

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: Certification Ordinance Article 2-1-19
Report No.: RJBEDV-WTW-P25100404-2
Product: Poly Edge V850
Brand: HP
Model No.: PVAN-EDGE-V850
Received Date: 2025/10/20
Test Date: 2025/11/20 ~ 2025/11/21
Issued Date: 2025/12/19
Applicant: HP Inc.
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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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Approved by: _____

Jeremy Lin

, Date: _____

2025/12/19

Jeremy Lin / Project Engineer

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Prepared by : Gina Liu / Specialist



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Release Control Record

Issue No.	Description	Date Issued
RJBEDV-WTW-P25100404-2	Original release.	2025/12/19

1 Certificate

Product: Poly Edge V850

Brand: HP

Test Model: PVAN-EDGE-V850

Sample Status: Engineering sample

Applicant: HP Inc.

Test Date: 2025/11/20 ~ 2025/11/21

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	Pass
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	72 Hz
Spurious Emissions	2.208 dB
Output Power Density	2.889 dB
Frequency Tolerance	614.95 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	Poly Edge V850
Brand	HP
Test Model	PVAN-EDGE-V850
Test Software Version	Tera Term V4.106
Status of EUT	Engineering sample
Power Supply Rating	USB adapter: 5V AC adapter: 48V POE: 48V
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 1024QAM for OFDMA in 11ax mode
Modulation Technology	DSSS, OFDM, OFDMA
Transfer Rate	Up to 143.4 Mbps
Operating Frequency	2.412 GHz ~ 2.472 GHz
Number of Channel	802.11b, 802.11g, 802.11n (HT20), 802.11ax (HE20): 13
Housing Requirements	Particular screw and separating the housing was only possible by special tools.

Note:

1. The EUT uses following accessories.

Item	Brand	Model	Specification
RJ-45 Cable	EXCELTEK	PO02008	1.5m
Coil Cable	EXCELTEK	PE0003	570mm

2. The EUT uses following support unit.

Item	Brand	Model	Specification
USB Adapter	HP	TPN-DA20	AC Input power: 100-240Vac; 50-60Hz; 1.7A DC Output power: 5.0Vdc; 3.0A or 9.0Vdc; 3.0A or 12.0Vdc; 5.0A or 15.0Vdc; 4.33A or 20.0Vdc; 3.25A DC Output Cable: 1.73m without core
Adapter	MASS POWER	E025-1C480052B3	AC Input power: 100-240Vac; 50/60Hz; 0.6A DC Output power: 48Vdc; 0.52A DC Output Cable: 1.85m non-shielded cable without core
PoE Injector	CERIO	POE-S48G2	48Vdc
Adapter for POE	L.T.E	LTE36ES-S5-1	AC Input power: 100-240Vac; 50/60Hz; 0.75A DC Output power: 48Vdc; 0.75A DC Output Cable: 1.85m non-shielded cable without core
Console Board	PEGATRON	REVLON_CONSOLE_BOARD Rev : 1.00	-
Console Cable	XINYA	H2530-04SVB-060/030	0.2M

3. There are Bluetooth and WLAN (2.4 GHz & 5 GHz) and NFC technology used for the EUT.

4. 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 Density (mW/MHz)	Maximum Conducted RF Output Power Density (mW/MHz)	Maximum Radiated RF Output Power Density (mW/MHz)
802.11b	7	6.888	13.617
802.11g	6	5.384	10.644
802.11n (HT20)	6	5.371	10.618
802.11ax (HE20)	8	7.746	15.314

3.3 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna NO.	RF Chain NO.	Brand	Model	Antenna Peak Gain(dBi)	Frequency range	Antenna Type	Connector Type
1	0	PEGATRON	NA	2.96	2.4 GHz ~ 2.4835 GHz	PCB	ipex(MHF)
				2.25	5.15 GHz ~ 5.25 GHz	PCB	ipex(MHF)
				2.09	5.25 GHz ~ 5.35 GHz	PCB	ipex(MHF)
				2.63	5.47 GHz ~ 5.725 GHz	PCB	ipex(MHF)
				2.52	5.725 GHz ~ 5.85 GHz	PCB	ipex(MHF)

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

2. The EUT incorporates a SISO function:

2.4 GHz Band		
Modulation Mode	TX & RX Configuration	
802.11b	1TX	1RX
802.11g	1TX	1RX
802.11n (HT20)	1TX	1RX
802.11ax (HE20)	1TX	1RX

Note:

- The modulation and bandwidth are similar for 802.11n mode for 20 MHz and 802.11ax mode for 20 MHz. Therefore the investigated worst case is the representative mode in test report.
- The EUT does not use channel puncturing and bandwidth reduction.

3. Antenna Pattern:

Please refer to the attached file (Antenna pattern).

3.4 Channel List

13 channels are provided for 802.11b, 802.11g, 802.11n (HT20), 802.11ax (HE20):

Channel	Frequency	Channel	Frequency
1	2412 MHz	8	2447 MHz
2	2417 MHz	9	2452 MHz
3	2422 MHz	10	2457 MHz
4	2427 MHz	11	2462 MHz
5	2432 MHz	12	2467 MHz
6	2437 MHz	13	2472 MHz
7	2442 MHz		

3.5 Power Setting

Power Setting				
Channel	802.11b	802.11g	802.11n (HT20)	802.11ax (HE20)
1	74	92	92	92
7	74	92	92	92
13	74	92	92	92

3.6 Test Mode Applicability and Tested Channel Detail

Test Conditions	Voltage (Vdc)
V_{normal}	48

Note: After checking the fluctuation of input voltage to the circuit of the radio part (excluding the power supply) of the equipment to be tested, the fluctuation less than $\pm 1\%$ when input voltage from an external supply into the equipment fluctuates $\pm 10\%$, therefore, the test is carried out only at the normal voltage.

Pre-Scan:	1. The AC Adapter has the following models: AC adapter (E025-1C480052B3) / USB Adapter (TPN-DA20) / PoE mode (POE-S48G2). Pre-scan these models of AC Adapters and find the worst case as a representative test condition.
Worst Case:	1. Worst Condition: AC adapter (E025-1C480052B3)

Following channel(s) was (were) selected for the final test as listed below:

Test Item	Test Conditions	Mode	Tested Channel	Modulation	Data Rate Parameter
Frequency Tolerance	Chain 0	20MHz System	1, 7, 13	unmodulated	-
Occupied Bandwidth	Chain 0	802.11b	1, 7, 13	DBPSK	1Mb/s
		802.11g	1, 7, 13	BPSK	6Mb/s
		802.11n (HT20)	1, 7, 13	BPSK	MCS0
		802.11ax (HE20)	1, 7, 13	BPSK	MCS0
Spurious Emissions	Chain 0	802.11b	1, 7, 13	DBPSK	1Mb/s
		802.11g	1, 7, 13	BPSK	6Mb/s
		802.11n (HT20)	1, 7, 13	BPSK	MCS0
		802.11ax (HE20)	1, 7, 13	BPSK	MCS0
Spurious Emissions of Receiver	Chain 0	20MHz System	1, 7, 13	-	-
Antenna Power	Chain 0	802.11b	1, 7, 13	DBPSK	1Mb/s
		802.11g	1, 7, 13	BPSK	6Mb/s
		802.11n (HT20)	1, 7, 13	BPSK	MCS0
		802.11ax (HE20)	1, 7, 13	BPSK	MCS0
Number of Carriers within 1 MHz Bandwidth in OFDM	Chain 0	802.11g	1, 7, 13	BPSK	6Mb/s
Interference Prevention Function	-	Normal Operation			

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
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2025/5/23	2026/5/22	BV CPS E&E	(d)
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A	N/A	N/A
Spectrum Analyzer R&S	FSU26	101645	2025/7/28	2026/7/27	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 test was performed in Oven room.
- Tested Date: 2025/11/21

4.2 Occupied Bandwidth

Refer to section 4.1 to get the tested date and information of the instruments.

4.3 Spurious Emissions

Refer to section 4.1 to get the tested date and information of the instruments.

4.4 Spurious Emissions of Receiver

Refer to section 4.1 to get the tested date and information of the instruments.

4.5 Antenna Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until	Calibration Authority	Calibration Method
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2025/5/23	2026/5/22	BV CPS E&E	(d)
MXG Vector Signal Generator Agilent	N5182B	MY53050162	2025/6/2	2026/6/1	ETC	(c)
Peak Power Analyzer Keysight	8990B	MY51000485	2025/1/20	2026/1/19	ETC	(c)
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A	N/A	N/A
Spectrum Analyzer R&S	FSU26	101645	2025/7/28	2026/7/27	ETC	(c)
Wideband Power Sensor Keysight	N1923A	MY58020002	2025/1/21	2026/1/20	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 test was performed in Oven room.
- Tested Date: 2025/11/20

4.6 Number of Carriers within 1 MHz Bandwidth in OFDM

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until	Calibration Authority	Calibration Method
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2025/5/23	2026/5/22	BV CPS E&E	(d)
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A	N/A	N/A
Spectrum Analyzer R&S	FSU26	101645	2025/7/28	2026/7/27	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 test was performed in Oven room.
- Tested Date: 2025/11/20

4.7 Interference Prevention Function

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until	Calibration Authority	Calibration Method
WLAN Test Set Anritsu	MT8860C	1702001	2025/5/12	2026/5/11	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 test was performed in Oven room.
- Tested Date: 2025/11/20

5 Limits of Test Items

5.1 Frequency Tolerance

Tolerance of frequency shall be +/- 50ppm.

5.2 Occupied Bandwidth

Modulation Method	Limit
DSSS	<26 MHz
OFDM	<26 MHz
	26 – 40 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 dB + "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 Number of Carriers within 1 MHz Bandwidth in OFDM

For each 1 MHz bandwidth in OFDM, there should be at least 1 carrier.

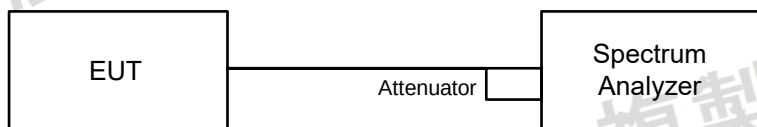
5.7 Interference Prevention Function

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

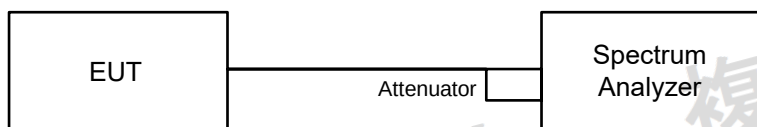
When performing radiolocation work: A function that allows you to distinguish between reflected waves of radio waves transmitted by your own station and radio waves transmitted by other radio stations by identifying the modulation method and other characteristics of received radio waves. (However, if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

6 Test Arrangements

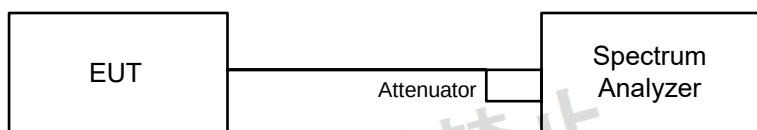
6.1 Frequency Tolerance



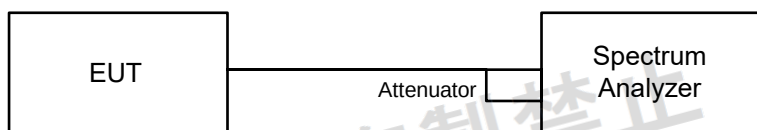
6.2 Occupied Bandwidth



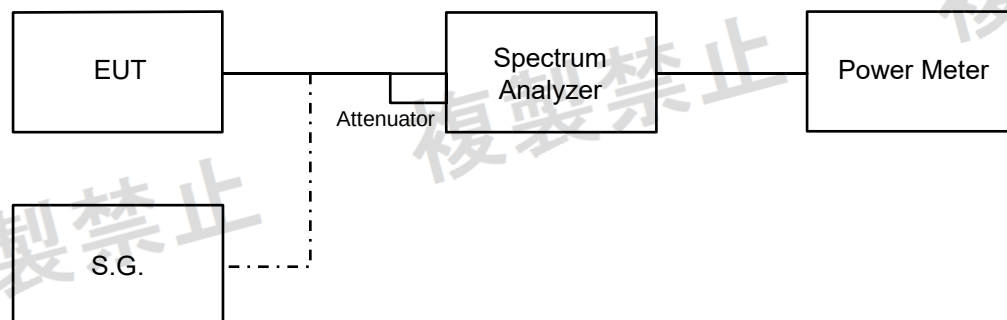
6.3 Spurious Emissions



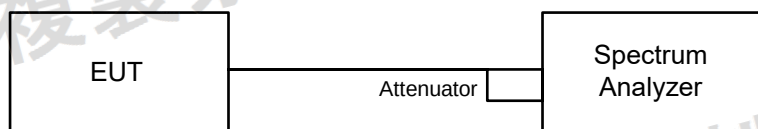
6.4 Spurious Emissions of Receiver



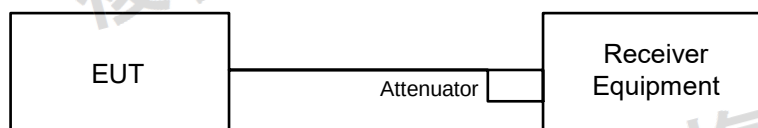
6.5 Antenna Power



6.6 Number of Carriers within 1 MHz Bandwidth in OFDM



6.7 Interference Prevention Function



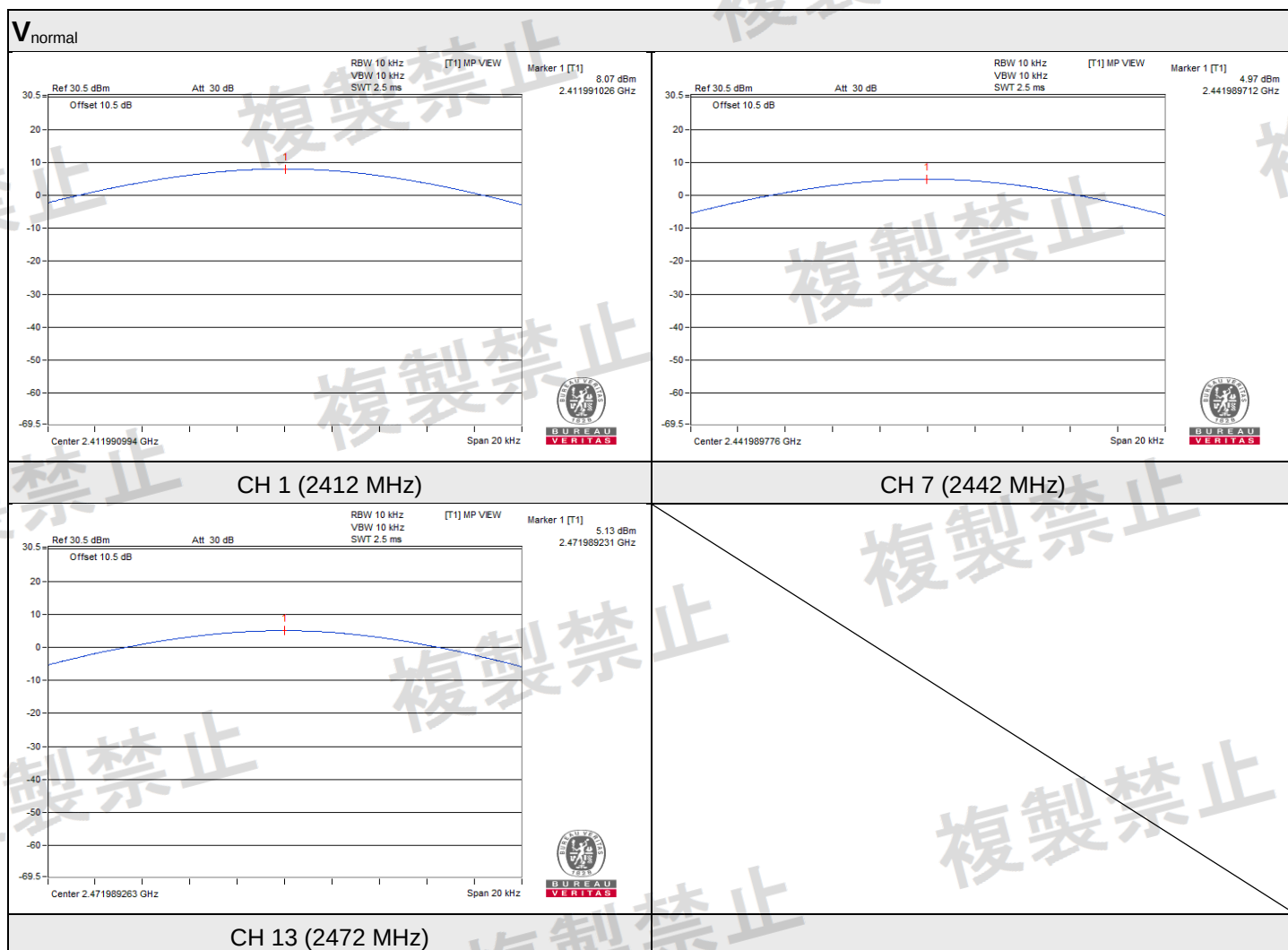
7 Test Results of Test Item

7.1 Frequency Tolerance

Environmental Conditions:	24°C, 64% RH	Tested By:	Match Tsui
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20 MHz System Chain 0

Channel	Frequency (MHz)	V_{normal}	
		Carrier frequency (MHz)	Frequency tolerance (ppm)
1	2412	2411.991026	-3.721
7	2442	2441.989712	-4.213
13	2472	2471.989231	-4.356



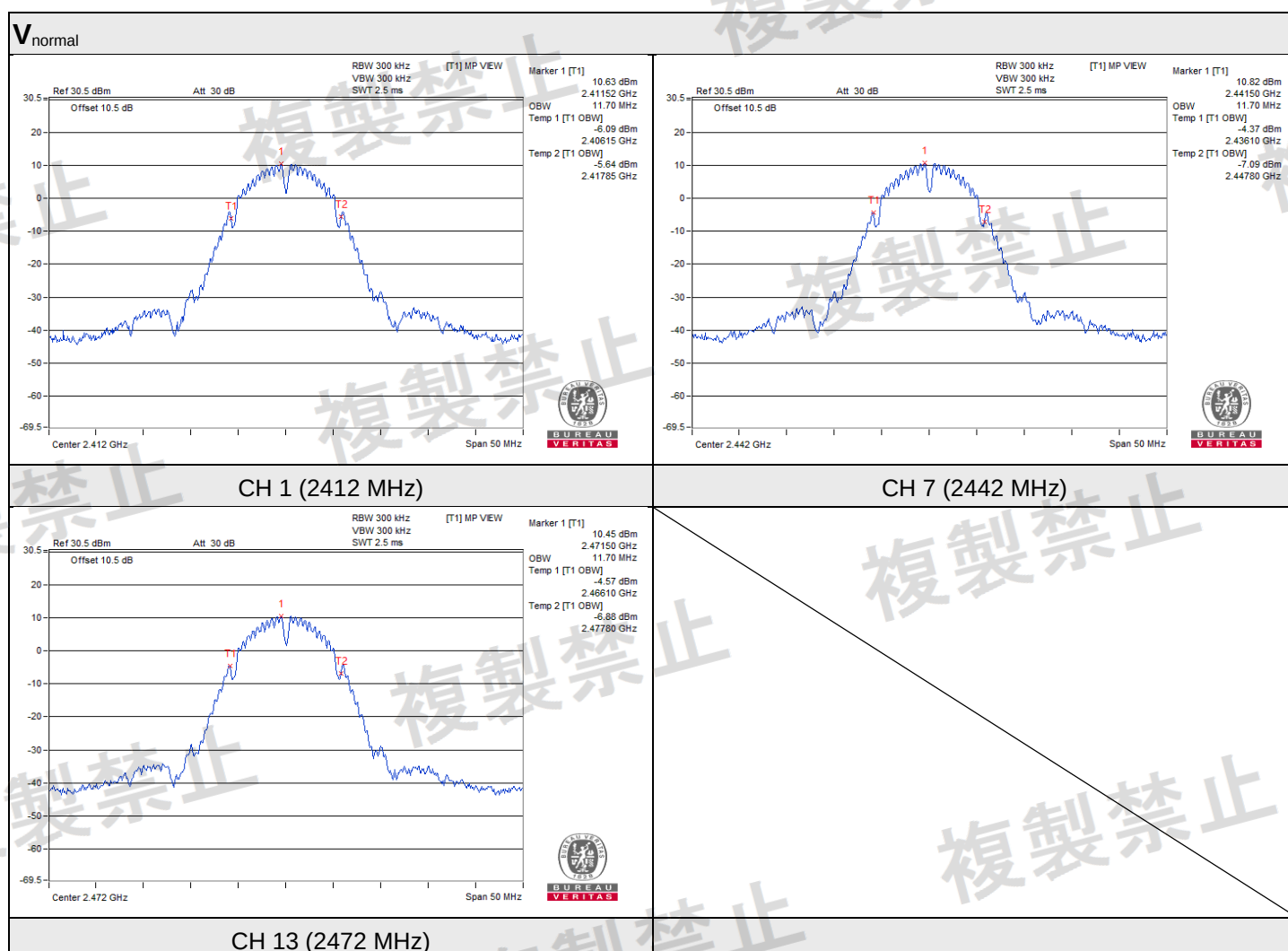
7.2 Occupied Bandwidth

Environmental Conditions:	24°C, 64% RH	Tested By:	Match Tsui
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802.11b Chain 0

Channel	Frequency (MHz)	V _{normal}
		Occupied Bandwidth (MHz)
1	2412	11.70
7	2442	11.70
13	2472	11.70

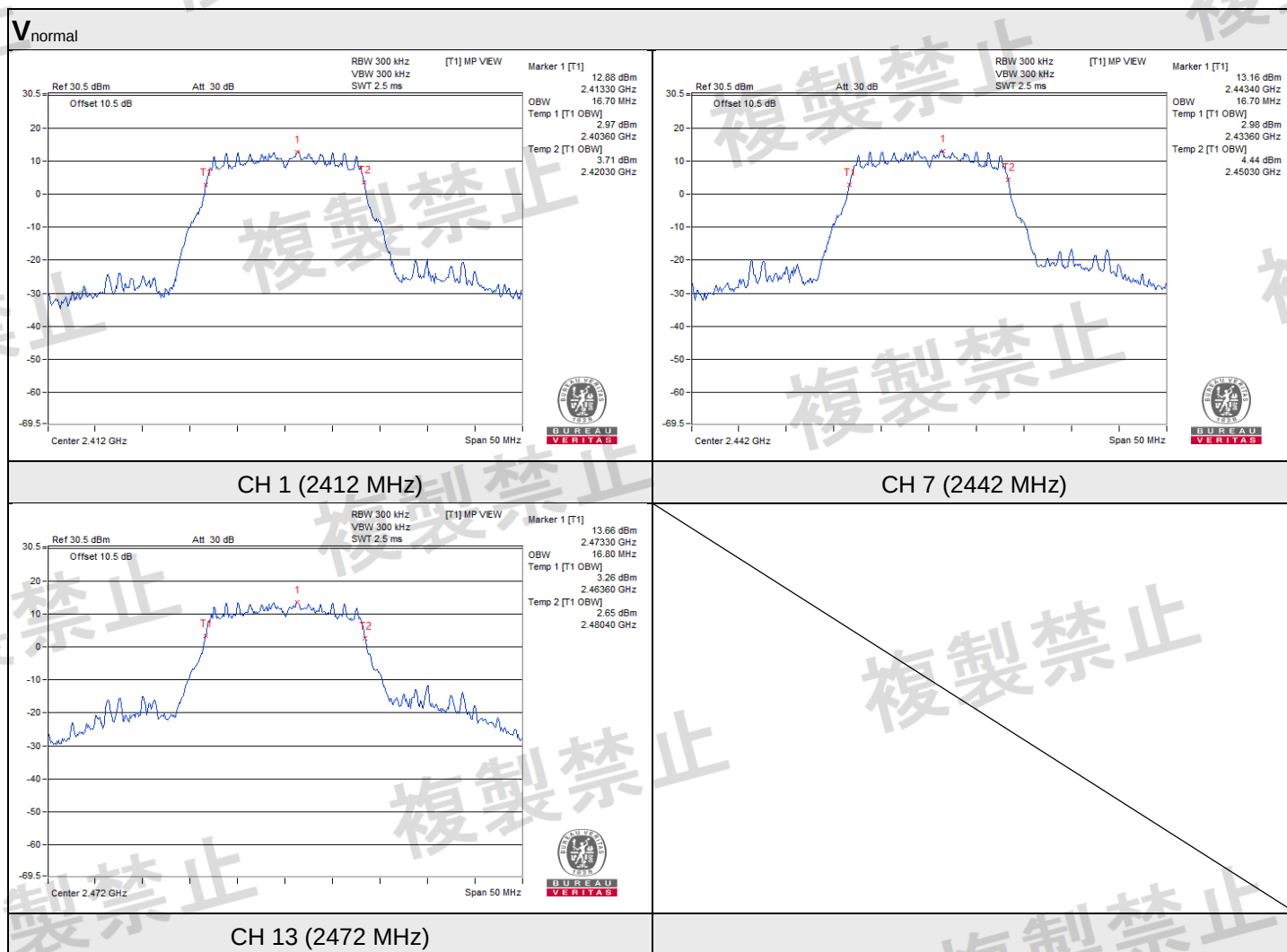
NOTE: For the test plots please refer to the below pages.



802.11g Chain 0

Channel	Frequency (MHz)	V _{normal}
		Occupied Bandwidth (MHz)
1	2412	16.70
7	2442	16.70
13	2472	16.80

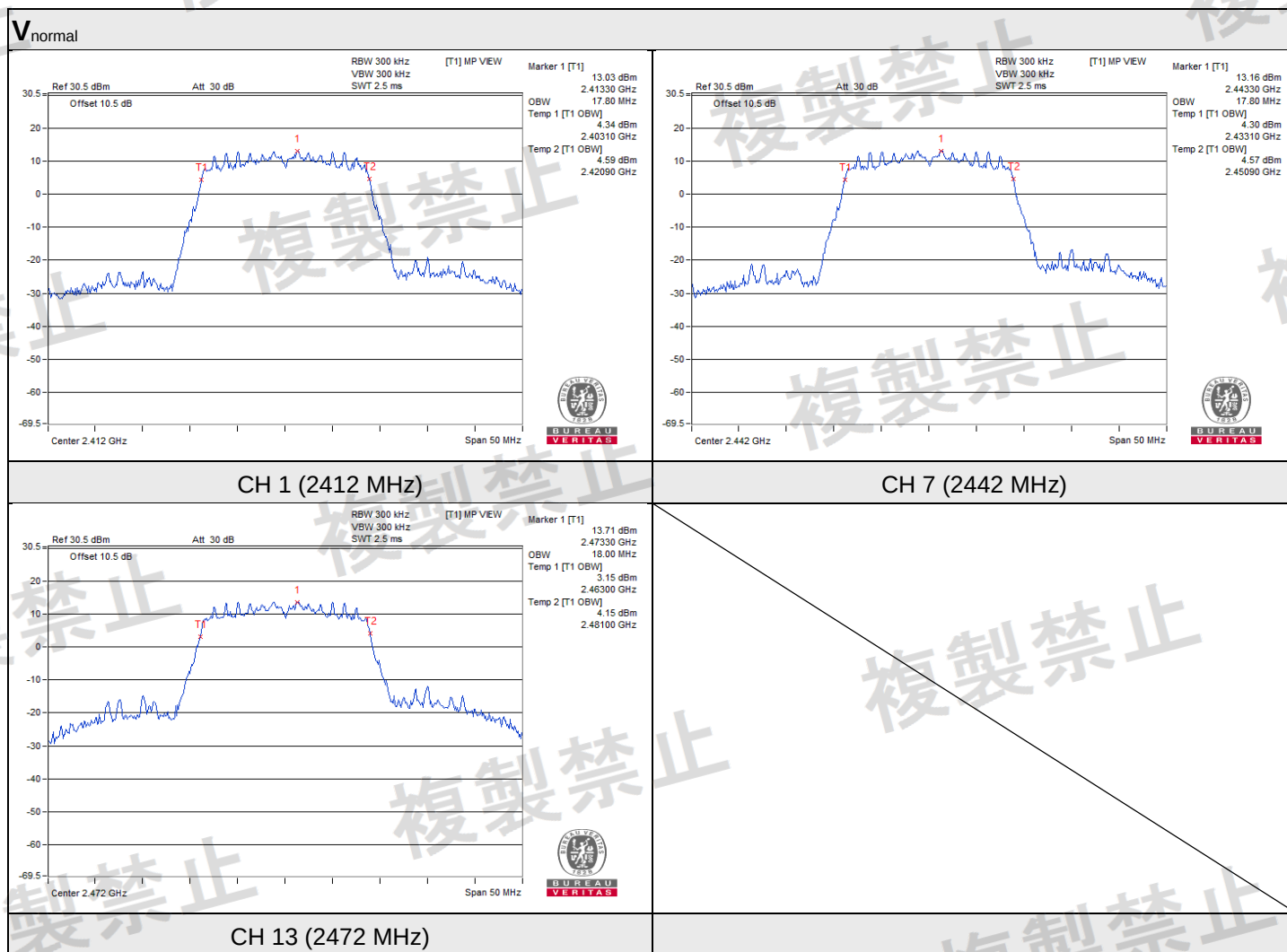
NOTE: For the test plots please refer to the below pages.



802.11n (HT20) Chain 0

Channel	Frequency (MHz)	V _{normal}
		Occupied Bandwidth (MHz)
1	2412	17.80
7	2442	17.80
13	2472	18.00

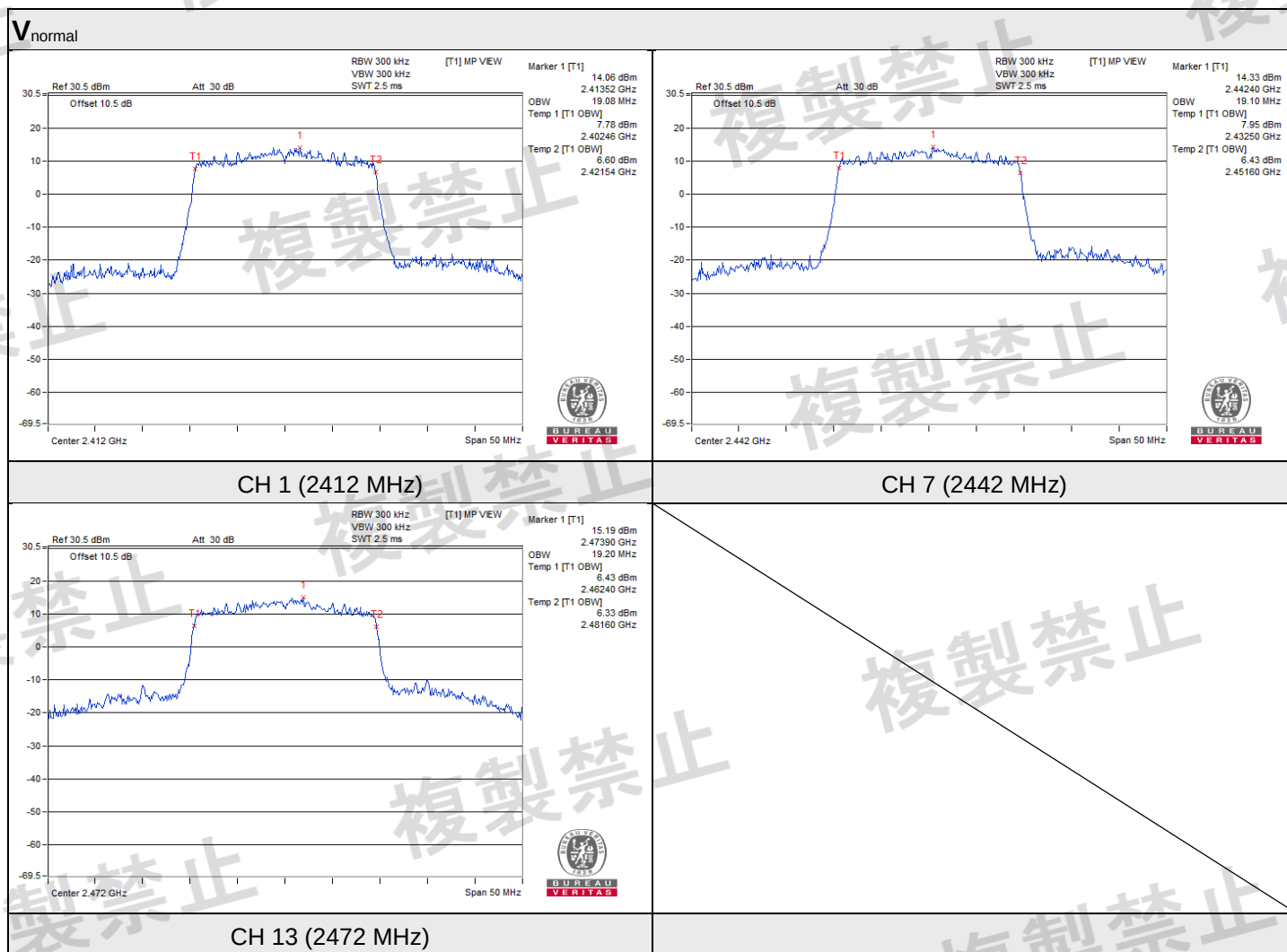
NOTE: For the test plots please refer to the below pages.



802.11ax (HE20) Chain 0

Channel	Frequency (MHz)	V _{normal}
		Occupied Bandwidth (MHz)
1	2412	19.08
7	2442	19.10
13	2472	19.20

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



7.3 Spurious Emissions

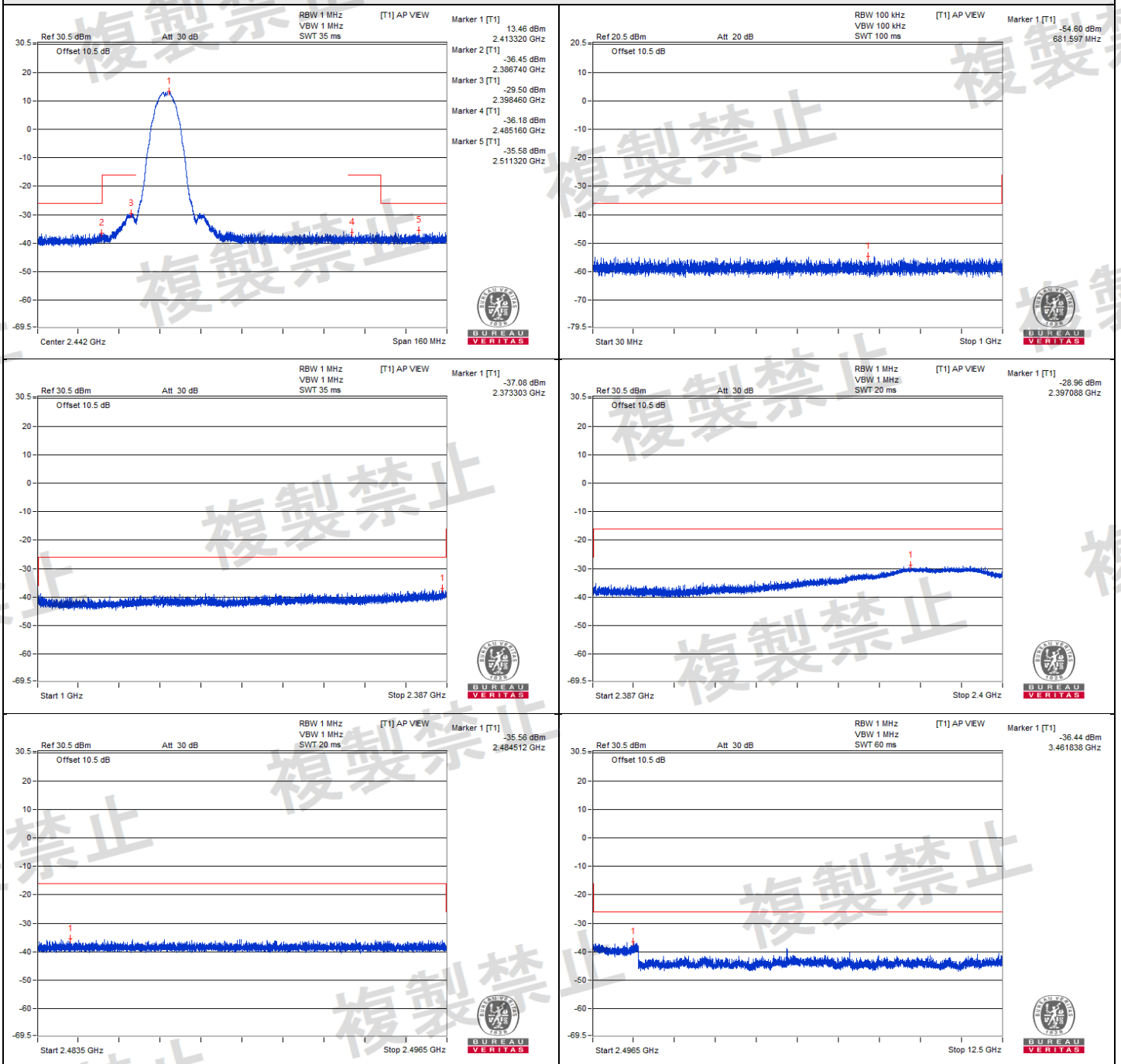
Environmental Conditions:	24°C, 64% RH	Tested By:	Match Tsui
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802.11b Chain 0

TEST CHANNEL		CH 1 (2412 MHz)			
TEST CONDITION	FREQUENCY RANGE(MHz)	FREQUENCY (MHz)	MEASUREMENT VALUE	LIMIT	RESULT
V _{normal}	30.0 to 1000.0	681.597	0.003467 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2373.303	0.195884 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2397.088	1.270574 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2484.512	0.277971 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	3461.838	0.226986 uW/MHz	2.5 uW/MHz	PASS
TEST CHANNEL		CH 7 (2442 MHz)			
V _{normal}	30.0 to 1000.0	248.977	0.003698 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2321.638	0.188365 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2397.116	0.26485 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2489.516	0.301995 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	3486.847	0.213304 uW/MHz	2.5 uW/MHz	PASS
TEST CHANNEL		CH 13 (2472 MHz)			
V _{normal}	30.0 to 1000.0	326.456	0.004325 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2376.944	0.203704 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2391.050	0.261818 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2486.865	1.064143 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	2497.750	0.203236 uW/MHz	2.5 uW/MHz	PASS

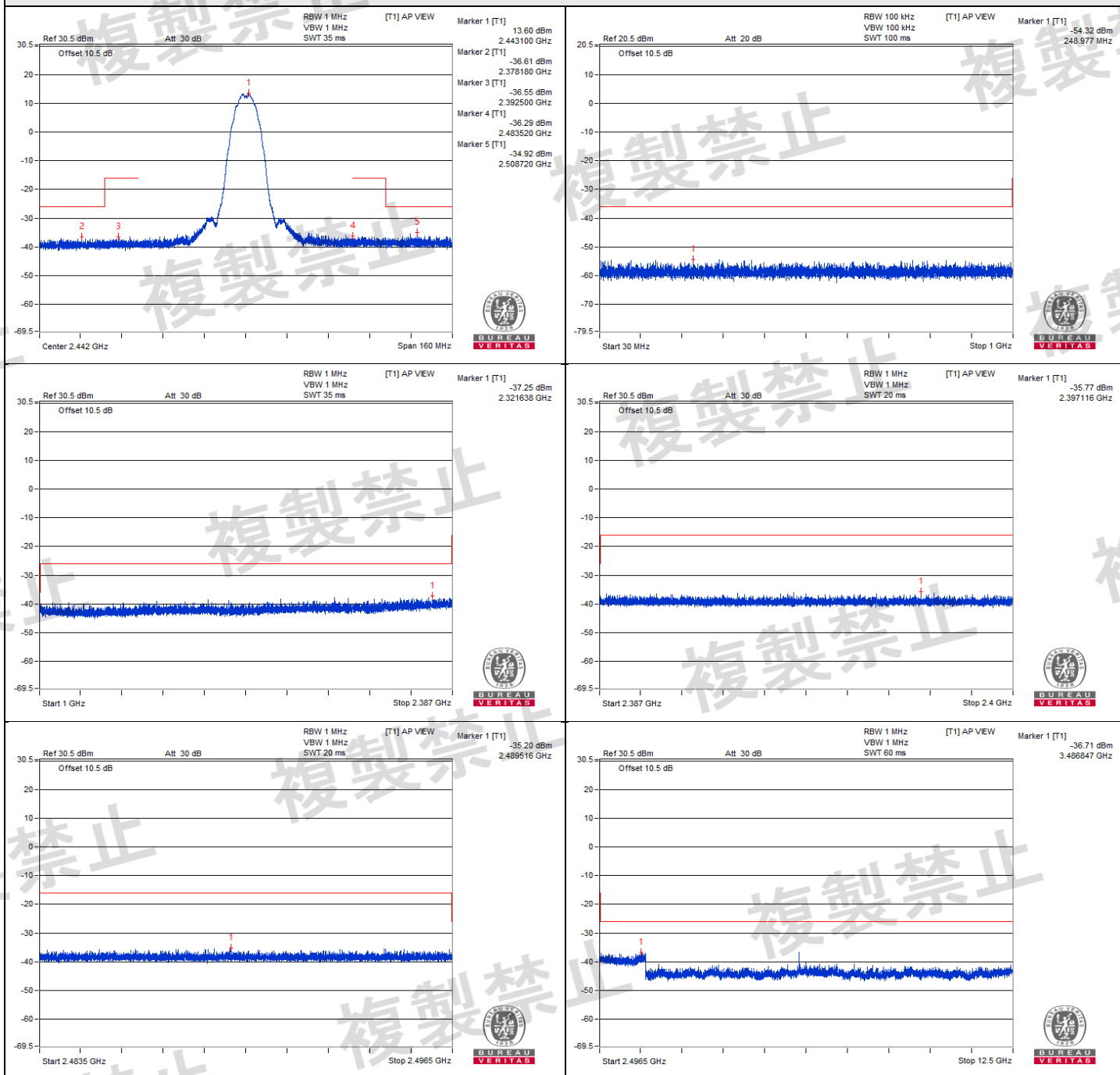
NOTE: 1. The spectrum plots are attached on the following pages.

Vnormal



CH 1 (2412 MHz)

Vnormal

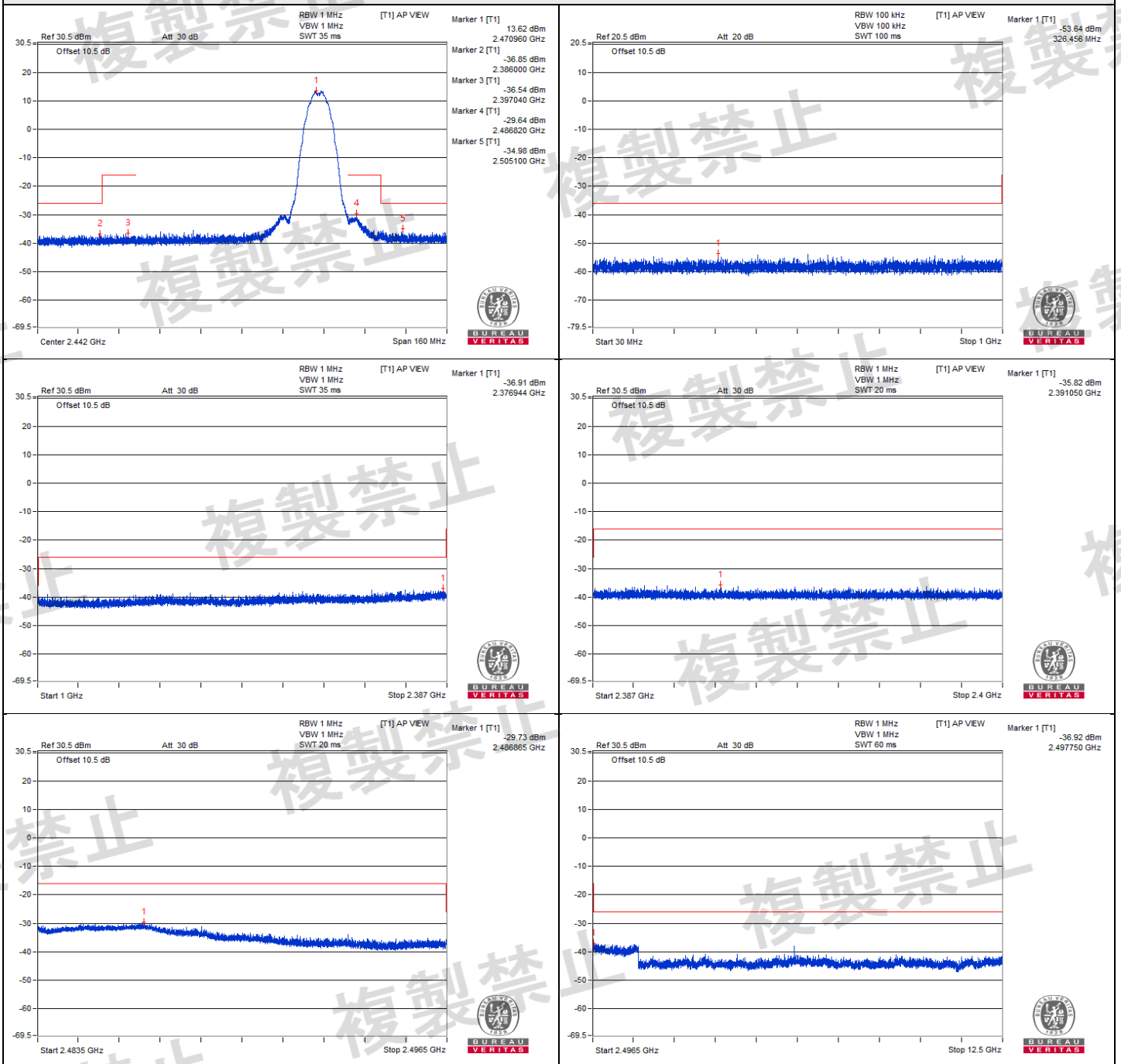


CH 7 (2442 MHz)



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VERITAS

Vnormal



CH 13 (2472 MHz)

802.11g Chain 0

TEST CHANNEL		CH 1 (2412 MHz)			
TEST CONDITION	FREQUENCY RANGE(MHz)	FREQUENCY (MHz)	MEASUREMENT VALUE	LIMIT	RESULT
V _{normal}	30.0 to 1000.0	262.800	0.004325 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2387.000	0.021121 uW/MHz	2.5 uW/MHz	PASS(1)
	2387.0 to 2400.0	2399.976	0.0309 uW/MHz	25 uW/MHz	PASS(2)
	2483.5 to 2496.5	2484.295	0.300608 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	7236.909	0.271644 uW/MHz	2.5 uW/MHz	PASS
TEST CHANNEL		CH 7 (2442 MHz)			
V _{normal}	30.0 to 1000.0	826.128	0.004285 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2277.254	0.206538 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2396.916	0.628058 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2483.685	0.812831 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	7321.938	0.460257 uW/MHz	2.5 uW/MHz	PASS
TEST CHANNEL		CH 13 (2472 MHz)			
V _{normal}	30.0 to 1000.0	86.502	0.003715 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2357.006	0.202768 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2396.171	0.273527 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2483.508	1.097436 uW/MHz	25 uW/MHz	PASS(3)
	2496.5 to 12500.0	2496.500	0.051098 uW/MHz	2.5 uW/MHz	PASS(4)

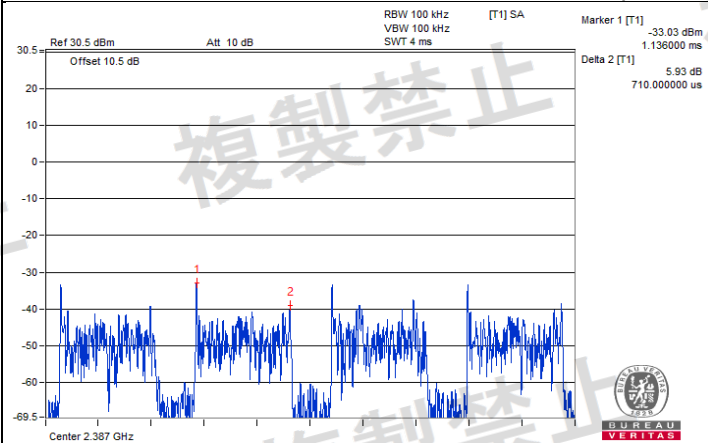
NOTE: 1. The spectrum plots are attached on the following pages.

2. (No.): The value was tested under Measuring Mode *Zero Span.

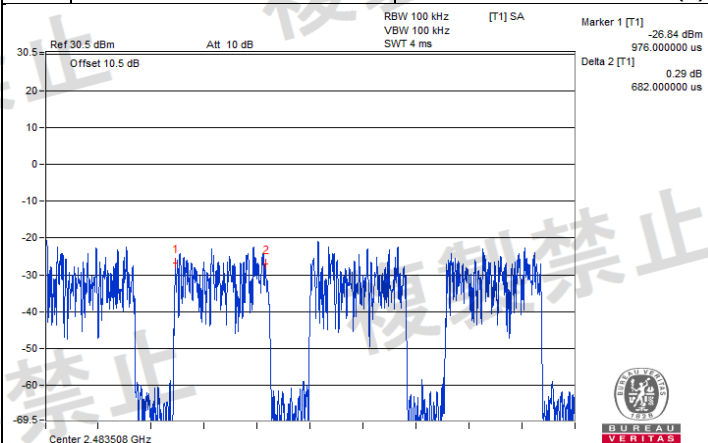


Measuring Mode *Zero Span

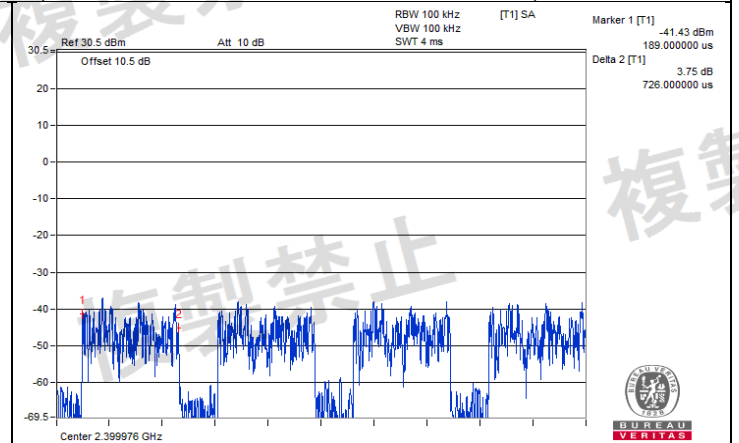
1. Set the spectrum analyzer as below and it takes in a value of all data point.
2. Regarding the all data value, it transforms the "dBm" value into "uW" value.
3. It adds the all values and calculates a grand total. Define a grand total as "P".
4. It divides "P" by sample data point (>400) and calculates the mean value.
5. It reports the mean value.
6. This test value includes the RBW conversion compensation (use a low bandwidth converted to 1 MHz.)



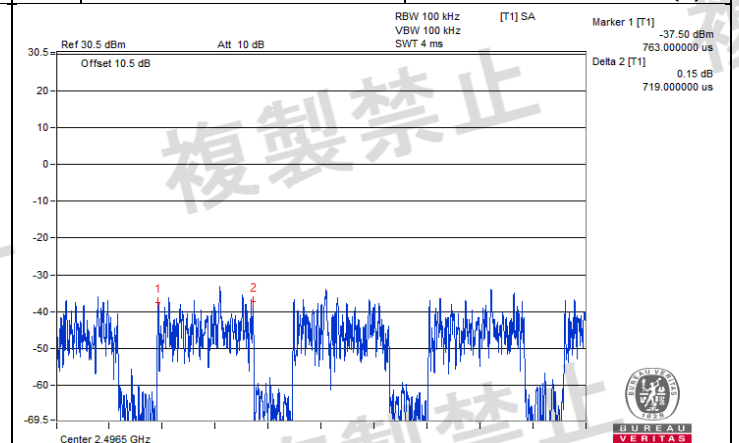
1 2387.000MHz P = 0.021121 uW/MHz(6)



3 2483.508MHz P = 1.097436 uW/MHz(6)

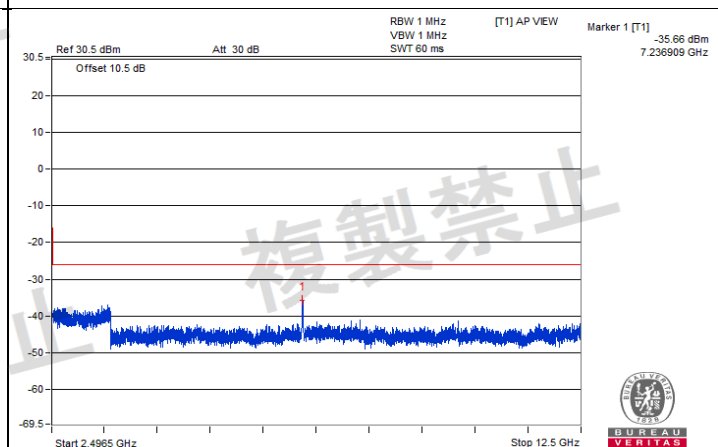
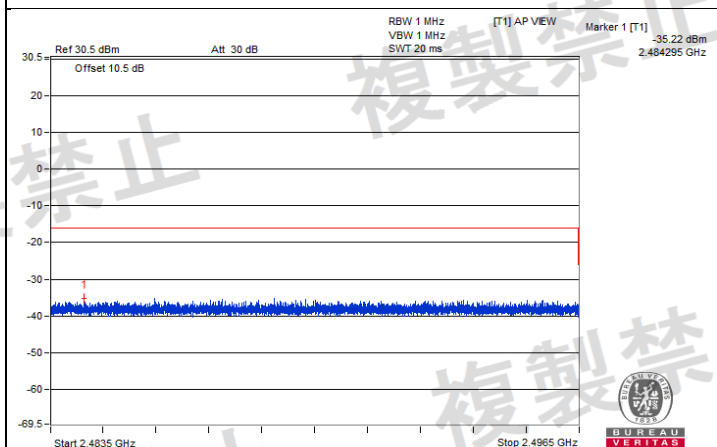
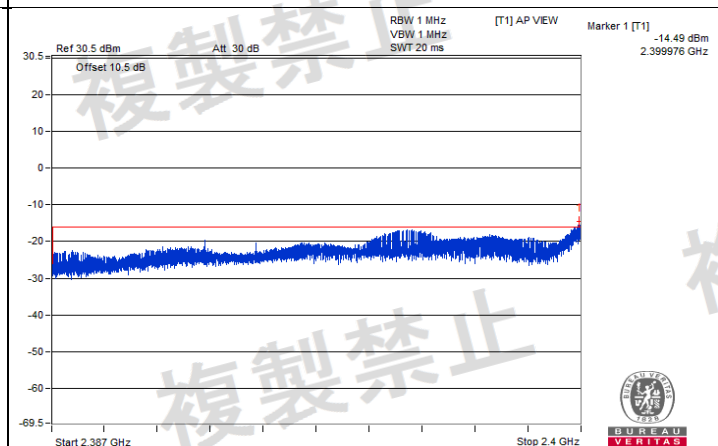
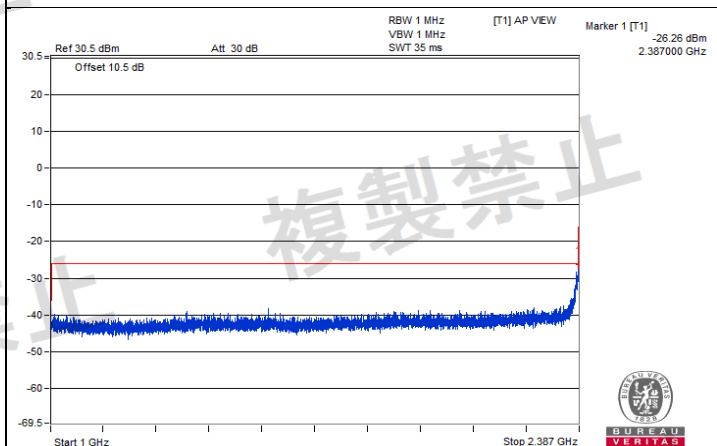
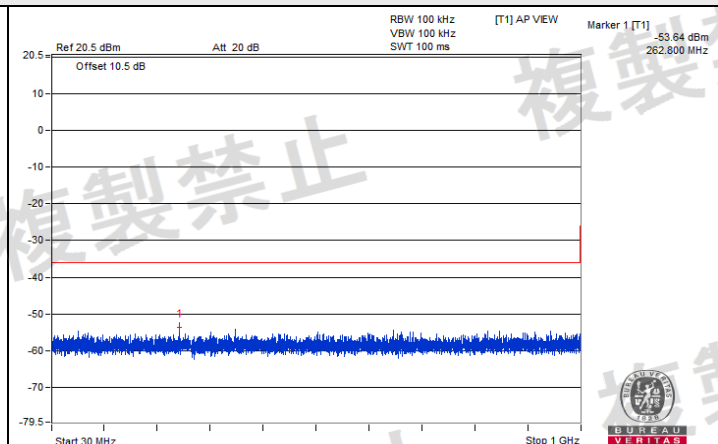
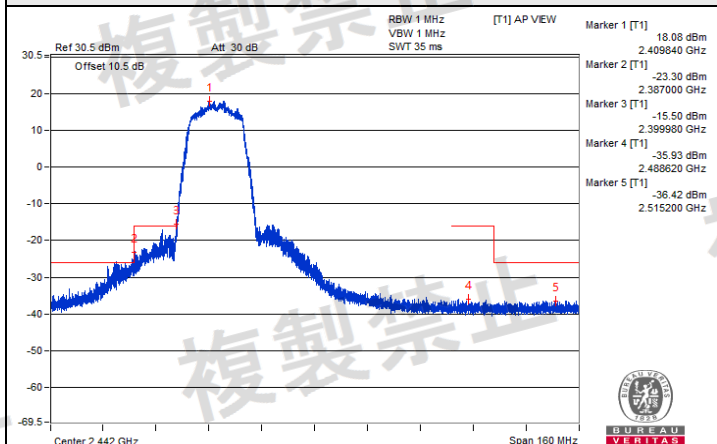


2 2399.976MHz P = 0.0309 uW/MHz(6)



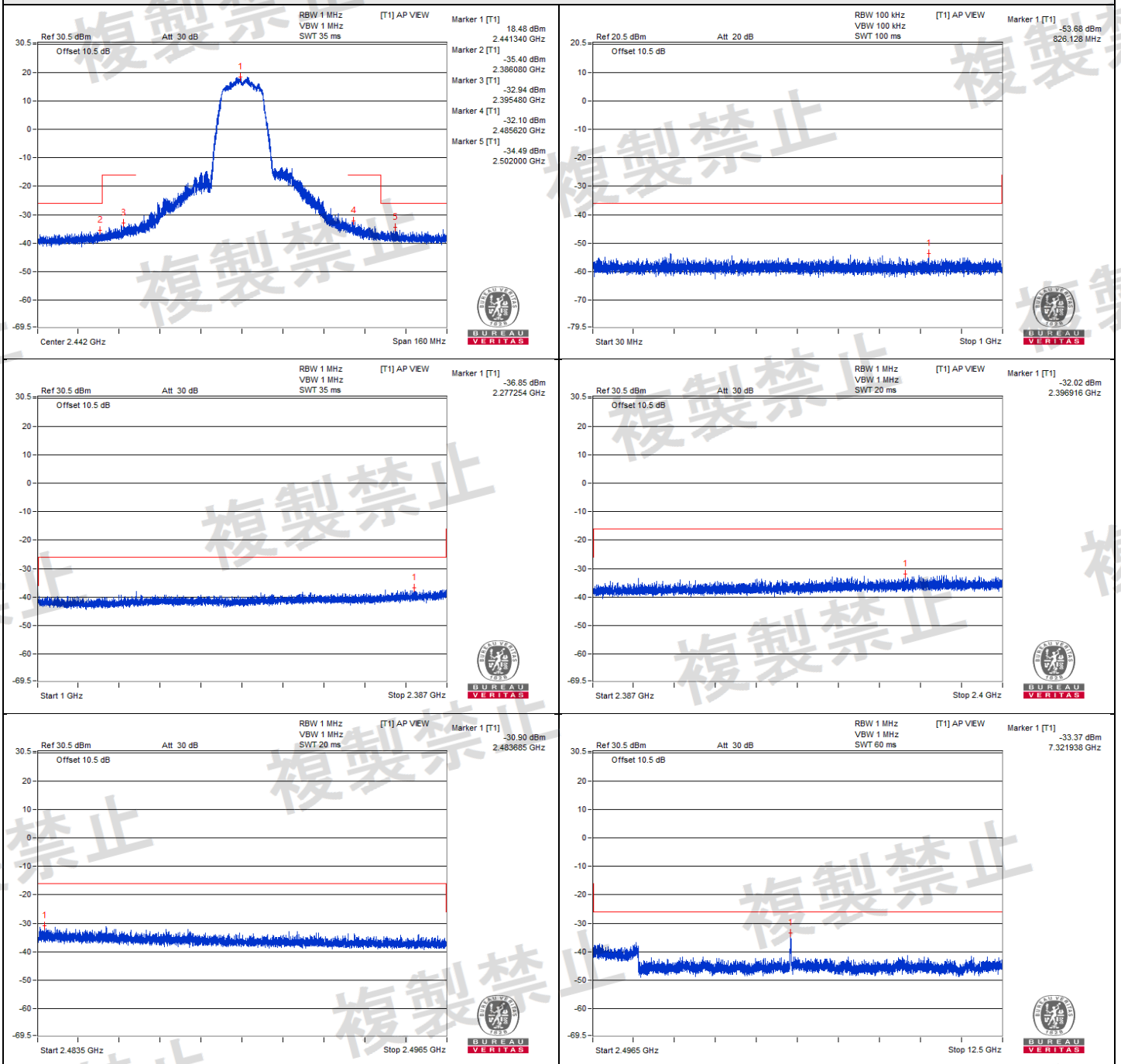
4 2496.500MHz P = 0.051098 uW/MHz(6)

Vnormal



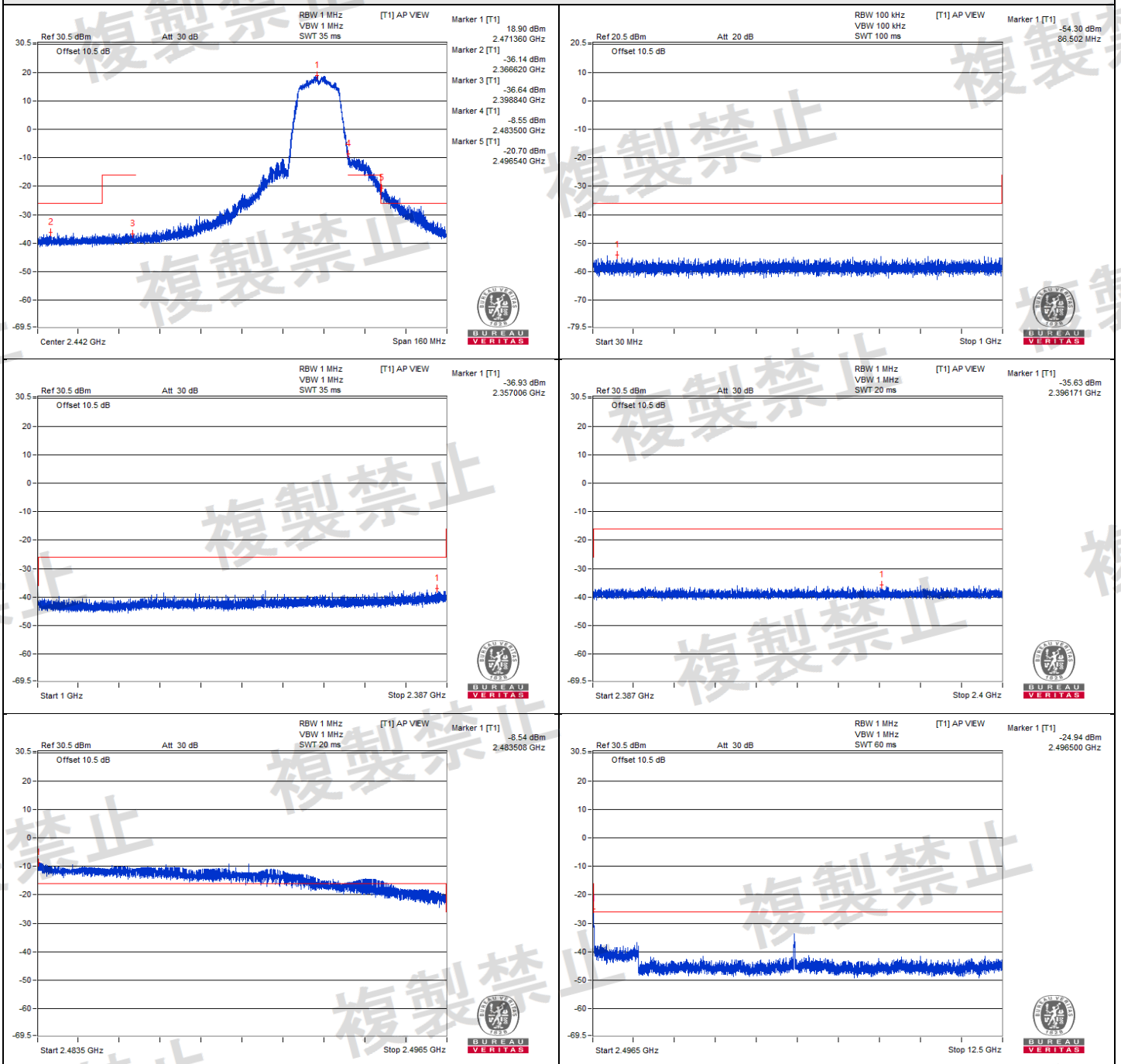
CH 1 (2412 MHz)

Vnormal



CH 7 (2442 MHz)

Vnormal



CH 13 (2472 MHz)

802.11n (HT20) Chain 0

TEST CHANNEL		CH 1 (2412 MHz)			
TEST CONDITION	FREQUENCY RANGE(MHz)	FREQUENCY (MHz)	MEASUREMENT VALUE	LIMIT	RESULT
V _{normal}	30.0 to 1000.0	814.851	0.004355 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2387.000	0.02968 uW/MHz	2.5 uW/MHz	PASS(1)
	2387.0 to 2400.0	2399.337	0.031186 uW/MHz	25 uW/MHz	PASS(2)
	2483.5 to 2496.5	2495.650	0.294442 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	7239.409	0.276694 uW/MHz	2.5 uW/MHz	PASS
TEST CHANNEL		CH 7 (2442 MHz)			
V _{normal}	30.0 to 1000.0	989.815	0.003917 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2386.307	0.39355 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2399.490	1.078947 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2483.635	1.355189 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	7325.690	0.576766 uW/MHz	2.5 uW/MHz	PASS
TEST CHANNEL		CH 13 (2472 MHz)			
V _{normal}	30.0 to 1000.0	288.020	0.003758 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2239.805	0.186209 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2391.061	0.293765 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2483.521	0.603464 uW/MHz	25 uW/MHz	PASS(3)
	2496.5 to 12500.0	2497.750	0.037692 uW/MHz	2.5 uW/MHz	PASS(4)

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

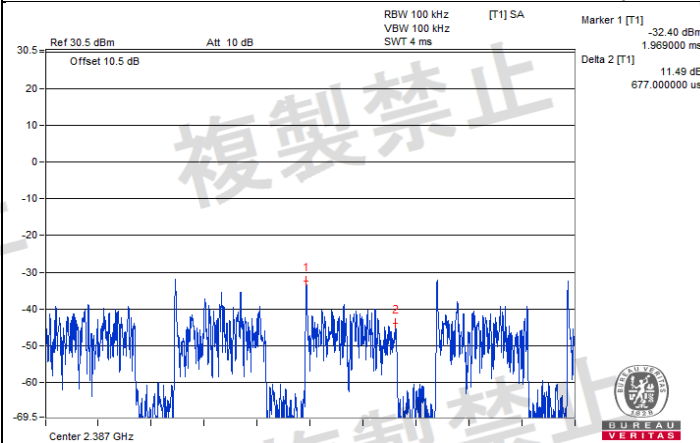
2. (No.): The value was tested under Measuring Mode *Zero Span.



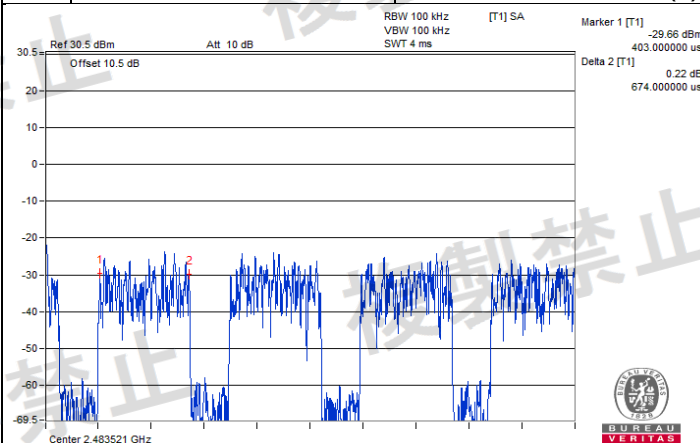
BUREAU
VERITAS

Measuring Mode *Zero Span

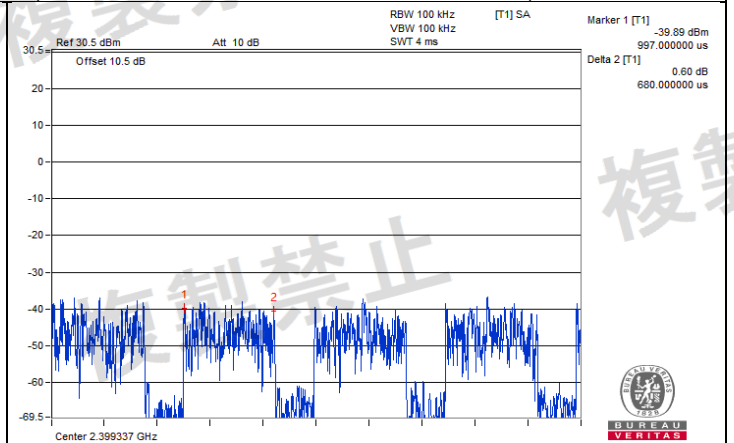
1. Set the spectrum analyzer as below and it takes in a value of all data point.
2. Regarding the all data value, it transforms the "dBm" value into "uW" value.
3. It adds the all values and calculates a grand total. Define a grand total as "P".
4. It divides "P" by sample data point (>400) and calculates the mean value.
5. It reports the mean value.
6. This test value includes the RBW conversion compensation (use a low bandwidth converted to 1 MHz.)



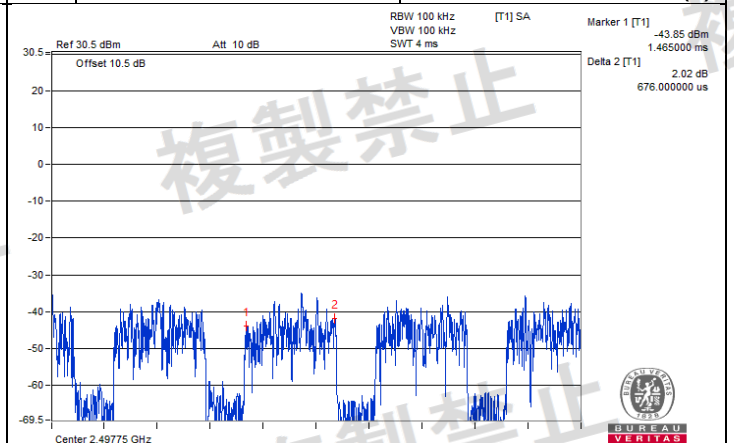
1 | 2387.000MHz | P = 0.02968 uW/MHz(6)



3 | 2483.521MHz | P = 0.603464 uW/MHz(6)

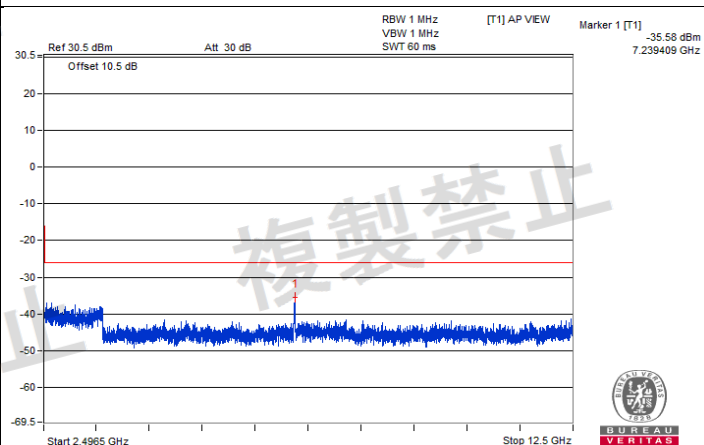
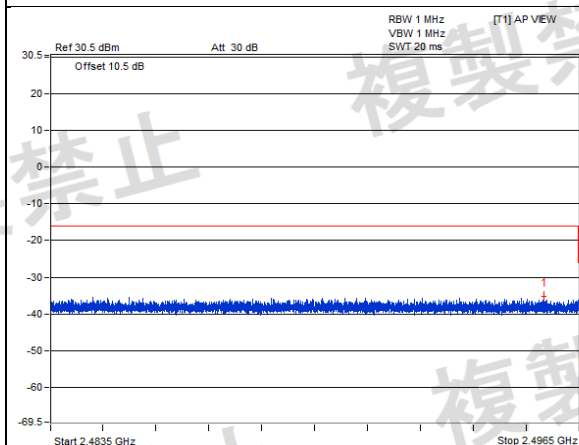
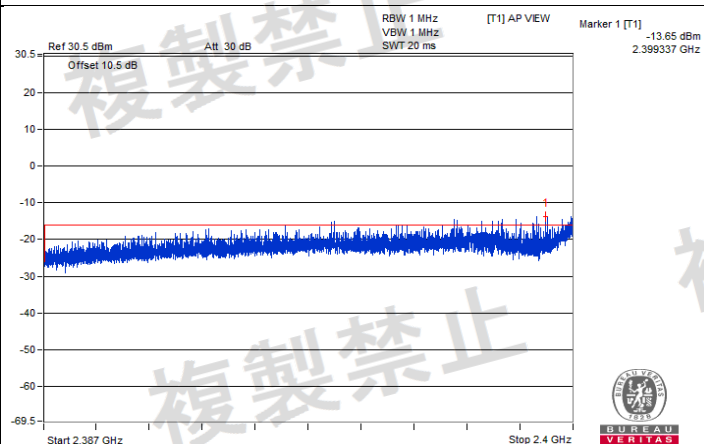
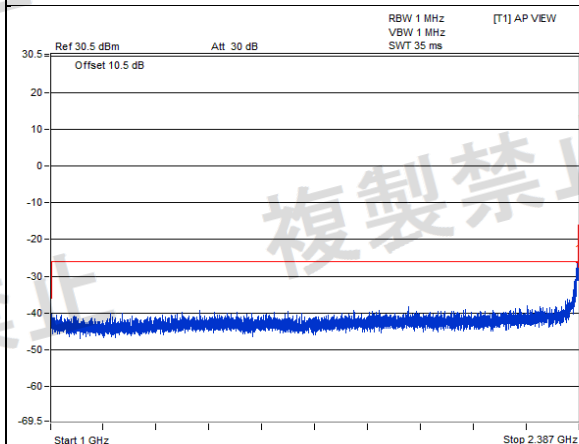
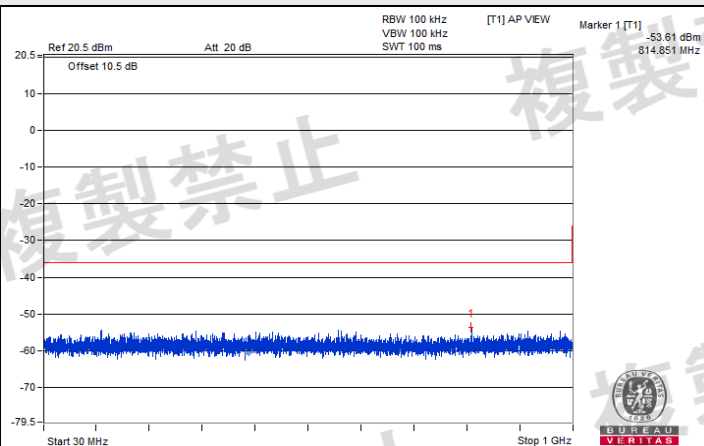
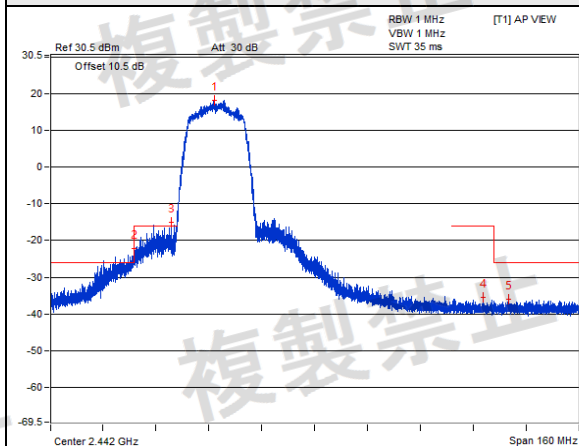


2 | 2399.337MHz | P = 0.031186 uW/MHz(6)



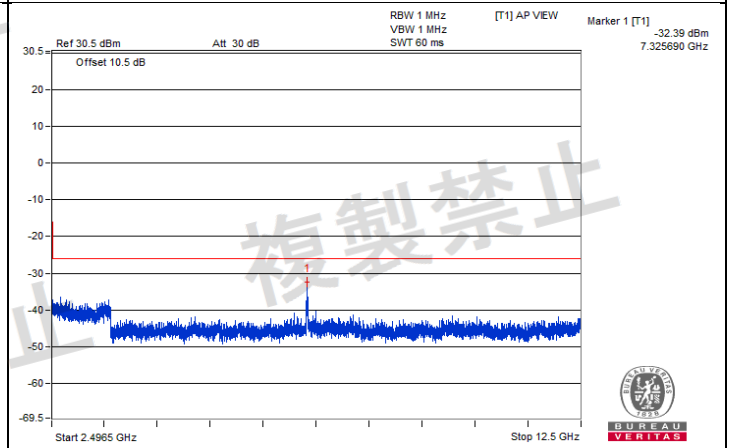
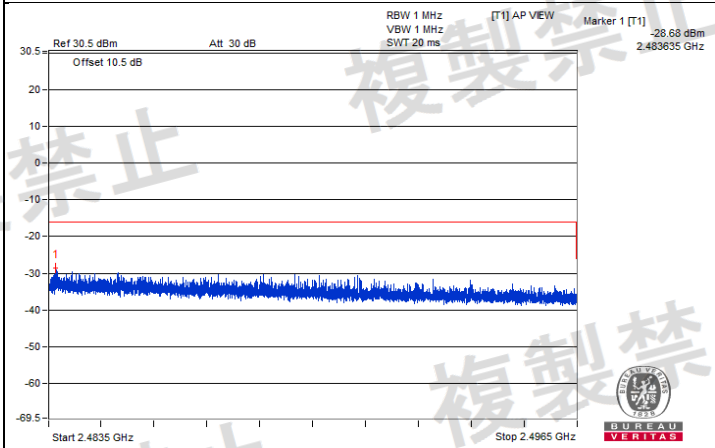
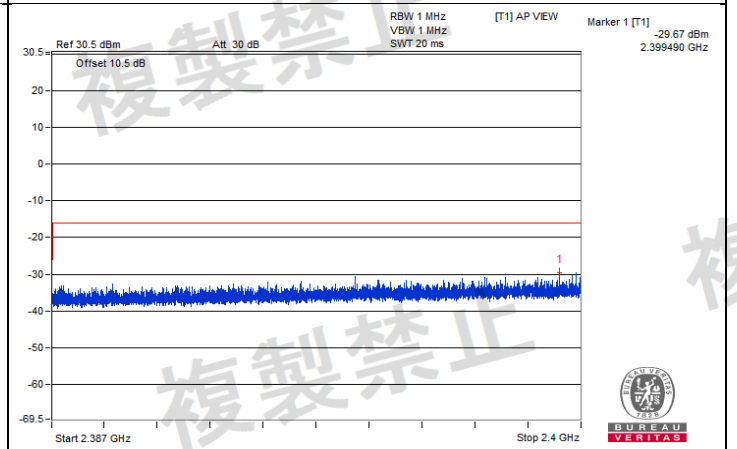
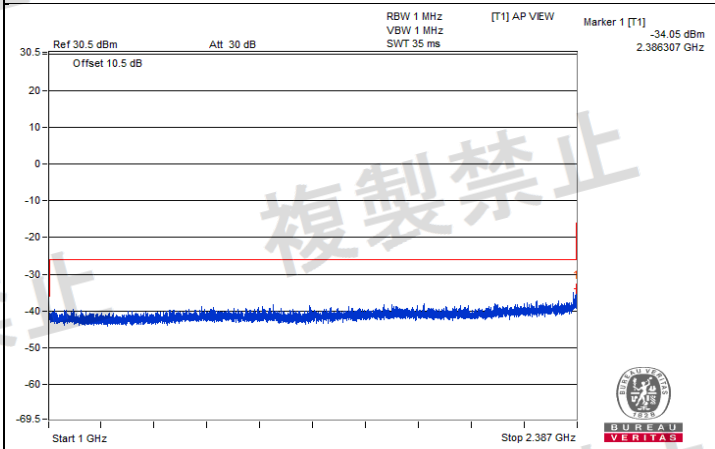
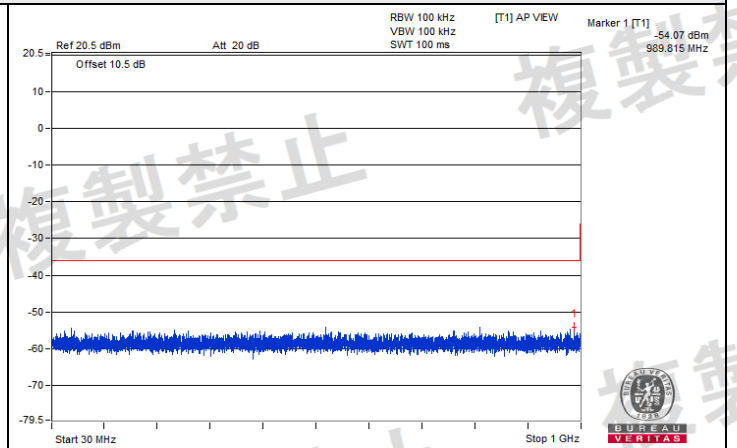
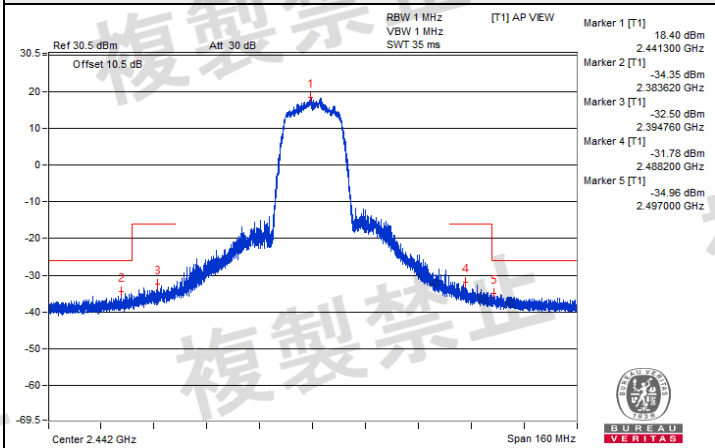
4 | 2497.750MHz | P = 0.037692 uW/MHz(6)

Vnormal



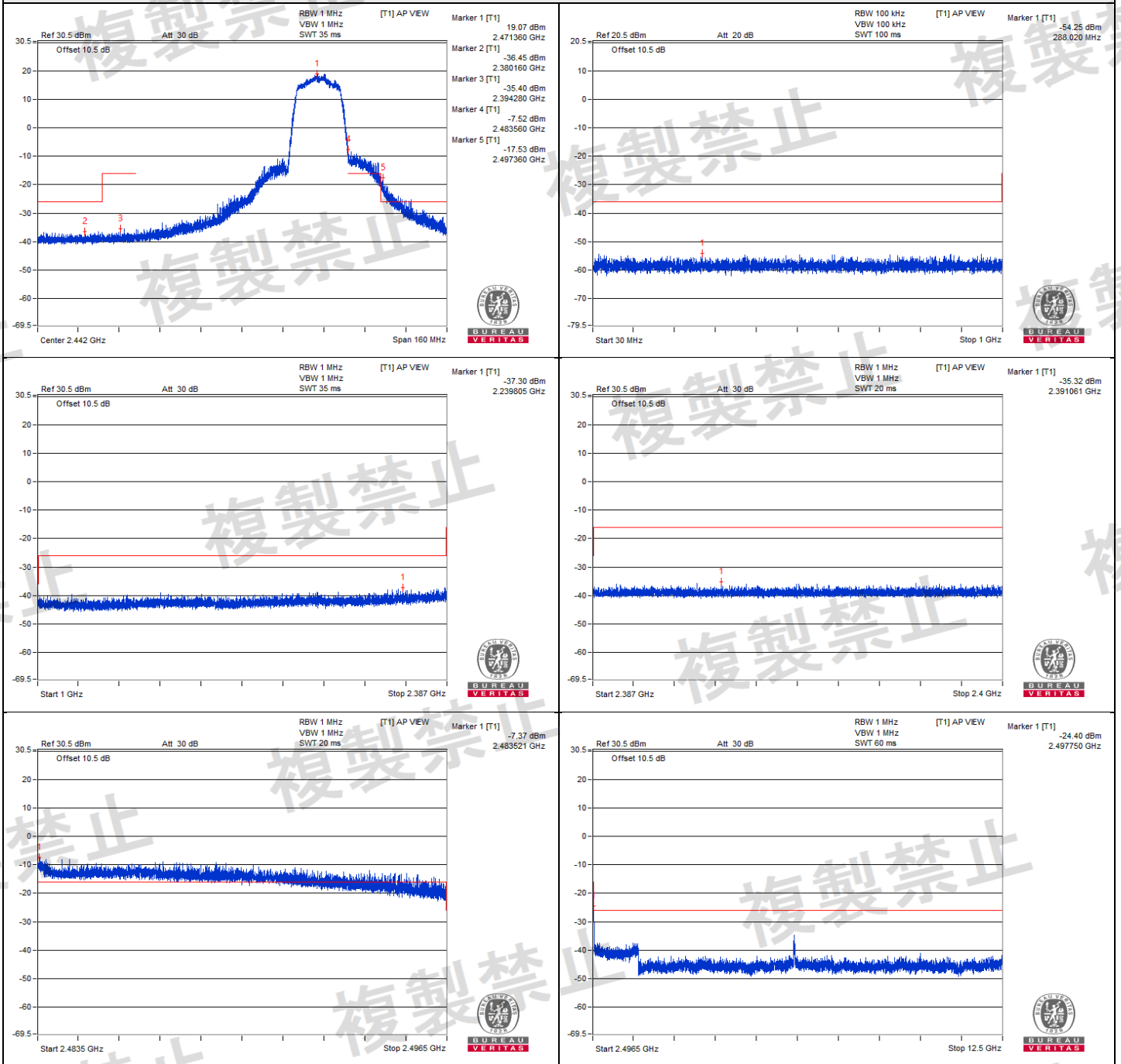
CH 1 (2412 MHz)

Vnormal



CH 7 (2442 MHz)

Vnormal



CH 13 (2472 MHz)

802.11ax (HE20) Chain 0

TEST CHANNEL		CH 1 (2412 MHz)			
TEST CONDITION	FREQUENCY RANGE(MHz)	FREQUENCY (MHz)	MEASUREMENT VALUE	LIMIT	RESULT
V _{normal}	30.0 to 1000.0	429.519	0.004102 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2385.613	0.053516 uW/MHz	2.5 uW/MHz	PASS(1)
	2387.0 to 2400.0	2389.569	0.088193 uW/MHz	25 uW/MHz	PASS(2)
	2483.5 to 2496.5	2484.204	0.362243 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	7241.910	0.295801 uW/MHz	2.5 uW/MHz	PASS
TEST CHANNEL		CH 7 (2442 MHz)			
V _{normal}	30.0 to 1000.0	562.288	0.004083 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2386.653	0.528445 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2398.776	2.654606 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2487.372	3.11889 uW/MHz	25 uW/MHz	PASS
	2496.5 to 12500.0	7324.439	0.375837 uW/MHz	2.5 uW/MHz	PASS
TEST CHANNEL		CH 13 (2472 MHz)			
V _{normal}	30.0 to 1000.0	332.276	0.003698 uW/100kHz	0.25 uW/100kHz	PASS
	1000.0 to 2387.0	2276.907	0.163682 uW/MHz	2.5 uW/MHz	PASS
	2387.0 to 2400.0	2399.049	0.414 uW/MHz	25 uW/MHz	PASS
	2483.5 to 2496.5	2490.678	0.963268 uW/MHz	25 uW/MHz	PASS(3)
	2496.5 to 12500.0	2496.500	0.227763 uW/MHz	2.5 uW/MHz	PASS(4)

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

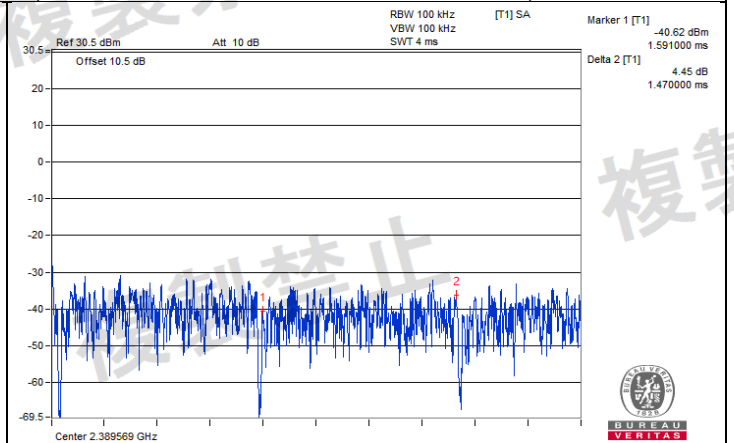
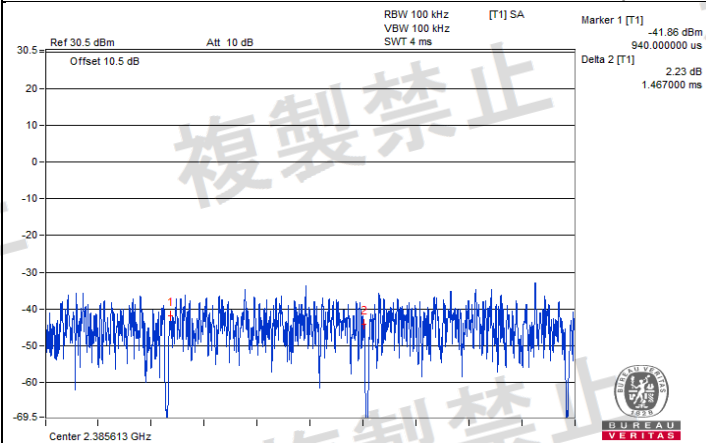
2. (No.): The value was tested under Measuring Mode *Zero Span.



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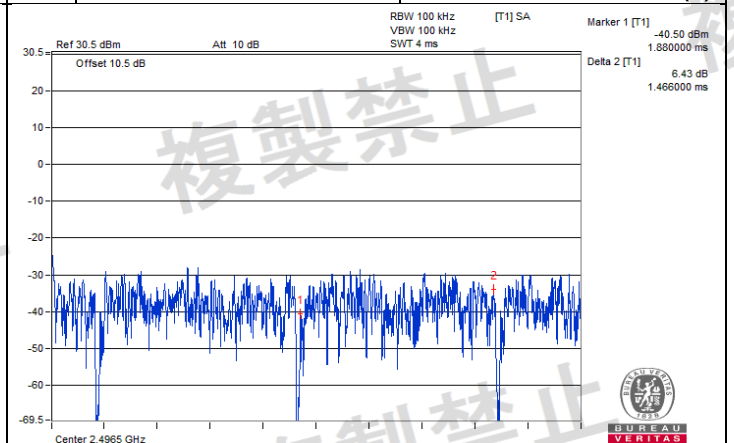
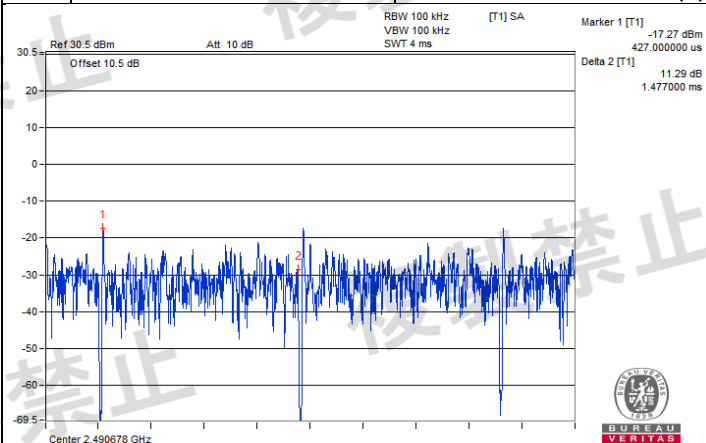
Measuring Mode *Zero Span

1. Set the spectrum analyzer as below and it takes in a value of all data point.
2. Regarding the all data value, it transforms the "dBm" value into "uW" value.
3. It adds the all values and calculates a grand total. Define a grand total as "P".
4. It divides "P" by sample data point (>400) and calculates the mean value.
5. It reports the mean value.
6. This test value includes the RBW conversion compensation (use a low bandwidth converted to 1 MHz.)



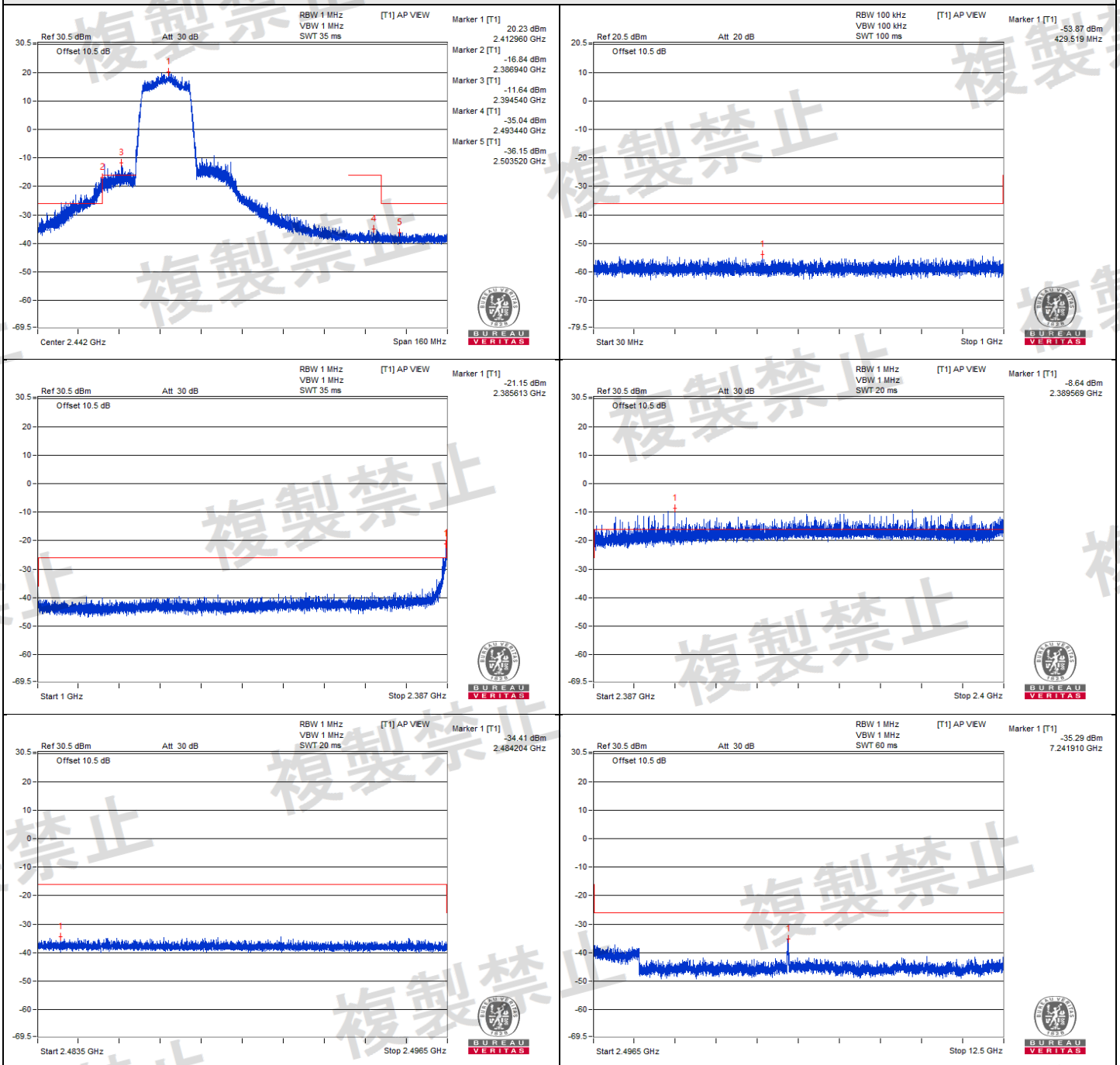
1 2385.613MHz P = 0.053516 uW/MHz(6)

2 2389.569MHz P = 0.088193 uW/MHz(6)

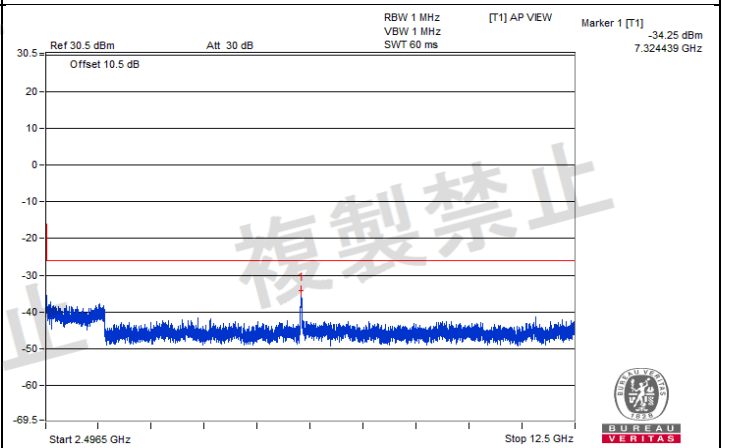
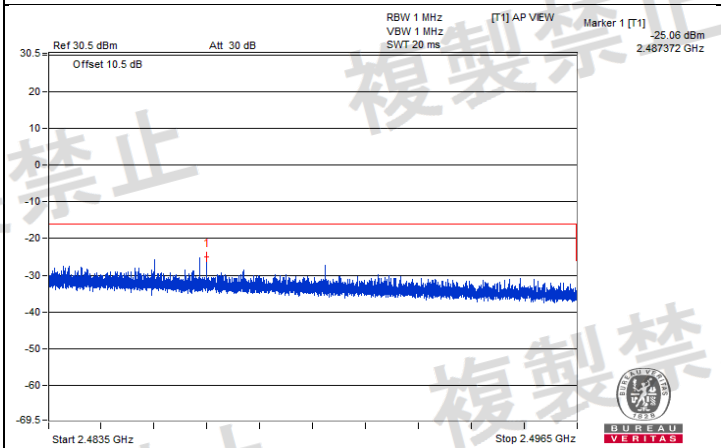
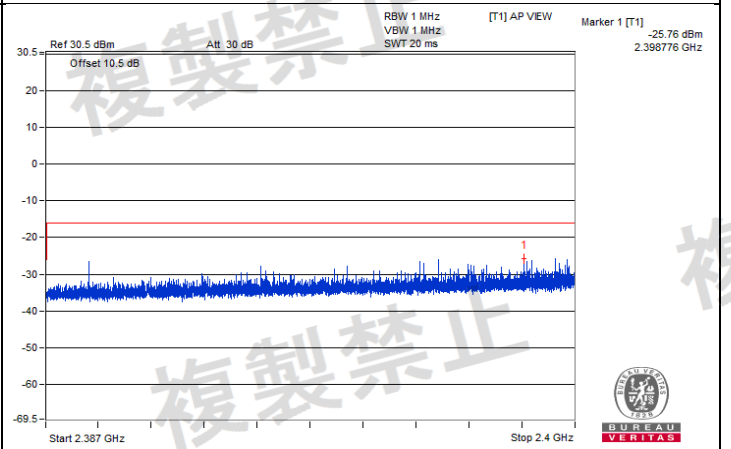
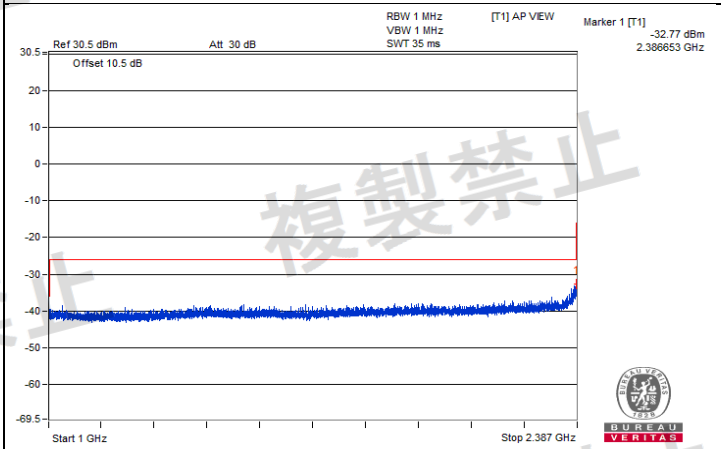
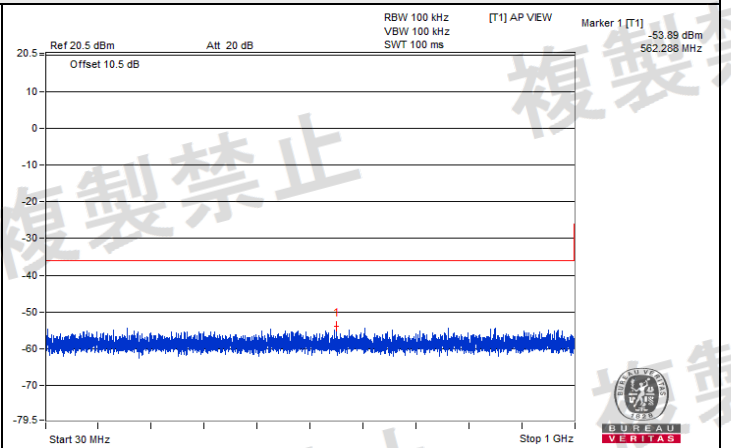
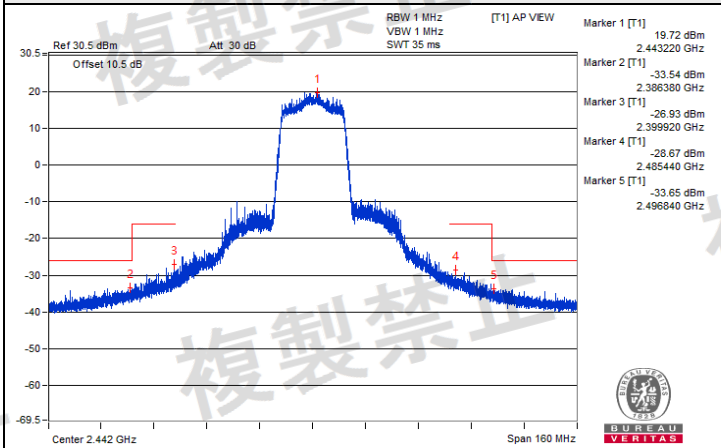


3 2490.678MHz P = 0.963268 uW/MHz(6)

4 2496.500MHz P = 0.227763 uW/MHz(6)

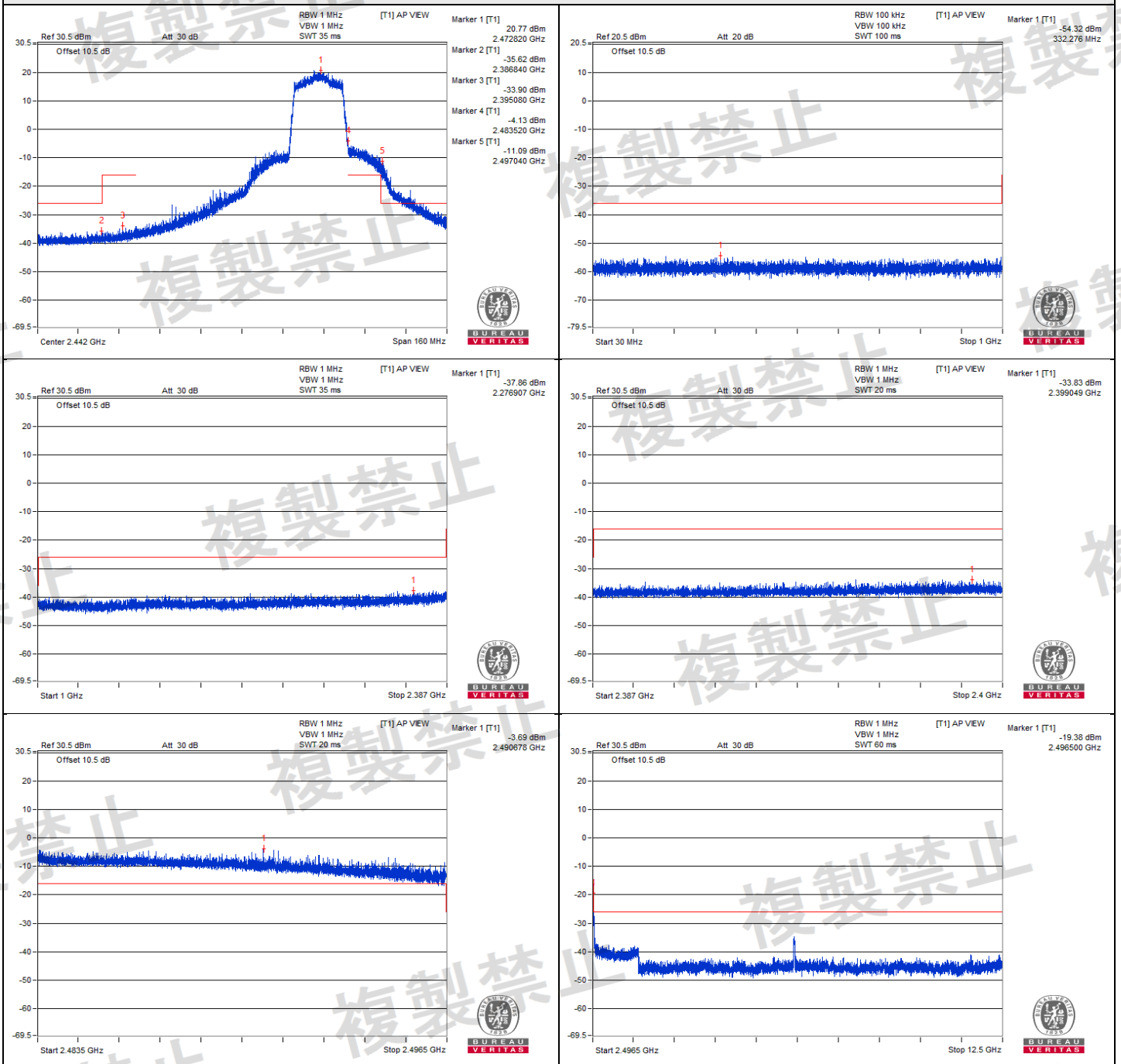
V_{normal}**CH 1 (2412 MHz)**

Vnormal



CH 7 (2442 MHz)

Vnormal



CH 13 (2472 MHz)

7.4 Spurious Emissions of Receiver

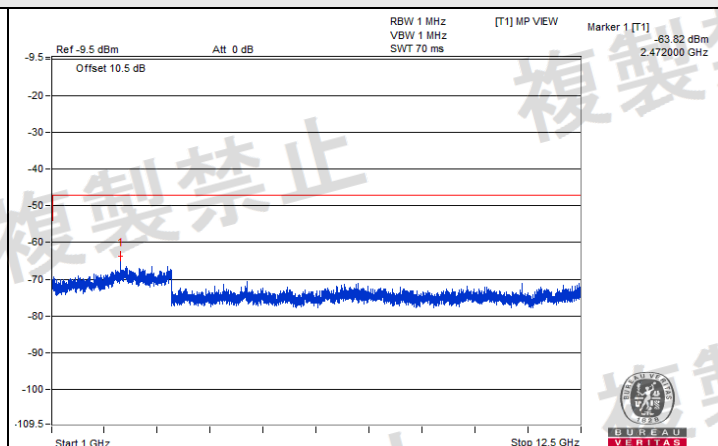
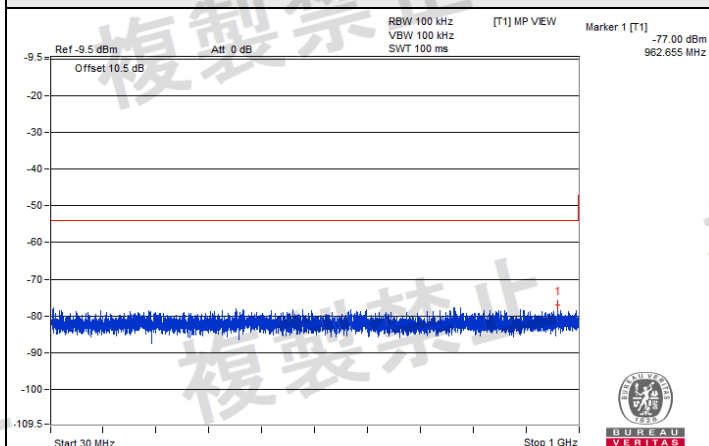
Environmental Conditions:	24°C, 64% RH	Tested By:	Match Tsui
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20 MHz System Chain 0

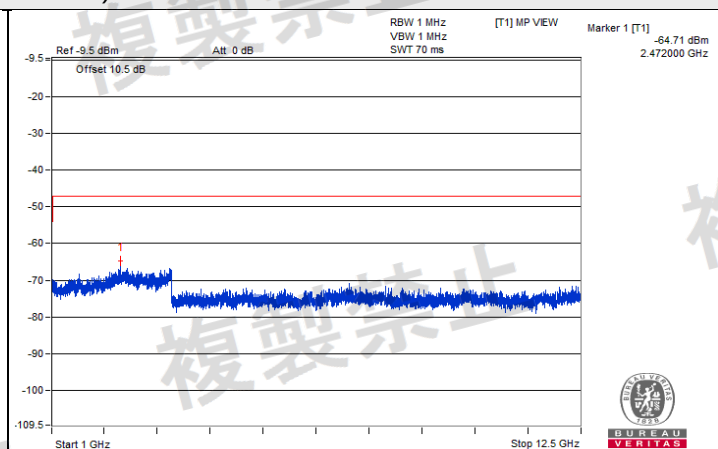
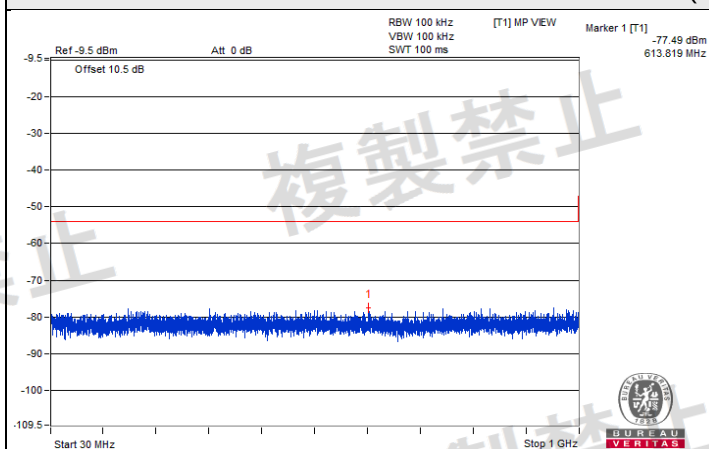
TEST CHANNEL		CH 1 (2412 MHz)			
TEST CONDITION	FREQUENCY RANGE(MHz)	FREQUENCY (MHz)	MEASUREMENT VALUE(nW)	LIMIT (nW)	RESULT
V_{normal}	30.0 to 1000.0	962.655	0.019953	4	PASS
	1000.0 to 12500.0	2472.000	0.414954	20	PASS
TEST CHANNEL		CH 7 (2442 MHz)			
V_{normal}	30.0 to 1000.0	613.819	0.017824	4	PASS
	1000.0 to 12500.0	2472.000	0.338065	20	PASS
TEST CHANNEL		CH 13 (2472 MHz)			
V_{normal}	30.0 to 1000.0	978.418	0.017824	4	PASS
	1000.0 to 12500.0	2472.000	0.327341	20	PASS

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

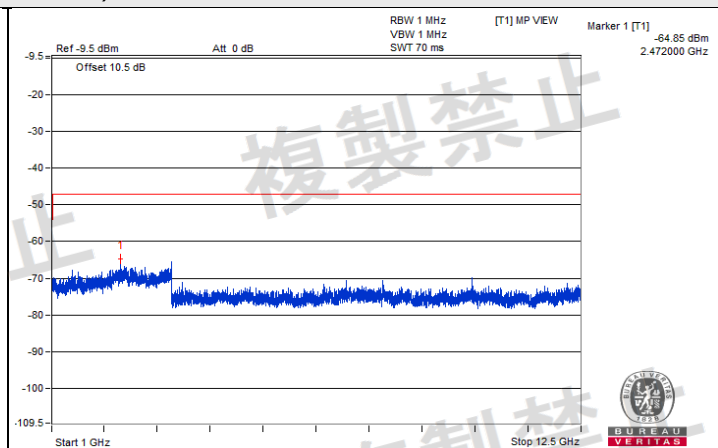
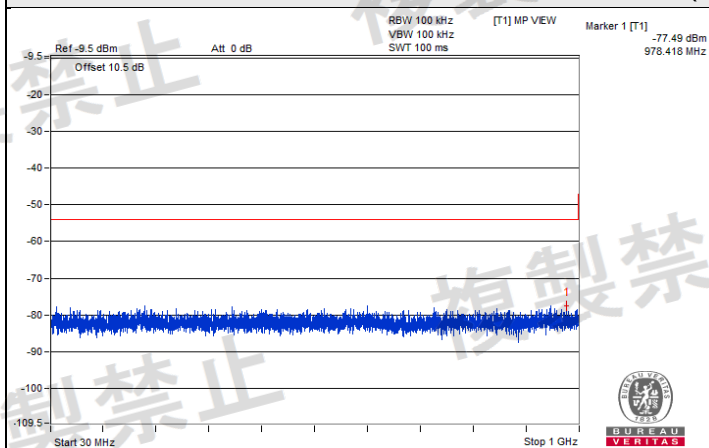
Vnormal



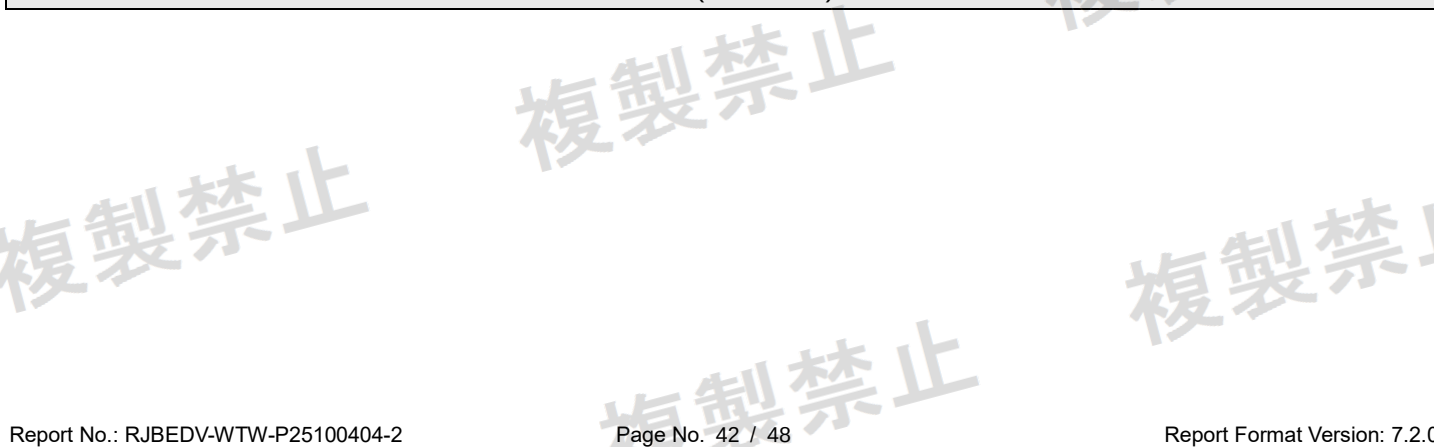
CH 1 (2412 MHz)



CH 7 (2442 MHz)



CH 13 (2472 MHz)



7.5 Antenna Power

Environmental Conditions:	25°C, 60% RH	Tested By:	Match Tsui
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802.11b

Voltage (Vdc)	Channel Number	Frequency (MHz)	Conducted RF Output Power Density (mW/MHz)	Radiated RF Output Power Density (mW/MHz)
48	1	2412	6.013	11.888
	7	2442	6.888	13.617
	13	2472	6.731	13.307
Maximum Limit (mW/MHz):			10	-
Rated Power (mW/MHz):			7	-
Maximum Tolerance of Antenna Power (mW/MHz):			8.4	-
Maximum EIRP Limit (mW/MHz):			-	16.368

Notes:

1. Antenna gain is 2.96 dBi.
2. The radiated RF output power density is a "calculated" value derived from the conducted value.
3. Formula: Radiated RF output power density = Conducted RF output power density + Antenna gain

802.11g

Voltage (Vdc)	Channel Number	Frequency (MHz)	Conducted RF Output Power Density (mW/MHz)	Radiated RF Output Power Density (mW/MHz)
48	1	2412	4.743	9.377
	7	2442	5.371	10.618
	13	2472	5.384	10.644
Maximum Limit (mW/MHz):			10	-
Rated Power (mW/MHz):			6	-
Maximum Tolerance of Antenna Power (mW/MHz):			7.2	-
Maximum EIRP Limit (mW/MHz):			-	16.368

Notes:

1. Antenna gain is 2.96 dBi.
2. The radiated RF output power density is a "calculated" value derived from the conducted value.
3. Formula: Radiated RF output power density = Conducted RF output power density + Antenna gain

802.11n (HT20)

Voltage (Vdc)	Channel Number	Frequency (MHz)	Conducted RF Output Power Density (mW/MHz)	Radiated RF Output Power Density (mW/MHz)
48	1	2412	4.199	8.301
	7	2442	5.371	10.618
	13	2472	5.261	10.401
Maximum Limit (mW/MHz):			10	-
Rated Power (mW/MHz):			6	-
Maximum Tolerance of Antenna Power (mW/MHz):			7.2	-
Maximum EIRP Limit (mW/MHz):			-	16.368

Notes:

1. Antenna gain is 2.96 dBi.
2. The radiated RF output power density is a "calculated" value derived from the conducted value.
3. Formula: Radiated RF output power density = Conducted RF output power density + Antenna gain

802.11ax (HE20)

Voltage (Vdc)	Channel Number	Frequency (MHz)	Conducted RF Output Power Density (mW/MHz)	Radiated RF Output Power Density (mW/MHz)
48	1	2412	6.399	12.651
	7	2442	7.246	14.325
	13	2472	7.746	15.314
Maximum Limit (mW/MHz):			10	-
Rated Power (mW/MHz):			8	-
Maximum Tolerance of Antenna Power (mW/MHz):			9.6	-
Maximum EIRP Limit (mW/MHz):			-	16.368

Notes:

1. Antenna gain is 2.96 dBi.
2. The radiated RF output power density is a "calculated" value derived from the conducted value.
3. Formula: Radiated RF output power density = Conducted RF output power density + Antenna gain

7.6 Number of Carriers within 1 MHz Bandwidth in OFDM

Environmental Conditions:	24°C, 64% RH	Tested By:	Match Tsui
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About OFDM Technical, one OFDM Channel will have 52 sub-carriers. At present, we observe this product via the spectrum, and we know that there are 3 carriers in 1 MHz bandwidth in OFDM.

7.7 Interference Prevention Function

Environmental Conditions:	24°C, 64% RH	Tested By:	Match Tsui
Link Mode		Test Result	
WiFi 2.4G		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.

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

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