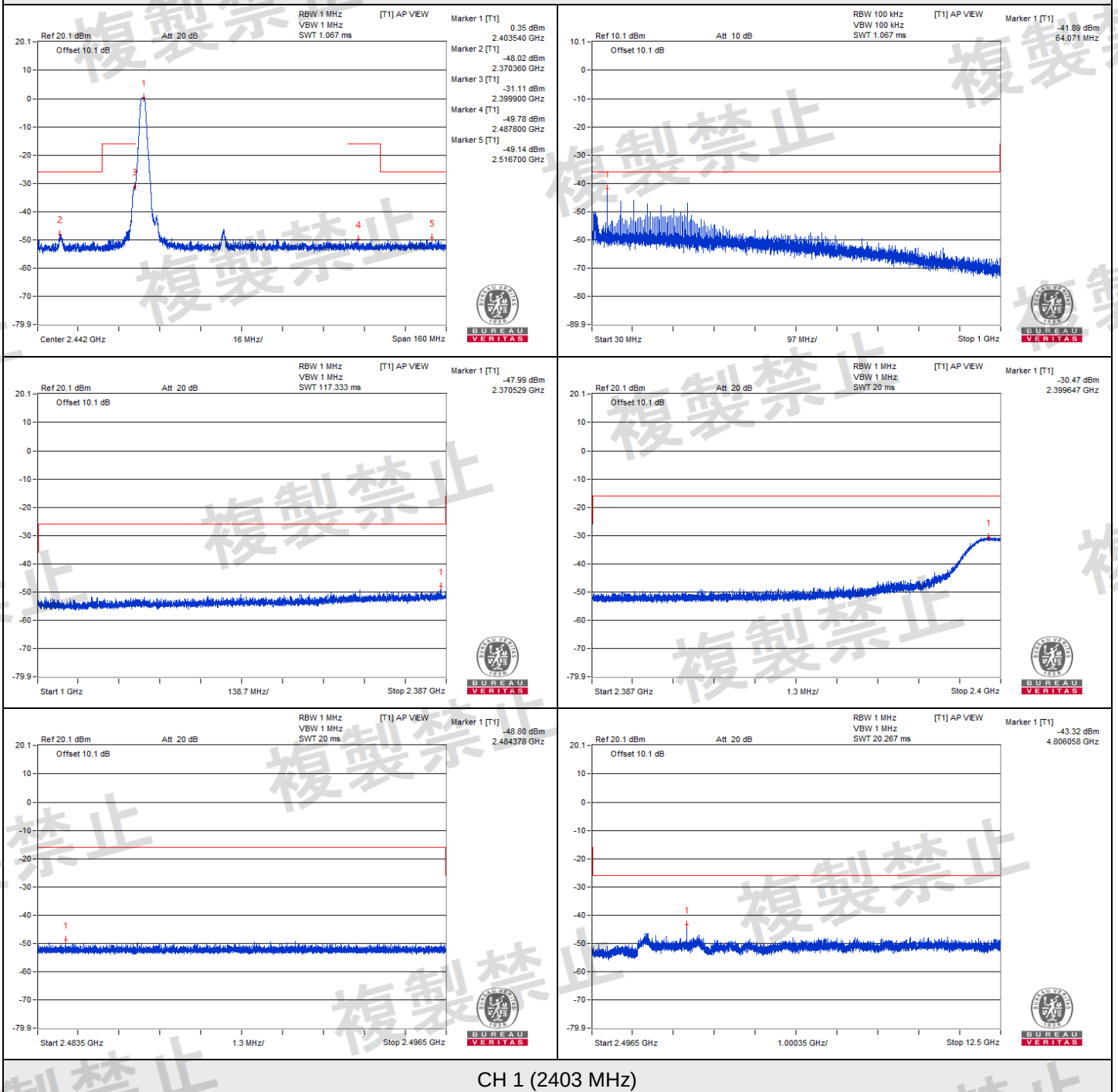
Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng
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TEST CHANNEL		CH 1 (2403 MHz)			
TEST CONDITION	FREQUENCY RANGE(MHz)	FREQUENCY (MHz)	MEASUREMENT VALUE	LIMIT	RESULT
V_{normal}	30.0 to 1000.0	64.071	0.064714 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2370.529	0.015885 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2399.647	0.897429 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2484.378	0.013183 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	4806.058	0.046559 uW/MHz	2.5 uW/MHz	PASS
V_{max.}	30.0 to 1000.0	64.071	0.037325 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2370.703	0.021086 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2399.675	0.851138 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2487.993	0.012078 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	4804.808	0.054954 uW/MHz	2.5 uW/MHz	PASS
V_{min.}	30.0 to 1000.0	63.950	0.04102 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2370.876	0.015453 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2399.911	0.857038 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2490.198	0.012677 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	4807.309	0.047206 uW/MHz	2.5 uW/MHz	PASS
TEST CHANNEL		CH 40 (2442 MHz)			
V_{normal}	30.0 to 1000.0	63.950	0.055719 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2363.421	0.011695 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2398.148	0.012023 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2486.744	0.012303 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	3746.937	0.024099 uW/MHz	2.5 uW/MHz	PASS
V_{max.}	30.0 to 1000.0	63.950	0.061518 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2344.523	0.013274 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2388.229	0.012912 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2486.513	0.011588 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	3759.442	0.021232 uW/MHz	2.5 uW/MHz	PASS
V_{min.}	30.0 to 1000.0	63.950	0.047643 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2354.926	0.012417 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2393.008	0.01194 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2486.212	0.012882 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	3799.456	0.023988 uW/MHz	2.5 uW/MHz	PASS

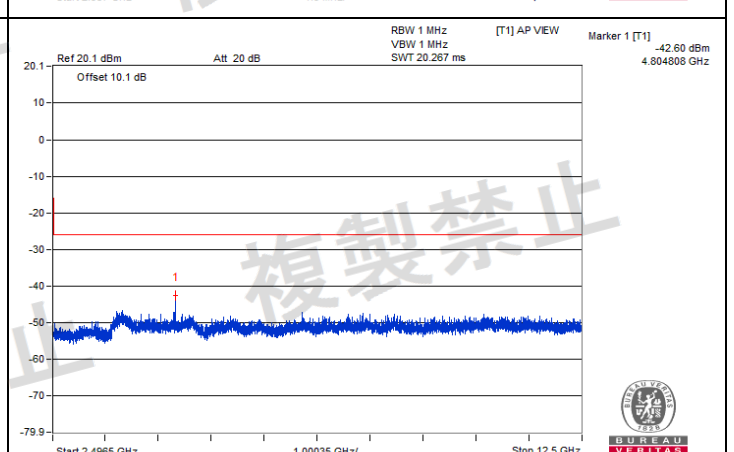
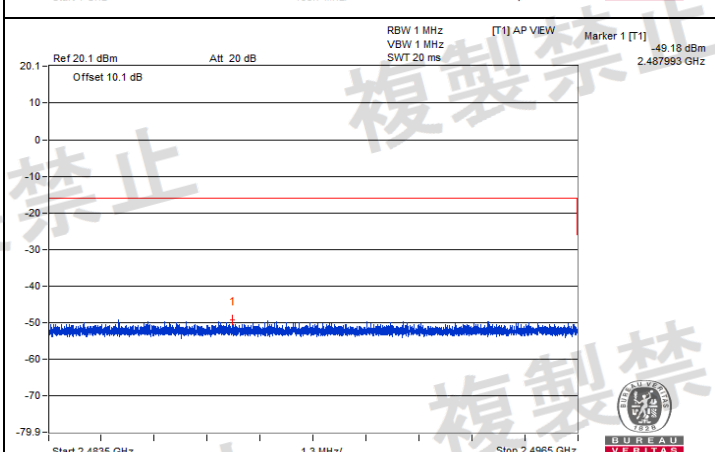
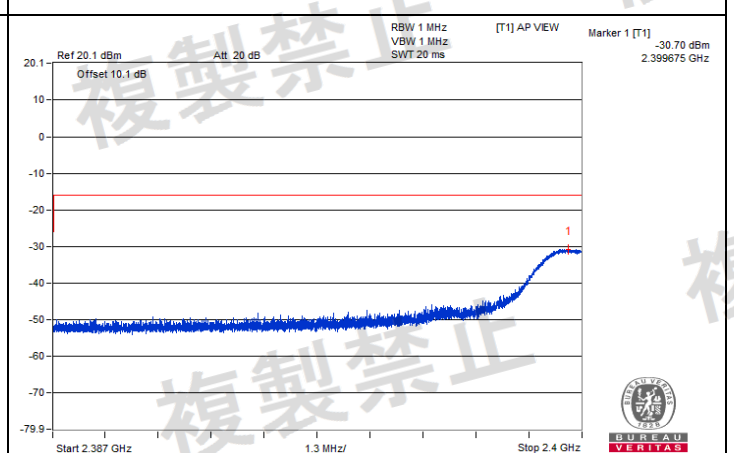
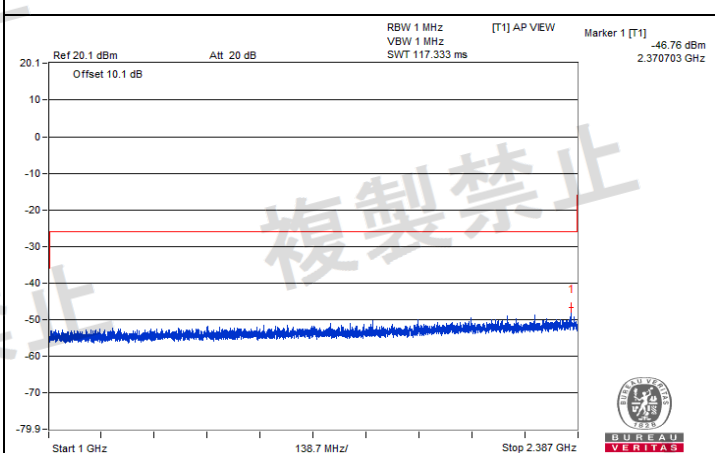
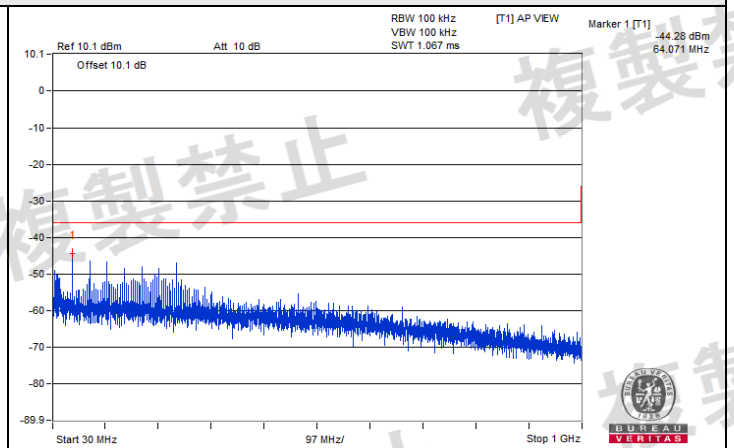
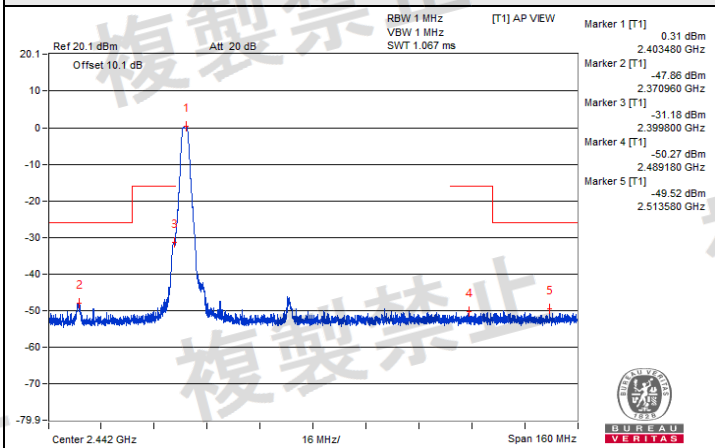
TEST CHANNEL		CH 77 (2479 MHz)			
TEST CONDITION	FREQUENCY RANGE(MHz)	FREQUENCY (MHz)	MEASUREMENT VALUE	LIMIT	RESULT
V_{normal}	30.0 to 1000.0	63.950	0.04529 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2353.539	0.011298 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2399.314	0.011324 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2483.552	0.029923 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	3759.442	0.02421 uW/MHz	2.5 uW/MHz	PASS
V_{max.}	30.0 to 1000.0	63.950	0.046559 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2369.836	0.011858 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2387.185	0.011092 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2483.528	0.032137 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	3784.451	0.022699 uW/MHz	2.5 uW/MHz	PASS
V_{min.}	30.0 to 1000.0	64.071	0.047534 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2265.464	0.011722 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2388.329	0.011194 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2483.544	0.04121 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	3865.729	0.022182 uW/MHz	2.5 uW/MHz	PASS

NOTE: 1. The spectrum plots are attached on the following pages.

Vnormal

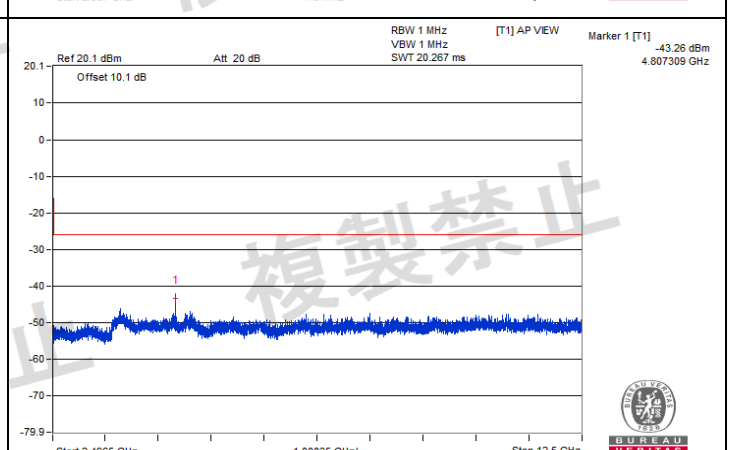
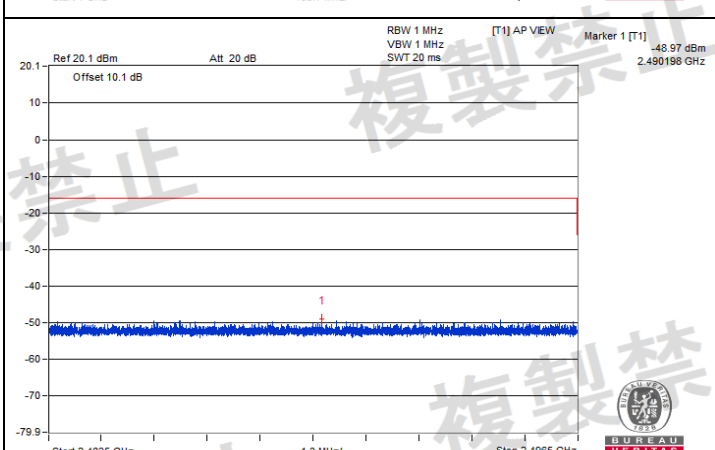
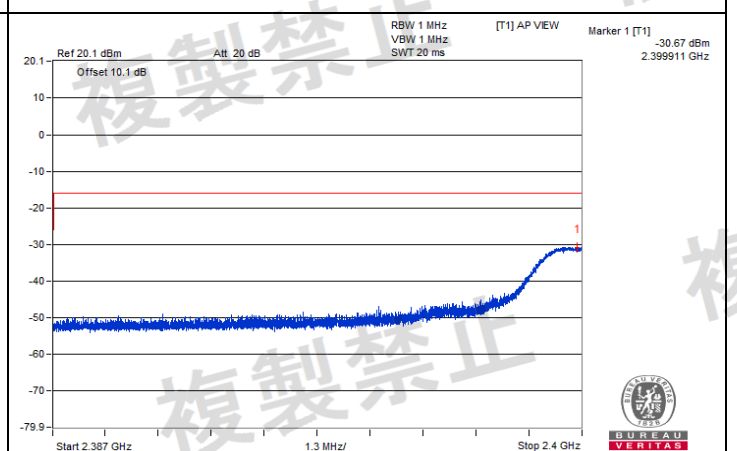
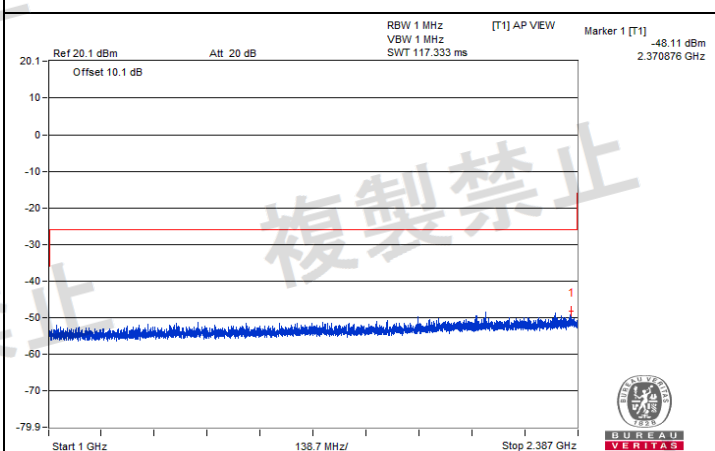
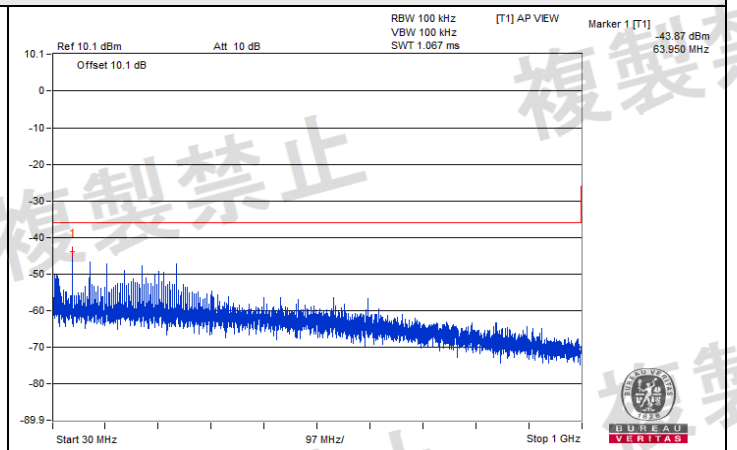
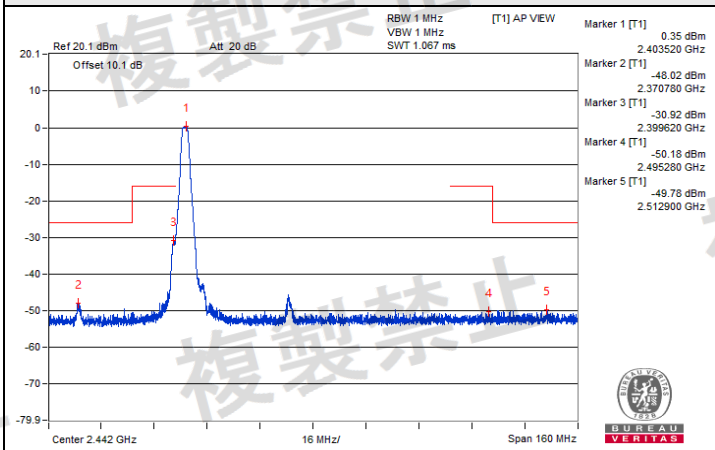


V_{max}.



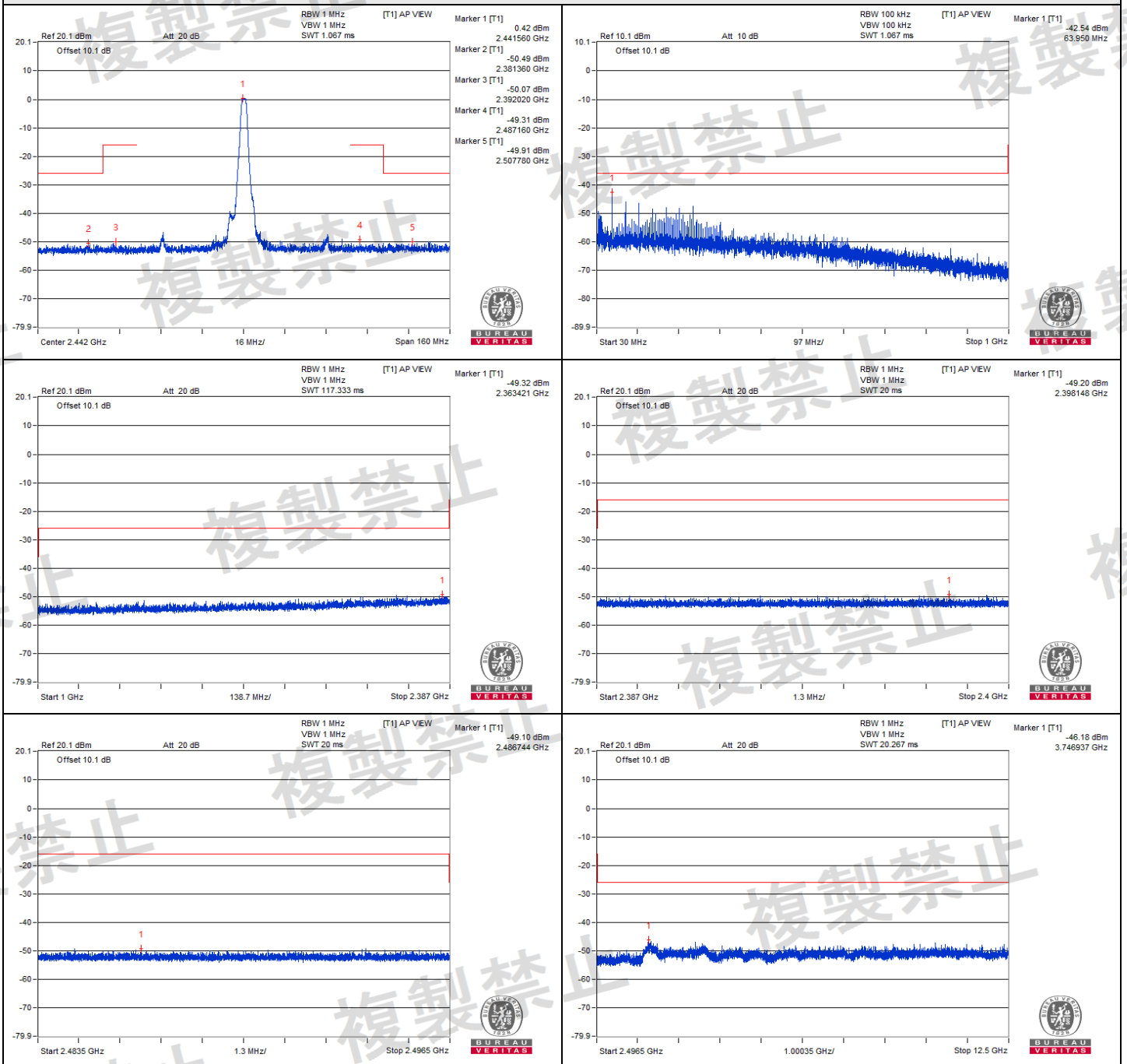
CH 1 (2403 MHz)

V_{min}.



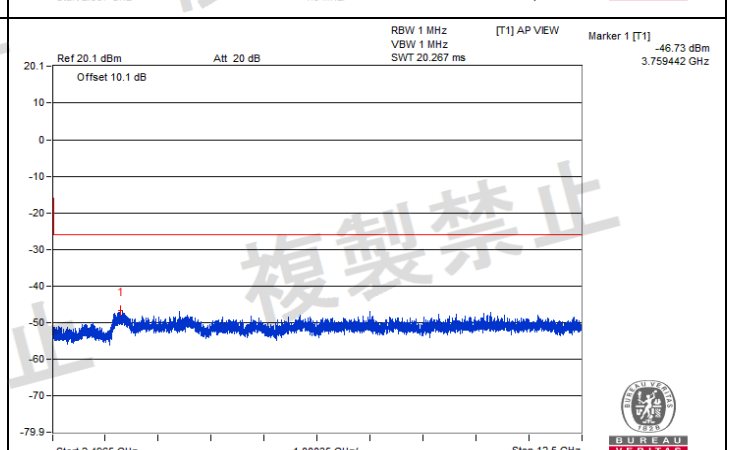
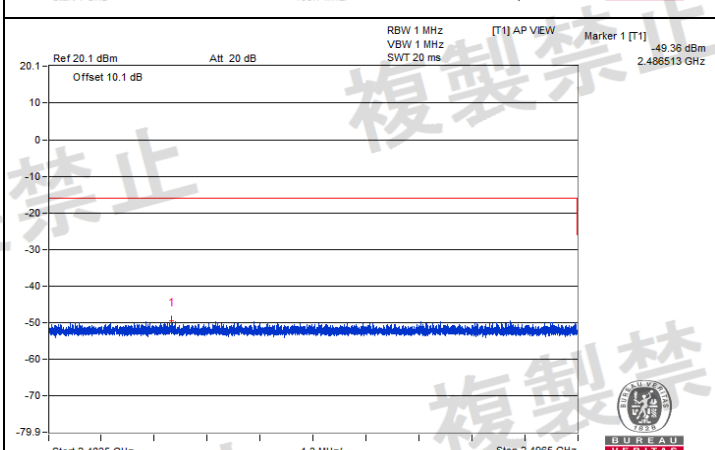
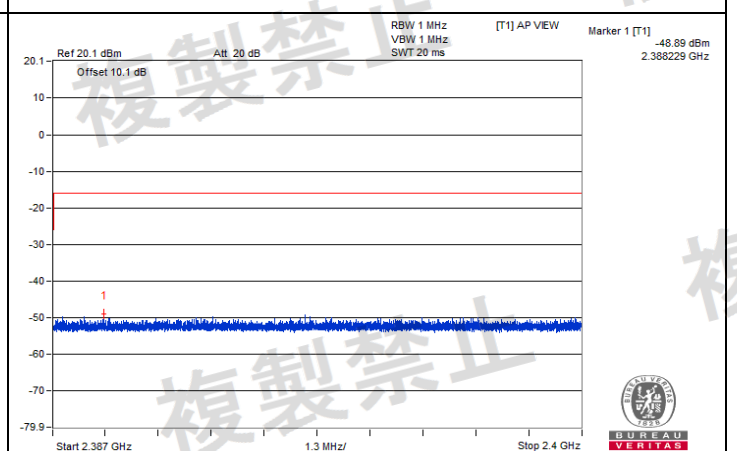
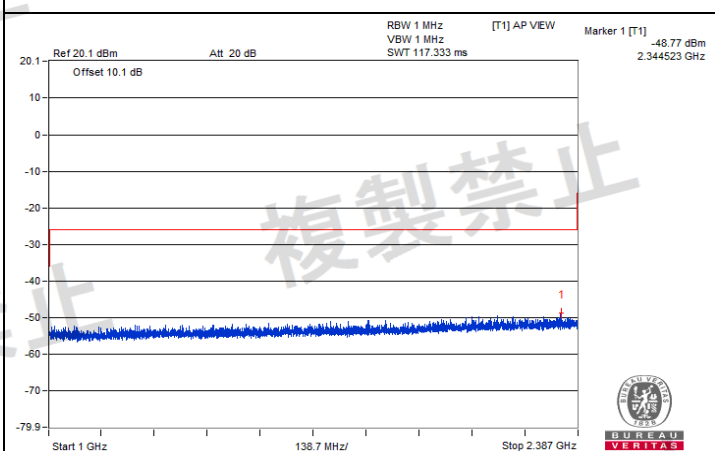
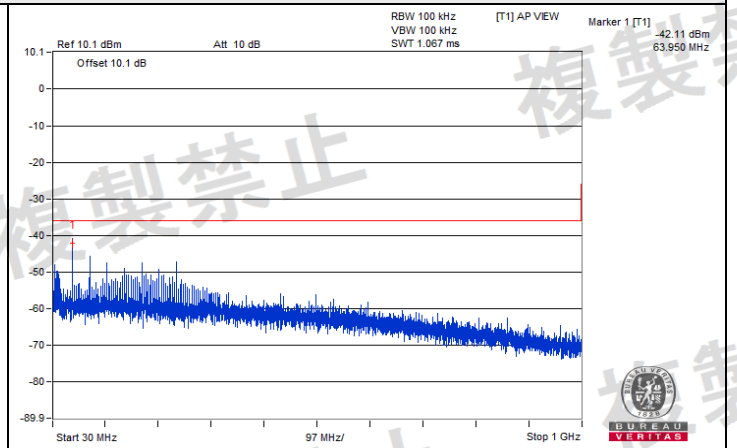
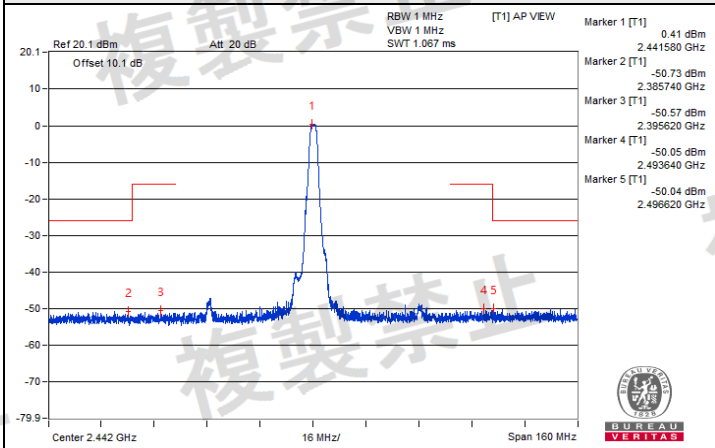
CH 1 (2403 MHz)

V normal



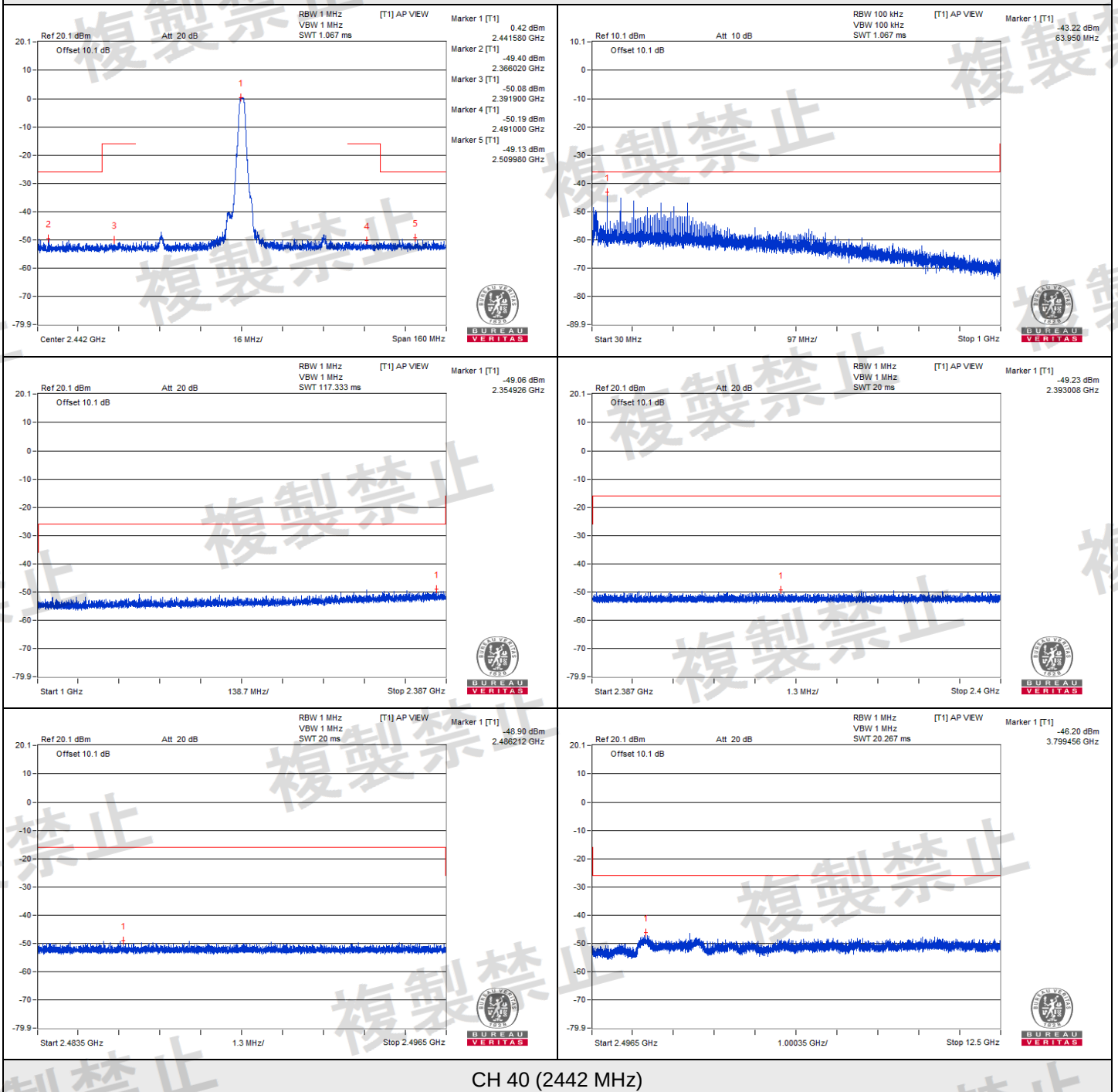
CH 40 (2442 MHz)

V max.

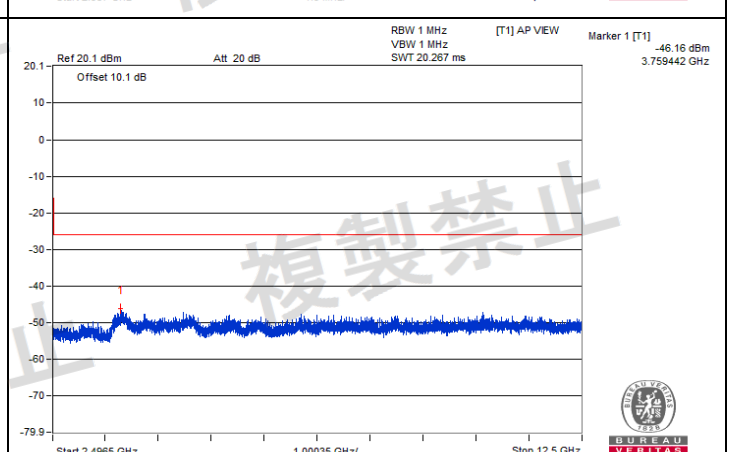
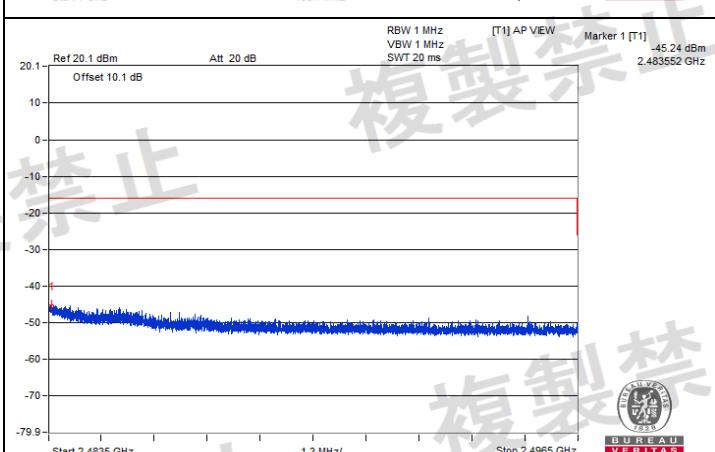
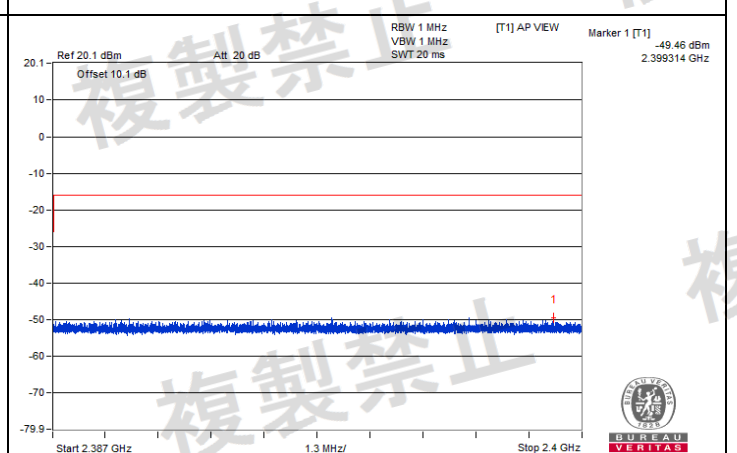
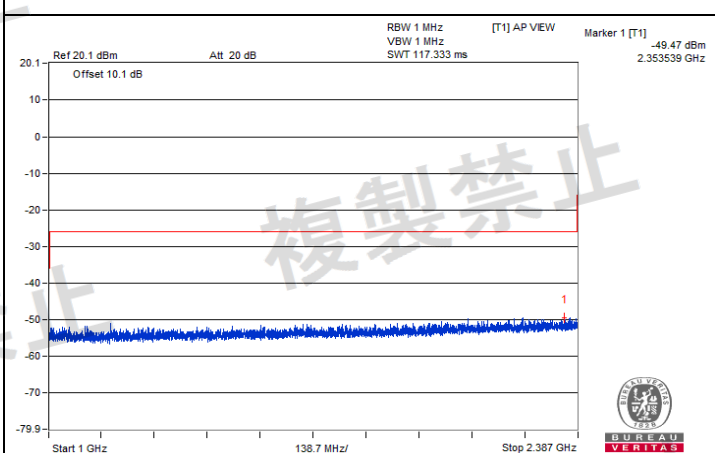
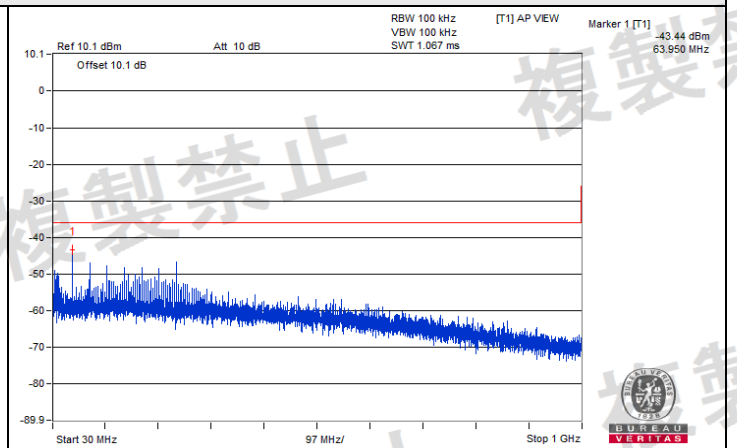
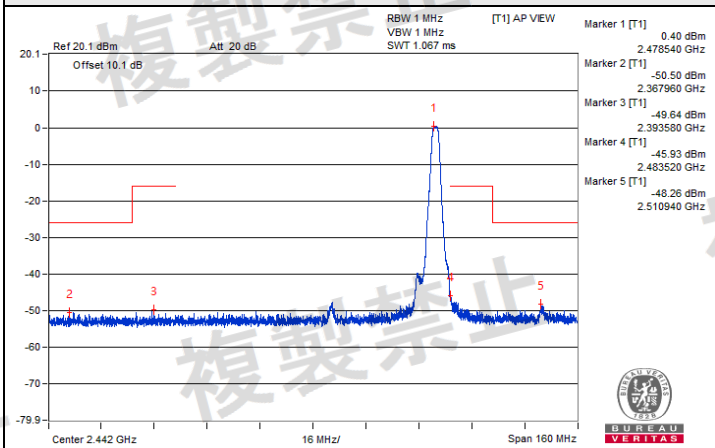


CH 40 (2442 MHz)

V_{min}.

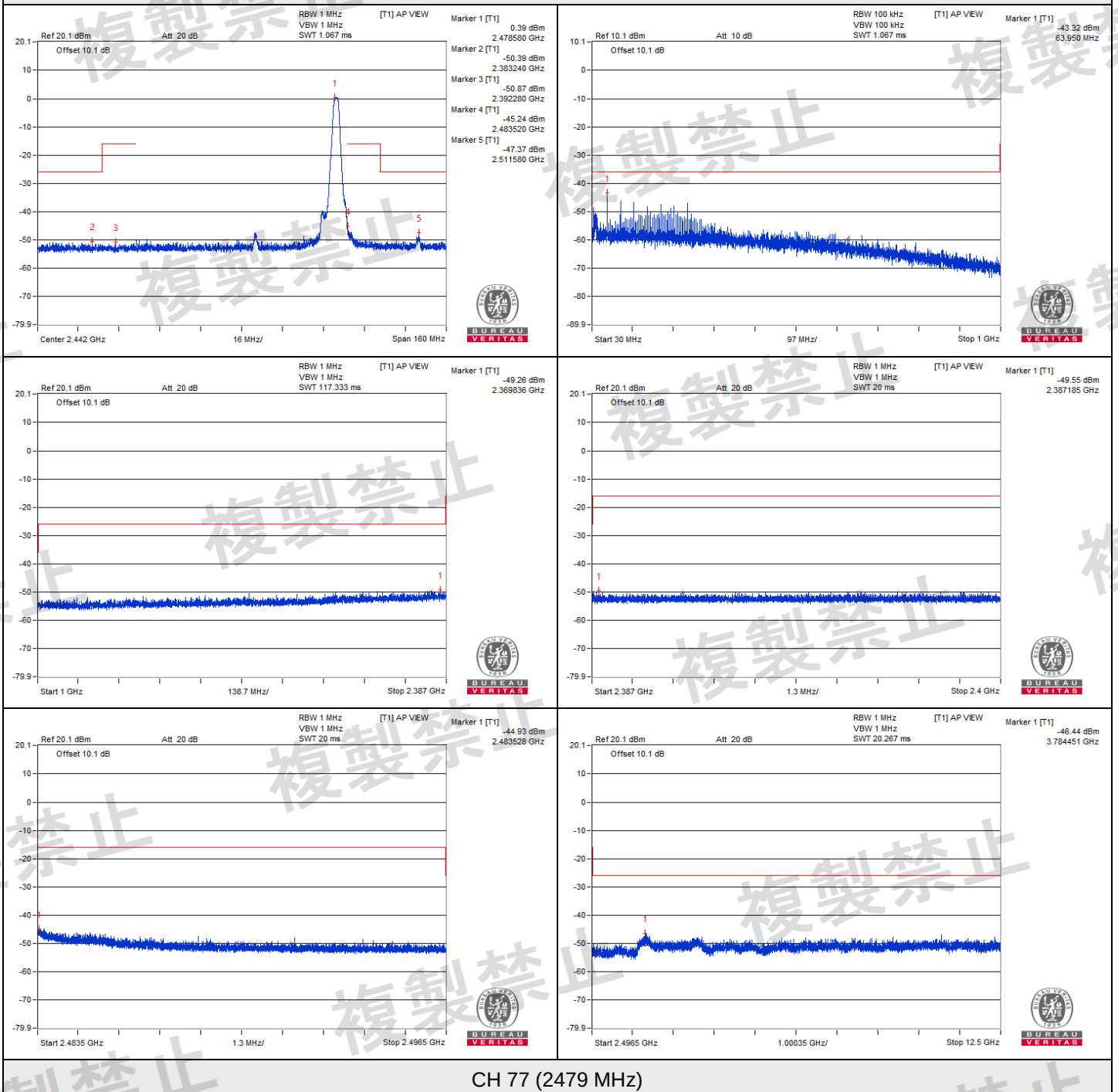


Vnormal

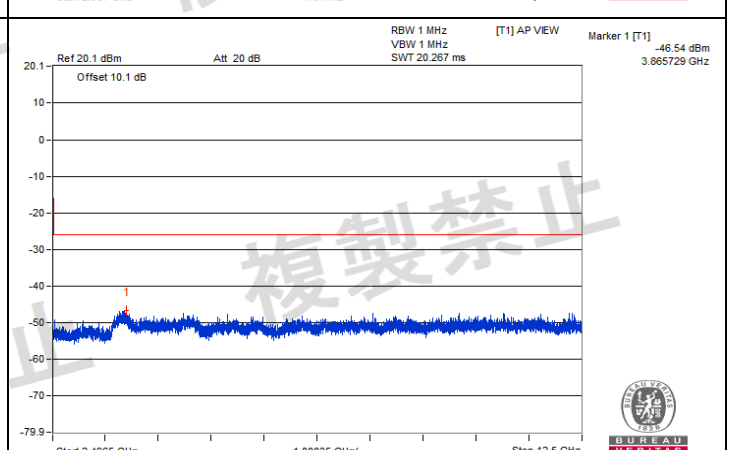
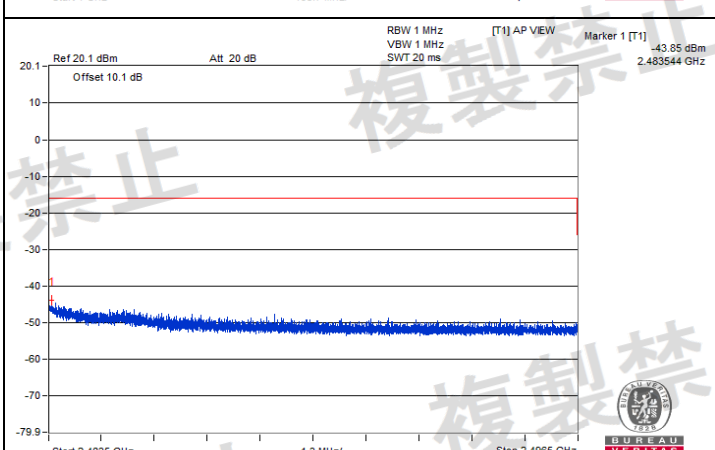
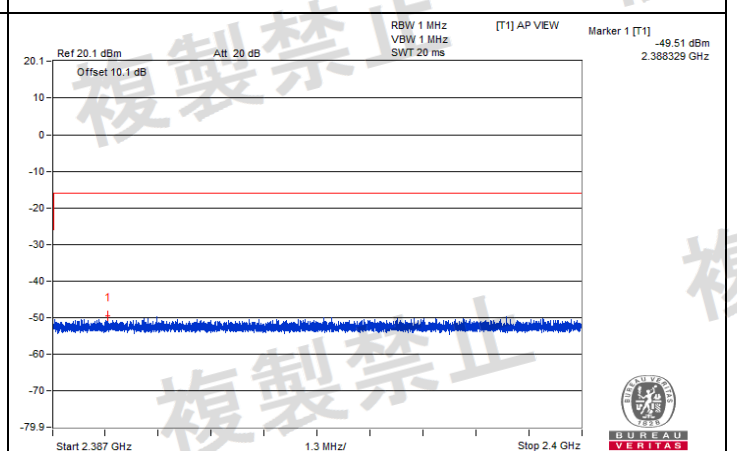
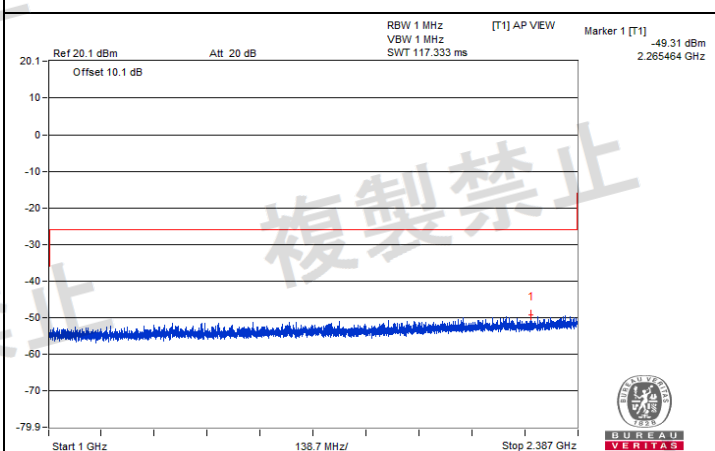
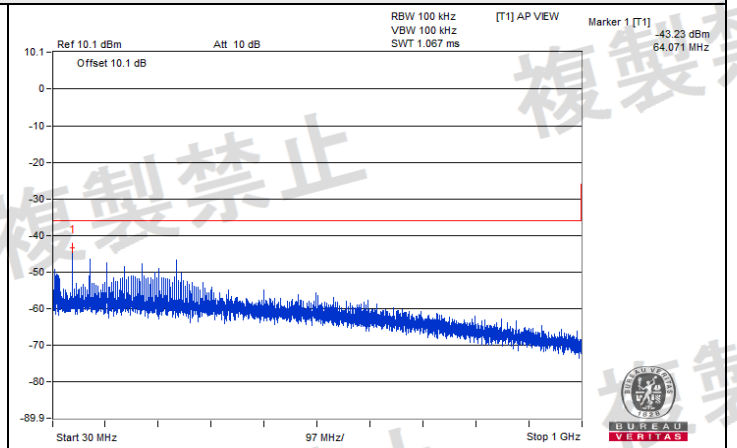
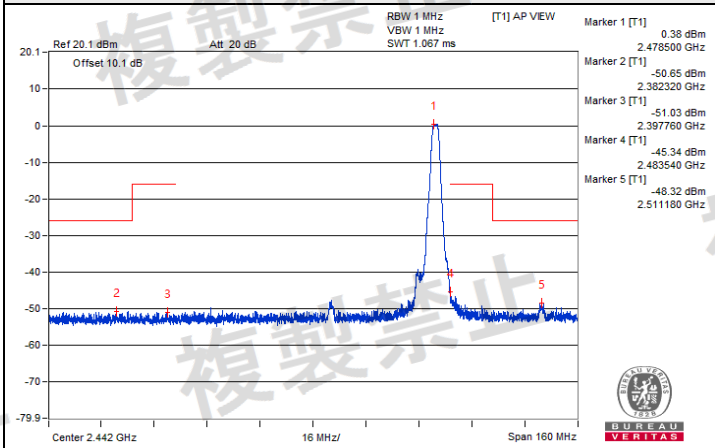


CH 77 (2479 MHz)

V_{max}.



V_{min}.

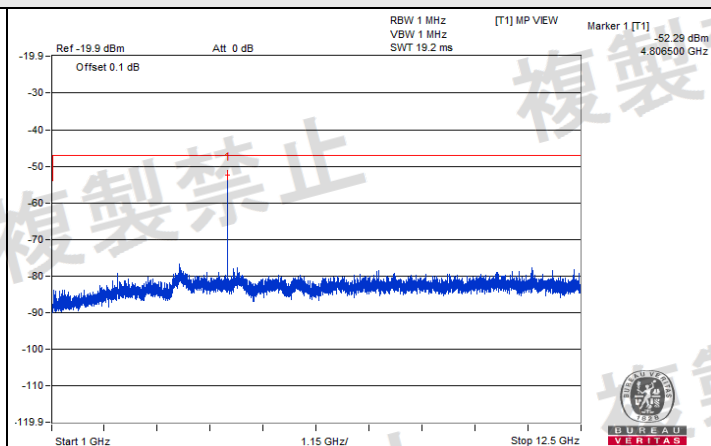
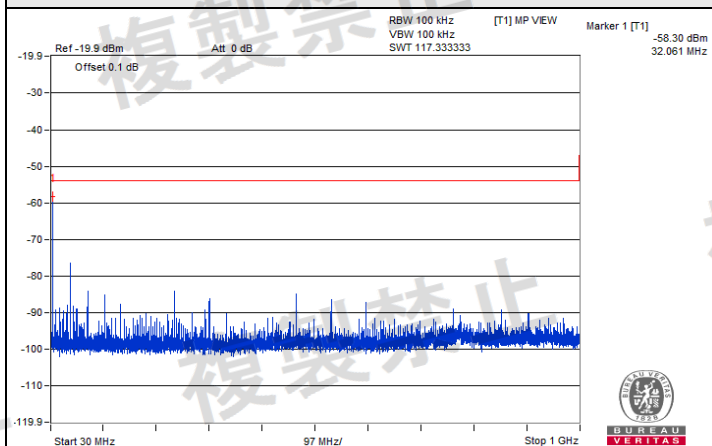
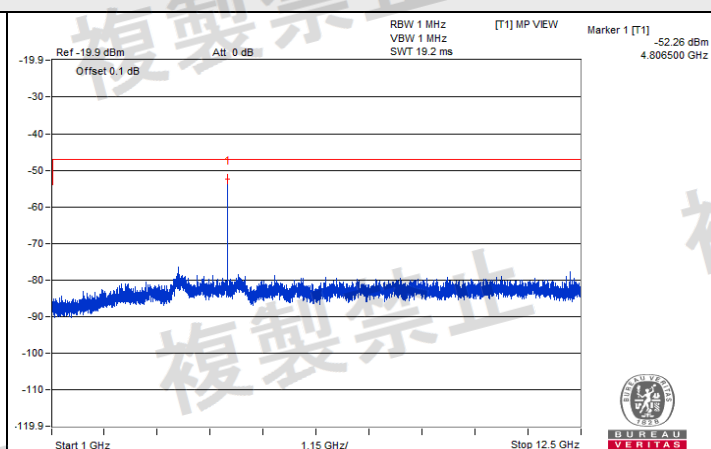
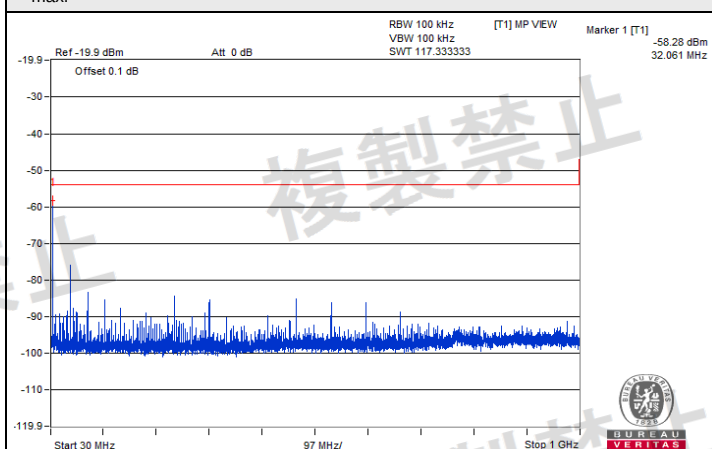
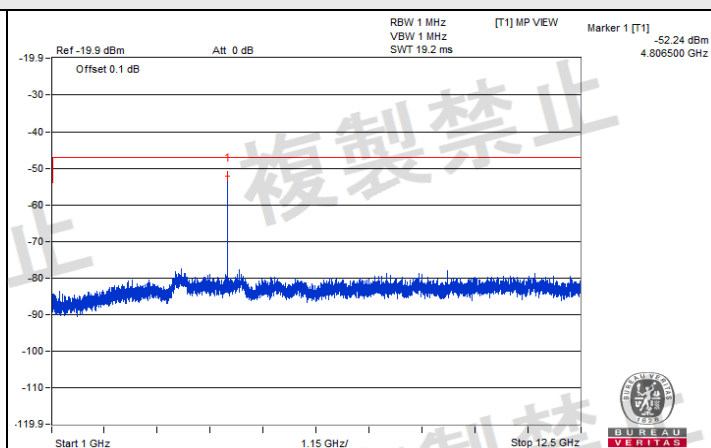
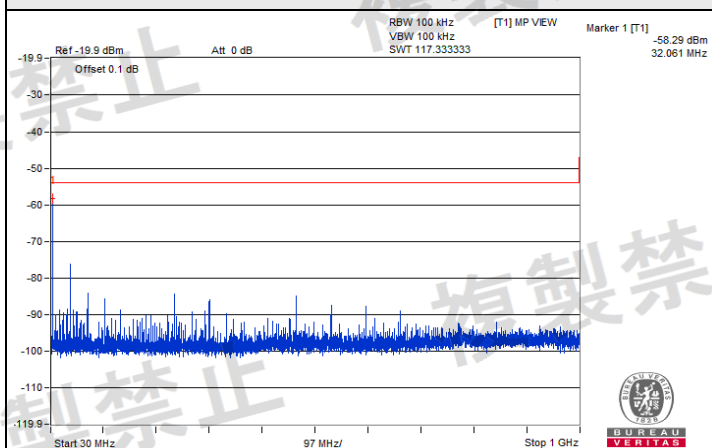


CH 77 (2479 MHz)

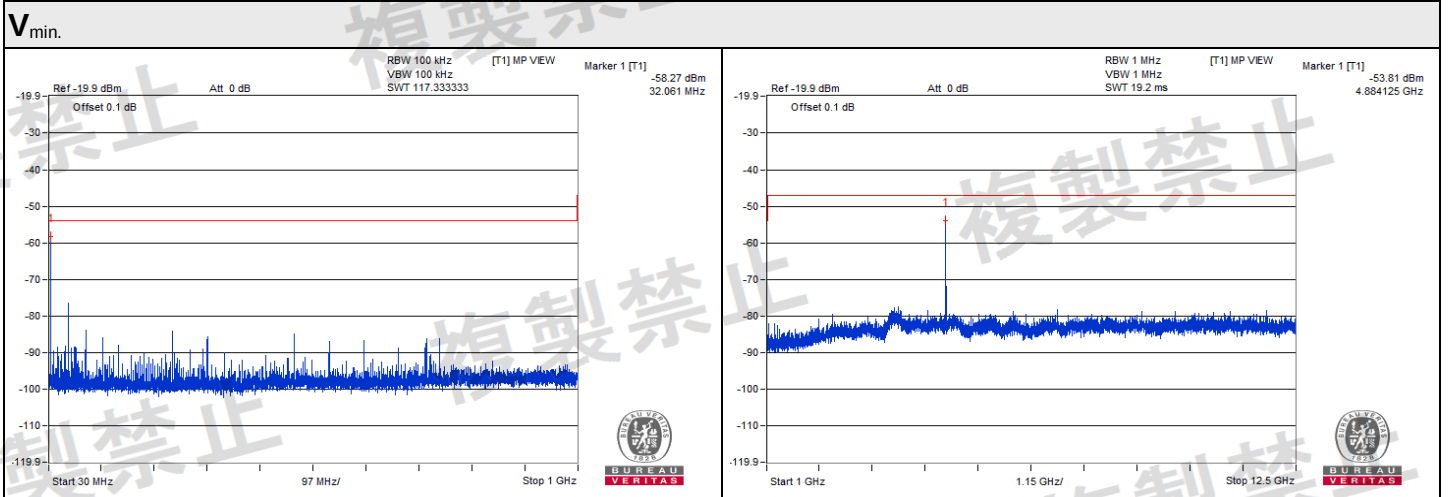
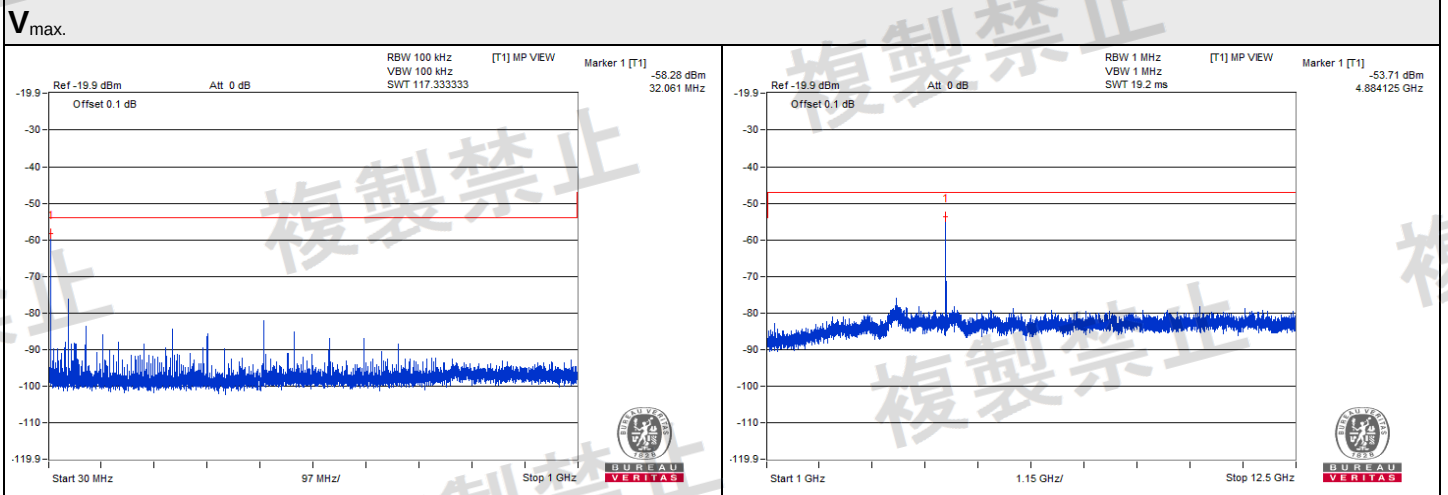
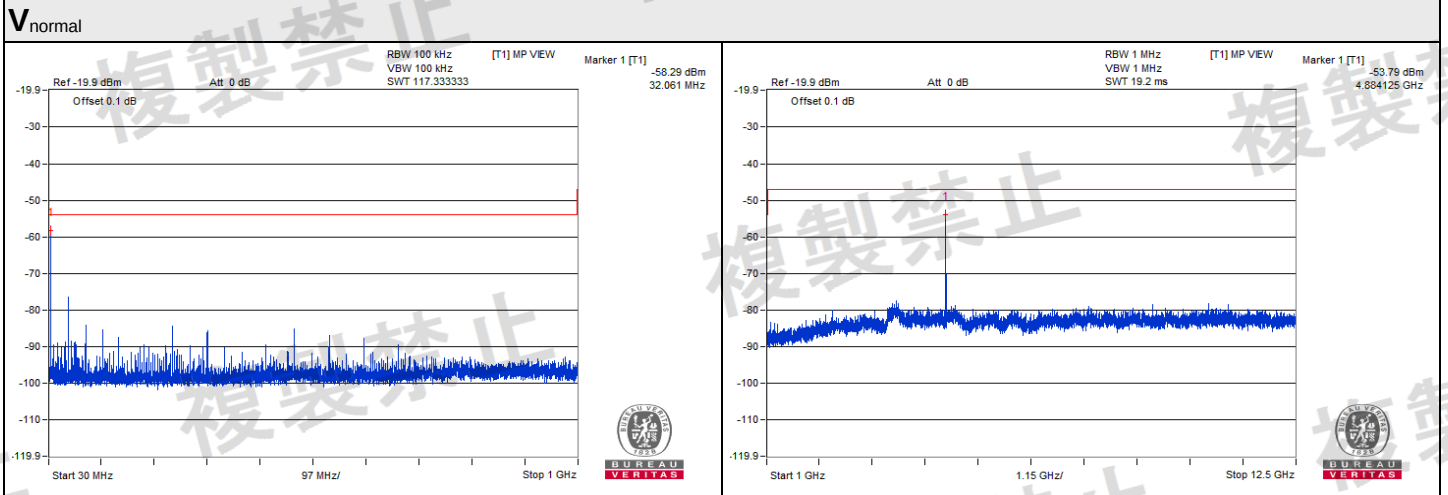
7.4 Spurious Emissions of Receiver

Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng
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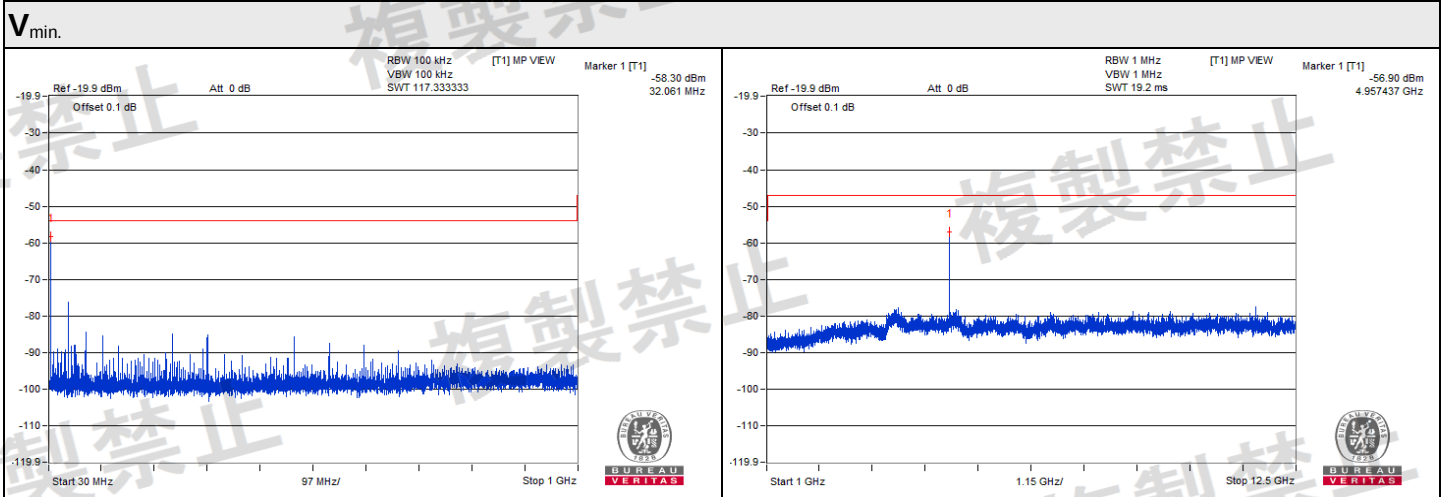
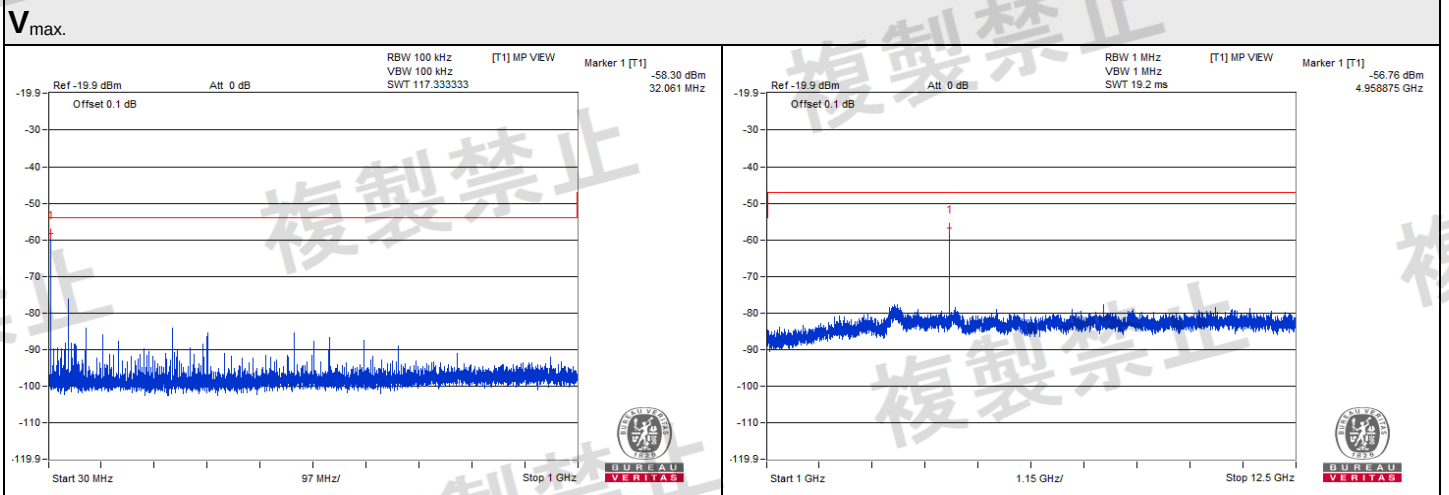
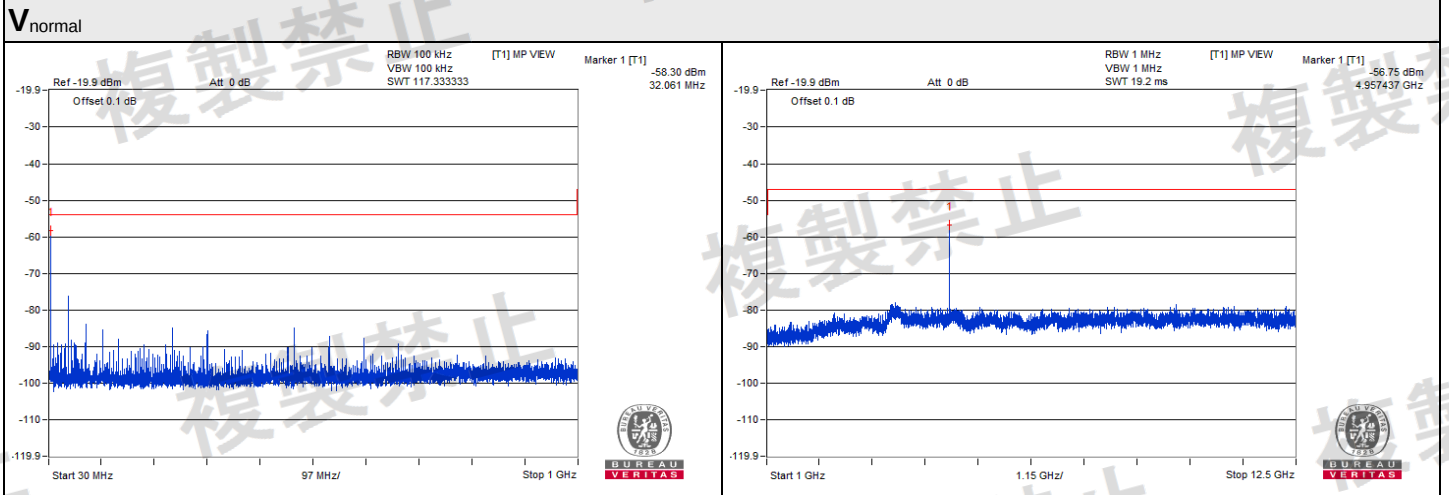
TEST CHANNEL		CH 1 (2403 MHz)			
TEST CONDITION	FREQUENCY RANGE(MHz)	FREQUENCY (MHz)	MEASUREMENT VALUE(nW)	LIMIT (nW)	RESULT
V_{normal}	30.0 to 1000.0	32.061	1.479108	4	PASS
	1000.0 to 12500.0	4806.500	5.902011	20	PASS
V_{max.}	30.0 to 1000.0	32.061	1.485936	4	PASS
	1000.0 to 12500.0	4806.500	5.942922	20	PASS
V_{min.}	30.0 to 1000.0	32.061	1.482518	4	PASS
	1000.0 to 12500.0	4806.500	5.970353	20	PASS
TEST CHANNEL		CH 40 (2442 MHz)			
V_{normal}	30.0 to 1000.0	32.061	1.482518	4	PASS
	1000.0 to 12500.0	4884.125	4.178304	20	PASS
V_{max.}	30.0 to 1000.0	32.061	1.485936	4	PASS
	1000.0 to 12500.0	4884.125	4.255984	20	PASS
V_{min.}	30.0 to 1000.0	32.061	1.489361	4	PASS
	1000.0 to 12500.0	4884.125	4.159106	20	PASS
TEST CHANNEL		CH 77 (2479 MHz)			
V_{normal}	30.0 to 1000.0	32.061	1.479108	4	PASS
	1000.0 to 12500.0	4957.437	2.113489	20	PASS
V_{max.}	30.0 to 1000.0	32.061	1.479108	4	PASS
	1000.0 to 12500.0	4958.875	2.108628	20	PASS
V_{min.}	30.0 to 1000.0	32.061	1.479108	4	PASS
	1000.0 to 12500.0	4957.437	2.041738	20	PASS

V_{normal}**V_{max}****V_{min}**

CH 1 (2403 MHz)



CH 40 (2442 MHz)



CH 77 (2479 MHz)

7.5 Antenna Power

Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng
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For GFSK

Voltage (Vdc)	Channel Number	Frequency (MHz)	Conducted RF Output Power (mW)	Radiated RF Output Power (mW)
5	1	2403	1.096	4.964
	40	2442	1.104	5
	77	2479	1.107	5.014
5.5	1	2403	1.117	5.059
	40	2442	1.138	5.154
	77	2479	1.153	5.222
4.5	1	2403	1.148	5.199
	40	2442	1.135	5.14
	77	2479	1.117	5.059
Maximum Limit (mW):			10	-
Rated Power (mW):			2	-
Tolerance of Antenna Power (mW):			2.4	-
Maximum EIRP Limit (mW):			-	16.368

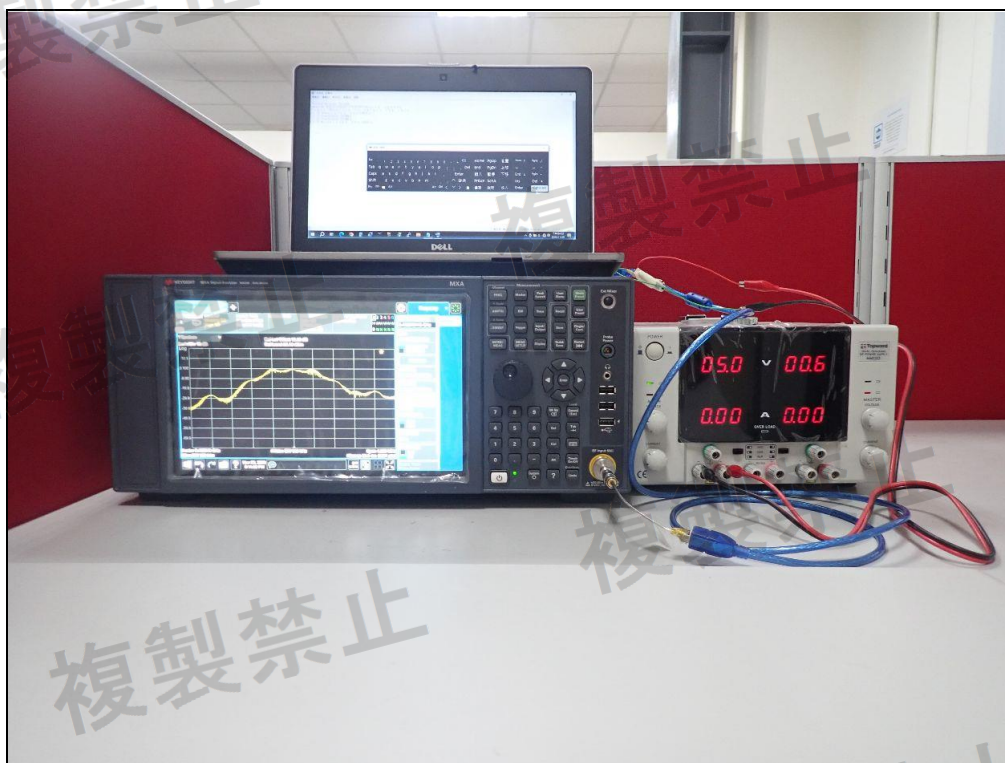
Notes:

1. Antenna gain is 6.56 dBi.
2. The radiated RF output power is a "calculated" value derived from the conducted value.
3. Formula: Radiated RF output power = Conducted RF output power + Antenna gain

7.6 Interference Prevention Function

Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng
Link Mode		Test Result	
GFSK		Pass	

8 Pictures of Test Arrangements



9 Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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Email: service.adt@bureauveritas.com

Web Site: <http://ee.bureauveritas.com.tw>

The address and road map of all our labs can be found in our web site also.

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