TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 15, Subpart C (Section 15.247)**
Report No.:	RFBARR-WTW-P23110067F
FCC ID:	RAS-MT7925B14L
Product:	2TX 11be (WiFi7) BW160 + BT/BLE Combo Card
Brand:	MediaTek
Model No.:	MT7925B14L
Received Date:	2024/8/30
Test Date:	2024/9/6 ~ 2024/9/19
Issued Date:	2024/9/27
Applicant:	MediaTek Inc.
Address:	No. 1, Dusing 1st Rd., Hsinchu Science Park, Hsinchu City, 30078 Taiwan
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
Test Location:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
FCC Registration / Designation Number:	723255 / TW2022

Approved by: _____ , **Date:** 2024/9/27

Wen Yu / Assistant Manager

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Prepared by : Claire Kuan / Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBARR-WTW-P23110067F	Original release.	2024/9/27

1 Certificate

Product:	2TX 11be (WiFi7) BW160 + BT/BLE Combo Card
Brand:	MediaTek
Test Model:	MT7925B14L
Sample Status:	Engineering sample
Applicant:	MediaTek Inc.
Test Date:	2024/9/6 ~ 2024/9/19
Standard:	47 CFR FCC Part 15, Subpart C (Section 15.247)
Measurement procedure:	ANSI C63.10-2013 KDB 558074 D01 15.247 Meas Guidance v05r02 KDB 662911 D01 Multiple Transmitter Output v02r01

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

47 CFR FCC Part 15, Subpart C (Section 15.247)			
Standard / Clause	Test Item	Result	Remark
15.247(b)	RF Output Power	NA	Refer to Note 1 below
15.247(e)	Power Spectral Density	NA	Refer to Note 1 below
15.247(a)(2)	6 dB Bandwidth	NA	Refer to Note 1 below
15.247(d)	Conducted Out of Band Emissions	NA	Refer to Note 1 below
15.207	AC Power Conducted Emissions	Pass	Minimum passing margin is -11.87 dB at 0.16953 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -0.1 dB at 287.57 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.08 dB at 2484.7 and 4923.89 MHz
15.203	Antenna Requirement	Pass	Antenna connector is i-pex(MHF) not a standard connector.

Notes:
1. AC Power Conducted Emissions and Unwanted Emissions test items were performed for this addendum. The others testing data refer to original test report.
2. 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 CISPR 16-4-2:

Measurement	Specification	Expanded Uncertainty (k=2) (±)
AC Power Conducted Emissions	150 kHz ~ 30 MHz	1.9 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.1 dB
	30 MHz ~ 1 GHz	5.5 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	5.1 dB
	18 GHz ~ 40 GHz	5.3 dB

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	2TX 11be (WiFi7) BW160 + BT/BLE Combo Card
Brand	MediaTek
Test Model	MT7925B14L
Status of EUT	Engineering sample
Power Supply Rating	3.3 Vdc from host equipment
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in VHT mode 1024QAM for OFDMA in 11ax mode 4096QAM for OFDMA in 11be mode
Modulation Technology	DSSS, OFDM, OFDMA
Transfer Rate	802.11b: up to 11 Mbps 802.11g: up to 54 Mbps 802.11n: up to 300 Mbps VHT: up to 400 Mbps 802.11ax: up to 573.5 Mbps 802.11be: up to 688.2 Mbps
Operating Frequency	2.412 GHz ~ 2.472 GHz
Number of Channel	802.11b, 802.11g, 802.11n (HT20), VHT20, 802.11ax (HE20), 802.11be (EHT20): 13 802.11n (HT40), VHT40, 802.11ax (HE40), 802.11be (EHT40): 9
Resource Unit (RU)	Single RU: 26-tone, 52-tone, 106-tone, 242-tone, 484-tone Multi-RU (Small RU): 52-tone + 26-tone, 106-tone + 26-tone
Output Power	**1TX:** 259.418 mW (24.14 dBm) **2TX:** 303.063 mW (24.82 dBm)

Note:

1. This report is prepared for FCC class II permissive change. The difference compared with the Report No.: RFBARR-WTW-P23110067 R1 as the following:
   - ◆ Add Monopole Antenna (Refer to Section 3.2).
2. According to above conditions, there are AC Power Conducted Emissions and Unwanted Emissions needs to be performed. All data for meeting the requirement is verified.
3. There are Bluetooth and WLAN (2.4 GHz & 5 GHz & 5.9 GHz & 6 GHz) technology used for the EUT.
4. Simultaneously transmission condition.

Condition	Technology	
1	WLAN (5 GHz) (2TX)	Bluetooth
2	WLAN (5.9 GHz) (2TX)	Bluetooth
3	WLAN (6 GHz) (2TX)	Bluetooth
4	WLAN (2.4 GHz) (1TX)	WLAN (5 GHz) (1TX)
5	WLAN (2.4 GHz) (1TX)	WLAN (5.9 GHz) (1TX)
6	WLAN (2.4 GHz) (1TX)	WLAN (6 GHz) (1TX)
Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.		

5. The EUT support OFDMA and Partial RU mode, therefore partial RU combination were investigated and the worst case scenario was identified.
6. The EUT support MRU mode is listed as below.

BW	Small size	
	52+26-tone MRU	106+26-tone MRU
20MHz	v	v
40MHz	v	v

7. 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 Antenna Description of EUT

1. The antenna information is listed as below.

Original

Antenna Set	RF Chain No.	Brand	Model	Antenna Net Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connector Type	Cable Length (mm)
1	Chain0	PSA	RFMTA340718EMLB302	3.18 4.92	2.4~2.4835 5.15~5.895	PIFA	i-pex(MHF)	200
	Chain1	PSA	RFMTA340718EMLB302	3.18 4.92	2.4~2.4835 5.15~5.895	PIFA	i-pex(MHF)	200
2	Chain0	PSA	RFMTA311020EMMB301	1.71 4.82 4.76 4.29 4.61 4.09	2.4~2.4835 5.15~5.895 5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	PIFA	i-pex(MHF)	200
	Chain1	PSA	RFMTA311020EMMB301	1.71 4.82 4.76 4.29 4.61 4.09	2.4~2.4835 5.15~5.895 5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	PIFA	i-pex(MHF)	200
3	Chain0	PSA	RFMTA421230IMMB701	-13.92 -13.91 -13.91 -14.46	5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	PIFA	i-pex(MHF)	300
	Chain1	PSA	RFMTA421230IMMB701	-13.92 -13.91 -13.91 -14.46	5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	PIFA	i-pex(MHF)	300

Newly

Antenna Set	RF Chain No.	Brand	Model	Antenna Net Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connector Type	Cable Length (mm)
4	Chain0	HongBo	260-25096	3.11 4.88 4.91 4.9 4.9 4.87 4.73 4.29 4.58 4.09	2.4~2.4835 5.15~5.250 5.25~5.35 5.47~5.725 5.725~5.85 5.85~5.895 5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	Monopole	i-pex(MHF)	300
	Chain1	HongBo	260-25096	3.11 4.88 4.91 4.9 4.9 4.87 4.73 4.29 4.58 4.09	2.4~2.4835 5.15~5.250 5.25~5.35 5.47~5.725 5.725~5.85 5.85~5.895 5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	Monopole	i-pex(MHF)	300

Note: Max. gain was selected for the final test.

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

2. The EUT incorporates a MIMO function:

2.4 GHz Band					
Modulation Mode	**TX & RX Configuration**			**CDD Mode**	**Beamforming Mode**
802.11b	SIMO	1TX (Diversity)	2RX	Not Support	Not Support
802.11g		1TX (Diversity)	2RX	Not Support	Not Support
802.11n (HT20)		1TX (Diversity)	2RX	Not Support	Not Support
802.11n (HT40)		1TX (Diversity)	2RX	Not Support	Not Support
VHT20		1TX (Diversity)	2RX	Not Support	Not Support
VHT40		1TX (Diversity)	2RX	Not Support	Not Support
802.11ax (HE20)		1TX (Diversity)	2RX	Not Support	Not Support
802.11ax (HE40)		1TX (Diversity)	2RX	Not Support	Not Support
802.11be (EHT20)		1TX (Diversity)	2RX	Not Support	Not Support
802.11be (EHT40)		1TX (Diversity)	2RX	Not Support	Not Support
802.11ax (RU26/52/106/242/484)		1TX (Diversity)	2RX	Not Support	Not Support
802.11be (RU26/52/106/242/484 MRU52+26/106+26)		1TX (Diversity)	2RX	Not Support	Not Support
802.11b	MIMO	2TX	2RX	Support	Not Support
802.11g		2TX	2RX	Support	Not Support
802.11n (HT20)		2TX	2RX	Support NSS2	Not Support
802.11n (HT40)		2TX	2RX	Support NSS2	Not Support
VHT20		2TX	2RX	Support NSS2	Not Support
VHT40		2TX	2RX	Support NSS2	Not Support
802.11ax (HE20)		2TX	2RX	Support NSS2	Not Support
802.11ax (HE40)		2TX	2RX	Support NSS2	Not Support
802.11be (EHT20)		2TX	2RX	Support NSS2	Not Support
802.11be (EHT40)		2TX	2RX	Support NSS2	Not Support
802.11ax (RU26/52/106/242/484)		2TX	2RX	Support NSS2	Not Support
802.11be (RU26/52/106/242/484 MRU52+26/106+26)		2TX	2RX	Support NSS2	Not Support

Note: The modulation and bandwidth are similar for 802.11n mode for 20 MHz (40 MHz), VHT mode for 20 MHz (40 MHz), 802.11ax mode for 20 MHz (40 MHz) and 802.11be mode for 20 MHz (40 MHz) therefore the manufacturer will control the power for 802.11n/VHT/ax mode is same as the 802.11be mode or more lower than it and investigated worst case to representative mode in test report.

3.3 Channel List

13 channels are provided for 802.11b, 802.11g, 802.11n (HT20), VHT20, 802.11ax (HE20), 802.11be (EHT20):

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		

9 channels are provided for 802.11n (HT40), VHT40, 802.11ax (HE40), 802.11be (EHT40):

Channel	Frequency	Channel	Frequency
3	2422 MHz	8	2447 MHz
4	2427 MHz	9	2452 MHz
5	2432 MHz	10	2457 MHz
6	2437 MHz	11	2462 MHz
7	2442 MHz		

3.4 Test Mode Applicability and Tested Channel Detail

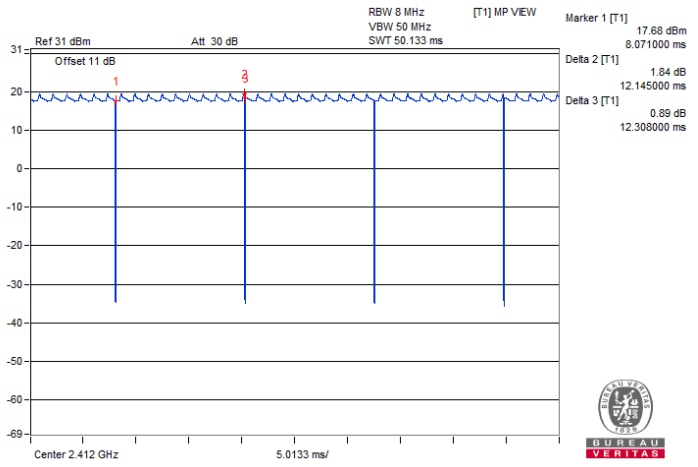
Pre-Scan:	1. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports.

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

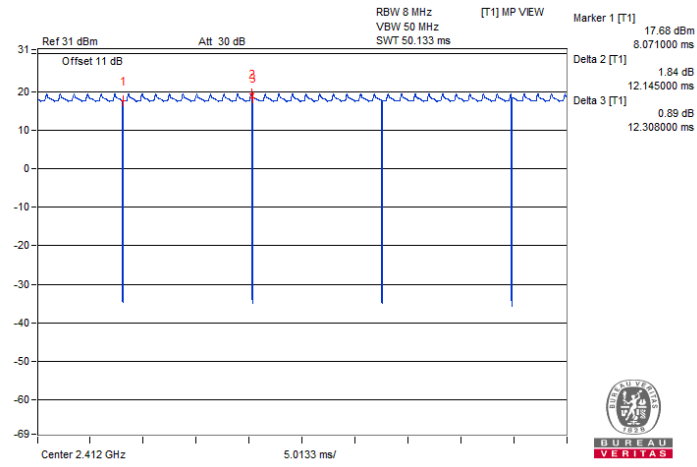
Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
AC Power Conducted Emissions	C	802.11b	2TX	1	DBPSK	1Mb/s
Unwanted Emissions below 1 GHz	A,B	802.11b	2TX	1	DBPSK	1Mb/s
Unwanted Emissions above 1 GHz	A,B	802.11b	1TX / 2TX	1, 6, 11, 12, 13	DBPSK	1Mb/s
EUT Configure Mode:	A	EUT only (remove 50 ohm terminator and Connect to the appropriate equipment)				
	B	EUT with 50 ohm terminator				
	C	EUT with antenna (Monopole Antenna)				
Note: Channel puncturing mechanism is not supported.						

3.5 Duty Cycle of Test Signal

802.11b 1TX: Duty cycle = 12.145 ms / 12.308 ms x 100% = 98.7%
802.11b 2TX: Duty cycle = 12.145 ms / 12.308 ms x 100% = 98.7%



802.11b 1TX



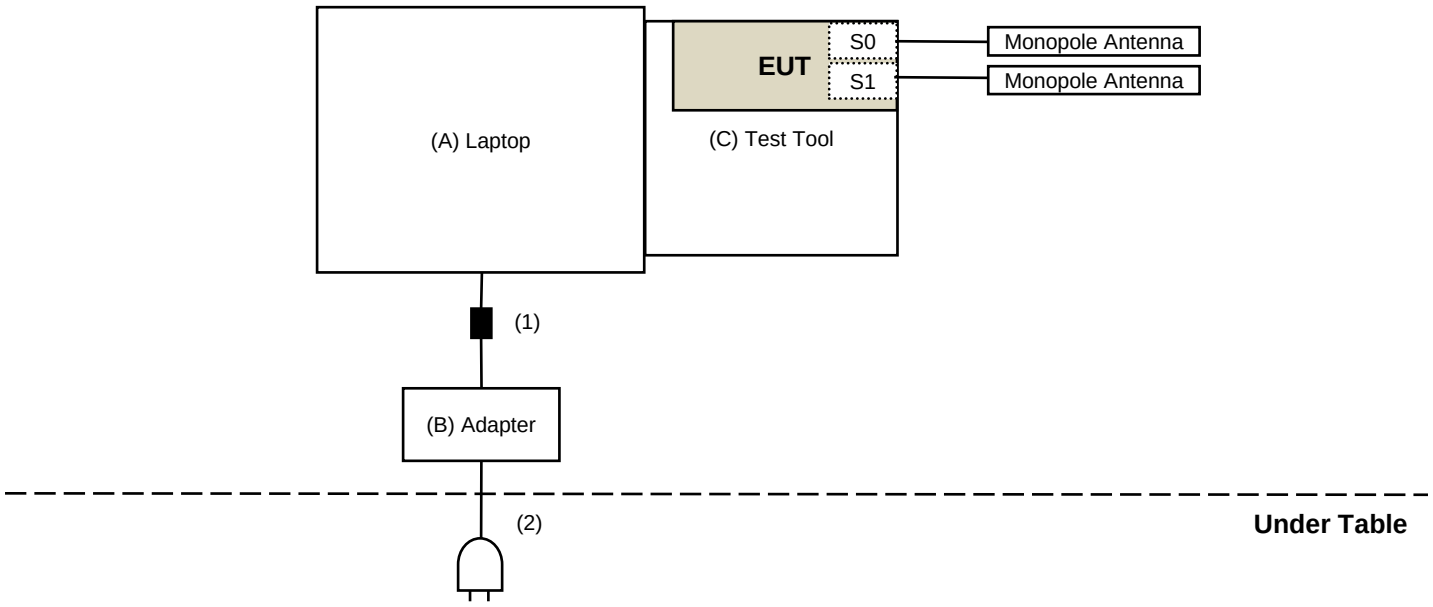
802.11b 2TX

3.6 Test Program Used and Operation Descriptions

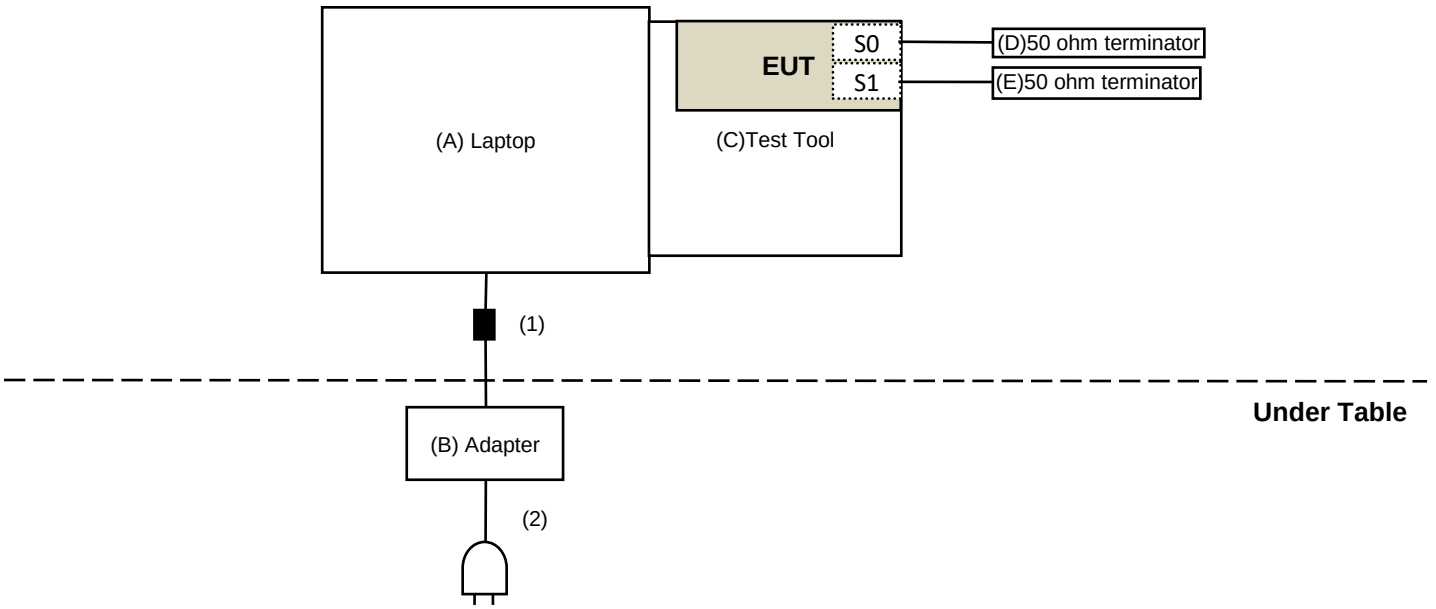
Controlling software (QAtool_V16 (0.0.2.104)) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices

For AC Power Conducted Emission test



For Unwanted Emission test



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Laptop	Dell	Latitude 5480	14CSPH2	N/A	Provided by Lab
B	Adapter	DELL	LLA65NS2-01	N/A	N/A	Provided by Lab
C	Test Tool	Mediatek	MTK1849	N/A	N/A	Supplied by applicant
D	50 Ohm terminator	WOKEN	WTER-18S2	N/A	N/A	Provided by Lab
E	50 Ohm terminator	WOKEN	WTER-18S2	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	DC Cable	1	1.8	No	1	Provided by Lab
2	AC Cable	1	1.7	No	0	Provided by Lab

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 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance Telegartner	50 ohm	3	2023/10/20	2024/10/19
EMI Test Receiver R&S	ESCS 30	847124/029	2023/10/18	2024/10/17
Fixed Attenuator STI	STI02-2200-10	005	2024/2/19	2025/2/18
LISN R&S	ESH3-Z5	835239/001	2024/4/3	2025/4/2
		848773/004	2023/10/13	2024/10/12
RF Coaxial Cable JYEBAO	5D-FB	COCCAB-001	2024/2/19	2025/2/18
Software BVADT	BVADT_Cond_V7.3.7.4	N/A	N/A	N/A

Notes:

1. The test was performed in Conduction 1
2. Tested Date: 2024/9/9 ~ 2024/9/10

4.2 Unwanted Emissions below 1 GHz

Mode A

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
MXA Signal Analyzer Keysight	N9020B	MY60112408	2024/3/7	2025/3/6
Software	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2024/9/8

Mode B

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-406	2023/10/13	2024/10/12
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Fixed Attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-03	2024/2/17	2025/2/16
Loop Antenna Electro-Metrics	EM-6879	264	2024/2/23	2025/2/22
MXE EMI Receiver Agilent	N9038A	MY51210202	2024/7/29	2025/7/28
Preamplifier EMCI	EMC330N	980701	2024/2/17	2025/2/16
	EMC001340	980142	2024/2/19	2025/2/18
RF Coaxial Cable JYEBAO	5D-FB	LOOPCAB-001	2024/2/19	2025/2/18
		LOOPCAB-002	2024/2/19	2025/2/18
RF Coaxial Cable mTJ	100100-CFD400LW-200	CFD400-200	2024/2/17	2025/2/16
	100100-CFD400LW-400	CFD400-400	2024/2/17	2025/2/16
	100100-CFD400LW-800	CFD400-800	2024/2/17	2025/2/16
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2024/9/6

4.3 Unwanted Emissions above 1 GHz

Mode A

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
MXA Signal Analyzer Keysight	N9020B	MY60112408	2024/3/7	2025/3/6
Software	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2024/9/8 ~ 2024/9/19

Mode B

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-783	2023/11/12	2024/11/11
	BBHA 9170	9170-739	2023/11/12	2024/11/11
MXA Signal Analyzer Keysight	N9020B	MY60112410	2024/3/13	2025/3/12
Preamplifier EMCI	EMC12630SE	980688	2024/8/8	2025/8/7
	EMC184045SE	980387	2024/8/8	2025/8/7
RF Coaxial Cable EMCI	EMC102-KM-KM-1200	160924	2024/1/29	2025/1/28
	EMC102-KM-KM-4000	200214	2024/1/29	2025/1/28
	EMC104-SM-SM-1200	160922	2024/1/29	2025/1/28
	EMC104-SM-SM-2000	180502	2024/1/29	2025/1/28
	EMC104-SM-SM-6000	210704	2023/11/2	2024/11/1
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2024/9/6

5 Limits of Test Items

5.1 AC Power Conducted Emissions

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Notes:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

5.2 Unwanted Emissions below 1 GHz

Radiated emissions up to 1 GHz which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20 dB below the highest level of the desired power:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

5.3 Unwanted Emissions above 1 GHz

Radiated emissions above 1 GHz which fall in the restricted bands must comply with the radiated emission limits specified as below table.
Other emissions:
(1) For Peak conducted power limits shall be at least 20 dB below the highest level of the desired power:
(2) For RMS averaging conducted power limits shall be at least 30 dB below the highest level of the desired power:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
Above 960	500	3

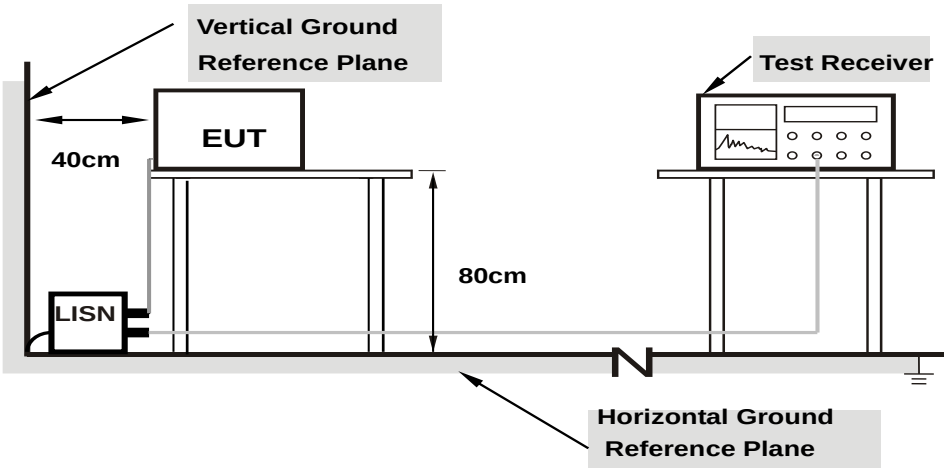
Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

6 Test Arrangements

6.1 AC Power Conducted Emissions

6.1.1 Test Setup



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.1.2 Test Procedure

a. The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50 uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

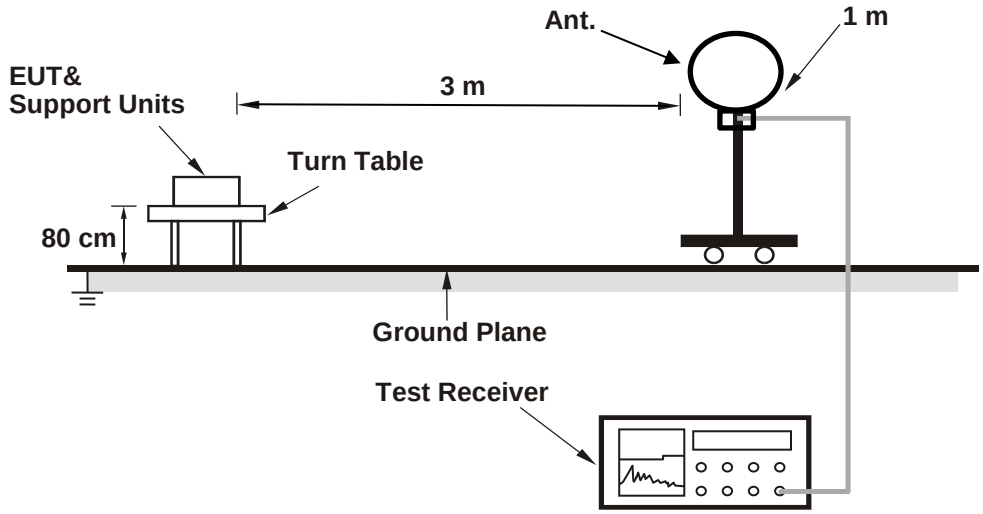
Note: The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz-30 MHz.

6.2 Unwanted Emissions below 1 GHz

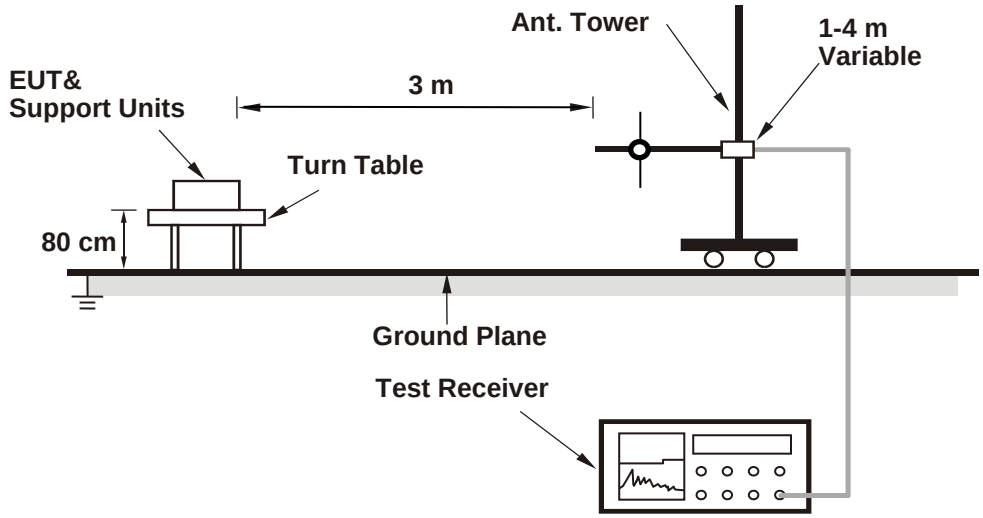
6.2.1 Test Setup

For Radiated Configuration:

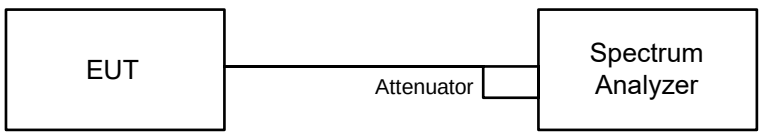
For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



For Conducted Configuration:



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.2.2 Test Procedure

Radiated versus Conducted Measurement.
The unwanted emission limits in both the restricted and non-restricted bands are based on antenna-port conducted measurements in conjunction with cabinet emissions tests are permitted to demonstrate compliance.
The following steps was performed:

a. Cabinet emissions measurements. Radiated measurement was performed to ensure that cabinet emissions are below the emission limits. For the cabinet-emission measurements the antenna was replaced by a termination matching the nominal impedance of the antenna.
b. Conducted tests was performed using equipment that matches the nominal impedance of the antenna assembly used with the EUT.
c. EIRP calculation. A value representative of an upper bound on out-of-band antenna gain (in dBi) shall be added to the measured antenna-port conducted emission power to compute EIRP within the specified measurement bandwidth. (For emissions in the restricted bands, additional calculations are required to convert EIRP to field strength at the specified distance.) The upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands or 2 dBi, whichever is greater.
d. EIRP adjustments for multiple outputs. (Follow the procedures specified in FCC KDB Publication 662911)
e. For all of Radiation emission test

For Radiated emission below 30 MHz

e-1.1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

e-1.2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

e-1.3. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.

e-1.4. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e-1.5. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode, except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency (150 kHz to 30 MHz).
3. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated emission above 30 MHz

e-2.1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

e-2.2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

e-2.3. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

e-2.4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e-2.5. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

Notes:

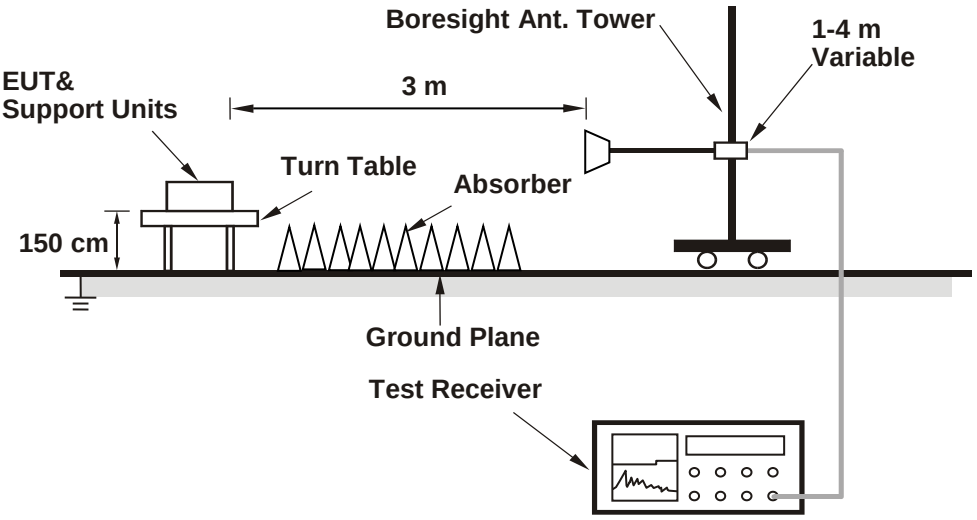
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

Radiated versus Conducted Measurement
For Radiated measurement: The level of unwanted emissions was measured when radiated by the cabinet or structure of the equipment with the antenna connector(s) terminated by a specified load (cabinet radiation). For Conducted measurement: The level of unwanted emissions was measured as their power in a specified load (conducted spurious emissions).
Conducted Unwanted Emission Convert Formula
a. Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8 d = measurement distance in 3 meters. b. EIRP Level (dBm) = Raw Value(dBm) + Correction Factor(dB) c. Correction Factor is directional gain, and the composite gain will be used when signal support the correlated signal For the out of band spurious the gain for the specific band may have been used rather than the highest gain across all bands. For the band edge the gain for the specific band may have been used. Notes: 1. In restricted bands below 1000 MHz, add upper bound on ground plane reflection: For frequencies between 30 MHz and 1000 MHz, add 4.7 dB. 2. The conducted emission test was considered some factor to compute test result.

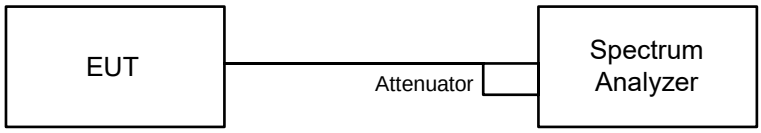
6.3 Unwanted Emissions above 1 GHz

6.3.1 Test Setup

For Radiated Configuration:



For Conducted Configuration:



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.3.2 Test Procedure

Radiated versus Conducted Measurement.
The unwanted emission limits in both the restricted and non-restricted bands are based on antenna-port conducted measurements in conjunction with cabinet emissions tests are permitted to demonstrate compliance.
The following steps was performed:

a. Cabinet emissions measurements. Radiated measurement was performed to ensure that cabinet emissions are below the emission limits. For the cabinet-emission measurements the antenna was replaced by a termination matching the nominal impedance of the antenna.

b. Conducted tests was performed using equipment that matches the nominal impedance of the antenna assembly used with the EUT.

c. EIRP calculation. A value representative of an upper bound on out-of-band antenna gain (in dBi) shall be added to the measured antenna-port conducted emission power to compute EIRP within the specified measurement bandwidth. (For emissions in the restricted bands, additional calculations are required to convert EIRP to field strength at the specified distance.) The upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands or 2 dBi, whichever is greater.

d. EIRP adjustments for multiple outputs. (Follow the procedures specified in FCC KDB Publication 662911)

e. For all of Radiation emission test

e-1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

e-2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

e-3. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

e-4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e-5. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Notes:

1. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) and Average detection (AV) at frequency above 1 GHz.
2. For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10 Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1 GHz.
3. All modes of operation were investigated and the worst-case emissions are reported.

Radiated versus Conducted Measurement
For Radiated measurement: The level of unwanted emissions was measured when radiated by the cabinet or structure of the equipment with the antenna connector(s) terminated by a specified load (cabinet radiation). For Conducted measurement: The level of unwanted emissions was measured as their power in a specified load (conducted spurious emissions). For Verified radiated measurement: The level of unwanted emissions was measured when radiated by the cabinet or structure of the equipment with the antenna connector(s) terminated by a specified load (cabinet radiation).
Conducted Unwanted Emission Convert Formula
a. Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8 d = measurement distance in 3 meters. b. EIRP Level (dBm) = Raw Value(dBm) + Correction Factor(dB). c. Correction Factor is directional gain, and the composite gain will be used when signal support the correlated signal For the out of band spurious the gain for the specific band may have been used rather than the highest gain across all bands. For the band edge the gain for the specific band may have been used. Note: The conducted emission test was considered some factor to compute test result.

7 Test Results of Test Item

7.1 AC Power Conducted Emissions

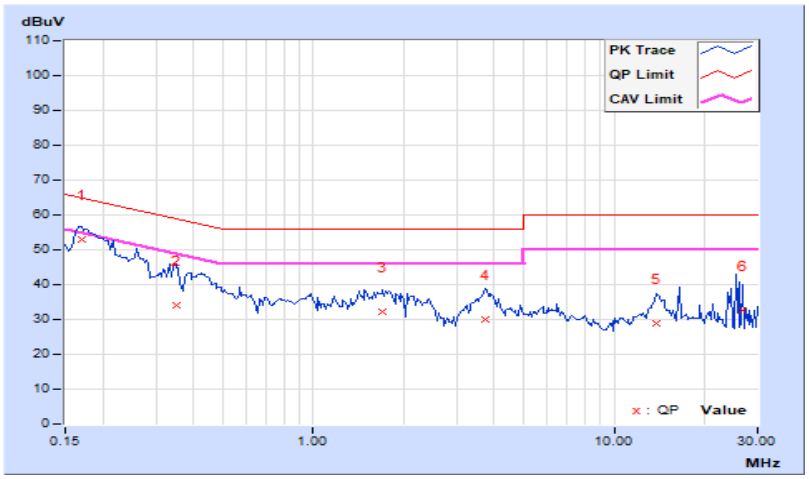
Mode C

RF Mode	802.11b	**Channel**	CH 1：2412 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	21 °C, 64 % RH
Tested By	Willy Lin		

Phase Of Power : Line (L)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	**0.16953**	**9.93**	**43.18**	**30.62**	**53.11**	**40.55**	**64.98**	**54.98**	**-11.87**	**-14.43**
2	0.34922	9.94	24.09	8.64	34.03	18.58	58.98	48.98	-24.95	-30.40
3	1.70703	10.01	22.36	14.48	32.37	24.49	56.00	46.00	-23.63	-21.51
4	3.73828	10.11	19.98	13.06	30.09	23.17	56.00	46.00	-25.91	-22.83
5	13.81250	10.74	18.32	10.78	29.06	21.52	60.00	50.00	-30.94	-28.48
6	26.73438	11.40	21.21	2.82	32.61	14.22	60.00	50.00	-27.39	-35.78

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

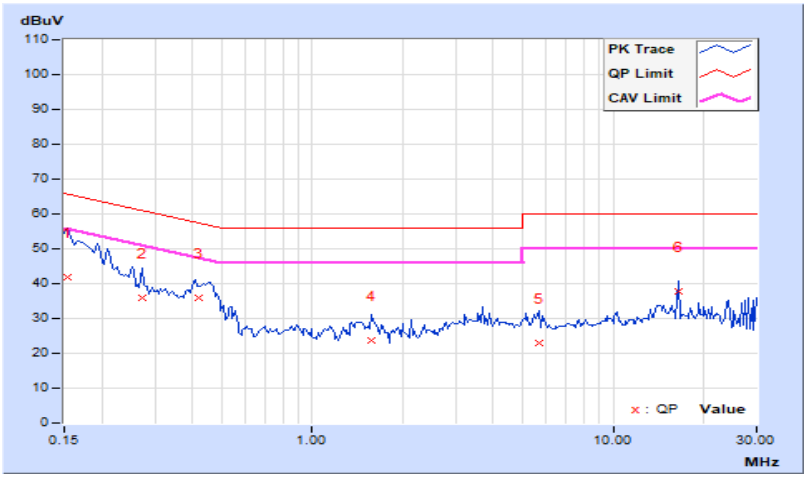


RF Mode	802.11b	Channel	CH 1：2412 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	21 °C, 64 % RH
Tested By	Willy Lin		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.99	31.82	13.70	41.81	23.69	65.79	55.79	-23.98	-32.10
2	0.27109	9.99	26.06	13.34	36.05	23.33	61.08	51.08	-25.03	-27.75
3	0.41953	10.00	25.81	17.71	35.81	27.71	57.46	47.46	-21.65	-19.75
4	1.57813	10.05	13.63	5.31	23.68	15.36	56.00	46.00	-32.32	-30.64
5	5.68359	10.23	12.88	6.69	23.11	16.92	60.00	50.00	-36.89	-33.08
6	16.46484	10.73	27.18	26.54	37.91	37.27	60.00	50.00	-22.09	-12.73

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



7.2 Unwanted Emissions below 1 GHz

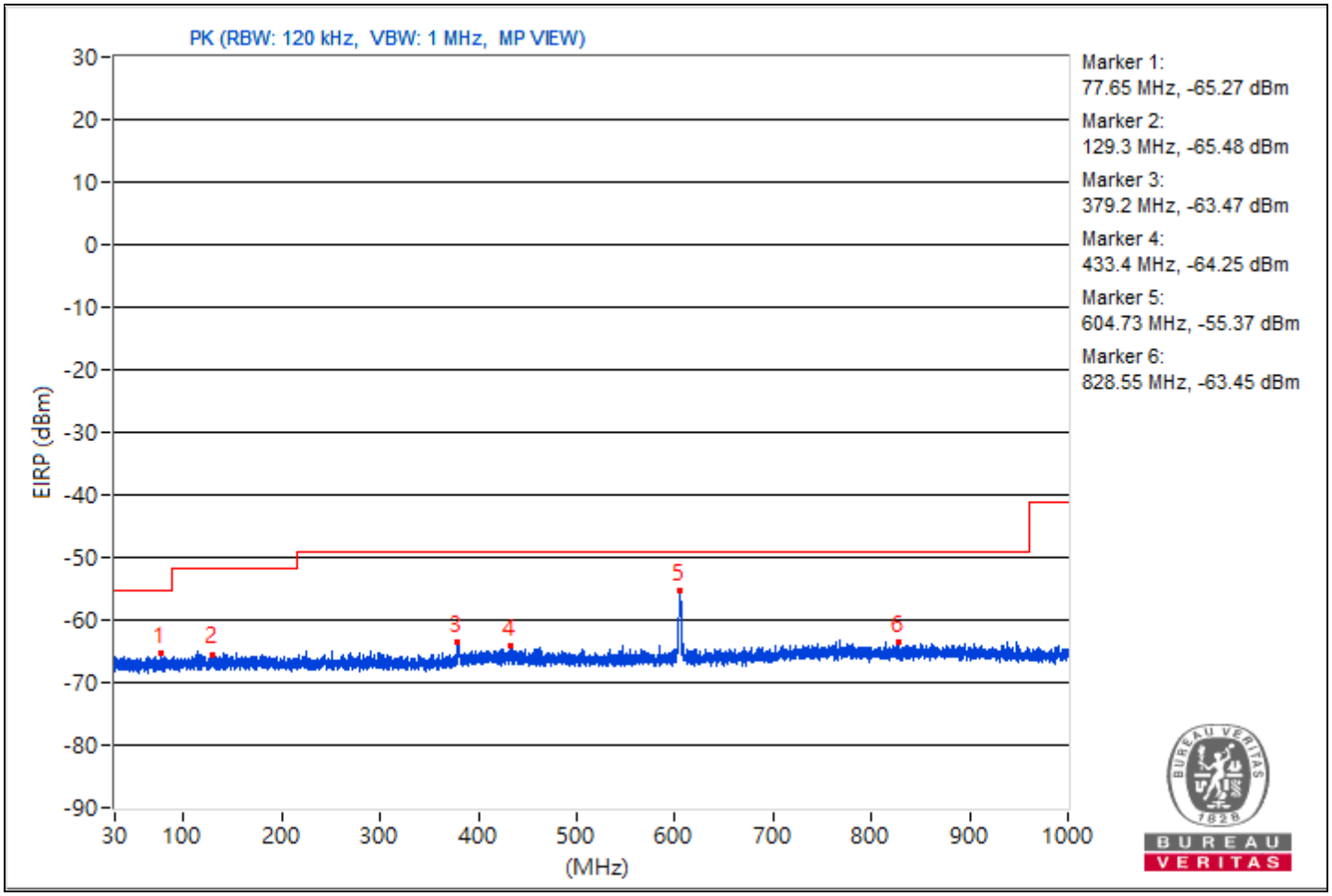
Mode A

RF Mode	802.11b	Channel	CH 1：2412 MHz
Frequency Range	30 MHz ~ 1 GHz	Environmental Conditions	22°C, 55% RH
Tested By	Kevin Ko		

Conducted Unwanted Emissions								
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Raw Value Chain 1 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	77.65	29.99 PK	40	-10.01	-79.24	-83.64	12.63	-65.27
2	129.3	29.78 PK	43.5	-13.72	-82.63	-80.01	12.63	-65.48
3	379.2	31.79 PK	46	-14.21	-81.12	-77.74	12.63	-63.47
4	433.4	31.01 PK	46	-14.99	-81.62	-78.65	12.63	-64.25
5	**604.73**	**39.89 PK**	**46**	**-6.11**	**-73**	**-69.64**	**12.63**	**-55.37**
6	828.55	31.81 PK	46	-14.19	-78.13	-80.32	12.63	-63.45

Notes:

1. Margin value = Emission Level - Limit value
2. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



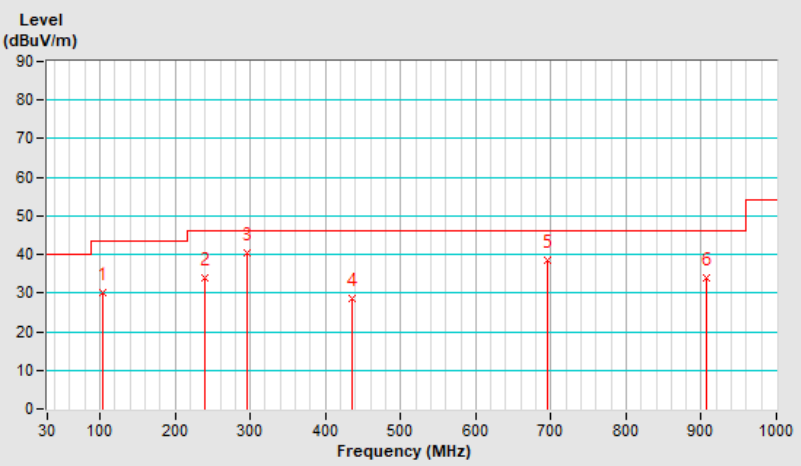
Mode B

RF Mode	802.11b	Channel	CH 1：2412 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	22 °C, 65 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	104.29	30.2 QP	43.5	-13.3	1.50 H	336	51.6	-21.4
2	239.68	33.9 QP	46.0	-12.1	1.00 H	249	53.4	-19.5
3	295.32	40.4 QP	46.0	-5.6	1.00 H	309	57.9	-17.5
4	434.83	28.7 QP	46.0	-17.3	1.50 H	328	42.5	-13.8
5	696.12	38.4 QP	46.0	-7.6	2.00 H	223	47.5	-9.1
6	907.42	34.0 QP	46.0	-12.0	1.00 H	256	39.7	-5.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

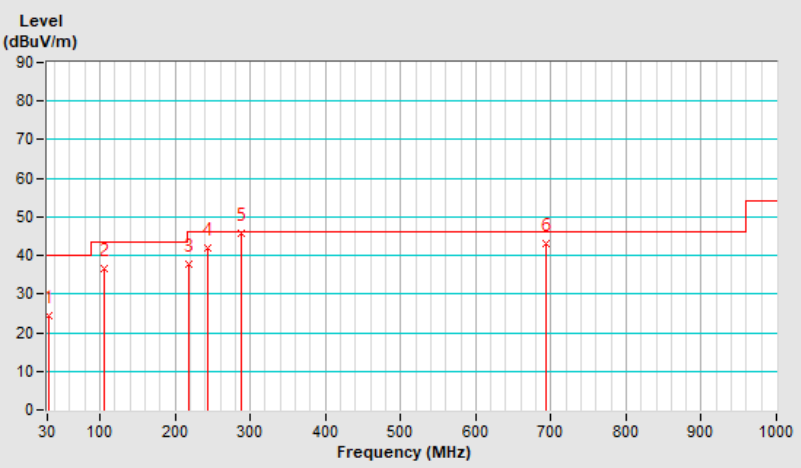


RF Mode	802.11b	Channel	CH 1：2412 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	22 °C, 65 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	32.38	24.5 QP	40.0	-15.5	1.50 V	258	43.3	-18.8
2	104.78	36.5 QP	43.5	-7.0	1.50 V	295	57.8	-21.3
3	218.91	37.8 QP	46.0	-8.2	2.00 V	148	59.3	-21.5
4	243.97	42.0 QP	46.0	-4.0	1.50 V	37	61.3	-19.3
5	**287.57**	**45.9 QP**	**46.0**	**-0.1**	**2.00 V**	**264**	**63.7**	**-17.8**
6	693.81	43.0 QP	46.0	-3.0	3.00 V	35	52.1	-9.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



7.3 Unwanted Emissions above 1 GHz

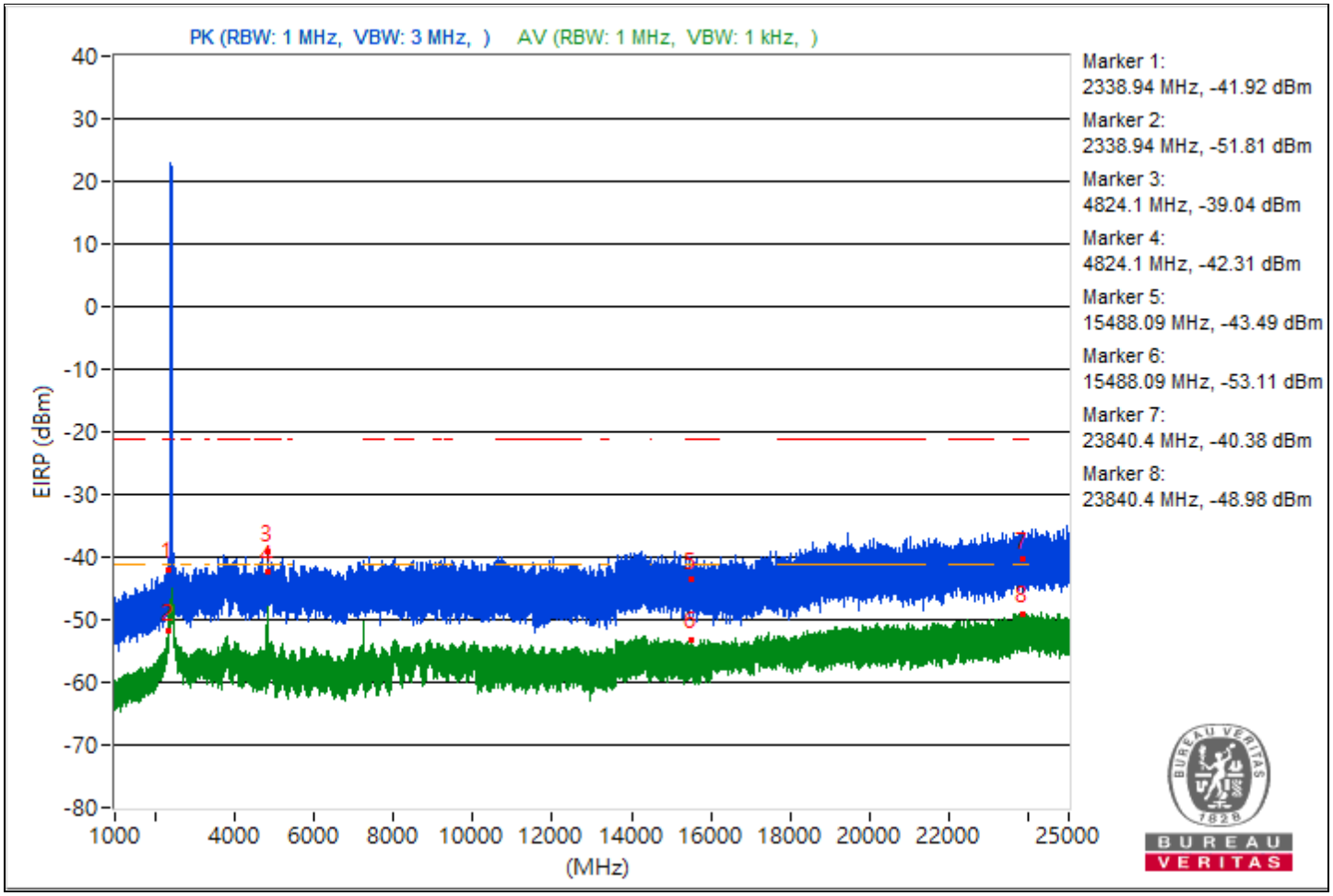
Mode A 1Tx

Conducted Unwanted Emissions

RF Mode	802.11b	Channel	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	22°C, 55% RH
Tested By	Kevin Ko		

Conducted Unwanted Emissions							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2338.94	53.34 PK	74	-20.66	-46.84	4.92	-41.92
2	2338.94	43.45 AV	54	-10.55	-56.73	4.92	-51.81
3	4824.1	56.22 PK	74	-17.78	-43.96	4.92	-39.04
4	4824.1	52.95 AV	54	-1.05	-47.23	4.92	-42.31
5	15488.09	51.77 PK	74	-22.23	-48.41	4.92	-43.49
6	15488.09	42.15 AV	54	-11.85	-58.03	4.92	-53.11
7	23840.4	54.88 PK	74	-19.12	-45.3	4.92	-40.38
8	23840.4	46.28 AV	54	-7.72	-53.9	4.92	-48.98

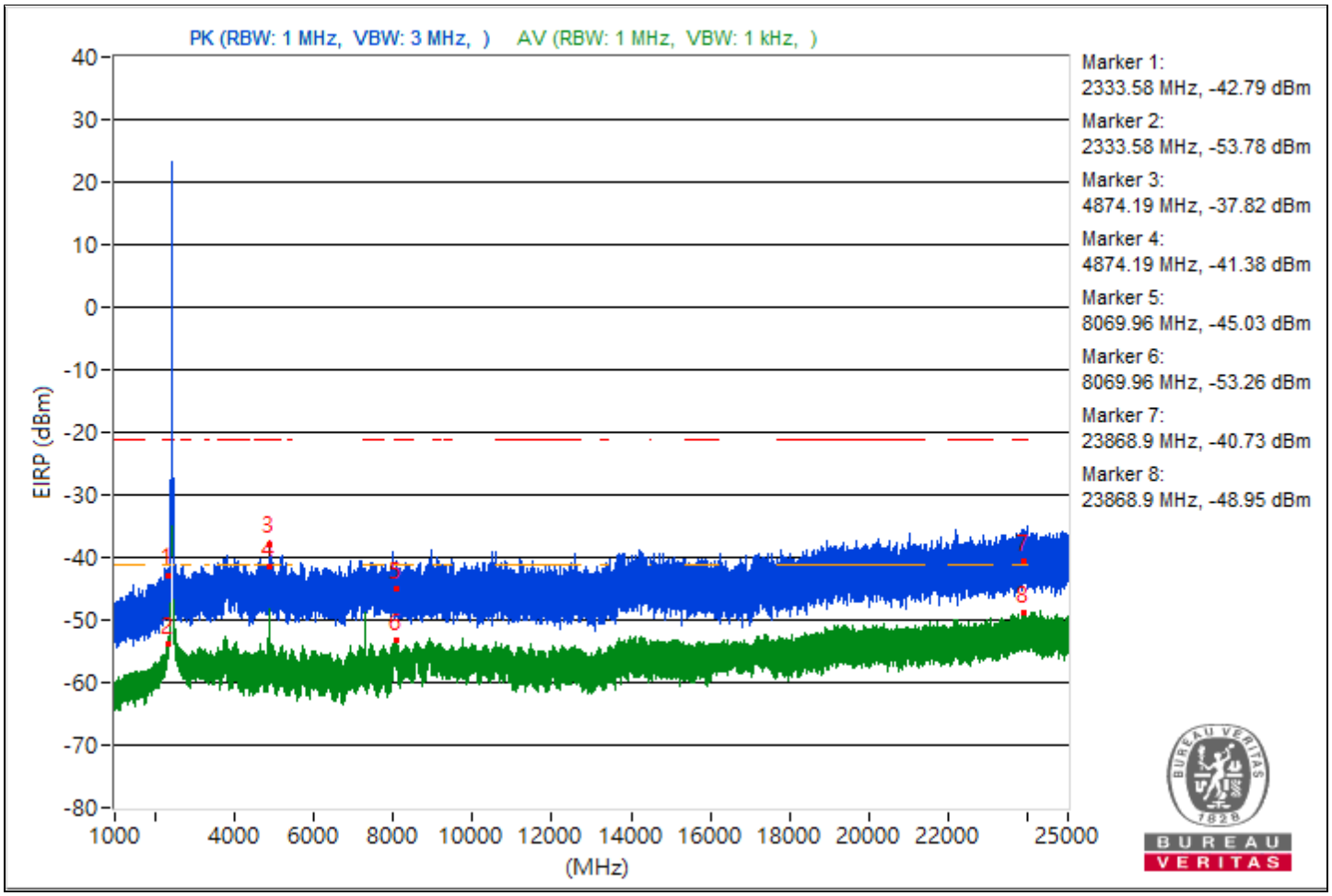
Note: Margin value = Emission Level - Limit value



RF Mode	802.11b	Channel	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	22°C, 55% RH
Tested By	Kevin Ko		

Conducted Unwanted Emissions							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2333.58	52.47 PK	74	-21.53	-47.71	4.92	-42.79
2	2333.58	41.48 AV	54	-12.52	-58.7	4.92	-53.78
3	4874.19	57.44 PK	74	-16.56	-42.74	4.92	-37.82
4	**4874.19**	**53.88 AV**	**54**	**-0.12**	**-46.3**	**4.92**	**-41.38**
5	8069.96	50.23 PK	74	-23.77	-49.95	4.92	-45.03
6	8069.96	42 AV	54	-12	-58.18	4.92	-53.26
7	23868.9	54.53 PK	74	-19.47	-45.65	4.92	-40.73
8	23868.9	46.31 AV	54	-7.69	-53.87	4.92	-48.95

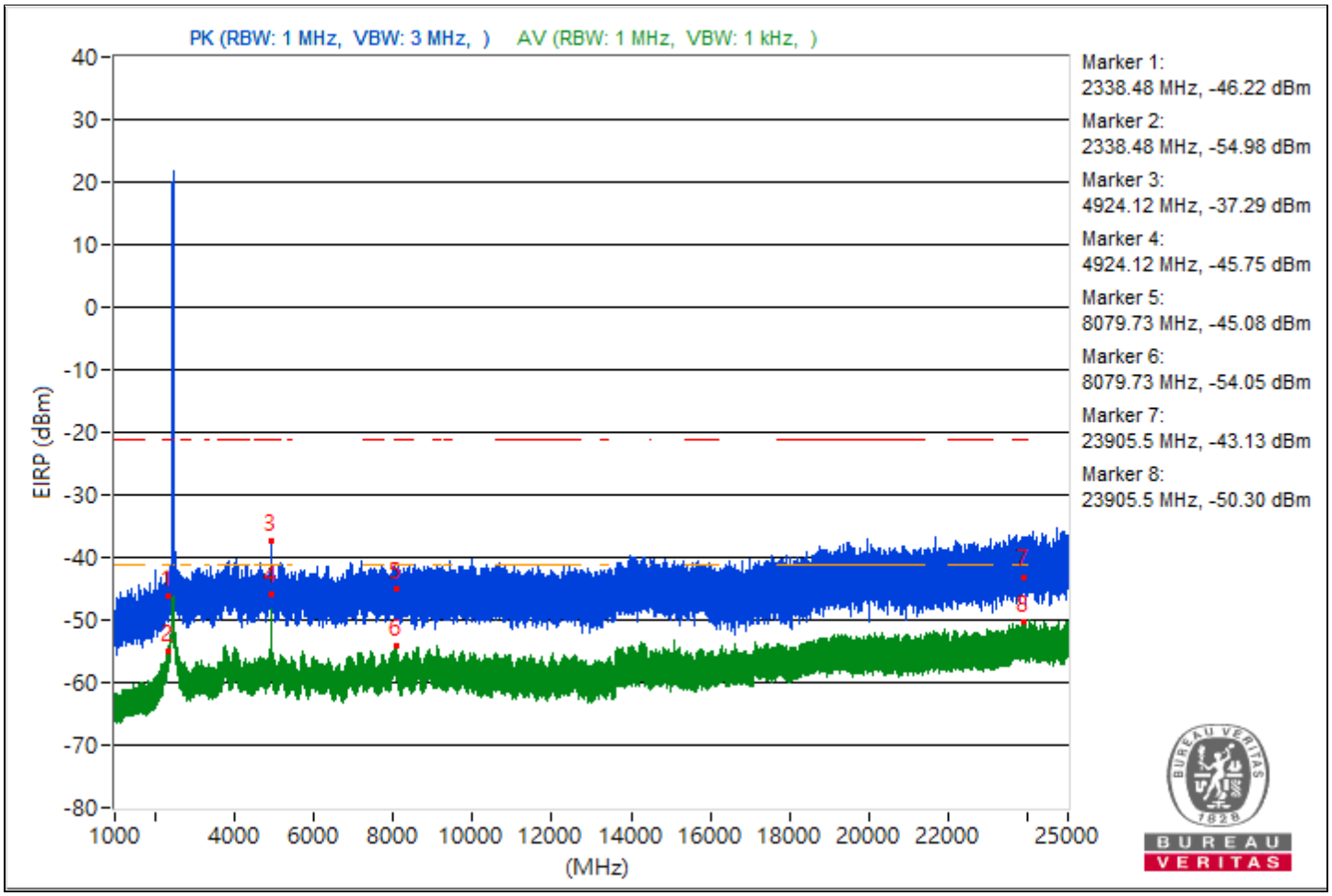
Note: Margin value = Emission Level - Limit value



RF Mode	802.11b	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	22°C, 55% RH
Tested By	Kevin Ko		

Conducted Unwanted Emissions							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2338.48	49.04 PK	74	-24.96	-51.14	4.92	-46.22
2	2338.48	40.28 AV	54	-13.72	-59.9	4.92	-54.98
3	4924.12	57.97 PK	74	-16.03	-42.21	4.92	-37.29
4	4924.12	49.51 AV	54	-4.49	-50.67	4.92	-45.75
5	8079.73	50.18 PK	74	-23.82	-50	4.92	-45.08
6	8079.73	41.21 AV	54	-12.79	-58.97	4.92	-54.05
7	23905.5	52.13 PK	74	-21.87	-48.05	4.92	-43.13
8	23905.5	44.96 AV	54	-9.04	-55.22	4.92	-50.3

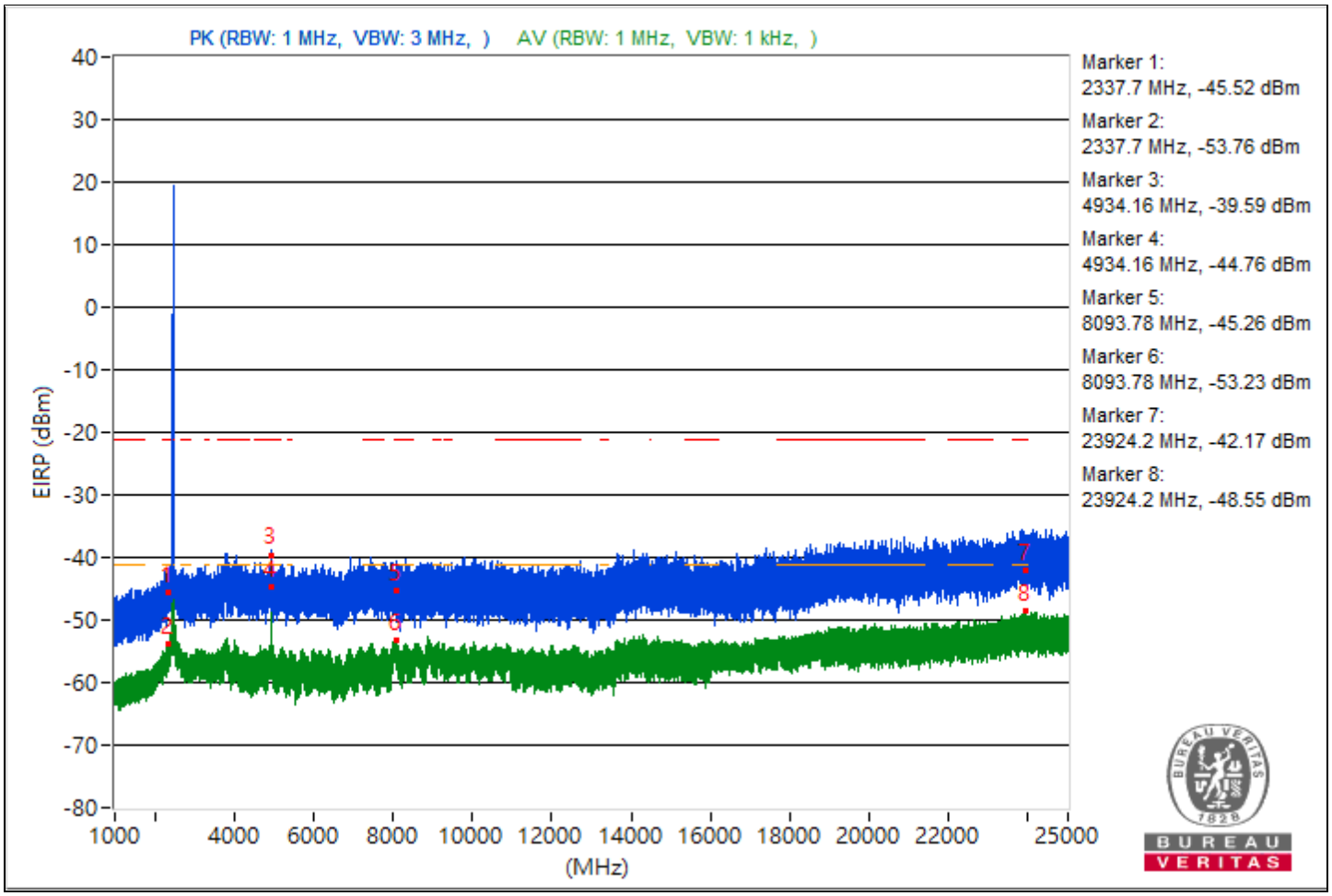
Note: Margin value = Emission Level - Limit value



RF Mode	802.11b	Channel	CH 12：2467 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	22°C, 55% RH
Tested By	Kevin Ko		

Conducted Unwanted Emissions							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2337.7	49.74 PK	74	-24.26	-50.44	4.92	-45.52
2	2337.7	41.5 AV	54	-12.5	-58.68	4.92	-53.76
3	4934.16	55.67 PK	74	-18.33	-44.51	4.92	-39.59
4	4934.16	50.5 AV	54	-3.5	-49.68	4.92	-44.76
5	8093.78	50 PK	74	-24	-50.18	4.92	-45.26
6	8093.78	42.03 AV	54	-11.97	-58.15	4.92	-53.23
7	23924.2	53.09 PK	74	-20.91	-47.09	4.92	-42.17
8	23924.2	46.71 AV	54	-7.29	-53.47	4.92	-48.55

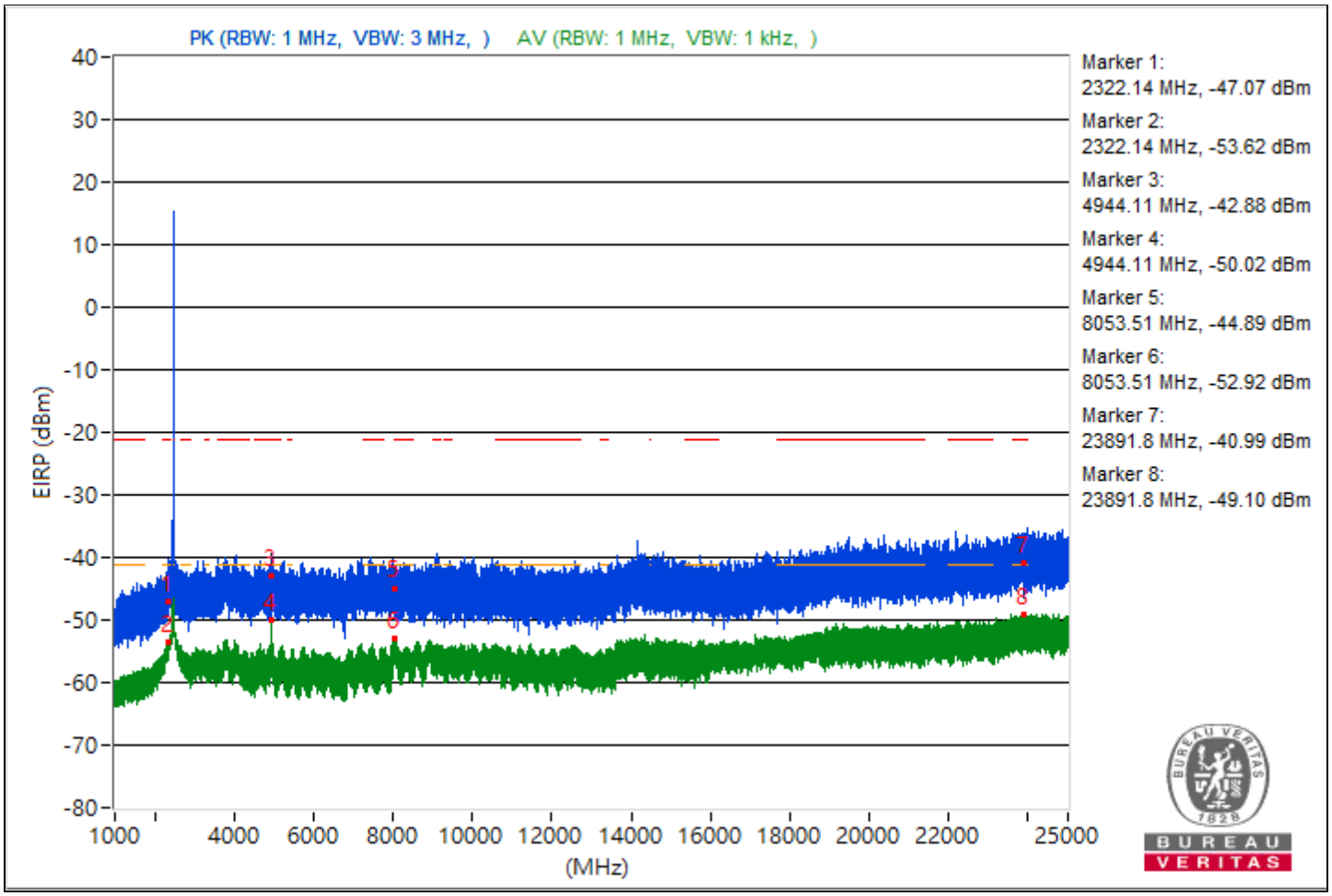
Note: Margin value = Emission Level - Limit value



RF Mode	802.11b	Channel	CH 13：2472 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	22°C, 55% RH
Tested By	Kevin Ko		

Conducted Unwanted Emissions							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2322.14	48.19 PK	74	-25.81	-51.99	4.92	-47.07
2	2322.14	41.64 AV	54	-12.36	-58.54	4.92	-53.62
3	4944.11	52.38 PK	74	-21.62	-47.8	4.92	-42.88
4	4944.11	45.24 AV	54	-8.76	-54.94	4.92	-50.02
5	8053.51	50.37 PK	74	-23.63	-49.81	4.92	-44.89
6	8053.51	42.34 AV	54	-11.66	-57.84	4.92	-52.92
7	23891.8	54.27 PK	74	-19.73	-45.91	4.92	-40.99
8	23891.8	46.16 AV	54	-7.84	-54.02	4.92	-49.1

Note: Margin value = Emission Level - Limit value



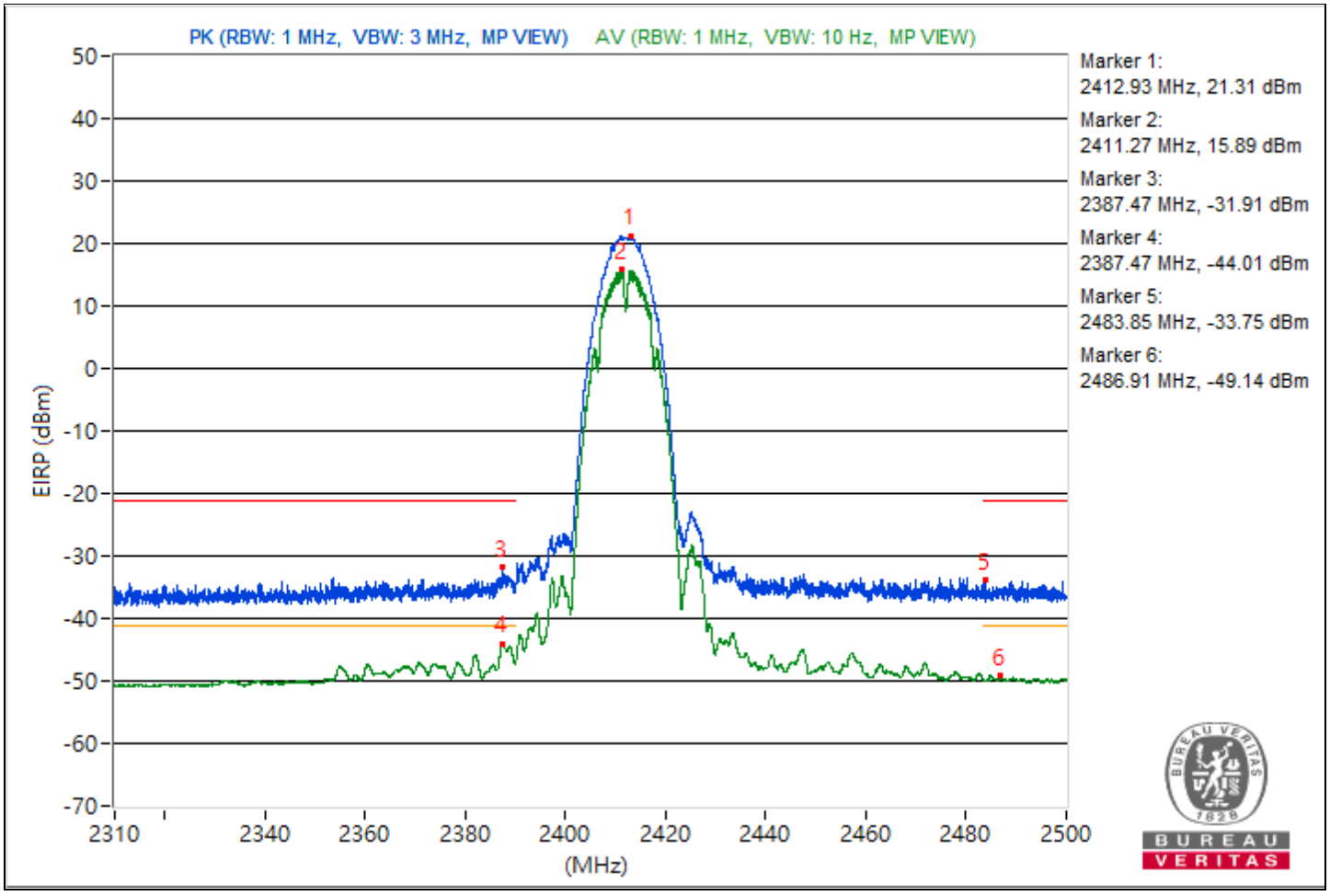
Conducted Band Edges

RF Mode	802.11b	Channel	CH 1：2412 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	22°C, 55% RH
Tested By	Kevin Ko		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2412.93	116.57 PK			18.13	3.18	21.31
2	*2411.27	111.15 AV			12.71	3.18	15.89
3	2387.47	63.35 PK	74	-10.65	-35.09	3.18	-31.91
4	2387.47	51.25 AV	54	-2.75	-47.19	3.18	-44.01
5	2483.85	61.51 PK	74	-12.49	-36.93	3.18	-33.75
6	2486.91	46.12 AV	54	-7.88	-52.32	3.18	-49.14

Notes:

1. Margin value = Emission Level - Limit value
2. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

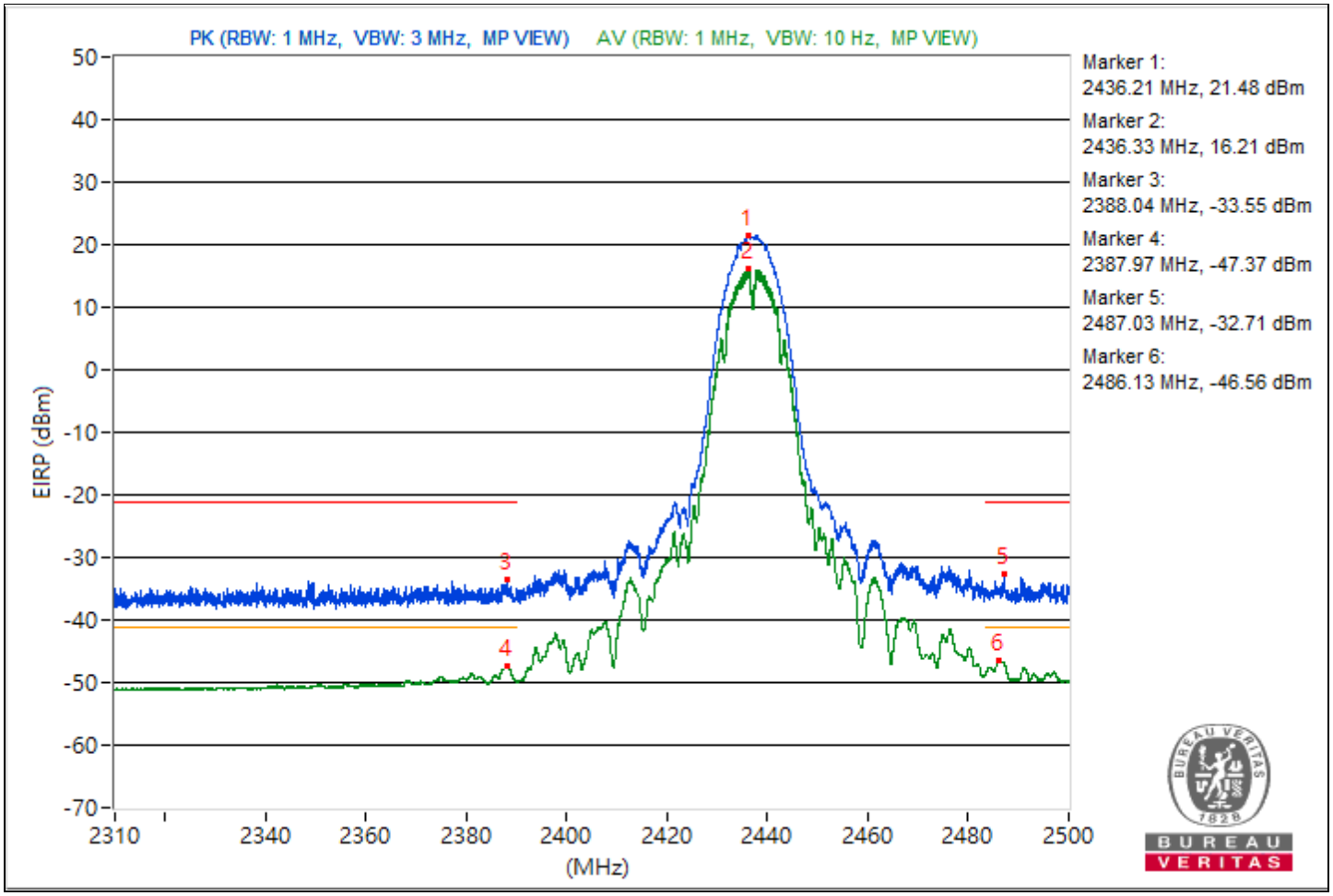


RF Mode	802.11b	Channel	CH 6：2437 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	22°C, 55% RH
Tested By	Kevin Ko		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2436.21	116.74 PK			18.3	3.18	21.48
2	*2436.33	111.47 AV			13.03	3.18	16.21
3	2388.04	61.71 PK	74	-12.29	-36.73	3.18	-33.55
4	2387.97	47.89 AV	54	-6.11	-50.55	3.18	-47.37
5	2487.03	62.55 PK	74	-11.45	-35.89	3.18	-32.71
6	2486.13	48.7 AV	54	-5.3	-49.74	3.18	-46.56

Notes:

1. Margin value = Emission Level - Limit value
2. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

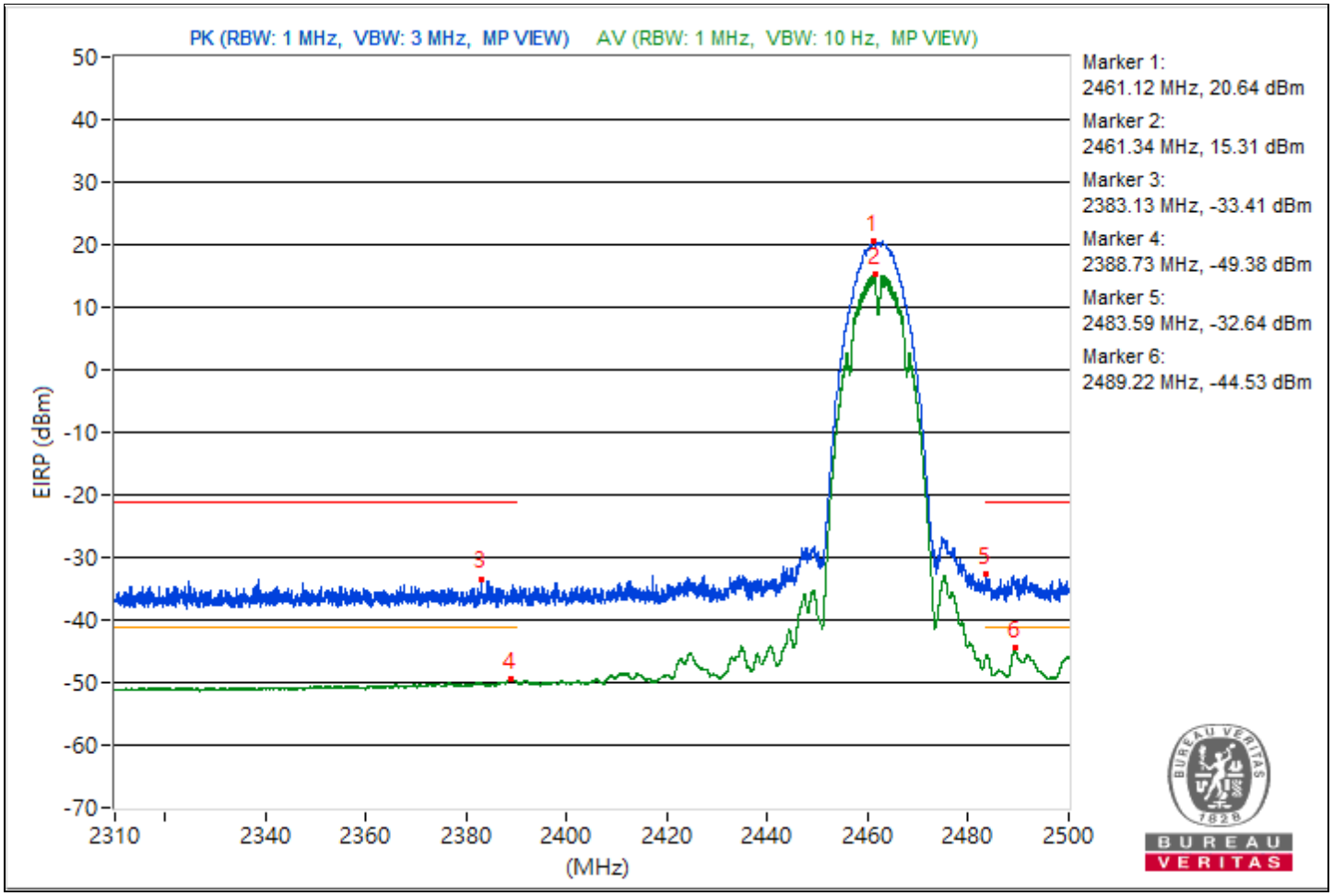


RF Mode	802.11b	Channel	CH 11：2462 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	22°C, 55% RH
Tested By	Kevin Ko		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2461.12	115.9 PK			17.46	3.18	20.64
2	*2461.34	110.57 AV			12.13	3.18	15.31
3	2383.13	61.85 PK	74	-12.15	-36.59	3.18	-33.41
4	2388.73	45.88 AV	54	-8.12	-52.56	3.18	-49.38
5	2483.59	62.62 PK	74	-11.38	-35.82	3.18	-32.64
6	2489.22	50.73 AV	54	-3.27	-47.71	3.18	-44.53

Notes:

1. Margin value = Emission Level - Limit value
2. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

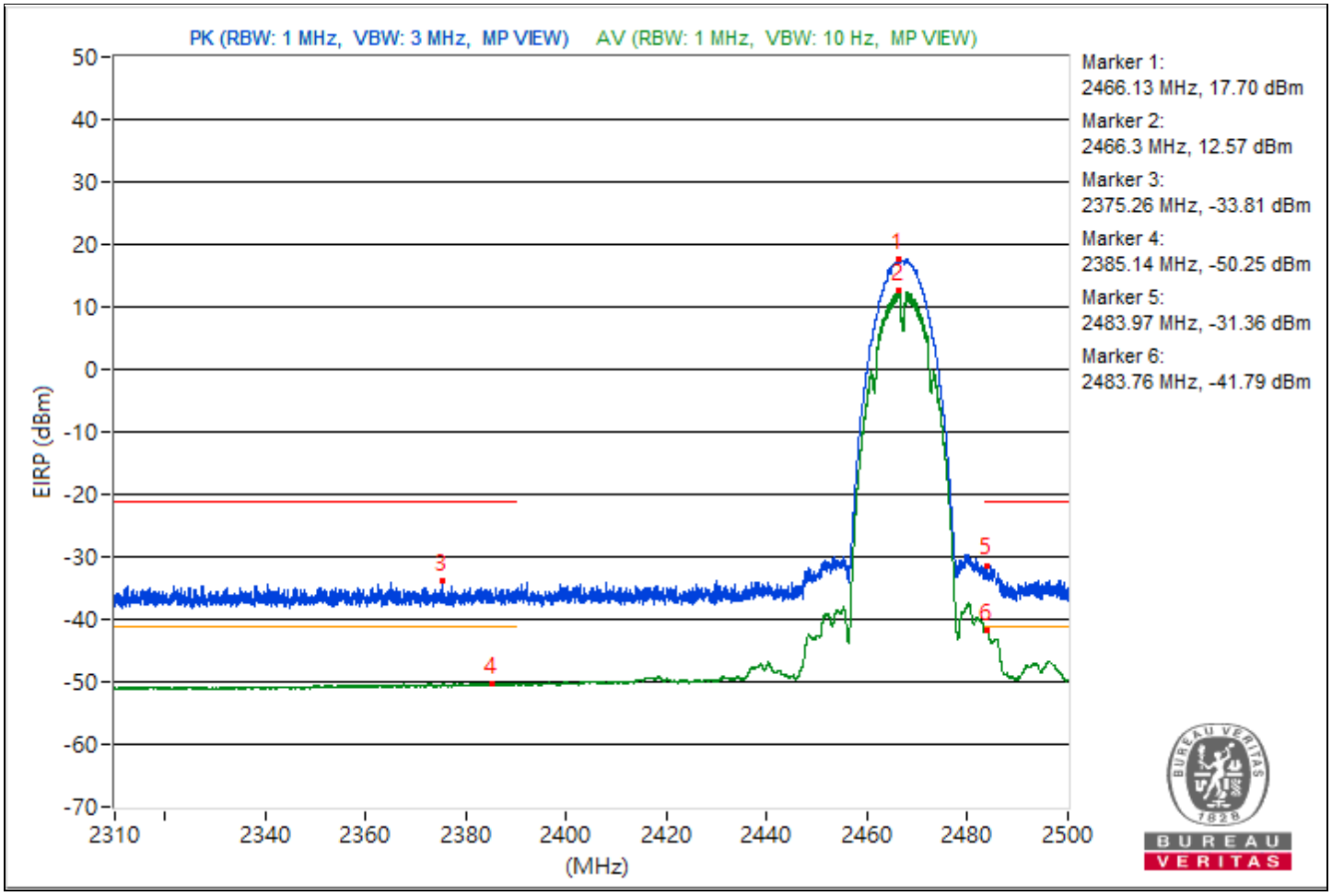


RF Mode	802.11b	Channel	CH 12：2467 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	22°C, 55% RH
Tested By	Kevin Ko		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2466.13	112.96 PK			14.52	3.18	17.7
2	*2466.3	107.83 AV			9.39	3.18	12.57
3	2375.26	61.45 PK	74	-12.55	-36.99	3.18	-33.81
4	2385.14	45.01 AV	54	-8.99	-53.43	3.18	-50.25
5	2483.97	63.9 PK	74	-10.1	-34.54	3.18	-31.36
6	2483.76	53.47 AV	54	-0.53	-44.97	3.18	-41.79

Notes:

1. Margin value = Emission Level - Limit value
2. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

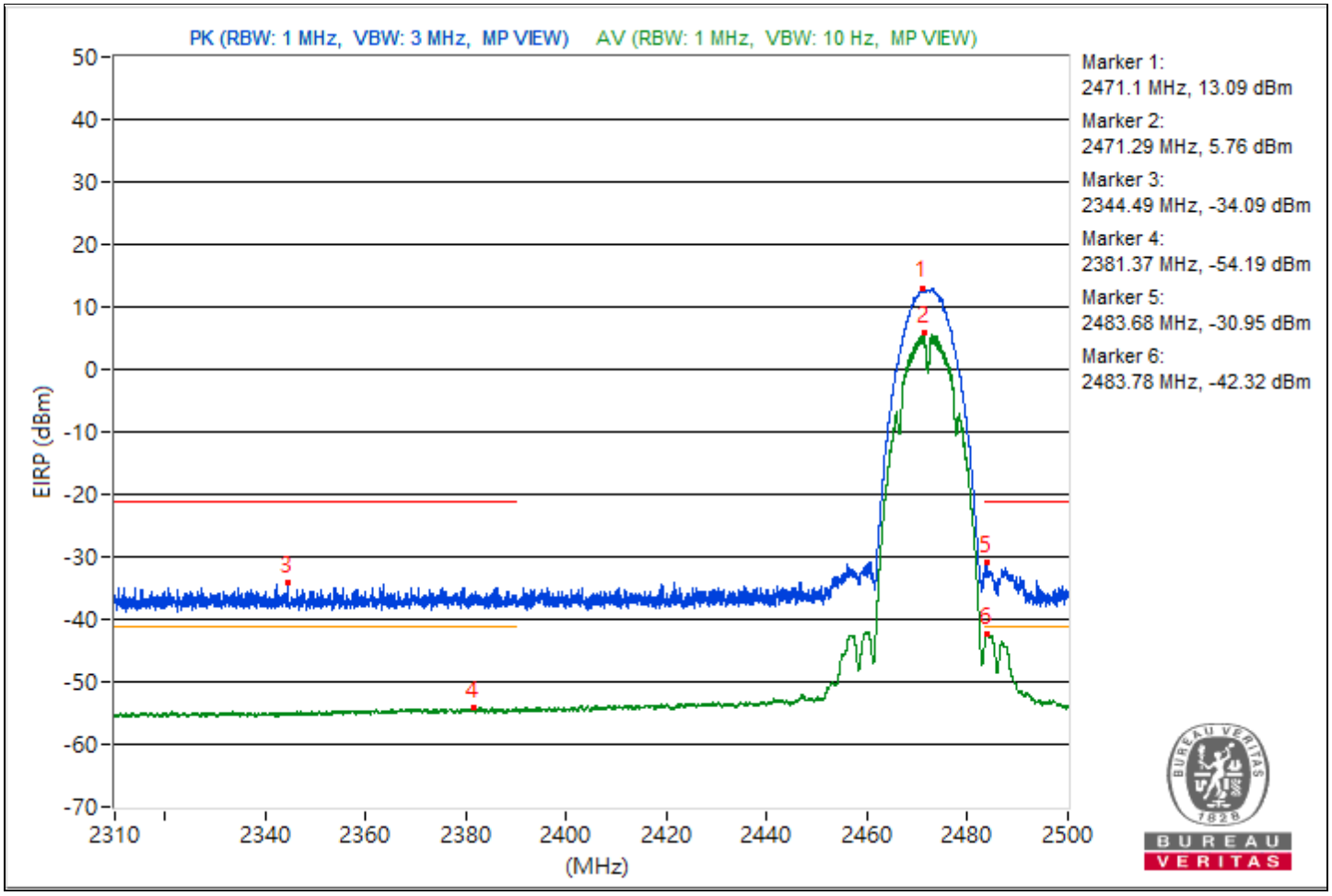


RF Mode	802.11b	Channel	CH 13：2472 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	22°C, 55% RH
Tested By	Kevin Ko		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2471.1	108.35 PK			9.91	3.18	13.09
2	*2471.29	101.02 AV			2.58	3.18	5.76
3	2344.49	61.17 PK	74	-12.83	-37.27	3.18	-34.09
4	2381.37	41.07 AV	54	-12.93	-57.37	3.18	-54.19
5	2483.68	64.31 PK	74	-9.69	-34.13	3.18	-30.95
6	2483.78	52.94 AV	54	-1.06	-45.5	3.18	-42.32

Notes:

1. Margin value = Emission Level - Limit value
2. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.



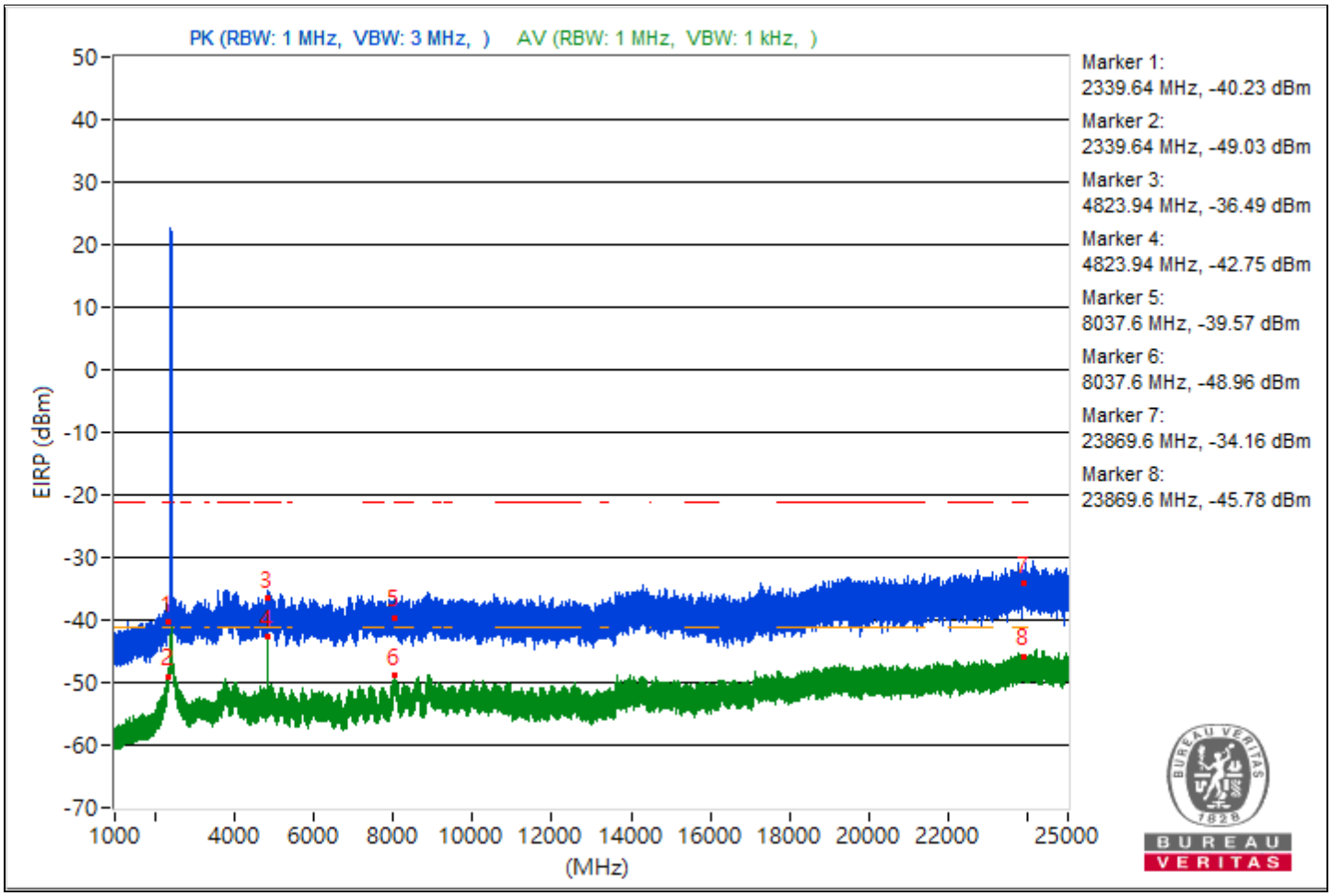
Mode A 2Tx

Conducted Unwanted Emissions

RF Mode	802.11b	Channel	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	28°C, 68% RH
Tested By	Kevin Ko		

Conducted Unwanted Emissions								
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Raw Value Chain 1 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2339.64	55.03 PK	74	-18.97	-51.04	-51.3	7.93	-40.23
2	2339.64	46.23 AV	54	-7.77	-60.1	-59.84	7.93	-49.03
3	4823.94	58.77 PK	74	-15.23	-50.68	-45.59	7.93	-36.49
4	4823.94	52.51 AV	54	-1.49	-60.32	-51.18	7.93	-42.75
5	8037.6	55.69 PK	74	-18.31	-49.49	-51.85	7.93	-39.57
6	8037.6	46.3 AV	54	-7.7	-60.33	-59.51	7.93	-48.96
7	23869.6	61.1 PK	74	-12.9	-43.77	-47.02	7.93	-34.16
8	23869.6	49.48 AV	54	-4.52	-55.54	-58.36	7.93	-45.78

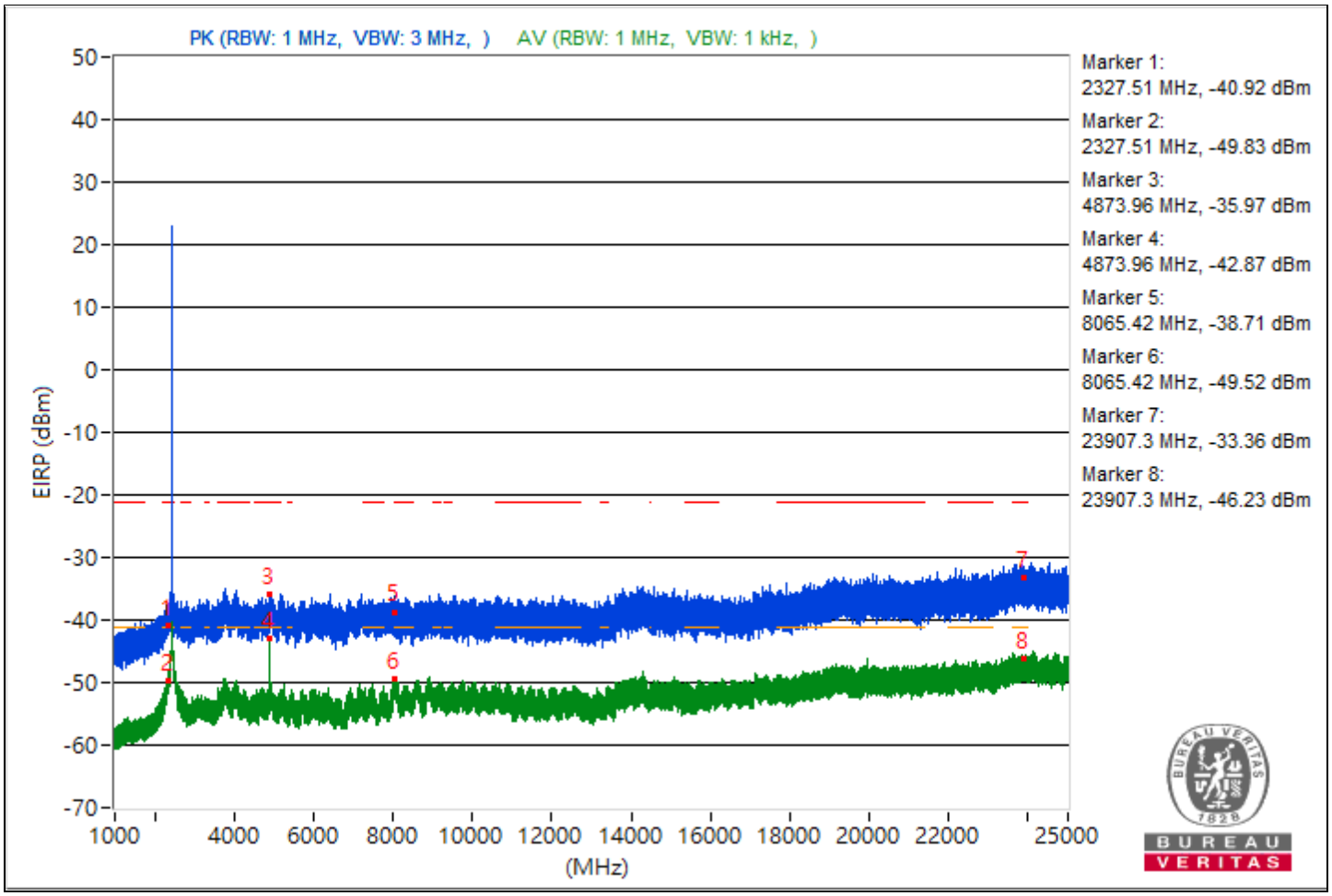
Note: Margin value = Emission Level - Limit value



RF Mode	802.11b	Channel	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	28°C, 68% RH
Tested By	Kevin Ko		

Conducted Unwanted Emissions								
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Raw Value Chain 1 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2327.51	54.34 PK	74	-19.66	-51.66	-52.07	7.93	-40.92
2	2327.51	45.43 AV	54	-8.57	-61.3	-60.3	7.93	-49.83
3	4873.96	59.29 PK	74	-14.71	-48.19	-45.92	7.93	-35.97
4	4873.96	52.39 AV	54	-1.61	-59.43	-51.44	7.93	-42.87
5	8065.42	56.55 PK	74	-17.45	-49.34	-49.98	7.93	-38.71
6	8065.42	45.74 AV	54	-8.26	-62.28	-59.19	7.93	-49.52
7	23907.3	61.9 PK	74	-12.1	-43.28	-45.62	7.93	-33.36
8	23907.3	49.03 AV	54	-4.97	-60.69	-55.25	7.93	-46.23

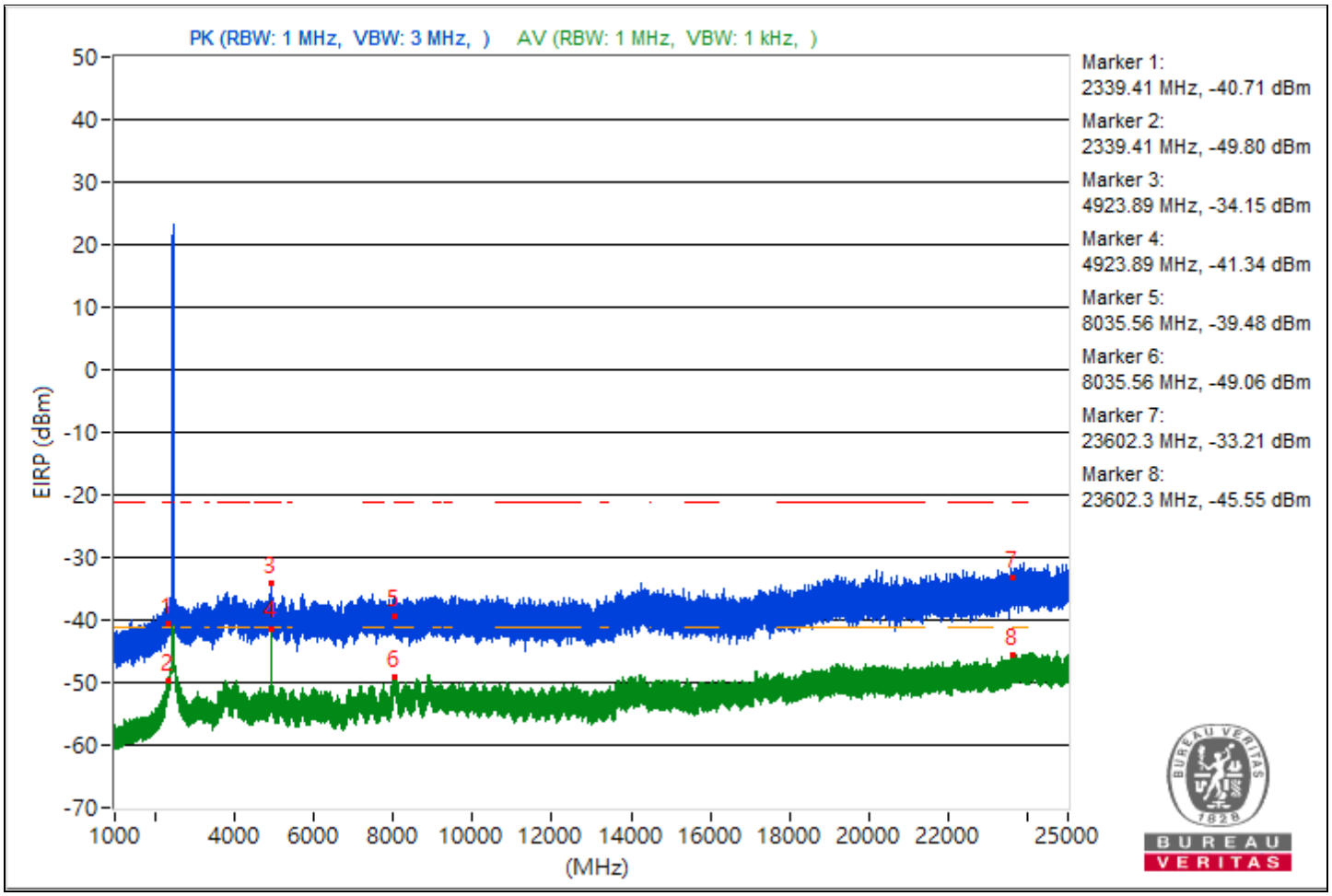
Note: Margin value = Emission Level - Limit value



RF Mode	802.11b	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	28°C, 68% RH
Tested By	Kevin Ko		

Conducted Unwanted Emissions								
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Raw Value Chain 1 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2339.41	54.55 PK	74	-19.45	-52.37	-51.03	7.93	-40.71
2	2339.41	45.46 AV	54	-8.54	-60.33	-61.2	7.93	-49.8
3	4923.89	61.11 PK	74	-12.89	-44.4	-45.9	7.93	-34.15
4	**4923.89**	**53.92 AV**	**54**	**-0.08**	**-52.87**	**-51.76**	**7.93**	**-41.34**
5	8035.56	55.78 PK	74	-18.22	-49.17	-52.18	7.93	-39.48
6	8035.56	46.2 AV	54	-7.8	-60.38	-59.65	7.93	-49.06
7	23602.3	62.05 PK	74	-11.95	-44.39	-43.91	7.93	-33.21
8	23602.3	49.71 AV	54	-4.29	-55.56	-57.69	7.93	-45.55

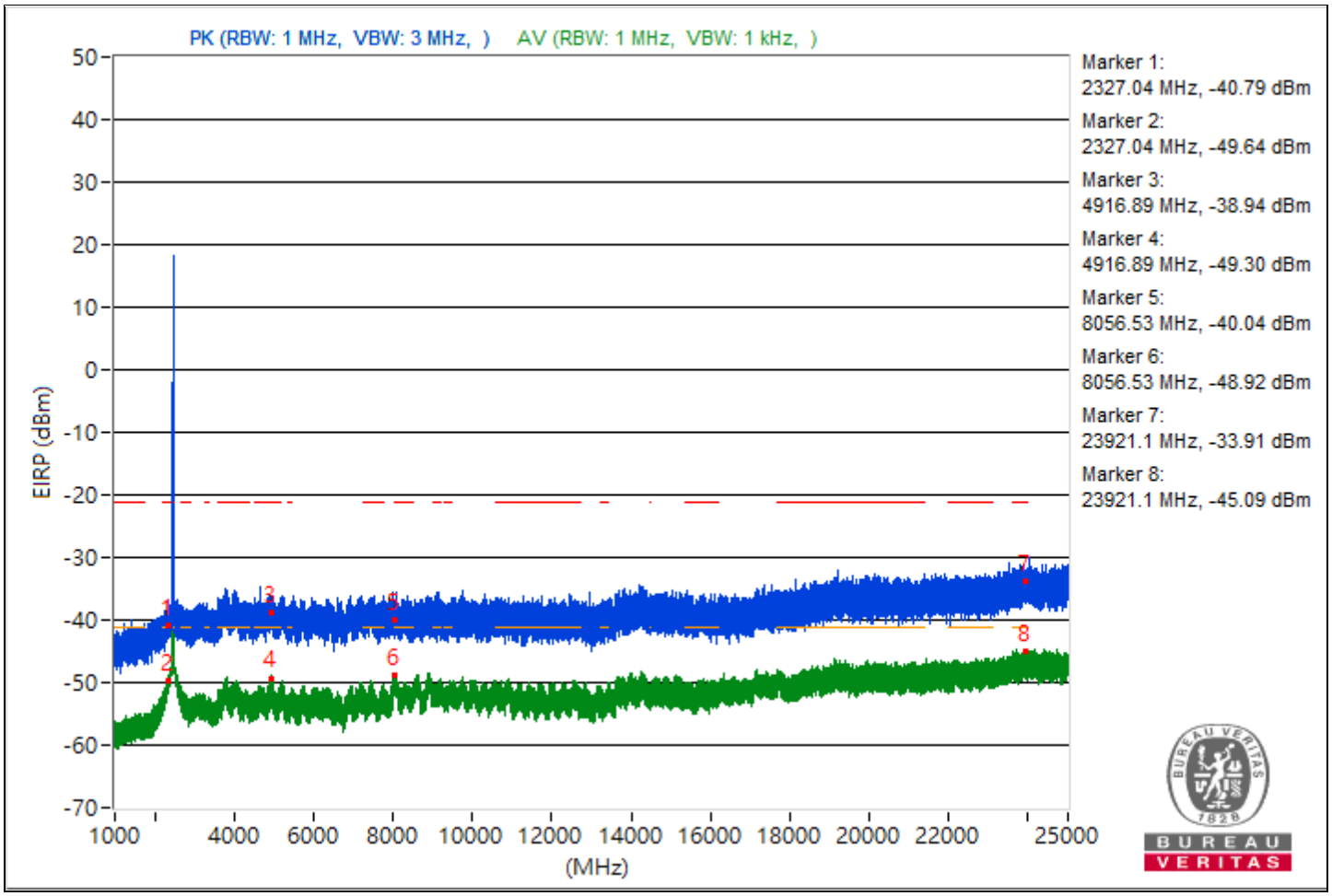
Note: Margin value = Emission Level - Limit value



RF Mode	802.11b	Channel	CH 12：2467 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	26°C, 64% RH
Tested By	Kevin Ko		

Conducted Unwanted Emissions								
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Raw Value Chain 1 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2327.04	54.47 PK	74	-19.53	-53.14	-50.66	7.93	-40.79
2	2327.04	45.62 AV	54	-8.38	-61.01	-60.19	7.93	-49.64
3	4916.89	56.32 PK	74	-17.68	-49.95	-49.82	7.93	-38.94
4	4916.89	45.96 AV	54	-8.04	-59.17	-61.66	7.93	-49.3
5	8056.53	55.22 PK	74	-18.78	-50.13	-52.04	7.93	-40.04
6	8056.53	46.34 AV	54	-7.66	-59.12	-60.75	7.93	-48.92
7	23921.1	61.35 PK	74	-12.65	-45.4	-44.37	7.93	-33.91
8	23921.1	50.17 AV	54	-3.83	-58.68	-54.39	7.93	-45.09

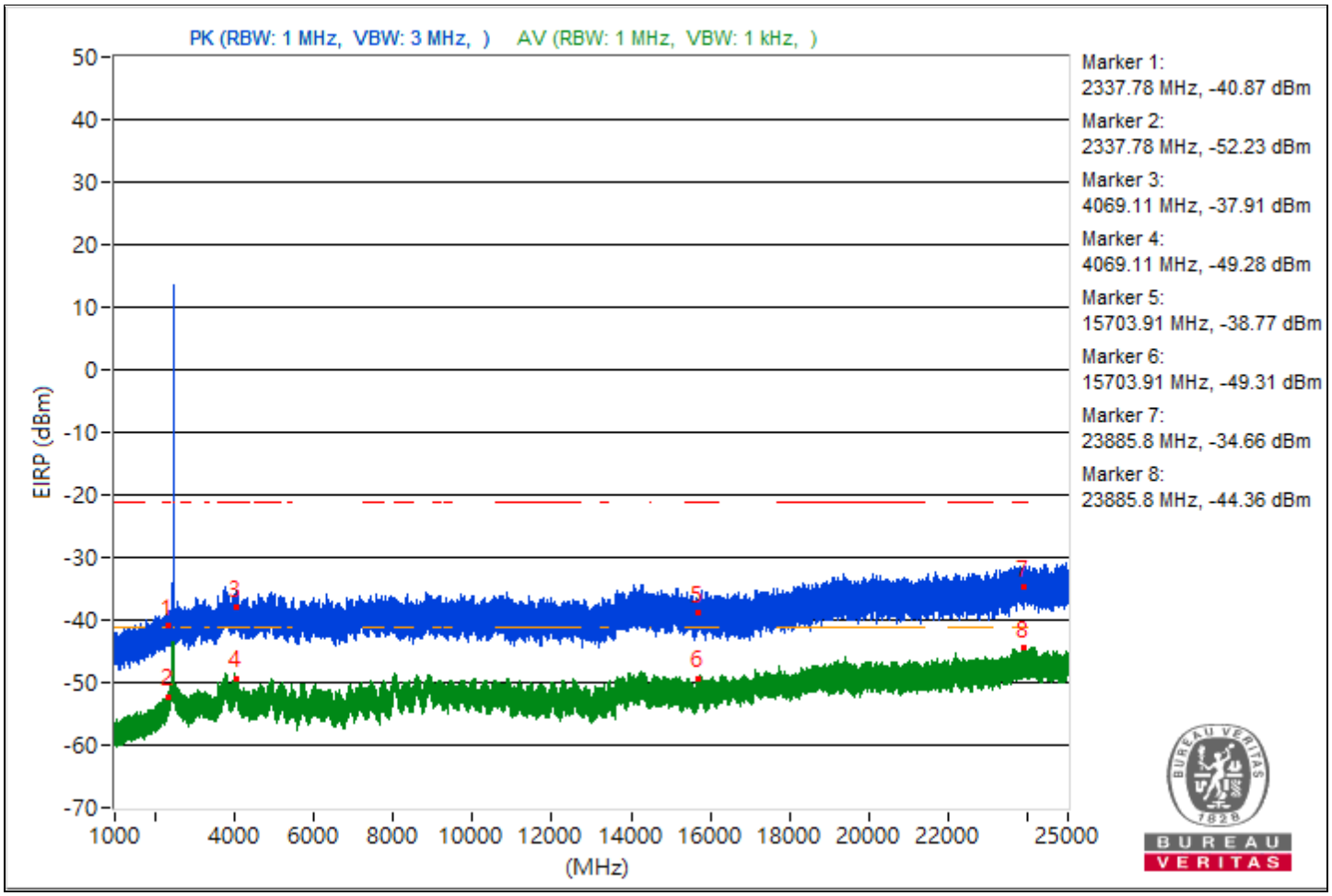
Note: Margin value = Emission Level - Limit value



RF Mode	802.11b	Channel	CH 13：2472 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	26°C, 64% RH
Tested By	Kevin Ko		

Conducted Unwanted Emissions								
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Raw Value Chain 1 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2337.78	54.39 PK	74	-19.61	-52.1	-51.54	7.93	-40.87
2	2337.78	43.03 AV	54	-10.97	-64.46	-62.17	7.93	-52.23
3	4069.11	57.35 PK	74	-16.65	-48.32	-49.46	7.93	-37.91
4	4069.11	45.98 AV	54	-8.02	-58.91	-62.1	7.93	-49.28
5	15703.91	56.49 PK	74	-17.51	-49.29	-50.18	7.93	-38.77
6	15703.91	45.95 AV	54	-8.05	-61.8	-59.1	7.93	-49.31
7	23885.8	60.6 PK	74	-13.4	-44.9	-46.45	7.93	-34.66
8	23885.8	50.9 AV	54	-3.1	-56.61	-54.29	7.93	-44.36

Note: Margin value = Emission Level - Limit value



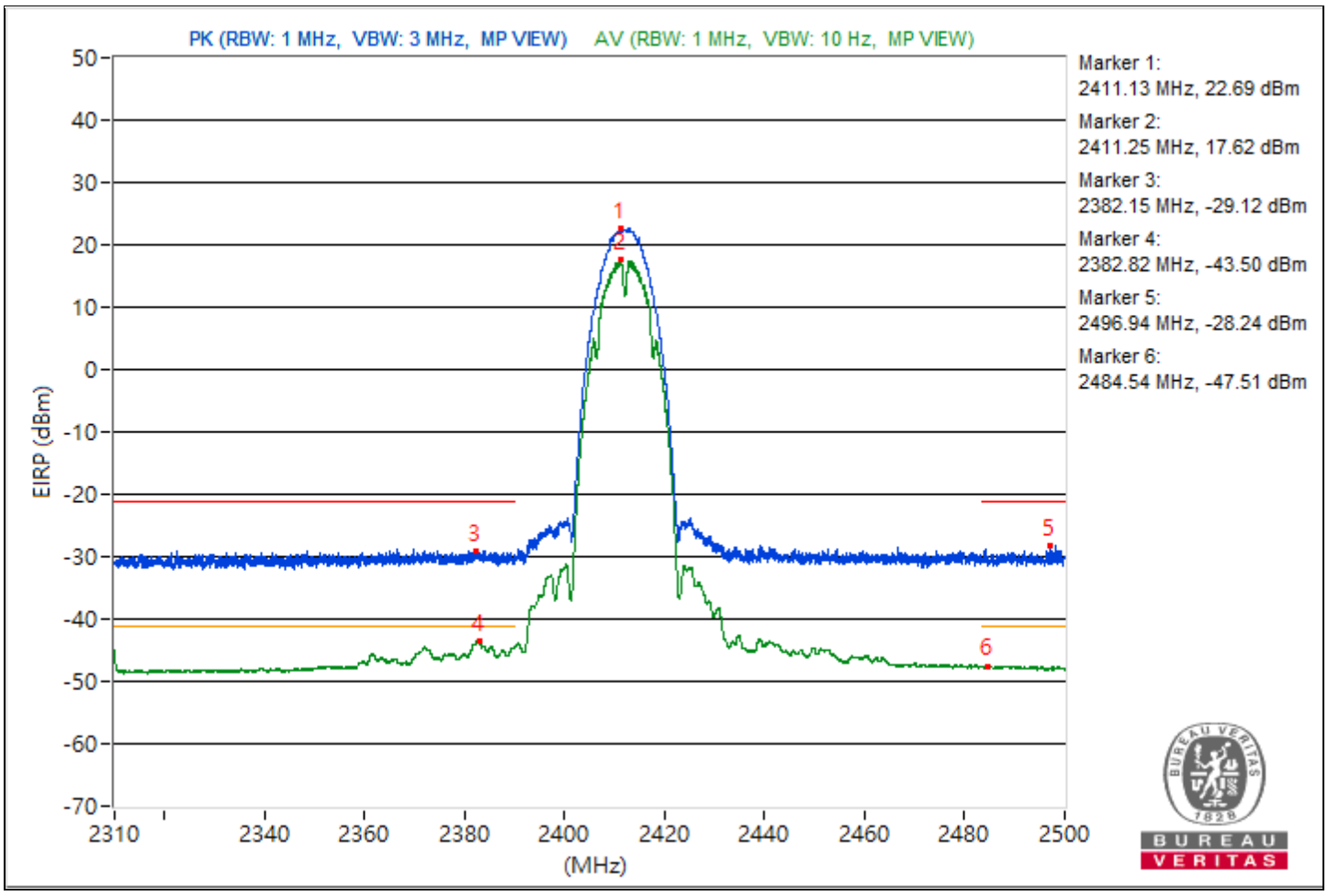
Conducted Band Edges

RF Mode	802.11b	Channel	CH 1：2412 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	26°C, 64% RH
Tested By	Kevin Ko		

Conducted Band Edge								
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Raw Value Chain 1 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2411.13	117.95 PK			13.12	13.83	6.19	22.69
2	*2411.25	112.88 AV			8.12	8.71	6.19	17.62
3	2382.15	66.14 PK	74	-7.86	-39.93	-37.15	6.19	-29.12
4	2382.82	51.76 AV	54	-2.24	-54.2	-51.58	6.19	-43.5
5	2496.94	67.02 PK	74	-6.98	-36.71	-38.31	6.19	-28.24
6	2484.54	47.75 AV	54	-6.25	-56.48	-56.95	6.19	-47.51

Notes:

1. Margin value = Emission Level - Limit value
2. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

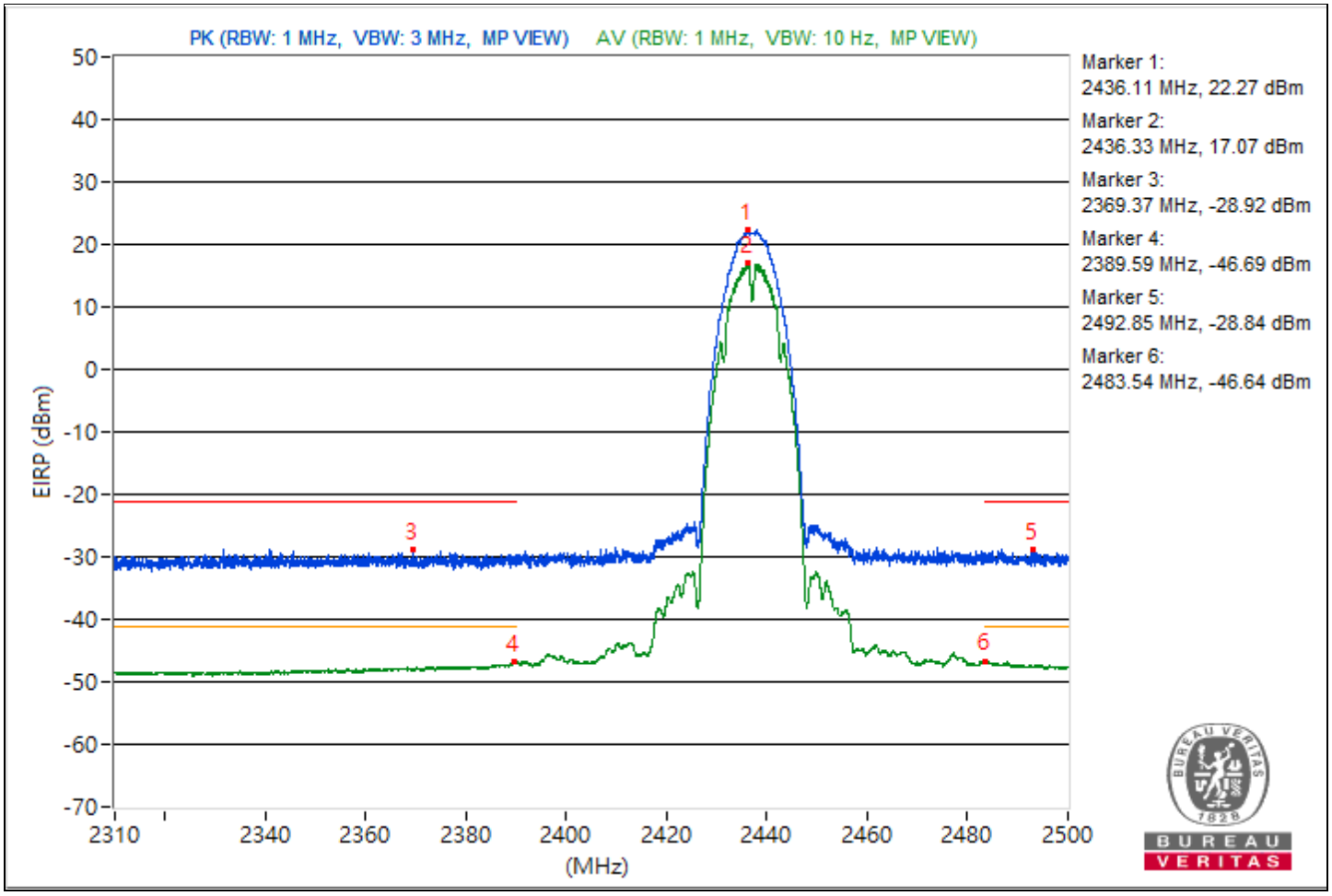


RF Mode	802.11b	Channel	CH 6：2437 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	26°C, 64% RH
Tested By	Kevin Ko		

Conducted Band Edge								
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Raw Value Chain 1 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2436.11	117.53 PK			12.86	13.27	6.19	22.27
2	*2436.33	112.33 AV			7.52	8.2	6.19	17.07
3	2369.37	66.34 PK	74	-7.66	-39.04	-37.36	6.19	-28.92
4	2389.59	48.57 AV	54	-5.43	-55.53	-56.28	6.19	-46.69
5	2492.85	66.42 PK	74	-7.58	-36.91	-39.58	6.19	-28.84
6	2483.54	48.62 AV	54	-5.38	-55.92	-55.76	6.19	-46.64

Notes:

1. Margin value = Emission Level - Limit value
2. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

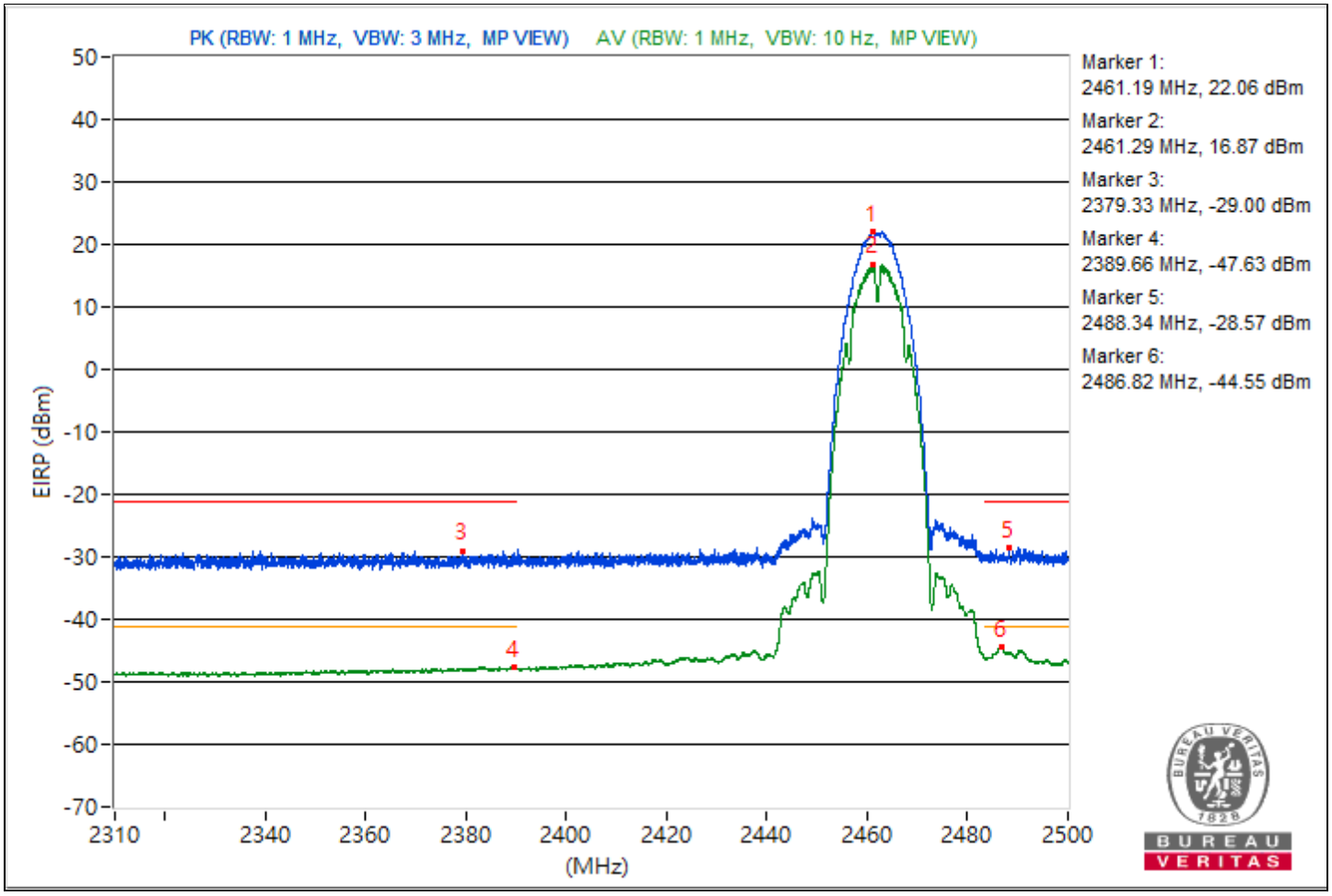


RF Mode	802.11b	Channel	CH 11：2462 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	26°C, 64% RH
Tested By	Kevin Ko		

Conducted Band Edge								
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Raw Value Chain 1 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2461.19	117.32 PK			12.53	13.16	6.19	22.06
2	*2461.29	112.13 AV			7.29	8.01	6.19	16.87
3	2379.33	66.26 PK	74	-7.74	-39.77	-37.05	6.19	-29
4	2389.66	47.63 AV	54	-6.37	-56.56	-57.12	6.19	-47.63
5	2488.34	66.69 PK	74	-7.31	-36.88	-38.89	6.19	-28.57
6	2486.82	50.71 AV	54	-3.29	-52.47	-55.57	6.19	-44.55

Notes:

1. Margin value = Emission Level - Limit value
2. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

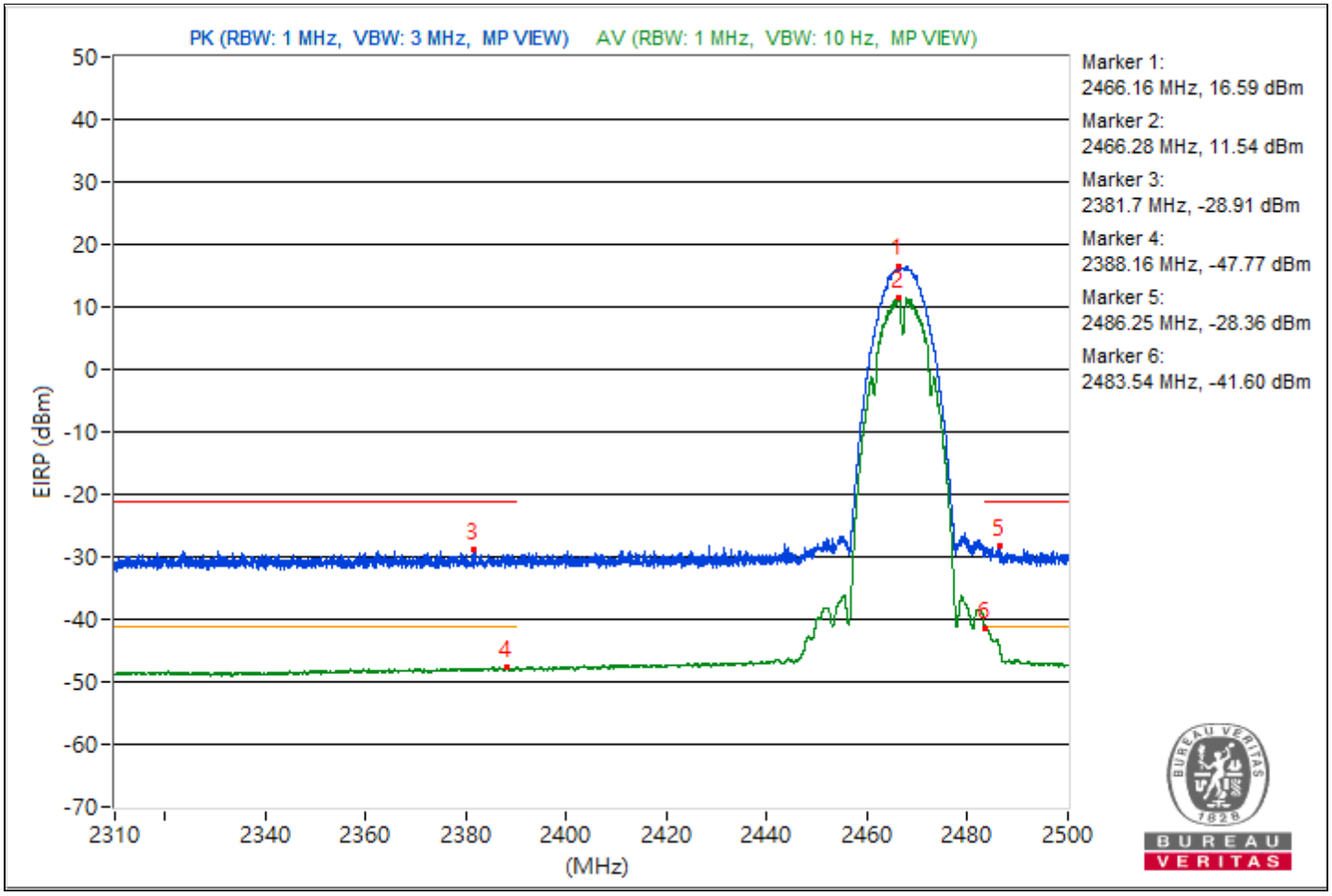


RF Mode	802.11b	Channel	CH 12：2467 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	26°C, 64% RH
Tested By	Kevin Ko		

Conducted Band Edge								
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Raw Value Chain 1 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2466.16	111.85 PK			7.13	7.63	6.19	16.59
2	*2466.28	106.8 AV			1.92	2.73	6.19	11.54
3	2381.7	66.35 PK	74	-7.65	-40.66	-36.52	6.19	-28.91
4	2388.16	47.49 AV	54	-6.51	-56.69	-57.27	6.19	-47.77
5	2486.25	66.9 PK	74	-7.1	-36.33	-39.29	6.19	-28.36
6	2483.54	53.66 AV	54	-0.34	-51.38	-50.29	6.19	-41.6

Notes:

1. Margin value = Emission Level - Limit value
2. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

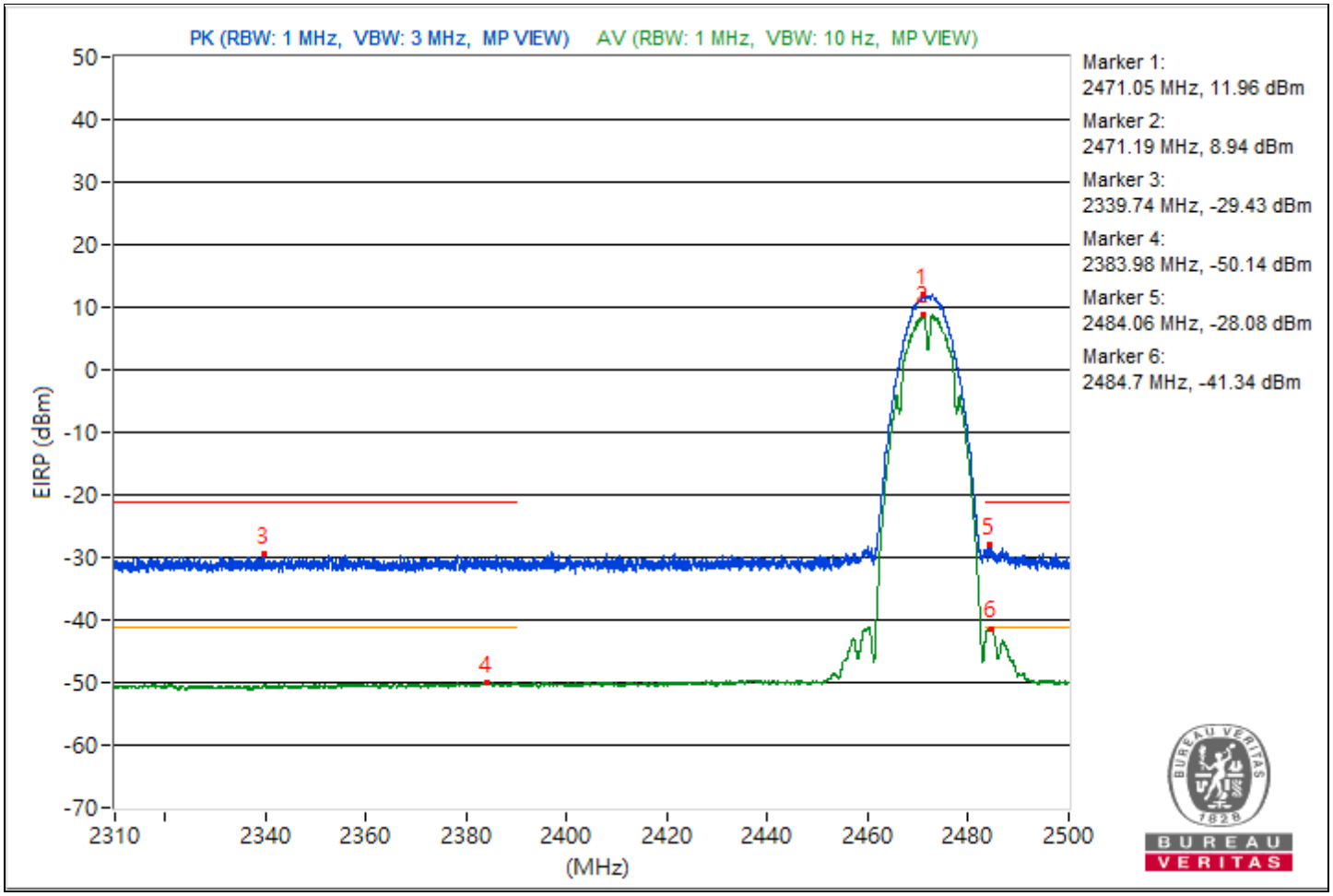


RF Mode	802.11b	Channel	CH 13：2472 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	28°C, 68% RH
Tested By	Kevin Ko		

Conducted Band Edge								
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Raw Value Chain 1 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2471.05	107.22 PK			2.37	3.12	6.19	11.96
2	*2471.19	104.2 AV			-0.72	0.17	6.19	8.94
3	2339.74	65.83 PK	74	-8.17	-40.12	-37.53	6.19	-29.43
4	2383.98	45.12 AV	54	-8.88	-59.64	-59.06	6.19	-50.14
5	2484.06	67.18 PK	74	-6.82	-36.56	-38.15	6.19	-28.08
6	**2484.7**	**53.92 AV**	**54**	**-0.08**	**-51.16**	**-50.01**	**6.19**	**-41.34**

Notes:

1. Margin value = Emission Level - Limit value
2. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.



Mode B

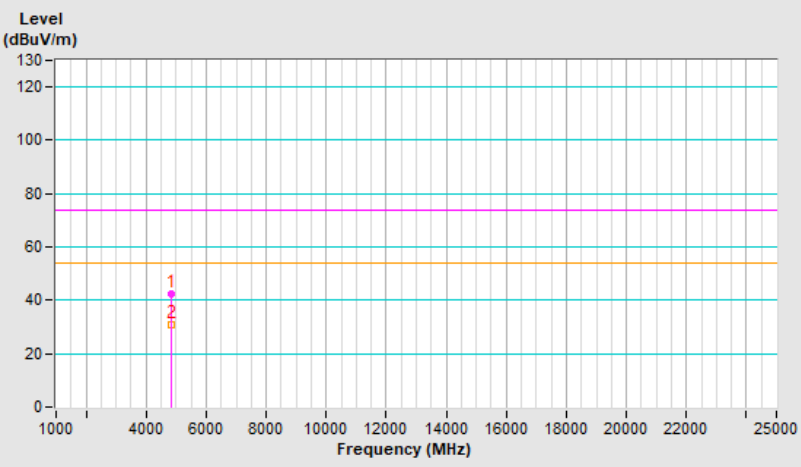
1Tx

RF Mode	802.11b	Channel	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4824.00	42.6 PK	74.0	-31.4	1.75 H	261	38.0	4.6
2	4824.00	30.9 AV	54.0	-23.1	1.75 H	261	26.3	4.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

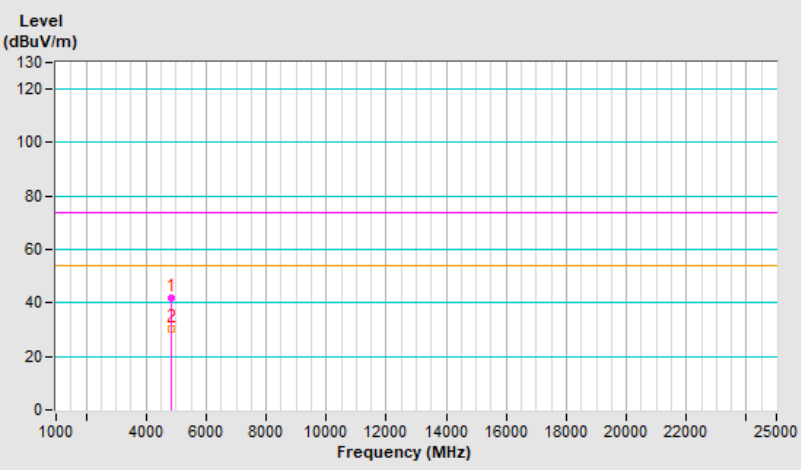


RF Mode	802.11b	Channel	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4824.00	41.9 PK	74.0	-32.1	2.45 V	259	37.3	4.6
2	4824.00	30.5 AV	54.0	-23.5	2.45 V	259	25.9	4.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

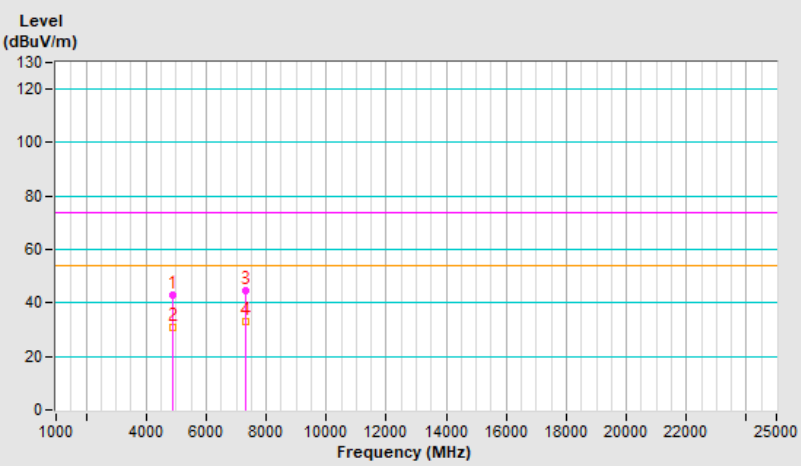


RF Mode	802.11b	**Channel**	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	4874.00	42.7 PK	74.0	-31.3	1.71 H	270	38.1	4.6
2	4874.00	31.0 AV	54.0	-23.0	1.71 H	270	26.4	4.6
3	7311.00	44.4 PK	74.0	-29.6	2.45 H	297	32.9	11.5
4	7311.00	33.0 AV	54.0	-21.0	2.45 H	297	21.5	11.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

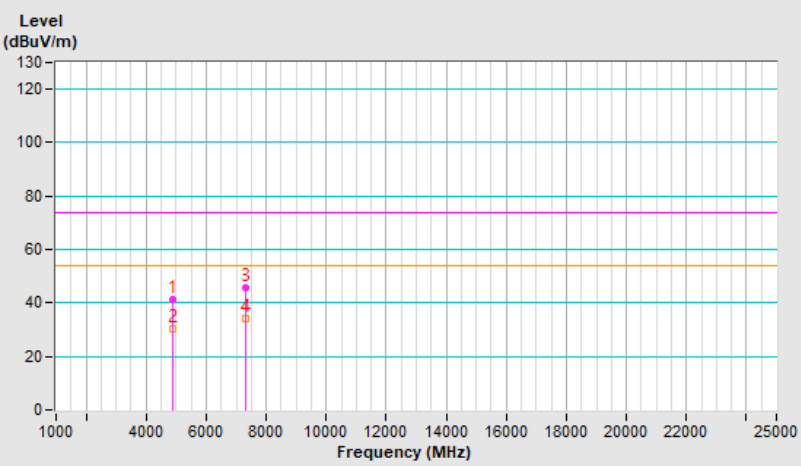


RF Mode	802.11b	**Channel**	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	4874.00	41.4 PK	74.0	-32.6	2.43 V	254	36.8	4.6
2	4874.00	30.2 AV	54.0	-23.8	2.43 V	254	25.6	4.6
3	7311.00	45.5 PK	74.0	-28.5	2.08 V	258	34.0	11.5
4	7311.00	34.1 AV	54.0	-19.9	2.08 V	258	22.6	11.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

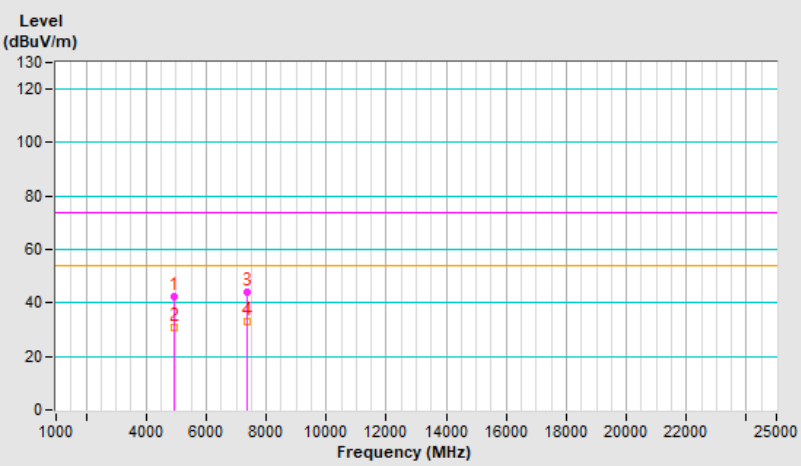


RF Mode	802.11b	**Channel**	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	4924.00	42.6 PK	74.0	-31.4	1.73 H	258	37.9	4.7
2	4924.00	30.9 AV	54.0	-23.1	1.73 H	258	26.2	4.7
3	7386.00	44.3 PK	74.0	-29.7	2.47 H	290	32.2	12.1
4	7386.00	33.1 AV	54.0	-20.9	2.47 H	290	21.0	12.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

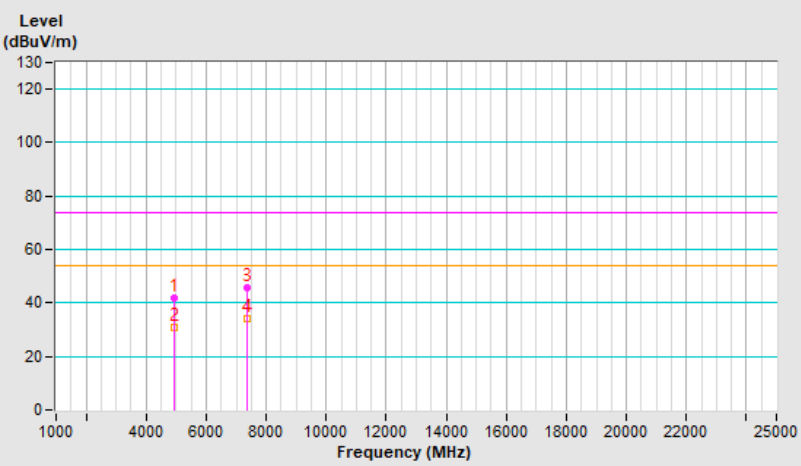


RF Mode	802.11b	Channel	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4924.00	42.0 PK	74.0	-32.0	2.42 V	244	37.3	4.7
2	4924.00	30.6 AV	54.0	-23.4	2.42 V	244	25.9	4.7
3	7386.00	45.5 PK	74.0	-28.5	2.03 V	259	33.4	12.1
4	7386.00	34.2 AV	54.0	-19.8	2.03 V	259	22.1	12.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

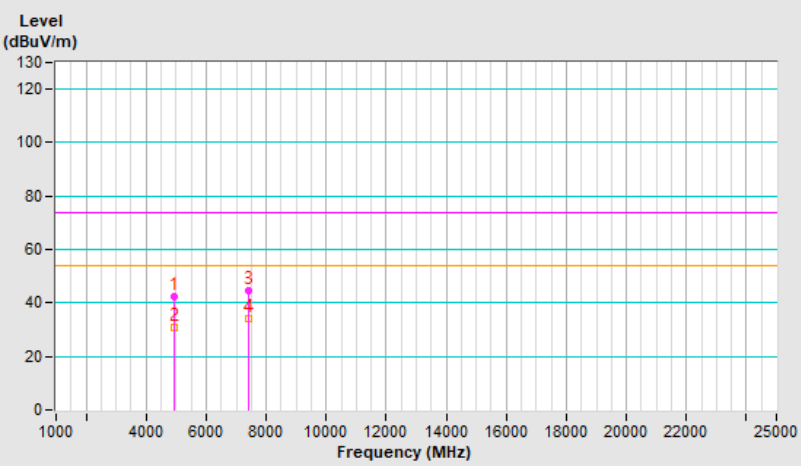


RF Mode	802.11b	Channel	CH 12 : 2467 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4934.00	42.4 PK	74.0	-31.6	1.73 H	265	37.7	4.7
2	4934.00	30.6 AV	54.0	-23.4	1.73 H	265	25.9	4.7
3	7401.00	44.8 PK	74.0	-29.2	2.54 H	315	32.7	12.1
4	7401.00	33.9 AV	54.0	-20.1	2.54 H	315	21.8	12.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

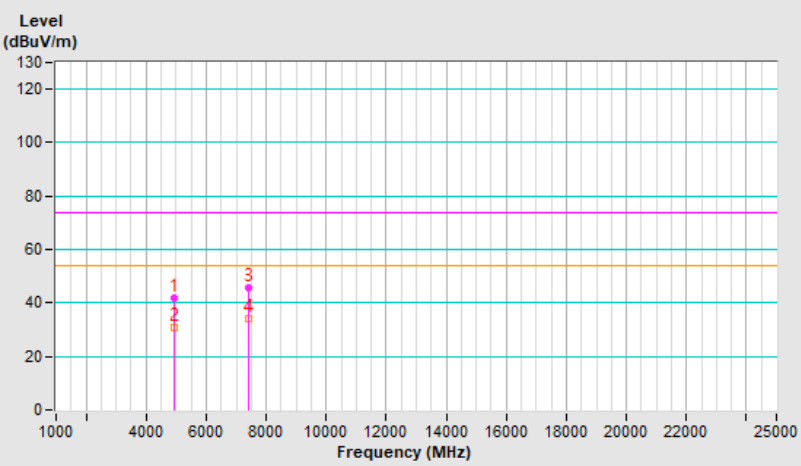


RF Mode	802.11b	**Channel**	CH 12 : 2467 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	4934.00	42.0 PK	74.0	-32.0	2.38 V	250	37.3	4.7
2	4934.00	30.6 AV	54.0	-23.4	2.38 V	250	25.9	4.7
3	7401.00	45.5 PK	74.0	-28.5	2.05 V	258	33.4	12.1
4	7401.00	33.9 AV	54.0	-20.1	2.05 V	258	21.8	12.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

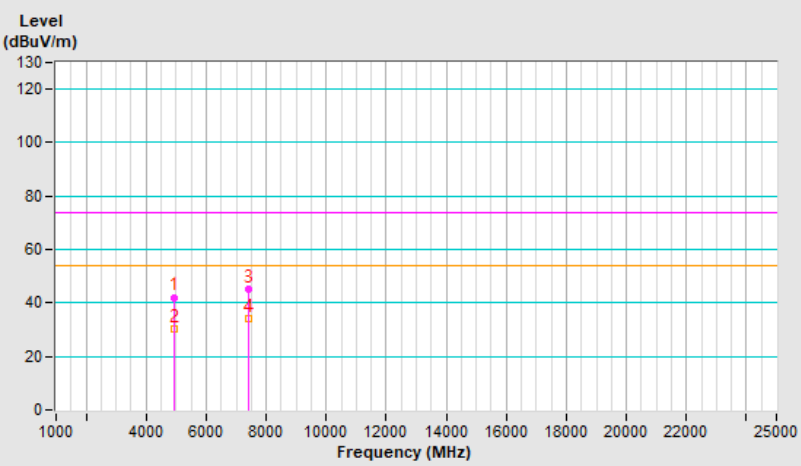


RF Mode	802.11b	Channel	CH 13：2472 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4944.00	42.1 PK	74.0	-31.9	1.71 H	279	37.2	4.9
2	4944.00	30.3 AV	54.0	-23.7	1.71 H	279	25.4	4.9
3	7416.00	45.1 PK	74.0	-28.9	2.49 H	306	33.0	12.1
4	7416.00	33.9 AV	54.0	-20.1	2.49 H	306	21.8	12.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

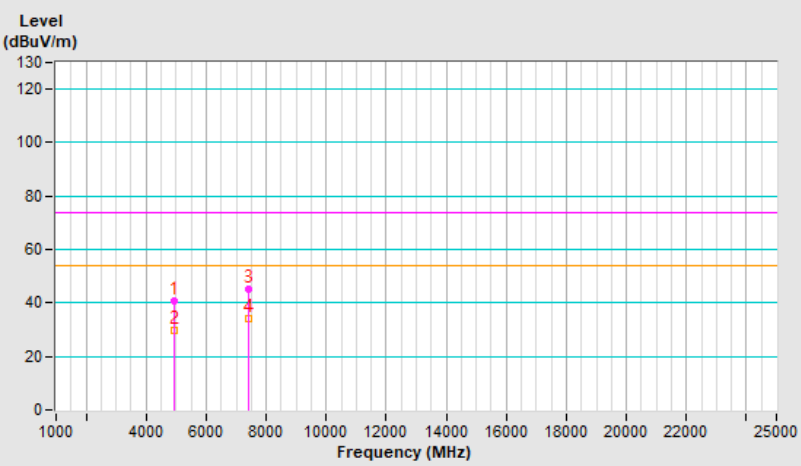


RF Mode	802.11b	Channel	CH 13：2472 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4944.00	40.9 PK	74.0	-33.1	2.38 V	268	36.0	4.9
2	4944.00	29.8 AV	54.0	-24.2	2.38 V	268	24.9	4.9
3	7416.00	45.4 PK	74.0	-28.6	2.03 V	263	33.3	12.1
4	7416.00	33.9 AV	54.0	-20.1	2.03 V	263	21.8	12.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.



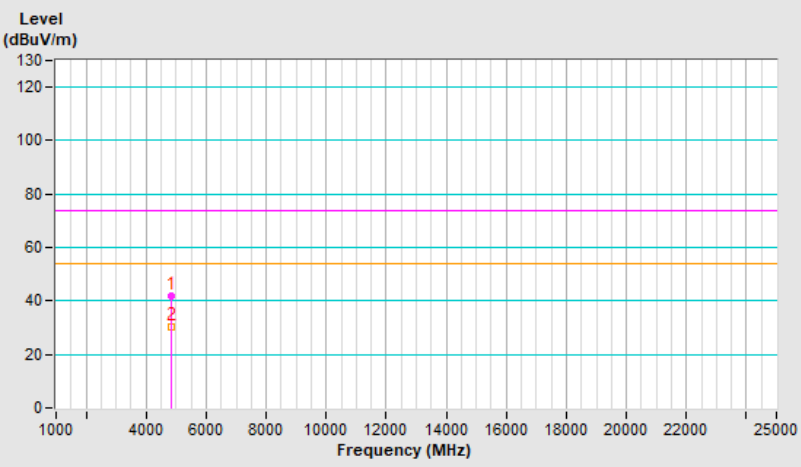
2Tx

RF Mode	802.11b	Channel	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4824.00	41.7 PK	74.0	-32.3	1.79 H	281	37.1	4.6
2	4824.00	30.5 AV	54.0	-23.5	1.79 H	281	25.9	4.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

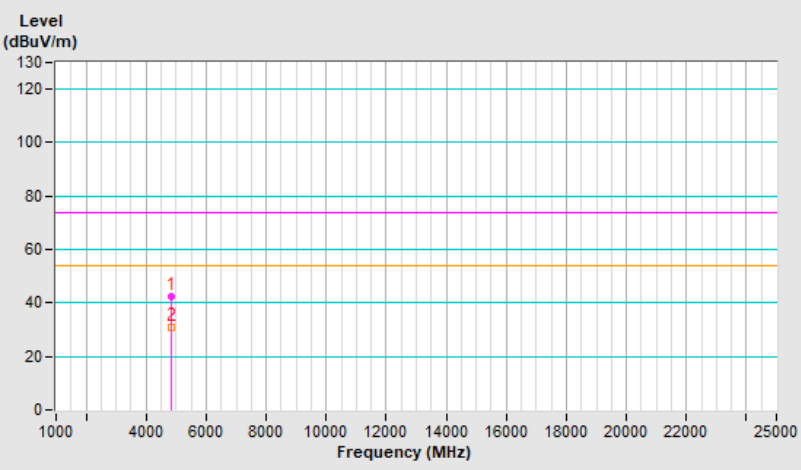


RF Mode	802.11b	**Channel**	CH 1：2412 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	4824.00	42.3 PK	74.0	-31.7	2.49 V	268	37.7	4.6
2	4824.00	30.6 AV	54.0	-23.4	2.49 V	268	26.0	4.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

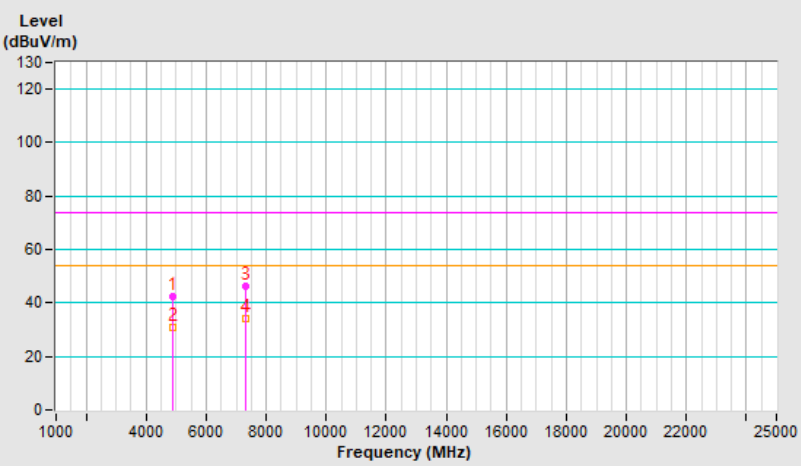


RF Mode	802.11b	**Channel**	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	4874.00	42.6 PK	74.0	-31.4	1.73 H	253	38.0	4.6
2	4874.00	30.8 AV	54.0	-23.2	1.73 H	253	26.2	4.6
3	7311.00	46.0 PK	74.0	-28.0	2.45 H	291	34.5	11.5
4	7311.00	33.9 AV	54.0	-20.1	2.45 H	291	22.4	11.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

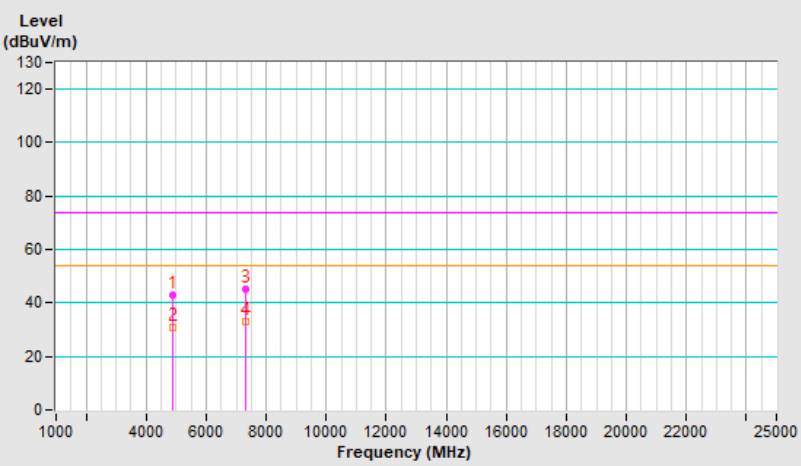


RF Mode	802.11b	**Channel**	CH 6：2437 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	4874.00	42.9 PK	74.0	-31.1	2.46 V	265	38.3	4.6
2	4874.00	31.0 AV	54.0	-23.0	2.46 V	265	26.4	4.6
3	7311.00	45.2 PK	74.0	-28.8	2.02 V	243	33.7	11.5
4	7311.00	32.8 AV	54.0	-21.2	2.02 V	243	21.3	11.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

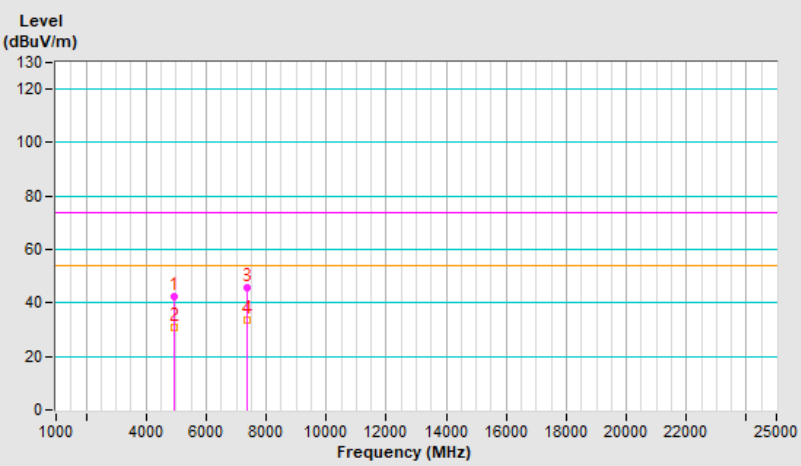


RF Mode	802.11b	**Channel**	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	4924.00	42.2 PK	74.0	-31.8	1.73 H	254	37.5	4.7
2	4924.00	30.6 AV	54.0	-23.4	1.73 H	254	25.9	4.7
3	7386.00	45.7 PK	74.0	-28.3	2.48 H	299	33.6	12.1
4	7386.00	33.8 AV	54.0	-20.2	2.48 H	299	21.7	12.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

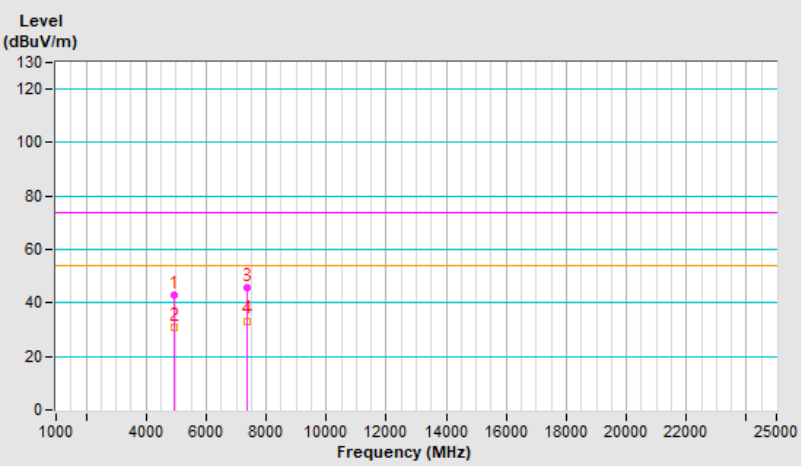


RF Mode	802.11b	**Channel**	CH 11：2462 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	4924.00	42.7 PK	74.0	-31.3	2.44 V	279	38.0	4.7
2	4924.00	31.0 AV	54.0	-23.0	2.44 V	279	26.3	4.7
3	7386.00	45.5 PK	74.0	-28.5	2.07 V	251	33.4	12.1
4	7386.00	33.3 AV	54.0	-20.7	2.07 V	251	21.2	12.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

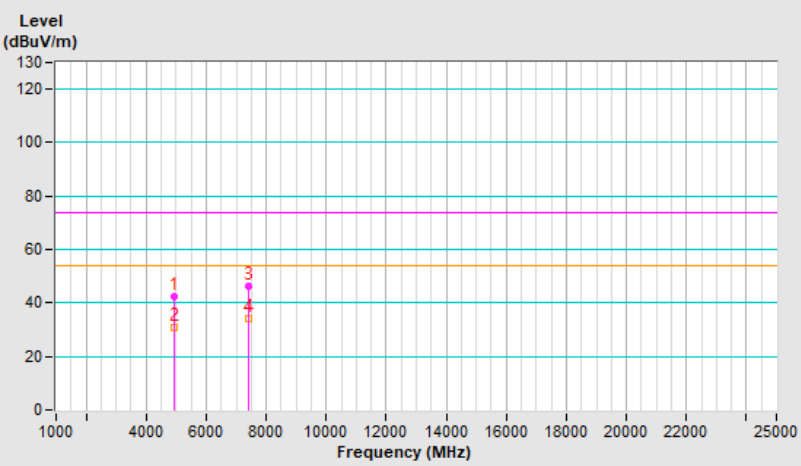


RF Mode	802.11b	Channel	CH 12 : 2467 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4934.00	42.5 PK	74.0	-31.5	1.70 H	264	37.8	4.7
2	4934.00	30.6 AV	54.0	-23.4	1.70 H	264	25.9	4.7
3	7401.00	46.2 PK	74.0	-27.8	2.50 H	277	34.1	12.1
4	7401.00	33.9 AV	54.0	-20.1	2.50 H	277	21.8	12.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

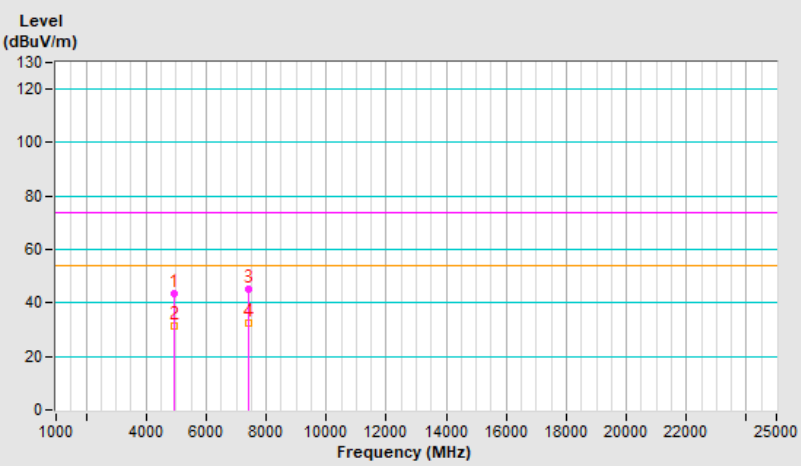


RF Mode	802.11b	**Channel**	CH 12 : 2467 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	4934.00	43.3 PK	74.0	-30.7	2.51 V	280	38.6	4.7
2	4934.00	31.2 AV	54.0	-22.8	2.51 V	280	26.5	4.7
3	7401.00	44.9 PK	74.0	-29.1	2.06 V	252	32.8	12.1
4	7401.00	32.4 AV	54.0	-21.6	2.06 V	252	20.3	12.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

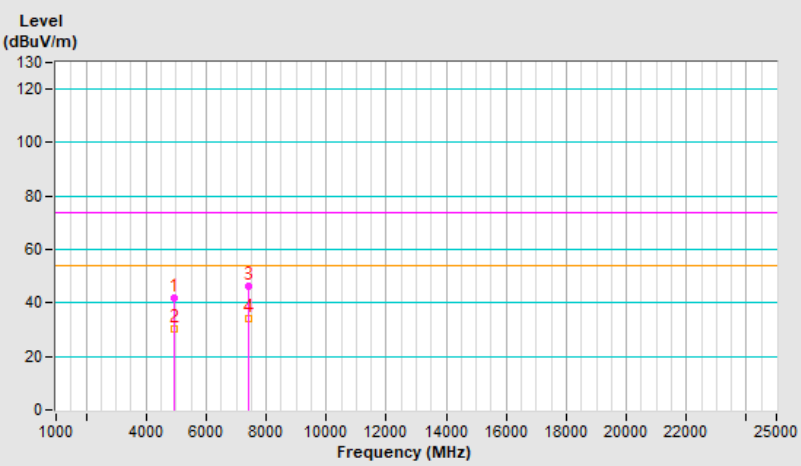


RF Mode	802.11b	**Channel**	CH 13：2472 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	4944.00	42.0 PK	74.0	-32.0	1.73 H	241	37.1	4.9
2	4944.00	30.3 AV	54.0	-23.7	1.73 H	241	25.4	4.9
3	7416.00	46.4 PK	74.0	-27.6	2.41 H	276	34.3	12.1
4	**7416.00**	**34.3 AV**	**54.0**	**-19.7**	**2.41 H**	**276**	**22.2**	**12.1**

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.

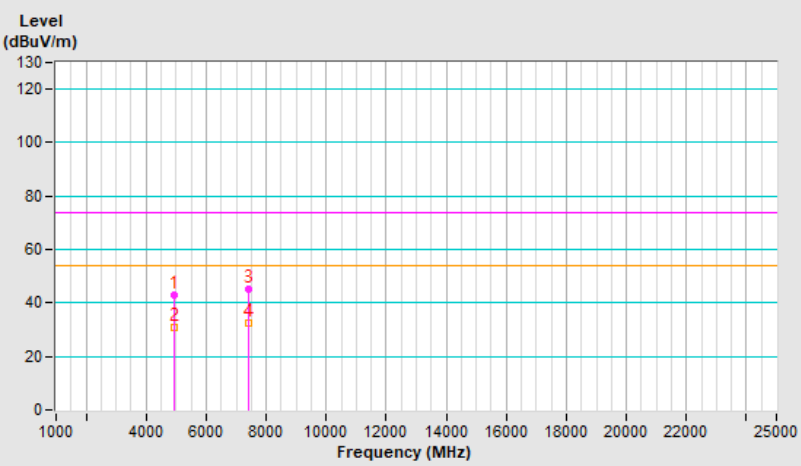


RF Mode	802.11b	**Channel**	CH 13：2472 MHz
Frequency Range	1 GHz ~ 25 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20 °C, 64 % RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	4944.00	42.8 PK	74.0	-31.2	2.41 V	262	37.9	4.9
2	4944.00	31.0 AV	54.0	-23.0	2.41 V	262	26.1	4.9
3	7416.00	44.9 PK	74.0	-29.1	1.99 V	242	32.8	12.1
4	7416.00	32.5 AV	54.0	-21.5	1.99 V	242	20.4	12.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.



8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

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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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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